

EMC Test Report

Project Number: 4025620

Report Number: 4025620EMC01

Revision Level: 0

Client: Tyco Safety Products/Sensormatic

Equipment Under Test: Ultra Max Phasing Tool

Model: AMX-1000

FCC ID: BVCAMX1000

IC ID: 3506A-AMX1000

Applicable Standards: FCC Part 15 Subpart C, § 15.247

RSS-247, Issue 1

ANSI C63.10: 2013

Report issued on: 13 September 2016

Test Result: Compliant

Tested by:



Fabian Nica, Senior Technician

Reviewed by:



Jeremy Pickens, Senior EMC Engineer

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.

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Table of Contents

1	SUMMARY OF TEST RESULTS	4
1.1	MODIFICATIONS REQUIRED FOR COMPLIANCE	4
2	GENERAL INFORMATION	5
2.1	CLIENT INFORMATION	5
2.1	TEST LABORATORY	5
2.2	GENERAL INFORMATION OF EUT	5
2.3	OPERATING MODES AND CONDITIONS	5
2.4	EUT CONNECTION BLOCK DIAGRAM	6
2.5	SYSTEM CONFIGURATIONS	6
3	BANDWIDTH	7
3.1	TEST RESULT.....	7
3.2	TEST METHOD.....	7
3.3	TEST SITE	7
3.4	TEST EQUIPMENT	7
3.5	TEST DATA.....	7
4	OUTPUT POWER	9
4.1	TEST RESULT.....	9
4.2	TEST METHOD.....	9
4.3	TEST SITE	9
4.4	TEST EQUIPMENT	9
4.5	TEST DATA.....	10
5	POWER SPECTRAL DENSITY	11
5.1	TEST RESULT.....	11
5.2	TEST METHOD.....	11
5.3	TEST SITE	11
5.4	TEST EQUIPMENT	11
5.5	TEST DATA.....	11
6	CONDUCTED SPURIOUS EMISSIONS	13
6.1	TEST RESULT.....	13
6.2	TEST METHOD.....	13
6.3	TEST SITE	13
6.4	TEST EQUIPMENT	13
6.5	TEST DATA – DTS BANDEDGE	14
6.6	TEST DATA – CONDUCTED SPURIOUS EMISSIONS	15
7	FIELD STRENGTH OF SPURIOUS RADIATION	16
7.1	TEST RESULT.....	16
7.2	TEST METHOD.....	16
7.3	TEST SITE	16
7.4	TEST EQUIPMENT	17
7.5	PEAK PLOTS	18
7.6	TABULAR DATA	30
8	RADIATED EMISSIONS AT BAND EDGE / RESTRICTED BAND	31
8.1	TEST RESULT.....	31
8.2	TEST METHOD.....	31
8.3	TEST SITE	31
8.4	TEST EQUIPMENT	31
8.5	TEST DATA.....	32



9 REVISION HISTORY 34

1 Summary of Test Results

Test Description	Test Specification		Test Result
Bandwidth	15.247(d)	RSS-247 S5.2 (1) RSS-GEN S6.6	Compliant
Transmitter Output Power	15.247(b)(3)	RSS-247 S5.4 (4)	Compliant
Power Spectral Density	15.247(e)	RSS-247 S5.2 (2)	Compliant
Conducted Spurious Emissions / Band edge	15.247(d)	RSS-247 S5.5	Compliant
Radiated Spurious Emissions / Restricted Bands	15.35(b), 15.209	RSS-GEN S6.13 RSS-GEN S8.10	Compliant
AC Powerline Conducted Emission	15.107, 15.207	RSS-GEN S8.8	NA(1)

(1) The device is battery-powered with no facility to connect to the AC mains.

1.1 *Modifications Required for Compliance*

None

2 General Information

2.1 Client Information

Name: Tyco Safety Products/Sensormatic
Address: 6600 Congress Avenue
City, State, Zip, Country: Boca Raton, FL 33487, USA

2.1 Test Laboratory

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

Accrediting Body: A2LA
Type of lab: Testing Laboratory
Certificate Number: 3212.01

2.2 General Information of EUT

Type of Product: Ultra Max Phasing Tool
Model Number: AMX-1000
Part Number: 0304-0152-01
Serial Number: Not Labeled

FCC ID: BVCAMX1000
IC ID: 3506A-AMX1000

Frequency Range: 2405-2475MHz (Channels 11 – 25)
Modulation: 802.15.4
Antenna: External, Monopole:
3.2 and 5dBi (Pulse/Larsen P/Ns: W1027 and W1038)
3.0 and 5dBi (L-Com P/Ns: HG2403RD-RSF and HG2405RD-RSP)

Rated Voltage: 9 Vdc Battery
Test Voltage: 9 Vdc Battery

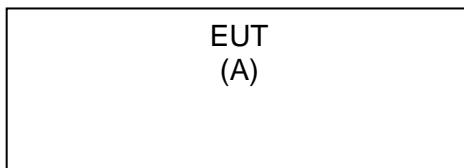
Sample Received Date: 11 August 2016
Dates of testing: 17 August – 13 September 2016

2.3 Operating Modes and Conditions

Continuous traffic was generated using test commands. The device was programmed to transmit at 100% duty cycle at low, middle, and high channels.

Channel 11, 2405MHz
Channel 18, 2440MHz
Channel 25, 2475MHz

2.4 EUT Connection Block Diagram



2.5 System Configurations

Device reference	Manufacturer	Description	Model Number	Serial Number
A	Tyco Safety Products/Sensormatic	Ultra Max Phasing Tool	AMX-1000	Not Labeled

3 Bandwidth

3.1 Test Result

Test Description	Test Specification		Test Result
6 dB bandwidth / 99% OBW	15.247(d)	RSS-247 S5.2 (1) RSS-GEN S6.6	Compliant

3.2 Test Method

The procedures from ANSI C63.10: 2013 clause 11.8 and 558074 D01 DTS Meas Guidance v03r05 were used to determine the 6 dB bandwidth and 99% OBW.

3.3 Test Site

SGS EMC Laboratory, Suwanee, GA

Environmental Conditions

Temperature: 25.0 °C

Relative Humidity: 47.0 %

3.4 Test Equipment

Test End Date: 13-Sep-2016

Tester: JOP

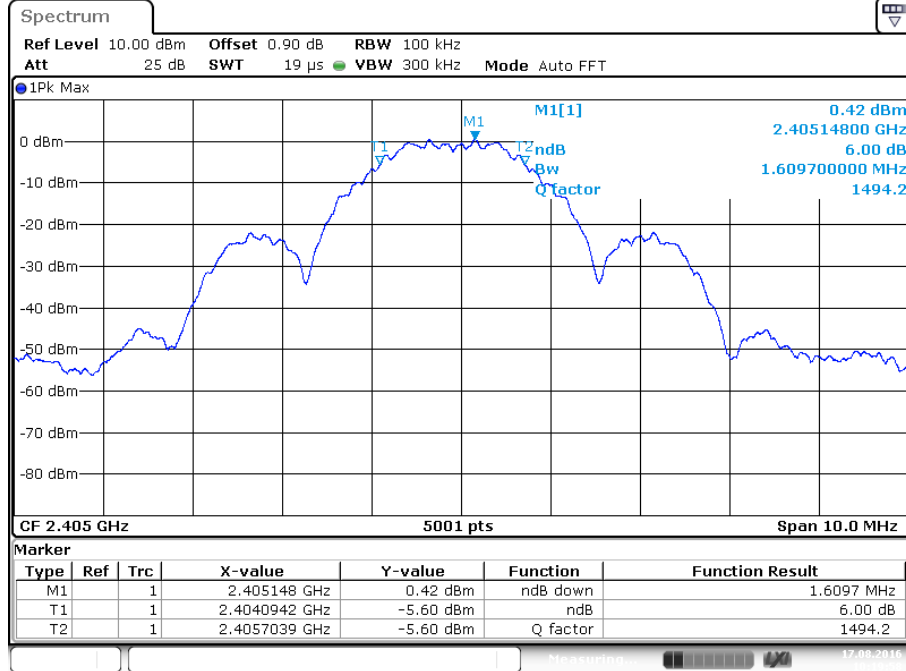
Equipment	Model	Manufacturer	Asset Number	Cal Due Date
SIGNAL ANALYZER	FSV30	ROHDE & SCHWARZ	B085749	8-Oct-2017
RF CABLE	1134	GORE	B094785	26-Jul-2017

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

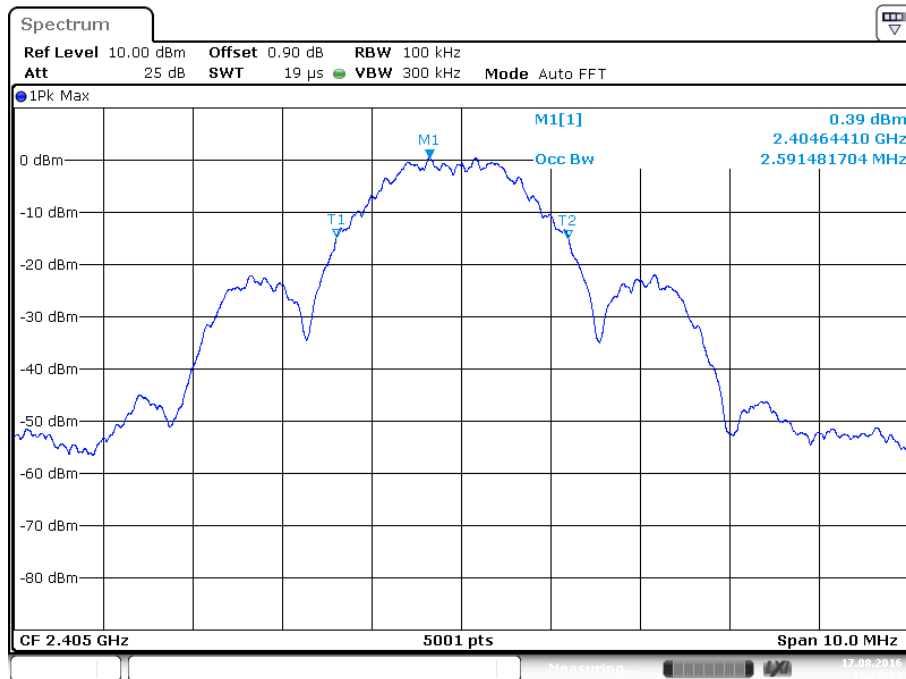
3.5 Test Data

Channel	6dB Bandwidth (MHz)	Occupied Bandwidth (99%) (MHz)
11	1.61	2.591
18	1.634	2.587
25	1.604	2.589

Sample Plots



Date: 17.AUG.2016 10:19:58



Date: 17.AUG.2016 10:20:23

4 Output Power

4.1 Test Result

Test Description	Test Specification		Test Result
Peak Output Power	15.247(b) (3)	RSS-247 S5.4 (4)	Compliant

4.2 Test Method

Fundamental power measurements were recorded using the peak power procedures from ANSI C63.10: 2013 clause 11.9 and KDB 558074 D01 Measurement Guidance v03r05.

