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Report On

EMC Evaluation of
Inseego Corp.
MIFI8000 Wireless Hotspot Modem

FCC Part 15 Subpart B
ICES-003 Issue 6

Report No. 72142923

May 2019



America

TÜV SÜD America Inc., 10040 Mesa Rim Road, San Diego, CA 92121
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REPORT ON	EMC Evaluation of the Inseego Corp. MIFI8000 Wireless Hotspot Modem
TEST REPORT NUMBER	72142923
TEST REPORT DATE	May 2019
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APPROVED BY	 Ferdinand S. Custodio <hr/> Name Authorized Signatory Title: Senior EMC Test Engineer/Wireless Team Lead
DATED	<hr/> May 16, 2019



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Revision History

72142923 Inseego Corp. MIFI8000 Wireless Hotspot Modem					
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SECTION 1

REPORT SUMMARY

EMC Evaluation of the
Insego Corp.
MIFI8000 Wireless Hotspot Modem



1.1 INTRODUCTION

The information contained in this report is intended to show verification of the Insego Corp. MIFI8000 Wireless Hotspot Modem to the requirements of FCC Part 15 Subpart B and Innovation, Science and Economic Development Canada ICES-003.

Objective	To perform EMC Evaluation to determine the Equipment Under Test's (EUT's) compliance with the Test Specification, for the series of tests carried out.
Manufacturer	Insego Corp.
Product Marketing Name	MiFi 8000
Model Number(s)	MIFI8000
Serial Number(s)	AT071218B00062
Number of Samples Tested	1
Highest Frequency Generated or Used	5 GHz (802.11a)
Test Specification/Issue/Date	<ul style="list-style-type: none"> • FCC Part 15 Subpart B (October 1, 2018) • Spectrum Management and Telecommunications Interference-Causing Equipment Standard ICES-003 Information Technology Equipment (ITE) — Limits and methods of measurement (Issue 6 April 2017).
Start of Test	March 29, 2019
Finish of Test	April 23, 2019
Name of Engineer(s)	Xiaoying Zhang
Related Document(s)	None



1.2 BRIEF SUMMARY OF RESULTS

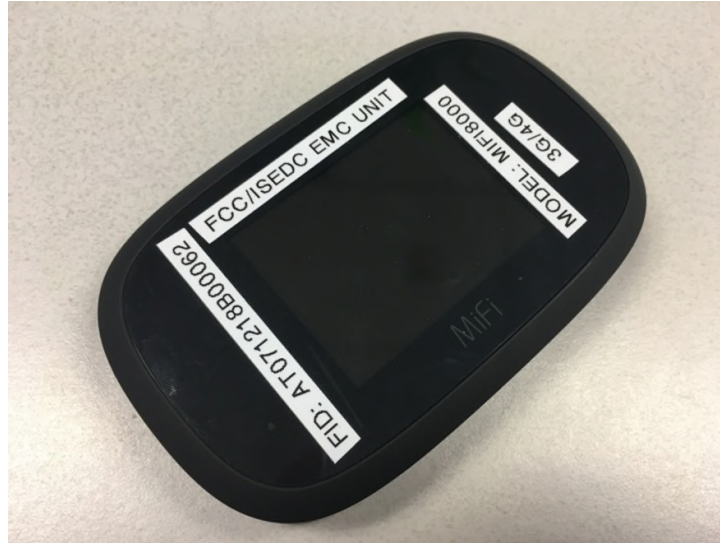
A brief summary of the tests carried out in accordance with FCC Part 15 Subpart B with cross-reference to Innovation, Science and Economic Development Canada Interference-Causing Equipment Standard ICES-003 is shown below.

Part 15	ICES-003	Test Description	Result	Comments/Base Standard
§15.107	Clause 6.1	Conducted Emissions	Compliant	Class B requirement
§15.109	Clause 6.2	Radiated Emissions	Compliant	Class B requirement

1.3 PRODUCT INFORMATION

1.3.1 Technical Description

The Equipment Under Test (EUT) is a Inseego Corp. MIFI8000 Wireless Hotspot Modem as shown in the photograph below. The EUT is a Wireless Hotspot Modem supporting 2G/3G/4G Technologies. The EUT comes with a USB Port.



Equipment Under Test (EUT)



1.3.2 Labelling Requirement for Innovation, Science and Economic Development Canada

The manufacturer, importer or supplier shall meet the labelling requirements set out in this section and in Notice 2014-DRS1003 for electronic labelling for every unit:

- (i) Prior to marketing in Canada, for ITE manufactured in Canada, and;
- (ii) Prior to importation into Canada, for imported ITE.

Each unit of an ITE model shall bear a label (see below) that represents the manufacturer's or the importer's SDoC with Innovation, Science and Economic Development Canada's ICES-003. This label shall be permanently affixed to the ITE or displayed electronically and its text must be clearly legible. If the dimensions of the device are too small or if it is not practical to place the label on the ITE and electronic labelling has not been implemented, the label shall be, upon agreement with Innovation, Science and Economic Development Canada, placed in a prominent location in the user manual supplied with the ITE. The user manual may be in an electronic format and must be readily available.

Innovation, Science and Economic Development Canada ICES-003 Compliance Label:

CAN ICES-3 (B)/NMB-3(B)

1.3.3 Labelling Requirement for Part 15 (SDoC) Device

See FCC Publication Number: 784748 for details:

<https://apps.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=27980&switch=P>



1.4 EUT TEST CONFIGURATION

1.4.1 Test Configuration Description

Test Configuration	Description
Default	The EUT is powered by internal battery or AC/DC Power Supply and work in unintentional mode.

1.4.2 EUT Exercise Software

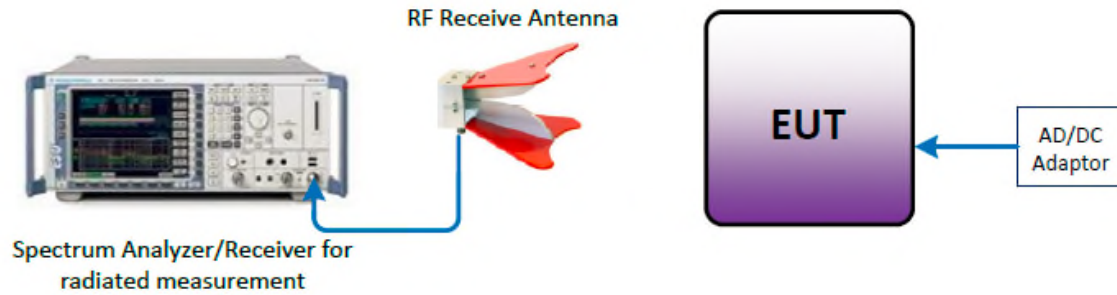
None.

1.4.3 Support Equipment and I/O cables

Manufacturer	Equipment/Cable	Description
Inseego Corp.	USB Cable	Standard USB Type A to USB Type C
Inseego Corp.	External AC-DC Power Adapter	Model: SSW-2783, PN: 40123126.01 Input: 100-240VAC, 50/60Hz, 0.5A Output: 5VDC, max. 2A

1.4.4 Simplified Test Configuration Diagram

Radiated Test Configuration



Not To Scale – Illustration Purpose Only
Objects may not represent actual image of original equipment/s or set-up.



