FCC / ISED Test Report

For

PDK-R0010-SDE

Report #: 34448

FCC ID: CFS8DLBLE50
IC ID: 573F-BLE50

Report Completion Date: 2018-02-23
Revised: 2018-05-17

Prepared by and for:
Honeywell International Inc.
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Suite 100 PO Box 9040
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Testing
NVLAP Lab Code: 600110

Document Introduction

Honeywell tested the above equipment in accordance with the requirements set forth in the listed standards. All indications of Pass/Fail in the report are opinions expressed by Honeywell 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.

This document is a record of the FCC/ISED Test Report for Honeywell products. It demonstrates the data required to be analyzed to certify a product according to the requirements of the FCC & ISED.

The results in the report reflect only the model of the items under test unless noted otherwise. This document may not be altered or revised in any way unless done so my Honeywell and all revisions are duly noted in the revisions section. Any alterations of this document not carried out by Honeywell 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.

Test Report Revision History

Revision	Prepared By	Reviewed By	Revision Detail	Release Date
---	M. Antola	A. Roussin	Original Release	2018-02-23
A	M. Antola	A. Roussin	Updated spurious emissions (1-18GHz) & radiated Bandedge data to account for 100% duty cycle	2018-04-10
B	M. Antola	A. Roussin	Added clarification to Radiated Emissions (Unintentional) test description section	2018-04-19
C	M. Antola	A. Roussin	Added conducted emissions data	2018-05-17

Report Authorization

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Contents

Honeywell International **Document #: 800-23065, Rev. 1.3**
2 Corporate Center Dr., Melville, NY 11747 **TEL: (516) 577-2000**

Applicable Test Standards/Limits

Test Standards/Limits	Result	Dates Tested
ANSI C63.4: 2014	Compliant	12/13/17-04/10/18
ANSI C63.10: 2013	Compliant	12/13/17-04/10/18
ICES-003 Issue 6: 2016	Compliant	12/13/17-04/10/18
RSS-247, Issue 2, Section 5	Compliant	12/13/17-04/10/18
RSS-GEN, Issue 4	Compliant	12/13/17-04/10/18
CFR 47 Pt 15 Subpart B, Section 15.107/109	Compliant	12/13/17-04/10/18
CFR 47 Pt 15 Subpart C, Section 15.207/209	Compliant	12/13/17-04/10/18
CFR 47 Pt 15 Subpart C, Section 15.247	Compliant	12/13/17-04/10/18

Deviations from Test Methods

#	Deviation Description
0	None

Facilities and Accreditation

The test site and measurement facility used to collect data are located at 2 Corporate Center Dr., Melville, NY 11747, USA. Honeywell International is accredited by NVLAP, Laboratory Code 600110-0. The full scope of accreditation can be viewed at the NVLAP website.

Test Item Description

The PDK-R0010-SDE is a Bluetooth 5.0 lite module and reusable block which is based on Nordic's nRF52832 chip.

The module uses a single surface mount antenna with a maximum gain of 3.3dBi.

The EUT operates at a 100% duty cycle and has been tested as such per KDB 558074 and C63.10 guidelines.

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Worse-Case Configuration & Mode

Radiated emissions was performed with the EUT set to transmit at the channel with the highest output power as worst-case scenario. The EUT was tested in all three orthogonal planes in order to determine the worst-case emissions. It was determined that the Z axis orientation was the worst-case orientation. Therefore, all final radiated test was performed with the EUT in the Z axis orientation.

Test Sample Identification

Sample ID Number	Sample Serial Number	Date Received
MEL-410	Non-serialized production unit	12/11/17
MEL-424	Non-serialized production unit	1/25/18

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Calibration & Measurement Uncertainty

- Measuring Instrument Calibration – The measuring equipment utilized to perform the tests documented in this report have been calibrated in accordance with the manufacturer's recommendations and is traceable to recognized national standards.

- Sample Calculation – Where relevant, the following sample calculation is provided:

  Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) – Preamp Gain (dB)

  [i.e.] 37 dBuV/m = 30 dBuV + 18.5 dB/m + 0.5 dB – 12 dB

- Uncertainty - Figures are valid to a confidence level of 95%.

Test	Standard Uncertainty
Radiated Emissions (30-200MHz Horizontal)	+/- 5.05 dB
Radiated Emissions (30-200MHz Vertical)	+/- 5.28 dB
Radiated Emissions (200-1000MHz Horizontal)	+/- 10.21 dB
Radiated Emissions (200-1000MHz Vertical)	+/- 10.36 dB
Radiated Emissions (Above 1GHz)	+/- 9.70 dB
Conducted Emissions (150KHz-30MHz)	+/- 4.36 dB

Opinions / Interpretations

None

Test Summary

All tests described below are required, unless otherwise noted. Notes should be described in detail in the "Additional notes" section.

#	Test Description	Status
1	99% Bandwidth	PASS
2	6 dB Occupied Bandwidth	PASS
3	Maximum Conducted Output Power	PASS
4	Maximum Power Spectral Density	PASS
5	Band Edge / Conducted Spurious Emissions	PASS
6	Radiated Emissions (Unintentional)	PASS
7	Radiated Emissions (Intentional)	PASS

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6dB Occupied Bandwidth (DTS Bandwidth)

Test Description

Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission. Refer to KDB 558074 D01 DTS Meas Guidance v04.

Test Criteria

Reference	Limit
CFR 47 Subpart C 15.247 (a)(2) RSS-247 Section 5.2 (a)	≥ 500kHz

Test Information

Tester	Test Location	Date	Temperature (ºC)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
CL	RF Lab	02/07/18	22.4	15.5	1012	P

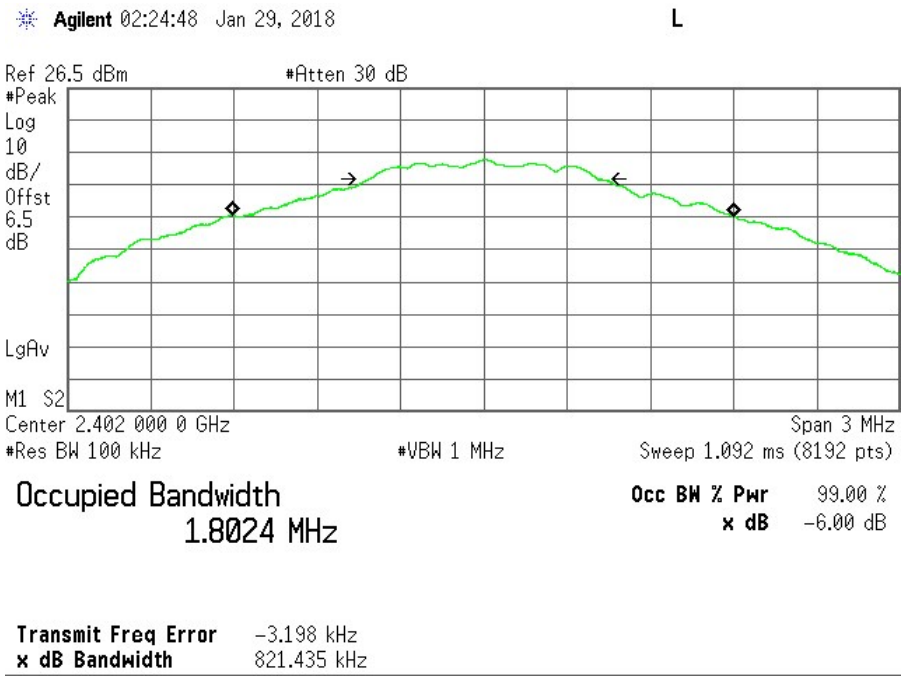
Equipment List

Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
Spectrum Analyzer	11549	MY46187211	Agilent	E4440A	06/06/17	06/06/19
Environmental Meter	11548	A078188	Extech Instruments	SD700	04/24/17	04/24/18

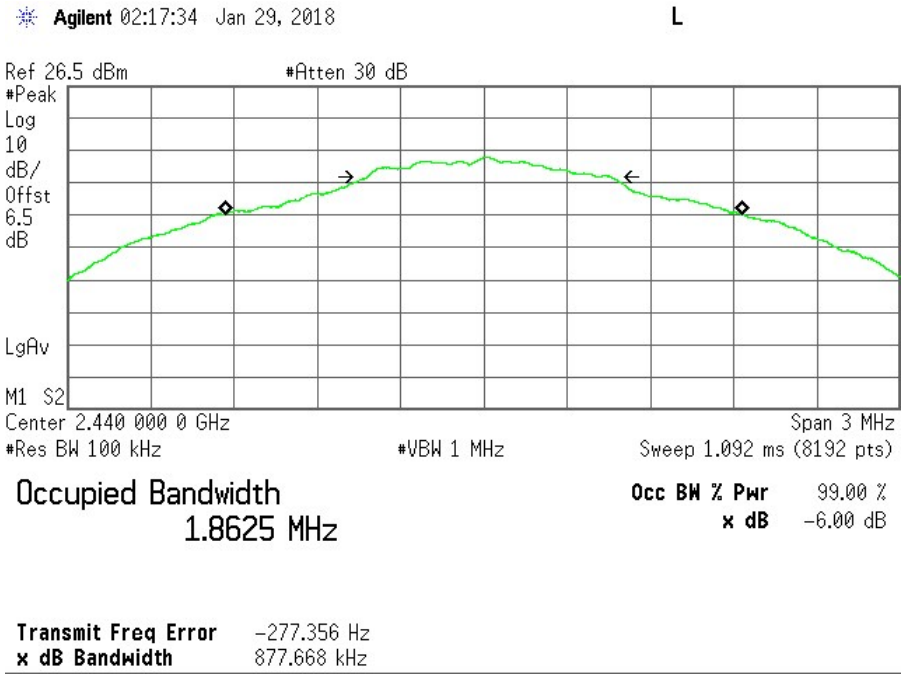
Test Results

Channel	Frequency (GHz)	6dB Bandwidth (in MHz)
Low	2402	0.821
Mid	2440	0.878
High	2480	0.820

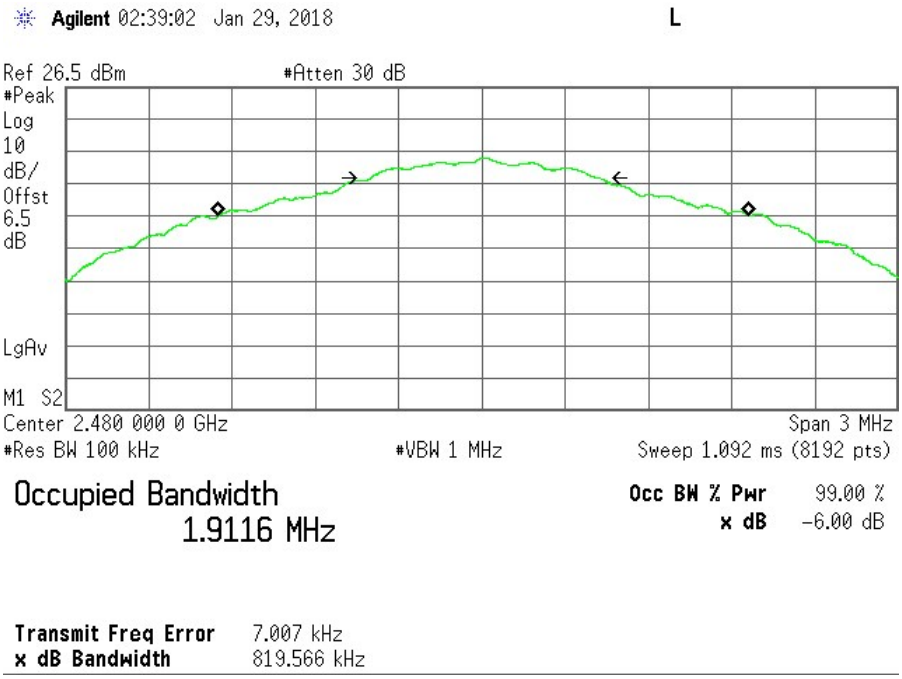
6dB Bandwidth



Low Channel - Plot



Mid Channel - Plot



High Channel – Plot

99% Bandwidth

Test Description

The emission bandwidth (x dB) is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated x dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth.
When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth, as calculated or measured.

Test Criteria

Reference	Limit
RSS-GEN, Section 6.6	N/A

Test Information

Tester	Test Location	Date	Temperature (ºC)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
CL	RF Lab	02/07/18	22.4	15.5	1012	P

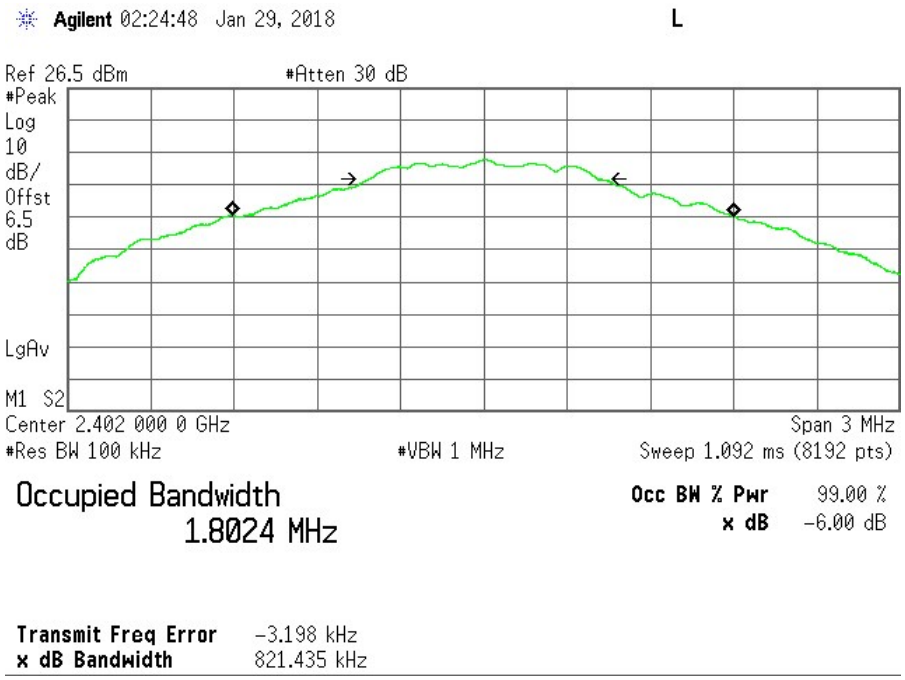
Equipment List

Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
Spectrum Analyzer	11549	MY46187211	Agilent	E4440A	06/06/17	06/06/19
Environmental Meter	11548	A078188	Extech Instruments	SD700	04/24/17	04/24/18

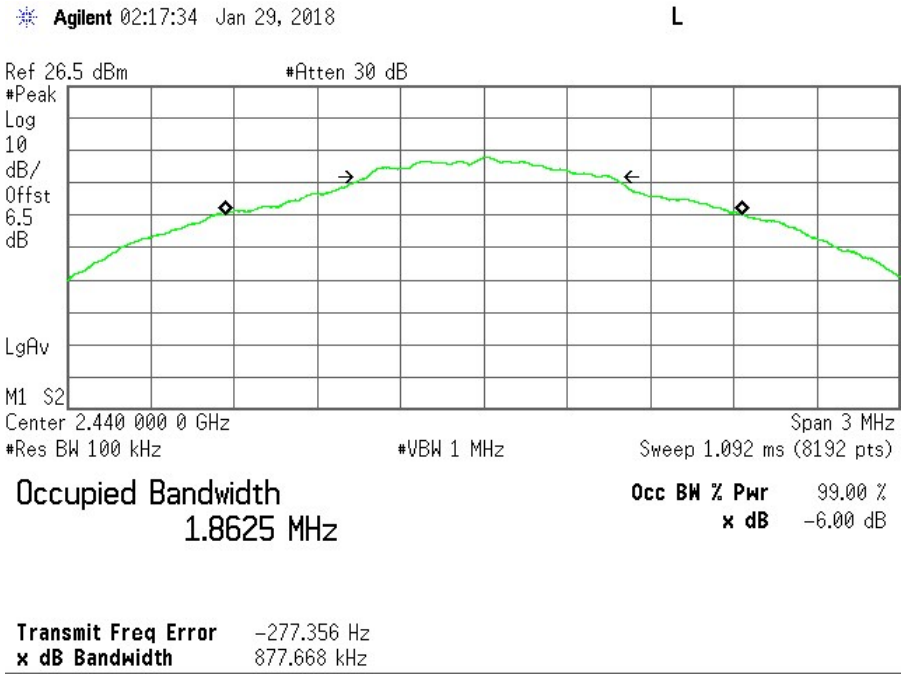
Test Results

Channel	Frequency (GHz)	99% Bandwidth (in MHz)
Low	2402	1.80
Mid	2440	1.86
High	2480	1.91

