



**FCC 47 CFR PART 15 SUBPART C
INDUSTRY CANADA RSS-247 ISSUE 1**

**BLUETOOTH LOW ENERGY
CERTIFICATION TEST REPORT**

FOR

WIRELESS HEADSET

**MODEL NUMBER:
419811**

**FCC ID: A94419811
IC: 3232A-419811**

REPORT NUMBER: R10991036-E2

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Revision History

<u>Ver.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
1	2015-12-11	Initial Issue	Mark Nolting
2	2015-12-16	Revised RSS References from RSS-210 to RSS-247.	Mark Nolting
3	2015-12-18	Revised Radiated plots to remove product references.	Mark Nolting

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Bose
100 The Mountain Rd.
Framingham, Massachusetts, 01701, USA

EUT DESCRIPTION: Wireless Headset

MODEL: 419811

SERIAL NUMBER: DP2-A097 (Radiated sample);
DP2-C004 (Antenna-port sample)

DATE TESTED: 11/03-11/05/2015

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	PASS
INDUSTRY CANADA RSS-247 Issue 1	PASS
INDUSTRY CANADA RSS-GEN Issue 4	PASS

UL LLC tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL LLC based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL LLC and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL LLC will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released
For UL LLC By:



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Prepared By:



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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2013, RSS-GEN Issue 4, RSS-247 Issue 1.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 12 Laboratory Dr., Research Triangle Park, NC 27709, USA and 2800 Suite B Perimeter Park Dr., Morrisville, NC 27560.

12 Laboratory Dr., RTP, NC 27709	
<input type="checkbox"/>	Chamber A
<input checked="" type="checkbox"/>	Chamber C

2800 Suite B Perimeter Park Dr., Morrisville, NC 27560	
<input type="checkbox"/>	Chamber NORTH
<input checked="" type="checkbox"/>	Chamber SOUTH

The onsite chambers are covered under Industry Canada company address code 2180C with site numbers 2180C -1 through 2180C-4, respectively.

UL LLC (RTP) is accredited by NVLAP, Laboratory Code 200246-0. The full scope of accreditation can be viewed at <http://www.nist.gov/nvlap/>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

$$\begin{aligned} \text{Field Strength (dBuV/m)} &= \text{Measured Voltage (dBuV)} + \text{Antenna Factor (dB/m)} + \\ &\text{Cable Loss (dB)} - \text{Preamp Gain (dB)} \\ 36.5 \text{ dBuV} + 18.7 \text{ dB/m} + 0.6 \text{ dB} - 26.9 \text{ dB} &= 28.9 \text{ dBuV/m} \end{aligned}$$

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER		UNCERTAINTY
Total RF power, conducted	+/-	0.45
RF power density, conducted	+/-	1.50
Spurious emissions, conducted	+/-	2.94
All emissions, radiated up to 18 GHz	+/-	5.36
Temperature	+/-	0.07
Humidity	+/-	2.26
DC and low frequency voltages	+/-	1.27
Conducted Disturbance, 0.15 to 30 MHz	+/-	2.37

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a Wireless Headset that contains Bluetooth transceiver.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2402 - 2480	BLE	3.60	2.29

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an Inverted F trace antenna, with a maximum gain of 7.23 dBi.

5.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was 0.3.4-r184

The EUT driver software installed in the host support equipment during testing was 2.4.0.0

The test utility software, BlueTest3, used during testing was 2.6.2

5.5. WORST-CASE CONFIGURATION AND MODE

Radiated-emissions testing were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

The fundamental of the EUT was investigated in three orthogonal orientations X,Y,Z. It was determined that X orientation was worst-case orientation; therefore, all final radiated testing was performed with the EUT in X orientation.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop	Lenovo	T-410	R8K07LR	N/A
AC Adapter	Lenovo	ADLX65NLT2A	36RGT7	N/A

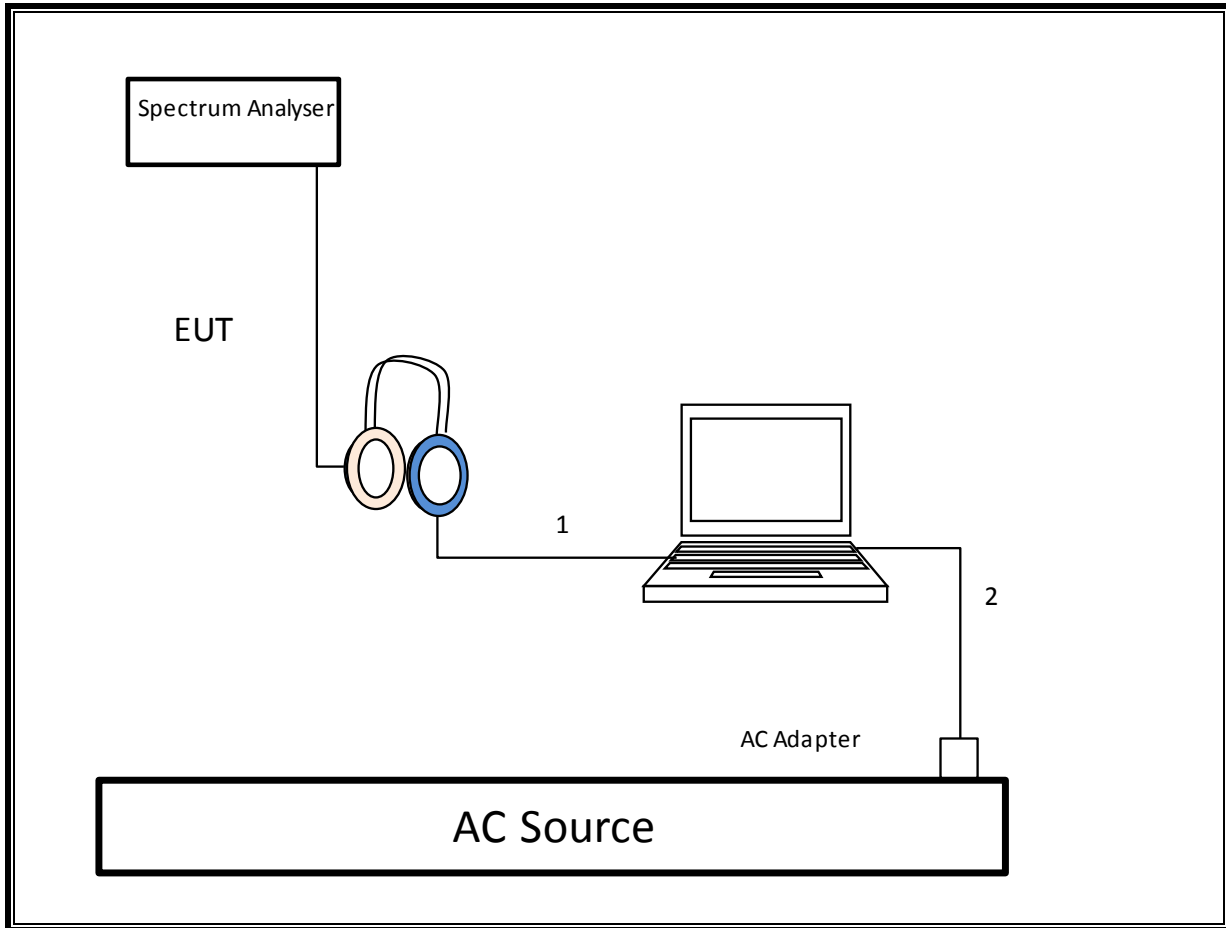
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB	1	Micro USB	Unshielded	0.33	For USB charging cable.
2	Audio	1	3.5mm audio	Unshielded	1.2	For back-up audio cable.

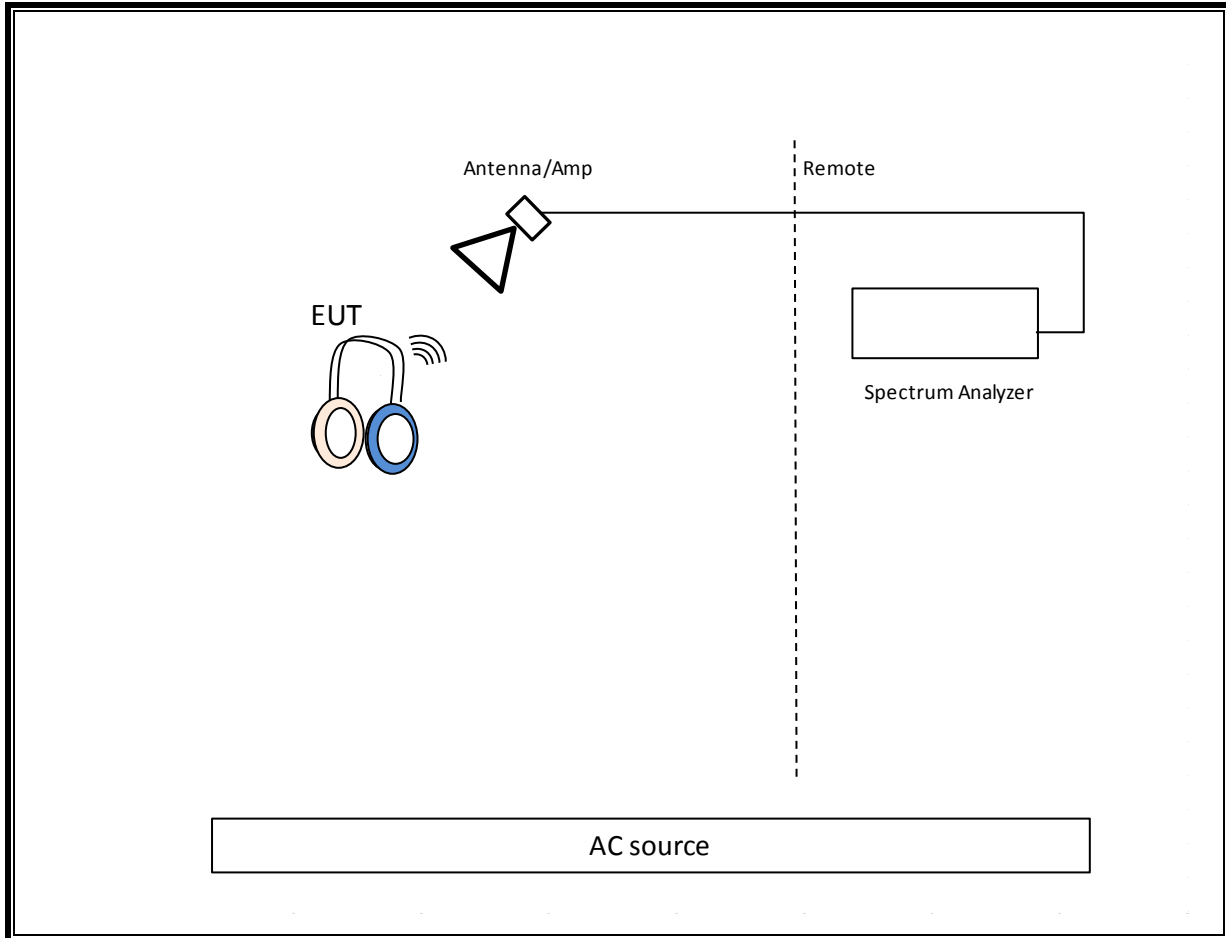
TEST SETUP

The EUT is set up as a stand-alone device during radiated-emissions testing. For convenience, the device is connected to a laptop PC via a USB cable to configure the device for test during antenna-port measurements. Test software exercised the radio portion of the device.

