RF Test Report

Project Number: 4260491

Report Number: 4260491EMC01 **Revision Level:** 0

Client: Vayyar Imaging Ltd.

Equipment Under Test: Handheld UWB Device

Model Number VM20SQ

FCC ID: 2AHIS-VSENSE

Applicable Standards: ANSI C63.10:2013

FCC Part 15.519

Report issued on: 06 April 2018

Test Result: Compliant

Tested by: Jeremy Pickens, Senior EMC Engineer

Reviewed by: David Schramm, Operations Manager

Remarks: This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

Table of Contents

1 Summary of Test Results

Basic Standards	Test Result
15.519(c) / 15.209, Radiated Emissions below 960 MHz	Compliant
15.519(d), Radiated Emissions in GPS Receive Bands	Compliant
15.519(b), UWB Bandwidth requirement	Compliant
15.519(c) Radiated power density(EIRP)	Compliant
15.519(e), Peak Power within a 50MHz bandwidth	Compliant

1.1 *Modifications Required to Compliance*

None

2 General Information

2.1 *Client Information*

Name:	Vayyar Imaging Ltd.
Address:	11 Altalef St.
City, State, Zip, Country:	Yahud, Israel, 5621608

2.2 *Test Laboratory*

Name:	SGS North America, Inc.
Address:	620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country:	Suwanee, GA 30024, USA

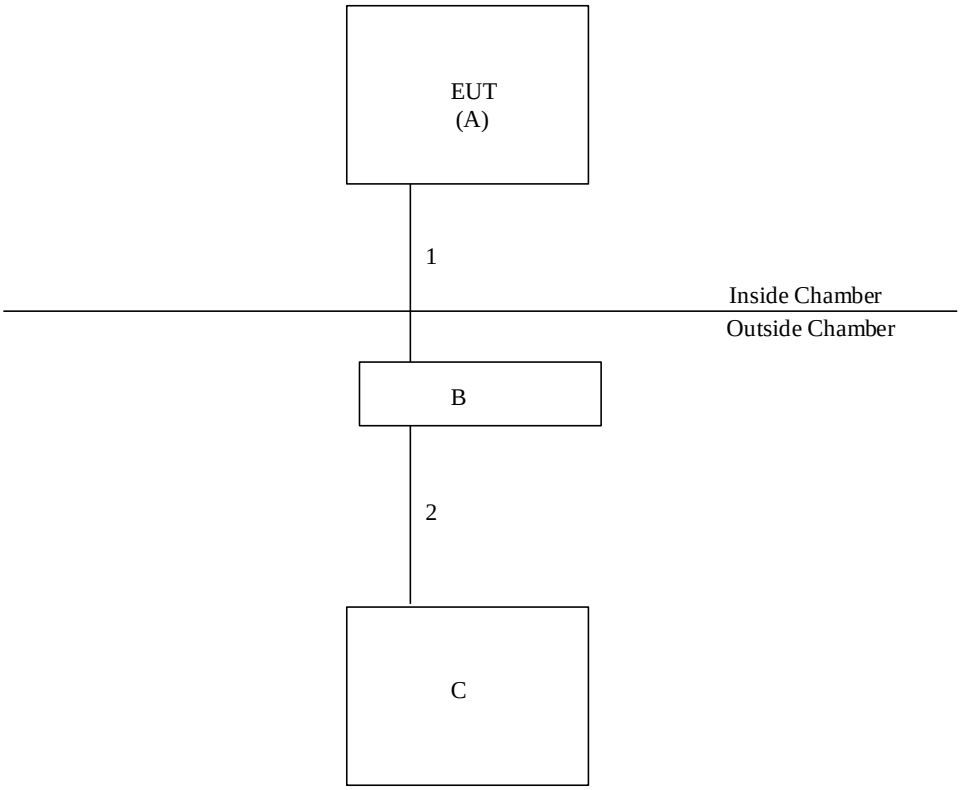
2.3 *General Information of EUT*

Model Number:	VM20SQ
Serial Number:	AOI1437782
Firmware Version:	FCC
FCC ID:	2AHIS-VSENSE
Sample Received Date:	15 January 2018
Dates of testing:	16 - 23 January 2018

2.4 *Operating Modes and Conditions*

The EUT was programmed by the manufacturer to transmit continuously using the “Swept-Enhanced” profile.

2.5 *EUT Block Diagram*



2.6 *System Configurations*

Device reference	Manufacturer	Description	Model Number	Serial Number
A	Vayyar Imaging	UWB device	VM20SQ	AOI1437782
Support Equipment				
B	Unitek	USB 3.0 7-Port Hub	Y-3187	NSN
C	Lenovo	Laptop	T500	NSN

2.7 *Cable List*

Cable reference	Port Name	Start	End	Cable Length (m)	Ferrite installed?	Shielded?
1	USB	EUT	USB Hub	2	N	Y
2	USB	USB Hub	Laptop	12	N	Y

3 Radiated Emissions below 960 MHz

3.1 *Test Result*

Test Description	Basic Standards	Test Result
Radiated Emissions	FCC15.519(3) (c)	Compliant

3.2 *Test Method*

Exploratory scans were performed over the frequency range as indicated in the tables below using the max hold function and incorporating a Peak detector and using TILE! software. The final test data was measured using a Quasi-Peak detector. The receiver's resolution bandwidth was set to 120 kHz. Measurements were made with the antenna positioned in both the horizontal and vertical planes of polarization. The antenna height was varied from 1 m to 4 m and the EUT was rotated 360° to find the maximum emitting point for each frequency. The EUT was manipulated through 3 orthogonal axes. The radiated measurements were recorded and compared to the limits indicated in the table below.

Radiated emissions limit below 1 GHz		
Frequency Range(MHz)	Limit(QP dBµV/m)	Distance
30 – 88	40	3m
88 – 216	43.52	3m
216 – 960	46	3m

3.3 *Test Site*

10m Absorber Lined Shielded Enclosure (ALSE), Suwanee, GA

Environmental Conditions

Temperature:	24.6 °C
Relative Humidity:	14.3 %
Atmospheric Pressure:	97.9 kPa

3.4 *Test Equipment*

Test End Date: 18-Jan-2018 Tester: JOP

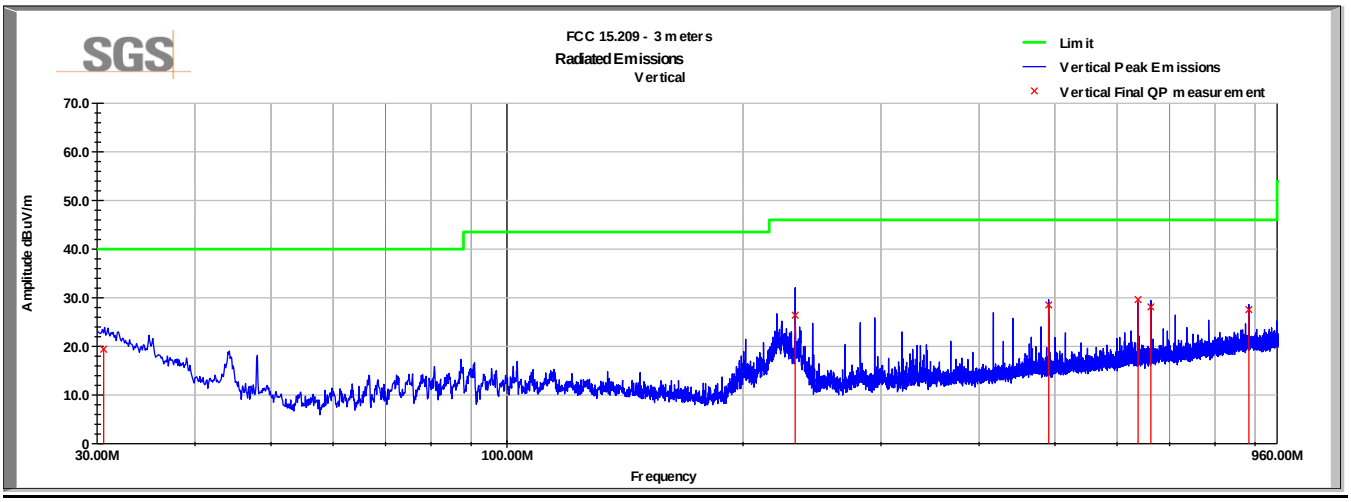
Equipment	Model	Manufacturer	Asset Number	Cal Due Date
EMI TEST RECEIVER	ESU40	ROHDE & SCHWARZ	B079629	25-Apr-2018
ANTENNA, BILOG	JB6	SUNOL	B079690	29-Nov-2018
RF CABLE	SF106	HUBER & SUHNER	B079661	25-Jul-2018
RF CABLE	SF106	HUBER & SUHNER	B079713	24-Jul-2018
RF CABLE	UC-N-MM-78	MAURY MICROWAVE	17017	25-Jul-2018
RF CABLE	SUCOFLEX 100	HUBER & SUHNER	B108523	24-Jul-2018
LOW NOISE AMPLIFIER	TS-PR18	ROHDE & SCHWARZ	B094463	22-Feb-2018

