



**FCC 47 CFR PART 15 SUBPART C
INDUSTRY CANADA RSS-210 ISSUE 8**

**BLUETOOTH LOW ENERGY
CERTIFICATION TEST REPORT**

FOR

HEALTH TRACKING BAND

MODEL NUMBERS:

**FTJ10001, FTJ10002, FTJ10003, FTJ10004,
FTJ10011, FTJ10012, FTJ10013, FTJ10014.
FTJ50001, FTJ50011, FTJ50012, FTJ50013,
FTJ50014**

**FCC ID: 2AB8ZND5
IC: 1000X-ND5**

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Prepared for
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2200 MISSION COLLEGE BOULEVARD
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NVLAP LAB CODE 200065-0

Revision History

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TABLE OF CONTENTS

1. ATTESTATION OF TEST RESULTS	4
2. TEST METHODOLOGY	5
3. FACILITIES AND ACCREDITATION.....	5
4. CALIBRATION AND UNCERTAINTY	5
4.1. MEASURING INSTRUMENT CALIBRATION.....	5
4.2. SAMPLE CALCULATION.....	5
4.3. MEASUREMENT UNCERTAINTY	6
5. EQUIPMENT UNDER TEST	7
5.1. DESCRIPTION OF EUT.....	7
5.2. MANUFACTURER'S DESCRIPTION OF MODEL DIFFERENCES	7
5.3. MAXIMUM OUTPUT POWER	7
5.4. DESCRIPTION OF AVAILABLE ANTENNAS	7
5.5. SOFTWARE AND FIRMWARE	7
5.6. WORST-CASE CONFIGURATION AND MODE	7
5.7. DESCRIPTION OF TEST SETUP	8
6. TEST AND MEASUREMENT EQUIPMENT	10
7. MEASUREMENT METHODS	11
8. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS	12
9. ANTENNA PORT TEST RESULTS	14
9.1. 6 dB BANDWIDTH.....	14
9.2. 99% BANDWIDTH.....	16
9.3. OUTPUT POWER	18
9.4. AVERAGE POWER.....	20
9.5. POWER SPECTRAL DENSITY.....	21
9.6. CONDUCTED SPURIOUS EMISSIONS	23
10. RADIATED TEST RESULTS.....	27
10.1. LIMITS AND PROCEDURE	27
10.2. TRANSMITTER ABOVE 1 GHz – EUT WITHOUT WRISTBAND	28
10.3. WORST-CASE BELOW 1 GHz – EUT WITHOUT WRISTBAND.....	38
10.4. TRANSMITTER ABOVE 1 GHz – EUT WITH METAL WRISTBAND.....	41
10.5. WORST-CASE BELOW 1 GHz –EUT WITH METAL WRISTBAND	51
11. SETUP PHOTOS	54

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: INTEL CORPORATION
2200 MISSION COLLEGE BOULEVARD
SANTA CLARA, CA 95052, U.S.A

EUT DESCRIPTION: HEALTH TRACKING BAND

MODEL: FTJ10001, FTJ10002, FTJ10003, FTJ10004, FTJ10011,
FTJ10012, FTJ10013, FTJ10014. FTJ50001, FTJ50011,
FTJ50012, FTJ50013, FTJ50014

SERIAL NUMBER: LS4794FZ516008V

DATE TESTED: MAY 21 to 27, 2015

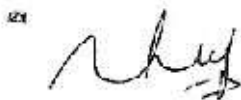
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Pass
INDUSTRY CANADA RSS-210 Issue 8 Annex 8	Pass
INDUSTRY CANADA RSS-GEN Issue 4	Pass

UL Verification Services Inc. 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 Verification Services Inc. 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 Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. 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
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Tested By:



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EMC LABORATORY TECHNICIAN
UL Verification Services Inc.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, RSS-GEN Issue 4, and RSS-247, Issue 1, and ANSI C63.10-2009 for FCC test and ANSI C63.10:2013 deviation of measurement height of 0.8m rather than 1.5m for IC test.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

47173 Benicia Street	47266 Benicia Street
☒ Chamber A	☐ Chamber D
☒ Chamber B	☐ Chamber E
☒ Chamber C	☐ Chamber F
	☐ Chamber G
	☐ Chamber H

The above test sites and facilities are covered under FCC Test Firm Registration # 208313.

Chambers A through H are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-8, respectively.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://ts.nist.gov/standards/scopes/2000650.htm>.

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
Conducted Disturbance, 0.15 to 30 MHz	± 3.52 dB
Radiated Disturbance, 30 to 1000 MHz	± 4.94 dB
Radiated Disturbance, 1 to 6 GHz	± 3.86 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a wearable device intended for health tracking. The device incorporates a BLE radio with an integral antenna.

The EUT is battery powered and incorporates wireless charging.

5.2. MANUFACTURER'S DESCRIPTION OF MODEL DIFFERENCES

Model numbers FTJ10001, FTJ10002, FTJ10003, FTJ10004, FTJ10011, FTJ10012, FTJ10013, FTJ10014. FTJ50001, FTJ50011, FTJ50012, FTJ50013 and FTJ50014 are the same except for band style and color.

5.3. 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	4.53	2.84

5.4. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a PCB antenna, with a maximum gain of 0 dBi.

5.5. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was DVT, rev. build 1883.

5.6. WORST-CASE CONFIGURATION AND MODE

Radiated emission was 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 for the EUT without metal band and the Y orientation was worst-case orientation for the EUT with metal band, therefore, all final radiated testing was performed with the EUT in X orientation without metal band and Y orientation with metal band .

5.7. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop	Lenovo	20332	YB04282152	--
Pass Thru Board 1 (Connected to Laptop)	Intel	--	--	--
Pass Thru Board 2 (Connected to EUT)	Intel	--	--	--

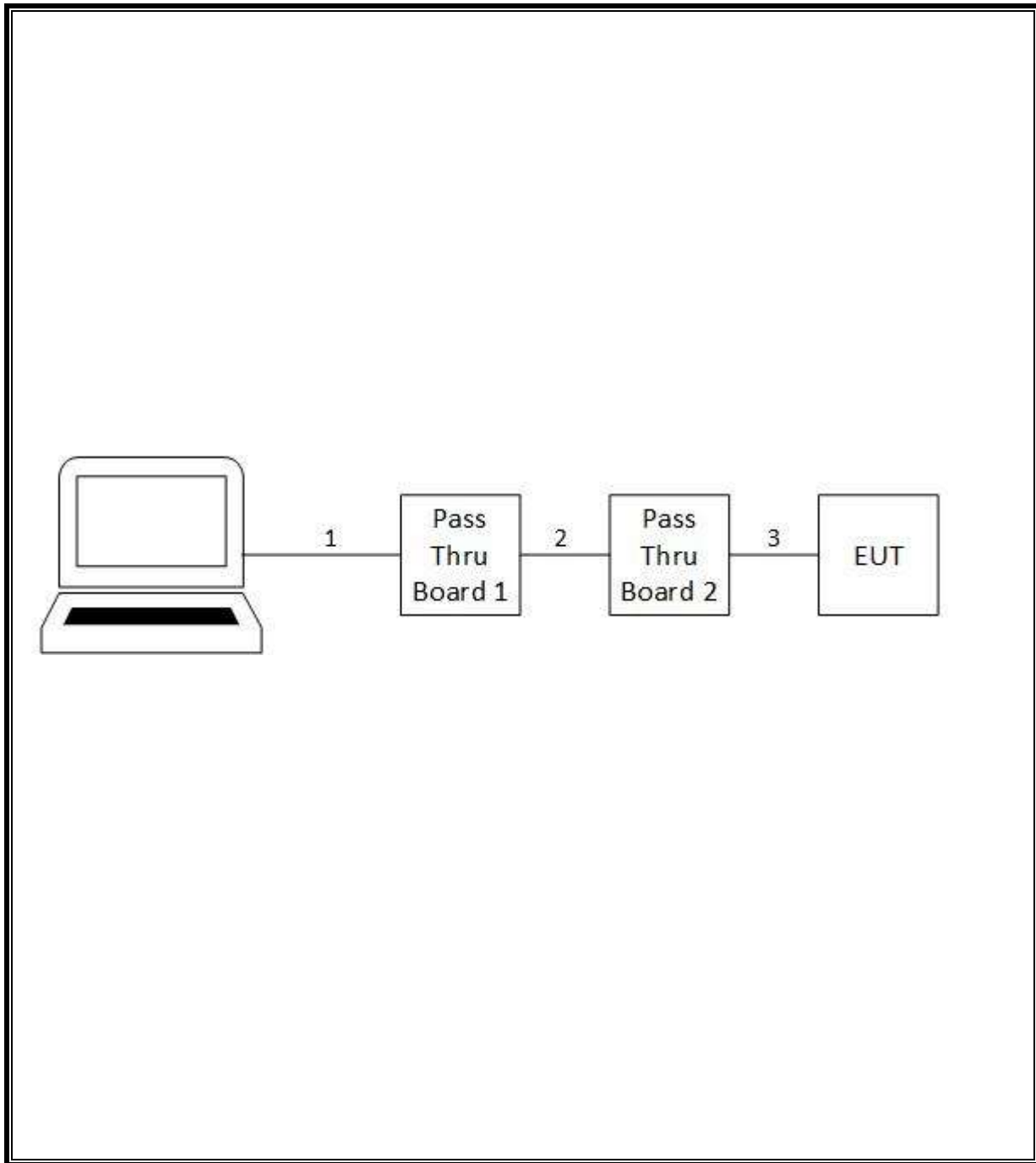
I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB	1	USB B	shielded	1	Laptop to Pass Thru Board 2
2	DATA	1	Multi Pin	Unshielded	0.15	Pass Thru Board 1 to Pass Thru Board 2
3	DATA	1	Soldered Pins	Unshielded	0.03	Pass Thru Board 2 to EUT

TEST SETUP

The EUT is continuously transmitting during the tests.

SETUP DIAGRAM FOR TESTS



6. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment List					
Description	Manufacturer	Model	T No.	Cal Date	Cal Due
Radiated Software	UL	UL EMC	Ver 9.5, July 22, 2014		
Antenna, Horn 1-18GHz	ETS	3117	345	03/03/2015	03/03/2016
Antenna, Horn 1-18GHz	ETS	3117	119	01/25/2015	01/15/2016
Spectrum Analyzer, PXA, 3Hz-44GHz	Agilent	N9030A	907	05/15/2015	05/15/2016
Spectrum Analyzer, PXA, 3Hz-44GHz	Agilent	N8030A	342	06/25/2014	06/25/2015
Spectrum Analyzer, PXA, 3Hz-44GHz	Agilent	E4446A	99	06/03/2014	06/03/2015
Antenna, Broadband Hybrid, 30Mhz - 1000Mhz	Sunol Sciences	JB1	243	12/08/2014	12/08/2015
Power Meter, P-series single channel	Agilent	N1911A	229	08/07/2014	08/07/2015
Power Sensor, Peak and average, 50MHz-6 GHz, 5MHz BW	Agilent	E9323A	117	03/09/2015	03/09/2016

7. MEASUREMENT METHODS

6 dB BW: KDB 558074 D01 v03r02, Section 8.1.

Output Power: KDB 558074 D01 v03r02, Section 9.1.2.

Power Spectral Density: KDB 558074 D01 v03r02, Section 10.2.

Out-of-band emissions in non-restricted bands: KDB 558074 D01 v03r02, Section 11.0.

Out-of-band emissions in restricted bands: KDB 558074 D01 v03r02, Section 12.1.

Band-edge: KDB 558074 D01 v03r02, Section 12.1

8. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

LIMITS

None; for reporting purposes only.

