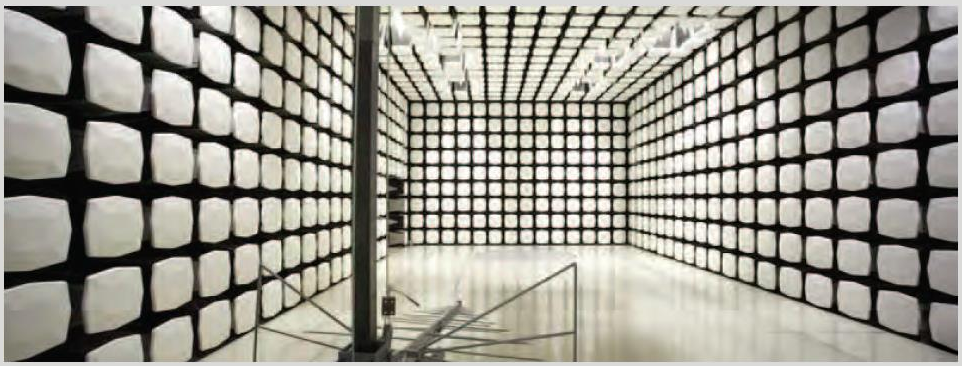
Schweitzer Engineering Laboratories, Inc.

9630-9110

FCC 15.247:2017

902 – 928 MHz Transceiver

Report # SCHW0219



NVLAP Lab Code: 200630-0

CERTIFICATE OF TEST

Last Date of Test: October 20, 2017
Schweitzer Engineering Laboratories, Inc.
Model: 9630-9110

Radio Equipment Testing

Standards

Specification	Method
FCC 15.207:2017	ANSI C63.10:2013
FCC 15.247:2017	

Results

Method Clause	Test Description	Applied	Results	Comments
6.2	AC - Powerline Conducted Emissions	Yes	Pass	
6.5, 6.6	Spurious Radiated Emissions	Yes	Pass	
7.5	Duty Cycle	Yes	Pass	
7.8.2	Carrier Frequency Separation	No	N/A	Not required for DTS devices.
7.8.3	Number of Hopping Frequencies	No	N/A	Not required for DTS devices.
7.8.4	Dwell Time	No	N/A	Not required for DTS devices.
7.8.5	Output Power	Yes	Pass	
7.8.6	Band Edge Compliance	Yes	Pass	
7.8.6	Band Edge Compliance - Hopping Mode	No	N/A	Not required for DTS devices.
7.8.7	Occupied Bandwidth	Yes	Pass	
7.8.8	Spurious Conducted Emissions	Yes	Pass	
11.10.2	Power Spectral Density	Yes	Pass	
ANSI C63.4 - 12.2.5	Radiated Emissions for Receiver	Yes	Pass	

Deviations From Test Standards

None

Approved By:

Kyle Holgate, Operations Manager

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information.

REVISION HISTORY

Revision Number	Description	Date	Page Number
00	None		

ACCREDITATIONS AND AUTHORIZATIONS

2017.6.12

United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Accredited by A2LA to ISO / IEC 17065 as a product certifier. This allows Element to certify transmitters to FCC and IC specifications.

NVLAP - Each laboratory is accredited by NVLAP to ISO 17025

Canada

ISED - Recognized by Innovation, Science and Economic Development Canada as a Certification Body (CB). Certification chambers and Open Area Test Sites are filed with ISED.

European Union

European Commission – Within Element, we have a EU Notified Body validated for the EMCD and RED Directives.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

MSIP / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Israel

MOC – Recognized by MOC as a CAB for the acceptance of test data.

Hong Kong

OFCA – Recognized by OFCA as a CAB for the acceptance of test data.

Vietnam

MIC – Recognized by MIC as a CAB for the acceptance of test data.

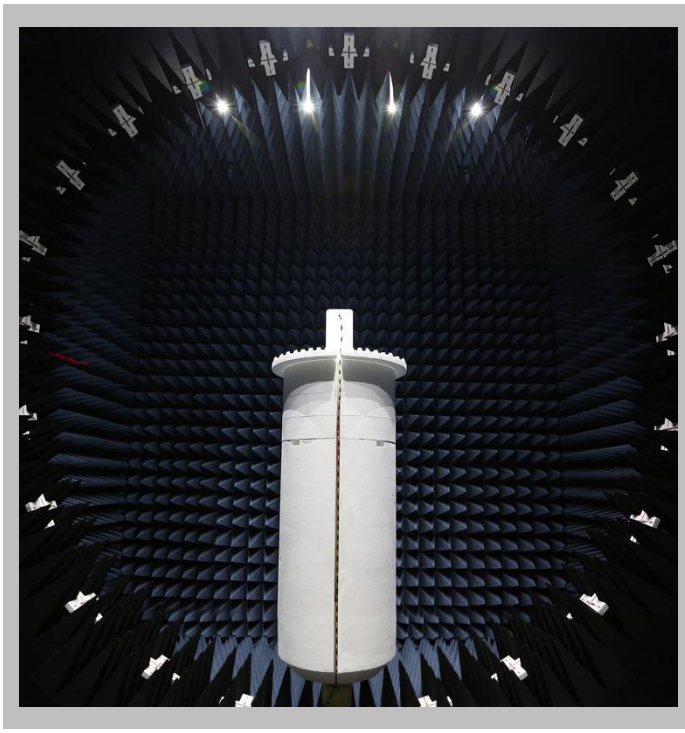
SCOPE

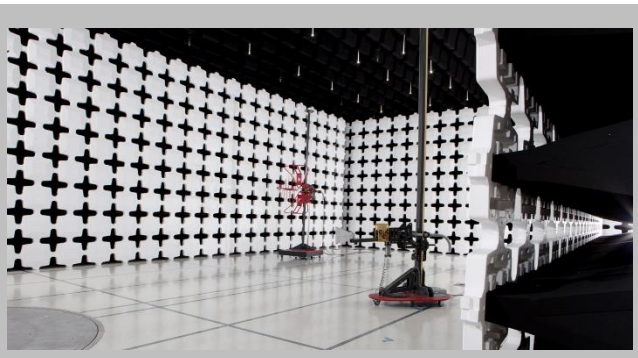
For details on the Scopes of our Accreditations, please visit:
http://portlandcustomer.element.com/ts/scope/scope.htm
http://gsi.nist.gov/global/docs/cabs/designations.html

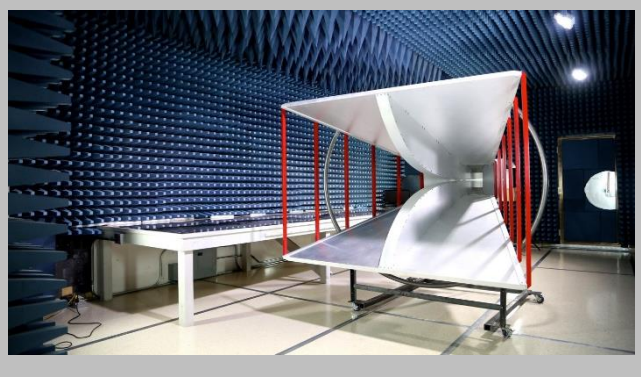
FACILITIES

2017.7.25

California	Minnesota	New York	Oregon	Texas	Washington
Labs OC01-13 41 Tesla Irvine, CA 92618 (949) 861-8918	Labs MN01-08, MN10 9349 W Broadway Ave. Brooklyn Park, MN 55445 (612)-638-5136	Labs NY01-04 4939 Jordan Rd. Elbridge, NY 13060 (315) 554-8214	Labs EV01-12 22975 NW Evergreen Pkwy Hillsboro, OR 97124 (503) 844-4066	Labs TX01-09 3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	Labs NC01-05 19201 120th Ave NE Bothell, WA 98011 (425)984-6600
NVLAP					
NVLAP Lab Code: 200676-0	NVLAP Lab Code: 200881-0	NVLAP Lab Code: 200761-0	NVLAP Lab Code: 200630-0	NVLAP Lab Code:201049-0	NVLAP Lab Code: 200629-0
Innovation, Science and Economic Development Canada					
2834B-1, 2834B-3	2834E-1, 2834E-3	N/A	2834D-1, 2834D-*2*	2834G-1	2834F-1
BSMI					
SL2-IN-E-1154R	SL2-IN-E-1152R	N/A	SL2-IN-E-1017	SL2-IN-E-1158R	SL2-IN-E-1153R
VCCI					
A-0029	A-0109	N/A	A-0108	A-0201	A-0110
Recognized Phase I CAB for ACMA, BSMI, IDA, KCC/RRA, MIC, MOC, NCC, OFCA					
US0158	US0175	N/A	US0017	US0191	US0157







MEASUREMENT UNCERTAINTY

TMU.2015.07.10

Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation has been performed for each test per our internal quality document QM205.4.6. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (K=2) can be found included as part of the applicable test description page. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable), and are available upon request.

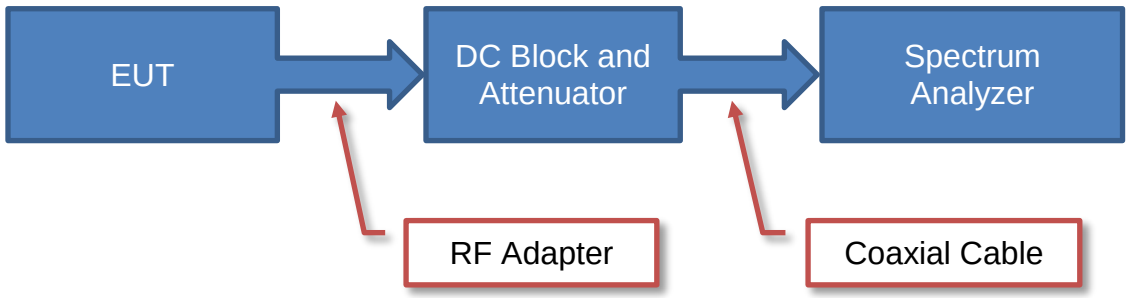
The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

Test	+ MU	- MU
Frequency Accuracy (Hz)	0.0007%	-0.0007%
Amplitude Accuracy (dB)	1.2 dB	-1.2 dB
Conducted Power (dB)	0.3 dB	-0.3 dB
Radiated Power via Substitution (dB)	0.7 dB	-0.7 dB
Temperature (degrees C)	0.7°C	-0.7°C
Humidity (% RH)	2.5% RH	-2.5% RH
Voltage (AC)	1.0%	-1.0%
Voltage (DC)	0.7%	-0.7%
Field Strength (dB)	5.2 dB	-5.2 dB
AC Powerline Conducted Emissions (dB)	2.4 dB	-2.4 dB

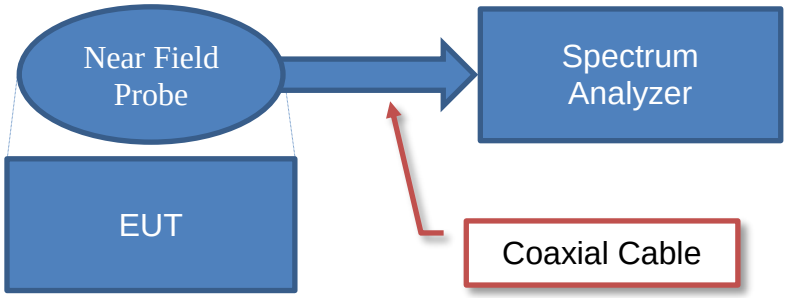
Test Setup Block Diagrams

2017.1.25

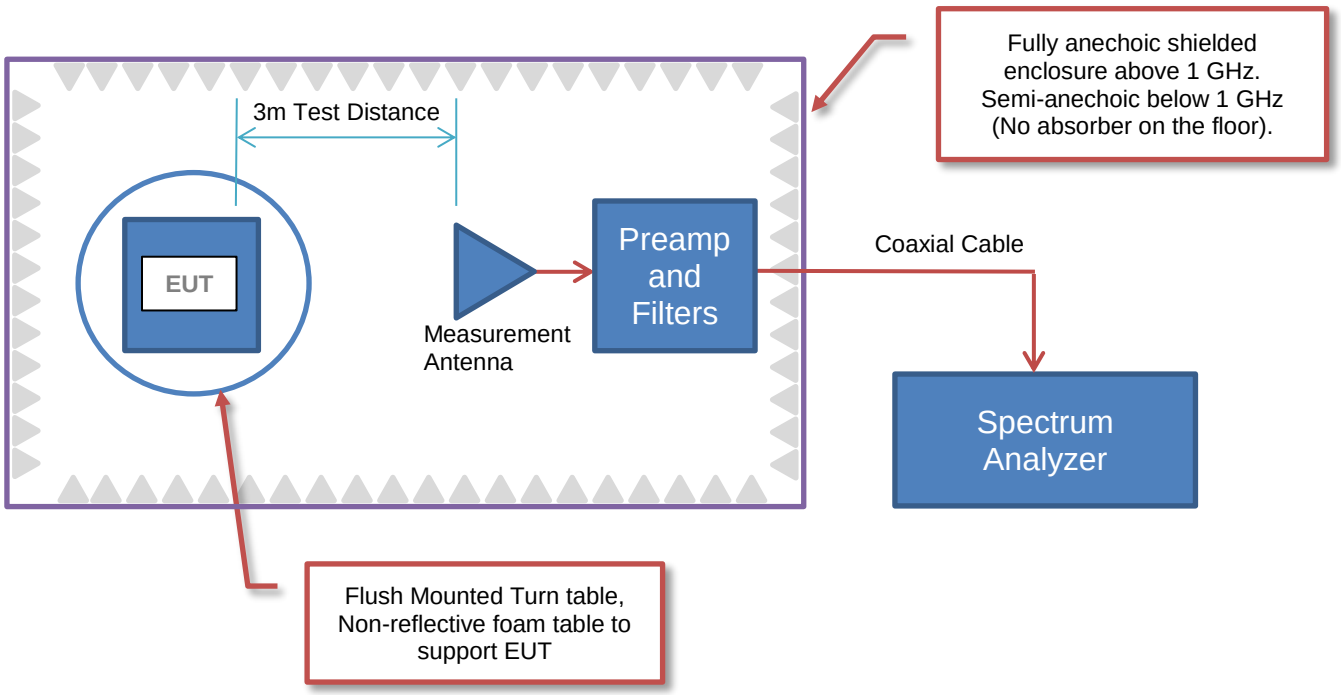
Antenna Port Conducted Measurements



Near Field Test Fixture Measurements



Spurious Radiated Emissions



PRODUCT DESCRIPTION

2017-1-25

Client and Equipment Under Test (EUT) Information

Company Name:	Schweitzer Engineering Laboratories, Inc.
Address:	2350 NE Hopkins Court
City, State, Zip:	Pullman, WA 99163
Test Requested By:	Jason Graham
Model:	9630-9110
First Date of Test:	July 24, 2017
Last Date of Test:	October 20, 2017
Receipt Date of Samples:	July 24, 2017
Equipment Design Stage:	Production
Equipment Condition:	No Damage
Purchase Authorization:	Verified

Information Provided by the Party Requesting the Test

Functional Description of the EUT:
Fault and Load Transmitter and Receiver System utilizing a DTS radio operating in the 902 – 928 MHz band.

Testing Objective:
Seeking to demonstrate compliance under FCC 15.247:2017 for DTS operation in the 902 - 928 MHz band.

CONFIGURATIONS

Configuration SCHW0219- 1

Software/Firmware Running during test	
Description	**Version**
Quick_3070_EXE.VI	14.0
sdr900_REV_A_cap_arr-180kHz.out	SHA: 8c7695bd9bd646f2a783d65b34fc513c4399156c

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
900MHz Radio Module 9630-9110	Schweitzer Engineering Laboratories, Inc.	070-1144 Rev. C	A02654144

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
USB-SPI Interface Control	National Instruments	NI USB-8451	1B0362B
DC Power Supply #1	Topward Electrical Instruments Co., LTD	TPS 2000	946421
DC Power Supply #2	Sorenson	XEL 30-3P	J00361872
Host Laptop	Dell	Latitude E6430	9073438417
Host Laptop Power Supply	Dell	FA90PM111	CN-0K8WXN-73245-295-1067-A00

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Cable Pair	No	1.2m	No	900MHz Radio Module 9630-9110	DC Power Supply #1
DC Cable Pair	No	1.2m	No	900MHz Radio Module 9630-9110	DC Power Supply #2
Interface Cable	No	0.10m	No	900MHz Radio Module 9630-9110	USB-SPI Interface Control
USB Cable	Yes	1.4m	No	USB-SPI Interface Control	Host Laptop
DC Cable	Yes	1.2m	Yes	Host Laptop	Host Laptop Power Supply
AC Cable	No	1.6m	No	Host Laptop Power Supply	AC Mains

CONFIGURATIONS

Configuration SCHW0219- 3

Software/Firmware Running during test	
Description	**Version**
Quick_3070_EXE.VI	14.0
sdr900_REV_A_cap_arr-180kHz.out	SHA: 8c7695bd9bd646f2a783d65b34fc513c4399156c

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
900MHz Radio Module 9630-9110	Schweitzer Engineering Laboratories, Inc.	070-1144 Rev. C	A02654144
Yagi Antenna (14.15dBi)	PCTEL	BMYD890M	560069
3dB N-Type Attenuator	Fairview	SA6021-03	None

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
USB-SPI Interface Control	National Instruments	NI USB-8451	1B0362B
DC Power Supply #1	Topward Electrical Instruments Co., LTD	TPS 2000	946421
DC Power Supply #2	Sorenson	XEL 30-3P	J00361872

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Cable Pair	No	1.2m	No	900MHz Radio Module 9630-9110	DC Power Supply #1
DC Cable Pair	No	1.2m	No	900MHz Radio Module 9630-9110	DC Power Supply #2
Interface Cable	No	0.10m	No	900MHz Radio Module 9630-9110	USB-SPI Interface Control
LMR Cable	Yes	10.5m	No	Yagi Antenna (14.15dBi)	900MHz Radio Module 9630-9110
RG-316 Cable	Yes	0.30m	No	LMR Cable	900MHz Radio Module 9630-9110

CONFIGURATIONS

2017-1-25

Configuration SCHW0219- 4

Software/Firmware Running during test	
Description	**Version**
Quick_3070_EXE.VI	14.0
sdr900_REV_A_cap_arr-180kHz.out	SHA: 8c7695bd9bd646f2a783d65b34fc513c4399156c

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
900MHz Radio Module 9630-9110	Schweitzer Engineering Laboratories, Inc.	070-1144 Rev. C	A02654144
Yagi Antenna (8.55dBi)	PCTEL	BMOY8903	123009

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
USB-SPI Interface Control	National Instruments	NI USB-8451	1B0362B
DC Power Supply #1	Topward Electrical Instruments Co., LTD	TPS 2000	946421
DC Power Supply #2	Sorenson	XEL 30-3P	J00361872

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Cable Pair	No	1.2m	No	900MHz Radio Module 9630-9110	DC Power Supply #1
DC Cable Pair	No	1.2m	No	900MHz Radio Module 9630-9110	DC Power Supply #2
Interface Cable	No	0.10m	No	900MHz Radio Module 9630-9110	USB-SPI Interface Control
RG-316 Cable	Yes	0.30m	No	Yagi Antenna (8.55dBi)	900MHz Radio Module 9630-9110

CONFIGURATIONS

2017-1-25

Configuration SCHW0219- 5

Software/Firmware Running during test	
Description	**Version**
Quick_3070_EXE.VI	14.0
sdr900_REV_A_cap_arr-180kHz.out	SHA: 8c7695bd9bd646f2a783d65b34fc513c4399156c

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
900MHz Radio Module 9630-9110	Schweitzer Engineering Laboratories, Inc.	070-1144 Rev. C	A02654144
Omni Antenna (9.15dBi)	PCTEL	MFB9157NF	508078

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
USB-SPI Interface Control	National Instruments	NI USB-8451	1B0362B
DC Power Supply #1	Topward Electrical Instruments Co., LTD	TPS 2000	946421
DC Power Supply #2	Sorenson	XEL 30-3P	J00361872

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Cable Pair	No	1.2m	No	900MHz Radio Module 9630-9110	DC Power Supply #1
DC Cable Pair	No	1.2m	No	900MHz Radio Module 9630-9110	DC Power Supply #2
Interface Cable	No	0.10m	No	900MHz Radio Module 9630-9110	USB-SPI Interface Control
LMR Cable	Yes	1.0m	No	Omni Antenna (9.15dBi)	900MHz Radio Module 9630-9110
RG-316 Cable	Yes	0.30m	No	LMR Cable	900MHz Radio Module 9630-9110

CONFIGURATIONS

Configuration SCHW0219- 6

Software/Firmware Running during test	
Description	**Version**
Quick_3070_EXE.VI	14.0
sdr900_REV_A_cap_arr-180kHz.out	SHA: 8c7695bd9bd646f2a783d65b34fc513c4399156c

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
900MHz Radio Module 9630-9110	Schweitzer Engineering Laboratories, Inc.	070-1144 Rev. C	A02654144

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
USB-SPI Interface Control	National Instruments	NI USB-8451	1B0362B
DC Power Supply #1	Topward Electrical Instruments Co., LTD	TPS 2000	946421
DC Power Supply #2	Sorenson	XEL 30-3P	J00361872
Host Laptop	Dell	Latitude E6430	9073438417
Host Laptop Power Supply	Dell	FA90PM111	CN-0K8WXN-73245-295-1067-A00
SMA Terminator (1W)	Fairview	ST2650	None

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
DC Cable Pair	No	1.2m	No	900MHz Radio Module 9630-9110	DC Power Supply #1
DC Cable Pair	No	1.2m	No	900MHz Radio Module 9630-9110	DC Power Supply #2
Interface Cable	No	0.10m	No	900MHz Radio Module 9630-9110	USB-SPI Interface Control
USB Cable	Yes	1.4m	No	USB-SPI Interface Control	Host Laptop
DC Cable	Yes	1.2m	Yes	Host Laptop	Host Laptop Power Supply
AC Cable	No	1.6m	No	Host Laptop Power Supply	AC Mains

CONFIGURATIONS

2017-1-25

Configuration SCHW0228- 1

Software/Firmware Running during test	
Description	**Version**
sdr900_REV_A_cap_arr-180kHz.out	SHA: 8c7695bd9bd646f2a783d65b34fc513c4399156c

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
900MHz Radio Module 9630-9110 (Integral Antenna)	Schweitzer Engineering Laboratories, Inc.	070-1144 Rev. C	A02654122

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
USB-SPI Interface Control	National Instruments	NI USB-8451	1ADD00A

Remote Equipment Outside of Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
DC Power Supply #1	Topward Electrical Instruments Co., LTD	TPS 2000	946421
DC Power Supply #2	Sorenson	XEL 30-3P	J00361872
Host Laptop Power Supply	Dell	FA90PM111	CN-0K8WXN-73245-295-1067-A00
Host Laptop	Dell	Latitude E6430	9073438417

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Cable x 2	No	1.6m	No	AC Mains	DC Power Supplies
DC Cable (3.5 VDC rail)	No	4.0 m	Yes	DC Power Supply #1	900MHz Radio Module 9630
DC Cable (3.0 VDC rail)	Yes	2.2 m	Yes	DC Power Supply #2	900MHz Radio Module 9630
Interface Cable	No	0.10m	No	900MHz Radio Module 9630	USB-SPI Interface Control
USB Cable	Yes	1.4m	No	Host Laptop	USB-SPI Interface Control

CONFIGURATIONS

2017-1-25

Configuration SCHW0228- 2

Software/Firmware Running during test	
Description	**Version**
sdr900_REV_A_cap_arr-180kHz.out	SHA: 8c7695bd9bd646f2a783d65b34fc513c4399156c

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
900MHz Radio Module 9630-9110 (Integral Antenna)	Schweitzer Engineering Laboratories, Inc.	070-1144 Rev. C	A02654118

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
USB-SPI Interface Control	National Instruments	NI USB-8451	1ADD00A

Remote Equipment Outside of Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
DC Power Supply #1	Topward Electrical Instruments Co., LTD	TPS 2000	946421
DC Power Supply #2	Sorenson	XEL 30-3P	J00361872
Host Laptop Power Supply	Dell	FA90PM111	CN-0K8WXN-73245-295-1067-A00
Host Laptop	Dell	Latitude E6430	9073438417