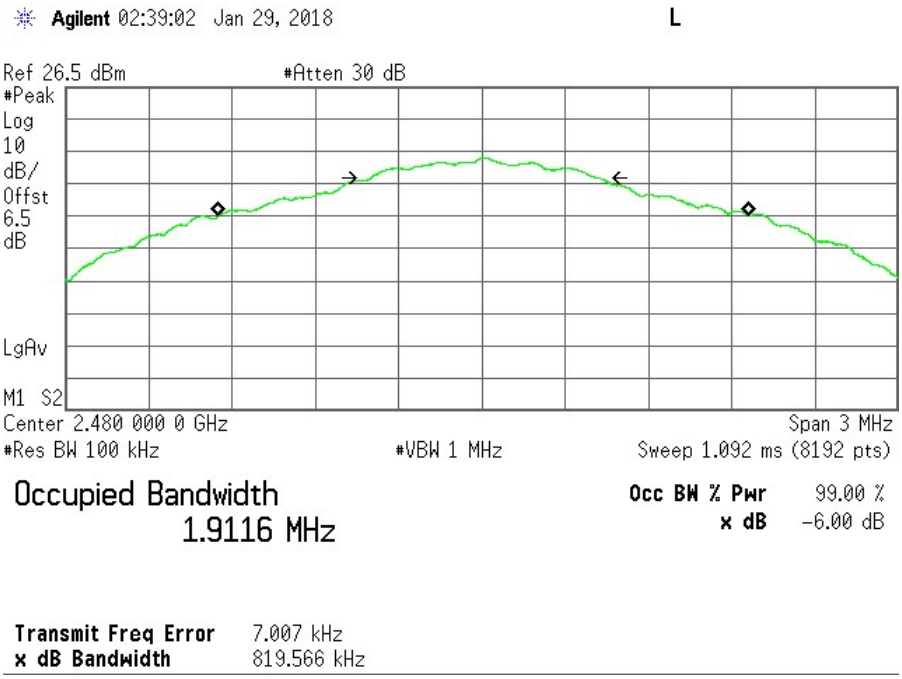
99% Bandwidth



Low Channel - Plot



Mid Channel - Plot



High Channel – Plot

Maximum Conducted Output Power

Test Description

For systems using digital modulation in the 902-928MHz, 2400-2483,5MHz and 5725-5850MHz bands, the conducted output power limit (specified below) is based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

Maximum conducted (peak) output power was the method employed to determine fundamental emission output power.

Method RBW ≥ DTS bandwidth per C63.10 and KDB 558074 was utilized for this test program.

Test Criteria

Reference	Limit
CFR 47 Subpart C 15.247 (b)(3) RSS-247 Section 5.4 (d)	1W (30dBm)

Test Information

Tester	Test Location	Date	Temperature (ºC)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
CL	RF Lab	02/07/18	22.4	15.5	1012	P

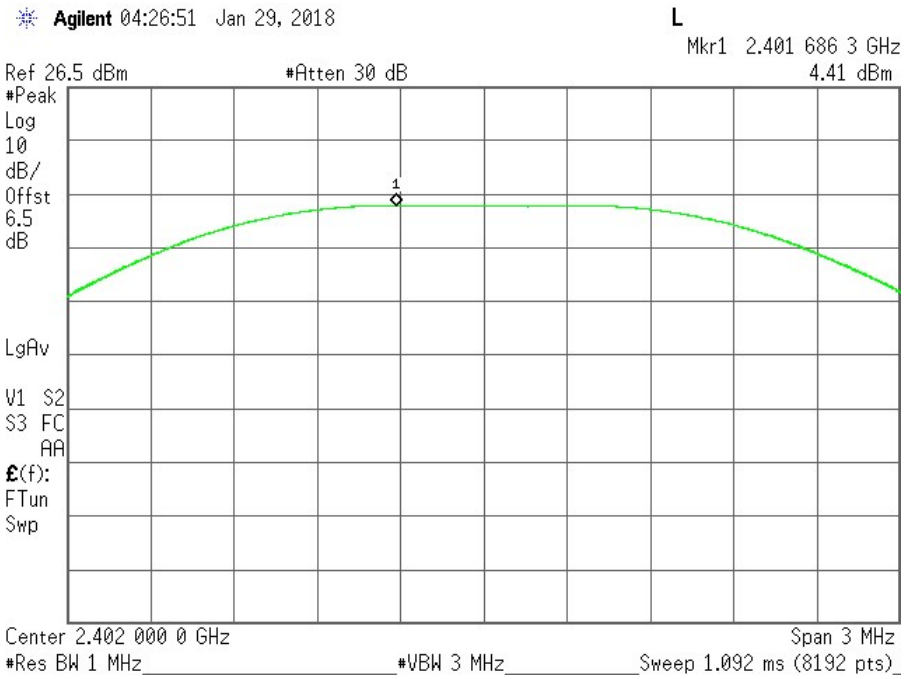
Equipment List

Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
Spectrum Analyzer	11549	MY46187211	Agilent	E4440A	06/06/17	06/06/19
Environmental Meter	11548	A078188	Extech Instruments	SD700	04/24/17	04/24/18

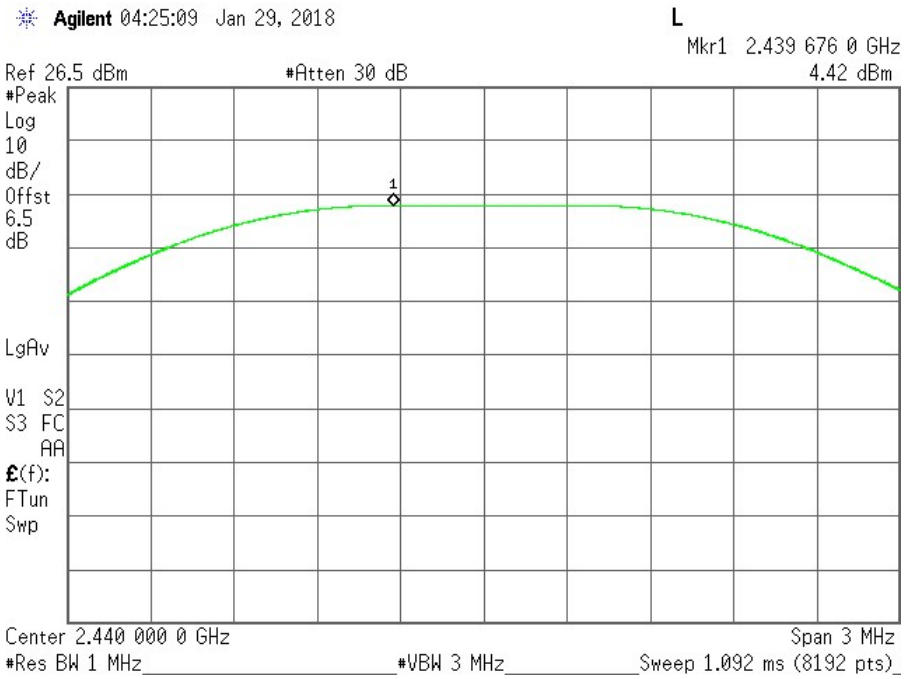
Test Results

Channel	Frequency (GHz)	Tx Channel BW Power (dBm)
Low	2402	4.41
Mid	2440	4.42
High	2480	4.49

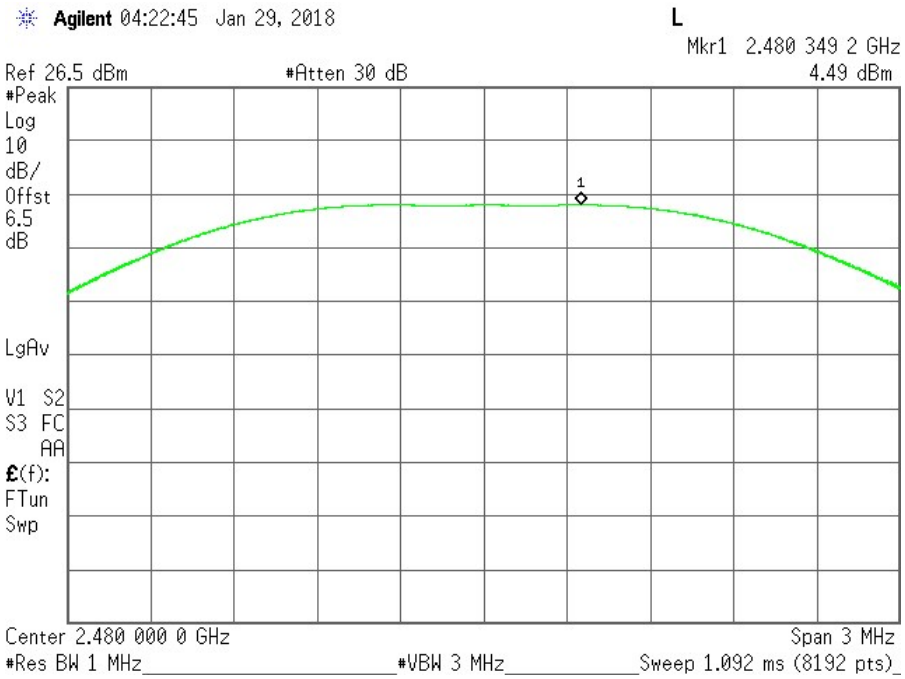
Output Power



Low Channel - Plot



Mid Channel - Plot



High Channel – Plot

Maximum Power Spectral Density

Test Description

The DTS rules specify a conducted PSD limit within the *DTS bandwidth* during any time interval of continuous transmission. Such specifications require that the same method as used to determine the conducted output power shall also be used to determine the power spectral density. Therefore, if maximum peak conducted output power was measured to demonstrate compliance to the output power limit, then the peak PSD procedure below (Method PKPSD) shall be used. If maximum conducted output power was measured to demonstrate compliance to the output power limit, then one of the average PSD procedures shall be used.

Since maximum conducted (peak) output power was the method employed to determine fundamental emission output power, then the peak power spectral density method was utilized.

Method PKPSD per C63.10 and KDB 558074 was utilized for this test program.

Test Criteria

Reference	Limit
CFR 47 Subpart C 15.247 (e) RSS-247 Section 5.2 (b)	< 8 dBm in any 3 kHz Band

Test Information

Tester	Test Location	Date	Temperature (ºC)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
CL	RF Lab	02/07/18	22.4	15.5	1012	P

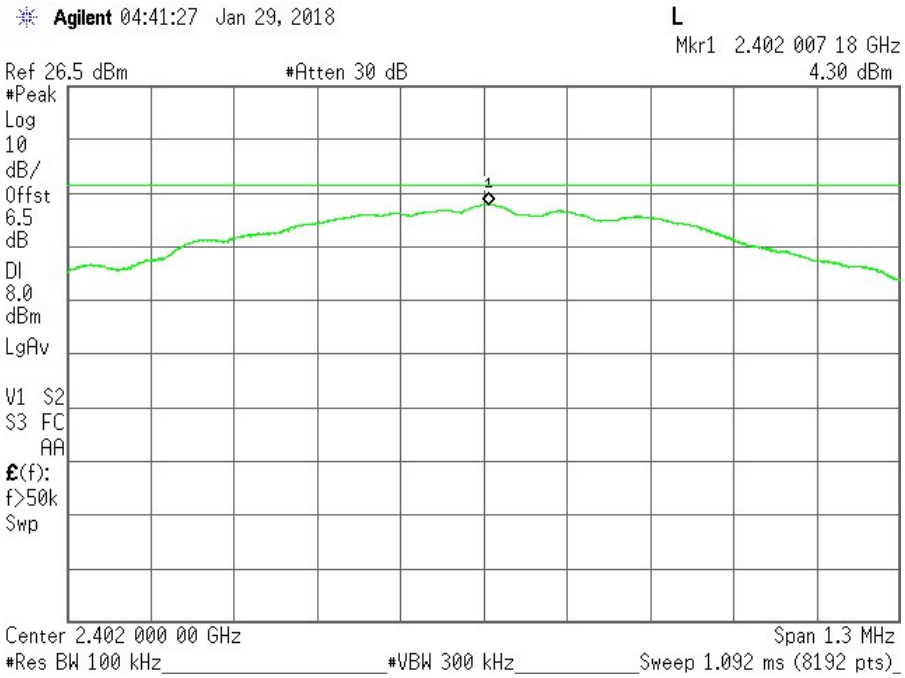
Equipment List

Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
Spectrum Analyzer	11549	MY46187211	Agilent	E4440A	06/06/17	06/06/19
Environmental Meter	11548	A078188	Extech Instruments	SD700	04/24/17	04/24/18

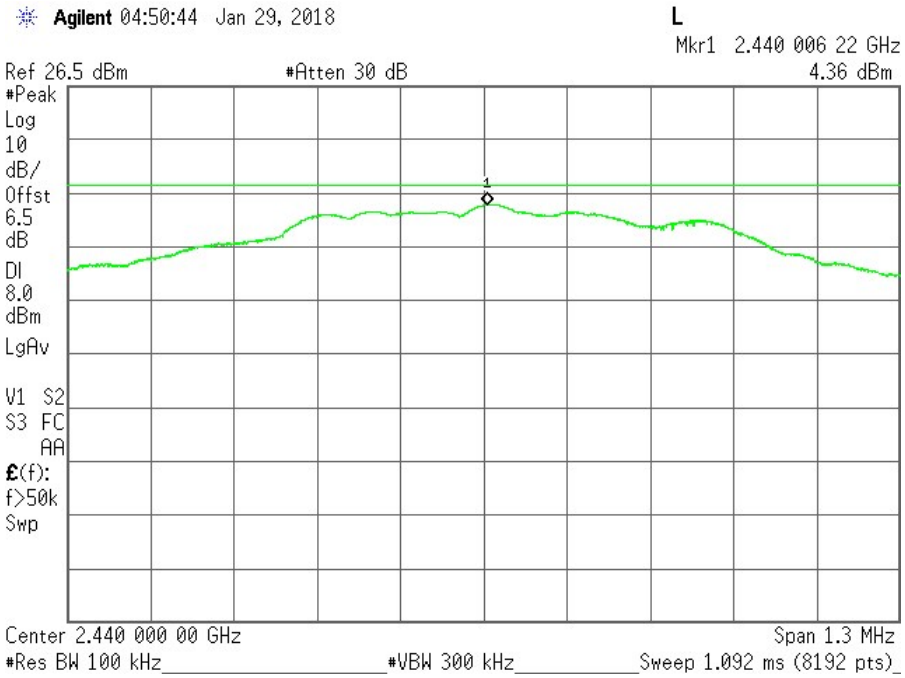
Test Results

Channel	Frequency (GHz)	Max Power (dBm)
Low	2402	4.30
Mid	2440	4.36
High	2480	4.38

