



**FCC 47 CFR PART 15 SUBPART E  
INDUSTRY CANADA (ISED CANADA) RSS-247 ISSUE 2**

**CLASS 2 PERMISSIVE CHANGE TEST REPORT**

**FOR**

**WIRELESS ACCESS POINT**

**MODEL NUMBER: E71-308-01**

**FCC ID: 2AL4H-E7130801**

**IC: 22737-E7130801**

**REPORT NUMBER: R11669553-E2**

**ISSUE DATE: 2017-07-11**

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**NVLAP LAB CODE 200246-0**

Revision History

Ver.	Issue Date	Revisions	Revised By
1	2017-06-07	Initial Issue.	Brian Kiewra
2	2017-06-30	Corrected directional gain for TxBF modes.	Brian Kiewra
3	2017-7-05	Removed power and PSD measurements for modes referencing original grant power.	Brian Kiewra
4	2017-07-10	Revised and added differences in Section 1.2. Revised EUT description and antenna spec in Sections 6.1 and 6.3. Revised worse-case configuration text section 6.5.	Brian Kiewra
5	2017-07-11	Removed power and PSD for 802.11a mode in the 5.8 band. This will be covered by power in original grant	Brian Kiewra

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## 1. DATA REUSE

### 1.1. INTRODUCTION

The 15.407 antenna port test results for E71-308-01 are represented by Aruba APIN0324 and APIN0325 reports 31560847.001 and 31560848.001 (FCC ID: Q9DAPIN0324325, IC: 4675A-APIN0324325). This report for contains conducted power measurements and radiated emissions measurements.

Telefonix takes full responsibility that the data as referenced in reports 31560847.001 and 31560848.001 (FCC ID: Q9DAPIN0324325, IC: 4675A-APIN0324325) represent compliance for this FCC ID.

### 1.2. DIFFERENCES

Telefonix device E71-308-01 and Aruba device APIN0324/APIN0325 have identical RF circuit boards and antennas. Differences between the two devices are as follows: power was lowered in 11a/g modes, deactivation of BT, and internal antenna use only. Therefore, APIN0324/APIN0325 antenna port test results are used in this report to represent how E71-308-01 operates from a conducted perspective. The exception to this is the conducted power and PSD measurements made on E71-308-01. Power was required to be lowered for 802.11a mode in the 5.2 band for bandedge compliancy. **Note:** Performed radiated spurious emissions spot checks on modes that did not require power to be lowered.

### 1.3. TESTING PERFORMED

Testing performed under this report (R11669553-E1) are Conducted Output power, PSD, and Radiated Emissions. All other data is referenced to reports 31560847.001 and 31560848.001 (FCC ID: Q9DAPIN0324325, IC: 4675A-APIN0324325)

### 1.4. REFERENCE DETAIL SECTION

Equipment Class	Reference FCC ID	Type Grant	Grant Date	Report Number
WLAN	FCC ID: Q9DAPIN0324325, IC: 4675A- APIN0324325	New	2015-07-21	31560847.001 and 31560848.001

## 2. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** Telefonix, Inc.  
2340 Ernie Krueger Circle  
Waukegan, IL 60097-3442 USA

**EUT DESCRIPTION:** Wireless Access Point

**MODEL:** E71-308-01

**SERIAL NUMBER:** 0000000068

**DATE TESTED:** 2017-05-02 to 2017-05-23

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart E	Pass
INDUSTRY CANADA (ISED CANADA) RSS-247 Issue 2	Pass
INDUSTRY CANADA (ISED 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, or any agency of the U.S. Government.

Approved & Released  
For UL LLC By:



Jeffrey Moser  
EMC Program Manager  
UL – Consumer Technology Division

Prepared By:



Brian T. Kiewra  
EMC Engineer  
UL – Consumer Technology Division

### 3. 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 and RSS-247 Issue 2.

### 4. 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 type="checkbox"/> Chamber C

2800 Suite B Perimeter Park Dr., Morrisville, NC 27560
<input 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/>.

## 5. CALIBRATION AND UNCERTAINTY

### 5.1. 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.

### 5.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

### 5.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Occupied Channel Bandwidth	±2.00%
RF output power, conducted	±1.3 dB
Power Spectral Density, conducted	±2.47 dB
Unwanted Emissions, conducted	±2.94dB
All emissions, radiated	±5.36 dB
Temperature	±0.07°C
Supply voltages	±2.40%
Time	±3.39%

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



## 6. EQUIPMENT UNDER TEST

### 6.1. DESCRIPTION OF EUT

The EUT is an 802.11a/b/g/n/ac transceiver. EUT is strictly non TxBF in 802.11a/b/g modes and strictly TxBF in 802.11n/ac modes.

### 6.2. MAXIMUM OUTPUT POWER

The transmitter has a combined maximum conducted average output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5180 - 5240	802.11a	21.83	152.41
5180 - 5240	802.11n HT20 <sup>1</sup>	15.82	38.19
5190 - 5230	802.11n HT40 <sup>1</sup>	18.19	65.92
5210	802.11ac HT80 <sup>1</sup>	17.29	53.58
5745 - 5825	802.11a <sup>1</sup>	22.5	177.83
5745 - 5825	802.11n HT20 <sup>1</sup>	21.74	149.28
5755-5795	802.11n HT40 <sup>1</sup>	22.83	191.87
5775	802.11ac HT80 <sup>1</sup>	21.96	157.04

Note 1: Original power from report numbers 31560847.001 and 31560848.001 of TUV Rheinland.

### 6.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes 4 omnidirectional antennas, each with a maximum gain of 5.5 dBi.

### 6.4. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was ipq806xqdart\_csu3\_evm\_dpd\_fixes\_bdf v6.4.4.4-4.2.3.2\_54910.

The test utility software used during testing was QSPR, ver. 5.0.0.

## 6.5. WORST-CASE CONFIGURATION AND MODE

Spot checks were tested 1-18GHz. For all other modes worst-case was tested 1-18GHz, below 1GHz, and above 18GHz. Worst-case radiated emissions were performed with the EUT set to transmit at the channel with the highest output power as worst-case scenario .

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

Band	Mode	Orientation
5.2	11a	Z
5.2	11n	X
5.8	11a	X
5.8	11n	Z

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

Based on the baseline scan, the worst-case data rates were:

802.11a mode: 6 Mbps

802.11n HT20mode: MCS0

802.11n HT40mode: MCS0

802.11ac HT80mode: MCS0

## 6.6. DESCRIPTION OF TEST SETUP

### SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop	Lenovo	T450s	PC-0A2UQS 16/01	NA
Power Supply	Lenovo	ADLX65NLC2A	11S45N0259Z1ZS97597WTW	NA

### I/O CABLES

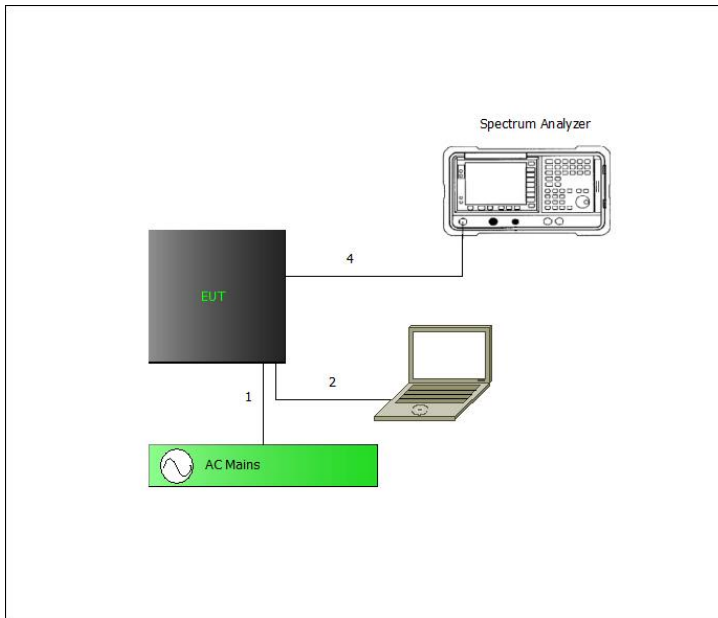
I/O Cable List						
Cable No.	Port	# of Identical Ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	DMC-MD20A	3	Banana	3 conductor	>3m	AC Mains
2	DMC-MD20A	3	RJ45	ENET	>3m	Used to configure EUT
3	DMC-MD20A	3	D-Sub	Stranded	>3m	Terminated w/ D-Sub Connector
4	Antenna	3	SMA	RF	<3m	None

### TEST SETUP

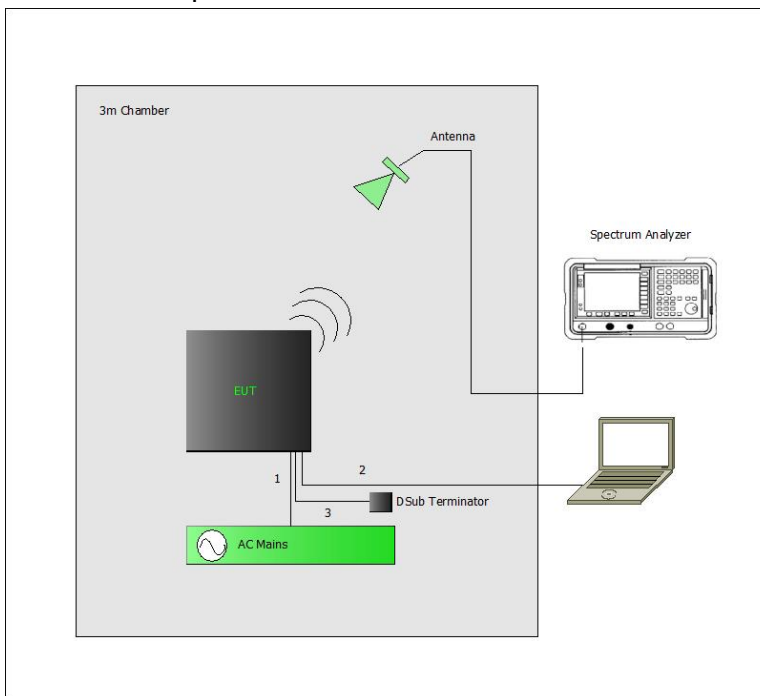
The EUT is installed as a standalone device.

## SETUP DIAGRAM FOR TESTS

### Conducted Setup



### Radiated Setup



## 7. 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 - South Chamber)

Equip. ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	<b>30-1000 MHz</b>				
AT0074	Hybrid Broadband Antenna	Sunol Sciences Corp.	JB3	2016-06-07	2017-06-30
	<b>1-18 GHz</b>				
AT0069	Double-Ridged Waveguide Horn Antenna, 1 to 18 GHz	ETS Lindgren	3117	2017-04-05	2018-04-05
	<b>18-40 GHz</b>				
AT0076	Horn Antenna, 18-26.5GHz	ARA	MWH-1826/B	2016-09-06	2017-09-06
AT0077	Horn Antenna, 26-40GHz	ARA	MWH-2640/B	2016-09-06	2017-09-06
	<b>Gain-Loss Chains</b>				
S-SAC02	Gain-loss string: 30-1000MHz	Various	Various	2016-06-26	2017-06-30
S-SAC03	Gain-loss string: 1-18GHz	Various	Various	2016-08-28	2017-08-28
S-SAC04	Gain-loss string: 18-40GHz	Various	Various	2017-03-03	2018-03-03
	<b>Receiver &amp; Software</b>				
SA0025	Spectrum Analyzer	Agilent	N9030A	2017-04-10	2018-04-10
SA0026 (18-40GHz RSE)	Spectrum Analyzer	Agilent	N9030A	2017-02-17	2018-02-28
SOFTEMI	EMI Software	UL	Version 9.5	NA	NA
	<b>Additional Equipment used</b>				
s/n 161024887	Environmental Meter	Fisher Scientific	15-077-963	2016-12-23	2018-12-23

Test Equipment Used - Wireless Conducted Measurement Equipment

Equipment ID	Description	Manufacturer	Model Number	Last Cal.	Next Cal.
	<b>Common Equipment</b>				
	<b>Conducted Room 1</b>				
SA0020	Spectrum Analyzer	Agilent Technologies	E4446A	2017-04-25	2018-04-25
PWM004	RF Power Meter	Keysight Technologies	N1911A	2016-06-22	2017-06-22
PWS003	Peak and Avg Power Sensor, 50MHz to 6GHz	Keysight Technologies	E9323A	2016-06-21	2017-06-21
SN 161024885	Environmental Meter	Fisher Scientific	15-077-963	2016-12-23	2018-12-23

## 8. MEASUREMENT METHODS

Conducted Output Power: KDB 789033 D02 v01r04, Section E.3.b (Method PM-G).

Power Spectral Density: KDB 789033 D02 v01r04, Section F.

Unwanted emissions in restricted bands: KDB 789033 D02 v01r04, Section G.1, G.3, G.4, G.5, G.6

Unwanted emissions in non-restricted bands: KDB 789033 D02 v01r04, Section G.2, G.3, G.4, G.5, G.6

## 9. ON TIME AND DUTY CYCLE

### LIMITS

None; for reporting purposes only.

### PROCEDURE

KDB 789033 Zero-Span Spectrum Analyzer Method.

### 9.1. 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>5.2Band</b>						
802.11a CDD	2.025	2.095	0.967	96.66%	0.15	0.494
802.11n HT20 CDD	4.960	5.040	0.984	98.41%	0.00	0.010
802.11n HT40 CDD	2.4020	2.4740	0.971	97.09%	0.13	0.416
802.11ac VHT80 CDD	1.1370	1.2040	0.944	94.44%	0.25	0.880
<b>5.8Band</b>						
802.11a CDD	2.025	2.095	0.967	96.66%	0.15	0.494
802.11n HT20 CDD	4.950	5.020	0.986	98.61%	0.00	0.010
802.11n HT40 CDD	2.412	2.474	0.975	97.49%	0.11	0.415
802.11ac VHT80 CDD	1.1340	1.2040	0.942	94.19%	0.26	0.882

### Test Information

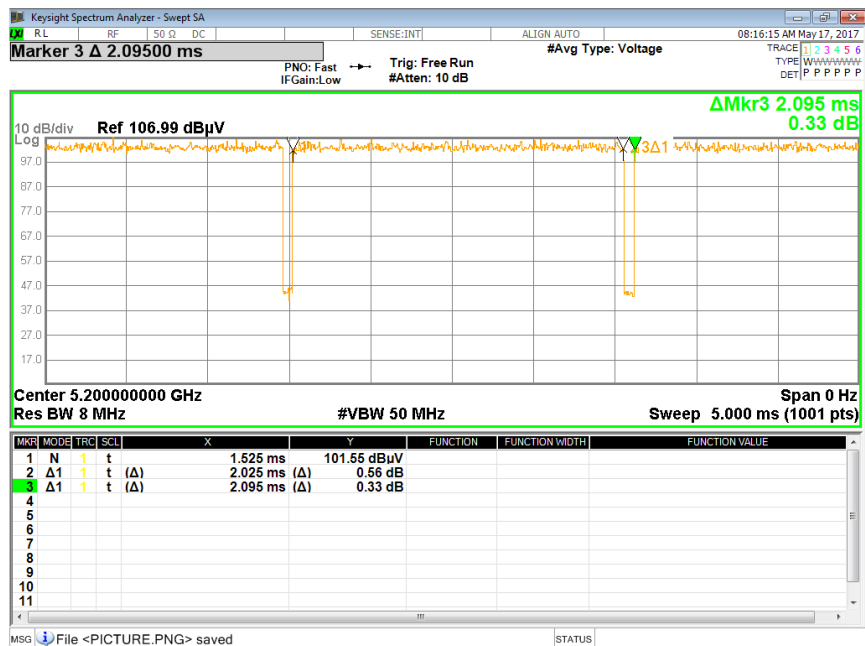
Date: 2017-05-17

Tester: John Manser

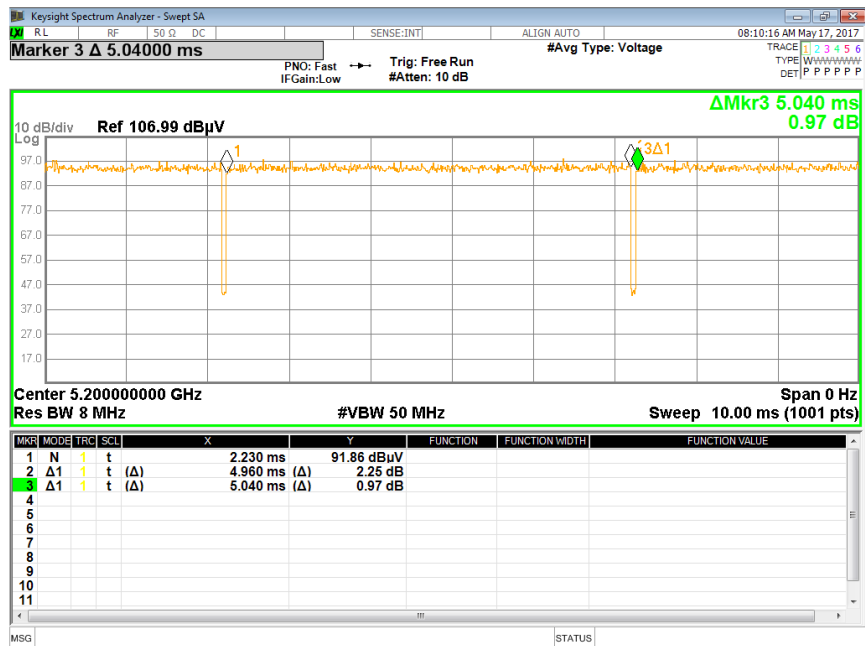


## 5.2 Band

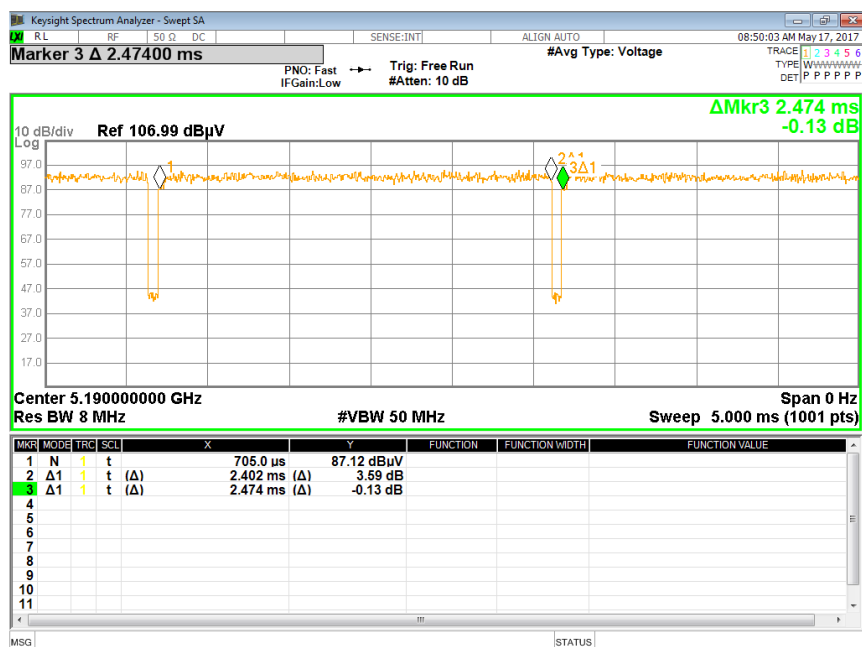
### DUTY CYCLE 802.11a MODE



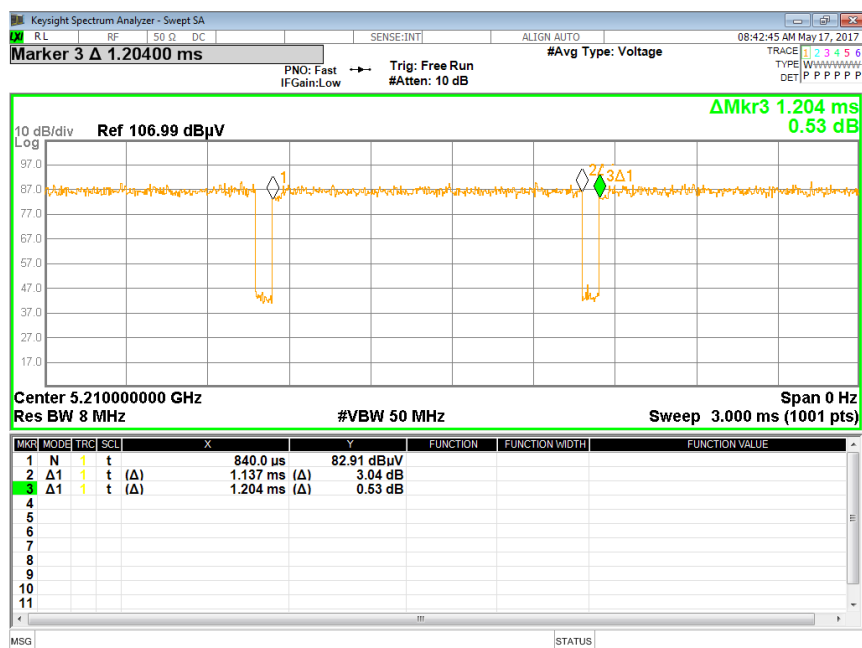
### DUTY CYCLE 802.11n HT20 MODE



## DUTY CYCLE 802.11n HT40 MODE

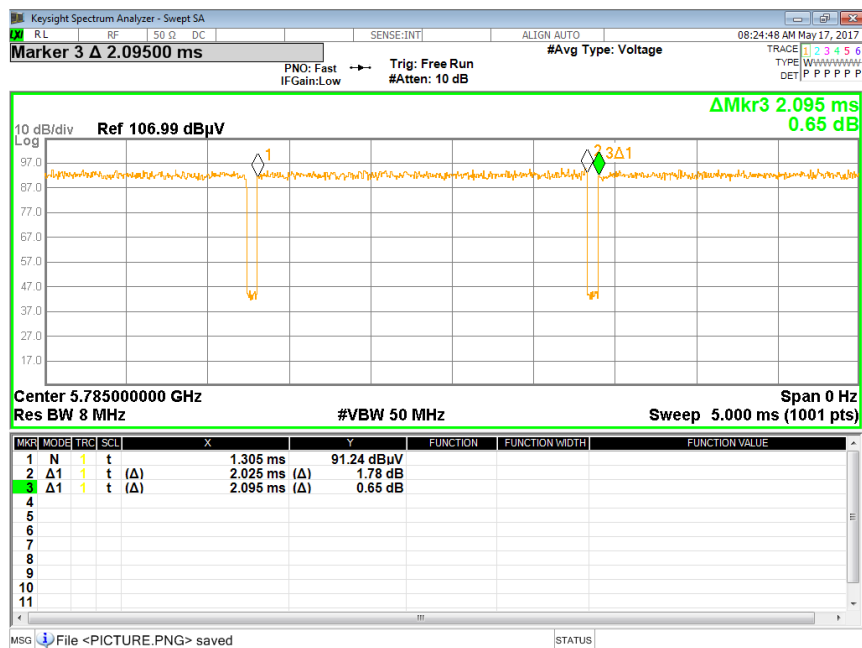


## DUTY CYCLE 802.11ac VHT80 MODE

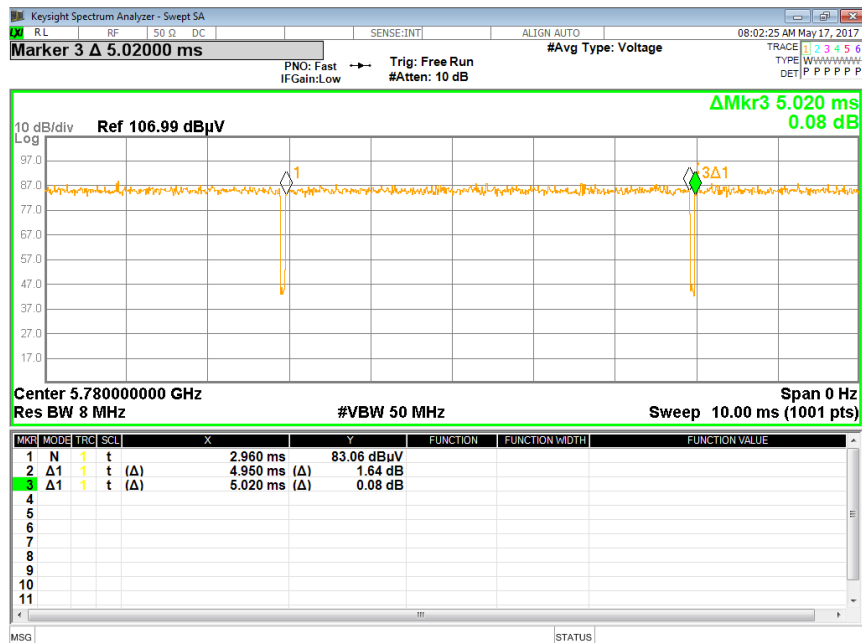


## 5.8 Band

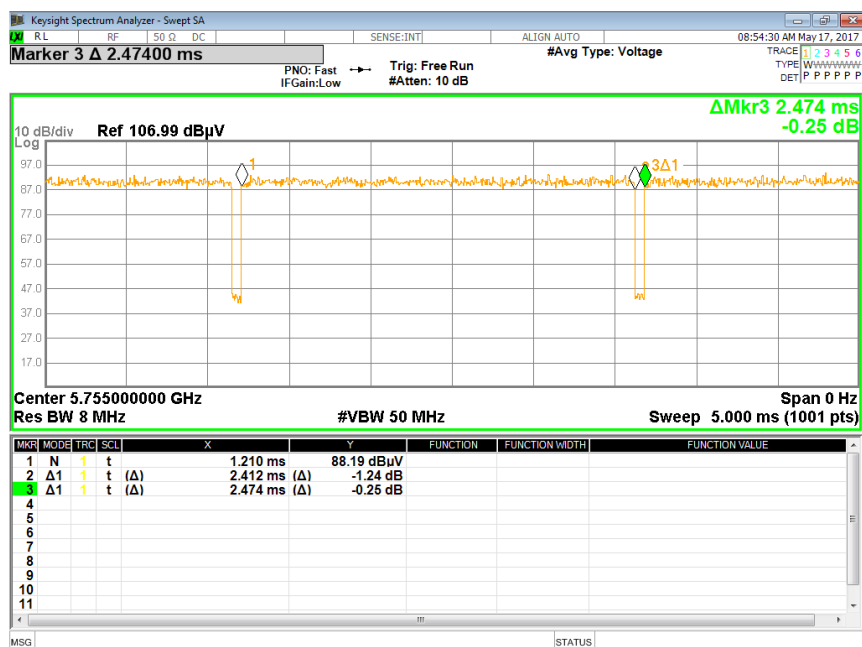
### DUTY CYCLE 802.11a MODE



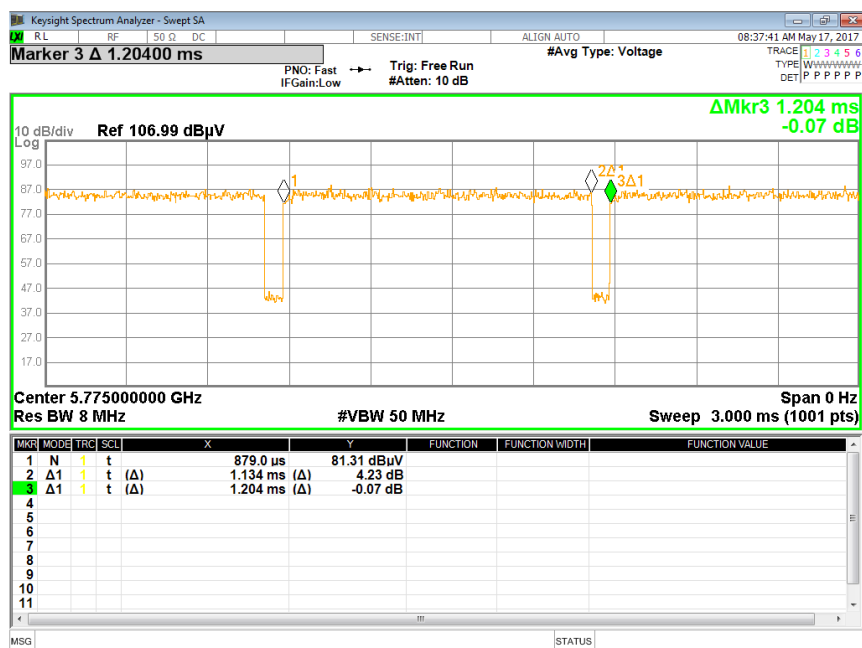
### DUTY CYCLE 802.11n HT20 MODE



## DUTY CYCLE 802.11n HT40 MODE



## DUTY CYCLE 802.11ac VHT80 MODE



## 10. ANTENNA PORT TEST RESULTS

### 10.1. 802.11a MODE IN THE 5.2 GHz BAND

#### 10.1.1. OUTPUT POWER AND PPSD

##### 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**

This EUT mode is 802.11a. No beamforming but cyclic delay diversity operation is assumed for this mode. However, acc. to KDB 66911, with  $N_{\text{ant}} \leq 4$  the array gain is zero. Total directional gain is equal to single antenna gain.

## Output Power

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Chain 2 Antenna Gain (dBi)	Chain 3 Antenna Gain (dBi)	Directional Gain (dBi)
5.50	5.50	5.50	5.50	5.50

## PSD

Antenna Gain (dBi)	10 * Log (4 chains) (dB)	Correlated Chains Directional Gain (dBi)
5.50	6.02	11.52

## RESULTS

### Output Power Results

#### 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	5.50	15.02	30.00	7.98
Mid	5200	5.50	15.02	30.00	7.98
High	5240	5.50	15.02	30.00	7.98

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)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	15.88	16.10	15.59	15.65	21.83	30.00	-8.17
Mid	5200	15.77	16.02	15.49	15.66	21.76	30.00	-8.24
High	5240	15.58	15.85	15.32	15.34	21.55	30.00	-8.45

Note - The above data represents gated average power measurements, as described in method PM-G.