SETUP DIAGRAM FOR CONDUCTED TESTS



SETUP DIAGRAM FOR RADIATED TESTS



6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville - South Chamber)

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
AT0074	Hybrid Broadband Antenna, 30-1000MHz	Sunol Sciences Corp.	JB3	2015-06-10	2016-06-30
AT0069	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2015-02-17	2016-02-29
S-SAC02	Gain-loss string: 30-1000MHz	Various	Various	2015-06-09	2016-06-30
S-SAC03	Gain-loss string: 1-18GHz	Various	Various	2015-08-22	2016-08-31
SA0026	Spectrum Analyzer	Agilent	N9030A	2015-03-27	2016-03-31
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
HI0050	Temp/Humid/Pressure Meter	Cole-Parmer	99760-00	2015-07-01	2016-07-31

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (RTP – Chamber C)

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
AT0063	Horn Antenna, 18-26.5GHz	ARA	MWH-1826/B	2015-08-27	2016-08-31
C-SAC03	Gain-loss string: 18-40GHz	Various	Various	2015-09-27	2016-09-30
SA0025	Spectrum Analyzer	Keysite	N9030A	2015-03-27	2016-03-31
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
HI0034	Temp/Humid/Pressure Meter	Cole-Parmer	99760-00	2015-03-23	2016-03-31

Test Equipment Used - Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
SA0020	Spectrum Analyzer	Agilent Technologies	E4446	2015-02-26	2016-02-29
PWS004	Power Sensor, 50MHz to 6 GHz	Keysight Technologies	E9323A	2015-06-05	2016-06-05
PWM004	Power Sensor, 50MHz to 6 GHz	Keysight Technologies	N1911A	2015-06-08	2016-06-08
T1023	Power Sensor, 10MHz to 6 GHz	ETS Lindgren	7002-006	2015-10-01	2016-10-01
MM0168	Digital Multimeter	Agilent Technologies	U1232A	2015-08-17	2016-08-31
76023	Temp/Humid Chamber	Cincinnati Sub-Zero	ZPH-8-3.5-SCT/AC	2015-05-13	2016-05-31
43733	Temp/Humid/Pressure Meter	Cole-Parmer	99760-00	2014-03-24	2016-03-31

7. MEASUREMENT METHODS

6 dB BW: KDB 558074 D01 v03r03, Section 8.1.

Output Power: KDB 558074 D01 v03r03, Section 9.1.2.

Power Spectral Density: KDB 558074 D01 v03r03, Section 10.2.

Out-of-band emissions in non-restricted bands: KDB 558074 D01 v03r03, Section 11.0.

Out-of-band emissions in restricted bands: KDB 558074 D01 v03r03, Section 12.1.

8. ON TIME, DUTY CYCLE

LIMITS

None; for reporting purposes only.

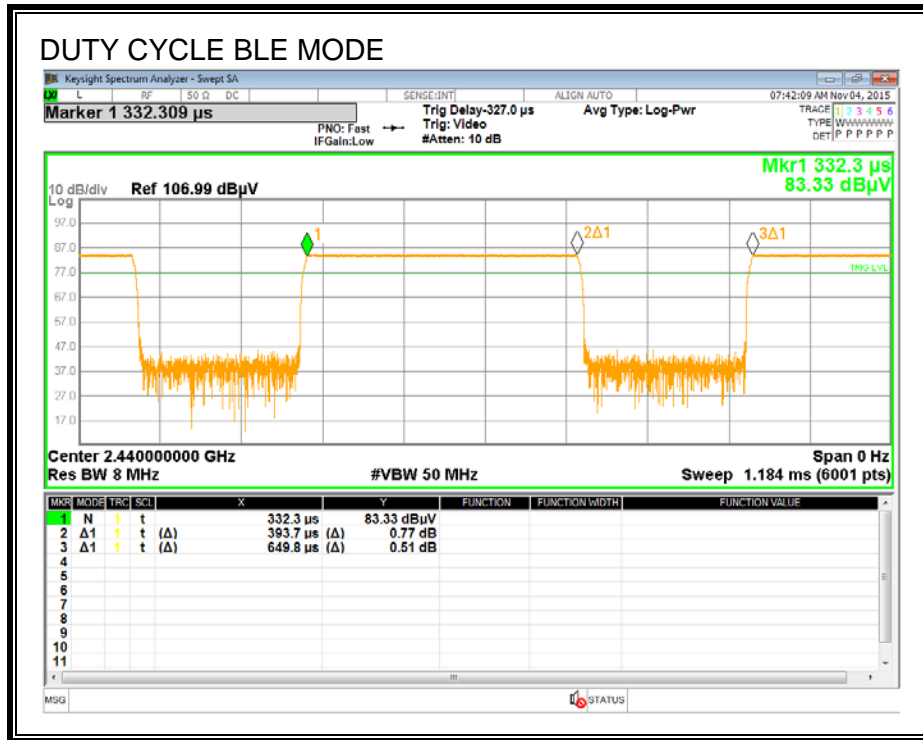
PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method.

8.1. ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
BLE	0.394	0.650	0.606	60.63%	2.17	2.538

8.2. DUTY CYCLE PLOTS



9. ANTENNA PORT TEST RESULTS

9.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

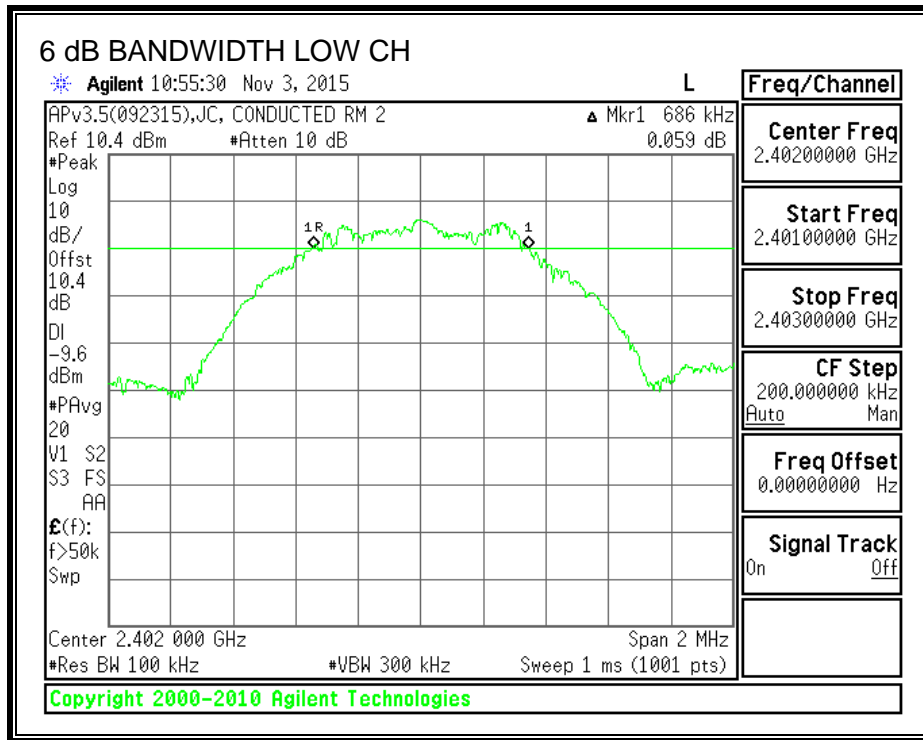
IC RSS-247 A5.2 (1)

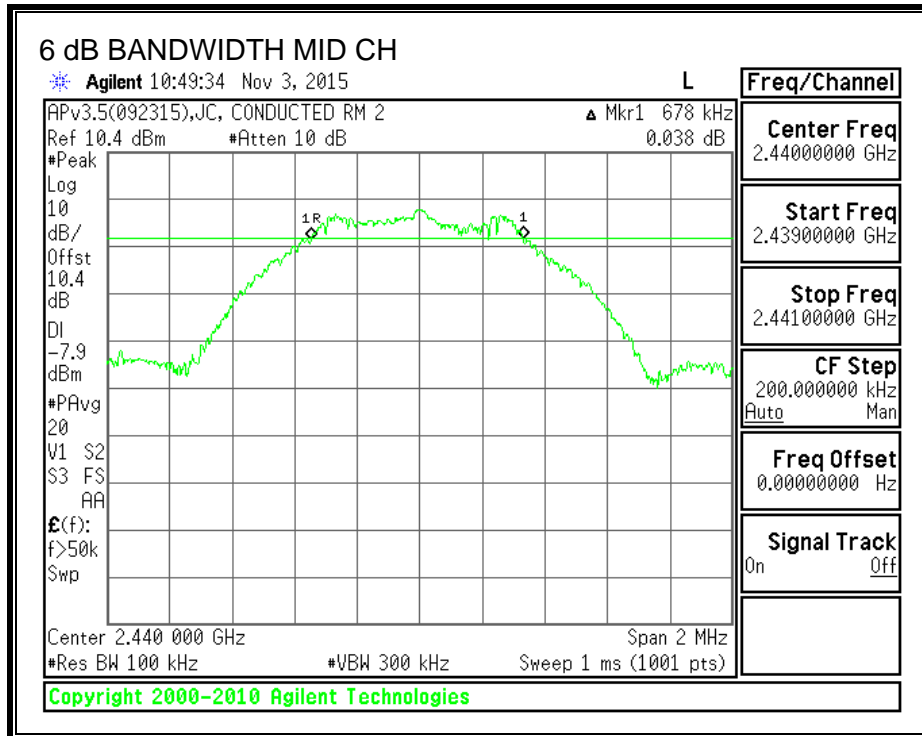
The minimum 6 dB bandwidth shall be at least 500 kHz.

