



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

CERTIFICATION TEST REPORT

FOR

WIRELESS AUDIO MODULE

MODEL NUMBER: 420128RM

FCC ID: A94420128RM

IC: 3232A-420128RM

REPORT NUMBER: R11005838-E2

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Prepared for

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Revision History

<u>Version</u>	<u>Issue Date</u>	<u>Revisions</u>	<u>Revised By</u>
1	2016-03-25	Initial Issue	Ron Reichard
2	2016-05-06	Revised data rate information on page 9 and revised high radiated bandedge plots for 5.2 GHz to include fundamental (refer to pages 76 and 83). Revised equipment list due to associated radiated band edge retesting (page 15).	Jeff Moser

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: Bose Corp.
100 The Mountain Rd.
Framingham, Massachusetts, 01701, USA

EUT DESCRIPTION: Wireless Audio Module

MODEL: 420128RM

SERIAL NUMBER: Radiated: RE05, RE03
Conducted: 0109

DATE TESTED: 2016-01-14 to 2016-03-25, 2016-04-27

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart E	Pass
INDUSTRY CANADA RSS-247 Issue 1	Pass
INDUSTRY CANADA RSS-GEN Issue 4	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 LLC By:



Jeff Moser
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Prepared By:



Ron Reichard
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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 C63.10-2013, RSS-GEN Issue 4, RSS-247 Issue 1.

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 and 2800 Suite B, Perimeter Park Drive, Morrisville, NC 27560.

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

2800 Suite B Perimeter Park Dr., Morrisville, NC 27560
<input checked="" type="checkbox"/> Chamber NORTH
<input checked="" type="checkbox"/> Chamber SOUTH

The onsite chambers are covered under Industry Canada company address code 2180C with site numbers 2180C -1 through 2180C-4, respectively.

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

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Total RF power, conducted	+/- 0.45
RF power density, conducted	+/- 1.50
Spurious emissions, conducted	+/- 2.94
All emissions, radiated up to 18 GHz	+/- 5.36
Temperature	+/- 0.07
Humidity	+/- 2.26
DC and low frequency voltages	+/- 1.27

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

Model 420128RM is an Audio Transceiver module that uses QPSK modulation. The device operates in the 2.4/5.2/5.8 GHz bands, is SISO and utilizes two antennas for diversity.

5.1. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5180-5240	QPSK	8.83	7.64
5736-5814	QPSK	9.31	8.53

5.2. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes two inverted F trace antennas with gains as follows:

	5.2GHz	5.8GHz
Antenna-A	4.18 dBi	4.98 dBi
Antenna-B	5.02 dBi	5.56 dBi

5.3. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was Rev. 03.

The test utility software used during testing were the following macro commands:

5.2 GHz Band

- 5G2 Only.TTL
- Set_Both_5G_Power_Levels_PCL.TTL
- RF CHx.TTL (Where x = Low/Mid/High Channel)

5.8 GHz Band

- 5G8 Only.TTL
- Set_both_5G_Power_Levels_PCL_RevE+_2016-02-10.TTL
- RF CHx.TTL (Where x = Low/Mid/High Channel)

5.4. WORST-CASE CONFIGURATION AND MODE

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

The fundamental of the EUT was investigated in three orthogonal orientations X,Y,Z and was determined that in the 5.2 GHz band, the Z orientation was worst-case orientation for Antenna A and X orientation for Antenna B. In the 5.8 GHz band, the X orientation was worst-case orientation for Antenna A and B. Therefore, all final radiated testing was performed with the EUT in Z orientation for Antenna A and X orientation for Antenna B in the 5.2 GHz band and X orientation for Antenna A and Antenna B in the 5.8 GHz band

Worst-case data rate as provided by the client was: 22 Mbps

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop	Lenovo	T450	Not available	-
Laptop adapter	Lenovo	ADLX65NLC2A	Not available	-
USB to Serial Adapter	Tripp-Lite	USA-19HS	Not available	-
Power/communications adapter board	Not available	Not available	Not available	-
Wall mount 18V or 16V DC power supply (Control Board)	Jameco	DDU180100 or DCU160050	Not available	-

I/O CABLES

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length	Remarks
1	Antenna	1	SMA	Un-Shielded	0.5	SMA To SMA cable connecting SMA/U.FL adapter to SA.
2	Antenna	1	SMA to U.FL	Un-Shielded	0.1	SMA to U.FL adapter
3	EUT Data Port	1	Ribbon (26 conductor FFC)	Un-Shielded	0.2	Control Board to EUT
4	DC Supply	1	Barrel	Un-Shielded	0.5	DC Supply to Control Board. Control Board supplies power to EUT.
5	Serial to 3.5 mm	1	Serial	Un-Shielded	1.5	From USB/Serial adapter to 3.5 mm data port on control board.
6	USB	1	USB to USB	Un-Shielded	0.8	From PC to USB/Serial adapter
7	DC	1	DC	Un-Shielded	0.8	N/A
8	AC	1	2 Prong	Un-Shielded	1.5	N/A

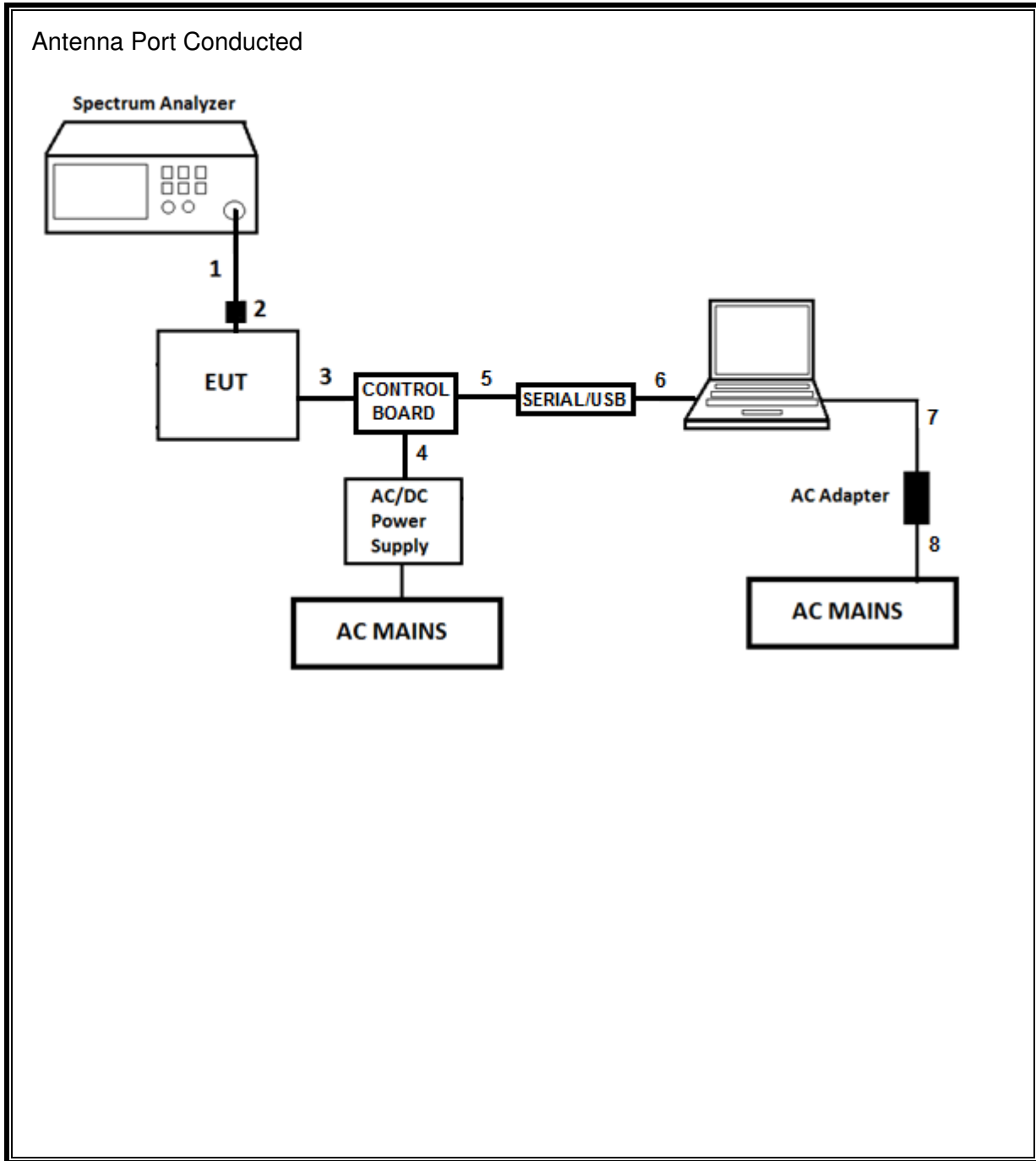
TEST SETUP

The EUT is connected to the Control Board during radiated-emissions testing. The Control Board allows for changing the EUT's channel/mode via laptop and provides power to the EUT.

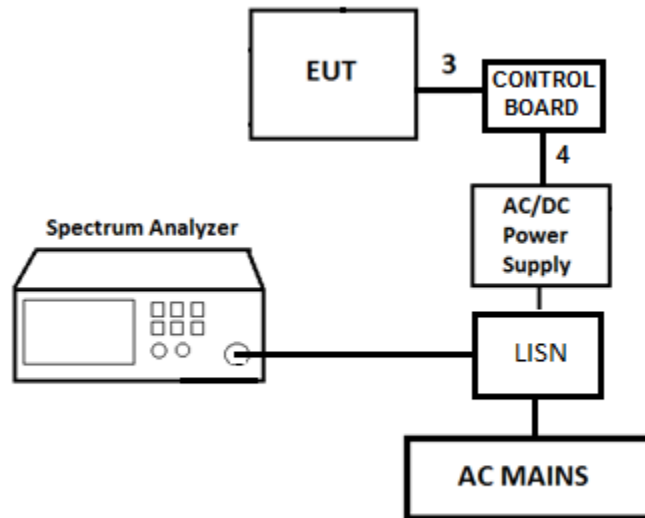
For convenience, the device is connected to a laptop PC via a Communications Control Board/Serial Cable/Serial-USB adapter/USB cable to configure the device for test during antenna-port measurements.

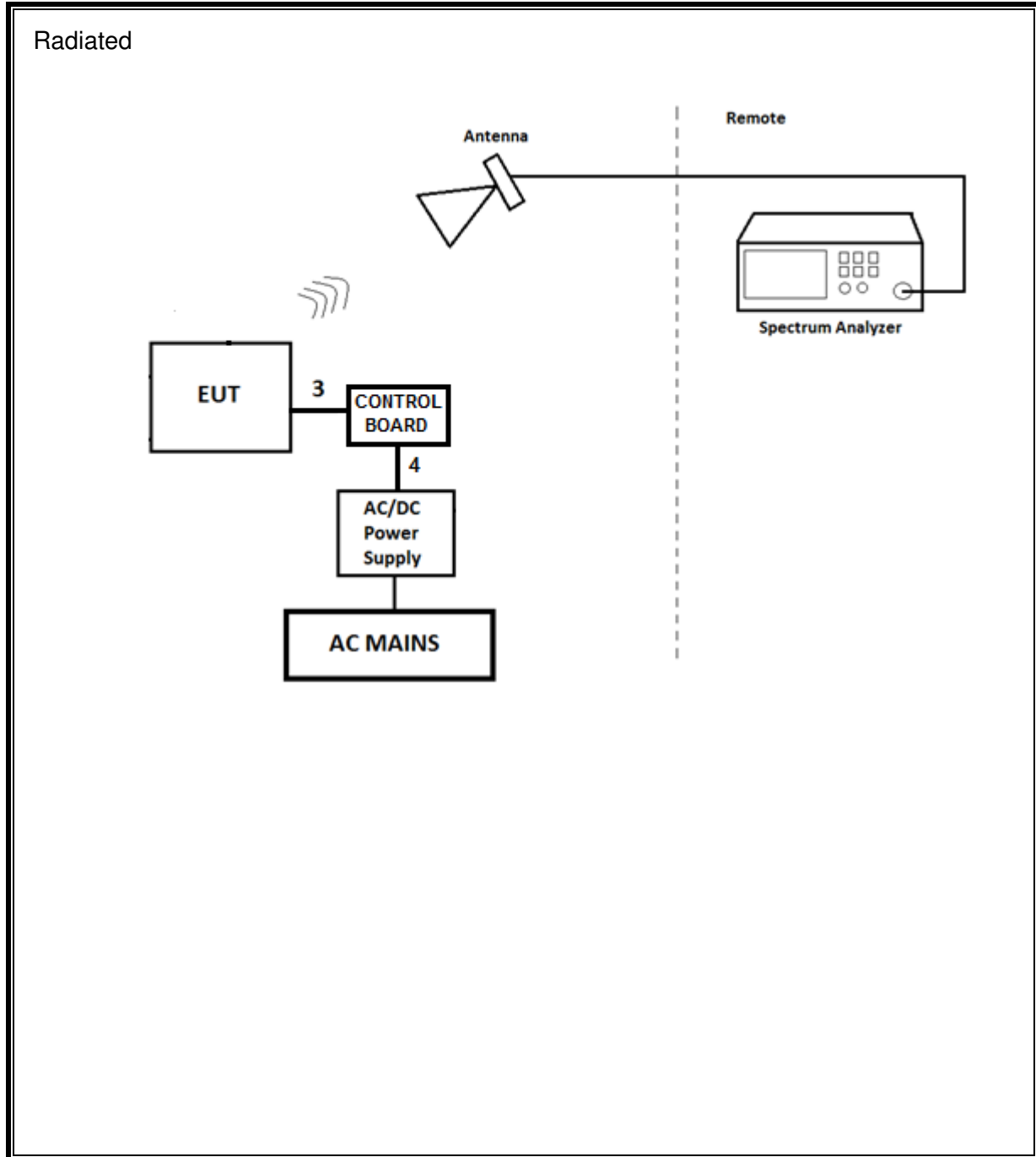
Test software exercised the radio portion of the device.

SETUP DIAGRAM FOR TESTS



Line Conducted





6. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville - North Chamber)

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
AT0073	Hybrid Broadband Antenna, 30-1000MHz	Sunol Sciences Corp.	JB3	2015-06-10	2016-06-30
AT0072	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2015-02-17, 2016-03-07	2016-02-29, 2017-03-31
N-SAC02	Gain-loss string: 30-1000MHz	Various	Various	2015-06-04	2016-06-30
N-SAC03	Gain-loss string: 1-18GHz	Various	Various	2015-09-29	2016-09-30
SA0026	Spectrum Analyzer	Agilent	N9030A	2015-03-27	2016-03-31
SA0027	Spectrum Analyzer	Agilent	N9030A	2016-02-08	2017-02-28
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
HI0079	Temp/Humid/Pressure Meter	Springfield Precision	PreciseTemp	2015-07-01	2016-07-31

Test Equipment Used - Radiated Disturbance Emissions Test Equipment (Morrisville - South Chamber)

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
AT0079	Active Loop Antenna	ETS-Lindgren	6502	2015-12-08	2016-12-31
S-SAC01	Gain-loss string: 0.009-30MHz	Various	Various	2015-10-07	2016-10-31
SA0025	Spectrum Analyzer	Agilent	N9030A	2016-03-17	2017-03-31
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
HI0050	Temp/Humid/Pressure Meter	Cole-Parmer	99760-00	2015-07-01	2016-07-31

Note – All testing in this chamber was performed on 2016-03-25.

Test Equipment Used - Radiated Disturbance Emissions (E-field) – Chamber C

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
AT0063	Horn Antenna, 18-26.5GHz	ARA	MWH-1826/B	2015-08-27	2016-08-31
AT0061	Horn Antenna, 26-40GHz	ARA	MWH-2640/B	2015-08-27	2016-08-31
C-SAC03	Gain-loss string: 18-40GHz	Various	Various	2015-09-27	2016-09-30
SA0016	Spectrum Analyzer	Agilent	N9030A	2015-08-26	2016-08-31
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
HI0034	Temp/Humid/Pressure Meter	Cole-Parmer	99760-00	2015-03-23	2016-03-31

Note – All testing in this chamber was performed prior to or on 2016-03-25.

Test Equipment Used - Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	Conducted Room 2				
SA0020	Spectrum Analyzer	Agilent Technologies	E4446A	2015-02-26	2016-02-29
PWM003	RF Power Meter	Keysight Technologies	N1911A	2015-06-08	2017-06-08
PWS003	Peak and Avg Power Sensor, 50MHz to 6GHz	Keysight Technologies	E9323A	2015-06-05	2016-06-05
43733	Temp/Humid/Pressure Meter	Cole-Parmer	99760-00	2014-03-24	2016-03-24
MM0168	True RMS Multimeter	Agilent	U1232A	2015-08-17	2016-08-31
76021	DC Regulated Power Supply	CircuitSpecialists.Com	CSI3005X5	NA	NA

Note – All testing in this room was performed prior to 2016-02-29

Test Equipment Used - Line-Conducted Emissions – Voltage (Morrisville – Conducted 1)

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
CBL077	Coax cable, RG223, N-male to BNC-male, 20-ft.	Pasternack	PE3476-240	2015-10-29	2016-10-31
HI0079	Temp/Humid/Pressure Meter	Springfield Precision	PreciseTemp	2015-07-01	2016-07-31
LISN002	LISN, 50-ohm/50-uH, 2-conductor, 25A	Fischer Custom Com.	FCC-LISN-50-25-2-01-550V	2015-08-24	2016-08-31
MM0167	Multi-meter	Agilent	U1232A	2015-08-17	2016-08-31
PRE0101521 (75141)	EMI Test Receiver 9kHz-7GHz	Rohde & Schwarz	ESCI 7	2015-08-26	2016-08-31
TL001	Transient Limiter, 0.009-30MHz	Com-Power	LIT-930A	2015-05-22	2016-05-31
PS215	AC Power Source	Elgar	CW2501M (s/n 1523A02397)	NA	NA
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA

7. MEASUREMENT METHODS

26 dB Emission BW: KDB 789033 D02 v01r01, Section C.

99% Occupied BW: KDB 789033 D02 v01r01, Section D.

Conducted Output Power: KDB 789033 D02 v01r01, Section E.3.a (Method PM).

Power Spectral Density: KDB 789033 D02 v01r01, Section F (Method SA-1).

Unwanted emissions in restricted bands: KDB 789033 D02 v01r01, Sections G.3, G.4, G.5, and G.6.

Unwanted emissions in non-restricted bands: KDB 789033 D02 v01r01, Sections G.3, G.4, and G.5.

8. ANTENNA PORT TEST RESULTS

8.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

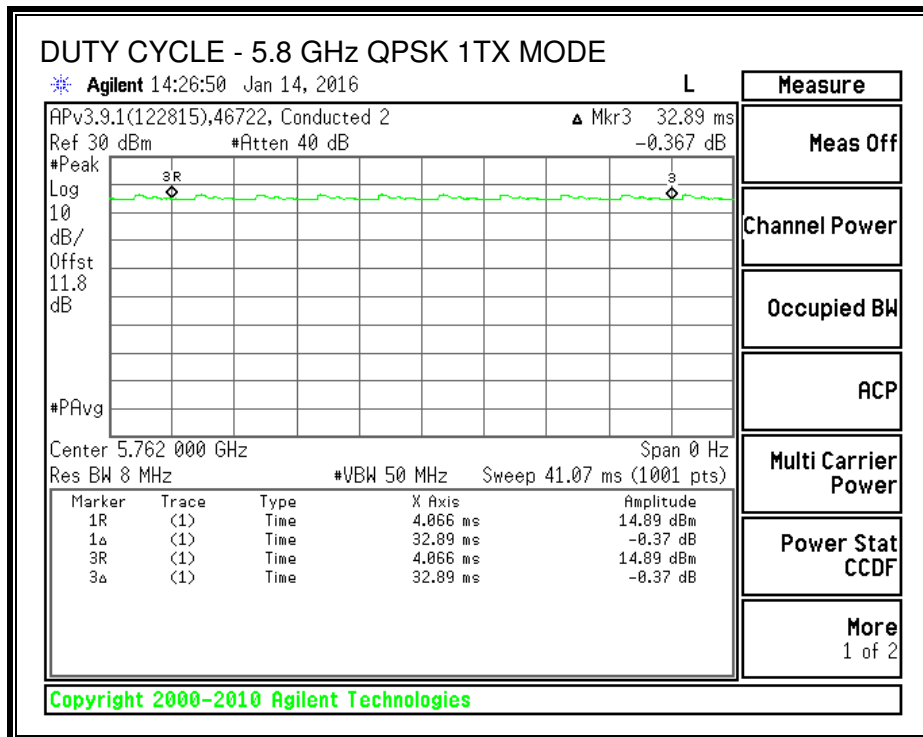
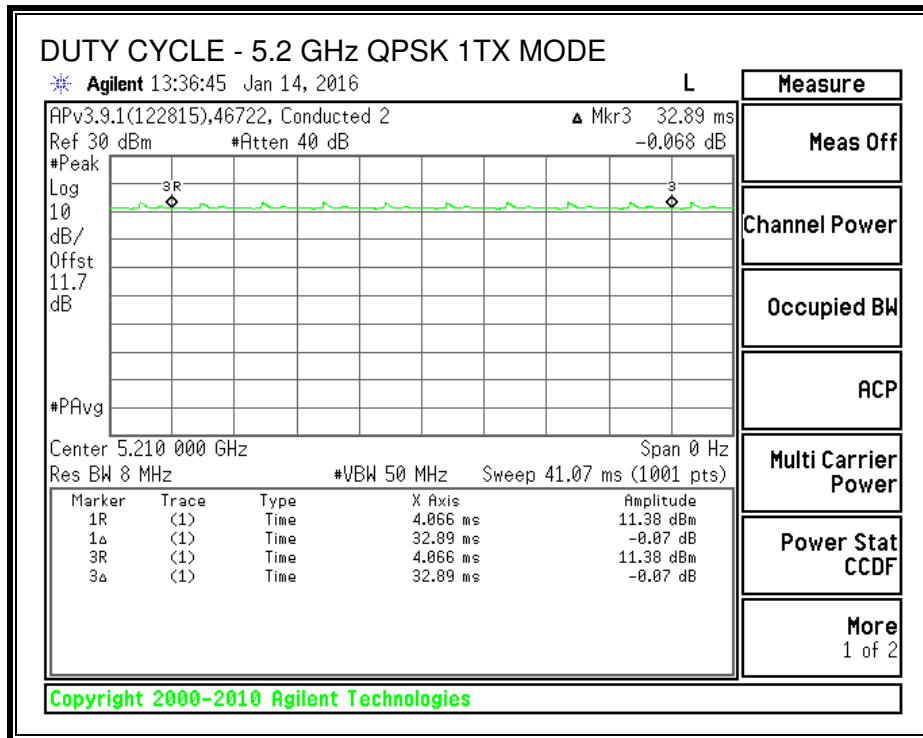
PROCEDURE

KDB 789033 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)
5.2 GHz QPSK	32.890	32.890	1.000	100.00%	0.00	0.010
5.8 GHz QPSK	32.890	32.890	1.000	100.00%	0.00	0.010

DUTY CYCLE PLOTS



8.2. QPSK MODE IN THE 5.2 GHz BAND

8.2.1. 26 dB BANDWIDTH

LIMITS

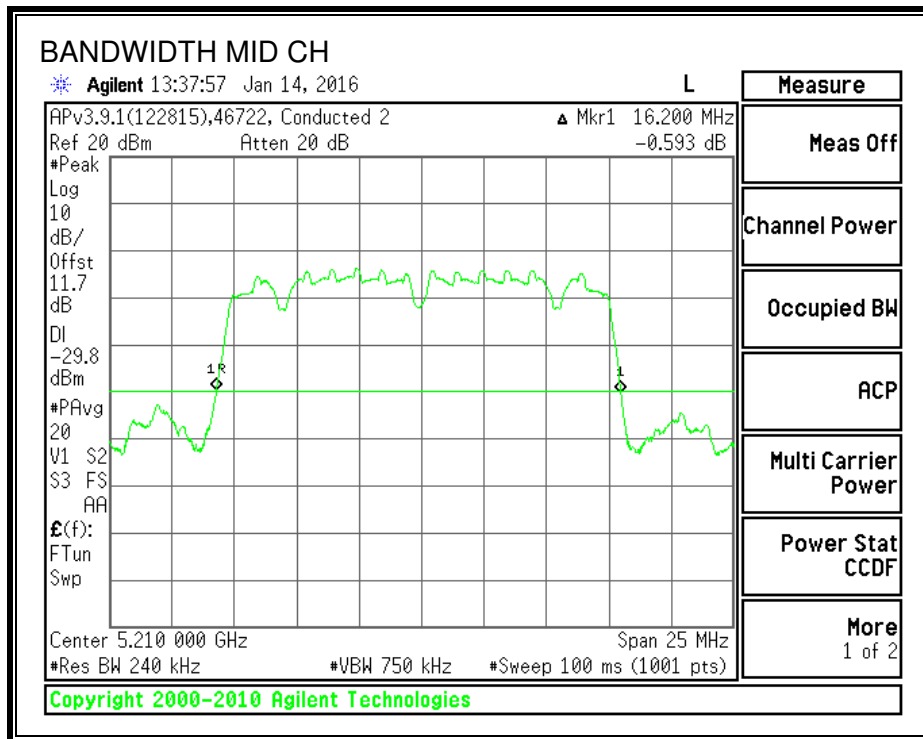
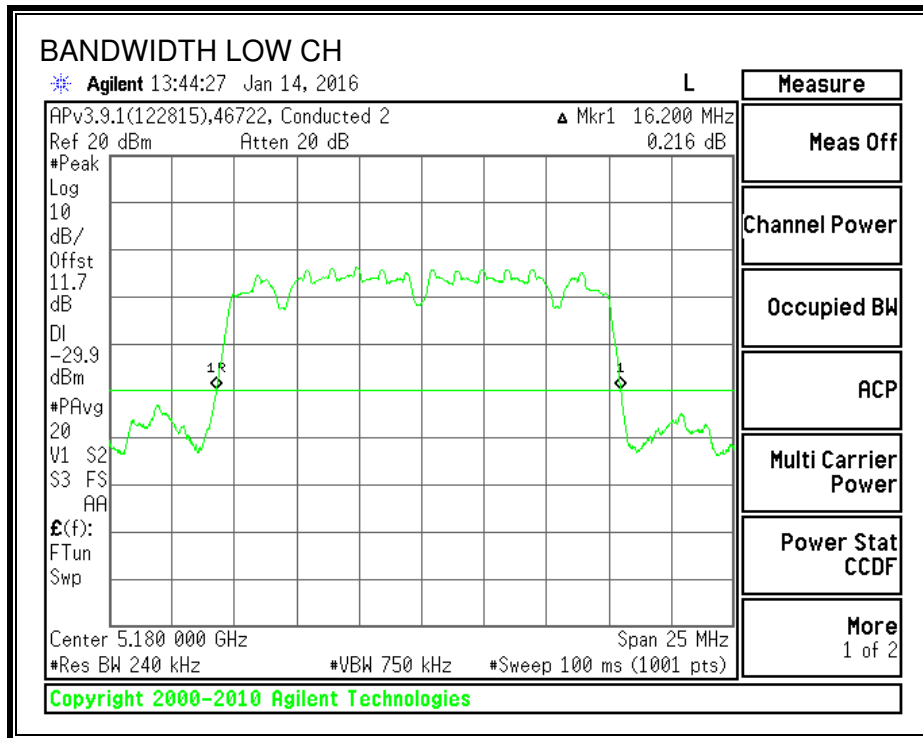
None; for reporting purposes only.

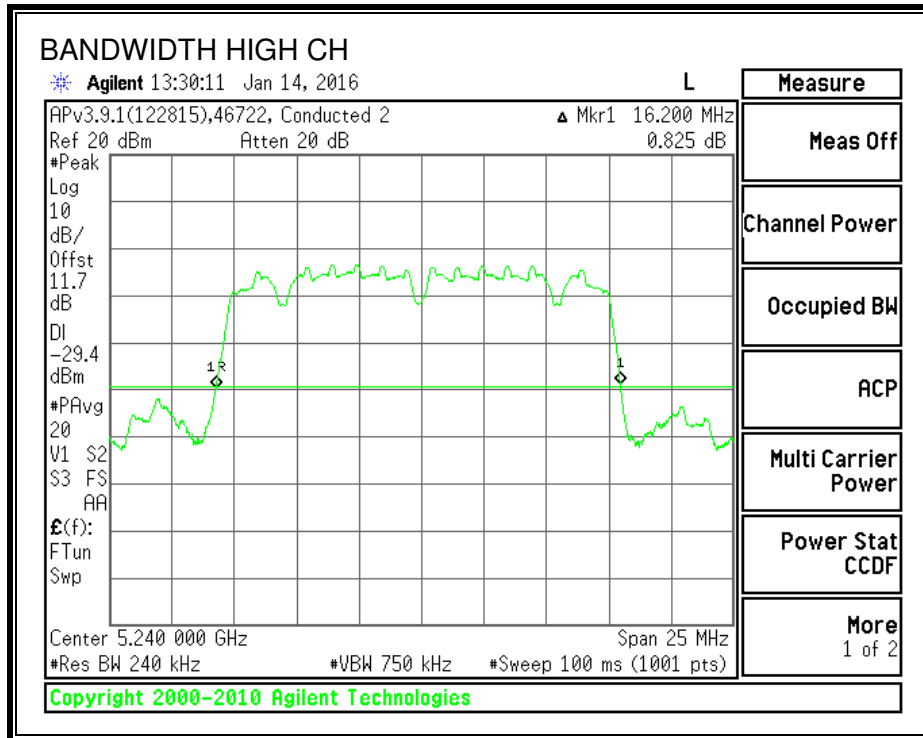
RESULTS

Chain 0

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	16.20
Mid	5210	16.20
High	5240	16.20

26 dB BANDWIDTH

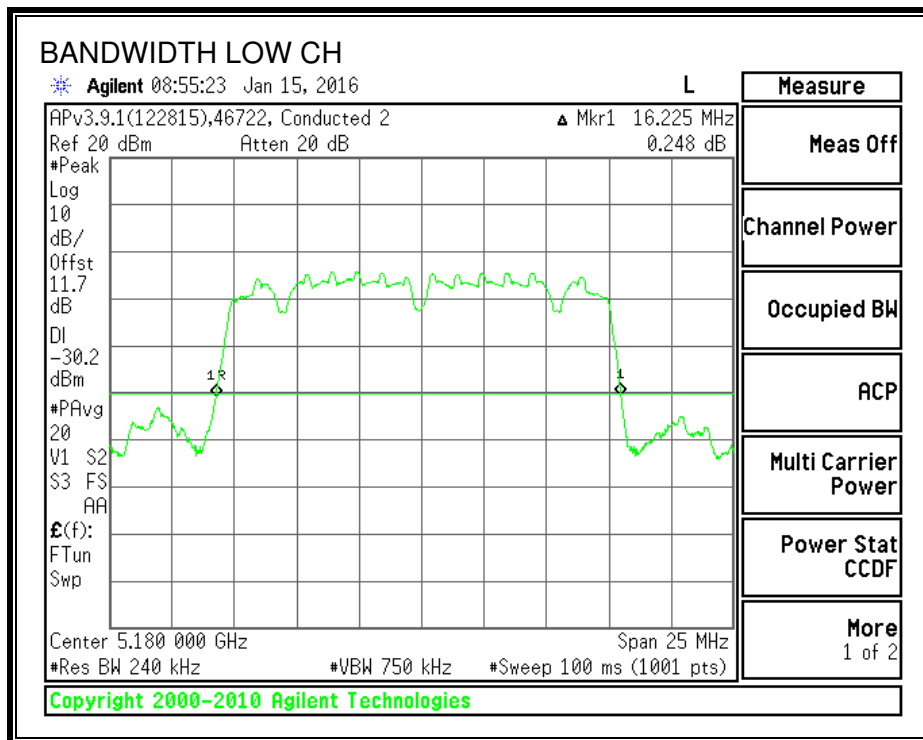


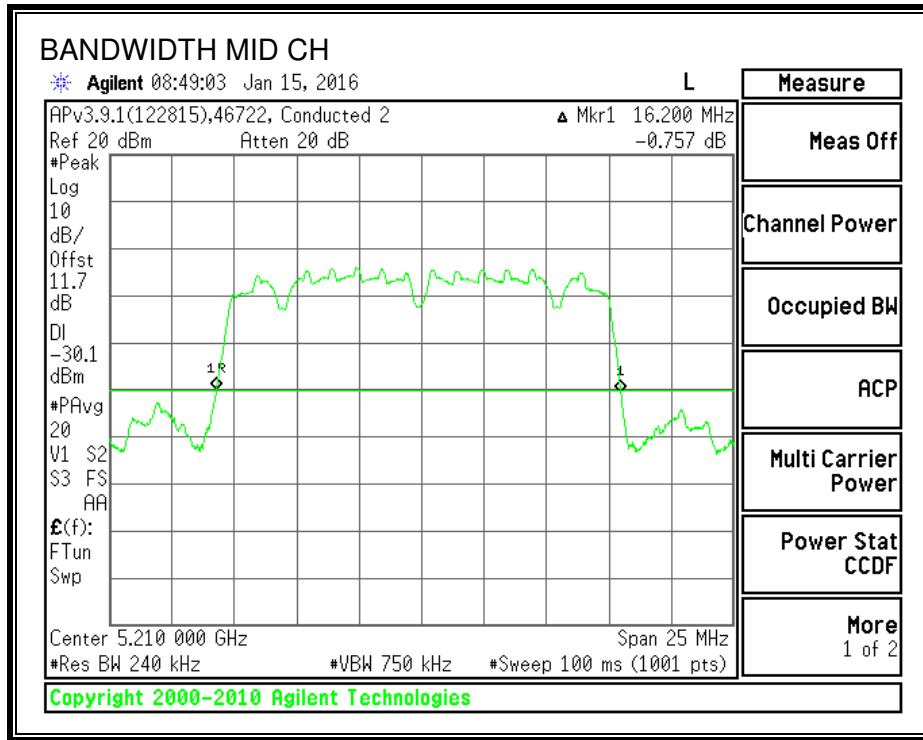


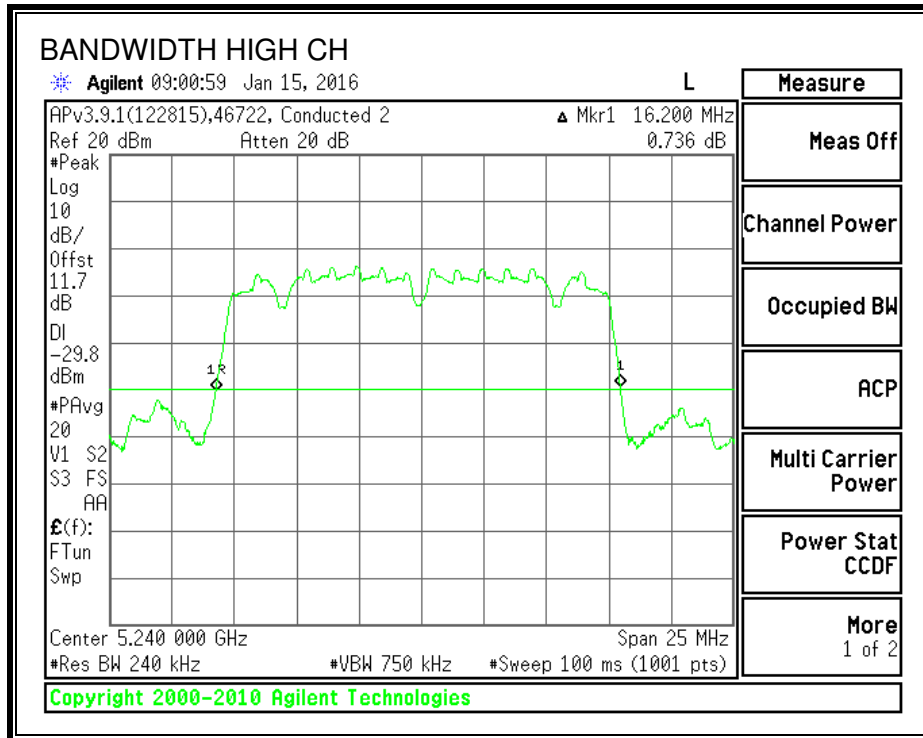
Chain 1

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	16.23
Mid	5210	16.20
High	5240	16.20

26 dB BANDWIDTH







8.2.2. 99% BANDWIDTH

LIMITS

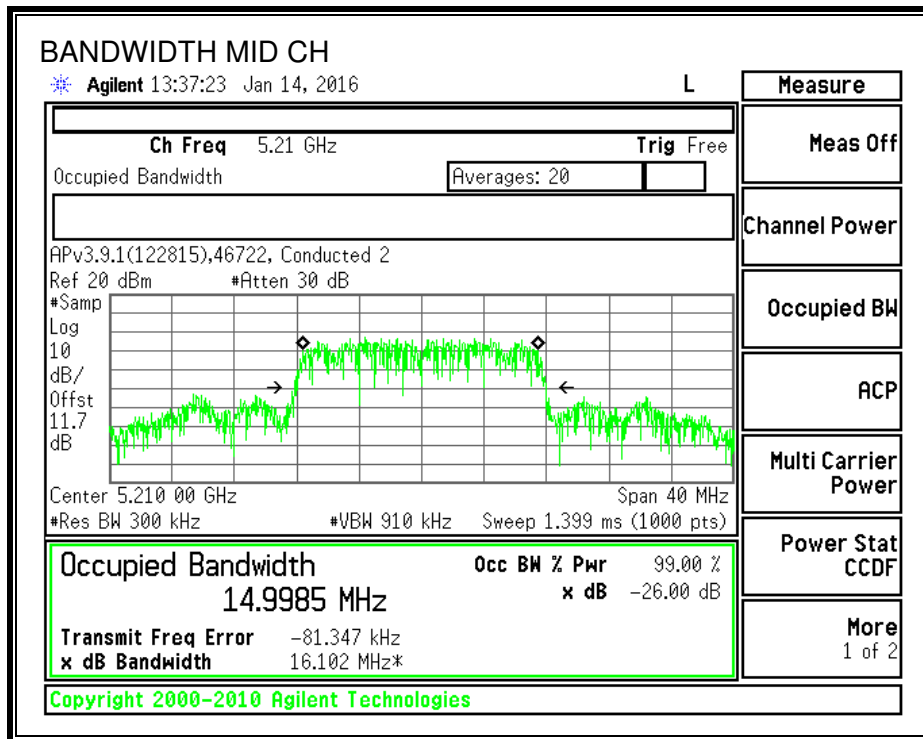
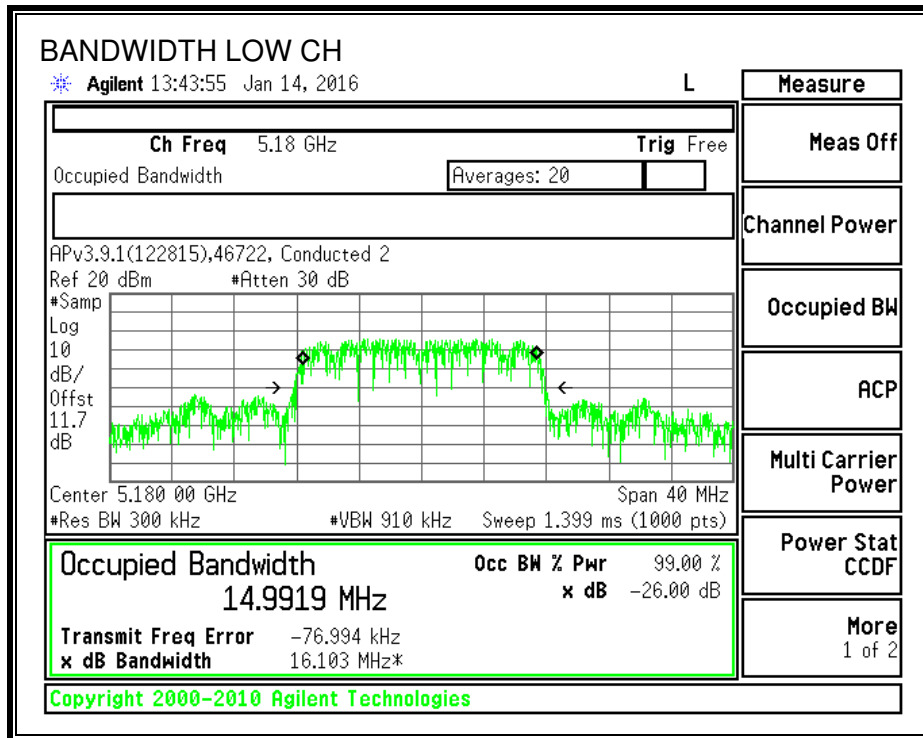
None; for reporting purposes only.