## PSD Results

### 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	5.50	11.52	30.00	11.48
Mid	5200	5.50	11.52	30.00	11.48
High	5240	5.50	11.52	30.00	11.48

Duty Cycle CF (dB)	0.15	Included in Calculations of Corr'd Power
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### Output Power Results

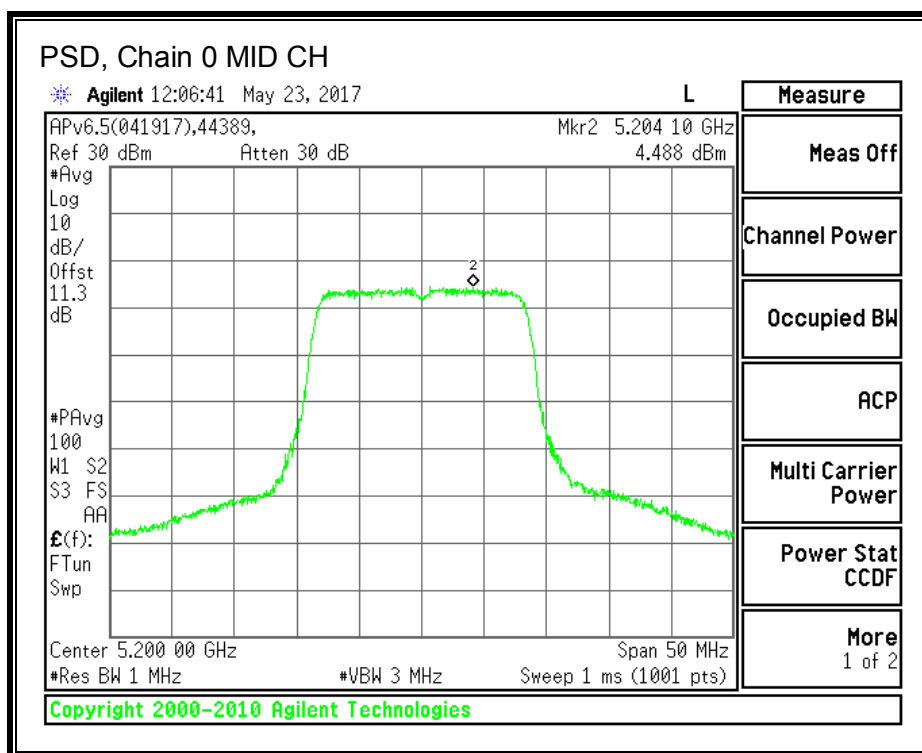
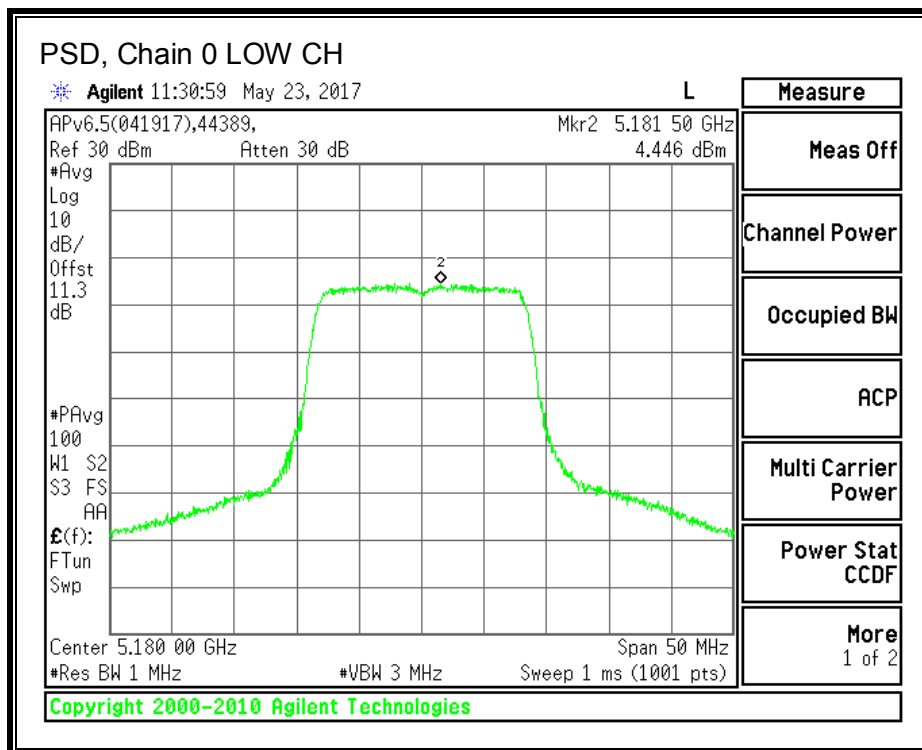
Channel	Frequency (MHz)	Chain 0 Meas PSD (dBm)	Chain 1 Meas PSD (dBm)	Chain 2 Meas PSD (dBm)	Chain 3 Meas PSD (dBm)	Total Corr'd PSD (dBm)	PSD Limit (dBm)	PSD Margin (dB)
Low	5180	4.45	5.25	5.36	4.92	11.18	11.48	-0.30
Mid	5200	4.49	5.06	4.85	4.61	10.92	11.48	-0.56
High	5240	4.56	4.56	4.64	4.33	10.69	11.48	-0.79

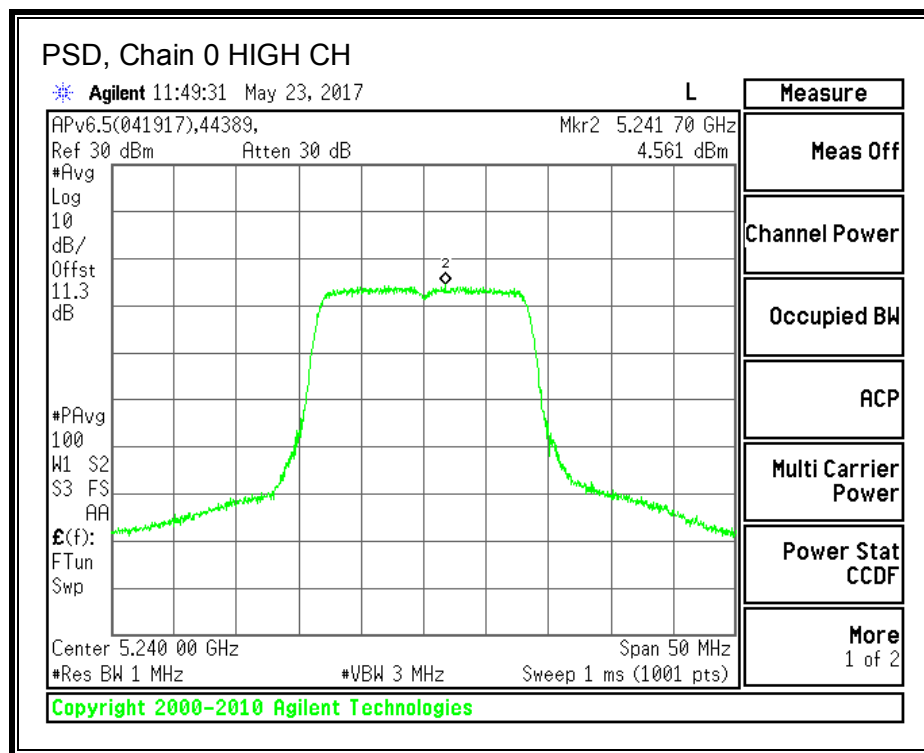
## Test Information

Date: 2017-05-23  
Tester: Niklas Haydon

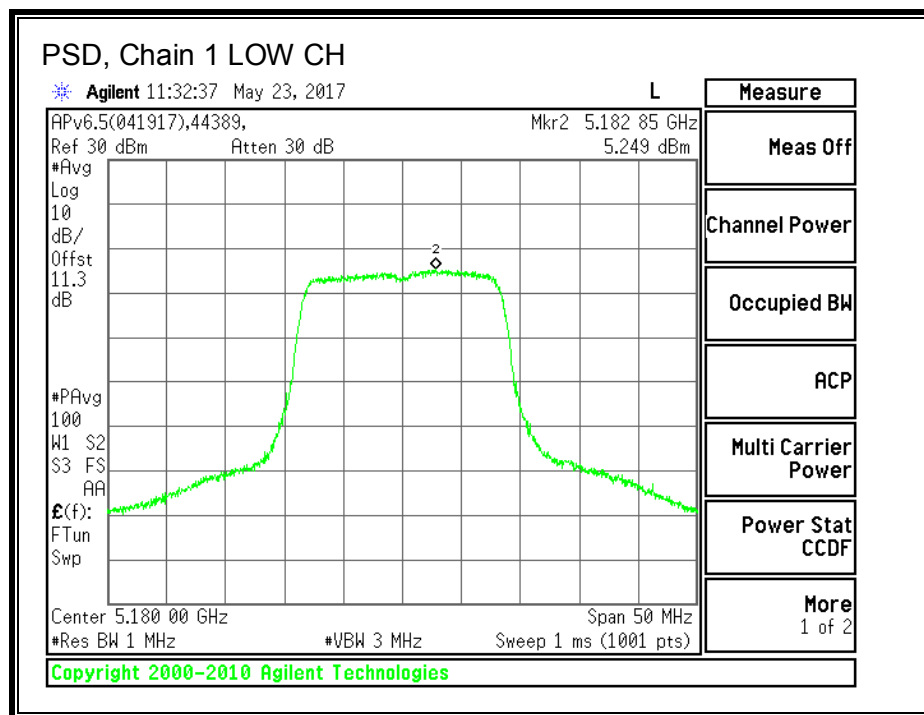


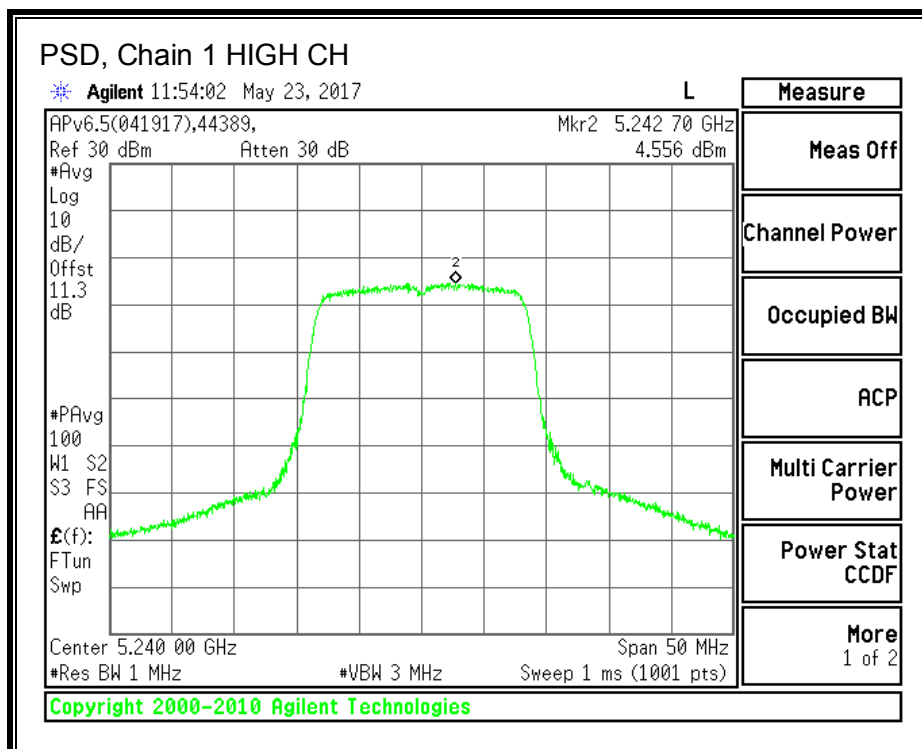
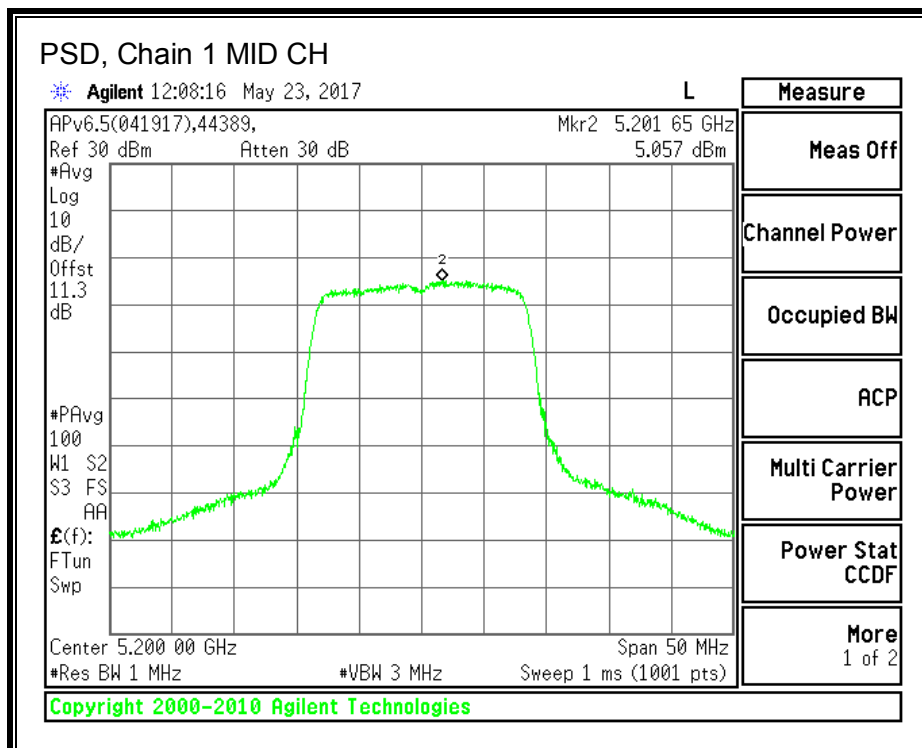
**PSD, Chain 0**



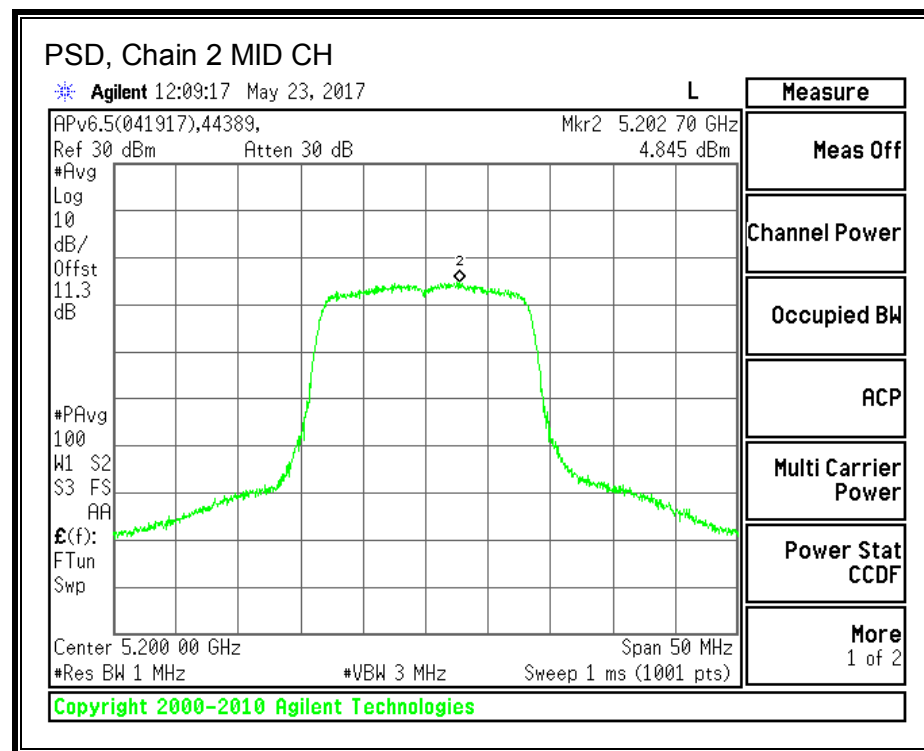
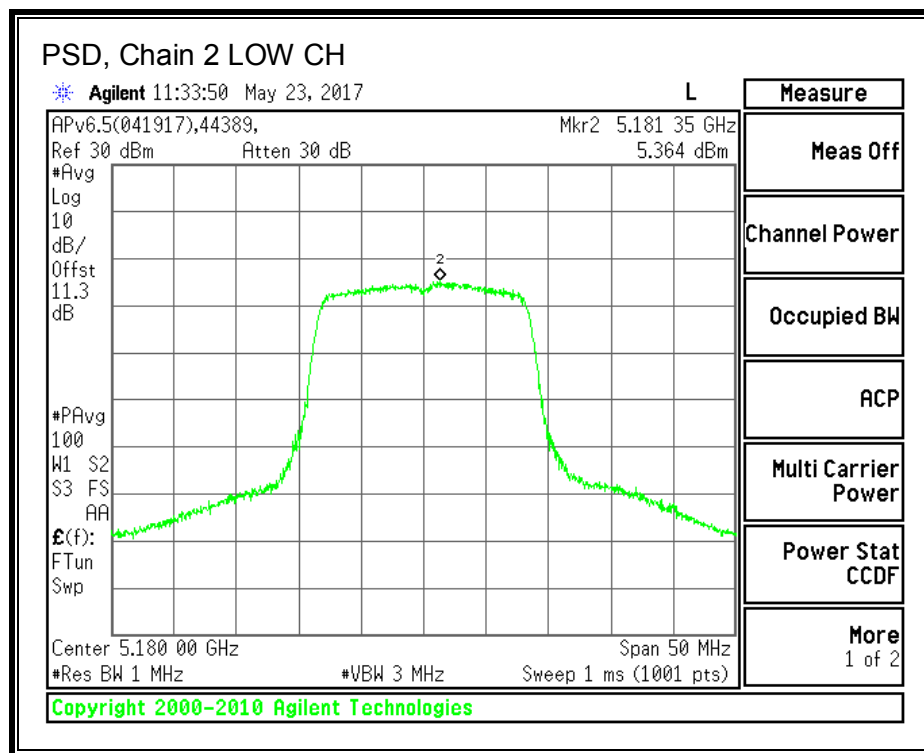


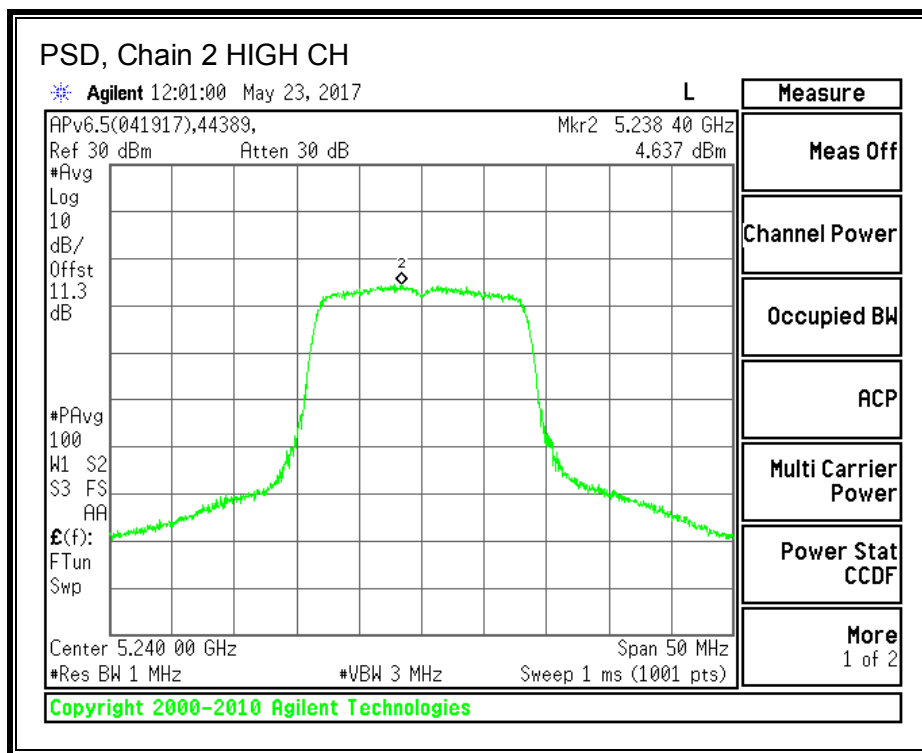
**PSD, Chain 1**



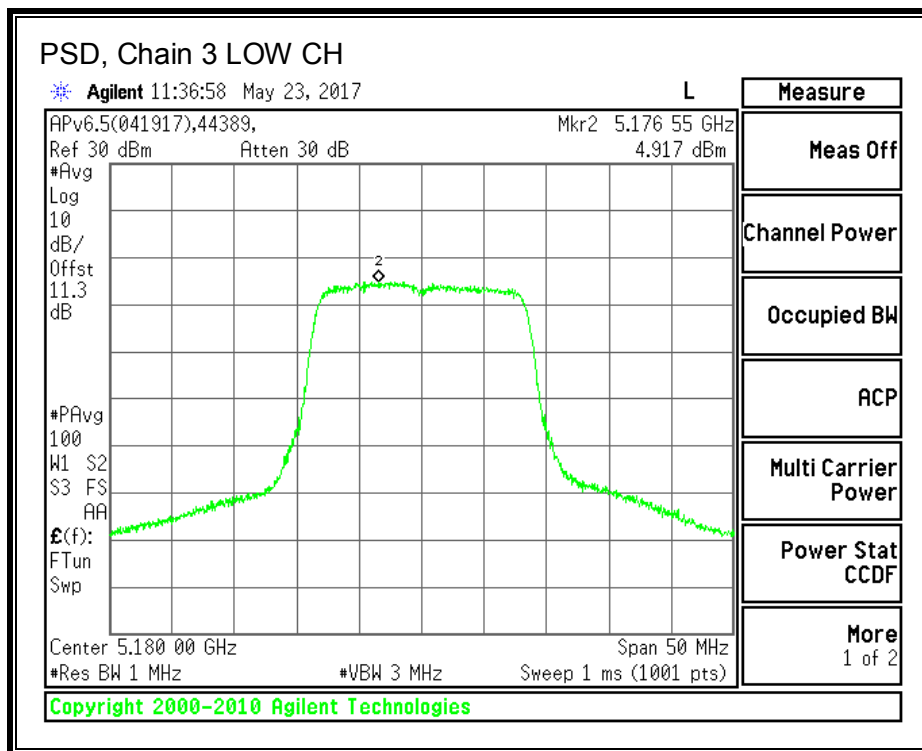


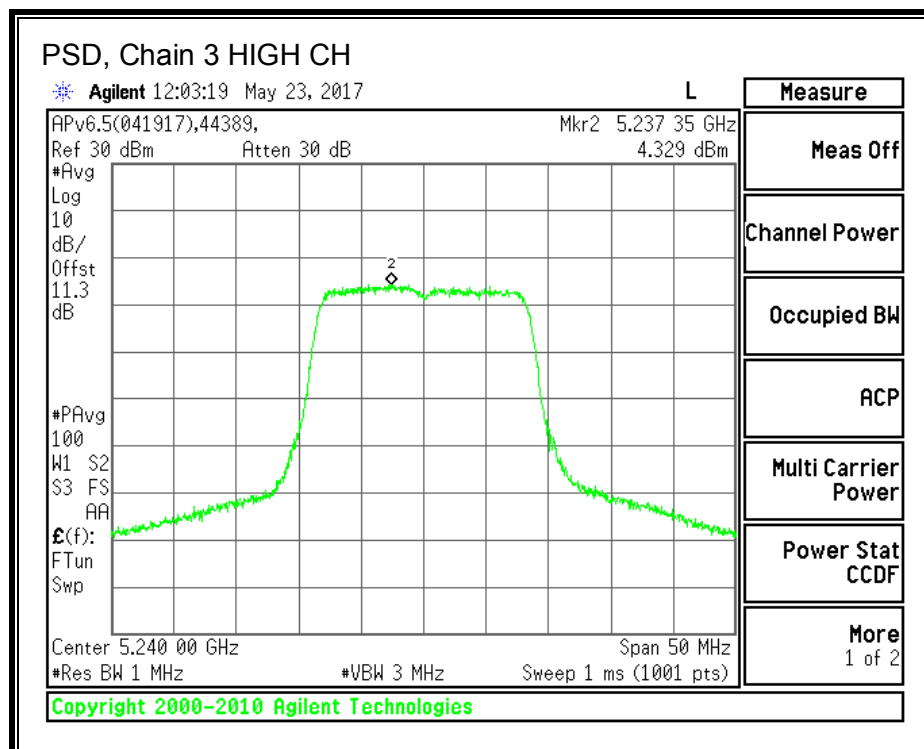
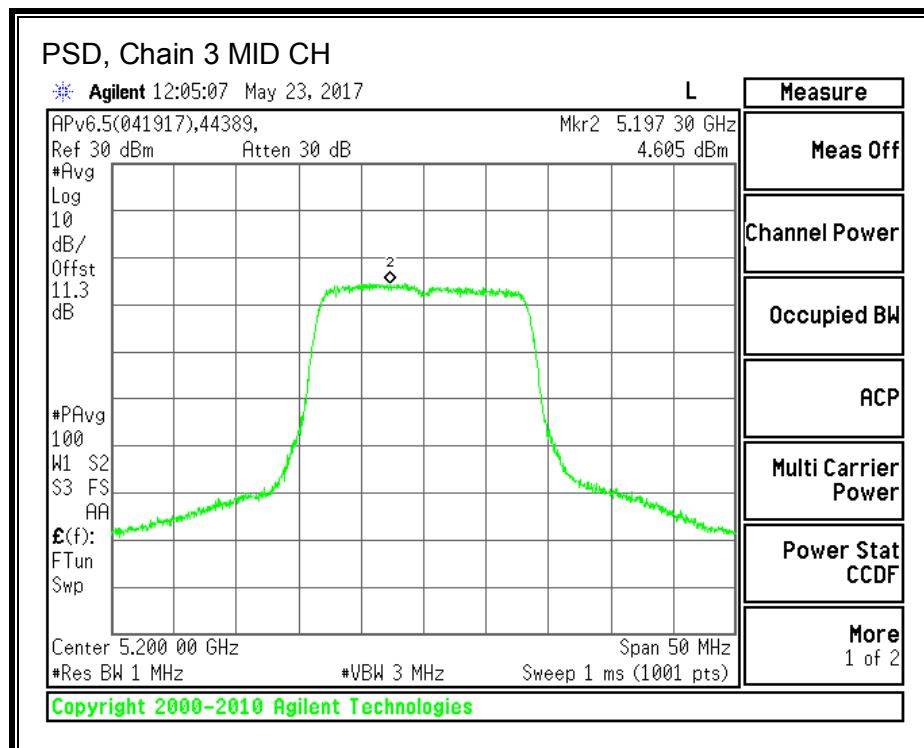
## OUTPUT POWER AND PSD, Chain 2





### PSD, Chain 3





## 11. RADIATED TEST RESULTS

### 11.1. 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
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 peak measurements above 1 GHz, the resolution bandwidth is set to 1 MHz and the video bandwidth is set to 3 MHz. For average measurements above 1GHz, the resolution bandwidth and video bandwidth are set as described in ANSI C63.10:2013 for the applicable measurement. The particular averaging method used for this test program was by RMS Averaging.

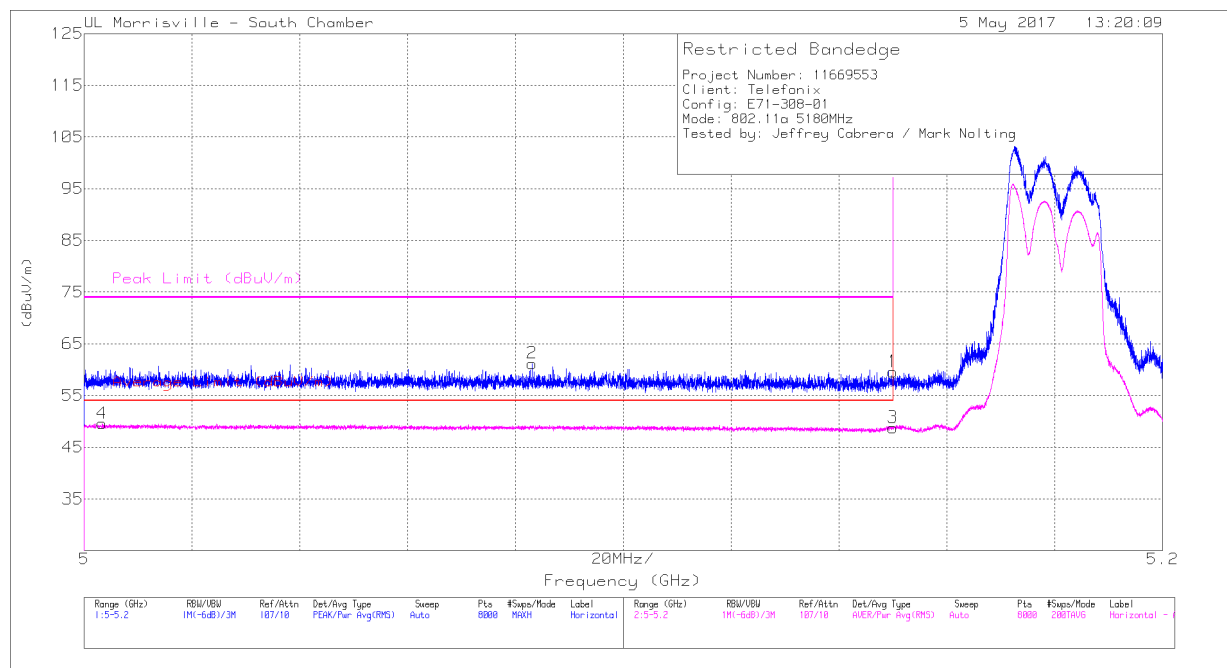
The spectrum from 1 to 18 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band. For 30-1000MHz and 18 GHz to 40 GHz, the worst-case channel was selected. These scans were performed to show continued compliance with the radio in the new enclosure as described in the Data Reuse section 1.

