TEST REPORT

Intertek

Accepted for Use

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RENDERED TO

AREVA NP Inc.
4100 International Plaza
Fort Worth, TX 76109

AREVA	AREVA NP Inc.
	58-9224198-000

PRODUCTS EVALUATED: Quantum Silicones QSil 5558MC Silicone Elastomer

EVALUATION PROPERTY: Pressure Resistance (Pressure Test 5A)

Report of Testing pressure resistance capabilities for compliance with the applicable requirements of AREVA NP Inc. Test Plan, Document No. 51-9213537-000

1 Table of Contents

2 Introduction

Intertek Testing Services NA (Intertek) has conducted testing for AREVA NP Inc., on the pressure resistance capabilities of Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) through a 12" thick concrete deck for compliance with the applicable requirements of and in accordance with AREVA NP Inc. Document No. 51-9213537-000, *Detailed Test Plan for Conducting MOX Pressure Test 5A [Test Plan]*. This evaluation took place on November 21, 2013.

This project was undertaken to evaluate the pressure resistance capability of an 8" thick silicone elastomer seal when installed around various cables at air pressure increments above atmospheric pressure.

3 Test Samples

3.1. SAMPLE SELECTION

The sealant material was not independently selected for testing; it was supplied by AREVA NP Inc., and was received in several shipments on June 19 to October 4, 2013. The samples were received with Certificates of Conformance and are considered traceable. Basic information on sealant material(s) is presented in the table below.

Sealant Material	Lot /Batch#	Expiration Date
QSil 5558 MC	130606	6/14/2014
QSil 5558 MC	130912	9/30/14

Information regarding receiving dates and origin can be found in Appendix F: Quality Documents. All samples were received in good condition at the Evaluation Center.

3.2. SAMPLE AND ASSEMBLY DESCRIPTION

The test deck was used to simulate a confinement zone or HVAC boundary in which the penetration seal assemblies may be installed. The test deck was not considered an integral part of the penetration seal assembly being tested and therefore was not intended to replicate MOX-specific plant conditions and not considered integral in bounding the performance of the penetration seal assemblies (e.g., concrete blend, compressive strength, rebar size and spacing). The test deck was constructed of normal weight reinforced concrete.

The opening cast into the test deck simulated certain features consistent with MOX penetrations (e.g., chamfered edges when deemed relevant, relatively smooth interior finishes, etc.). A detailed description of each penetration can be found in Appendix D, AREVA NP Inc. Engineering Information Record, Document No. 51-9213537-000. Included in that document is a table of revision history with a description of changes made to the approved plan. The installation and documentation of penetration seal assemblies contained within the test slab was performed by AREVA under AREVA's Quality Assurance Program [Reference 12.6 in the test plan found in Appendix D].

Note: The test slab from MOX Pressure Test 5 (Intertek Report 101276459SAT-001A; AREVA document number 58-9224197-000) was re-used for MOX Pressure Test 5A. The penetration seal assembly and associated cables from MOX Pressure Test 5 were completely removed from the test slab. Additionally, all residual seal material along the sides of the opening was removed and the concrete prepared for re-use in Pressure Test 5A by roughening the opening with a grinder equipped with a Hilti® DG-CW AP-SP Diamond Cup Wheel (Hilti® Item No. 2066711). This is the same method that MOX Services will be using to remove the epoxy coating from the inside of the penetrations in the plant. This ensured that the seal material to concrete interface of the test penetration was representative of anticipated plant installations.

The opening sealed and tested in Pressure Test 5A was a 48" x 34" blockout containing nine different cable types as penetrating items. The penetrating items for this blockout included the following items found in Shaw AREVA MOX Services Drawings DCS01-ZMJ-DS-NTE-N-65107-2 Sheets 84-116, "*Technical Engineering Information"* [Test Plan Reference 12.2]:

- (1) 0.32" diameter cable with 15 mil CSPE jacket, product mark no. wfb-7
- (1) 0.50" diameter cable with 45 mil CSPE jacket, product mark no. wfa-1
- (1) 1.54" diameter cable with 80 mil CSPE jacket, product mark no. wfa-13
- (1) 0.248" diameter cable with 15 mil XLPE jacket, product mark no. whe-2
- (1) 0.33" diameter cable with 60 mil XLPE jacket, product mark no. wbe-1
- (1) 0.25" diameter cable with 7 mil Modified XLPO jacket, product mark no. whe-8
- (1) 0.44" diameter cable with 9 mil Modified XLPO jacket, product mark no. wbh-1
- (1) 0.53" diameter cable with 35 mil LSZH - XLPO jacket, product mark no. wfa-26
- (1) 1.02" diameter cable with 65 mil LSZH - XLPO jacket, product mark no. wfe-6

The cables penetrated through the opening, made a "u" shaped bend on one side of the seal and penetrated through the opening again. In effect the cables were looped with both ends of each cable terminating on the same side of the opening and forming a "u" shape through the seal. Using this configuration prevented any pressure leakage due to air travel through the cables.

The opening was sealed with an eight (8) inch thick Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) penetration seal with no permanent damming installed around the various penetrating commodities.

Note: Once the seal had been installed and allowed to cure, a hole was drilled in the silicone elastomer at the location depicted in Appendix B of the Test Plan. The hole was sealed using QSil 5558MC seal material in accordance with Document 01-9198306 (latest revision), *"Installation Instruction Manual for MOX Penetration Seal Test Program"* [Test Reference 12.1]. This "field patched" hole was included in this test plan to evaluate the pressure resistance of seal repairs using the same elastomer as the base seal.

The test was performed with the test deck oriented in the horizontal position.

4 Testing and Evaluation Methods

The Test Plan in Appendix D defines the test methods, acceptance criteria and test report documentation requirements for MOX Pressure Test 5A. Additionally, the detailed Test Plan defines the roles and responsibilities of MOX Services, AREVA, the selected testing laboratory, and any other subcontracted entity engaged in support of penetration seal pressure testing efforts.

The detailed Test Plan also describes the procurement plan for materials associated with MOX Pressure Test 5A and identifies the entities responsible for procuring the various components of the test assemblies based on the quality level assigned to each component.

The Test Plan also establishes minimum quality requirements for the penetration seal materials used in the test assembly and links quality requirements in the AREVA Quality Assurance (QA) program to customer/project quality requirements.

4.1. TEST APPARATUS

TEST APPARATUS

In the absence of any consensus codes or standards related to the pressure testing of penetration seal assemblies, the MOX Penetration Seal Program has developed a standardized method for conducting pressure testing of MOX penetration seal designs. In support of this effort, Intertek assisted in the design and construction of a pressure test apparatus to be use in the conduct of MOX penetration seal pressure tests.

The pressure chamber apparatus consists of two hemispherical 72” diameter steel pressure vessels, calibrated equipment and a data acquisition system. The apparatus accurately maintains the desired air pressure, using one of two sensitive, manually adjustable pressure regulators; a high (0-15 psi) and a low (0-2 psi) range. The sealed collection chamber feeds any leakage air back to the test device, where it is channeled through one of two calibrated flow meters, once again, a high (0-200 L/min) and a low (0-20 L/min) range. A calibrated electronic pressure transducer (0-5 psi) measures the differential pressure between the two chambers and the data acquisition software determines the net pressure drop across the test seal and the leakage through the seal. The chambers are interchangeable and the direction can be reversed very quickly so both can serve as the pressure or the collection chamber.

The primary components described above include the following devices:

Pressure Chamber — 2-piece hemispherical 72” diameter steel vessel
3 connection ports per piece
16 flange attachment points per piece
Flange attachment via 3/8” diameter holes @ 22-1/2° spacing

Pressure Cart — Stainless steel rolling cart with control equipment and associated Data Acquisition System

Regulator (low)	Control Air, Inc., Amherst, NH Type 700 0-2 psi
Regulator (high)	Control Air, Inc., Amherst, NH Type 700 0-15 psi

Mass Flow Meter Omega Engineering, Inc., Stamford, CT
Model No. FMA-872A-V-NIST
Serial No. 4270050001001
0-20 lpm

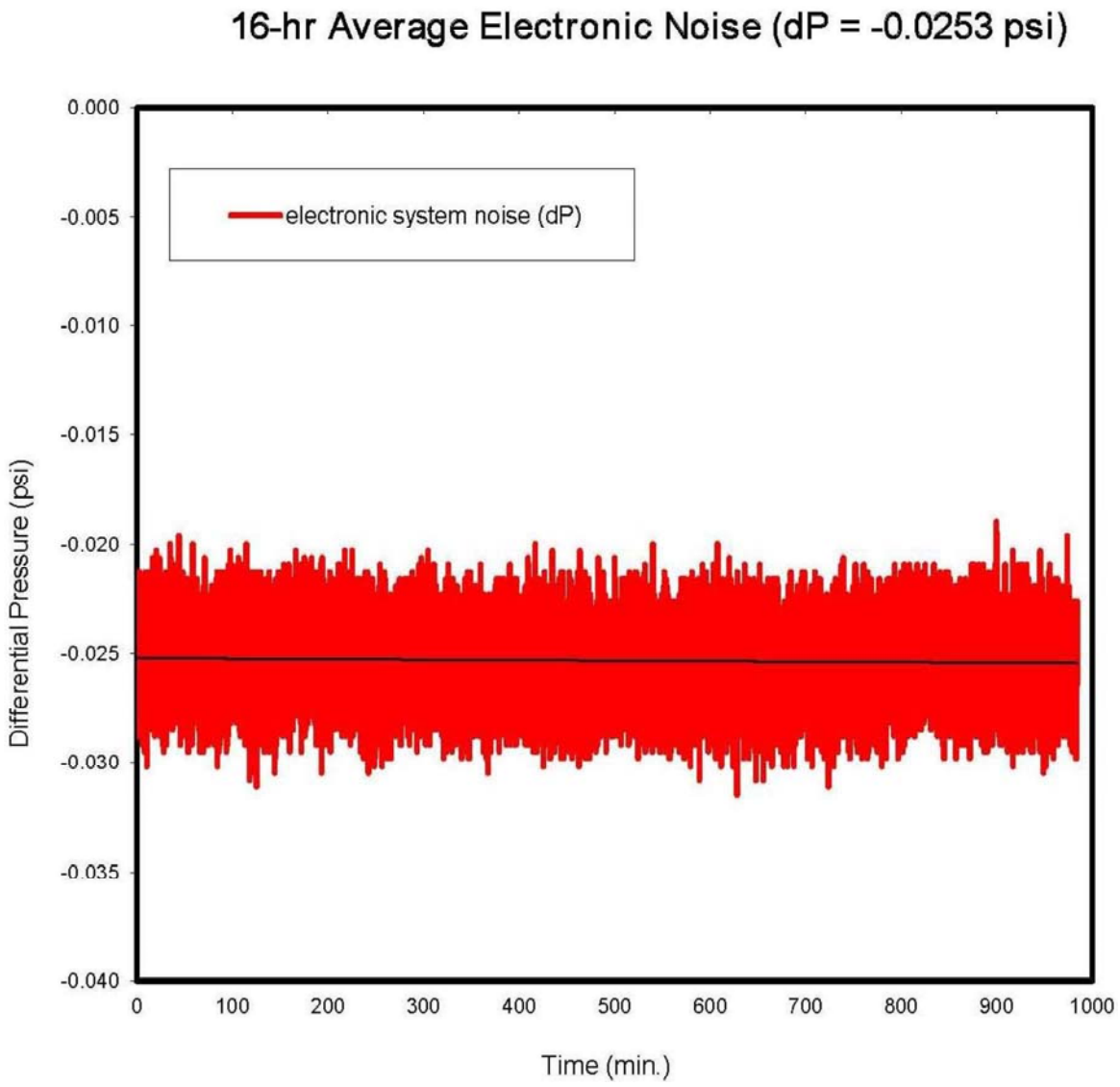
Mass Flow Meter Omega Engineering, Inc., Stamford, CT
Model No. FMA-875A-V-NIST
Serial No. 4270050003001
0-200 lpm

Pressure Transducer Omegadyne Inc., Sunbury, OH
Model No. PX409-005 DWUV
Serial No. 406707
Pressure Range: 0-5 psi
Input 0-100mVdc

Power Supply	Omega Engineering, Inc., Stamford, CT Model No. PSS-10 +10V @ 400 mA Input 115 VAC 50/60 Hz
Multifunction DAQ	National Instruments, Model No. NI USB-6210 16 Input, 16-bit, 250 kS/s, Multifunction I/O

Dedicated CPU HP Compaq Pro-6300 Microtower
Serial No. MXL3090LN6
OS Windows 7 Pro

Additionally, during initial system start-up testing and verification, it was discovered that the data acquisition system (DAQ) was so sensitive that “signal noise” resulted in data fluctuations for reported differential pressure even when the system was at equilibrium (i.e., both high side and low side pressure chambers were at atmospheric conditions). After collecting data for 16 hours overnight, the average fluctuation was -0.025 psi.



Since the initial pressure stage prescribed by the AREVA NP Test Plan is 1.0 inches of water (0.0361 psi) and the average data fluctuation due to “signal noise” was almost 70% of this value (-0.025 psi), it was decided that an inclined-plane manometer would be used to ensure that the Stage 1 differential pressure was applied at precisely 1.0 inches of water.

For subsequent pressure stages (i.e., Stages 2-5), the Test Plan required pressure was applied and maintained using the DAQ reported differential pressure without consideration for any "signal noise". Since the "signal noise" always reported some level of negative pressure at the beginning of the test, this method assured that the tests were conducted with additional margin, as the actual differential pressure that the test specimen was subjected to was equal to the DAQ reported differential pressure plus the additional pressure needed to overcome the negative "signal noise" reported at the beginning of the test when both pressure chambers were at atmospheric conditions.

4.2. TEST STANDARD

AREVA NP Inc. Document No. 51-9213537-000

Pressure rated penetration seals at the MOX facility are required to remain "sufficiently leak-tight" at various pressure levels in order to support the functional goals of the various pressure rating requirements (i.e., confinement, suppression system clean agent concentration, fire induced pressure loads or HVAC pressure boundary loads). The term "sufficiently leak-tight" indicates that the penetration seal meets the predetermined acceptance criteria for the pressure level(s) being tested.

The acceptance criteria that constitutes "sufficiently leak-tight" varies based on the pressure requirement and the operating mode of the plant. For most pressure conditions and operating modes, "sufficiently leak-tight" means that the penetration seal assembly must remain in place but is allowed to leak (i.e., the penetration seal cannot become dislodged from the opening or otherwise catastrophically fail such that a substantial leakage path is created).

Per MOX Services Calculation "Confinement Boundary Air Leakage Criteria" [Test Plan Reference 12.3], penetration seals that function as confinement zone 3b boundary components must maintain a leakage rate less than 0.01 cfm/sq. ft. of penetration area when tested at a pressure that bounds C3b to non-C3b zone pressures during normal operating conditions.

The table below identifies the differential pressure levels (stages) for conducting pressures tests, as well as, the acceptance criteria in order to be considered "sufficiently leak-tight".

Differential Pressure Test Levels

Test Stage	Differential Pressure (inch w.g.)	Required Hold Time (minutes)	Acceptance Criteria	Basis for the Selected Differential Pressure
1	1.0	30	Leakage $\leq$ 0.01 cfm/sq. ft. of penetration area	Testing at this differential pressure bounds the 0.51 inches w.g. pressure for C3b to C2 areas during normal operation [Test Plan Reference 12.10].
2	5.0	30	Seal Remains In Place	Testing at this differential pressure bounds the 4.0 inches w.g. pressure anticipated as a result of clean agent suppression system discharge [Test Plan Reference 12.8].

Test Stage	Differential Pressure (inch w.g.)	Required Hold Time (minutes)	Acceptance Criteria	Basis for the Selected Differential Pressure
3	10.0	30	Seal Remains In Place	Testing at this differential pressure bounds the 7.0 inches w.g. pressure used as the screening pressure cutoff for fire induced pressures [Test Plan References 12.8 and 12.9] and some of the HVAC pressure boundaries [Test Plan Reference 12.10].
4	20.0	30	Seal Remains In Place	Testing at this differential pressure bounds all of the calculated fire induced pressures [Test Plan Reference 12.9] and many of the HVAC pressure boundaries [Test Plan Reference 12.10].
5	40.0	30	Seal Remains In Place	Testing at this differential pressure bounds all of the HVAC pressure boundaries [Test Plan Reference 12.10].

The test assembly shall be attached to the pressure test apparatus and subjected to the pressures identified in Table 9-1 as described below.

The test assembly shall be attached to the pressure test apparatus and subjected to air pressure tests at the select pressure levels identified in Table 9-1, beginning with the Stage 1 pressure of 1.0 inches w.g. Once this pressure has been obtained, the pressure shall be maintained for the hold time specified in Table 9-1. The maximum leakage rate observed during the hold time shall be recorded. If the leakage rate exceeds the acceptance criteria during Stage 1 testing, the time of failure shall be noted and the test shall be continued, since leakage alone does not constitute failure after Stage 1.

Once the designated hold time has been achieved, the pressure shall be increased to the next pressure level identified in Table 9-1 (Stage 2, then Stage 3, then Stage 4 and finally Stage 5) and held for the designated hold time. The maximum leakage rate observed during each hold time shall be recorded.

Following completion of Stage 5 pressure testing, the test may continue at the discretion of the AREVA test engineer and the testing laboratory manager in charge. Subsequent pressures, hold times and maximum leakage rates shall be recorded as directed by the AREVA test engineer.

If at any pressure level (or test stage) the penetration seal becomes dislodged from the opening or otherwise catastrophically fails, the pressure test shall be terminated and the time to failure and pressure at which the failure occurred shall be recorded.

5 Testing and Evaluation Results

5.1. RESULTS AND OBSERVATIONS

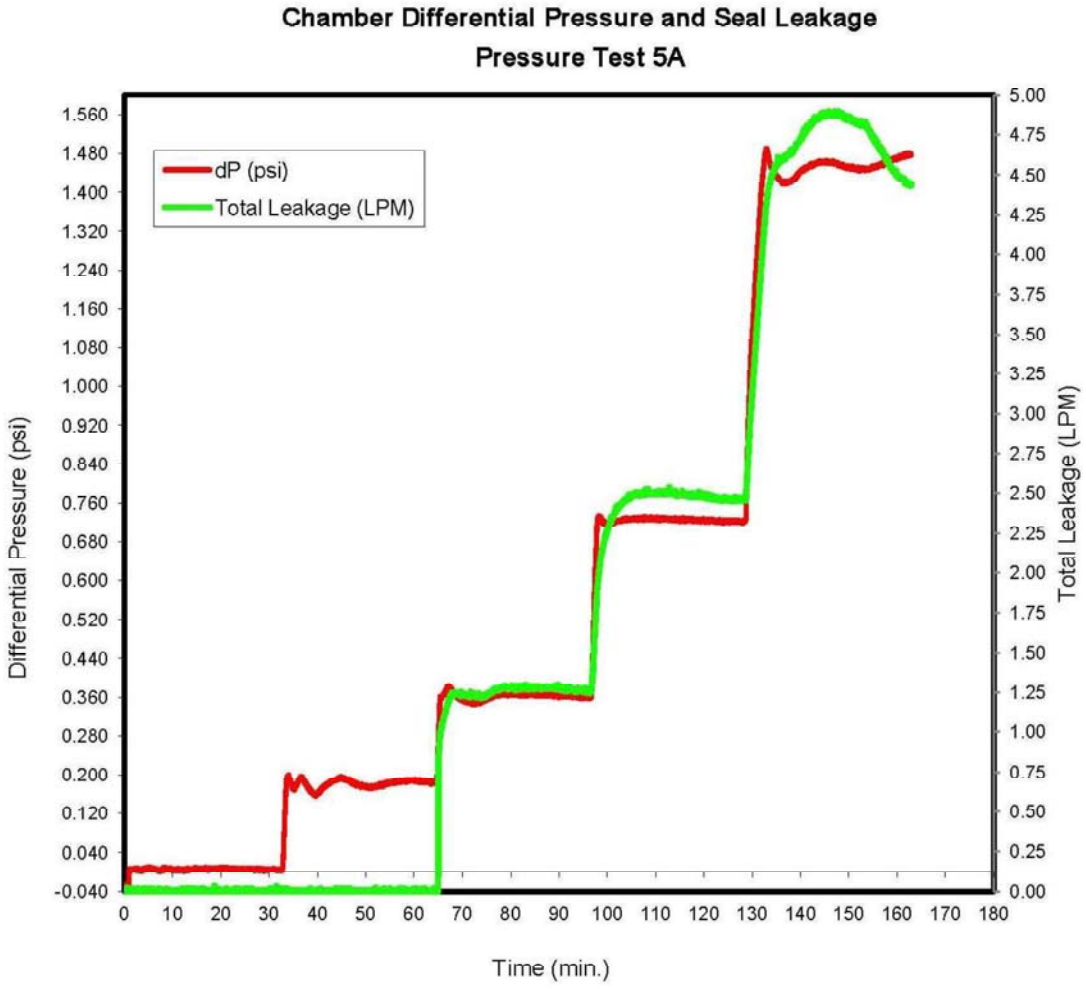
The test deck was mounted horizontally between two 72" diameter hemispherical pressure vessels. The deck was fixed to the pressure chamber using (16) 5/16" x 2-1/2" long sleeve anchors (Red Head) through 16 pre-drilled holes. Silicone II caulk (GE) was used to create a pressure tight seal between the pressure chamber and the test deck.

The test was initiated at 8:38 a.m. on November 21, 2013. Scott Groesbeck, representing AREVA NP Inc., was present to witness the test. The ambient temperature at the start of the test was 73°F, with a relative humidity of 94%.

The test procedure followed that presented in Section 9.0 of the Test Plan. The graph and table on the following page(s) provides a summary of results and observations for the five pressure stages, any observed leakage, and the maximum leakage rate. Additionally, the raw data for Pressure Test 5A is contained in Appendix B of this test report. The official start and stop times for each pressure stage were timed using a traceable, calibrated stopwatch. The approximate start and stop times for each pressure stage are recorded below. These start and stop times can be correlated to the data in Appendix B using the heading "Time (min)".

Pressure Test 5A Start and Stop Times

Stage	Start Time	Stop Time
1	1.1	31.1
2	33.6	63.6
3	65.8	95.8
4	98	128
5	133	163


Chamber Differential Pressure and Seal Leakage
Pressure Test 5A
dP (psi)
Total Leakage (LPM)
Differential Pressure (psi)
Total Leakage (LPM)
Time (min.)
1.560
1.480
1.400
1.320
1.240
1.160
1.080
1.000
0.920
0.840
0.760
0.680
0.600
0.520
0.440
0.360
0.280
0.200
0.120
0.040
-0.040
5.00
4.75
4.50
4.25
4.00
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180

Test Results and Observations

Test Stage	Differential Pressure inch w.g. (psi)	Required Hold Time (minutes)	Acceptance Criteria	PASS/ FAIL	Max Leakage (Total LPM)	Max Leakage (Total cfm)
1	1.0 (0.036)	30	Leakage ≤ 0.01 cfm/sq. ft. of penetration area	PASS[1]	0.00	0.00
2	5.0 (0.181)	30	Seal Remains In Place	PASS	0.00	0.00
3	10.0 (0.361)	30	Seal Remains In Place	PASS	1.30	0.046
4	20.0 (0.722)	30	Seal Remains In Place	PASS	2.54	0.090
5	40.0 (1.44)	30	Seal Remains In Place	PASS	4.90	0.173

[1] Based on the table above and the allowable leakage for Pressure Test 5A per the Test Plan, the test specimen was allowed to have up to 0.113 cfm of leakage at Stage 1. There was zero actual leakage.

5.2. POST TEST EXAMINATION

Because the test assembly was intended to undergo seismic pressure testing the same day (Seismic Test 2A), the pressure chamber was not removed and no post test examination was performed.

Refer to the test report for MOX Seismic Pressure Test 2A for additional information (Intertek Test Report 101276459SAT-011 or AREVA NP, Inc. document number 58-9224228-000).

6 Conclusion

Intertek Testing Services NA (Intertek) has conducted testing for AREVA NP Inc., on the pressure resistance capabilities of Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) through a 12" thick concrete deck for compliance with the applicable requirements of and in accordance with AREVA NP Inc. Document No. 51-9213537-000, *Detailed Test Plan for Conducting MOX Pressure Test 5A*. This evaluation took place on November 21, 2013.

The seal in Pressure Test 5A met the acceptance criteria as defined in the test plan.

This project was undertaken to evaluate the pressure resistance capability of an 8" thick silicone elastomer seal when installed around various cables at air pressure increments above atmospheric pressure.

The conclusions of this test report may not be used as part of the requirements for Intertek product certification. Authority to Mark must be issued for a product to become certified.

INTERTEK TESTING SERVICES NA

Reported by [redacted]
Mike Dey
Staff Engineer

Reviewed by: [redacted]
P istance

Reviewed by: [redacted]

Michael A. Brown
Quality Supervisor

APPENDIX A
Assembly Drawings

AREVA

Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

APPENDIX A: TEST DECK/TEST SLAB DRAWINGS

The test deck (test slab) for Pressure Test 5A is depicted on page A-2.

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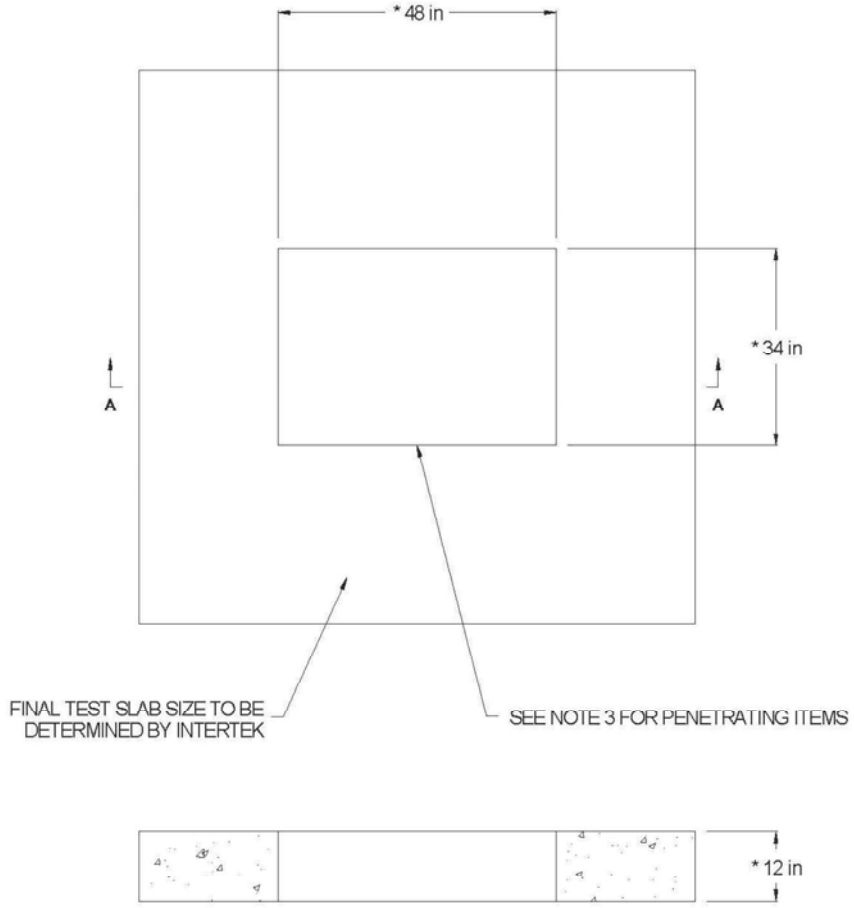
Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

Pressure Test P5A Test Deck



SECTION A-A

NOTES:

1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC (OR APPROVED DESIGNEE).
3. SEE APPENDIX B FOR PENETRATING ITEMS AND PENETRATION SEAL DESIGN.

Page A-2

APPENDIX B: TEST PENETRATION DRAWINGS

This appendix contains drawings for Test Penetrants C1 thru C9. These drawings identify penetrating cable locations within the test penetration, as well as, the penetration seal design. Table B1 of this appendix provides the cable types to be used in each location.

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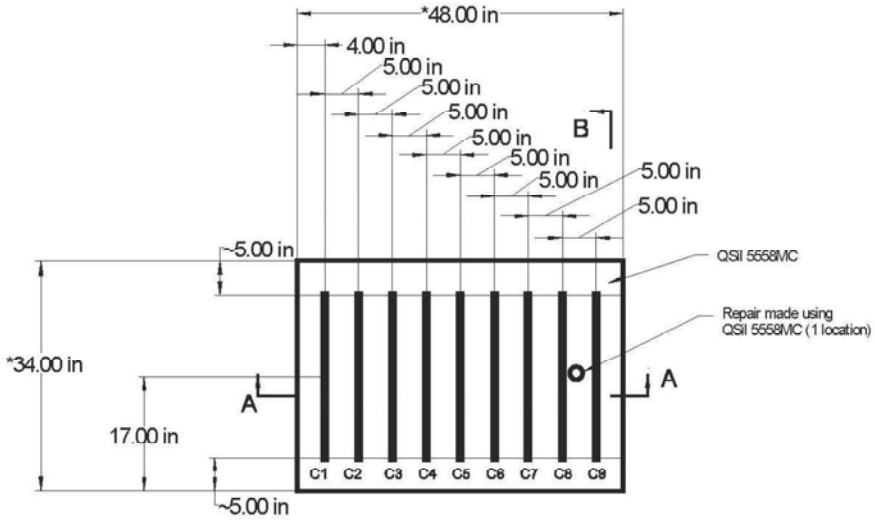
Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

Pressure Test P5A



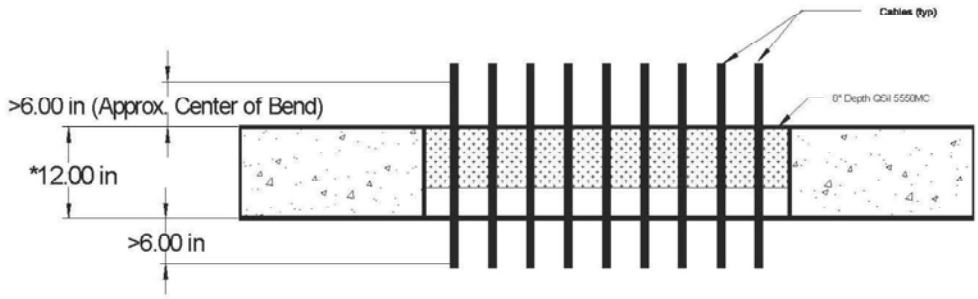
Cable descriptions are provided in Table B-1.

Section Views are on Pages B-3, and B-4.

NOTES:

1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.
3. REPAIR HOLE IS DEPICTED AS 2" DIAMETER DRILL/CORE BORE, HOWEVER, ACTUAL SIZE AND METHOD OF HOLE CREATION WILL BE DETERMINED AT THE TIME OF INSTALLATION AND NOTED IN THE INSTALLATION RECORDS.

Pressure Test P5A



Section A-A

NOTES:

1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.

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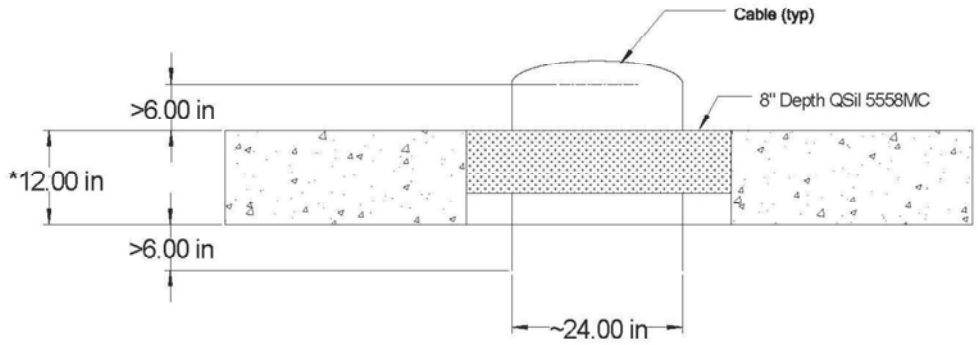
Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

Pressure Test P5A



Section B-B

NOTES:

1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC

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Table B-1: Cable Descriptions

Cable Identification	Mark No.	Cable Description
C1	wfb-7	1/C 8 AWG 7/S TC 45 MILS XLPE, 15 MILS CSPE FIREWALL III® 600V
C2	wfa-1	2/C 10 AWG 7/S TC 30 MILS XLPE, 45 MILS CSPE JKT FIREWALL® III 600V
C3	wfa-26	3/C 10 AWG 7/S TC, 20 MILS XLPE, 1-#10 AWG CU GW, O/A TINNED COPPER BRAID SHIELD, 35 MIL ZH-XLPO JKT X-LINK® 600V
C4	whe-2	5/C 22 AWG 7/.010 SILVER PLATED ALLOY 20 MILS XLPE 15 MILS XLPE JACKET 600V
C5	wfe-6	3/C 2 AWG 7/S TC 35 MILS XLPE, 1-#6 AWG CU GW, 65 MIL ZH-XLPO JKT X-LINK® 600V
C6	whe-8	COAX CABLE WITH RG TYPE 59/U, or equal / 22 AWG FOR 62 OHMS (RSS-6-104/LE) Except Not UL Listed & Meets ICEA S-19-81 Paragraph 6.19.6 (IEEE-383 Paragraph 2.56)
C7	wbh-1	Coax Cable 16 AWG for 75 ohms (RSS-6-110A/LE) Excepts meets ICEA S-19-81 paragraph 6.16.6 (IEEE-383 Paragraph 2.56)
C8	wfa-13	37/C 10 AWG 7/S TC 30 MILS XLPE, 80 MIL CSPE JKT FIREWALL® III 600V
C9	wbe-1	1/C 6 AWG 7/S TC Class B Strand 60 MILS XLPE FIREWALL® SIS 600V Type SIS/XHHW-2 (UL) Listed Colored Grey

APPENDIX B
Test Data

Areva NP Inc. Project No. G101276459SAT-010 November 21, 2013

Time (min)	Ch 1 dP (psi)	Ch 2 High Flow (LPM)	Ch 3 Low Flow (LPM)	Total Flow (LPM)
0	-0.0285	0.0069	0	0.0069
0.0333	-0.0275	0.0201	0	0.0201
0.0667	-0.0265	0.0069	0	0.0069
0.1	-0.0262	0.0069	0	0.0069
0.1333	-0.0249	0	0	0
0.1667	-0.0255	0.0069	0.0022	0.0091
0.2	-0.0279	0	0	0
0.2333	-0.0255	0.0069	0.0009	0.0078
0.2667	-0.0275	0.0069	0	0.0069
0.3	-0.0265	0.0069	0	0.0069
0.3333	-0.0269	0	0	0
0.3667	-0.0288	0	0	0
0.4	-0.0288	0	0	0
0.4333	-0.0259	0.0069	0	0.0069
0.4667	-0.0269	0	0	0
0.5	-0.0279	0	0.0009	0.0009
0.5333	-0.0269	0.0201	0.0022	0.0223
0.5667	-0.0285	0	0.0009	0.0009
0.6	-0.0259	0	0	0
0.6333	-0.0255	0	0	0
0.6667	-0.0262	0	0.0009	0.0009
0.7	-0.0262	0.0069	0	0.0069
0.7333	-0.0239	0	0	0
0.7667	-0.0255	0	0	0
0.8	-0.0272	0.0069	0	0.0069
0.8333	-0.0298	0.0069	0.0022	0.0091
0.8667	-0.0285	0	0	0
0.9	-0.019	0	0	0
0.9333	-0.0153	0	0	0
0.9667	-0.0012	0.0069	0	0.0069
1	0.0074	0	0	0
1.0333	0.0057	0	0	0
1.0667	0.0037	0.0069	0.0009	0.0078
1.1	0.0074	0	0	0
1.1333	0.0044	0	0.0009	0.0009
1.1667	0.0031	0	0.0009	0.0009
1.2	0.006	0	0.0022	0.0022
1.2333	0.006	0.0201	0	0.0201
1.2667	0.0054	0.0069	0.0009	0.0078
1.3	0.0077	0	0	0
1.3333	0.0014	0.0069	0	0.0069
1.3667	0.0011	0.0069	0.0009	0.0078
1.4	0.0021	0	0.0009	0.0009

1.4333	0.0054	0.0069	0.0009	0.0078
1.4667	0.0028	0	0	0
1.5	0.0044	0	0.0009	0.0009
1.5333	0.0021	0.0201	0	0.0201
1.5667	0.0044	0	0.0009	0.0009
1.6	0.0054	0	0	0
1.6333	0.0047	0	0.0009	0.0009
1.6667	0.0041	0.0069	0	0.0069
1.7	0.0044	0	0	0
1.7333	0.006	0	0	0
1.7667	0.0037	0.0069	0.0009	0.0078
1.8	0.0057	0	0	0
1.8333	0.0047	0	0.0009	0.0009
1.8667	0.0034	0	0	0
1.9	0.0057	0	0	0
1.9333	0.0051	0	0.0009	0.0009
1.9667	0.0047	0.0069	0	0.0069
2	0.006	0.0069	0	0.0069
2.0333	0.0051	0	0.0009	0.0009
2.0667	0.0064	0.0069	0.0009	0.0078
2.1	0.0044	0	0	0
2.1333	0.008	0	0	0
2.1667	0.0074	0.0069	0	0.0069
2.2	0.0041	0	0.0009	0.0009
2.2333	0.0051	0	0	0
2.2667	0.007	0.0069	0.0009	0.0078
2.3	0.0077	0	0.0009	0.0009
2.3333	0.0051	0	0.0022	0.0022
2.3667	0.0074	0	0	0
2.4	0.008	0.0069	0.0009	0.0078
2.4333	0.0064	0.0069	0.0022	0.0091
2.4667	0.0037	0.0069	0.0009	0.0078
2.5	0.007	0	0.0009	0.0009
2.5333	0.0021	0	0	0
2.5667	0.0057	0	0.0009	0.0009
2.6	0.0044	0	0	0
2.6333	0.007	0	0	0
2.6667	0.006	0.0069	0.0022	0.0091
2.7	0.0034	0	0.0009	0.0009
2.7333	0.0047	0	0.0022	0.0022
2.7667	0.0037	0	0	0
2.8	0.0084	0.0201	0	0.0201
2.8333	0.0037	0	0	0
2.8667	0.0064	0.0069	0	0.0069
2.9	0.0057	0	0.0009	0.0009
2.9333	0.0047	0	0	0
2.9667	0.0074	0	0	0

3	0.0077	0.0069	0.0022	0.0091
3.0333	0.0054	0	0	0
3.0667	0.0028	0	0	0
3.1	0.0051	0	0	0
3.1333	0.0057	0	0	0
3.1667	0.0024	0	0	0
3.2	0.0034	0	0	0
3.2333	0.0064	0	0.0009	0.0009
3.2667	0.0057	0	0	0
3.3	0.0021	0.0069	0	0.0069
3.3333	0.0047	0	0	0
3.3667	0.0067	0	0	0
3.4	0.0044	0	0	0
3.4333	0.0044	0	0.0009	0.0009
3.4667	0.0008	0	0	0
3.5	0.0021	0	0	0
3.5333	0.0024	0	0	0
3.5667	0.0028	0	0.0009	0.0009
3.6	0.0014	0	0	0
3.6333	0.0014	0.0069	0	0.0069
3.6667	0.0047	0.0069	0	0.0069
3.7	0.0021	0.0069	0.0009	0.0078
3.7333	0.0047	0	0.0009	0.0009
3.7667	0.0047	0.0069	0	0.0069
3.8	0.0051	0	0	0
3.8333	0.0018	0	0	0
3.8667	0.0034	0	0.0009	0.0009
3.9	0.0024	0	0	0
3.9333	0.0034	0	0	0
3.9667	0.008	0	0	0
4	0.0051	0.0069	0.0009	0.0078
4.0333	0.006	0	0	0
4.0667	0.0067	0.0069	0	0.0069
4.1	0.0074	0.0201	0	0.0201
4.1333	0.006	0.0069	0	0.0069
4.1667	0.0077	0	0.0009	0.0009
4.2	0.0028	0	0	0
4.2333	0.0067	0	0	0
4.2667	0.007	0	0	0
4.3	0.0064	0.0201	0.0009	0.021
4.3333	0.0047	0	0.0009	0.0009
4.3667	0.0084	0	0	0
4.4	0.008	0	0.0009	0.0009
4.4333	0.0074	0	0	0
4.4667	0.008	0	0	0
4.5	0.0041	0	0	0
4.5333	0.0077	0	0	0

4.5667	0.0031	0.0069	0	0.0069
4.6	0.0097	0	0	0
4.6333	0.0057	0.0069	0.0022	0.0091
4.6667	0.0047	0.0069	0	0.0069
4.7	0.0047	0	0	0
4.7333	0.006	0	0	0
4.7667	0.0103	0	0	0
4.8	0.007	0	0	0
4.8333	0.0107	0	0	0
4.8667	0.009	0.0069	0	0.0069
4.9	0.0074	0.0069	0	0.0069
4.9333	0.0057	0.0069	0	0.0069
4.9667	0.008	0	0	0
5	0.007	0	0	0
5.0333	0.0093	0	0	0
5.0667	0.0077	0.0069	0	0.0069
5.1	0.0087	0.0069	0	0.0069
5.1333	0.0074	0	0	0
5.1667	0.011	0	0.0009	0.0009
5.2	0.0087	0.0069	0	0.0069
5.2333	0.0064	0.0069	0.0009	0.0078
5.2667	0.008	0	0	0
5.3	0.008	0	0	0
5.3333	0.0084	0.0069	0	0.0069
5.3667	0.0067	0	0.0009	0.0009
5.4	0.0051	0.0069	0	0.0069
5.4333	0.0067	0.0201	0.0009	0.021
5.4667	0.0037	0	0.0009	0.0009
5.5	0.0064	0.0069	0	0.0069
5.5333	0.008	0.0069	0	0.0069
5.5667	0.008	0	0.0009	0.0009
5.6	0.008	0	0.0009	0.0009
5.6333	0.0047	0	0	0
5.6667	0.0057	0	0.0009	0.0009
5.7	0.008	0	0	0
5.7333	0.006	0.0069	0	0.0069
5.7667	0.0093	0.0069	0	0.0069
5.8	0.0041	0	0	0
5.8333	0.0077	0.0201	0.0009	0.021
5.8667	0.0074	0	0	0
5.9	0.0084	0	0.0009	0.0009
5.9333	0.0047	0.0069	0	0.0069
5.9667	0.0057	0	0	0
6	0.0074	0	0.0009	0.0009
6.0333	0.0057	0.0069	0	0.0069
6.0667	0.0057	0	0	0
6.1	0.0041	0.0069	0.0009	0.0078

6.1333	0.006	0.0069	0	0.0069
6.1667	0.0074	0	0.0009	0.0009
6.2	0.0054	0	0.0009	0.0009
6.2333	0.0054	0.0069	0	0.0069
6.2667	0.0084	0	0	0
6.3	0.0064	0	0	0
6.3333	0.0041	0	0	0
6.3667	0.0044	0.0069	0.0009	0.0078
6.4	0.0037	0.0069	0.0009	0.0078
6.4333	0.0064	0	0	0
6.4667	0.0028	0.0069	0.0009	0.0078
6.5	0.007	0.0069	0	0.0069
6.5333	0.0047	0	0	0
6.5667	0.0047	0	0	0
6.6	0.0037	0.0069	0.0009	0.0078
6.6333	0.0051	0	0	0
6.6667	0.0031	0	0	0
6.7	0.0037	0.0069	0	0.0069
6.7333	0.0037	0	0	0
6.7667	0.0044	0.0069	0	0.0069
6.8	0.0064	0.0069	0	0.0069
6.8333	0.0028	0.0069	0	0.0069
6.8667	0.0037	0.0069	0.0009	0.0078
6.9	0.0034	0	0	0
6.9333	0.0047	0	0	0
6.9667	0.0031	0	0	0
7	0.0047	0	0.0009	0.0009
7.0333	0.0011	0.0069	0.0009	0.0078
7.0667	0.0014	0.0069	0.0009	0.0078
7.1	0.0021	0	0	0
7.1333	0.0031	0	0	0
7.1667	0.0037	0	0.0022	0.0022
7.2	0.0021	0.0201	0.0009	0.021
7.2333	0.0024	0	0	0
7.2667	0.0008	0	0	0
7.3	0.0011	0	0	0
7.3333	-0.0002	0.0069	0.0009	0.0078
7.3667	0.0034	0	0	0
7.4	0.0028	0.0069	0.0009	0.0078
7.4333	0.0051	0.0069	0.0009	0.0078
7.4667	0.0044	0.0069	0.0009	0.0078
7.5	0.0034	0.0069	0	0.0069
7.5333	0.0005	0	0	0
7.5667	0.006	0	0	0
7.6	0.0037	0	0.0009	0.0009
7.6333	0.0021	0.0069	0.0009	0.0078
7.6667	0.0047	0	0	0

7.7	0.0037	0	0	0
7.7333	0.0064	0	0	0
7.7667	0.0074	0	0	0
7.8	0.0034	0.0069	0	0.0069
7.8333	0.0067	0	0	0
7.8667	0.007	0	0.0009	0.0009
7.9	0.0074	0.0069	0	0.0069
7.9333	0.006	0.0069	0	0.0069
7.9667	0.009	0	0	0
8	0.0067	0	0	0
8.0333	0.01	0	0	0
8.0667	0.008	0.0069	0	0.0069
8.1	0.0051	0	0	0
8.1333	0.0024	0.0069	0.0009	0.0078
8.1667	0.0103	0.0069	0	0.0069
8.2	0.0051	0	0	0
8.2333	0.008	0	0	0
8.2667	0.0067	0	0.0009	0.0009
8.3	0.0074	0.0069	0	0.0069
8.3333	0.0093	0	0	0
8.3667	0.0057	0	0	0
8.4	0.0067	0.0069	0	0.0069
8.4333	0.0087	0	0	0
8.4667	0.0097	0	0	0
8.5	0.0107	0	0.0009	0.0009
8.5333	0.0097	0	0	0
8.5667	0.0047	0	0	0
8.6	0.0044	0	0	0
8.6333	0.0047	0	0	0
8.6667	0.0054	0	0.0009	0.0009
8.7	0.0047	0.0201	0	0.0201
8.7333	0.0054	0	0	0
8.7667	0.0067	0	0.0009	0.0009
8.8	0.0074	0	0	0
8.8333	0.0047	0	0.0022	0.0022
8.8667	0.007	0	0	0
8.9	0.0087	0.0069	0	0.0069
8.9333	0.0077	0	0.0009	0.0009
8.9667	0.006	0	0	0
9	0.0041	0.0069	0	0.0069
9.0333	0.0074	0	0	0
9.0667	0.0077	0	0	0
9.1	0.009	0	0.0009	0.0009
9.1333	0.0064	0	0	0
9.1667	0.0067	0.0069	0	0.0069
9.2	0.0047	0	0	0
9.2333	0.0067	0	0	0

9.2667	0.008	0	0	0
9.3	0.008	0.0069	0.0009	0.0078
9.3333	0.0047	0.0069	0	0.0069
9.3667	0.0044	0	0	0
9.4	0.0041	0	0.0009	0.0009
9.4333	0.0044	0	0	0
9.4667	0.0057	0	0	0
9.5	0.0074	0	0	0
9.5333	0.0054	0	0	0
9.5667	0.0044	0	0	0
9.6	0.0047	0.0069	0	0.0069
9.6333	0.0097	0.0069	0	0.0069
9.6667	0.006	0	0	0
9.7	0.006	0	0	0
9.7333	0.0077	0	0	0
9.7667	0.0047	0.0069	0.0009	0.0078
9.8	0.0028	0.0069	0	0.0069
9.8333	0.007	0	0	0
9.8667	0.0018	0.0069	0	0.0069
9.9	0.0064	0.0069	0.0009	0.0078
9.9333	0.0051	0	0.0009	0.0009
9.9667	0.0057	0	0	0
10	0.0041	0	0.0009	0.0009
10.0333	0.0074	0.0069	0	0.0069
10.0667	0.0041	0	0	0
10.1	0.006	0	0	0
10.1333	0.0077	0	0.0009	0.0009
10.1667	0.0054	0	0	0
10.2	0.0051	0	0	0
10.2333	0.0064	0	0.0009	0.0009
10.2667	0.0074	0	0.0009	0.0009
10.3	0.0024	0.0069	0.0009	0.0078
10.3333	0.0054	0.0069	0	0.0069
10.3667	0.007	0	0	0
10.4	0.0054	0	0	0
10.4333	0.0037	0	0	0
10.4667	0.006	0.0069	0	0.0069
10.5	0.0011	0.0069	0.0009	0.0078
10.5333	0.0037	0.0069	0.0009	0.0078
10.5667	0.006	0.0069	0	0.0069
10.6	0.0057	0	0	0
10.6333	0.0021	0.0069	0.0009	0.0078
10.6667	0.0041	0	0.0009	0.0009
10.7	0.0031	0	0.0009	0.0009
10.7333	0.0037	0	0.0009	0.0009
10.7667	0.0057	0	0	0
10.8	0.0024	0	0	0