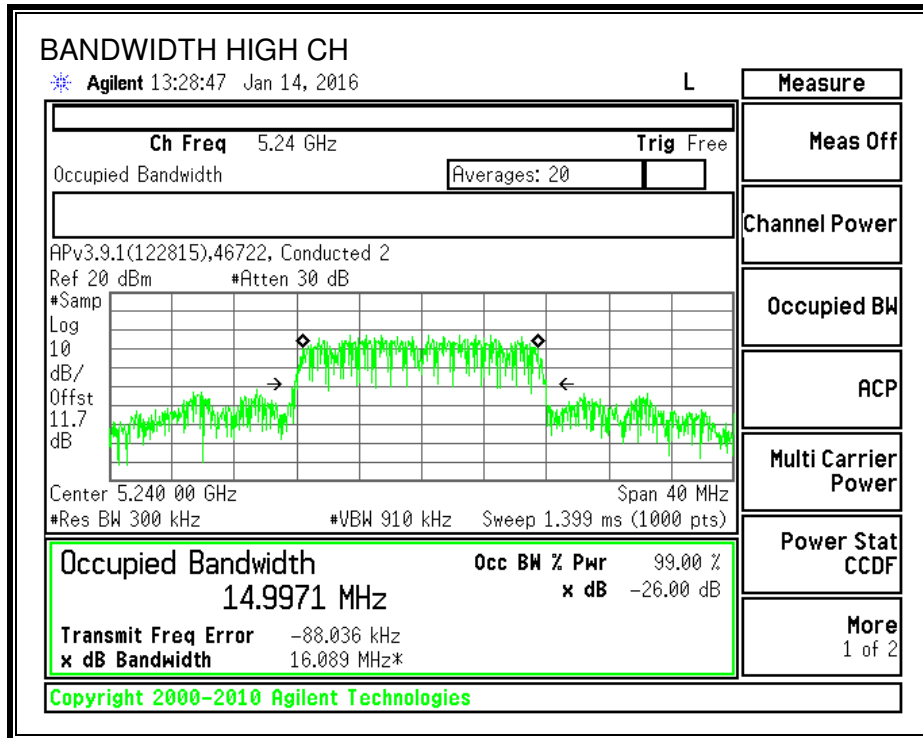
RESULTS

Chain 0

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	14.9919
Mid	5210	14.9985
High	5240	14.9971

99% BANDWIDTH

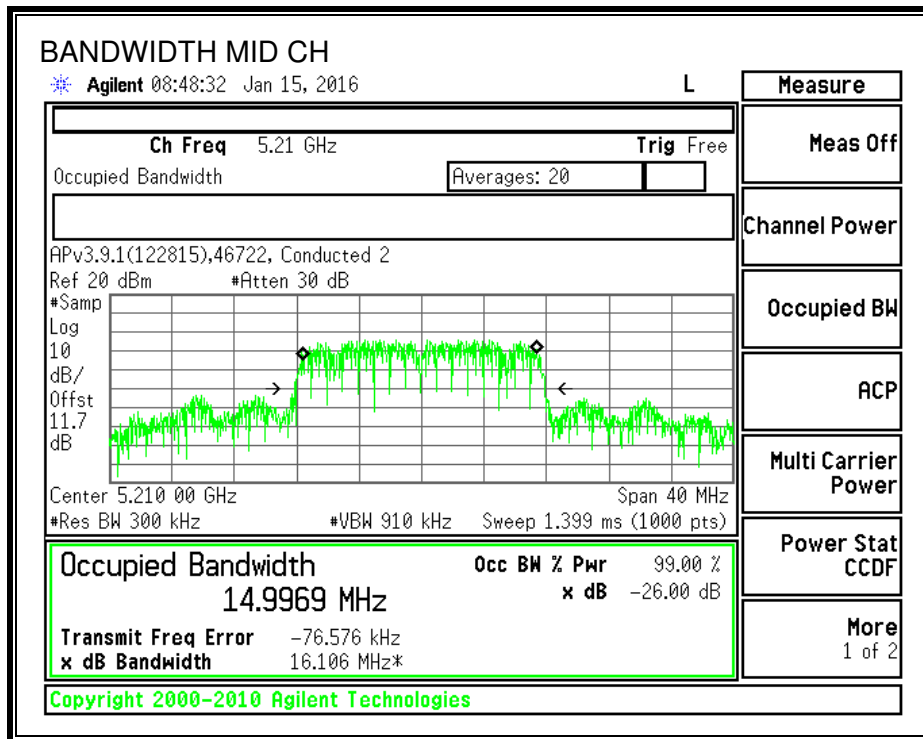
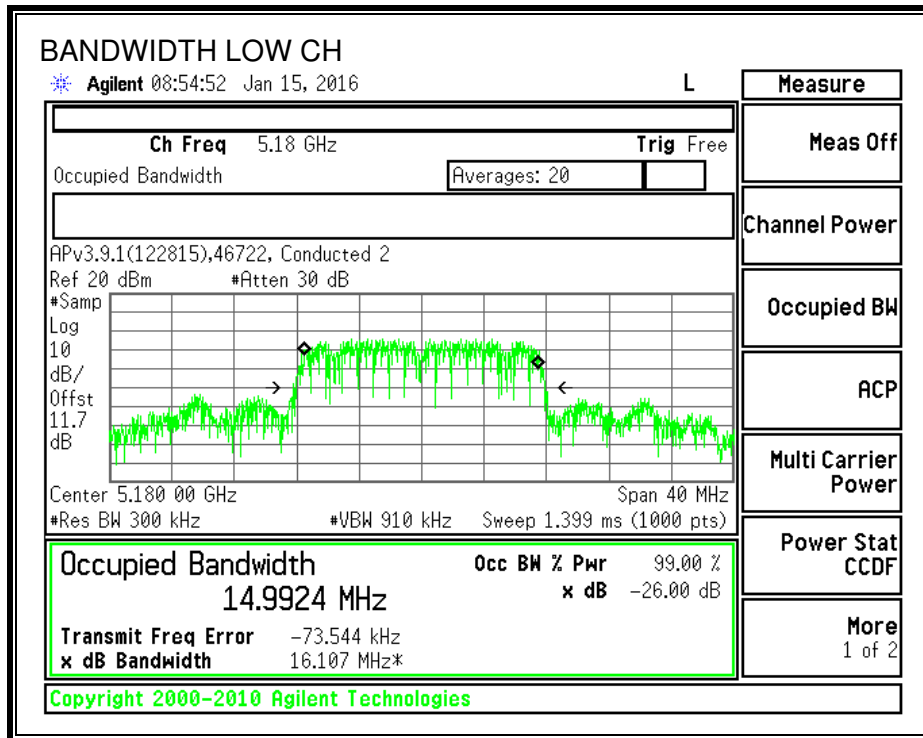


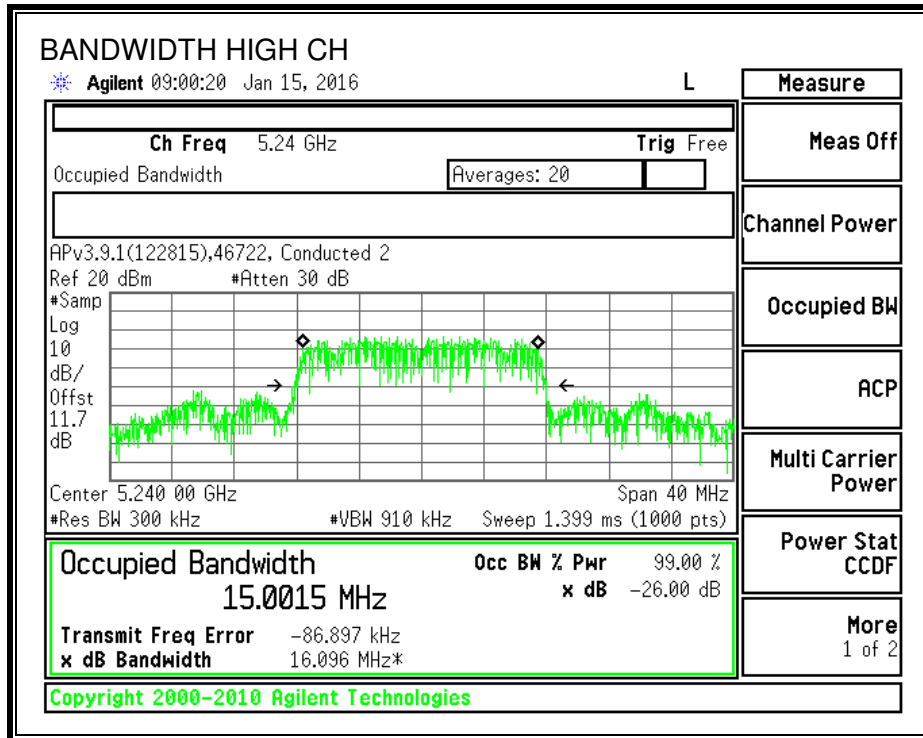


Chain 1

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	14.9924
Mid	5210	14.9969
High	5240	15.0015

99% BANDWIDTH





8.2.3. OUTPUT POWER AND PSD (FCC)

LIMITS

FCC §15.407 (a) (1)

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-to-point U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density 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 – There are two antennas with a diversity switch. Only one can transmit at any given time.

RESULTS

Chain 0

Note – The below results are average power measurements.

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	4.18	4.18	24.00	11.00
Mid	5210	4.18	4.18	24.00	11.00
High	5240	4.18	4.18	24.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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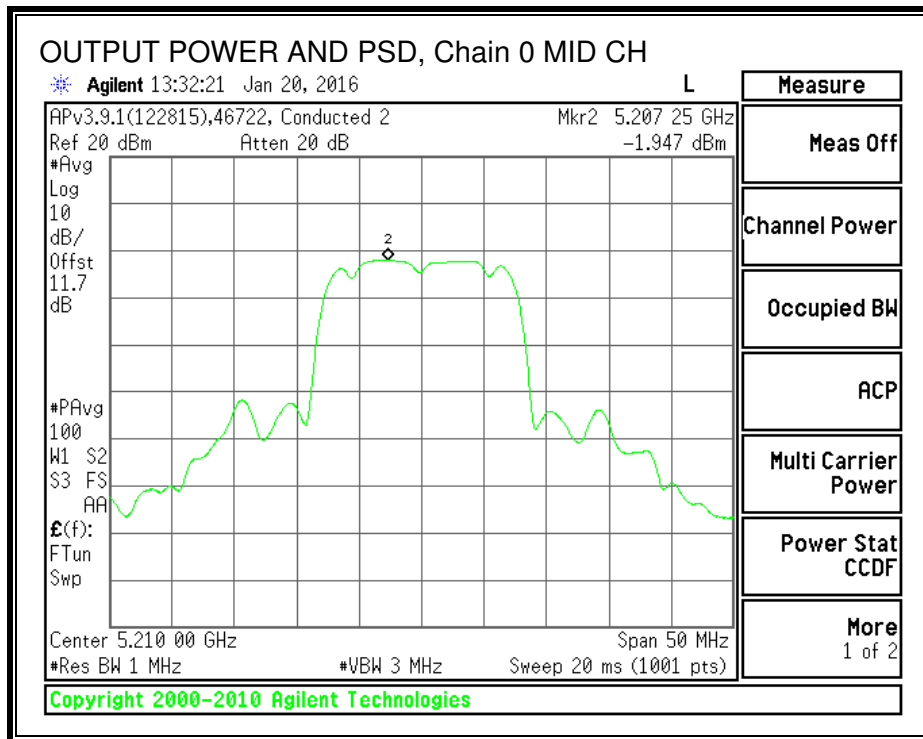
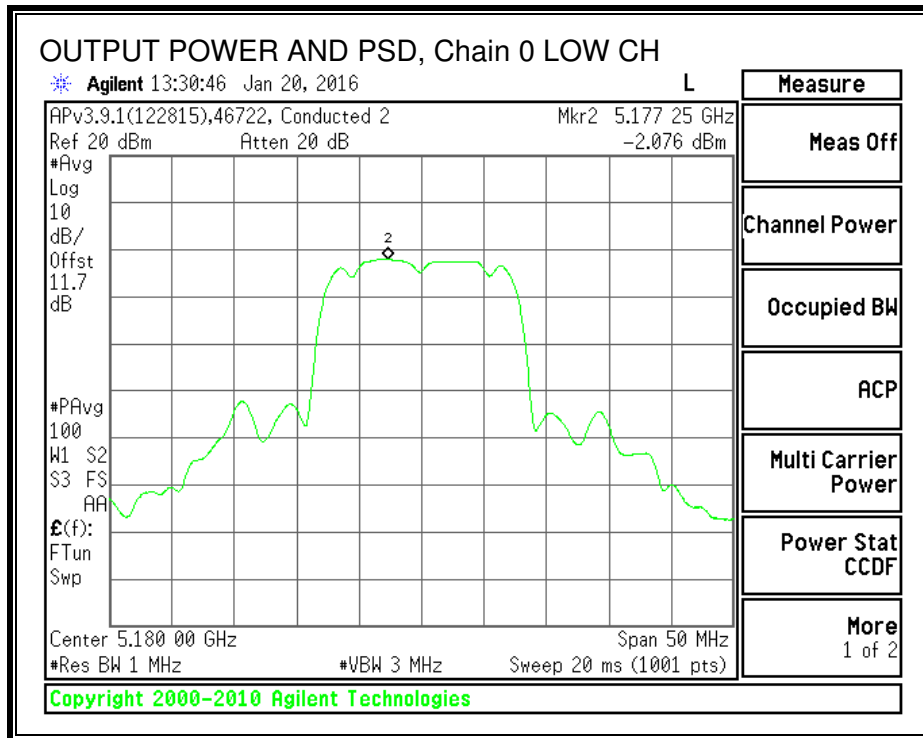
Output Power Results

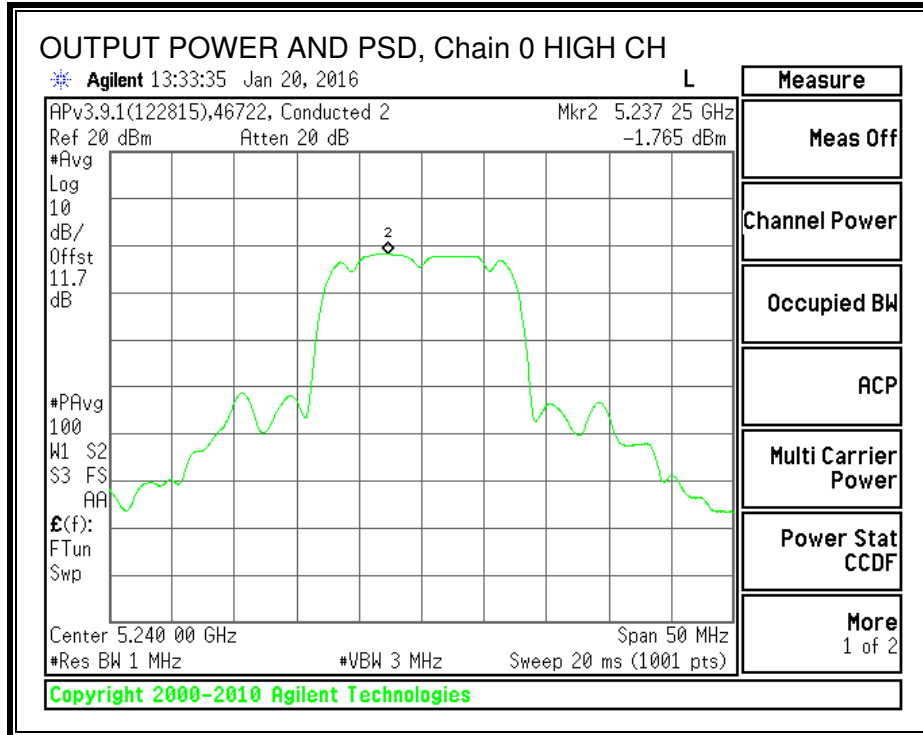
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	8.56	8.56	24.00	-15.44
Mid	5210	8.27	8.27	24.00	-15.73
High	5240	8.83	8.83	24.00	-15.17

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	-2.08	-2.08	11.00	-13.08
Mid	5210	-1.95	-1.95	11.00	-12.95
High	5240	-1.77	-1.77	11.00	-12.77

OUTPUT POWER AND PSD, Chain 0





Chain 1

Antenna Gain and Limits

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)	Power Limit (dBm)	PSD Limit (dBm)
Low	5180	5.02	5.02	24.00	11.00
Mid	5210	5.02	5.02	24.00	11.00
High	5240	5.02	5.02	24.00	11.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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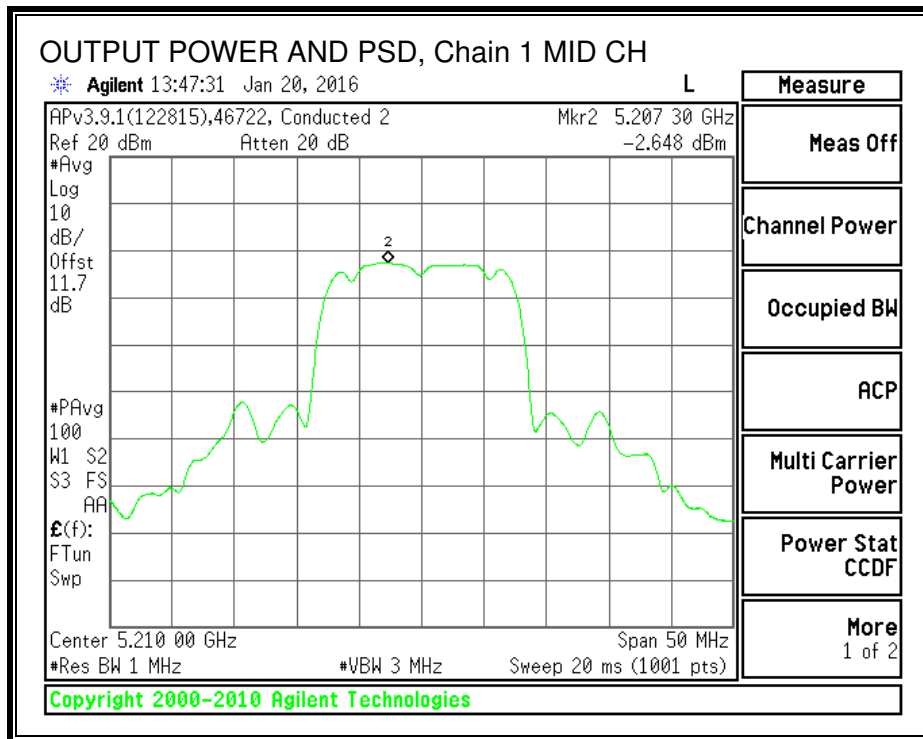
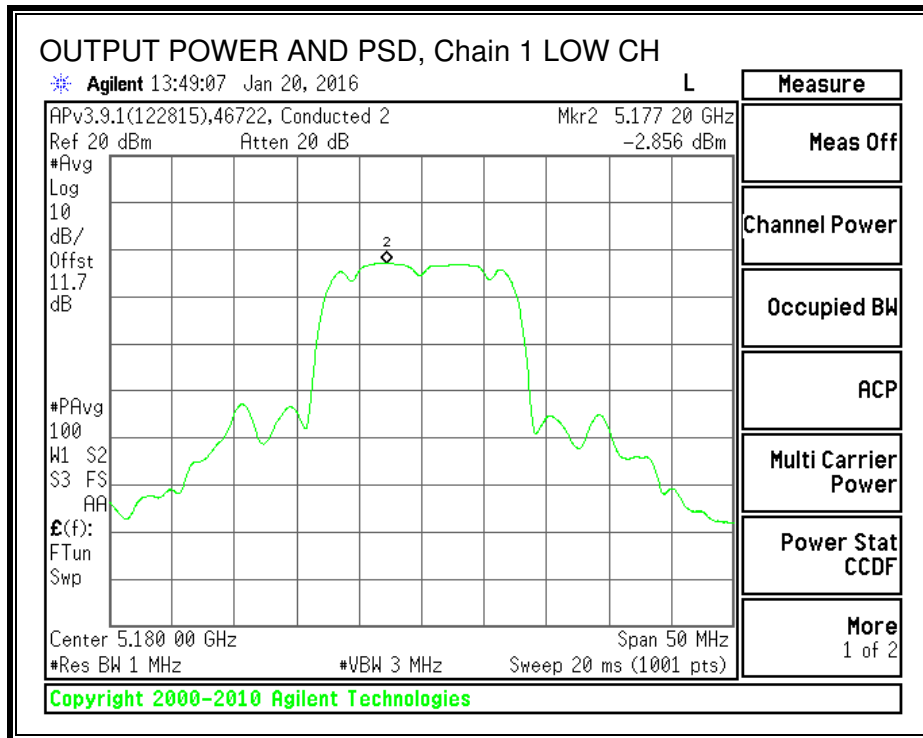
Output Power Results

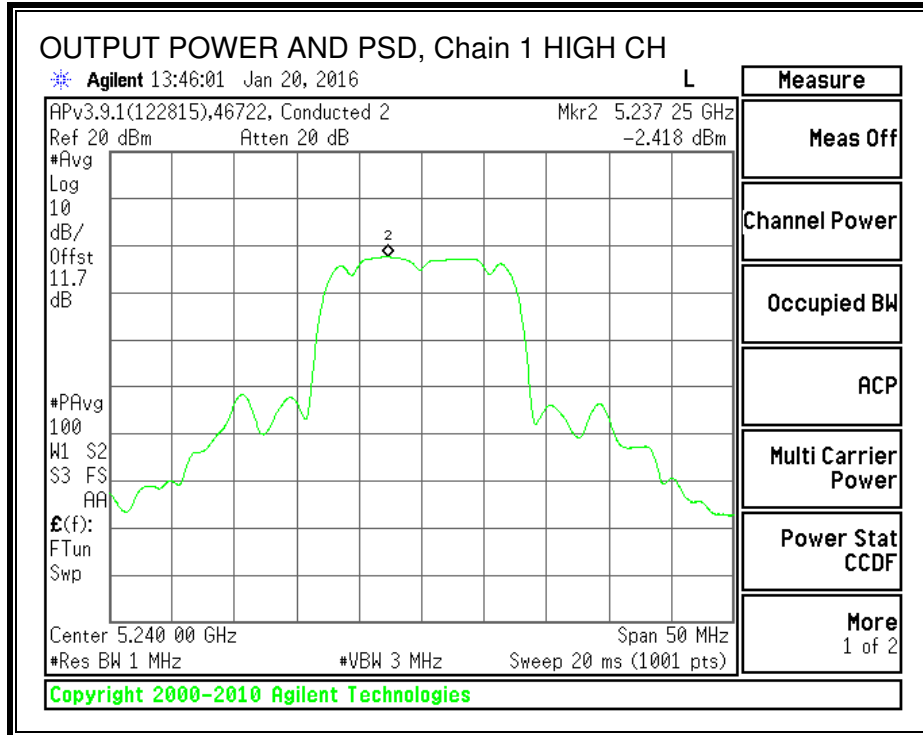
Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	8.00	8.00	24.00	-16.00
Mid	5210	8.35	8.35	24.00	-15.65
High	5240	8.31	8.31	24.00	-15.69

PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	-2.86	-2.86	11.00	-13.86
Mid	5210	-2.65	-2.65	11.00	-13.65
High	5240	-2.42	-2.42	11.00	-13.42

OUTPUT POWER AND PSD, Chain 1





8.2.4. OUTPUT POWER AND PPSD (IC)

LIMITS

IC RSS-247 6.2.1 (1)

The maximum e.i.r.p. shall not exceed 200 mW or $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.
Note – There are two antennas with a diversity switch. Only one can transmit at any given time.

RESULTS - QPSK, 5.2 GHz band

Chain 0

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)
Low	5180	14.9919	4.18	4.18
Mid	5210	14.9985	4.18	4.18
High	5240	14.9971	4.18	4.18

Limits

Channel	Frequency (MHz)	IC EIRP Limit (dBm)	IC eirp PSD Limit (dBm)
Low	5180	21.76	10.00
Mid	5210	21.76	10.00
High	5240	21.76	10.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	8.56	8.56	17.58	-9.02
Mid	5210	8.27	8.27	17.58	-9.31
High	5240	8.83	8.83	17.58	-8.75

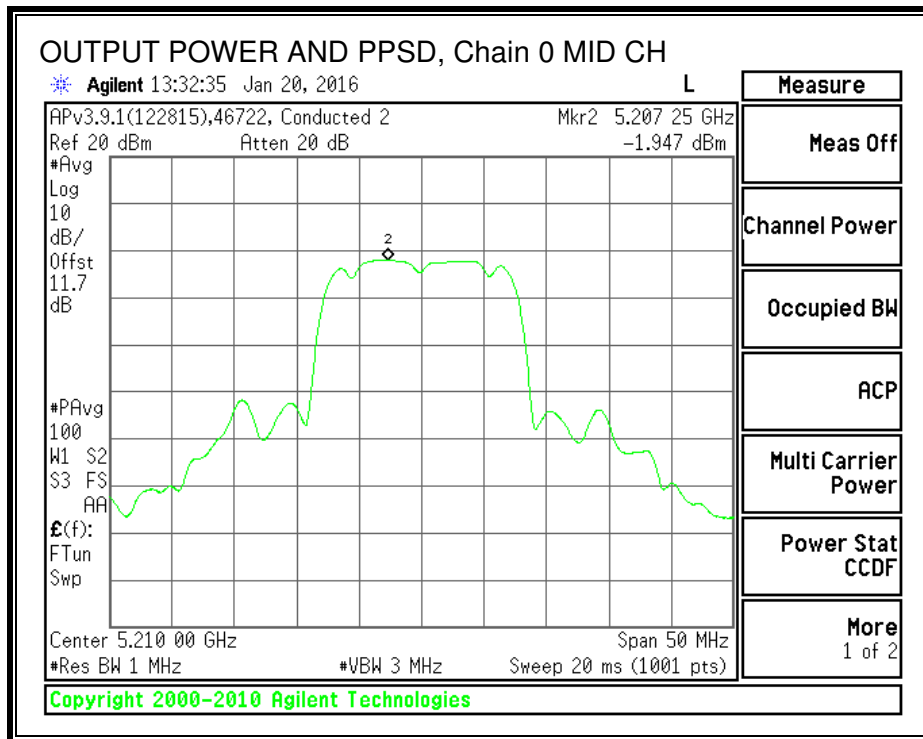
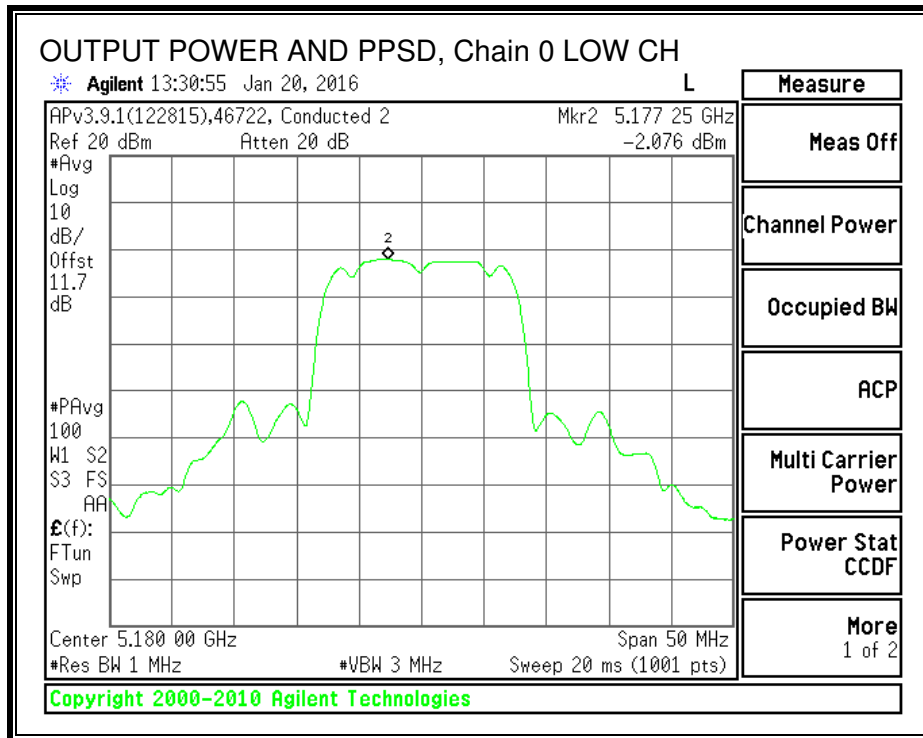
Note: Limit corrected by antenna gain.

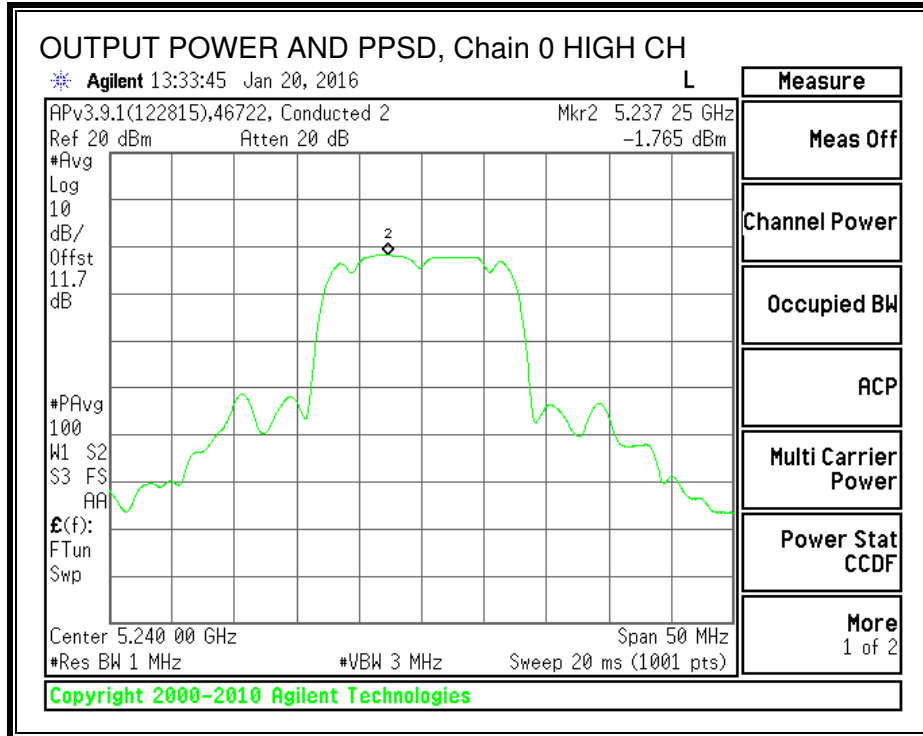
PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	-2.08	-2.08	5.82	-7.90
Mid	5210	-1.95	-1.95	5.82	-7.77
High	5240	-1.77	-1.77	5.82	-7.59

Note: Limit corrected by antenna gain.

OUTPUT POWER AND PPSD





Chain 1

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 99% BW (MHz)	Directional Gain for Power (dBi)	Directional Gain for PSD (dBi)
Low	5180	14.9924	5.02	5.02
Mid	5210	14.9969	5.02	5.02
High	5240	15.0015	5.02	5.02

Limits

Channel	Frequency (MHz)	IC EIRP Limit (dBm)	IC eirp PSD Limit (dBm)
Low	5180	21.76	10.00
Mid	5210	21.76	10.00
High	5240	21.76	10.00

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	8.00	8.00	16.74	-8.74
Mid	5210	8.35	8.35	16.74	-8.39
High	5240	8.31	8.31	16.74	-8.43

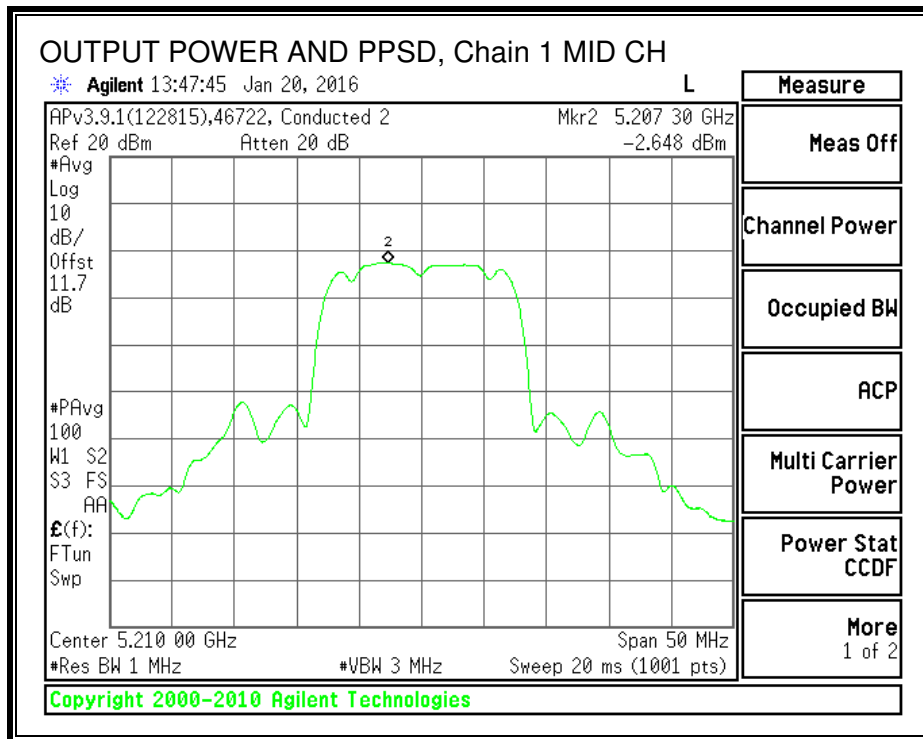
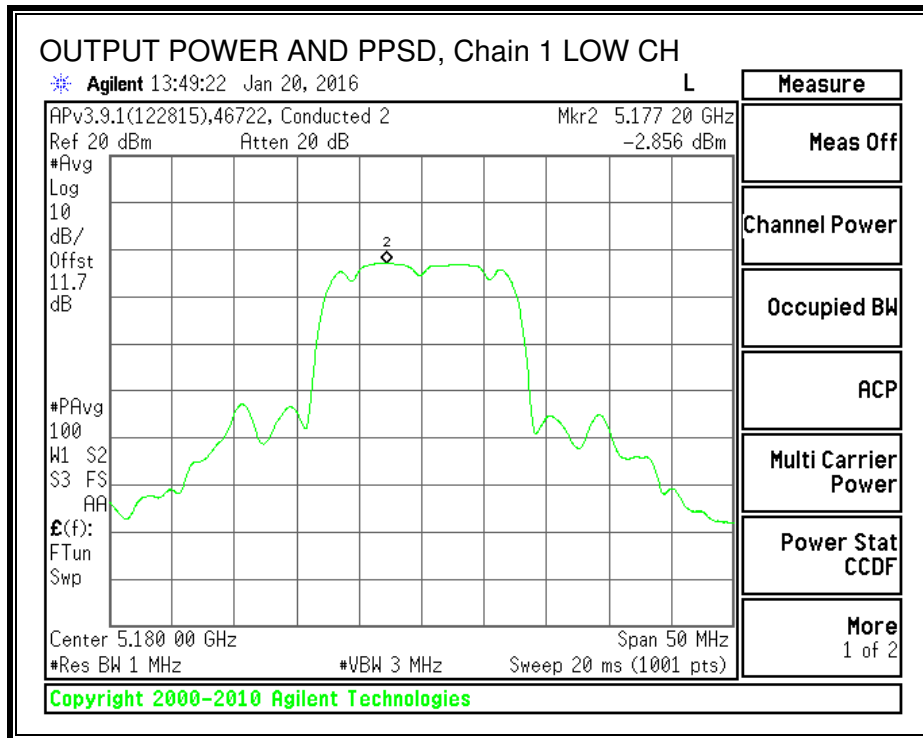
Note: Limit corrected by antenna gain.

