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

CERTIFICATION TEST REPORT

FOR

CELLULAR PHONE WITH BLUETOOTH AND WLAN RADIOS

MODEL NUMBER: A1662

FCC ID: BCG-E2945A
IC: 579C-E2945A

REPORT NUMBER: 15U21634-E4V2

ISSUE DATE: JANUARY 28, 2016

Prepared for
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1 INFINITE LOOP
CUPERTINO, CA 95014, U.S.A.

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	01/22/2016	Initial Issue	M. Mekuria
V2	01/28/2016	Revised report to address TCB's questions	T. Chu

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME:	APPLE, INC. 1 INFINITE LOOP CUPERTINO, CA 95014, U.S.A.
EUT DESCRIPTION:	CELLULAR PHONE WITH BLUETOOTH AND WLAN RADIOS
MODEL:	A1662
SERIAL NUMBER:	C39QG005GX9C
DATE TESTED:	AUGUST 20, 2015 – DECEMBER 10, 2015

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.

Approved & Released For
UL Verification Services Inc. By:

MENGISTU MEKURIA
PROJECT LEADER
UL VERIFICATION SERVICES INC.

Tested By:

ERIC YU
EMC ENGINEER
UL VERIFICATION SERVICES INC.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, KDB 558074 D01 v03r04, ANSI C63.10-2013, RSS-GEN Issue 4, and RSS-247 Issue 1.

3. FACILITIES AND ACCREDITATION

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

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

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. Chambers A through H are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-8, respectively.

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

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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, 30 to 1000 MHz	± 4.94 dB
Radiated Disturbance, 1 to 6 GHz	± 3.86 dB
Radiated Disturbance, 6 to 18 GHz	± 4.23 dB
Radiated Disturbance, 18 to 26 GHz	± 5.30 dB
Radiated Disturbance, 26 to 40 GHz	± 5.23 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT, Model A1662 is a mobile phone with multimedia functions (music, application support, and video), cellular GSM/GPRS/EGPRS/CDMA/WCDMA/HSPA+/DC-HSDPA/LTE radio, IEEE 802.11a/b/g/n/ac radio, Bluetooth radio and NFC. The rechargeable battery is not user accessible.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
2412 - 2472	802.11b 1TX	21.52	141.91
2412 - 2472	802.11g	Covered by HT20 1TX	
2412 - 2472	802.11n HT20 1TX	26.51	447.71

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

Frequency Band (GHz)	Antenna Gain (dBi)
2.4	-0.90

5.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was 7.47.130.1

5.5. WORST-CASE CONFIGURATION AND MODE

Radiated emission and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

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

Worst-case data rates as provided by the client were:

802.11b mode: 1 Mbps
802.11g mode: 6 Mbps
802.11n HT20mode: MCS0

The target power for 802.11g and 802.11n HT20 1TX are the same and use the same modulation (OFDM).

There are two vendors of the WiFi/Bluetooth radio modules: variant 1 and variant 2. The Wi-Fi/Bluetooth radio modules have the same mechanical outline (e.g., the same package dimension and pin-out layout), use the same on-board antenna matching circuit, have an identical antenna structure, and are built and tested to conform to the same specifications and to operate within the same tolerances.

Baseline testing was performed on the two variants to determine the worst case on all conducted power and radiated emissions.

For simultaneous transmission of multiple channels from the same antenna in the 2.4GHz and 5GHz bands, tests were conducted for various configurations having the highest power, least separation in frequencies and widest operation bandwidths. No noticeable new emission was found.

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop AC/DC adapter	Lenovo	92P1160	11S92P1160Z1ZBGH798B12	N/A
Laptop	Lenovo	7659	L3-AL664 08/03	N/A
Earphone	Apple	N/A	N/A	N/A
EUT AC/CD adapter	Apple	A1385	D293062F3WVDHLHCF	N/A

I/O CABLES (CONDUCTED TEST)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	Antenna	1	SMA	Un-Shielded	0.2	To spectrum Analyzer
2	USB	1	USB	Shielded	1	N/A
3	AC	1	AC	Un-shielded	3	N/A

I/O CABLES (RADIATED ABOVE 1 GHZ)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
None Used						

I/O CABLES (RADAITED BELOW 1 GHZ)

I/O Cable List						
Cable No	Port	# of identical	Connector Type	Cable Type	Cable Length (m)	Remarks
1	Headphones Jack	1	3.5mm Audio	Shielded	0.9	N/A
2	AC	1	AC	Un-shielded	3	N/A

I/O CABLES (AC LINE CONDUCTED: AC/DC ADAPTER)

I/O Cable List						
Cable No	Port	# of identical	Connector Type	Cable Type	Cable Length (m)	Remarks
1	Headphones Jack	1	3.5mm Audio	Shielded	0.9	N/A
2	AC	1	AC	Un-shielded	3	N/A

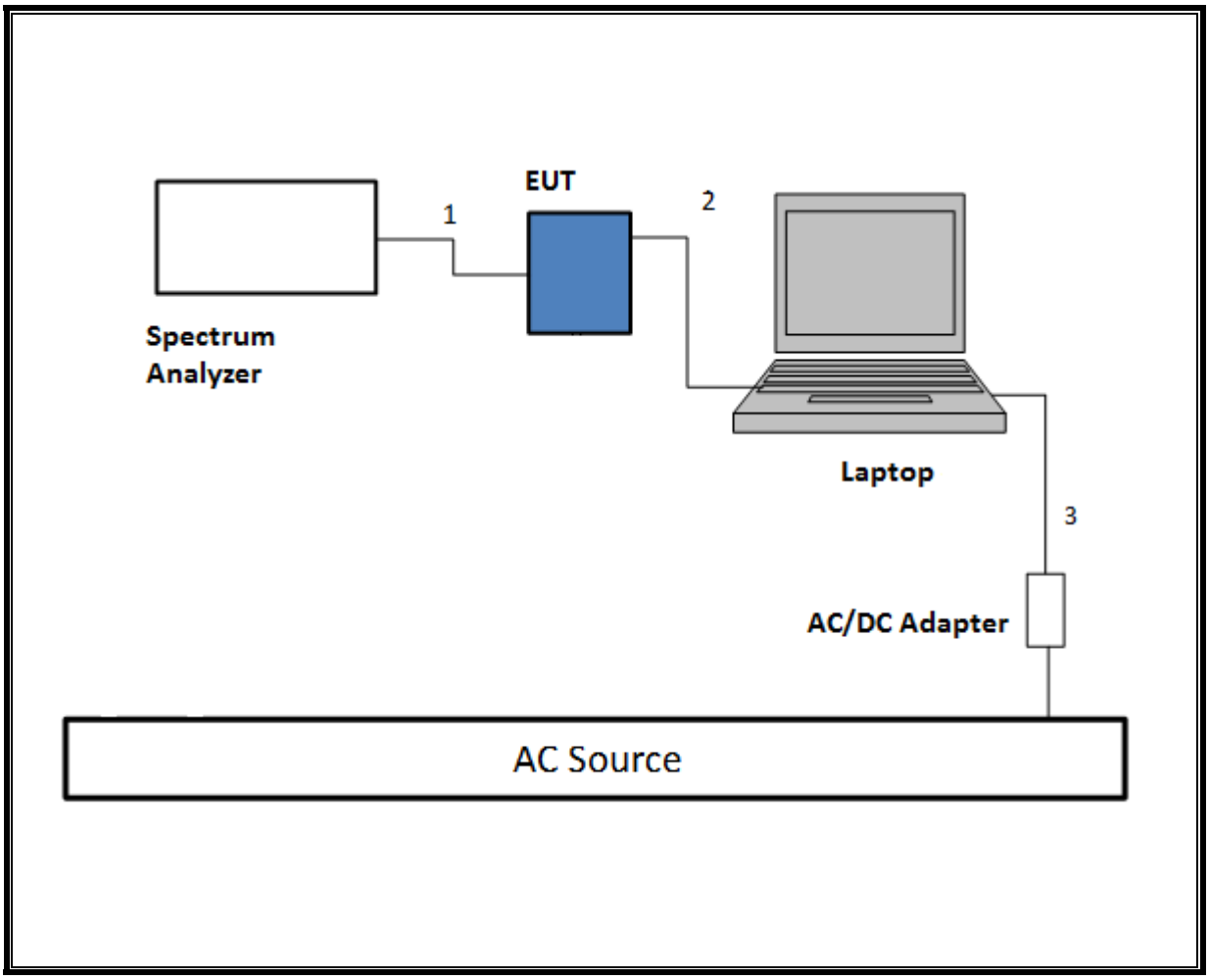
I/O CABLES (AC LINE CONDUCTED: LAPTOP CONFIGUARTION)

I/O Cable List						
Cable No	Port	# of identical	Connector Type	Cable Type	Cable Length (m)	Remarks
1	Headphones Jack	1	3.5mm Audio	Shielded	0.9	N/A
2	USB	1	USB	Shielded	1	N/A
3	AC	1	AC	Un-shielded	3	N/A

TEST SETUP - CONDUCTED TESTS

The EUT was tested connected to a host Laptop via USB cable adapter and spectrum analyzer to antenna port. Test software exercised the EUT.

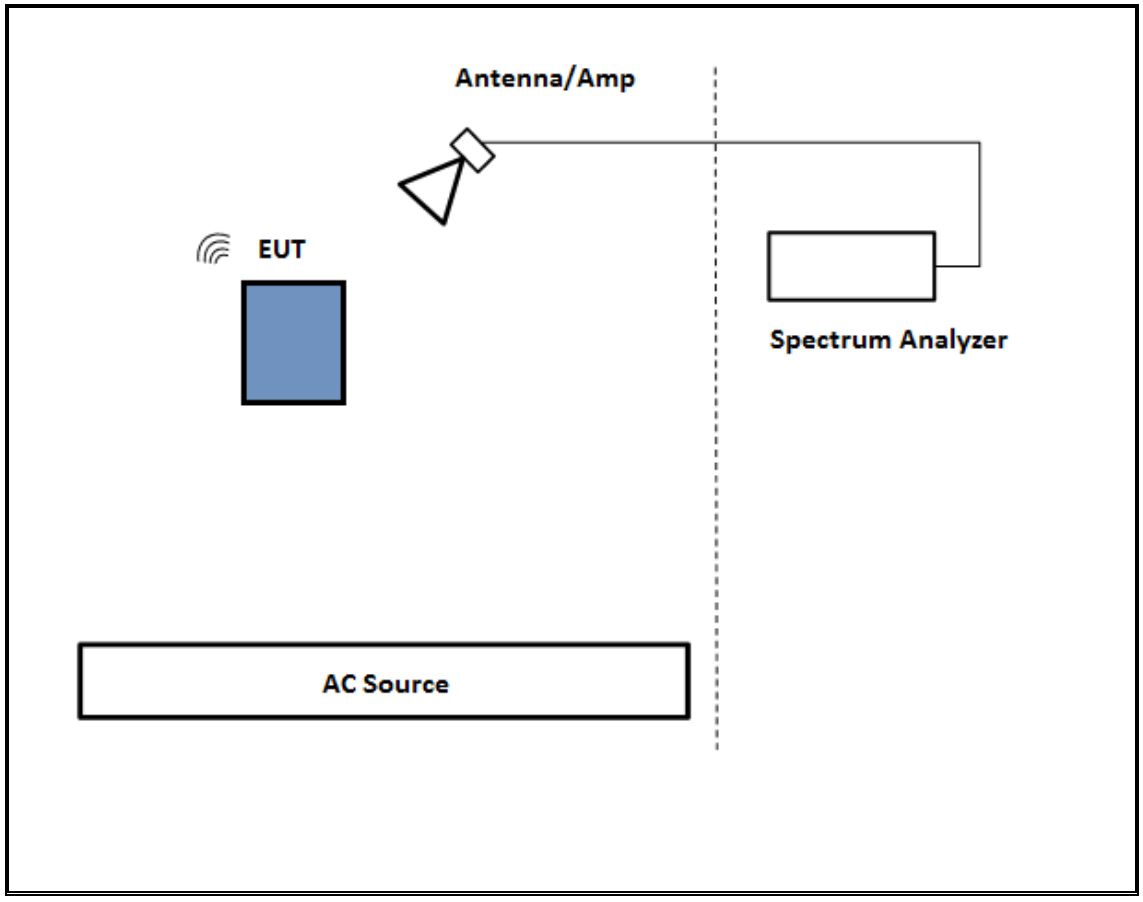
SETUP DIAGRAM



TEST SETUP- RADIATED-ABOVE 1 GHZ

The EUT was tested battery powered. Test software exercised the EUT.

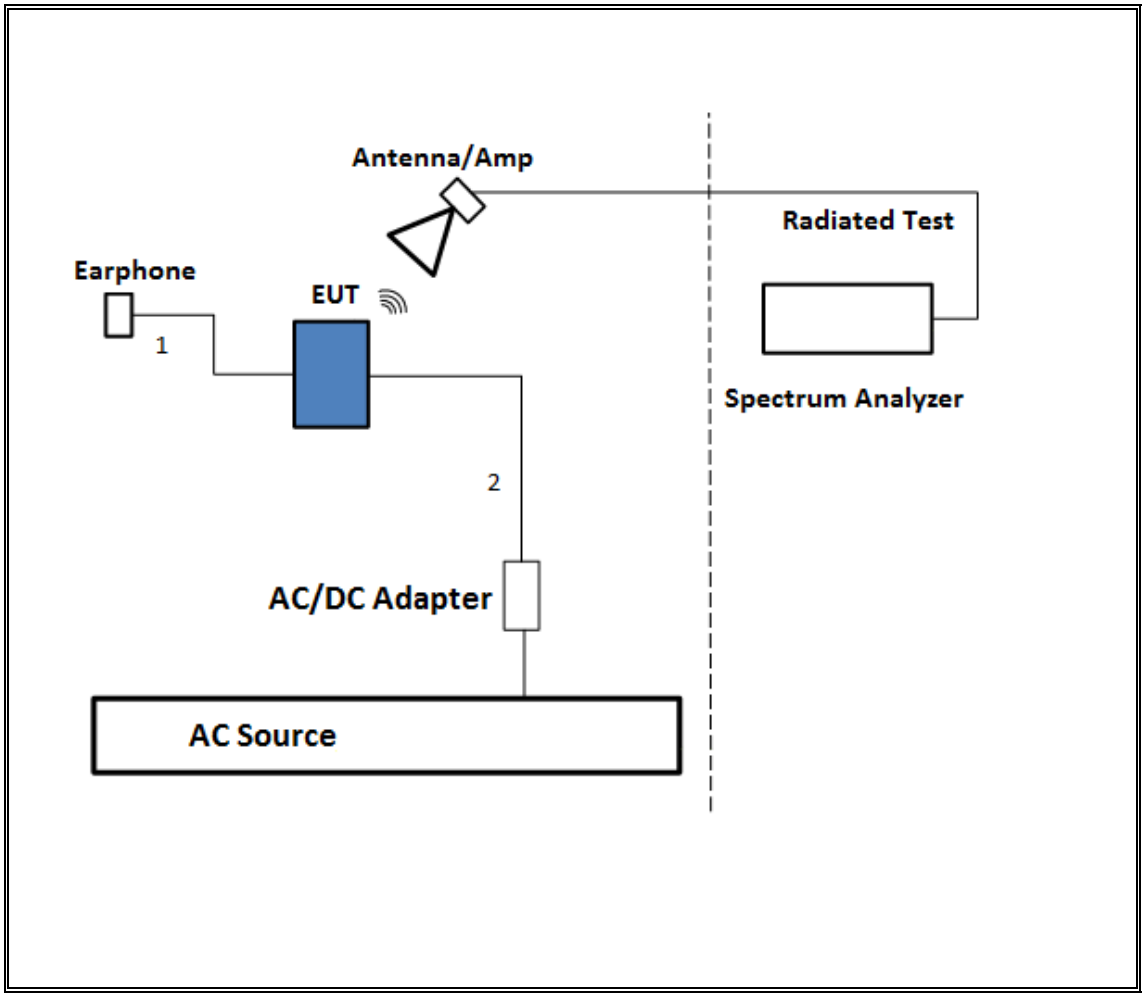
SETUP DIAGRAM



TEST SETUP- BELOW 1GHz

The EUT was tested with earphone connected and powered by AC adapter. Test software exercised the EUT.

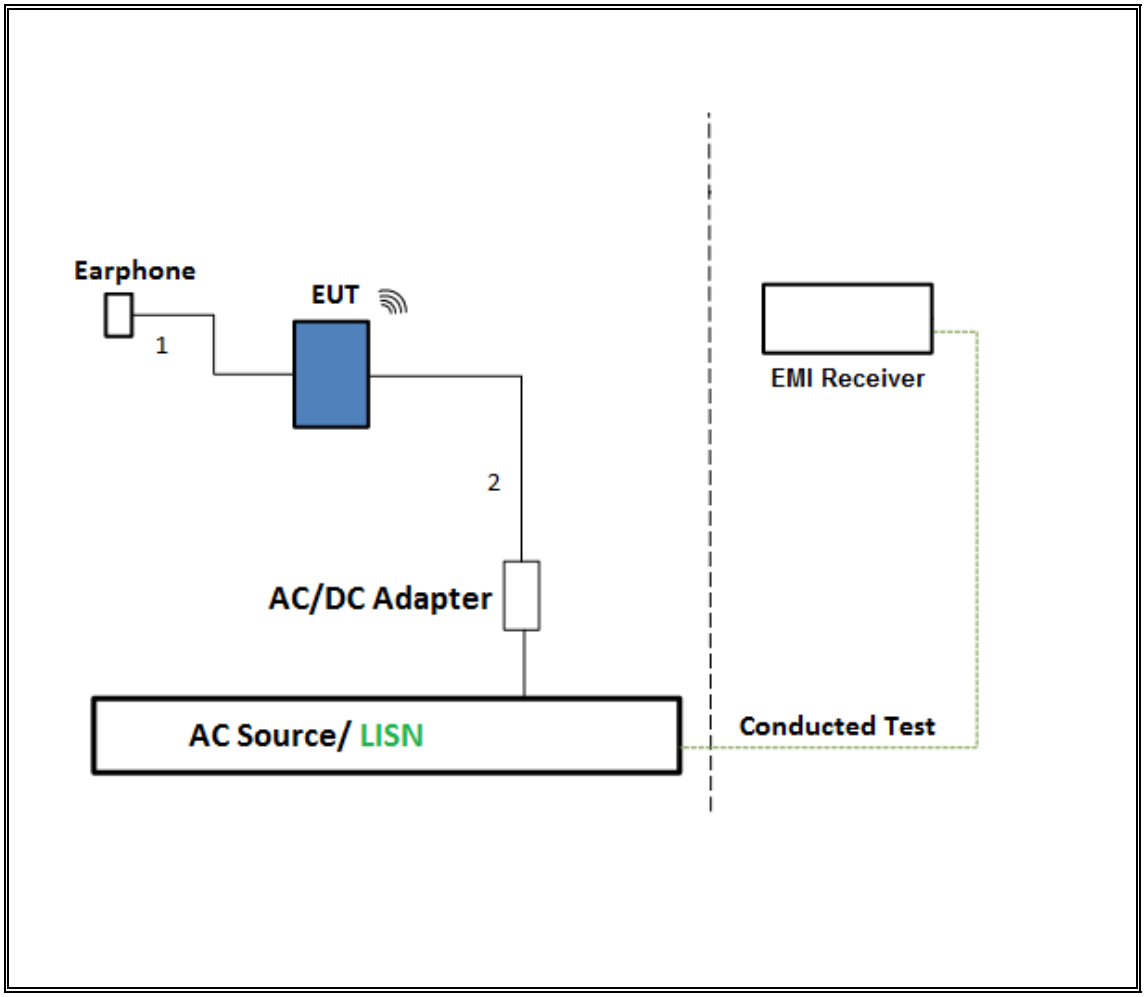
SETUP DIAGRAM



TEST SETUP- AC LINE CONDUCTED: AC/DC ADAPTER

The EUT was tested with earphone connected and powered by AC/DC adapter via USB cable. Test software exercised the EUT.

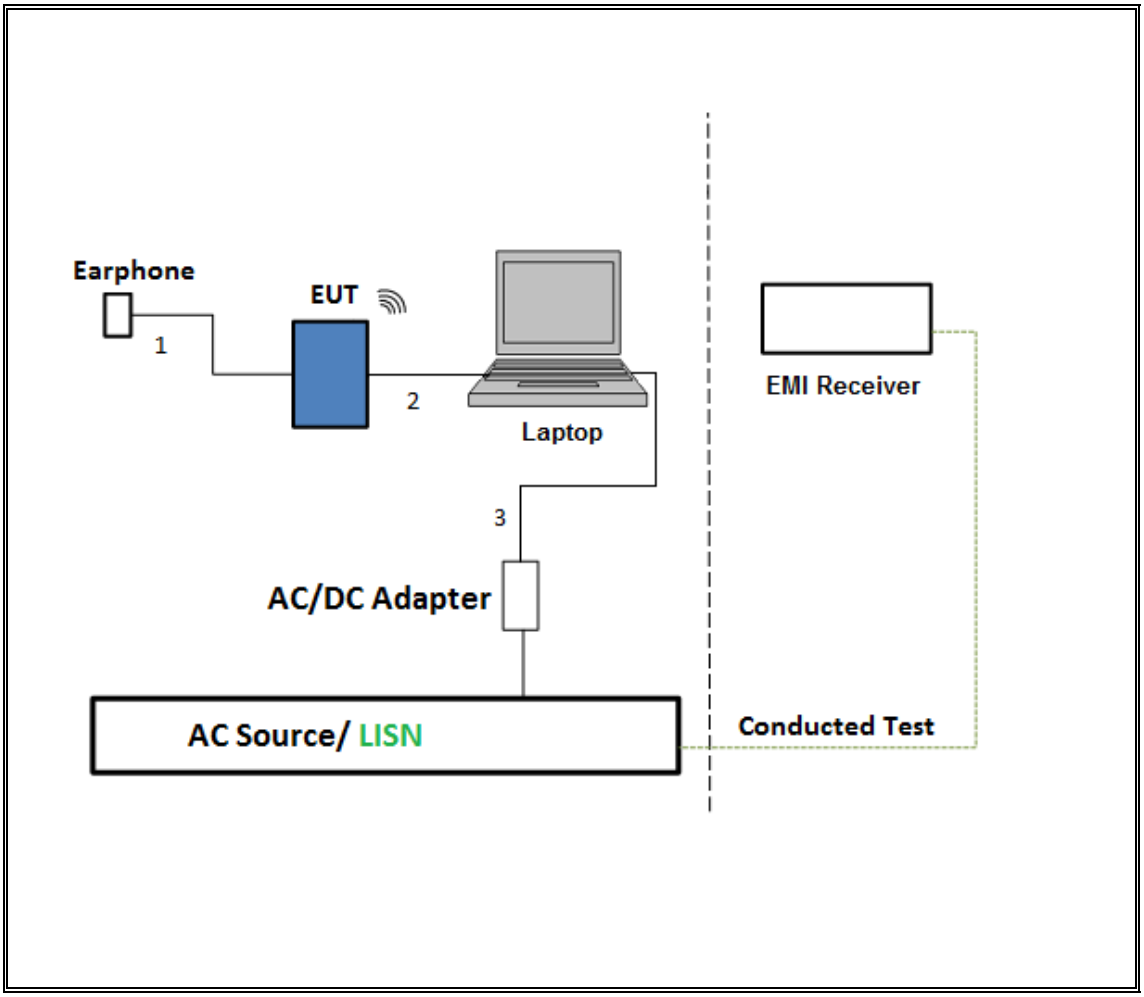
SETUP DIAGRAM



TEST SETUP- AC LINE CONDUCTED: LAPTOP CONFIGURATION

The EUT was tested with earphone connected and powered by host PC via USB cable. Test software exercised the EUT.

SETUP DIAGRAM



5.7. 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**	**Cal Date**	**Cal Due**
Antenna, Horn 1-18GHz	ETS Lindgren	3117	2/10/2015	2/10/2016
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB3	1/14/2015	1/14/2016
Amplifier, 1 - 18GHz	Miteq	AFS42-00101800-25-S-42	6/2/2015	6/2/2016
Amplifier, 10KHz to 1GHz, 32dB	Sonoma	310N	6/9/2015	6/9//2016
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent	N9030A	6/11/2015	6/11/2016
Antenna, Broadband Hybrid, 30MHz to 2000MHz	Sunol Sciences	JB1	2/13/2015	2/13/2016
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent	N9030A	2/20/2015	2/20/2016
Power Meter, P-series single channel	Agilent	N1911A	4/7/2015	4/7/2016
Power Sensor, P - series, 50MHz to 18GHz, Wideband	Agilent	N1921A	2/27/2015	2/27/2016
Antenna, Horn 18 to 26.5GHz	ARA	MWH-1826	12/17/2014	12/17/2015
Spectrum Analyzer, 40 GHz	Agilent	8564E	8/14/2015	8/14/2016
Amplifier, 1 to 26.5GHz, 23.5dB Gain minimum	Agilent	8449B	6/29/2015	6/29/2016
AC Line Conducted				
EMI Test Receiver 9Khz-7GHz	Rohde & Schwarz	ECSI7	09/16/14	08/07/16
LISN for Conducted Emissions CISPR-16	FCC	50/250-25-2	01/16/15	01/16/16
Power Cable, Line Conducted Emissions ANSI 63.4	U L	PG1	7/28/2015	7/28/2016
UL SOFTWARE				
* Radiated Software	UL	UL EMC	Ver 9.5, July 22, 2014	
* Conducted Software	UL	UL EMC	Ver 2.2, March 31, 2015	
* AC Line Conducted Software	UL	UL EMC	Ver 9.5, April 3, 2015	

Note: * indicates automation software version used in the compliance certification testing

6. MEASUREMENT METHODS

6 dB BW: KDB 558074 D01 v03r04, Section 8.1.

Output Power: KDB 558074 D01 v03r04, Section 9.1.2.

Power Spectral Density: KDB 558074 D01 v03r04, Section 10.2.

Out-of-band emissions in non-restricted bands: KDB 558074 D01 v03r04, Section 11.0.

Out-of-band emissions in restricted bands: KDB 558074 D01 v03r04, Section 12.1.

Band-edge: KDB 558074 D01 v03r04, Section 12.1.

7. ANTENNA PORT TEST RESULTS

7.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

PROCEDURE

KDB 558074 Zero-Span Spectrum Analyzer Method.

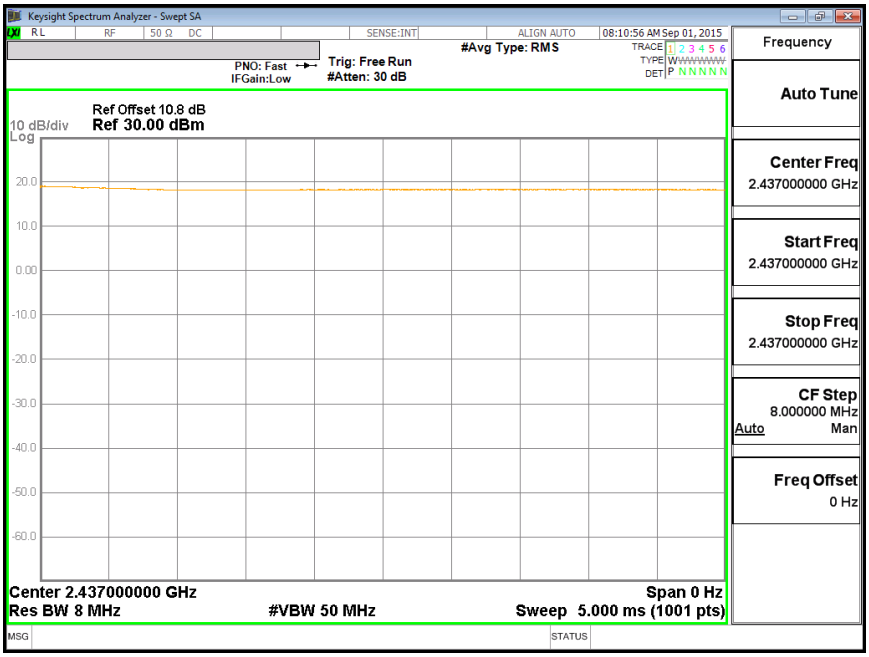
ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
2.4GHz Band						
802.11b 1TX	5.000	5.000	1.000	100.00%	0.00	0.010
802.11n HT20 1TX	1.920	1.944	0.988	98.77%	0.00	0.010

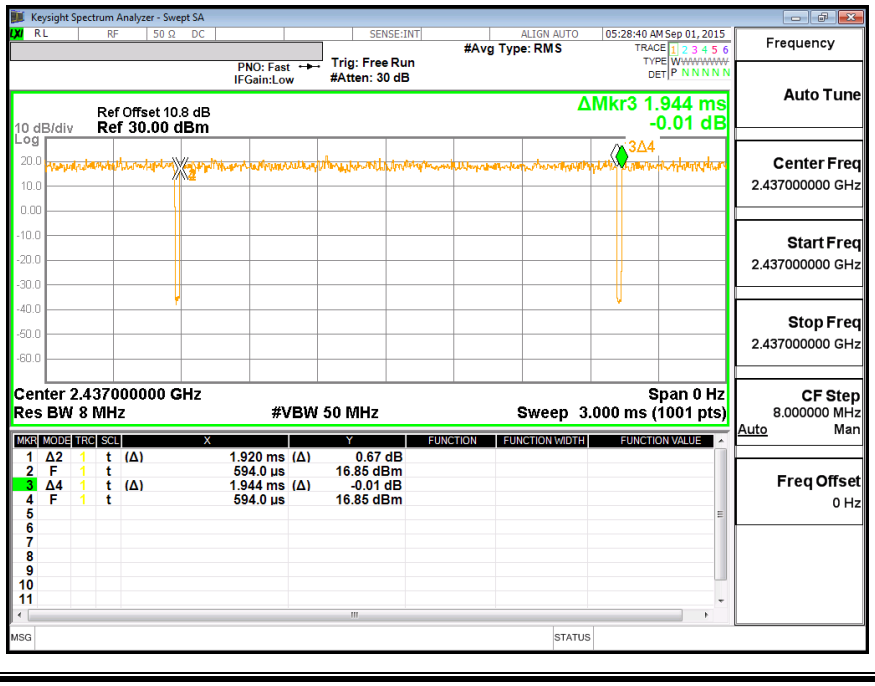
DUTY CYCLE PLOTS

2.4 GHz BAND

DUTY CYCLE 802.11b 1TX MODE



DUTY CYCLE 802.11n HT20 1TX MODE



7.2. 802.11b SISO MODE IN THE 2.4 GHz BAND

7.2.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-247 (5.2) (1)

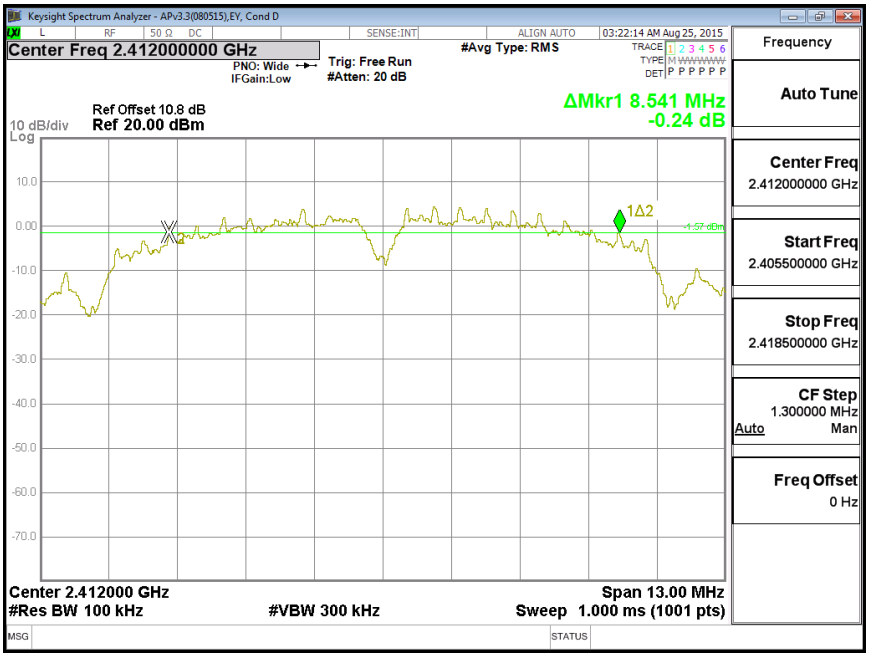
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS for Chain 0

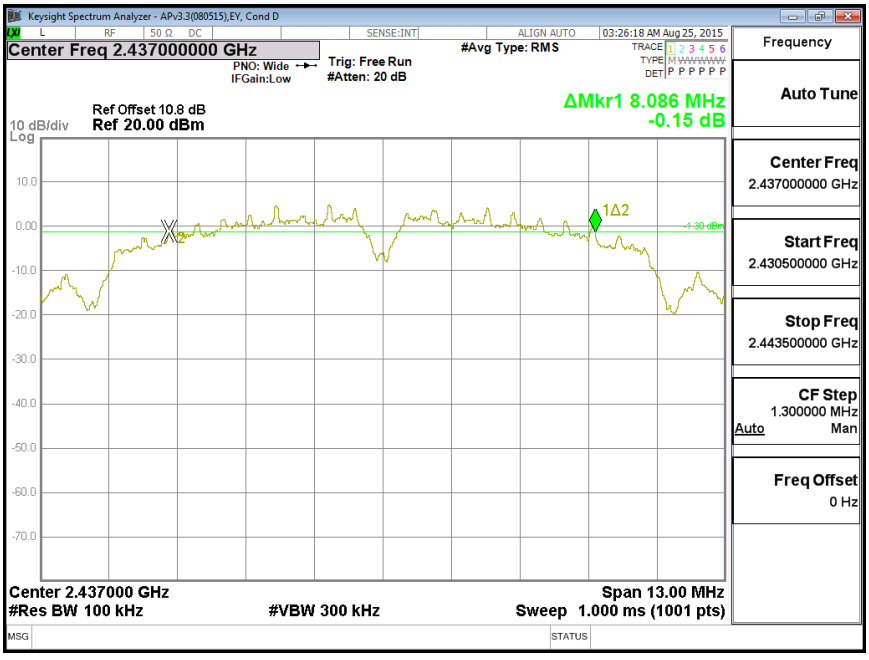
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	8.54	0.5
Mid	2437	8.09	0.5
High_11	2462	8.57	0.5
High_12	2467	8.55	0.5
High_13	2472	8.53	0.5