10.8333	0.0024	0	0	0
10.8667	0.0018	0	0	0
10.9	0.0024	0	0	0
10.9333	0.007	0	0	0
10.9667	0.0014	0	0.0009	0.0009
11	0.0064	0	0.0009	0.0009
11.0333	0.0037	0.0069	0	0.0069
11.0667	0.0021	0	0	0
11.1	0.0028	0.0069	0.0022	0.0091
11.1333	0.0018	0	0	0
11.1667	0.0021	0	0	0
11.2	0.0041	0	0	0
11.2333	0.008	0.0069	0.0022	0.0091
11.2667	0.006	0.0069	0.0009	0.0078
11.3	0.0054	0	0	0
11.3333	0.0057	0	0	0
11.3667	0.0044	0	0	0
11.4	0.0044	0.0069	0.0009	0.0078
11.4333	0.0054	0.0069	0	0.0069
11.4667	0.0067	0	0	0
11.5	0.0028	0	0	0
11.5333	0.0031	0.0069	0	0.0069
11.5667	0.0047	0.0069	0	0.0069
11.6	0.0041	0	0	0
11.6333	0.0064	0	0	0
11.6667	0.0064	0.0069	0.0009	0.0078
11.7	0.0077	0	0	0
11.7333	0.007	0	0.0009	0.0009
11.7667	0.0054	0	0.0009	0.0009
11.8	0.0051	0.0069	0	0.0069
11.8333	0.0044	0.0069	0	0.0069
11.8667	0.0024	0.0069	0	0.0069
11.9	0.0051	0.0201	0	0.0201
11.9333	0.0031	0.0069	0	0.0069
11.9667	0.0031	0	0.0009	0.0009
12	0.0051	0	0	0
12.0333	0.0064	0	0	0
12.0667	0.0041	0	0.0009	0.0009
12.1	0.0054	0	0.0009	0.0009
12.1333	0.0037	0	0	0
12.1667	0.007	0	0	0
12.2	0.0031	0	0	0
12.2333	0.0024	0	0.0009	0.0009
12.2667	0.0037	0.0201	0	0.0201
12.3	0.0041	0	0	0
12.3333	0.0057	0	0	0
12.3667	0.0064	0.0069	0	0.0069

12.4	0.0008	0	0.0022	0.0022
12.4333	0.0064	0.0069	0.0009	0.0078
12.4667	0.0041	0.0069	0.0009	0.0078
12.5	0.0054	0	0	0
12.5333	0.0077	0	0	0
12.5667	0.006	0	0	0
12.6	0.0074	0.0069	0	0.0069
12.6333	0.0067	0	0.0009	0.0009
12.6667	0.0037	0.0069	0	0.0069
12.7	0.0047	0	0.0009	0.0009
12.7333	0.0041	0	0	0
12.7667	0.0054	0	0	0
12.8	0.0028	0	0	0
12.8333	0.0047	0	0	0
12.8667	0.0044	0	0	0
12.9	0.0041	0	0	0
12.9333	0.008	0	0.0009	0.0009
12.9667	0.0064	0	0	0
13	0.0064	0	0	0
13.0333	0.0064	0.0201	0	0.0201
13.0667	0.0034	0	0.0009	0.0009
13.1	0.009	0.0069	0	0.0069
13.1333	0.0047	0	0.0022	0.0022
13.1667	0.0011	0.0069	0	0.0069
13.2	0.0051	0.0069	0.0009	0.0078
13.2333	0.007	0	0.0009	0.0009
13.2667	0.0051	0.0201	0	0.0201
13.3	0.0047	0	0.0009	0.0009
13.3333	0.0051	0	0	0
13.3667	0.0047	0.0069	0	0.0069
13.4	0.0051	0	0	0
13.4333	0.0037	0.0069	0	0.0069
13.4667	0.0051	0.0069	0	0.0069
13.5	0.0044	0	0	0
13.5333	0.0057	0.0201	0	0.0201
13.5667	0.006	0	0.0009	0.0009
13.6	0.0067	0	0	0
13.6333	0.0051	0.0201	0	0.0201
13.6667	0.007	0	0	0
13.7	0.0064	0	0	0
13.7333	0.0064	0	0	0
13.7667	0.0028	0.0069	0	0.0069
13.8	0.0057	0.0069	0	0.0069
13.8333	0.0031	0	0.0009	0.0009
13.8667	0.006	0	0.0009	0.0009
13.9	0.0054	0.0069	0	0.0069
13.9333	0.0051	0	0	0

13.9667	0.0034	0	0	0
14	0.006	0.0069	0	0.0069
14.0333	0.0044	0.0069	0	0.0069
14.0667	0.007	0.0069	0	0.0069
14.1	0.006	0.0069	0	0.0069
14.1333	0.0051	0.0069	0	0.0069
14.1667	0.0057	0	0	0
14.2	0.0044	0	0	0
14.2333	0.0047	0	0	0
14.2667	0.0051	0	0	0
14.3	0.0064	0	0	0
14.3333	0.0077	0	0	0
14.3667	0.0057	0	0.0022	0.0022
14.4	0.0037	0	0.0009	0.0009
14.4333	0.009	0.0069	0.0009	0.0078
14.4667	0.0034	0.0069	0.0009	0.0078
14.5	0.0057	0.0201	0	0.0201
14.5333	0.008	0	0	0
14.5667	0.0054	0.0069	0.0009	0.0078
14.6	0.008	0.0069	0	0.0069
14.6333	0.0057	0	0.0009	0.0009
14.6667	0.0077	0	0	0
14.7	0.0044	0	0	0
14.7333	0.01	0	0.0009	0.0009
14.7667	0.0067	0	0	0
14.8	0.0074	0	0.0009	0.0009
14.8333	0.0044	0	0.0009	0.0009
14.8667	0.0064	0	0	0
14.9	0.0093	0	0	0
14.9333	0.0037	0	0	0
14.9667	0.0041	0	0.0009	0.0009
15	0.0031	0.0069	0.0009	0.0078
15.0333	0.0084	0	0.0009	0.0009
15.0667	0.0064	0	0	0
15.1	0.0087	0	0	0
15.1333	0.0028	0	0	0
15.1667	0.0067	0	0	0
15.2	0.0034	0	0	0
15.2333	0.0044	0	0.0009	0.0009
15.2667	0.006	0.0069	0.0009	0.0078
15.3	0.006	0	0.0009	0.0009
15.3333	0.0067	0	0.0009	0.0009
15.3667	0.006	0.0069	0.0009	0.0078
15.4	0.0031	0	0	0
15.4333	0.0077	0	0	0
15.4667	0.0051	0	0.0009	0.0009
15.5	0.0084	0	0	0

15.5333	0.0051	0.0069	0	0.0069
15.5667	0.0067	0.0069	0	0.0069
15.6	0.006	0.0069	0	0.0069
15.6333	0.0037	0	0.0009	0.0009
15.6667	0.0057	0.0069	0	0.0069
15.7	0.0074	0.0069	0	0.0069
15.7333	0.009	0	0	0
15.7667	0.0051	0	0	0
15.8	0.0067	0.0069	0.0009	0.0078
15.8333	0.0047	0.0069	0.0009	0.0078
15.8667	0.0077	0	0	0
15.9	0.0084	0	0	0
15.9333	0.006	0.0201	0	0.0201
15.9667	0.006	0	0	0
16	0.0077	0	0.0009	0.0009
16.0333	0.0074	0.0069	0.0009	0.0078
16.0667	0.0044	0.0069	0.0009	0.0078
16.1	0.0087	0.0069	0.0009	0.0078
16.1333	0.0064	0	0	0
16.1667	0.0077	0	0.0009	0.0009
16.2	0.0074	0	0	0
16.2333	0.009	0.0069	0	0.0069
16.2667	0.007	0.0069	0.0009	0.0078
16.3	0.0051	0	0	0
16.3333	0.0087	0.0069	0	0.0069
16.3667	0.0047	0.0069	0.0009	0.0078
16.4	0.0051	0	0	0
16.4333	0.0047	0	0	0
16.4667	0.006	0	0	0
16.5	0.0064	0	0	0
16.5333	0.008	0.0069	0	0.0069
16.5667	0.009	0.0201	0	0.0201
16.6	0.0044	0	0	0
16.6333	0.0074	0	0	0
16.6667	0.007	0	0	0
16.7	0.006	0	0	0
16.7333	0.0084	0	0.0009	0.0009
16.7667	0.0093	0.0069	0	0.0069
16.8	0.0074	0	0	0
16.8333	0.0047	0	0	0
16.8667	0.01	0	0	0
16.9	0.0084	0	0	0
16.9333	0.0077	0	0.0009	0.0009
16.9667	0.006	0.0069	0	0.0069
17	0.0041	0	0.0009	0.0009
17.0333	0.007	0.0069	0.0009	0.0078
17.0667	0.0054	0	0	0

17.1	0.0054	0	0	0
17.1333	0.0057	0	0	0
17.1667	0.0067	0.0069	0.0009	0.0078
17.2	0.0064	0.0069	0	0.0069
17.2333	0.0051	0	0	0
17.2667	0.0074	0	0	0
17.3	0.0047	0.0069	0	0.0069
17.3333	0.008	0	0.0009	0.0009
17.3667	0.0054	0.0069	0	0.0069
17.4	0.0077	0.0069	0	0.0069
17.4333	0.0057	0	0	0
17.4667	0.0024	0	0	0
17.5	0.0067	0.0069	0	0.0069
17.5333	0.009	0	0	0
17.5667	0.0054	0.0069	0	0.0069
17.6	0.0093	0	0	0
17.6333	0.0047	0.0069	0.0009	0.0078
17.6667	0.0087	0	0.0009	0.0009
17.7	0.0087	0	0.0009	0.0009
17.7333	0.006	0	0	0
17.7667	0.0074	0.0069	0	0.0069
17.8	0.0074	0.0069	0	0.0069
17.8333	0.0051	0	0.0009	0.0009
17.8667	0.0084	0.0069	0	0.0069
17.9	0.0051	0	0.0009	0.0009
17.9333	0.0051	0	0	0
17.9667	0.009	0	0	0
18	0.0077	0	0	0
18.0333	0.007	0	0	0
18.0667	0.0057	0	0.0009	0.0009
18.1	0.0057	0.0069	0.0022	0.0091
18.1333	0.0087	0	0.0009	0.0009
18.1667	0.0051	0	0.0009	0.0009
18.2	0.0054	0	0.0009	0.0009
18.2333	0.007	0.0069	0	0.0069
18.2667	0.0064	0	0	0
18.3	0.006	0.0069	0	0.0069
18.3333	0.0064	0	0	0
18.3667	0.0064	0	0.0009	0.0009
18.4	0.009	0.0069	0	0.0069
18.4333	0.0047	0	0	0
18.4667	0.0064	0.0069	0	0.0069
18.5	0.0097	0	0	0
18.5333	0.0074	0.0069	0	0.0069
18.5667	0.0054	0	0.0009	0.0009
18.6	0.0084	0.0069	0	0.0069
18.6333	0.0084	0	0	0

18.6667	0.0093	0.0332	0.0009	0.0341
18.7	0.0064	0	0	0
18.7333	0.0057	0	0.0009	0.0009
18.7667	0.0074	0.0069	0	0.0069
18.8	0.0064	0	0.0009	0.0009
18.8333	0.0093	0	0	0
18.8667	0.0097	0.0069	0	0.0069
18.9	0.007	0	0	0
18.9333	0.007	0.0069	0.0009	0.0078
18.9667	0.0087	0	0.0009	0.0009
19	0.0087	0	0	0
19.0333	0.0064	0.0069	0.0009	0.0078
19.0667	0.0067	0	0	0
19.1	0.009	0.0069	0	0.0069
19.1333	0.007	0.0069	0	0.0069
19.1667	0.0064	0	0	0
19.2	0.0064	0.0069	0	0.0069
19.2333	0.0077	0	0	0
19.2667	0.0044	0.0201	0.0009	0.021
19.3	0.0077	0	0.0009	0.0009
19.3333	0.0084	0	0	0
19.3667	0.0051	0	0.0009	0.0009
19.4	0.0047	0	0	0
19.4333	0.0074	0	0	0
19.4667	0.0074	0	0	0
19.5	0.0057	0	0	0
19.5333	0.009	0	0	0
19.5667	0.0077	0	0.0009	0.0009
19.6	0.0084	0.0069	0	0.0069
19.6333	0.0077	0	0	0
19.6667	0.0097	0	0.0009	0.0009
19.7	0.0064	0.0069	0	0.0069
19.7333	0.0084	0	0	0
19.7667	0.009	0	0	0
19.8	0.01	0.0069	0	0.0069
19.8333	0.0057	0	0	0
19.8667	0.006	0	0.0009	0.0009
19.9	0.0097	0	0.0009	0.0009
19.9333	0.0074	0	0	0
19.9667	0.007	0	0	0
20	0.0047	0	0	0
20.0333	0.0084	0	0	0
20.0667	0.0054	0	0.0009	0.0009
20.1	0.0074	0	0	0
20.1333	0.006	0	0	0
20.1667	0.007	0	0	0
20.2	0.0087	0	0	0

20.2333	0.0037	0.0069	0	0.0069
20.2667	0.0064	0.0069	0	0.0069
20.3	0.0087	0	0	0
20.3333	0.0074	0	0	0
20.3667	0.0067	0	0	0
20.4	0.0077	0	0.0009	0.0009
20.4333	0.0103	0	0.0009	0.0009
20.4667	0.0051	0	0	0
20.5	0.0087	0	0	0
20.5333	0.0054	0	0	0
20.5667	0.009	0	0.0009	0.0009
20.6	0.0077	0.0069	0	0.0069
20.6333	0.0087	0	0	0
20.6667	0.0064	0	0	0
20.7	0.007	0	0	0
20.7333	0.006	0.0069	0	0.0069
20.7667	0.0087	0	0.0009	0.0009
20.8	0.007	0.0069	0.0009	0.0078
20.8333	0.008	0	0.0009	0.0009
20.8667	0.0084	0	0	0
20.9	0.0047	0	0.0009	0.0009
20.9333	0.0051	0	0	0
20.9667	0.008	0	0.0022	0.0022
21	0.0074	0	0	0
21.0333	0.006	0	0.0009	0.0009
21.0667	0.009	0.0201	0	0.0201
21.1	0.007	0	0.0009	0.0009
21.1333	0.0067	0	0	0
21.1667	0.0074	0	0.0009	0.0009
21.2	0.0054	0	0	0
21.2333	0.0087	0.0069	0	0.0069
21.2667	0.0103	0	0	0
21.3	0.0074	0	0	0
21.3333	0.0074	0	0	0
21.3667	0.0084	0	0	0
21.4	0.0084	0.0069	0.0022	0.0091
21.4333	0.0054	0	0.0009	0.0009
21.4667	0.0077	0	0	0
21.5	0.0074	0.0069	0	0.0069
21.5333	0.0067	0.0069	0	0.0069
21.5667	0.008	0	0	0
21.6	0.0064	0	0	0
21.6333	0.0087	0	0	0
21.6667	0.0077	0	0	0
21.7	0.0074	0	0	0
21.7333	0.0028	0.0069	0	0.0069
21.7667	0.0044	0	0	0

21.8	0.006	0	0	0
21.8333	0.0077	0.0069	0	0.0069
21.8667	0.0057	0	0	0
21.9	0.0057	0	0	0
21.9333	0.0074	0	0.0009	0.0009
21.9667	0.0057	0	0	0
22	0.0057	0	0	0
22.0333	0.0084	0	0	0
22.0667	0.0057	0.0069	0.0009	0.0078
22.1	0.0051	0	0.0009	0.0009
22.1333	0.0047	0	0.0009	0.0009
22.1667	0.0047	0.0069	0	0.0069
22.2	0.0087	0.0069	0	0.0069
22.2333	0.0051	0.0069	0	0.0069
22.2667	0.0064	0	0	0
22.3	0.009	0.0069	0.0009	0.0078
22.3333	0.0054	0.0069	0	0.0069
22.3667	0.006	0.0069	0	0.0069
22.4	0.0041	0	0	0
22.4333	0.007	0	0.0009	0.0009
22.4667	0.0074	0	0.0009	0.0009
22.5	0.008	0	0.0009	0.0009
22.5333	0.0074	0.0069	0.0009	0.0078
22.5667	0.0054	0.0069	0.0009	0.0078
22.6	0.0054	0	0	0
22.6333	0.0064	0	0	0
22.6667	0.0054	0.0069	0.0009	0.0078
22.7	0.0067	0.0069	0	0.0069
22.7333	0.007	0.0069	0	0.0069
22.7667	0.0067	0	0	0
22.8	0.0067	0	0	0
22.8333	0.007	0	0	0
22.8667	0.0034	0	0	0
22.9	0.0077	0.0069	0	0.0069
22.9333	0.0074	0	0.0009	0.0009
22.9667	0.0057	0.0201	0	0.0201
23	0.0051	0	0	0
23.0333	0.0057	0	0	0
23.0667	0.0054	0.0069	0	0.0069
23.1	0.008	0	0	0
23.1333	0.0067	0	0.0009	0.0009
23.1667	0.0067	0	0	0
23.2	0.0037	0	0	0
23.2333	0.0054	0	0	0
23.2667	0.0057	0	0	0
23.3	0.0064	0	0	0
23.3333	0.0067	0	0.0009	0.0009

23.3667	0.0077	0	0	0
23.4	0.006	0	0.0009	0.0009
23.4333	0.0047	0	0.0022	0.0022
23.4667	0.0077	0	0	0
23.5	0.006	0.0069	0.0009	0.0078
23.5333	0.0047	0	0.0009	0.0009
23.5667	0.0051	0.0201	0	0.0201
23.6	0.0054	0	0	0
23.6333	0.0074	0.0069	0.0022	0.0091
23.6667	0.0051	0	0	0
23.7	0.0064	0	0	0
23.7333	0.0067	0	0	0
23.7667	0.0047	0	0	0
23.8	0.007	0	0	0
23.8333	0.006	0	0	0
23.8667	0.0047	0.0069	0	0.0069
23.9	0.006	0	0.0009	0.0009
23.9333	0.0034	0.0069	0.0009	0.0078
23.9667	0.0087	0	0.0009	0.0009
24	0.0037	0	0.0009	0.0009
24.0333	0.006	0	0.0009	0.0009
24.0667	0.0047	0	0	0
24.1	0.0064	0.0069	0.0009	0.0078
24.1333	0.0054	0	0.0009	0.0009
24.1667	0.0057	0	0.0009	0.0009
24.2	0.0074	0	0.0009	0.0009
24.2333	0.0064	0	0	0
24.2667	0.007	0.0069	0	0.0069
24.3	0.0064	0.0069	0	0.0069
24.3333	0.0034	0.0069	0	0.0069
24.3667	0.009	0	0.0009	0.0009
24.4	0.0031	0.0069	0	0.0069
24.4333	0.0064	0	0	0
24.4667	0.007	0	0	0
24.5	0.0047	0	0.0009	0.0009
24.5333	0.0074	0	0	0
24.5667	0.007	0.0069	0.0009	0.0078
24.6	0.009	0	0	0
24.6333	0.0064	0	0.0009	0.0009
24.6667	0.0057	0	0.0009	0.0009
24.7	0.0074	0	0.0009	0.0009
24.7333	0.006	0	0	0
24.7667	0.0047	0	0	0
24.8	0.0057	0	0.0009	0.0009
24.8333	0.007	0.0069	0.0009	0.0078
24.8667	0.0057	0	0.0009	0.0009
24.9	0.0074	0	0.0009	0.0009

24.9333	0.0064	0	0	0
24.9667	0.0041	0.0069	0.0009	0.0078
25	0.0054	0.0069	0	0.0069
25.0333	0.0067	0	0	0
25.0667	0.0034	0.0069	0	0.0069
25.1	0.0044	0.0201	0	0.0201
25.1333	0.0047	0	0.0009	0.0009
25.1667	0.0064	0.0069	0	0.0069
25.2	0.0064	0.0069	0.0009	0.0078
25.2333	0.0031	0	0	0
25.2667	0.006	0	0.0009	0.0009
25.3	0.0054	0	0	0
25.3333	0.0057	0.0069	0	0.0069
25.3667	0.0064	0	0	0
25.4	0.0041	0	0.0009	0.0009
25.4333	0.0047	0	0	0
25.4667	0.0087	0	0	0
25.5	0.0047	0.0201	0	0.0201
25.5333	0.0044	0.0069	0.0009	0.0078
25.5667	0.0074	0	0	0
25.6	0.0074	0	0	0
25.6333	0.0087	0.0069	0	0.0069
25.6667	0.0051	0	0	0
25.7	0.0067	0	0	0
25.7333	0.0041	0	0	0
25.7667	0.0051	0	0	0
25.8	0.0057	0	0	0
25.8333	0.006	0	0	0
25.8667	0.007	0.0069	0	0.0069
25.9	0.0031	0.0201	0	0.0201
25.9333	0.007	0	0	0
25.9667	0.0034	0	0	0
26	0.0064	0.0069	0.0009	0.0078
26.0333	0.0057	0	0	0
26.0667	0.0028	0.0069	0.0009	0.0078
26.1	0.0064	0	0.0009	0.0009
26.1333	0.0028	0	0.0009	0.0009
26.1667	0.0077	0	0	0
26.2	0.0051	0	0.0009	0.0009
26.2333	0.0054	0.0069	0	0.0069
26.2667	0.0051	0	0.0022	0.0022
26.3	0.0051	0	0.0009	0.0009
26.3333	0.008	0.0201	0	0.0201
26.3667	0.0093	0.0069	0	0.0069
26.4	0.0067	0	0	0
26.4333	0.007	0	0	0
26.4667	0.0067	0.0069	0.0009	0.0078

26.5	0.0064	0.0069	0	0.0069
26.5333	0.008	0	0.0009	0.0009
26.5667	0.0077	0	0.0009	0.0009
26.6	0.0057	0.0069	0	0.0069
26.6333	0.0074	0	0	0
26.6667	0.0067	0.0069	0.0009	0.0078
26.7	0.0054	0.0069	0.0009	0.0078
26.7333	0.0074	0.0069	0	0.0069
26.7667	0.0074	0	0.0009	0.0009
26.8	0.007	0.0069	0.0009	0.0078
26.8333	0.0054	0.0069	0	0.0069
26.8667	0.0031	0	0.0009	0.0009
26.9	0.0047	0	0.0009	0.0009
26.9333	0.0034	0	0	0
26.9667	0.0021	0	0	0
27	0.0014	0	0.0009	0.0009
27.0333	0.0037	0.0069	0	0.0069
27.0667	0.0064	0	0	0
27.1	0.0044	0	0.0022	0.0022
27.1333	0.0041	0	0	0
27.1667	0.0067	0	0	0
27.2	0.008	0	0	0
27.2333	0.0067	0	0	0
27.2667	0.0074	0	0	0
27.3	0.0051	0	0	0
27.3333	0.0044	0.0069	0	0.0069
27.3667	0.0034	0	0	0
27.4	0.0041	0.0069	0.0009	0.0078
27.4333	0.006	0	0.0009	0.0009
27.4667	0.0087	0	0.0022	0.0022
27.5	0.0041	0	0.0009	0.0009
27.5333	0.0051	0	0	0
27.5667	0.0057	0	0	0
27.6	0.0031	0	0	0
27.6333	0.006	0	0	0
27.6667	0.006	0	0	0
27.7	0.0028	0.0069	0	0.0069
27.7333	0.0044	0	0.0009	0.0009
27.7667	0.007	0.0069	0.0009	0.0078
27.8	0.0077	0.0069	0	0.0069
27.8333	0.0057	0.0069	0	0.0069
27.8667	0.0041	0.0069	0	0.0069
27.9	0.0057	0.0069	0	0.0069
27.9333	0.008	0	0	0
27.9667	0.0047	0.0069	0.0009	0.0078
28	0.0044	0.0069	0	0.0069
28.0333	0.0054	0.0069	0.0009	0.0078

28.0667	0.0031	0	0	0
28.1	0.0011	0	0	0
28.1333	0.007	0	0	0
28.1667	0.0041	0	0	0
28.2	0.0064	0	0.0009	0.0009
28.2333	0.0064	0.0069	0	0.0069
28.2667	0.0044	0	0	0
28.3	0.006	0	0.0009	0.0009
28.3333	0.0054	0.0069	0.0022	0.0091
28.3667	0.006	0.0069	0.0009	0.0078
28.4	0.0077	0	0	0
28.4333	0.008	0.0069	0	0.0069
28.4667	0.0074	0	0.0009	0.0009
28.5	0.0051	0.0069	0.0009	0.0078
28.5333	0.0041	0	0	0
28.5667	0.0028	0	0.0009	0.0009
28.6	0.0024	0	0	0
28.6333	0.0064	0	0.0009	0.0009
28.6667	0.0064	0	0.0022	0.0022
28.7	0.0054	0	0.0009	0.0009
28.7333	0.0044	0	0	0
28.7667	0.0047	0	0.0009	0.0009
28.8	0.0021	0	0	0
28.8333	0.0047	0.0069	0	0.0069
28.8667	0.0074	0.0069	0.0009	0.0078
28.9	0.0064	0.0069	0	0.0069
28.9333	0.0008	0	0	0
28.9667	0.0044	0	0.0009	0.0009
29	0.0044	0.0069	0.0009	0.0078
29.0333	0.0044	0	0.0009	0.0009
29.0667	0.0054	0	0.0022	0.0022
29.1	0.0021	0.0069	0	0.0069
29.1333	0.0047	0	0	0
29.1667	0.0047	0	0.0009	0.0009
29.2	0.0057	0	0	0
29.2333	0.0051	0.0069	0	0.0069
29.2667	0.0037	0	0	0
29.3	0.0051	0	0.0009	0.0009
29.3333	0.0064	0.0069	0	0.0069
29.3667	0.0041	0	0	0
29.4	0.0024	0	0	0
29.4333	0.006	0	0	0
29.4667	0.0051	0	0	0
29.5	0.0064	0	0	0
29.5333	0.0037	0	0	0
29.5667	0.0041	0.0069	0.0009	0.0078
29.6	0.0024	0	0	0

29.6333	0.0054	0	0	0
29.6667	0.0047	0	0	0
29.7	0.0077	0.0069	0	0.0069
29.7333	0.006	0	0.0009	0.0009
29.7667	0.0057	0.0069	0.0009	0.0078
29.8	0.0044	0	0	0
29.8333	0.006	0	0	0
29.8667	0.0064	0	0	0
29.9	0.0047	0	0	0
29.9333	0.0044	0.0069	0.0022	0.0091
29.9667	0.006	0.0069	0	0.0069
30	0.0074	0	0	0
30.0333	0.006	0.0069	0	0.0069
30.0667	0.0074	0	0.0009	0.0009
30.1	0.0051	0	0	0
30.1333	0.0047	0.0201	0.0009	0.021
30.1667	0.006	0	0.0009	0.0009
30.2	0.0067	0.0069	0	0.0069
30.2333	0.0064	0	0	0
30.2667	0.0064	0	0.0009	0.0009
30.3	0.0047	0.0201	0.0009	0.021
30.3333	0.0051	0	0	0
30.3667	0.0041	0	0.0009	0.0009
30.4	0.0051	0	0	0
30.4333	0.0041	0.0069	0	0.0069
30.4667	0.0051	0.0201	0.0009	0.021
30.5	0.0037	0	0	0
30.5333	0.0037	0.0069	0	0.0069
30.5667	0.0054	0	0.0009	0.0009
30.6	0.0044	0	0	0
30.6333	0.0041	0	0	0
30.6667	0.0051	0	0	0
30.7	0.0051	0	0.0009	0.0009
30.7333	0.0028	0.0069	0.0009	0.0078
30.7667	0.006	0	0.0009	0.0009
30.8	0.0054	0.0069	0.0009	0.0078
30.8333	0.0051	0	0.0009	0.0009
30.8667	0.0067	0.0069	0.0009	0.0078
30.9	0.0051	0.0069	0.0009	0.0078
30.9333	0.0031	0	0	0
30.9667	0.0087	0	0	0
31	0.0074	0	0	0
31.0333	0.007	0	0	0
31.0667	0.0051	0.0069	0	0.0069
31.1	0.0057	0	0	0
31.1333	0.0034	0.0069	0	0.0069
31.1667	0.0037	0.0069	0	0.0069

31.2	0.0077	0.0069	0	0.0069
31.2333	0.0077	0	0.0009	0.0009
31.2667	0.0051	0	0	0
31.3	0.0047	0	0	0
31.3333	0.0051	0	0	0
31.3667	0.0067	0	0.0009	0.0009
31.4	0.0047	0	0	0
31.4333	0.0037	0	0	0
31.4667	0.0054	0	0.0009	0.0009
31.5	0.0018	0	0	0
31.5333	0.0054	0.0332	0	0.0332
31.5667	0.0064	0.0069	0.0009	0.0078
31.6	0.0051	0	0	0
31.6333	0.0041	0.0201	0.0009	0.021
31.6667	0.0051	0.0069	0	0.0069
31.7	0.0044	0.0069	0	0.0069
31.7333	0.0067	0	0	0
31.7667	0.0054	0	0	0
31.8	0.0054	0	0	0
31.8333	0.0041	0	0	0
31.8667	0.0037	0.0069	0	0.0069
31.9	0.0037	0	0	0
31.9333	0.0037	0	0	0
31.9667	0.0034	0.0069	0	0.0069
32	0.0021	0.0069	0	0.0069
32.0333	0.0041	0.0069	0.0009	0.0078
32.0667	0.0041	0	0	0
32.1	0.0021	0	0	0
32.1333	0.0047	0.0069	0	0.0069
32.1667	0.0031	0	0	0
32.2	0.0028	0	0	0
32.2333	0.0024	0.0069	0.0009	0.0078
32.2667	0.0041	0	0.0009	0.0009
32.3	0.0051	0	0	0
32.3333	0.0031	0	0.0009	0.0009
32.3667	0.0037	0	0	0
32.4	0.0054	0.0069	0	0.0069
32.4333	0.0041	0	0.0009	0.0009
32.4667	0.0028	0	0	0
32.5	0.0024	0	0.0009	0.0009
32.5333	0.0037	0	0.0009	0.0009
32.5667	0.0014	0.0069	0	0.0069
32.6	0.0064	0.0069	0	0.0069
32.6333	0.0054	0	0	0
32.6667	0.0074	0.0201	0	0.0201
32.7	0.0074	0.0069	0	0.0069
32.7333	0.0077	0	0.0009	0.0009

32.7667	0.0077	0	0	0
32.8	0.0159	0.0069	0	0.0069
32.8333	0.0205	0	0	0
32.8667	0.0222	0.0069	0.0009	0.0078
32.9	0.0284	0	0.0009	0.0009
32.9333	0.0337	0.0069	0	0.0069
32.9667	0.0423	0	0	0
33	0.0521	0	0.0009	0.0009
33.0333	0.0594	0	0.0009	0.0009
33.0667	0.0686	0.0069	0	0.0069
33.1	0.0785	0	0	0
33.1333	0.088	0	0.0009	0.0009
33.1667	0.0943	0.0069	0	0.0069
33.2	0.1035	0	0	0
33.2333	0.1137	0	0	0
33.2667	0.1206	0.0069	0	0.0069
33.3	0.1311	0	0	0
33.3333	0.139	0	0.0009	0.0009
33.3667	0.1459	0	0	0
33.4	0.1512	0	0	0
33.4333	0.1624	0	0	0
33.4667	0.1657	0	0	0
33.5	0.1736	0	0	0
33.5333	0.1779	0	0	0
33.5667	0.1838	0.0069	0	0.0069
33.6	0.1881	0	0.0009	0.0009
33.6333	0.1914	0.0201	0	0.0201
33.6667	0.1904	0	0	0
33.7	0.1956	0	0	0
33.7333	0.1976	0	0.0009	0.0009
33.7667	0.1933	0	0.0009	0.0009
33.8	0.1973	0	0	0
33.8333	0.1963	0	0	0
33.8667	0.1979	0	0	0
33.9	0.1956	0	0	0
33.9333	0.1989	0.0069	0	0.0069
33.9667	0.1956	0	0	0
34	0.1996	0	0	0
34.0333	0.2002	0.0069	0.0009	0.0078
34.0667	0.2009	0	0.0009	0.0009
34.1	0.1966	0.0069	0	0.0069
34.1333	0.1966	0	0.0009	0.0009
34.1667	0.1943	0.0069	0	0.0069
34.2	0.1917	0	0	0
34.2333	0.1927	0.0069	0	0.0069
34.2667	0.1884	0.0069	0	0.0069
34.3	0.189	0	0	0

34.3333	0.1923	0	0.0009	0.0009
34.3667	0.1894	0.0069	0.0009	0.0078
34.4	0.1874	0.0069	0	0.0069
34.4333	0.1864	0.0069	0.0009	0.0078
34.4667	0.1858	0	0	0
34.5	0.1811	0.0069	0.0009	0.0078
34.5333	0.1838	0	0	0
34.5667	0.1828	0	0.0009	0.0009
34.6	0.1788	0	0.0009	0.0009
34.6333	0.1785	0	0.0009	0.0009
34.6667	0.1782	0	0	0
34.7	0.1759	0	0	0
34.7333	0.1782	0	0	0
34.7667	0.1739	0	0.0022	0.0022
34.8	0.1736	0.0069	0.0009	0.0078
34.8333	0.1706	0.0069	0	0.0069
34.8667	0.1739	0	0.0009	0.0009
34.9	0.1742	0.0069	0	0.0069
34.9333	0.1756	0.0069	0	0.0069
34.9667	0.1746	0.0069	0	0.0069
35	0.1713	0	0	0
35.0333	0.1723	0.0069	0	0.0069
35.0667	0.1716	0.0069	0	0.0069
35.1	0.1693	0	0	0
35.1333	0.17	0.0069	0	0.0069
35.1667	0.1726	0.0069	0.0009	0.0078
35.2	0.1736	0	0.0009	0.0009
35.2333	0.1686	0.0069	0.0009	0.0078
35.2667	0.1746	0	0	0
35.3	0.1713	0.0069	0.0022	0.0091
35.3333	0.1746	0	0.0022	0.0022
35.3667	0.1729	0.0069	0	0.0069
35.4	0.1739	0	0	0
35.4333	0.1752	0	0	0
35.4667	0.1736	0	0	0
35.5	0.1746	0	0	0
35.5333	0.1759	0	0.0009	0.0009
35.5667	0.1759	0	0	0
35.6	0.1772	0.0069	0	0.0069
35.6333	0.1772	0	0	0
35.6667	0.1815	0	0.0009	0.0009
35.7	0.1782	0	0	0
35.7333	0.1798	0.0069	0	0.0069
35.7667	0.1805	0	0	0
35.8	0.1815	0	0	0
35.8333	0.1818	0	0	0
35.8667	0.1828	0.0069	0	0.0069

35.9	0.1831	0	0.0009	0.0009
35.9333	0.1844	0	0	0
35.9667	0.1838	0	0.0009	0.0009
36	0.1864	0.0069	0.0009	0.0078
36.0333	0.189	0.0069	0	0.0069
36.0667	0.1858	0	0	0
36.1	0.1858	0.0069	0.0009	0.0078
36.1333	0.1884	0	0.0009	0.0009
36.1667	0.1894	0	0	0
36.2	0.1914	0	0.0009	0.0009
36.2333	0.1917	0	0	0
36.2667	0.1894	0.0069	0.0009	0.0078
36.3	0.193	0	0	0
36.3333	0.1943	0	0	0
36.3667	0.1907	0	0	0
36.4	0.1933	0.0069	0	0.0069
36.4333	0.192	0	0	0
36.4667	0.1927	0	0.0009	0.0009
36.5	0.1973	0	0	0
36.5333	0.1953	0.0069	0	0.0069
36.5667	0.194	0	0	0
36.6	0.1937	0.0069	0.0009	0.0078
36.6333	0.1937	0	0	0
36.6667	0.1956	0	0.0009	0.0009
36.7	0.1956	0	0.0009	0.0009
36.7333	0.1917	0.0069	0	0.0069
36.7667	0.195	0	0.0009	0.0009
36.8	0.1943	0.0069	0	0.0069
36.8333	0.194	0	0.0009	0.0009
36.8667	0.1963	0	0.0009	0.0009
36.9	0.192	0	0	0
36.9333	0.194	0	0	0
36.9667	0.1917	0	0	0
37	0.193	0	0.0009	0.0009
37.0333	0.1914	0	0	0
37.0667	0.1943	0	0	0
37.1	0.1884	0	0	0
37.1333	0.1914	0	0	0
37.1667	0.1871	0	0.0022	0.0022
37.2	0.1897	0	0	0
37.2333	0.19	0	0	0
37.2667	0.1861	0	0	0
37.3	0.1874	0	0	0
37.3333	0.1851	0.0069	0.0009	0.0078
37.3667	0.1808	0	0	0
37.4	0.1841	0.0069	0.0009	0.0078
37.4333	0.1864	0	0.0022	0.0022

37.4667	0.1825	0	0	0
37.5	0.1838	0.0069	0.0009	0.0078
37.5333	0.1825	0	0.0009	0.0009
37.5667	0.1802	0	0	0
37.6	0.1841	0	0.0009	0.0009
37.6333	0.1795	0	0	0
37.6667	0.1828	0	0	0
37.7	0.1795	0	0	0
37.7333	0.1765	0	0	0
37.7667	0.1798	0	0.0009	0.0009
37.8	0.1802	0	0.0009	0.0009
37.8333	0.1756	0	0	0
37.8667	0.1769	0	0	0
37.9	0.1785	0	0	0
37.9333	0.1765	0	0	0
37.9667	0.1756	0.0069	0	0.0069
38	0.1713	0	0	0
38.0333	0.1765	0.0069	0.0009	0.0078
38.0667	0.1746	0	0	0
38.1	0.1746	0	0	0
38.1333	0.1726	0.0069	0	0.0069
38.1667	0.1732	0	0	0
38.2	0.1746	0	0.0009	0.0009
38.2333	0.1742	0	0.0009	0.0009
38.2667	0.1716	0	0.0009	0.0009
38.3	0.1703	0.0069	0	0.0069
38.3333	0.1729	0.0069	0.0009	0.0078
38.3667	0.1677	0	0	0
38.4	0.1706	0	0	0
38.4333	0.1693	0	0	0
38.4667	0.1696	0	0	0
38.5	0.168	0.0069	0.0009	0.0078
38.5333	0.1693	0	0.0009	0.0009
38.5667	0.1673	0.0201	0	0.0201
38.6	0.1657	0	0.0009	0.0009
38.6333	0.1634	0	0	0
38.6667	0.1677	0	0	0
38.7	0.1634	0	0	0
38.7333	0.167	0	0.0009	0.0009
38.7667	0.1653	0	0	0
38.8	0.164	0	0	0
38.8333	0.1667	0.0069	0.0009	0.0078
38.8667	0.164	0	0	0
38.9	0.1611	0.0069	0.0009	0.0078
38.9333	0.1614	0	0.0009	0.0009
38.9667	0.1614	0	0	0
39	0.1627	0	0.0009	0.0009

39.0333	0.1604	0	0.0009	0.0009
39.0667	0.1617	0.0069	0.0009	0.0078
39.1	0.1607	0	0	0
39.1333	0.1598	0.0069	0	0.0069
39.1667	0.1614	0	0	0
39.2	0.163	0.0069	0.0009	0.0078
39.2333	0.1627	0.0069	0.0009	0.0078
39.2667	0.1591	0.0069	0.0009	0.0078
39.3	0.1575	0	0	0
39.3333	0.1607	0	0	0
39.3667	0.1584	0	0	0
39.4	0.1598	0.0069	0	0.0069
39.4333	0.1607	0.0069	0	0.0069
39.4667	0.1565	0	0	0
39.5	0.1581	0	0.0009	0.0009
39.5333	0.1581	0.0069	0.0009	0.0078
39.5667	0.1575	0	0	0
39.6	0.1601	0	0	0
39.6333	0.1568	0	0.0009	0.0009
39.6667	0.1594	0	0	0
39.7	0.1571	0	0	0
39.7333	0.1588	0	0	0
39.7667	0.1598	0	0.0009	0.0009
39.8	0.1575	0.0069	0	0.0069
39.8333	0.1588	0	0	0
39.8667	0.1598	0	0.0009	0.0009
39.9	0.1604	0.0069	0	0.0069
39.9333	0.1607	0	0	0
39.9667	0.1601	0.0069	0	0.0069
40	0.1601	0	0.0009	0.0009
40.0333	0.1614	0.0069	0	0.0069
40.0667	0.1624	0.0069	0.0009	0.0078
40.1	0.1601	0	0	0
40.1333	0.1607	0	0	0
40.1667	0.1621	0	0	0
40.2	0.1614	0	0.0009	0.0009
40.2333	0.163	0	0.0009	0.0009
40.2667	0.1667	0.0069	0	0.0069
40.3	0.1653	0.0069	0	0.0069
40.3333	0.1644	0.0069	0.0009	0.0078
40.3667	0.1637	0	0	0
40.4	0.1677	0.0201	0	0.0201
40.4333	0.1644	0.0069	0.0009	0.0078
40.4667	0.1627	0	0	0
40.5	0.1637	0.0069	0	0.0069
40.5333	0.1693	0	0	0
40.5667	0.1693	0	0.0009	0.0009

40.6	0.1686	0.0201	0	0.0201
40.6333	0.1686	0.0069	0	0.0069
40.6667	0.1686	0.0069	0	0.0069
40.7	0.1713	0	0	0
40.7333	0.1667	0.0069	0	0.0069
40.7667	0.1696	0	0	0
40.8	0.17	0	0	0
40.8333	0.169	0.0069	0	0.0069
40.8667	0.1693	0.0069	0	0.0069
40.9	0.1709	0.0069	0.0009	0.0078
40.9333	0.1723	0	0	0
40.9667	0.1726	0.0069	0	0.0069
41	0.1732	0.0069	0.0009	0.0078
41.0333	0.1752	0	0	0
41.0667	0.1732	0	0	0
41.1	0.1746	0.0069	0	0.0069
41.1333	0.1729	0	0	0
41.1667	0.1726	0	0.0009	0.0009
41.2	0.1732	0	0	0
41.2333	0.1716	0.0069	0	0.0069
41.2667	0.1746	0	0	0
41.3	0.1759	0.0069	0.0009	0.0078
41.3333	0.1759	0	0	0
41.3667	0.1739	0	0	0
41.4	0.1785	0.0069	0.0009	0.0078
41.4333	0.1765	0.0069	0	0.0069
41.4667	0.1772	0	0.0009	0.0009
41.5	0.1772	0	0.0009	0.0009
41.5333	0.1762	0.0069	0	0.0069
41.5667	0.1756	0	0.0035	0.0035
41.6	0.1792	0	0.0009	0.0009
41.6333	0.1765	0	0.0009	0.0009
41.6667	0.1779	0.0069	0	0.0069
41.7	0.1779	0.0069	0.0009	0.0078
41.7333	0.1752	0.0069	0	0.0069
41.7667	0.1811	0	0.0009	0.0009
41.8	0.1811	0	0	0
41.8333	0.1785	0	0	0
41.8667	0.1798	0	0	0
41.9	0.1815	0.0069	0.0009	0.0078
41.9333	0.1795	0	0	0
41.9667	0.1802	0	0	0
42	0.1795	0	0	0
42.0333	0.1805	0	0	0
42.0667	0.1815	0	0	0
42.1	0.1785	0.0069	0	0.0069
42.1333	0.1802	0	0	0

42.1667	0.1811	0	0	0
42.2	0.1841	0	0	0
42.2333	0.1802	0.0069	0	0.0069
42.2667	0.1828	0	0	0
42.3	0.1802	0	0.0022	0.0022
42.3333	0.1831	0.0069	0.0009	0.0078
42.3667	0.1828	0	0	0
42.4	0.1818	0.0069	0	0.0069
42.4333	0.1858	0	0.0009	0.0009
42.4667	0.1811	0	0	0
42.5	0.1841	0	0.0009	0.0009
42.5333	0.1811	0.0069	0.0009	0.0078
42.5667	0.1841	0.0069	0.0009	0.0078
42.6	0.1841	0.0069	0	0.0069
42.6333	0.1835	0	0.0009	0.0009
42.6667	0.1854	0.0069	0.0009	0.0078
42.7	0.1861	0	0.0009	0.0009
42.7333	0.1861	0	0.0022	0.0022
42.7667	0.1867	0.0069	0	0.0069
42.8	0.1861	0.0069	0	0.0069
42.8333	0.1871	0	0.0009	0.0009
42.8667	0.1867	0	0.0009	0.0009
42.9	0.1851	0.0069	0	0.0069
42.9333	0.1877	0	0	0
42.9667	0.1877	0	0.0009	0.0009
43	0.1884	0	0	0
43.0333	0.1864	0	0.0009	0.0009
43.0667	0.1867	0	0	0
43.1	0.1871	0	0.0009	0.0009
43.1333	0.1881	0.0069	0	0.0069
43.1667	0.1858	0	0	0
43.2	0.1874	0	0	0
43.2333	0.1897	0.0069	0.0009	0.0078
43.2667	0.1871	0.0069	0	0.0069
43.3	0.1877	0	0	0
43.3333	0.1897	0.0069	0	0.0069
43.3667	0.1887	0	0.0009	0.0009
43.4	0.189	0	0	0
43.4333	0.189	0	0	0
43.4667	0.1871	0.0069	0.0009	0.0078
43.5	0.1894	0	0.0009	0.0009
43.5333	0.189	0	0	0
43.5667	0.191	0	0	0
43.6	0.1874	0.0069	0	0.0069
43.6333	0.1904	0.0069	0	0.0069
43.6667	0.1894	0	0	0
43.7	0.1881	0	0	0

43.7333	0.1914	0.0201	0	0.0201
43.7667	0.1917	0.0069	0.0009	0.0078
43.8	0.1907	0	0	0
43.8333	0.19	0	0	0
43.8667	0.1897	0	0	0
43.9	0.191	0.0069	0	0.0069
43.9333	0.1897	0	0.0009	0.0009
43.9667	0.1894	0	0	0
44	0.1887	0	0	0
44.0333	0.191	0	0	0
44.0667	0.19	0.0069	0	0.0069
44.1	0.1943	0	0	0
44.1333	0.1937	0	0.0009	0.0009
44.1667	0.193	0	0.0009	0.0009
44.2	0.1917	0	0.0009	0.0009
44.2333	0.19	0	0	0
44.2667	0.1923	0	0	0
44.3	0.1933	0	0.0009	0.0009
44.3333	0.1907	0.0069	0.0009	0.0078
44.3667	0.1943	0	0.0009	0.0009
44.4	0.193	0	0	0
44.4333	0.1927	0.0069	0	0.0069
44.4667	0.1953	0	0	0
44.5	0.1914	0	0	0
44.5333	0.196	0.0201	0	0.0201
44.5667	0.194	0.0069	0.0009	0.0078
44.6	0.1937	0	0	0
44.6333	0.1933	0	0	0
44.6667	0.194	0	0	0
44.7	0.195	0	0	0
44.7333	0.194	0.0069	0	0.0069
44.7667	0.194	0	0.0009	0.0009
44.8	0.1963	0	0	0
44.8333	0.1937	0	0	0
44.8667	0.1963	0	0	0
44.9	0.1979	0	0.0022	0.0022
44.9333	0.1956	0	0	0
44.9667	0.191	0.0069	0	0.0069
45	0.1956	0.0069	0	0.0069
45.0333	0.1914	0	0.0009	0.0009
45.0667	0.1953	0	0	0
45.1	0.1927	0	0.0009	0.0009
45.1333	0.1943	0	0	0
45.1667	0.193	0	0	0
45.2	0.1943	0.0069	0	0.0069
45.2333	0.1953	0	0	0
45.2667	0.195	0.0201	0	0.0201