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Cable x 2	No	1.6m	No	AC Mains	DC Power Supplies
DC Cable (3.5 VDC rail)	No	4.0 m	Yes	DC Power Supply #1	900MHz Radio Module 9630
DC Cable (3.0 VDC rail)	Yes	2.2 m	Yes	DC Power Supply #2	900MHz Radio Module 9630
Interface Cable	No	0.10m	No	900MHz Radio Module 9630	USB-SPI Interface Control
USB Cable	Yes	1.4m	No	Host Laptop	USB-SPI Interface Control

CONFIGURATIONS

2017-1-25

Configuration SCHW0228- 3

Software/Firmware Running during test	
Description	**Version**
sdr900_REV_A_cap_arr-180kHz.out	SHA: 8c7695bd9bd646f2a783d65b34fc513c4399156c

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
900MHz Radio Module 9630-9110	Schweitzer Engineering Laboratories, Inc.	070-1144 Rev. C	A02654144

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
USB-SPI Interface Control	National Instruments	NI USB-8451	1ADD00A

Remote Equipment Outside of Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
DC Power Supply #1	Topward Electrical Instruments Co., LTD	TPS 2000	946421
DC Power Supply #2	Sorenson	XEL 30-3P	J00361872
Host Laptop Power Supply	Dell	FA90PM111	CN-0K8WXN-73245-295-1067-A00
Host Laptop	Dell	Latitude E6430	9073438417

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Cable x 2	No	1.6m	No	AC Mains	DC Power Supplies
DC Cable (3.5 VDC rail)	No	4.0 m	Yes	DC Power Supply #1	900MHz Radio Module 9630
DC Cable (3.0 VDC rail)	Yes	2.2 m	Yes	DC Power Supply #2	900MHz Radio Module 9630
Interface Cable	No	0.10m	No	900MHz Radio Module 9630	USB-SPI Interface Control
USB Cable	Yes	1.4m	No	Host Laptop	USB-SPI Interface Control

CONFIGURATIONS

Configuration SCHW0228- 4

Software/Firmware Running during test	
Description	**Version**
sdr900_REV_A_cap_arr-180kHz.out	SHA: 8c7695bd9bd646f2a783d65b34fc513c4399156c

EUT			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
900MHz Radio Module 9630-9110	Schweitzer Engineering Laboratories, Inc.	070-1144 Rev. C	A02654144

Peripherals in test setup boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
USB-SPI Interface Control	National Instruments	NI USB-8451	1ADD00A

Remote Equipment Outside of Test Setup Boundary			
Description	**Manufacturer**	**Model/Part Number**	**Serial Number**
DC Power Supply #1	Topward Electrical Instruments Co., LTD	TPS 2000	946421
DC Power Supply #2	Sorenson	XEL 30-3P	J00361872
Host Laptop Power Supply	Dell	FA90PM111	CN-0K8WXN-73245-295-1067-A00
Host Laptop	Dell	Latitude E6430	9073438417

Cables					
Cable Type	**Shield**	**Length (m)**	**Ferrite**	**Connection 1**	**Connection 2**
AC Cable x 2	No	1.6m	No	AC Mains	DC Power Supplies
Interface Cable	No	0.10m	No	900MHz Radio Module 9630	USB-SPI Interface Control
USB Cable	Yes	1.4m	No	Host Laptop	USB-SPI Interface Control
DC Cable (3.5 VDC rail)	No	1.0 m	No	DC Power Supply #1	900MHz Radio Module 9630
DC Cable (3.0 VDC rail)	No	1.0 m	No	DC Power Supply #2	900MHz Radio Module 9630

MODIFICATIONS

2017-1-25

Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	7/24/2017	Output Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
2	7/24/2017	Band Edge Compliance	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
3	7/24/2017	Occupied Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
4	7/24/2017	Spurious Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
5	7/24/2017	Power Spectral Density	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
6	7/26/2017	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
7	7/28/2017	AC – Powerline Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
8	10/20/2017	AC – Powerline Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
9	10/20/2017	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
10	10/20/2017	Radiated Emissions for Receiver	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

AC - POWERLINE CONDUCTED EMISSIONS

PSA-ESCI 2017.06.01

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

MODES OF OPERATION

Transmitting continuously at Mid Ch (915 MHz)

POWER SETTINGS INVESTIGATED

110VAC/60Hz

CONFIGURATIONS INVESTIGATED

SCHW0219 - 6

SAMPLE CALCULATIONS

Conducted Emissions: Adjusted Level = Measured Level + Transducer Factor + Cable Attenuation Factor + External Attenuator

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Interval
LISN	Solar Electronics	9252-50-R-24-BNC	LIP	10/4/2016	24 mo
LISN	Solar Electronics	9252-50-R-24-BNC	LIN	1/6/2017	12 mo
Cable - Conducted Cable Assembly	Northwest EMC	EVG, HHD, RKA	EVGA	4/13/2017	12 mo
Receiver	Rohde & Schwarz	ESCI	ARH	3/27/2017	12 mo

MEASUREMENT BANDWIDTHS

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

Measurements were made using the bandwidths and detectors specified. No video filter was used.

MEASUREMENT UNCERTAINTY

A measurement uncertainty estimation has been performed for each test per our internal quality document WP 342. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty for radiated emissions measurements is less than +/- 4 dB, and for conducted emissions measurements is less than +/- 2.7 dB. Our measurement data meets or exceeds the measurement uncertainty requirements of CISPR 16-4; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for measurement uncertainty are available upon request.

TEST DESCRIPTION

The EUT will be powered either directly or indirectly from the AC power line. Therefore, conducted emissions measurements were made on the AC input of the EUT, or on the AC input of the device used to power the EUT.

The EUT was transmitting at its maximum data rate. For each mode, the spectrum was scanned from 150 kHz to 30 MHz. The test setup and procedures were in accordance with ANSI C63.10.

AC - POWERLINE CONDUCTED EMISSIONS

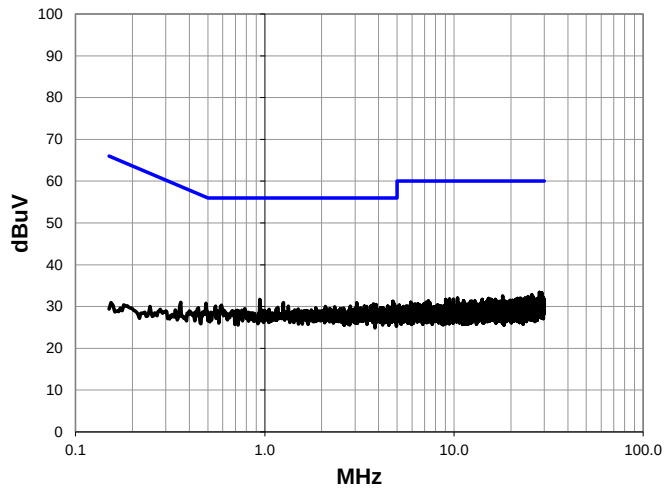
EmiR5 2017.07.11 PSA-ESCI 2017.06.01

Work Order:	SCHW0219	**Date:**	07/28/17		
Project:	None	**Temperature:**	22.7 °C		
Job Site:	EV07	**Humidity:**	42.3% RH		
Serial Number:	A02654144	**Barometric Pres.:**	1022 mbar	**Tested by:**	Mark Baytan
EUT:	9630-9110				
Configuration:	6				
Customer:	Schweitzer Engineering Laboratories, Inc.				
Attendees:	Allan Davis				
EUT Power:	110VAC/60Hz				
Operating Mode:	Transmitting continuously at Mid Ch (915 MHz)				
Deviations:	None				
Comments:	Power level setting: 27 dBm. 3.5VDC input to DC voltage regulator. 1W SMA terminator on antenna port.				

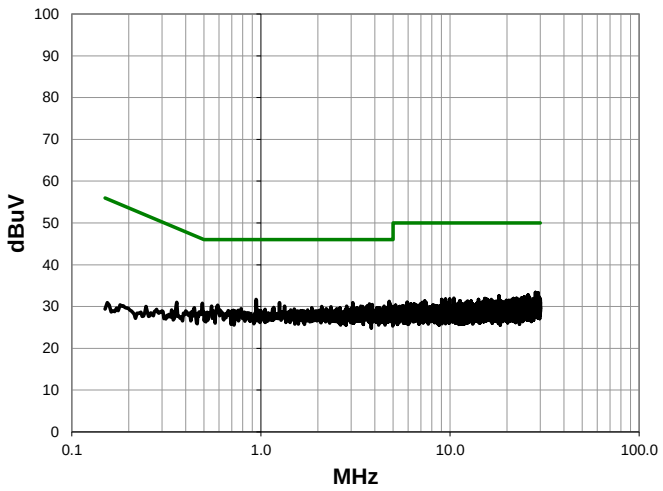
Test Specifications	**Class B**	**Test Method**	
FCC 15.207:2017		ANSI C63.10:2013	

Run #	6	**Line:**	High Line	**Ext. Attenuation:**	0	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.941	12.2	19.5	31.7	56.0	-24.3
4.758	11.4	19.8	31.2	56.0	-24.8
1.254	11.4	19.5	30.9	56.0	-25.1
3.060	11.1	19.8	30.9	56.0	-25.1
4.813	10.9	19.8	30.7	56.0	-25.3

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.941	12.2	19.5	31.7	46.0	-14.3
4.758	11.4	19.8	31.2	46.0	-14.8
1.254	11.4	19.5	30.9	46.0	-15.1
3.060	11.1	19.8	30.9	46.0	-15.1
4.813	10.9	19.8	30.7	46.0	-15.3

3.746	10.8	19.8	30.6	56.0	-25.4
0.490	11.3	19.5	30.8	56.2	-25.4
3.870	10.7	19.8	30.5	56.0	-25.5
0.590	10.8	19.5	30.3	56.0	-25.7
0.549	10.6	19.5	30.1	56.0	-25.9
1.333	10.6	19.5	30.1	56.0	-25.9
2.832	10.4	19.7	30.1	56.0	-25.9
3.362	10.3	19.8	30.1	56.0	-25.9
3.638	10.3	19.8	30.1	56.0	-25.9
4.470	10.3	19.8	30.1	56.0	-25.9
2.094	10.4	19.6	30.0	56.0	-26.0
3.452	10.2	19.8	30.0	56.0	-26.0
3.780	10.2	19.8	30.0	56.0	-26.0
4.989	10.2	19.8	30.0	56.0	-26.0
2.344	10.3	19.6	29.9	56.0	-26.1
4.922	10.1	19.8	29.9	56.0	-26.1
4.631	10.0	19.8	29.8	56.0	-26.2
1.859	10.1	19.6	29.7	56.0	-26.3
3.217	9.9	19.8	29.7	56.0	-26.3
4.123	9.9	19.8	29.7	56.0	-26.3
4.224	9.9	19.8	29.7	56.0	-26.3
2.616	9.9	19.7	29.6	56.0	-26.4
3.000	9.8	19.8	29.6	56.0	-26.4
0.784	10.0	19.5	29.5	56.0	-26.5
2.209	9.9	19.6	29.5	56.0	-26.5
2.512	9.8	19.7	29.5	56.0	-26.5
4.269	9.7	19.8	29.5	56.0	-26.5
1.501	9.8	19.6	29.4	56.0	-26.6
4.530	9.6	19.8	29.4	56.0	-26.6
28.306	12.3	21.1	33.4	60.0	-26.6
2.806	9.6	19.7	29.3	56.0	-26.7
29.164	12.1	21.2	33.3	60.0	-26.7
0.713	9.6	19.5	29.1	56.0	-26.9
1.620	9.4	19.6	29.0	56.0	-27.0
1.515	9.3	19.6	28.9	56.0	-27.1
25.825	11.9	20.9	32.8	60.0	-27.2
0.445	10.2	19.5	29.7	57.0	-27.3
18.136	12.1	20.4	32.5	60.0	-27.5
25.922	11.5	20.9	32.4	60.0	-27.6
28.556	11.3	21.1	32.4	60.0	-27.6
29.362	11.2	21.2	32.4	60.0	-27.6
24.631	11.5	20.8	32.3	60.0	-27.7
28.832	11.2	21.1	32.3	60.0	-27.7
29.306	11.1	21.2	32.3	60.0	-27.7
0.359	11.5	19.5	31.0	58.8	-27.8
24.691	11.4	20.8	32.2	60.0	-27.8
26.265	11.3	20.9	32.2	60.0	-27.8
26.292	11.3	20.9	32.2	60.0	-27.8
28.321	11.1	21.1	32.2	60.0	-27.8
29.261	11.0	21.2	32.2	60.0	-27.8
29.601	11.0	21.2	32.2	60.0	-27.8
10.447	11.9	20.1	32.0	60.0	-28.0
23.770	11.2	20.8	32.0	60.0	-28.0
29.205	10.8	21.2	32.0	60.0	-28.0
15.275	11.5	20.4	31.9	60.0	-28.1
21.632	11.3	20.6	31.9	60.0	-28.1
22.285	11.3	20.6	31.9	60.0	-28.1
22.430	11.3	20.6	31.9	60.0	-28.1
22.576	11.2	20.7	31.9	60.0	-28.1
25.754	11.0	20.9	31.9	60.0	-28.1
27.694	10.8	21.1	31.9	60.0	-28.1
29.328	10.7	21.2	31.9	60.0	-28.1
29.739	10.7	21.2	31.9	60.0	-28.1
9.469	11.7	20.1	31.8	60.0	-28.2
9.954	11.7	20.1	31.8	60.0	-28.2
29.429	10.6	21.2	31.8	60.0	-28.2
29.884	10.6	21.2	31.8	60.0	-28.2
29.959	10.6	21.2	31.8	60.0	-28.2
9.037	11.7	20.0	31.7	60.0	-28.3
14.111	11.5	20.2	31.7	60.0	-28.3
15.211	11.3	20.4	31.7	60.0	-28.3
15.562	11.3	20.4	31.7	60.0	-28.3
15.748	11.3	20.4	31.7	60.0	-28.3
16.536	11.3	20.4	31.7	60.0	-28.3
21.263	11.1	20.6	31.7	60.0	-28.3
27.821	10.6	21.1	31.7	60.0	-28.3
26.325	10.7	20.9	31.6	60.0	-28.4
27.228	10.5	21.1	31.6	60.0	-28.4
28.243	10.5	21.1	31.6	60.0	-28.4
19.800	11.0	20.5	31.5	60.0	-28.5
20.419	11.0	20.5	31.5	60.0	-28.5

3.746	10.8	19.8	30.6	46.0	-15.4
0.490	11.3	19.5	30.8	46.2	-15.4
3.870	10.7	19.8	30.5	46.0	-15.5
0.590	10.8	19.5	30.3	46.0	-15.7
0.549	10.6	19.5	30.1	46.0	-15.9
1.333	10.6	19.5	30.1	46.0	-15.9
2.832	10.4	19.7	30.1	46.0	-15.9
3.362	10.3	19.8	30.1	46.0	-15.9
3.638	10.3	19.8	30.1	46.0	-15.9
4.470	10.3	19.8	30.1	46.0	-15.9
2.094	10.4	19.6	30.0	46.0	-16.0
3.452	10.2	19.8	30.0	46.0	-16.0
3.780	10.2	19.8	30.0	46.0	-16.0
4.989	10.2	19.8	30.0	46.0	-16.0
2.344	10.3	19.6	29.9	46.0	-16.1
4.922	10.1	19.8	29.9	46.0	-16.1
4.631	10.0	19.8	29.8	46.0	-16.2
1.859	10.1	19.6	29.7	46.0	-16.3
3.217	9.9	19.8	29.7	46.0	-16.3
4.123	9.9	19.8	29.7	46.0	-16.3
4.224	9.9	19.8	29.7	46.0	-16.3
2.616	9.9	19.7	29.6	46.0	-16.4
3.000	9.8	19.8	29.6	46.0	-16.4
0.784	10.0	19.5	29.5	46.0	-16.5
2.209	9.9	19.6	29.5	46.0	-16.5
2.512	9.8	19.7	29.5	46.0	-16.5
4.269	9.7	19.8	29.5	46.0	-16.5
1.501	9.8	19.6	29.4	46.0	-16.6
4.530	9.6	19.8	29.4	46.0	-16.6
28.306	12.3	21.1	33.4	50.0	-16.6
2.806	9.6	19.7	29.3	46.0	-16.7
29.164	12.1	21.2	33.3	50.0	-16.7
0.713	9.6	19.5	29.1	46.0	-16.9
1.620	9.4	19.6	29.0	46.0	-17.0
1.515	9.3	19.6	28.9	46.0	-17.1
25.825	11.9	20.9	32.8	50.0	-17.2
0.445	10.2	19.5	29.7	47.0	-17.3
18.136	12.1	20.4	32.5	50.0	-17.5
25.922	11.5	20.9	32.4	50.0	-17.6
28.556	11.3	21.1	32.4	50.0	-17.6
29.362	11.2	21.2	32.4	50.0	-17.6
24.631	11.5	20.8	32.3	50.0	-17.7
28.832	11.2	21.1	32.3	50.0	-17.7
29.306	11.1	21.2	32.3	50.0	-17.7
0.359	11.5	19.5	31.0	48.8	-17.8
24.691	11.4	20.8	32.2	50.0	-17.8
26.265	11.3	20.9	32.2	50.0	-17.8
26.292	11.3	20.9	32.2	50.0	-17.8
28.321	11.1	21.1	32.2	50.0	-17.8
29.261	11.0	21.2	32.2	50.0	-17.8
29.601	11.0	21.2	32.2	50.0	-17.8
10.447	11.9	20.1	32.0	50.0	-18.0
23.770	11.2	20.8	32.0	50.0	-18.0
29.205	10.8	21.2	32.0	50.0	-18.0
15.275	11.5	20.4	31.9	50.0	-18.1
21.632	11.3	20.6	31.9	50.0	-18.1
22.285	11.3	20.6	31.9	50.0	-18.1
22.430	11.3	20.6	31.9	50.0	-18.1
22.576	11.2	20.7	31.9	50.0	-18.1
25.754	11.0	20.9	31.9	50.0	-18.1
27.694	10.8	21.1	31.9	50.0	-18.1
29.328	10.7	21.2	31.9	50.0	-18.1
29.739	10.7	21.2	31.9	50.0	-18.1
9.469	11.7	20.1	31.8	50.0	-18.2
9.954	11.7	20.1	31.8	50.0	-18.2
29.429	10.6	21.2	31.8	50.0	-18.2
29.884	10.6	21.2	31.8	50.0	-18.2
29.959	10.6	21.2	31.8	50.0	-18.2
9.037	11.7	20.0	31.7	50.0	-18.3
14.111	11.5	20.2	31.7	50.0	-18.3
15.211	11.3	20.4	31.7	50.0	-18.3
15.562	11.3	20.4	31.7	50.0	-18.3
15.748	11.3	20.4	31.7	50.0	-18.3
16.536	11.3	20.4	31.7	50.0	-18.3
21.263	11.1	20.6	31.7	50.0	-18.3
27.821	10.6	21.1	31.7	50.0	-18.3
26.325	10.7	20.9	31.6	50.0	-18.4
27.228	10.5	21.1	31.6	50.0	-18.4
28.243	10.5	21.1	31.6	50.0	-18.4
19.800	11.0	20.5	31.5	50.0	-18.5
20.419	11.0	20.5	31.5	50.0	-18.5

