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Report On

Radio Testing of the
Novatel Wireless Inc.
SA 1100 Security Radio Communicator

FCC Part 15 Subpart C §15.249
IC RSS-210 Issue 8 December 2010

Report No. SD72105384-0415B June 2015

TÜV SÜD America Inc., 10040 Mesa Rim Road, San Diego, CA 92121
Tel: (858) 678-1400. Website: www.TUVamerica.com

REPORT ON	Radio Testing of the Novatel Wireless Inc. SA 1100 Security Radio Communicator
TEST REPORT NUMBER	SD72105384-0415B
PREPARED FOR	Novatel Wireless Inc. 9645 Scranton Road San Diego, CA 92121
CONTACT PERSON	Roman Olmos Hardware Engineer II & ISO-17025 Technical Manager (858) 812-3400 rolmos@nvtl.com
PREPARED BY	Xiaoying Zhang **Name** Title: EMC/Wireless Test Engineer
APPROVED BY	Juan Manuel Gonzalez **Name** Authorized Signatory Title: Commercial Wireless EMC lab manager
DATED	June 09, 2015

Revision History

SD72105384-0415B Novatel Wireless Inc. SA 1100 Security Radio Communicator					
DATE	OLD REVISION	NEW REVISION	REASON	PAGES AFFECTED	APPROVED BY
06/09/2015	Initial Release				Juan M Gonzalez

CONTENTS

SECTION 1

REPORT SUMMARY

Radio Testing of the
Novatel Wireless Inc.
SA 1100 Security Radio Communicator

1.1 INTRODUCTION

The information contained in this report is intended to show verification of the Novatel Wireless Inc. SA 1100 Security Radio Communicator to the requirements of FCC Part 15 Subpart C §15.249 and IC RSS-210 Issue 8 December 2010.

Objective	To perform Radio Testing to determine the Equipment Under Test's (EUT's) compliance with the Test Specification, for the series of tests carried out.
Manufacturer	Novatel Wireless Inc.
Model Name	SA 1100
Model Number(s)	SA1100-30-AT
FCC ID Number	PKRNVWSA1100
IC Number	3229A-SA1100
Serial Number(s)	7405120015 / 7404450032
Number of Samples Tested	2
Test Specification/Issue/Date	• FCC Part 15 Subpart C §15.249 (October 1, 2014). • RSS-210 - Licence-exempt Radio Apparatus (All Frequency Bands): Category I Equipment (Issue 8, December 2010). • RSS-Gen - General Requirements and Information for the Certification of Radio Apparatus (Issue 4, November 2014).
Start of Test	May 26, 2015
Finish of Test	May 29, 2014
Name of Engineer(s)	Xiaoying Zhang
Related Document(s)	None. Supporting documents for EUT certification are separate exhibits.

1.2 BRIEF SUMMARY OF RESULTS

A brief summary of the tests carried out in accordance with FCC Part 15 Subpart C §15.249 with cross-reference to the corresponding IC RSS standard is shown below.

Section	Spec Clause	RSS	Test Description	Result	Comments/Base Standard
-	§15.107	RSS-Gen 7.1.3	Conducted Limits	N/A[1]	See Note
2.1	§15.215(c)	RSS-Gen 6.6	20 dB Bandwidth	Compliant	
2.2	-	RSS-Gen 6.6	99% Emission Bandwidth	Compliant	
2.3	§15.249(a)	RSS-210 A2.9(a)	Field Strength Limits for Fundamental and Harmonics	Compliant	
2.4	§15.249(d)	RSS-210 A2.9(b)	Radiated Spurious Emissions	Compliant	
-		RSS-Gen 5.2	Receiver Spurious Emissions	N/A[2]	See Note

Note: N/A[1]: *Not applicable, Powered by the host. Test not required.*
N/A[2]: *Not applicable, EUT has no Stand-Alone receiver port.*

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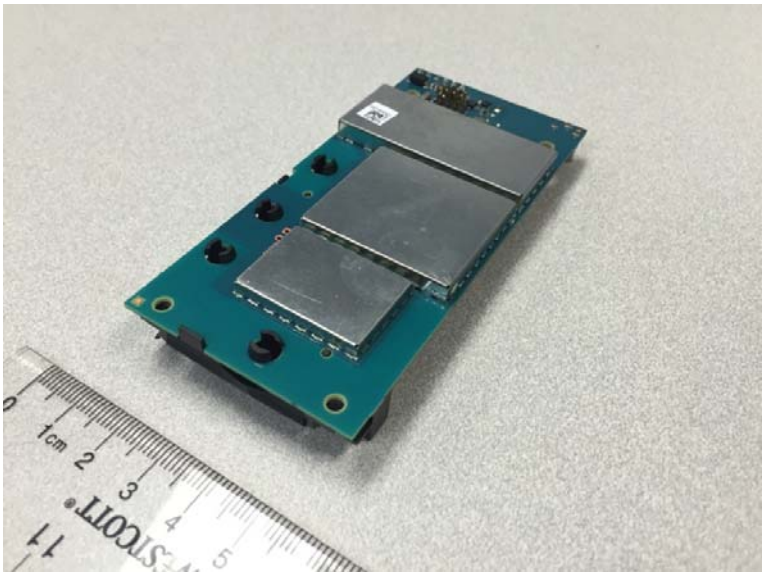
1.3 PRODUCT INFORMATION

1.3.1 Technical Description

The Equipment Under Test (EUT) was a Novatel Wireless Inc. SA 1100 Security Radio Communicator as shown in the photograph below. The EUT is a device that enables remote communication between the central monitoring station and a remote security panel.



Equipment Under Test

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1.3.2 EUT General Description

EUT Description	Security Radio Communicator
Model Name	SA 1100
Model Number(s)	SA1100-30-AT
Rated Voltage	12VDC
Output Power	93.6 dBµV/m @ 3 meters
Frequency Range	908 MHz to 916 MHz in the 902 MHz to 928 MHz Band
Number of Operating Frequencies	1
Modulation	FSK/GFSK
Channels Verified	Low Channel 908.4MHz High Channel 916MHz
Antenna Type	Integral

1.3.3 Antenna Details

Antenna Type	Monopole
Antenna Peak Gain	0 dBi (900MHz)
EUT Antenna Connector	N/A (surface mount).

1.4 EUT TEST CONFIGURATION

1.4.1 Test Configuration Description

Test Configuration	Description
A	Antenna conducted port test configuration. All measurements were performed on the Z-Wave antenna. EUT is pre-programmed to transmit at Low and High channels continuously set to max. power.
B	Radiated emissions test configuration. EUT is pre-programmed to transmit at Low and High channels continuously set to max. power. A panel was used to ensure that the panel loading was present against the SA 1100 antennas. This ensures that the antenna performance is centered on the designated bands i.e (Z-wave).

1.4.2 EUT Exercise Software

EUT is loaded with a test firmware allowing continuous transmission (test mode) at test frequencies.

