CERTIFICATION TEST REPORT

Report Number. : 11692709-E3V2

Applicant	:	QUALCOMM TECHNOLOGIES, INC. 5770 MOREHOUSE DRIVE, SAN DIEGO, CA 92121, USA
FCC ID	:	J9C2NET2LTE
IC	:	2723A-2NET2LTE
Model Number	:	QCL-HUB-2.0-US
EUT Description	:	WIRELESS DATA HUB
Test Standard(s)	:	FCC 47 CFR PART 15 SUBPART E INDUSTRY CANADA RSS - 247 ISSUE 2

Date Of Issue:
September 15, 2017

Prepared by:
UL Verification Services Inc.
47173 Benicia Street
Fremont, CA 94538, U.S.A.
TEL: (510) 771-1000
FAX: (510) 661-0888

NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
V1	08/03/17	Initial Issue	--
V2	09/15/17	Updated section 2 and section 8	Eric Yu

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: QUALCOMM TECHNOLOGIES, INC.
5770 MOREHOUSE DRIVE,
SAN DIEGO, CA 92121 USA

EUT DESCRIPTION: WIRELSS DATA HUB

SERIAL NUMBER: QUALC001TN10M1RP74, QUALC001TN10M1RN3C

DATE TESTED: JULY 12 to SEPTEMBER 08, 2017

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart E	Pass
INDUSTRY CANADA RSS-247 Issue 2	Pass
INDUSTRY CANADA RSS-GEN Issue 4	Pass

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

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

Approved & Released For
UL Verification Services Inc. By:

FRANK IBRAHIM
PROGRAM MANAGER
UL VERIFICATION SERVICES INC.

Prepared By:

TOM CHEN
LABORATORY ENGINEER
UL VERIFICATION SERVICES INC.

2. TEST METHODOLOGY

FCC: The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, FCC 14-30, FCC KDB 905462 D03 v01r02, D04 v01/D06 v02/D07 v02, FCC KDB 789033 D02 v01r04, ANSI C63.10-2013, RSS-GEN Issue 4, and RSS-247 Issue 2.

3. FACILITIES AND ACCREDITATION

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

47173 Benicia Street	47266 Benicia Street
☒ Chamber A(IC: 2324B-1)	☐ Chamber D(IC: 22541-1)
☒ Chamber B(IC: 2324B-2)	☐ Chamber E(IC: 22541-2)
☒ Chamber C(IC: 2324B-3)	☐ Chamber F(IC: 22541-3)
	☐ Chamber G(IC: 22541-4)
	☐ Chamber H(IC: 22541-5)

The above test sites and facilities are covered under FCC Test Firm Registration # 208313.
UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0.
Chambers A through C are covered under Industry Canada company address code 2324B with site numbers 2324B -1 through 2324B-3, respectively. Chambers D through H are covered under Industry Canada company address code 22541 with site numbers 22541 -1 through 22541-5, respectively.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

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

4.3. MEASUREMENT UNCERTAINTY

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

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

Parameter	Uncertainty
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.84 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.65 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz	3.15 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	5.36 dB
Worst Case Radiated Disturbance, 1000 to 18000 MHz	4.32 dB
Worst Case Radiated Disturbance, 18000 to 26000 MHz	4.45 dB
Worst Case Radiated Disturbance, 26000 to 40000 MHz	5.24 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

This EUT is a 2net2 device (LTE North American Version AT&T) that has the following radio modules:

- Wistron WWAN module, M14Q2FG.
- Qualcomm Unlicensed Module, QCA WCN 3660.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

5.2GHz Band

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5180 - 5260	802.11a	16.29	42.56

5.3GHz Band

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5260 - 5320	802.11a	16.39	43.55

5.6GHz Band

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5500 - 5700	802.11a	16.45	44.16

5.8GHz Band

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5745 - 5825	802.11a	16.61	45.81

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an integrated antennas, with the following maximum gains:

Band of operation (MHz)	5.15-5.25	5.25-5.35	5.47-5.725	5.725-5.850
Antenna Type	PIFA	PIFA	PIFA	PIFA
Antenna Gain (dBi)	2.7	3.8	1.4	1.1

5.4. SOFTWARE AND FIRMWARE

The test utility software used during testing was adb Ver.1.0.26, QRCT Ver.3.0.84.0

5.5. WORST-CASE CONFIGURATION AND MODE

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

Radiated emission below 1 GHz, above 18 GHz, and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

Worst-case data rates as provided by the client was: 802.11a mode: 6 Mbps

5.6. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

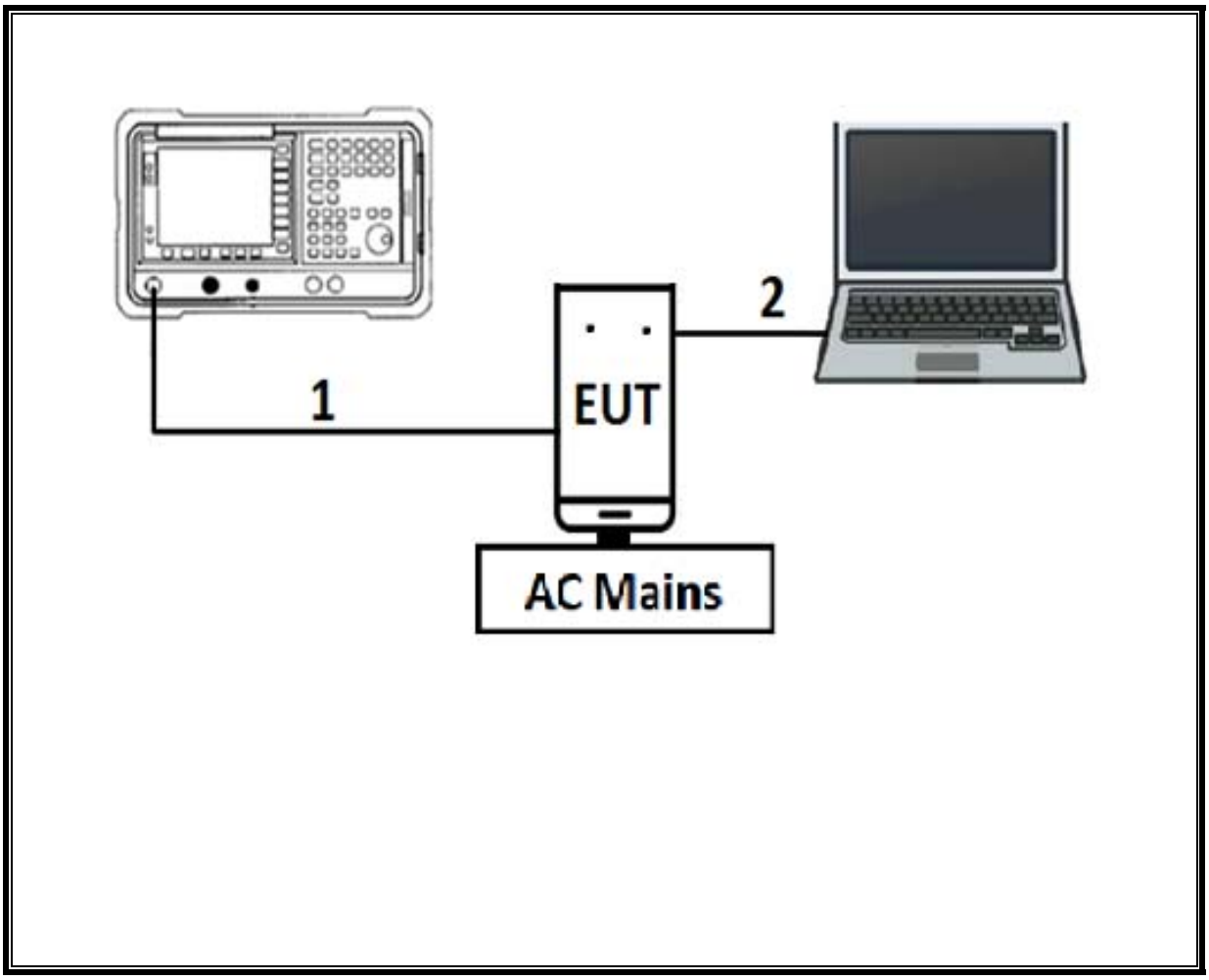
Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
AC Adapter	HP	PPP012D-S	WCNXF0AAR4QOCS	N/A
Laptop	HP	EliteBook 6930p	2CE00821BZ	N/A

I/O CABLES (CONDUCTED TEST)

I/O Cable List						
Cable No	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	Antenna	1	RF	Shielded	0.2	To Spectrum Analyzer
2	USB	1	USB	Un-shielded	1m	Laptop to EUT