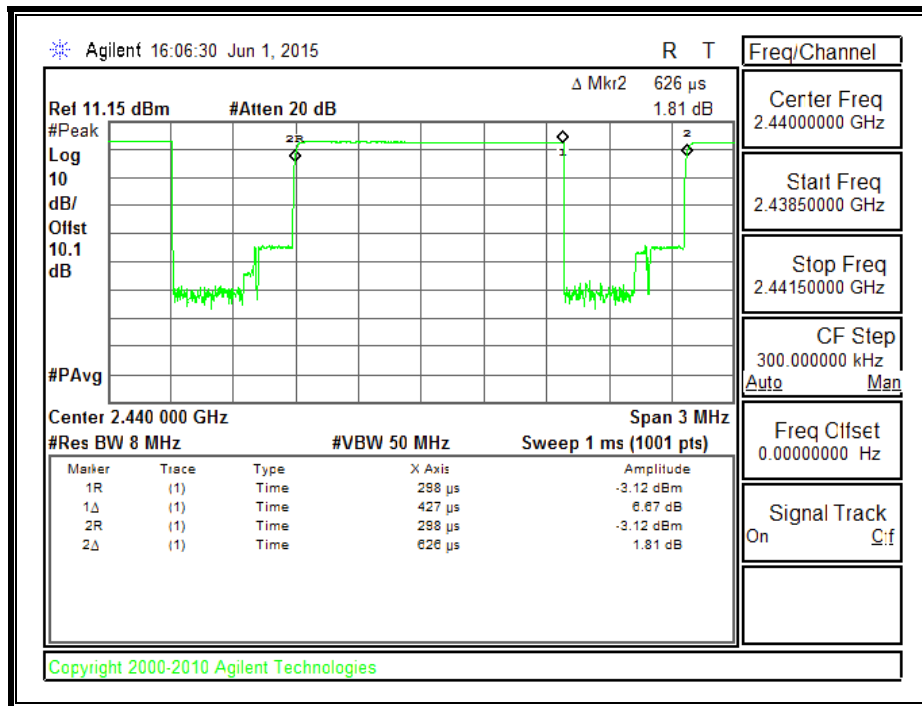
PROCEDURE

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	0.427	0.626	0.682	68.21%	1.66	2.342

DUTY CYCLE PLOTS



9. ANTENNA PORT TEST RESULTS

9.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

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

RESULTS

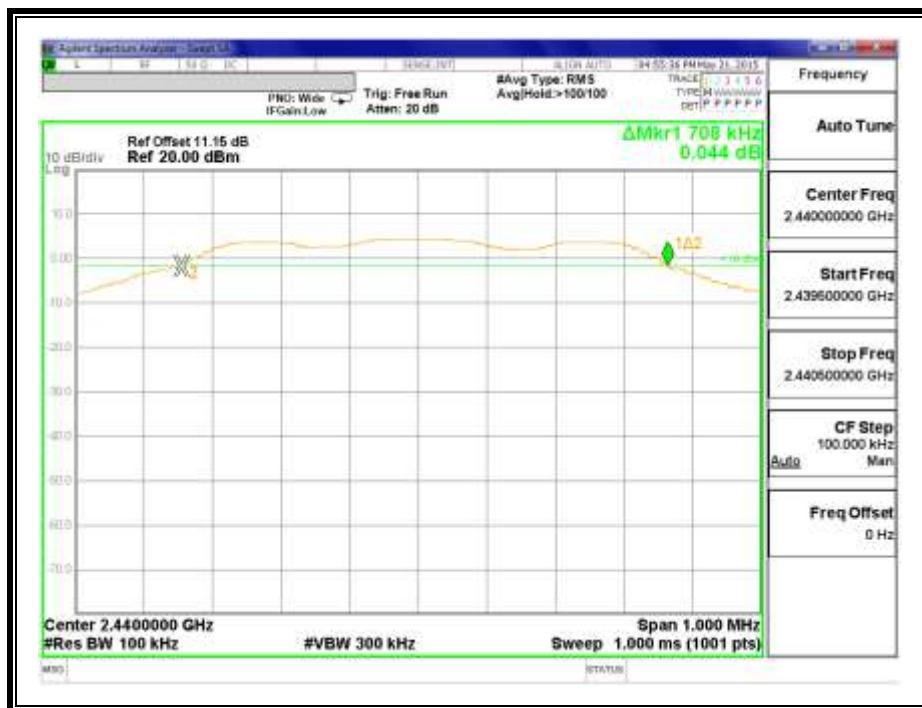
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2402	0.6910	0.5
Middle	2440	0.7080	0.5
High	2480	0.7070	0.5

6 dB BANDWIDTH PLOTS

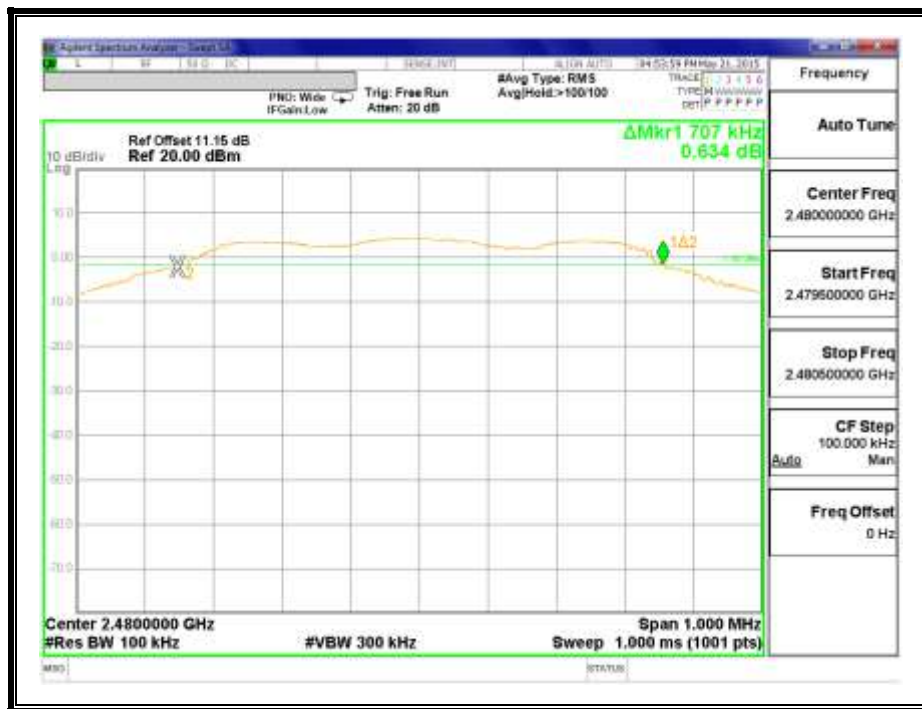
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



9.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

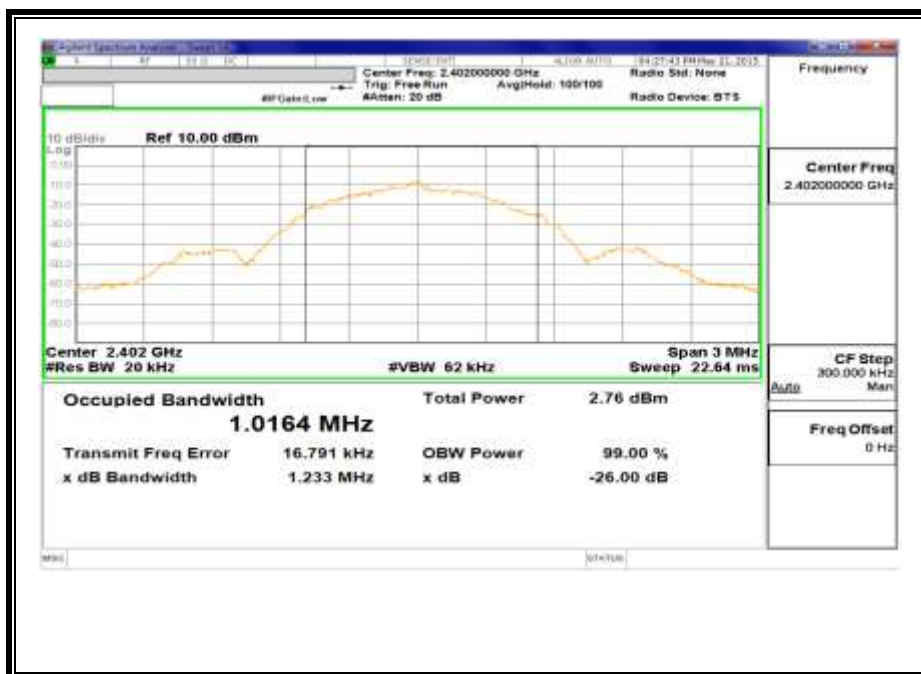
The transmitter output is connected to the spectrum analyzer. The RBW is set to 1% to 3% of the 99 % bandwidth and to 1% of the span. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	1.0164
Middle	2440	1.0150
High	2480	1.0154

99% BANDWIDTH PLOTS

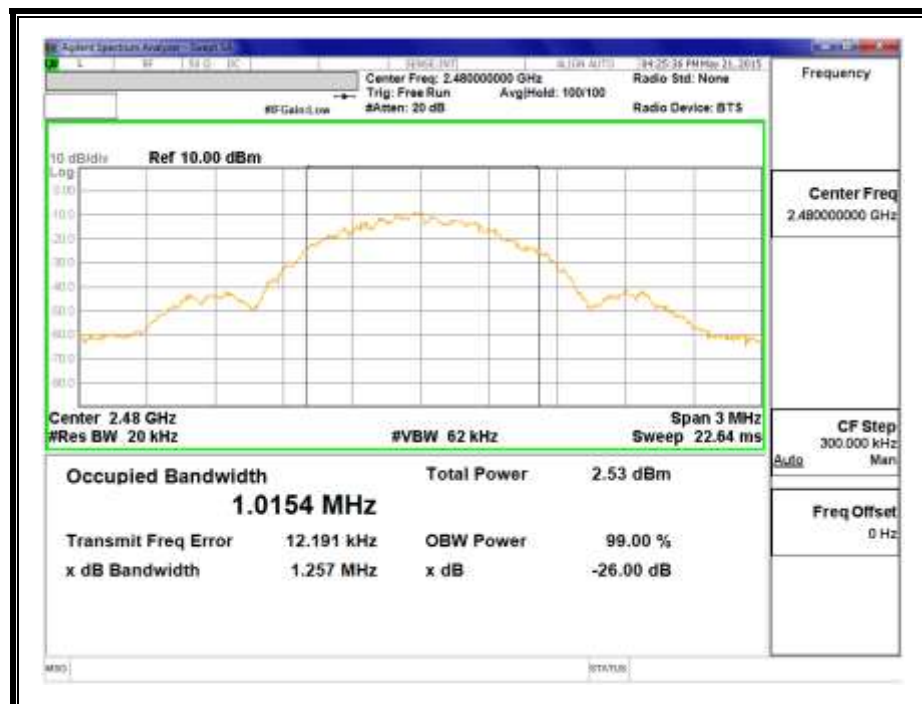
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



9.3. OUTPUT POWER

LIMITS

FCC §15.247 (b)

IC RSS-210 A8.4

The maximum antenna gain is less than or equal to 6 dBi, therefore the limit is 30 dBm.

RESULTS

Channel	Frequency (MHz)	Peak Power Reading (dBm)	Limit (dBm)	Margin (dB)
Low	2402	4.528	30	-25.472
Middle	2440	4.493	30	-25.507
High	2480	4.385	30	-25.615

OUTPUT POWER PLOTS

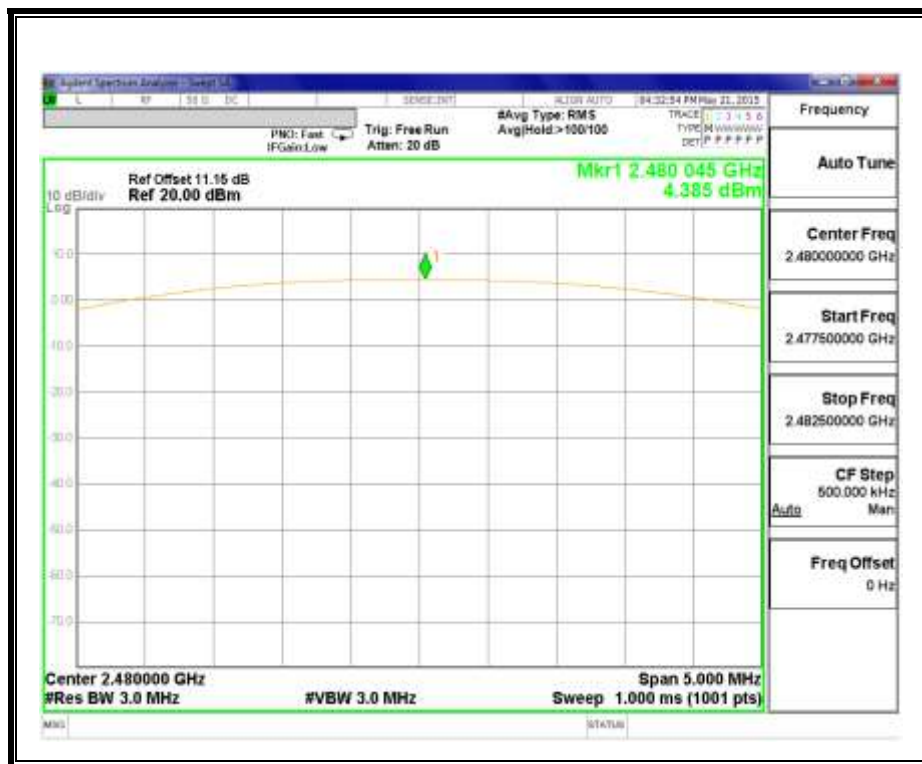
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