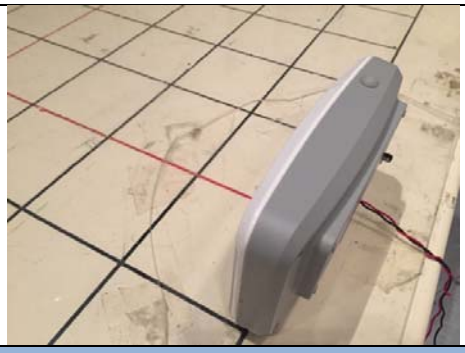
1.4.3 Support Equipment and I/O cables

Manufacturer	Equipment/Cable	Model	Description
Novatel	USB Serial Converter	-	-
DELL	Personal Computer	Latitude E6410	S/N: KR51311519
Hewlett Packard	DC Power Supply	E3610A	S/N: D802039
Duralast	VDC Battery	-	12 VDC Battery

1.4.4 Worst Case Configuration

For radiated measurements X, and Y orientations were verified. Official measurements were performed using X orientation (worst case).

"X" Configuration



"Y" Configuration

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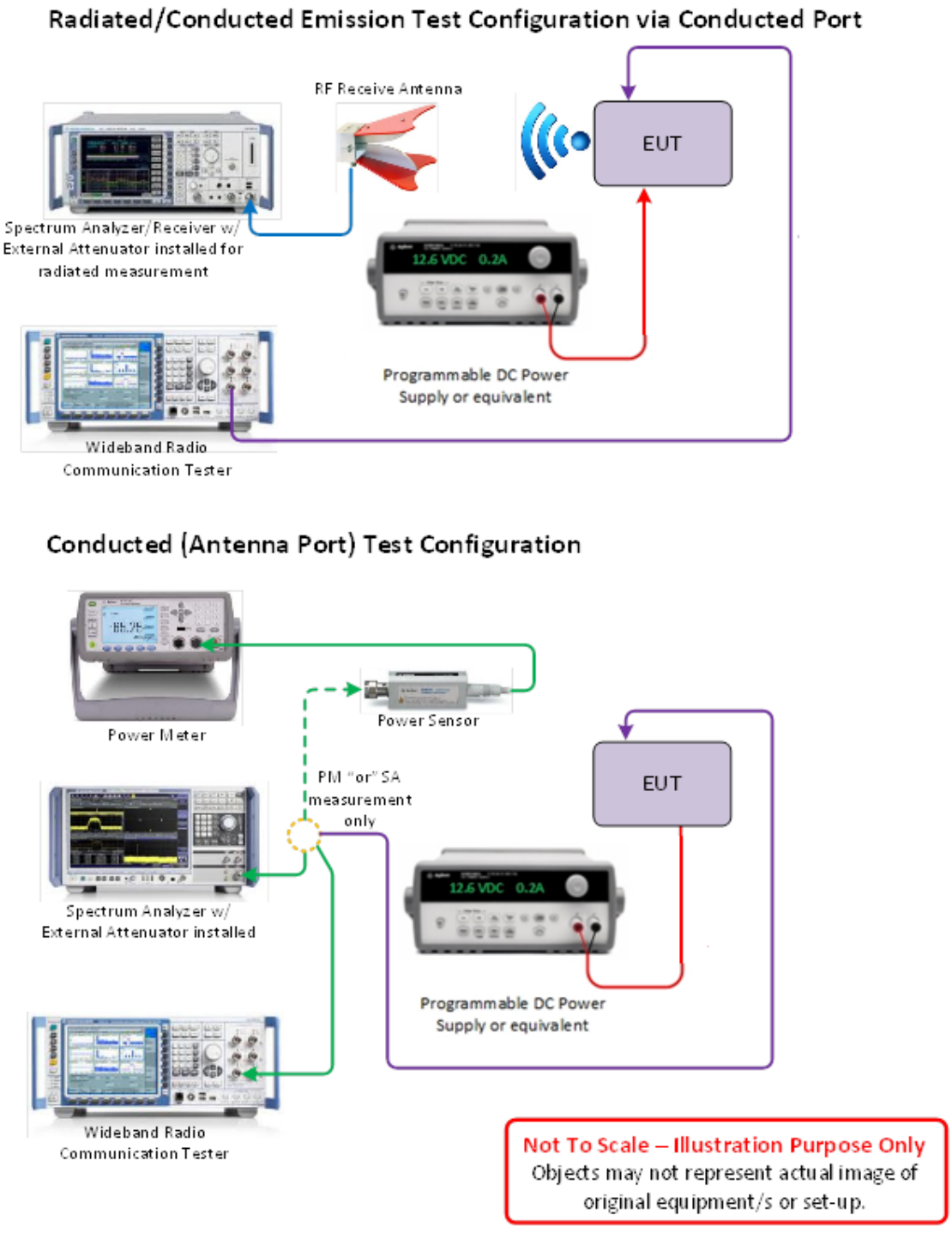
1.4.5 Simplified Test Configuration Diagram



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1.5 DEVIATIONS FROM THE STANDARD

No deviations from the applicable test standards or test plan were made during testing.

1.6 MODIFICATION RECORD

Description of Modification	Modification Fitted By	Date Modification Fitted
Serial Number 7405120015, 7404450032		
N/A		

The table above details modifications made to the EUT during the test programme. The modifications incorporated during each test (if relevant) are recorded on the appropriate test pages.

1.7 TEST METHODOLOGY

All measurements contained in this report were conducted with ANSI C63.4-2009, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.
For conducted and radiated emissions the equipment under test (EUT) was configured to measure its highest possible emission level. This level was based on the maximized cable configuration from exploratory testing per ANSI C63.4-2009. The test modes were adapted according to the Operating Instructions provided by the manufacturer/client.

1.8 TEST FACILITY LOCATION

1.8.1 TÜV SÜD America Inc. (Mira Mesa)

10040 Mesa Rim Road, San Diego, CA 92121-2912 (32.901268,-117.177681). Phone: 858 678 1400 FAX: 858-546 0364

1.8.2 TÜV SÜD America Inc. (Rancho Bernardo)

Sony Electronics Inc., Building #8 16530 Via Esprillo, San Diego, CA 92127-1708 (33.018644,-117.092409). Phone: 858 942 5542 FAX: 858-546 0364

1.9 TEST FACILITY REGISTRATION

1.9.1 FCC – Registration No.: US1146

TUV SUD America Inc. (San Diego), is an accredited test facility with the site description report on file and has met all the requirements specified in §2.948 of the FCC rules. The acceptance letter from the FCC is maintained in our files and the Registration is US1146.

1.9.2 Industry Canada (IC) Registration No.: 3067A

The 10m Semi-anechoic chamber of TUV SUD America Inc. (San Diego) has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No. 3067A.

SECTION 2

TEST DETAILS

Radio Testing of the
Novatel Wireless Inc.
SA 1100 Security Radio Communicator

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2.1 20 dB BANDWIDTH

2.1.1 Specification Reference

FCC 47 CFR Part 15, Clause 15.215(c)
Industry Canada RSS-GEN, Clause 6.6

2.1.2 Standard Applicable

(c) Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated. The requirement to contain the designated bandwidth of the emission within the specified frequency band includes the effects from frequency sweeping, frequency hopping and other modulation techniques that may be employed as well as the frequency stability of the transmitter over expected variations in temperature and supply voltage. If a frequency stability is not specified in the regulations, it is recommended that the fundamental emission be kept within at least the central 80% of the permitted band in order to minimize the possibility of out-of-band operation.