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.

## 11.2. TRANSMITTER ABOVE 1 GHz

### 11.2.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND

#### RESTRICTED BANDEDGE (LOW CHANNEL)



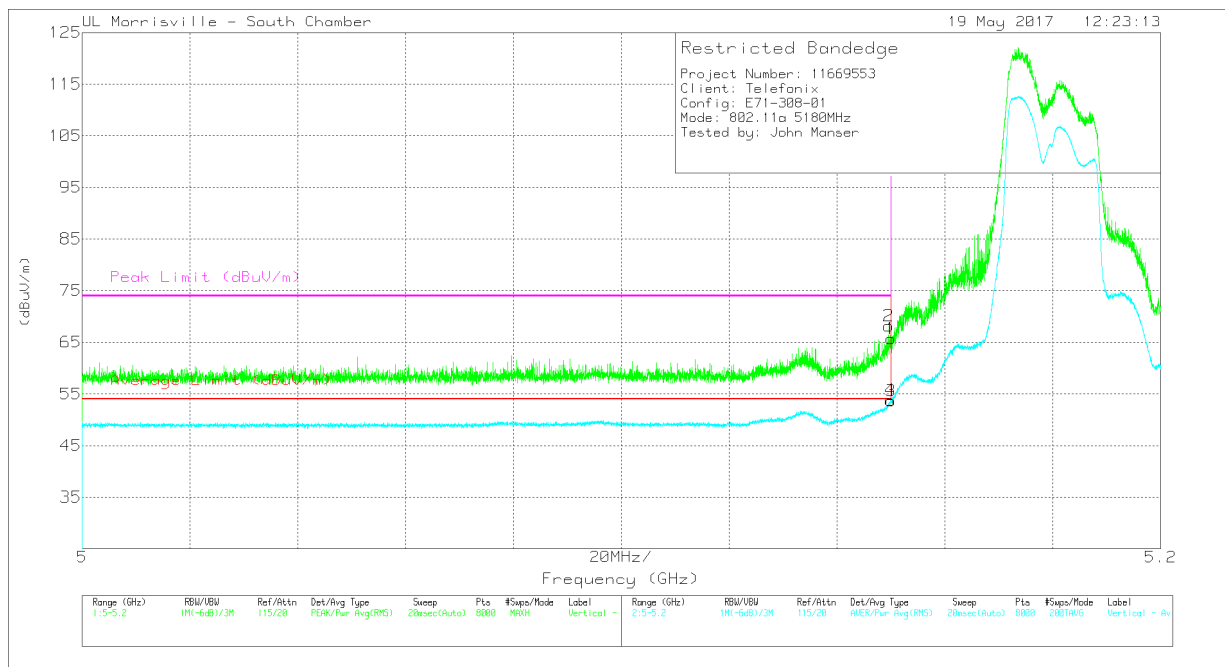
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	38.2	Pk	34.1	-22.7	10	0	59.6	-	-	74	-14.4	225	301	H
2	* 5.083	39.72	Pk	34.1	-22.6	10	0	61.22	-	-	74	-12.78	225	301	H
3	* 5.15	27.22	RMS	34.1	-22.7	10	.15	48.77	54	-5.23	-	-	225	301	H
4	* 5.003	27.79	RMS	34	-22.4	10	.15	49.54	54	-4.46	-	-	225	301	H

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

Pk - Peak detector

RMS - RMS detection





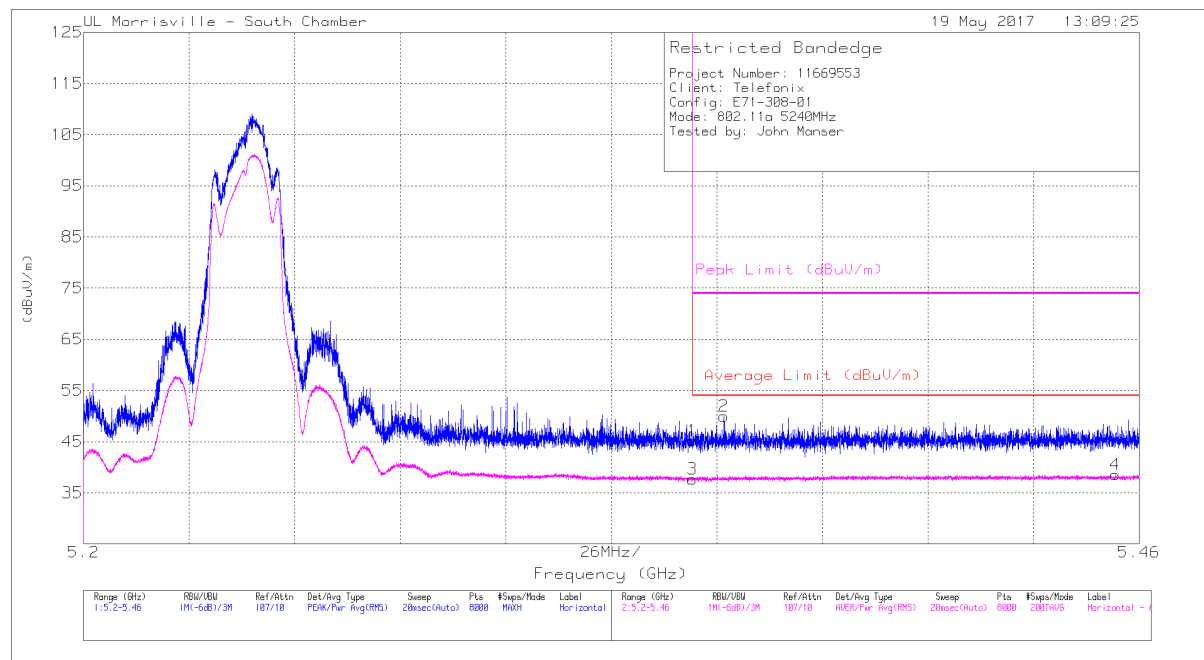
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	54.3	Pk	34.1	-22.7	0	65.7	-	-	74	-8.3	174	304	V
2	* 5.15	56.76	Pk	34.1	-22.7	0	68.16	-	-	74	-5.84	174	304	V
3	* 5.15	42.13	RMS	34.1	-22.7	.15	53.68	54	-.32	-	-	174	304	V
4	* 5.15	42.2	RMS	34.1	-22.7	.15	53.75	54	-.25	-	-	174	304	V

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

Pk - Peak detector

RMS - RMS detection

# **RESTRICTED BANDEDGE (HIGH CHANNEL)**

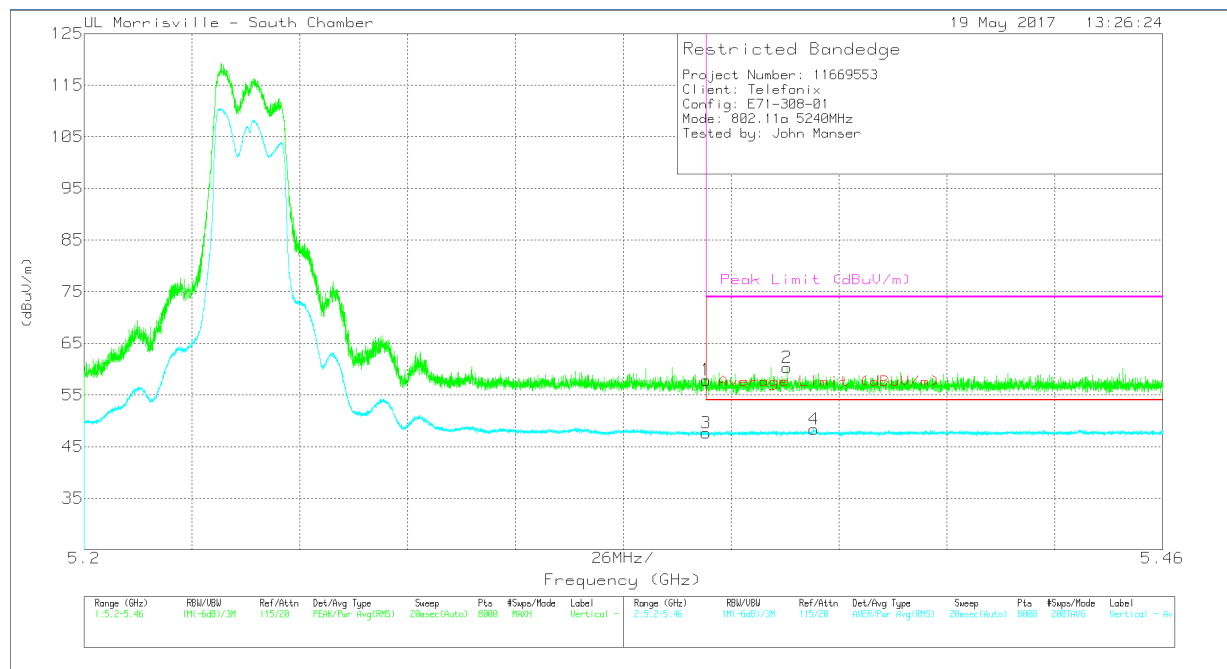


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	34	Pk	34.4	-23.2	0	45.2	-	-	74	-28.8	257	309	H
2	* 5.358	38.9	Pk	34.4	-23.3	0	50	-	-	74	-24	257	309	H
3	* 5.35	26.31	RMS	34.4	-23.2	.15	37.66	54	-16.34	-	-	257	309	H
4	* 5.454	27.48	RMS	34.5	-23.6	.15	38.53	54	-15.47	-	-	257	309	H

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

Pk - Peak detector

RMS - RMS detection



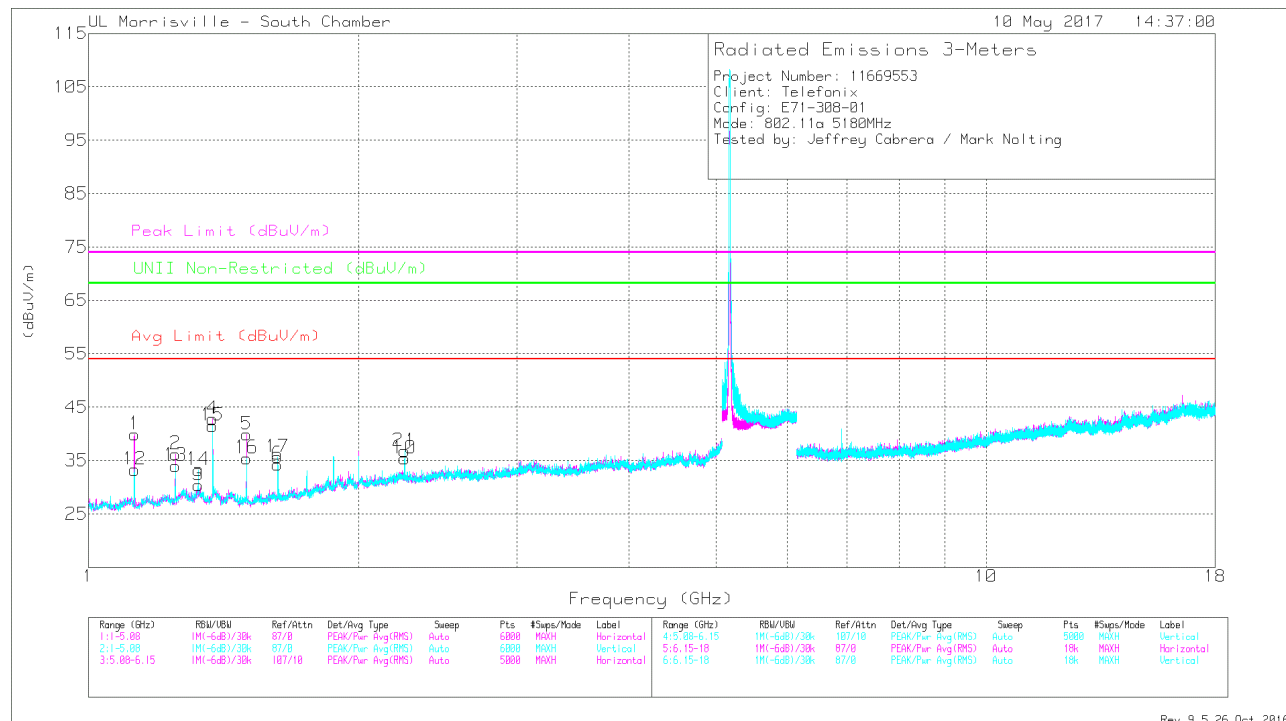
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	46.69	Pk	34.4	-23.2	0	57.89	-	-	74	-16.11	168	324	V
2	* 5.369	49.21	Pk	34.4	-23.3	0	60.31	-	-	74	-13.69	168	324	V
3	* 5.35	36.29	RMS	34.4	-23.2	.15	47.64	54	-6.36	-	-	168	324	V
4	* 5.376	37.14	RMS	34.4	-23.3	.15	48.39	54	-5.61	-	-	168	324	V

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

Pk - Peak detector

RMS - RMS detection

# HARMONICS AND SPURIOUS EMISSIONS



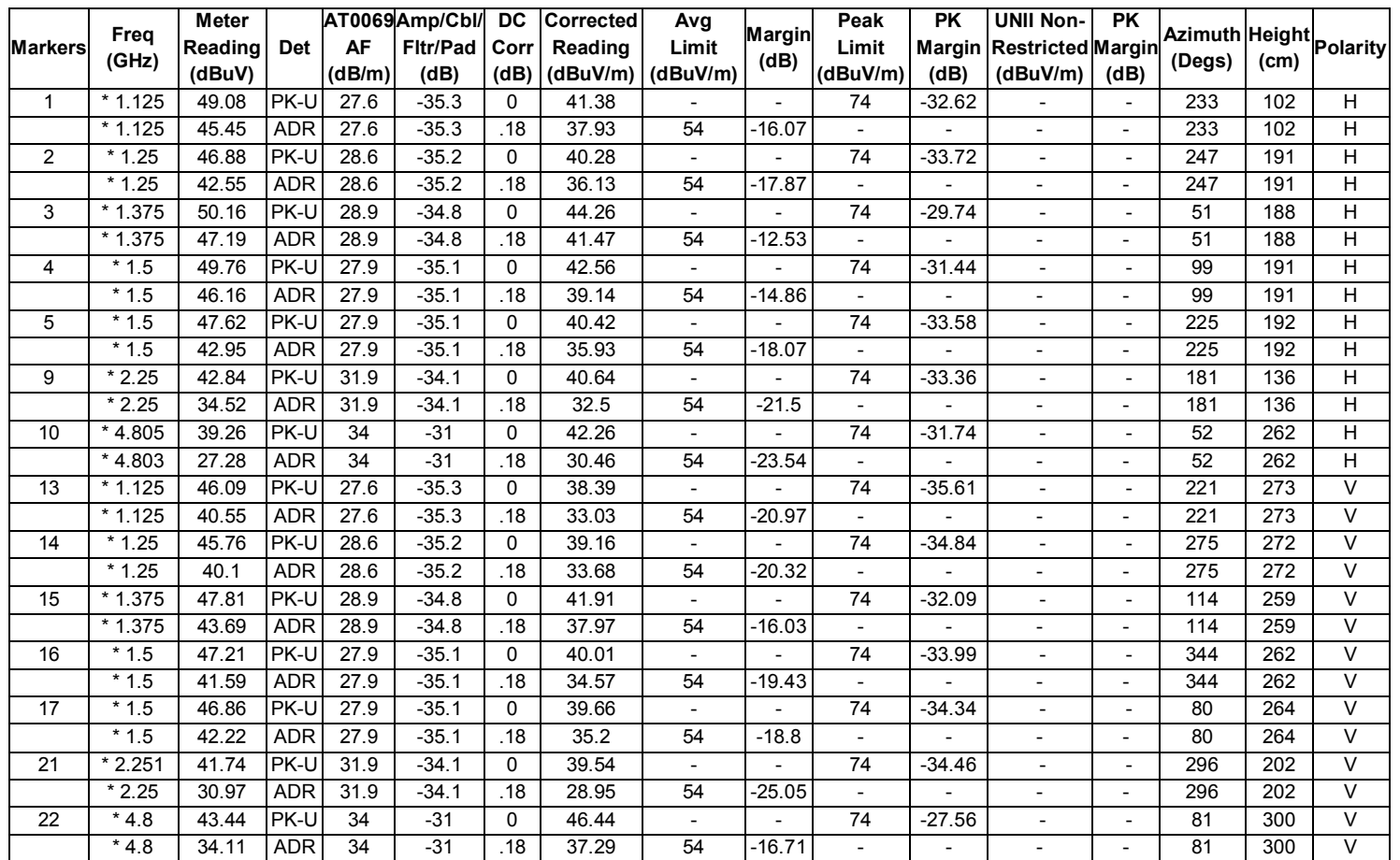
Marker	Freq. (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.125	49.63	PK-U	27.6	-35.3	0	41.93	-	-	74	-32.07	-	-	232	103	H
	* 1.125	46.07	ADR	27.6	-35.3	.15	38.52	54	-15.48	-	-	-	-	232	103	H
2	* 1.25	46.6	PK-U	28.6	-35.2	0	40	-	-	74	-34	-	-	249	186	H
	* 1.25	41.32	ADR	28.6	-35.2	.15	34.87	54	-19.13	-	-	-	-	249	186	H
3	* 1.325	43.33	PK-U	28.9	-34.9	0	37.33	-	-	74	-36.67	-	-	186	192	H
	* 1.325	33.55	ADR	28.9	-34.9	.15	27.7	54	-26.3	-	-	-	-	186	192	H
4	* 1.375	50.43	PK-U	28.9	-34.8	0	44.53	-	-	74	-29.47	-	-	51	184	H
	* 1.375	47.3	ADR	28.9	-34.8	.15	41.55	54	-12.45	-	-	-	-	51	184	H
5	* 1.5	58.73	PK-U	27.9	-35.1	0	51.53	-	-	74	-22.47	-	-	100	193	H
	* 1.5	44.91	ADR	27.9	-35.1	.15	37.86	54	-16.14	-	-	-	-	100	193	H
6	* 1.5	51.02	PK-U	27.9	-35.1	0	43.82	-	-	74	-30.18	-	-	229	121	H
	* 1.5	47.92	ADR	27.9	-35.1	.15	40.87	54	-13.13	-	-	-	-	229	121	H
10	* 2.25	44.1	PK-U	31.9	-34.1	0	41.9	-	-	74	-32.1	-	-	233	127	H
	* 2.25	35.42	ADR	31.9	-34.1	.15	33.37	54	-20.63	-	-	-	-	233	127	H
12	* 1.125	46.37	PK-U	27.6	-35.3	0	38.67	-	-	74	-35.33	-	-	37	345	V
	* 1.125	40.57	ADR	27.6	-35.3	.15	33.02	54	-20.98	-	-	-	-	37	345	V
13	* 1.25	44.32	PK-U	28.6	-35.2	0	37.72	-	-	74	-36.28	-	-	320	338	V
	* 1.25	37.29	ADR	28.6	-35.2	.15	30.84	54	-23.16	-	-	-	-	320	338	V
14	* 1.325	42.7	PK-U	28.9	-34.9	0	36.7	-	-	74	-37.3	-	-	218	345	V
	* 1.325	33.06	ADR	28.9	-34.9	.15	27.21	54	-26.79	-	-	-	-	218	345	V
15	* 1.375	49.5	PK-U	28.9	-34.8	0	43.6	-	-	74	-30.4	-	-	92	215	V
	* 1.375	46.23	ADR	28.9	-34.8	.15	40.48	54	-13.52	-	-	-	-	92	215	V
16	* 1.5	48.29	PK-U	27.9	-35.1	0	41.09	-	-	74	-32.91	-	-	220	141	V
	* 1.5	43.76	ADR	27.9	-35.1	.15	36.71	54	-17.29	-	-	-	-	220	141	V

Marker	Freq. (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	DC Corr (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
17	* 1.375	49.16	PK-U	28.9	-34.8	0	43.26	-	-	74	-30.74	-	-	237	160	V
	* 1.375	45.79	ADR	28.9	-34.8	.15	40.04	54	-13.96	-	-	-	-	237	160	V
21	* 2.25	43.46	PK-U	31.9	-34.1	0	41.26	-	-	74	-32.74	-	-	212	364	V
	* 2.25	35.69	ADR	31.9	-34.1	.15	33.64	54	-20.36	-	-	-	-	212	364	V

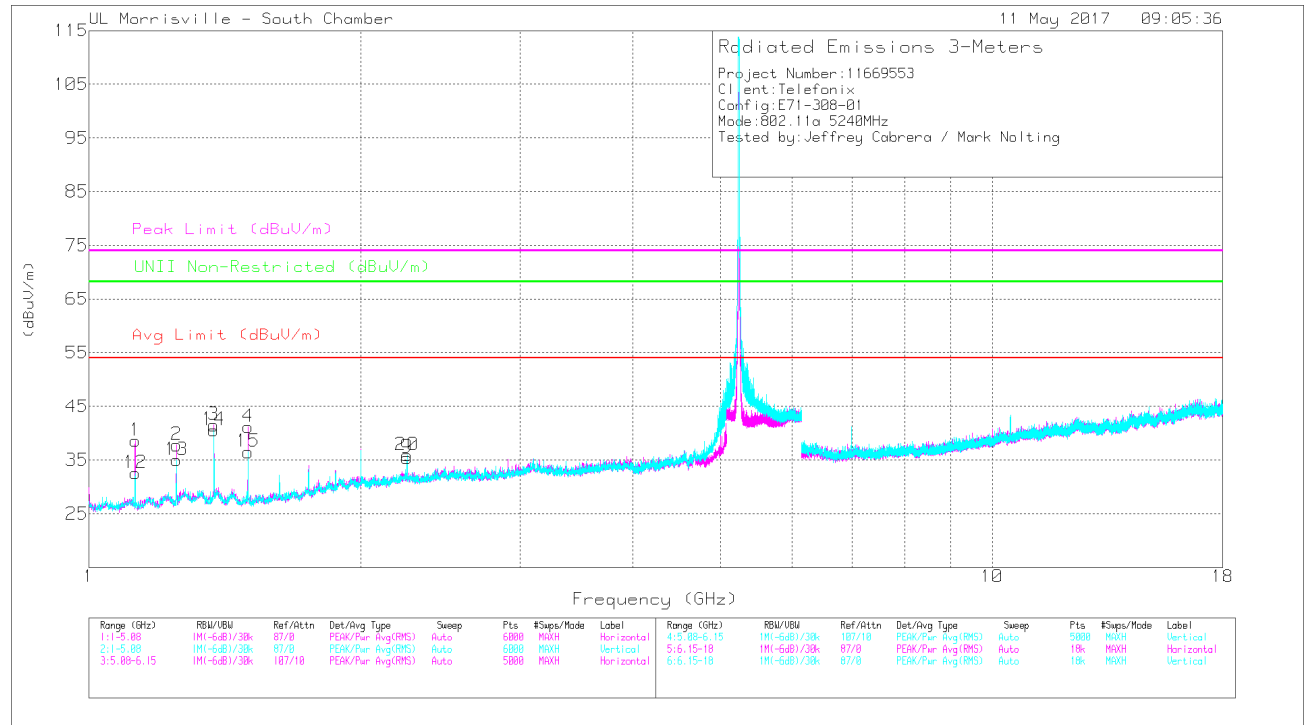
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average



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12 Laboratory Dr., RTP, NC 27709  
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Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	DC Corr (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	* 1.125	49.19	PK-U	27.6	-35.3	0	41.49	-	-	74	-32.51	-	-	224	103	H
	* 1.125	45.46	ADR	27.6	-35.3	.15	37.91	54	-16.09	-	-	-	-	224	103	H
2	* 1.25	47.76	PK-U	28.6	-35.2	0	41.16	-	-	74	-32.84	-	-	244	196	H
	* 1.25	43.27	ADR	28.6	-35.2	.15	36.82	54	-17.18	-	-	-	-	244	196	H
3	* 1.375	50.52	PK-U	28.9	-34.8	0	44.62	-	-	74	-29.38	-	-	49	181	H
	* 1.375	47.16	ADR	28.9	-34.8	.15	41.41	54	-12.59	-	-	-	-	49	181	H
4	* 1.5	49.76	PK-U	27.9	-35.1	0	42.56	-	-	74	-31.44	-	-	96	191	H
	* 1.5	46.49	ADR	27.9	-35.1	.15	39.44	54	-14.56	-	-	-	-	96	191	H
9	* 2.25	44.31	PK-U	31.9	-34.1	0	42.11	-	-	74	-31.89	-	-	186	150	H
	* 2.25	37.4	ADR	31.9	-34.1	.15	35.35	54	-18.65	-	-	-	-	186	150	H
12	* 1.125	47.34	PK-U	27.6	-35.3	0	39.64	-	-	74	-34.36	-	-	312	155	V
	* 1.125	42.74	ADR	27.6	-35.3	.15	35.19	54	-18.81	-	-	-	-	312	155	V
13	* 1.25	43.21	PK-U	28.6	-35.2	0	36.61	-	-	74	-37.39	-	-	296	396	V
	* 1.25	34.87	ADR	28.6	-35.2	.15	28.42	54	-25.58	-	-	-	-	296	396	V
14	* 1.375	48.13	PK-U	28.9	-34.8	0	42.23	-	-	74	-31.77	-	-	236	151	V
	* 1.375	44.36	ADR	28.9	-34.8	.15	38.61	54	-15.39	-	-	-	-	236	151	V
15	* 1.5	48.36	PK-U	27.9	-35.1	0	41.16	-	-	74	-32.84	-	-	192	145	V
	* 1.5	44.17	ADR	27.9	-35.1	.15	37.12	54	-16.88	-	-	-	-	192	145	V
20	* 2.25	43.87	PK-U	31.9	-34.1	0	41.67	-	-	74	-32.33	-	-	217	356	V
	* 2.25	35.53	ADR	31.9	-34.1	.15	33.48	54	-20.52	-	-	-	-	217	356	V

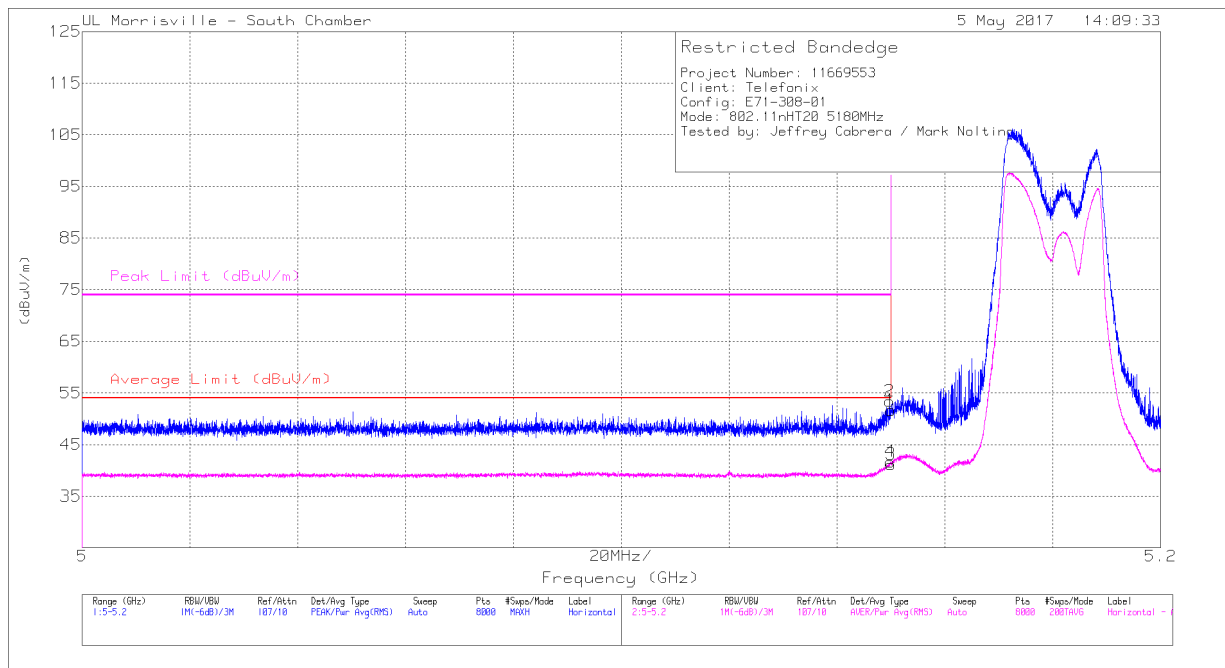
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

