



**FCC 47 CFR PART 15 SUBPART C**

**CERTIFICATION TEST REPORT**

**FOR**

**HOME AUTOMATION GATEWAY PRODUCT: 802.11a/b/g/n 2x2 MIMO,  
BLUETOOTH, BLUETOOTH LOW ENERGY, ZigBee and Z-WAVE**

**MODEL NUMBER: ID: 087**

**FCC ID: DKNCS08**

**REPORT NUMBER: R10526502-RF1A**

**ISSUE DATE: 2015-05-13**

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Revision History

<u>Rev.</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
--	2015-05-06	Initial Issue	Jeff Moser
1	2015-05-13	Revised Power Spectral Density data to remove duty cycle reference and added Radiated Emissions procedure.	Jeff Moser

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# 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** EHOSTAR TECHNOLOGIES LLC  
90 INVERNESS CIRCLE EAST  
ENGLEWOOD CO, 80112, USA

**EUT DESCRIPTION:** HOME AUTOMATION GATEWAY PRODUCT

**MODEL:** ID: 087

**SERIAL NUMBER:** FCC3, FCC6 (RE06039Z00445L)

**DATE TESTED:** February 23, 2015 – April 29, 2015

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Pass

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

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

Approved & Released For  
UL Verification Services Inc. By:



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Project Lead  
UL Verification Services Inc.

Prepared By:



Jeff Moser  
EMC Program Manager  
UL LLC – Consumer Technology Division

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2009, and KDB 558074 D01 v03r02.

Note – Radiated testing above 1GHz was performed on a 1.5m table height, per ANSI C63.10: 2013. All other testing was performed per ANSI C63.10: 2009.

## 3. FACILITIES AND ACCREDITATION

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

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

The onsite chambers (A & C) are covered under Industry Canada company address code 2180C with site numbers 2180C -1 through 2180C-2, respectively.

UL LLC (RTP) is accredited by NVLAP, Laboratory Code 200246-0. The full scope of accreditation can be viewed at <http://ts.nist.gov/standards/scopes/2002460.htm>.

## 4. CALIBRATION AND UNCERTAINTY

### 4.1. MEASURING INSTRUMENT CALIBRATION

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

### 4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

### 4.3. MEASUREMENT UNCERTAINTY

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

Test	Uncertainty
Conducted Emissions (0.150-30MHz)	+/- 2.37 dB
Total RF power, conducted	+/- 0.45 dB
RF power density, conducted	+/- 1.5 dB
Spurious emissions, conducted	+/- 1.46 dB
Radiated Emissions (30-1000 MHz)	+/- 6.04 dB (3m)
Radiated Emissions (1-6 GHz)	+/- 5.96 dB
Radiated Emissions (6-18 GHz)	+/- 6.10 dB
Radiated Emissions (18-26 GHz)	+/- 6.81 dB

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

## 5. EQUIPMENT UNDER TEST

### 5.1. DESCRIPTION OF EUT

The EUT, EchoStar's ID:087 Home Automation Gateway Product, is a controller with a portfolio of connected devices offered as part of connected home services which allows the user to manage their home automation connected devices from the TV and their connected mobile hand held devices.

The EUT contains an 802.11a/b/g/n (n - 20MHz/40MHz) 2x2 MIMO transceiver, along with Bluetooth, Bluetooth Low Energy, ZigBee and Z-Wave (908 MHz and 916 MHz) transceivers.

The 802.11a/b/g/n 2.4/5GHz radio in the ID:087 is derived from the MediaTek MT7632U chipset.

This report covers the 802.11 b/g/n 2.4 GHz technologies. Other reports were issued to cover the other radio technologies:

- R10526502-RF2: 802.11 a/n 5 GHz
- R10526502-RF3: Bluetooth
- R10526502-RF4: Bluetooth Low Energy
- R10526502-RF5: ZigBee
- R10526502-RF6: Z-Wave

### 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 - 2462	802.11b	18.76	75.16
2412 - 2462	802.11g	20.78	119.67
2412 - 2462	802.11n HT20	23.73	236.05
2422 - 2452	802.11n HT40	15.21	33.19



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### **5.3. DESCRIPTION OF AVAILABLE ANTENNAS**

The 802.11a/b/g/n 2.4/5GHz radio uses two Airgain, model N2420DS series antennas.

WLAN Antenna 0 has a gain of 3.1dBi in the 2.4GHz band and 2.5dBi in the 5GHz band.  
WLAN Antenna 1 has a gain of 3.1dBi in the 2.4GHz band and 2.5dBi in the 5GHz band.

Antenna 0 is J21 u.fl on the PCB and has a short cable, Antenna 1 is J20 u.fl on the PCB and has a longer cable.

The Zigbee antenna is a trace antenna on the PCB. The trace antenna has a gain of 3dBi.

The Bluetooth antenna is a trace antenna on the PCB. The trace antenna has a gain of 3dBi

The Z-wave antenna is a trace antenna on the PCB. The trace antenna has a gain of 1.6dBi.

### **5.4. SOFTWARE AND FIRMWARE**

The firmware in all units was: Linux kernel version 3.1.10

The driver for Bluetooth: HCI Control 1.0

The driver SW for Zigbee: Nodetest version 1.0

The driver for Z-wave: ZWave test ZM5304

The driver for Wi-Fi: Linux MT7662 0.0.00

The test utility SW: Python Test Scripts rev. 1.0

## 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 device is a table-top device and was positioned as such during radiated and line-conducted testing.

Worst-case data rates as provided by the client and confirmed:

802.11b mode: 1 Mbps  
802.11g mode: 6 Mbps  
802.11n HT20mode: MCS8  
802.11n HT40mode: MCS8

Radiated emissions for EUT with antenna was performed and passed; therefore, antenna port spurious was not performed.

Note Regarding desired powered for each mode:

- 802.11b – This mode was set so that all channels are set for the same power.
- 802.11g – This mode was set so the channels had a stair-step power setting: Channels 1-4 are set for the same power, Channels 5-7 are set for the same power and Channels 8-11 are set for the same power. Channels 1-4 and 8-11 are set to have the same output power where Channels 5-7 are set for a higher power.
- 802.11n – These channels are set for a bell-curve power where the edge channels are lower and the middle channels are higher.

## 5.6. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
EUT AC adapter	LITEON	PB-1180-2ES1	ETC1444046079	-
Laptop PC	HP	EliteBook 8470p	CNU342CL9Z	-
Laptop PC AC adapter	HP	677774-001	WCNXA0C3U5IA7F	

### I/O CABLES

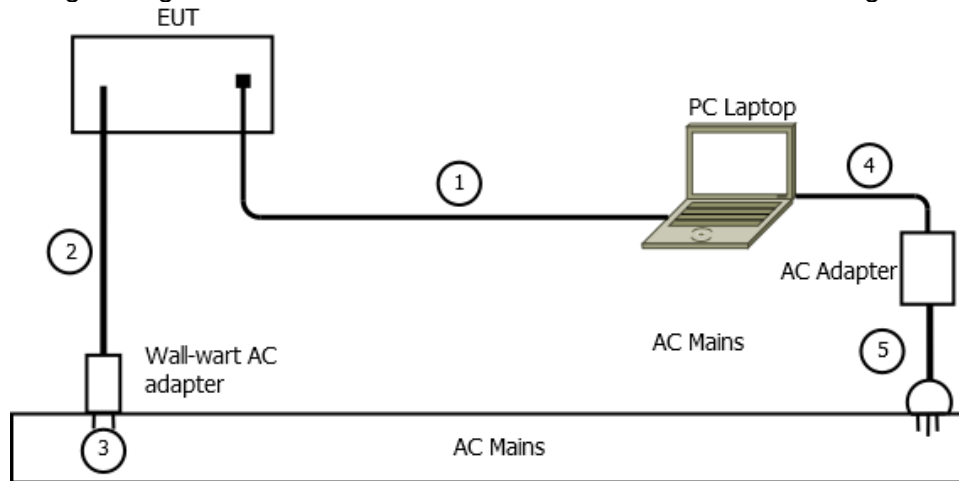
I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	Ethernet	1	RJ45	CAT5UTP	15	Connection between laptop PC and EUT used to control the transmitter function of the EUT.
2	DC (12V)	1	2C DC	Unshielded	1.8	Wall-wart AC adapter DC output to EUT. Non-detachable.
3	AC	1	2C AC	N/A	0	Wall-wart AC adapter's AC input.
4	DC	1	2C DC	Unshielded	1.8	Laptop AC adapter output to laptop PC. Non-detachable
5	AC	1	3C AC	Unshielded	1.8	Laptop PC power adapter AC input. Detachable.

### TEST SETUP

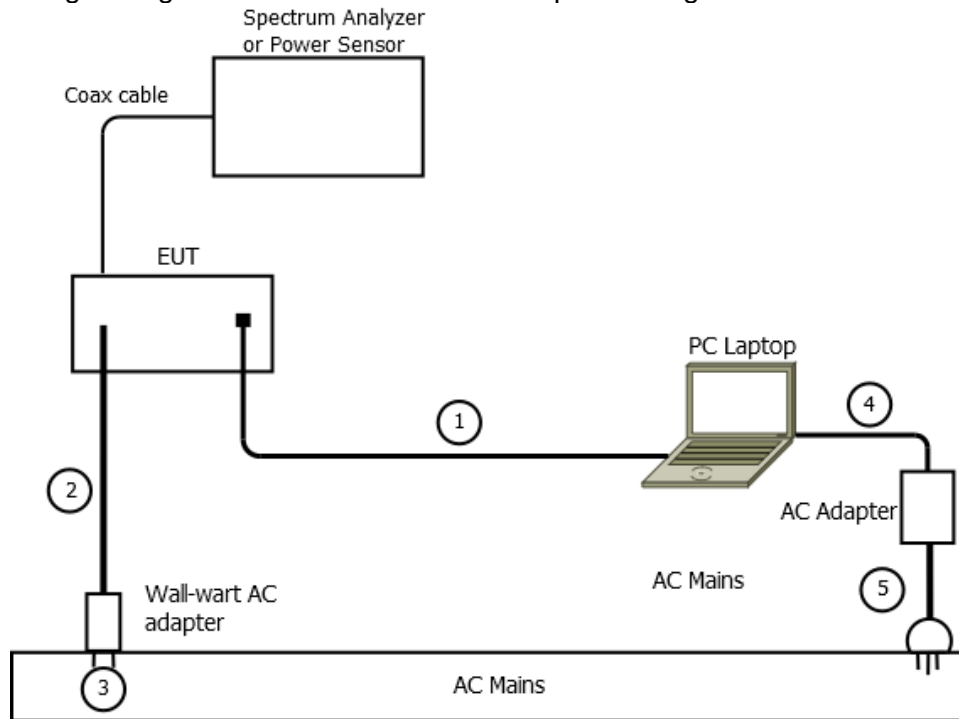
The EUT was configured as a table-top device connected to a located laptop PC over an Ethernet cable. This Ethernet connection was used to control the transmitter function of the EUT.

**SETUP DIAGRAM FOR TESTS**

The following arrangement was used for radiated and line-conducted testing.



The following arrangement was used for antenna-port testing.



## 6. TEST AND MEASUREMENT EQUIPMENT

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

### Radiated Disturbance Emissions (E-field) – Chamber C

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
AT0066	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB1	2014-07-10	2015-07-31
AT0062 (Testing after 02/28/2015)	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2014-07-22	2015-07-31
AT0067 (Testing before 03/01/2015)	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2014-02-19	2015-02-28
AT0063	Horn Antenna, 18-26.5GHz	ARA	MWH-1826/B	2014-07-23	2015-07-31
AT0061	Horn Antenna, 26.5-40GHz	ARA	MWH-2640/B	2014-07-23	2015-07-31
SAC_G (Hybrid)	Gain-Loss string for Hybrid antenna at 3m	Various	Various	2015-02-01	2016-02-29
SAC_G (3117)	Gain-Loss string for 3117 antenna at 3m	Various	Various	2015-02-01	2016-02-29
SAC_G (MWH-1826/B)	Gain-Loss string for MWH-1826/B antenna at 3m	Various	Various	2015-01-26	2016-01-31
SAC_G (MWH-2640/B)	Gain-Loss string for MWH-2640/B antenna at 3m	Various	Various	2015-01-26	2016-01-31
SA0018	Spectrum Analyzer	Agilent	N9030A	2014-06-26	2015-06-30
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
HPF009	1GHz High-pass Filter	Micro-Tronics	HPM17672	2015-01-28	2016-01-31
HI0069	Temp/Humid/Pressure Meter	Cole-Parmer	99760-00	2014-06-27	2015-06-27

Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	<b>Common Equipment</b>				
SA0020	Spectrum Analyzer, 3Hz-44GHz	Agilent Technologies	E4446	2015-02-26	2016-02-29
PAR0037	Power Meter, 100kHz to 110 GHz	HP	437B	2015-01-19	2016-01-31
MM0143	Digital Multimeter	Fluke	175	2014-09-04	2016-09-30
HI0069	Temp/Humid/Pressure Meter	Cole-Parmer	99760-00	2014-06-27	2015-06-27

Power-line Conducted Disturbance Emissions - Voltage

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
SA0021	EMI Test Receiver 9kHz-3.6GHz	Rohde & Schwarz	ESR3	2014-05-26	2015-05-31
ATA509	Coaxial cable, 20 ft., BNC - male to BNC-male	UL	RG-223	2014-09-15	2015-07-31
HI0041	Temp/Humid/Pressure Meter	Cole-Parmer	99760-00	2015-03-23	2016-03-31
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
ATA508	Transient Limiter, 0.009 to 100 MHz	Electro-Metrics	EM 7600	2014-09-03	2015-09-30
LISN002 (EUT)	LISN, 50-ohm/50-uH, 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50-25-2-01-550V	2014-09-04	2015-09-30
LISN003 (AUX)	LISN, 50-ohm/50-uH, 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50-25-2-01-550V	2014-09-04	2015-09-30

---

## 7. MEASUREMENT METHODS

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

Output Power: KDB 558074 D01 v03r02, Section 9.2.3.1.

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

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

Out-of-band emissions in restricted bands: KDB 558074 D01 v03r02, Section 12.0.



## 8. ANTENNA PORT TEST RESULTS

### 8.1. ON TIME AND DUTY CYCLE

#### LIMITS

None; for reporting purposes only.

#### PROCEDURE

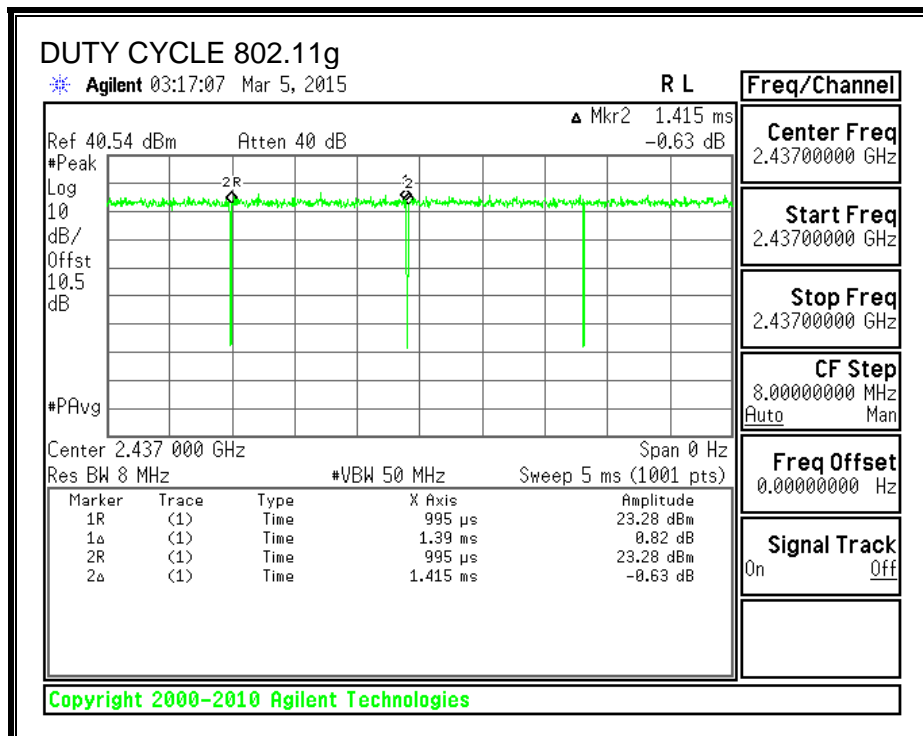
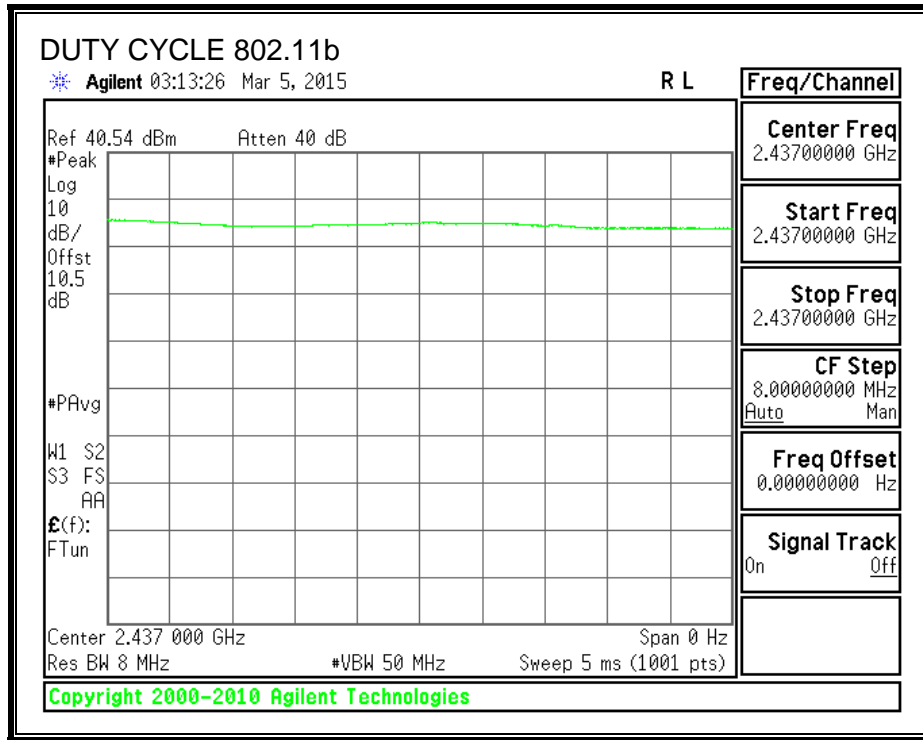
KDB 558074 Zero-Span Spectrum Analyzer Method.

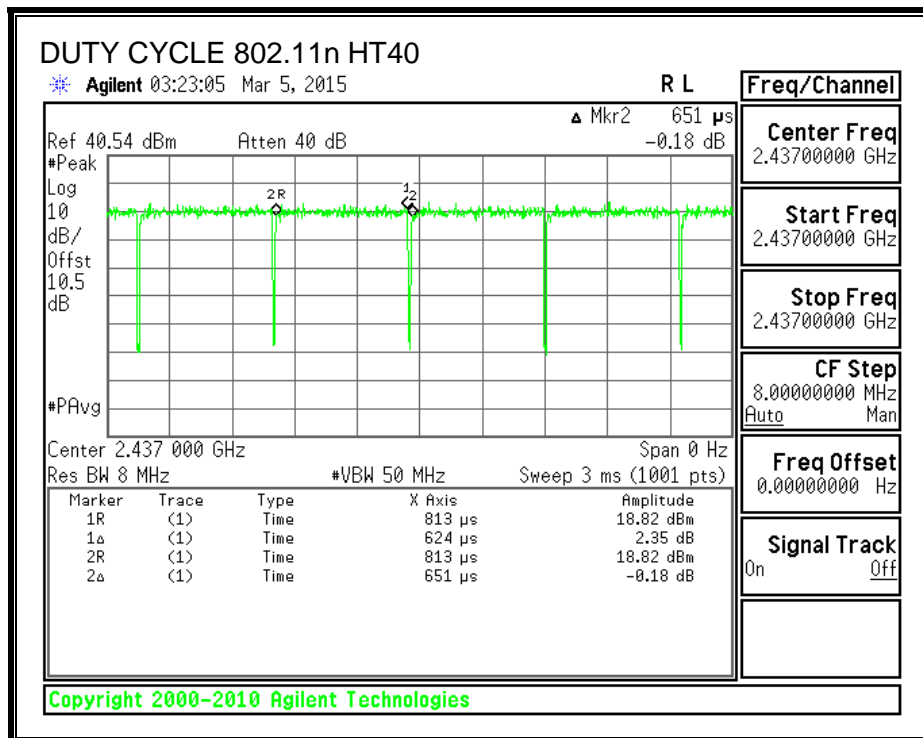
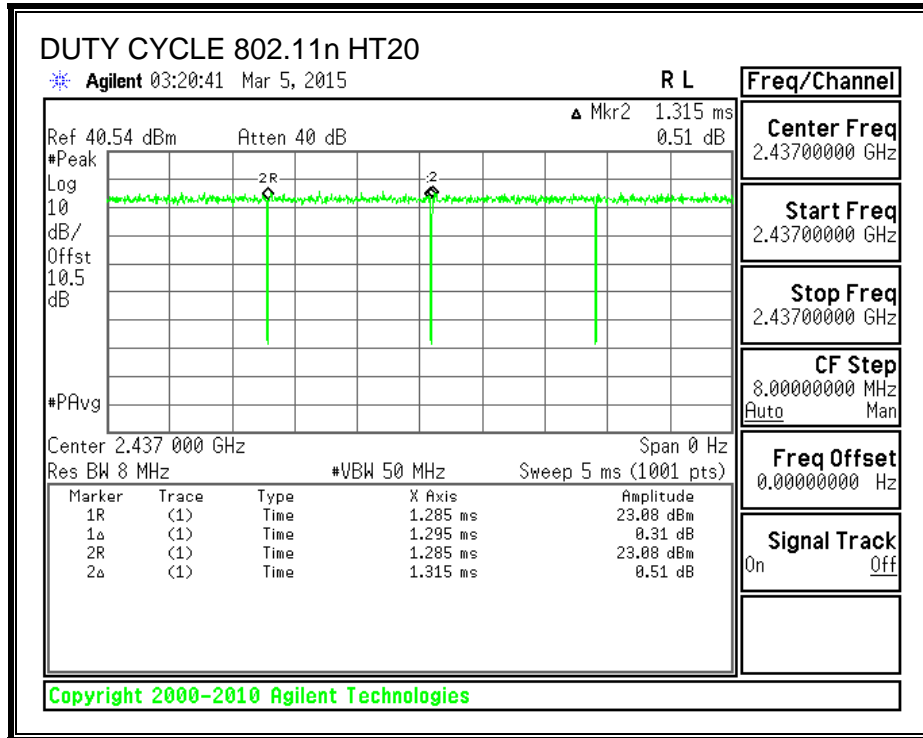
#### ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/B Minimum VBW (kHz)
<b>2.4GHz Band</b>						
802.11b	1.000	1.000	1.000	100.00%	0.00	0.010
802.11g	1.390	1.415	0.982	98.23%	0.00	0.010
802.11n HT20	1.295	1.315	0.985	98.48%	0.00	0.010
802.11n HT40	0.624	0.651	0.959	95.85%	0.18	1.603

**DUTY CYCLE PLOTS**

**2.4 GHz BAND**





## 8.2. 802.11b MODE IN THE 2.4 GHz BAND

### 8.2.1. 6 dB BANDWIDTH

#### LIMITS

FCC §15.247 (a) (2)

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

#### RESULTS – 802.11b

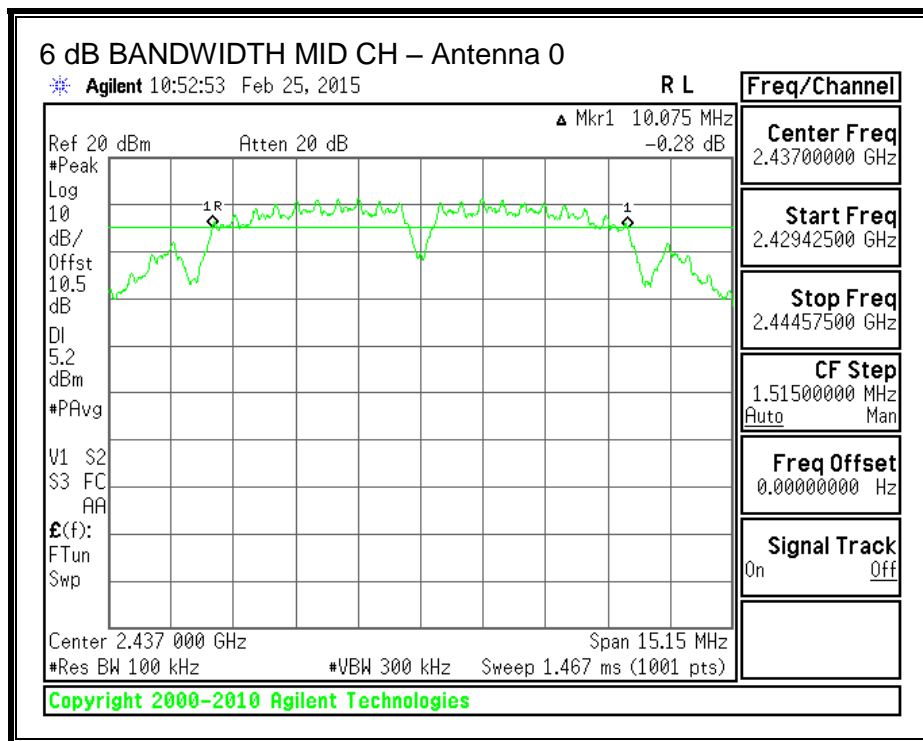
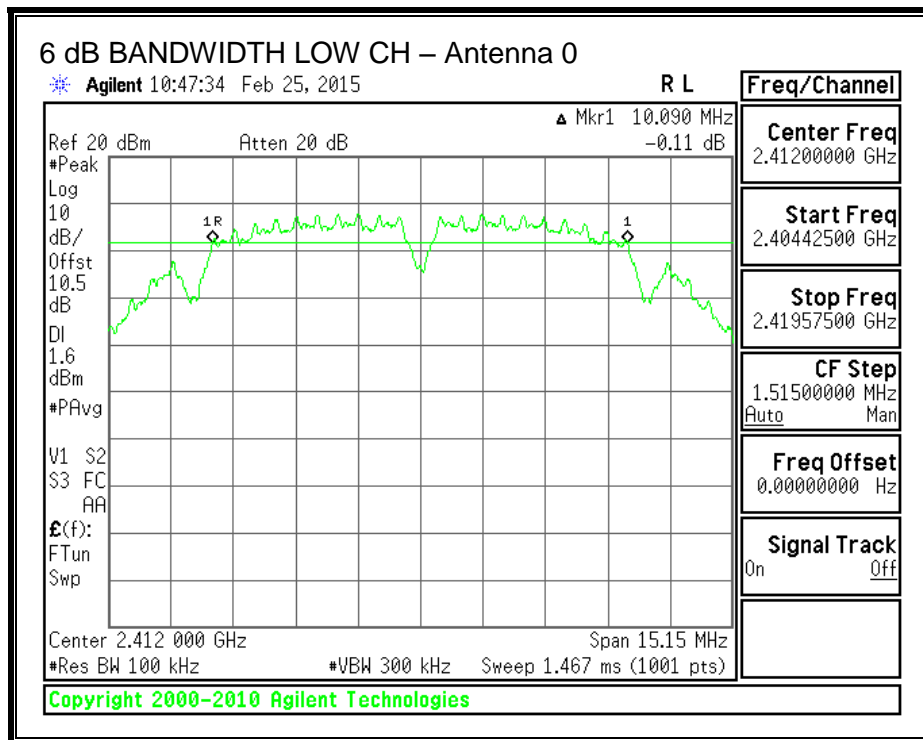
Antenna 0

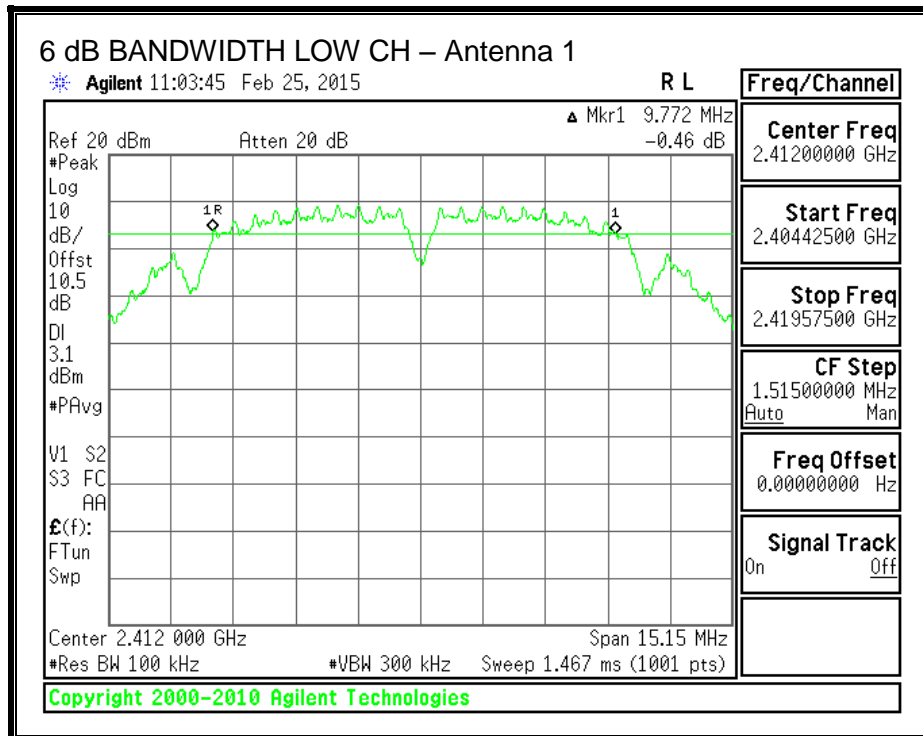
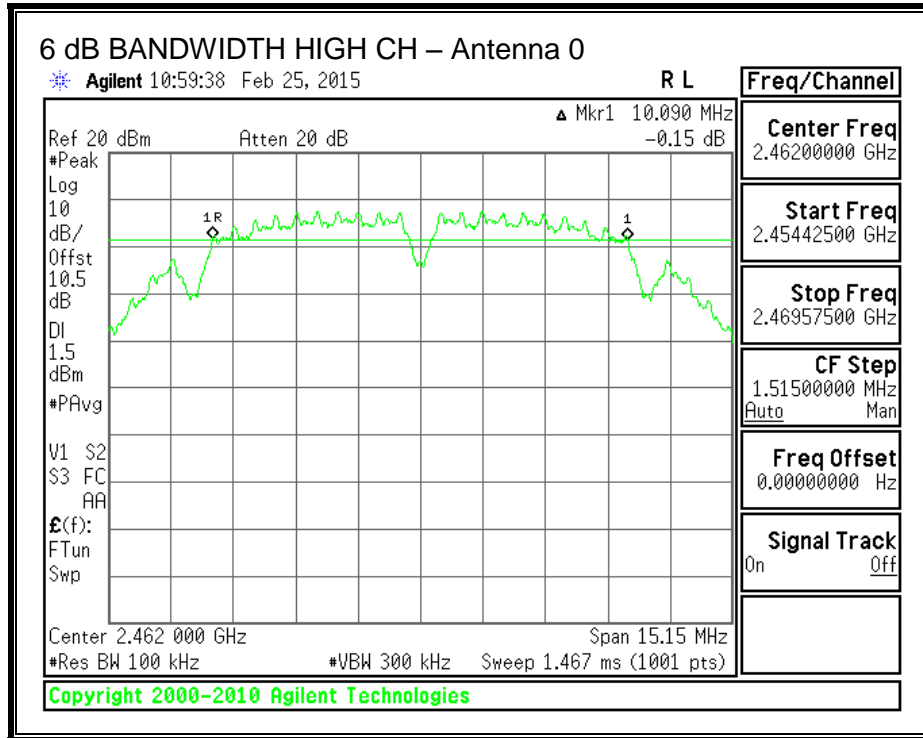
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	10.090	0.5
Mid	2437	10.075	0.5
High	2462	10.090	0.5

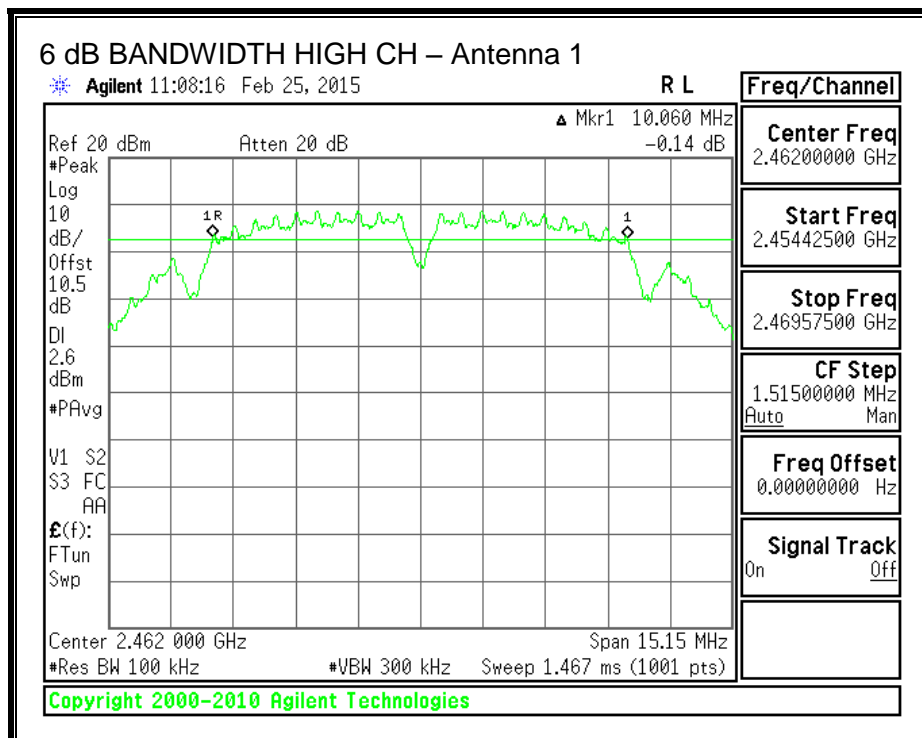
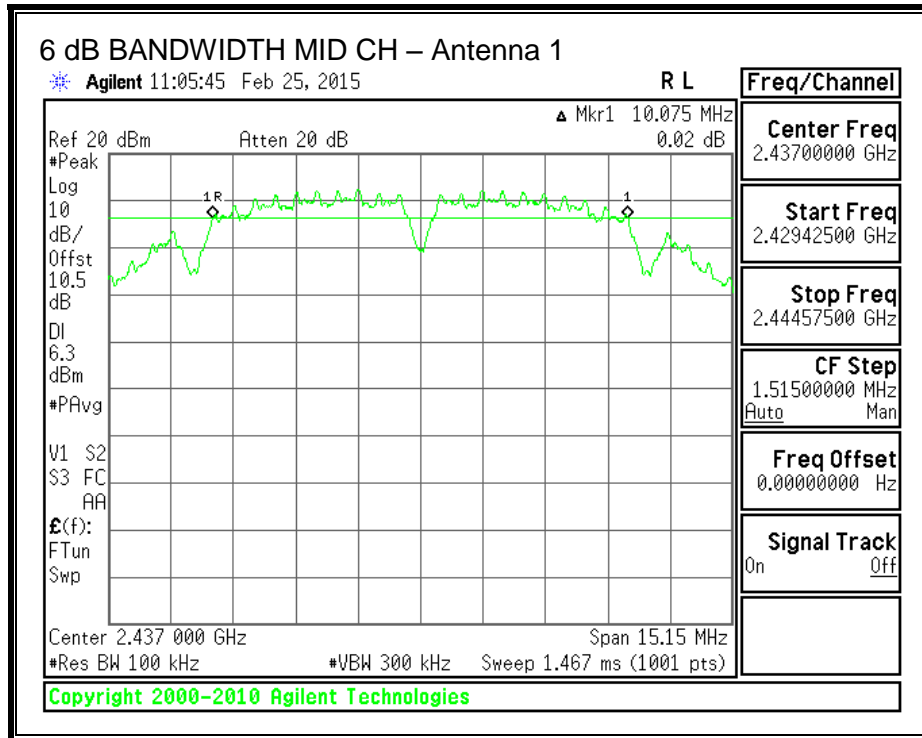
Antenna 1

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	9.772	0.5
Mid	2437	10.075	0.5
High	2462	10.060	0.5

**6 dB BANDWIDTH**







## 8.2.2. 99% BANDWIDTH

### LIMITS

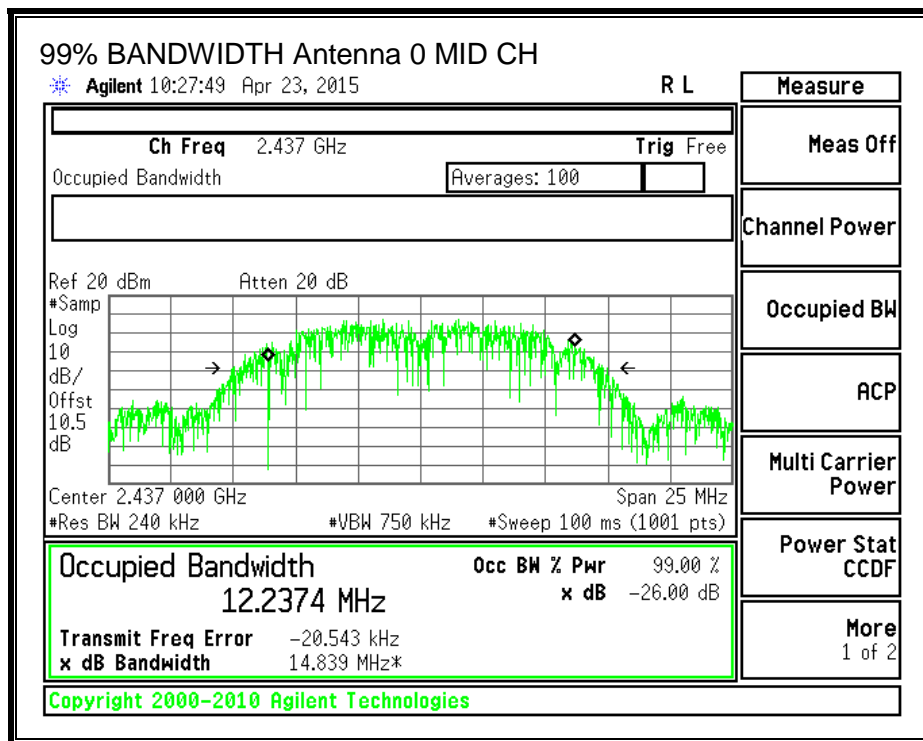
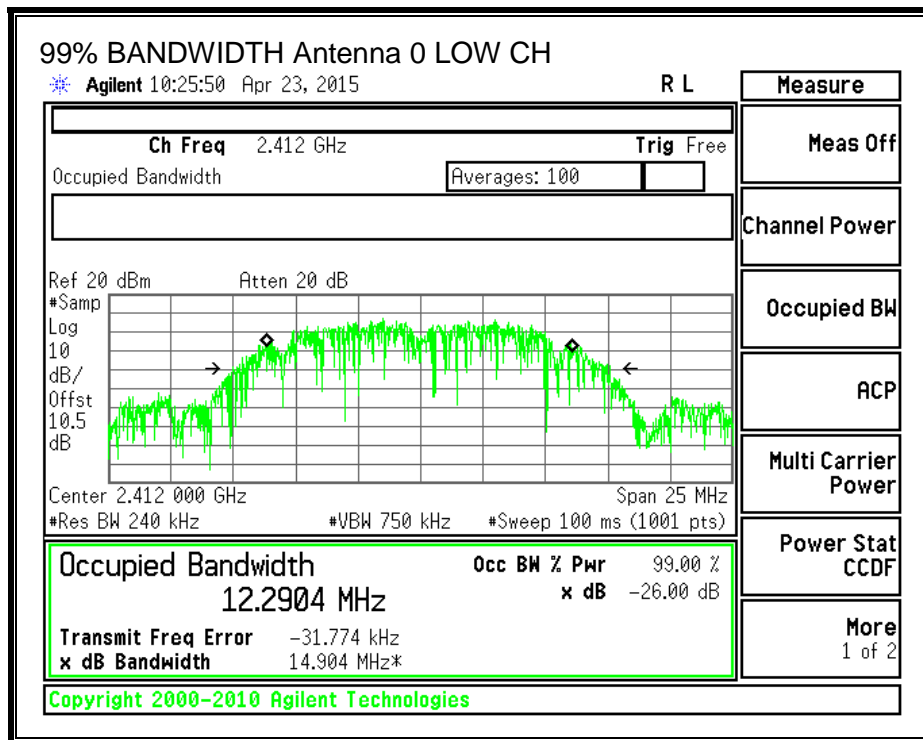
None; for reporting purposes only.

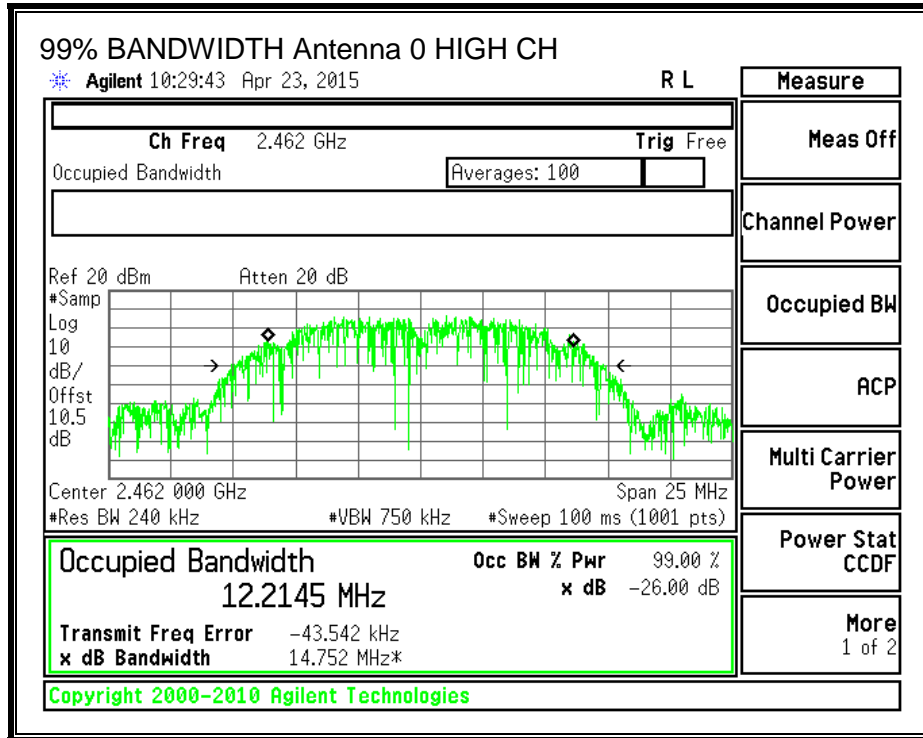
### RESULTS – 802.11b

Channel	Frequency (MHz)	99% BW Ant 0 (MHz)	99% BW Ant 1 (MHz)
Low	2412	12.2904	12.3077
Mid	2437	12.2374	12.2539
High	2462	12.2145	12.2355

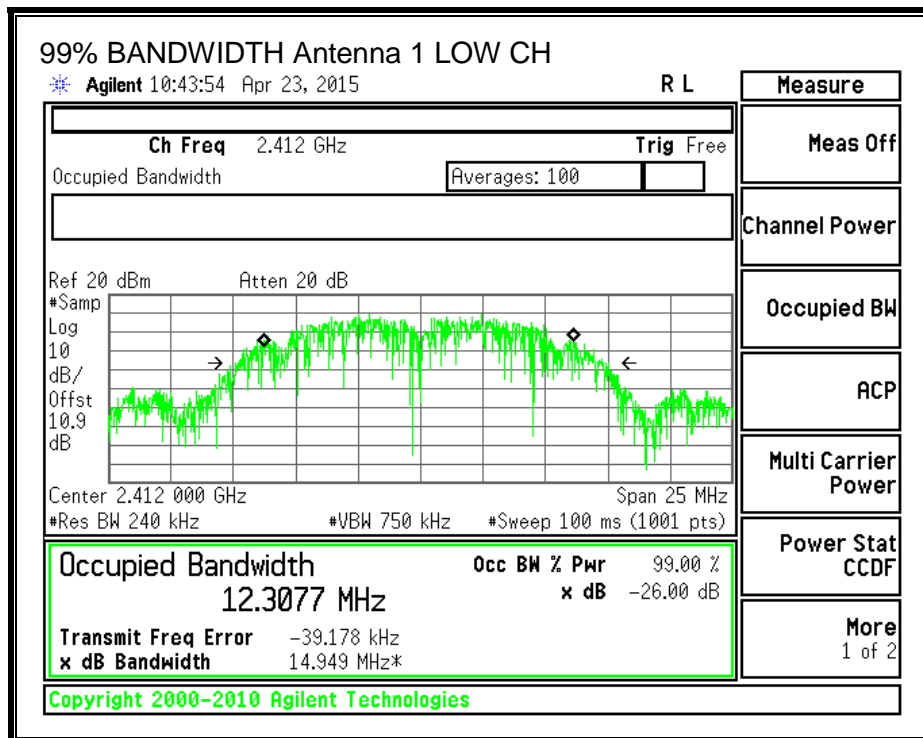


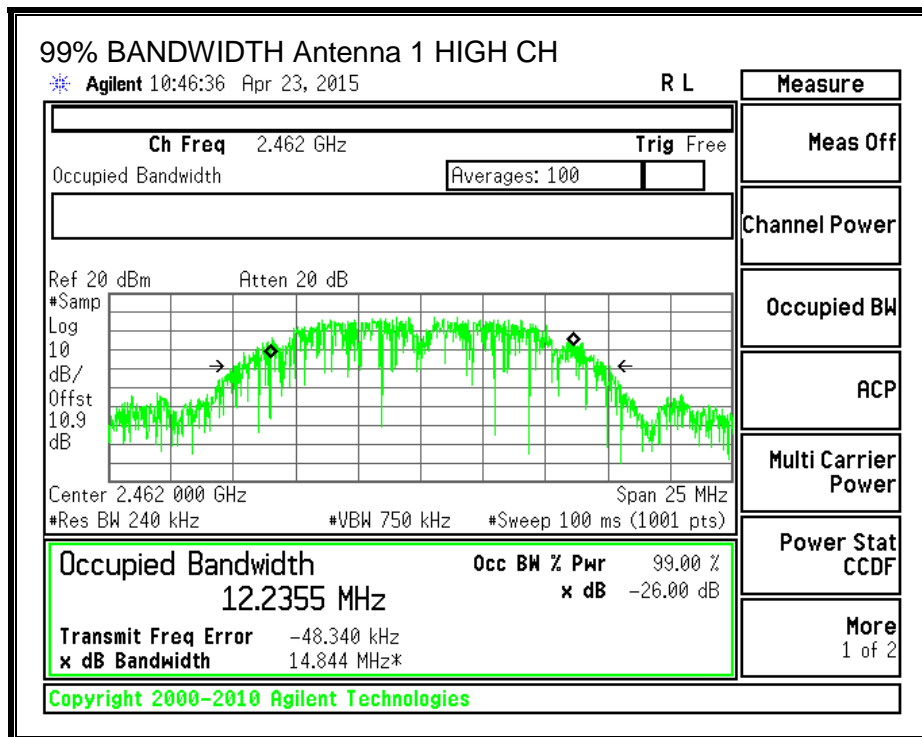
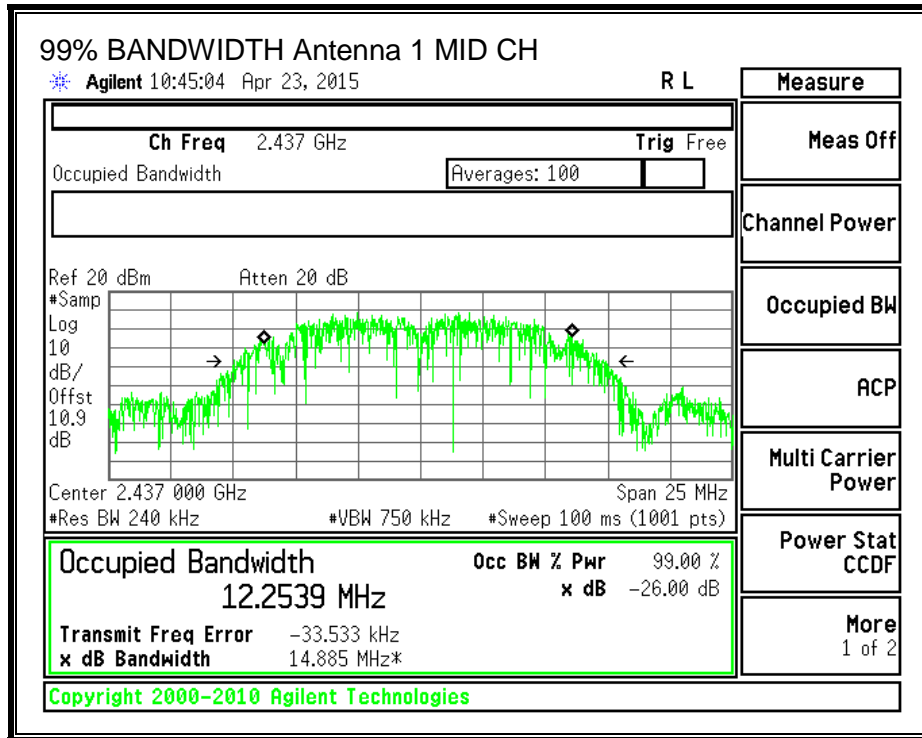
**99% BANDWIDTH, Antenna 0**





**99% BANDWIDTH, Antenna 1**





### 8.2.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### RESULTS – 802.11b

##### Antenna 0

Channel	Frequency (MHz)	Power (dBm)
Low	2412	18.76
Mid	2437	18.12
High	2462	17.33

##### Antenna 1

Channel	Frequency (MHz)	Power (dBm)
Low	2412	18.19
Mid	2437	17.99
High	2462	17.58

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## 8.2.4. OUTPUT POWER

### LIMITS

FCC §15.247

For systems using digital modulation in the 902–928 MHz, 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. Note – In this mode, the device works as a SISO device and utilizes the two antennas for diversity.

**RESULTS – 802.11b**

**Limits - Antenna 0**

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	3.10	30.00	30	36	30.00
Mid	2437	3.10	30.00	30	36	30.00
High	2462	3.10	30.00	30	36	30.00

<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd Power</b>
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**Results**

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	2412	18.76	18.76	30.00	-11.24
Mid	2437	18.12	18.12	30.00	-11.88
High	2462	17.33	17.33	30.00	-12.67

**Limits - Antenna 1**

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	3.10	30.00	30	36	30.00
Mid	2437	3.10	30.00	30	36	30.00
High	2462	3.10	30.00	30	36	30.00

<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd Power</b>
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**Results**

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	2412	18.19	18.19	30.00	-11.81
Mid	2437	17.99	17.99	30.00	-12.01
High	2462	17.58	17.58	30.00	-12.42

## 8.2.5. POWER SPECTRAL DENSITY

### LIMITS

FCC §15.247

### RESULTS – 802.11b

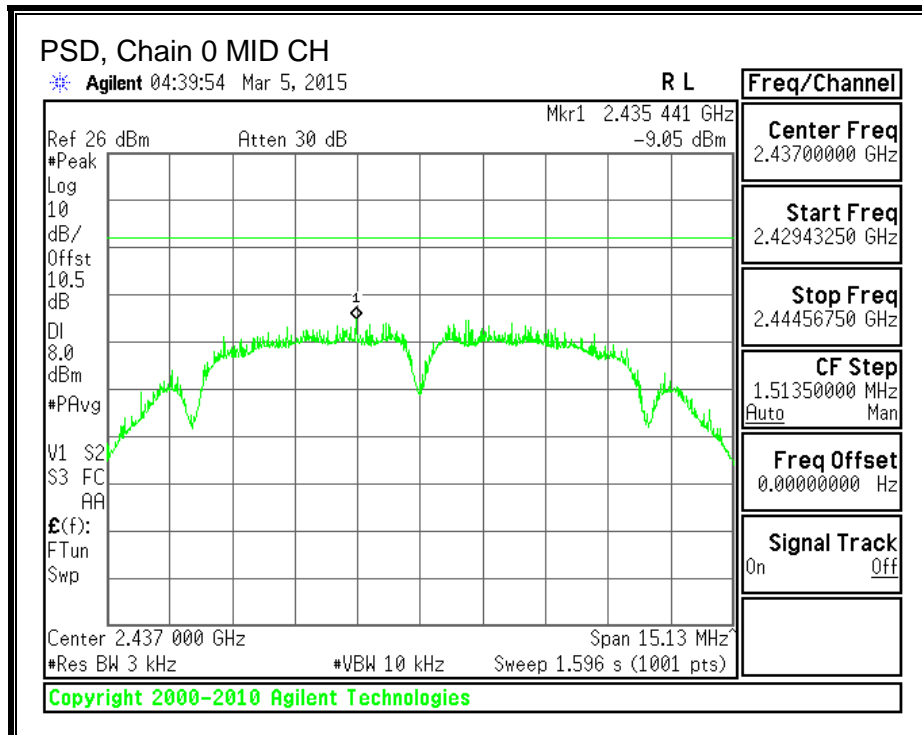
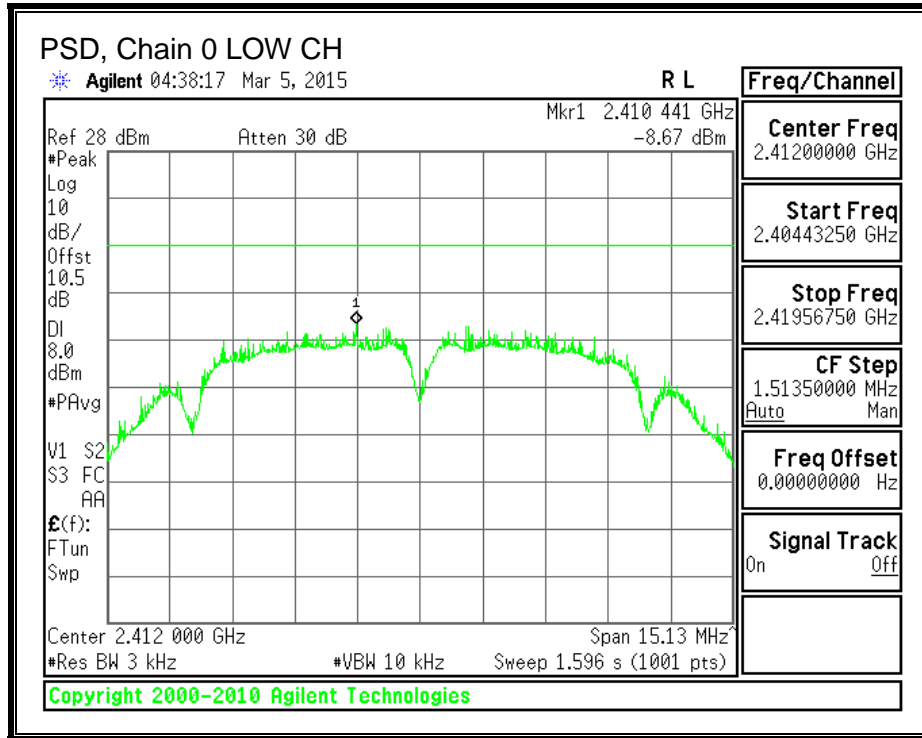
#### PSD Results - Antenna 0

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-8.67	-8.67	8.0	-16.7
Mid	2437	-9.05	-9.05	8.0	-17.1
High	2462	-8.98	-8.98	8.0	-17.0

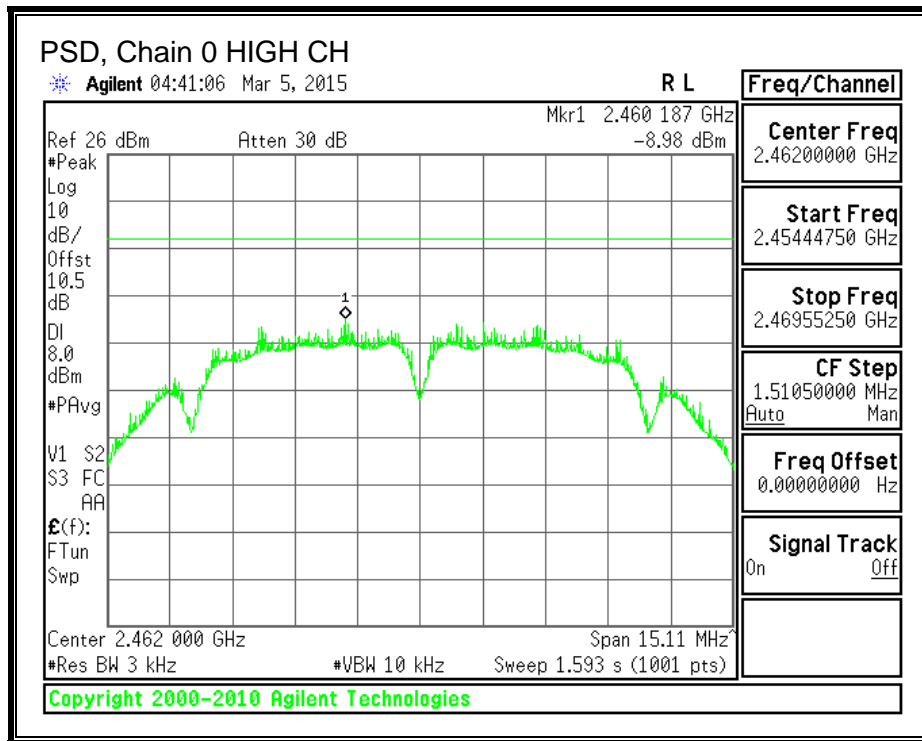
#### PSD Results - Antenna 1

Channel	Frequency (MHz)	Chain 1 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-7.07	-7.07	8.0	-15.1
Mid	2437	-7.95	-7.95	8.0	-16.0
High	2462	-8.23	-8.23	8.0	-16.2

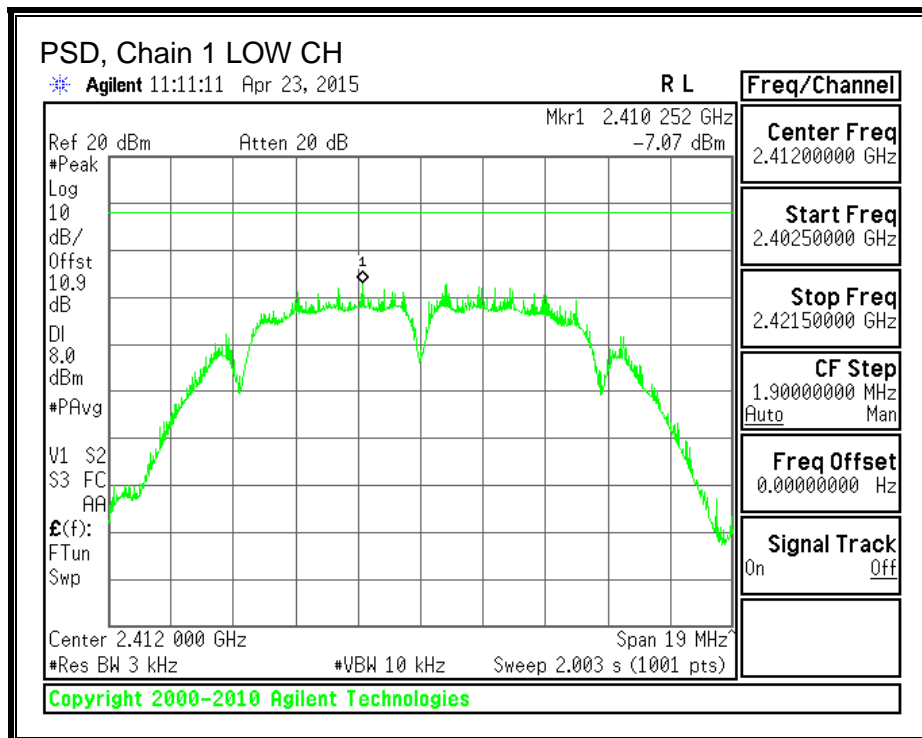
**PSD, Chain 0**

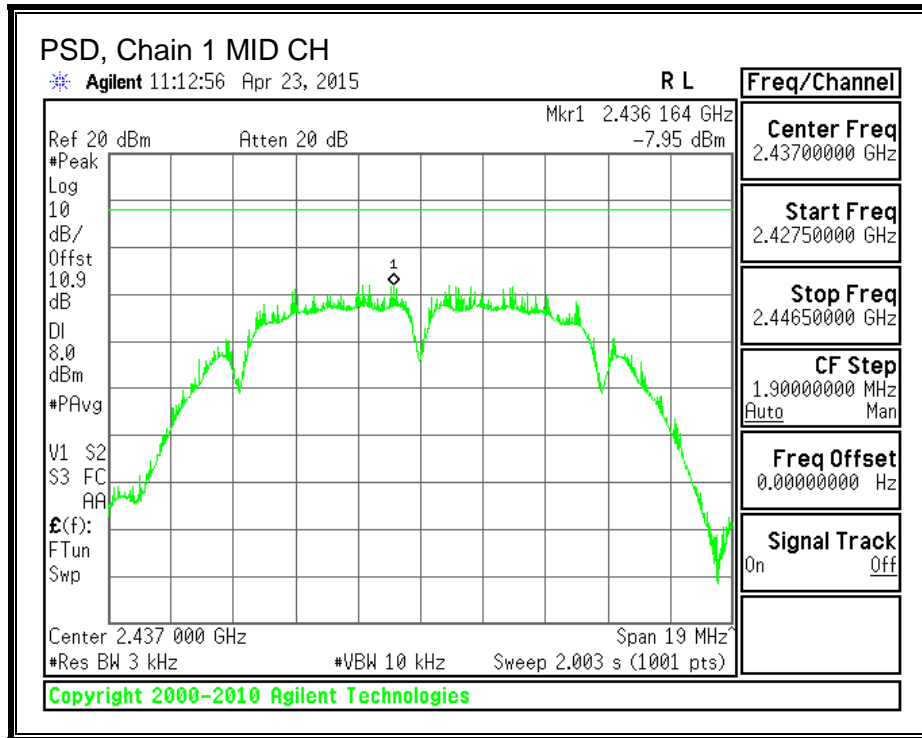


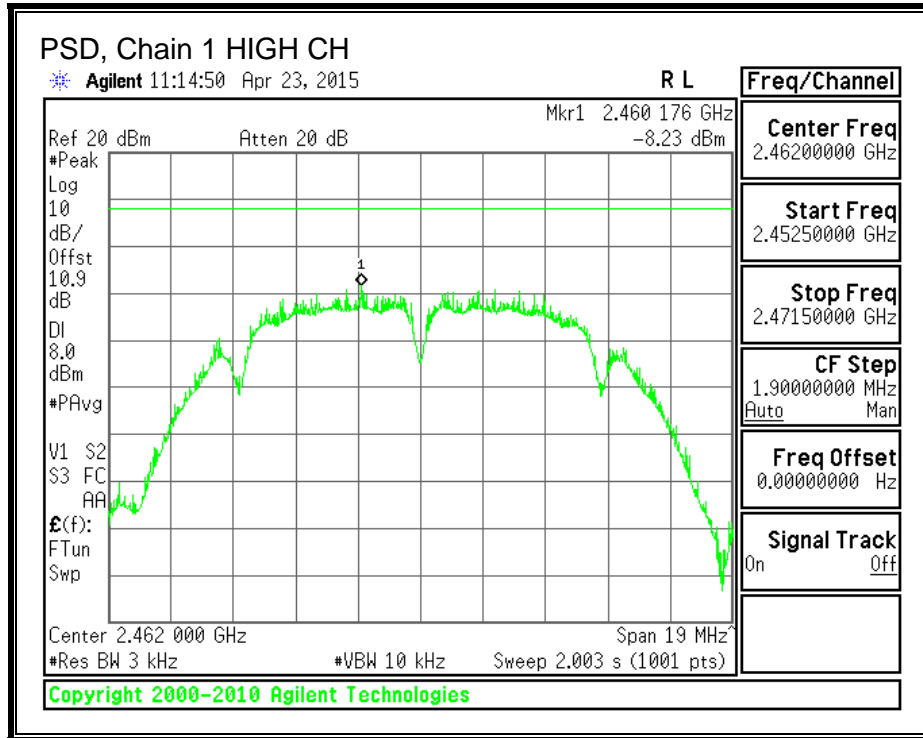




**PSD, Chain 1**







## 8.2.6. OUT-OF-BAND EMISSIONS

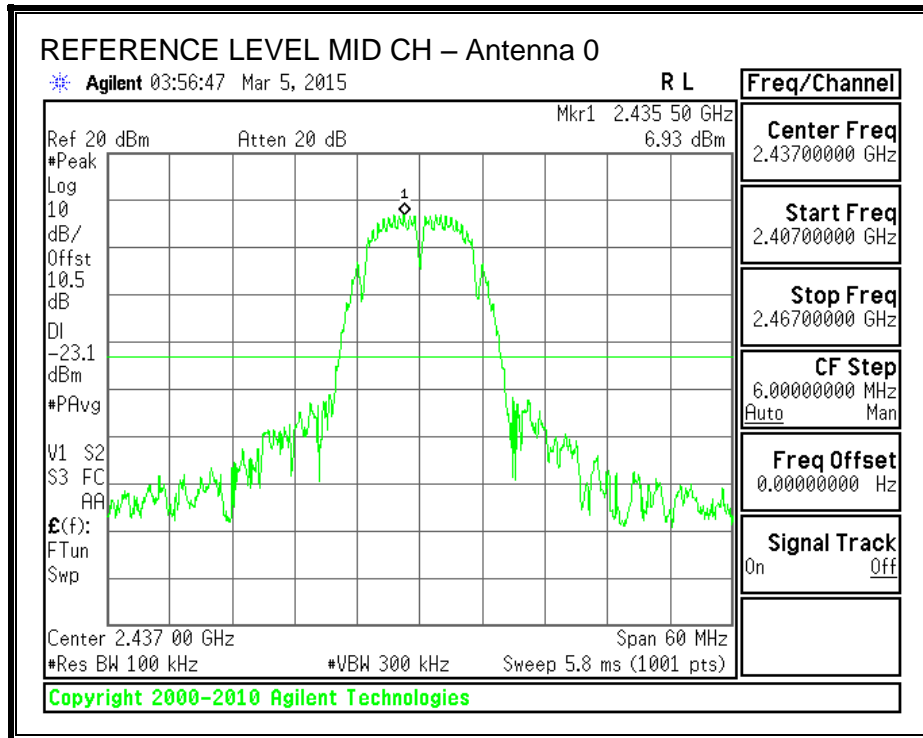
### LIMITS

FCC §15.247 (d)

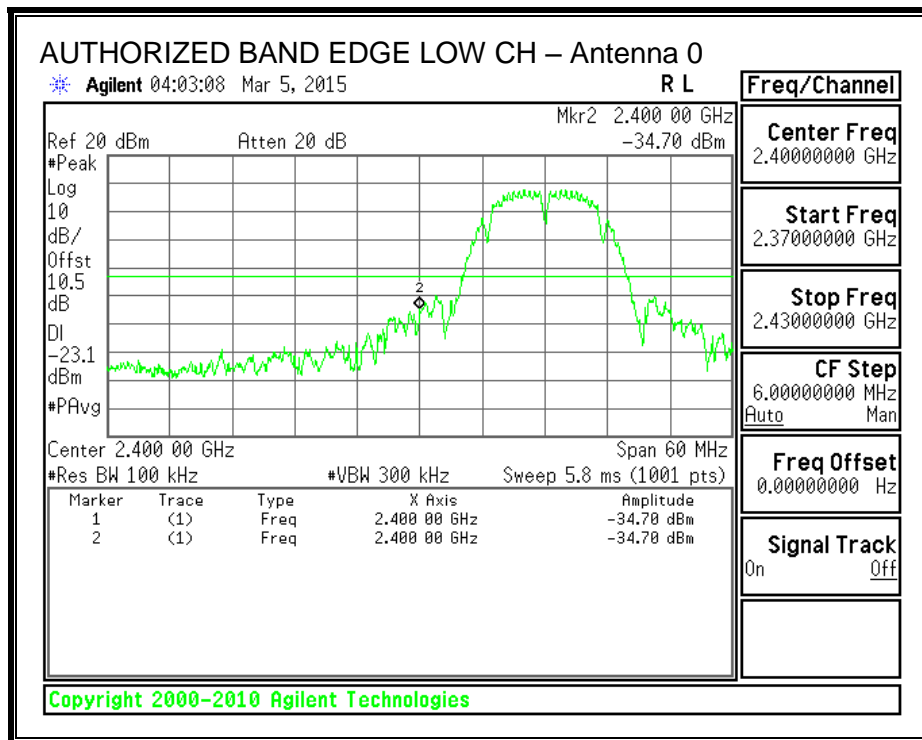
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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 – 802.11b**

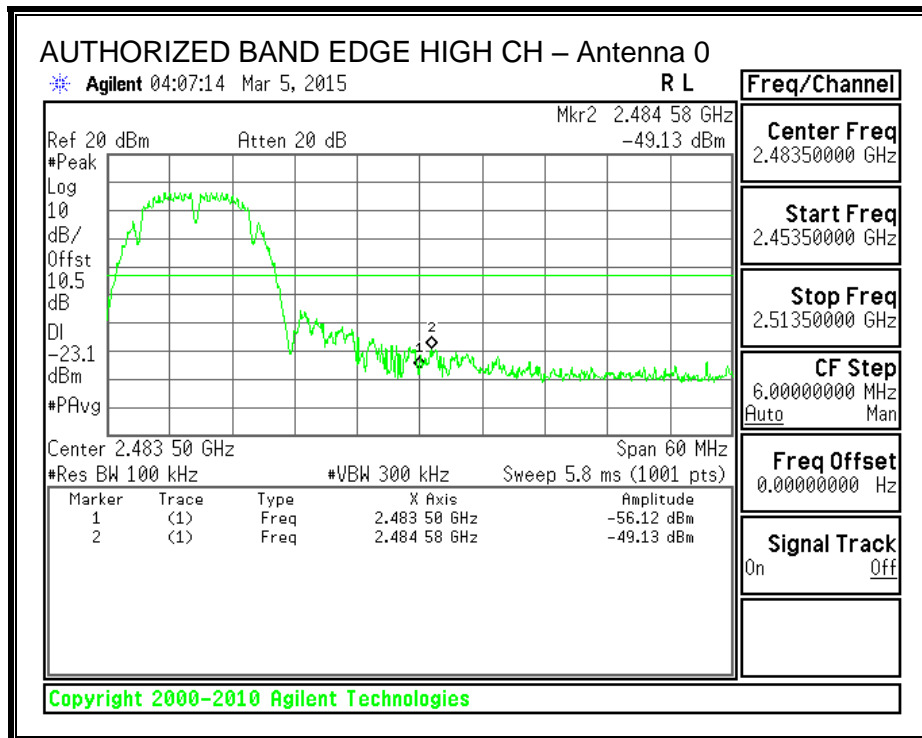
**IN-BAND REFERENCE LEVEL – Antenna 0**



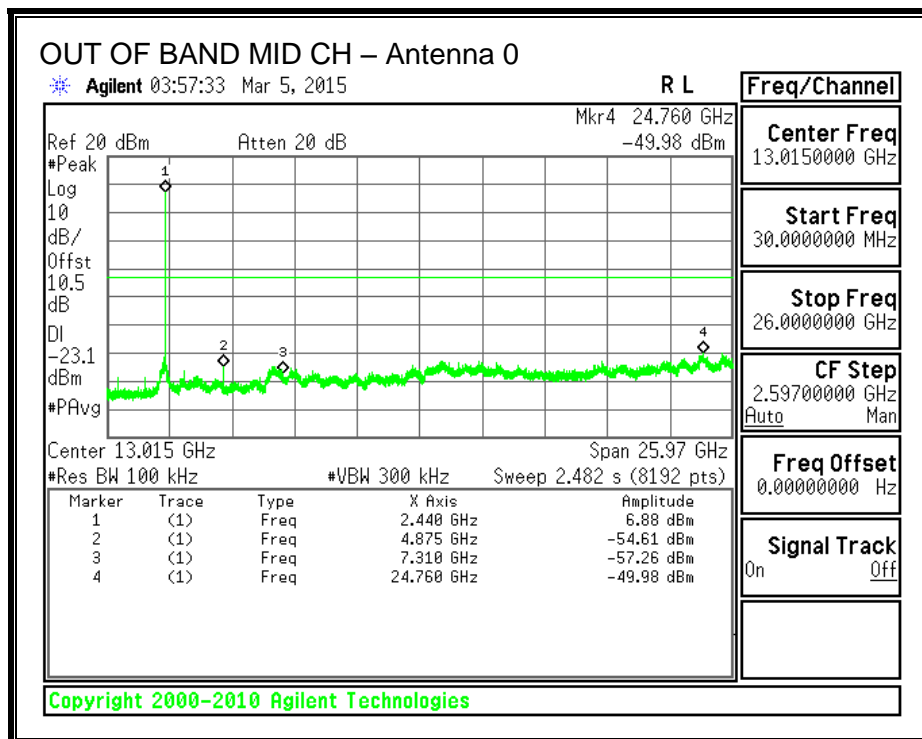
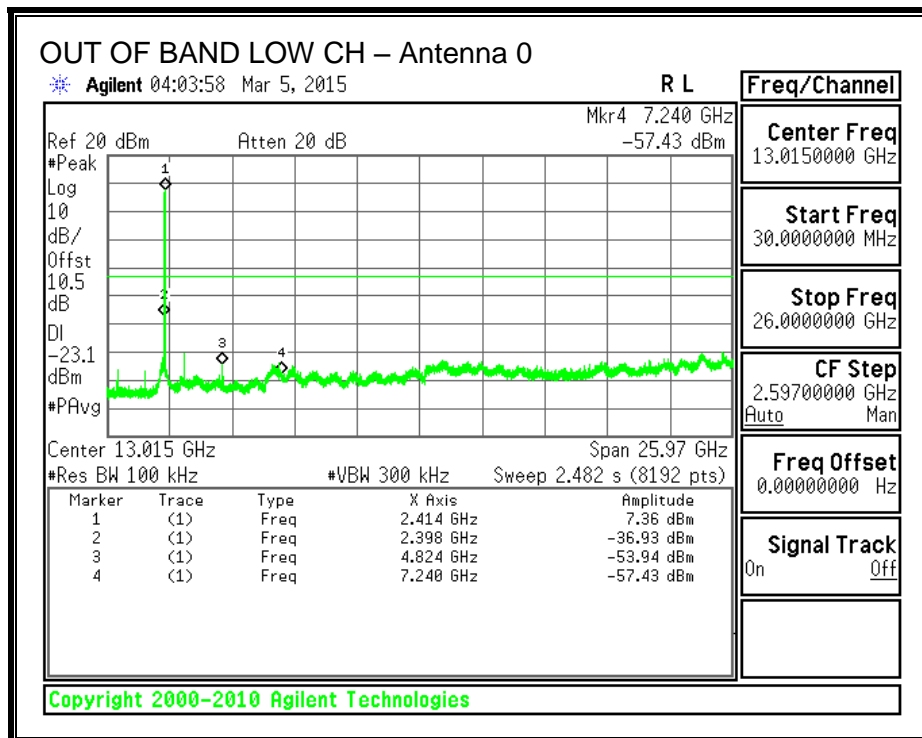
**LOW CHANNEL BANDEGE**

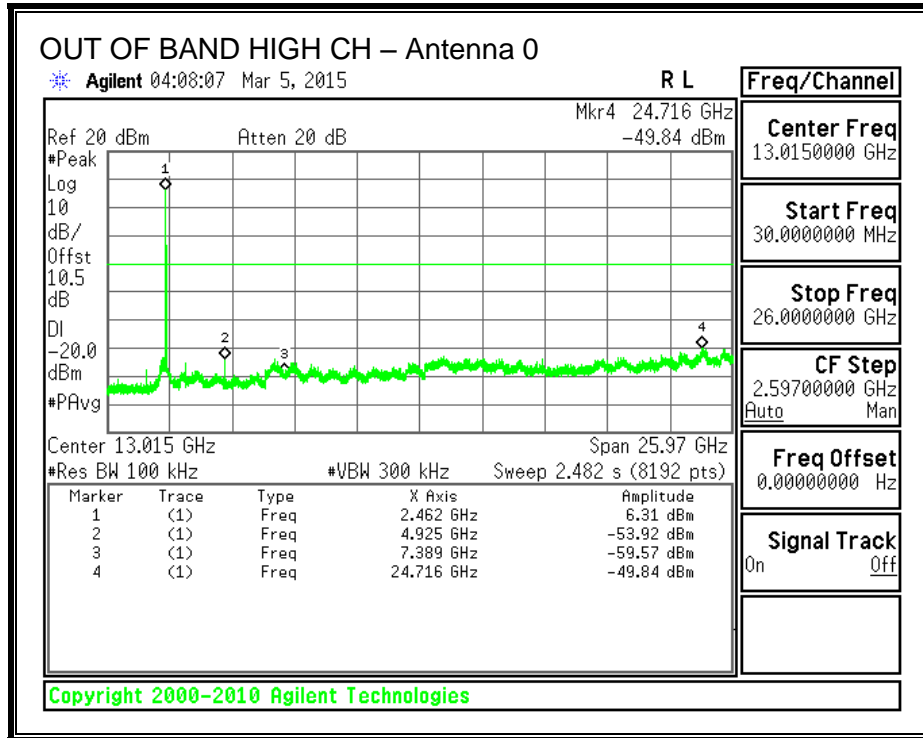


**HIGH CHANNEL BANDEGE**



**OUT-OF-BAND EMISSIONS**

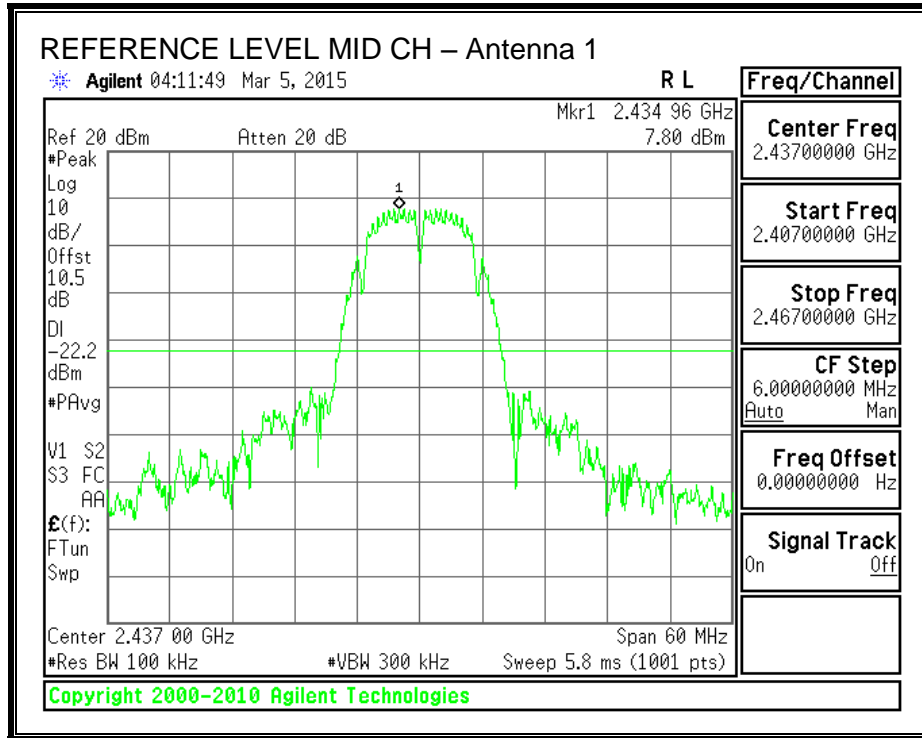




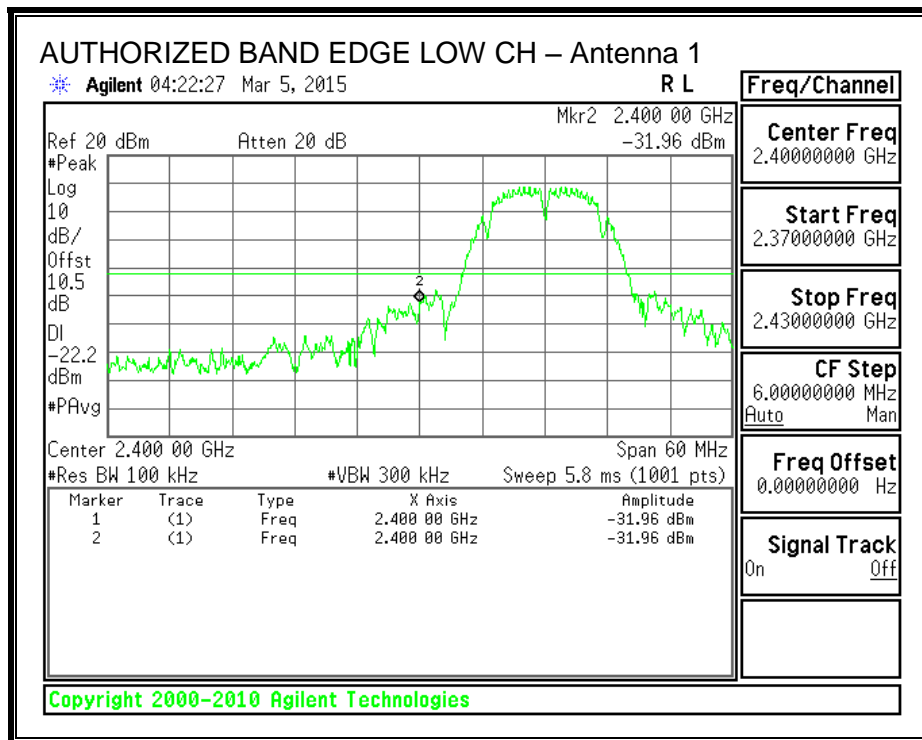
Note – The limit line was set for -20.0 dBm, but should have been set for -23.1 dBm. Based on the correct limit line, all measured frequencies are still below the limit.