2.1.3 Equipment Under Test and Modification State

Serial No: 7405120015 / Test Configuration A

2.1.4 Date of Test/Initial of test personnel who performed the test

May 27, 2015/XYZ

2.1.5 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.1.6 Environmental Conditions/ Test Location

Test performed at TÜV SÜD America Inc. Rancho Bernardo facility

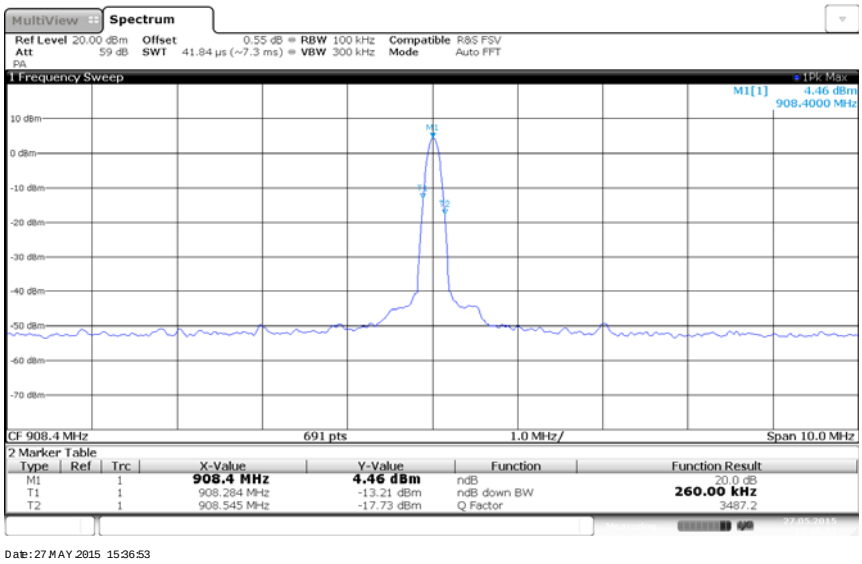
Ambient Temperature	25.1°C
Relative Humidity	51.2%
ATM Pressure	98.8 kPa

2.1.7 Additional Observations

- This is a condcted test.
- “n dB down” marker function of the Spectrum Analyzer used.
- Span is wide enough to capture the channel transmission.
- RBW is 1% of the Span, VBW is 3XRBW.
- Sweep is auto.
- Detector is peak.
- Trace is max hold.

2.1.8 Test Results

Channel	Frequency (MHz)	20dB Bandwidth (kHz)
Low Channel	908.4	260.0
High Channel	916.0	275.0



Low Channel

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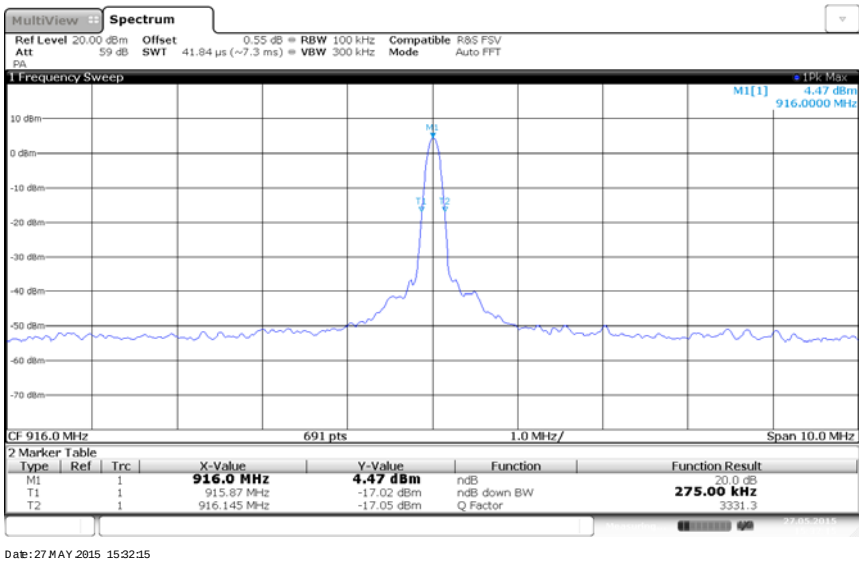

High Channel

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2.2 99% EMISSION BANDWIDTH

2.2.1 Specification Reference

Industry Canada RSS-GEN, Clause 6.6

2.2.2 Standard Applicable

When an occupied bandwidth value is not specified in the applicable RSS, the transmitted signal bandwidth to be reported is to be its 99% emission bandwidth, as calculated or measured.

- The transmitter shall be operated at its maximum carrier power measured under normal test conditions.
- The span of the analyzer shall be set to capture all products of the modulation process, including the emission skirts.
- The resolution bandwidth shall be set in the range of 1% to 5% of the occupied bandwidth (OBW) and the video bandwidth (VBW) shall be set to approximately 3 x RBW.

Video averaging is not permitted.
A peak, or peak hold, may be used in place of the sampling detector as this may produce a wider bandwidth than the actual bandwidth (worst-case measurement). Use of a peak hold may be necessary to determine the occupied bandwidth if the device is not transmitting continuously.
The trace data points are recovered and are directly summed in linear power level terms. The recovered amplitude data points, beginning at the lowest frequency, are placed in a running sum until 0.5% of the total is reached and that frequency recorded. The process is repeated for the highest frequency data points (starting at the highest frequency, at the right side of the span, and going down in frequency). This frequency is then recorded.
The difference between the two recorded frequencies is the 99% occupied bandwidth.

2.2.3 Equipment Under Test and Modification State

Serial No: 7405120015 / Test Configuration A

2.2.4 Date of Test/Initial of test personnel who performed the test

May 27, 2015/XYZ

2.2.5 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.2.6 Environmental Conditions/ Test Location

Test performed at TÜV SÜD America Inc. Rancho Bernardo facility

Ambient Temperature	25.1°C
Relative Humidity	51.2%
ATM Pressure	98.8 kPa

2.2.7 Additional Observations

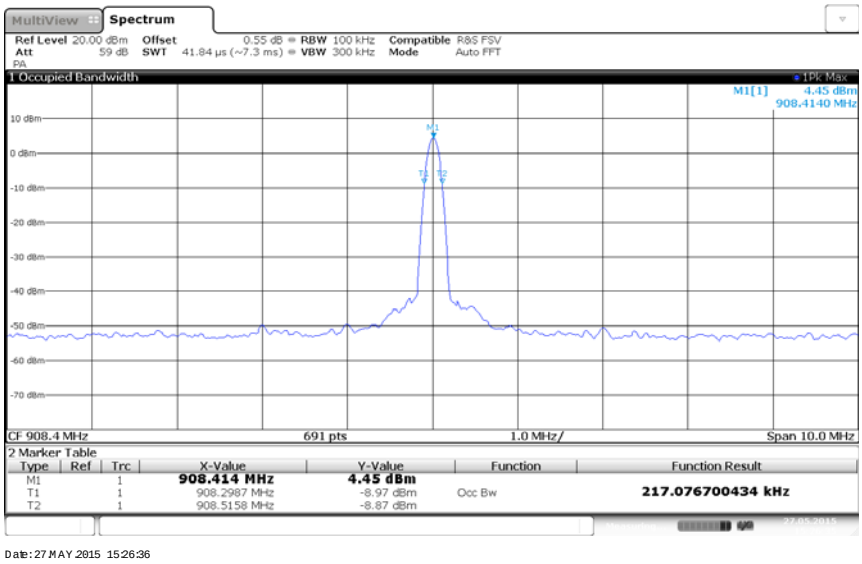
- This is a conducted test.
- Span is wide enough to capture the channel transmission.
- RBW is 1% of the Span.VBW is 3XRBW.