9.4. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

Channel	Frequency (MHz)	AV power (dBm)
Low	2402	4.18
Middle	2440	4.19
High	2480	4.11

9.5. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247 (e)

IC RSS-210 A8.2 (b)

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	-7.01	8	-15.01
Middle	2440	-7.08	8	-15.08
High	2480	-7.61	8	-15.61

POWER SPECTRAL DENSITY PLOTS

LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



9.6. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

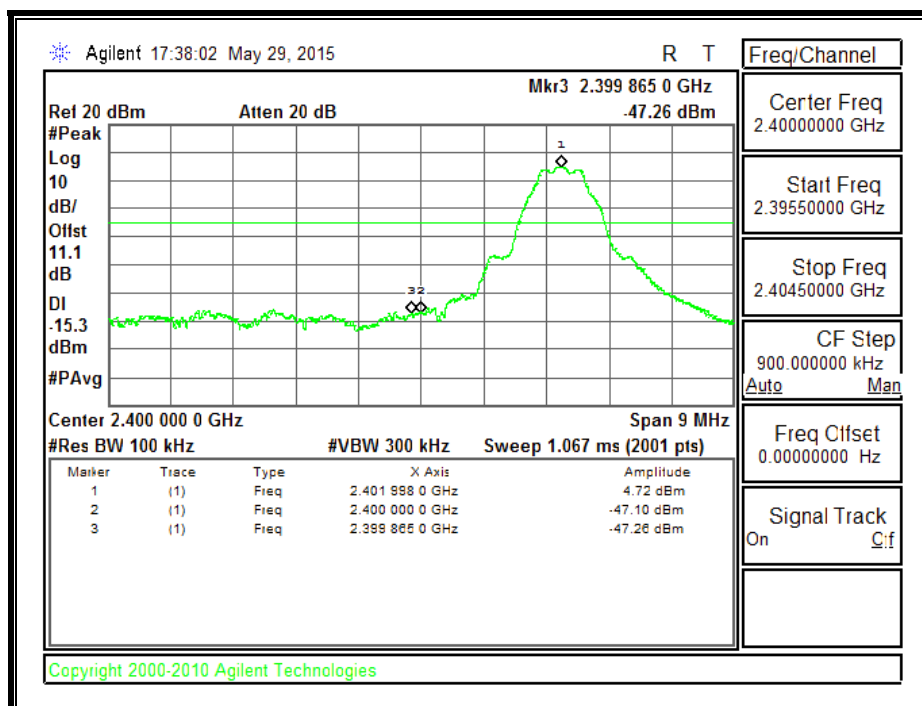
IC RSS-210 A8.5

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

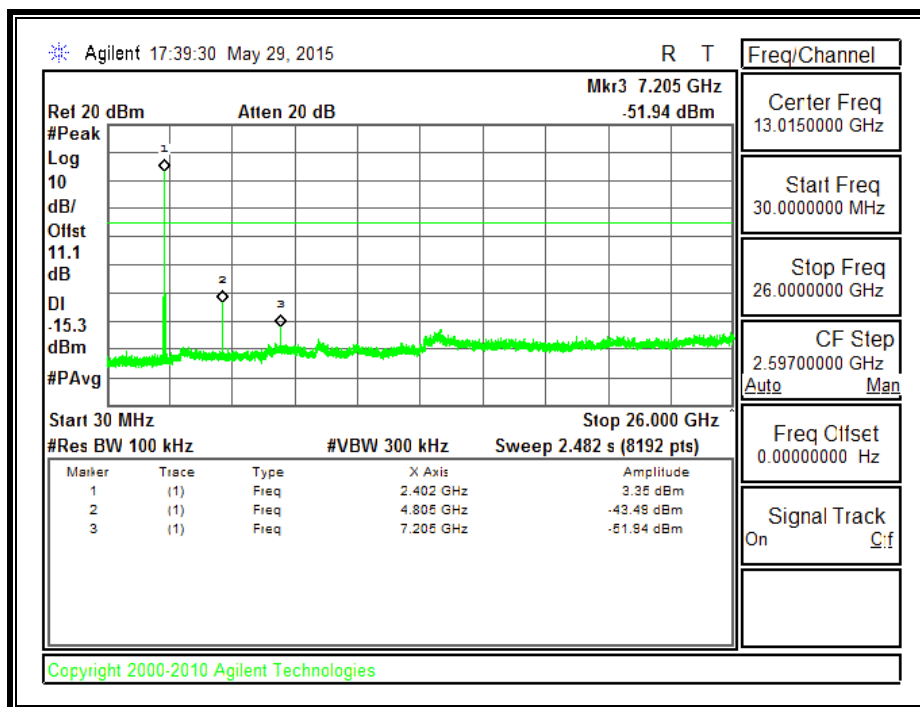
RESULTS

SPURIOUS EMISSIONS, LOW CHANNEL

LOW CHANNEL BANDEDGE



LOW CHANNEL SPURIOUS

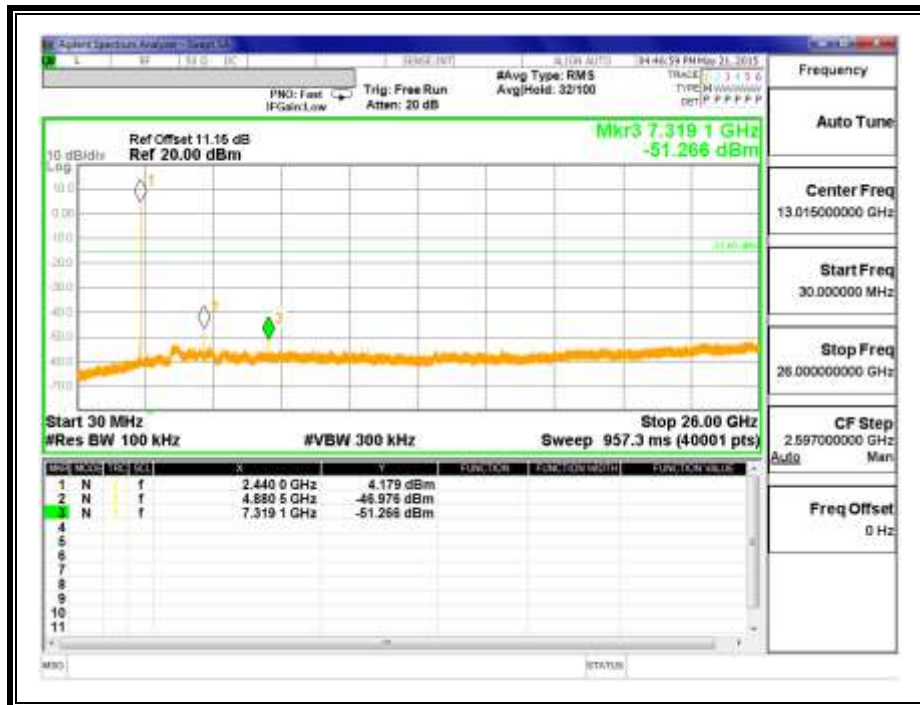


SPURIOUS EMISSIONS, MID CHANNEL

MID CHANNEL BANDEDGE

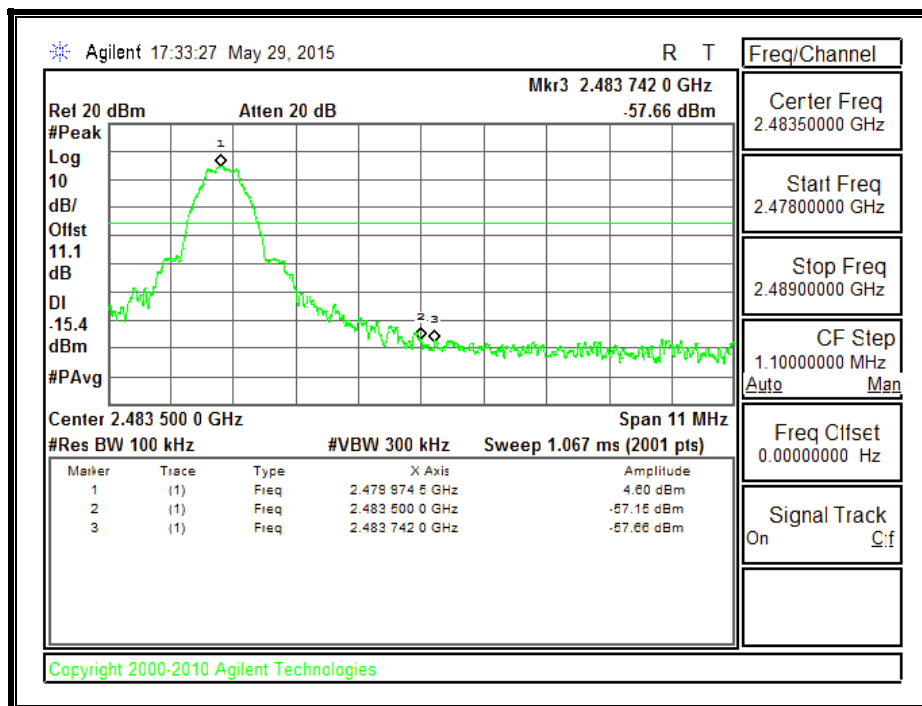


MID CHANNEL SPURIOUS

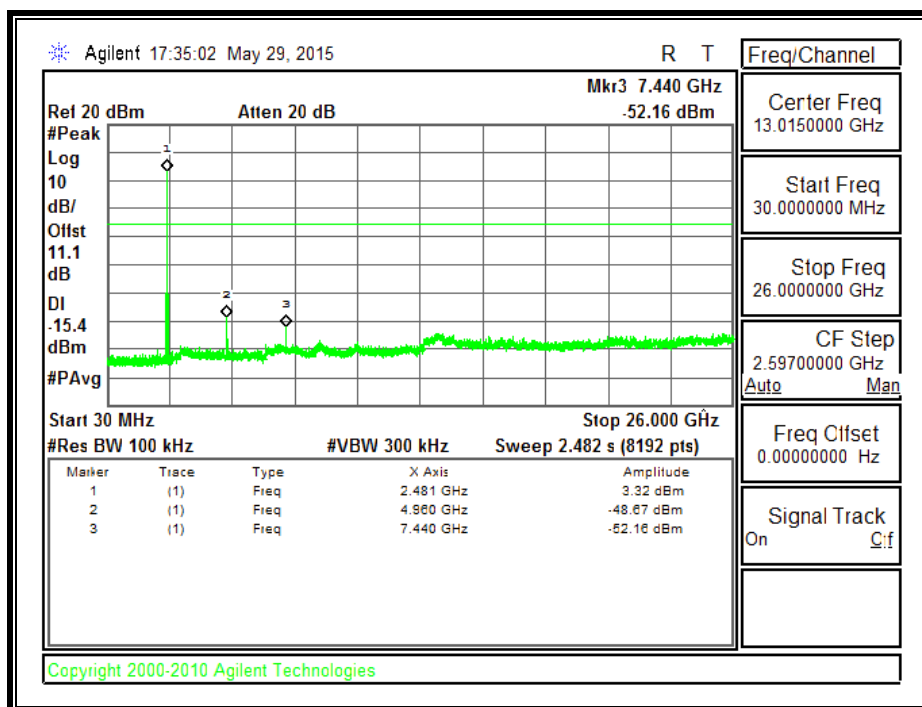


SPURIOUS EMISSIONS, HIGH CHANNEL

HIGH CHANNEL BANDEDGE



HIGH CHANNEL SPURIOUS



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. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

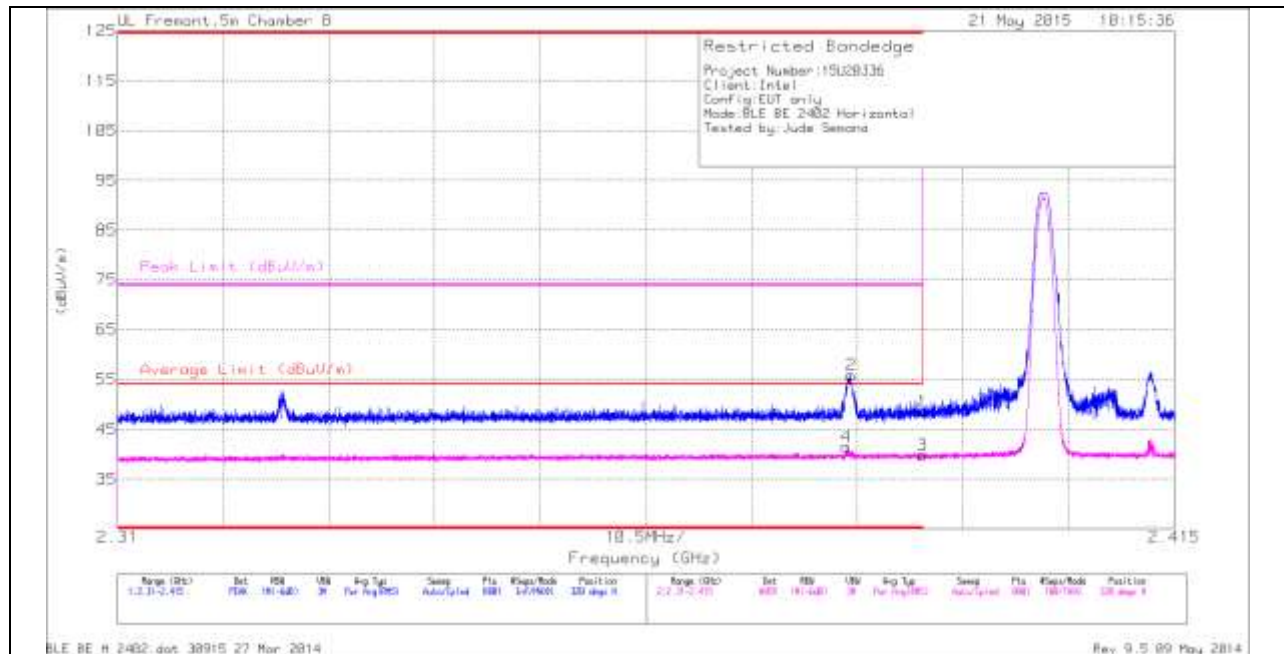
For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 3MHz video bandwidth with average detector 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 the 2.4 GHz 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.

