FCC 47 CFR PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

GSM/WCDMA/LTE PHONE WITH BT + DTS WLAN b/g/n & NFC

MODEL NUMBER: LGK371, K371, LG-K371

FCC ID: ZNFK371

REPORT NUMBER: 16I22670-E2V1

ISSUE DATE: 2/16/2016

Prepared for
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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2/16/2016	Initial issue	D. CORONIA

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	LG ELECTRONICS MOBILECOMM U.S.A., INC.
EUT DESCRIPTION:	GSM/WCDMA/LTE PHONE WITH BT + DTS WLAN b/g/n & NFC
MODEL:	LGK371, K371, LG-K371
SERIAL NUMBER:	512CYFT000387, 512CJZ000388, 510CYPY001168, 510CYHE001169, 510CYCV001171, 510CYYQ001170
DATE TESTED:	NOVEMBER 25, 2015 **–** FEBRUARY 10, 2016

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart C	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.

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with ANSI C63.10-2013 for FCC, FCC CFR 47 Part 2, and FCC CFR 47 Part 15.

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.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0.

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

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:

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

36.5 dBuV + 18.7 dB/m + 0.6 dB – 26.9 dB = 28.9 dBuV/m

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, 9KHz to 30 MHz	2.14 dB
Radiated Disturbance, 30 to 1000 MHz	4.98 dB
Radiated Disturbance,1000 to 6000 MHz	3.86 dB
Radiated Disturbance,6000 to 18000 MHz	4.23 dB
Radiated Disturbance,18000 to 26000 MHz	5.30 dB
Radiated Disturbance,26000 to 40000 MHz	5.23 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE PHONE WITH BT + DTS WLAN b/g/n & NFC

5.1. MAXIMUM OUTPUT POWER

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2402 - 2480	Basic GFSK	9.20	8.32
2402 - 2480	Enhanced 8PSK	10.15	10.35

5.2. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a SUS antenna, with a maximum gain of 0.39 dBi.

5.3. WORST-CASE CONFIGURATION AND MODE

Radiated emission and power line conducted emission were performed with the EUT set to transmit on the channel with higher 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.

5.4. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
AC Adapter	LG	MMCS-02WRE	N/A	N/A
Earphone	LG	N/A	N/A	N/A

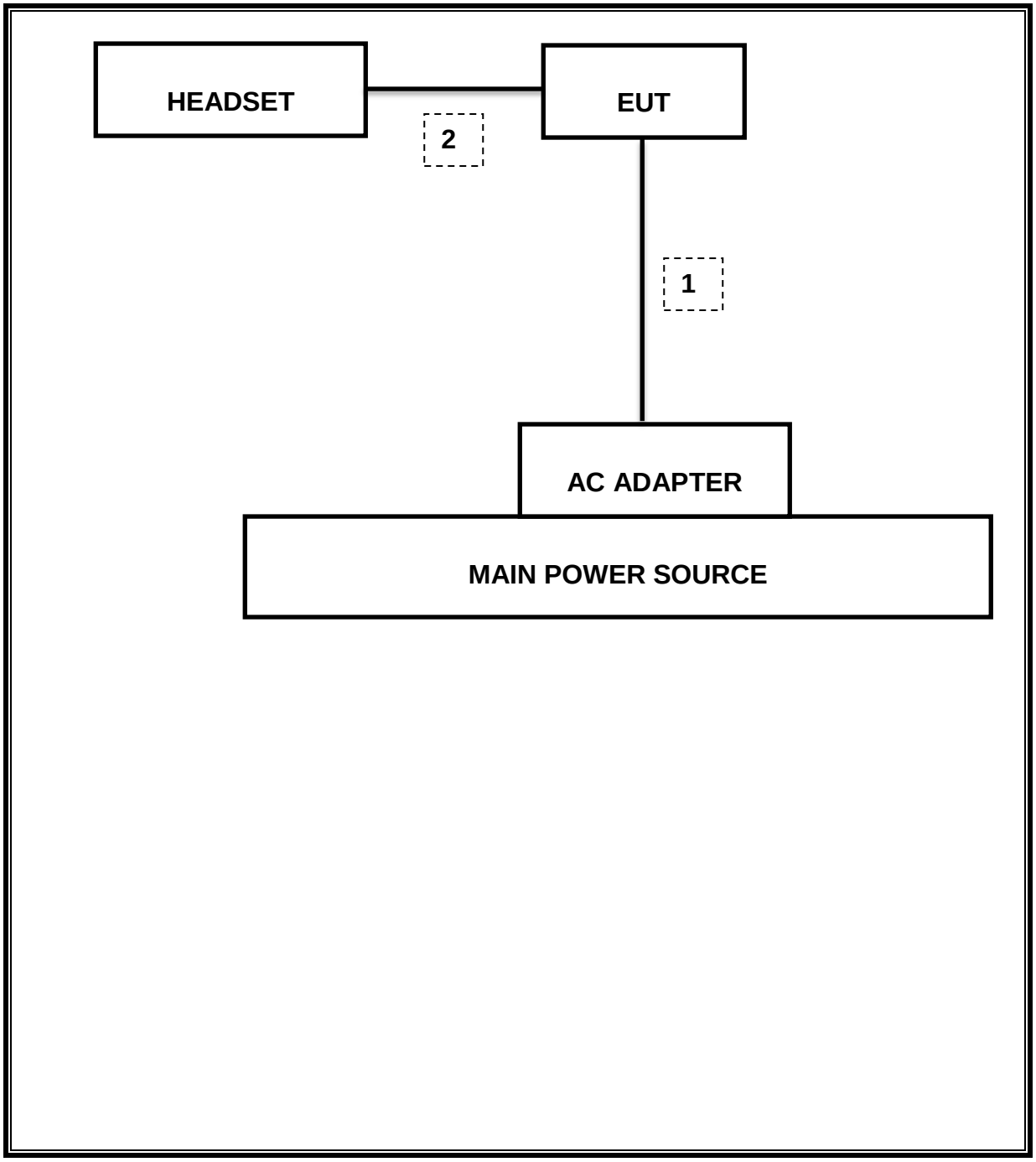
I/O CABLES

I/O Cable List						
Cable No	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	DC Power	1	Mini-USB	Shielded	1.2m	N/A
2	Audio	1	Mini-Jack	Unshielded	1m	N/A

TEST SETUP

The EUT is continuously communicating to the Bluetooth tester during the tests.
EUT was set in the Hidden menu mode to enable BT communications.

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 Number**	**Cal Due**
Antenna, Biconolog, 30MHz-1 GHz	Sunol Sciences	JB1	130	09/01/16
Antenna, Horn, 18GHz	ETS Lindgren	3117	345	03/03/16
Antenna, Horn, 26.5 GHz	ARA	MWH-1826/B	447	05/12/16
RF Preamplifier, 1GHz - 18GHz	Miteq	NSP4000-SP2	88	04/07/16
RF Preamplifier, 1GHz - 26.5GHz	HP	8449B	404	06/29/16
Amplifier, 10KHz to 1 GHz	Keysight	8447D	15	08/14/16
Spectrum Analyzer, PXA, 3 Hz to 44 GHz	Keysight	N9030A	907	01/06/17
Bluetooth Tester	Rohde & Schwarz	CBT	438	04/24/16
Directional Coupler	Mini-Circuits	ZUDC10-183+	1140	CNR
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	417	05/04/16
High Pass Filter 6GHz	Micro-Tronics	HPS17542	893	04/25/16
High Pass Filter 3GHz	Micro-Tronics	HPS17543	898	04/25/16

Test Software List			
Description	**Manufacturer**	**Model**	**Version**
Radiated Software	UL	UL EMC	Ver 9.5, June 24, 2015
Conducted Software	UL	UL EMC	Ver 9.5, May 26, 2015
Antenna Port Software	UL	UL RF	Ver 3.7, Nov 12, 2015

7. SUMMARY TABLE

FCC Part Section	RSS Section(s)	Test Description	Test Limit	Test Condition	Test Result
2.1049	RSS-GEN 6.6	20 dB Occupied Bandwidth & (99%)	N/A	Conducted	Pass
2.1051, 15.247 (d)	RSS-247 5.5	Band Edge / Conducted Spurious Emission	-20dBc		Pass
15.247 (b)(1)	RSS-247 5.4.2	TX conducted output power	<21dBm		Pass
15.247 (a)(1)	RSS-247 5.1.2	Hopping frequency separation	> 25KHz		Pass
15.247 (a)(1)(iii)	RSS-247 5.1.4	Number of Hopping Channels	More than 15 non-overlapping channels		Pass
15.247 (a)(1)(iii)	RSS-247 5.1.4	Avg Time of Occupancy	< 0.4sec		Pass
15.207 (a)	RSS-GEN 8.8	AC Power Line conducted emissions	Section 10	Radiated	Pass
15.205, 15.209	RSS-GEN 8.9/7	Radiated Spurious Emission	< 54dBuV/m		Pass

8. ANTENNA PORT TEST RESULTS

8.1. ON TIME, DUTY CYCLE

LIMITS

None; for reporting purposes only

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method

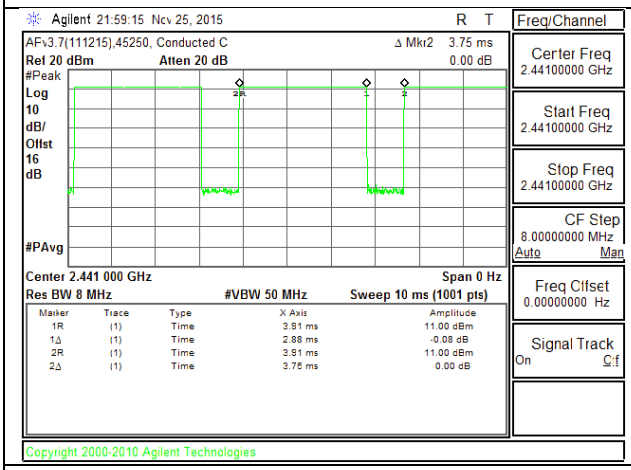
RESULTS

ON TIME AND DUTY CYCLE RESULTS

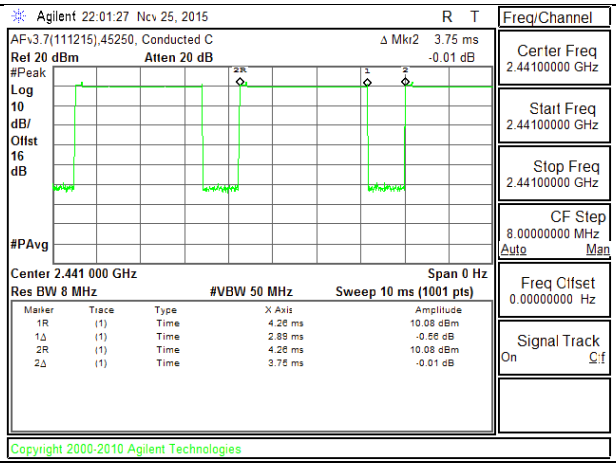
Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
GFSK	2.880	3.75	0.768	76.80%	1.15	0.347
8PSK	2.89	3.75	0.771	77.07%	1.13	0.346

DUTY CYCLE PLOTS

GFSK



8PSK



NOTE: --

8.2. 20 dB AND 99% BANDWIDTH

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

DA 00-705: The transmitter output is connected to a spectrum analyzer. The RBW is set to ≥ 1% of the 20 dB bandwidth. The VBW is set to ≥ RBW. The sweep time is coupled.

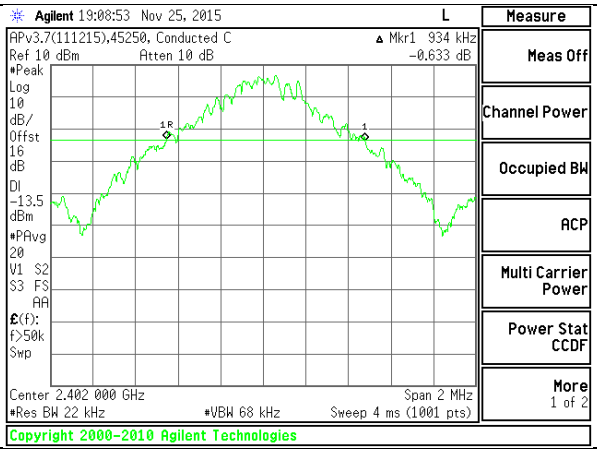
RESULTS

8.2.1. GFSK 20 dB BANDWIDTH PLOTS AND TABLE

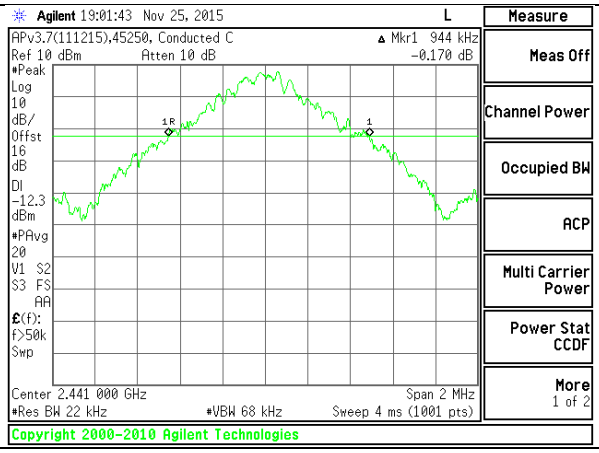
TEST RESULT TABLE

Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
Low	2402	0.934
Middle	2441	0.944
High	2480	0.942

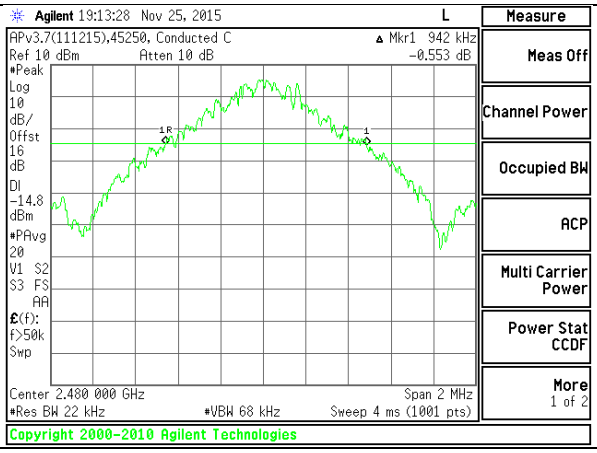
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL

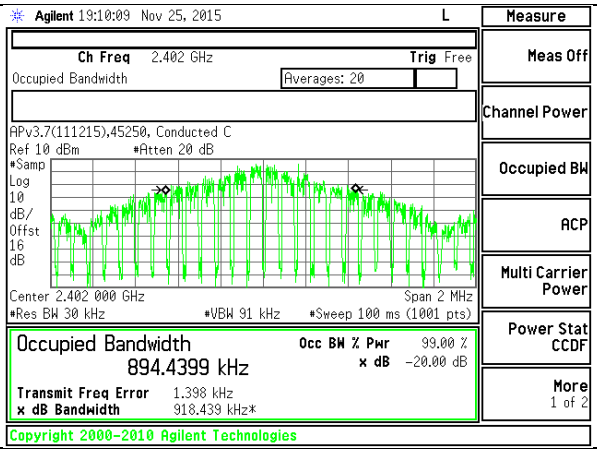


8.2.2. GFSK 99% BANDWIDTH PLOTS AND TABLE

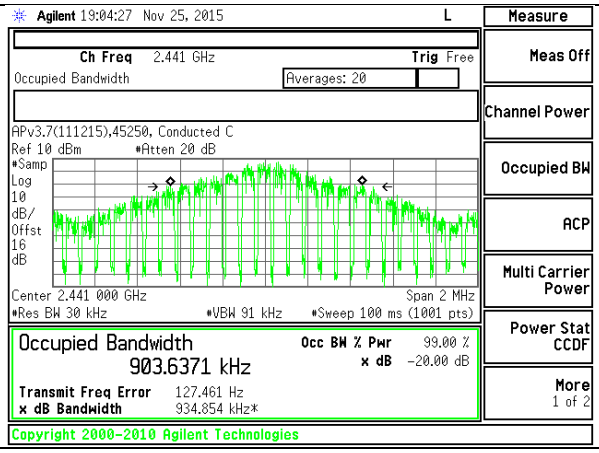
TEST RESULT TABLE

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	0.894
Middle	2441	0.904
High	2480	0.899

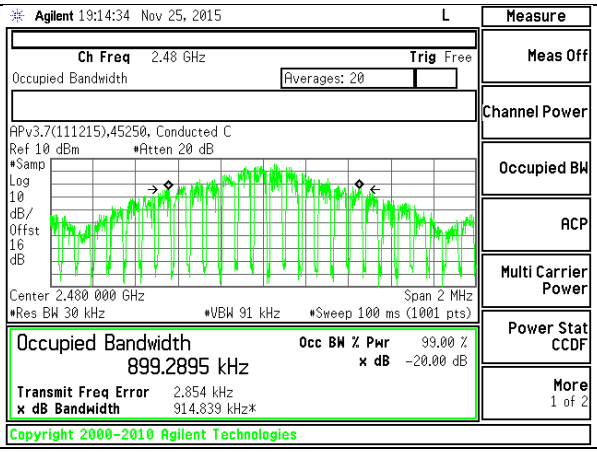
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL

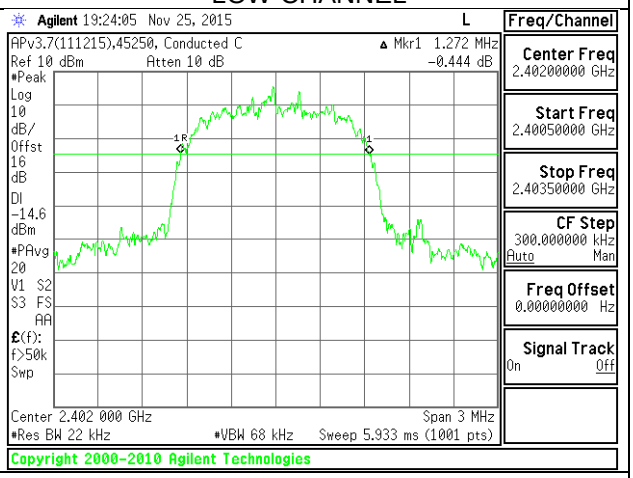


8.2.3. 8PSK 20 dB BANDWIDTH PLOTS AND TABLE

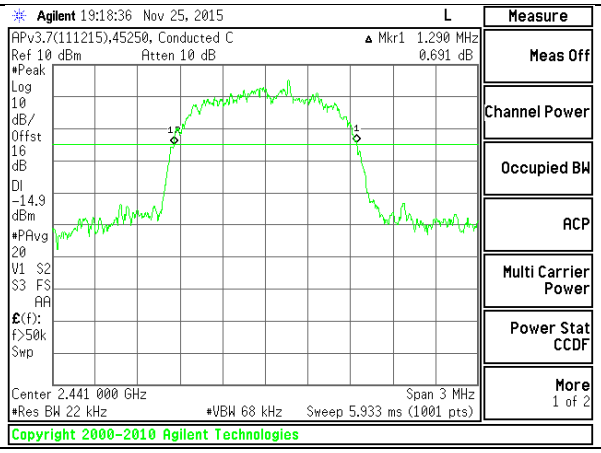
TEST RESULT TABLE

Channel	Frequency (MHz)	20 dB Bandwidth (MHz)
Low	2402	1.272
Middle	2441	1.29
High	2480	1.266