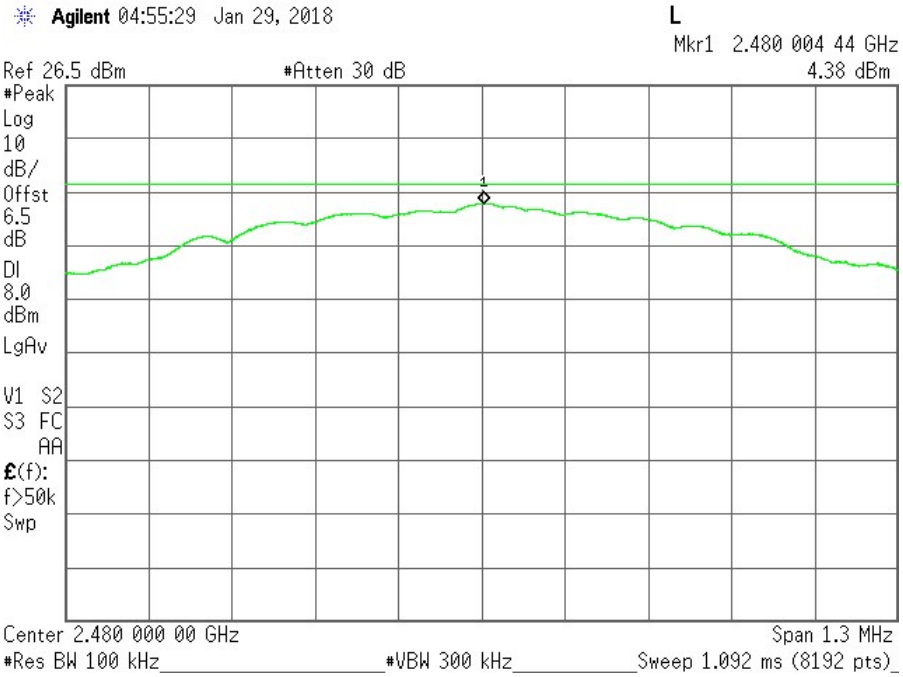
PSD



Low Channel - Plot



Mid Channel - Plot



High Channel – Plot

Authorized Band Edge / Conducted Spurious Emissions

Test Description

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a)

Test Criteria

Reference	Limit
CFR 47 Subpart C 15.247 (d) RSS-247, Section 5.5 KDB 558074 D01 Section 11	20dB Below the Fundamental

Test Information

Tester	Test Location	Date	Temperature (ºC)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
CL	RF Lab	02/07/18	22.4	15.5	1012	P

Equipment List

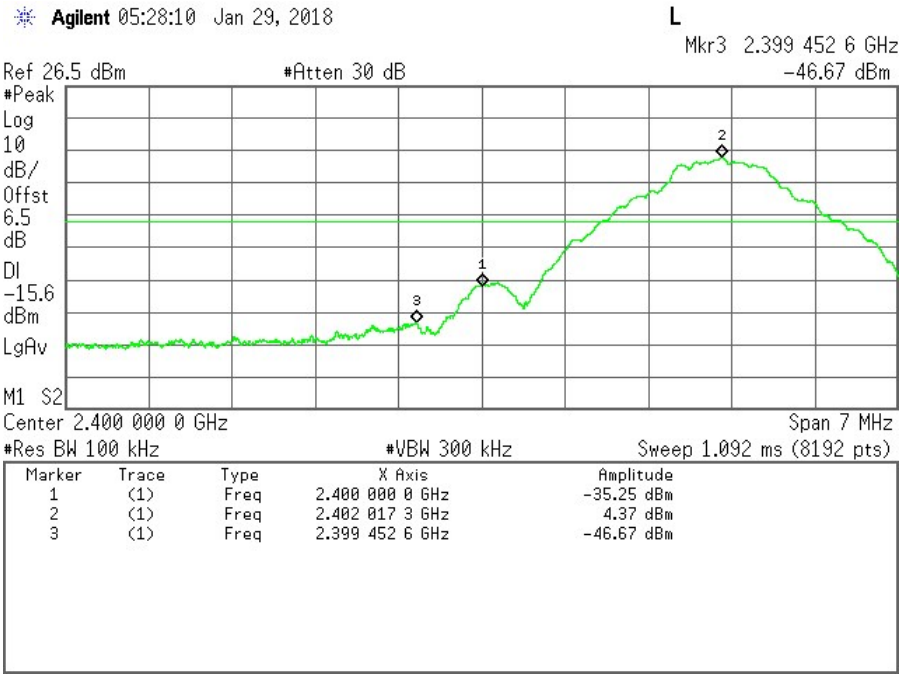
Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
Spectrum Analyzer	11549	MY46187211	Agilent	E4440A	06/06/17	06/06/19
Environmental Meter	11548	A078188	Extech Instruments	SD700	04/24/17	04/24/18

Test Results

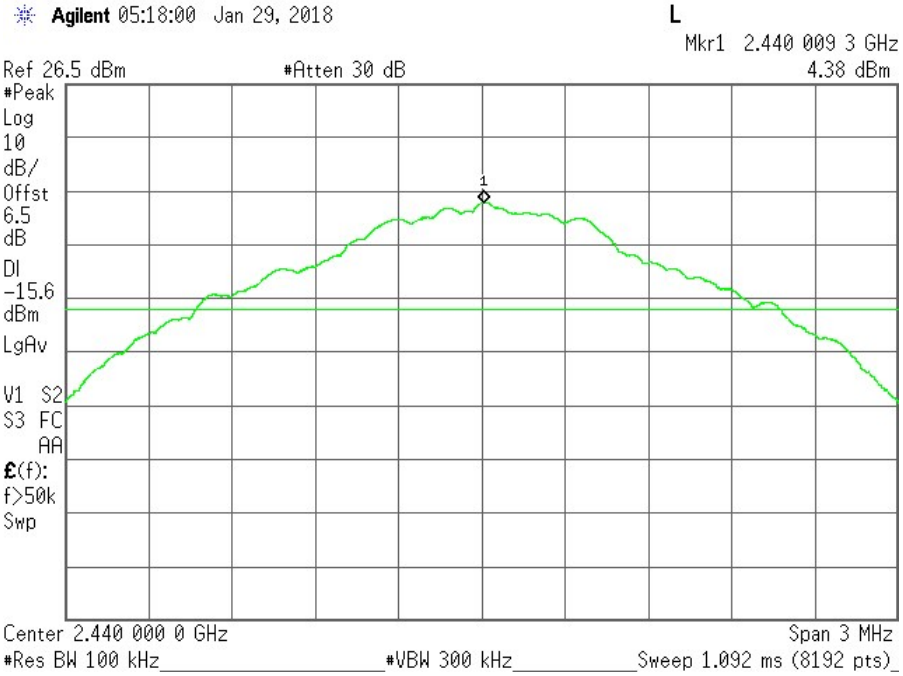
Authorized Band Edge				
Channel	**Frequency (GHz)**	**Fundamental to Band edge delta (dB)**	**Limit (dB)**	**Margin (dB)**
Low	2402	39.62	20	-19.62
High	2480	54.63	20	-34.63

Conducted Spurious		
Channel	**Frequency (GHz)**	**Highest Spurious Emission delta from limit (dB)**
Low	2402	-30.46
Mid	2440	-29.17
High	2480	-30.79

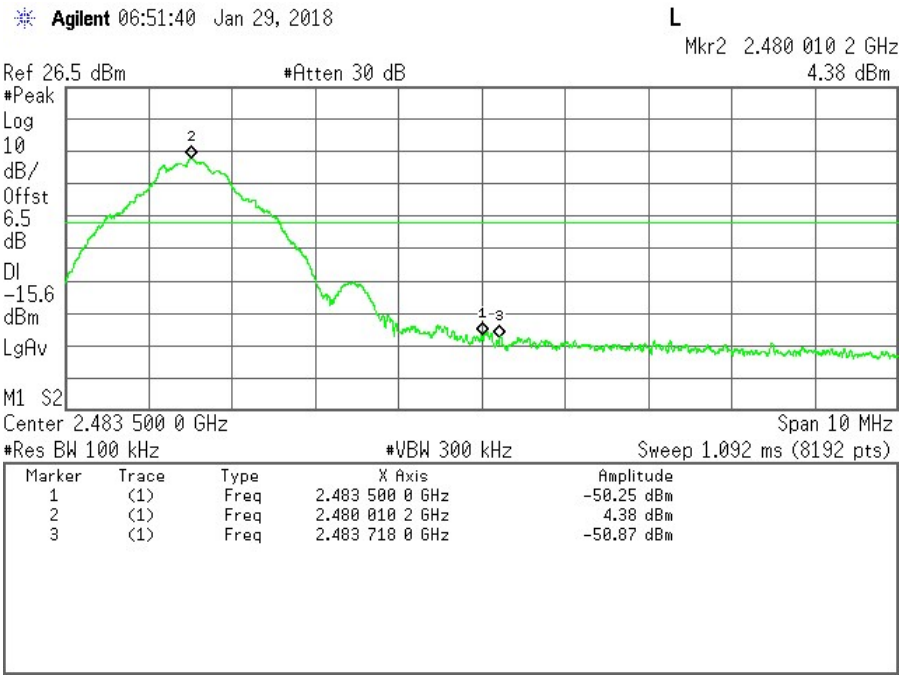
Band Edge



Low Channel - Plot

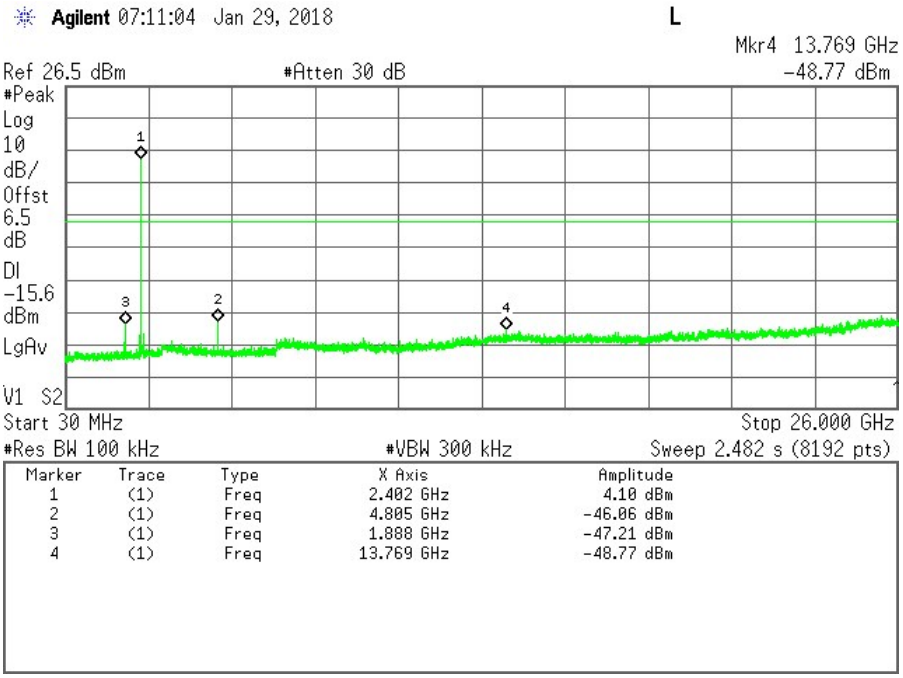


Mid (Reference) Channel - Plot

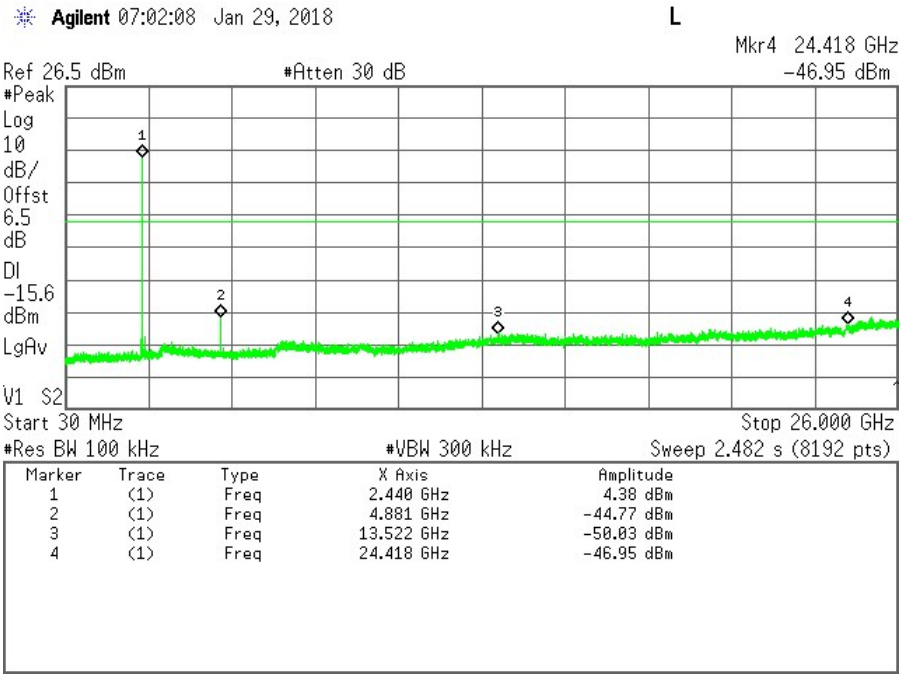


High Channel – Plot

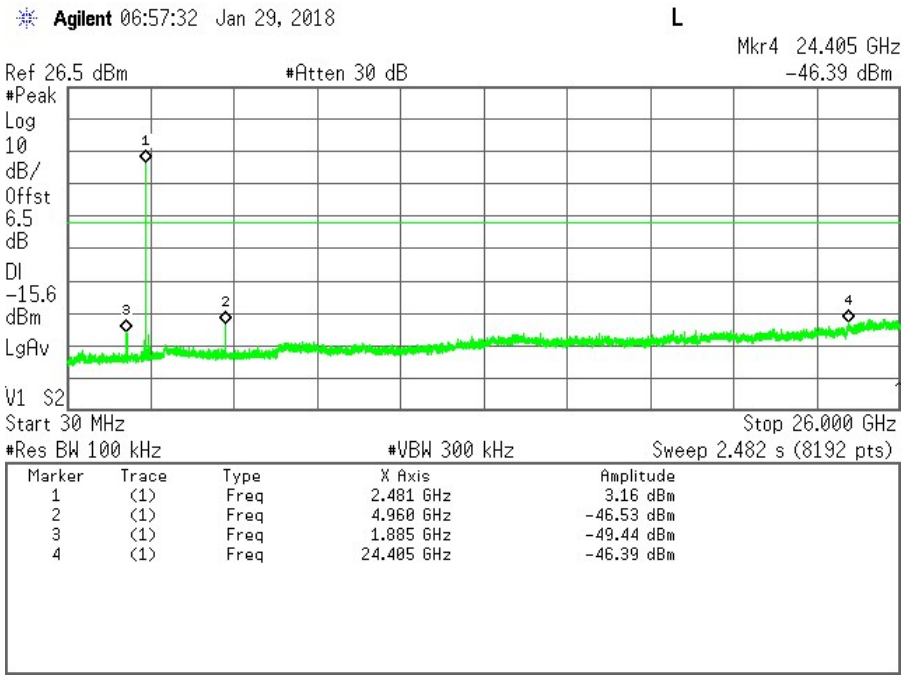
Conducted Spurious



Low Channel - Plot



Mid Channel - Plot



High Channel – Plot

Radiated Emissions (Unintentional)

Test Description

The Radiated Emissions (Unintentional) measurement is a test of the whole EUT during normal operation. During testing, the EUT's transmitter was put into Idle mode to purely test the digital circuity for unintentional emissions. It is a Radiated Emissions measurement performed from 30 MHz to 5x the highest operating frequency of the device. Prescans are done in a 3 meter anechoic chamber, while final measurements are made on the OATS. The EUT is positioned on a turntable in the manner for which the device will be normally used, with all peripherals connected in idle, with all cables typically used with the EUT dressed appropriately.