23.135	10.8	20.7	31.5	60.0	-28.5	23.135	10.8	20.7	31.5	50.0	-18.5
24.411	10.7	20.8	31.5	60.0	-28.5	24.411	10.7	20.8	31.5	50.0	-18.5
25.851	10.6	20.9	31.5	60.0	-28.5	25.851	10.6	20.9	31.5	50.0	-18.5
27.485	10.4	21.1	31.5	60.0	-28.5	27.485	10.4	21.1	31.5	50.0	-18.5
27.914	10.4	21.1	31.5	60.0	-28.5	27.914	10.4	21.1	31.5	50.0	-18.5
11.268	11.3	20.1	31.4	60.0	-28.6	11.268	11.3	20.1	31.4	50.0	-18.6
16.058	11.0	20.4	31.4	60.0	-28.6	16.058	11.0	20.4	31.4	50.0	-18.6
16.218	11.0	20.4	31.4	60.0	-28.6	16.218	11.0	20.4	31.4	50.0	-18.6
20.106	10.9	20.5	31.4	60.0	-28.6	20.106	10.9	20.5	31.4	50.0	-18.6
20.740	10.8	20.6	31.4	60.0	-28.6	20.740	10.8	20.6	31.4	50.0	-18.6
21.005	10.8	20.6	31.4	60.0	-28.6	21.005	10.8	20.6	31.4	50.0	-18.6
23.863	10.6	20.8	31.4	60.0	-28.6	23.863	10.6	20.8	31.4	50.0	-18.6
24.173	10.6	20.8	31.4	60.0	-28.6	24.173	10.6	20.8	31.4	50.0	-18.6
24.602	10.6	20.8	31.4	60.0	-28.6	24.602	10.6	20.8	31.4	50.0	-18.6
25.031	10.6	20.8	31.4	60.0	-28.6	25.031	10.6	20.8	31.4	50.0	-18.6
25.706	10.5	20.9	31.4	60.0	-28.6	25.706	10.5	20.9	31.4	50.0	-18.6
26.609	10.5	20.9	31.4	60.0	-28.6	26.609	10.5	20.9	31.4	50.0	-18.6
28.982	10.2	21.2	31.4	60.0	-28.6	28.982	10.2	21.2	31.4	50.0	-18.6
7.335	11.4	19.9	31.3	60.0	-28.7	7.335	11.4	19.9	31.3	50.0	-18.7
12.906	11.1	20.2	31.3	60.0	-28.7	12.906	11.1	20.2	31.3	50.0	-18.7
15.125	10.9	20.4	31.3	60.0	-28.7	15.125	10.9	20.4	31.3	50.0	-18.7
15.987	10.9	20.4	31.3	60.0	-28.7	15.987	10.9	20.4	31.3	50.0	-18.7
18.394	10.8	20.5	31.3	60.0	-28.7	18.394	10.8	20.5	31.3	50.0	-18.7
20.975	10.7	20.6	31.3	60.0	-28.7	20.975	10.7	20.6	31.3	50.0	-18.7
22.490	10.6	20.7	31.3	60.0	-28.7	22.490	10.6	20.7	31.3	50.0	-18.7
25.385	10.5	20.8	31.3	60.0	-28.7	25.385	10.5	20.8	31.3	50.0	-18.7
25.978	10.4	20.9	31.3	60.0	-28.7	25.978	10.4	20.9	31.3	50.0	-18.7
26.452	10.4	20.9	31.3	60.0	-28.7	26.452	10.4	20.9	31.3	50.0	-18.7
26.844	10.4	20.9	31.3	60.0	-28.7	26.844	10.4	20.9	31.3	50.0	-18.7
12.256	11.0	20.2	31.2	60.0	-28.8	12.256	11.0	20.2	31.2	50.0	-18.8
12.435	11.0	20.2	31.2	60.0	-28.8	12.435	11.0	20.2	31.2	50.0	-18.8
16.991	10.8	20.4	31.2	60.0	-28.8	16.991	10.8	20.4	31.2	50.0	-18.8
17.524	10.8	20.4	31.2	60.0	-28.8	17.524	10.8	20.4	31.2	50.0	-18.8
17.991	10.8	20.4	31.2	60.0	-28.8	17.991	10.8	20.4	31.2	50.0	-18.8
18.688	10.7	20.5	31.2	60.0	-28.8	18.688	10.7	20.5	31.2	50.0	-18.8
21.139	10.6	20.6	31.2	60.0	-28.8	21.139	10.6	20.6	31.2	50.0	-18.8
25.277	10.4	20.8	31.2	60.0	-28.8	25.277	10.4	20.8	31.2	50.0	-18.8
27.661	10.1	21.1	31.2	60.0	-28.8	27.661	10.1	21.1	31.2	50.0	-18.8
14.834	10.7	20.4	31.1	60.0	-28.9	14.834	10.7	20.4	31.1	50.0	-18.9
17.737	10.7	20.4	31.1	60.0	-28.9	17.737	10.7	20.4	31.1	50.0	-18.9
17.815	10.7	20.4	31.1	60.0	-28.9	17.815	10.7	20.4	31.1	50.0	-18.9
18.464	10.6	20.5	31.1	60.0	-28.9	18.464	10.6	20.5	31.1	50.0	-18.9
23.423	10.3	20.8	31.1	60.0	-28.9	23.423	10.3	20.8	31.1	50.0	-18.9
23.520	10.3	20.8	31.1	60.0	-28.9	23.520	10.3	20.8	31.1	50.0	-18.9
23.661	10.3	20.8	31.1	60.0	-28.9	23.661	10.3	20.8	31.1	50.0	-18.9
26.150	10.2	20.9	31.1	60.0	-28.9	26.150	10.2	20.9	31.1	50.0	-18.9
27.056	10.1	21.0	31.1	60.0	-28.9	27.056	10.1	21.0	31.1	50.0	-18.9
28.463	10.0	21.1	31.1	60.0	-28.9	28.463	10.0	21.1	31.1	50.0	-18.9
5.925	11.1	19.9	31.0	60.0	-29.0	5.925	11.1	19.9	31.0	50.0	-19.0
7.127	11.1	19.9	31.0	60.0	-29.0	7.127	11.1	19.9	31.0	50.0	-19.0
12.409	10.8	20.2	31.0	60.0	-29.0	12.409	10.8	20.2	31.0	50.0	-19.0
15.140	10.6	20.4	31.0	60.0	-29.0	15.140	10.6	20.4	31.0	50.0	-19.0
15.155	10.6	20.4	31.0	60.0	-29.0	15.155	10.6	20.4	31.0	50.0	-19.0
19.087	10.5	20.5	31.0	60.0	-29.0	19.087	10.5	20.5	31.0	50.0	-19.0
19.140	10.5	20.5	31.0	60.0	-29.0	19.140	10.5	20.5	31.0	50.0	-19.0
19.852	10.5	20.5	31.0	60.0	-29.0	19.852	10.5	20.5	31.0	50.0	-19.0
19.905	10.5	20.5	31.0	60.0	-29.0	19.905	10.5	20.5	31.0	50.0	-19.0
19.975	10.5	20.5	31.0	60.0	-29.0	19.975	10.5	20.5	31.0	50.0	-19.0
22.087	10.4	20.6	31.0	60.0	-29.0	22.087	10.4	20.6	31.0	50.0	-19.0
23.348	10.2	20.8	31.0	60.0	-29.0	23.348	10.2	20.8	31.0	50.0	-19.0
25.430	10.2	20.8	31.0	60.0	-29.0	25.430	10.2	20.8	31.0	50.0	-19.0
26.023	10.1	20.9	31.0	60.0	-29.0	26.023	10.1	20.9	31.0	50.0	-19.0
27.153	9.9	21.1	31.0	60.0	-29.0	27.153	9.9	21.1	31.0	50.0	-19.0
27.396	9.9	21.1	31.0	60.0	-29.0	27.396	9.9	21.1	31.0	50.0	-19.0
27.795	9.9	21.1	31.0	60.0	-29.0	27.795	9.9	21.1	31.0	50.0	-19.0
7.455	11.0	19.9	30.9	60.0	-29.1	7.455	11.0	19.9	30.9	50.0	-19.1
9.626	10.8	20.1	30.9	60.0	-29.1	9.626	10.8	20.1	30.9	50.0	-19.1
12.883	10.7	20.2	30.9	60.0	-29.1	12.883	10.7	20.2	30.9	50.0	-19.1
14.625	10.6	20.3	30.9	60.0	-29.1	14.625	10.6	20.3	30.9	50.0	-19.1
15.760	10.5	20.4	30.9	60.0	-29.1	15.760	10.5	20.4	30.9	50.0	-19.1
17.569	10.5	20.4	30.9	60.0	-29.1	17.569	10.5	20.4	30.9	50.0	-19.1
20.598	10.4	20.5	30.9	60.0	-29.1	20.598	10.4	20.5	30.9	50.0	-19.1
21.072	10.3	20.6	30.9	60.0	-29.1	21.072	10.3	20.6	30.9	50.0	-19.1
21.236	10.3	20.6	30.9	60.0	-29.1	21.236	10.3	20.6	30.9	50.0	-19.1
22.318	10.3	20.6	30.9	60.0	-29.1	22.318	10.3	20.6	30.9	50.0	-19.1
22.550	10.2	20.7	30.9	60.0	-29.1	22.550	10.2	20.7	30.9	50.0	-19.1
22.647	10.2	20.7	30.9	60.0	-29.1	22.647	10.2	20.7	30.9	50.0	-19.1
24.008	10.1	20.8	30.9	60.0	-29.1	24.008	10.1	20.8	30.9	50.0	-19.1
7.227	10.9	19.9	30.8	60.0	-29.2	7.227	10.9	19.9	30.8	50.0	-19.2
10.607	10.7	20.1	30.8	60.0	-29.2	10.607	10.7	20.1	30.8	50.0	-19.2
11.063	10.7	20.1	30.8	60.0	-29.2	11.063	10.7	20.1	30.8	50.0	-19.2

11.368	10.6	20.2	30.8	60.0	-29.2	11.368	10.6	20.2	30.8	50.0	-19.2
12.003	10.6	20.2	30.8	60.0	-29.2	12.003	10.6	20.2	30.8	50.0	-19.2
12.734	10.6	20.2	30.8	60.0	-29.2	12.734	10.6	20.2	30.8	50.0	-19.2
12.842	10.6	20.2	30.8	60.0	-29.2	12.842	10.6	20.2	30.8	50.0	-19.2
13.842	10.6	20.2	30.8	60.0	-29.2	13.842	10.6	20.2	30.8	50.0	-19.2
18.233	10.4	20.4	30.8	60.0	-29.2	18.233	10.4	20.4	30.8	50.0	-19.2
19.039	10.3	20.5	30.8	60.0	-29.2	19.039	10.3	20.5	30.8	50.0	-19.2
20.207	10.3	20.5	30.8	60.0	-29.2	20.207	10.3	20.5	30.8	50.0	-19.2
20.237	10.3	20.5	30.8	60.0	-29.2	20.237	10.3	20.5	30.8	50.0	-19.2
21.733	10.2	20.6	30.8	60.0	-29.2	21.733	10.2	20.6	30.8	50.0	-19.2
21.803	10.2	20.6	30.8	60.0	-29.2	21.803	10.2	20.6	30.8	50.0	-19.2
22.602	10.1	20.7	30.8	60.0	-29.2	22.602	10.1	20.7	30.8	50.0	-19.2
23.296	10.0	20.8	30.8	60.0	-29.2	23.296	10.0	20.8	30.8	50.0	-19.2
23.949	10.0	20.8	30.8	60.0	-29.2	23.949	10.0	20.8	30.8	50.0	-19.2
24.214	10.0	20.8	30.8	60.0	-29.2	24.214	10.0	20.8	30.8	50.0	-19.2
25.143	10.0	20.8	30.8	60.0	-29.2	25.143	10.0	20.8	30.8	50.0	-19.2
26.765	9.9	20.9	30.8	60.0	-29.2	26.765	9.9	20.9	30.8	50.0	-19.2
9.525	10.6	20.1	30.7	60.0	-29.3	9.525	10.6	20.1	30.7	50.0	-19.3
10.503	10.6	20.1	30.7	60.0	-29.3	10.503	10.6	20.1	30.7	50.0	-19.3
13.111	10.5	20.2	30.7	60.0	-29.3	13.111	10.5	20.2	30.7	50.0	-19.3
16.681	10.3	20.4	30.7	60.0	-29.3	16.681	10.3	20.4	30.7	50.0	-19.3
17.039	10.3	20.4	30.7	60.0	-29.3	17.039	10.3	20.4	30.7	50.0	-19.3
17.118	10.3	20.4	30.7	60.0	-29.3	17.118	10.3	20.4	30.7	50.0	-19.3
17.174	10.3	20.4	30.7	60.0	-29.3	17.174	10.3	20.4	30.7	50.0	-19.3
18.737	10.2	20.5	30.7	60.0	-29.3	18.737	10.2	20.5	30.7	50.0	-19.3
18.841	10.2	20.5	30.7	60.0	-29.3	18.841	10.2	20.5	30.7	50.0	-19.3
19.248	10.2	20.5	30.7	60.0	-29.3	19.248	10.2	20.5	30.7	50.0	-19.3
19.274	10.2	20.5	30.7	60.0	-29.3	19.274	10.2	20.5	30.7	50.0	-19.3
22.859	10.0	20.7	30.7	60.0	-29.3	22.859	10.0	20.7	30.7	50.0	-19.3
23.050	10.0	20.7	30.7	60.0	-29.3	23.050	10.0	20.7	30.7	50.0	-19.3
24.885	9.9	20.8	30.7	60.0	-29.3	24.885	9.9	20.8	30.7	50.0	-19.3
27.582	9.6	21.1	30.7	60.0	-29.3	27.582	9.6	21.1	30.7	50.0	-19.3
6.190	10.7	19.9	30.6	60.0	-29.4	6.190	10.7	19.9	30.6	50.0	-19.4
6.448	10.7	19.9	30.6	60.0	-29.4	6.448	10.7	19.9	30.6	50.0	-19.4
6.940	10.7	19.9	30.6	60.0	-29.4	6.940	10.7	19.9	30.6	50.0	-19.4
9.205	10.6	20.0	30.6	60.0	-29.4	9.205	10.6	20.0	30.6	50.0	-19.4
11.495	10.4	20.2	30.6	60.0	-29.4	11.495	10.4	20.2	30.6	50.0	-19.4
14.163	10.4	20.2	30.6	60.0	-29.4	14.163	10.4	20.2	30.6	50.0	-19.4
14.666	10.3	20.3	30.6	60.0	-29.4	14.666	10.3	20.3	30.6	50.0	-19.4
14.685	10.3	20.3	30.6	60.0	-29.4	14.685	10.3	20.3	30.6	50.0	-19.4
17.315	10.2	20.4	30.6	60.0	-29.4	17.315	10.2	20.4	30.6	50.0	-19.4
17.375	10.2	20.4	30.6	60.0	-29.4	17.375	10.2	20.4	30.6	50.0	-19.4
20.274	10.1	20.5	30.6	60.0	-29.4	20.274	10.1	20.5	30.6	50.0	-19.4
21.389	10.0	20.6	30.6	60.0	-29.4	21.389	10.0	20.6	30.6	50.0	-19.4
21.964	10.0	20.6	30.6	60.0	-29.4	21.964	10.0	20.6	30.6	50.0	-19.4
23.214	9.9	20.7	30.6	60.0	-29.4	23.214	9.9	20.7	30.6	50.0	-19.4
24.508	9.8	20.8	30.6	60.0	-29.4	24.508	9.8	20.8	30.6	50.0	-19.4
25.482	9.8	20.8	30.6	60.0	-29.4	25.482	9.8	20.8	30.6	50.0	-19.4
26.687	9.7	20.9	30.6	60.0	-29.4	26.687	9.7	20.9	30.6	50.0	-19.4
6.280	10.6	19.9	30.5	60.0	-29.5	6.280	10.6	19.9	30.5	50.0	-19.5
7.365	10.6	19.9	30.5	60.0	-29.5	7.365	10.6	19.9	30.5	50.0	-19.5
10.648	10.4	20.1	30.5	60.0	-29.5	10.648	10.4	20.1	30.5	50.0	-19.5
13.521	10.3	20.2	30.5	60.0	-29.5	13.521	10.3	20.2	30.5	50.0	-19.5
17.968	10.1	20.4	30.5	60.0	-29.5	17.968	10.1	20.4	30.5	50.0	-19.5
19.475	10.0	20.5	30.5	60.0	-29.5	19.475	10.0	20.5	30.5	50.0	-19.5
22.124	9.9	20.6	30.5	60.0	-29.5	22.124	9.9	20.6	30.5	50.0	-19.5
22.147	9.9	20.6	30.5	60.0	-29.5	22.147	9.9	20.6	30.5	50.0	-19.5
7.485	10.5	19.9	30.4	60.0	-29.6	7.485	10.5	19.9	30.4	50.0	-19.6
11.122	10.3	20.1	30.4	60.0	-29.6	11.122	10.3	20.1	30.4	50.0	-19.6
11.548	10.2	20.2	30.4	60.0	-29.6	11.548	10.2	20.2	30.4	50.0	-19.6
12.141	10.2	20.2	30.4	60.0	-29.6	12.141	10.2	20.2	30.4	50.0	-19.6
12.469	10.2	20.2	30.4	60.0	-29.6	12.469	10.2	20.2	30.4	50.0	-19.6
12.588	10.2	20.2	30.4	60.0	-29.6	12.588	10.2	20.2	30.4	50.0	-19.6
17.871	10.0	20.4	30.4	60.0	-29.6	17.871	10.0	20.4	30.4	50.0	-19.6
19.714	9.9	20.5	30.4	60.0	-29.6	19.714	9.9	20.5	30.4	50.0	-19.6
20.509	9.9	20.5	30.4	60.0	-29.6	20.509	9.9	20.5	30.4	50.0	-19.6
20.930	9.8	20.6	30.4	60.0	-29.6	20.930	9.8	20.6	30.4	50.0	-19.6
25.512	9.6	20.8	30.4	60.0	-29.6	25.512	9.6	20.8	30.4	50.0	-19.6
26.060	9.5	20.9	30.4	60.0	-29.6	26.060	9.5	20.9	30.4	50.0	-19.6
5.146	10.5	19.8	30.3	60.0	-29.7	5.146	10.5	19.8	30.3	50.0	-19.7
6.634	10.4	19.9	30.3	60.0	-29.7	6.634	10.4	19.9	30.3	50.0	-19.7
8.100	10.3	20.0	30.3	60.0	-29.7	8.100	10.3	20.0	30.3	50.0	-19.7
8.235	10.3	20.0	30.3	60.0	-29.7	8.235	10.3	20.0	30.3	50.0	-19.7
12.021	10.1	20.2	30.3	60.0	-29.7	12.021	10.1	20.2	30.3	50.0	-19.7
14.402	10.1	20.2	30.3	60.0	-29.7	14.402	10.1	20.2	30.3	50.0	-19.7
14.808	9.9	20.4	30.3	60.0	-29.7	14.808	9.9	20.4	30.3	50.0	-19.7
15.786	9.9	20.4	30.3	60.0	-29.7	15.786	9.9	20.4	30.3	50.0	-19.7
15.901	9.9	20.4	30.3	60.0	-29.7	15.901	9.9	20.4	30.3	50.0	-19.7
16.812	9.9	20.4	30.3	60.0	-29.7	16.812	9.9	20.4	30.3	50.0	-19.7
17.218	9.9	20.4	30.3	60.0	-29.7	17.218	9.9	20.4	30.3	50.0	-19.7
18.591	9.8	20.5	30.3	60.0	-29.7	18.591	9.8	20.5	30.3	50.0	-19.7

21.535	9.7	20.6	30.3	60.0	-29.7	21.535	9.7	20.6	30.3	50.0	-19.7
24.538	9.5	20.8	30.3	60.0	-29.7	24.538	9.5	20.8	30.3	50.0	-19.7
5.612	10.3	19.9	30.2	60.0	-29.8	5.612	10.3	19.9	30.2	50.0	-19.8
6.850	10.3	19.9	30.2	60.0	-29.8	6.850	10.3	19.9	30.2	50.0	-19.8
8.820	10.2	20.0	30.2	60.0	-29.8	8.820	10.2	20.0	30.2	50.0	-19.8
9.705	10.1	20.1	30.2	60.0	-29.8	9.705	10.1	20.1	30.2	50.0	-19.8
10.921	10.1	20.1	30.2	60.0	-29.8	10.921	10.1	20.1	30.2	50.0	-19.8
11.163	10.1	20.1	30.2	60.0	-29.8	11.163	10.1	20.1	30.2	50.0	-19.8
14.342	10.0	20.2	30.2	60.0	-29.8	14.342	10.0	20.2	30.2	50.0	-19.8
14.551	9.9	20.3	30.2	60.0	-29.8	14.551	9.9	20.3	30.2	50.0	-19.8
15.409	9.8	20.4	30.2	60.0	-29.8	15.409	9.8	20.4	30.2	50.0	-19.8
16.412	9.8	20.4	30.2	60.0	-29.8	16.412	9.8	20.4	30.2	50.0	-19.8
5.813	10.2	19.9	30.1	60.0	-29.9	5.813	10.2	19.9	30.1	50.0	-19.9
5.847	10.2	19.9	30.1	60.0	-29.9	5.847	10.2	19.9	30.1	50.0	-19.9
6.772	10.2	19.9	30.1	60.0	-29.9	6.772	10.2	19.9	30.1	50.0	-19.9
8.436	10.1	20.0	30.1	60.0	-29.9	8.436	10.1	20.0	30.1	50.0	-19.9
8.541	10.1	20.0	30.1	60.0	-29.9	8.541	10.1	20.0	30.1	50.0	-19.9
9.160	10.1	20.0	30.1	60.0	-29.9	9.160	10.1	20.0	30.1	50.0	-19.9
10.122	10.0	20.1	30.1	60.0	-29.9	10.122	10.0	20.1	30.1	50.0	-19.9
10.361	10.0	20.1	30.1	60.0	-29.9	10.361	10.0	20.1	30.1	50.0	-19.9
11.794	9.9	20.2	30.1	60.0	-29.9	11.794	9.9	20.2	30.1	50.0	-19.9
12.182	9.9	20.2	30.1	60.0	-29.9	12.182	9.9	20.2	30.1	50.0	-19.9
13.387	9.9	20.2	30.1	60.0	-29.9	13.387	9.9	20.2	30.1	50.0	-19.9
13.793	9.9	20.2	30.1	60.0	-29.9	13.793	9.9	20.2	30.1	50.0	-19.9
14.913	9.7	20.4	30.1	60.0	-29.9	14.913	9.7	20.4	30.1	50.0	-19.9
15.476	9.7	20.4	30.1	60.0	-29.9	15.476	9.7	20.4	30.1	50.0	-19.9
5.418	10.1	19.9	30.0	60.0	-30.0	5.418	10.1	19.9	30.0	50.0	-20.0
5.694	10.1	19.9	30.0	60.0	-30.0	5.694	10.1	19.9	30.0	50.0	-20.0
8.891	10.0	20.0	30.0	60.0	-30.0	8.891	10.0	20.0	30.0	50.0	-20.0
9.764	9.9	20.1	30.0	60.0	-30.0	9.764	9.9	20.1	30.0	50.0	-20.0
13.305	9.8	20.2	30.0	60.0	-30.0	13.305	9.8	20.2	30.0	50.0	-20.0
5.642	10.0	19.9	29.9	60.0	-30.1	5.642	10.0	19.9	29.9	50.0	-20.1
7.835	10.0	19.9	29.9	60.0	-30.1	7.835	10.0	19.9	29.9	50.0	-20.1
7.910	9.9	20.0	29.9	60.0	-30.1	7.910	9.9	20.0	29.9	50.0	-20.1
8.175	9.9	20.0	29.9	60.0	-30.1	8.175	9.9	20.0	29.9	50.0	-20.1
9.193	9.9	20.0	29.9	60.0	-30.1	9.193	9.9	20.0	29.9	50.0	-20.1
13.167	9.7	20.2	29.9	60.0	-30.1	13.167	9.7	20.2	29.9	50.0	-20.1
16.580	9.5	20.4	29.9	60.0	-30.1	16.580	9.5	20.4	29.9	50.0	-20.1
5.384	9.9	19.9	29.8	60.0	-30.2	5.384	9.9	19.9	29.8	50.0	-20.2
6.067	9.9	19.9	29.8	60.0	-30.2	6.067	9.9	19.9	29.8	50.0	-20.2
6.686	9.9	19.9	29.8	60.0	-30.2	6.686	9.9	19.9	29.8	50.0	-20.2
7.015	9.9	19.9	29.8	60.0	-30.2	7.015	9.9	19.9	29.8	50.0	-20.2
7.660	9.9	19.9	29.8	60.0	-30.2	7.660	9.9	19.9	29.8	50.0	-20.2
8.305	9.8	20.0	29.8	60.0	-30.2	8.305	9.8	20.0	29.8	50.0	-20.2
8.738	9.8	20.0	29.8	60.0	-30.2	8.738	9.8	20.0	29.8	50.0	-20.2
8.753	9.8	20.0	29.8	60.0	-30.2	8.753	9.8	20.0	29.8	50.0	-20.2
5.713	9.8	19.9	29.7	60.0	-30.3	5.713	9.8	19.9	29.7	50.0	-20.3
6.015	9.8	19.9	29.7	60.0	-30.3	6.015	9.8	19.9	29.7	50.0	-20.3
10.163	9.6	20.1	29.7	60.0	-30.3	10.163	9.6	20.1	29.7	50.0	-20.3
7.988	9.6	20.0	29.6	60.0	-30.4	7.988	9.6	20.0	29.6	50.0	-20.4
8.660	9.6	20.0	29.6	60.0	-30.4	8.660	9.6	20.0	29.6	50.0	-20.4
18.293	9.2	20.4	29.6	60.0	-30.4	18.293	9.2	20.4	29.6	50.0	-20.4
7.149	9.6	19.9	29.5	60.0	-30.5	7.149	9.6	19.9	29.5	50.0	-20.5
6.884	9.5	19.9	29.4	60.0	-30.6	6.884	9.5	19.9	29.4	50.0	-20.6
0.154	11.2	19.7	30.9	65.8	-34.9	0.154	11.2	19.7	30.9	55.8	-24.9

AC - POWERLINE CONDUCTED EMISSIONS

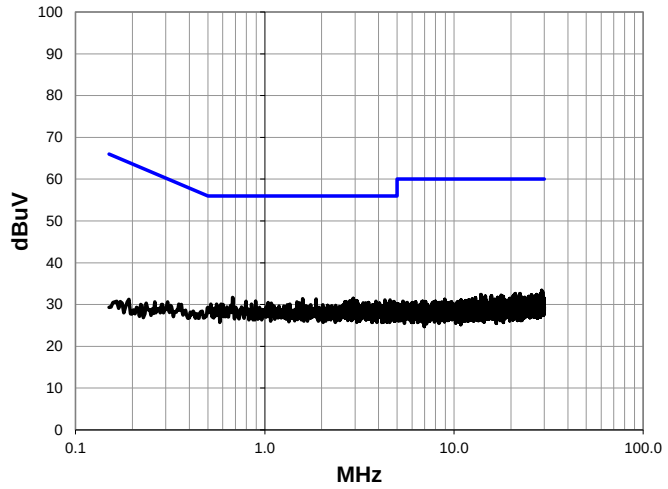
EmiR5 2017.07.11 PSA-ESCI 2017.06.01

Work Order:	SCHW0219	**Date:**	07/28/17		
Project:	None	**Temperature:**	22.7 °C		
Job Site:	EV07	**Humidity:**	42.3% RH		
Serial Number:	A02654144	**Barometric Pres.:**	1022 mbar	**Tested by:**	Mark Baytan
EUT:	9630-9110				
Configuration:	6				
Customer:	Schweitzer Engineering Laboratories, Inc.				
Attendees:	Allan Davis				
EUT Power:	110VAC/60Hz				
Operating Mode:	Transmitting continuously at Mid Ch (915 MHz)				
Deviations:	None				
Comments:	Power level setting: 27 dBm. 3.5VDC input to DC voltage regulator. 1W SMA terminator on antenna port.				