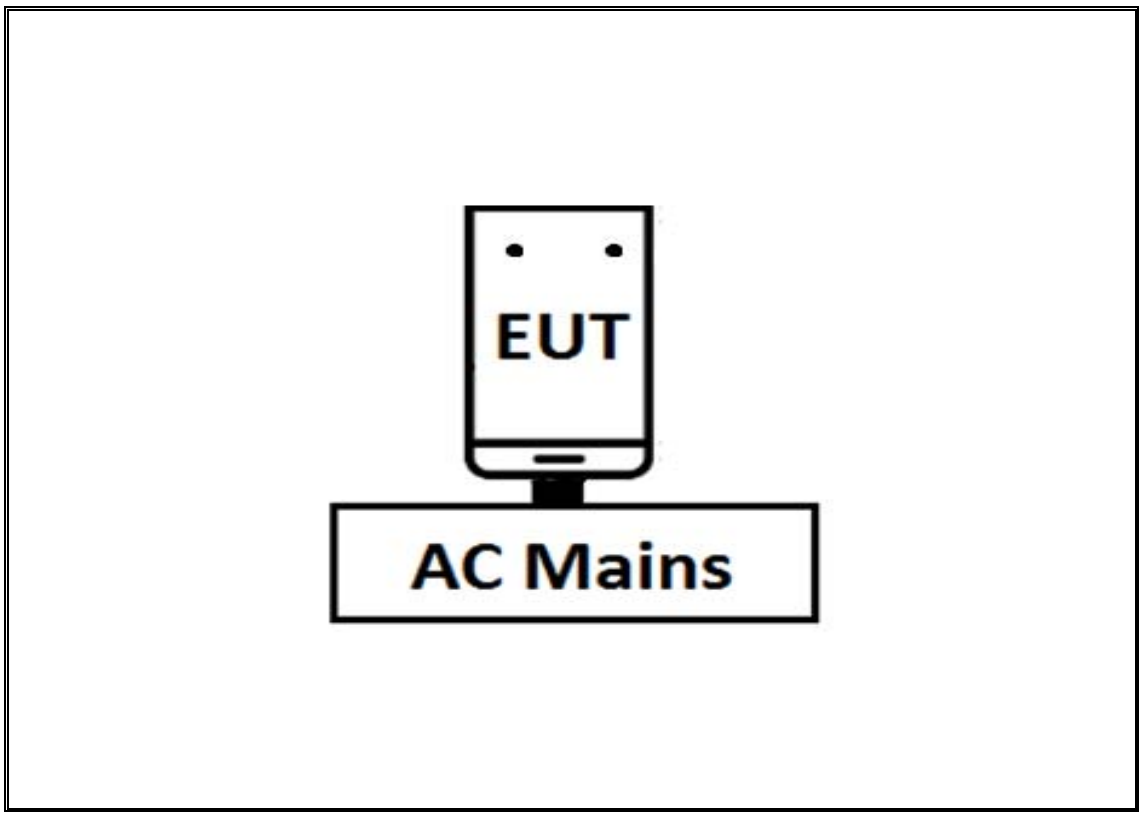
TEST SETUP

CONDCUTED TEST SETUP DIAGRAM



TEST SETUP

RADIATED AND AC LINE CONDUCTED EMISSIONS SETUP DIAGRAM



6. TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Asset**	**Cal Due**
Antenna, Broadband Hybrid, 30MHz to 2000MHz w/4dB Pad	Sunol Sciences Corp.	JB3	T477	06/22/2018
Antenna, Active Loop 9kHz-30MHz	ETS-Lindgren	6502	T1683	02/17/2018
Antenna, Horn 1-18GHz	ETS-Lindgren	3117	T345	03/07/2018
Antenna, Horn 18-26.5GHz	ARA	MWH-1826/B	T449	05/26/2018
Antenna, Horn 26.5 - 40GHz	ARA	MWH-1826/B	T446	05/26/2018
Power Meter, P-series single channel	Agilent (Keysight) Technologies	N1911A	T1264	07/08/2018
Power Sensor, P – series, 50MHz to 18GHz, Wideband	Agilent (Keysight) Technologies	N1921A	T413	06/20/2018
Amplifier, 1-26.5GHz	Agilent (Keysight) Technologies	8449B	T404	07/05/2018
Amplifier, 10kHz-1GHz	Agilent (Keysight) Technologies	8447D	T15	08/26/2017
RF Amplifier	MITEQ	AFS42-00101800-25-S-42	T493	02/15/2018
Spectrum Analyzer, PSA, 3Hz to 26.5GHz	Agilent (Keysight) Technologies	E4440A	T908	04/13/2018
Spectrum Analyzer, PXA, 3Hz to 44GHz	Agilent (Keysight) Technologies	N9030A	T907	01/23/2018
Spectrum Analyzer, PSA, 3Hz to 26.5GHz	Agilent (Keysight) Technologies	E9030A	T905	01/11/2018
LISN	FISCHER	FCC-LISN-50/250-25-2-01	T1310	01/17/2018

Test Software List			
Description	**Manufacturer**	**Model**	**Version**
Radiated Software	UL	UL EMC	Ver 9.5, Apr 26, 2016
Antenna Port Software	UL	UL RF	Ver 6.8, June 08, 2017

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

7. MEASUREMENT METHODS

On Time and Duty Cycle: KDB 789033 D02 v01r04, Section B.

26 dB Emission BW: KDB 789033 D02 v01r04, Section C.

99% Occupied BW: KDB 789033 D02 v01r04, Section D.

Conducted Output Power: KDB 789033 D02 v01r04, Section E.3.b (Method PM-G) and KDB 789033 D02 v01r03, Section E.2.b (Method SA-1)

Power Spectral Density: KDB 789033 D02 v01r04, Section F

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

Unwanted emissions in non-restricted bands: KDB 789033 D02 v01r04, Sections G.3, G.4, and G.5.

AC Power Line Conducted Emissions: ANSI C63.10-2013, Section 6.2.

8. ANTENNA PORT TEST RESULTS

8.1. ON TIME AND DUTY CYCLE

LIMITS

None; for reporting purposes only.

ON TIME AND DUTY CYCLE RESULTS

Mode	ON Time (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
802.11a	1.364	1.372	0.99	99.417%	0.00	0.01

DUTY CYCLE PLOTS

DUTY CYCLE 802.11a MODE

8.2. 11a MODE IN THE 5.2GHz BAND

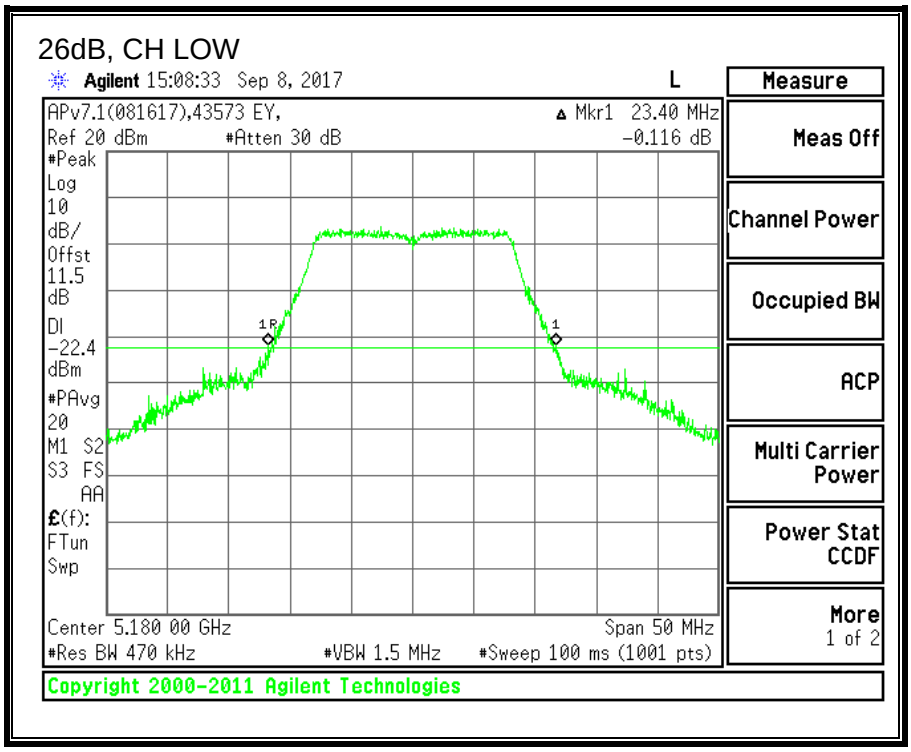
8.2.1. 26 dB BANDWIDTH

LIMITS

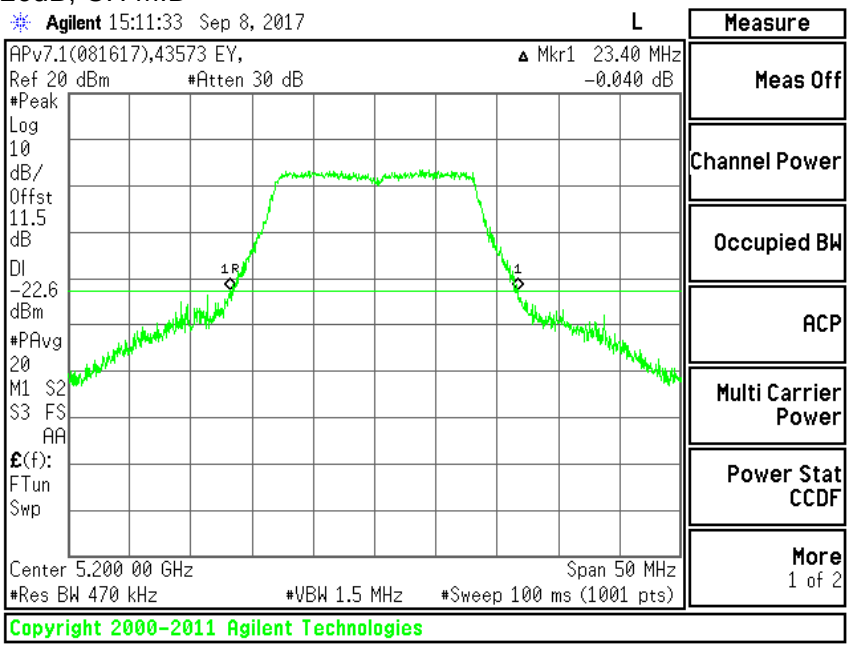
None; for reporting purposes only.