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: AT071218B00062		
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 C63.4-2014, 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 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 C63.4-2014. 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)

16936 Via Del Campo, San Diego, CA 92127-1708 (33.018644,-117.092409). Phone: (858) 678-1400 Fax: (858) 546-0364.

1.9 TEST FACILITY REGISTRATION

1.9.1 FCC – Designation 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 Designation is US1146.



1.9.2 Innovation, Science and Economic Development Canada (IC) Registration No.: 3067A-1 & 22806-1

The 10m Semi-anechoic chamber of TUV SUD America Inc. (San Diego Rancho Bernardo) has been registered by Certification and Engineering Bureau of Innovation, Science and Economic Development Canada for radio equipment testing with Registration No. 3067A-1.

The 3m Semi-anechoic chamber of TUV SUD America Inc. (San Diego Mira Mesa) has been registered by Certification and Engineering Bureau of Innovation, Science and Economic Development Canada for radio equipment testing with Registration No. 22806-1.

1.9.3 BSMI – Laboratory Code: SL2-IN-E-028R (US0102)

TUV Product Service Inc. (San Diego) is a recognized EMC testing laboratory by the BSMI under the MRA (Mutual Recognition Arrangement) with the United States. Accreditation includes CNS 13438 up to 6GHz.

1.9.4 NCC (National Communications Commission - US0102)

TUV SUD America Inc. (San Diego) is listed as a Foreign Recognized Telecommunication Equipment Testing Laboratory and is accredited to ISO/IEC 17025 (A2LA Certificate No.2955.13) which under APEC TEL MRA Phase 1 was designated as a Conformity Assessment Body competent to perform testing of equipment subject to the Technical Regulations covered under its scope of accreditation including RTTE01, PLMN01 and PLMN08 for TTE type of testing and LP002 for Low-Power RF Device type of testing.

1.9.5 VCCI – Registration No. A-0280 and A-0281

TUV SUD America Inc. (San Diego) is a VCCI registered measurement facility which includes radiated field strength measurement, radiated field strength measurement above 1GHz, mains port interference measurement and telecommunication port interference measurement.

1.9.6 RRA – Identification No. US0102

TUV SUD America Inc. (San Diego) is National Radio Research Agency (RRA) recognized laboratory under Phase I of the APEC Tel MRA.

1.9.7 OFCA – U.S. Identification No. US0102

TUV SUD America Inc. (San Diego) is recognized by Office of the Communications Authority (OFCA) under Appendix B, Phase I of the APEC Tel MRA.



SECTION 2

TEST DETAILS

EMC Evaluation of the
Insego Corp.
MIFI8000 Wireless Hotspot Modem



2.1 CONDUCTED EMISSIONS

2.1.1 Specification Reference

Part 15 Subpart B §15.107(a)

2.1.2 Standard Applicable

Except for Class A digital devices, for equipment that is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed the limits in the following table, as measured using a 50 μH/50 ohms line impedance stabilization network (LISN). Compliance with the provisions of this paragraph shall be based on the measurement of the radio frequency voltage between each power line and ground at the power terminal. The lower limit applies at the band edges

Frequency of emission (MHz)	Conducted limit (dBμV)	
	Quasi-peak	Average
0.15–0.5	66 to 56*	56 to 46*
0.5–5	56	46
5–30	60	50

**Decreases with the logarithm of the frequency.*

2.1.3 Equipment Under Test and Modification State

Serial No: AT071218B00062 / Default Test Configuration

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

March 23, 2019/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 performed at TÜV SÜD America Inc. Rancho Bernardo facility.

Ambient Temperature 25.9 °C
 Relative Humidity 47.2 %
 ATM Pressure 98.8 kPa



2.1.7 Additional Observations

Measurement was done using EMC32 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 2.1.8 for sample computation.

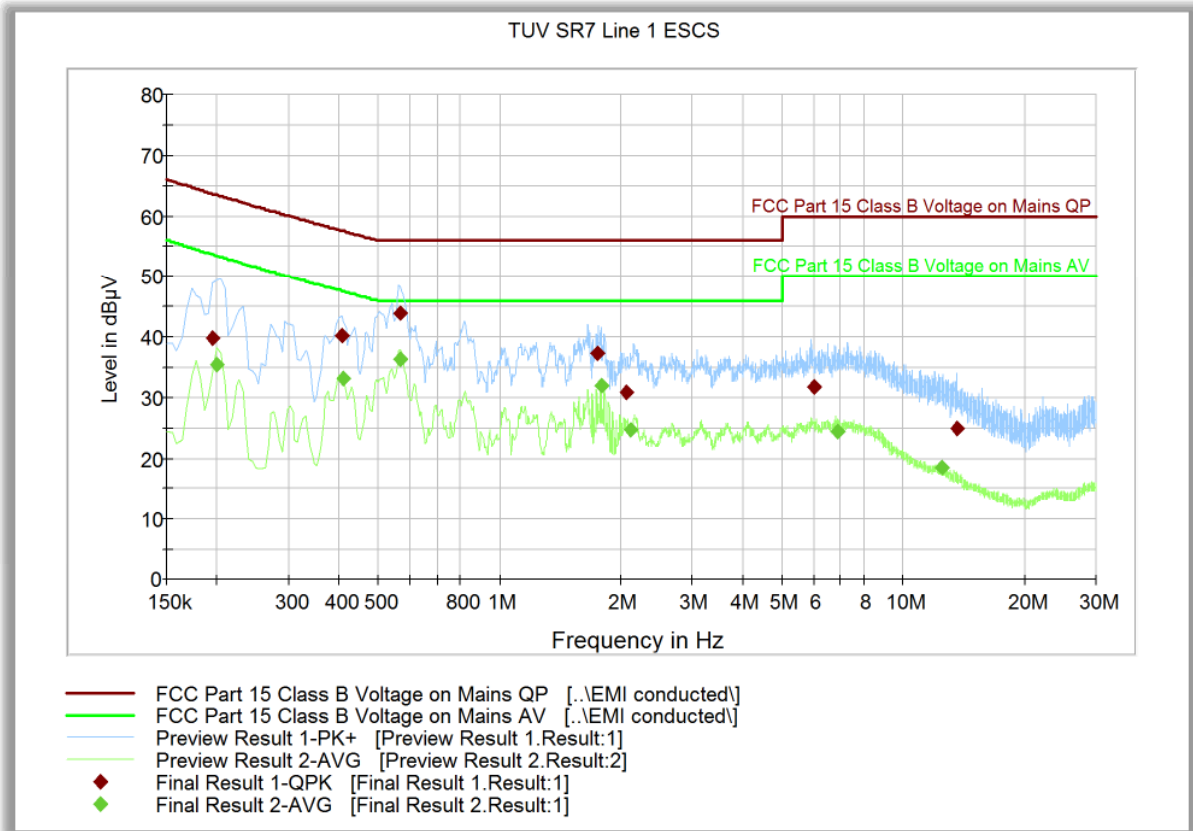
2.1.8 Sample Computation (Conducted Emission – Quasi Peak)

Measuring equipment raw measurement (db μ V) @ 150kHz		5.5
Correction Factor (dB)	Asset# 8822(20 dB attenuator)	19.9
	Asset# 1177 (cable)	0.15
	Asset# 1176 (cable)	0.35
	Asset# 7567(LISN)	0.30
Reported QuasiPeak Final Measurement (dbμV) @ 150kHz		26.2

2.1.9 Test Results

Compliant. See attached plots and tables.