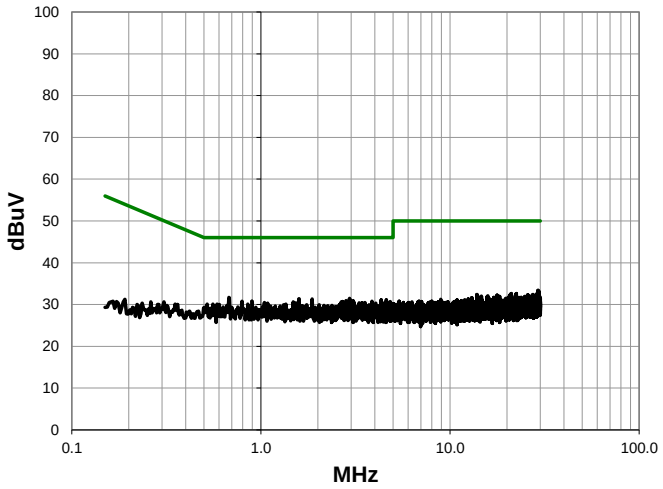
Test Specifications	**Class B**	**Test Method**	
FCC 15.207:2017		ANSI C63.10:2013	

Run #	7	**Line:**	Neutral	**Ext. Attenuation:**	0	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.676	12.2	19.5	31.7	56.0	-24.3
2.937	11.7	19.8	31.5	56.0	-24.5
1.586	11.8	19.6	31.4	56.0	-24.6
1.866	11.7	19.6	31.3	56.0	-24.7
2.967	11.3	19.8	31.1	56.0	-24.9

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.676	12.2	19.5	31.7	46.0	-14.3
2.937	11.7	19.8	31.5	46.0	-14.5
1.586	11.8	19.6	31.4	46.0	-14.6
1.866	11.7	19.6	31.3	46.0	-14.7
2.967	11.3	19.8	31.1	46.0	-14.9

4.325	11.3	19.8	31.1	56.0	-24.9	4.325	11.3	19.8	31.1	46.0	-14.9
4.597	11.3	19.8	31.1	56.0	-24.9	4.597	11.3	19.8	31.1	46.0	-14.9
2.821	11.2	19.7	30.9	56.0	-25.1	2.821	11.2	19.7	30.9	46.0	-15.1
3.064	11.1	19.8	30.9	56.0	-25.1	3.064	11.1	19.8	30.9	46.0	-15.1
0.795	11.3	19.5	30.8	56.0	-25.2	0.795	11.3	19.5	30.8	46.0	-15.2
0.896	11.3	19.5	30.8	56.0	-25.2	0.896	11.3	19.5	30.8	46.0	-15.2
3.866	11.0	19.8	30.8	56.0	-25.2	3.866	11.0	19.8	30.8	46.0	-15.2
2.698	11.0	19.7	30.7	56.0	-25.3	2.698	11.0	19.7	30.7	46.0	-15.3
3.079	10.9	19.8	30.7	56.0	-25.3	3.079	10.9	19.8	30.7	46.0	-15.3
4.813	10.9	19.8	30.7	56.0	-25.3	4.813	10.9	19.8	30.7	46.0	-15.3
1.478	11.0	19.6	30.6	56.0	-25.4	1.478	11.0	19.6	30.6	46.0	-15.4
2.653	10.9	19.7	30.6	56.0	-25.4	2.653	10.9	19.7	30.6	46.0	-15.4
1.042	11.0	19.5	30.5	56.0	-25.5	1.042	11.0	19.5	30.5	46.0	-15.5
3.538	10.7	19.8	30.5	56.0	-25.5	3.538	10.7	19.8	30.5	46.0	-15.5
1.527	10.8	19.6	30.4	56.0	-25.6	1.527	10.8	19.6	30.4	46.0	-15.6
3.034	10.6	19.8	30.4	56.0	-25.6	3.034	10.6	19.8	30.4	46.0	-15.6
3.306	10.6	19.8	30.4	56.0	-25.6	3.306	10.6	19.8	30.4	46.0	-15.6
3.422	10.6	19.8	30.4	56.0	-25.6	3.422	10.6	19.8	30.4	46.0	-15.6
4.515	10.6	19.8	30.4	56.0	-25.6	4.515	10.6	19.8	30.4	46.0	-15.6
4.720	10.6	19.8	30.4	56.0	-25.6	4.720	10.6	19.8	30.4	46.0	-15.6
1.083	10.8	19.5	30.3	56.0	-25.7	1.083	10.8	19.5	30.3	46.0	-15.7
4.037	10.5	19.8	30.3	56.0	-25.7	4.037	10.5	19.8	30.3	46.0	-15.7
4.627	10.4	19.8	30.2	56.0	-25.8	4.627	10.4	19.8	30.2	46.0	-15.8
4.836	10.4	19.8	30.2	56.0	-25.8	4.836	10.4	19.8	30.2	46.0	-15.8
0.519	10.6	19.5	30.1	56.0	-25.9	0.519	10.6	19.5	30.1	46.0	-15.9
0.557	10.6	19.5	30.1	56.0	-25.9	0.557	10.6	19.5	30.1	46.0	-15.9
0.587	10.6	19.5	30.1	56.0	-25.9	0.587	10.6	19.5	30.1	46.0	-15.9
0.851	10.6	19.5	30.1	56.0	-25.9	0.851	10.6	19.5	30.1	46.0	-15.9
1.355	10.6	19.5	30.1	56.0	-25.9	1.355	10.6	19.5	30.1	46.0	-15.9
4.922	10.3	19.8	30.1	56.0	-25.9	4.922	10.3	19.8	30.1	46.0	-15.9
1.318	10.4	19.5	29.9	56.0	-26.1	1.318	10.4	19.5	29.9	46.0	-16.1
1.747	10.3	19.6	29.9	56.0	-26.1	1.747	10.3	19.6	29.9	46.0	-16.1
2.027	10.3	19.6	29.9	56.0	-26.1	2.027	10.3	19.6	29.9	46.0	-16.1
3.720	10.1	19.8	29.9	56.0	-26.1	3.720	10.1	19.8	29.9	46.0	-16.1
2.150	10.2	19.6	29.8	56.0	-26.2	2.150	10.2	19.6	29.8	46.0	-16.2
2.374	10.2	19.6	29.8	56.0	-26.2	2.374	10.2	19.6	29.8	46.0	-16.2
1.650	10.1	19.6	29.7	56.0	-26.3	1.650	10.1	19.6	29.7	46.0	-16.3
2.258	10.1	19.6	29.7	56.0	-26.3	2.258	10.1	19.6	29.7	46.0	-16.3
2.762	10.0	19.7	29.7	56.0	-26.3	2.762	10.0	19.7	29.7	46.0	-16.3
4.183	9.9	19.8	29.7	56.0	-26.3	4.183	9.9	19.8	29.7	46.0	-16.3
1.191	10.1	19.5	29.6	56.0	-26.4	1.191	10.1	19.5	29.6	46.0	-16.4
2.471	9.8	19.7	29.5	56.0	-26.5	2.471	9.8	19.7	29.5	46.0	-16.5
4.425	9.6	19.8	29.4	56.0	-26.6	4.425	9.6	19.8	29.4	46.0	-16.6
29.168	12.2	21.2	33.4	60.0	-26.6	29.168	12.2	21.2	33.4	50.0	-16.6
3.914	9.5	19.8	29.3	56.0	-26.7	3.914	9.5	19.8	29.3	46.0	-16.7
2.083	9.5	19.6	29.1	56.0	-26.9	2.083	9.5	19.6	29.1	46.0	-16.9
29.515	11.9	21.2	33.1	60.0	-26.9	29.515	11.9	21.2	33.1	50.0	-16.9
21.046	12.0	20.6	32.6	60.0	-27.4	21.046	12.0	20.6	32.6	50.0	-17.4
22.344	12.0	20.6	32.6	60.0	-27.4	22.344	12.0	20.6	32.6	50.0	-17.4
28.806	11.5	21.1	32.6	60.0	-27.4	28.806	11.5	21.1	32.6	50.0	-17.4
13.868	12.2	20.2	32.4	60.0	-27.6	13.868	12.2	20.2	32.4	50.0	-17.6
27.388	11.3	21.1	32.4	60.0	-27.6	27.388	11.3	21.1	32.4	50.0	-17.6
28.929	11.3	21.1	32.4	60.0	-27.6	28.929	11.3	21.1	32.4	50.0	-17.6
22.188	11.7	20.6	32.3	60.0	-27.7	22.188	11.7	20.6	32.3	50.0	-17.7
25.702	11.4	20.9	32.3	60.0	-27.7	25.702	11.4	20.9	32.3	50.0	-17.7
17.722	11.8	20.4	32.2	60.0	-27.8	17.722	11.8	20.4	32.2	50.0	-17.8
20.722	11.6	20.6	32.2	60.0	-27.8	20.722	11.6	20.6	32.2	50.0	-17.8
28.329	11.1	21.1	32.2	60.0	-27.8	28.329	11.1	21.1	32.2	50.0	-17.8
15.786	11.7	20.4	32.1	60.0	-27.9	15.786	11.7	20.4	32.1	50.0	-17.9
14.655	11.7	20.3	32.0	60.0	-28.0	14.655	11.7	20.3	32.0	50.0	-18.0
17.886	11.6	20.4	32.0	60.0	-28.0	17.886	11.6	20.4	32.0	50.0	-18.0
22.132	11.4	20.6	32.0	60.0	-28.0	22.132	11.4	20.6	32.0	50.0	-18.0
25.993	11.1	20.9	32.0	60.0	-28.0	25.993	11.1	20.9	32.0	50.0	-18.0
26.944	11.0	21.0	32.0	60.0	-28.0	26.944	11.0	21.0	32.0	50.0	-18.0
27.668	10.9	21.1	32.0	60.0	-28.0	27.668	10.9	21.1	32.0	50.0	-18.0
14.002	11.7	20.2	31.9	60.0	-28.1	14.002	11.7	20.2	31.9	50.0	-18.1
18.267	11.5	20.4	31.9	60.0	-28.1	18.267	11.5	20.4	31.9	50.0	-18.1
20.516	11.4	20.5	31.9	60.0	-28.1	20.516	11.4	20.5	31.9	50.0	-18.1
24.863	11.1	20.8	31.9	60.0	-28.1	24.863	11.1	20.8	31.9	50.0	-18.1
26.713	11.0	20.9	31.9	60.0	-28.1	26.713	11.0	20.9	31.9	50.0	-18.1
27.280	10.8	21.1	31.9	60.0	-28.1	27.280	10.8	21.1	31.9	50.0	-18.1
29.030	10.7	21.2	31.9	60.0	-28.1	29.030	10.7	21.2	31.9	50.0	-18.1
29.698	10.7	21.2	31.9	60.0	-28.1	29.698	10.7	21.2	31.9	50.0	-18.1
15.644	11.4	20.4	31.8	60.0	-28.2	15.644	11.4	20.4	31.8	50.0	-18.2
22.210	11.2	20.6	31.8	60.0	-28.2	22.210	11.2	20.6	31.8	50.0	-18.2
26.430	10.9	20.9	31.8	60.0	-28.2	26.430	10.9	20.9	31.8	50.0	-18.2
29.586	10.6	21.2	31.8	60.0	-28.2	29.586	10.6	21.2	31.8	50.0	-18.2
17.021	11.3	20.4	31.7	60.0	-28.3	17.021	11.3	20.4	31.7	50.0	-18.3
23.035	11.0	20.7	31.7	60.0	-28.3	23.035	11.0	20.7	31.7	50.0	-18.3
23.706	10.9	20.8	31.7	60.0	-28.3	23.706	10.9	20.8	31.7	50.0	-18.3
29.101	10.5	21.2	31.7	60.0	-28.3	29.101	10.5	21.2	31.7	50.0	-18.3

29.127	10.5	21.2	31.7	60.0	-28.3	29.127	10.5	21.2	31.7	50.0	-18.3
13.006	11.4	20.2	31.6	60.0	-28.4	13.006	11.4	20.2	31.6	50.0	-18.4
14.573	11.3	20.3	31.6	60.0	-28.4	14.573	11.3	20.3	31.6	50.0	-18.4
20.763	11.0	20.6	31.6	60.0	-28.4	20.763	11.0	20.6	31.6	50.0	-18.4
22.829	10.9	20.7	31.6	60.0	-28.4	22.829	10.9	20.7	31.6	50.0	-18.4
26.512	10.7	20.9	31.6	60.0	-28.4	26.512	10.7	20.9	31.6	50.0	-18.4
26.982	10.6	21.0	31.6	60.0	-28.4	26.982	10.6	21.0	31.6	50.0	-18.4
28.071	10.5	21.1	31.6	60.0	-28.4	28.071	10.5	21.1	31.6	50.0	-18.4
29.228	10.4	21.2	31.6	60.0	-28.4	29.228	10.4	21.2	31.6	50.0	-18.4
19.774	11.0	20.5	31.5	60.0	-28.5	19.774	11.0	20.5	31.5	50.0	-18.5
20.225	11.0	20.5	31.5	60.0	-28.5	20.225	11.0	20.5	31.5	50.0	-18.5
22.068	10.9	20.6	31.5	60.0	-28.5	22.068	10.9	20.6	31.5	50.0	-18.5
23.378	10.7	20.8	31.5	60.0	-28.5	23.378	10.7	20.8	31.5	50.0	-18.5
23.773	10.7	20.8	31.5	60.0	-28.5	23.773	10.7	20.8	31.5	50.0	-18.5
26.049	10.6	20.9	31.5	60.0	-28.5	26.049	10.6	20.9	31.5	50.0	-18.5
26.344	10.6	20.9	31.5	60.0	-28.5	26.344	10.6	20.9	31.5	50.0	-18.5
29.974	10.3	21.2	31.5	60.0	-28.5	29.974	10.3	21.2	31.5	50.0	-18.5
17.196	11.0	20.4	31.4	60.0	-28.6	17.196	11.0	20.4	31.4	50.0	-18.6
20.673	10.8	20.6	31.4	60.0	-28.6	20.673	10.8	20.6	31.4	50.0	-18.6
20.707	10.8	20.6	31.4	60.0	-28.6	20.707	10.8	20.6	31.4	50.0	-18.6
23.986	10.6	20.8	31.4	60.0	-28.6	23.986	10.6	20.8	31.4	50.0	-18.6
24.124	10.6	20.8	31.4	60.0	-28.6	24.124	10.6	20.8	31.4	50.0	-18.6
25.124	10.6	20.8	31.4	60.0	-28.6	25.124	10.6	20.8	31.4	50.0	-18.6
25.467	10.6	20.8	31.4	60.0	-28.6	25.467	10.6	20.8	31.4	50.0	-18.6
28.511	10.3	21.1	31.4	60.0	-28.6	28.511	10.3	21.1	31.4	50.0	-18.6
28.657	10.3	21.1	31.4	60.0	-28.6	28.657	10.3	21.1	31.4	50.0	-18.6
29.399	10.2	21.2	31.4	60.0	-28.6	29.399	10.2	21.2	31.4	50.0	-18.6
29.881	10.2	21.2	31.4	60.0	-28.6	29.881	10.2	21.2	31.4	50.0	-18.6
12.488	11.1	20.2	31.3	60.0	-28.7	12.488	11.1	20.2	31.3	50.0	-18.7
15.670	10.9	20.4	31.3	60.0	-28.7	15.670	10.9	20.4	31.3	50.0	-18.7
17.767	10.9	20.4	31.3	60.0	-28.7	17.767	10.9	20.4	31.3	50.0	-18.7
19.733	10.8	20.5	31.3	60.0	-28.7	19.733	10.8	20.5	31.3	50.0	-18.7
20.539	10.8	20.5	31.3	60.0	-28.7	20.539	10.8	20.5	31.3	50.0	-18.7
21.128	10.7	20.6	31.3	60.0	-28.7	21.128	10.7	20.6	31.3	50.0	-18.7
22.900	10.6	20.7	31.3	60.0	-28.7	22.900	10.6	20.7	31.3	50.0	-18.7
25.560	10.4	20.9	31.3	60.0	-28.7	25.560	10.4	20.9	31.3	50.0	-18.7
25.586	10.4	20.9	31.3	60.0	-28.7	25.586	10.4	20.9	31.3	50.0	-18.7
26.896	10.4	20.9	31.3	60.0	-28.7	26.896	10.4	20.9	31.3	50.0	-18.7
28.631	10.2	21.1	31.3	60.0	-28.7	28.631	10.2	21.1	31.3	50.0	-18.7
8.936	11.2	20.0	31.2	60.0	-28.8	8.936	11.2	20.0	31.2	50.0	-18.8
16.308	10.8	20.4	31.2	60.0	-28.8	16.308	10.8	20.4	31.2	50.0	-18.8
21.005	10.6	20.6	31.2	60.0	-28.8	21.005	10.6	20.6	31.2	50.0	-18.8
21.024	10.6	20.6	31.2	60.0	-28.8	21.024	10.6	20.6	31.2	50.0	-18.8
21.457	10.6	20.6	31.2	60.0	-28.8	21.457	10.6	20.6	31.2	50.0	-18.8
23.725	10.4	20.8	31.2	60.0	-28.8	23.725	10.4	20.8	31.2	50.0	-18.8
24.546	10.4	20.8	31.2	60.0	-28.8	24.546	10.4	20.8	31.2	50.0	-18.8
24.699	10.4	20.8	31.2	60.0	-28.8	24.699	10.4	20.8	31.2	50.0	-18.8
25.822	10.3	20.9	31.2	60.0	-28.8	25.822	10.3	20.9	31.2	50.0	-18.8
27.127	10.1	21.1	31.2	60.0	-28.8	27.127	10.1	21.1	31.2	50.0	-18.8
28.567	10.1	21.1	31.2	60.0	-28.8	28.567	10.1	21.1	31.2	50.0	-18.8
10.895	11.0	20.1	31.1	60.0	-28.9	10.895	11.0	20.1	31.1	50.0	-18.9
11.962	10.9	20.2	31.1	60.0	-28.9	11.962	10.9	20.2	31.1	50.0	-18.9
14.760	10.7	20.4	31.1	60.0	-28.9	14.760	10.7	20.4	31.1	50.0	-18.9
15.730	10.7	20.4	31.1	60.0	-28.9	15.730	10.7	20.4	31.1	50.0	-18.9
16.577	10.7	20.4	31.1	60.0	-28.9	16.577	10.7	20.4	31.1	50.0	-18.9
17.371	10.7	20.4	31.1	60.0	-28.9	17.371	10.7	20.4	31.1	50.0	-18.9
18.591	10.6	20.5	31.1	60.0	-28.9	18.591	10.6	20.5	31.1	50.0	-18.9
19.666	10.6	20.5	31.1	60.0	-28.9	19.666	10.6	20.5	31.1	50.0	-18.9
20.968	10.5	20.6	31.1	60.0	-28.9	20.968	10.5	20.6	31.1	50.0	-18.9
23.113	10.4	20.7	31.1	60.0	-28.9	23.113	10.4	20.7	31.1	50.0	-18.9
27.609	10.0	21.1	31.1	60.0	-28.9	27.609	10.0	21.1	31.1	50.0	-18.9
29.310	9.9	21.2	31.1	60.0	-28.9	29.310	9.9	21.2	31.1	50.0	-18.9
29.343	9.9	21.2	31.1	60.0	-28.9	29.343	9.9	21.2	31.1	50.0	-18.9
12.439	10.8	20.2	31.0	60.0	-29.0	12.439	10.8	20.2	31.0	50.0	-19.0
14.264	10.8	20.2	31.0	60.0	-29.0	14.264	10.8	20.2	31.0	50.0	-19.0
17.442	10.6	20.4	31.0	60.0	-29.0	17.442	10.6	20.4	31.0	50.0	-19.0
18.647	10.5	20.5	31.0	60.0	-29.0	18.647	10.5	20.5	31.0	50.0	-19.0
19.315	10.5	20.5	31.0	60.0	-29.0	19.315	10.5	20.5	31.0	50.0	-19.0
20.442	10.5	20.5	31.0	60.0	-29.0	20.442	10.5	20.5	31.0	50.0	-19.0
20.584	10.5	20.5	31.0	60.0	-29.0	20.584	10.5	20.5	31.0	50.0	-19.0
21.173	10.4	20.6	31.0	60.0	-29.0	21.173	10.4	20.6	31.0	50.0	-19.0
24.053	10.2	20.8	31.0	60.0	-29.0	24.053	10.2	20.8	31.0	50.0	-19.0
27.206	9.9	21.1	31.0	60.0	-29.0	27.206	9.9	21.1	31.0	50.0	-19.0
27.877	9.9	21.1	31.0	60.0	-29.0	27.877	9.9	21.1	31.0	50.0	-19.0
11.510	10.7	20.2	30.9	60.0	-29.1	11.510	10.7	20.2	30.9	50.0	-19.1
12.607	10.7	20.2	30.9	60.0	-29.1	12.607	10.7	20.2	30.9	50.0	-19.1
18.871	10.4	20.5	30.9	60.0	-29.1	18.871	10.4	20.5	30.9	50.0	-19.1
20.043	10.4	20.5	30.9	60.0	-29.1	20.043	10.4	20.5	30.9	50.0	-19.1
20.173	10.4	20.5	30.9	60.0	-29.1	20.173	10.4	20.5	30.9	50.0	-19.1
21.990	10.3	20.6	30.9	60.0	-29.1	21.990	10.3	20.6	30.9	50.0	-19.1
24.997	10.1	20.8	30.9	60.0	-29.1	24.997	10.1	20.8	30.9	50.0	-19.1

25.139	10.1	20.8	30.9	60.0	-29.1
26.359	10.0	20.9	30.9	60.0	-29.1
27.743	9.8	21.1	30.9	60.0	-29.1
28.220	9.8	21.1	30.9	60.0	-29.1
29.799	9.7	21.2	30.9	60.0	-29.1
5.377	10.9	19.9	30.8	60.0	-29.2
6.843	10.9	19.9	30.8	60.0	-29.2
7.992	10.8	20.0	30.8	60.0	-29.2
10.943	10.7	20.1	30.8	60.0	-29.2
11.454	10.6	20.2	30.8	60.0	-29.2
12.305	10.6	20.2	30.8	60.0	-29.2
13.905	10.6	20.2	30.8	60.0	-29.2
16.468	10.4	20.4	30.8	60.0	-29.2
16.733	10.4	20.4	30.8	60.0	-29.2
20.878	10.2	20.6	30.8	60.0	-29.2
21.468	10.2	20.6	30.8	60.0	-29.2
22.639	10.1	20.7	30.8	60.0	-29.2
24.728	10.0	20.8	30.8	60.0	-29.2
28.142	9.7	21.1	30.8	60.0	-29.2
7.071	10.8	19.9	30.7	60.0	-29.3
10.492	10.6	20.1	30.7	60.0	-29.3
11.357	10.5	20.2	30.7	60.0	-29.3
11.645	10.5	20.2	30.7	60.0	-29.3
13.398	10.5	20.2	30.7	60.0	-29.3
14.517	10.4	20.3	30.7	60.0	-29.3
16.140	10.3	20.4	30.7	60.0	-29.3
16.189	10.3	20.4	30.7	60.0	-29.3
18.957	10.2	20.5	30.7	60.0	-29.3
19.446	10.2	20.5	30.7	60.0	-29.3
21.613	10.1	20.6	30.7	60.0	-29.3
23.896	9.9	20.8	30.7	60.0	-29.3
27.956	9.6	21.1	30.7	60.0	-29.3
6.272	10.7	19.9	30.6	60.0	-29.4
6.761	10.7	19.9	30.6	60.0	-29.4
7.832	10.7	19.9	30.6	60.0	-29.4
8.652	10.6	20.0	30.6	60.0	-29.4
9.067	10.6	20.0	30.6	60.0	-29.4
9.712	10.5	20.1	30.6	60.0	-29.4
11.570	10.4	20.2	30.6	60.0	-29.4
11.857	10.4	20.2	30.6	60.0	-29.4
12.715	10.4	20.2	30.6	60.0	-29.4
16.633	10.2	20.4	30.6	60.0	-29.4
18.737	10.1	20.5	30.6	60.0	-29.4
19.614	10.1	20.5	30.6	60.0	-29.4
21.953	10.0	20.6	30.6	60.0	-29.4
23.591	9.8	20.8	30.6	60.0	-29.4
23.665	9.8	20.8	30.6	60.0	-29.4
24.299	9.8	20.8	30.6	60.0	-29.4
5.653	10.6	19.9	30.5	60.0	-29.5
6.045	10.6	19.9	30.5	60.0	-29.5
7.731	10.6	19.9	30.5	60.0	-29.5
8.332	10.5	20.0	30.5	60.0	-29.5
9.496	10.4	20.1	30.5	60.0	-29.5
12.398	10.3	20.2	30.5	60.0	-29.5
14.454	10.2	20.3	30.5	60.0	-29.5
14.999	10.1	20.4	30.5	60.0	-29.5
15.237	10.1	20.4	30.5	60.0	-29.5
16.853	10.1	20.4	30.5	60.0	-29.5
16.909	10.1	20.4	30.5	60.0	-29.5
18.416	10.0	20.5	30.5	60.0	-29.5
20.796	9.9	20.6	30.5	60.0	-29.5
21.692	9.9	20.6	30.5	60.0	-29.5
22.438	9.9	20.6	30.5	60.0	-29.5
22.703	9.8	20.7	30.5	60.0	-29.5
22.729	9.8	20.7	30.5	60.0	-29.5
25.758	9.6	20.9	30.5	60.0	-29.5
7.671	10.5	19.9	30.4	60.0	-29.6
8.205	10.4	20.0	30.4	60.0	-29.6
8.958	10.4	20.0	30.4	60.0	-29.6
9.231	10.3	20.1	30.4	60.0	-29.6
12.212	10.2	20.2	30.4	60.0	-29.6
12.850	10.2	20.2	30.4	60.0	-29.6
13.308	10.2	20.2	30.4	60.0	-29.6
15.942	10.0	20.4	30.4	60.0	-29.6
18.177	10.0	20.4	30.4	60.0	-29.6
5.970	10.4	19.9	30.3	60.0	-29.7
8.902	10.3	20.0	30.3	60.0	-29.7
9.622	10.2	20.1	30.3	60.0	-29.7
9.746	10.2	20.1	30.3	60.0	-29.7
10.305	10.2	20.1	30.3	60.0	-29.7
10.760	10.2	20.1	30.3	60.0	-29.7