45.3	0.1914	0	0	0
45.3333	0.193	0.0069	0.0022	0.0091
45.3667	0.1933	0	0	0
45.4	0.192	0	0.0009	0.0009
45.4333	0.1897	0	0.0009	0.0009
45.4667	0.1917	0	0.0009	0.0009
45.5	0.193	0	0	0
45.5333	0.1937	0.0069	0	0.0069
45.5667	0.1923	0.0069	0	0.0069
45.6	0.195	0	0	0
45.6333	0.1917	0.0069	0	0.0069
45.6667	0.193	0	0	0
45.7	0.1927	0	0	0
45.7333	0.1887	0	0.0009	0.0009
45.7667	0.1907	0	0	0
45.8	0.191	0	0	0
45.8333	0.1914	0	0	0
45.8667	0.1927	0.0069	0	0.0069
45.9	0.189	0.0069	0.0009	0.0078
45.9333	0.1923	0	0	0
45.9667	0.1904	0.0069	0	0.0069
46	0.1887	0.0069	0	0.0069
46.0333	0.1904	0.0201	0	0.0201
46.0667	0.1904	0	0.0009	0.0009
46.1	0.19	0	0	0
46.1333	0.191	0	0.0009	0.0009
46.1667	0.1904	0	0	0
46.2	0.19	0	0	0
46.2333	0.1887	0	0	0
46.2667	0.1884	0	0.0022	0.0022
46.3	0.1871	0	0	0
46.3333	0.1917	0.0069	0.0009	0.0078
46.3667	0.1904	0.0069	0.0022	0.0091
46.4	0.1897	0	0	0
46.4333	0.1877	0.0069	0.0009	0.0078
46.4667	0.1864	0	0	0
46.5	0.1877	0	0	0
46.5333	0.1884	0.0069	0.0009	0.0078
46.5667	0.1894	0	0	0
46.6	0.1923	0	0.0009	0.0009
46.6333	0.1894	0	0	0
46.6667	0.1858	0	0.0009	0.0009
46.7	0.189	0.0069	0	0.0069
46.7333	0.1877	0	0	0
46.7667	0.1858	0.0201	0	0.0201
46.8	0.1877	0	0	0
46.8333	0.1897	0	0	0

46.8667	0.1858	0.0069	0.0009	0.0078
46.9	0.1864	0.0069	0.0009	0.0078
46.9333	0.1871	0	0	0
46.9667	0.1864	0	0	0
47	0.1858	0.0069	0.0009	0.0078
47.0333	0.1828	0	0.0009	0.0009
47.0667	0.1874	0	0.0009	0.0009
47.1	0.1864	0	0	0
47.1333	0.1864	0	0.0009	0.0009
47.1667	0.1811	0	0	0
47.2	0.1848	0.0069	0	0.0069
47.2333	0.1841	0	0	0
47.2667	0.1864	0	0.0022	0.0022
47.3	0.1828	0.0069	0	0.0069
47.3333	0.1825	0	0	0
47.3667	0.1831	0	0.0009	0.0009
47.4	0.1828	0	0	0
47.4333	0.1811	0	0	0
47.4667	0.1802	0	0	0
47.5	0.1808	0	0	0
47.5333	0.1831	0	0	0
47.5667	0.1841	0	0	0
47.6	0.1844	0	0	0
47.6333	0.1841	0	0	0
47.6667	0.1821	0	0	0
47.7	0.1831	0.0069	0	0.0069
47.7333	0.1815	0.0069	0	0.0069
47.7667	0.1844	0.0069	0	0.0069
47.8	0.1825	0	0	0
47.8333	0.1831	0	0	0
47.8667	0.1795	0.0069	0	0.0069
47.9	0.1811	0	0	0
47.9333	0.1782	0	0	0
47.9667	0.1805	0	0	0
48	0.1825	0	0	0
48.0333	0.1765	0	0	0
48.0667	0.1811	0	0	0
48.1	0.1798	0.0069	0	0.0069
48.1333	0.1779	0	0	0
48.1667	0.1808	0	0.0009	0.0009
48.2	0.1811	0	0	0
48.2333	0.1825	0	0	0
48.2667	0.1805	0	0	0
48.3	0.1798	0	0	0
48.3333	0.1802	0	0	0
48.3667	0.1815	0.0069	0.0009	0.0078
48.4	0.1792	0.0069	0	0.0069

48.4333	0.1788	0	0	0
48.4667	0.1795	0.0069	0	0.0069
48.5	0.1775	0	0.0009	0.0009
48.5333	0.1769	0	0	0
48.5667	0.1785	0	0	0
48.6	0.1775	0	0.0009	0.0009
48.6333	0.1765	0.0069	0	0.0069
48.6667	0.1795	0.0069	0.0009	0.0078
48.7	0.1762	0	0.0009	0.0009
48.7333	0.1772	0	0	0
48.7667	0.1775	0	0	0
48.8	0.1795	0	0	0
48.8333	0.1795	0	0	0
48.8667	0.1785	0	0.0009	0.0009
48.9	0.1785	0	0	0
48.9333	0.1739	0	0	0
48.9667	0.1759	0	0.0009	0.0009
49	0.1792	0.0069	0.0009	0.0078
49.0333	0.1795	0.0069	0	0.0069
49.0667	0.1808	0	0.0009	0.0009
49.1	0.1765	0.0069	0	0.0069
49.1333	0.1769	0	0.0022	0.0022
49.1667	0.1769	0.0069	0	0.0069
49.2	0.1782	0.0069	0.0009	0.0078
49.2333	0.1769	0	0	0
49.2667	0.1765	0	0	0
49.3	0.1769	0	0	0
49.3333	0.1762	0	0.0009	0.0009
49.3667	0.1775	0	0.0022	0.0022
49.4	0.1795	0	0.0009	0.0009
49.4333	0.1746	0	0	0
49.4667	0.1752	0	0	0
49.5	0.1762	0.0069	0	0.0069
49.5333	0.1756	0	0.0009	0.0009
49.5667	0.1756	0	0	0
49.6	0.1759	0.0069	0.0009	0.0078
49.6333	0.1749	0	0	0
49.6667	0.1765	0	0.0009	0.0009
49.7	0.1749	0	0	0
49.7333	0.1765	0.0069	0	0.0069
49.7667	0.1782	0	0.0009	0.0009
49.8	0.1769	0	0.0009	0.0009
49.8333	0.1746	0	0	0
49.8667	0.1752	0	0.0009	0.0009
49.9	0.1746	0.0069	0.0009	0.0078
49.9333	0.1736	0	0.0009	0.0009
49.9667	0.1765	0	0	0

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50	0.1759	0	0.0009	0.0009
50.0333	0.1772	0.0069	0.0009	0.0078
50.0667	0.1746	0	0	0
50.1	0.1782	0	0.0009	0.0009
50.1333	0.1756	0.0069	0	0.0069
50.1667	0.1759	0	0	0
50.2	0.1739	0	0	0
50.2333	0.1772	0	0.0009	0.0009
50.2667	0.1769	0	0	0
50.3	0.1749	0	0	0
50.3333	0.1756	0	0.0009	0.0009
50.3667	0.1762	0	0.0009	0.0009
50.4	0.1729	0	0.0009	0.0009
50.4333	0.1742	0	0	0
50.4667	0.1723	0.0069	0	0.0069
50.5	0.1762	0	0	0
50.5333	0.1765	0.0069	0.0009	0.0078
50.5667	0.1742	0	0.0009	0.0009
50.6	0.1742	0	0	0
50.6333	0.1746	0.0069	0	0.0069
50.6667	0.1756	0.0069	0.0009	0.0078
50.7	0.1749	0	0	0
50.7333	0.1732	0.0069	0	0.0069
50.7667	0.1732	0	0	0
50.8	0.1719	0.0069	0	0.0069
50.8333	0.1732	0.0069	0.0022	0.0091
50.8667	0.1752	0	0.0009	0.0009
50.9	0.1736	0.0069	0	0.0069
50.9333	0.1759	0	0	0
50.9667	0.1752	0	0.0009	0.0009
51	0.1749	0.0069	0	0.0069
51.0333	0.1749	0.0069	0	0.0069
51.0667	0.1759	0.0069	0.0022	0.0091
51.1	0.1775	0	0	0
51.1333	0.1752	0	0	0
51.1667	0.1752	0	0	0
51.2	0.1762	0	0.0009	0.0009
51.2333	0.1732	0	0	0
51.2667	0.1723	0	0	0
51.3	0.1732	0	0	0
51.3333	0.1746	0	0.0009	0.0009
51.3667	0.1756	0	0	0
51.4	0.1765	0	0	0
51.4333	0.1769	0	0.0009	0.0009
51.4667	0.1769	0	0	0
51.5	0.1759	0	0.0009	0.0009
51.5333	0.1769	0	0	0

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51.5667	0.1749	0.0069	0	0.0069
51.6	0.1746	0	0.0022	0.0022
51.6333	0.1749	0	0	0
51.6667	0.1765	0.0201	0	0.0201
51.7	0.1765	0	0	0
51.7333	0.1746	0	0	0
51.7667	0.1742	0	0	0
51.8	0.1775	0	0	0
51.8333	0.1746	0.0201	0	0.0201
51.8667	0.1752	0	0	0
51.9	0.1749	0	0	0
51.9333	0.1769	0	0	0
51.9667	0.1759	0.0069	0.0009	0.0078
52	0.1756	0.0069	0	0.0069
52.0333	0.1775	0	0	0
52.0667	0.1749	0.0201	0.0022	0.0223
52.1	0.1746	0	0	0
52.1333	0.1756	0	0	0
52.1667	0.1742	0.0069	0	0.0069
52.2	0.1779	0	0	0
52.2333	0.1752	0	0	0
52.2667	0.1756	0	0	0
52.3	0.1762	0	0	0
52.3333	0.1759	0	0	0
52.3667	0.1775	0	0	0
52.4	0.1775	0	0	0
52.4333	0.1779	0	0	0
52.4667	0.1775	0	0.0022	0.0022
52.5	0.1752	0	0	0
52.5333	0.1765	0	0	0
52.5667	0.1752	0	0	0
52.6	0.1762	0	0.0009	0.0009
52.6333	0.1788	0	0	0
52.6667	0.1802	0	0	0
52.7	0.1802	0	0	0
52.7333	0.1765	0	0	0
52.7667	0.1759	0.0069	0	0.0069
52.8	0.1792	0	0	0
52.8333	0.1749	0	0	0
52.8667	0.1815	0.0069	0	0.0069
52.9	0.1805	0	0.0009	0.0009
52.9333	0.1785	0	0.0022	0.0022
52.9667	0.1769	0.0069	0	0.0069
53	0.1759	0.0069	0	0.0069
53.0333	0.1779	0	0.0009	0.0009
53.0667	0.1802	0.0069	0.0009	0.0078
53.1	0.1792	0	0	0

53.1333	0.1759	0	0	0
53.1667	0.1772	0	0	0
53.2	0.1798	0	0	0
53.2333	0.1798	0	0.0009	0.0009
53.2667	0.1769	0	0	0
53.3	0.1808	0	0	0
53.3333	0.1792	0	0.0009	0.0009
53.3667	0.1802	0.0069	0	0.0069
53.4	0.1779	0	0	0
53.4333	0.1779	0.0069	0.0009	0.0078
53.4667	0.1798	0	0	0
53.5	0.1749	0	0	0
53.5333	0.1802	0.0069	0	0.0069
53.5667	0.1779	0.0069	0.0009	0.0078
53.6	0.1802	0	0.0009	0.0009
53.6333	0.1825	0	0	0
53.6667	0.1818	0	0	0
53.7	0.1798	0	0	0
53.7333	0.1795	0	0	0
53.7667	0.1782	0.0201	0	0.0201
53.8	0.1821	0.0069	0.0009	0.0078
53.8333	0.1808	0	0.0009	0.0009
53.8667	0.1782	0.0069	0	0.0069
53.9	0.1811	0	0	0
53.9333	0.1811	0.0069	0	0.0069
53.9667	0.1802	0.0069	0.0009	0.0078
54	0.1818	0	0.0009	0.0009
54.0333	0.1835	0	0	0
54.0667	0.1788	0	0.0009	0.0009
54.1	0.1795	0	0	0
54.1333	0.1788	0	0	0
54.1667	0.1838	0	0.0009	0.0009
54.2	0.1811	0	0	0
54.2333	0.1821	0.0069	0	0.0069
54.2667	0.1825	0.0069	0	0.0069
54.3	0.1821	0	0.0009	0.0009
54.3333	0.1805	0.0069	0	0.0069
54.3667	0.1818	0.0069	0	0.0069
54.4	0.1841	0.0069	0	0.0069
54.4333	0.1831	0	0	0
54.4667	0.1848	0	0	0
54.5	0.1811	0	0	0
54.5333	0.1835	0	0	0
54.5667	0.1825	0	0	0
54.6	0.1808	0	0.0009	0.0009
54.6333	0.1825	0	0.0009	0.0009
54.6667	0.1808	0	0.0009	0.0009

54.7	0.1841	0	0	0
54.7333	0.1821	0	0.0009	0.0009
54.7667	0.1802	0	0	0
54.8	0.1835	0	0	0
54.8333	0.1815	0.0069	0.0009	0.0078
54.8667	0.1841	0	0	0
54.9	0.1838	0.0069	0	0.0069
54.9333	0.1835	0	0	0
54.9667	0.1815	0	0.0009	0.0009
55	0.1821	0	0	0
55.0333	0.1851	0.0201	0	0.0201
55.0667	0.1858	0	0	0
55.1	0.1841	0	0.0009	0.0009
55.1333	0.1838	0	0	0
55.1667	0.1844	0.0069	0.0009	0.0078
55.2	0.1848	0	0	0
55.2333	0.1861	0	0	0
55.2667	0.1828	0	0	0
55.3	0.1835	0	0	0
55.3333	0.1825	0	0	0
55.3667	0.1844	0.0069	0	0.0069
55.4	0.1844	0	0	0
55.4333	0.1844	0	0	0
55.4667	0.1848	0	0	0
55.5	0.1818	0.0069	0.0009	0.0078
55.5333	0.1848	0	0	0
55.5667	0.1844	0	0.0009	0.0009
55.6	0.1838	0	0.0009	0.0009
55.6333	0.1821	0.0069	0.0009	0.0078
55.6667	0.1835	0	0.0009	0.0009
55.7	0.1858	0	0.0009	0.0009
55.7333	0.1815	0.0069	0.0009	0.0078
55.7667	0.1851	0	0	0
55.8	0.1835	0	0	0
55.8333	0.1854	0	0	0
55.8667	0.1854	0	0.0009	0.0009
55.9	0.1864	0.0069	0.0009	0.0078
55.9333	0.1871	0	0.0009	0.0009
55.9667	0.1851	0	0.0009	0.0009
56	0.1831	0.0069	0	0.0069
56.0333	0.1858	0.0069	0	0.0069
56.0667	0.1864	0	0.0009	0.0009
56.1	0.1828	0	0.0009	0.0009
56.1333	0.1841	0	0	0
56.1667	0.1825	0.0069	0	0.0069
56.2	0.1854	0	0	0
56.2333	0.1854	0	0	0

56.2667	0.1838	0	0	0
56.3	0.1858	0	0	0
56.3333	0.1861	0	0	0
56.3667	0.1861	0	0	0
56.4	0.1881	0	0.0009	0.0009
56.4333	0.1851	0	0.0009	0.0009
56.4667	0.1867	0	0	0
56.5	0.1848	0.0069	0	0.0069
56.5333	0.1831	0.0069	0	0.0069
56.5667	0.1877	0.0069	0	0.0069
56.6	0.1848	0	0.0009	0.0009
56.6333	0.1841	0.0069	0	0.0069
56.6667	0.1877	0.0069	0	0.0069
56.7	0.1854	0	0	0
56.7333	0.1867	0.0069	0	0.0069
56.7667	0.1881	0	0.0009	0.0009
56.8	0.1854	0	0	0
56.8333	0.1854	0	0	0
56.8667	0.1867	0	0.0009	0.0009
56.9	0.1854	0	0.0009	0.0009
56.9333	0.1854	0.0069	0	0.0069
56.9667	0.1858	0	0.0022	0.0022
57	0.1841	0.0201	0	0.0201
57.0333	0.1897	0	0	0
57.0667	0.1861	0.0069	0	0.0069
57.1	0.1881	0	0	0
57.1333	0.1867	0	0	0
57.1667	0.1877	0.0069	0	0.0069
57.2	0.1864	0.0069	0	0.0069
57.2333	0.1838	0.0069	0	0.0069
57.2667	0.189	0	0	0
57.3	0.189	0	0	0
57.3333	0.1858	0	0	0
57.3667	0.1858	0	0.0009	0.0009
57.4	0.1858	0	0.0009	0.0009
57.4333	0.1867	0.0069	0	0.0069
57.4667	0.1867	0.0069	0	0.0069
57.5	0.1881	0	0	0
57.5333	0.189	0.0201	0.0009	0.021
57.5667	0.1871	0	0.0009	0.0009
57.6	0.1877	0.0069	0.0009	0.0078
57.6333	0.1884	0	0.0009	0.0009
57.6667	0.1881	0	0	0
57.7	0.1867	0	0	0
57.7333	0.1861	0.0069	0	0.0069
57.7667	0.1877	0	0	0
57.8	0.1848	0.0069	0	0.0069

57.8333	0.1874	0	0	0
57.8667	0.1854	0.0069	0	0.0069
57.9	0.1877	0	0	0
57.9333	0.1894	0	0	0
57.9667	0.1861	0.0201	0.0009	0.021
58	0.1871	0.0069	0	0.0069
58.0333	0.189	0	0	0
58.0667	0.1884	0	0	0
58.1	0.1867	0	0.0009	0.0009
58.1333	0.1877	0	0	0
58.1667	0.19	0.0069	0.0009	0.0078
58.2	0.1887	0	0	0
58.2333	0.1884	0	0	0
58.2667	0.1871	0	0	0
58.3	0.189	0	0.0009	0.0009
58.3333	0.1861	0	0	0
58.3667	0.1844	0	0.0022	0.0022
58.4	0.1871	0	0	0
58.4333	0.1897	0.0069	0.0009	0.0078
58.4667	0.1877	0.0069	0	0.0069
58.5	0.19	0	0.0009	0.0009
58.5333	0.1887	0	0	0
58.5667	0.1867	0	0.0009	0.0009
58.6	0.1907	0.0069	0	0.0069
58.6333	0.1887	0	0	0
58.6667	0.1848	0	0.0009	0.0009
58.7	0.1884	0	0.0009	0.0009
58.7333	0.1881	0.0069	0	0.0069
58.7667	0.1864	0	0	0
58.8	0.1894	0.0069	0	0.0069
58.8333	0.1864	0	0.0009	0.0009
58.8667	0.1887	0.0069	0	0.0069
58.9	0.189	0	0.0009	0.0009
58.9333	0.1871	0	0.0022	0.0022
58.9667	0.1874	0	0.0009	0.0009
59	0.1877	0	0	0
59.0333	0.1897	0.0069	0.0009	0.0078
59.0667	0.1881	0	0	0
59.1	0.1887	0	0	0
59.1333	0.1904	0.0069	0	0.0069
59.1667	0.1907	0	0.0009	0.0009
59.2	0.189	0	0	0
59.2333	0.1904	0	0.0009	0.0009
59.2667	0.1907	0	0	0
59.3	0.1877	0	0	0
59.3333	0.1887	0	0	0
59.3667	0.189	0	0	0

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59.4	0.1894	0.0069	0	0.0069
59.4333	0.1871	0.0069	0.0009	0.0078
59.4667	0.1887	0	0	0
59.5	0.1881	0	0.0009	0.0009
59.5333	0.1874	0	0	0
59.5667	0.1877	0	0.0009	0.0009
59.6	0.1884	0	0.0009	0.0009
59.6333	0.1867	0.0069	0.0009	0.0078
59.6667	0.1894	0	0	0
59.7	0.1884	0	0.0009	0.0009
59.7333	0.1904	0	0	0
59.7667	0.1877	0.0069	0.0009	0.0078
59.8	0.1884	0.0069	0	0.0069
59.8333	0.1874	0	0	0
59.8667	0.1881	0	0	0
59.9	0.189	0.0069	0.0009	0.0078
59.9333	0.19	0.0201	0	0.0201
59.9667	0.1887	0	0	0
60	0.1881	0	0	0
60.0333	0.189	0	0	0
60.0667	0.1884	0	0	0
60.1	0.1894	0	0.0009	0.0009
60.1333	0.1897	0	0.0009	0.0009
60.1667	0.1864	0	0	0
60.2	0.1877	0	0	0
60.2333	0.1914	0.0069	0.0009	0.0078
60.2667	0.189	0	0	0
60.3	0.1871	0	0	0
60.3333	0.1887	0	0	0
60.3667	0.1871	0	0	0
60.4	0.1861	0	0.0022	0.0022
60.4333	0.1871	0.0069	0	0.0069
60.4667	0.1864	0.0201	0	0.0201
60.5	0.1864	0	0	0
60.5333	0.1877	0	0	0
60.5667	0.1881	0.0069	0	0.0069
60.6	0.189	0	0	0
60.6333	0.1877	0.0069	0	0.0069
60.6667	0.1867	0	0	0
60.7	0.1897	0.0069	0	0.0069
60.7333	0.1851	0	0.0009	0.0009
60.7667	0.1881	0	0	0
60.8	0.1848	0.0069	0	0.0069
60.8333	0.1874	0	0.0009	0.0009
60.8667	0.1884	0	0	0
60.9	0.1864	0	0	0
60.9333	0.1844	0	0	0

60.9667	0.1887	0	0	0
61	0.1877	0	0	0
61.0333	0.1884	0	0.0009	0.0009
61.0667	0.19	0	0	0
61.1	0.1861	0.0069	0	0.0069
61.1333	0.1877	0	0	0
61.1667	0.1871	0	0	0
61.2	0.1831	0	0	0
61.2333	0.19	0.0069	0	0.0069
61.2667	0.1851	0	0	0
61.3	0.1871	0.0069	0	0.0069
61.3333	0.189	0.0069	0	0.0069
61.3667	0.1877	0	0	0
61.4	0.1877	0.0069	0	0.0069
61.4333	0.1877	0	0	0
61.4667	0.1881	0.0069	0	0.0069
61.5	0.1867	0.0069	0	0.0069
61.5333	0.1887	0	0	0
61.5667	0.1848	0	0	0
61.6	0.1867	0.0069	0	0.0069
61.6333	0.1877	0.0069	0	0.0069
61.6667	0.1877	0.0069	0.0009	0.0078
61.7	0.1838	0.0201	0	0.0201
61.7333	0.1867	0	0.0009	0.0009
61.7667	0.1867	0	0	0
61.8	0.1848	0.0069	0.0009	0.0078
61.8333	0.1858	0	0	0
61.8667	0.1884	0	0.0009	0.0009
61.9	0.1874	0.0069	0.0009	0.0078
61.9333	0.1848	0	0	0
61.9667	0.1871	0	0	0
62	0.1881	0	0	0
62.0333	0.1884	0	0.0009	0.0009
62.0667	0.1861	0	0	0
62.1	0.1867	0	0.0009	0.0009
62.1333	0.1864	0	0	0
62.1667	0.1848	0.0201	0.0009	0.021
62.2	0.1854	0	0.0009	0.0009
62.2333	0.1887	0	0	0
62.2667	0.1854	0	0	0
62.3	0.1874	0	0.0009	0.0009
62.3333	0.1841	0	0	0
62.3667	0.1881	0	0	0
62.4	0.1854	0	0	0
62.4333	0.1867	0	0	0
62.4667	0.1871	0	0.0009	0.0009
62.5	0.1851	0	0.0009	0.0009

62.5333	0.1877	0	0	0
62.5667	0.1874	0.0069	0	0.0069
62.6	0.1848	0	0	0
62.6333	0.1864	0.0069	0	0.0069
62.6667	0.1864	0.0069	0	0.0069
62.7	0.1861	0	0.0009	0.0009
62.7333	0.1844	0.0069	0	0.0069
62.7667	0.1867	0	0.0009	0.0009
62.8	0.1864	0	0.0009	0.0009
62.8333	0.1848	0.0069	0	0.0069
62.8667	0.1838	0	0.0009	0.0009
62.9	0.1844	0	0.0009	0.0009
62.9333	0.1871	0	0	0
62.9667	0.1867	0	0.0009	0.0009
63	0.1864	0	0	0
63.0333	0.1864	0.0069	0.0009	0.0078
63.0667	0.1838	0	0	0
63.1	0.1861	0	0	0
63.1333	0.1838	0	0.0009	0.0009
63.1667	0.1844	0	0	0
63.2	0.1854	0	0.0009	0.0009
63.2333	0.1861	0	0	0
63.2667	0.1825	0	0.0009	0.0009
63.3	0.1867	0	0	0
63.3333	0.1848	0	0	0
63.3667	0.1841	0	0	0
63.4	0.1841	0.0069	0.0009	0.0078
63.4333	0.1848	0	0	0
63.4667	0.1831	0	0	0
63.5	0.1851	0	0	0
63.5333	0.1805	0	0	0
63.5667	0.1877	0	0.0009	0.0009
63.6	0.1851	0	0	0
63.6333	0.1838	0	0	0
63.6667	0.1867	0	0.0009	0.0009
63.7	0.1848	0	0.0009	0.0009
63.7333	0.1858	0	0	0
63.7667	0.1844	0	0	0
63.8	0.1828	0.0069	0.0009	0.0078
63.8333	0.1848	0	0	0
63.8667	0.1815	0	0	0
63.9	0.1818	0.0069	0	0.0069
63.9333	0.1835	0	0.0009	0.0009
63.9667	0.1854	0.0201	0.0009	0.021
64	0.1854	0.0069	0	0.0069
64.0333	0.1874	0	0	0
64.0667	0.1825	0	0	0

64.1	0.1838	0.0069	0.0009	0.0078
64.1333	0.1844	0	0.0009	0.0009
64.1667	0.1851	0	0	0
64.2	0.1835	0	0	0
64.2333	0.1838	0	0.0009	0.0009
64.2667	0.1851	0.0069	0	0.0069
64.3	0.1848	0	0	0
64.3333	0.1838	0.0069	0	0.0069
64.3667	0.1838	0	0.0009	0.0009
64.4	0.1867	0	0	0
64.4333	0.1844	0.0069	0	0.0069
64.4667	0.1851	0	0	0
64.5	0.1851	0	0	0
64.5333	0.1831	0	0	0
64.5667	0.1844	0	0	0
64.6	0.1858	0	0	0
64.6333	0.1818	0.0069	0	0.0069
64.6667	0.1844	0	0	0
64.7	0.1851	0.0069	0	0.0069
64.7333	0.1838	0	0	0
64.7667	0.1894	0	0	0
64.8	0.1999	0.0069	0	0.0069
64.8333	0.2085	0	0	0
64.8667	0.2183	0	0.0009	0.0009
64.9	0.2312	0	0.0009	0.0009
64.9333	0.2378	0	0	0
64.9667	0.2493	0.0069	0	0.0069
65	0.2572	0	0	0
65.0333	0.2674	0.0069	0.8228	0.8297
65.0667	0.2769	0	0.8385	0.8385
65.1	0.2881	0	0.8569	0.8569
65.1333	0.2957	0.0069	0.8754	0.8823
65.1667	0.3023	0	0.8859	0.8859
65.2	0.3131	0	0.9003	0.9003
65.2333	0.3194	0.0069	0.9122	0.9191
65.2667	0.3312	0	0.9293	0.9293
65.3	0.3381	0	0.9437	0.9437
65.3333	0.347	0	0.9621	0.9621
65.3667	0.3526	0	0.9661	0.9661
65.4	0.3609	0	0.9871	0.9871
65.4333	0.3582	0	0.9911	0.9911
65.4667	0.3576	0.0069	0.9937	1.0006
65.5	0.3553	0	1.0016	1.0016
65.5333	0.3562	0	1.0016	1.0016
65.5667	0.3592	0	1.0055	1.0055
65.6	0.3566	0	1.0134	1.0134
65.6333	0.3576	0	1.0213	1.0213

65.6667	0.3595	0	1.0226	1.0226
65.7	0.3579	0	1.0332	1.0332
65.7333	0.3566	0	1.0358	1.0358
65.7667	0.3622	0.0069	1.041	1.048
65.8	0.3618	0.0069	1.045	1.0519
65.8333	0.3628	0	1.0463	1.0463
65.8667	0.3615	0	1.0529	1.0529
65.9	0.3618	0	1.0568	1.0568
65.9333	0.3625	0	1.0568	1.0568
65.9667	0.3632	0.0069	1.0621	1.069
66	0.3641	0	1.0713	1.0713
66.0333	0.3651	0	1.0726	1.0726
66.0667	0.3645	0	1.0818	1.0818
66.1	0.3665	0.0069	1.0831	1.09
66.1333	0.3658	0.0069	1.0831	1.09
66.1667	0.3638	0.0069	1.0871	1.094
66.2	0.3688	0.0069	1.0884	1.0953
66.2333	0.3688	0	1.0976	1.0976
66.2667	0.3688	0.0069	1.0936	1.1006
66.3	0.3684	0	1.1042	1.1042
66.3333	0.3697	0	1.1107	1.1107
66.3667	0.3704	0	1.1107	1.1107
66.4	0.3701	0.0069	1.1186	1.1255
66.4333	0.3714	0.0069	1.1134	1.1203
66.4667	0.3717	0	1.1186	1.1186
66.5	0.3737	0	1.1173	1.1173
66.5333	0.3737	0	1.1186	1.1186
66.5667	0.3734	0	1.1265	1.1265
66.6	0.3734	0	1.1384	1.1384
66.6333	0.377	0	1.1476	1.1476
66.6667	0.3743	0	1.1462	1.1462
66.7	0.3773	0	1.1515	1.1515
66.7333	0.376	0	1.1581	1.1581
66.7667	0.3803	0	1.162	1.162
66.8	0.3809	0	1.1594	1.1594
66.8333	0.378	0	1.1633	1.1633
66.8667	0.3783	0	1.1725	1.1725
66.9	0.3803	0	1.1752	1.1752
66.9333	0.3773	0	1.1739	1.1739
66.9667	0.3826	0	1.1791	1.1791
67	0.379	0	1.1791	1.1791
67.0333	0.3806	0	1.1831	1.1831
67.0667	0.3793	0	1.1831	1.1831
67.1	0.3816	0	1.1883	1.1883
67.1333	0.3803	0.0069	1.191	1.1979
67.1667	0.3836	0	1.1923	1.1923
67.2	0.3822	0	1.2002	1.2002

67.2333	0.3822	0	1.1988	1.1988
67.2667	0.3819	0	1.2041	1.2041
67.3	0.3819	0.0069	1.2054	1.2123
67.3333	0.3813	0	1.2028	1.2028
67.3667	0.3816	0	1.2067	1.2067
67.4	0.3806	0.0201	1.2107	1.2307
67.4333	0.3757	0	1.2107	1.2107
67.4667	0.3806	0	1.2107	1.2107
67.5	0.379	0.0069	1.2146	1.2215
67.5333	0.3773	0	1.2107	1.2107
67.5667	0.3763	0	1.2172	1.2172
67.6	0.379	0	1.2159	1.2159
67.6333	0.3743	0.0069	1.2172	1.2242
67.6667	0.378	0.0069	1.2186	1.2255
67.7	0.3763	0.0069	1.2186	1.2255
67.7333	0.3737	0.0201	1.2278	1.2478
67.7667	0.378	0	1.2291	1.2291
67.8	0.374	0	1.237	1.237
67.8333	0.3711	0	1.2343	1.2343
67.8667	0.3743	0	1.2317	1.2317
67.9	0.3727	0	1.2357	1.2357
67.9333	0.3724	0	1.2278	1.2278
67.9667	0.3711	0	1.233	1.233
68	0.3714	0	1.2291	1.2291
68.0333	0.3724	0	1.2304	1.2304
68.0667	0.3707	0	1.2304	1.2304
68.1	0.3707	0	1.2317	1.2317
68.1333	0.3711	0	1.2396	1.2396
68.1667	0.3668	0	1.237	1.237
68.2	0.3714	0.0069	1.2343	1.2413
68.2333	0.3714	0	1.2357	1.2357
68.2667	0.3701	0	1.233	1.233
68.3	0.3668	0	1.237	1.237
68.3333	0.3678	0	1.2449	1.2449
68.3667	0.3668	0	1.2422	1.2422
68.4	0.3658	0.0069	1.2396	1.2465
68.4333	0.3668	0.0069	1.2435	1.2505
68.4667	0.3678	0	1.237	1.237
68.5	0.3671	0	1.2449	1.2449
68.5333	0.3661	0	1.2383	1.2383
68.5667	0.3661	0	1.2383	1.2383
68.6	0.3648	0	1.2343	1.2343
68.6333	0.3658	0	1.2357	1.2357
68.6667	0.3612	0	1.2435	1.2435
68.7	0.3632	0	1.2422	1.2422
68.7333	0.3681	0	1.2409	1.2409
68.7667	0.3645	0.0069	1.237	1.2439

68.8	0.3625	0	1.2409	1.2409
68.8333	0.3628	0	1.2383	1.2383
68.8667	0.3589	0	1.2396	1.2396
68.9	0.3625	0.0069	1.2343	1.2413
68.9333	0.3609	0	1.2383	1.2383
68.9667	0.3595	0	1.2396	1.2396
69	0.3615	0	1.2383	1.2383
69.0333	0.3628	0	1.237	1.237
69.0667	0.3622	0	1.237	1.237
69.1	0.3589	0.0069	1.237	1.2439
69.1333	0.3595	0.0069	1.2343	1.2413
69.1667	0.3586	0	1.2383	1.2383
69.2	0.3589	0	1.2357	1.2357
69.2333	0.3589	0	1.2357	1.2357
69.2667	0.3615	0	1.2396	1.2396
69.3	0.3559	0	1.233	1.233
69.3333	0.3579	0.0069	1.237	1.2439
69.3667	0.3589	0	1.2304	1.2304
69.4	0.3569	0.0069	1.233	1.24
69.4333	0.3576	0	1.233	1.233
69.4667	0.3599	0.0069	1.2225	1.2294
69.5	0.3592	0	1.2291	1.2291
69.5333	0.3579	0	1.2251	1.2251
69.5667	0.3592	0	1.233	1.233
69.6	0.3595	0.0069	1.2291	1.236
69.6333	0.3572	0.0069	1.2291	1.236
69.6667	0.3566	0	1.2304	1.2304
69.7	0.3559	0.0069	1.2304	1.2373
69.7333	0.3572	0.0201	1.2343	1.2544
69.7667	0.3602	0	1.2317	1.2317
69.8	0.3582	0	1.233	1.233
69.8333	0.3533	0	1.2317	1.2317
69.8667	0.3543	0.0069	1.2396	1.2465
69.9	0.3582	0.0069	1.2343	1.2413
69.9333	0.3543	0	1.2396	1.2396
69.9667	0.3559	0	1.233	1.233
70	0.3546	0.0069	1.237	1.2439
70.0333	0.3539	0	1.2357	1.2357
70.0667	0.3543	0	1.2304	1.2304
70.1	0.3553	0.0069	1.233	1.24
70.1333	0.352	0	1.2357	1.2357
70.1667	0.3562	0	1.237	1.237
70.2	0.3543	0.0069	1.2304	1.2373
70.2333	0.3543	0	1.2304	1.2304
70.2667	0.3556	0	1.2317	1.2317
70.3	0.3536	0	1.2357	1.2357
70.3333	0.3516	0	1.2291	1.2291

70.3667	0.352	0.0069	1.233	1.24
70.4	0.3526	0	1.2317	1.2317
70.4333	0.3553	0	1.2278	1.2278
70.4667	0.3523	0	1.2291	1.2291
70.5	0.35	0	1.2317	1.2317
70.5333	0.3513	0	1.2304	1.2304
70.5667	0.352	0	1.2317	1.2317
70.6	0.352	0	1.237	1.237
70.6333	0.351	0	1.233	1.233
70.6667	0.3497	0	1.2304	1.2304
70.7	0.353	0.0069	1.2278	1.2347
70.7333	0.3526	0	1.2291	1.2291
70.7667	0.351	0.0069	1.2278	1.2347
70.8	0.353	0.0069	1.2317	1.2386
70.8333	0.3503	0	1.2265	1.2265
70.8667	0.3497	0.0069	1.2317	1.2386
70.9	0.3507	0.0069	1.2304	1.2373
70.9333	0.3487	0.0069	1.2278	1.2347
70.9667	0.351	0	1.2238	1.2238
71	0.3483	0	1.2238	1.2238
71.0333	0.352	0	1.2317	1.2317
71.0667	0.3516	0.0069	1.2225	1.2294
71.1	0.351	0	1.233	1.233
71.1333	0.3513	0	1.2278	1.2278
71.1667	0.3516	0	1.2304	1.2304
71.2	0.3493	0	1.2304	1.2304
71.2333	0.3487	0.0069	1.2265	1.2334
71.2667	0.3503	0.0069	1.2304	1.2373
71.3	0.3503	0	1.2304	1.2304
71.3333	0.349	0	1.2291	1.2291
71.3667	0.3523	0.0069	1.2212	1.2281
71.4	0.3493	0	1.2251	1.2251
71.4333	0.3493	0	1.2238	1.2238
71.4667	0.3497	0	1.2238	1.2238
71.5	0.3483	0	1.2238	1.2238
71.5333	0.3497	0	1.2199	1.2199
71.5667	0.351	0	1.2251	1.2251
71.6	0.3507	0.0069	1.2291	1.236
71.6333	0.3483	0	1.2251	1.2251
71.6667	0.35	0.0069	1.2225	1.2294
71.7	0.351	0	1.2225	1.2225
71.7333	0.3487	0.0201	1.233	1.2531
71.7667	0.349	0	1.2343	1.2343
71.8	0.3507	0	1.2317	1.2317
71.8333	0.3493	0	1.2278	1.2278
71.8667	0.3493	0	1.2265	1.2265
71.9	0.3503	0	1.2251	1.2251

71.9333	0.3457	0	1.2278	1.2278
71.9667	0.3451	0	1.2238	1.2238
72	0.348	0.0069	1.2251	1.2321
72.0333	0.3467	0.0069	1.2304	1.2373
72.0667	0.3477	0	1.2317	1.2317
72.1	0.348	0	1.2291	1.2291
72.1333	0.349	0	1.2304	1.2304
72.1667	0.3467	0	1.2238	1.2238
72.2	0.3477	0.0069	1.2291	1.236
72.2333	0.3483	0.0069	1.233	1.24
72.2667	0.346	0	1.2304	1.2304
72.3	0.3464	0	1.2265	1.2265
72.3333	0.3477	0	1.2265	1.2265
72.3667	0.3483	0.0069	1.2265	1.2334
72.4	0.3474	0	1.2278	1.2278
72.4333	0.348	0	1.2278	1.2278
72.4667	0.3467	0.0201	1.2225	1.2426
72.5	0.3464	0	1.2238	1.2238
72.5333	0.3451	0	1.2238	1.2238
72.5667	0.3444	0	1.2251	1.2251
72.6	0.346	0	1.2265	1.2265
72.6333	0.3487	0.0069	1.2212	1.2281
72.6667	0.3477	0.0069	1.2238	1.2307
72.7	0.3483	0.0069	1.2225	1.2294
72.7333	0.348	0	1.2238	1.2238
72.7667	0.3487	0	1.2199	1.2199
72.8	0.3503	0	1.2186	1.2186
72.8333	0.3457	0.0201	1.2212	1.2413
72.8667	0.3493	0.0069	1.2212	1.2281
72.9	0.3503	0	1.2251	1.2251
72.9333	0.3487	0	1.2291	1.2291
72.9667	0.3474	0.0069	1.2251	1.2321
73	0.35	0	1.2225	1.2225
73.0333	0.348	0.0069	1.2225	1.2294
73.0667	0.3474	0	1.2251	1.2251
73.1	0.3474	0	1.2225	1.2225
73.1333	0.346	0	1.2199	1.2199
73.1667	0.348	0	1.2186	1.2186
73.2	0.3497	0	1.2199	1.2199
73.2333	0.3493	0.0069	1.2225	1.2294
73.2667	0.3497	0.0069	1.2212	1.2281
73.3	0.3507	0	1.2172	1.2172
73.3333	0.3477	0.0201	1.2225	1.2426
73.3667	0.35	0	1.2186	1.2186
73.4	0.3503	0	1.2186	1.2186
73.4333	0.3464	0	1.2225	1.2225
73.4667	0.3516	0	1.2199	1.2199

73.5	0.351	0	1.2159	1.2159
73.5333	0.3497	0	1.2172	1.2172
73.5667	0.3503	0.0069	1.2212	1.2281
73.6	0.3507	0.0069	1.2186	1.2255
73.6333	0.3487	0.0069	1.2225	1.2294
73.6667	0.3487	0	1.2186	1.2186
73.7	0.3493	0	1.2251	1.2251
73.7333	0.352	0	1.2212	1.2212
73.7667	0.3507	0.0069	1.2212	1.2281
73.8	0.3477	0	1.2172	1.2172
73.8333	0.3507	0	1.2146	1.2146
73.8667	0.3477	0	1.2225	1.2225
73.9	0.3497	0	1.2172	1.2172
73.9333	0.3503	0.0069	1.2186	1.2255
73.9667	0.352	0	1.2225	1.2225
74	0.3507	0.0069	1.2186	1.2255
74.0333	0.3513	0	1.2186	1.2186
74.0667	0.353	0.0069	1.2159	1.2229
74.1	0.3507	0	1.2159	1.2159
74.1333	0.3543	0	1.2159	1.2159
74.1667	0.351	0.0069	1.2225	1.2294
74.2	0.3536	0.0069	1.2212	1.2281
74.2333	0.3559	0.0069	1.2186	1.2255
74.2667	0.3523	0.0069	1.2172	1.2242
74.3	0.3523	0	1.2199	1.2199
74.3333	0.3543	0	1.2172	1.2172
74.3667	0.3513	0.0069	1.2172	1.2242
74.4	0.3516	0	1.2212	1.2212
74.4333	0.3513	0	1.2238	1.2238
74.4667	0.3533	0	1.2199	1.2199
74.5	0.3526	0	1.2278	1.2278
74.5333	0.3526	0	1.2317	1.2317
74.5667	0.3516	0.0069	1.2265	1.2334
74.6	0.3562	0	1.2225	1.2225
74.6333	0.353	0.0069	1.2265	1.2334
74.6667	0.3526	0	1.2225	1.2225
74.7	0.3523	0	1.2278	1.2278
74.7333	0.3543	0	1.2265	1.2265
74.7667	0.3562	0	1.2199	1.2199
74.8	0.3543	0.0069	1.2225	1.2294
74.8333	0.3539	0.0069	1.2225	1.2294
74.8667	0.3533	0	1.2291	1.2291
74.9	0.353	0.0069	1.2304	1.2373
74.9333	0.3553	0	1.2317	1.2317
74.9667	0.3566	0.0069	1.2317	1.2386
75	0.3572	0	1.2357	1.2357
75.0333	0.3579	0	1.233	1.233

75.0667	0.3572	0	1.2304	1.2304
75.1	0.3572	0	1.2383	1.2383
75.1333	0.3569	0	1.2343	1.2343
75.1667	0.3569	0	1.237	1.237
75.2	0.3566	0	1.2396	1.2396
75.2333	0.3553	0.0069	1.237	1.2439
75.2667	0.3546	0.0069	1.2396	1.2465
75.3	0.3572	0.0069	1.2396	1.2465
75.3333	0.3576	0	1.2357	1.2357
75.3667	0.3572	0.0069	1.2409	1.2478
75.4	0.3566	0	1.237	1.237
75.4333	0.3586	0	1.2383	1.2383
75.4667	0.3572	0	1.2357	1.2357
75.5	0.3595	0	1.2435	1.2435
75.5333	0.3582	0	1.2409	1.2409
75.5667	0.3592	0.0069	1.2422	1.2492
75.6	0.3572	0.0069	1.2409	1.2478
75.6333	0.3592	0.0069	1.2449	1.2518
75.6667	0.3589	0	1.2488	1.2488
75.7	0.3572	0	1.2462	1.2462
75.7333	0.3579	0	1.2462	1.2462
75.7667	0.3599	0.0069	1.2462	1.2531
75.8	0.3612	0	1.2514	1.2514
75.8333	0.3615	0	1.2514	1.2514
75.8667	0.3622	0	1.2514	1.2514
75.9	0.3602	0.0069	1.2449	1.2518
75.9333	0.3599	0.0069	1.2475	1.2544
75.9667	0.3615	0	1.2462	1.2462
76	0.3589	0.0069	1.2435	1.2505
76.0333	0.3576	0	1.2449	1.2449
76.0667	0.3595	0	1.2475	1.2475
76.1	0.3618	0.0069	1.2488	1.2557
76.1333	0.3628	0.0069	1.2488	1.2557
76.1667	0.3641	0	1.2528	1.2528
76.2	0.3618	0	1.2475	1.2475
76.2333	0.3589	0	1.2475	1.2475
76.2667	0.3628	0	1.2567	1.2567
76.3	0.3609	0	1.2488	1.2488
76.3333	0.3612	0	1.2541	1.2541
76.3667	0.3632	0	1.2659	1.2659
76.4	0.3609	0	1.2646	1.2646
76.4333	0.3599	0	1.262	1.262
76.4667	0.3628	0	1.2646	1.2646
76.5	0.3632	0.0069	1.2646	1.2715
76.5333	0.3622	0	1.2685	1.2685
76.5667	0.3651	0	1.262	1.262
76.6	0.3638	0	1.2633	1.2633

76.6333	0.3615	0	1.2672	1.2672
76.6667	0.3622	0	1.2646	1.2646
76.7	0.3622	0	1.262	1.262
76.7333	0.3625	0	1.2633	1.2633
76.7667	0.3632	0	1.2646	1.2646
76.8	0.3628	0.0069	1.2646	1.2715
76.8333	0.3648	0	1.2672	1.2672
76.8667	0.3648	0	1.2672	1.2672
76.9	0.3668	0	1.2633	1.2633
76.9333	0.3625	0	1.2646	1.2646
76.9667	0.3622	0	1.262	1.262
77	0.3638	0	1.2659	1.2659
77.0333	0.3658	0	1.2646	1.2646
77.0667	0.3651	0	1.2659	1.2659
77.1	0.3674	0.0069	1.2659	1.2728
77.1333	0.3648	0.0069	1.2633	1.2702
77.1667	0.3645	0	1.262	1.262
77.2	0.3628	0	1.2646	1.2646
77.2333	0.3655	0.0069	1.2606	1.2676
77.2667	0.3645	0	1.2646	1.2646
77.3	0.3638	0.0069	1.262	1.2689
77.3333	0.3648	0	1.2672	1.2672
77.3667	0.3635	0	1.2659	1.2659
77.4	0.3648	0	1.2672	1.2672
77.4333	0.3674	0	1.2685	1.2685
77.4667	0.3665	0	1.2712	1.2712
77.5	0.3641	0	1.2606	1.2606
77.5333	0.3618	0.0069	1.2698	1.2768
77.5667	0.3651	0	1.2751	1.2751
77.6	0.3674	0	1.2646	1.2646
77.6333	0.3655	0	1.2685	1.2685
77.6667	0.3678	0	1.2712	1.2712
77.7	0.3681	0	1.2738	1.2738
77.7333	0.3668	0	1.2738	1.2738
77.7667	0.3665	0	1.2751	1.2751
77.8	0.3684	0	1.2738	1.2738
77.8333	0.3655	0	1.2738	1.2738
77.8667	0.3661	0.0069	1.2751	1.282
77.9	0.3671	0	1.2685	1.2685
77.9333	0.3658	0	1.2725	1.2725
77.9667	0.3678	0	1.2751	1.2751
78	0.3681	0	1.2725	1.2725
78.0333	0.3651	0	1.2698	1.2698
78.0667	0.3684	0	1.2685	1.2685
78.1	0.3641	0	1.2712	1.2712
78.1333	0.3684	0	1.2725	1.2725
78.1667	0.3668	0	1.2764	1.2764