Note: The equipment calibration period is 1 year.

Software:
“RE 30-1000 MHz (12-2015)” TILE!

3.5 *Test Data*

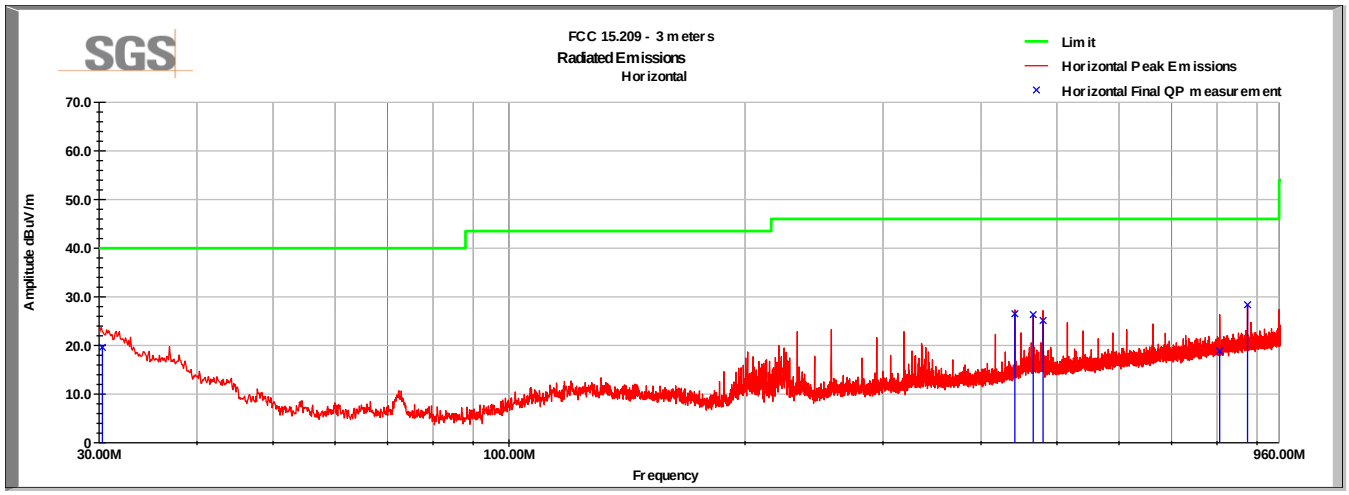
Vertical Radiated Emissions Plot



Vertical Radiated Emissions Data

Frequency MHz	Raw QP (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	QP Value (dBuV/m)	Limit (dBuV/m)	Margin (dB)
30.59	28.8	V	147.0	270.0	21.8	0.5	31.7	19.4	40.0	-20.6
233.19	46.6	V	127.0	168.0	12.0	1.4	33.5	26.4	46.0	-19.6
490.91	41.6	V	45.0	325.0	18.2	2.0	33.3	28.5	46.0	-17.5
638.19	40.4	V	16.0	400.0	20.1	2.3	33.2	29.6	46.0	-16.4
662.74	38.5	V	77.0	243.0	20.5	2.4	33.2	28.1	46.0	-17.9
883.66	35.1	V	109.0	148.0	22.9	2.8	33.2	27.6	46.0	-18.4
QP Value = Level + AF + CL - Amp										
Margin = QP Value - Limit										

Horizontal Radiated Emissions Plot



Horizontal Radiated Emissions Data

Frequency MHz	Raw QP (dBuV)	Polarity (V/H)	Azimuth (degrees)	Height (cm)	AF (dB/m)	Loss (dB)	Amp (dB)	QP Value (dBuV/m)	Limit (dBuV/m)	Margin (dB)
30.29	28.7	H	203.0	241.0	22.1	0.5	31.7	19.6	40.0	-20.4
441.82	40.9	H	180.0	176.0	17.1	1.9	33.4	26.5	46.0	-19.5
466.37	40.1	H	38.0	120.0	17.6	2.0	33.3	26.3	46.0	-19.7
480.05	38.5	H	98.0	214.0	17.9	2.0	33.3	25.1	46.0	-20.9
806.40	27.5	H	105.0	326.0	22.0	2.6	33.2	18.9	46.0	-27.1
875.09	36.1	H	270.0	298.0	22.8	2.7	33.2	28.4	46.0	-17.6
QP Value = Level + AF + CL - Amp										
Margin = QP Value - Limit										

4 Bandwidth requirements

4.1 *Test Result*

Test Description	Basic Standards	Test Result
Bandwidth requirement (-10 dB requirements)	15.503 (d), 15.519 (3)(b)	Compliant

4.2 *Test Method*

1) The −10 dB bandwidth of the fundamental emission shall be at least 500 MHz. For transmitters that employ frequency hopping, stepped frequency or similar modulation types, measurement of the −10 dB minimum bandwidth specified in this paragraph shall be made with the frequency hop or step function disabled and with the transmitter operating continuously at a fundamental frequency following the provisions of §15.31(m).
2) The −10 dB bandwidth is based on measurement using a peak detector, a 1 MHz resolution bandwidth, and a video bandwidth greater than or equal to the resolution bandwidth.