Test Criteria

Reference	Limit		
CFR 47 Subpart B, 15.109 ICES-003	Frequency Range	Field Strength Limit (uV/m) at 3M	Field Strength Limit (dBuV/m) at 3M
	30-88	100	40
	88-216	150	43.5
	216-960	200	46
	Above 960	500	54

Test Information

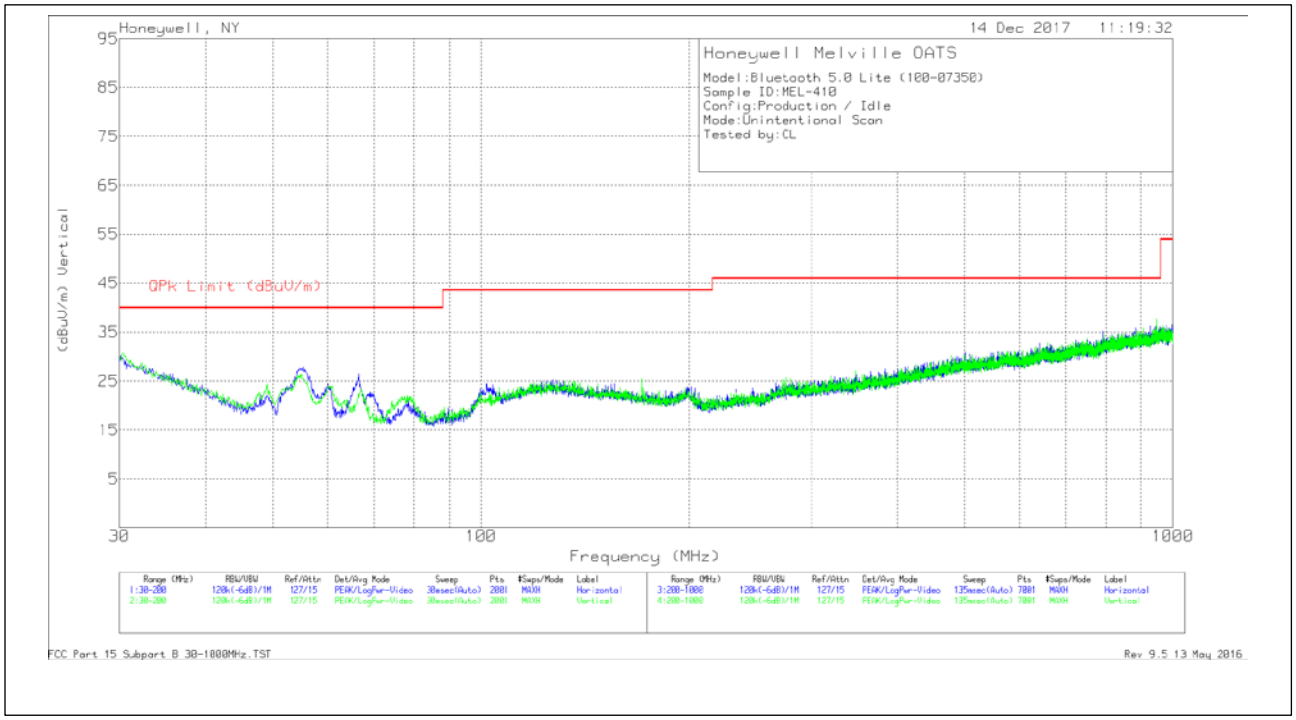
Tester	Test Location	Date	Temperature (ºC)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
CL/JB	RF Chamber/OATS	12/14/17-12/20/17	-3.3	77	1005	P

Equipment List

Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
RF Chamber						
Spectrum Analyzer	11496	100303	Rohde & Schwarz	FSU26	04/10/17	04/10/18
Bilog Antenna (30MHz-6GHz)	11534	A012816	Sunol	JB6	03/09/17	03/09/18
Horn Antenna (1-18GHz)	2319	2317	EMCO	3115	02/03/17	02/03/18
Preamp (1-18GHz)	11539	160362	Amplical	AMP1G18-35	N/A	N/A
Measurement Software	11543	Version 9.5	UL	UL EMC	N/A	N/A
Environmental Meter	11548	A.078188	Extech Instruments	SD700	04/24/17	04/14/18
OATS						
Spectrum Analyzer	11545	103125	Rohde & Schwarz	FSW26	02/14/17	02/14/18
Bilog Antenna (30MHz-6GHz)	11534	A012816	Sunol	JB6	03/09/17	03/09/18
Horn Antenna (1-18GHz)	2973	3127	EMCO	RGA-60	02/03/17	02/03/18
Preamp (1-18GHz)	11539	160362	Amplical	AMP1G18-35	N/A	N/A
Measurement Software	11543	Version 9.5	UL	UL EMC	N/A	N/A
Environmental Meter	11533	A070144	Extech Instruments	SD700	08/21/17	08/21/20

Test Results

Below 1GHz



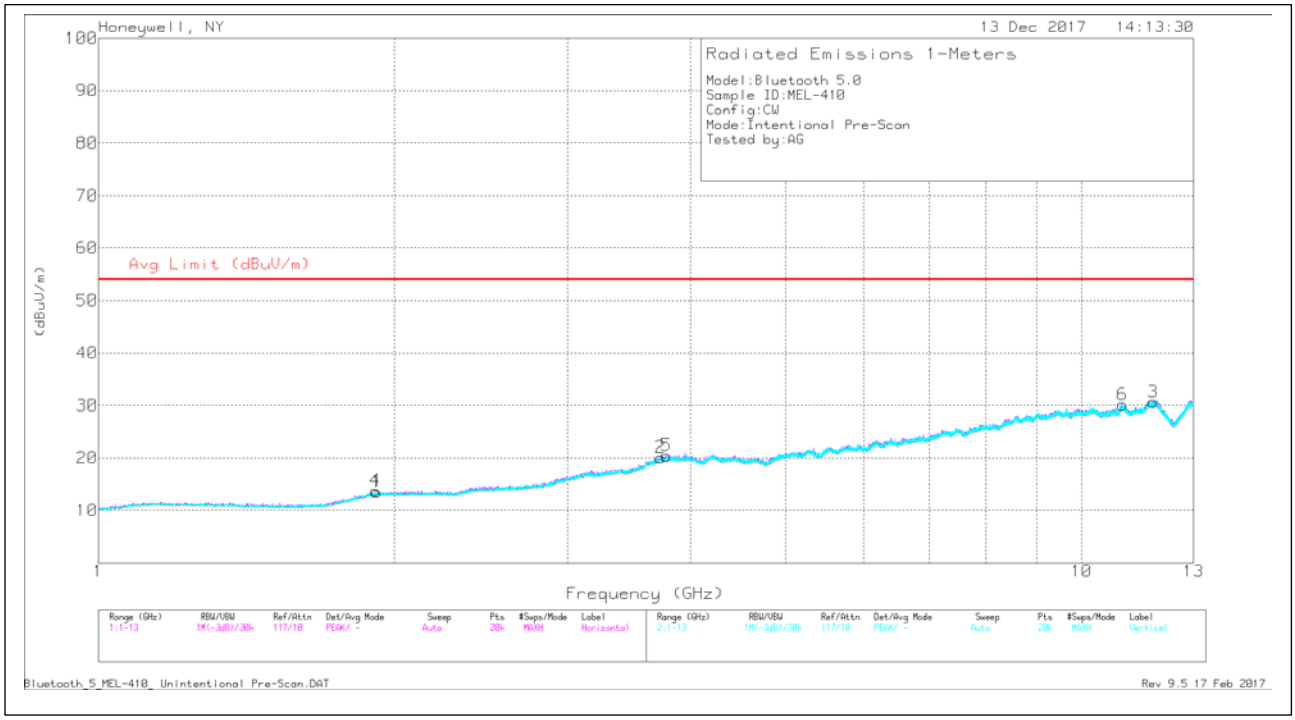
Plot

Frequency (MHz)	Meter Reading (dBuV)	Det	AF JB6 [dB/m]	Cable 1 [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
30.0517	11.17	Qp	25.6	.8	37.57	40	-2.43	59	231	H
55.5807	15.45	Qp	11.9	1.1	28.45	40	-11.55	134	367	H
30.7946	11.05	Qp	25.2	.9	37.15	40	-2.85	221	128	V
55.3243	19.14	Qp	11.9	1.1	32.14	40	-7.86	77	300	V
963.0747	4.19	Qp	27.4	9.2	40.79	53.97	-13.18	251	213	H
947.6528	4.13	Qp	27.4	9.2	40.73	46.02	-5.29	180	121	V

Qp - Quasi-Peak detector

Data

Above 1GHz



Plot

Frequency (GHz)	Meter Reading (dBuV)	Det	3115 Antenna [dB/m]	SMA5	Above1G Preamp [dB]	Distance Corr Factor [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.919	33.79	Pk	27.9	2.2	-40.9	-9.5	13.49	54	-40.51	0-360	98	H
3.729	35.13	Pk	32.3	3.1	-41	-9.5	20.03	54	-33.97	0-360	98	H
11.819	35.75	Pk	39.6	4.7	-39.9	-9.5	30.65	54	-23.35	0-360	98	H
1.914	34.2	Pk	27.8	2.2	-40.9	-9.5	13.8	54	-40.2	0-360	98	V
3.785	35.29	Pk	32.6	3.1	-41.1	-9.5	20.39	54	-33.61	0-360	98	V
11.014	35.63	Pk	38.5	5	-39.5	-9.5	30.13	54	-23.87	0-360	98	V

Pk - Peak detector

Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m] Horn#1	Above 1G Preamp(miniC)	SMA7 CF	SMA6 CF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.919	24.42	Av	27.9	-26.8	2.4	1.1	29.02	54	-24.98	74	-44.98	8	116	H
3.73	21.99	Av	32.1	-26.9	3.3	1.4	31.89	54	-22.11	74	-42.11	44	186	H
11.82	22.73	Av	39.8	-25.9	7.2	2.9	46.73	54	-7.27	74	-27.27	50	201	H
1.915	24.25	Av	27.9	-26.8	2.4	1.1	28.85	54	-25.15	74	-45.15	56	397	V
3.784	21.86	Av	32.3	-26.8	3.3	1.5	32.16	54	-21.84	74	-41.84	54	368	V
11.017	21.55	Av	39.4	-25.9	5.8	2.2	43.05	54	-10.95	74	-30.95	124	213	V

Av - Average detection

Data

Radiated Emissions (Intentional)

Test Description

Intentional Radiator Radiated Emissions are a test of the emissions, and harmonics on the EUT. The EUT is positioned to get the maximum emissions after a series of prescan measurements.
The EUT is placed on a non-conducting table 80 cm above the ground plane for below 1 GHz measurements and 1.5 m above the ground plane for above 1 GHz 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 1 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 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.

Test Criteria

Reference	Limit		
CFR 47 Subpart C, 15.205 CFR 47 Subpart C, 15.209 RSS-GEN	Frequency Range (MHz)	Field Strength Limit (uV/m)	Measurement distance (meters)
	0.009-0.490	2400/F(kHz)	300
	0.490-1.705	24000/F(kHz)	30
	1.705-30.0	30	30
	30-88	100**	3
	88-216	150**	3
	216-960	200**	3
	Above 960	500	3

**Except as provided in paragraph (g), fundamental emissions from intentional radiators operating under this section shall not be located in the frequency bands 54-72 MHz, 76-88 MHz, 174-216 MHz or 470-806 MHz. However, operation within these frequency bands is permitted under other sections of this part, e.g., §§15.231 and 15.241.

Test Information

Tester	Test Location	Date	Temperature (ºC)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
CL/JB	RF Chamber/OATS	01/23/18-04/10/18	4.4	50	1001	P

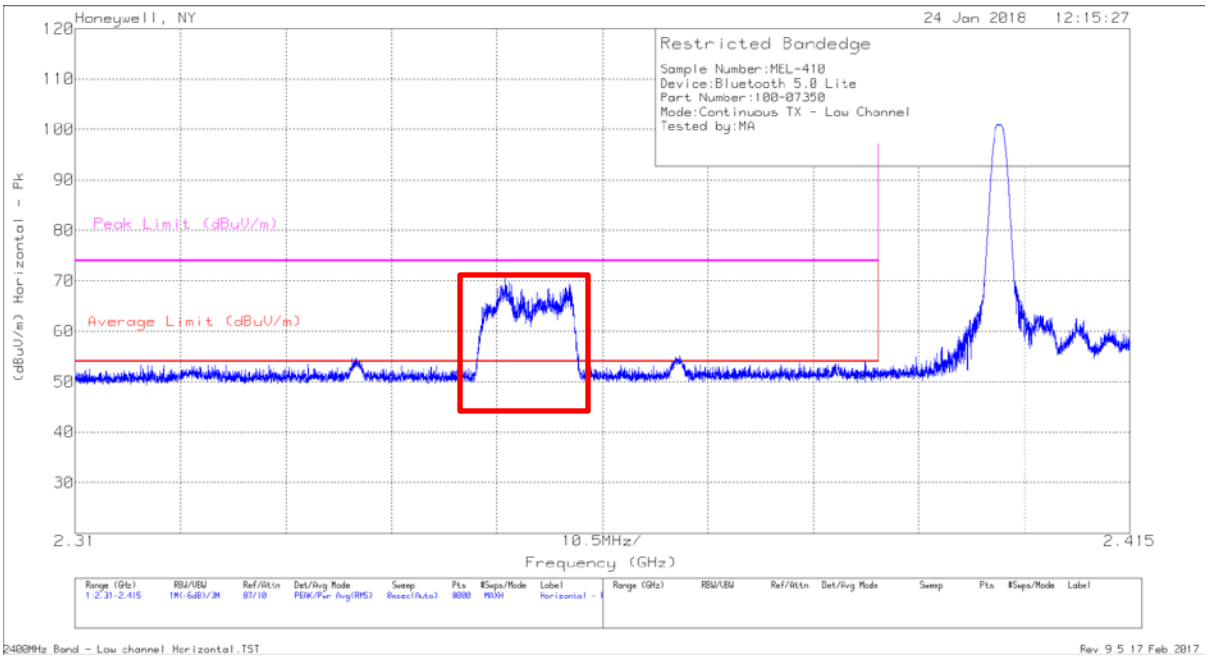
NOTE: Below 30MHz, pretesting showed that no emissions as a product of the EUT were detected within 20dB of the regulatory limit. Worse-case plot/data reported from 30MHz - 1GHz. No emissions detected above the system noise floor above 18GHz. Prescans performed in an anechoic chamber, final measurements performed on an OATS.