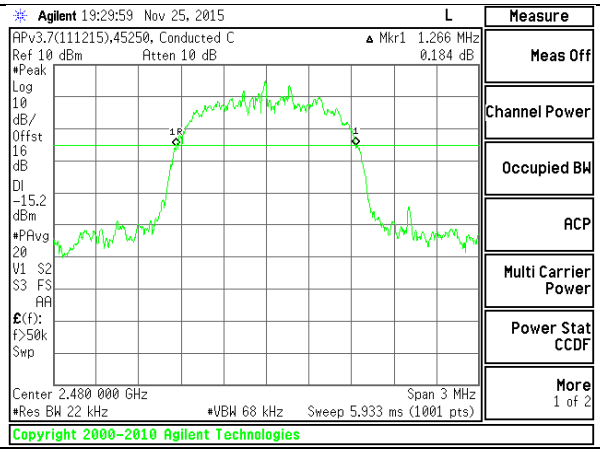
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL

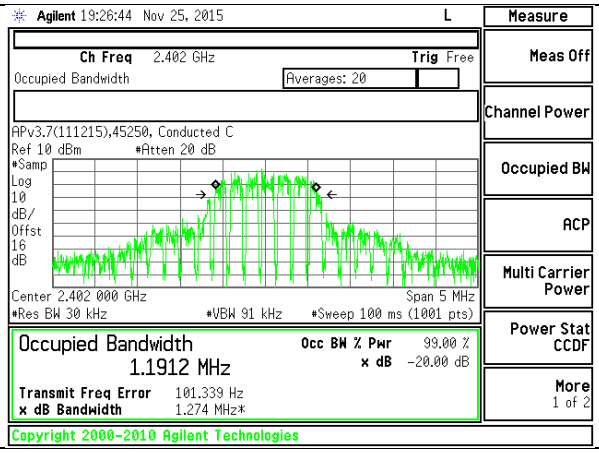


8.2.4. 8PSK 99% BANDWIDTH PLOTS AND TABLE

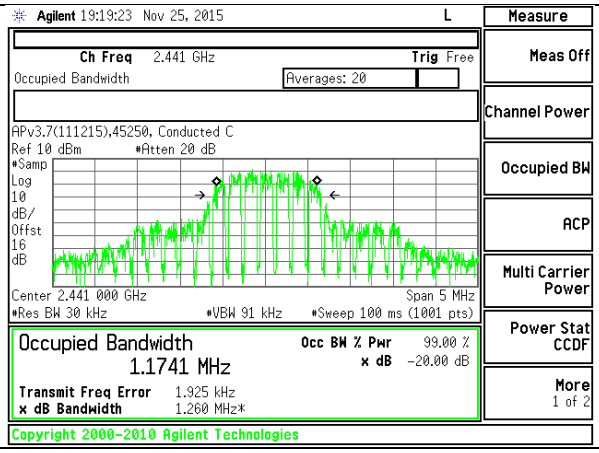
TEST RESULT TABLE

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2402	1.191
Middle	2441	1.174
High	2480	1.194

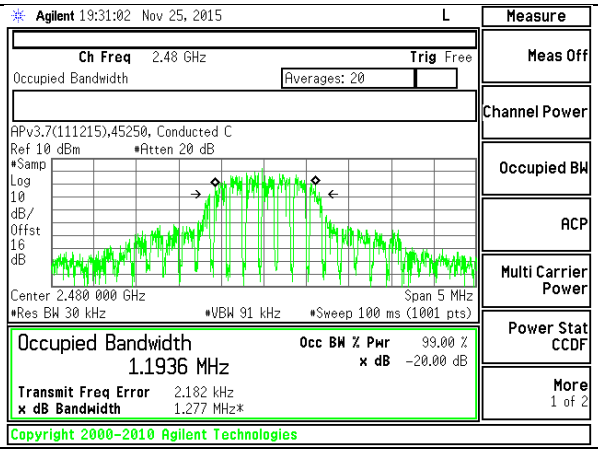
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



8.3. HOPPING FREQUENCY SEPARATION

LIMIT

FCC §15.247 (a) (1)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hoping channel, whichever is greater.

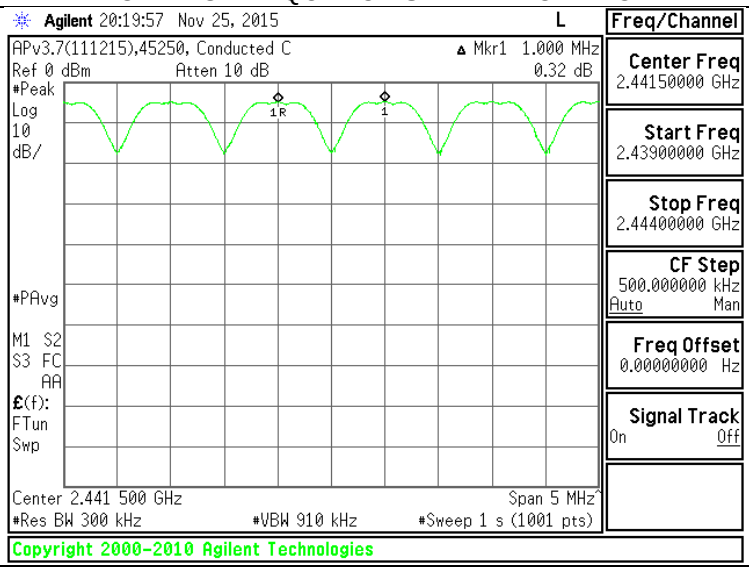
Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW.

TEST PROCEDURE

DA 00-705: The transmitter output is connected to a spectrum analyzer. The RBW is set to 300 kHz and the VBW is set to≥ RBW. The sweep time is coupled.

RESULTS

HOPPING FREQUENCY SEPARATION PLOT



NOTE: Hopping Frequency Separation is 1 MHz

8.4. NUMBER OF HOPPING CHANNELS

LIMIT

FCC §15.247 (a) (1) (iii)

Frequency hopping systems in the 2400 – 2483.5 MHz band shall use at least 15 non-overlapping channels.

TEST PROCEDURE

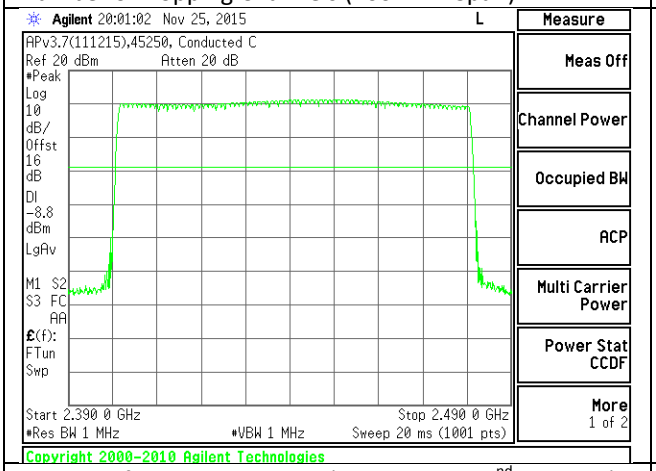
DA 00-705: The transmitter output is connected to a spectrum analyzer. The span is set to cover the entire authorized band, in either a single sweep or in multiple contiguous sweeps. The RBW is set to a maximum of 1 % of the span. The analyzer is set to Max Hold.

RESULTS

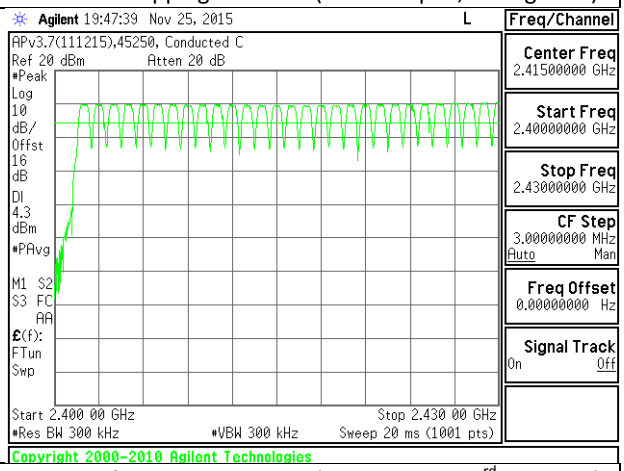
Normal Mode: 79 Channels observed.

8.4.1. NUMBER OF HOPPING CHANNELS PLOTS

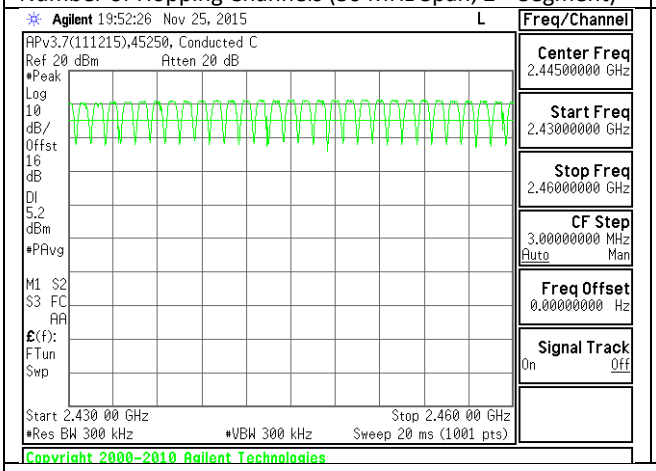
Number of Hopping Channels (100 MHz Span)



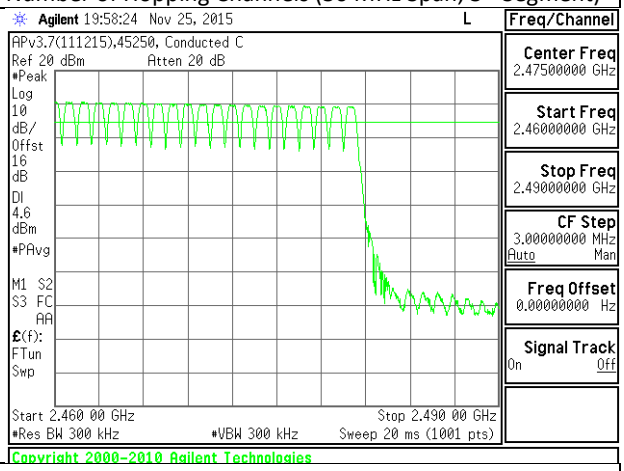
Number of Hopping Channels (30 MHz Span, 1st Segment)



Number of Hopping Channels (30 MHz Span, 2nd Segment)



Number of Hopping Channels (30 MHz Span, 3rd Segment)



NOTE: --

8.5. AVERAGE TIME OF OCCUPANCY

LIMIT

FCC §15.247 (a) (1) (iii)

The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed.

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The span is set to 0 Hz, centered on a single, selected hopping channel. The width of a single pulse is measured in a fast scan. The number of pulses is measured in a 3.16 second scan, to enable resolution of each occurrence.

The average time of occupancy in the specified 31.6 second period (79 channels * 0.4 s) is equal to 10 * (# of pulses in 3.16 s) * pulse width.

For AFH mode, the average time of occupancy in the specified 8 second period (20 channels * 0.4 seconds) is equal to 10 * (# of pulses in 0.8 s) * pulse width.

RESULTS

AVERAGE TIME OF OCCUPANCY

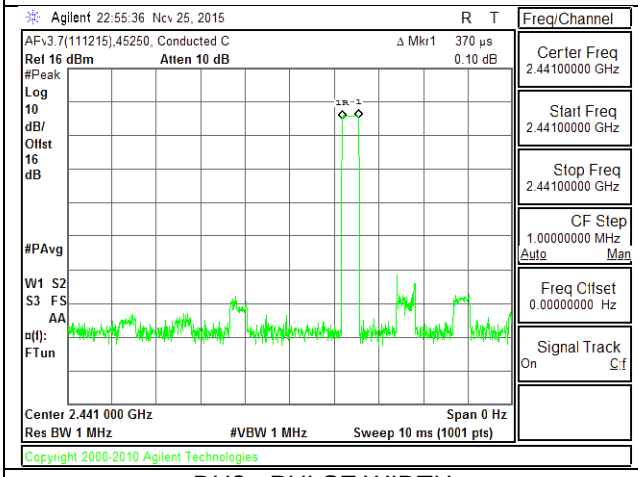
DH Packet	Pulse Width (msec)	Number of Pulses in 3.16 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK Normal Mode					
DH1	0.37	31	0.1147	0.4	-0.2853
DH3	1.62	17	0.2754	0.4	-0.1246
DH5	2.88	9	0.2592	0.4	-0.1408

DH Packet	Pulse Width (sec)	Number of Pulses in 0.8 seconds	Average Time of Occupancy (sec)	Limit (sec)	Margin (sec)
GFSK AFH Mode					
DH1	0.37	7.75	0.02868	0.4	-0.3713
DH3	1.62	4.25	0.06885	0.4	-0.3312
DH5	2.88	2.25	0.06480	0.4	-0.3352

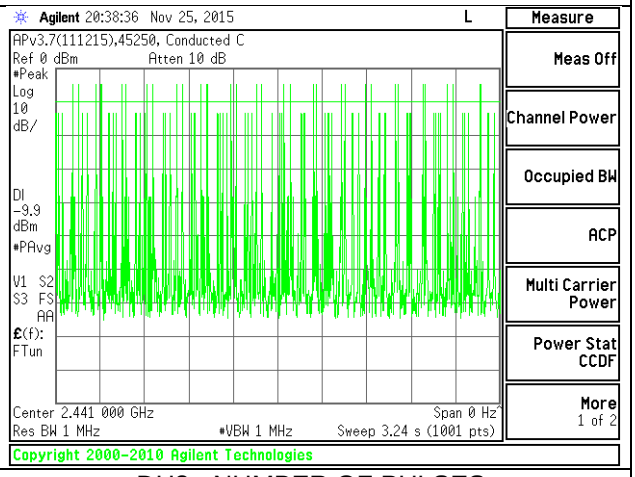
NOTE: --

Pulse Width and Number of Pulses in 3.16 Seconds Period Plots

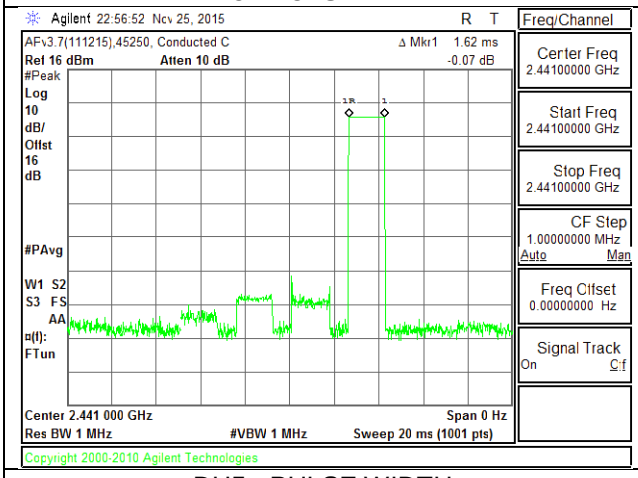
DH1 - PULSE WIDTH



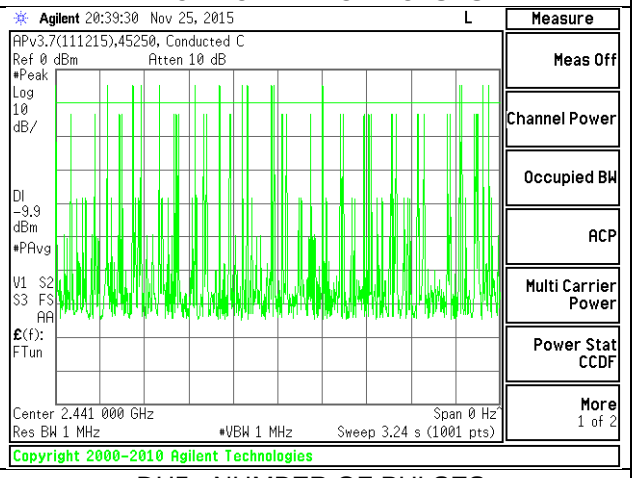
DH1 - NUMBER OF PULSES



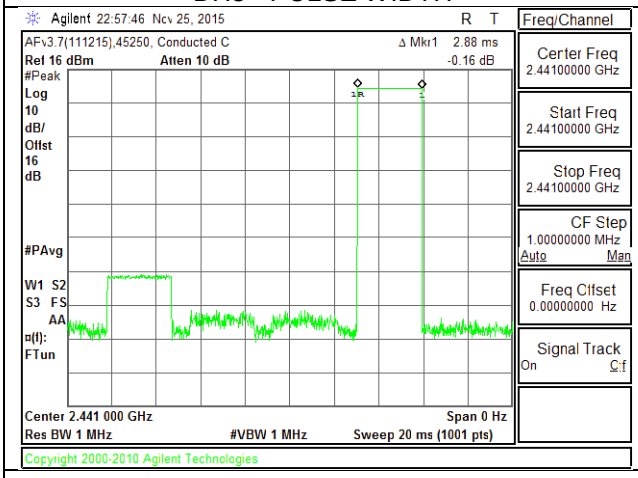
DH3 - PULSE WIDTH



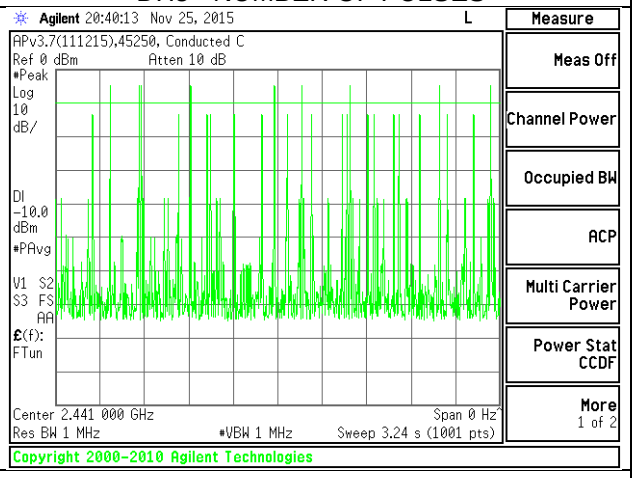
DH3 - NUMBER OF PULSES



DH5 - PULSE WIDTH



DH5 - NUMBER OF PULSES



NOTE: --

8.6. OUTPUT POWER

LIMIT

§15.247 (b) (1)

The maximum antenna gain is less than 6 dBi, therefore the limit is 21 dBm.