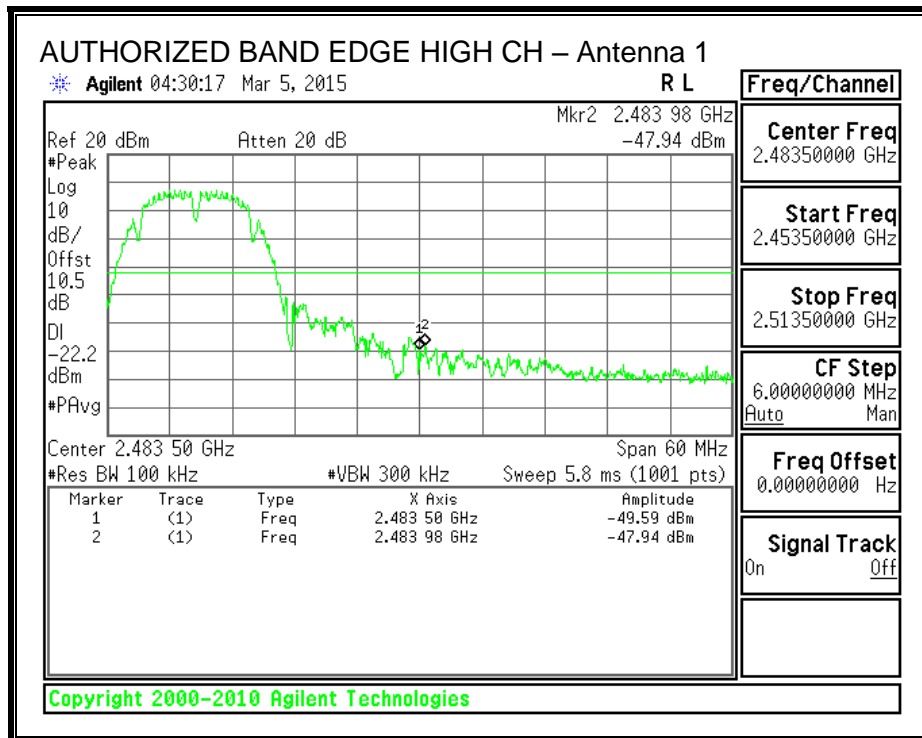
**IN-BAND REFERENCE LEVEL – Antenna 1**



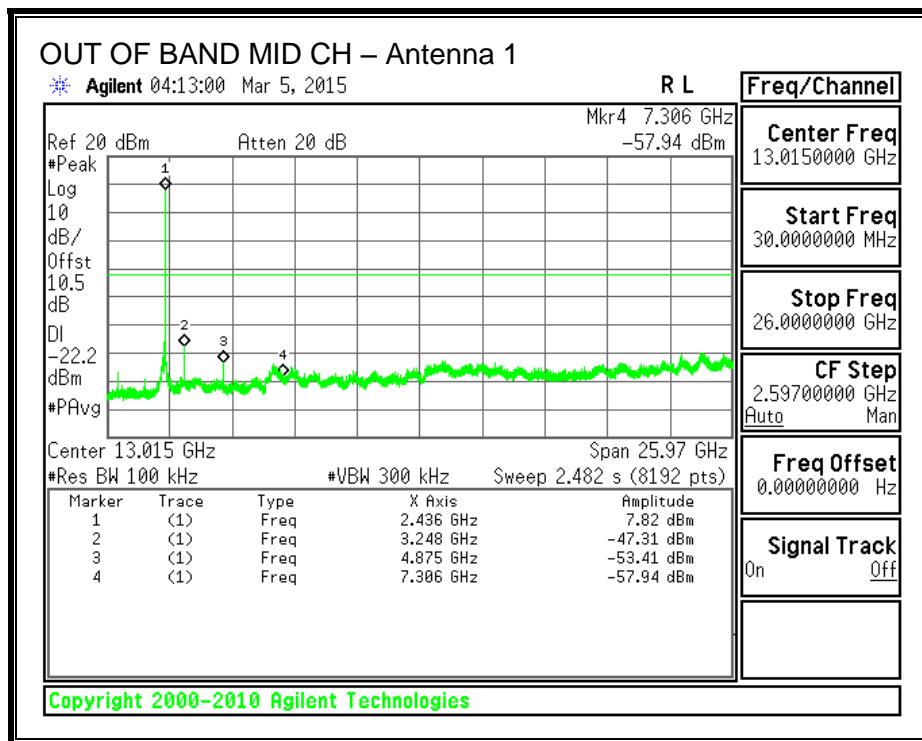
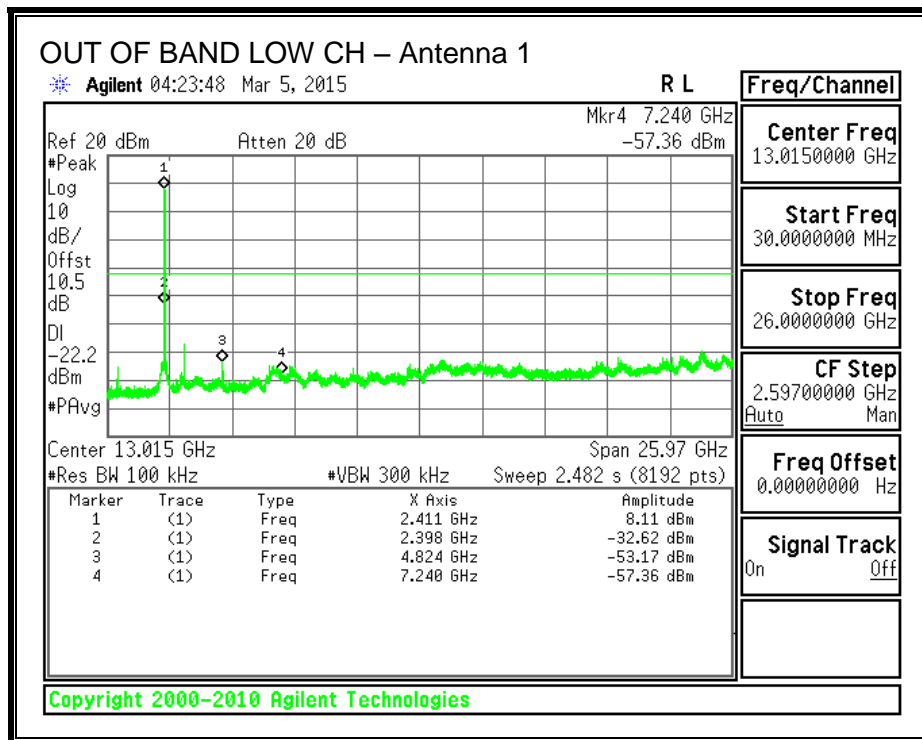
**LOW CHANNEL BANDEDGE**

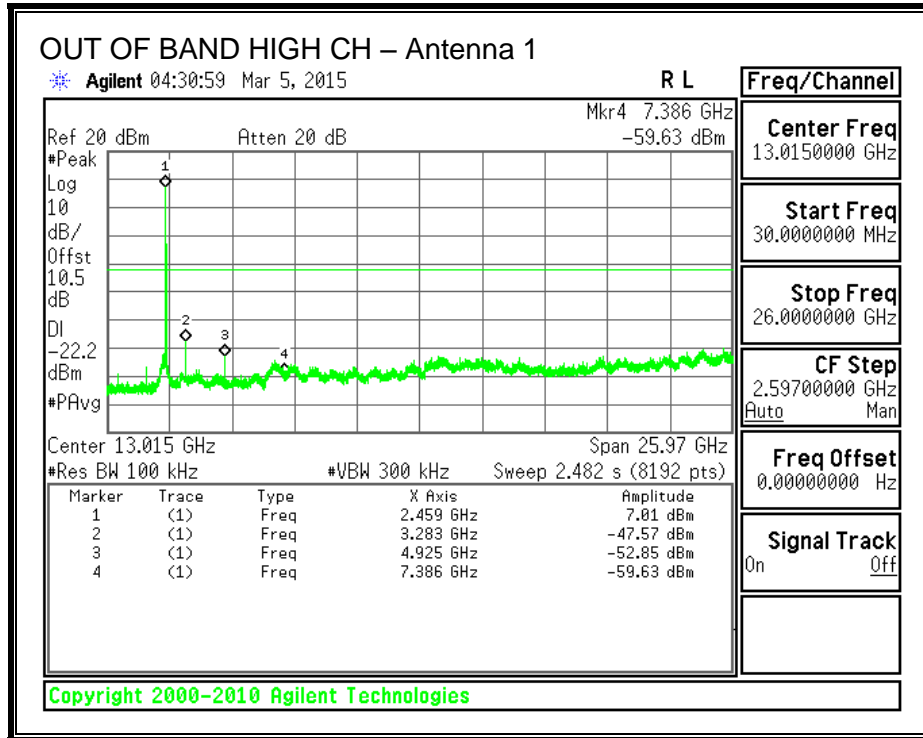


**HIGH CHANNEL BANDEDGE**



**OUT-OF-BAND EMISSIONS**





### 8.3. 802.11g MODE IN THE 2.4 GHz BAND

#### 8.3.1. 6 dB BANDWIDTH

##### LIMITS

FCC §15.247 (a) (2)

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

##### RESULTS – 802.11g

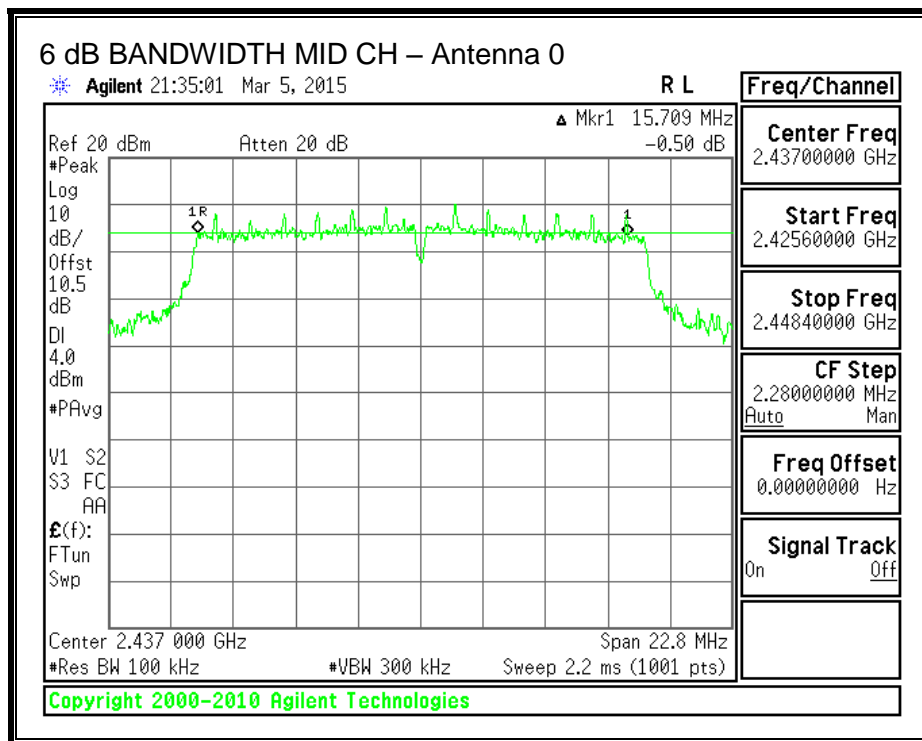
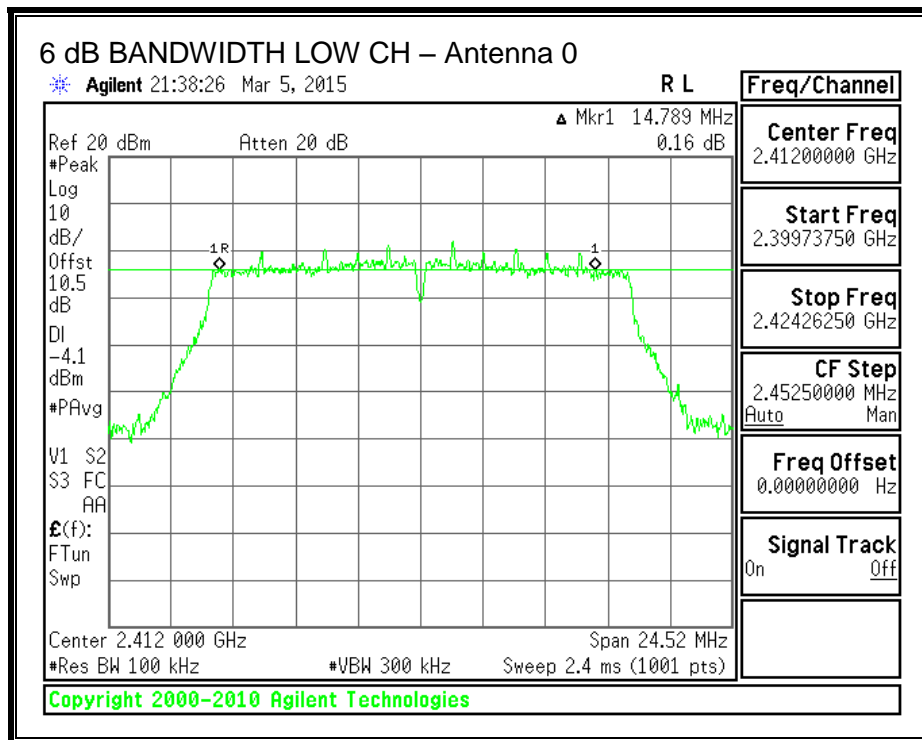
Antenna 0

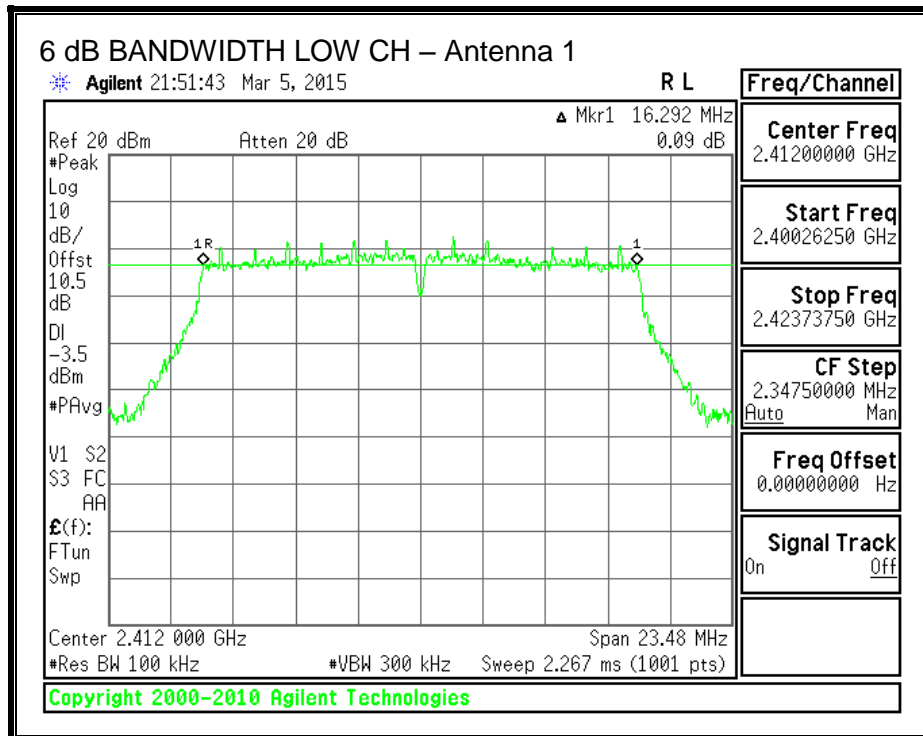
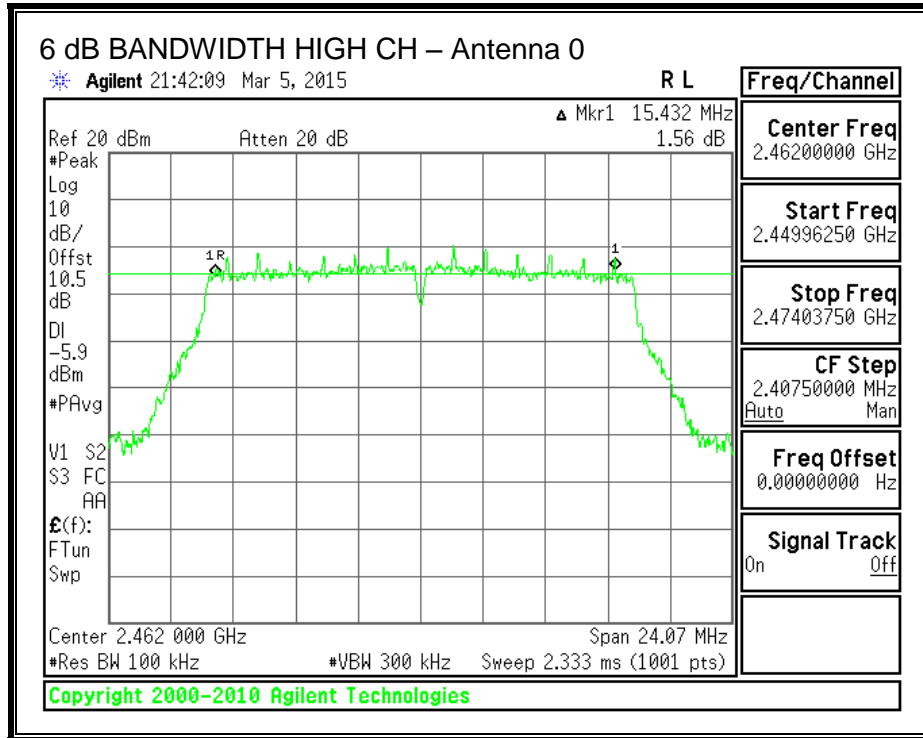
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	14.789	0.5
Mid	2437	15.709	0.5
High	2462	15.432	0.5

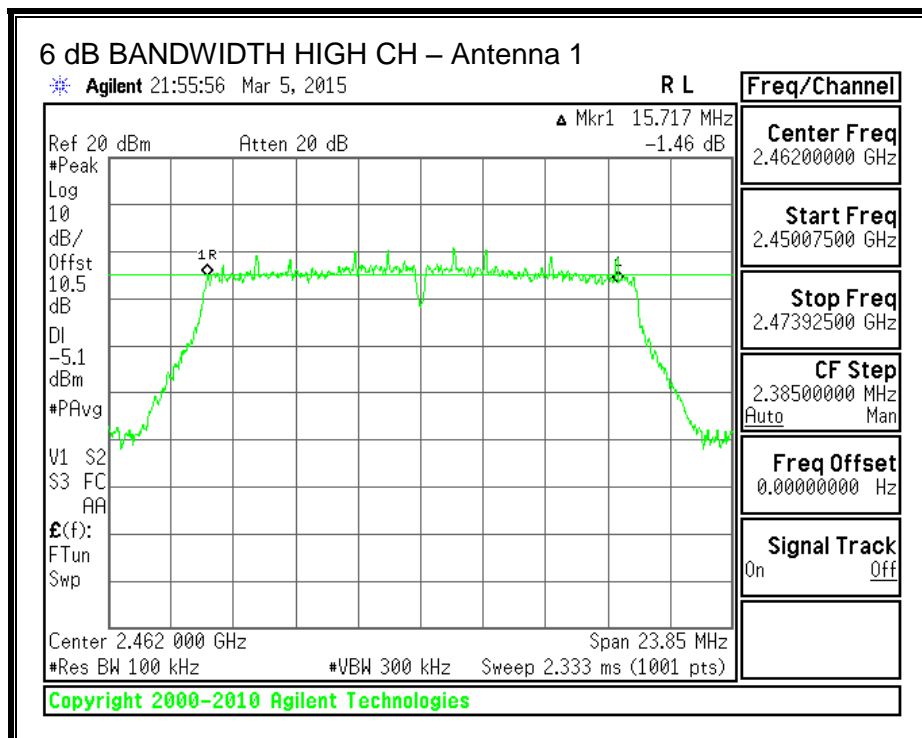
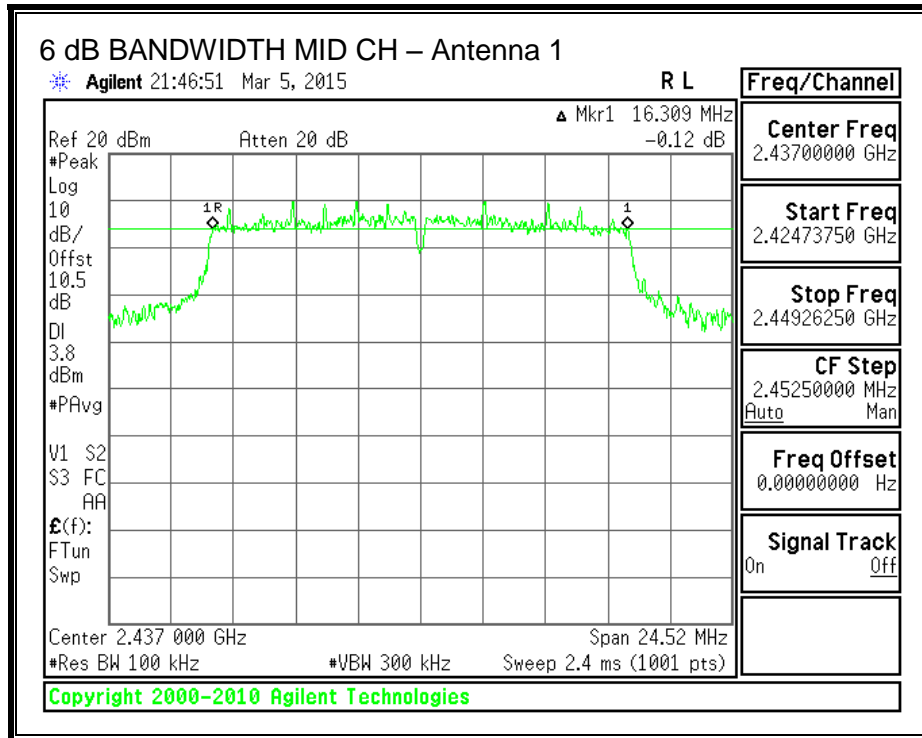
Antenna 1

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	2412	16.292	0.5
Mid	2437	16.309	0.5
High	2462	15.717	0.5

**6 dB BANDWIDTH**









### 8.3.2. 99% BANDWIDTH

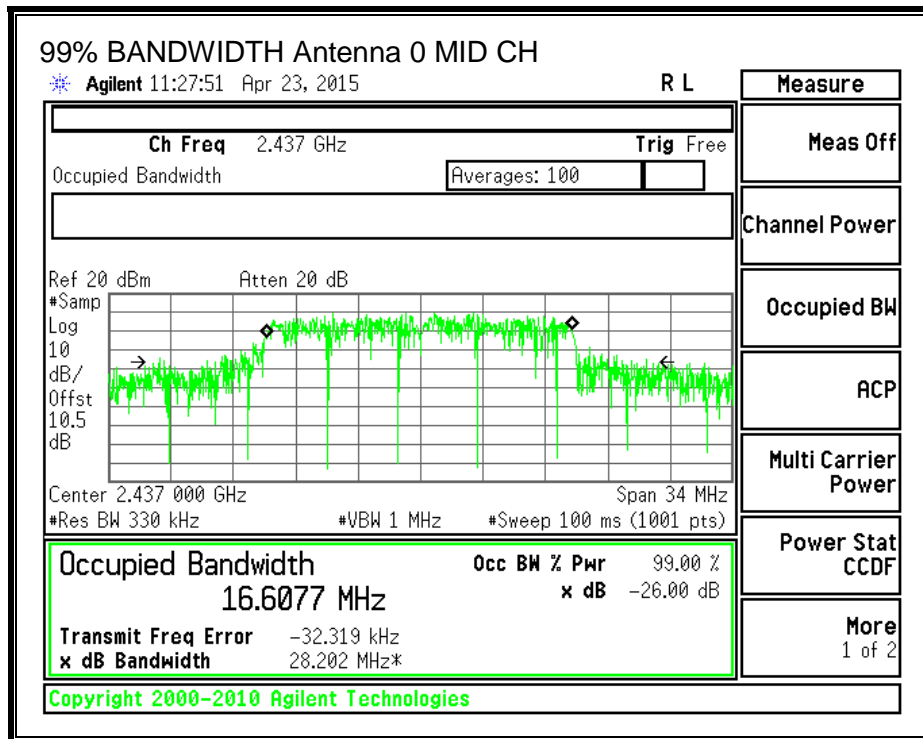
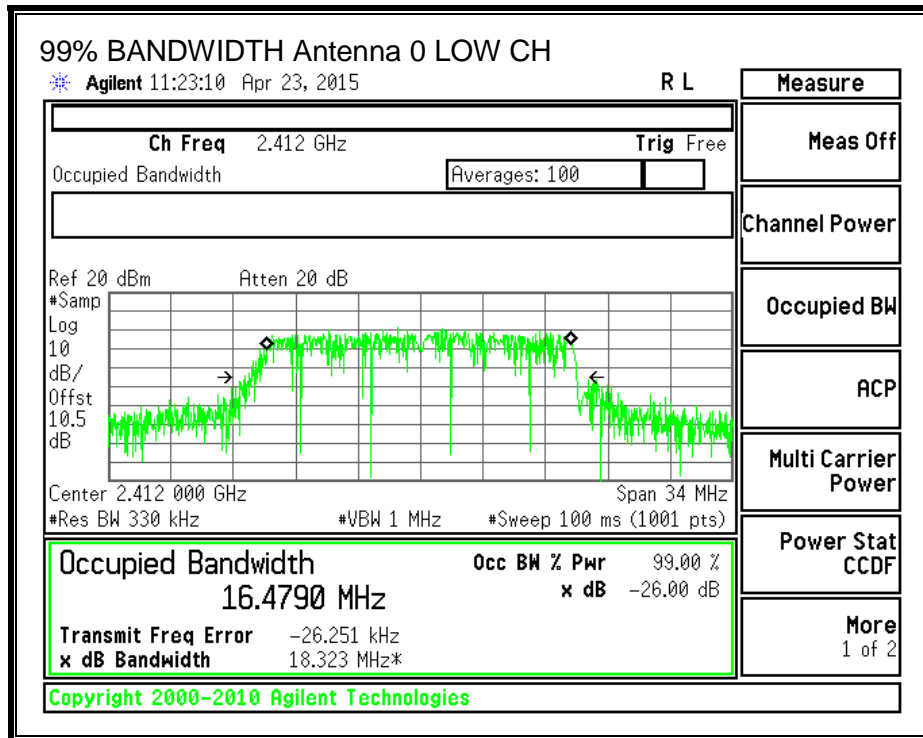
#### LIMITS

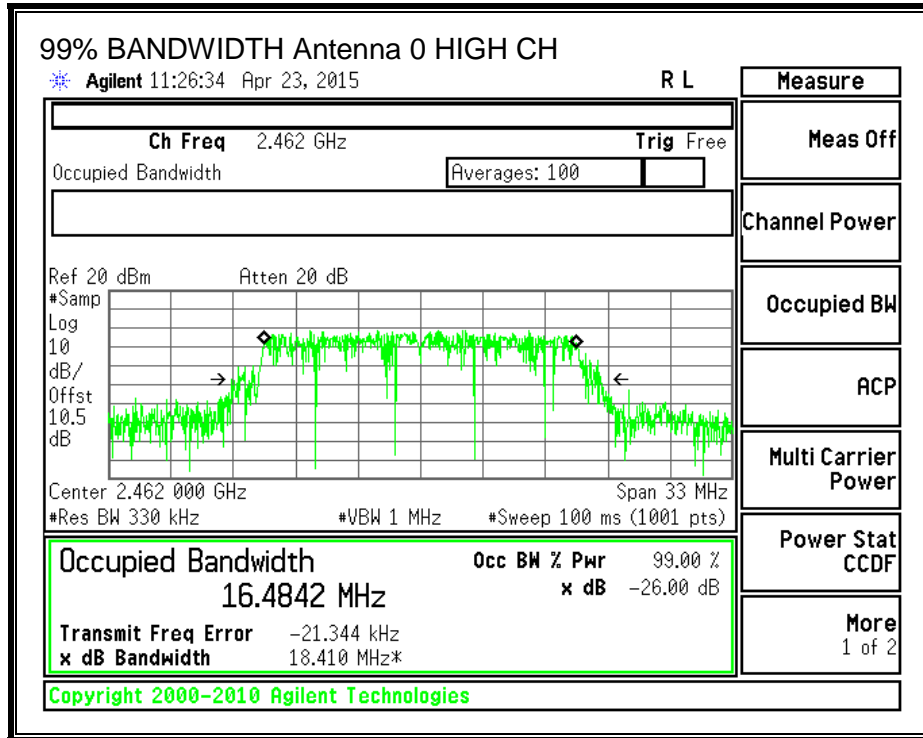
None; for reporting purposes only.

#### RESULTS – 802.11g

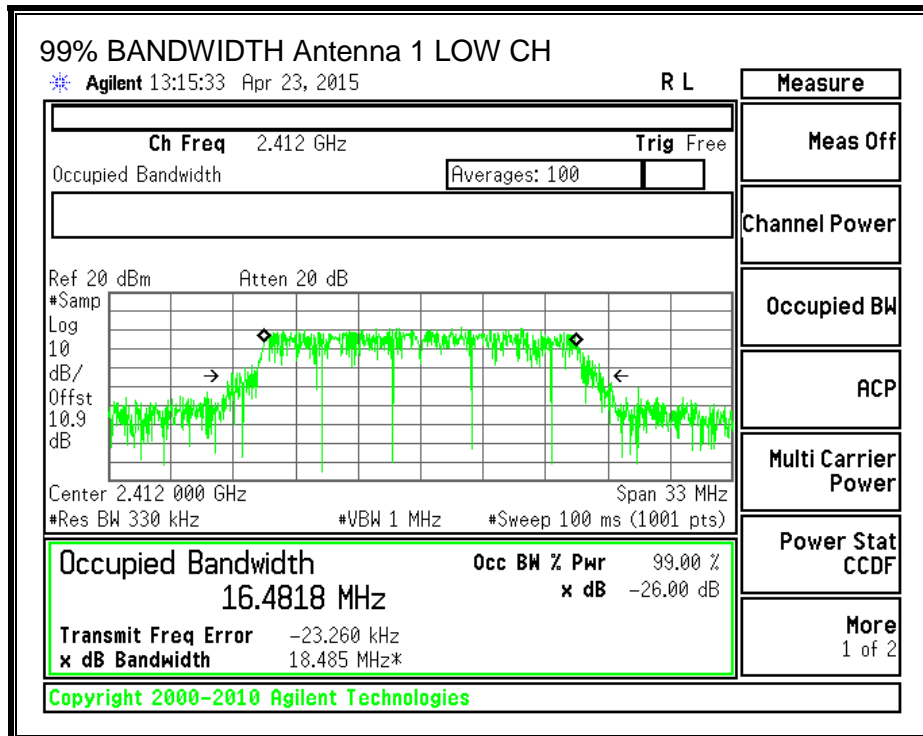
Channel	Frequency (MHz)	99% BW Ant 0 (MHz)	99% BW Ant 1 (MHz)
Low	2412	16.4790	16.4818
Mid	2437	16.6077	16.6711
High	2462	16.4842	16.4840

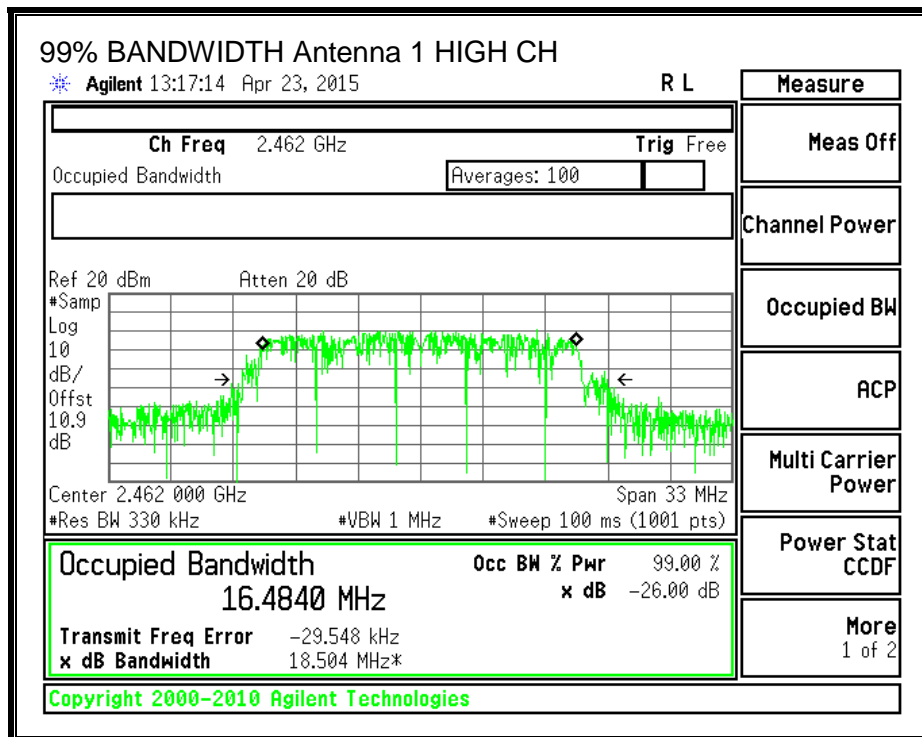
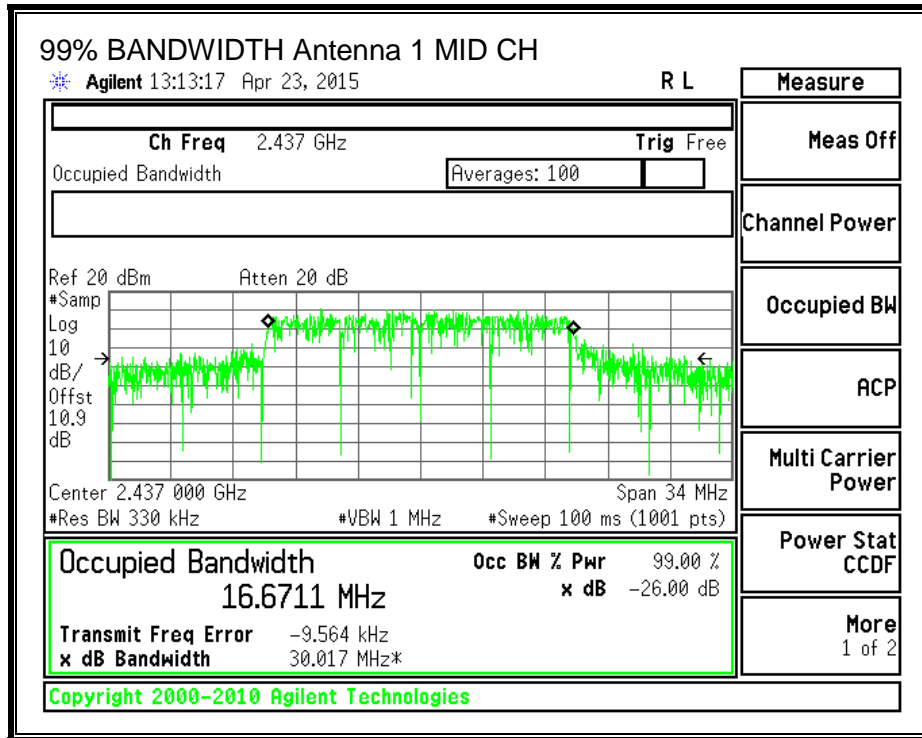
**99% BANDWIDTH, Antenna 0**





**99% BANDWIDTH, Antenna 1**





### 8.3.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### RESULTS – 802.11g

Note – For 802.11g, the power was set as a stair step: Channels 1-4 are the same power, Channels 5-7 are the same power and Channels 8-11 are the same power.

#### Antenna 0

Channel	Frequency (MHz)	Power (dBm)
Low	2412	11.51
Mid	2437	20.02
High	2462	11.35

#### Antenna 1

Channel	Frequency (MHz)	Power (dBm)
Low	2412	11.61
Mid	2437	20.78
High	2462	11.59

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### **8.3.4. OUTPUT POWER**

#### **LIMITS**

FCC §15.247

For systems using digital modulation in the 902–928 MHz, 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.  
Note – In this mode, the device works as a SISO device and utilizes the two antennas for diversity.

**RESULTS – 802.11g**

Note – For 802.11g, the power was set as a stair step: Channels 1-4 are the same power, Channels 5-7 are the same power and Channels 8-11 are the same power.

**Limits - Antenna 0**

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	3.10	30.00	30	36	30.00
Mid	2437	3.10	30.00	30	36	30.00
High	2462	3.10	30.00	30	36	30.00

<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd Power</b>
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**Results**

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	2412	11.51	11.51	30.00	-18.49
Mid	2437	20.02	20.02	30.00	-9.98
High	2462	11.35	11.35	30.00	-18.65

**Limits - Antenna 1**

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	3.10	30.00	30	36	30.00
Mid	2437	3.10	30.00	30	36	30.00
High	2462	3.10	30.00	30	36	30.00

<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd Power</b>
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**Results**

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	2412	11.61	11.61	30.00	-18.39
Mid	2437	20.78	20.78	30.00	-9.22
High	2462	11.59	11.59	30.00	-18.41

### 8.3.5. POWER SPECTRAL DENSITY

#### LIMITS

FCC §15.247

#### RESULTS – 802.11g

Note – For 802.11g, the power was set as a stair step: Channels 1-4 are the same power, Channels 5-7 are the same power and Channels 8-11 are the same power.

##### PSD Results - Antenna 0

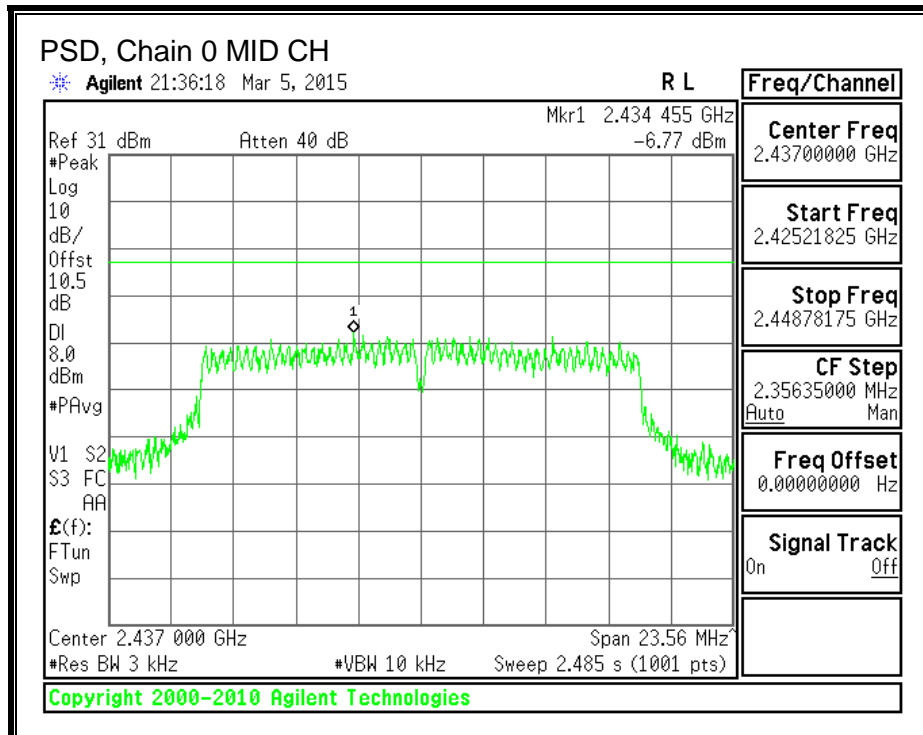
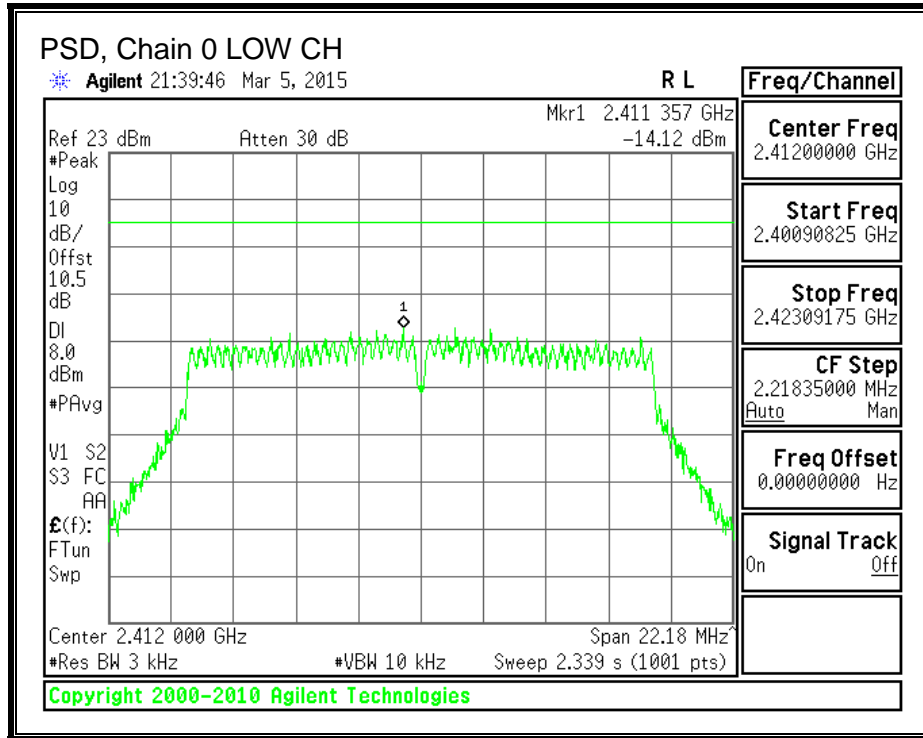
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-14.12	-14.12	8.0	-22.1
Mid	2437	-6.77	-6.77	8.0	-14.8
High	2462	-14.79	-14.79	8.0	-22.8

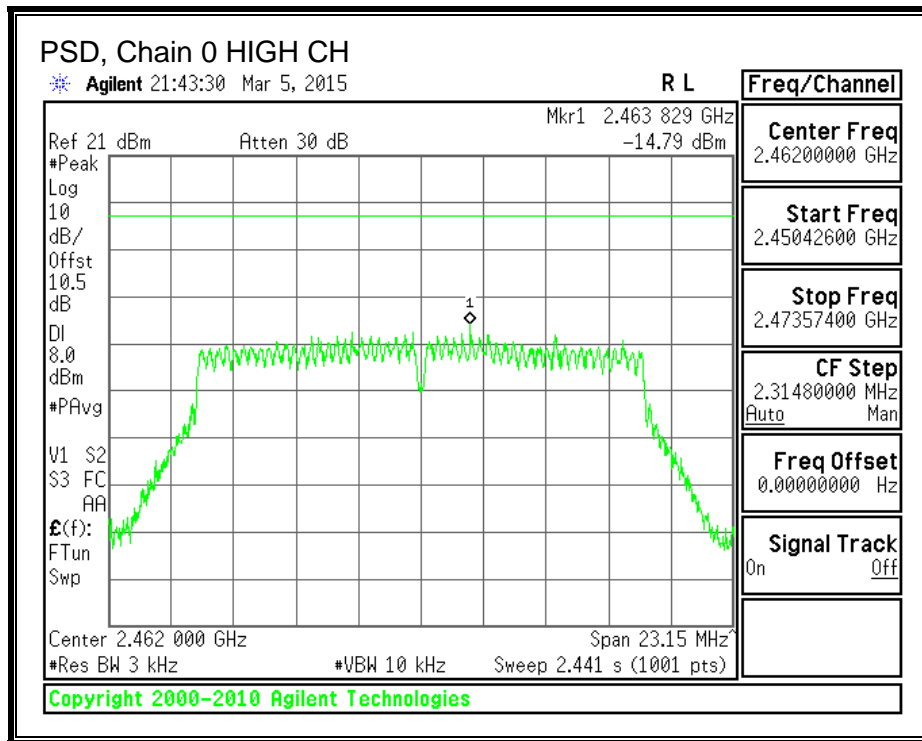
##### PSD Results - Antenna 1

Channel	Frequency (MHz)	Chain 1 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-14.10	-14.10	8.0	-22.1
Mid	2437	-6.04	-6.04	8.0	-14.0
High	2462	-14.66	-14.66	8.0	-22.7

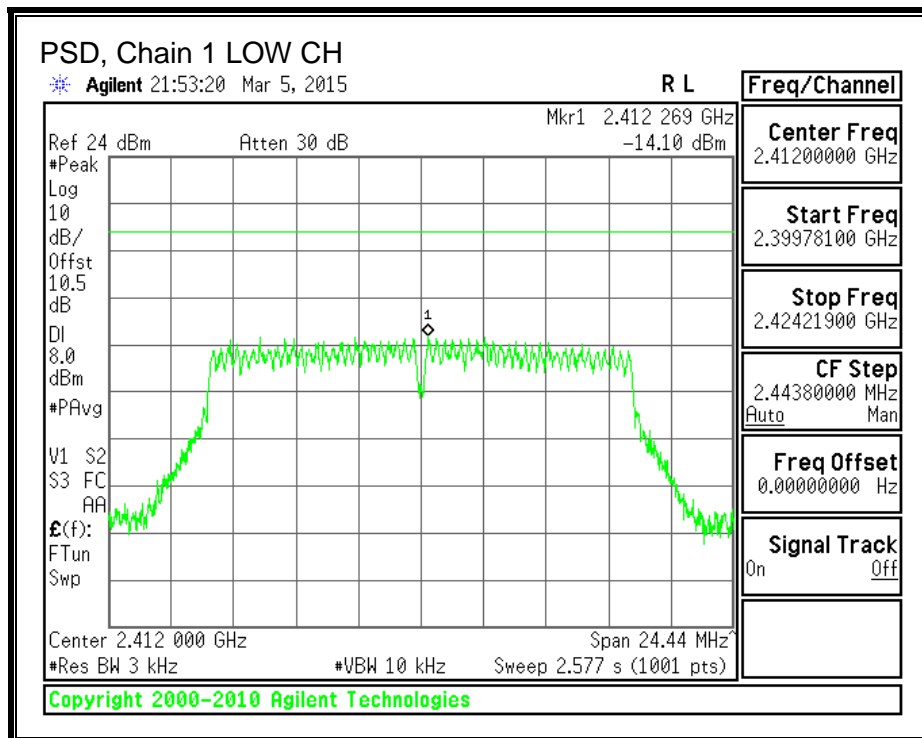


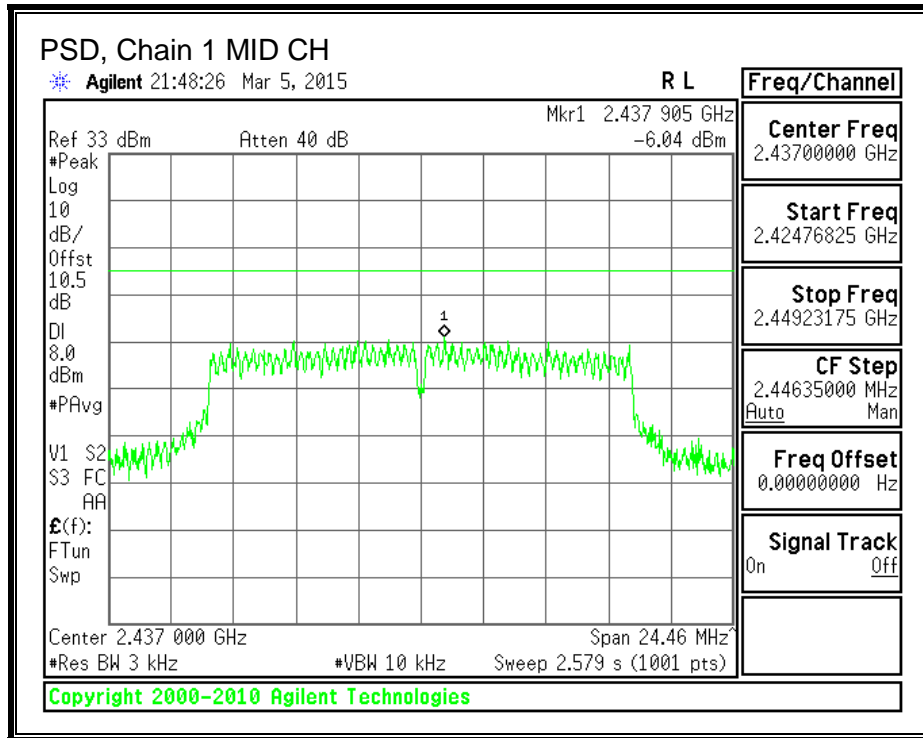
**PSD, Chain 0**

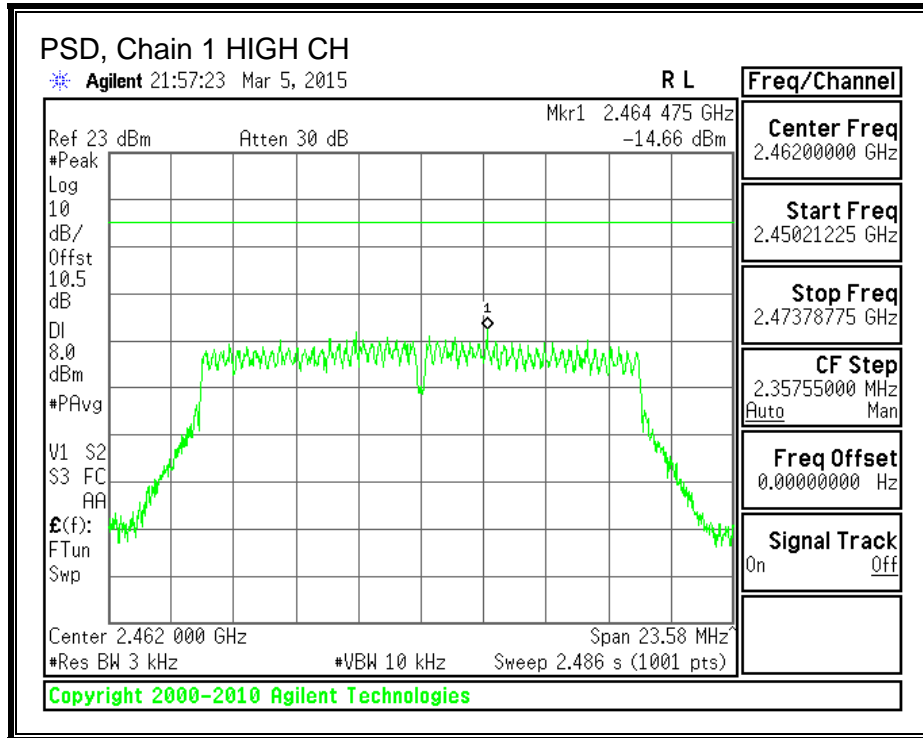




**PSD, Chain 1**







### 8.3.6. OUT-OF-BAND EMISSIONS

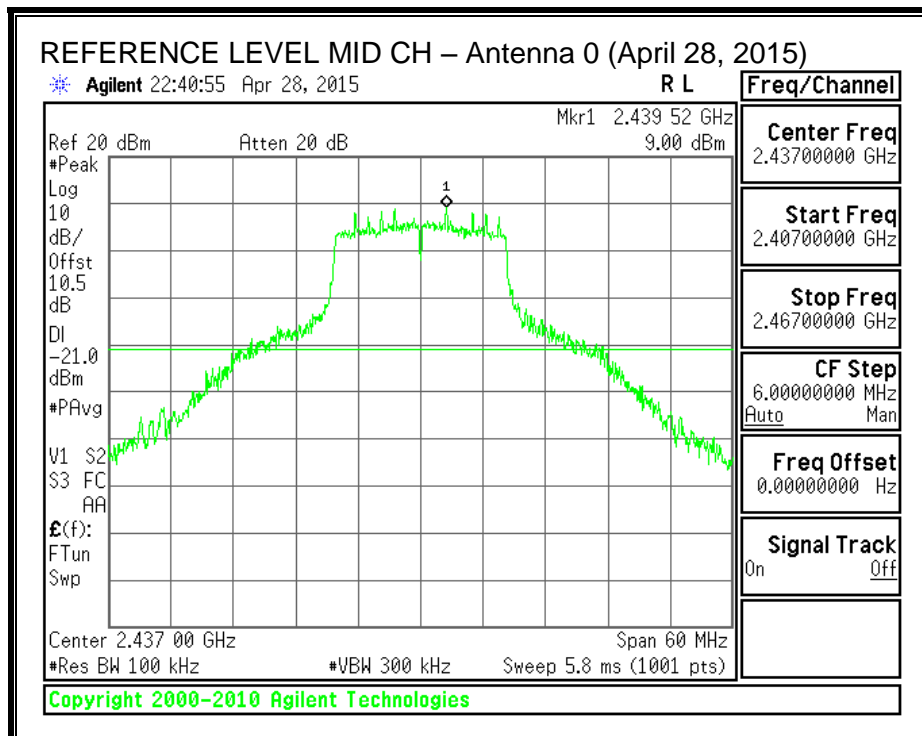
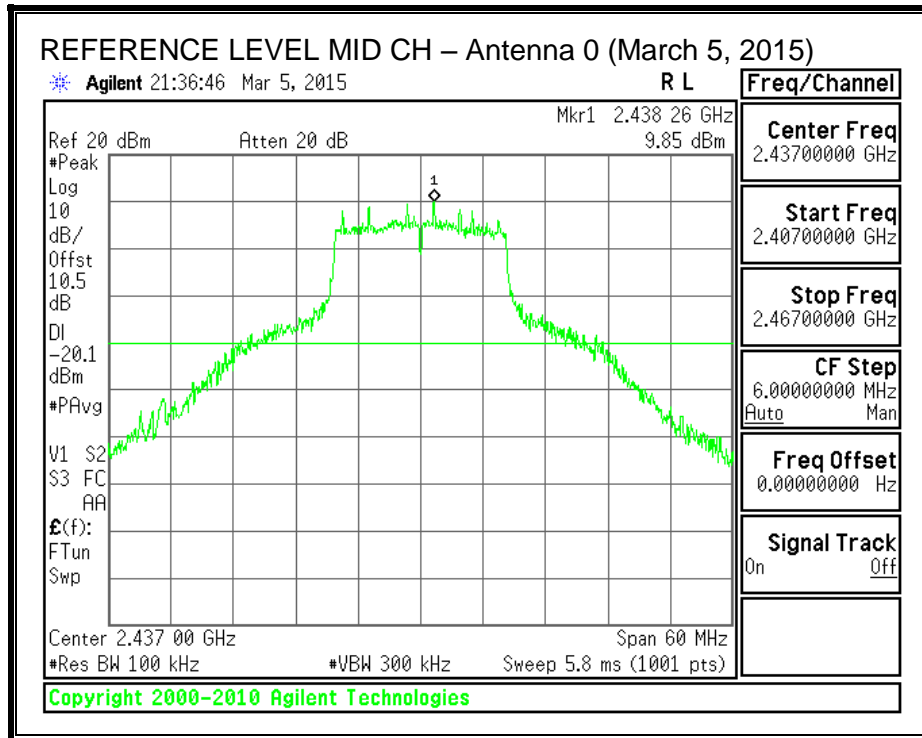
#### LIMITS

FCC §15.247 (d)

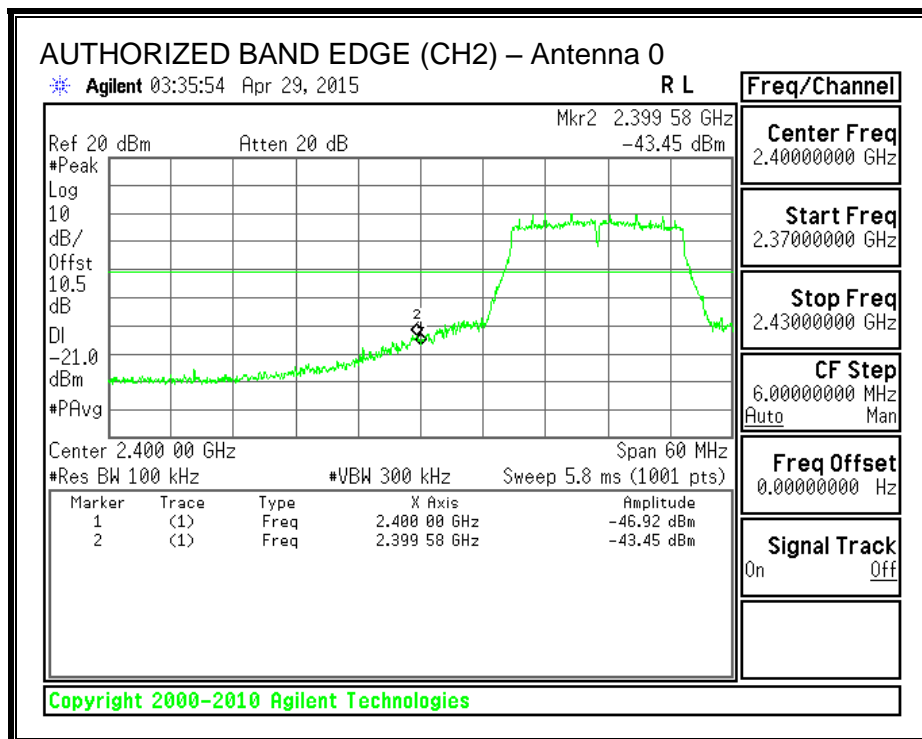
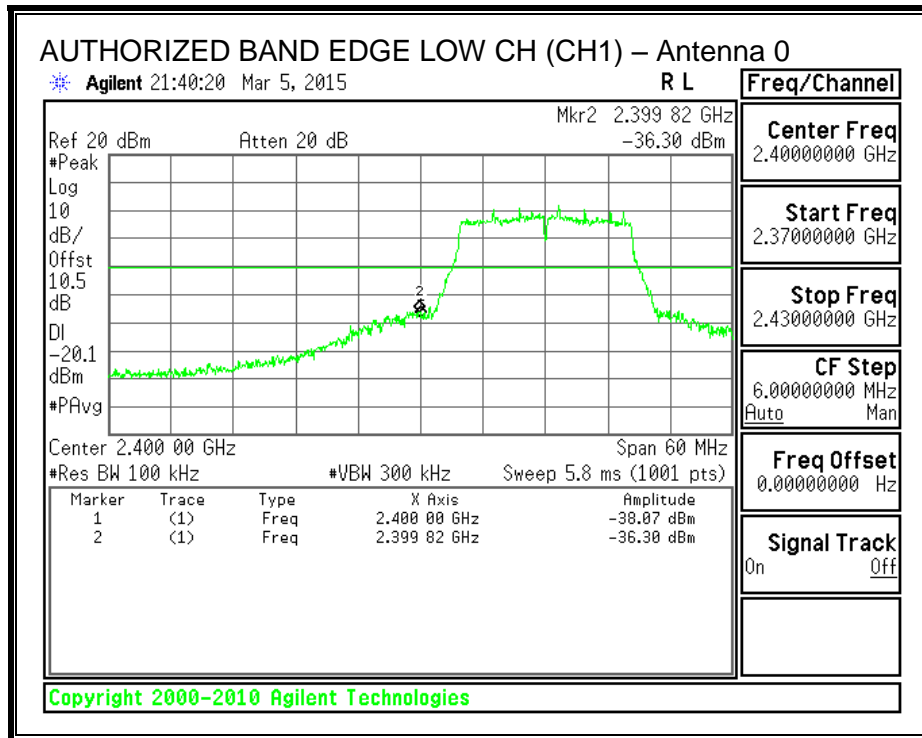
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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.

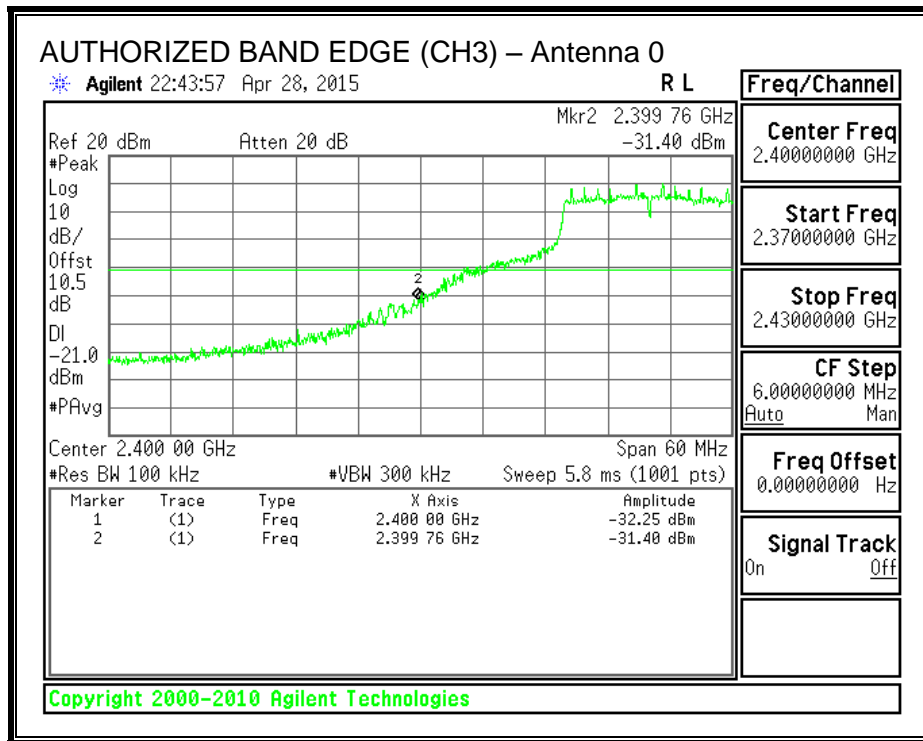
**RESULTS – 802.11g**

**IN-BAND REFERENCE LEVEL – Antenna 0**



**LOW CHANNEL BANDEDGE**

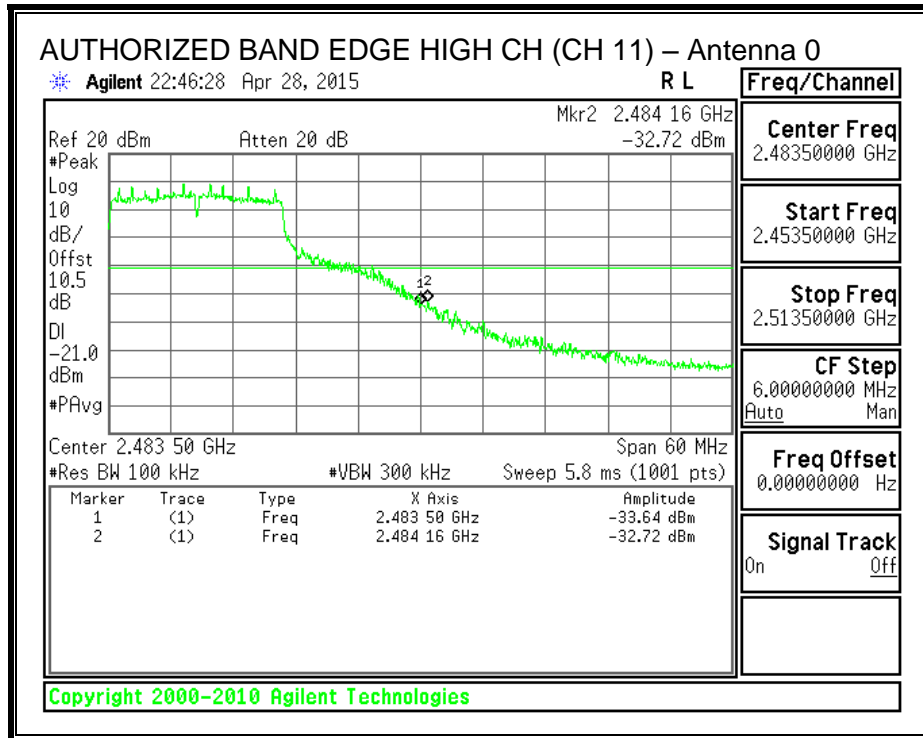




Note – CH3 was tested at the Mid Channel Power setting to achieve worst-case results.

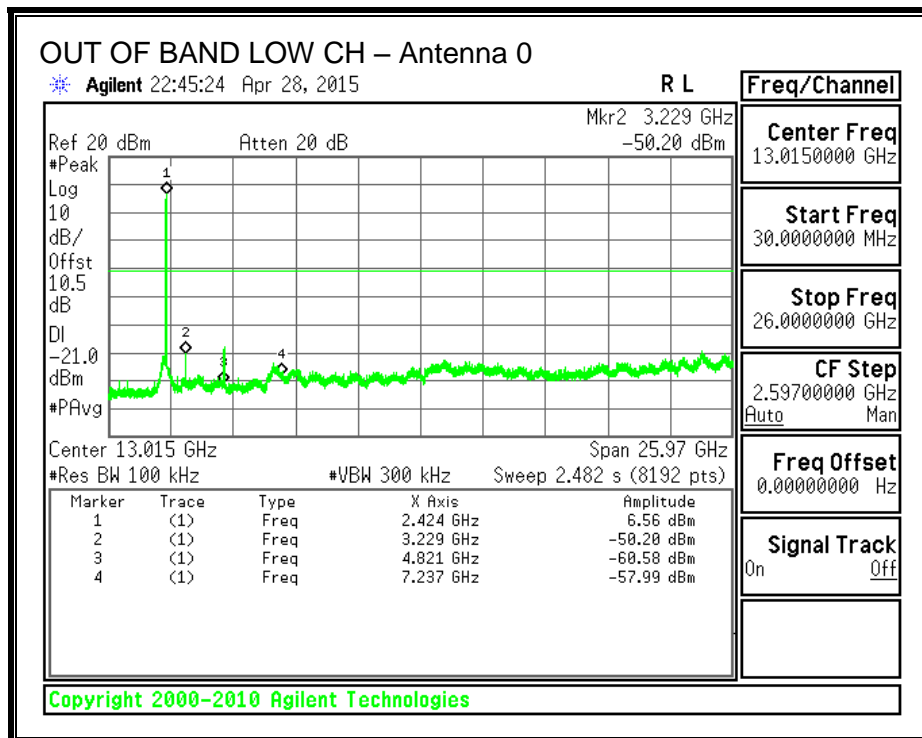


**HIGH CHANNEL BANDEDGE**

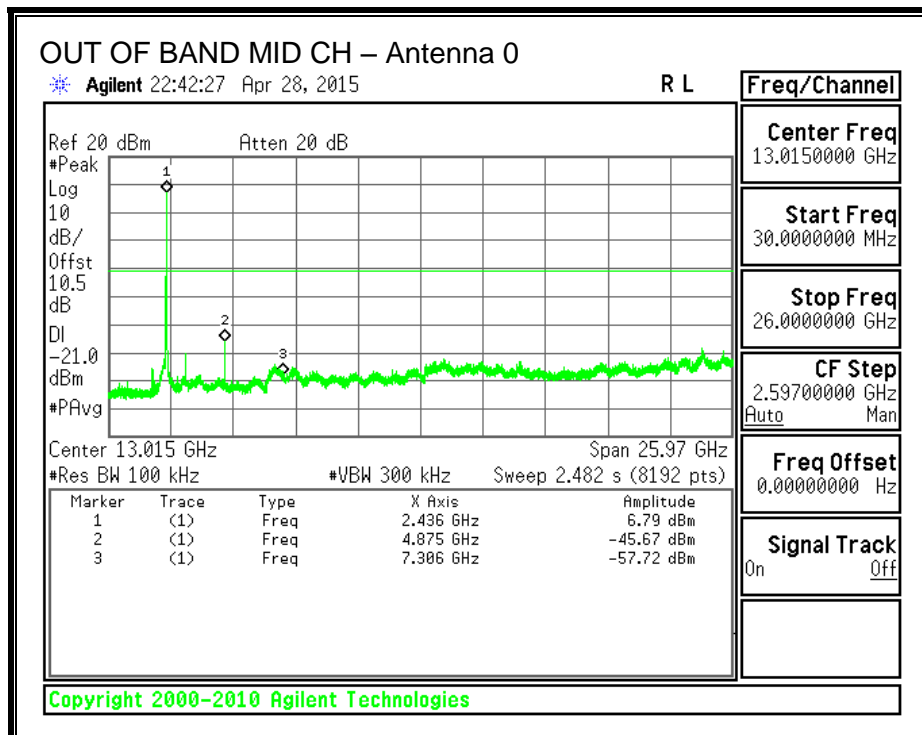


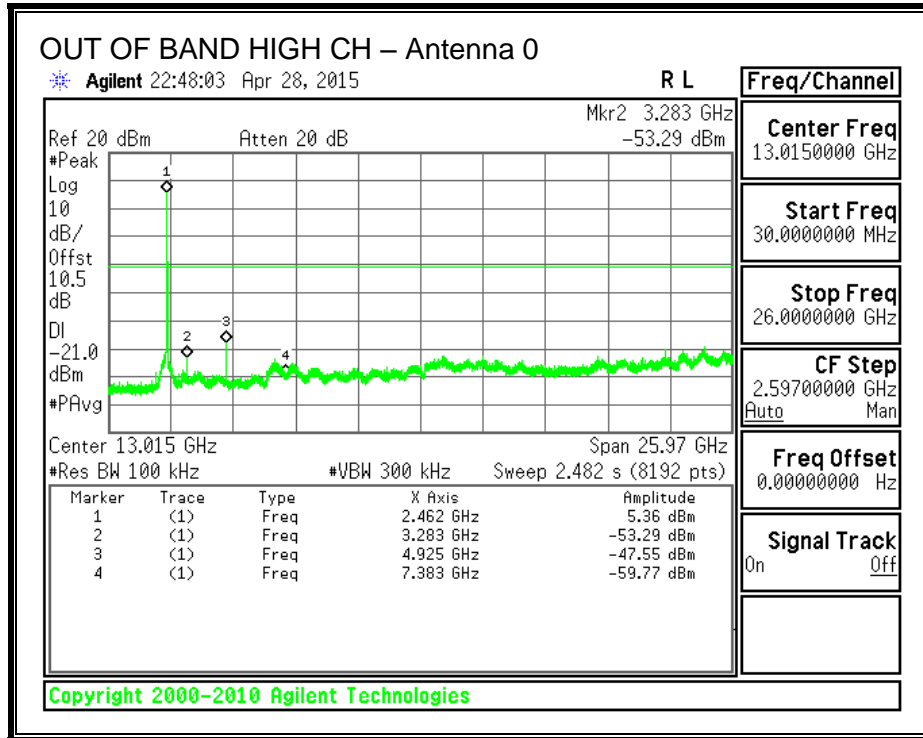
Note – CH11 was tested at the Mid Channel Power setting to achieve worst-case results.

**OUT-OF-BAND EMISSIONS**



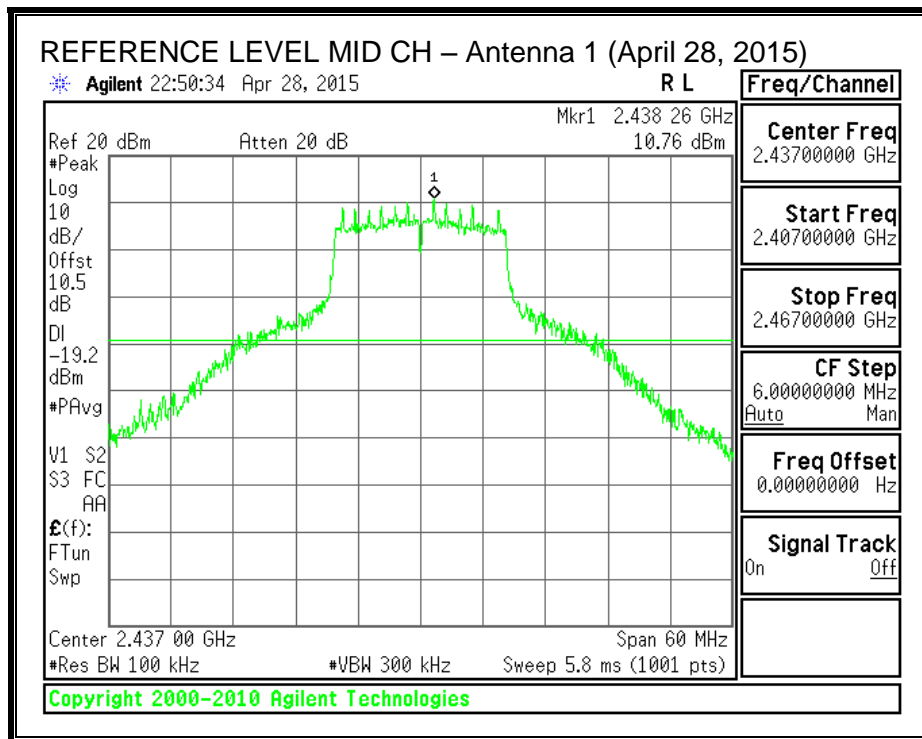
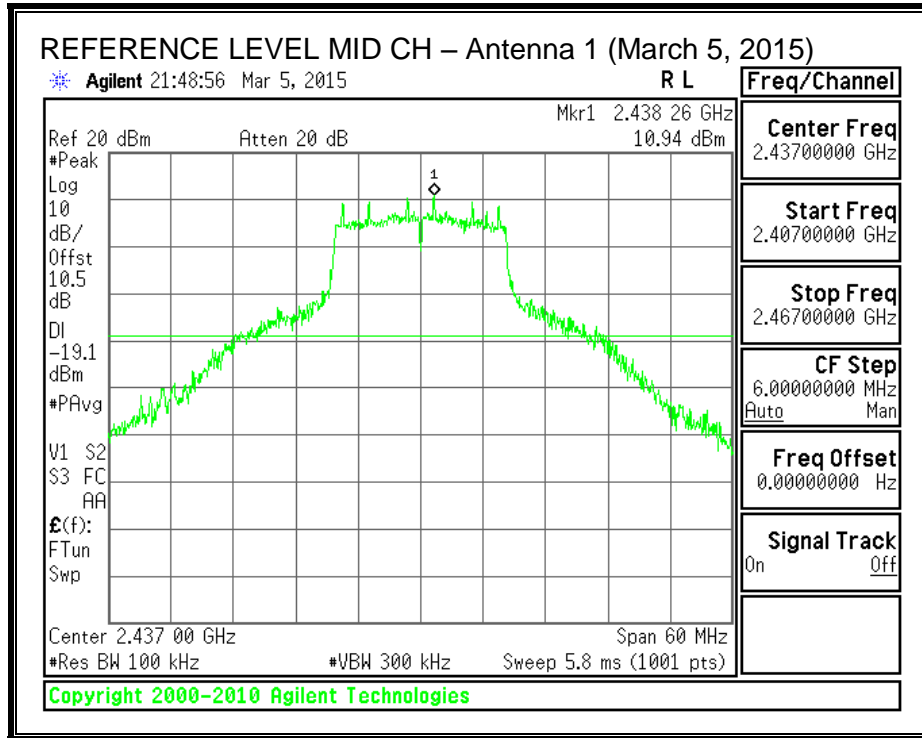
Note – For Conducted Spurious, the Low Channel was tested at the same power setting as Mid channel to achieve worst-case results.



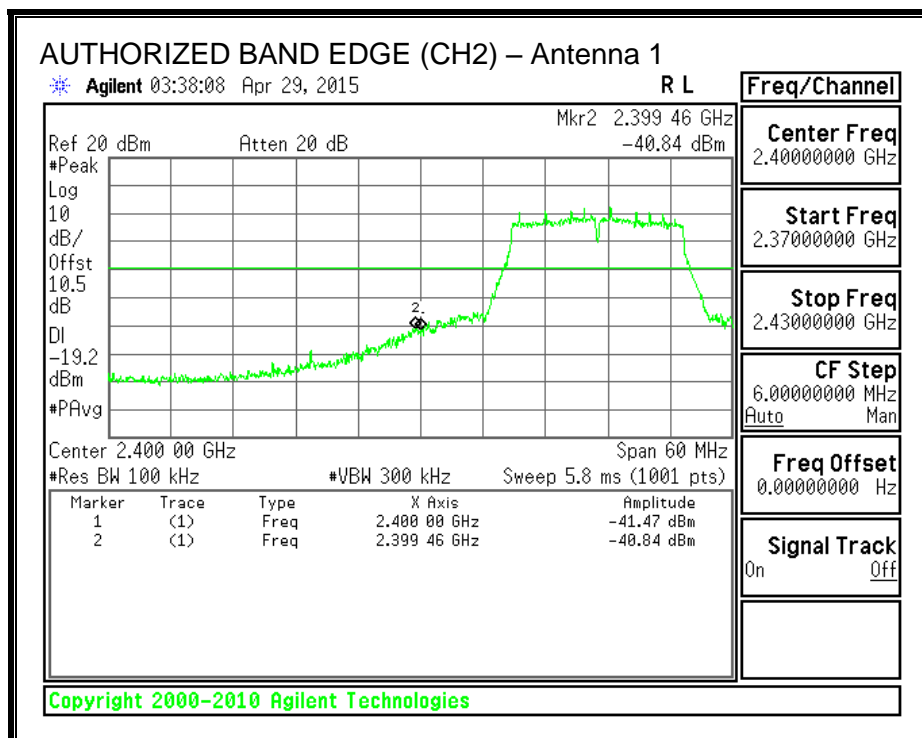
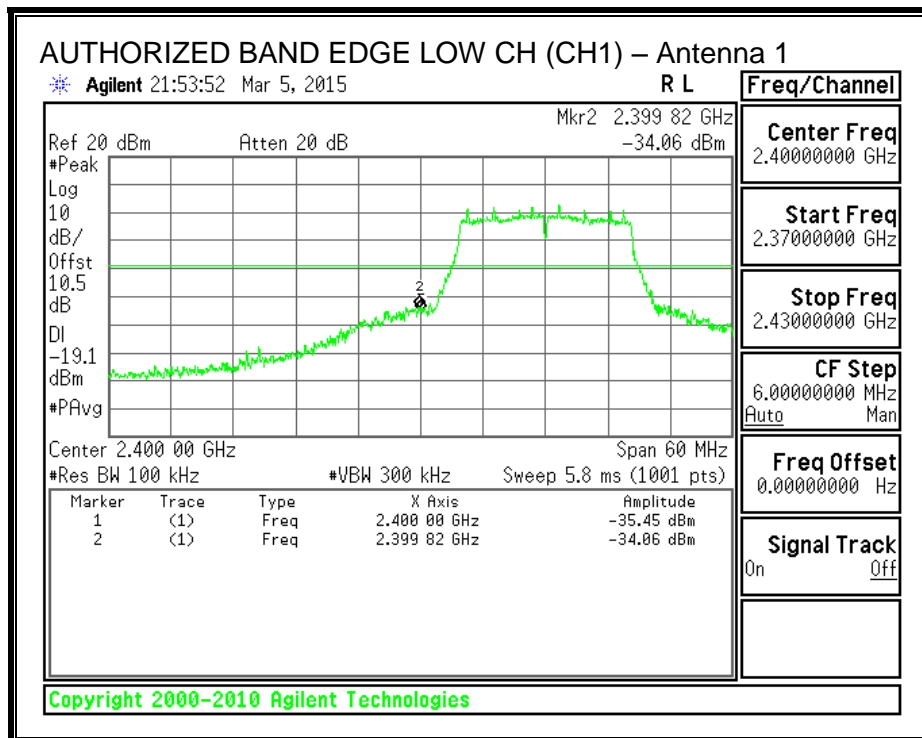


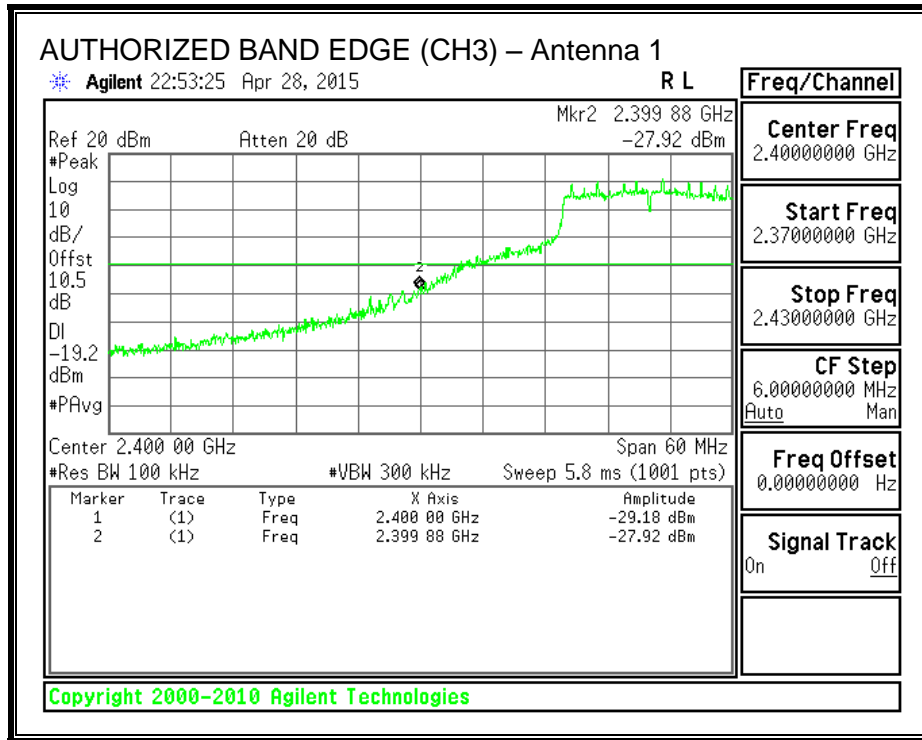
Note – For Conducted Spurious, the High Channel was tested at the same power setting as Mid channel to achieve worst-case results.

**IN-BAND REFERENCE LEVEL – Antenna 1**



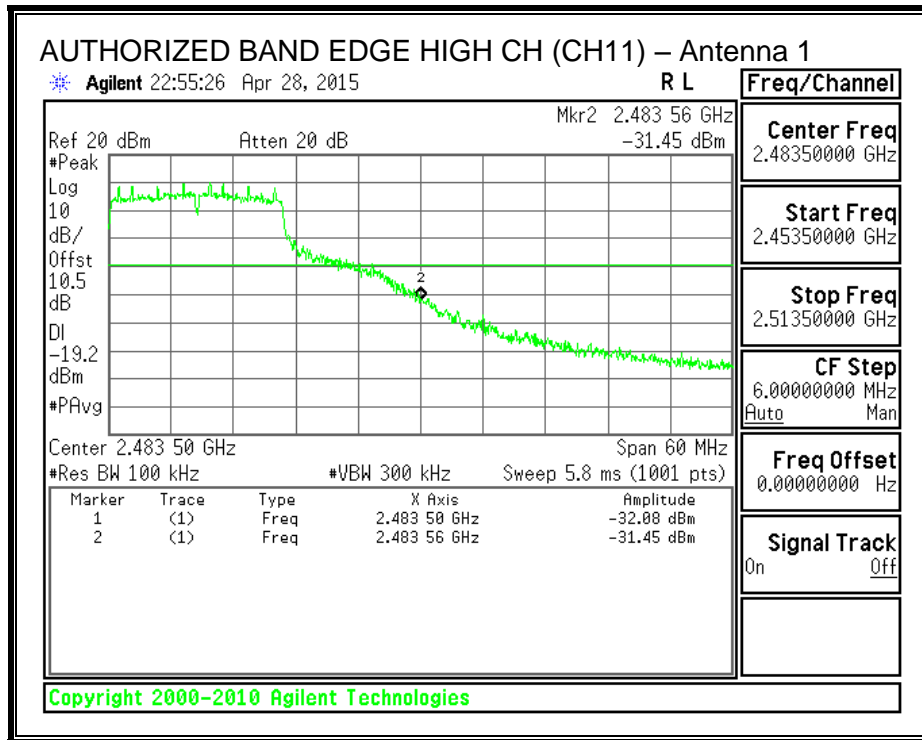
**LOW CHANNEL BANDEDGE**





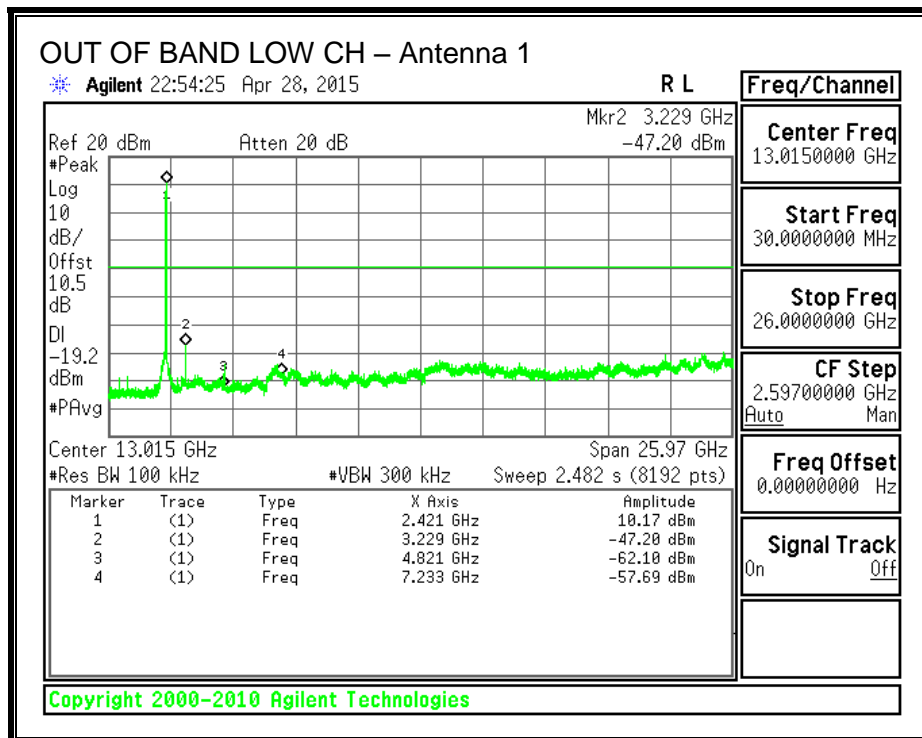
Note – CH3 was tested at the Mid Channel Power setting to achieve worst-case results.

**HIGH CHANNEL BANDEDGE**

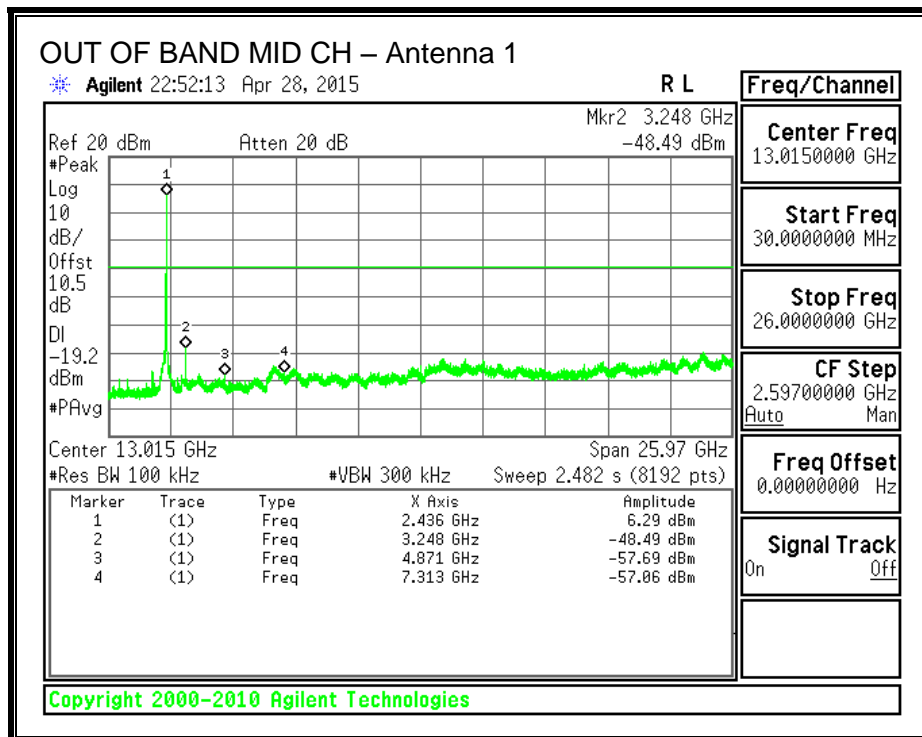


Note – CH11 was tested at the Mid Channel Power setting to achieve worst-case results.