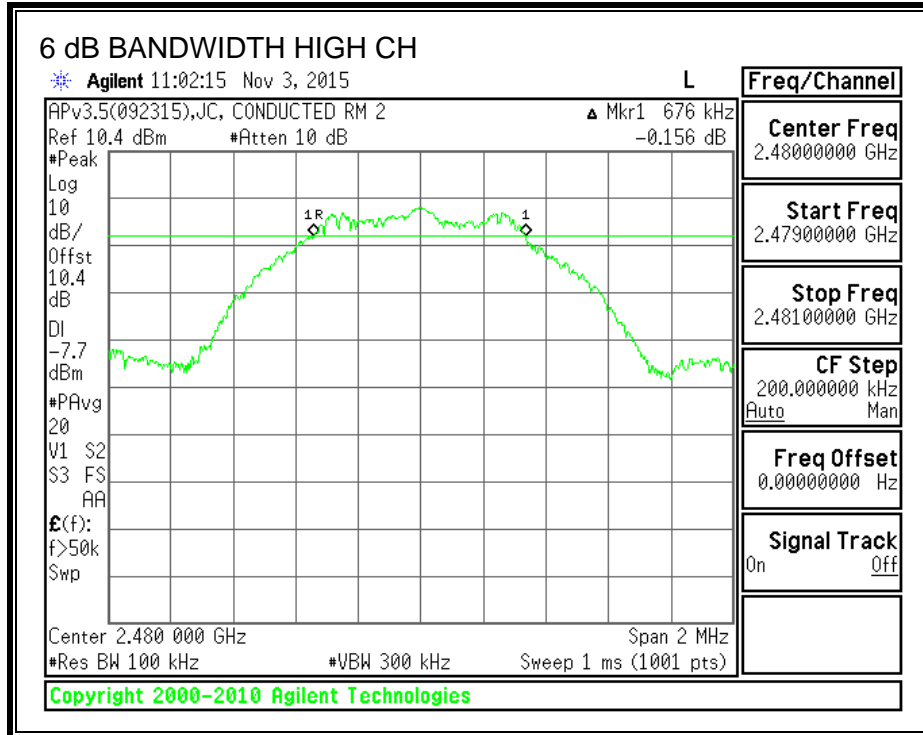
RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2402	0.6860	0.5
Middle	2440	0.6780	0.5
High	2480	0.6760	0.5

6 dB BANDWIDTH







9.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

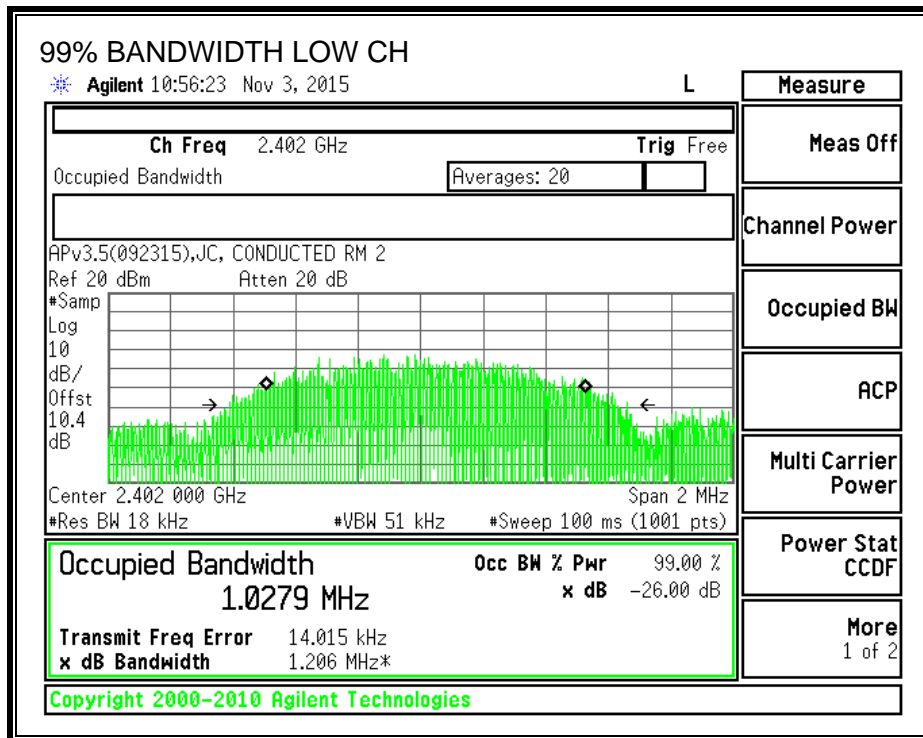
TEST PROCEDURE

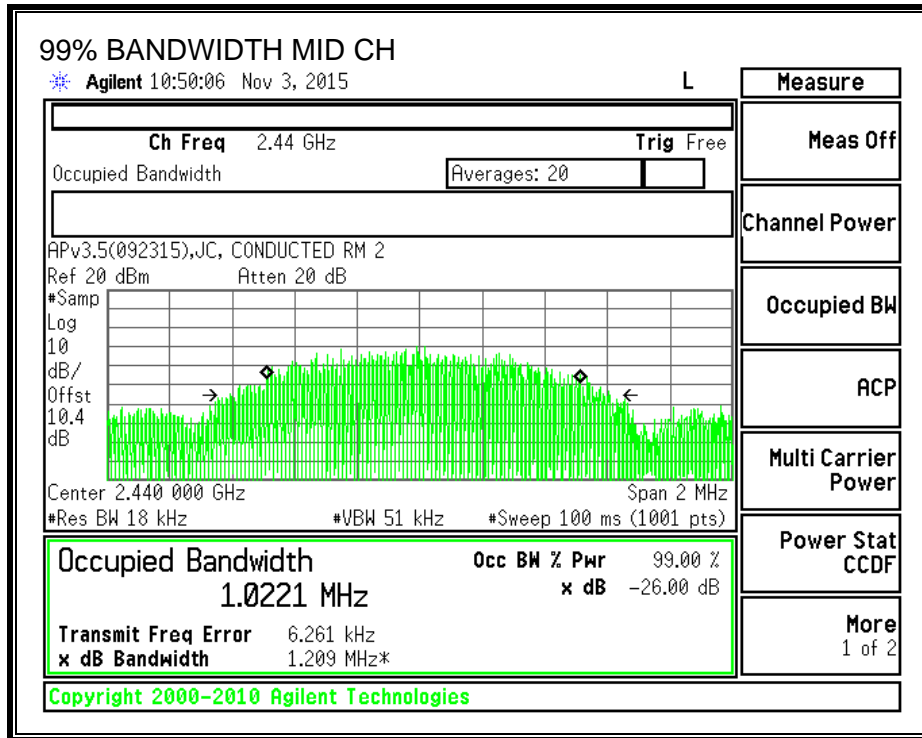
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 5% of the 99 % bandwidth and to 1% of the span. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

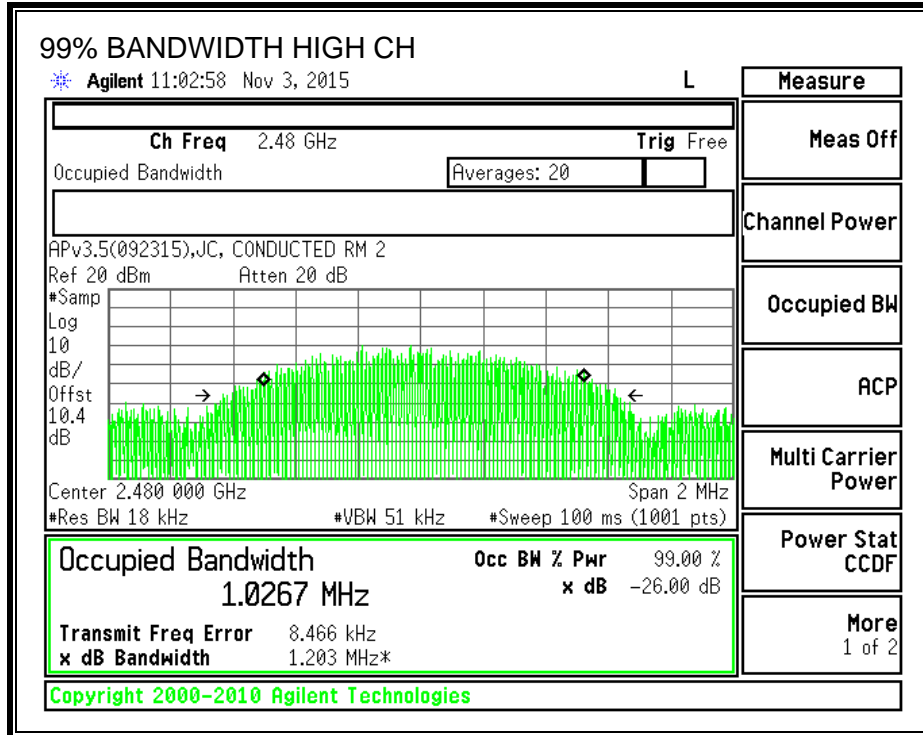
RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	1.0279
Middle	2440	1.0221
High	2480	1.0267

99% BANDWIDTH







9.3. OUTPUT POWER

LIMITS

FCC §15.247 (b)

IC RSS-247 A5.4

The maximum antenna gain is 7.23 dBi for other than fixed, point-to-point operations, therefore the limit is 28.77 dBm.