78.2	0.3641	0.0069	1.2725	1.2794
78.2333	0.3668	0	1.2764	1.2764
78.2667	0.3651	0	1.2725	1.2725
78.3	0.3648	0	1.2777	1.2777
78.3333	0.3648	0	1.2804	1.2804
78.3667	0.3691	0	1.2791	1.2791
78.4	0.3661	0	1.2791	1.2791
78.4333	0.3648	0	1.2777	1.2777
78.4667	0.3661	0.0069	1.2843	1.2912
78.5	0.3658	0.0069	1.2817	1.2886
78.5333	0.3655	0	1.283	1.283
78.5667	0.3651	0.0069	1.283	1.2899
78.6	0.3668	0.0069	1.2843	1.2912
78.6333	0.3641	0	1.2843	1.2843
78.6667	0.3661	0.0069	1.2804	1.2873
78.7	0.3661	0	1.2817	1.2817
78.7333	0.3658	0.0069	1.2804	1.2873
78.7667	0.3648	0	1.2843	1.2843
78.8	0.3655	0.0069	1.2869	1.2939
78.8333	0.3651	0	1.2883	1.2883
78.8667	0.3645	0	1.2869	1.2869
78.9	0.3651	0.0069	1.2856	1.2925
78.9333	0.3661	0.0069	1.2804	1.2873
78.9667	0.3641	0	1.2791	1.2791
79	0.3661	0	1.2764	1.2764
79.0333	0.3638	0.0069	1.2751	1.282
79.0667	0.3655	0.0069	1.2777	1.2847
79.1	0.3651	0	1.2751	1.2751
79.1333	0.3668	0	1.2764	1.2764
79.1667	0.3658	0.0069	1.2751	1.282
79.2	0.3671	0	1.2751	1.2751
79.2333	0.3678	0	1.2738	1.2738
79.2667	0.3671	0	1.2685	1.2685
79.3	0.3641	0.0069	1.2698	1.2768
79.3333	0.3671	0	1.2698	1.2698
79.3667	0.3661	0	1.2791	1.2791
79.4	0.3628	0.0069	1.2725	1.2794
79.4333	0.3671	0	1.2698	1.2698
79.4667	0.3665	0	1.2672	1.2672
79.5	0.3678	0.0069	1.2738	1.2807
79.5333	0.3661	0	1.2738	1.2738
79.5667	0.3668	0	1.2764	1.2764
79.6	0.3651	0.0069	1.2764	1.2833
79.6333	0.3668	0	1.2777	1.2777
79.6667	0.3678	0	1.2791	1.2791
79.7	0.3668	0	1.2738	1.2738
79.7333	0.3674	0.0069	1.2698	1.2768

79.7667	0.3668	0	1.2698	1.2698
79.8	0.3641	0	1.2698	1.2698
79.8333	0.3655	0	1.2751	1.2751
79.8667	0.3658	0.0069	1.2698	1.2768
79.9	0.3632	0	1.2777	1.2777
79.9333	0.3671	0	1.2777	1.2777
79.9667	0.3648	0	1.2791	1.2791
80	0.3645	0	1.2725	1.2725
80.0333	0.3658	0	1.283	1.283
80.0667	0.3658	0	1.2791	1.2791
80.1	0.3655	0.0069	1.2804	1.2873
80.1333	0.3668	0	1.2804	1.2804
80.1667	0.3671	0.0069	1.2791	1.286
80.2	0.3661	0.0069	1.2883	1.2952
80.2333	0.3658	0.0069	1.2804	1.2873
80.2667	0.3658	0	1.283	1.283
80.3	0.3671	0	1.2764	1.2764
80.3333	0.3658	0.0069	1.2751	1.282
80.3667	0.3658	0.0069	1.2804	1.2873
80.4	0.3635	0	1.2712	1.2712
80.4333	0.3688	0.0069	1.2764	1.2833
80.4667	0.3638	0	1.2764	1.2764
80.5	0.3684	0.0069	1.2791	1.286
80.5333	0.3668	0	1.2685	1.2685
80.5667	0.3655	0	1.2751	1.2751
80.6	0.3668	0	1.2791	1.2791
80.6333	0.3651	0	1.2777	1.2777
80.6667	0.3638	0	1.2738	1.2738
80.7	0.3658	0	1.2751	1.2751
80.7333	0.3661	0.0069	1.2725	1.2794
80.7667	0.3658	0	1.2698	1.2698
80.8	0.3688	0	1.2698	1.2698
80.8333	0.3681	0	1.2633	1.2633
80.8667	0.3651	0	1.2685	1.2685
80.9	0.3658	0	1.2659	1.2659
80.9333	0.3668	0.0069	1.2659	1.2728
80.9667	0.3648	0	1.2593	1.2593
81	0.3665	0	1.2685	1.2685
81.0333	0.3658	0	1.2685	1.2685
81.0667	0.3665	0.0201	1.2738	1.2939
81.1	0.3661	0	1.2725	1.2725
81.1333	0.3681	0	1.2685	1.2685
81.1667	0.3638	0	1.2725	1.2725
81.2	0.3635	0.0069	1.2738	1.2807
81.2333	0.3668	0	1.2751	1.2751
81.2667	0.3638	0	1.2791	1.2791
81.3	0.3655	0	1.2698	1.2698

81.3333	0.3648	0	1.2712	1.2712
81.3667	0.3658	0	1.2738	1.2738
81.4	0.3668	0	1.2777	1.2777
81.4333	0.3684	0	1.2738	1.2738
81.4667	0.3671	0	1.2764	1.2764
81.5	0.3671	0	1.283	1.283
81.5333	0.3688	0	1.2804	1.2804
81.5667	0.3661	0.0069	1.2685	1.2755
81.6	0.3668	0	1.2725	1.2725
81.6333	0.3645	0	1.2738	1.2738
81.6667	0.3658	0.0069	1.2725	1.2794
81.7	0.3641	0	1.2751	1.2751
81.7333	0.3651	0	1.2712	1.2712
81.7667	0.3668	0	1.2764	1.2764
81.8	0.3622	0	1.2712	1.2712
81.8333	0.3655	0	1.2672	1.2672
81.8667	0.3632	0	1.2725	1.2725
81.9	0.3658	0.0201	1.2738	1.2939
81.9333	0.3645	0	1.2751	1.2751
81.9667	0.3688	0	1.2725	1.2725
82	0.3641	0.0069	1.2712	1.2781
82.0333	0.3655	0	1.2725	1.2725
82.0667	0.3645	0.0069	1.2698	1.2768
82.1	0.3651	0.0069	1.2712	1.2781
82.1333	0.3658	0	1.2672	1.2672
82.1667	0.3678	0.0069	1.2751	1.282
82.2	0.3648	0.0069	1.2725	1.2794
82.2333	0.3674	0	1.2791	1.2791
82.2667	0.3674	0	1.2804	1.2804
82.3	0.3635	0.0069	1.2817	1.2886
82.3333	0.3622	0	1.283	1.283
82.3667	0.3684	0.0069	1.2751	1.282
82.4	0.3665	0	1.2804	1.2804
82.4333	0.3625	0	1.2777	1.2777
82.4667	0.3678	0.0069	1.2751	1.282
82.5	0.3651	0	1.2764	1.2764
82.5333	0.3635	0.0069	1.2712	1.2781
82.5667	0.3645	0.0069	1.2725	1.2794
82.6	0.3681	0.0069	1.2738	1.2807
82.6333	0.3691	0	1.2738	1.2738
82.6667	0.3655	0	1.2817	1.2817
82.7	0.3668	0	1.2751	1.2751
82.7333	0.3641	0.0069	1.2738	1.2807
82.7667	0.3628	0	1.2738	1.2738
82.8	0.3655	0.0069	1.2751	1.282
82.8333	0.3658	0	1.2764	1.2764
82.8667	0.3658	0.0069	1.2804	1.2873

82.9	0.3655	0	1.2751	1.2751
82.9333	0.3635	0	1.2764	1.2764
82.9667	0.3665	0	1.2738	1.2738
83	0.3635	0.0069	1.2764	1.2833
83.0333	0.3661	0	1.2791	1.2791
83.0667	0.3658	0.0201	1.2804	1.3004
83.1	0.3658	0.0069	1.283	1.2899
83.1333	0.3678	0	1.2791	1.2791
83.1667	0.3658	0	1.2777	1.2777
83.2	0.3625	0	1.2764	1.2764
83.2333	0.3661	0	1.2764	1.2764
83.2667	0.3665	0	1.2817	1.2817
83.3	0.3681	0	1.283	1.283
83.3333	0.3671	0.0069	1.2751	1.282
83.3667	0.3688	0.0069	1.2804	1.2873
83.4	0.3665	0	1.2764	1.2764
83.4333	0.3668	0	1.2672	1.2672
83.4667	0.3671	0	1.2672	1.2672
83.5	0.3645	0.0201	1.2738	1.2939
83.5333	0.3635	0	1.2725	1.2725
83.5667	0.3628	0.0069	1.2725	1.2794
83.6	0.3665	0.0069	1.2738	1.2807
83.6333	0.3678	0.0069	1.2712	1.2781
83.6667	0.3668	0	1.2672	1.2672
83.7	0.3671	0.0201	1.2672	1.2873
83.7333	0.3671	0	1.2725	1.2725
83.7667	0.3668	0	1.2685	1.2685
83.8	0.3661	0	1.2725	1.2725
83.8333	0.3678	0.0069	1.2685	1.2755
83.8667	0.3684	0	1.2712	1.2712
83.9	0.3635	0.0201	1.2725	1.2925
83.9333	0.3681	0.0069	1.2725	1.2794
83.9667	0.3661	0	1.2777	1.2777
84	0.3655	0.0069	1.2725	1.2794
84.0333	0.3638	0	1.2685	1.2685
84.0667	0.3648	0	1.2738	1.2738
84.1	0.3665	0	1.2764	1.2764
84.1333	0.3651	0.0069	1.2791	1.286
84.1667	0.3635	0	1.2791	1.2791
84.2	0.3668	0	1.2817	1.2817
84.2333	0.3641	0	1.2856	1.2856
84.2667	0.3641	0	1.2777	1.2777
84.3	0.3632	0.0069	1.2777	1.2847
84.3333	0.3668	0	1.2751	1.2751
84.3667	0.3655	0	1.2791	1.2791
84.4	0.3668	0.0069	1.2764	1.2833
84.4333	0.3674	0	1.2751	1.2751

84.4667	0.3674	0	1.2764	1.2764
84.5	0.3668	0	1.2804	1.2804
84.5333	0.3635	0	1.2764	1.2764
84.5667	0.3665	0.0069	1.2764	1.2833
84.6	0.3678	0.0069	1.2725	1.2794
84.6333	0.3665	0.0069	1.2751	1.282
84.6667	0.3655	0.0069	1.2738	1.2807
84.7	0.3671	0.0069	1.2791	1.286
84.7333	0.3665	0.0069	1.2804	1.2873
84.7667	0.3632	0	1.2869	1.2869
84.8	0.3671	0	1.2896	1.2896
84.8333	0.3648	0.0069	1.2751	1.282
84.8667	0.3641	0	1.2698	1.2698
84.9	0.3648	0	1.2672	1.2672
84.9333	0.3668	0	1.2725	1.2725
84.9667	0.3641	0	1.2712	1.2712
85	0.3622	0	1.2725	1.2725
85.0333	0.3665	0.0069	1.2804	1.2873
85.0667	0.3668	0.0069	1.2751	1.282
85.1	0.3658	0	1.2791	1.2791
85.1333	0.3628	0.0069	1.2764	1.2833
85.1667	0.3655	0	1.2764	1.2764
85.2	0.3628	0.0069	1.2685	1.2755
85.2333	0.3645	0	1.2738	1.2738
85.2667	0.3658	0	1.2777	1.2777
85.3	0.3635	0.0069	1.2738	1.2807
85.3333	0.3638	0	1.2777	1.2777
85.3667	0.3661	0.0069	1.2777	1.2847
85.4	0.3658	0	1.2738	1.2738
85.4333	0.3658	0.0069	1.283	1.2899
85.4667	0.3651	0	1.2804	1.2804
85.5	0.3615	0	1.2791	1.2791
85.5333	0.3655	0	1.2791	1.2791
85.5667	0.3655	0.0069	1.2856	1.2925
85.6	0.3668	0	1.2791	1.2791
85.6333	0.3661	0	1.2804	1.2804
85.6667	0.3632	0	1.2817	1.2817
85.7	0.3648	0	1.2791	1.2791
85.7333	0.3661	0	1.2817	1.2817
85.7667	0.3628	0	1.2764	1.2764
85.8	0.3635	0	1.2751	1.2751
85.8333	0.3622	0	1.2791	1.2791
85.8667	0.3658	0	1.2791	1.2791
85.9	0.3661	0	1.283	1.283
85.9333	0.3655	0	1.2777	1.2777
85.9667	0.3678	0	1.2791	1.2791
86	0.3655	0	1.2751	1.2751

86.0333	0.3635	0	1.2791	1.2791
86.0667	0.3622	0.0069	1.2764	1.2833
86.1	0.3651	0	1.2777	1.2777
86.1333	0.3628	0.0069	1.2698	1.2768
86.1667	0.3635	0	1.2698	1.2698
86.2	0.3628	0.0069	1.2738	1.2807
86.2333	0.3635	0	1.2738	1.2738
86.2667	0.3645	0	1.2712	1.2712
86.3	0.3651	0	1.2685	1.2685
86.3333	0.3665	0.0069	1.2738	1.2807
86.3667	0.3655	0.0069	1.2725	1.2794
86.4	0.3668	0	1.2725	1.2725
86.4333	0.3658	0	1.2725	1.2725
86.4667	0.3648	0	1.2791	1.2791
86.5	0.3641	0.0069	1.2738	1.2807
86.5333	0.3681	0	1.2791	1.2791
86.5667	0.3671	0	1.2751	1.2751
86.6	0.3655	0.0069	1.2712	1.2781
86.6333	0.3625	0.0069	1.2725	1.2794
86.6667	0.3651	0.0069	1.2725	1.2794
86.7	0.3632	0	1.2777	1.2777
86.7333	0.3625	0	1.2751	1.2751
86.7667	0.3661	0	1.2751	1.2751
86.8	0.3648	0	1.2751	1.2751
86.8333	0.3661	0	1.2804	1.2804
86.8667	0.3648	0	1.2764	1.2764
86.9	0.3632	0	1.2738	1.2738
86.9333	0.3665	0	1.2791	1.2791
86.9667	0.3641	0	1.2791	1.2791
87	0.3635	0	1.2764	1.2764
87.0333	0.3658	0	1.2777	1.2777
87.0667	0.3628	0	1.2764	1.2764
87.1	0.3655	0	1.283	1.283
87.1333	0.3681	0	1.2869	1.2869
87.1667	0.3651	0	1.2817	1.2817
87.2	0.3648	0.0069	1.2817	1.2886
87.2333	0.3661	0	1.2764	1.2764
87.2667	0.3628	0	1.2791	1.2791
87.3	0.3615	0	1.2725	1.2725
87.3333	0.3638	0.0069	1.2804	1.2873
87.3667	0.3618	0	1.2791	1.2791
87.4	0.3648	0	1.283	1.283
87.4333	0.3658	0.0069	1.2791	1.286
87.4667	0.3658	0	1.2843	1.2843
87.5	0.3628	0	1.283	1.283
87.5333	0.3648	0	1.2777	1.2777
87.5667	0.3655	0.0069	1.2791	1.286

87.6	0.3645	0.0069	1.2777	1.2847
87.6333	0.3655	0	1.2791	1.2791
87.6667	0.3658	0.0069	1.2751	1.282
87.7	0.3615	0	1.2791	1.2791
87.7333	0.3632	0	1.2725	1.2725
87.7667	0.3638	0	1.2738	1.2738
87.8	0.3665	0	1.2725	1.2725
87.8333	0.3658	0	1.2738	1.2738
87.8667	0.3635	0	1.2738	1.2738
87.9	0.3645	0.0069	1.2764	1.2833
87.9333	0.3651	0	1.2751	1.2751
87.9667	0.3665	0.0069	1.2751	1.282
88	0.3625	0.0069	1.2738	1.2807
88.0333	0.3658	0	1.2698	1.2698
88.0667	0.3632	0.0069	1.2712	1.2781
88.1	0.3661	0	1.2738	1.2738
88.1333	0.3638	0	1.2777	1.2777
88.1667	0.3625	0.0069	1.2791	1.286
88.2	0.3625	0	1.2777	1.2777
88.2333	0.3655	0.0069	1.2751	1.282
88.2667	0.3648	0	1.2725	1.2725
88.3	0.3635	0	1.2698	1.2698
88.3333	0.3645	0	1.2725	1.2725
88.3667	0.3645	0	1.2791	1.2791
88.4	0.3615	0.0069	1.2738	1.2807
88.4333	0.3641	0	1.2738	1.2738
88.4667	0.3648	0	1.2751	1.2751
88.5	0.3628	0	1.2764	1.2764
88.5333	0.3622	0	1.283	1.283
88.5667	0.3628	0	1.2725	1.2725
88.6	0.3632	0	1.2856	1.2856
88.6333	0.3661	0	1.2777	1.2777
88.6667	0.3641	0.0069	1.2804	1.2873
88.7	0.3665	0.0069	1.2777	1.2847
88.7333	0.3638	0	1.2751	1.2751
88.7667	0.3635	0.0069	1.2777	1.2847
88.8	0.3635	0.0069	1.2725	1.2794
88.8333	0.3635	0.0069	1.2698	1.2768
88.8667	0.3632	0.0069	1.2698	1.2768
88.9	0.3612	0	1.2738	1.2738
88.9333	0.3635	0	1.2738	1.2738
88.9667	0.3655	0	1.2777	1.2777
89	0.3625	0	1.2804	1.2804
89.0333	0.3641	0	1.2725	1.2725
89.0667	0.3655	0.0201	1.2738	1.2939
89.1	0.3635	0	1.2698	1.2698
89.1333	0.3658	0.0069	1.2738	1.2807

89.1667	0.3658	0.0069	1.2698	1.2768
89.2	0.3665	0	1.2751	1.2751
89.2333	0.3641	0	1.2751	1.2751
89.2667	0.3648	0.0069	1.2777	1.2847
89.3	0.3618	0.0069	1.2777	1.2847
89.3333	0.3665	0.0069	1.2764	1.2833
89.3667	0.3632	0	1.2751	1.2751
89.4	0.3615	0	1.2764	1.2764
89.4333	0.3658	0.0069	1.2738	1.2807
89.4667	0.3615	0	1.2672	1.2672
89.5	0.3632	0	1.2738	1.2738
89.5333	0.3632	0.0069	1.2751	1.282
89.5667	0.3625	0	1.2804	1.2804
89.6	0.3632	0	1.2791	1.2791
89.6333	0.3625	0	1.2764	1.2764
89.6667	0.3628	0.0069	1.2764	1.2833
89.7	0.3635	0	1.2725	1.2725
89.7333	0.3622	0	1.2738	1.2738
89.7667	0.3628	0	1.2777	1.2777
89.8	0.3645	0	1.2777	1.2777
89.8333	0.3635	0.0201	1.2804	1.3004
89.8667	0.3609	0	1.2777	1.2777
89.9	0.3645	0.0069	1.2777	1.2847
89.9333	0.3638	0	1.2777	1.2777
89.9667	0.3595	0.0069	1.2777	1.2847
90	0.3638	0.0069	1.2764	1.2833
90.0333	0.3651	0	1.2712	1.2712
90.0667	0.3641	0	1.2777	1.2777
90.1	0.3641	0	1.2738	1.2738
90.1333	0.3622	0	1.2804	1.2804
90.1667	0.3632	0.0069	1.2804	1.2873
90.2	0.3628	0	1.2685	1.2685
90.2333	0.3615	0	1.2672	1.2672
90.2667	0.3612	0	1.2672	1.2672
90.3	0.3661	0	1.2712	1.2712
90.3333	0.3615	0	1.2646	1.2646
90.3667	0.3625	0	1.2672	1.2672
90.4	0.3628	0.0069	1.2712	1.2781
90.4333	0.3628	0	1.2685	1.2685
90.4667	0.3612	0	1.262	1.262
90.5	0.3632	0.0069	1.2659	1.2728
90.5333	0.3632	0	1.2698	1.2698
90.5667	0.3648	0	1.2672	1.2672
90.6	0.3622	0	1.2698	1.2698
90.6333	0.3632	0	1.2659	1.2659
90.6667	0.3605	0	1.2672	1.2672
90.7	0.3625	0	1.2672	1.2672

90.7333	0.3632	0	1.2725	1.2725
90.7667	0.3615	0	1.2725	1.2725
90.8	0.3612	0	1.2633	1.2633
90.8333	0.3645	0	1.2633	1.2633
90.8667	0.3622	0	1.262	1.262
90.9	0.3625	0.0069	1.2593	1.2662
90.9333	0.3635	0	1.2672	1.2672
90.9667	0.3628	0	1.2672	1.2672
91	0.3645	0	1.2646	1.2646
91.0333	0.3605	0	1.2659	1.2659
91.0667	0.3628	0.0069	1.2606	1.2676
91.1	0.3651	0	1.258	1.258
91.1333	0.3645	0	1.258	1.258
91.1667	0.3628	0.0069	1.2685	1.2755
91.2	0.3622	0	1.2659	1.2659
91.2333	0.3635	0.0069	1.2672	1.2741
91.2667	0.3615	0.0069	1.2672	1.2741
91.3	0.3658	0	1.2659	1.2659
91.3333	0.3612	0	1.2646	1.2646
91.3667	0.3635	0.0201	1.262	1.282
91.4	0.3632	0.0069	1.2646	1.2715
91.4333	0.3602	0	1.2659	1.2659
91.4667	0.3645	0	1.2646	1.2646
91.5	0.3622	0.0069	1.2659	1.2728
91.5333	0.3618	0	1.2606	1.2606
91.5667	0.3638	0	1.2593	1.2593
91.6	0.3635	0.0069	1.2606	1.2676
91.6333	0.3605	0	1.2606	1.2606
91.6667	0.3625	0	1.262	1.262
91.7	0.3625	0	1.258	1.258
91.7333	0.3635	0.0201	1.2606	1.2807
91.7667	0.3628	0.0069	1.262	1.2689
91.8	0.3635	0	1.262	1.262
91.8333	0.3605	0.0069	1.2593	1.2662
91.8667	0.3615	0	1.258	1.258
91.9	0.3618	0	1.262	1.262
91.9333	0.3612	0.0069	1.2646	1.2715
91.9667	0.3622	0	1.2672	1.2672
92	0.3641	0	1.2633	1.2633
92.0333	0.3645	0	1.2646	1.2646
92.0667	0.3628	0	1.2672	1.2672
92.1	0.3618	0.0201	1.2659	1.286
92.1333	0.3605	0	1.2646	1.2646
92.1667	0.3602	0	1.2738	1.2738
92.2	0.3632	0.0069	1.2698	1.2768
92.2333	0.3635	0.0069	1.2685	1.2755
92.2667	0.3648	0	1.2672	1.2672

92.3	0.3618	0.0069	1.2659	1.2728
92.3333	0.3632	0	1.2712	1.2712
92.3667	0.3618	0	1.2685	1.2685
92.4	0.3635	0	1.2672	1.2672
92.4333	0.3609	0	1.2659	1.2659
92.4667	0.3628	0	1.2685	1.2685
92.5	0.3609	0.0069	1.2633	1.2702
92.5333	0.3638	0.0069	1.2672	1.2741
92.5667	0.3632	0	1.2685	1.2685
92.6	0.3612	0	1.262	1.262
92.6333	0.3612	0	1.2659	1.2659
92.6667	0.3625	0.0069	1.262	1.2689
92.7	0.3609	0.0069	1.2606	1.2676
92.7333	0.3618	0	1.2659	1.2659
92.7667	0.3605	0	1.262	1.262
92.8	0.3625	0	1.2646	1.2646
92.8333	0.3595	0	1.2672	1.2672
92.8667	0.3622	0	1.2672	1.2672
92.9	0.3635	0	1.2672	1.2672
92.9333	0.3586	0	1.2659	1.2659
92.9667	0.3609	0	1.262	1.262
93	0.3602	0	1.2593	1.2593
93.0333	0.3612	0.0069	1.2646	1.2715
93.0667	0.3618	0	1.2633	1.2633
93.1	0.3605	0.0069	1.262	1.2689
93.1333	0.3622	0	1.262	1.262
93.1667	0.3635	0.0069	1.2554	1.2623
93.2	0.3605	0	1.262	1.262
93.2333	0.3628	0	1.258	1.258
93.2667	0.3635	0	1.2606	1.2606
93.3	0.3622	0	1.2567	1.2567
93.3333	0.3641	0	1.2514	1.2514
93.3667	0.3622	0.0069	1.2488	1.2557
93.4	0.3618	0	1.2501	1.2501
93.4333	0.3605	0	1.2514	1.2514
93.4667	0.3615	0	1.2593	1.2593
93.5	0.3635	0.0069	1.2541	1.261
93.5333	0.3602	0.0069	1.2633	1.2702
93.5667	0.3612	0	1.2633	1.2633
93.6	0.3592	0	1.2646	1.2646
93.6333	0.3605	0.0069	1.2633	1.2702
93.6667	0.3618	0	1.2554	1.2554
93.7	0.3605	0.0069	1.2514	1.2584
93.7333	0.3618	0	1.2606	1.2606
93.7667	0.3595	0	1.2567	1.2567
93.8	0.3609	0.0069	1.2606	1.2676
93.8333	0.3622	0	1.2593	1.2593

93.8667	0.3589	0.0201	1.2567	1.2768
93.9	0.3612	0.0069	1.2567	1.2636
93.9333	0.3615	0	1.2646	1.2646
93.9667	0.3586	0	1.2554	1.2554
94	0.3586	0	1.262	1.262
94.0333	0.3628	0	1.262	1.262
94.0667	0.3612	0.0069	1.2633	1.2702
94.1	0.3586	0	1.262	1.262
94.1333	0.3609	0	1.2633	1.2633
94.1667	0.3612	0	1.2633	1.2633
94.2	0.3635	0	1.2633	1.2633
94.2333	0.3618	0	1.2593	1.2593
94.2667	0.3572	0.0069	1.2633	1.2702
94.3	0.3638	0	1.2567	1.2567
94.3333	0.3628	0.0069	1.262	1.2689
94.3667	0.3635	0	1.2606	1.2606
94.4	0.3602	0	1.2633	1.2633
94.4333	0.3612	0	1.258	1.258
94.4667	0.3628	0	1.2672	1.2672
94.5	0.3592	0.0069	1.2672	1.2741
94.5333	0.3618	0	1.2659	1.2659
94.5667	0.3628	0	1.262	1.262
94.6	0.3635	0	1.2593	1.2593
94.6333	0.3615	0.0069	1.2633	1.2702
94.6667	0.3622	0	1.2646	1.2646
94.7	0.3592	0	1.2633	1.2633
94.7333	0.3595	0.0069	1.2633	1.2702
94.7667	0.3586	0	1.2698	1.2698
94.8	0.3582	0.0069	1.262	1.2689
94.8333	0.3609	0	1.258	1.258
94.8667	0.3628	0.0069	1.2567	1.2636
94.9	0.3612	0	1.258	1.258
94.9333	0.3599	0	1.2541	1.2541
94.9667	0.3566	0	1.2567	1.2567
95	0.3615	0	1.2606	1.2606
95.0333	0.3605	0	1.2567	1.2567
95.0667	0.3566	0	1.258	1.258
95.1	0.3625	0	1.2501	1.2501
95.1333	0.3615	0	1.2528	1.2528
95.1667	0.3582	0	1.2567	1.2567
95.2	0.3595	0	1.262	1.262
95.2333	0.3602	0	1.2501	1.2501
95.2667	0.3615	0	1.2567	1.2567
95.3	0.3592	0	1.2514	1.2514
95.3333	0.3592	0	1.2528	1.2528
95.3667	0.3615	0	1.2528	1.2528
95.4	0.3609	0.0201	1.2567	1.2768

95.4333	0.3602	0	1.2528	1.2528
95.4667	0.3605	0	1.2514	1.2514
95.5	0.3618	0.0069	1.2528	1.2597
95.5333	0.3592	0	1.2554	1.2554
95.5667	0.3595	0	1.2567	1.2567
95.6	0.3595	0	1.2528	1.2528
95.6333	0.3615	0.0069	1.2567	1.2636
95.6667	0.3602	0	1.2554	1.2554
95.7	0.3628	0	1.2528	1.2528
95.7333	0.3615	0	1.2514	1.2514
95.7667	0.3586	0	1.2475	1.2475
95.8	0.3595	0	1.2541	1.2541
95.8333	0.3592	0	1.2501	1.2501
95.8667	0.3586	0.0069	1.2514	1.2584
95.9	0.3612	0	1.2554	1.2554
95.9333	0.3579	0	1.2554	1.2554
95.9667	0.3609	0	1.2554	1.2554
96	0.3589	0	1.258	1.258
96.0333	0.3592	0.0069	1.2567	1.2636
96.0667	0.3605	0.0201	1.2514	1.2715
96.1	0.3579	0.0201	1.2554	1.2755
96.1333	0.3595	0.0069	1.2554	1.2623
96.1667	0.3586	0.0069	1.2528	1.2597
96.2	0.3582	0.0201	1.2528	1.2728
96.2333	0.3586	0.0069	1.2567	1.2636
96.2667	0.3595	0	1.258	1.258
96.3	0.3605	0	1.2514	1.2514
96.3333	0.3602	0.0069	1.2501	1.257
96.3667	0.3579	0	1.2449	1.2449
96.4	0.3612	0.0069	1.2528	1.2597
96.4333	0.3592	0.0069	1.2528	1.2597
96.4667	0.3579	0	1.2528	1.2528
96.5	0.3612	0	1.2567	1.2567
96.5333	0.3576	0	1.2528	1.2528
96.5667	0.3605	0.0069	1.258	1.2649
96.6	0.3589	0	1.2541	1.2541
96.6333	0.3612	0	1.2593	1.2593
96.6667	0.3602	0	1.2567	1.2567
96.7	0.3691	0	1.2659	1.2659
96.7333	0.3793	0	1.2777	1.2777
96.7667	0.3855	0	1.2896	1.2896
96.8	0.3957	0	1.2975	1.2975
96.8333	0.4102	0	1.3106	1.3106
96.8667	0.4158	0	1.3251	1.3251
96.9	0.4277	0	1.3409	1.3409
96.9333	0.4382	0	1.358	1.358
96.9667	0.4448	0	1.3685	1.3685

97	0.4514	0.0069	1.3803	1.3872
97.0333	0.4606	0	1.3961	1.3961
97.0667	0.4728	0	1.4013	1.4013
97.1	0.4859	0	1.4329	1.4329
97.1333	0.4961	0	1.45	1.45
97.1667	0.5093	0	1.4671	1.4671
97.2	0.5198	0	1.4908	1.4908
97.2333	0.5333	0	1.5105	1.5105
97.2667	0.5452	0	1.5328	1.5328
97.3	0.5537	0	1.5578	1.5578
97.3333	0.5676	0.0069	1.5736	1.5805
97.3667	0.5787	0.0069	1.5868	1.5937
97.4	0.5883	0	1.6144	1.6144
97.4333	0.5988	0.0069	1.6302	1.6371
97.4667	0.61	0	1.6512	1.6512
97.5	0.6215	0	1.667	1.667
97.5333	0.6281	0	1.6933	1.6933
97.5667	0.638	0.0069	1.7064	1.7133
97.6	0.6472	0	1.7261	1.7261
97.6333	0.6531	0	1.7446	1.7446
97.6667	0.6646	0.0069	1.7603	1.7673
97.7	0.6673	0.0069	1.7814	1.7883
97.7333	0.6791	0.0201	1.7985	1.8185
97.7667	0.687	0	1.8195	1.8195
97.8	0.6966	0	1.8313	1.8313
97.8333	0.7018	0	1.8498	1.8498
97.8667	0.7071	0.0201	1.8668	1.8869
97.9	0.7163	0.0069	1.8892	1.8961
97.9333	0.7232	0.0069	1.905	1.9119
97.9667	0.7278	0	1.9168	1.9168
98	0.7308	0	1.9247	1.9247
98.0333	0.7295	0.0201	1.9431	1.9632
98.0667	0.7288	0	1.951	1.951
98.1	0.7328	0	1.9615	1.9615
98.1333	0.7288	0	1.9707	1.9707
98.1667	0.7292	0	1.9747	1.9747
98.2	0.7324	0	1.9905	1.9905
98.2333	0.7341	0	1.9931	1.9931
98.2667	0.7318	0	2.0062	2.0062
98.3	0.7328	0.0069	2.0049	2.0118
98.3333	0.7315	0	2.0141	2.0141
98.3667	0.7308	0	2.026	2.026
98.4	0.7321	0	2.0352	2.0352
98.4333	0.7331	0	2.047	2.047
98.4667	0.7305	0	2.0536	2.0536
98.5	0.7295	0	2.0588	2.0588
98.5333	0.7315	0	2.072	2.072

98.5667	0.7324	0.0069	2.0799	2.0868
98.6	0.7295	0	2.0878	2.0878
98.6333	0.7275	0.0069	2.0878	2.0947
98.6667	0.7288	0.0069	2.093	2.0999
98.7	0.7282	0.0069	2.0996	2.1065
98.7333	0.7275	0	2.1075	2.1075
98.7667	0.7292	0.0201	2.1141	2.1341
98.8	0.7265	0	2.1206	2.1206
98.8333	0.7272	0.0069	2.1167	2.1236
98.8667	0.7262	0	2.1246	2.1246
98.9	0.7269	0	2.1338	2.1338
98.9333	0.7239	0.0069	2.1404	2.1473
98.9667	0.7213	0	2.1417	2.1417
99	0.7222	0	2.1469	2.1469
99.0333	0.7216	0.0069	2.1483	2.1552
99.0667	0.7242	0.0069	2.1509	2.1578
99.1	0.7186	0	2.1588	2.1588
99.1333	0.7222	0.0069	2.1653	2.1723
99.1667	0.7199	0	2.1772	2.1772
99.2	0.7193	0.0069	2.1732	2.1802
99.2333	0.7203	0	2.1824	2.1824
99.2667	0.7236	0	2.1877	2.1877
99.3	0.717	0	2.189	2.189
99.3333	0.7183	0	2.193	2.193
99.3667	0.719	0	2.2022	2.2022
99.4	0.7196	0	2.2048	2.2048
99.4333	0.7163	0	2.2048	2.2048
99.4667	0.7173	0	2.2087	2.2087
99.5	0.719	0.0069	2.214	2.2209
99.5333	0.7196	0.0069	2.2219	2.2288
99.5667	0.719	0	2.2219	2.2219
99.6	0.7193	0.0201	2.2219	2.242
99.6333	0.719	0	2.2245	2.2245
99.6667	0.7166	0.0069	2.2285	2.2354
99.7	0.719	0.0069	2.2324	2.2393
99.7333	0.719	0.0069	2.2364	2.2433
99.7667	0.7186	0.0069	2.2377	2.2446
99.8	0.7176	0.0201	2.2416	2.2617
99.8333	0.7173	0	2.2456	2.2456
99.8667	0.7196	0	2.2442	2.2442
99.9	0.7196	0	2.2508	2.2508
99.9333	0.7183	0.0069	2.2561	2.263
99.9667	0.7183	0	2.2613	2.2613
100	0.716	0	2.2692	2.2692
100.0333	0.7203	0	2.2653	2.2653
100.0667	0.7166	0.0069	2.2653	2.2722
100.1	0.7199	0	2.2679	2.2679

100.1333	0.7196	0	2.2771	2.2771
100.1667	0.7203	0	2.2771	2.2771
100.2	0.719	0	2.2771	2.2771
100.2333	0.719	0	2.285	2.285
100.2667	0.7186	0	2.2863	2.2863
100.3	0.7193	0	2.289	2.289
100.3333	0.7196	0	2.2929	2.2929
100.3667	0.7216	0	2.2995	2.2995
100.4	0.7206	0	2.3008	2.3008
100.4333	0.7203	0	2.3034	2.3034
100.4667	0.719	0	2.3008	2.3008
100.5	0.7193	0.0069	2.3021	2.309
100.5333	0.7196	0	2.3139	2.3139
100.5667	0.7203	0	2.3192	2.3192
100.6	0.7196	0	2.3205	2.3205
100.6333	0.7183	0	2.3205	2.3205
100.6667	0.717	0	2.3139	2.3139
100.7	0.7183	0	2.3218	2.3218
100.7333	0.7193	0	2.3192	2.3192
100.7667	0.7196	0.0201	2.331	2.3511
100.8	0.7213	0	2.3337	2.3337
100.8333	0.718	0	2.3337	2.3337
100.8667	0.7193	0.0069	2.3363	2.3432
100.9	0.7216	0.0069	2.3389	2.3458
100.9333	0.7203	0	2.3429	2.3429
100.9667	0.7166	0.0069	2.3455	2.3524
101	0.7196	0	2.3416	2.3416
101.0333	0.7213	0	2.3429	2.3429
101.0667	0.7186	0.0069	2.3402	2.3472
101.1	0.7193	0.0069	2.3442	2.3511
101.1333	0.7222	0	2.3586	2.3586
101.1667	0.7226	0.0069	2.3573	2.3643
101.2	0.7206	0	2.3573	2.3573
101.2333	0.7196	0	2.3613	2.3613
101.2667	0.7203	0.0069	2.3573	2.3643
101.3	0.7229	0	2.3573	2.3573
101.3333	0.7222	0	2.3652	2.3652
101.3667	0.7226	0.0069	2.3639	2.3708
101.4	0.718	0	2.3652	2.3652
101.4333	0.719	0	2.3771	2.3771
101.4667	0.7216	0	2.3652	2.3652
101.5	0.7262	0	2.3705	2.3705
101.5333	0.7203	0	2.3731	2.3731
101.5667	0.7222	0.0069	2.3771	2.384
101.6	0.7219	0	2.3771	2.3771
101.6333	0.7219	0.0069	2.381	2.3879
101.6667	0.7219	0	2.3876	2.3876

101.7	0.7206	0.0069	2.3876	2.3945
101.7333	0.7219	0.0201	2.3876	2.4076
101.7667	0.7242	0.0069	2.3889	2.3958
101.8	0.7216	0.0069	2.3863	2.3932
101.8333	0.7236	0.0069	2.3863	2.3932
101.8667	0.7252	0	2.3902	2.3902
101.9	0.7222	0.0201	2.3994	2.4195
101.9333	0.7252	0.0069	2.3876	2.3945
101.9667	0.7232	0	2.3955	2.3955
102	0.7242	0	2.3955	2.3955
102.0333	0.7239	0.0069	2.3981	2.405
102.0667	0.7242	0.0069	2.3981	2.405
102.1	0.7249	0	2.3981	2.3981
102.1333	0.7219	0.0069	2.4034	2.4103
102.1667	0.7255	0	2.4034	2.4034
102.2	0.7219	0	2.402	2.402
102.2333	0.7245	0	2.4086	2.4086
102.2667	0.7232	0.0069	2.4086	2.4155
102.3	0.7229	0	2.4047	2.4047
102.3333	0.7236	0	2.4073	2.4073
102.3667	0.7249	0	2.4165	2.4165
102.4	0.7242	0.0069	2.4191	2.4261
102.4333	0.7249	0	2.4178	2.4178
102.4667	0.7239	0	2.4231	2.4231
102.5	0.7255	0.0069	2.4218	2.4287
102.5333	0.7249	0	2.4231	2.4231
102.5667	0.7232	0.0069	2.4191	2.4261
102.6	0.7259	0	2.427	2.427
102.6333	0.7222	0	2.4257	2.4257
102.6667	0.7245	0	2.4283	2.4283
102.7	0.7236	0	2.4257	2.4257
102.7333	0.7245	0	2.4218	2.4218
102.7667	0.7249	0.0069	2.4283	2.4353
102.8	0.7229	0.0069	2.4231	2.43
102.8333	0.7245	0.0069	2.4297	2.4366
102.8667	0.7245	0	2.4297	2.4297
102.9	0.7229	0	2.431	2.431
102.9333	0.7232	0	2.431	2.431
102.9667	0.7245	0	2.4336	2.4336
103	0.7265	0	2.4375	2.4375
103.0333	0.7262	0	2.4336	2.4336
103.0667	0.7242	0	2.4402	2.4402
103.1	0.7275	0	2.4441	2.4441
103.1333	0.7269	0.0069	2.4349	2.4418
103.1667	0.7285	0.0069	2.4375	2.4445
103.2	0.7269	0.0069	2.4389	2.4458
103.2333	0.7255	0	2.4362	2.4362

103.2667	0.7252	0	2.4375	2.4375
103.3	0.7272	0.0069	2.4336	2.4405
103.3333	0.7285	0	2.4454	2.4454
103.3667	0.7272	0	2.4428	2.4428
103.4	0.7269	0.0069	2.4402	2.4471
103.4333	0.7272	0.0069	2.4481	2.455
103.4667	0.7275	0	2.4481	2.4481
103.5	0.7259	0	2.4507	2.4507
103.5333	0.7275	0.0069	2.4454	2.4524
103.5667	0.7275	0	2.452	2.452
103.6	0.7275	0	2.4467	2.4467
103.6333	0.7262	0	2.4533	2.4533
103.6667	0.7295	0.0069	2.4494	2.4563
103.7	0.7272	0	2.4533	2.4533
103.7333	0.7272	0	2.4507	2.4507
103.7667	0.7278	0	2.4599	2.4599
103.8	0.7239	0	2.4586	2.4586
103.8333	0.7282	0	2.4494	2.4494
103.8667	0.7262	0.0069	2.4533	2.4602
103.9	0.7275	0	2.4573	2.4573
103.9333	0.7301	0.0069	2.4599	2.4668
103.9667	0.7275	0	2.4612	2.4612
104	0.7269	0	2.4612	2.4612
104.0333	0.7275	0.0069	2.4612	2.4681
104.0667	0.7275	0	2.4652	2.4652
104.1	0.7288	0	2.4612	2.4612
104.1333	0.7282	0	2.4665	2.4665
104.1667	0.7285	0.0069	2.4625	2.4694
104.2	0.7252	0	2.4599	2.4599
104.2333	0.7288	0	2.4625	2.4625
104.2667	0.7275	0.0069	2.4717	2.4787
104.3	0.7275	0.0201	2.4612	2.4813
104.3333	0.7262	0	2.4704	2.4704
104.3667	0.7292	0	2.4652	2.4652
104.4	0.7259	0	2.473	2.473
104.4333	0.7255	0	2.4757	2.4757
104.4667	0.7295	0.0069	2.4717	2.4787
104.5	0.7278	0	2.4744	2.4744
104.5333	0.7269	0.0069	2.4704	2.4773
104.5667	0.7292	0	2.473	2.473
104.6	0.7282	0.0201	2.473	2.4931
104.6333	0.7285	0	2.473	2.473
104.6667	0.7275	0.0069	2.473	2.48
104.7	0.7298	0	2.4704	2.4704
104.7333	0.7282	0	2.4678	2.4678
104.7667	0.7252	0	2.4652	2.4652
104.8	0.7278	0	2.4665	2.4665

104.8333	0.7255	0.0069	2.4678	2.4747
104.8667	0.7278	0.0069	2.4796	2.4865
104.9	0.7288	0.0069	2.4744	2.4813
104.9333	0.7298	0	2.4809	2.4809
104.9667	0.7262	0.0069	2.477	2.4839
105	0.7288	0	2.4744	2.4744
105.0333	0.7278	0	2.4823	2.4823
105.0667	0.7262	0	2.4757	2.4757
105.1	0.7282	0.0069	2.4796	2.4865
105.1333	0.7285	0.0069	2.4809	2.4879
105.1667	0.7292	0.0069	2.4823	2.4892
105.2	0.7282	0	2.4862	2.4862
105.2333	0.7275	0	2.4796	2.4796
105.2667	0.7288	0	2.4809	2.4809
105.3	0.7301	0.0069	2.4836	2.4905
105.3333	0.7282	0	2.4849	2.4849
105.3667	0.7285	0	2.4823	2.4823
105.4	0.7292	0	2.4901	2.4901
105.4333	0.7295	0.0069	2.4875	2.4944
105.4667	0.7292	0	2.4967	2.4967
105.5	0.7275	0	2.4954	2.4954
105.5333	0.7278	0	2.4928	2.4928
105.5667	0.7265	0	2.498	2.498
105.6	0.7285	0	2.5007	2.5007
105.6333	0.7265	0	2.502	2.502
105.6667	0.7301	0	2.4954	2.4954
105.7	0.7262	0.0069	2.4928	2.4997
105.7333	0.7278	0.0069	2.498	2.505
105.7667	0.7265	0	2.4888	2.4888
105.8	0.7315	0.0069	2.4967	2.5036
105.8333	0.7265	0	2.4954	2.4954
105.8667	0.7285	0	2.4875	2.4875
105.9	0.7305	0	2.4967	2.4967
105.9333	0.7269	0	2.4862	2.4862
105.9667	0.7269	0.0069	2.4875	2.4944
106	0.7262	0.0069	2.498	2.505
106.0333	0.7295	0.0069	2.4967	2.5036
106.0667	0.7305	0	2.4954	2.4954
106.1	0.7282	0	2.4954	2.4954
106.1333	0.7298	0	2.4901	2.4901
106.1667	0.7265	0	2.4954	2.4954
106.2	0.7311	0	2.4875	2.4875
106.2333	0.7295	0	2.4862	2.4862
106.2667	0.7272	0	2.4928	2.4928
106.3	0.7285	0.0069	2.4941	2.501
106.3333	0.7252	0	2.4941	2.4941
106.3667	0.7285	0.0069	2.4928	2.4997

106.4	0.7269	0	2.498	2.498
106.4333	0.7262	0	2.4941	2.4941
106.4667	0.7315	0.0069	2.498	2.505
106.5	0.7301	0	2.4967	2.4967
106.5333	0.7275	0	2.4967	2.4967
106.5667	0.7315	0	2.4954	2.4954
106.6	0.7255	0	2.4954	2.4954
106.6333	0.7298	0	2.4875	2.4875
106.6667	0.7282	0	2.4836	2.4836
106.7	0.7262	0	2.4875	2.4875
106.7333	0.7288	0	2.4836	2.4836
106.7667	0.7282	0	2.4862	2.4862
106.8	0.7308	0	2.4875	2.4875
106.8333	0.7288	0	2.4954	2.4954
106.8667	0.7262	0.0069	2.498	2.505
106.9	0.7292	0	2.4928	2.4928
106.9333	0.7301	0.0069	2.4849	2.4918
106.9667	0.7298	0.0069	2.4888	2.4957
107	0.7285	0	2.4888	2.4888
107.0333	0.7285	0	2.4901	2.4901
107.0667	0.7282	0.0069	2.4901	2.4971
107.1	0.7269	0	2.4915	2.4915
107.1333	0.7259	0.0069	2.498	2.505
107.1667	0.7305	0	2.4941	2.4941
107.2	0.7275	0	2.498	2.498
107.2333	0.7275	0	2.4915	2.4915
107.2667	0.7308	0	2.502	2.502
107.3	0.7318	0	2.4928	2.4928
107.3333	0.7315	0.0069	2.4954	2.5023
107.3667	0.7282	0.0069	2.498	2.505
107.4	0.7308	0.0069	2.4928	2.4997
107.4333	0.7301	0	2.4875	2.4875
107.4667	0.7282	0	2.4967	2.4967
107.5	0.7318	0	2.4901	2.4901
107.5333	0.7252	0	2.4967	2.4967
107.5667	0.7295	0	2.4993	2.4993
107.6	0.7285	0	2.4954	2.4954
107.6333	0.7265	0	2.498	2.498
107.6667	0.7308	0.0069	2.4875	2.4944
107.7	0.7292	0	2.4915	2.4915
107.7333	0.7275	0	2.4875	2.4875
107.7667	0.7295	0	2.4954	2.4954
107.8	0.7282	0	2.4901	2.4901
107.8333	0.7295	0.0069	2.5033	2.5102
107.8667	0.7288	0.0069	2.5033	2.5102
107.9	0.7265	0.0201	2.5046	2.5247
107.9333	0.7318	0.0069	2.4993	2.5063