2.1.10 FCC Class B 120V 60Hz (Line 1 – Hot)



Quasi Peak

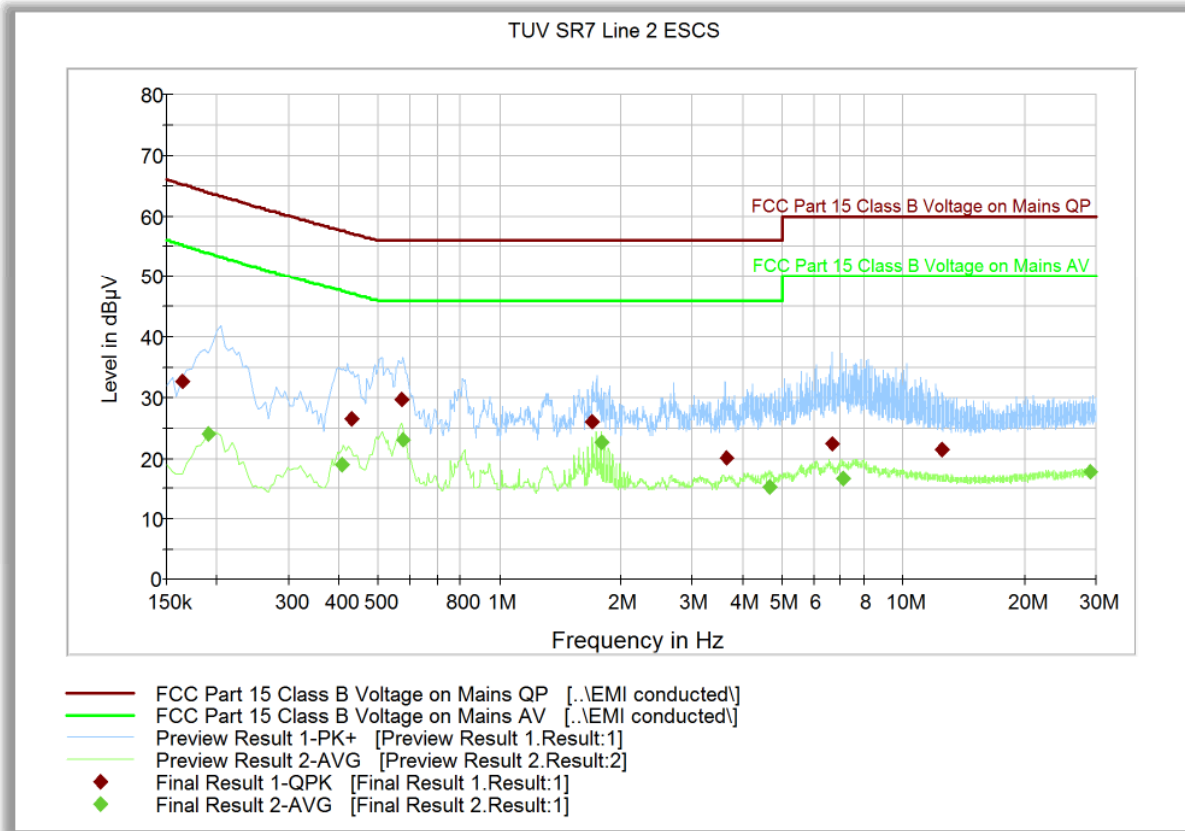
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV)
0.195000	39.8	1000.0	9.000	Off	L1	20.2	23.9	63.7
0.406500	40.3	1000.0	9.000	Off	L1	20.3	17.3	57.6
0.568500	43.9	1000.0	9.000	Off	L1	20.2	12.1	56.0
1.743000	37.2	1000.0	9.000	Off	L1	20.1	18.8	56.0
2.071500	30.9	1000.0	9.000	Off	L1	20.4	25.1	56.0
5.991000	31.8	1000.0	9.000	Off	L1	20.4	28.2	60.0
13.614000	24.8	1000.0	9.000	Off	L1	20.7	35.2	60.0

Average

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin - Ave (dB)	Limit - Ave (dBµV)
0.199500	35.5	1000.0	9.000	Off	L1	20.2	17.9	53.5
0.411000	33.2	1000.0	9.000	Off	L1	20.3	14.3	47.5
0.568500	36.4	1000.0	9.000	Off	L1	20.2	9.6	46.0
1.783500	32.1	1000.0	9.000	Off	L1	20.1	13.9	46.0
2.116500	24.7	1000.0	9.000	Off	L1	20.5	21.3	46.0
6.900000	24.5	1000.0	9.000	Off	L1	20.5	25.5	50.0
12.426000	18.6	1000.0	9.000	Off	L1	20.7	31.4	50.0



2.1.11 FCC Class B 120V 60Hz (Line 2 – Neutral)



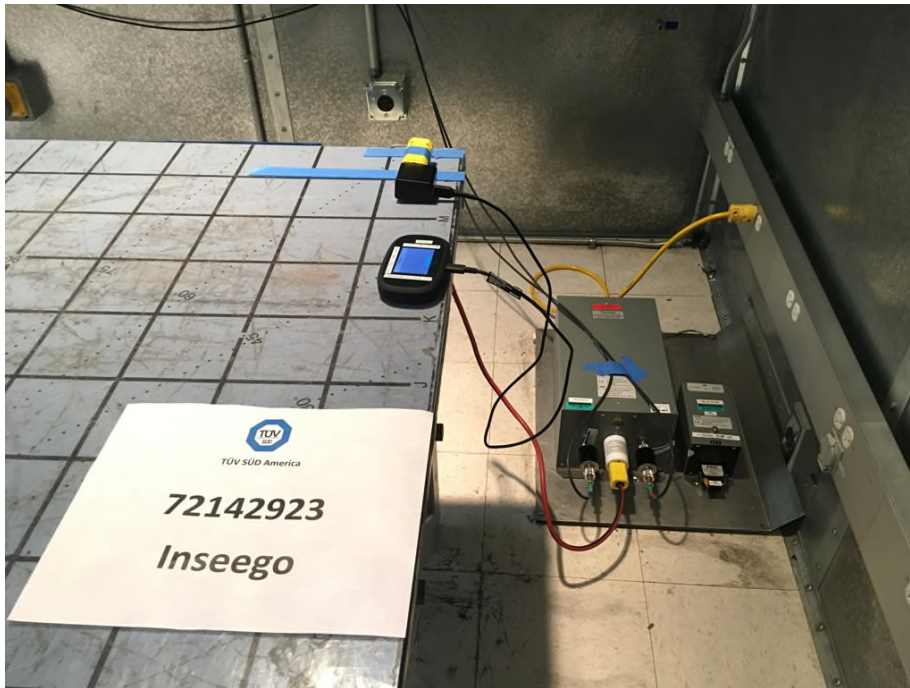
Quasi Peak

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin - QPK (dB)	Limit - QPK (dBµV)
0.163500	32.7	1000.0	9.000	Off	N	20.1	32.5	65.2
0.429000	26.6	1000.0	9.000	Off	N	20.2	30.6	57.2
0.573000	29.6	1000.0	9.000	Off	N	20.1	26.4	56.0
1.698000	26.1	1000.0	9.000	Off	N	20.1	29.9	56.0
3.637500	20.1	1000.0	9.000	Off	N	20.4	35.9	56.0
6.661500	22.5	1000.0	9.000	Off	N	20.5	37.5	60.0
12.471000	21.5	1000.0	9.000	Off	N	20.7	38.5	60.0