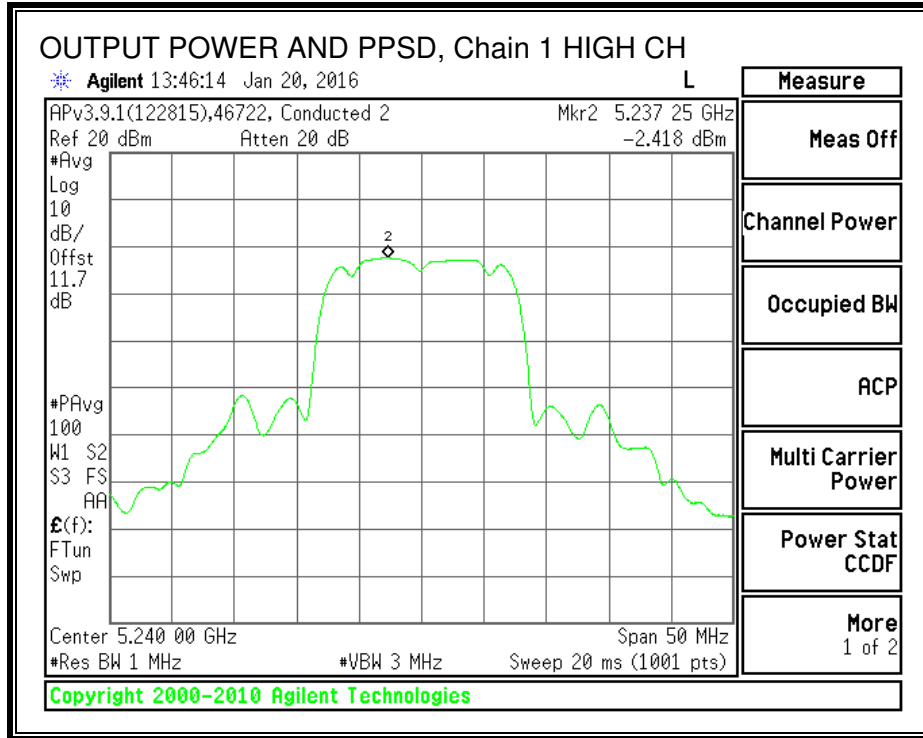
PPSD Results

Channel	Frequency (MHz)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	-2.86	-2.86	4.98	-7.84
Mid	5210	-2.65	-2.65	4.98	-7.63
High	5240	-2.42	-2.42	4.98	-7.40

Note: Limit corrected by antenna gain.

OUTPUT POWER AND PPSD





8.3. QPSK MODE IN THE 5.8 GHz BAND

8.3.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

IC RSS-247 6.2.4 (1)

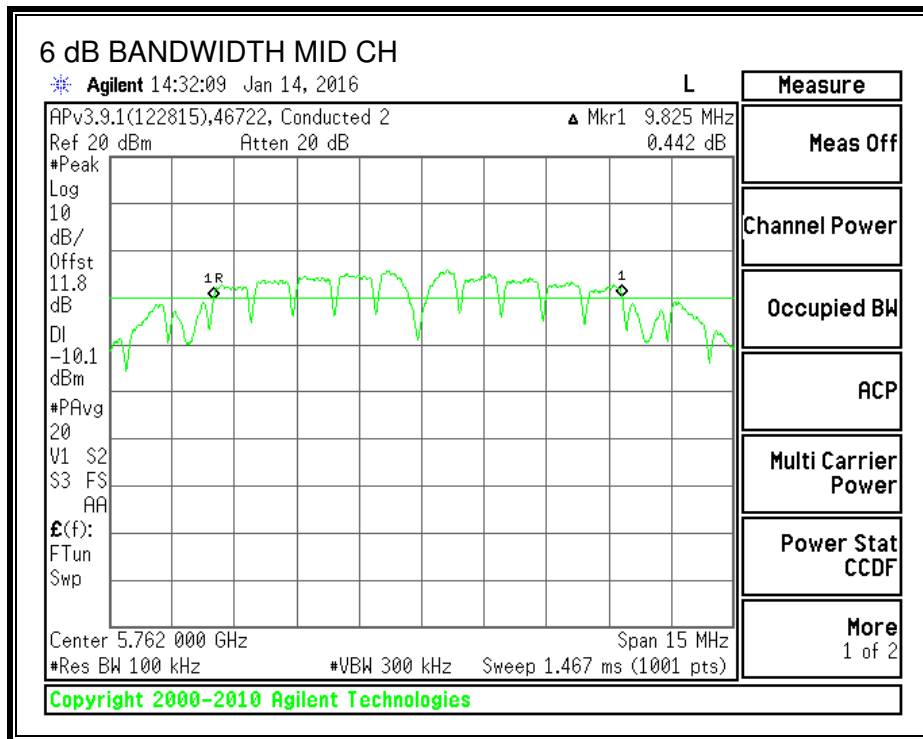
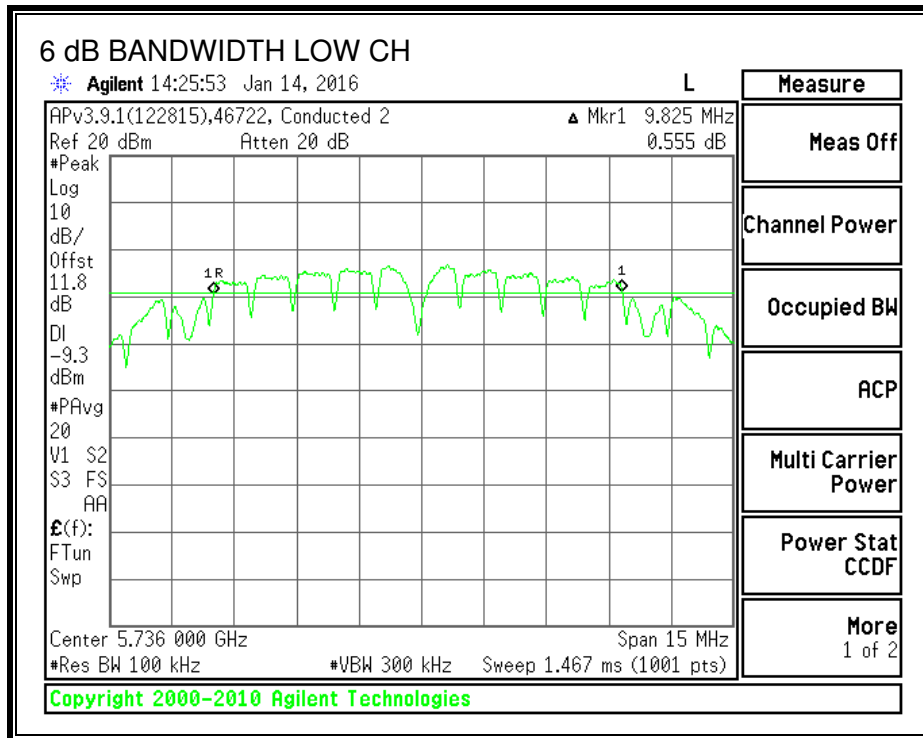
The minimum 6 dB bandwidth shall be at least 500 kHz.

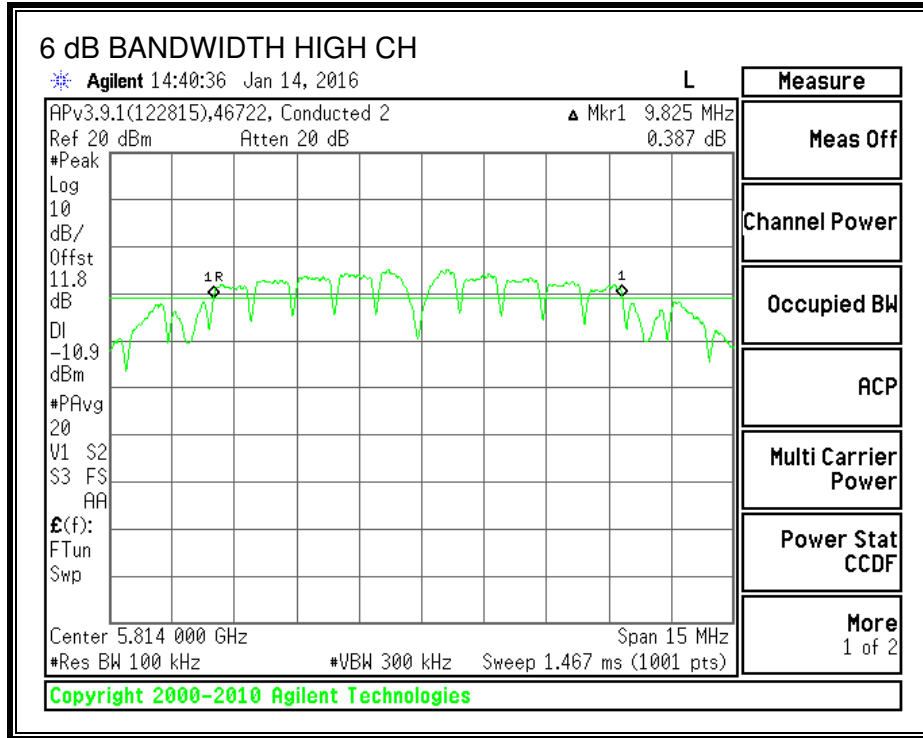
RESULTS

Chain 0

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5736	9.8250	0.5
Mid	5762	9.8250	0.5
High	5814	9.8250	0.5

6 dB BANDWIDTH

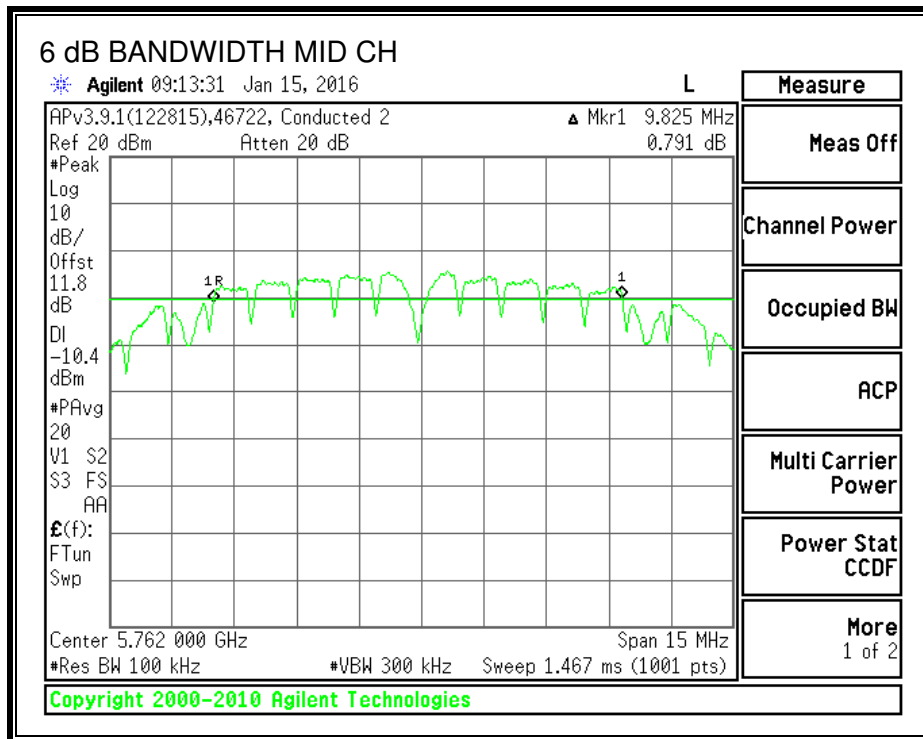
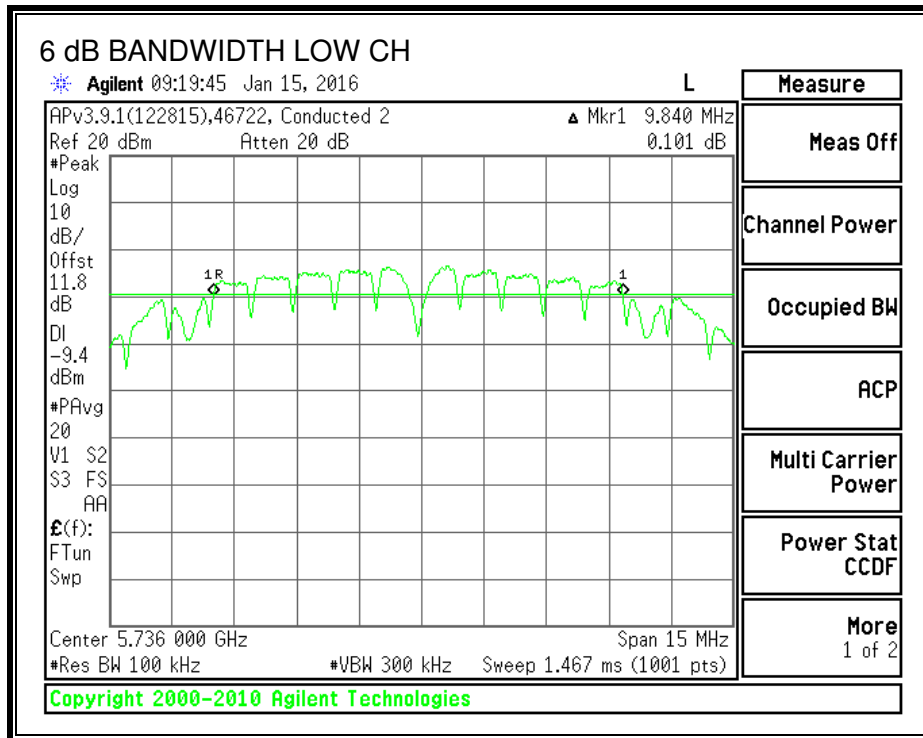


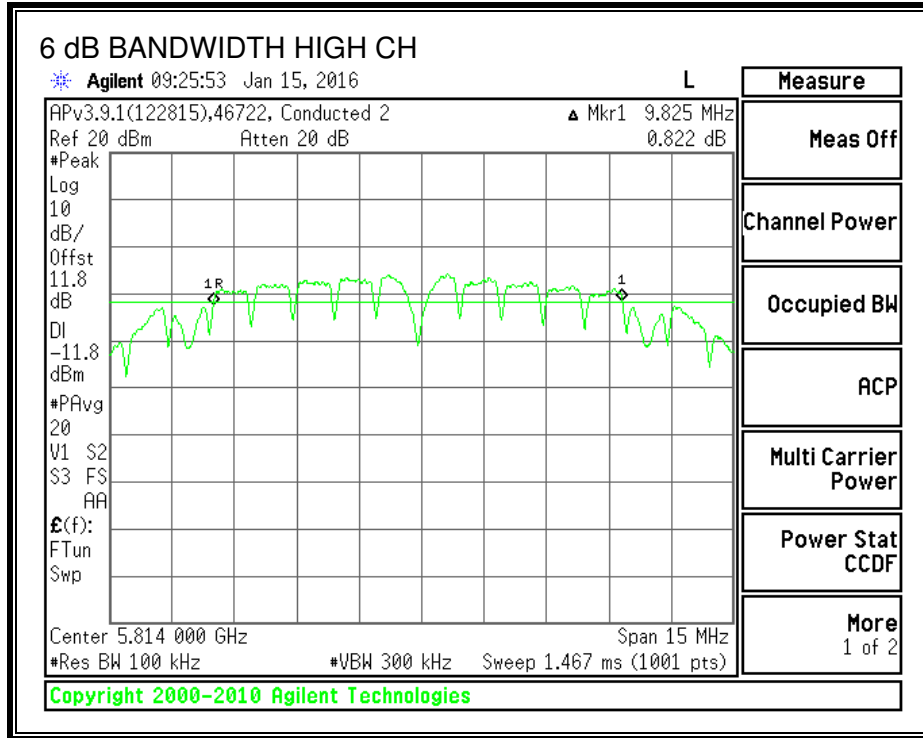


Chain 1

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5736	9.8400	0.5
Mid	5762	9.8250	0.5
High	5814	9.8250	0.5

6 dB BANDWIDTH





8.3.2. 26 dB BANDWIDTH

LIMITS

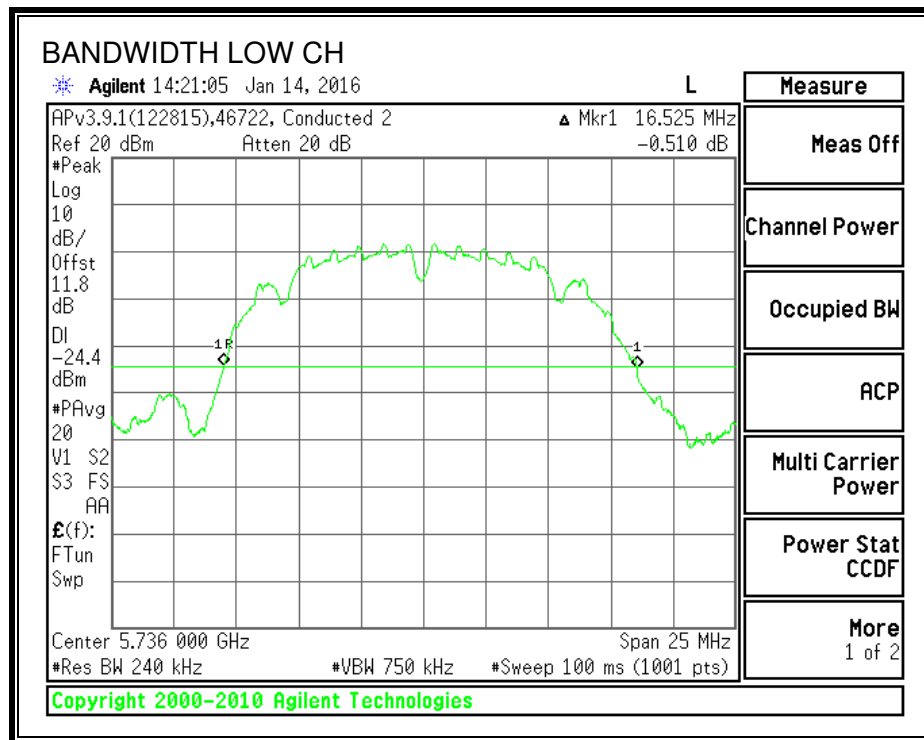
None; for reporting purposes only.

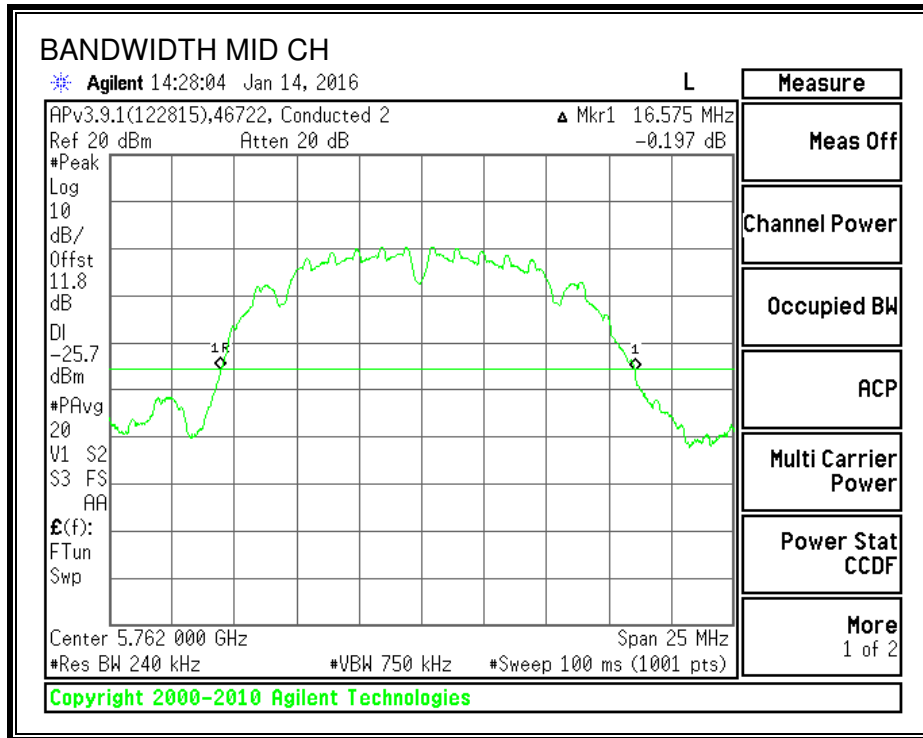
RESULTS

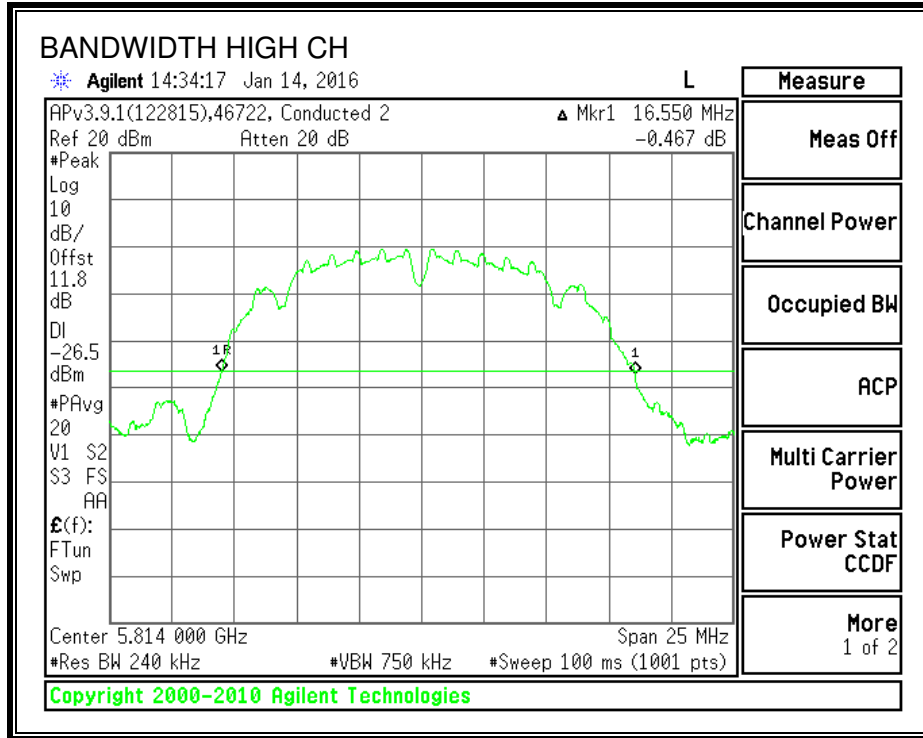
Chain 0

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5736	16.525
Mid	5762	16.575
High	5814	16.550

26 dB BANDWIDTH



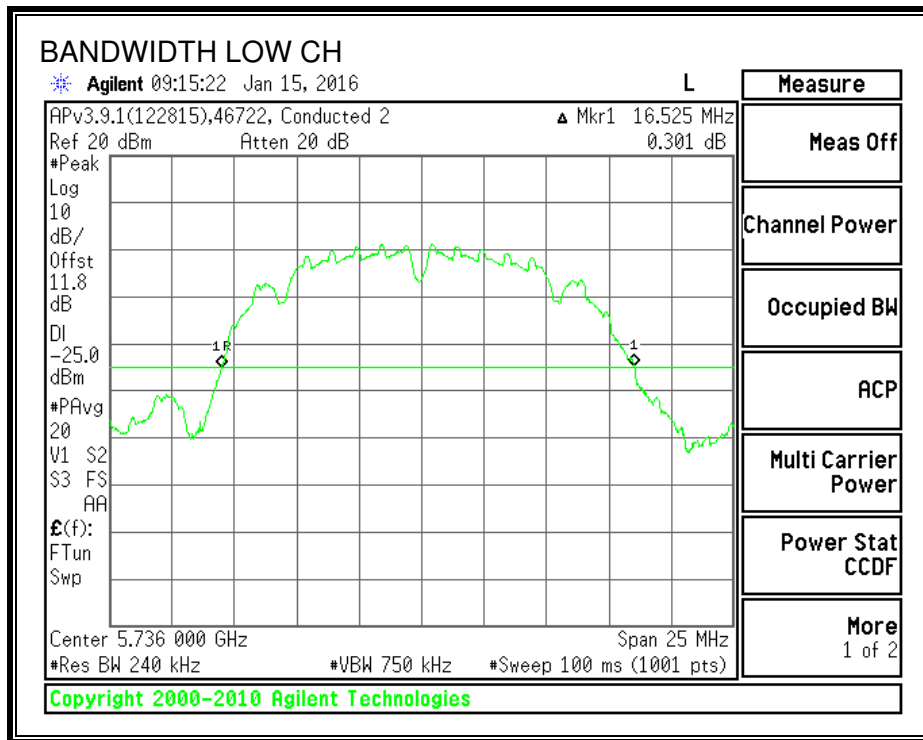


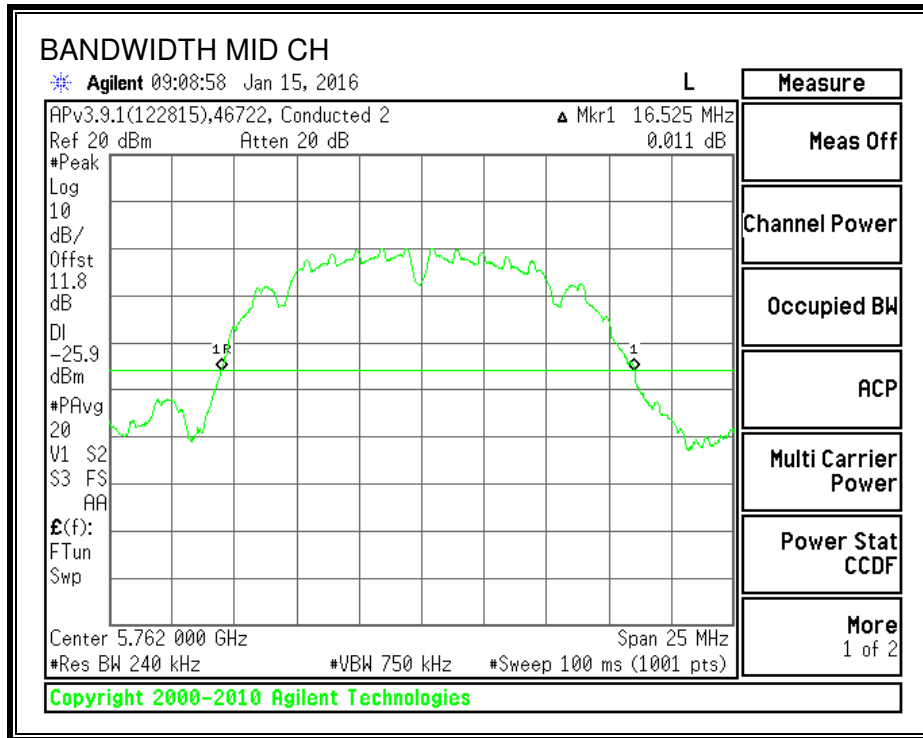


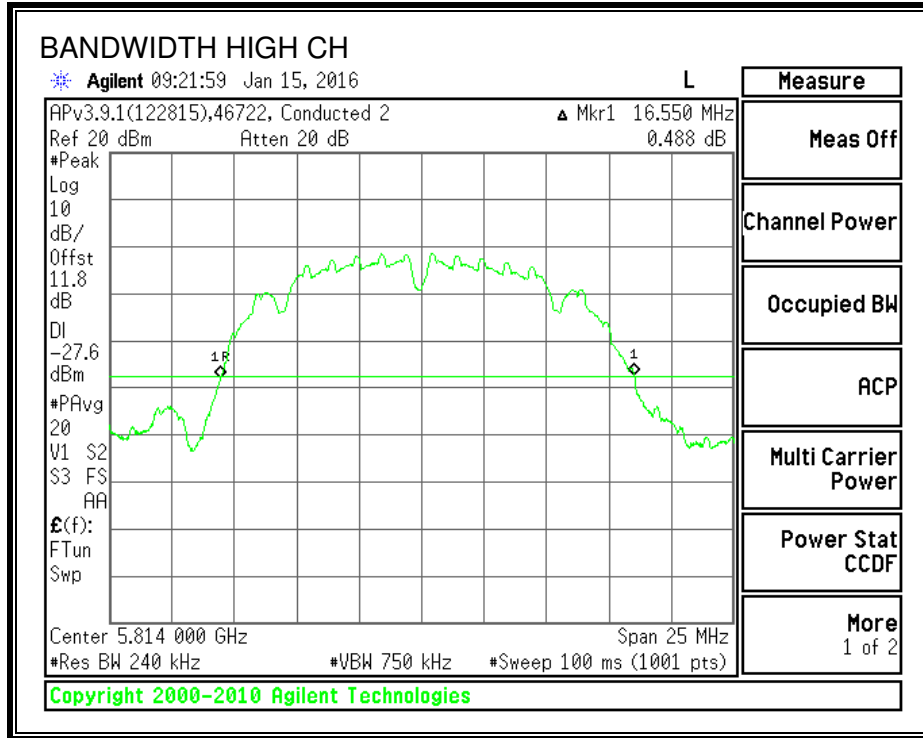
Chain 1

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5736	16.525
Mid	5762	16.525
High	5814	16.550

26 dB BANDWIDTH







8.3.3. 99% BANDWIDTH

LIMITS

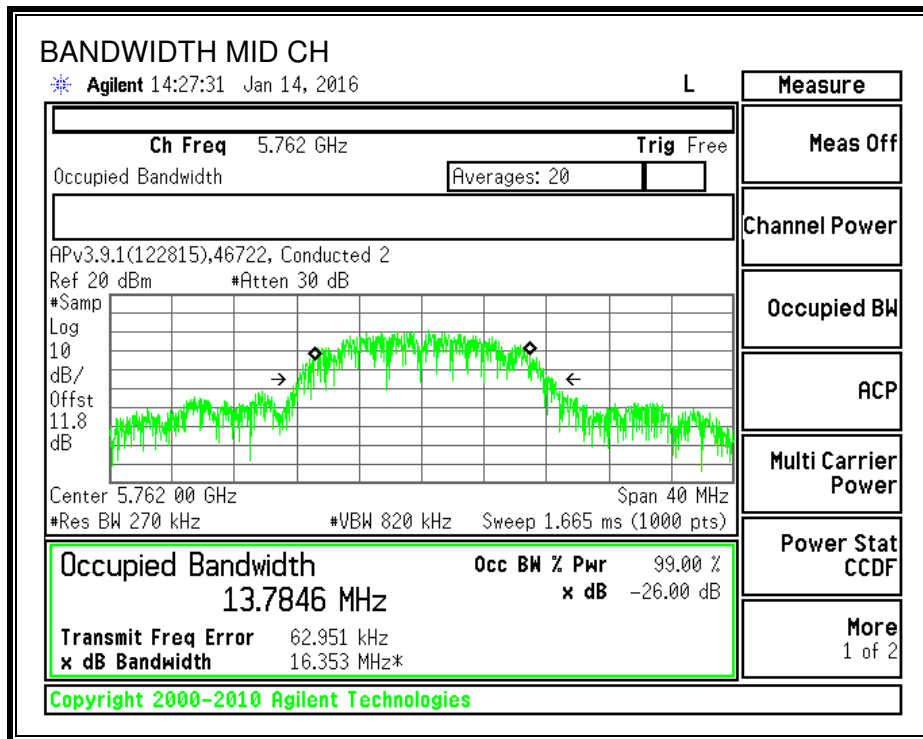
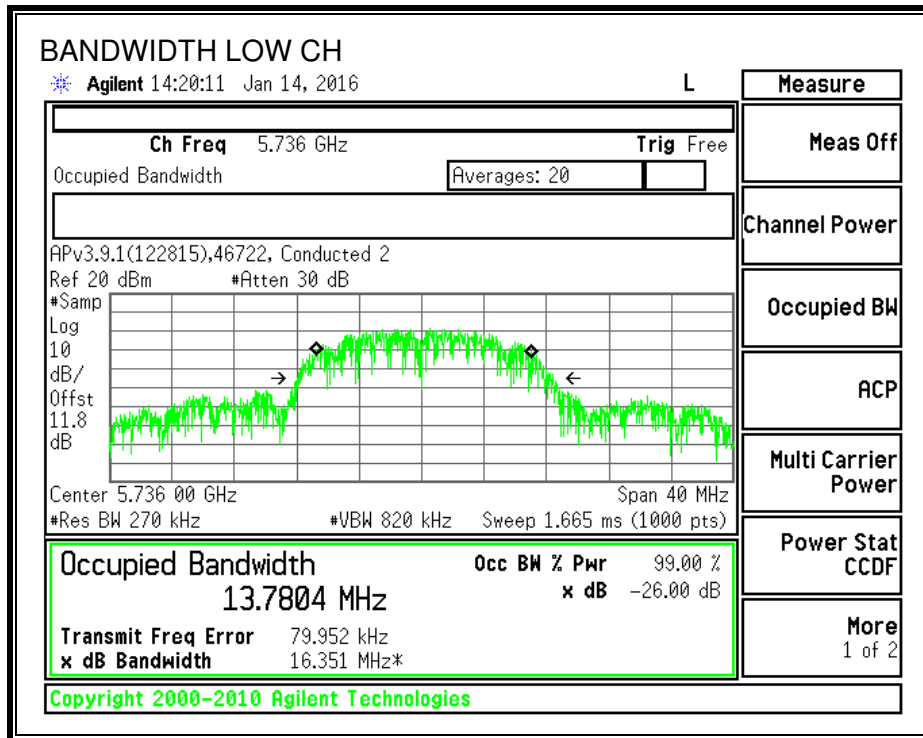
None; for reporting purposes only.