107.9667	0.7311	0	2.502	2.502
108	0.7288	0	2.502	2.502
108.0333	0.7269	0.0069	2.5086	2.5155
108.0667	0.7275	0	2.5072	2.5072
108.1	0.7305	0	2.5033	2.5033
108.1333	0.7311	0	2.4928	2.4928
108.1667	0.7298	0.0069	2.4954	2.5023
108.2	0.7288	0.0201	2.498	2.5181
108.2333	0.7298	0	2.4954	2.4954
108.2667	0.7282	0.0069	2.498	2.505
108.3	0.7285	0	2.498	2.498
108.3333	0.7278	0	2.498	2.498
108.3667	0.7282	0	2.4954	2.4954
108.4	0.7269	0	2.502	2.502
108.4333	0.7301	0.0069	2.498	2.505
108.4667	0.7305	0.0201	2.5086	2.5286
108.5	0.7301	0	2.5033	2.5033
108.5333	0.7295	0	2.4967	2.4967
108.5667	0.7295	0.0069	2.5007	2.5076
108.6	0.7292	0.0069	2.4928	2.4997
108.6333	0.7308	0	2.4954	2.4954
108.6667	0.7285	0	2.4954	2.4954
108.7	0.7292	0	2.498	2.498
108.7333	0.7285	0	2.5007	2.5007
108.7667	0.7288	0.0069	2.5033	2.5102
108.8	0.7265	0	2.5046	2.5046
108.8333	0.7311	0	2.5007	2.5007
108.8667	0.7295	0	2.4954	2.4954
108.9	0.7321	0	2.498	2.498
108.9333	0.7282	0	2.4928	2.4928
108.9667	0.7282	0.0069	2.4941	2.501
109	0.7295	0	2.4928	2.4928
109.0333	0.7301	0.0069	2.4941	2.501
109.0667	0.7318	0	2.4915	2.4915
109.1	0.7275	0.0069	2.4941	2.501
109.1333	0.7269	0	2.4993	2.4993
109.1667	0.7308	0	2.5033	2.5033
109.2	0.7272	0.0069	2.4967	2.5036
109.2333	0.7315	0	2.4941	2.4941
109.2667	0.7301	0	2.4915	2.4915
109.3	0.7285	0	2.4954	2.4954
109.3333	0.7265	0	2.4954	2.4954
109.3667	0.7288	0	2.498	2.498
109.4	0.7282	0	2.502	2.502
109.4333	0.7262	0	2.5007	2.5007
109.4667	0.7282	0	2.498	2.498
109.5	0.7269	0.0069	2.4928	2.4997

109.5333	0.7272	0	2.4941	2.4941
109.5667	0.7298	0.0069	2.4954	2.5023
109.6	0.7269	0	2.498	2.498
109.6333	0.7278	0	2.4928	2.4928
109.6667	0.7308	0	2.4954	2.4954
109.7	0.7311	0	2.4954	2.4954
109.7333	0.7288	0	2.4954	2.4954
109.7667	0.7292	0	2.4941	2.4941
109.8	0.7275	0	2.4941	2.4941
109.8333	0.7282	0.0069	2.5007	2.5076
109.8667	0.7288	0	2.498	2.498
109.9	0.7295	0	2.4941	2.4941
109.9333	0.7292	0	2.4941	2.4941
109.9667	0.7265	0	2.4928	2.4928
110	0.7278	0	2.4941	2.4941
110.0333	0.7282	0	2.4993	2.4993
110.0667	0.7292	0	2.4954	2.4954
110.1	0.7288	0.0069	2.4941	2.501
110.1333	0.7252	0	2.4954	2.4954
110.1667	0.7295	0	2.4901	2.4901
110.2	0.7301	0.0069	2.4915	2.4984
110.2333	0.7288	0	2.4941	2.4941
110.2667	0.7278	0	2.4954	2.4954
110.3	0.7318	0.0069	2.4941	2.501
110.3333	0.7272	0	2.4993	2.4993
110.3667	0.7282	0	2.498	2.498
110.4	0.7272	0.0069	2.4954	2.5023
110.4333	0.7295	0.0069	2.502	2.5089
110.4667	0.7282	0	2.4954	2.4954
110.5	0.7285	0.0069	2.502	2.5089
110.5333	0.7295	0	2.498	2.498
110.5667	0.7265	0	2.5007	2.5007
110.6	0.7288	0	2.4993	2.4993
110.6333	0.7308	0.0069	2.5046	2.5115
110.6667	0.7252	0	2.5033	2.5033
110.7	0.7265	0	2.5033	2.5033
110.7333	0.7249	0.0069	2.5086	2.5155
110.7667	0.7288	0	2.5046	2.5046
110.8	0.7278	0	2.5072	2.5072
110.8333	0.7295	0.0069	2.5072	2.5142
110.8667	0.7295	0	2.5086	2.5086
110.9	0.7275	0	2.5086	2.5086
110.9333	0.7295	0	2.4993	2.4993
110.9667	0.7282	0	2.502	2.502
111	0.7278	0	2.4941	2.4941
111.0333	0.7252	0.0069	2.4993	2.5063
111.0667	0.7269	0.0069	2.4967	2.5036

111.1	0.7269	0.0069	2.498	2.505
111.1333	0.7285	0	2.498	2.498
111.1667	0.7282	0.0069	2.4993	2.5063
111.2	0.7282	0.0069	2.498	2.505
111.2333	0.7282	0.0069	2.4928	2.4997
111.2667	0.7305	0	2.5007	2.5007
111.3	0.7285	0.0069	2.4954	2.5023
111.3333	0.7292	0	2.4928	2.4928
111.3667	0.7285	0	2.502	2.502
111.4	0.7285	0	2.498	2.498
111.4333	0.7275	0	2.5007	2.5007
111.4667	0.7278	0	2.4993	2.4993
111.5	0.7311	0.0069	2.5007	2.5076
111.5333	0.7275	0.0069	2.4954	2.5023
111.5667	0.7275	0	2.5033	2.5033
111.6	0.7259	0.0069	2.4941	2.501
111.6333	0.7272	0	2.5086	2.5086
111.6667	0.7288	0	2.5046	2.5046
111.7	0.7282	0	2.5007	2.5007
111.7333	0.7272	0	2.4954	2.4954
111.7667	0.7292	0	2.4993	2.4993
111.8	0.7269	0.0069	2.4954	2.5023
111.8333	0.7298	0	2.4967	2.4967
111.8667	0.7262	0.0069	2.4967	2.5036
111.9	0.7301	0	2.4928	2.4928
111.9333	0.7311	0	2.4954	2.4954
111.9667	0.7262	0	2.4967	2.4967
112	0.7288	0.0201	2.498	2.5181
112.0333	0.7275	0.0069	2.4954	2.5023
112.0667	0.7285	0	2.4954	2.4954
112.1	0.7265	0	2.4993	2.4993
112.1333	0.7275	0	2.5007	2.5007
112.1667	0.7272	0.0069	2.4993	2.5063
112.2	0.7275	0	2.5007	2.5007
112.2333	0.7272	0.0069	2.5059	2.5128
112.2667	0.7269	0	2.502	2.502
112.3	0.7255	0.0069	2.5033	2.5102
112.3333	0.7259	0	2.4941	2.4941
112.3667	0.7269	0	2.498	2.498
112.4	0.7275	0	2.4993	2.4993
112.4333	0.7278	0.0069	2.4993	2.5063
112.4667	0.7259	0	2.4967	2.4967
112.5	0.7298	0	2.5059	2.5059
112.5333	0.7272	0	2.5007	2.5007
112.5667	0.7282	0	2.5007	2.5007
112.6	0.7288	0.0069	2.502	2.5089
112.6333	0.7265	0	2.4928	2.4928

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112.6667	0.7278	0.0069	2.498	2.505
112.7	0.7249	0.0069	2.5059	2.5128
112.7333	0.7272	0	2.5046	2.5046
112.7667	0.7255	0	2.5072	2.5072
112.8	0.7269	0.0069	2.5059	2.5128
112.8333	0.7255	0	2.5086	2.5086
112.8667	0.7278	0	2.5086	2.5086
112.9	0.7269	0.0332	2.5059	2.5391
112.9333	0.7285	0.0069	2.4993	2.5063
112.9667	0.7272	0	2.5059	2.5059
113	0.7282	0	2.498	2.498
113.0333	0.7292	0.0069	2.502	2.5089
113.0667	0.7292	0	2.502	2.502
113.1	0.7275	0	2.502	2.502
113.1333	0.7278	0.0069	2.4993	2.5063
113.1667	0.7295	0	2.5072	2.5072
113.2	0.7292	0.0069	2.502	2.5089
113.2333	0.7262	0	2.4967	2.4967
113.2667	0.7249	0.0069	2.4993	2.5063
113.3	0.7282	0	2.5033	2.5033
113.3333	0.7272	0	2.4967	2.4967
113.3667	0.7285	0.0069	2.5007	2.5076
113.4	0.7282	0	2.4954	2.4954
113.4333	0.7272	0	2.5046	2.5046
113.4667	0.7275	0	2.5007	2.5007
113.5	0.7288	0.0069	2.5007	2.5076
113.5333	0.7288	0.0069	2.498	2.505
113.5667	0.7255	0	2.4941	2.4941
113.6	0.7255	0.0069	2.4967	2.5036
113.6333	0.7278	0.0069	2.4954	2.5023
113.6667	0.7278	0.0069	2.4941	2.501
113.7	0.7269	0	2.4928	2.4928
113.7333	0.7255	0.0069	2.4928	2.4997
113.7667	0.7259	0	2.4888	2.4888
113.8	0.7242	0	2.4941	2.4941
113.8333	0.7272	0.0069	2.4928	2.4997
113.8667	0.7275	0	2.4888	2.4888
113.9	0.7262	0	2.4875	2.4875
113.9333	0.7255	0.0069	2.4928	2.4997
113.9667	0.7245	0	2.4928	2.4928
114	0.7285	0	2.4901	2.4901
114.0333	0.7301	0.0069	2.4915	2.4984
114.0667	0.7259	0	2.4928	2.4928
114.1	0.7269	0.0201	2.4954	2.5155
114.1333	0.7295	0	2.4862	2.4862
114.1667	0.7245	0	2.4901	2.4901
114.2	0.7288	0.0069	2.4941	2.501

114.2333	0.7269	0	2.4928	2.4928
114.2667	0.7285	0	2.4928	2.4928
114.3	0.7262	0.0069	2.4915	2.4984
114.3333	0.7278	0	2.4836	2.4836
114.3667	0.7259	0	2.4862	2.4862
114.4	0.7252	0.0069	2.4849	2.4918
114.4333	0.7262	0	2.4796	2.4796
114.4667	0.7262	0.0069	2.4849	2.4918
114.5	0.7259	0	2.4901	2.4901
114.5333	0.7269	0.0069	2.4901	2.4971
114.5667	0.7282	0	2.4862	2.4862
114.6	0.7255	0.0069	2.4875	2.4944
114.6333	0.7288	0	2.4888	2.4888
114.6667	0.7249	0	2.4849	2.4849
114.7	0.7272	0.0069	2.4809	2.4879
114.7333	0.7282	0	2.4915	2.4915
114.7667	0.7269	0	2.4888	2.4888
114.8	0.7298	0.0069	2.4941	2.501
114.8333	0.7269	0	2.4888	2.4888
114.8667	0.7249	0	2.4849	2.4849
114.9	0.7255	0	2.4901	2.4901
114.9333	0.7282	0	2.4901	2.4901
114.9667	0.7265	0	2.4928	2.4928
115	0.7282	0.0069	2.4915	2.4984
115.0333	0.7262	0.0069	2.4888	2.4957
115.0667	0.7269	0.0069	2.4862	2.4931
115.1	0.7226	0	2.4875	2.4875
115.1333	0.7282	0	2.4875	2.4875
115.1667	0.7272	0	2.4875	2.4875
115.2	0.7242	0	2.4928	2.4928
115.2333	0.7252	0.0069	2.4849	2.4918
115.2667	0.7262	0.0069	2.4928	2.4997
115.3	0.7265	0	2.4915	2.4915
115.3333	0.7239	0	2.4928	2.4928
115.3667	0.7272	0.0069	2.4954	2.5023
115.4	0.7252	0.0069	2.4954	2.5023
115.4333	0.7265	0	2.4967	2.4967
115.4667	0.7255	0	2.4915	2.4915
115.5	0.7262	0.0201	2.4915	2.5115
115.5333	0.7278	0	2.4901	2.4901
115.5667	0.7288	0.0201	2.4954	2.5155
115.6	0.7272	0.0069	2.4901	2.4971
115.6333	0.7285	0.0069	2.4954	2.5023
115.6667	0.7262	0	2.498	2.498
115.7	0.7305	0	2.4993	2.4993
115.7333	0.7265	0	2.4862	2.4862
115.7667	0.7239	0.0069	2.4875	2.4944

115.8	0.7262	0	2.4901	2.4901
115.8333	0.7269	0.0069	2.4888	2.4957
115.8667	0.7278	0	2.4888	2.4888
115.9	0.7262	0.0069	2.4823	2.4892
115.9333	0.7262	0.0069	2.4901	2.4971
115.9667	0.7219	0	2.4888	2.4888
116	0.7265	0.0069	2.4967	2.5036
116.0333	0.7262	0	2.4915	2.4915
116.0667	0.7262	0	2.4888	2.4888
116.1	0.7278	0.0069	2.4915	2.4984
116.1333	0.7252	0	2.4836	2.4836
116.1667	0.7229	0	2.4888	2.4888
116.2	0.7236	0	2.4901	2.4901
116.2333	0.7249	0.0069	2.4915	2.4984
116.2667	0.7282	0	2.4849	2.4849
116.3	0.7262	0.0069	2.4862	2.4931
116.3333	0.7262	0	2.4915	2.4915
116.3667	0.7285	0	2.4888	2.4888
116.4	0.7255	0	2.4809	2.4809
116.4333	0.7272	0	2.4888	2.4888
116.4667	0.7259	0	2.4888	2.4888
116.5	0.7288	0	2.4862	2.4862
116.5333	0.7236	0.0069	2.4849	2.4918
116.5667	0.7275	0	2.4836	2.4836
116.6	0.7262	0	2.4862	2.4862
116.6333	0.7288	0	2.4901	2.4901
116.6667	0.7252	0.0069	2.4888	2.4957
116.7	0.7278	0	2.4875	2.4875
116.7333	0.7278	0	2.4836	2.4836
116.7667	0.7249	0	2.4888	2.4888
116.8	0.7272	0	2.4849	2.4849
116.8333	0.7265	0.0069	2.4888	2.4957
116.8667	0.7285	0	2.4875	2.4875
116.9	0.7252	0.0069	2.4862	2.4931
116.9333	0.7288	0	2.4836	2.4836
116.9667	0.7239	0.0069	2.4783	2.4852
117	0.7275	0	2.4836	2.4836
117.0333	0.7252	0	2.4823	2.4823
117.0667	0.7249	0.0069	2.4836	2.4905
117.1	0.7242	0.0069	2.4862	2.4931
117.1333	0.7269	0	2.4849	2.4849
117.1667	0.7259	0	2.477	2.477
117.2	0.7269	0.0069	2.4849	2.4918
117.2333	0.7259	0	2.4796	2.4796
117.2667	0.7292	0.0069	2.4796	2.4865
117.3	0.7295	0	2.4849	2.4849
117.3333	0.7272	0	2.4823	2.4823

117.3667	0.7265	0	2.4823	2.4823
117.4	0.7292	0.0069	2.4809	2.4879
117.4333	0.7265	0.0069	2.4796	2.4865
117.4667	0.7272	0	2.4796	2.4796
117.5	0.7259	0	2.4809	2.4809
117.5333	0.7255	0.0201	2.4796	2.4997
117.5667	0.7226	0.0069	2.4862	2.4931
117.6	0.7295	0	2.4744	2.4744
117.6333	0.7278	0.0069	2.4783	2.4852
117.6667	0.7249	0	2.4823	2.4823
117.7	0.7249	0.0069	2.4796	2.4865
117.7333	0.7275	0	2.477	2.477
117.7667	0.7239	0	2.4744	2.4744
117.8	0.7275	0.0069	2.477	2.4839
117.8333	0.7262	0.0069	2.4796	2.4865
117.8667	0.7269	0	2.4783	2.4783
117.9	0.7242	0	2.4796	2.4796
117.9333	0.7275	0	2.4757	2.4757
117.9667	0.7269	0.0069	2.477	2.4839
118	0.7259	0	2.4744	2.4744
118.0333	0.7242	0.0069	2.473	2.48
118.0667	0.7245	0	2.477	2.477
118.1	0.7236	0	2.4783	2.4783
118.1333	0.7229	0	2.4783	2.4783
118.1667	0.7265	0	2.4849	2.4849
118.2	0.7245	0	2.4809	2.4809
118.2333	0.7245	0	2.4836	2.4836
118.2667	0.7262	0	2.4757	2.4757
118.3	0.7229	0	2.4849	2.4849
118.3333	0.7252	0	2.4836	2.4836
118.3667	0.7232	0	2.4836	2.4836
118.4	0.7269	0.0069	2.4796	2.4865
118.4333	0.7252	0	2.4796	2.4796
118.4667	0.7252	0.0069	2.4849	2.4918
118.5	0.7249	0	2.4862	2.4862
118.5333	0.7275	0	2.4796	2.4796
118.5667	0.7245	0.0069	2.4783	2.4852
118.6	0.7239	0	2.4796	2.4796
118.6333	0.7255	0	2.4836	2.4836
118.6667	0.7249	0.0069	2.4836	2.4905
118.7	0.7236	0	2.4836	2.4836
118.7333	0.7236	0	2.4809	2.4809
118.7667	0.7239	0	2.4888	2.4888
118.8	0.7252	0	2.4862	2.4862
118.8333	0.7239	0.0201	2.4875	2.5076
118.8667	0.7262	0	2.4849	2.4849
118.9	0.7278	0	2.4836	2.4836

118.9333	0.7226	0.0069	2.4862	2.4931
118.9667	0.7236	0	2.4836	2.4836
119	0.7262	0.0069	2.4836	2.4905
119.0333	0.7229	0	2.477	2.477
119.0667	0.7242	0.0069	2.4823	2.4892
119.1	0.7242	0.0069	2.4744	2.4813
119.1333	0.7255	0	2.4744	2.4744
119.1667	0.7259	0	2.4796	2.4796
119.2	0.7272	0.0069	2.477	2.4839
119.2333	0.7269	0	2.4783	2.4783
119.2667	0.7255	0.0069	2.4783	2.4852
119.3	0.7278	0	2.4783	2.4783
119.3333	0.7226	0	2.4757	2.4757
119.3667	0.7213	0	2.4796	2.4796
119.4	0.7278	0	2.4783	2.4783
119.4333	0.7232	0.0069	2.4757	2.4826
119.4667	0.7222	0	2.4783	2.4783
119.5	0.7262	0.0201	2.4823	2.5023
119.5333	0.7236	0	2.4783	2.4783
119.5667	0.7249	0	2.4809	2.4809
119.6	0.7245	0.0069	2.4757	2.4826
119.6333	0.7269	0	2.4757	2.4757
119.6667	0.7252	0	2.473	2.473
119.7	0.7265	0	2.4744	2.4744
119.7333	0.7269	0.0069	2.477	2.4839
119.7667	0.7236	0	2.4796	2.4796
119.8	0.7245	0	2.4757	2.4757
119.8333	0.7249	0	2.4757	2.4757
119.8667	0.7282	0.0069	2.4744	2.4813
119.9	0.7252	0	2.477	2.477
119.9333	0.7255	0	2.473	2.473
119.9667	0.7245	0.0069	2.4796	2.4865
120	0.7236	0	2.4783	2.4783
120.0333	0.7226	0	2.4757	2.4757
120.0667	0.7265	0	2.473	2.473
120.1	0.7259	0	2.4744	2.4744
120.1333	0.7275	0	2.4691	2.4691
120.1667	0.7249	0.0069	2.4757	2.4826
120.2	0.7236	0.0069	2.473	2.48
120.2333	0.7269	0	2.4744	2.4744
120.2667	0.7249	0	2.473	2.473
120.3	0.7216	0.0069	2.4757	2.4826
120.3333	0.7245	0.0069	2.4744	2.4813
120.3667	0.7252	0	2.4796	2.4796
120.4	0.7245	0	2.4823	2.4823
120.4333	0.7252	0.0069	2.4744	2.4813
120.4667	0.7222	0.0201	2.4757	2.4957

120.5	0.7265	0	2.4717	2.4717
120.5333	0.7226	0	2.4757	2.4757
120.5667	0.7262	0.0069	2.4691	2.476
120.6	0.7245	0	2.4704	2.4704
120.6333	0.7265	0	2.473	2.473
120.6667	0.7222	0	2.4717	2.4717
120.7	0.7242	0	2.4704	2.4704
120.7333	0.7252	0.0201	2.4665	2.4865
120.7667	0.7252	0	2.4704	2.4704
120.8	0.7275	0	2.4717	2.4717
120.8333	0.7255	0.0069	2.4704	2.4773
120.8667	0.7229	0	2.4652	2.4652
120.9	0.7229	0	2.4744	2.4744
120.9333	0.7242	0.0069	2.473	2.48
120.9667	0.7239	0	2.4704	2.4704
121	0.7252	0.0069	2.4717	2.4787
121.0333	0.7216	0	2.4757	2.4757
121.0667	0.7262	0	2.4678	2.4678
121.1	0.7262	0	2.473	2.473
121.1333	0.7255	0	2.4691	2.4691
121.1667	0.7278	0	2.4717	2.4717
121.2	0.7255	0.0201	2.4691	2.4892
121.2333	0.7226	0	2.473	2.473
121.2667	0.7222	0	2.473	2.473
121.3	0.7236	0	2.4717	2.4717
121.3333	0.7252	0	2.473	2.473
121.3667	0.7255	0	2.4704	2.4704
121.4	0.7239	0.0069	2.473	2.48
121.4333	0.7255	0.0069	2.473	2.48
121.4667	0.7272	0	2.473	2.473
121.5	0.7255	0.0069	2.4717	2.4787
121.5333	0.7278	0	2.4757	2.4757
121.5667	0.7255	0	2.4704	2.4704
121.6	0.7232	0.0069	2.4704	2.4773
121.6333	0.7222	0.0069	2.4612	2.4681
121.6667	0.7245	0.0069	2.4625	2.4694
121.7	0.7239	0.0069	2.4625	2.4694
121.7333	0.7226	0	2.4586	2.4586
121.7667	0.7262	0	2.4665	2.4665
121.8	0.7252	0.0201	2.4652	2.4852
121.8333	0.7252	0.0201	2.4638	2.4839
121.8667	0.7236	0.0069	2.4612	2.4681
121.9	0.7265	0	2.4678	2.4678
121.9333	0.7239	0	2.4678	2.4678
121.9667	0.7249	0	2.4691	2.4691
122	0.7242	0	2.4652	2.4652
122.0333	0.7255	0.0069	2.4625	2.4694

122.0667	0.7255	0.0069	2.4573	2.4642
122.1	0.7255	0	2.4586	2.4586
122.1333	0.7232	0	2.4586	2.4586
122.1667	0.7242	0	2.4638	2.4638
122.2	0.7236	0	2.4652	2.4652
122.2333	0.7239	0.0069	2.4625	2.4694
122.2667	0.7232	0.0069	2.4612	2.4681
122.3	0.7242	0	2.4612	2.4612
122.3333	0.7222	0	2.4612	2.4612
122.3667	0.7229	0	2.4678	2.4678
122.4	0.7203	0	2.4638	2.4638
122.4333	0.7245	0.0069	2.4691	2.476
122.4667	0.7209	0.0069	2.4665	2.4734
122.5	0.7245	0.0069	2.4625	2.4694
122.5333	0.7229	0	2.4678	2.4678
122.5667	0.7229	0	2.4612	2.4612
122.6	0.7242	0	2.4638	2.4638
122.6333	0.7249	0	2.4638	2.4638
122.6667	0.7245	0	2.4625	2.4625
122.7	0.7245	0	2.4638	2.4638
122.7333	0.7259	0	2.4573	2.4573
122.7667	0.7245	0.0069	2.4625	2.4694
122.8	0.7242	0	2.4625	2.4625
122.8333	0.7252	0	2.4665	2.4665
122.8667	0.7216	0.0069	2.4665	2.4734
122.9	0.7262	0.0069	2.4665	2.4734
122.9333	0.7236	0	2.4665	2.4665
122.9667	0.7216	0	2.4717	2.4717
123	0.7226	0.0069	2.4625	2.4694
123.0333	0.7236	0	2.4625	2.4625
123.0667	0.7232	0	2.4625	2.4625
123.1	0.7219	0	2.4638	2.4638
123.1333	0.7236	0	2.4665	2.4665
123.1667	0.7239	0	2.4717	2.4717
123.2	0.7226	0	2.4638	2.4638
123.2333	0.7213	0.0069	2.4665	2.4734
123.2667	0.7216	0	2.4652	2.4652
123.3	0.7206	0	2.4586	2.4586
123.3333	0.7226	0.0069	2.4599	2.4668
123.3667	0.7259	0	2.4625	2.4625
123.4	0.7275	0	2.4638	2.4638
123.4333	0.7269	0	2.4546	2.4546
123.4667	0.7239	0.0069	2.4612	2.4681
123.5	0.7236	0.0069	2.4599	2.4668
123.5333	0.7245	0	2.4546	2.4546
123.5667	0.7239	0	2.4612	2.4612
123.6	0.7249	0	2.4652	2.4652

123.6333	0.7216	0.0069	2.4599	2.4668
123.6667	0.7255	0	2.4507	2.4507
123.7	0.7229	0.0069	2.4612	2.4681
123.7333	0.7242	0.0069	2.4573	2.4642
123.7667	0.7229	0	2.4612	2.4612
123.8	0.7216	0.0069	2.4612	2.4681
123.8333	0.7193	0	2.456	2.456
123.8667	0.7239	0	2.4691	2.4691
123.9	0.7232	0	2.4625	2.4625
123.9333	0.7249	0	2.4625	2.4625
123.9667	0.7232	0.0069	2.4612	2.4681
124	0.7226	0	2.4638	2.4638
124.0333	0.7255	0	2.4652	2.4652
124.0667	0.7219	0	2.4612	2.4612
124.1	0.7232	0.0069	2.4638	2.4708
124.1333	0.7232	0	2.4586	2.4586
124.1667	0.7213	0.0069	2.4573	2.4642
124.2	0.7259	0	2.4625	2.4625
124.2333	0.7242	0.0201	2.4586	2.4787
124.2667	0.7199	0	2.4546	2.4546
124.3	0.7222	0	2.4573	2.4573
124.3333	0.7236	0	2.4612	2.4612
124.3667	0.7232	0.0069	2.4652	2.4721
124.4	0.7245	0	2.4625	2.4625
124.4333	0.7226	0.0069	2.4665	2.4734
124.4667	0.7213	0	2.4573	2.4573
124.5	0.7249	0	2.4612	2.4612
124.5333	0.7252	0.0069	2.4599	2.4668
124.5667	0.7242	0.0069	2.456	2.4629
124.6	0.7219	0	2.4599	2.4599
124.6333	0.7249	0.0069	2.4586	2.4655
124.6667	0.7245	0	2.4612	2.4612
124.7	0.7213	0	2.4599	2.4599
124.7333	0.7213	0.0069	2.4586	2.4655
124.7667	0.7242	0	2.4612	2.4612
124.8	0.7239	0.0069	2.4612	2.4681
124.8333	0.7252	0	2.4612	2.4612
124.8667	0.7206	0	2.4612	2.4612
124.9	0.7242	0.0069	2.4652	2.4721
124.9333	0.7259	0	2.4638	2.4638
124.9667	0.7245	0	2.456	2.456
125	0.7259	0	2.4638	2.4638
125.0333	0.7209	0.0069	2.4546	2.4616
125.0667	0.7226	0	2.4612	2.4612
125.1	0.7249	0.0069	2.4586	2.4655
125.1333	0.7236	0	2.456	2.456
125.1667	0.7232	0.0069	2.4586	2.4655

125.2	0.7242	0	2.4599	2.4599
125.2333	0.7216	0	2.456	2.456
125.2667	0.7209	0	2.4638	2.4638
125.3	0.7196	0	2.4691	2.4691
125.3333	0.7245	0	2.452	2.452
125.3667	0.7213	0.0201	2.4494	2.4694
125.4	0.7206	0	2.4573	2.4573
125.4333	0.7216	0.0069	2.4586	2.4655
125.4667	0.7209	0	2.452	2.452
125.5	0.7239	0.0069	2.4533	2.4602
125.5333	0.7226	0	2.456	2.456
125.5667	0.7252	0.0069	2.4612	2.4681
125.6	0.7222	0	2.4546	2.4546
125.6333	0.7226	0	2.456	2.456
125.6667	0.7245	0	2.4573	2.4573
125.7	0.7229	0.0069	2.4481	2.455
125.7333	0.7222	0.0069	2.4481	2.455
125.7667	0.7242	0.0069	2.4494	2.4563
125.8	0.7213	0.0069	2.4507	2.4576
125.8333	0.7239	0.0069	2.4507	2.4576
125.8667	0.7239	0	2.4612	2.4612
125.9	0.7239	0	2.4546	2.4546
125.9333	0.7245	0.0069	2.452	2.4589
125.9667	0.7239	0.0069	2.4507	2.4576
126	0.7219	0	2.4533	2.4533
126.0333	0.7249	0.0069	2.452	2.4589
126.0667	0.7245	0	2.4481	2.4481
126.1	0.7232	0.0069	2.4428	2.4497
126.1333	0.7219	0.0069	2.452	2.4589
126.1667	0.7206	0	2.4533	2.4533
126.2	0.7245	0	2.4481	2.4481
126.2333	0.7232	0.0069	2.4494	2.4563
126.2667	0.7226	0	2.4507	2.4507
126.3	0.7236	0	2.4507	2.4507
126.3333	0.7219	0.0069	2.4507	2.4576
126.3667	0.7239	0.0069	2.4533	2.4602
126.4	0.7209	0.0201	2.4599	2.48
126.4333	0.7236	0.0201	2.4573	2.4773
126.4667	0.7229	0	2.4573	2.4573
126.5	0.7219	0.0201	2.456	2.476
126.5333	0.7209	0.0069	2.4599	2.4668
126.5667	0.7252	0	2.4507	2.4507
126.6	0.7203	0	2.4481	2.4481
126.6333	0.7245	0	2.4507	2.4507
126.6667	0.7219	0	2.452	2.452
126.7	0.7236	0.0069	2.4573	2.4642
126.7333	0.7239	0	2.4599	2.4599

126.7667	0.7245	0.0069	2.4586	2.4655
126.8	0.7219	0.0069	2.4573	2.4642
126.8333	0.7236	0	2.4573	2.4573
126.8667	0.7222	0	2.452	2.452
126.9	0.7239	0.0069	2.4652	2.4721
126.9333	0.7245	0	2.4599	2.4599
126.9667	0.7232	0	2.4625	2.4625
127	0.7229	0	2.4599	2.4599
127.0333	0.7229	0	2.4691	2.4691
127.0667	0.7232	0	2.4638	2.4638
127.1	0.7236	0	2.4533	2.4533
127.1333	0.7213	0	2.4625	2.4625
127.1667	0.7255	0.0069	2.4612	2.4681
127.2	0.7222	0	2.4599	2.4599
127.2333	0.7203	0.0069	2.4546	2.4616
127.2667	0.7229	0	2.4546	2.4546
127.3	0.7216	0	2.4573	2.4573
127.3333	0.7216	0.0069	2.4546	2.4616
127.3667	0.7236	0	2.452	2.452
127.4	0.7209	0	2.4652	2.4652
127.4333	0.7209	0	2.4599	2.4599
127.4667	0.7209	0.0069	2.4586	2.4655
127.5	0.7236	0	2.4546	2.4546
127.5333	0.7239	0.0069	2.4638	2.4708
127.5667	0.7226	0	2.4625	2.4625
127.6	0.7209	0.0069	2.4638	2.4708
127.6333	0.7239	0.0069	2.4638	2.4708
127.6667	0.7239	0	2.4599	2.4599
127.7	0.7219	0	2.4704	2.4704
127.7333	0.7206	0.0069	2.4638	2.4708
127.7667	0.7226	0	2.4612	2.4612
127.8	0.7193	0.0069	2.4612	2.4681
127.8333	0.7216	0	2.4612	2.4612
127.8667	0.7229	0	2.456	2.456
127.9	0.7226	0	2.456	2.456
127.9333	0.7222	0	2.4599	2.4599
127.9667	0.7229	0	2.4533	2.4533
128	0.7222	0	2.4586	2.4586
128.0333	0.7232	0	2.4612	2.4612
128.0667	0.7199	0.0069	2.4665	2.4734
128.1	0.7203	0	2.452	2.452
128.1333	0.7222	0	2.4533	2.4533
128.1667	0.7199	0	2.4546	2.4546
128.2	0.7229	0	2.4533	2.4533
128.2333	0.7236	0	2.4638	2.4638
128.2667	0.7219	0	2.4625	2.4625
128.3	0.7222	0	2.4586	2.4586

128.3333	0.7232	0	2.456	2.456
128.3667	0.7226	0	2.4612	2.4612
128.4	0.7259	0	2.4586	2.4586
128.4333	0.7236	0.0069	2.4573	2.4642
128.4667	0.7226	0	2.4599	2.4599
128.5	0.7213	0	2.4599	2.4599
128.5333	0.7222	0	2.4612	2.4612
128.5667	0.7222	0.0069	2.456	2.4629
128.6	0.7236	0	2.4573	2.4573
128.6333	0.7249	0.0069	2.4481	2.455
128.6667	0.7265	0	2.456	2.456
128.7	0.7331	0.0069	2.4652	2.4721
128.7333	0.7433	0	2.4809	2.4809
128.7667	0.7594	0.0069	2.4954	2.5023
128.8	0.7752	0	2.5164	2.5164
128.8333	0.7907	0	2.5362	2.5362
128.8667	0.8042	0	2.5572	2.5572
128.9	0.8203	0.0069	2.5677	2.5746
128.9333	0.8341	0.0069	2.5861	2.5931
128.9667	0.8457	0.0069	2.6098	2.6167
129	0.8598	0	2.6295	2.6295
129.0333	0.87	0.0069	2.6506	2.6575
129.0667	0.8825	0.0069	2.6611	2.668
129.1	0.8964	0	2.6769	2.6769
129.1333	0.9052	0	2.6953	2.6953
129.1667	0.9158	0	2.7176	2.7176
129.2	0.9283	0.0069	2.7347	2.7416
129.2333	0.9408	0	2.7637	2.7637
129.2667	0.95	0	2.7755	2.7755
129.3	0.9589	0.0069	2.7913	2.7982
129.3333	0.9674	0.0069	2.8176	2.8245
129.3667	0.976	0	2.836	2.836
129.4	0.9869	0	2.8531	2.8531
129.4333	0.9938	0	2.8689	2.8689
129.4667	1.0037	0.0069	2.8859	2.8929
129.5	1.0106	0	2.8965	2.8965
129.5333	1.0181	0	2.9096	2.9096
129.5667	1.029	0	2.9385	2.9385
129.6	1.0366	0	2.9517	2.9517
129.6333	1.0425	0	2.9622	2.9622
129.6667	1.0484	0	2.9806	2.9806
129.7	1.0547	0	2.9977	2.9977
129.7333	1.0622	0	3.0109	3.0109
129.7667	1.0688	0	3.0267	3.0267
129.8	1.0757	0.0069	3.0398	3.0467
129.8333	1.082	0.0069	3.0556	3.0625
129.8667	1.0896	0	3.07	3.07

129.9	1.0952	0	3.0819	3.0819
129.9333	1.0994	0.0069	3.0977	3.1046
129.9667	1.1014	0.0069	3.1161	3.123
130	1.11	0	3.1318	3.1318
130.0333	1.1156	0	3.1411	3.1411
130.0667	1.1198	0	3.1581	3.1581
130.1	1.1228	0	3.1726	3.1726
130.1333	1.1281	0	3.1818	3.1818
130.1667	1.1327	0.0069	3.1989	3.2058
130.2	1.1366	0	3.2081	3.2081
130.2333	1.1429	0	3.2265	3.2265
130.2667	1.1488	0	3.2318	3.2318
130.3	1.1564	0	3.2515	3.2515
130.3333	1.161	0.0069	3.2607	3.2676
130.3667	1.1685	0.0069	3.2765	3.2834
130.4	1.1735	0	3.291	3.291
130.4333	1.1807	0	3.3067	3.3067
130.4667	1.1843	0.0069	3.3238	3.3308
130.5	1.1909	0	3.3344	3.3344
130.5333	1.1962	0	3.3528	3.3528
130.5667	1.2054	0	3.3633	3.3633
130.6	1.2094	0.0069	3.3791	3.386
130.6333	1.215	0.0069	3.3935	3.4005
130.6667	1.2215	0	3.4106	3.4106
130.7	1.2261	0	3.4172	3.4172
130.7333	1.2317	0.0069	3.433	3.4399
130.7667	1.2367	0.0069	3.4514	3.4583
130.8	1.2426	0	3.4659	3.4659
130.8333	1.2459	0.0069	3.4816	3.4886
130.8667	1.2528	0	3.4948	3.4948
130.9	1.2548	0.0069	3.5106	3.5175
130.9333	1.261	0	3.5263	3.5263
130.9667	1.2673	0	3.5355	3.5355
131	1.2719	0	3.55	3.55
131.0333	1.2772	0	3.575	3.575
131.0667	1.2821	0	3.5855	3.5855
131.1	1.2834	0	3.5934	3.5934
131.1333	1.288	0.0069	3.5987	3.6056
131.1667	1.293	0	3.6171	3.6171
131.2	1.2986	0.0201	3.6342	3.6542
131.2333	1.3038	0	3.6486	3.6486
131.2667	1.3104	0	3.6539	3.6539
131.3	1.3147	0	3.6749	3.6749
131.3333	1.3213	0	3.6855	3.6855
131.3667	1.3275	0	3.7118	3.7118
131.4	1.3338	0	3.7183	3.7183
131.4333	1.3354	0	3.7315	3.7315

131.4667	1.3427	0	3.7551	3.7551
131.5	1.3499	0	3.7617	3.7617
131.5333	1.3552	0	3.7841	3.7841
131.5667	1.3575	0.0069	3.7985	3.8055
131.6	1.3644	0.0069	3.8104	3.8173
131.6333	1.3693	0	3.8183	3.8183
131.6667	1.3726	0	3.8327	3.8327
131.7	1.3782	0.0069	3.8472	3.8541
131.7333	1.3835	0.0069	3.8577	3.8646
131.7667	1.3901	0	3.8801	3.8801
131.8	1.3943	0.0069	3.8945	3.9015
131.8333	1.3963	0.0069	3.9103	3.9172
131.8667	1.4012	0.0069	3.9221	3.9291
131.9	1.4072	0.0201	3.9379	3.958
131.9333	1.4085	0	3.9577	3.9577
131.9667	1.4134	0	3.9682	3.9682
132	1.4167	0	3.9853	3.9853
132.0333	1.4226	0	3.9918	3.9918
132.0667	1.4249	0	4.0142	4.0142
132.1	1.4282	0	4.0247	4.0247
132.1333	1.4322	0	4.0418	4.0418
132.1667	1.4355	0	4.051	4.051
132.2	1.4401	0	4.0615	4.0615
132.2333	1.4381	0.0332	4.0707	4.104
132.2667	1.4454	0	4.0957	4.0957
132.3	1.4457	0	4.1036	4.1036
132.3333	1.4493	0	4.1154	4.1154
132.3667	1.4546	0	4.1273	4.1273
132.4	1.4569	0.0069	4.1404	4.1474
132.4333	1.4618	0.0069	4.1615	4.1684
132.4667	1.4638	0	4.1654	4.1654
132.5	1.4661	0.0069	4.172	4.1789
132.5333	1.47	0	4.1891	4.1891
132.5667	1.4674	0.0069	4.197	4.2039
132.6	1.4743	0	4.2088	4.2088
132.6333	1.475	0.0069	4.218	4.2249
132.6667	1.4769	0	4.2364	4.2364
132.7	1.4799	0.0069	4.2417	4.2486
132.7333	1.4848	0	4.2562	4.2562
132.7667	1.4855	0	4.268	4.268
132.8	1.4845	0	4.2877	4.2877
132.8333	1.4881	0.0069	4.2969	4.3038
132.8667	1.4881	0.0069	4.3074	4.3144
132.9	1.4878	0	4.314	4.314
132.9333	1.4904	0	4.318	4.318
132.9667	1.4895	0	4.3232	4.3232
133	1.4885	0.0069	4.339	4.3459

133.0333	1.4872	0.0069	4.3469	4.3538
133.0667	1.4865	0	4.3482	4.3482
133.1	1.4868	0	4.3653	4.3653
133.1333	1.4829	0	4.3679	4.3679
133.1667	1.4819	0	4.3692	4.3692
133.2	1.4796	0.0201	4.3784	4.3985
133.2333	1.4806	0	4.3811	4.3811
133.2667	1.4769	0.0069	4.3863	4.3933
133.3	1.4779	0.0069	4.3955	4.4025
133.3333	1.474	0	4.3969	4.3969
133.3667	1.4746	0	4.4126	4.4126
133.4	1.472	0	4.4074	4.4074
133.4333	1.469	0.0069	4.4166	4.4235
133.4667	1.4667	0	4.4192	4.4192
133.5	1.4677	0	4.4232	4.4232
133.5333	1.4677	0	4.4245	4.4245
133.5667	1.4631	0	4.4324	4.4324
133.6	1.4641	0.0069	4.4324	4.4393
133.6333	1.4651	0	4.4455	4.4455
133.6667	1.4641	0	4.4508	4.4508
133.7	1.4615	0.0069	4.4521	4.459
133.7333	1.4582	0	4.4613	4.4613
133.7667	1.4559	0	4.46	4.46
133.8	1.4595	0	4.4679	4.4679
133.8333	1.4532	0	4.4771	4.4771
133.8667	1.4539	0.0069	4.4784	4.4853
133.9	1.4559	0	4.481	4.481
133.9333	1.4542	0	4.4771	4.4771
133.9667	1.4539	0.0069	4.4836	4.4906
134	1.4506	0	4.4942	4.4942
134.0333	1.4516	0.0069	4.4889	4.4958
134.0667	1.4477	0.0069	4.4994	4.5063
134.1	1.4516	0	4.5047	4.5047
134.1333	1.449	0.0069	4.4968	4.5037
134.1667	1.45	0	4.5047	4.5047
134.2	1.4467	0	4.5126	4.5126
134.2333	1.4473	0	4.5113	4.5113
134.2667	1.4457	0.0069	4.5126	4.5195
134.3	1.4467	0.0069	4.5152	4.5221
134.3333	1.4444	0.0069	4.5178	4.5248
134.3667	1.4414	0	4.5244	4.5244
134.4	1.4424	0	4.5191	4.5191
134.4333	1.4444	0	4.5178	4.5178
134.4667	1.4414	0.0069	4.5231	4.53
134.5	1.4417	0	4.5205	4.5205
134.5333	1.4401	0	4.5244	4.5244
134.5667	1.443	0.0201	4.5389	4.5589

134.6	1.4391	0	4.5389	4.5389
134.6333	1.4404	0	4.5402	4.5402
134.6667	1.4375	0	4.5507	4.5507
134.7	1.4381	0	4.5468	4.5468
134.7333	1.4391	0	4.5402	4.5402
134.7667	1.4355	0.0069	4.5533	4.5603
134.8	1.4381	0	4.5533	4.5533
134.8333	1.4358	0	4.552	4.552
134.8667	1.4388	0.0069	4.5507	4.5576
134.9	1.4348	0.0069	4.5494	4.5563
134.9333	1.4371	0	4.5507	4.5507
134.9667	1.4348	0	4.5547	4.5547
135	1.4328	0.0069	4.5547	4.5616
135.0333	1.4345	0	4.552	4.552
135.0667	1.4325	0.0069	4.5599	4.5668
135.1	1.4338	0	4.5652	4.5652
135.1333	1.4342	0.0069	4.5678	4.5747
135.1667	1.4338	0	4.5599	4.5599
135.2	1.4322	0	4.5599	4.5599
135.2333	1.4325	0	4.5678	4.5678
135.2667	1.4315	0	4.5717	4.5717
135.3	1.4338	0	4.5757	4.5757
135.3333	1.4319	0	4.5731	4.5731
135.3667	1.4292	0.0332	4.5796	4.6129
135.4	1.4315	0	4.5717	4.5717
135.4333	1.4272	0.0069	4.577	4.5839
135.4667	1.4296	0.0069	4.577	4.5839
135.5	1.4266	0	4.5757	4.5757
135.5333	1.4279	0.0069	4.577	4.5839
135.5667	1.4269	0	4.5809	4.5809
135.6	1.4279	0	4.5849	4.5849
135.6333	1.4289	0	4.5783	4.5783
135.6667	1.4256	0	4.5862	4.5862
135.7	1.424	0.0069	4.5823	4.5892
135.7333	1.423	0.0069	4.5875	4.5944
135.7667	1.4249	0	4.5902	4.5902
135.8	1.4256	0	4.5809	4.5809
135.8333	1.4256	0	4.5875	4.5875
135.8667	1.4243	0	4.5902	4.5902
135.9	1.4253	0	4.5862	4.5862
135.9333	1.4246	0	4.5915	4.5915
135.9667	1.4223	0.0069	4.5888	4.5958
136	1.4243	0	4.5849	4.5849
136.0333	1.4217	0	4.5928	4.5928
136.0667	1.4203	0	4.5967	4.5967
136.1	1.4213	0	4.598	4.598
136.1333	1.421	0.0069	4.5862	4.5931

136.1667	1.4193	0	4.5928	4.5928
136.2	1.4217	0	4.5994	4.5994
136.2333	1.423	0	4.5994	4.5994
136.2667	1.4177	0	4.5941	4.5941
136.3	1.4223	0	4.5915	4.5915
136.3333	1.4193	0	4.5967	4.5967
136.3667	1.4203	0.0069	4.5928	4.5997
136.4	1.4217	0	4.6007	4.6007
136.4333	1.4187	0	4.5954	4.5954
136.4667	1.42	0	4.5967	4.5967
136.5	1.4193	0	4.6046	4.6046
136.5333	1.423	0	4.6033	4.6033
136.5667	1.4236	0	4.6033	4.6033
136.6	1.4236	0.0201	4.602	4.6221
136.6333	1.423	0	4.6007	4.6007
136.6667	1.4213	0	4.6007	4.6007
136.7	1.421	0	4.602	4.602
136.7333	1.4207	0	4.6059	4.6059
136.7667	1.42	0	4.6072	4.6072
136.8	1.42	0	4.5994	4.5994
136.8333	1.4193	0	4.602	4.602
136.8667	1.4174	0.0069	4.6086	4.6155
136.9	1.4217	0.0069	4.6086	4.6155
136.9333	1.4207	0	4.6125	4.6125
136.9667	1.422	0	4.6165	4.6165
137	1.42	0	4.6099	4.6099
137.0333	1.4223	0	4.6178	4.6178
137.0667	1.419	0	4.6151	4.6151
137.1	1.4223	0	4.6165	4.6165
137.1333	1.4184	0	4.6204	4.6204
137.1667	1.4193	0.0069	4.6178	4.6247
137.2	1.4197	0	4.6165	4.6165
137.2333	1.4177	0	4.6178	4.6178
137.2667	1.4243	0	4.6191	4.6191
137.3	1.423	0	4.6257	4.6257
137.3333	1.4226	0	4.623	4.623
137.3667	1.4213	0.0069	4.6243	4.6313
137.4	1.4203	0	4.6243	4.6243
137.4333	1.4207	0	4.6243	4.6243
137.4667	1.419	0	4.6296	4.6296
137.5	1.42	0	4.6204	4.6204
137.5333	1.419	0	4.6243	4.6243
137.5667	1.422	0	4.6217	4.6217
137.6	1.4217	0	4.6296	4.6296
137.6333	1.4226	0	4.6362	4.6362
137.6667	1.4193	0.0069	4.6243	4.6313
137.7	1.4197	0	4.6296	4.6296