Limit

(3) For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt. For using antennas with greater than 6dBi of gain, the limit is reduced in dB by the amount the gain exceeds 6dBi

4.3 Test Site

SGS EMC Laboratory, Suwanee, GA

Environmental Conditions

Temperature: 25.0 °C
 Relative Humidity: 47.0 %

4.4 Test Equipment

Test End Date: 13-Sep-2016

Tester: JOP

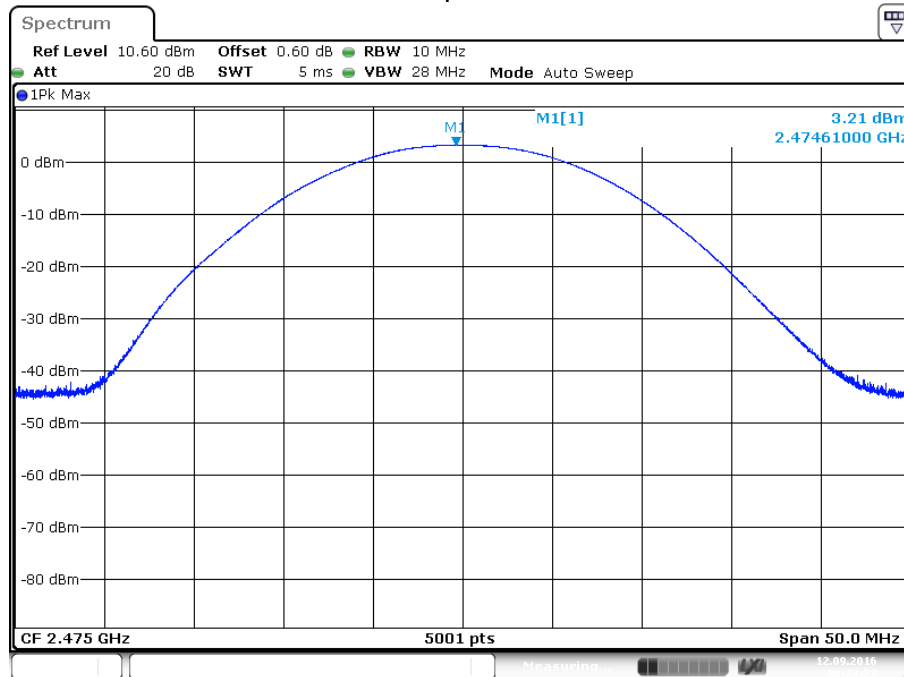
Equipment	Model	Manufacturer	Asset Number	Cal Due Date
SIGNAL ANALYZER	FSV30	ROHDE & SCHWARZ	B085749	8-Oct-2017
RF CABLE	1134	GORE	B094785	26-Jul-2017

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

4.5 Test Data

Channel	Frequency (MHz)	Peak Power (dBm)	Limit (30dBm)	Margin (dB)
11	2405	3.83	30	-26.17
18	2440	3.66	30	-26.34
25	2475	3.2	30	-26.8

Sample Plot



Date: 12.SEP.2016 08:23:22

5 Power Spectral Density

5.1 Test Result

Test Description	Test Specification		Test Result
Power Spectral Density	15.247(e)	RSS-247 S5.2 (2)	Compliant

5.2 Test Method

Fundamental power spectral density measurements were recorded using the peak PSD procedures from ANSI C63.10: 2013 clause 11.10 and KDB 558074 D01 Measurement Guidance v03r05.

Limit

The limit is 8 dBm.

5.3 Test Site

SGS EMC Laboratory, Suwanee, GA

Environmental Conditions

Temperature: 25.0 °C
 Relative Humidity: 47.0 %

5.4 Test Equipment

Test End Date: 13-Sep-2016

Tester: JOP

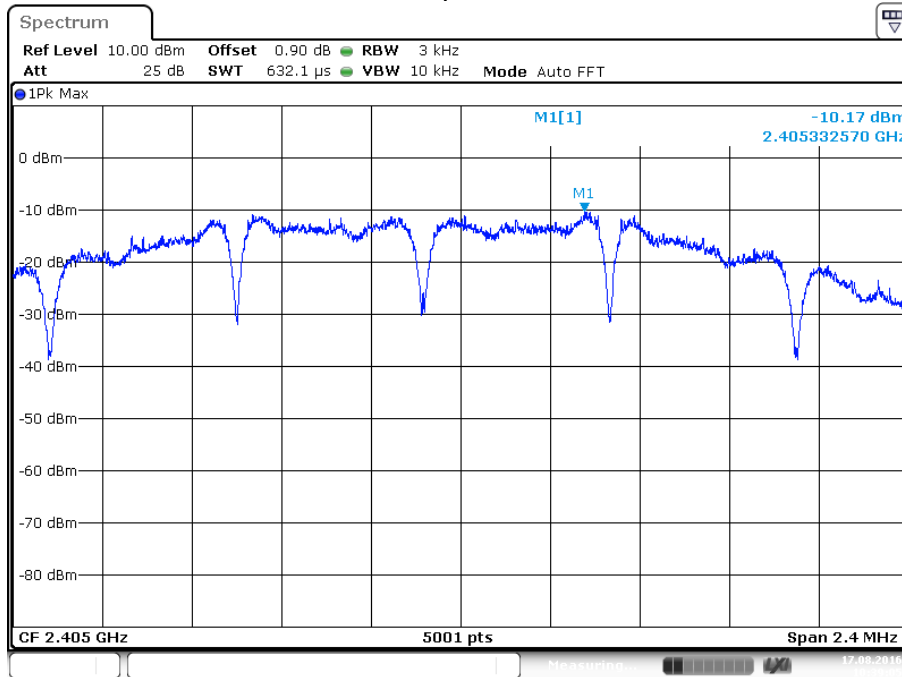
Equipment	Model	Manufacturer	Asset Number	Cal Due Date
SIGNAL ANALYZER	FSV30	ROHDE & SCHWARZ	B085749	8-Oct-2017
RF CABLE	1134	GORE	B094785	26-Jul-2017

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

5.5 Test Data

Channel	Frequency (MHz)	Peak PSD (dBm)	Limit (30dBm)	Margin (dB)
11	2405	-10.17	8	-18.17
18	2440	-10.36	8	-18.36
25	2475	-10.73	8	-18.73

Sample Plot



Date: 17.AUG.2016 10:39:06

6 Conducted Spurious Emissions

6.1 Test Result

Test Description	Test Specification		Test Result
Conducted Spurious Emissions	15.247(d)	RSS-247 S5.5	Compliant

6.2 Test Method

Spurious emissions in non-restricted frequency bands were recorded using the methods defined in ANSI C63.10: 2013 clause 11.11 and KDB 558074 D01 Measurement Guidance v03r05.

Lowest, middle, and highest channels were investigated. Only the worst-case (lowest data rate) for each modulation was reported. Antenna Port 2 yielded the higher output power levels and was used for conducted spurious measurements. The maximum target power was used (20dBm).

Because the maximum conducted peak output power was used to determine compliance with the output power limits, the limit is 20 dB below the maximum in-band peak PSD level in 100 kHz.

6.3 Test Site

SGS EMC Laboratory, Suwanee, GA

Environmental Conditions

Temperature: 25.0 °C
 Relative Humidity: 47.0 %

6.4 Test Equipment

Test End Date: 13-Sep-2016

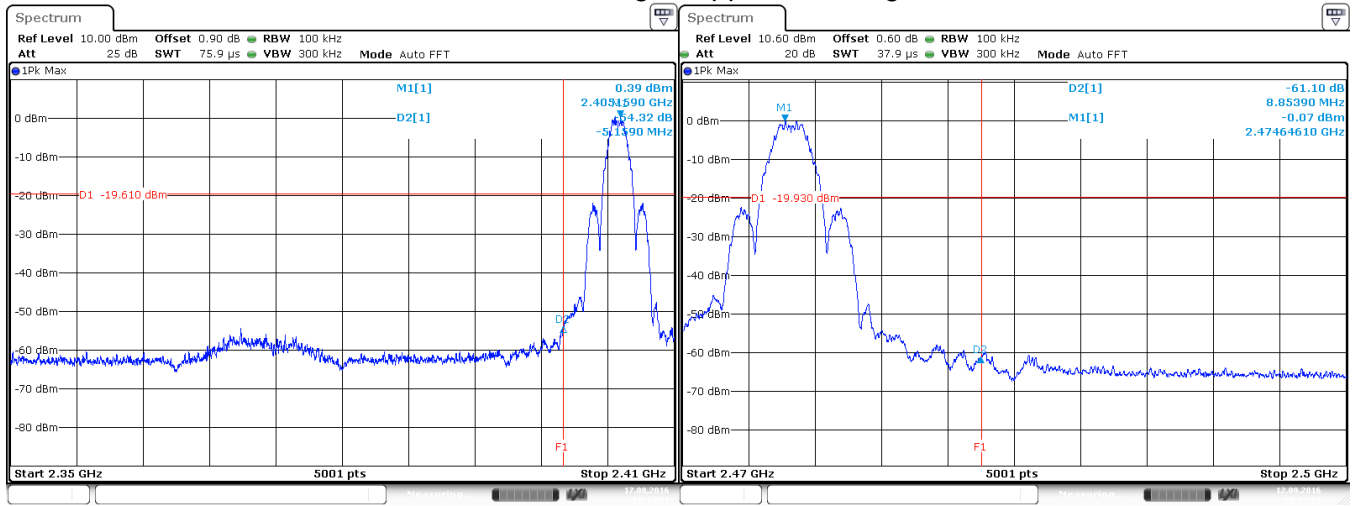
Tester: JOP

Equipment	Model	Manufacturer	Asset Number	Cal Due Date
SIGNAL ANALYZER	FSV30	ROHDE & SCHWARZ	B085749	8-Oct-2017
RF CABLE	1134	GORE	B094785	26-Jul-2017
RF CABLE	SF102	HUBER & SUHNER	B079822	27-Jul-2017