RESULTS

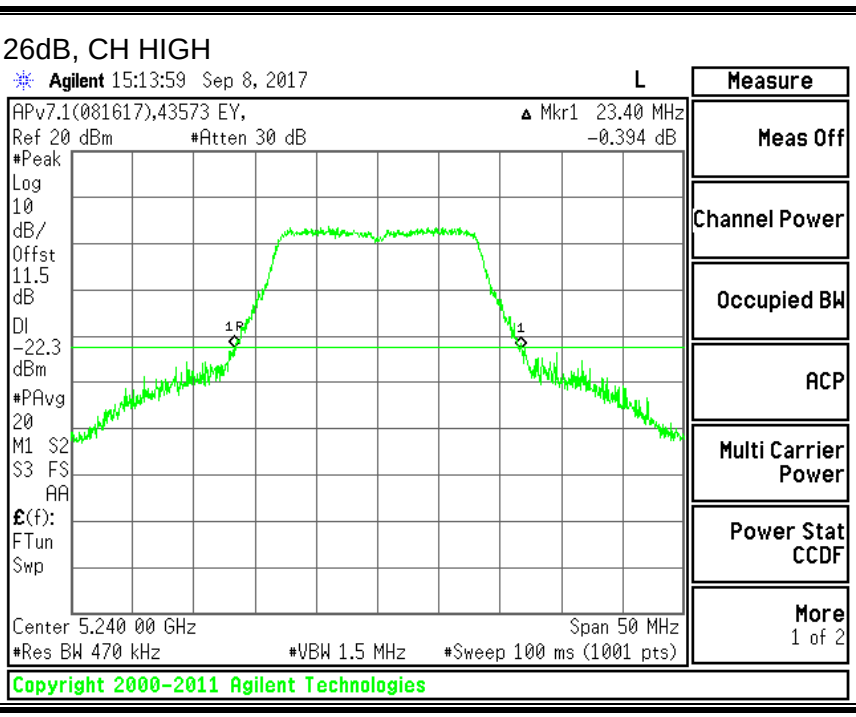
Channel	Frequency	26 dB BW (MHz)
Low	5180	23.40
Mid	5200	23.40
High	5240	23.40



26dB, CH MID



26dB, CH HIGH



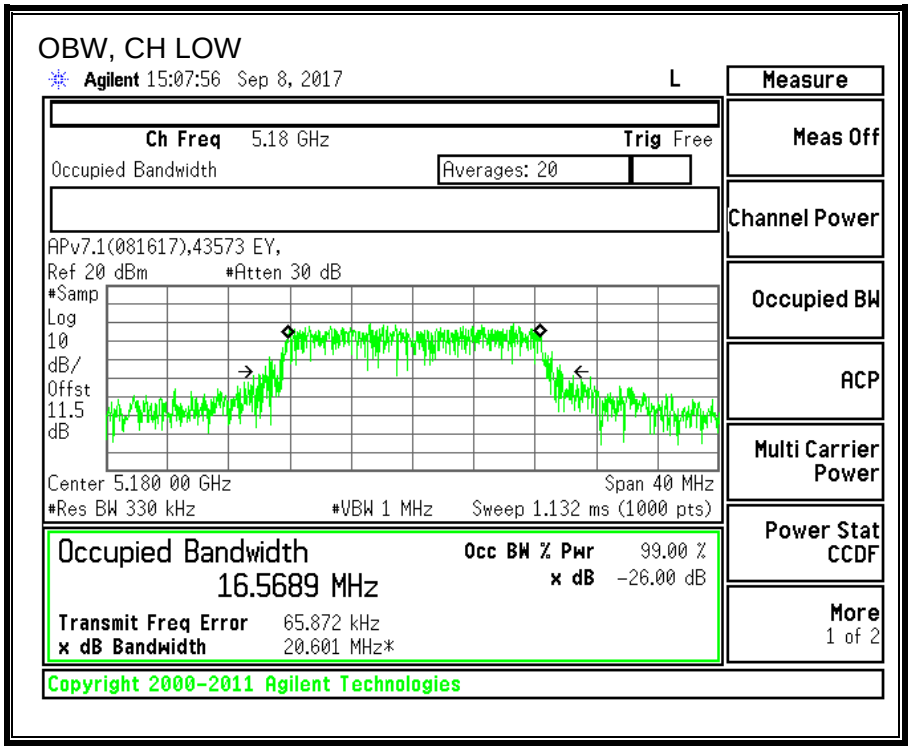
8.2.2. 99% BANDWIDTH

LIMITS

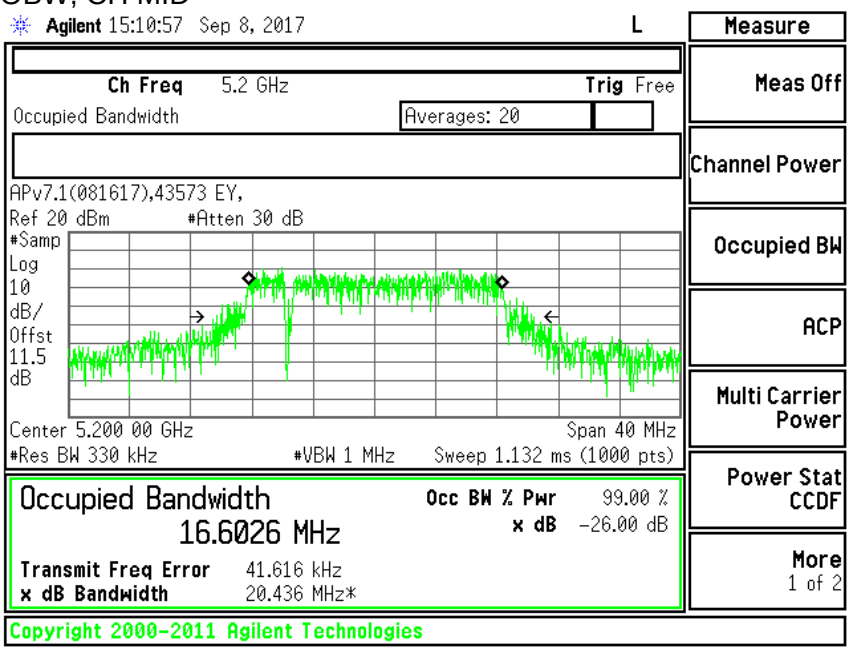
None; for reporting purposes only.

RESULTS

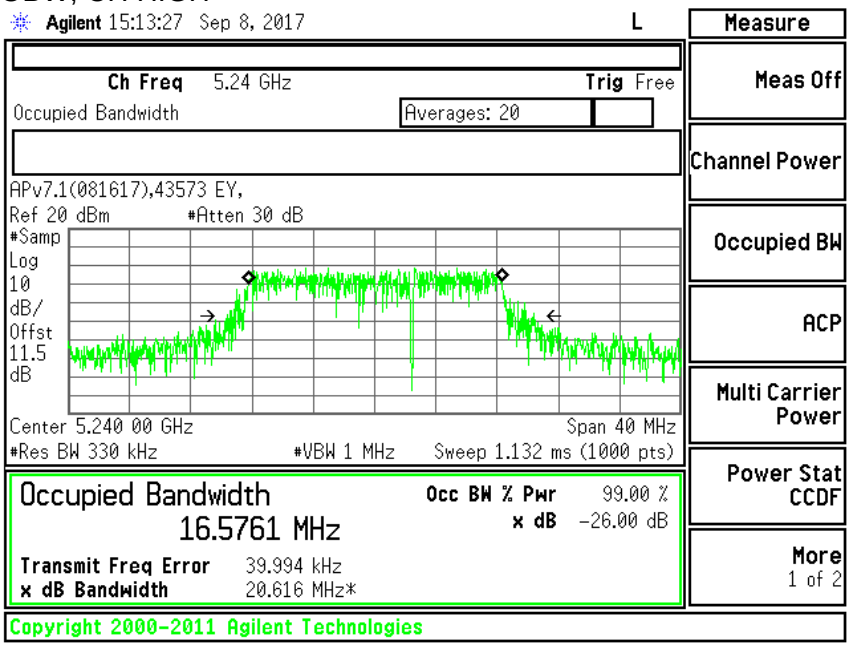
Channel	Frequency	99% BW (MHz)
Low	5180	16.5689
Mid	5200	16.6026
High	5240	16.5761



OBW, CH MID



OBW, CH HIGH



8.2.3. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (1)

(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.