137.7333	1.4246	0	4.6322	4.6322
137.7667	1.4226	0	4.6322	4.6322
137.8	1.42	0	4.6349	4.6349
137.8333	1.423	0	4.6322	4.6322
137.8667	1.4207	0	4.627	4.627
137.9	1.4233	0.0201	4.6349	4.6549
137.9333	1.4226	0	4.6388	4.6388
137.9667	1.4223	0	4.6414	4.6414
138	1.421	0	4.6362	4.6362
138.0333	1.4223	0	4.6467	4.6467
138.0667	1.4217	0	4.6401	4.6401
138.1	1.4223	0.0069	4.6506	4.6576
138.1333	1.4249	0.0069	4.6401	4.647
138.1667	1.4236	0.0069	4.6388	4.6457
138.2	1.4272	0	4.6322	4.6322
138.2333	1.4253	0	4.6375	4.6375
138.2667	1.4236	0	4.6388	4.6388
138.3	1.4226	0.0069	4.6454	4.6523
138.3333	1.424	0	4.6388	4.6388
138.3667	1.4253	0	4.6388	4.6388
138.4	1.4243	0.0201	4.6401	4.6602
138.4333	1.4272	0	4.6414	4.6414
138.4667	1.4276	0	4.6414	4.6414
138.5	1.4256	0	4.6506	4.6506
138.5333	1.4289	0	4.6493	4.6493
138.5667	1.4236	0	4.6467	4.6467
138.6	1.4269	0	4.652	4.652
138.6333	1.4282	0.0069	4.6467	4.6536
138.6667	1.4256	0	4.6533	4.6533
138.7	1.4269	0.0069	4.6612	4.6681
138.7333	1.4272	0	4.6612	4.6612
138.7667	1.4269	0	4.6651	4.6651
138.8	1.4292	0	4.6677	4.6677
138.8333	1.4309	0	4.673	4.673
138.8667	1.4315	0	4.6651	4.6651
138.9	1.4305	0.0069	4.6664	4.6733
138.9333	1.4328	0	4.6743	4.6743
138.9667	1.4325	0	4.6691	4.6691
139	1.4286	0	4.6717	4.6717
139.0333	1.4305	0.0069	4.6756	4.6825
139.0667	1.4335	0.0069	4.6861	4.6931
139.1	1.4302	0.0069	4.6835	4.6904
139.1333	1.4348	0.0201	4.673	4.6931
139.1667	1.4312	0.0069	4.6835	4.6904
139.2	1.4348	0	4.6809	4.6809
139.2333	1.4358	0	4.6835	4.6835
139.2667	1.4381	0	4.6914	4.6914

139.3	1.4345	0	4.6888	4.6888
139.3333	1.4361	0	4.698	4.698
139.3667	1.4371	0	4.6914	4.6914
139.4	1.4345	0.0069	4.6954	4.7023
139.4333	1.4401	0	4.6927	4.6927
139.4667	1.4394	0	4.6927	4.6927
139.5	1.4365	0	4.6954	4.6954
139.5333	1.4414	0.0069	4.698	4.7049
139.5667	1.4391	0.0069	4.7006	4.7075
139.6	1.4398	0	4.7046	4.7046
139.6333	1.4381	0	4.7032	4.7032
139.6667	1.4398	0	4.7072	4.7072
139.7	1.4407	0	4.7046	4.7046
139.7333	1.4398	0.0069	4.698	4.7049
139.7667	1.4421	0.0069	4.7046	4.7115
139.8	1.4407	0	4.7085	4.7085
139.8333	1.4421	0.0069	4.7124	4.7194
139.8667	1.4411	0	4.7098	4.7098
139.9	1.4407	0.0069	4.719	4.7259
139.9333	1.443	0.0069	4.719	4.7259
139.9667	1.4457	0.0069	4.7282	4.7351
140	1.4424	0	4.7243	4.7243
140.0333	1.4424	0	4.7256	4.7256
140.0667	1.4437	0	4.719	4.719
140.1	1.4437	0	4.7243	4.7243
140.1333	1.4434	0	4.723	4.723
140.1667	1.4424	0	4.7243	4.7243
140.2	1.446	0	4.723	4.723
140.2333	1.4457	0.0201	4.7203	4.7404
140.2667	1.4444	0	4.723	4.723
140.3	1.4444	0	4.7269	4.7269
140.3333	1.4454	0.0201	4.723	4.743
140.3667	1.4483	0.0069	4.744	4.7509
140.4	1.4463	0.0069	4.7335	4.7404
140.4333	1.4454	0	4.7322	4.7322
140.4667	1.4463	0	4.7335	4.7335
140.5	1.4457	0	4.7387	4.7387
140.5333	1.4486	0.0069	4.744	4.7509
140.5667	1.4473	0.0069	4.7585	4.7654
140.6	1.4473	0.0069	4.7598	4.7667
140.6333	1.449	0	4.7519	4.7519
140.6667	1.4467	0.0201	4.7598	4.7799
140.7	1.448	0	4.765	4.765
140.7333	1.4486	0	4.7558	4.7558
140.7667	1.4447	0	4.7572	4.7572
140.8	1.4454	0.0069	4.7585	4.7654
140.8333	1.449	0.0069	4.7664	4.7733

140.8667	1.4516	0	4.7598	4.7598
140.9	1.4493	0	4.7545	4.7545
140.9333	1.4513	0.0201	4.7598	4.7799
140.9667	1.45	0	4.7585	4.7585
141	1.4473	0.0069	4.7572	4.7641
141.0333	1.4526	0	4.7624	4.7624
141.0667	1.449	0	4.7637	4.7637
141.1	1.4503	0.0201	4.7637	4.7838
141.1333	1.449	0	4.7716	4.7716
141.1667	1.4503	0	4.7729	4.7729
141.2	1.449	0	4.7743	4.7743
141.2333	1.4506	0	4.7716	4.7716
141.2667	1.4519	0	4.7756	4.7756
141.3	1.4513	0	4.7769	4.7769
141.3333	1.4516	0.0201	4.7874	4.8075
141.3667	1.4526	0	4.7848	4.7848
141.4	1.4509	0	4.7861	4.7861
141.4333	1.45	0.0069	4.7808	4.7877
141.4667	1.4536	0.0069	4.7848	4.7917
141.5	1.4526	0.0069	4.7821	4.7891
141.5333	1.4523	0	4.79	4.79
141.5667	1.4519	0	4.7887	4.7887
141.6	1.4532	0.0069	4.794	4.8009
141.6333	1.4526	0	4.7913	4.7913
141.6667	1.4519	0	4.7874	4.7874
141.7	1.4536	0.0069	4.7992	4.8062
141.7333	1.4556	0	4.7966	4.7966
141.7667	1.4536	0	4.7927	4.7927
141.8	1.4532	0.0069	4.794	4.8009
141.8333	1.4536	0	4.794	4.794
141.8667	1.4526	0	4.7953	4.7953
141.9	1.4562	0	4.7992	4.7992
141.9333	1.4529	0	4.8019	4.8019
141.9667	1.4526	0.0069	4.8019	4.8088
142	1.4562	0	4.8058	4.8058
142.0333	1.4588	0	4.8019	4.8019
142.0667	1.4542	0.0201	4.8071	4.8272
142.1	1.4526	0.0201	4.8071	4.8272
142.1333	1.4556	0.0069	4.8124	4.8193
142.1667	1.4546	0.0069	4.8124	4.8193
142.2	1.4575	0	4.8071	4.8071
142.2333	1.4529	0.0069	4.8137	4.8206
142.2667	1.4556	0.0069	4.8111	4.818
142.3	1.4556	0.0069	4.8111	4.818
142.3333	1.4559	0	4.8124	4.8124
142.3667	1.4585	0	4.8203	4.8203
142.4	1.4572	0.0069	4.8203	4.8272

142.4333	1.4565	0.0069	4.8216	4.8285
142.4667	1.4595	0	4.8229	4.8229
142.5	1.4559	0	4.8216	4.8216
142.5333	1.4565	0	4.8203	4.8203
142.5667	1.4575	0	4.8282	4.8282
142.6	1.4546	0	4.8216	4.8216
142.6333	1.4569	0	4.819	4.819
142.6667	1.4575	0.0069	4.8295	4.8364
142.7	1.4549	0.0201	4.8347	4.8548
142.7333	1.4582	0	4.8347	4.8347
142.7667	1.4598	0	4.8426	4.8426
142.8	1.4582	0.0069	4.8334	4.8403
142.8333	1.4569	0	4.8321	4.8321
142.8667	1.4582	0	4.8374	4.8374
142.9	1.4588	0.0201	4.8426	4.8627
142.9333	1.4572	0.0069	4.8387	4.8456
142.9667	1.4598	0	4.8413	4.8413
143	1.4588	0	4.8413	4.8413
143.0333	1.4585	0	4.8374	4.8374
143.0667	1.4579	0.0069	4.84	4.8469
143.1	1.4602	0	4.8492	4.8492
143.1333	1.4585	0.0069	4.8466	4.8535
143.1667	1.4582	0	4.8479	4.8479
143.2	1.4602	0	4.8426	4.8426
143.2333	1.4621	0.0069	4.8439	4.8509
143.2667	1.4582	0	4.8479	4.8479
143.3	1.4602	0	4.8479	4.8479
143.3333	1.4628	0	4.8505	4.8505
143.3667	1.4585	0	4.8518	4.8518
143.4	1.4618	0.0069	4.8492	4.8561
143.4333	1.4608	0	4.8518	4.8518
143.4667	1.4615	0	4.8518	4.8518
143.5	1.4611	0	4.8492	4.8492
143.5333	1.4595	0.0069	4.8545	4.8614
143.5667	1.4621	0	4.8545	4.8545
143.6	1.4602	0.0069	4.8531	4.8601
143.6333	1.4602	0.0069	4.8492	4.8561
143.6667	1.4611	0	4.8426	4.8426
143.7	1.4641	0.0069	4.8466	4.8535
143.7333	1.4605	0	4.8492	4.8492
143.7667	1.4602	0	4.8558	4.8558
143.8	1.4641	0.0201	4.8531	4.8732
143.8333	1.4598	0	4.861	4.861
143.8667	1.4638	0.0069	4.8571	4.864
143.9	1.4631	0	4.8584	4.8584
143.9333	1.4621	0	4.8558	4.8558
143.9667	1.4635	0	4.8558	4.8558

144	1.4602	0.0069	4.8545	4.8614
144.0333	1.4625	0	4.8545	4.8545
144.0667	1.4641	0	4.865	4.865
144.1	1.4605	0	4.8571	4.8571
144.1333	1.4641	0	4.8571	4.8571
144.1667	1.4611	0.0069	4.8571	4.864
144.2	1.4631	0	4.865	4.865
144.2333	1.4608	0	4.8624	4.8624
144.2667	1.4635	0	4.861	4.861
144.3	1.4644	0.0069	4.8637	4.8706
144.3333	1.4608	0.0201	4.8689	4.889
144.3667	1.4631	0	4.8702	4.8702
144.4	1.4615	0	4.8716	4.8716
144.4333	1.4644	0	4.8676	4.8676
144.4667	1.4638	0	4.8663	4.8663
144.5	1.4611	0.0069	4.8637	4.8706
144.5333	1.4625	0.0069	4.865	4.8719
144.5667	1.4635	0.0069	4.8702	4.8772
144.6	1.4628	0	4.8702	4.8702
144.6333	1.4615	0	4.8663	4.8663
144.6667	1.4638	0	4.865	4.865
144.7	1.4611	0.0069	4.8676	4.8745
144.7333	1.4628	0	4.8702	4.8702
144.7667	1.4635	0	4.8689	4.8689
144.8	1.4635	0.0069	4.8702	4.8772
144.8333	1.4631	0	4.8637	4.8637
144.8667	1.4621	0.0069	4.8676	4.8745
144.9	1.4654	0	4.8742	4.8742
144.9333	1.4651	0	4.8755	4.8755
144.9667	1.4611	0.0201	4.8716	4.8916
145	1.4661	0.0069	4.8729	4.8798
145.0333	1.4654	0.0069	4.8781	4.8851
145.0667	1.4608	0	4.8808	4.8808
145.1	1.4651	0	4.8808	4.8808
145.1333	1.4641	0	4.8716	4.8716
145.1667	1.4651	0.0069	4.8768	4.8837
145.2	1.4648	0	4.8781	4.8781
145.2333	1.4635	0.0201	4.8689	4.889
145.2667	1.4641	0	4.8663	4.8663
145.3	1.4651	0	4.8702	4.8702
145.3333	1.4658	0.0069	4.8729	4.8798
145.3667	1.4621	0	4.8768	4.8768
145.4	1.4635	0	4.8729	4.8729
145.4333	1.4641	0	4.8755	4.8755
145.4667	1.4631	0.0201	4.8729	4.8929
145.5	1.4615	0.0069	4.8729	4.8798
145.5333	1.4635	0	4.8834	4.8834

145.5667	1.4635	0	4.8729	4.8729
145.6	1.4648	0	4.8716	4.8716
145.6333	1.4631	0.0069	4.8689	4.8758
145.6667	1.4602	0.0069	4.8755	4.8824
145.7	1.4628	0	4.8716	4.8716
145.7333	1.4608	0.0069	4.8821	4.889
145.7667	1.4625	0.0069	4.8702	4.8772
145.8	1.4644	0.0069	4.8676	4.8745
145.8333	1.4615	0.0069	4.8716	4.8785
145.8667	1.4611	0.0201	4.8794	4.8995
145.9	1.4608	0	4.8768	4.8768
145.9333	1.4615	0.0069	4.8755	4.8824
145.9667	1.4638	0	4.8755	4.8755
146	1.4621	0.0069	4.8702	4.8772
146.0333	1.4638	0	4.8808	4.8808
146.0667	1.4631	0	4.8755	4.8755
146.1	1.4635	0.0069	4.8729	4.8798
146.1333	1.4608	0.0069	4.8755	4.8824
146.1667	1.4631	0	4.8755	4.8755
146.2	1.4635	0.0069	4.8755	4.8824
146.2333	1.4611	0	4.8729	4.8729
146.2667	1.4611	0	4.8755	4.8755
146.3	1.4608	0	4.8781	4.8781
146.3333	1.4625	0.0069	4.8755	4.8824
146.3667	1.4621	0.0069	4.8702	4.8772
146.4	1.4611	0	4.8729	4.8729
146.4333	1.4618	0	4.8781	4.8781
146.4667	1.4615	0	4.8755	4.8755
146.5	1.4628	0	4.8716	4.8716
146.5333	1.4608	0.0069	4.8755	4.8824
146.5667	1.4618	0	4.8794	4.8794
146.6	1.4628	0	4.8702	4.8702
146.6333	1.4611	0	4.8742	4.8742
146.6667	1.4621	0	4.8808	4.8808
146.7	1.4592	0	4.8768	4.8768
146.7333	1.4651	0.0069	4.8794	4.8864
146.7667	1.4638	0	4.8768	4.8768
146.8	1.4611	0.0069	4.8808	4.8877
146.8333	1.4615	0	4.8755	4.8755
146.8667	1.4615	0.0069	4.8702	4.8772
146.9	1.4608	0	4.8794	4.8794
146.9333	1.4615	0	4.8768	4.8768
146.9667	1.4631	0	4.8742	4.8742
147	1.4588	0.0069	4.8716	4.8785
147.0333	1.4618	0.0201	4.8794	4.8995
147.0667	1.4579	0	4.8702	4.8702
147.1	1.4635	0	4.8716	4.8716

147.1333	1.4615	0	4.8794	4.8794
147.1667	1.4602	0.0201	4.8768	4.8969
147.2	1.4621	0	4.8729	4.8729
147.2333	1.4618	0	4.8768	4.8768
147.2667	1.4611	0	4.8794	4.8794
147.3	1.4602	0.0069	4.8755	4.8824
147.3333	1.4605	0	4.8794	4.8794
147.3667	1.4605	0.0069	4.8768	4.8837
147.4	1.4615	0	4.8808	4.8808
147.4333	1.4608	0.0069	4.8729	4.8798
147.4667	1.4579	0	4.8808	4.8808
147.5	1.4611	0.0069	4.8794	4.8864
147.5333	1.4625	0	4.8834	4.8834
147.5667	1.4615	0.0069	4.8808	4.8877
147.6	1.4608	0	4.8808	4.8808
147.6333	1.4602	0	4.8781	4.8781
147.6667	1.4611	0	4.8742	4.8742
147.7	1.4595	0	4.8768	4.8768
147.7333	1.4595	0.0069	4.8729	4.8798
147.7667	1.4608	0	4.8808	4.8808
147.8	1.4611	0.0069	4.8781	4.8851
147.8333	1.4575	0	4.8808	4.8808
147.8667	1.4546	0	4.8794	4.8794
147.9	1.4588	0	4.8768	4.8768
147.9333	1.4569	0.0069	4.8729	4.8798
147.9667	1.4582	0.0201	4.8794	4.8995
148	1.4546	0	4.8808	4.8808
148.0333	1.4575	0	4.8808	4.8808
148.0667	1.4552	0.0069	4.8781	4.8851
148.1	1.4556	0.0069	4.8702	4.8772
148.1333	1.4579	0	4.8702	4.8702
148.1667	1.4569	0	4.8702	4.8702
148.2	1.4565	0	4.8676	4.8676
148.2333	1.4569	0	4.8716	4.8716
148.2667	1.4582	0	4.8663	4.8663
148.3	1.4556	0	4.8702	4.8702
148.3333	1.4542	0	4.8768	4.8768
148.3667	1.4556	0.0069	4.8637	4.8706
148.4	1.4536	0	4.8755	4.8755
148.4333	1.4569	0	4.8755	4.8755
148.4667	1.4559	0.0069	4.8755	4.8824
148.5	1.4572	0	4.8716	4.8716
148.5333	1.4556	0.0069	4.8729	4.8798
148.5667	1.4539	0	4.8663	4.8663
148.6	1.4539	0.0069	4.865	4.8719
148.6333	1.4536	0	4.8676	4.8676
148.6667	1.4546	0.0069	4.8663	4.8732

148.7	1.4539	0.0201	4.8676	4.8877
148.7333	1.4582	0.0069	4.8689	4.8758
148.7667	1.4529	0.0069	4.865	4.8719
148.8	1.4556	0	4.8624	4.8624
148.8333	1.4546	0	4.8637	4.8637
148.8667	1.4565	0.0069	4.8637	4.8706
148.9	1.4526	0	4.8689	4.8689
148.9333	1.4513	0	4.8624	4.8624
148.9667	1.4552	0	4.8584	4.8584
149	1.4569	0	4.8492	4.8492
149.0333	1.4542	0	4.8545	4.8545
149.0667	1.4539	0	4.8597	4.8597
149.1	1.4559	0	4.8492	4.8492
149.1333	1.4559	0	4.8466	4.8466
149.1667	1.4519	0	4.8518	4.8518
149.2	1.4516	0	4.8479	4.8479
149.2333	1.4519	0	4.8505	4.8505
149.2667	1.4549	0.0069	4.8492	4.8561
149.3	1.4519	0.0069	4.8558	4.8627
149.3333	1.4539	0.0069	4.8479	4.8548
149.3667	1.4546	0	4.8492	4.8492
149.4	1.4519	0.0069	4.8492	4.8561
149.4333	1.4516	0	4.8439	4.8439
149.4667	1.4506	0	4.8426	4.8426
149.5	1.4549	0	4.8466	4.8466
149.5333	1.4523	0.0201	4.8492	4.8693
149.5667	1.4523	0.0069	4.8518	4.8588
149.6	1.4532	0	4.84	4.84
149.6333	1.4549	0.0069	4.8492	4.8561
149.6667	1.4529	0	4.84	4.84
149.7	1.4516	0	4.8413	4.8413
149.7333	1.4546	0	4.84	4.84
149.7667	1.45	0	4.8426	4.8426
149.8	1.4523	0.0069	4.8453	4.8522
149.8333	1.4516	0.0069	4.8453	4.8522
149.8667	1.4542	0	4.8479	4.8479
149.9	1.4519	0.0069	4.8387	4.8456
149.9333	1.4506	0.0069	4.8387	4.8456
149.9667	1.4516	0	4.84	4.84
150	1.449	0	4.8479	4.8479
150.0333	1.4526	0.0201	4.8466	4.8666
150.0667	1.4526	0	4.8453	4.8453
150.1	1.4516	0	4.8492	4.8492
150.1333	1.4493	0.0069	4.8413	4.8482
150.1667	1.4529	0.0069	4.8492	4.8561
150.2	1.4503	0	4.8374	4.8374
150.2333	1.4519	0.0069	4.8347	4.8417

150.2667	1.4506	0	4.8453	4.8453
150.3	1.4516	0.0069	4.8361	4.843
150.3333	1.4526	0	4.8413	4.8413
150.3667	1.4486	0.0201	4.84	4.8601
150.4	1.4516	0	4.8374	4.8374
150.4333	1.4483	0	4.8321	4.8321
150.4667	1.4513	0	4.8374	4.8374
150.5	1.448	0	4.84	4.84
150.5333	1.449	0.0069	4.8426	4.8496
150.5667	1.4513	0.0069	4.8334	4.8403
150.6	1.4496	0	4.8321	4.8321
150.6333	1.4503	0	4.84	4.84
150.6667	1.449	0	4.8374	4.8374
150.7	1.4549	0.0069	4.8321	4.839
150.7333	1.449	0	4.8361	4.8361
150.7667	1.4503	0	4.8347	4.8347
150.8	1.449	0	4.8334	4.8334
150.8333	1.4516	0	4.8321	4.8321
150.8667	1.4516	0.0069	4.8321	4.839
150.9	1.4526	0.0069	4.8347	4.8417
150.9333	1.4526	0.0069	4.8334	4.8403
150.9667	1.45	0	4.8321	4.8321
151	1.4506	0	4.8321	4.8321
151.0333	1.4493	0	4.8295	4.8295
151.0667	1.449	0	4.8334	4.8334
151.1	1.4483	0.0069	4.8308	4.8377
151.1333	1.45	0	4.8334	4.8334
151.1667	1.449	0	4.8255	4.8255
151.2	1.4519	0.0069	4.8255	4.8325
151.2333	1.4493	0	4.8268	4.8268
151.2667	1.4483	0	4.8295	4.8295
151.3	1.4477	0.0069	4.8282	4.8351
151.3333	1.4477	0.0201	4.8268	4.8469
151.3667	1.4509	0	4.8282	4.8282
151.4	1.4516	0	4.8255	4.8255
151.4333	1.4509	0	4.8216	4.8216
151.4667	1.4509	0	4.8295	4.8295
151.5	1.4503	0.0201	4.8216	4.8417
151.5333	1.4493	0	4.8268	4.8268
151.5667	1.449	0	4.8176	4.8176
151.6	1.4463	0.0201	4.819	4.839
151.6333	1.449	0	4.8216	4.8216
151.6667	1.4483	0.0069	4.8229	4.8298
151.7	1.4509	0.0201	4.8203	4.8403
151.7333	1.45	0	4.819	4.819
151.7667	1.45	0	4.8242	4.8242
151.8	1.4463	0	4.8176	4.8176

151.8333	1.447	0	4.819	4.819
151.8667	1.4496	0	4.815	4.815
151.9	1.449	0	4.8242	4.8242
151.9333	1.4503	0.0069	4.819	4.8259
151.9667	1.4523	0	4.815	4.815
152	1.449	0.0069	4.819	4.8259
152.0333	1.4506	0	4.8163	4.8163
152.0667	1.447	0.0201	4.8163	4.8364
152.1	1.4447	0.0069	4.8163	4.8233
152.1333	1.4467	0	4.819	4.819
152.1667	1.449	0	4.815	4.815
152.2	1.448	0	4.815	4.815
152.2333	1.449	0	4.8084	4.8084
152.2667	1.4454	0.0069	4.8084	4.8154
152.3	1.4483	0	4.8058	4.8058
152.3333	1.448	0.0069	4.8071	4.814
152.3667	1.447	0	4.8071	4.8071
152.4	1.448	0	4.8137	4.8137
152.4333	1.447	0	4.819	4.819
152.4667	1.4503	0.0069	4.8176	4.8246
152.5	1.4503	0.0069	4.819	4.8259
152.5333	1.449	0.0201	4.819	4.839
152.5667	1.4513	0.0069	4.8137	4.8206
152.6	1.447	0.0069	4.8176	4.8246
152.6333	1.4457	0	4.8084	4.8084
152.6667	1.4463	0.0069	4.8124	4.8193
152.7	1.4483	0	4.8163	4.8163
152.7333	1.4473	0.0069	4.8111	4.818
152.7667	1.447	0	4.8163	4.8163
152.8	1.4473	0	4.8111	4.8111
152.8333	1.4477	0	4.815	4.815
152.8667	1.4473	0.0069	4.8111	4.818
152.9	1.4486	0	4.8045	4.8045
152.9333	1.4483	0	4.8084	4.8084
152.9667	1.4503	0.0069	4.815	4.8219
153	1.449	0	4.8098	4.8098
153.0333	1.4477	0.0069	4.8242	4.8311
153.0667	1.4509	0.0069	4.819	4.8259
153.1	1.447	0.0069	4.8163	4.8233
153.1333	1.4463	0.0069	4.815	4.8219
153.1667	1.447	0	4.8019	4.8019
153.2	1.4457	0.0069	4.8124	4.8193
153.2333	1.4477	0.0069	4.8071	4.814
153.2667	1.4477	0	4.8032	4.8032
153.3	1.4496	0	4.8084	4.8084
153.3333	1.4477	0.0201	4.815	4.8351
153.3667	1.4457	0	4.8006	4.8006

153.4	1.4483	0.0069	4.8006	4.8075
153.4333	1.4486	0	4.8006	4.8006
153.4667	1.4454	0	4.8045	4.8045
153.5	1.4457	0.0069	4.8006	4.8075
153.5333	1.4457	0	4.7992	4.7992
153.5667	1.4503	0.0069	4.7992	4.8062
153.6	1.4483	0	4.8006	4.8006
153.6333	1.4473	0	4.7927	4.7927
153.6667	1.4493	0.0069	4.8045	4.8114
153.7	1.4496	0.0069	4.7913	4.7983
153.7333	1.447	0	4.7927	4.7927
153.7667	1.4493	0.0201	4.794	4.814
153.8	1.4496	0	4.7966	4.7966
153.8333	1.4483	0.0069	4.7913	4.7983
153.8667	1.4503	0.0069	4.7913	4.7983
153.9	1.4483	0.0069	4.7874	4.7943
153.9333	1.448	0	4.7835	4.7835
153.9667	1.4477	0	4.7874	4.7874
154	1.446	0	4.7887	4.7887
154.0333	1.4493	0	4.7821	4.7821
154.0667	1.4496	0	4.7808	4.7808
154.1	1.4463	0	4.7782	4.7782
154.1333	1.4496	0	4.7835	4.7835
154.1667	1.449	0	4.7769	4.7769
154.2	1.4486	0	4.7743	4.7743
154.2333	1.4483	0.0069	4.7729	4.7799
154.2667	1.449	0	4.7743	4.7743
154.3	1.4486	0	4.765	4.765
154.3333	1.45	0.0069	4.769	4.7759
154.3667	1.449	0	4.7611	4.7611
154.4	1.448	0.0069	4.7585	4.7654
154.4333	1.4496	0.0069	4.7624	4.7693
154.4667	1.4506	0	4.7664	4.7664
154.5	1.4477	0.0069	4.7585	4.7654
154.5333	1.4477	0	4.7598	4.7598
154.5667	1.4503	0	4.7493	4.7493
154.6	1.449	0	4.748	4.748
154.6333	1.4503	0	4.7466	4.7466
154.6667	1.4493	0.0069	4.7466	4.7536
154.7	1.4526	0.0069	4.7401	4.747
154.7333	1.4506	0.0069	4.7453	4.7522
154.7667	1.4513	0.0069	4.7401	4.747
154.8	1.4496	0	4.7387	4.7387
154.8333	1.45	0	4.7348	4.7348
154.8667	1.4532	0	4.7282	4.7282
154.9	1.4519	0	4.7282	4.7282
154.9333	1.4549	0	4.723	4.723

154.9667	1.4536	0	4.7269	4.7269
155	1.4526	0	4.7217	4.7217
155.0333	1.4542	0	4.7243	4.7243
155.0667	1.4493	0	4.7203	4.7203
155.1	1.4509	0	4.7124	4.7124
155.1333	1.4529	0.0069	4.7138	4.7207
155.1667	1.4519	0.0069	4.7151	4.722
155.2	1.4513	0.0201	4.7177	4.7378
155.2333	1.4536	0	4.7164	4.7164
155.2667	1.4496	0.0069	4.7138	4.7207
155.3	1.4539	0	4.7124	4.7124
155.3333	1.4552	0	4.7138	4.7138
155.3667	1.4506	0.0069	4.7085	4.7154
155.4	1.4523	0	4.7098	4.7098
155.4333	1.4546	0.0201	4.7046	4.7246
155.4667	1.4536	0.0069	4.7032	4.7102
155.5	1.4539	0	4.6967	4.6967
155.5333	1.4536	0.0069	4.698	4.7049
155.5667	1.4526	0.0069	4.698	4.7049
155.6	1.4539	0	4.6954	4.6954
155.6333	1.4539	0	4.698	4.698
155.6667	1.4552	0.0069	4.6967	4.7036
155.7	1.4532	0.0069	4.7019	4.7088
155.7333	1.4542	0	4.6967	4.6967
155.7667	1.4549	0.0069	4.6914	4.6983
155.8	1.4532	0.0069	4.6875	4.6944
155.8333	1.4556	0.0069	4.6875	4.6944
155.8667	1.4565	0	4.6861	4.6861
155.9	1.4509	0	4.6861	4.6861
155.9333	1.4526	0.0201	4.6861	4.7062
155.9667	1.4546	0	4.6783	4.6783
156	1.4562	0	4.6809	4.6809
156.0333	1.4552	0	4.6809	4.6809
156.0667	1.4556	0	4.673	4.673
156.1	1.4572	0	4.6809	4.6809
156.1333	1.4556	0	4.6769	4.6769
156.1667	1.4549	0	4.6704	4.6704
156.2	1.4572	0	4.673	4.673
156.2333	1.4556	0	4.6651	4.6651
156.2667	1.4546	0	4.6664	4.6664
156.3	1.4569	0	4.6664	4.6664
156.3333	1.4569	0	4.6651	4.6651
156.3667	1.4556	0	4.6625	4.6625
156.4	1.4556	0	4.6572	4.6572
156.4333	1.4582	0.0069	4.6506	4.6576
156.4667	1.4572	0	4.6493	4.6493
156.5	1.4559	0.0069	4.6533	4.6602

156.5333	1.4598	0.0069	4.6506	4.6576
156.5667	1.4592	0	4.6546	4.6546
156.6	1.4592	0.0201	4.6533	4.6733
156.6333	1.4585	0.0069	4.6559	4.6628
156.6667	1.4559	0.0069	4.6533	4.6602
156.7	1.4582	0	4.6506	4.6506
156.7333	1.4565	0.0069	4.6467	4.6536
156.7667	1.4588	0.0069	4.6428	4.6497
156.8	1.4598	0	4.6414	4.6414
156.8333	1.4592	0	4.6467	4.6467
156.8667	1.4546	0	4.6546	4.6546
156.9	1.4579	0	4.6441	4.6441
156.9333	1.4588	0.0069	4.6493	4.6562
156.9667	1.4585	0	4.6414	4.6414
157	1.4618	0.0069	4.6362	4.6431
157.0333	1.4608	0	4.6349	4.6349
157.0667	1.4556	0.0069	4.6362	4.6431
157.1	1.4602	0	4.6349	4.6349
157.1333	1.4556	0.0069	4.6362	4.6431
157.1667	1.4572	0.0069	4.6243	4.6313
157.2	1.4572	0.0201	4.627	4.647
157.2333	1.4595	0	4.6204	4.6204
157.2667	1.4611	0	4.623	4.623
157.3	1.4608	0	4.6151	4.6151
157.3333	1.4605	0	4.6191	4.6191
157.3667	1.4582	0	4.6204	4.6204
157.4	1.4608	0	4.6138	4.6138
157.4333	1.4602	0	4.6099	4.6099
157.4667	1.4615	0	4.6125	4.6125
157.5	1.4598	0	4.6059	4.6059
157.5333	1.4618	0.0069	4.602	4.6089
157.5667	1.4595	0	4.6086	4.6086
157.6	1.4625	0	4.6099	4.6099
157.6333	1.4635	0	4.6033	4.6033
157.6667	1.4625	0.0069	4.5994	4.6063
157.7	1.4631	0	4.5915	4.5915
157.7333	1.4602	0	4.5875	4.5875
157.7667	1.4608	0	4.5888	4.5888
157.8	1.4592	0	4.5915	4.5915
157.8333	1.4621	0	4.5915	4.5915
157.8667	1.4648	0.0201	4.5967	4.6168
157.9	1.4611	0	4.5888	4.5888
157.9333	1.4651	0	4.5836	4.5836
157.9667	1.4638	0	4.5836	4.5836
158	1.4635	0	4.5823	4.5823
158.0333	1.4631	0.0069	4.5783	4.5852
158.0667	1.4644	0	4.5796	4.5796

158.1	1.4625	0	4.5731	4.5731
158.1333	1.4621	0	4.5731	4.5731
158.1667	1.4635	0	4.5731	4.5731
158.2	1.4618	0	4.5691	4.5691
158.2333	1.4598	0.0069	4.5652	4.5721
158.2667	1.4658	0.0201	4.5665	4.5866
158.3	1.4644	0	4.5665	4.5665
158.3333	1.4641	0	4.5612	4.5612
158.3667	1.4674	0	4.5639	4.5639
158.4	1.4644	0	4.5678	4.5678
158.4333	1.4641	0	4.5639	4.5639
158.4667	1.4671	0	4.5599	4.5599
158.5	1.4654	0	4.556	4.556
158.5333	1.4681	0	4.556	4.556
158.5667	1.4641	0	4.5547	4.5547
158.6	1.4661	0	4.5454	4.5454
158.6333	1.4677	0.0069	4.5547	4.5616
158.6667	1.4654	0	4.5415	4.5415
158.7	1.4667	0.0069	4.5389	4.5458
158.7333	1.4654	0.0069	4.5441	4.5511
158.7667	1.4648	0.0069	4.5454	4.5524
158.8	1.4658	0.0069	4.5402	4.5471
158.8333	1.4651	0	4.5415	4.5415
158.8667	1.4654	0	4.5402	4.5402
158.9	1.4648	0	4.5402	4.5402
158.9333	1.47	0.0069	4.5362	4.5432
158.9667	1.4687	0	4.5389	4.5389
159	1.4664	0.0069	4.527	4.534
159.0333	1.4681	0.0069	4.527	4.534
159.0667	1.4681	0.0069	4.5376	4.5445
159.1	1.4694	0	4.5284	4.5284
159.1333	1.4677	0.0069	4.5284	4.5353
159.1667	1.4684	0.0069	4.5244	4.5313
159.2	1.4707	0	4.5218	4.5218
159.2333	1.4684	0	4.5284	4.5284
159.2667	1.4661	0	4.5218	4.5218
159.3	1.4667	0	4.5218	4.5218
159.3333	1.4681	0.0069	4.5244	4.5313
159.3667	1.469	0.0069	4.5231	4.53
159.4	1.4687	0.0069	4.5244	4.5313
159.4333	1.469	0.0069	4.5244	4.5313
159.4667	1.4704	0.0069	4.5218	4.5287
159.5	1.4697	0	4.5191	4.5191
159.5333	1.4694	0.0069	4.5165	4.5234
159.5667	1.472	0	4.5178	4.5178
159.6	1.469	0	4.5165	4.5165
159.6333	1.469	0	4.5152	4.5152

159.6667	1.4681	0	4.5126	4.5126
159.7	1.469	0	4.5086	4.5086
159.7333	1.4694	0	4.5099	4.5099
159.7667	1.4687	0.0201	4.5099	4.53
159.8	1.469	0	4.5007	4.5007
159.8333	1.469	0.0069	4.506	4.5129
159.8667	1.471	0.0069	4.5047	4.5116
159.9	1.4697	0	4.5007	4.5007
159.9333	1.4714	0	4.4981	4.4981
159.9667	1.4714	0	4.5047	4.5047
160	1.4677	0	4.5073	4.5073
160.0333	1.469	0	4.5021	4.5021
160.0667	1.4717	0	4.4968	4.4968
160.1	1.47	0.0069	4.4968	4.5037
160.1333	1.4697	0.0069	4.4955	4.5024
160.1667	1.4717	0	4.4889	4.4889
160.2	1.472	0.0069	4.4968	4.5037
160.2333	1.4727	0	4.4902	4.4902
160.2667	1.473	0.0069	4.4876	4.4945
160.3	1.4733	0.0069	4.4836	4.4906
160.3333	1.4743	0	4.485	4.485
160.3667	1.4697	0.0069	4.4876	4.4945
160.4	1.4733	0	4.4889	4.4889
160.4333	1.4753	0.0069	4.4863	4.4932
160.4667	1.4727	0	4.4902	4.4902
160.5	1.47	0	4.4863	4.4863
160.5333	1.474	0	4.4876	4.4876
160.5667	1.4727	0	4.4797	4.4797
160.6	1.47	0	4.4876	4.4876
160.6333	1.4727	0	4.481	4.481
160.6667	1.4723	0	4.4889	4.4889
160.7	1.4727	0.0069	4.4797	4.4866
160.7333	1.475	0	4.4797	4.4797
160.7667	1.4727	0	4.481	4.481
160.8	1.475	0.0069	4.4797	4.4866
160.8333	1.474	0.0069	4.4784	4.4853
160.8667	1.475	0	4.481	4.481
160.9	1.4746	0	4.4718	4.4718
160.9333	1.474	0.0069	4.4718	4.4787
160.9667	1.4766	0	4.4705	4.4705
161	1.472	0.0069	4.4705	4.4774
161.0333	1.4723	0.0069	4.4692	4.4761
161.0667	1.4733	0	4.4731	4.4731
161.1	1.476	0.0069	4.4639	4.4708
161.1333	1.472	0	4.4692	4.4692
161.1667	1.474	0	4.4718	4.4718
161.2	1.476	0.0069	4.4639	4.4708

161.2333	1.476	0	4.4639	4.4639
161.2667	1.4746	0.0069	4.4652	4.4722
161.3	1.475	0.0069	4.46	4.4669
161.3333	1.4773	0	4.4639	4.4639
161.3667	1.4766	0.0201	4.4613	4.4814
161.4	1.472	0.0069	4.456	4.4629
161.4333	1.4786	0.0069	4.456	4.4629
161.4667	1.4776	0.0069	4.4534	4.4603
161.5	1.4766	0.0069	4.4481	4.4551
161.5333	1.4756	0.0069	4.4468	4.4537
161.5667	1.4776	0	4.4521	4.4521
161.6	1.4763	0	4.4495	4.4495
161.6333	1.4746	0	4.4442	4.4442
161.6667	1.4789	0	4.4468	4.4468
161.7	1.4753	0.0201	4.4429	4.4629
161.7333	1.4746	0	4.4495	4.4495
161.7667	1.476	0.0069	4.4455	4.4524
161.8	1.476	0	4.4442	4.4442
161.8333	1.4783	0	4.4402	4.4402
161.8667	1.4753	0.0069	4.4389	4.4459
161.9	1.4783	0.0069	4.4389	4.4459
161.9333	1.4783	0.0069	4.4363	4.4432
161.9667	1.4783	0	4.4416	4.4416
162	1.4753	0	4.4429	4.4429
162.0333	1.4769	0.0069	4.4416	4.4485
162.0667	1.4753	0	4.4416	4.4416
162.1	1.4743	0	4.4468	4.4468
162.1333	1.4796	0.0201	4.4416	4.4616
162.1667	1.4779	0	4.435	4.435
162.2	1.4756	0	4.4416	4.4416
162.2333	1.4802	0	4.4389	4.4389
162.2667	1.4753	0	4.435	4.435
162.3	1.4786	0	4.4337	4.4337
162.3333	1.4756	0.0069	4.4442	4.4511
162.3667	1.4773	0	4.4363	4.4363
162.4	1.4806	0.0069	4.4363	4.4432
162.4333	1.4776	0	4.4402	4.4402
162.4667	1.4776	0.0069	4.435	4.4419
162.5	1.4769	0	4.4363	4.4363
162.5333	1.4806	0	4.4337	4.4337
162.5667	1.4783	0.0069	4.435	4.4419
162.6	1.4756	0.0069	4.431	4.438
162.6333	1.4773	0.0069	4.4363	4.4432
162.6667	1.4806	0.0069	4.4324	4.4393
162.7	1.4766	0	4.431	4.431
162.7333	1.4783	0.0069	4.435	4.4419
162.7667	1.4793	0	4.4337	4.4337

162.8	1.4783	0	4.4297	4.4297
162.8333	1.4773	0	4.435	4.435
162.8667	1.4763	0.0069	4.4376	4.4445
162.9	1.4766	0	4.4337	4.4337
162.9333	1.4786	0	4.435	4.435

APPENDIX C
Photographs


9213537-P1
PRESSURE SA


WFA-1
WFA 24
WHE-2
WFE-8
WHE-8
WBH-1
WFA-13
WBE-1
9213537-P1


9213537-P1
WBE-1
WFA-13
WBH-1
WHE-8
WFE-6
WHE-2
WFA 26
WFA-1
WFB-7
2013/11/07


2013/11/07


8"
2013/11/07


2013/11/07


2013/11/08


2013/11/08


WFA-1
WFA-2
WFE-2
WFE-6
WHE-8
WBH-1
WFA-13
WBE-1
9213537-P1
2013/11/08


WFA-1
WFA 2G
WHE-2
WFE-6
WHE-8
WBH-1
WFA-13
WBE-1
9213537-P1
2013/11/08


WFA-1
WFA 2G
WHE-2
WFE-6
WHE-8
WBH-1
WFA-13
WBE-1
9213537-P1
2013/11/08

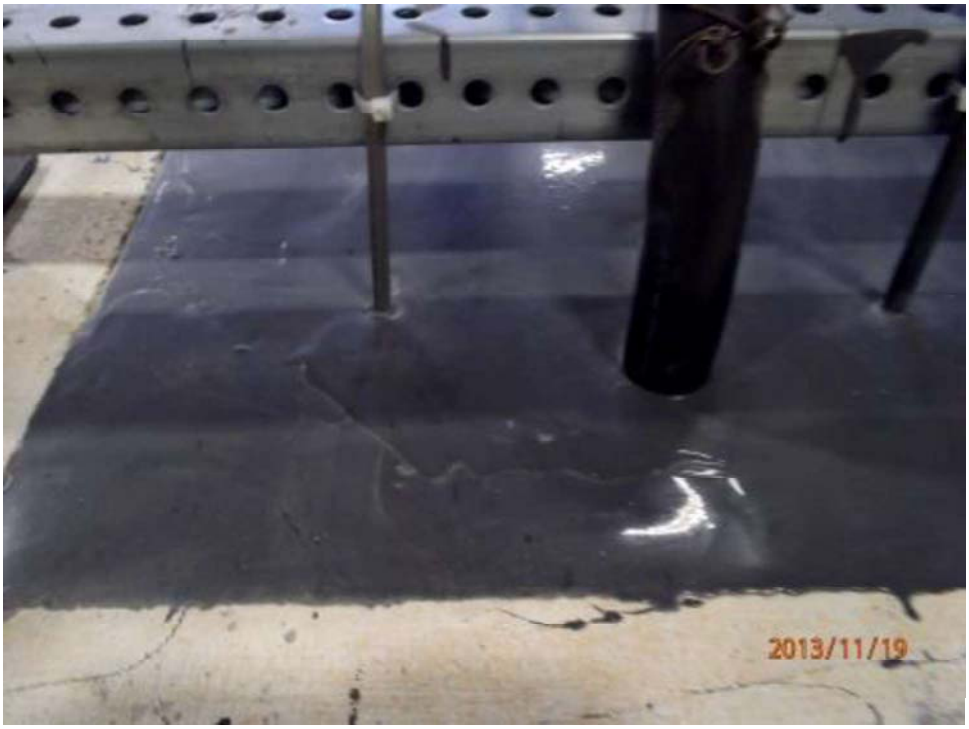

PRESSURE BA
2013/11/08

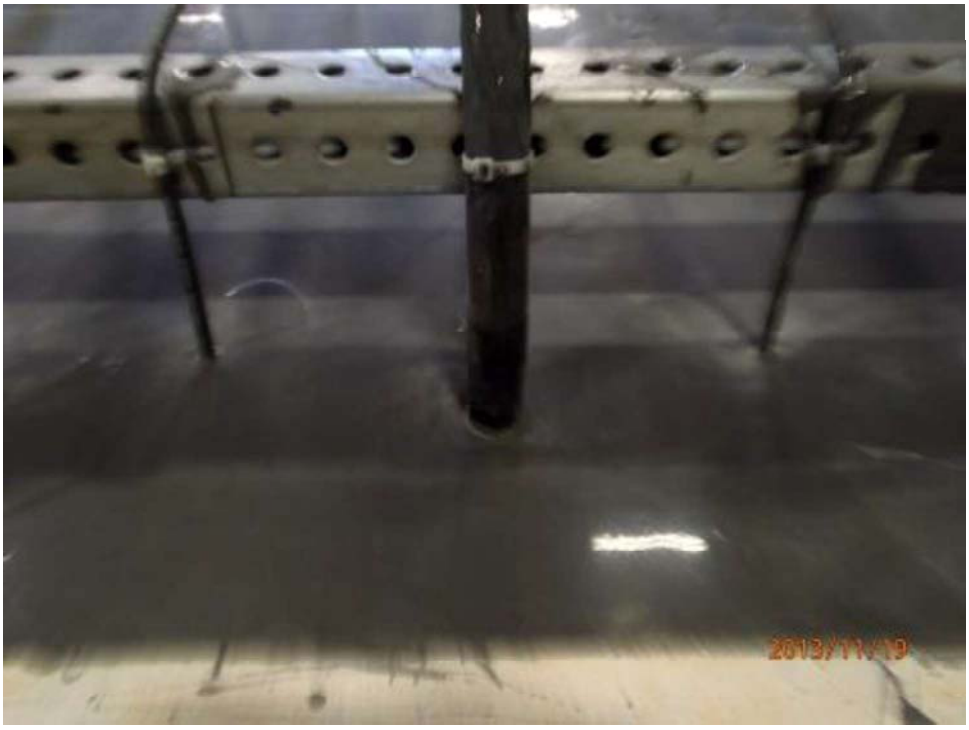

2013/11/08


WBE-1
WBA-13
WBH-1
WHE-8
WHE-6
WHE-2
WFA-20
WFA-1
2013/11/08


9213537-P1
PRESSURE 5A
2013/11/19


9213537-P1
PRESSURE 5A
2013/11/19


2013/11/19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2013/11/19


9213537-P1
2013/11/19


WBE-1
WFA-13
WBH-1
2013/11/19


WHE-8
WFE-6
WHE-2
2013/11/19


WFA-2
WFA-1
WFB-1
2013/11/19


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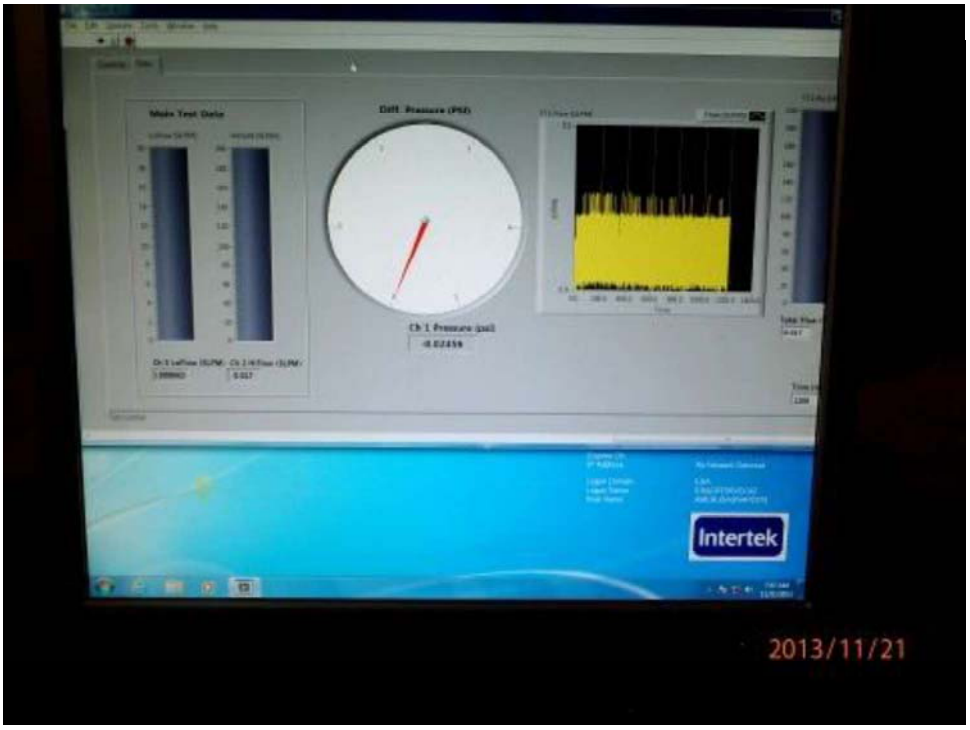
Intertek
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TEST GAUGE
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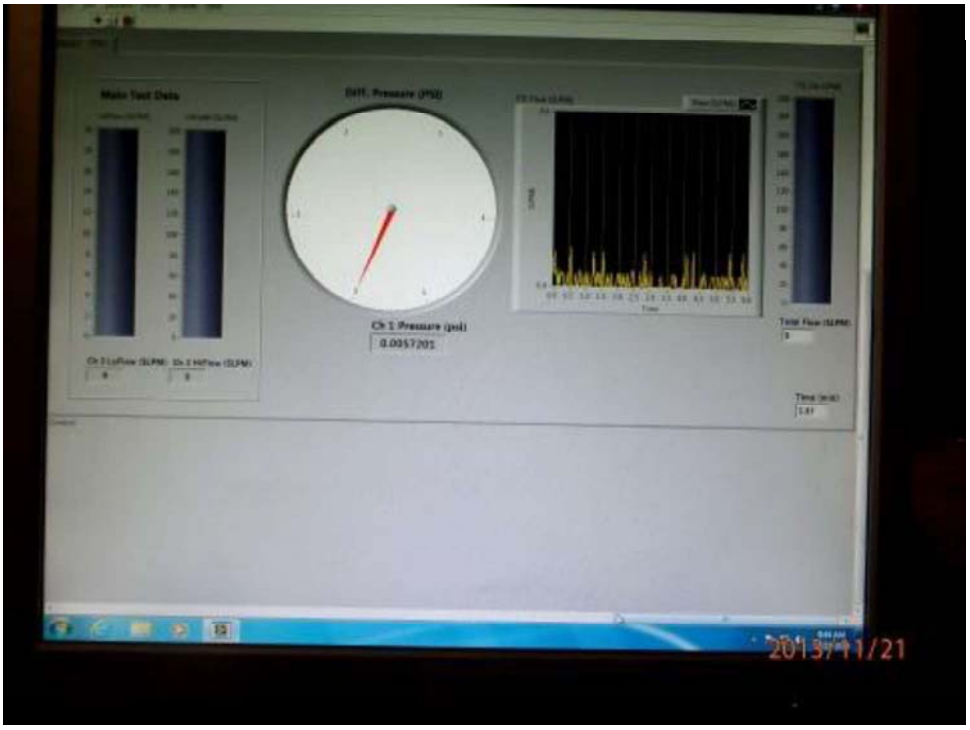
Accuracy
Grade 3A
0.25 %
ASHCROFT
MADE IN USA
2013/11/21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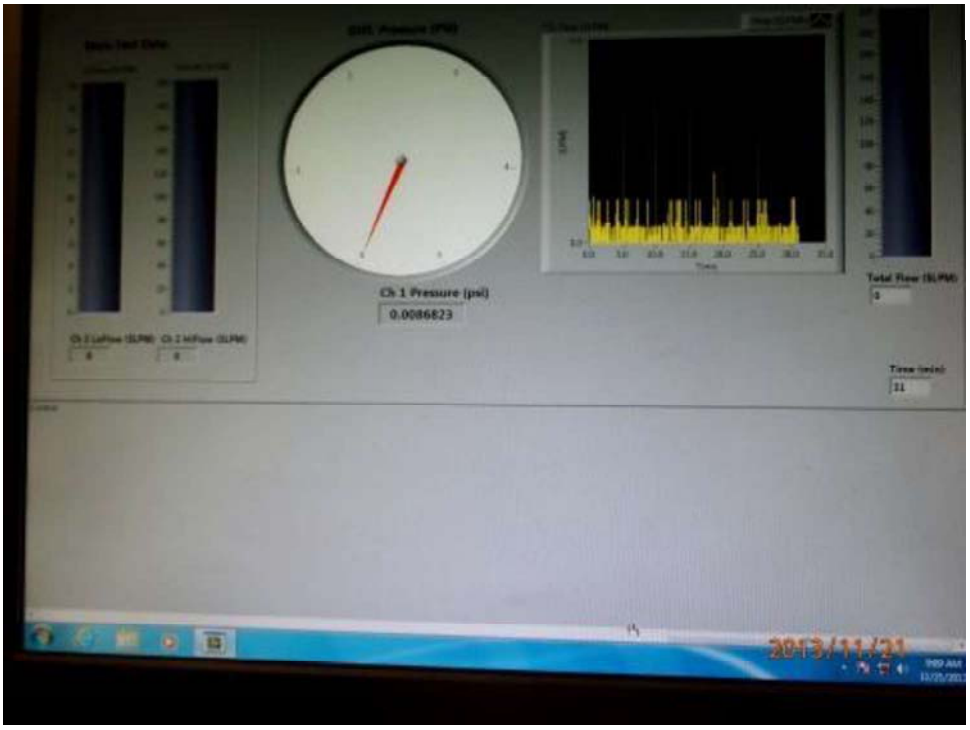
2013/11/21