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

6.5 Test Data – DTS Bandedge

Lower band edge / Upper band edge

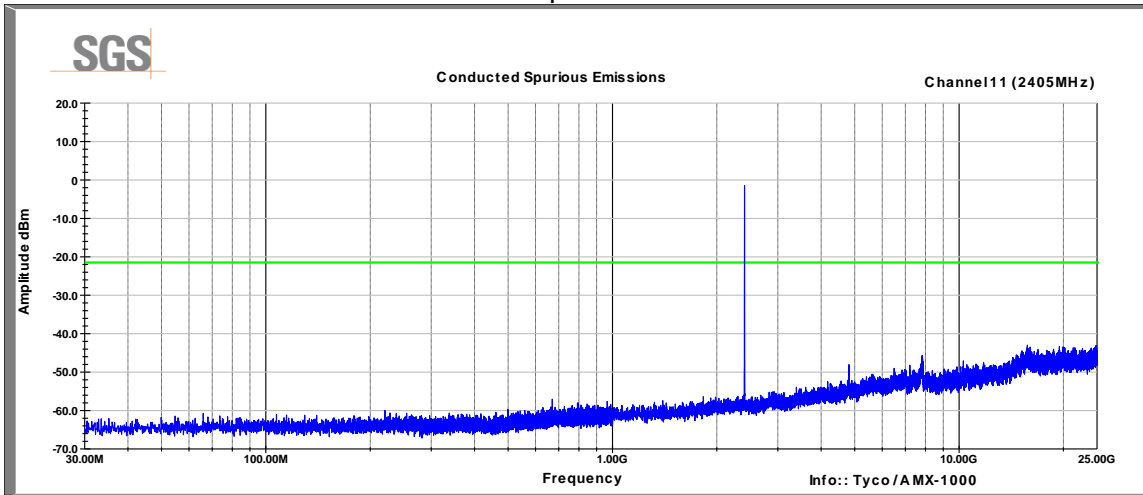


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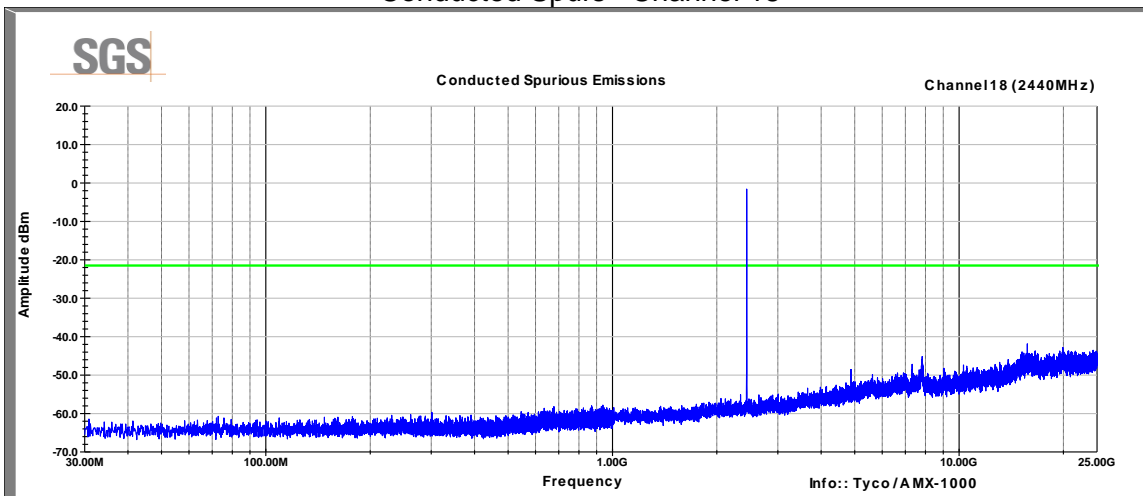
Date: 12.SEP.2016 08:33:24

6.6 Test Data – Conducted Spurious Emissions

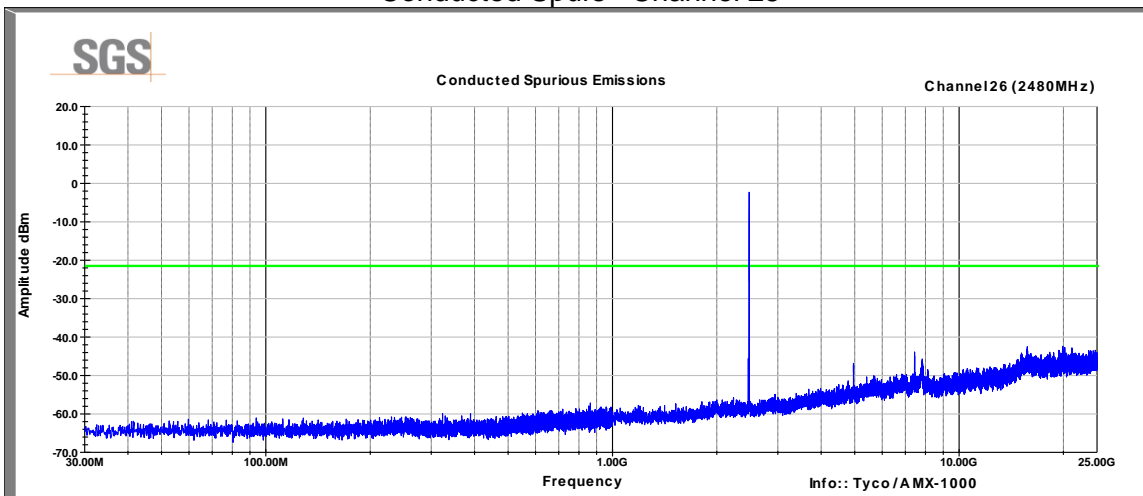
Conducted Spurs –Channel 11



Conducted Spurs –Channel 18



Conducted Spurs –Channel 25



7 Field Strength of Spurious Radiation

7.1 Test Result

Test Description	Test Specification		Test Result
Spurious Emissions	15.247 (d) and 15.209	RSS-247 S5.5	Compliant

7.2 Test Method

Radiated emission measurements were performed with the antenna installed as intended. The measurement methods defined in ANSI C63.4: 2014 were used.

Lowest, middle, and highest channels were investigated.

Test distance:

30 to 1000 MHz - The EUT to measurement antenna distance was 3 meters

1 to 18 GHz - The EUT to measurement antenna distance was 3 meters

18 to 26 GHz - The EUT to measurement antenna distance was 1 meter

Limits within restricted bands of operation:

Frequency	Limits ⁽¹⁾		Peak Limits dBuV/m
	Microvolts/m	dBuV/m	
30 - 88 MHz	100	40 ⁽²⁾	--
88 - 216 MHz	150	43.5 ⁽²⁾	--
216 - 960 MHz	200	46 ⁽²⁾	--
960 - 1000 MHz	500	54 ⁽²⁾	--
1 - 40 GHz	500	54 ⁽³⁾	74

(1) These limits are applicable to emissions outside of the intentional transmit frequency band.

(2) Quasi-peak limit

(3) Average limit

7.3 Test Site

SGS EMC Laboratory, Suwanee, GA

Environmental Conditions

Temperature: 23.0 °C

Relative Humidity: 48.5 %

7.4 Test Equipment

Test Date: 13-Sep-2016

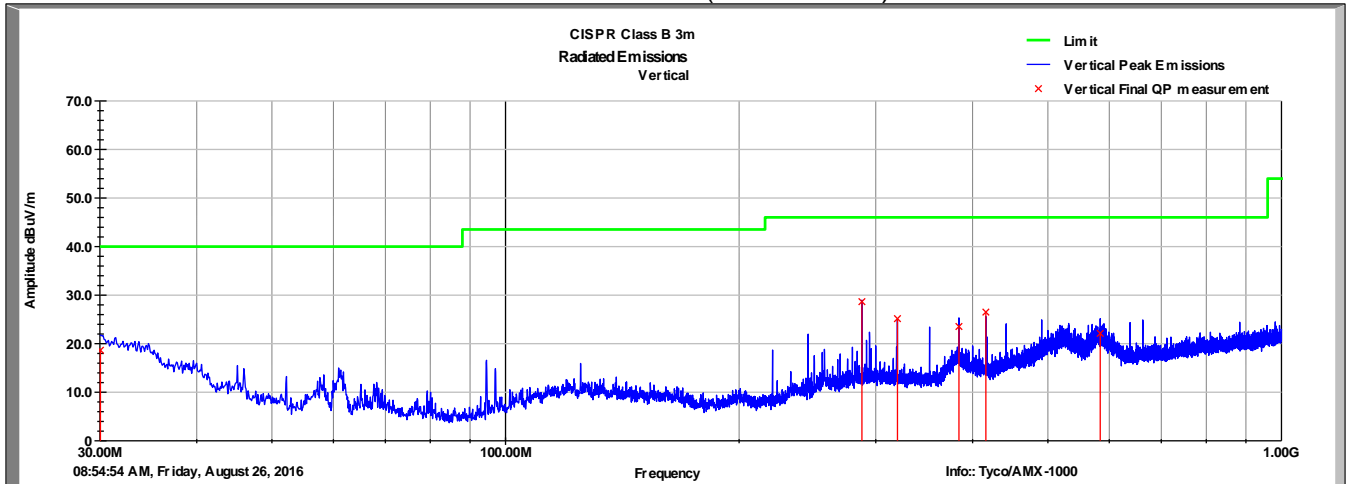
Tester: JC

Equipment	Model	Manufacturer	Asset Number	Cal Due Date
EMI TEST RECEIVER	ESU40	ROHDE & SCHWARZ	B079629	20-Jun-2017
ANTENNA, BILOG	JB6	SUNOL	B079690	21-Oct-2016
RF CABLE	SF106	HUBER & SUHNER	B079716	27-Jul-2017
RF CABLE	SF106	HUBER & SUHNER	B079713	27-Jul-2017
RF CABLE	SF106	HUBER & SUHNER	B085892	27-Jul-2017
RF CABLE	SUCOFLEX 100	HUBER & SUHNER	B108523	4-Aug-2017
LOW NOISE AMPLIFIER	TS-PR18	ROHDE & SCHWARZ	B094463	16-Feb-2017
DRG HORN (MEDIUM)	3117	ETS LINDGREN	B079699	26-Apr-2017
RF CABLE	SF106	HUBER & SUHNER	B079712	27-Jul-2017
RF CABLE	SF102	HUBER & SUHNER	B079822	27-Jul-2017
RF CABLE	SF102	HUBER & SUHNER	B079823	27-Jul-2017
HORN(SMALL)	LB-180400-20-C-KF	A-INFO	15007	29-Mar-2017
LOW NOISE AMPLIFIER	NSP1800-25-HG	MITEQ	B085930	29-Jul-2017

Note: The equipment calibration period is 1 year.