25.139	10.1	20.8	30.9	50.0	-19.1
26.359	10.0	20.9	30.9	50.0	-19.1
27.743	9.8	21.1	30.9	50.0	-19.1
28.220	9.8	21.1	30.9	50.0	-19.1
29.799	9.7	21.2	30.9	50.0	-19.1
5.377	10.9	19.9	30.8	50.0	-19.2
6.843	10.9	19.9	30.8	50.0	-19.2
7.992	10.8	20.0	30.8	50.0	-19.2
10.943	10.7	20.1	30.8	50.0	-19.2
11.454	10.6	20.2	30.8	50.0	-19.2
12.305	10.6	20.2	30.8	50.0	-19.2
13.905	10.6	20.2	30.8	50.0	-19.2
16.468	10.4	20.4	30.8	50.0	-19.2
16.733	10.4	20.4	30.8	50.0	-19.2
20.878	10.2	20.6	30.8	50.0	-19.2
21.468	10.2	20.6	30.8	50.0	-19.2
22.639	10.1	20.7	30.8	50.0	-19.2
24.728	10.0	20.8	30.8	50.0	-19.2
28.142	9.7	21.1	30.8	50.0	-19.2
7.071	10.8	19.9	30.7	50.0	-19.3
10.492	10.6	20.1	30.7	50.0	-19.3
11.357	10.5	20.2	30.7	50.0	-19.3
11.645	10.5	20.2	30.7	50.0	-19.3
13.398	10.5	20.2	30.7	50.0	-19.3
14.517	10.4	20.3	30.7	50.0	-19.3
16.140	10.3	20.4	30.7	50.0	-19.3
16.189	10.3	20.4	30.7	50.0	-19.3
18.957	10.2	20.5	30.7	50.0	-19.3
19.446	10.2	20.5	30.7	50.0	-19.3
21.613	10.1	20.6	30.7	50.0	-19.3
23.896	9.9	20.8	30.7	50.0	-19.3
27.956	9.6	21.1	30.7	50.0	-19.3
6.272	10.7	19.9	30.6	50.0	-19.4
6.761	10.7	19.9	30.6	50.0	-19.4
7.832	10.7	19.9	30.6	50.0	-19.4
8.652	10.6	20.0	30.6	50.0	-19.4
9.067	10.6	20.0	30.6	50.0	-19.4
9.712	10.5	20.1	30.6	50.0	-19.4
11.570	10.4	20.2	30.6	50.0	-19.4
11.857	10.4	20.2	30.6	50.0	-19.4
12.715	10.4	20.2	30.6	50.0	-19.4
16.633	10.2	20.4	30.6	50.0	-19.4
18.737	10.1	20.5	30.6	50.0	-19.4
19.614	10.1	20.5	30.6	50.0	-19.4
21.953	10.0	20.6	30.6	50.0	-19.4
23.591	9.8	20.8	30.6	50.0	-19.4
23.665	9.8	20.8	30.6	50.0	-19.4
24.299	9.8	20.8	30.6	50.0	-19.4
5.653	10.6	19.9	30.5	50.0	-19.5
6.045	10.6	19.9	30.5	50.0	-19.5
7.731	10.6	19.9	30.5	50.0	-19.5
8.332	10.5	20.0	30.5	50.0	-19.5
9.496	10.4	20.1	30.5	50.0	-19.5
12.398	10.3	20.2	30.5	50.0	-19.5
14.454	10.2	20.3	30.5	50.0	-19.5
14.999	10.1	20.4	30.5	50.0	-19.5
15.237	10.1	20.4	30.5	50.0	-19.5
16.853	10.1	20.4	30.5	50.0	-19.5
16.909	10.1	20.4	30.5	50.0	-19.5
18.416	10.0	20.5	30.5	50.0	-19.5
20.796	9.9	20.6	30.5	50.0	-19.5
21.692	9.9	20.6	30.5	50.0	-19.5
22.438	9.9	20.6	30.5	50.0	-19.5
22.703	9.8	20.7	30.5	50.0	-19.5
22.729	9.8	20.7	30.5	50.0	-19.5
25.758	9.6	20.9	30.5	50.0	-19.5
7.671	10.5	19.9	30.4	50.0	-19.6
8.205	10.4	20.0	30.4	50.0	-19.6
8.958	10.4	20.0	30.4	50.0	-19.6
9.231	10.3	20.1	30.4	50.0	-19.6
12.212	10.2	20.2	30.4	50.0	-19.6
12.850	10.2	20.2	30.4	50.0	-19.6
13.308	10.2	20.2	30.4	50.0	-19.6
15.942	10.0	20.4	30.4	50.0	-19.6
18.177	10.0	20.4	30.4	50.0	-19.6
5.970	10.4	19.9	30.3	50.0	-19.7
8.902	10.3	20.0	30.3	50.0	-19.7
9.622	10.2	20.1	30.3	50.0	-19.7
9.746	10.2	20.1	30.3	50.0	-19.7
10.305	10.2	20.1	30.3	50.0	-19.7
10.760	10.2	20.1	30.3	50.0	-19.7

11.380	10.1	20.2	30.3	60.0	-29.7	11.380	10.1	20.2	30.3	50.0	-19.7
12.033	10.1	20.2	30.3	60.0	-29.7	12.033	10.1	20.2	30.3	50.0	-19.7
12.779	10.1	20.2	30.3	60.0	-29.7	12.779	10.1	20.2	30.3	50.0	-19.7
13.174	10.1	20.2	30.3	60.0	-29.7	13.174	10.1	20.2	30.3	50.0	-19.7
15.372	9.9	20.4	30.3	60.0	-29.7	15.372	9.9	20.4	30.3	50.0	-19.7
15.539	9.9	20.4	30.3	60.0	-29.7	15.539	9.9	20.4	30.3	50.0	-19.7
19.073	9.8	20.5	30.3	60.0	-29.7	19.073	9.8	20.5	30.3	50.0	-19.7
23.132	9.6	20.7	30.3	60.0	-29.7	23.132	9.6	20.7	30.3	50.0	-19.7
23.415	9.5	20.8	30.3	60.0	-29.7	23.415	9.5	20.8	30.3	50.0	-19.7
5.022	10.4	19.8	30.2	60.0	-29.8	5.022	10.4	19.8	30.2	50.0	-19.8
13.782	10.0	20.2	30.2	60.0	-29.8	13.782	10.0	20.2	30.2	50.0	-19.8
14.051	10.0	20.2	30.2	60.0	-29.8	14.051	10.0	20.2	30.2	50.0	-19.8
14.357	10.0	20.2	30.2	60.0	-29.8	14.357	10.0	20.2	30.2	50.0	-19.8
15.517	9.8	20.4	30.2	60.0	-29.8	15.517	9.8	20.4	30.2	50.0	-19.8
17.998	9.8	20.4	30.2	60.0	-29.8	17.998	9.8	20.4	30.2	50.0	-19.8
18.125	9.8	20.4	30.2	60.0	-29.8	18.125	9.8	20.4	30.2	50.0	-19.8
5.701	10.2	19.9	30.1	60.0	-29.9	5.701	10.2	19.9	30.1	50.0	-19.9
5.914	10.2	19.9	30.1	60.0	-29.9	5.914	10.2	19.9	30.1	50.0	-19.9
7.791	10.2	19.9	30.1	60.0	-29.9	7.791	10.2	19.9	30.1	50.0	-19.9
7.940	10.1	20.0	30.1	60.0	-29.9	7.940	10.1	20.0	30.1	50.0	-19.9
8.839	10.1	20.0	30.1	60.0	-29.9	8.839	10.1	20.0	30.1	50.0	-19.9
12.753	9.9	20.2	30.1	60.0	-29.9	12.753	9.9	20.2	30.1	50.0	-19.9
13.126	9.9	20.2	30.1	60.0	-29.9	13.126	9.9	20.2	30.1	50.0	-19.9
14.099	9.9	20.2	30.1	60.0	-29.9	14.099	9.9	20.2	30.1	50.0	-19.9
14.163	9.9	20.2	30.1	60.0	-29.9	14.163	9.9	20.2	30.1	50.0	-19.9
15.308	9.7	20.4	30.1	60.0	-29.9	15.308	9.7	20.4	30.1	50.0	-19.9
15.872	9.7	20.4	30.1	60.0	-29.9	15.872	9.7	20.4	30.1	50.0	-19.9
16.226	9.7	20.4	30.1	60.0	-29.9	16.226	9.7	20.4	30.1	50.0	-19.9
5.160	10.2	19.8	30.0	60.0	-30.0	5.160	10.2	19.8	30.0	50.0	-20.0
6.627	10.1	19.9	30.0	60.0	-30.0	6.627	10.1	19.9	30.0	50.0	-20.0
6.783	10.1	19.9	30.0	60.0	-30.0	6.783	10.1	19.9	30.0	50.0	-20.0
7.235	10.1	19.9	30.0	60.0	-30.0	7.235	10.1	19.9	30.0	50.0	-20.0
8.402	10.0	20.0	30.0	60.0	-30.0	8.402	10.0	20.0	30.0	50.0	-20.0
8.544	10.0	20.0	30.0	60.0	-30.0	8.544	10.0	20.0	30.0	50.0	-20.0
9.951	9.9	20.1	30.0	60.0	-30.0	9.951	9.9	20.1	30.0	50.0	-20.0
10.454	9.9	20.1	30.0	60.0	-30.0	10.454	9.9	20.1	30.0	50.0	-20.0
11.178	9.9	20.1	30.0	60.0	-30.0	11.178	9.9	20.1	30.0	50.0	-20.0
12.671	9.8	20.2	30.0	60.0	-30.0	12.671	9.8	20.2	30.0	50.0	-20.0
13.820	9.8	20.2	30.0	60.0	-30.0	13.820	9.8	20.2	30.0	50.0	-20.0
14.846	9.6	20.4	30.0	60.0	-30.0	14.846	9.6	20.4	30.0	50.0	-20.0
15.099	9.6	20.4	30.0	60.0	-30.0	15.099	9.6	20.4	30.0	50.0	-20.0
17.610	9.6	20.4	30.0	60.0	-30.0	17.610	9.6	20.4	30.0	50.0	-20.0
7.261	10.0	19.9	29.9	60.0	-30.1	7.261	10.0	19.9	29.9	50.0	-20.1
9.156	9.9	20.0	29.9	60.0	-30.1	9.156	9.9	20.0	29.9	50.0	-20.1
9.443	9.8	20.1	29.9	60.0	-30.1	9.443	9.8	20.1	29.9	50.0	-20.1
15.245	9.5	20.4	29.9	60.0	-30.1	15.245	9.5	20.4	29.9	50.0	-20.1
15.286	9.5	20.4	29.9	60.0	-30.1	15.286	9.5	20.4	29.9	50.0	-20.1
17.543	9.5	20.4	29.9	60.0	-30.1	17.543	9.5	20.4	29.9	50.0	-20.1
21.807	9.3	20.6	29.9	60.0	-30.1	21.807	9.3	20.6	29.9	50.0	-20.1
5.537	9.9	19.9	29.8	60.0	-30.2	5.537	9.9	19.9	29.8	50.0	-20.2
5.556	9.9	19.9	29.8	60.0	-30.2	5.556	9.9	19.9	29.8	50.0	-20.2
5.821	9.9	19.9	29.8	60.0	-30.2	5.821	9.9	19.9	29.8	50.0	-20.2
7.168	9.9	19.9	29.8	60.0	-30.2	7.168	9.9	19.9	29.8	50.0	-20.2
10.216	9.7	20.1	29.8	60.0	-30.2	10.216	9.7	20.1	29.8	50.0	-20.2
14.234	9.6	20.2	29.8	60.0	-30.2	14.234	9.6	20.2	29.8	50.0	-20.2
16.670	9.4	20.4	29.8	60.0	-30.2	16.670	9.4	20.4	29.8	50.0	-20.2
17.599	9.4	20.4	29.8	60.0	-30.2	17.599	9.4	20.4	29.8	50.0	-20.2
5.291	9.9	19.8	29.7	60.0	-30.3	5.291	9.9	19.8	29.7	50.0	-20.3
6.227	9.8	19.9	29.7	60.0	-30.3	6.227	9.8	19.9	29.7	50.0	-20.3
6.977	9.8	19.9	29.7	60.0	-30.3	6.977	9.8	19.9	29.7	50.0	-20.3
9.809	9.6	20.1	29.7	60.0	-30.3	9.809	9.6	20.1	29.7	50.0	-20.3
11.216	9.6	20.1	29.7	60.0	-30.3	11.216	9.6	20.1	29.7	50.0	-20.3
13.641	9.5	20.2	29.7	60.0	-30.3	13.641	9.5	20.2	29.7	50.0	-20.3
5.459	9.7	19.9	29.6	60.0	-30.4	5.459	9.7	19.9	29.6	50.0	-20.4
6.925	9.7	19.9	29.6	60.0	-30.4	6.925	9.7	19.9	29.6	50.0	-20.4
11.018	9.5	20.1	29.6	60.0	-30.4	11.018	9.5	20.1	29.6	50.0	-20.4
7.425	9.6	19.9	29.5	60.0	-30.5	7.425	9.6	19.9	29.5	50.0	-20.5
9.313	9.4	20.1	29.5	60.0	-30.5	9.313	9.4	20.1	29.5	50.0	-20.5
6.944	9.5	19.9	29.4	60.0	-30.6	6.944	9.5	19.9	29.4	50.0	-20.6
7.388	9.5	19.9	29.4	60.0	-30.6	7.388	9.5	19.9	29.4	50.0	-20.6
0.262	11.0	19.6	30.6	61.4	-30.8	0.262	11.0	19.6	30.6	51.4	-20.8
7.149	9.3	19.9	29.2	60.0	-30.8	7.149	9.3	19.9	29.2	50.0	-20.8
0.191	11.6	19.6	31.2	64.0	-32.8	0.191	11.6	19.6	31.2	54.0	-22.8

AC - POWERLINE CONDUCTED EMISSIONS

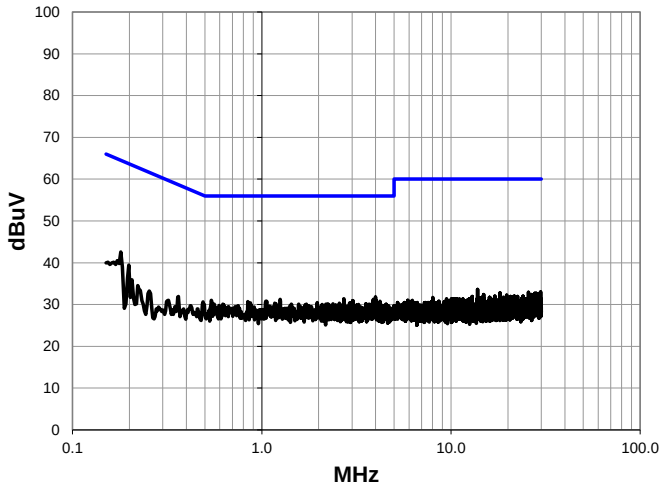
EmiR5 2017.07.11 PSA-ESCI 2017.06.01

Work Order:	SCHW0219	**Date:**	07/28/17		
Project:	None	**Temperature:**	22.7 °C		
Job Site:	EV07	**Humidity:**	42.3% RH		
Serial Number:	A02654144	**Barometric Pres.:**	1022 mbar	**Tested by:**	Mark Baytan
EUT:	9630-9110				
Configuration:	6				
Customer:	Schweitzer Engineering Laboratories, Inc.				
Attendees:	Allan Davis				
EUT Power:	110VAC/60Hz				
Operating Mode:	Transmitting continuously at Mid Ch (915 MHz)				
Deviations:	None				
Comments:	Power level setting: 27 dBm. 3.5VDC input to DC voltage regulator. 1W SMA terminator on antenna port.				

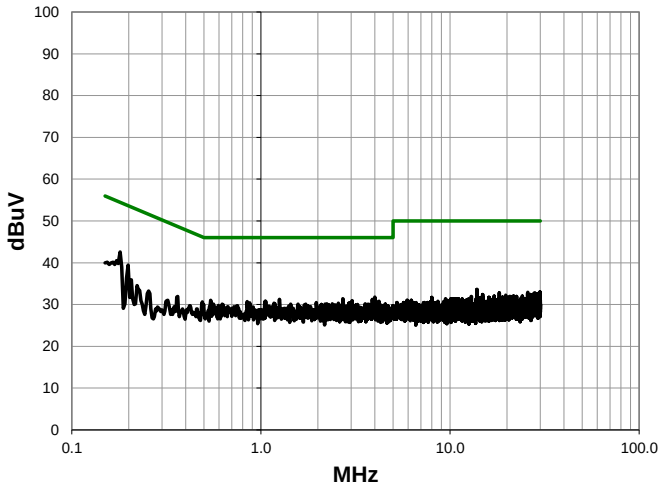
Test Specifications	**Class B**	**Test Method**	
FCC 15.207:2017		ANSI C63.10:2013	

Run #	8	**Line:**	Neutral	**Ext. Attenuation:**	0	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.180	23.1	19.5	42.6	64.5	-21.9
3.993	12.0	19.8	31.8	56.0	-24.2
0.199	19.8	19.6	39.4	63.7	-24.3
2.713	11.7	19.7	31.4	56.0	-24.6
1.251	11.7	19.5	31.2	56.0	-24.8

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.180	23.1	19.5	42.6	54.5	-11.9
3.993	12.0	19.8	31.8	46.0	-14.2
0.199	19.8	19.6	39.4	53.7	-14.3
2.713	11.7	19.7	31.4	46.0	-14.6
1.251	11.7	19.5	31.2	46.0	-14.8

3.881	11.4	19.8	31.2	56.0	-24.8
0.542	11.5	19.5	31.0	56.0	-25.0
4.026	11.2	19.8	31.0	56.0	-25.0
3.026	11.1	19.8	30.9	56.0	-25.1
1.049	11.3	19.5	30.8	56.0	-25.2
1.060	11.3	19.5	30.8	56.0	-25.2
4.213	11.0	19.8	30.8	56.0	-25.2
0.844	11.2	19.5	30.7	56.0	-25.3
1.963	10.9	19.6	30.5	56.0	-25.5
0.490	11.1	19.5	30.6	56.2	-25.6
0.870	10.9	19.5	30.4	56.0	-25.6
2.967	10.6	19.8	30.4	56.0	-25.6
1.172	10.8	19.5	30.3	56.0	-25.7
2.568	10.6	19.7	30.3	56.0	-25.7
2.915	10.6	19.7	30.3	56.0	-25.7
1.187	10.7	19.5	30.2	56.0	-25.8
2.232	10.6	19.6	30.2	56.0	-25.8
2.377	10.5	19.7	30.2	56.0	-25.8
3.552	10.4	19.8	30.2	56.0	-25.8
0.624	10.6	19.5	30.1	56.0	-25.9
1.433	10.5	19.6	30.1	56.0	-25.9
1.568	10.5	19.6	30.1	56.0	-25.9
1.721	10.5	19.6	30.1	56.0	-25.9
2.180	10.5	19.6	30.1	56.0	-25.9
3.691	10.3	19.8	30.1	56.0	-25.9
4.549	10.3	19.8	30.1	56.0	-25.9
2.086	10.4	19.6	30.0	56.0	-26.0
3.243	10.2	19.8	30.0	56.0	-26.0
3.761	10.2	19.8	30.0	56.0	-26.0
2.273	10.3	19.6	29.9	56.0	-26.1
2.456	10.2	19.7	29.9	56.0	-26.1
2.683	10.2	19.7	29.9	56.0	-26.1
3.183	10.1	19.8	29.9	56.0	-26.1
0.594	10.3	19.5	29.8	56.0	-26.2
4.343	10.0	19.8	29.8	56.0	-26.2
4.422	9.9	19.8	29.7	56.0	-26.3
4.593	9.9	19.8	29.7	56.0	-26.3
4.978	9.9	19.8	29.7	56.0	-26.3
1.404	10.1	19.5	29.6	56.0	-26.4
2.168	10.0	19.6	29.6	56.0	-26.4
2.512	9.9	19.7	29.6	56.0	-26.4
2.859	9.9	19.7	29.6	56.0	-26.4
4.687	9.8	19.8	29.6	56.0	-26.4
13.846	13.4	20.2	33.6	60.0	-26.4
4.052	9.7	19.8	29.5	56.0	-26.5
3.351	9.5	19.8	29.3	56.0	-26.7
0.363	12.4	19.5	31.9	58.7	-26.8
29.817	11.8	21.2	33.0	60.0	-27.0
25.687	12.0	20.9	32.9	60.0	-27.1
18.173	12.4	20.4	32.8	60.0	-27.2
27.788	11.6	21.1	32.7	60.0	-27.3
28.179	11.6	21.1	32.7	60.0	-27.3
29.123	11.4	21.2	32.6	60.0	-27.4
0.206	16.3	19.6	35.9	63.4	-27.5
14.879	12.0	20.4	32.4	60.0	-27.6
26.598	11.5	20.9	32.4	60.0	-27.6
27.829	11.3	21.1	32.4	60.0	-27.6
19.707	11.7	20.5	32.2	60.0	-27.8
29.250	11.0	21.2	32.2	60.0	-27.8
0.419	10.2	19.5	29.7	57.5	-27.8
26.631	11.2	20.9	32.1	60.0	-27.9
29.336	10.9	21.2	32.1	60.0	-27.9
29.537	10.9	21.2	32.1	60.0	-27.9
17.103	11.6	20.4	32.0	60.0	-28.0
21.673	11.4	20.6	32.0	60.0	-28.0
24.083	11.2	20.8	32.0	60.0	-28.0
27.997	10.9	21.1	32.0	60.0	-28.0
29.373	10.8	21.2	32.0	60.0	-28.0
12.939	11.7	20.2	31.9	60.0	-28.1
14.778	11.5	20.4	31.9	60.0	-28.1
20.688	11.3	20.6	31.9	60.0	-28.1
21.374	11.3	20.6	31.9	60.0	-28.1
22.486	11.3	20.6	31.9	60.0	-28.1
26.239	11.0	20.9	31.9	60.0	-28.1
18.935	11.3	20.5	31.8	60.0	-28.2
21.636	11.2	20.6	31.8	60.0	-28.2
22.337	11.2	20.6	31.8	60.0	-28.2
28.549	10.7	21.1	31.8	60.0	-28.2
0.221	14.9	19.6	34.5	62.8	-28.3
8.007	11.7	20.0	31.7	60.0	-28.3
15.983	11.3	20.4	31.7	60.0	-28.3