## 11.2.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND

### RESTRICTED BANDEDGE (LOW CHANNEL)



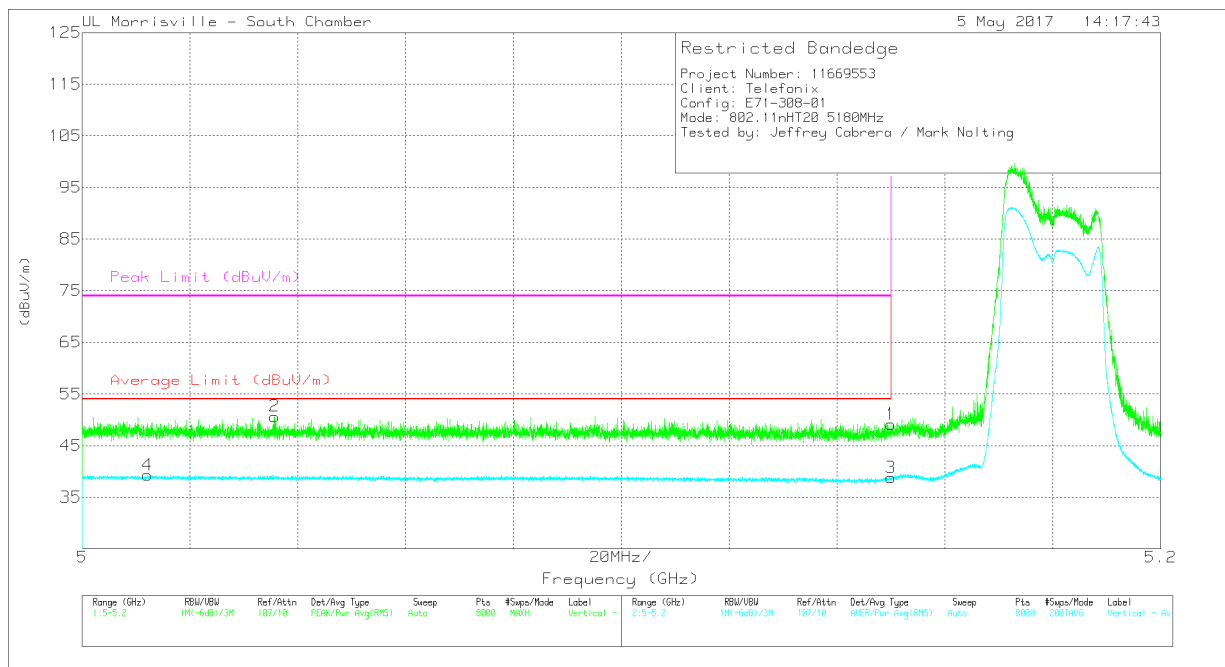
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	40.25	Pk	34.1	-22.7	51.65	-	-	74	-22.35	357	103	H
2	* 5.15	41.98	Pk	34.1	-22.7	53.38	-	-	74	-20.62	357	103	H
3	* 5.15	29.78	RMS	34.1	-22.7	41.18	54	-12.82	-	-	357	103	H
4	* 5.15	30.28	RMS	34.1	-22.7	41.68	54	-12.32	-	-	357	103	H

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

Pk - Peak detector

RMS - RMS detection





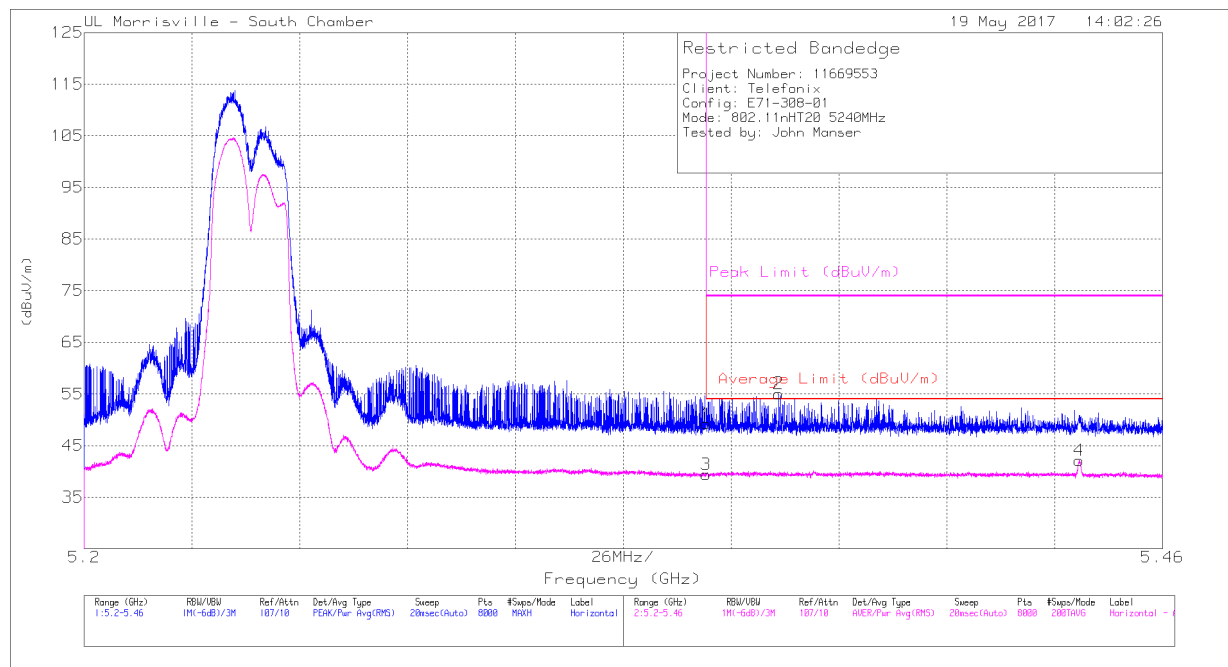
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	37.75	Pk	34.1	-22.7	49.15	-	-	74	-24.85	236	368	V
2	* 5.036	39.15	Pk	34	-22.5	50.65	-	-	74	-23.35	236	368	V
3	* 5.15	27.37	RMS	34.1	-22.7	38.77	54	-15.23	-	-	236	368	V
4	* 5.012	27.71	RMS	34	-22.4	39.31	54	-14.69	-	-	236	368	V

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

Pk - Peak detector

RMS - RMS detection

# AUTHORIZED BANDEDGE (HIGH CHANNEL)

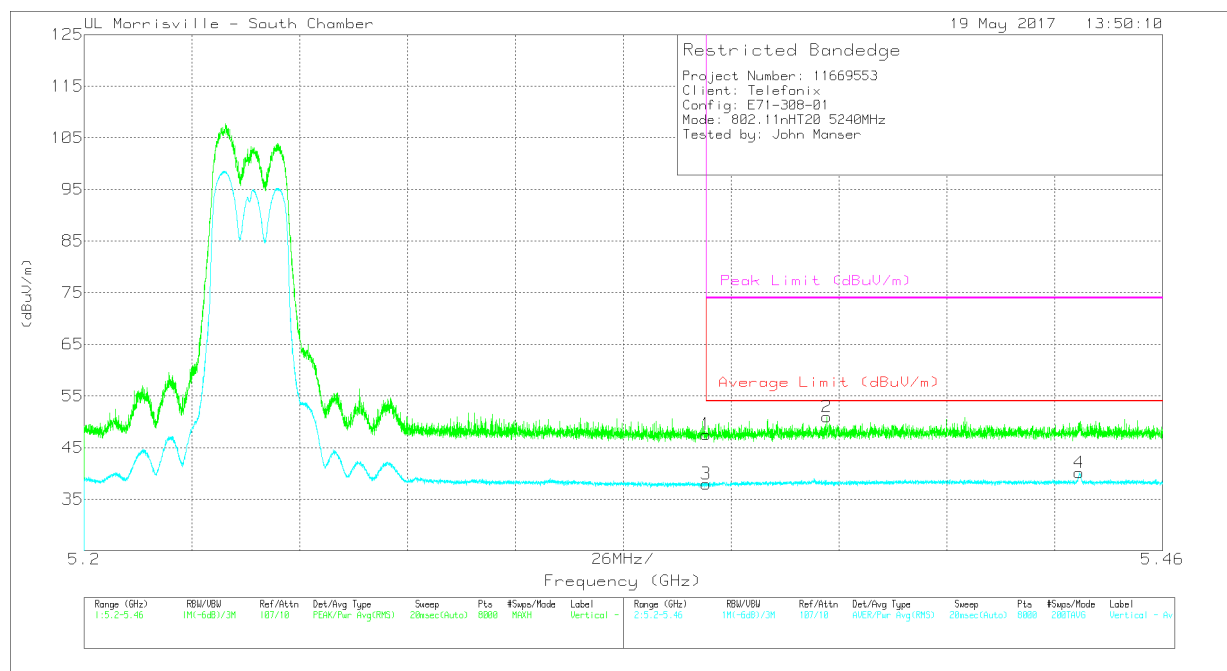


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	38.06	Pk	34.4	-23.2	49.26	-	-	74	-24.74	250	316	H
2	* 5.367	43.96	Pk	34.4	-23.3	55.06	-	-	74	-18.94	250	316	H
3	* 5.35	28.21	RMS	34.4	-23.2	39.41	54	-14.59	-	-	250	316	H
4	* 5.44	31.28	RMS	34.4	-23.6	42.08	54	-11.92	-	-	250	316	H

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

Pk - Peak detector

RMS - RMS detection



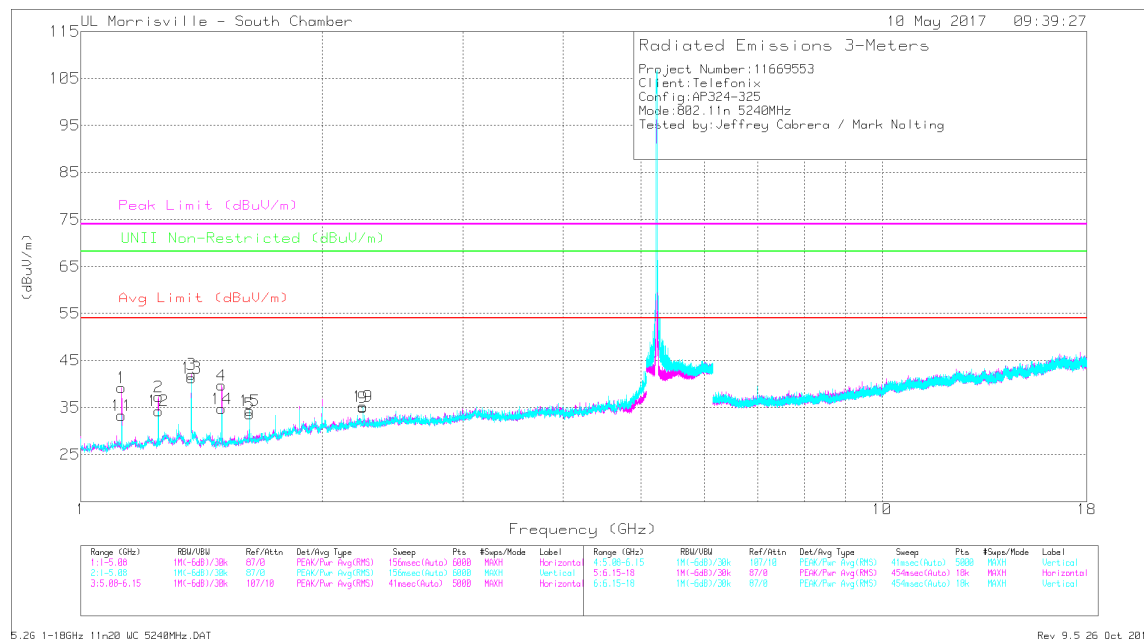
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	36.36	Pk	34.4	-23.2	47.56	-	-	74	-26.44	338	360	V
2	* 5.379	39.96	Pk	34.4	-23.4	50.96	-	-	74	-23.04	338	360	V
3	* 5.35	26.77	RMS	34.4	-23.2	37.97	54	-16.03	-	-	338	360	V
4	* 5.44	29.31	RMS	34.4	-23.6	40.11	54	-13.89	-	-	338	360	V

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

Pk - Peak detector

RMS - RMS detection

# HARMONICS AND SPURIOUS EMISSIONS – WORSE CASE



Markers	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (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	* 1.125	49.95	PK-U	27.6	-35.3	42.25	-	-	74	-31.75	-	-	227	102	H
	* 1.125	46.7	ADR	27.6	-35.3	39	54	-15	-	-	-	-	227	102	H
2	* 1.25	46.97	PK-U	28.6	-35.2	40.37	-	-	74	-33.63	-	-	245	198	H
	* 1.25	42.19	ADR	28.6	-35.2	35.59	54	-18.41	-	-	-	-	245	198	H
3	* 1.375	50.79	PK-U	28.9	-34.8	44.89	-	-	74	-29.11	-	-	50	181	H
	* 1.375	47.34	ADR	28.9	-34.8	41.44	54	-12.56	-	-	-	-	50	181	H
4	* 1.5	48.62	PK-U	27.9	-35.1	41.42	-	-	74	-32.58	-	-	94	186	H
	* 1.5	44.25	ADR	27.9	-35.1	37.05	54	-16.95	-	-	-	-	94	186	H
5	* 1.375	47.63	PK-U	28.9	-34.8	41.73	-	-	74	-32.27	-	-	72	185	H
	* 1.375	43.56	ADR	28.9	-34.8	37.66	54	-16.34	-	-	-	-	72	185	H
9	* 2.25	42.75	PK-U	31.9	-34.1	40.55	-	-	74	-33.45	-	-	2	185	H
	* 2.25	33.32	ADR	31.9	-34.1	31.12	54	-22.88	-	-	-	-	2	185	H
11	* 1.125	46.36	PK-U	27.6	-35.3	38.66	-	-	74	-35.34	-	-	356	172	V
	* 1.125	40.65	ADR	27.6	-35.3	32.95	54	-21.05	-	-	-	-	356	172	V
12	* 1.25	44.78	PK-U	28.6	-35.2	38.18	-	-	74	-35.82	-	-	257	250	V
	* 1.25	37.58	ADR	28.6	-35.2	30.98	54	-23.02	-	-	-	-	257	250	V
13	* 1.373	49.79	PK-U	28.9	-34.8	43.89	-	-	74	-30.11	-	-	58	250	V
	* 1.375	44.88	ADR	28.9	-34.8	38.98	54	-15.02	-	-	-	-	58	250	V
14	* 1.5	46.35	PK-U	27.9	-35.1	39.15	-	-	74	-34.85	-	-	327	290	V
	* 1.5	40.34	ADR	27.9	-35.1	33.14	54	-20.86	-	-	-	-	327	290	V
15	* 1.625	44.79	PK-U	28.4	-34.5	38.69	-	-	74	-35.31	-	-	269	278	V
	* 1.625	38.05	ADR	28.4	-34.5	31.95	54	-22.05	-	-	-	-	269	278	V
19	* 2.25	43.85	PK-U	31.9	-34.1	41.65	-	-	74	-32.35	-	-	228	105	V
	* 2.25	36.25	ADR	31.9	-34.1	34.05	54	-19.95	-	-	-	-	228	105	V

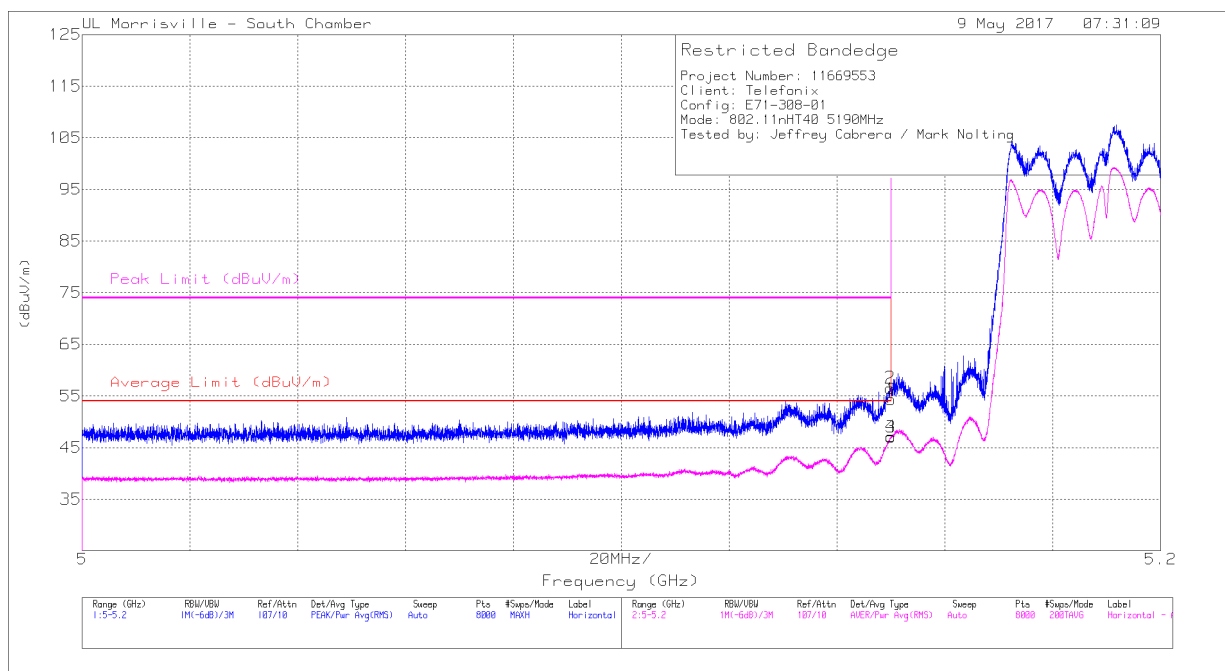
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

### 11.2.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND

#### RESTRICTED BANDEDGE (LOW CHANNEL)

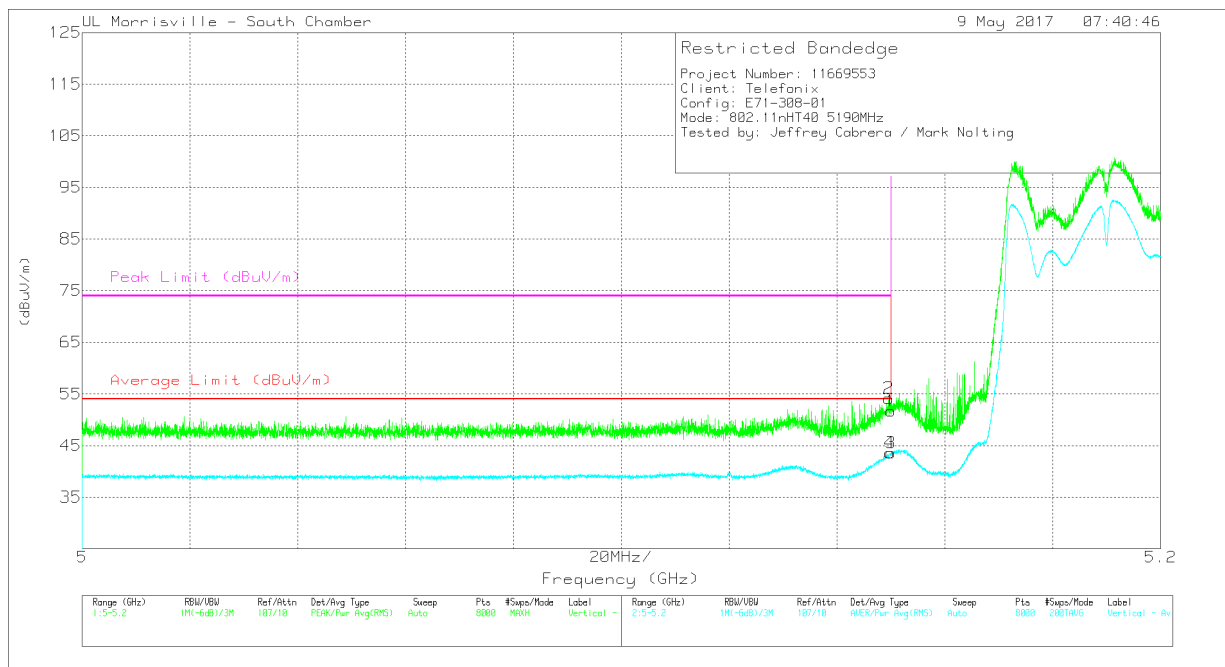


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	42.95	Pk	34.1	-22.7	0	54.35	-	-	74	-19.65	267	111	H
2	* 5.15	45.13	Pk	34.1	-22.7	0	56.53	-	-	74	-17.47	267	111	H
3	* 5.15	35.39	RMS	34.1	-22.7	.13	46.92	54	-7.08	-	-	267	111	H
4	* 5.15	35.57	RMS	34.1	-22.7	.13	47.1	54	-6.9	-	-	267	111	H

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

Pk - Peak detector

RMS - RMS detection



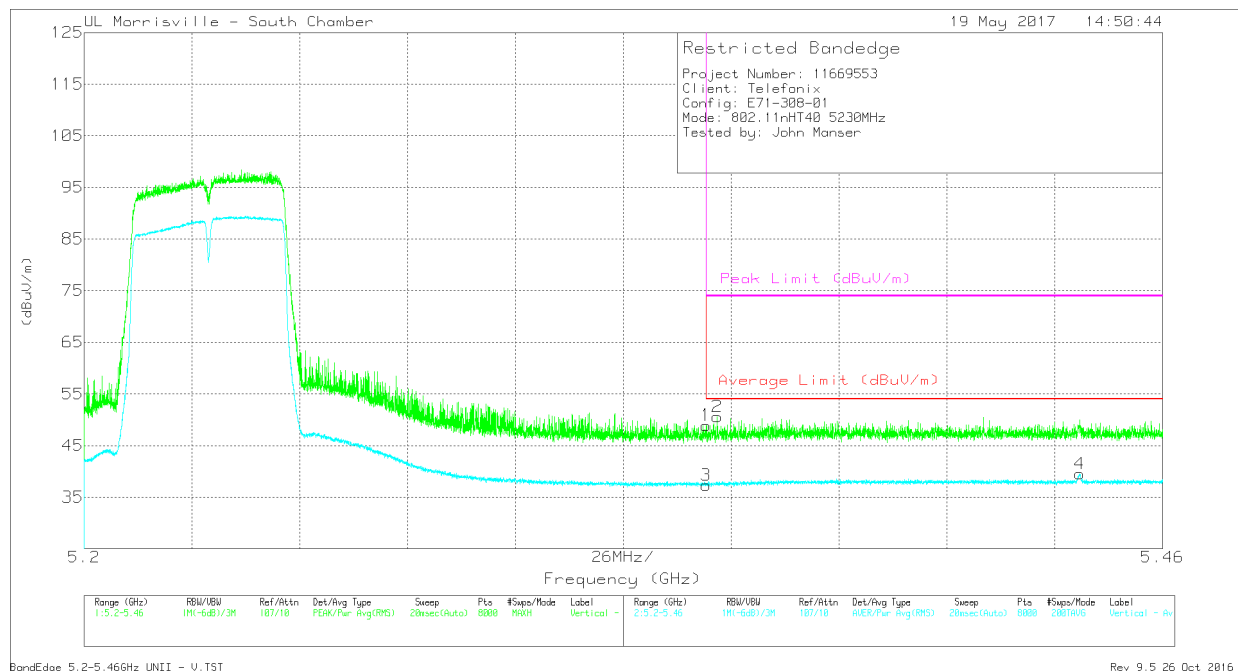
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	40.28	Pk	34.1	-22.7	0	51.68	-	-	74	-22.32	275	133	V
2	* 5.15	42.74	Pk	34.1	-22.7	0	54.14	-	-	74	-19.86	275	133	V
3	* 5.15	31.95	RMS	34.1	-22.7	.13	43.48	54	-10.52	-	-	275	133	V
4	* 5.15	31.95	RMS	34.1	-22.7	.13	43.48	54	-10.52	-	-	275	133	V

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

Pk - Peak detector

RMS - RMS detection





Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	37.71	Pk	34.4	-23.2	0	48.91	-	-	74	-25.09	346	383	V
2	* 5.353	39.45	Pk	34.4	-23.3	0	50.55	-	-	74	-23.45	346	383	V
3	* 5.35	25.98	RMS	34.4	-23.2	.13	37.31	54	-16.69	-	-	346	383	V
4	* 5.44	28.56	RMS	34.4	-23.6	.13	39.49	54	-14.51	-	-	346	383	V

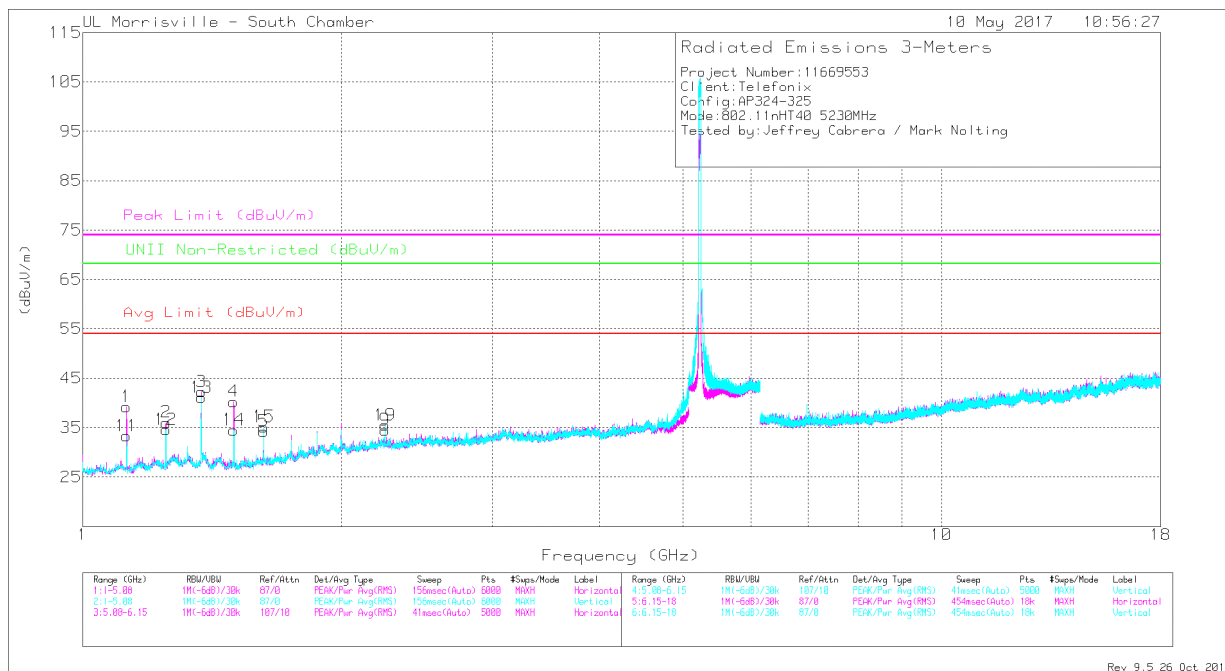
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

RMS - RMS detection



# HARMONICS AND SPURIOUS EMISSIONS – WORST CASE



Marker	Freq. (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (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	* 1.125	49.77	PK-U	27.6	-35.3	0	42.07	-	-	74	-31.93	-	-	229	104	H
	* 1.125	46.16	ADR	27.6	-35.3	.13	38.59	54	-15.41	-	-	-	-	229	104	H
2	* 1.25	46.88	PK-U	28.6	-35.2	0	40.28	-	-	74	-33.72	-	-	246	194	H
	* 1.25	42.17	ADR	28.6	-35.2	.13	35.7	54	-18.3	-	-	-	-	246	194	H
3	* 1.375	50.73	PK-U	28.9	-34.8	0	44.83	-	-	74	-29.17	-	-	51	182	H
	* 1.375	47.58	ADR	28.9	-34.8	.13	41.81	54	-12.19	-	-	-	-	51	182	H
4	* 1.5	48.9	PK-U	27.9	-35.1	0	41.7	-	-	74	-32.3	-	-	94	188	H
	* 1.5	44.16	ADR	27.9	-35.1	.13	37.09	54	-16.91	-	-	-	-	94	188	H
5	* 1.375	47.12	PK-U	28.9	-34.8	0	41.22	-	-	74	-32.78	-	-	78	188	H
	* 1.375	42.64	ADR	28.9	-34.8	.13	36.87	54	-17.13	-	-	-	-	78	188	H
9	* 2.25	44.02	PK-U	31.9	-34.1	0	41.82	-	-	74	-32.18	-	-	184	143	H
	* 2.25	35.78	ADR	31.9	-34.1	.13	33.71	54	-20.29	-	-	-	-	184	143	H
11	* 1.125	47.17	PK-U	27.6	-35.3	0	39.47	-	-	74	-34.53	-	-	310	156	V
	* 1.125	42.3	ADR	27.6	-35.3	.13	34.73	54	-19.27	-	-	-	-	310	156	V
12	* 1.25	45.11	PK-U	28.6	-35.2	0	38.51	-	-	74	-35.49	-	-	295	259	V
	* 1.25	38.34	ADR	28.6	-35.2	.13	31.87	54	-22.13	-	-	-	-	295	259	V
13	* 1.375	44.33	PK-U	28.9	-34.8	0	38.43	-	-	74	-35.57	-	-	112	172	V
	* 1.375	35.88	ADR	28.9	-34.8	.13	30.11	54	-23.89	-	-	-	-	112	172	V
14	* 1.499	48.4	PK-U	27.9	-35.1	0	41.2	-	-	74	-32.8	-	-	226	146	V
	* 1.5	42.5	ADR	27.9	-35.1	.13	35.43	54	-18.57	-	-	-	-	226	146	V
15	* 1.375	49.17	PK-U	28.9	-34.8	0	43.27	-	-	74	-30.73	-	-	241	156	V
	* 1.375	45.08	ADR	28.9	-34.8	.13	39.31	54	-14.69	-	-	-	-	241	156	V
19	* 2.25	43.22	PK-U	31.9	-34.1	0	41.02	-	-	74	-32.98	-	-	217	361	V
	* 2.25	35	ADR	31.9	-34.1	.13	32.93	54	-21.07	-	-	-	-	217	361	V