TEST PROCEDURE

The transmitter output was connected to a power meter equipped with a power sensor capable of measuring peak power. The cable assembly insertion loss of 10.4 dB (including 10 dB pad and 0.4 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Output Power (dBm)	Directional Gain (dBi)	Limit (dBm)	Margin (dB)
Low	2402	1.61	7.23	28.8	-27.16
Middle	2440	3.57	7.23	28.8	-25.20
High	2480	3.60	7.23	28.8	-25.17

9.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter and a gated average power measurement was performed. The cable assembly insertion loss of 10.4 dB (including 10 dB pad and 0.4 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	AV power (dBm)
Low	2402	-1.27
Middle	2440	2.94
High	2480	3.1

9.5. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247 (e)

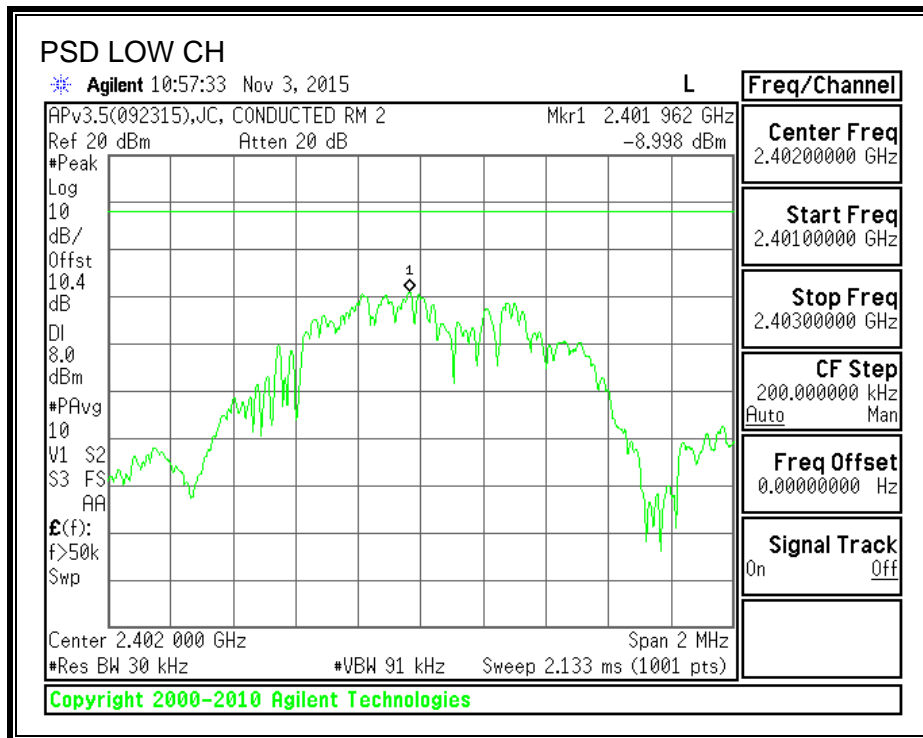
IC RSS-247 A5.2 (2)

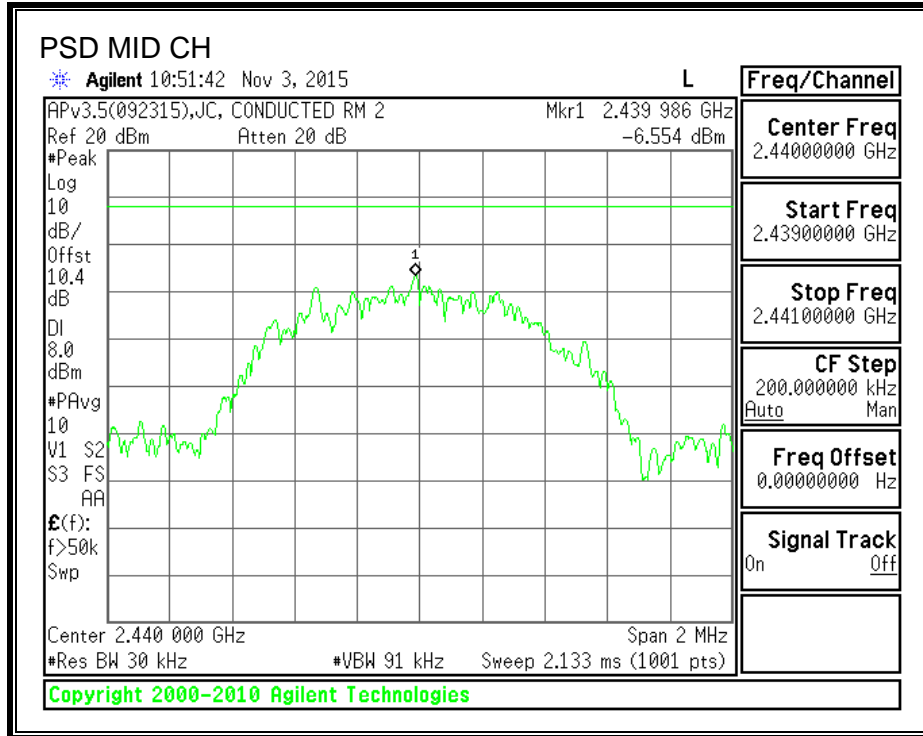
The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

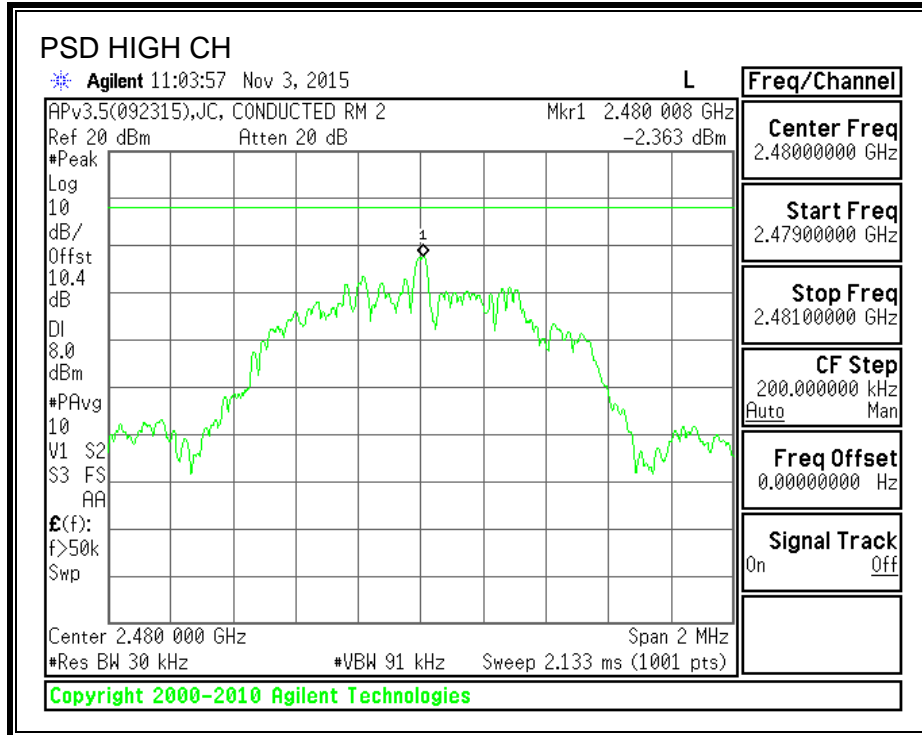
RESULTS

Channel	Frequency (MHz)	PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2402	-9.00	8	-17.00
Middle	2440	-6.55	8	-14.55
High	2480	-2.36	8	-10.36

POWER SPECTRAL DENSITY







9.6. CONDUCTED SPURIOUS EMISSIONS

LIMITS

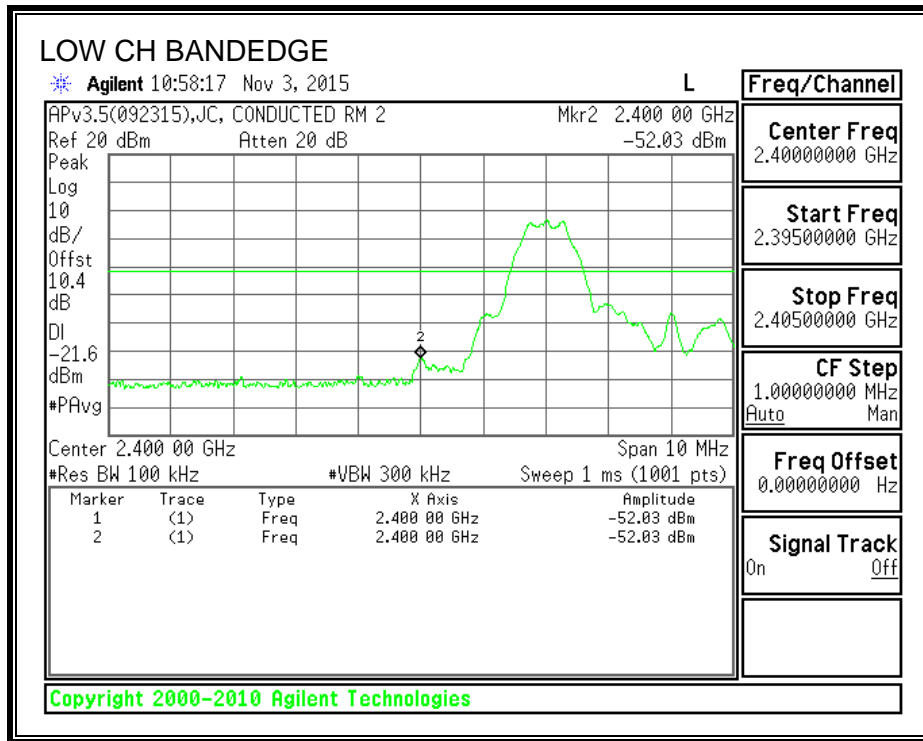
FCC §15.247 (d)

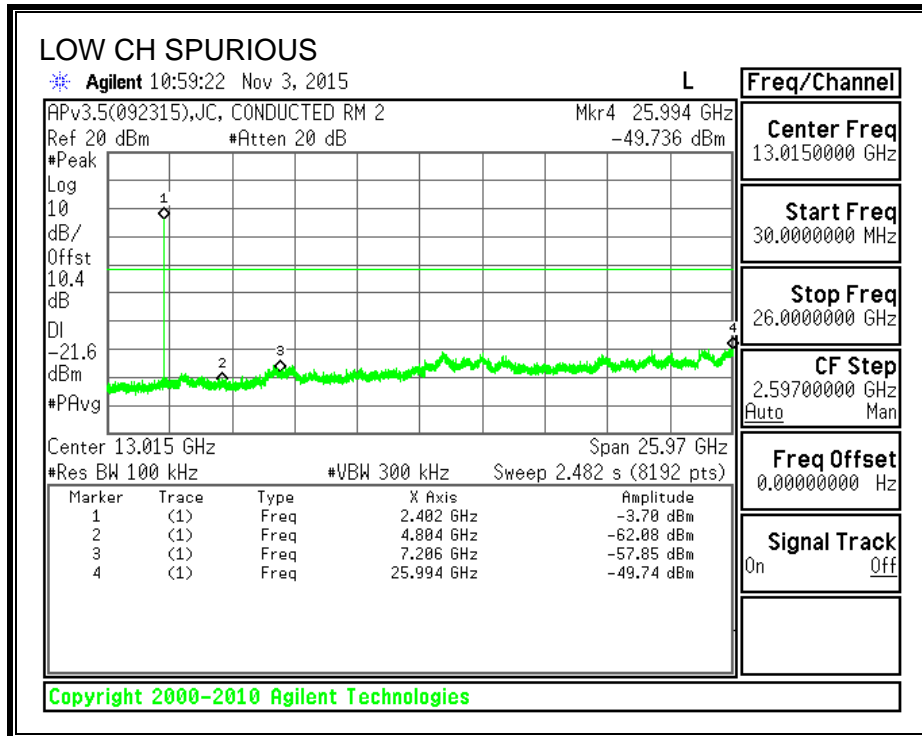
IC RSS-247 A5.5

Output power was measured based on the use of a peak measurement, therefore the required attenuation is 20 dB.