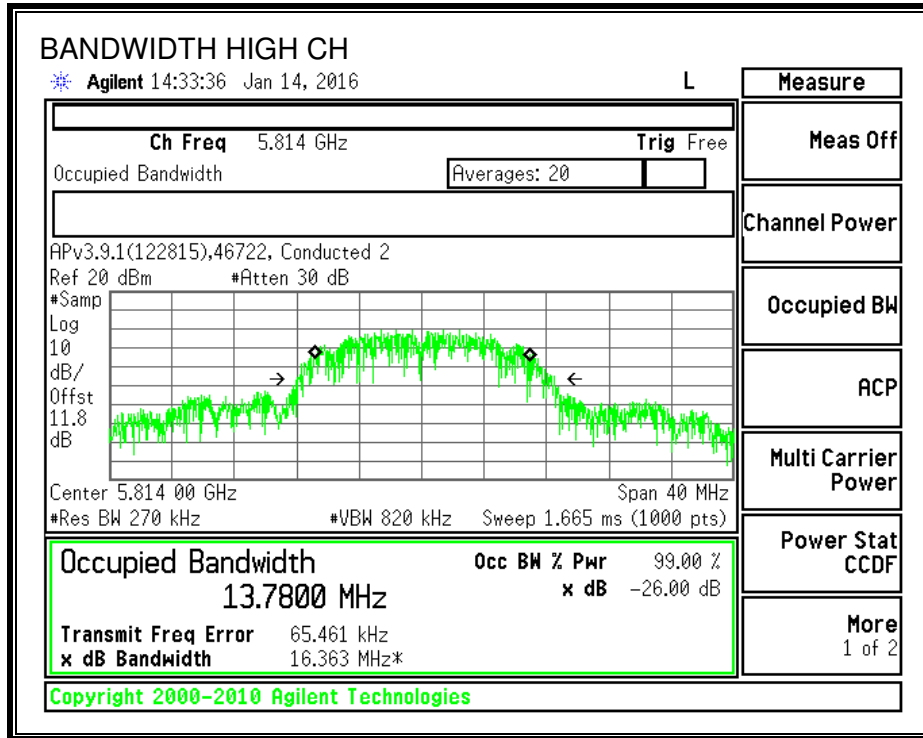
RESULTS

Chain 0

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5736	13.7804
Mid	5762	13.7846
High	5814	13.7800

99% BANDWIDTH

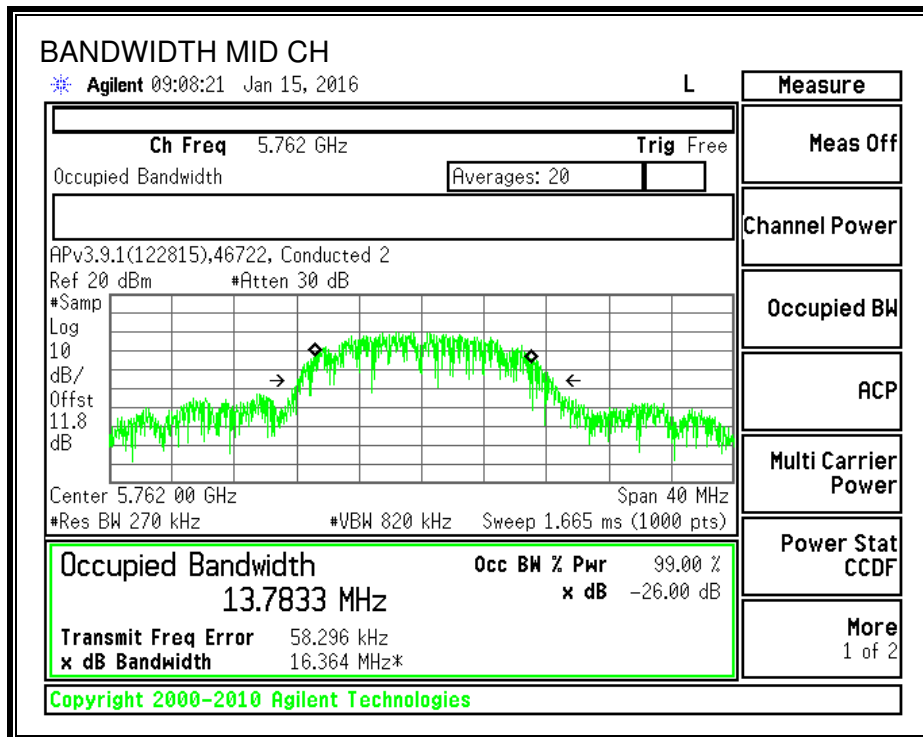
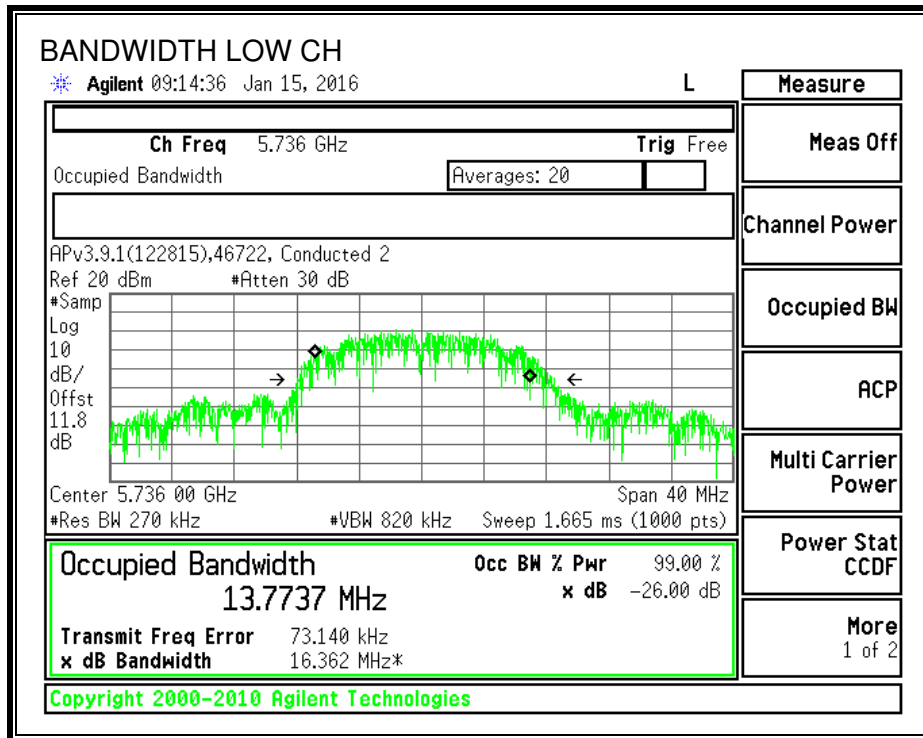


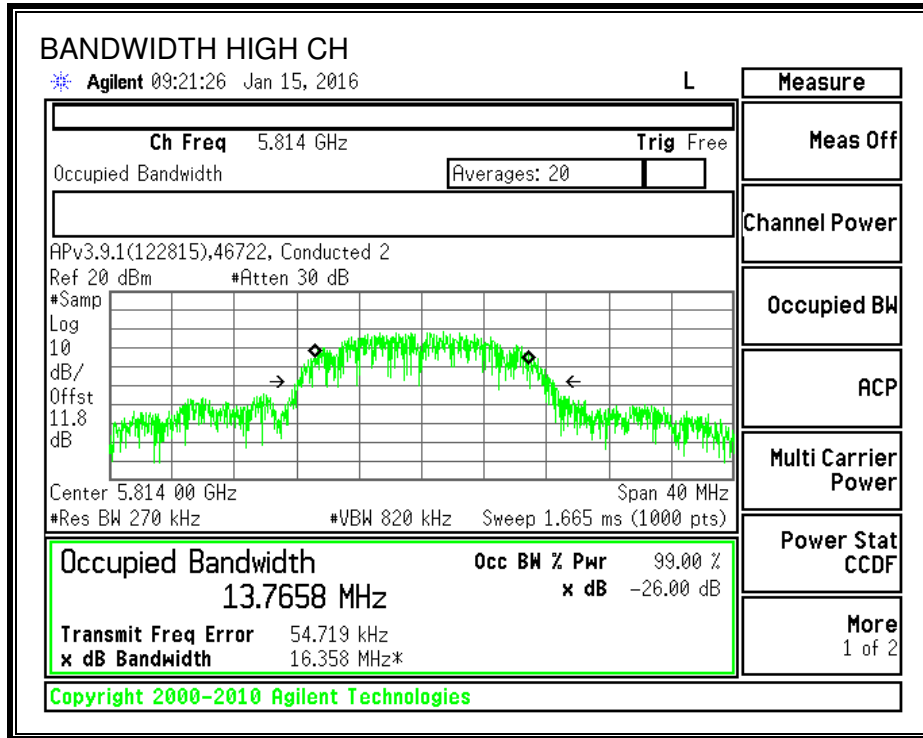


Chain 1

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5736	13.7737
Mid	5762	13.7833
High	5814	13.7658

99% BANDWIDTH





8.3.4. OUTPUT POWER

LIMITS

FCC §15.407 (a) (3)

IC RSS 247 6.2.4 (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density 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 – There are two antennas with a diversity switch. Only one can transmit at any given time.

RESULTS

Chain 0

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5736	4.98	30.00
Mid	5762	4.98	30.00
High	5814	4.98	30.00

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

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5736	9.31	9.31	30.00	-20.69
Mid	5762	9.09	9.09	30.00	-20.91
High	5814	8.19	8.19	30.00	-21.81

Chain 1

Antenna Gain and Limit

Channel	Frequency (MHz)	Directional Gain for Power (dBi)	Power Limit (dBm)
Low	5736	5.56	30.00
Mid	5762	5.56	30.00
High	5814	5.56	30.00

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

Output Power Results

Channel	Frequency (MHz)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5736	9.04	9.04	30.00	-20.96
Mid	5762	8.64	8.64	30.00	-21.36
High	5814	8.30	8.30	30.00	-21.70

8.3.5. Maximum Power Spectral Density (PSD)

LIMITS

FCC §15.407 (a) (3)

IC RSS 247 6.2.4 (1)

For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density 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 – There are two antennas with a diversity switch. Only one can transmit at any given time.

RESULTS

Chain 0

Antenna Gain and Limits

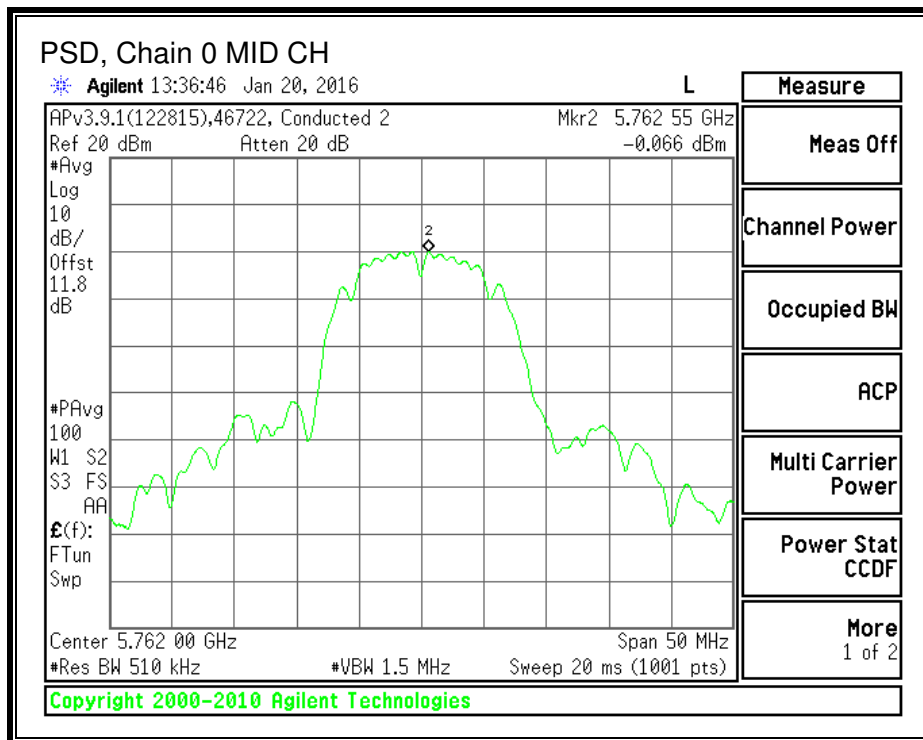
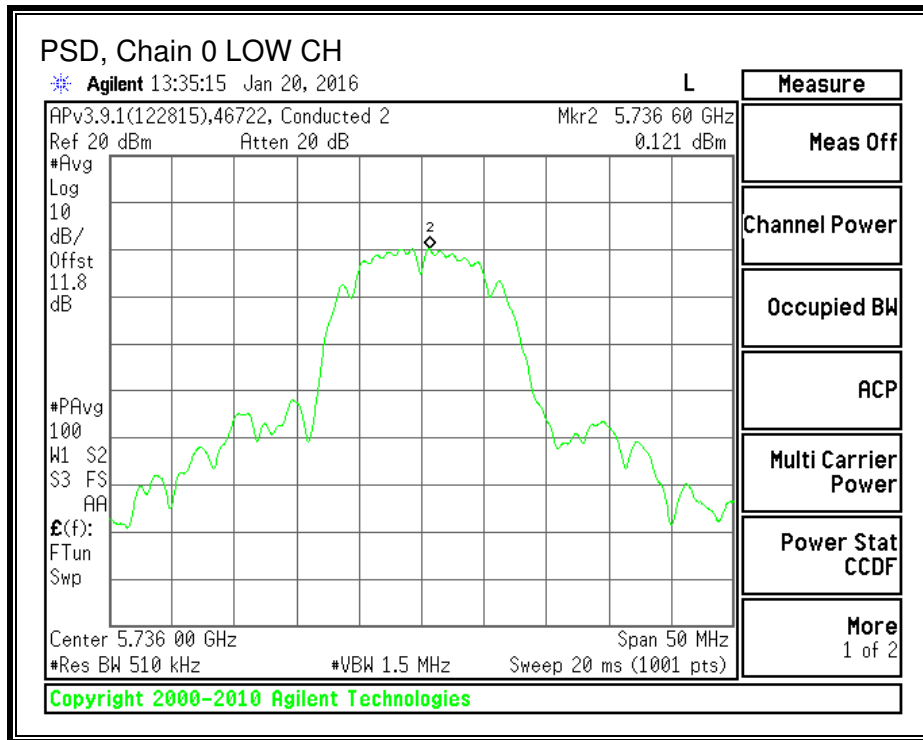
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5736	4.98	30.00
Mid	5762	4.98	30.00
High	5814	4.98	30.00

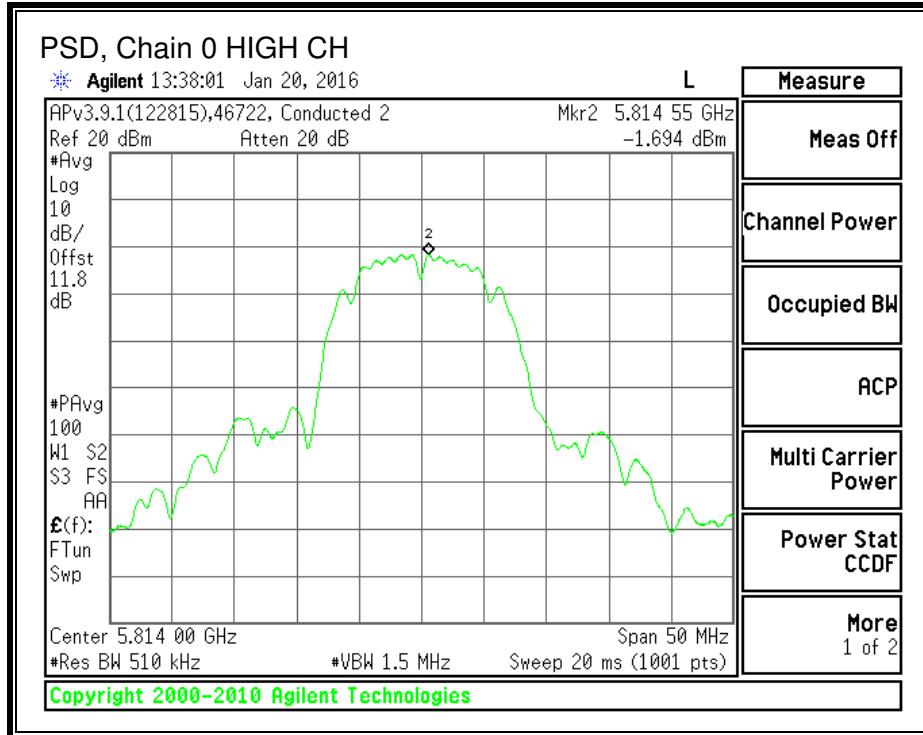
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
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PSD Results

Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5736	0.12	0.12	30.00	-29.88
Mid	5762	-0.07	-0.07	30.00	-30.07
High	5814	-1.69	-1.69	30.00	-31.69

PSD, Chain 0





Chain 1

Antenna Gain and Limits

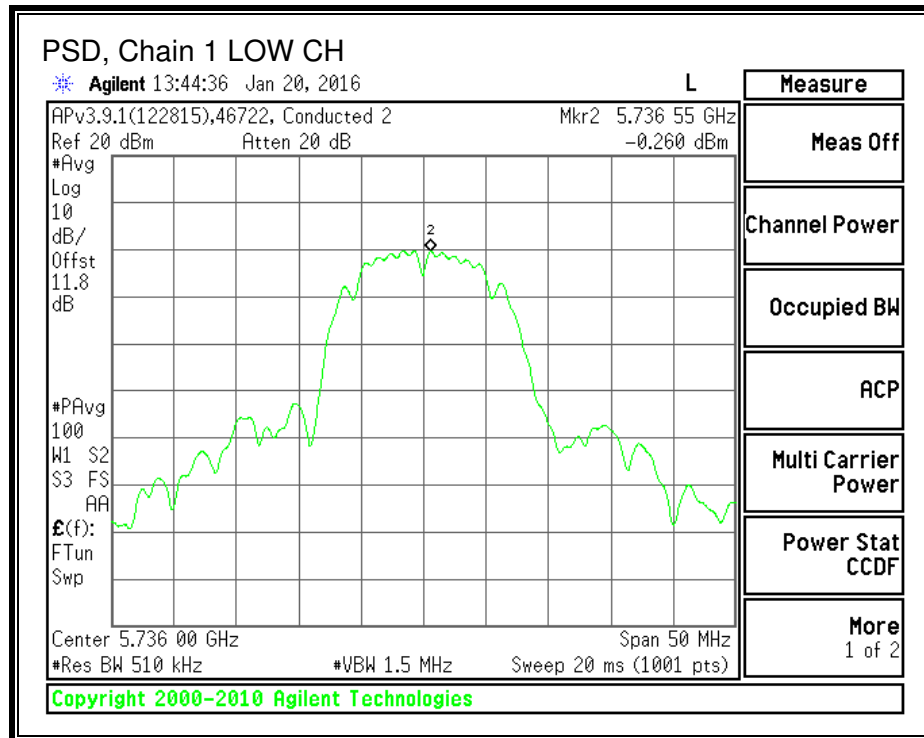
Channel	Frequency (MHz)	Directional Gain (dBi)	PSD Limit (dBm)
Low	5736	5.56	30.00
Mid	5762	5.56	30.00
High	5814	5.56	30.00

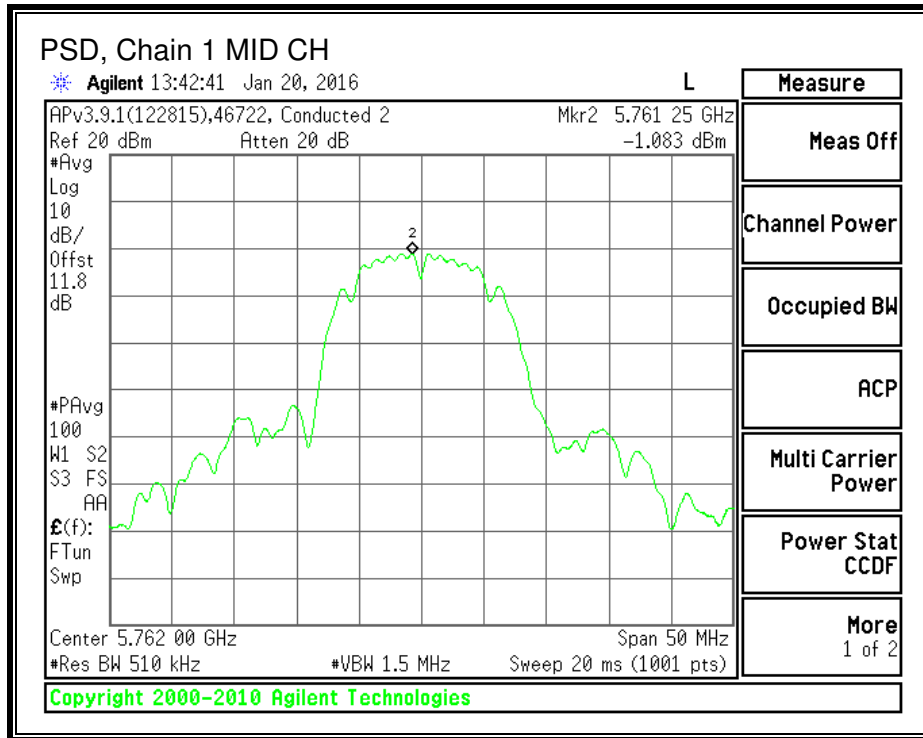
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD
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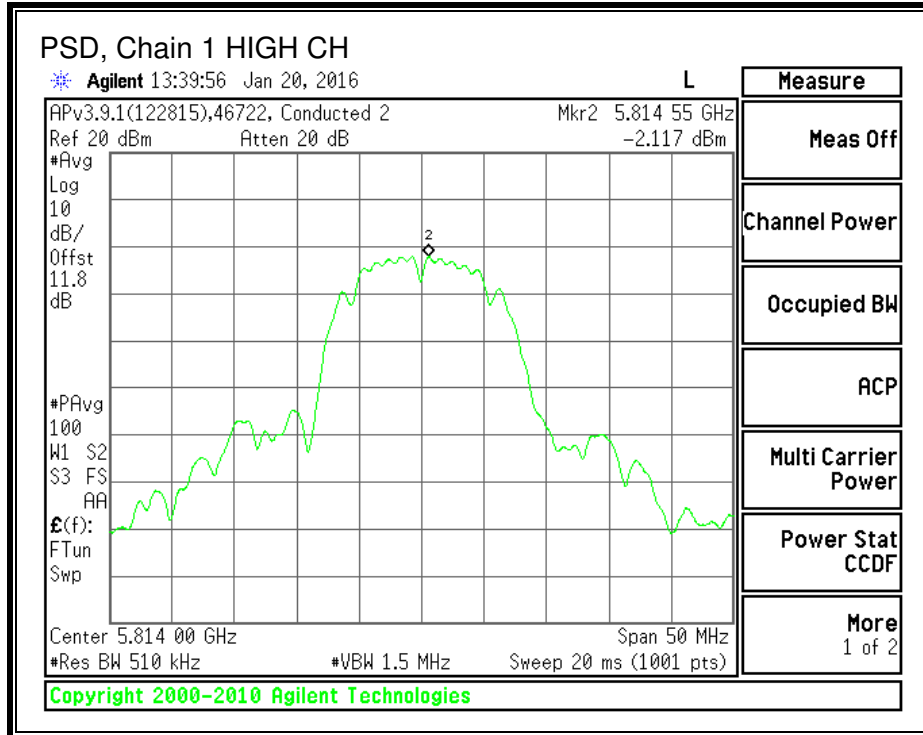
PSD Results

Channel	Frequency (MHz)	Chain 1 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5736	-0.26	-0.26	30.00	-30.26
Mid	5762	-1.08	-1.08	30.00	-31.08
High	5814	-2.12	-2.12	30.00	-32.12

PSD, Chain 1







9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN Clause 8.9 (Transmitter)

IC RSS-GEN Clause 7.1.2 (Receiver)

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
0.009-0.490	2400/F(kHz) @ 300 m	-
0.490-1.705	24000/F(kHz) @ 30 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 for the 30-1000 MHz range, 9 kHz for peak detection measurements or 9 kHz for quasi-peak detection measurements for the 0.15-30 MHz range and 200 Hz for peak detection measurements or 200 Hz for quasi-peak detection measurements for the 9 to 150 kHz range. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements. For this evaluation, RMS Power Averaging was used and the resolution/video bandwidth settings were 1MHz/3MHz.

The spectrum from 9 kHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band, except where noted.

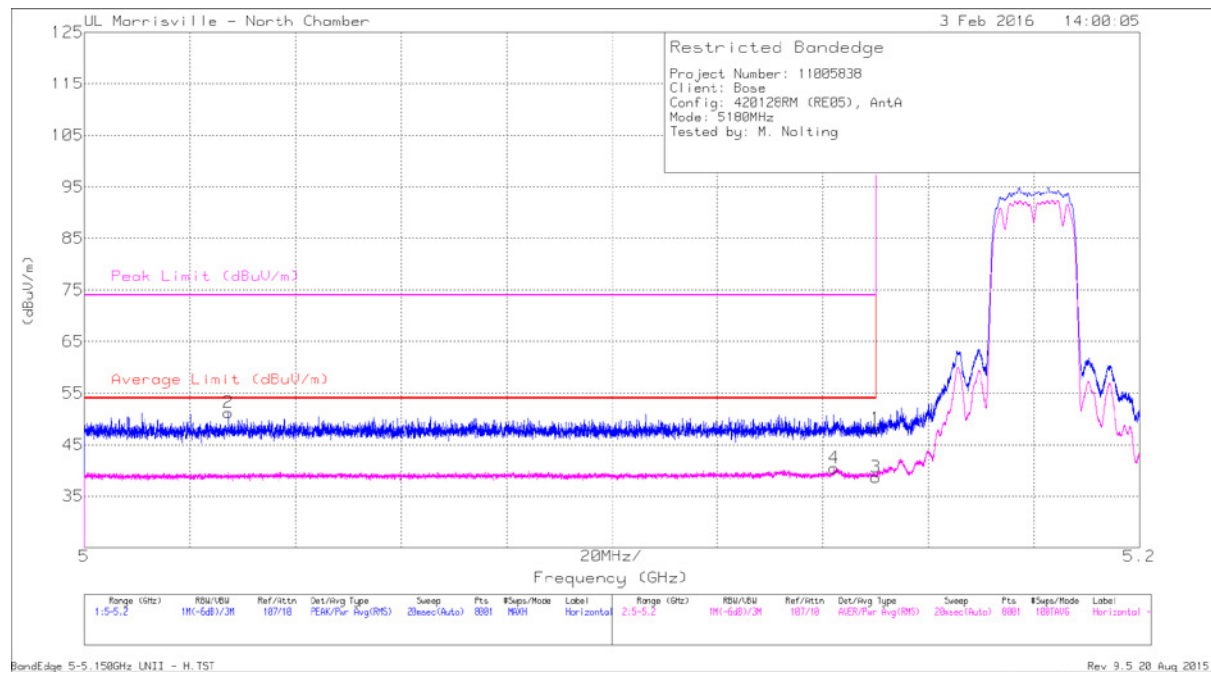
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

9.2. TRANSMITTER 1-18 GHz

9.2.1. TX 1-18 GHz QPSK MODE IN THE 5.2 GHz BAND

Chain 0 (Antenna A, J402)

RESTRICTED BANDEDGE (LOW CHANNEL)

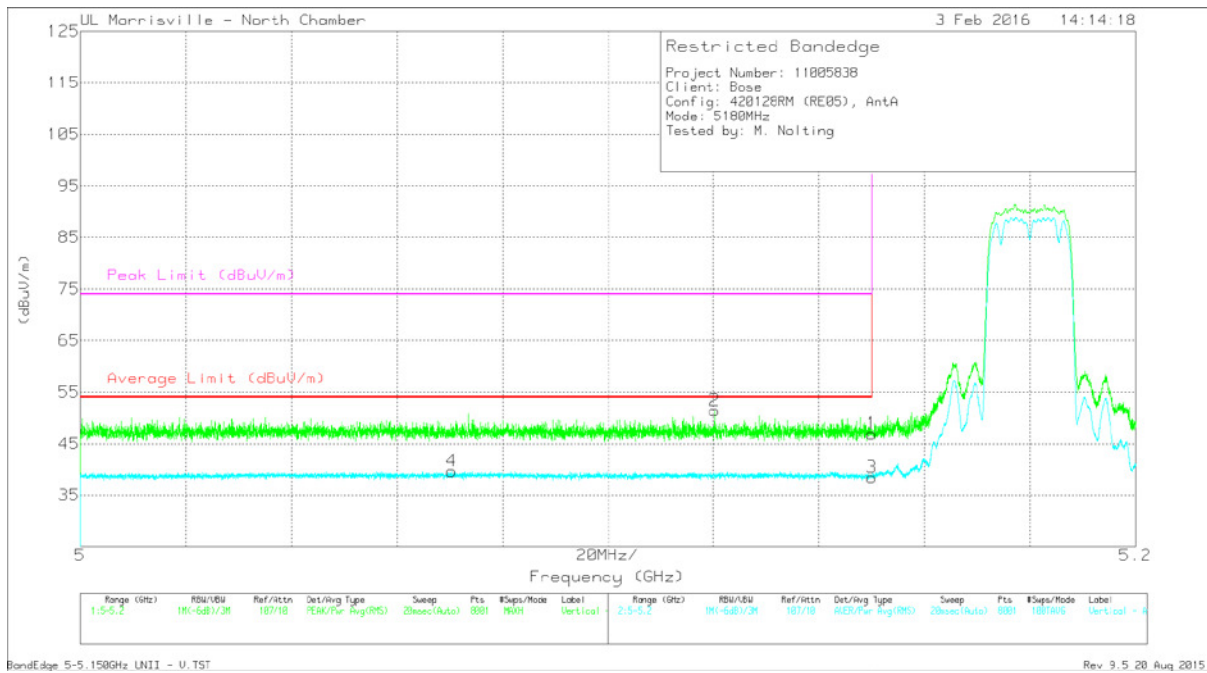


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.027	39.94	Pk	34.1	-22.8	51.24	-	-	74	-22.76	146	292	H
4	* 5.142	29.45	RMS	34.3	-23.3	40.45	54	-13.55	-	-	146	292	H
1	5.15	37.26	Pk	34.3	-23.4	48.16	-	-	74	-25.84	146	292	H
3	5.15	27.79	RMS	34.3	-23.4	38.69	54	-15.31	-	-	146	292	H

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

Pk - Peak detector

RMS - RMS detection



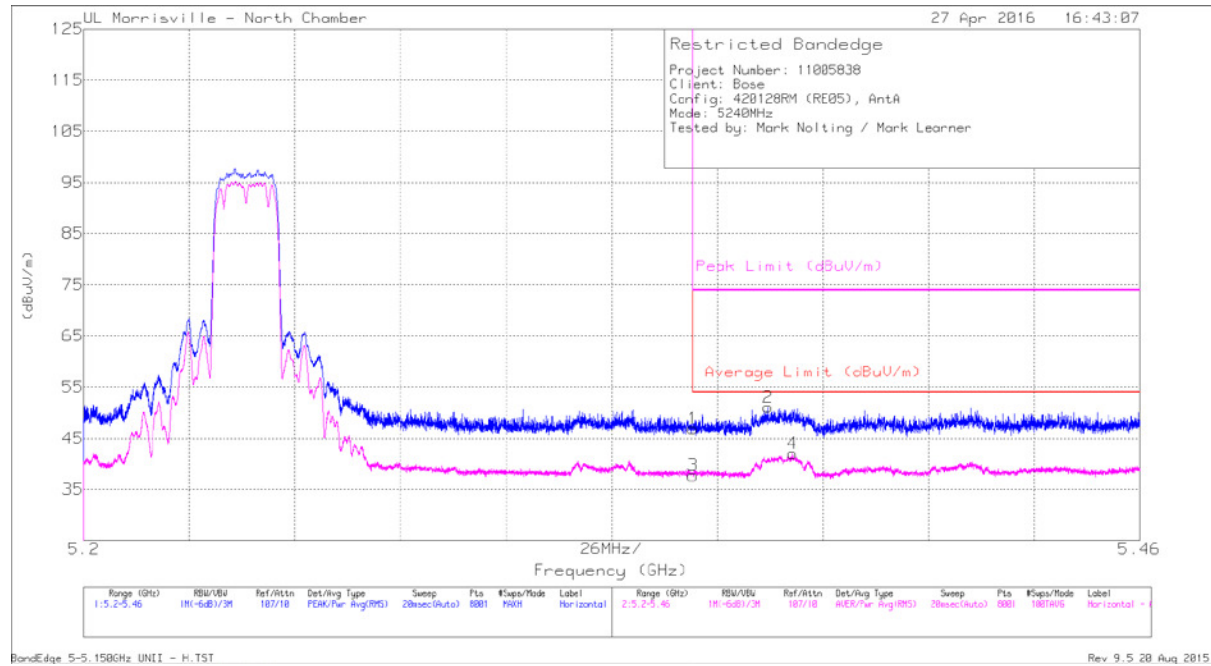
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.12	40.35	Pk	34.3	-23.2	51.45	-	-	74	-22.55	72	385	V
4	* 5.07	28.46	RMS	34.2	-23	39.66	54	-14.34	-	-	72	385	V
1	5.15	36.05	Pk	34.3	-23.4	46.95	-	-	74	-27.05	72	385	V
3	5.15	27.59	RMS	34.3	-23.4	38.49	54	-15.51	-	-	72	385	V

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

Pk - Peak detector

RMS - RMS detection

RESTRICTED BANDEDGE (HIGH CHANNEL)

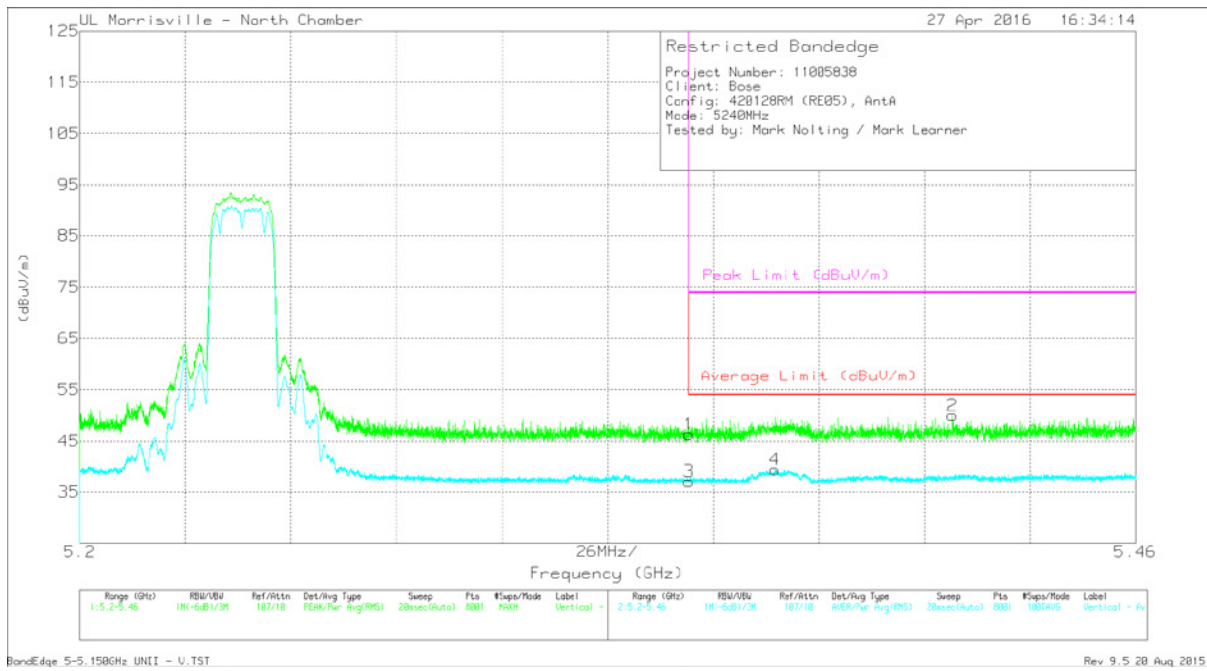


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	36.07	Pk	34.4	-23.6	46.87	-	-	74	-27.13	334	214	H
2	* 5.369	40.39	Pk	34.4	-23.7	51.09	-	-	74	-22.91	334	214	H
3	* 5.35	26.96	RMS	34.4	-23.6	37.76	54	-16.24	-	-	334	214	H
4	* 5.375	31.33	RMS	34.4	-23.7	42.03	54	-11.97	-	-	334	214	H

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

Pk - Peak detector

RMS - RMS detection

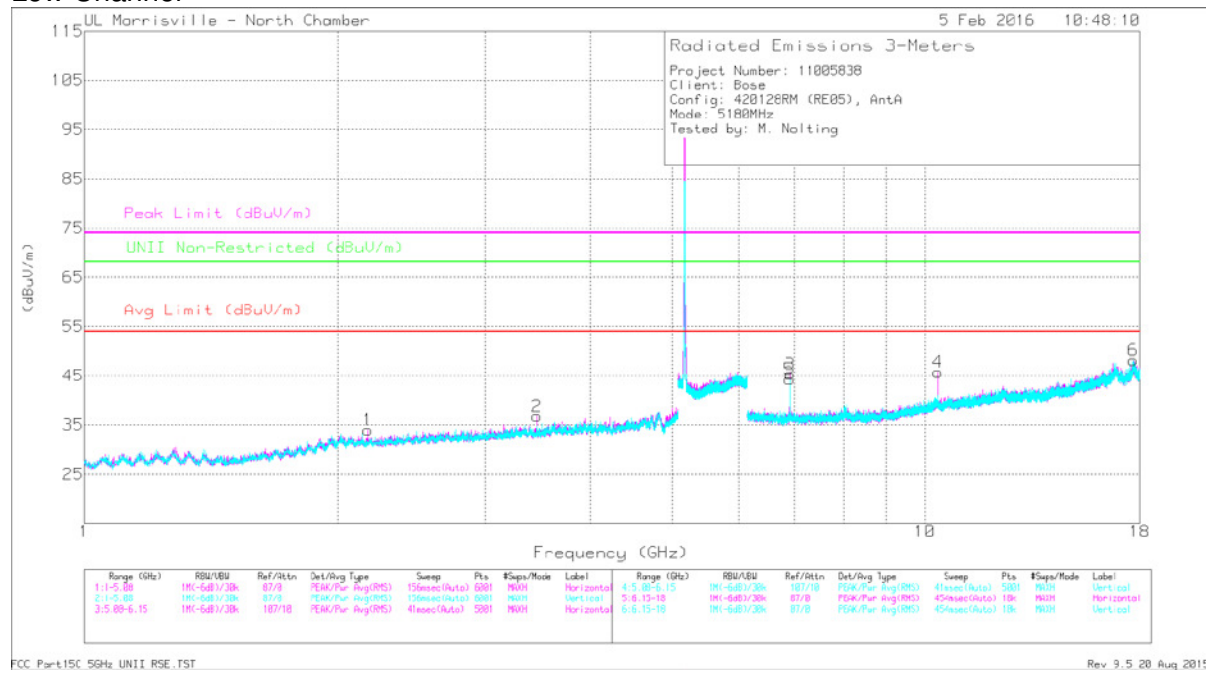


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	35.5	Pk	34.4	-23.6	46.3	-	-	74	-27.7	51	335	V
2	* 5.415	39.14	Pk	34.4	-23.6	49.94	-	-	74	-24.06	51	335	V
3	* 5.35	26.31	RMS	34.4	-23.6	37.11	54	-16.89	-	-	51	335	V
4	* 5.371	28.69	RMS	34.4	-23.7	39.39	54	-14.61	-	-	51	335	V

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

HARMONICS AND SPURIOUS EMISSIONS

Low Channel

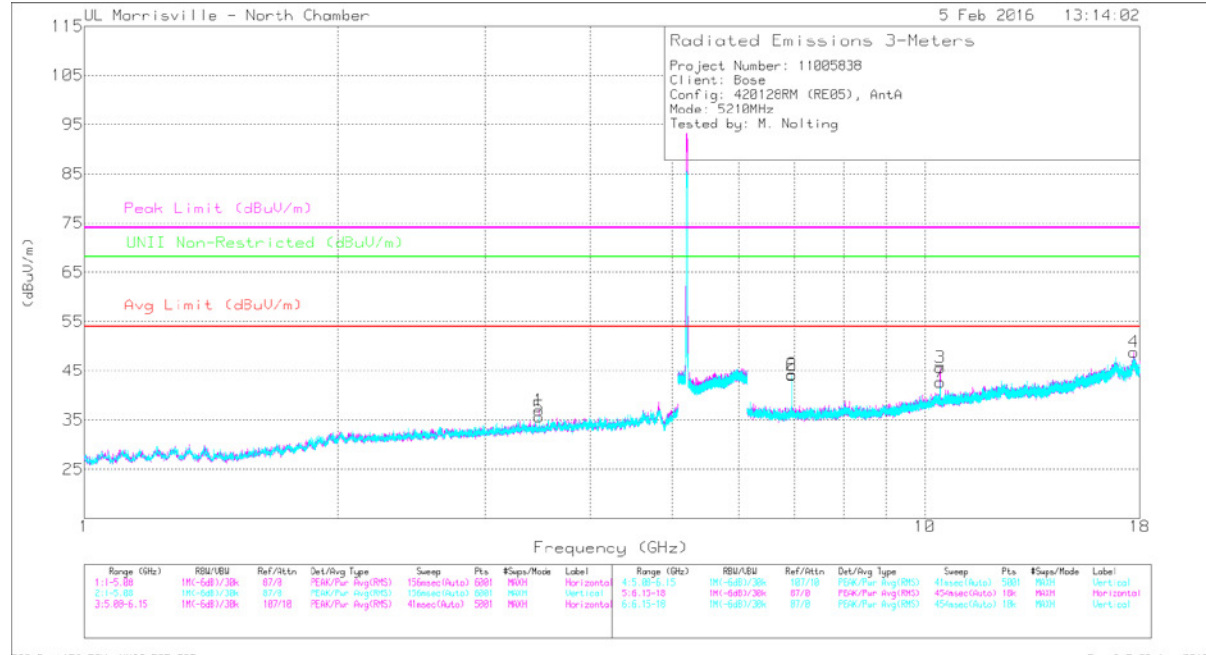


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.178	42.58	PK-U	31.6	-35.3	38.88	-	-	-	-	68.2	-29.32	158	109	H
2	3.453	44.15	PK-U	33.1	-34.1	43.15	-	-	-	-	68.2	-25.05	296	118	H
5	6.907	43.95	PK-U	35.6	-30.6	48.95	-	-	-	-	68.2	-19.25	103	218	V
3	6.907	44.9	PK-U	35.6	-30.5	50	-	-	-	-	68.2	-18.2	347	218	H
4	10.36	38.64	PK-U	37.6	-26.7	49.54	-	-	-	-	68.2	-18.66	319	205	H
6	17.696	34.84	PK-U	41.9	-23.1	53.64	-	-	-	-	68.2	-14.56	84	135	V