7.5 Peak Plots

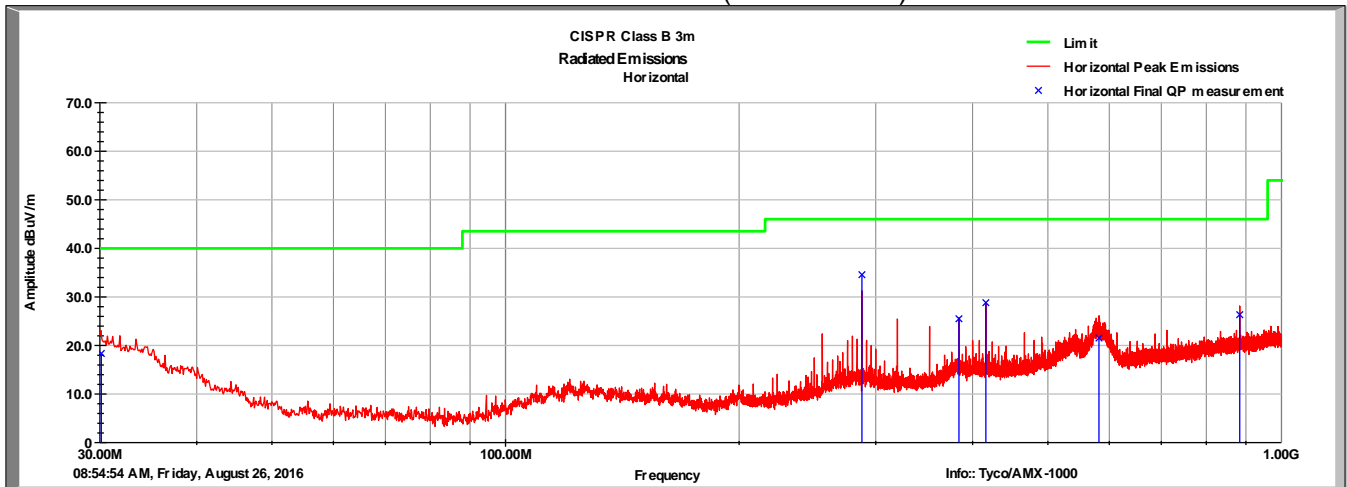
Low Channel (Channel 11, 2405MHz)
 Peak Plot Vertical (30-1000MHz)



Low Channel (Channel 11, 2405MHz)
 Tabular Data (30-1000MHz)

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)
30.05	27.9	V	70.0	157.0	22.3	0.5	32.0	18.6	40.0	-21.4
287.99	46.6	V	202.0	167.0	14.1	1.4	33.4	28.7	46.0	-17.3
319.98	42.3	V	31.0	176.0	14.7	1.5	33.4	25.1	46.0	-20.9
383.98	39.3	V	112.0	176.0	15.9	1.7	33.3	23.5	46.0	-22.5
415.98	41.4	V	280.0	148.0	16.6	1.7	33.3	26.5	46.0	-19.5
583.97	33.7	V	196.0	157.0	19.5	2.1	33.1	22.1	46.0	-23.9
QP Value = Level + AF + CL - Amp										
Margin = QP Value - Limit										

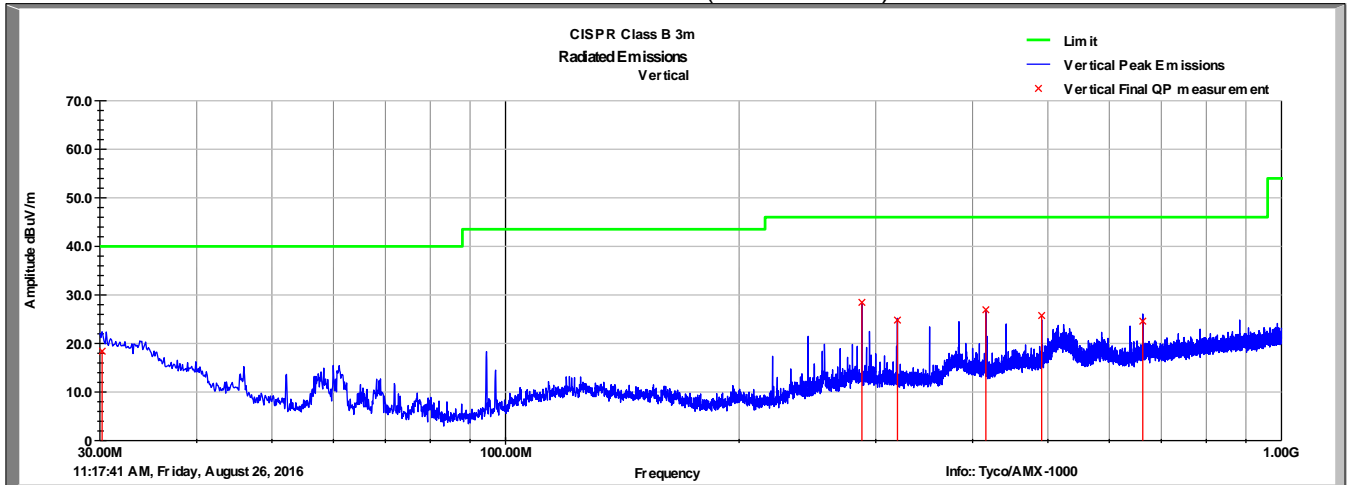
Low Channel (Channel 11, 2405MHz)
 Peak Plot Horizontal (30-1000MHz)



Low Channel (Channel 11, 2405MHz)
 Tabular Data (30-1000MHz)

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)
30.13	27.7	H	230.0	232.0	22.2	0.5	32.0	18.3	40.0	-21.7
287.99	52.5	H	129.0	109.0	14.1	1.4	33.4	34.6	46.0	-11.4
383.98	41.2	H	255.0	316.0	15.9	1.7	33.3	25.5	46.0	-20.5
415.98	43.7	H	309.0	307.0	16.6	1.7	33.3	28.8	46.0	-17.2
581.98	33.1	H	48.0	204.0	19.5	2.1	33.1	21.5	46.0	-24.5
883.64	34.2	H	43.0	270.0	22.7	2.6	33.1	26.3	46.0	-19.7
QP Value = Level + AF + CL - Amp										
Margin = QP Value - Limit										

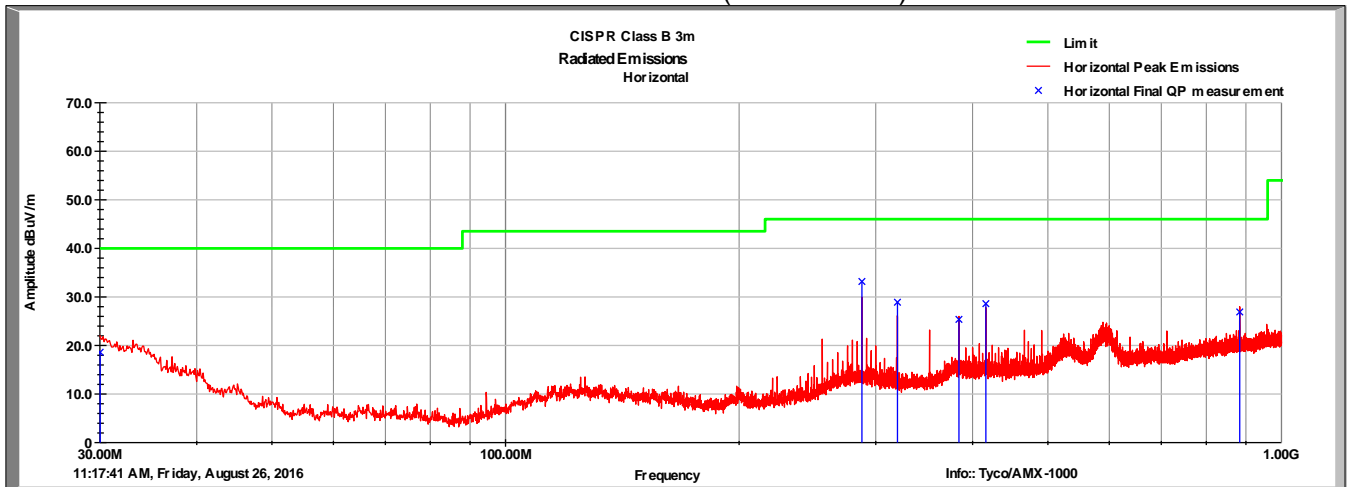
Mid Channel (Channel 18, 2440MHz)
 Peak Plot Vertical (30-1000MHz)



Mid Channel (Channel 18, 2440MHz)
 Tabular Data (30-1000MHz)

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)
30.20	27.8	V	136.0	100.0	22.1	0.5	32.0	18.4	40.0	-21.6
287.99	46.4	V	181.0	176.0	14.1	1.4	33.4	28.5	46.0	-17.5
319.99	42.0	V	191.0	156.0	14.7	1.5	33.4	24.8	46.0	-21.2
415.98	41.9	V	269.0	157.0	16.6	1.7	33.3	26.9	46.0	-19.1
490.90	38.9	V	12.0	137.0	18.1	1.9	33.2	25.7	46.0	-20.3
662.73	35.0	V	326.0	243.0	20.5	2.2	33.1	24.6	46.0	-21.4
QP Value = Level + AF + CL - Amp										
Margin = QP Value - Limit										

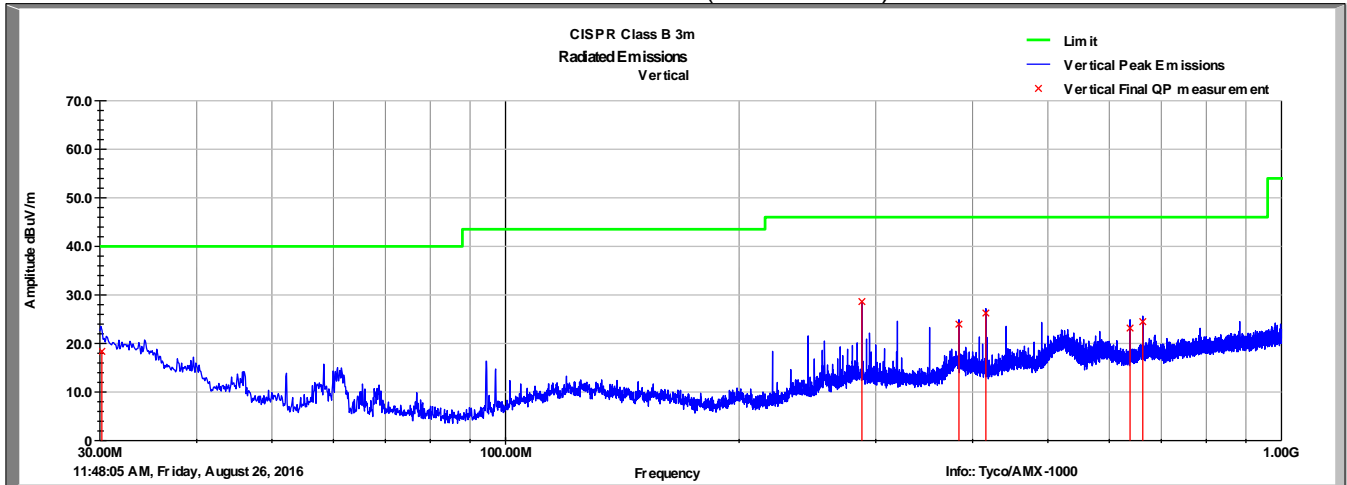
Mid Channel (Channel 18, 2440MHz)
 Peak Plot Horizontal (30-1000MHz)