3.881	11.4	19.8	31.2	46.0	-14.8
0.542	11.5	19.5	31.0	46.0	-15.0
4.026	11.2	19.8	31.0	46.0	-15.0
3.026	11.1	19.8	30.9	46.0	-15.1
1.049	11.3	19.5	30.8	46.0	-15.2
1.060	11.3	19.5	30.8	46.0	-15.2
4.213	11.0	19.8	30.8	46.0	-15.2
0.844	11.2	19.5	30.7	46.0	-15.3
1.963	10.9	19.6	30.5	46.0	-15.5
0.490	11.1	19.5	30.6	46.2	-15.6
0.870	10.9	19.5	30.4	46.0	-15.6
2.967	10.6	19.8	30.4	46.0	-15.6
1.172	10.8	19.5	30.3	46.0	-15.7
2.568	10.6	19.7	30.3	46.0	-15.7
2.915	10.6	19.7	30.3	46.0	-15.7
1.187	10.7	19.5	30.2	46.0	-15.8
2.232	10.6	19.6	30.2	46.0	-15.8
2.377	10.5	19.7	30.2	46.0	-15.8
3.552	10.4	19.8	30.2	46.0	-15.8
0.624	10.6	19.5	30.1	46.0	-15.9
1.433	10.5	19.6	30.1	46.0	-15.9
1.568	10.5	19.6	30.1	46.0	-15.9
1.721	10.5	19.6	30.1	46.0	-15.9
2.180	10.5	19.6	30.1	46.0	-15.9
3.691	10.3	19.8	30.1	46.0	-15.9
4.549	10.3	19.8	30.1	46.0	-15.9
2.086	10.4	19.6	30.0	46.0	-16.0
3.243	10.2	19.8	30.0	46.0	-16.0
3.761	10.2	19.8	30.0	46.0	-16.0
2.273	10.3	19.6	29.9	46.0	-16.1
2.456	10.2	19.7	29.9	46.0	-16.1
2.683	10.2	19.7	29.9	46.0	-16.1
3.183	10.1	19.8	29.9	46.0	-16.1
0.594	10.3	19.5	29.8	46.0	-16.2
4.343	10.0	19.8	29.8	46.0	-16.2
4.422	9.9	19.8	29.7	46.0	-16.3
4.593	9.9	19.8	29.7	46.0	-16.3
4.978	9.9	19.8	29.7	46.0	-16.3
1.404	10.1	19.5	29.6	46.0	-16.4
2.168	10.0	19.6	29.6	46.0	-16.4
2.512	9.9	19.7	29.6	46.0	-16.4
2.859	9.9	19.7	29.6	46.0	-16.4
4.687	9.8	19.8	29.6	46.0	-16.4
13.846	13.4	20.2	33.6	50.0	-16.4
4.052	9.7	19.8	29.5	46.0	-16.5
3.351	9.5	19.8	29.3	46.0	-16.7
0.363	12.4	19.5	31.9	48.7	-16.8
29.817	11.8	21.2	33.0	50.0	-17.0
25.687	12.0	20.9	32.9	50.0	-17.1
18.173	12.4	20.4	32.8	50.0	-17.2
27.788	11.6	21.1	32.7	50.0	-17.3
28.179	11.6	21.1	32.7	50.0	-17.3
29.123	11.4	21.2	32.6	50.0	-17.4
0.206	16.3	19.6	35.9	53.4	-17.5
14.879	12.0	20.4	32.4	50.0	-17.6
26.598	11.5	20.9	32.4	50.0	-17.6
27.829	11.3	21.1	32.4	50.0	-17.6
19.707	11.7	20.5	32.2	50.0	-17.8
29.250	11.0	21.2	32.2	50.0	-17.8
0.419	10.2	19.5	29.7	47.5	-17.8
26.631	11.2	20.9	32.1	50.0	-17.9
29.336	10.9	21.2	32.1	50.0	-17.9
29.537	10.9	21.2	32.1	50.0	-17.9
17.103	11.6	20.4	32.0	50.0	-18.0
21.673	11.4	20.6	32.0	50.0	-18.0
24.083	11.2	20.8	32.0	50.0	-18.0
27.997	10.9	21.1	32.0	50.0	-18.0
29.373	10.8	21.2	32.0	50.0	-18.0
12.939	11.7	20.2	31.9	50.0	-18.1
14.778	11.5	20.4	31.9	50.0	-18.1
20.688	11.3	20.6	31.9	50.0	-18.1
21.374	11.3	20.6	31.9	50.0	-18.1
22.486	11.3	20.6	31.9	50.0	-18.1
26.239	11.0	20.9	31.9	50.0	-18.1
18.935	11.3	20.5	31.8	50.0	-18.2
21.636	11.2	20.6	31.8	50.0	-18.2
22.337	11.2	20.6	31.8	50.0	-18.2
28.549	10.7	21.1	31.8	50.0	-18.2
0.221	14.9	19.6	34.5	52.8	-18.3
8.007	11.7	20.0	31.7	50.0	-18.3
15.983	11.3	20.4	31.7	50.0	-18.3

16.062	11.3	20.4	31.7	60.0	-28.3	16.062	11.3	20.4	31.7	50.0	-18.3
21.333	11.1	20.6	31.7	60.0	-28.3	21.333	11.1	20.6	31.7	50.0	-18.3
27.280	10.6	21.1	31.7	60.0	-28.3	27.280	10.6	21.1	31.7	50.0	-18.3
28.455	10.6	21.1	31.7	60.0	-28.3	28.455	10.6	21.1	31.7	50.0	-18.3
0.254	13.6	19.6	33.2	61.6	-28.4	0.254	13.6	19.6	33.2	51.6	-18.4
14.271	11.4	20.2	31.6	60.0	-28.4	14.271	11.4	20.2	31.6	50.0	-18.4
16.051	11.2	20.4	31.6	60.0	-28.4	16.051	11.2	20.4	31.6	50.0	-18.4
26.758	10.7	20.9	31.6	60.0	-28.4	26.758	10.7	20.9	31.6	50.0	-18.4
27.579	10.5	21.1	31.6	60.0	-28.4	27.579	10.5	21.1	31.6	50.0	-18.4
28.899	10.5	21.1	31.6	60.0	-28.4	28.899	10.5	21.1	31.6	50.0	-18.4
14.943	11.1	20.4	31.5	60.0	-28.5	14.943	11.1	20.4	31.5	50.0	-18.5
18.211	11.1	20.4	31.5	60.0	-28.5	18.211	11.1	20.4	31.5	50.0	-18.5
23.688	10.7	20.8	31.5	60.0	-28.5	23.688	10.7	20.8	31.5	50.0	-18.5
24.038	10.7	20.8	31.5	60.0	-28.5	24.038	10.7	20.8	31.5	50.0	-18.5
26.284	10.6	20.9	31.5	60.0	-28.5	26.284	10.6	20.9	31.5	50.0	-18.5
28.743	10.4	21.1	31.5	60.0	-28.5	28.743	10.4	21.1	31.5	50.0	-18.5
28.873	10.4	21.1	31.5	60.0	-28.5	28.873	10.4	21.1	31.5	50.0	-18.5
29.810	10.3	21.2	31.5	60.0	-28.5	29.810	10.3	21.2	31.5	50.0	-18.5
10.264	11.3	20.1	31.4	60.0	-28.6	10.264	11.3	20.1	31.4	50.0	-18.6
10.413	11.3	20.1	31.4	60.0	-28.6	10.413	11.3	20.1	31.4	50.0	-18.6
10.686	11.3	20.1	31.4	60.0	-28.6	10.686	11.3	20.1	31.4	50.0	-18.6
11.063	11.3	20.1	31.4	60.0	-28.6	11.063	11.3	20.1	31.4	50.0	-18.6
12.495	11.2	20.2	31.4	60.0	-28.6	12.495	11.2	20.2	31.4	50.0	-18.6
13.752	11.2	20.2	31.4	60.0	-28.6	13.752	11.2	20.2	31.4	50.0	-18.6
20.572	10.9	20.5	31.4	60.0	-28.6	20.572	10.9	20.5	31.4	50.0	-18.6
25.116	10.6	20.8	31.4	60.0	-28.6	25.116	10.6	20.8	31.4	50.0	-18.6
25.165	10.6	20.8	31.4	60.0	-28.6	25.165	10.6	20.8	31.4	50.0	-18.6
25.613	10.5	20.9	31.4	60.0	-28.6	25.613	10.5	20.9	31.4	50.0	-18.6
27.754	10.3	21.1	31.4	60.0	-28.6	27.754	10.3	21.1	31.4	50.0	-18.6
28.075	10.3	21.1	31.4	60.0	-28.6	28.075	10.3	21.1	31.4	50.0	-18.6
28.496	10.3	21.1	31.4	60.0	-28.6	28.496	10.3	21.1	31.4	50.0	-18.6
28.635	10.3	21.1	31.4	60.0	-28.6	28.635	10.3	21.1	31.4	50.0	-18.6
29.026	10.2	21.2	31.4	60.0	-28.6	29.026	10.2	21.2	31.4	50.0	-18.6
9.469	11.2	20.1	31.3	60.0	-28.7	9.469	11.2	20.1	31.3	50.0	-18.7
10.052	11.2	20.1	31.3	60.0	-28.7	10.052	11.2	20.1	31.3	50.0	-18.7
11.585	11.1	20.2	31.3	60.0	-28.7	11.585	11.1	20.2	31.3	50.0	-18.7
21.434	10.7	20.6	31.3	60.0	-28.7	21.434	10.7	20.6	31.3	50.0	-18.7
22.061	10.7	20.6	31.3	60.0	-28.7	22.061	10.7	20.6	31.3	50.0	-18.7
22.214	10.7	20.6	31.3	60.0	-28.7	22.214	10.7	20.6	31.3	50.0	-18.7
22.274	10.7	20.6	31.3	60.0	-28.7	22.274	10.7	20.6	31.3	50.0	-18.7
25.803	10.4	20.9	31.3	60.0	-28.7	25.803	10.4	20.9	31.3	50.0	-18.7
26.001	10.4	20.9	31.3	60.0	-28.7	26.001	10.4	20.9	31.3	50.0	-18.7
26.847	10.4	20.9	31.3	60.0	-28.7	26.847	10.4	20.9	31.3	50.0	-18.7
29.407	10.1	21.2	31.3	60.0	-28.7	29.407	10.1	21.2	31.3	50.0	-18.7
0.322	11.5	19.5	31.0	59.7	-28.7	0.322	11.5	19.5	31.0	49.7	-18.7
16.733	10.8	20.4	31.2	60.0	-28.8	16.733	10.8	20.4	31.2	50.0	-18.8
18.509	10.7	20.5	31.2	60.0	-28.8	18.509	10.7	20.5	31.2	50.0	-18.8
20.748	10.6	20.6	31.2	60.0	-28.8	20.748	10.6	20.6	31.2	50.0	-18.8
21.188	10.6	20.6	31.2	60.0	-28.8	21.188	10.6	20.6	31.2	50.0	-18.8
21.285	10.6	20.6	31.2	60.0	-28.8	21.285	10.6	20.6	31.2	50.0	-18.8
21.938	10.6	20.6	31.2	60.0	-28.8	21.938	10.6	20.6	31.2	50.0	-18.8
23.855	10.4	20.8	31.2	60.0	-28.8	23.855	10.4	20.8	31.2	50.0	-18.8
27.194	10.1	21.1	31.2	60.0	-28.8	27.194	10.1	21.1	31.2	50.0	-18.8
10.768	11.0	20.1	31.1	60.0	-28.9	10.768	11.0	20.1	31.1	50.0	-18.9
12.249	10.9	20.2	31.1	60.0	-28.9	12.249	10.9	20.2	31.1	50.0	-18.9
14.096	10.9	20.2	31.1	60.0	-28.9	14.096	10.9	20.2	31.1	50.0	-18.9
16.879	10.7	20.4	31.1	60.0	-28.9	16.879	10.7	20.4	31.1	50.0	-18.9
16.916	10.7	20.4	31.1	60.0	-28.9	16.916	10.7	20.4	31.1	50.0	-18.9
17.427	10.7	20.4	31.1	60.0	-28.9	17.427	10.7	20.4	31.1	50.0	-18.9
17.722	10.7	20.4	31.1	60.0	-28.9	17.722	10.7	20.4	31.1	50.0	-18.9
19.308	10.6	20.5	31.1	60.0	-28.9	19.308	10.6	20.5	31.1	50.0	-18.9
19.826	10.6	20.5	31.1	60.0	-28.9	19.826	10.6	20.5	31.1	50.0	-18.9
20.099	10.6	20.5	31.1	60.0	-28.9	20.099	10.6	20.5	31.1	50.0	-18.9
20.233	10.6	20.5	31.1	60.0	-28.9	20.233	10.6	20.5	31.1	50.0	-18.9
20.315	10.6	20.5	31.1	60.0	-28.9	20.315	10.6	20.5	31.1	50.0	-18.9
20.882	10.5	20.6	31.1	60.0	-28.9	20.882	10.5	20.6	31.1	50.0	-18.9
21.785	10.5	20.6	31.1	60.0	-28.9	21.785	10.5	20.6	31.1	50.0	-18.9
23.740	10.3	20.8	31.1	60.0	-28.9	23.740	10.3	20.8	31.1	50.0	-18.9
23.893	10.3	20.8	31.1	60.0	-28.9	23.893	10.3	20.8	31.1	50.0	-18.9
26.351	10.2	20.9	31.1	60.0	-28.9	26.351	10.2	20.9	31.1	50.0	-18.9
27.097	10.1	21.0	31.1	60.0	-28.9	27.097	10.1	21.0	31.1	50.0	-18.9
28.970	9.9	21.2	31.1	60.0	-28.9	28.970	9.9	21.2	31.1	50.0	-18.9
29.642	9.9	21.2	31.1	60.0	-28.9	29.642	9.9	21.2	31.1	50.0	-18.9
29.948	9.9	21.2	31.1	60.0	-28.9	29.948	9.9	21.2	31.1	50.0	-18.9
5.918	11.1	19.9	31.0	60.0	-29.0	5.918	11.1	19.9	31.0	50.0	-19.0
6.239	11.1	19.9	31.0	60.0	-29.0	6.239	11.1	19.9	31.0	50.0	-19.0
14.237	10.8	20.2	31.0	60.0	-29.0	14.237	10.8	20.2	31.0	50.0	-19.0
16.547	10.6	20.4	31.0	60.0	-29.0	16.547	10.6	20.4	31.0	50.0	-19.0
17.356	10.6	20.4	31.0	60.0	-29.0	17.356	10.6	20.4	31.0	50.0	-19.0
17.927	10.6	20.4	31.0	60.0	-29.0	17.927	10.6	20.4	31.0	50.0	-19.0
17.972	10.6	20.4	31.0	60.0	-29.0	17.972	10.6	20.4	31.0	50.0	-19.0

18.360	10.5	20.5	31.0	60.0	-29.0	18.360	10.5	20.5	31.0	50.0	-19.0
20.792	10.4	20.6	31.0	60.0	-29.0	20.792	10.4	20.6	31.0	50.0	-19.0
23.363	10.2	20.8	31.0	60.0	-29.0	23.363	10.2	20.8	31.0	50.0	-19.0
9.682	10.8	20.1	30.9	60.0	-29.1	9.682	10.8	20.1	30.9	50.0	-19.1
12.040	10.7	20.2	30.9	60.0	-29.1	12.040	10.7	20.2	30.9	50.0	-19.1
14.562	10.6	20.3	30.9	60.0	-29.1	14.562	10.6	20.3	30.9	50.0	-19.1
15.857	10.5	20.4	30.9	60.0	-29.1	15.857	10.5	20.4	30.9	50.0	-19.1
17.875	10.5	20.4	30.9	60.0	-29.1	17.875	10.5	20.4	30.9	50.0	-19.1
20.390	10.4	20.5	30.9	60.0	-29.1	20.390	10.4	20.5	30.9	50.0	-19.1
23.072	10.2	20.7	30.9	60.0	-29.1	23.072	10.2	20.7	30.9	50.0	-19.1
26.989	9.9	21.0	30.9	60.0	-29.1	26.989	9.9	21.0	30.9	50.0	-19.1
8.626	10.8	20.0	30.8	60.0	-29.2	8.626	10.8	20.0	30.8	50.0	-19.2
11.645	10.6	20.2	30.8	60.0	-29.2	11.645	10.6	20.2	30.8	50.0	-19.2
12.827	10.6	20.2	30.8	60.0	-29.2	12.827	10.6	20.2	30.8	50.0	-19.2
13.726	10.6	20.2	30.8	60.0	-29.2	13.726	10.6	20.2	30.8	50.0	-19.2
14.211	10.6	20.2	30.8	60.0	-29.2	14.211	10.6	20.2	30.8	50.0	-19.2
15.114	10.4	20.4	30.8	60.0	-29.2	15.114	10.4	20.4	30.8	50.0	-19.2
16.144	10.4	20.4	30.8	60.0	-29.2	16.144	10.4	20.4	30.8	50.0	-19.2
16.573	10.4	20.4	30.8	60.0	-29.2	16.573	10.4	20.4	30.8	50.0	-19.2
18.032	10.4	20.4	30.8	60.0	-29.2	18.032	10.4	20.4	30.8	50.0	-19.2
18.811	10.3	20.5	30.8	60.0	-29.2	18.811	10.3	20.5	30.8	50.0	-19.2
19.949	10.3	20.5	30.8	60.0	-29.2	19.949	10.3	20.5	30.8	50.0	-19.2
20.035	10.3	20.5	30.8	60.0	-29.2	20.035	10.3	20.5	30.8	50.0	-19.2
24.561	10.0	20.8	30.8	60.0	-29.2	24.561	10.0	20.8	30.8	50.0	-19.2
9.223	10.6	20.1	30.7	60.0	-29.3	9.223	10.6	20.1	30.7	50.0	-19.3
12.338	10.5	20.2	30.7	60.0	-29.3	12.338	10.5	20.2	30.7	50.0	-19.3
14.043	10.5	20.2	30.7	60.0	-29.3	14.043	10.5	20.2	30.7	50.0	-19.3
15.401	10.3	20.4	30.7	60.0	-29.3	15.401	10.3	20.4	30.7	50.0	-19.3
16.211	10.3	20.4	30.7	60.0	-29.3	16.211	10.3	20.4	30.7	50.0	-19.3
16.412	10.3	20.4	30.7	60.0	-29.3	16.412	10.3	20.4	30.7	50.0	-19.3
16.636	10.3	20.4	30.7	60.0	-29.3	16.636	10.3	20.4	30.7	50.0	-19.3
18.767	10.2	20.5	30.7	60.0	-29.3	18.767	10.2	20.5	30.7	50.0	-19.3
19.558	10.2	20.5	30.7	60.0	-29.3	19.558	10.2	20.5	30.7	50.0	-19.3
22.852	10.0	20.7	30.7	60.0	-29.3	22.852	10.0	20.7	30.7	50.0	-19.3
24.378	9.9	20.8	30.7	60.0	-29.3	24.378	9.9	20.8	30.7	50.0	-19.3
24.672	9.9	20.8	30.7	60.0	-29.3	24.672	9.9	20.8	30.7	50.0	-19.3
24.736	9.9	20.8	30.7	60.0	-29.3	24.736	9.9	20.8	30.7	50.0	-19.3
26.709	9.8	20.9	30.7	60.0	-29.3	26.709	9.8	20.9	30.7	50.0	-19.3
6.093	10.7	19.9	30.6	60.0	-29.4	6.093	10.7	19.9	30.6	50.0	-19.4
7.873	10.7	19.9	30.6	60.0	-29.4	7.873	10.7	19.9	30.6	50.0	-19.4
7.917	10.6	20.0	30.6	60.0	-29.4	7.917	10.6	20.0	30.6	50.0	-19.4
8.108	10.6	20.0	30.6	60.0	-29.4	8.108	10.6	20.0	30.6	50.0	-19.4
9.742	10.5	20.1	30.6	60.0	-29.4	9.742	10.5	20.1	30.6	50.0	-19.4
9.794	10.5	20.1	30.6	60.0	-29.4	9.794	10.5	20.1	30.6	50.0	-19.4
9.872	10.5	20.1	30.6	60.0	-29.4	9.872	10.5	20.1	30.6	50.0	-19.4
10.152	10.5	20.1	30.6	60.0	-29.4	10.152	10.5	20.1	30.6	50.0	-19.4
11.794	10.4	20.2	30.6	60.0	-29.4	11.794	10.4	20.2	30.6	50.0	-19.4
14.528	10.3	20.3	30.6	60.0	-29.4	14.528	10.3	20.3	30.6	50.0	-19.4
15.495	10.2	20.4	30.6	60.0	-29.4	15.495	10.2	20.4	30.6	50.0	-19.4
15.838	10.2	20.4	30.6	60.0	-29.4	15.838	10.2	20.4	30.6	50.0	-19.4
17.703	10.2	20.4	30.6	60.0	-29.4	17.703	10.2	20.4	30.6	50.0	-19.4
19.602	10.1	20.5	30.6	60.0	-29.4	19.602	10.1	20.5	30.6	50.0	-19.4
20.464	10.1	20.5	30.6	60.0	-29.4	20.464	10.1	20.5	30.6	50.0	-19.4
21.259	10.0	20.6	30.6	60.0	-29.4	21.259	10.0	20.6	30.6	50.0	-19.4
23.441	9.8	20.8	30.6	60.0	-29.4	23.441	9.8	20.8	30.6	50.0	-19.4
23.527	9.8	20.8	30.6	60.0	-29.4	23.527	9.8	20.8	30.6	50.0	-19.4
5.231	10.7	19.8	30.5	60.0	-29.5	5.231	10.7	19.8	30.5	50.0	-19.5
5.672	10.6	19.9	30.5	60.0	-29.5	5.672	10.6	19.9	30.5	50.0	-19.5
6.414	10.6	19.9	30.5	60.0	-29.5	6.414	10.6	19.9	30.5	50.0	-19.5
6.619	10.6	19.9	30.5	60.0	-29.5	6.619	10.6	19.9	30.5	50.0	-19.5
7.294	10.6	19.9	30.5	60.0	-29.5	7.294	10.6	19.9	30.5	50.0	-19.5
7.567	10.6	19.9	30.5	60.0	-29.5	7.567	10.6	19.9	30.5	50.0	-19.5
8.608	10.5	20.0	30.5	60.0	-29.5	8.608	10.5	20.0	30.5	50.0	-19.5
9.249	10.4	20.1	30.5	60.0	-29.5	9.249	10.4	20.1	30.5	50.0	-19.5
11.499	10.3	20.2	30.5	60.0	-29.5	11.499	10.3	20.2	30.5	50.0	-19.5
11.827	10.3	20.2	30.5	60.0	-29.5	11.827	10.3	20.2	30.5	50.0	-19.5
13.678	10.3	20.2	30.5	60.0	-29.5	13.678	10.3	20.2	30.5	50.0	-19.5
15.696	10.1	20.4	30.5	60.0	-29.5	15.696	10.1	20.4	30.5	50.0	-19.5
17.211	10.1	20.4	30.5	60.0	-29.5	17.211	10.1	20.4	30.5	50.0	-19.5
17.412	10.1	20.4	30.5	60.0	-29.5	17.412	10.1	20.4	30.5	50.0	-19.5
17.483	10.1	20.4	30.5	60.0	-29.5	17.483	10.1	20.4	30.5	50.0	-19.5
19.453	10.0	20.5	30.5	60.0	-29.5	19.453	10.0	20.5	30.5	50.0	-19.5
20.934	9.9	20.6	30.5	60.0	-29.5	20.934	9.9	20.6	30.5	50.0	-19.5
22.725	9.8	20.7	30.5	60.0	-29.5	22.725	9.8	20.7	30.5	50.0	-19.5
24.993	9.7	20.8	30.5	60.0	-29.5	24.993	9.7	20.8	30.5	50.0	-19.5
7.238	10.5	19.9	30.4	60.0	-29.6	7.238	10.5	19.9	30.4	50.0	-19.6
8.309	10.4	20.0	30.4	60.0	-29.6	8.309	10.4	20.0	30.4	50.0	-19.6
10.481	10.3	20.1	30.4	60.0	-29.6	10.481	10.3	20.1	30.4	50.0	-19.6
12.600	10.2	20.2	30.4	60.0	-29.6	12.600	10.2	20.2	30.4	50.0	-19.6
15.013	10.0	20.4	30.4	60.0	-29.6	15.013	10.0	20.4	30.4	50.0	-19.6
19.028	9.9	20.5	30.4	60.0	-29.6	19.028	9.9	20.5	30.4	50.0	-19.6