2013/11/21


Ch 1 Pressure (psi)
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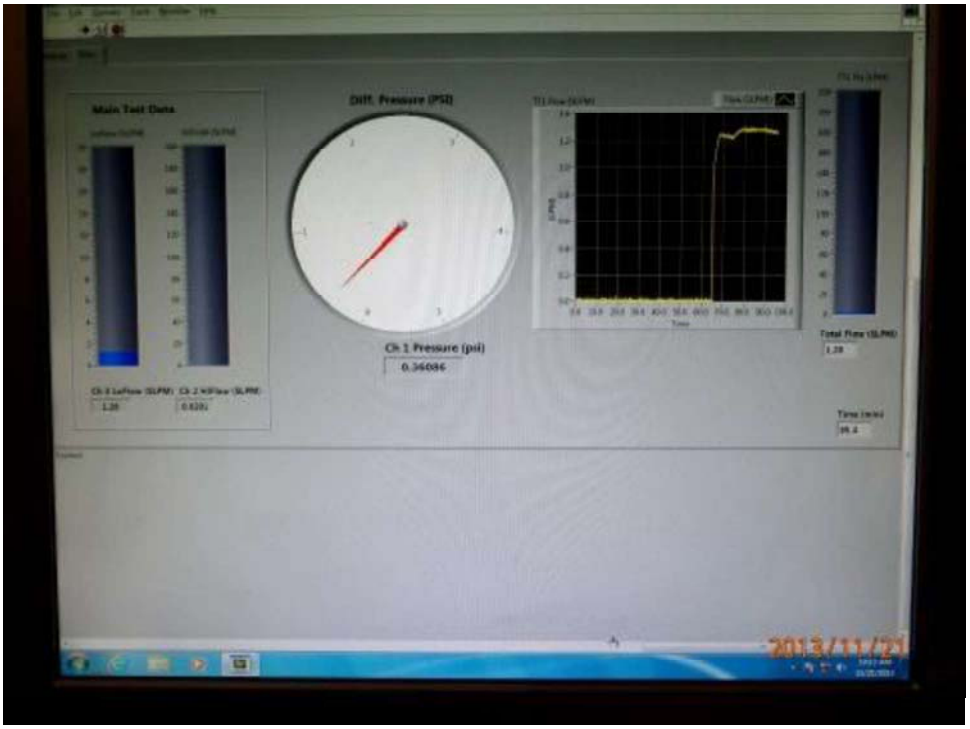
2013/11/21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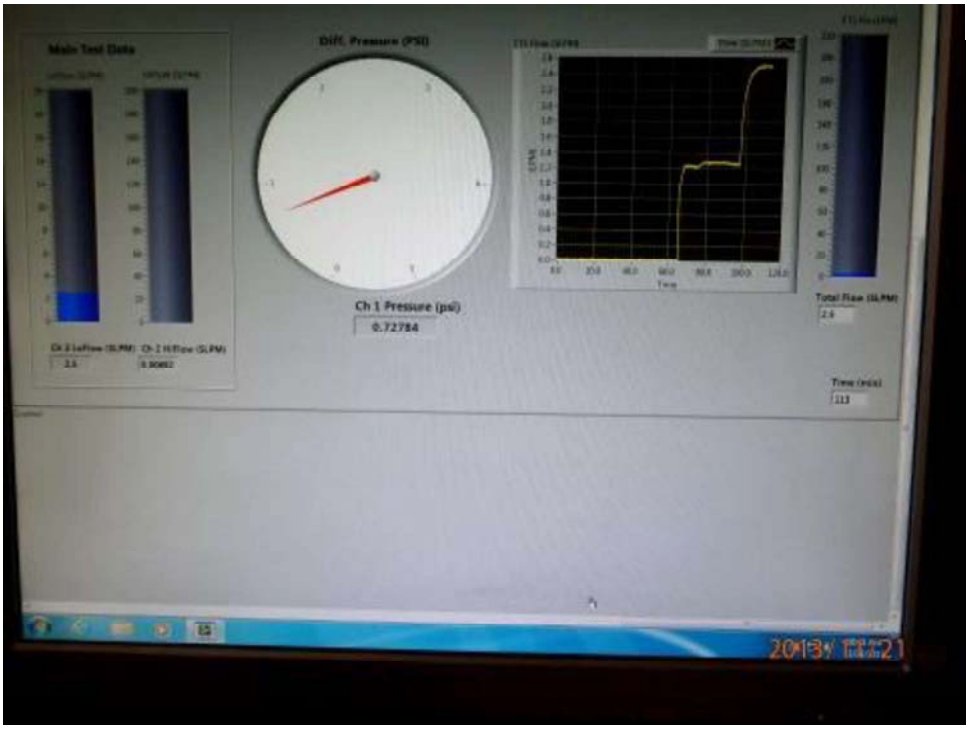
2013/11/21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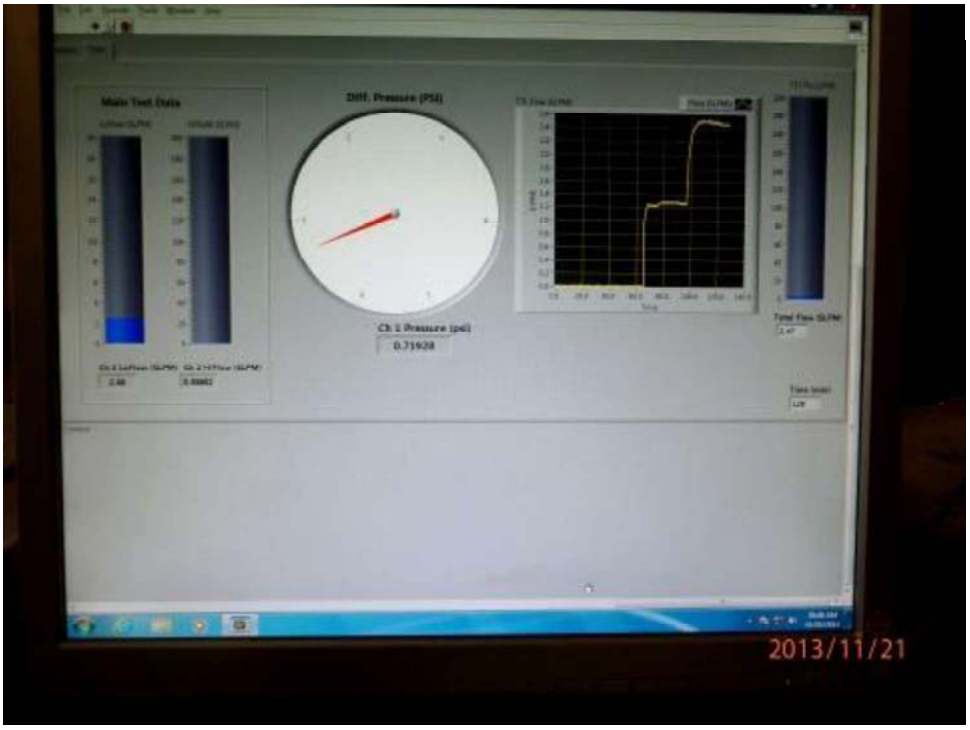
2013/11/21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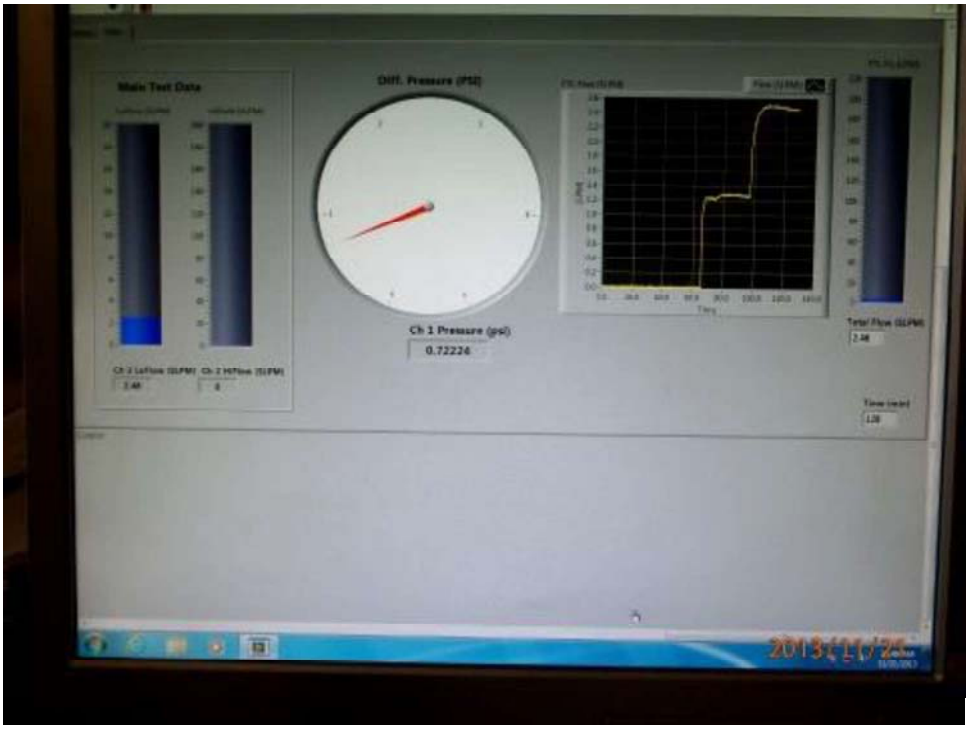
2013/11/21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Ch 1 Pressure (psi)
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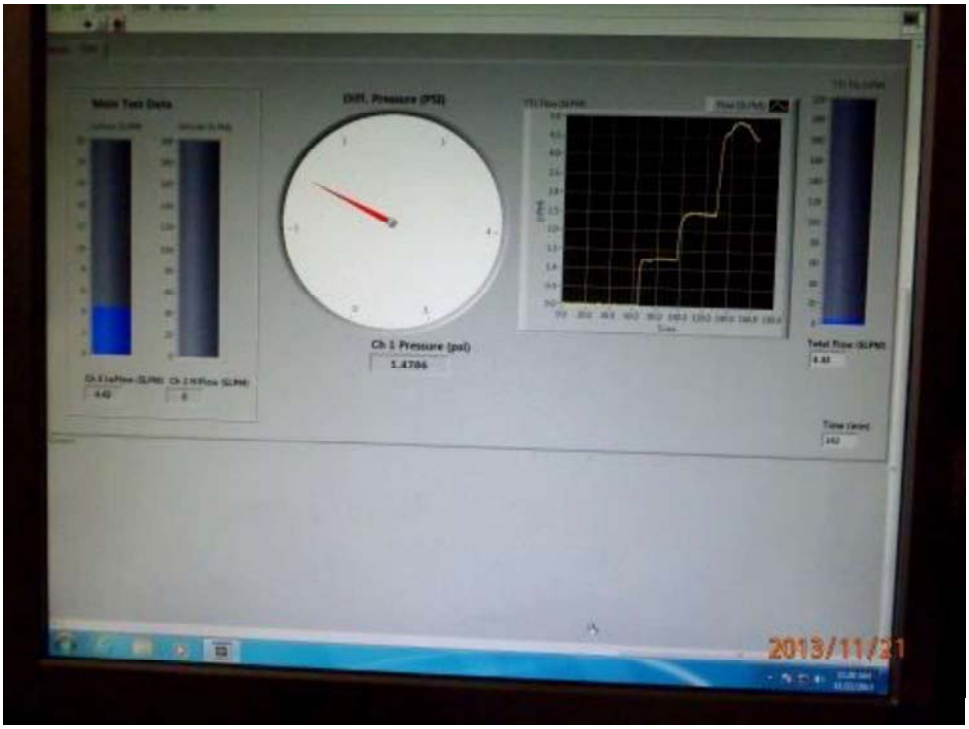
2013/11/21


Diff. Pressure (PSI)
Ch 1 Pressure (psi)
1.4786
2013/11/21

APPENDIX D
Test Plan

20004-019 (11/20/2012)

AREVA

AREVA NP Inc.

Engineering Information Record

Document No.: 51 - 9213537 - 000

Detailed Test Plan for Conducting MOX Pressure Test 5A

[redacted]
Mike Dey
Staff Engineer

[redacted]
Michael A. Brown
Quality Supervisor

AREVA

20004-019 (11/20/2012)
Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

Safety Related? ☒ YES ☐ NO

Does this document establish design or technical requirements? ☐ YES ☒ NO

Does this document contain assumptions requiring verification? ☐ YES ☒ NO

Does this document contain Customer Required Format? ☐ YES ☒ NO

Signature Block

Name and Title/Discipline	Signature	P/LP, R/LR, A-CRF, A	Date	Pages/Sections Prepared/Reviewed/ Approved or Comments
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Vic Kaldenbach Princ Des Eng Spec II / PEYFI-A	[redacted]	R	10/28/2013	All
Scott Groesbeck Manager Tech Ops / PEYFI-A	[redacted]	A	10/28/13	All
Perry Calos Project Manager / IBL-A	[redacted]	A	10/28/13	All

Note: P/LP designates Preparer (P), Lead Preparer (LP)
R/LR designates Reviewer (R), Lead Reviewer (LR)
A-CRF designates Project Manager Approver of Customer Required Format (A-CRF)
A designates Approver/RTM – Verification of Reviewer Independence

MOX Services concurrence: [redacted] ngineer — 29Oct13
Name / Title — Date

AREVA

20004-019 (11/20/2012)
Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

Record of Revision

Revision No.	Pages/Sections/ Paragraphs Changed	Brief Description / Change Authorization
000	All	Initial Issue. This document contains the main body of the report (pages 1-18), Appendix A (2 pages), Appendix B (5 pages), Appendix C (5 pages), Appendix D (2 pages), for a total of 32 pages.

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(continued)

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ACRONYMS

CGD	Commercial Grade Dedication
CGI	Commercial Grade Item
CSPE	Chlorosulfonated Polyethylene
IROFS	Items Relied On For Safety
LSZH	Low Smoke Zero Halogen
MOX	Mixed Oxide
MFFF	Mixed Oxide Fuel Fabrication Facility
QA	Quality Assurance
QL	Quality Level
SSC	Structures, Systems and Components
w.g.	Water Gauge
XLPE	Crosslinked Polyethylene
XLPO	Crosslinked Polyolefin

Penetration Seal Materials

QSil 5558MC	Quantum Silicones QSil 5558MC Silicone Elastomer

AREVA

Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

BACKGROUND

AREVA NP (AREVA) is assisting Shaw AREVA MOX Services (MOX Services) in the development and implementation of a penetration seal program for the Mixed Oxide Fuel Fabrication Facility (MFFF). One aspect of the MOX penetration seal program includes conducting various types of qualification tests of penetration seal assemblies to substantiate the performance capabilities of specific penetration seal designs. Pressure testing is one type of qualification testing that needs to be performed in order to demonstrate the pressure retaining capability of MOX penetration seal designs. The data collected during pressure testing is needed to determine acceptable levels of leakage to maintain the necessary pressure differentials between confinement zones within the MFFF under various conditions, such as normal operation or inadvertent clean agent discharge. Other types of qualification testing, such as fire testing and testing for seismic qualification of penetration seal assemblies, are addressed by other test plans.

1.0 PURPOSE

The purpose of this test plan is to define the test assembly, test methods and acceptance criteria for conducting a pressure test in support of the MOX penetration seal program.

This test plan defines the test methods, acceptance criteria and test report documentation requirements for MOX Pressure Test 5A. Additionally, this detailed test plan defines the roles and responsibilities of MOX Services, AREVA, the selected testing laboratory, and any other subcontracted entity engaged in support of penetration seal pressure testing efforts.

This detailed test plan also describes the procurement plan for materials associated with MOX Pressure Test 5A and identifies the entities responsible for procuring the various components of the test assemblies based on the quality level assigned to each component.

This test plan also establishes minimum quality requirements for the penetration seal materials used in the test assembly and links quality requirements in the AREVA Quality Assurance (QA) program to customer/project quality requirements.

2.0 OBJECTIVE

The primary objective of this test plan is to evaluate the pressure resistance capability of an 8" thick silicone elastomer seal when installed around various cables at air pressure increments above atmospheric pressure provided in Section 9.2. The specific silicone elastomer seal material to be used in this test is Quantum Silicone QSil 5558MC silicone elastomer.

The specific configuration to be tested is described below. Critical characteristics and the associated limiting parameters that will be substantiated by a successful test are also provided.

2.1 Test Deck Description

The test deck will consist of a 12" thick concrete slab measuring approximately 96" x 96" (8' x 8') [Note: Final test slab size to be determined by Intertek and documented in the final test report]. Within this slab will be one (1) precast 48" x 34" opening sized to replicate penetrations found in the MOX facility. The test deck will be horizontally oriented with a hemispherical 72" diameter steel pressure vessel mounted above and below the precast opening in the slab.

> **Note:** The test slab from MOX Pressure Test 5 will be re-used for MOX Pressure Test 5A. The penetration seal assembly and associated cables from MOX Pressure Test 5 will be completely removed from the test slab. Additionally, any residual seal material along the sides of the opening will be removed and the concrete prepared for re-use in Pressure Test 5A by roughening the open with a grinder equipped with a Hilti® DG-CW AP-SP Diamond Cup Wheel (Hilti® Item

Intertek

No. 2066711). This is the same method that MOX Services will be using to remove the epoxy coating from the inside of the penetrations in the plant. This will ensure that the seal material to concrete interface of the test penetration is representative of anticipated plant installations.

Additionally, most of the openings (penetrations) in the MOX facility have been cast with a ¾" bevel on both sides of the opening. For testing and qualification purposes, this feature is considered aesthetic, and it has no adverse effect on the functional performance of the penetration seal installation. In fact for some applications, such as in the case of pressure resistant penetrations seals, the bevel provides a benefit over non-beveled openings. Therefore, for the purposes of the penetration seal test program, the bevel feature will not be included for pressure tests covered in this test plan.

Drawings showing the general layout of the test deck (test slab) for this pressure test can be found in Appendix A.

2.2 Test Description

The opening to be sealed and tested in Pressure Test 5A is a 48" x 34" blockout containing nine different cable types as penetrating items. The penetrating items for this blockout will include the following items found in Shaw AREVA MOX Services Drawings DCS01-ZMJ-DS-NTE-N-65107-2 Sheets 84-116, "*Technical Engineering Information*" [Reference 12.2]:

- (1) 0.32" diameter cable with 15 mil CSPE jacket, product mark no. wfb-7
- (1) 0.50" diameter cable with 45 mil CSPE jacket, product mark no. wfa-1
- (1) 1.54" diameter cable with 80 mil CSPE jacket, product mark no. wfa-13
- (1) 0.248" diameter cable with 15 mil XLPE jacket, product mark no. whe-2
- (1) 0.33" diameter cable with 60 mil XLPE jacket, product mark no. wbe-1
- (1) 0.25" diameter cable with 7 mil Modified XLPO jacket, product mark no. whe-8
- (1) 0.44" diameter cable with 9 mil Modified XLPO jacket, product mark no. wbh-1
- (1) 0.53" diameter cable with 35 mil LSZH - XLPO jacket, product mark no. wfa-26
- (1) 1.02" diameter cable with 65 mil LSZH - XLPO jacket, product mark no. wfe-6

The cables will penetrate through the opening, make a "u" shaped bend on one side of the seal and penetrate through the opening again. In effect the cables will be looped with both ends of each cable terminating on the same side of the opening and forming a "u" shape through the seal. Using this configuration will prevent any pressure leakage due to air travel through the cables.

The opening will be sealed with an eight (8) inch thick Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) penetration seal with no permanent damming installed around the various penetrating commodities.

Note: Once the seal has been installed and allowed to cure, a hole will be drilled (or otherwise cut) in the silicone elastomer at the location depicted in Appendix B. The hole shall be sealed using QSil 5558MC seal material in accordance with Document 01-9198306 (latest revision), "*Installation Instruction Manual for MOX Penetration Seal Test Program*" [Reference 12.1]. This "field patched" hole is being included in this test plan to evaluate the pressure resistance of seal repairs using the same elastomer as the base seal.

The test will be performed with the test deck oriented in the horizontal position.

2.3 Critical Characteristics and Limiting Parameters Being Tested

The specific critical characteristics and associated limiting parameters being tested for MOX Pressure Test 5A are as follows.

This test will evaluate pressure resistance capabilities of an eight (8) inch thick Quantum Silicones QSil 5558MC Silicone Elastomer seal with no permanent damming installed in an unlined (bare concrete) penetration. MOX cables are being included to evaluate the pressure resistance capability of the silicone elastomer seal material at the cable interface. A successful test will substantiate the acceptability of this seal material to function as a pressure seal when installed around the following types of cables:

- CSPE jacketed cables
- XLPE jacketed cables
- Modified XLPO jacketed cables
- LSZH – XLPO jacketed cables

Additionally, for each jacket type the following parameters are being tested:

- Small diameter cable
- Large diameter cable
- Thin jacket material
- Thick jacket material

A variety of conductor configurations are being tested from one conductor to 37 conductors.

Finally, the test will substantiate repair processes using the same seal material (QSil 5558MC).

3.0 ACCEPTANCE CRITERIA

Pressure rated penetration seals at the MOX facility are required to remain "sufficiently leak-tight" at various pressure levels in order to support the functional goals of the various pressure rating requirements (i.e., confinement, suppression system clean agent concentration, fire induced pressure loads or HVAC pressure boundary loads). The term "sufficiently leak-tight" indicates that the penetration seal meets the predetermined acceptance criteria for the pressure level(s) being tested.

The acceptance criteria that constitutes "sufficiently leak-tight" varies based on the pressure requirement and the operating mode of the plant. For most pressure conditions and operating modes, "sufficiently leak-tight" means that the penetration seal assembly must remain in place but is allowed to leak (i.e., the penetration seal cannot become dislodged from the opening or otherwise catastrophically fail such that a substantial leakage path is created).

Per MOX Services Calculation "Confinement Boundary Air Leakage Criteria" [Reference 12.3], penetration seals that function as confinement zone 3b boundary components must maintain a leakage rate less than 0.01 cfm/sq. ft. of penetration area when tested at a pressure that bounds C3b to non-C3b zone pressures during normal operating conditions.

Table 9-1 identifies the differential pressure levels (stages) for conducting pressure tests, as well as, the acceptance criteria in order to be considered "sufficiently leak-tight".

4.0 RESPONSIBILITIES

The following roles and responsibilities apply to this test plan.

4.1 MOX Services

4.1.1 Provide review and concurrence of this detailed pressure test plan.

4.1.2 Provide concurrence for any revisions made to this test plan during test specimen construction activities.

4.1.3 Provide some of the materials for test assembly construction from MOX Services surplus or scrap (if available).

4.1.4 Witness pressure test (if desired).

4.2 AREVA

4.2.1 Develop and revise (if necessary) this detailed pressure test plan.

4.2.2 Provide management and oversight of all aspects of the MOX penetration seal test program.

4.2.3 Select the pressure testing facility and establish sub-contract agreements. The testing laboratory selected for performance of this pressure test is Intertek Testing Services NA, Inc., Elmendorf, TX.

4.2.4 Provide engineering instructions to the testing laboratory for performance of the test including test parameters, acceptance criteria, requirements for documenting the test results in a final test report, etc.

4.2.5 Procure all primary penetration seal materials, devices and components (i.e., any materials, devices and components intended to replicate future Safety Related (QL-1) designs to be installed in the MOX facility) as designated in the procurement plan section (Section 5.0) of this test plan.

4.2.6 Notify MOX Services at least 10 days prior to test date to facilitate MOX Services decision to witness the pressure test.

4.2.7 Witness pressure test.

4.2.8 Perform post-test examinations.

4.2.9 Review, approve and issue final test reports.

4.3 Testing Laboratory (Intertek Testing Services NA, Inc.)

4.3.1 Notify AREVA at least 5 days prior to the start of test assembly construction activities.

4.3.2 Construct test decks in accordance with this test plan and AREVA direction.

4.3.3 Procure test deck materials and any other test assembly components identified under the Testing Laboratory scope in the procurement plan section (Section 5.0) of this test plan.

4.3.4 Procure testing equipment necessary for pressure testing services in accordance with this test plan and verify that the testing equipment is properly calibrated.

4.3.5 Provide pressure testing services in accordance with this test plan.

4.3.6 Assist AREVA, as necessary, in conducting detailed post-test destructive examinations of the test assemblies.

4.3.7 Dispose of test assemblies upon completion of the pressure tests.

4.3.8 Generate final test reports in accordance with test plan requirements (Section 11.0).

4.4 Other Subcontracted Entities

There are no other Subcontractors for this pressure test plan.

5.0 PROCUREMENT PLAN

This penetration seal pressure test plan involves many elements beyond the penetration seal material being qualified. Some of these elements include the test deck or test slab, various fasteners for securing laboratory instrumentation to the test assembly, etc. Not all elements of the test assembly are required to be procured to the same quality level as the penetration seal material, which must be capable of satisfying the quality requirements of the end product (i.e., QL-1 qualified penetration seal assemblies for plant applications). The following procurement plan takes into consideration the required quality level of the various materials required for these penetration seal pressure tests and prescribes an approach for material procurement which considers cost, schedule and quality requirements.

5.1 Penetration Seal Materials

The vast majority of penetration seals that will be installed throughout the MFFF are designated QL-1. MOX Services defines QL-1 in PP9-1, "SSC Quality Levels & Marking Design Documents" [Reference 12.4] as follows:

> *QL-1 SSCs are typically IROFS (all IROFS are QL-1 and may be either SSCs or Administrative Controls) credited in the Integrated Safety Analysis with a required function to prevent or mitigate design basis events such that high-consequence events are made highly unlikely; intermediate-consequence events are made unlikely; or to prevent criticality. For example, the failure of an IROFS item could cause:*
>
> 1. *Loss of a primary confinement feature leading to release of material resulting in exceeding 10CFR70.61 performance requirements;*
> 2. *Failure to satisfy the double contingency principle for the prevention of a criticality accident; or*
> 3. *Loss of other safety function required to meet 10CFR70.61 performance requirements.*

This definition correlates with the following definition of "Nuclear Safety Related" in AREVA Administrative Procedure (AP) 1702-25, "Assignment of Nuclear Safety Classification to Products and Services" [Reference 12.5]:

> *Definition of "Nuclear Safety Related"*
>
> *Company products and services are considered to be nuclear safety related if they involve the evaluation, specification, design or change in design, operation, or performance of structures, systems, and components which must function directly, or must support other systems which function, to ensure any of the following:*
>
> - *The integrity of the reactor coolant pressure boundary*
> - *The capability to shut down the reactor and maintain it in a safe shutdown condition*
> - *The capability to prevent or mitigate the consequences of accidents which could result in potential offsite radiation exposures greater than accepted limits.*

On this basis, permanent penetration seal materials used in this test program shall be procured by AREVA or supplied by MOX Services and suitably base-lined so that future procurements of the same commercial materials can undergo the commercial grade dedication process in support of Nuclear Safety Related (i.e., MOX QL-1) plant installations. Only the primary seal material specified as a part of the final seal design and which are left in place during testing become an integral part of the seal assembly and need to be base-lined for future dedication of similarly procured materials.

The quality level of the penetration seal materials procured for this test plan is **Non-Safety**.

Note: Commercial Grade Dedication (CGD) must be performed for Commercial Grade Items (CGIs) used in Safety Related applications when procured from suppliers where specific quality controls for nuclear applications cannot be imposed in a practical manner in accordance with 56-9141754-001, "AREVA NP Inc. Quality Assurance Program" [Reference 12.6]. However, none of the seal materials to be procured and used in the test program are intended or approved for installation in the MOX facility. Therefore, CGD of penetration seal materials used for test purposes is not required.

For this pressure test, the following materials shall be procured by AREVA and base-lined for future dedication activities.

1. Quantum Silicones QSil 5558MC Silicone Elastomer

5.2 Test Deck/Test Slab

The test deck will be used to simulate a confinement zone or HVAC boundary in which the penetration seal assemblies may be installed. The test deck is not considered an integral part of the penetration seal assembly being tested and therefore is not intended to replicate MOX-specific plant conditions and not considered integral in bounding the performance of the penetration seal assemblies (e.g., concrete blend, compressive strength, rebar size and spacing). The test deck will be comprised of normal weight reinforced concrete.

The opening cast into the test deck will simulate certain features consistent with MOX penetrations (e.g., chamfered edges when deemed relevant, relatively smooth interior finishes, etc.) as defined by detailed test plan drawings contained in Appendix A.

The testing laboratory shall be responsible for procuring all materials and components associated with the construction of the test deck, unless otherwise specified below. The test deck shall comply with the requirements of the approved detailed test plan drawings contained in Appendix A, and in accordance with the testing facility's Quality Assurance Program.

The quality level of the test deck is **Non-safety**.

5.3 Penetrating Items

Penetrating items (e.g., cables) will be used in this pressure test to simulate MOX-specific plant commodities during the pressure test but are not considered an integral part of the penetration seal assembly being tested. Therefore, the quality level of the penetrating items is **Non-safety**.

Penetrating items for this pressure test will come from MOX Services. MOX Services supplied items are identified on the MOX Services Bill of Materials in Section C.2 of Appendix C.

6.0 SPECIAL PRECAUTIONS

6.1 Precautions for Construction of Test Assemblies

Observe testing facilities safe work practices for construction, lifting, and moving of test assemblies.

6.2 Precautions for Installation of Seal Assemblies

Observe specific precautions recommended by seal material manufacturer as noted on product literature and material safety data sheets contained in AREVA NP Inc. Document 01-9198306, *Installation Instruction Manual for MOX Penetration Seal Test Program* [Reference 12.1].

6.3 Precautions for Conducting Pressure Tests

Proper safety precautions shall be exercised to preclude personnel from direct exposure to loss of pressure events, unexpected disengaging of testing equipment from the test deck, and all other related hazards.

7.0 PREREQUISITES

7.1 General Test Configuration Requirements

The test assembly, including slab layout and penetration seal configurations shall be as specified by AREVA and in accordance with the drawings and information contained in Appendix A of this test plan, and AREVA NP Inc. Document 01-9198306, *Installation Instruction Manual for MOX Penetration Seal Test Program* [Reference 12.1].

7.2 Safety Related Materials

Penetration seal materials that are purchased **Non-Safety** for this test program but are to be base-lined for future Nuclear Safety Related via the Commercial Grade Dedication process are indicated on the AREVA Bill of Materials (Appendix C.1).

7.3 Dimensioned Drawings

All test articles shall conform to the dimensioned drawings supplied by AREVA and contained in Appendix A and B of this test plan. Any differences between designed and constructed/tested assemblies shall be noted in final drawings contained within the test report.

7.4 Test Configuration

All test articles shall be securely fastened to the test apparatus by the laboratory. All openings shall be sealed in accordance with test plan instructions, drawings (Appendix A and Appendix B) and AREVA Document 01-9198306 [Reference 12.1].

8.0 TEST ASSEMBLY CONSTRUCTION

8.1 Test Slab Construction

The Testing Laboratory shall construct the test slab, including location and size of openings and placement of penetrating items, in accordance with the drawings contained in Appendix A of this Test Plan.

AREVA QC (or approved designee) shall conduct an inspection of the test slab for compliance with the approved Test Plan drawings prior to installation of individual penetration seal test assemblies. Any differences between the approved Test Plan drawings and the as-built test slab configuration shall be corrected (if deemed necessary by the ARVEA Test Engineer) or noted by the QC Inspector (if correction is not required). Completion of this verification shall be documented as required by AREVA Document 01-9198306, *Installation Instruction Manual for MOX Penetration Seal Test Program*.

8.2 Penetration Seal Installation

AREVA (or approved designee) shall install the penetration seal test assemblies in accordance with the drawings contained in Appendix A of this Test Plan and in accordance with AREVA Document 01-9198306, *Installation Instruction Manual for MOX Penetration Seal Test Program*.

QA/QC verification of penetration seal installations shall be documented as required by AREVA Document 01-9198306, *Installation Instruction Manual for MOX Penetration Seal Test Program*.

8.3 Pre-Test Verifications

Prior to conducting the pressure test for each test assembly, the AREVA Test Engineer shall sign-off indicating that the test article (test penetration) is complete and ready for testing as required by AREVA Document 01-9198306, *Installation Instruction Manual for MOX Penetration Seal Test Program*.

9.0 PROCEDURE

9.1 Pressure Test Apparatus

The pressure test apparatus to be used for these pressure tests shall be constructed and maintained by the testing laboratory. Two hemispherical 72" diameter steel pressure vessels shall be used to construct the assembly. One side shall be used to induce the testing pressures above atmospheric pressure based on Table 9-1, while the other side shall measure the pressure increase or "leakage" through the penetration. The test apparatus shall be "leak-tight" and substantial enough to withstand the pressures created for test purposes. Attachment shall be sufficient to withstand the forces imposed on the pressure vessels during the test.

9.2 Process

The anticipated differential pressures, as they apply to MFFF penetration seal designs, are discussed in DCS01-BRA-DS-TRD-B-01365-0 [Reference 12.7]. Depending upon its location in the plant, a penetration seal may be subjected to differential pressures from one or more of the following sources:

- Clean agent suppression system discharge (inadvertent or in response to a fire)
- Normal HVAC operation in support of facility confinement zone separation
- Fire induced pressure
- HVAC pressure boundary

The full range of differential pressures under various conditions is identified in Calculations DCS01-XGA-DS-CAL-B-01105-0 [Reference 12.8], DCS01-ASI-DS-CAL-R-10552-0 [Reference 12.9], and DCS01-QJJ-DS-CAL-V-10421-0 [Reference 12.10].

The pressure levels specified in Table 9-1 are to be used in the pressure tests. These pressures are intended to bound a range of calculated differential pressures anticipated based on the various pressure conditions described above and detailed in the referenced calculations, with additional margin. The bounding differential pressures to be used for each penetration seal pressure test, the test hold time at each pressure, the acceptance criteria to be considered "sufficiently leak-tight", and the basis for each pressure, are identified in Table 9-1.

A hold time of 30 minutes has been established for each pressure level to ensure that sufficient time at pressure is maintained to; 1) confirm that no leakage occurs at that pressure, or 2) stabilize make up air and attain reasonably accurate leakage rate information for those configurations where leakage is detected.

Table 9-1: Differential Pressure Test Levels

Test Stage	Differential Pressure (inch w.g.)	Required Hold Time (minutes)	Acceptance Criteria	Basis for the Selected Differential Pressure
1	1.0	30	Leakage ≤ 0.01 cfm/sq. ft. of penetration area	Testing at this differential pressure bounds the 0.51 inches w.g. pressure for C3b to C2 areas during normal operation [Reference 12.10].
2	5.0	30	Seal Remains In Place	Testing at this differential pressure bounds the 4.0 inches w.g. pressure anticipated as a result of clean agent suppression system discharge [Reference 12.8].
3	10.0	30	Seal Remains In Place	Testing at this differential pressure bounds the 7.0 inches w.g. pressure used as the screening pressure cutoff for fire induced pressures [References 12.8 and 12.9] and some of the HVAC pressure boundaries [Reference 12.10].
4	20.0	30	Seal Remains In Place	Testing at this differential pressure bounds all of the calculated fire induced pressures [Reference 12.9] and many of the HVAC pressure boundaries [Reference 12.10].
5	40.0	30	Seal Remains In Place	Testing at this differential pressure bounds all of the HVAC pressure boundaries [Reference 12.10].

Each test assembly shall be attached to the pressure test apparatus and subjected to the pressures identified in Table 9-1 as described below.

9.2.1 The test assembly shall be attached to the pressure test apparatus and subjected to air pressure tests at the select pressure levels identified in Table 9-1, beginning with the Stage 1 pressure of 1.0 inches w.g. Once this pressure has been obtained, the pressure shall be maintained for the hold time specified in Table 9-1. The maximum leakage rate observed during the hold time shall be recorded. If the leakage rate exceeds the acceptance criteria during Stage 1 testing, the time of failure shall be noted and the test shall be continued, since leakage alone does not constitute failure after Stage 1.

9.2.2 Once the designated hold time has been achieved, the pressure shall be increased to the next pressure level identified in Table 9-1 (Stage 2, then Stage 3, then Stage 4 and finally Stage 5) and held for the designated hold time. The maximum leakage rate observed during each hold time shall be recorded.

9.2.3 Following completion of Stage 5 pressure testing, the test may continue at the discretion of the AREVA test engineer and the testing laboratory manager in charge. Subsequent pressures, hold times and maximum leakage rates shall be recorded as directed by the AREVA test engineer.

9.2.4 If at any pressure level (or test stage) the penetration seal becomes dislodged from the opening or otherwise catastrophically fails, the pressure test shall be terminated and the time to failure and pressure at which the failure occurred shall be recorded.

9.3 Post Test Examination

Following completion of the pressure test, visual and destructive (if deemed necessary) post-test examinations shall be performed. These examinations shall include, but not necessarily be limited to, the following:

Visual observations of penetration seal condition including:

- Integrity of seal and conditions on the exposed side of the penetration
- Integrity of seal and conditions on the unexposed side of the penetration
- Location of any penetration seal degradation
- Condition of seal to barrier interface
- Condition of seal to penetrating item interfaces

Once visual observations are complete, destructive examinations may be used to obtain additional information or gain extra insights into penetration seal performance during the pressure tests.

10.0 DATA SYSTEMS

During the pressure tests, the various data systems connected to the test apparatus (blowers, anemometers, manometers, etc.) shall be controlled and monitored by the testing laboratory. Data recorded for these components shall be compiled and contained in the pressure test report.

11.0 TEST REPORT

The testing laboratory shall submit a report on the results of the test. The test report shall contain the collected data and required quality control documentation. The final test report shall be prepared in sufficient detail to summarize the total testing activity. The final report shall include as a minimum:

- Date of test
- Location of test
- Description of test apparatus and test articles
- Calibration documentation for all data systems connected to the test apparatus
- Test procedures used
- Acceptance criteria
- Provide quality control records
- Results of the pressure test
- Color digital photographs of the test project

12.0 REFERENCES

12.1 AREVA NP Inc. Document 01-9198306 (latest revision), *"Installation Instruction Manual for MOX Penetration Seal Test Program"*

12.2 Shaw AREVA MOX Services Drawings DCS01-ZMJ-DS-NTE-N-65107-2 Sheets 84-116, *"Technical Engineering Information"*

12.3 Shaw AREVA MOX Services Calculation DCS01-QJJ-DS-CAL-V-13312-0, *"Confinement Boundary Air Leakage Criteria"*

12.4 Shaw AREVA MOX Services Procedure PP9-1, Revision 14, *"SSC Quality Levels & Marking Design Documents"*

12.5 AREVA NP Inc. Procedure 1702-25, Revision 018, *"Assignment of Nuclear Safety Classification to Products and Services"*

12.6 AREVA NP Inc. Document 56-9141754-001, *"AREVA NP Inc. Quality Assurance Program"*

12.7 Shaw AREVA MOX Services Document DCS01-BRA-DS-TRD-B-01365-0, *"Technical Requirements Document for MFFF Penetration Seals"*

12.8 Shaw AREVA MOX Services Calculation DCS01-XGA-DS-CAL-B-01105-0, *"BMF HVAC and Fire Induced Pressure Loads"*

12.9 Shaw AREVA MOX Services Calculation DCS01-ASI-DS-CAL-R-10552-0, *"Fire Induced Room Pressure Analysis"*

12.10 Shaw AREVA MOX Services Calculation DCS01-QJJ-DS-CAL-V-10421-0, *"Pressure Differentials Across Internal Barriers within the MOX Facility"*

Retrieval of Reference Documents

References 12.2, 12.3, 12.4, 12.7, 12.8, 12.9 and 12.10 of this document were not entered into the AREVA NP Records Management system because they can be retrieved using the Shaw AREVA MOX Services Records Management system. These documents have been authorized for use as design information in this document with the AREVA NP Project Manager's written authorization as indicated by the PM's signature on Page 2.

AREVA

Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

APPENDIX A: TEST DECK/TEST SLAB DRAWINGS

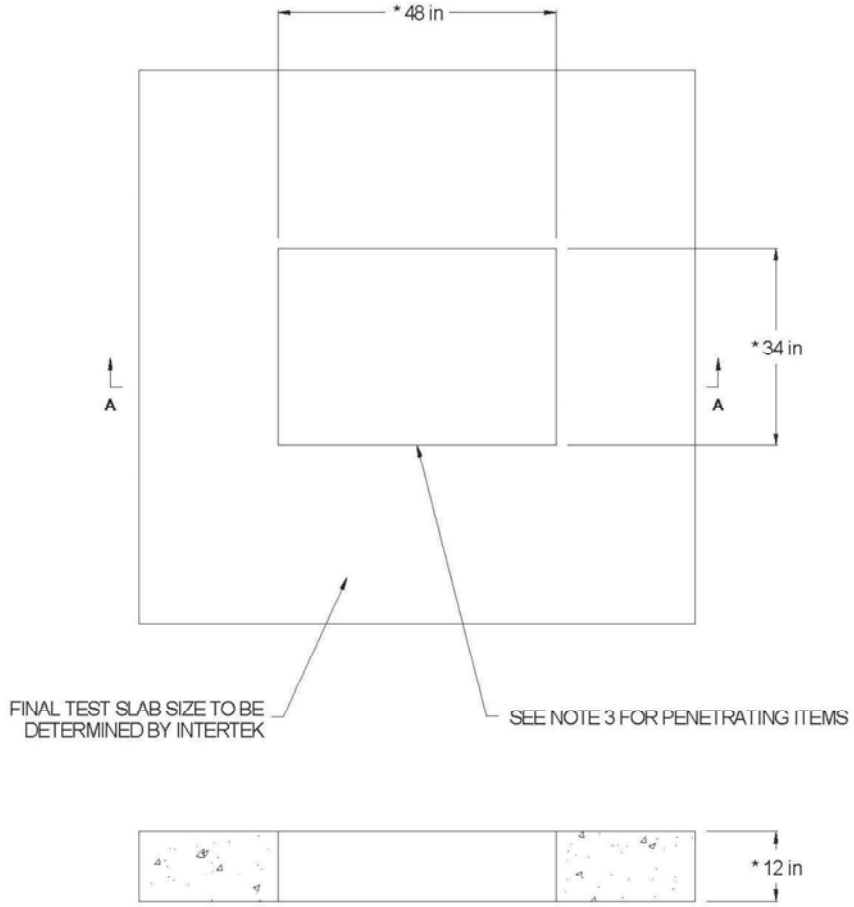
The test deck (test slab) for Pressure Test 5A is depicted on page A-2.

AREVA

Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

Pressure Test P5A Test Deck



SECTION A-A

NOTES:

1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC (OR APPROVED DESIGNEE).
3. SEE APPENDIX B FOR PENETRATING ITEMS AND PENETRATION SEAL DESIGN.