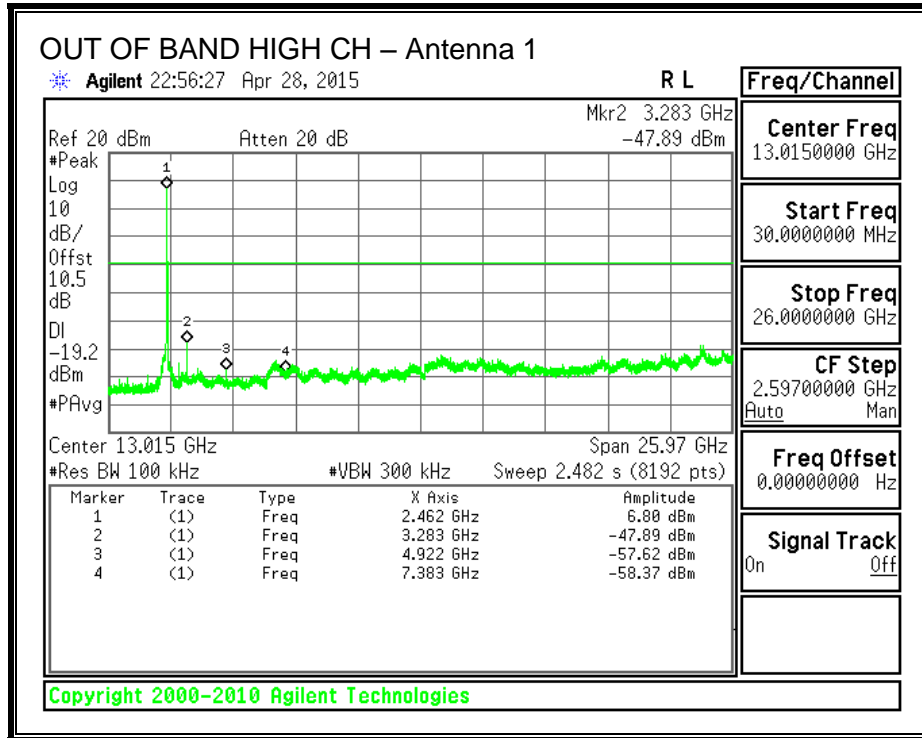
**OUT-OF-BAND EMISSIONS**



Note – For Conducted Spurious, the Low Channel was tested at the same power setting as Mid channel to achieve worst-case results.







Note – For Conducted Spurious, the High Channel was tested at the same power setting as Mid channel to achieve worst-case results.

## 8.4. 802.11n HT20 MODE IN THE 2.4 GHz BAND

### 8.4.1. 6 dB BANDWIDTH

#### LIMITS

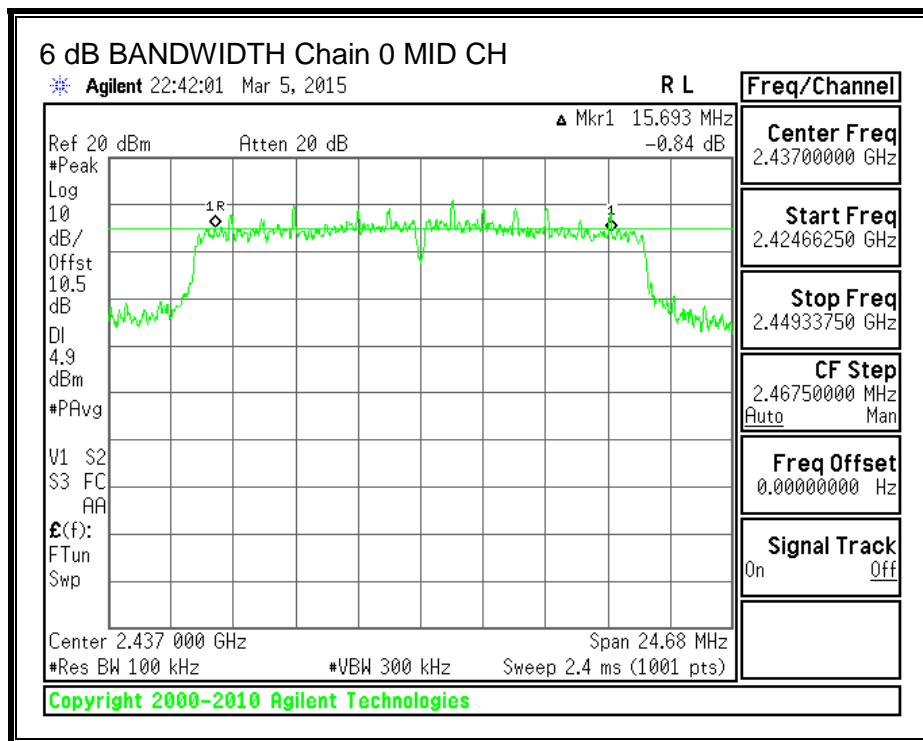
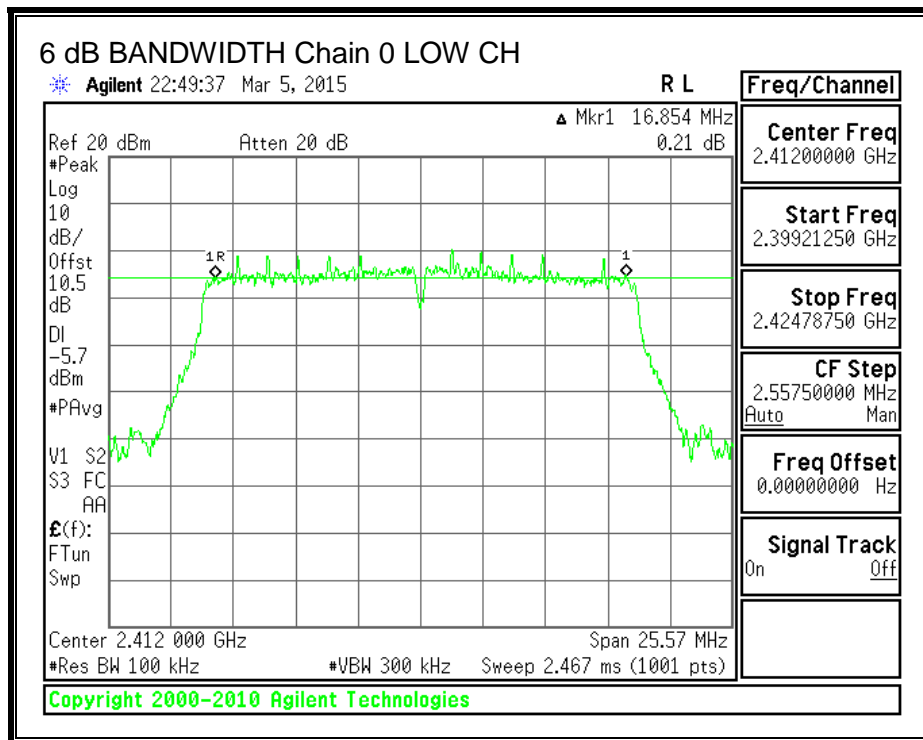
FCC §15.247 (a) (2)

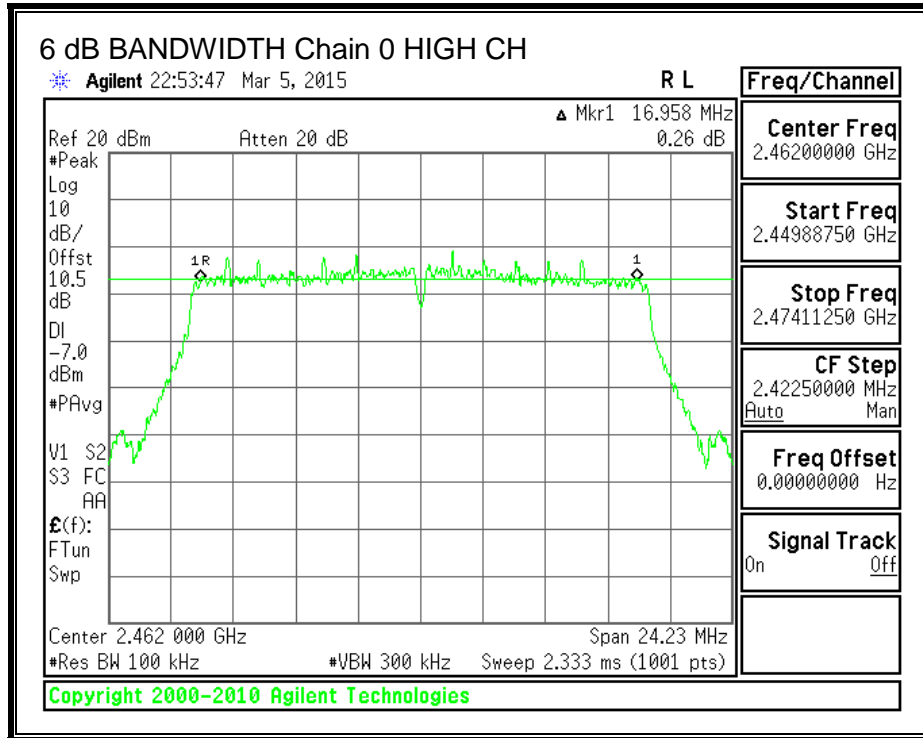
The minimum 6 dB bandwidth shall be at least 500 kHz.

#### RESULTS – 802.11n HT20

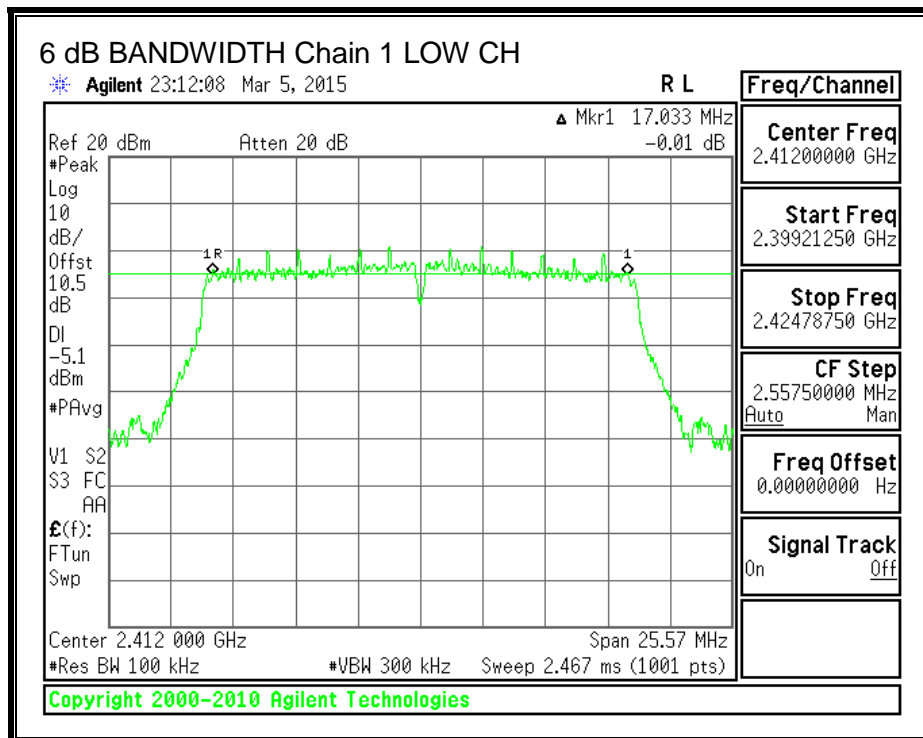
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	2412	16.854	17.033	0.5
Mid	2437	15.693	15.094	0.5
High	2462	16.958	16.983	0.5

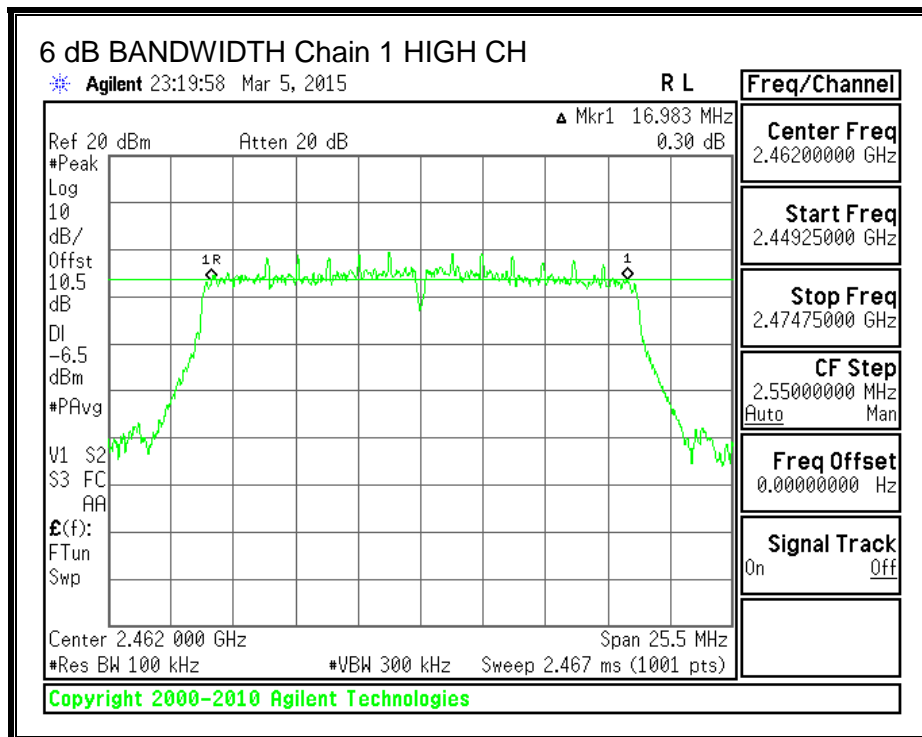
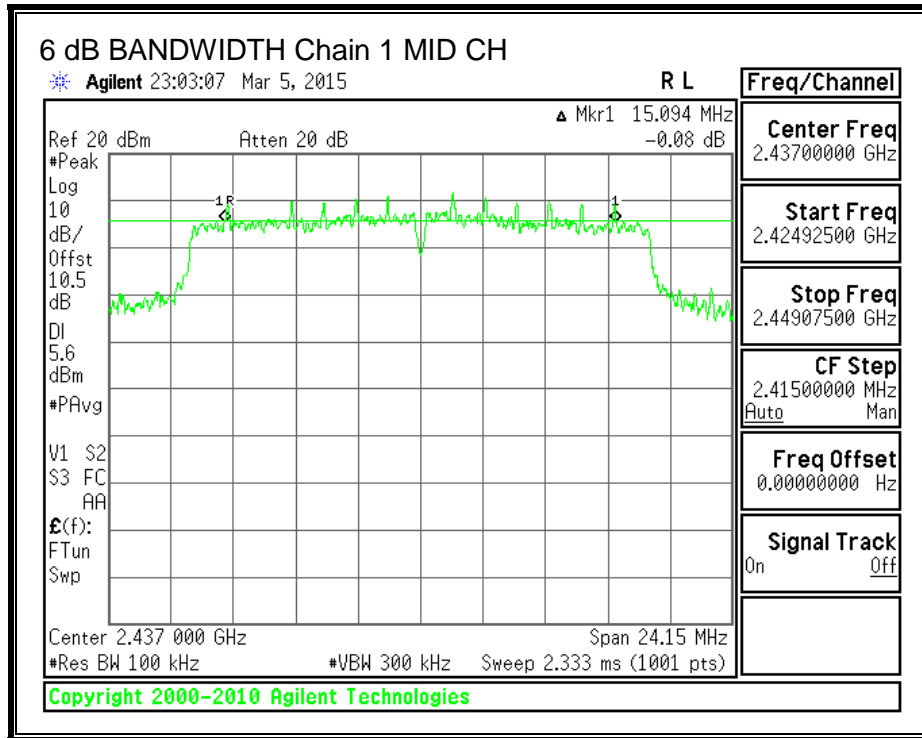
**6 dB BANDWIDTH, Chain 0**





**6 dB BANDWIDTH, Chain 1**





### 8.4.2. 99% BANDWIDTH

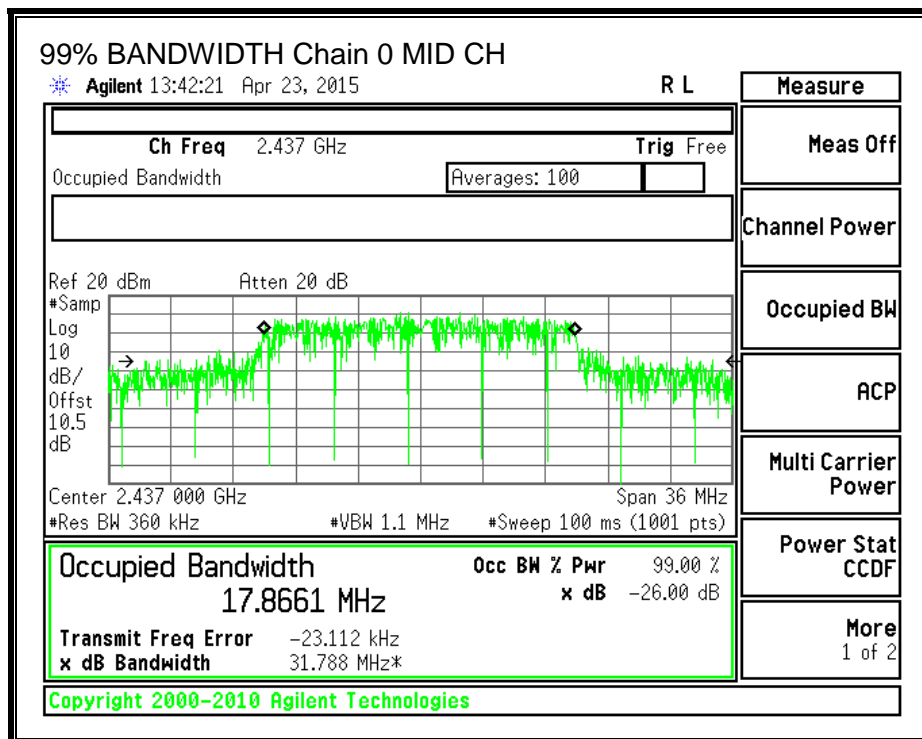
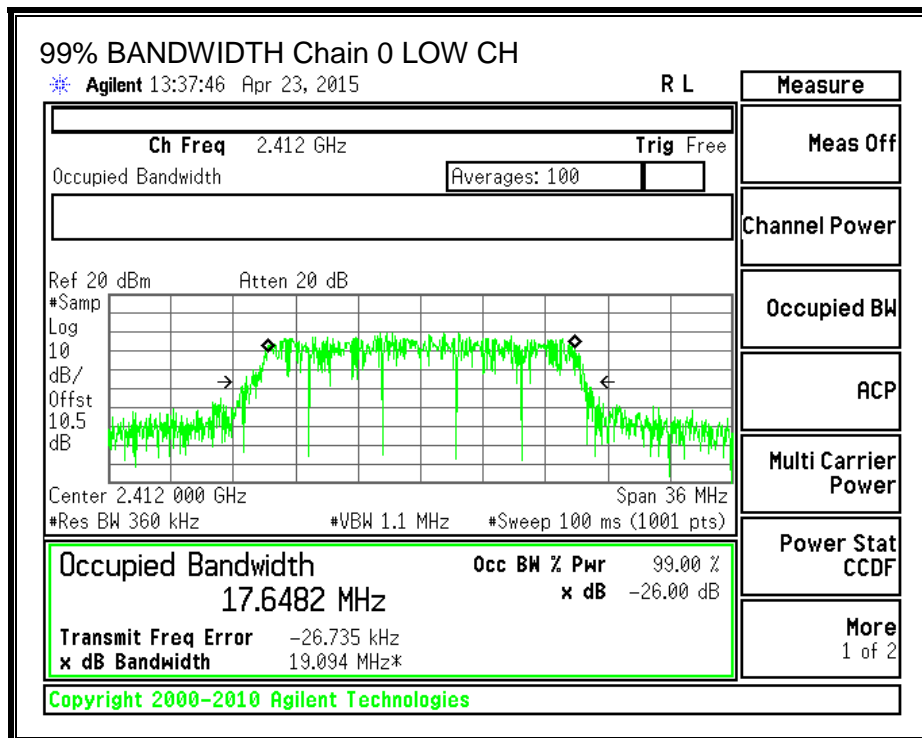
#### LIMITS

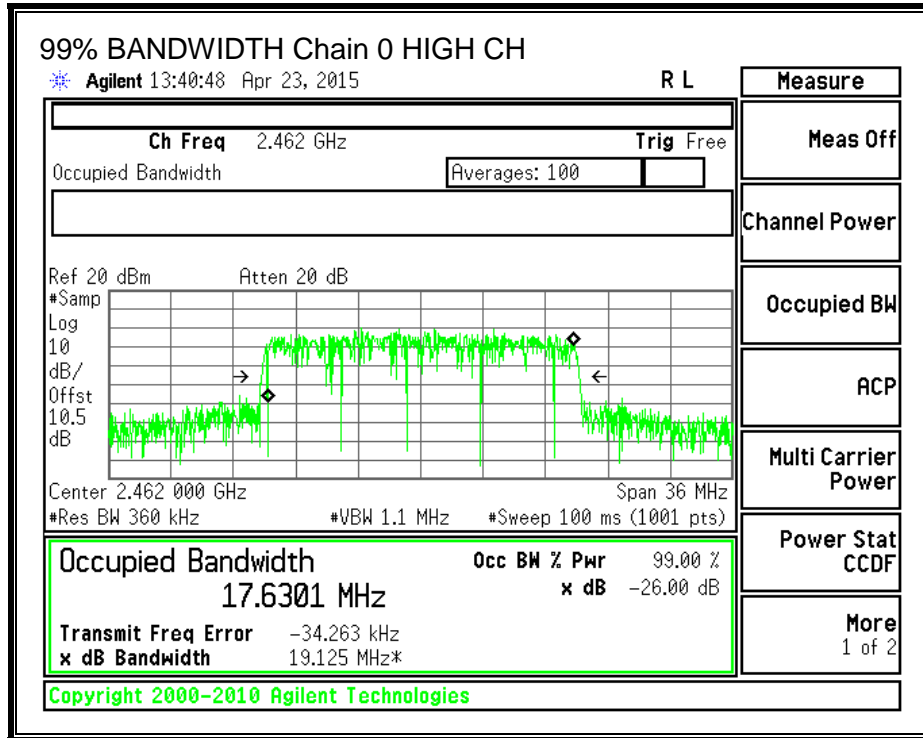
None; for reporting purposes only.

#### RESULTS – 802.11n HT20

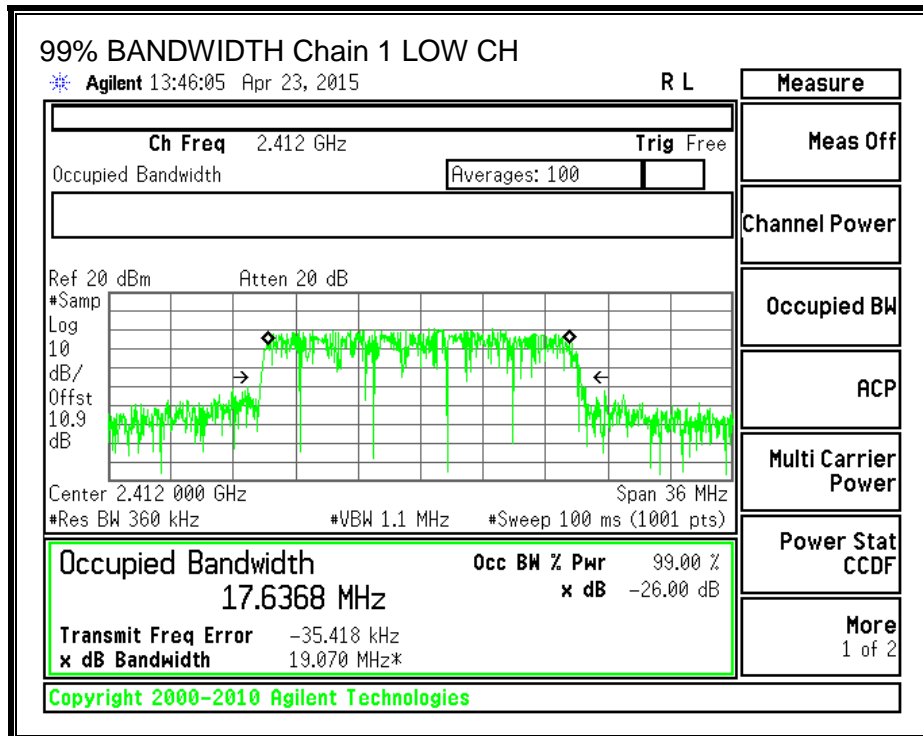
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	2412	17.6482	17.6368
Mid	2437	17.8661	17.9075
High	2462	17.6301	17.6218

**99% BANDWIDTH, Chain 0**

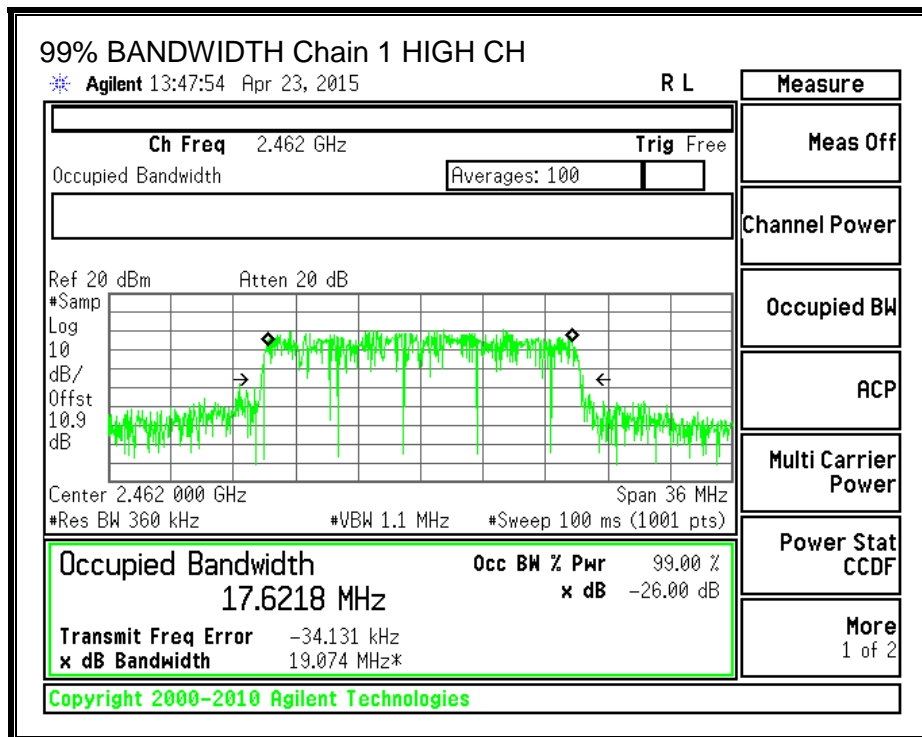
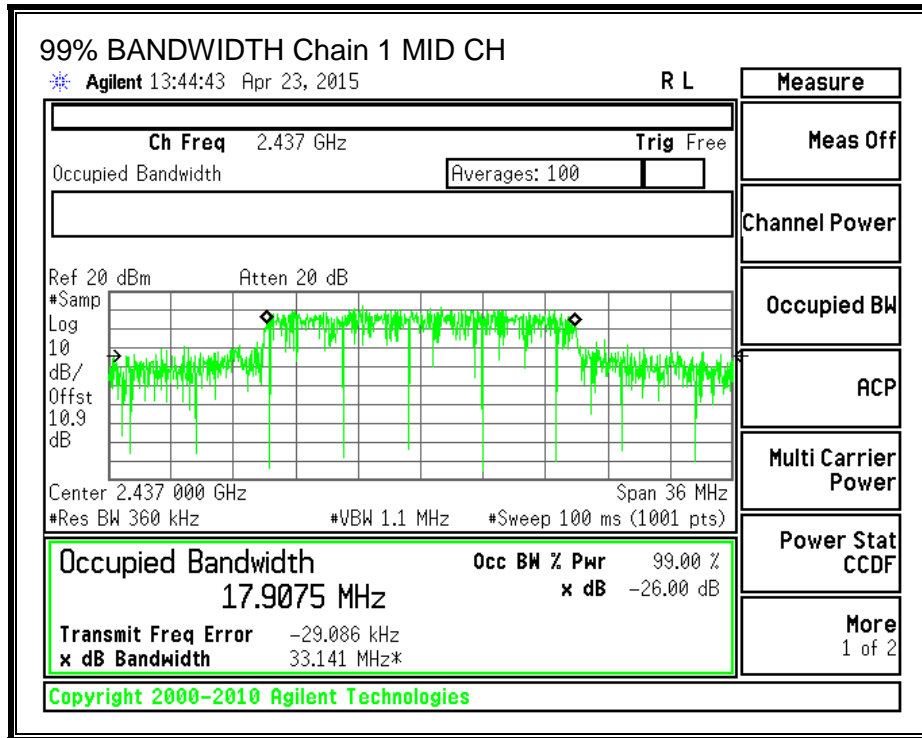




**99% BANDWIDTH, Chain 1**







### 8.4.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### RESULTS – 802.11n HT20

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low (1)	2412	10.54	11.39	14.00
2	2417	16.94	18.05	20.54
3	2422	18.69	17.76	21.26
4	2427	18.99	19.85	22.45
5	2432	20.34	21.07	23.73
Mid (6)	2437	20.27	20.89	23.60
7	2442	19.30	20.01	22.68
8	2447	18.48	19.20	21.87
9	2452	16.22	16.95	19.61
10	2457	15.17	15.91	18.57
High (11)	2462	9.34	9.96	12.67

### 8.4.4. OUTPUT POWER

#### LIMITS

FCC §15.247

For systems using digital modulation in the 902–928 MHz, 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

The EUT operated in CDD mode. Therefore, for output power the chains were considered uncorrelated and for Power Spectral Density, the chains were considered correlated.

Output Power - The TX chains are uncorrelated and the antenna gain is the same for each chain. The directional gain is equal to the antenna gain.

<b>Chain 0 Antenna Gain (dBi)</b>	<b>Chain 1 Antenna Gain (dBi)</b>	<b>Uncorrelated Chains Directional Gain (dBi)</b>
3.10	3.10	3.10

**RESULTS - 802.11n HT20**

A Power meter was used for these measurements.

**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	3.10	30.00	30	36	30.00
2	2417	3.10	30.00	30	36	30.00
3	2422	3.10	30.00	30	36	30.00
4	2427	3.10	30.00	30	36	30.00
5	2432	3.10	30.00	30	36	30.00
Mid (6)	2437	3.10	30.00	30	36	30.00
7	2442	3.10	30.00	30	36	30.00
8	2447	3.10	30.00	30	36	30.00
9	2452	3.10	30.00	30	36	30.00
10	2457	3.10	30.00	30	36	30.00
High (11)	2462	3.10	30.00	30	36	30.00

<b>Duty Cycle CF (dB)</b>	0.00	<b>Included in Calculations of Corr'd Power</b>
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**Results**

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margi (dB)
Low (1)	2412	10.54	11.39	14.00	30.00	-16.00
2	2417	16.94	18.05	20.54	30.00	-9.46
3	2422	18.69	17.76	21.26	30.00	-8.74
4	2427	18.99	19.85	22.45	30.00	-7.55
5	2432	20.34	21.07	23.73	30.00	-6.27
Mid (6)	2437	20.27	20.89	23.60	30.00	-6.40
7	2442	19.30	20.01	22.68	30.00	-7.32
8	2447	18.48	19.20	21.87	30.00	-8.13
9	2452	16.22	16.95	19.61	30.00	-10.39
10	2457	15.17	15.91	18.57	30.00	-11.43
High (11)	2462	9.34	9.96	12.67	30.00	-17.33

### 8.4.5. POWER SPECTRAL DENSITY

#### LIMITS

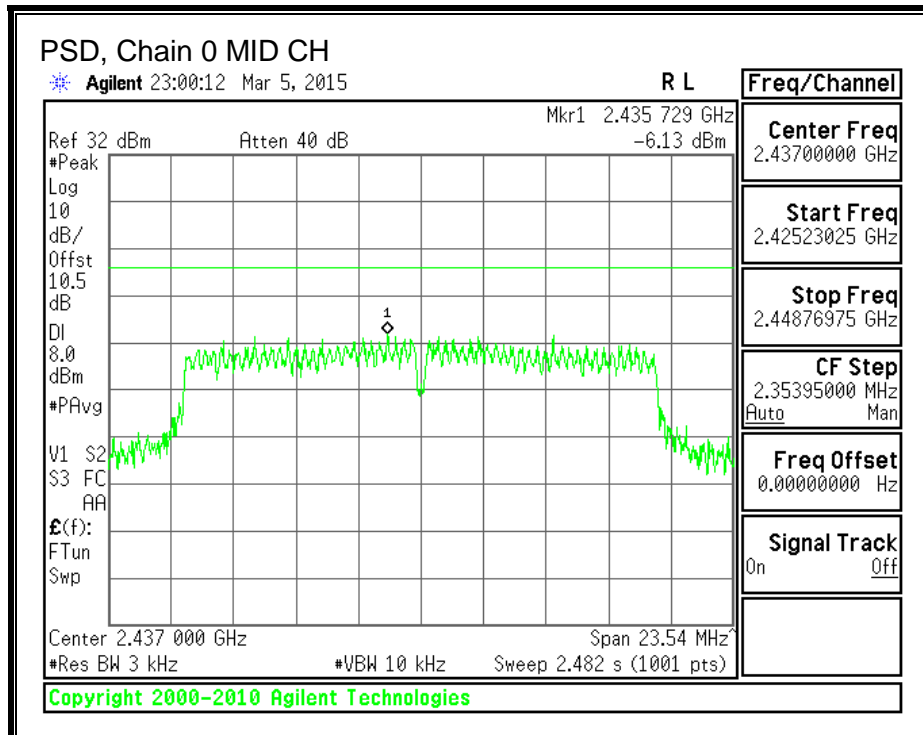
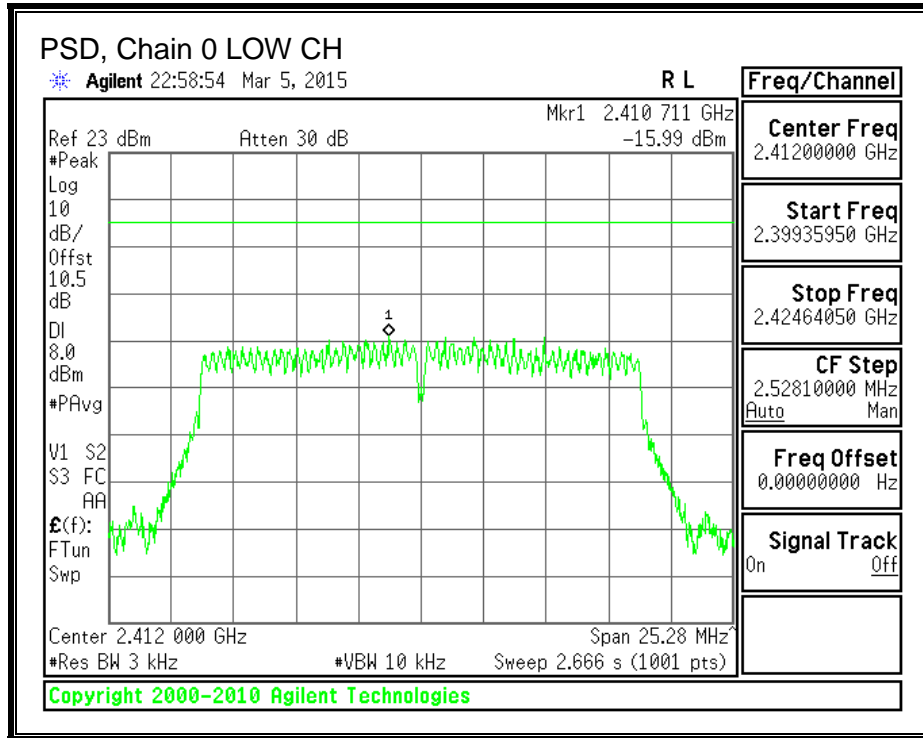
FCC §15.247

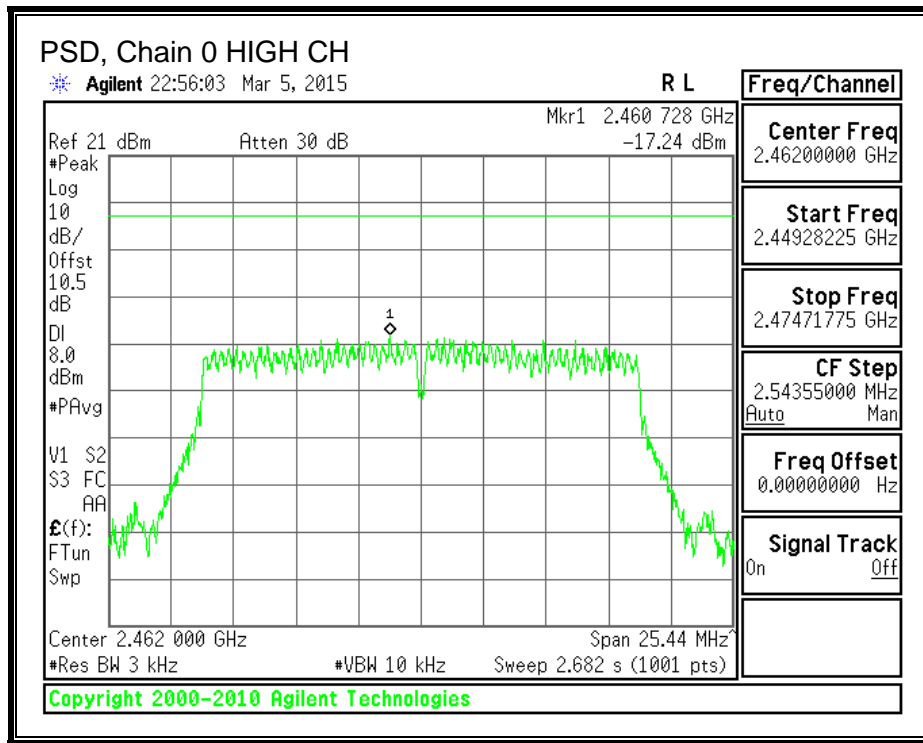
#### RESULTS - 802.11n HT20

##### PSD Results

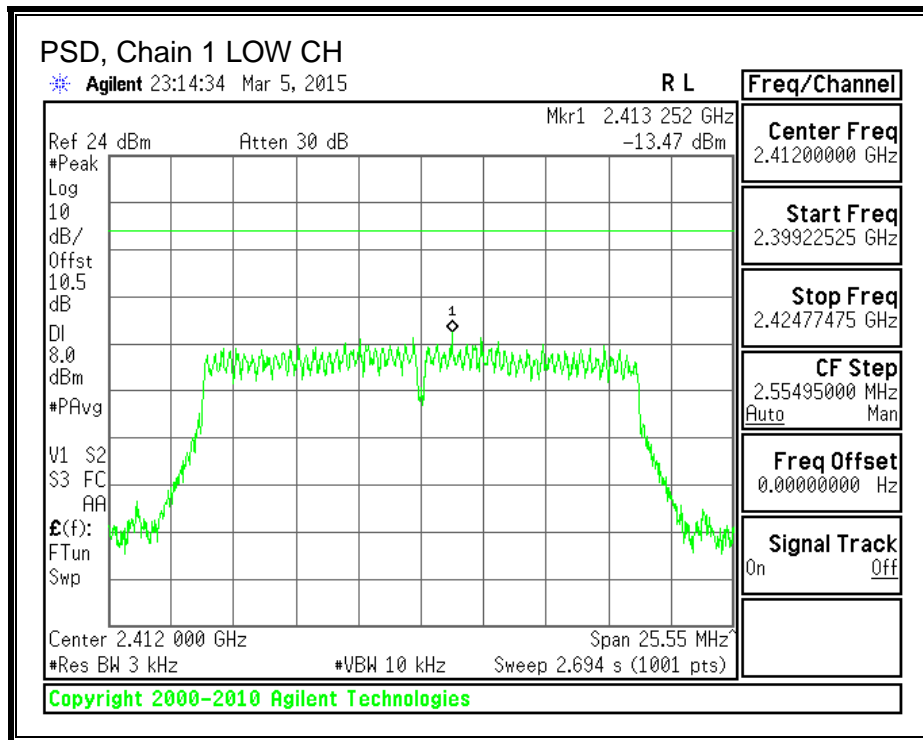
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-15.99	-13.47	-11.54	8.0	-19.5
Mid	2437	-6.13	-5.63	-2.86	8.0	-10.9
High	2462	-17.24	-16.83	-14.02	8.0	-22.0

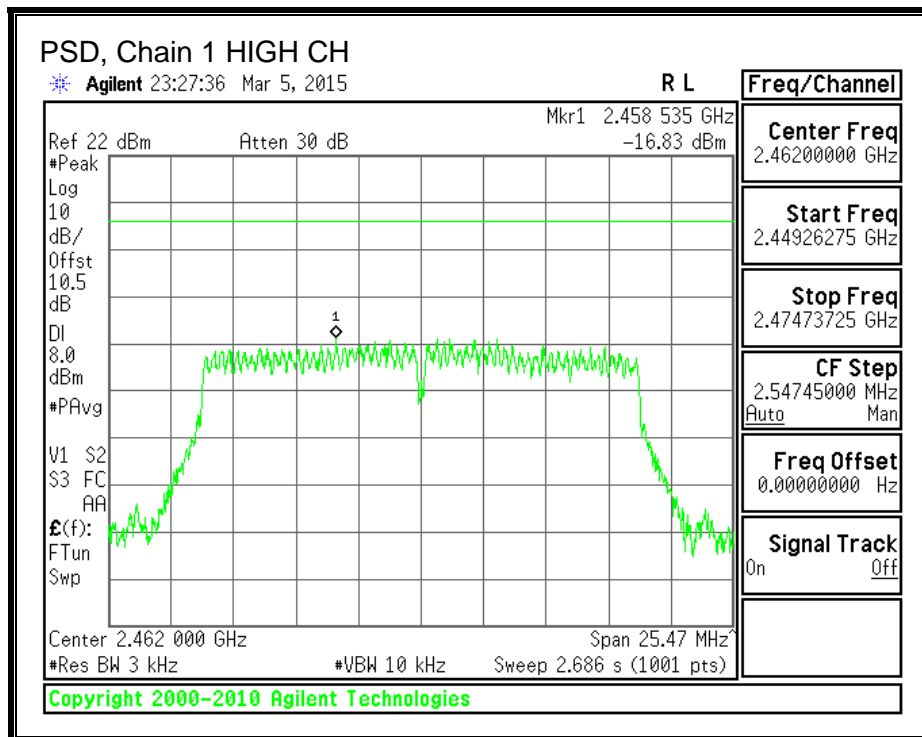
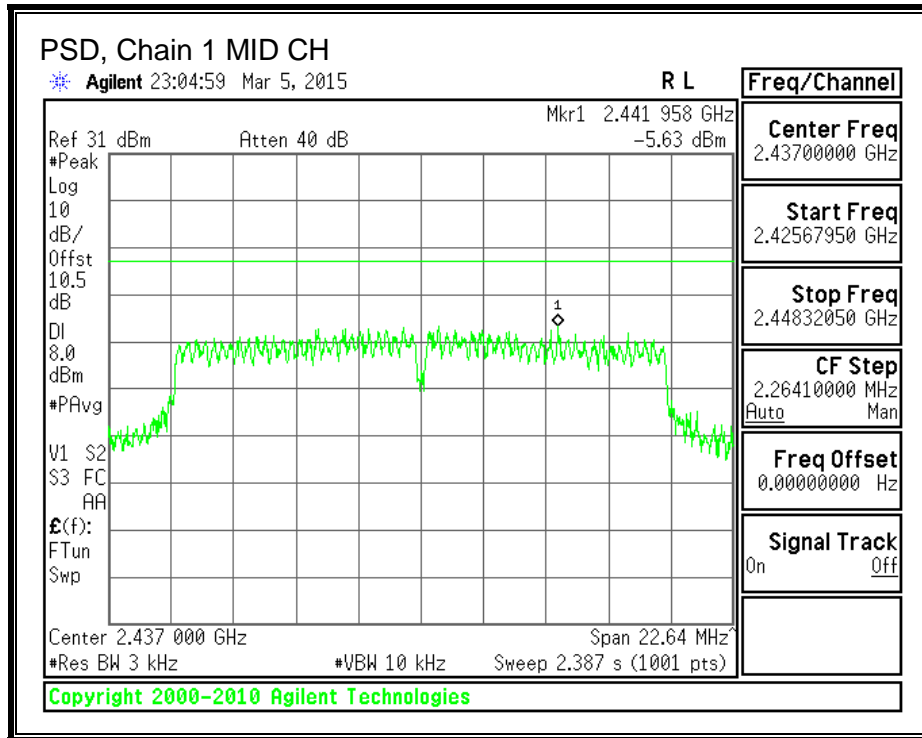
**PSD, Chain 0**





**PSD, Chain 1**







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## 8.4.6. OUT-OF-BAND EMISSIONS

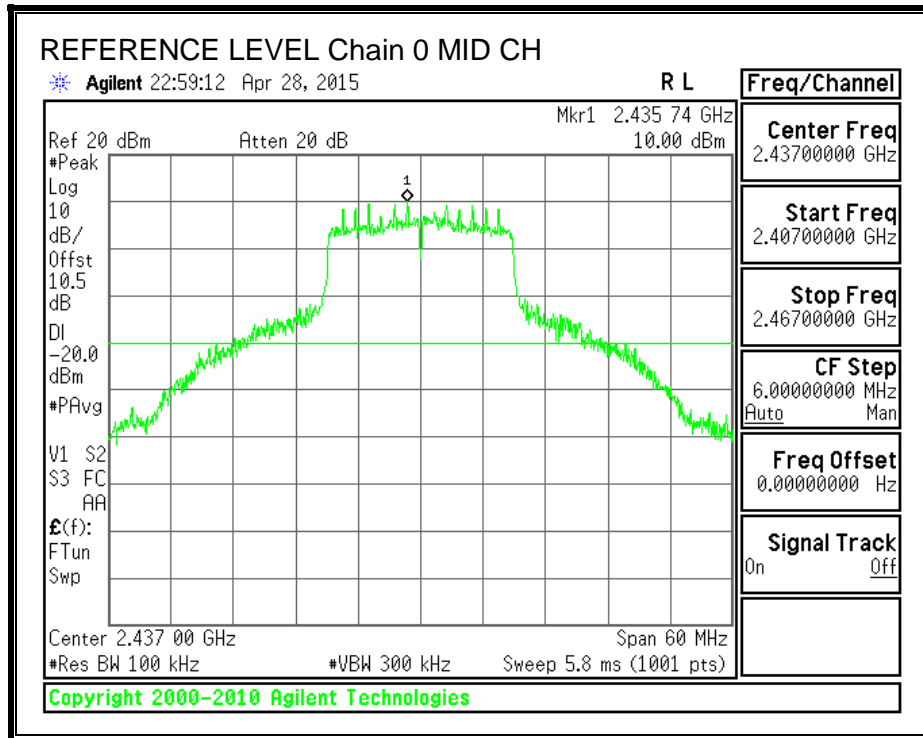
### LIMITS

FCC §15.247 (d)

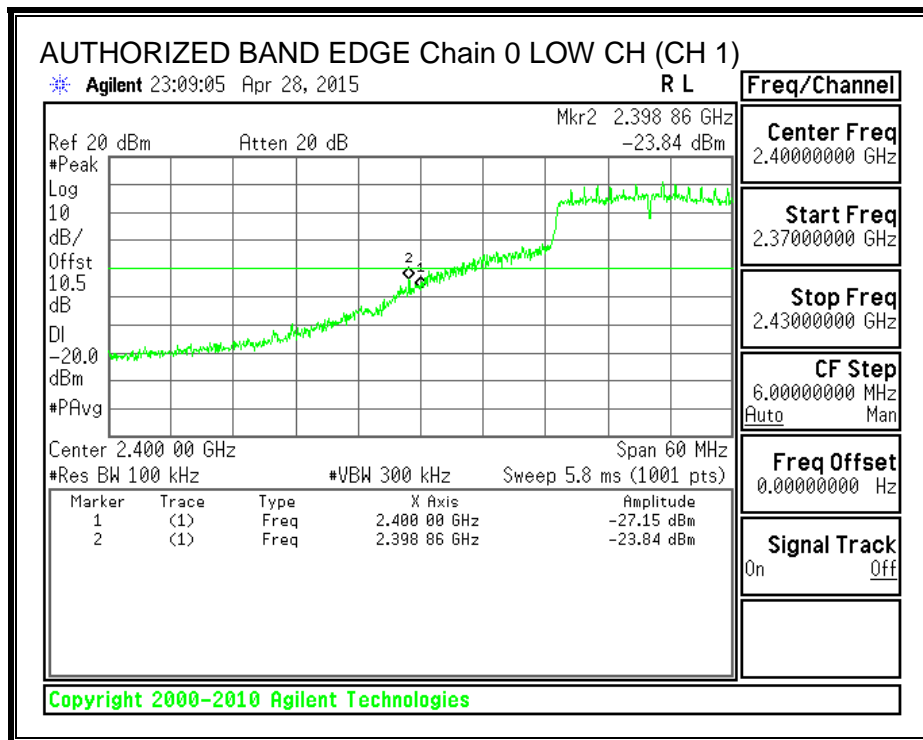
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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 - 802.11n HT20**

**IN-BAND REFERENCE LEVEL, Chain 0**

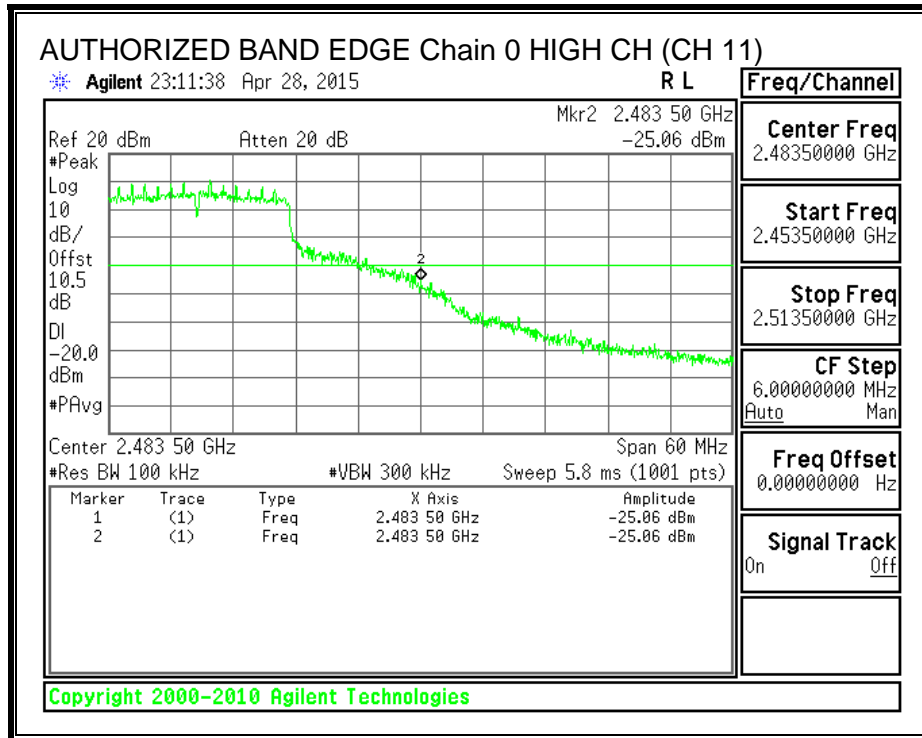


**LOW CHANNEL BANDEDGE, Chain 0**



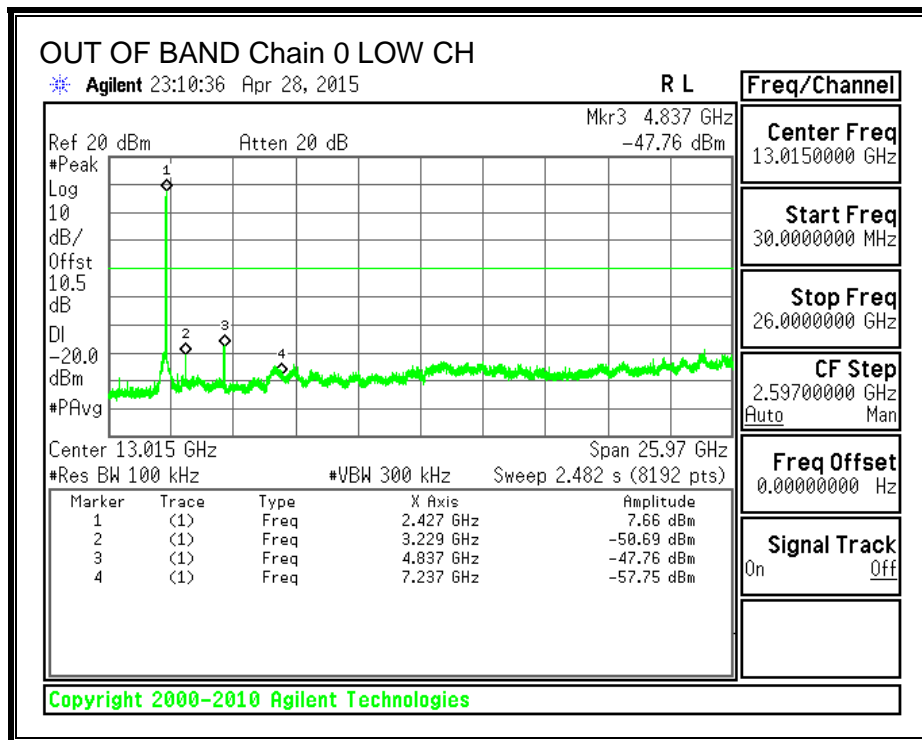
Note – CH1 was tested at the Mid Channel Power setting to achieve worst-case results.

**HIGH CHANNEL BANDEDGE, Chain 0**

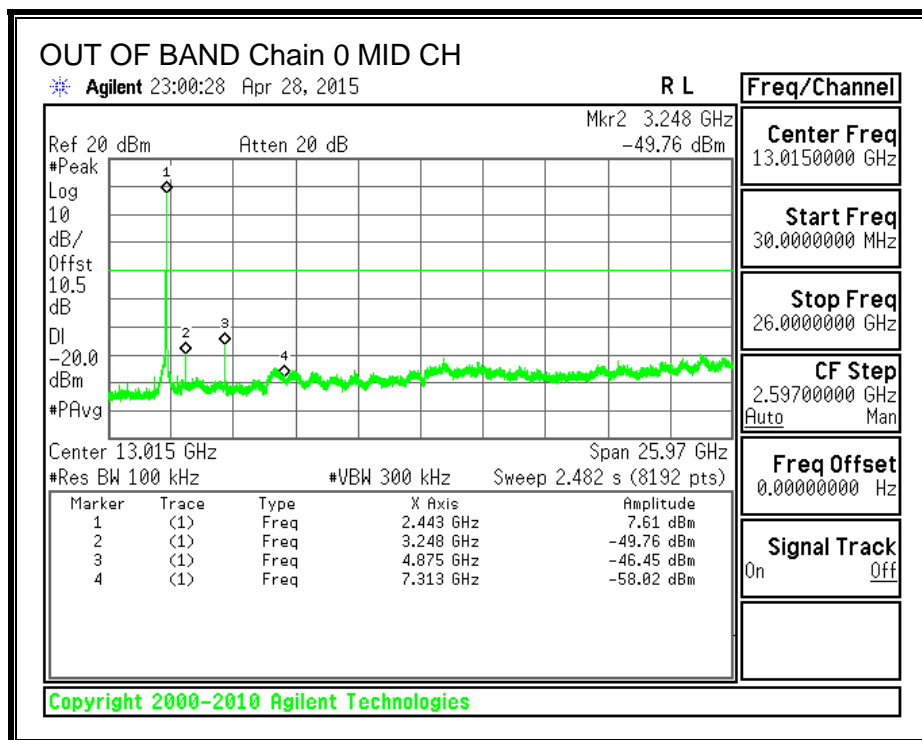


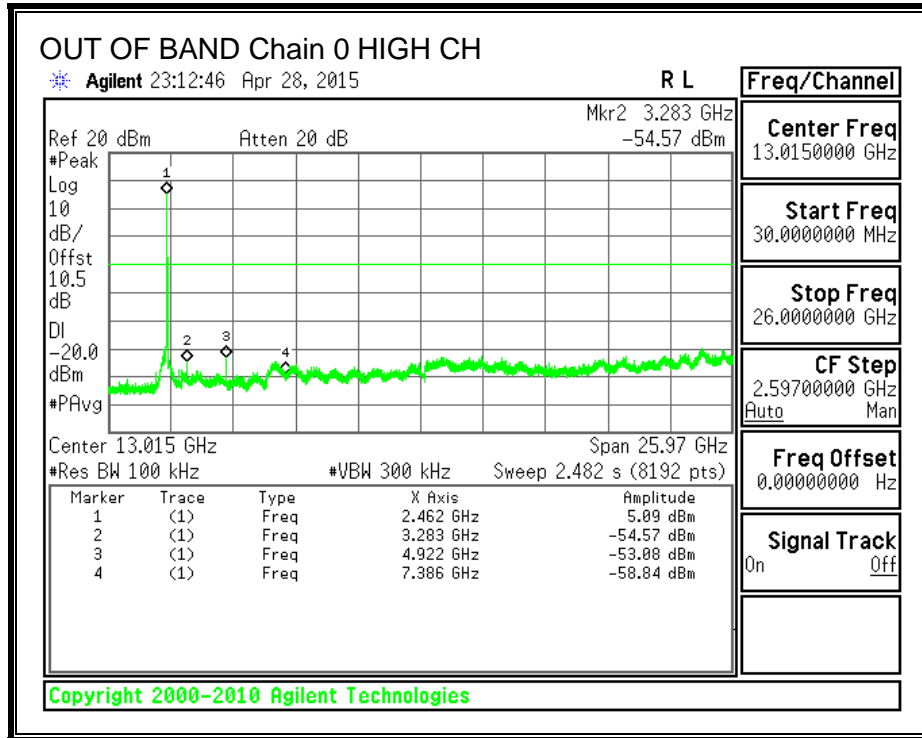
Note – CH11 was tested at the Mid Channel Power setting to achieve worst-case results.

**OUT-OF-BAND EMISSIONS, Chain 0**



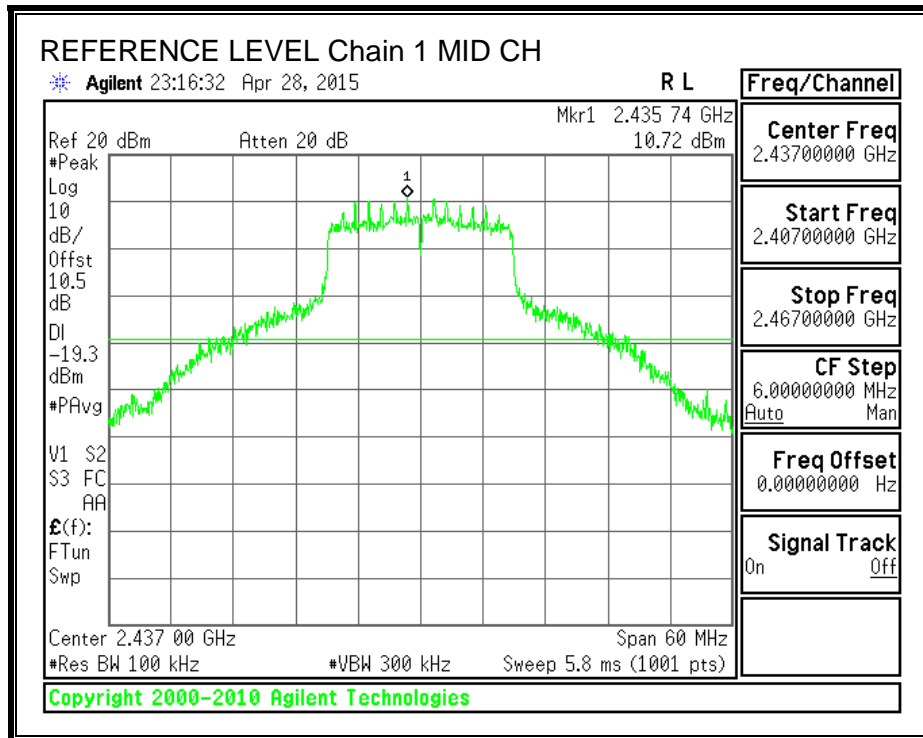
Note – For Conducted Spurious, the Low Channel was tested at the same power setting as Mid channel to achieve worst-case results.



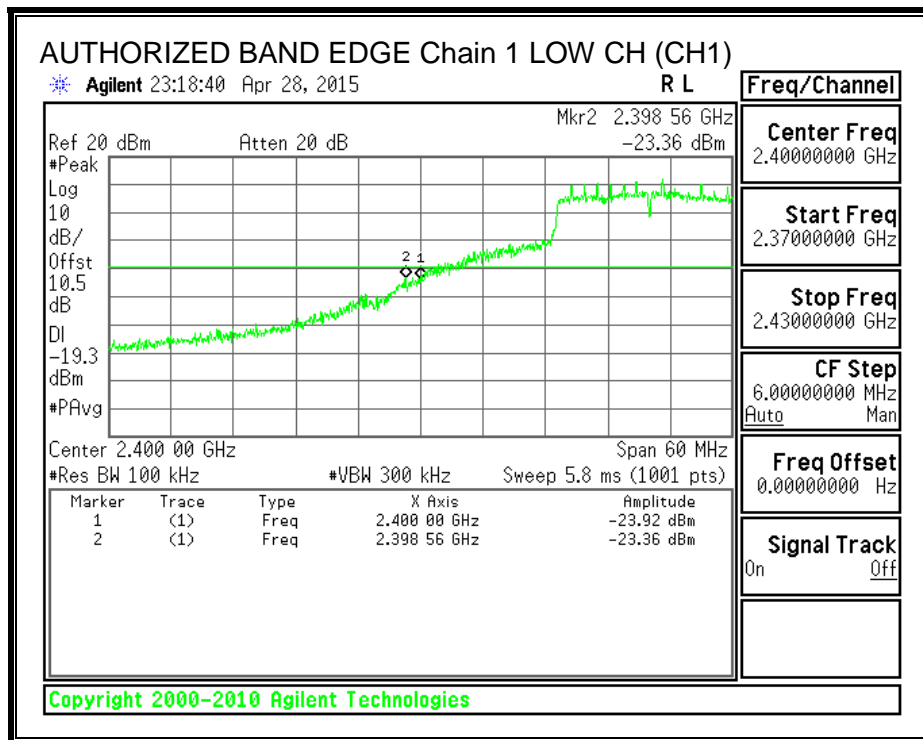


Note – For Conducted Spurious, the High Channel was tested at the same power setting as Mid channel to achieve worst-case results.

**IN-BAND REFERENCE LEVEL, Chain 1**



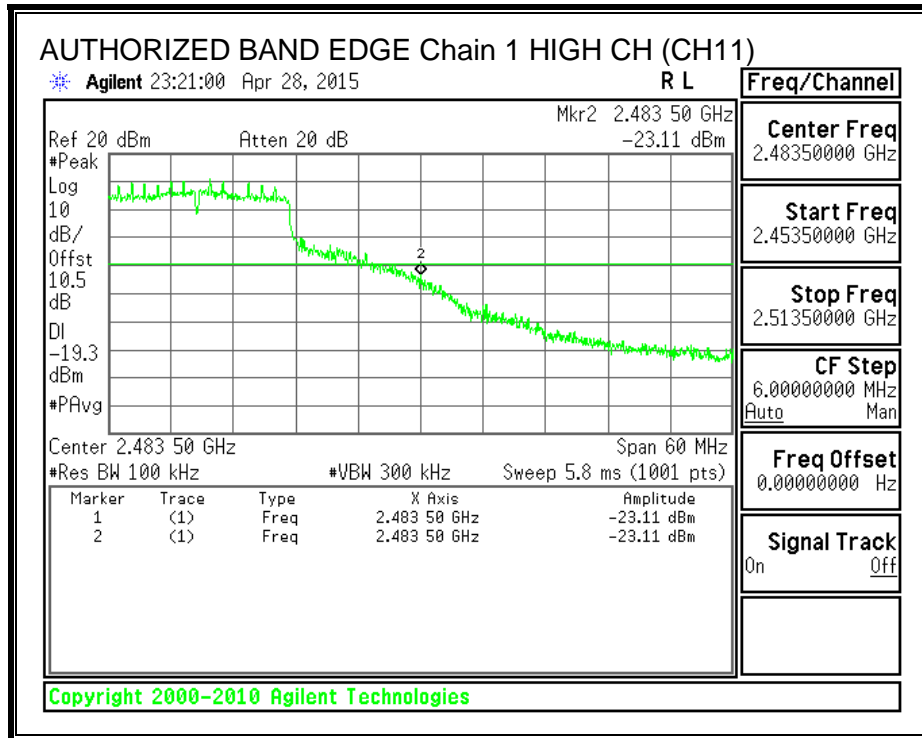
**LOW CHANNEL BANDEDGE, Chain 1**



Note – CH1 was tested at the Mid Channel Power setting to achieve worst-case results.

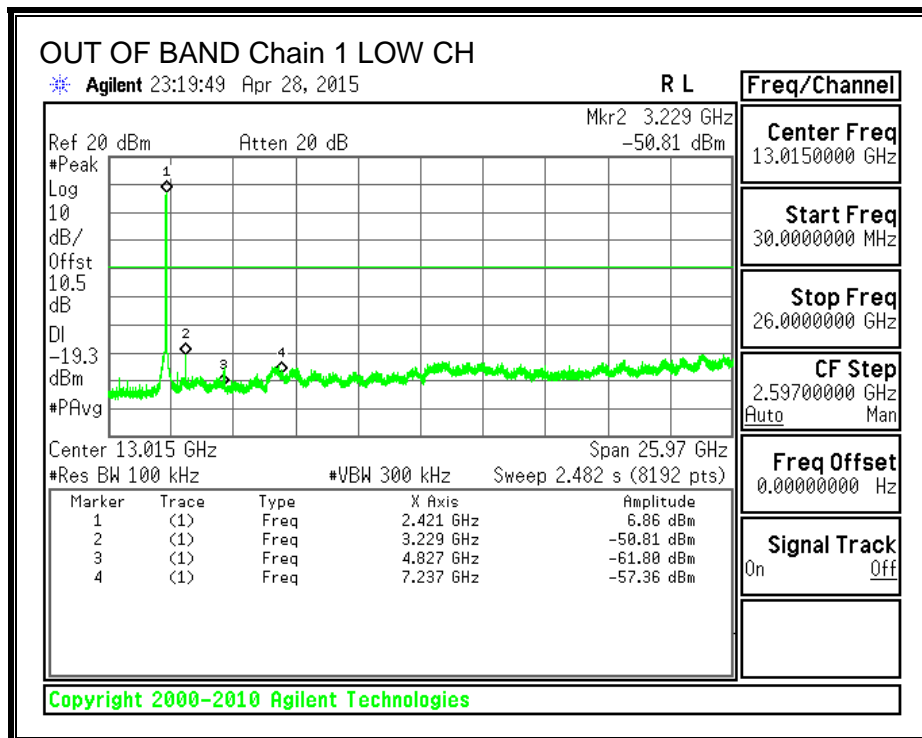


**HIGH CHANNEL BANDEDGE, Chain 1**

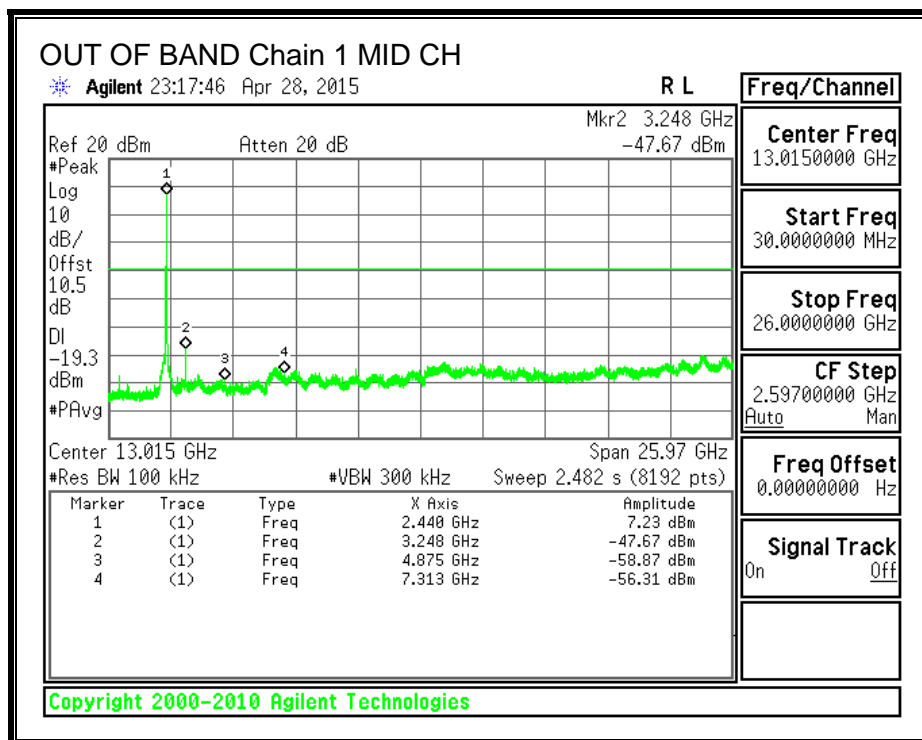


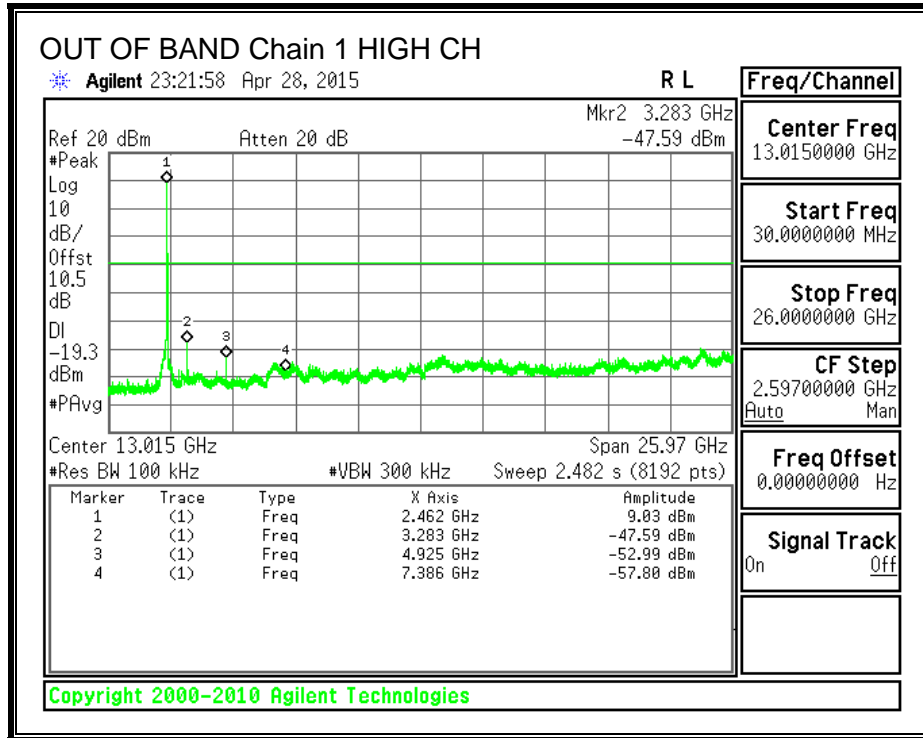
Note – CH11 was tested at the Mid Channel Power setting to achieve worst-case results

**OUT-OF-BAND EMISSIONS, Chain 1**



Note – For Conducted Spurious, the Low Channel was tested at the same power setting as Mid channel to achieve worst-case results.





Note – For Conducted Spurious, the High Channel was tested at the same power setting as Mid channel to achieve worst-case results.

## 8.5. 802.11n HT40 MODE IN THE 2.4 GHZ BAND

### 8.5.1. 6 dB BANDWIDTH

#### LIMITS

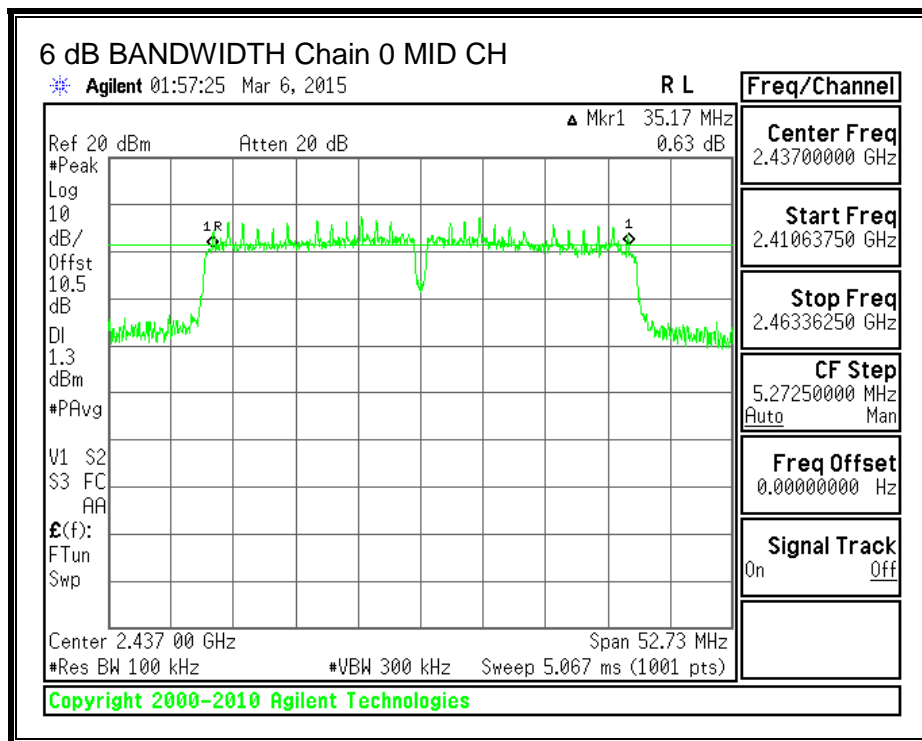
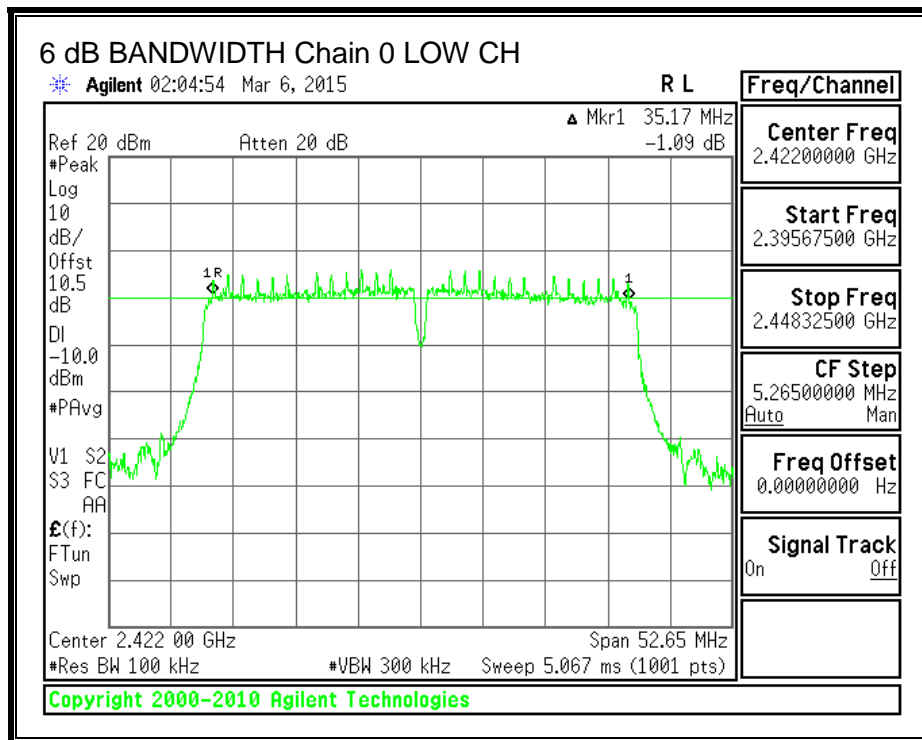
FCC §15.247 (a) (2)

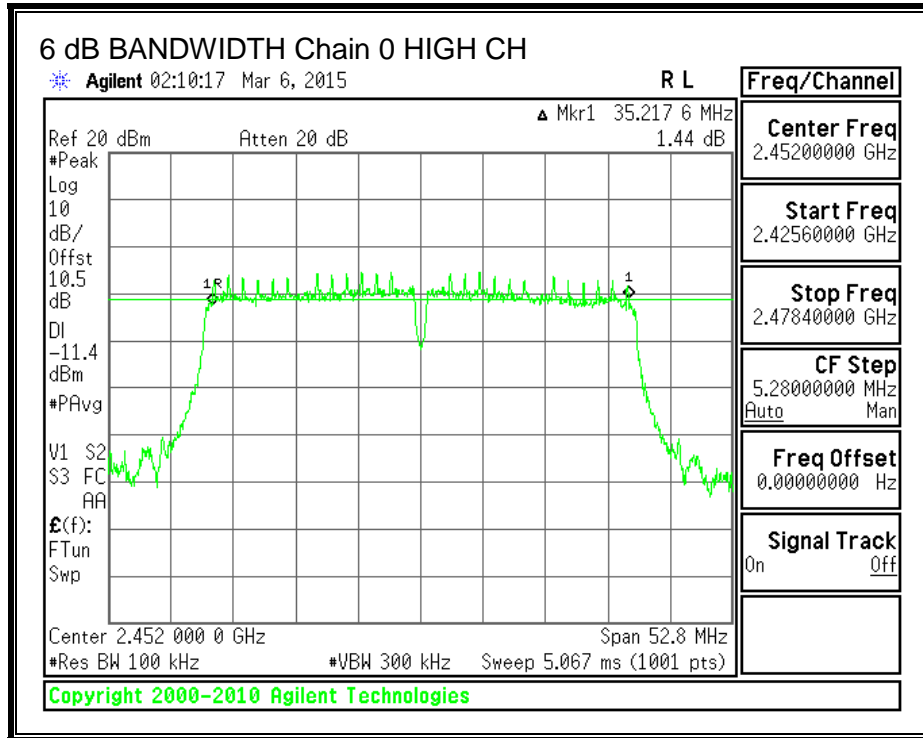
The minimum 6 dB bandwidth shall be at least 500 kHz.

#### RESULTS – 802.11n HT40

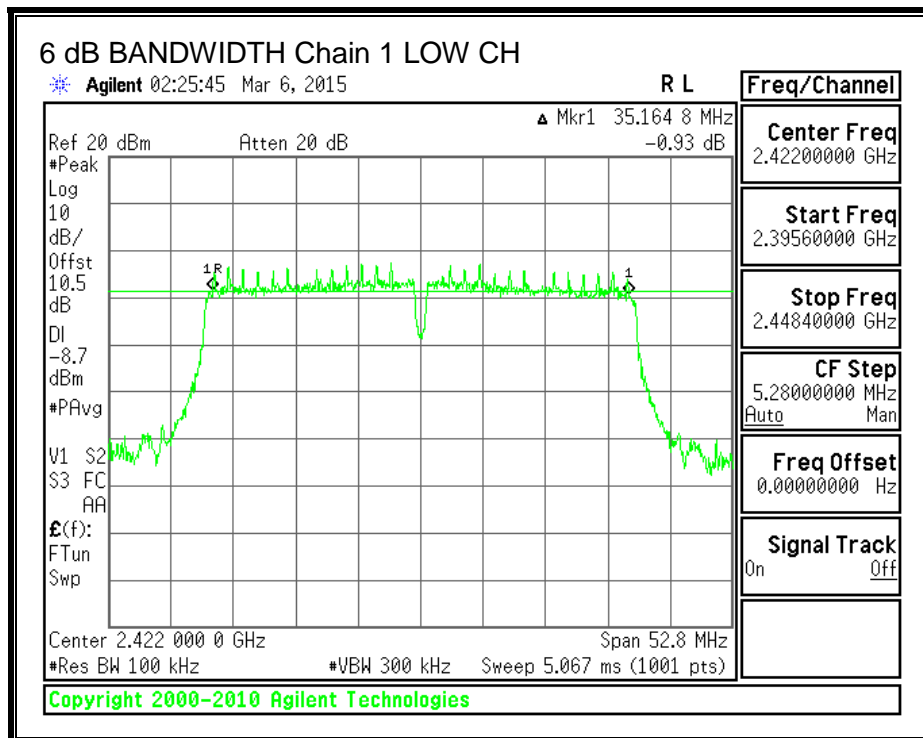
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	2422	35.170	35.165	0.5
Mid	2437	35.170	35.218	0.5
High	2452	35.218	35.200	0.5

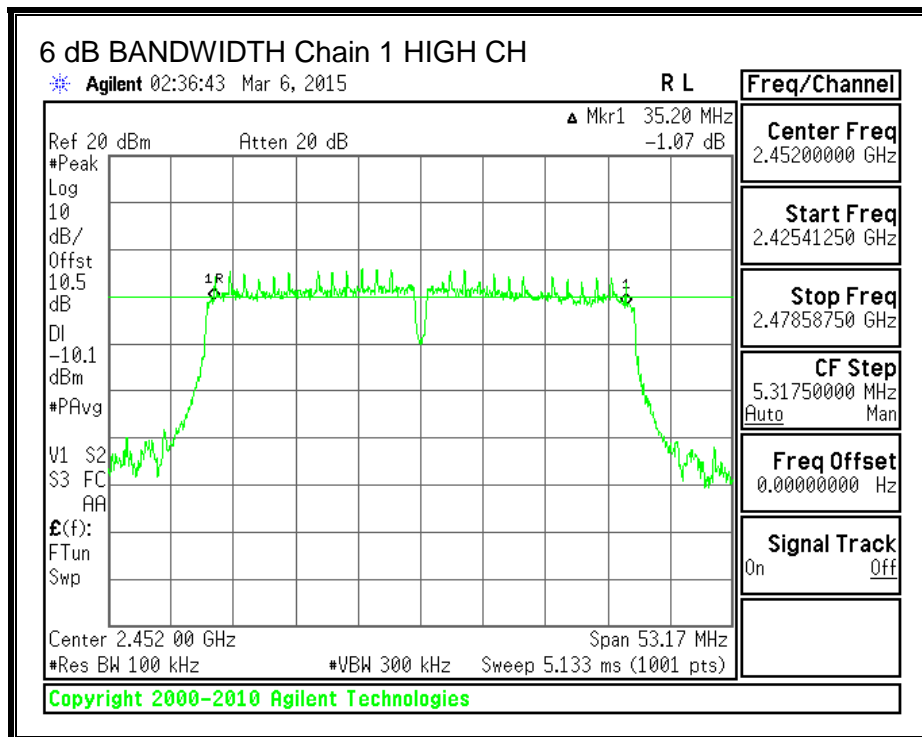
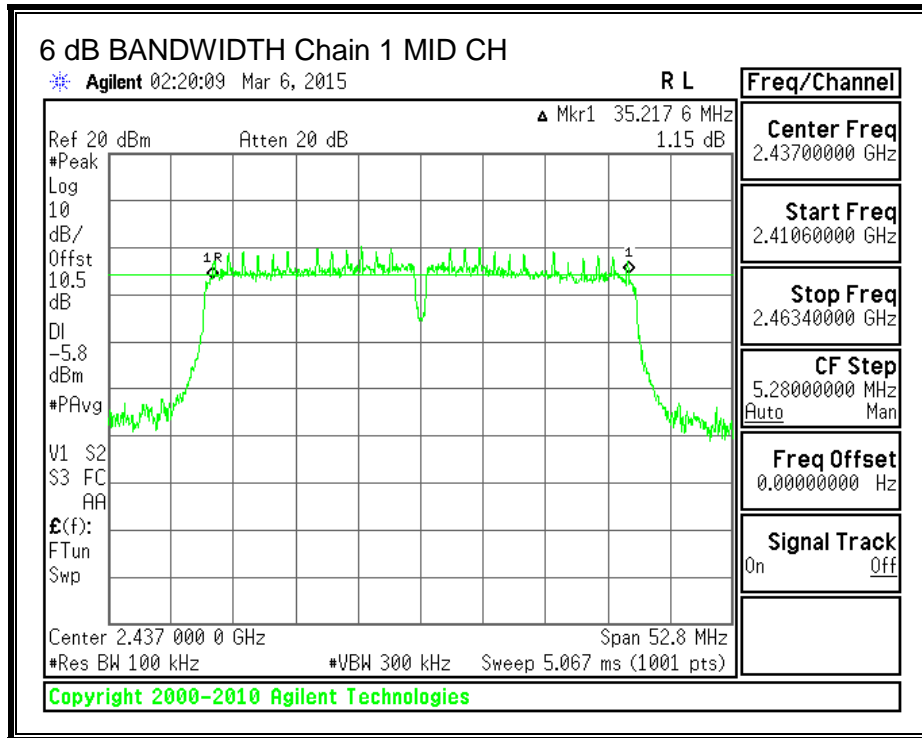
**6 dB BANDWIDTH, Chain 0**





**6 dB BANDWIDTH, Chain 1**





## 8.5.2. 99% BANDWIDTH

### LIMITS

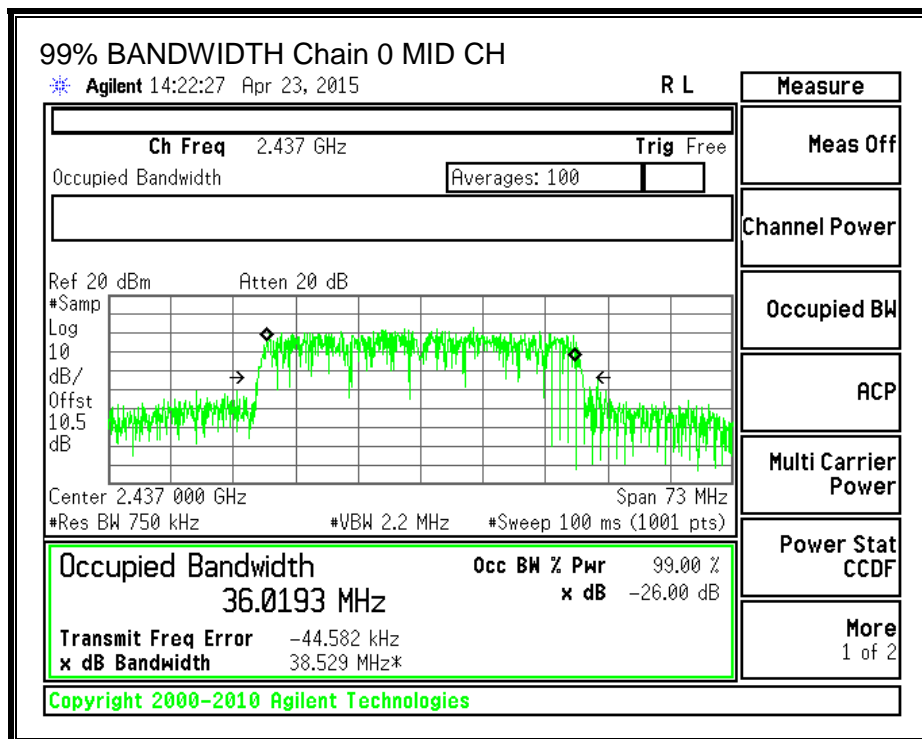
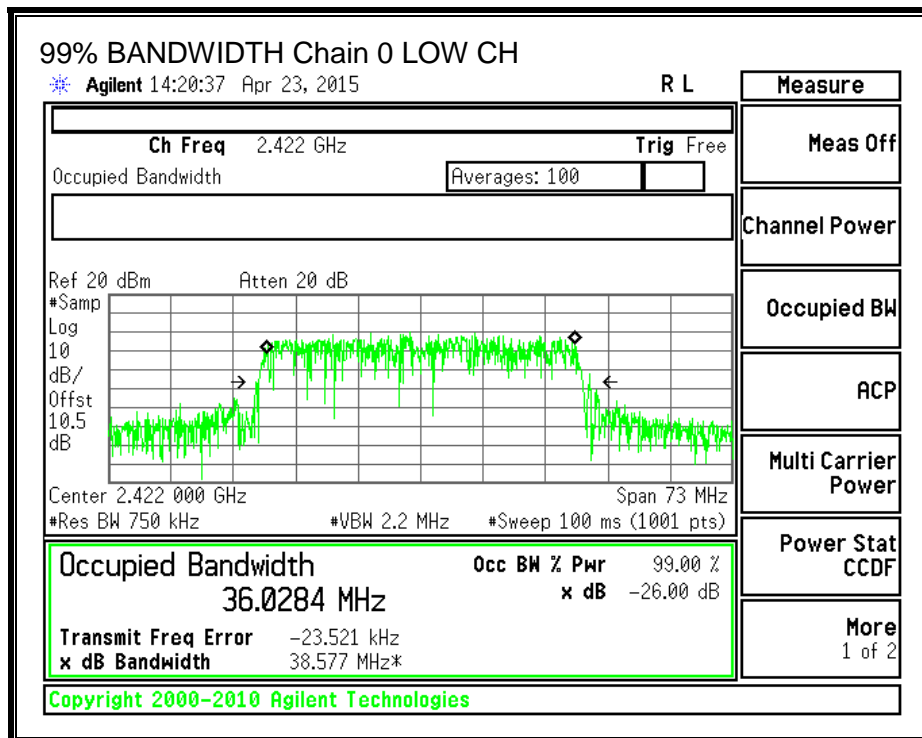
None; for reporting purposes only.