HORIZONTAL PEAK AND AVERAGE PLOT

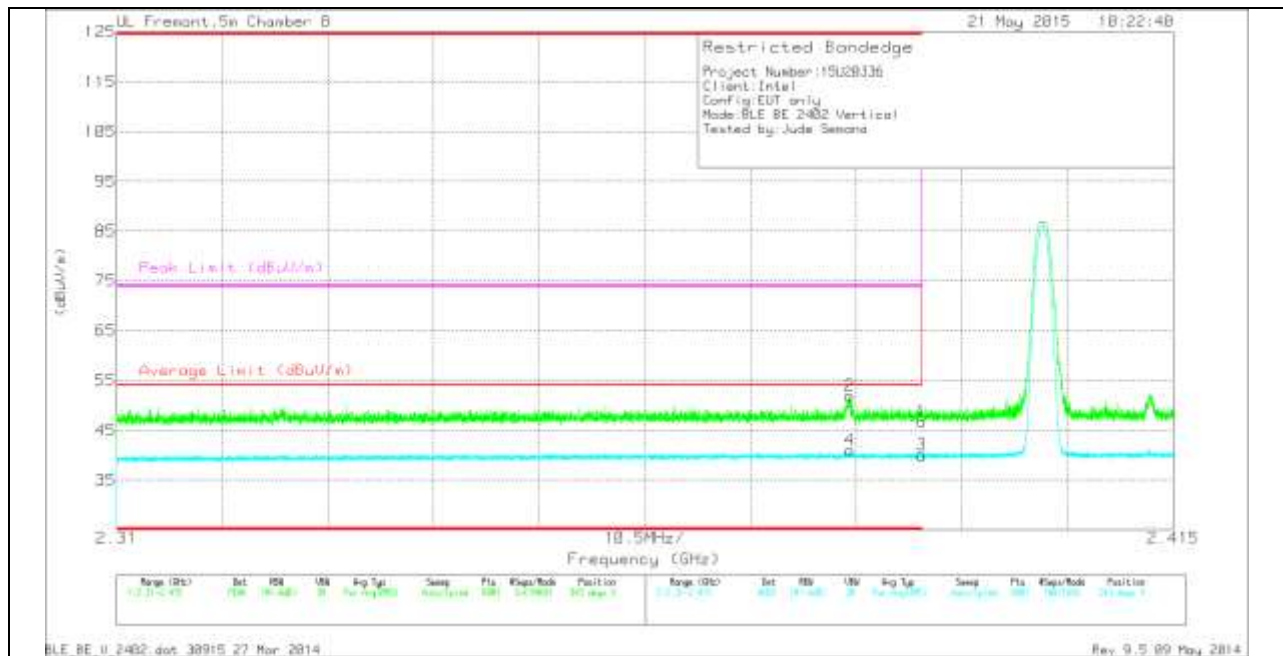


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fit r/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	39.21	PK	32	-22.6	0	48.61	-	-	74	-25.39	320	290	H
2	* 2.383	46.53	PK	32	-22.6	0	55.93	-	-	74	-18.07	320	290	H
3	* 2.39	28.74	RMS	32	-22.6	1.7	39.84	54	-14.16	-	-	320	290	H
4	* 2.382	30.48	RMS	32	-22.6	1.7	41.58	54	-12.42	-	-	320	290	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector
RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/CbI/Filt r/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	37.48	PK	32	-22.6	0	46.88	-	-	74	-27.12	343	346	V
2	* 2.383	42.55	PK	32	-22.6	0	51.95	-	-	74	-22.05	343	346	V
3	* 2.39	28.76	RMS	32	-22.6	1.7	39.86	54	-14.14	-	-	343	346	V
4	* 2.383	29.65	RMS	32	-22.6	1.7	40.75	54	-13.25	-	-	343	346	V

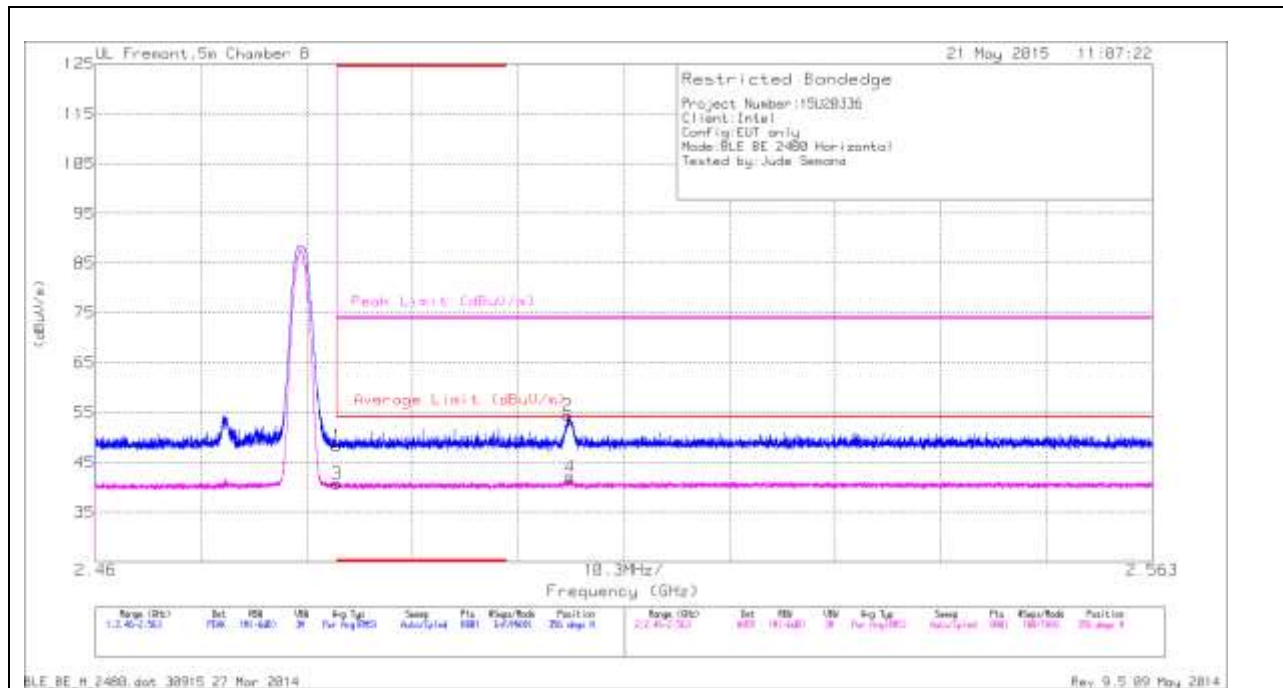
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL) - EUT WITHOUT WRISTBAND

HORIZONTAL PEAK AND AVERAGE PLOT

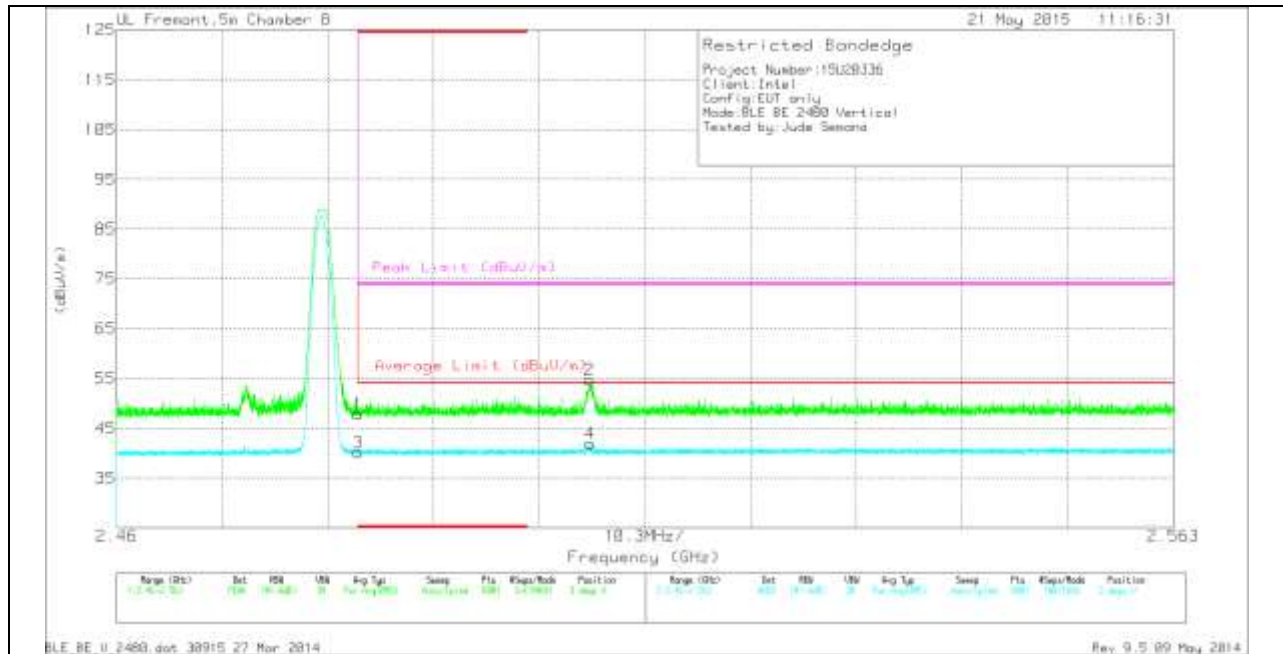


HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dBm)	Amp/CbI/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBm)	Average Limit (dBm)	Margin (dB)	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	38.24	PK	32.5	-22.4	0	48.34	-	-	74	-25.66	356	223	H
3	* 2.484	28.99	RMS	32.5	-22.4	1.7	40.79	54	-13.21	-	-	356	223	H
2	2.506	44.35	PK	32.5	-22.4	0	54.45	-	-	74	-19.55	356	223	H
4	2.506	30.4	RMS	32.5	-22.4	1.7	42.2	54	-11.8	-	-	356	223	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector
RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fit r/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	37.77	PK	32.5	-22.4	0	47.87	-	-	74	-26.13	3	320	V
3	* 2.484	28.33	RMS	32.5	-22.4	1.7	40.13	54	-13.87	-	-	3	320	V
2	2.506	44.65	PK	32.5	-22.4	0	54.75	-	-	74	-19.25	3	320	V
4	2.506	30.15	RMS	32.5	-22.4	1.7	41.95	54	-12.05	-	-	3	320	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fit r/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	* 2.326	39.98	PK	31.7	-22.7	0	48.98	-	-	74	-25.02	0-360	199	H
4	1.861	33.93	PK	31.4	-23.3	0	42.03	-	-	74	-31.97	0-360	199	V
2	3.101	33.02	PK	32.7	-31.4	0	34.32	-	-	74	-39.68	0-360	101	H
3	5.688	31.72	PK	34.9	-29.2	0	37.42	-	-	74	-36.58	0-360	199	H
5	6.336	30.95	PK	35.6	-29	0	37.55	-	-	74	-36.45	0-360	199	V
6	10.058	27.79	PK	37.2	-23.6	0	41.39	-	-	74	-32.61	0-360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