6 dB BANDWIDTH

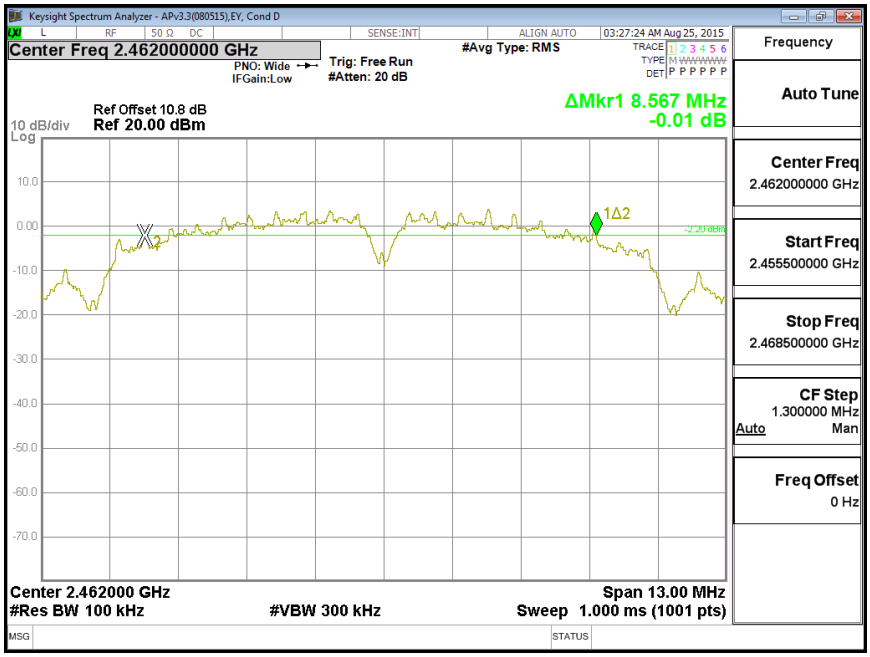
6 dB BANDWIDTH LOW CH



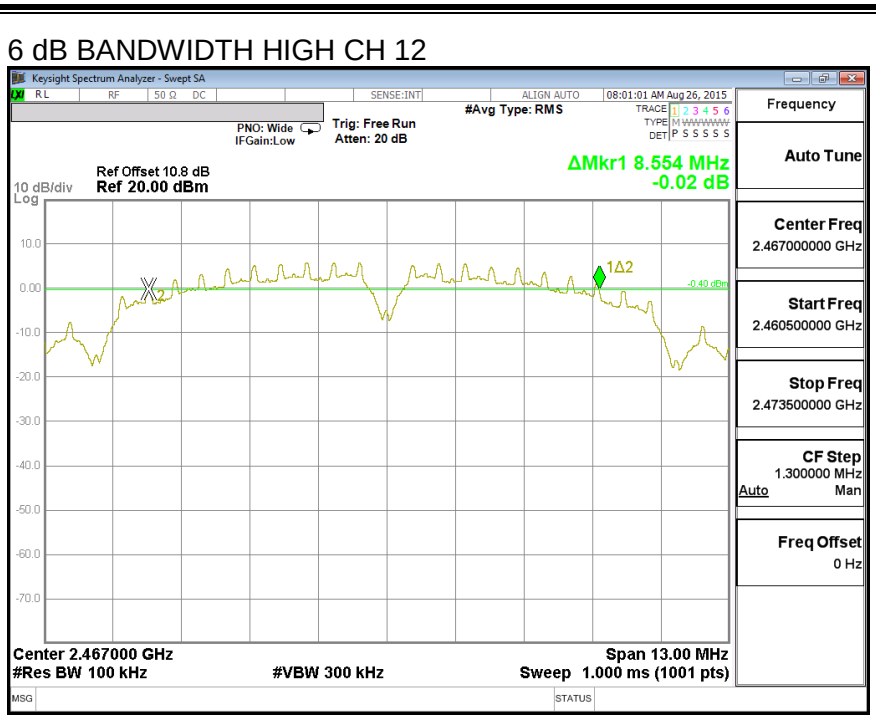
6 dB BANDWIDTH MID CH



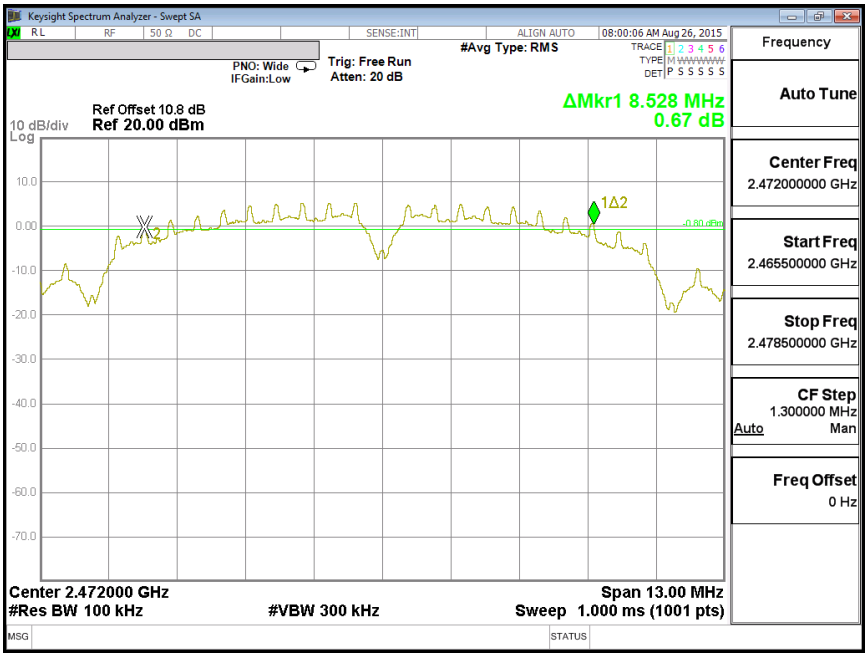
6 dB BANDWIDTH HIGH CH 11



6 dB BANDWIDTH HIGH CH 12



6 dB BANDWIDTH HIGH CH 13



7.2.2. 99% BANDWIDTH

LIMITS

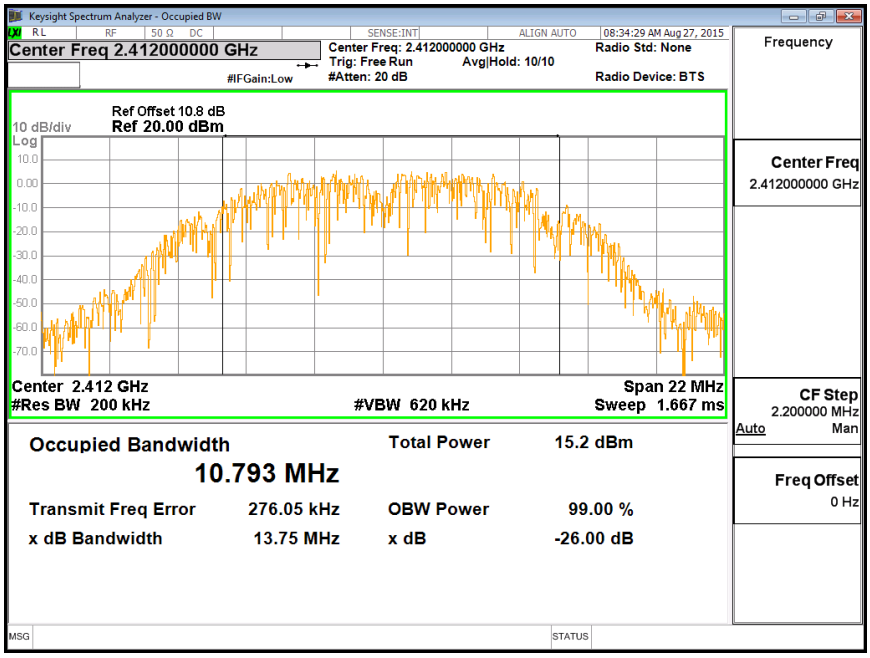
None; for reporting purposes only.

RESULTS for Chain 0

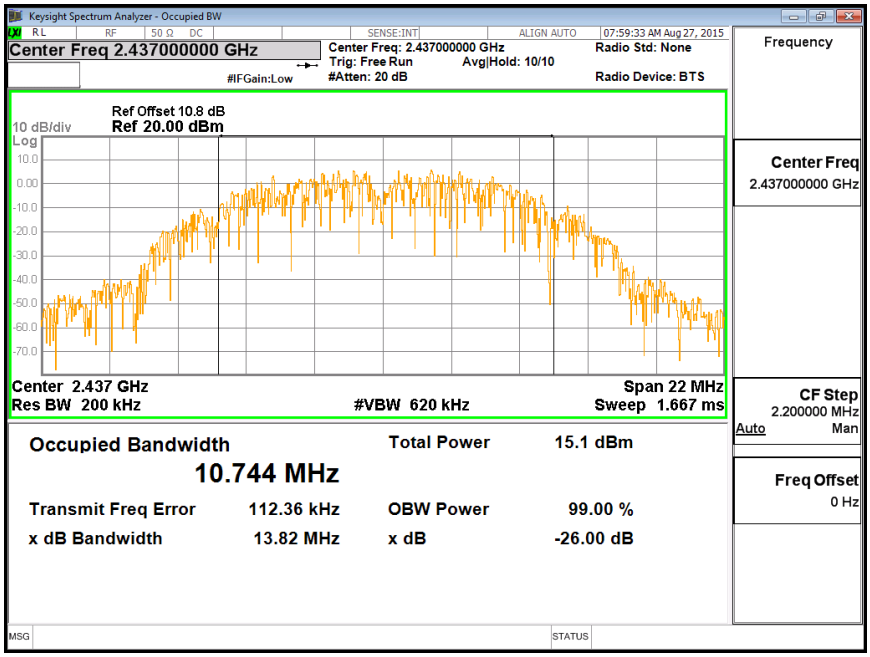
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	10.793
Mid	2437	10.744
High_11	2462	10.527
High_12	2467	10.587
High_13	2472	10.952

99% BANDWIDTH,

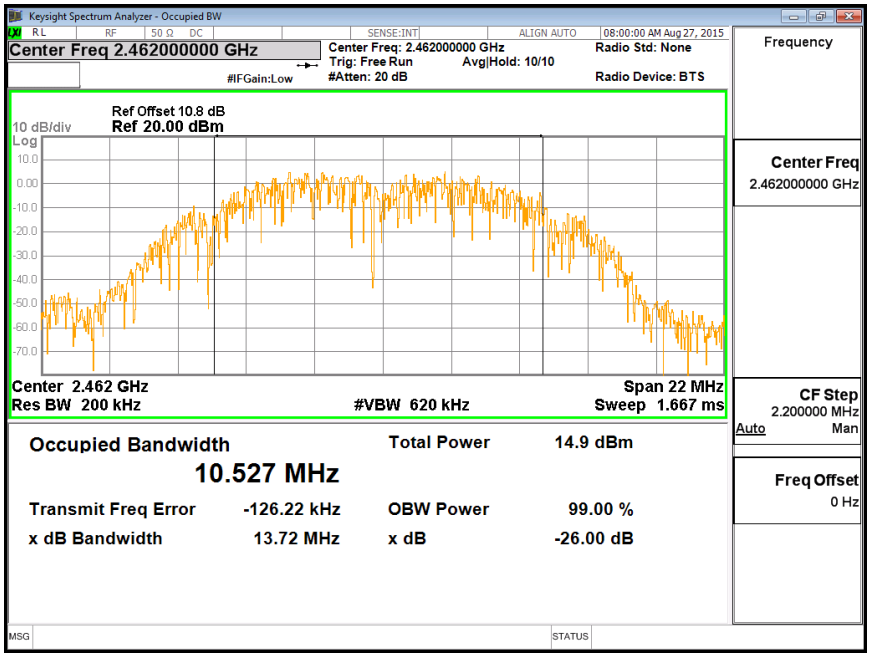
BANDWIDTH LOW CH



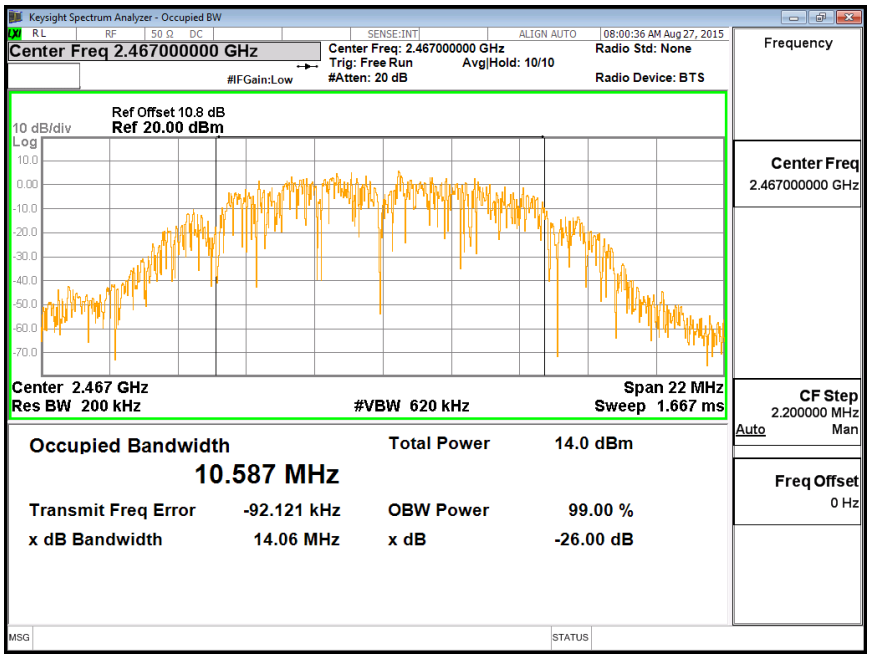
BANDWIDTH MID CH



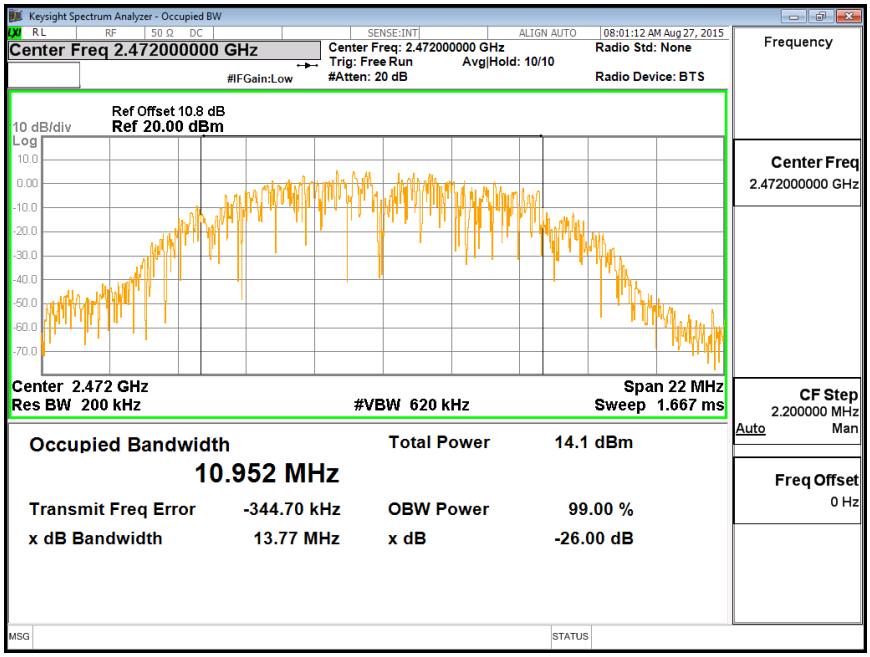
BANDWIDTH HIGH CH11



BANDWIDTH HIGH CH12



BANDWIDTH HIGH CH 13



7.2.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	2412	18.45
Mid	2437	18.50
High_11	2462	18.43
High_12	2467	17.98
High_13	2472	14.94

7.2.4. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-247 (5.4) (4)

For systems using digital modulation in the 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, 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.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	-0.90	30.00	30	36	30.00
Mid	2437	-0.90	30.00	30	36	30.00
High_11	2462	-0.90	30.00	30	36	30.00
High_12	2467	-0.90	30.00	30	36	30.00
High_13	2472	-0.90	30.00	30	36	30.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	2412	21.44	21.44	30.00	-8.56
Mid	2437	21.52	21.52	30.00	-8.48
High_11	2462	21.42	21.42	30.00	-8.58
High_12	2467	20.95	20.95	30.00	-9.05
High_13	2472	17.93	17.93	30.00	-12.07

7.2.5. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247

IC RSS-247 (5.2) (2)

For digitally modulated systems, the power spectral density conducted form the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 KHz band during any time interval of continuous transmissions.

RESULTS

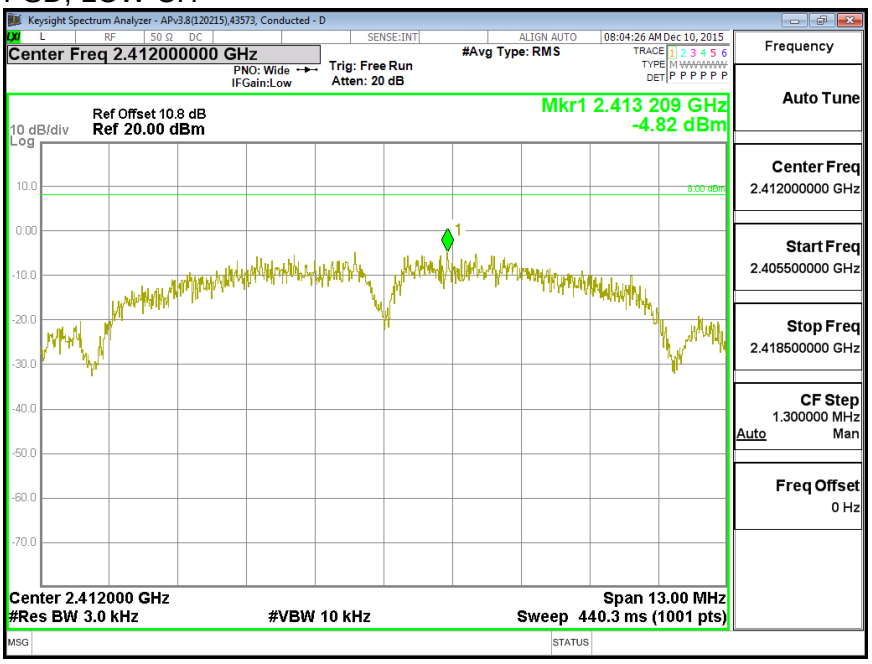
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

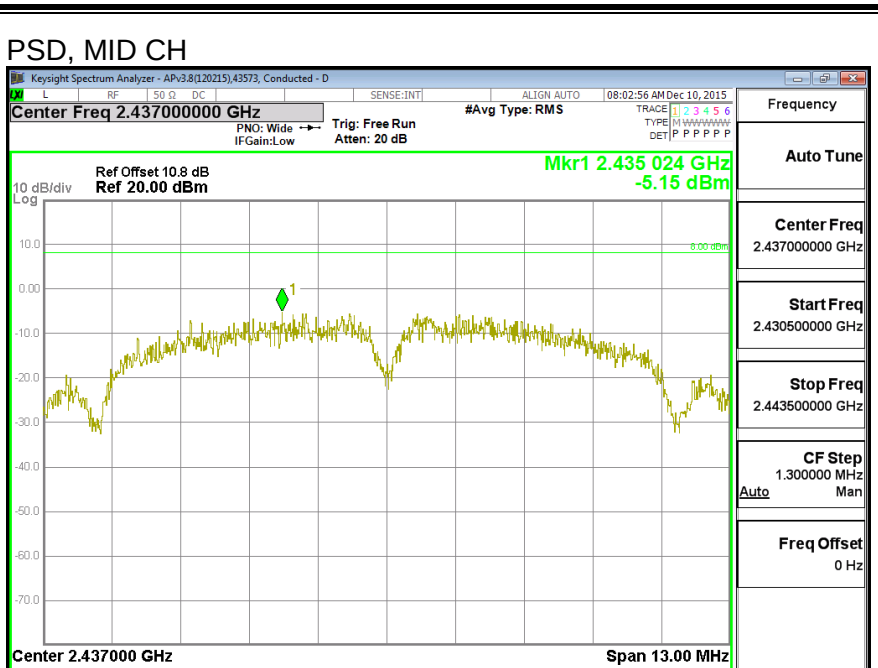
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-4.82	-4.82	8.0	-12.8
Mid	2437	-5.15	-5.15	8.0	-13.2
High_11	2462	-5.51	-5.51	8.0	-13.5
High_12	2467	-5.96	-5.96	8.0	-14.0
High_13	2472	-8.69	-8.69	8.0	-16.7

PSD

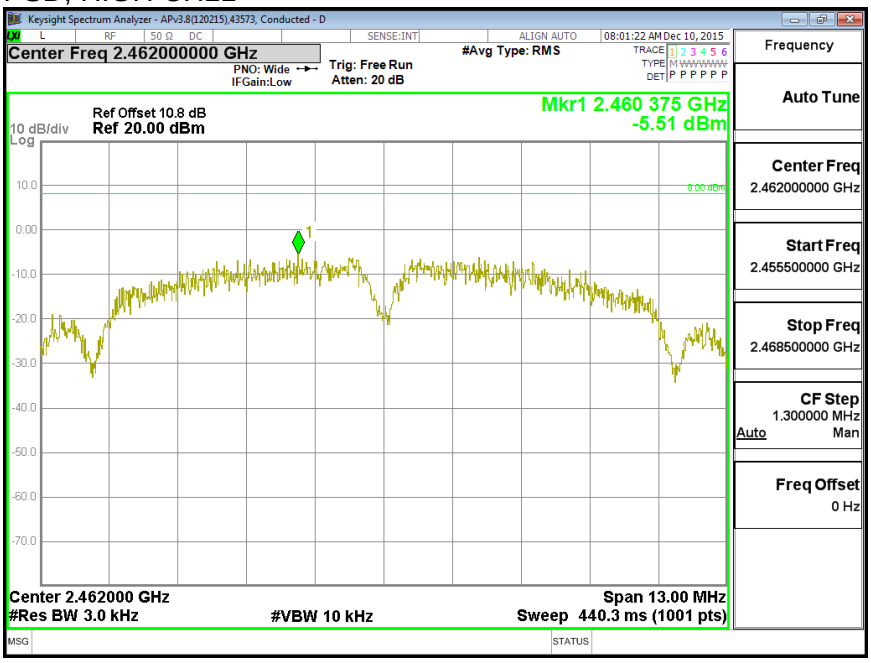
PSD, LOW CH



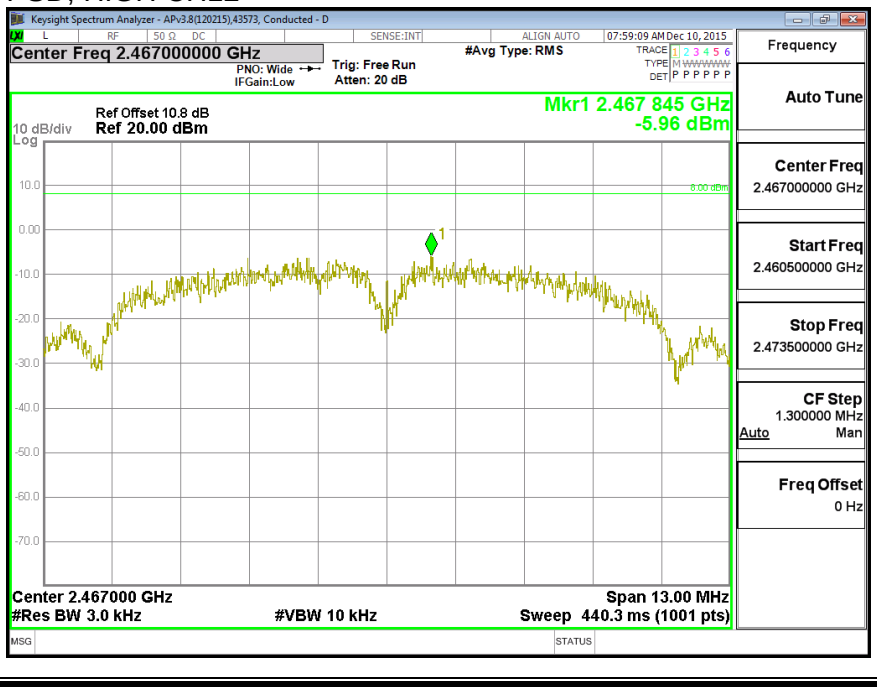
PSD, MID CH



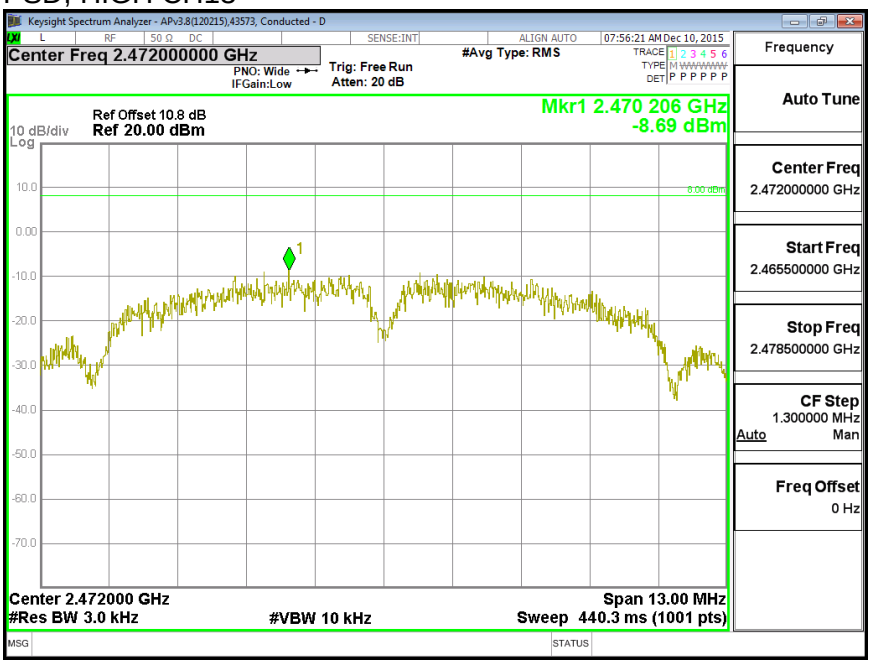
PSD, HIGH CH11



PSD, HIGH CH12



PSD, HIGH CH13



7.2.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

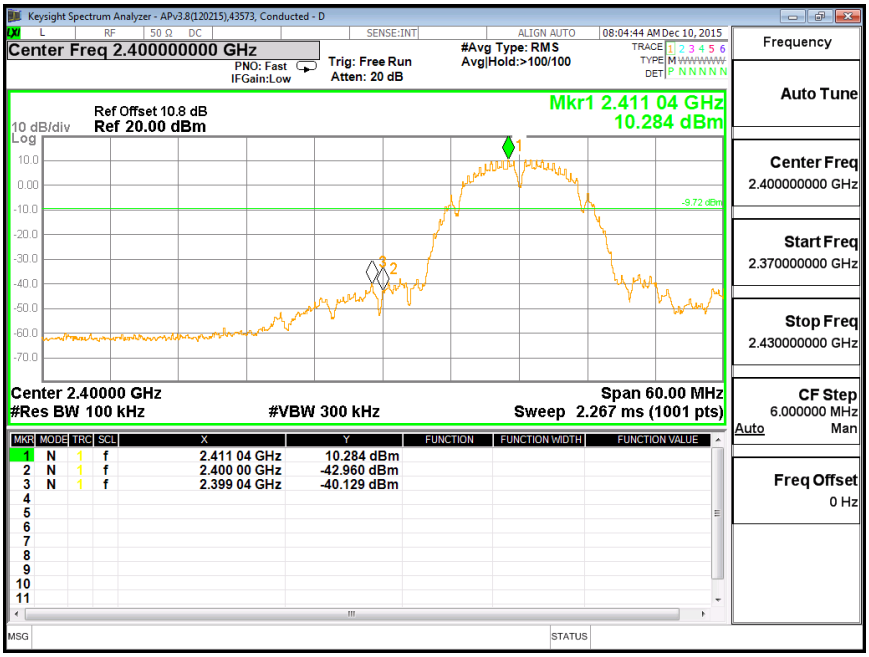
IC RSS-247 (5.5)

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.