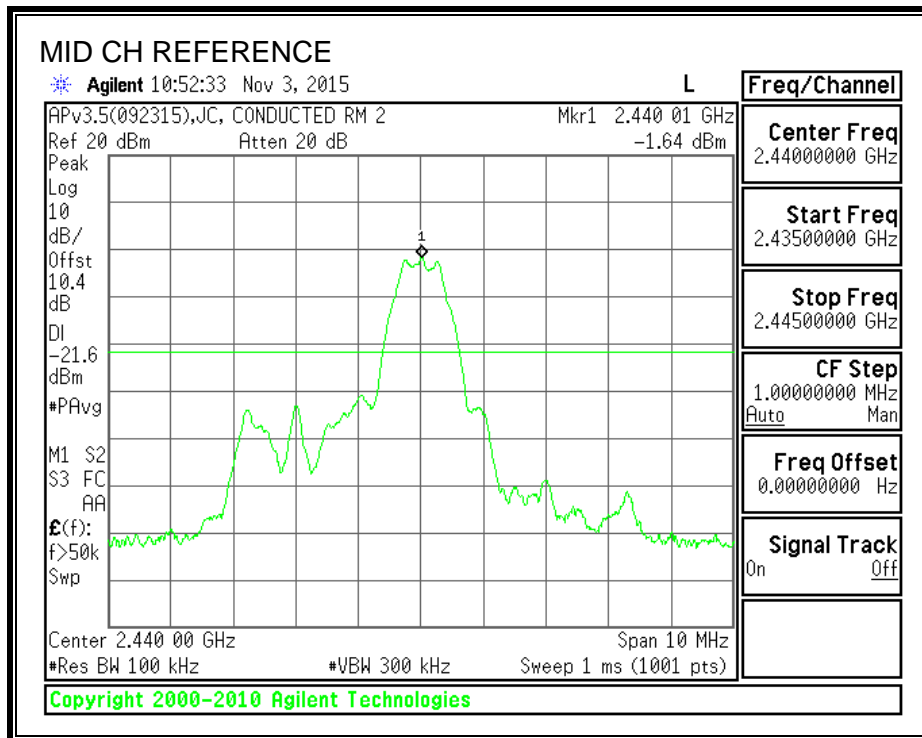
RESULTS

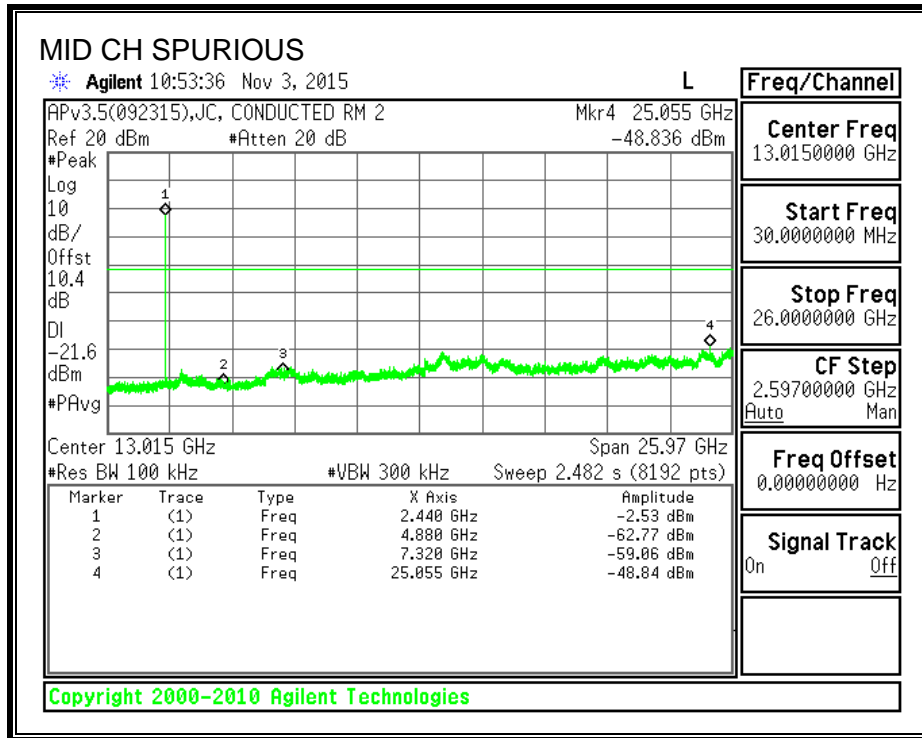
SPURIOUS EMISSIONS, LOW CHANNEL



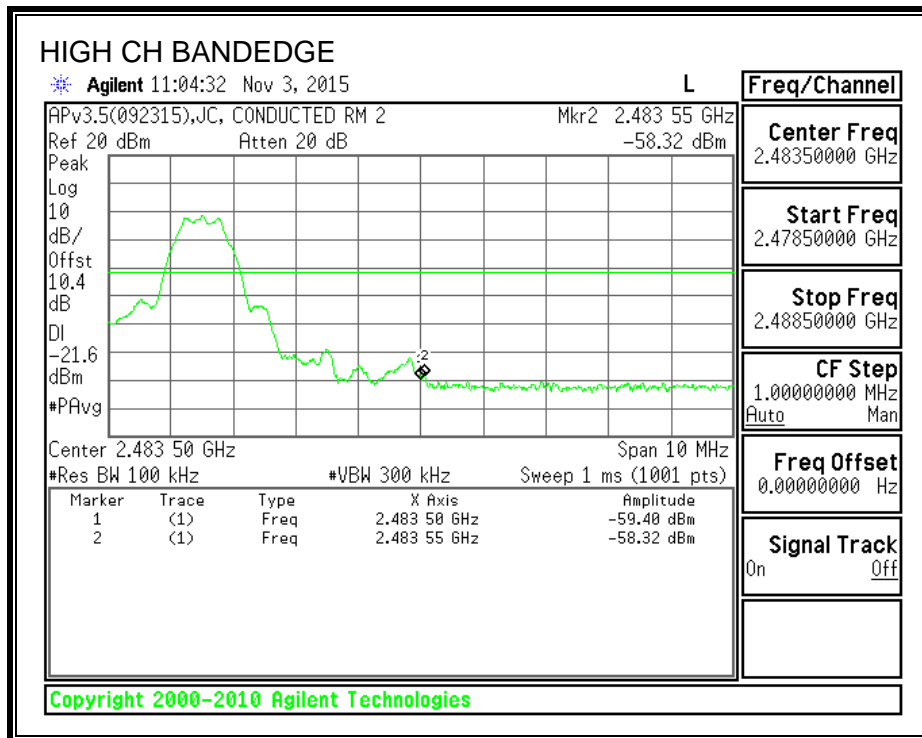


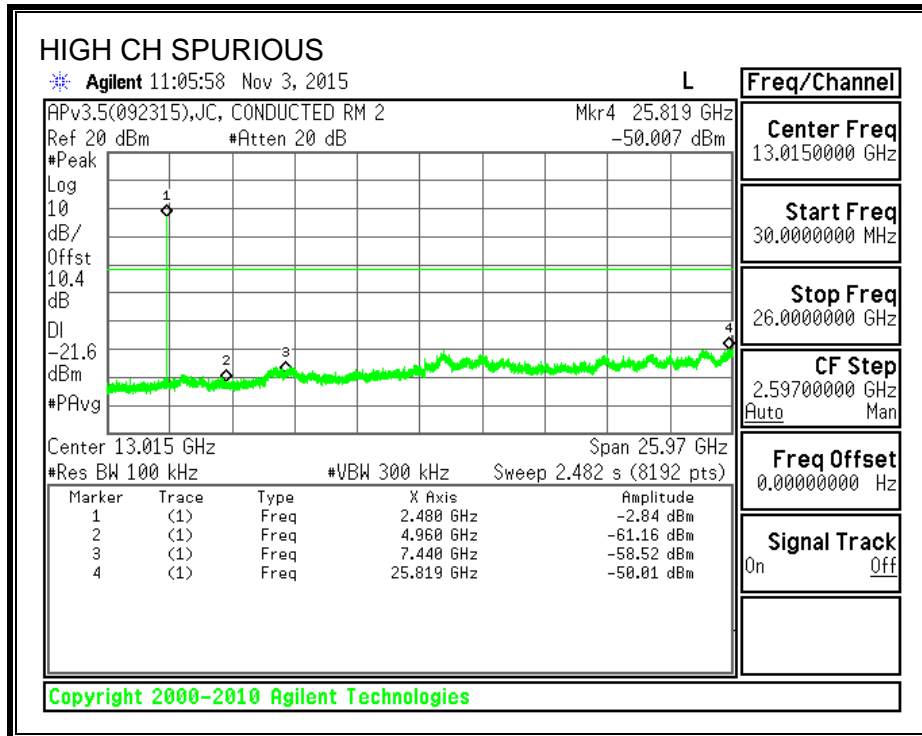
SPURIOUS EMISSIONS, MID CHANNEL





SPURIOUS EMISSIONS, HIGH CHANNEL





10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN Clause 8.9 (Transmitter)

IC RSS-GEN Clause 7.1.2 (Receiver)

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1GHz measurements and 1.5 m above the ground plane for above 1GHz measurements. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 120 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