IC RSS-247 6.2.1(1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 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.

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5180	23.40	16.57	2.70
Mid	5200	23.40	16.60	2.70
High	5240	23.40	16.58	2.70

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC EIRP Limit (dBm)	Max IC Power (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC eirp PSD Limit (dBm)	PPSD Limit (dBm)
Low	5180	24.00	22.19	19.49	19.49	11.00	10.00	7.30
Mid	5200	24.00	22.20	19.50	19.50	11.00	10.00	7.30
High	5240	24.00	22.19	19.49	19.49	11.00	10.00	7.30

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

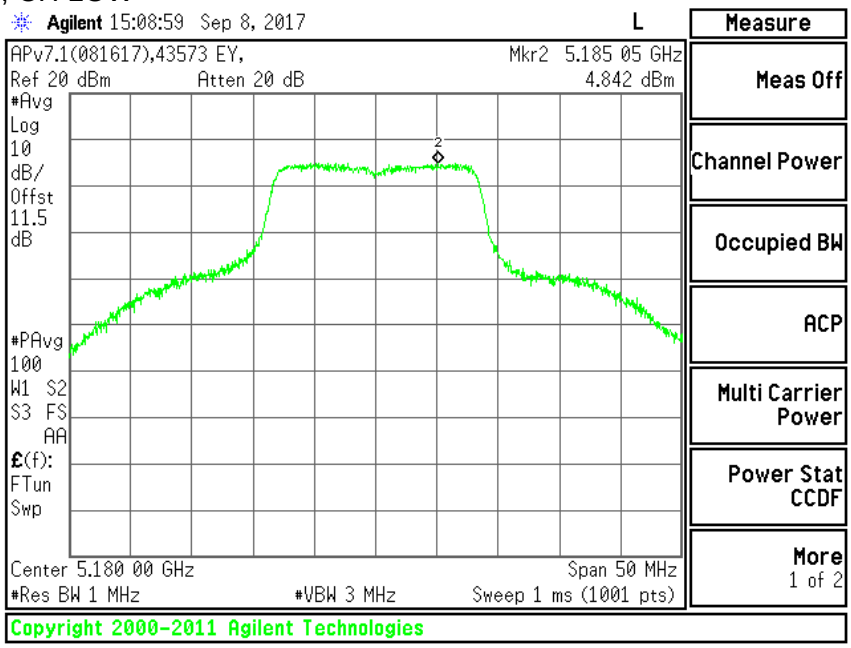
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	14.32	14.32	19.49	-5.17
Mid	5200	16.11	16.11	19.50	-3.39
High	5240	16.29	16.29	19.49	-3.20

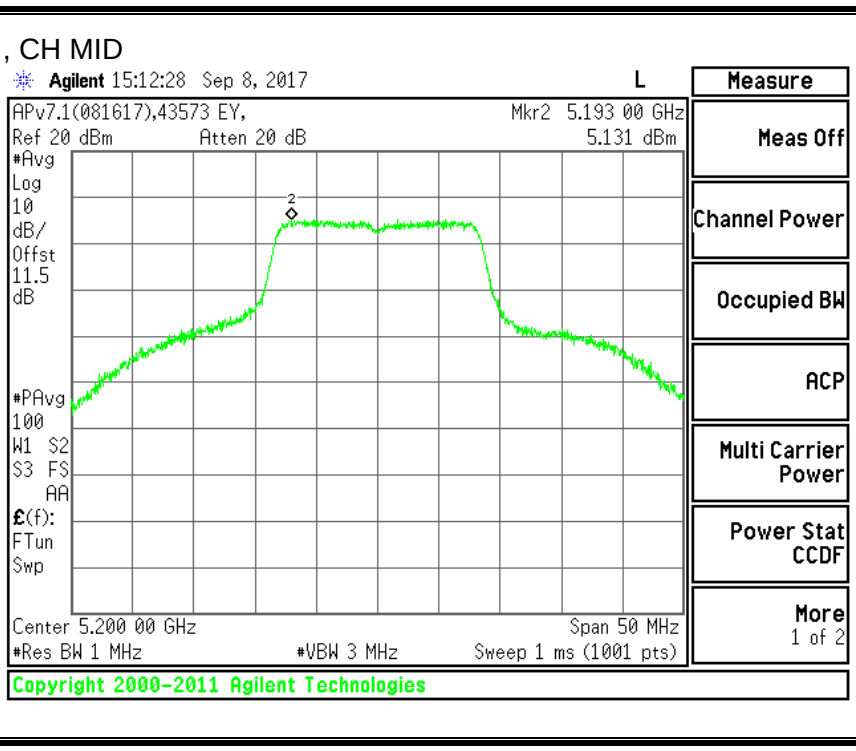
PPSD Results

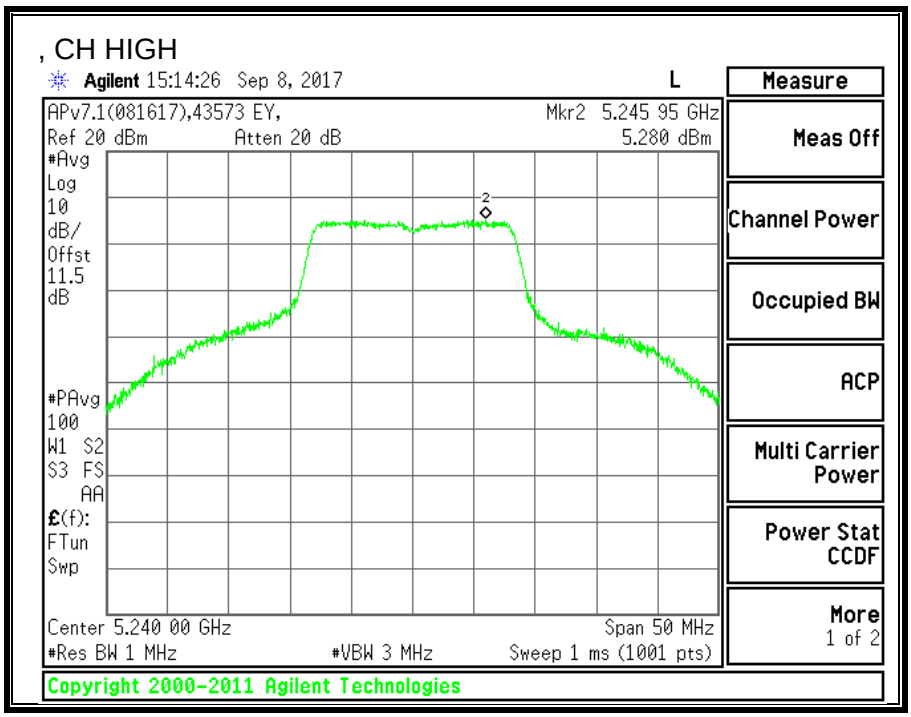
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	4.84	4.84	7.30	-2.46
Mid	5200	5.13	5.13	7.30	-2.17
High	5240	5.20	5.20	7.30	-2.10