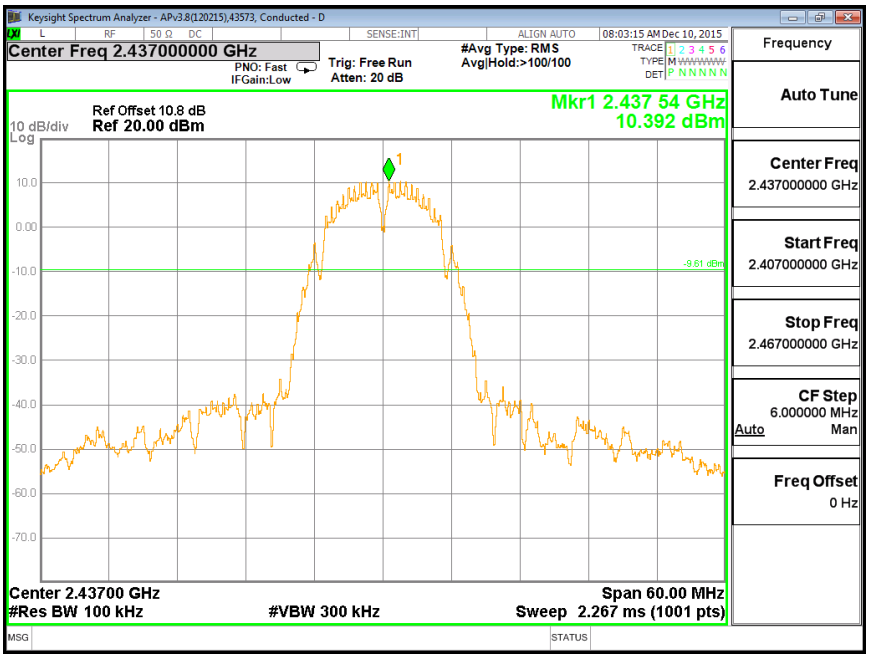
RESULTS

LOW CHANNEL BANDEDGE

AUTHORIZED BAND EDGE LOW CH

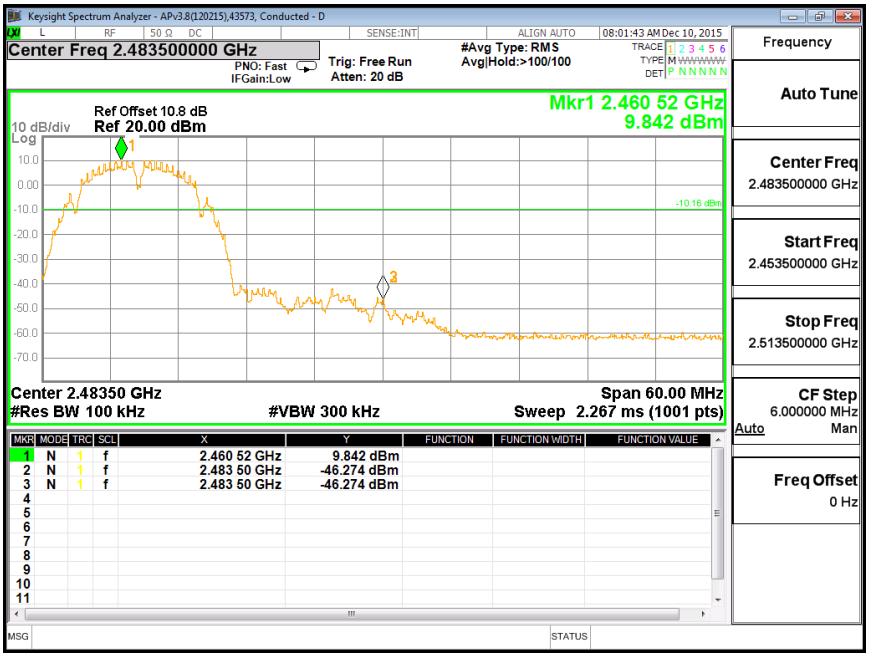


AUTHORIZED BAND EDGE MID CH

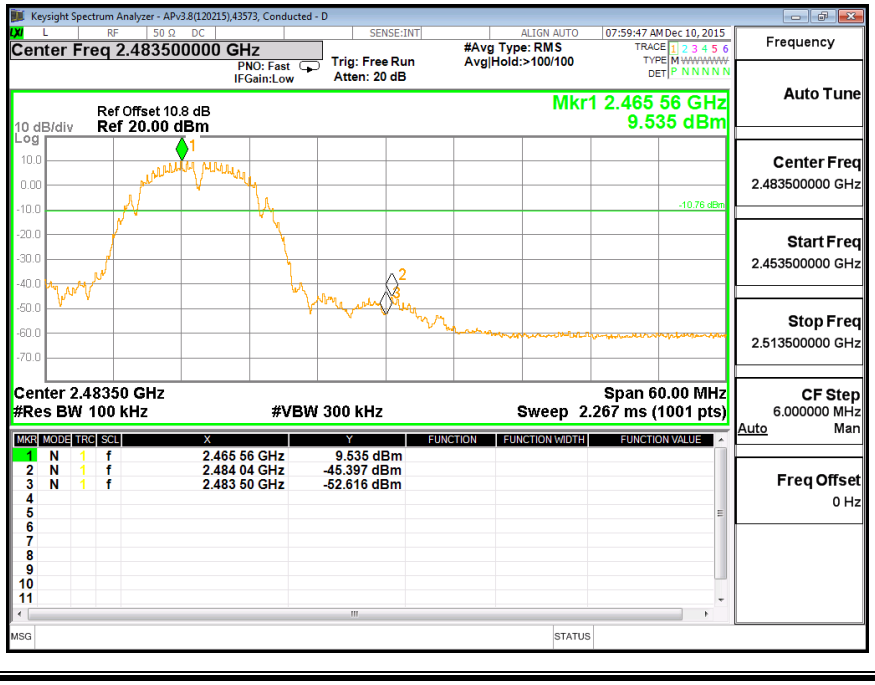


HIGH CHANNEL BANDEDGE

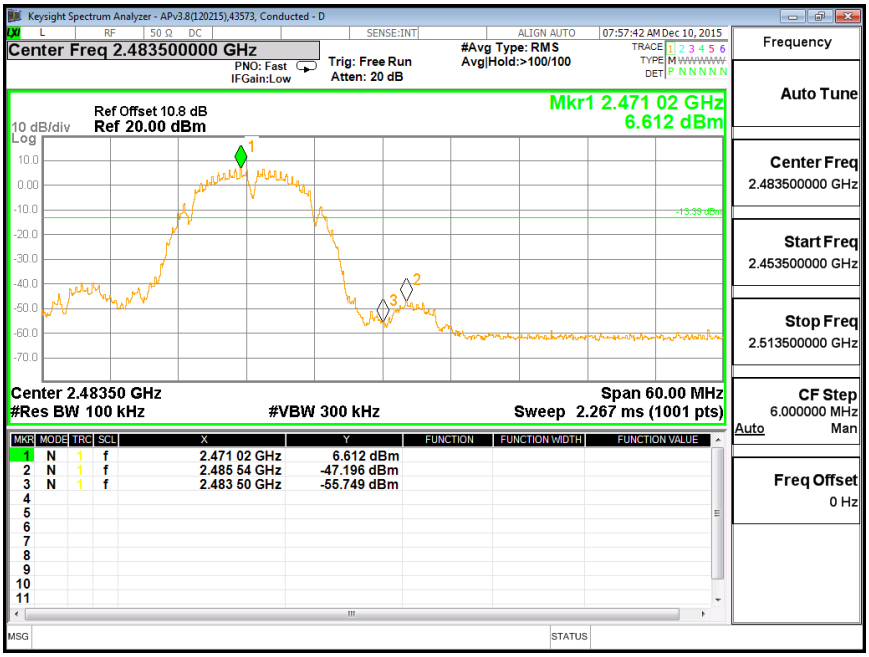
AUTHORIZED BAND EDGE HIGH CH11



AUTHORIZED BAND EDGE HIGH CH12

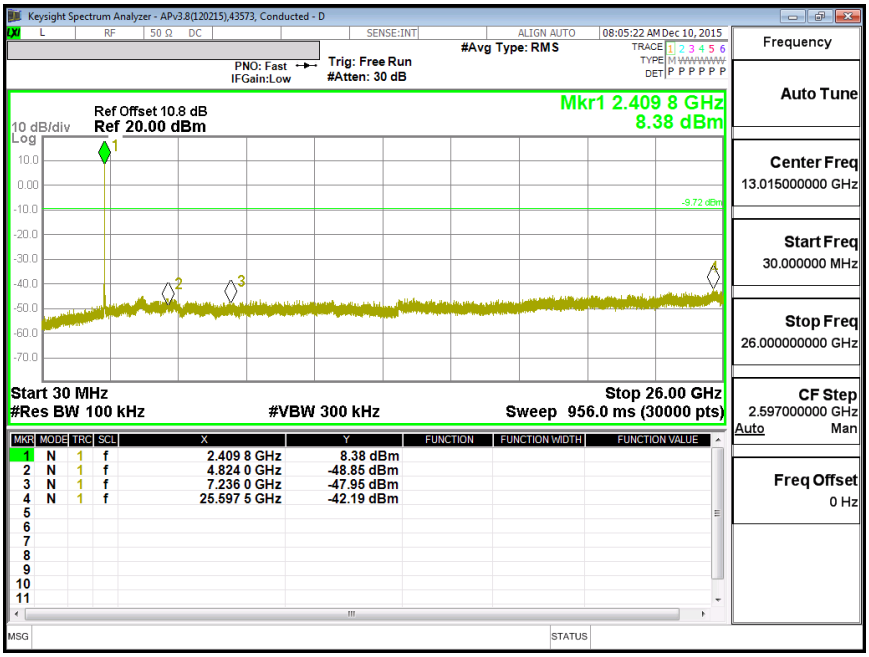


AUTHORIZED BAND EDGE HIGH CH13

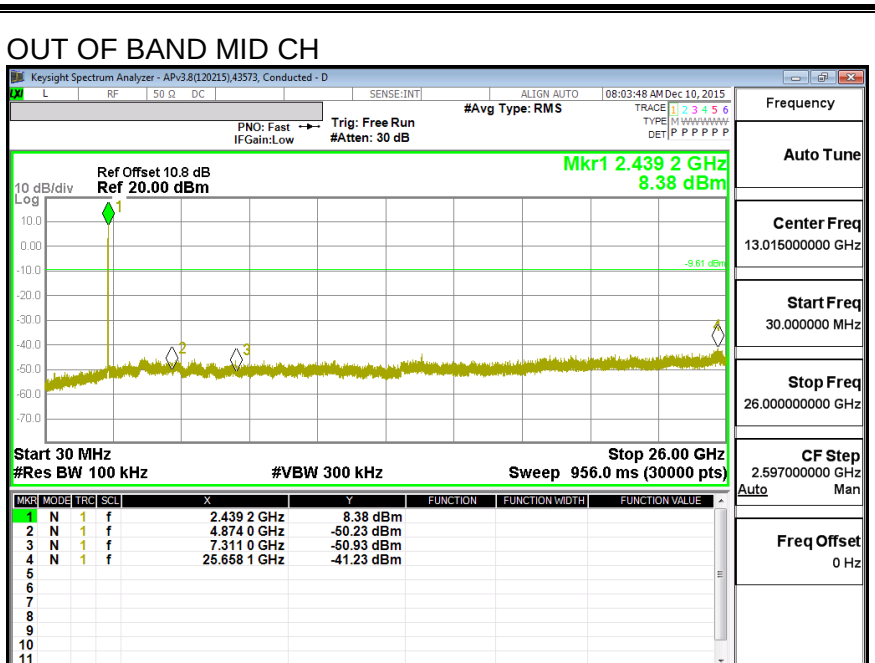


OUT-OF-BAND EMISSIONS

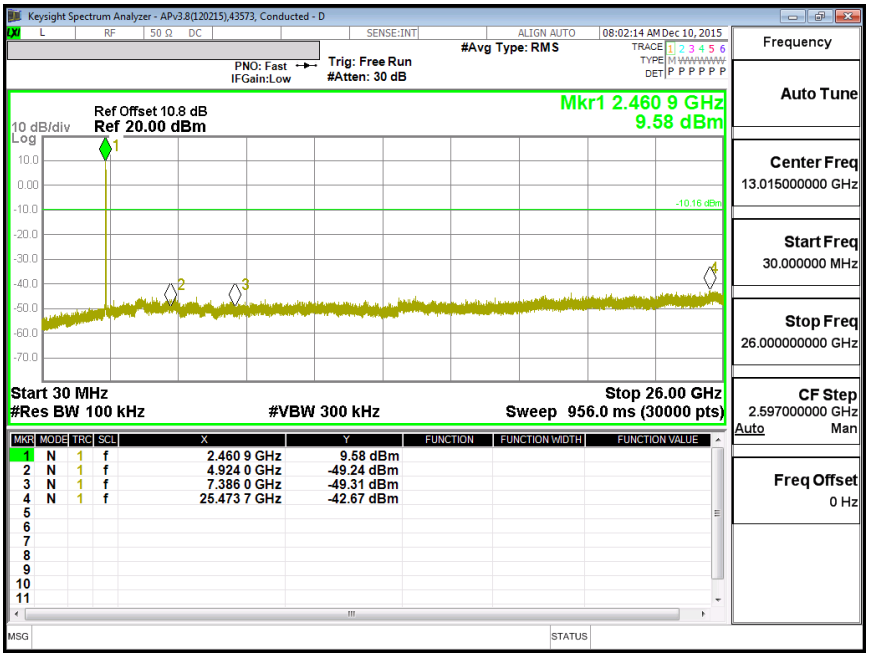
OUT OF BAND LOW CH



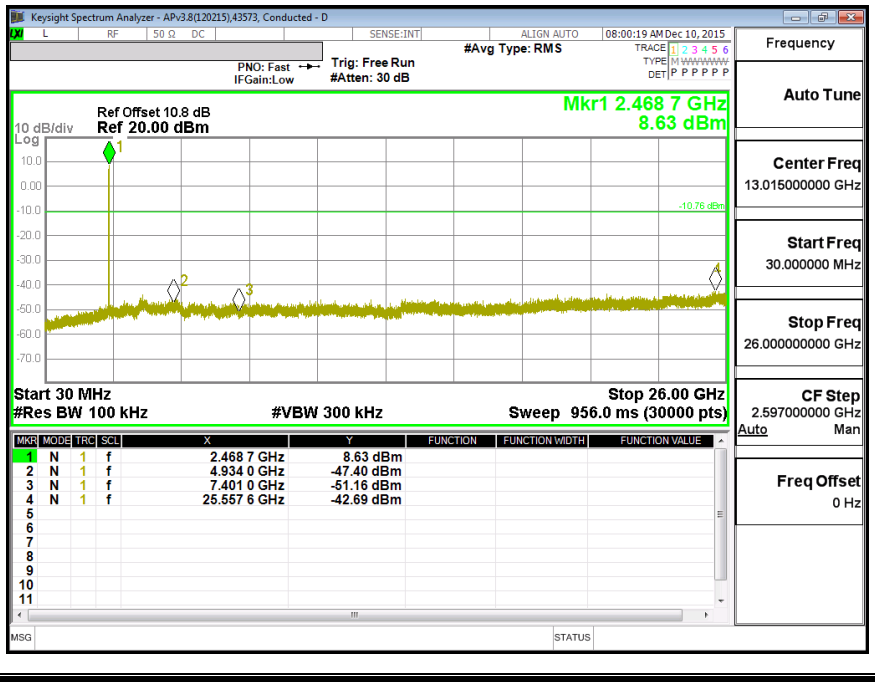
OUT OF BAND MID CH



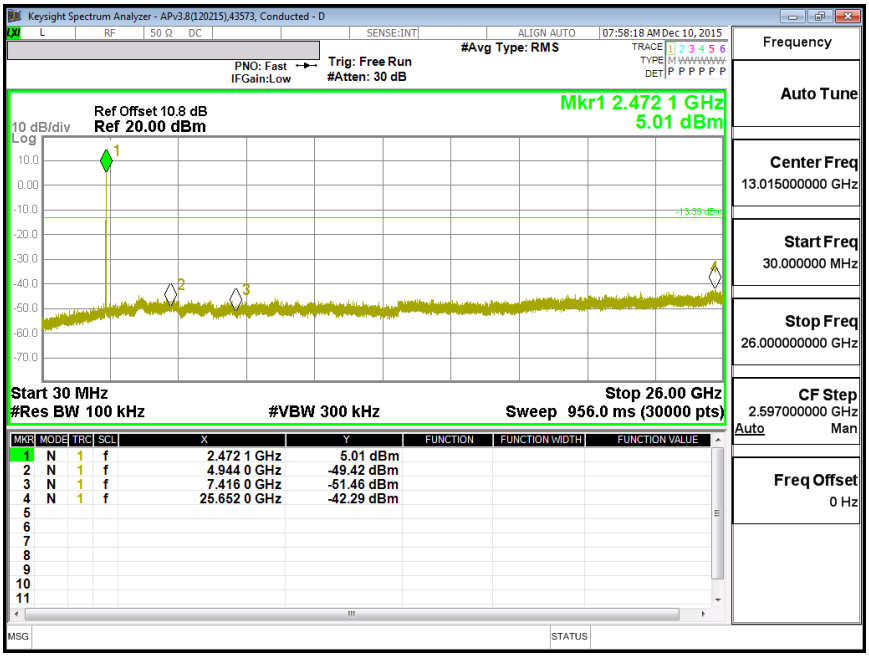
OUT OF BAND HIGH CH11



OUT OF BAND HIGH CH12



OUT OF BAND HIGH CH13



7.3. 802.11n HT20 SISO MODE IN THE 2.4 GHz BAND

7.3.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-247 (5.2) (1)

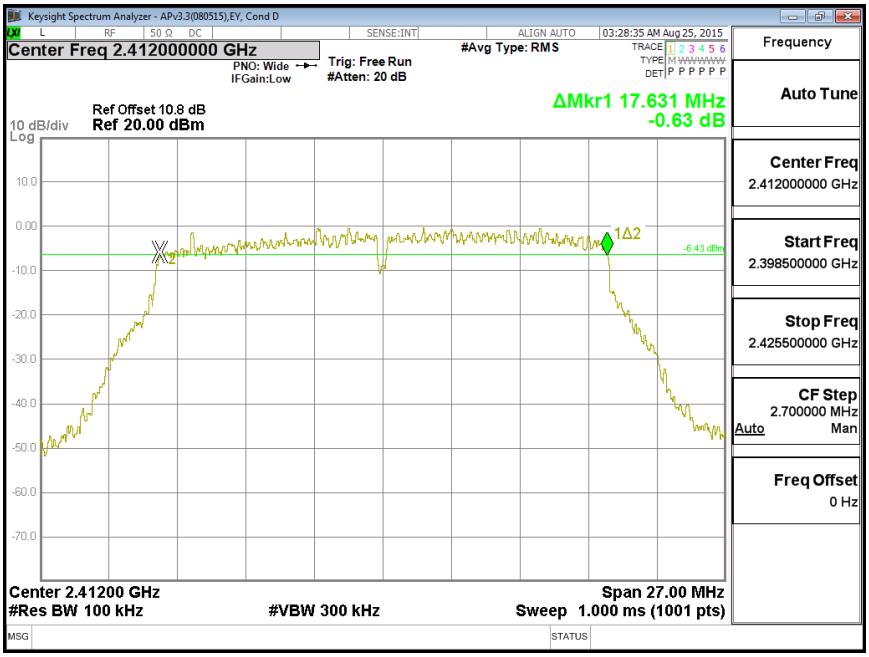
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

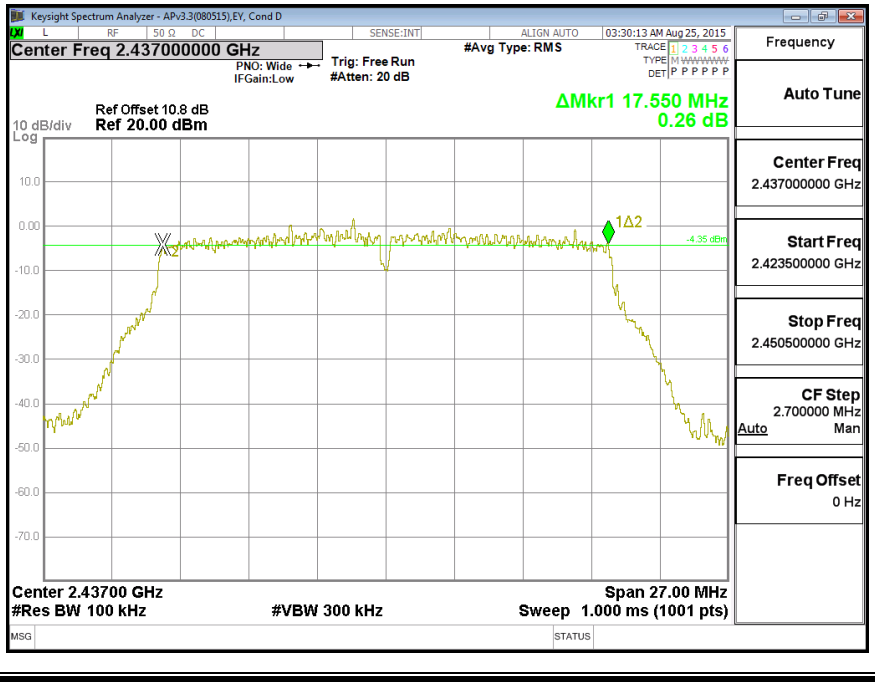
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	17.63	0.5
Mid	2437	17.55	0.5
High_11	2462	16.55	0.5
High_12	2467	16.95	0.5
High_13	2472	17.24	0.5

6 dB BANDWIDTH,

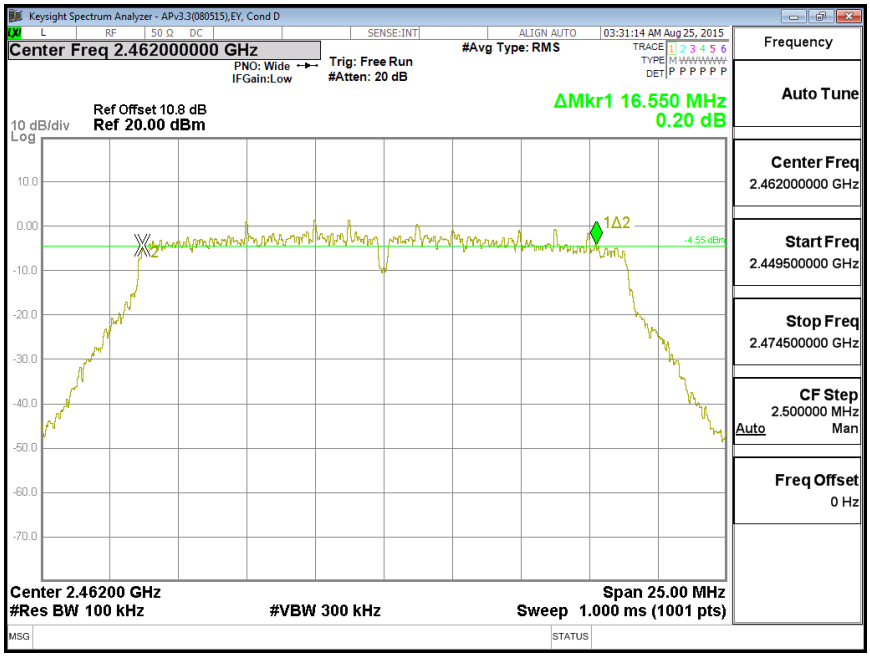
6 dB BANDWIDTH LOW CH



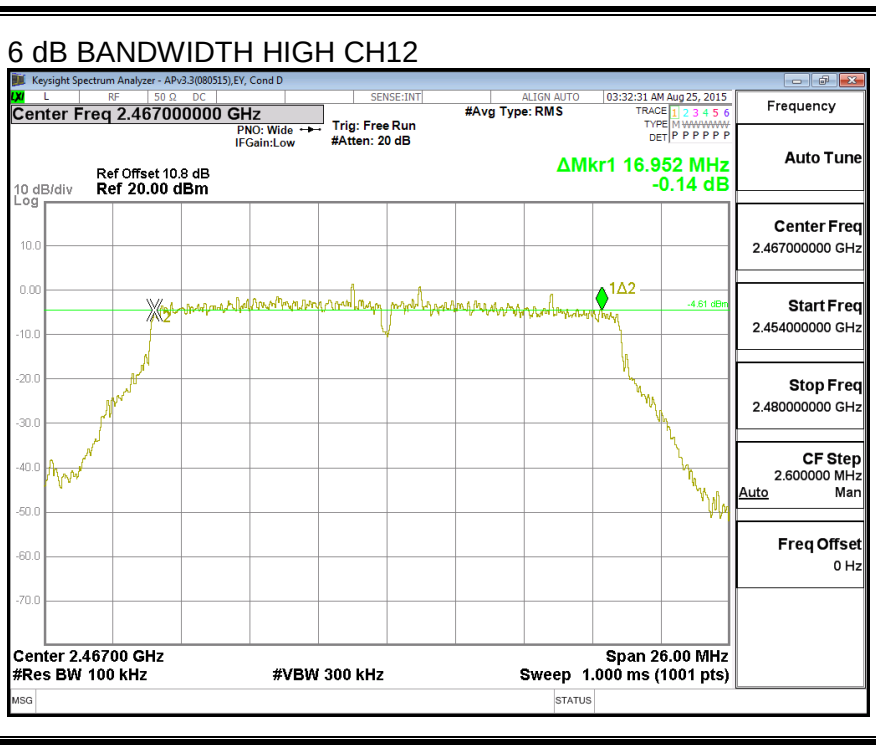
6 dB BANDWIDTH MID CH



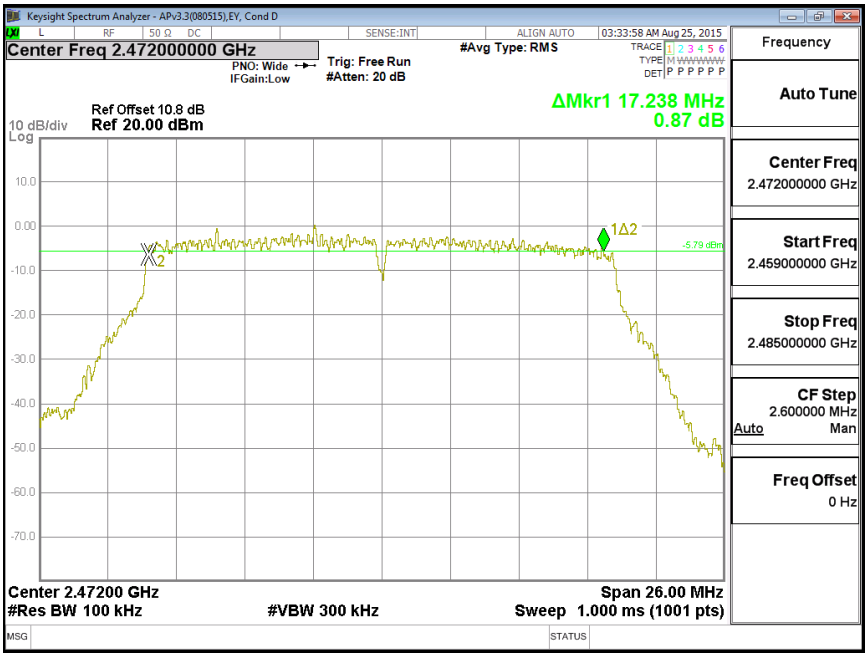
6 dB BANDWIDTH HIGH CH11



6 dB BANDWIDTH HIGH CH12



6 dB BANDWIDTH HIGH CH13



7.3.2. 99% BANDWIDTH

LIMITS

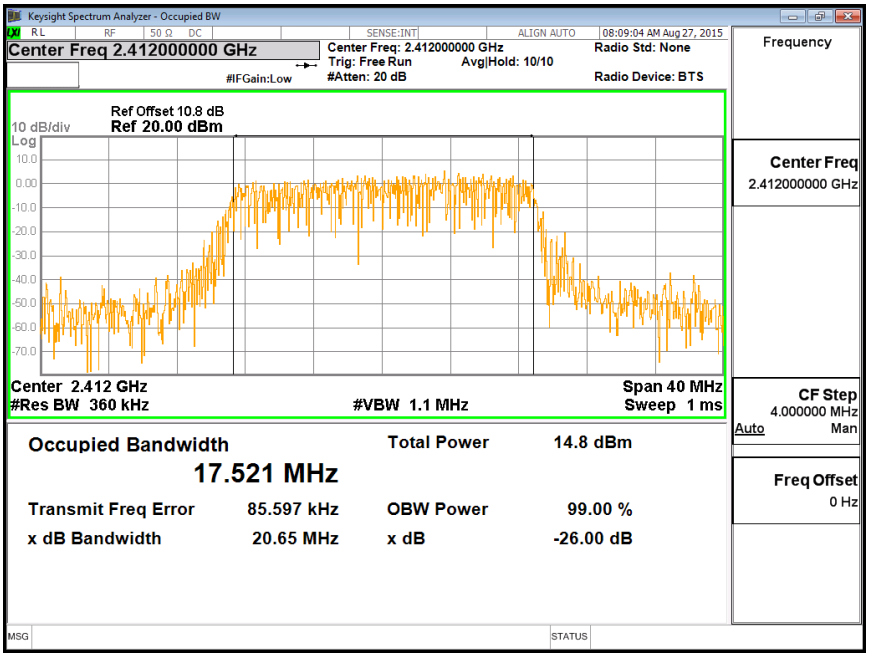
None; for reporting purposes only.

RESULTS

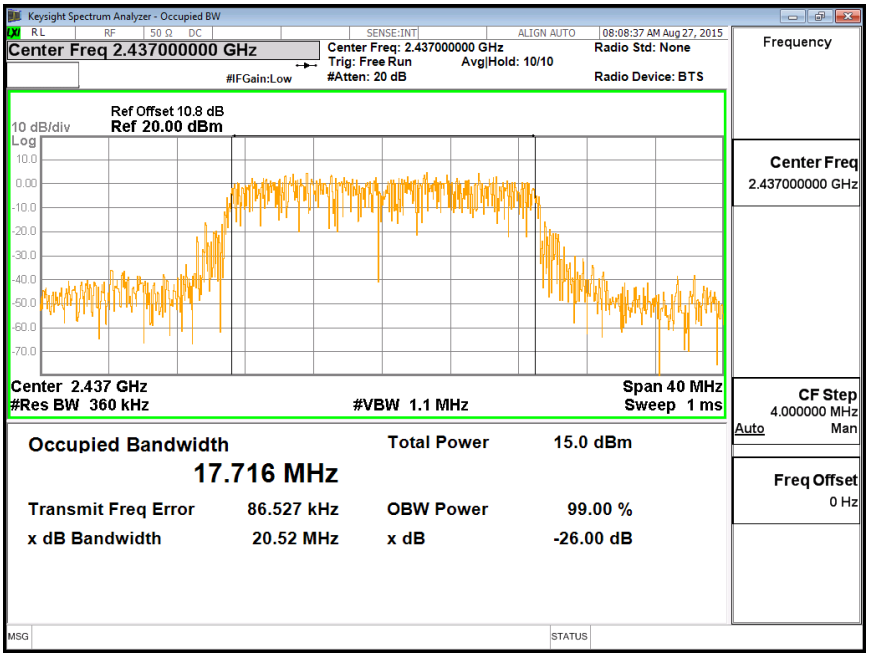
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	2412	17.521
Mid	2437	17.716
High_11	2462	17.686
High_12	2467	17.685
High_13	2472	17.588

99% BANDWIDTH,

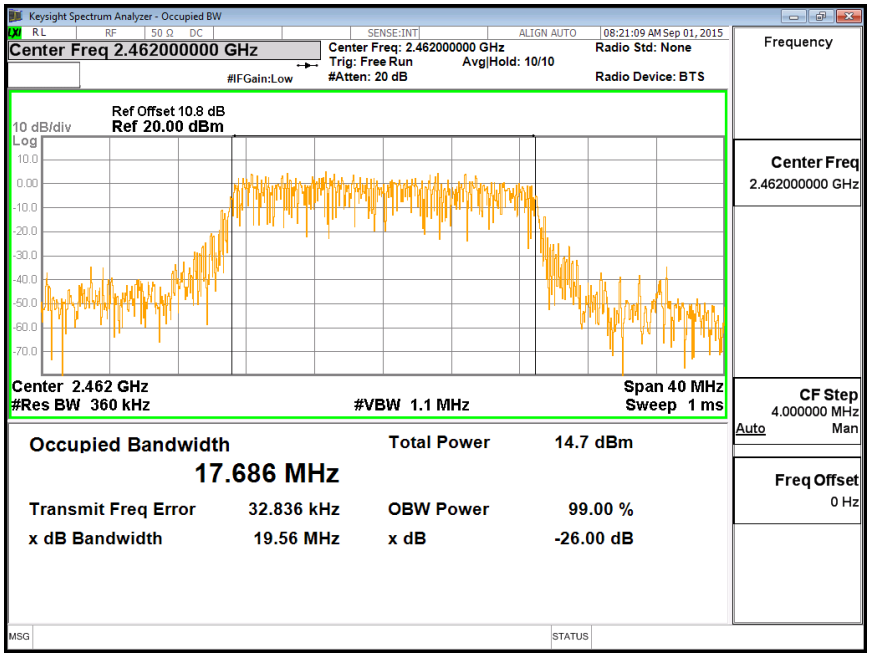
BANDWIDTH LOW CH



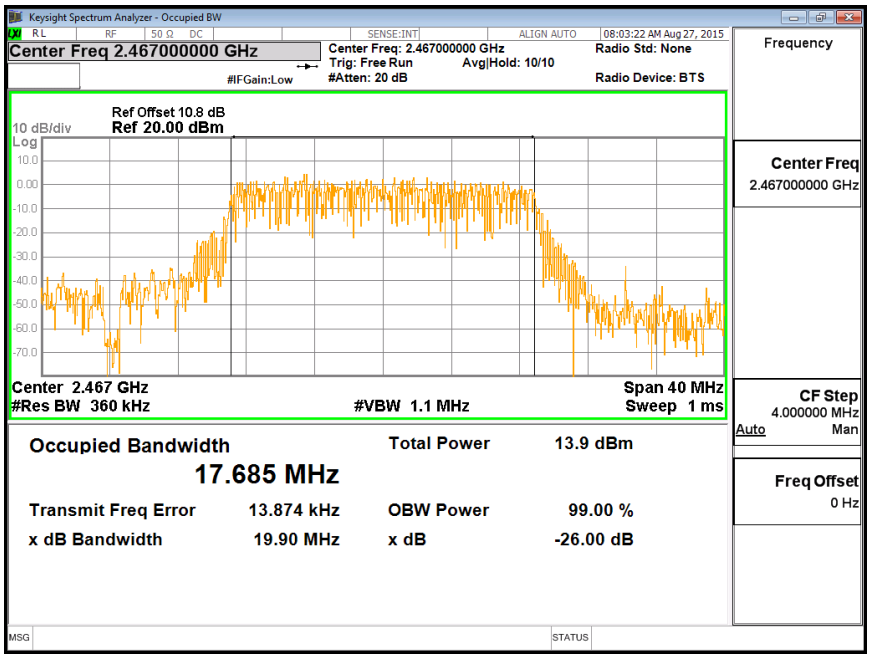
BANDWIDTH MID CH



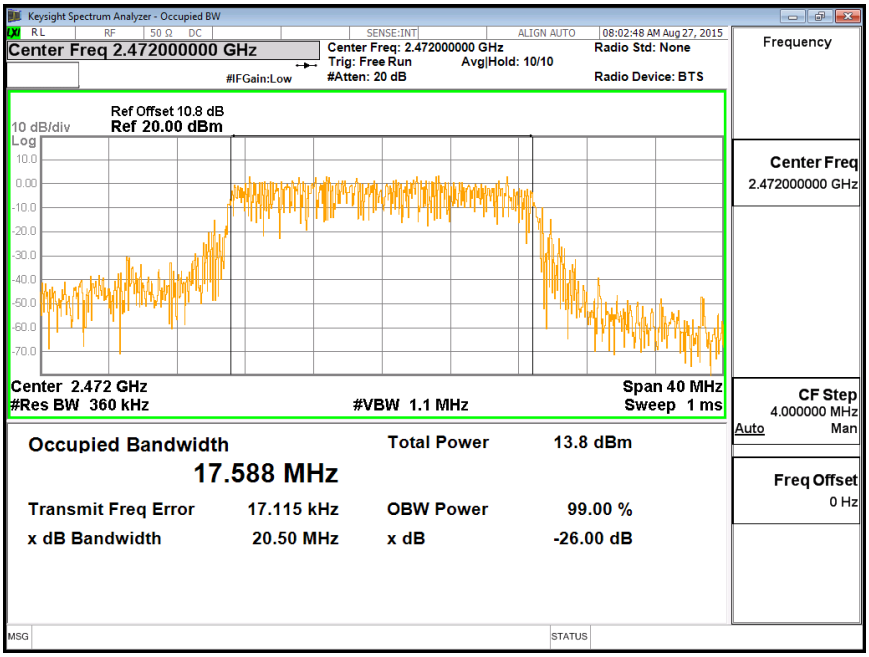
BANDWIDTH HIGH CH 11



BANDWIDTH HIGH CH 12



BANDWIDTH HIGH CH 13



7.3.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low_1	2412	15.98
Low_2	2417	18.42
Mid	2437	18.42
High_10	2457	17.44
High_11	2462	13.93
High_12	2467	11.96
High_13	2472	4.90

7.3.4. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-247 (5.4) (4)

For systems using digital modulation in the 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, 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.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low_1	2412	-0.90	30.00	30	36	30.00
Low_2	2417	-0.90	30.00	30	36	30.00
Mid	2437	-0.90	30.00	30	36	30.00
High_10	2457	-0.90	30.00	30	36	30.00
High_11	2462	-0.90	30.00	30	36	30.00
High_12	2467	-0.90	30.00	30	36	30.00
High_13	2472	-0.90	30.00	30	36	30.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power

Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low_1	2412	24.07	24.07	30.00	-5.93
Low_2	2417	26.51	26.51	30.00	-3.49
Mid	2437	26.47	26.47	30.00	-3.53
High_10	2457	25.61	25.61	30.00	-4.39
High_11	2462	21.95	21.95	30.00	-8.05
High_12	2467	20.07	20.07	30.00	-9.93
High_13	2472	12.95	12.95	30.00	-17.05

7.3.5. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247

IC RSS-247 (5.2) (2)

For digitally modulated systems, the power spectral density conducted form the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 KHz band during any time interval of continuous transmissions.

RESULTS

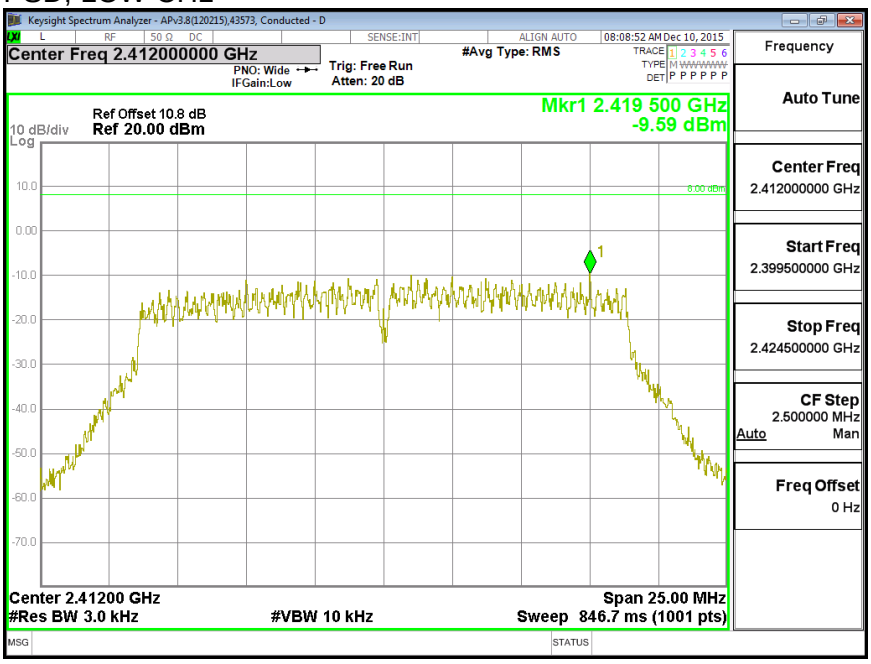
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

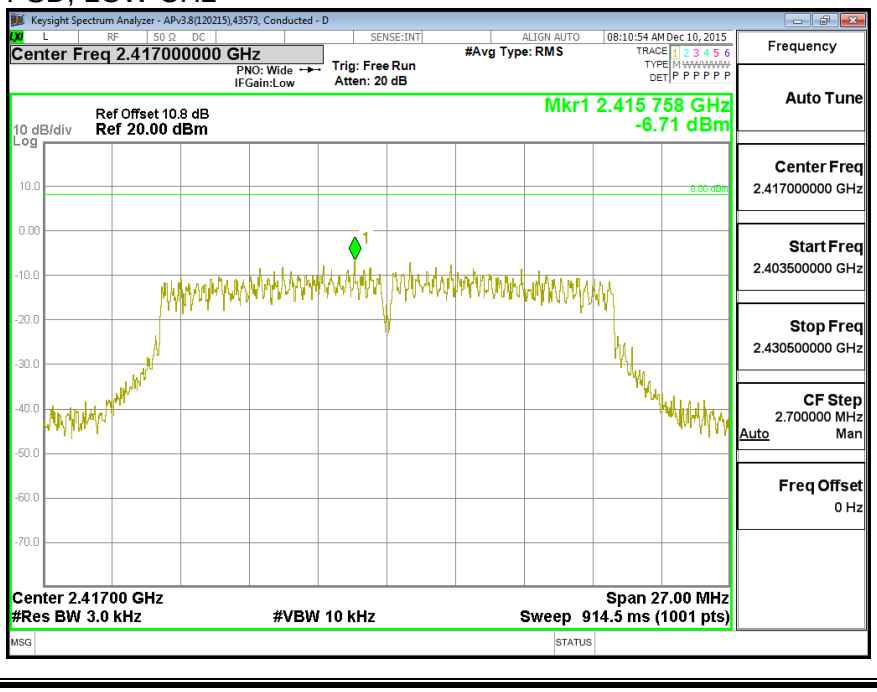
Channel	Frequency (MHz)	Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low_1	2412	-9.59	-9.59	8.0	-17.6
Low_2	2417	-6.71	-6.71	8.0	-14.7
Mid	2437	-6.56	-6.56	8.0	-14.6
High_10	2457	-8.68	-8.68	8.0	-16.7
High_11	2462	-9.90	-9.90	8.0	-17.9
High_12	2467	-13.56	-13.56	8.0	-21.6
High_13	2472	-20.77	-20.77	8.0	-28.8