Mid Channel (Channel 18, 2440MHz)
 Tabular Data (30-1000MHz)

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)
30.03	27.8	H	273.0	243.0	22.3	0.5	32.0	18.6	40.0	-21.4
287.99	51.1	H	120.0	110.0	14.1	1.4	33.4	33.2	46.0	-12.8
319.98	46.1	H	146.0	110.0	14.7	1.5	33.4	28.9	46.0	-17.1
383.98	41.1	H	281.0	307.0	15.9	1.7	33.3	25.4	46.0	-20.6
415.98	43.5	H	125.0	289.0	16.6	1.7	33.3	28.6	46.0	-17.4
883.65	34.7	H	136.0	250.0	22.7	2.6	33.1	26.9	46.0	-19.1
QP Value = Level + AF + CL - Amp										
Margin = QP Value - Limit										

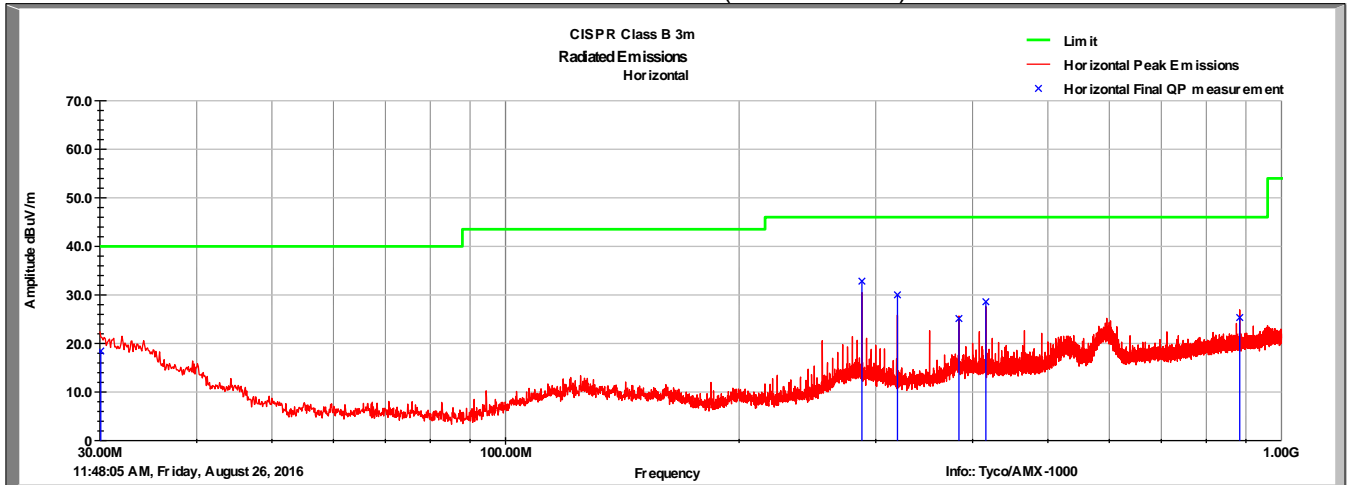
High Channel (Channel 25, 2475MHz) Peak Plot Vertical (30-1000MHz)



High Channel (Channel 26, 2480MHz) Tabular Data (30-1000MHz)

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)
30.18	27.7	V	335.0	205.0	22.2	0.5	32.0	18.4	40.0	-21.6
287.99	46.6	V	180.0	177.0	14.1	1.4	33.4	28.6	46.0	-17.4
383.98	39.7	V	269.0	184.0	15.9	1.7	33.3	24.0	46.0	-22.0
415.98	41.2	V	257.0	148.0	16.6	1.7	33.3	26.3	46.0	-19.7
638.18	34.0	V	78.0	371.0	20.1	2.2	33.1	23.2	46.0	-22.8
662.73	34.9	V	14.0	241.0	20.5	2.2	33.1	24.5	46.0	-21.5
QP Value = Level + AF + CL - Amp										
Margin = QP Value - Limit										

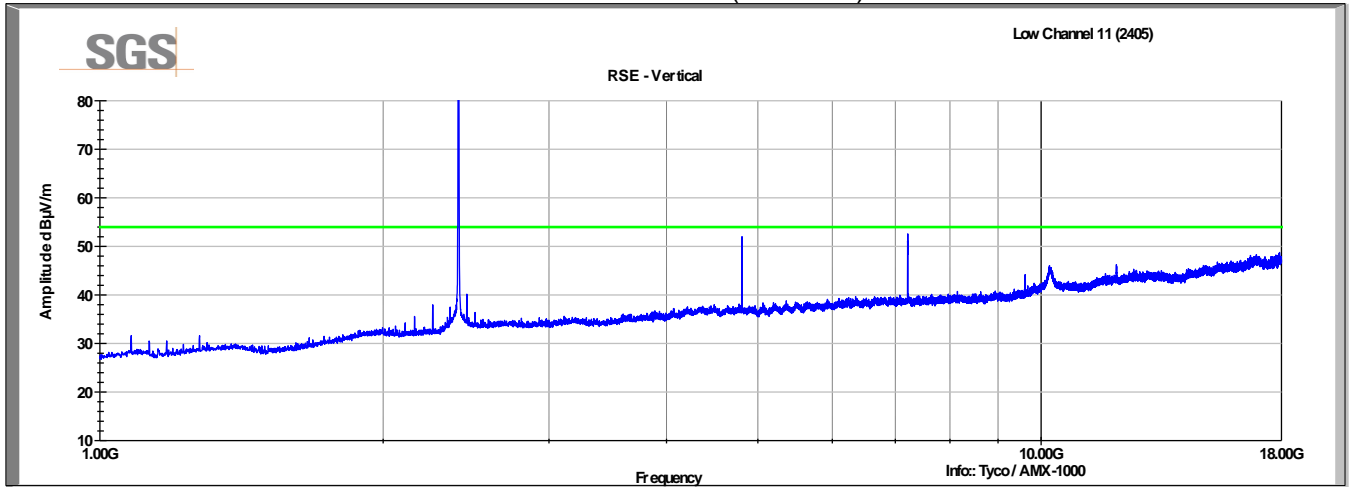
High Channel (Channel 25, 2475MHz) Peak Plot Horizontal (30-1000MHz)



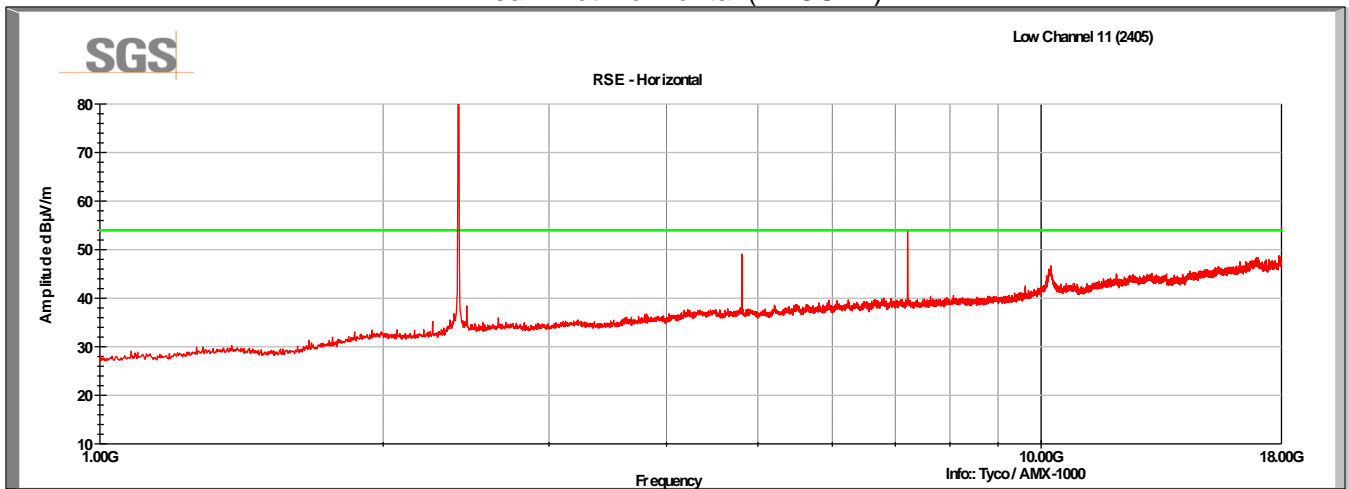
High Channel (Channel 26, 2480MHz) Tabular Data (30-1000MHz)

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)
30.09	27.7	H	288.0	232.0	22.2	0.5	32.0	18.4	40.0	-21.6
287.99	50.7	H	276.0	110.0	14.1	1.4	33.4	32.8	46.0	-13.2
319.98	47.2	H	135.0	100.0	14.7	1.5	33.4	30.0	46.0	-16.0
383.98	40.9	H	286.0	307.0	15.9	1.7	33.3	25.1	46.0	-20.9
415.98	43.5	H	281.0	297.0	16.6	1.7	33.3	28.6	46.0	-17.4
883.64	33.2	H	45.0	384.0	22.7	2.6	33.1	25.4	46.0	-20.6
QP Value = Level + AF + CL - Amp										
Margin = QP Value - Limit										