, CH LOW



, CH MID





8.3. 11a MODE IN THE 5.3GHz BAND

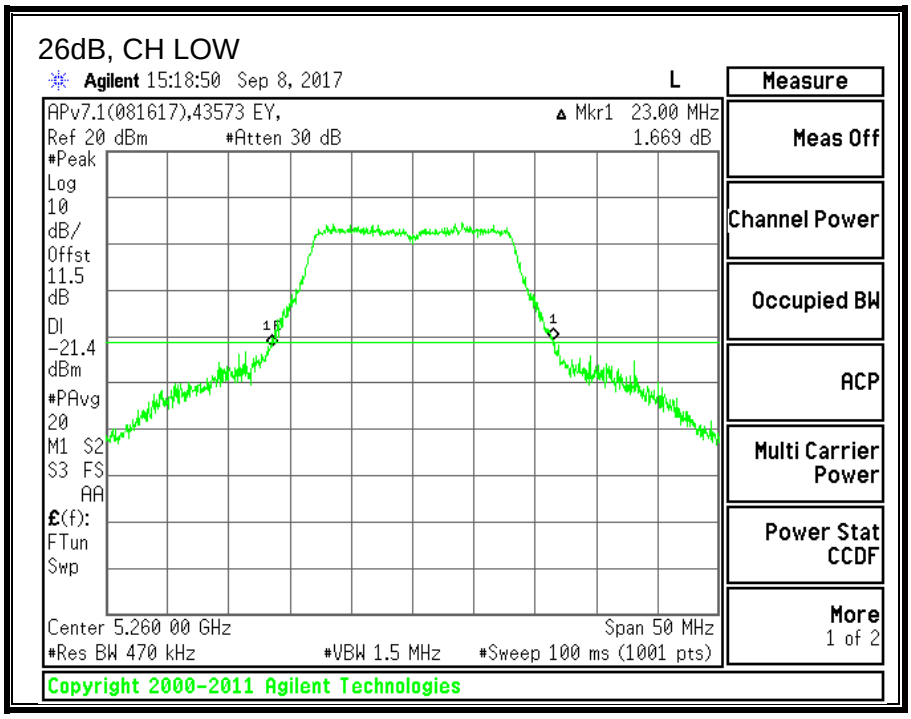
8.3.1. 26 dB BANDWIDTH

LIMITS

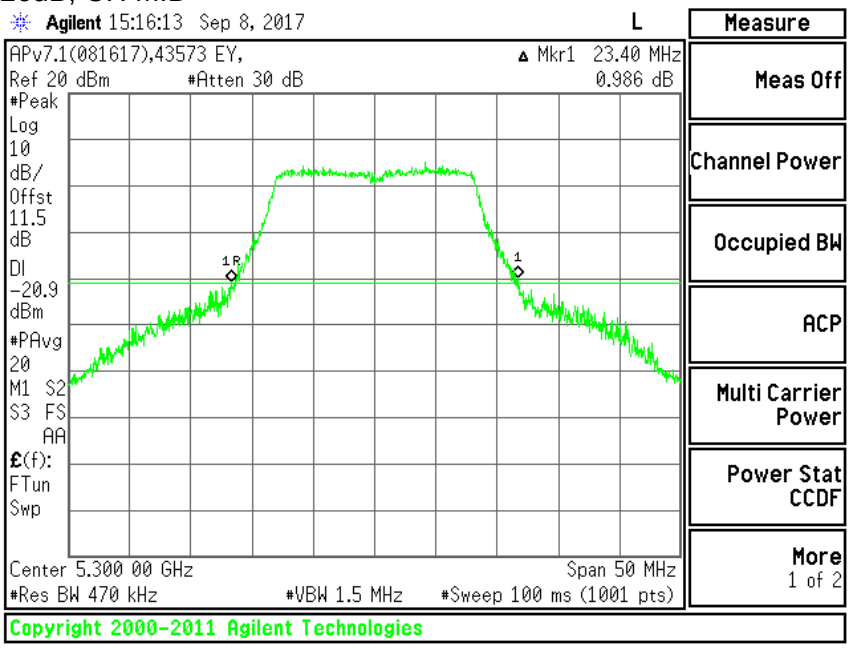
None; for reporting purposes only.

RESULTS

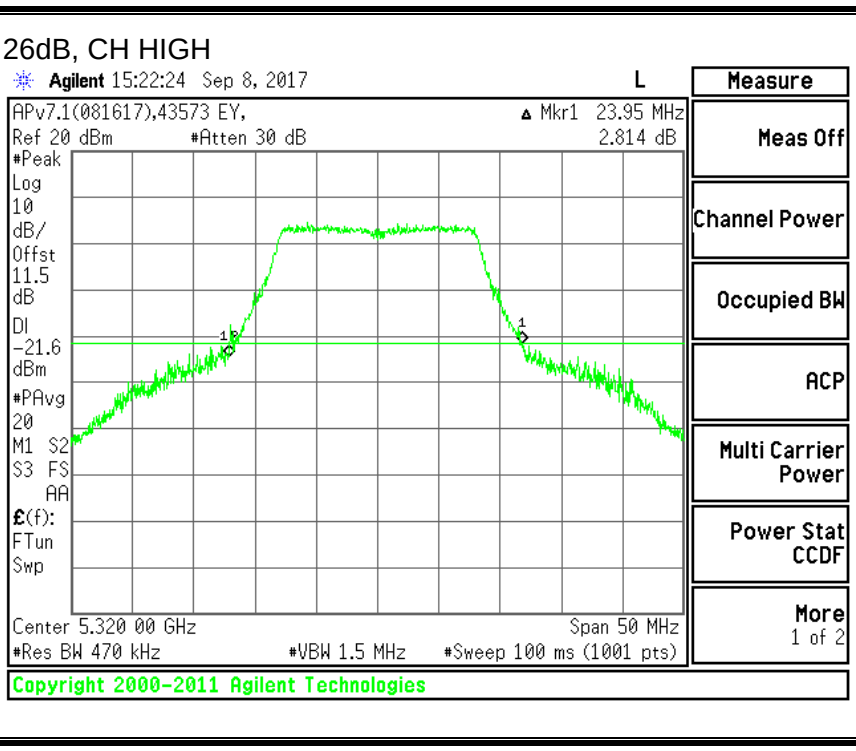
Channel	Frequency	26 dB BW (MHz)
Low	5260	23.00
Mid	5300	23.40
High	5320	23.95



26dB, CH MID



26dB, CH HIGH



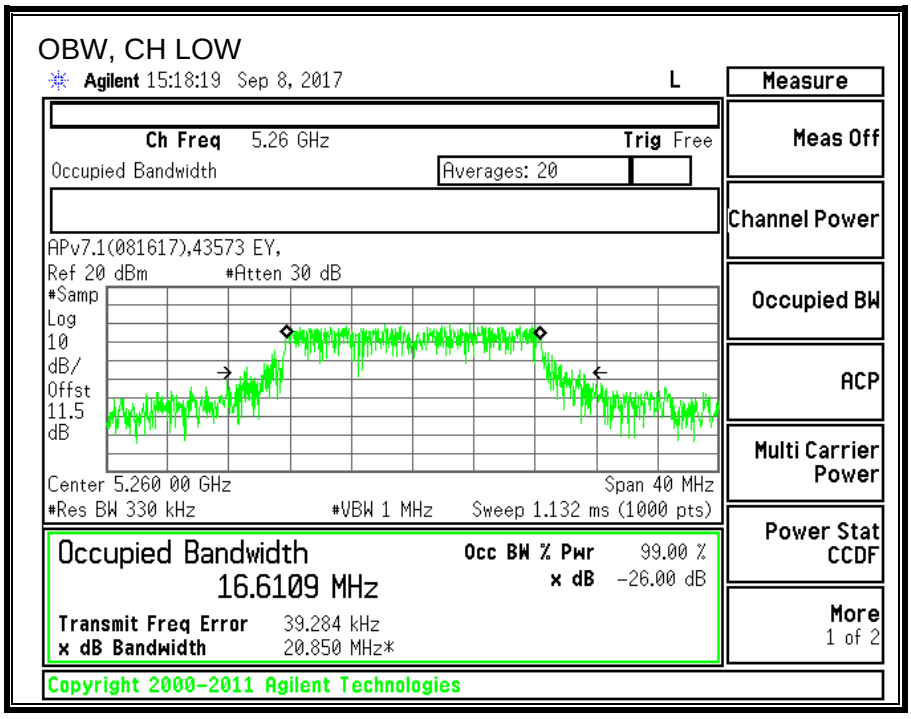
8.3.2. 99% BANDWIDTH

LIMITS

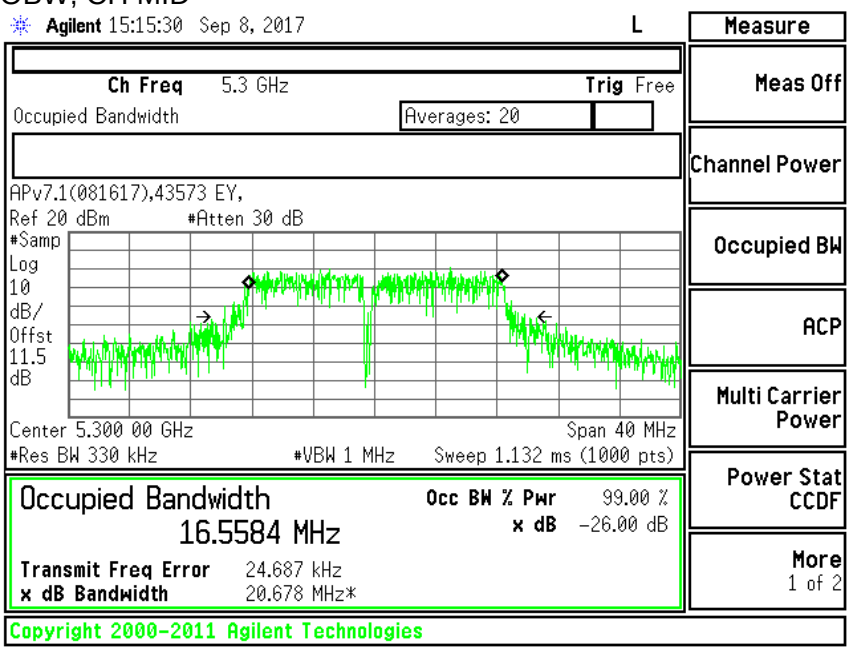
None; for reporting purposes only.