Equipment List

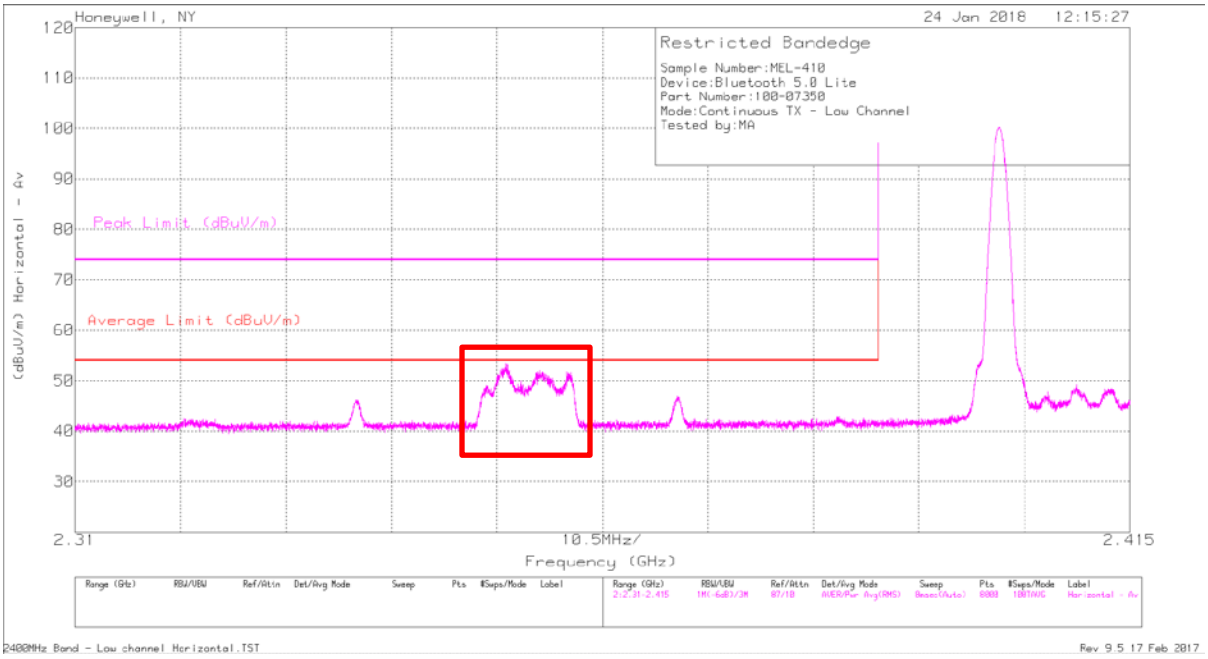
Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
RF Chamber						
Spectrum Analyzer	11496	100303	Rohde & Schwarz	FSU26	04/10/17	04/10/18
Spectrum Analyzer	11549	MY46178211	Agilent	E4440A	06/06/17	06/06/19
Loop Antenna (9kHz-30MHz)	11535	121080	Com-Power	AL-130R	10/17/17	10/17/18
Bilog Antenna (30MHz-5GHz)	11311	A022406	Sunol	JB5	02/01/18	02/01/19
Horn Antenna (1-18GHz)	2319	2317	EMCO	3115	01/10/18	01/10/19
Horn Antenna (18-40GHz)	11472	151	EMCO	EM-6963	02/06/17	02/06/18
Preamp (1-18GHz)	11539	160362	Amplical	AMP1G18-35	N/A	N/A
Preamp (18-40GHz)	11541	160911	Amplical	AMP18G40-35	N/A	N/A
Band Reject Filter	11553	G041	Micro-tronics	BRM50702-01	N/A	N/A
Measurement Software	11543	Version 9.5	UL	UL EMC	N/A	N/A
Environmental Meter	11548	A.078188	Extech Instruments	SD700	04/24/17	04/14/18
OATS						
Spectrum Analyzer	11545	103125	Rohde & Schwarz	FSW26	02/14/17	02/14/18
Bilog Antenna (30MHz-6GHz)	11534	A012816	Sunol	JB6	03/09/17	03/09/18
Horn Antenna (1-18GHz)	2973	3127	EMCO	RGA-60	01/22/18	01/22/19
Preamp (1-18GHz)	11539	160362	Amplical	AMP1G18-35	N/A	N/A
High Pass Filter	11552	G018	Micro-tronics	HPM50111-01	N/A	N/A
Measurement Software	11543	Version 9.5	UL	UL EMC	N/A	N/A
Environmental Meter	11533	A070144	Extech Instruments	SD700	08/21/17	08/21/20

Test Results

Restricted Band Edge



Low Channel Horizontal – Peak Plot



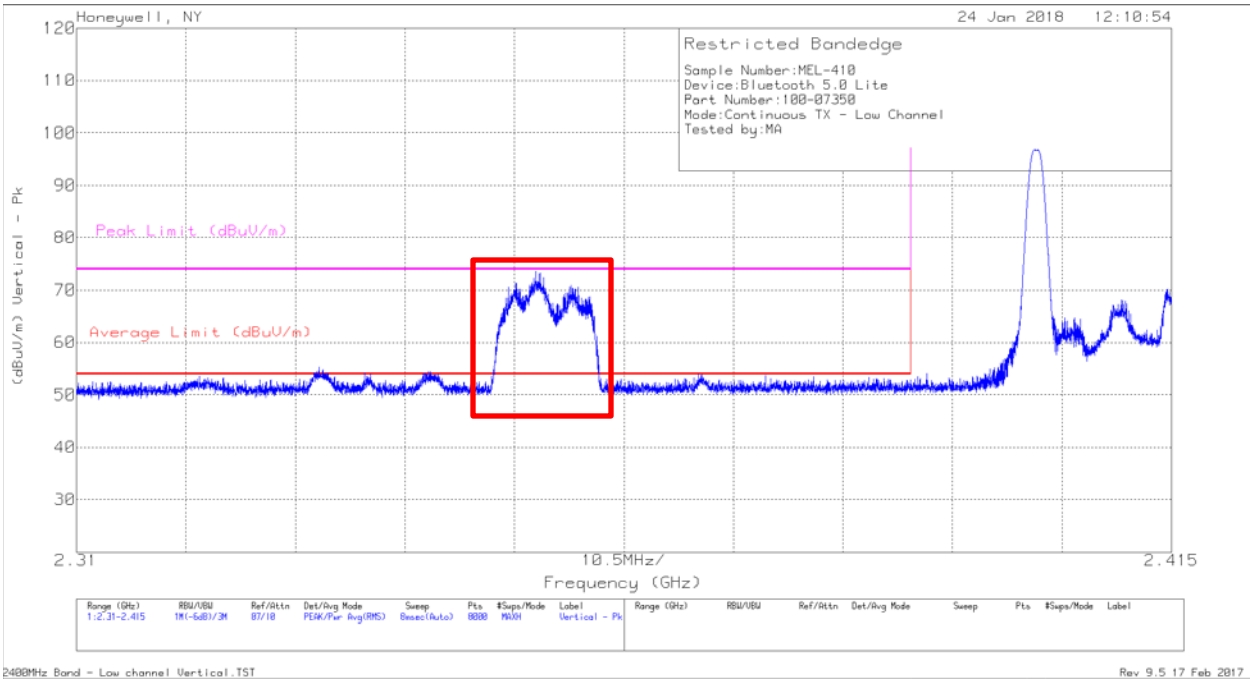
Low Channel Horizontal – Average Plot

NOTE: Emissions highlighted in the plot above is OATS ambient and not a product of the transmitter

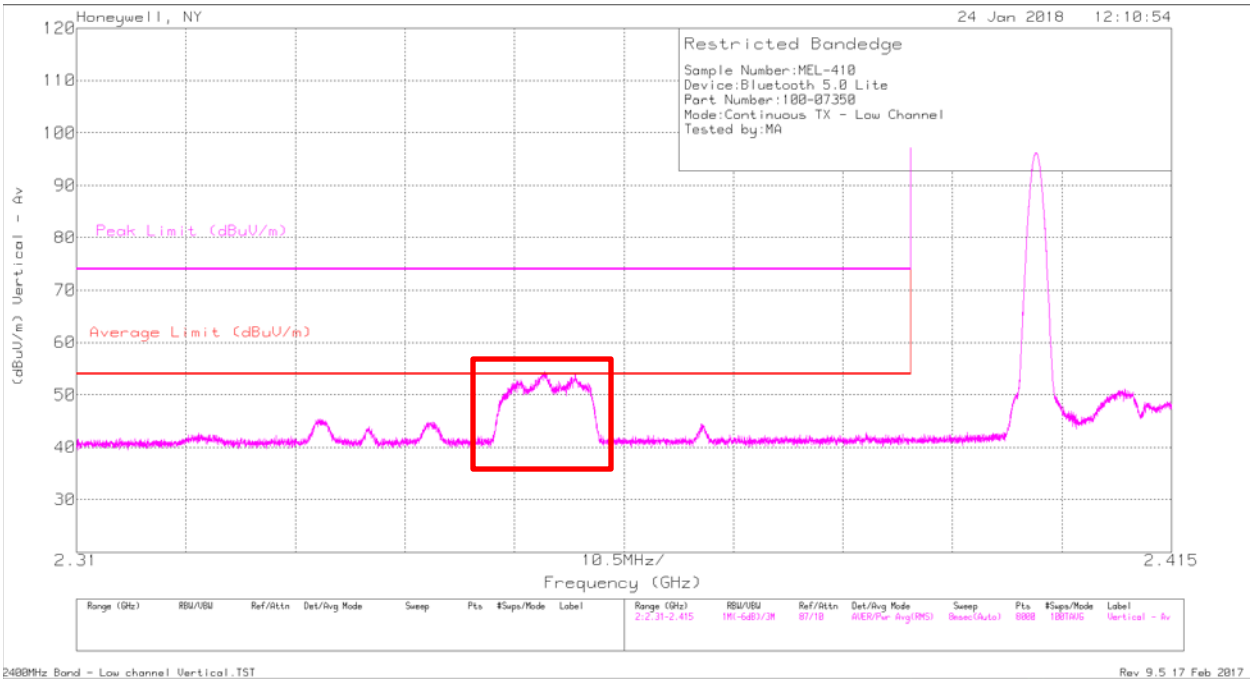
Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	SWBOX3 [dB]	SMA7 [dB]	SMA5 [dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.39	17.67	Pk	28.5	.7	2.6	2.5	51.97	-	-	74	-22.03	57	119	H
* 2.338	20.87	Pk	28.1	.7	2.6	2.5	54.77	-	-	74	-19.23	57	119	H
* 2.37	21.13	Pk	28.3	.7	2.6	2.5	55.23	-	-	74	-18.77	57	119	H
* 2.39	6.74	RMS	28.5	.7	2.6	2.5	41.04	54	-12.96	-	-	57	119	H
* 2.338	12.25	RMS	28.1	.7	2.6	2.5	46.15	54	-7.85	-	-	57	119	H
* 2.37	12.35	RMS	28.3	.7	2.6	2.5	46.45	54	-7.55	-	-	57	119	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

Low Channel Horizontal – Data



Low Channel Vertical – Peak Plot



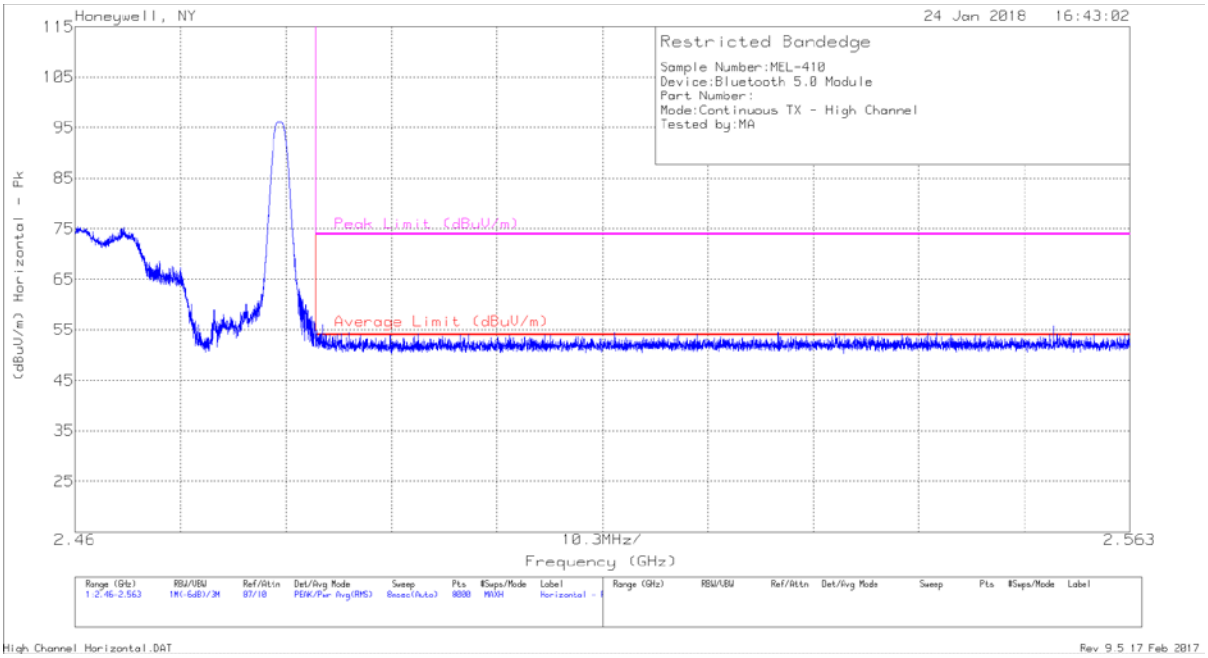
Low Channel Vertical – Average Plot

NOTE: Emissions highlighted in the plot above is OATS ambient and not a product of the transmitter

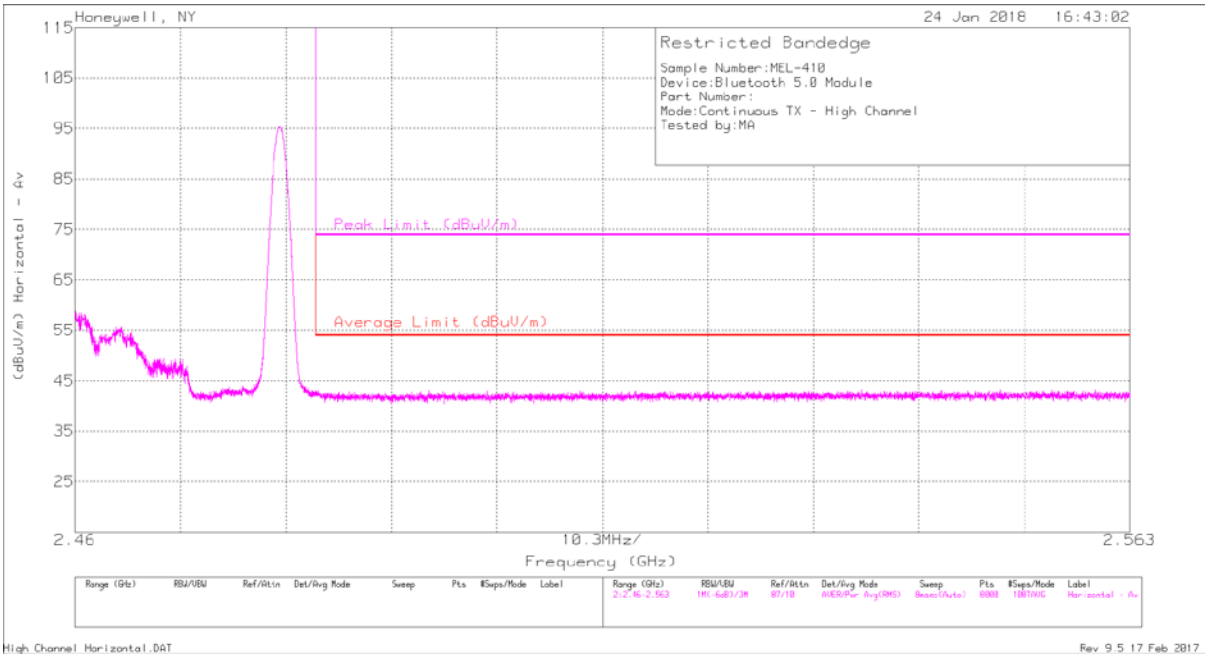
Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	SWBOX3 [dB]	SMA7 [dB]	SMA5 [dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.39	16.9	Pk	28.5	.7	2.6	2.5	51.2	-	-	74	-22.8	293	210	V
* 2.37	19.17	Pk	28.3	.7	2.6	2.5	53.27	-	-	74	-20.73	293	210	V
* 2.344	19.79	Pk	28.1	.7	2.6	2.5	53.69	-	-	74	-20.31	293	210	V
* 2.333	20.06	Pk	28.1	.7	2.6	2.5	53.96	-	-	74	-20.04	293	210	V
* 2.39	7.3	RMS	28.5	.7	2.6	2.5	41.6	54	-12.4	-	-	293	210	V
* 2.37	10.32	RMS	28.3	.7	2.6	2.5	44.42	54	-9.58	-	-	293	210	V
* 2.333	11.47	RMS	28.1	.7	2.6	2.5	45.37	54	-8.63	-	-	293	210	V
* 2.344	10.82	RMS	28.1	.7	2.6	2.5	44.72	54	-9.28	-	-	293	210	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