4.3 *Test Site*

10m Absorber Lined Shielded Enclosure (ALSE), Suwanee, GA

Environmental Conditions

Temperature:	23.8 °C
Relative Humidity:	12.8%
Atmospheric Pressure:	97.8 kPa

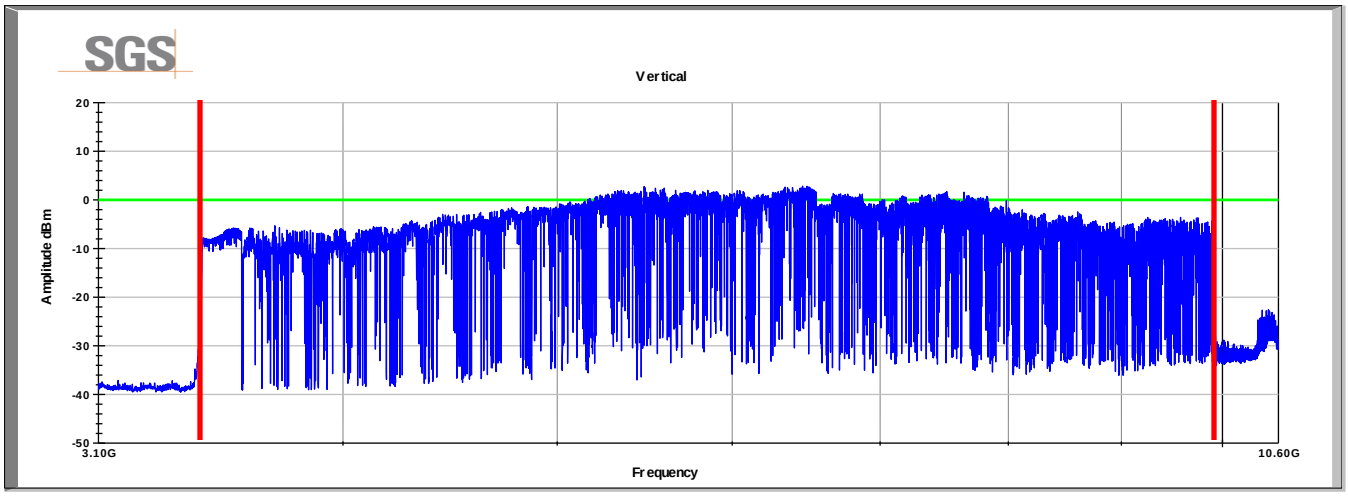
4.4 *Test Equipment*

Test End Date: 17-Jan-2018 Tester: JOP

Equipment	Model	Manufacturer	Asset Number	Cal Due Date
EMI TEST RECEIVER	ESU40	ROHDE & SCHWARZ	B079629	25-Apr-2018
ANTENNA, DRG HORN (MEDIUM)	3117	ETS LINDGREN	B079699	16-May-2018
RF CABLE	SF106	HUBER & SUHNER	B079716	24-Jul-2018
RF CABLE	SUCOFLEX 100	HUBER & SUHNER	B108523	24-Jul-2018
LOW NOISE AMPLIFIER	TS-PR18	ROHDE & SCHWARZ	B094463	22-Feb-2018

Note: The calibration period for this equipment is 1 year.

4.5 *Test Data*



Lower (-10 dB): 3.453 GHz
Upper (10 dB): 9.918 GHz

Bandwidth = 6465 MHz
Center = 6.686 GHz

5 Peak Power within a 50 MHz bandwidth

5.1 *Test Result*

Test Description	Basic Standards	Test Result
Peak Power in a 50 MHz Bandwidth	15.519 (3)(e)	Compliant

5.2 *Test Method*

1) There is a limit on the peak level of the emissions contained within a 50 MHz bandwidth centered on the frequency at which the highest radiated emission occurs, f_M. That limit is 0 dBm EIRP.
2) The peak EIRP limit is 20 log (RBW/50) dBm where RBW is the resolution bandwidth in megahertz that is employed by the measurement instrument. RBW shall not be lower than 1 MHz or greater than 50 MHz. The video bandwidth of the measurement instrument shall not be less than RBW.

If RBW is greater than 3 MHz, the application for certification filed with the Commission shall contain a detailed description of the test procedure, calibration of the test setup, and the Test Site.

Scans were performed with the EUT oriented in 3 orthogonal axes. The worst case orientation was reported.

5.3 *Test Site*

10m Absorber Lined Shielded Enclosure (ALSE), Suwanee, GA

Environmental Conditions

Temperature:	23.8 °C
Relative Humidity:	12.8%
Atmospheric Pressure:	97.8 kPa

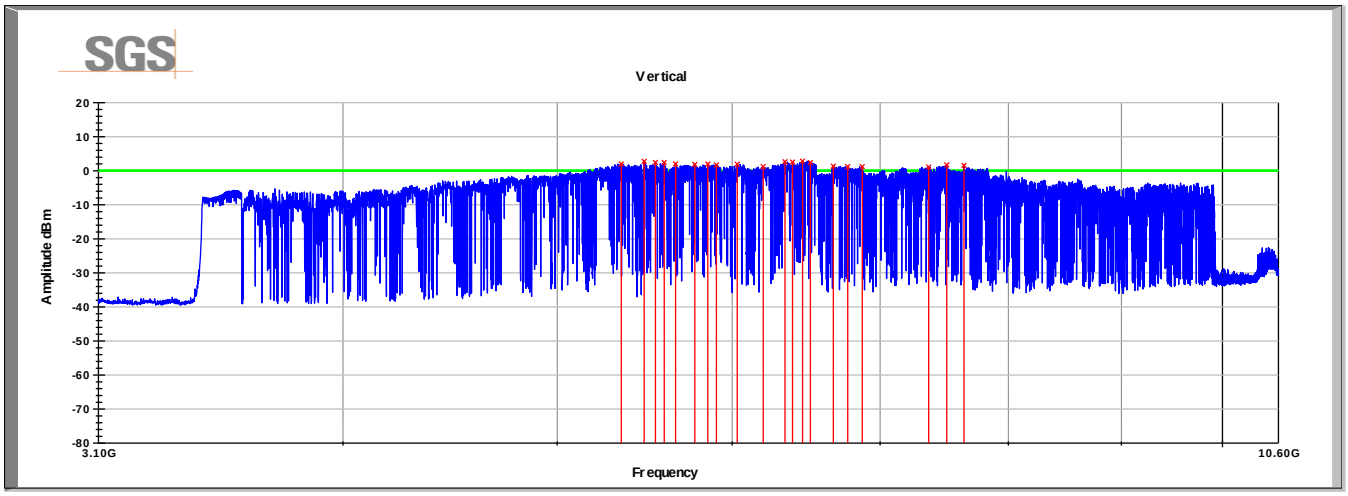
5.4 *Test Equipment*

Test End Date: 17-Jan-2018 Tester: JOP

Equipment	Model	Manufacturer	Asset Number	Cal Due Date
EMI TEST RECEIVER	ESU40	ROHDE & SCHWARZ	B079629	25-Apr-2018
ANTENNA, DRG HORN (MEDIUM)	3117	ETS LINDGREN	B079699	16-May-2018
RF CABLE	SF106	HUBER & SUHNER	B079716	24-Jul-2018
RF CABLE	SUCOFLEX 100	HUBER & SUHNER	B108523	24-Jul-2018
LOW NOISE AMPLIFIER	TS-PR18	ROHDE & SCHWARZ	B094463	22-Feb-2018
SIGNAL ANALYZER	FSV30	ROHDE & SCHWARZ	B085749	1-Nov-2019

Note: The calibration period for this equipment is 1 year except for the FSV30 which is on a 2 year cycle.

5.5 *Test Data*



Note: Peak plot recorded using 10MHz RBW. Final data recorded using a 28MHz RBW.