RESULTS

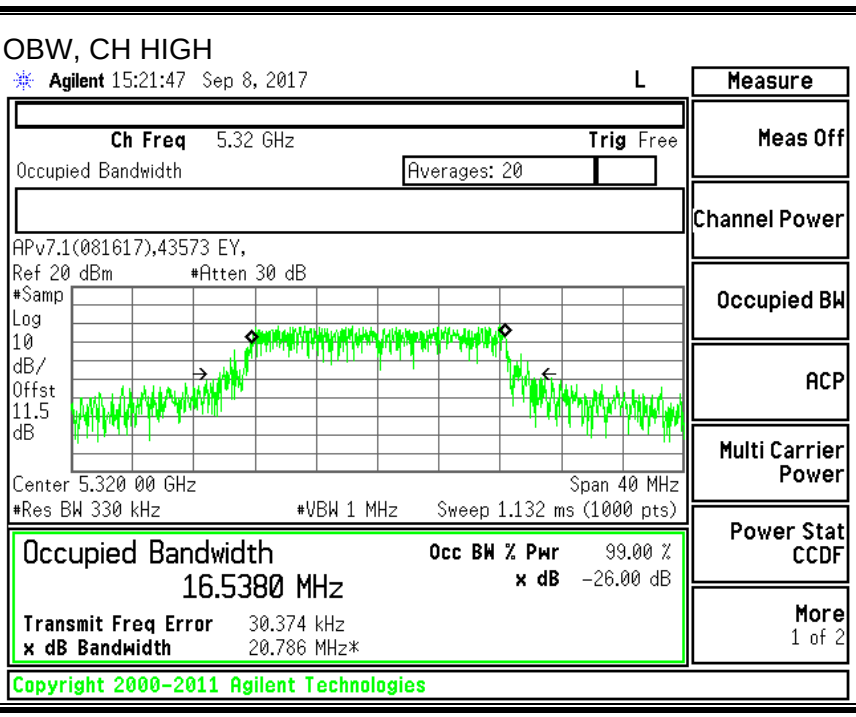
Channel	Frequency	99% BW (MHz)
Low	5260	16.6109
Mid	5300	16.5584
High	5320	16.5380



OBW, CH MID



OBW, CH HIGH



8.3.3. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247 (6.2.2) (1)

The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5260	23.00	16.61	3.80
Mid	5300	23.40	16.56	3.80
High	5320	23.95	16.54	3.80

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5260	24.00	23.20	29.20	23.20	11.00	11.00	11.00
Mid	5300	24.00	23.19	29.19	23.19	11.00	11.00	11.00
High	5320	24.00	23.18	29.18	23.18	11.00	11.00	11.00

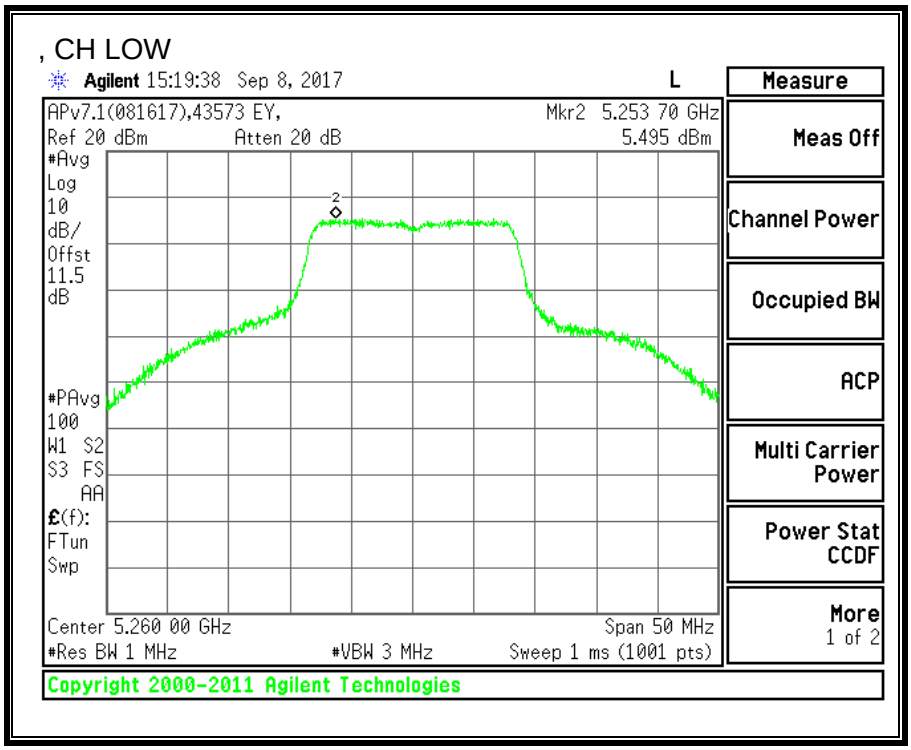
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PPSD

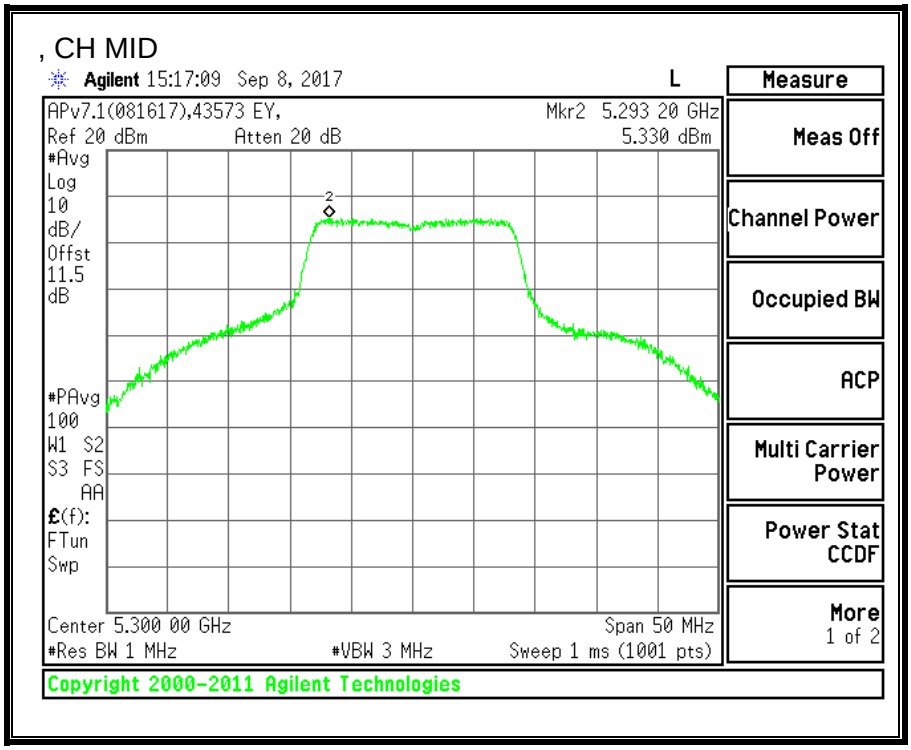
Output Power Results

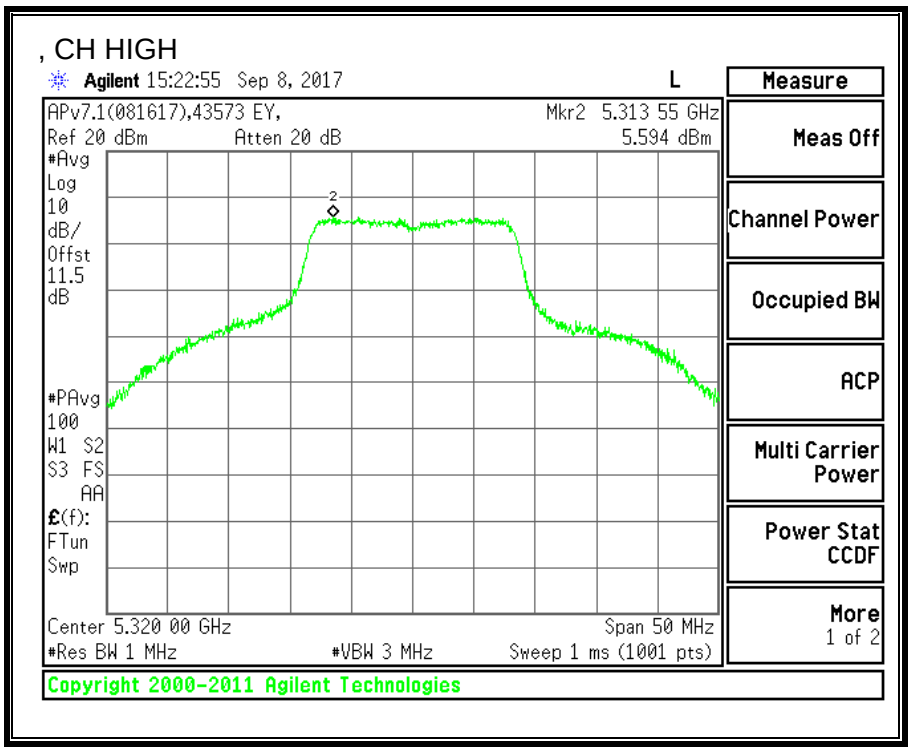
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	16.31	16.31	23.20	-6.89
Mid	5300	16.39	16.39	23.19	-6.80
High	5320	16.15	16.15	23.18	-7.03