TEST PROCEDURE

DA 00-705: The transmitter output is connected to a spectrum analyzer the analyzer bandwidth is set to a value greater than the 20 dB bandwidth of the EUT.

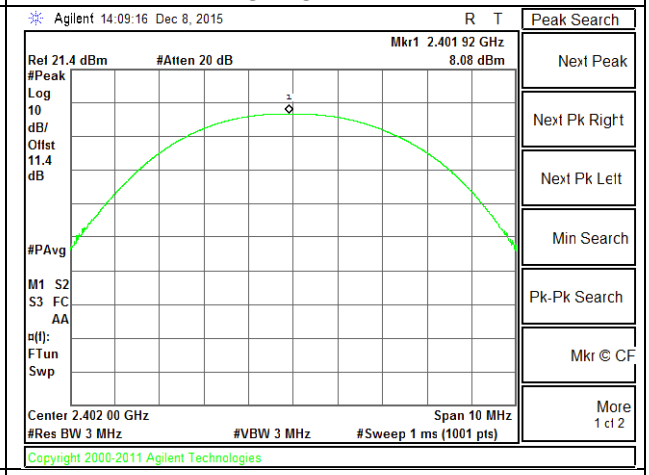
RESULTS

8.6.1. GFSK OUTPUT POWER PLOTS AND TABLE

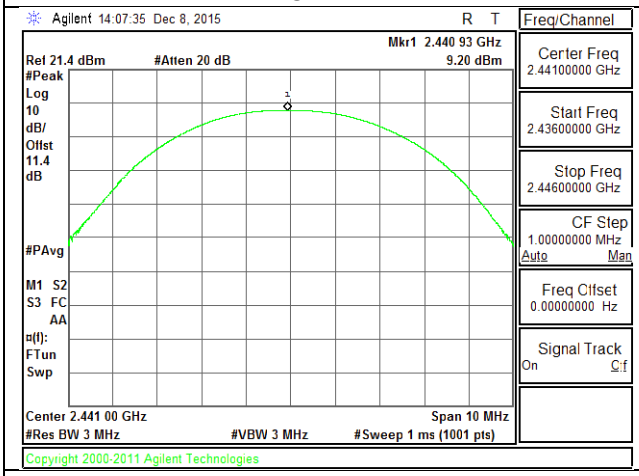
TEST RESULT TABLE

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	8.08	21	-12.92
Middle	2441	9.20	21	-11.80
High	2480	7.76	21	-13.24

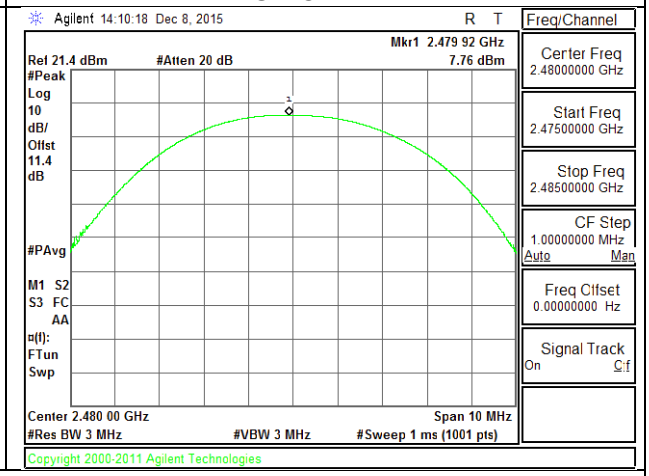
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



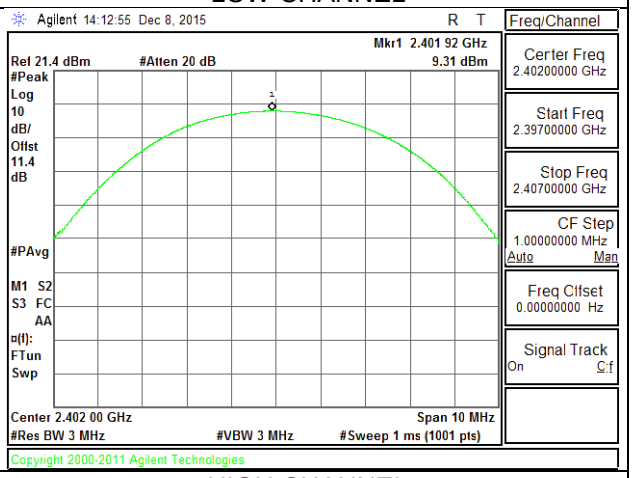
NOTE:

8.6.2. 8PSK OUTPUT POWER PLOTS AND TABLE

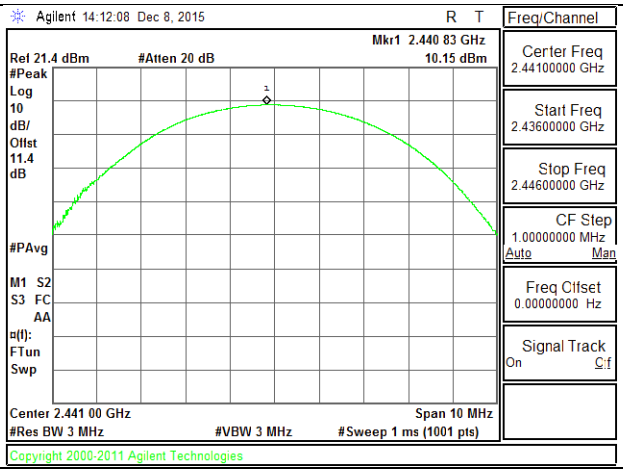
TEST RESULT TABLE

Channel	Frequency (MHz)	Output Power (dBm)	Limit (dBm)	Margin (dB)
Low	2402	9.31	21	-11.69
Middle	2441	10.15	21	-10.85
High	2480	8.98	21	-12.02

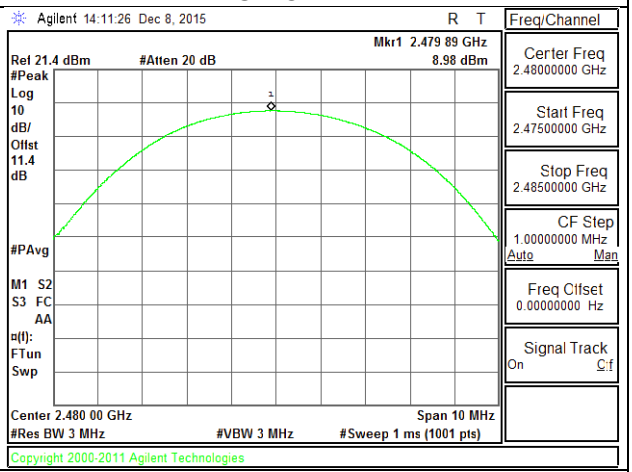
LOW CHANNEL



MID CHANNEL



HIGH CHANNEL



NOTE:

8.7. AVERAGE POWER

LIMIT

None; for reporting purposes only.

TEST PROCEDURE

DA 00-705: The transmitter output is connected to a power meter.

RESULTS

The cable assembly insertion loss of 10.7 dB (including 10 dB pad and 0.7 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

BASIC DATA RATE GFSK

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	7.5
Middle	2441	9.0
High	2480	7.4
Worst		9.0

ENHANCED DATA RATE 8DPSK

Channel	Frequency (MHz)	Average Power (dBm)
Low	2402	6.0
Middle	2441	7.6
High	2480	6.2
Worst		7.6

NOTE: --

8.8. CONDUCTED SPURIOUS EMISSIONS

LIMITS

FCC §15.247 (d)

Limit = -20 dBc

TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer. The resolution bandwidth is set to 100 kHz. The video bandwidth is set to 300 kHz.

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

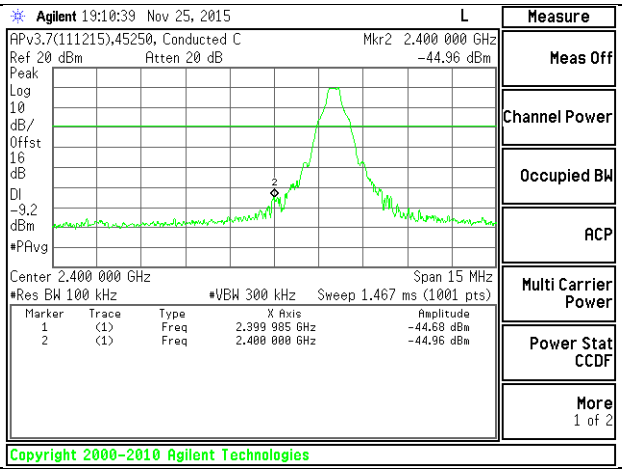
The bandedges at 2.4 and 2.4835 GHz are investigated with the transmitter set to the normal hopping mode.

RESULTS

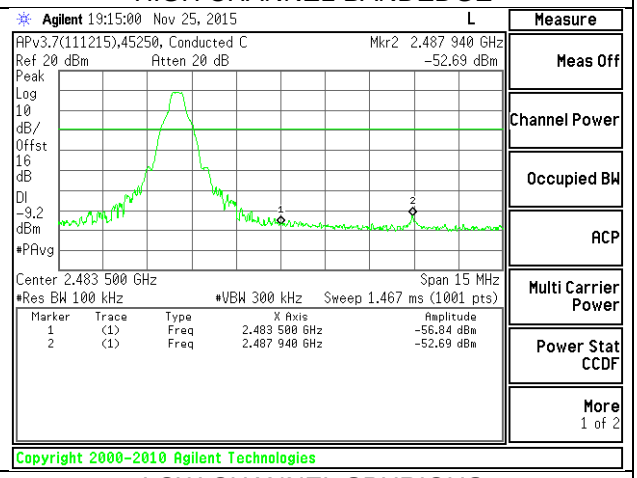
8.8.1. BASIC DATA RATE GFSK MODULATION NON-HOPPING MODE

BANDEDGE AND SPURIOUS EMISSIONS PLOTS

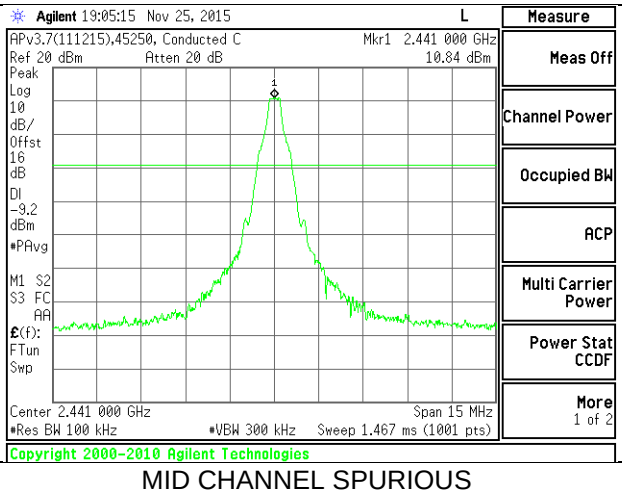
LOW CHANNEL BANDEDGE



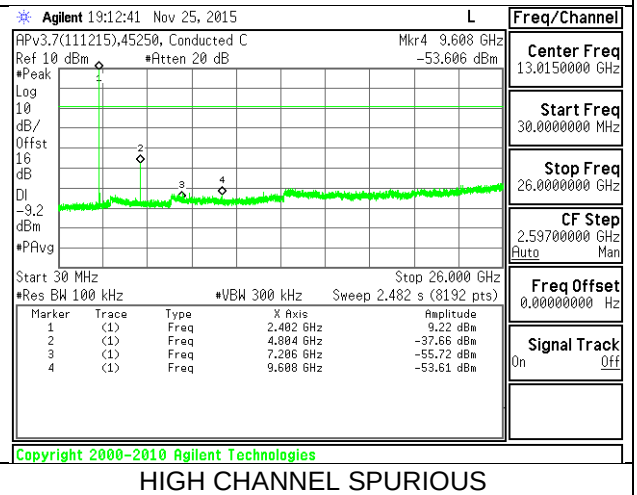
HIGH CHANNEL BANDEDGE



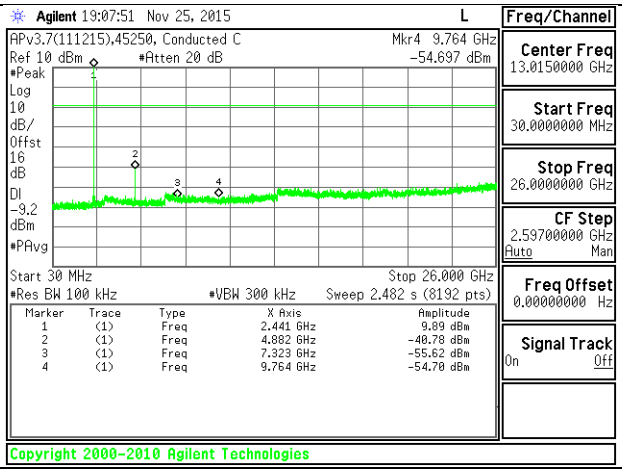
MID CHANNEL REFERENCE



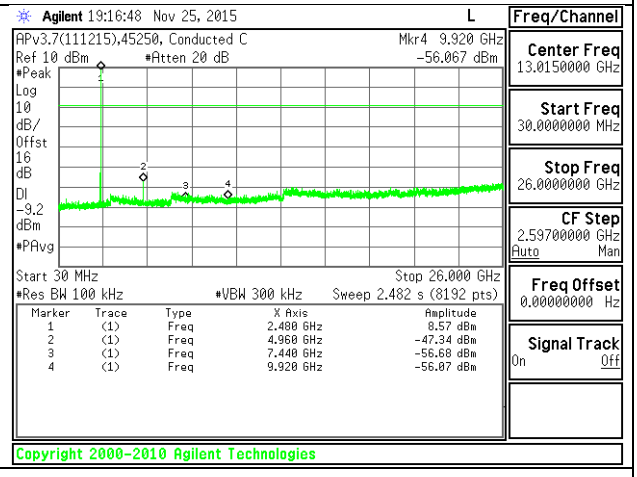
LOW CHANNEL SPURIOUS



MID CHANNEL SPURIOUS



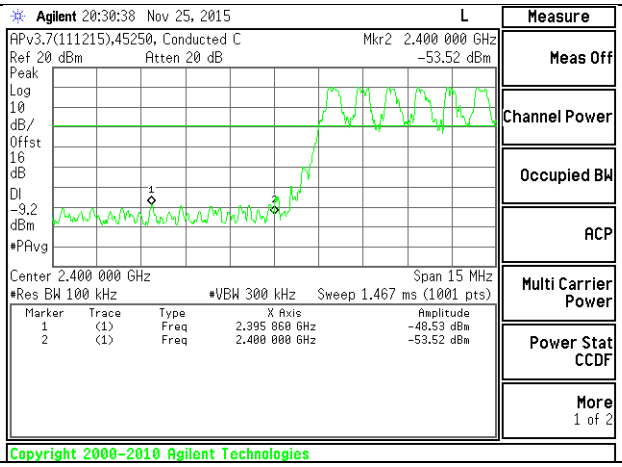
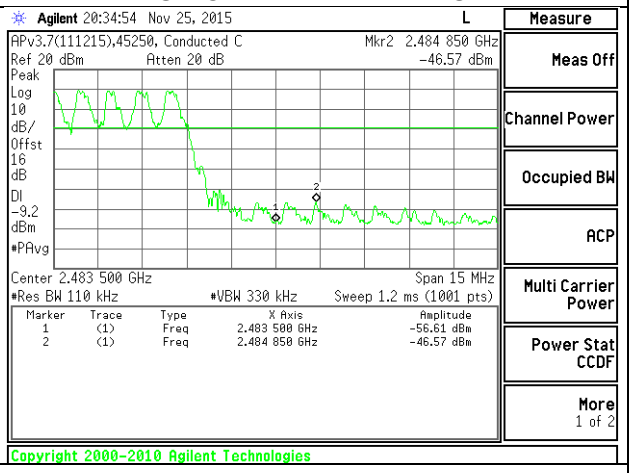
HIGH CHANNEL SPURIOUS



NOTE:--

8.8.2. BASIC DATA RATE GFSK MODULATION HOPPING MODE

SPURIOUS BANDEDGE EMISSIONS PLOTS

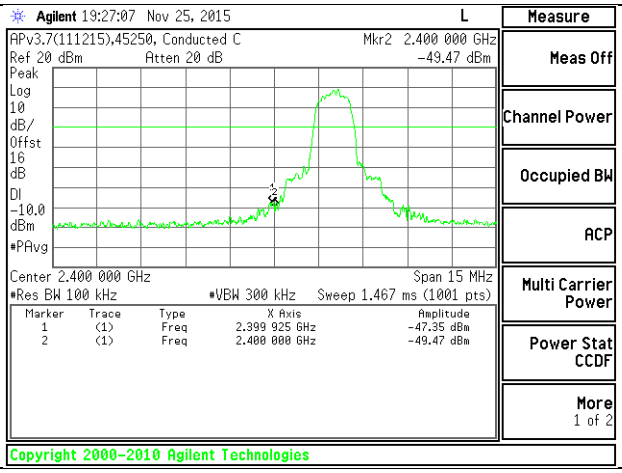
LOW CHANNEL BANDEDGE	HIGH CHANNEL BANDEDGE
	