Average

Frequency (MHz)	Average (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	Filter	Line	Corr. (dB)	Margin - Ave (dB)	Limit - Ave (dBµV)
0.190500	24.0	1000.0	9.000	Off	N	20.1	29.8	53.9
0.406500	19.0	1000.0	9.000	Off	N	20.1	28.6	47.6
0.577500	23.0	1000.0	9.000	Off	N	20.1	23.0	46.0
1.783500	22.7	1000.0	9.000	Off	N	20.0	23.3	46.0
4.668000	15.4	1000.0	9.000	Off	N	20.4	30.6	46.0
7.125000	16.8	1000.0	9.000	Off	N	20.5	33.2	50.0
29.161500	17.7	1000.0	9.000	Off	N	20.7	32.3	50.0

2.1.12 Test Setup Photo





2.2 RADIATED EMISSIONS

2.2.1 Specification Reference

Part 15 Subpart B §15.109(a)

2.2.2 Standard Applicable

(a) Except for Class A digital devices, the field strength of radiated emissions from unintentional radiators at a distance of 3 meters shall not exceed the following values:

Frequency of emission (MHz)	Field Strength (microvolts/meter)
30-88	100
88-216	150
216-960	200
Above 960	500

2.2.3 Equipment Under Test and Modification State

Serial No: AT071218B00062 / Default Test Configuration

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

March 25, 2019/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 performed at TÜV SÜD America Inc. Rancho Bernardo facility.

Ambient Temperature 21.5 °C
 Relative Humidity 48.7 %
 ATM Pressure 99.2 kPa

2.2.7 Additional Observations

- The spectrum was searched from 30MHz to 18GHz.
- Verification was performed at 3 meters.
- Measurement was done using EMC32 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 2.2.8 for sample computation.



2.2.8 Sample Computation (Radiated Emission)

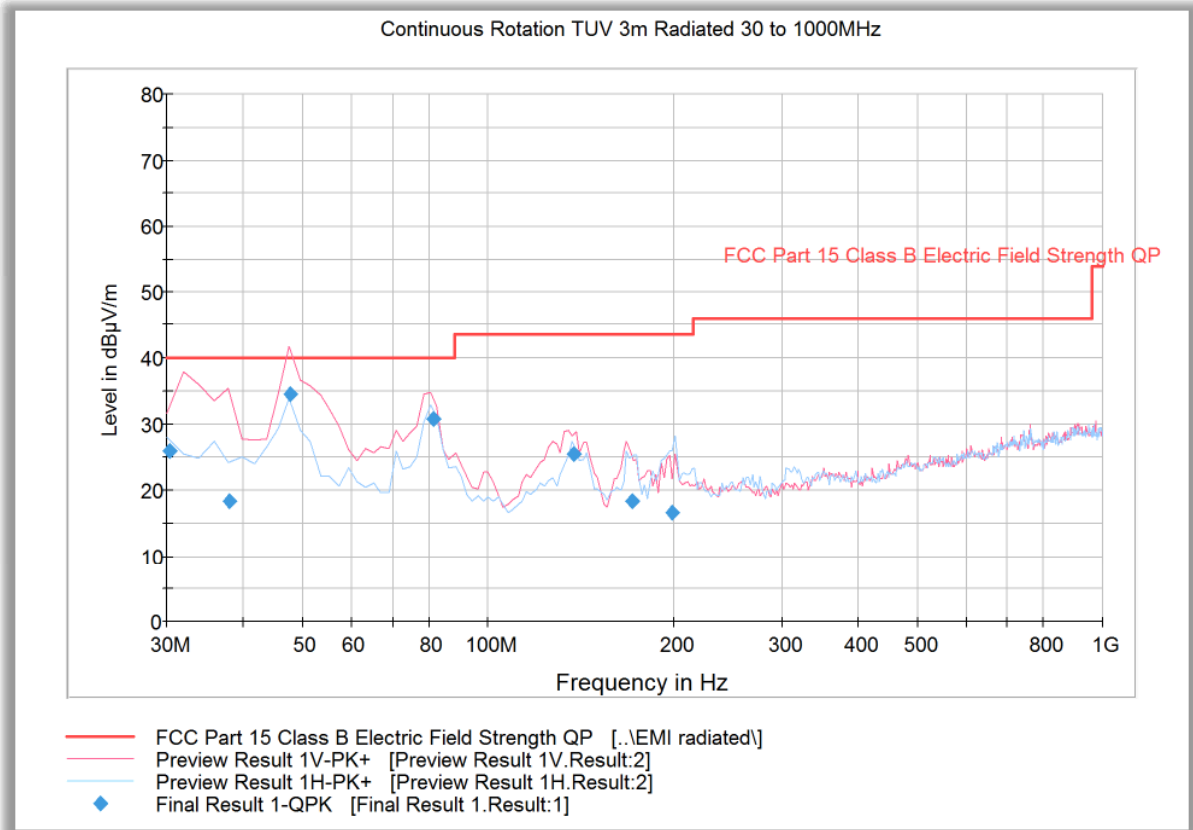
Measuring equipment raw measurement (db μ V) @ 30 MHz		24.4
Correction Factor (dB)	Asset# 1066 (cable)	0.3
	Asset# 1172 (cable)	0.3
	Asset# 1016 (preamplifier)	-30.7
	Asset# 1175(cable)	0.3
	Asset# 1033 (antenna)	17.2
Reported QuasiPeak Final Measurement (dbμV/m) @ 30MHz		11.8

2.2.9 Test Results

See attached plots.