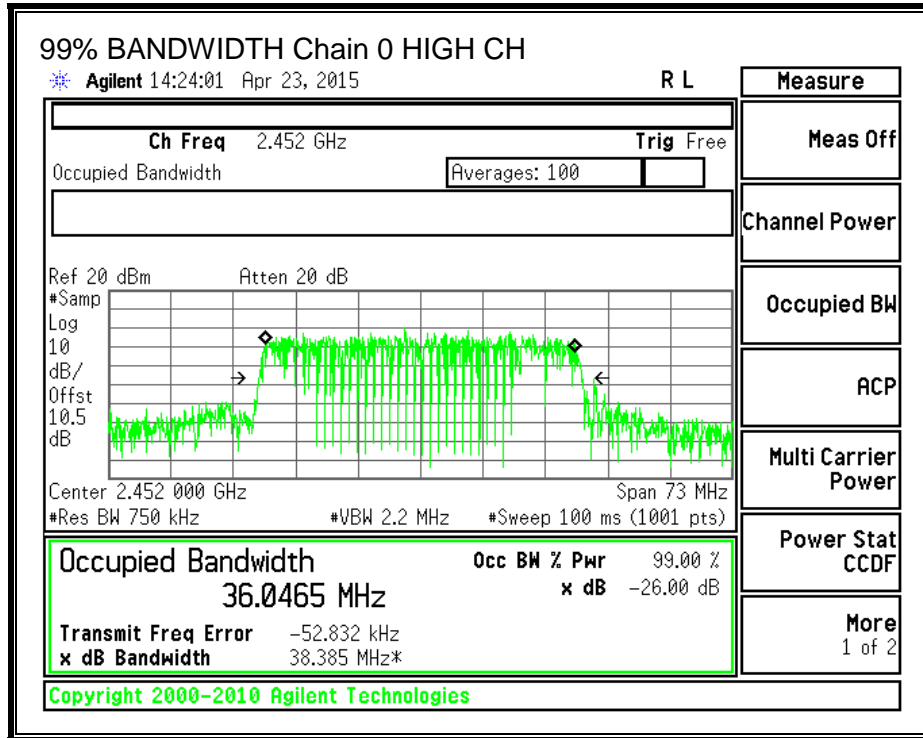
### RESULTS – 802.11n HT40

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	2422	36.0284	36.0621
Mid	2437	36.0193	36.0348
High	2452	36.0465	36.0214

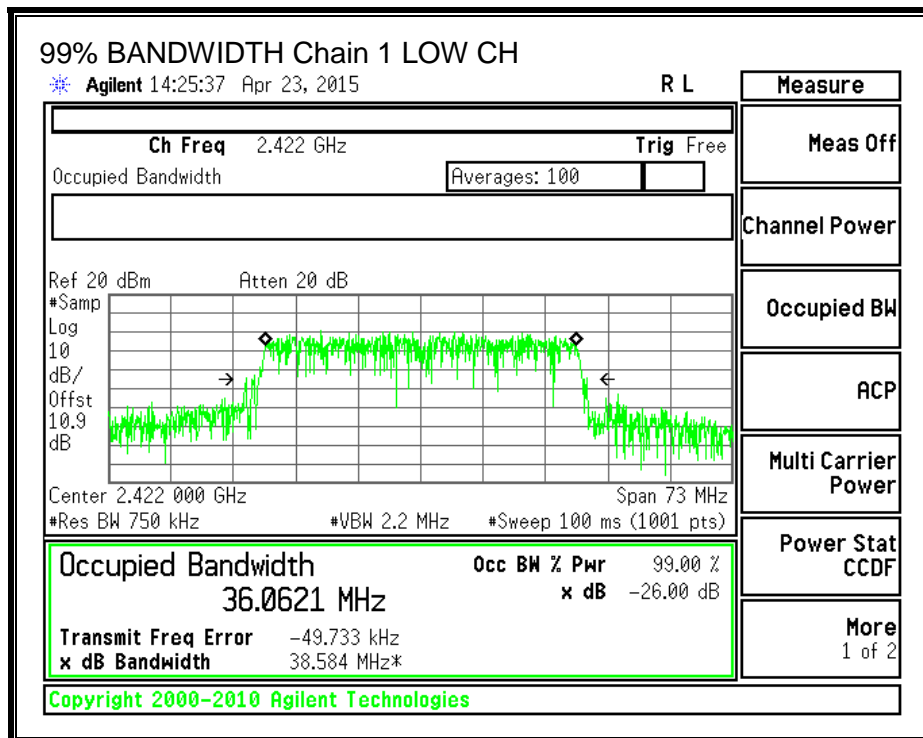


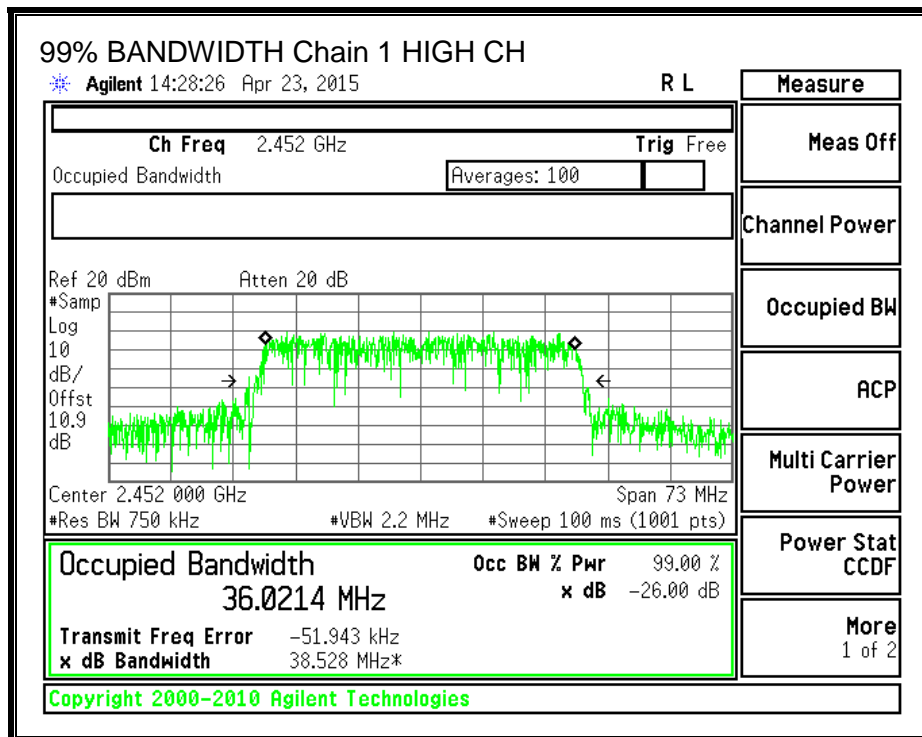
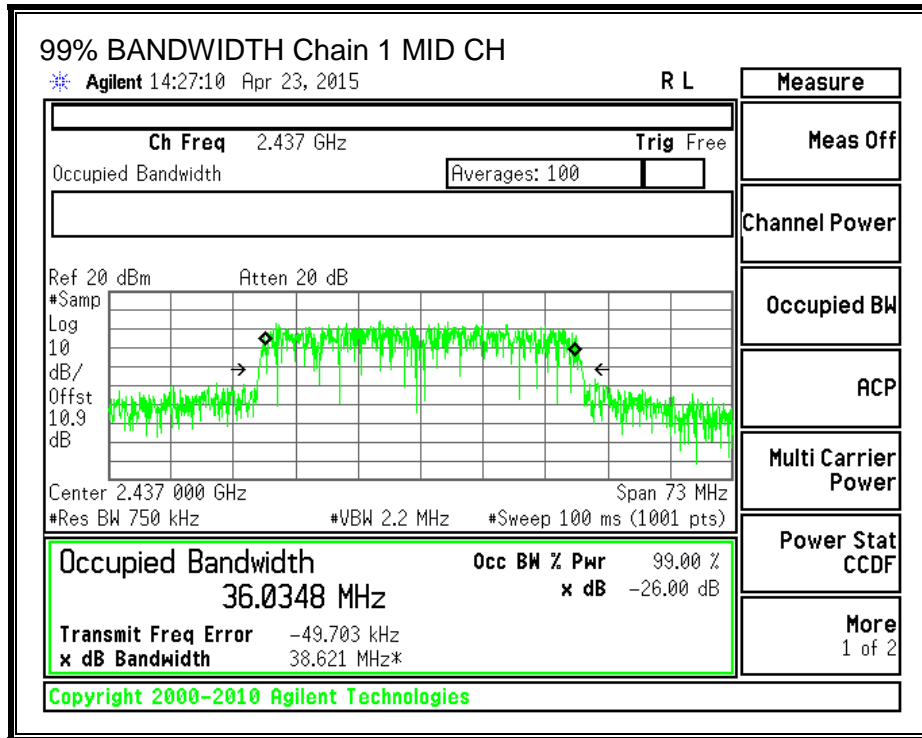
**99% BANDWIDTH, Chain 0**





**99% BANDWIDTH, Chain 1**





### 8.5.3. AVERAGE POWER

#### LIMITS

None; for reporting purposes only.

#### RESULTS – 802.11n HT40

<b>Duty Cycle CF (dB)</b>	0.18	<b>Included in Calculations of Corr'd Power</b>
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#### Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)
Low (3)	2422	9.80	11.00	13.63
4	2427	9.40	10.99	13.46
5	2432	10.40	11.20	14.01
Mid (6)	2437	11.60	12.40	15.21
7	2442	10.70	11.00	14.04
8	2447	9.20	10.00	12.81
High (9)	2452	8.59	9.69	12.37

## 8.5.4. OUTPUT POWER

### LIMITS

FCC §15.247

For systems using digital modulation in the 902–928 MHz, 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

The EUT operated in CDD mode. Therefore, for output power the chains were considered uncorrelated and for Power Spectral Density, the chains were considered correlated.

Output Power - The TX chains are uncorrelated and the antenna gain is the same for each chain. The directional gain is equal to the antenna gain.

<b>Chain 0 Antenna Gain (dBi)</b>	<b>Chain 1 Antenna Gain (dBi)</b>	<b>Uncorrelated Chains Directional Gain (dBi)</b>
3.10	3.10	3.10

**RESULTS – 802.11n HT40**

**Limits**

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low (3)	2422	3.10	30.00	30	36	30.00
4	2427	3.10	30.00	30	36	30.00
5	2432	3.10	30.00	30	36	30.00
Mid (6)	2437	3.10	30.00	30	36	30.00
7	2442	3.10	30.00	30	36	30.00
8	2447	3.10	30.00	30	36	30.00
High (9)	2452	3.10	30.00	30	36	30.00

<b>Duty Cycle CF (dB)</b>	0.18	<b>Included in Calculations of Corr'd Power</b>
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**Results**

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low (3)	2422	9.80	11.00	13.63	30.00	-16.37
4	2427	9.40	10.99	13.46	30.00	-16.54
5	2432	10.40	11.20	14.01	30.00	-15.99
Mid (6)	2437	11.60	12.40	15.21	30.00	-14.79
7	2442	10.70	11.00	14.04	30.00	-15.96
8	2447	9.20	10.00	12.81	30.00	-17.19
High (9)	2452	8.50	9.69	12.33	30.00	-17.67

### 8.5.5. POWER SPECTRAL DENSITY

#### LIMITS

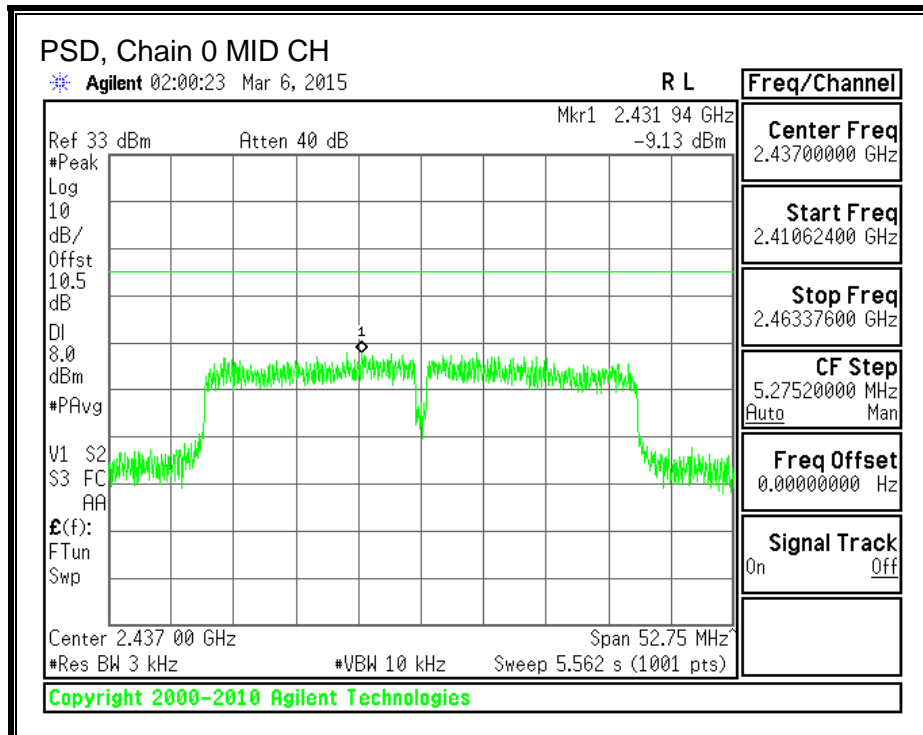
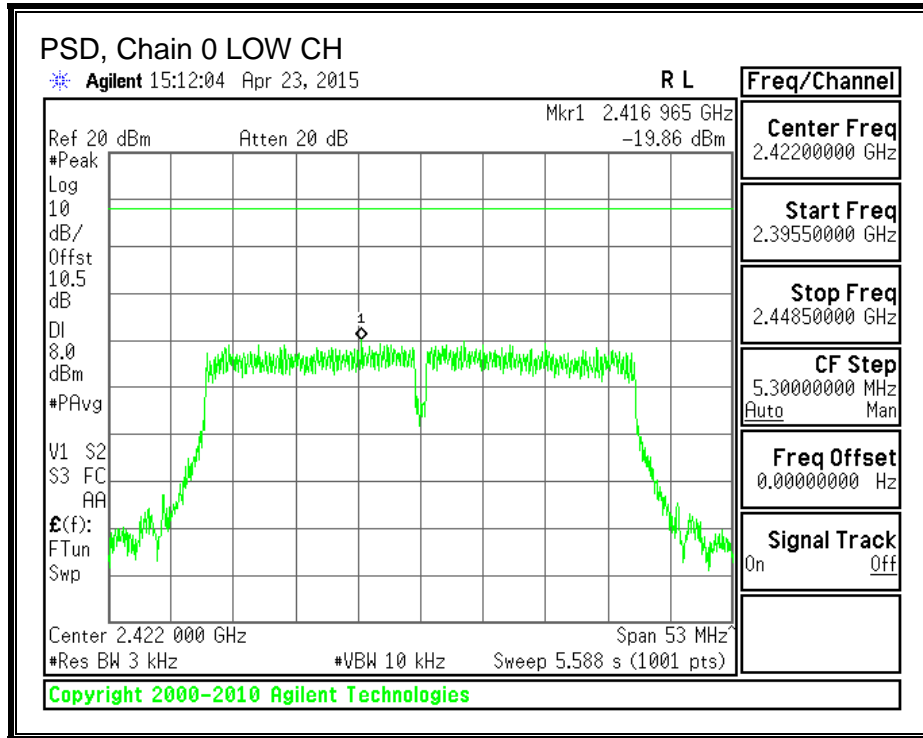
FCC §15.247

#### RESULTS – 802.11n HT40

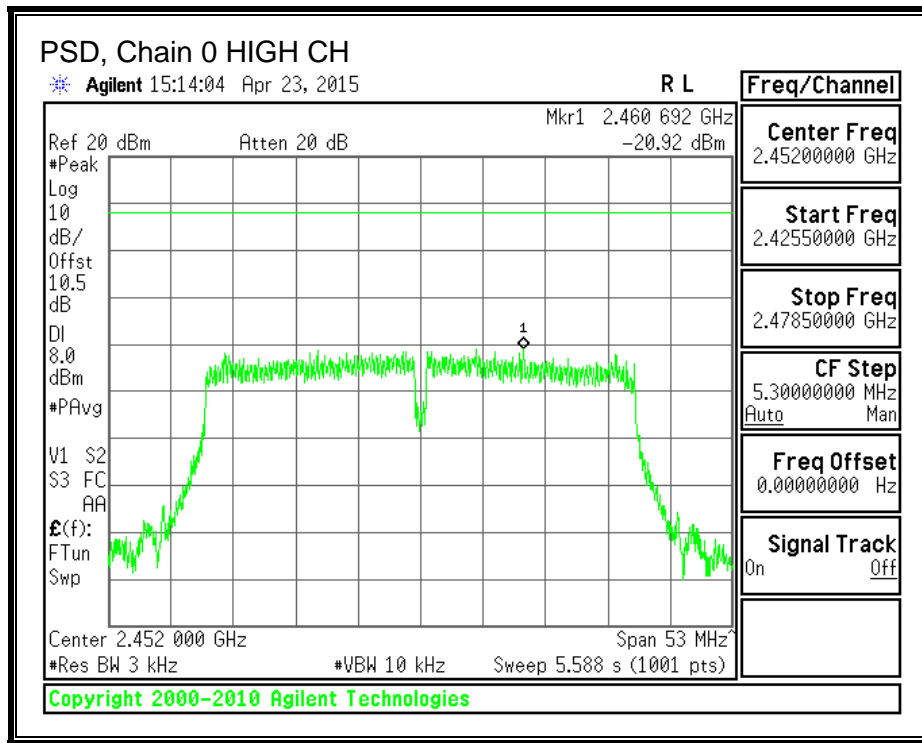
##### PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2422	-19.86	-18.63	-16.19	8.0	-24.2
Mid	2437	-9.13	-14.95	-8.12	8.0	-16.1
High	2452	-20.92	-18.95	-16.81	8.0	-24.8

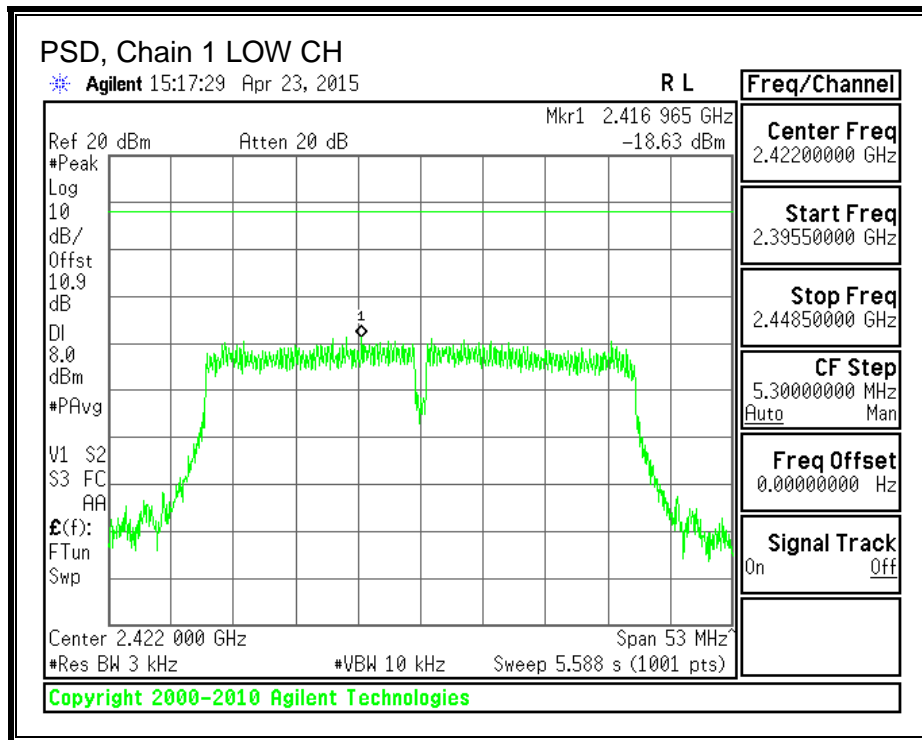
**PSD, Chain 0**

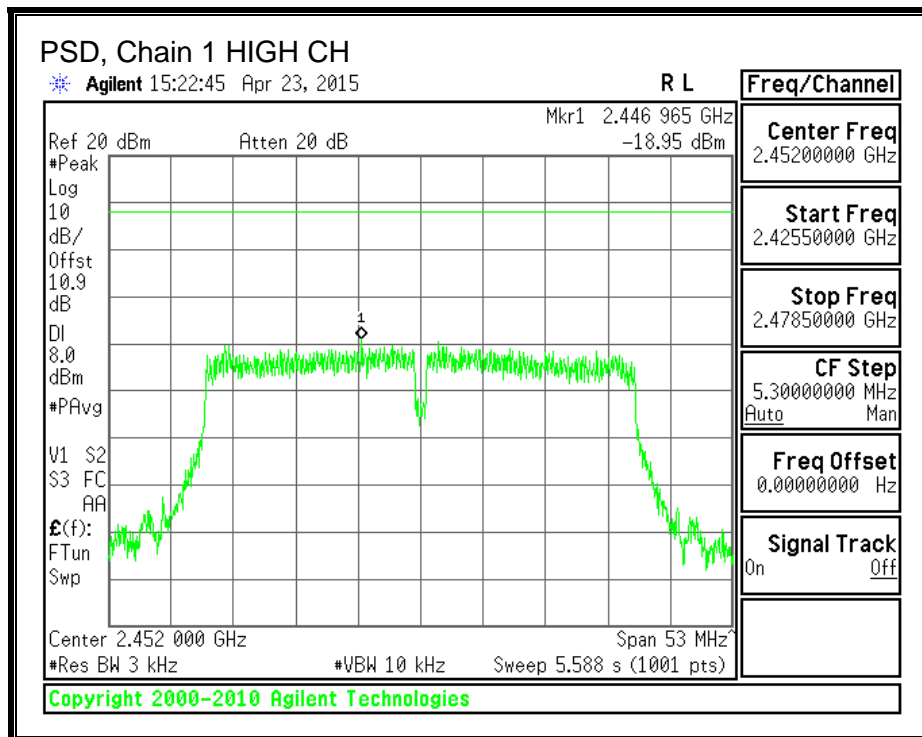
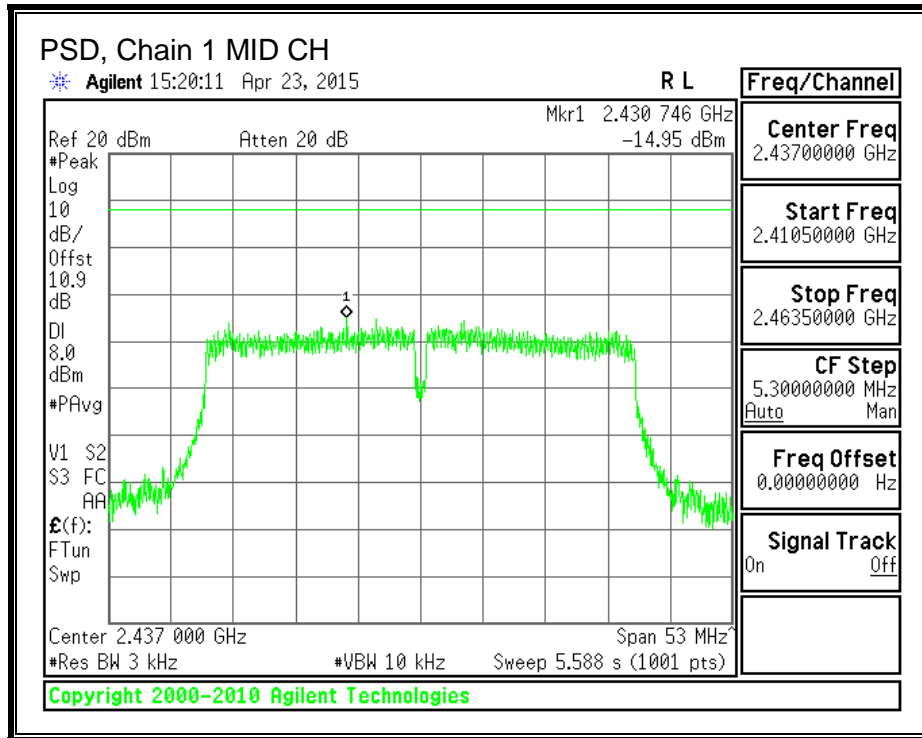






**PSD, Chain 1**





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## 8.5.6. OUT-OF-BAND EMISSIONS

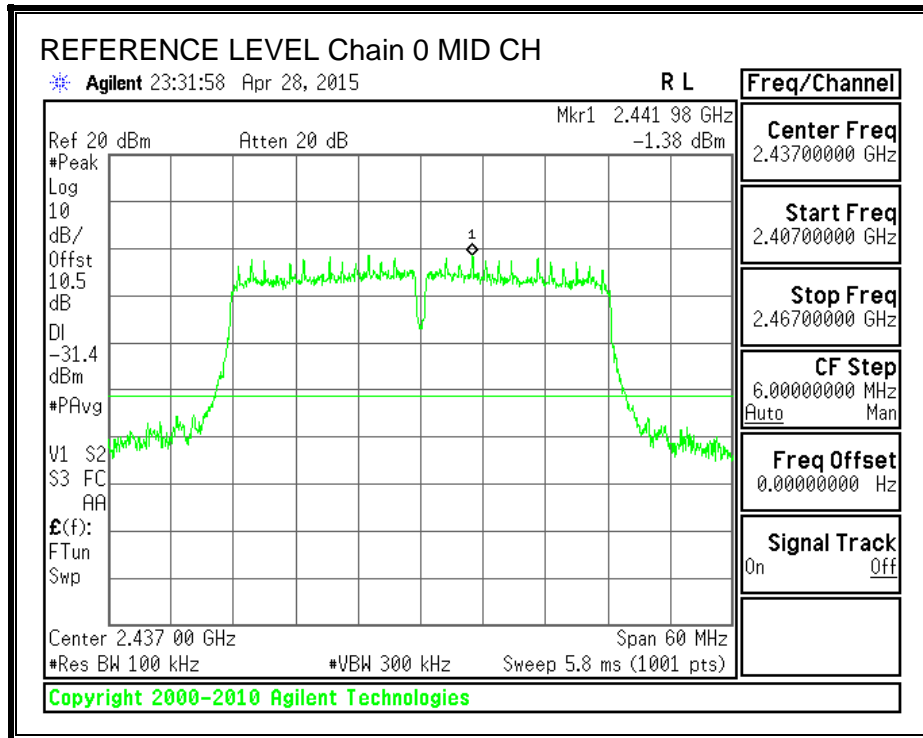
### LIMITS

FCC §15.247 (d)

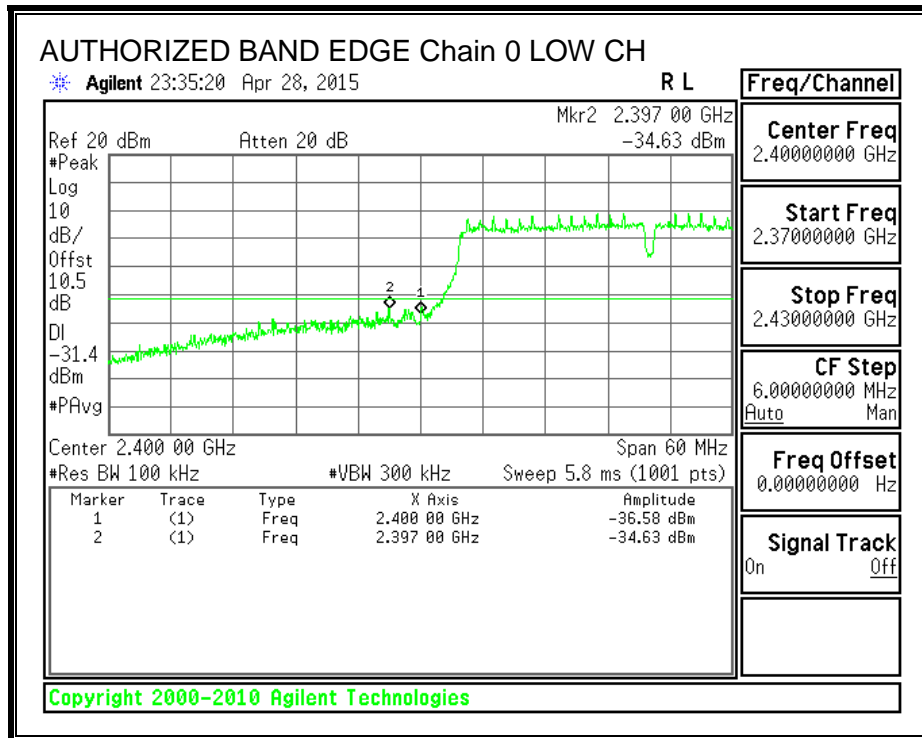
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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 – 802.11n HT40**

**IN-BAND REFERENCE LEVEL, Chain 0**

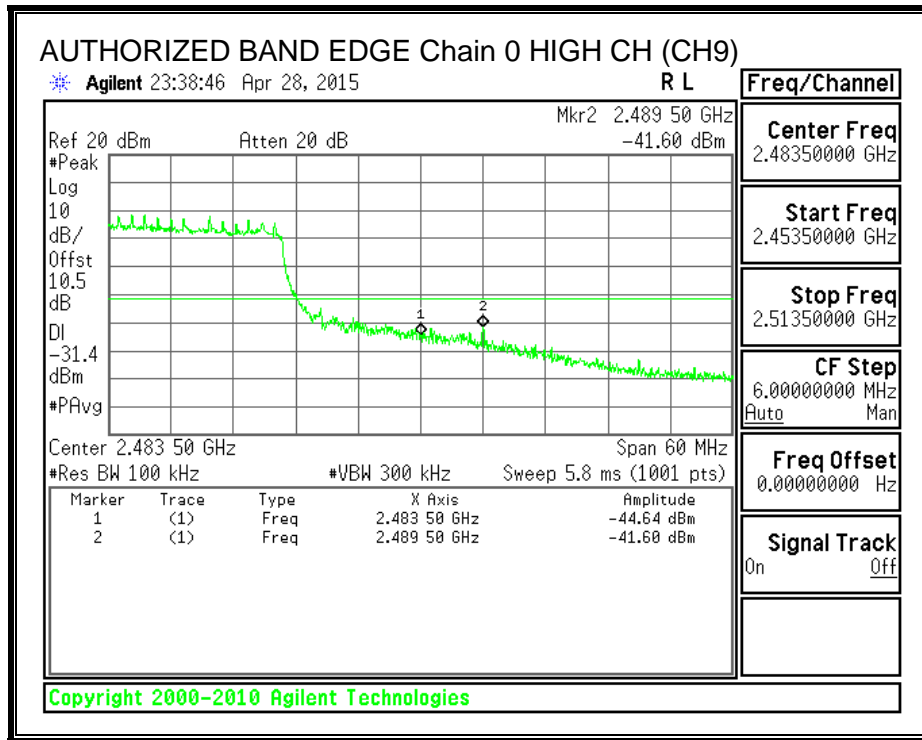


**LOW CHANNEL BANDEDGE, Chain 0**



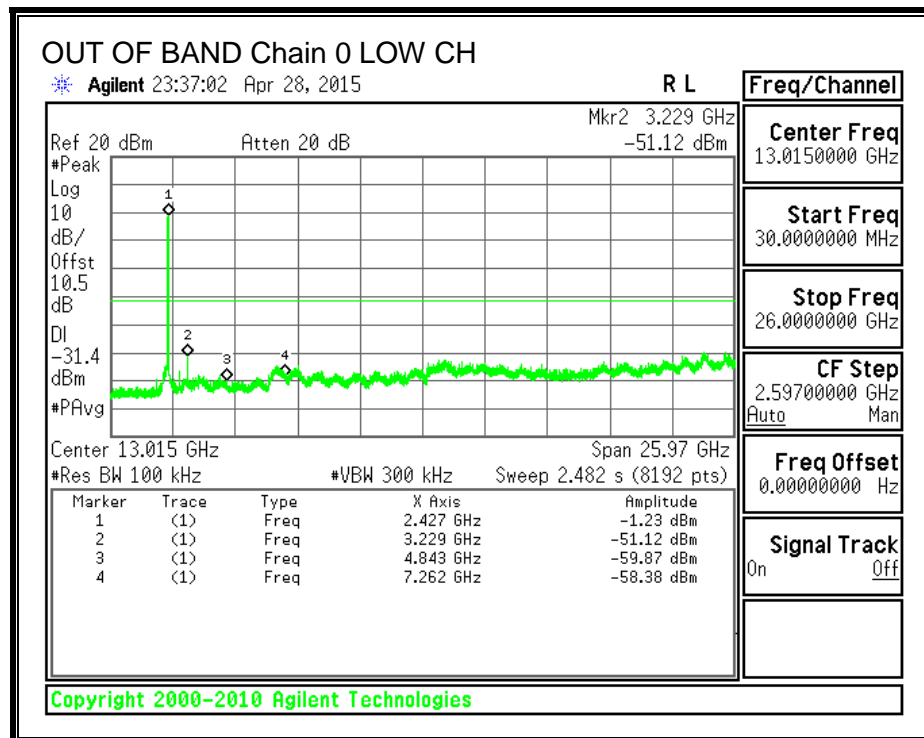
Note – The Low Channel was tested at the Mid Channel Power setting to achieve worst-case results.

**HIGH CHANNEL BANDEDGE, Chain 0**

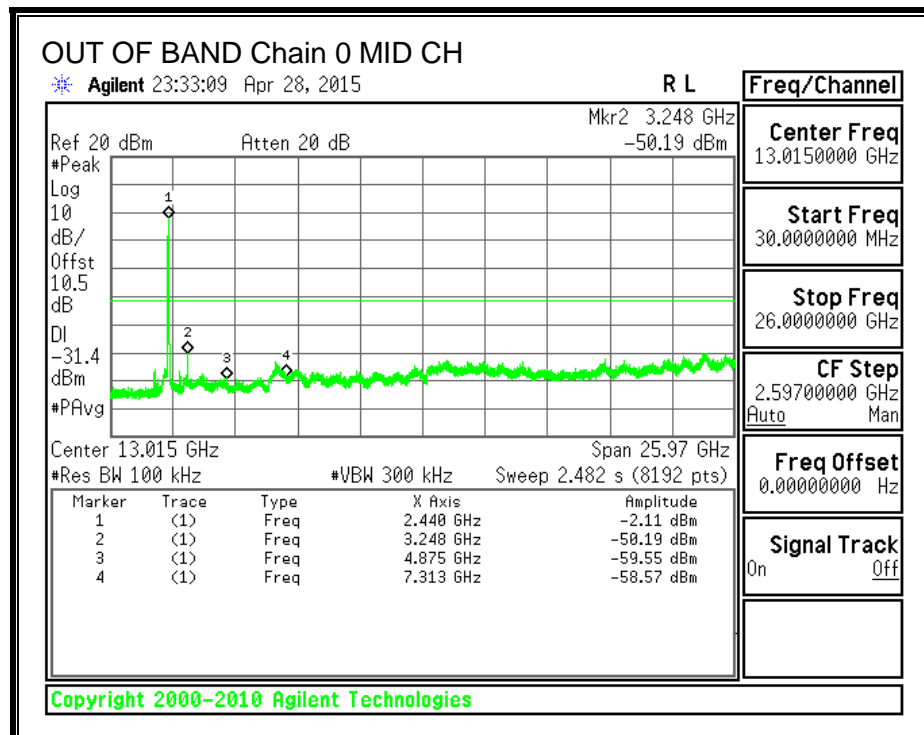


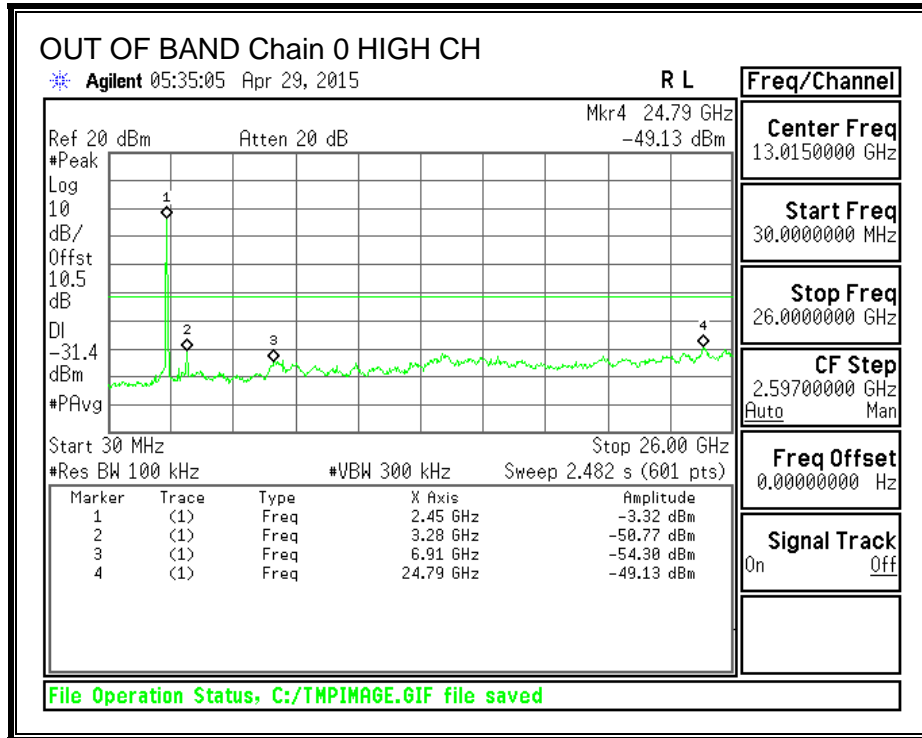
Note – The High Channel was tested at the Mid Channel Power setting to achieve worst-case results.

**OUT-OF-BAND EMISSIONS, Chain 0**



Note – For Conducted Spurious, the Low Channel was tested at the same power setting as Mid channel to achieve worst-case results.

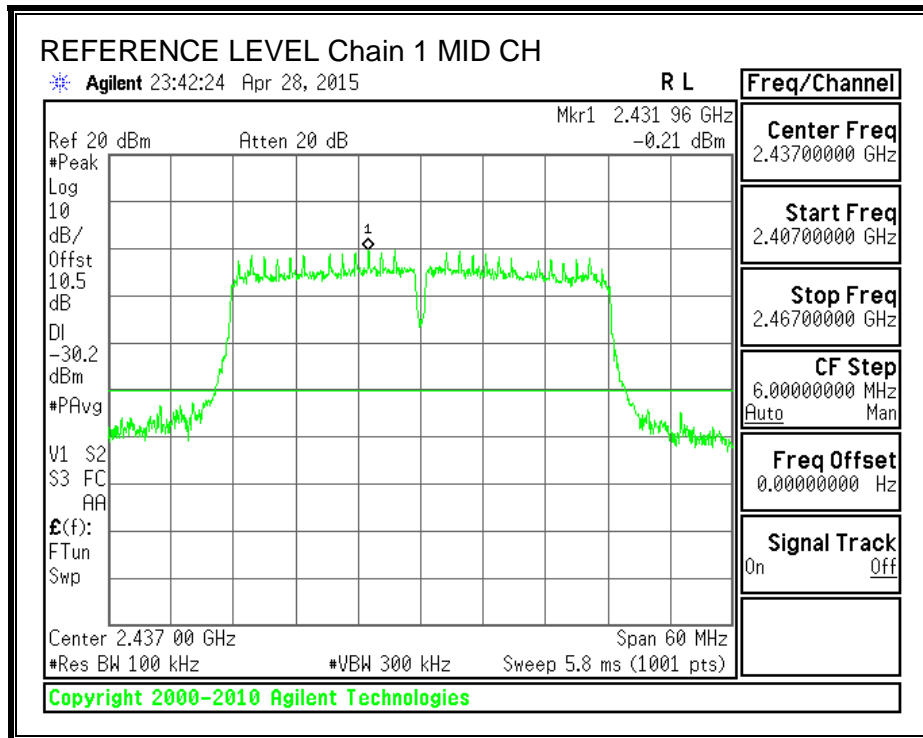




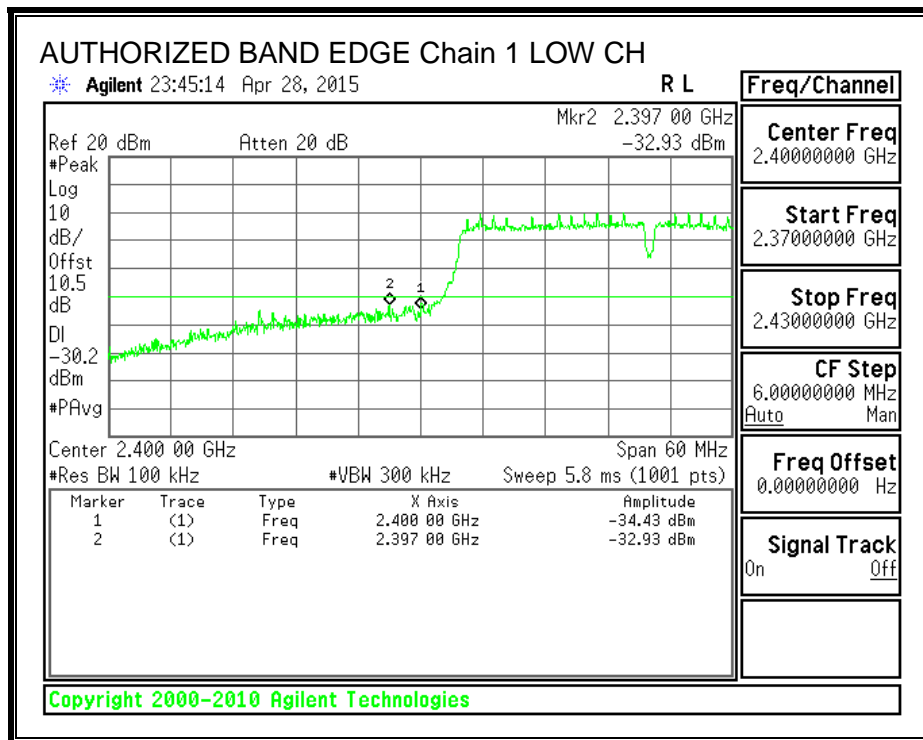
Note – For Conducted Spurious, the High Channel was tested at the same power setting as Mid channel to achieve worst-case results.



**IN-BAND REFERENCE LEVEL, Chain 1**

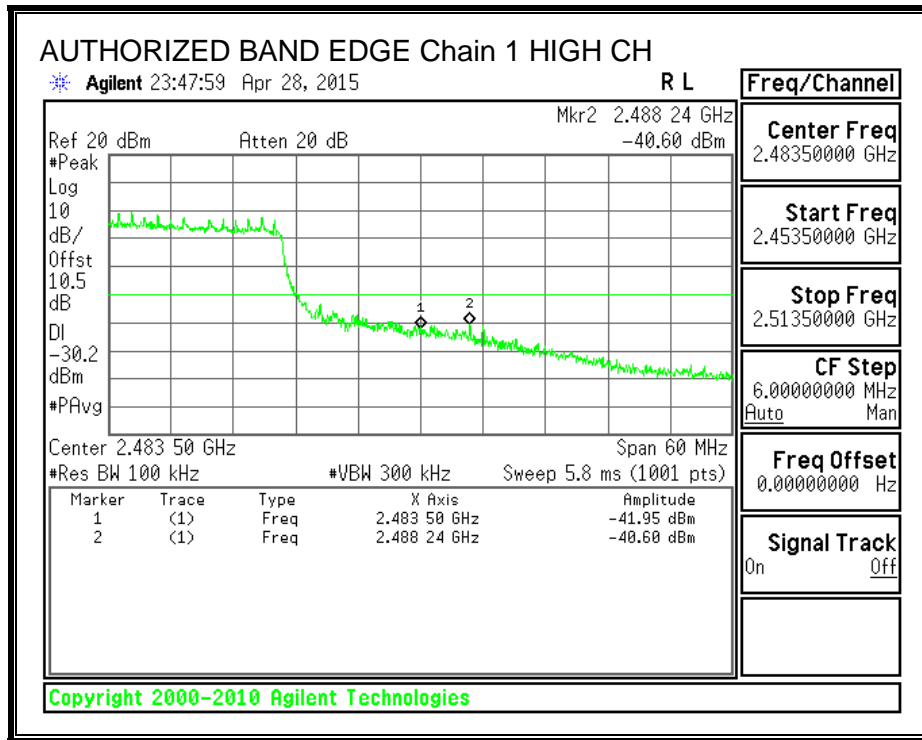


**LOW CHANNEL BANDEDGE, Chain 1**



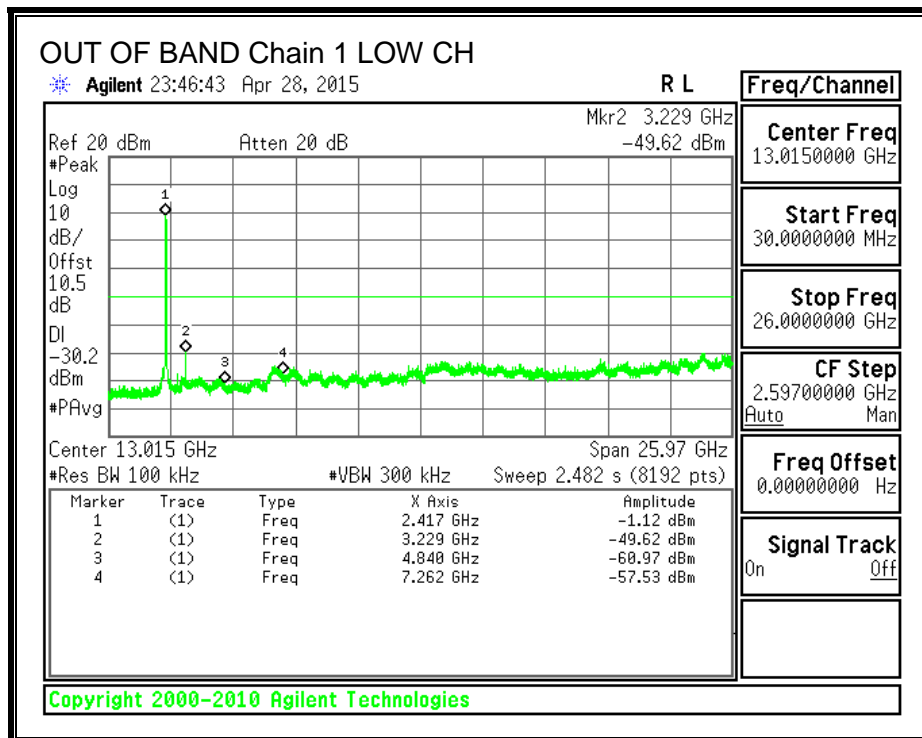
Note – The Low Channel was tested at the Mid Channel Power setting to achieve worst-case results.

**HIGH CHANNEL BANDEDGE, Chain 1**

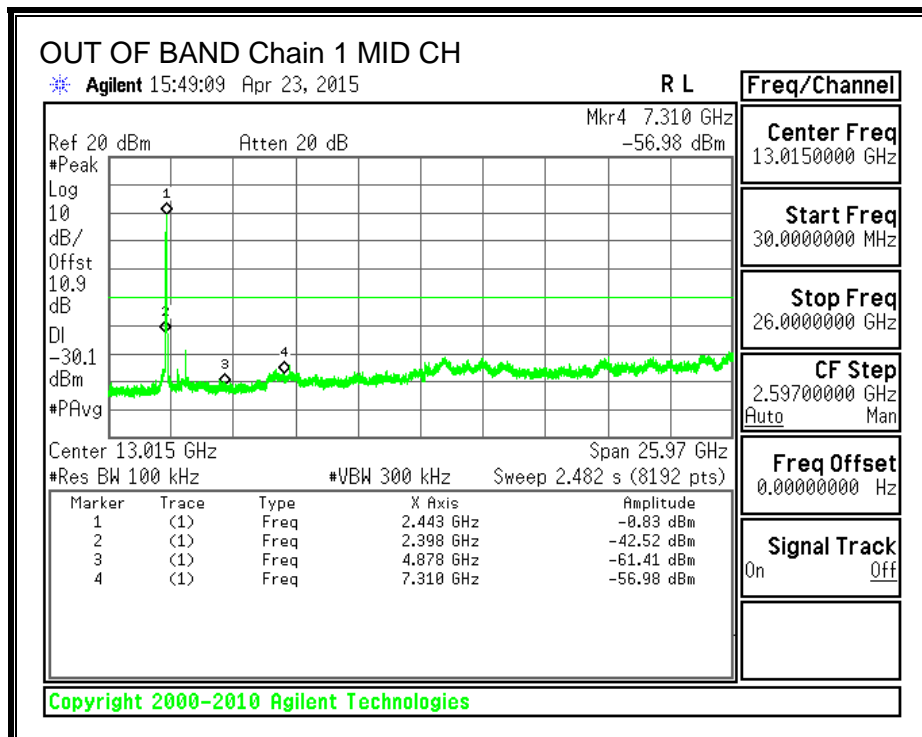


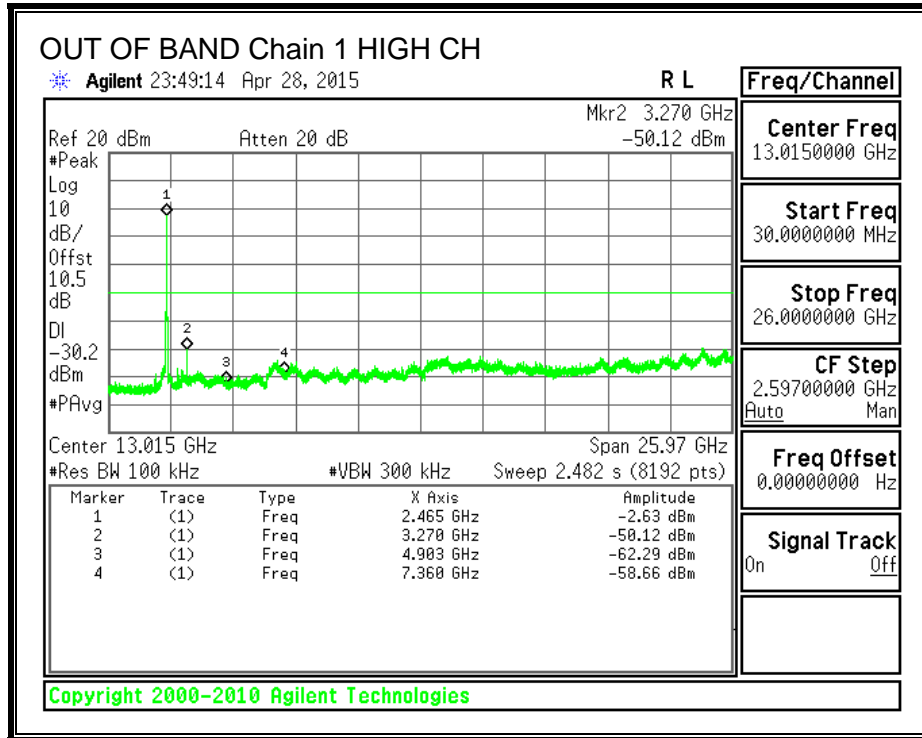
Note – The High Channel was tested at the Mid Channel Power setting to achieve worst-case results.

**OUT-OF-BAND EMISSIONS, Chain 1**



Note – For Conducted Spurious, the Low Channel was tested at the same power setting as Mid channel to achieve worst-case results.





Note – For Conducted Spurious, the High Channel was tested at the same power setting as Mid channel to achieve worst-case results.

## 9. RADIATED TEST RESULTS

### 9.1. LIMITS AND PROCEDURE

#### 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 measurements and 1.5 m above the ground plane for above 1GHz measurements. The antenna to EUT distance is 3 meters.

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

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

The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

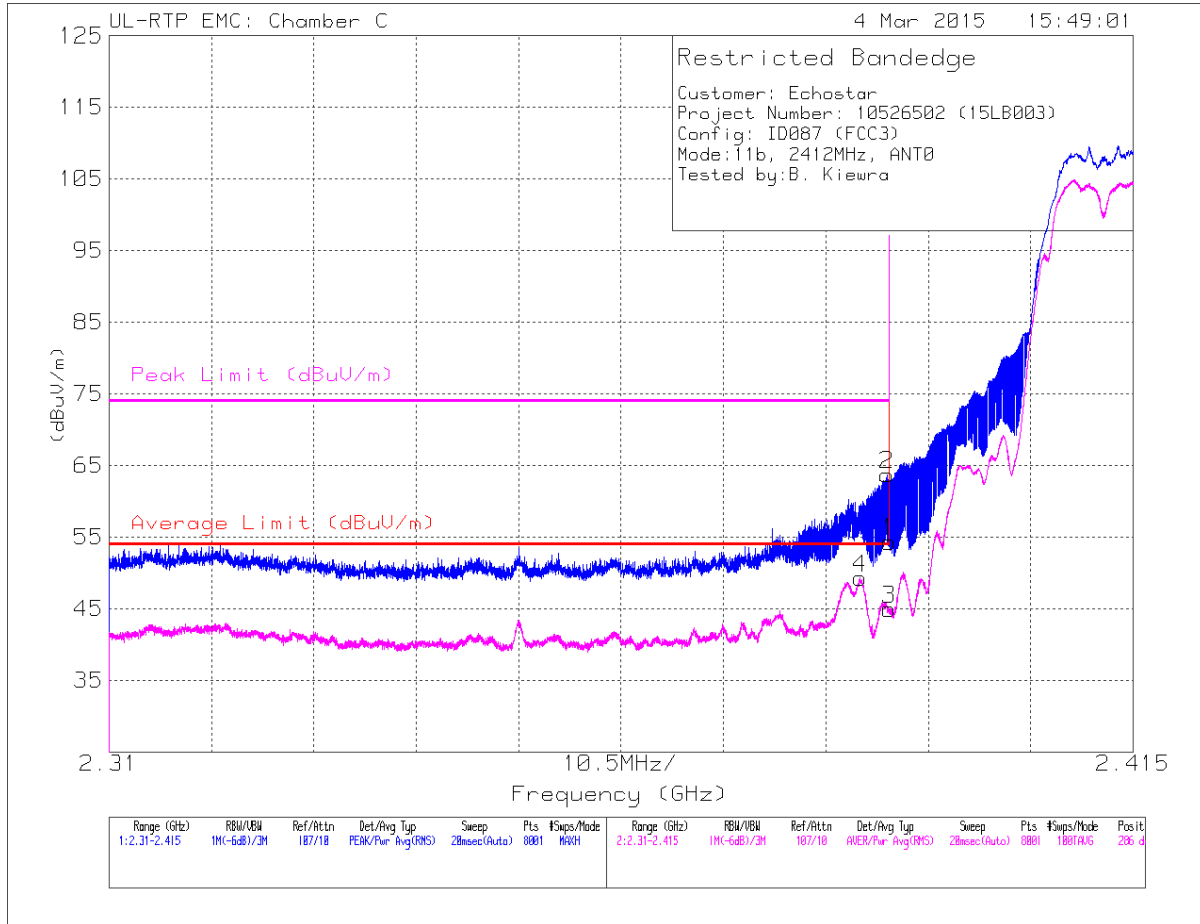
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

## 9.2. TRANSMITTER ABOVE 1 GHz

### 9.2.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND

#### RESTRICTED BANDEDGE (LOW CHANNEL – ANTENNA 0)

##### HORIZONTAL



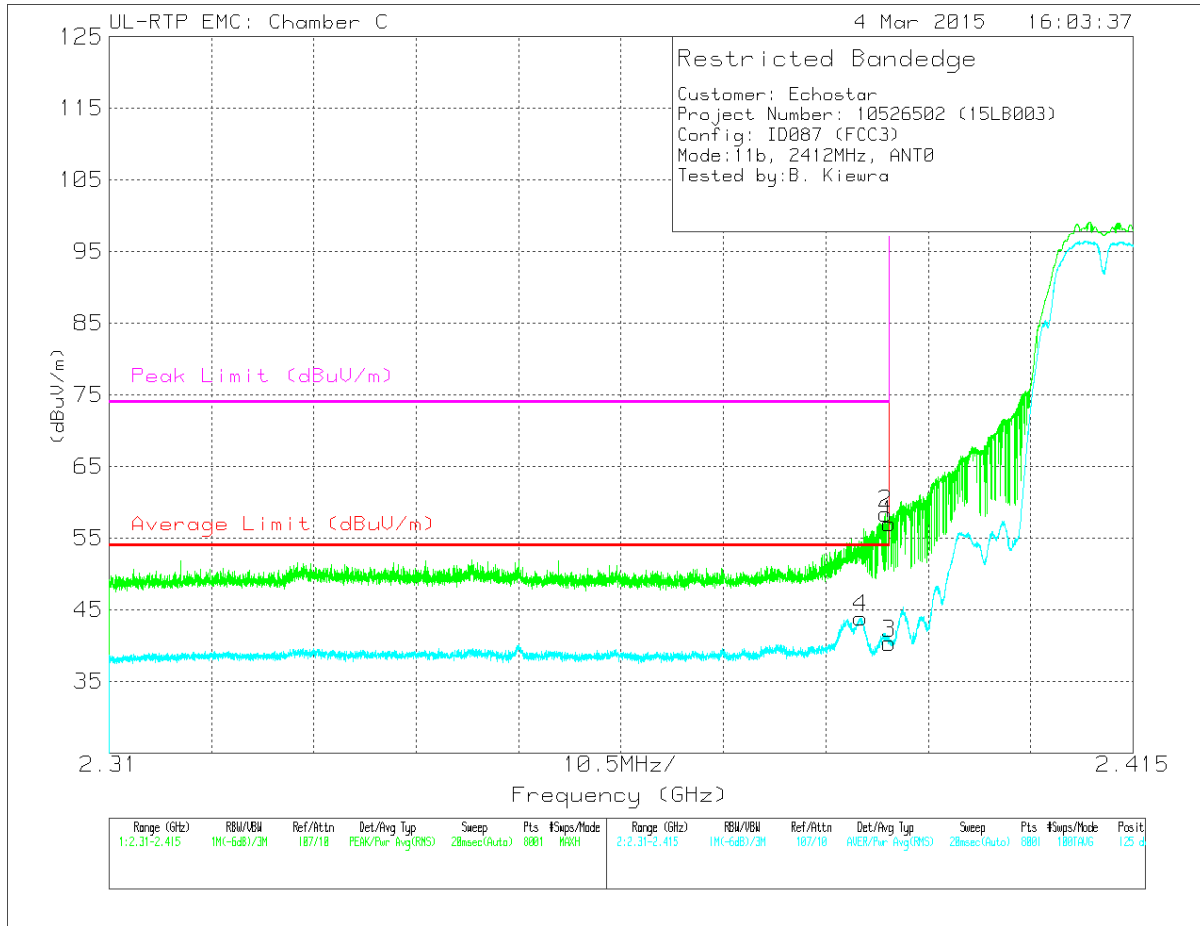
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Fltr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	48.96	Pk	32.1	-26.7	54.36	-	-	74	-19.64	286	144	H
2	* 2.39	58.31	Pk	32.1	-26.7	63.71	-	-	74	-10.29	286	144	H
3	* 2.39	39.58	RMS	32.1	-26.7	44.98	54	-9.02	-	-	286	144	H
4	* 2.387	43.91	RMS	32.1	-26.7	49.31	54	-4.69	-	-	286	144	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	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	51.66	Pk	32.1	-26.7	57.06	-	-	74	-16.94	125	267	V
2	* 2.39	53.03	Pk	32.1	-26.7	58.43	-	-	74	-15.57	125	267	V
3	* 2.39	34.95	RMS	32.1	-26.7	40.35	54	-13.65	-	-	125	267	V
4	* 2.387	38.48	RMS	32.1	-26.7	43.88	54	-10.12	-	-	125	267	V

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

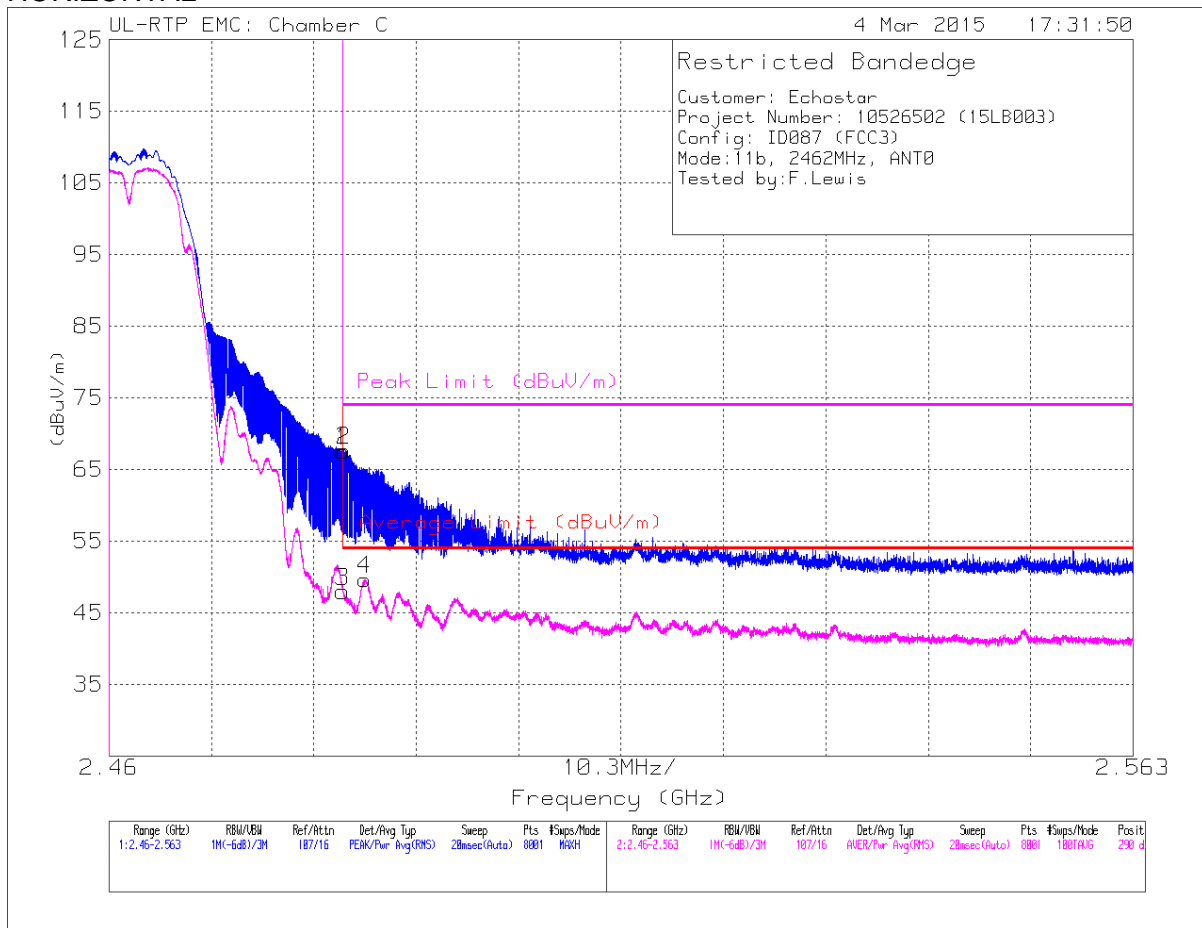
Pk - Peak detector

RMS - RMS detection



**RESTRICTED BANDEDGE (HIGH CHANNEL - ANTENNA 0)**

**HORIZONTAL**



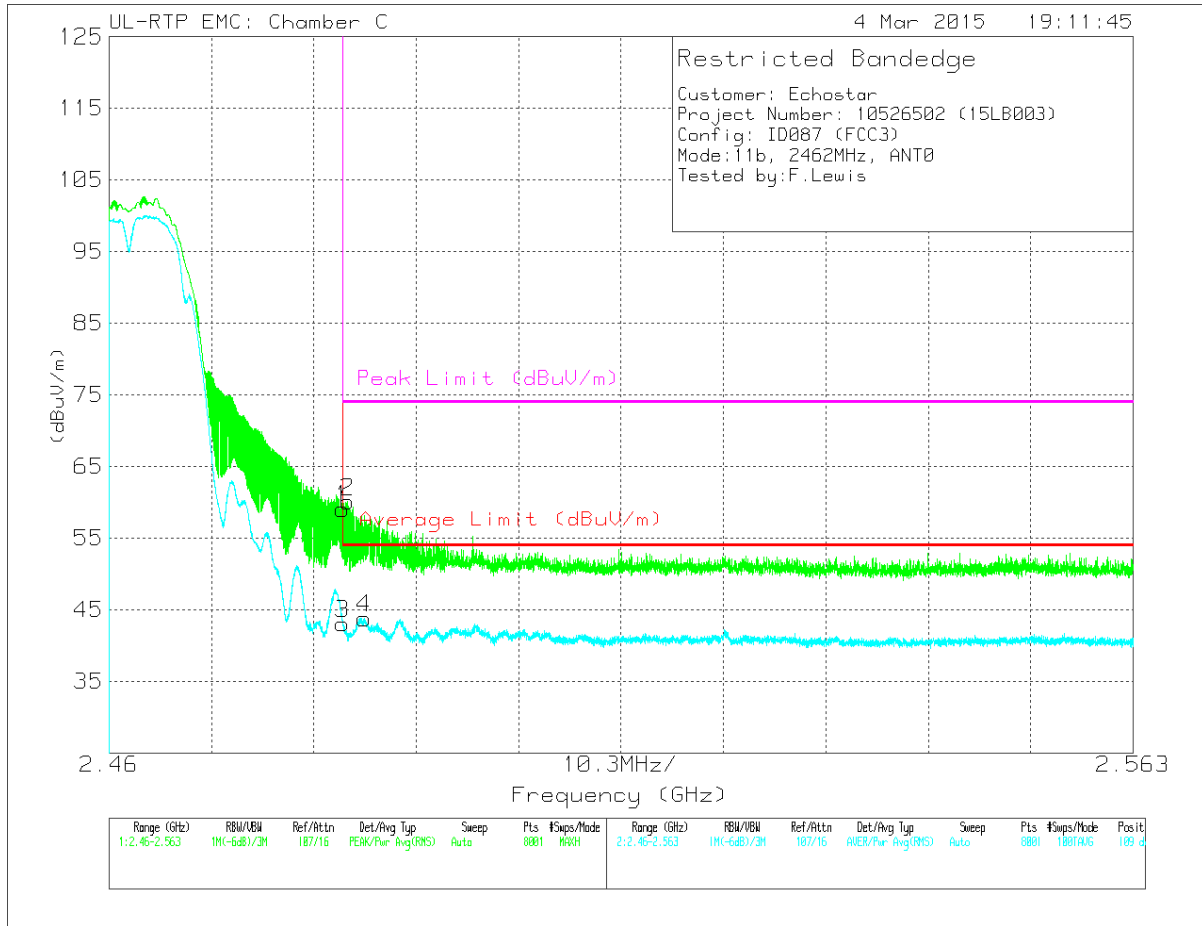
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	61.77	Pk	32.3	-26.5	67.57	-	-	74	-6.43	290	108	H
2	* 2.484	61.85	Pk	32.3	-26.5	67.65	-	-	74	-6.35	290	108	H
3	* 2.484	42.2	RMS	32.3	-26.5	48	54	-6	-	-	290	108	H
4	* 2.486	43.86	RMS	32.3	-26.5	49.66	54	-4.34	-	-	290	108	H

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

Pk - Peak detector

RMS - RMS detection

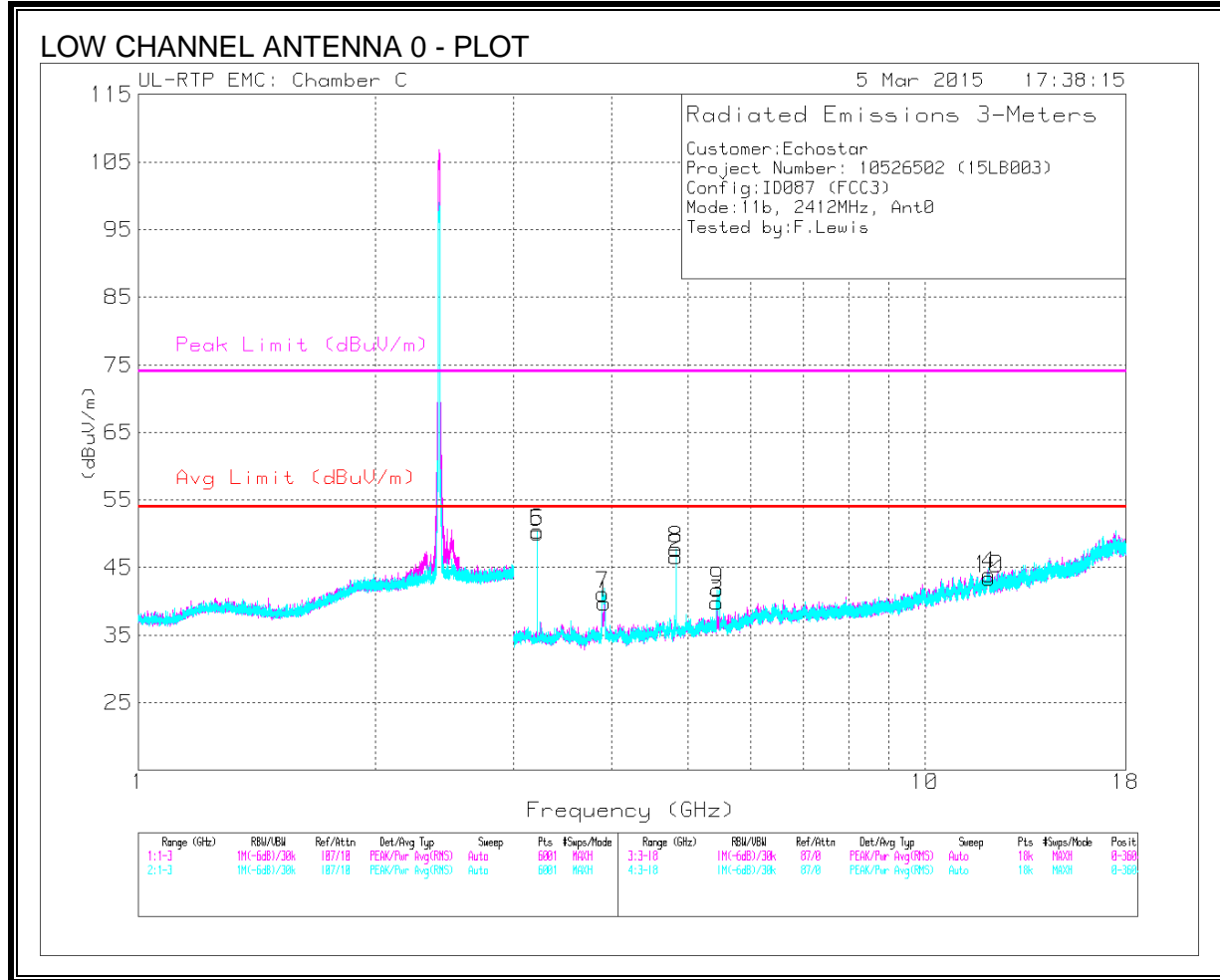
VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	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	53.29	Pk	32.3	-26.5	59.09	-	-	74	-14.91	109	262	V
2	* 2.484	54.31	Pk	32.3	-26.5	60.11	-	-	74	-13.89	109	262	V
3	* 2.484	37.28	RMS	32.3	-26.5	43.08	54	-10.92	-	-	109	262	V
4	* 2.486	38.03	RMS	32.3	-26.5	43.83	54	-10.17	-	-	109	262	V

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

**HARMONICS AND SPURIOUS EMISSIONS - ANTENNA 0**



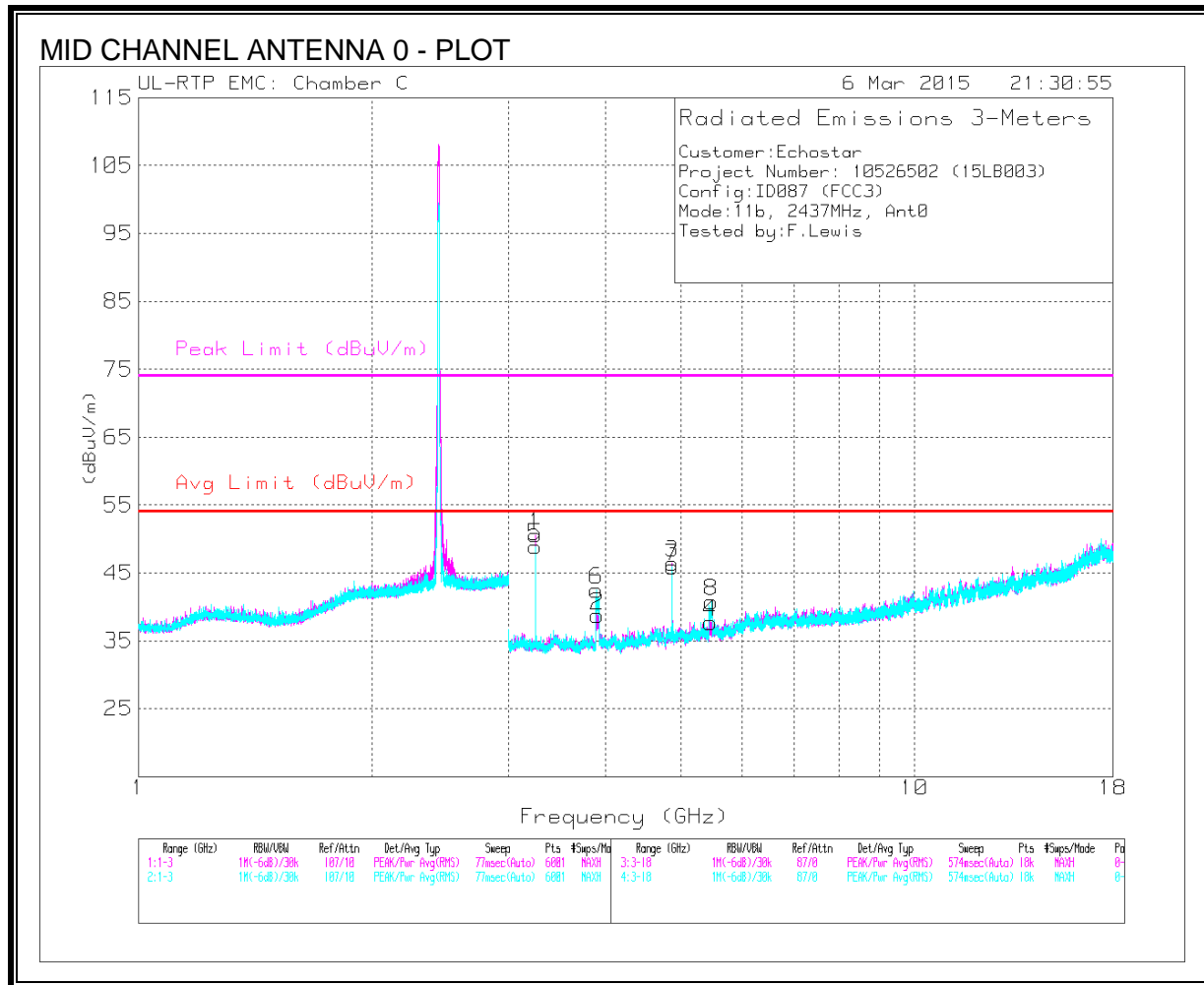
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Fltr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.905	50.68	PK2	33.6	-34.3	49.98	-	-	74	-24.02	127	355	H
	* 3.905	35.84	MAv1	33.6	-34.3	35.14	54	-18.86	-	-	127	355	H
2	* 4.824	49.93	PK2	34.1	-32.7	51.33	-	-	74	-22.67	295	101	H
	* 4.824	45.22	MAv1	34.1	-32.7	46.62	54	-7.38	-	-	295	101	H
3	* 5.444	47.51	PK2	34.5	-31.9	50.11	-	-	74	-23.89	123	344	H
	* 5.441	32.15	MAv1	34.5	-31.9	34.75	54	-19.25	-	-	123	344	H
4	* 12.07	38.18	PK2	38.7	-25.1	51.78	-	-	74	-22.22	292	198	H
	* 12.089	26.59	MAv1	38.7	-25.9	39.39	54	-14.61	-	-	292	198	H
7	* 3.911	52.94	PK2	33.6	-34.2	52.34	-	-	74	-21.66	300	281	V
	* 3.886	36.82	MAv1	33.6	-34.5	35.92	54	-18.08	-	-	300	281	V
8	* 4.824	51.16	PK2	34.1	-32.7	52.56	-	-	74	-21.44	177	315	V
	* 4.824	47.1	MAv1	34.1	-32.7	48.5	54	-5.5	-	-	177	315	V
9	* 5.458	46.82	PK2	34.5	-31.9	49.42	-	-	74	-24.58	281	284	V
	* 5.459	32.42	MAv1	34.5	-31.9	35.02	54	-18.98	-	-	281	284	V
10	* 12.086	38.17	PK2	38.7	-25.8	51.07	-	-	74	-22.93	82	198	V
	* 12.087	26.53	MAv1	38.7	-25.8	39.43	54	-14.57	-	-	82	198	V
5	3.216	54.65	Pk	32.9	-34.6	52.95	-	-	74	-21.05	249	250	H
6	3.216	55.75	Pk	32.9	-34.6	54.05	-	-	74	-19.95	87	101	V

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

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average



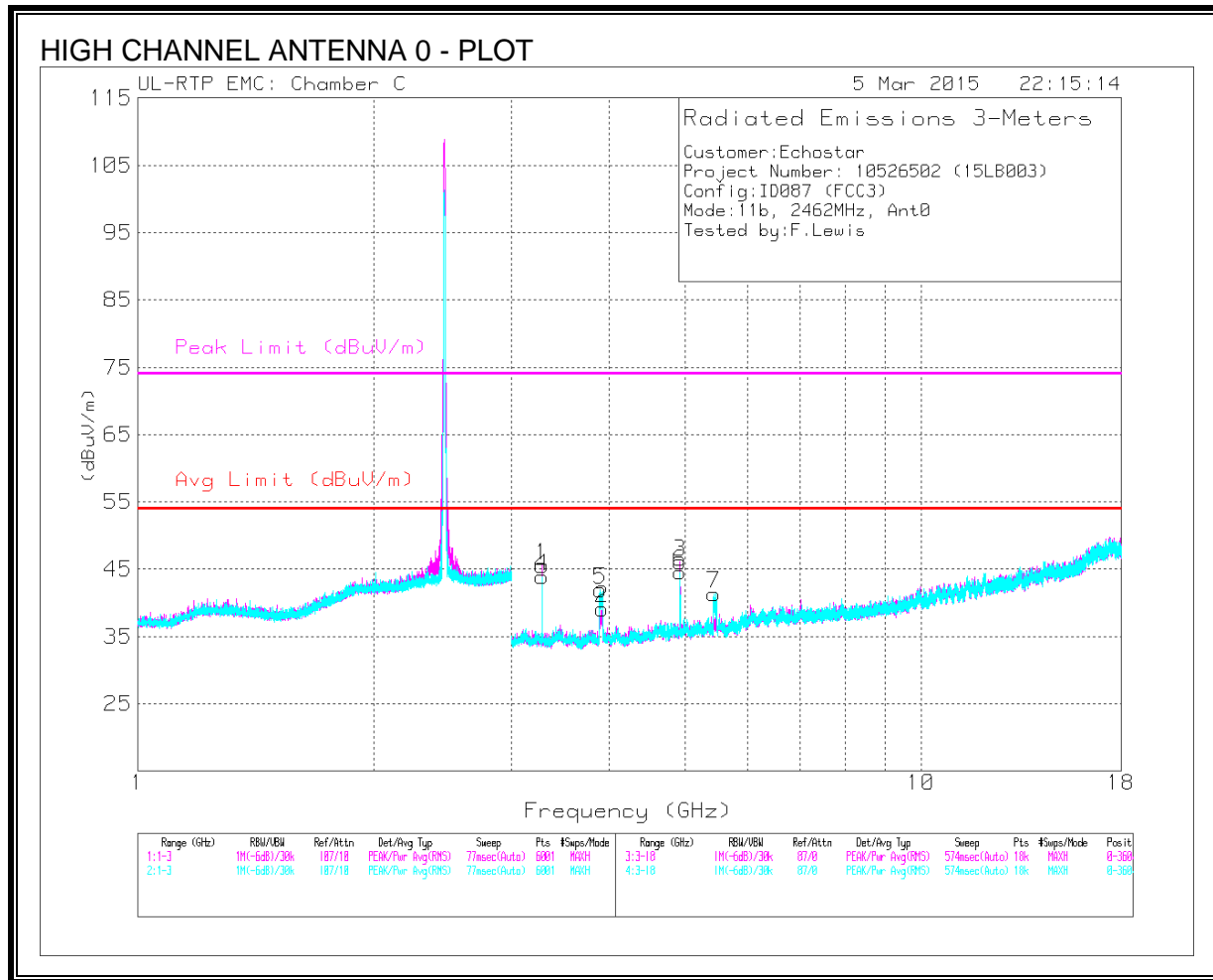
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Ftr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.89	51.7	PK2	33.6	-34.5	50.8	-	-	74	-23.2	106	391	H
	3.89	35.72	MAv1	33.6	-34.5	34.82	54	-19.18	-	-	106	391	H
3	* 4.874	50.06	PK2	34.1	-32.9	51.26	-	-	74	-22.74	121	297	H
	4.874	46.1	MAv1	34.1	-32.9	47.3	54	-6.7	-	-	121	297	H
4	* 5.445	47.05	PK2	34.5	-31.9	49.65	-	-	74	-24.35	133	321	H
	5.454	32.03	MAv1	34.5	-32	34.53	54	-19.47	-	-	133	321	H
6	* 3.889	53.78	PK2	33.6	-34.5	52.88	-	-	74	-21.12	321	247	V
	3.889	37.36	MAv1	33.6	-34.5	36.46	54	-17.54	-	-	321	247	V
7	* 4.874	50.65	PK2	34.1	-32.9	51.85	-	-	74	-22.15	184	313	V
	4.874	46.46	MAv1	34.1	-32.9	47.66	54	-6.34	-	-	184	313	V
1	* 5.445	48.18	PK2	34.5	-31.9	50.78	-	-	74	-23.22	280	295	V
	5.454	32.7	MAv1	34.5	-32	35.2	54	-18.8	-	-	280	295	V
5	3.249	54.73	Pk	32.9	-34.3	53.33	-	-	74	-20.67	249	246	H
8	3.249	54.06	Pk	32.9	-34.3	52.66	-	-	74	-21.34	91	116	V