NOTE:--

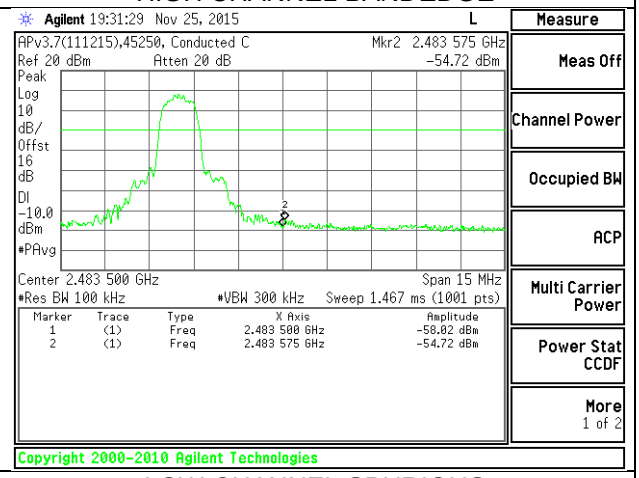
8.8.3. ENHANCED DATA RATE 8PSK MODULATION NON-HOPPING MODE

BANDEDGE AND SPURIOUS EMISSIONS PLOTS

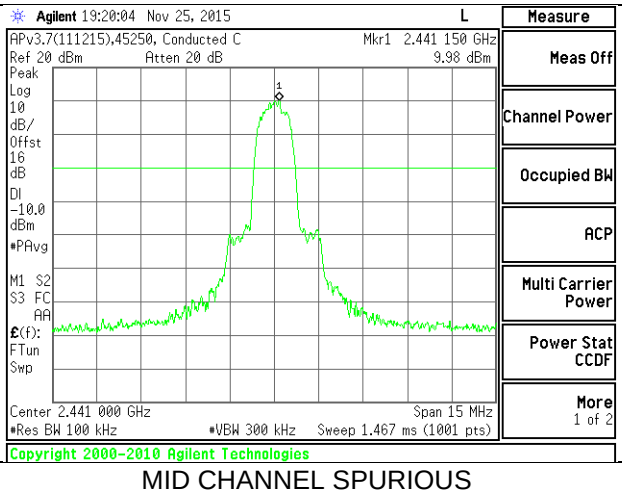
LOW CHANNEL BANDEDGE



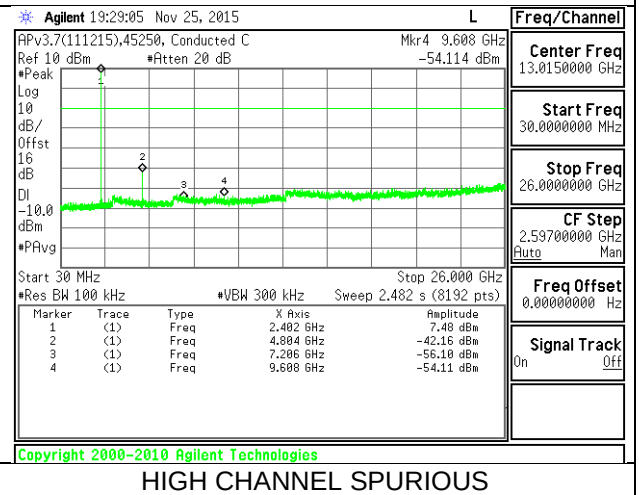
HIGH CHANNEL BANDEDGE



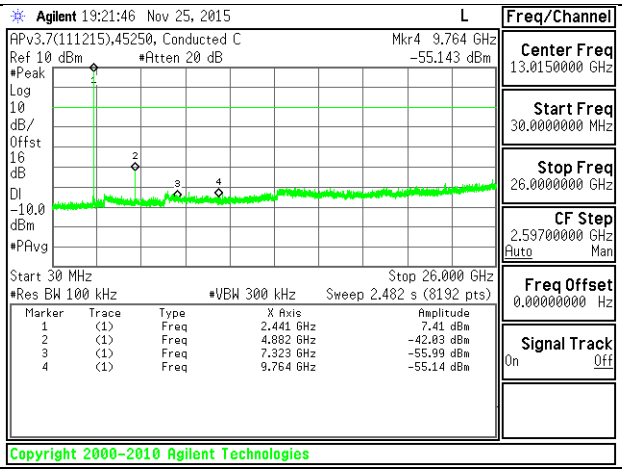
MID CHANNEL REFERENCE



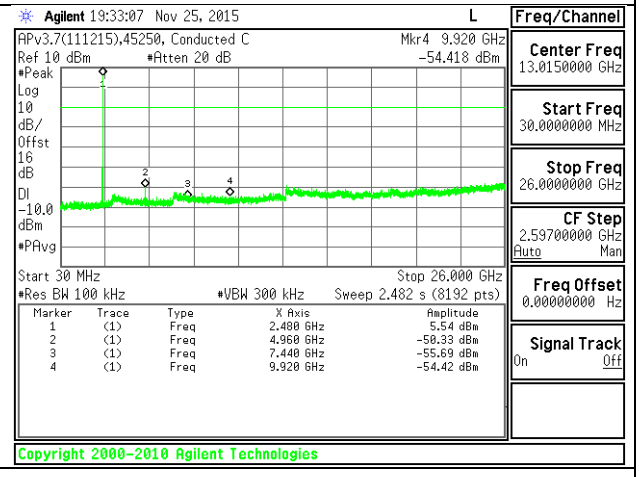
LOW CHANNEL SPURIOUS



MID CHANNEL SPURIOUS



HIGH CHANNEL SPURIOUS

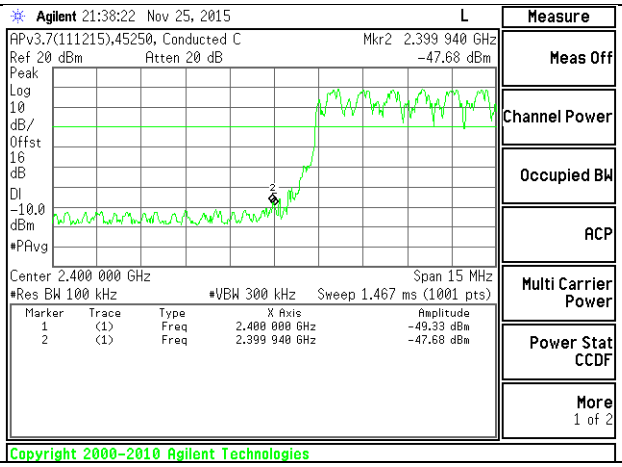


NOTE:--

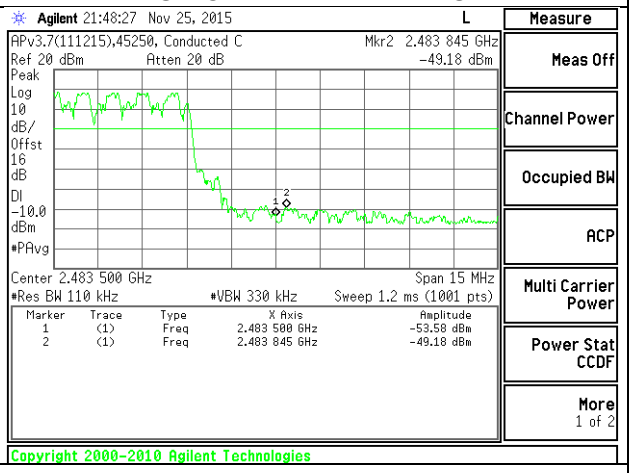
8.8.4. ENHANCED DATA RATE 8PSK MODULATION HOPPING MODE

SPURIOUS BANDEDGE EMISSIONS PLOTS

LOW CHANNEL BANDEDGE



HIGH CHANNEL BANDEDGE



NOTE:--

9. RADIATED TEST RESULTS

LIMITS

FCC §15.205 and §15.209

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 and 150cm for above 1GHz. 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 band edge measurements above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 1 MHz for peak measurements and 1/T (on time) for average measurement. For example, GFSK = 1/T.

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.

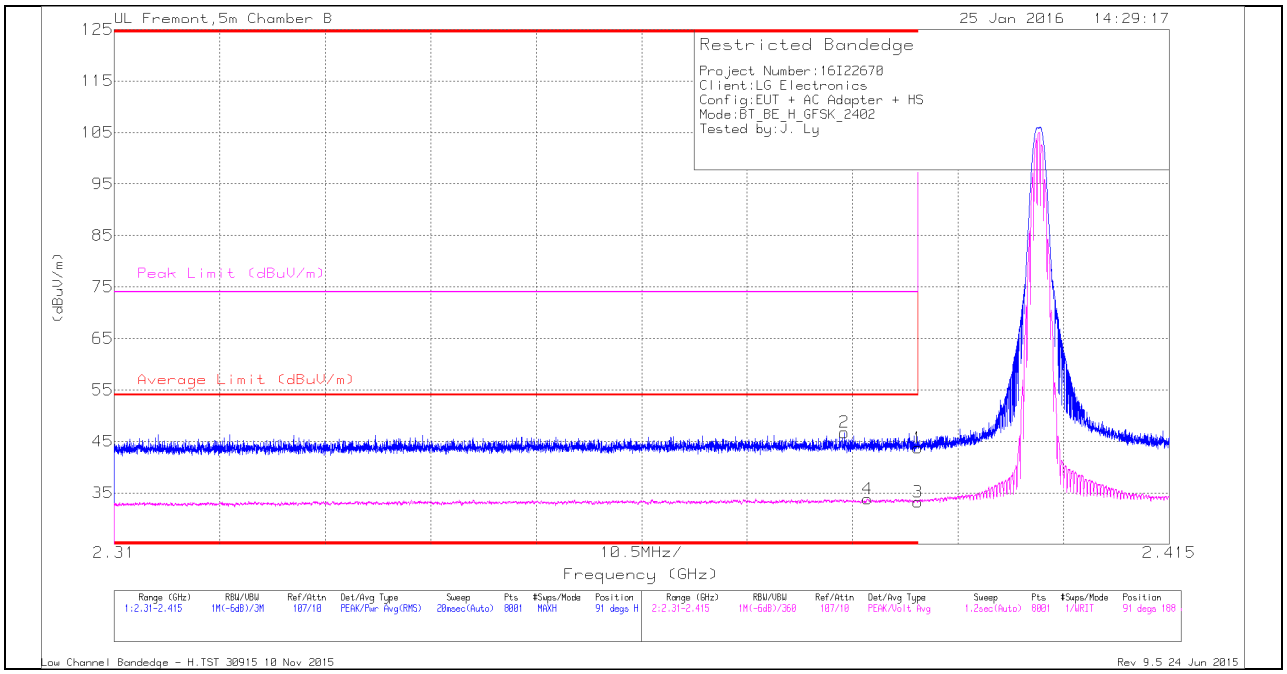
RESULTS

9.1. TRANSMITTER ABOVE 1 GHz

9.1.1. GFSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

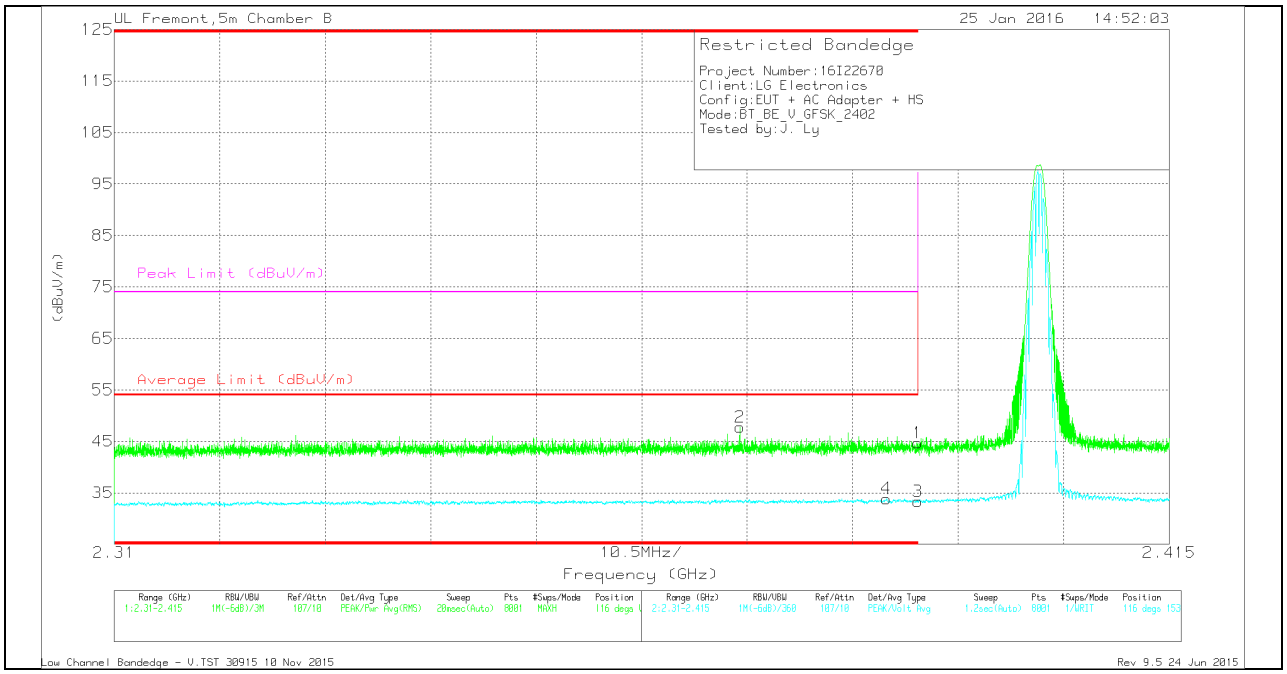
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.383	36.53	Pk	32	-21.8	46.73	-	-	74	-27.27	91	188	H
4	* 2.385	23.71	VA1T	32	-21.9	33.81	54	-20.19	-	-	91	188	H
1	* 2.39	33.63	Pk	32	-21.9	43.73	-	-	74	-30.27	91	188	H
3	* 2.39	23.13	VA1T	32	-21.9	33.23	54	-20.77	-	-	91	188	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (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	34.61	Pk	32	-21.9	44.71	-	-	74	-29.29	116	153	V
2	* 2.372	37.67	Pk	31.9	-21.8	47.77	-	-	74	-26.23	116	153	V
3	* 2.39	23.21	VA1T	32	-21.9	33.31	54	-20.69	-	-	116	153	V
4	* 2.387	23.77	VA1T	32	-21.9	33.87	54	-20.13	-	-	116	153	V

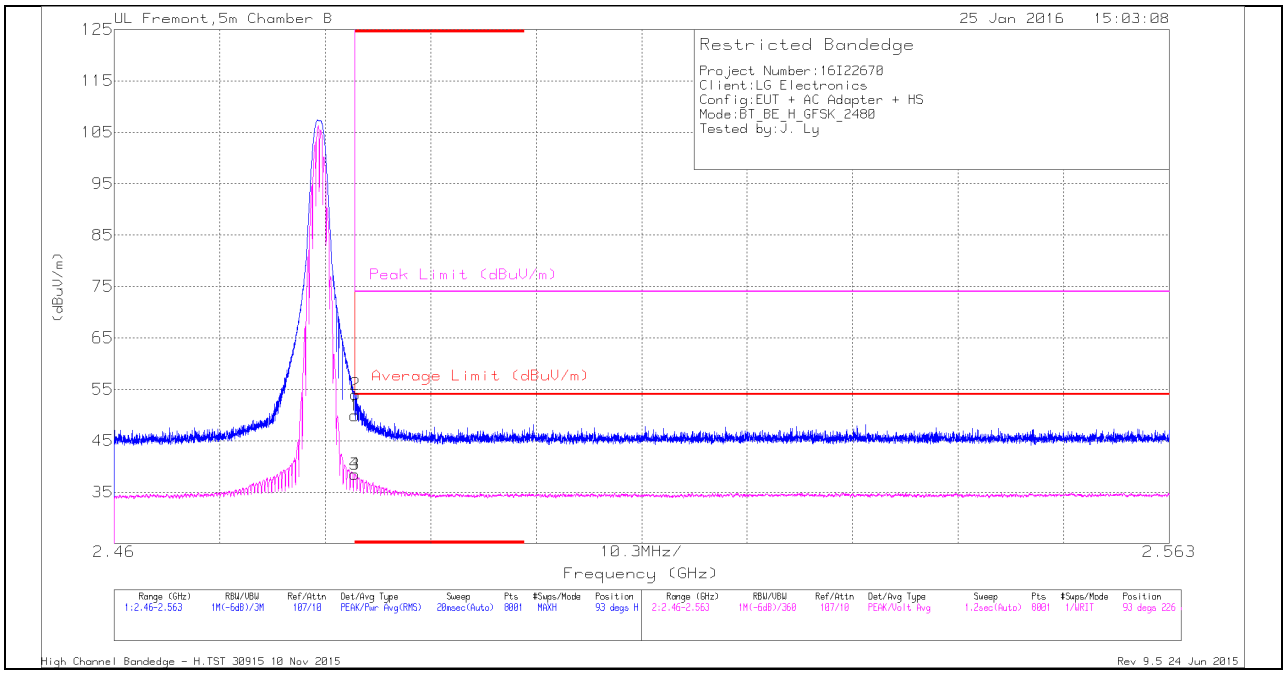
* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

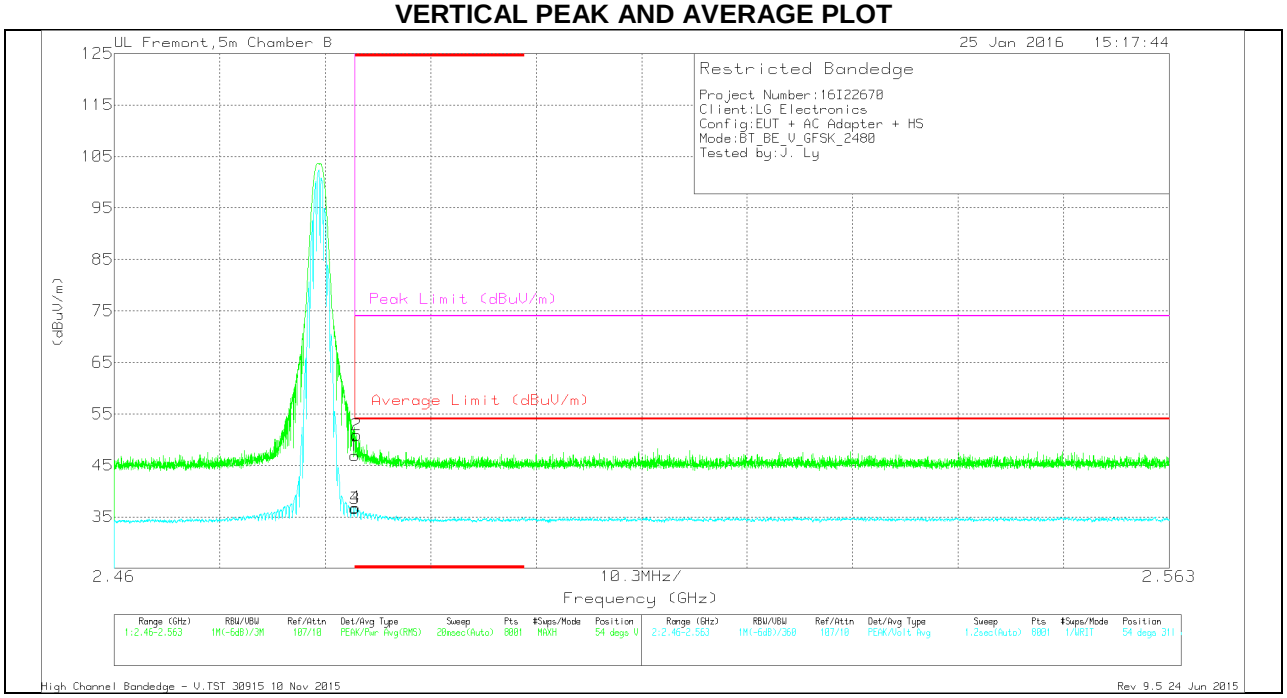
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.22	Pk	32.5	-21.8	49.92	-	-	74	-24.08	93	226	H
2	* 2.484	43.31	Pk	32.5	-21.8	54.01	-	-	74	-19.99	93	226	H
3	* 2.484	27.75	VA1T	32.5	-21.8	38.45	54	-15.55	-	-	93	226	H
4	* 2.484	27.84	VA1T	32.5	-21.8	38.54	54	-15.46	-	-	93	226	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (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	36.25	Pk	32.5	-21.8	46.95	-	-	74	-27.05	54	311	V
2	* 2.484	40.19	Pk	32.5	-21.8	50.89	-	-	74	-23.11	54	311	V
3	* 2.484	25.91	VA1T	32.5	-21.8	36.61	54	-17.39	-	-	54	311	V
4	* 2.484	26.09	VA1T	32.5	-21.8	36.79	54	-17.21	-	-	54	311	V