PSD

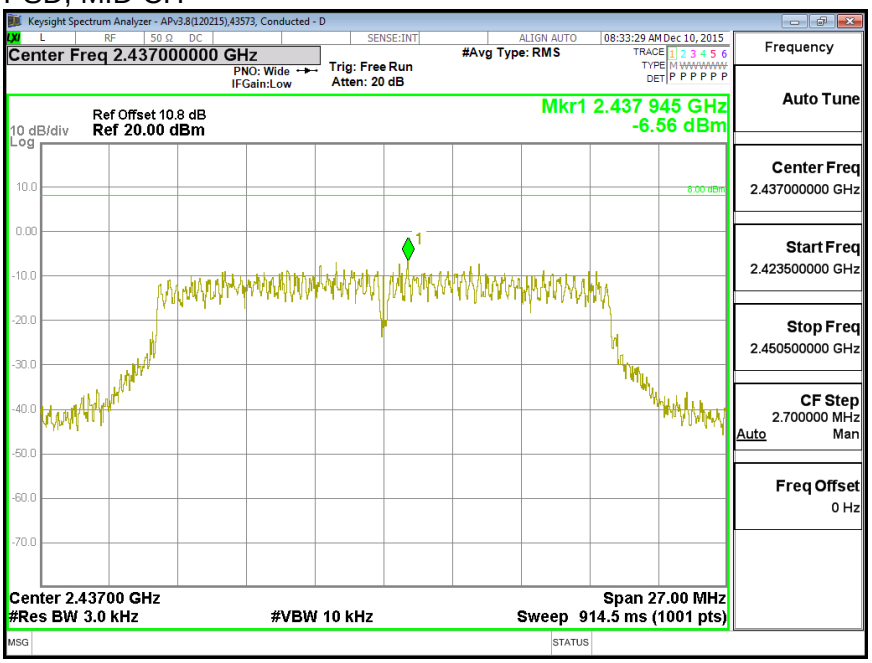
PSD, LOW CH1



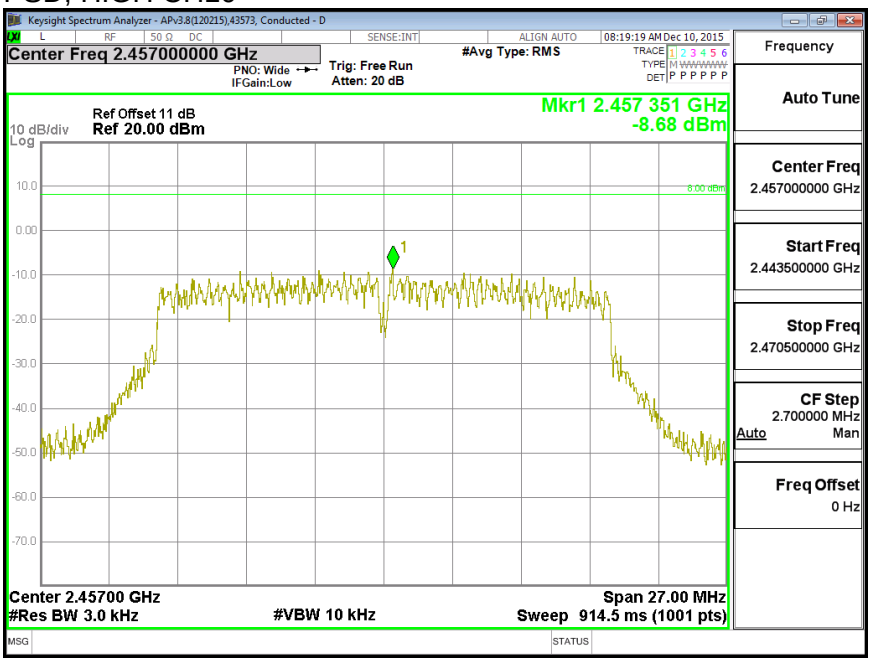
PSD, LOW CH2



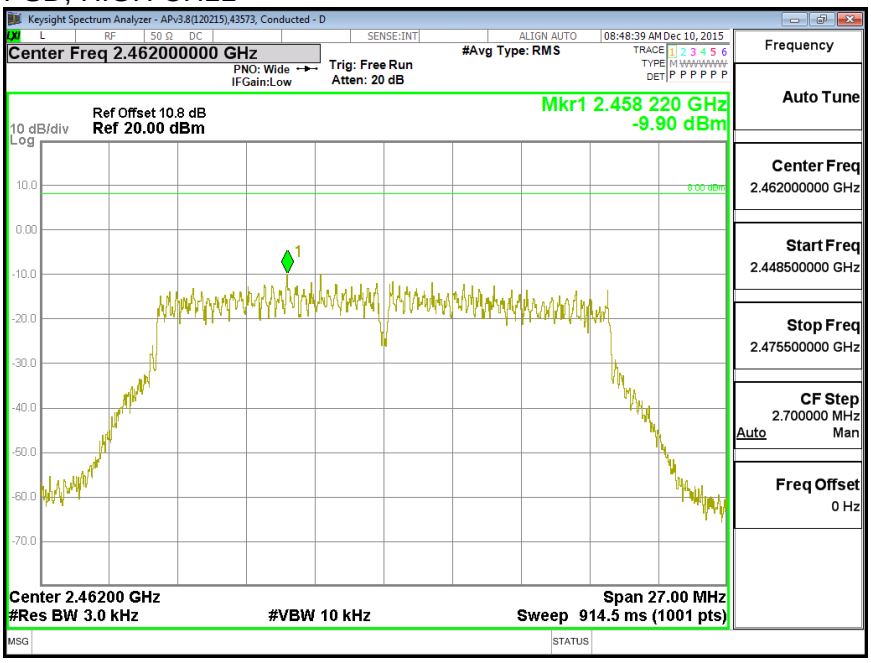
PSD, MID CH



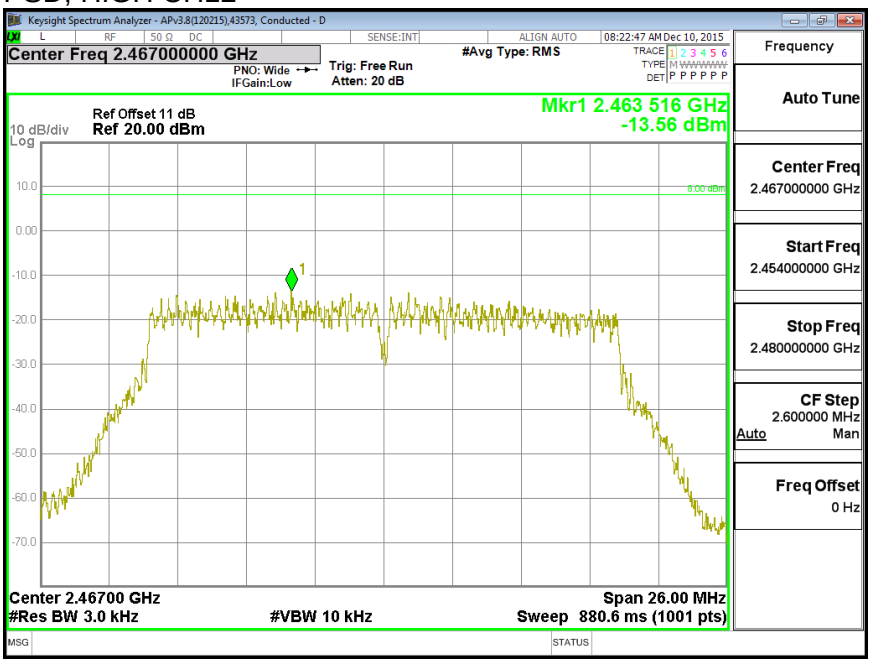
PSD, HIGH CH10



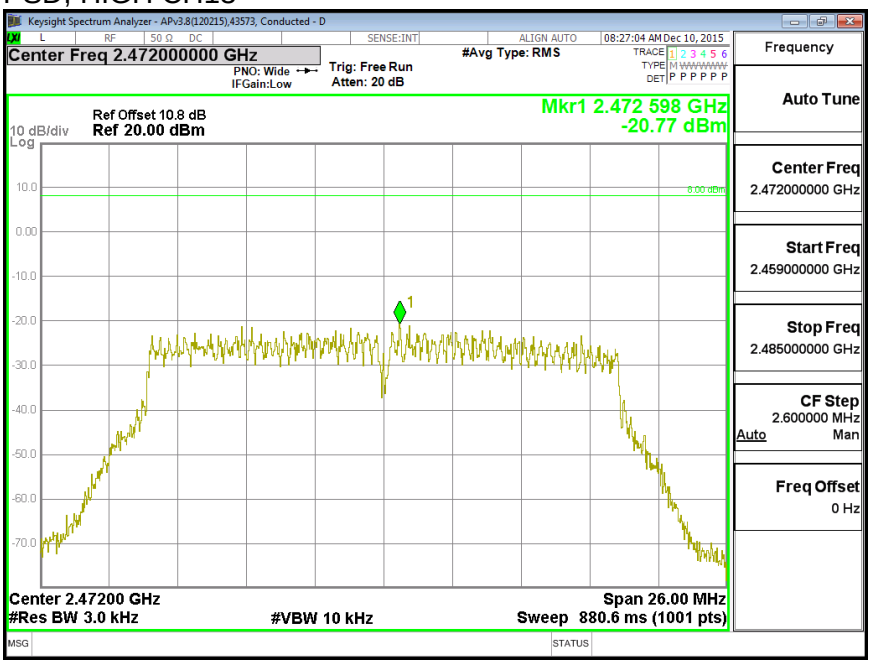
PSD, HIGH CH11



PSD, HIGH CH12



PSD, HIGH CH13



7.3.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

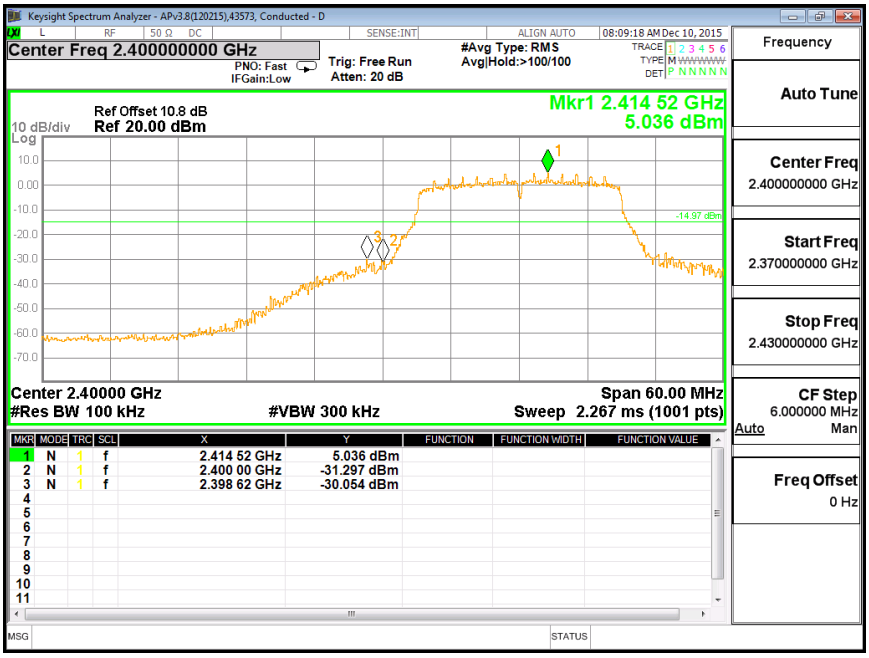
IC RSS-247 (5.5)

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.

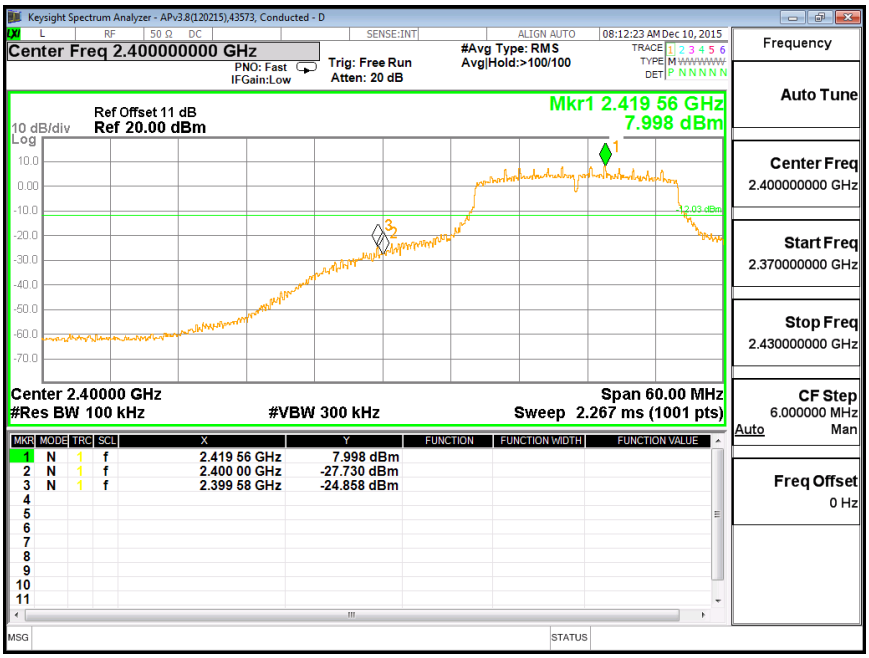
RESULTS 0

LOW CHANNEL BANDEDGE

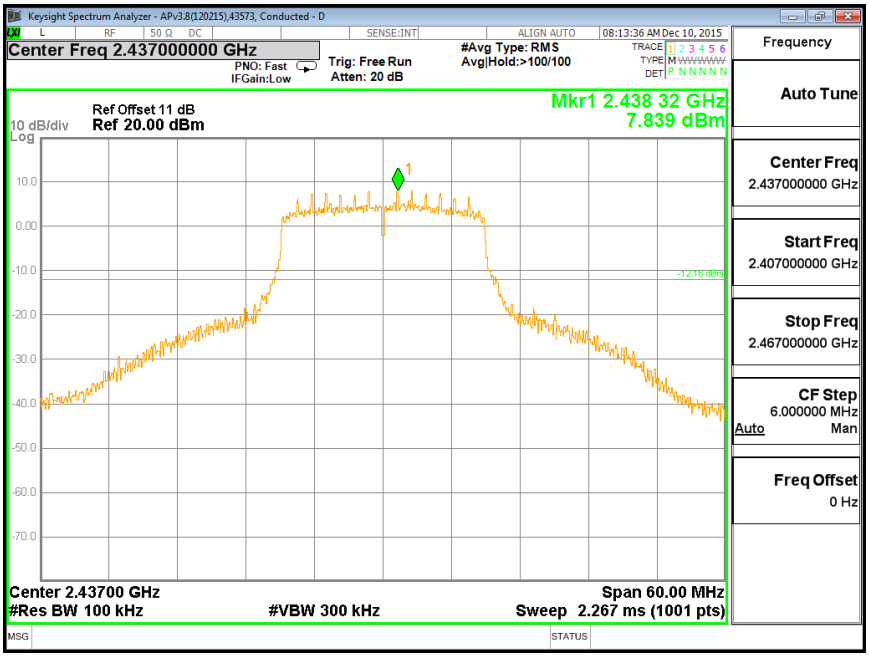
AUTHORIZED BAND EDGE LOW CH1



AUTHORIZED BAND EDGE LOW CH2

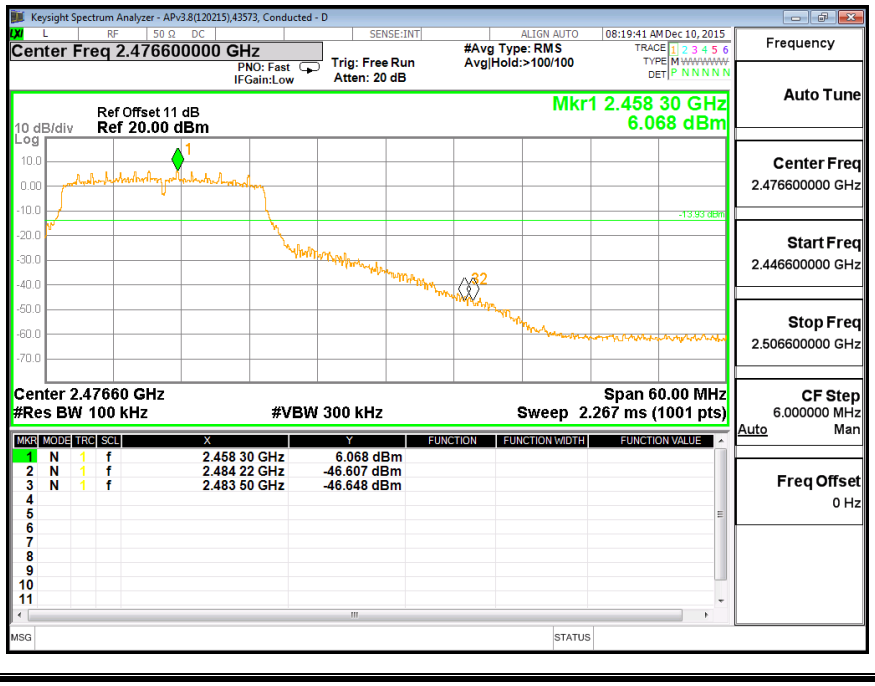


AUTHORIZED BAND EDGE MID CH

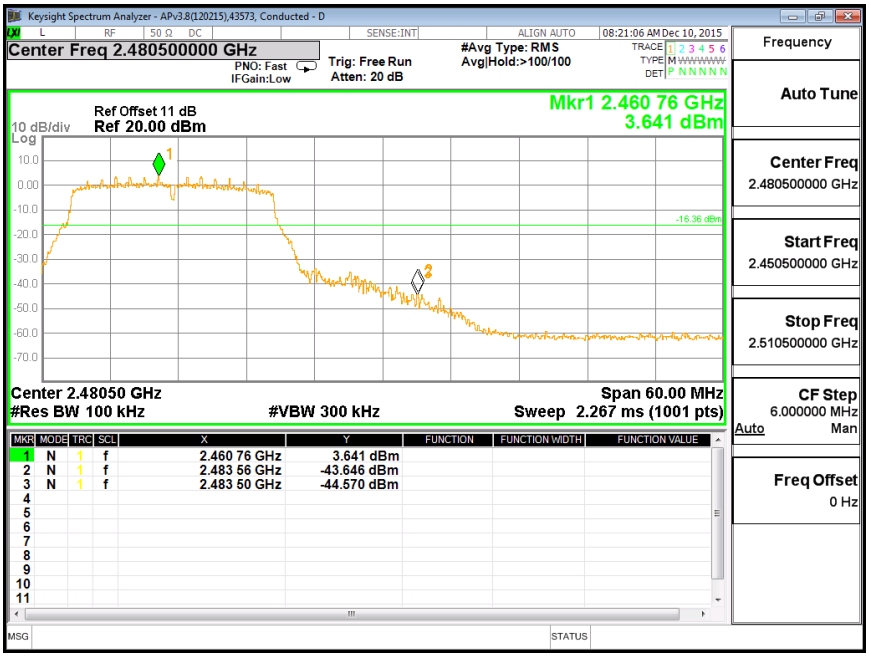


HIGH CHANNEL BANDEDGE

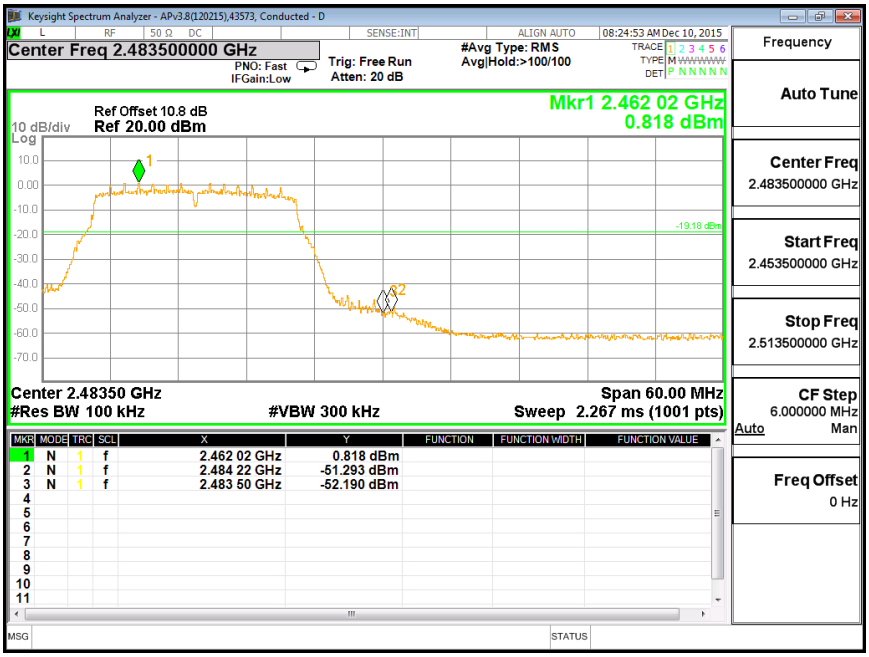
AUTHORIZED BAND EDGE HIGH CH10



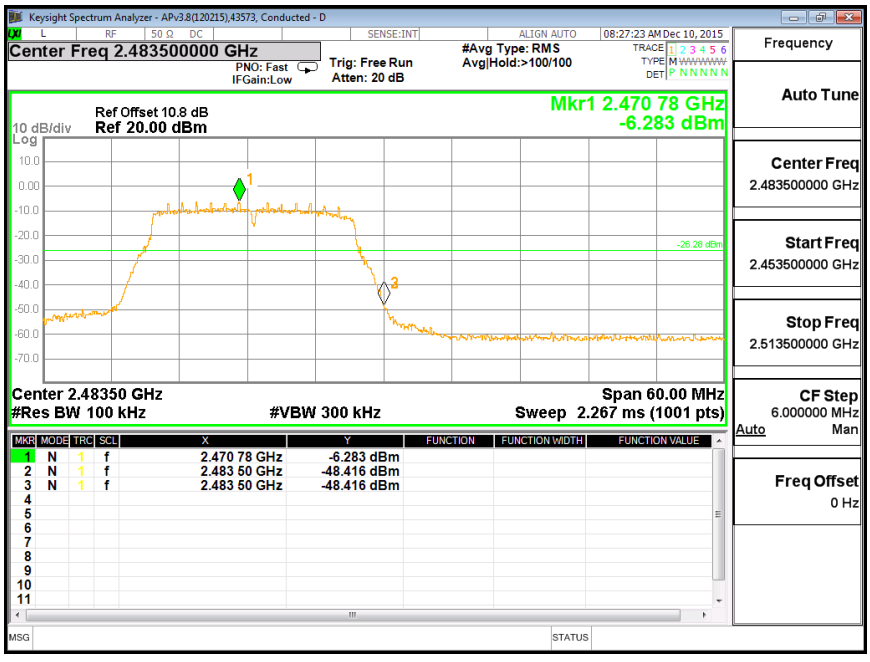
AUTHORIZED BAND EDGE HIGH CH11



AUTHORIZED BAND EDGE HIGH CH12

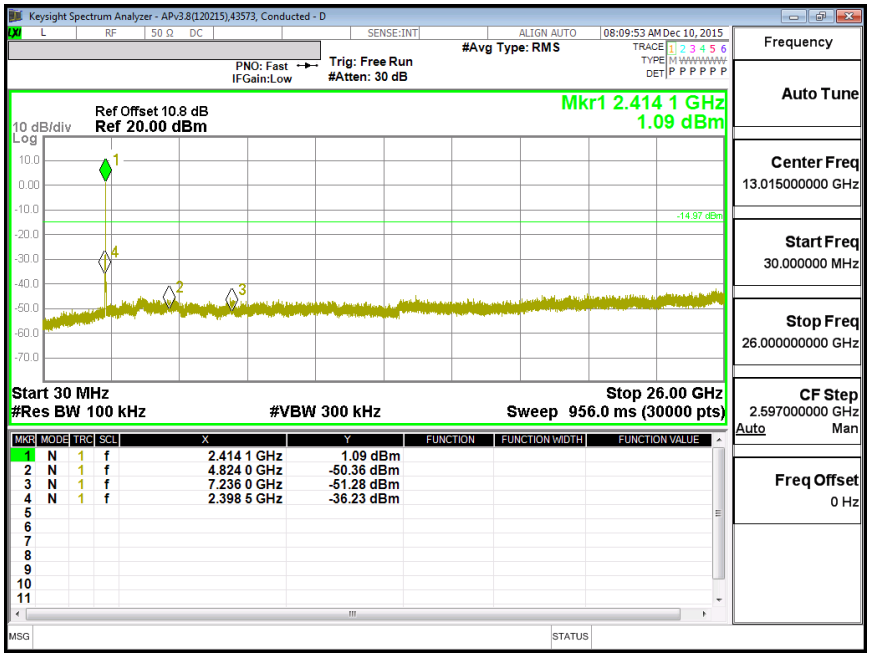


AUTHORIZED BAND EDGE HIGH CH13

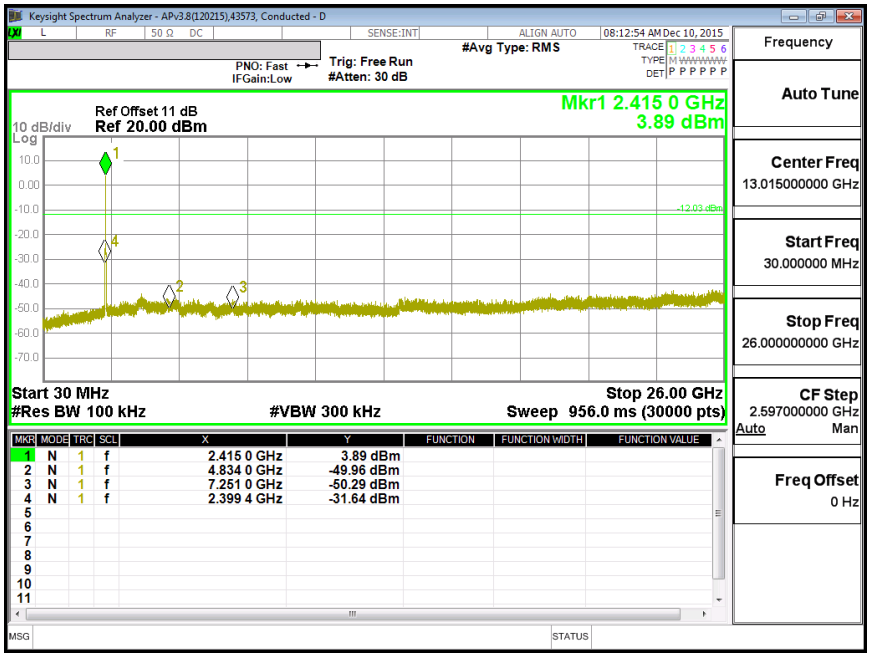


OUT-OF-BAND EMISSIONS

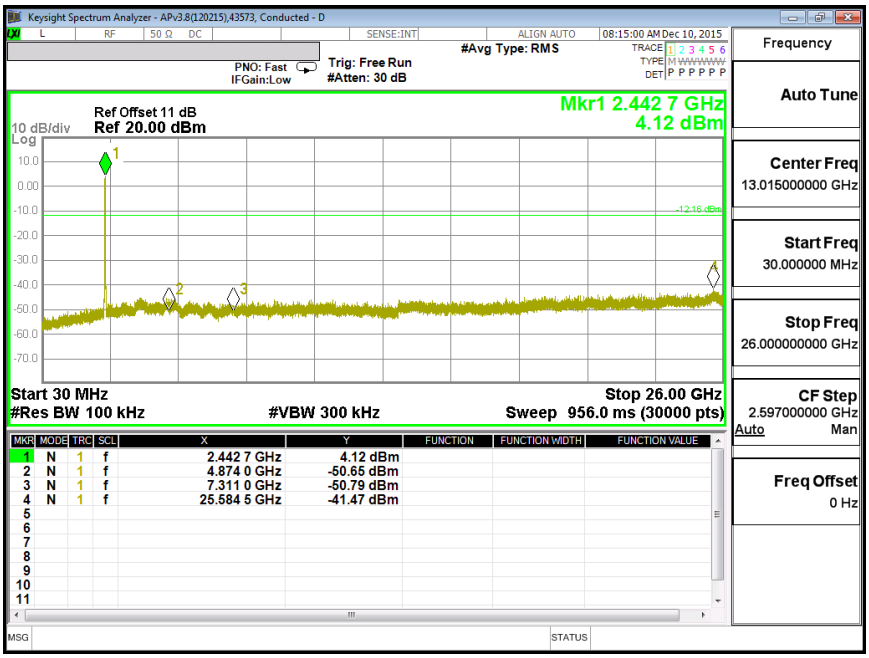
OUT OF BAND LOW CH1



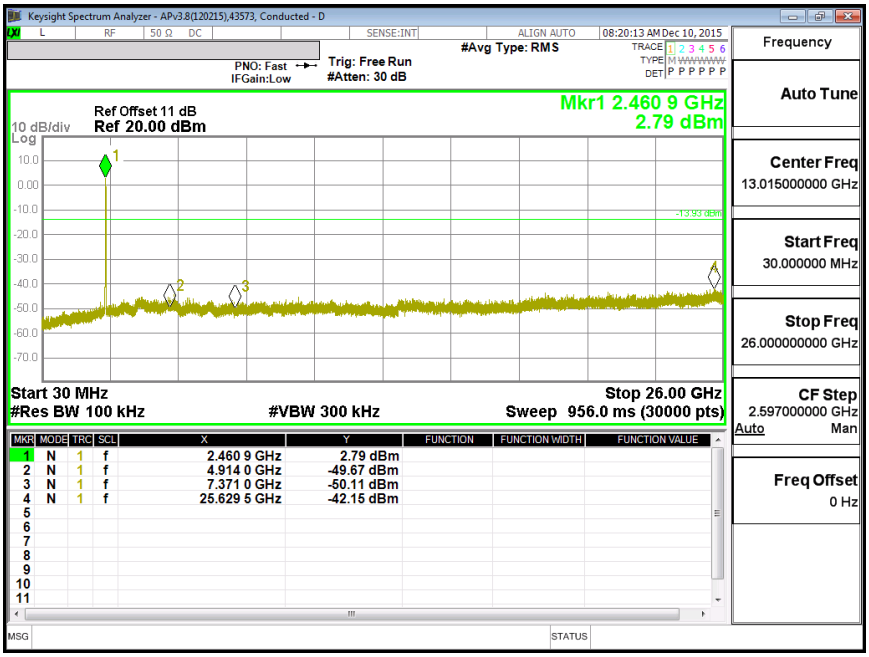
OUT OF BAND LOW CH2



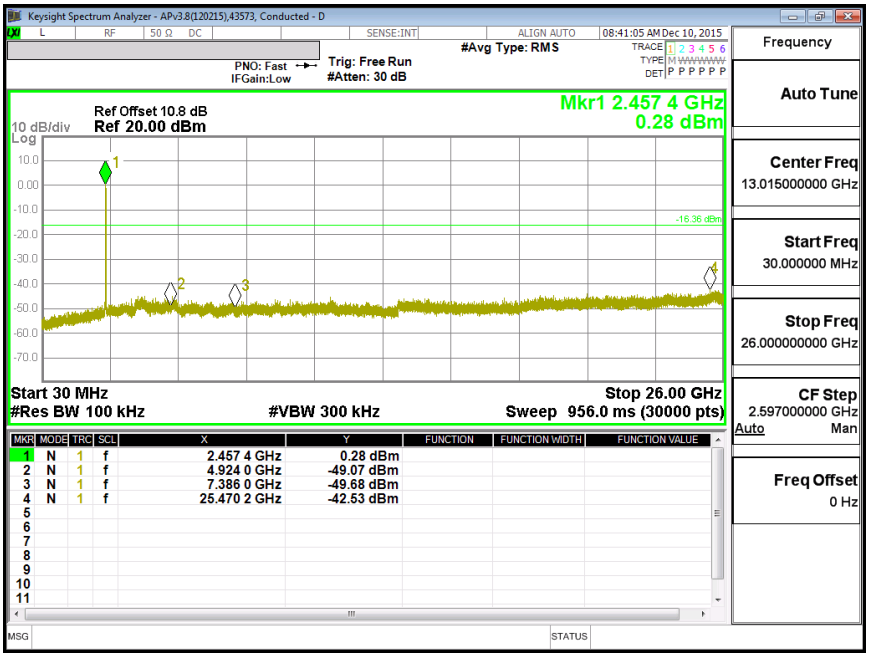
OUT OF BAND MID CH



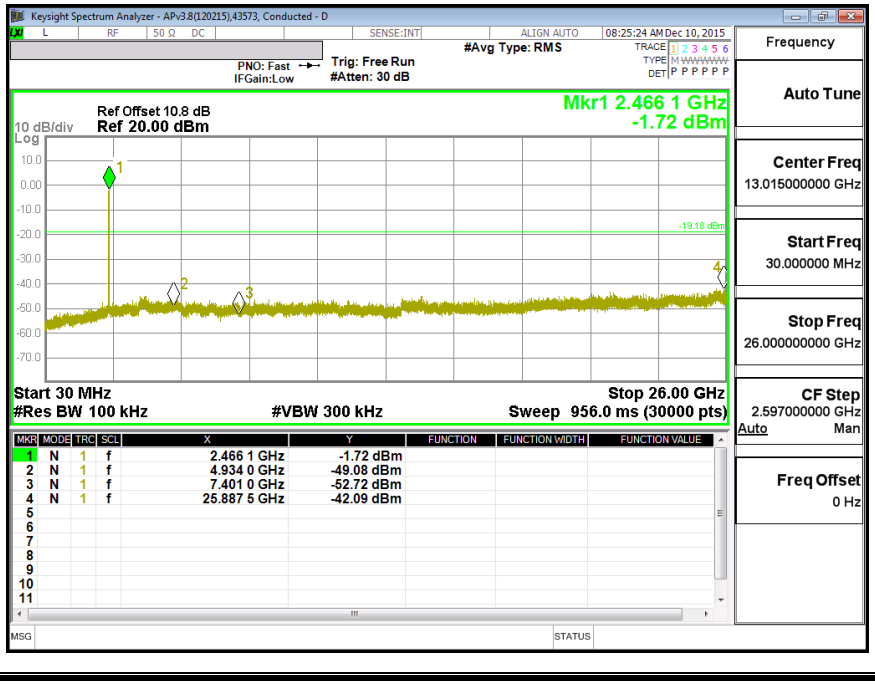
OUT OF BAND HIGH CH10



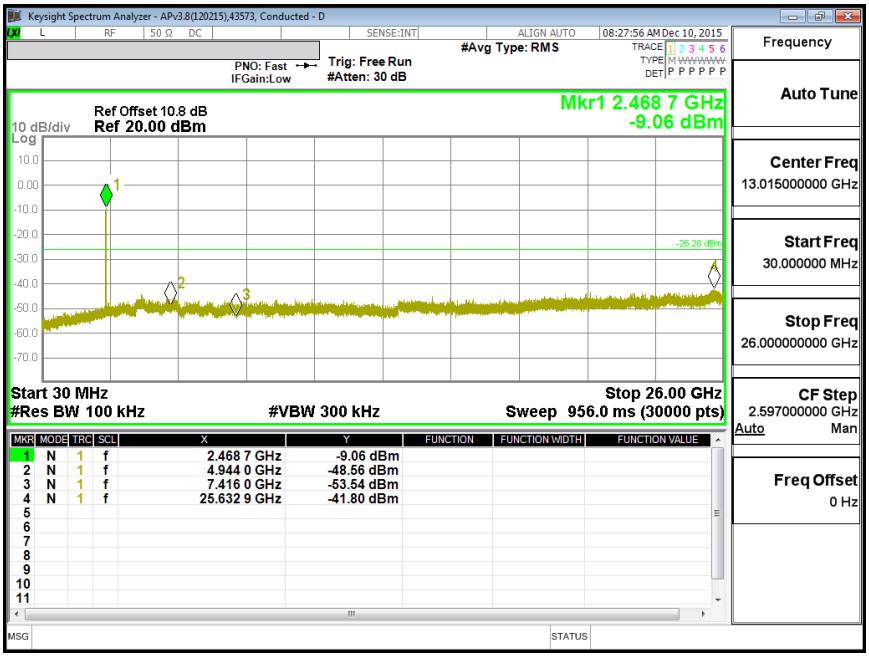
OUT OF BAND HIGH CH11



OUT OF BAND HIGH CH12



OUT OF BAND HIGH CH13



8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN, Section 8.9 and 8.10.

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 measurement below 1GHz; 1.5 m above the ground plane for measurement 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 measurements above 1 GHz the resolution bandwidth is set to 1 MHz, the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

For 2.4 GHz band, 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.