8.380	10.3	20.0	30.3	60.0	-29.7	8.380	10.3	20.0	30.3	50.0	-19.7
9.574	10.2	20.1	30.3	60.0	-29.7	9.574	10.2	20.1	30.3	50.0	-19.7
10.231	10.2	20.1	30.3	60.0	-29.7	10.231	10.2	20.1	30.3	50.0	-19.7
10.611	10.2	20.1	30.3	60.0	-29.7	10.611	10.2	20.1	30.3	50.0	-19.7
11.865	10.1	20.2	30.3	60.0	-29.7	11.865	10.1	20.2	30.3	50.0	-19.7
11.928	10.1	20.2	30.3	60.0	-29.7	11.928	10.1	20.2	30.3	50.0	-19.7
15.219	9.9	20.4	30.3	60.0	-29.7	15.219	9.9	20.4	30.3	50.0	-19.7
15.308	9.9	20.4	30.3	60.0	-29.7	15.308	9.9	20.4	30.3	50.0	-19.7
16.457	9.9	20.4	30.3	60.0	-29.7	16.457	9.9	20.4	30.3	50.0	-19.7
18.647	9.8	20.5	30.3	60.0	-29.7	18.647	9.8	20.5	30.3	50.0	-19.7
20.136	9.8	20.5	30.3	60.0	-29.7	20.136	9.8	20.5	30.3	50.0	-19.7
22.572	9.6	20.7	30.3	60.0	-29.7	22.572	9.6	20.7	30.3	50.0	-19.7
23.624	9.5	20.8	30.3	60.0	-29.7	23.624	9.5	20.8	30.3	50.0	-19.7
7.432	10.3	19.9	30.2	60.0	-29.8	7.432	10.3	19.9	30.2	50.0	-19.8
7.518	10.3	19.9	30.2	60.0	-29.8	7.518	10.3	19.9	30.2	50.0	-19.8
10.943	10.1	20.1	30.2	60.0	-29.8	10.943	10.1	20.1	30.2	50.0	-19.8
12.081	10.0	20.2	30.2	60.0	-29.8	12.081	10.0	20.2	30.2	50.0	-19.8
12.529	10.0	20.2	30.2	60.0	-29.8	12.529	10.0	20.2	30.2	50.0	-19.8
12.768	10.0	20.2	30.2	60.0	-29.8	12.768	10.0	20.2	30.2	50.0	-19.8
13.178	10.0	20.2	30.2	60.0	-29.8	13.178	10.0	20.2	30.2	50.0	-19.8
14.972	9.8	20.4	30.2	60.0	-29.8	14.972	9.8	20.4	30.2	50.0	-19.8
15.379	9.8	20.4	30.2	60.0	-29.8	15.379	9.8	20.4	30.2	50.0	-19.8
15.610	9.8	20.4	30.2	60.0	-29.8	15.610	9.8	20.4	30.2	50.0	-19.8
19.252	9.7	20.5	30.2	60.0	-29.8	19.252	9.7	20.5	30.2	50.0	-19.8
24.863	9.4	20.8	30.2	60.0	-29.8	24.863	9.4	20.8	30.2	50.0	-19.8
26.150	9.3	20.9	30.2	60.0	-29.8	26.150	9.3	20.9	30.2	50.0	-19.8
6.384	10.2	19.9	30.1	60.0	-29.9	6.384	10.2	19.9	30.1	50.0	-19.9
13.525	9.9	20.2	30.1	60.0	-29.9	13.525	9.9	20.2	30.1	50.0	-19.9
13.920	9.9	20.2	30.1	60.0	-29.9	13.920	9.9	20.2	30.1	50.0	-19.9
5.534	10.1	19.9	30.0	60.0	-30.0	5.534	10.1	19.9	30.0	50.0	-20.0
6.347	10.1	19.9	30.0	60.0	-30.0	6.347	10.1	19.9	30.0	50.0	-20.0
7.339	10.1	19.9	30.0	60.0	-30.0	7.339	10.1	19.9	30.0	50.0	-20.0
13.122	9.8	20.2	30.0	60.0	-30.0	13.122	9.8	20.2	30.0	50.0	-20.0
14.681	9.7	20.3	30.0	60.0	-30.0	14.681	9.7	20.3	30.0	50.0	-20.0
6.824	10.0	19.9	29.9	60.0	-30.1	6.824	10.0	19.9	29.9	50.0	-20.1
13.641	9.7	20.2	29.9	60.0	-30.1	13.641	9.7	20.2	29.9	50.0	-20.1
15.670	9.5	20.4	29.9	60.0	-30.1	15.670	9.5	20.4	29.9	50.0	-20.1
19.099	9.4	20.5	29.9	60.0	-30.1	19.099	9.4	20.5	29.9	50.0	-20.1
5.746	9.9	19.9	29.8	60.0	-30.2	5.746	9.9	19.9	29.8	50.0	-20.2
7.000	9.9	19.9	29.8	60.0	-30.2	7.000	9.9	19.9	29.8	50.0	-20.2
8.179	9.8	20.0	29.8	60.0	-30.2	8.179	9.8	20.0	29.8	50.0	-20.2
8.850	9.8	20.0	29.8	60.0	-30.2	8.850	9.8	20.0	29.8	50.0	-20.2
8.996	9.8	20.0	29.8	60.0	-30.2	8.996	9.8	20.0	29.8	50.0	-20.2
13.376	9.6	20.2	29.8	60.0	-30.2	13.376	9.6	20.2	29.8	50.0	-20.2
17.599	9.4	20.4	29.8	60.0	-30.2	17.599	9.4	20.4	29.8	50.0	-20.2
5.806	9.8	19.9	29.7	60.0	-30.3	5.806	9.8	19.9	29.7	50.0	-20.3
6.933	9.8	19.9	29.7	60.0	-30.3	6.933	9.8	19.9	29.7	50.0	-20.3
7.634	9.8	19.9	29.7	60.0	-30.3	7.634	9.8	19.9	29.7	50.0	-20.3
11.286	9.6	20.1	29.7	60.0	-30.3	11.286	9.6	20.1	29.7	50.0	-20.3
5.063	9.8	19.8	29.6	60.0	-30.4	5.063	9.8	19.8	29.6	50.0	-20.4
7.160	9.7	19.9	29.6	60.0	-30.4	7.160	9.7	19.9	29.6	50.0	-20.4
18.867	9.1	20.5	29.6	60.0	-30.4	18.867	9.1	20.5	29.6	50.0	-20.4
6.571	9.6	19.9	29.5	60.0	-30.5	6.571	9.6	19.9	29.5	50.0	-20.5
7.059	9.6	19.9	29.5	60.0	-30.5	7.059	9.6	19.9	29.5	50.0	-20.5
11.719	9.3	20.2	29.5	60.0	-30.5	11.719	9.3	20.2	29.5	50.0	-20.5
7.015	9.3	19.9	29.2	60.0	-30.8	7.015	9.3	19.9	29.2	50.0	-20.8
14.402	9.0	20.2	29.2	60.0	-30.8	14.402	9.0	20.2	29.2	50.0	-20.8
9.384	9.0	20.1	29.1	60.0	-30.9	9.384	9.0	20.1	29.1	50.0	-20.9

AC - POWERLINE CONDUCTED EMISSIONS

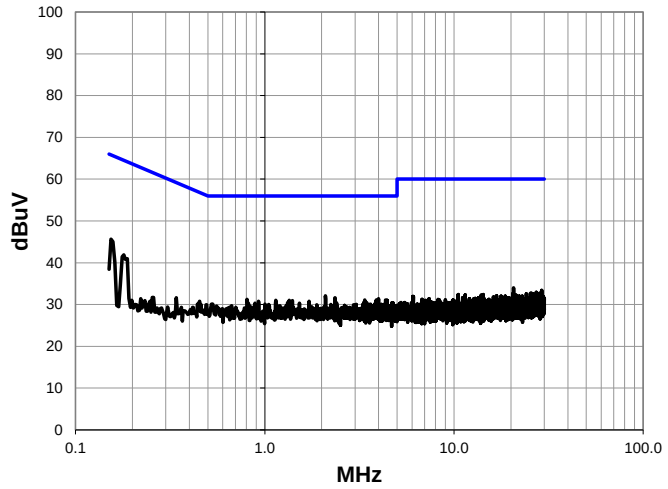
EmiR5 2017.07.11 PSA-ESCI 2017.06.01

Work Order:	SCHW0219	**Date:**	07/28/17		
Project:	None	**Temperature:**	22.7 °C		
Job Site:	EV07	**Humidity:**	42.3% RH		
Serial Number:	A02654144	**Barometric Pres.:**	1022 mbar	**Tested by:**	Mark Baytan
EUT:	9630-9110				
Configuration:	6				
Customer:	Schweitzer Engineering Laboratories, Inc.				
Attendees:	Allan Davis				
EUT Power:	110VAC/60Hz				
Operating Mode:	Transmitting continuously at Mid Ch (915 MHz)				
Deviations:	None				
Comments:	Power level setting: 27 dBm. 3.5VDC input to DC voltage regulator. 1W SMA terminator on antenna port.				

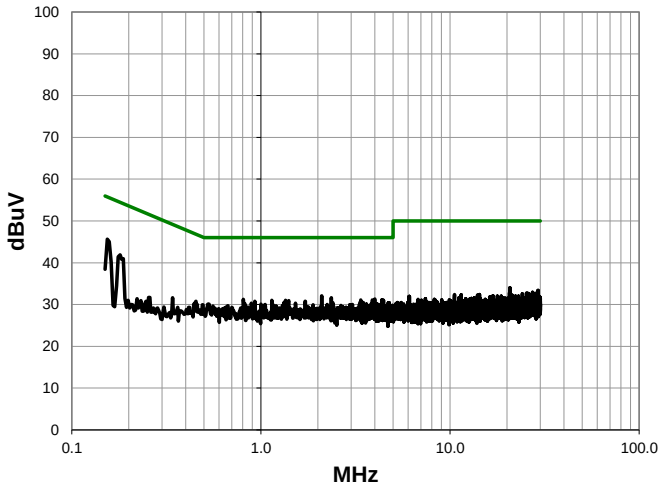
Test Specifications	**Class B**	**Test Method**	
FCC 15.207:2017		ANSI C63.10:2013	

Run #	9	**Line:**	High Line	**Ext. Attenuation:**	0	**Results**	Pass

Peak Data - vs - Quasi Peak Limit



Peak Data - vs - Average Limit



Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.154	25.9	19.7	45.6	65.8	-20.2
0.180	22.4	19.5	41.9	64.5	-22.6
2.094	12.5	19.6	32.1	56.0	-23.9
2.355	12.0	19.6	31.6	56.0	-24.4
3.993	11.5	19.8	31.3	56.0	-24.7

Peak Data - vs - Average Limit

Freq (MHz)	Amplitude (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Compared to Spec. (dB)
0.154	25.9	19.7	45.6	55.8	-10.2
0.180	22.4	19.5	41.9	54.5	-12.6
2.094	12.5	19.6	32.1	46.0	-13.9
2.355	12.0	19.6	31.6	46.0	-14.4
3.993	11.5	19.8	31.3	46.0	-14.7

0.807	11.7	19.5	31.2	56.0	-24.8	0.807	11.7	19.5	31.2	46.0	-14.8
3.373	11.3	19.8	31.1	56.0	-24.9	3.373	11.3	19.8	31.1	46.0	-14.9
3.881	11.3	19.8	31.1	56.0	-24.9	3.881	11.3	19.8	31.1	46.0	-14.9
4.358	11.3	19.8	31.1	56.0	-24.9	4.358	11.3	19.8	31.1	46.0	-14.9
1.142	11.5	19.5	31.0	56.0	-25.0	1.142	11.5	19.5	31.0	46.0	-15.0
1.348	11.5	19.5	31.0	56.0	-25.0	1.348	11.5	19.5	31.0	46.0	-15.0
4.437	11.2	19.8	31.0	56.0	-25.0	4.437	11.2	19.8	31.0	46.0	-15.0
1.400	11.4	19.5	30.9	56.0	-25.1	1.400	11.4	19.5	30.9	46.0	-15.1
0.926	11.3	19.5	30.8	56.0	-25.2	0.926	11.3	19.5	30.8	46.0	-15.2
1.713	11.2	19.6	30.8	56.0	-25.2	1.713	11.2	19.6	30.8	46.0	-15.2
3.355	10.8	19.8	30.6	56.0	-25.4	3.355	10.8	19.8	30.6	46.0	-15.4
1.321	11.0	19.5	30.5	56.0	-25.5	1.321	11.0	19.5	30.5	46.0	-15.5
3.463	10.7	19.8	30.5	56.0	-25.5	3.463	10.7	19.8	30.5	46.0	-15.5
2.396	10.7	19.7	30.4	56.0	-25.6	2.396	10.7	19.7	30.4	46.0	-15.6
4.705	10.6	19.8	30.4	56.0	-25.6	4.705	10.6	19.8	30.4	46.0	-15.6
4.761	10.6	19.8	30.4	56.0	-25.6	4.761	10.6	19.8	30.4	46.0	-15.6
0.889	10.8	19.5	30.3	56.0	-25.7	0.889	10.8	19.5	30.3	46.0	-15.7
1.523	10.7	19.6	30.3	56.0	-25.7	1.523	10.7	19.6	30.3	46.0	-15.7
1.001	10.6	19.5	30.1	56.0	-25.9	1.001	10.6	19.5	30.1	46.0	-15.9
3.616	10.3	19.8	30.1	56.0	-25.9	3.616	10.3	19.8	30.1	46.0	-15.9
3.810	10.3	19.8	30.1	56.0	-25.9	3.810	10.3	19.8	30.1	46.0	-15.9
4.127	10.3	19.8	30.1	56.0	-25.9	4.127	10.3	19.8	30.1	46.0	-15.9
0.452	11.3	19.5	30.8	56.8	-26.0	0.452	11.3	19.5	30.8	46.8	-16.0
1.049	10.5	19.5	30.0	56.0	-26.0	1.049	10.5	19.5	30.0	46.0	-16.0
2.239	10.4	19.6	30.0	56.0	-26.0	2.239	10.4	19.6	30.0	46.0	-16.0
3.041	10.2	19.8	30.0	56.0	-26.0	3.041	10.2	19.8	30.0	46.0	-16.0
3.564	10.2	19.8	30.0	56.0	-26.0	3.564	10.2	19.8	30.0	46.0	-16.0
3.914	10.2	19.8	30.0	56.0	-26.0	3.914	10.2	19.8	30.0	46.0	-16.0
4.265	10.2	19.8	30.0	56.0	-26.0	4.265	10.2	19.8	30.0	46.0	-16.0
20.703	13.4	20.6	34.0	60.0	-26.0	20.703	13.4	20.6	34.0	50.0	-16.0
1.157	10.4	19.5	29.9	56.0	-26.1	1.157	10.4	19.5	29.9	46.0	-16.1
1.885	10.3	19.6	29.9	56.0	-26.1	1.885	10.3	19.6	29.9	46.0	-16.1
2.952	10.1	19.8	29.9	56.0	-26.1	2.952	10.1	19.8	29.9	46.0	-16.1
2.642	10.1	19.7	29.8	56.0	-26.2	2.642	10.1	19.7	29.8	46.0	-16.2
3.631	10.0	19.8	29.8	56.0	-26.2	3.631	10.0	19.8	29.8	46.0	-16.2
4.959	10.0	19.8	29.8	56.0	-26.2	4.959	10.0	19.8	29.8	46.0	-16.2
0.669	10.2	19.5	29.7	56.0	-26.3	0.669	10.2	19.5	29.7	46.0	-16.3
4.231	9.9	19.8	29.7	56.0	-26.3	4.231	9.9	19.8	29.7	46.0	-16.3
4.881	9.9	19.8	29.7	56.0	-26.3	4.881	9.9	19.8	29.7	46.0	-16.3
4.810	9.8	19.8	29.6	56.0	-26.4	4.810	9.8	19.8	29.6	46.0	-16.4
4.560	9.6	19.8	29.4	56.0	-26.6	4.560	9.6	19.8	29.4	46.0	-16.6
29.101	12.2	21.2	33.4	60.0	-26.6	29.101	12.2	21.2	33.4	50.0	-16.6
27.239	11.8	21.1	32.9	60.0	-27.1	27.239	11.8	21.1	32.9	50.0	-17.1
20.610	12.3	20.5	32.8	60.0	-27.2	20.610	12.3	20.5	32.8	50.0	-17.2
27.429	11.7	21.1	32.8	60.0	-27.2	27.429	11.7	21.1	32.8	50.0	-17.2
28.638	11.7	21.1	32.8	60.0	-27.2	28.638	11.7	21.1	32.8	50.0	-17.2
25.359	11.9	20.8	32.7	60.0	-27.3	25.359	11.9	20.8	32.7	50.0	-17.3
25.616	11.8	20.9	32.7	60.0	-27.3	25.616	11.8	20.9	32.7	50.0	-17.3
2.500	9.0	19.7	28.7	56.0	-27.3	2.500	9.0	19.7	28.7	46.0	-17.3
26.001	11.7	20.9	32.6	60.0	-27.4	26.001	11.7	20.9	32.6	50.0	-17.4
24.124	11.7	20.8	32.5	60.0	-27.5	24.124	11.7	20.8	32.5	50.0	-17.5
0.340	12.1	19.5	31.6	59.2	-27.6	0.340	12.1	19.5	31.6	49.2	-17.6
10.529	12.3	20.1	32.4	60.0	-27.6	10.529	12.3	20.1	32.4	50.0	-17.6
14.286	12.2	20.2	32.4	60.0	-27.6	14.286	12.2	20.2	32.4	50.0	-17.6
27.657	11.3	21.1	32.4	60.0	-27.6	27.657	11.3	21.1	32.4	50.0	-17.6
11.462	12.1	20.2	32.3	60.0	-27.7	11.462	12.1	20.2	32.3	50.0	-17.7
26.657	11.4	20.9	32.3	60.0	-27.7	26.657	11.4	20.9	32.3	50.0	-17.7
28.030	11.2	21.1	32.3	60.0	-27.7	28.030	11.2	21.1	32.3	50.0	-17.7
13.958	12.0	20.2	32.2	60.0	-27.8	13.958	12.0	20.2	32.2	50.0	-17.8
21.292	11.6	20.6	32.2	60.0	-27.8	21.292	11.6	20.6	32.2	50.0	-17.8
27.347	11.1	21.1	32.2	60.0	-27.8	27.347	11.1	21.1	32.2	50.0	-17.8
27.504	11.1	21.1	32.2	60.0	-27.8	27.504	11.1	21.1	32.2	50.0	-17.8
16.830	11.7	20.4	32.1	60.0	-27.9	16.830	11.7	20.4	32.1	50.0	-17.9
26.053	11.2	20.9	32.1	60.0	-27.9	26.053	11.2	20.9	32.1	50.0	-17.9
28.008	11.0	21.1	32.1	60.0	-27.9	28.008	11.0	21.1	32.1	50.0	-17.9
28.273	11.0	21.1	32.1	60.0	-27.9	28.273	11.0	21.1	32.1	50.0	-17.9
28.317	11.0	21.1	32.1	60.0	-27.9	28.317	11.0	21.1	32.1	50.0	-17.9
17.770	11.6	20.4	32.0	60.0	-28.0	17.770	11.6	20.4	32.0	50.0	-18.0
18.655	11.5	20.5	32.0	60.0	-28.0	18.655	11.5	20.5	32.0	50.0	-18.0
22.173	11.4	20.6	32.0	60.0	-28.0	22.173	11.4	20.6	32.0	50.0	-18.0
22.964	11.3	20.7	32.0	60.0	-28.0	22.964	11.3	20.7	32.0	50.0	-18.0
28.780	10.9	21.1	32.0	60.0	-28.0	28.780	10.9	21.1	32.0	50.0	-18.0
6.060	12.0	19.9	31.9	60.0	-28.1	6.060	12.0	19.9	31.9	50.0	-18.1
6.097	12.0	19.9	31.9	60.0	-28.1	6.097	12.0	19.9	31.9	50.0	-18.1
20.845	11.3	20.6	31.9	60.0	-28.1	20.845	11.3	20.6	31.9	50.0	-18.1
22.057	11.3	20.6	31.9	60.0	-28.1	22.057	11.3	20.6	31.9	50.0	-18.1
29.668	10.7	21.2	31.9	60.0	-28.1	29.668	10.7	21.2	31.9	50.0	-18.1
16.174	11.4	20.4	31.8	60.0	-28.2	16.174	11.4	20.4	31.8	50.0	-18.2
21.874	11.2	20.6	31.8	60.0	-28.2	21.874	11.2	20.6	31.8	50.0	-18.2
22.288	11.2	20.6	31.8	60.0	-28.2	22.288	11.2	20.6	31.8	50.0	-18.2
27.291	10.7	21.1	31.8	60.0	-28.2	27.291	10.7	21.1	31.8	50.0	-18.2