- Sweep is auto.
- Detector is peak.
- The % Power Bandwidth setting in the spectrum analyzer was set to 99% (default).
- The Channel Bandwidth measurement function of the spectrum analyzer was used for this test.

2.2.8 Test Results

Channel	Frequency (MHz)	99% Bandwidth (kHz)
Low Channel	908.4	217.08
High Channel	916.0	217.08

2.2.9 Test Plots



Low Channel

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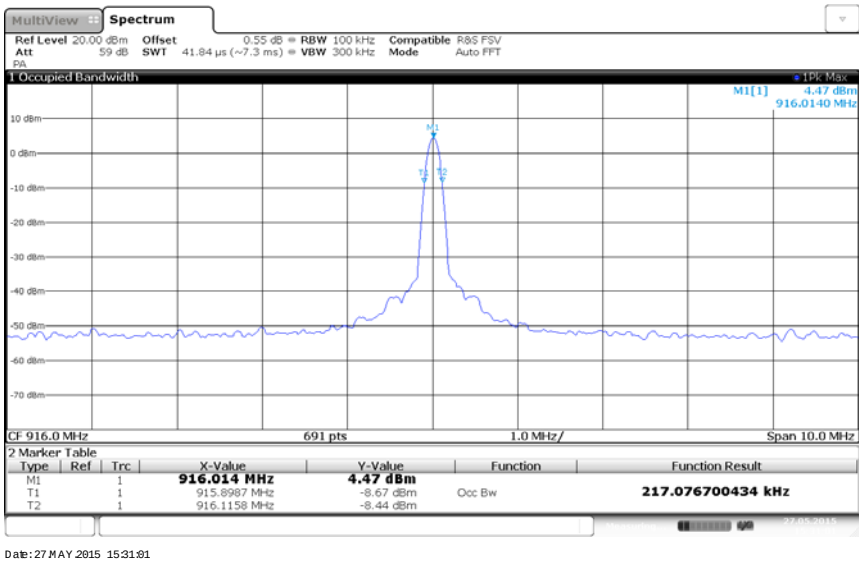

High Channel

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2.3 FIELD STRENGTH LIMITS FOR FUNDAMENTAL AND HARMONICS

2.3.1 Specification Reference

FCC 47 CFR Part 15, Clause 15.249(a)
Industry Canada RSS-210, Clause A2.9(a)

2.3.2 Standard Applicable

(a) The field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of fundamental (dBµV/m)	Field strength of harmonics (microvolts/meter)	Field strength of harmonics (dBµV/m)
902–928 MHz	50	93.98	500	53.98
2400–2483.5 MHz	50	93.98	500	53.98
5725–5875 MHz	50	93.98	500	53.98
24.0–24.25 GHz	250	107.96	2500	67.96

The field strength limits in paragraphs (a) of this section are based on average limits.

2.3.3 Equipment Under Test and Modification State

Serial No: 7404450032/ Test Configuration B

2.3.4 Date of Test/Initial of test personnel who performed the test

March 29, 2015/XYZ

2.3.5 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.3.6 Environmental Conditions/ Test Location

Test performed at TÜV SÜD America Inc. Rancho Bernardo facility

Ambient Temperature	25.9 °C
Relative Humidity	43.7 %
ATM Pressure	98.9 kPa

2.3.7 Additional Observations

- This is a radiated test. The spectrum was searched from 1GHz to at least the 10th harmonic (10GHz).
- Measurement was done using EMC32 V8.53 automated software. Reported level is the actual level with all the correction factors factored in. Correction Factor column is for informational purposes only. See Section 2.3.8 for sample computation.

2.3.8 Sample Computation (Radiated Emission)

Measuring equipment raw measurement (dbµV) @ 30 MHz			24.4
Correction Factor (dB)	Asset# 1066 (cable)	0.3	-12.6
	Asset# 1172 (cable)	0.3	
	Asset# 1016 (preamplifier)	-30.7	
	Asset# 1175(cable)	0.3	
	Asset# 1033 (antenna)	17.2	
Reported QuasiPeak Final Measurement (dbµV/m) @ 30MHz			**11.8**

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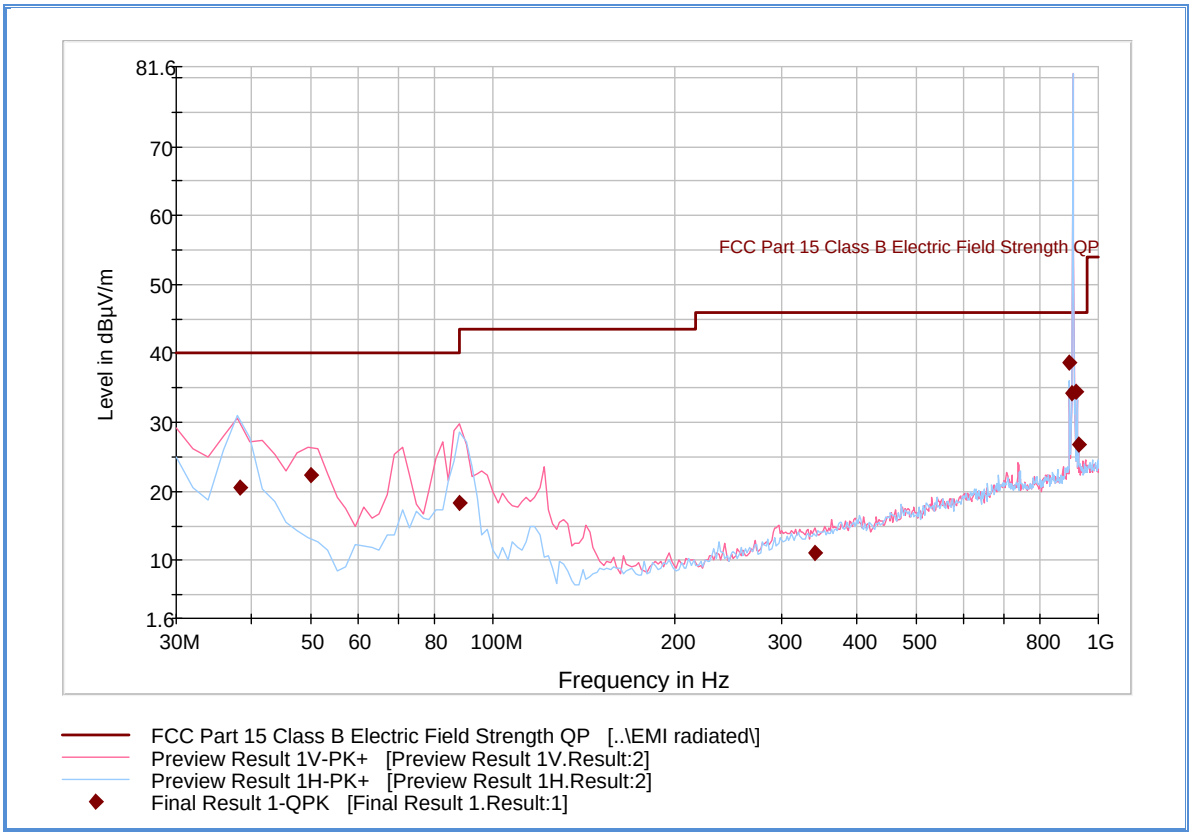
2.3.9 Test Results for Low Channel 908.4MHz below 1GHz (Fundamental, Band Edges and Immediate Restricted Bands)