Pk - Peak detector

PK-U - U-NII: Maximum Peak

Middle Channel



FCC_Part15C_5GHz_UNII_RSE_TST

Rev. 9.5.20 Aug 2015

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 17.713	33.86	PK-U	41.9	-22.3	53.46	-	-	74	-20.54	-	-	157	120	H
	* 17.713	22.85	ADR	41.9	-22.3	42.45	54	-11.55	-	-	-	-	157	120	H
1	3.473	44.7	PK-U	33.1	-34.1	43.7	-	-	-	-	68.2	-24.5	292	102	H
5	3.473	44.12	PK-U	33.1	-34.1	43.12	-	-	-	-	68.2	-25.08	222	242	V
2	6.947	42.54	PK-U	35.6	-30.1	48.04	-	-	-	-	68.2	-20.16	349	217	H
6	6.947	43.05	PK-U	35.6	-30.1	48.55	-	-	-	-	68.2	-19.65	52	343	V
3	10.42	40.19	PK-U	37.6	-27.7	50.09	-	-	-	-	68.2	-18.11	317	116	H
7	10.42	37.47	PK-U	37.6	-27.7	47.37	-	-	-	-	68.2	-20.83	2	103	V

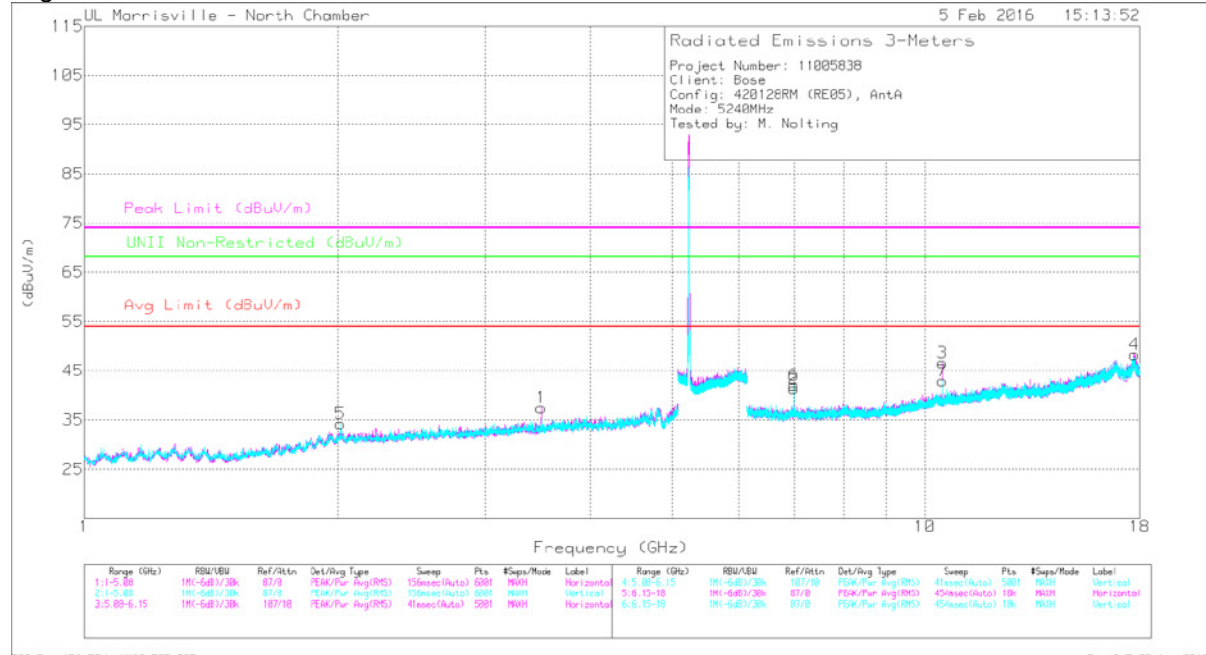
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

High Channel



FCC_Part15C_5GHz_UNII_RSE_TST

Rev. 9.5.20_Aug.2015

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 17.759	34.21	PK-U	41.9	-22.6	53.51	-	-	74	-20.49	-	-	112	176	H
	* 17.764	22.46	ADR	41.9	-22.7	41.66	54	-12.34	-	-	-	-	112	176	H
5	2.012	42.69	PK-U	31.7	-35.2	39.19	-	-	-	-	68.2	-29.01	130	200	V
1	3.493	44.43	PK-U	33.1	-34	43.53	-	-	-	-	68.2	-24.67	294	116	H
2	6.987	41.78	PK-U	35.6	-30.4	46.98	-	-	-	-	68.2	-21.22	352	214	H
6	6.987	41.87	PK-U	35.6	-30.4	47.07	-	-	-	-	68.2	-21.13	116	238	V
3	10.48	40.73	PK-U	37.7	-27.9	50.53	-	-	-	-	68.2	-17.67	312	119	H
7	10.48	38.83	PK-U	37.7	-27.9	48.63	-	-	-	-	68.2	-19.57	347	101	V

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

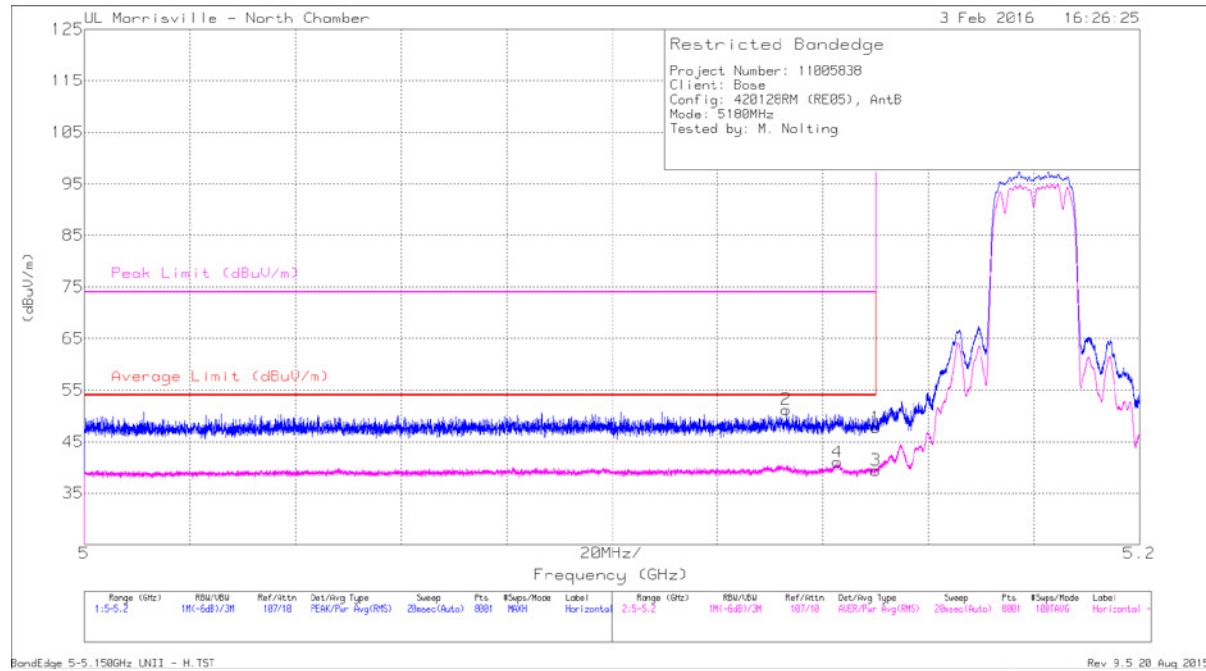
Pk - Peak detector

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Chain 1 (Antenna B, J403)

RESTRICTED BANDEDGE (LOW CHANNEL)

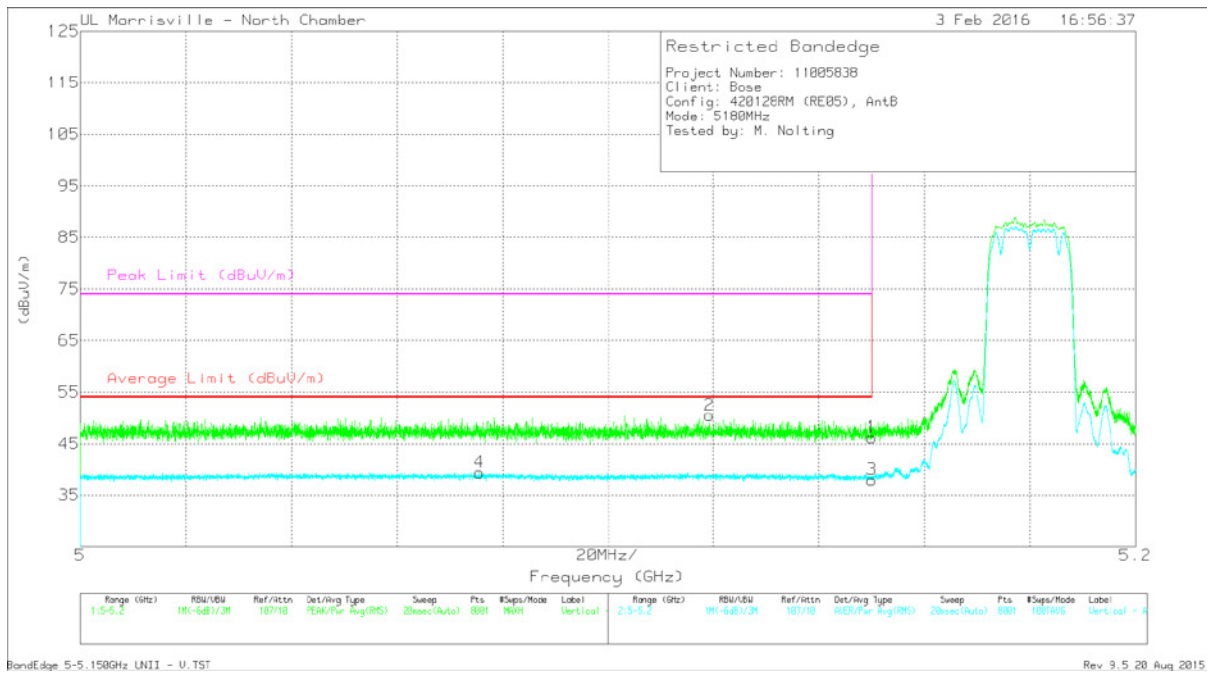


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	36.86	Pk	34.3	-23.4	47.76	-	-	74	-26.24	73	112	H
2	* 5.133	40.24	Pk	34.3	-23.3	51.24	-	-	74	-22.76	73	112	H
3	5.15	28.52	RMS	34.3	-23.4	39.42	54	-14.58	-	-	73	112	H
4	* 5.143	30.03	RMS	34.3	-23.3	41.03	54	-12.97	-	-	73	112	H

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

Pk - Peak detector

RMS - RMS detection



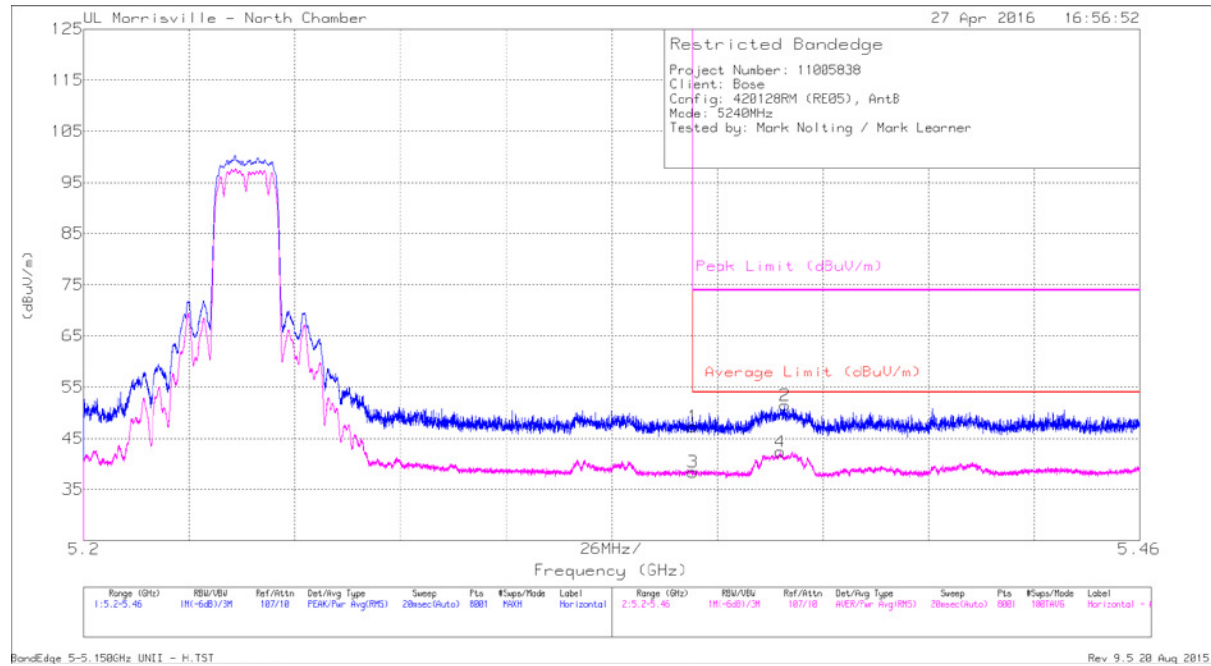
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.15	35.32	Pk	34.3	-23.4	46.22	-	-	74	-27.78	94	384	V
2	* 5.119	39.43	Pk	34.3	-23.2	50.53	-	-	74	-23.47	94	384	V
3	5.15	27.15	RMS	34.3	-23.4	38.05	54	-15.95	-	-	94	384	V
4	* 5.076	28.21	RMS	34.2	-23	39.41	54	-14.59	-	-	94	384	V

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

Pk - Peak detector

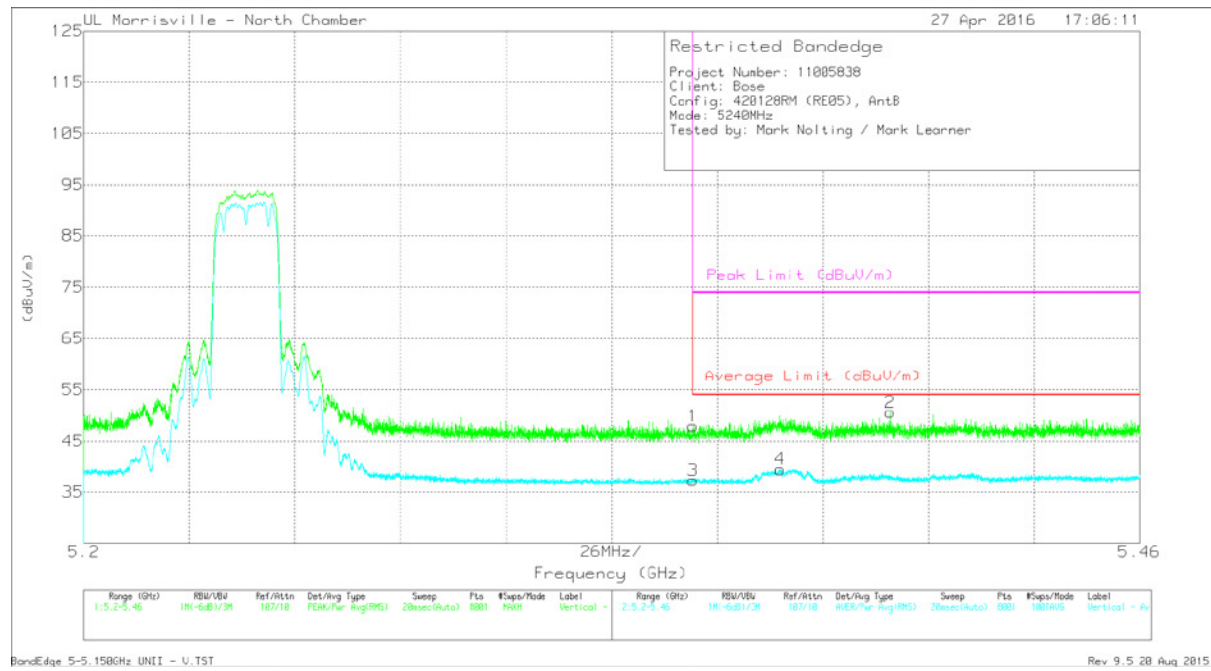
RMS - RMS detection

RESTRICTED BANDEDGE (HIGH CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	36.46	Pk	34.4	-23.6	47.26	-	-	74	-26.74	69	101	H
2	* 5.373	40.73	Pk	34.4	-23.7	51.43	-	-	74	-22.57	69	101	H
3	* 5.35	27.59	RMS	34.4	-23.6	38.39	54	-15.61	-	-	69	101	H
4	* 5.371	31.65	RMS	34.4	-23.7	42.35	54	-11.65	-	-	69	101	H

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

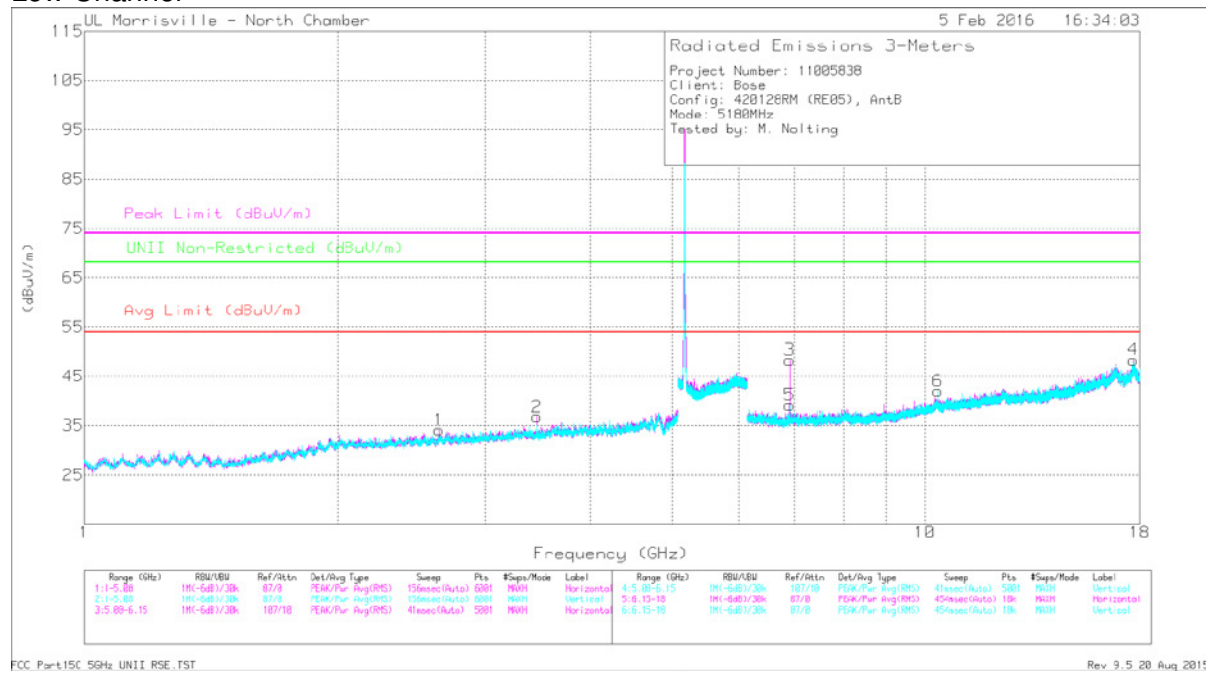


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr /Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	37.08	Pk	34.4	-23.6	47.88	-	-	74	-26.12	158	341	V
2	* 5.399	39.65	Pk	34.4	-23.5	50.55	-	-	74	-23.45	158	341	V
3	* 5.35	26.54	RMS	34.4	-23.6	37.34	54	-16.66	-	-	158	341	V
4	* 5.371	28.78	RMS	34.4	-23.7	39.48	54	-14.52	-	-	158	341	V

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

HARMONICS AND SPURIOUS EMISSIONS

Low Channel

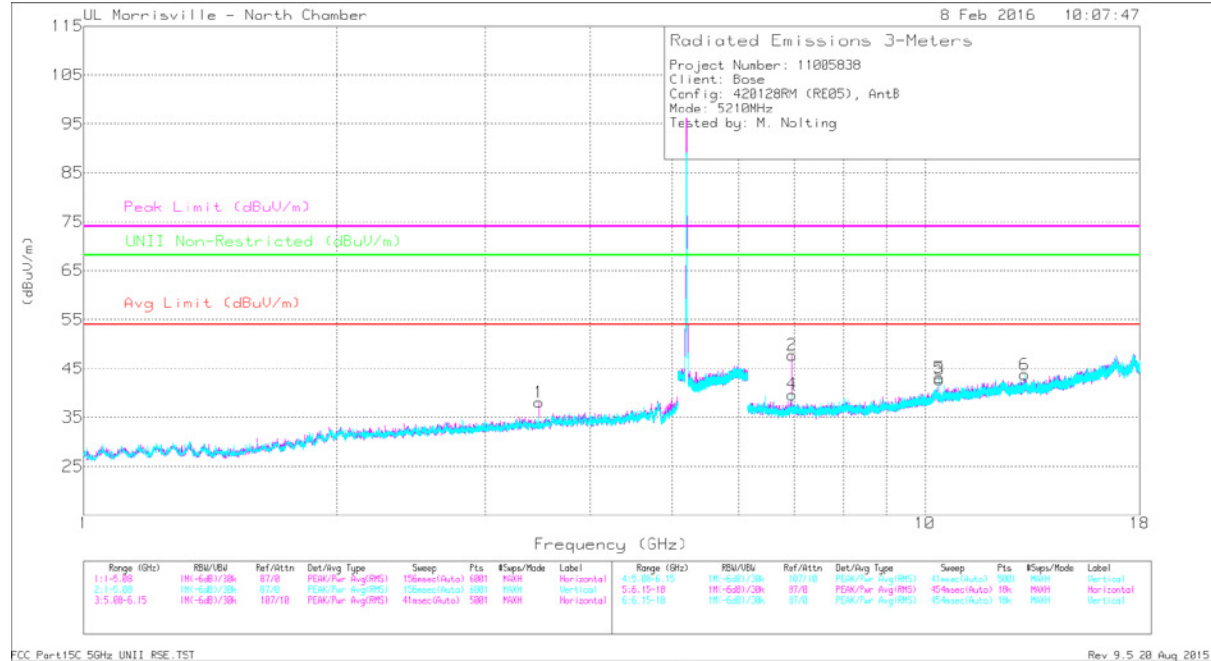


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.647	42.65	PK-U	32.3	-34.4	40.55	-	-	-	-	68.2	-27.65	94	142	H
2	3.453	45.19	PK-U	33.1	-34.1	44.19	-	-	-	-	68.2	-24.01	264	120	H
3	6.907	46.51	PK-U	35.6	-30.6	51.51	-	-	-	-	68.2	-16.69	34	106	H
5	6.907	43.54	PK-U	35.6	-30.5	48.64	-	-	-	-	68.2	-19.56	243	369	V
6	10.36	36.68	PK-U	37.6	-26.7	47.58	-	-	-	-	68.2	-20.62	116	104	V
4	17.699	35.03	PK-U	41.9	-23	53.93	-	-	-	-	68.2	-14.27	235	250	H

Pk - Peak detector

PK-U - U-NII: Maximum Peak

Middle Channel



FCC Part15C 5GHz UNII RSE.TST

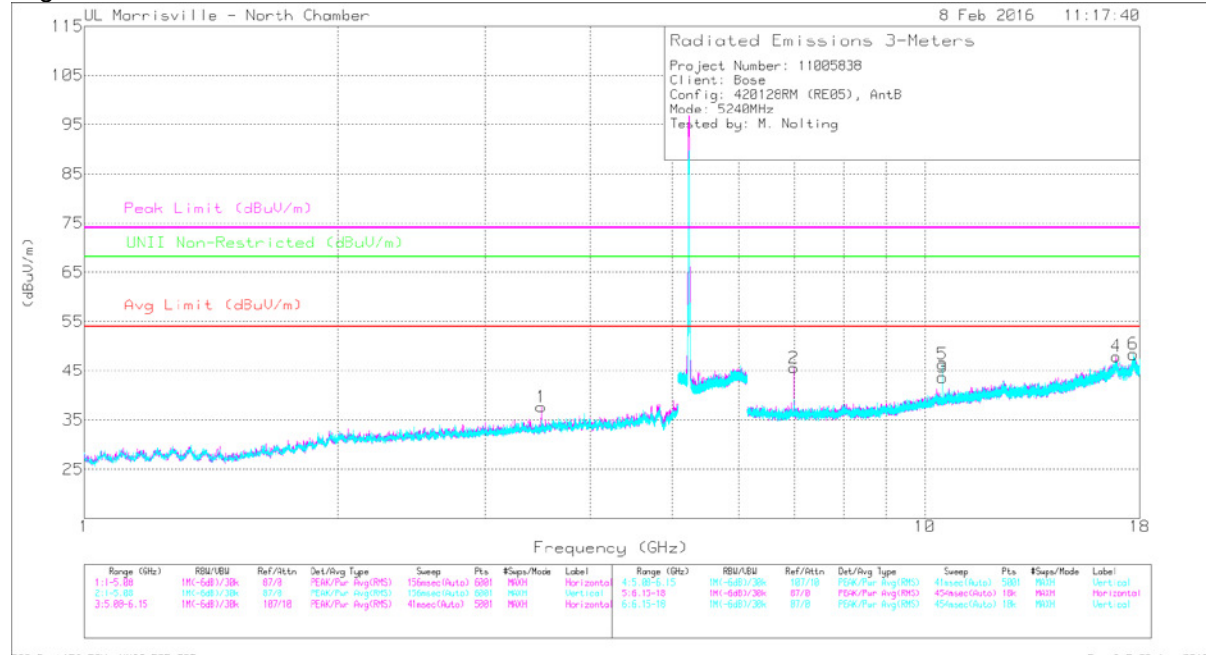
Rev 9.5 28 Aug 2015

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.473	44.53	PK-U	33.1	-34.1	43.53	-	-	-	-	68.2	-24.67	261	120	H
2	6.947	45.28	PK-U	35.6	-30.1	50.78	-	-	-	-	68.2	-17.42	36	101	H
4	6.947	42.93	PK-U	35.6	-30.1	48.43	-	-	-	-	68.2	-19.77	240	398	V
3	10.42	38.24	PK-U	37.6	-27.7	48.14	-	-	-	-	68.2	-20.06	25	109	H
5	10.42	38.28	PK-U	37.6	-27.7	48.18	-	-	-	-	68.2	-20.02	67	113	V
6	13.147	36.79	PK-U	39.2	-27.5	48.49	-	-	-	-	68.2	-19.71	141	180	V

Pk - Peak detector

PK-U - U-NII: Maximum Peak

High Channel



FCC_Part15C_5GHz_UNII_RSE_TST

Rev. 9.5 20_Aug 2015

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.493	45.2	PK-U	33.1	-34	44.3	-	-	-	-	68.2	-23.9	260	115	H
2	6.987	43.59	PK-U	35.6	-30.4	48.79	-	-	-	-	68.2	-19.41	37	103	H
3	10.48	39.17	PK-U	37.7	-27.9	48.97	-	-	-	-	68.2	-19.23	31	101	H
5	10.48	40.54	PK-U	37.7	-27.9	50.34	-	-	-	-	68.2	-17.86	68	115	V
4	16.895	35.77	PK-U	42.2	-24.7	53.27	-	-	-	-	68.2	-14.93	93	183	H
6	17.696	34.84	PK-U	41.9	-23.1	53.64	-	-	-	-	68.2	-14.56	330	237	V

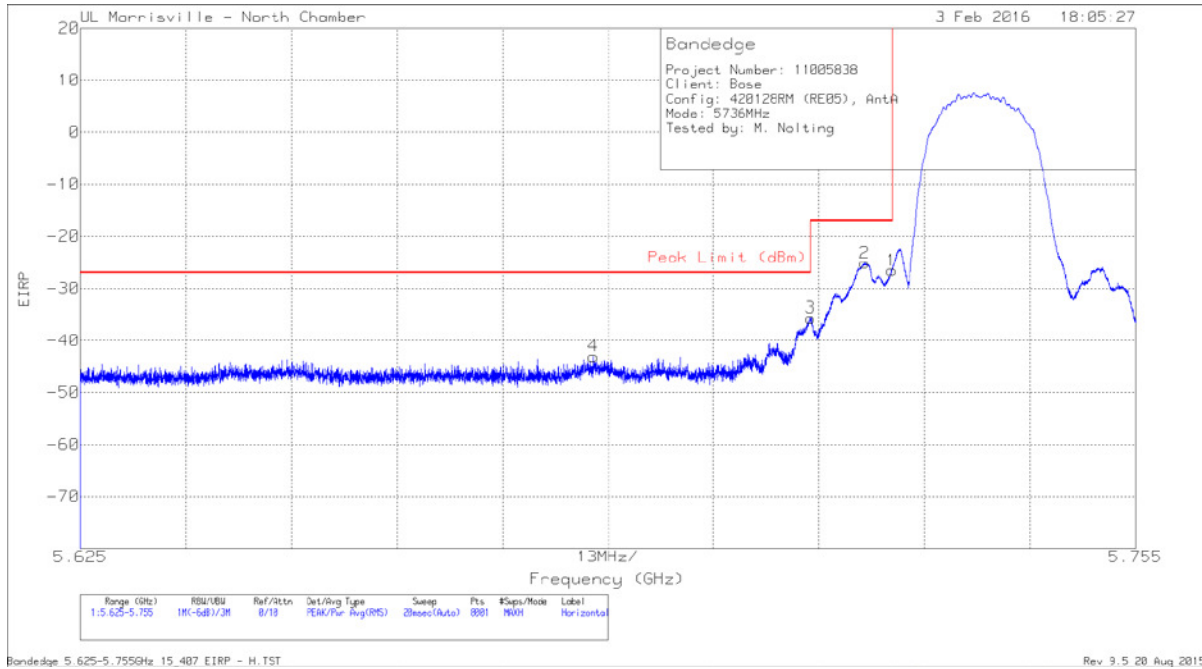
PK - Peak detector

PK-U - U-NII: Maximum Peak

9.2.2. TX 1-18 GHz QPSK MODE IN THE 5.8 GHz BAND

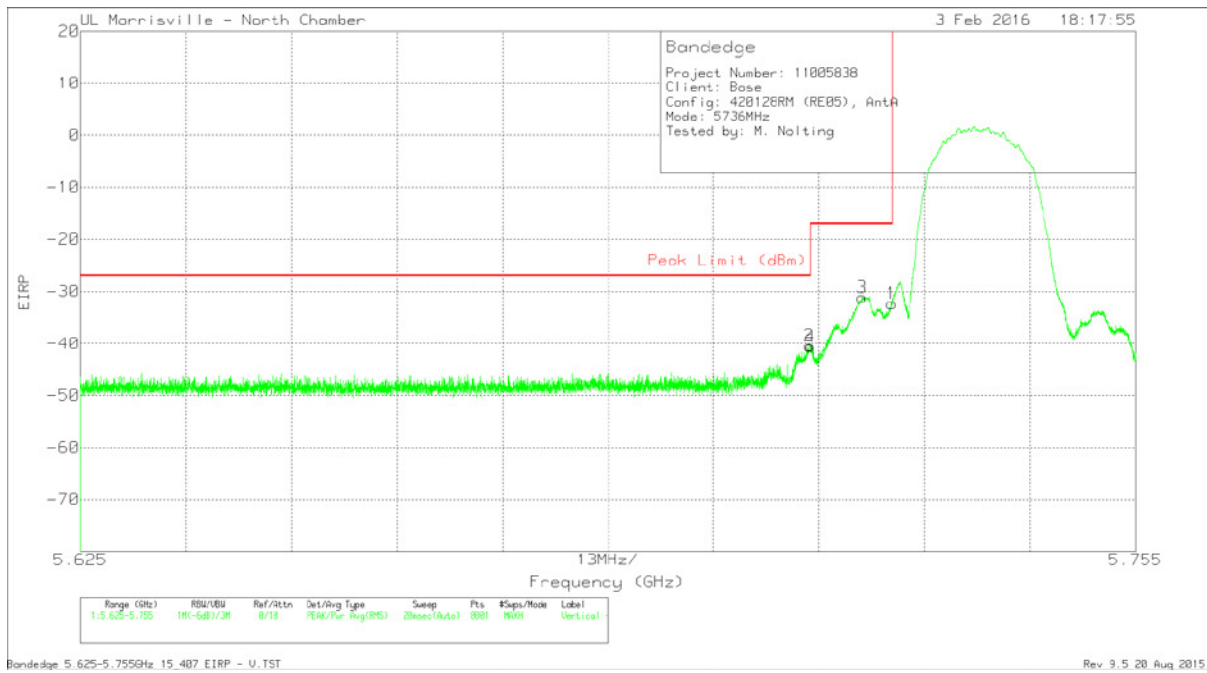
Chain 0 (Antenna A, J402)

AUTHORIZED BANDEGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-49.46	Pk	34.7	-23.6	11.8	-26.56	-17	-9.56	87	101	H
2	5.722	-48.12	Pk	34.7	-23.5	11.8	-25.12	-17	-8.12	87	101	H
3	5.715	-58.69	Pk	34.7	-23.5	11.8	-35.69	-27	-8.69	87	101	H
4	5.688	-66.05	Pk	34.7	-23.5	11.8	-43.05	-27	-16.05	87	101	H

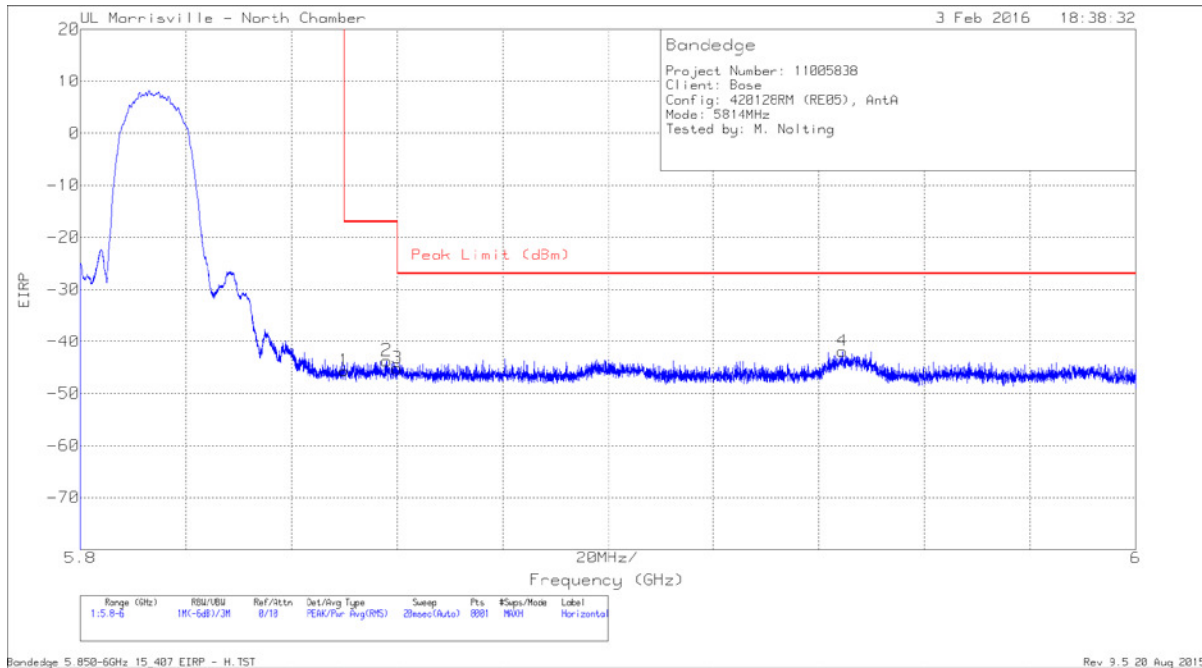
Pk - Peak detector



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.715	-63.41	Pk	34.7	-23.5	11.8	-40.41	-27	-13.41	97	399	V
4	5.715	-63.6	Pk	34.7	-23.5	11.8	-40.6	-27	-13.6	97	399	V
3	5.721	-54.13	Pk	34.7	-23.5	11.8	-31.13	-17	-14.13	97	399	V
1	5.725	-55.22	Pk	34.7	-23.6	11.8	-32.32	-17	-15.32	97	399	V

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

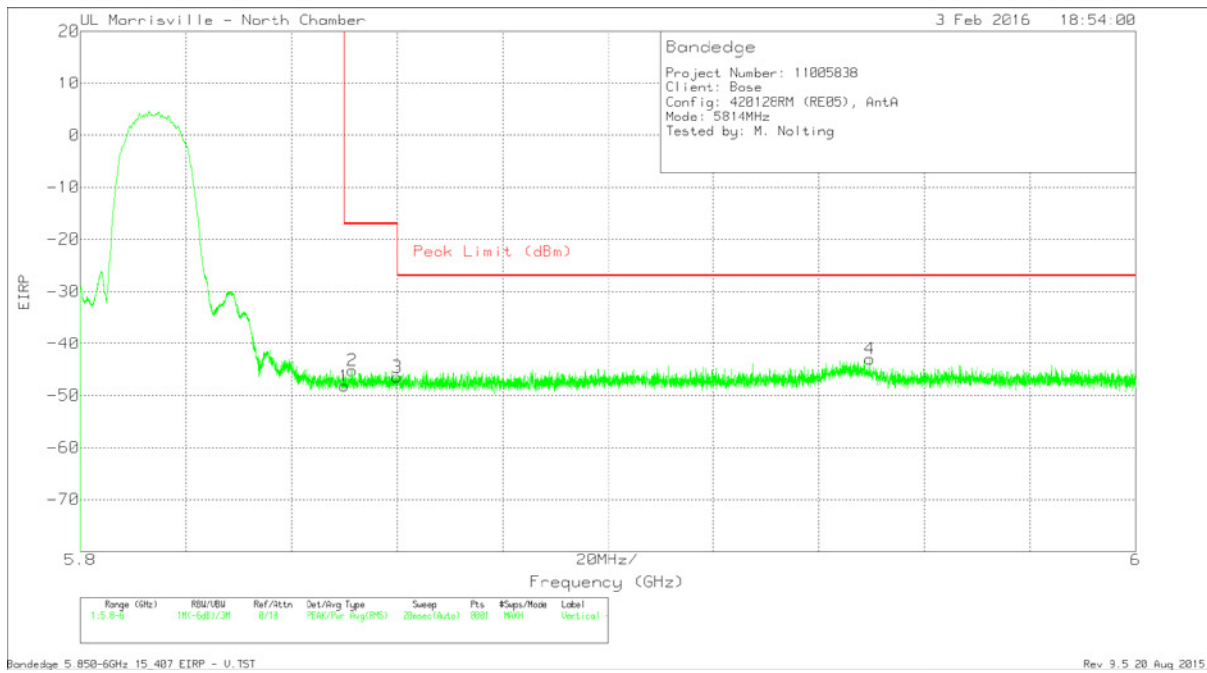


Bandedge 5.850-6GHz 15.407 EIRP - H.TST

Rev. 9.5 20 Aug 2015.