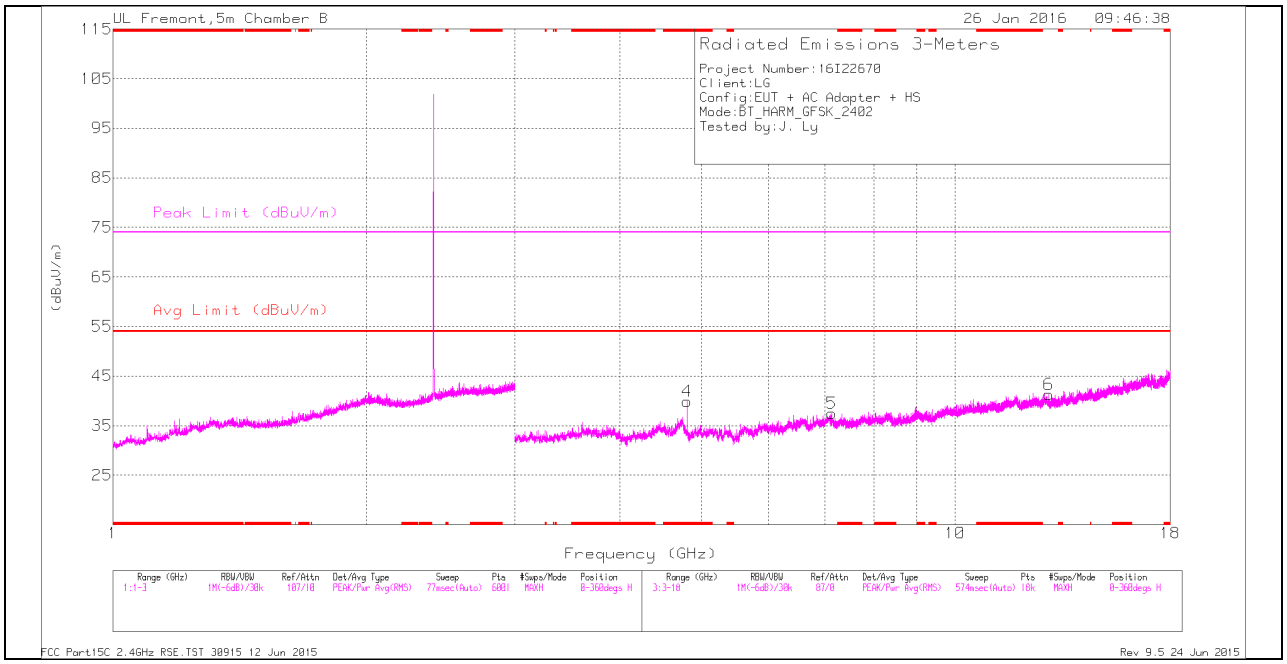
* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

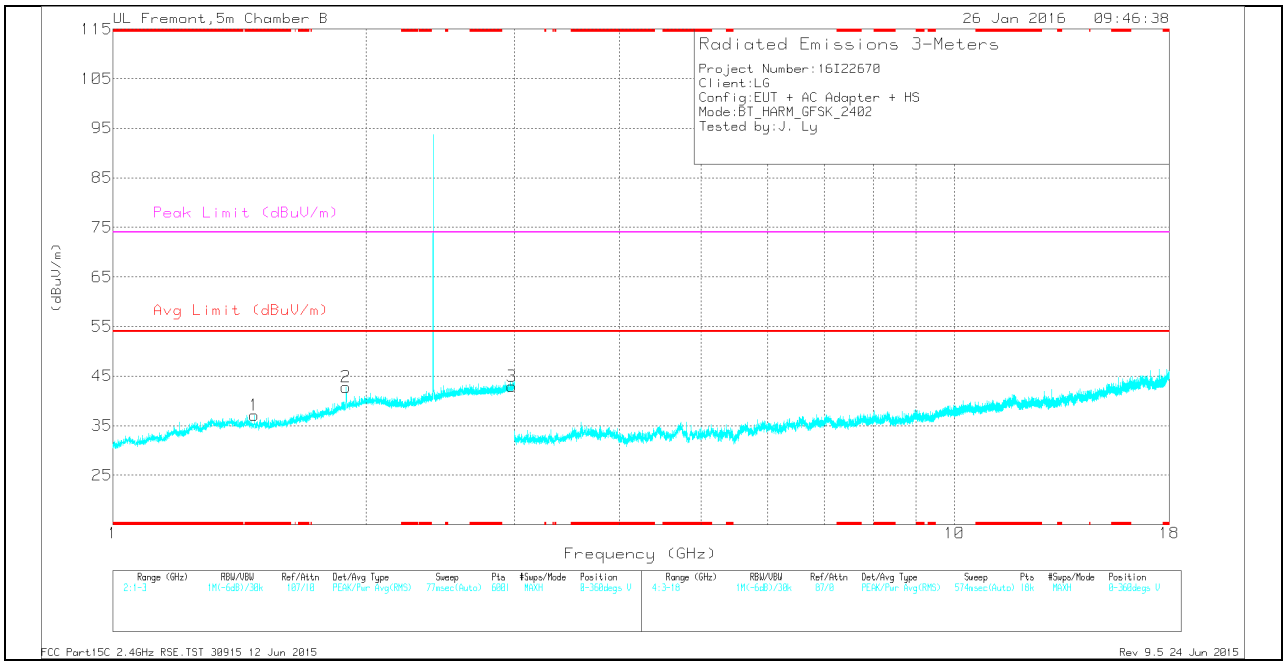
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



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

LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.472	30.35	Pk	28.8	-22.1	37.05	-	-	74	-36.95	0-360	200	V
4	* 4.803	36.56	Pk	34.3	-31	39.86	-	-	74	-34.14	0-360	101	H
2	1.894	32.75	Pk	31.7	-21.7	42.75	-	-	74	-31.25	0-360	200	V
3	2.981	31.09	Pk	32.6	-20.7	42.99	-	-	74	-31.01	0-360	200	V
5	7.133	31.34	Pk	35.5	-29.4	37.44	-	-	74	-36.56	0-360	199	H
6	12.904	26.93	Pk	38.8	-24.4	41.33	-	-	74	-32.67	0-360	199	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

Radiated Emissions

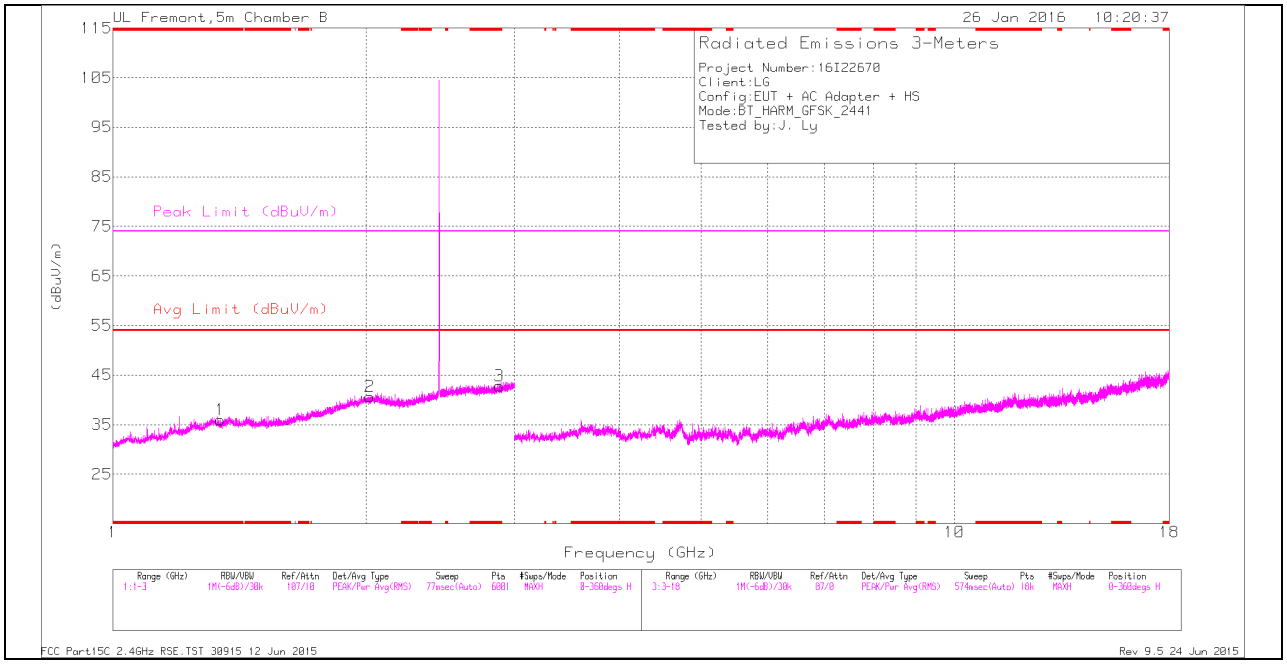
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.468	36.98	PK2	28.9	-22.1	43.78	-	-	74	-30.22	1	101	V
* 1.476	24.01	VA1T	28.8	-22.1	30.71	54	-23.29	-	-	1	101	V
* 4.804	42.62	PK2	34.3	-31	45.92	-	-	74	-28.08	133	128	H
* 4.804	35.64	VA1T	34.3	-31	38.94	54	-15.06	-	-	133	128	H
1.892	24.34	VA1T	31.7	-21.7	34.34	54	-19.66	-	-	12	148	V
1.893	37.56	PK2	31.7	-21.6	47.66	-	-	74	-26.34	12	148	V
2.979	38.26	PK2	32.6	-20.6	50.26	-	-	74	-23.74	12	148	V
2.981	25.62	VA1T	32.5	-20.7	37.42	54	-16.58	-	-	12	148	V
7.134	24.81	VA1T	35.5	-29.4	30.91	54	-23.09	-	-	133	128	H
7.135	37.17	PK2	35.5	-29.4	43.27	-	-	74	-30.73	133	128	H
12.906	34.5	PK2	38.8	-24.4	48.9	-	-	74	-25.1	133	128	H
12.906	21.54	VA1T	38.8	-24.4	35.94	54	-18.06	-	-	133	128	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

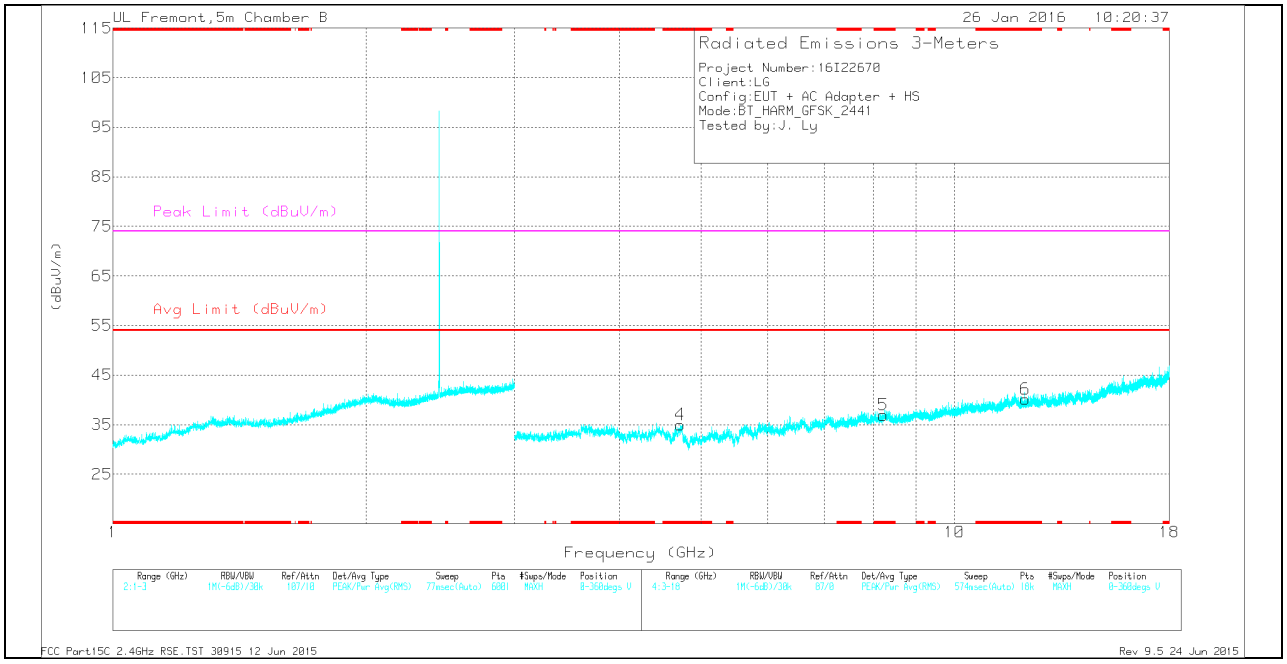
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

MID CHANNEL HORIZONTAL



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



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/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.341	29.07	Pk	29.4	-22.5	35.97	-	-	74	-38.03	0-360	101	H
3	* 2.879	31.08	Pk	32.6	-20.9	42.78	-	-	74	-31.22	0-360	199	H
4	* 4.727	31.5	Pk	34.3	-30.8	35	-	-	74	-39	0-360	199	V
5	* 8.227	29.81	Pk	35.7	-28.6	36.91	-	-	74	-37.09	0-360	101	V
6	* 12.137	26.31	Pk	38.6	-24.8	40.11	-	-	74	-33.89	0-360	199	V
2	2.018	30.05	Pk	32.2	-21.6	40.65	-	-	74	-33.35	0-360	101	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

Radiated Emissions

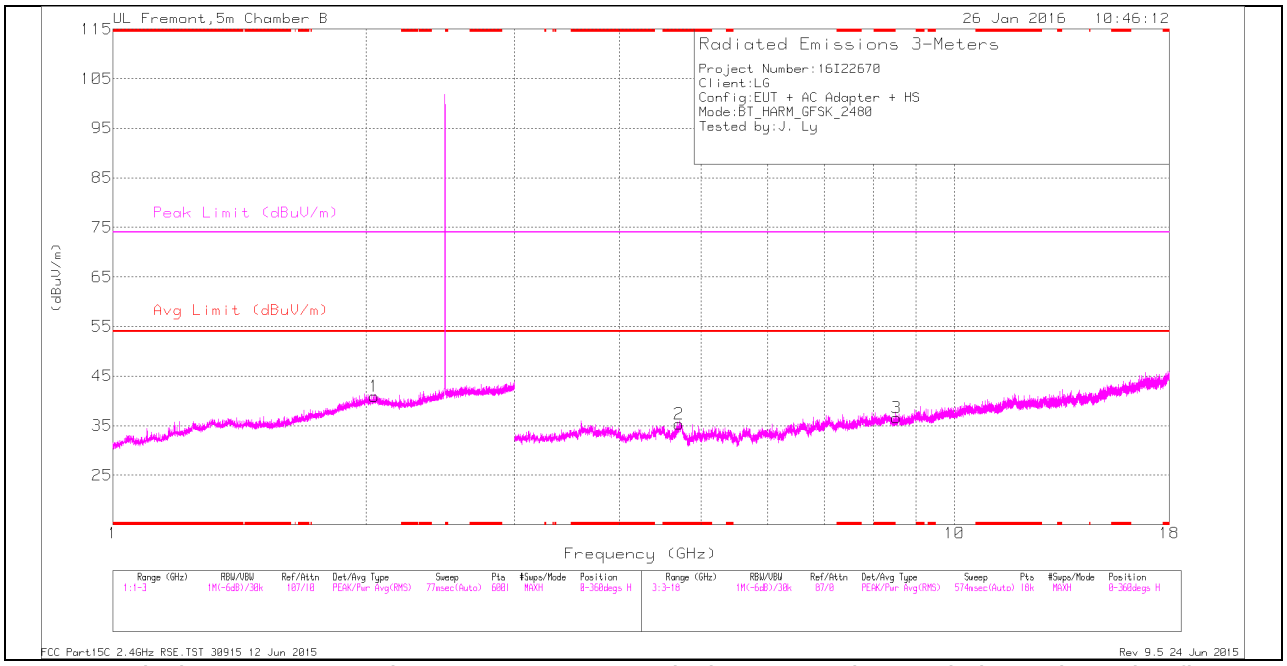
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.341	36.75	PK2	29.4	-22.5	43.65	-	-	74	-30.35	1	101	H
* 1.34	23.9	VA1T	29.4	-22.5	30.8	54	-23.2	-	-	1	101	H
* 2.878	38.36	PK2	32.6	-20.9	50.06	-	-	74	-23.94	1	101	H
* 2.878	25.13	VA1T	32.6	-20.9	36.83	54	-17.17	-	-	1	101	H
* 4.727	37.65	PK2	34.3	-30.8	41.15	-	-	74	-32.85	1	101	V
* 4.728	25.47	VA1T	34.3	-30.7	29.07	54	-24.93	-	-	1	101	V
* 8.228	37.81	PK2	35.7	-28.6	44.91	-	-	74	-29.09	1	101	V
* 8.228	25.73	VA1T	35.7	-28.6	32.83	54	-21.17	-	-	1	101	V
* 12.137	34.05	PK2	38.6	-24.8	47.85	-	-	74	-26.15	1	101	V
* 12.139	21.4	VA1T	38.6	-24.8	35.2	54	-18.8	-	-	1	101	V
2.018	36.82	PK2	32.2	-21.6	47.42	-	-	74	-26.58	1	101	H
2.019	24.51	VA1T	32.2	-21.6	35.11	54	-18.89	-	-	1	101	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