Low Channel Vertical – Data



High Channel Horizontal – Peak Plot

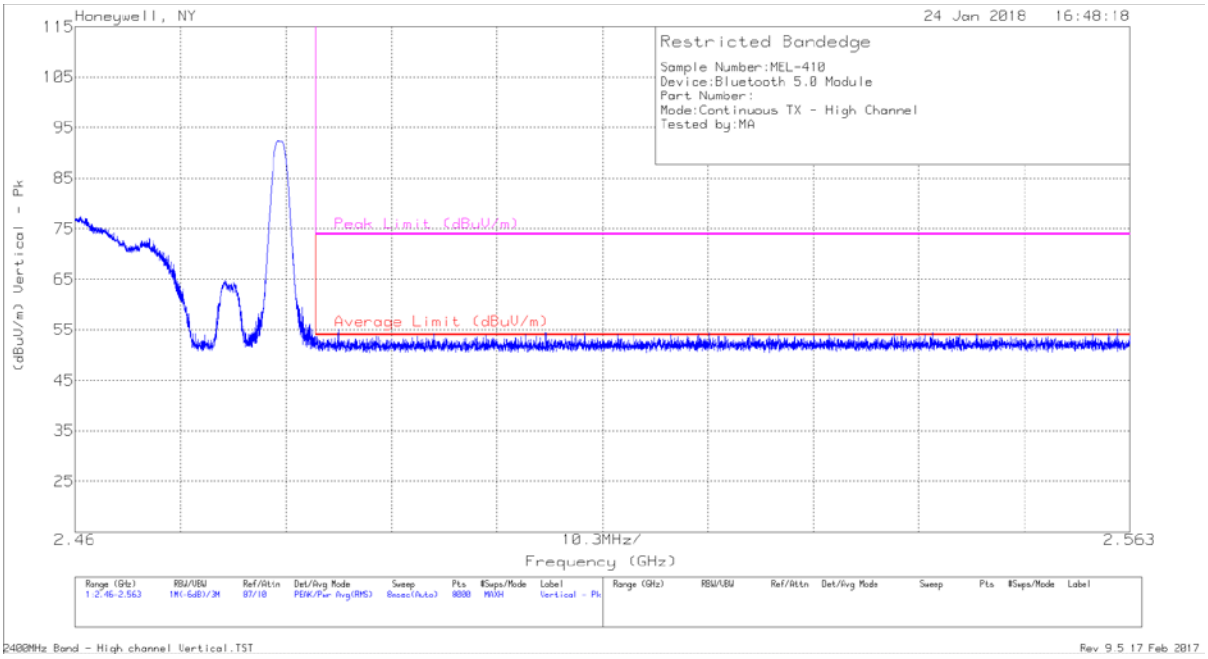


High Channel Horizontal – Average Plot

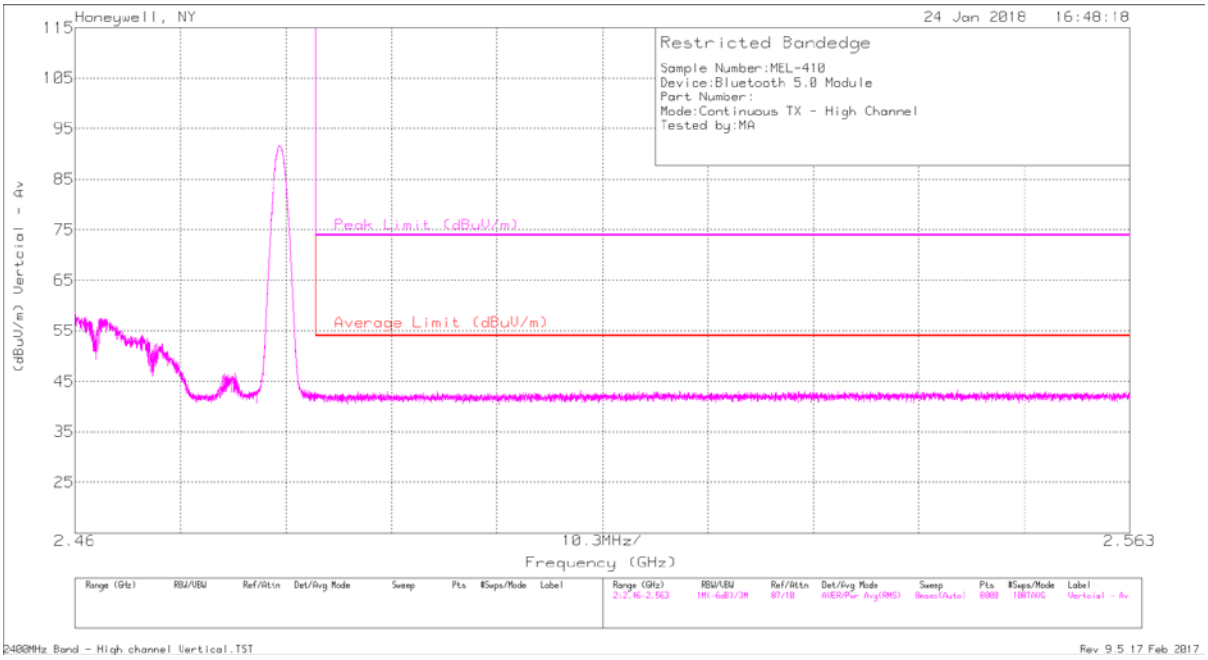
Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	SWBOX3 [dB]	SMA7 [dB]	SMA5 [dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.484	16.99	Pk	28.7	.7	2.6	2.6	51.59	-	-	74	-22.41	51	115	H
* 2.484	21.46	Pk	28.7	.7	2.6	2.6	56.06	-	-	74	-17.94	51	115	H
* 2.484	7.43	RMS	28.7	.7	2.6	2.6	42.03	54	-11.97	-	-	51	115	H
2.55	8.19	RMS	29	.7	2.7	2.6	43.19	54	-10.81	-	-	51	115	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

Antenna 1: High Channel Horizontal – Data



High Channel Vertical – Peak Plot



High Channel Vertical – Average Plot

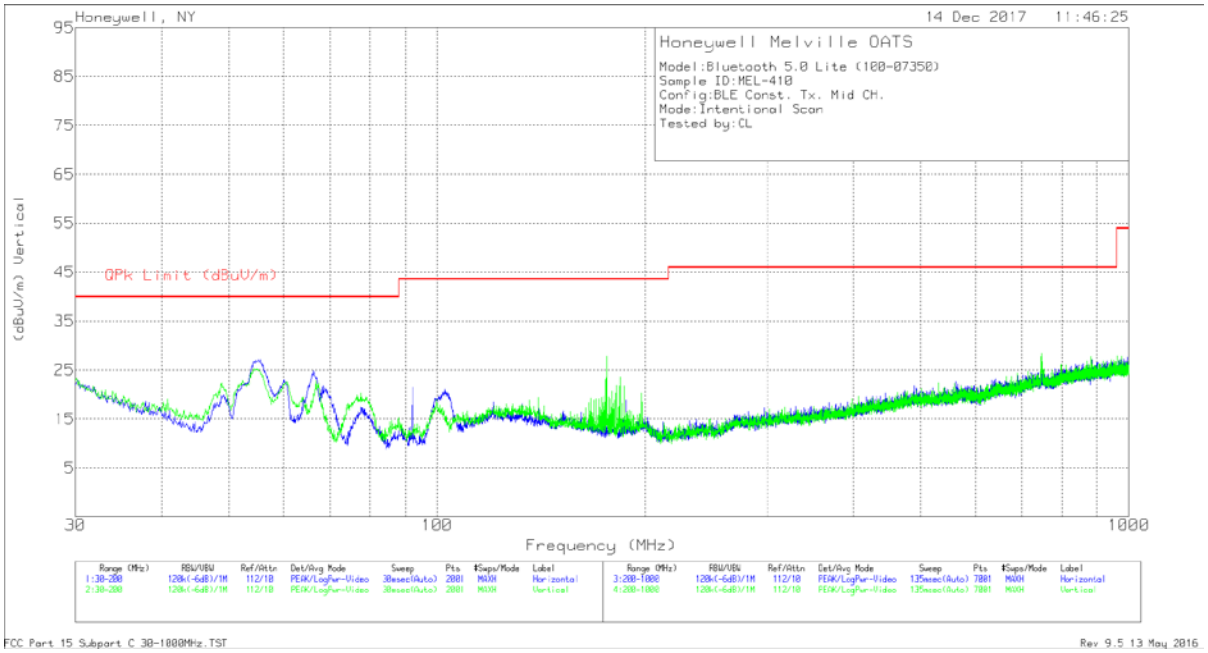
Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	SWBOX3 [dB]	SMA7 [dB]	SMA5 [dB]	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.484	17.82	Pk	28.7	.7	2.6	2.6	52.42	-	-	74	-21.58	344	144	V
2.562	20.21	Pk	29	.7	2.7	2.6	55.21	-	-	74	-18.79	344	144	V
* 2.484	7.95	RMS	28.7	.7	2.6	2.6	42.55	54	-11.45	-	-	344	144	V
2.546	8.3	RMS	29	.7	2.7	2.6	43.3	54	-10.7	-	-	344	144	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

High Channel Vertical – Data

Spurious Emissions

Below 1GHz (Worse-case)



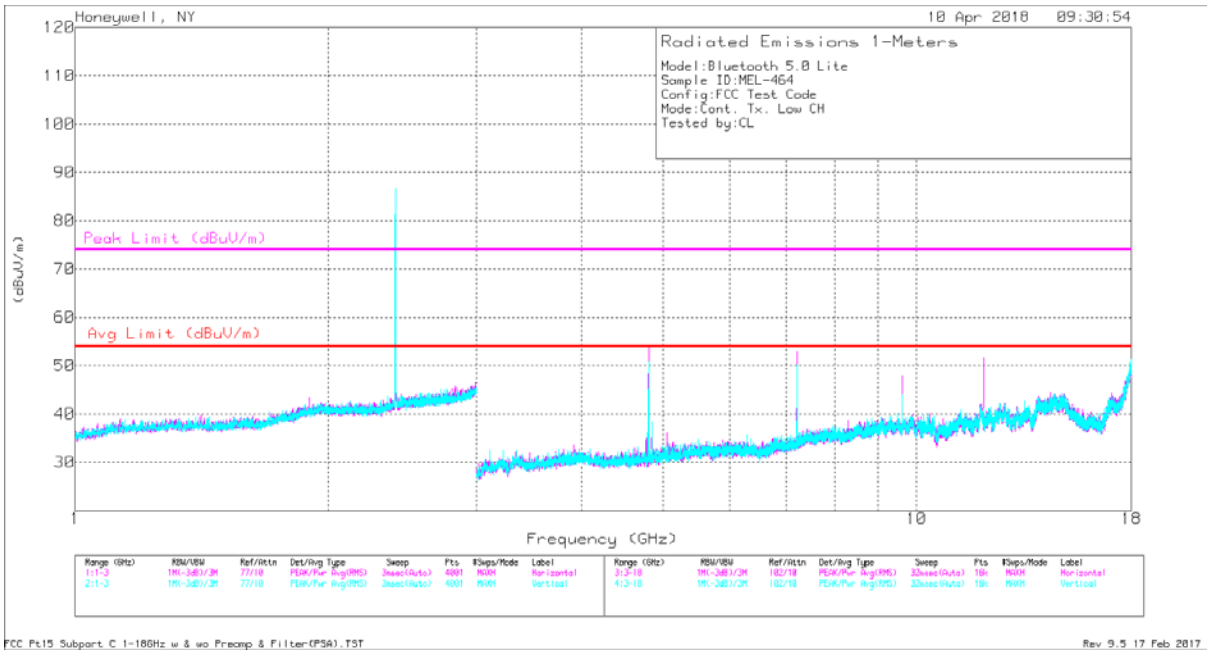
Mid Channel - Plot

Frequency (MHz)	Meter Reading (dBuV)	Det	AF JB6 [dB/m]	Cable 1 [dB]	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
55.9273	16.08	Qp	11.9	1.1	29.08	40	-10.92	194	390	H
66.3218	11.98	Qp	12.1	1.3	25.38	40	-14.62	170	368	H
174.6641	19.75	Qp	16	2.2	37.95	43.52	-5.57	196	349	H
54.3067	20.52	Qp	12	1.1	33.62	40	-6.38	280	173	V
66.8746	22.78	Qp	12.2	1.3	36.28	40	-3.72	214	123	V
176.0568	13.53	Qp	15.9	2.1	31.53	43.52	-11.99	94	390	V

Qp - Quasi-Peak detector

Mid Channel - Data

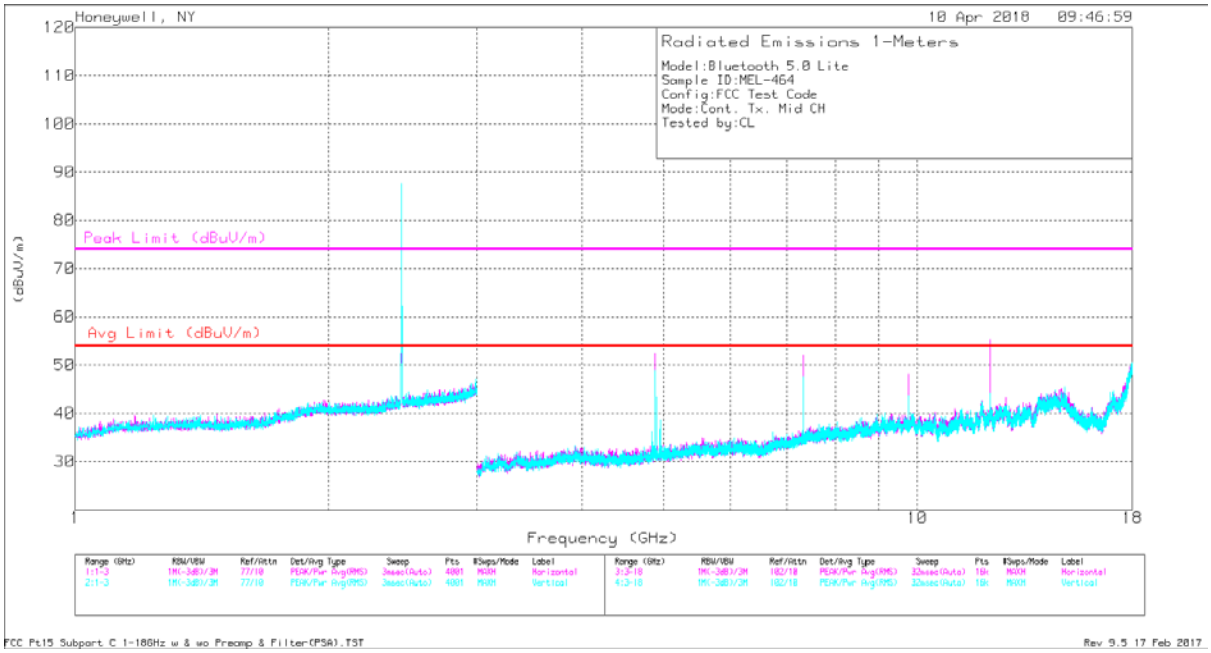
1-18GHz



Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	SWBOX2 [dB]	SMA7 [dB]	SMA5 [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.804	53.98	Av	33.1	-41.1	3.7	3.7	53.38	54	-.62	-	-	292	241	H
7.207	44.89	Av	36.2	-39.5	4.6	4.5	50.69	54	-3.31	-	-	276	238	H
9.609	34.01	Av	38	-39	5.6	5.2	43.81	54	-10.19	-	-	14	245	H
* 12.012	35.23	Av	39.4	-37.3	6.6	5.6	49.53	54	-4.47	-	-	8	208	H
14.415	28.23	Av	42	-36.9	6.8	6.4	46.53	54	-7.47	-	-	257	280	H
16.812	28.13	Av	39.5	-38.1	7.4	7.2	44.13	54	-9.87	-	-	53	138	H
* 4.804	53.83	Av	33.1	-41.1	3.7	3.7	53.23	54	-.77	-	-	345	160	V
7.207	39.45	Av	36.2	-39.5	4.6	4.5	45.25	54	-8.75	-	-	74	129	V
9.611	27.92	Av	38	-39	5.6	5.2	37.72	54	-16.28	-	-	221	276	V
* 12.012	27.6	Av	39.4	-37.3	6.6	5.6	41.9	54	-12.1	-	-	323	230	V
14.414	28.25	Av	42	-36.9	6.8	6.4	46.55	54	-7.45	-	-	252	105	V
16.813	28	Av	39.5	-38.1	7.4	7.2	44	54	-10	-	-	210	311	V
* 4.805	57.93	PK	33.1	-41.1	3.7	3.7	57.33	-	-	74	-16.67	292	241	H
7.207	51.18	PK	36.2	-39.5	4.6	4.5	56.98	-	-	74	-17.02	276	238	H
9.607	42.73	PK	38	-39	5.6	5.2	52.53	-	-	74	-21.47	14	245	H
* 12.01	44.3	PK	39.4	-37.3	6.6	5.6	58.6	-	-	74	-15.4	8	208	H
14.411	38.94	PK	42	-36.9	6.8	6.4	57.24	-	-	74	-16.76	257	280	H
16.813	39.95	PK	39.5	-38.1	7.4	7.2	55.95	-	-	74	-18.05	53	138	H
* 4.805	57.79	PK	33.1	-41.1	3.7	3.7	57.19	-	-	74	-16.81	345	160	V
7.205	47.08	PK	36.2	-39.5	4.6	4.5	52.88	-	-	74	-21.12	74	129	V
9.608	39.69	PK	38	-39	5.6	5.2	49.49	-	-	74	-24.51	221	276	V
* 12.012	38.82	PK	39.4	-37.3	6.6	5.6	53.12	-	-	74	-20.88	323	230	V
14.416	39.66	PK	42	-36.9	6.8	6.4	57.96	-	-	74	-16.04	252	105	V
16.818	39.77	PK	39.5	-38.1	7.4	7.2	55.77	-	-	74	-18.23	210	311	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK - KDB558074 Method: Maximum Peak
Av - KDB558074 Option 1 Maximum RMS Average