2.2.9.1 Below 1GHz Radiated Emissions



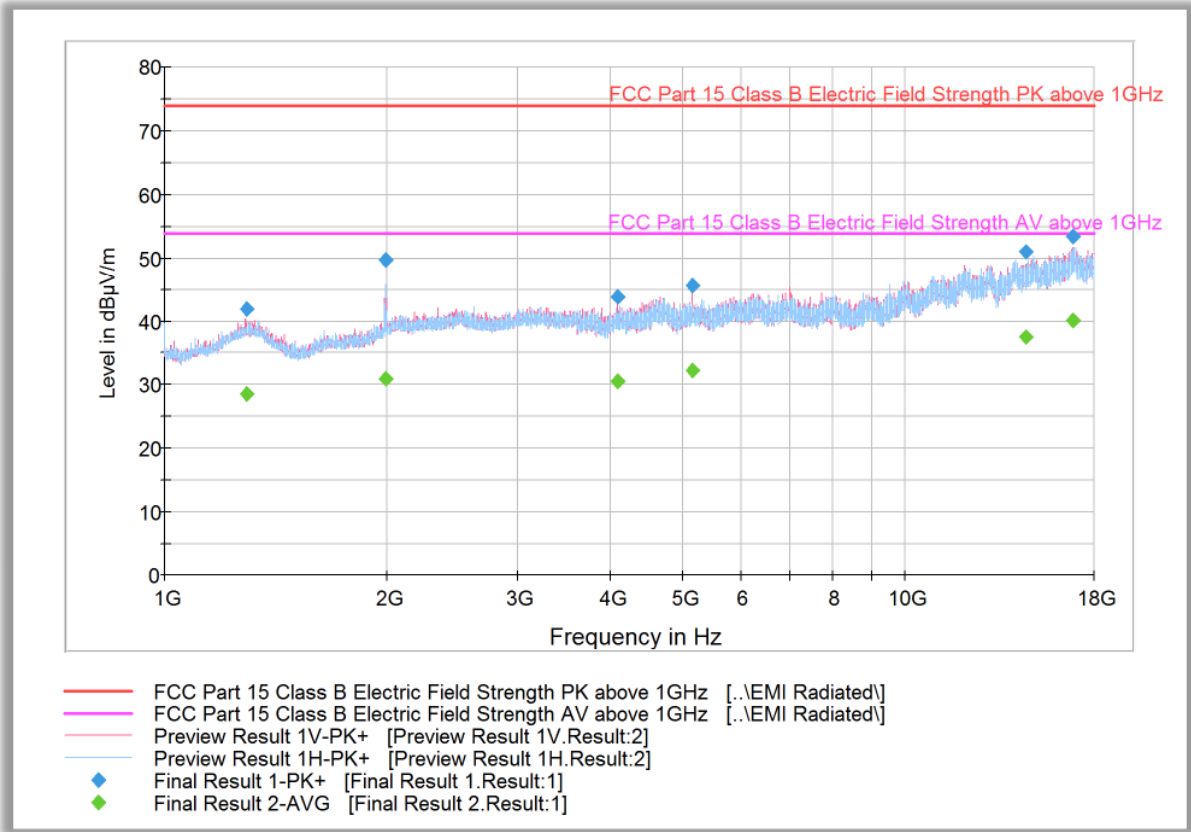
Quasi-Peak Data

Frequency (MHz)	QuasiPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
30.280000	25.9	1000.0	120.000	109.0	V	113.0	-7.9	14.1	40.0
37.975551	18.4	1000.0	120.000	110.0	V	220.0	-11.1	21.6	40.0
47.694990	34.6	1000.0	120.000	100.0	V	339.0	-14.3	5.4	40.0
81.301082	30.7	1000.0	120.000	138.0	V	180.0	-16.8	9.3	40.0
137.609940	25.4	1000.0	120.000	105.0	V	240.0	-14.1	18.1	43.5
171.296032	18.3	1000.0	120.000	100.0	V	185.0	-11.6	25.2	43.5
199.782124	16.6	1000.0	120.000	127.0	H	135.0	-10.8	26.9	43.5

Test Notes:



2.2.9.2 Above 1GHz Radiated Emission Test



Peak Data

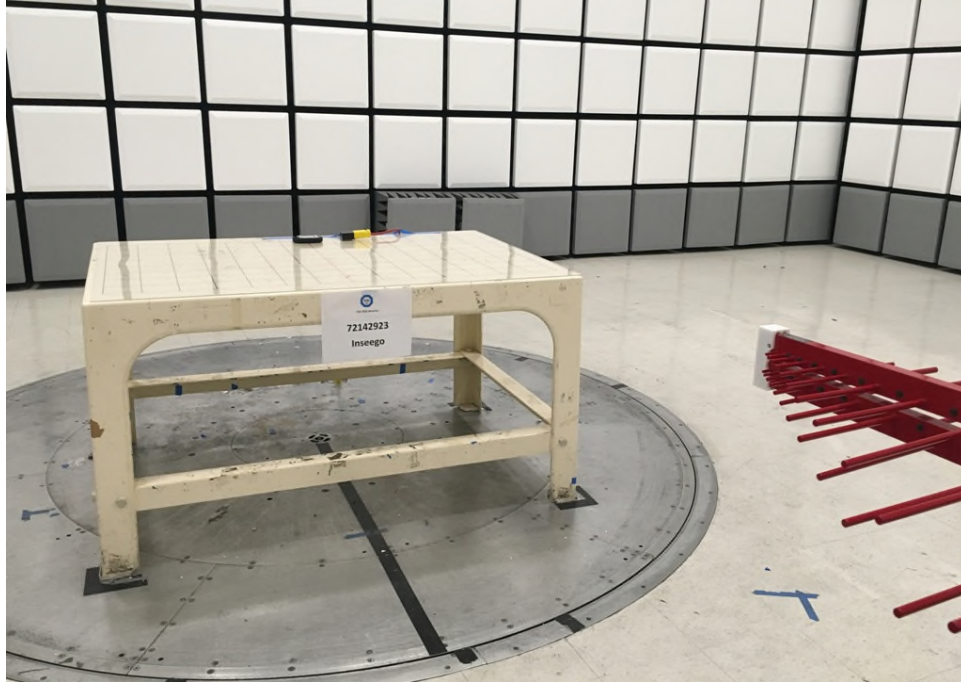
Frequency (MHz)	MaxPeak (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
1288.100000	41.9	1000.0	1000.000	115.8	V	315.0	-5.3	32.0	73.9
1988.666667	49.6	1000.0	1000.000	406.1	H	-7.0	-2.3	24.3	73.9
4084.166667	43.7	1000.0	1000.000	151.2	V	105.0	2.7	30.2	73.9
5165.566667	45.5	1000.0	1000.000	102.8	V	330.0	4.2	28.4	73.9
14548.233333	51.0	1000.0	1000.000	252.4	V	293.0	15.3	22.9	73.9
16892.000000	53.4	1000.0	1000.000	311.2	V	319.0	18.0	20.5	73.9