Quasi Peak Data

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
38.335551	20.4	1000.0	120.000	350.0	H	7.0	-15.9	19.6	40.0
50.198878	22.4	1000.0	120.000	100.0	V	276.0	-20.0	17.6	40.0
88.172745	18.2	1000.0	120.000	200.0	V	342.0	-21.2	25.3	43.5
340.645932	11.1	1000.0	120.000	139.0	V	35.0	-11.2	34.9	46.0
896.013948	38.8	1000.0	120.000	150.0	H	35.0	1.1	7.2	46.0
903.205611	34.2	1000.0	120.000	105.0	V	319.0	1.2	11.8	46.0
908.397275	**93.6**	**1000.0**	**120.000**	**155.0**	**H**	**110.0**	**1.0**	**0.4**	**94.0**
920.804489	34.4	1000.0	120.000	100.0	H	35.0	1.3	11.6	46.0
927.956152	26.8	1000.0	120.000	150.0	H	45.0	1.4	19.2	46.0

Test Notes: All spurious emissions complies with the general requirement of 15.209 and 15.249. The fundamental complies with 15.249.

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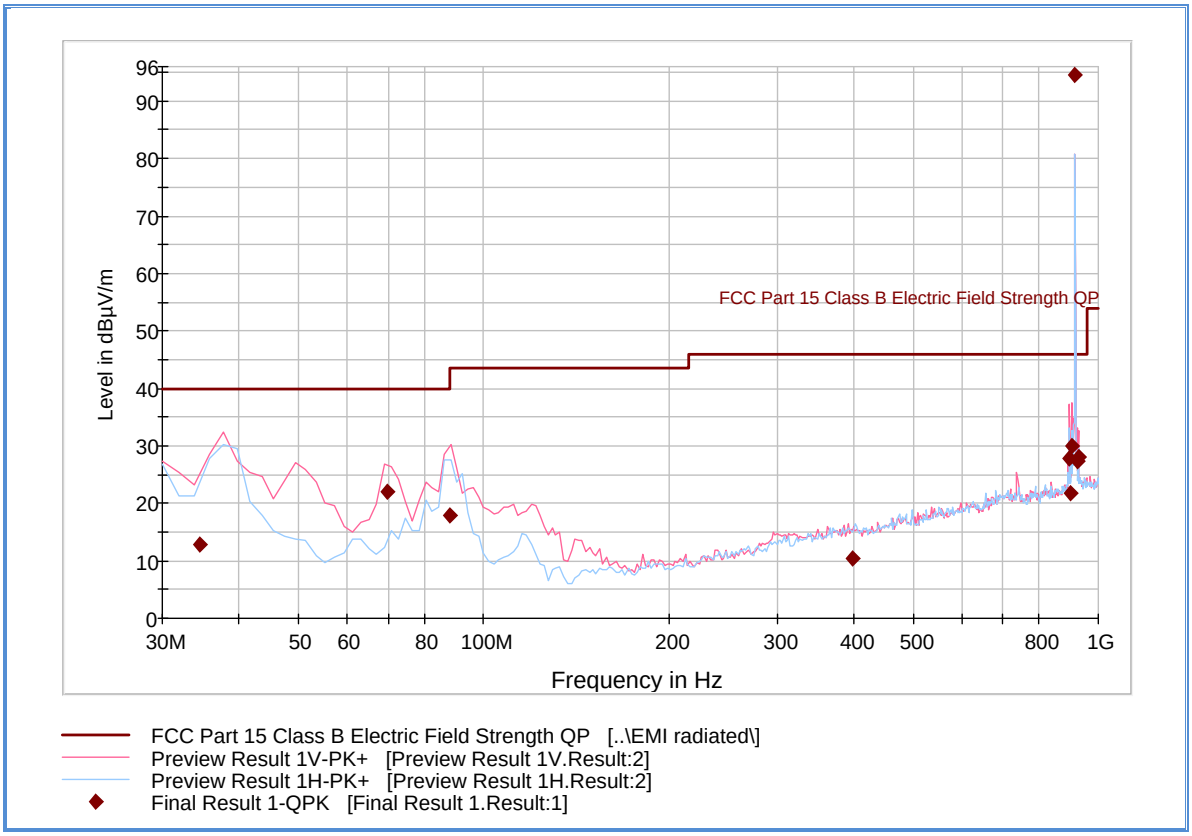
2.3.10 Test Results for High Channel 916MHz below 1GHz (Fundamental, Band Edges and Immediate Restricted Bands)



Quasi Peak Data

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
34.575551	12.8	1000.0	120.000	150.0	V	343.0	-13.9	27.2	40.0
69.797756	22.1	1000.0	120.000	101.0	V	302.0	-22.4	17.9	40.0
88.116633	17.9	1000.0	120.000	200.0	V	342.0	-21.2	25.6	43.5
397.978677	10.4	1000.0	120.000	116.0	H	162.0	-9.0	35.6	46.0
896.013948	27.7	1000.0	120.000	100.0	V	82.0	1.1	18.3	46.0
900.021723	21.9	1000.0	120.000	100.0	V	50.0	1.3	24.1	46.0
904.005611	29.9	1000.0	120.000	150.0	V	227.0	1.2	16.1	46.0
916.012826	**93.5**	**1000.0**	**120.000**	**150.0**	**H**	**79.0**	**1.1**	**0.5**	**94.0**
923.988377	27.3	1000.0	120.000	105.0	V	51.0	1.4	18.7	46.0

Test Notes: All spurious emissions complies with the general requirement of 15.209 and 15.249. The fundamental complies with 15.249.