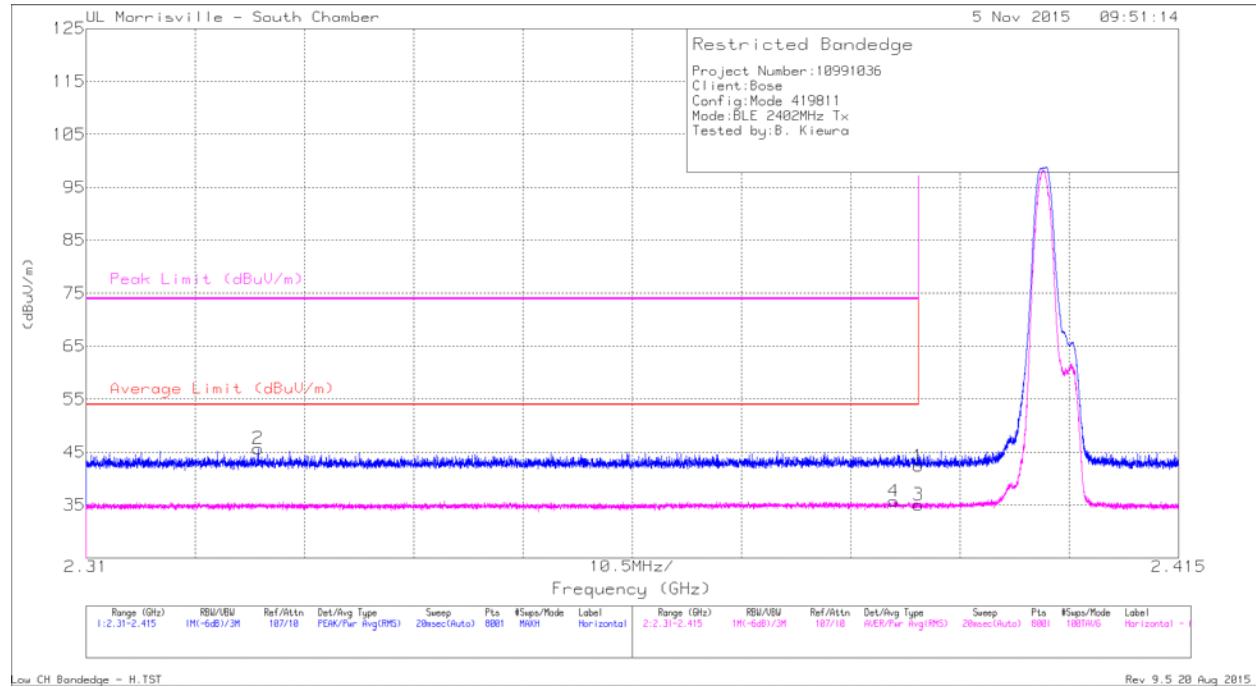
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

10.2. TRANSMITTER ABOVE 1 GHz

10.3. TX ABOVE 1 GHz FOR BLUETOOTH LOW ENERGY MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



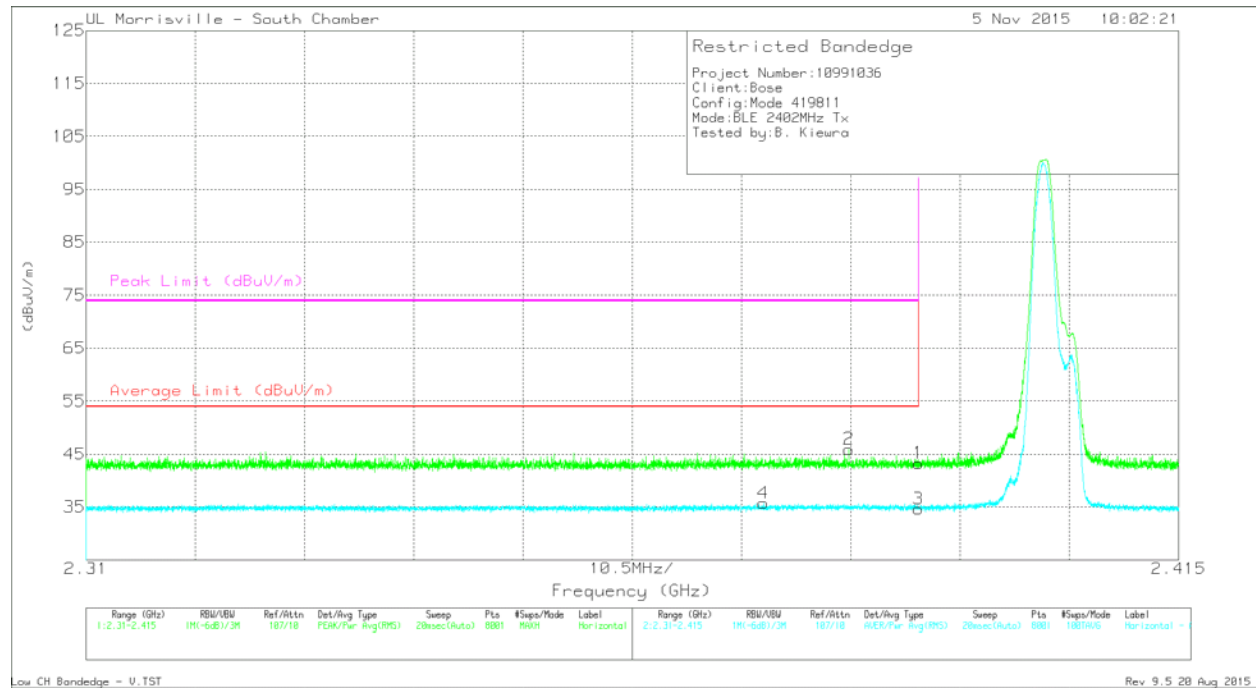
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AF AT0069 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	34.57	Pk	32	-24.2	0	42.37	-	-	74	-31.63	253	125	H
2	* 2.327	37.54	Pk	31.9	-23.8	0	45.64	-	-	74	-28.36	253	125	H
3	* 2.39	25.06	RMS	32	-24.2	2.17	35.03	54	-18.97	-	-	253	125	H
4	* 2.388	25.64	RMS	32	-24.1	2.17	35.71	54	-18.29	-	-	253	125	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



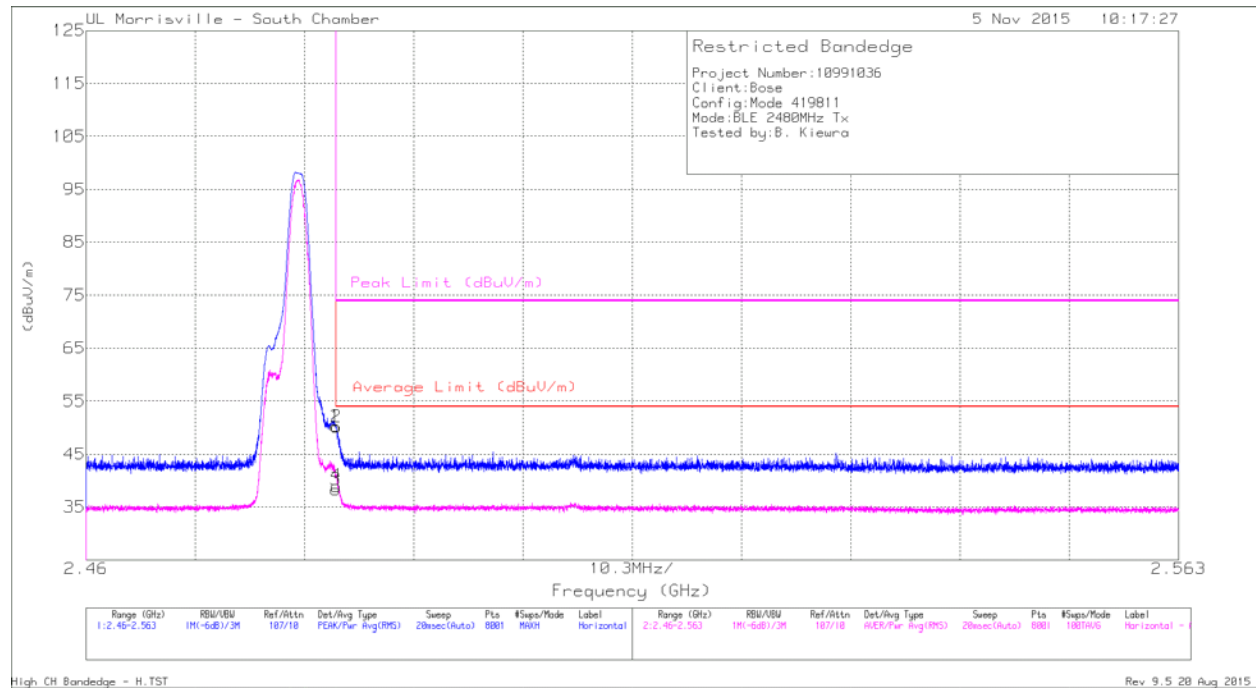
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	35.46	Pk	32	-24.2	0	43.26	-	-	74	-30.74	17	149	V
2	* 2.383	38.03	Pk	32	-24.1	0	45.93	-	-	74	-28.07	17	149	V
3	* 2.39	24.66	RMS	32	-24.2	2.17	34.63	54	-19.37	-	-	17	149	V
4	* 2.375	25.64	RMS	32	-24.1	2.17	35.71	54	-18.29	-	-	17	149	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



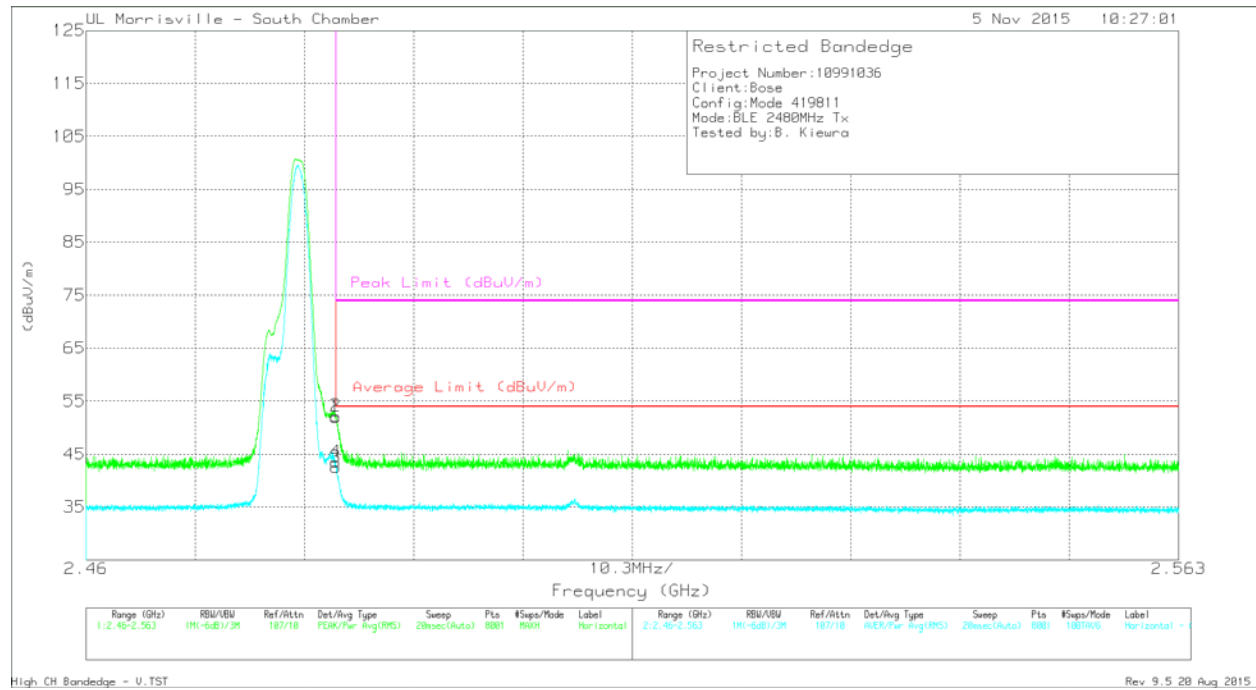
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	42.82	Pk	32.1	-24.7	0	50.22	-	-	74	-23.78	242	115	H
2	* 2.484	42.74	Pk	32.1	-24.7	0	50.14	-	-	74	-23.86	242	115	H
3	* 2.484	30.87	RMS	32.1	-24.7	2.17	40.44	54	-13.56	-	-	242	115	H
4	* 2.484	31.58	RMS	32.1	-24.7	2.17	41.15	54	-12.85	-	-	242	115	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	44.52	Pk	32.1	-24.7	0	51.92	-	-	74	-22.08	19	120	V
2	* 2.484	44.76	Pk	32.1	-24.7	0	52.16	-	-	74	-21.84	19	120	V
3	* 2.484	32.94	RMS	32.1	-24.7	2.17	42.51	54	-11.49	-	-	19	120	V
4	* 2.484	33.93	RMS	32.1	-24.7	2.17	43.5	54	-10.5	-	-	19	120	V