Average Data

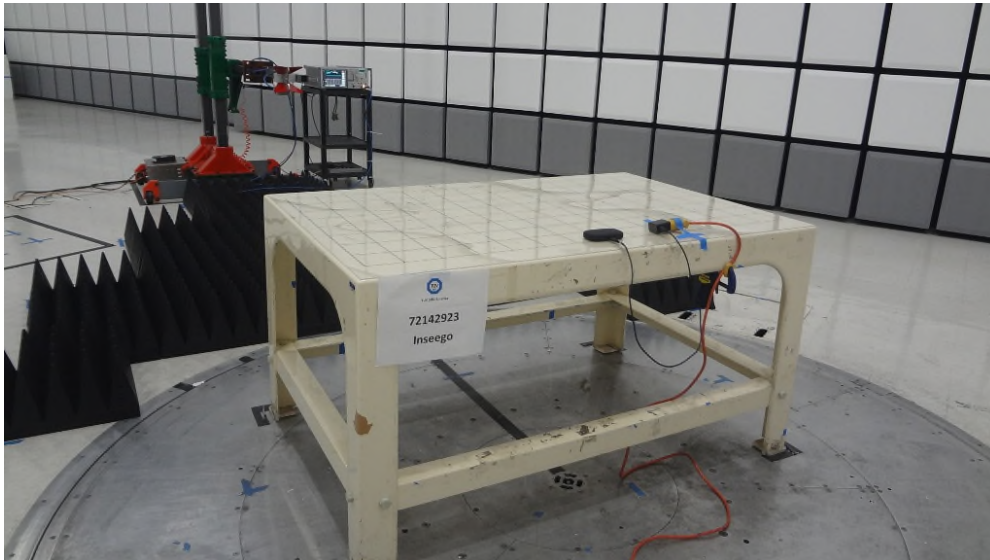
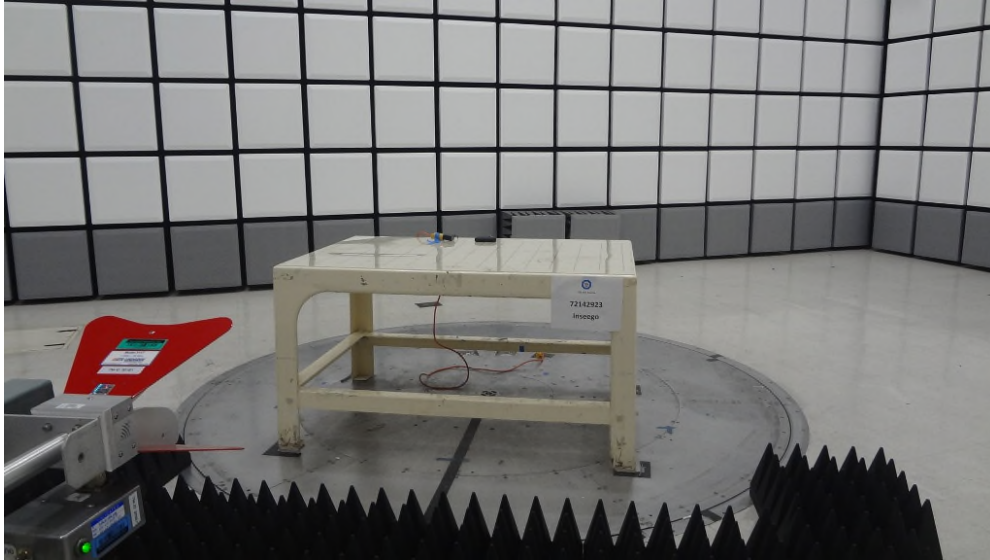
Frequency (MHz)	Average (dBµV/m)	Meas. Time (ms)	Bandwidth (kHz)	Height (cm)	Polarization	Azimuth (deg)	Corr. (dB)	Margin (dB)	Limit (dBµV/m)
1288.100000	28.5	1000.0	1000.000	115.8	V	315.0	-5.3	25.4	53.9
1988.666667	31.0	1000.0	1000.000	406.1	H	-7.0	-2.3	22.9	53.9
4084.166667	30.6	1000.0	1000.000	151.2	V	105.0	2.7	23.3	53.9
5165.566667	32.3	1000.0	1000.000	102.8	V	330.0	4.2	21.6	53.9
14548.233333	37.5	1000.0	1000.000	252.4	V	293.0	15.3	16.4	53.9
16892.000000	40.2	1000.0	1000.000	311.2	V	319.0	18.0	13.7	53.9

Test Notes:

2.2.10 Test Setup Photo (Below 1GHz)



2.2.11 Test Setup Photo (Above 1GHz)





SECTION 3

TEST EQUIPMENT USED



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 Emissions						
1024	EMI Test Receiver	ESCS 30	847793/001	Rhode & Schwarz	09/19/18	09/19/19
7567	LISN	FCC-LISN-50-25-2	120304	Fischer Custom Comm.	12/14/17	12/14/19
8822	20dB Attenuator	34-20-34	N/A	MCE / Weinschel	Verified by 7608 and 7582	
8824	20dB Attenuator	34-20-34	N/A	MCE / Weinschel	Verified by 7608 and 7582	
7608	Vector Signal Generator	SMBV100A	259021	Rhode & Schwarz	09/19/17	09/19/19
7582	Signal/Spectrum Analyzer	FSW26	101614	Rhode & Schwarz	01/07/19	01/07/20
Radiated Emission						
1002	Bilog Antenna	3142C	00058717	ETS-Lindgren	11/20/17	11/20/19
1040	EMI Test Receiver	ESIB40	100292	Rhode & Schwarz	10/15/18	10/15/19
1049	EMI Test Receiver	ESU	100133	Rhode & Schwarz	07/13/18	07/13/19
8628	Pre-amplifier	QLI-01182835-JO	8986002	Quinstar	03/07/19	03/07/20
7575	Double-ridged waveguide horn antenna	3117	00155511	EMCO	06/16/18	06/16/20
1016	Pre-amplifier	PAM-0202	187	A.H. Systems, Inc.	03/08/19	03/08/20
7582	Signal/Spectrum Analyzer	FSW26	101614	Rhode & Schwarz	01/07/19	01/07/20
7608	Vector Signal Generator	SMBV100A	259021	Rhode & Schwarz	09/19/17	09/19/19
8921	High-frequency cable	SucoFlex 100 SX	N/A	Suhner	Verified by 7608 and 7582	
8923	High-frequency cable	Micropore 19057793	N/A	United Microwave Products	Verified by 7608 and 7582	
Miscellaneous						
6708	Multimeter	34401A	US36086974	Hewlett Packard	07/18/18	07/18/19
7554	Barometer/Temperature/Humidity Transmitter	iBTHX-W	0400706	Omega	05/25/18	05/25/19
	Test Software	EMC32	V8.53	Rhode & Schwarz	N/A	

3.2 MEASUREMENT UNCERTAINTY

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

3.2.1 Conducted Measurements

	Input Quantity (Contribution) X_i	Value	Prob. Dist.	Divisor	$u_i(x)$	$u_i(x)^2$
1	Receiver reading	0.10 dB	Normal, k=1	1.000	0.10	0.01
2	LISN-receiver attenuation	0.10 dB	Normal, k=2	2.000	0.05	0.00
3	LISN voltage division factor	0.30 dB	Normal, k=2	2.000	0.15	0.02
4	Receiver sinewave accuracy	0.36 dB	Normal, k=2	2.000	0.18	0.03
5	Receiver pulse amplitude	1.50 dB	Rectangular	1.732	0.87	0.75
6	Receiver pulse repetition rate	1.50 dB	Rectangular	1.732	0.87	0.75
7	Noise floor proximity	0.00 dB	Rectangular	1.732	0.00	0.00
8	AMN VDF frequency interpolation	0.10 dB	Rectangular	1.732	0.06	0.00
9	Mismatch	0.07 dB	U-shaped	1.414	0.05	0.00
10	LISN impedance	2.65 dB	Triangular	2.449	1.08	1.17
11	Effect of mains disturbance	0.00 dB			0.00	0.00
12	Effect of the environment					
Combined standard uncertainty				Normal	1.66 dB	
Expanded uncertainty				Normal, k=2	3.31 dB	