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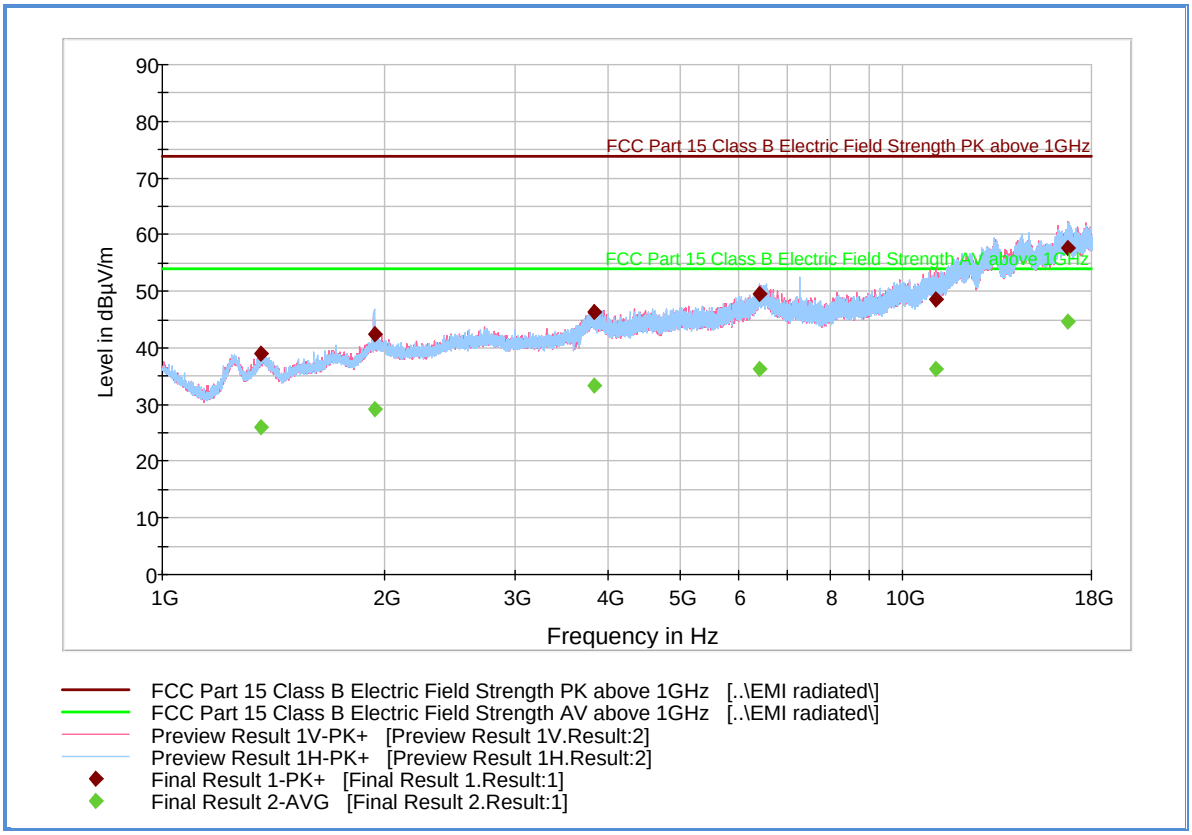
2.3.11 Test Results for High Channel 908.4MHz above 1GHz (Harmonics)



Peak Data

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
1360.53333	38.9	1000.0	1000.000	351.2	H	182.0	-5.3	35.0	73.9
1932.93333	42.5	1000.0	1000.000	344.1	H	10.0	-2.3	31.4	73.9
3836.60000	46.3	1000.0	1000.000	401.8	V	14.0	4.9	27.6	73.9
6400.93333	49.6	1000.0	1000.000	401.9	H	230.0	11.2	24.3	73.9
11093.2666	48.6	1000.0	1000.000	181.6	V	122.0	14.5	25.3	73.9
16755.0666	57.7	1000.0	1000.000	140.7	V	144.0	23.5	16.2	73.9

Average Data

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
1360.53333	26.0	1000.0	1000.000	351.2	H	182.0	-5.3	27.9	53.9
1932.93333	29.1	1000.0	1000.000	344.1	H	10.0	-2.3	24.8	53.9
3836.60000	33.3	1000.0	1000.000	401.8	V	14.0	4.9	20.6	53.9
6400.93333	36.3	1000.0	1000.000	401.9	H	230.0	11.2	17.6	53.9
11093.2666	36.3	1000.0	1000.000	181.6	V	122.0	14.5	17.6	53.9
16755.0666	44.7	1000.0	1000.000	140.7	V	144.0	23.5	9.2	53.9

Test Notes: All harmonics complies with the general requirement of 15.209. (The Average limit for 15.249 is 94.8 dBµV/m – 50 = 44.8 dBµV/m, and the Peak limit for 15.249 is 66.8 dBµV/m. The limits of 15.209 are applicable.)

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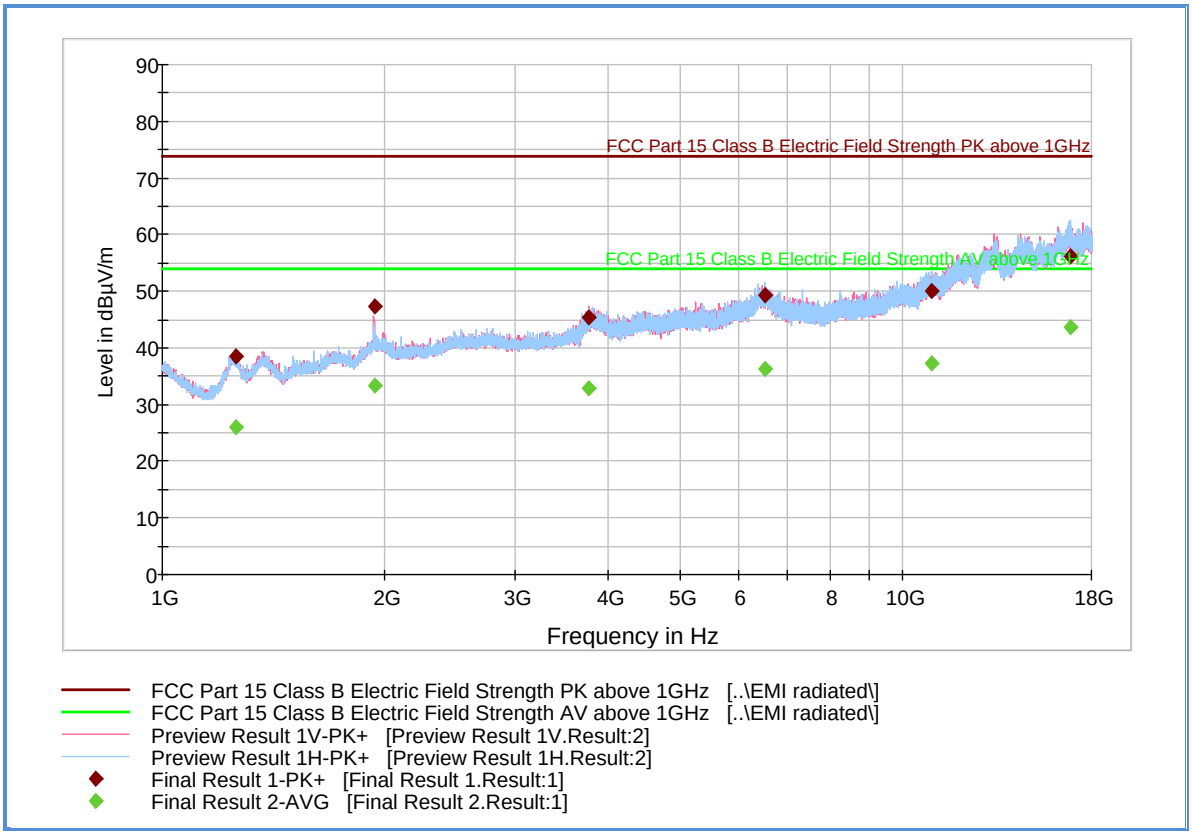
2.3.12 Test Results for High Channel 916MHz above 1GHz (Harmonics)