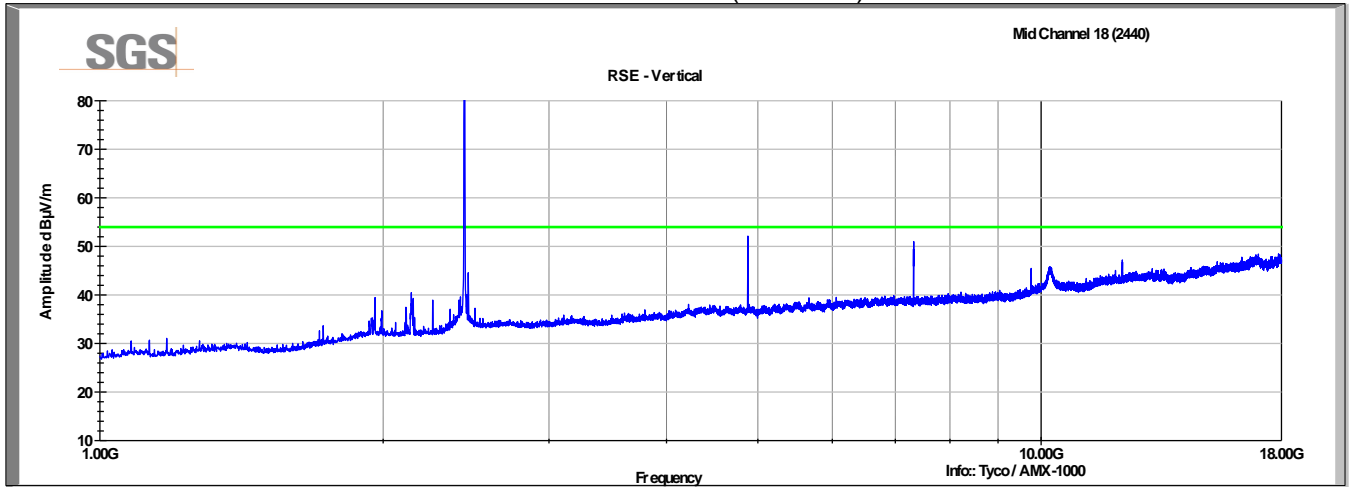
Low Channel (Channel 11, 2405MHz)
Peak Plot Vertical (1-18GHz)



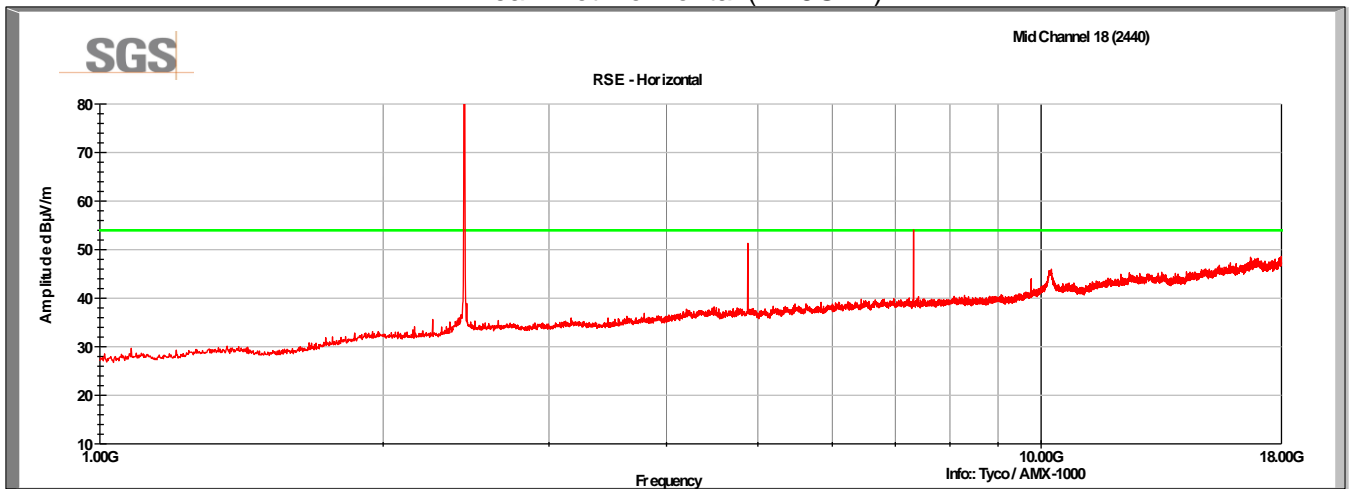
Low Channel (Channel 11, 2405MHz)
Peak Plot Horizontal (1-18GHz)



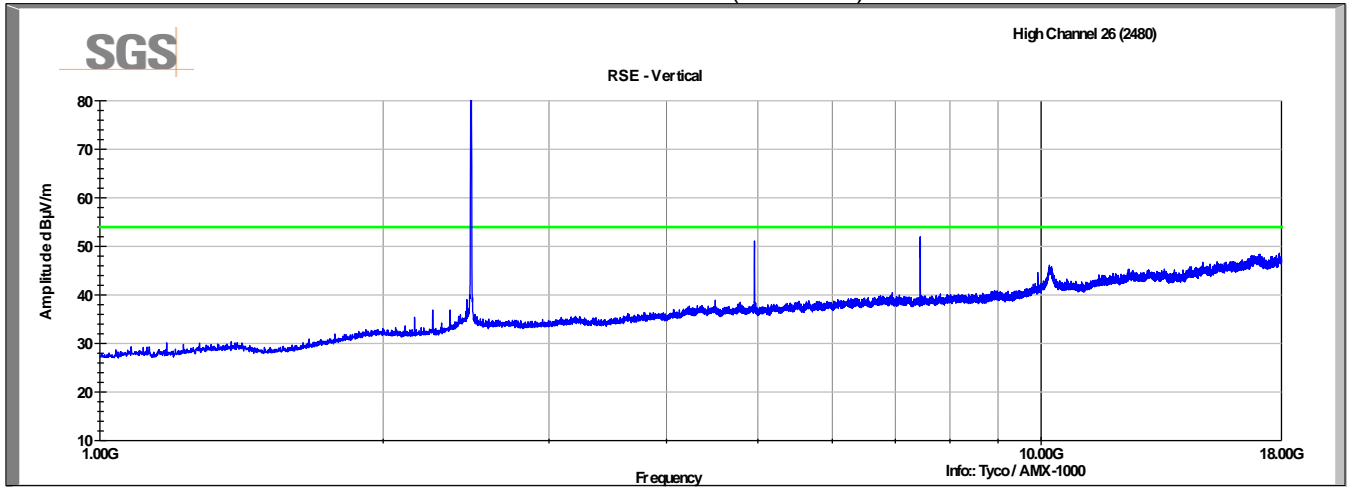
Mid Channel (Channel 18, 2440MHz)
Peak Plot Vertical (1-18GHz)



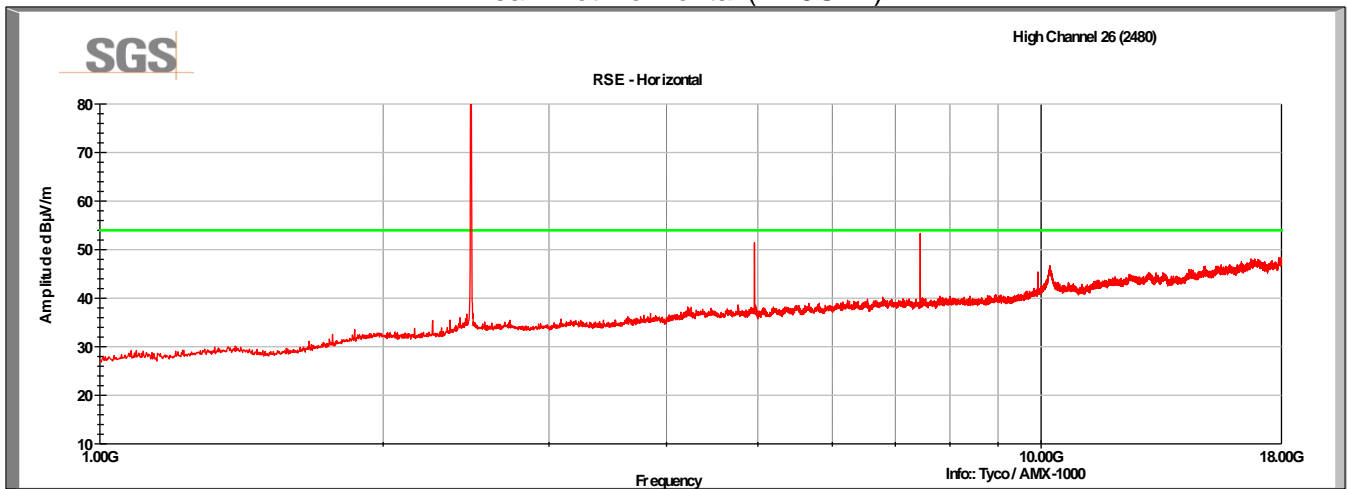
Mid Channel (Channel 18, 2440MHz)
Peak Plot Horizontal (1-18GHz)



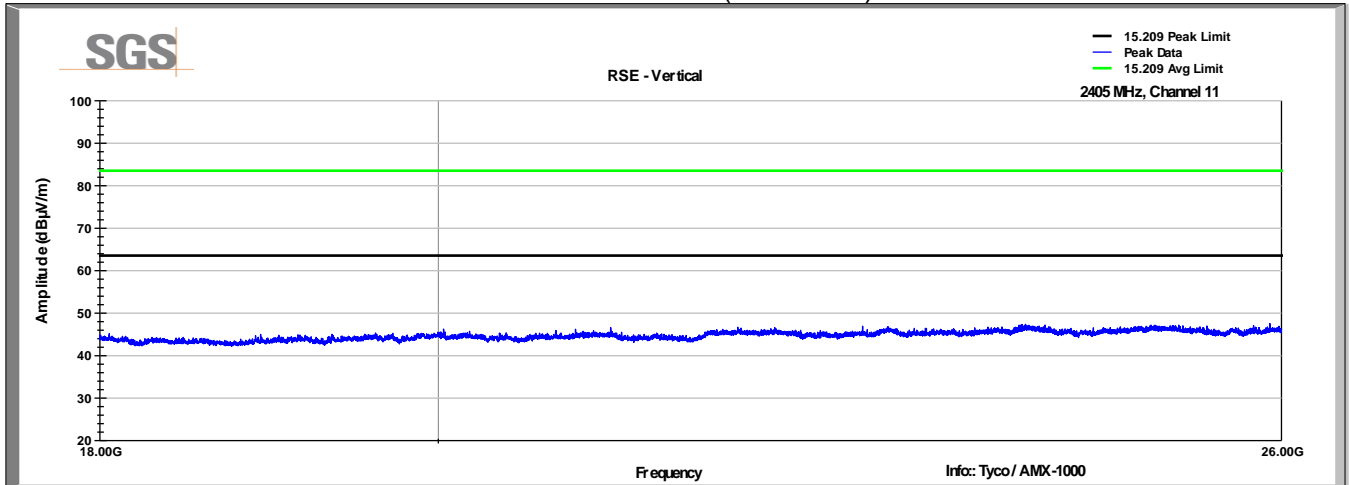
High Channel (Channel 25, 2475MHz)
Peak Plot Vertical (1-18GHz)