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	5.495	5.50	11.00	-5.51
Mid	5300	5.330	5.33	11.00	-5.67
High	5320	5.594	5.59	11.00	-5.41







8.4. 11a MODE IN THE 5.6GHz BAND

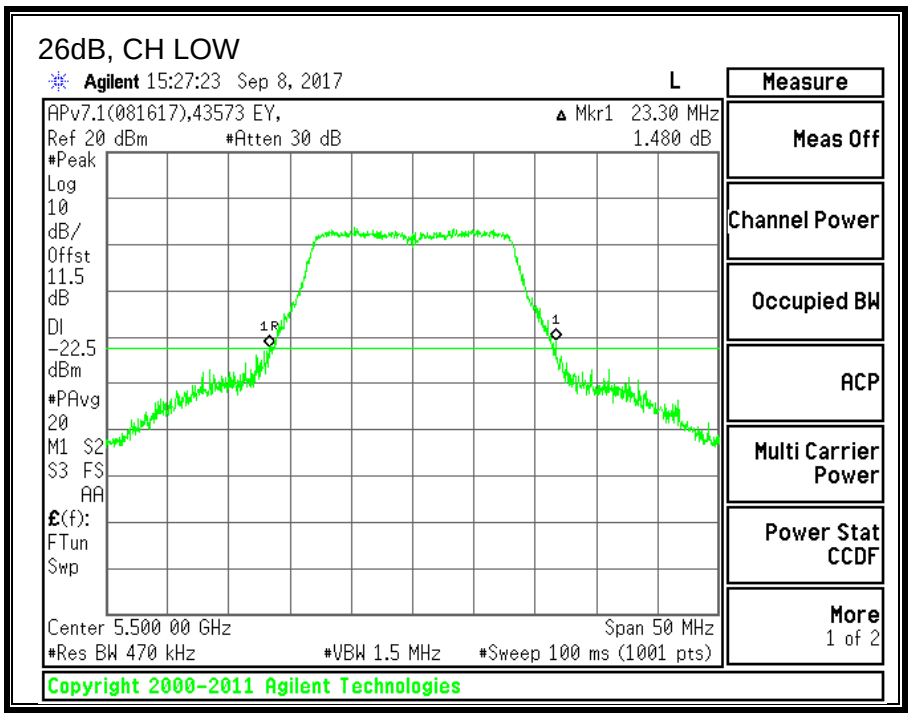
8.4.1. 26 dB BANDWIDTH

LIMITS

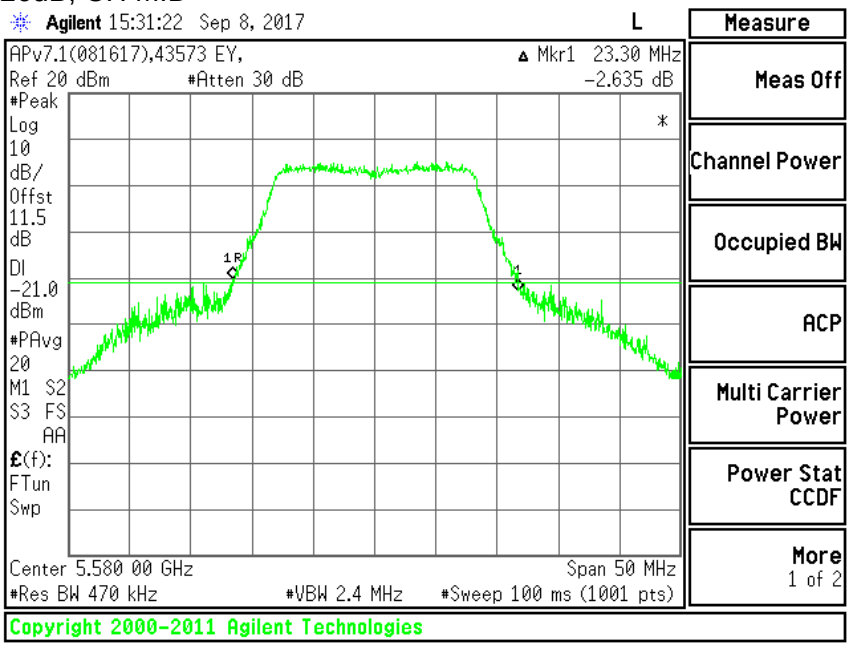
None; for reporting purposes only.

RESULTS

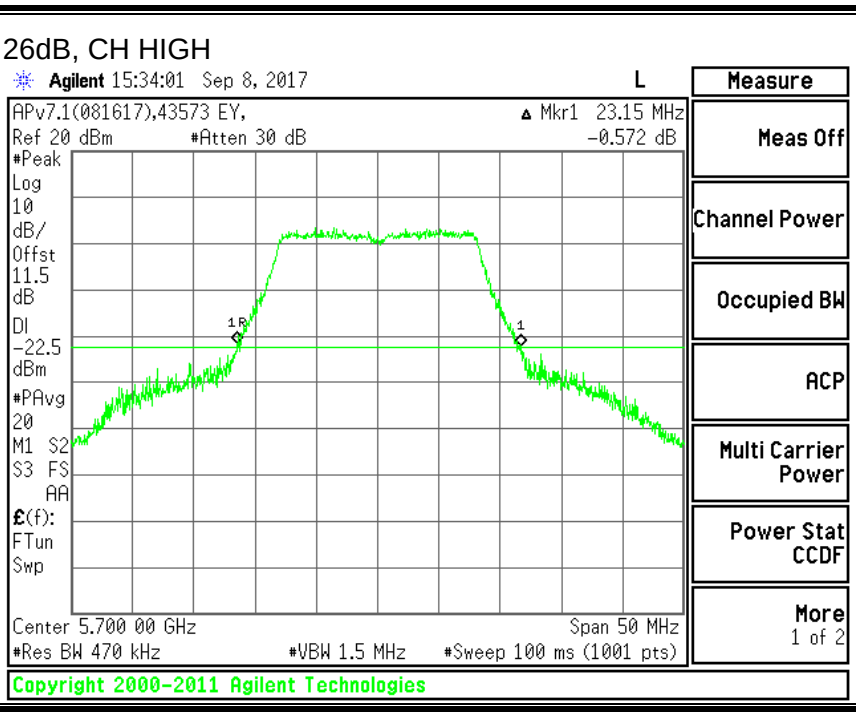
Channel	Frequency	26 dB BW (MHz)
Low	5500	23.30
Mid	5580	23.30
High	5700	23.15