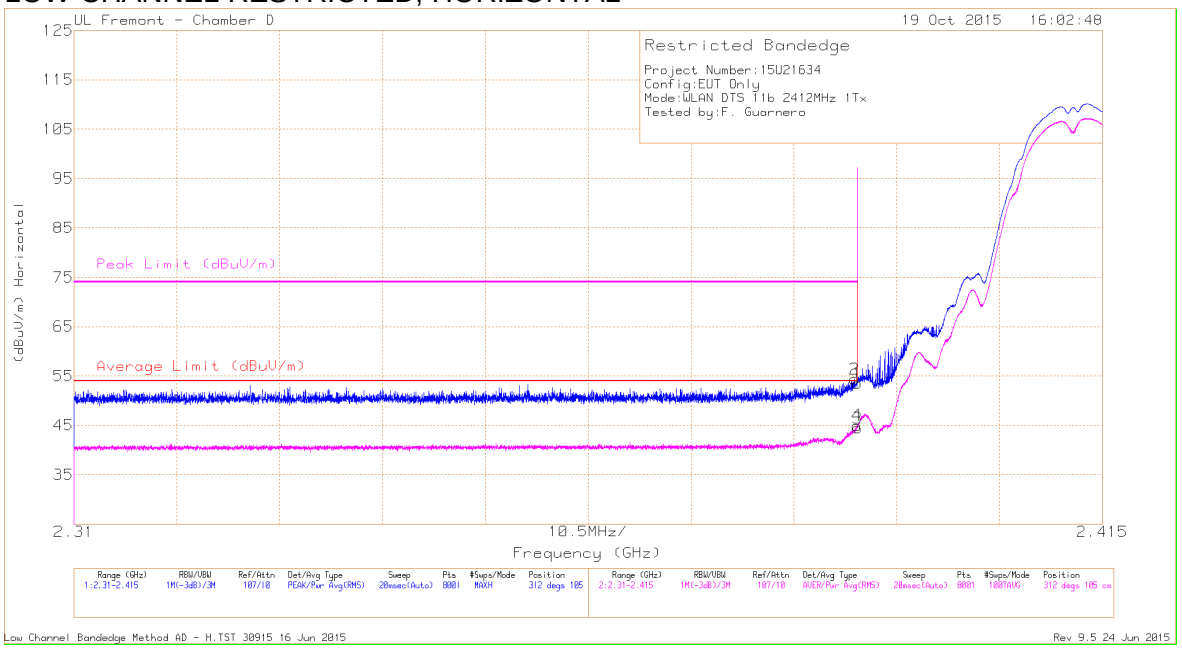
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

8.2. TRANSMITTER ABOVE 1 GHz

8.2.1. 802.11b 1Tx MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL, CH 1)

LOW CHANNEL RESTRICTED, HORIZONTAL



Trace Markers

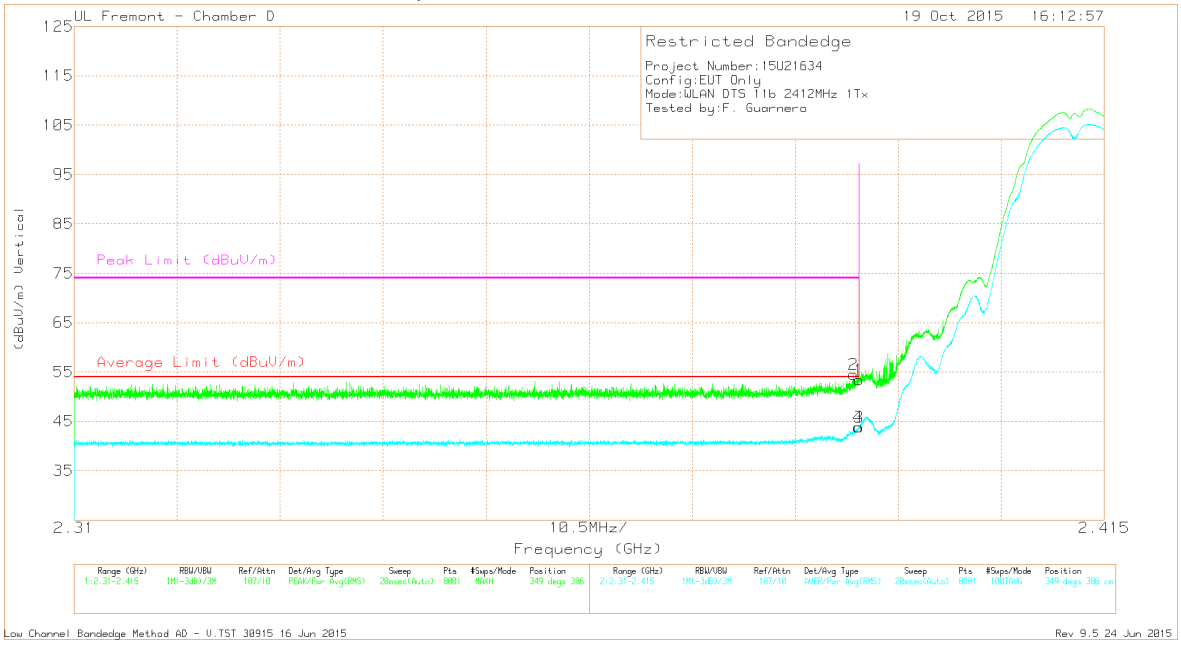
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	42.13	Pk	32.1	-20.7	53.53	-	-	74	-20.47	312	105	H
2	* 2.39	42.94	Pk	32.1	-20.7	54.34	-	-	74	-19.66	312	105	H
3	* 2.39	33.07	RMS	32.1	-20.7	44.47	54	-9.53	-	-	312	105	H
4	* 2.39	33.61	RMS	32.1	-20.7	45.01	54	-8.99	-	-	312	105	H

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

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	* 2.389	43.11	Pk	32.1	-20.7	54.51	-	-	74	-19.49	349	386	V
1	* 2.39	41.97	Pk	32.1	-20.7	53.37	-	-	74	-20.63	349	386	V
3	* 2.39	32.44	RMS	32.1	-20.7	43.84	54	-10.16	-	-	349	386	V
4	* 2.39	32.4	RMS	32.1	-20.7	43.8	54	-10.2	-	-	349	386	V

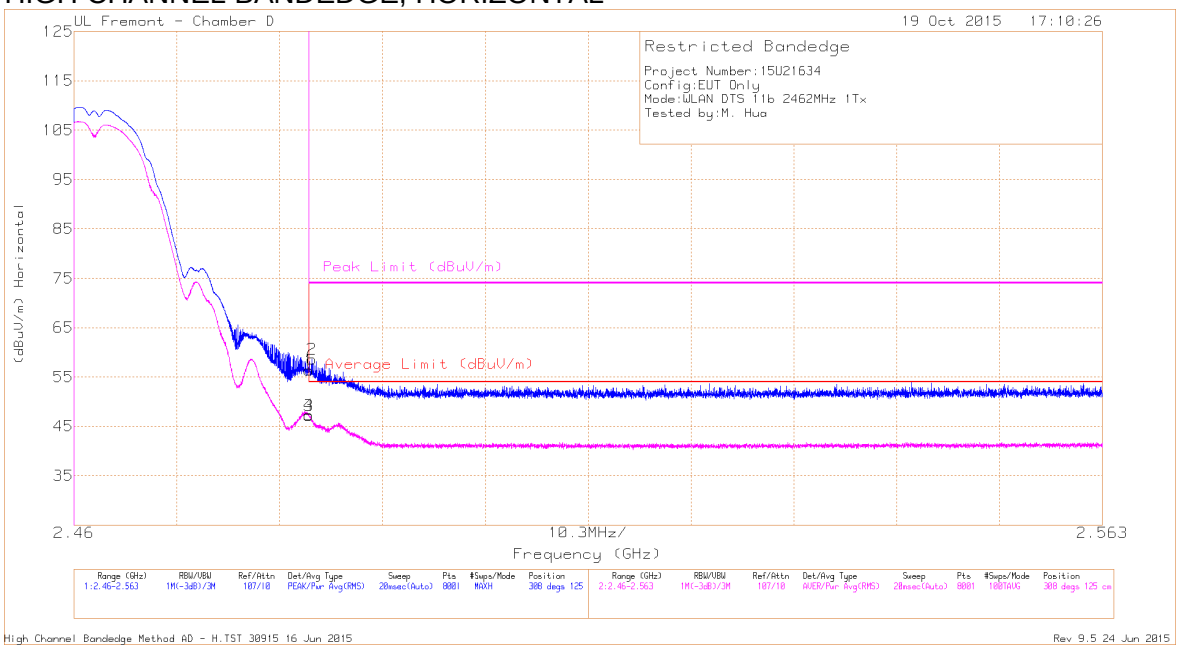
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 11)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Trace Markers

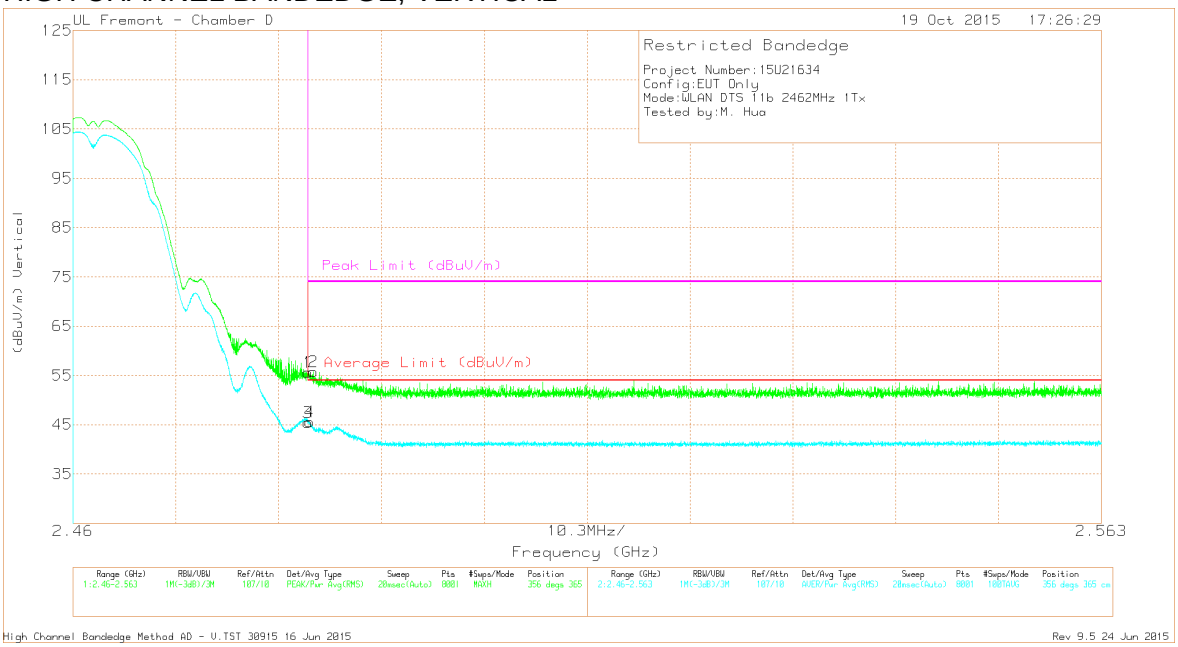
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	44.94	Pk	32.2	-20.8	56.34	-	-	74	-17.66	308	125	H
2	* 2.484	47.16	Pk	32.2	-20.8	58.56	-	-	74	-15.44	308	125	H
3	* 2.484	35.84	RMS	32.2	-20.8	47.24	54	-6.76	-	-	308	125	H
4	* 2.484	35.86	RMS	32.2	-20.8	47.26	54	-6.74	-	-	308	125	H

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

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	44.18	Pk	32.2	-20.8	0	55.58	-	-	74	-18.42	356	365	V
2	* 2.484	44.32	Pk	32.2	-20.8	0	55.72	-	-	74	-18.28	356	365	V
3	* 2.484	34.1	RMS	32.2	-20.8	0	45.5	54	-8.50	-	-	356	365	V
4	* 2.484	34.18	RMS	32.2	-20.8	0	45.58	54	-8.42	-	-	356	365	V

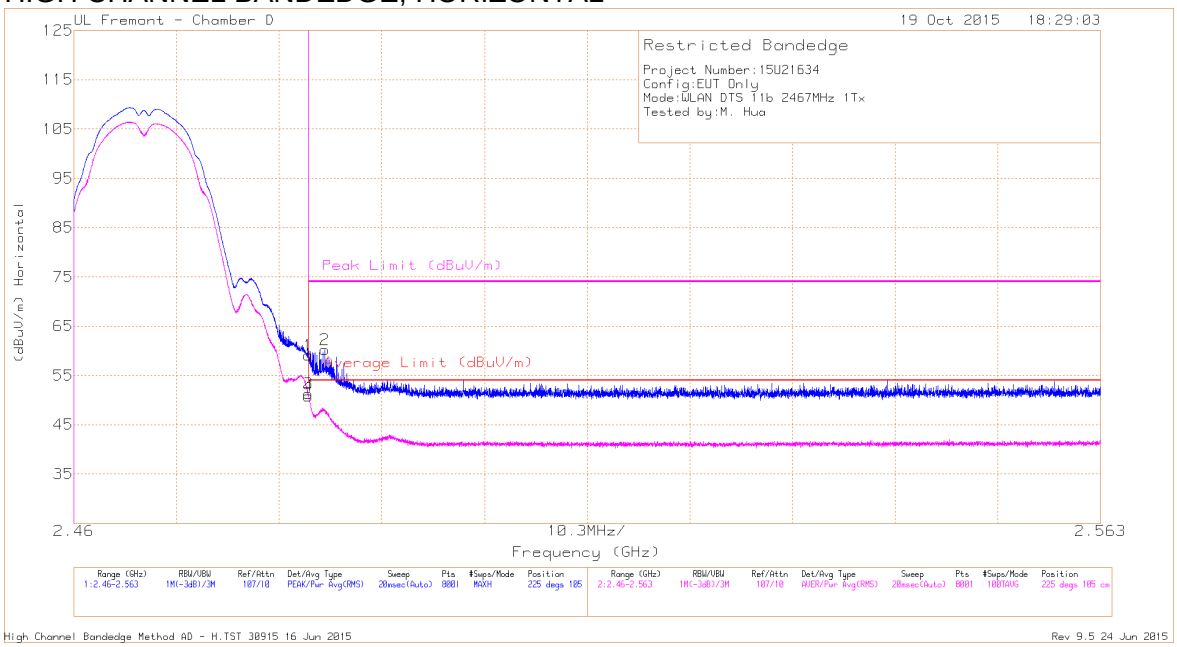
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 12)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Trace Markers

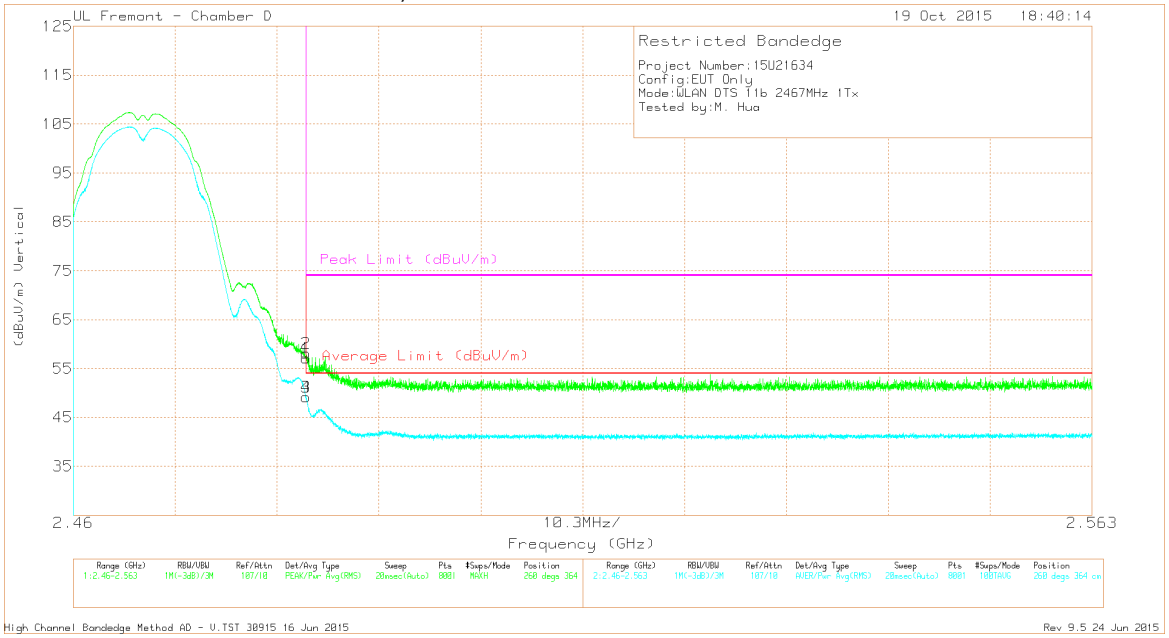
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	47.68	Pk	32.2	-20.8	59.08	-	-	74	-14.92	225	105	H
3	* 2.484	39.89	RMS	32.2	-20.8	51.29	54	-2.71	-	-	225	105	H
4	* 2.484	39.41	RMS	32.2	-20.8	50.81	54	-3.19	-	-	225	105	H
2	* 2.485	48.86	Pk	32.2	-20.8	60.26	-	-	74	-13.74	225	105	H

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

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	45.74	Pk	32.2	-20.8	0	57.14	-	-	74	-16.86	260	364	V
2	* 2.484	46.67	Pk	32.2	-20.8	0	58.07	-	-	74	-15.93	260	364	V
3	* 2.484	37.73	RMS	32.2	-20.8	0	49.13	54	-4.87	-	-	260	364	V
4	* 2.484	37.78	RMS	32.2	-20.8	0	49.18	54	-4.82	-	-	260	364	V

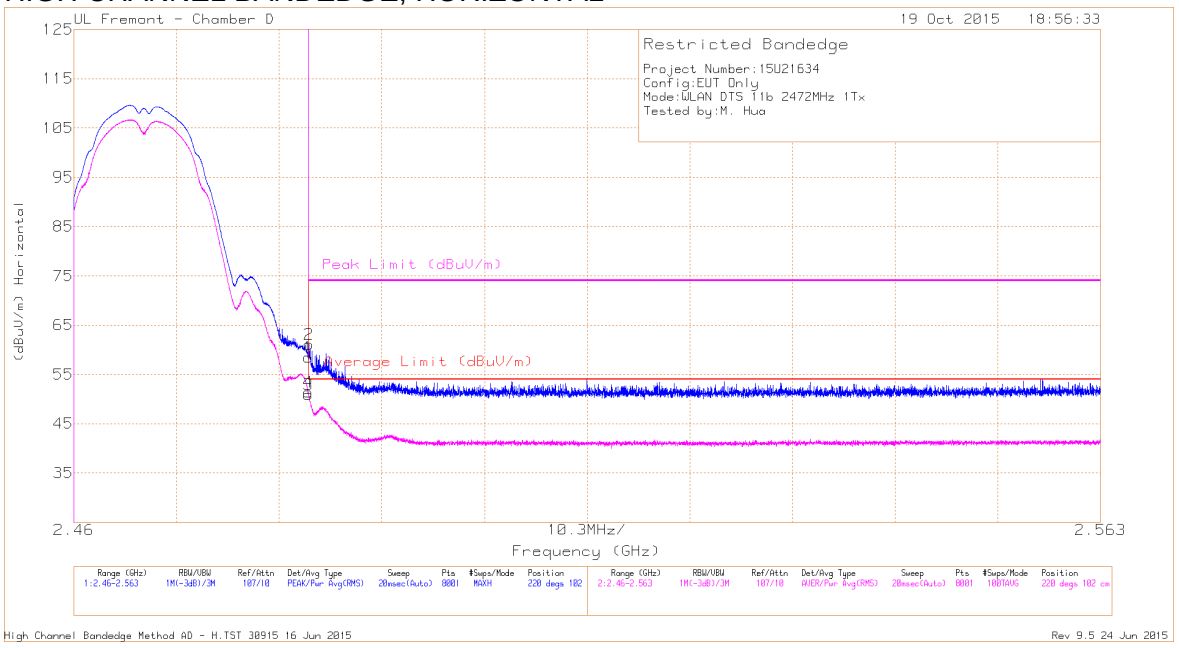
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 13)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Trace Markers

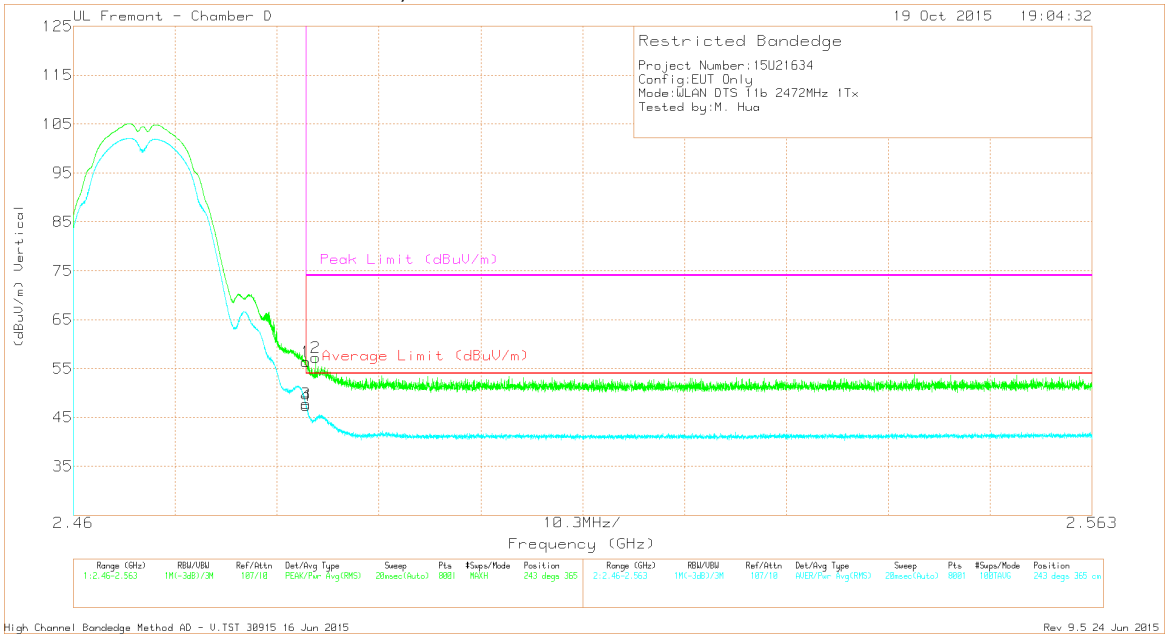
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	47.05	Pk	32.2	-20.8	0	58.45	-	-	74	-15.55	220	102	H
2	* 2.484	49.75	Pk	32.2	-20.8	0	61.15	-	-	74	-12.85	220	102	H
3	* 2.484	39.47	RMS	32.2	-20.8	0	50.87	54	-3.13	-	-	220	102	H
4	* 2.484	39.96	RMS	32.2	-20.8	0	51.36	54	-2.64	-	-	220	102	H

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

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	45.03	Pk	32.2	-20.8	0	56.43	-	-	74	-17.57	243	365	V
3	* 2.484	36.44	RMS	32.2	-20.8	0	47.84	54	-6.16	-	-	243	365	V
4	* 2.484	36.01	RMS	32.2	-20.8	0	47.41	54	-6.59	-	-	243	365	V
2	* 2.485	45.9	Pk	32.2	-20.8	0	57.3	-	-	74	-16.7	243	365	V

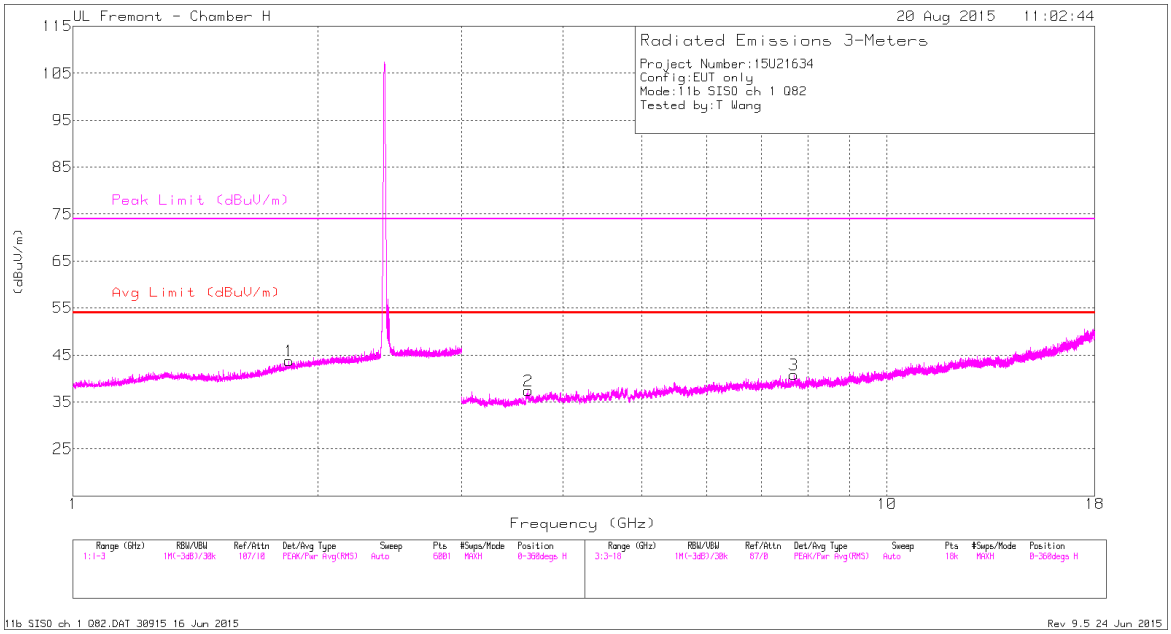
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

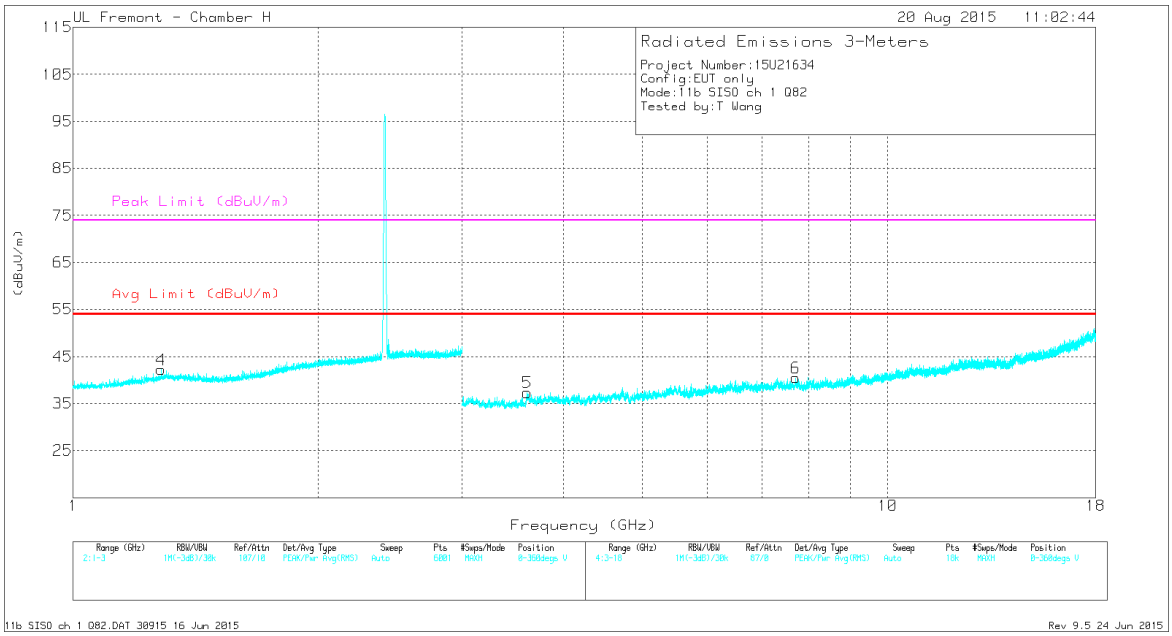
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL, CH 1

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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	* 1.281	44.28	PK2	28.8	-24.9	48.18	-	-	74	-25.82	1	100	V
	* 1.282	32.71	MAv1	28.8	-24.9	36.61	54	-17.39	-	-	1	100	V
2	* 3.621	42.15	PK2	33.1	-31.8	43.45	-	-	74	-30.55	1	100	H
	* 3.621	30.83	MAv1	33.1	-31.8	32.13	54	-21.87	-	-	1	100	H
3	* 7.684	39.34	PK2	35.9	-28.2	47.04	-	-	74	-26.96	1	100	H
	* 7.686	27.77	MAv1	35.9	-28.1	35.57	54	-18.43	-	-	1	100	H
5	* 3.608	41.86	PK2	33	-31.7	43.16	-	-	74	-30.84	1	100	V
	* 3.608	31.03	MAv1	33	-31.7	32.33	54	-21.67	-	-	1	100	V
6	* 7.708	38.88	PK2	35.9	-27.8	46.98	-	-	74	-27.02	1	100	V
	* 7.706	28.06	MAv1	35.9	-27.8	36.16	54	-17.84	-	-	1	100	V
1	1.842	37.44	Pk	30.5	-24.2	43.74	-	-	74	-30.26	0-360	201	H

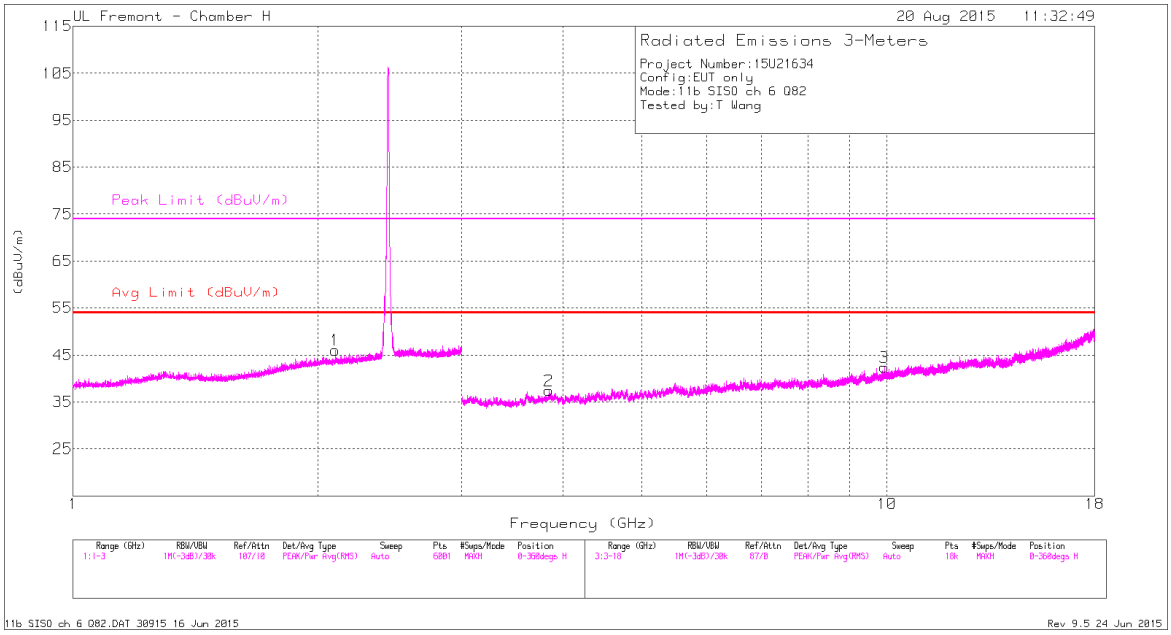
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

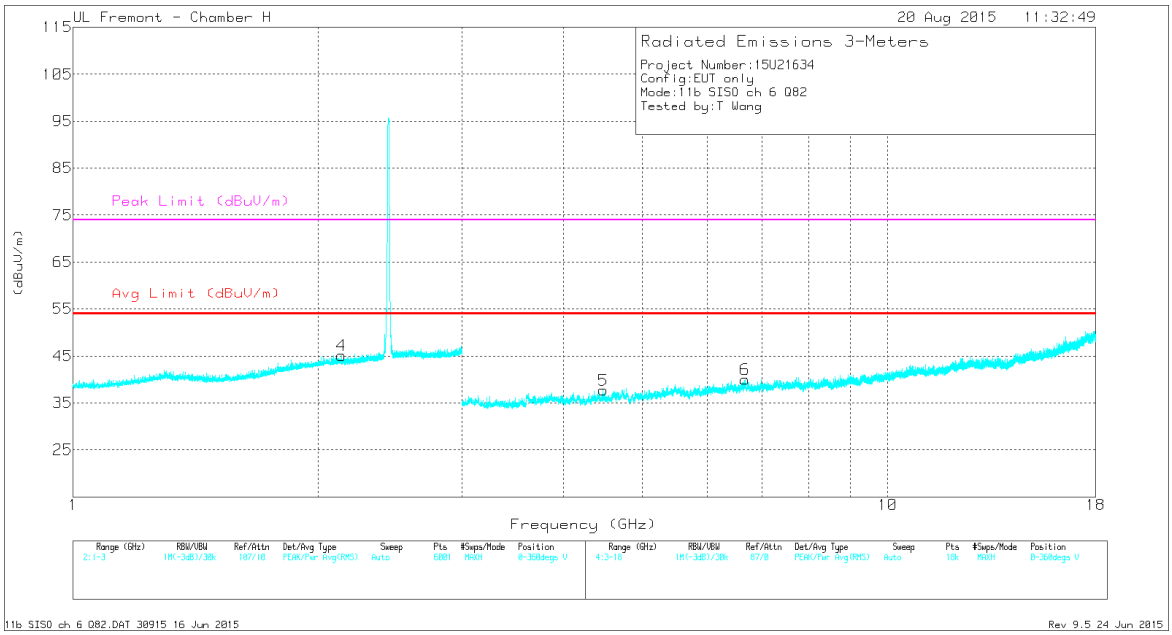
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL, CH 6

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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	* 3.841	42.31	PK2	33.5	-31.1	44.71	-	-	74	-29.29	2	100	H
	* 3.844	31.25	MAv1	33.5	-31.1	33.65	54	-20.35	-	-	2	100	H
1	2.099	38.31	Pk	31.5	-23.8	46.01	-	-	74	-27.99	0-360	201	H
4	2.135	37.5	Pk	31.4	-23.8	45.1	-	-	74	-28.9	0-360	200	V
5	4.473	35.21	Pk	33.8	-31.3	37.71	-	-	74	-36.29	0-360	100	V
6	6.683	32.8	Pk	35.8	-28.6	40	-	-	74	-34	0-360	200	V
3	9.925	30.97	Pk	36.9	-25.5	42.37	-	-	74	-31.63	0-360	100	H

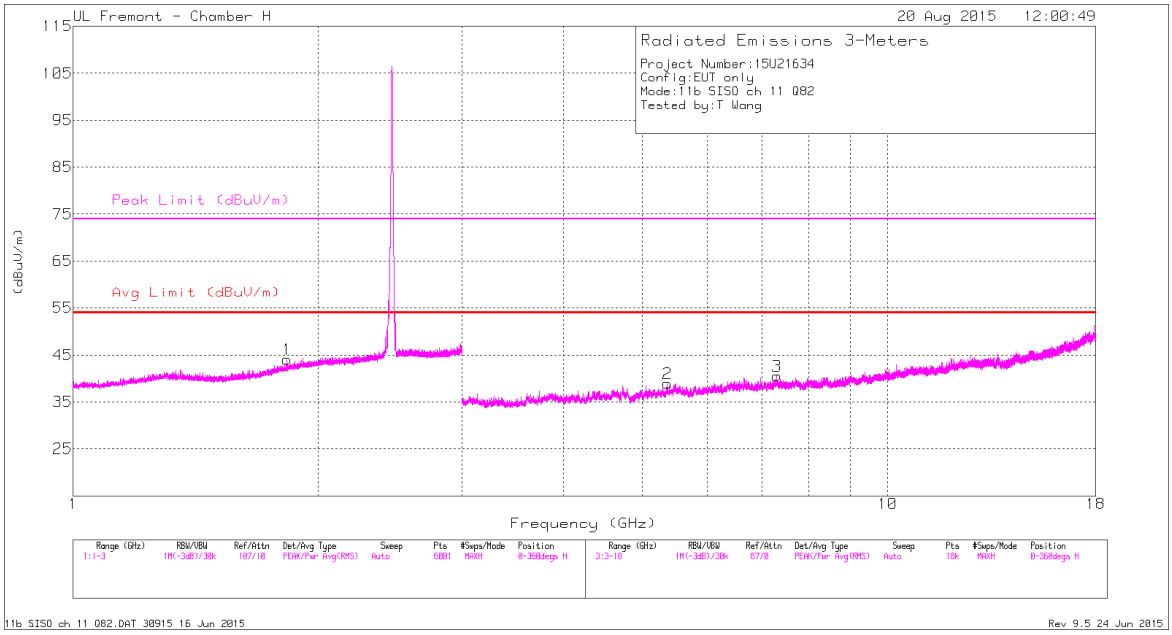
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