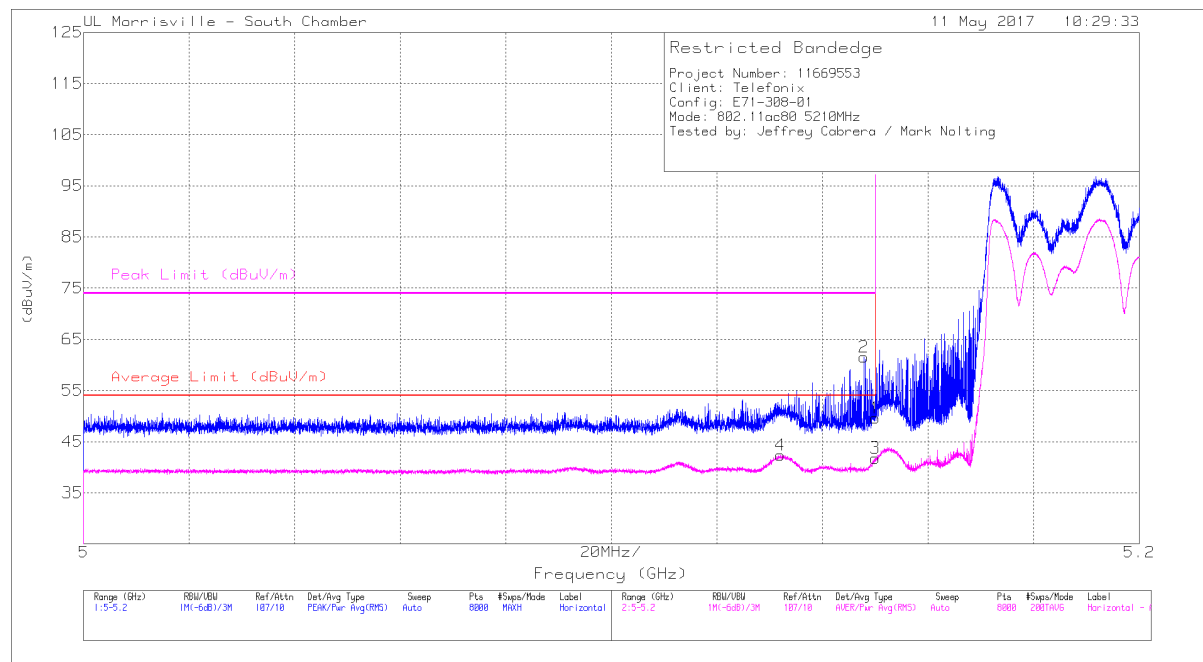
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

# 11.2.4. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.2 GHz BAND

## AUTHORIZED BANDEDGE (LOW CHANNEL)

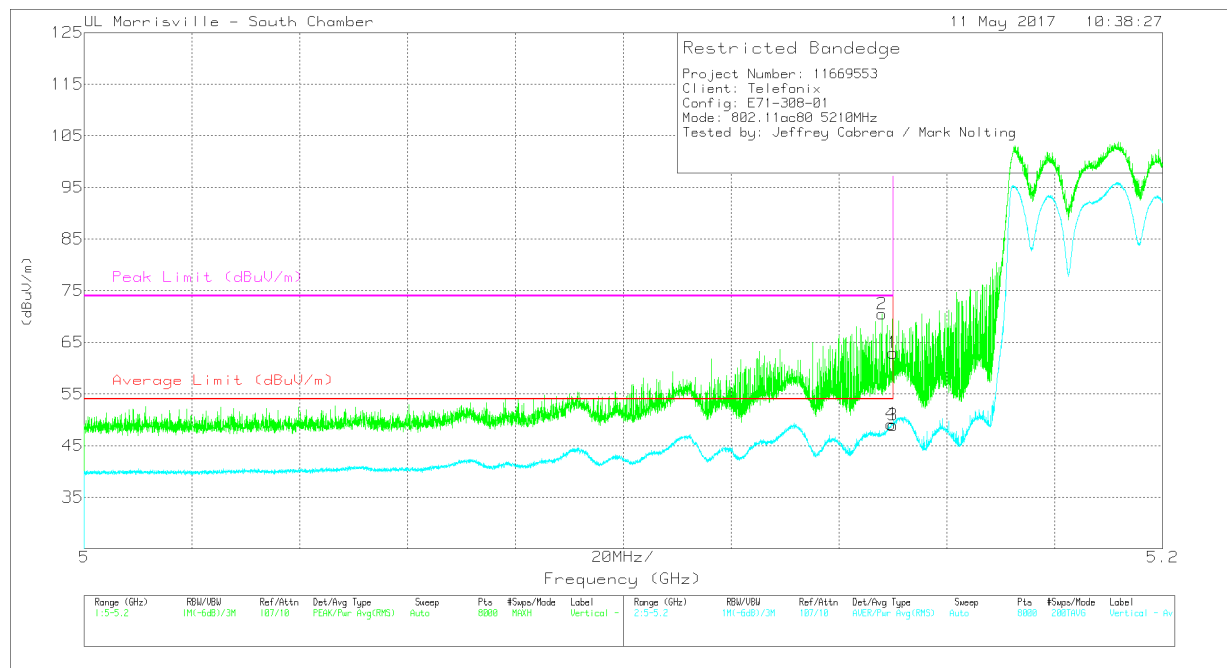


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cb// Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	38.21	Pk	34.1	-22.7	0	49.61	-	-	74	-24.39	261	318	H
2	* 5.148	50.09	Pk	34.1	-22.7	0	61.49	-	-	74	-12.51	261	318	H
3	* 5.15	30.12	RMS	34.1	-22.7	.25	41.77	54	-12.23	-	-	261	318	H
4	* 5.132	30.57	RMS	34.1	-22.6	.25	42.32	54	-11.68	-	-	261	318	H

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

Pk - Peak detector

RMS - RMS detection



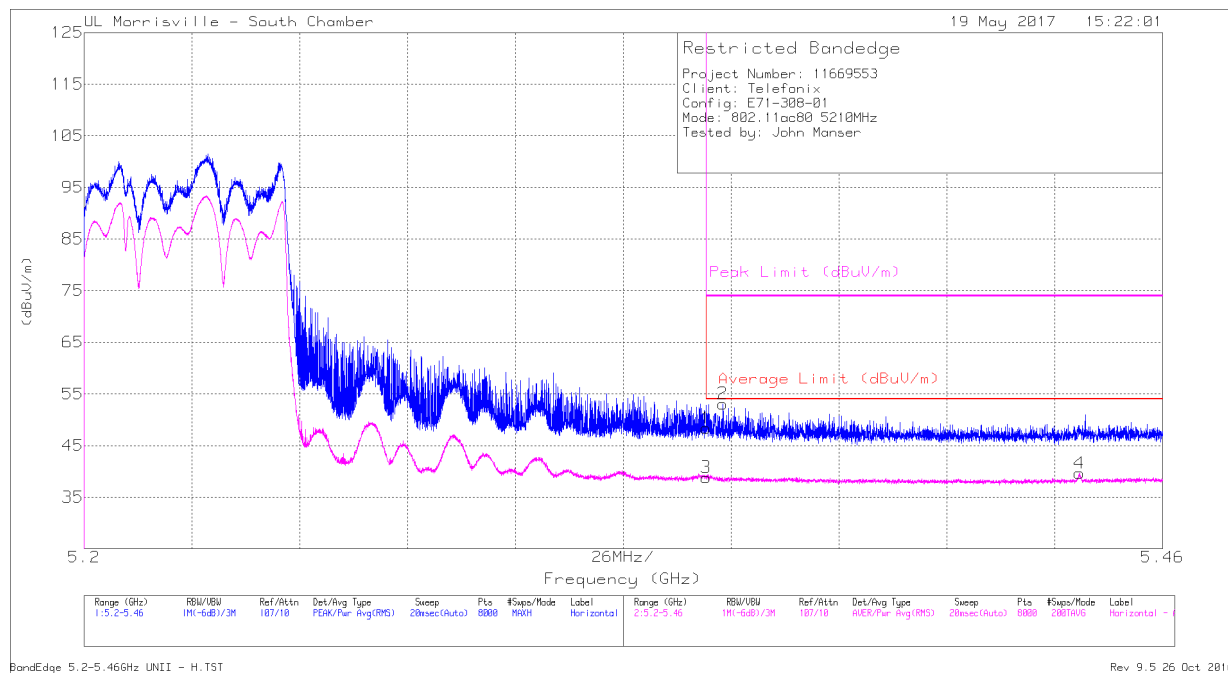
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	51.55	Pk	34.1	-22.7	0	62.95	-	-	74	-11.05	60	292	V
2	* 5.148	59.13	Pk	34.1	-22.7	0	70.53	-	-	74	-3.47	60	292	V
3	* 5.15	37.54	RMS	34.1	-22.7	.25	49.19	54	-4.81	-	-	60	292	V
4	* 5.15	37.77	RMS	34.1	-22.7	.25	49.42	54	-4.58	-	-	60	292	V

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

Pk - Peak detector

RMS - RMS detection

# **AUTHORIZED BANDEDGE (HIGH CHANNEL)**

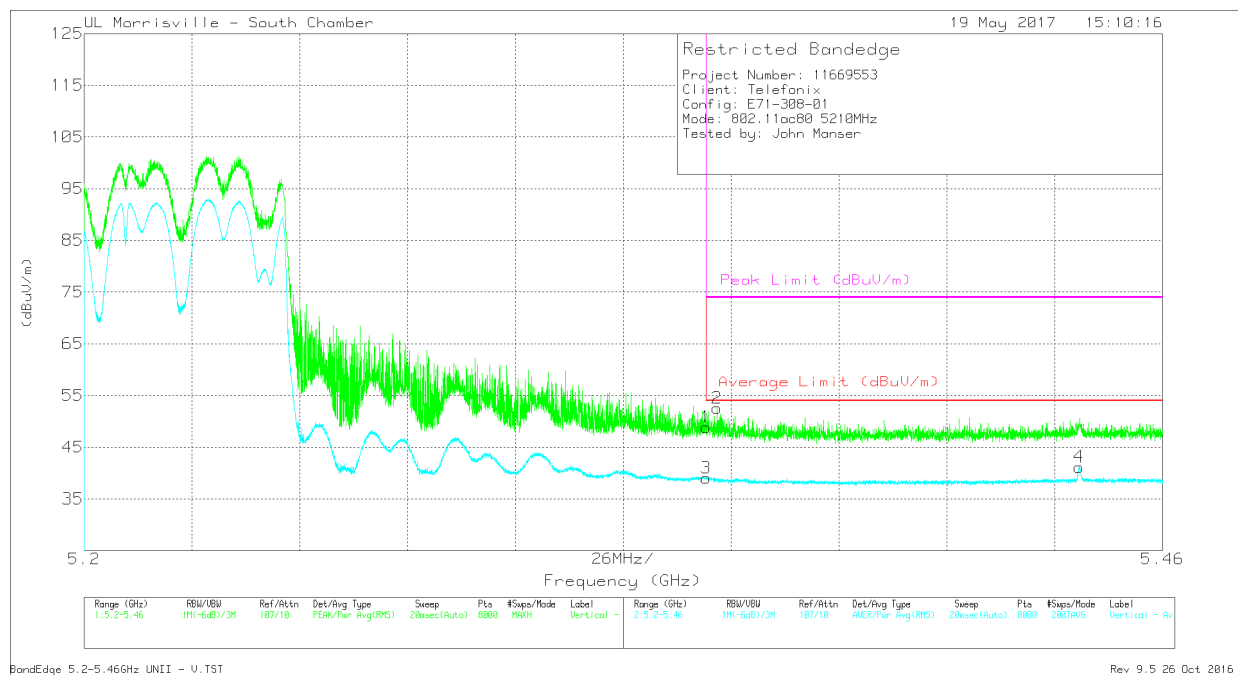


Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	37.18	Pk	34.4	-23.2	0	48.38	-	-	74	-25.62	323	370	H
2	* 5.354	42	Pk	34.4	-23.3	0	53.1	-	-	74	-20.9	323	370	H
3	* 5.35	27.38	RMS	34.4	-23.2	.25	38.83	54	-15.17	-	-	323	370	H
4	* 5.44	28.56	RMS	34.4	-23.6	.25	39.61	54	-14.39	-	-	323	370	H

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

Pk - Peak detector

RMS - RMS detection



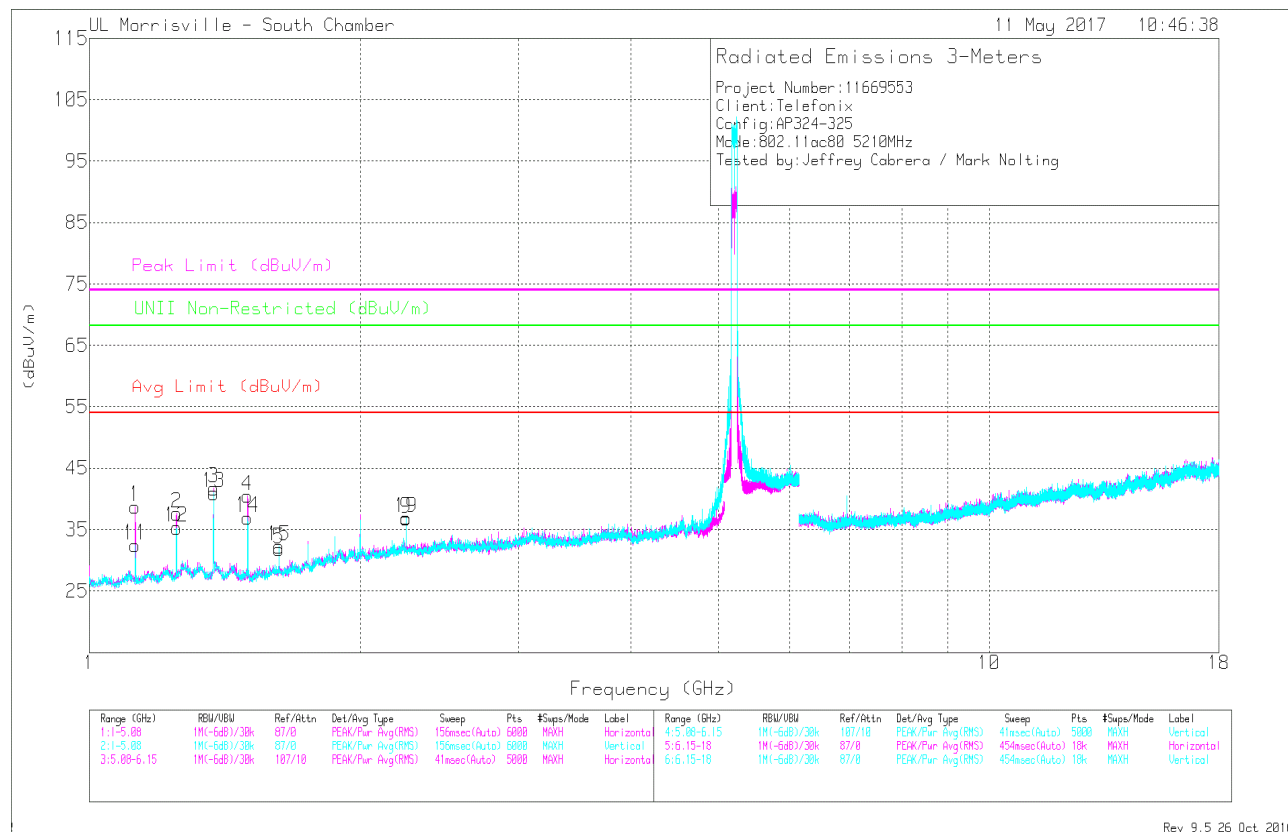
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	37.67	Pk	34.4	-23.2	0	48.87	-	-	74	-25.13	314	396	V
2	* 5.353	41.47	Pk	34.4	-23.3	0	52.57	-	-	74	-21.43	314	396	V
3	* 5.35	27.6	RMS	34.4	-23.2	.25	39.05	54	-14.95	-	-	314	396	V
4	* 5.44	30.13	RMS	34.4	-23.6	.25	41.18	54	-12.82	-	-	314	396	V

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

Pk - Peak detector

RMS - RMS detection

# HARMONICS AND SPURIOUS EMISSIONS – WORST CASE



Marker	Freq (GHz)	Meter Reading (dBUV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (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	* 1.125	49.52	PK-U	27.6	-35.3	0	41.82	-	-	74	-32.18	-	-	222	102	H
	* 1.125	45.93	ADR	27.6	-35.3	.25	38.48	54	-15.52	-	-	-	-	222	102	H
2	* 1.25	47.54	PK-U	28.6	-35.2	0	40.94	-	-	74	-33.06	-	-	247	198	H
	* 1.25	43.06	ADR	28.6	-35.2	.25	36.71	54	-17.29	-	-	-	-	247	198	H
3	* 1.375	50.75	PK-U	28.9	-34.8	0	44.85	-	-	74	-29.15	-	-	51	180	H
	* 1.375	47.42	ADR	28.9	-34.8	.25	41.77	54	-12.23	-	-	-	-	51	180	H
4	* 1.5	49.96	PK-U	27.9	-35.1	0	42.76	-	-	74	-31.24	-	-	97	193	H
	* 1.5	46.11	ADR	27.9	-35.1	.25	39.16	54	-14.84	-	-	-	-	97	193	H
5	* 1.375	46.81	PK-U	28.9	-34.8	0	40.91	-	-	74	-33.09	-	-	80	187	H
	* 1.375	42.34	ADR	28.9	-34.8	.25	36.69	54	-17.31	-	-	-	-	80	187	H
9	* 2.25	43.76	PK-U	31.9	-34.1	0	41.56	-	-	74	-32.44	-	-	179	141	H
	* 2.25	35.8	ADR	31.9	-34.1	.25	33.85	54	-20.15	-	-	-	-	179	141	H
11	* 1.125	47.04	PK-U	27.6	-35.3	0	39.34	-	-	74	-34.66	-	-	310	161	V
	* 1.125	42.11	ADR	27.6	-35.3	.25	34.66	54	-19.34	-	-	-	-	310	161	V
12	* 1.25	45.75	PK-U	28.6	-35.2	0	39.15	-	-	74	-34.85	-	-	296	245	V
	* 1.25	39.14	ADR	28.6	-35.2	.25	32.79	54	-21.21	-	-	-	-	296	245	V
13	* 1.375	49.79	PK-U	28.9	-34.8	0	43.89	-	-	74	-30.11	-	-	54	235	V
	* 1.375	46.32	ADR	28.9	-34.8	.25	40.67	54	-13.33	-	-	-	-	54	235	V
14	* 1.5	48.31	PK-U	27.9	-35.1	0	41.11	-	-	74	-32.89	-	-	222	133	V
	* 1.5	44.04	ADR	27.9	-35.1	.25	37.09	54	-16.91	-	-	-	-	222	133	V

Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	DC Corr (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
15	* 1.5	47.18	PK-U	27.9	-35.1	0	39.98	-	-	74	-34.02	-	-	233	175	V
	* 1.5	41.98	ADR	27.9	-35.1	.25	35.03	54	-18.97	-	-	-	-	233	175	V
19	* 2.25	43.09	PK-U	31.9	-34.1	0	40.89	-	-	74	-33.11	-	-	261	153	V
	* 2.25	33.28	ADR	31.9	-34.1	.25	31.33	54	-22.67	-	-	-	-	261	153	V

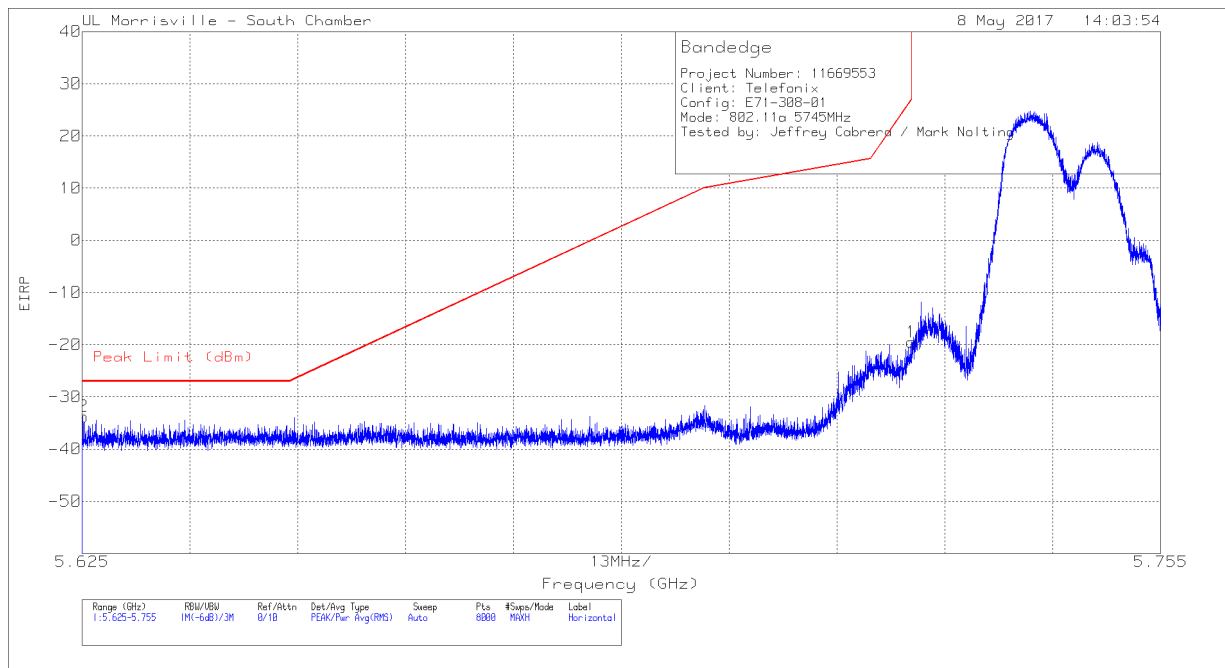
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

## 11.2.5. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND

### AUTHORIZED BANDEGE (LOW CHANNEL)

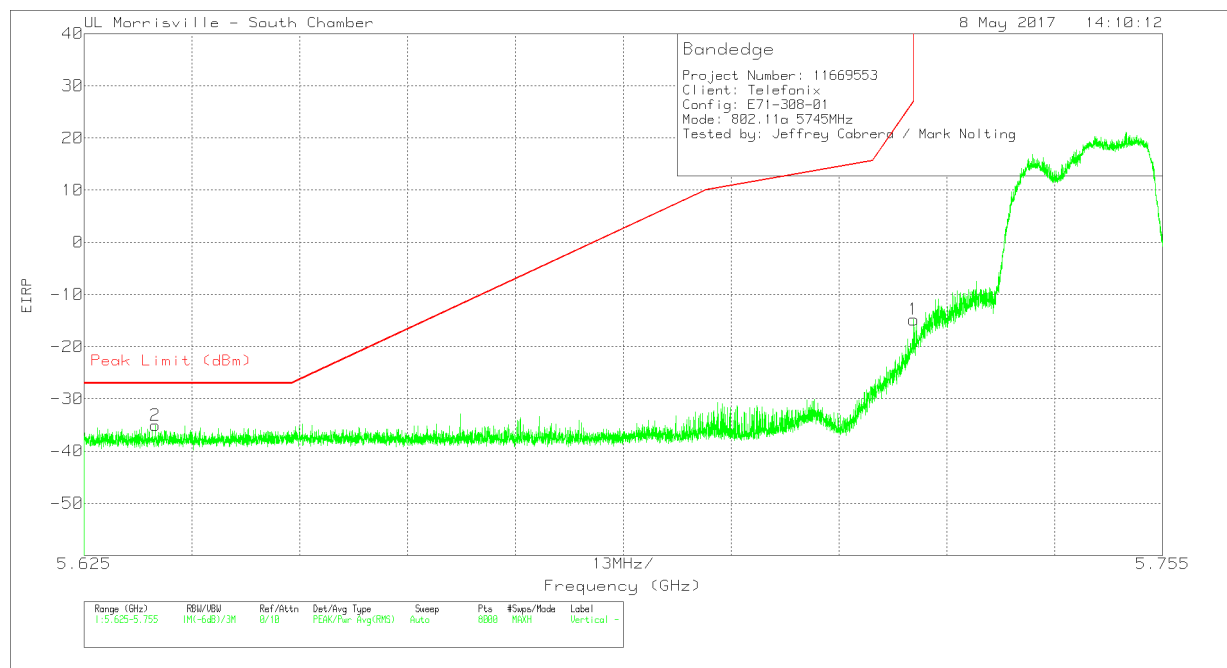


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Conversion Factor (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.625	-66.78	Pk	34.6	-23.5	11.8	10.1	0	-33.78	-27	-6.78	338	322	H
1	5.725	-52.52	Pk	34.6	-23.5	11.8	10.1	0	-19.52	27	-46.52	338	322	H

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

Pk - Peak detector



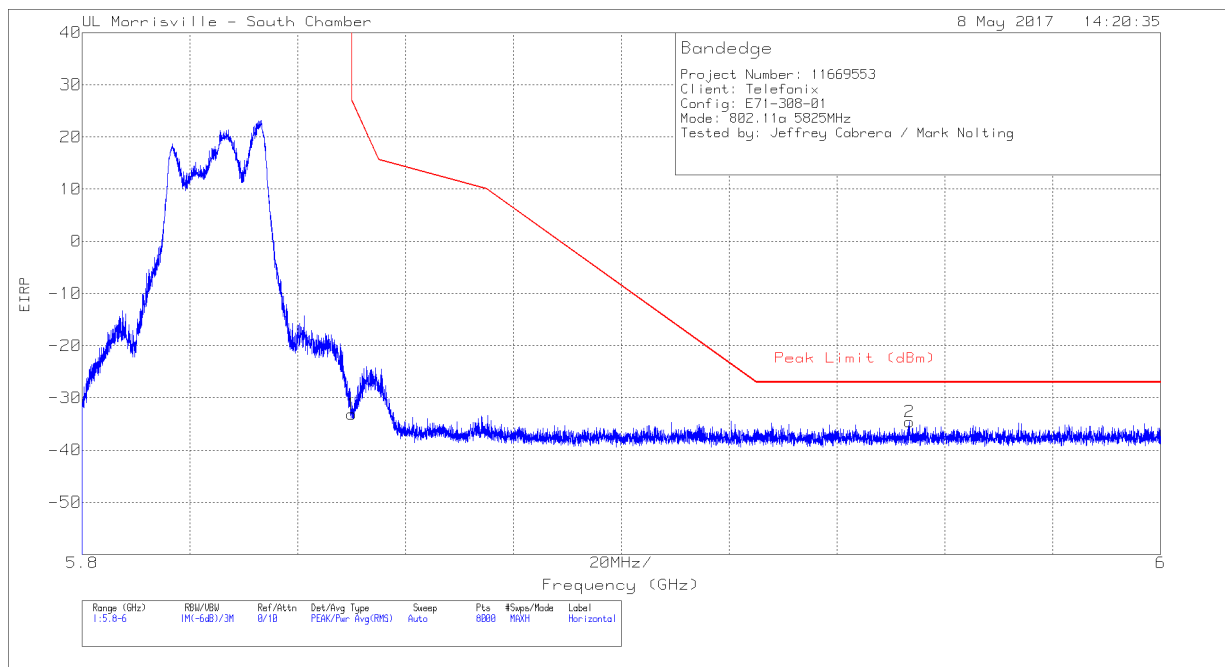


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Conversion Factor (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.634	-67.96	Pk	34.6	-23.6	11.8	10.1	0	-35.06	-27	-8.06	293	388	V
1	5.725	-47.81	Pk	34.6	-23.5	11.8	10.1	0	-14.81	27	-41.81	293	388	V

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

Pk - Peak detector

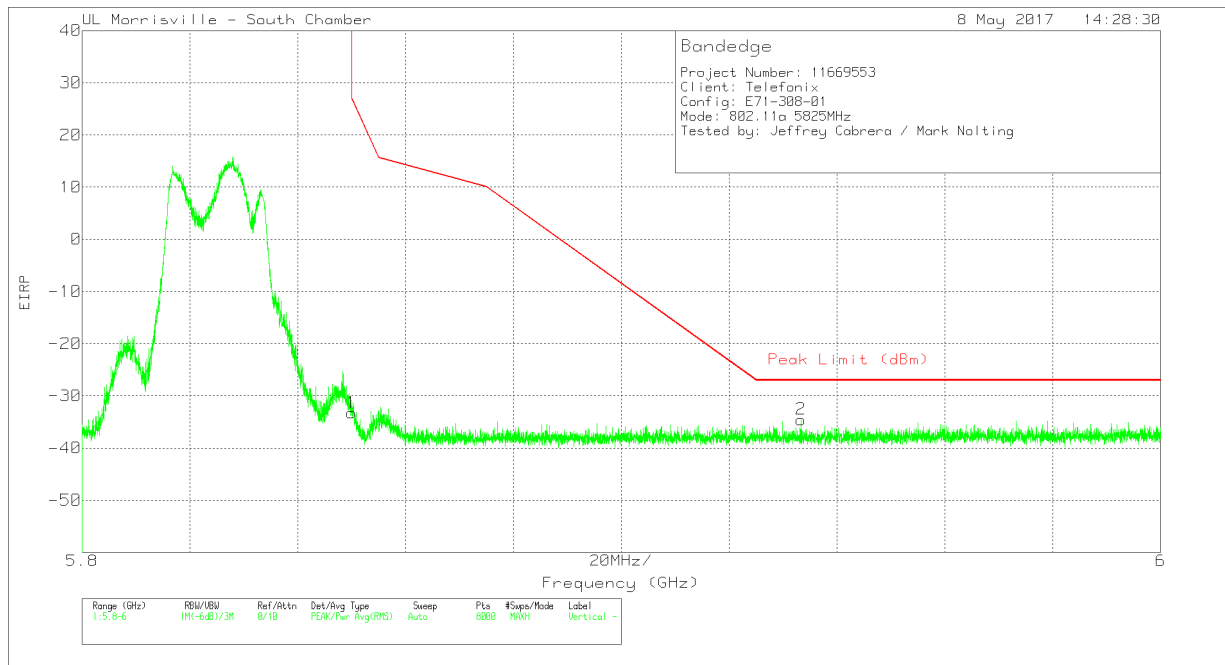
**AUTHORIZED BANDEDGE (HIGH CHANNEL)**



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	Conversion Factor (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.59	Pk	34.8	-23.2	11.8	10.1	0	-33.09	26.99	-60.08	4	333	H
2	5.953	-68.39	Pk	34.9	-23	11.8	10.1	0	-34.59	-27	-7.59	4	333	H