Peak Data

Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
1257.23333	38.6	1000.0	1000.000	124.7	H	185.0	-5.7	35.3	73.9
1932.76666	47.5	1000.0	1000.000	183.5	V	354.0	-2.3	26.4	73.9
3761.16666	45.4	1000.0	1000.000	229.4	V	237.0	4.6	28.5	73.9
6521.46666	49.2	1000.0	1000.000	401.9	H	27.0	11.2	24.7	73.9
10949.3333	50.1	1000.0	1000.000	155.6	V	167.0	14.7	23.8	73.9
16863.0666	56.3	1000.0	1000.000	278.3	H	239.0	23.1	17.6	73.9

Average Data

Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
1257.23333	26.0	1000.0	1000.000	124.7	H	185.0	-5.7	27.9	53.9
1932.76666	33.3	1000.0	1000.000	183.5	V	354.0	-2.3	20.6	53.9
3761.16666	32.8	1000.0	1000.000	229.4	V	237.0	4.6	21.1	53.9
6521.46666	36.2	1000.0	1000.000	401.9	H	27.0	11.2	17.7	53.9
10949.3333	37.2	1000.0	1000.000	155.6	V	167.0	14.7	16.7	53.9
16863.0666	43.6	1000.0	1000.000	278.3	H	239.0	23.1	10.3	53.9

Test Notes: All harmonics complies with the general requirement of 15.209. (The Average limit for 15.249 is 94.5 dBµV/m – 50 = 44.5 dBµV/m, and the Peak limit for 15.249 is 66.5 dBµV/m. The limits of 15.209 are applicable.)

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2.4 RADIATED SPURIOUS EMISSIONS

2.4.1 Specification Reference

FCC 47 CFR Part 15, Clause 15.249(d)
Industry Canada RSS-210, Clause A2.9(b)

2.4.2 Standard Applicable

(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

2.4.3 Equipment Under Test and Modification State

Serial No: 7404450032/ Test Configuration B

2.4.4 Date of Test/Initial of test personnel who performed the test

March 29, 2015/XYZ

2.4.5 Test Equipment Used

The major items of test equipment used for the above tests are identified in Section 3.1.

2.4.6 Environmental Conditions/ Test Location

Test performed at TÜV SÜD America Inc. Rancho Bernardo facility

Ambient Temperature	25.9 °C
Relative Humidity	43.7 %
ATM Pressure	98.9 kPa

2.4.7 Additional Observations

- This is a radiated test. The spectrum was searched from 30MHz to at least the 10^{th} harmonic (10GHz).
- The measurement results are identical to test results presented under Section 2.3.9 up to Section 2.3.12 of this test report. No other significant spurious emissions observed other than harmonics of the fundamental frequency.

SECTION 3

TEST EQUIPMENT USED

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3.1 TEST EQUIPMENT USED

List of absolute measuring and other principal items of test equipment.

ID Number (SDGE/SDRB)	Test Equipment	Type	Serial Number	Manufacturer	Cal Date	Cal Due Date
Conducted Port Setup						
7582	Signal/Spectrum Analyzer	FSW26	101614	Rhode & Schwarz	12/22/14	12/22/15
1003	Signal Generator	SMR 40	1104.0002.40	Rhode & Schwarz	04/29/15	04/29/16
Radiated Test Setup						
1002	Bilog Antenna	3142C	00058717	ETS-Lindgren	01/30/14	01/30/16
1051	Double-ridged waveguide horn antenna	3115	9408-4329	EMCO	02/28/14	02/28/16
8628	Pre-amplifier	QLJ 01182835-JO	8986002	QuinStar Technologies Inc.	03/20/15	03/20/16
1040	EMI Test Receiver	ESIB40	100292	Rhode & Schwarz	09/29/14	09/29/15
1049	EMI Test Receiver	ESU	100133	Rhode & Schwarz	03/11/15	03/11/16
1016	Pre-amplifier	PAM-0202	187	PAM	12/10/14	12/10/15
Miscellaneous						
6792	Multimeter	3478A	2911A70964	Hewlett Packard	08/12/14	08/12/15
1072	DC Power Supply	E3610A	KR51311519	Hewlett Packard	Verified by 6792	
	Test Software	EMC32	V8.53	Rhode & Schwarz	N/A	

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3.2 MEASUREMENT UNCERTAINTY

For a 95% confidence level, the measurement uncertainties for defined systems are:

3.2.1 Radiated Emission Measurements (Below 1GHz)

	Contribution	Probability Distribution Type	Probability Distribution x_i	Standard Uncertainty $u(x_i)$	$[u(x_i)]^2$
1	Receiver/Spectrum Analyzer	Rectangular	0.45	0.26	0.07
2	Cables	Rectangular	0.50	0.29	0.08
3	Preamp	Rectangular	0.50	0.29	0.08
4	Antenna	Rectangular	0.75	0.43	0.19
5	Site	Rectangular	3.55	2.05	4.20
6	EUT Setup	Rectangular	1.00	0.58	0.33
				Combined Uncertainty (u_c):	2.23
				Coverage Factor (k):	2
				Expanded Uncertainty:	4.45

3.2.2 Radiated Emission Measurements (Above 1GHz)

	Contribution	Probability Distribution Type	Probability Distribution x_i	Standard Uncertainty $u(x_i)$	$[u(x_i)]^2$
1	Receiver/Spectrum Analyzer	Rectangular	0.57	0.33	0.11
2	Cables	Rectangular	0.70	0.40	0.16
3	Preamp	Rectangular	0.50	0.29	0.08
4	Antenna	Rectangular	0.37	0.21	0.05
5	Site	Rectangular	3.55	2.05	4.20
6	EUT Setup	Rectangular	1.00	0.58	0.33
				Combined Uncertainty (u_c):	2.22
				Coverage Factor (k):	2
				Expanded Uncertainty:	4.44