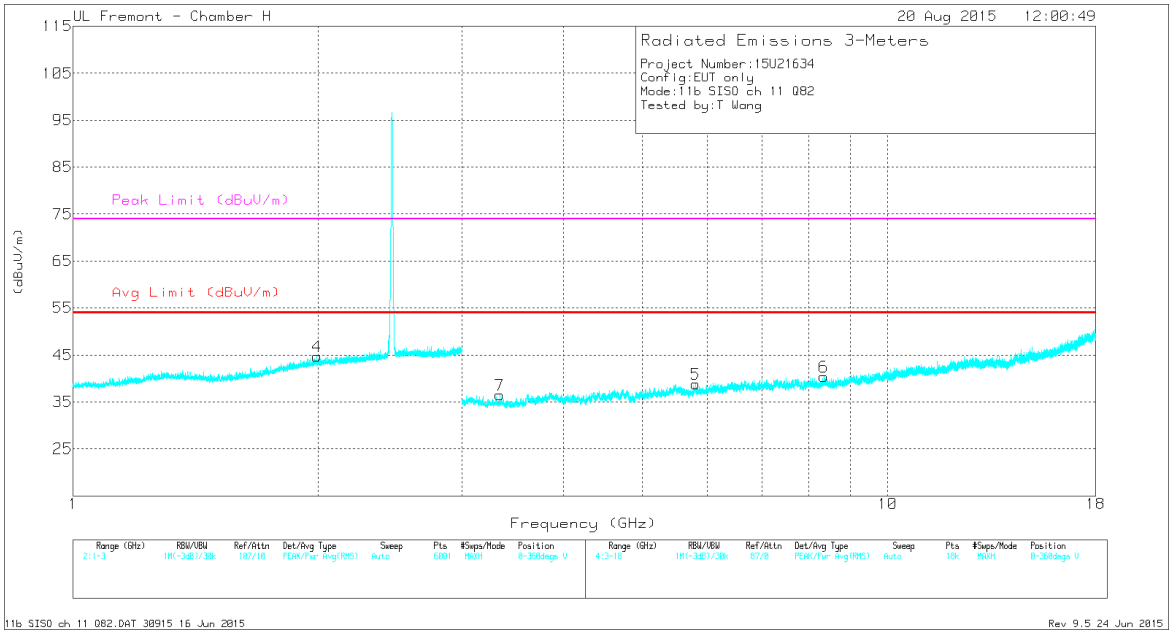
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, CH 11

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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	* 5.364	41.05	PK2	35.1	-31.2	44.95	-	-	74	-29.05	0	100	H
	* 5.364	29.91	MAv1	35.1	-31.2	33.81	54	-20.19	-	-	0	100	H
3	* 7.31	39.41	PK2	35.9	-28.4	46.91	-	-	74	-27.09	0	100	H
	* 7.307	28.24	MAv1	35.9	-28.4	35.74	54	-18.26	-	-	0	100	H
6	* 8.342	38.92	PK2	35.9	-27.1	47.72	-	-	74	-26.28	0	100	V
	* 8.343	27.24	MAv1	35.9	-27.1	36.04	54	-17.96	-	-	0	100	V
1	1.83	37.87	Pk	30.4	-24.2	44.07	-	-	74	-29.93	0-360	100	H
4	1.992	37.52	Pk	31.2	-24	44.72	-	-	74	-29.28	0-360	200	V
7	3.342	35.11	Pk	32.8	-31.4	36.51	-	-	74	-37.49	0-360	100	V
5	5.809	33.83	Pk	34.9	-29.9	38.83	-	-	74	-35.17	0-360	100	V

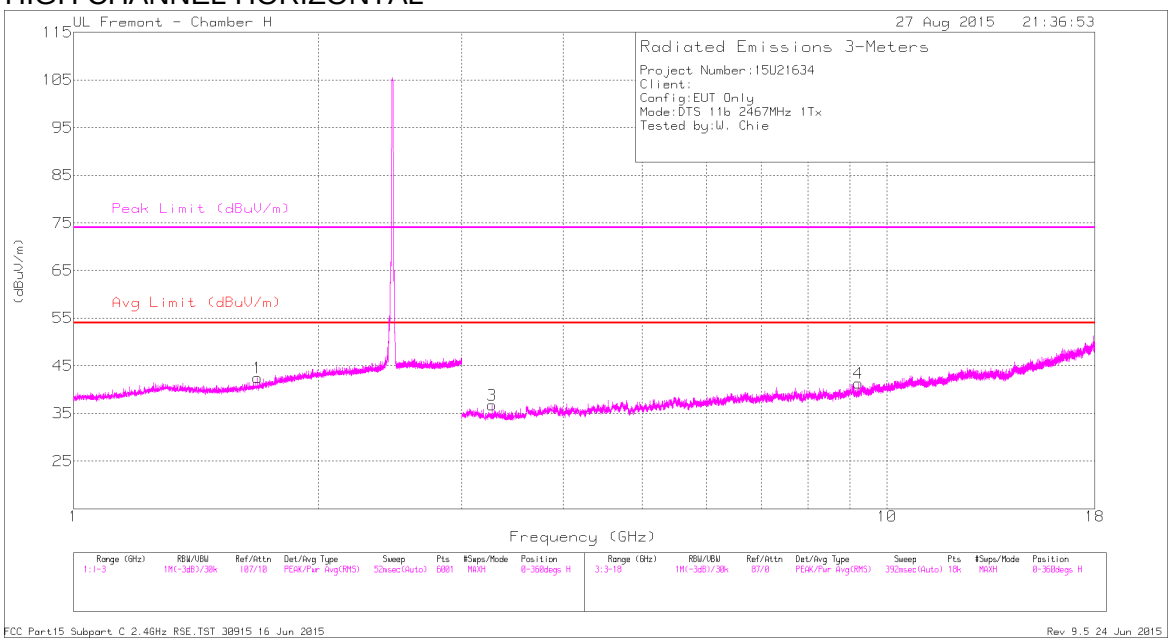
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

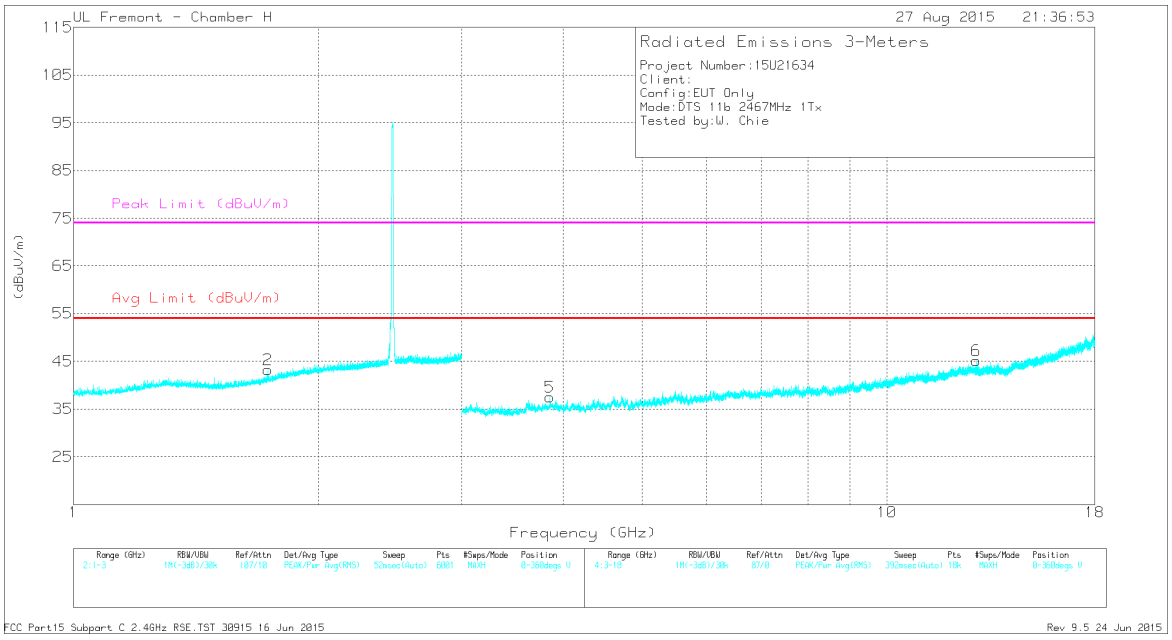
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, CH 12

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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	* 1.687	43.86	PK2	28.9	-24.1	48.66	-	-	74	-25.34	184	163	H
	* 1.687	31.59	MAv1	28.9	-24.1	36.39	54	-17.61-	-	-	184	163	H
5	* 3.847	41.73	PK2	33.5	-31.2	44.03	-	-	74	-29.97	169	217	V
	* 3.849	30.84	MAv1	33.5	-31.2	33.14	54	-20.86-	-	-	169	217	V
2	1.735	43.84	PK2	29.4	-24	49.24	-	-	-	-	216	239	V
3	3.271	41.34	PK2	32.8	-31.7	42.44	-	-	-	-	238	189	H
4	9.222	37.2	PK2	36.4	-27.2	46.4	-	-	-	-	221	121	H
6	12.862	35.6	PK2	39.4	-24.8	50.2	-	-	-	-	236	386	V

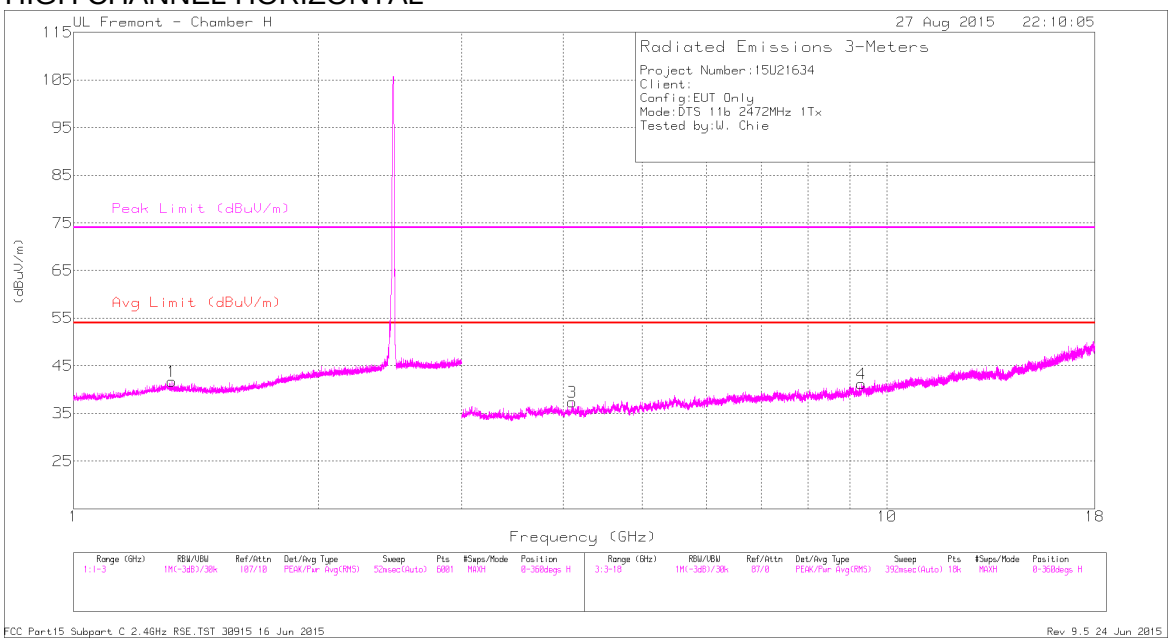
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

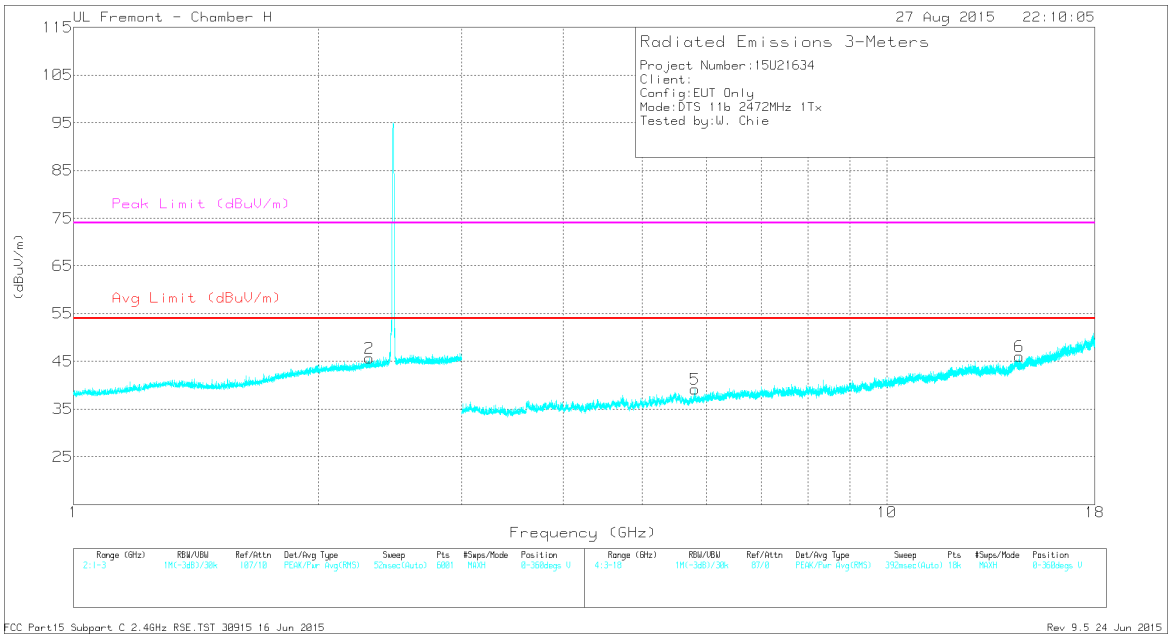
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, CH 13

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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	* 1.322	43.95	PK2	28.9	-24.8	48.05	-	-	74	-25.95	91	131	H
	* 1.32	31.88	MAv1	28.9	-24.8	35.98	54	-18.02	-	-	91	131	H
3	* 4.105	41.93	PK2	33.5	-30.7	44.73	-	-	74	-29.27	42	283	H
	* 4.098	29.59	MAv1	33.5	-30.8	32.29	54	-21.71	-	-	42	283	H
4	* 9.302	37.96	PK2	36.4	-26.1	48.26	-	-	74	-25.74	296	363	H
	* 9.304	25.48	MAv1	36.4	-26.1	35.78	54	-18.22	-	-	296	363	H
2	2.31	43.45	PK2	31.8	-23.5	51.75	-	-	-	-	104	216	V
5	5.805	40.13	PK2	34.9	-29.6	45.43	-	-	-	-	275	118	V
6	14.548	37.35	PK2	40	-25.6	51.75	-	-	-	-	248	124	V

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

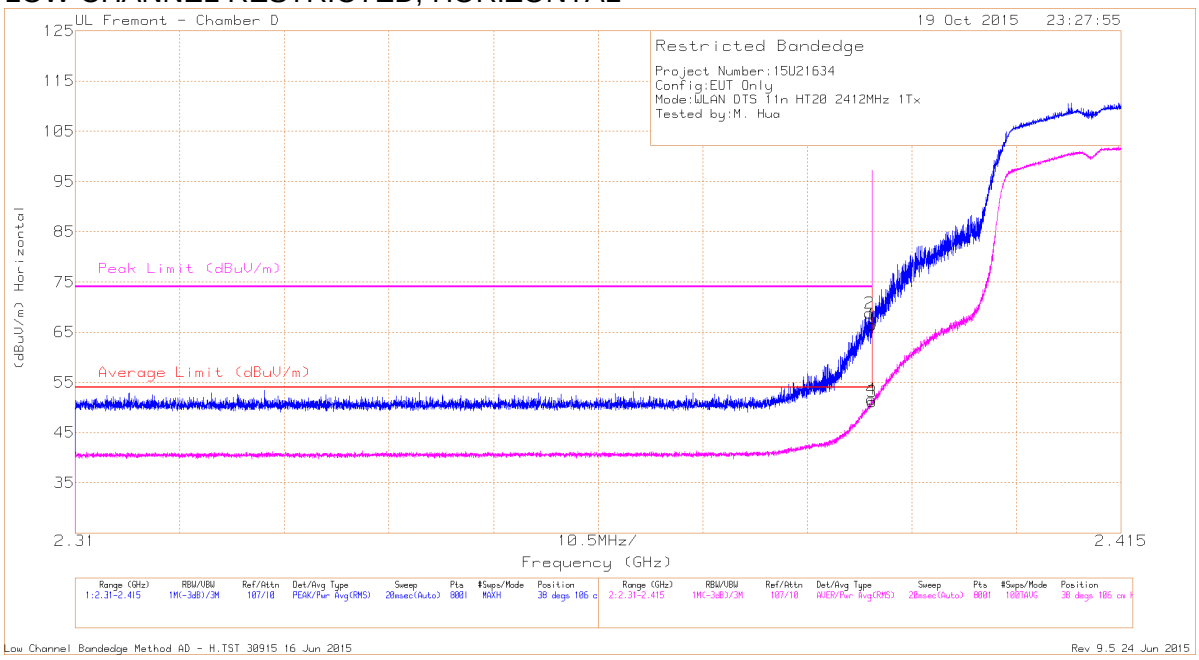
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

8.2.2. 802.11n HT20 1Tx MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL, CH 1)

LOW CHANNEL RESTRICTED, HORIZONTAL



Trace Markers

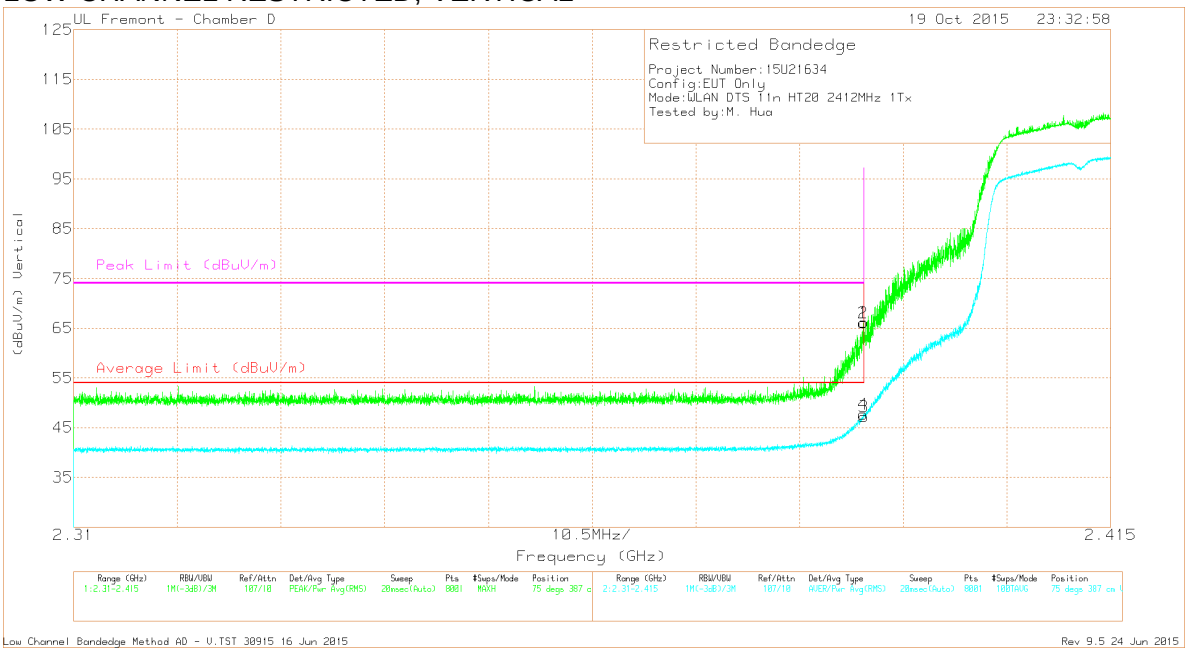
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	55.07	Pk	32.1	-20.7	0	66.47	-	-	74	-7.53	38	106	H
2	* 2.39	57.43	Pk	32.1	-20.7	0	68.83	-	-	74	-5.17	38	106	H
3	* 2.39	39.79	RMS	32.1	-20.7	0	51.19	54	-2.81	-	-	38	106	H
4	* 2.39	40.22	RMS	32.1	-20.7	0	51.62	54	-2.38	-	-	38	106	H

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

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	54.79	Pk	32.1	-20.7	0	66.19	-	-	74	-7.81	75	387	V
2	* 2.39	54.61	Pk	32.1	-20.7	0	66.01	-	-	74	-7.99	75	387	V
3	* 2.39	35.84	RMS	32.1	-20.7	0	47.24	54	-6.76	-	-	75	387	V
4	* 2.39	36.29	RMS	32.1	-20.7	0	47.69	54	-6.31	-	-	75	387	V

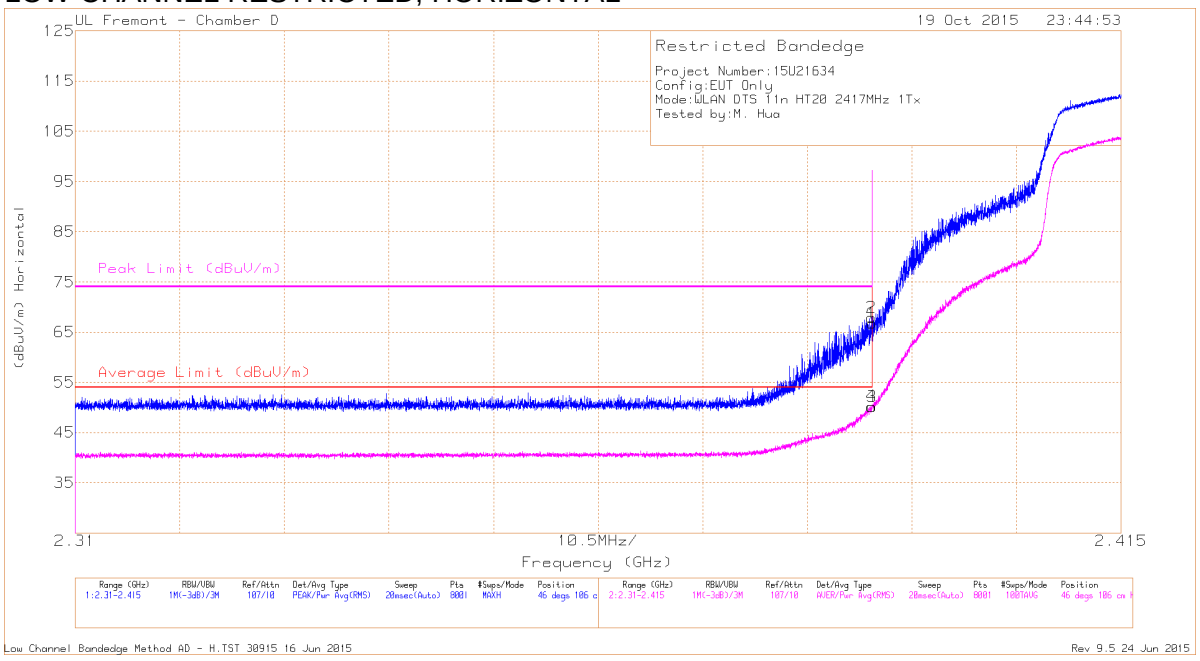
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (LOW CHANNEL, CH 2)

LOW CHANNEL RESTRICTED, HORIZONTAL



Trace Markers

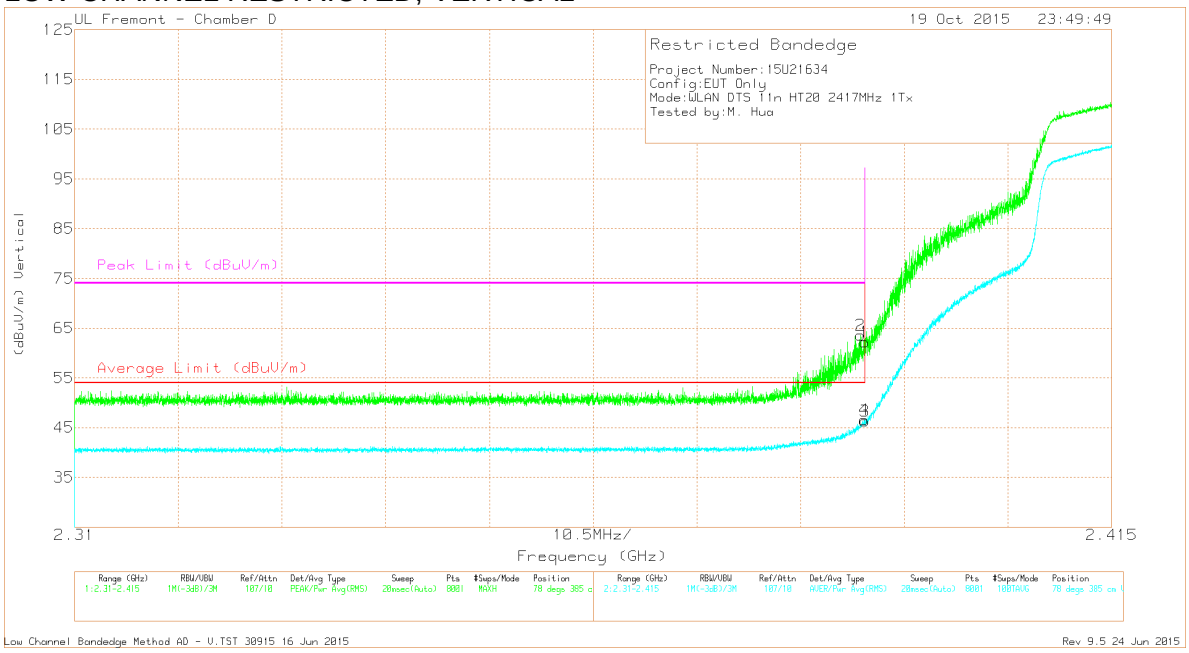
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	55.41	Pk	32.1	-20.7	0	66.81	-	-	74	-7.19	46	106	H
2	* 2.39	56.52	Pk	32.1	-20.7	0	67.92	-	-	74	-6.08	46	106	H
3	* 2.39	38.81	RMS	32.1	-20.7	0	50.21	54	-3.79	-	-	46	106	H
4	* 2.39	38.83	RMS	32.1	-20.7	0	50.23	54	-3.77	-	-	46	106	H

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

Pk - Peak detector

RMS - RMS detection

LOW CHANNEL RESTRICTED, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	50.81	Pk	32.1	-20.7	0	62.21	-	-	74	-11.79	78	385	V
2	* 2.39	52.13	Pk	32.1	-20.7	0	63.53	-	-	74	-10.47	78	385	V
3	* 2.39	34.88	RMS	32.1	-20.7	0	46.28	54	-7.72	-	-	78	385	V
4	* 2.39	35.18	RMS	32.1	-20.7	0	46.58	54	-7.42	-	-	78	385	V

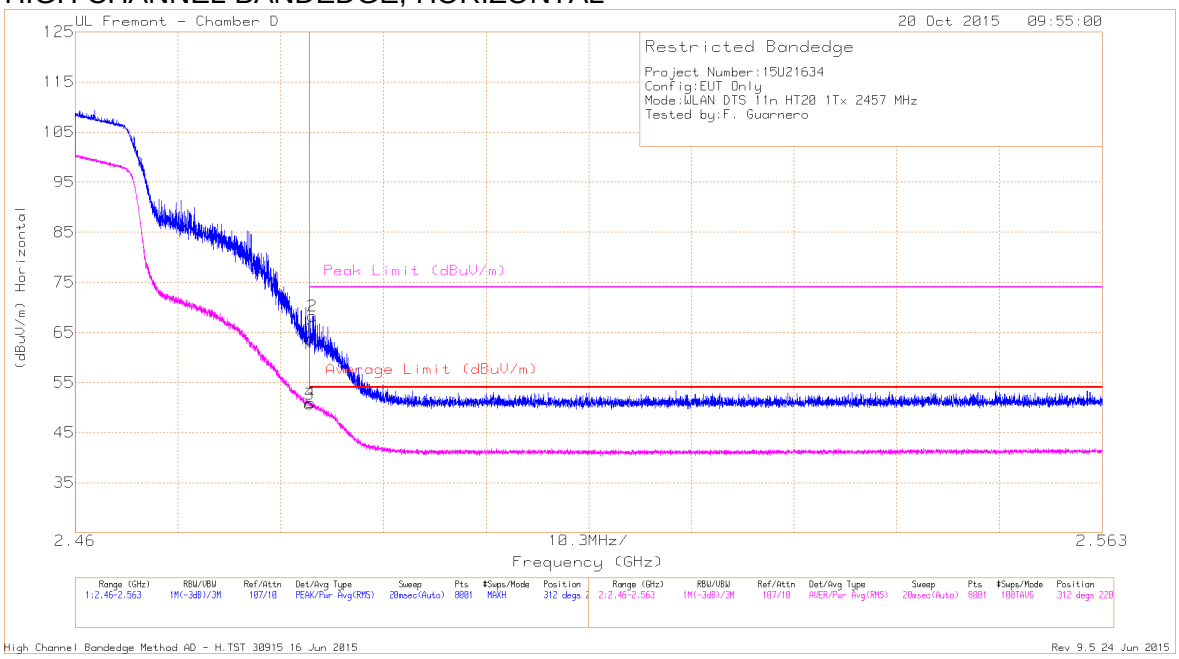
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 10)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Trace Markers

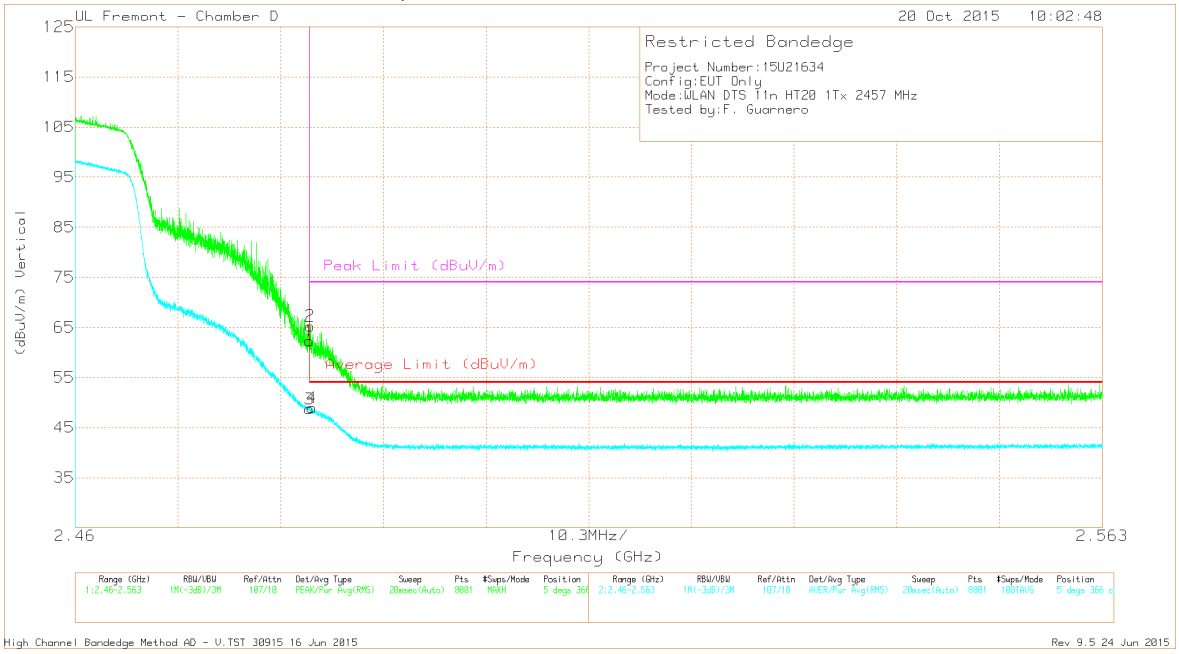
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	52.33	Pk	32.2	-20.8	63.73	-	-	74	-10.27	312	220	H
2	* 2.484	56.85	Pk	32.2	-20.8	68.25	-	-	74	-5.75	312	220	H
3	* 2.484	39.28	RMS	32.2	-20.8	50.68	54	-3.32	-	-	312	220	H
4	* 2.484	39.57	RMS	32.2	-20.8	50.97	54	-3.03	-	-	312	220	H

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

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	50.91	Pk	32.2	-20.8	62.31	-	-	74	-11.69	5	366	V
2	* 2.484	53.88	Pk	32.2	-20.8	65.28	-	-	74	-8.72	5	366	V
3	* 2.484	37.35	RMS	32.2	-20.8	48.75	54	-5.25	-	-	5	366	V
4	* 2.484	37.56	RMS	32.2	-20.8	48.96	54	-5.04	-	-	5	366	V

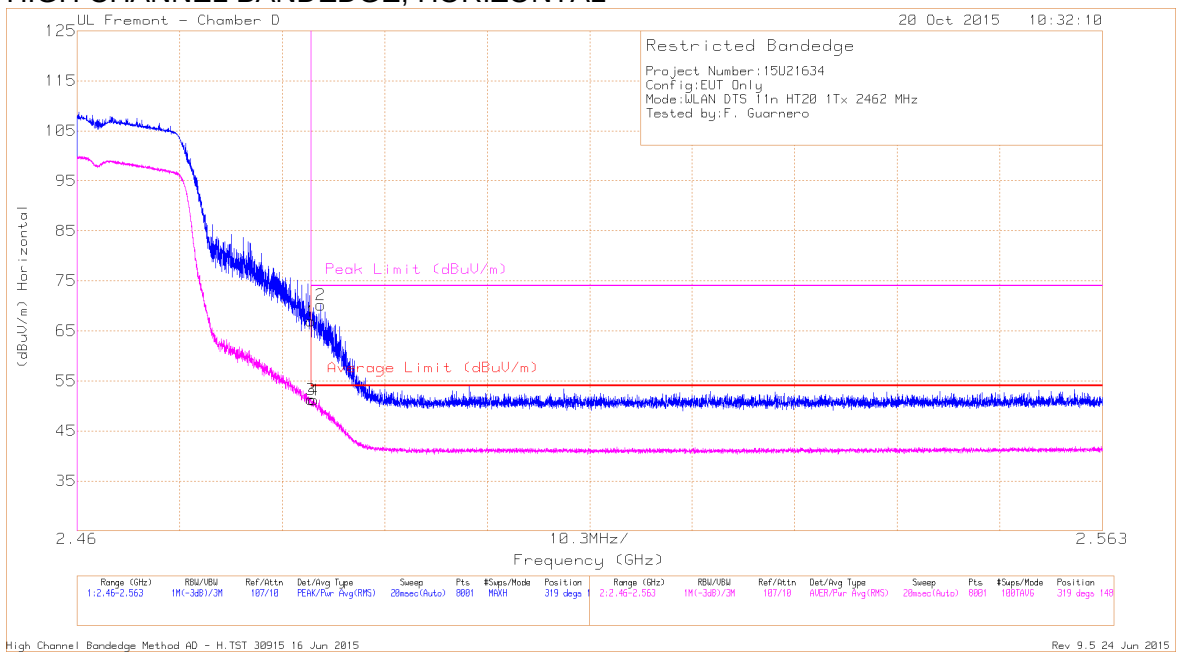
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 11)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Trace Markers