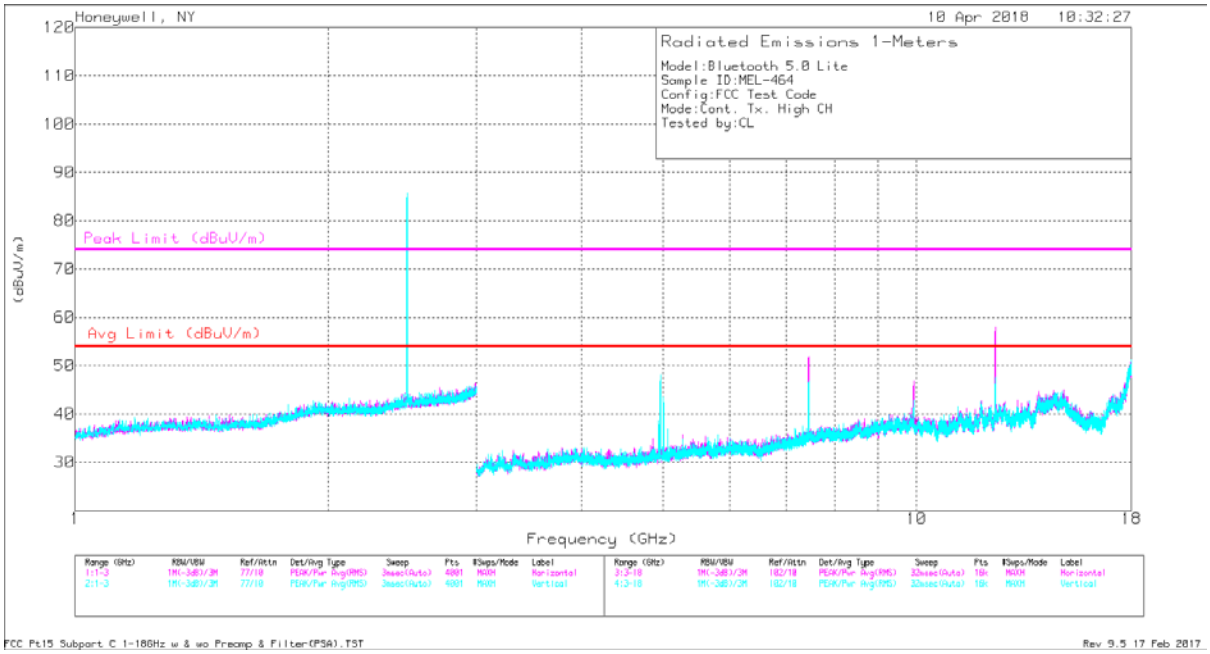
Low Channel – Plot/Data



Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	SWBOX2 [dB]	SMA7 [dB]	SMA5 [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.88	52.58	Av	33.2	-41.3	3.7	3.6	51.78	54	-2.22	-	-	76	116	H
* 7.319	42.89	Av	36.6	-39.7	4.6	4.5	48.89	54	-5.11	-	-	237	152	H
9.761	30.48	Av	38	-39.1	5.5	5.3	40.18	54	-13.82	-	-	271	236	H
* 12.202	35.98	Av	39.2	-37.2	6.4	6	50.38	54	-3.62	-	-	0	209	H
14.645	28.16	Av	42.6	-36.9	6.7	6.4	46.96	54	-7.04	-	-	167	122	H
17.075	28.44	Av	40.8	-38.1	7.5	7	45.64	54	-8.36	-	-	252	185	H
* 4.88	48.46	Av	33.2	-41.3	3.7	3.6	47.66	54	-6.34	-	-	177	231	V
* 7.321	37.26	Av	36.6	-39.7	4.6	4.5	43.26	54	-10.74	-	-	310	231	V
9.761	29.76	Av	38	-39.1	5.5	5.3	39.46	54	-14.54	-	-	336	245	V
* 12.203	27.92	Av	39.2	-37.2	6.4	6	42.32	54	-11.68	-	-	79	119	V
14.643	28.05	Av	42.6	-36.9	6.7	6.4	46.85	54	-7.15	-	-	163	345	V
17.077	28.28	Av	40.8	-38.1	7.5	7	45.48	54	-8.52	-	-	184	297	V
* 4.881	56.74	PK	33.2	-41.3	3.7	3.6	55.94	-	-	74	-18.06	76	116	H
* 7.321	49.46	PK	36.6	-39.7	4.6	4.5	55.46	-	-	74	-18.54	237	152	H
9.762	40.84	PK	38	-39.1	5.5	5.3	50.54	-	-	74	-23.46	271	236	H
* 12.202	44.4	PK	39.2	-37.2	6.4	6	58.8	-	-	74	-15.2	0	209	H
14.643	39.53	PK	42.6	-36.9	6.7	6.4	58.33	-	-	74	-15.67	167	122	H
17.076	39.73	PK	40.8	-38.1	7.5	7	56.93	-	-	74	-17.07	252	185	H
* 4.88	53.2	PK	33.2	-41.3	3.7	3.6	52.4	-	-	74	-21.6	177	231	V
* 7.321	45.62	PK	36.6	-39.7	4.6	4.5	51.62	-	-	74	-22.38	310	231	V
9.761	40.86	PK	38	-39.1	5.5	5.3	50.56	-	-	74	-23.44	336	245	V
* 12.204	38.93	PK	39.2	-37.2	6.4	6	53.33	-	-	74	-20.67	79	119	V
14.64	39.41	PK	42.6	-36.9	6.7	6.4	58.21	-	-	74	-15.79	163	345	V
17.083	40.16	PK	40.9	-38.1	7.5	7	57.46	-	-	74	-16.54	184	297	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK2 - KDB558074 Method: Maximum Peak
MAv1 - KDB558074 Option 1 Maximum RMS Average

Mid Channel – Plot/Data



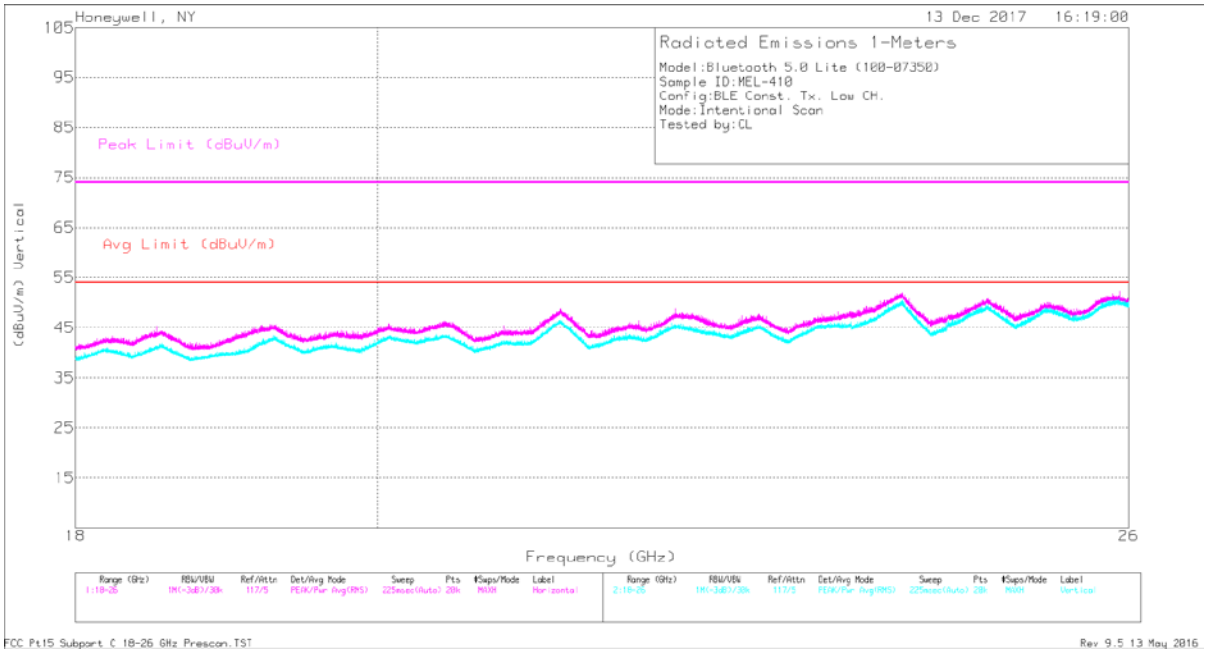
Frequency (GHz)	Meter Reading (dBuV)	Det	AF [dB/m]	SWBOX2 [dB]	SMA7 [dB]	SMA5 [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.96	46.61	Av	33.3	-41.6	3.8	3.7	45.81	54	-8.19	-	-	309	293	H
* 7.441	39.28	Av	36.7	-39.7	4.7	4.6	45.58	54	-8.42	-	-	247	148	H
9.919	31.65	Av	38.2	-39.2	5.5	5.3	41.45	54	-12.55	-	-	12	224	H
* 12.402	36.76	Av	38.9	-37.1	6.4	5.9	50.86	54	-3.14	-	-	8	239	H
14.882	27.83	Av	41.9	-36.9	6.8	6.5	46.13	54	-7.87	-	-	110	307	H
17.356	27.97	Av	42.6	-38.2	7.6	7.1	47.07	54	-6.93	-	-	182	333	H
* 4.96	47.32	Av	33.3	-41.6	3.8	3.7	46.52	54	-7.48	-	-	192	209	V
* 7.441	37.42	Av	36.7	-39.7	4.7	4.6	43.72	54	-10.28	-	-	171	253	V
9.919	29.45	Av	38.2	-39.2	5.5	5.3	39.25	54	-14.75	-	-	292	208	V
* 12.402	32.4	Av	38.9	-37.1	6.4	5.9	46.5	54	-7.5	-	-	100	220	V
14.884	27.55	Av	41.9	-36.9	6.8	6.5	45.85	54	-8.15	-	-	302	295	V
17.357	27.95	Av	42.6	-38.2	7.6	7.1	47.05	54	-6.95	-	-	121	119	V
* 4.961	52.21	PK	33.3	-41.6	3.8	3.7	51.41	-	-	74	-22.59	309	293	H
* 7.441	47.27	PK2	36.7	-39.7	4.7	4.6	53.57	-	-	74	-20.43	247	148	H
9.921	41.48	PK	38.2	-39.2	5.5	5.3	51.28	-	-	74	-22.72	12	224	H
* 12.402	45.04	PK	38.9	-37.1	6.4	5.9	59.14	-	-	74	-14.86	8	239	H
14.881	39.12	PK	41.9	-36.9	6.8	6.5	57.42	-	-	74	-16.58	110	307	H
17.357	39.01	PK	42.6	-38.2	7.6	7.1	58.11	-	-	74	-15.89	182	333	H
* 4.96	52.36	PK	33.3	-41.6	3.8	3.7	51.56	-	-	74	-22.44	192	209	V
* 7.441	45.9	PK	36.7	-39.7	4.7	4.6	52.2	-	-	74	-21.8	171	253	V
9.924	40.53	PK	38.2	-39.2	5.5	5.3	50.33	-	-	74	-23.67	292	208	V
* 12.401	41.88	PK	38.9	-37.1	6.4	5.9	55.98	-	-	74	-18.02	100	220	V
14.885	39.3	PK	41.9	-36.9	6.8	6.5	57.6	-	-	74	-16.4	302	295	V
17.36	39.3	PK	42.6	-38.2	7.6	7.1	58.4	-	-	74	-15.6	121	119	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
PK - KDB558074 Method: Maximum Peak
Av - KDB558074 Option 1 Maximum RMS Average

High Channel – Plot/Data

18-26GHz

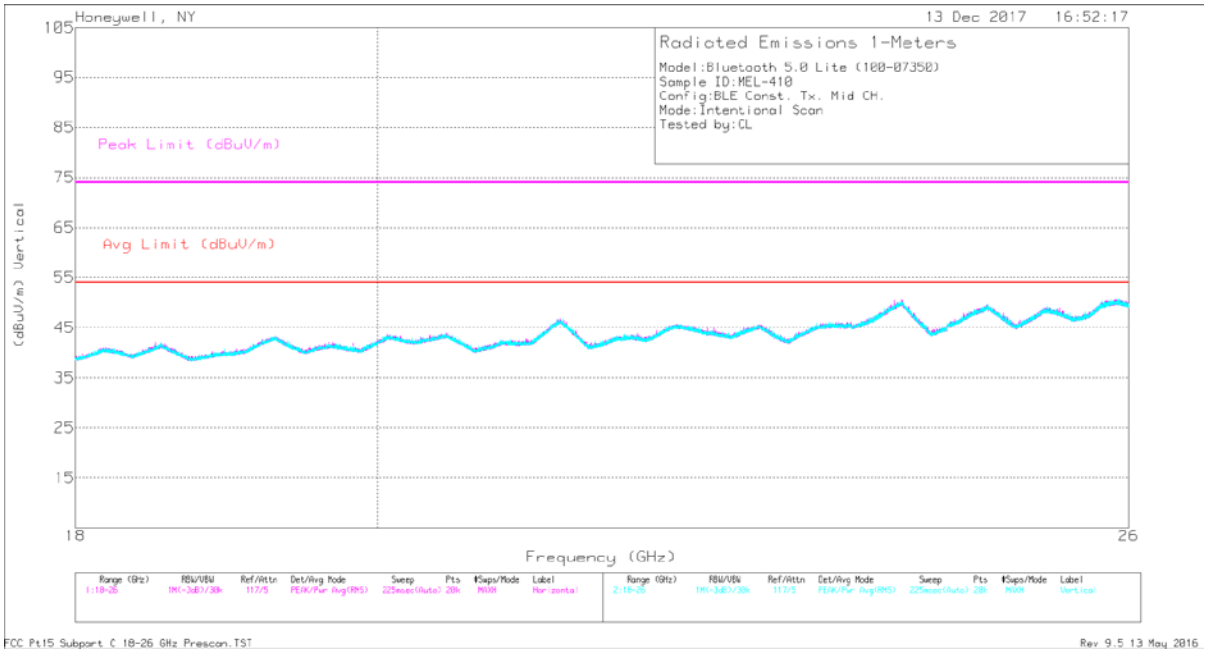
Note: No emissions were detected above the system noise floor.