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

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.912	50.82	PK2	33.6	-34.2	50.22	-	-	74	-23.78	119	388	H
	* 3.886	35.79	MAv1	33.6	-34.5	34.89	54	-19.11	-	-	119	388	H
3	* 4.924	49.87	PK2	34.1	-33.1	50.87	-	-	74	-23.13	118	271	H
	* 4.924	44.85	MAv1	34.1	-33.1	45.85	54	-8.15	-	-	118	271	H
5	* 3.912	53.3	PK2	33.6	-34.2	52.7	-	-	74	-21.3	303	274	V
	* 3.912	37.29	MAv1	33.6	-34.2	36.69	54	-17.31	-	-	303	274	V
6	* 4.924	49.36	PK2	34.1	-33.1	50.36	-	-	74	-23.64	185	305	V
	* 4.924	44.29	MAv1	34.1	-33.1	45.29	54	-8.71	-	-	185	305	V
7	* 5.443	47.77	PK2	34.5	-31.9	50.37	-	-	74	-23.63	284	295	V
	* 5.439	32.37	MAv1	34.5	-31.9	34.97	54	-19.03	-	-	284	295	V
1	3.283	51.87	Pk	32.8	-34.3	50.37	-	-	74	-23.63	265	136	H
4	3.283	50.93	Pk	32.8	-34.3	49.43	-	-	74	-24.57	93	125	V

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

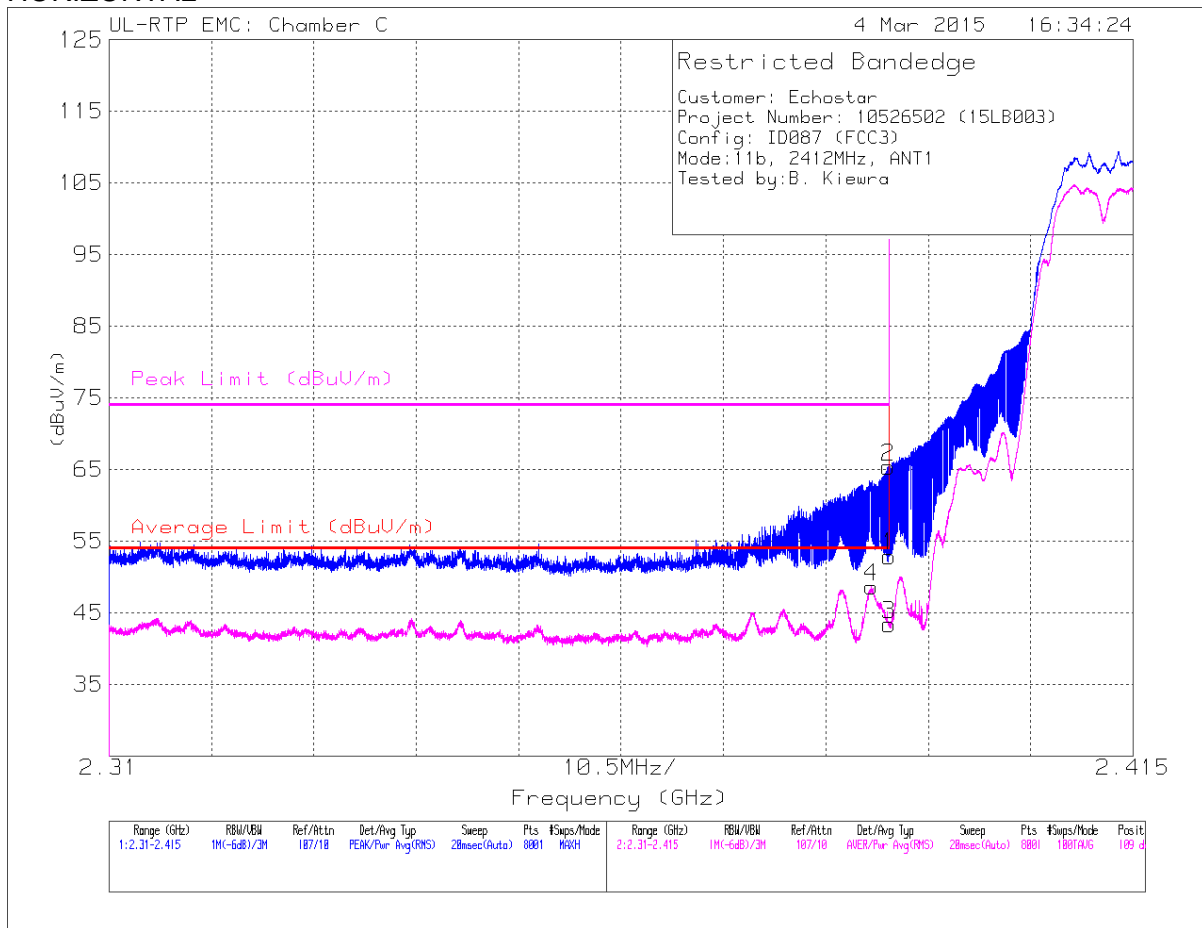
Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

**RESTRICTED BANDEDGE (LOW CHANNEL – ANTENNA 1)**

**HORIZONTAL**



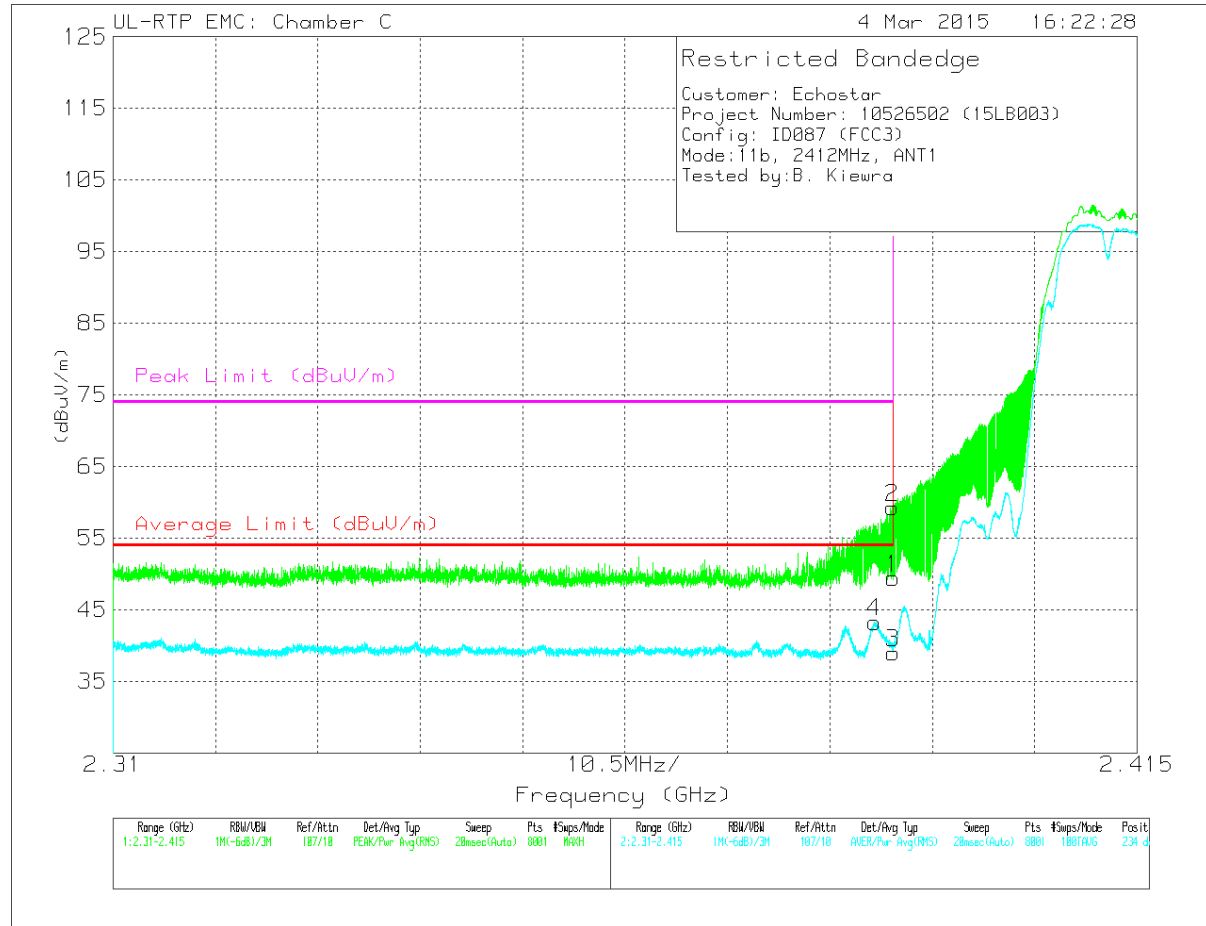
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	47.5	Pk	32.1	-26.7	52.9	-	-	74	-21.1	109	180	H
2	* 2.39	59.96	Pk	32.1	-26.7	65.36	-	-	74	-8.64	109	180	H
3	* 2.39	37.98	RMS	32.1	-26.7	43.38	54	-10.62	-	-	109	180	H
4	* 2.388	43.23	RMS	32.1	-26.7	48.63	54	-5.37	-	-	109	180	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	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	44.06	Pk	32.1	-26.7	49.46	-	-	74	-24.54	234	273	V
2	* 2.39	53.9	Pk	32.1	-26.7	59.3	-	-	74	-14.7	234	273	V
3	* 2.39	33.62	RMS	32.1	-26.7	39.02	54	-14.98	-	-	234	273	V
4	* 2.388	37.89	RMS	32.1	-26.7	43.29	54	-10.71	-	-	234	273	V

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

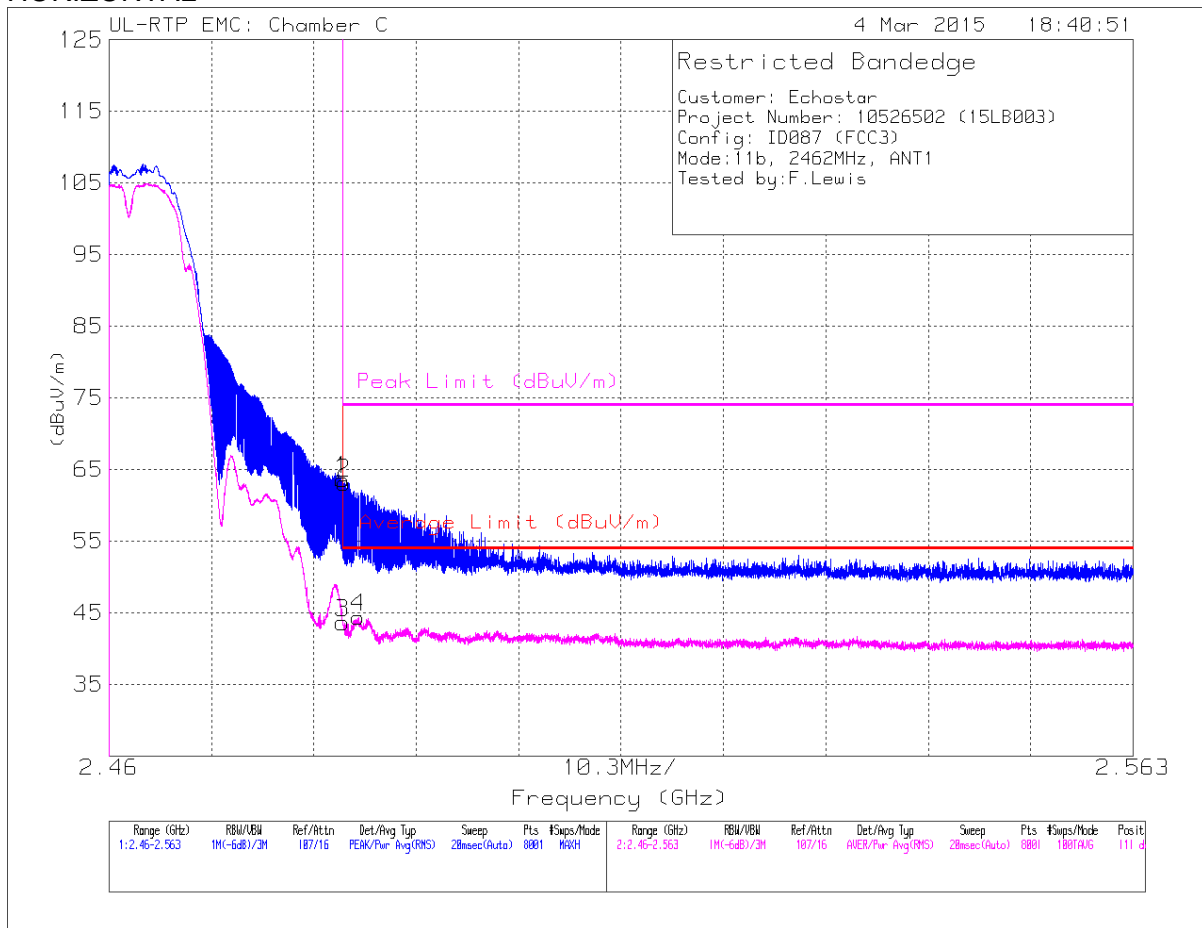
Pk - Peak detector

RMS - RMS detection



**RESTRICTED BANDEDGE (HIGH CHANNEL - ANTENNA 1)**

**HORIZONTAL**



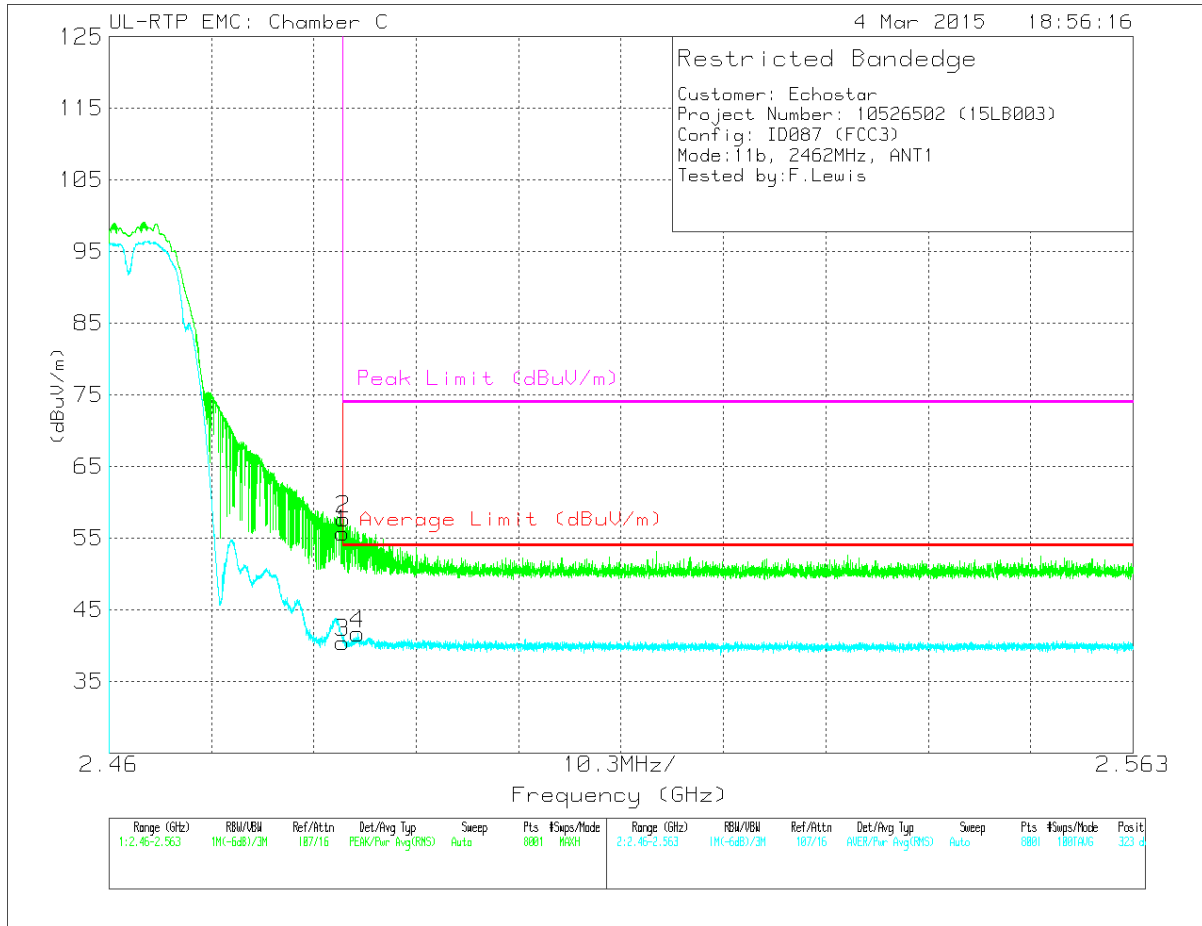
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	57.79	Pk	32.3	-26.5	63.59	-	-	74	-10.41	111	142	H
2	* 2.484	57.36	Pk	32.3	-26.5	63.16	-	-	74	-10.84	111	142	H
3	* 2.484	37.84	RMS	32.3	-26.5	43.64	54	-10.36	-	-	111	142	H
4	* 2.485	38.6	RMS	32.3	-26.5	44.4	54	-9.6	-	-	111	142	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



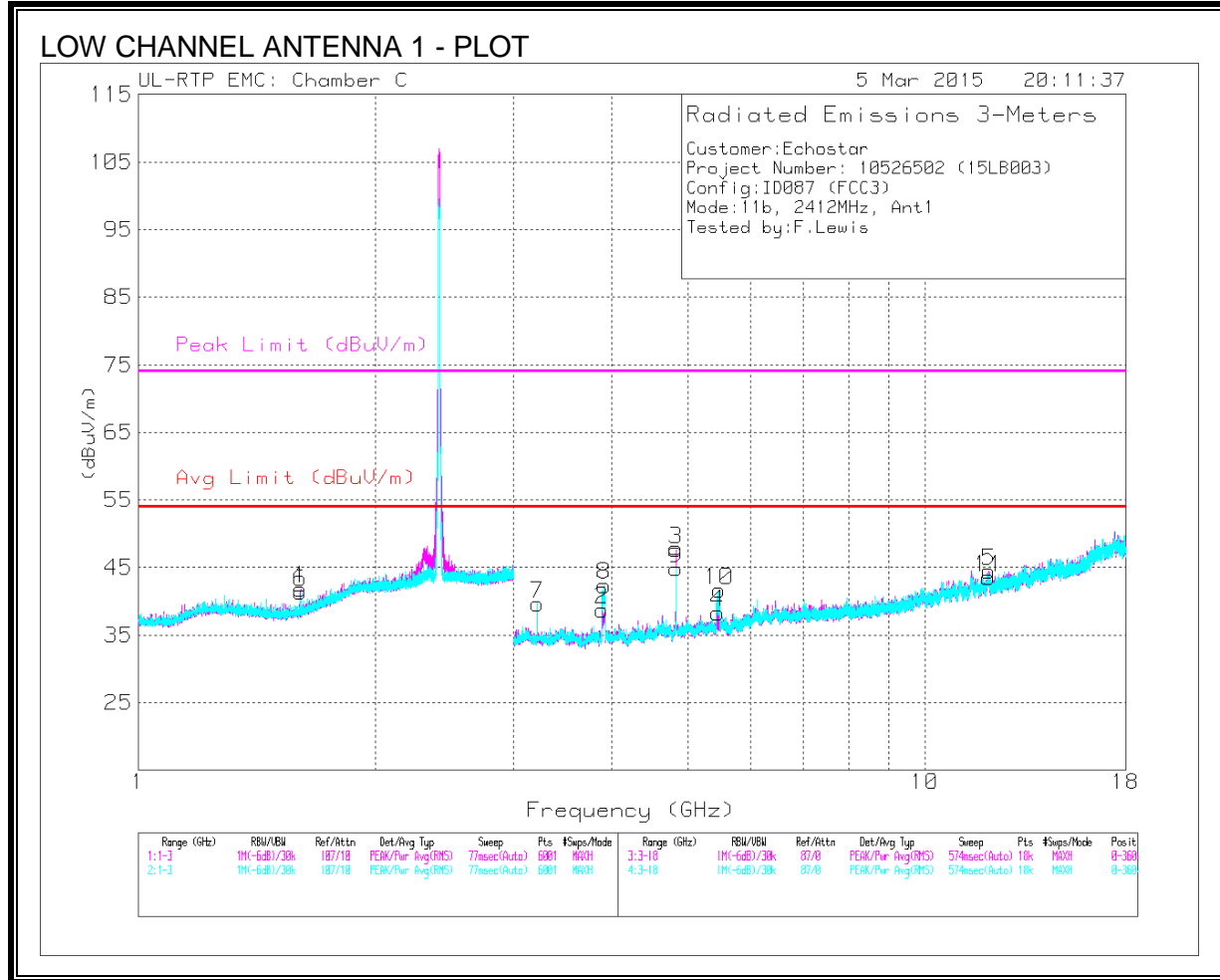
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	49.93	Pk	32.3	-26.5	55.73	-	-	74	-18.27	323	242	V
2	* 2.484	51.87	Pk	32.3	-26.5	57.67	-	-	74	-16.33	323	242	V
3	* 2.484	34.65	RMS	32.3	-26.5	40.45	54	-13.55	-	-	323	242	V
4	* 2.485	35.87	RMS	32.3	-26.5	41.67	54	-12.33	-	-	323	242	V

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

Pk - Peak detector

RMS - RMS detection

**HARMONICS AND SPURIOUS EMISSIONS - ANTENNA 1**



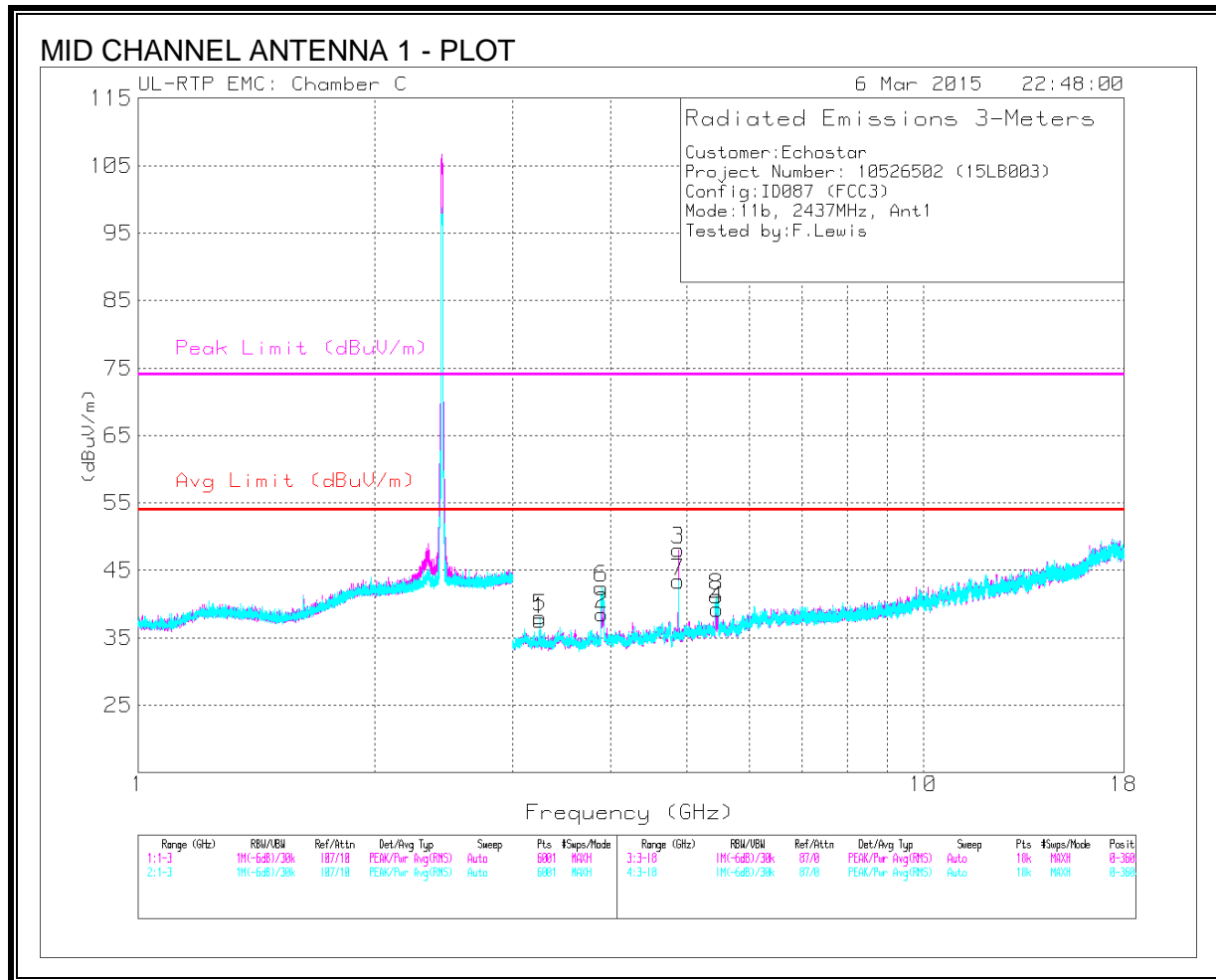
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Fltr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.608	50.07	PK2	28.2	-28.5	49.77	-	-	74	-24.23	331	103	H
	* 1.608	41.1	MAv1	28.2	-28.5	40.8	54	-13.2	-	-	331	103	H
6	* 1.608	49.78	PK2	28.2	-28.5	49.48	-	-	74	-24.52	294	314	V
	* 1.608	39.18	MAv1	28.2	-28.5	38.88	54	-15.12	-	-	294	314	V
2	* 3.888	49.82	PK2	33.6	-34.5	48.92	-	-	74	-25.08	274	364	H
	* 3.888	34.93	MAv1	33.6	-34.5	34.03	54	-19.97	-	-	274	364	H
3	* 4.824	50.78	PK2	34.1	-32.7	52.18	-	-	74	-21.82	278	265	H
	* 4.824	46.18	MAv1	34.1	-32.7	47.58	54	-6.42	-	-	278	265	H
4	* 5.448	46.63	PK2	34.5	-32	49.13	-	-	74	-24.87	124	398	H
	* 5.455	32.28	MAv1	34.5	-32	34.78	54	-19.22	-	-	124	398	H
5	* 12.06	39.26	PK2	38.7	-24.8	53.16	-	-	74	-20.84	58	375	H
	* 12.06	26.44	MAv1	38.7	-24.8	40.34	54	-13.66	-	-	58	375	H
8	* 3.9	51.04	PK2	33.6	-34.4	50.24	-	-	74	-23.76	307	287	V
	* 3.909	37.2	MAv1	33.6	-34.2	36.6	54	-17.4	-	-	307	287	V
9	* 4.824	46.68	PK2	34.1	-32.7	48.08	-	-	74	-25.92	213	305	V
	* 4.824	39.83	MAv1	34.1	-32.7	41.23	54	-12.77	-	-	213	305	V
11	* 12.061	38.51	PK2	38.7	-24.9	52.31	-	-	74	-21.69	197	328	V
	* 12.059	26.44	MAv1	38.7	-24.8	40.34	54	-13.66	-	-	197	328	V
7	3.216	48.28	Pk	32.9	-34.6	46.58	-	-	74	-27.42	84	106	V
10	5.476	47.59	Pk	34.5	-31.7	50.39	-	-	74	-23.61	86	346	V

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

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average



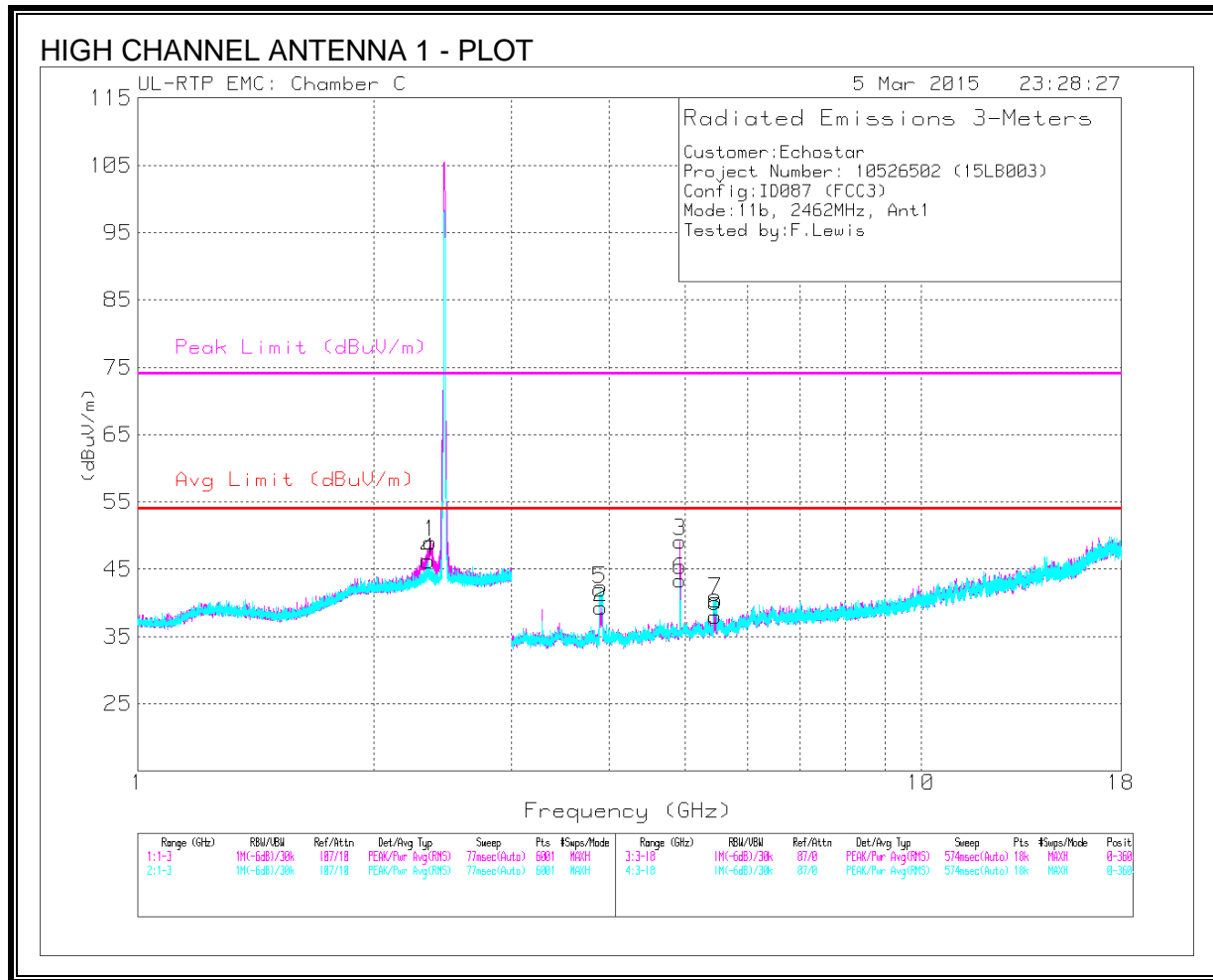
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.889	52.2	PK2	33.6	-34.5	51.3	-	-	74	-22.7	122	360	H
	* 3.89	36.28	MAv1	33.6	-34.5	35.38	54	-18.62	-	-	122	360	H
3	* 4.874	50.69	PK2	34.1	-32.9	51.89	-	-	74	-22.11	276	255	H
	* 4.874	47.13	MAv1	34.1	-32.9	48.33	54	-5.67	-	-	276	255	H
4	* 5.445	48.39	PK2	34.5	-31.9	50.99	-	-	74	-23.01	124	354	H
	* 5.445	32.46	MAv1	34.5	-31.9	35.06	54	-18.94	-	-	124	354	H
6	* 3.889	52.52	PK2	33.6	-34.5	51.62	-	-	74	-22.38	311	246	V
	* 3.89	37.08	MAv1	33.6	-34.5	36.18	54	-17.82	-	-	311	246	V
7	* 4.874	48.46	PK2	34.1	-32.9	49.66	-	-	74	-24.34	34	291	V
	* 4.874	43.74	MAv1	34.1	-32.9	44.94	54	-9.06	-	-	34	291	V
8	* 5.445	47.05	PK2	34.5	-31.9	49.65	-	-	74	-24.35	279	354	V
	* 5.452	32.28	MAv1	34.5	-32	34.78	54	-19.22	-	-	279	354	V
1	3.249	47.89	Pk	32.9	-34.3	46.49	-	-	74	-27.51	84	182	H
5	3.249	47.06	Pk	32.9	-34.3	45.66	-	-	74	-28.34	352	273	V

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

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.363	52.72	PK2	32	-26.7	58.02	-	-	74	-15.98	111	180	H
	* 2.365	41.42	MAv1	32	-26.7	46.72	54	-7.28	-	-	111	180	H
4	* 2.349	48.99	PK2	32	-26.7	54.29	-	-	74	-19.71	241	275	V
	* 2.356	36.63	MAv1	32	-26.7	41.93	54	-12.07	-	-	241	275	V
2	* 3.888	50.89	PK2	33.6	-34.5	49.99	-	-	74	-24.01	185	311	H
	* 3.888	35.29	MAv1	33.6	-34.5	34.39	54	-19.61	-	-	185	311	H
3	* 4.924	52.21	PK2	34.1	-33.1	53.21	-	-	74	-20.79	108	275	H
	* 4.924	48.89	MAv1	34.1	-33.1	49.89	54	-4.11	-	-	108	275	H
8	* 5.457	47.17	PK2	34.5	-31.9	49.77	-	-	74	-24.23	134	364	H
	* 5.459	32.06	MAv1	34.5	-31.9	34.66	54	-19.34	-	-	134	364	H
5	* 3.912	53.98	PK2	33.6	-34.2	53.38	-	-	74	-20.62	306	261	V
	* 3.912	37.64	MAv1	33.6	-34.2	37.04	54	-16.96	-	-	306	261	V
6	* 4.924	48.16	PK2	34.1	-33.1	49.16	-	-	74	-24.84	29	378	V
	* 4.924	43.08	MAv1	34.1	-33.1	44.08	54	-9.92	-	-	29	378	V
7	* 5.444	48.53	PK2	34.5	-31.9	51.13	-	-	74	-22.87	285	288	V
	* 5.438	32.7	MAv1	34.5	-31.9	35.3	54	-18.7	-	-	285	288	V

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

Pk - Peak detector

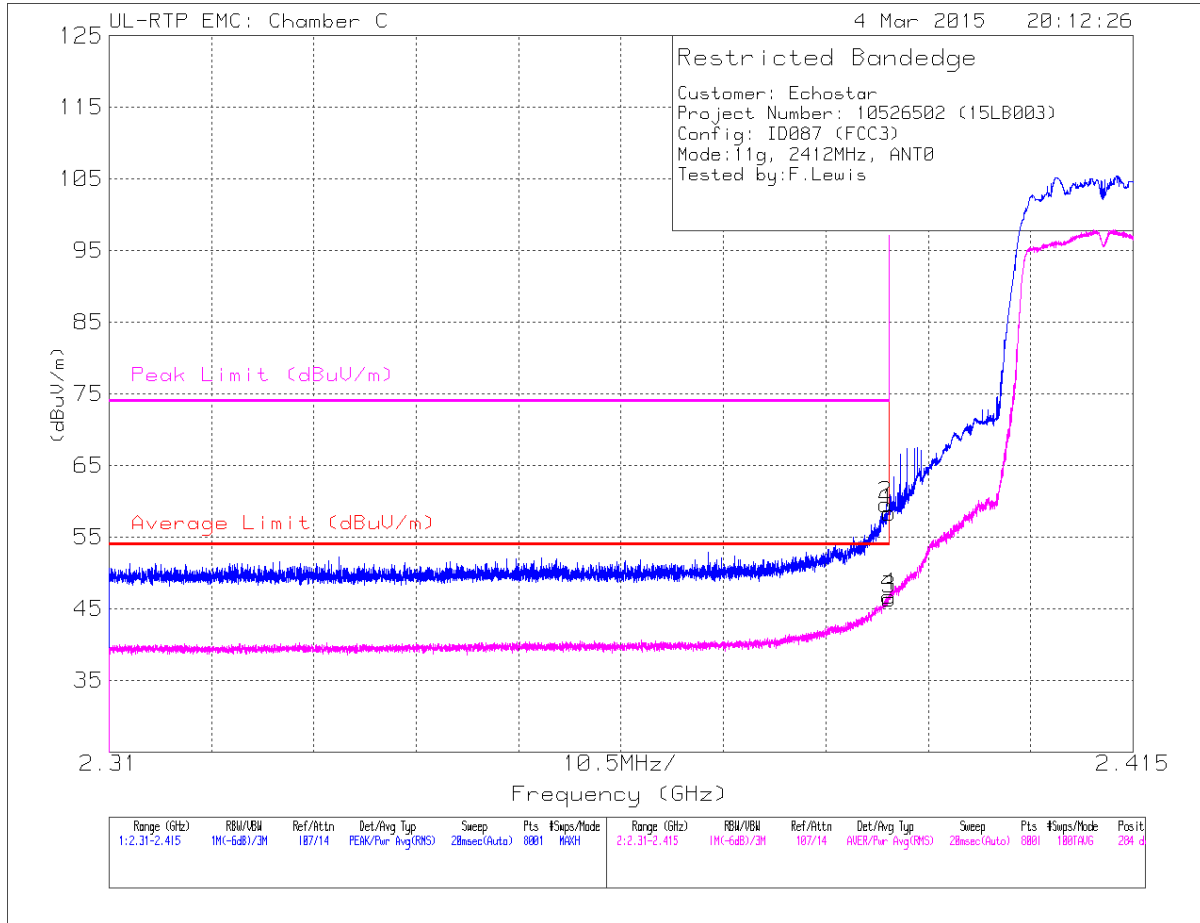
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

### 9.2.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND

#### RESTRICTED BANDEGE (LOW CHANNEL – ANTENNA 0)

#### HORIZONTAL



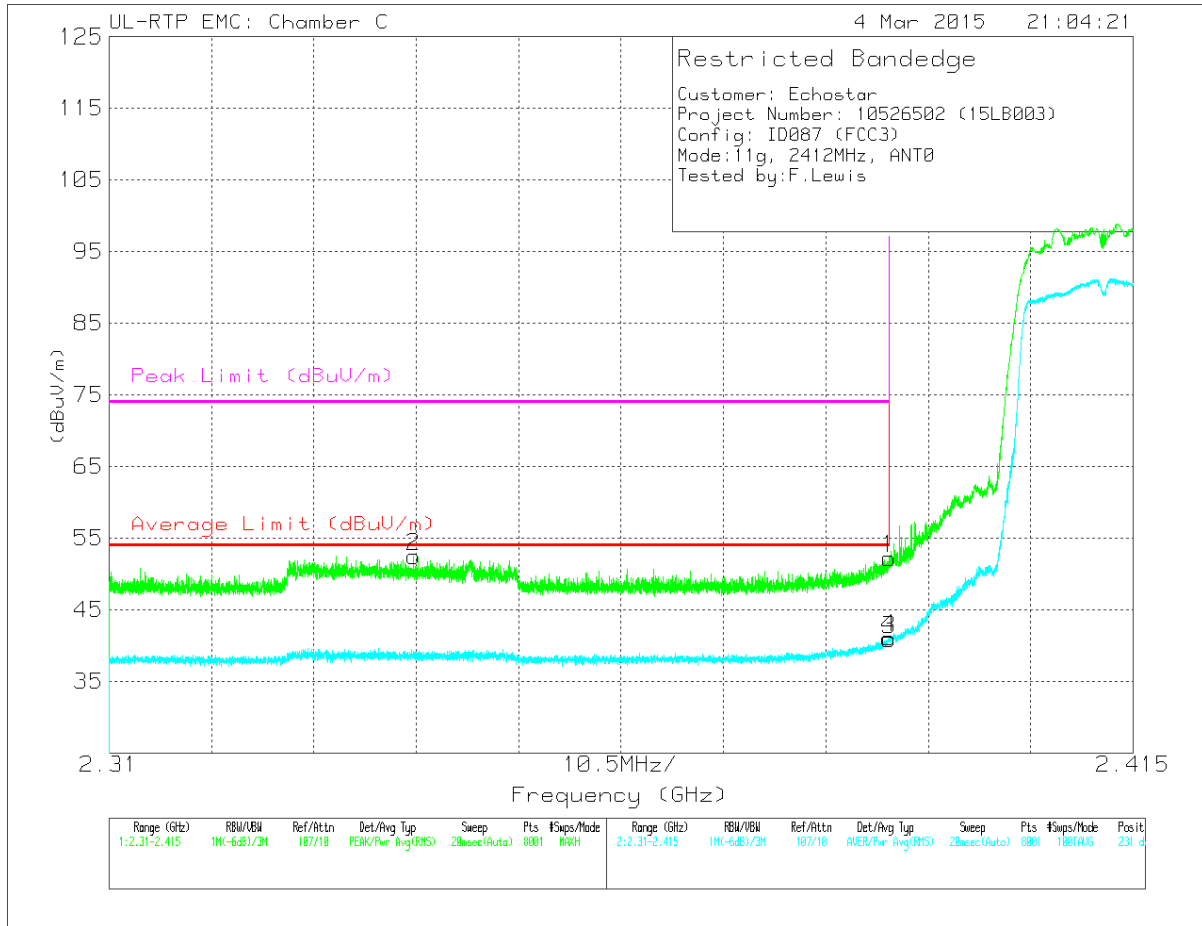
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	53.02	Pk	32.1	-26.7	58.42	-	-	74	-15.58	284	172	H
2	* 2.39	54.18	Pk	32.1	-26.7	59.58	-	-	74	-14.42	284	172	H
3	* 2.39	41	RMS	32.1	-26.7	46.4	54	-7.6	-	-	284	172	H
4	* 2.39	41.36	RMS	32.1	-26.7	46.76	54	-7.24	-	-	284	172	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	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	46.82	Pk	32.1	-26.7	52.22	-	-	74	-21.78	231	397	V
2	* 2.341	47.26	Pk	32	-26.8	52.46	-	-	74	-21.54	231	397	V
3	* 2.39	35.5	RMS	32.1	-26.7	40.9	54	-13.1	-	-	231	397	V
4	* 2.39	35.67	RMS	32.1	-26.7	41.07	54	-12.93	-	-	231	397	V

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

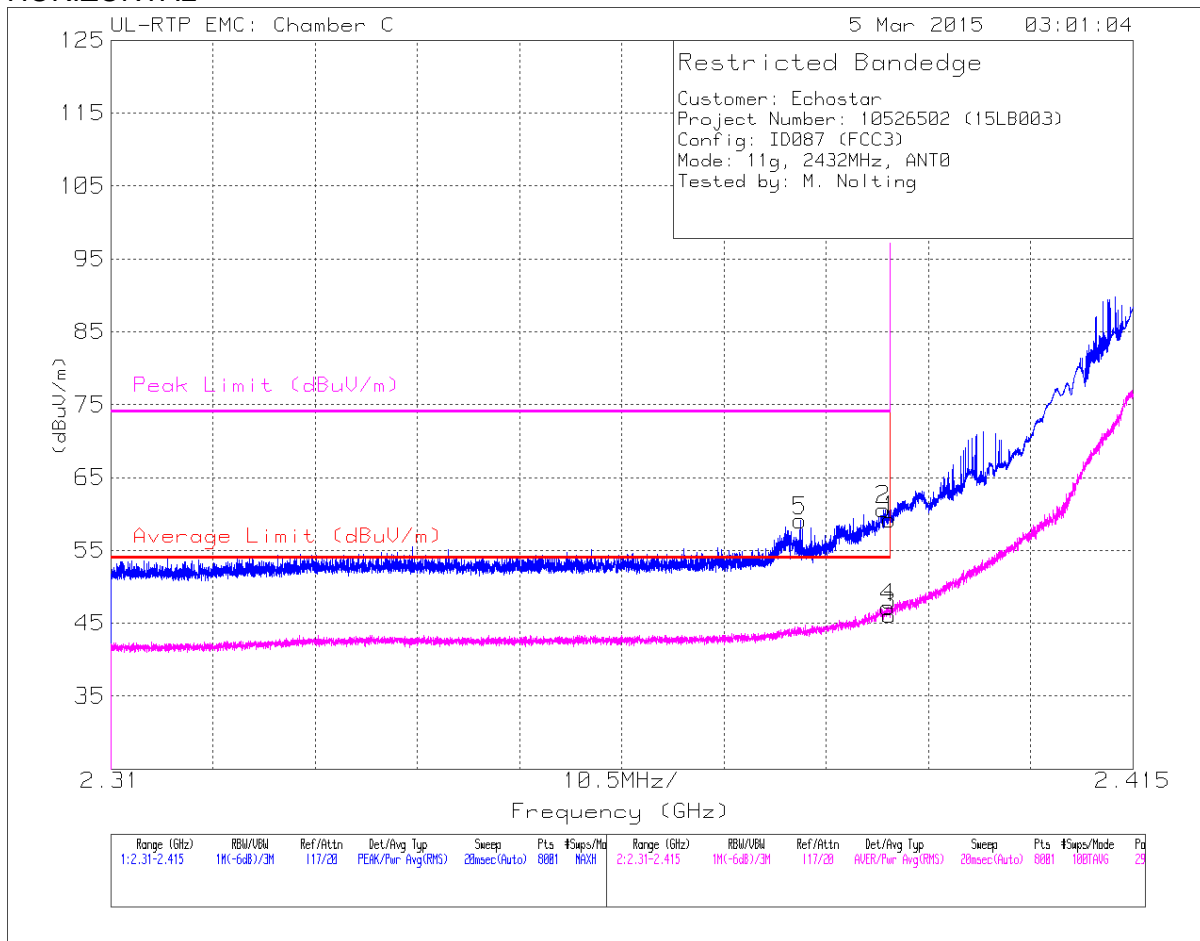
Pk - Peak detector

RMS - RMS detection



**RESTRICTED BANDEGE (CHANNEL 5 – ANTENNA 0)**

**HORIZONTAL**



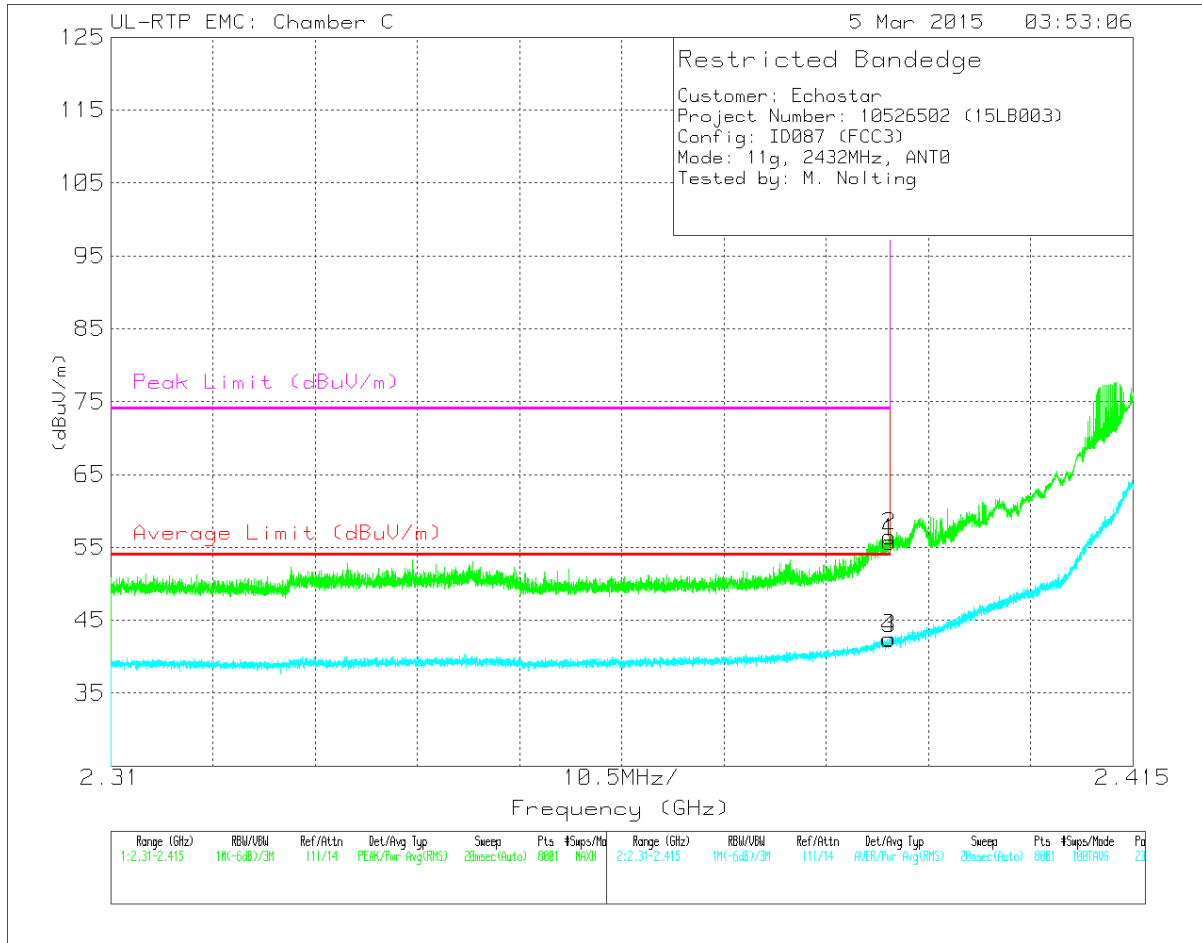
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/ Ftr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 2.381	53.68	Pk	32.1	-26.7	59.08	-	-	74	-14.92	291	149	H
2	* 2.389	55.2	Pk	32.1	-26.7	60.6	-	-	74	-13.4	291	149	H
1	* 2.39	53.81	Pk	32.1	-26.7	59.21	-	-	74	-14.79	291	149	H
3	* 2.39	40.68	RMS	32.1	-26.7	46.08	54	-7.92	-	-	291	149	H
4	* 2.39	41.77	RMS	32.1	-26.7	47.17	54	-6.83	-	-	291	149	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	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	50.3	Pk	32.1	-26.7	55.7	-	-	74	-18.3	230	318	V
2	* 2.39	51.15	Pk	32.1	-26.7	56.55	-	-	74	-17.45	230	318	V
3	* 2.39	37.09	RMS	32.1	-26.7	42.49	54	-11.51	-	-	230	318	V
4	* 2.39	37	RMS	32.1	-26.7	42.4	54	-11.6	-	-	230	318	V

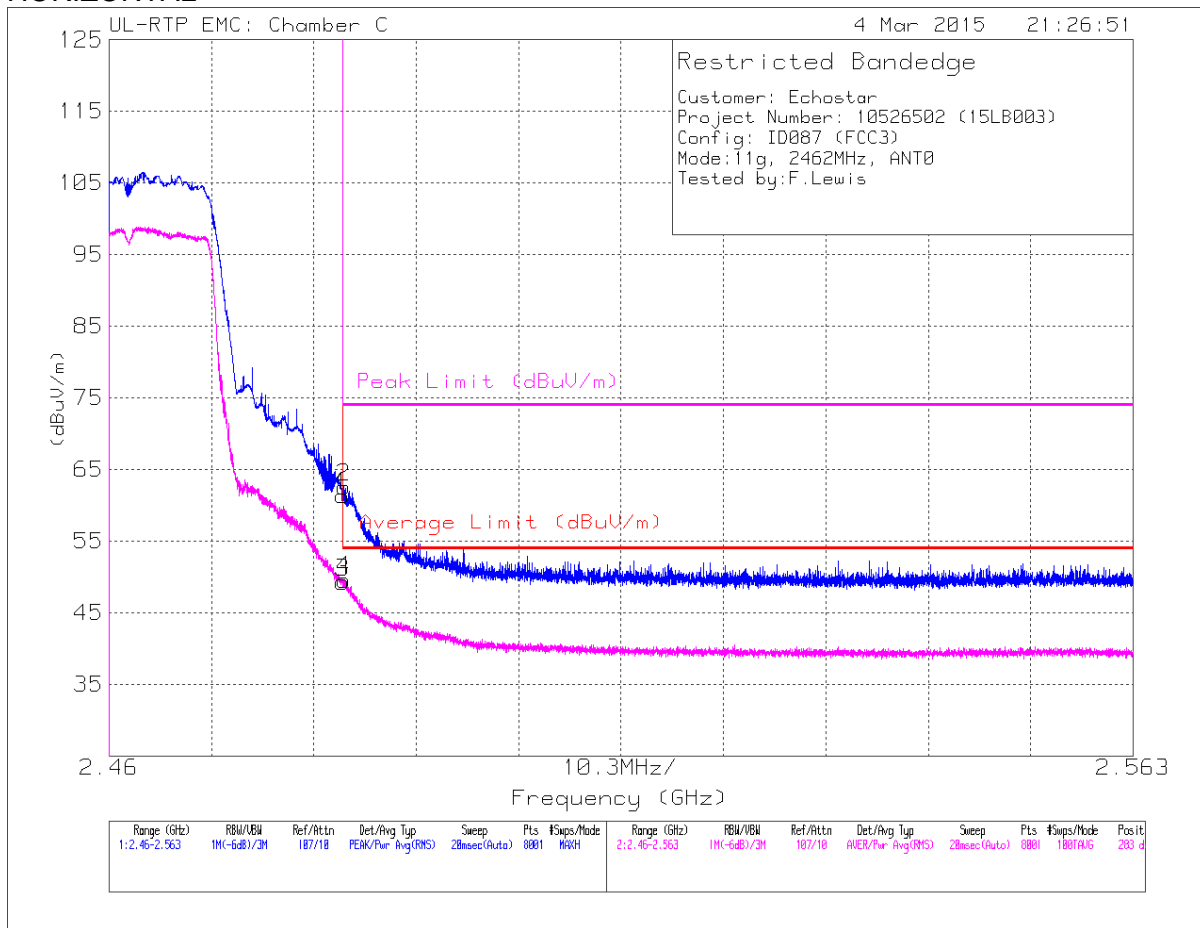
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**RESTRICTED BANDEDGE (HIGH CHANNEL - ANTENNA 0)**

**HORIZONTAL**



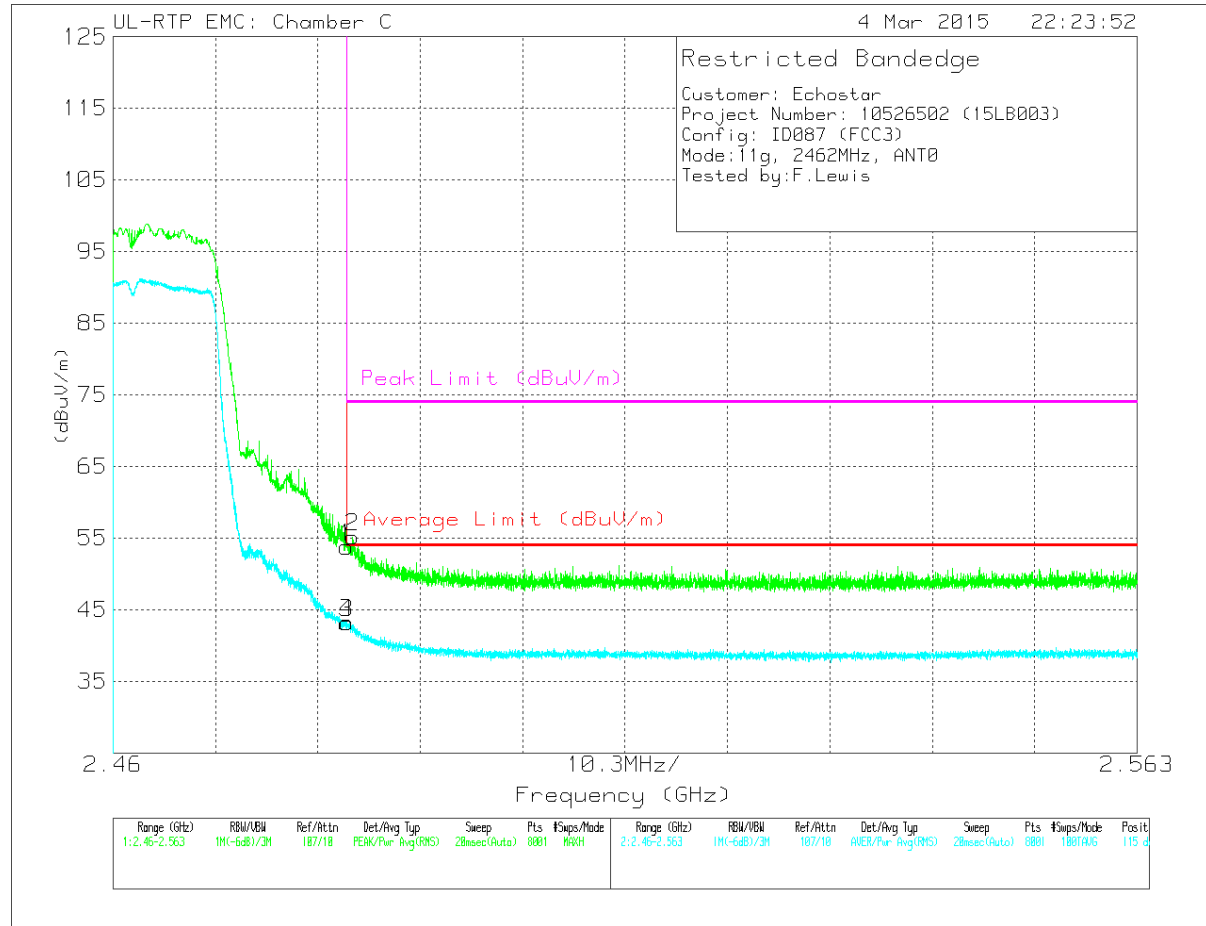
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/ Ftr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	55.58	Pk	32.3	-26.5	61.38	-	-	74	-12.62	283	320	H
2	* 2.484	56.78	Pk	32.3	-26.5	62.58	-	-	74	-11.42	283	320	H
3	* 2.484	43.51	RMS	32.3	-26.5	49.31	54	-4.69	-	-	283	320	H
4	* 2.484	43.8	RMS	32.3	-26.5	49.6	54	-4.4	-	-	283	320	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	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	47.99	Pk	32.3	-26.5	53.79	-	-	74	-20.21	115	313	V
2	* 2.484	49.37	Pk	32.3	-26.5	55.17	-	-	74	-18.83	115	313	V
3	* 2.484	37.38	RMS	32.3	-26.5	43.18	54	-10.82	-	-	115	313	V
4	* 2.484	37.46	RMS	32.3	-26.5	43.26	54	-10.74	-	-	115	313	V

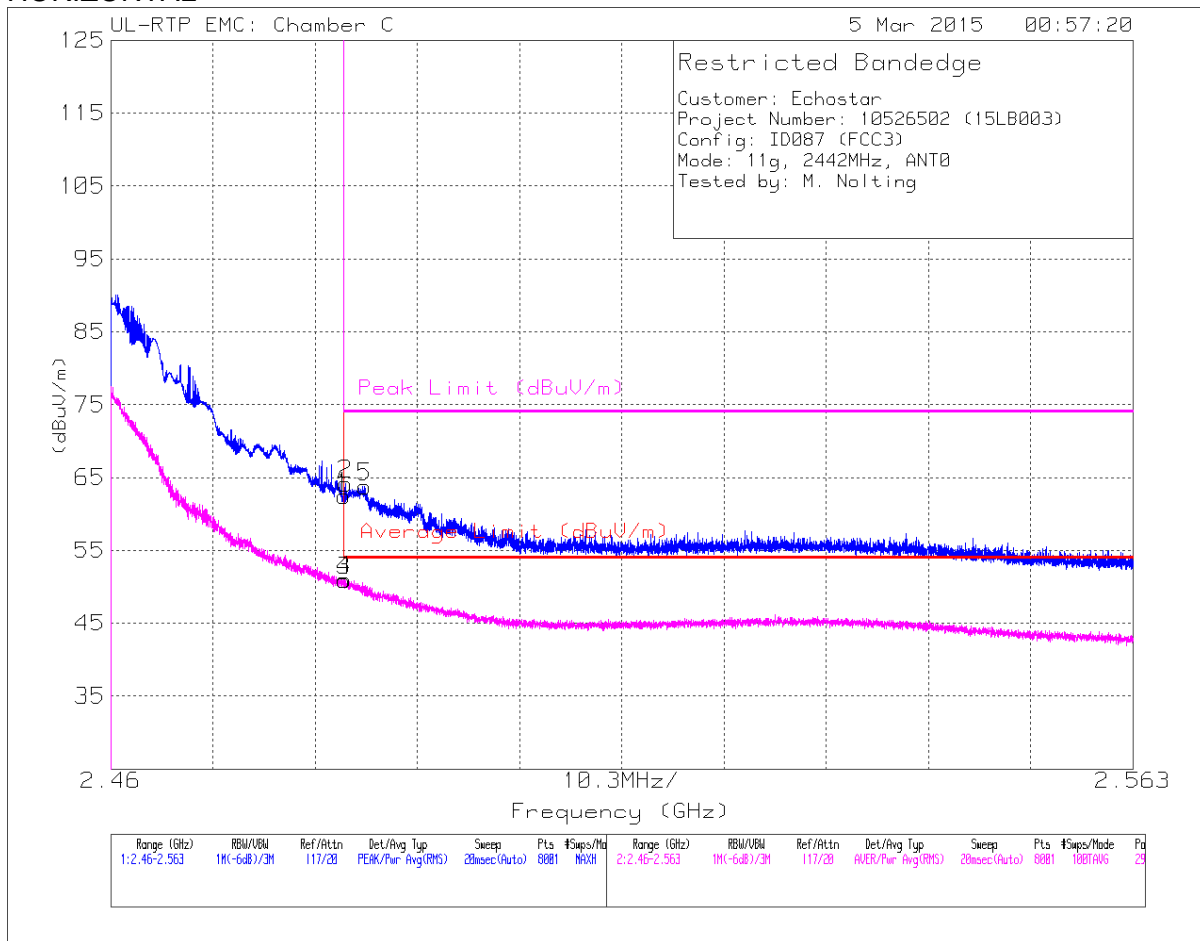
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**RESTRICTED BANDEDGE (CHANNEL 7 - ANTENNA 0)**

**HORIZONTAL**



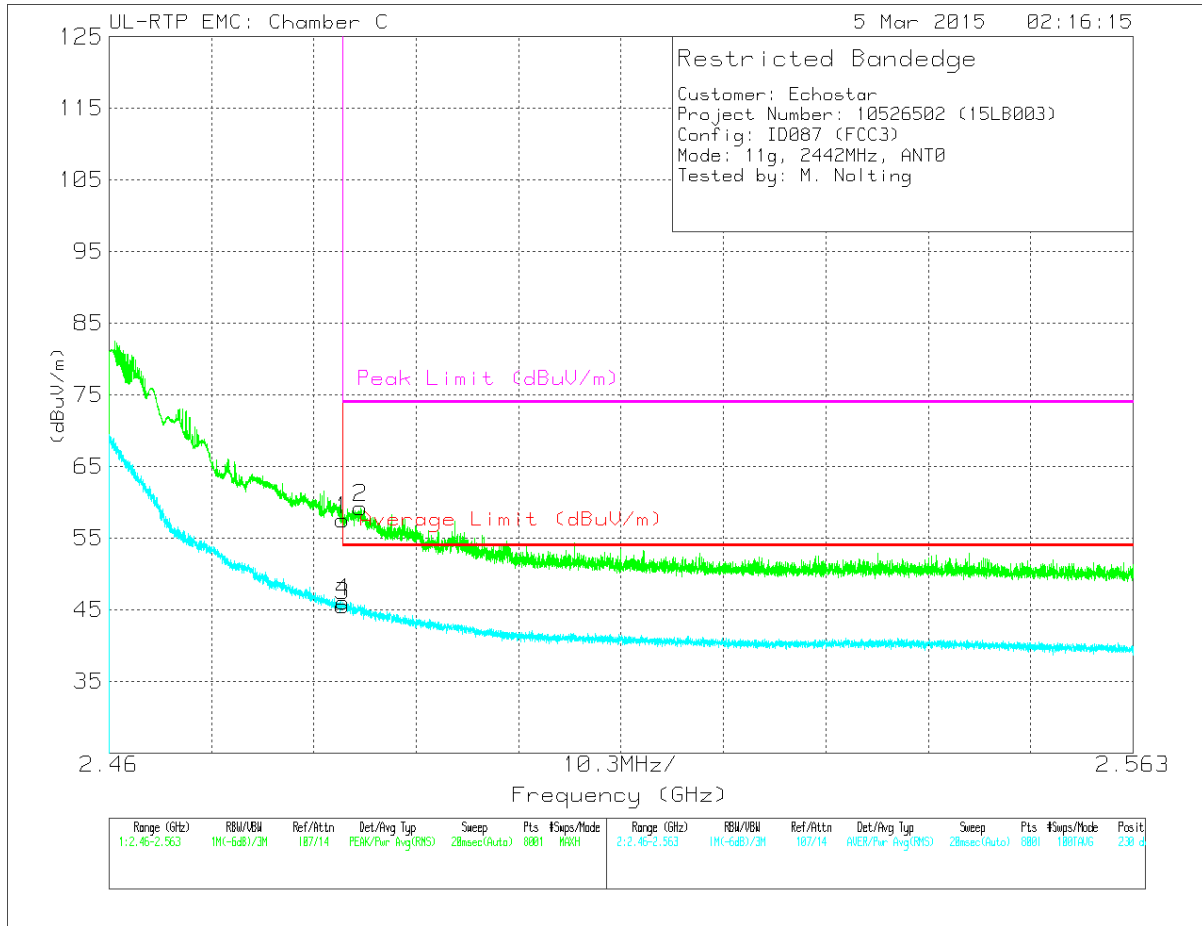
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/ Fltr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	56.64	Pk	32.3	-26.5	62.44	-	-	74	-11.56	290	110	H
2	* 2.484	58.33	Pk	32.3	-26.5	64.13	-	-	74	-9.87	290	110	H
5	* 2.486	57.93	Pk	32.3	-26.5	63.73	-	-	74	-10.27	290	110	H
3	* 2.484	45.07	RMS	32.3	-26.5	50.87	54	-3.13	-	-	290	110	H
4	* 2.484	45.11	RMS	32.3	-26.5	50.91	54	-3.09	-	-	290	110	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



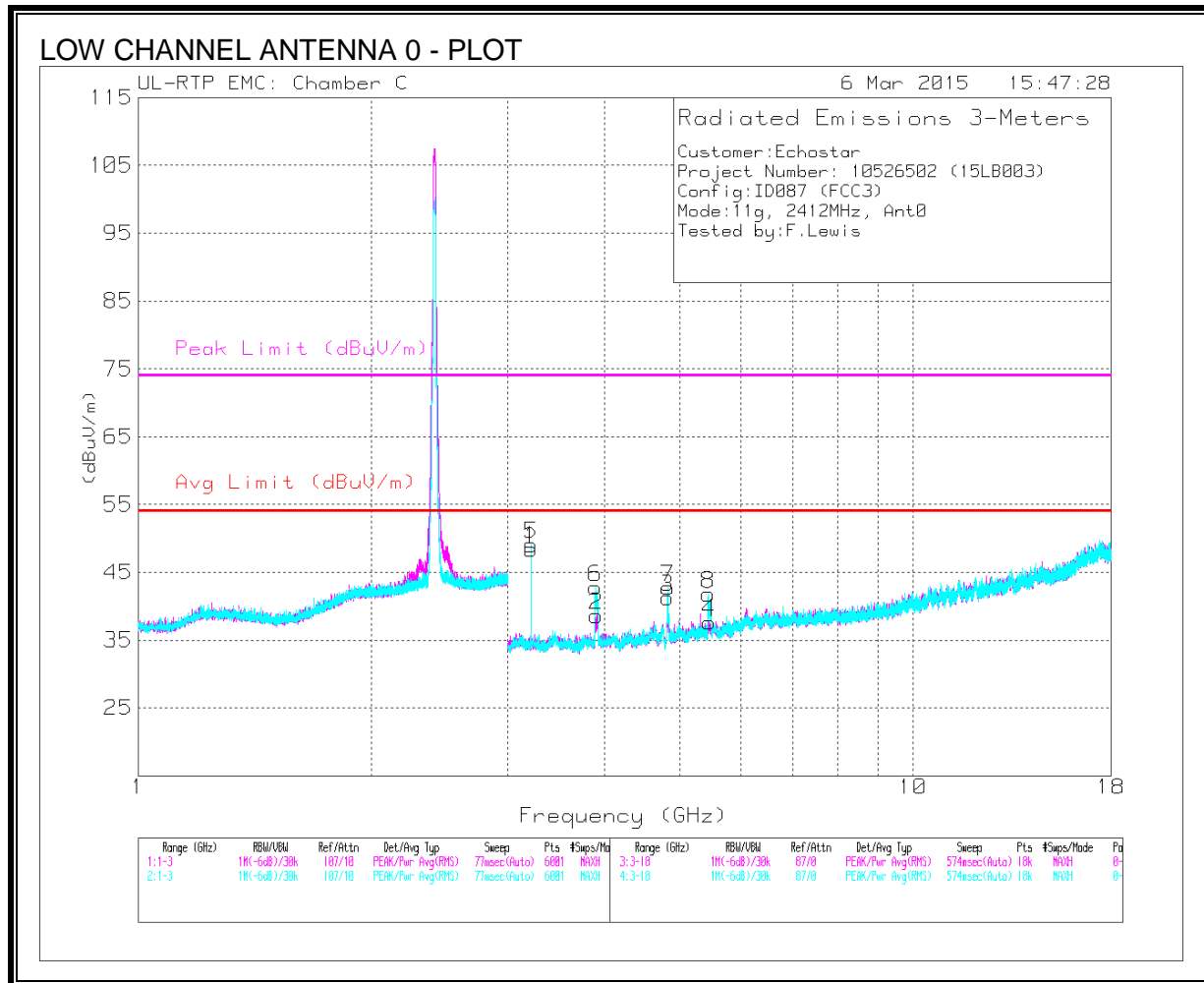
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	51.76	Pk	32.3	-26.5	57.56	-	-	74	-16.44	230	376	V
2	* 2.485	53.46	Pk	32.3	-26.5	59.26	-	-	74	-14.74	230	376	V
3	* 2.484	39.78	RMS	32.3	-26.5	45.58	54	-8.42	-	-	230	376	V
4	* 2.484	40.27	RMS	32.3	-26.5	46.07	54	-7.93	-	-	230	376	V

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

Pk - Peak detector

RMS - RMS detection

**HARMONICS AND SPURIOUS EMISSIONS - ANTENNA 0**



Note – For Radiated Spurious, the Low Channel was tested at the same power setting as Mid channel to achieve worst-case results.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Fltr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.889	51.14	PK2	33.6	-34.5	50.24	-	-	74	-23.76	118	317	H
	* 3.889	35.71	MAv1	33.6	-34.5	34.81	54	-19.19	-	-	118	317	H
3	* 4.826	48.01	PK2	34.1	-32.7	49.41	-	-	74	-24.59	135	283	H
	* 4.826	37.13	MAv1	34.1	-32.7	38.53	54	-15.47	-	-	135	283	H
4	* 3.91	53.56	PK2	33.6	-34.2	52.96	-	-	74	-21.04	318	259	V
	* 3.911	37.16	MAv1	33.6	-34.2	36.56	54	-17.44	-	-	318	259	V
6	* 4.822	49.66	PK2	34.1	-32.7	51.06	-	-	74	-22.94	182	298	V
	* 4.826	38.3	MAv1	34.1	-32.7	39.7	54	-14.3	-	-	182	298	V
7	* 5.445	48.64	PK2	34.5	-31.9	51.24	-	-	74	-22.76	293	239	V
	* 5.458	32.82	MAv1	34.5	-31.9	35.42	54	-18.58	-	-	293	239	V
8	3.216	54.35	Pk	32.9	-34.6	52.65	-	-	74	-21.35	248	263	H
1	3.216	54.87	Pk	32.9	-34.6	53.17	-	-	74	-20.83	85	101	V
5	5.461	47.22	Pk	34.5	-31.9	49.82	-	-	74	-24.18	128	349	H

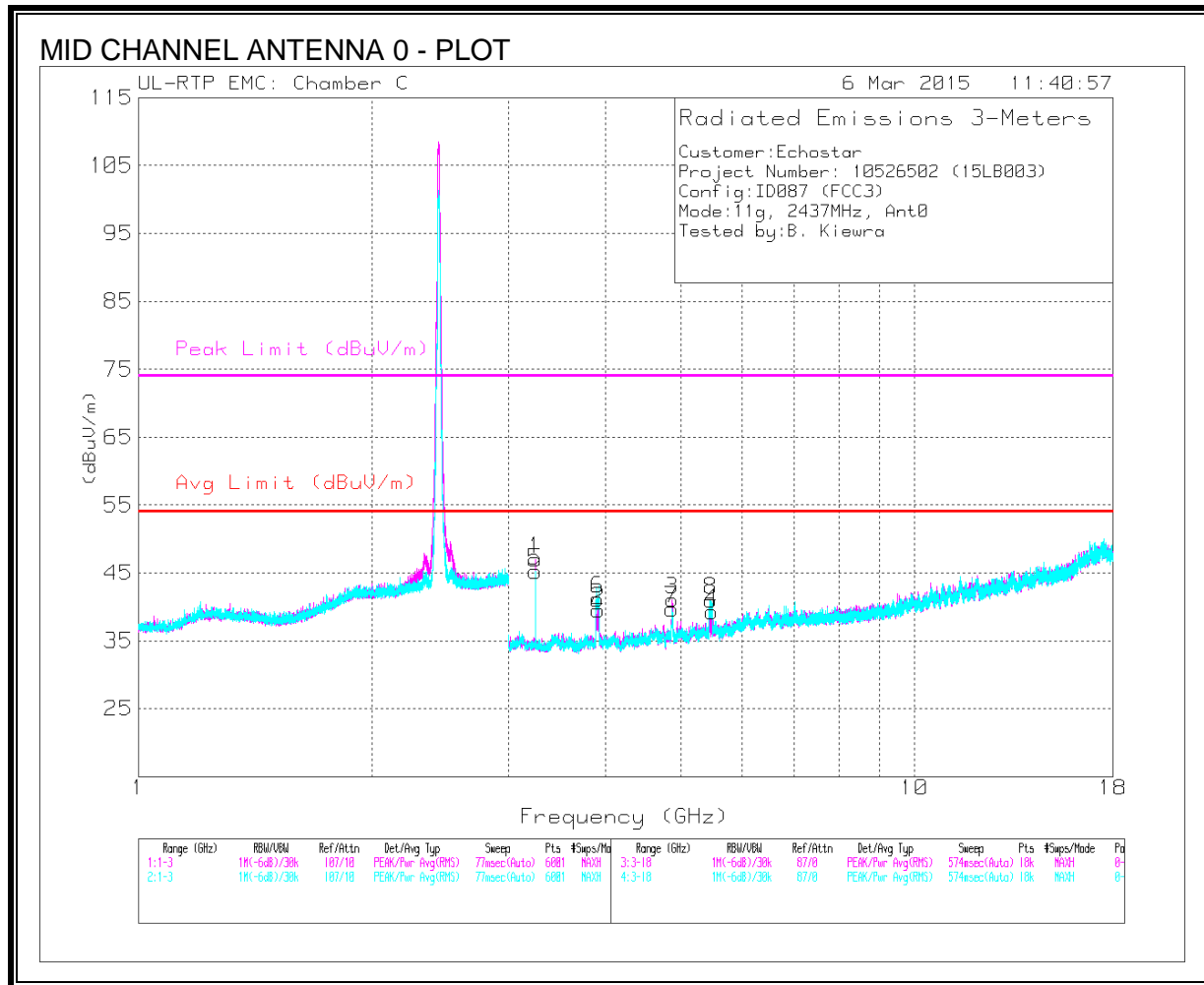
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average





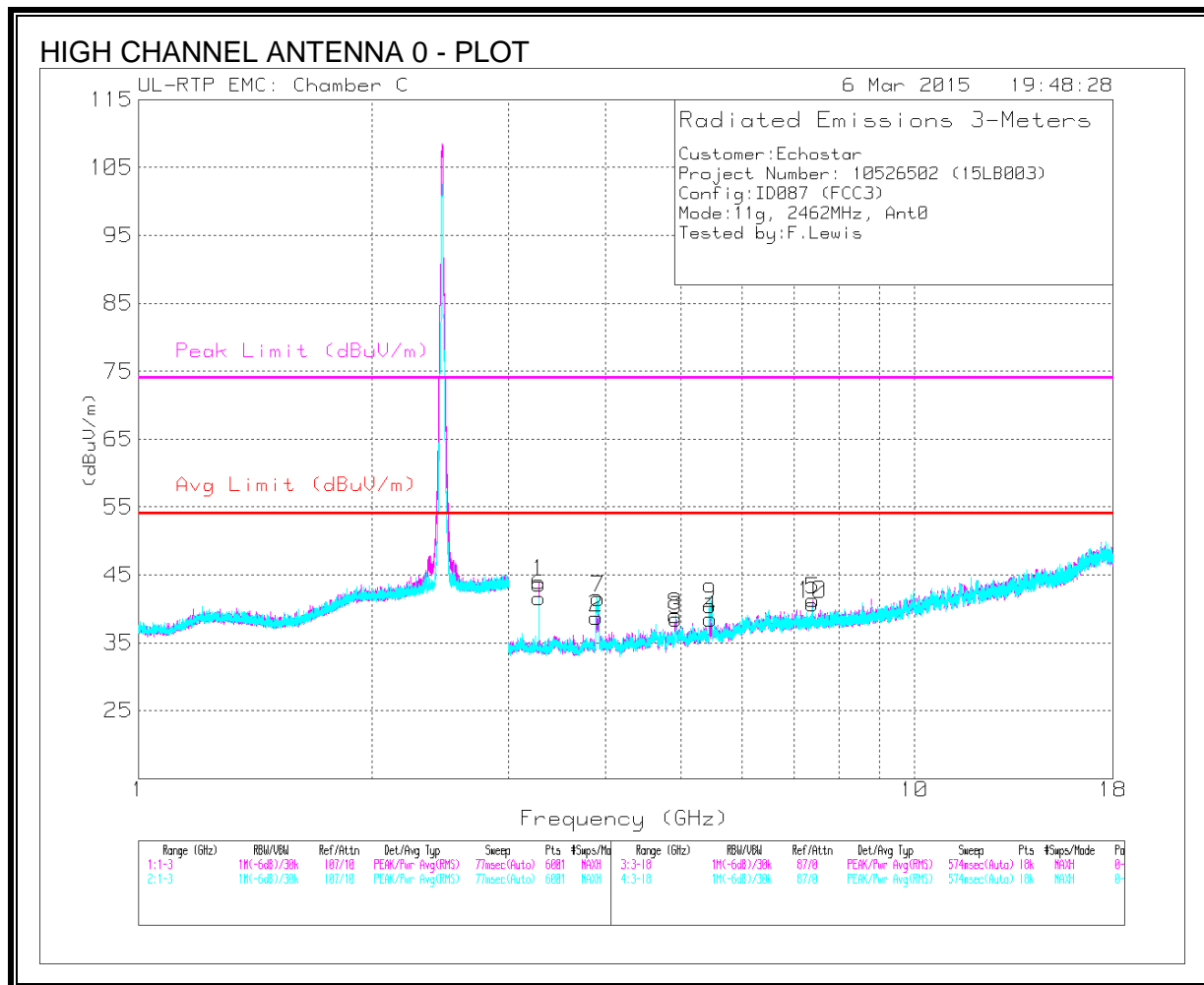
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Fltr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.889	52.03	PK2	33.6	-34.5	51.13	-	-	74	-22.87	112	275	H
	* 3.89	35.61	MAv1	33.6	-34.5	34.71	54	-19.29	-	-	112	275	H
3	* 4.873	49.08	PK2	34.1	-32.9	50.28	-	-	74	-23.72	294	102	H
	* 4.872	37.25	MAv1	34.1	-32.9	38.45	54	-15.55	-	-	294	102	H
6	* 3.911	53.61	PK2	33.6	-34.2	53.01	-	-	74	-20.99	302	274	V
	* 3.889	37.68	MAv1	33.6	-34.5	36.78	54	-17.22	-	-	302	274	V
7	* 4.872	47.82	PK2	34.1	-32.9	49.02	-	-	74	-24.98	70	296	V
	* 4.872	35.7	MAv1	34.1	-32.9	36.9	54	-17.1	-	-	70	296	V
1	3.249	48.41	Pk	32.9	-34.3	47.01	-	-	74	-26.99	0-360	250	H
5	3.249	46.65	Pk	32.9	-34.3	45.25	-	-	74	-28.75	0-360	151	V
8	5.467	38.38	Pk	34.5	-31.9	40.98	-	-	74	-33.02	0-360	250	V
4	5.48	36.37	Pk	34.5	-31.6	39.27	-	-	74	-34.73	0-360	250	H

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

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average



Note – For Radiated Spurious, the High Channel was tested at the same power setting as Mid channel to achieve worst-case results.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Fltr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.91	50.15	PK2	33.6	-34.2	49.55	-	-	74	-24.45	247	376	H
	* 3.889	35.1	MAv1	33.6	-34.5	34.2	54	-19.8	-	-	247	376	H
3	* 4.918	47.09	PK2	34.1	-33.2	47.99	-	-	74	-26.01	118	272	H
	* 4.922	35.84	MAv1	34.1	-33.1	36.84	54	-17.16	-	-	118	272	H
5	* 5.445	47.14	PK2	34.5	-31.9	49.74	-	-	74	-24.26	134	321	H
	* 5.445	32.08	MAv1	34.5	-31.9	34.68	54	-19.32	-	-	134	321	H
7	* 7.388	42.25	PK2	35.7	-28.5	49.45	-	-	74	-24.55	240	234	H
	* 7.389	30.27	MAv1	35.7	-28.5	37.47	54	-16.53	-	-	240	234	H
8	* 3.911	53.18	PK2	33.6	-34.2	52.58	-	-	74	-21.42	300	275	V
	* 3.889	37.18	MAv1	33.6	-34.5	36.28	54	-17.72	-	-	300	275	V
9	* 4.918	46.63	PK2	34.1	-33.2	47.53	-	-	74	-26.47	183	316	V
	* 4.921	35.17	MAv1	34.1	-33.1	36.17	54	-17.83	-	-	183	316	V
10	* 5.457	46.95	PK2	34.5	-31.9	49.55	-	-	74	-24.45	340	249	V
	* 5.457	32.04	MAv1	34.5	-31.9	34.64	54	-19.36	-	-	340	249	V
1	* 7.388	42.95	PK2	35.7	-28.5	50.15	-	-	74	-23.85	191	371	V
	* 7.388	30.68	MAv1	35.7	-28.5	37.88	54	-16.12	-	-	191	371	V
6	3.283	50.43	Pk	32.8	-34.3	48.93	-	-	74	-25.07	267	136	H
4	3.283	48.73	Pk	32.8	-34.3	47.23	-	-	74	-26.77	195	161	V