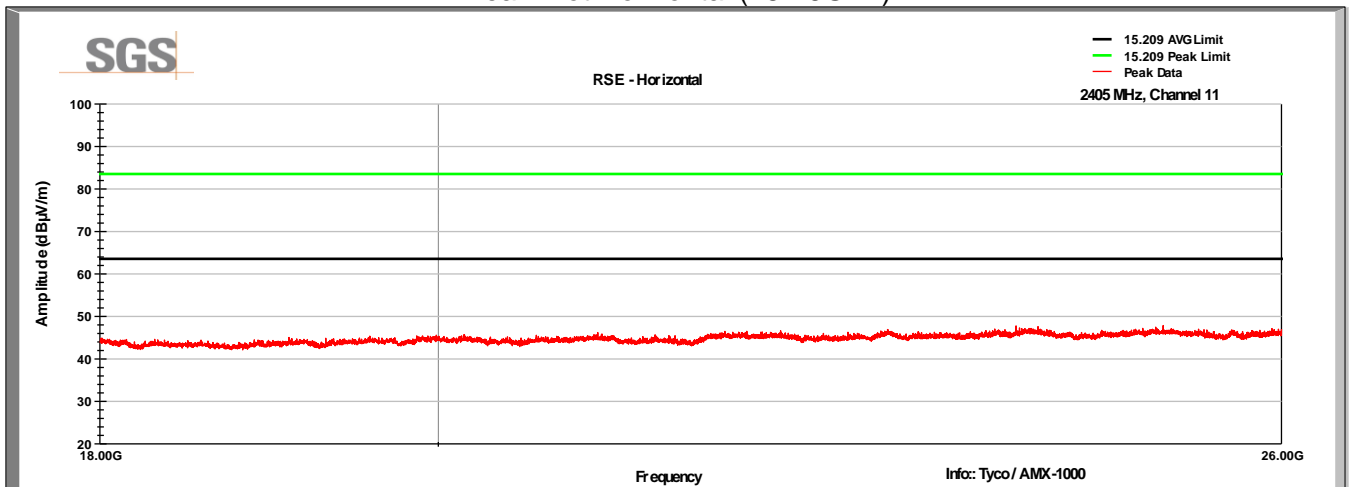
High Channel (Channel 25, 2475MHz)
Peak Plot Horizontal (1-18GHz)



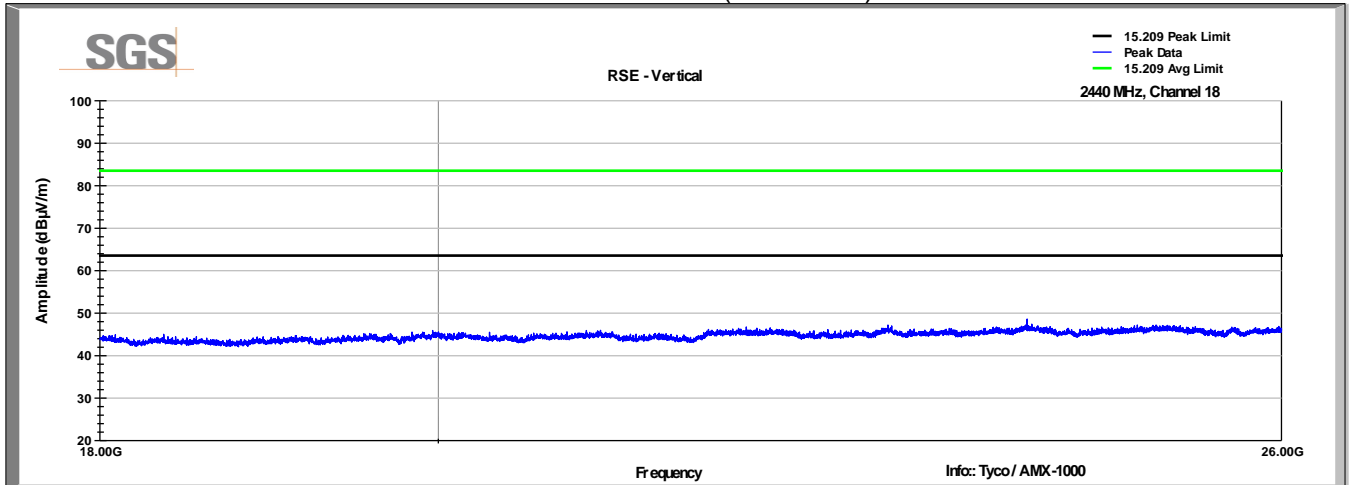
Low Channel (Channel 11, 2405MHz)
Peak Plot Vertical (18-26GHz)



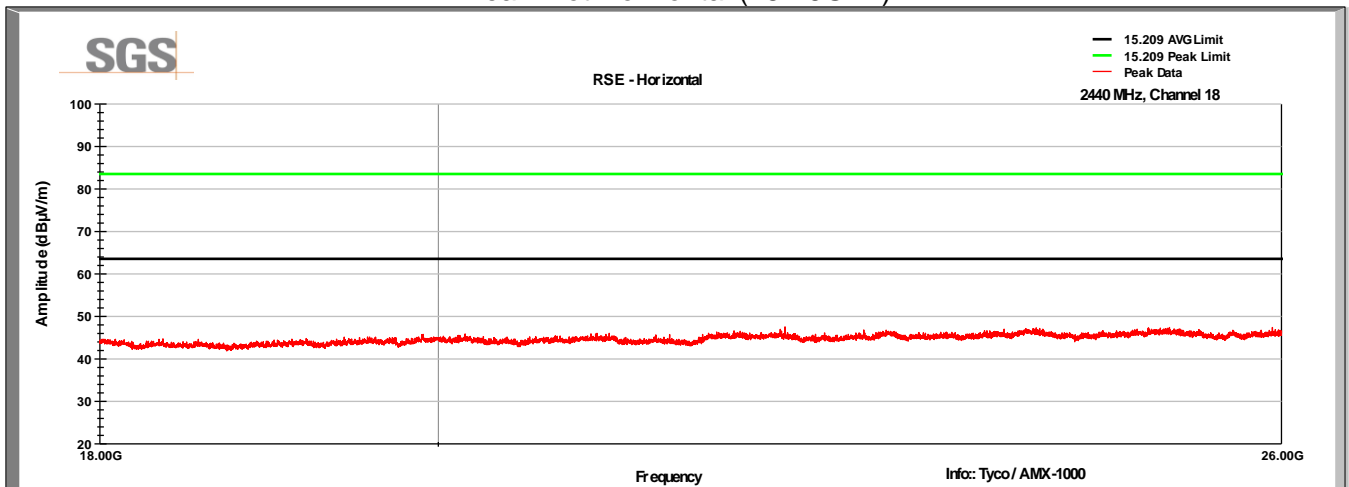
Low Channel (Channel 11, 2405MHz)
Peak Plot Horizontal (18-26GHz)



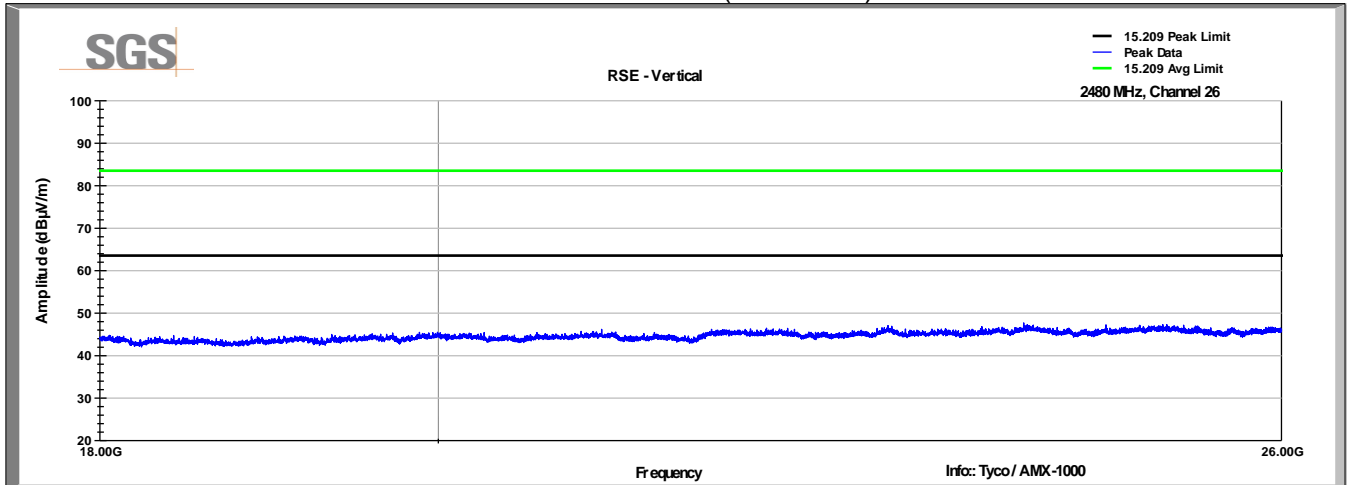
Mid Channel (Channel 18, 2440MHz)
 Peak Plot Vertical (18-26GHz)