Frequency (GHz)	Meter Reading (dBuV)	Det	Horn ACF [dB]	SMA 5 [dB]	Preamp [dB]	Distance Corr Factor [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 18.532	37.22	Pk	43.8	7.3	-34.8	-9.5	44.02	54	-9.98	74	-29.98	0-360	98	H
* 21.334	36.91	Pk	44.9	8.1	-32.3	-9.5	48.11	54	-5.98	74	-25.89	0-360	98	H
* 23.971	36.88	Pk	46.3	8.5	-30.9	-9.5	51.28	54	-2.72	74	-22.72	0-360	98	H
* 19.27	34.51	Pk	44.3	8	-34.5	-9.5	42.81	54	-11.19	74	-31.19	0-360	98	V
* 21.32	34.97	Pk	44.9	8.1	-32	-9.5	46.47	54	-7.53	74	-27.53	0-360	98	V
24.046	35.5	Pk	46.3	8.4	-30.9	-9.5	49.8	54	-4.2	74	-24.2	0-360	98	V

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

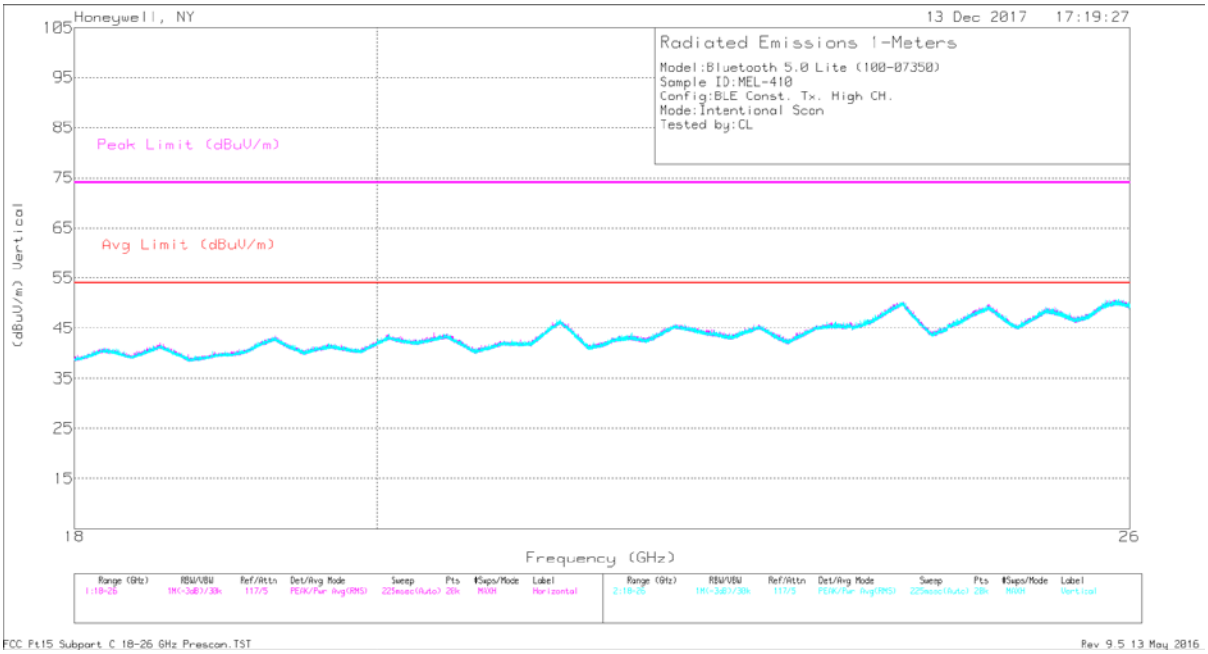
Low Channel – Plot/Data



Frequency (GHz)	Meter Reading (dBuV)	Det	Horn ACF [dB]	SMA 5 [dB]	Preamp [dB]	Distance Corr Factor [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 19.302	34.57	Pk	44.3	8	-34.2	-9.5	43.17	54	-10.83	74	-30.83	0-360	98	H
* 21.317	35.18	Pk	44.9	8.1	-31.9	-9.5	46.78	54	-7.22	74	-27.22	0-360	98	H
24.014	35.76	Pk	46.3	8.4	-30.4	-9.5	50.56	54	-3.44	74	-23.44	0-360	98	H
* 20.466	34.49	Pk	44.4	8.3	-34.2	-9.5	43.49	54	-10.51	74	-30.51	0-360	98	V
* 22.86	35.14	Pk	45.7	8.2	-34.2	-9.5	45.34	54	-8.66	74	-28.66	0-360	98	V
24.752	36.85	Pk	46	8.7	-32.5	-9.5	49.55	54	-4.45	74	-24.45	0-360	98	V

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

Mid Channel – Plot/Data



Frequency (GHz)	Meter Reading (dBuV)	Det	Horn ACF [dB]	SMA 5 [dB]	Preamp [dB]	Distance Corr Factor [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 19.291	34.35	Pk	44.3	8	-34.3	-9.5	42.85	54	-11.15	74	-31.15	0-360	98	H
* 21.313	35.03	Pk	44.9	8.1	-32	-9.5	46.53	54	-7.47	74	-27.47	0-360	98	H
24.03	35.32	Pk	46.3	8.4	-30.5	-9.5	50.02	54	-3.98	74	-23.98	0-360	98	H
* 20.52	34.9	Pk	44.4	8.4	-34.6	-9.5	43.6	54	-10.4	74	-30.4	0-360	98	V
* 22.201	35.32	Pk	45.6	8.4	-34.1	-9.5	45.72	54	-8.28	74	-28.28	0-360	98	V
24.737	36.99	Pk	46	8.7	-32.6	-9.5	49.59	54	-4.41	74	-24.41	0-360	98	V

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

High Channel – Plot/Data

Conducted Emissions (Mains)

Test Description

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10 / C63.4.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorder for both NEUTRAL and HOT lines.

Test Criteria

Reference	Limit (dBuV)		
	Frequency Range (MHz)	Quasi-Peak	Average
CFR 47 Subpart C, 15.207 RSS-GEN CFR 47 Subpart B, 15.107 ICES-003	0.15-0.5	66 to 56	56 to 46
	0.5-5	56	46
	5-30	60	50

Test Information

Tester	Test Location	Date	Temperature (ºC)	Humidity (%RH)	Pressure (mbar)	Results (P/F)
MA	RF Lab	5/17/18	22.6	8.8	1014	P

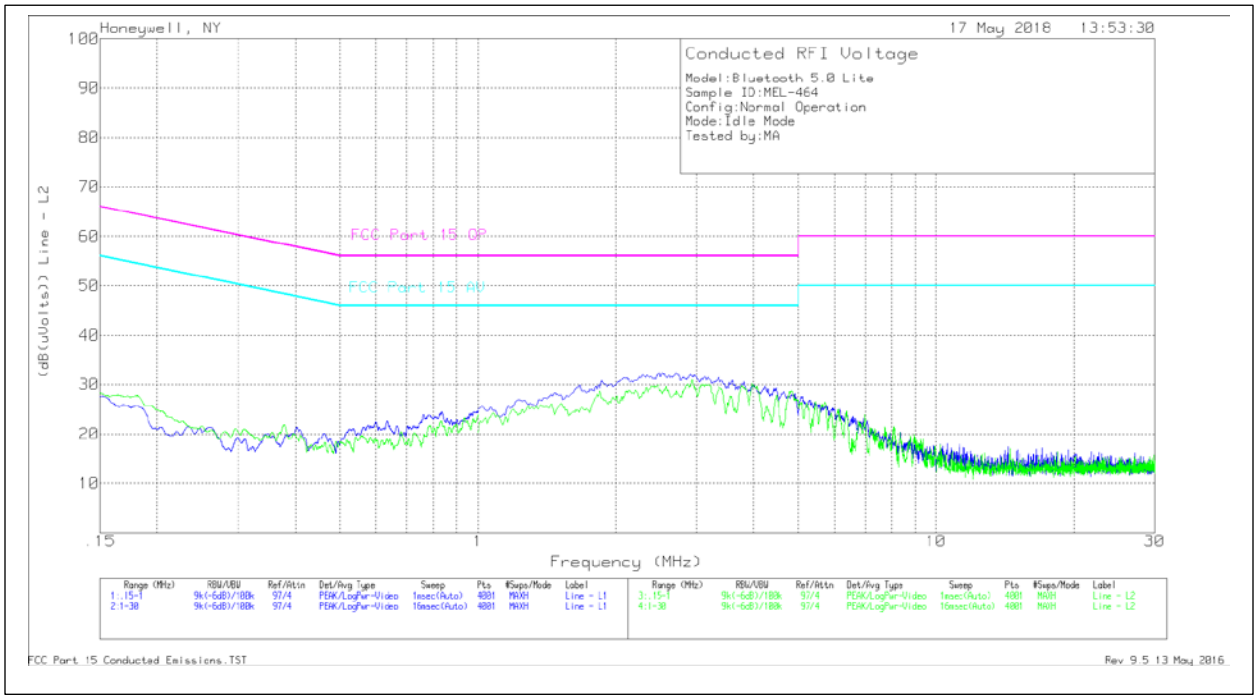
Equipment List

Instrument Type	ID #	Serial #	Manufacturer	Model	Cal Date	Cal Due Date
Spectrum Analyzer	11556	MY49430802	Keysight	N9030A (PXA)	12/19/2017	12/19/2018
LISN	11527	241259	Com-Power	LIN-120A	01/10/2018	01/10/2019
Measurement Software	11543	Version 9.5	UL	UL EMC	N/A	N/A
Environmental Meter	11533	A078144	Extech Instruments	SD700	08/21/2017	08/21/2020

NOTE: Worse-case plot/data reported for intentional testing.

Test Results

Unintentional Mode



Plot

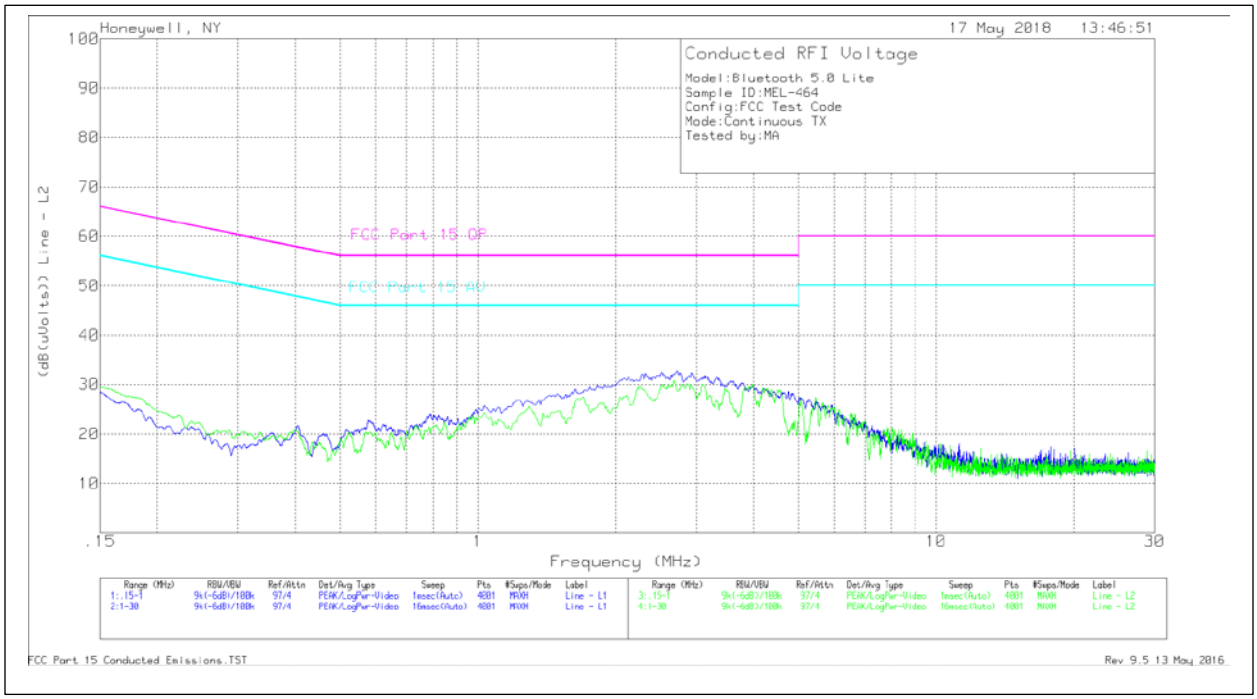
Range 1: Line - L1 .15 - 1MHz									
Frequency (MHz)	**Meter Reading (dBuV)**	**Det**	**Gain/Loss [dB] LISN1**	**CDE Cable #1**	**Corrected Reading (dB(uVolts))**	**FCC Part 15 QP**	**Margin (dB)**	**FCC Part 15 AV**	**Margin (dB)**
.15469	16.86	Pk	10.6	-.1	27.36	65.74	-38.38	55.74	-28.38
2.711	22.42	Pk	9.9	.1	32.42	56	-23.58	46	-13.58
2.10925	21.51	Pk	9.9	0	31.41	56	-24.59	46	-14.59
1.67063	19.91	Pk	9.9	0	29.81	56	-26.19	46	-16.19
3.349	21.53	Pk	9.9	.1	31.53	56	-24.47	46	-14.47
4.42925	19.24	Pk	9.9	.1	29.24	56	-26.76	46	-16.76

Range 3: Line - L2 .15 - 1MHz									
Frequency (MHz)	**Meter Reading (dBuV)**	**Det**	**Gain/Loss [dB] LISN1**	**CDE Cable #1**	**Corrected Reading (dB(uVolts))**	**FCC Part 15 QP**	**Margin (dB)**	**FCC Part 15 AV**	**Margin (dB)**
.18035	17.15	Pk	10.5	.1	27.75	64.47	-36.72	54.47	-26.72
1.4495	16.08	Pk	9.9	0	25.98	56	-30.02	46	-20.02
1.84825	18.74	Pk	9.9	0	28.64	56	-27.36	46	-17.36
2.93575	20.86	Pk	10	.1	30.96	56	-25.04	46	-15.04
3.97975	20.06	Pk	10	.1	30.16	56	-25.84	46	-15.84
2.47175	20.01	Pk	9.9	.1	30.01	56	-25.99	46	-15.99

Pk - Peak detector

Data

Intentional Mode



High Channel – Plot

Line - L1									
Frequency (MHz)	**Meter Reading (dBuV)**	**Det**	**Gain/Loss [dB] LISN1**	**CDE Cable #1**	**Corrected Reading (dB(uVolts))**	**FCC Part 15 QP**	**Margin (dB)**	**FCC Part 15 AV**	**Margin (dB)**
1.03625	15.76	Pk	9.9	0	25.66	56	-30.34	46	-20.34
2.08025	21.37	Pk	9.9	0	31.27	56	-24.73	46	-14.73
2.32313	22.2	Pk	9.9	0	32.1	56	-23.9	46	-13.9
2.5225	22.44	Pk	9.9	.1	32.44	56	-23.56	46	-13.56
2.7255	22.77	Pk	9.9	.1	32.77	56	-23.23	46	-13.23
3.33088	21.54	Pk	9.9	.1	31.54	56	-24.46	46	-14.46

Line - L2									
Frequency (MHz)	**Meter Reading (dBuV)**	**Det**	**Gain/Loss [dB] LISN1**	**CDE Cable #1**	**Corrected Reading (dB(uVolts))**	**FCC Part 15 QP**	**Margin (dB)**	**FCC Part 15 AV**	**Margin (dB)**
1.29725	15.66	Pk	9.9	0	25.56	56	-30.44	46	-20.44
1.70325	17.59	Pk	9.9	0	27.49	56	-28.51	46	-18.51
2.2615	19.79	Pk	9.9	0	29.69	56	-26.31	46	-16.31
2.682	20.86	Pk	9.9	.1	30.86	56	-25.14	46	-15.14
3.09888	19.79	Pk	10	.1	29.89	56	-26.11	46	-16.11
3.90363	19.49	Pk	10	.1	29.59	56	-26.41	46	-16.41

Pk - Peak detector

High Channel – Data

END OF REPORT