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-69.21	Pk	34.9	-23.1	11.8	-45.61	-17	-28.61	0	106	H
2	5.858	-67.27	Pk	34.9	-23.1	11.8	-43.67	-17	-26.67	0	106	H
3	5.86	-68.69	Pk	34.9	-23.1	11.8	-45.09	-27	-18.09	0	106	H
4	5.944	-65.94	Pk	35	-22.7	11.8	-41.84	-27	-14.84	0	106	H

Pk - Peak detector

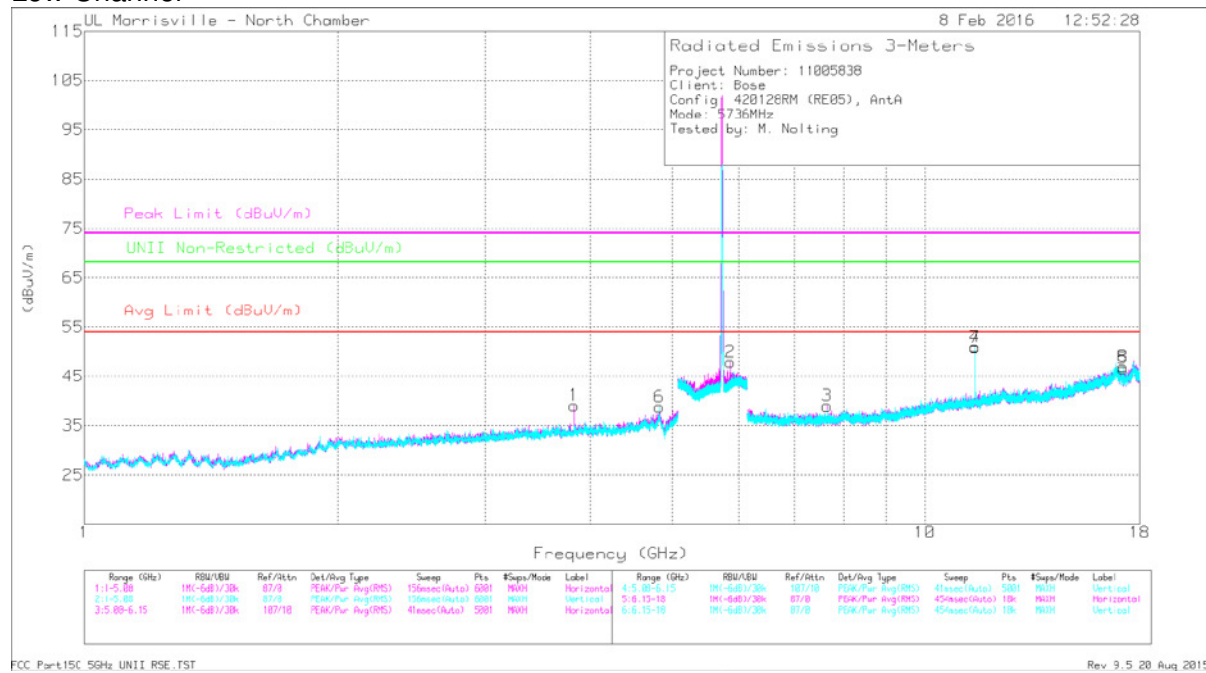


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-71.81	Pk	34.9	-23.1	11.8	-48.21	-17	-31.21	86	387	V
2	5.852	-68.76	Pk	34.9	-23.1	11.8	-45.16	-17	-28.16	86	387	V
3	5.86	-70.07	Pk	34.9	-23.1	11.8	-46.47	-27	-19.47	86	387	V
4	5.95	-67.21	Pk	35	-22.6	11.8	-43.01	-27	-16.01	86	387	V

Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS

Low Channel



Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.824	44.88	PK-U	33.5	-33.4	44.98	-	-	74	-29.02	-	-	333	102	H
	* 3.824	37.81	ADR	33.5	-33.4	37.91	54	-16.09	-	-	-	-	333	102	H
6	* 4.836	40.32	PK-U	34.1	-31.8	42.62	-	-	74	-31.38	-	-	233	191	V
	* 4.83	29.37	ADR	34.1	-31.9	31.57	54	-22.43	-	-	-	-	233	191	V
3	* 7.648	40.51	PK-U	35.8	-30.3	36.9	54	-17.1	-	-	-	-	36	103	H
	* 7.648	31.4	ADR	35.8	-30.3	36.9	54	-17.1	-	-	-	-	36	103	H
4	* 11.472	42.79	PK-U	38.3	-26.7	54.39	-	-	74	-19.61	-	-	79	112	H
	* 11.472	39.7	ADR	38.3	-26.7	51.3	54	-2.7	-	-	-	-	79	112	H
7	* 11.472	42.44	PK-U	38.3	-26.7	54.04	-	-	74	-19.96	-	-	95	102	V
	* 11.472	39.38	ADR	38.3	-26.7	50.98	54	-3.02	-	-	-	-	95	102	V
2	5.867	41.77	PK-U	34.9	-23.1	53.57	-	-	-	-	68.2	-14.63	360	103	H
8	17.208	38.32	PK-U	41.8	-26.2	53.92	-	-	-	-	68.2	-14.28	88	115	V
5	17.206	36.81	PK-U	41.8	-26.2	52.41	-	-	-	-	68.2	-15.79	88	115	H

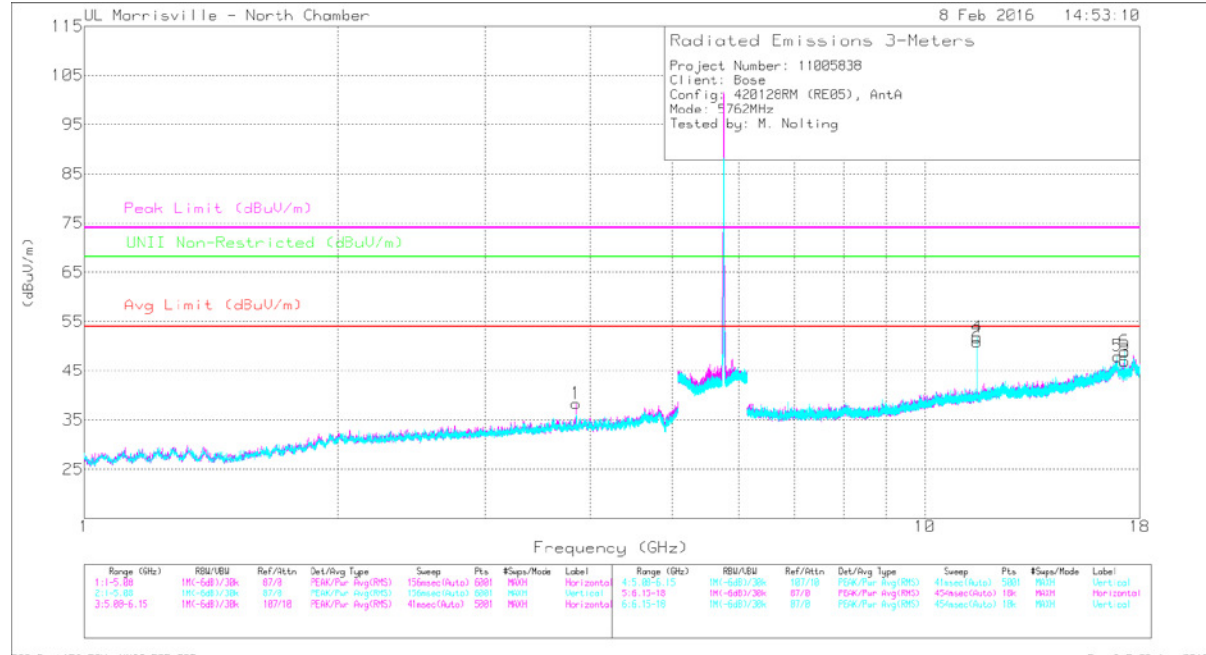
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Middle Channel



FCC_Part15C_5GHz_UNII_RSE_TST

Rev. 9.5 20 Aug 2015

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.841	44.34	PK-U	33.5	-33.3	44.54	-	-	74	-29.46	-	-	333	101	H
	* 3.841	37.11	ADR	33.5	-33.3	37.31	54	-16.69	-	-	-	-	333	101	H
2	* 11.524	42.9	PK-U	38.3	-26.8	54.4	-	-	74	-19.6	-	-	80	108	H
	* 11.524	39.44	ADR	38.3	-26.8	50.94	54	-3.06	-	-	-	-	80	108	H
4	* 11.524	42.58	PK-U	38.3	-26.8	54.08	-	-	74	-19.92	-	-	95	106	V
	* 11.524	39.83	ADR	38.3	-26.8	51.33	54	-2.67	-	-	-	-	95	106	V
5	16.943	35.85	PK-U	42.2	-25.3	52.75	-	-	-	-	68.2	-15.45	331	162	V
6	17.286	39.36	PK-U	41.7	-26.3	54.76	-	-	-	-	68.2	-13.44	88	115	V
3	17.286	38.19	PK-U	41.7	-26.3	53.59	-	-	-	-	68.2	-14.61	88	113	H

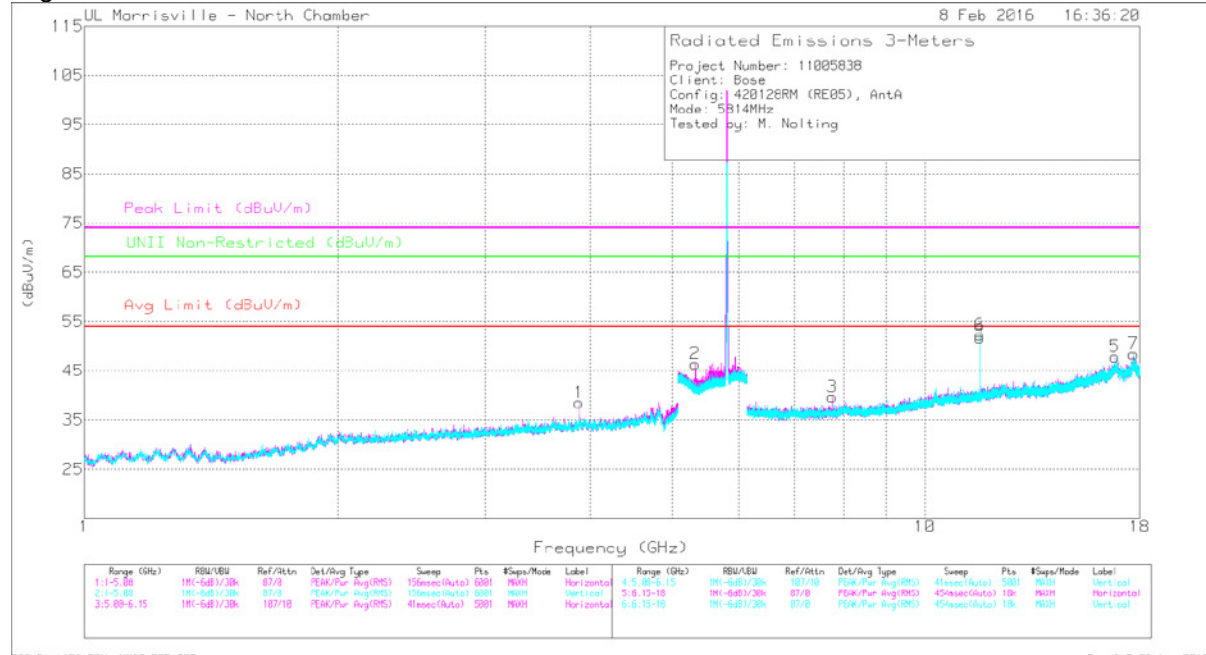
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

High Channel



FCC_Part15C_5GHz_UNII_RSE_TST

Rev. 9.5.20 Aug 2015

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.876	44.07	PK-U	33.6	-33.2	44.47	-	-	74	-29.53	-	-	332	101	H
	* 3.876	36.6	ADR	33.6	-33.2	37	54	-17	-	-	-	-	332	101	H
4	* 11.628	43.82	PK-U	38.5	-27.3	55.02	-	-	74	-18.98	-	-	272	111	H
	* 11.628	40.98	ADR	38.5	-27.3	52.18	54	-1.82	-	-	-	-	272	111	H
6	* 11.628	43.81	PK-U	38.5	-27.3	55.01	-	-	74	-18.99	-	-	98	113	V
	* 11.628	40.51	ADR	38.5	-27.3	51.71	54	-2.29	-	-	-	-	98	113	V
2	5.333	41.69	PK-U	34.5	-23.8	52.39	-	-	-	-	68.2	-15.81	346	102	H
3	7.752	40.29	PK-U	35.8	-30	46.09	-	-	-	-	68.2	-22.11	37	101	H
5	16.825	35.32	PK-U	42.3	-24.7	52.92	-	-	-	-	68.2	-15.28	271	237	H
7	17.698	34.95	PK-U	41.9	-23	53.85	-	-	-	-	68.2	-14.35	166	261	V

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

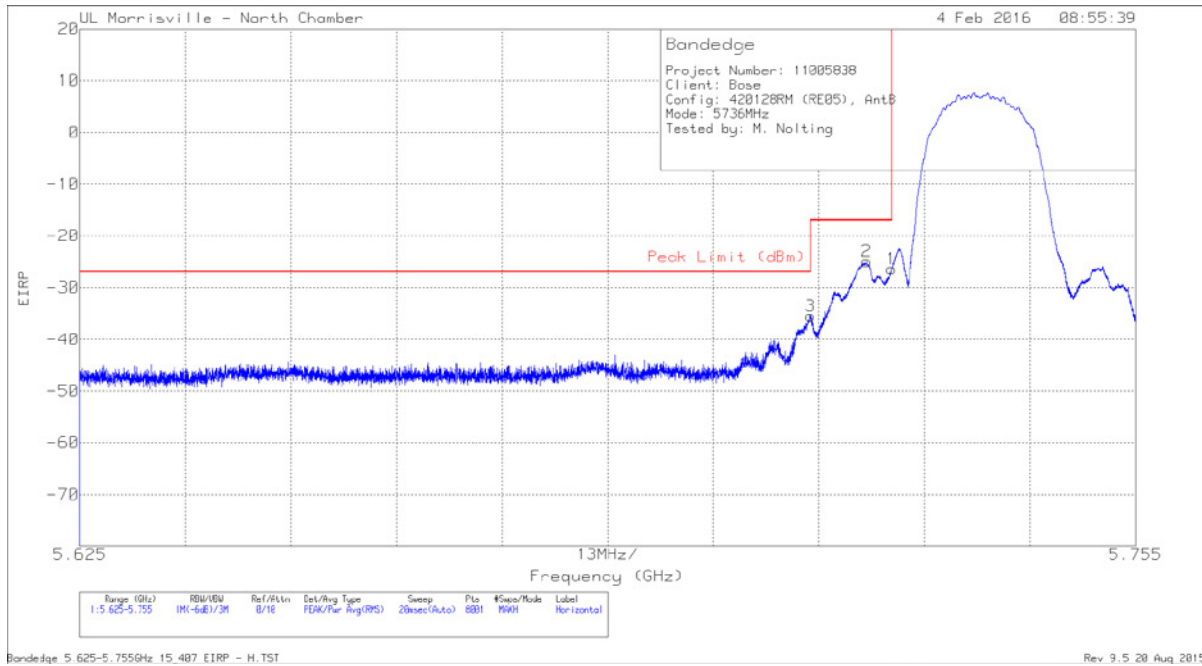
Pk - Peak detector

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

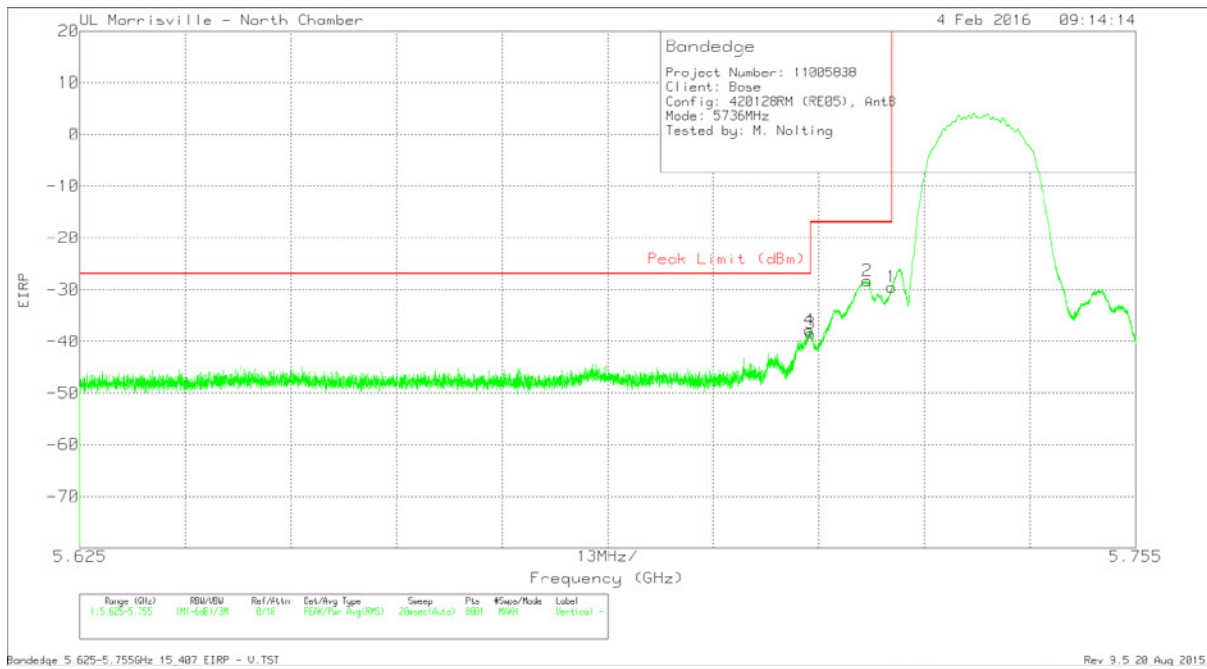
Chain 1 (Antenna B, J403)

RESTRICTED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/ Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-49.28	Pk	34.7	-23.6	11.8	-26.38	-17	-9.38	90	117	H
2	5.722	-47.93	Pk	34.7	-23.5	11.8	-24.93	-17	-7.93	90	117	H
3	5.715	-58.49	Pk	34.7	-23.5	11.8	-35.49	-27	-8.49	90	117	H

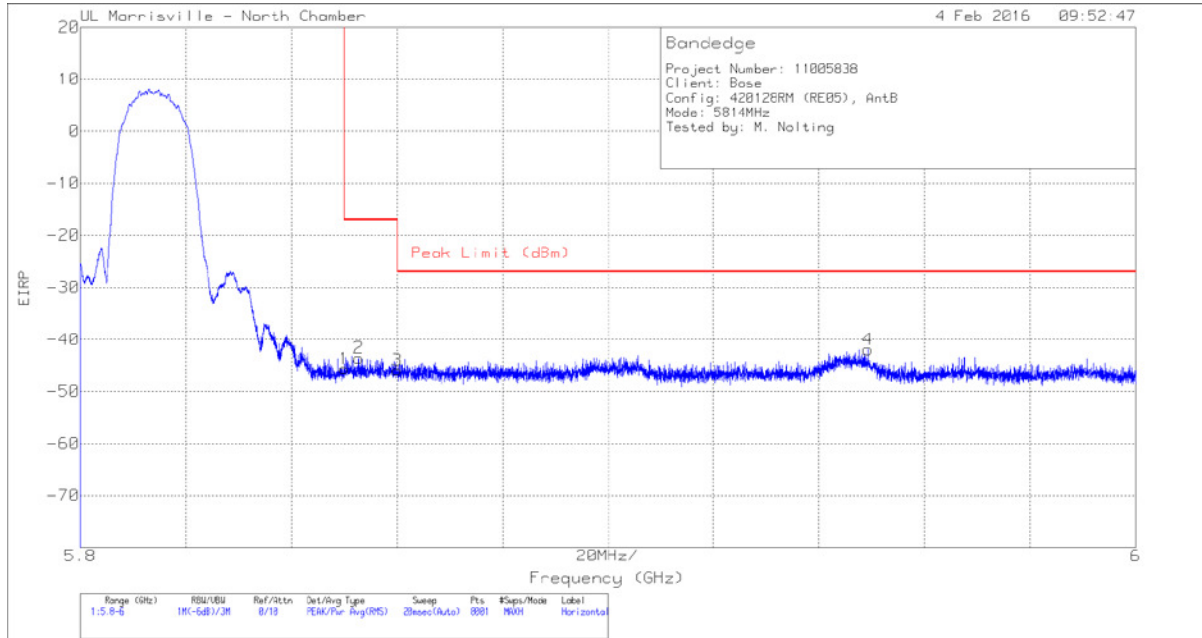
Pk - Peak detector



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	-52.38	Pk	34.7	-23.6	11.8	-29.48	-17	-12.48	155	101	V
2	5.722	-51.27	Pk	34.7	-23.5	11.8	-28.27	-17	-11.27	155	101	V
3	5.715	-61.4	Pk	34.7	-23.5	11.8	-38.4	-27	-11.4	155	101	V
4	5.715	-60.81	Pk	34.7	-23.5	11.8	-37.81	-27	-10.81	155	101	V

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

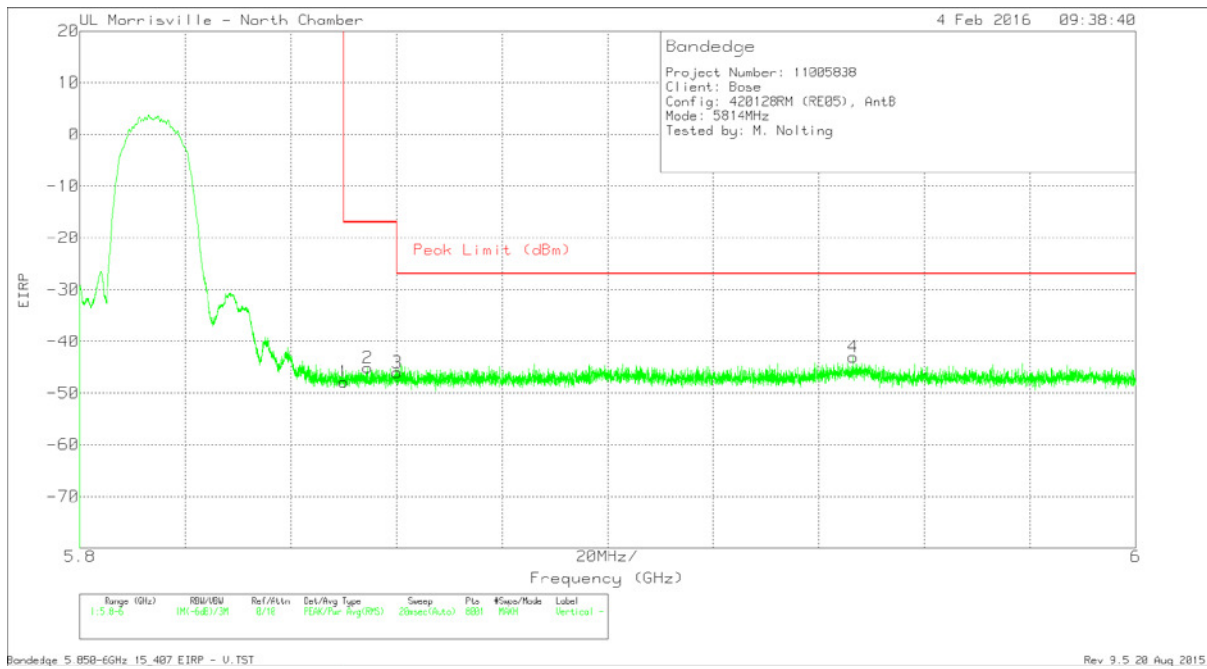


Bandedge 5.850-6GHz 15.407 EIRP - H.TST

Rev. 9.5 20 Aug 2015.

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-69.25	Pk	34.9	-23.1	11.8	-45.65	-17	-28.65	88	101	H
2	5.853	-67.16	Pk	34.9	-23.1	11.8	-43.56	-17	-26.56	88	101	H
3	5.86	-69.5	Pk	34.9	-23.1	11.8	-45.9	-27	-18.9	88	101	H
4	5.949	-66.14	Pk	35	-22.6	11.8	-41.94	-27	-14.94	88	101	H

Pk - Peak detector

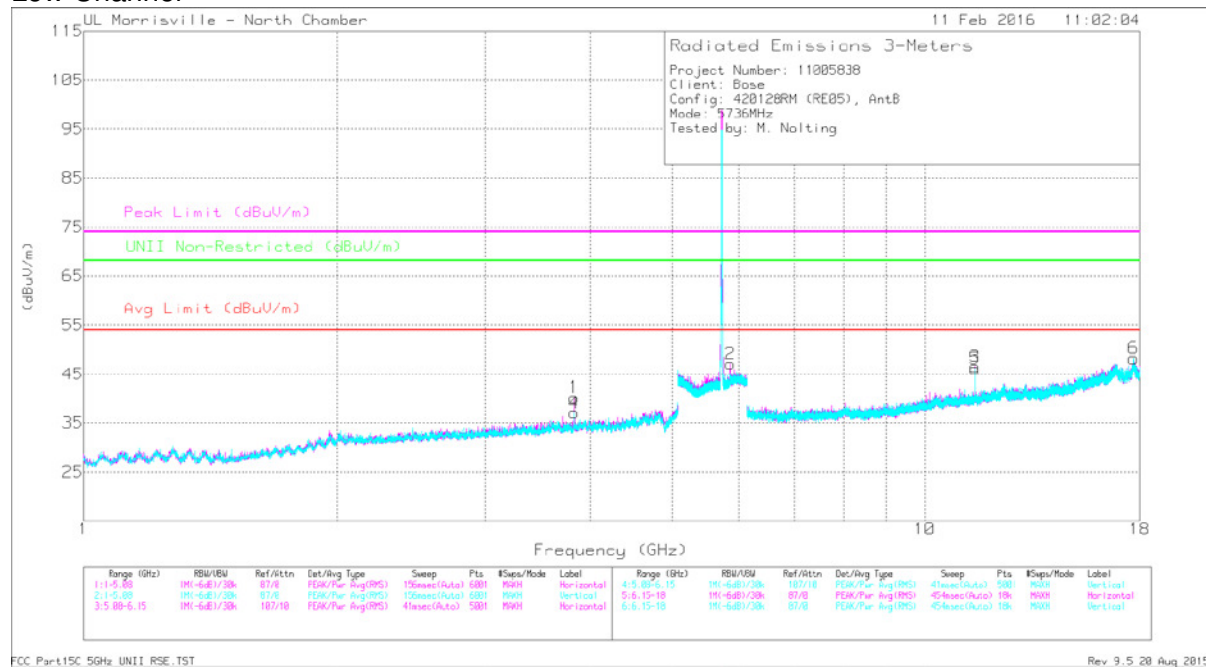


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-71.43	Pk	34.9	-23.1	11.8	-47.83	-17	-30.83	156	104	V
2	5.854	-68.7	Pk	34.9	-23.1	11.8	-45.1	-17	-28.1	156	104	V
3	5.86	-69.63	Pk	34.9	-23.1	11.8	-46.03	-27	-19.03	156	104	V
4	5.947	-67.1	Pk	35	-22.7	11.8	-43	-27	-16	156	104	V

Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS

Low Channel



FCC Part15C_5GHz_UNII_RSE_TST

Rev. 9.5 28 Aug 2015.

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.824	45.48	PK-U	33.5	-33.4	45.58	-	-	74	-28.42	-	-	248	102	H
	* 3.824	39.18	ADR	33.5	-33.4	39.28	54	-14.72	-	-	-	-	248	102	H
4	* 3.824	44.37	PK-U	33.5	-33.4	44.47	-	-	74	-29.53	-	-	206	395	V
	* 3.824	36.15	ADR	33.5	-33.4	36.25	54	-17.75	-	-	-	-	206	395	V
3	* 11.472	39.1	PK-U	38.3	-26.7	50.7	-	-	74	-23.3	-	-	183	234	H
	* 11.472	34.05	ADR	38.3	-26.7	45.65	54	-8.35	-	-	-	-	183	234	H
5	* 11.472	40.01	PK-U	38.3	-26.7	51.61	-	-	74	-22.39	-	-	145	391	V
	* 11.472	34.79	ADR	38.3	-26.7	46.39	54	-7.61	-	-	-	-	145	391	V
6	* 17.701	34.48	PK-U	41.9	-22.8	53.58	-	-	74	-20.42	-	-	231	272	V
	* 17.7	23.27	ADR	41.9	-22.9	42.27	54	-11.73	-	-	-	-	231	272	V
2	5.868	40.95	PK-U	34.9	-23	52.85	-	-	-	-	68.2	-15.35	89	104	H

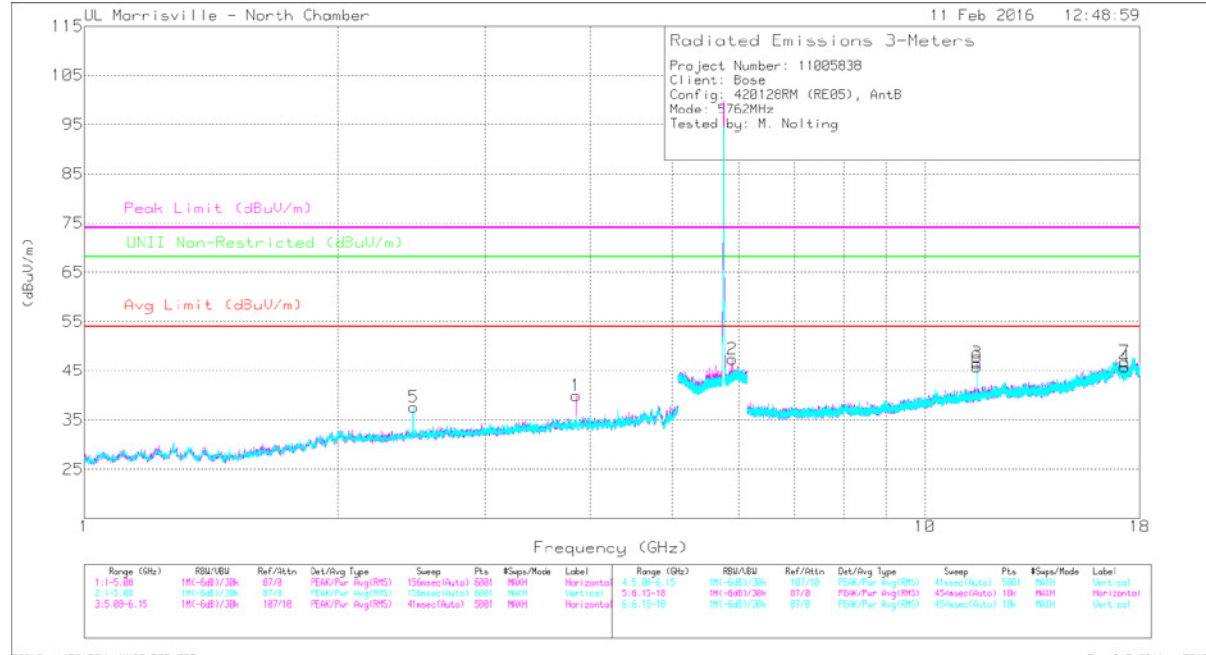
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Middle Channel



FCC_Part15C_5GHz_UNII_RSE_TST

Rev. 9.5 20_Aug 2015

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.841	45.15	PK-U	33.5	-33.3	45.35	-	-	74	-28.65	-	-	246	101	H
	* 3.841	38.77	ADR	33.5	-33.3	38.97	54	-15.03	-	-	-	-	246	101	H
3	* 11.524	39.36	PK-U	38.3	-26.8	50.86	-	-	74	-23.14	-	-	187	107	H
	* 11.524	34.63	ADR	38.3	-26.8	46.13	54	-7.87	-	-	-	-	187	107	H
6	* 11.524	39.6	PK-U	38.3	-26.8	51.1	-	-	74	-22.9	-	-	145	385	V
	* 11.524	34.95	ADR	38.3	-26.8	46.45	54	-7.55	-	-	-	-	145	385	V
5	2.464	44.71	PK-U	32	-34.7	42.01	-	-	-	-	68.2	-26.19	296	254	V
2	5.893	41.11	PK-U	34.9	-22.8	53.21	-	-	-	-	68.2	-14.99	87	102	H
4	17.295	36.98	PK-U	41.7	-26.4	52.28	-	-	-	-	68.2	-15.92	176	110	H
7	17.284	37.65	PK-U	41.7	-26.3	53.05	-	-	-	-	68.2	-15.15	88	112	V

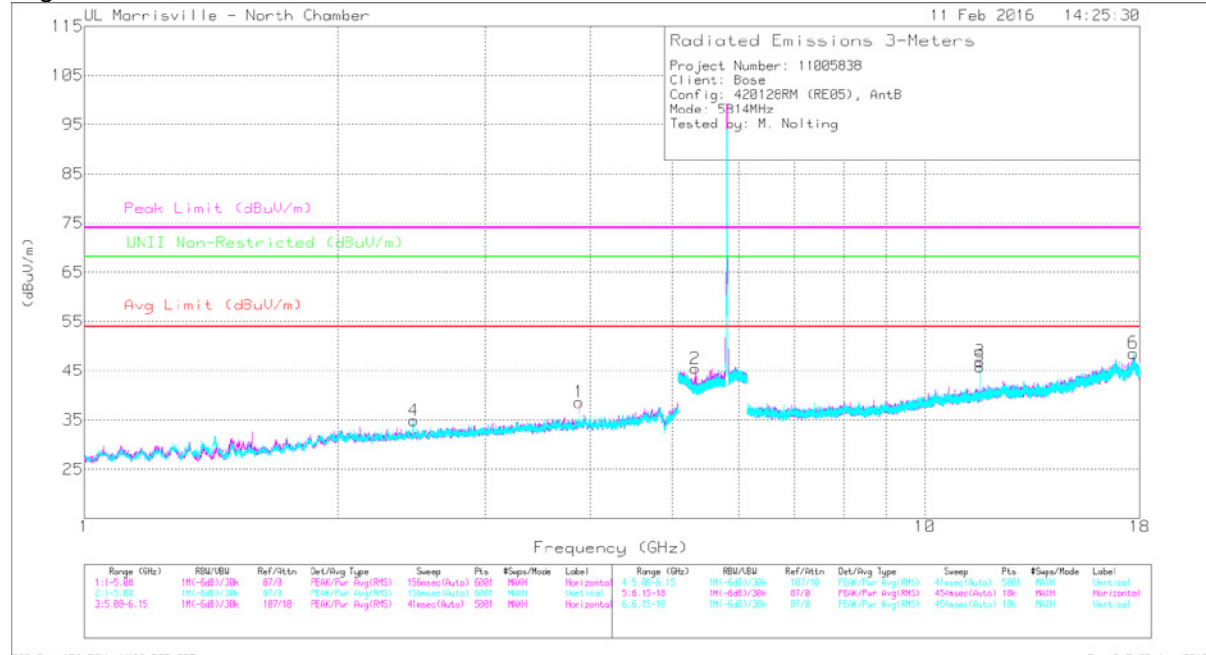
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