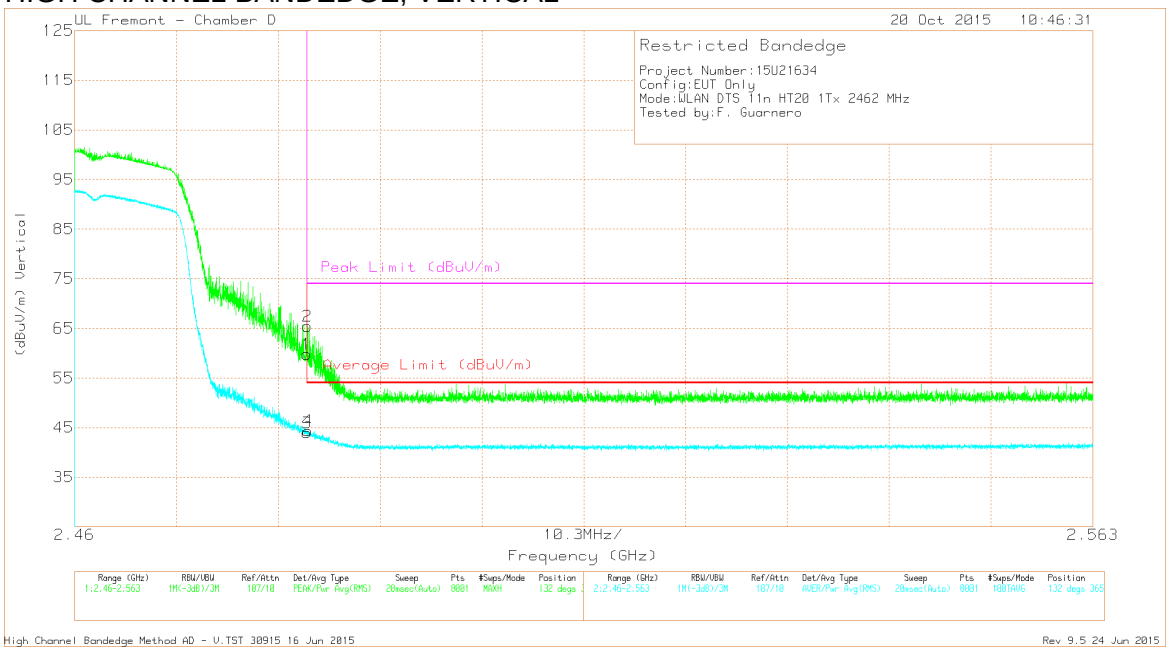
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	55.55	Pk	32.2	-20.8	66.95	-	-	74	-7.05	319	148	H
2	* 2.484	58.8	Pk	32.2	-20.8	70.2	-	-	74	-3.8	319	148	H
3	* 2.484	39.9	RMS	32.2	-20.8	51.3	54	-2.7	-	-	319	148	H
4	* 2.484	39.79	RMS	32.2	-20.8	51.19	54	-2.81	-	-	319	148	H

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

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	48.42	Pk	32.2	-20.8	59.82	-	-	74	-14.18	132	365	V
2	* 2.484	54.04	Pk	32.2	-20.8	65.44	-	-	74	-8.56	132	365	V
3	* 2.484	32.57	RMS	32.2	-20.8	43.97	54	-10.03	-	-	132	365	V
4	* 2.484	32.96	RMS	32.2	-20.8	44.36	54	-9.64	-	-	132	365	V

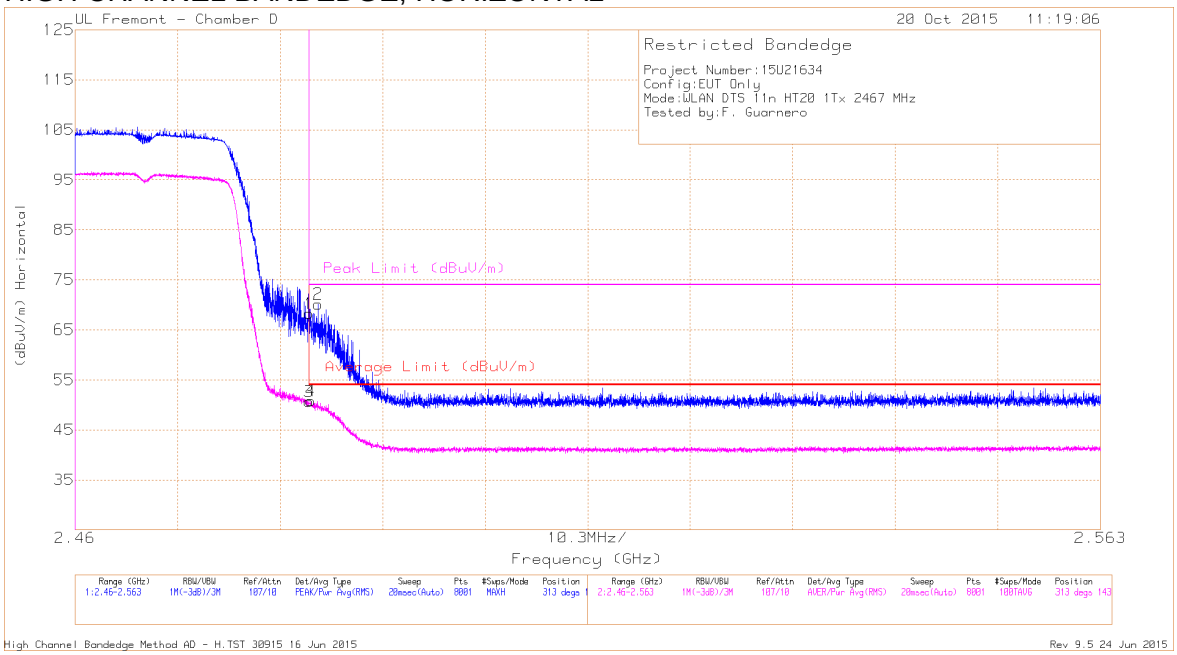
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 12)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Trace Markers

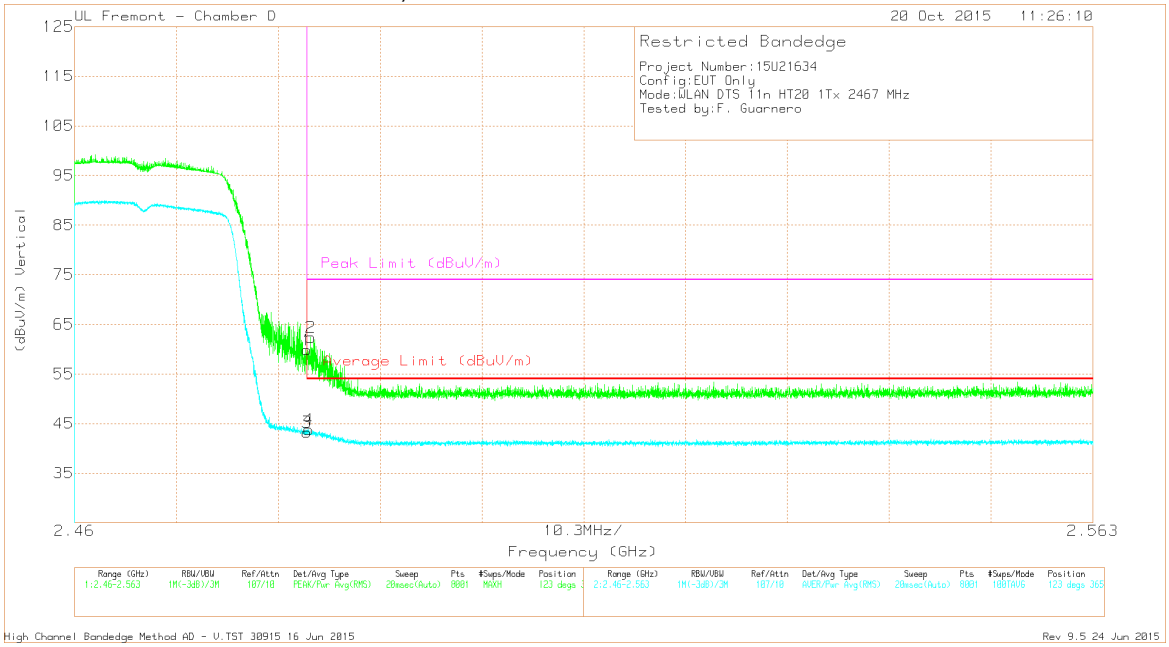
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	56.87	Pk	32.2	-20.8	68.27	-	-	74	-5.73	313	143	H
2	* 2.484	58.77	Pk	32.2	-20.8	70.17	-	-	74	-3.83	313	143	H
3	* 2.484	39.27	RMS	32.2	-20.8	50.67	54	-3.33	-	-	313	143	H
4	* 2.484	39.41	RMS	32.2	-20.8	50.81	54	-3.19	-	-	313	143	H

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

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	48.46	Pk	32.2	-20.8	59.86	-	-	74	-14.14	123	365	V
2	* 2.484	50.97	Pk	32.2	-20.8	62.37	-	-	74	-11.63	123	365	V
3	* 2.484	31.87	RMS	32.2	-20.8	43.27	54	-10.73	-	-	123	365	V
4	* 2.484	32.4	RMS	32.2	-20.8	43.8	54	-10.2	-	-	123	365	V

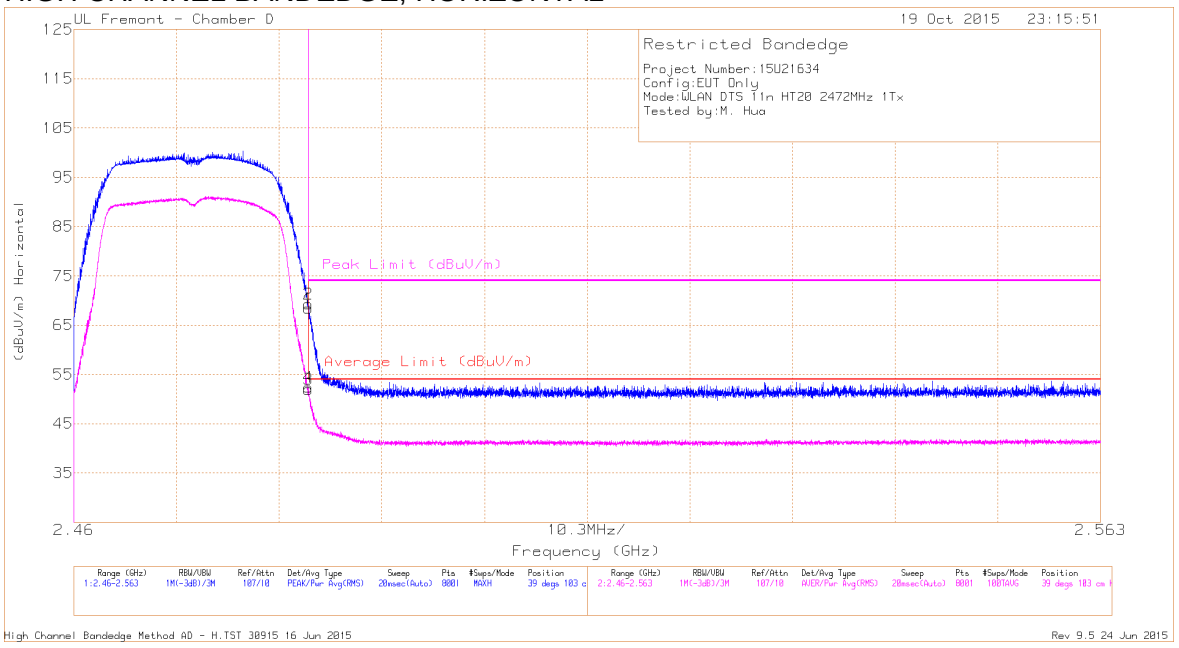
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 13)

HIGH CHANNEL BANDEDGE, HORIZONTAL



Trace Markers

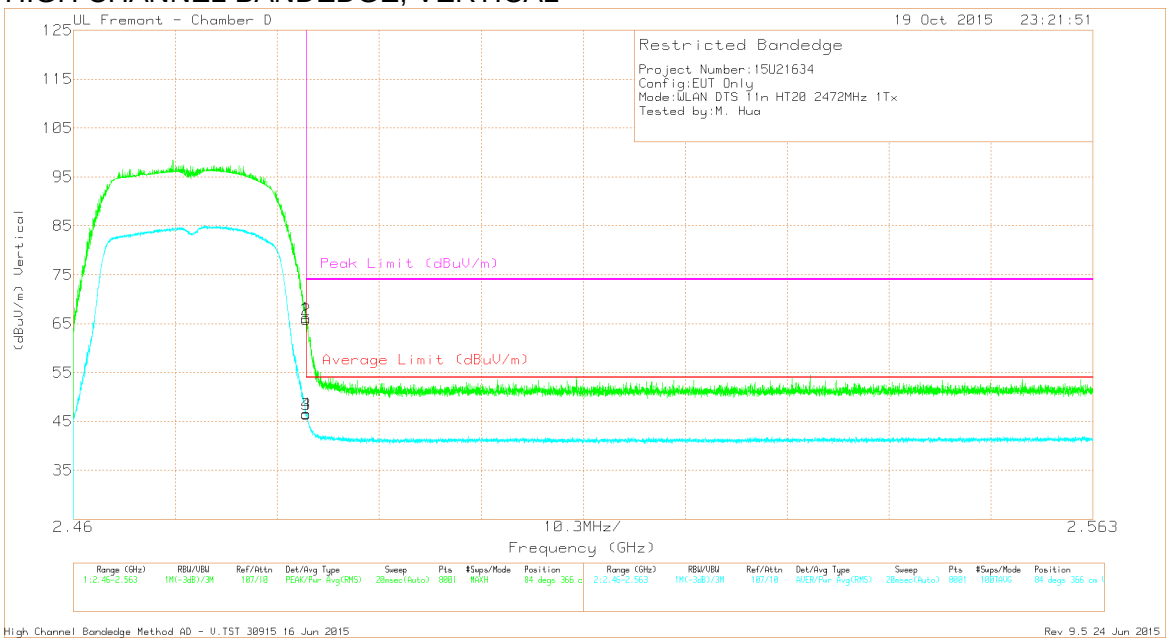
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	57.04	Pk	32.2	-20.8	0	68.44	-	-	74	-5.56	39	103	H
2	* 2.484	57.92	Pk	32.2	-20.8	0	69.32	-	-	74	-4.68	39	103	H
3	* 2.484	40.57	RMS	32.2	-20.8	0	51.97	54	-2.03	-	-	39	103	H
4	* 2.484	41.03	RMS	32.2	-20.8	0	52.43	54	-1.57	-	-	39	103	H

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

Pk - Peak detector

RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	54.8	Pk	32.2	-20.8	0	66.2	-	-	74	-7.8	84	366	V
2	* 2.484	54.36	Pk	32.2	-20.8	0	65.76	-	-	74	-8.24	84	366	V
3	* 2.484	35.08	RMS	32.2	-20.8	0	46.48	54	-7.52	-	-	84	366	V
4	* 2.484	35.22	RMS	32.2	-20.8	0	46.62	54	-7.38	-	-	84	366	V

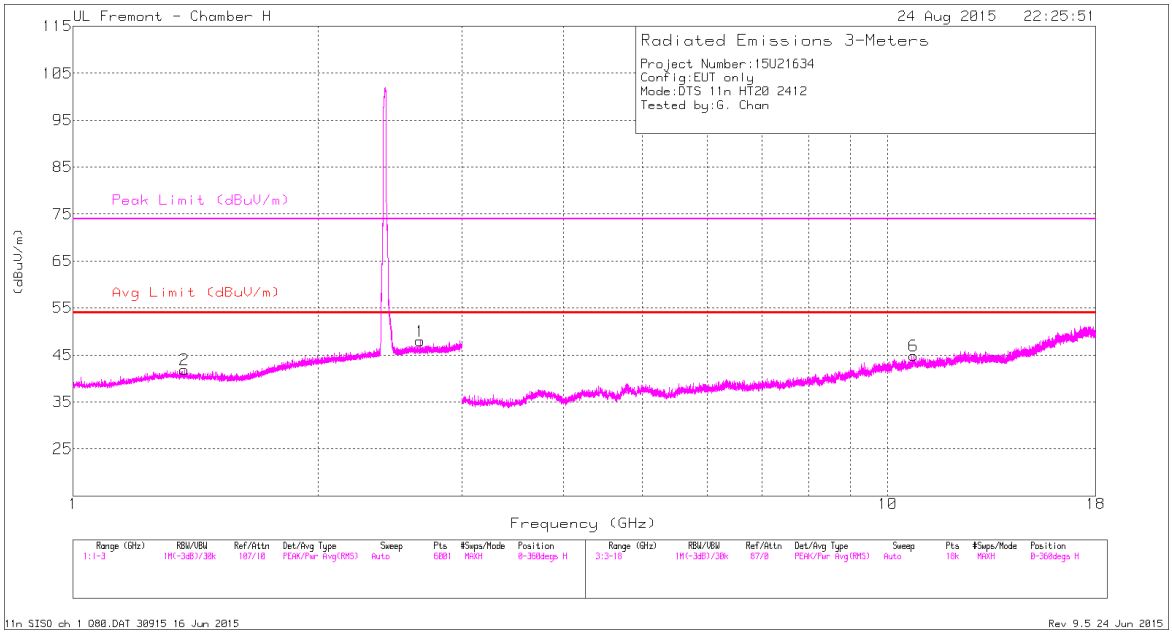
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

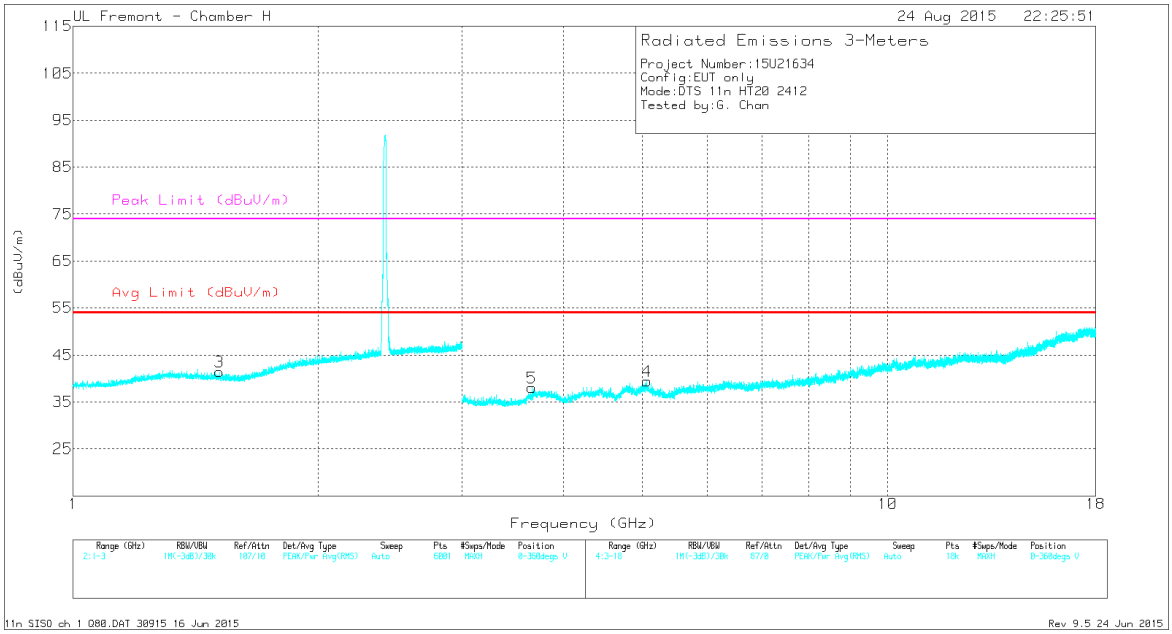
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL, CH 1

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	* 2.669	41.93	PK2	32.4	-20.6	53.73	-	-	74	-20.27	279	107	H
	* 2.668	30.19	MAv1	32.4	-20.6	41.99	54	-12.01	-	-	279	107	H
2	* 1.368	41.86	PK2	28.7	-22.2	48.36	-	-	74	-25.64	317	168	H
	* 1.369	30.39	MAv1	28.7	-22.2	36.89	54	-17.11	-	-	317	168	H
3	* 1.512	42.21	PK2	28.2	-21.9	48.51	-	-	74	-25.49	348	246	V
	* 1.511	30.15	MAv1	28.2	-21.9	36.45	54	-17.55	-	-	348	246	V
6	* 10.759	33.8	PK2	37.9	-20.4	51.3	-	-	74	-22.7	15	284	H
	* 10.757	22.45	MAv1	37.9	-20.4	39.95	54	-14.05	-	-	15	284	H
4	* 5.061	37.57	PK2	34.3	-26.7	45.17	-	-	74	-28.83	72	247	V
	* 5.058	26.39	MAv1	34.3	-26.7	33.99	54	-20.01	-	-	72	247	V
5	* 3.66	38.79	PK2	33.1	-29.2	42.69	-	-	74	-31.31	136	199	V
	* 3.66	27.49	MAv1	33.1	-29.2	31.39	54	-22.61	-	-	136	199	V

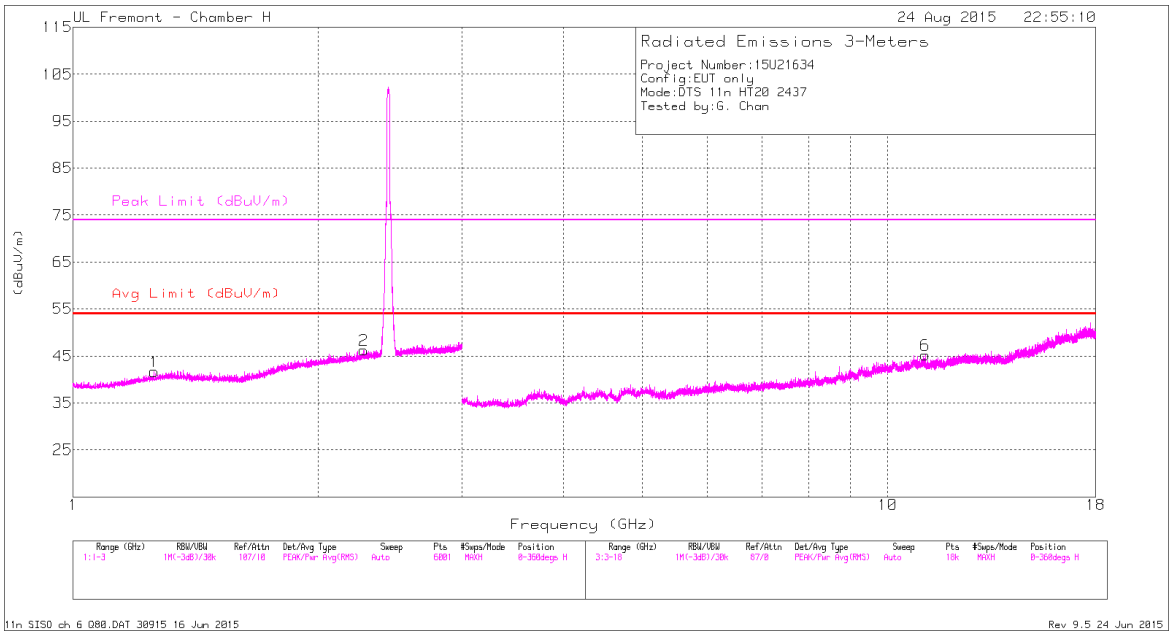
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

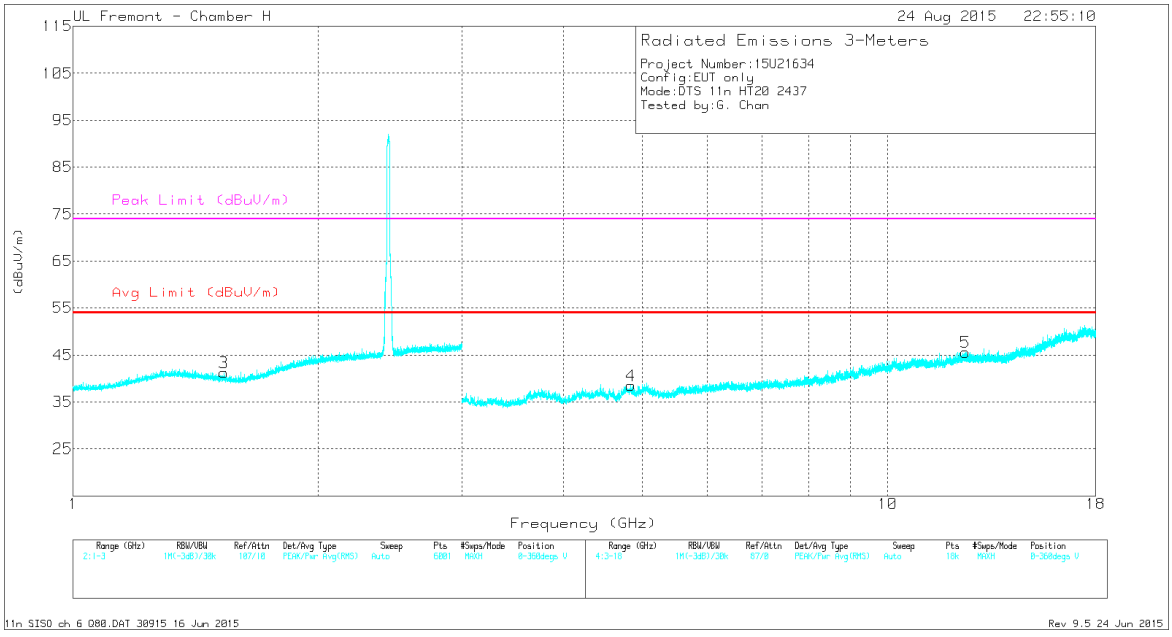
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL, CH 6

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	* 1.258	42.2	PK2	28.6	-22.3	48.5	-	-	74	-25.5	83	115	H
	* 1.259	30.49	MAv1	28.6	-22.3	36.79	54	-17.21	-	-	83	115	H
2	* 2.272	41.78	PK2	31.9	-20.9	52.78	-	-	74	-21.22	146	157	H
	* 2.274	30.12	MAv1	31.9	-20.9	41.12	54	-12.88	-	-	146	157	H
3	* 1.532	41.91	PK2	28.2	-21.9	48.21	-	-	74	-25.79	191	177	V
	* 1.53	30.28	MAv1	28.2	-21.9	36.58	54	-17.42	-	-	191	177	V
6	* 11.11	34.35	PK2	38	-21.2	51.15	-	-	74	-22.85	137	153	H
	* 11.109	22.97	MAv1	38	-21.2	39.77	54	-14.23	-	-	137	153	H
4	* 4.836	38	PK2	34.1	-27.6	44.5	-	-	74	-29.5	225	140	V
	* 4.834	26.62	MAv1	34.1	-27.6	33.12	54	-20.88	-	-	225	140	V
5	* 12.455	34.98	PK2	39	-21.6	52.38	-	-	74	-21.62	193	201	V
	* 12.454	23.38	MAv1	39	-21.6	40.78	54	-13.22	-	-	193	201	V

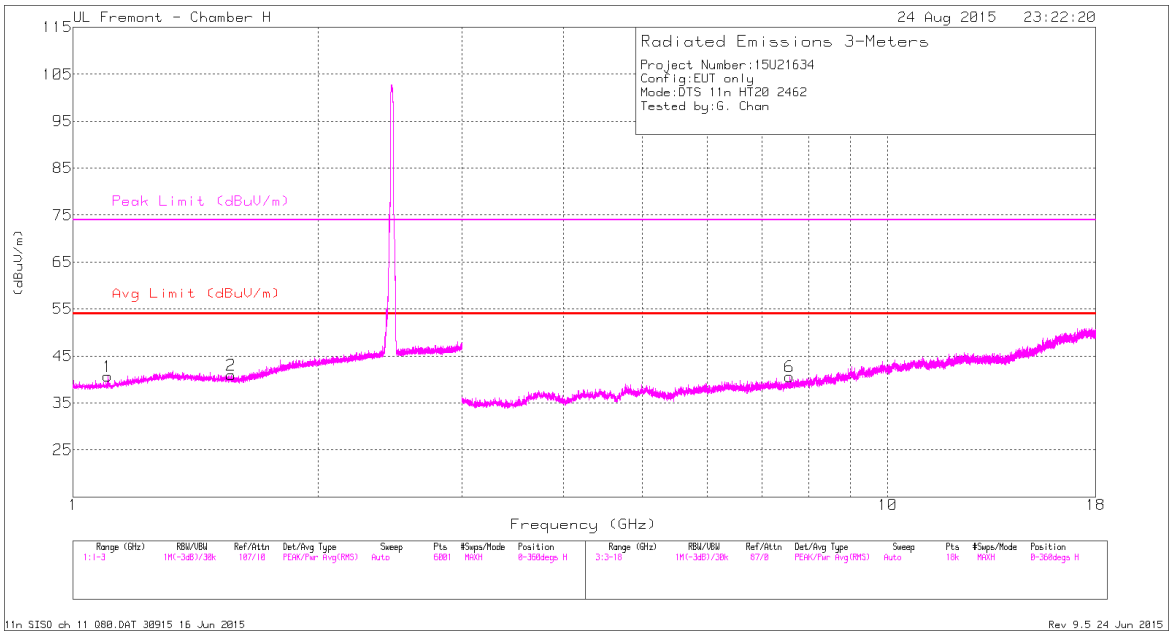
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

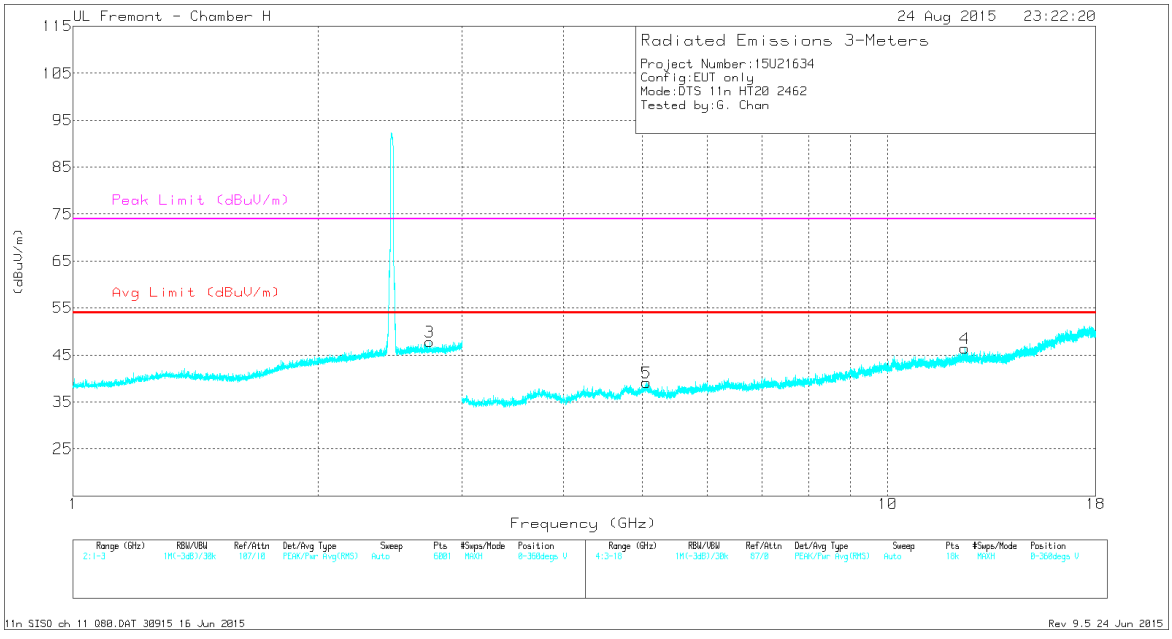
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, CH 11

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (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	* 1.102	41.81	PK2	27.2	-22.5	46.51	-	-	74	-27.49	349	261	H
	* 1.102	30.3	MAv1	27.2	-22.5	35	54	-19	-	-	349	261	H
2	* 1.564	43.07	PK2	28.1	-21.9	49.27	-	-	74	-24.73	178	227	H
	* 1.565	30.14	MAv1	28.1	-21.9	36.34	54	-17.66	-	-	178	227	H
3	* 2.739	42.13	PK2	32.5	-20.5	54.13	-	-	74	-19.87	65	166	V
	* 2.738	30.17	MAv1	32.5	-20.5	42.17	54	-11.83	-	-	65	166	V
6	* 7.574	36.08	PK2	35.6	-24.9	46.78	-	-	74	-27.22	243	100	H
	* 7.574	24.5	MAv1	35.6	-25	35.1	54	-18.9	-	-	243	100	H
4	* 12.431	35.32	PK2	39	-21.1	53.22	-	-	74	-20.78	4	233	V
	* 12.429	22.76	MAv1	39	-21.1	40.66	54	-13.34	-	-	4	233	V
5	* 5.056	37.9	PK2	34.3	-26.7	45.5	-	-	74	-28.5	87	170	V
	* 5.056	25.85	MAv1	34.3	-26.7	33.45	54	-20.55	-	-	87	170	V

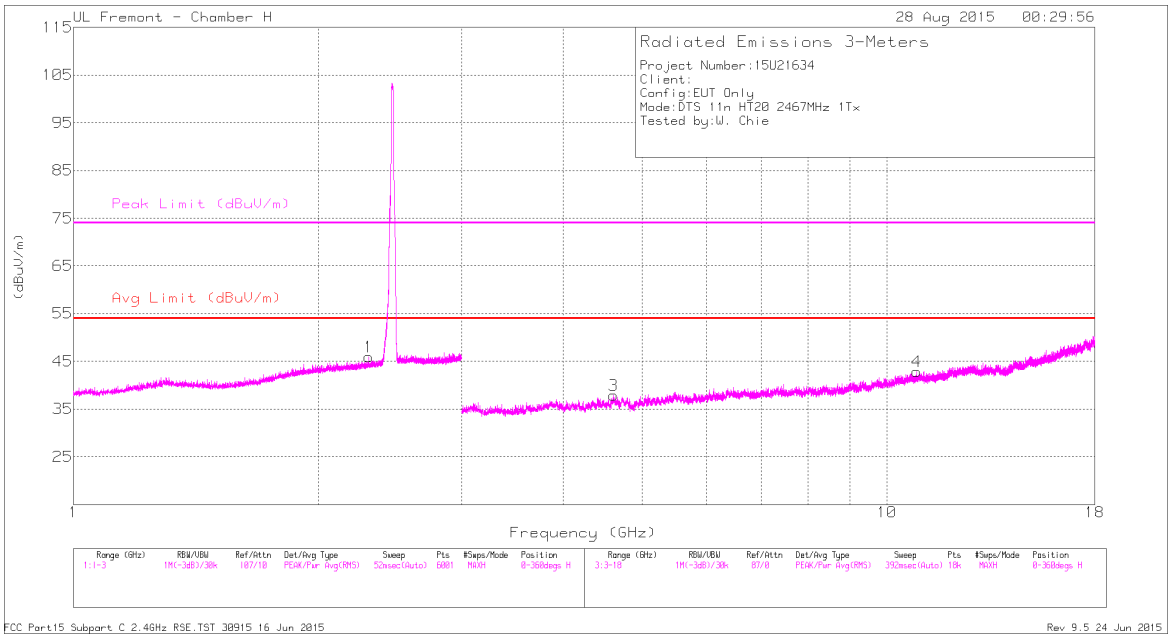
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

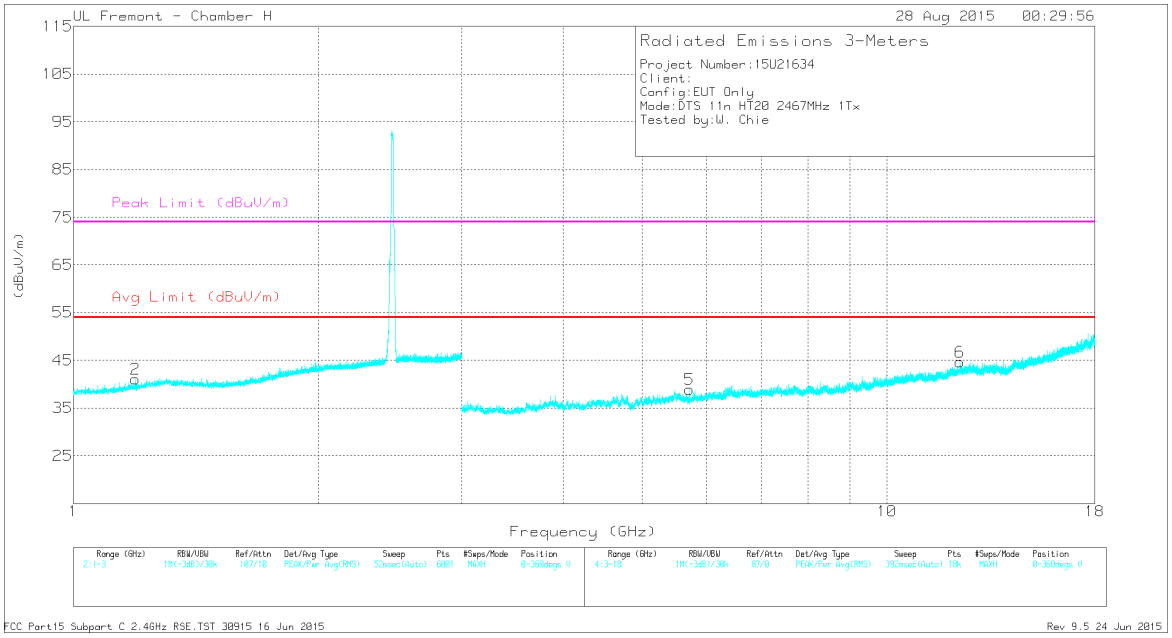
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, CH 12