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

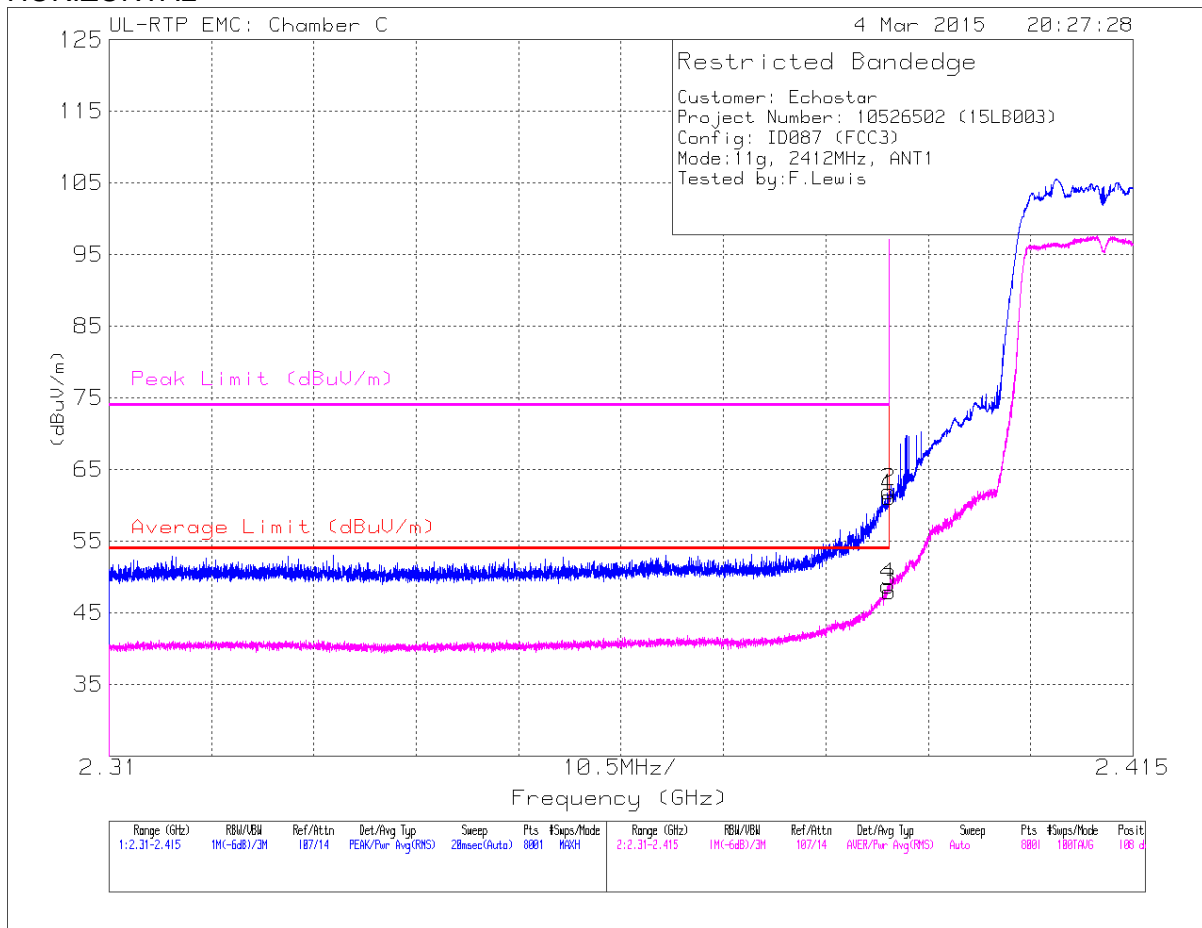
Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

**RESTRICTED BANDEDGE (LOW CHANNEL – ANTENNA 1)**

**HORIZONTAL**



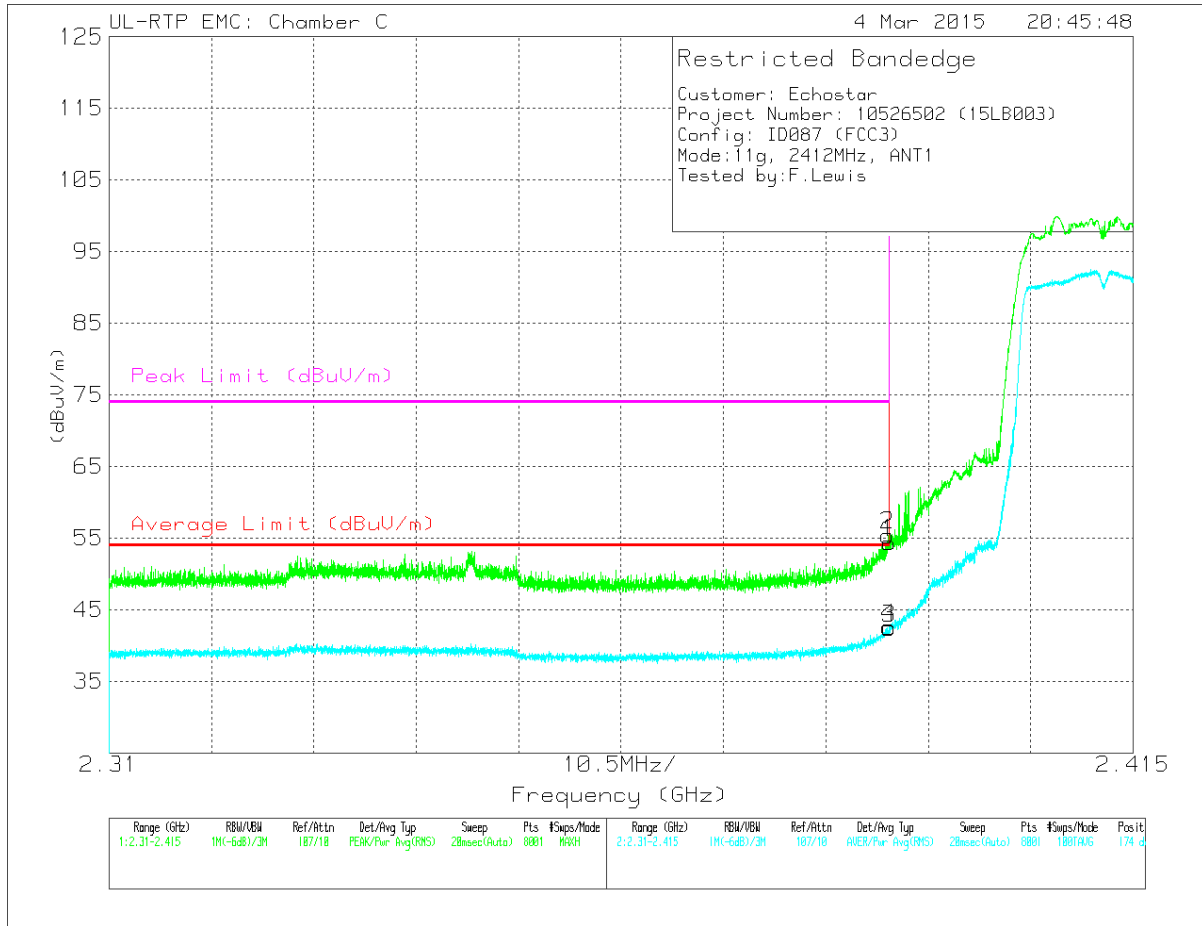
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/ Fitr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	55.75	Pk	32.1	-26.7	61.15	-	-	74	-12.85	108	203	H
2	* 2.39	56.54	Pk	32.1	-26.7	61.94	-	-	74	-12.06	108	203	H
3	* 2.39	42.57	RMS	32.1	-26.7	47.97	54	-6.03	-	-	108	203	H
4	* 2.39	43.38	RMS	32.1	-26.7	48.78	54	-5.22	-	-	108	203	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	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	48.97	Pk	32.1	-26.7	54.37	-	-	74	-19.63	174	399	V
2	* 2.39	50	Pk	32.1	-26.7	55.4	-	-	74	-18.6	174	399	V
3	* 2.39	37.06	RMS	32.1	-26.7	42.46	54	-11.54	-	-	174	399	V
4	* 2.39	37.19	RMS	32.1	-26.7	42.59	54	-11.41	-	-	174	399	V

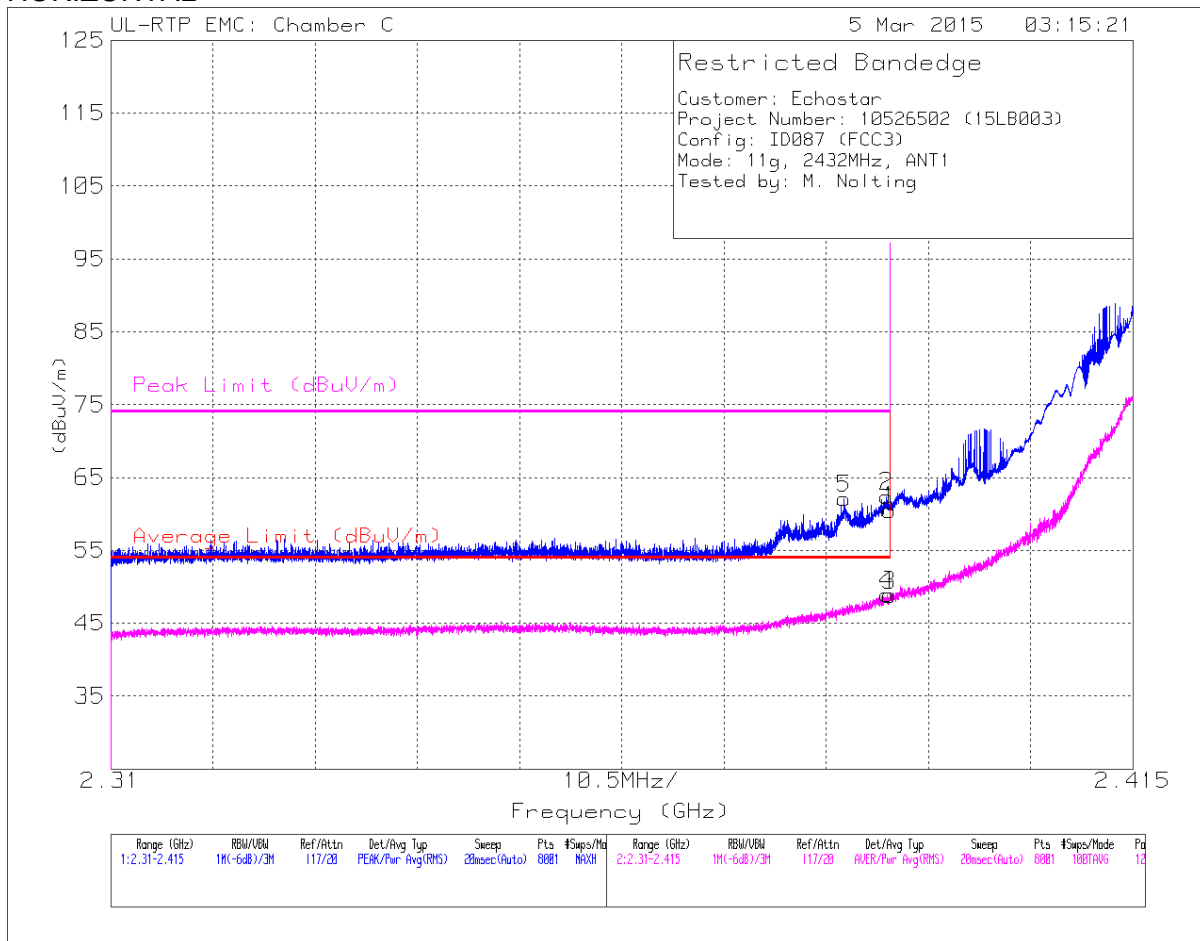
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**RESTRICTED BANDEGE (CHANNEL 5 – ANTENNA 1)**

**HORIZONTAL**



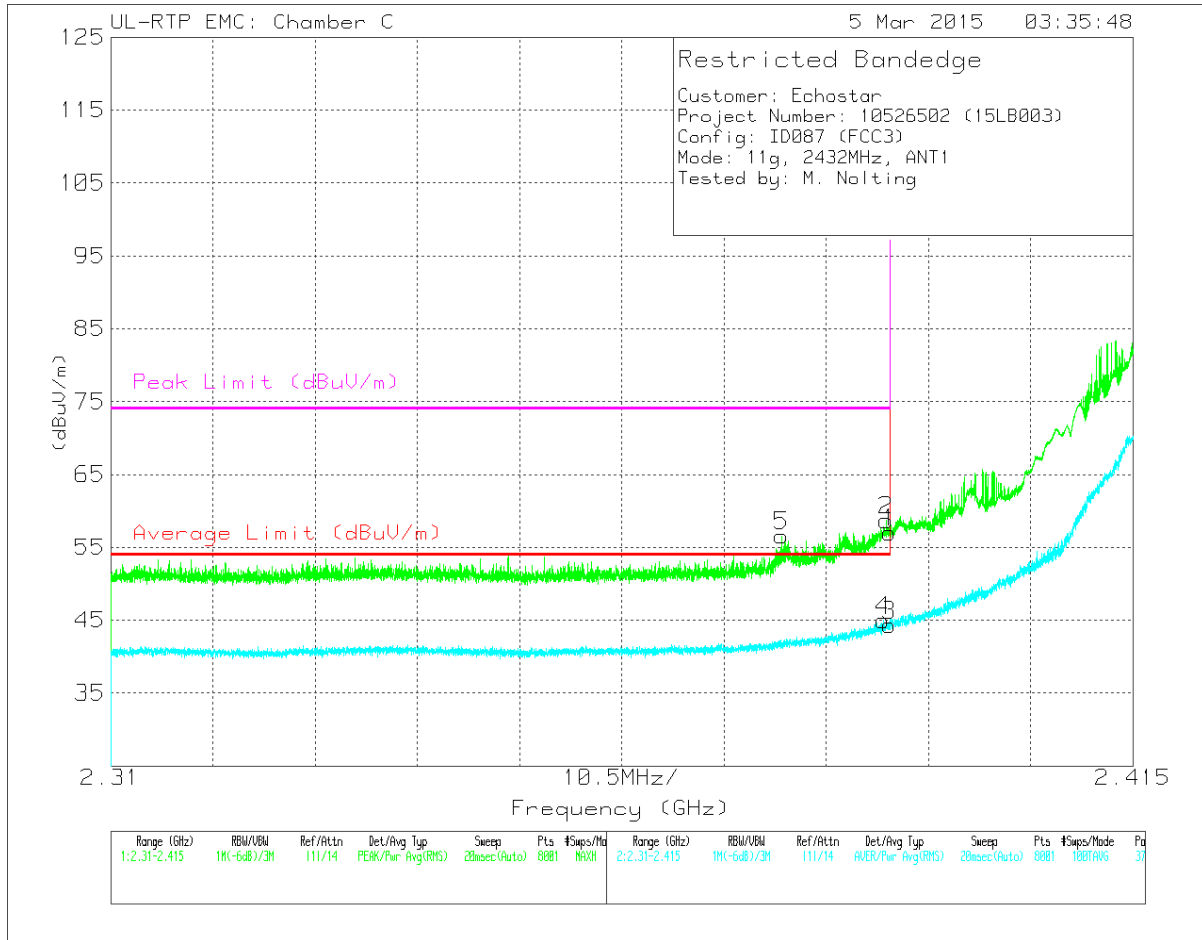
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/ Ftr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 2.385	56.72	Pk	32.1	-26.7	62.12	-	-	74	-11.88	129	108	H
1	* 2.39	55.16	Pk	32.1	-26.7	60.56	-	-	74	-13.44	129	108	H
2	* 2.39	57.01	Pk	32.1	-26.7	62.41	-	-	74	-11.59	129	108	H
3	* 2.39	43.46	RMS	32.1	-26.7	48.86	54	-5.14	-	-	129	108	H
4	* 2.39	43.54	RMS	32.1	-26.7	48.94	54	-5.06	-	-	129	108	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 2.379	51.19	Pk	32.1	-26.7	56.59	-	-	74	-17.41	37	370	V
4	* 2.389	39.57	RMS	32.1	-26.7	44.97	54	-9.03	-	-	37	370	V
1	* 2.39	51.66	Pk	32.1	-26.7	57.06	-	-	74	-16.94	37	370	V
2	* 2.39	53.32	Pk	32.1	-26.7	58.72	-	-	74	-15.28	37	370	V
3	* 2.39	38.92	RMS	32.1	-26.7	44.32	54	-9.68	-	-	37	370	V

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

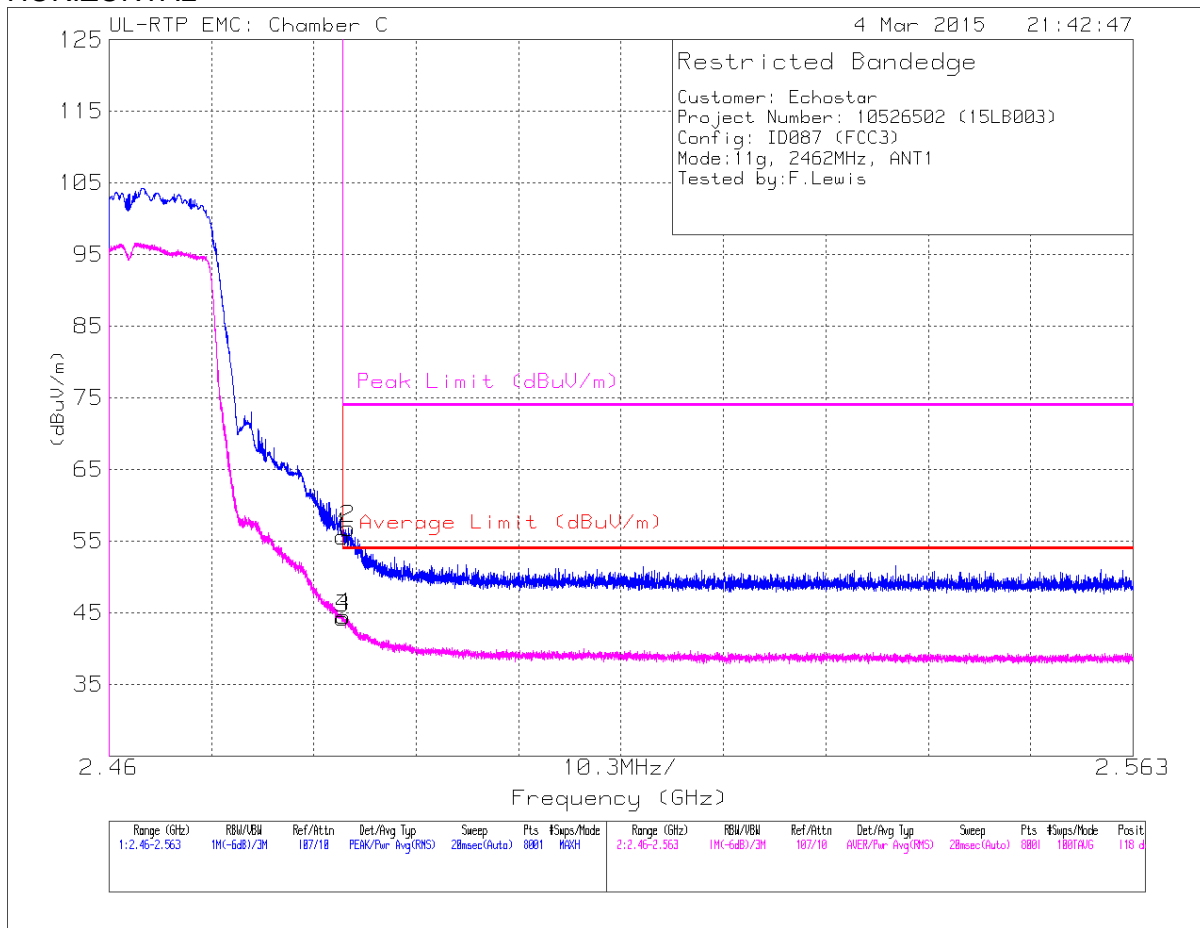
Pk - Peak detector

RMS - RMS detection



**RESTRICTED BANDEGE (HIGH CHANNEL - ANTENNA 1)**

**HORIZONTAL**



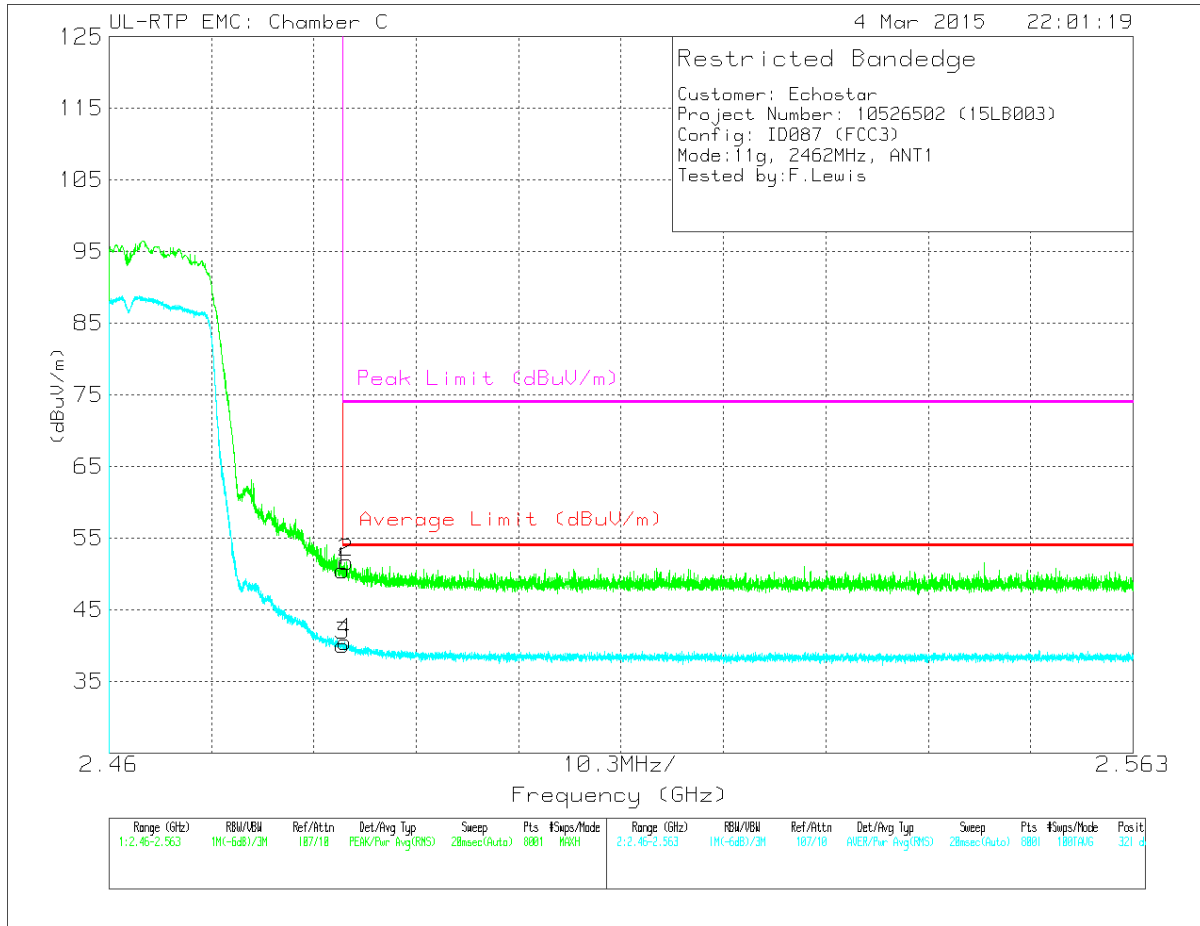
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	49.85	Pk	32.3	-26.5	55.65	-	-	74	-18.35	118	145	H
2	* 2.484	51.01	Pk	32.3	-26.5	56.81	-	-	74	-17.19	118	145	H
3	* 2.484	38.48	RMS	32.3	-26.5	44.28	54	-9.72	-	-	118	145	H
4	* 2.484	38.69	RMS	32.3	-26.5	44.49	54	-9.51	-	-	118	145	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	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	44.71	Pk	32.3	-26.5	50.51	-	-	74	-23.49	321	241	V
2	* 2.484	45.87	Pk	32.3	-26.5	51.67	-	-	74	-22.33	321	241	V
3	* 2.484	34.23	RMS	32.3	-26.5	40.03	54	-13.97	-	-	321	241	V
4	* 2.484	34.71	RMS	32.3	-26.5	40.51	54	-13.49	-	-	321	241	V

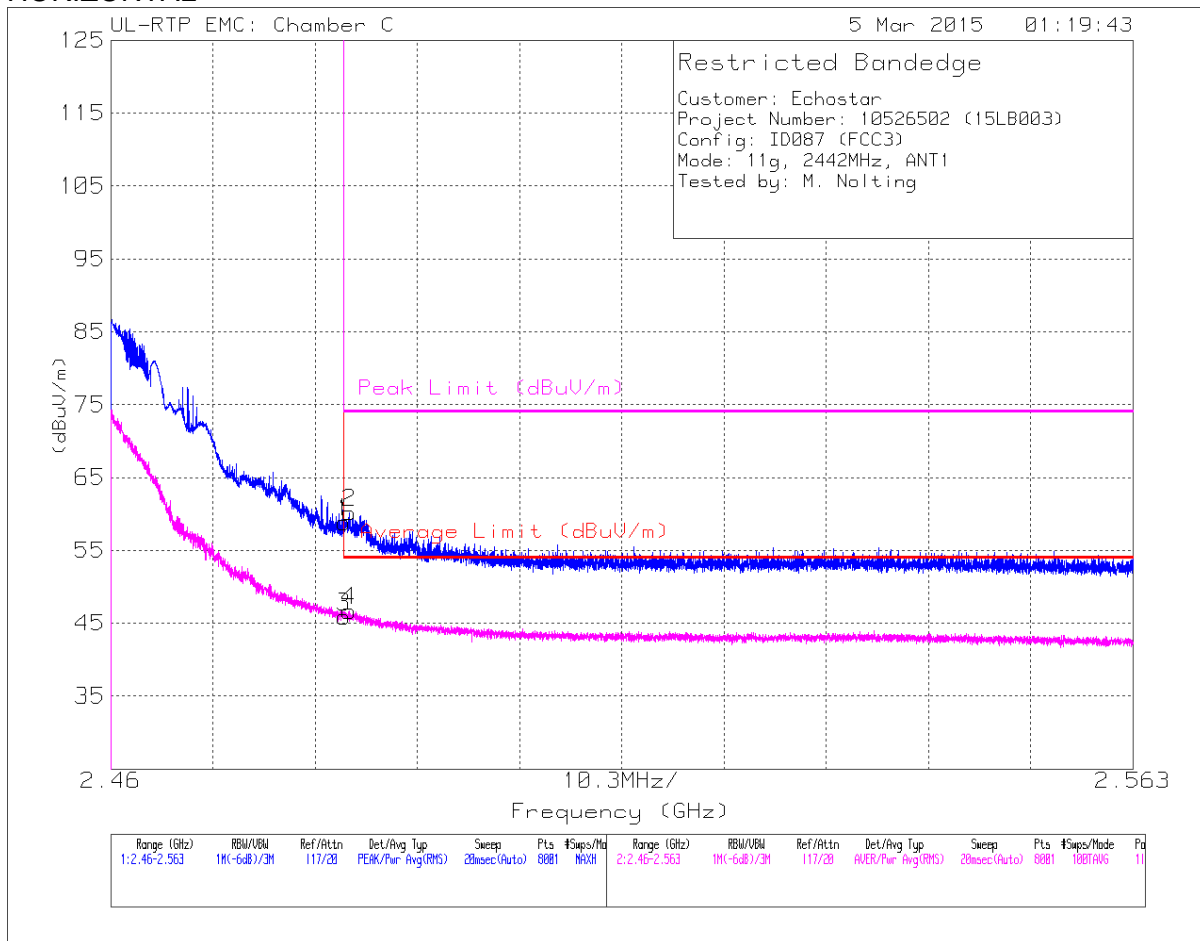
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**RESTRICTED BANDEDGE (CHANNEL 7 - ANTENNA 1)**

**HORIZONTAL**



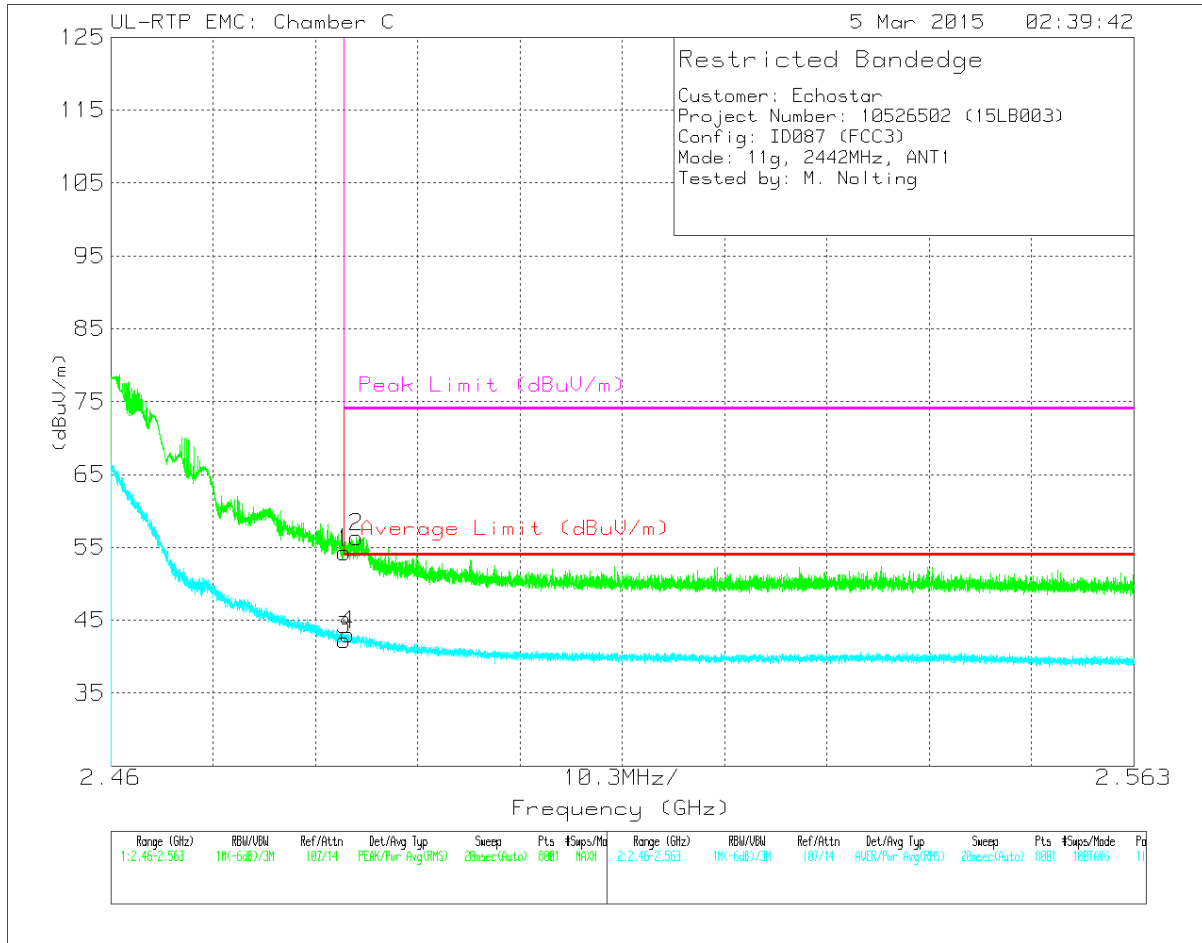
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Fltr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	53.08	Pk	32.3	-26.5	58.88	-	-	74	-15.12	112	104	H
2	* 2.484	54.38	Pk	32.3	-26.5	60.18	-	-	74	-13.82	112	104	H
3	* 2.484	40.06	RMS	32.3	-26.5	45.86	54	-8.14	-	-	112	104	H
4	* 2.484	40.89	RMS	32.3	-26.5	46.69	54	-7.31	-	-	112	104	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



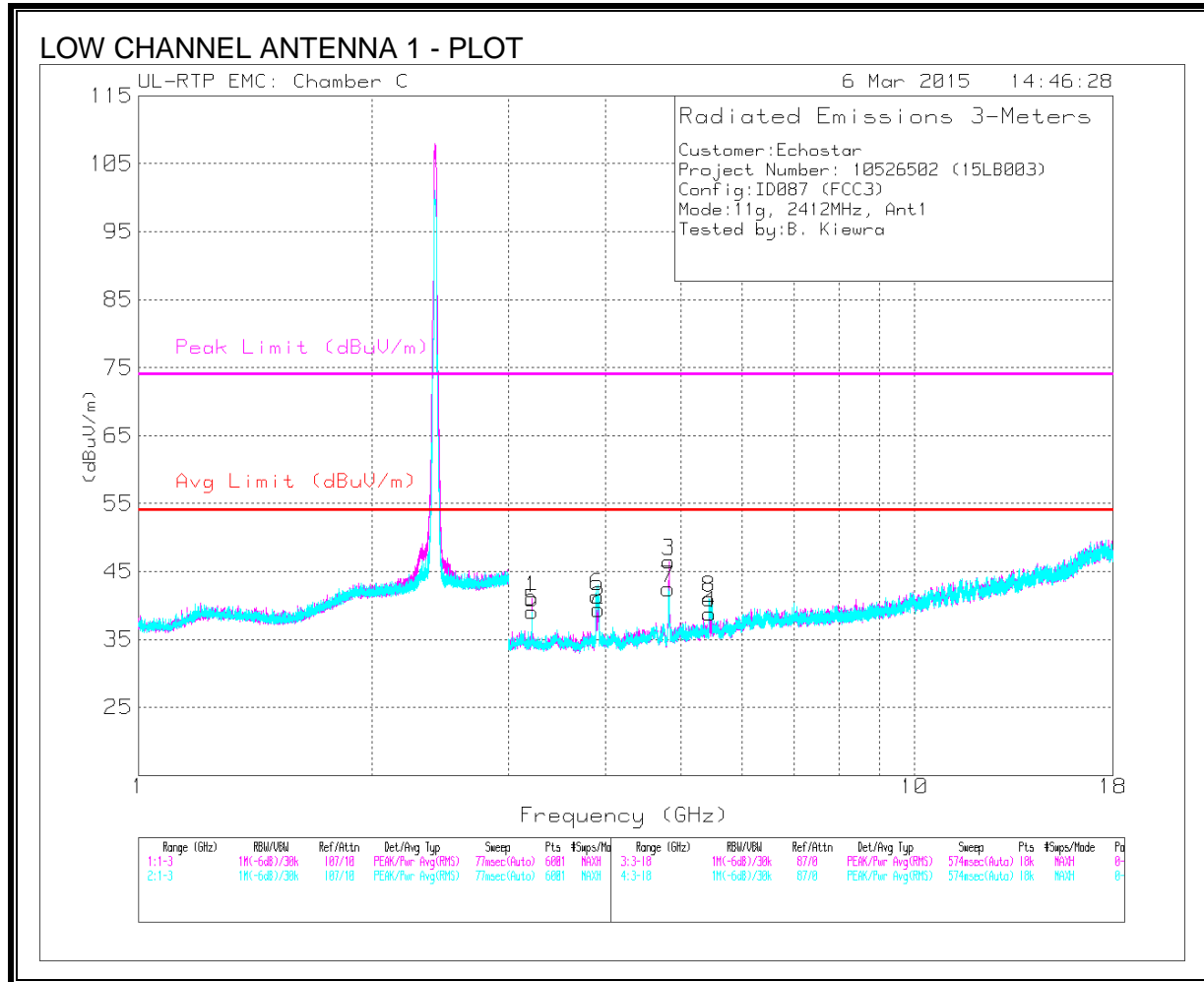
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Filtr/Pad	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	48.49	Pk	32.3	-26.5	54.29	-	-	74	-19.71	11	335	V
2	* 2.485	50.59	Pk	32.3	-26.5	56.39	-	-	74	-17.61	11	335	V
3	* 2.484	36.51	RMS	32.3	-26.5	42.31	54	-11.69	-	-	11	335	V
4	* 2.484	37.23	RMS	32.3	-26.5	43.03	54	-10.97	-	-	11	335	V

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

Pk - Peak detector

RMS - RMS detection

**HARMONICS AND SPURIOUS EMISSIONS - ANTENNA 1**



Note – For Radiated Spurious, the Low Channel was tested at the same power setting as Mid channel to achieve worst-case results.

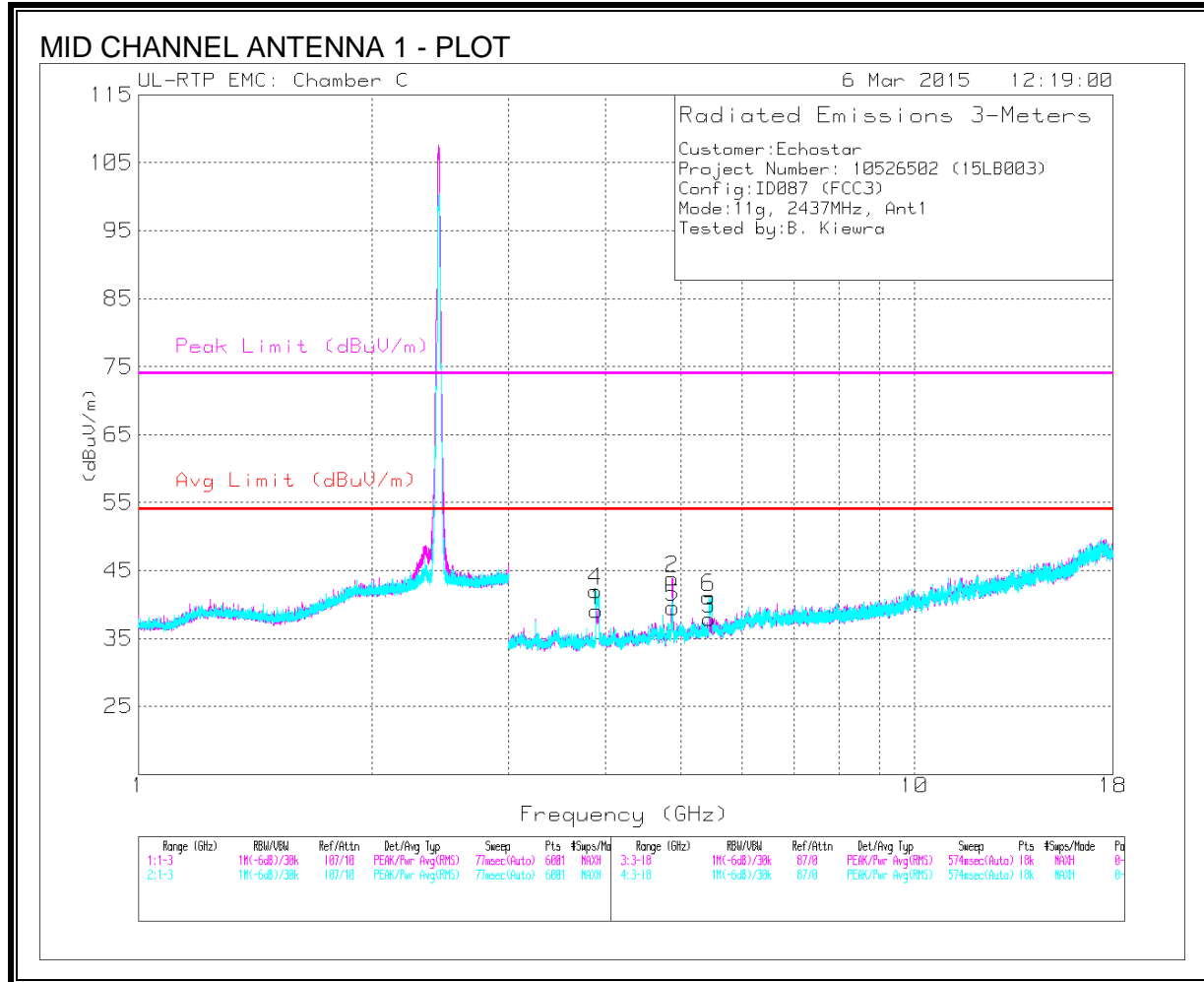
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Fltr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.89	48.79	PK2	33.6	-34.5	47.89	-	-	74	-26.11	291	341	H
	* 3.886	35.05	MAv1	33.6	-34.5	34.15	54	-19.85	-	-	291	341	H
3	* 4.826	51.81	PK2	34.1	-32.7	53.21	-	-	74	-20.79	276	278	H
	* 4.826	39.76	MAv1	34.1	-32.7	41.16	54	-12.84	-	-	276	278	H
4	* 5.445	48.12	PK2	34.5	-31.9	50.72	-	-	74	-23.28	128	380	H
	* 5.446	32.22	MAv1	34.5	-31.9	34.82	54	-19.18	-	-	128	380	H
6	* 3.889	53.73	PK2	33.6	-34.5	52.83	-	-	74	-21.17	314	316	V
	* 3.889	37.62	MAv1	33.6	-34.5	36.72	54	-17.28	-	-	314	316	V
7	* 4.826	49.48	PK2	34.1	-32.7	50.88	-	-	74	-23.12	166	378	V
	* 4.825	37.87	MAv1	34.1	-32.7	39.27	54	-14.73	-	-	166	378	V
8	* 5.454	44.1	PK2	34.5	-32	46.6	-	-	74	-27.4	166	251	V
	* 5.448	31.53	MAv1	34.5	-32	34.03	54	-19.97	-	-	166	251	V
1	3.216	42.7	Pk	32.9	-34.6	41	-	-	74	-33	0-360	151	H
5	3.216	40.78	Pk	32.9	-34.6	39.08	-	-	74	-34.92	0-360	151	V

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

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average



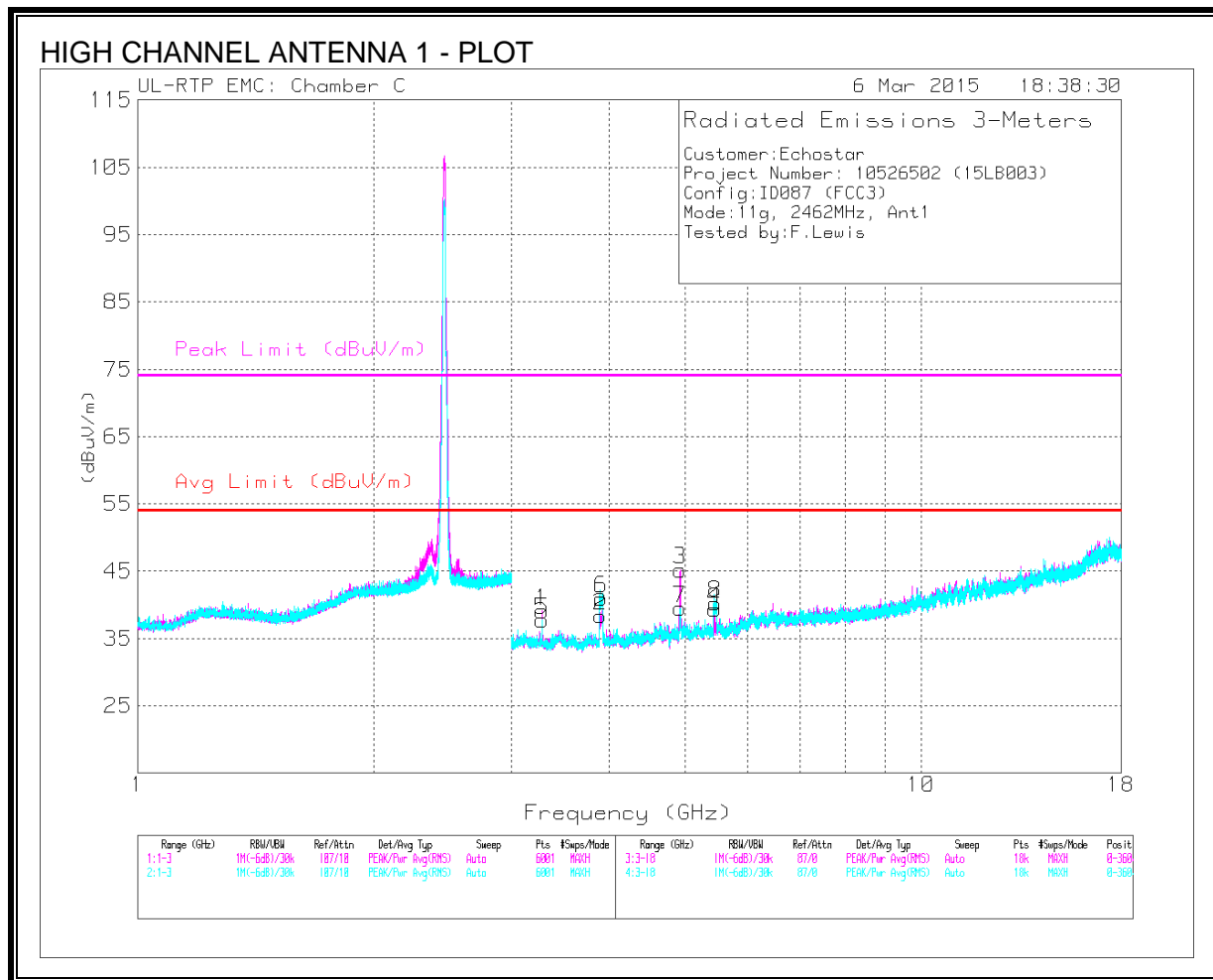
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Fltr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.89	52.49	PK2	33.6	-34.5	51.59	-	-	74	-22.41	121	396	H
	* 3.889	36.48	MAv1	33.6	-34.5	35.58	54	-18.42	-	-	121	396	H
2	* 4.876	52.85	PK2	34.1	-32.9	54.05	-	-	74	-19.95	275	254	H
	* 4.872	40.99	MAv1	34.1	-32.9	42.19	54	-11.81	-	-	275	254	H
3	* 5.445	47.9	PK2	34.5	-31.9	50.5	-	-	74	-23.5	130	354	H
	* 5.445	32.34	MAv1	34.5	-31.9	34.94	54	-19.06	-	-	130	354	H
4	* 3.889	53.44	PK2	33.6	-34.5	52.54	-	-	74	-21.46	298	255	V
	* 3.89	37.04	MAv1	33.6	-34.5	36.14	54	-17.86	-	-	298	255	V
5	* 4.873	49.89	PK2	34.1	-32.9	51.09	-	-	74	-22.91	169	338	V
	* 4.872	38.04	MAv1	34.1	-32.9	39.24	54	-14.76	-	-	169	338	V
6	* 5.445	48.27	PK2	34.5	-31.9	50.87	-	-	74	-23.13	284	227	V
	* 5.457	32.67	MAv1	34.5	-31.9	35.27	54	-18.73	-	-	284	227	V

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

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average



Note – For Radiated Spurious, the High Channel was tested at the same power setting as Mid channel to achieve worst-case results.



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/Fltr/Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.911	51.75	PK2	33.6	-34.2	51.15	-	-	74	-22.85	118	342	H
	* 3.889	35.7	MAv1	33.6	-34.5	34.8	54	-19.2	-	-	118	342	H
3	* 4.922	49.32	PK2	34.1	-33.1	50.32	-	-	74	-23.68	48	114	H
	* 4.926	37.97	MAv1	34.1	-33.1	38.97	54	-15.03	-	-	48	114	H
4	* 5.445	48.69	PK2	34.5	-31.9	51.29	-	-	74	-22.71	127	354	H
	* 5.445	32.42	MAv1	34.5	-31.9	35.02	54	-18.98	-	-	127	354	H
6	* 3.889	52.99	PK2	33.6	-34.5	52.09	-	-	74	-21.91	301	257	V
	* 3.889	37.49	MAv1	33.6	-34.5	36.59	54	-17.41	-	-	301	257	V
7	* 4.922	49.13	PK2	34.1	-33.1	50.13	-	-	74	-23.87	73	272	V
	* 4.922	36.91	MAv1	34.1	-33.1	37.91	54	-16.09	-	-	73	272	V
8	* 5.445	47.98	PK2	34.5	-31.9	50.58	-	-	74	-23.42	278	281	V
	* 5.453	32.52	MAv1	34.5	-32	35.02	54	-18.98	-	-	278	281	V
1	3.282	40.59	Pk	32.8	-34.3	39.09	-	-	74	-34.91	0-360	250	H
5	3.282	39.26	Pk	32.8	-34.3	37.76	-	-	74	-36.24	0-360	250	V

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

Pk - Peak detector

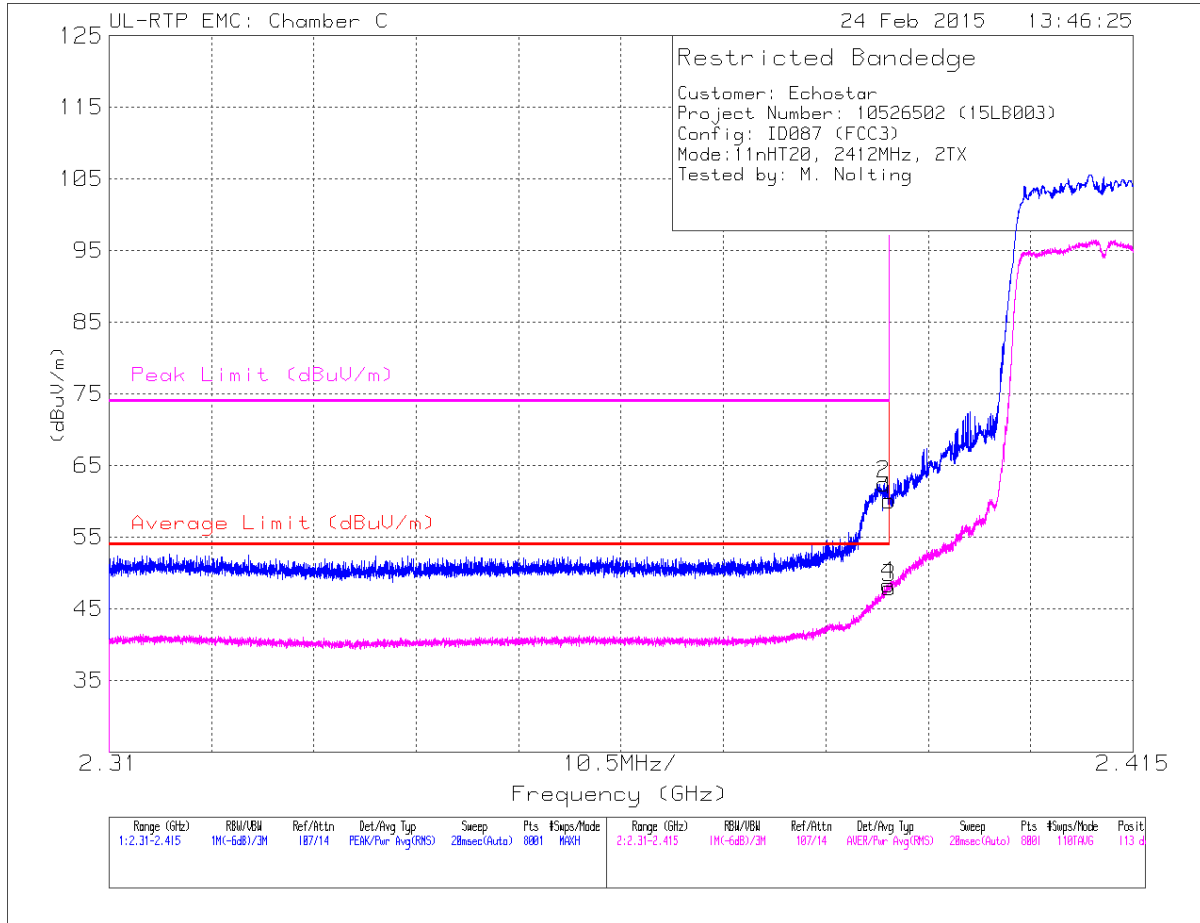
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

### 9.2.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

#### RESTRICTED BANDEGE (LOW CHANNEL)

#### HORIZONTAL



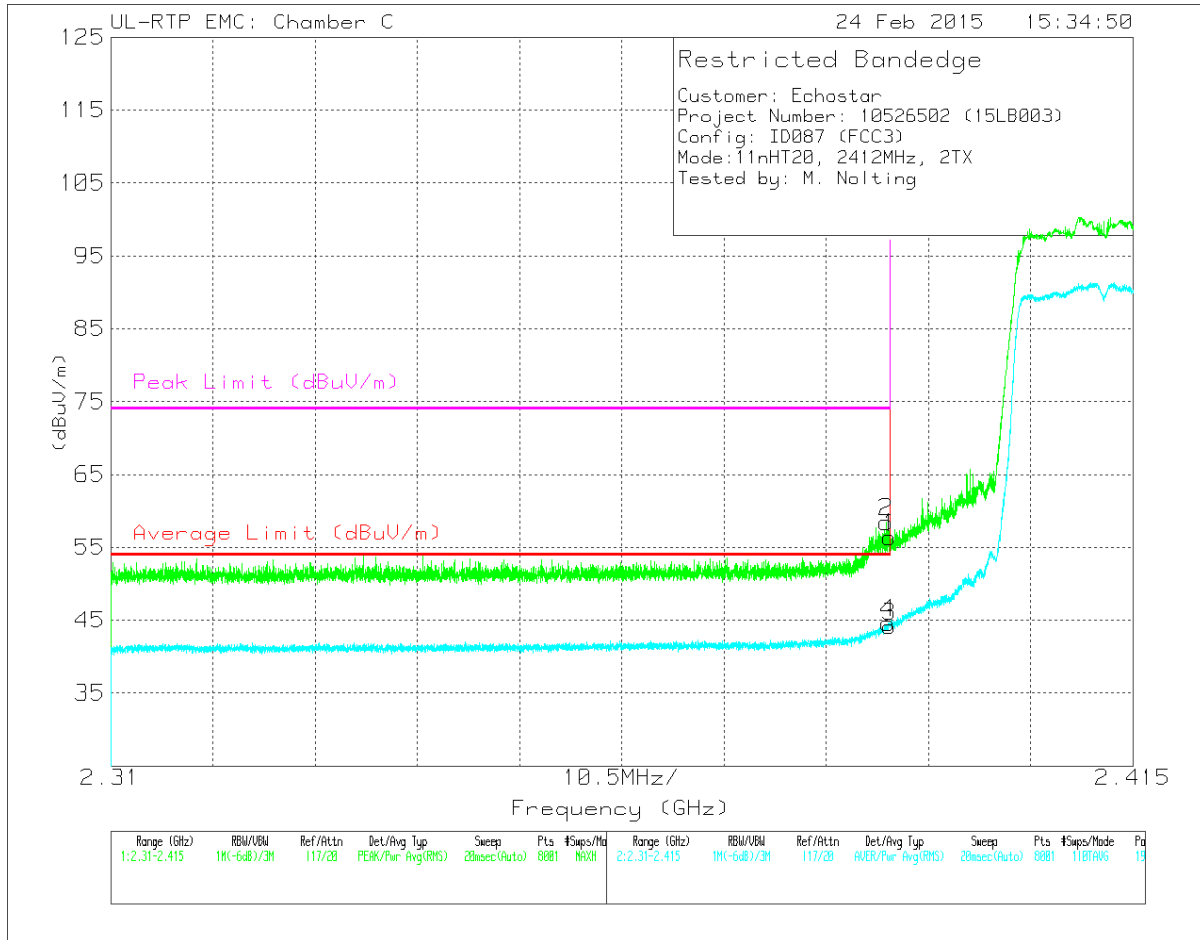
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/Filtr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	54.54	Pk	32.3	-26.7	0	60.14	-	-	74	-13.86	113	124	H
2	* 2.389	56.87	Pk	32.3	-26.7	0	62.47	-	-	74	-11.53	113	124	H
3	* 2.39	42.21	RMS	32.3	-26.7	.11	47.92	54	-6.08	-	-	113	124	H
4	* 2.39	42.66	RMS	32.3	-26.7	.11	48.37	54	-5.63	-	-	113	124	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/Filtr/Pad	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	50.75	Pk	32.3	-26.7	0	56.35	-	-	74	-17.65	19	367	V
2	* 2.39	52.87	Pk	32.3	-26.7	0	58.47	-	-	74	-15.53	19	367	V
3	* 2.39	38.43	RMS	32.3	-26.7	.11	44.14	54	-9.86	-	-	19	367	V
4	* 2.39	38.9	RMS	32.3	-26.7	.11	44.61	54	-9.39	-	-	19	367	V

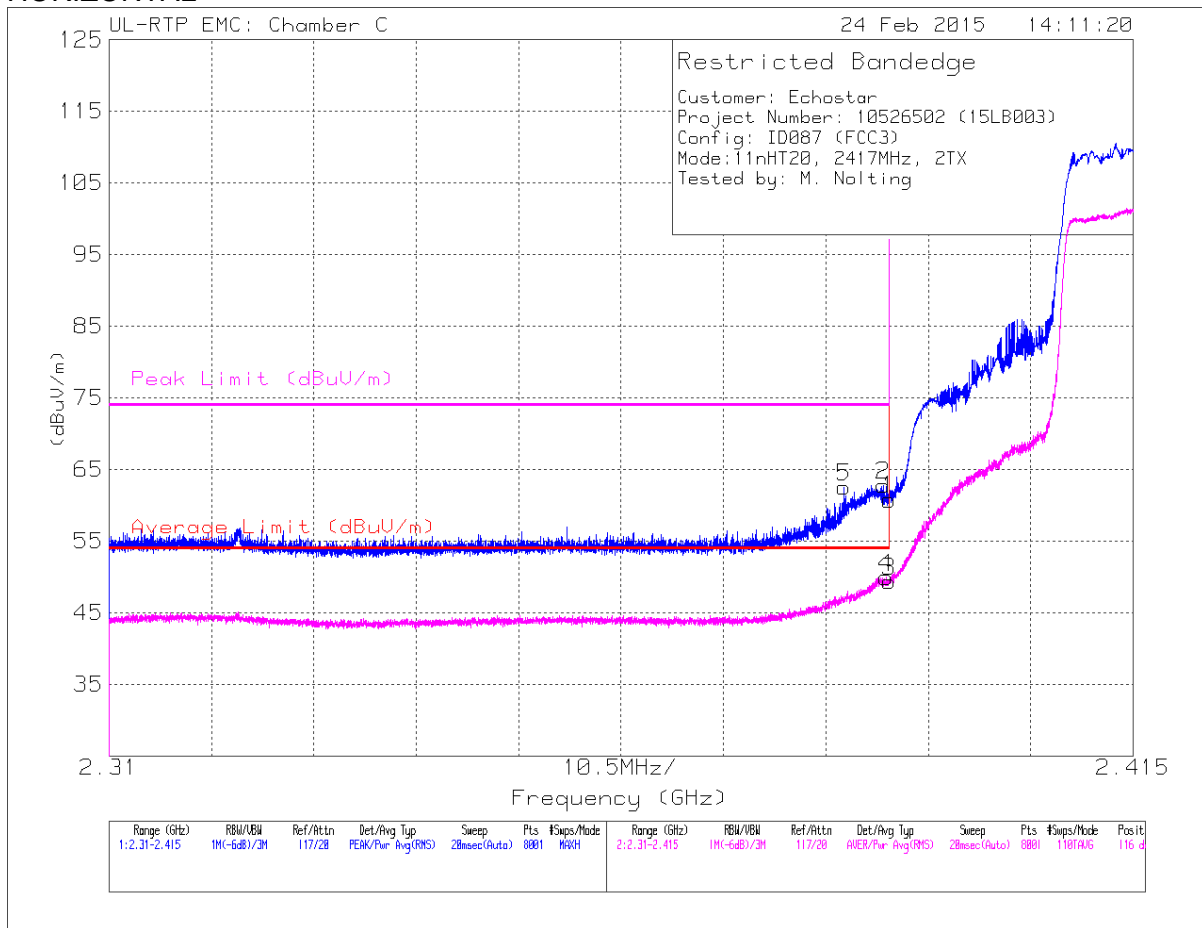
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**RESTRICTED BANDEGE (CHANNEL 2)**

**HORIZONTAL**



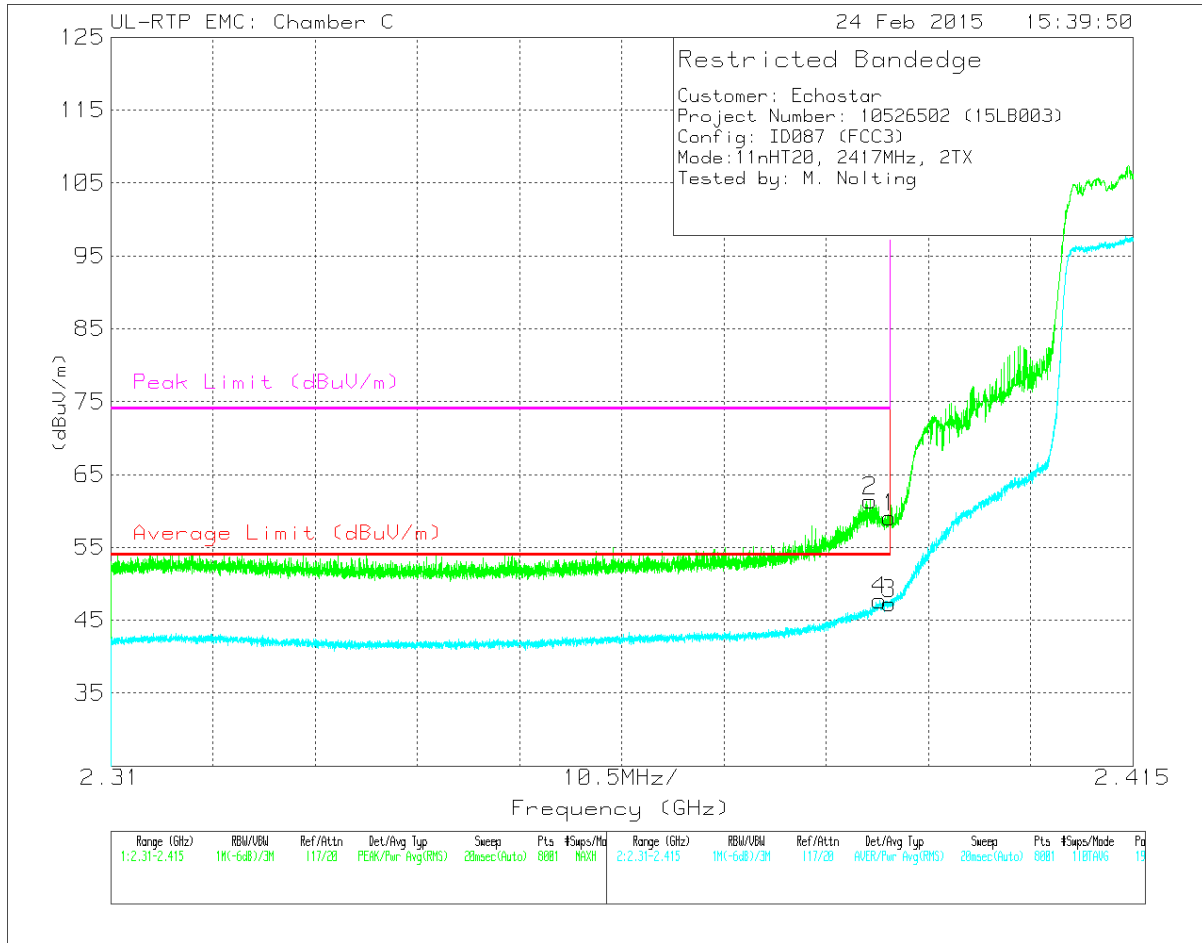
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	55.2	Pk	32.3	-26.7	0	60.8	-	-	74	-13.2	116	124	H
2	* 2.389	57.22	Pk	32.3	-26.7	0	62.82	-	-	74	-11.18	116	124	H
5	* 2.385	56.96	Pk	32.3	-26.7	0	62.56	-	-	74	-11.44	116	124	H
3	* 2.39	43.68	RMS	32.3	-26.7	.11	49.39	54	-4.61	-	-	116	124	H
4	* 2.39	44.27	RMS	32.3	-26.7	.11	49.98	54	-4.02	-	-	116	124	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.388	55.78	Pk	32.3	-26.7	0	61.38	-	-	74	-12.62	19	367	V
4	* 2.389	42.04	RMS	32.3	-26.7	.11	47.75	54	-6.25	-	-	19	367	V
1	* 2.39	53.51	Pk	32.3	-26.7	0	59.11	-	-	74	-14.89	19	367	V
3	* 2.39	41.57	RMS	32.3	-26.7	.11	47.28	54	-6.72	-	-	19	367	V

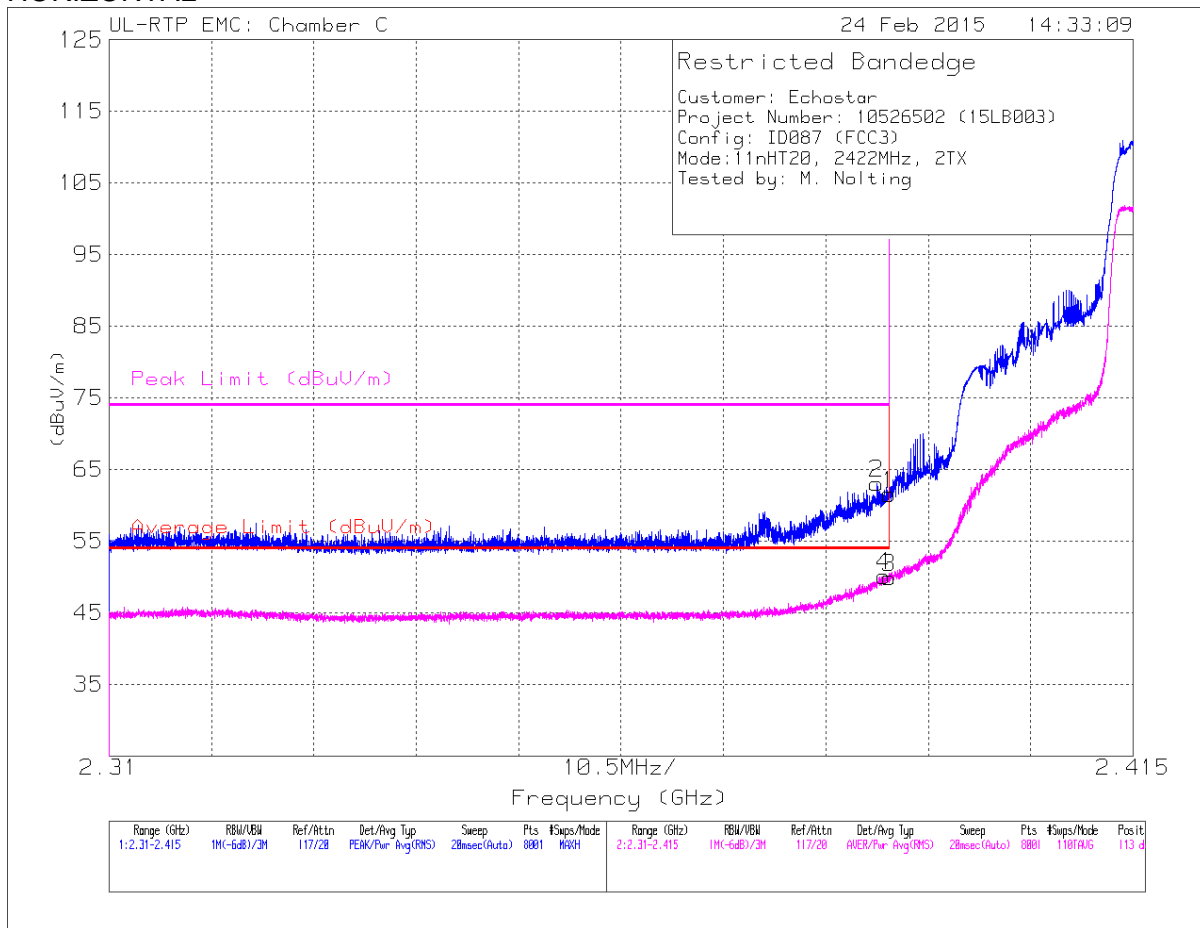
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**RESTRICTED BANDEGE (CHANNEL 3)**

**HORIZONTAL**



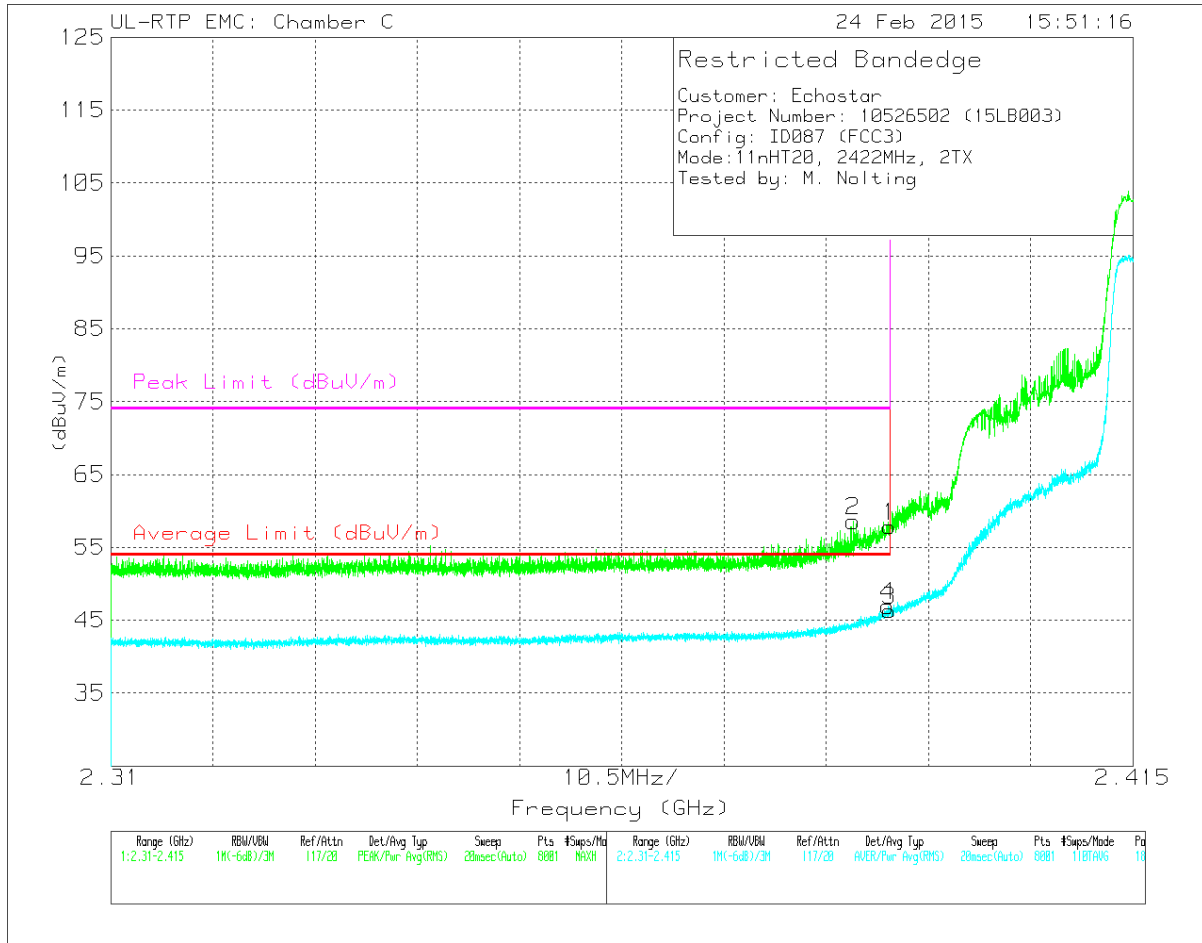
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.389	57.46	Pk	32.3	-26.7	0	63.06	-	-	74	-10.94	113	124	H
4	* 2.389	44.43	RMS	32.3	-26.7	.11	50.14	54	-3.86	-	-	113	124	H
1	* 2.39	55.95	Pk	32.3	-26.7	0	61.55	-	-	74	-12.45	113	124	H
3	* 2.39	44.19	RMS	32.3	-26.7	.11	49.9	54	-4.1	-	-	113	124	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	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	52.27	Pk	32.3	-26.7	0	57.87	-	-	74	-16.13	18	377	V
2	* 2.386	53.01	Pk	32.3	-26.7	0	58.61	-	-	74	-15.39	18	377	V
3	* 2.39	40.62	RMS	32.3	-26.7	.11	46.33	54	-7.67	-	-	18	377	V
4	* 2.39	41.24	RMS	32.3	-26.7	.11	46.95	54	-7.05	-	-	18	377	V

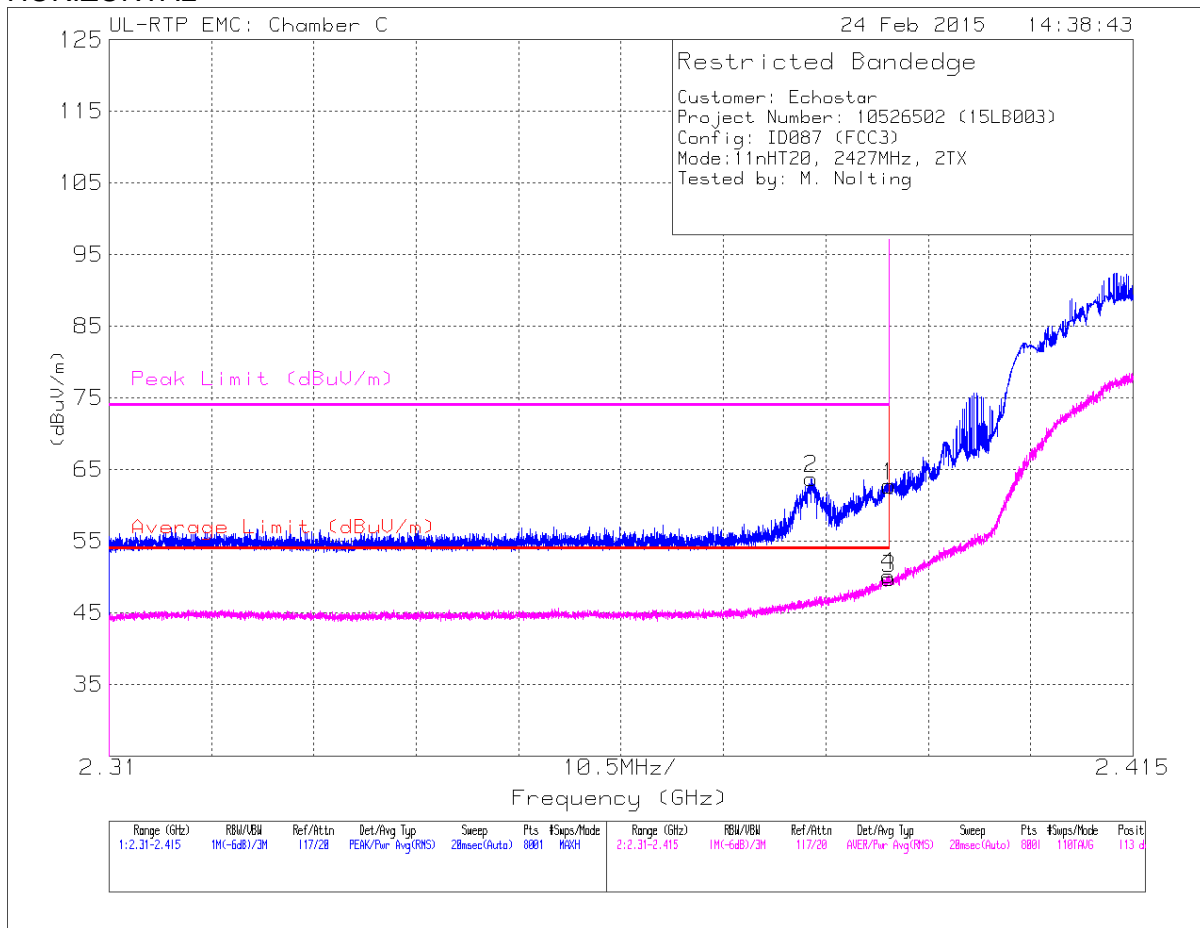
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**RESTRICTED BANDEGE (CHANNEL 4)**

**HORIZONTAL**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	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	57.15	Pk	32.3	-26.7	0	62.75	-	-	74	-11.25	113	124	H
2	* 2.382	58.15	Pk	32.3	-26.7	0	63.75	-	-	74	-10.25	113	124	H
3	* 2.39	44.06	RMS	32.3	-26.7	.11	49.77	54	-4.23	-	-	113	124	H
4	* 2.39	44.48	RMS	32.3	-26.7	.11	50.19	54	-3.81	-	-	113	124	H

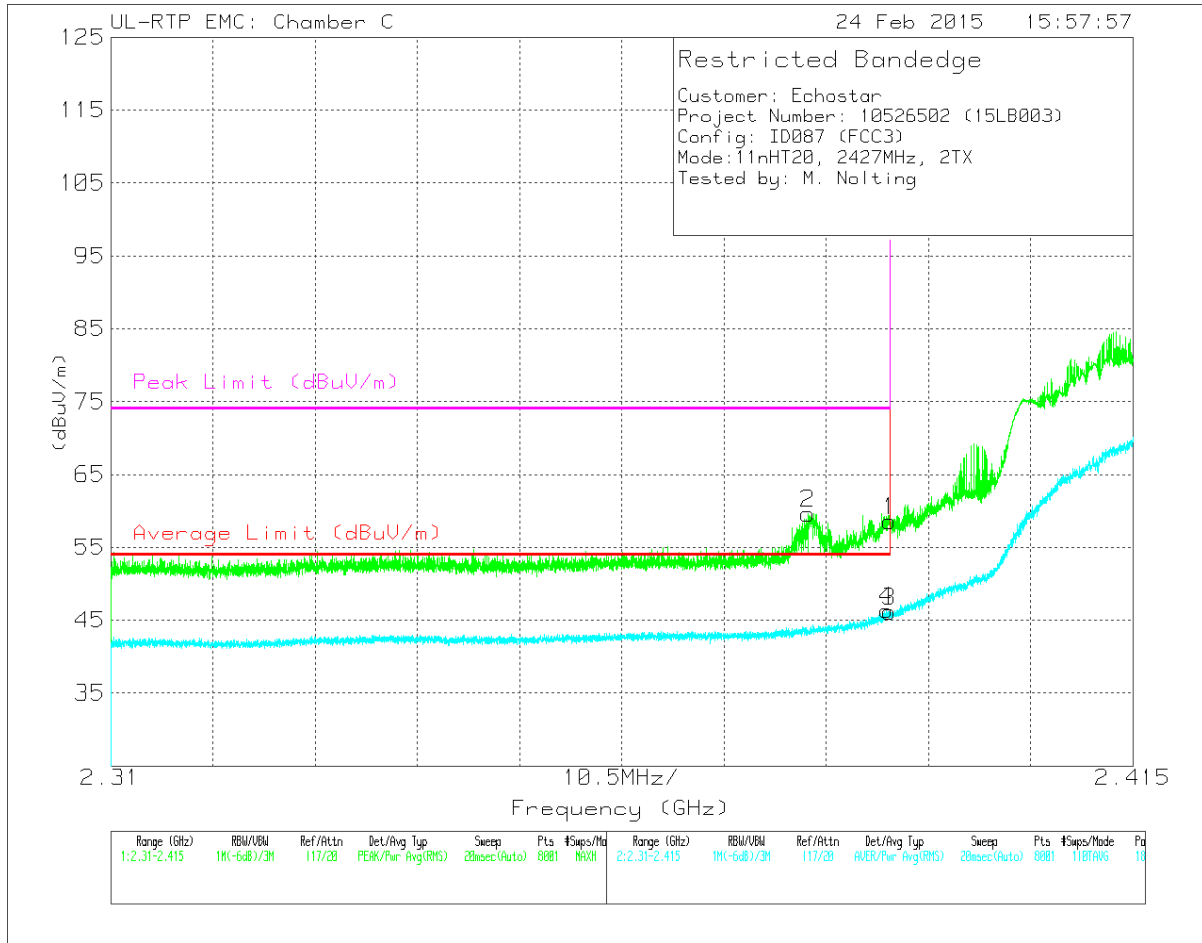
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection



VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F Itr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.382	54.03	Pk	32.3	-26.7	0	59.63	-	-	74	-14.37	18	377	V
1	* 2.39	53.01	Pk	32.3	-26.7	0	58.61	-	-	74	-15.39	18	377	V
3	* 2.39	40.45	RMS	32.3	-26.7	.11	46.16	54	-7.84	-	-	18	377	V
4	* 2.39	40.64	RMS	32.3	-26.7	.11	46.35	54	-7.65	-	-	18	377	V

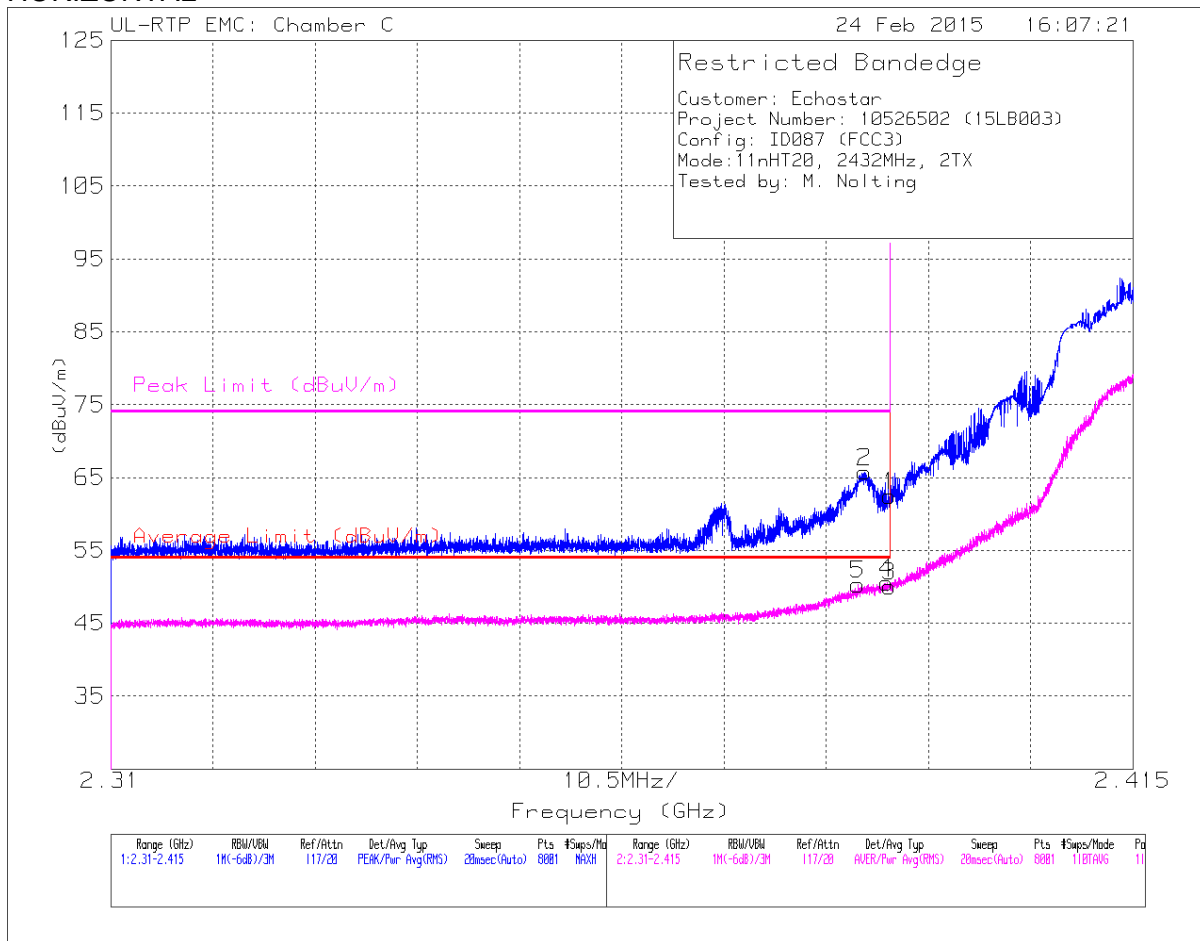
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**RESTRICTED BANDEDGE (CHANNEL 5)**