Intertek

APPENDIX B: TEST PENETRATION DRAWINGS

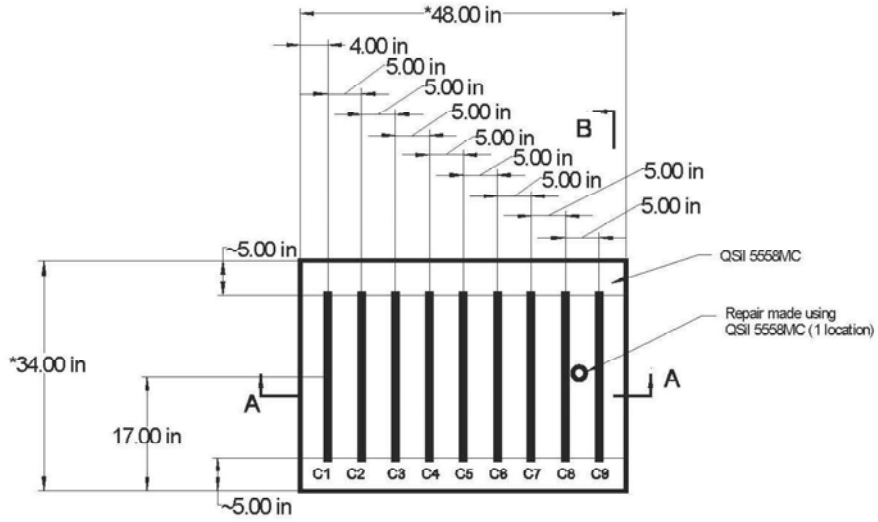
This appendix contains drawings for Test Penetrants C1 thru C9. These drawings identify penetrating cable locations within the test penetration, as well as, the penetration seal design. Table B1 of this appendix provides the cable types to be used in each location.

AREVA

Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

Pressure Test P5A



Cable descriptions are provided in Table B-1.

Section Views are on Pages B-3, and B-4.

NOTES:

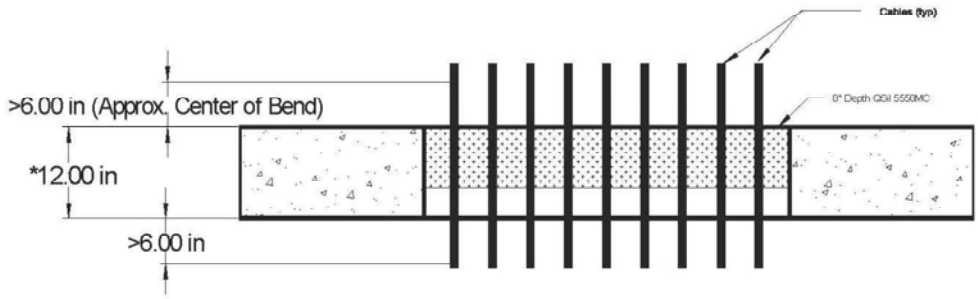
1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.
3. REPAIR HOLE IS DEPICTED AS 2" DIAMETER DRILL/CORE BORE, HOWEVER, ACTUAL SIZE AND METHOD OF HOLE CREATION WILL BE DETERMINED AT THE TIME OF INSTALLATION AND NOTED IN THE INSTALLATION RECORDS.

AREVA

Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

Pressure Test P5A



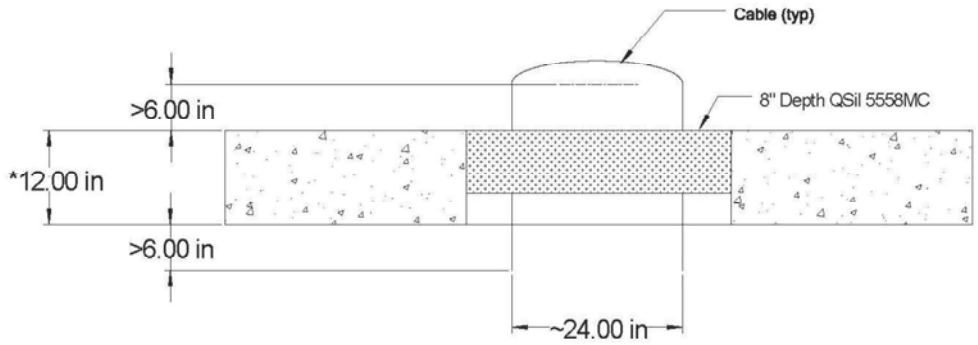
Section A-A

NOTES:

1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC.

Intertek

Pressure Test P5A



Section B-B

NOTES:

1. TOLERANCE ON ALL SLAB DIMENSIONS IS +/- 1/4"
2. * INDICATES DIMENSIONS TO BE VERIFIED BY AREVA QC

Table B-1: Cable Descriptions

Cable Identification	Mark No.	Cable Description
C1	wfb-7	1/C 8 AWG 7/S TC 45 MILS XLPE, 15 MILS CSPE FIREWALL III® 600V
C2	wfa-1	2/C 10 AWG 7/S TC 30 MILS XLPE, 45 MILS CSPE JKT FIREWALL® III 600V
C3	wfa-26	3/C 10 AWG 7/S TC, 20 MILS XLPE, 1-#10 AWG CU GW, O/A TINNED COPPER BRAID SHIELD, 35 MIL ZH-XLPO JKT X-LINK® 600V
C4	whe-2	5/C 22 AWG 7/.010 SILVER PLATED ALLOY 20 MILS XLPE 15 MILS XLPE JACKET 600V
C5	wfe-6	3/C 2 AWG 7/S TC 35 MILS XLPE, 1-#6 AWG CU GW, 65 MIL ZH-XLPO JKT X-LINK® 600V
C6	whe-8	COAX CABLE WITH RG TYPE 59/U, or equal / 22 AWG FOR 62 OHMS (RSS-6-104/LE) Except Not UL Listed & Meets ICEA S-19-81 Paragraph 6.19.6 (IEEE-383 Paragraph 2.56)
C7	wbh-1	Coax Cable 16 AWG for 75 ohms (RSS-6-110A/LE) Excepts meets ICEA S-19-81 paragraph 6.16.6 (IEEE-383 Paragraph 2.56)
C8	wfa-13	37/C 10 AWG 7/S TC 30 MILS XLPE, 80 MIL CSPE JKT FIREWALL® III 600V
C9	wbe-1	1/C 6 AWG 7/S TC Class B Strand 60 MILS XLPE FIREWALL® SIS 600V Type SIS/XHHW-2 (UL) Listed Colored Grey

AREVA

Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

APPENDIX C: BILL OF MATERIALS

This appendix contains the Bill of Materials for this fire test. The Bill of Materials in Section C.1 identifies materials to be provided by AREVA. The Bill of Materials in Section C.2 identifies materials to be provided by MOX Services. The Bill of Materials in Section C.3 identifies materials to be provided by Intertek.

AREVA

Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

C.1 Table Bill of Materials for AREVA Supplied Items

Bill of Material for AREVA Supplied Items					
Item	**Description**	**Part Number**	**Quantity**	**Units**	**Total**
1	Quantum Silicones QSil 5558MC (50lb part A, 50lb part B, 100lb set)	N/A	8	Set	8 Sets

C.2 Bill of Materials for MOX Services Supplied Items

Bill of Material for MOX Services Supplied Items					
Item	**Description**	**Mark Number**	**Quantity**	**Units**	**Total**
1	1/C 8 AWG 7/S TC 45 MILS XLPE, 15 MILS CSPE FIREWALL III® 600V	wfb-7	8	Ft.	8 Ft.
2	2/C 10 AWG 7/S TC 30 MILS XLPE, 45 MILS CSPE JKT FIREWALL® III 600V	wfa-1	8	Ft.	8 Ft.
3	37/C 10 AWG 7/S TC 30 MILS XLPE, 80 MIL CSPE JKT FIREWALL® III 600V	wfa-13	8	Ft.	8 Ft.
4	5/C 22 AWG 7/.010 SILVER PLATED ALLOY 20 MILS XLPE 15 MILS XLPE JACKET 600V	whe-2	8	Ft.	8 Ft.
5	1/C 6 AWG 7/S TC Class B Strand 60 MILS XLPE FIREWALL® SIS 600V Type SIS/XHHW-2 (UL) Listed Colored Grey	wbe-1	8	Ft.	8 Ft.
6	COAX CABLE WITH RG TYPE 59/U, or equal / 22 AWG FOR 62 OHMS (RSS-6-104/LE) Except Not UL Listed & Meets ICEA S-19-81 Paragraph 6.19.6 (IEEE-383 Paragraph 2.56)	whe-8	8	Ft.	8 Ft.
7	Coax Cable 16 AWG for 75 ohms (RSS-6-110A/LE) Excepts meets ICEA S-19-81 paragraph 6.16.6 (IEEE-383 Paragraph 2.56)	wbh-1	8	Ft.	8 Ft.

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Detailed Test Plan for Conducting MOX Pressure Test 5A

Bill of Material for MOX Services Supplied Items					
Item	**Description**	**Mark Number**	**Quantity**	**Units**	**Total**
8	3/C 10 AWG 7/S TC, 20 MILS XLPE, 1-#10 AWG CU GW, O/A TINNED COPPER BRAID SHIELD, 35 MIL ZH-XLPO JKT X-LINK® 600V	wfa-26	8	Ft.	8 Ft.
9	3/C 2 AWG 7/S TC 35 MILS XLPE, 1-#6 AWG CU GW, 65 MIL ZH-XLPO JKT X-LINK® 600V	wfe-6	8	Ft.	8 Ft.

Page C-4

AREVA

Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

C.3 Bill of Materials for Intertek Supplied Items

Bill of Material for Intertek Supplied Items*					
Item	**Description**	**Part Number**	**Quantity**	**Units**	**Total**
N/A	There are no Intertek Supplied Items for Pressure Test 5A.	N/A	N/A	N/A	N/A

* *This BOM applies to Intertek Supplied Items other than materials required to construct the test slab. Construction of the test slab, including procurement of any materials required for the test slab, is the responsibility of Intertek.*

AREVA

Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

APPENDIX D: DESIGN VERIFICATION CHECKLIST

22410-8 (02/25/2013) *Page 1 of 2*

AREVA

DESIGN VERIFICATION CHECKLIST

Document Identifier 51 - 9213537 - 000

Title Detailed Test Plan for Conducting MOX Pressure Test 5A

1.	Were the inputs correctly selected and incorporated into design or analysis?	☒ Y	☐ N	☐ N/A
2.	Are assumptions necessary to perform the design or analysis activity adequately described and reasonable? Where necessary, are the assumptions identified for subsequent re-verifications when the detailed design activities are completed? Note: If there are no assumptions (of any type), then N/A shall be checked.	☐ Y	☐ N	☒ N/A
3.	Are the appropriate quality and quality assurance requirements specified? Or, for documents prepared per AREVA NP Inc. procedures, have the procedural requirements been met?	☒ Y	☐ N	☐ N/A
4.	If the design or analysis cites or is required to cite requirements or criteria based upon applicable codes, standards, specific regulatory requirements, including issue and addenda, are these properly identified, and are the requirements/criteria for design or analysis met?	☒ Y	☐ N	☐ N/A
5.	Have applicable construction and operating experience been considered?	☒ Y	☐ N	☐ N/A
6.	Have the design interface requirements been satisfied?	☒ Y	☐ N	☐ N/A
7.	Was an appropriate design or analytical method used?	☒ Y	☐ N	☐ N/A
8.	Is the output reasonable compared to inputs?	☒ Y	☐ N	☐ N/A
9.	Are the specified parts, equipment and processes suitable for the required application?	☒ Y	☐ N	☐ N/A
10.	Are the specified materials compatible with each other and the design environmental conditions to which the material will be exposed?	☒ Y	☐ N	☐ N/A
11.	Have adequate maintenance features and requirements been specified?	☐ Y	☐ N	☒ N/A
12.	Are accessibility and other design provisions adequate for performance of needed maintenance and repair?	☐ Y	☐ N	☒ N/A
13.	Has adequate accessibility been provided to perform the in-service inspection expected to be required during the plant life?	☐ Y	☐ N	☒ N/A
14.	Has the design properly considered radiation exposure to the public and plant personnel?	☐ Y	☐ N	☒ N/A
15.	Are the acceptance criteria incorporated in the design documents sufficient to allow verification that design requirements have been satisfactorily accomplished?	☒ Y	☐ N	☐ N/A
16.	Have adequate preoperational and subsequent periodic test requirements been appropriately specified?	☐ Y	☐ N	☒ N/A
17.	Are adequate handling, storage, cleaning and shipping requirements specified?	☒ Y	☐ N	☐ N/A
18.	Are adequate identification requirements specified?	☒ Y	☐ N	☐ N/A
19.	Is the document prepared and being released under the AREVA NP Inc. Quality Assurance Program? If not, are requirements for record preparation review, approval, retention, etc., adequately specified?	☒ Y	☐ N	☐ N/A

AREVA

Document No.: 51-9213537-000

Detailed Test Plan for Conducting MOX Pressure Test 5A

22410-8 (02/25/2013) *Page 2 of 2*

AREVA

DESIGN VERIFICATION CHECKLIST

Document Identifier 51 - 9213537 - 000

Comments on the preceding responses:
N/A

Verified By:	Victor E. Kaldenbach	[redacted]	10/25/2013
(First, MI, Last)	Printed / Typed Name	Signature	Date

APPENDIX E
Commercial Grade Dedication-Related Documents

The vast majority of penetration seals that will be installed throughout the MFFF will be designated as quality level QL-1. For this reason, permanent penetration seal materials used in this test program were procured by AREVA or supplied by MOX Services and suitably base-lined so that future procurements of the same commercial materials can undergo the Commercial Grade Dedication process in support Nuclear Safety Related (i.e., MOX QL-1) plant installations.

Only the primary seal material(s) that were specified as a part of the final penetration seal design and left in place during the test needed to be base-lined for future dedication of similarly procured materials. For this fire test, the following AREVA documents contain information associated with materials that underwent the base-lining process. These documents establish material critical characteristics as a baseline for future Commercial Grade Dedication.

- AREVA Document 51-9212663-000, "Quantum Silicones QSil 5558MC Silicone Elastomer Critical Characteristics"

These documents are available from the AREVA Records Management System or the MOX Records Management System.

APPENDIX F
Quality Documents

Controlled Document

AREVA

Document No.: 01-9198306-004

Installation Instruction Manual for MOX Penetration Seal Test Program

A.1 Quality Verification for Installation of Silicone Elastomer Penetration Seals

Page 1 of 3

01-9198306-F01 (QC-F01)

Attribute	Requirement	Initial / Date
7.1.2	Test Penetration Number 9213537-P1	[redacted] 11/5/2013
QC	Verify critical attributes of the test slab and the applicable penetration are correct. Critical attributes are identified in the test plan (i.e., dimensions marked with an asterisk).	[redacted] 11/7/2013
QC	Verify the dam depth is as specified in the test plan and confirm that the penetration is clean and free of dirt, oil, and any other foreign materials.	[redacted] 11/7/2013 *
7.2.1.1	Record material type, lot number and shelf life for batch on Form QC-F01, Table A-1	Attached
7.2.1.3	Record the batch number on Form QC-F01, Table A-1	Attached
7.2.12	Record sample weight and sample density on Form QC-F01, Table A-1	Attached
QC	Verify the total sample weight recorded on the cup label, the sample weight recorded on the cup label and Form QC-F01, Table A-1, and sample density recorded on the cup label and Form QC-F01, Table A-1. Record acceptance on Form QC-F01, Table A-1.	Attached
7.3.2	Remove all temporary damming per Section 6.3	[redacted] 11/15/2013
QC	Verify that the completed seal assembly is in accordance with the test plan design (i.e., temporary damming has been removed, and the installed seal configuration(s) and depth(s) are per the test plan. **Any approved deviations from the test plan shall be clearly noted below.**	[redacted] 11/15/2013

Comments (can be continued on back):

* ADDED 2 9/16" DIA HOLE FOR USE AS A QSIL REPAIR PER TEST PLAN.
QA RE-VERIFIED DEPTH & CLEANLINESS, [redacted] 11/12/13.

Penetration Seal Assembly Complete: [redacted] 11/15/13 Date

Penetration Ready for Testing: [redacted] 11/20/13 Date

AREVA Test Engineer

Page A-2

AREVA

Document No.: 01-9198306-004

Installation Instruction Manual for MOX Penetration Seal Test Program

Test Penetration Number 9213537-P1

Page 2 of 3

Form QC-F01, Table A-1: Silicone Elastomer Batch Sample Quality Control

	Product Name	Lot Number	Shelf Life (Expiration)	Batch Number	Sample Weight (g)	Sample Density (lbs/ft^3)	QC Initial / Date
11/7	QSIL-5558MC	130606	06/14/14	130606-DVR-90	139.2	78.5	[redacted] / 11-12-13
	"	"	06/14/14	130606-DVR-91	139.3	78.6	/ 11-12-13
	"	130912	09/30/14	130912-DVR-104	145.8	82.2	/ 11-12-13
11/8	"	130912	"	130912-DVR-105	143.3	80.8	11-12-13
	"	"	"	130912-DVR-106	142.7	80.5	11-12-13
	"	"	"	130912-DVR-107	141.6	79.9	11-12-13
	"	"	"	130912-DVR-108	140.7	79.4	11-12-13
	"	"	"	130912-DVR-109	140.7	79.4	11-12-13
	"	"	"	130912-DVR-110	143.3	80.8	11-12-13
	"	"	"	130912-DVR-111	142.3	80.3	11-12-13
	"	"	"	130912-DVR-112	142.2	80.2	11-12-13
	"	"	"	130912-DVR-113	DVR 11/14/13 ~~145.5~~ 142.1	80.1	11-12-13
	"	"	"	130912-DVR-114	140.6	79.3	11-12-13

AREVA

Document No: 01-9198306-004

Installation Instruction Manual for MOX Penetration Seal Test Program

Test Penetration Number 9213537-P1

Form QC-F01, Table A-1: Silicone Elastomer Batch Sample Quality Control

Product Name	Lot Number	Shelf Life (Expiration)	Batch Number	Sample Weight (g)	Sample Density (lbs/ft^3)	QC Initial / Date
QSIL5558MC	130912	09/30/14	130912-DVR-115	145.4	82.0	[redacted] / 11-12-13
"	"	"	130912-DVR-116	143.6	81.0	[redacted] / 11-12-13
"	"	"	130912-DVR-117	142.9	80.6	[redacted] / 11-13-13
"	"					

QSil 5558MC Certificate of Conformance

Product	QSil 5558MC
Batch Identification	130606

Final Batch Physicals

Tests	Specifications	Results
Appearance "A"	Black	Black
Appearance "B"	Beige	Beige
Viscosity "A" component, cps #5 Spindle @ 20rpm	<4,000	3,160 cps
Viscosity "B" component, cps # 5 Spindle @ 20 rpm	<4,000	1,980 cps
Specific Gravity "A" component (g/cm^3)	1.35-1.40	1.37
Specific Gravity "B" component (g/cm^3)	1.35-1.40	1.36
Catalyzed Properties 1:1 Mix Ratio		
Work Time, (snap time), minutes	20-40	25min.
Shore A, 24 hour	>45	57
QSi Heat Cured Method 15 min. @ 150°C		
Tensile strength, psi	>400	472
Elongation, %	>75	106
Young's Modulus	Report	478
General Product Information		
Date of Manufacture	6/6/13	
Shelf Life, months	12 months from date of shipment if stored at ≤38C (100F).	

Storage Conditions: This material should be stored in the original, unopened container at less than 100F. Under these conditions, the material will be useful for a period of 12 months.

QSi Batch Release Authorization: [redacted]
Quality Control
QSi, LLC

Quantum Silicones certifies that the [material described above] has been tested in accordance with the company's standard lot acceptance procedures and complies (except as stated above) with the specifications associated with such material's Quantum Silicones Product Reference Number. This certification applies only to the material lot tested. Lot acceptance data are available for examination. This material has not been subjected to tests appropriate for medical device or pharmaceutical applications. QUANTUM SILICONES MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MECHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE WITH RESPECT TO THE PRODUCT TO WHICH THE ABOVE INFORMATION REFERS. [This Certificate is valid unsigned.]

Quantum Silicones, LLC
8021 Reycan Road
Richmond, VA 23237
(804)271-9010
Fax (804)271-9055
www.quantumsilicones.com

Date of shipment 6/14/2013

REV-1
11/29/12

QSil 5558MC Certificate of Conformance

Product	QSil 5558MC
Batch Identification	130912
Purchase Order	1013038872
Shipping Address	Areva
Quantity	1500
Specification Number	

Final Batch Physicals

Tests	Specifications	Results
Appearance "A"	Black	Black
Appearance "B"	Beige	Beige
Viscosity "A" component, cps #5 Spindle @ 20rpm	<4,000	2,940 cps
Viscosity "B" component, cps # 5 Spindle @ 20 rpm	<4,000	2,100 cps
Specific Gravity "A" component (g/cm^3)	1.35-1.40	1.38
Specific Gravity "B" component (g/cm^3)	1.35-1.40	1.37
Catalyzed Properties 1:1 Mix Ratio		
Work Time, (snap time), minutes	20-40	24 min
Shore A, 24 hour	>45	62
QSi Heat Cured Method 15 min. @ 150°C		
Tensile strength, psi	>400	436
Elongation, %	>75	78
Young's Modulus	Report	493
General Product Information		
Date of Manufacture	9/23/13	
Shelf Life, months	12 months from date of shipment if stored at ≤38C (100F).	

Storage Conditions: This material should be stored in the original, unopened container at less than 100F. Under these conditions, the material will be useful for a period of 12 months.

QSi Batch Release Authorization: [redacted]
Quality Control
QSi, LLC

Quantum Silicones certifies that the material described above has been tested in accordance with the company's standard lot acceptance procedures. This is to certify that the above shipment has been determined to meet all QSi specification requirements at the time of manufacture. This certification applies only to the material lot tested. Lot acceptance data are available for examination. This material has not been subjected to tests appropriate for medical device or pharmaceutical applications. QUANTUM SILICONES MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE WITH RESPECT TO THE PRODUCT TO WHICH THE ABOVE INFORMATION REFERS. [This Certificate is valid unsigned.]

Quantum Silicones, LLC
8021 Reycan Road
Richmond, VA 23237
(804)271-9010
Fax (804)271-9055
www.quantumsilicones.com

Date of shipment 9/30/2013

REV-3
9/26/13

Intertek

Q/A RECEIVING REPORT

Client/Project Name: Areva NP
Client or Project No.: G101147165SAT-001
Received From: c/o Quantum Silicones
Project Location: INTERTEK –Elmendorf, TX

Report No: 11-G101147165SAT-001
Date Received: 6/19/2013
Date Inspected: 6/19/2013
Inspected By: MABrown [redacted]

ITEM DESCRIPTION	P.O NO.	QUANTITY Order	QUANTITY Rec'd	QUANTITY B/O	I.D. NO.	Cont. Matl Y/N	Cert. Recd Y/N	Safety Rel'd Y/N	Com. Integrity	ACCEPTANCE Accpt.	ACCEPTANCE Rej.	ACCEPTANCE Hold	REMARKS
QSIL 5558 MC Part A 50 5gal pails Lot # 130606	Client	50	50	–	SAT1306191104-001	Y	Y	Y	G	✓			Receiving Only: Materials stored in the Conditioning Room
QSIL 5558 MC Part B 50 5gal pails Lot # 130606	Client	50	50	–	SAT1306191104-002	Y	Y	Y	G	✓			

9/12-NQAP-005.7.1

Q/A RECEIVING REPORT

Intertek

Client/Project Name: Areva NP
Client or Project No.: G101266224SAT-003B
Received From: Areva NP c/o Texas Specialty Stee
Project Location: INTERTEK –Elmendorf, TX

Report No: 03-G101266224SAT-003B
Date Received: 10/4/2013
Date Inspected: 10/6/2013
Inspected By: MABro[redacted]

ITEM DESCRIPTION	P.O. NO.	QUANTITY Order	QUANTITY Rec'd	QUANTITY B/O	I.D. NO.	Cont Matl Y/N	Cert. Rec'd Y/N	Safety Rec'd Y/N	Cin Integrity	ACCEPTANCE Accpt	ACCEPTANCE Rej	ACCEPTANCE Hold	REMARKS
5 gallon pails - QSIL 5558 MC "A" (50 lbs) Batch ID: 130912; Exp 9/30/14	(Client)	15	15	--	SAT13100041503-001	Y	Y	Y	G	✓			Receiving Only: Stored in the conditioning room
5 gallon pails - QSIL 5558 MC "B" (50 lbs) Batch ID: 130912; Exp 9/30/14	(Client)	15	15	--	SAT13100041503-002	Y	Y	Y	G	✓			

9/12-NQAP-005.7.1

Q/A RECEIVING REPORT

Intertek

Client/Project Name: AREVA NP
Client or Project No.: 01- G101276459SAT-010 (PressTest 5A)
Received From: AREVA MOX Services
Project Location: INTERTEK –Elmendorf, TX

Report No: 01-G101276459SAT-010
Date Received: 11/01/2013
Date Inspected: 11/05/2013
Inspected By: M Dey [redacted]

ITEM DESCRIPTION	P.O. NO.	QUANTITY Order	QUANTITY Rec'd	QUANTITY B/O	I.D. NO.	Cont Matl Y/N	Cert. Rec'd Y/N	Safety Rel'd Y/N	Con. Integrity	ACCEPTANCE Accpt	ACCEPTANCE Rej.	ACCEPTANCE Hold	REMARKS
Cable, Control, 1/C#8AWG, 7/S TC, 45 MILS XLPE (4699)	(Client)	8 ft.	8 ft.		SAT1311011419-001	Y	N	N	G	✓			Receiving Only:
Cable, Control, 2/C#10AWG, 7/S TC, 30 MILS XLPE (4713	(Client)	8 ft.	8 ft.		SAT1311011419-002	Y	N	N	G	✓			
Cable, Control, 37/C#10AWG, 7/S TC, 30 MILS XLPE (4836	(Client)	8 ft.	8 ft.		SAT1311011419-003	Y	N	N	G	✓			
Cable, Control, 5/C#22AWG, 7/.010 Silver Plated (4753)	(Client)	8 ft.	8 ft.		SAT1311011419-004	Y	N	N	G	✓			
Cable, SIS, 1/C 6AWG. 7S TC Class B Strand, 60 M (5115	(Client)	8 ft.	8 ft.		SAT1311011419-005	Y	N	N	G	✓			
Cable, Coax, RG Type 59/U, 22AWG for 62 OHMS (RS (5109)	(Client)	8 ft.	8 ft.		SAT1311011419-006	Y	N	N	G	✓			
Cable, Coax, 16AWG, for 75 OHMS (RSS-6-110A/LE) (4925)	(Client)	8 ft.	8 ft.		SAT1311011419-007	Y	N	N	G	✓			
Cable, Power, 3C# 10AWG 7/S TC, 20 MILS XLPE, 1 (21189)	(Client)	8 ft.	8 ft.		SAT1311011419-008	Y	N	N	G	✓			
Cable, Power, Halogen Free, 3C#2AWG + G, 7/S TC (21116)	(Client)	8 ft.	8 ft.		SAT1311011419-009	Y	N	N	G	✓			

9/12-NQAP-005.7.1

Intertek

LIST OF CALIBRATED EQUIPMENT

Description	Serial No.	Calibration Due Date
Thermo-Hygrometer	130548237	9/19/15
Data Acquisition System	18041FE	1/16/2014*
Pressure Transducer	406707	7/16/2014*
Mass Flowmeter	4270050001001	2/1/2014*
Mass Flowmeter	4270050003001	2/7/2014*
Stopwatch	122601005	10/23/2014

*See Intertek Corrective Action Request (CAR) 51-AMER-SAT-2014-INT and AREVA Contract Variation Approval Request (CVAR) 87-9224669-000

Build B
Horizontal

Calibration complies with ISO/IEC 17025, ANSI/NCSL Z540-1, and 9001

Cert. No.: 4096-5373559

Calibration
Certificate No. 1750.01

Traceable® Certificate of Calibration for Digital Humidity/Temp. Meter

Manufactured for and distributed by: Fisher Scientific, 300 Industry Drive, Pittsburgh, PA 15275-1001

Instrument Identification:

Model Numbers: 11-661-13, FB61254, 245C5 S/N: 130548237 Manufacturer: Control Company

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Chilled Mirror Hygrometer	31874/H2048MCR	6/14/15	11081
Digital Thermometer	41334977/41335007	9/26/13	4000-4643062

Certificate Information:

Technician: 104 Procedure: CAL-17 Cal Date: 9/19/13 **Cal Due: 9/19/15**
Test Conditions: 23.0°C 51.0 %RH 1013 mBar

Calibration Data: (New Instrument)

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±U	TUR
%RH		N.A.		42.95	42	Y	39	47	1.30	3.1:1
°C		N.A.		24.218	24	Y	23	25	0.590	1.7:1

This instrument was calibrated in compliance with ISO/IEC 17025:2005 and ANSI/NCSL Z540-1-1994 Part 1.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

The calibration results published in this certificate were obtained using equipment capable of producing results that are traceable to NIST and through NIST to the International System of Units (SI).

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±U=Expanded Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2; Min = As Left Nominal(Rounded) - Tolerance; Max = As Left Nominal(Rounded) + Tolerance; Date=MM/DD/YY

[redacted]
[redacted]
Aaron Justice, Technical Manager

Maintaining Accuracy:

In our opinion once calibrated your Digital Humidity/Temp. Meter should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Digital Humidity/Temp. Meters change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

This device was calibrated using a single test point. Should additional test points be required, please contact Control Company for factory calibration and re-certification traceable to National Institute of Standards and Technology.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

Certificate of Calibration

Certificate Number:	2994344	**Date:**	28-MAY-2014
Serial Number: **Description:**	18041FE CCA,USB-6210	**Part Number:**	194710E-04L
Calibration Date:	06-DEC-2012	**Shelf Life:**	0 Days
Calibration Due Date*:	-	**Recommended Calibration Interval:**	12 Months
Temperature:	22.26 °C	**Humidity:**	40.7% RH

Standards Used

Manufacturer	Model	Tracking Number	Calibration Date	Calibration Due
NATIONAL INSTRUMENTS	PXI-4070	6712	26-JUN-12	26-JUN-13
NATIONAL INSTRUMENTS	PXI-6259	6871	27-JUN-12	27-JUN-13
NATIONAL INSTRUMENTS	PXI-5421	7591	25-JUN-12	25-JUN-13
VAISALA	HMT331	7885	24-MAY-12	24-MAY-13

National Instruments certifies that at the time of test, the above product was calibrated in accordance with applicable National Instruments procedures. Th procedures are designed to ensure that the product listed above meets or exceeds National Instruments specifications.

We further certify that the environment in which this product was calibrated is maintained within the operating specifications of the instrument(s) standards. The measurement standards used during calibration are traceable to NIST and/or other International Measurement Institutes (NMI's) that signatories of the International Committee of Weights and Measure (CIPM) Mutual Recognition Agreement (MRA).

The information shown on this certificate applies only to the instrument identified above and this certificate may not be reproduced, except in full, withou prior written consent of National Instruments.

*Optional field, ***Calibration Due Date***, may be established by combining the *Recommended Calibration Interval*, *Calibration Date* and, when applic accounting for *Shelf Life*. Shelf life defines how long an instrument may be stored, after calibration, without impact to its specifications.

The instrument's Calibration Due Date can be calculated using the following methods:

a) If date placed in service is within *Calibration Date + Shelf Life*: *Calibration Due Date* = date placed in service + *Recommended Calibration Interval*

b) If date placed in service is outside *Calibration Date + Shelf Life*: *Calibration Due Date* = *Calibration Date + Shelf Life + Recommended Calibration Interval*

For questions or comments, please contact National Instruments Technical Support.

[redacted]

Andrew Krupp
Vice President, Quality and Continuous Improvement

OMEGADYNE INC.
CERTIFICATE OF CALIBRATION

Model Number: PX409-005DWUV
Serial Number: 406707
Date: 7/15/2011
Job: R3274

Capacity: 5.00 PSID
Excitation: 10.00 Vdc
Technician: KAPOME

Pressure Connection: 1/4-18 NPT Male

WIRING CODE

Electrical Connection: Integral Cable 4-Cond
BLACK = - EXCITATION
WHITE = + SIGNAL
GREEN = - SIGNAL
RED = + EXCITATION

CALIBRATION WORKSHEET

NOTES

Pressure PSID	OUTPUT mVdc
0.00	0.007
2.50	50.008
5.00	100.016
2.50	50.007
0.00	0.007

NIST Traceable Number(s): C-1954, C-1289

Omegadyne Inc. certifies that the above instrumentation has been calibrated and tested to meet or to exceed the published specifications. This calibration was performed using instrumentation and standards that are traceable to the National Institute of Standards and Technology. This document also ensures that all testing performed complies with MIL-STD 45662-A, ISO 10012-1, and ANSI/NCSL Z540-1-1994 requirements. After Final Calibration our products are stored in an environmentally controlled stock room and are considered in bonded storage. Depending on environmental conditions and severity of use, factory calibration is recommended every one to three years after the initial service installation date.

[redacted]

Accepted and Certified By

7/15/2011
Date

OMEGA ENGINEERING, INC.
An OMEGA Technologies Company
ONE OMEGA DRIVE, BOX 4047, STAMFORD, CT, U.S.A. 06907-0047
(203) 359-1660 TELEX: 996404 CABLE: OMEGA FAX: (203) 359-7700
http://www.omega.com e-mail: info@omega.com

CERTIFICATE OF ACCURACY

This is to certify that meter serial number 4270050001001 is certified to an accuracy of +/- 1 % of 20 SCFM of N2 and has been calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technology (N.I.S.T.) according to our procedures.

All traceable certifications and related procedures for the equipment used are on file.

Barometer Number:	N/A
Vol-U-Meter Number:	Base 1920 Cell 1898
Type of Gas:	N2
Gas Used for Calibration:	N2
Pressure Gauge Number:	1122
Timer Number:	N/A
Thermometer Number:	N/A
Voltmeter:	NA
Calibrated By:	[redacted]
Date Calibrated:	2-1-13

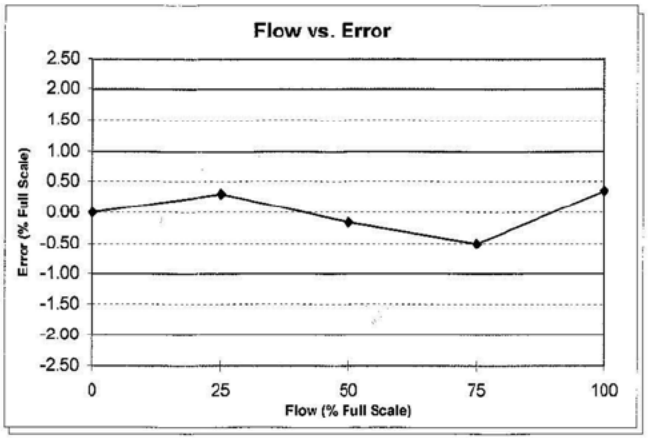
Uncertainty of measurements: +/- 0.3 % of reading

Calibrations were performed under a controlled Quality System Manual, which incorporates the requirements of ISO Guide 25, ISO 10012-1, ISO 9001 (1994) and ISO 13485. The released ISO 13485 registration (Medical Devices – Quality Management Systems – System Requirements for Regulatory Purposes) includes Design Controls and Metrology Systems.

0122220B FM-1011 REV B

OMEGA ENGINEERING, INC.
An OMEGA Technologies Company
ONE OMEGA DRIVE, BOX 4047, STAMFORD, CT, U.S.A. 06907-0047
(203)359-1660 TELEX: 996404 CABLE: OMEGA FAX: (203) 359-7700
http://www.omega.com e-mail: info@omega.com

Mass Flowmeter/Flow Controller Calibration Data Sheet



DATE	2/1/2013
TIME	7:59:59 AM
Shop Order No.	427005
Serial No.	4270050001001

Calibration Data

Setpoint (SLPM)	Flow Signal (Volts)	Device Flow (SLPM)	Actual Flow (SLPM)	% FS Error * (%)
00.00	0.000	00.00	00.00	0.00
05.00	1.253	05.01	05.07	0.30
10.00	2.502	10.01	09.98	-0.16
15.00	3.752	15.01	14.91	-0.50
20.00	5.000	20.00	20.07	0.35

* % Full Scale (FS) Error = (100)(Actual Flow - Device Flow) / Full Scale Flow

GAS

Nameplate (Actual)	Nitrogen
Surrogate (Calibration)	Nitrogen (N2)

STANDARD CONDITIONS

Std. Pressure	101.32 kPa (760 Torr)
Std. Temperature	21.1 °C

PRESSURE

Inlet (P_1)	20 PSIG
Outlet (P_2)	N/A

TEMPERATURE

Calib. Temperature	21.9 °C
Oper. Temperature	70 °F

Max. Flow Rate	20 SLPM
Gas Factor	1

Calibrator	MT
Flow Standard	PICO 1898-1
Unit Accuracy	1.0 FS & 0.0 Rate
Calib. Attitude	Horizontal (base down)

LEAK TEST DATA

Inboard (Externally Pressurized) Helium Leak Rate: < 1 x 10^{-8} atm cc/sec
Vacuum Pressure: < 5 milliTorr

Tested By: [redacted] **Date:** 2-1-13

FM-1119 Rev. K

OMEGA ENGINEERING, INC.
An OMEGA Technologies Company
ONE OMEGA DRIVE, BOX 4047, STAMFORD, CT, U.S.A. 06907-0047
(203) 359-1660 TELEX: 996404 CABLE: OMEGA FAX: (203) 359-7700
http://www.omega.com e-mail: info@omega.com

CERTIFICATE OF ACCURACY

This is to certify that meter serial number 427005003001 is certified to an accuracy of +/- 1 % of 200 sccm of N2 and has been calibrated using standards whose accuracies are traceable to the National Institute of Standards and Technology (N.I.S.T.) according to our procedures.

All traceable certifications and related procedures for the equipment used are on file.

Barometer Number:	1667
Vol-U-Meter Number:	613
Type of Gas:	N2
Gas Used for Calibration:	N2
Pressure Gauge Number:	1950
Timer Number:	1876
Thermometer Number:	985
Voltmeter:	NA
Calibrated By:	[redacted]
Date Calibrated:	2-7-13

Uncertainty of measurements: +/- 0.3 % of reading

Calibrations were performed under a controlled Quality System Manual, which incorporates the requirements of ISO Guide 25, ISO 10012-1, ISO 9001 (1994) and ISO 13485. The released ISO 13485 registration (Medical Devices – Quality Management Systems – System Requirements for Regulatory Purposes) includes Design Controls and Metrology Systems.

0122220B FM-1011 REV B

OMEGA ENGINEERING, INC.
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http://www.omega.com e-mail: info@omega.com

MASS FLOWMETER/FLOW CONTROLLER CALIBRATION DATA SHEET

SPECIFICATIONS

MODEL #: FMA-875A-V-NIST

SERIAL #: 4270050003001

FLOW RANGE: 200 SLPM

OPERATING TEMPERATURE: 70 F

NAMEPLATE (PROCESS) GAS: N2

SURROGATE (CALIBRATION) GAS: N2

STANDARD TEMPERATURE: 21.1 C

STANDARD PRESSURE: 101.32 kPa (760 Torr)

P1 (INLET PRESSURE): 20 PSIG

P2 (OUTLET PRESSURE): N/A

CALIBRATION TEMPERATURE: 18.7 C

CALIBRATION ATTITUDE (calibration attitude checked):

- ☒ Horizontal (base down)
- ☐ Horizontal (upside down)
- ☐ Horizontal (front down)
- ☐ Horizontal (back down)
- ☐ Vertical (inlet up)
- ☐ Vertical (inlet down)

CALIBRATION ACCURACY: ± 1 % OF FULL SCALE FLOW

CALIBRATION DATA

% FULL SCALE (Nominal)	FLOW SIGNAL OUTPUT (signal type checked) ☒ Vdc ☐ mAdc	STANDARD VOLUMETRIC FLOW (Units: SLPM)		ERROR * (% Full Scale)
		DEVICE	MEASURED	
100	5.000	200.000	200.079	.5395
75	3.750	150.000	149.317	-.3415
50	2.500	100.000	100.488	.2440
25	1.250	50.000	50.852	.4260
0	0.00	0.000	0.000	------

* % FULL SCALE ERROR = (100) (MEASURED FLOW - DEVICE FLOW) ÷ FULL SCALE FLOW

CALIBRATED BY: [redacted] DATE: 2-7-13

LEAK TEST DATA

INBOARD (EXTERNALLY-PRESSURIZED) HELIUM LEAK RATE: $\leq 1 \times 10^{-8}$ atm cc/sec

VACUUM PRESSURE: ≤5 millitorr

TESTED BY: [redacted] DATE: 2-1-13

FM-355-OE Rev. 0

[redacted] 5/15/13

Calibration complies with ISO 9001 ISO/IEC 17025 AND ANSI/NCSL Z540-1

Cert. No.: 1042-4689088

Calibration Certificate No. 1750.01

Traceable® Certificate of Calibration for Waterproof Stopwatch

Manufactured for and distributed by: Fisher Scientific, 300 Industry Drive, Pittsburgh, PA 15275-1001

Instrument Identification:

Model Numbers: 0666256, FB70240 S/N: 122601005 Manufacturer: Control Company

Standards/Equipment:

Description	Serial Number	Due Date	NIST Traceable Reference
Non-contact Frequency Counter	26.6 2025	3/06/13	1000313632

Certificate Information:

Technician: 67 Procedure: CAL-01 Cal Date: 10/23/12 **Cal Due: 10/23/14**

Test Conditions: 22.5°C 45.0 %RH 1015 mBar

Calibration Data: (New Instrument)

Unit(s)	Nominal	As Found	In Tol	Nominal	As Left	In Tol	Min	Max	±U	TUR
Sec/24hr		N.A.		0.000	-0.600	Y	-8.640	8.640	0.130	>4:1

This Instrument was calibrated using Instruments Traceable to National Institute of Standards and Technology.

A Test Uncertainty Ratio of at least 4:1 is maintained unless otherwise stated and is calculated using the expanded measurement uncertainty. Uncertainty evaluation includes the instrument under test and is calculated in accordance with the ISO "Guide to the Expression of Uncertainty in Measurement" (GUM). The uncertainty represents an expanded uncertainty using a coverage factor k=2 to approximate a 95% confidence level. In tolerance conditions are based on test results falling within specified limits with no reduction by the uncertainty of the measurement. The results contained herein relate only to the item calibrated. This certificate shall not be reproduced except in full, without written approval of Control Company.

Nominal=Standard's Reading; As Left=Instrument's Reading; In Tol=In Tolerance; Min/Max=Acceptance Range; ±U=Expanded Measurement Uncertainty; TUR=Test Uncertainty Ratio; Accuracy=±(Max-Min)/2; Min = Nominal(Rounded) - Tolerance; Max = Nominal(Rounded) + Tolerance; Date=MM/DD/YY

[redacted] [redacted]

Maintaining Accuracy:

In our opinion once calibrated your Waterproof Stopwatch should maintain its accuracy. There is no exact way to determine how long calibration will be maintained. Waterproof Stopwatchs change little, if any at all, but can be affected by aging, temperature, shock, and contamination.

Recalibration:

For factory calibration and re-certification traceable to National Institute of Standards and Technology contact Control Company.

CONTROL COMPANY 4455 Rex Road Friendswood, TX 77546 USA
Phone 281 482-1714 Fax 281 482-9448 service@control3.com www.control3.com

TEST ARTICLE ATTRIBUTE CHECKLIST

PROJECT NO: [redacted] 11-21-13 101276459-007 010 CLIENT: AREVA

Project Description PRESSURE TEST #5A

		SAT	UNSAT
I.	**ASSEMBLY**		
	Proper materials used	X	
	Material documentation complete	X	
	Configuration/dimensions in accordance w/ approved drawings	X	
	Description of assembly: BACK AREVA PRESSURE 5A		
II.	**ELECTRICAL CABLE**		
	Correct material used	X	
	Material documentation complete	X	
	Correct cable lay-in and fill requirements	X	
	Description of electrical cable:		
III.	**THERMOCOUPLES**		
	Correct thermocouple type, certs received	N/A	
	Thermocouples positioned in accordance with test plan		
	Adequately labeled and secured		
	Quality Assurance verification done		
	Description of thermocouples:		
IV.	**FIRE BARRIER**		
	Name or type of material QSIL 5558MC		
	INTERTEK received material documentation provided by Client	X	
	Materials provided by INTERTEK properly documented	X	
	Materials installed by INTERTEK in accordance with test plan	X	
	INTERTEK Quality Assurance responsibilities determined	X	
	QA responsibilities of Client installation determined	X	
	Moisture check required ..... Yes ___ No X		
	Special requirements		

V. FINAL PREBURN VERIFICATION

Final visual inspection & approval (initials) INTERTEK [redacted] Client [redacted]

CALIBRATION DOCUMENTATION (S/N and calibration due date)

Data Acquisition Equipment: SEE TEST DATA PACKAGE

Other Measurement Devices:

Temperature 73 Humidity 94 Date 11-21-13 Time of Test start 8:38AM

INTERTEK pre-burn checklist performed by [redacted]

Client representative present to witness test [redacted]

Note: Verification to be made using initials by INTERTEK Quality Assurance or test personnel.

09-013-12/30/03

Intertek

TEST ACTIVITIES EVENT LOG

Note:
This Log is used to document the date and note the significant events during the completion of Test Project # G101276459SAT-010 (Pressure Test #5A) for AREVA NP Inc.

ITEM	DATE	INIT'L
Verified opening sizes per the test plan	5/29/13	MD
Concrete poured by Alamo Concrete	5/29/13	MD
Concrete conditioned	6/3/13	MD
Critical attributes of test deck and test samples verified	6/17/13	MD
Begin pouring seals	6/19/13	MD
Finish pouring seals	6/24/13	MD
Completed seal assembly verified against the test plan	6/24/13	MD
Pressure Test #1 conducted	7/16/13	MD
Repurpose test deck for Pressure Test #5	7/17/13	MD
Critical attributes of test deck and test samples verified	7/18/13	MD
Holes cored, cables installed, seals poured	7/18/13	MD
Completed seal assembly verified against the test plan	7/19/13	MD
Pressure Test #5 conducted	7/29/13	MD
Repurpose test deck for Pressure Test #5A		
Critical attributes of test deck and test samples verified	11/7/13	MD
Begin pouring seals	11/7/13	MD
Finish pouring seals	11/12/13	MD
Completed seal assembly verified against the test plan	11/15/13	MD
Pressure Test #5A conducted	11/21/13	MD

9/12 NQAP-007.7.3

Certificate of Conformance

Client Name: Areva NP Inc. Date: July 22, 2014
Project No: G101276459SAT-010

Intertek Testing Services NA (Intertek) has conducted testing for AREVA NP Inc., on the pressure resistance capabilities of Quantum Silicones QSil 5558MC Silicone Elastomer (QSil 5558MC) through a 12" thick concrete deck for compliance with the applicable requirements of and in accordance with AREVA NP Inc. Document No. 51-9213537-000, *Detailed Test Plan for Conducting MOX Pressure Test 5A [Test Plan]*. This evaluation took place on November 21, 2013.

The materials, processes), and deliverable(s) in this project were managed under and conform to the test laboratory's 10CFR50 Appendix B Quality Assurance Program.

Michael A Brown
Quality Supervisor

July 22, 2014
Date

Intertek Testing Laboratory
16015 Shady Falls Road, Elmendorf TX 78112
210-635-8100

Quality Assurance Statement

Intertek is devoted to engineering, inspection, quality assurance and testing of building materials, products and assemblies. Intertek has developed and implemented a Quality Assurance Program designed to provide its clients with a planned procedure of order and document processing for inspection and testing services it provides to assure conformity to requirements, codes, standards and specifications. The Program is designed to meet the intent of ANSI 45.2 Quality Assurance Program Requirements for Nuclear Power Plants, and complies with the requirements of the ASME Code, SPPE, Military Standards and other less stringent programs. It is the Laboratory's intention to adhere strictly to this Program, to assure that the services offered to its clients remains of the highest quality and accuracy possible.

All QA Surveillance documents remain on file at the Laboratory, and are available for inspection by authorized personnel in the performance of an on-site QA Audit. All materials, services and supplies used herein were obtained with appropriate QA Certifications of Compliance.

REVISION SUMMARY

DATE	SUMMARY
July 22, 2014	Original Issue Date