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

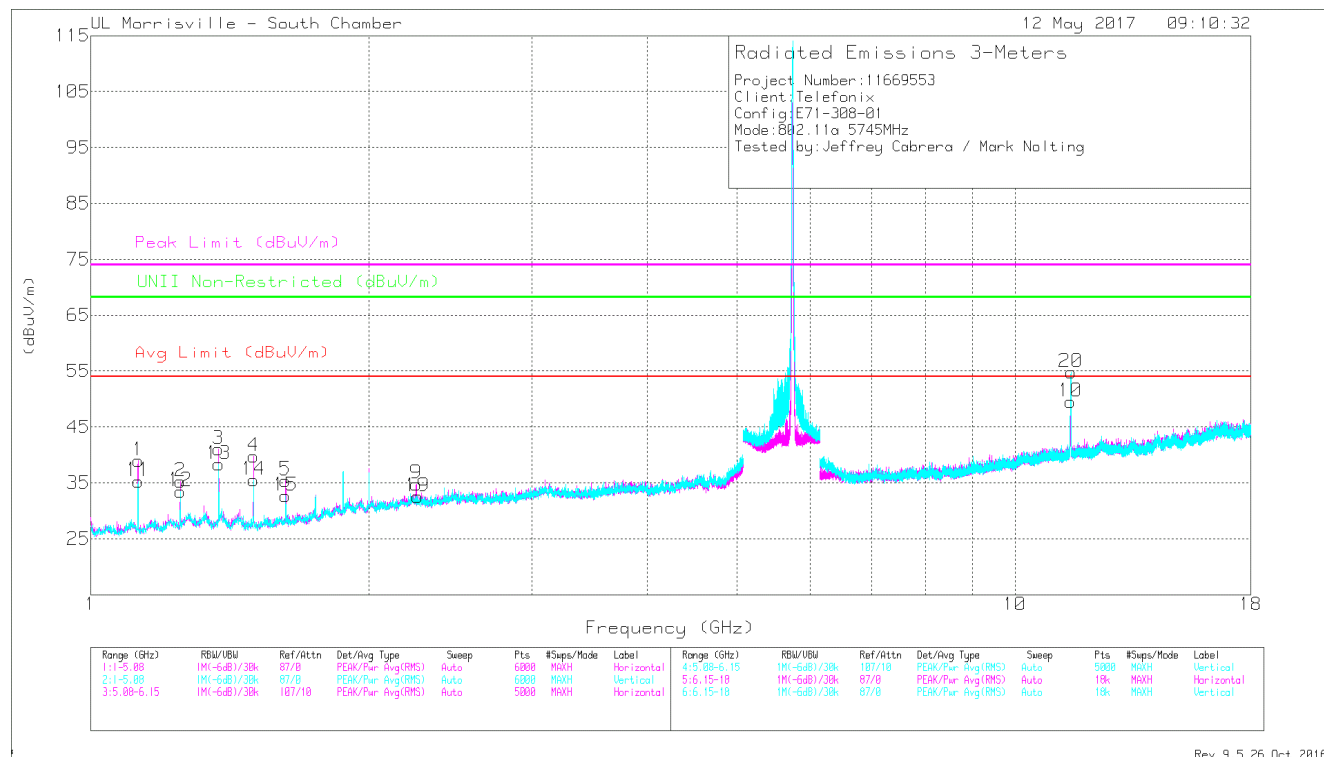
Pk - Peak detector



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	Conversion Factor (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.76	Pk	34.8	-23.2	11.8	10.1	0	-33.26	26.99	-60.25	292	283	V
2	5.933	-68.32	Pk	34.9	-23	11.8	10.1	0	-34.52	-27	-7.52	292	283	V

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

# HARMONICS AND SPURIOUS EMISSIONS



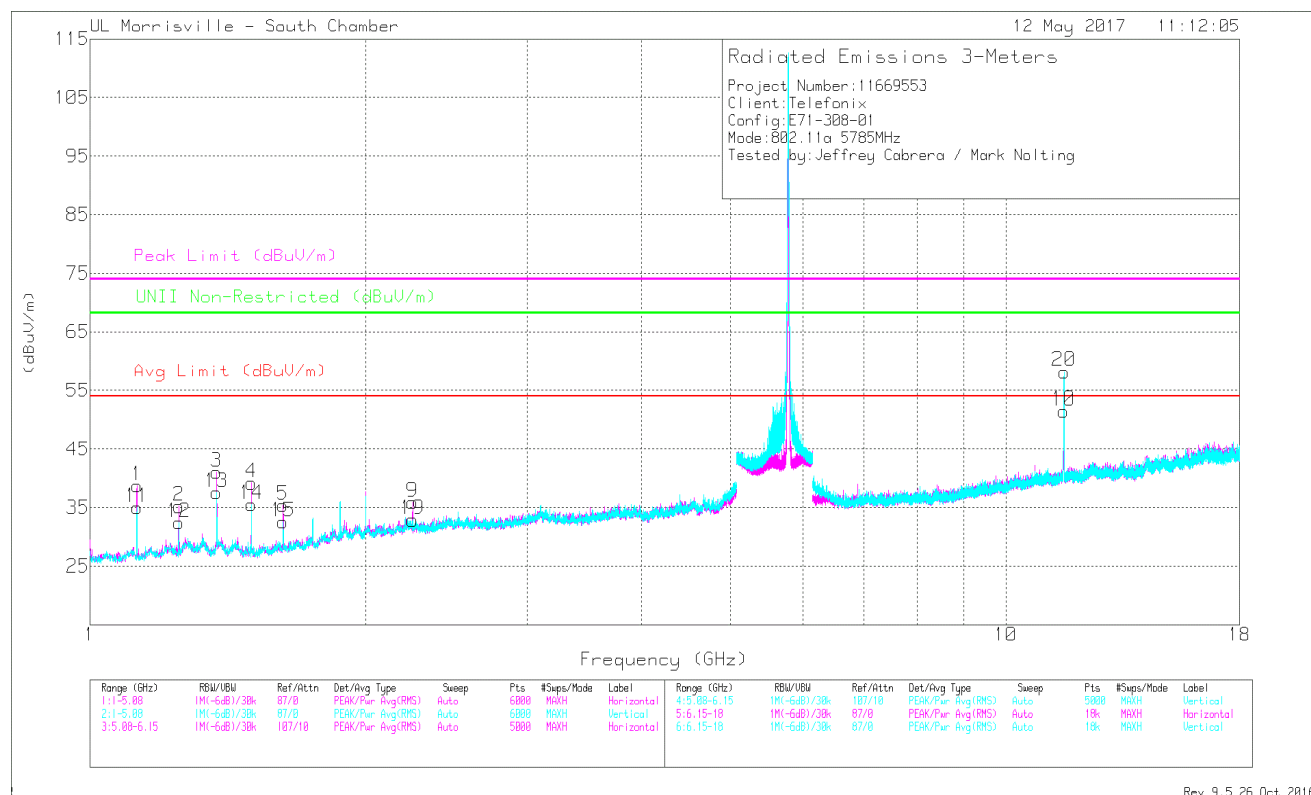
Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.125	49.96	PK-U	27.6	-35.3	0	42.26	-	-	74	-31.74	-	-	170	102	H
	* 1.125	46.59	ADR	27.6	-35.3	.15	39.04	54	-14.96	-	-	-	-	170	102	H
2	* 1.25	45.8	PK-U	28.6	-35.2	0	39.2	-	-	74	-34.8	-	-	241	191	H
	* 1.25	40.43	ADR	28.6	-35.2	.15	33.98	54	-20.02	-	-	-	-	241	191	H
3	* 1.375	49.5	PK-U	28.9	-34.8	0	43.6	-	-	74	-30.4	-	-	202	190	H
	* 1.375	46.13	ADR	28.9	-34.8	.15	40.38	54	-13.62	-	-	-	-	202	190	H
4	* 1.5	47.8	PK-U	27.9	-35.1	0	40.6	-	-	74	-33.4	-	-	194	193	H
	* 1.5	42.93	ADR	27.9	-35.1	.15	35.88	54	-18.12	-	-	-	-	194	193	H
5	* 1.375	48.12	PK-U	28.9	-34.8	0	42.22	-	-	74	-31.78	-	-	178	214	H
	* 1.375	43.42	ADR	28.9	-34.8	.15	37.67	54	-16.33	-	-	-	-	178	214	H
9	* 2.25	42.95	PK-U	31.9	-34.1	0	40.75	-	-	74	-33.25	-	-	232	216	H
	* 2.25	32.57	ADR	31.9	-34.1	.15	30.52	54	-23.48	-	-	-	-	232	216	H
11	* 1.125	46.54	PK-U	27.6	-35.3	0	38.84	-	-	74	-35.16	-	-	204	321	V
	* 1.125	40.97	ADR	27.6	-35.3	.15	33.42	54	-20.58	-	-	-	-	204	321	V
12	* 1.25	43.89	PK-U	28.6	-35.2	0	37.29	-	-	74	-36.71	-	-	274	316	V
	* 1.25	36.57	ADR	28.6	-35.2	.15	30.12	54	-23.88	-	-	-	-	274	316	V
13	* 1.375	45.25	PK-U	28.9	-34.8	0	39.35	-	-	74	-34.65	-	-	53	294	V
	* 1.375	39.11	ADR	28.9	-34.8	.15	33.36	54	-20.64	-	-	-	-	53	294	V
14	* 1.5	47.22	PK-U	27.9	-35.1	0	40.02	-	-	74	-33.98	-	-	249	279	V
	* 1.5	41.17	ADR	27.9	-35.1	.15	34.12	54	-19.88	-	-	-	-	249	279	V
15	* 1.5	43.72	PK-U	27.9	-35.1	0	36.52	-	-	74	-37.48	-	-	15	255	V
	* 1.625	36.76	ADR	28.4	-34.5	.15	30.81	54	-23.19	-	-	-	-	15	255	V
19	* 2.257	41.1	PK-U	31.9	-34.1	0	38.9	-	-	74	-35.1	-	-	242	135	V
	* 2.258	29.38	ADR	31.9	-34.1	.15	27.33	54	-26.67	-	-	-	-	242	135	V

Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (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
10	* 11.49	44.75	PK-U	38.3	-24.9	0	58.15	-	-	74	-15.85	-	-	176	395	H
	* 11.489	31.71	ADR	38.3	-24.9	.15	45.26	54	-8.74	-	-	-	-	176	395	H
20	* 11.498	48.52	PK-U	38.3	-24.8	0	62.02	-	-	74	-11.98	-	-	90	204	V
	* 11.497	35.41	ADR	38.3	-24.8	.15	49.06	54	-4.94	-	-	-	-	90	204	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



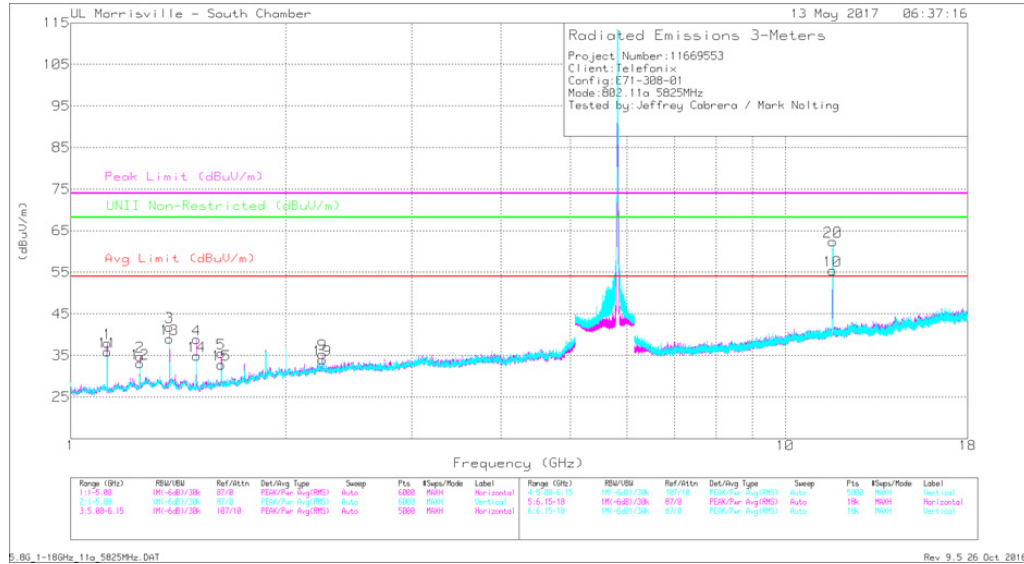
Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.125	49.96	PK-U	27.6	-35.3	0	42.26	-	-	74	-31.74	-	-	170	102	H
	* 1.125	46.59	ADR	27.6	-35.3	.15	39.04	54	-14.96	-	-	-	-	170	102	H
2	* 1.25	45.8	PK-U	28.6	-35.2	0	39.2	-	-	74	-34.8	-	-	241	191	H
	* 1.25	40.43	ADR	28.6	-35.2	.15	33.98	54	-20.02	-	-	-	-	241	191	H
3	* 1.375	49.5	PK-U	28.9	-34.8	0	43.6	-	-	74	-30.4	-	-	202	190	H
	* 1.375	46.13	ADR	28.9	-34.8	.15	40.38	54	-13.62	-	-	-	-	202	190	H
4	* 1.5	47.8	PK-U	27.9	-35.1	0	40.6	-	-	74	-33.4	-	-	194	193	H
	* 1.5	42.93	ADR	27.9	-35.1	.15	35.88	54	-18.12	-	-	-	-	194	193	H
5	* 1.375	48.12	PK-U	28.9	-34.8	0	42.22	-	-	74	-31.78	-	-	178	214	H
	* 1.375	43.42	ADR	28.9	-34.8	.15	37.67	54	-16.33	-	-	-	-	178	214	H
9	* 2.25	42.95	PK-U	31.9	-34.1	0	40.75	-	-	74	-33.25	-	-	232	216	H
	* 2.25	32.57	ADR	31.9	-34.1	.15	30.52	54	-23.48	-	-	-	-	232	216	H
11	* 1.125	46.54	PK-U	27.6	-35.3	0	38.84	-	-	74	-35.16	-	-	204	321	V
	* 1.125	40.97	ADR	27.6	-35.3	.15	33.42	54	-20.58	-	-	-	-	204	321	V
12	* 1.25	43.89	PK-U	28.6	-35.2	0	37.29	-	-	74	-36.71	-	-	274	316	V
	* 1.25	36.57	ADR	28.6	-35.2	.15	30.12	54	-23.88	-	-	-	-	274	316	V
13	* 1.375	45.25	PK-U	28.9	-34.8	0	39.35	-	-	74	-34.65	-	-	53	294	V
	* 1.375	39.11	ADR	28.9	-34.8	.15	33.36	54	-20.64	-	-	-	-	53	294	V
14	* 1.5	47.22	PK-U	27.9	-35.1	0	40.02	-	-	74	-33.98	-	-	249	279	V
	* 1.5	41.17	ADR	27.9	-35.1	.15	34.12	54	-19.88	-	-	-	-	249	279	V
15	* 1.5	43.72	PK-U	27.9	-35.1	0	36.52	-	-	74	-37.48	-	-	15	255	V
	* 1.625	36.76	ADR	28.4	-34.5	.15	30.81	54	-23.19	-	-	-	-	15	255	V
19	* 2.257	41.1	PK-U	31.9	-34.1	0	38.9	-	-	74	-35.1	-	-	242	135	V
	* 2.258	29.38	ADR	31.9	-34.1	.15	27.33	54	-26.67	-	-	-	-	242	135	V

Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	DC Corr (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
10	* 11.49	44.75	PK-U	38.3	-24.9	0	58.15	-	-	74	-15.85	-	-	176	395	H
	* 11.489	31.71	ADR	38.3	-24.9	.15	45.26	54	-8.74	-	-	-	-	176	395	H
20	* 11.498	48.52	PK-U	38.3	-24.8	0	62.02	-	-	74	-11.98	-	-	90	204	V
	* 11.497	35.41	ADR	38.3	-24.8	.15	49.06	54	-4.94	-	-	-	-	90	204	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



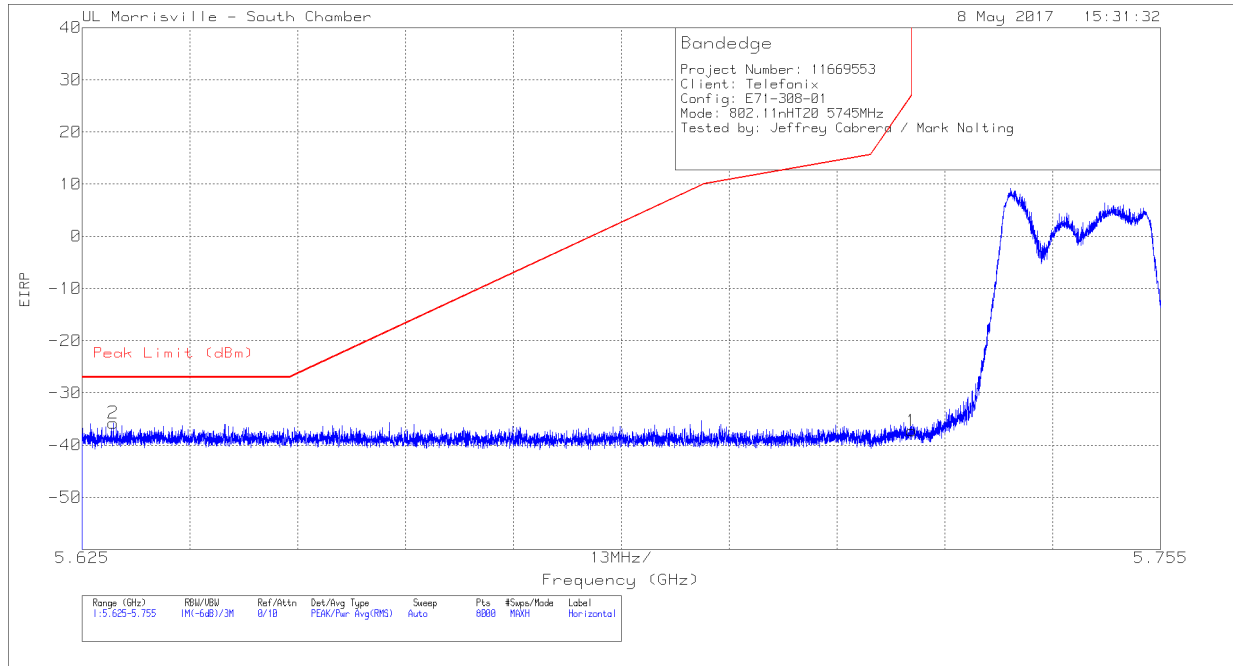
Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.125	49.5	PK-U	27.6	-35.3	0	41.8	-	-	74	-32.2	-	-	172	102	H
	* 1.125	46.17	ADR	27.6	-35.3	.15	38.62	54	-15.38	-	-	-	-	172	102	H
2	* 1.25	45.9	PK-U	28.6	-35.2	0	39.3	-	-	74	-34.7	-	-	235	119	H
	* 1.25	40.4	ADR	28.6	-35.2	.15	33.95	54	-20.05	-	-	-	-	235	119	H
3	* 1.375	50.07	PK-U	28.9	-34.8	0	44.17	-	-	74	-29.83	-	-	257	107	H
	* 1.375	46.8	ADR	28.9	-34.8	.15	41.05	54	-12.95	-	-	-	-	257	107	H
4	* 1.5	49.53	PK-U	27.9	-35.1	0	42.33	-	-	74	-31.67	-	-	233	103	H
	* 1.5	45.41	ADR	27.9	-35.1	.15	38.36	54	-15.64	-	-	-	-	233	103	H
5	* 1.625	46.21	PK-U	28.4	-34.5	0	40.11	-	-	74	-33.89	-	-	83	318	H
	* 1.625	41.02	ADR	28.4	-34.5	.15	35.07	54	-18.93	-	-	-	-	83	318	H
9	* 2.25	42.3	PK-U	31.9	-34.1	0	40.1	-	-	74	-33.9	-	-	226	168	H
	* 2.25	31.95	ADR	31.9	-34.1	.15	29.9	54	-24.1	-	-	-	-	226	168	H
11	* 1.125	48.58	PK-U	27.6	-35.3	0	40.88	-	-	74	-33.12	-	-	127	189	V
	* 1.125	44.17	ADR	27.6	-35.3	.15	36.62	54	-17.38	-	-	-	-	127	189	V
12	* 1.25	44.48	PK-U	28.6	-35.2	0	37.88	-	-	74	-36.12	-	-	88	191	V
	* 1.25	36.89	ADR	28.6	-35.2	.15	30.44	54	-23.56	-	-	-	-	88	191	V
13	* 1.375	48.52	PK-U	28.9	-34.8	0	42.62	-	-	74	-31.38	-	-	224	185	V
	* 1.375	44.83	ADR	28.9	-34.8	.15	39.08	54	-14.92	-	-	-	-	224	185	V
14	* 1.5	47.66	PK-U	27.9	-35.1	0	40.46	-	-	74	-33.54	-	-	37	374	V
	* 1.5	42.68	ADR	27.9	-35.1	.15	35.63	54	-18.37	-	-	-	-	37	374	V
15	* 1.625	45.95	PK-U	28.4	-34.5	0	39.85	-	-	74	-34.15	-	-	319	143	V
	* 1.625	38.68	ADR	28.4	-34.5	.15	32.73	54	-21.27	-	-	-	-	319	143	V
19	* 2.25	42.46	PK-U	31.9	-34.1	0	40.26	-	-	74	-33.74	-	-	260	134	V
	* 2.25	33.8	ADR	31.9	-34.1	.15	31.75	54	-22.25	-	-	-	-	260	134	V
10	* 11.647	40.15	PK-U	38.4	-25.1	0	53.45	-	-	74	-20.55	-	-	98	257	H
	* 11.647	28.68	ADR	38.4	-25.1	.15	42.13	54	-11.87	-	-	-	-	98	257	H
20	* 11.657	49.19	PK-U	38.4	-25	0	62.59	-	-	74	-11.41	-	-	252	287	V
	* 11.657	36.52	ADR	38.4	-25	.15	50.07	54	-3.93	-	-	-	-	252	287	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



## 11.2.6. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND

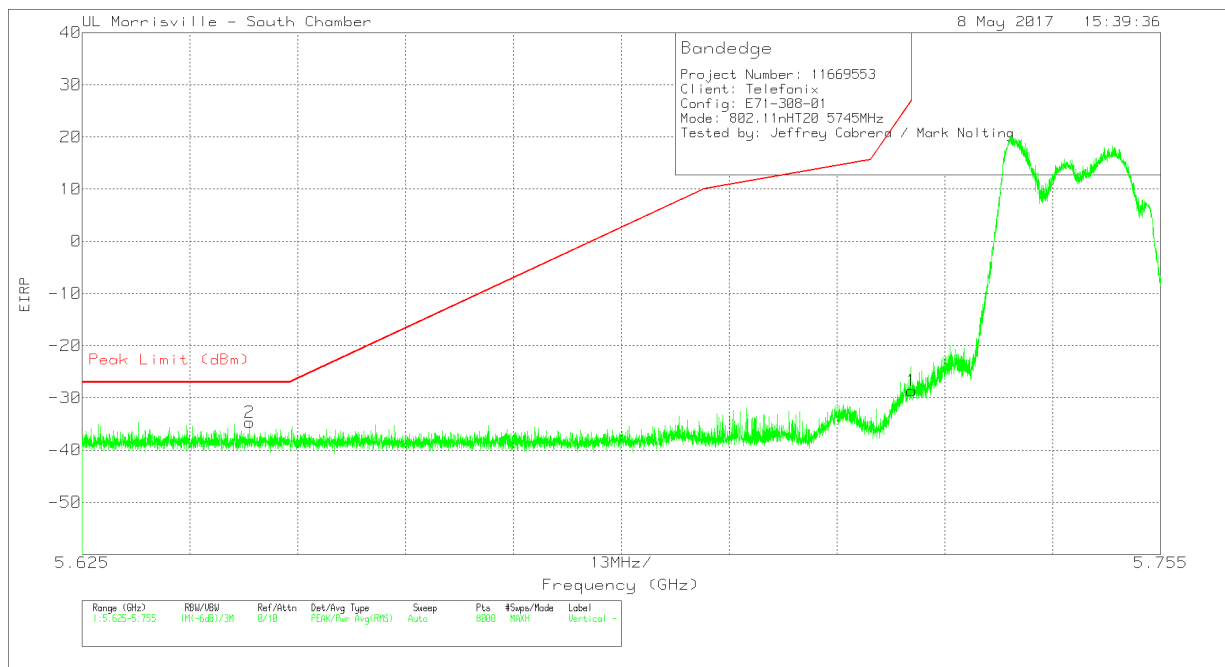
### AUTHORIZED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Conversion Factor (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.629	-68.65	Pk	34.6	-23.6	11.8	10.1	0	-35.75	-27	-8.75	114	387	H
1	5.725	-70.28	Pk	34.6	-23.5	11.8	10.1	0	-37.28	27	-64.28	114	387	H

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

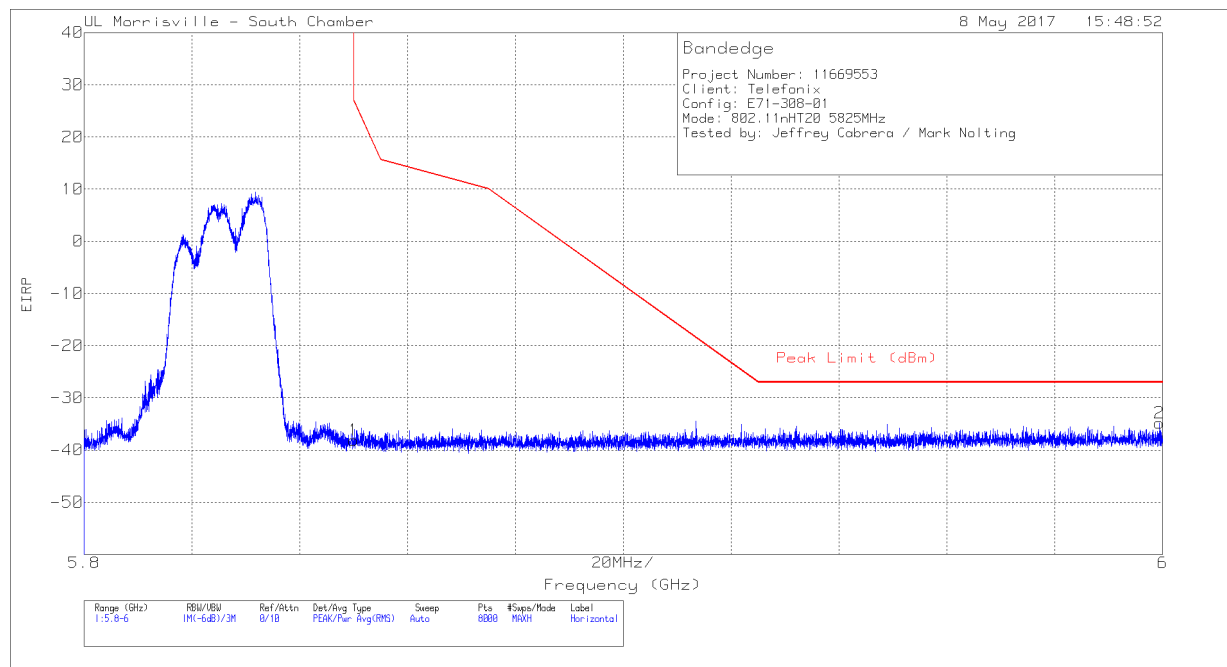
Pk - Peak detector



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Conversion Factor (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.645	-67.69	Pk	34.6	-23.5	11.8	10.1	0	-34.69	-27	-7.69	323	394	V
1	5.725	-61.6	Pk	34.6	-23.5	11.8	10.1	0	-28.6	27	-55.6	323	394	V