Radiated Emissions

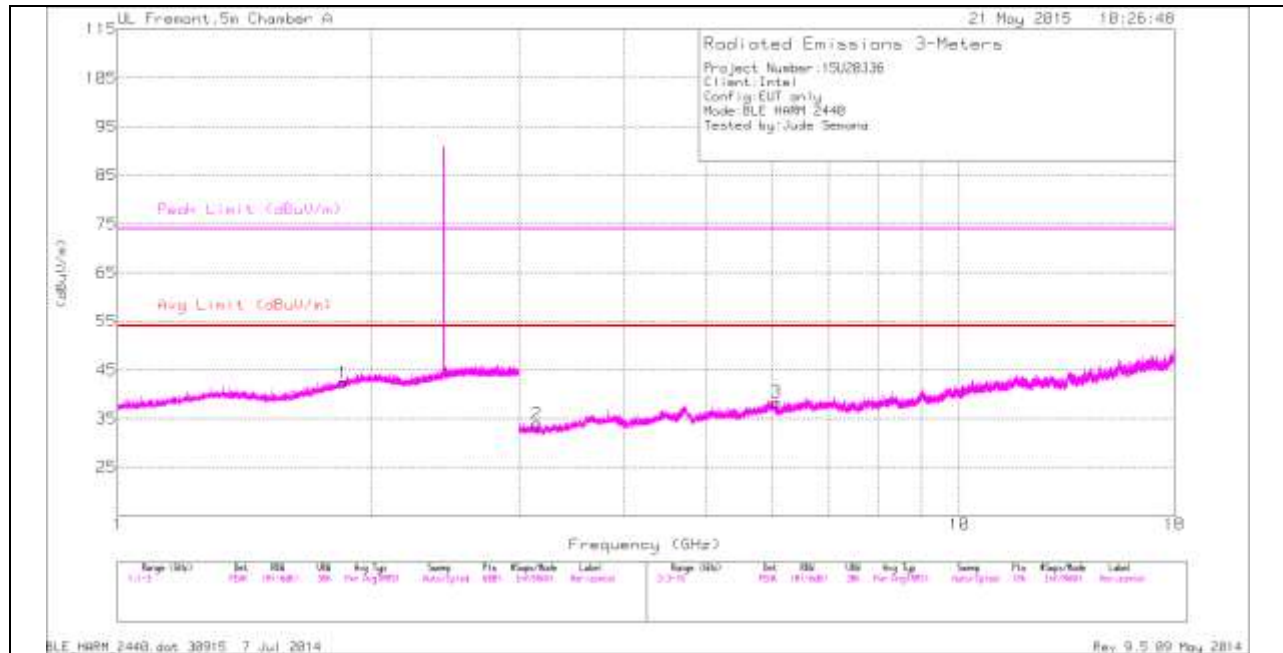
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.326	46.79	PK2	31.7	-22.7	0	55.79	-	-	74	-18.21	307	250	H
* 2.327	31.11	MAv1	31.7	-22.7	1.7	41.81	54	-12.19	-	-	307	250	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

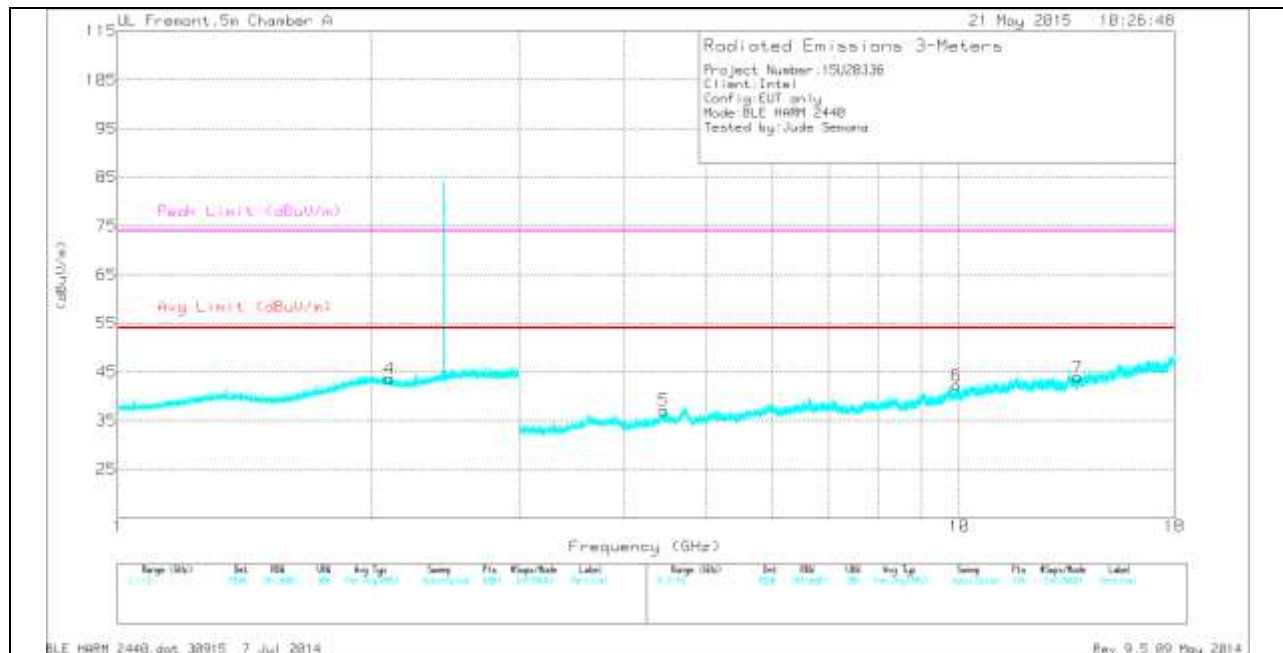
MAv1 - KDB558074 Option 1 Maximum RMS Average

MID CHANNEL HORIZONTAL – EUT WITHOUT WRISTBAND



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL – EUT WITHOUT WRISTBAND



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

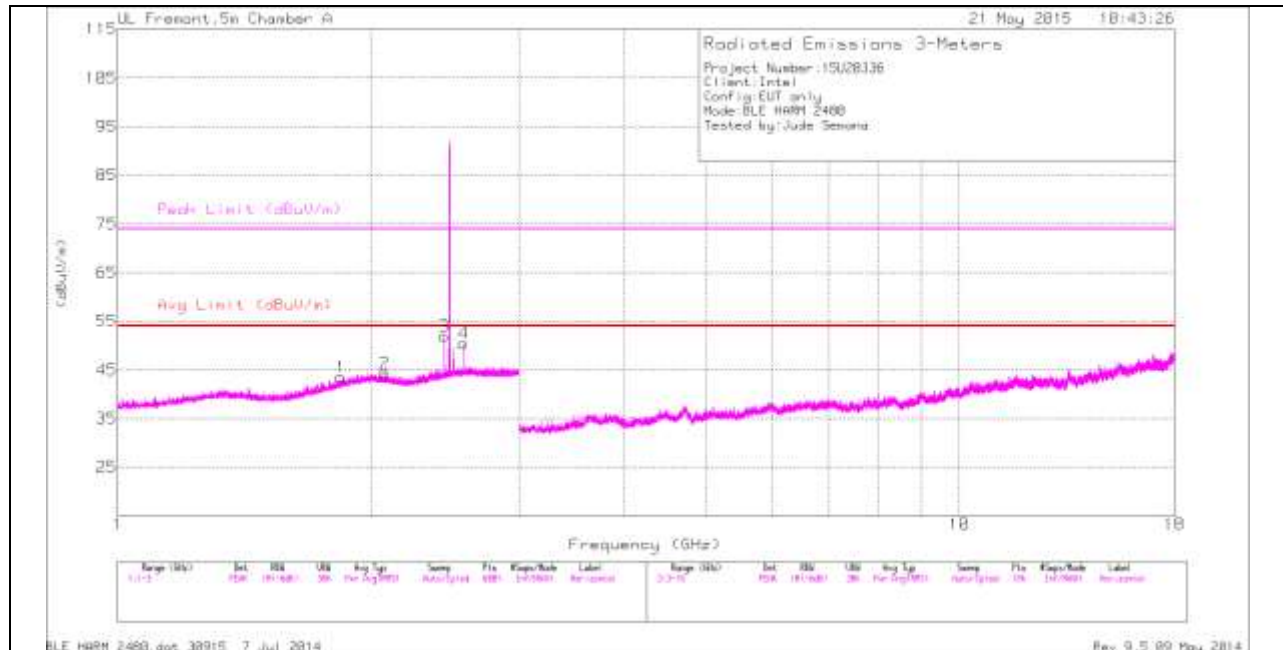
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fit r/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	1.854	34.41	PK	31.3	-23.3	0	42.41	-	-	74	-31.59	0-360	199	H
4	2.104	34.82	PK	31.8	-23	0	43.62	-	-	74	-30.38	0-360	101	V
2	3.15	32.45	PK	32.5	-31	0	33.95	-	-	74	-40.05	0-360	101	H
3	6.059	32.46	PK	35.6	-29.7	0	38.36	-	-	74	-35.64	0-360	101	H
5	4.454	32.13	PK	33.9	-28.9	0	37.13	-	-	74	-36.87	0-360	199	V
6	9.92	28.68	PK	37.1	-23.6	0	42.18	-	-	74	-31.82	0-360	199	V
7	13.822	26.93	PK	38.9	-21.9	0	43.93	-	-	74	-30.07	0-360	199	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector

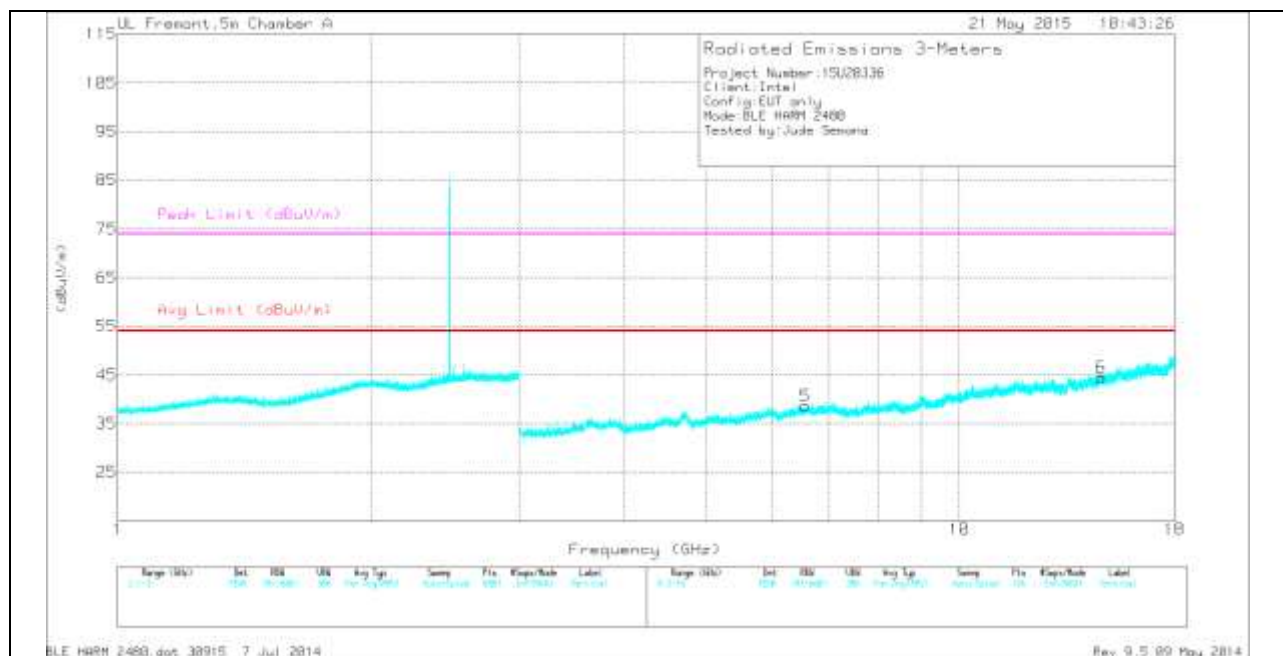
BLE_HARM_2440.dat 30915 7 Jul 2014
Rev 9.5 09 May 2014

HIGH CHANNEL HORIZONTAL – EUT WITHOUT WRISTBAND



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL – EUT WITHOUT WRISTBAND



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fit r/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	1.841	35.62	PK	31.2	-23.3	0	43.52	-	-	74	-30.48	0-360	101	H
2	2.076	35.46	PK	31.9	-23.1	0	44.26	-	-	74	-29.74	0-360	101	H
3	2.444	42.15	PK	32.3	-22.5	0	51.95	-	-	74	-22.05	0-360	101	H
4	2.577	40	PK	32.7	-22.3	0	50.4	-	-	74	-23.6	0-360	101	H
5	6.557	30.84	PK	35.9	-28.1	0	38.64	-	-	74	-35.36	0-360	101	V
6	14.716	25.54	PK	39.8	-20.8	0	44.54	-	-	74	-29.46	0-360	101	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector

Radiated Emissions

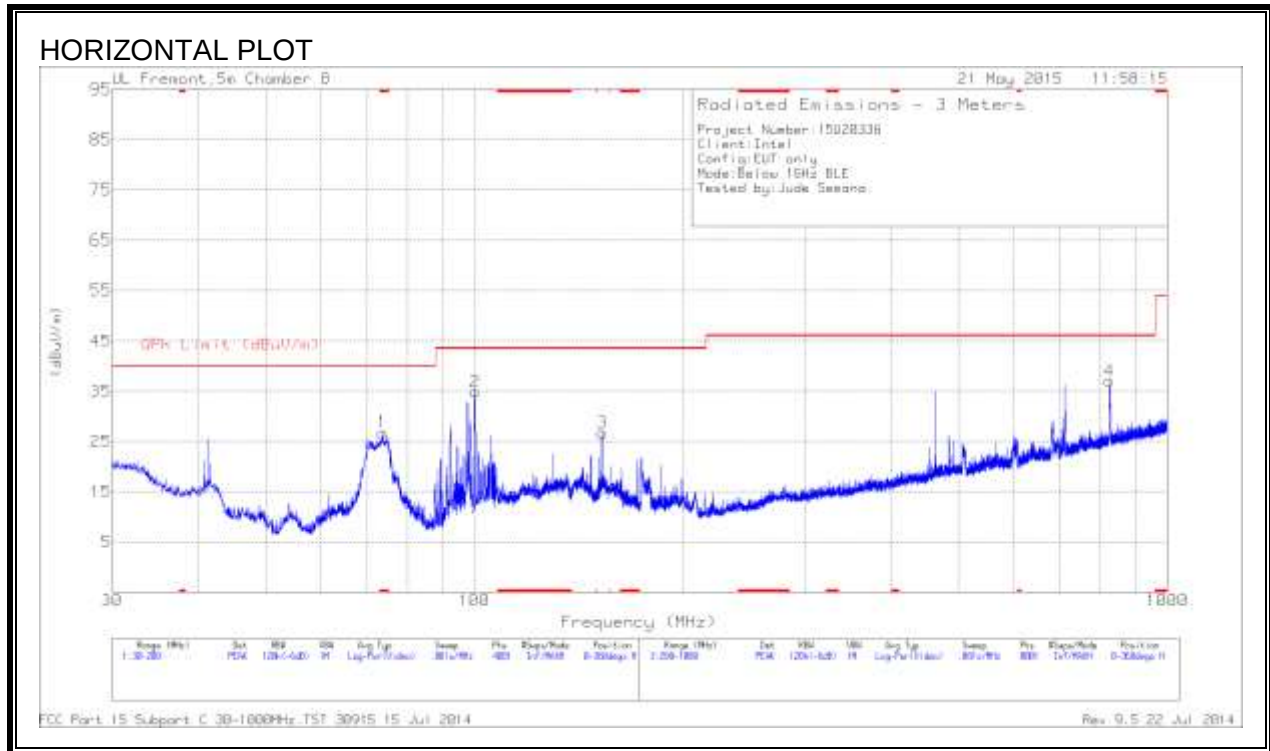
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.444	48.47	PK2	32.3	-22.5	0	58.27	-	-	74	-15.73	297	229	H
2.444	33.14	MAv1	32.3	-22.5	1.7	44.64	54	-9.36	-	-	297	229	H
2.576	48.8	PK2	32.7	-22.3	0	59.2	-	-	74	-14.8	280	309	H
2.577	31.87	MAv1	32.7	-22.3	1.7	43.97	54	-10.03	-	-	280	309	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

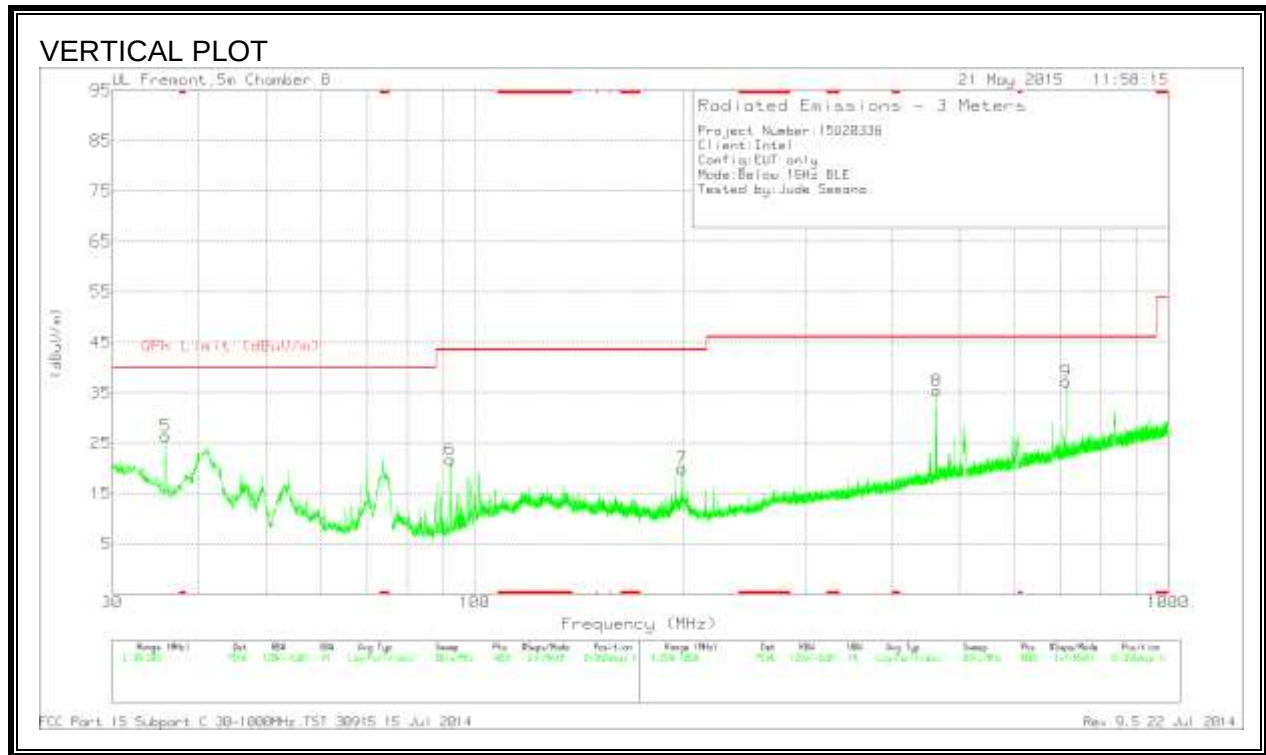
10.3. WORST-CASE BELOW 1 GHz – EUT WITHOUT WRISTBAND

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

HORIZONTAL PLOT



VERTICAL PLOT



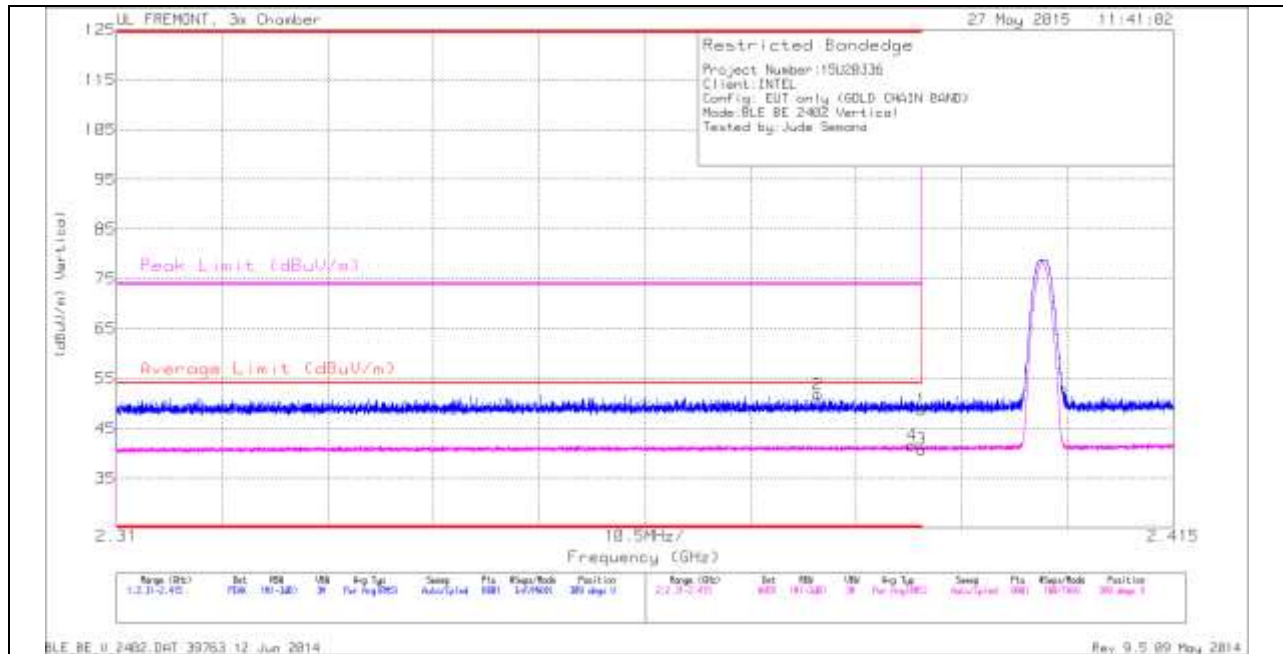
BELOW 1 GHz TABLE

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 73.7325	47.23	PK	8	-28.4	26.83	40	-13.17	0-360	101	H
5	35.8225	38.27	PK	16.9	-28.8	26.37	40	-13.63	0-360	101	V
6	92.305	41.61	PK	8.2	-28.1	21.71	43.52	-21.81	0-360	101	V
2	100.3375	52.67	PK	10.3	-28.1	34.87	43.52	-8.65	0-360	101	H
3	152.8675	41.84	PK	12.4	-27.5	26.74	43.52	-16.78	0-360	101	H
7	199.1075	34.38	PK	12.6	-27	19.98	43.52	-23.54	0-360	101	V
8	463.7	44.07	PK	17.2	-25.9	35.37	46.02	-10.65	0-360	101	V
9	712.7	41.31	PK	20.4	-24.5	37.21	46.02	-8.81	0-360	101	V
4	825	38.8	PK	21.8	-23.6	37	46.02	-9.02	0-360	101	H

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.
PK - Peak detector

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

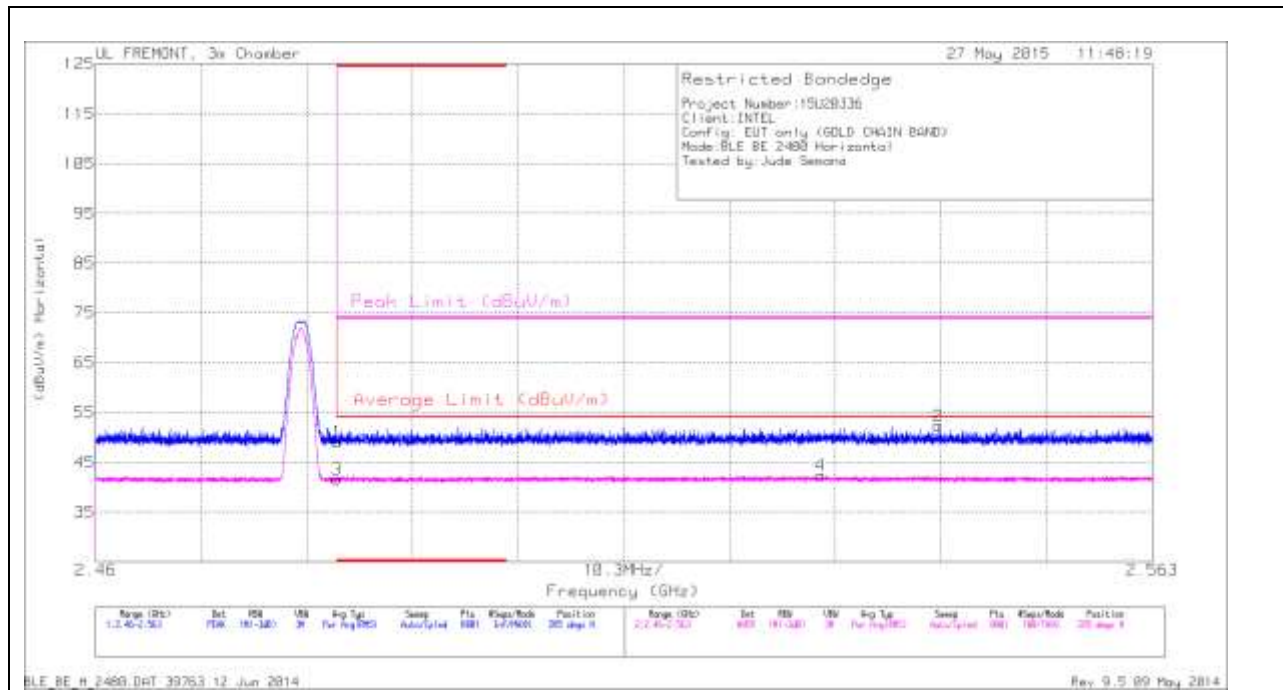
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/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
2	* 2.38	43.04	PK	31.9	-23.1	0	51.84	-	-	74	-22.16	309	247	V
4	* 2.389	31.14	RMS	32	-23.1	1.7	41.74	54	-12.26	-	-	309	247	V
1	* 2.39	39.86	PK	32	-23.1	0	48.76	-	-	74	-25.24	309	247	V
3	* 2.39	30.25	RMS	32	-23.1	1.7	40.85	54	-13.15	-	-	309	247	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL) – EUT WITH METAL WRISTBAND