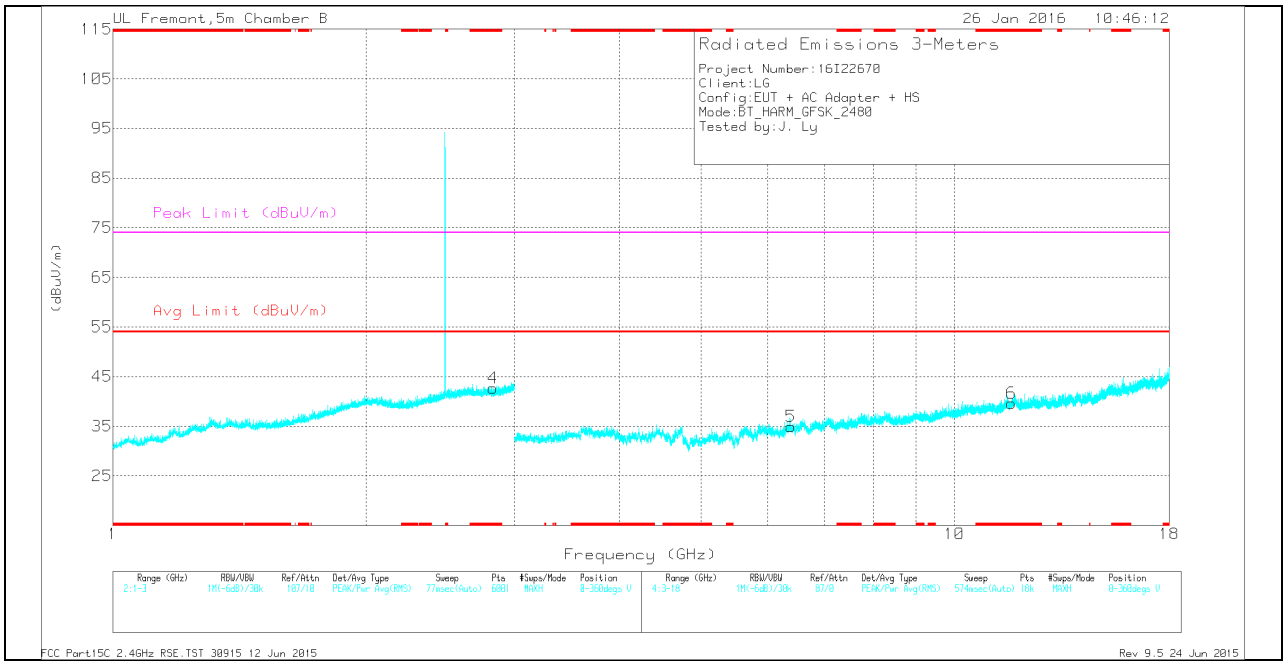
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HIGH CHANNEL HORIZONTAL



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



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/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.83	31.2	Pk	32.6	-21.1	42.7	-	-	74	-31.3	0-360	199	V
2	* 4.703	32.5	Pk	34.2	-31.4	35.3	-	-	74	-38.7	0-360	101	H
6	* 11.685	26.26	Pk	38.5	-25.1	39.66	-	-	74	-34.34	0-360	199	V
1	2.043	30.41	Pk	32.1	-21.6	40.91	-	-	74	-33.09	0-360	101	H
5	6.39	30.76	Pk	35.7	-31.5	34.96	-	-	74	-39.04	0-360	199	V
3	8.534	29.11	Pk	35.7	-28.2	36.61	-	-	74	-37.39	0-360	101	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.831	38.09	PK2	32.6	-21.2	49.49	-	-	74	-24.51	1	101	V
* 2.828	25.09	VA1T	32.6	-21.2	36.49	54	-17.51	-	-	1	101	V
* 4.702	39.69	PK2	34.2	-31.4	42.49	-	-	74	-31.51	1	101	H
* 4.703	26.76	VA1T	34.2	-31.4	29.56	54	-24.44	-	-	1	101	H
* 11.686	34.81	PK2	38.5	-25.1	48.21	-	-	74	-25.79	1	101	V
* 11.686	22.18	VA1T	38.5	-25.1	35.58	54	-18.42	-	-	1	101	V
2.043	24.76	VA1T	32.1	-21.6	35.26	54	-18.74	-	-	1	101	H
2.044	37.79	PK2	32.1	-21.7	48.19	-	-	74	-25.81	1	101	H
6.39	27.31	VA1T	35.7	-31.5	31.51	54	-22.49	-	-	1	101	V
6.391	39.71	PK2	35.7	-31.5	43.91	-	-	74	-30.09	1	101	V
8.532	24.89	VA1T	35.7	-28.2	32.39	54	-21.61	-	-	1	101	H
8.535	36.85	PK2	35.7	-28.2	44.35	-	-	74	-29.65	1	101	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

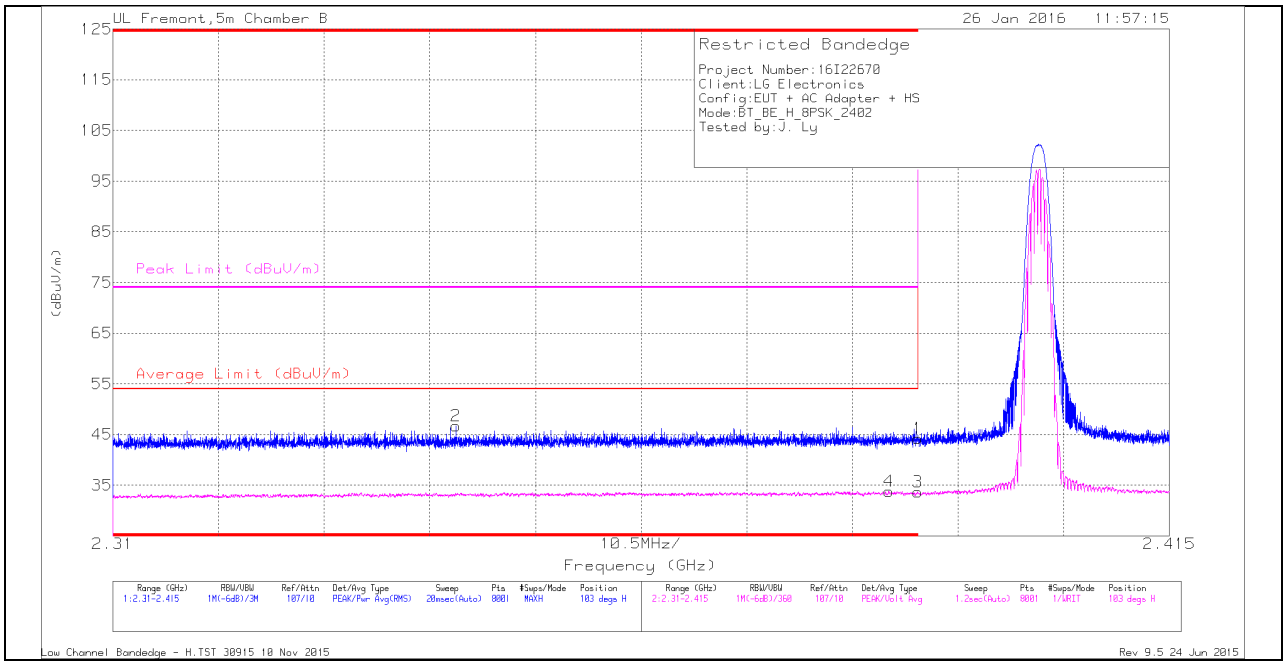
PK2 - KDB558074 Method: Maximum Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

9.1.2. 8PSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

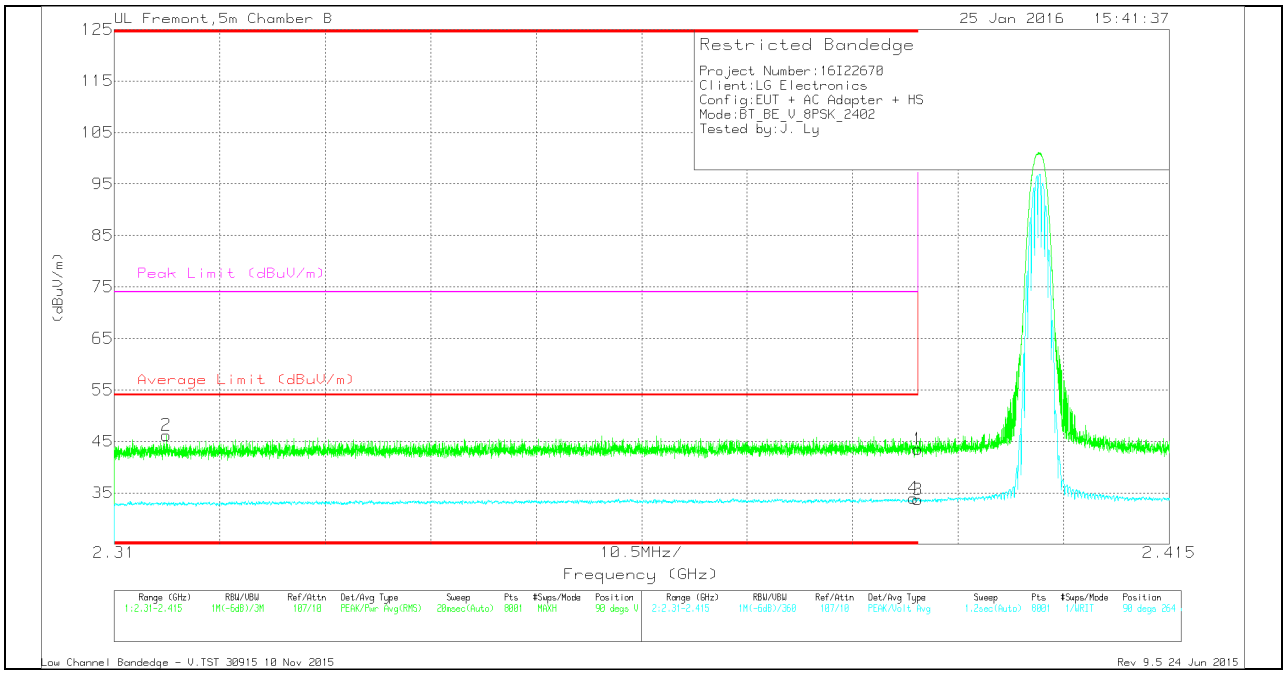
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	34.08	Pk	32	-21.9	44.18	-	-	74	-29.82	103	152	H
2	* 2.344	36.83	Pk	31.8	-21.9	46.73	-	-	74	-27.27	103	152	H
3	* 2.39	23.6	VA1T	32	-21.9	33.7	54	-20.3	-	-	103	152	H
4	* 2.387	23.73	VA1T	32	-21.9	33.83	54	-20.17	-	-	103	152	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (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	33.4	Pk	32	-21.9	43.5	-	-	74	-30.5	90	264	V
2	* 2.315	36.51	Pk	31.6	-21.9	46.21	-	-	74	-27.79	90	264	V
3	* 2.39	23.61	VA1T	32	-21.9	33.71	54	-20.29	-	-	90	264	V
4	* 2.39	23.87	VA1T	32	-21.9	33.97	54	-20.03	-	-	90	264	V

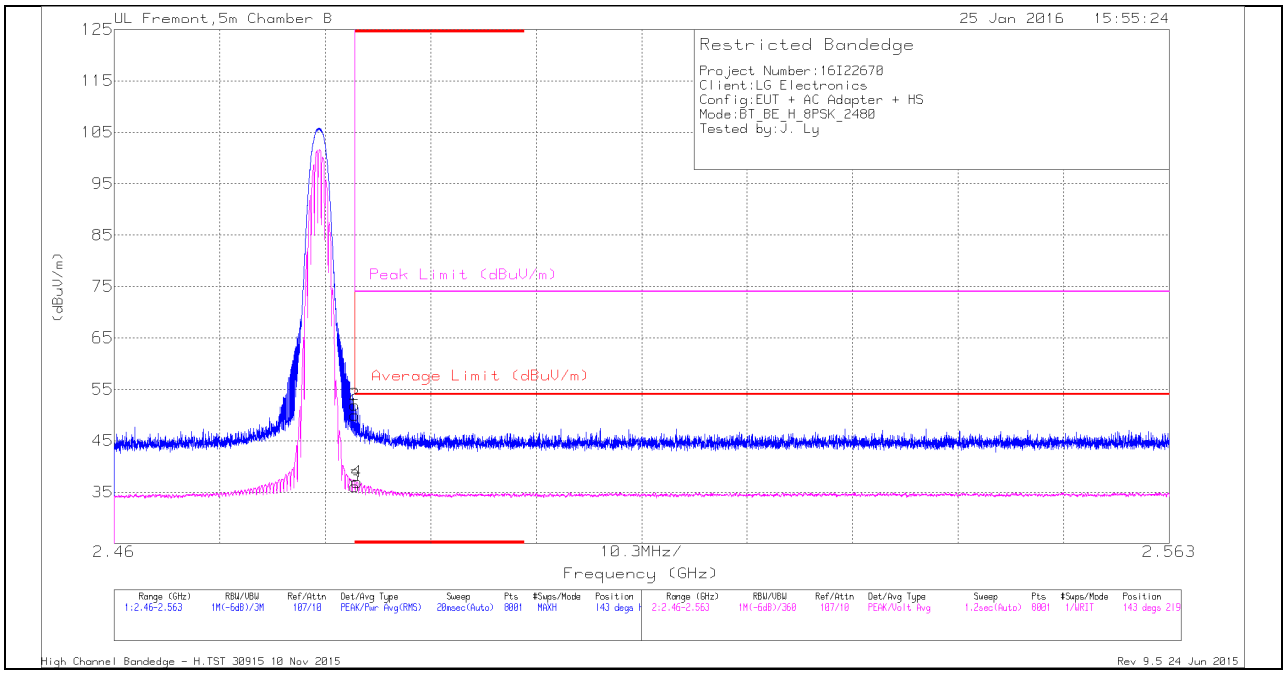
* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

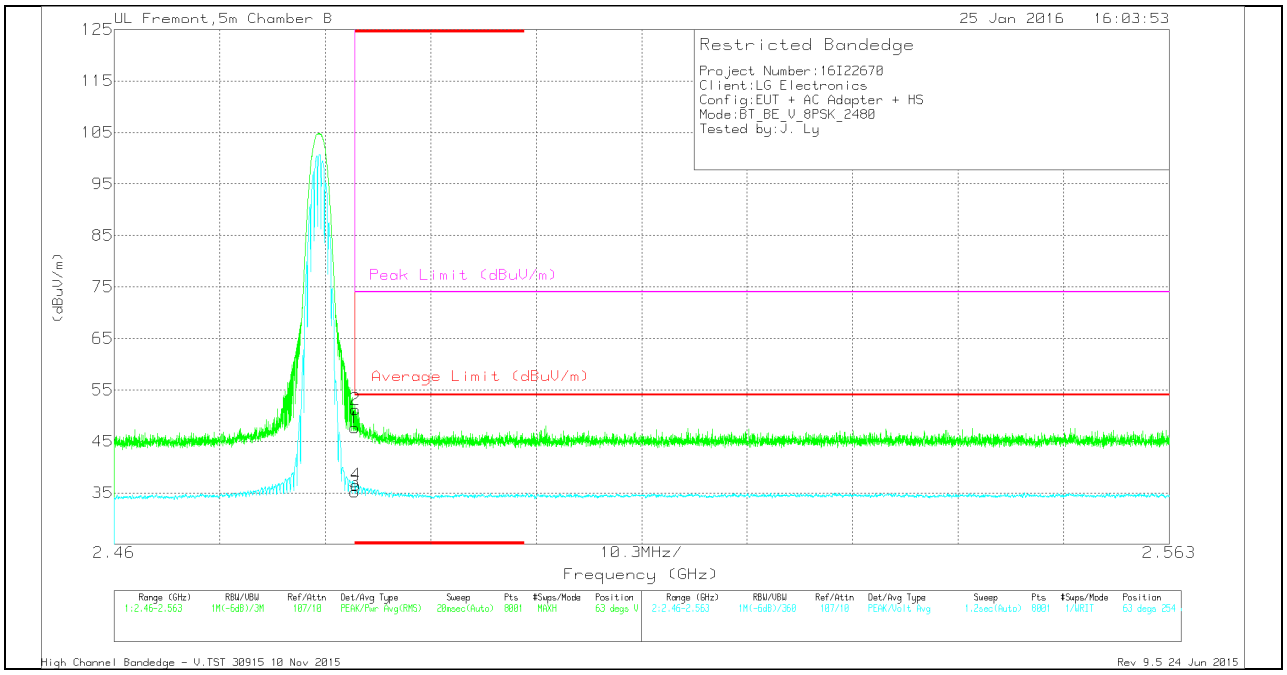
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.31	Pk	32.5	-21.8	50.01	-	-	74	-23.99	143	219	H
2	* 2.484	41.28	Pk	32.5	-21.8	51.98	-	-	74	-22.02	143	219	H
3	* 2.484	25.41	VA1T	32.5	-21.8	36.11	54	-17.89	-	-	143	219	H
4	* 2.484	26.27	VA1T	32.5	-21.8	36.97	54	-17.03	-	-	143	219	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (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	36.94	Pk	32.5	-21.8	47.64	-	-	74	-26.36	63	254	V
2	* 2.484	40.52	Pk	32.5	-21.8	51.22	-	-	74	-22.78	63	254	V
3	* 2.484	24.47	VA1T	32.5	-21.8	35.17	54	-18.83	-	-	63	254	V
4	* 2.484	25.84	VA1T	32.5	-21.8	36.54	54	-17.46	-	-	63	254	V