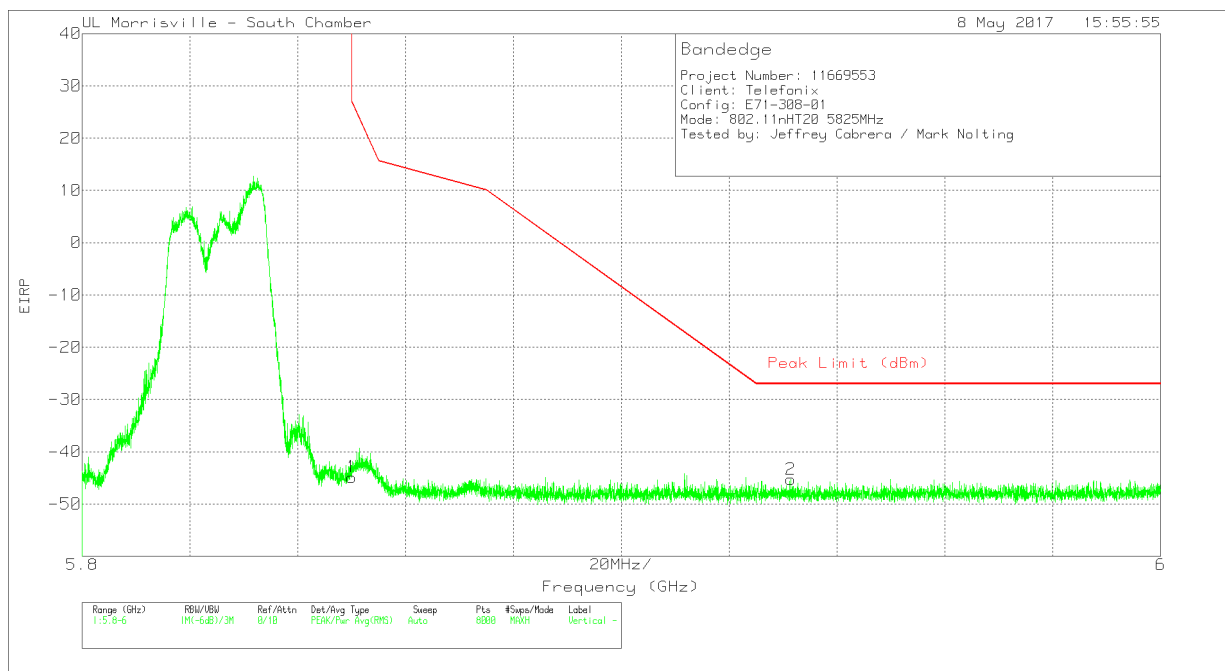
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
Pk - Peak detector

**AUTHORIZED BANDEDGE (HIGH CHANNEL)**



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl/Filtr /Pad (dB)	Conversion Factor (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-71.62	Pk	34.8	-23.2	11.8	10.1	0	-38.12	26.99	-65.11	128	389	H
2	5.999	-69.06	Pk	35.1	-22.8	11.8	10.1	0	-34.86	-27	-7.86	128	389	H

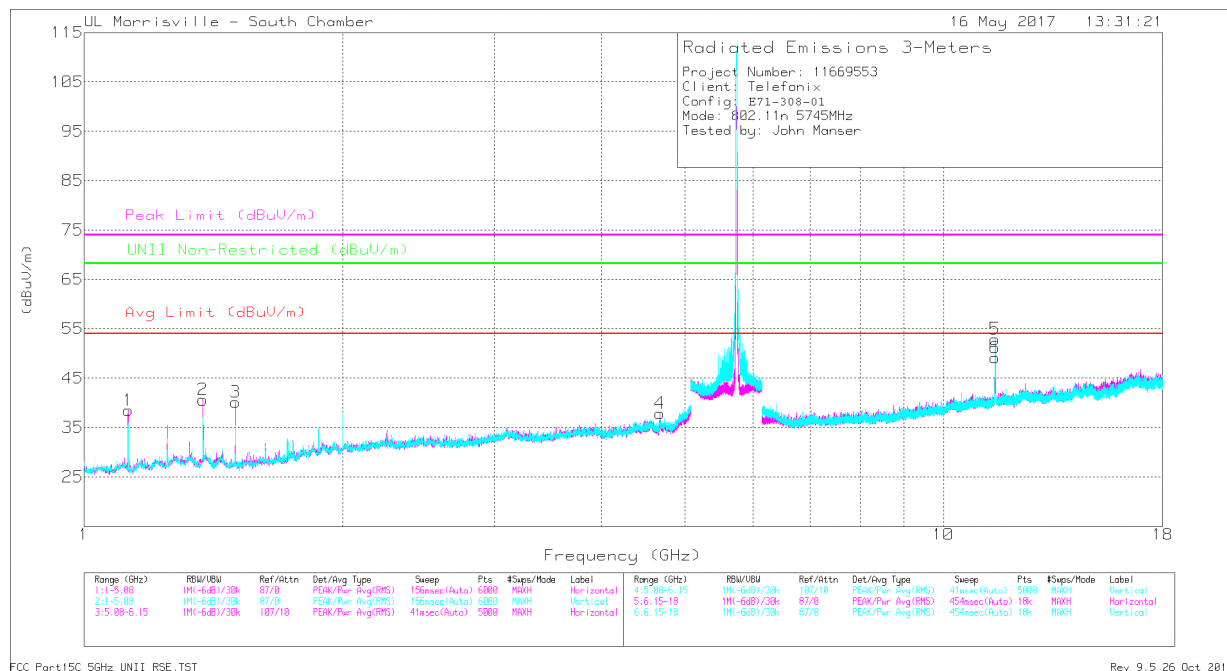
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band  
Pk - Peak detector



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-68.25	Pk	34.8	-23.2	11.8	-44.85	26.99	-71.84	9	281	V
2	5.931	-68.95	Pk	34.9	-23	11.8	-45.25	-27	-18.25	9	281	V

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

# HARMONICS AND SPURIOUS EMISSIONS

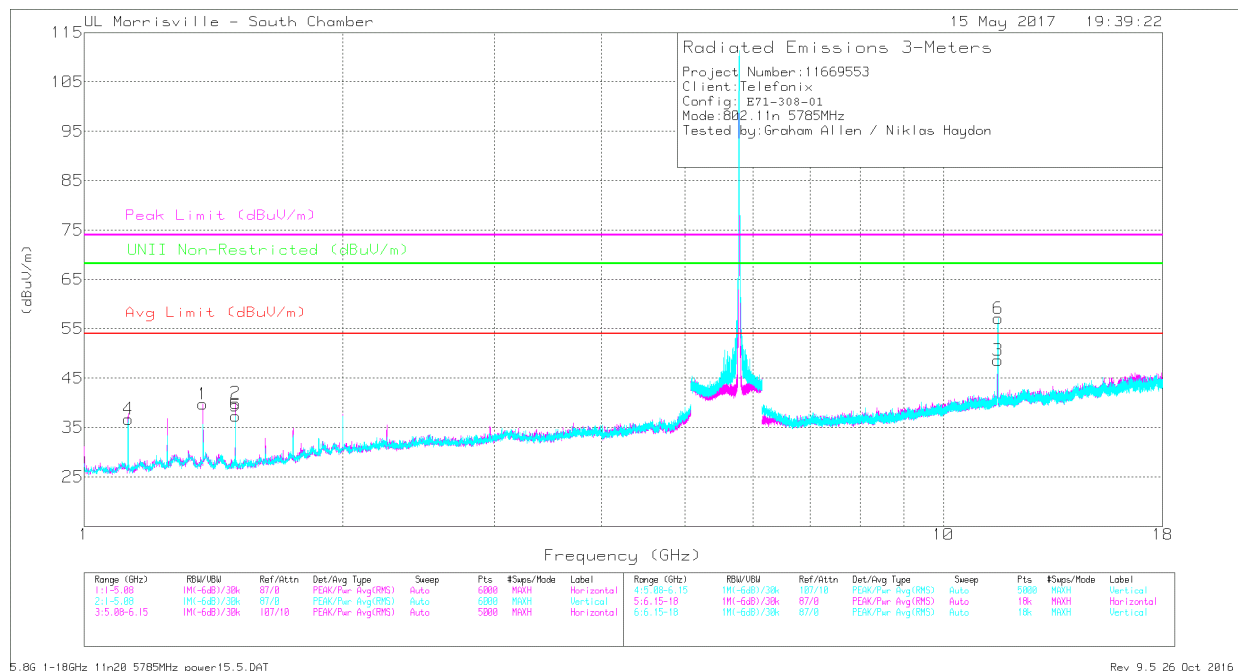


Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.125	48.98	PK-U	27.6	-35.3	0	41.28	-	-	74	-32.72	-	-	173	103	H
	* 1.125	45.37	ADR	27.6	-35.3	0	37.67	54	-16.33	-	-	-	-	173	103	H
2	* 1.375	50.7	PK-U	28.9	-34.8	0	44.8	-	-	74	-29.2	-	-	79	179	H
	* 1.375	47.69	ADR	28.9	-34.8	0	41.79	54	-12.21	-	-	-	-	79	179	H
3	* 1.5	50.32	PK-U	27.9	-35.1	0	43.12	-	-	74	-30.88	-	-	234	103	H
	* 1.5	47.04	ADR	27.9	-35.1	0	39.84	54	-14.16	-	-	-	-	234	103	H
4	* 4.677	39.18	PK-U	34	-31	0	42.18	-	-	74	-31.82	-	-	27	359	H
	* 4.677	27.93	ADR	34	-31	0	30.93	54	-23.07	-	-	-	-	27	359	H
6	* 11.489	43.14	PK-U	38.3	-24.9	0	56.54	-	-	74	-17.46	-	-	263	193	H
	* 11.489	30.58	ADR	38.3	-24.9	0	43.98	54	-10.02	-	-	-	-	263	193	H
5	* 11.487	45.54	PK-U	38.3	-24.9	0	58.94	-	-	74	-15.06	-	-	317	188	V
	* 11.487	32.67	ADR	38.3	-24.9	0	46.07	54	-7.93	-	-	-	-	317	188	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

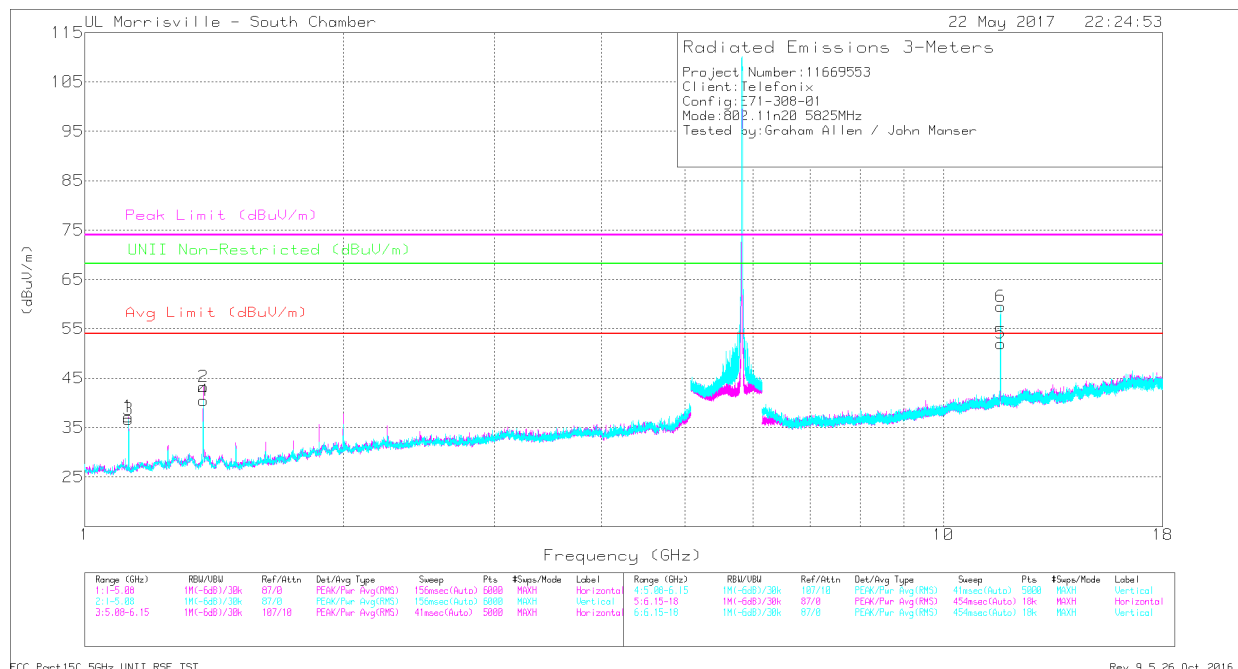


Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.375	49.04	PK-U	28.9	-34.8	0	43.14	-	-	74	-30.86	-	-	108	101	H
	* 1.375	45.42	ADR	28.9	-34.8	0	39.52	54	-14.48	-	-	-	-	108	101	H
2	* 1.5	50.08	PK-U	27.9	-35.1	0	42.88	-	-	74	-31.12	-	-	246	107	H
	* 1.5	46.77	ADR	27.9	-35.1	0	39.57	54	-14.43	-	-	-	-	246	107	H
3	* 11.577	44.58	PK-U	38.3	-25.1	0	57.78	-	-	74	-16.22	-	-	194	203	H
	* 11.577	31.94	ADR	38.3	-25.1	0	45.14	54	-8.86	-	-	-	-	194	203	H
4	* 1.125	48.77	PK-U	27.6	-35.3	0	41.07	-	-	74	-32.93	-	-	144	183	V
	* 1.125	44.44	ADR	27.6	-35.3	0	36.74	54	-17.26	-	-	-	-	144	183	V
5	* 1.5	48.9	PK-U	27.9	-35.1	0	41.7	-	-	74	-32.3	-	-	55	376	V
	* 1.5	45.32	ADR	27.9	-35.1	0	38.12	54	-15.88	-	-	-	-	55	376	V
6	* 11.577	52.76	PK-U	38.3	-25.1	0	65.96	-	-	74	-8.04	-	-	318	237	V
	* 11.577	40.4	ADR	38.3	-25.1	0	53.6	54	-4	-	-	-	-	318	237	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



Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl /Ftr/Pad (dB)	DC Corr (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	* 1.125	48.51	PK-U	27.6	-35.3	0	40.81	-	-	74	-33.19	-	-	80	105	H
	* 1.125	43.95	ADR	27.6	-35.3	0	36.25	54	-17.75	-	-	-	-	80	105	H
2	* 1.375	52.3	PK-U	28.9	-34.8	0	46.4	-	-	74	-27.6	-	-	80	197	H
	* 1.375	49.66	ADR	28.9	-34.8	0	43.76	54	-10.24	-	-	-	-	80	197	H
5	* 11.658	46.58	PK-U	38.4	-25	0	59.98	-	-	74	-14.02	-	-	102	276	H
	* 11.658	33.61	ADR	38.4	-25	0	47.01	54	-6.99	-	-	-	-	102	276	H
3	* 1.125	49.4	PK-U	27.6	-35.3	0	41.7	-	-	74	-32.3	-	-	53	150	V
	* 1.125	45.08	ADR	27.6	-35.3	0	37.38	54	-16.62	-	-	-	-	53	150	V
4	* 1.375	50.71	PK-U	28.9	-34.8	0	44.81	-	-	74	-29.19	-	-	75	236	V
	* 1.375	47.39	ADR	28.9	-34.8	0	41.49	54	-12.51	-	-	-	-	75	236	V
6	* 11.656	53.48	PK-U	38.4	-25	0	66.88	-	-	74	-7.12	-	-	316	186	V
	* 11.656	40.29	ADR	38.4	-25	0	53.69	54	-.31	-	-	-	-	316	186	V

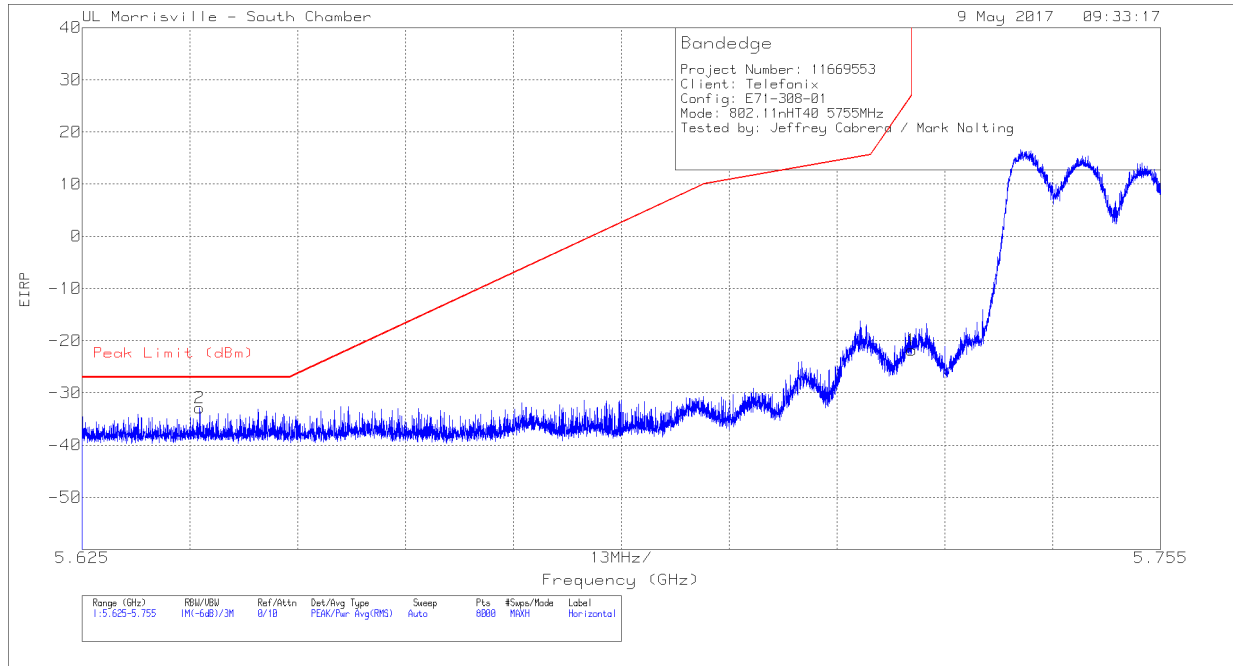
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

## 11.2.7. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND

### AUTHORIZED BANDEDGE (LOW CHANNEL)

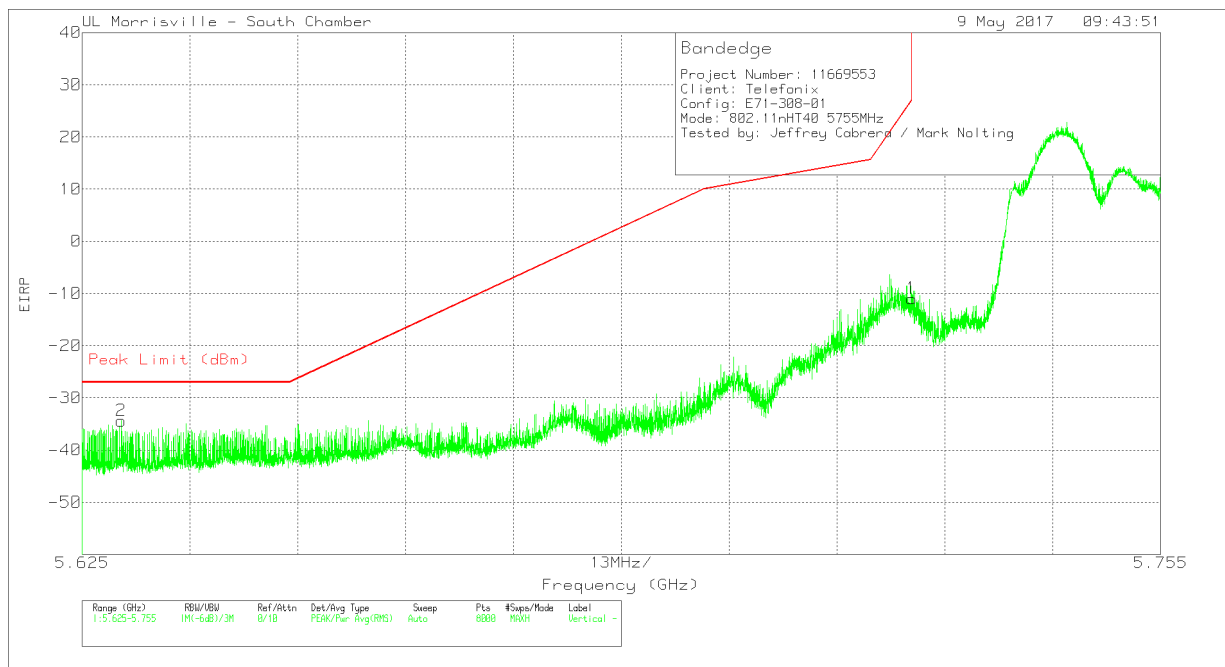


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	Conversion Factor (dB)	Pad (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.639	-65.91	Pk	34.6	-23.5	11.8	10.1	0	-32.91	-27	-5.91	109	286	H
1	5.725	-54.83	Pk	34.6	-23.5	11.8	10.1	0	-21.83	27	-48.83	109	286	H

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

Pk - Peak detector

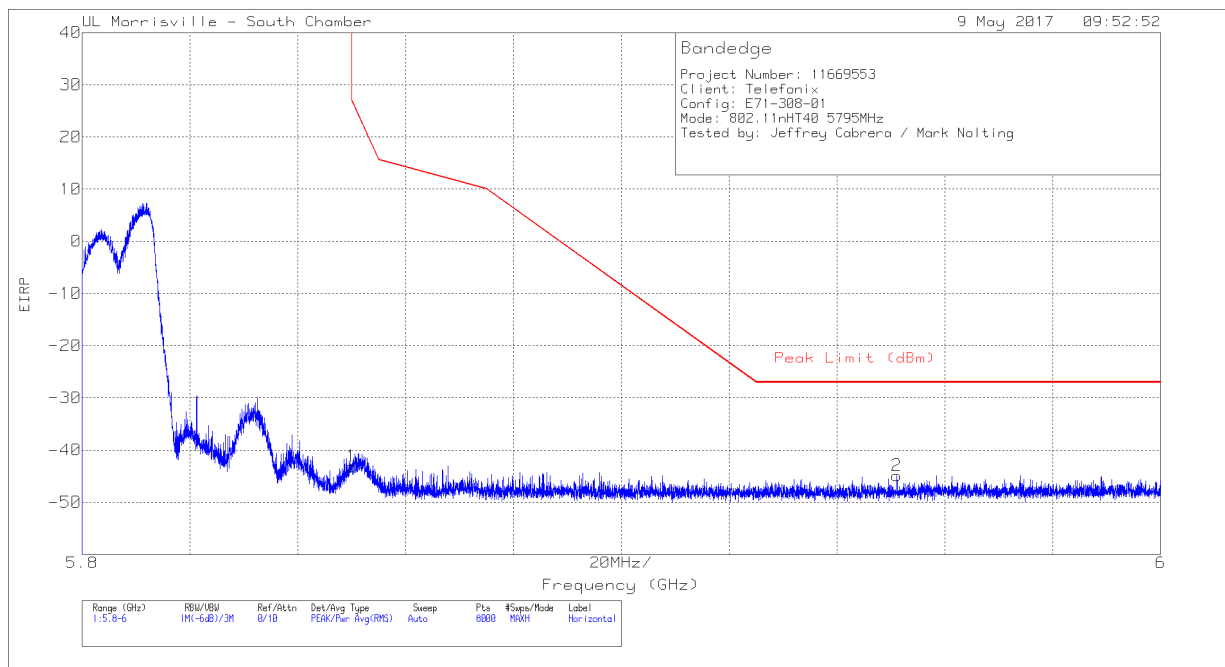




Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.63	-57.18	Pk	34.6	-23.6	11.8	0	-34.38	-27	-7.38	66	277	V
1	5.725	-33.85	Pk	34.6	-23.5	11.8	0	-10.95	27	-37.95	66	277	V

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

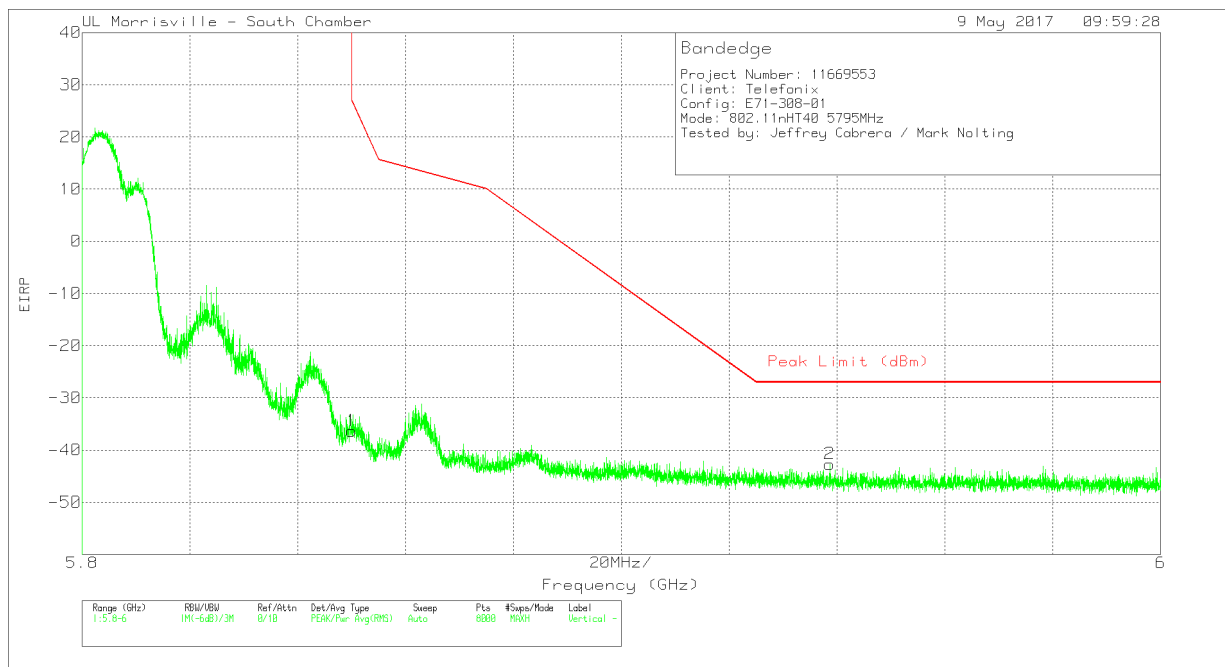
**AUTHORIZED BANDEDGE (HIGH CHANNEL)**



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.56	Pk	34.8	-23.2	11.8	0	-43.16	26.99	-70.15	117	207	H
2	5.951	-68.58	Pk	34.9	-23	11.8	0	-44.88	-27	-17.88	117	207	H

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

Pk - Peak detector

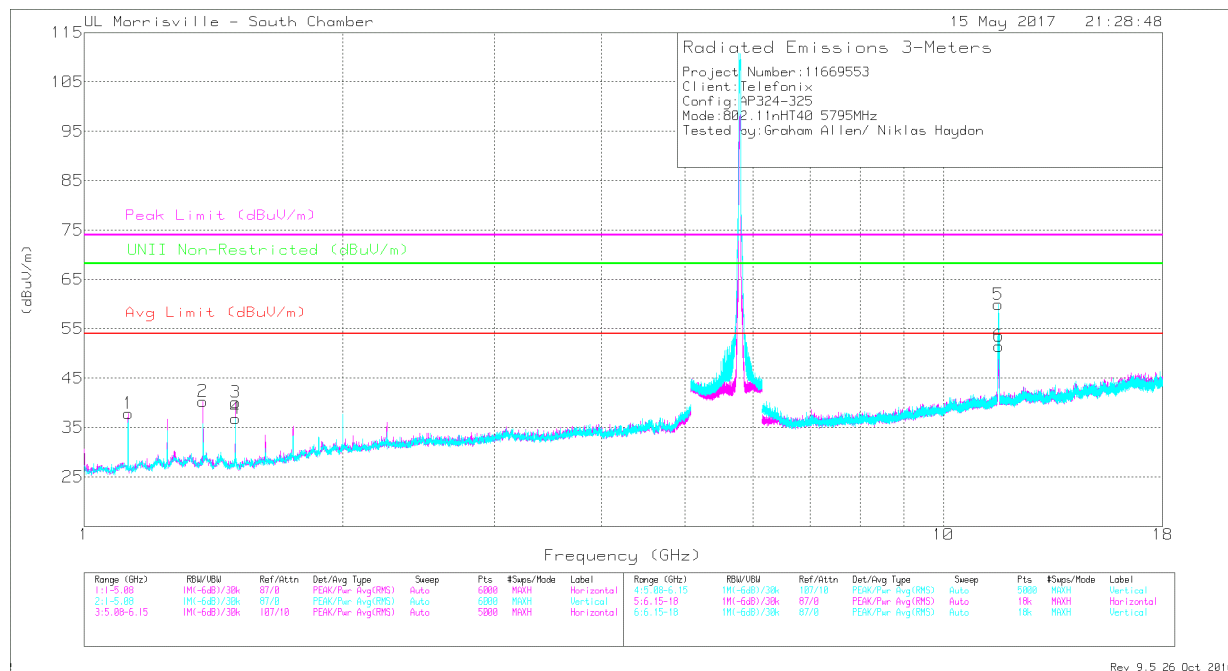


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-59.73	Pk	34.8	-23.2	11.8	0	-36.33	26.99	-63.32	0	277	V
2	5.939	-66.36	Pk	34.9	-23	11.8	0	-42.66	-27	-15.66	0	277	V

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

Pk - Peak detector

# HARMONICS AND SPURIOUS EMISSIONS – WORST CASE



Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (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	* 1.125	49.23	PK-U	27.6	-35.3	0	41.53	-	-	74	-32.47	-	-	192	102	H
	* 1.125	45.33	ADR	27.6	-35.3	.11	37.74	54	-16.26	-	-	-	-	192	102	H
2	* 1.375	49.13	PK-U	28.9	-34.8	0	43.23	-	-	74	-30.77	-	-	217	114	H
	* 1.375	45.12	ADR	28.9	-34.8	.11	39.33	54	-14.67	-	-	-	-	217	114	H
3	* 1.5	50.51	PK-U	27.9	-35.1	0	43.31	-	-	74	-30.69	-	-	247	105	H
	* 1.5	46.74	ADR	27.9	-35.1	.11	39.65	54	-14.35	-	-	-	-	247	105	H
4	* 1.5	48.43	PK-U	27.9	-35.1	0	41.23	-	-	74	-32.77	-	-	18	197	V
	* 1.5	43.48	ADR	27.9	-35.1	.11	36.39	54	-17.61	-	-	-	-	18	197	V
6	* 11.59	41.81	PK-U	38.3	-25.2	0	54.91	-	-	74	-19.09	-	-	191	112	H
	* 11.589	30.36	ADR	38.3	-25.2	.11	43.57	54	-10.43	-	-	-	-	191	112	H
5	* 11.597	51.38	PK-U	38.3	-25.2	0	64.48	-	-	74	-9.52	-	-	329	227	V
	* 11.597	40.63	ADR	38.3	-25.2	.11	53.84	54	-16	-	-	-	-	329	227	V