29.183	10.6	21.2	31.8	60.0	-28.2	29.183	10.6	21.2	31.8	50.0	-18.2
29.743	10.6	21.2	31.8	60.0	-28.2	29.743	10.6	21.2	31.8	50.0	-18.2
16.371	11.3	20.4	31.7	60.0	-28.3	16.371	11.3	20.4	31.7	50.0	-18.3
24.363	10.9	20.8	31.7	60.0	-28.3	24.363	10.9	20.8	31.7	50.0	-18.3
26.829	10.8	20.9	31.7	60.0	-28.3	26.829	10.8	20.9	31.7	50.0	-18.3
28.545	10.6	21.1	31.7	60.0	-28.3	28.545	10.6	21.1	31.7	50.0	-18.3
28.825	10.6	21.1	31.7	60.0	-28.3	28.825	10.6	21.1	31.7	50.0	-18.3
29.362	10.5	21.2	31.7	60.0	-28.3	29.362	10.5	21.2	31.7	50.0	-18.3
11.126	11.5	20.1	31.6	60.0	-28.4	11.126	11.5	20.1	31.6	50.0	-18.4
13.447	11.4	20.2	31.6	60.0	-28.4	13.447	11.4	20.2	31.6	50.0	-18.4
18.599	11.1	20.5	31.6	60.0	-28.4	18.599	11.1	20.5	31.6	50.0	-18.4
19.058	11.1	20.5	31.6	60.0	-28.4	19.058	11.1	20.5	31.6	50.0	-18.4
19.554	11.1	20.5	31.6	60.0	-28.4	19.554	11.1	20.5	31.6	50.0	-18.4
26.471	10.7	20.9	31.6	60.0	-28.4	26.471	10.7	20.9	31.6	50.0	-18.4
12.947	11.3	20.2	31.5	60.0	-28.5	12.947	11.3	20.2	31.5	50.0	-18.5
18.569	11.0	20.5	31.5	60.0	-28.5	18.569	11.0	20.5	31.5	50.0	-18.5
20.162	11.0	20.5	31.5	60.0	-28.5	20.162	11.0	20.5	31.5	50.0	-18.5
21.956	10.9	20.6	31.5	60.0	-28.5	21.956	10.9	20.6	31.5	50.0	-18.5
25.691	10.6	20.9	31.5	60.0	-28.5	25.691	10.6	20.9	31.5	50.0	-18.5
26.698	10.6	20.9	31.5	60.0	-28.5	26.698	10.6	20.9	31.5	50.0	-18.5
27.467	10.4	21.1	31.5	60.0	-28.5	27.467	10.4	21.1	31.5	50.0	-18.5
29.131	10.3	21.2	31.5	60.0	-28.5	29.131	10.3	21.2	31.5	50.0	-18.5
29.541	10.3	21.2	31.5	60.0	-28.5	29.541	10.3	21.2	31.5	50.0	-18.5
29.993	10.3	21.2	31.5	60.0	-28.5	29.993	10.3	21.2	31.5	50.0	-18.5
7.399	11.5	19.9	31.4	60.0	-28.6	7.399	11.5	19.9	31.4	50.0	-18.6
12.089	11.2	20.2	31.4	60.0	-28.6	12.089	11.2	20.2	31.4	50.0	-18.6
23.479	10.6	20.8	31.4	60.0	-28.6	23.479	10.6	20.8	31.4	50.0	-18.6
24.549	10.6	20.8	31.4	60.0	-28.6	24.549	10.6	20.8	31.4	50.0	-18.6
29.896	10.2	21.2	31.4	60.0	-28.6	29.896	10.2	21.2	31.4	50.0	-18.6
12.704	11.1	20.2	31.3	60.0	-28.7	12.704	11.1	20.2	31.3	50.0	-18.7
14.476	11.0	20.3	31.3	60.0	-28.7	14.476	11.0	20.3	31.3	50.0	-18.7
20.781	10.7	20.6	31.3	60.0	-28.7	20.781	10.7	20.6	31.3	50.0	-18.7
22.591	10.6	20.7	31.3	60.0	-28.7	22.591	10.6	20.7	31.3	50.0	-18.7
24.281	10.5	20.8	31.3	60.0	-28.7	24.281	10.5	20.8	31.3	50.0	-18.7
24.956	10.5	20.8	31.3	60.0	-28.7	24.956	10.5	20.8	31.3	50.0	-18.7
26.568	10.4	20.9	31.3	60.0	-28.7	26.568	10.4	20.9	31.3	50.0	-18.7
27.019	10.3	21.0	31.3	60.0	-28.7	27.019	10.3	21.0	31.3	50.0	-18.7
28.426	10.2	21.1	31.3	60.0	-28.7	28.426	10.2	21.1	31.3	50.0	-18.7
29.228	10.1	21.2	31.3	60.0	-28.7	29.228	10.1	21.2	31.3	50.0	-18.7
29.884	10.1	21.2	31.3	60.0	-28.7	29.884	10.1	21.2	31.3	50.0	-18.7
6.776	11.3	19.9	31.2	60.0	-28.8	6.776	11.3	19.9	31.2	50.0	-18.8
8.257	11.2	20.0	31.2	60.0	-28.8	8.257	11.2	20.0	31.2	50.0	-18.8
12.786	11.0	20.2	31.2	60.0	-28.8	12.786	11.0	20.2	31.2	50.0	-18.8
15.319	10.8	20.4	31.2	60.0	-28.8	15.319	10.8	20.4	31.2	50.0	-18.8
16.293	10.8	20.4	31.2	60.0	-28.8	16.293	10.8	20.4	31.2	50.0	-18.8
21.229	10.6	20.6	31.2	60.0	-28.8	21.229	10.6	20.6	31.2	50.0	-18.8
21.516	10.6	20.6	31.2	60.0	-28.8	21.516	10.6	20.6	31.2	50.0	-18.8
21.785	10.6	20.6	31.2	60.0	-28.8	21.785	10.6	20.6	31.2	50.0	-18.8
23.960	10.4	20.8	31.2	60.0	-28.8	23.960	10.4	20.8	31.2	50.0	-18.8
24.090	10.4	20.8	31.2	60.0	-28.8	24.090	10.4	20.8	31.2	50.0	-18.8
8.361	11.1	20.0	31.1	60.0	-28.9	8.361	11.1	20.0	31.1	50.0	-18.9
9.022	11.1	20.0	31.1	60.0	-28.9	9.022	11.1	20.0	31.1	50.0	-18.9
9.910	11.0	20.1	31.1	60.0	-28.9	9.910	11.0	20.1	31.1	50.0	-18.9
11.141	11.0	20.1	31.1	60.0	-28.9	11.141	11.0	20.1	31.1	50.0	-18.9
11.361	10.9	20.2	31.1	60.0	-28.9	11.361	10.9	20.2	31.1	50.0	-18.9
14.338	10.9	20.2	31.1	60.0	-28.9	14.338	10.9	20.2	31.1	50.0	-18.9
17.058	10.7	20.4	31.1	60.0	-28.9	17.058	10.7	20.4	31.1	50.0	-18.9
19.091	10.6	20.5	31.1	60.0	-28.9	19.091	10.6	20.5	31.1	50.0	-18.9
19.360	10.6	20.5	31.1	60.0	-28.9	19.360	10.6	20.5	31.1	50.0	-18.9
19.453	10.6	20.5	31.1	60.0	-28.9	19.453	10.6	20.5	31.1	50.0	-18.9
19.808	10.6	20.5	31.1	60.0	-28.9	19.808	10.6	20.5	31.1	50.0	-18.9
20.005	10.6	20.5	31.1	60.0	-28.9	20.005	10.6	20.5	31.1	50.0	-18.9
20.225	10.6	20.5	31.1	60.0	-28.9	20.225	10.6	20.5	31.1	50.0	-18.9
24.449	10.3	20.8	31.1	60.0	-28.9	24.449	10.3	20.8	31.1	50.0	-18.9
25.564	10.2	20.9	31.1	60.0	-28.9	25.564	10.2	20.9	31.1	50.0	-18.9
25.904	10.2	20.9	31.1	60.0	-28.9	25.904	10.2	20.9	31.1	50.0	-18.9
26.318	10.2	20.9	31.1	60.0	-28.9	26.318	10.2	20.9	31.1	50.0	-18.9
26.598	10.2	20.9	31.1	60.0	-28.9	26.598	10.2	20.9	31.1	50.0	-18.9
28.142	10.0	21.1	31.1	60.0	-28.9	28.142	10.0	21.1	31.1	50.0	-18.9
28.907	10.0	21.1	31.1	60.0	-28.9	28.907	10.0	21.1	31.1	50.0	-18.9
7.067	11.1	19.9	31.0	60.0	-29.0	7.067	11.1	19.9	31.0	50.0	-19.0
11.268	10.9	20.1	31.0	60.0	-29.0	11.268	10.9	20.1	31.0	50.0	-19.0
12.163	10.8	20.2	31.0	60.0	-29.0	12.163	10.8	20.2	31.0	50.0	-19.0
13.499	10.8	20.2	31.0	60.0	-29.0	13.499	10.8	20.2	31.0	50.0	-19.0
13.801	10.8	20.2	31.0	60.0	-29.0	13.801	10.8	20.2	31.0	50.0	-19.0
16.107	10.6	20.4	31.0	60.0	-29.0	16.107	10.6	20.4	31.0	50.0	-19.0
16.483	10.6	20.4	31.0	60.0	-29.0	16.483	10.6	20.4	31.0	50.0	-19.0
17.118	10.6	20.4	31.0	60.0	-29.0	17.118	10.6	20.4	31.0	50.0	-19.0
17.259	10.6	20.4	31.0	60.0	-29.0	17.259	10.6	20.4	31.0	50.0	-19.0
19.867	10.5	20.5	31.0	60.0	-29.0	19.867	10.5	20.5	31.0	50.0	-19.0
20.453	10.5	20.5	31.0	60.0	-29.0	20.453	10.5	20.5	31.0	50.0	-19.0

22.826	10.3	20.7	31.0	60.0	-29.0	22.826	10.3	20.7	31.0	50.0	-19.0
23.229	10.3	20.7	31.0	60.0	-29.0	23.229	10.3	20.7	31.0	50.0	-19.0
23.329	10.2	20.8	31.0	60.0	-29.0	23.329	10.2	20.8	31.0	50.0	-19.0
25.295	10.2	20.8	31.0	60.0	-29.0	25.295	10.2	20.8	31.0	50.0	-19.0
8.305	10.9	20.0	30.9	60.0	-29.1	8.305	10.9	20.0	30.9	50.0	-19.1
10.029	10.8	20.1	30.9	60.0	-29.1	10.029	10.8	20.1	30.9	50.0	-19.1
11.510	10.7	20.2	30.9	60.0	-29.1	11.510	10.7	20.2	30.9	50.0	-19.1
11.589	10.7	20.2	30.9	60.0	-29.1	11.589	10.7	20.2	30.9	50.0	-19.1
14.674	10.6	20.3	30.9	60.0	-29.1	14.674	10.6	20.3	30.9	50.0	-19.1
15.375	10.5	20.4	30.9	60.0	-29.1	15.375	10.5	20.4	30.9	50.0	-19.1
15.595	10.5	20.4	30.9	60.0	-29.1	15.595	10.5	20.4	30.9	50.0	-19.1
17.356	10.5	20.4	30.9	60.0	-29.1	17.356	10.5	20.4	30.9	50.0	-19.1
18.972	10.4	20.5	30.9	60.0	-29.1	18.972	10.4	20.5	30.9	50.0	-19.1
19.684	10.4	20.5	30.9	60.0	-29.1	19.684	10.4	20.5	30.9	50.0	-19.1
21.117	10.3	20.6	30.9	60.0	-29.1	21.117	10.3	20.6	30.9	50.0	-19.1
21.535	10.3	20.6	30.9	60.0	-29.1	21.535	10.3	20.6	30.9	50.0	-19.1
22.363	10.3	20.6	30.9	60.0	-29.1	22.363	10.3	20.6	30.9	50.0	-19.1
23.520	10.1	20.8	30.9	60.0	-29.1	23.520	10.1	20.8	30.9	50.0	-19.1
24.866	10.1	20.8	30.9	60.0	-29.1	24.866	10.1	20.8	30.9	50.0	-19.1
25.172	10.1	20.8	30.9	60.0	-29.1	25.172	10.1	20.8	30.9	50.0	-19.1
26.232	10.0	20.9	30.9	60.0	-29.1	26.232	10.0	20.9	30.9	50.0	-19.1
26.769	10.0	20.9	30.9	60.0	-29.1	26.769	10.0	20.9	30.9	50.0	-19.1
27.101	9.9	21.0	30.9	60.0	-29.1	27.101	9.9	21.0	30.9	50.0	-19.1
28.105	9.8	21.1	30.9	60.0	-29.1	28.105	9.8	21.1	30.9	50.0	-19.1
29.295	9.7	21.2	30.9	60.0	-29.1	29.295	9.7	21.2	30.9	50.0	-19.1
11.708	10.6	20.2	30.8	60.0	-29.2	11.708	10.6	20.2	30.8	50.0	-19.2
15.353	10.4	20.4	30.8	60.0	-29.2	15.353	10.4	20.4	30.8	50.0	-19.2
15.663	10.4	20.4	30.8	60.0	-29.2	15.663	10.4	20.4	30.8	50.0	-19.2
15.853	10.4	20.4	30.8	60.0	-29.2	15.853	10.4	20.4	30.8	50.0	-19.2
16.987	10.4	20.4	30.8	60.0	-29.2	16.987	10.4	20.4	30.8	50.0	-19.2
17.494	10.4	20.4	30.8	60.0	-29.2	17.494	10.4	20.4	30.8	50.0	-19.2
18.136	10.4	20.4	30.8	60.0	-29.2	18.136	10.4	20.4	30.8	50.0	-19.2
18.893	10.3	20.5	30.8	60.0	-29.2	18.893	10.3	20.5	30.8	50.0	-19.2
22.755	10.1	20.7	30.8	60.0	-29.2	22.755	10.1	20.7	30.8	50.0	-19.2
23.863	10.0	20.8	30.8	60.0	-29.2	23.863	10.0	20.8	30.8	50.0	-19.2
24.896	10.0	20.8	30.8	60.0	-29.2	24.896	10.0	20.8	30.8	50.0	-19.2
7.347	10.8	19.9	30.7	60.0	-29.3	7.347	10.8	19.9	30.7	50.0	-19.3
10.309	10.6	20.1	30.7	60.0	-29.3	10.309	10.6	20.1	30.7	50.0	-19.3
10.578	10.6	20.1	30.7	60.0	-29.3	10.578	10.6	20.1	30.7	50.0	-19.3
12.831	10.5	20.2	30.7	60.0	-29.3	12.831	10.5	20.2	30.7	50.0	-19.3
13.995	10.5	20.2	30.7	60.0	-29.3	13.995	10.5	20.2	30.7	50.0	-19.3
16.465	10.3	20.4	30.7	60.0	-29.3	16.465	10.3	20.4	30.7	50.0	-19.3
18.759	10.2	20.5	30.7	60.0	-29.3	18.759	10.2	20.5	30.7	50.0	-19.3
19.796	10.2	20.5	30.7	60.0	-29.3	19.796	10.2	20.5	30.7	50.0	-19.3
20.912	10.1	20.6	30.7	60.0	-29.3	20.912	10.1	20.6	30.7	50.0	-19.3
21.647	10.1	20.6	30.7	60.0	-29.3	21.647	10.1	20.6	30.7	50.0	-19.3
23.117	10.0	20.7	30.7	60.0	-29.3	23.117	10.0	20.7	30.7	50.0	-19.3
23.706	9.9	20.8	30.7	60.0	-29.3	23.706	9.9	20.8	30.7	50.0	-19.3
24.721	9.9	20.8	30.7	60.0	-29.3	24.721	9.9	20.8	30.7	50.0	-19.3
7.556	10.7	19.9	30.6	60.0	-29.4	7.556	10.7	19.9	30.6	50.0	-19.4
8.216	10.6	20.0	30.6	60.0	-29.4	8.216	10.6	20.0	30.6	50.0	-19.4
8.518	10.6	20.0	30.6	60.0	-29.4	8.518	10.6	20.0	30.6	50.0	-19.4
12.219	10.4	20.2	30.6	60.0	-29.4	12.219	10.4	20.2	30.6	50.0	-19.4
14.752	10.2	20.4	30.6	60.0	-29.4	14.752	10.2	20.4	30.6	50.0	-19.4
14.965	10.2	20.4	30.6	60.0	-29.4	14.965	10.2	20.4	30.6	50.0	-19.4
15.547	10.2	20.4	30.6	60.0	-29.4	15.547	10.2	20.4	30.6	50.0	-19.4
16.054	10.2	20.4	30.6	60.0	-29.4	16.054	10.2	20.4	30.6	50.0	-19.4
16.730	10.2	20.4	30.6	60.0	-29.4	16.730	10.2	20.4	30.6	50.0	-19.4
19.278	10.1	20.5	30.6	60.0	-29.4	19.278	10.1	20.5	30.6	50.0	-19.4
22.684	9.9	20.7	30.6	60.0	-29.4	22.684	9.9	20.7	30.6	50.0	-19.4
23.083	9.9	20.7	30.6	60.0	-29.4	23.083	9.9	20.7	30.6	50.0	-19.4
5.246	10.7	19.8	30.5	60.0	-29.5	5.246	10.7	19.8	30.5	50.0	-19.5
5.500	10.6	19.9	30.5	60.0	-29.5	5.500	10.6	19.9	30.5	50.0	-19.5
5.974	10.6	19.9	30.5	60.0	-29.5	5.974	10.6	19.9	30.5	50.0	-19.5
7.720	10.6	19.9	30.5	60.0	-29.5	7.720	10.6	19.9	30.5	50.0	-19.5
9.201	10.5	20.0	30.5	60.0	-29.5	9.201	10.5	20.0	30.5	50.0	-19.5
9.581	10.4	20.1	30.5	60.0	-29.5	9.581	10.4	20.1	30.5	50.0	-19.5
10.212	10.4	20.1	30.5	60.0	-29.5	10.212	10.4	20.1	30.5	50.0	-19.5
11.223	10.4	20.1	30.5	60.0	-29.5	11.223	10.4	20.1	30.5	50.0	-19.5
14.625	10.2	20.3	30.5	60.0	-29.5	14.625	10.2	20.3	30.5	50.0	-19.5
19.218	10.0	20.5	30.5	60.0	-29.5	19.218	10.0	20.5	30.5	50.0	-19.5
22.423	9.9	20.6	30.5	60.0	-29.5	22.423	9.9	20.6	30.5	50.0	-19.5
22.512	9.8	20.7	30.5	60.0	-29.5	22.512	9.8	20.7	30.5	50.0	-19.5
26.407	9.6	20.9	30.5	60.0	-29.5	26.407	9.6	20.9	30.5	50.0	-19.5
8.000	10.4	20.0	30.4	60.0	-29.6	8.000	10.4	20.0	30.4	50.0	-19.6
9.428	10.3	20.1	30.4	60.0	-29.6	9.428	10.3	20.1	30.4	50.0	-19.6
12.588	10.2	20.2	30.4	60.0	-29.6	12.588	10.2	20.2	30.4	50.0	-19.6
13.182	10.2	20.2	30.4	60.0	-29.6	13.182	10.2	20.2	30.4	50.0	-19.6
13.670	10.2	20.2	30.4	60.0	-29.6	13.670	10.2	20.2	30.4	50.0	-19.6
17.901	10.0	20.4	30.4	60.0	-29.6	17.901	10.0	20.4	30.4	50.0	-19.6
18.524	9.9	20.5	30.4	60.0	-29.6	18.524	9.9	20.5	30.4	50.0	-19.6

20.378	9.9	20.5	30.4	60.0	-29.6	20.378	9.9	20.5	30.4	50.0	-19.6
23.743	9.6	20.8	30.4	60.0	-29.6	23.743	9.6	20.8	30.4	50.0	-19.6
26.146	9.5	20.9	30.4	60.0	-29.6	26.146	9.5	20.9	30.4	50.0	-19.6
7.809	10.4	19.9	30.3	60.0	-29.7	7.809	10.4	19.9	30.3	50.0	-19.7
8.104	10.3	20.0	30.3	60.0	-29.7	8.104	10.3	20.0	30.3	50.0	-19.7
9.104	10.3	20.0	30.3	60.0	-29.7	9.104	10.3	20.0	30.3	50.0	-19.7
12.809	10.1	20.2	30.3	60.0	-29.7	12.809	10.1	20.2	30.3	50.0	-19.7
14.226	10.1	20.2	30.3	60.0	-29.7	14.226	10.1	20.2	30.3	50.0	-19.7
17.737	9.9	20.4	30.3	60.0	-29.7	17.737	9.9	20.4	30.3	50.0	-19.7
18.244	9.9	20.4	30.3	60.0	-29.7	18.244	9.9	20.4	30.3	50.0	-19.7
18.427	9.8	20.5	30.3	60.0	-29.7	18.427	9.8	20.5	30.3	50.0	-19.7
19.170	9.8	20.5	30.3	60.0	-29.7	19.170	9.8	20.5	30.3	50.0	-19.7
24.822	9.5	20.8	30.3	60.0	-29.7	24.822	9.5	20.8	30.3	50.0	-19.7
5.142	10.4	19.8	30.2	60.0	-29.8	5.142	10.4	19.8	30.2	50.0	-19.8
5.205	10.4	19.8	30.2	60.0	-29.8	5.205	10.4	19.8	30.2	50.0	-19.8
5.388	10.3	19.9	30.2	60.0	-29.8	5.388	10.3	19.9	30.2	50.0	-19.8
5.668	10.3	19.9	30.2	60.0	-29.8	5.668	10.3	19.9	30.2	50.0	-19.8
7.686	10.3	19.9	30.2	60.0	-29.8	7.686	10.3	19.9	30.2	50.0	-19.8
9.649	10.1	20.1	30.2	60.0	-29.8	9.649	10.1	20.1	30.2	50.0	-19.8
10.365	10.1	20.1	30.2	60.0	-29.8	10.365	10.1	20.1	30.2	50.0	-19.8
10.813	10.1	20.1	30.2	60.0	-29.8	10.813	10.1	20.1	30.2	50.0	-19.8
11.316	10.0	20.2	30.2	60.0	-29.8	11.316	10.0	20.2	30.2	50.0	-19.8
11.891	10.0	20.2	30.2	60.0	-29.8	11.891	10.0	20.2	30.2	50.0	-19.8
12.368	10.0	20.2	30.2	60.0	-29.8	12.368	10.0	20.2	30.2	50.0	-19.8
13.558	10.0	20.2	30.2	60.0	-29.8	13.558	10.0	20.2	30.2	50.0	-19.8
13.607	10.0	20.2	30.2	60.0	-29.8	13.607	10.0	20.2	30.2	50.0	-19.8
17.271	9.8	20.4	30.2	60.0	-29.8	17.271	9.8	20.4	30.2	50.0	-19.8
17.614	9.8	20.4	30.2	60.0	-29.8	17.614	9.8	20.4	30.2	50.0	-19.8
6.395	10.2	19.9	30.1	60.0	-29.9	6.395	10.2	19.9	30.1	50.0	-19.9
7.141	10.2	19.9	30.1	60.0	-29.9	7.141	10.2	19.9	30.1	50.0	-19.9
8.660	10.1	20.0	30.1	60.0	-29.9	8.660	10.1	20.0	30.1	50.0	-19.9
8.921	10.1	20.0	30.1	60.0	-29.9	8.921	10.1	20.0	30.1	50.0	-19.9
10.126	10.0	20.1	30.1	60.0	-29.9	10.126	10.0	20.1	30.1	50.0	-19.9
13.219	9.9	20.2	30.1	60.0	-29.9	13.219	9.9	20.2	30.1	50.0	-19.9
14.084	9.9	20.2	30.1	60.0	-29.9	14.084	9.9	20.2	30.1	50.0	-19.9
18.711	9.6	20.5	30.1	60.0	-29.9	18.711	9.6	20.5	30.1	50.0	-19.9
24.766	9.3	20.8	30.1	60.0	-29.9	24.766	9.3	20.8	30.1	50.0	-19.9
0.254	12.1	19.6	31.7	61.6	-29.9	0.254	12.1	19.6	31.7	51.6	-19.9
6.556	10.1	19.9	30.0	60.0	-30.0	6.556	10.1	19.9	30.0	50.0	-20.0
7.970	10.0	20.0	30.0	60.0	-30.0	7.970	10.0	20.0	30.0	50.0	-20.0
8.421	10.0	20.0	30.0	60.0	-30.0	8.421	10.0	20.0	30.0	50.0	-20.0
8.604	10.0	20.0	30.0	60.0	-30.0	8.604	10.0	20.0	30.0	50.0	-20.0
9.302	9.9	20.1	30.0	60.0	-30.0	9.302	9.9	20.1	30.0	50.0	-20.0
9.376	9.9	20.1	30.0	60.0	-30.0	9.376	9.9	20.1	30.0	50.0	-20.0
11.667	9.8	20.2	30.0	60.0	-30.0	11.667	9.8	20.2	30.0	50.0	-20.0
6.698	10.0	19.9	29.9	60.0	-30.1	6.698	10.0	19.9	29.9	50.0	-20.1
7.298	10.0	19.9	29.9	60.0	-30.1	7.298	10.0	19.9	29.9	50.0	-20.1
10.182	9.8	20.1	29.9	60.0	-30.1	10.182	9.8	20.1	29.9	50.0	-20.1
10.734	9.8	20.1	29.9	60.0	-30.1	10.734	9.8	20.1	29.9	50.0	-20.1
10.910	9.8	20.1	29.9	60.0	-30.1	10.910	9.8	20.1	29.9	50.0	-20.1
11.044	9.8	20.1	29.9	60.0	-30.1	11.044	9.8	20.1	29.9	50.0	-20.1
15.991	9.5	20.4	29.9	60.0	-30.1	15.991	9.5	20.4	29.9	50.0	-20.1
6.862	9.9	19.9	29.8	60.0	-30.2	6.862	9.9	19.9	29.8	50.0	-20.2
6.977	9.9	19.9	29.8	60.0	-30.2	6.977	9.9	19.9	29.8	50.0	-20.2
9.346	9.7	20.1	29.8	60.0	-30.2	9.346	9.7	20.1	29.8	50.0	-20.2
15.771	9.4	20.4	29.8	60.0	-30.2	15.771	9.4	20.4	29.8	50.0	-20.2
12.495	9.5	20.2	29.7	60.0	-30.3	12.495	9.5	20.2	29.7	50.0	-20.3
13.070	9.5	20.2	29.7	60.0	-30.3	13.070	9.5	20.2	29.7	50.0	-20.3
6.317	9.7	19.9	29.6	60.0	-30.4	6.317	9.7	19.9	29.6	50.0	-20.4
9.768	9.5	20.1	29.6	60.0	-30.4	9.768	9.5	20.1	29.6	50.0	-20.4
6.504	9.6	19.9	29.5	60.0	-30.5	6.504	9.6	19.9	29.5	50.0	-20.5
6.735	9.5	19.9	29.4	60.0	-30.6	6.735	9.5	19.9	29.4	50.0	-20.6