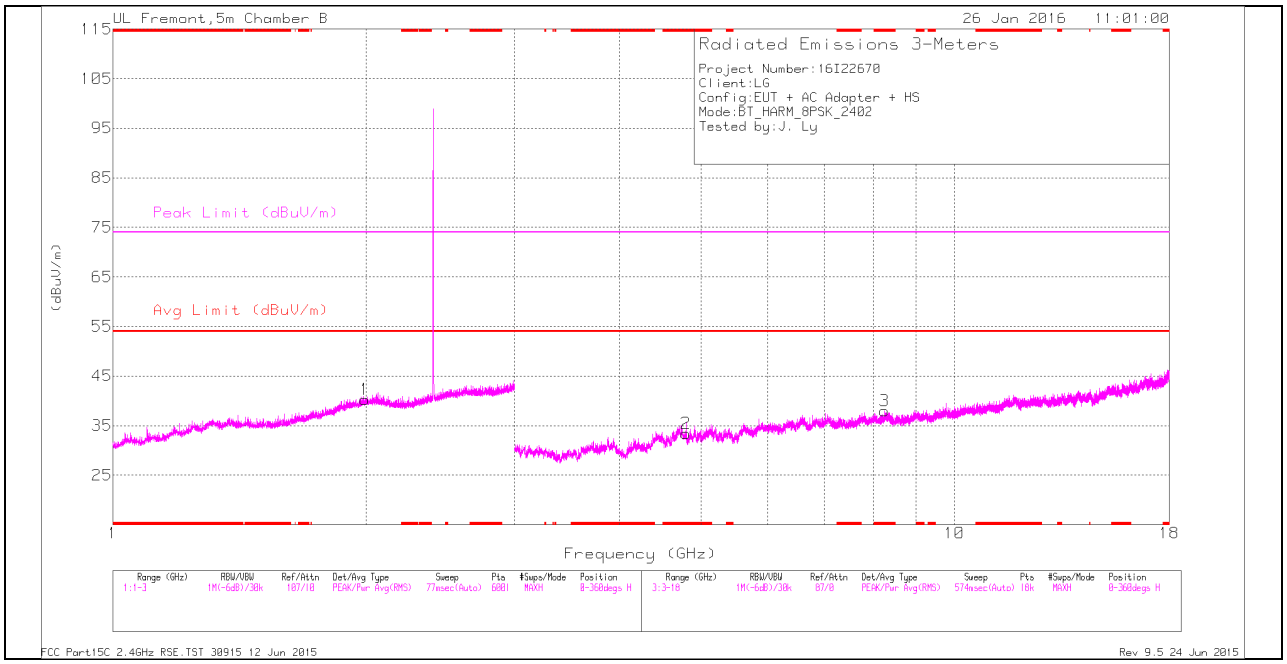
* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

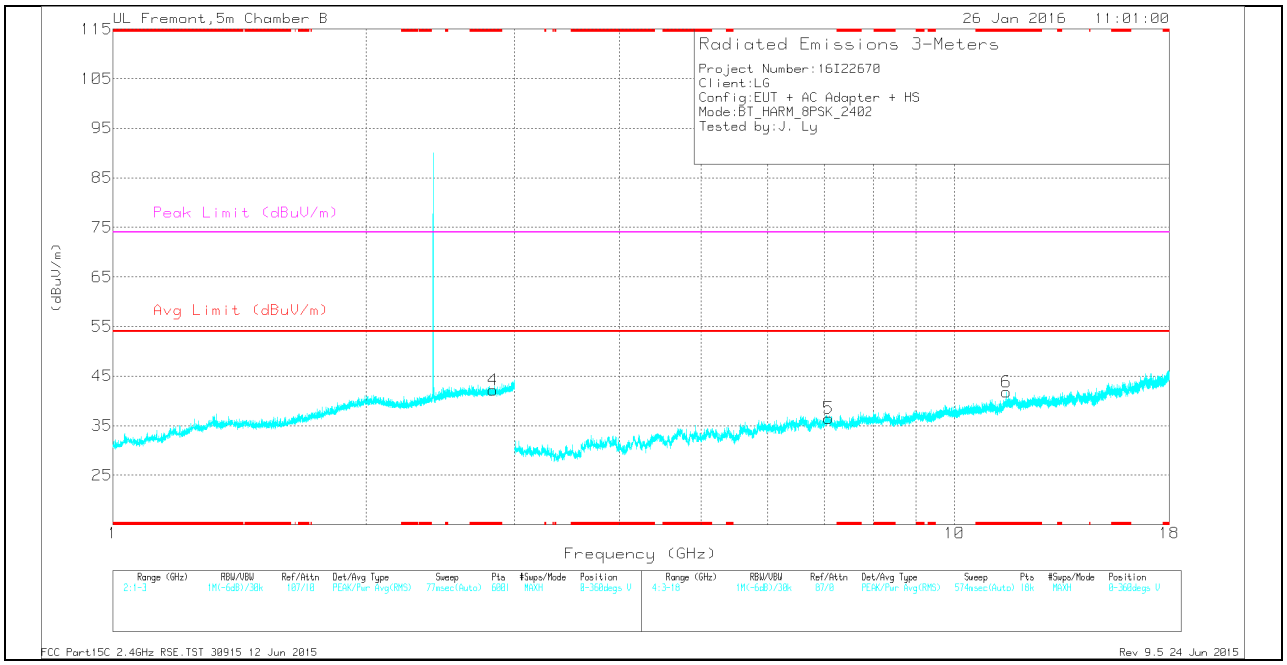
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



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

LOW CHANNEL VERTICAL



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

LOW CHANNEL DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.831	30.62	Pk	32.6	-21.1	42.12	-	-	74	-31.88	0-360	102	V
2	* 4.796	29.96	Pk	34.3	-30.9	33.36	-	-	74	-40.64	0-360	199	H
3	* 8.262	30.45	Pk	35.7	-28.2	37.95	-	-	74	-36.05	0-360	102	H
6	* 11.529	28.18	Pk	38.3	-24.7	41.78	-	-	74	-32.22	0-360	101	V
1	1.992	29.72	Pk	32.3	-21.7	40.32	-	-	74	-33.68	0-360	101	H
5	7.082	30.52	Pk	35.7	-29.7	36.52	-	-	74	-37.48	0-360	101	V

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

Radiated Emissions

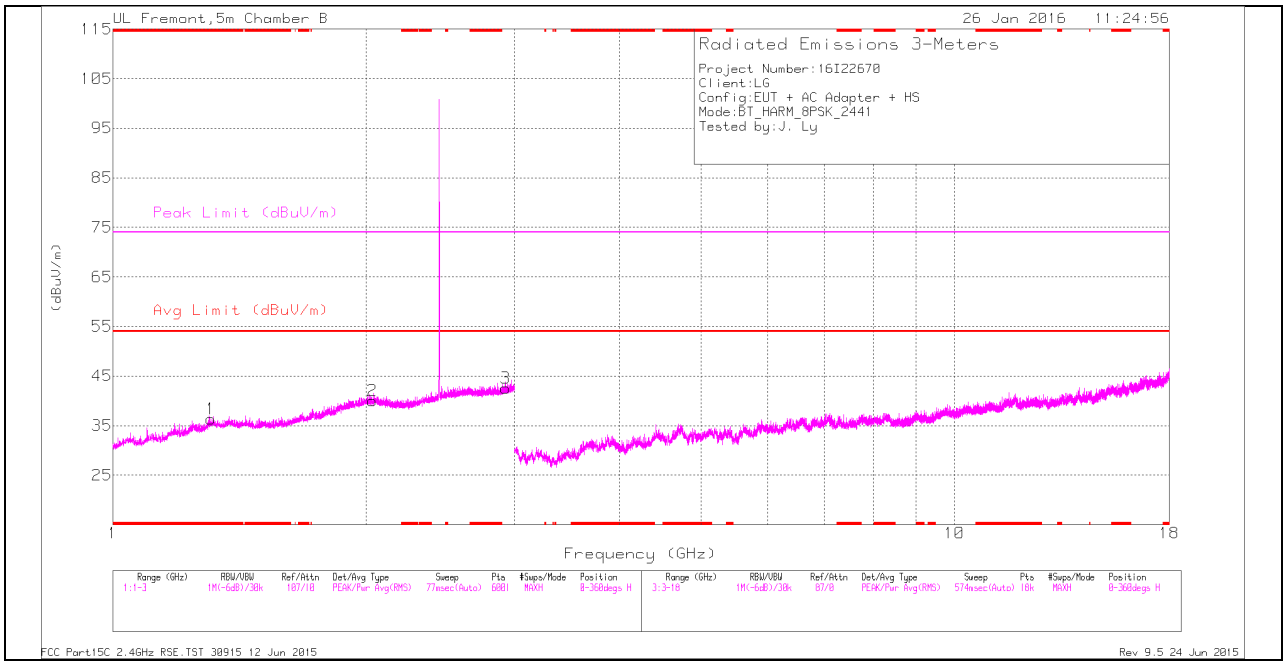
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.829	37.56	PK2	32.6	-21.1	49.06	-	-	74	-24.94	1	101	V
* 2.83	24.99	VA1T	32.6	-21.1	36.49	54	-17.51	-	-	1	101	V
* 4.797	37.45	PK2	34.3	-30.9	40.85	-	-	74	-33.15	1	101	H
* 4.798	24.54	VA1T	34.3	-30.9	27.94	54	-26.06	-	-	1	101	H
* 8.261	37.96	PK2	35.7	-28.2	45.46	-	-	74	-28.54	1	101	H
* 8.263	25.57	VA1T	35.7	-28.2	33.07	54	-20.93	-	-	1	101	H
* 11.53	34.4	PK2	38.3	-24.7	48	-	-	74	-26	1	101	V
* 11.527	22.04	VA1T	38.3	-24.7	35.64	54	-18.36	-	-	1	101	V
1.99	24.69	VA1T	32.3	-21.7	35.29	54	-18.71	-	-	1	101	H
1.993	38.19	PK2	32.3	-21.7	48.79	-	-	74	-25.21	1	101	H
7.082	27	VA1T	35.7	-29.7	33	54	-21	-	-	1	101	V
7.084	39.67	PK2	35.7	-29.7	45.67	-	-	74	-28.33	1	101	V

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

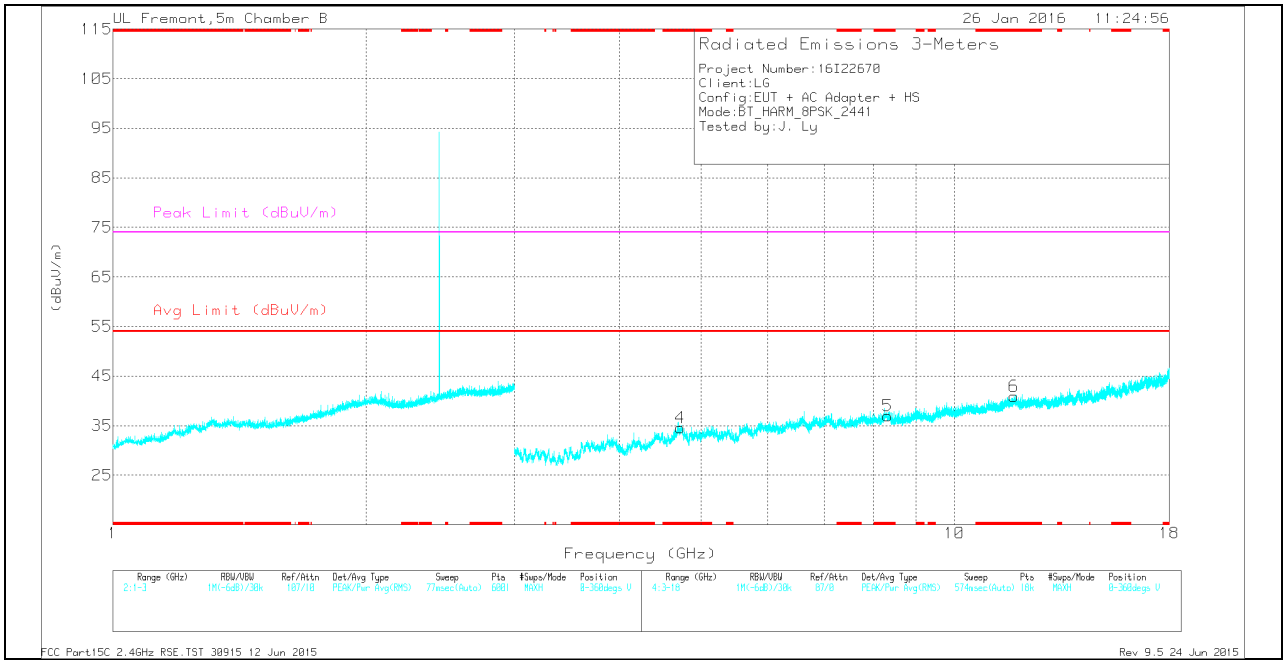
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

MID CHANNEL HORIZONTAL



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



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/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.308	29.41	Pk	29.4	-22.5	36.31	-	-	74	-37.69	0-360	101	H
4	* 4.722	31.16	Pk	34.3	-30.9	34.56	-	-	74	-39.44	0-360	200	V
5	* 8.329	29.01	Pk	35.7	-27.7	37.01	-	-	74	-36.99	0-360	200	V
6	* 11.769	26.71	Pk	38.6	-24.4	40.91	-	-	74	-33.09	0-360	101	V
2	2.035	29.48	Pk	32.2	-21.7	39.98	-	-	74	-34.02	0-360	101	H
3	2.927	30.8	Pk	32.6	-20.8	42.6	-	-	74	-31.4	0-360	101	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

Radiated Emissions

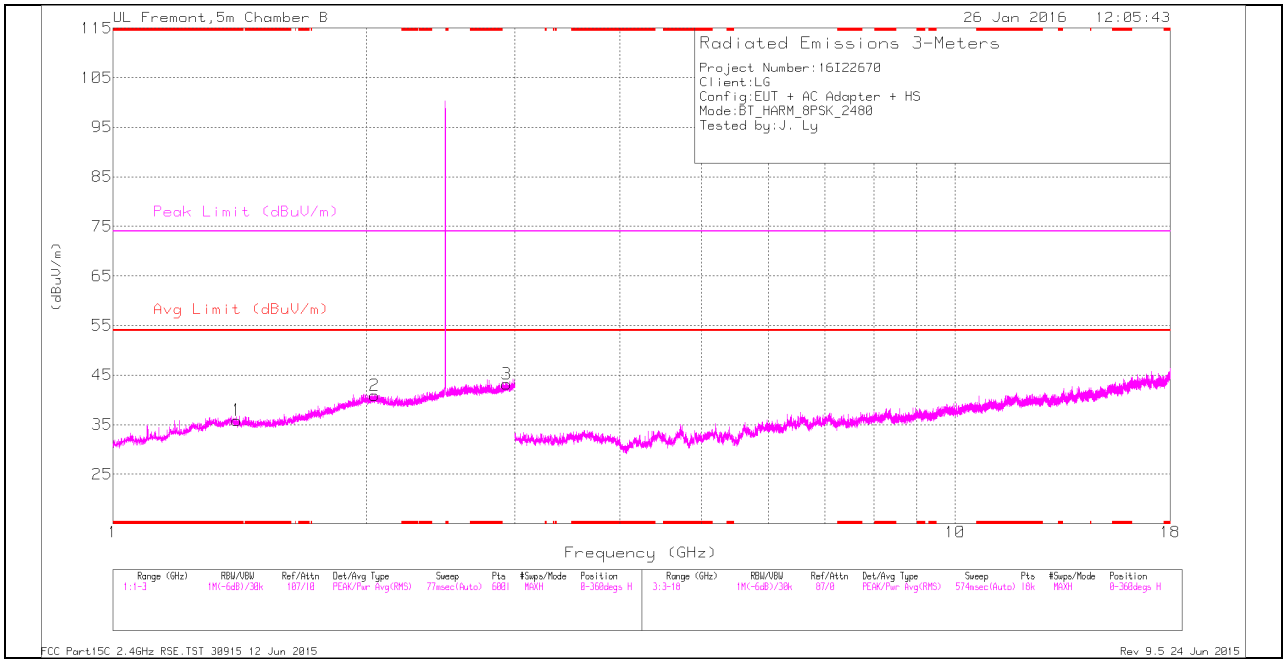
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.308	37.16	PK2	29.4	-22.5	44.06	-	-	74	-29.94	360	101	H
* 1.31	24.38	VA1T	29.4	-22.5	31.28	54	-22.72	-	-	360	101	H
* 4.722	38.51	PK2	34.3	-30.9	41.91	-	-	74	-32.09	360	101	V
* 4.721	25.99	VA1T	34.3	-30.9	29.39	54	-24.61	-	-	360	101	V
* 8.329	38.12	PK2	35.7	-27.8	46.02	-	-	74	-27.98	360	101	V
* 8.329	25.4	VA1T	35.7	-27.7	33.4	54	-20.6	-	-	360	101	V
* 11.767	34.48	PK2	38.6	-24.4	48.68	-	-	74	-25.32	360	101	V
* 11.768	22.06	VA1T	38.6	-24.4	36.26	54	-17.74	-	-	360	101	V
2.034	37.32	PK2	32.2	-21.7	47.82	-	-	74	-26.18	360	101	H
2.037	24.6	VA1T	32.1	-21.6	35.1	54	-18.9	-	-	360	101	H
2.928	38.14	PK2	32.6	-20.8	49.94	-	-	74	-24.06	360	101	H
2.929	25.09	VA1T	32.6	-20.8	36.89	54	-17.11	-	-	360	101	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

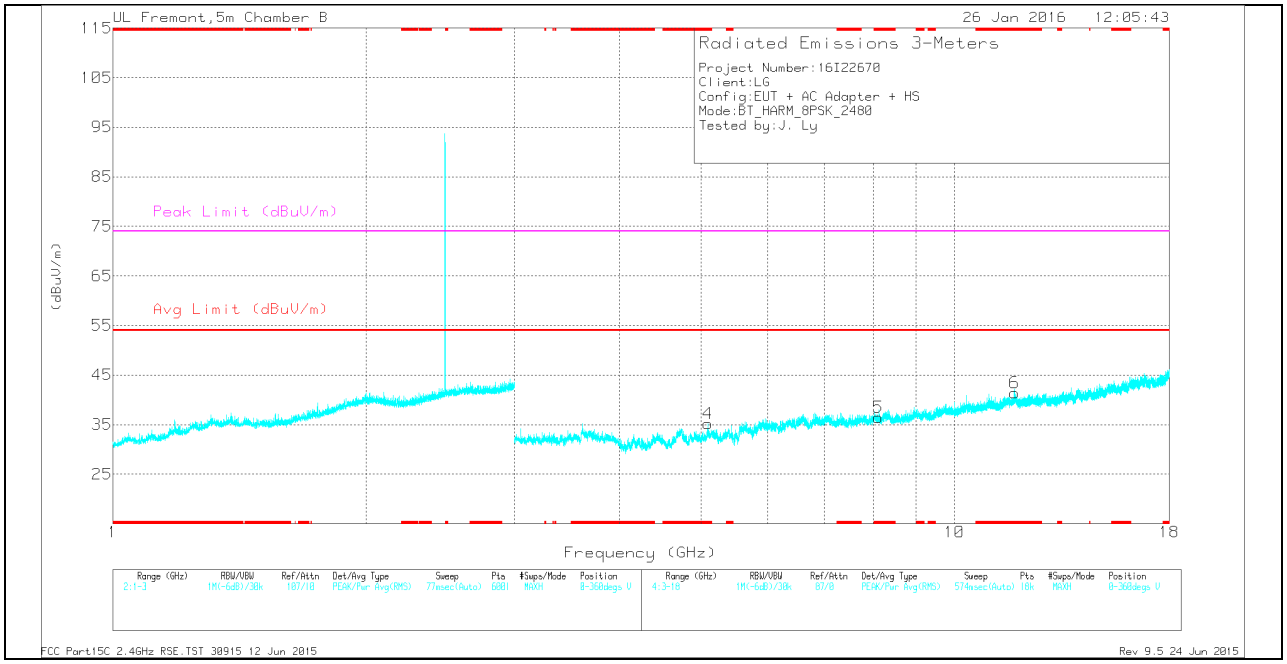
VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HIGH CHANNEL HORIZONTAL