3.2.2 Radiated Emission Measurements (Below 1GHz)

	Input Quantity (Contribution) X_i	Value	Prob. Dist.	Divisor	$u_i(x)$	$u_i(x)^2$
1	Receiver reading	0.10 dB	Normal, k=1	1.000	0.10	0.01
2	Attenuation: antenna-receiver	0.20 dB	Normal, k=2	2.000	0.10	0.01
3	Antenna factor AF	0.75 dB	Normal, k=2	2.000	0.38	0.14
4	Receiver sinewave accuracy	0.45 dB	Normal, k=2	2.000	0.23	0.05
5	Receiver pulse amplitude	1.50 dB	Rectangular	1.732	0.87	0.75
6	Receiver pulse repetition rate	1.50 dB	Rectangular	1.732	0.87	0.75
7	Noise floor proximity	0.50 dB	Rectangular	1.732	0.29	0.08
8	Mismatch: antenna-receiver	0.95 dB	U-shaped	1.414	0.67	0.45
9	AF frequency interpolation	0.30 dB	Rectangular	1.732	0.17	0.03
10	AF height deviations	0.10 dB	Rectangular	1.732	0.06	0.00
11	Directivity difference at 3 m	3.12 dB	Rectangular	1.732	1.80	3.24
12	Phase center location at 3 m	1.00 dB	Rectangular	1.732	0.58	0.33
13	Cross-polarisation	0.90 dB	Rectangular	1.732	0.52	0.27
14	Balance	0.00 dB	Rectangular	1.732	0.00	0.00
15	Site imperfections	3.76 dB	Triangular	2.449	1.54	2.36
16	Separation distance at 3 m	0.30 dB	Rectangular	1.732	0.17	0.03
17	Effect of setup table material	0.77 dB	Rectangular	1.732	0.44	0.20
18	Table height at 3 m	0.10 dB	Normal, k=2	2.000	0.05	0.00
19	Near-field effects	0.00 dB	Triangular	2.449	0.00	0.00
20	Effect of ambient noise on OATS	0.00 dB				0.00
Combined standard uncertainty				Normal	2.95 dB	
Expanded uncertainty				Normal, k=2	5.90 dB	



3.2.3 Radiated Emission Measurements (Above 1GHz)

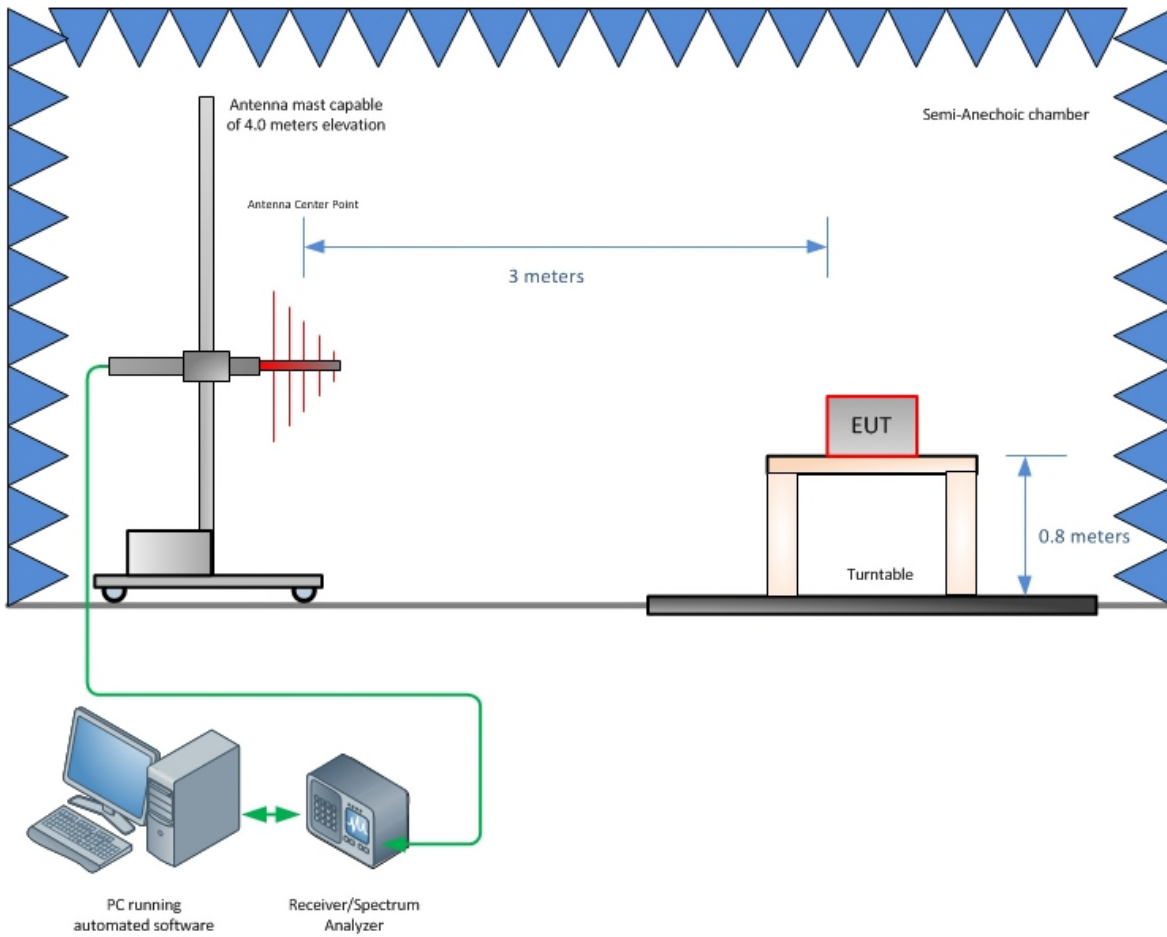
	Input Quantity (Contribution) X_i	Value	Prob. Dist.	Divisor	$u_i(x)$	$u_i(x)^2$						
1	Receiver reading	0.10 dB	Normal, k=1	1.000	0.10	0.01						
2	Attenuation: antenna-receiver	0.20 dB	Normal, k=2	2.000	0.10	0.01						
3	Antenna factor AF	0.75 dB	Normal, k=2	2.000	0.38	0.14						
4	Receiver sinewave accuracy	0.45 dB	Normal, k=2	2.000	0.23	0.05						
5	Receiver pulse amplitude	1.50 dB	Rectangular	1.732	0.87	0.75						
6	Receiver pulse repetition rate	1.50 dB	Rectangular	1.732	0.87	0.75						
7	Noise floor proximity	0.50 dB	Rectangular	1.732	0.29	0.08						
8	Mismatch: antenna-receiver	0.95 dB	U-shaped	1.414	0.67	0.45						
9	AF frequency interpolation	0.30 dB	Rectangular	1.732	0.17	0.03						
10	AF height deviations	0.10 dB	Rectangular	1.732	0.06	0.00						
11	Directivity difference at 3 m	3.12 dB	Rectangular	1.732	1.80	3.24						
12	Phase center location at 3 m	1.00 dB	Rectangular	1.732	0.58	0.33						
13	Cross-polarisation	0.90 dB	Rectangular	1.732	0.52	0.27						
14	Balance	0.00 dB	Rectangular	1.732	0.00	0.00						
15	Site imperfections	3.25 dB	Triangular	2.449	1.33	1.76						
16	Separation distance at 3 m	0.30 dB	Rectangular	1.732	0.17	0.03						
17	Effect of setup table material	0.77 dB	Rectangular	1.732	0.44	0.20						
18	Table height at 3 m	0.10 dB	Normal, k=2	2.000	0.05	0.00						
19	Near-field effects	0.00 dB	Triangular	2.449	0.00	0.00						
20	Effect of ambient noise on OATS	0.00 dB				0.00						
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;">Combined standard uncertainty</td> <td style="width: 15%;">Normal</td> <td style="width: 25%;">2.85 dB</td> </tr> <tr> <td>Expanded uncertainty</td> <td>Normal, k=2</td> <td>5.70 dB</td> </tr> </table>							Combined standard uncertainty	Normal	2.85 dB	Expanded uncertainty	Normal, k=2	5.70 dB
Combined standard uncertainty	Normal	2.85 dB										
Expanded uncertainty	Normal, k=2	5.70 dB										