Frequency MHz	Raw Peak dBuV	Polarity (V/H)	Axis (x,y,z)	Azimuth (degrees)	Height (cm)	AF (dB/m)	CL (dB)	Amp (dB)	Measurment BW	Conversion to 50MHz	Test Distance m	Conversion FS to EIRP	Peak Value dBm	Limit dBm	Margin (dB)
5098.75	88.3	V	y	0.0	175.0	35.0	3.2	33.3	28.0	5.0	1.0	104.7	-6.6	0.0	-6.6
5200.75	88.8	V	y	0.0	175.0	35.3	3.2	33.3	28.0	5.0	1.0	104.7	-5.8	0.0	-5.8
5363.50	88.6	V	y	0.0	175.0	35.0	3.3	33.3	28.0	5.0	1.0	104.7	-6.1	0.0	-6.1
5538.25	88.4	V	y	0.0	175.0	35.1	3.4	33.3	28.0	5.0	1.0	104.7	-6.1	0.0	-6.1
5686.00	87.9	V	y	0.0	175.0	35.2	3.4	33.3	28.0	5.0	1.0	104.7	-6.5	0.0	-6.5
5737.00	87.6	V	y	0.0	175.0	35.3	3.4	33.3	28.0	5.0	1.0	104.7	-6.7	0.0	-6.7
5812.75	87.6	V	y	0.0	175.0	35.4	3.4	33.3	28.0	5.0	1.0	104.7	-6.5	0.0	-6.5
5899.75	87.1	V	y	0.0	175.0	35.6	3.5	33.3	28.0	5.0	1.0	104.7	-6.8	0.0	-6.8
6011.50	87.0	V	y	0.0	175.0	35.9	3.5	33.3	28.0	5.0	1.0	104.7	-6.6	0.0	-6.6
6100.00	86.2	V	y	0.0	175.0	35.9	3.6	33.3	28.0	5.0	1.0	104.7	-7.3	0.0	-7.3
6198.25	87.6	V	y	0.0	175.0	36.0	3.6	33.3	28.0	5.0	1.0	104.7	-5.9	0.0	-5.9
6261.25	87.5	V	y	0.0	175.0	36.0	3.6	33.3	28.0	5.0	1.0	104.7	-6.0	0.0	-6.0
6363.25	87.7	V	y	0.0	175.0	35.9	3.7	33.3	28.0	5.0	1.0	104.7	-5.7	0.0	-5.7
6486.25	87.2	V	y	0.0	175.0	36.0	3.7	33.3	28.0	5.0	1.0	104.7	-6.1	0.0	-6.1
6538.75	86.1	V	y	0.0	175.0	36.0	3.7	33.3	28.0	5.0	1.0	104.7	-7.2	0.0	-7.2
6649.00	86.0	V	y	0.0	175.0	36.0	3.8	33.3	28.0	5.0	1.0	104.7	-7.3	0.0	-7.3
6748.75	85.9	V	y	0.0	175.0	36.0	3.8	33.3	28.0	5.0	1.0	104.7	-7.3	0.0	-7.3
6811.75	85.7	V	y	0.0	175.0	36.1	3.8	33.3	28.0	5.0	1.0	104.7	-7.4	0.0	-7.4
7012.00	86.0	V	y	0.0	175.0	36.4	3.9	33.3	28.0	5.0	1.0	104.7	-6.8	0.0	-6.8
7773.25	85.9	V	y	0.0	175.0	36.2	4.0	33.3	28.0	5.0	1.0	104.7	-6.9	0.0	-6.9
Peak Value = Level + AF + CL - Amp + Conversion(28/50) + Conversion (FS/EIRP)															
Margin = Peak Value - Limit															

6 Radiated Emissions (EIRP)

6.1 *Test Result*

Test Description	Basic Standards	Test Result
Radiated power density	15.519 (c)	Compliant

6.2 *Test Method*

Exploratory scan was performed on a test site that meets the requirements of ANSI C63.4:2014 above 960 MHz. The scan was performed at a distance of 1 meter. Field strength measurements were converted to EIRP. The distance of the scan is indicated on each scan.

Scans were performed with the EUT oriented in 3 orthogonal axes.

The conversion factor was calculated using 95.2 + 20*log(3/D) where D is the measurement distance.

Emissions from a transmitter operating under this section shall not exceed the following equivalent isotropically radiated power (EIRP) density levels:

1) The radiated emissions above 960 MHz from a device operating under the provisions of this section shall not exceed the following RMS average limits based on measurements using a 1 MHz resolution bandwidth:

Frequency (MHz)	EIRP (dBm)
960–1610	-75.3
1610–1990	-63.3
1990–3100	-61.3
3100–10600	-41.3
Above 10600	-61.3

2) In addition to the radiated emission limits specified in the table in paragraph (d)(1) of this section, transmitters operating under the provisions of this section shall not exceed the following RMS average limits when measured using a resolution bandwidth of no less than 1 kHz:

Frequency (MHz)	EIRP (dBm)
1164–1240	-85.3
1559–1610	-85.3

6.3 *Test Site*

10m Absorber Lined Shielded Enclosure (ALSE), Suwanee, GA

Environmental Conditions

Temperature:	23.8 °C
Relative Humidity:	12.8%
Atmospheric Pressure:	97.8 kPa

6.4 *Test Equipment*

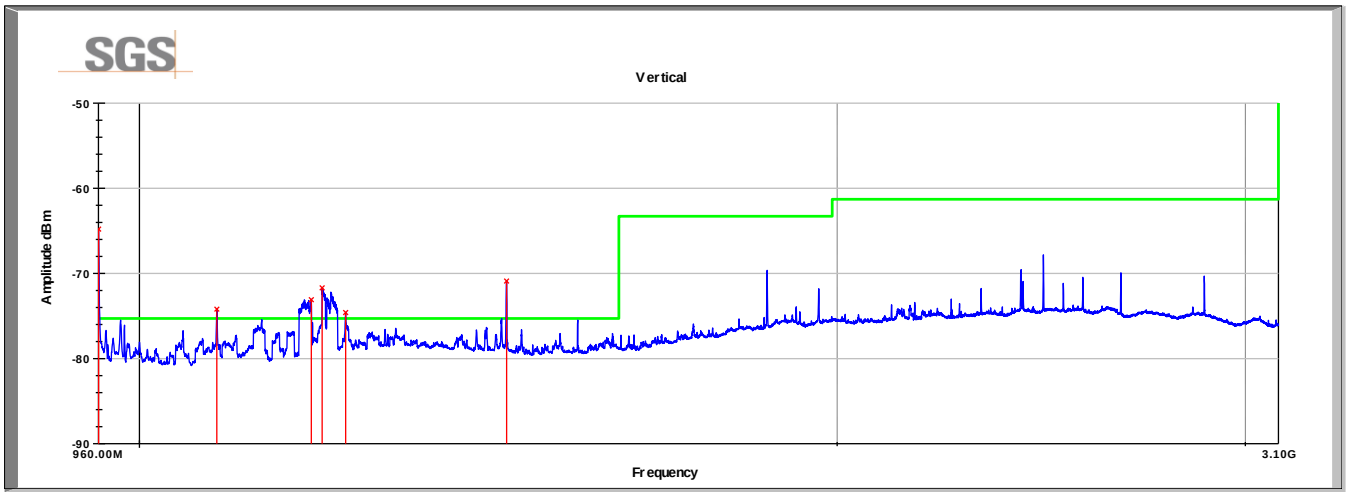
Test End Date: 17-Jan-2018 Tester: JOP

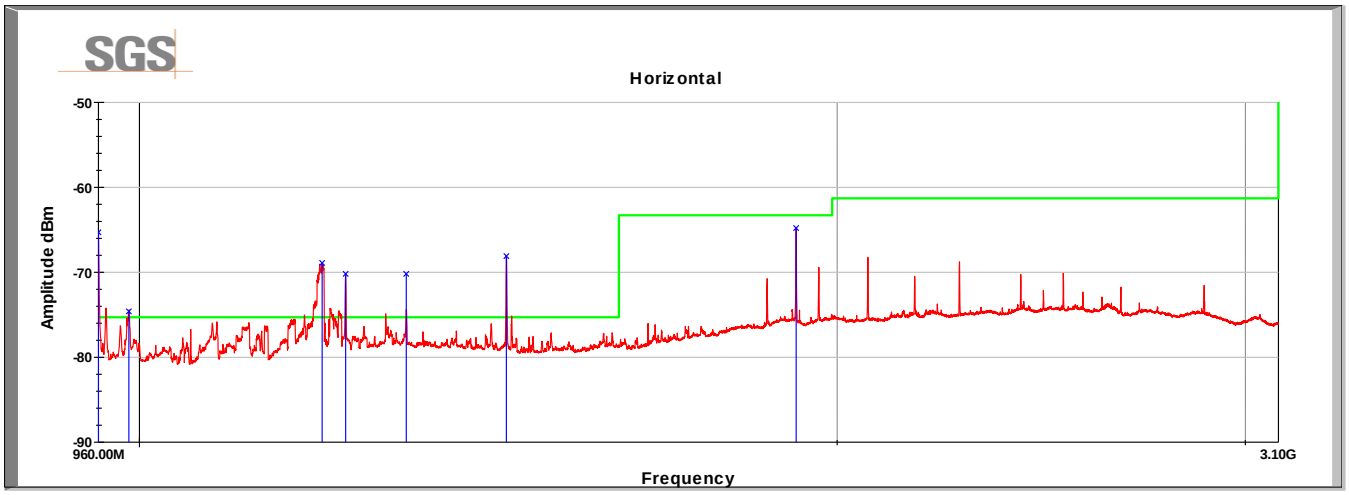
Equipment	Model	Manufacturer	Asset Number	Cal Due Date
EMI TEST RECEIVER	ESU40	ROHDE & SCHWARZ	B079629	25-Apr-2018
ANTENNA, DRG HORN (MEDIUM)	3117	ETS LINDGREN	B079699	16-May-2018
RF CABLE	SF106	HUBER & SUHNER	B079716	24-Jul-2018
RF CABLE	SUCOFLEX 100	HUBER & SUHNER	B108523	24-Jul-2018
LOW NOISE AMPLIFIER	TS-PR18	ROHDE & SCHWARZ	B094463	22-Feb-2018
HORN(SMALL)	LB-180400-20-C-KF	A-INFO	15007	21-Mar-2018
RF CABLE	SF102	HUBER & SUHNER	B079822	27-Jul-2018
RF CABLE	SF102	HUBER & SUHNER	B079824	26-Jul-2018
LOW NOISE AMPLIFIER	NSP1840-HG	MITEQ	B087572	28-Jul-2018

Note: The calibration period for this equipment is 1 year.

6.5 *Test Data*

960 to 3100 MHz
Test distance: 1m

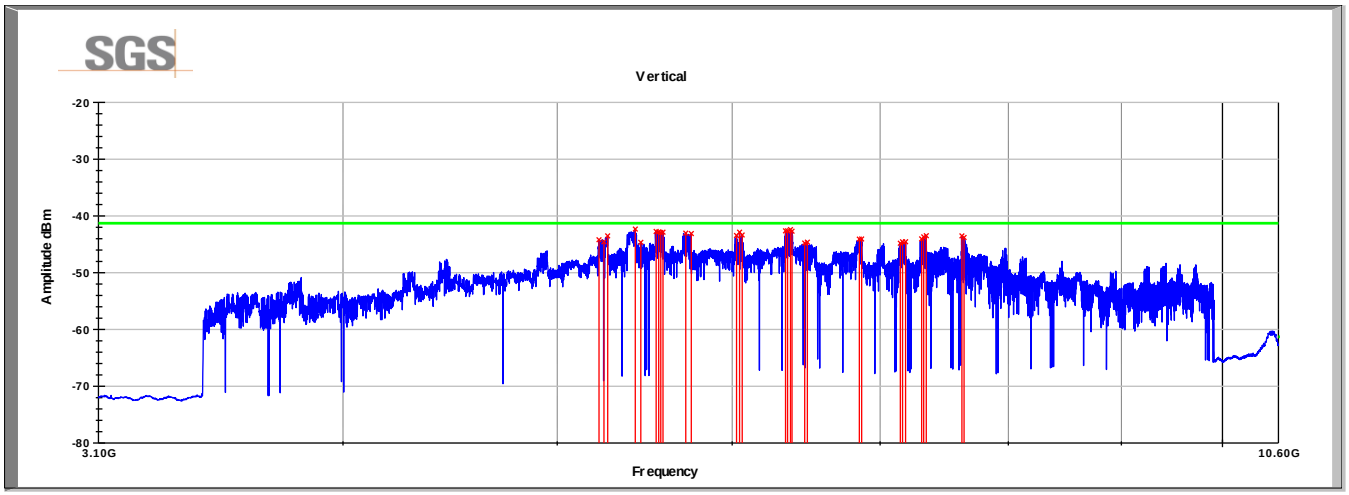




Frequency MHz	Raw RMS dBuV	Polarity (V/H)	Axis (x,y,z)	AF (dB/m)	CL (dB)	Amp (dB)	Test Distance m	Conversion FS to EIRP	RMS Value dBm	Limit dBm	Margin (dB)	Note
960.21	44.0	V	y	27.4	1.7	33.2	1.0	104.7	-64.8	-75.3	10.5	1
1079.84	34.9	V	y	27.2	1.8	33.3	1.0	104.7	-74.2	-75.3	1.1	1
1186.20	35.0	V	y	27.8	1.9	33.2	1.0	104.7	-73.1	-75.3	2.2	1
1199.04	36.4	V	y	27.8	1.9	33.2	1.0	104.7	-71.7	-75.3	3.6	1
1227.29	32.9	V	y	28.5	1.9	33.2	1.0	104.7	-74.6	-75.3	0.7	1
1440.00	36.2	V	y	28.7	2.1	33.3	1.0	104.7	-70.9	-75.3	4.4	1
960.00	43.5	H	y	27.4	1.7	33.2	1.0	104.7	-65.3	-75.3	10.0	1
989.53	34.1	H	y	27.4	1.7	33.2	1.0	104.7	-74.6	-75.3	0.7	1
1199.00	39.2	H	y	27.8	1.9	33.2	1.0	104.7	-68.9	-75.3	6.4	1
1227.29	37.3	H	y	28.5	1.9	33.2	1.0	104.7	-70.2	-75.3	5.1	1
1303.47	36.5	H	y	29.1	2.0	33.2	1.0	104.7	-70.2	-75.3	5.1	1
1439.79	39.0	H	y	28.7	2.1	33.3	1.0	104.7	-68.1	-75.3	7.2	1
1920.00	39.2	H	y	31.5	2.4	33.3	1.0	104.7	-64.8	-63.3	-1.5	1
RMS Value = Level + AF + CL - Amp + Conversion (FS/EIRP)												
Margin = RMS Value - Limit												

Note (1): The emissions were not associated with the transmissions from the EUT. These were digital transmissions traced to the USB or other digital emissions from the EUT. These emissions did not fluctuate when the UWB power was substantially reduced. As non-UWB emissions, they all meet the 500µV/m (-41.3dBm) limits of 15.209.