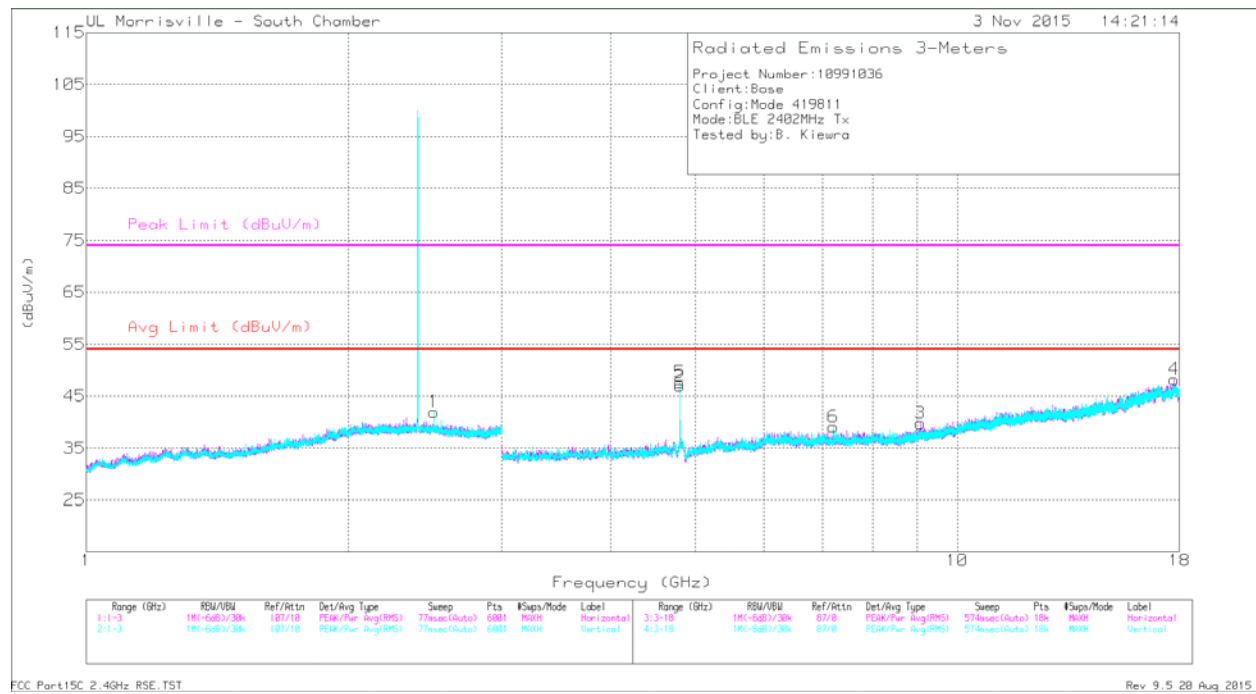
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

1-18GHz Low Channel



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl /Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.805	49.1	PK2	34	-31.7	0	51.4	-	-	74	-22.6	166	109	H
	* 4.804	40.73	MAv1	34	-31.7	2.17	45.2	54	-8.8	-	-	166	109	H
3	* 9.067	35.36	PK2	36.2	-27	0	44.56	-	-	74	-29.44	182	132	H
	* 9.067	23.72	MAv1	36.2	-27	0	32.92	54	-21.08	-	-	182	132	H
4	* 17.728	35.48	PK2	41.6	-22.7	0	54.38	-	-	74	-19.62	217	334	H
	* 17.727	23.27	MAv1	41.6	-22.8	0	42.07	54	-11.93	-	-	217	334	H
5	* 4.804	48.51	PK2	34	-31.7	0	50.81	-	-	74	-23.19	184	106	V
	* 4.804	40.62	MAv1	34	-31.7	2.17	45.09	54	-8.91	-	-	184	106	V
1	2.506	34.62	Pk	32.1	-24.8	0	41.92	-	-	-	-	0-360	102	V
6	7.206	32.25	Pk	35.5	-28.7	0	39.05	-	-	-	-	0-360	199	V

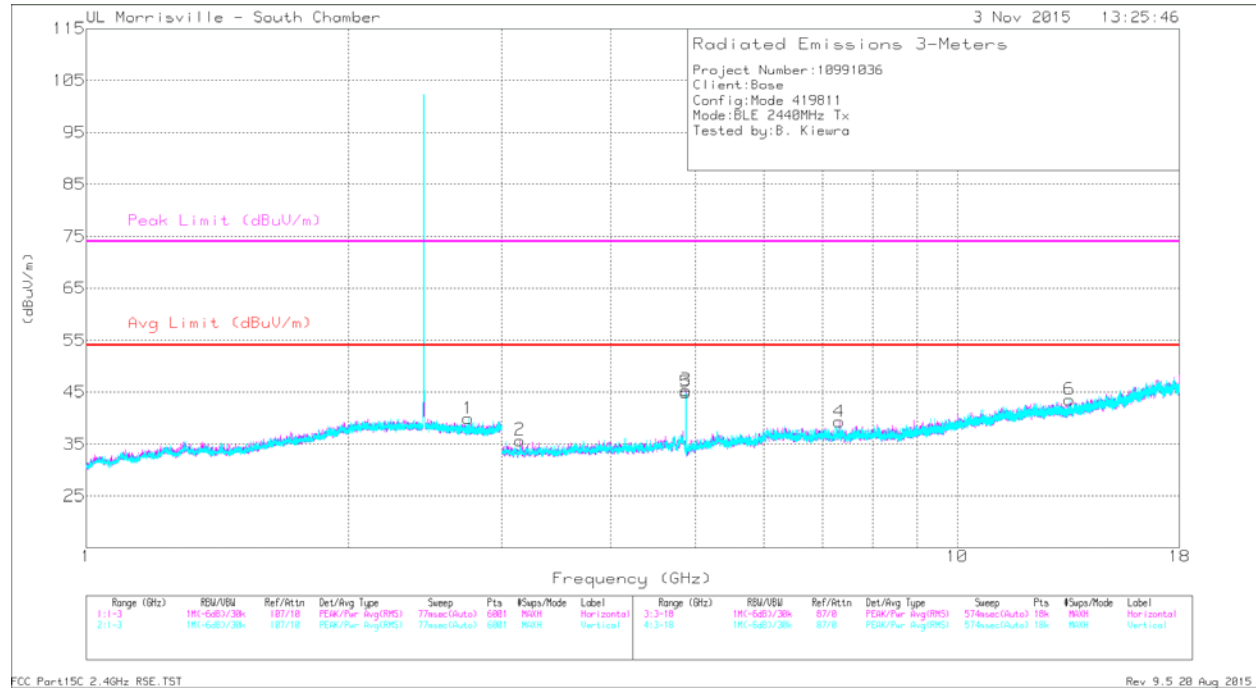
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

1-18GHz Mid Channel



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl /Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.744	37.52	PK2	32.3	-26	0	43.82	-	-	74	-30.18	306	317	V
	* 2.742	26.23	MAv1	32.3	-26	0	32.53	54	-21.47	-	-	306	317	V
3	* 4.881	46.59	PK2	33.9	-31.6	0	48.89	-	-	74	-25.11	34	310	H
	* 4.88	38.94	MAv1	33.9	-31.6	2.17	43.41	54	-10.59	-	-	34	310	H
4	* 7.321	37.96	PK2	35.5	-28.4	0	45.06	-	-	74	-28.94	269	112	H
	* 7.319	26.71	MAv1	35.5	-28.4	2.17	35.98	54	-18.02	-	-	269	112	H
5	* 4.88	47.22	PK2	33.9	-31.6	0	49.52	-	-	74	-24.48	72	112	V
	* 4.88	40	MAv1	33.9	-31.6	2.17	44.47	54	-9.53	-	-	72	112	V
2	3.148	36.32	Pk	32.8	-33.4	0	35.72	-	-	-	-	0-360	199	H
6	13.453	29.6	Pk	39.1	-25.1	0	43.6	-	-	-	-	0-360	199	V

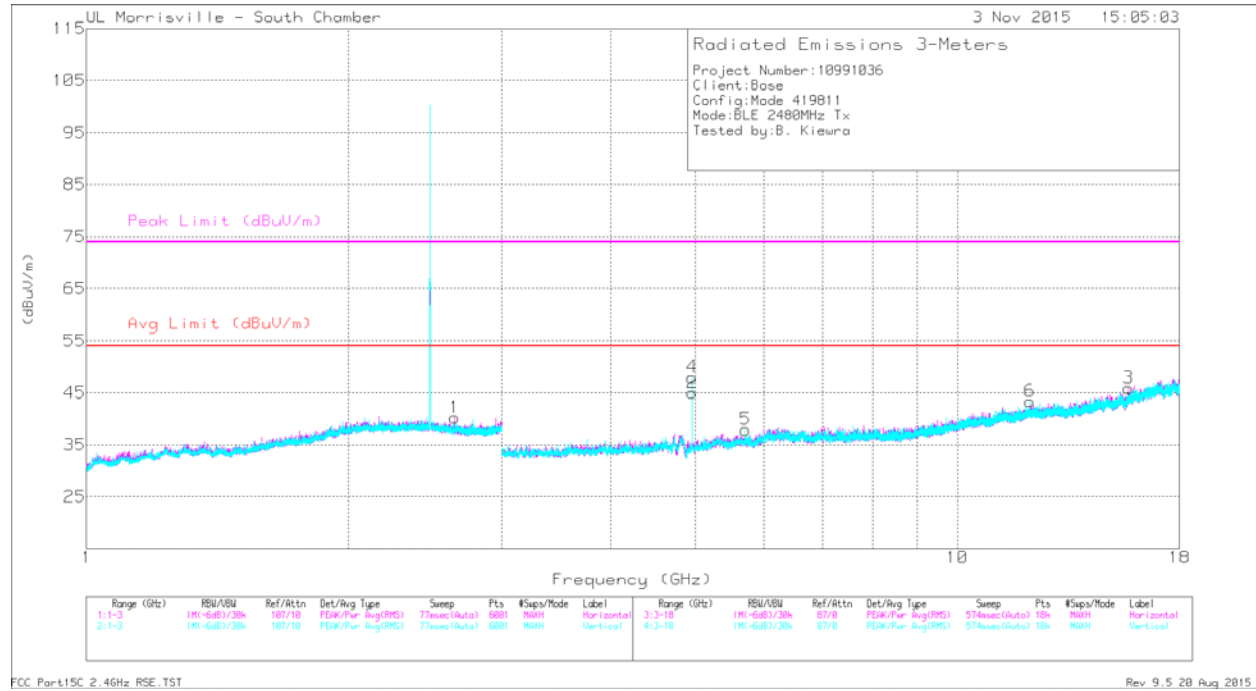
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