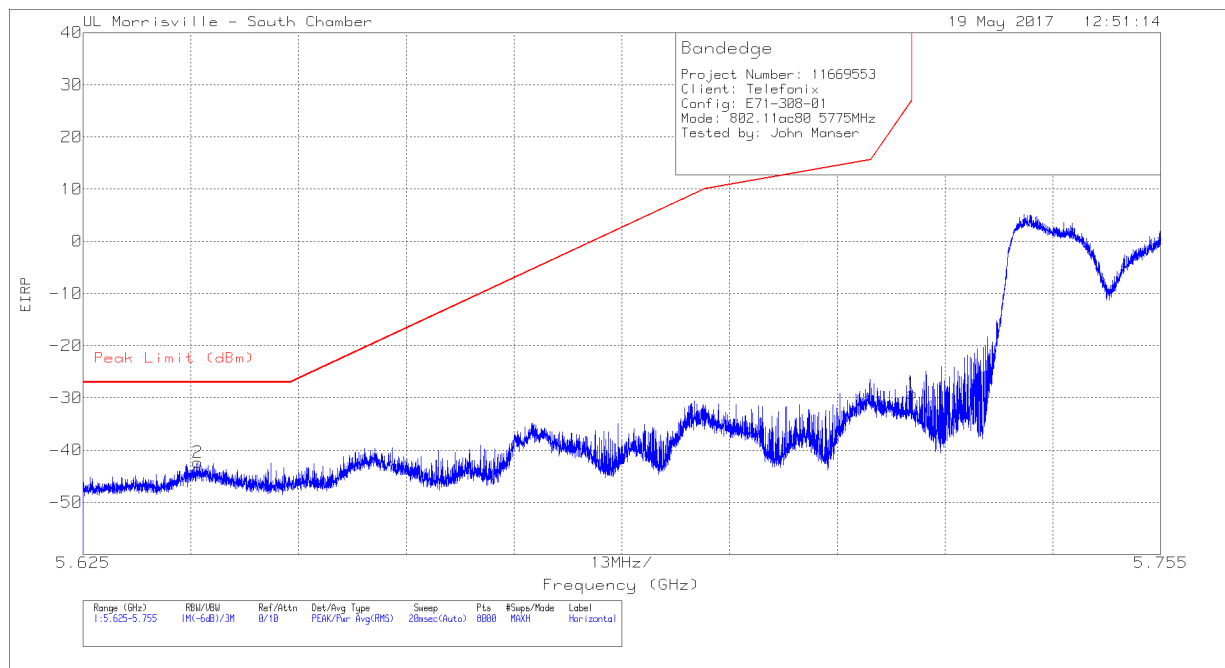
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

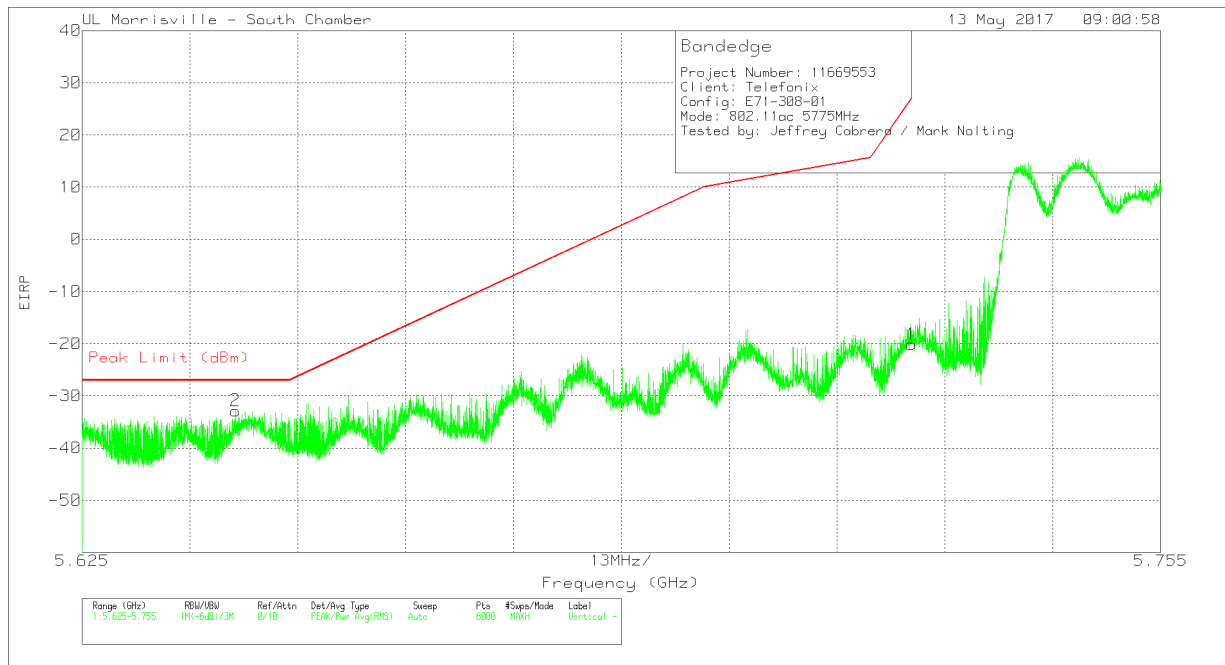
## 11.2.8. TX ABOVE 1 GHz 802.11ac VHT80 MODE IN THE 5.8 GHz BAND

### AUTHORIZED BANDEDGE (LOW CHANNEL)



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.639	-65.29	Pk	34.6	-23.5	11.8	0	-42.39	-27	-15.39	296	357	H
1	5.725	-52.01	Pk	34.6	-23.5	11.8	0	-29.11	27	-56.11	296	357	H

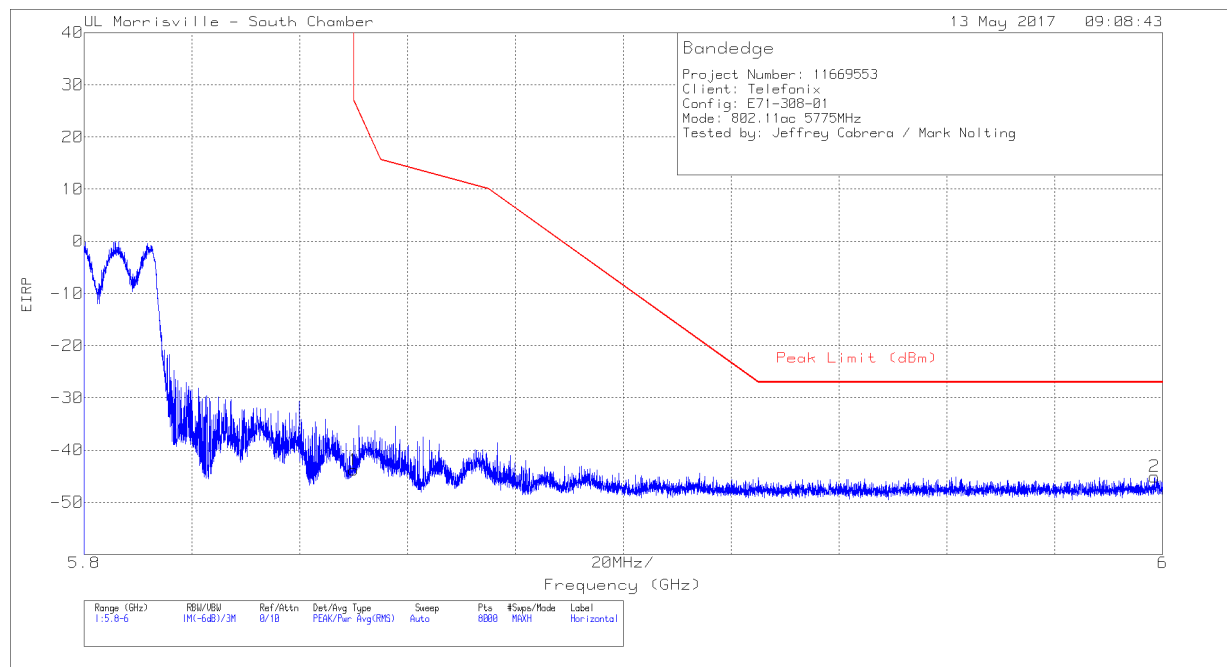
Pk - Peak detector



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.643	-55.73	Pk	34.6	-23.5	11.8	0	-32.83	-27	-5.83	340	286	V
1	5.725	-43.04	Pk	34.6	-23.5	11.8	0	-20.14	27	-47.14	340	286	V

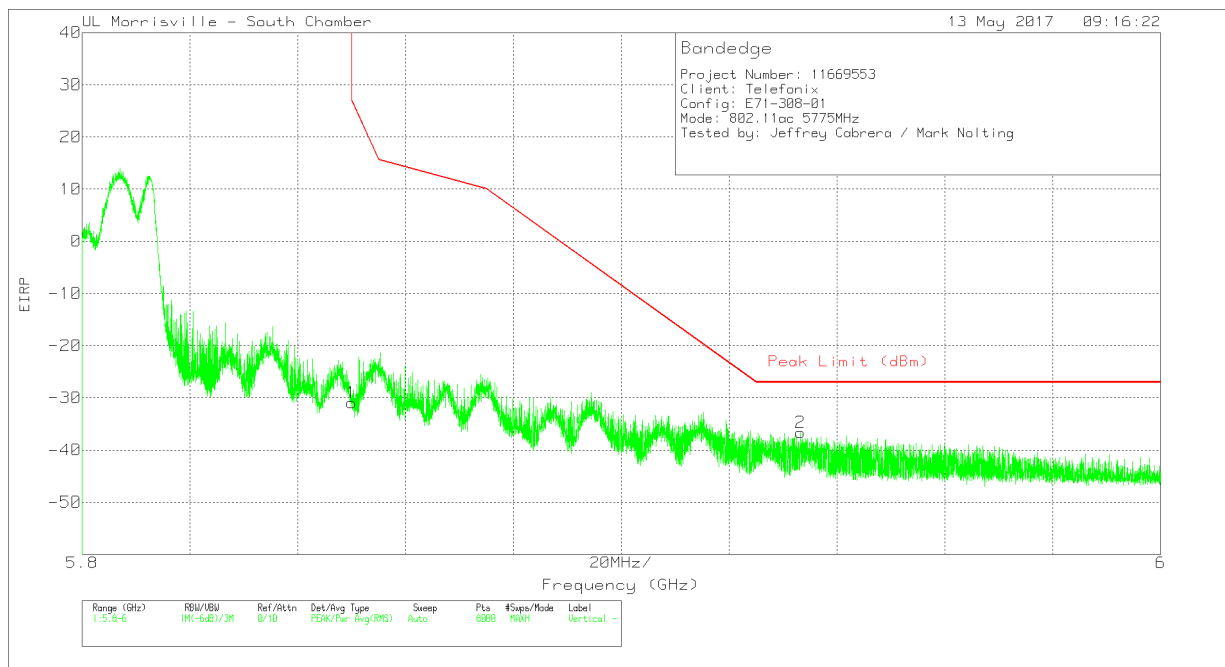
Pk - Peak detector

**AUTHORIZED BANDEDGE (HIGH CHANNEL)**



Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-67.24	Pk	34.8	-23.2	11.8	0	-43.84	26.99	-70.83	106	232	H
2	5.998	-69.19	Pk	35.1	-22.8	11.8	0	-45.09	-27	-18.09	106	232	H

Pk - Peak detector

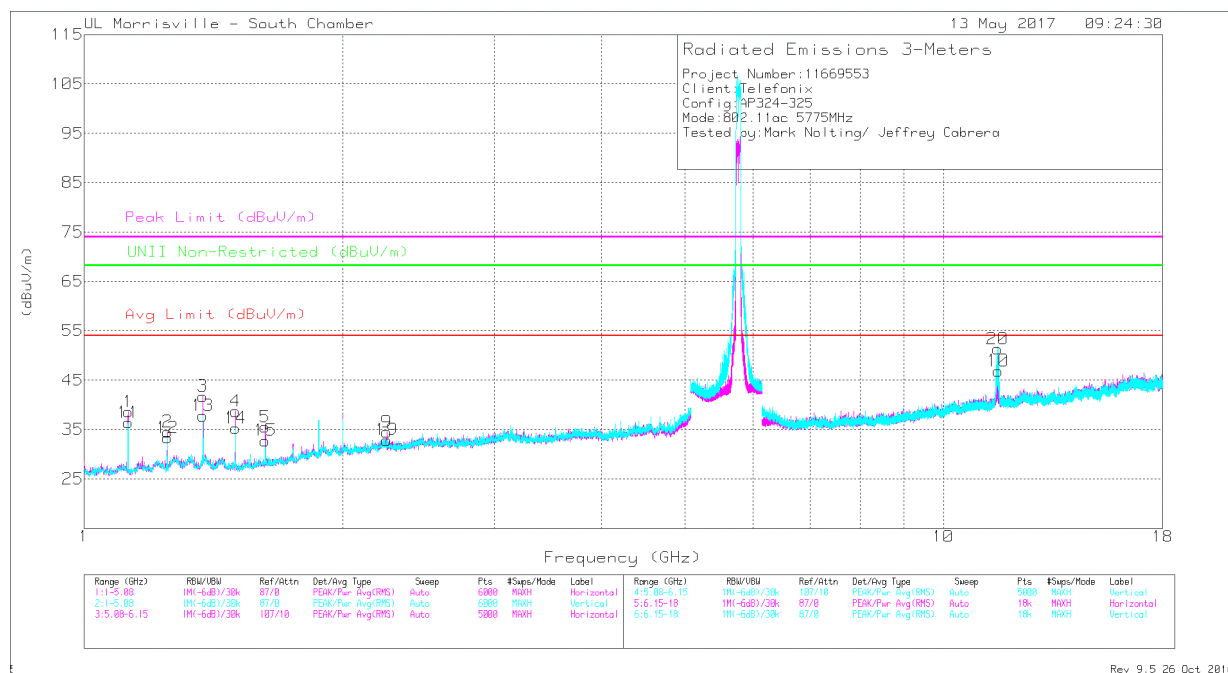


Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AT0069 AF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	Conversion Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-54.35	Pk	34.8	-23.2	11.8	0	-30.95	26.99	-57.94	82	295	V
2	5.933	-60.37	Pk	34.9	-23	11.8	0	-36.67	-27	-9.67	82	295	V

Pk - Peak detector



# HARMONICS AND SPURIOUS EMISSIONS – WORST CASE



Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AT0069 AF (dB/m)	Amp/Cbl /Filtr/Pad (dB)	DC Corr (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	* 1.125	49.35	PK-U	27.6	-35.3	0	41.65	-	-	74	-32.35	-	-	172	105	H
	* 1.125	45.54	ADR	27.6	-35.3	.26	38.1	54	-15.9	-	-	-	-	172	105	H
3	* 1.375	50.28	PK-U	28.9	-34.8	0	44.38	-	-	74	-29.62	-	-	259	113	H
	* 1.375	47	ADR	28.9	-34.8	.26	41.36	54	-12.64	-	-	-	-	259	113	H
4	* 1.5	48.43	PK-U	27.9	-35.1	0	41.23	-	-	74	-32.77	-	-	219	104	H
	* 1.5	44.36	ADR	27.9	-35.1	.26	37.42	54	-16.58	-	-	-	-	219	104	H
11	* 1.125	48.13	PK-U	27.6	-35.3	0	40.43	-	-	74	-33.57	-	-	109	147	V
	* 1.125	43.71	ADR	27.6	-35.3	.26	36.27	54	-17.73	-	-	-	-	109	147	V
13	* 1.375	48.54	PK-U	28.9	-34.8	0	42.64	-	-	74	-31.36	-	-	240	164	V
	* 1.375	44.35	ADR	28.9	-34.8	.26	38.71	54	-15.29	-	-	-	-	240	164	V
10	* 11.577	39.92	PK-U	38.3	-25.1	0	53.12	-	-	74	-20.88	-	-	100	265	H
	* 11.577	26.82	ADR	38.3	-25.1	.26	40.28	54	-13.72	-	-	-	-	100	265	H
20	* 11.571	41.88	PK-U	38.3	-25.1	0	55.08	-	-	74	-18.92	-	-	204	290	V
	* 11.57	29.47	ADR	38.3	-25.1	.26	42.93	54	-11.07	-	-	-	-	204	290	V

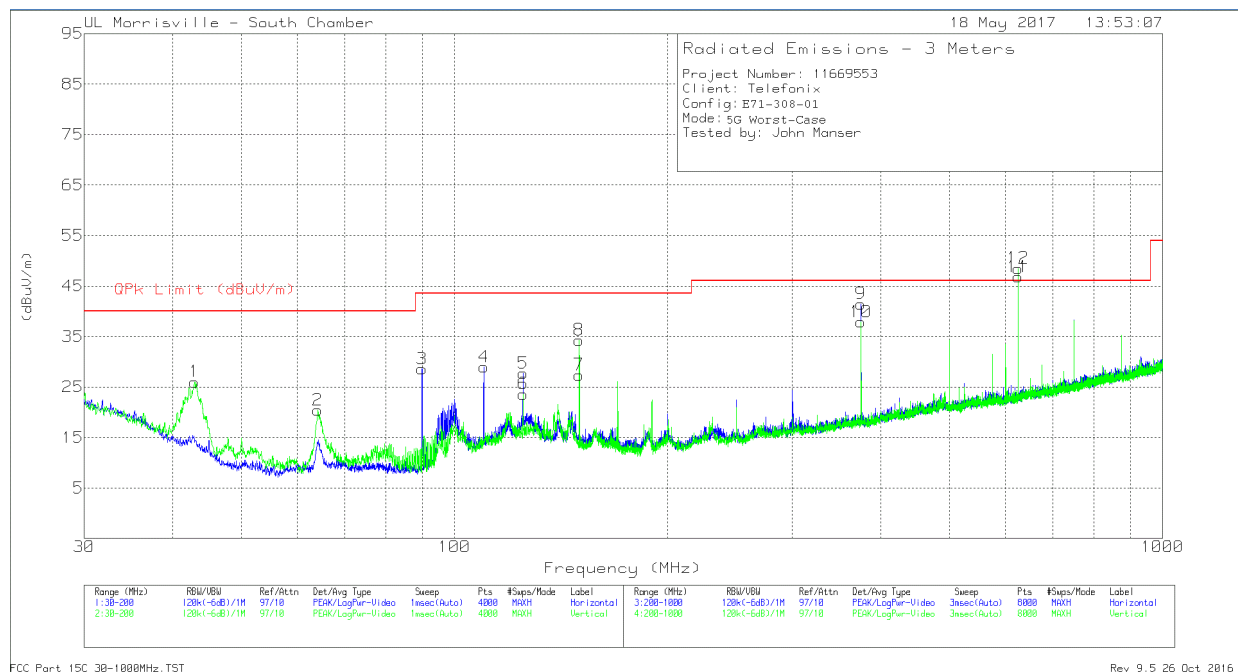
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

### 11.3. WORST-CASE BELOW 1 GHz

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



Marker	Freq (MHz)	Meter Reading (dBuV)	Det	AT0074 AF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 110.0057	42.97	Pk	16.9	-30.9	28.97	43.52	-14.55	0-360	298	H
	* 110.0057	28.94	Qp	16.9	-30.9	14.94	43.52	-28.58	121	327	H
5	* 125.0121	40.32	Pk	18.2	-30.8	27.72	43.52	-15.8	0-360	198	H
	* 125.0078	36.64	Qp	18.2	-30.8	24.04	43.52	-19.48	228	228	H
7	* 150.0086	41.1	Pk	16.9	-30.6	27.4	43.52	-16.12	0-360	398	H
	* 149.975	32.06	Qp	16.9	-30.6	18.36	43.52	-25.16	181	285	H
6	* 125.0121	36.24	Pk	18.2	-30.8	23.64	43.52	-19.88	0-360	101	V
	* 125.0083	34.22	Qp	18.2	-30.8	21.62	43.52	-21.90	109	111	V
8	* 150.0086	47.99	Pk	16.9	-30.6	34.29	43.52	-9.23	0-360	101	V
	* 150.0043	37.37	Qp	16.9	-30.6	23.67	43.52	-19.85	170	188	V
1	42.9659	41.42	Pk	16.2	-31.6	26.02	-	-	0-360	101	V
2	64.1363	39.76	Pk	12.1	-31.4	20.46	-	-	0-360	101	V
3	89.983	48.01	Pk	11.7	-31.1	28.61	-	-	0-360	298	H
9	375.0228	50.98	Pk	19.8	-29.3	41.48	-	-	0-360	102	H
10	375.0228	47.4	Pk	19.8	-29.3	37.9	-	-	0-360	102	V
11	625.0553	51.85	Pk	23.7	-28.7	46.85	-	-	0-360	102	H
12	625.0553	53.51	Pk	23.7	-28.7	48.51	-	-	0-360	198	V

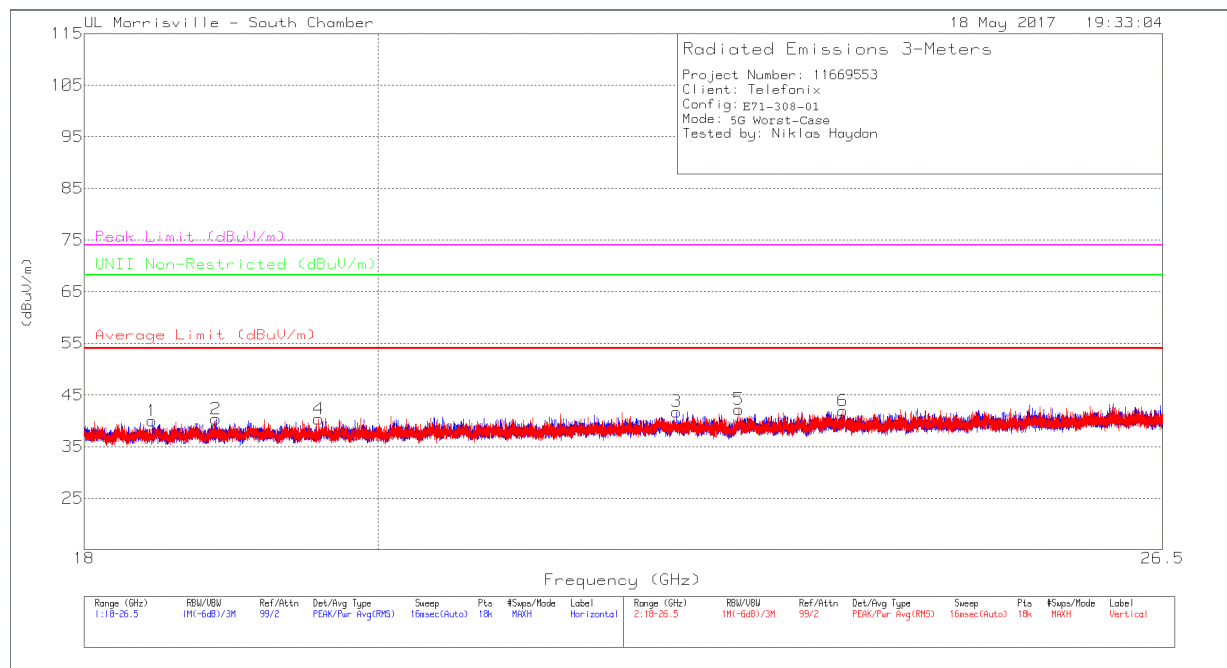
\* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

Qp - Quasi-Peak detector

## 11.4. WORST-CASE ABOVE 18 GHz

### SPURIOUS EMISSIONS 18 to 40GHz (WORST-CASE CONFIGURATION)

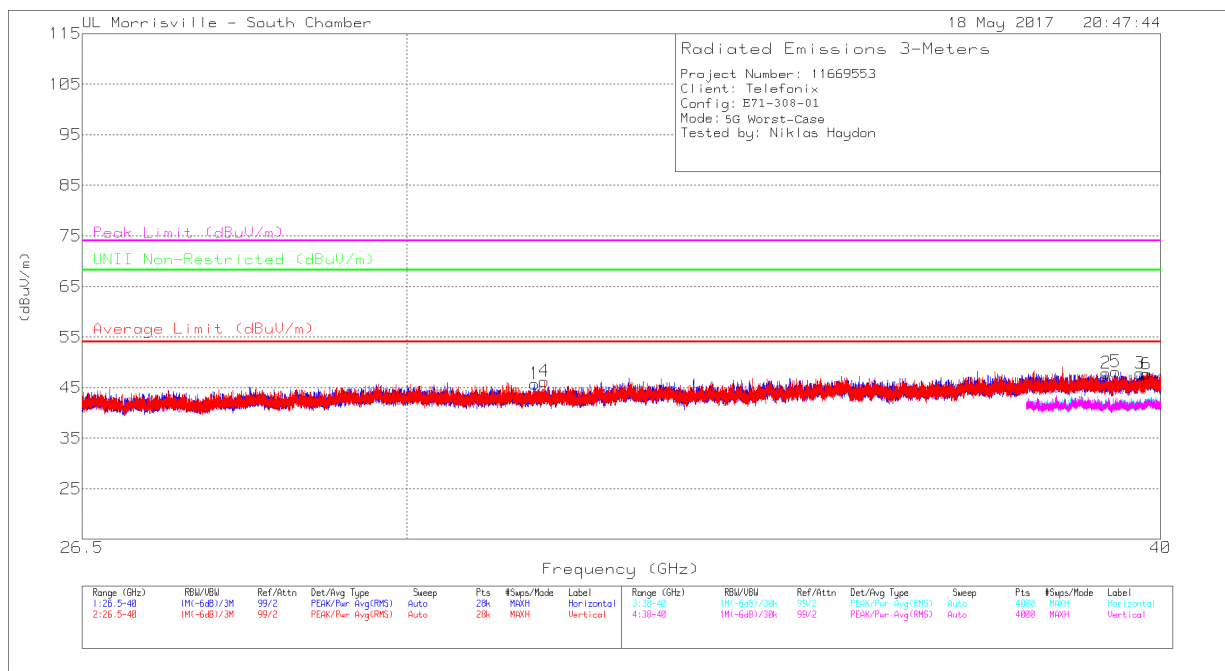


Marker	Freq (GHz)	Meter Reading (dBuV)	Det	AF AT0076 (dB/m)	Amp/Cbl (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 18.442	47.86	PK-U	32.7	-40.4	0	40.16	-	-	74	-33.84	-	-	226	133	H
	* 18.442	35.77	ADR	32.7	-40.4	.15	28.22	54	-25.78	-	-	-	-	226	133	H
2	* 18.871	48.77	PK-U	32.7	-40.3	0	41.17	-	-	74	-32.83	-	-	342	368	H
	* 18.871	36.13	ADR	32.7	-40.3	.15	28.68	54	-25.32	-	-	-	-	342	368	H
3	* 22.262	47.79	PK-U	33.5	-39.4	0	41.89	-	-	74	-32.11	-	-	114	376	H
	* 22.261	35.6	ADR	33.5	-39.4	.15	29.85	54	-24.15	-	-	-	-	114	376	H
4	* 19.579	47.46	PK-U	32.8	-40.1	0	40.16	-	-	74	-33.84	-	-	353	280	V
	* 19.579	35.41	ADR	32.8	-40.1	.15	28.26	54	-25.74	-	-	-	-	353	280	V
5	* 22.763	48	PK-U	33.6	-38.9	0	42.7	-	-	74	-31.3	-	-	3	175	V
	* 22.762	35.72	ADR	33.6	-38.9	.15	30.57	54	-23.43	-	-	-	-	3	175	V
6	* 23.63	47.34	PK-U	33.9	-38.5	0	42.74	-	-	74	-31.26	-	-	239	225	V
	* 23.63	35.52	ADR	33.9	-38.5	.15	31.07	54	-22.93	-	-	-	-	239	225	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



Markers	Freq (GHz)	Meter Reading (dBuV)	Det	AF AT0077 (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	* 31.497	44.28	PK-U	36.8	-34.2	46.88	-	-	74	-27.12	-	-	213	269	H
	* 31.497	31.84	ADR	36.8	-34.2	34.44	54	-19.56	-	-	-	-	213	269	H
2	* 39.171	44.72	PK-U	38.8	-35.3	48.22	-	-	74	-25.78	-	-	201	304	H
	* 39.174	33.41	ADR	38.8	-35.3	36.91	54	-17.09	-	-	-	-	201	304	H
3	* 39.69	45.08	PK-U	38.9	-34.9	49.08	-	-	74	-24.92	-	-	341	316	H
	* 39.69	32.99	ADR	38.9	-34.9	36.99	54	-17.01	-	-	-	-	341	316	H
4	* 31.611	44.36	PK-U	37	-34.3	47.06	-	-	74	-26.94	-	-	13	259	V
	* 31.611	31.72	ADR	37	-34.3	34.42	54	-19.58	-	-	-	-	13	259	V
5	* 39.315	45.25	PK-U	38.7	-35.2	48.75	-	-	74	-25.25	-	-	262	166	V
	* 39.315	33.17	ADR	38.7	-35.2	36.67	54	-17.33	-	-	-	-	262	166	V
6	* 39.781	45.11	PK-U	39	-34.9	49.21	-	-	74	-24.79	-	-	258	163	V
	* 39.781	32.93	ADR	39	-34.9	37.03	54	-16.97	-	-	-	-	258	163	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