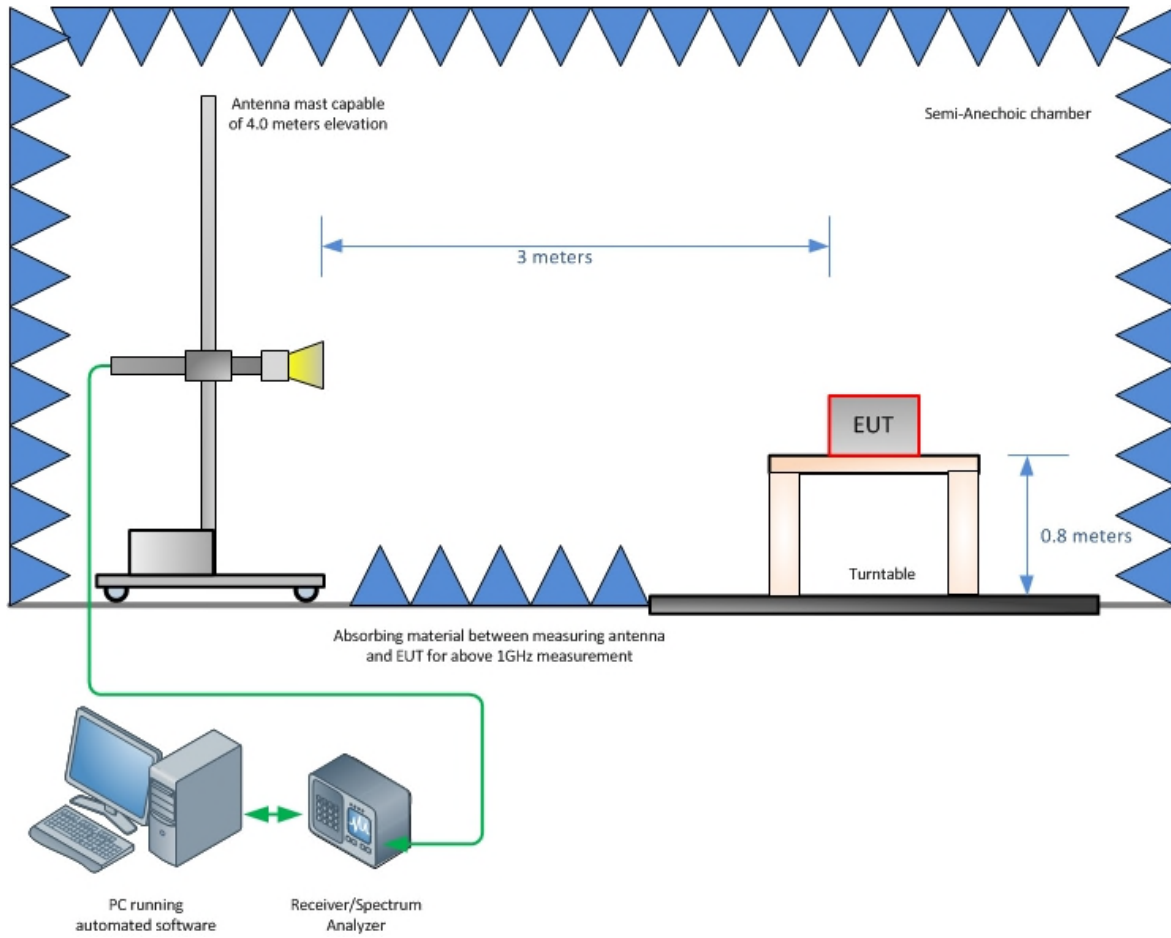
SECTION 4

DIAGRAM OF TEST SETUP

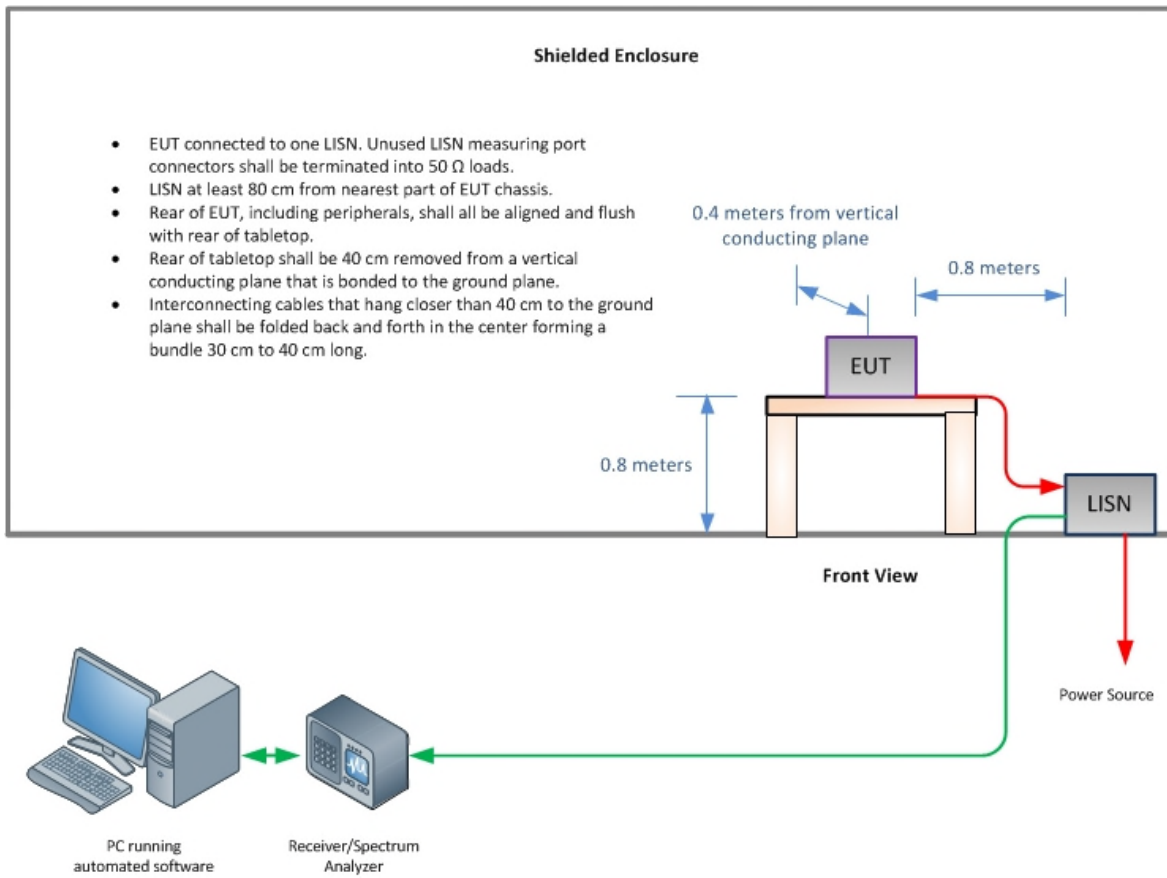
4.1 TEST SETUP DIAGRAM



Radiated Emission Test Setup (Below 1GHz)



Radiated Emission Test Setup (Above 1GHz)





SECTION 5

ACCREDITATION, DISCLAIMERS AND COPYRIGHT



5.1 ACCREDITATION, DISCLAIMERS AND COPYRIGHT

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