1-18GHz High Channel



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0069 (dB/m)	Amp/Cbl /Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.959	45.77	PK2	33.9	-31.6	0	48.07	-	-	74	-25.93	248	113	H
	* 4.96	37.58	MAv1	33.9	-31.6	2.17	42.05	54	-11.95	-	-	248	113	H
3	* 15.73	33.88	PK2	40.6	-23.5	0	50.98	-	-	74	-23.02	317	121	H
	* 15.731	22.33	MAv1	40.6	-23.5	0	39.43	54	-14.57	-	-	317	121	H
4	* 4.96	46.99	PK2	33.9	-31.6	0	49.29	-	-	74	-24.71	80	104	V
	* 4.96	39.79	MAv1	33.9	-31.6	2.17	44.26	54	-9.74	-	-	80	104	V
6	* 12.118	33.77	PK2	38.9	-24.8	0	47.87	-	-	74	-26.13	171	330	V
	* 12.119	22.55	MAv1	38.9	-24.8	0	36.65	54	-17.35	-	-	171	330	V
1	2.648	33.69	Pk	32.2	-25.7	0	40.19	-	-	-	-	0-360	199	H
5	5.715	33.8	Pk	34.6	-30.5	0	37.9	-	-	-	-	0-360	199	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

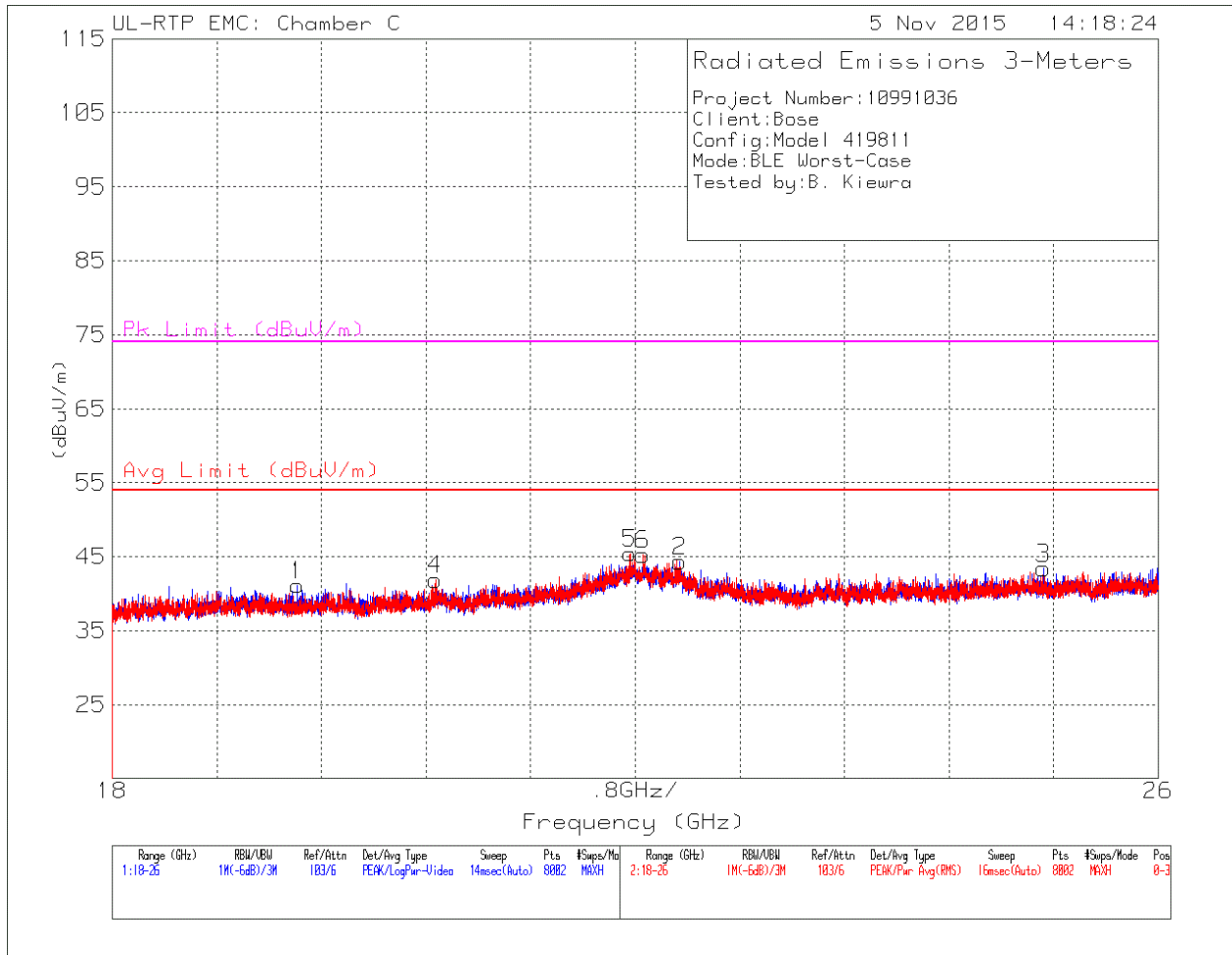
Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.3.1. WORST-CASE 18-26GHz

SPURIOUS EMISSIONS 18 TO 26GHz (WORST-CASE CONFIGURATION)

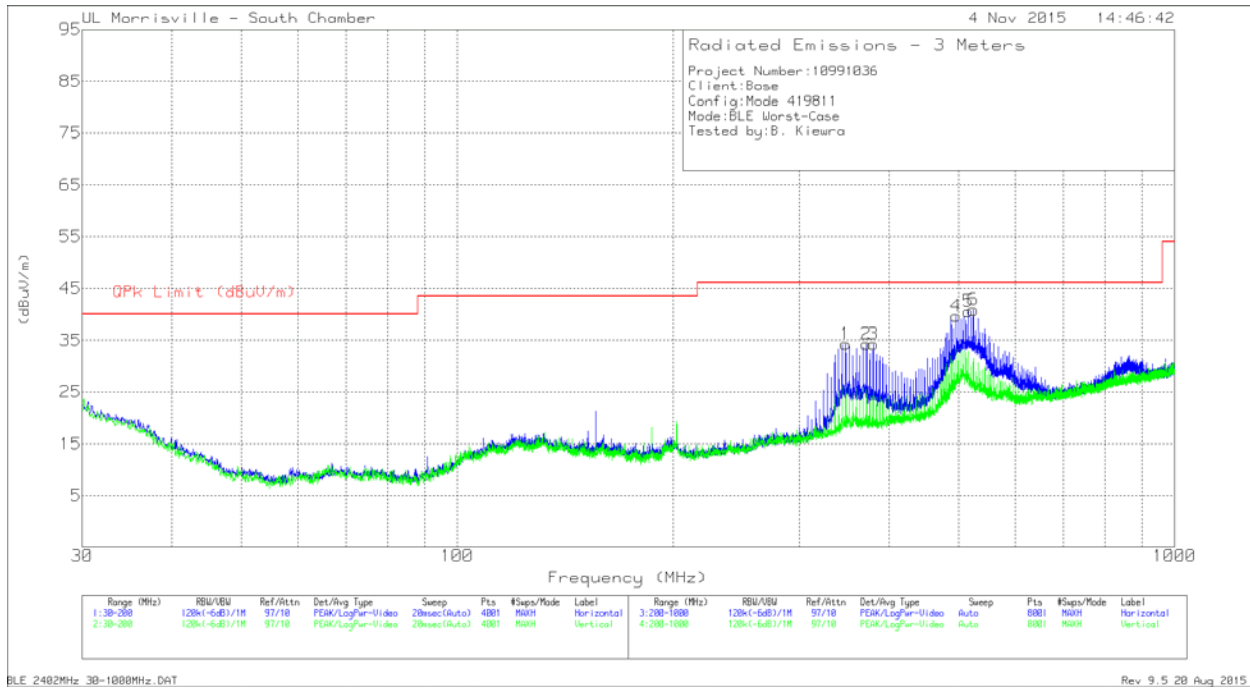


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Pk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	19.417	49.74	Pk	32.6	-41.2	41.14	-	-	74	-32.86	0-360	200	H
4	20.472	49.81	Pk	33.2	-41.1	41.91	-	-	74	-32.09	0-360	125	V
5	21.961	49.65	Pk	36.4	-40.6	45.45	-	-	74	-28.55	0-360	150	V
6	22.057	49.09	Pk	36.7	-40.5	45.29	-	-	74	-28.71	0-360	125	V
2	22.34	48.87	Pk	36	-40.5	44.37	-	-	74	-29.63	0-360	101	H
3	25.123	48.32	Pk	33.8	-38.7	43.42	-	-	74	-30.58	0-360	250	H

Pk - Peak detector

10.4. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF AT0074 (dB/m)	Port 0 Factors	DC Corr (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	348	44.43	Pk	19.2	-29.4	0	34.23	46.02	-11.79	0-360	102	H
2	372	43.76	Pk	19.8	-29.3	0	34.26	46.02	-11.76	0-360	102	H
3	380	43.85	Pk	19.7	-29.3	0	34.25	46.02	-11.77	0-360	102	H
4	496	46.43	Pk	22.1	-28.9	0	39.63	46.02	-6.39	0-360	199	H
5	516.0082	46.65	Qp	22.2	-28.9	0	39.95	46.02	-6.07	141	184	H
6	523.9861	46.06	Qp	22.4	-28.8	0	39.66	46.02	-6.36	148	183	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

Qp - Quasi-Peak detector

END OF REPORT