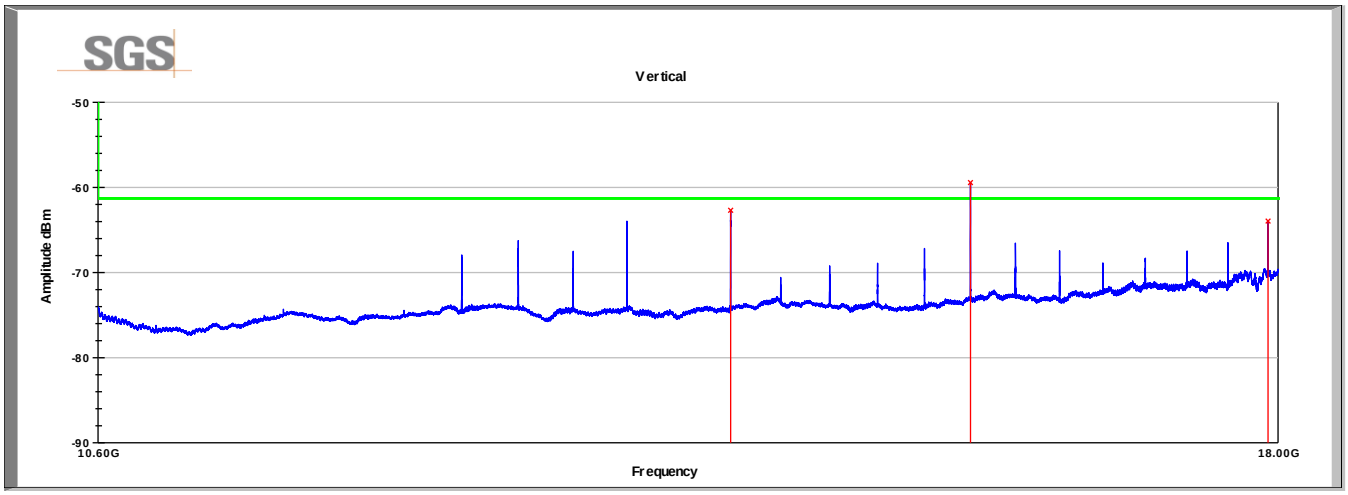
3.1 to 10.6 GHz
Test distance: 1m

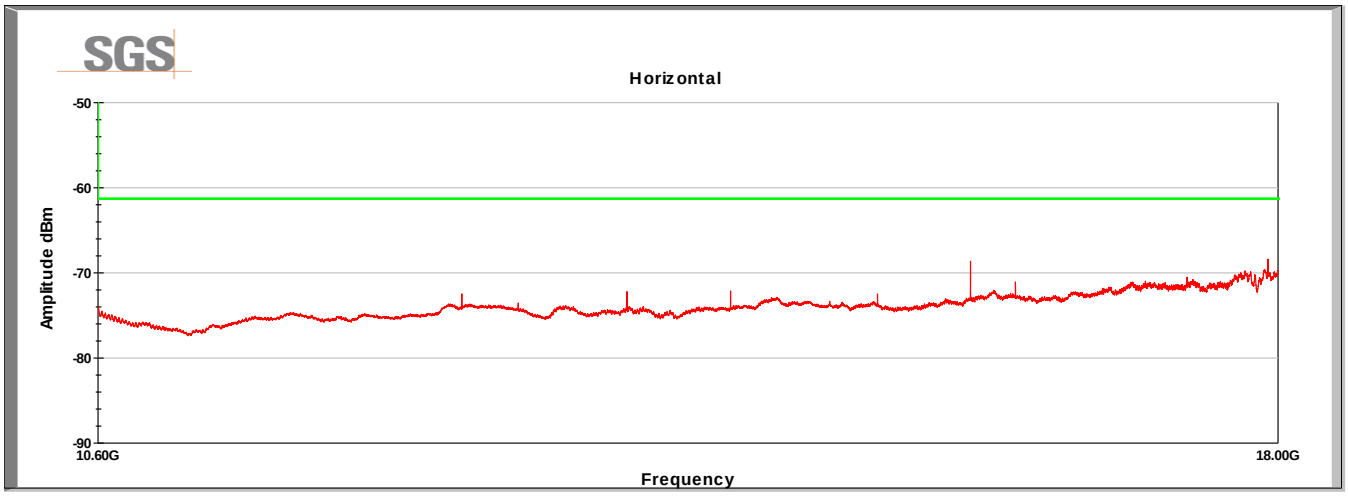


Only worst-case orientation reported

Frequency MHz	Raw RMS dBuV	Polarity (V/H)	Axis (x,y,z)	AF (dB/m)	CL (dB)	Amp (dB)	Test Distance m	Conversion FS to EIRP	RMS Value dBm	Limit dBm	Margin (dB)
5269.75	55.1	V	y	35.0	4.4	33.3	1.0	104.7	-43.5	-41.3	-2.2
5424.25	56.0	V	y	35.2	4.5	33.3	1.0	104.7	-42.3	-41.3	-1.0
5455.00	53.7	V	y	35.1	4.6	33.3	1.0	104.7	-44.7	-41.3	-3.4
5542.75	55.6	V	y	35.1	4.6	33.3	1.0	104.7	-42.7	-41.3	-1.4
5557.75	55.5	V	y	35.2	4.6	33.3	1.0	104.7	-42.8	-41.3	-1.5
5569.75	55.4	V	y	35.2	4.6	33.3	1.0	104.7	-42.9	-41.3	-1.6
5582.50	55.4	V	y	35.2	4.6	33.3	1.0	104.7	-42.9	-41.3	-1.6
5716.75	55.1	V	y	35.2	4.7	33.3	1.0	104.7	-43.0	-41.3	-1.7
5749.75	55.0	V	y	35.2	4.7	33.3	1.0	104.7	-43.1	-41.3	-1.8
6027.25	53.8	V	y	35.9	4.9	33.3	1.0	104.7	-43.5	-41.3	-2.2
6046.75	54.4	V	y	35.9	4.9	33.3	1.0	104.7	-42.9	-41.3	-1.6
6062.50	53.8	V	y	35.9	4.9	33.3	1.0	104.7	-43.4	-41.3	-2.1
6343.00	54.4	V	y	36.0	5.1	33.3	1.0	104.7	-42.6	-41.3	-1.3
6356.50	54.5	V	y	35.9	5.0	33.3	1.0	104.7	-42.6	-41.3	-1.3
6375.25	54.7	V	y	35.9	5.0	33.3	1.0	104.7	-42.4	-41.3	-1.1
6385.75	54.4	V	y	35.9	5.0	33.3	1.0	104.7	-42.7	-41.3	-1.4
6470.50	52.1	V	y	36.0	5.1	33.3	1.0	104.7	-44.8	-41.3	-3.5
6489.25	52.3	V	y	36.0	5.1	33.3	1.0	104.7	-44.6	-41.3	-3.3
6850.00	52.5	V	y	36.2	5.2	33.3	1.0	104.7	-44.1	-41.3	-2.8
6866.50	52.5	V	y	36.2	5.2	33.3	1.0	104.7	-44.1	-41.3	-2.8
7148.50	51.7	V	y	36.3	5.2	33.3	1.0	104.7	-44.8	-41.3	-3.5
7165.75	52.0	V	y	36.3	5.2	33.3	1.0	104.7	-44.6	-41.3	-3.3
7188.25	52.1	V	y	36.3	5.2	33.3	1.0	104.7	-44.6	-41.3	-3.3
7309.75	52.6	V	y	36.1	5.2	33.3	1.0	104.7	-44.1	-41.3	-2.8
7325.50	53.0	V	y	36.1	5.2	33.3	1.0	104.7	-43.7	-41.3	-2.4
7345.00	53.2	V	y	36.1	5.2	33.3	1.0	104.7	-43.5	-41.3	-2.2
7622.50	53.1	V	y	36.1	5.2	33.3	1.0	104.7	-43.5	-41.3	-2.2
7639.75	52.9	V	y	36.1	5.2	33.3	1.0	104.7	-43.8	-41.3	-2.5
RMS Value = Level + AF + CL - Amp + Conversion (FS/EIRP)											
Margin = RMS Value - Limit											