High Channel



FCC_Part15C_5GHz_UNII_RSE_TST

Rev. 9.5.20 Aug 2015

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF AT0072 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.876	44.82	PK-U	33.6	-33.2	45.22	-	-	74	-28.78	-	-	247	101	H
	* 3.876	37.2	ADR	33.6	-33.2	37.6	54	-16.4	-	-	-	-	247	101	H
3	* 11.628	40.04	PK-U	38.5	-27.3	51.24	-	-	74	-22.76	-	-	280	106	H
	* 11.628	35.5	ADR	38.5	-27.3	46.7	54	-7.3	-	-	-	-	280	106	H
5	* 11.628	40.26	PK-U	38.5	-27.3	51.46	-	-	74	-22.54	-	-	145	385	V
	* 11.628	35.12	ADR	38.5	-27.3	46.32	54	-7.68	-	-	-	-	145	385	V
4	2.462	30.29	ADR	32	-34.7	27.59	-	-	-	-	-	-	233	108	V
2	5.329	41.54	PK-U	34.5	-23.8	52.24	-	-	-	-	68.2	-15.96	73	101	H
6	17.689	34.61	PK-U	41.9	-23.4	53.11	-	-	-	-	68.2	-15.09	40	201	V

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

Pk - Peak detector

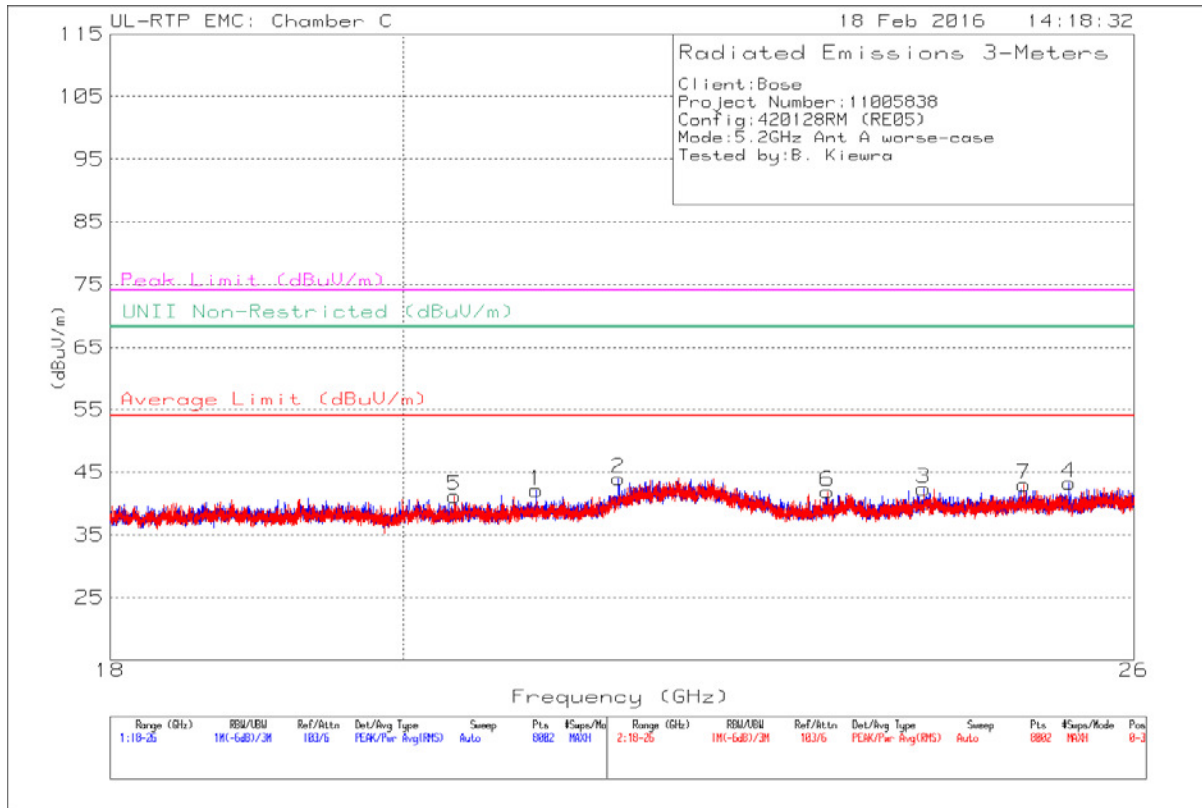
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.3. WORST-CASE ABOVE 18 GHz

9.3.1. SPURIOUS EMISSIONS 18 TO 26 GHz (5.2GHz WORST-CASE CONFIGURATION)

Chain 0



Trace Markers

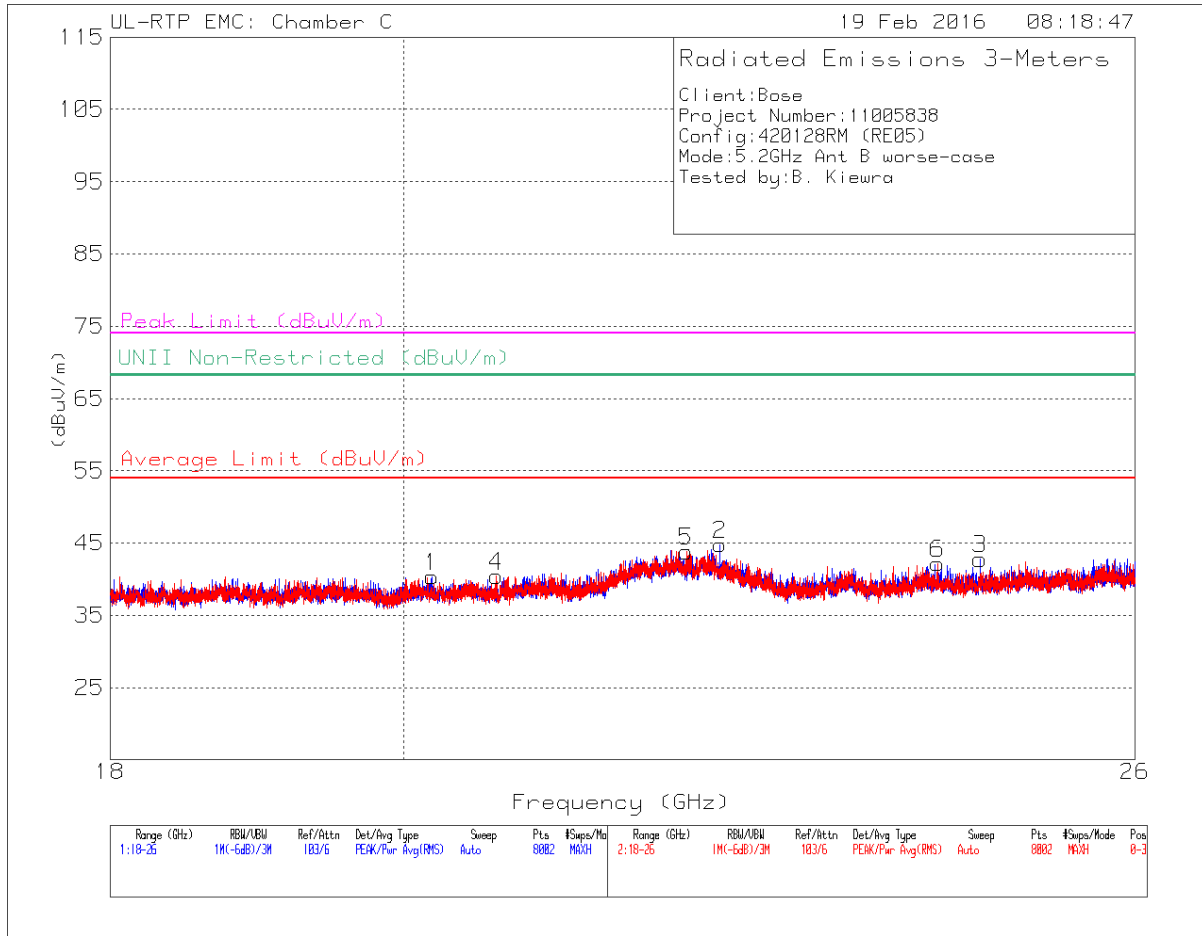
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 20.978	48.15	PK-U	33.1	-40.8	40.45	-	-	74	-33.55	-	-	3	385	H
	* 20.978	37.11	ADR	33.1	-40.8	29.41	54	-24.59	-	-	-	-	3	385	H
5	* 20.37	49.59	PK-U	32.9	-41.1	41.39	-	-	74	-32.61	-	-	264	370	V
	* 20.371	37.37	ADR	32.9	-41.1	29.17	54	-24.83	-	-	-	-	264	370	V
2	21.609	49.21	PK-U	34.7	-40.7	43.21	-	-	-	-	68.2	-24.99	9	319	H
3	24.11	48.3	PK-U	33.6	-39.3	42.6	-	-	-	-	68.2	-25.6	104	120	H
4	25.403	46.7	PK-U	33.9	-38.4	42.2	-	-	-	-	68.2	-26	103	227	H
6	23.289	47.99	PK-U	33.5	-40	41.49	-	-	-	-	68.2	-26.71	324	295	V
7	24.225	48.06	PK-U	33.5	-39.1	42.46	-	-	-	-	68.2	-25.74	152	262	V

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

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Chain 1



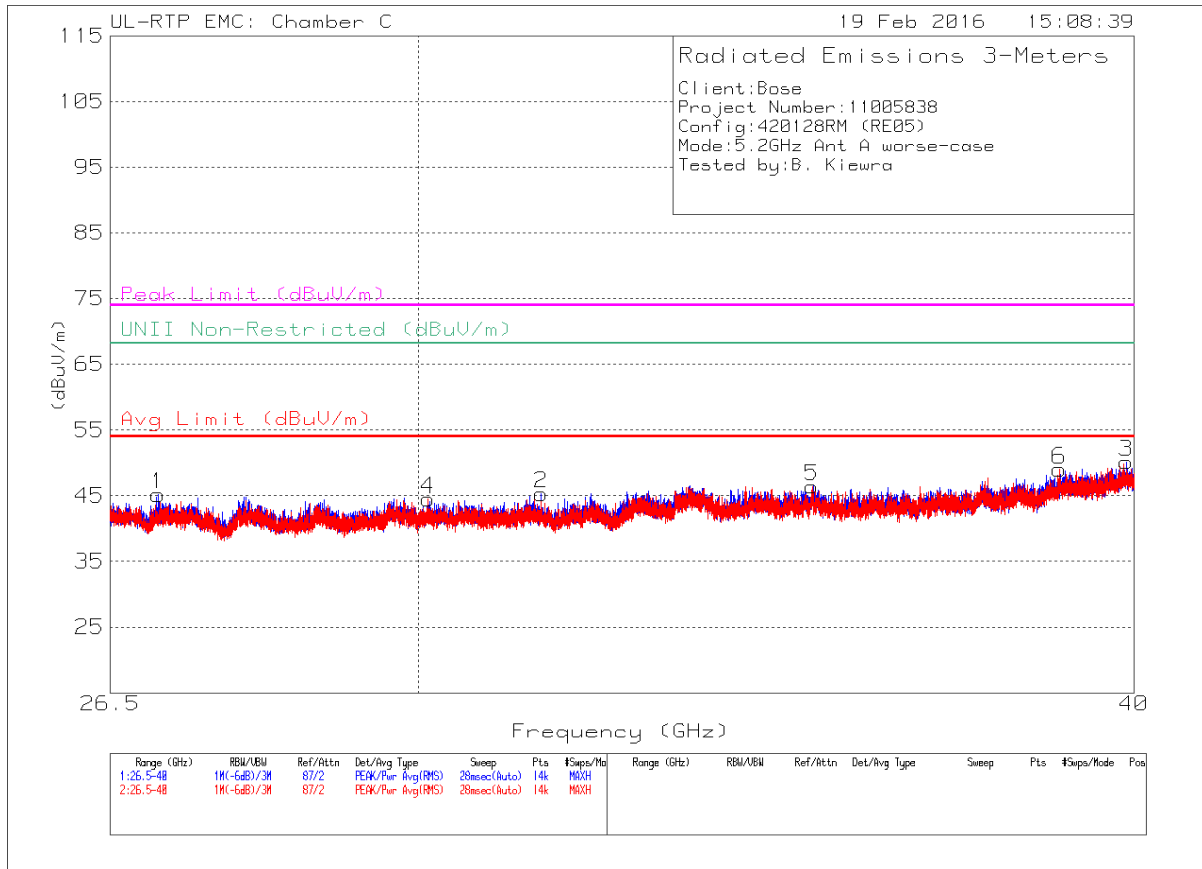
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Avg Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 20.203	48.71	PK-U	32.7	-40.9	40.51	-	-	74	-33.49	-	-	131	295	H
	* 20.205	37.32	ADR	32.7	-40.9	29.12	54	-24.88	-	-	-	-	131	295	H
2	* 22.403	48.45	PK-U	35.6	-40.5	43.55	-	-	74	-30.45	-	-	311	367	H
	* 22.403	36.69	ADR	35.6	-40.5	31.79	54	-22.21	-	-	-	-	311	367	H
4	* 20.677	48.31	PK-U	32.8	-41	40.11	-	-	74	-33.89	-	-	269	363	V
	* 20.675	37.11	ADR	32.8	-41	28.91	54	-25.09	-	-	-	-	269	363	V
5	* 22.135	48.25	PK-U	36.4	-40.6	44.05	-	-	74	-29.95	-	-	187	209	V
	* 22.136	36.51	ADR	36.4	-40.6	32.31	54	-21.69	-	-	-	-	187	209	V
3	24.595	48.13	PK-U	33.8	-38.7	43.23	-	-	-	-	68.2	-24.97	315	353	H
6	24.225	48.06	PK-U	33.5	-39.1	42.46	-	-	-	-	68.2	-25.74	152	262	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

9.3.2. SPURIOUS EMISSIONS 26 TO 40 GHz (5.2 GHz WORST-CASE CONFIGURATION)

Chain 0



Trace Markers

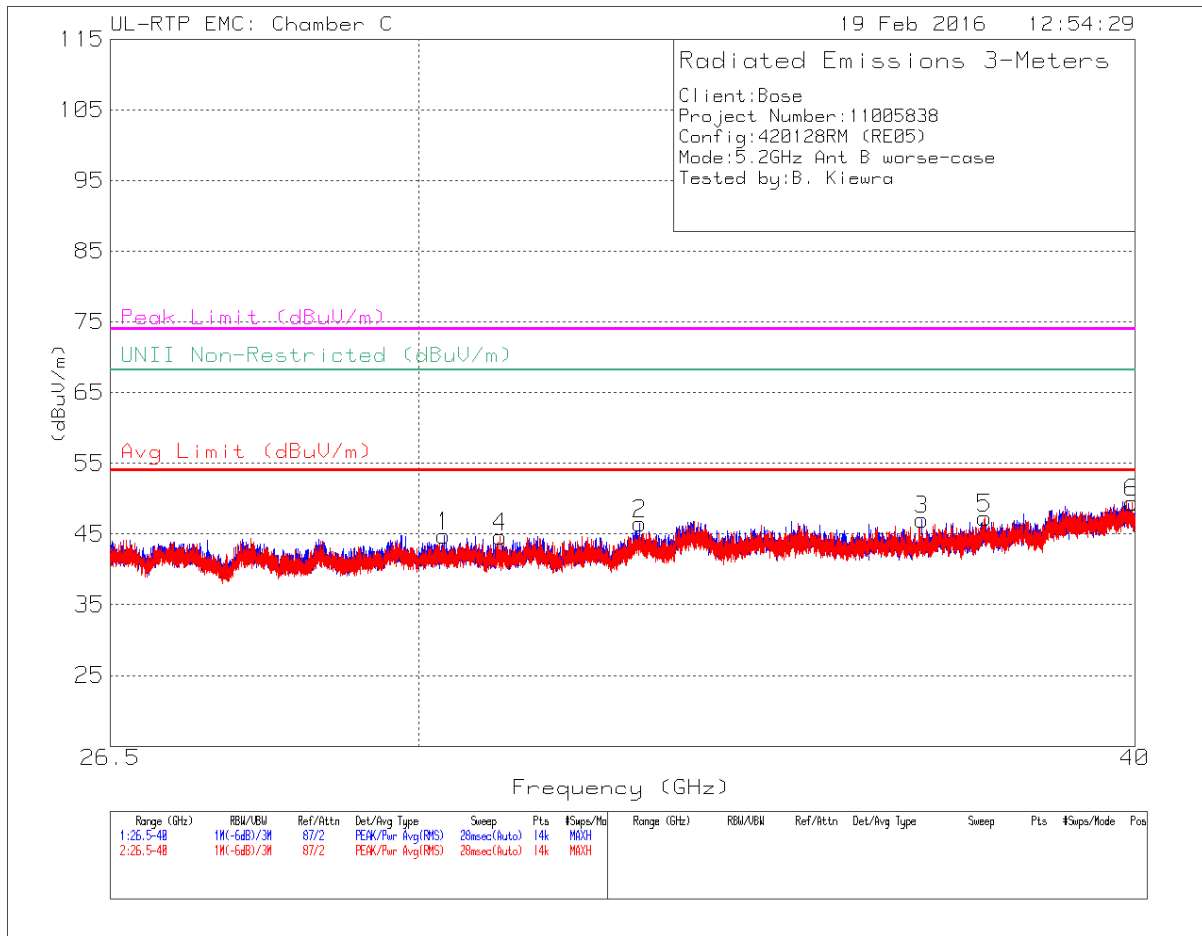
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	AVG Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 31.516	43.5	PK-U	36.5	-34.8	45.2	-	-	74	-28.8	-	-	295	400	H
	* 31.517	31.95	ADR	36.5	-34.8	33.65	54	-20.35	-	-	-	-	295	400	H
3	* 39.882	44.11	PK-U	38.4	-31.7	50.81	-	-	74	-23.19	-	-	236	236	H
	* 39.881	31.9	ADR	38.4	-31.7	38.6	54	-15.4	-	-	-	-	236	236	H
6	* 38.818	44.75	PK-U	38.3	-33.3	49.75	-	-	74	-24.25	-	-	71	223	V
	* 38.818	33.15	ADR	38.3	-33.3	38.15	54	-15.85	-	-	-	-	71	223	V
1	27.015	46.37	PK-U	35.9	-37.4	44.87	-	-	-	-	68.2	-23.33	202	170	H
4	30.117	43.92	PK-U	36.6	-35.4	45.12	-	-	-	-	68.2	-23.08	5	214	V
5	35.143	45.73	PK-U	37.3	-35.8	47.23	-	-	-	-	68.2	-20.97	1	142	V

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

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Chain 1



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 39.953	42.59	PK-U	38.5	-31.4	49.69	-	-	74	-24.31	-	-	102	400	V
	* 39.952	31.48	ADR	38.5	-31.4	38.58	54	-15.42	-	-	-	-	102	400	V
1	30.299	44.15	PK-U	36.5	-35.2	45.45	-	-	-	-	68.2	-22.75	242	143	H
4	30.997	44.28	PK-U	36.4	-35.5	45.18	-	-	-	-	68.2	-23.02	172	153	V
2	32.786	44.09	PK-U	37	-35	46.09	-	-	-	-	68.2	-22.11	230	205	H
3	36.722	44.94	PK-U	37.7	-35	47.64	-	-	-	-	68.2	-20.56	330	398	H
5	37.657	44.85	PK-U	38.1	-34.7	48.25	-	-	-	-	68.2	-19.95	0	179	V

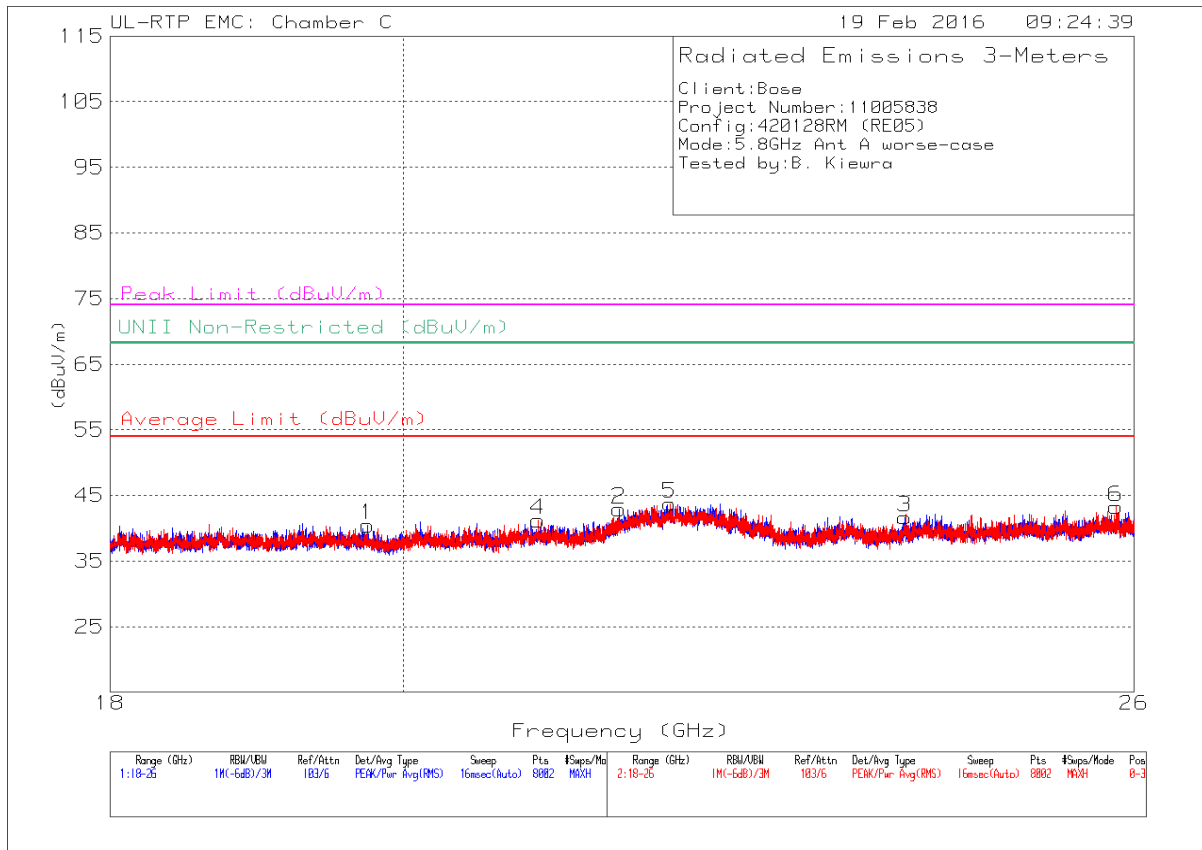
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.3.3. SPURIOUS EMISSIONS 18 TO 26 GHz (5.8 GHz WORST-CASE CONFIGURATION)

Chain 0



Trace Markers

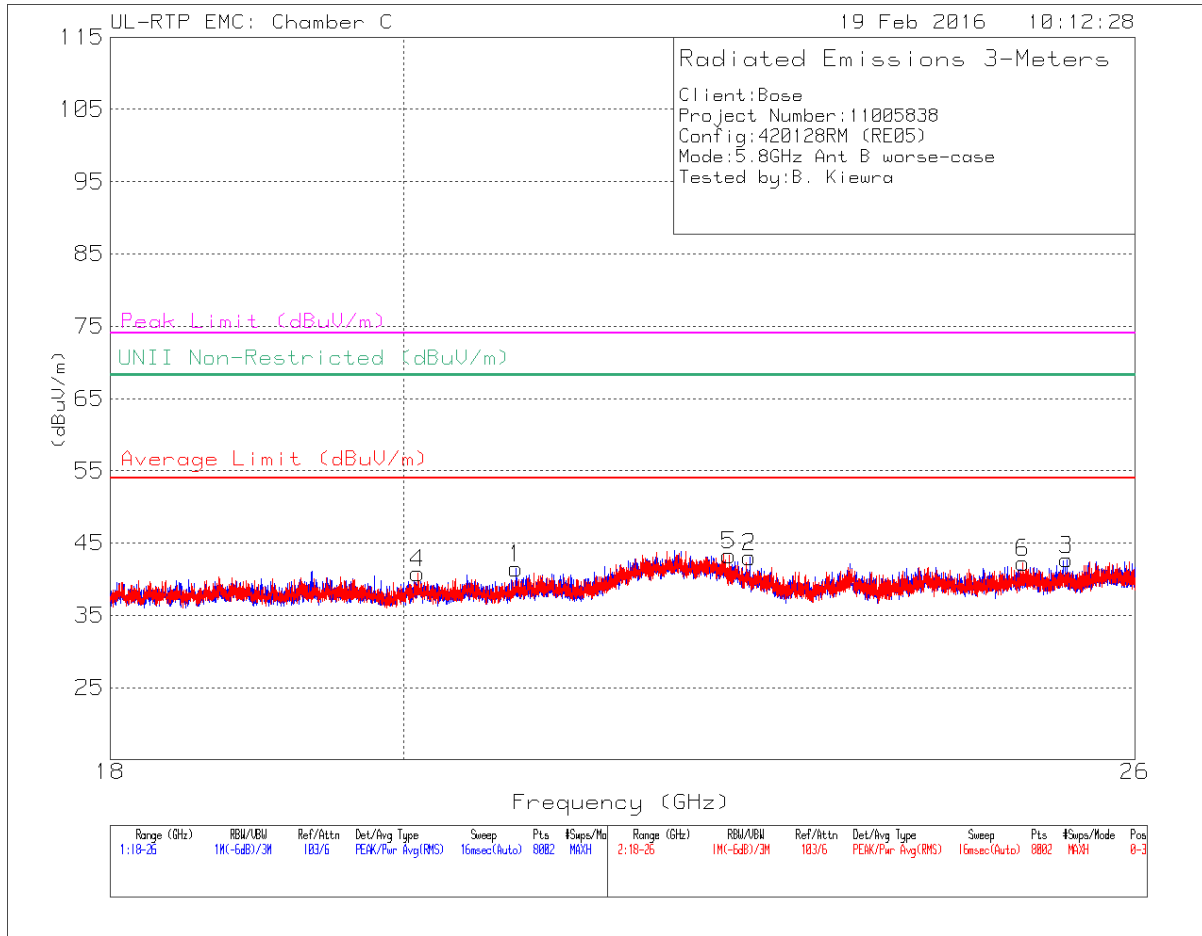
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Avg Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 19.744	49.08	PK-U	32.7	-40.7	41.08	-	-	74	-32.92	-	-	304	213	H
	* 19.743	37.21	ADR	32.7	-40.7	29.21	54	-24.79	-	-	-	-	304	213	H
3	* 23.944	48.46	PK-U	33.5	-39.3	42.66	-	-	74	-31.34	-	-	103	206	H
	* 23.944	36.86	ADR	33.5	-39.3	31.06	54	-22.94	-	-	-	-	103	206	H
4	* 20.992	48.11	PK-U	33.1	-40.5	40.71	-	-	74	-33.29	-	-	121	258	V
	* 20.992	37.11	ADR	33.1	-40.5	29.71	54	-24.29	-	-	-	-	121	258	V
2	21.613	48.97	PK-U	34.7	-40.7	42.97	-	-	-	-	68.2	-25.23	169	170	H
5	22.008	48.12	PK-U	36.7	-40.6	44.22	-	-	-	-	68.2	-23.98	348	101	V
6	25.835	46.81	PK-U	33.9	-37.6	43.11	-	-	-	-	68.2	-25.09	19	195	V

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

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

Chain 1



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Avg Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 20.822	49.48	PK-U	33.3	-40.7	42.08	-	-	74	-31.92	-	-	276	198	H
	* 20.821	37.23	ADR	33.3	-40.7	29.83	54	-24.17	-	-	-	-	276	198	H
2	* 22.641	48.58	PK-U	34.3	-40.4	42.48	-	-	74	-31.52	-	-	0	298	H
	* 22.642	37.08	ADR	34.3	-40.4	30.98	54	-23.02	-	-	-	-	0	298	H
4	* 20.101	48.24	PK-U	33	-41.1	40.14	-	-	74	-33.86	-	-	56	290	V
	* 20.098	37.57	ADR	33	-41.1	29.47	54	-24.53	-	-	-	-	56	290	V
5	* 22.476	49.2	PK-U	35	-40.6	43.6	-	-	74	-30.4	-	-	140	214	V
	* 22.476	36.93	ADR	35	-40.6	31.33	54	-22.67	-	-	-	-	140	214	V
6	24.975	47.18	PK-U	34	-38.5	42.68	-	-	-	-	68.2	-25.52	228	287	V
3	25.372	46.63	PK-U	34	-37.9	42.73	-	-	-	-	68.2	-25.47	10	293	H

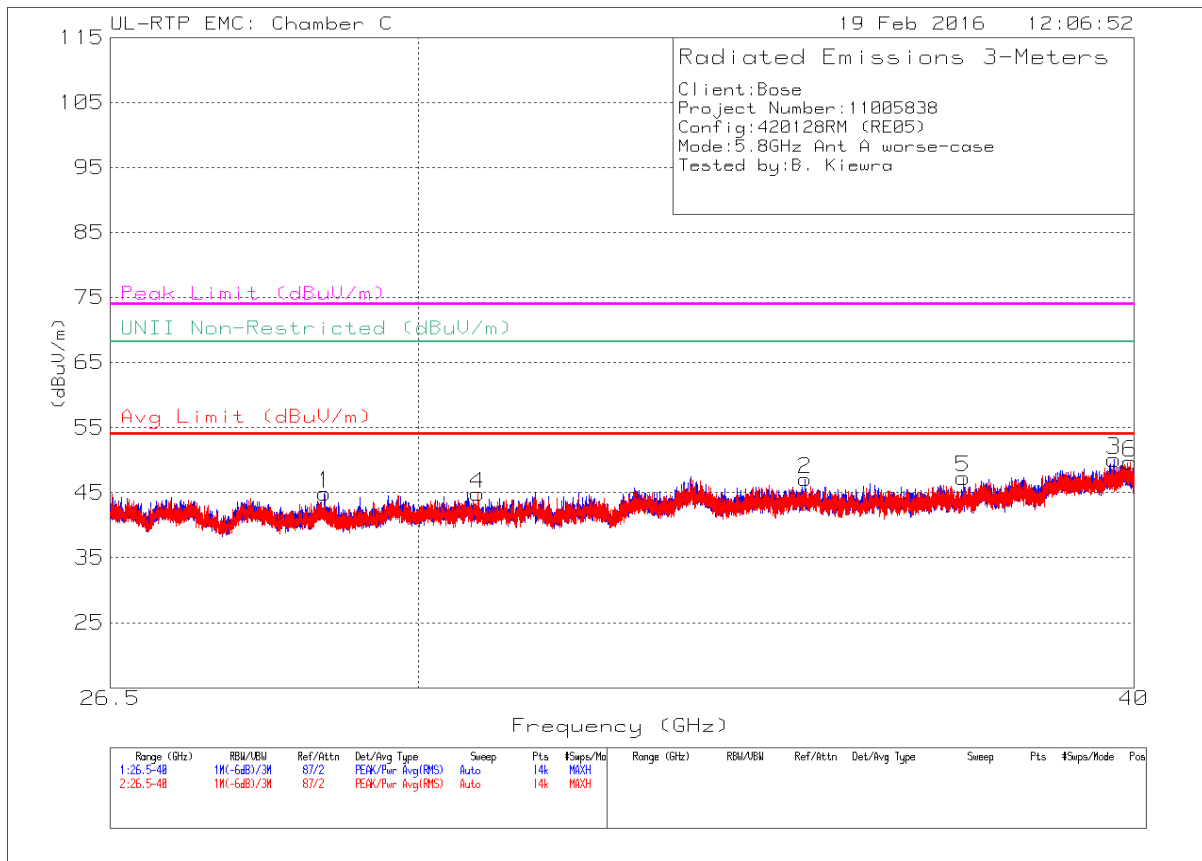
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.3.4. SPURIOUS EMISSIONS 26 TO 40 GHz (5.8 GHz WORST-CASE CONFIGURATION)

Chain 0

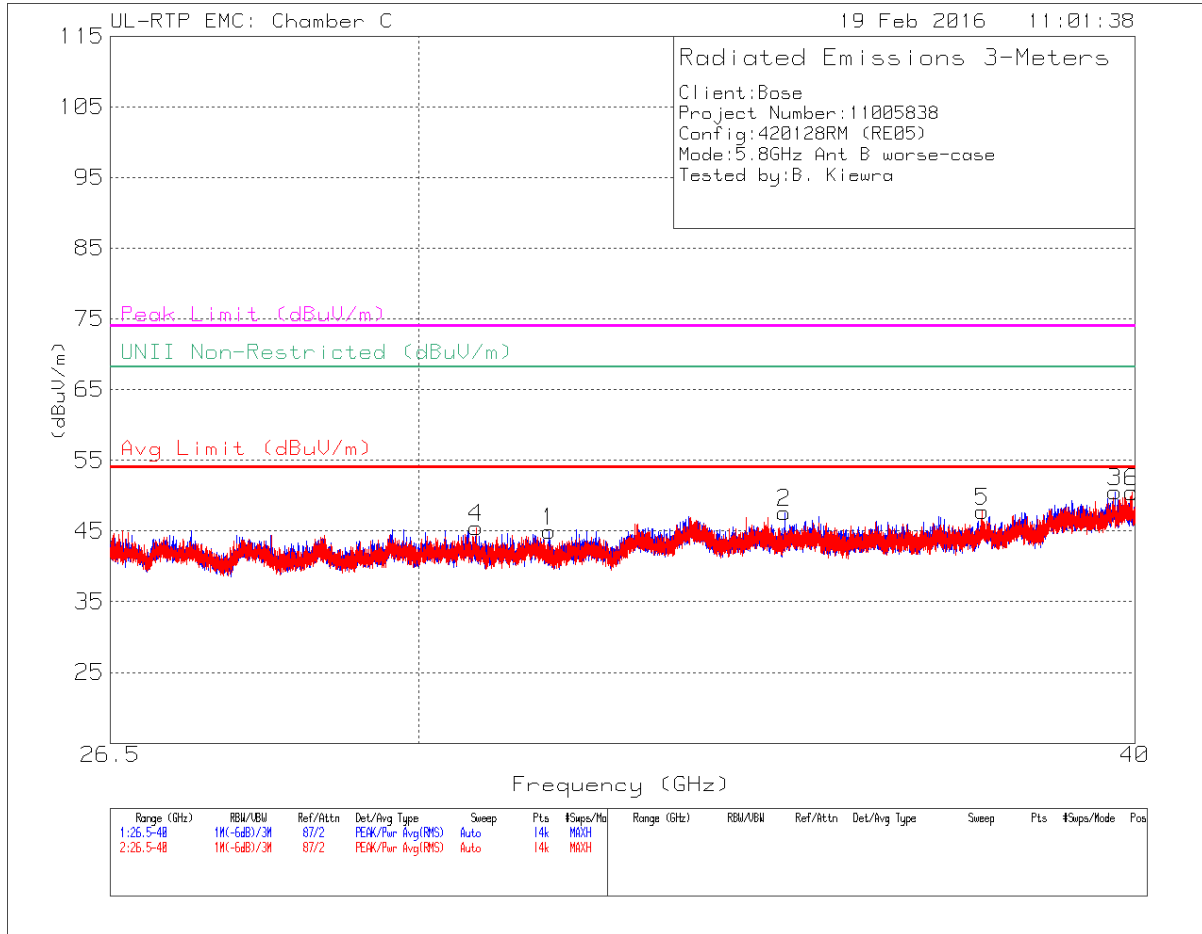


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 39.682	43.1	PK-U	38.2	-31.8	49.5	-	-	74	-24.5	-	-	360	317	H
	* 39.682	32.89	ADR	38.2	-31.8	39.29	54	-14.71	-	-	-	-	360	317	H
6	* 39.937	42.76	PK-U	38.5	-31.5	49.76	-	-	74	-24.24	-	-	34	212	V
	* 39.934	31.75	ADR	38.5	-31.5	38.75	54	-15.25	-	-	-	-	34	212	V
1	28.888	45.18	PK-U	36.1	-36.3	44.98	-	-	-	-	68.2	-23.22	290	176	H
4	30.72	44.56	PK-U	36.3	-35.6	45.26	-	-	-	-	68.2	-22.94	42	210	V
2	35.048	46.37	PK-U	37.4	-35.8	47.97	-	-	-	-	68.2	-20.23	3	368	H
5	37.348	44.45	PK-U	37.9	-35	47.35	-	-	-	-	68.2	-20.85	320	257	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

Chain 1



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Avg Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 31.614	42.75	PK-U	36.7	-34.8	44.65	-	-	74	-29.35	-	-	61	267	H
	* 31.612	31.91	ADR	36.7	-34.8	33.81	54	-20.19	-	-	-	-	61	267	H
3	* 39.681	43.92	PK-U	38.2	-31.7	50.42	-	-	74	-23.58	-	-	37	141	H
	* 39.679	32.11	ADR	38.2	-31.7	38.61	54	-15.39	-	-	-	-	37	141	H
6	* 39.951	43.21	PK-U	38.5	-31.4	50.31	-	-	74	-23.69	-	-	314	217	V
	* 39.949	31.48	ADR	38.5	-31.4	38.58	54	-15.42	-	-	-	-	314	217	V
4	30.695	44.14	PK-U	36.3	-35.4	45.04	-	-	-	-	68.2	-23.16	279	115	V
2	34.748	44.83	PK-U	37.5	-35.8	46.53	-	-	-	-	68.2	-21.67	136	381	H
5	37.622	46.51	PK-U	38.2	-34.9	49.81	-	-	-	-	68.2	-18.39	135	160	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
 PK-U - U-NII: Maximum Peak
 ADR - U-NII AD primary method, RMS average

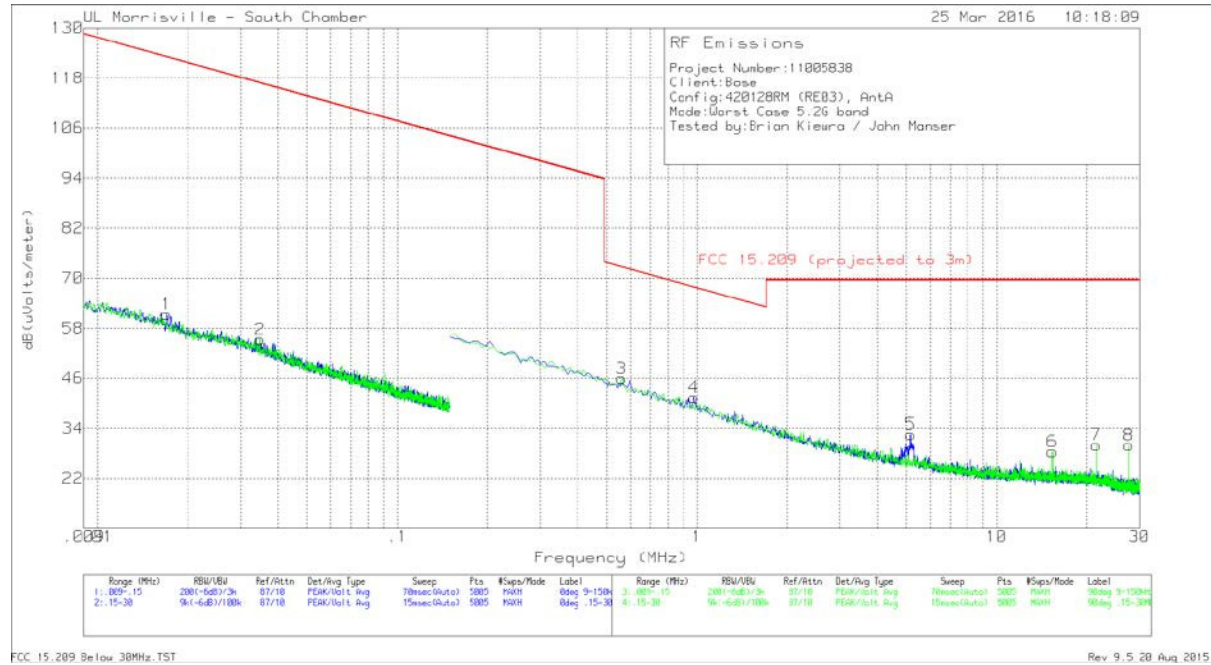
9.4. WORST-CASE BELOW 1 GHz

9.4.1. 5.2GHz BAND

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)

Note: All measurements were made at a test distance of 3 m. The limits in the plots and tabular data are the FCC/IC limits extrapolated from the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz – 30 MHz) to the measurement distance to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were $40 \cdot \log$ (specification distance / test distance).