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SECTION 4

DIAGRAM OF TEST SETUP

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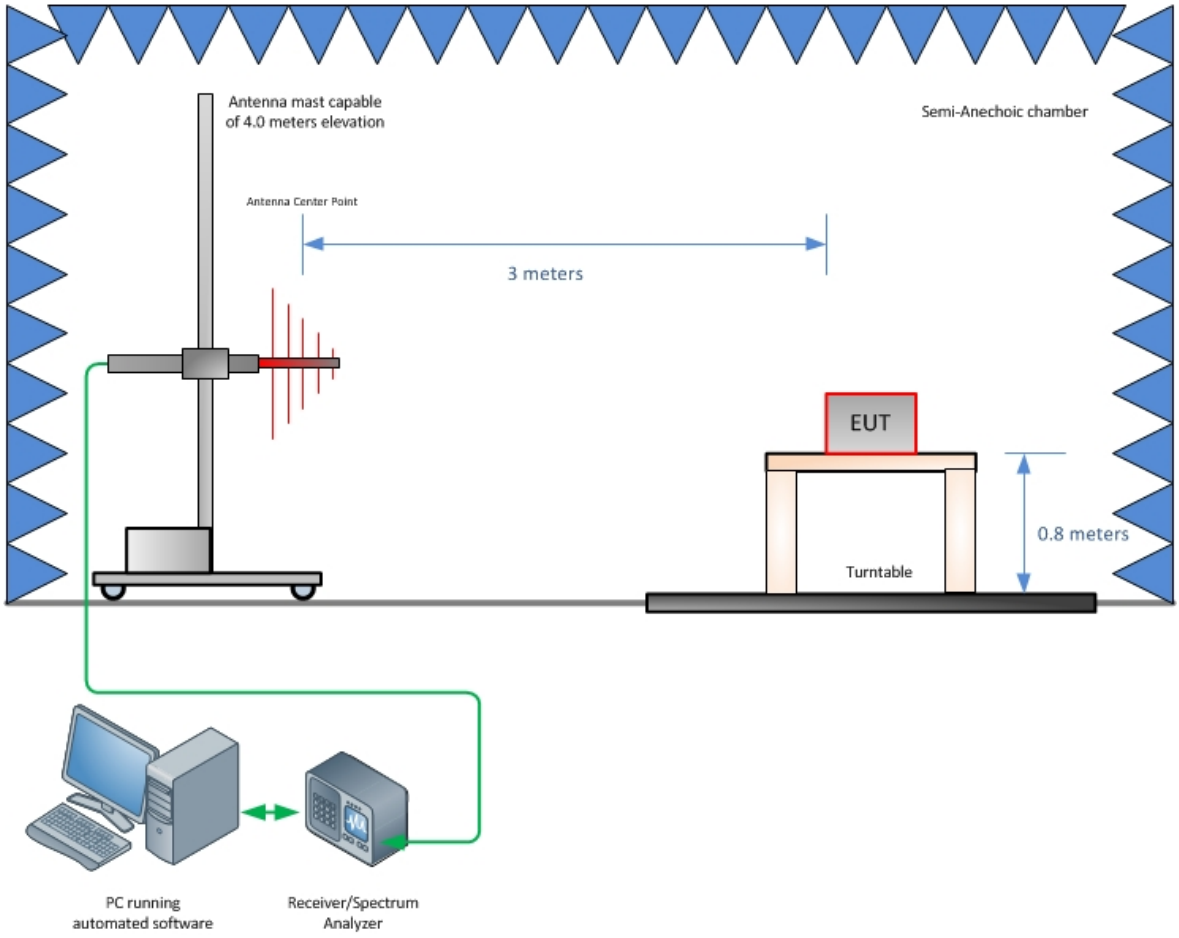
4.1 RADIATED EMISSION TEST SETUP (BELOW 1GHZ)



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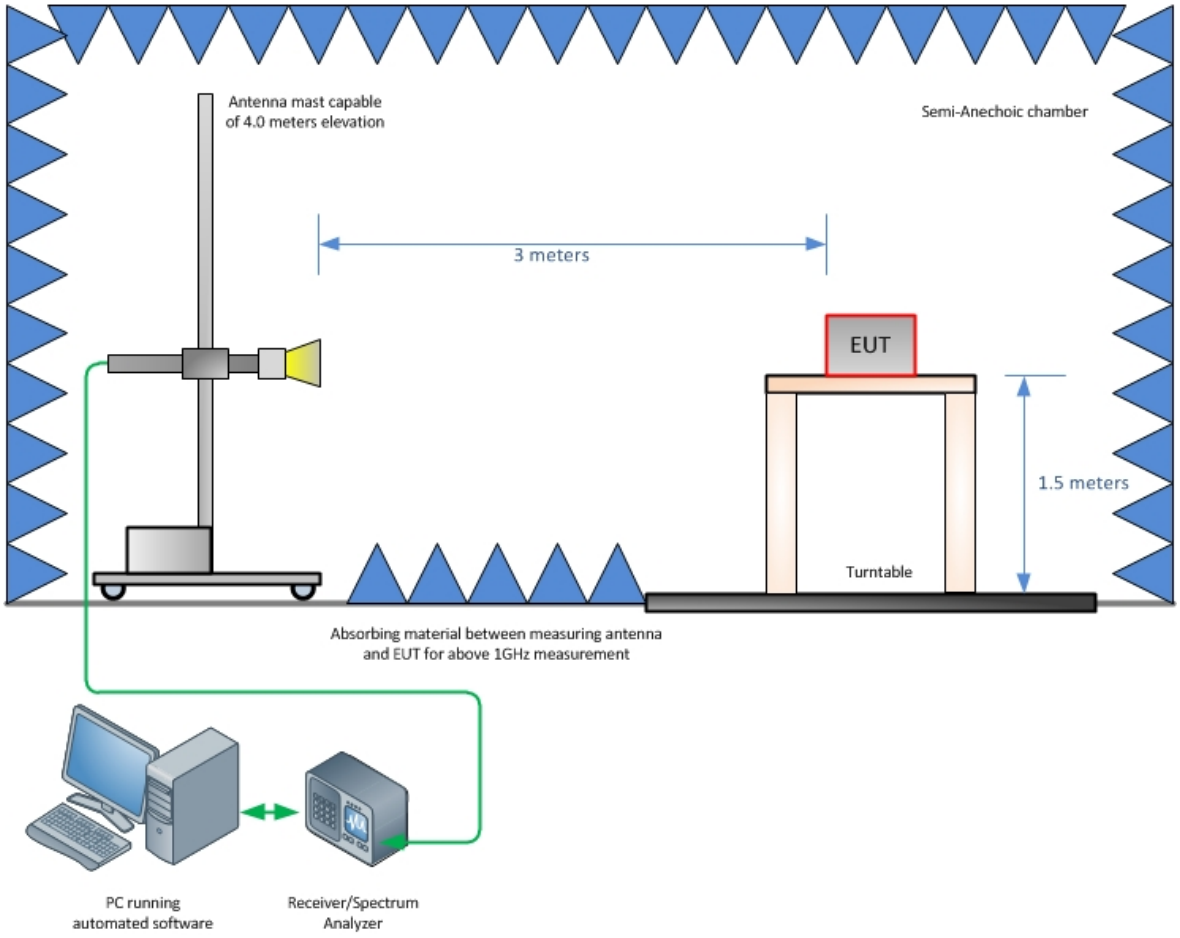
4.2 RADIATED EMISSION TEST SETUP (ABOVE 1GHZ)



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SECTION 5

ACCREDITATION, DISCLAIMERS AND COPYRIGHT

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