**HORIZONTAL**



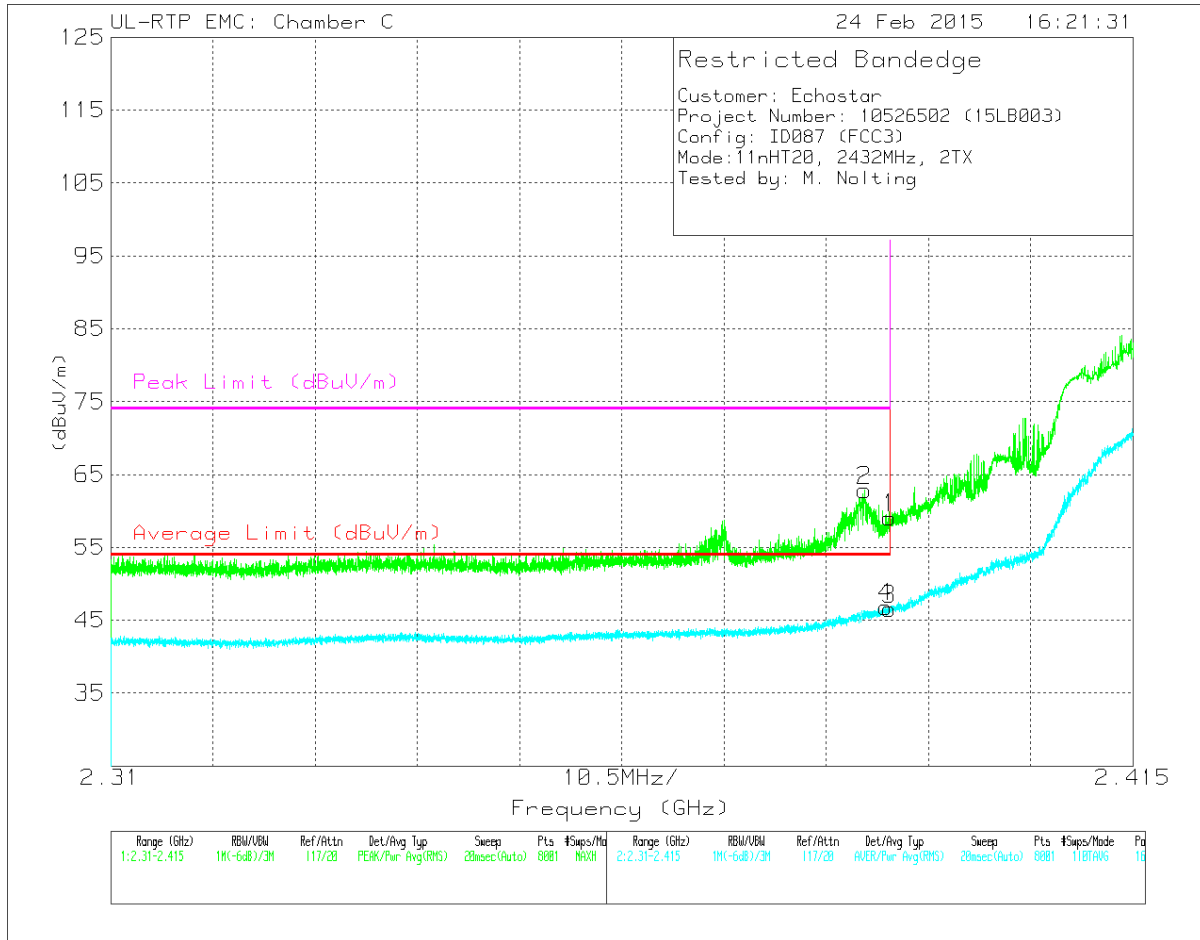
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	56.9	Pk	32.3	-26.7	0	62.5	-	-	74	-11.5	113	124	H
2	* 2.387	60.17	Pk	32.3	-26.7	0	65.77	-	-	74	-8.23	113	124	H
3	* 2.39	44.37	RMS	32.3	-26.7	.11	50.08	54	-3.92	-	-	113	124	H
4	* 2.39	44.83	RMS	32.3	-26.7	.11	50.54	54	-3.46	-	-	113	124	H
5	* 2.387	44.63	RMS	32.3	-26.7	.11	50.34	54	-3.66	-	-	113	124	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F Itr/Pad	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	53.45	Pk	32.3	-26.7	0	59.05	-	-	74	-14.95	16	376	V
2	* 2.387	57.24	Pk	32.3	-26.7	0	62.84	-	-	74	-11.16	16	376	V
3	* 2.39	40.8	RMS	32.3	-26.7	.11	46.51	54	-7.49	-	-	16	376	V
4	* 2.39	41.12	RMS	32.3	-26.7	.11	46.83	54	-7.17	-	-	16	376	V

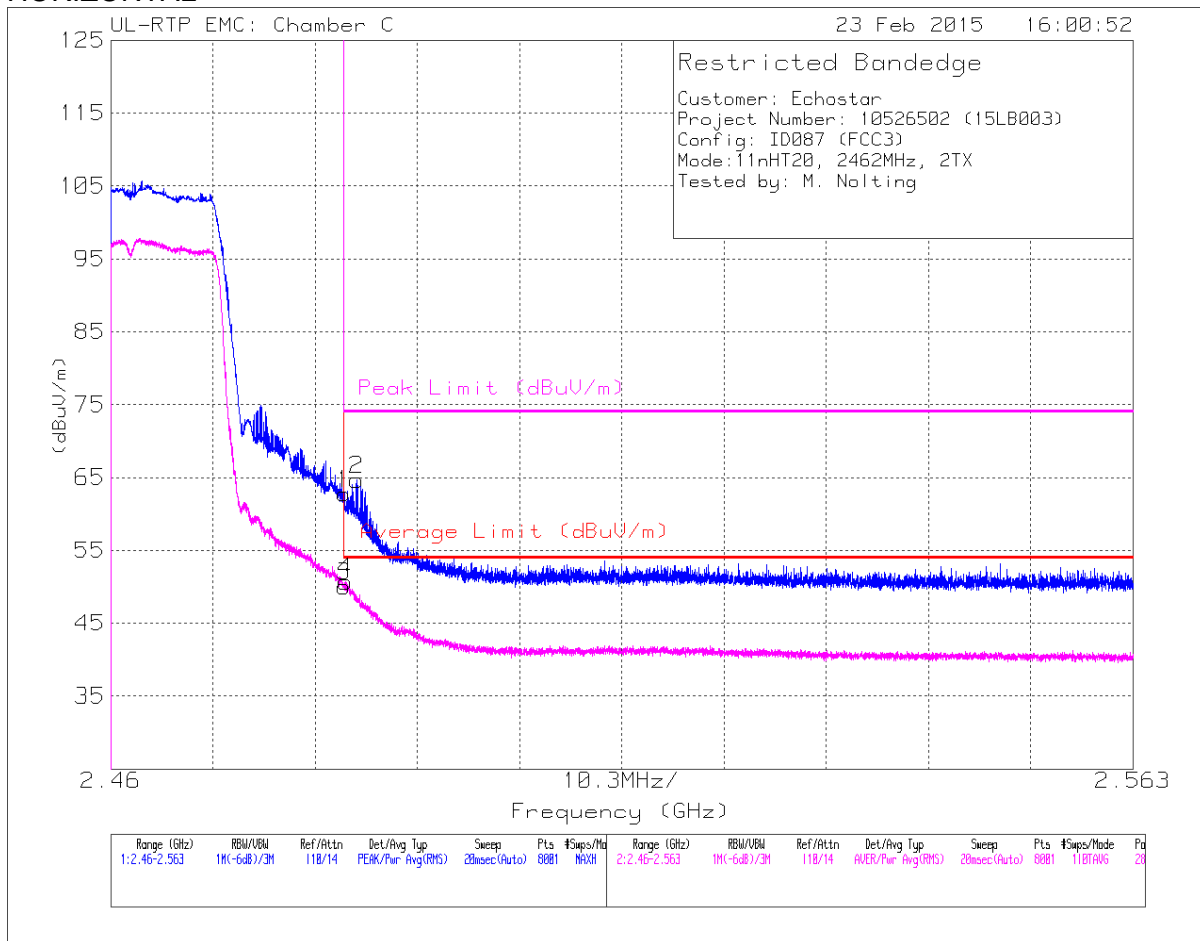
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL**



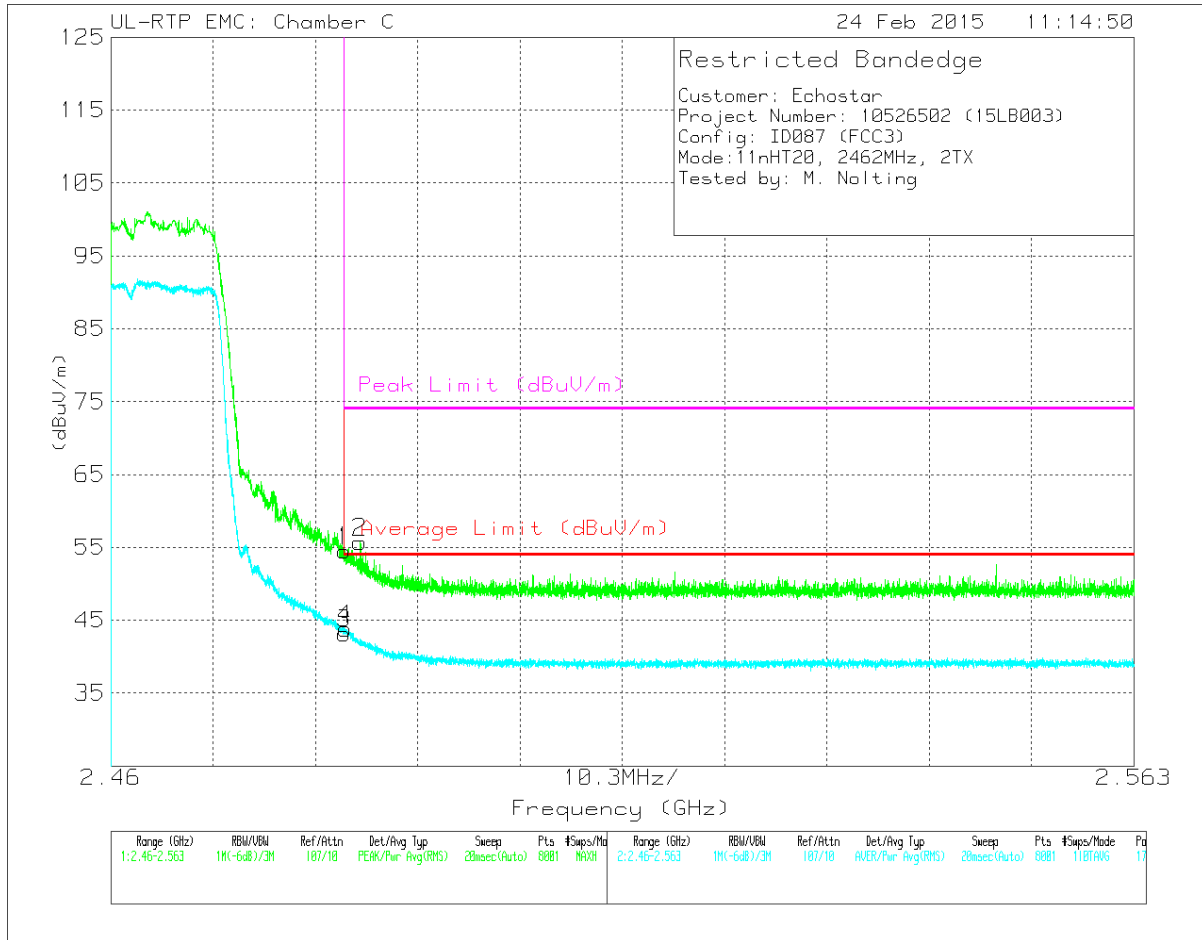
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/Filtr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	56.68	Pk	32.6	-26.5	0	62.78	-	-	74	-11.22	288	108	H
3	* 2.484	43.87	RMS	32.6	-26.5	.11	50.08	54	-3.92	-	-	288	108	H
4	* 2.484	44.44	RMS	32.6	-26.5	.11	50.65	54	-3.35	-	-	288	108	H
2	* 2.485	58.6	Pk	32.6	-26.5	0	64.7	-	-	74	-9.3	288	108	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/Filtr/Pad	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	48.42	Pk	32.6	-26.5	0	54.52	-	-	74	-19.48	177	372	V
3	* 2.484	36.97	RMS	32.6	-26.5	.11	43.18	54	-10.82	-	-	177	372	V
4	* 2.484	37.59	RMS	32.6	-26.5	.11	43.8	54	-10.2	-	-	177	372	V
2	* 2.485	49.59	Pk	32.6	-26.5	0	55.69	-	-	74	-18.31	177	372	V

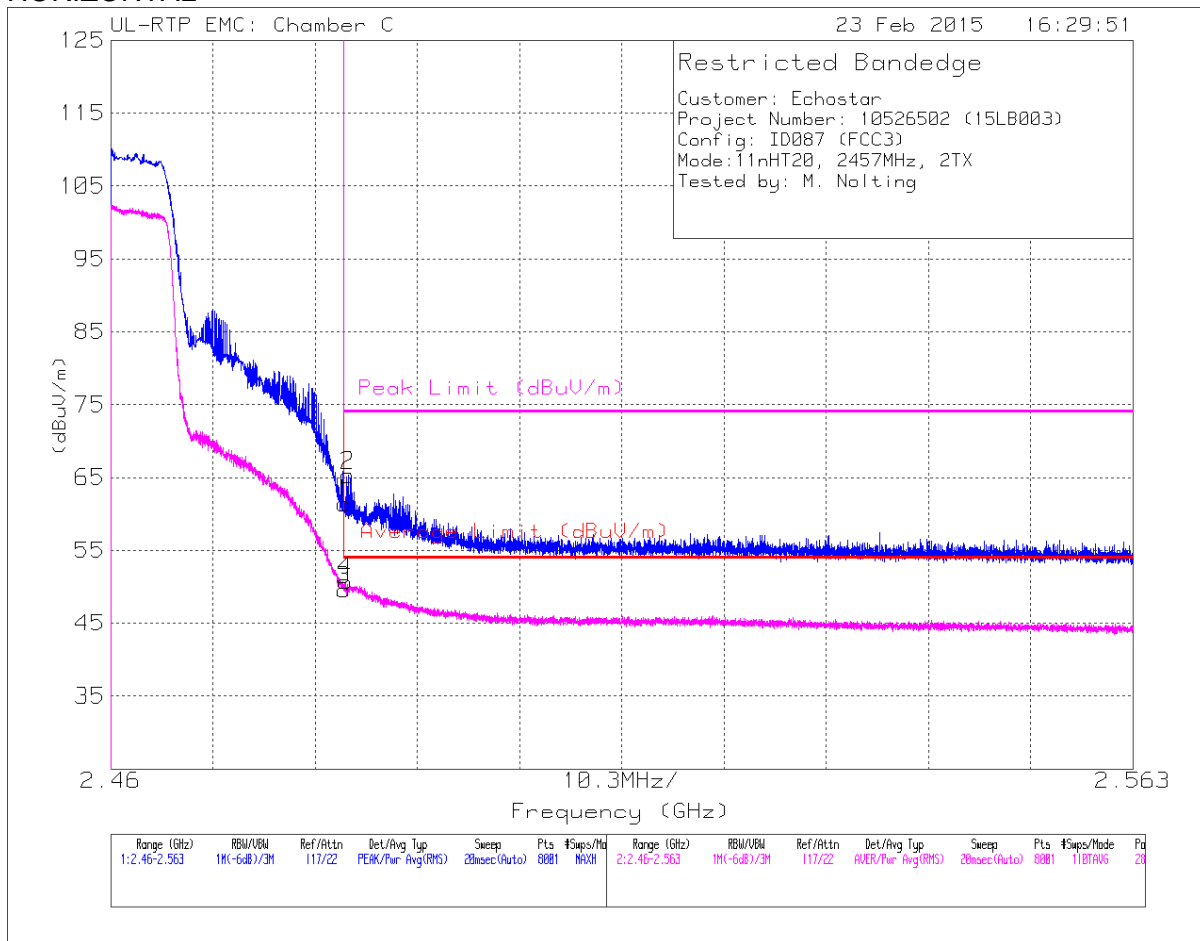
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (CHANNEL 10)**

**HORIZONTAL**



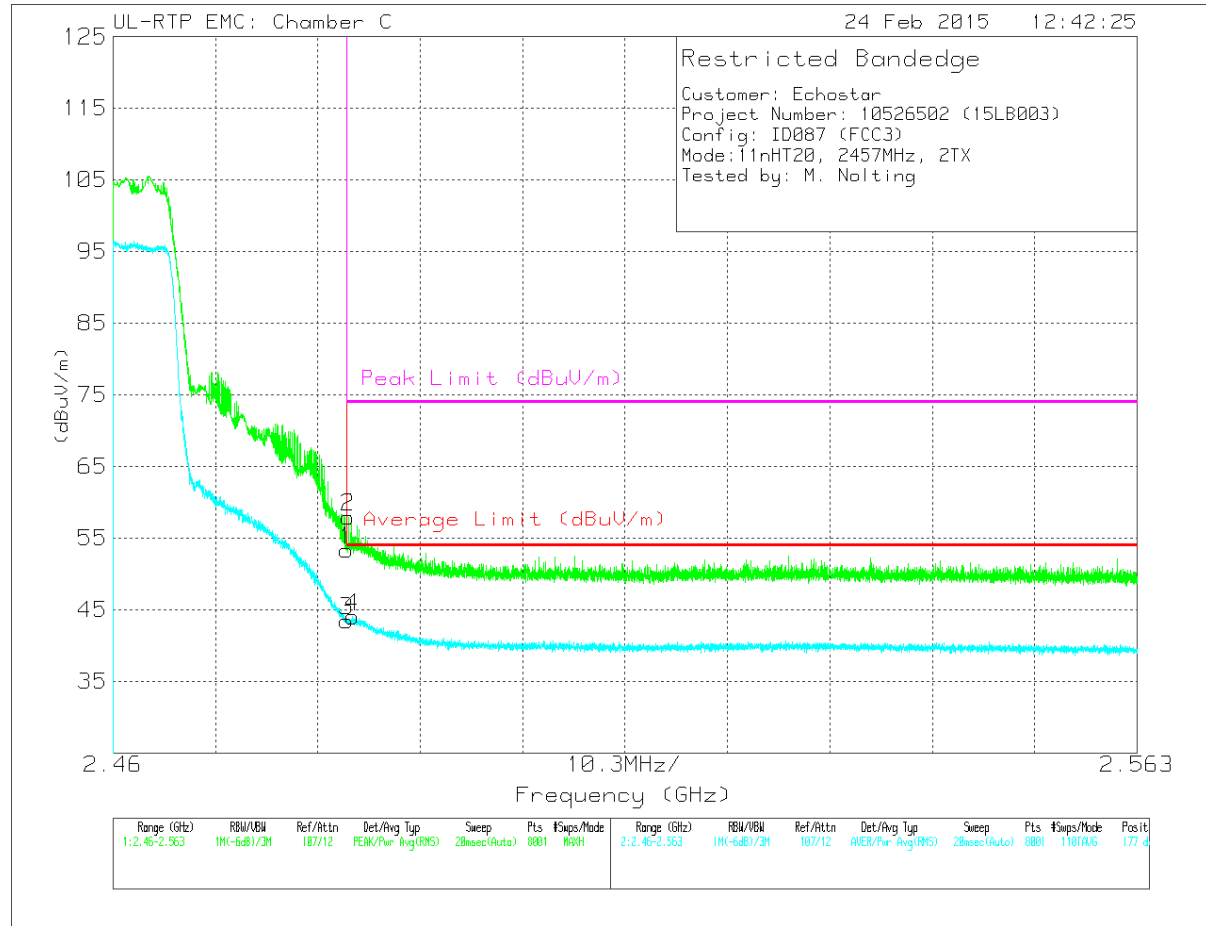
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	55.31	Pk	32.6	-26.5	0	61.41	-	-	74	-12.59	285	111	H
2	* 2.484	59.18	Pk	32.6	-26.5	0	65.28	-	-	74	-8.72	285	111	H
3	* 2.484	43.36	RMS	32.6	-26.5	.11	49.57	54	-4.43	-	-	285	111	H
4	* 2.484	44.55	RMS	32.6	-26.5	.11	50.76	54	-3.24	-	-	285	111	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/Filtr/Pad	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	47.23	Pk	32.6	-26.5	0	53.33	-	-	74	-20.67	177	371	V
2	* 2.484	51.87	Pk	32.6	-26.5	0	57.97	-	-	74	-16.03	177	371	V
3	* 2.484	37.26	RMS	32.6	-26.5	.11	43.47	54	-10.53	-	-	177	371	V
4	* 2.484	37.85	RMS	32.6	-26.5	.11	44.06	54	-9.94	-	-	177	371	V

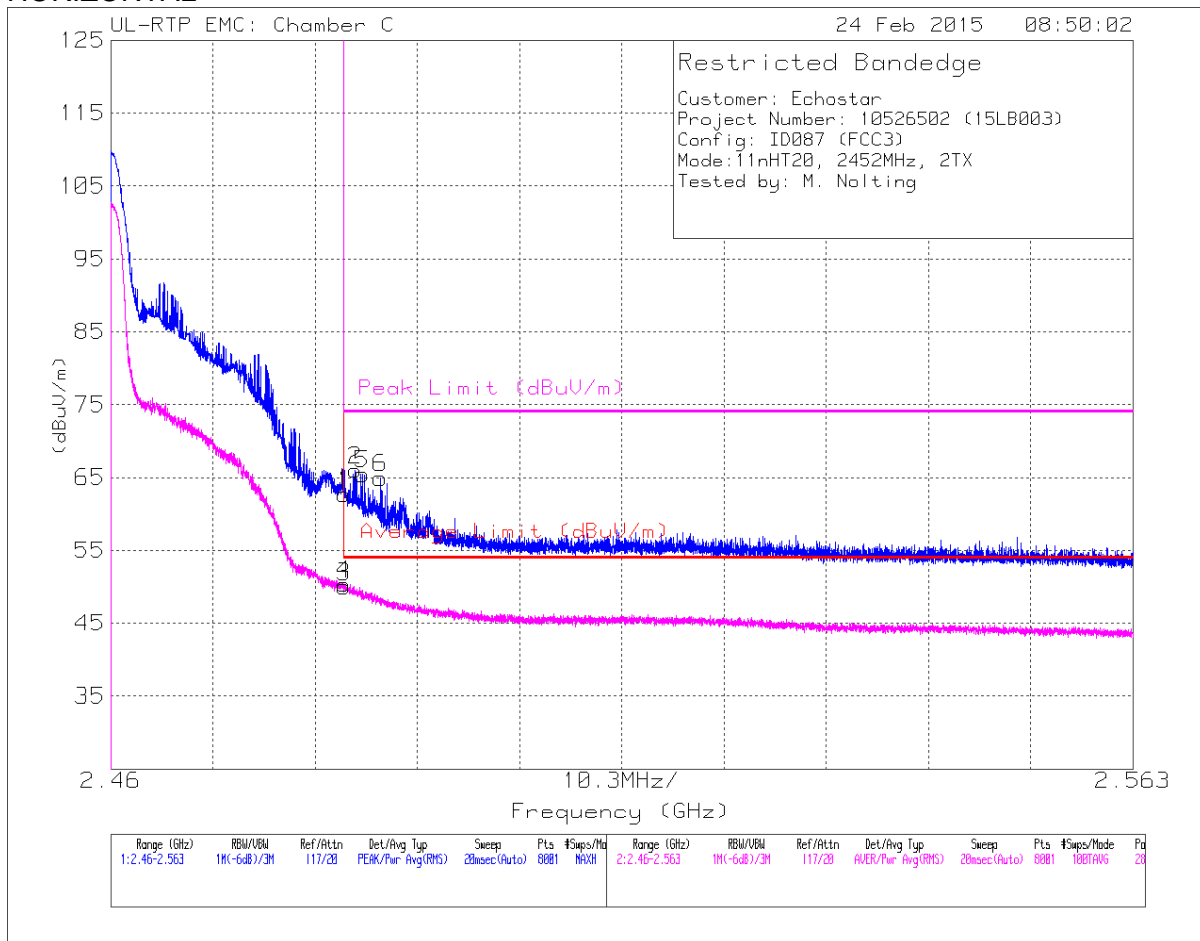
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (CHANNEL 9)**

**HORIZONTAL**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	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	56.6	Pk	32.6	-26.5	0	62.7	-	-	74	-11.3	285	108	H
2	* 2.485	59.92	Pk	32.6	-26.5	0	66.02	-	-	74	-7.98	285	108	H
5	* 2.485	59.35	Pk	32.6	-26.5	0	65.45	-	-	74	-8.55	285	108	H
6	* 2.487	58.75	Pk	32.7	-26.5	0	64.95	-	-	74	-9.05	285	108	H
3	* 2.484	43.81	RMS	32.6	-26.5	.11	50.02	54	-3.98	-	-	285	108	H
4	* 2.484	44.15	RMS	32.6	-26.5	.11	50.36	54	-3.64	-	-	285	108	H

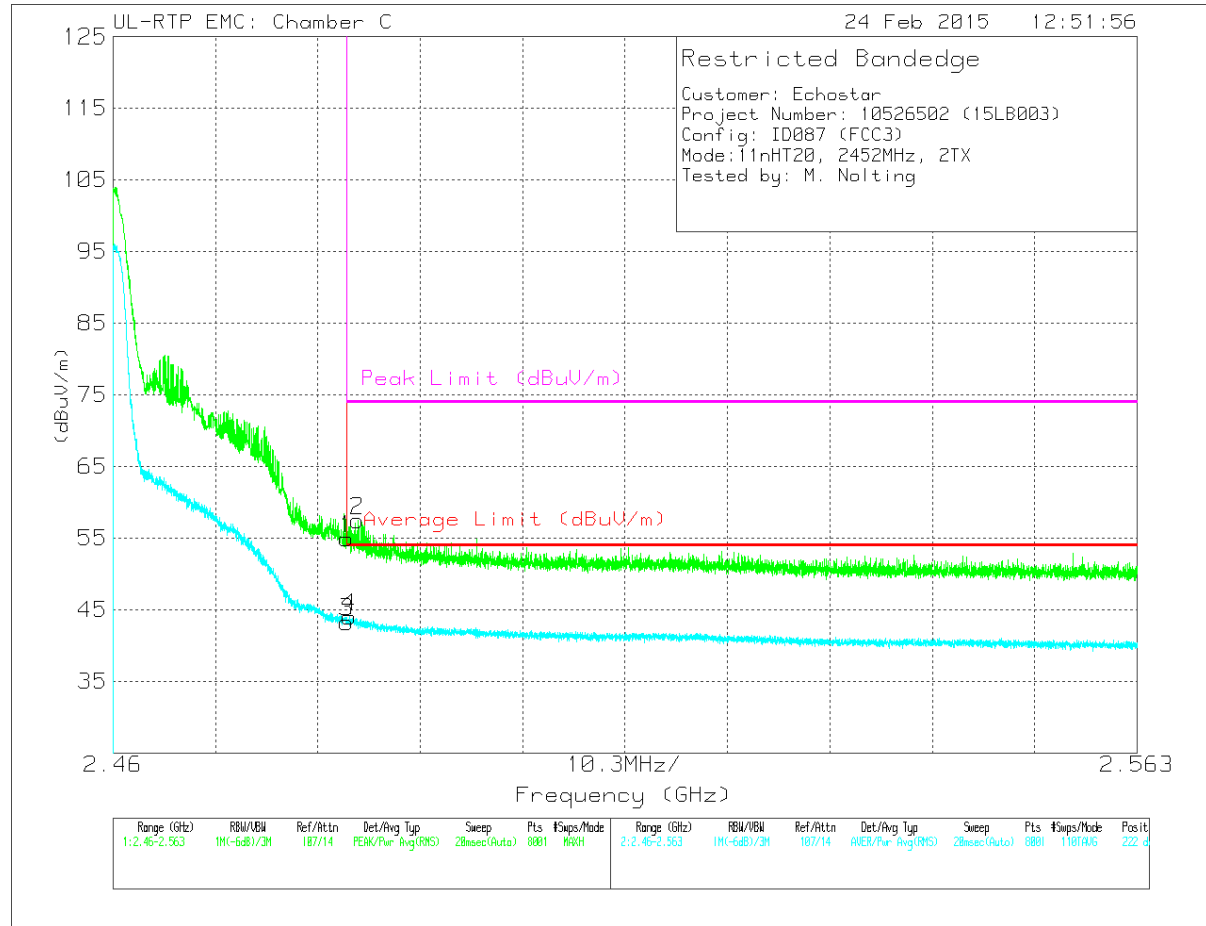
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection



VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/Filtr/Pad	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	48.85	Pk	32.6	-26.5	0	54.95	-	-	74	-19.05	222	372	V
2	* 2.485	51.38	Pk	32.6	-26.5	0	57.48	-	-	74	-16.52	222	372	V
3	* 2.484	37.08	RMS	32.6	-26.5	.11	43.29	54	-10.71	-	-	222	372	V
4	* 2.484	37.81	RMS	32.6	-26.5	.11	44.02	54	-9.98	-	-	222	372	V

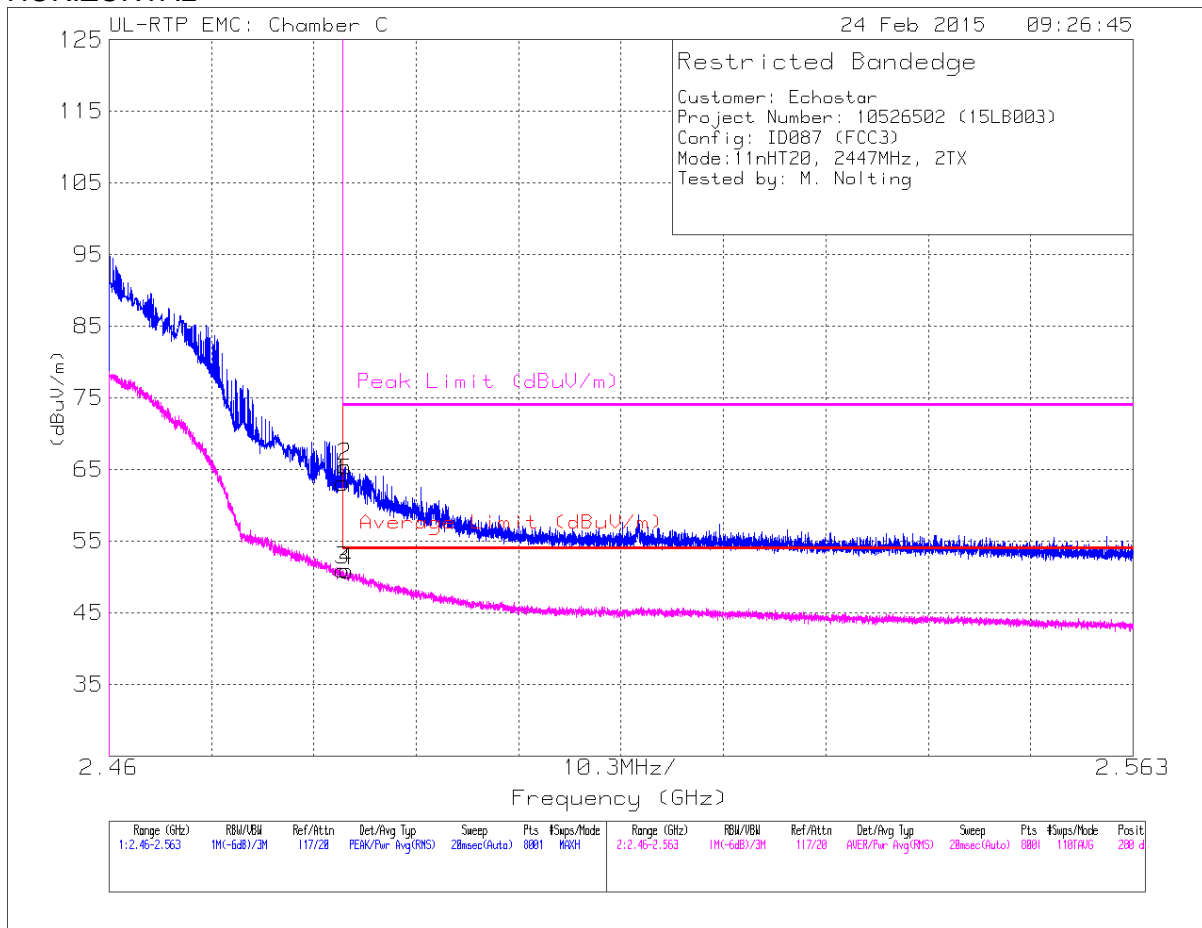
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (CHANNEL 8)**

**HORIZONTAL**



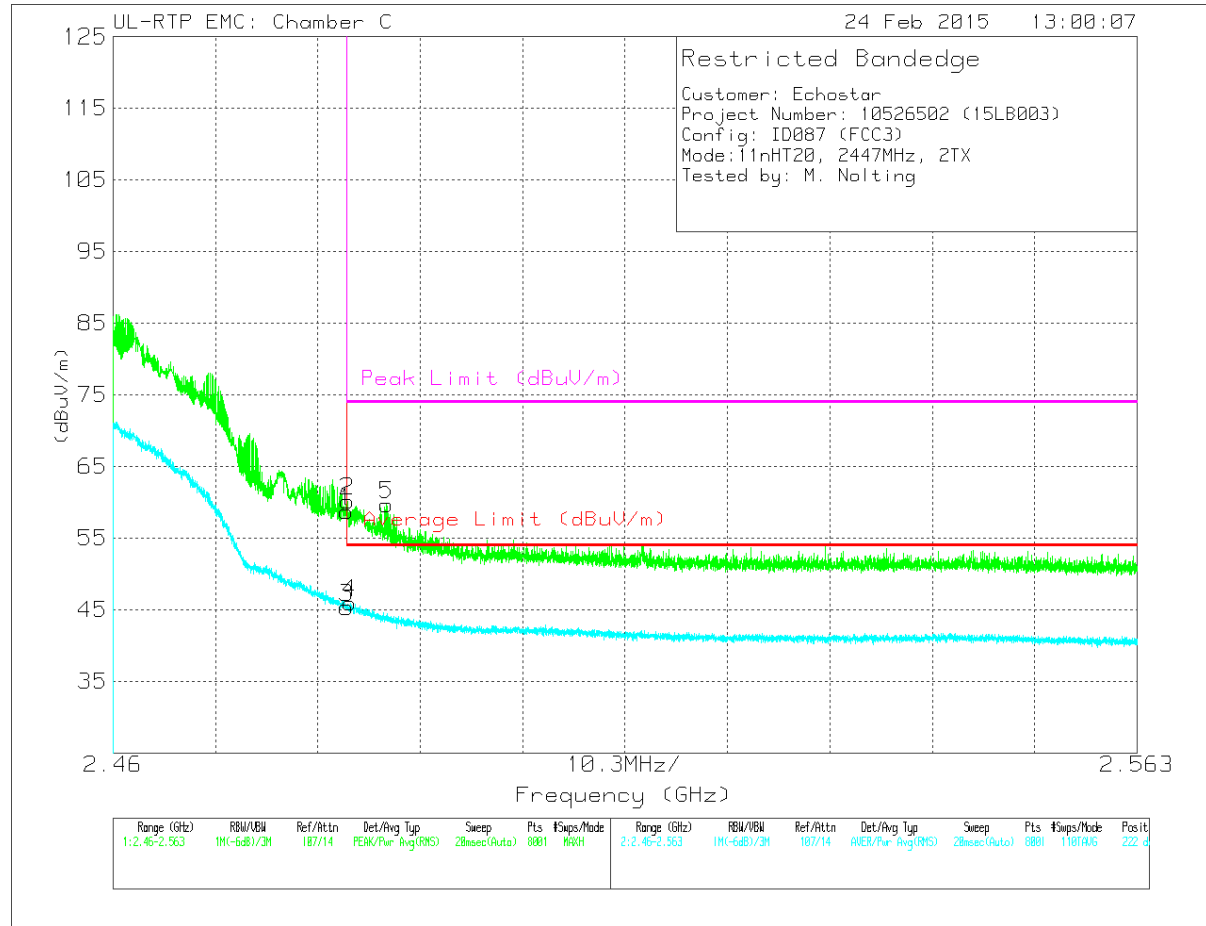
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	57.05	Pk	32.6	-26.5	0	63.15	-	-	74	-10.85	280	109	H
2	* 2.484	59.33	Pk	32.6	-26.5	0	65.43	-	-	74	-8.57	280	109	H
3	* 2.484	44.76	RMS	32.6	-26.5	.11	50.97	54	-3.03	-	-	280	109	H
4	* 2.484	44.67	RMS	32.6	-26.5	.11	50.88	54	-3.12	-	-	280	109	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	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	52.66	Pk	32.6	-26.5	0	58.76	-	-	74	-15.24	222	360	V
2	* 2.484	54.09	Pk	32.6	-26.5	0	60.19	-	-	74	-13.81	222	360	V
5	* 2.488	53.49	Pk	32.7	-26.5	0	59.69	-	-	74	-14.31	222	360	V
3	* 2.484	39.14	RMS	32.6	-26.5	.11	45.35	54	-8.65	-	-	222	360	V
4	* 2.484	39.75	RMS	32.6	-26.5	.11	45.96	54	-8.04	-	-	222	360	V

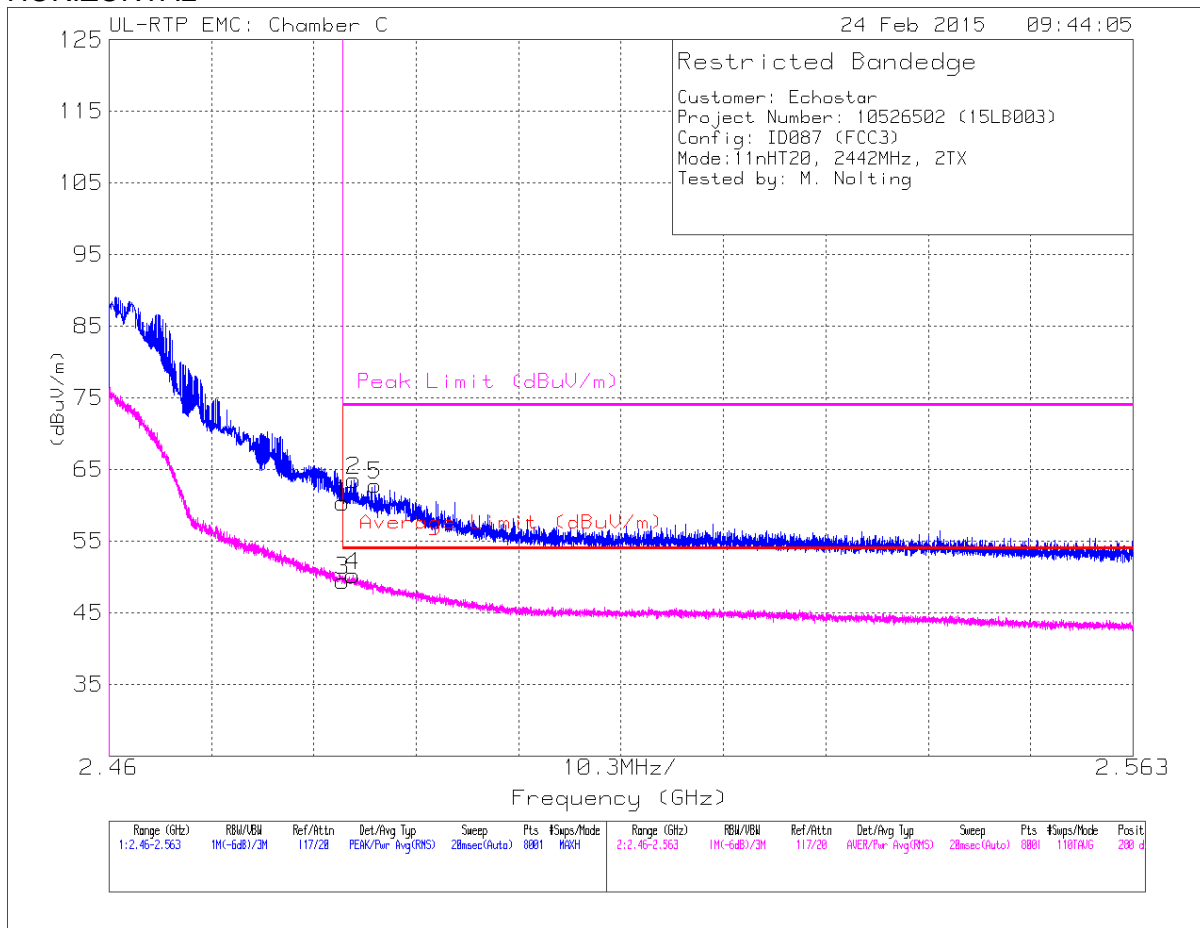
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (CHANNEL 7)**

**HORIZONTAL**



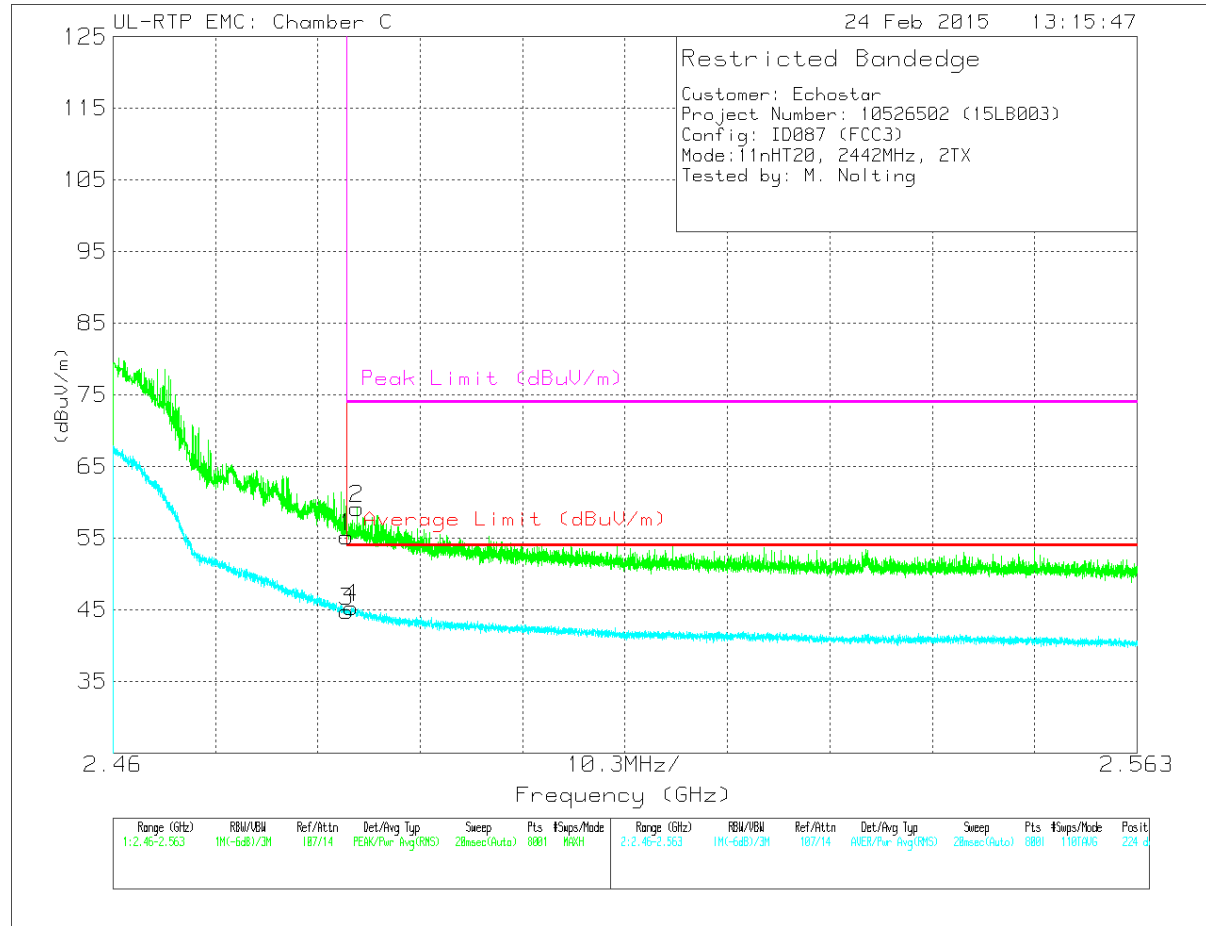
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	54.26	Pk	32.6	-26.5	0	60.36	-	-	74	-13.64	280	109	H
3	* 2.484	43.26	RMS	32.6	-26.5	.11	49.47	54	-4.53	-	-	280	109	H
2	* 2.485	57.42	Pk	32.6	-26.5	0	63.52	-	-	74	-10.48	280	109	H
4	* 2.485	44.01	RMS	32.6	-26.5	.11	50.22	54	-3.78	-	-	280	109	H
5	* 2.487	56.62	Pk	32.7	-26.5	0	62.82	-	-	74	-11.18	280	109	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F Itr/Pad	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	49.11	Pk	32.6	-26.5	0	55.21	-	-	74	-18.79	224	363	V
2	* 2.485	53.07	Pk	32.6	-26.5	0	59.17	-	-	74	-14.83	224	363	V
3	* 2.484	38.59	RMS	32.6	-26.5	.11	44.8	54	-9.2	-	-	224	363	V
4	* 2.484	39.1	RMS	32.6	-26.5	.11	45.31	54	-8.69	-	-	224	363	V

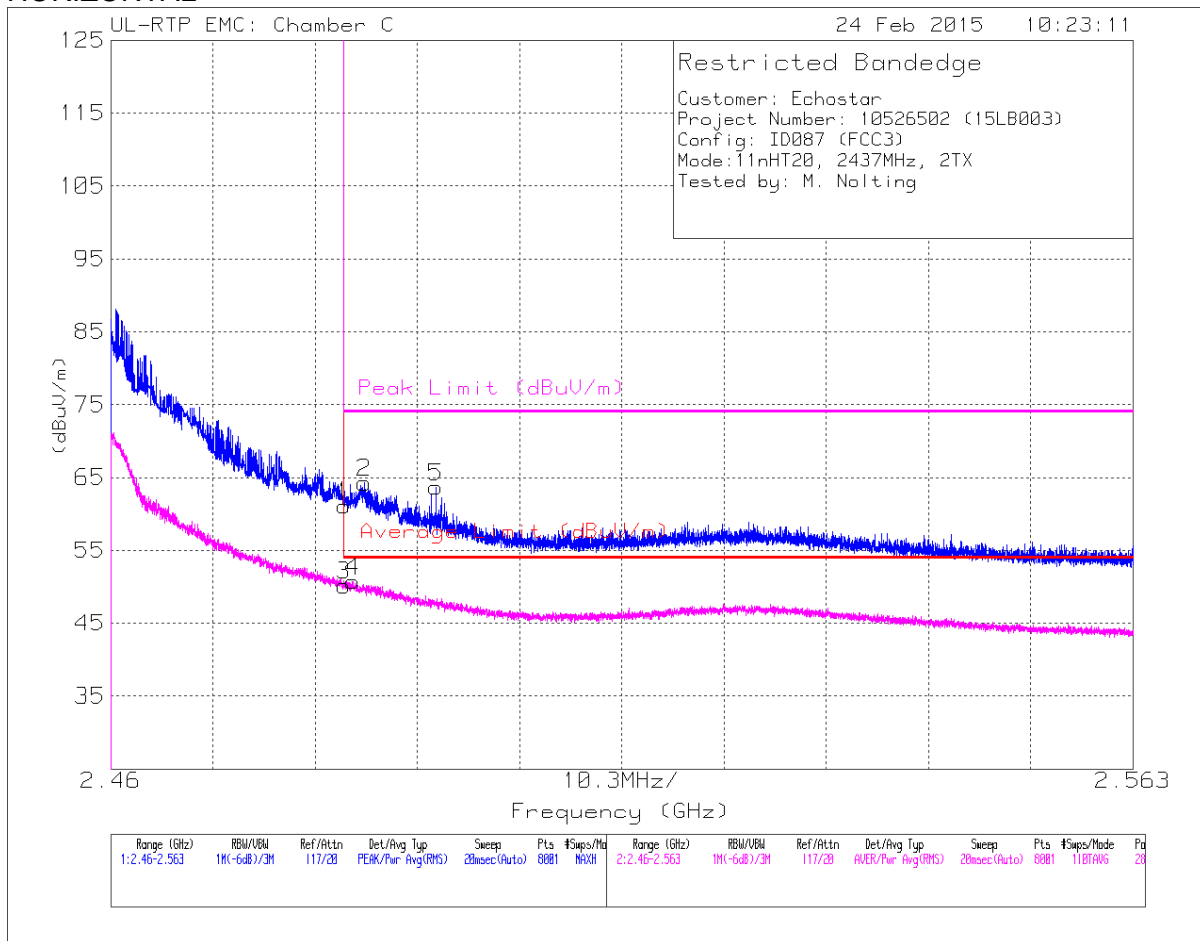
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (CHANNEL 6)**

**HORIZONTAL**



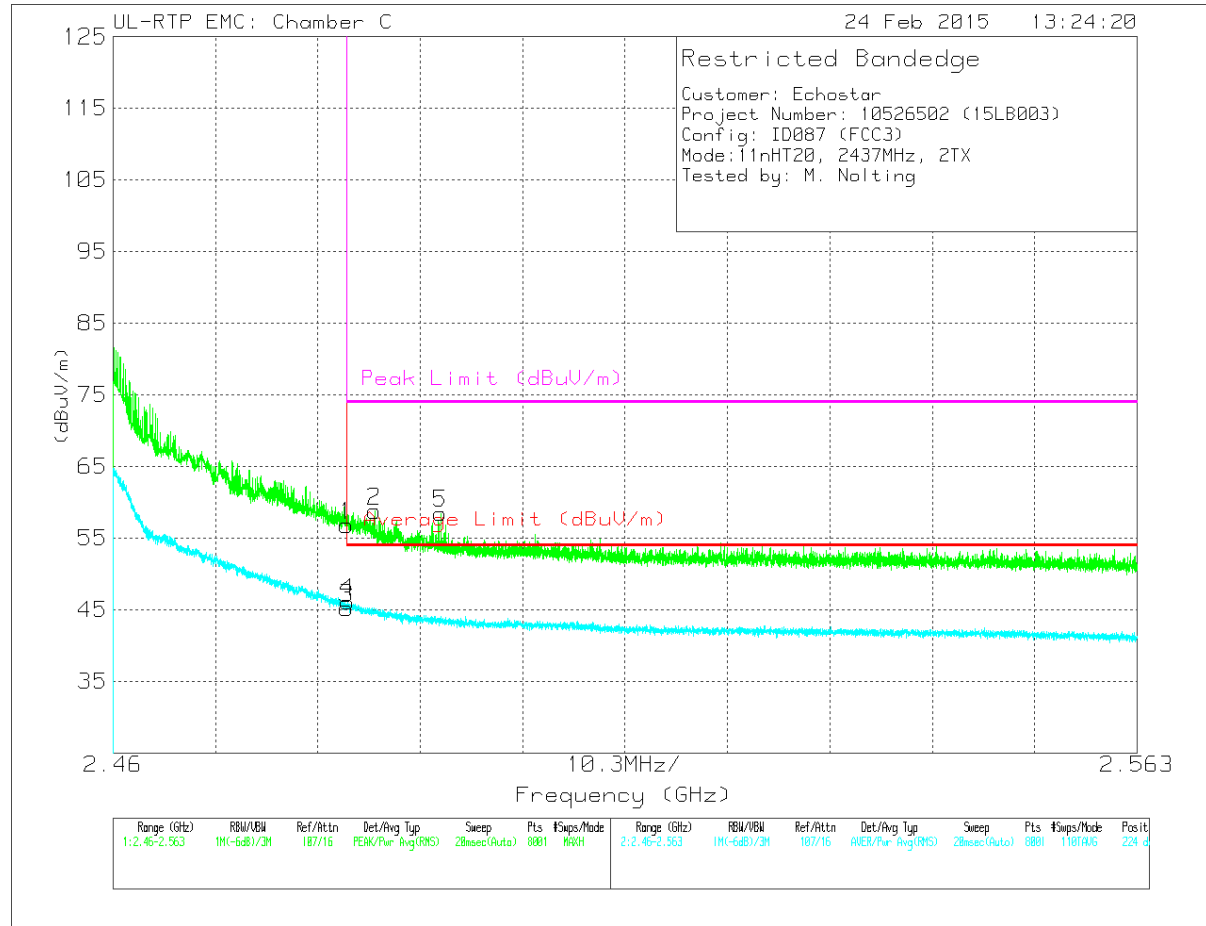
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	55.02	Pk	32.6	-26.5	0	61.12	-	-	74	-12.88	280	109	H
3	* 2.484	43.97	RMS	32.6	-26.5	.11	50.18	54	-3.82	-	-	280	109	H
4	* 2.484	44.54	RMS	32.6	-26.5	.11	50.75	54	-3.25	-	-	280	109	H
2	* 2.486	58.19	Pk	32.6	-26.5	0	64.29	-	-	74	-9.71	280	109	H
5	* 2.493	57.5	Pk	32.7	-26.5	0	63.7	-	-	74	-10.3	280	109	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



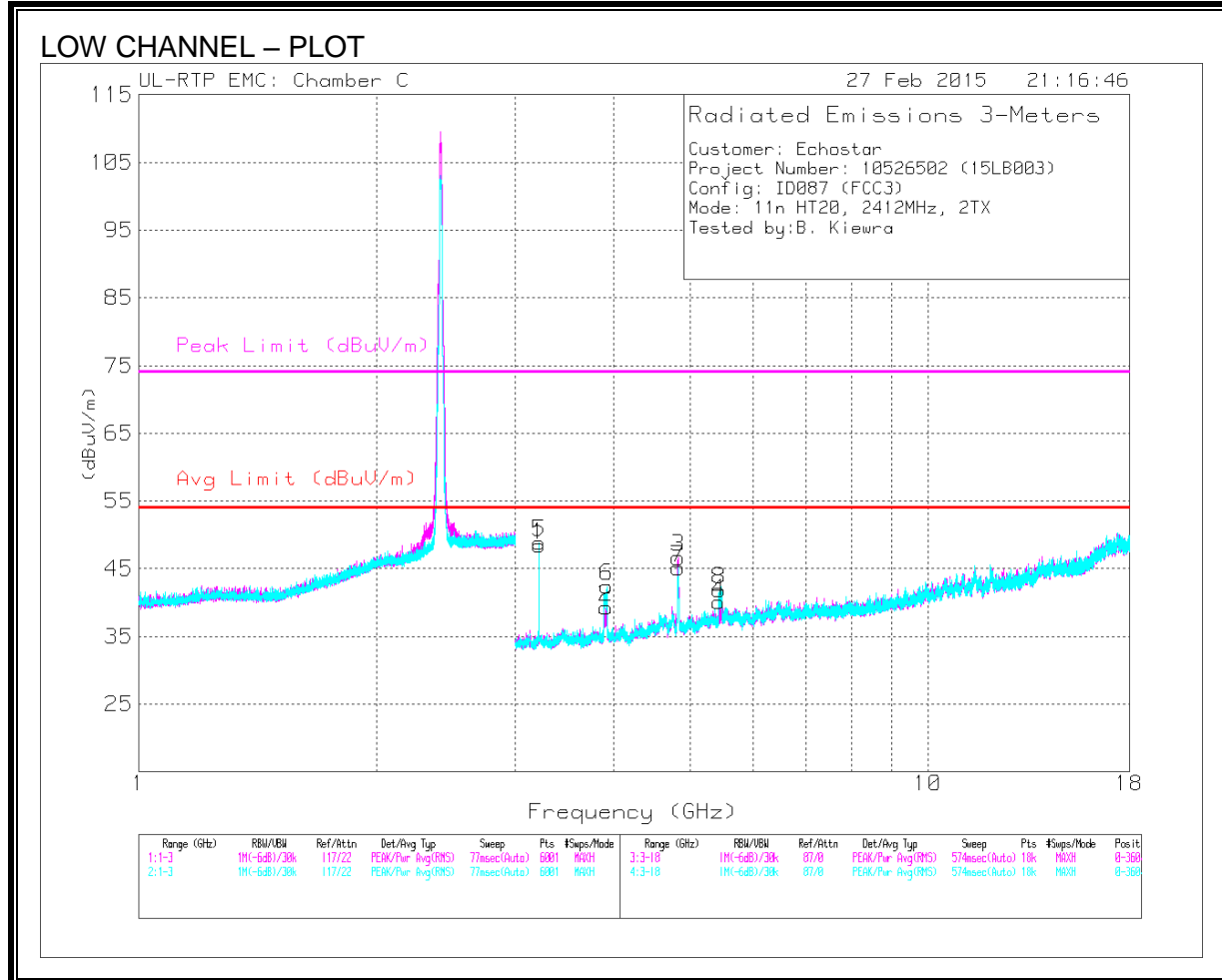
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	50.71	Pk	32.6	-26.5	0	56.81	-	-	74	-17.19	224	361	V
3	* 2.484	39.04	RMS	32.6	-26.5	.11	45.25	54	-8.75	-	-	224	361	V
4	* 2.484	39.91	RMS	32.6	-26.5	.11	46.12	54	-7.88	-	-	224	361	V
2	* 2.486	52.6	Pk	32.7	-26.5	0	58.8	-	-	74	-15.2	224	361	V
5	* 2.493	52.27	Pk	32.7	-26.5	0	58.47	-	-	74	-15.53	224	361	V

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

Pk - Peak detector

RMS - RMS detection

**HARMONICS AND SPURIOUS EMISSIONS**



Note – For Radiated Spurious, the Low Channel was tested at the same power setting as Mid channel to achieve worst-case results.



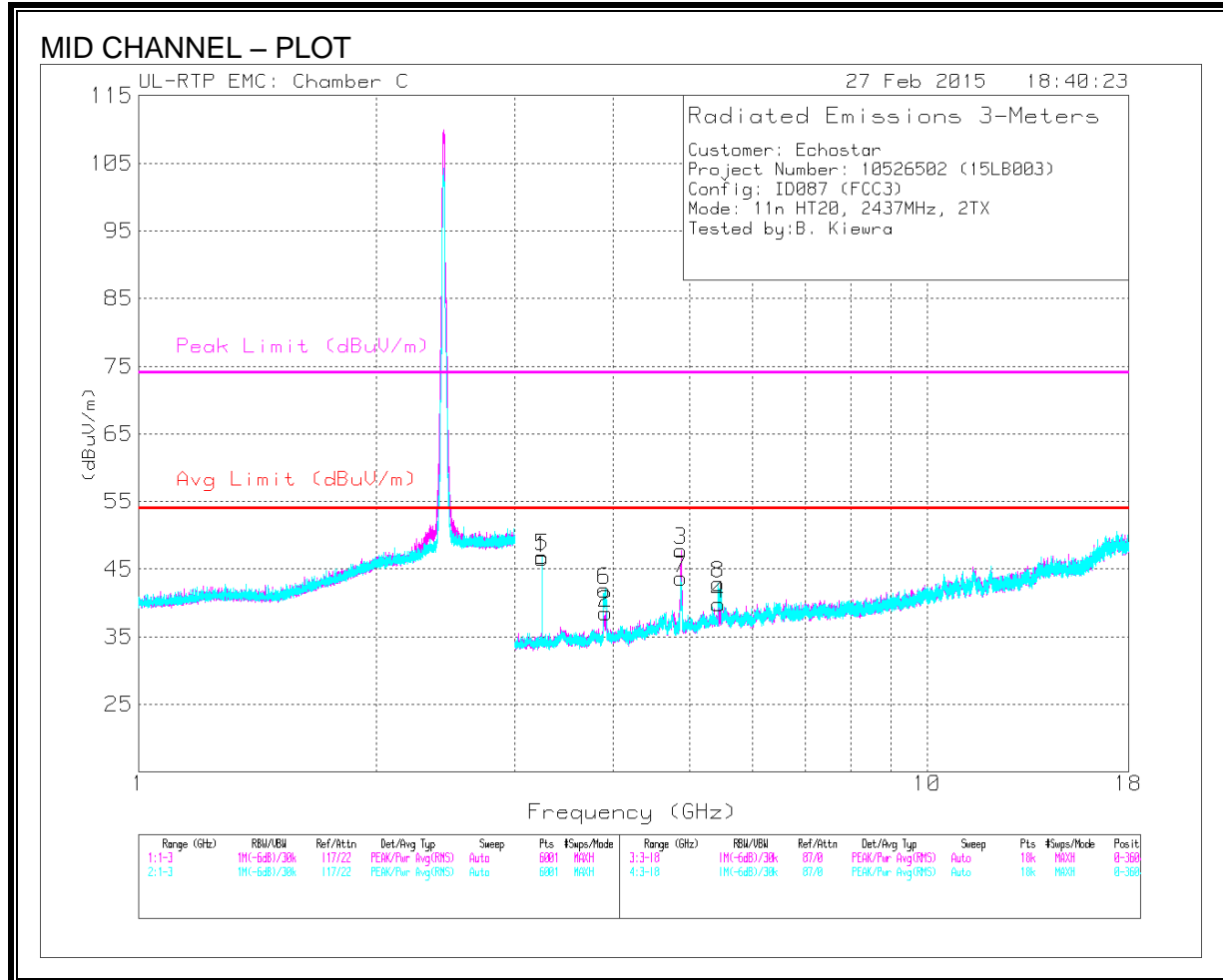
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.889	51.34	PK2	33.7	-34.5	0	50.54	-	-	74	-23.46	141	392	H
	* 3.885	36.25	MAv1	33.7	-34.5	.11	35.56	54	-18.44	-	-	141	392	H
3	* 4.823	51.97	PK2	35.1	-32.7	0	54.37	-	-	74	-19.63	262	100	H
	* 4.824	40.36	MAv1	35.1	-32.7	.11	42.87	54	-11.13	-	-	262	100	H
4	* 5.446	47.45	PK2	35.8	-32	0	51.25	-	-	74	-22.75	127	333	H
	* 5.455	32.21	MAv1	35.8	-32	.11	36.12	54	-17.88	-	-	127	333	H
6	* 3.91	53.69	PK2	33.7	-34.2	0	53.19	-	-	74	-20.81	307	303	V
	* 3.91	37.24	MAv1	33.7	-34.2	.11	36.85	54	-17.15	-	-	307	303	V
7	* 4.823	51.15	PK2	35.1	-32.7	0	53.55	-	-	74	-20.45	215	398	V
	* 4.823	39.4	MAv1	35.1	-32.7	.11	41.91	54	-12.09	-	-	215	398	V
8	* 5.446	48.1	PK2	35.8	-32	0	51.9	-	-	74	-22.1	292	261	V
	* 5.446	32.95	MAv1	35.8	-32	.11	36.86	54	-17.14	-	-	292	261	V
1	3.216	50.38	Pk	32.7	-34.6	0	48.48	-	-	74	-25.52	0-360	250	H
5	3.216	50.78	Pk	32.7	-34.6	0	48.88	-	-	74	-25.12	0-360	151	V

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

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average



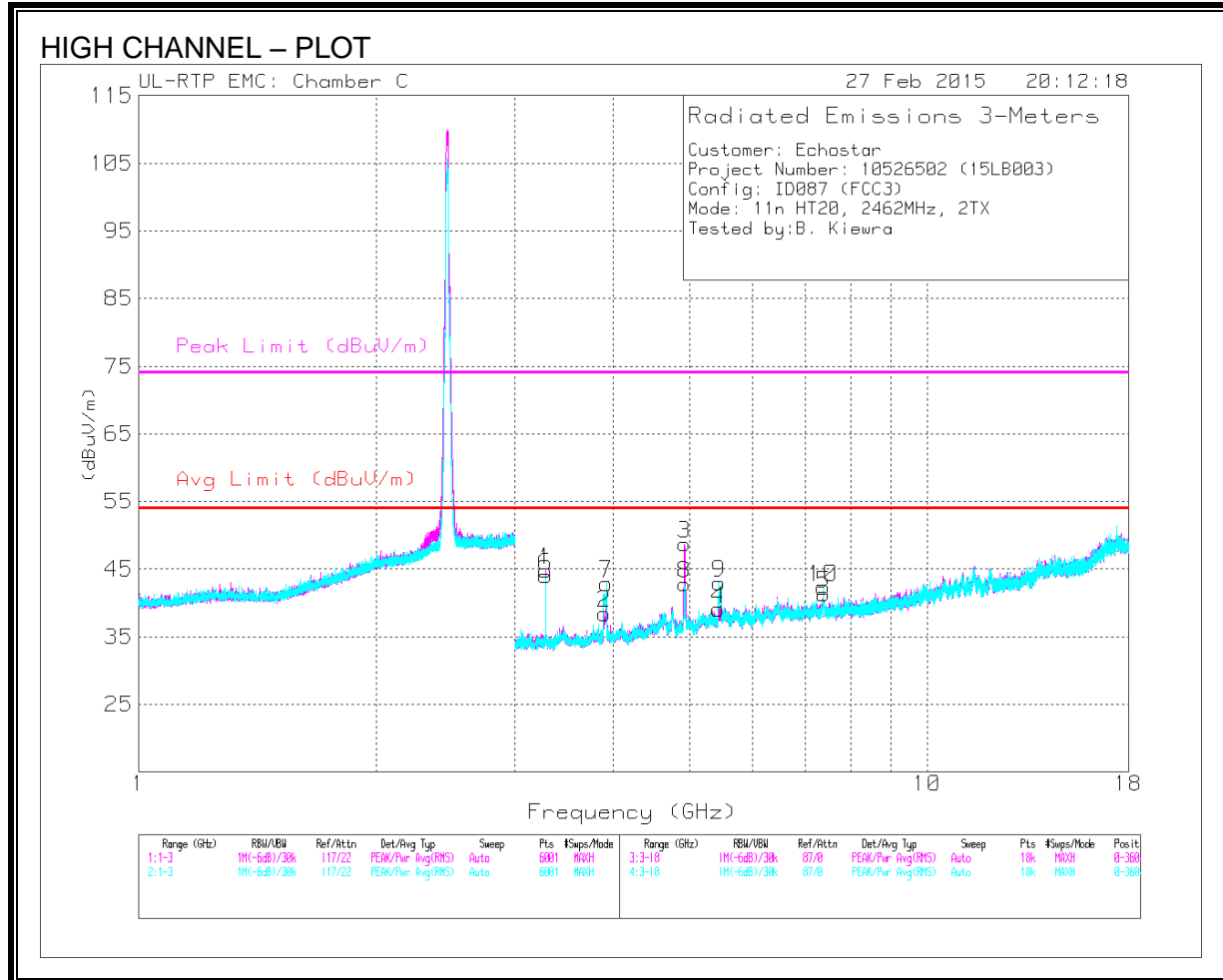
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/Fltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.89	51.3	PK2	33.7	-34.5	0	50.5	-	-	74	-23.5	115	389	H
	* 3.886	36.14	MAv1	33.7	-34.5	.11	35.45	54	-18.55	-	-	115	389	H
3	* 4.873	53.12	PK2	35	-32.9	0	55.22	-	-	74	-18.78	125	238	H
	* 4.873	40.61	MAv1	35	-32.9	.11	42.82	54	-11.18	-	-	125	238	H
4	* 5.449	43.38	PK2	35.8	-32	0	47.18	-	-	74	-26.82	265	145	H
	* 5.458	30.91	MAv1	35.8	-31.9	.11	34.92	54	-19.08	-	-	265	145	H
6	* 3.895	51.54	PK2	33.7	-34.5	0	50.74	-	-	74	-23.26	72	231	V
	* 3.899	36.05	MAv1	33.7	-34.4	.11	35.46	54	-18.54	-	-	72	231	V
7	* 4.873	49.51	PK2	35	-32.9	0	51.61	-	-	74	-22.39	213	216	V
	* 4.873	38.15	MAv1	35	-32.9	.11	40.36	54	-13.64	-	-	213	216	V
8	* 5.451	47.7	PK2	35.8	-32	0	51.5	-	-	74	-22.5	296	311	V
	* 5.46	32.49	MAv1	35.8	-31.9	.11	36.5	54	-17.5	-	-	296	311	V
1	3.249	48.24	Pk	32.7	-34.3	0	46.64	-	-	74	-27.36	0-360	250	H
5	3.249	48.47	Pk	32.7	-34.3	0	46.87	-	-	74	-27.13	0-360	151	V

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

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average



Note – For Radiated Spurious, the High Channel was tested at the same power setting as Mid channel to achieve worst-case results.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.886	51.35	PK2	33.7	-34.5	0	50.55	-	-	74	-23.45	138	357	H
	* 3.886	37.18	MAv1	33.7	-34.5	.11	36.49	54	-17.51	-	-	138	357	H
3	* 4.923	55.46	PK2	34.9	-33.1	0	57.26	-	-	74	-16.74	122	275	H
	* 4.924	43.41	MAv1	34.9	-33.1	.11	45.32	54	-8.68	-	-	122	275	H
4	* 5.446	46.58	PK2	35.8	-32	0	50.38	-	-	74	-23.62	124	294	H
	* 5.452	31.96	MAv1	35.8	-32	.11	35.87	54	-18.13	-	-	124	294	H
5	* 7.38	43.51	PK2	36.2	-28.5	0	51.21	-	-	74	-22.79	282	377	H
	* 7.386	31.41	MAv1	36.2	-28.5	.11	39.22	54	-14.78	-	-	282	377	H
7	* 3.89	53.94	PK2	33.7	-34.5	0	53.14	-	-	74	-20.86	301	265	V
	* 3.89	38.81	MAv1	33.7	-34.5	.11	38.12	54	-15.88	-	-	301	265	V
8	* 4.929	49.99	PK2	34.9	-33.1	0	51.79	-	-	74	-22.21	208	286	V
	* 4.924	38.04	MAv1	34.9	-33.1	.11	39.95	54	-14.05	-	-	208	286	V
9	* 5.437	47.95	PK2	35.8	-31.9	0	51.85	-	-	74	-22.15	297	240	V
	* 5.457	32.6	MAv1	35.8	-31.9	.11	36.61	54	-17.39	-	-	297	240	V
10	* 7.386	44.32	PK2	36.2	-28.5	0	52.02	-	-	74	-21.98	188	284	V
	* 7.387	31.79	MAv1	36.2	-28.5	.11	39.6	54	-14.4	-	-	188	284	V
1	3.282	46.4	Pk	32.7	-34.3	0	44.8	-	-	74	-29.2	0-360	151	H
6	3.282	45.61	Pk	32.7	-34.3	0	44.01	-	-	74	-29.99	0-360	151	V

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

Pk - Peak detector

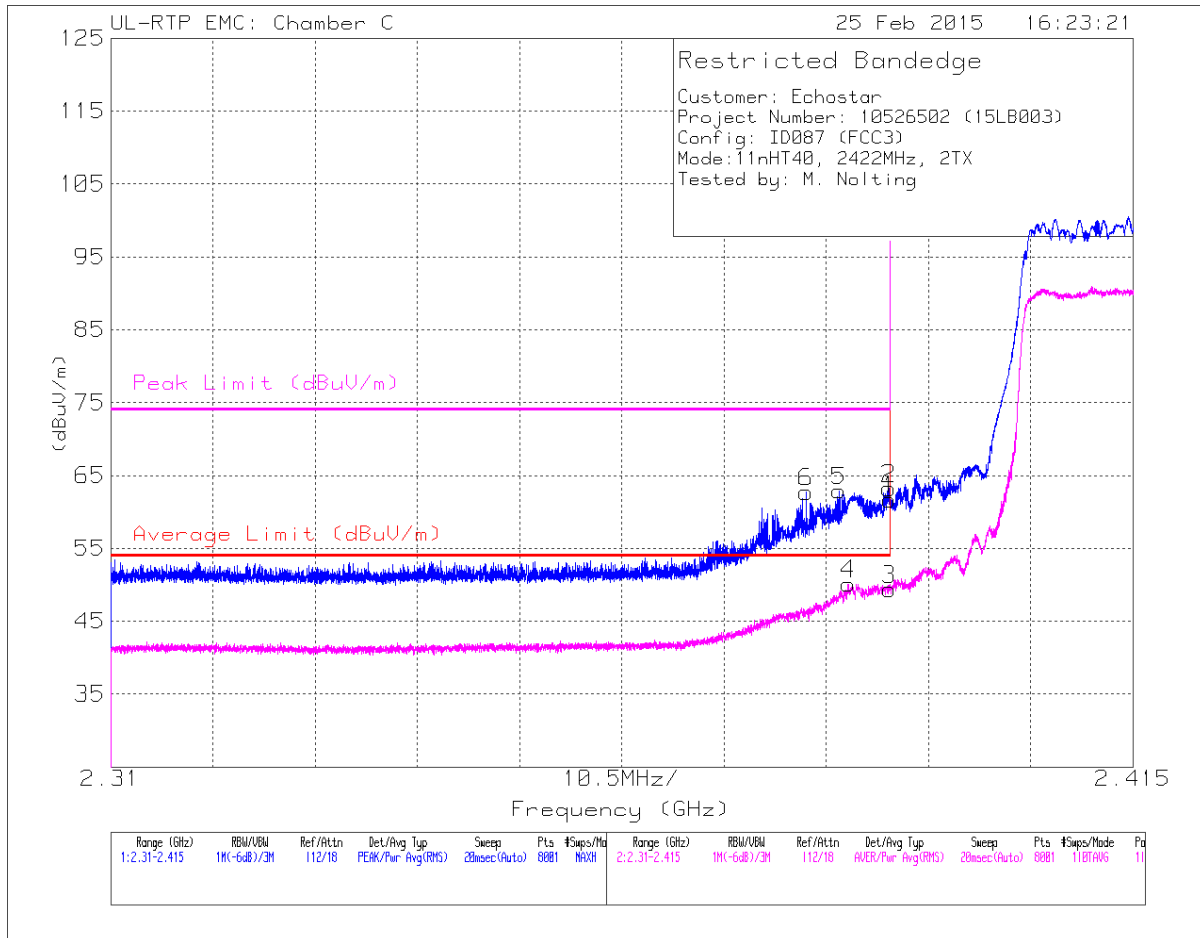
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

### 9.2.4. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 2.4 GHz BAND

#### RESTRICTED BANDEGE (LOW CHANNEL)

#### HORIZONTAL



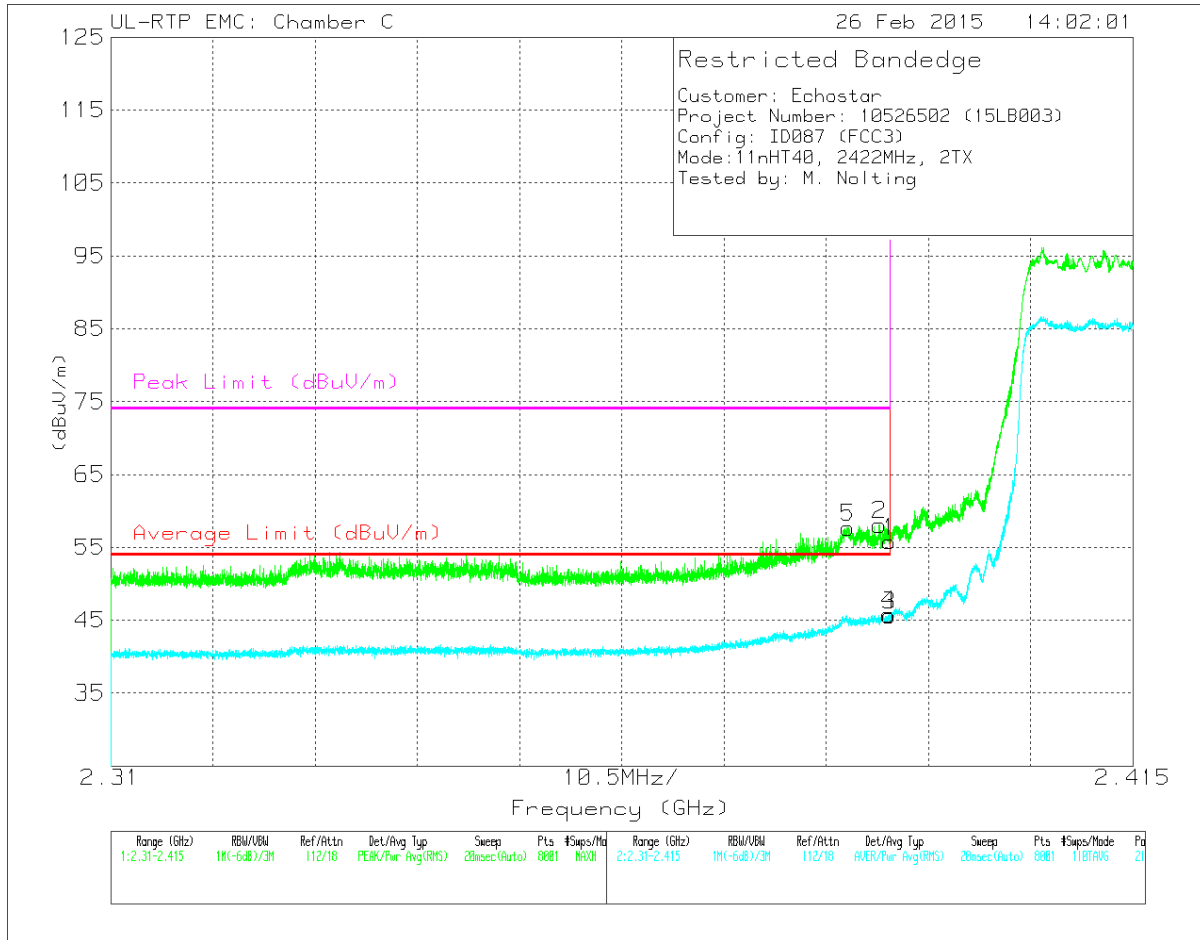
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	56.11	Pk	32.3	-26.7	0	61.71	-	-	74	-12.29	113	106	H
2	* 2.39	57.61	Pk	32.3	-26.7	0	63.21	-	-	74	-10.79	113	106	H
5	* 2.385	57.31	Pk	32.3	-26.7	0	62.91	-	-	74	-11.09	113	106	H
6	* 2.381	57.12	Pk	32.3	-26.7	0	62.72	-	-	74	-11.28	113	106	H
3	* 2.39	43.59	RMS	32.3	-26.7	.18	49.37	54	-4.63	-	-	113	106	H
4	* 2.386	44.34	RMS	32.3	-26.7	.18	50.12	54	-3.88	-	-	113	106	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	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	50.18	Pk	32.3	-26.7	0	55.78	-	-	74	-18.22	214	394	V
2	* 2.389	52.48	Pk	32.3	-26.7	0	58.08	-	-	74	-15.92	214	394	V
5	* 2.386	52.09	Pk	32.3	-26.7	0	57.69	-	-	74	-16.31	214	394	V
3	* 2.39	39.85	RMS	32.3	-26.7	.18	45.63	54	-8.37	-	-	214	394	V
4	* 2.39	40.01	RMS	32.3	-26.7	.18	45.79	54	-8.21	-	-	214	394	V

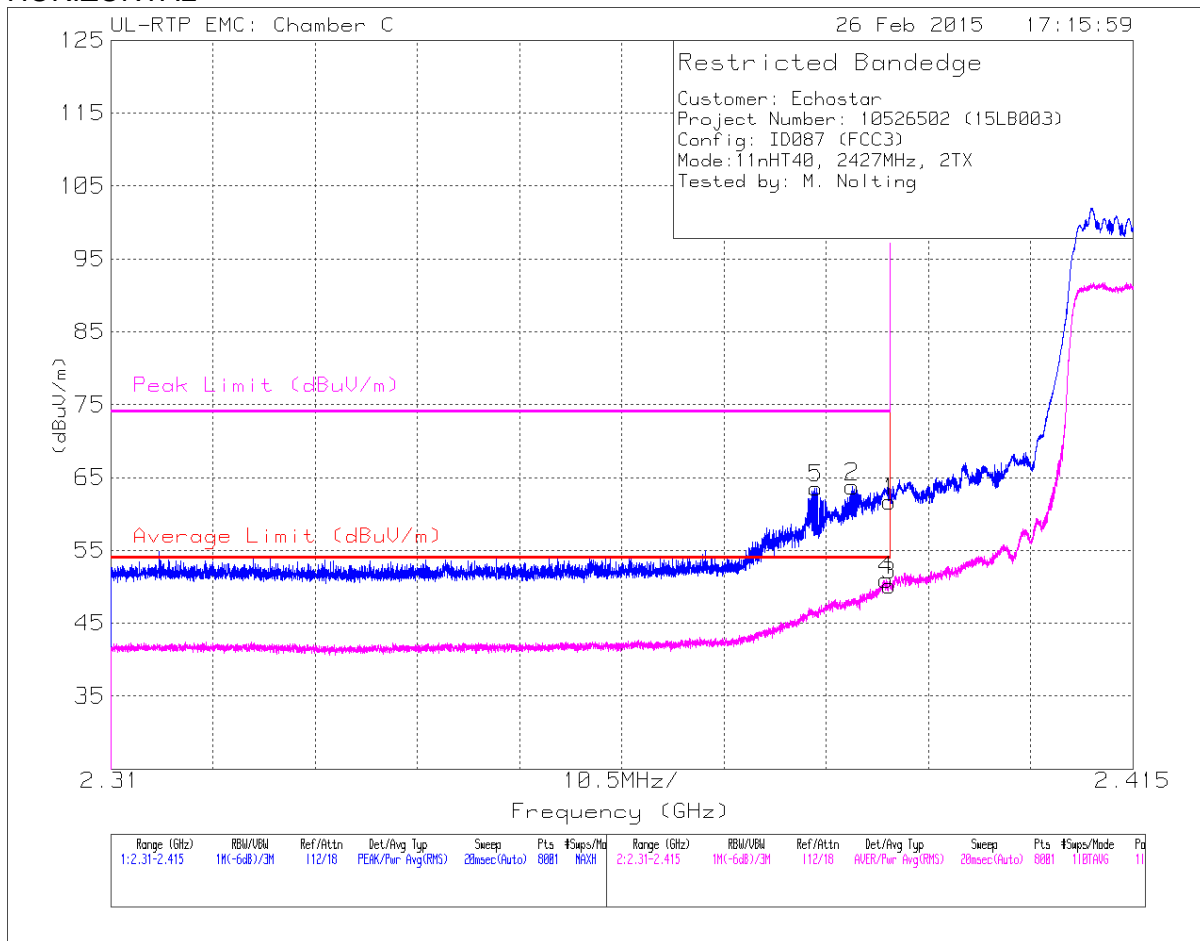
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK - Peak detector

RMS - RMS detection

**RESTRICTED BANDEGE (CHANNEL 4)**

**HORIZONTAL**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	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	56.09	Pk	32.3	-26.7	0	61.69	-	-	74	-12.31	110	123	H
2	* 2.386	58.13	Pk	32.3	-26.7	0	63.73	-	-	74	-10.27	110	123	H
5	* 2.382	57.95	Pk	32.3	-26.7	0	63.55	-	-	74	-10.45	110	123	H
3	* 2.39	44.42	RMS	32.3	-26.7	.18	50.2	54	-3.8	-	-	110	123	H
4	* 2.39	45.15	RMS	32.3	-26.7	.18	50.93	54	-3.07	-	-	110	123	H

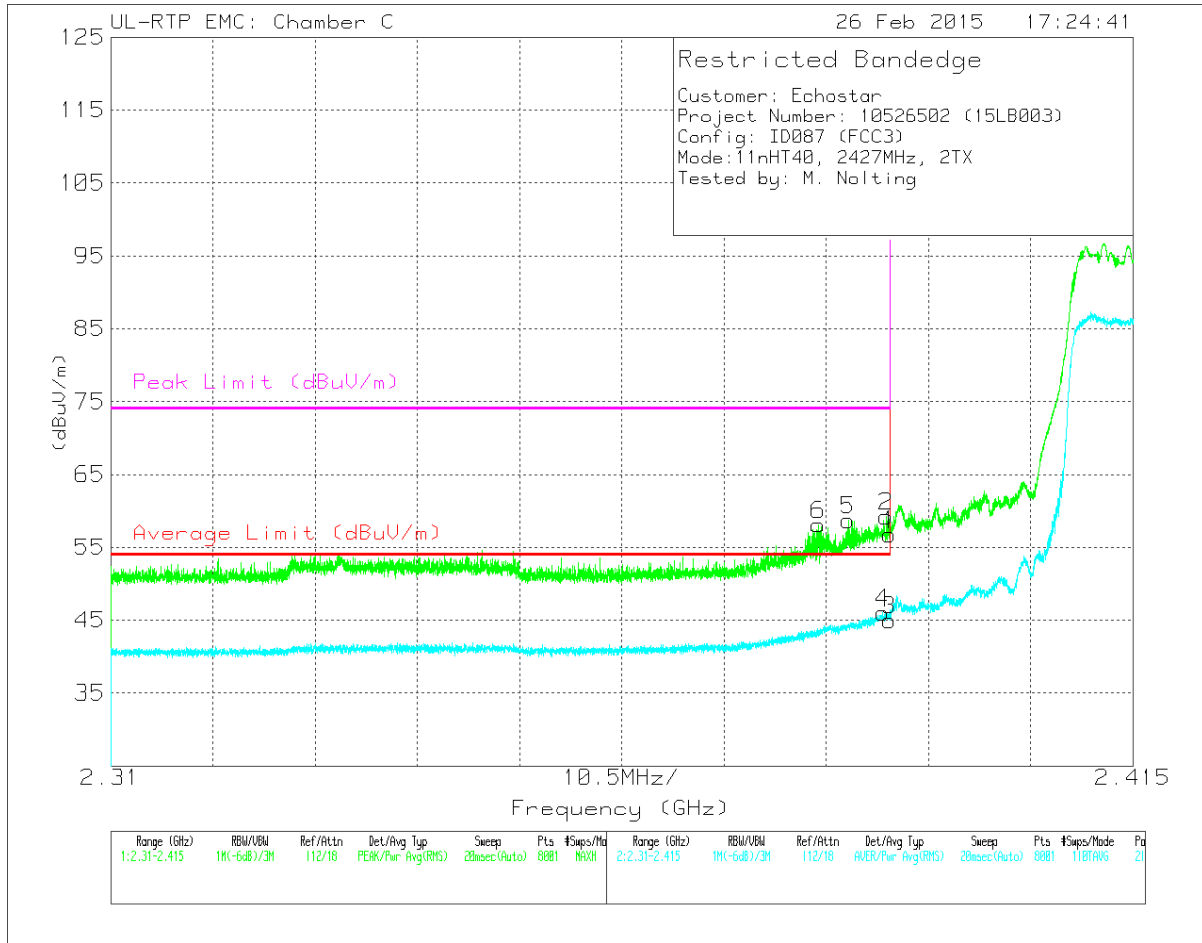
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection



VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	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	51.15	Pk	32.3	-26.7	0	56.75	-	-	74	-17.25	212	394	V
2	* 2.39	53.64	Pk	32.3	-26.7	0	59.24	-	-	74	-14.76	212	394	V
5	* 2.386	53.11	Pk	32.3	-26.7	0	58.71	-	-	74	-15.29	212	394	V
6	* 2.383	52.51	Pk	32.3	-26.7	0	58.11	-	-	74	-15.89	212	394	V
3	* 2.39	39.23	RMS	32.3	-26.7	.18	45.01	54	-8.99	-	-	212	394	V
4	* 2.389	40.23	RMS	32.3	-26.7	.18	46.01	54	-7.99	-	-	212	394	V

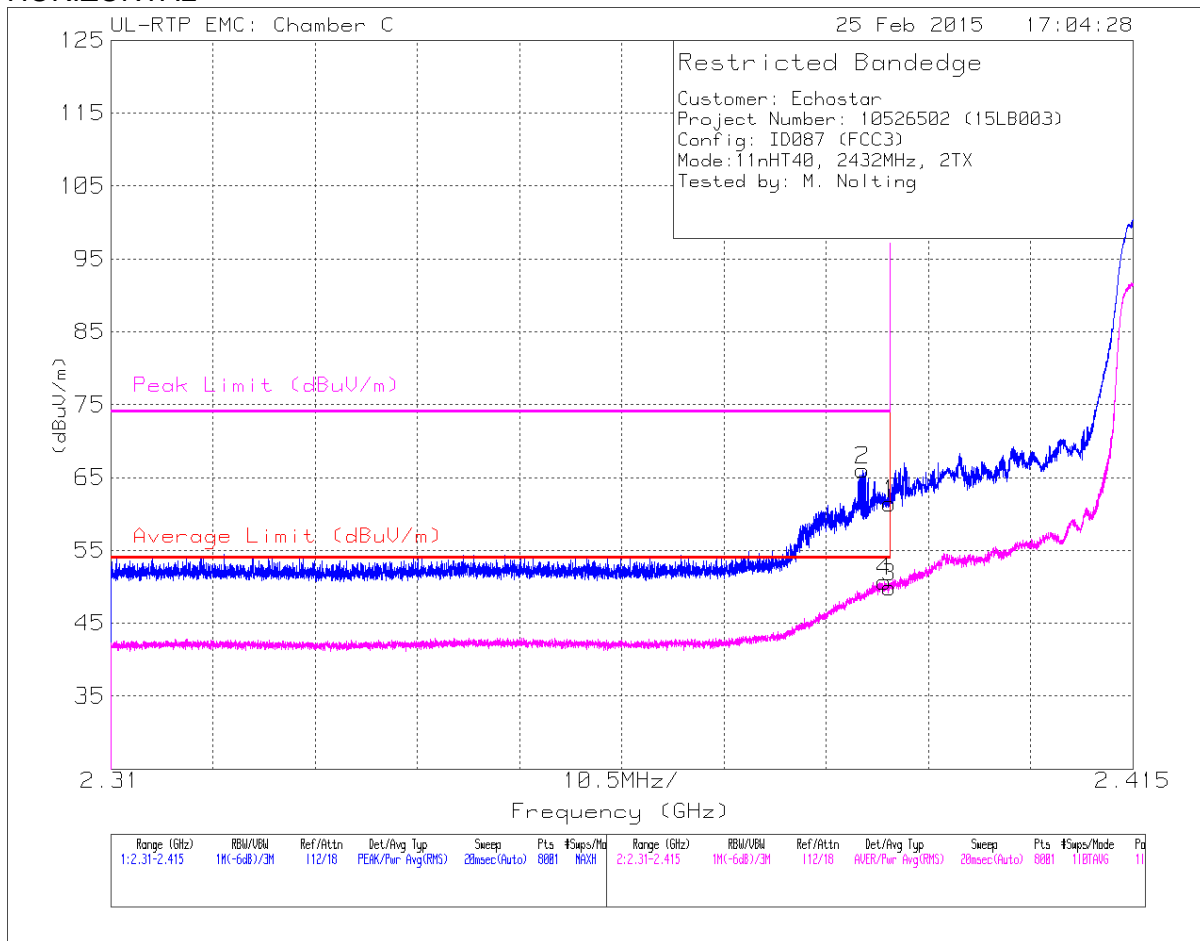
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**RESTRICTED BANDEDGE (CHANNEL 5)**

**HORIZONTAL**



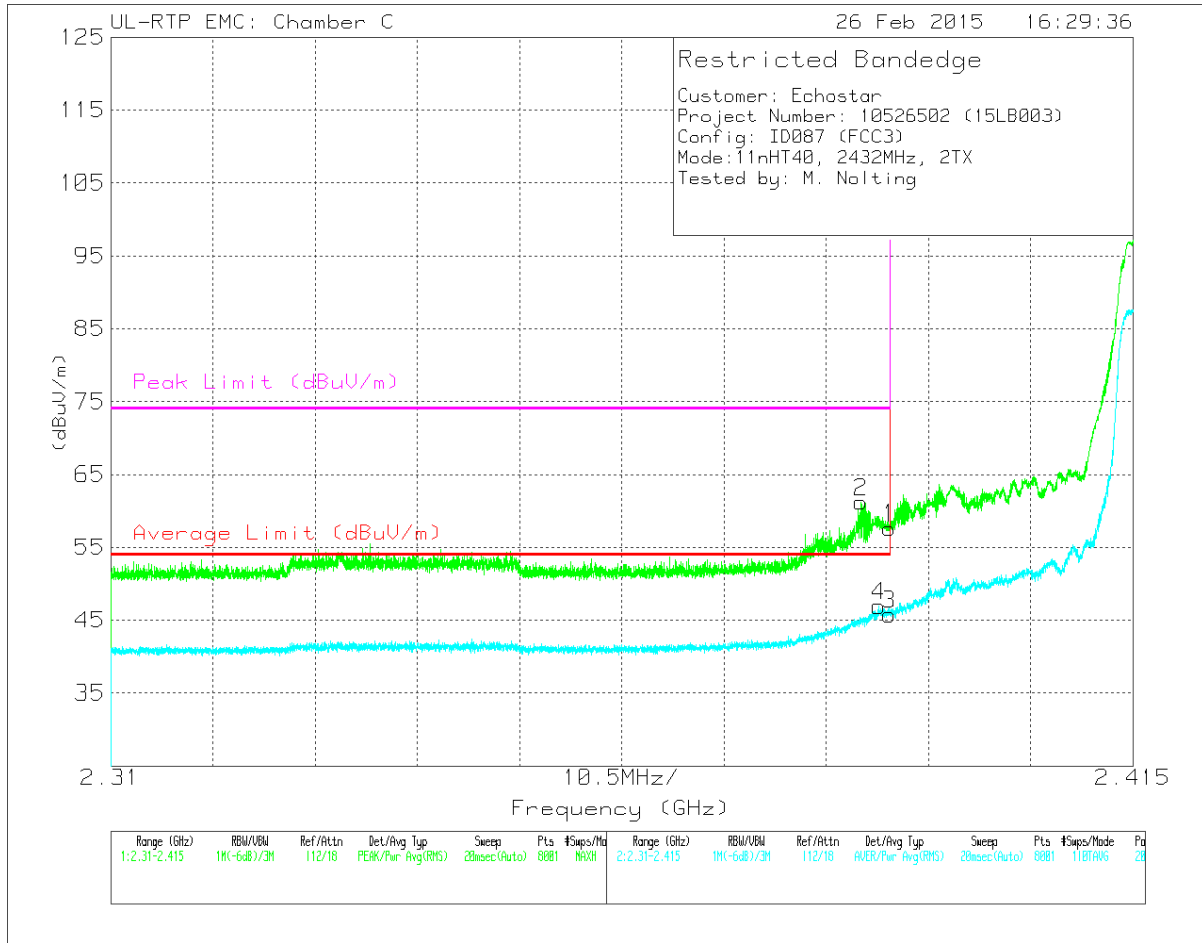
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.387	60.43	Pk	32.3	-26.7	0	66.03	-	-	74	-7.97	115	107	H
4	* 2.389	44.91	RMS	32.3	-26.7	.18	50.69	54	-3.31	-	-	115	107	H
1	* 2.39	55.81	Pk	32.3	-26.7	0	61.41	-	-	74	-12.59	115	107	H
3	* 2.39	44.15	RMS	32.3	-26.7	.18	49.93	54	-4.07	-	-	115	107	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.387	55.63	Pk	32.3	-26.7	0	61.23	-	-	74	-12.77	209	395	V
4	* 2.389	41.15	RMS	32.3	-26.7	.18	46.93	54	-7.07	-	-	209	395	V
1	* 2.39	52.02	Pk	32.3	-26.7	0	57.62	-	-	74	-16.38	209	395	V
3	* 2.39	39.98	RMS	32.3	-26.7	.18	45.76	54	-8.24	-	-	209	395	V

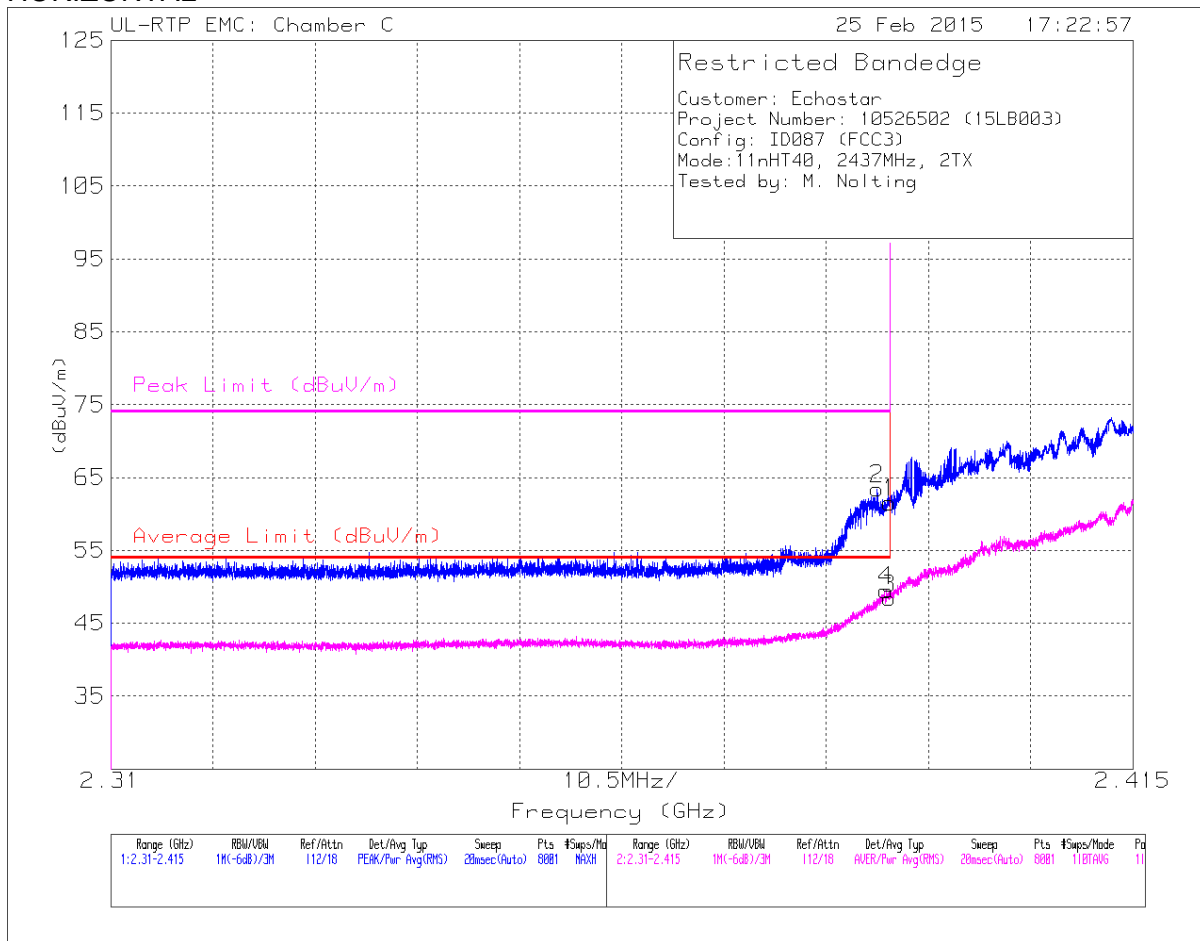
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**RESTRICTED BANDEDGE (CHANNEL 6)**

**HORIZONTAL**



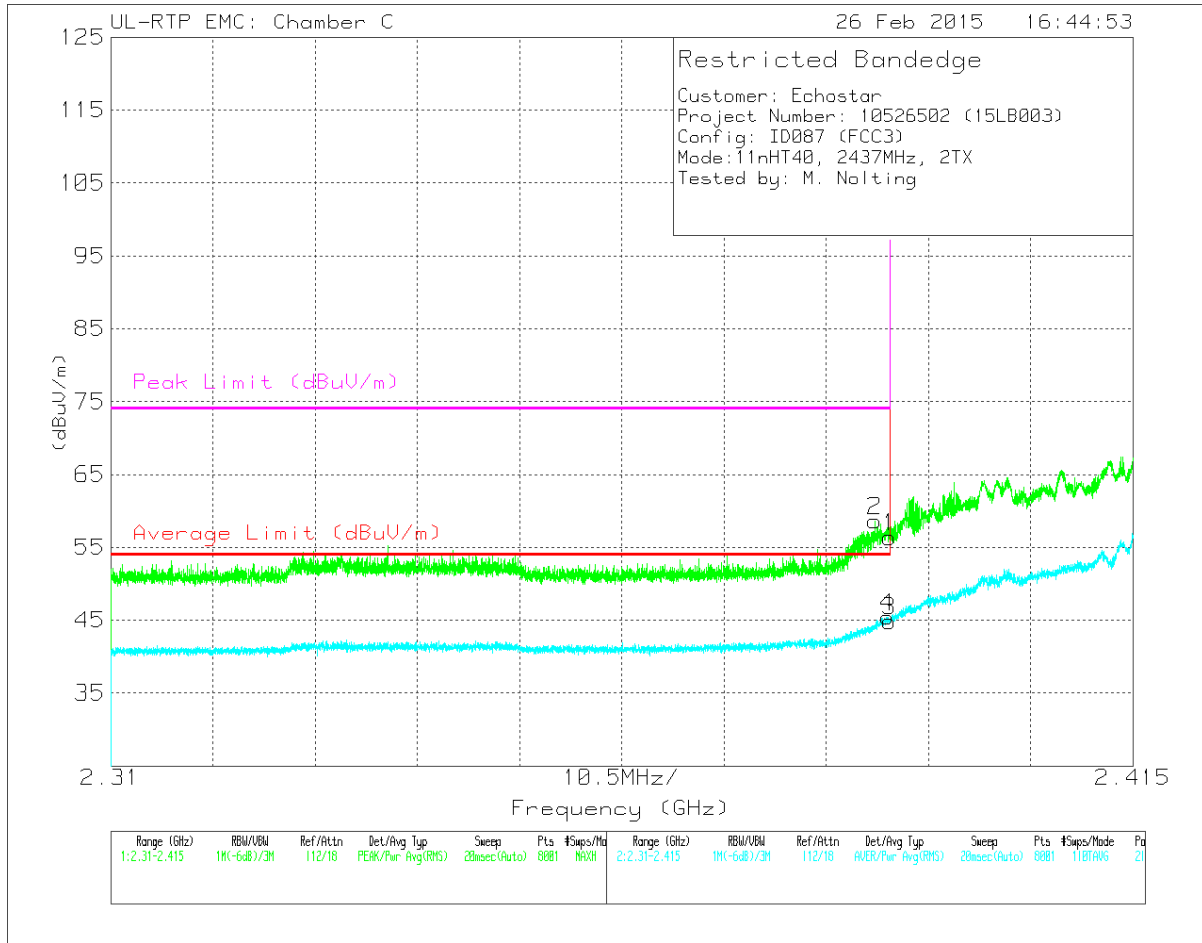
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.389	57.85	Pk	32.3	-26.7	0	63.45	-	-	74	-10.55	115	124	H
1	* 2.39	56	Pk	32.3	-26.7	0	61.6	-	-	74	-12.4	115	124	H
3	* 2.39	42.63	RMS	32.3	-26.7	.18	48.41	54	-5.59	-	-	115	124	H
4	* 2.39	43.7	RMS	32.3	-26.7	.18	49.48	54	-4.52	-	-	115	124	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.388	53.05	Pk	32.3	-26.7	0	58.65	-	-	74	-15.35	211	394	V
1	* 2.39	50.81	Pk	32.3	-26.7	0	56.41	-	-	74	-17.59	211	394	V
3	* 2.39	39.09	RMS	32.3	-26.7	.18	44.87	54	-9.13	-	-	211	394	V
4	* 2.39	39.66	RMS	32.3	-26.7	.18	45.44	54	-8.56	-	-	211	394	V

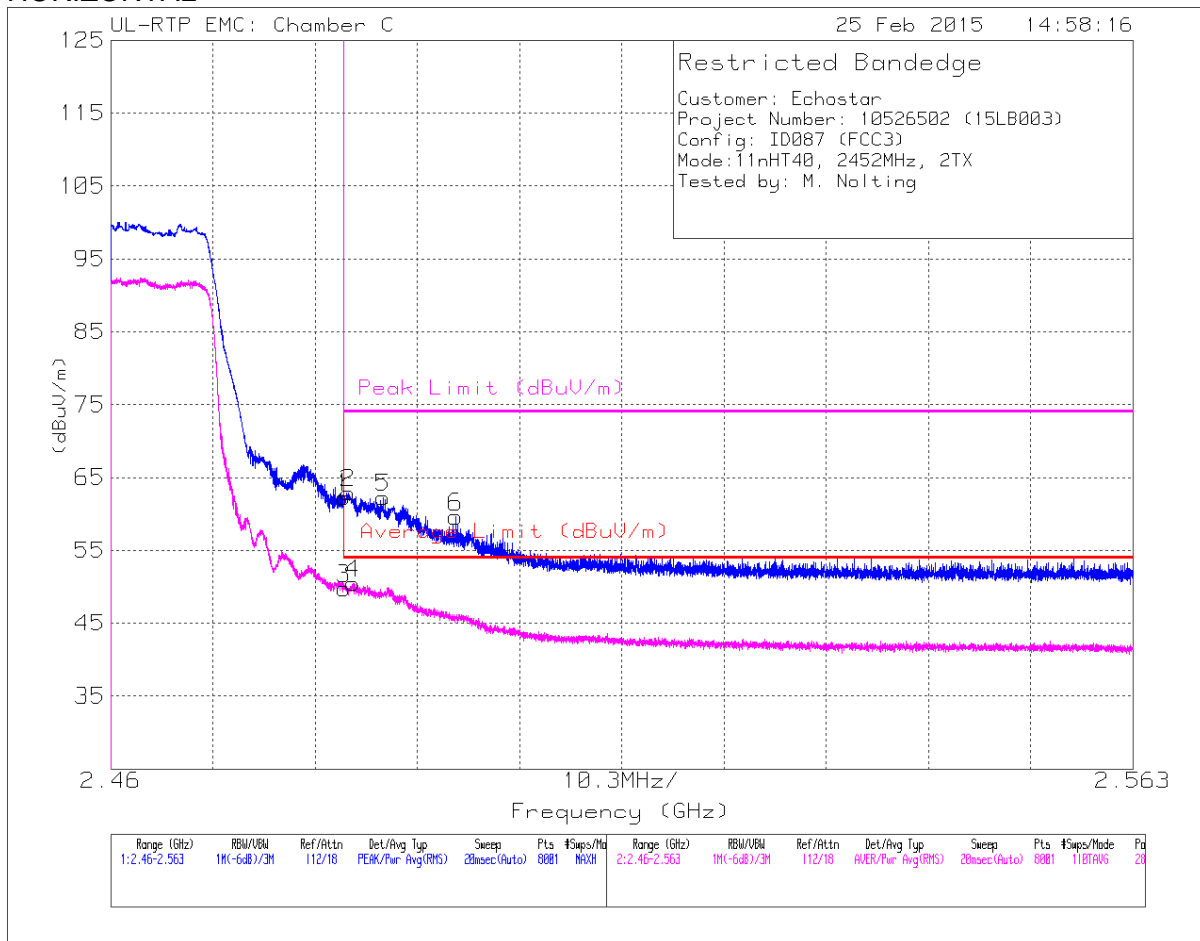
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (HIGH CHANNEL)**

**HORIZONTAL**



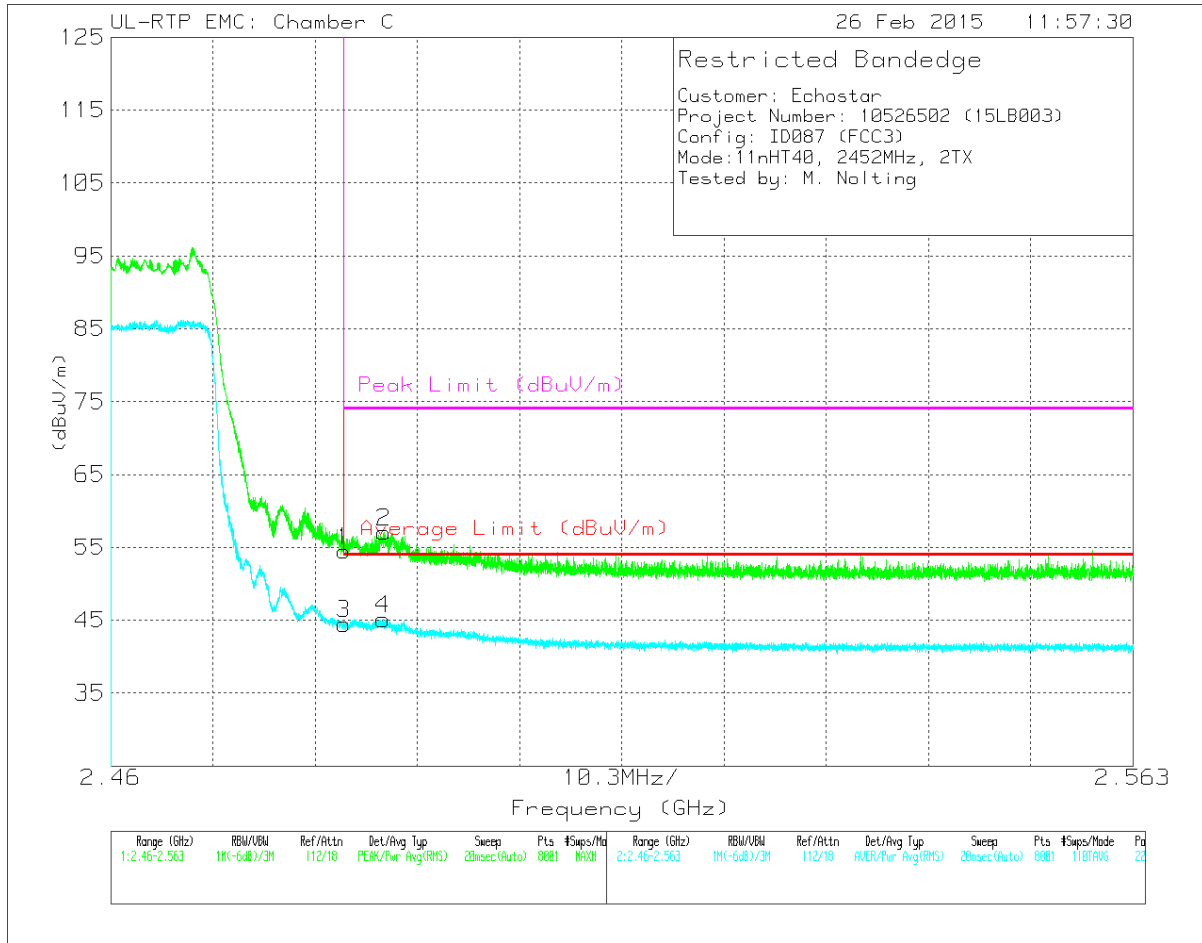
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	56.19	Pk	32.6	-26.5	0	62.29	-	-	74	-11.71	287	109	H
2	* 2.484	56.8	Pk	32.6	-26.5	0	62.9	-	-	74	-11.1	287	109	H
5	* 2.487	56.05	Pk	32.7	-26.5	0	62.25	-	-	74	-11.75	287	109	H
6	* 2.495	53.39	Pk	32.7	-26.5	0	59.59	-	-	74	-14.41	287	109	H
3	* 2.484	43.48	RMS	32.6	-26.5	.18	49.76	54	-4.24	-	-	287	109	H
4	* 2.484	44.21	RMS	32.6	-26.5	.18	50.49	54	-3.51	-	-	287	109	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	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	48.41	Pk	32.6	-26.5	0	54.51	-	-	74	-19.49	221	371	V
2	* 2.488	50.88	Pk	32.7	-26.5	0	57.08	-	-	74	-16.92	221	371	V
3	* 2.484	38.2	RMS	32.6	-26.5	.18	44.48	54	-9.52	-	-	221	371	V
4	* 2.487	38.77	RMS	32.7	-26.5	.18	45.15	54	-8.85	-	-	221	371	V

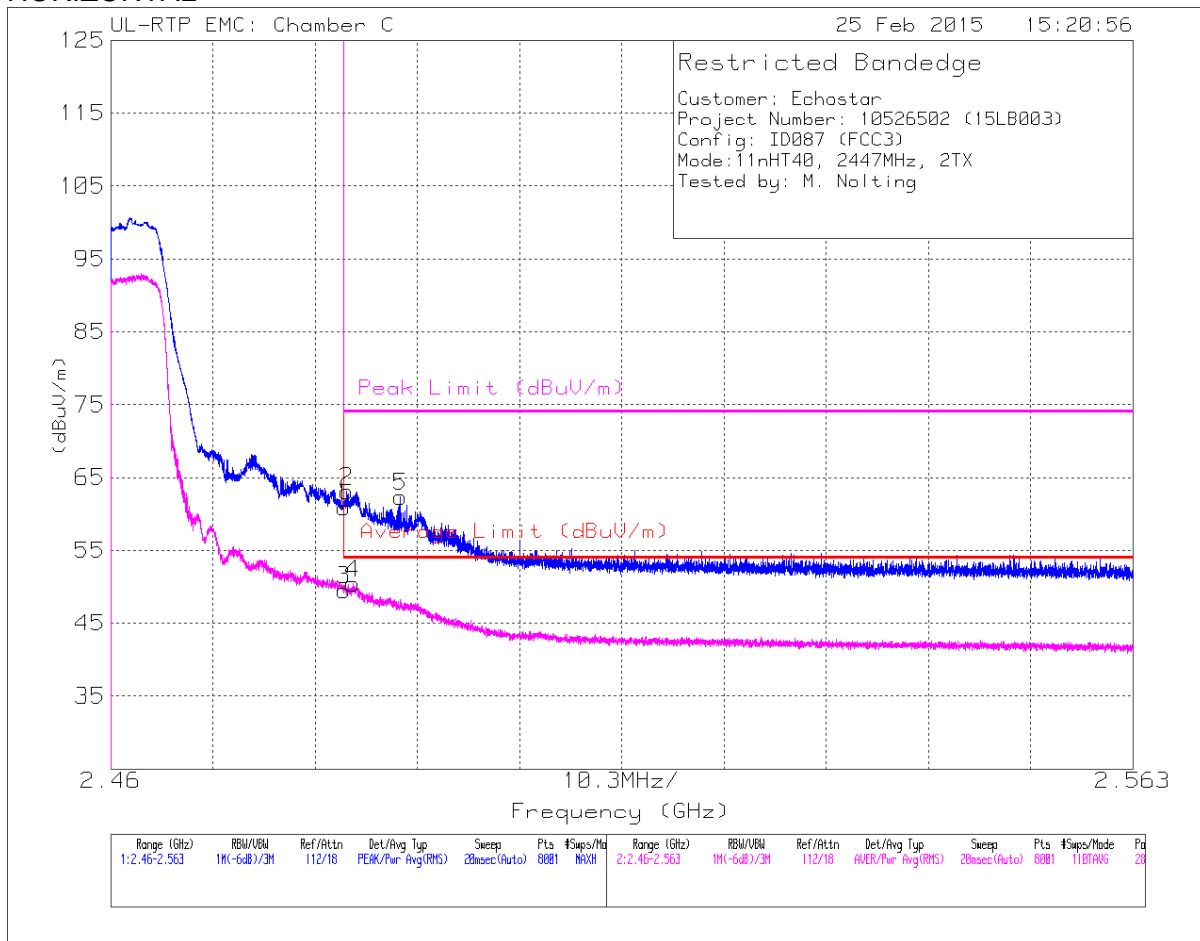
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (CHANNEL 8)**

**HORIZONTAL**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	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	54.77	Pk	32.6	-26.5	0	60.87	-	-	74	-13.13	287	110	H
2	* 2.484	56.98	Pk	32.6	-26.5	0	63.08	-	-	74	-10.92	287	110	H
3	* 2.484	43.28	RMS	32.6	-26.5	.18	49.56	54	-4.44	-	-	287	110	H
4	* 2.484	44.15	RMS	32.6	-26.5	.18	50.43	54	-3.57	-	-	287	110	H
5	* 2.489	56.15	Pk	32.7	-26.5	0	62.35	-	-	74	-11.65	287	110	H

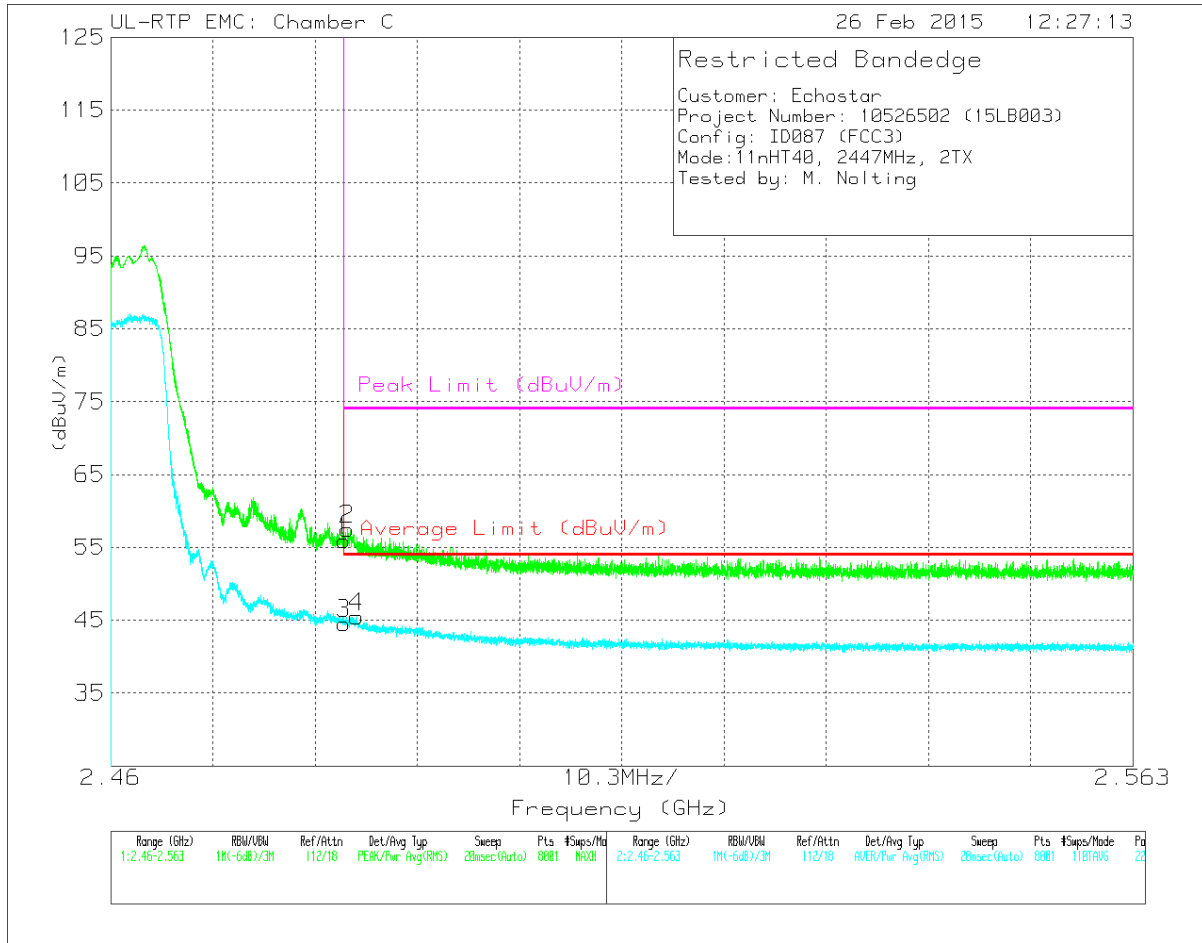
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection



VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	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	49.83	Pk	32.6	-26.5	0	55.93	-	-	74	-18.07	223	370	V
2	* 2.484	51.39	Pk	32.6	-26.5	0	57.49	-	-	74	-16.51	223	370	V
3	* 2.484	38.27	RMS	32.6	-26.5	.18	44.55	54	-9.45	-	-	223	370	V
4	* 2.485	39.19	RMS	32.6	-26.5	.18	45.47	54	-8.53	-	-	223	370	V

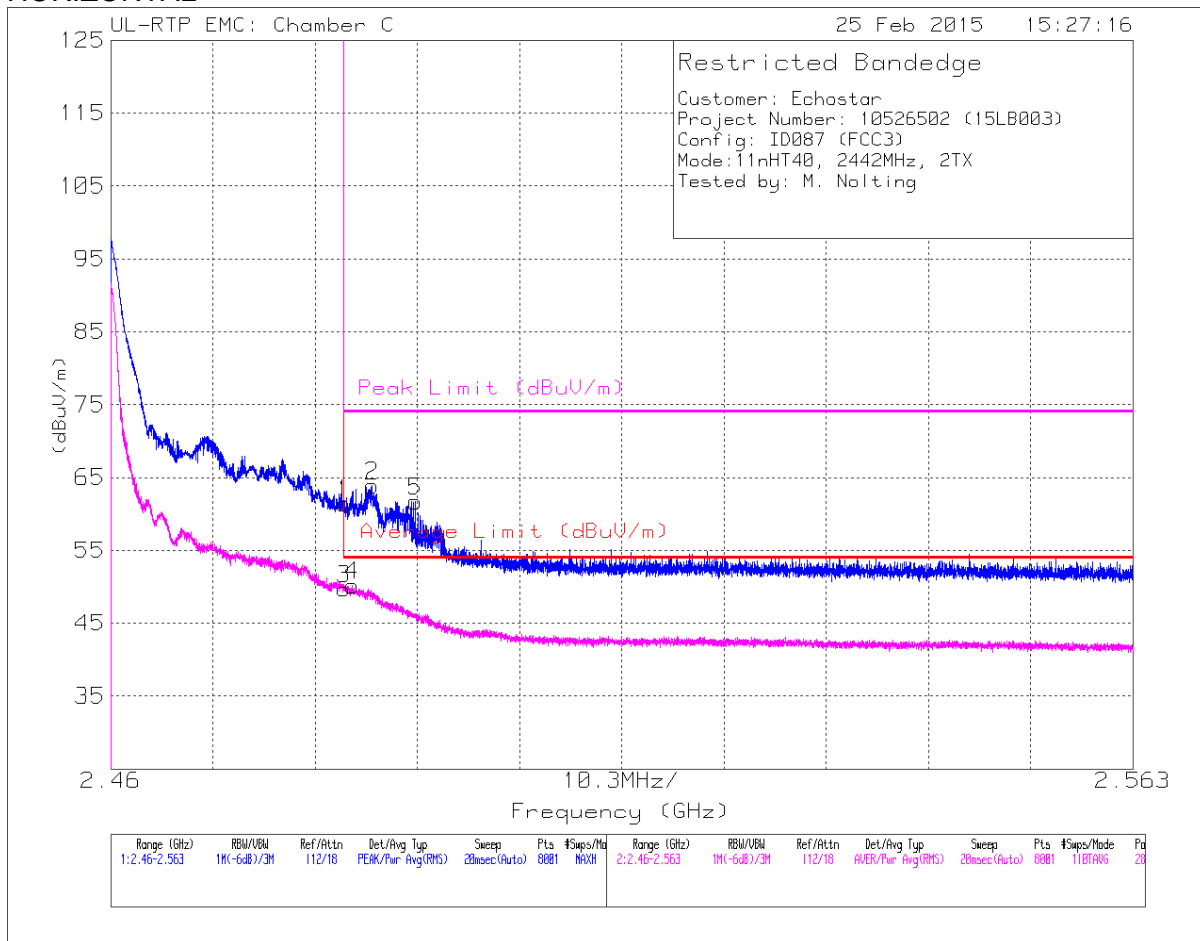
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (CHANNEL 7)**

**HORIZONTAL**



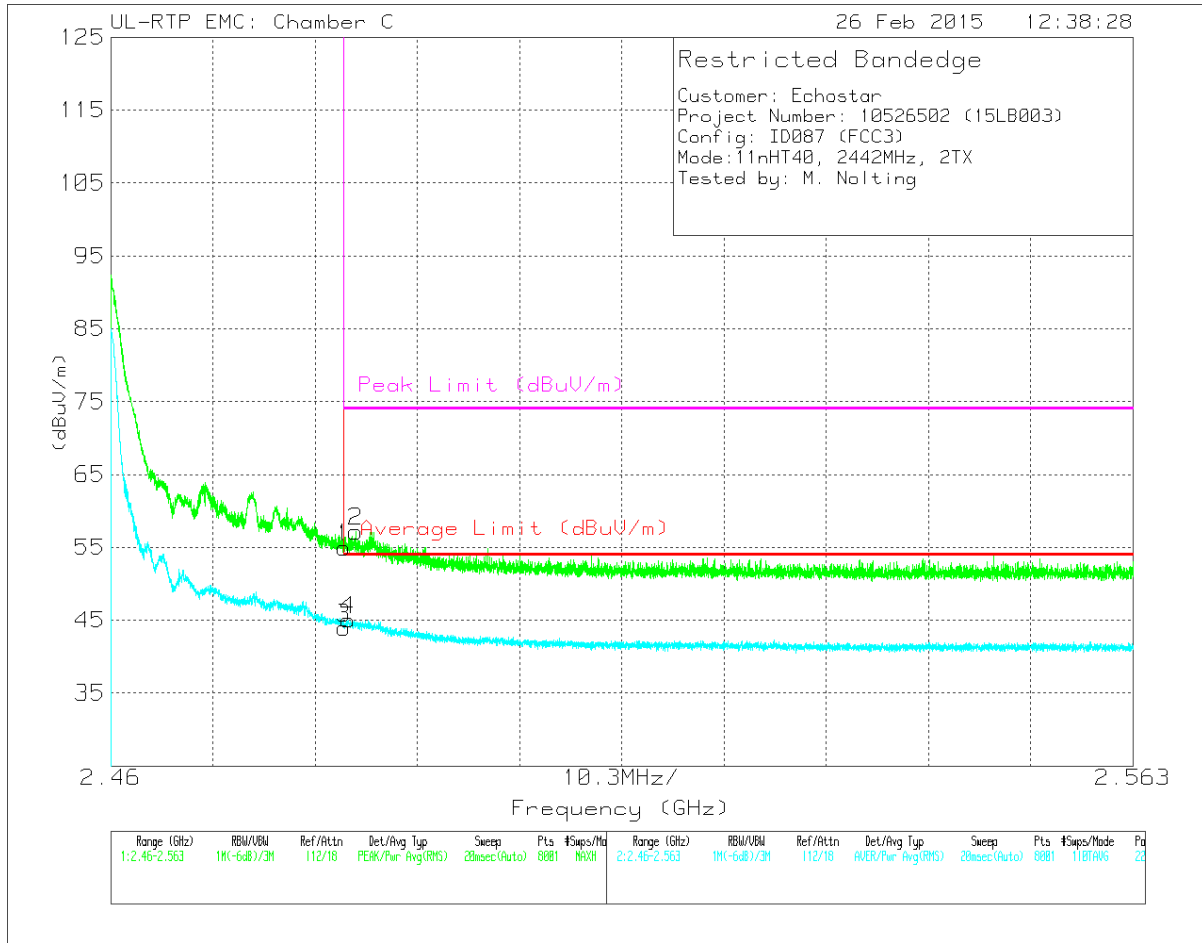
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	55.36	Pk	32.6	-26.5	0	61.46	-	-	74	-12.54	287	110	H
3	* 2.484	43.44	RMS	32.6	-26.5	.18	49.72	54	-4.28	-	-	287	110	H
4	* 2.484	43.93	RMS	32.6	-26.5	.18	50.21	54	-3.79	-	-	287	110	H
2	* 2.486	57.66	Pk	32.7	-26.5	0	63.86	-	-	74	-10.14	287	110	H
5	* 2.491	55.5	Pk	32.7	-26.5	0	61.7	-	-	74	-12.3	287	110	H

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

Pk - Peak detector

RMS - RMS detection

VERTICAL



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/Filtr/Pad	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	48.86	Pk	32.6	-26.5	0	54.96	-	-	74	-19.04	223	370	V
3	* 2.484	37.65	RMS	32.6	-26.5	.18	43.93	54	-10.07	-	-	223	370	V
4	* 2.484	38.76	RMS	32.6	-26.5	.18	45.04	54	-8.96	-	-	223	370	V
2	* 2.485	51.08	Pk	32.6	-26.5	0	57.18	-	-	74	-16.82	223	370	V

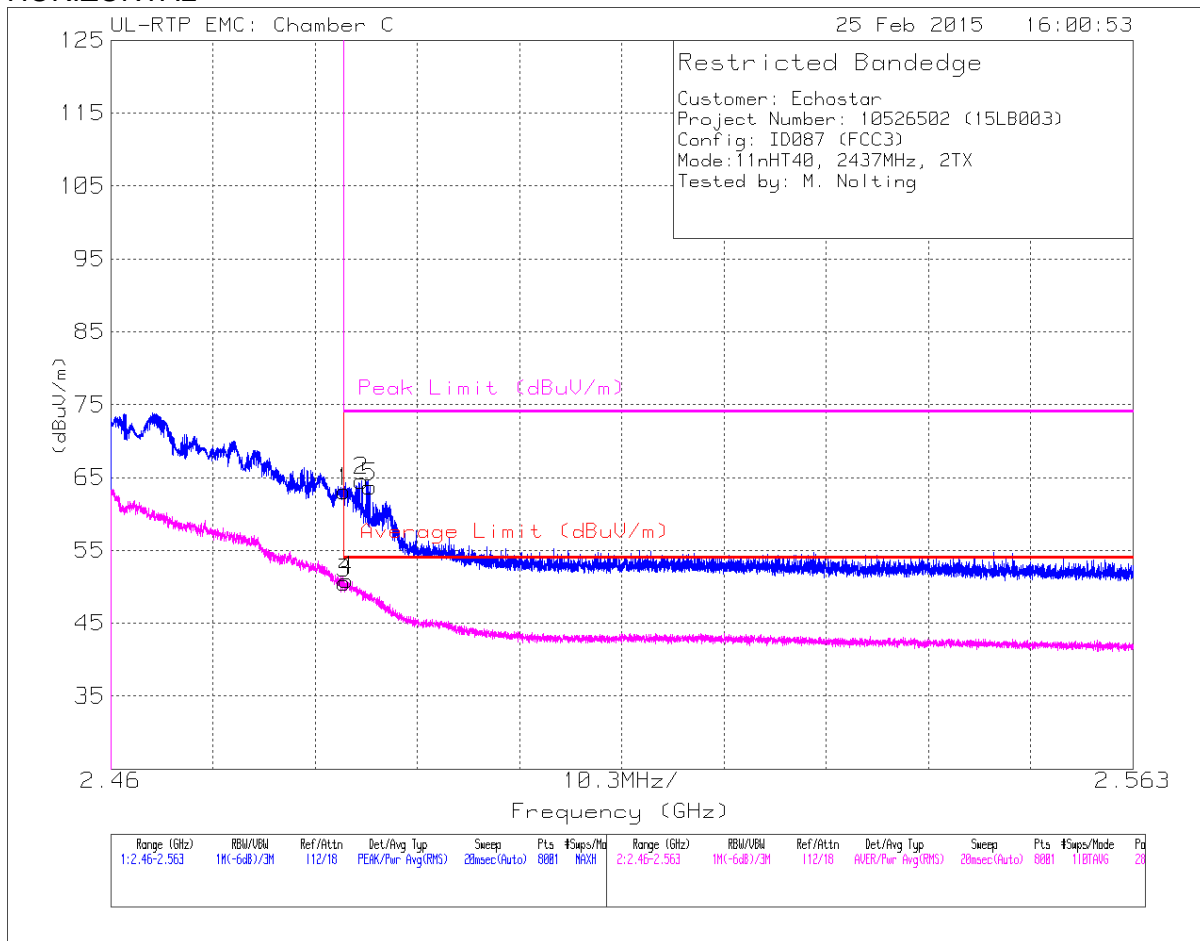
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

RMS - RMS detection

**AUTHORIZED BANDEDGE (CHANNEL 6)**

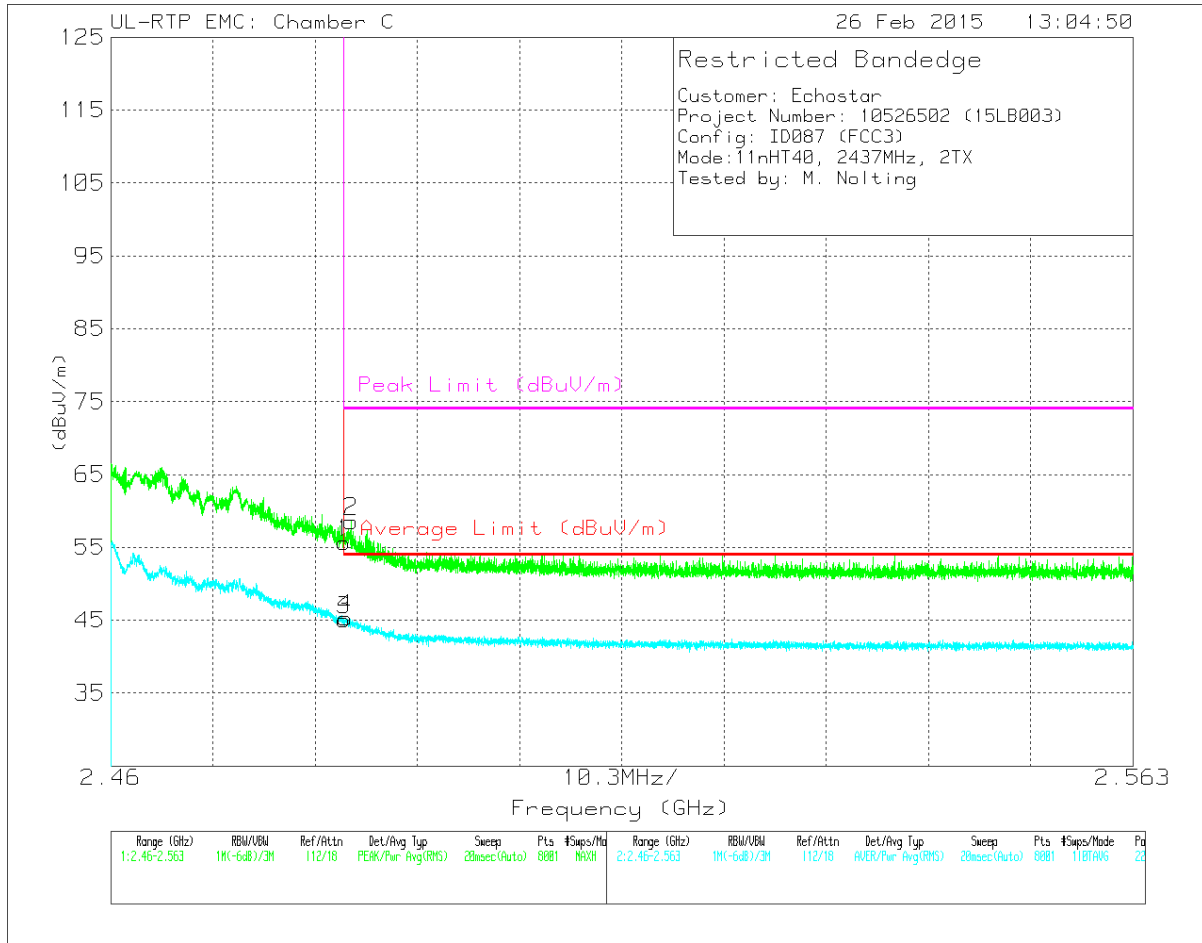
**HORIZONTAL**



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	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	56.99	Pk	32.6	-26.5	0	63.09	-	-	74	-10.91	284	109	H
2	* 2.485	58.44	Pk	32.6	-26.5	0	64.54	-	-	74	-9.46	284	109	H
5	* 2.486	57.61	Pk	32.6	-26.5	0	63.71	-	-	74	-10.29	284	109	H
3	* 2.484	44.24	RMS	32.6	-26.5	.18	50.52	54	-3.48	-	-	284	109	H
4	* 2.484	44.61	RMS	32.6	-26.5	.18	50.89	54	-3.11	-	-	284	109	H

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

VERTICAL



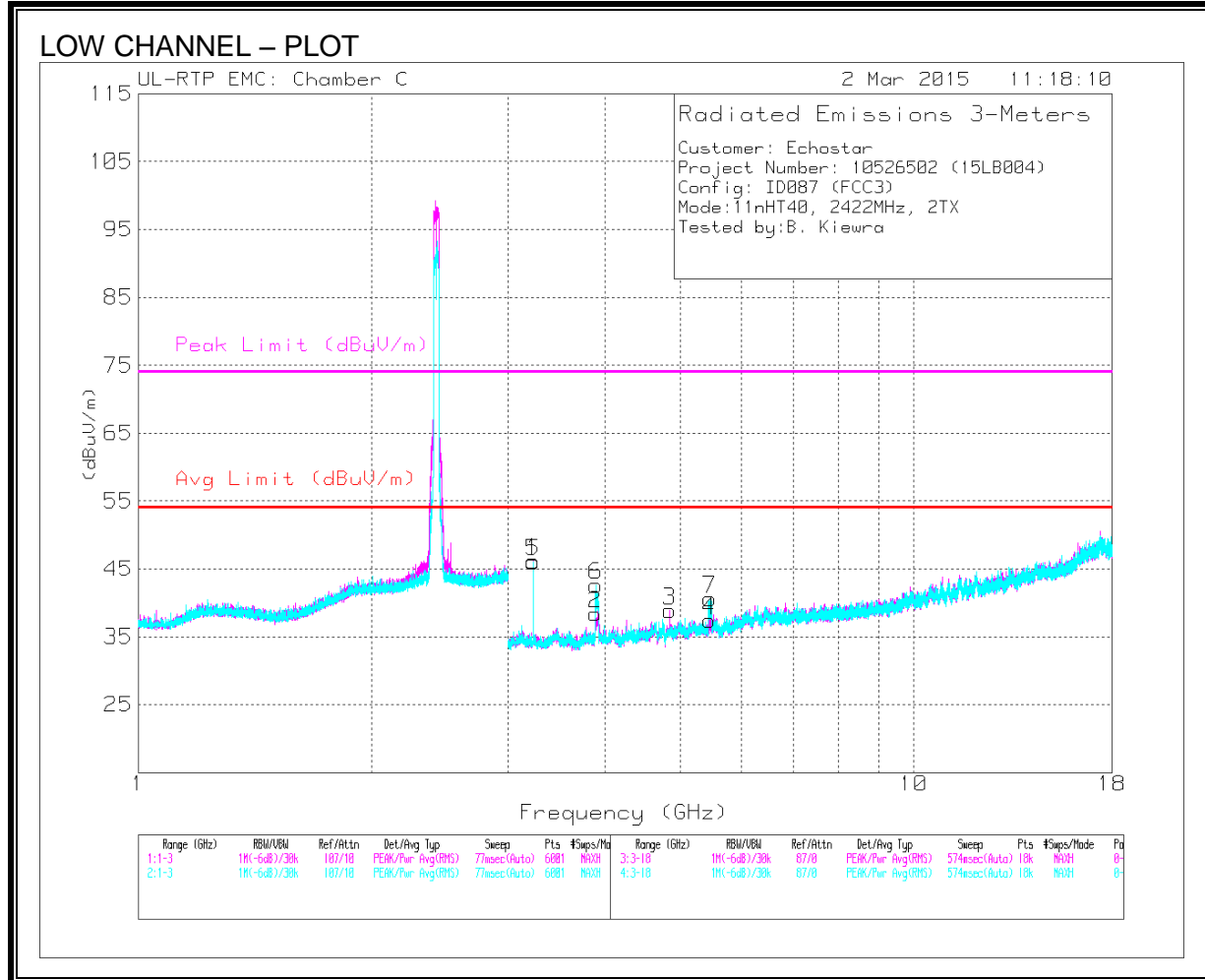
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0067 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	49.56	Pk	32.6	-26.5	0	55.66	-	-	74	-18.34	225	362	V
2	* 2.484	52.44	Pk	32.6	-26.5	0	58.54	-	-	74	-15.46	225	362	V
3	* 2.484	38.77	RMS	32.6	-26.5	.18	45.05	54	-8.95	-	-	225	362	V
4	* 2.484	39.02	RMS	32.6	-26.5	.18	45.3	54	-8.7	-	-	225	362	V

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

Pk - Peak detector

RMS - RMS detection

**HARMONICS AND SPURIOUS EMISSIONS**



Note – For Radiated Spurious, the Low Channel was tested at the same power setting as Mid channel to achieve worst-case results.

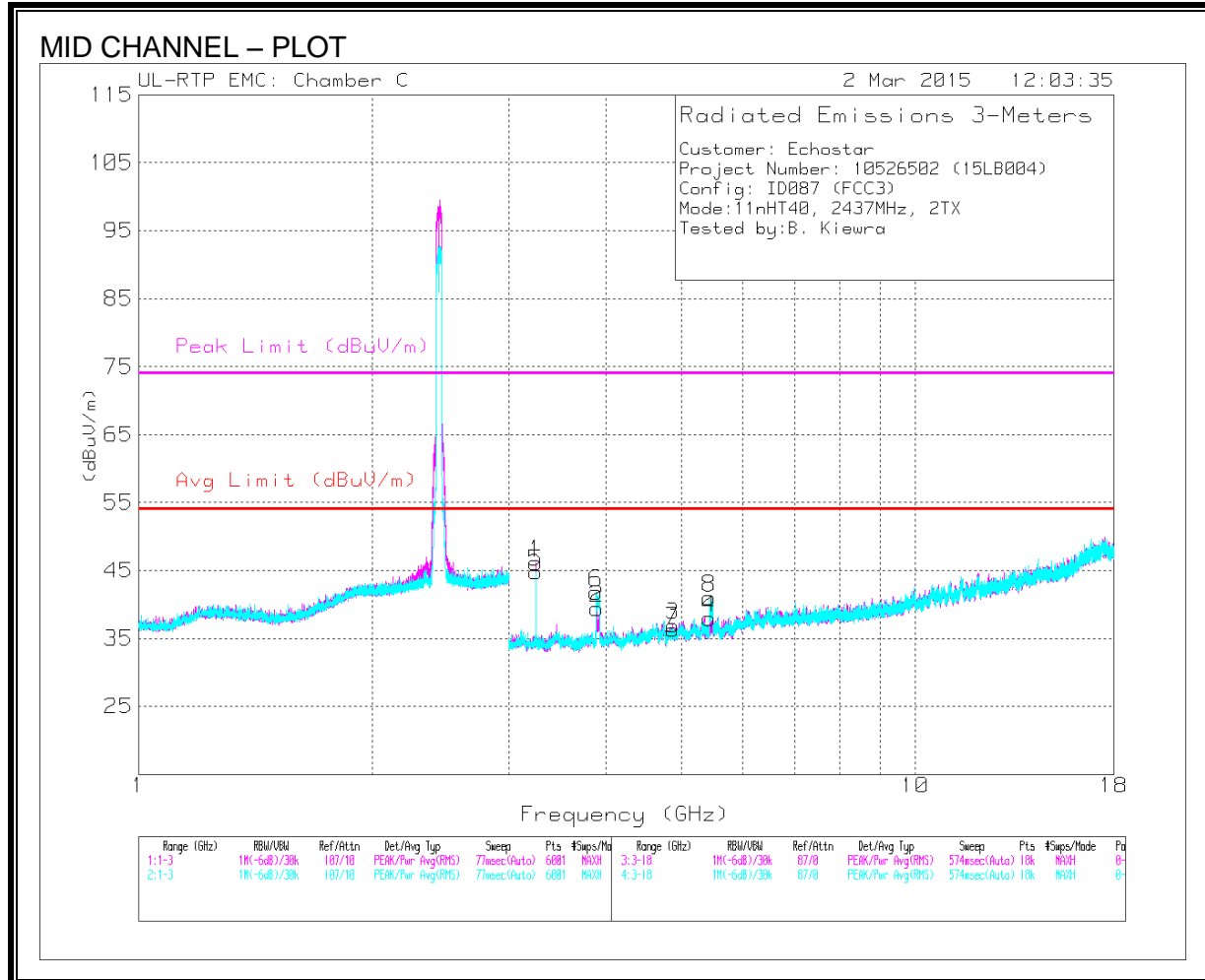
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.889	51.4	PK2	33.6	-34.5	0	50.5	-	-	74	-23.5	117	386	H
	* 3.889	35.81	MAv1	33.6	-34.5	0	34.91	54	-19.09	-	-	117	386	H
3	* 4.843	44.67	PK2	34.1	-32.8	0	45.97	-	-	74	-28.03	277	256	H
	* 4.843	32.61	MAv1	34.1	-32.8	.18	34.09	54	-19.91	-	-	277	256	H
4	* 5.438	43.45	PK2	34.5	-31.9	0	46.05	-	-	74	-27.95	296	207	H
	* 5.458	30.76	MAv1	34.5	-31.9	0	33.36	54	-20.64	-	-	296	207	H
6	* 3.886	51.68	PK2	33.6	-34.5	0	50.78	-	-	74	-23.22	75	219	V
	* 3.886	36.13	MAv1	33.6	-34.5	0	35.23	54	-18.77	-	-	75	219	V
7	* 5.445	47.05	PK2	34.5	-31.9	0	49.65	-	-	74	-24.35	326	324	V
	* 5.44	32.16	MAv1	34.5	-31.9	0	34.76	54	-19.24	-	-	326	324	V
1	3.229	47.73	Pk	32.9	-34.5	0	46.13	-	-	74	-27.87	0-360	250	H
5	3.229	47.67	Pk	32.9	-34.5	0	46.07	-	-	74	-27.93	0-360	151	V

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

PK - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average





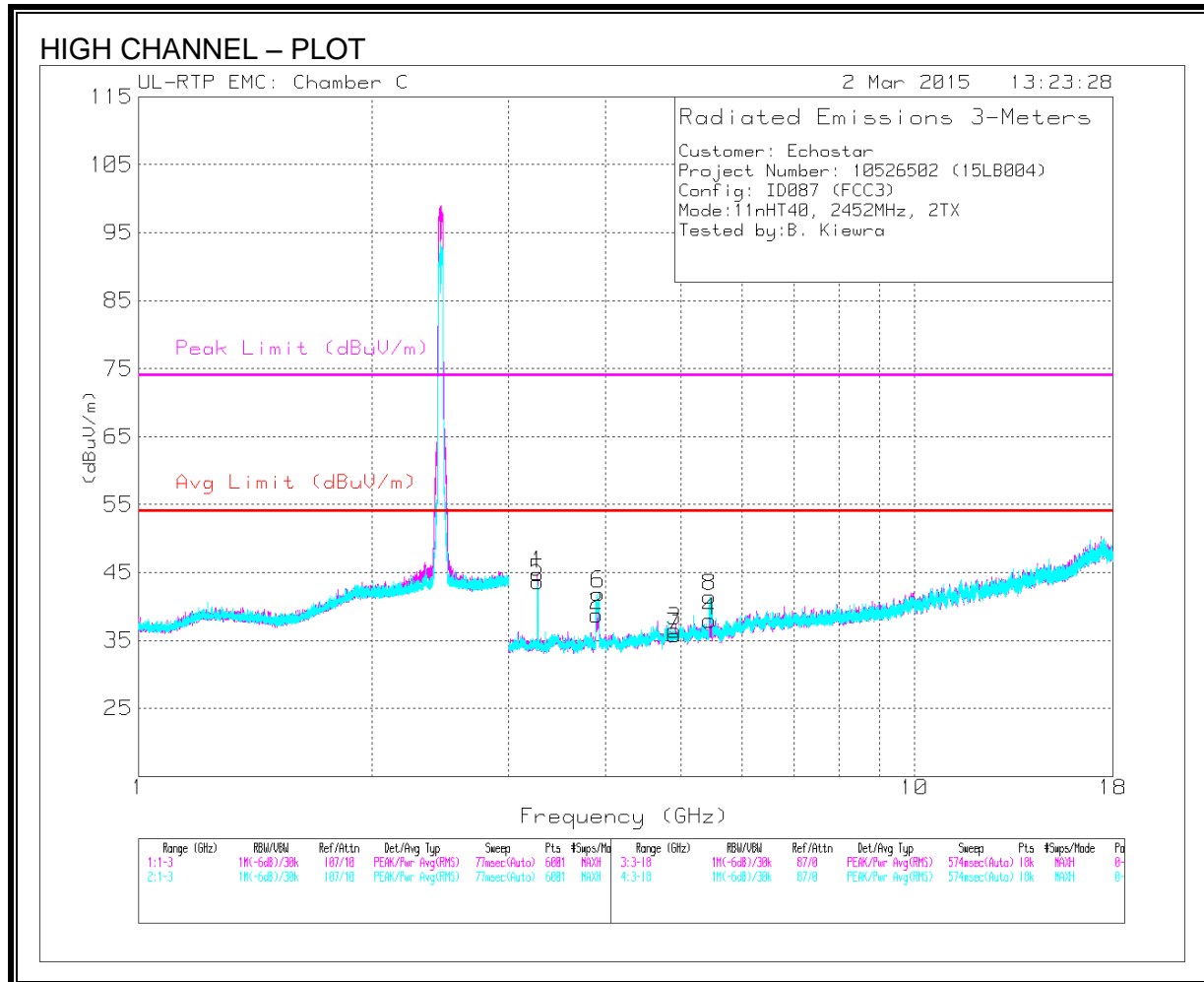
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl /Ftr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.889	51.52	PK2	33.6	-34.5	0	50.62	-	-	74	-23.38	121	327	H
	* 3.889	35.96	MAv1	33.6	-34.5	0	35.06	54	-18.94	-	-	121	327	H
3	* 4.874	45.13	PK2	34.1	-32.9	0	46.33	-	-	74	-27.67	271	251	H
	* 4.875	32.77	MAv1	34.1	-32.9	.18	34.15	54	-19.85	-	-	271	251	H
4	* 5.452	46.63	PK2	34.5	-32	0	49.13	-	-	74	-24.87	131	382	H
	* 5.458	31.77	MAv1	34.5	-31.9	0	34.37	54	-19.63	-	-	131	382	H
6	* 3.889	53.1	PK2	33.6	-34.5	0	52.2	-	-	74	-21.8	303	258	V
	* 3.889	36.89	MAv1	33.6	-34.5	0	35.99	54	-18.01	-	-	303	258	V
7	* 4.872	43.9	PK2	34.1	-32.9	0	45.1	-	-	74	-28.9	28	222	V
	* 4.872	31.56	MAv1	34.1	-32.9	.18	32.94	54	-21.06	-	-	28	222	V
8	* 5.445	47.39	PK2	34.5	-31.9	0	49.99	-	-	74	-24.01	83	310	V
	* 5.438	32.6	MAv1	34.5	-31.9	0	35.2	54	-18.8	-	-	83	310	V
1	3.249	47.55	Pk	32.9	-34.3	0	46.15	-	-	74	-27.85	0-360	250	H
5	3.249	46.17	Pk	32.9	-34.3	0	44.77	-	-	74	-29.23	0-360	151	V

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

Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average



Note – For Radiated Spurious, the High Channel was tested at the same power setting as Mid channel to achieve worst-case results.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0062 (dB/m)	Amp/Cbl/F ltr/Pad	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 3.911	50.88	PK2	33.6	-34.2	0	50.28	-	-	74	-23.72	121	370	H
	* 3.889	35.47	MAv1	33.6	-34.5	0	34.57	54	-19.43	-	-	121	370	H
3	* 4.904	45.73	PK2	34	-33.1	0	46.63	-	-	74	-27.37	107	294	H
	* 4.905	33.4	MAv1	34	-33.1	.18	34.48	54	-19.52	-	-	107	294	H
4	* 5.455	42.41	PK2	34.5	-32	0	44.91	-	-	74	-29.09	192	190	H
	* 5.458	30.54	MAv1	34.5	-31.9	0	33.14	54	-20.86	-	-	192	190	H
6	* 3.889	52.58	PK2	33.6	-34.5	0	51.68	-	-	74	-22.32	298	331	V
	* 3.889	36.68	MAv1	33.6	-34.5	0	35.78	54	-18.22	-	-	298	331	V
7	* 4.904	44.07	PK2	34	-33.1	0	44.97	-	-	74	-29.03	78	120	V
	* 4.903	31.73	MAv1	34	-33.1	.18	32.81	54	-21.19	-	-	78	120	V
8	* 5.447	47.53	PK2	34.5	-32	0	50.03	-	-	74	-23.97	89	294	V
	* 5.453	32.38	MAv1	34.5	-32	0	34.88	54	-19.12	-	-	89	294	V
1	3.269	46.19	Pk	32.9	-34.3	0	44.79	-	-	74	-29.21	0-360	250	H
5	3.269	45.02	Pk	32.9	-34.3	0	43.62	-	-	74	-30.38	0-360	151	V

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

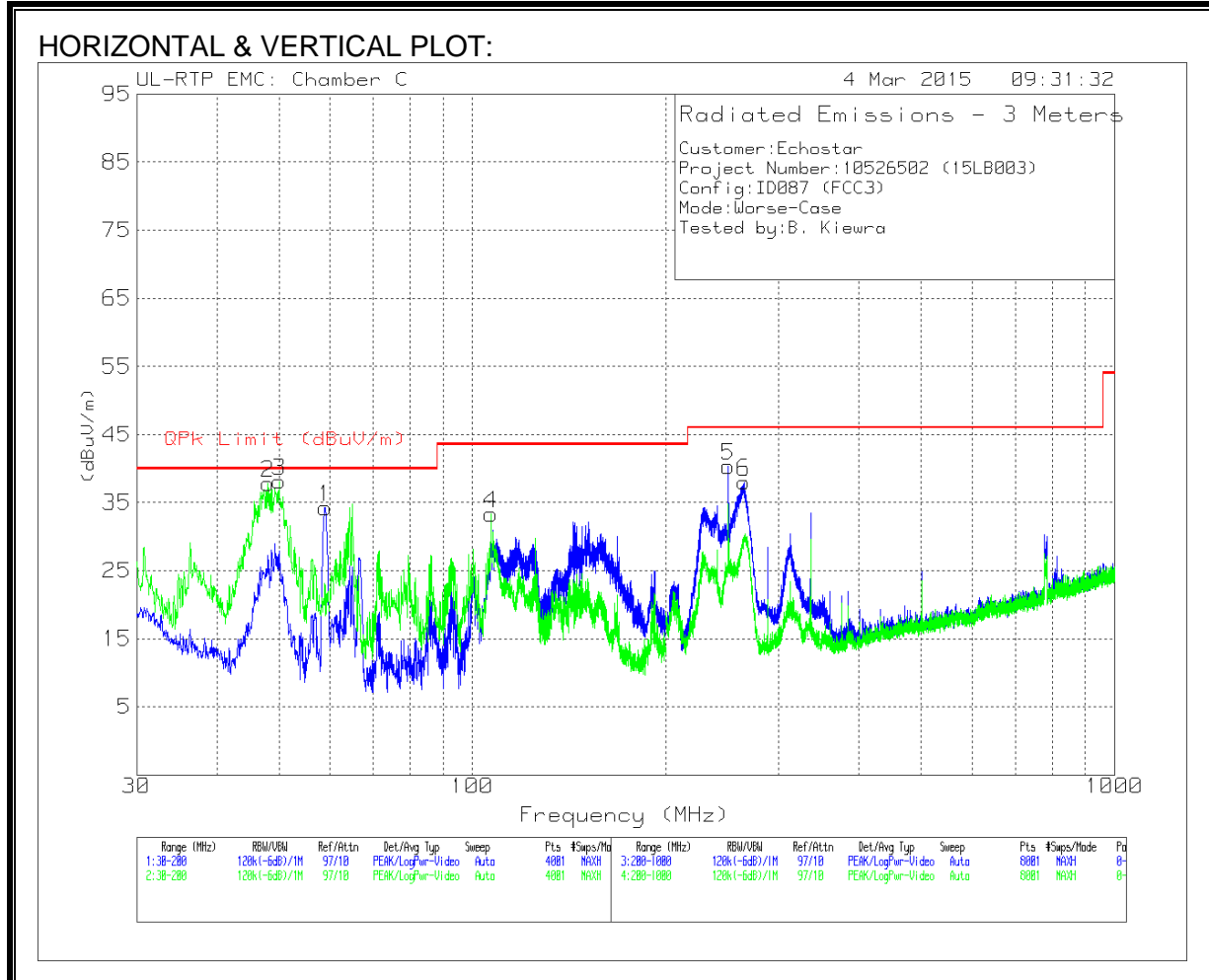
Pk - Peak detector

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

### 9.3. WORST-CASE BELOW 1 GHz

#### SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION IN THE 2.4GHz BAND)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0066 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 250.008	58.51	Qp	11.5	-30	40.01	46.02	-6.01	270	109	H
6	* 264.7	55.22	Pk	12.8	-30	38.02	46.02	-8	0-360	101	H
2	47.808	58.43	Qp	8.8	-31.4	35.83	40	-4.17	356	124	V
3	49.8315	57.98	Qp	7.9	-31.4	34.48	40	-5.52	45	106	V
1	56.7545	33.42	Qp	7.5	-31.3	9.62	40	-30.38	34	339	H
4	106.8825	52.04	Pk	12.1	-30.8	33.34	43.52	-10.18	0-360	101	V

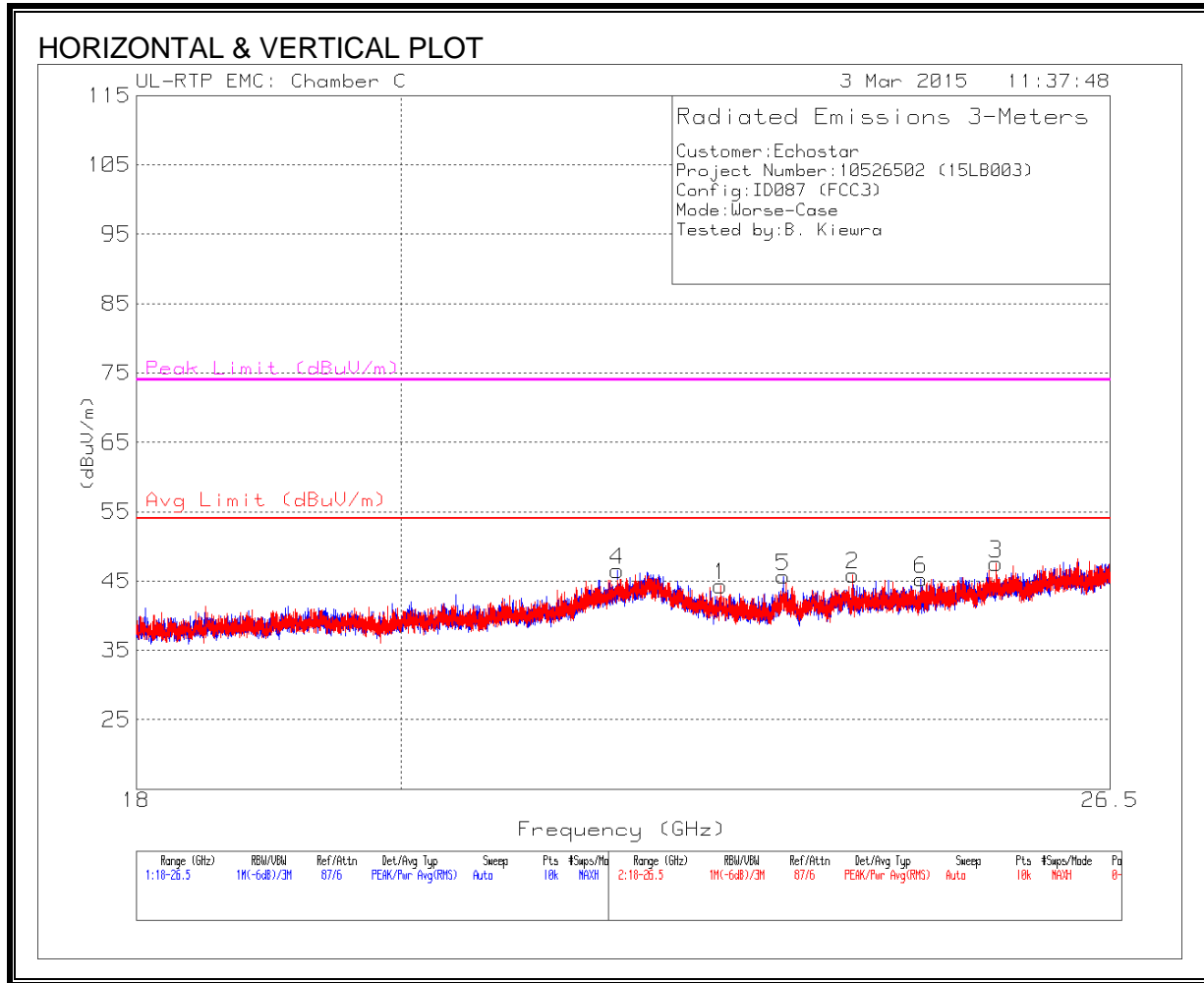
\* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

Pk - Peak detector

Qp - Quasi-Peak detector

### 9.4. WORST-CASE 18-26GHz

#### SPURIOUS EMISSIONS 18 TO 26GHz (WORST-CASE CONFIGURATION IN THE 2.4GHz BAND)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0063 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 22.702	42.03	Pk	34	-31.7	44.33	54	-9.67	74	-29.67	0-360	250	V
2	* 23.928	42.88	Pk	33.7	-30.7	45.88	54	-8.12	74	-28.12	0-360	250	V
4	21.791	42.02	Pk	36.4	-31.9	46.52	-	-	74	-27.48	0-360	151	H
5	23.278	43.07	Pk	33.5	-30.9	45.67	-	-	74	-28.33	0-360	151	H
6	24.584	41.16	Pk	33.8	-29.7	45.26	-	-	74	-28.74	0-360	151	H
3	25.326	42.42	Pk	33.9	-28.8	47.52	-	-	74	-26.48	0-360	150	V

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

Pk - 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

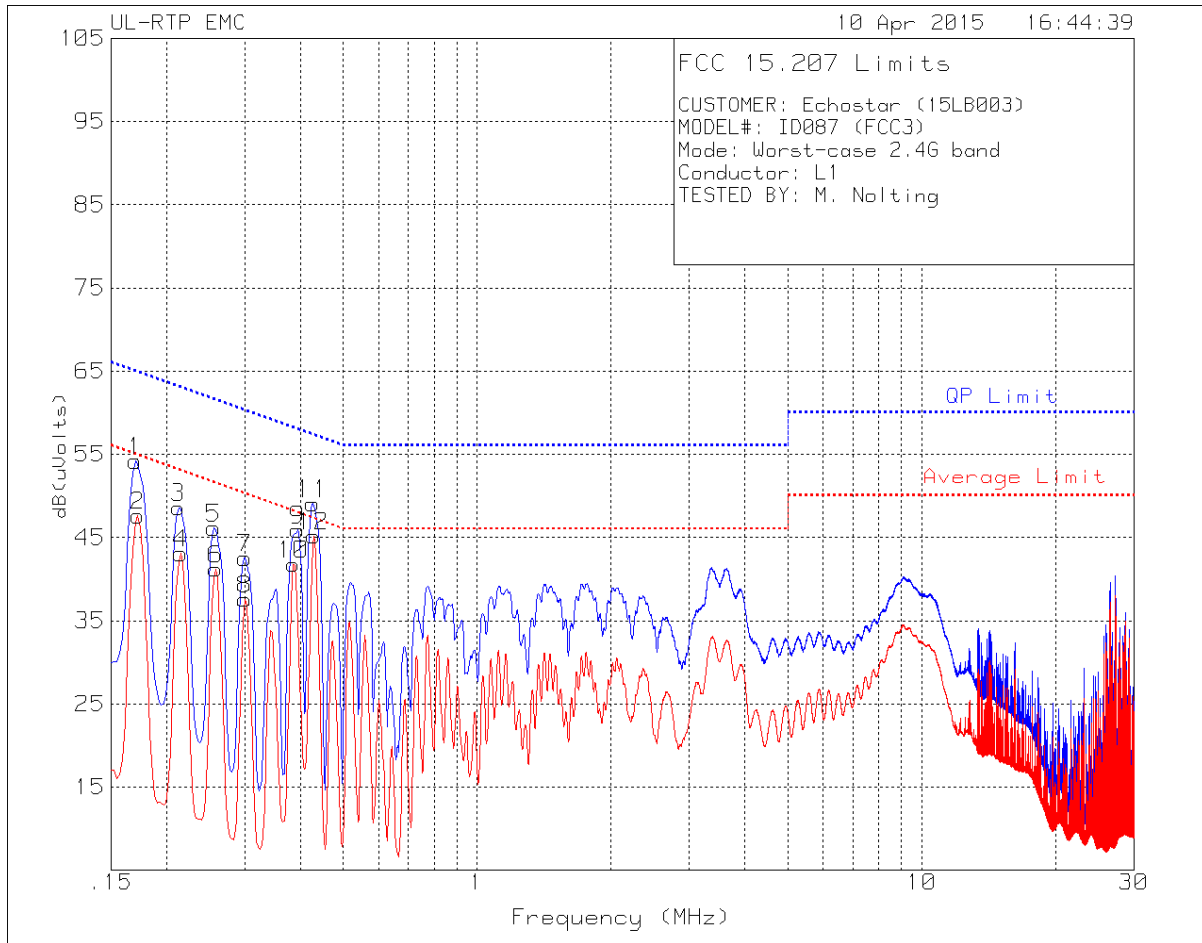
\* Decreases with the logarithm of the frequency.

### TEST PROCEDURE

Consistent with ANSI C63.4 and ANSI C63.10.

**RESULTS**

**LINE 1 RESULTS**

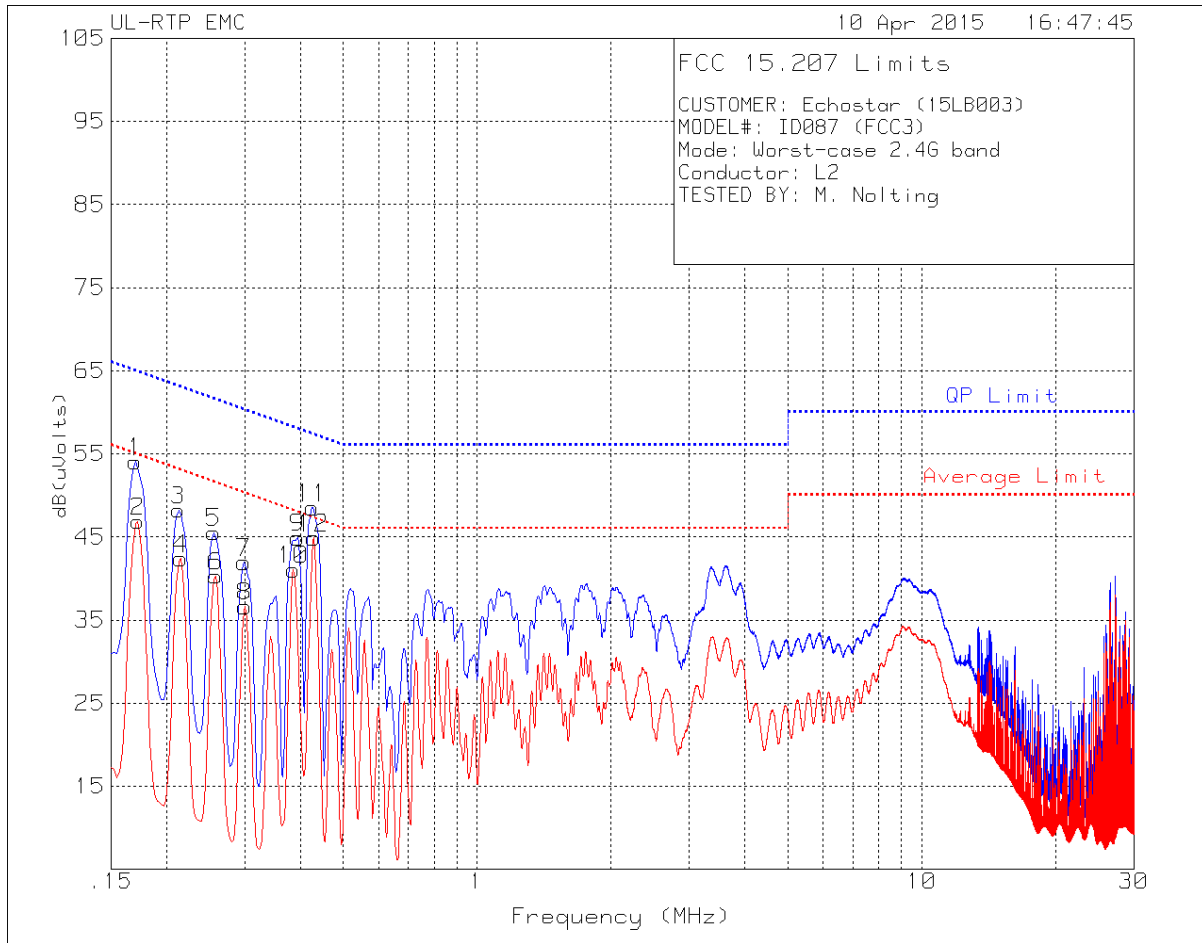


Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Limiter & Cable (dB)	Corrected Reading (dBuV)	QP Limit	QP Margin (dB)	Average Limit	Average Margin (dB)
1	.17025	44.53	Qp	.3	9.4	54.23	64.95	-10.72	-	-
2	.1725	37.93	Ca	.3	9.4	47.63	-	-	54.84	-7.21
3	.213	39	Qp	.2	9.4	48.6	63.09	-14.49	-	-
4	.21525	33.5	Ca	.2	9.4	43.1	-	-	53	-9.9
5	.25575	36.52	Qp	.2	9.4	46.12	61.57	-15.45	-	-
6	.258	31.62	Ca	.2	9.4	41.22	-	-	51.5	-10.28
7	.30075	33.02	Qp	.1	9.4	42.52	60.22	-17.7	-	-
8	.30075	28.08	Ca	.1	9.4	37.58	-	-	50.22	-12.64
10	.38625	32.29	Ca	.1	9.4	41.79	-	-	48.14	-6.35
9	.39525	36.39	Qp	.1	9.4	45.89	57.95	-12.06	-	-
11	.42675	39.56	Qp	.1	9.4	49.06	57.32	-8.26	-	-
12	.429	35.69	Ca	.1	9.4	45.19	-	-	47.27	-2.08

Qp - Quasi-Peak detector

Ca - CISPR average detection

**LINE 2 RESULTS**



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Limiter & Cable (dB)	Corrected Reading (dBuV)	QP Limit	QP Margin (dB)	Average Limit	Average Margin (dB)
1	.17025	44.35	Qp	.3	9.4	54.05	64.95	-10.9	-	-
2	.1725	37.19	Ca	.3	9.4	46.89	-	-	54.84	-7.95
3	.213	38.64	Qp	.2	9.4	48.24	63.09	-14.85	-	-
4	.21525	32.78	Ca	.2	9.4	42.38	-	-	53	-10.62
5	.25575	35.94	Qp	.2	9.4	45.54	61.57	-16.03	-	-
6	.258	30.7	Ca	.2	9.4	40.3	-	-	51.5	-11.2
7	.2985	32.43	Qp	.1	9.4	41.93	60.28	-18.35	-	-
8	.30075	27.14	Ca	.1	9.4	36.64	-	-	50.22	-13.58
10	.38625	31.58	Ca	.1	9.4	41.08	-	-	48.14	-7.06
9	.39525	35.44	Qp	.1	9.4	44.94	57.95	-13.01	-	-
11	.42562	39.01	Qp	.1	9.4	48.51	57.34	-8.83	-	-
12	.429	35.38	Ca	.1	9.4	44.88	-	-	47.27	-2.39

Qp - Quasi-Peak detector  
 Ca - CISPR average detection