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Trace Markers

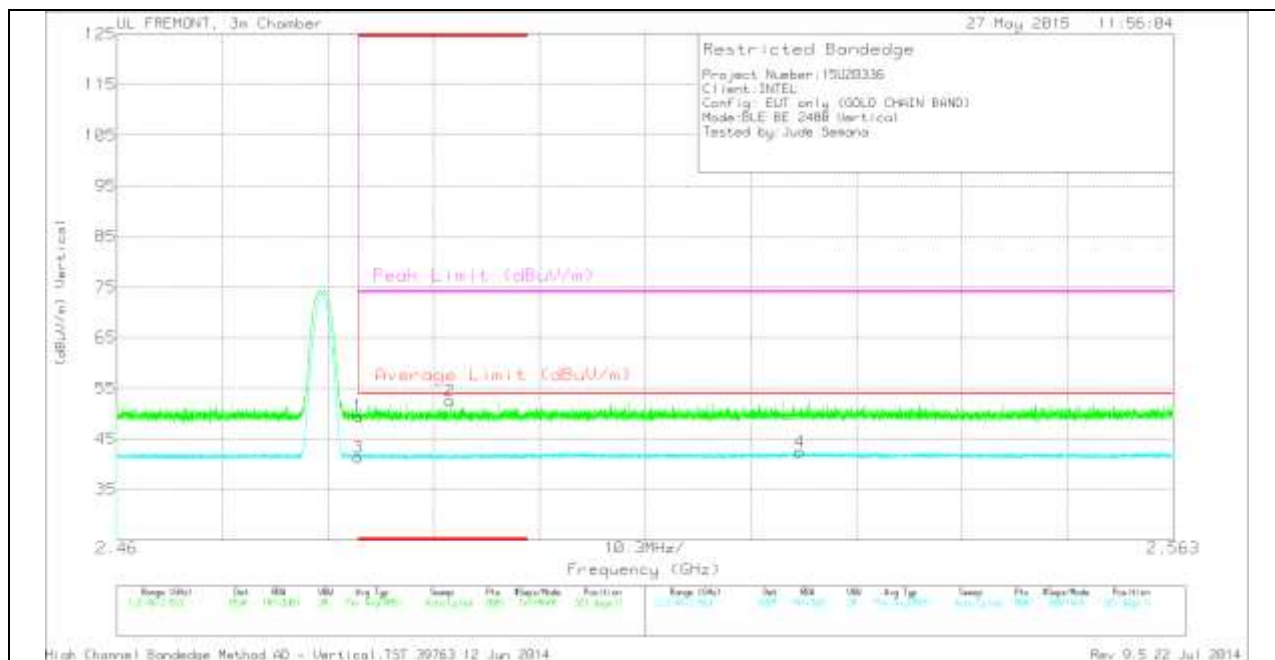
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.6	PK	32.3	-22.8	0	49.1	-	-	74	-24.9	285	304	H
3	* 2.484	30.5	RMS	32.3	-22.8	1.7	41.7	54	-12.3	-	-	285	304	H
4	2.531	30.93	RMS	32.4	-22.6	1.7	42.43	54	-11.57	-	-	285	304	H
2	2.542	42.56	PK	32.4	-22.6	0	52.36	-	-	74	-21.64	285	304	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dBm)	Amp/Cbl/Filt r/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	40.08	PK	32.3	-22.8	0	49.58	-	-	74	-24.42	321	321	V
2	* 2.492	43.12	PK	32.3	-22.9	0	52.52	-	-	74	-21.48	321	321	V
3	* 2.484	30.23	RMS	32.3	-22.8	1.67	41.4	54	-12.6	-	-	321	321	V
4	2.527	31.12	RMS	32.4	-22.7	1.67	42.49	54	-11.51	-	-	321	321	V

* - indicates frequency in CFR 47, Part 15 and Industry Canada RSS-Restricted Band.

PK - Peak detector

RMS - RMS detection

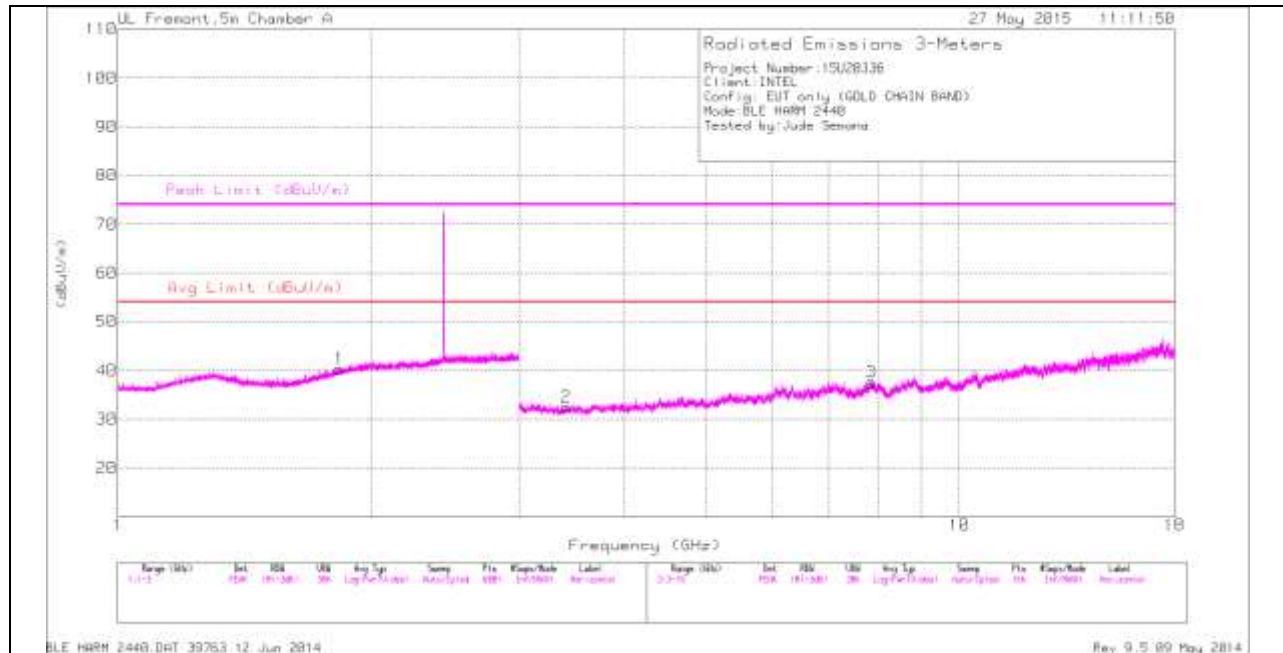
LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit riPad (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	1.835	32.84	PK	30.5	-23.3	0	40.04	-	-	74	-33.96	0-360	100	H
2	3.163	31.33	PK	32.7	-31	0	33.03	-	-	74	-40.97	0-360	100	H
3	5.758	30.78	PK	34.8	-30.5	0	35.08	-	-	74	-38.92	0-360	100	H
4	4.459	31.14	PK	33.7	-30.9	0	33.94	-	-	74	-40.06	0-360	200	V
5	8.663	27.94	PK	35.9	-26.9	0	36.94	-	-	74	-37.06	0-360	100	V
6	10.192	26.17	PK	37	-24.6	0	38.57	-	-	74	-35.43	0-360	200	V

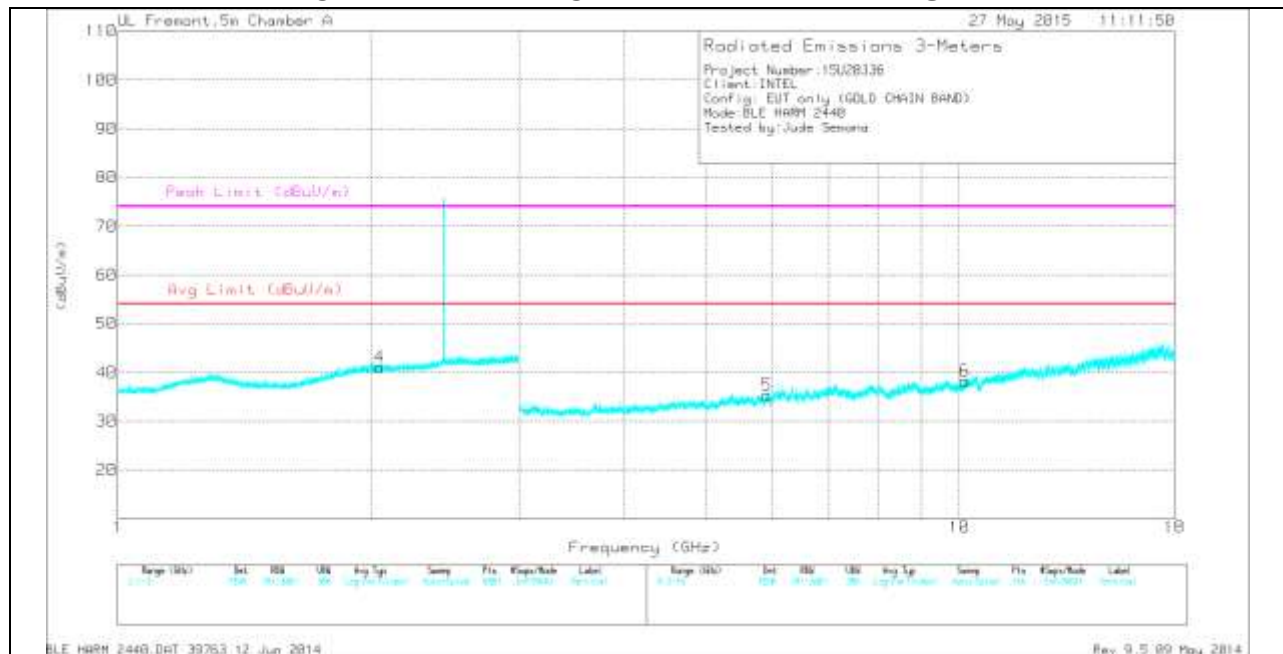
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector