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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	* 1.191	43.74	PK2	28	-24.9	46.84	-	-	74	-27.16	355	146	V
	* 1.191	32.02	MAv1	28	-24.9	35.12	54	-18.88	-	-	355	146	V
3	* 4.615	42.63	PK2	34	-31.2	45.43	-	-	74	-28.57	142	212	H
	* 4.612	30.31	MAv1	34	-31.2	33.11	54	-20.89	-	-	142	212	H
4	* 10.874	35.61	PK2	37.8	-24.6	48.81	-	-	74	-25.19	150	268	H
	* 10.874	24.47	MAv1	37.8	-24.6	37.67	54	-16.33	-	-	150	268	H
6	* 12.295	36.03	PK2	39.1	-24.3	50.83	-	-	74	-23.17	33	218	V
	* 12.296	24.53	MAv1	39.1	-24.3	39.33	54	-14.67	-	-	33	218	V
1	2.305	43.57	PK2	31.8	-23.5	51.87	-	-	-	-	332	120	H
5	5.721	41	PK2	34.8	-30.4	45.4	-	-	-	-	158	252	V

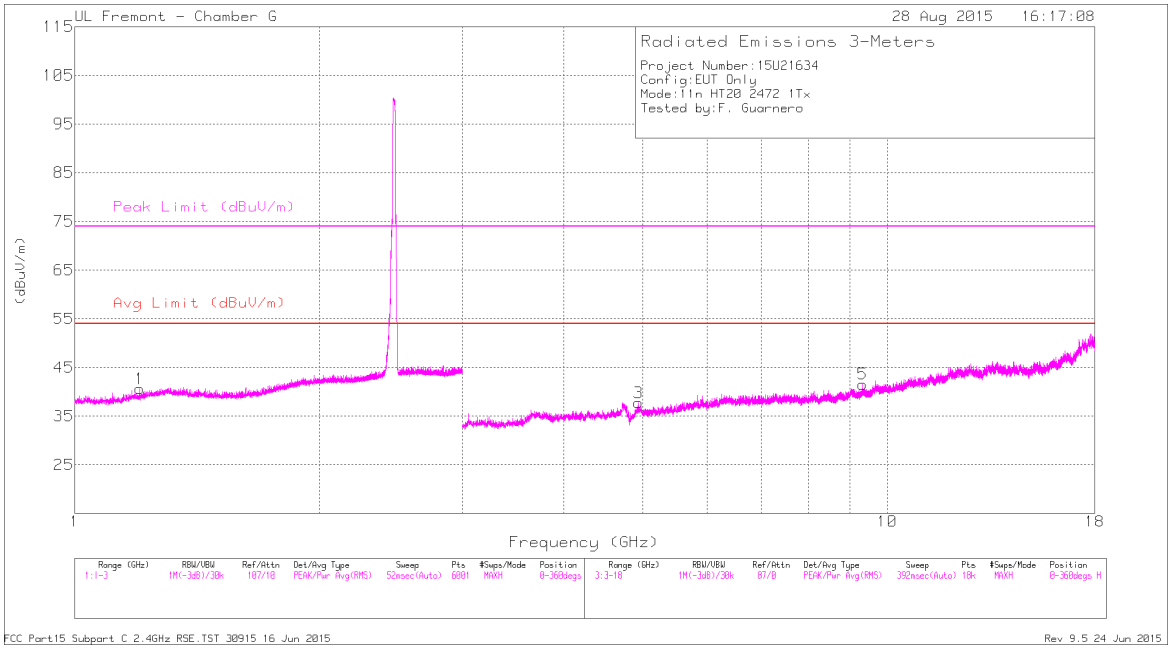
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

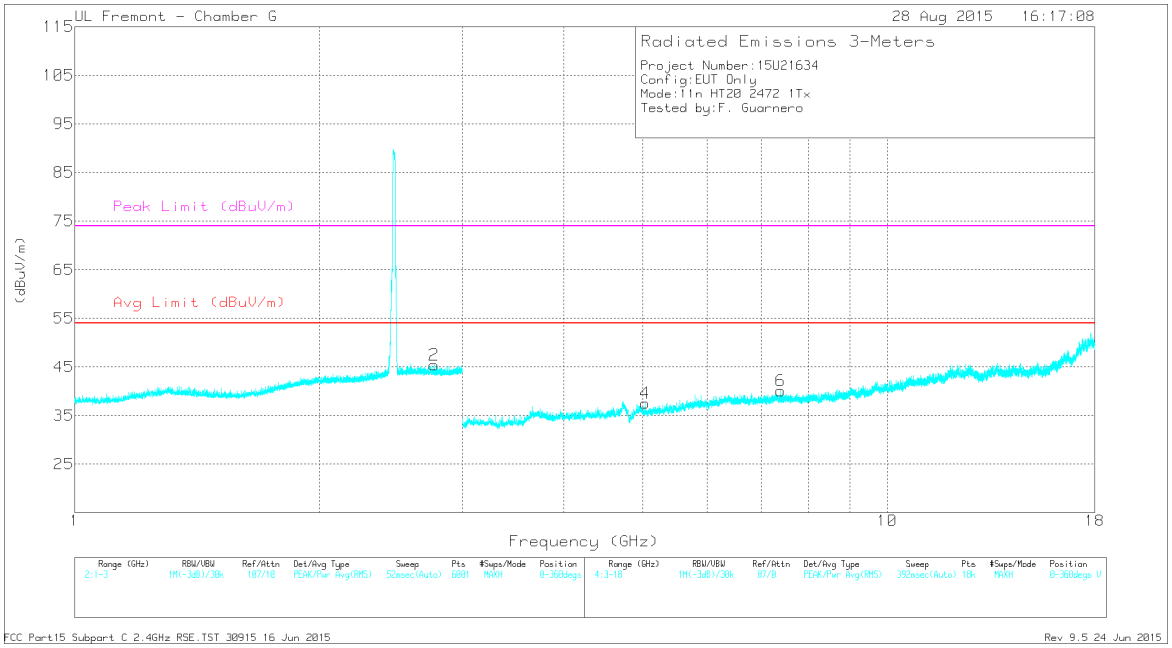
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, CH 13

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (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	* 1.201	44.15	PK2	28.4	-25.7	46.85	-	-	74	-27.15	63	169	H
	* 1.202	32.56	MAv1	28.4	-25.7	35.26	54	-18.74	-	-	63	169	H
2	* 2.768	43.92	PK2	32.3	-24.4	51.82	-	-	74	-22.18	189	222	V
	* 2.768	32.25	MAv1	32.3	-24.4	40.15	54	-13.85	-	-	189	222	V
3	* 4.94	41.9	PK2	34.1	-32.6	43.4	-	-	74	-30.6	341	282	H
	* 4.937	30.75	MAv1	34.1	-32.6	32.25	54	-21.75	-	-	341	282	H
5	* 9.331	39.36	PK2	36.5	-28.4	47.46	-	-	74	-26.54	243	306	H
	* 9.33	28.31	MAv1	36.5	-28.4	36.41	54	-17.59	-	-	243	306	H
4	* 5.037	41.46	PK2	34.2	-32.3	43.36	-	-	74	-30.64	113	193	V
	* 5.037	30.41	MAv1	34.2	-32.3	32.31	54	-21.69	-	-	113	193	V
6	* 7.388	41.3	PK2	35.6	-31	45.9	-	-	74	-28.1	269	356	V
	* 7.39	30.22	MAv1	35.6	-31	34.82	54	-19.18	-	-	269	356	V

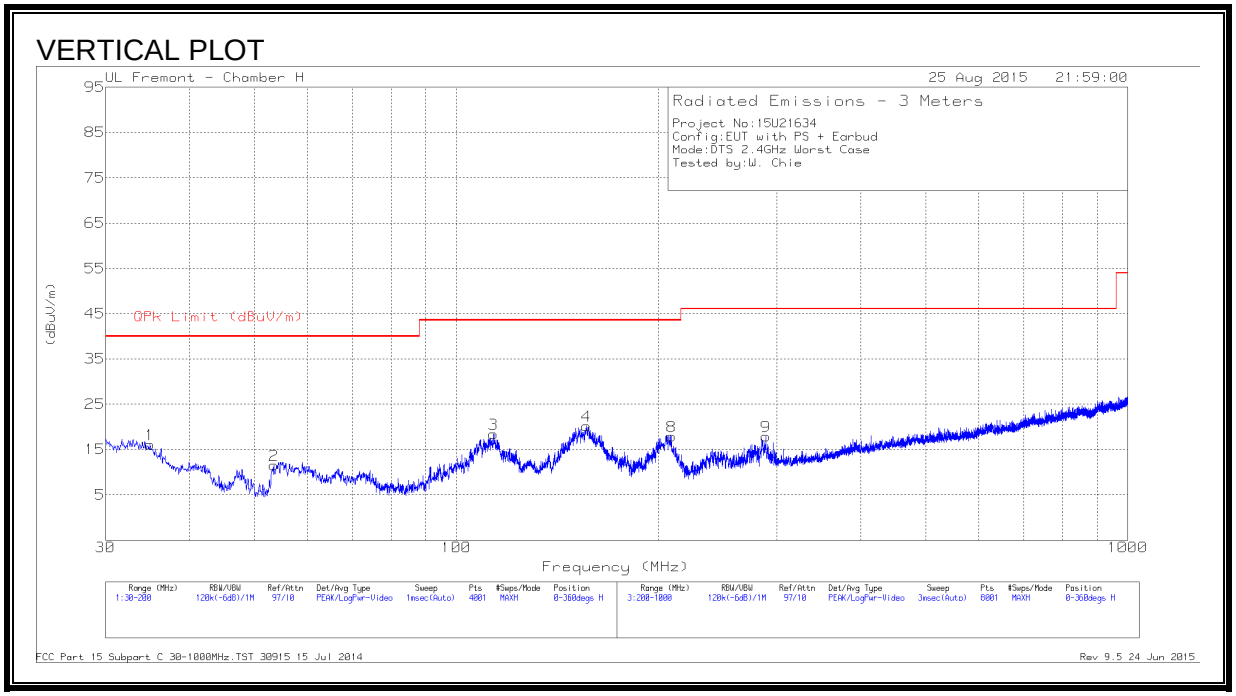
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

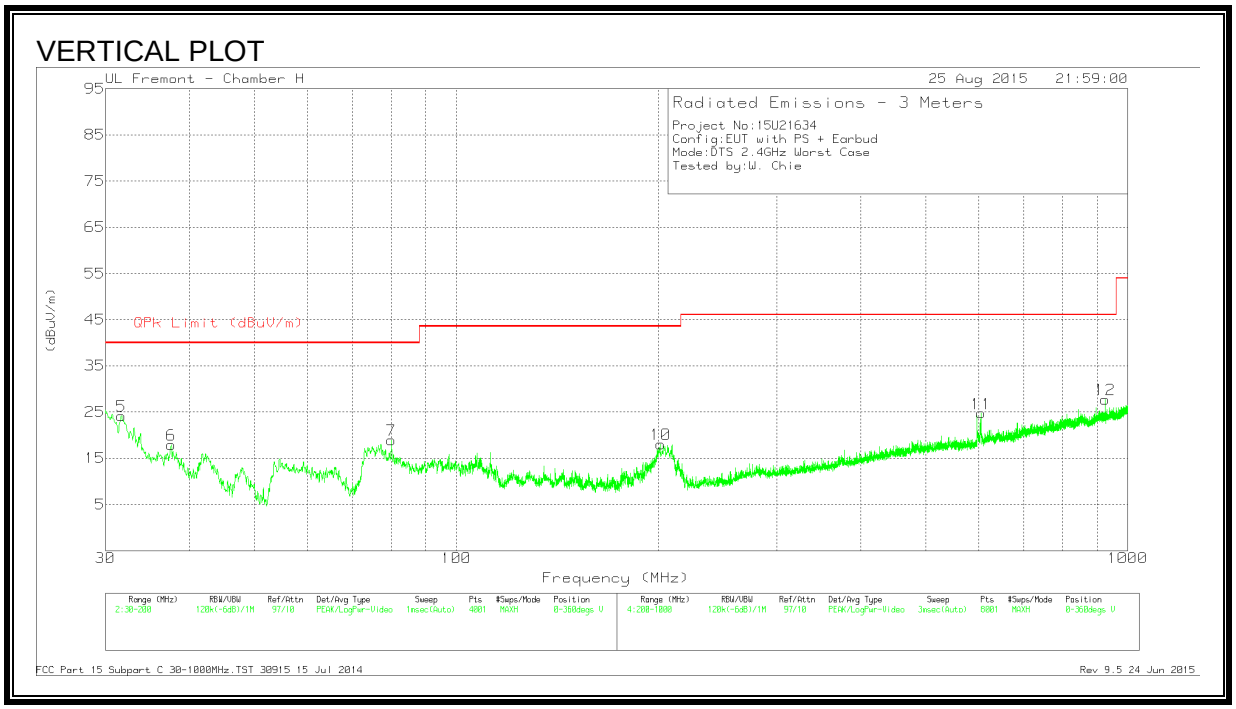
MAv1 - KDB558074 Option 1 Maximum RMS Average

8.3. WORST-CASE BELOW 1 GHz

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



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



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T900 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 113.64	35.73	Pk	13.1	-30.4	18.43	43.52	-25.09	0-360	301	H
6	* 37.565	32.5	Pk	16.6	-31.2	17.9	40	-22.1	0-360	100	V
5	31.7	34.67	Pk	20.8	-31.3	24.17	40	-15.83	0-360	100	V
1	34.9513	28.87	Pk	18.4	-31.2	16.07	40	-23.93	0-360	401	H
2	53.5025	35.33	Pk	7.2	-31	11.53	40	-28.47	0-360	401	H
7	79.98	41.79	Pk	7.8	-30.7	18.89	40	-21.11	0-360	100	V
4	156.14	38.14	Pk	12.1	-30	20.24	43.52	-23.28	0-360	201	H
10	201.5	35.78	Pk	12	-29.7	18.08	43.52	-25.44	0-360	99	V
8	209.3	37.27	Pk	10.4	-29.7	17.97	43.52	-25.55	0-360	201	H
9	288.9	33.83	Pk	13.3	-29.2	17.93	46.02	-28.09	0-360	100	H
11	604.2	33.83	Pk	18.8	-27.9	24.73	46.02	-21.29	0-360	99	V
12	924.8	31.57	Pk	22.3	-26.2	27.67	46.02	-18.35	0-360	201	V

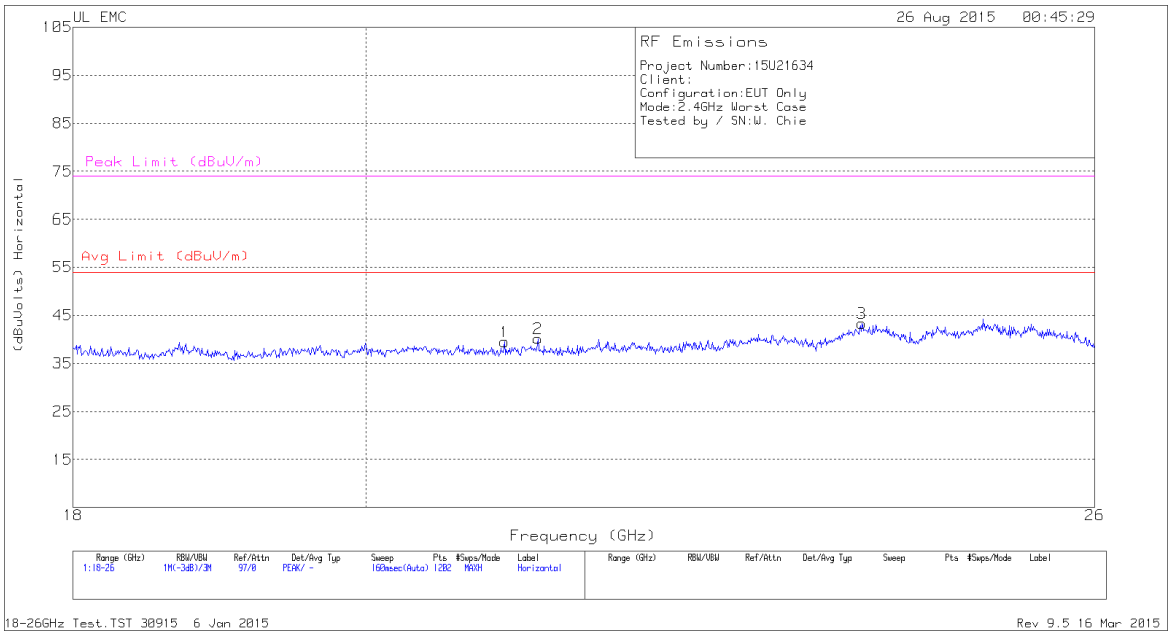
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

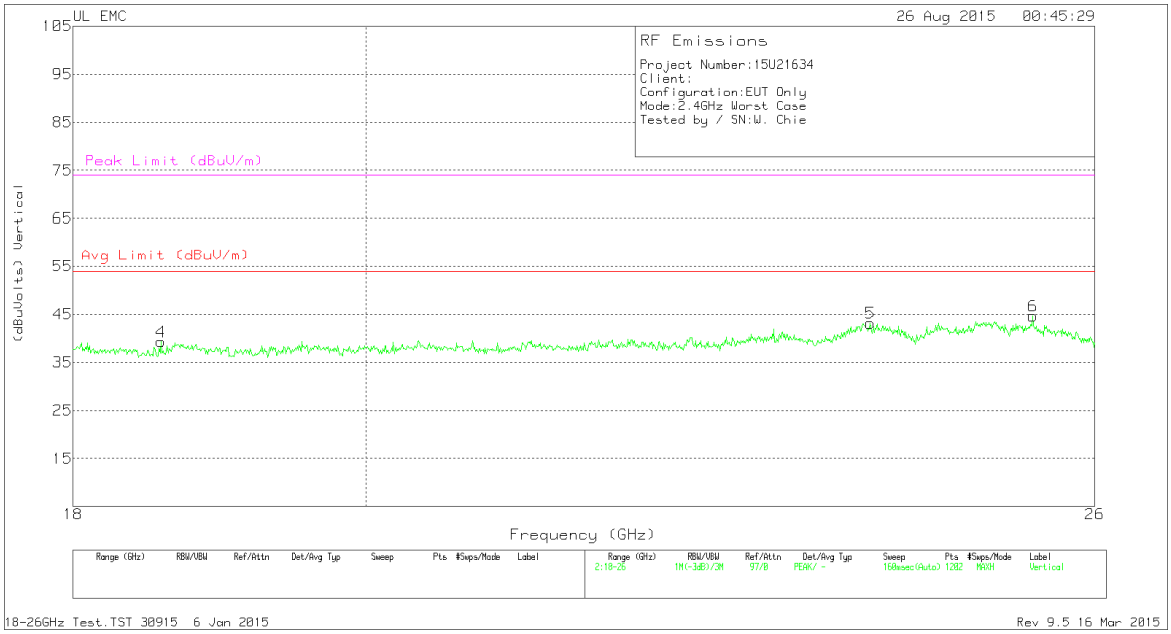
8.4. WORST-CASE 18 to 26 GHz

SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

HORIZONTAL PLOT



VERTICAL PLOT



HORIZONTAL & VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T89 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	21.024	41.9	Pk	32.5	-25.4	-9.5	39.5	54	-14.5	74	-34.5
2	21.277	41.77	Pk	33.2	-25.3	-9.5	40.16	54	-13.83	74	-33.83
3	23.908	43.33	Pk	33.4	-23.9	-9.5	43.33	54	-10.66	74	-30.66
4	18.58	41.53	Pk	32.5	-25.2	-9.5	39.33	54	-14.66	74	-34.66
5	23.982	43.67	Pk	33.3	-24.3	-9.5	43.16	54	-10.83	74	-30.83
6	25.427	44.67	Pk	33.8	-24.3	-9.5	44.66	54	-9.33	74	-29.33

Pk - Peak detector

9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBµV)	
	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.

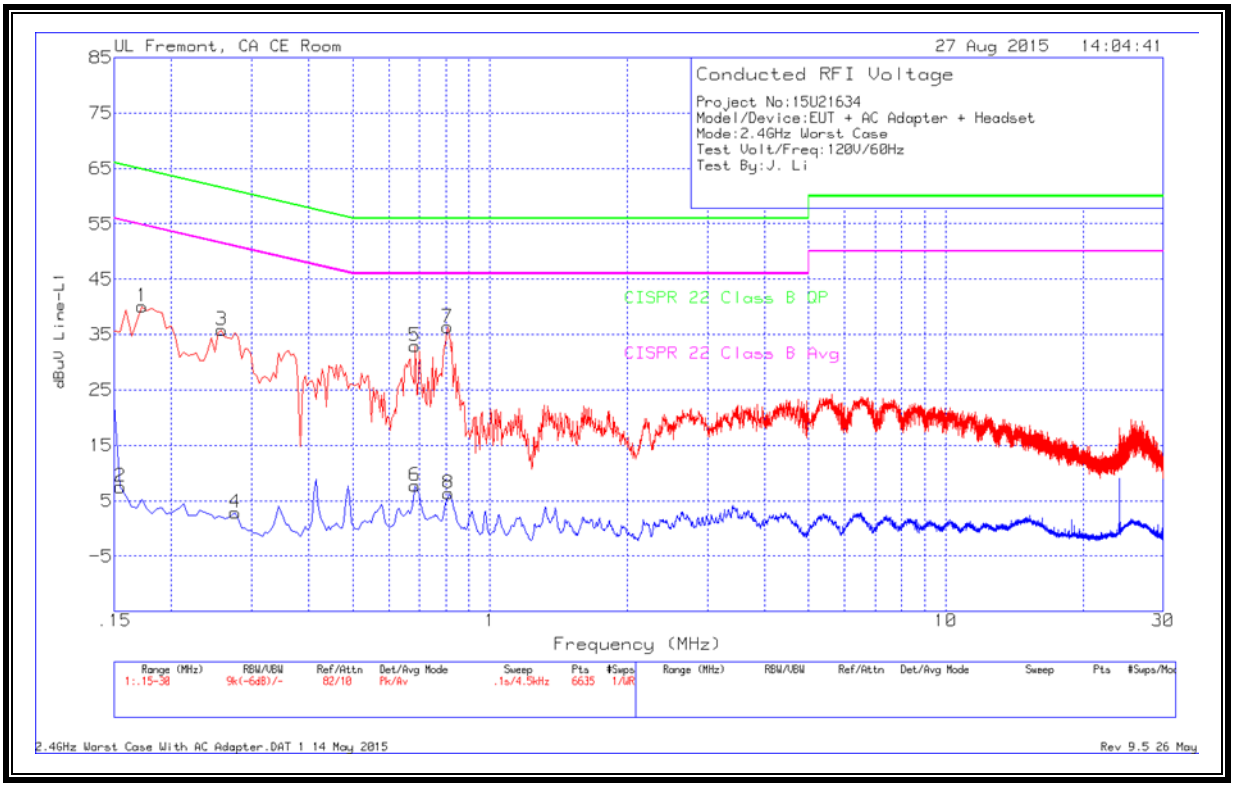
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS:

9.1. EUT POWERED BY AC/DC ADAPTER VIA USB CABLE

LINE 1



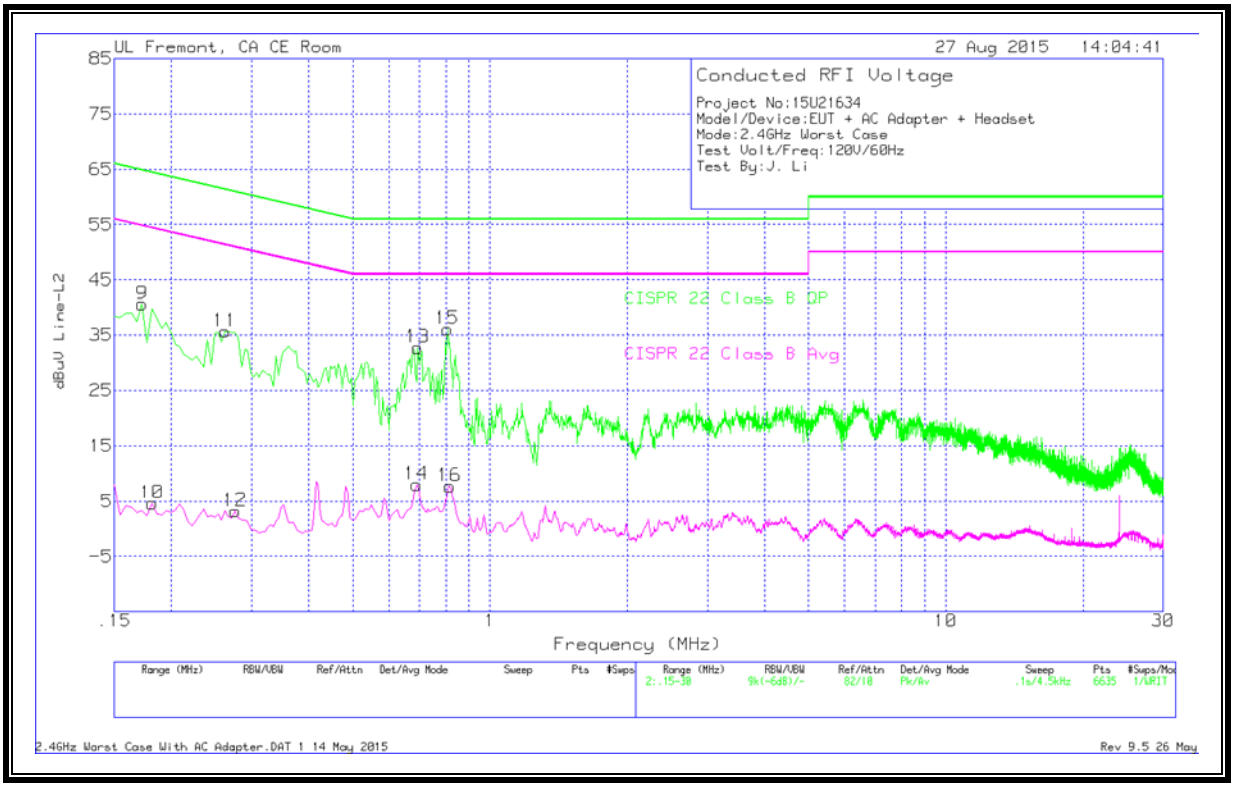
LINE 1 RESULTS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1	LC Cables 1&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
1	.1725	38.97	Pk	1.1	0	40.07	64.84	-24.77	-	-
2	.1545	6.23	Av	1.3	0	7.53	-	-	55.75	-48.22
3	.258	35.14	Pk	.7	0	35.84	61.5	-25.66	-	-
4	.276	2.26	Av	.6	0	2.86	-	-	50.94	-48.08
5	.6855	32.61	Pk	.3	0	32.91	56	-23.09	-	-
6	.6855	7.42	Av	.3	0	7.72	-	-	46	-38.28
7	.807	36.06	Pk	.3	0	36.36	56	-19.64	-	-
8	.8115	6.06	Av	.3	0	6.36	-	-	46	-39.64

Pk - Peak detector

Av - Average detection

LINE 2



LINE 2 RESULTS

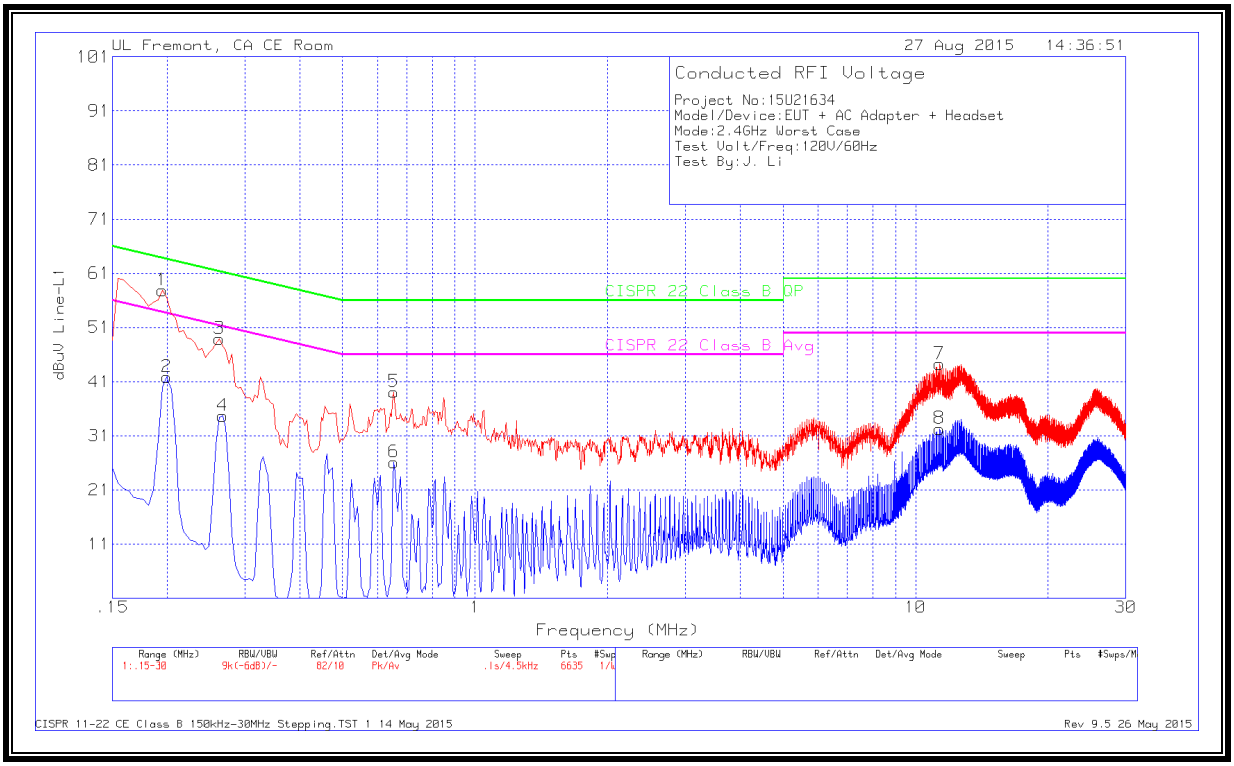
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2	LC Cables 2&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
9	.1725	39.42	Pk	1.2	0	40.62	64.84	-24.22	-	-
10	.1815	3.42	Av	1.2	0	4.62	-	-	54.42	-49.8
11	.2625	34.97	Pk	.7	0	35.67	61.35	-25.68	-	-
12	.276	2.51	Av	.7	0	3.21	-	-	50.94	-47.73
13	.6945	32.44	Pk	.3	0	32.74	56	-23.26	-	-
14	.69	7.69	Av	.3	0	7.99	-	-	46	-38.01
15	.807	35.79	Pk	.3	0	36.09	56	-19.91	-	-
16	.816	7.38	Av	.3	0	7.68	-	-	46	-38.32

Pk - Peak detector

Av - Average detection

9.2. EUT POWERED BY HOST PC VIA USB CABLE

LINE 1



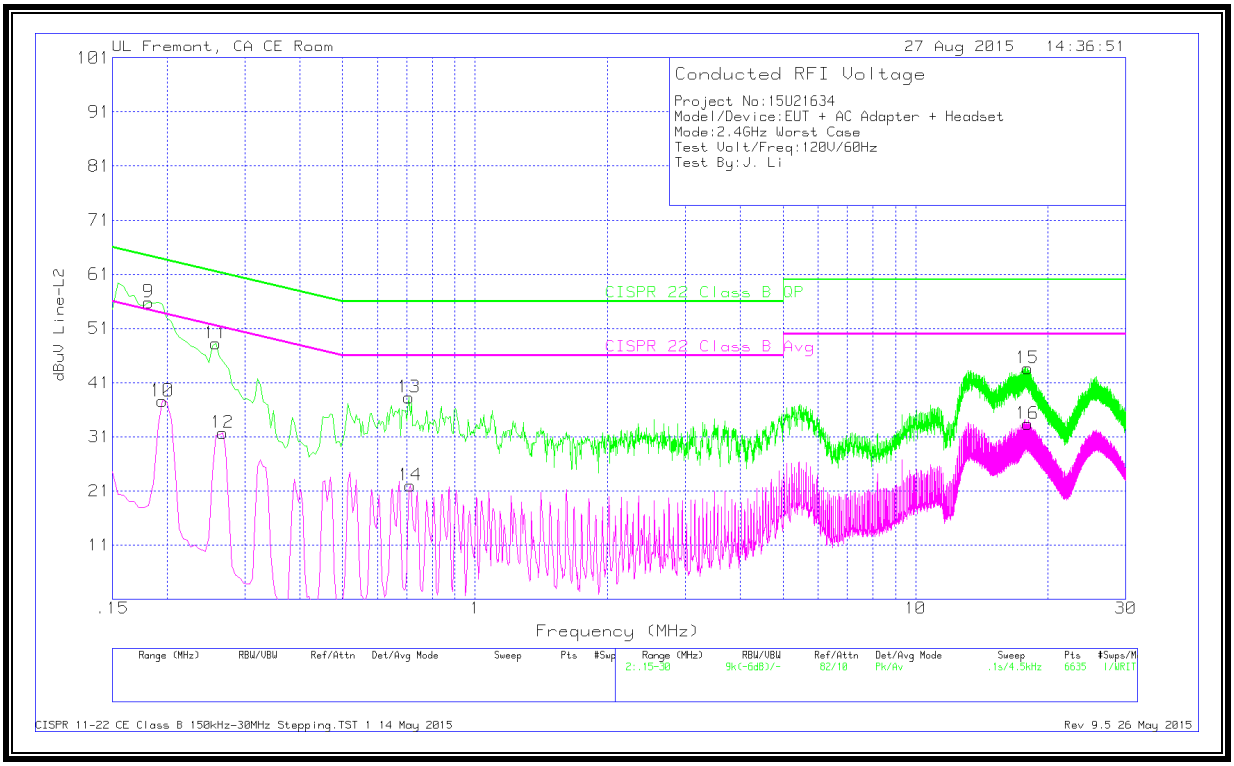
LINE 1 RESULTS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1	LC Cables 1&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
1	.195	56.86	Pk	1	0	57.86	63.82	-5.96	-	-
2	.1995	40.98	Av	.9	0	41.88	-	-	53.63	-11.75
3	.2625	48.23	Pk	.7	0	48.93	61.35	-12.42	-	-
4	.267	34.07	Av	.6	0	34.67	-	-	51.21	-16.54
5	.654	38.79	Pk	.3	0	39.09	56	-16.91	-	-
6	.654	25.83	Av	.3	0	26.13	-	-	46	-19.87
7	11.319	43.86	Pk	.2	.2	44.26	60	-15.74	-	-
8	11.319	31.89	Av	.2	.2	32.29	-	-	50	-17.71

Pk - Peak detector

Av - Average detection

LINE 2



LINE 2 RESULTS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2	LC Cables 2&3	Corrected Reading dBuV	CISPR 22 Class B QP	Margin (dB)	CISPR 22 Class B Avg	Margin (dB)
9	.1815	54.66	Pk	1.2	0	55.86	64.42	-8.56	-	-
10	.195	36.59	Av	1	0	37.59	-	-	53.82	-16.23
11	.258	47.57	Pk	.7	0	48.27	61.5	-13.23	-	-
12	.267	31.05	Av	.7	0	31.75	-	-	51.21	-19.46
13	.708	37.97	Pk	.3	0	38.27	56	-17.73	-	-
14	.7125	21.73	Av	.3	0	22.03	-	-	46	-23.97
15	17.961	43.16	Pk	.3	.2	43.66	60	-16.34	-	-
16	17.961	32.88	Av	.3	.2	33.38	-	-	50	-16.62

Pk - Peak detector

Av - Average detection