10.6 to 18 GHz
Test distance: 1m

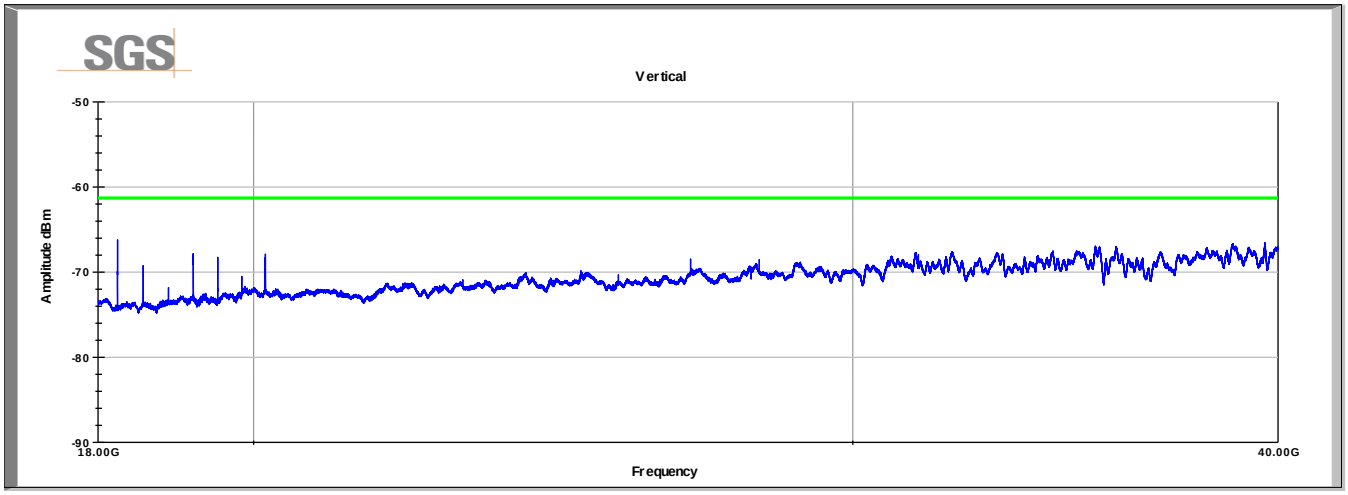


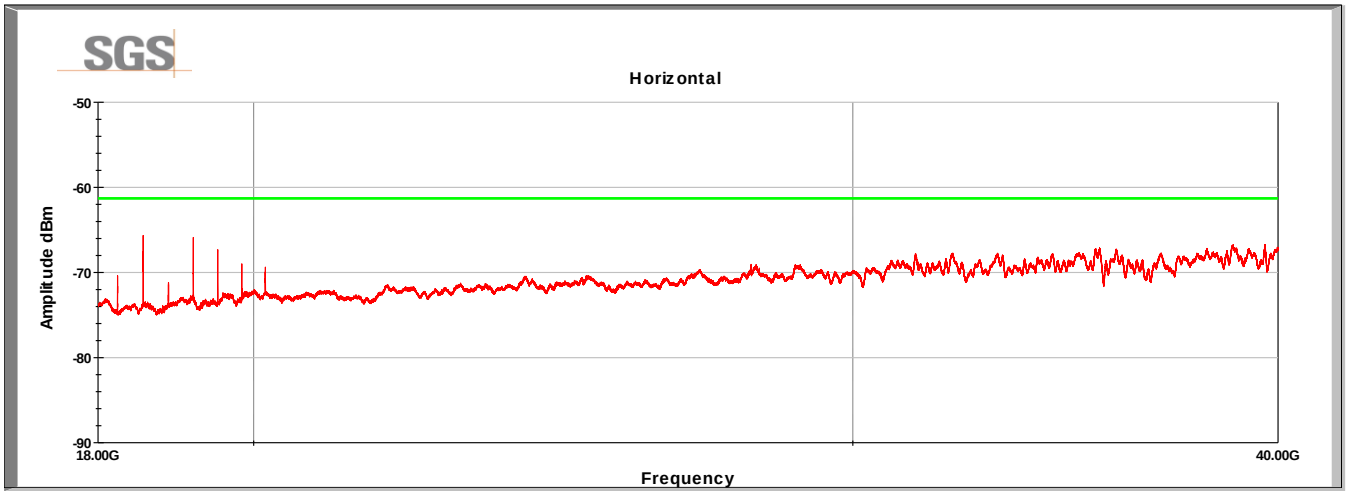


Frequency MHz	Raw RMS dBuV	Polarity (V/H)	Axis (x,y,z)	AF (dB/m)	CL (dB)	Amp (dB)	Test Distance m	Conversion FS to EIRP	RMS Value dBm	Limit dBm	Margin (dB)	Note
14079.70	38.4	V	y	39.7	7.7	33.3	0.3	115.2	-62.7	-61.3	-1.4	1
15679.60	40.9	V	y	40.5	7.7	33.3	0.3	115.2	-59.4	-61.3	1.9	1
17919.60	33.8	V	y	42.4	8.4	33.3	0.3	115.2	-64.0	-61.3	-2.7	1
RMS Value = Level + AF + CL - Amp + Conversion (FS/EIRP)												
Margin = RMS Value - Limit												

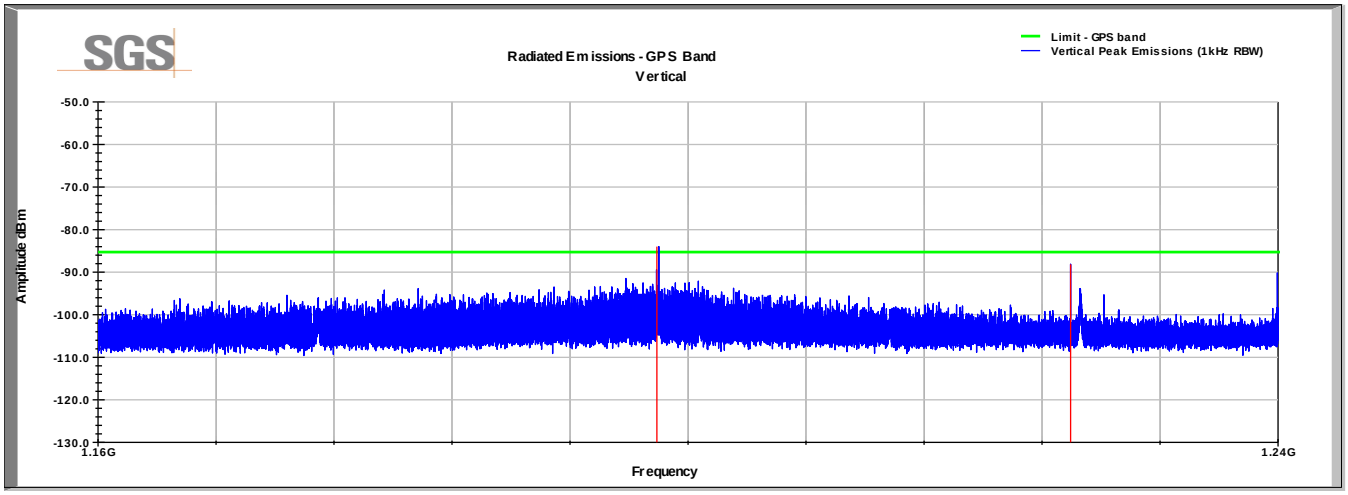
Note (1): The emissions were not associated with the transmissions from the EUT. These were digital transmissions traced to the USB or other digital emissions from the EUT. These emissions did not fluctuate when the UWB power was substantially reduced. As non-UWB emissions, they all meet the 500µV/m (-41.3dBm) limits of 15.209.