MID CHANNEL HORIZONTAL - METAL WRISTBAND



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL- WITH METAL WRISTBAND



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

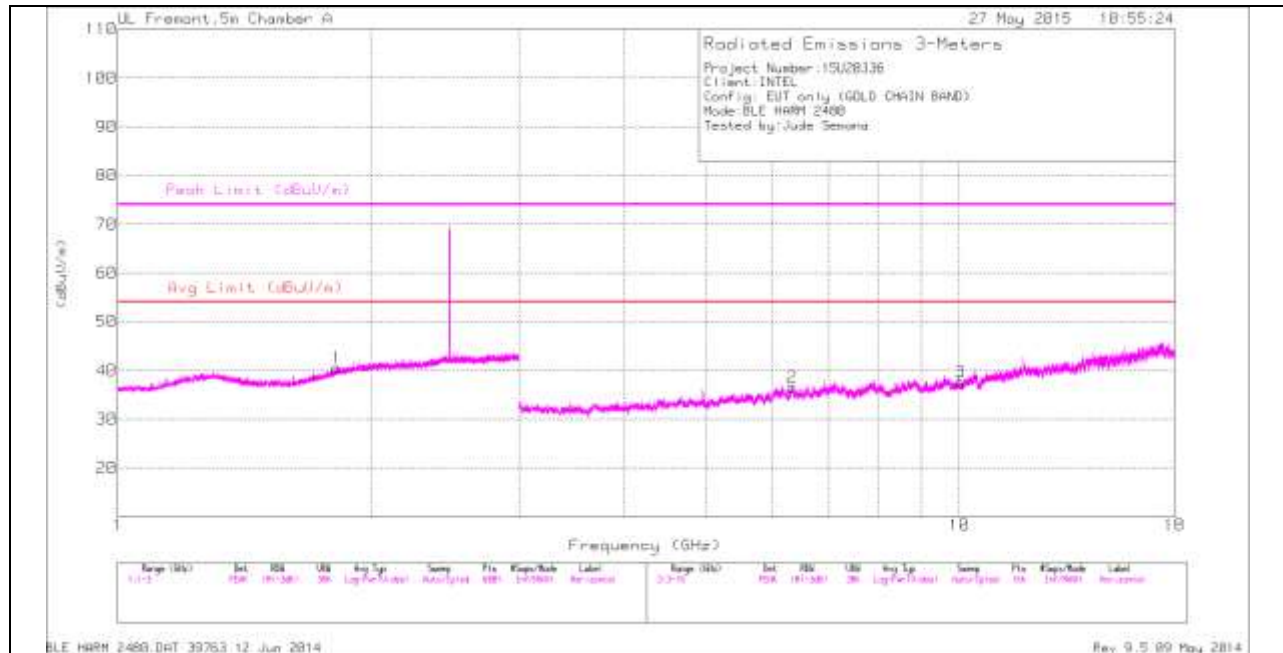
MID CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/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	1.833	33.11	PK	30.5	-23.3	0	40.31	-	-	74	-33.69	0-360	100	H
4	2.046	32.73	PK	31.5	-23.2	0	41.03	-	-	74	-32.97	0-360	200	V
2	3.412	31.61	PK	32.7	-31.8	0	32.51	-	-	74	-41.49	0-360	100	H
3	7.862	28.98	PK	35.8	-27.2	0	37.58	-	-	74	-36.42	0-360	200	H
5	5.909	30.69	PK	35	-30.4	0	35.29	-	-	74	-38.71	0-360	200	V
6	10.143	26.36	PK	37	-25.1	0	38.26	-	-	74	-35.74	0-360	200	V

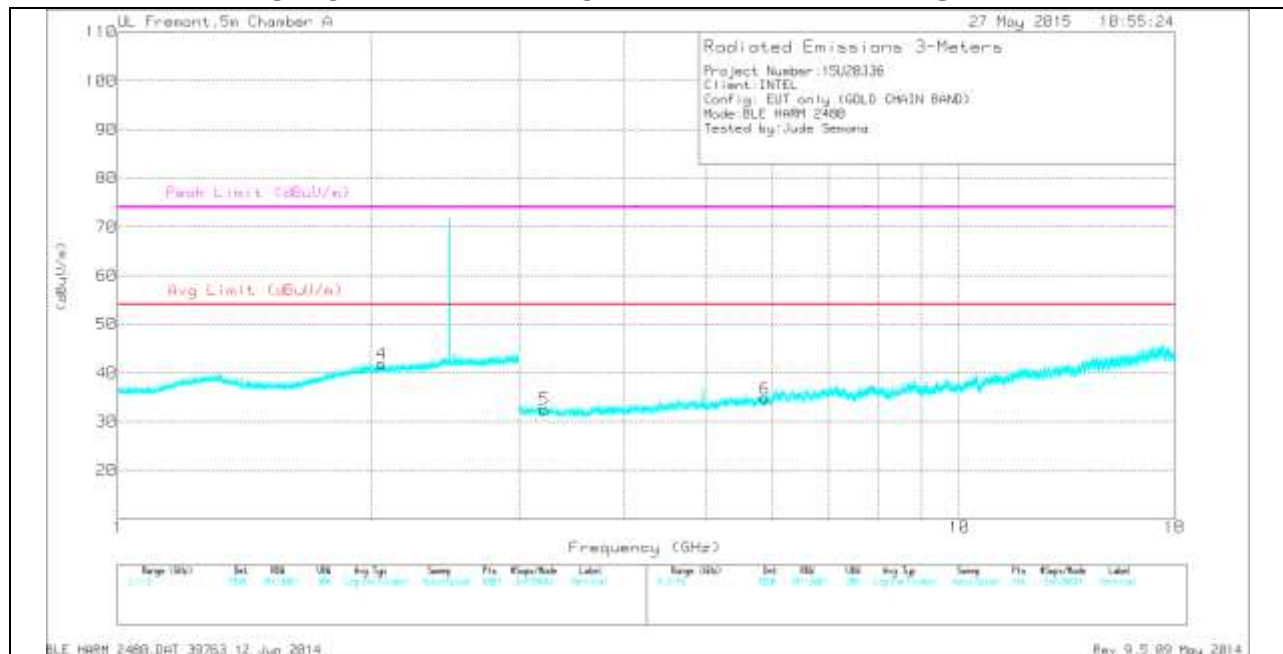
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector

HIGH CHANNEL HORIZONTAL – WITH METAL WRISTBAND



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL – WITH METAL WRISTBAND



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Filt r/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	1.821	33.39	PK	30.4	-23.3	0	40.49	-	-	74	-33.51	0-360	100	H
4	2.059	33.54	PK	31.5	-23.2	0	41.84	-	-	74	-32.16	0-360	200	V
2	6.328	30.13	PK	35.4	-29	0	36.53	-	-	74	-37.47	0-360	100	H
3	10.023	26.2	PK	36.9	-25.5	0	37.6	-	-	74	-36.4	0-360	200	H
5	3.211	31.19	PK	32.6	-31.3	0	32.49	-	-	74	-41.51	0-360	200	V
6	5.873	29.37	PK	35	-29.7	0	34.67	-	-	74	-39.33	0-360	200	V

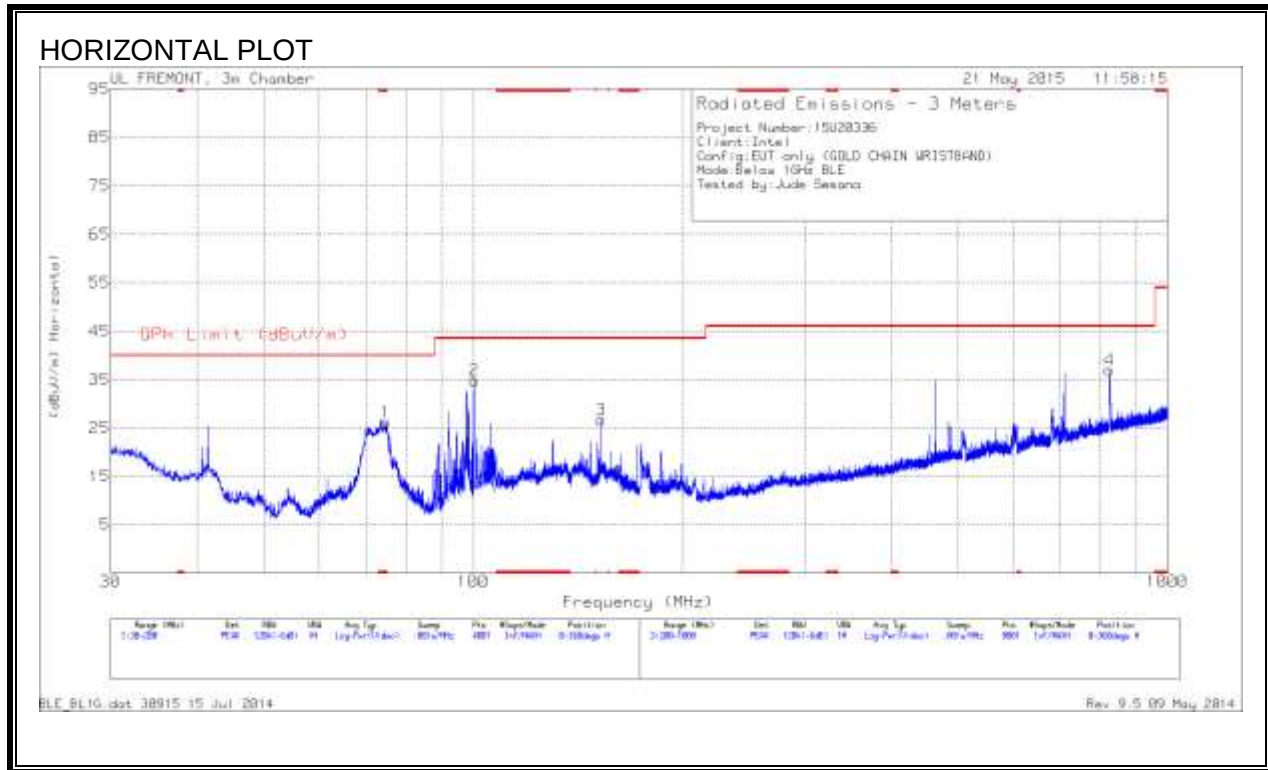
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK – Peak detector

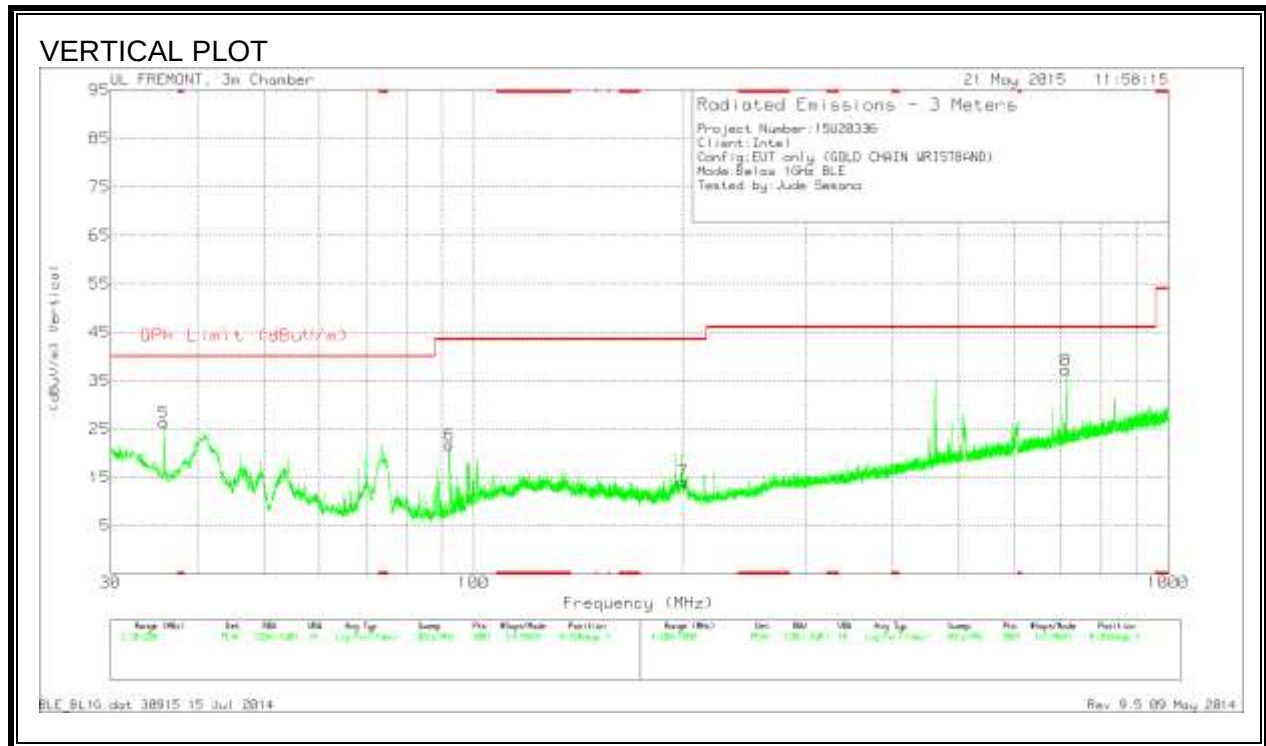
10.5. WORST-CASE BELOW 1 GHz –EUT WITH METAL WRISTBAND

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

HORIZONTAL PLOT



VERTICAL PLOT



BELOW 1 GHz TABLE

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	35.8225	38.27	PK	16.9	-28.8	26.37	40	-13.63	0-360	101	V
1	74.71	46.61	PK	8	-28.4	26.21	40	-13.79	0-360	101	H
6	92.305	41.61	PK	8.2	-28.1	21.71	43.52	-21.81	0-360	101	V
2	100.3375	52.67	PK	10.3	-28.1	34.87	43.52	-8.65	0-360	101	H
3	152.8675	41.84	PK	12.4	-27.5	26.74	43.52	-16.78	0-360	101	H
7	200.4	28.58	PK	12.6	-27	14.18	43.52	-29.34	0-360	200	V
8	712.7	41.31	PK	20.4	-24.5	37.21	46.02	-8.81	0-360	101	V
4	825	38.8	PK	21.8	-23.6	37	46.02	-9.02	0-360	101	H

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band
PK - Peak detector