Chain 0



Trace Markers

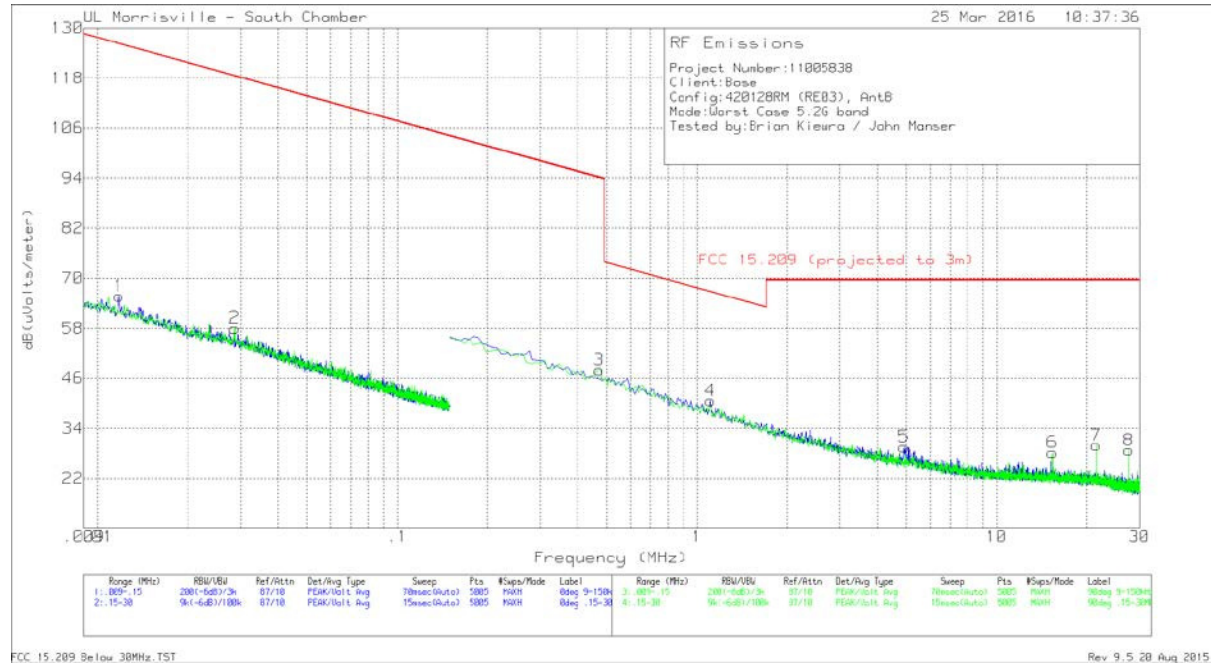
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Cbl (dB)	Corrected Reading dB(uV/m)	FCC 15.209 (projected to 3m)	Margin (dB)	Azimuth (Degs)
1	.01704	45.11	Pk	16.1	.1	61.31	122.98	-61.67	0-360
2	.03484	42.13	Pk	13.1	.1	55.33	116.76	-61.43	0-360
3	.56159	35.46	Pk	10.4	.1	45.96	72.62	-26.66	0-360
4	.97914	30.83	Pk	10.5	.1	41.43	67.79	-26.36	0-360
5	5.1606	21.58	Pk	10.6	.4	32.58	69.54	-36.96	0-360
6	15.36075	17.09	Pk	10.7	.6	28.39	69.54	-41.15	0-360
7	21.5047	19.14	Pk	10.1	.8	30.04	69.54	-39.5	0-360
8	27.64865	20.55	Pk	8.5	.9	29.95	69.54	-39.59	0-360

Pk - Peak detector

FCC 15.209 Below 30MHz.TST

Rev 9.5.20 Aug 2015

Chain 1



Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Cbl (dB)	Corrected Reading dB(uVolts/meter)	FCC 15.209 (projected to 3m)	Margin (dB)	Azimuth (Degs)
1	.01177	47.06	Pk	18.6	.1	65.76	126.19	-60.43	0-360
2	.02871	44.18	Pk	13.8	.1	58.08	118.44	-60.36	0-360
3	.47211	37.59	Pk	10.3	.1	47.99	94.12	-46.13	0-360
4	1.11037	29.93	Pk	10.5	.2	40.63	66.69	-26.06	0-360
5	4.91604	18.58	Pk	10.6	.4	29.58	69.54	-39.96	0-360
6	15.36075	16.93	Pk	10.7	.6	28.23	69.54	-41.31	0-360
7	21.5047	19.1	Pk	10.1	.8	30	69.54	-39.54	0-360
8	27.64865	19.35	Pk	8.5	.9	28.75	69.54	-40.79	0-360

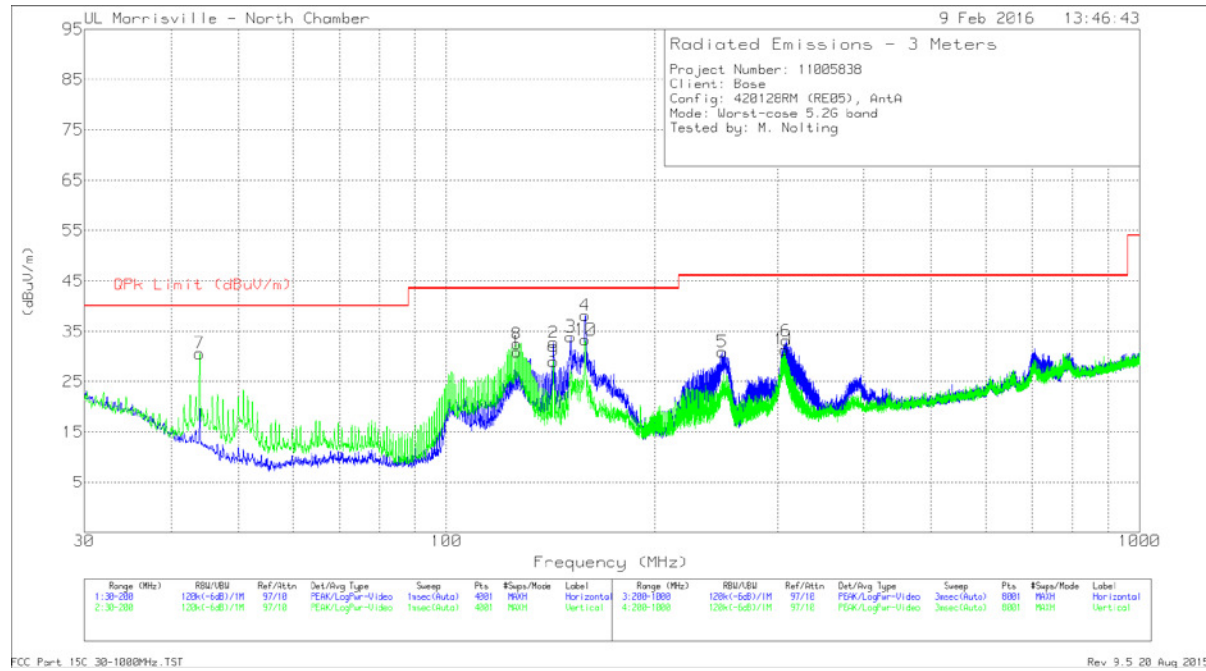
Pk - Peak detector

FCC 15.209 Below 30MHz.TST

Rev 9.5 20 Aug 2015

SPURIOUS EMISSIONS 30-1000 MHz (WORST-CASE CONFIGURATION)

Chain 0 (Antenna A, J402)



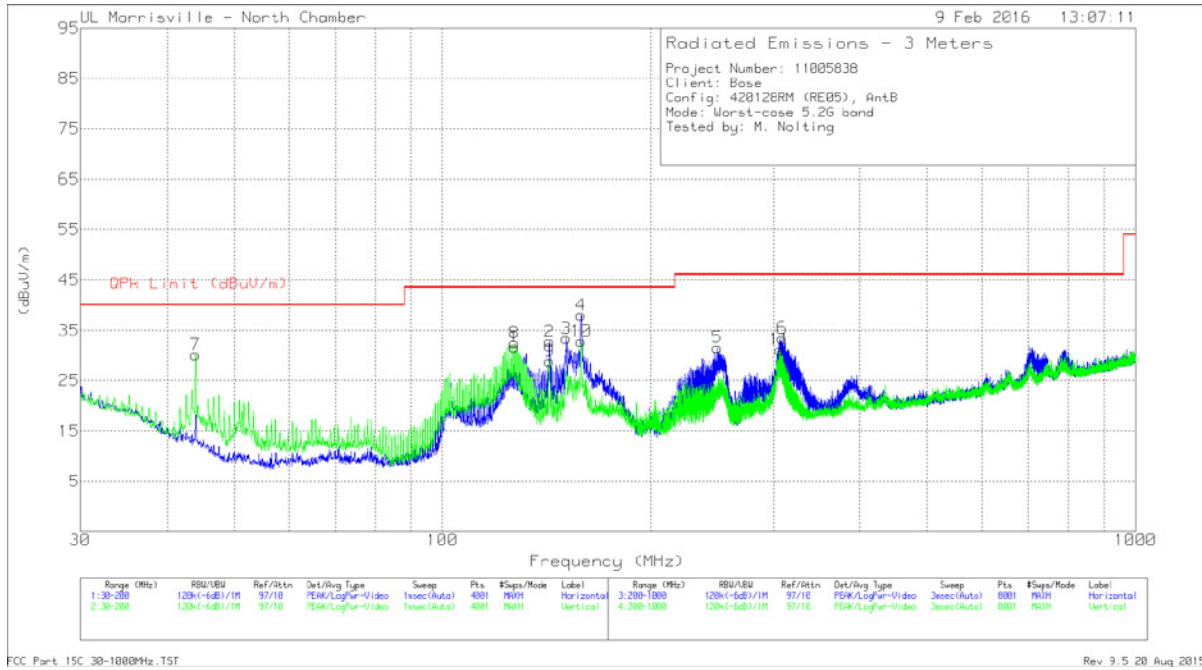
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0073 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 126.2625	43.34	Pk	18.2	-30.6	30.94	43.52	-12.58	0-360	199	H
8	* 126.305	44.91	Pk	18.2	-30.6	32.51	43.52	-11.01	0-360	102	V
5	* 250.1	44.42	Pk	16.3	-29.8	30.92	46.02	-15.1	0-360	102	H
7	43.9825	46.29	Pk	15.7	-31.4	30.59	-	-	0-360	102	V
9	142.6675	42.21	Pk	17.3	-30.5	29.01	-	-	0-360	102	V
2	142.71	45.98	Pk	17.3	-30.5	32.78	-	-	0-360	199	H
3	150.9125	47.42	Pk	16.9	-30.4	33.92	-	-	0-360	199	H
4	158.5592	51.66	Qp	16.8	-30.4	38.06	-	-	133	174	H
10	158.605	46.9	Pk	16.8	-30.4	33.3	-	-	0-360	102	V
11	307.5	42.43	Pk	18.3	-29.4	31.33	-	-	0-360	199	V
6	309.2	44.13	Pk	18.4	-29.4	33.13	-	-	0-360	102	H

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

Pk - Peak detector

Qp - Quasi-Peak detector

Chain 1 (Antenna B, J403)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0073 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 127.1125	44.01	Pk	18.2	-30.5	31.71	43.52	-11.81	0-360	199	H
8	* 127.1125	44.82	Pk	18.2	-30.5	32.52	43.52	-11	0-360	102	V
5	* 249.3	45.08	Pk	16.3	-29.8	31.58	46.02	-14.44	0-360	102	H
7	43.9825	45.82	Pk	15.7	-31.4	30.12	-	-	0-360	102	V
2	142.71	45.94	Pk	17.3	-30.5	32.74	-	-	0-360	199	H
9	142.71	42.11	Pk	17.3	-30.5	28.91	-	-	0-360	102	V
3	150.8275	46.9	Pk	16.9	-30.4	33.4	-	-	0-360	199	H
4	158.5877	51.09	Qp	16.8	-30.4	37.49	-	-	133	177	H
10	158.5625	46.42	Pk	16.8	-30.4	32.82	-	-	0-360	102	V
11	306.7	42.38	Pk	18.3	-29.5	31.18	-	-	0-360	200	V
6	309.1	44.44	Pk	18.4	-29.4	33.44	-	-	0-360	102	H

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

Pk - Peak detector

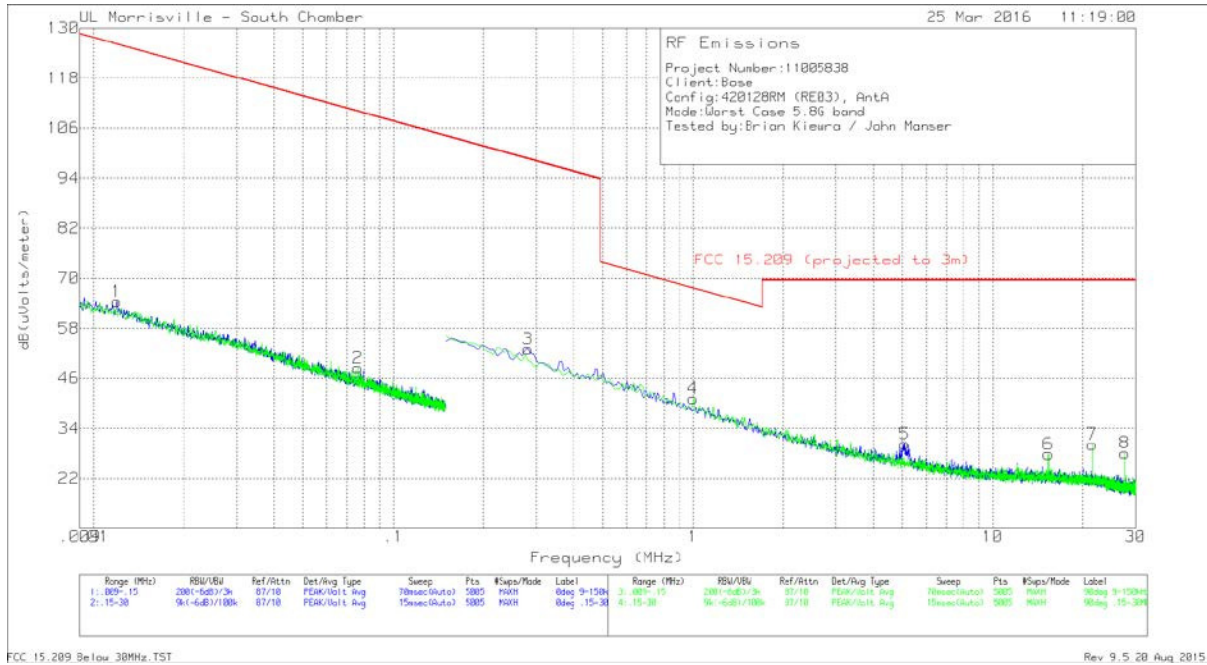
Qp - Quasi-Peak detector

9.4.2. 5.8GHz BAND

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)

Note: All measurements were made at a test distance of 3 m. The limits in the plots and tabular data are the FCC/IC limits extrapolated from the specification distance (300 m from 9-490 kHz and 30 m from 490 kHz – 30 MHz) to the measurement distance to clearly show the relative levels of fundamental and spurious emissions and demonstrate compliance with the requirement that the level of any spurious emissions be below the level of the intentionally transmitted signal. The extrapolation factor for the limits were $40 \cdot \text{Log}(\text{specification distance} / \text{test distance})$.

Chain 0



Trace Markers

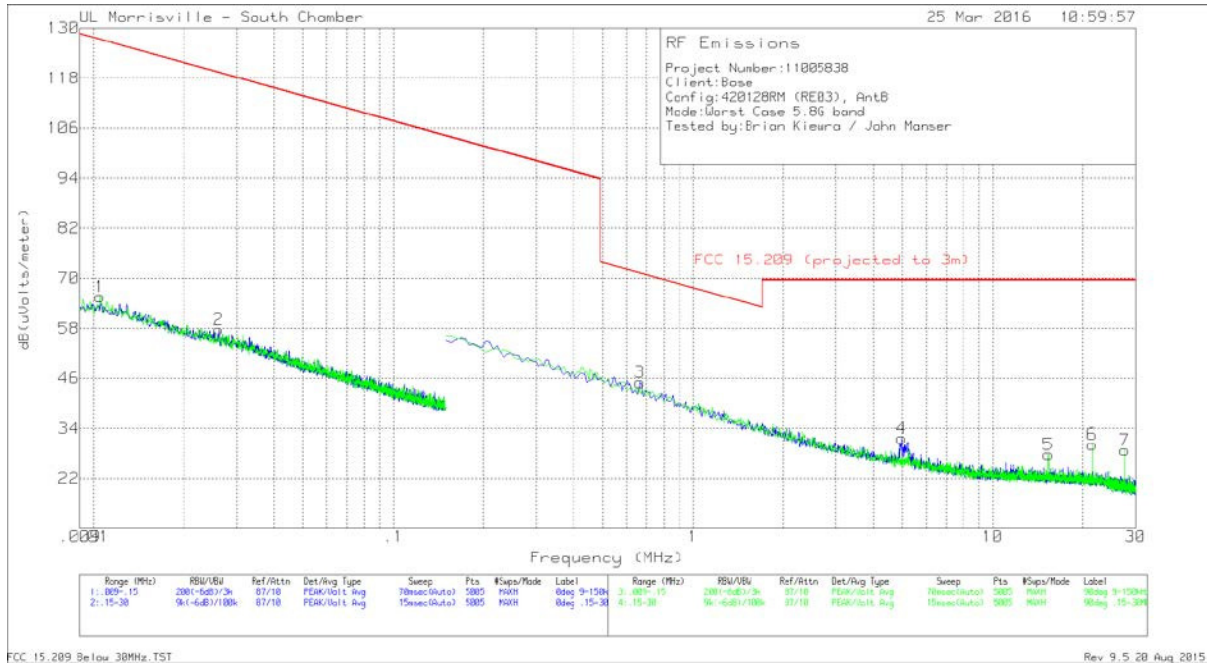
Marker	Frequency (MHz)	Meter Reading (dBUV)	Det	AF (dB/m)	Cbl (dB)	Corrected Reading dB(uV/m)	FCC 15.209 (projected to 3m)	Margin (dB)	Azimuth (Degs)
1	.01197	45.79	Pk	18.5	.1	64.39	126.04	-61.65	0-360
2	.07606	37.58	Pk	10.8	.1	48.48	109.98	-61.5	0-360
3	.28123	42.67	Pk	10.3	.1	53.07	98.62	-45.55	0-360
4	1.003	30.48	Pk	10.5	.2	41.18	67.58	-26.4	0-360
5	5.08902	19.22	Pk	10.6	.4	30.22	69.54	-39.32	0-360
6	15.36075	16.5	Pk	10.7	.6	27.8	69.54	-41.74	0-360
7	21.5047	19.27	Pk	10.1	.8	30.17	69.54	-39.37	0-360
8	27.64865	18.68	Pk	8.5	.9	28.08	69.54	-41.46	0-360

Pk - Peak detector

FCC 15.209 Below 30MHz.TST

Rev 9.5 20 Aug 2015

Chain 1



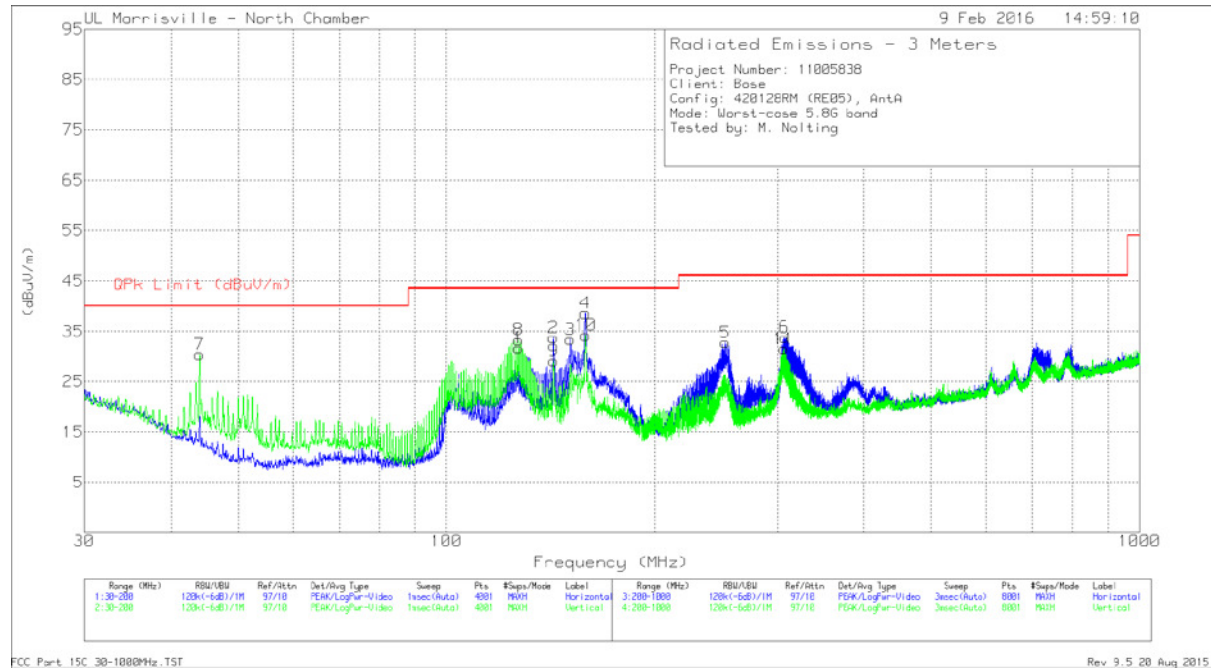
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF (dB/m)	Cbl (dB)	Corrected Reading dB(uV/m)	FCC 15.209 (projected to 3m)	Margin (dB)	Azimuth (Degs)
1	.01051	46.27	Pk	19.2	.1	65.57	127.17	-61.6	0-360
2	.02616	43.62	Pk	14	.1	57.72	119.25	-61.53	0-360
3	.66299	34.48	Pk	10.4	.1	44.98	71.17	-26.19	0-360
4	4.97569	20.63	Pk	10.6	.4	31.63	69.54	-37.91	0-360
5	15.36075	16.39	Pk	10.7	.6	27.69	69.54	-41.85	0-360
6	21.5047	19.26	Pk	10.1	.8	30.16	69.54	-39.38	0-360
7	27.64865	19.39	Pk	8.5	.9	28.79	69.54	-40.75	0-360

Pk - Peak detector
 FCC 15.209 Below 30MHz.TST
 Rev 9.5 20 Aug 2015

SPURIOUS EMISSIONS 30-1000 MHz (WORST-CASE CONFIGURATION)

Chain 0 (Antenna A, J402)



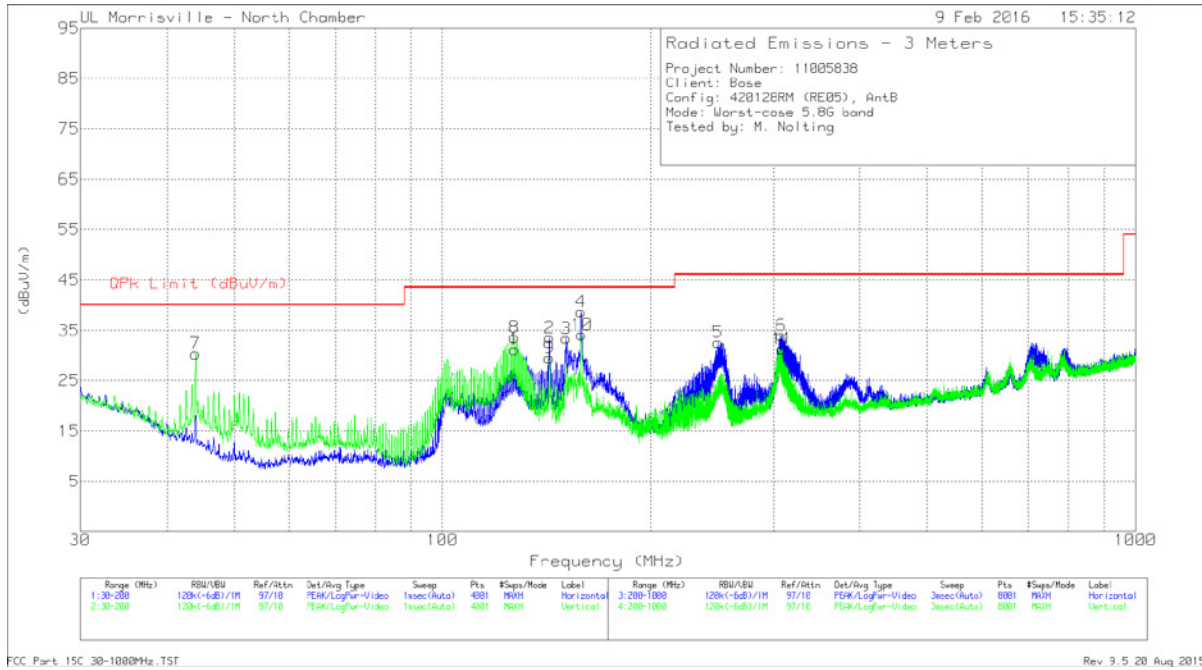
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0073 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 127.1125	43.99	Pk	18.2	-30.5	31.69	43.52	-11.83	0-360	200	H
8	* 127.07	45.62	Pk	18.2	-30.5	33.32	43.52	-10.2	0-360	102	V
5	* 252.6	46.18	Pk	16.4	-29.8	32.78	46.02	-13.24	0-360	102	H
7	43.9825	46.08	Pk	15.7	-31.4	30.38	-	-	0-360	102	V
2	142.6675	46.95	Pk	17.3	-30.5	33.75	-	-	0-360	200	H
9	142.71	42.33	Pk	17.3	-30.5	29.13	-	-	0-360	102	V
3	150.785	46.87	Pk	16.9	-30.4	33.37	-	-	0-360	200	H
4	158.6106	51.21	Qp	16.8	-30.4	37.61	-	-	130	169	H
10	158.7325	47.82	Pk	16.8	-30.4	34.22	-	-	0-360	102	V
11	306.7	42.72	Pk	18.3	-29.5	31.52	-	-	0-360	102	V
6	307.4	44.92	Pk	18.3	-29.4	33.82	-	-	0-360	102	H

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

Pk - Peak detector

Qp - Quasi-Peak detector

Chain 1 (Antenna B, J403)



Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AT0073 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPK Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 127.07	43.47	Pk	18.2	-30.5	31.17	43.52	-12.35	0-360	200	H
8	* 127.07	45.9	Pk	18.2	-30.5	33.6	43.52	-9.92	0-360	102	V
5	* 250	46.08	Pk	16.3	-29.8	32.58	46.02	-13.44	0-360	102	H
7	43.9825	46.06	Pk	15.7	-31.4	30.36	-	-	0-360	102	V
9	142.6675	42.71	Pk	17.3	-30.5	29.51	-	-	0-360	102	V
2	142.71	46.7	Pk	17.3	-30.5	33.5	-	-	0-360	200	H
3	150.8275	46.89	Pk	16.9	-30.4	33.39	-	-	0-360	299	H
4	158.7005	51.13	Qp	16.8	-30.4	37.53	-	-	128	172	H
10	158.7325	47.72	Pk	16.8	-30.4	34.12	-	-	0-360	102	V
6	308.3	45.22	Pk	18.3	-29.5	34.02	-	-	0-360	102	H
11	309.1	42.3	Pk	18.4	-29.4	31.3	-	-	0-360	102	V

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

Pk - Peak detector

Qp - Quasi-Peak detector

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

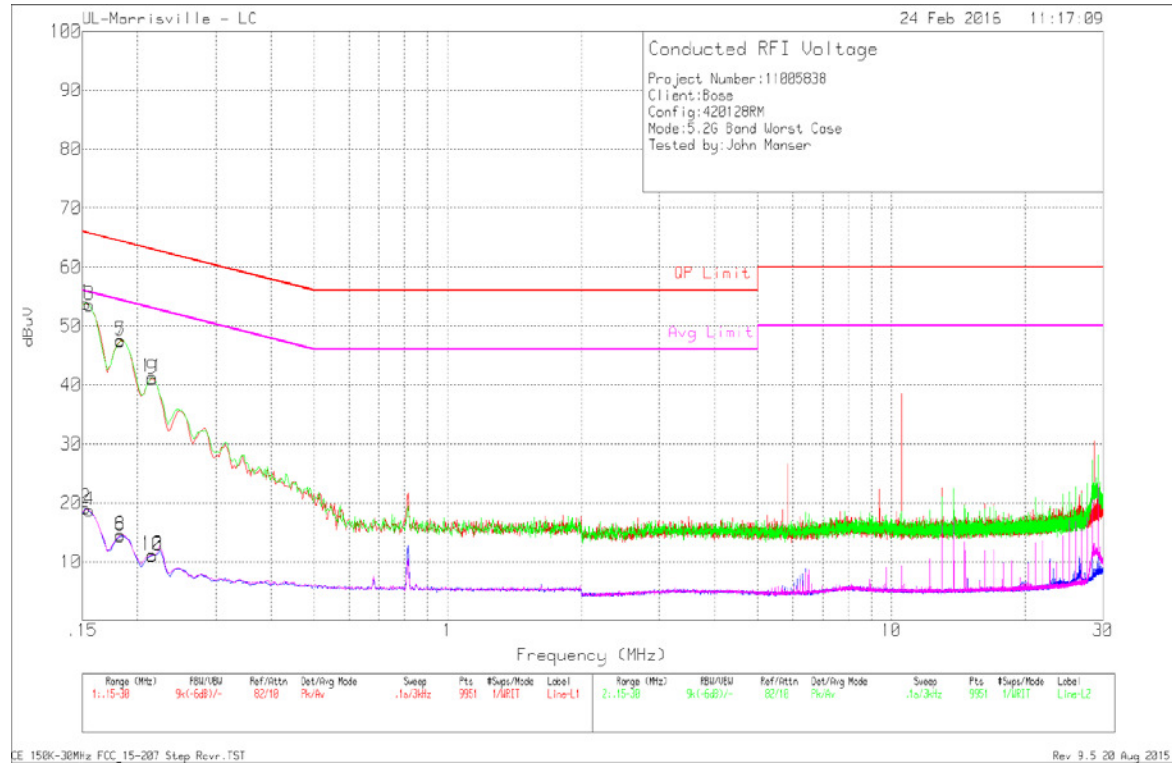
Frequency of Emission (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

* Decreases with the logarithm of the frequency.

RESULTS

5.2 GHz Band Worst Case

LINE 1 & 2 RESULTS



6 WORST EMISSIONS

RESULTS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cb/Limiter (dB)	Corrected Reading dBuV	QP Limit	Margin (dB)	Avg Limit	Margin (dB)
Range 1 Line 1										
1	.153	43.63	Pk	.2	10	53.83	65.84	-12.01	-	-
2	.153	8.91	Av	.2	10	19.11	-	-	55.84	-36.73
7	.183	37.44	Pk	.1	10	47.54	64.35	-16.81	-	-
8	.183	4.27	Av	.1	10	14.37	-	-	54.35	-39.98
9	.216	30.89	Pk	.1	10	40.99	62.97	-21.98	-	-
10	.216	.93	Av	.1	10	11.03	-	-	52.97	-41.94
Range 2 Line 2										
3	.156	43.25	Pk	.3	10	53.55	65.67	-12.12	-	-
4	.156	8.4	Av	.3	10	18.7	-	-	55.67	-36.97
5	.183	37.19	Pk	.3	10	47.49	64.35	-16.86	-	-
6	.183	4.26	Av	.3	10	14.56	-	-	54.35	-39.79
11	.216	31.08	Pk	.2	10	41.28	62.97	-21.69	-	-
12	.216	.95	Av	.2	10	11.15	-	-	52.97	-41.82

Pk - Peak detector

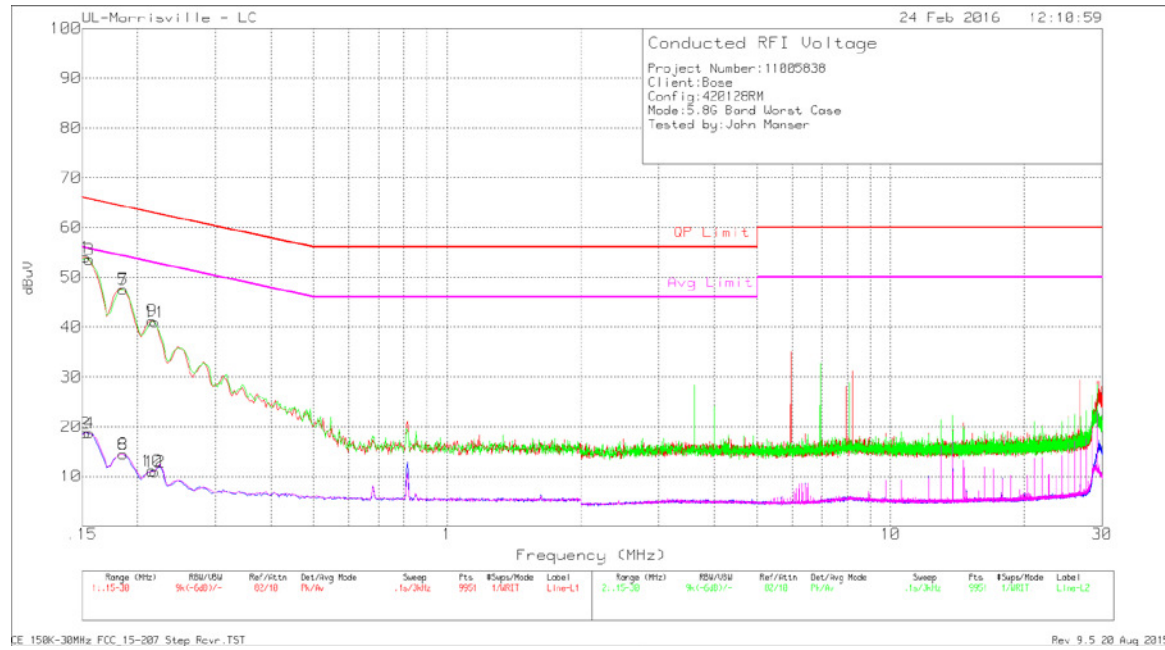
Av - Average detection

CE 150K-30MHz FCC_15-207 Step Rcvr.TST

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5.8 GHz Band Worst Case

LINE 1 & 2 RESULTS



6 WORST EMISSIONS

RESULTS

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN VCF (dB)	Cbl/Limiter (dB)	Corrected Reading dBuV	QP Limit	Margin (dB)	Avg Limit	Margin (dB)
Range 1 Line 1										
1	.153	43.81	Pk	.2	10	54.01	65.84	-11.83	-	-
2	.153	8.52	Av	.2	10	18.72	-	-	55.84	-37.12
7	.186	37.48	Pk	.1	10	47.58	64.21	-16.63	-	-
8	.186	4.33	Av	.1	10	14.43	-	-	54.21	-39.78
9	.216	31.16	Pk	.1	10	41.26	62.97	-21.71	-	-
10	.216	1	Av	.1	10	11.1	-	-	52.97	-41.87
Range 2 Line 2										
3	.156	43.26	Pk	.3	10	53.56	65.67	-12.11	-	-
4	.156	8.4	Av	.3	10	18.7	-	-	55.67	-36.97
5	.186	37.26	Pk	.3	10	47.56	64.21	-16.65	-	-
6	.186	4.17	Av	.3	10	14.47	-	-	54.21	-39.74
11	.219	30.75	Pk	.2	10	40.95	62.86	-21.91	-	-
12	.219	.73	Av	.2	10	10.93	-	-	52.86	-41.93

Pk - Peak detector

Av - Average detection

CE 150K-30MHz FCC_15-207 Step Rcvr.TST

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END OF REPORT