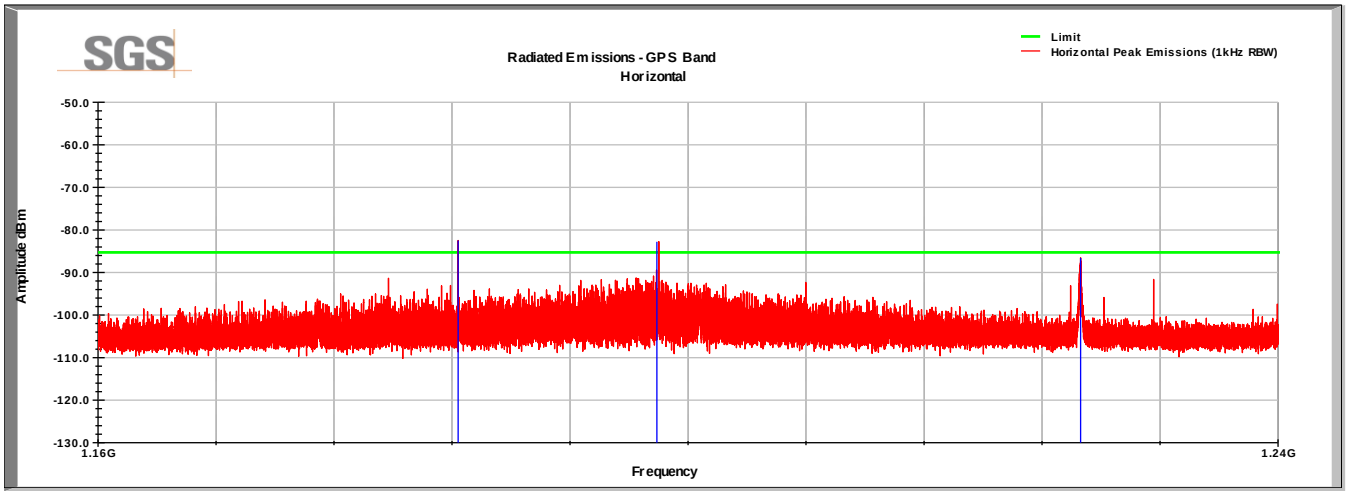
18 to 40 GHz
Test distance: 0.3m





Lower GPS Band
Test distance: 1m

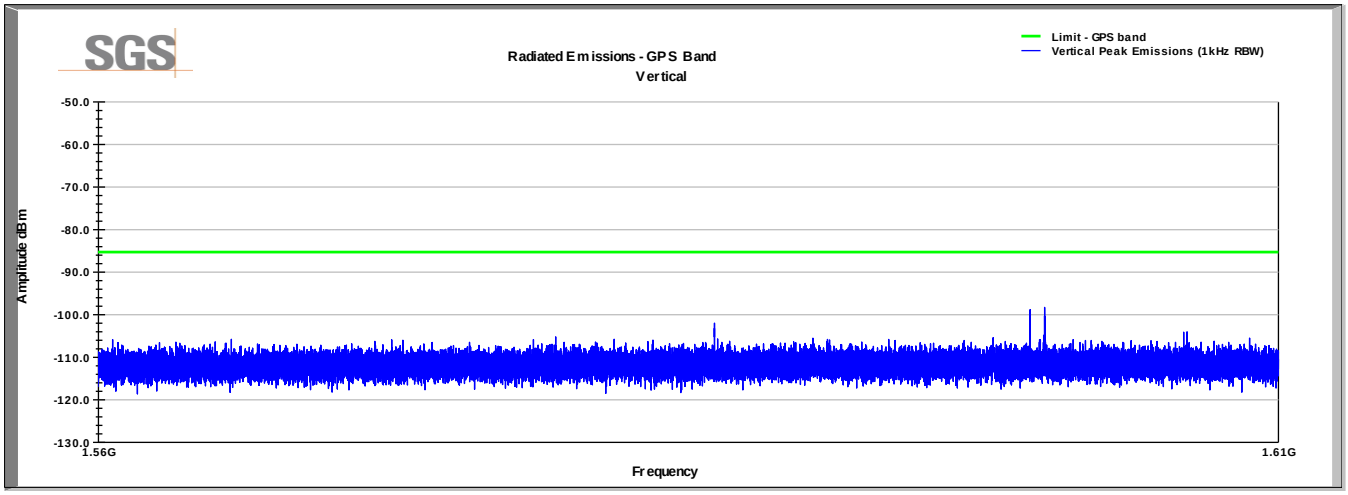


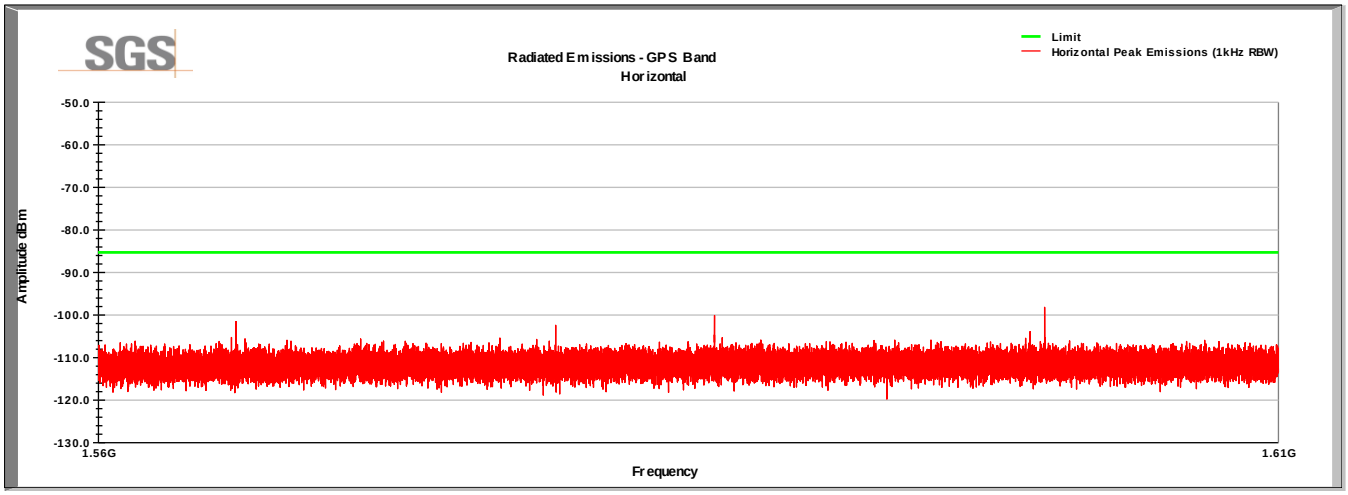


Frequency MHz	Raw RMS dBuV	Polarity (V/H)	Axis (x,y,z)	AF (dB/m)	CL (dB)	Amp (dB)	Test Distance m	Conversion FS to EIRP	RMS Value dBm	Limit dBm	Margin (dB)	Note
1200.00	23.5	V	y	28.5	1.9	33.2	1.0	104.7	-84.0	-85.3	1.3	1
1226.64	19.3	V	y	28.5	1.9	33.2	1.0	104.7	-88.2	-85.3	-2.9	1
1187.19	25.6	H	y	27.8	1.9	33.2	1.0	104.7	-82.5	-85.3	2.8	1
1200.00	24.7	H	y	28.5	1.9	33.2	1.0	104.7	-82.8	-85.3	2.5	1
1227.29	20.9	H	y	28.5	1.9	33.2	1.0	104.7	-86.6	-85.3	-1.3	1
RMS Value = Level + AF + CL - Amp + Conversion (FS/EIRP)												
Margin = RMS Value - Limit												

Note (1): The emissions were not associated with the transmissions from the EUT. These were digital transmissions traced to the USB or other digital emissions from the EUT. These emissions did not fluctuate when the UWB power was substantially reduced. As non-UWB emissions, they all meet the 500µV/m (-41.3dBm) limits of 15.209.

Upper GPS Band
Test distance: 1m





7 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	06 February 2018