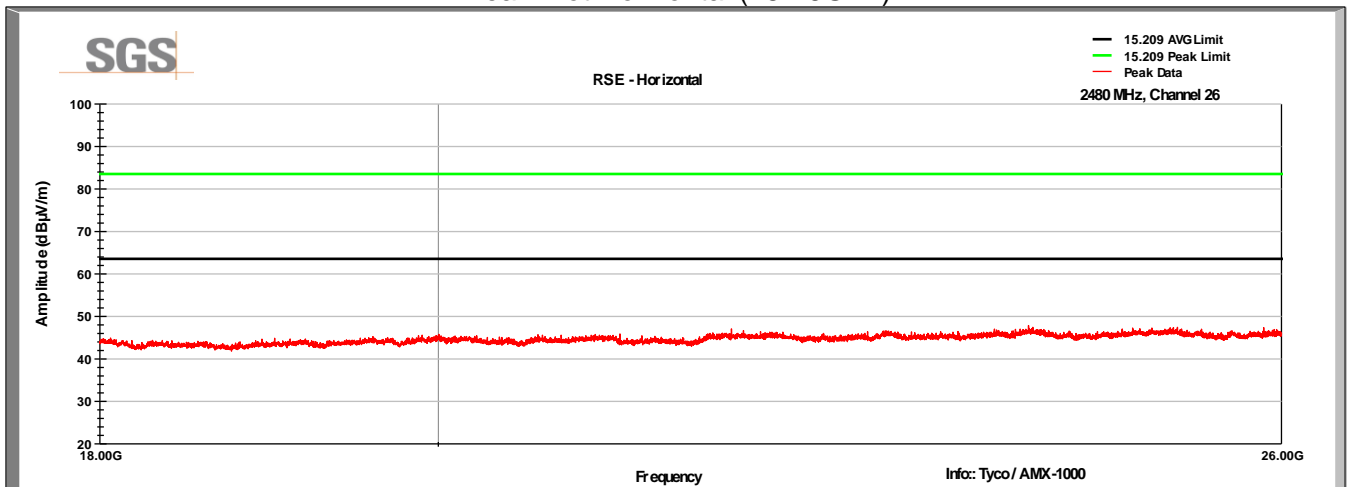
Mid Channel (Channel 18, 2440MHz)
 Peak Plot Horizontal (18-26GHz)



High Channel (Channel 25, 2475MHz)
 Peak Plot Vertical (18-26GHz)



High Channel (Channel 25, 2475MHz)
 Peak Plot Horizontal (18-26GHz)



7.6 Tabular Data

Frequency MHz	Raw QP (dBuV)	Polarity (V/H)	AF (dB/m)	Cable Loss (dB)	Amp Gain (dB)	Corr Value (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector
Channel 11 (2405MHz)									
4810.00	53.1	V	34.2	2.9	33.4	56.8	74.0	-17.2	Peak
4810.00	44.5	V	34.2	2.9	33.4	48.2	54.0	-5.8	AVG
4810.00	52.0	H	34.2	2.9	33.4	55.7	74.0	-18.3	Peak
4810.00	44.2	H	34.2	2.9	33.4	47.9	54.0	-6.1	AVG
7215.00	45.6	V	35.7	3.6	33.4	51.5	74.0	-22.5	Peak
7215.00	34.2	V	35.7	3.6	33.4	40.1	54.0	-13.9	AVG
7215.00	47.1	H	35.7	3.6	33.4	53.0	74.0	-21.0	Peak
7215.00	36.5	H	35.7	3.6	33.4	42.4	54.0	-11.6	AVG
Channel 18 (2440MHz)									
4880.00	53.4	V	34.2	2.9	33.4	57.1	74.0	-16.9	Peak
4880.00	46.6	V	34.2	2.9	33.4	50.3	54.0	-3.7	AVG
4880.00	53.5	H	34.2	2.9	33.4	57.2	74.0	-16.8	Peak
4880.00	46.9	H	34.2	2.9	33.4	50.6	54.0	-3.4	AVG
7320.00	52.0	V	35.7	3.6	33.4	57.9	74.0	-16.1	Peak
7320.00	43.8	V	35.7	3.6	33.4	49.7	54.0	-4.3	AVG
7320.00	55.0	H	35.7	3.6	33.4	60.9	74.0	-13.1	Peak
7320.00	47.5	H	35.7	3.6	33.4	53.4	54.0	-0.6	AVG
Channel 25 (2475MHz)									
4950.00	53.9	V	34.2	2.9	33.4	57.6	74.0	-16.4	Peak
4950.00	47.9	V	34.2	2.9	33.4	51.6	54.0	-2.4	AVG
4950.00	53.4	H	34.2	2.9	33.4	57.1	74.0	-16.9	Peak
4950.00	47.1	H	34.2	2.9	33.4	50.8	54.0	-3.2	AVG
7425.00	53.8	V	35.7	3.6	33.4	59.7	74.0	-14.3	Peak
7425.00	45.9	V	35.7	3.6	33.4	51.8	54.0	-2.2	AVG
7425.00	55.2	H	35.7	3.6	33.4	61.1	74.0	-12.9	Peak
7425.00	47.0	H	35.7	3.6	33.4	52.9	54.0	-1.1	AVG
QP Value = Level + AF + CL - Amp									
Margin = QP Value - Limit									

8 Radiated Emissions at Band Edge / Restricted Band

8.1 Test Result

Test Description	Test Specification	Test Result
Field strength of spurious radiation	15.247 (d) and 15.209	Compliant

8.2 Test Method

Peak and average field strength measurements were performed at the restricted band edges of 2390MHz and 2483.5MHz. Initial measurements were recorded with the maximum target power (8dBm). Reductions were applied where necessary to achieve compliance. Measurements were made using the conducted methods defined in FCC KDB publication 558074 D01 DTS Meas Guidance v03r05.

Offset was determined using the following equation from the KDB:

$$\text{Offset} = -20\text{Log}(D) + 104.8 - 107 + \text{CL} + \text{DC} + \text{AG}$$

Where:

$$D \text{ (Distance)} = 3\text{m}$$

$$\text{CL (Cable Loss)} = 0.9\text{dB}$$

$$\text{DC (Duty Cycle)} = 100\%, 10*\text{LOG}(1) = 0$$

$$\text{AG (Antenna Gain)} = 5\text{dBi}$$

$$\text{Offset} = -20\text{LOG}(3) + 104.8 - 107 + 0.9 + 0 + 5 = -5.8$$

8.3 Test Site

3m Absorber Lined Shielded Enclosure (ALSE), Suwanee, GA

Environmental Conditions

Temperature: 23.5 °C

Relative Humidity: 49.2 %

8.4 Test Equipment

Test End Date: 13-Sep-2016

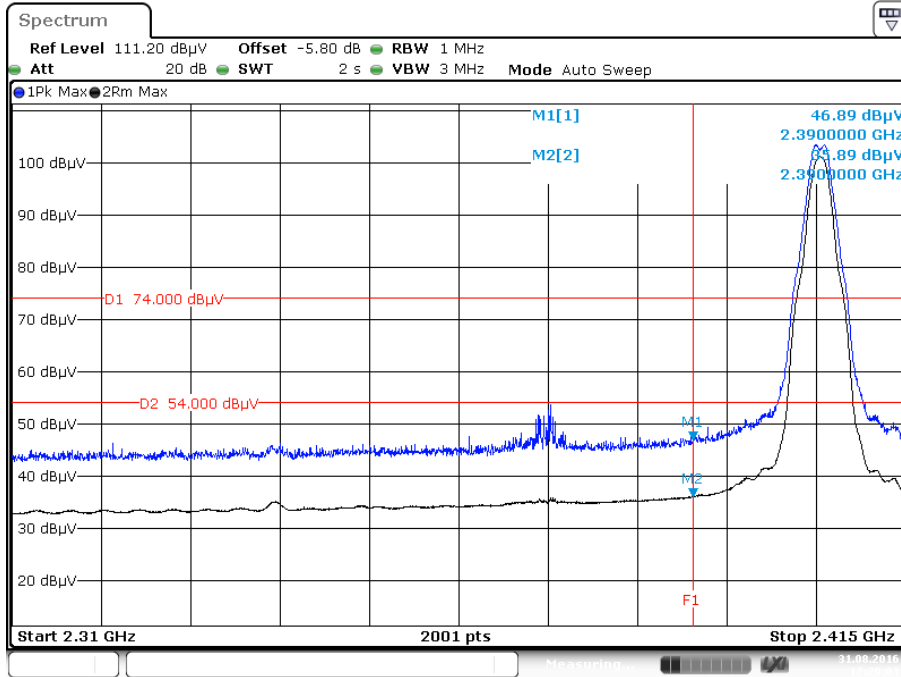
Tester: JOP

Equipment	Model	Manufacturer	Asset Number	Cal Due Date
SIGNAL ANALYZER	FSV30	ROHDE & SCHWARZ	B085749	8-Oct-2017
RF CABLE	1134	GORE	B094785	26-Jul-2017

Note: The equipment calibration period is 1 year.

8.5 Test Data

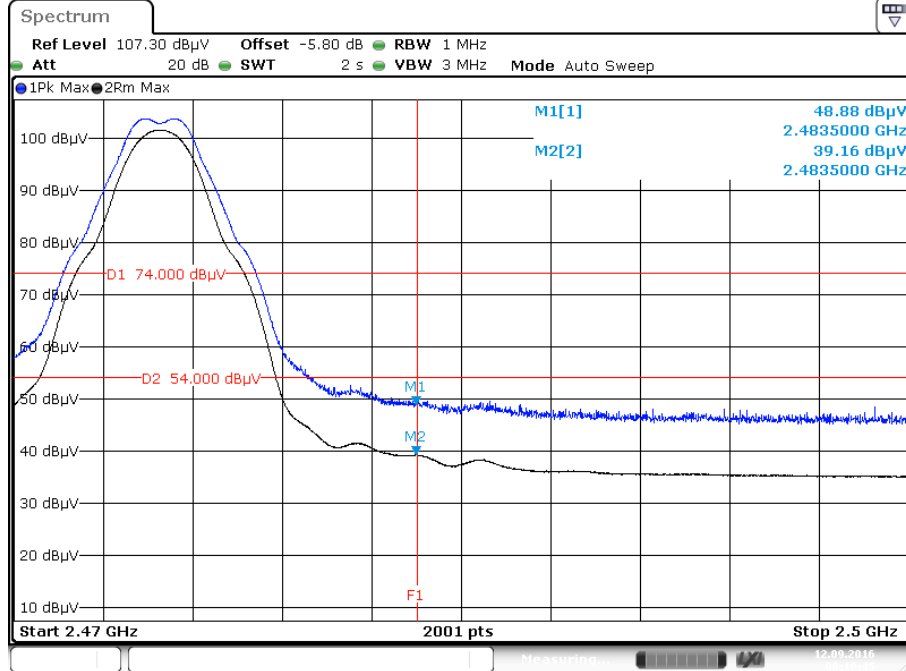
Channel 11



Date: 31.AUG.2016 12:29:04

Channel	Frequency (MHz)	Reading (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Measurement Detector
11	2390	46.9	74	-27.1	Peak
11	2390	36	54	-18	RMS

Channel 25



Date: 12.SEP.2016 08:18:45

Channel	Frequency (MHz)	Reading (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Measurement Detector
25	2483.5	48.9	74	-25.1	Peak
25	2483.5	39.2	54	-14.8	RMS

9 Revision History

Revision Level	Description of changes	Revision Date
0	Initial release	06 September 2016