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



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/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.402	28.79	Pk	29.3	-22.2	35.89	-	-	74	-38.11	0-360	101	H
4	* 5.098	32.08	Pk	34	-30.9	35.18	-	-	74	-38.82	0-360	199	V
5	* 8.116	29.36	Pk	35.7	-28.6	36.46	-	-	74	-37.54	0-360	199	V
6	* 11.79	27.27	Pk	38.6	-24.4	41.47	-	-	74	-32.53	0-360	199	V
2	2.046	30.47	Pk	32.1	-21.7	40.87	-	-	74	-33.13	0-360	200	H
3	2.932	31.24	Pk	32.6	-20.7	43.14	-	-	74	-30.86	0-360	200	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

Pk - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.401	36.74	PK2	29.3	-22.3	43.74	-	-	74	-30.26	1	102	H
* 1.402	24	VA1T	29.3	-22.3	31	54	-23	-	-	1	102	H
* 5.1	39.73	PK2	34	-31	42.73	-	-	74	-31.27	1	102	V
* 5.1	26.94	VA1T	34	-31	29.94	54	-24.06	-	-	1	102	V
* 8.117	37.98	PK2	35.7	-28.6	45.08	-	-	74	-28.92	1	102	V
* 8.115	25.39	VA1T	35.7	-28.6	32.49	54	-21.51	-	-	1	102	V
* 11.79	35.01	PK2	38.6	-24.4	49.21	-	-	74	-24.79	1	102	V
* 11.792	22.03	VA1T	38.6	-24.3	36.33	54	-17.67	-	-	1	102	V
2.045	24.75	VA1T	32.1	-21.7	35.15	54	-18.85	-	-	1	102	H
2.046	37.76	PK2	32.1	-21.7	48.16	-	-	74	-25.84	1	102	H
2.933	25.11	VA1T	32.6	-20.7	37.01	54	-16.99	-	-	1	102	H
2.934	38.39	PK2	32.6	-20.7	50.29	-	-	74	-23.71	1	102	H

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band

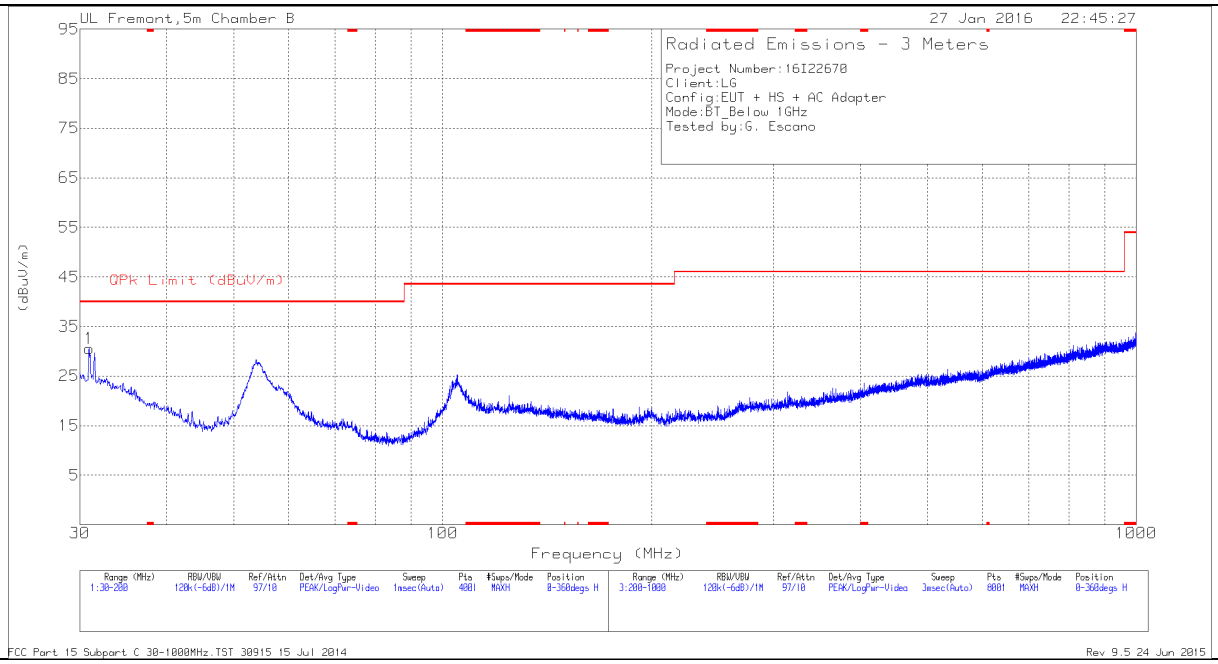
PK2 - KDB558074 Method: Maximum Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

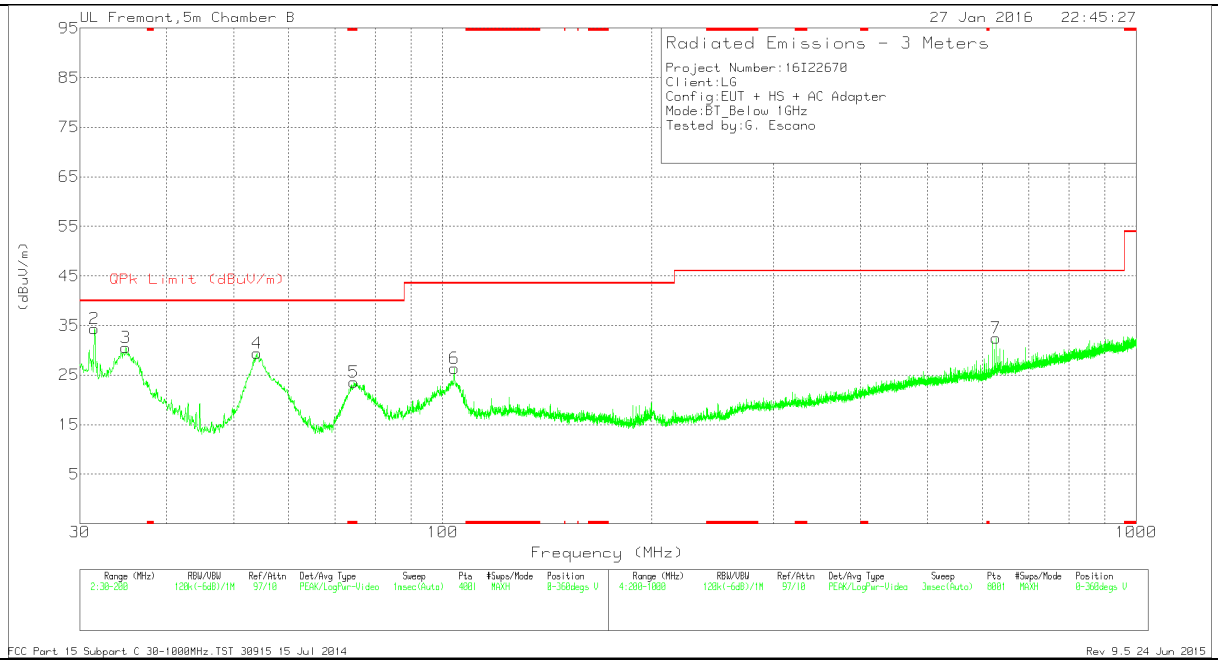
9.2. WORST-CASE BELOW 1 GHz

GFSK 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 T130 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 74.4975	40.02	Pk	11.9	-28.4	23.52	40	-16.48	0-360	101	V
1	30.935	34.83	Pk	24.5	-28.8	30.53	40	-9.47	0-360	199	H
2	31.4875	39.11	Pk	24.1	-28.8	34.41	40	-5.59	0-360	101	V
3	34.93	37.71	Pk	21.6	-28.8	30.51	40	-9.49	0-360	101	V
4	53.97	46.95	Pk	11	-28.5	29.45	40	-10.55	0-360	101	V
6	103.95	38.95	Pk	15.5	-28.1	26.35	43.52	-17.17	0-360	101	V
7	628	34.72	Pk	23.5	-25.8	32.42	46.02	-13.6	0-360	101	V

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band
Pk - Peak detector

Radiated Emissions

Frequency (MHz)	Meter Reading (dBuV)	Det	AF T130 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
31.6872	23.72	Qp	24	-28.9	18.82	40	-21.18	0	230	V

* - indicates frequency in 47 CFR §15.205/IC RSS-Gen §8.10 Restricted Band
Qp - Quasi-Peak detector

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 – 0.5	66 to 56	56 to 46
0.5 - 5	56	46
5 - 30	60	50

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

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.

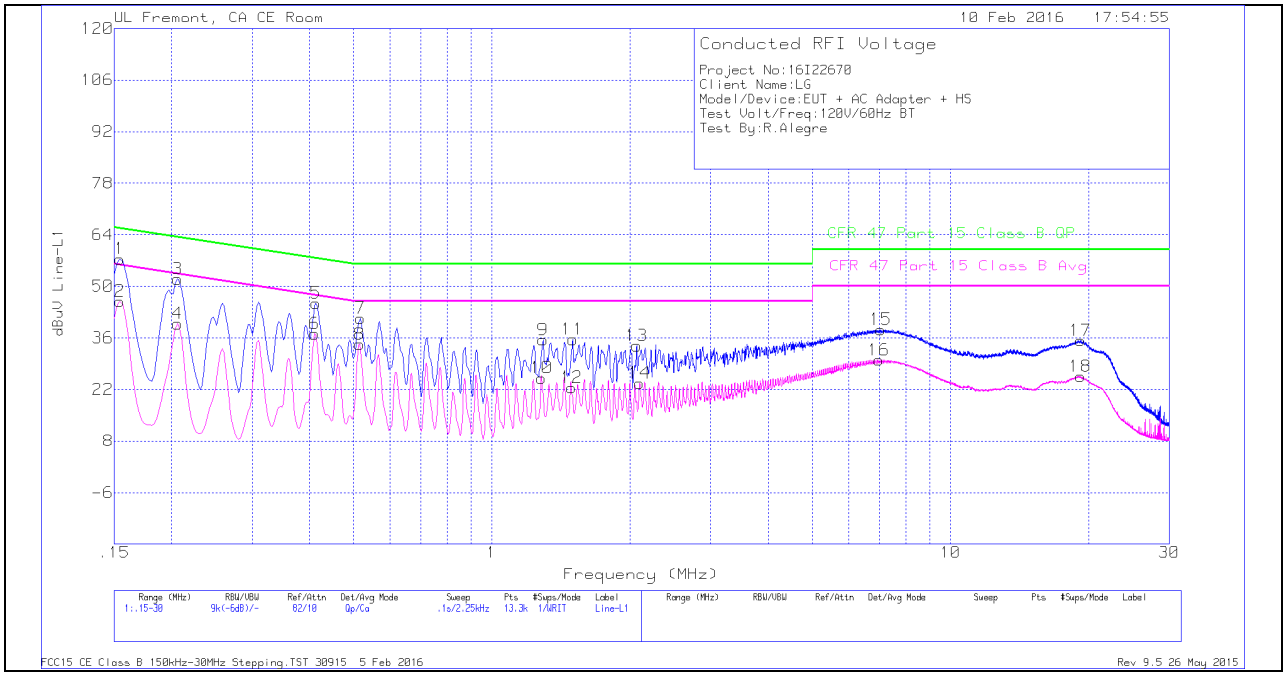
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

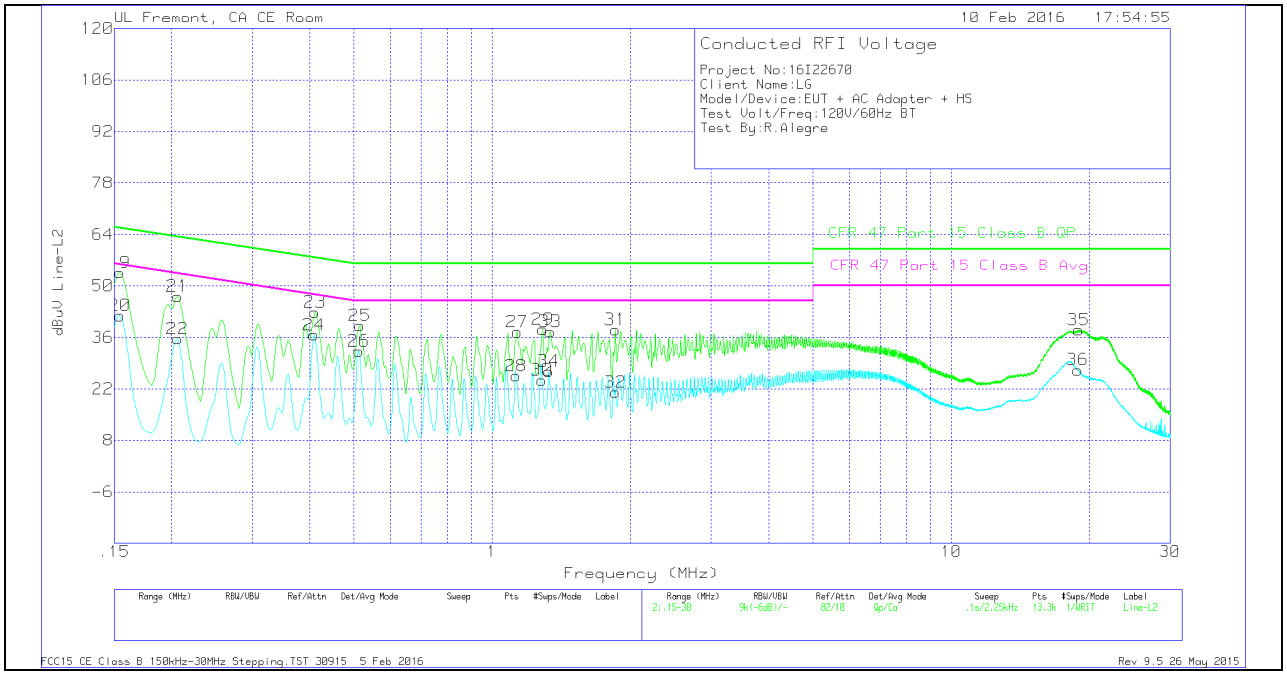
RESULTS

6 WORST EMISSIONS

LINE 1 PLOT



LINE 2 PLOT



LINE 1 & LINE 2 RESULTS

Trace Markers

Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T1310 IL L1	LC Cables 1&3	10dB Pad	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
1	.1545	47.44	Qp	0	0	10	57.44	65.75	-8.31	-	-
2	.1545	35.94	Ca	0	0	10	45.94	-	-	55.75	-9.81
3	.20625	41.99	Qp	0	0	10	51.99	63.35	-11.36	-	-
4	.20625	29.85	Ca	0	0	10	39.85	-	-	53.35	-13.5
5	.41325	35.45	Qp	0	0	10	45.45	57.58	-12.13	-	-
6	.411	27.13	Ca	0	0	10	37.13	-	-	47.63	-10.5
7	.51675	31.35	Qp	0	0	10	41.35	56	-14.65	-	-
8	.5145	24.28	Ca	0	0	10	34.28	-	-	46	-11.72
9	1.293	25.38	Qp	0	.1	10	35.48	56	-20.52	-	-
10	1.284	15.01	Ca	0	.1	10	25.11	-	-	46	-20.89
11	1.5	25.48	Qp	0	.1	10	35.58	56	-20.42	-	-
12	1.491	12.39	Ca	0	.1	10	22.49	-	-	46	-23.51
13	2.06925	23.78	Qp	0	.1	10	33.88	56	-22.12	-	-
14	2.10075	13.63	Ca	0	.1	10	23.73	-	-	46	-22.27
15	7.0485	28.16	Qp	0	.1	10	38.26	60	-21.74	-	-
16	6.97875	19.87	Ca	0	.1	10	29.97	-	-	50	-20.03
17	19.20075	25.11	Qp	0	.2	10	35.31	60	-24.69	-	-
18	19.1985	15.32	Ca	0	.2	10	25.52	-	-	50	-24.48

Qp - Quasi-Peak detector

Ca - CISPR average detection

Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T1310 IL L2	LC Cables 2&3	10dB Pad	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
19	.1545	43.59	Qp	0	0	10	53.59	65.75	-12.16	-	-
20	.1545	31.9	Ca	0	0	10	41.9	-	-	55.75	-13.85
21	.20625	37.16	Qp	0	0	10	47.16	63.35	-16.19	-	-
22	.20625	25.6	Ca	0	0	10	35.6	-	-	53.35	-17.75
23	.411	32.87	Qp	0	0	10	42.87	57.63	-14.76	-	-
24	.40875	26.68	Ca	0	0	10	36.68	-	-	47.67	-10.99
25	.5145	29.25	Qp	0	0	10	39.25	56	-16.75	-	-
26	.51225	22.27	Ca	0	0	10	32.27	-	-	46	-13.73
27	1.13325	27.35	Qp	0	.1	10	37.45	56	-18.55	-	-
28	1.1265	15.42	Ca	0	.1	10	25.52	-	-	46	-20.48
29	1.2885	28.12	Qp	0	.1	10	38.22	56	-17.78	-	-
30	1.284	14.3	Ca	0	.1	10	24.4	-	-	46	-21.6
31	1.8555	27.97	Qp	0	.1	10	38.07	56	-17.93	-	-
32	1.8555	11.01	Ca	0	.1	10	21.11	-	-	46	-24.89
33	1.338	27.45	Qp	0	.1	10	37.55	56	-18.45	-	-
34	1.32675	16.69	Ca	0	.1	10	26.79	-	-	46	-19.21
35	18.94875	27.82	Qp	0	.2	10	38.02	60	-21.98	-	-
36	18.87225	16.97	Ca	0	.2	10	27.17	-	-	50	-22.83

Qp - Quasi-Peak detector

Ca - CISPR average detection