26dB, CH MID



26dB, CH HIGH



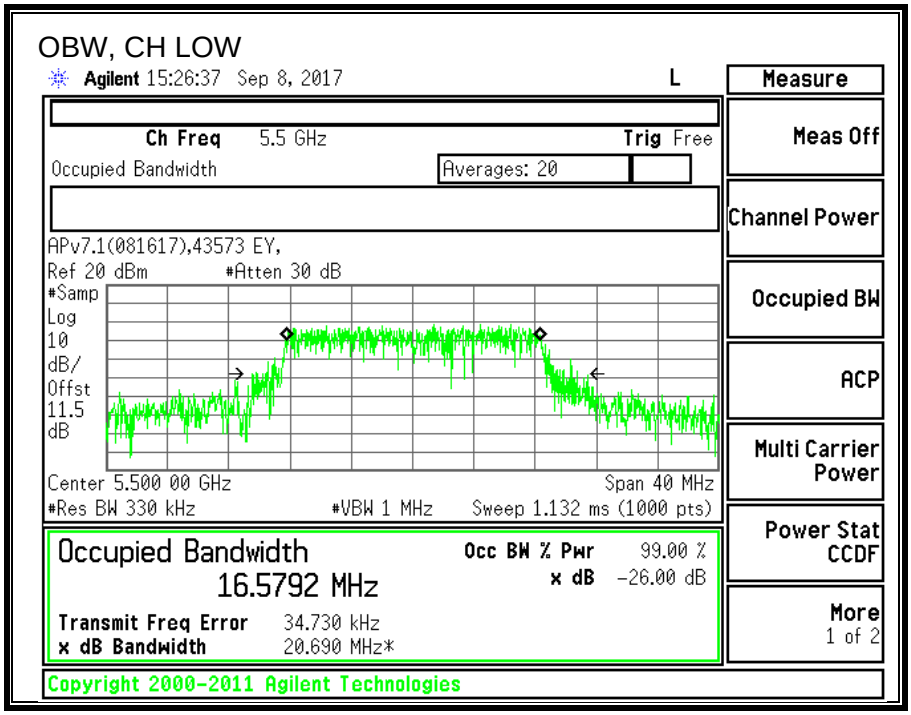
8.4.2. 99% BANDWIDTH

LIMITS

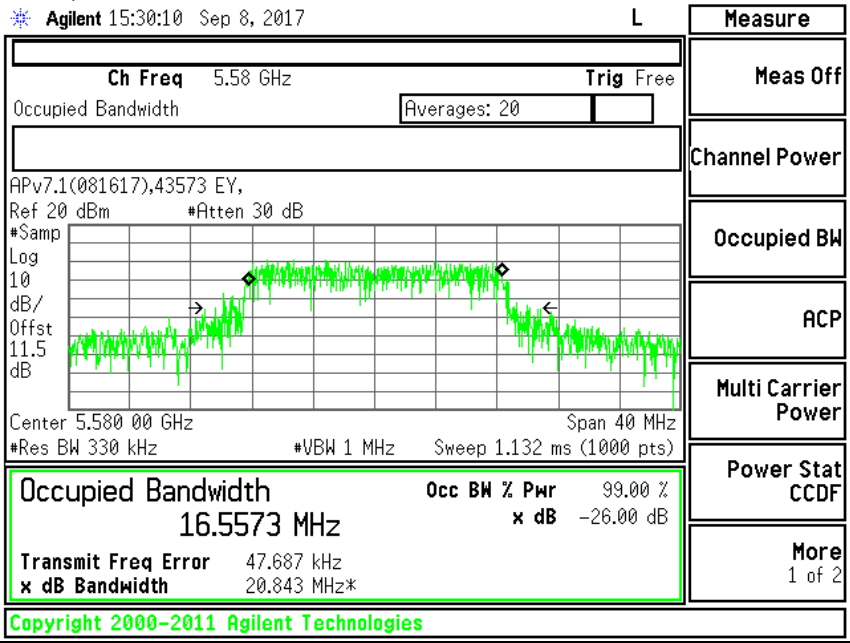
None; for reporting purposes only.

RESULTS

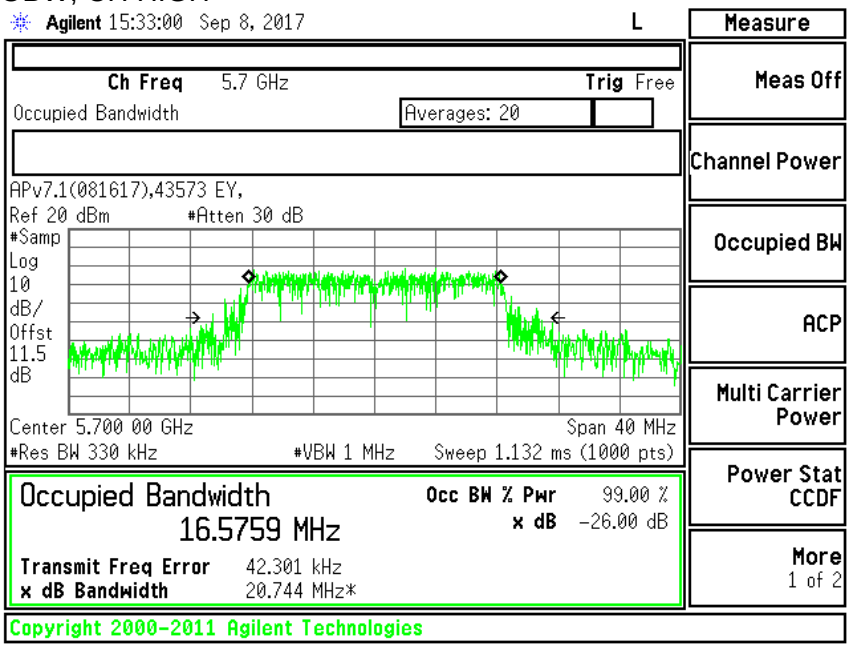
Channel	Frequency	99% BW (MHz)
Low	5500	16.5792
Mid	5580	16.5573
High	5700	16.5759



OBW, CH MID



OBW, CH HIGH



8.4.3. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-247 (6.2.3) (1)

The maximum conducted output power shall not exceed 250 mW or 11 + 10 log10B, dBm, whichever is less. The power spectral density shall not exceed 11 dBm in any 1.0 MHz band.

The maximum e.i.r.p. shall not exceed 1.0 W or 17 + 10 log10B, dBm, whichever is less. B is the 99% emission bandwidth in megahertz. Note that devices with a maximum e.i.r.p. greater than 500 mW shall implement TPC in order to have the capability to operate at least 6 dB below the maximum permitted e.i.r.p. of 1 W.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5500	23.30	16.579	1.40
Mid	5580	23.30	16.557	1.40
High	5700	23.15	16.576	1.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5500	24.00	23.20	29.20	23.20	11.00	11.00	11.00
Mid	5580	24.00	23.19	29.19	23.19	11.00	11.00	11.00
High	5700	24.00	23.19	29.19	23.19	11.00	11.00	11.00

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

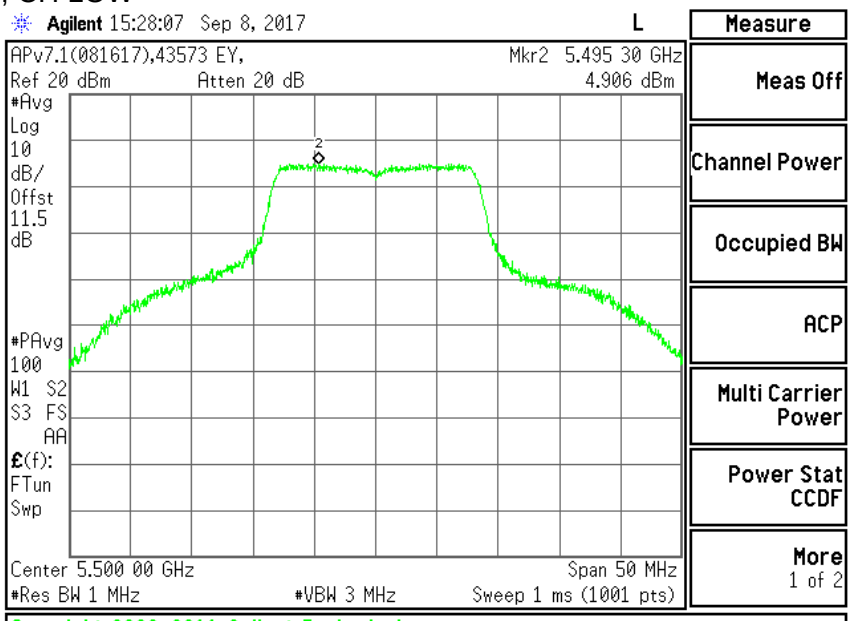
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	15.32	15.32	23.20	-7.88
Mid	5580	16.45	16.45	23.19	-6.74
High	5700	14.41	14.41	23.19	-8.78

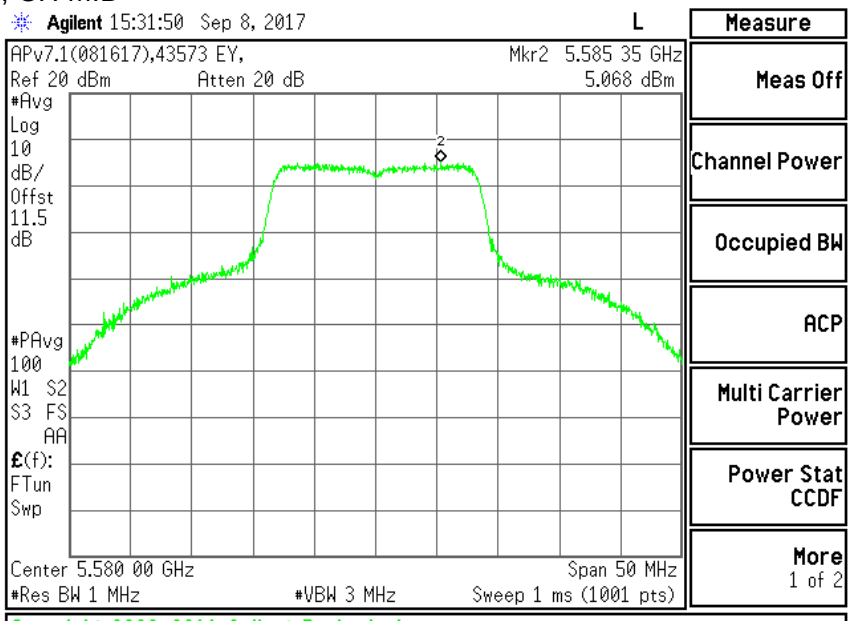
PPSD Results

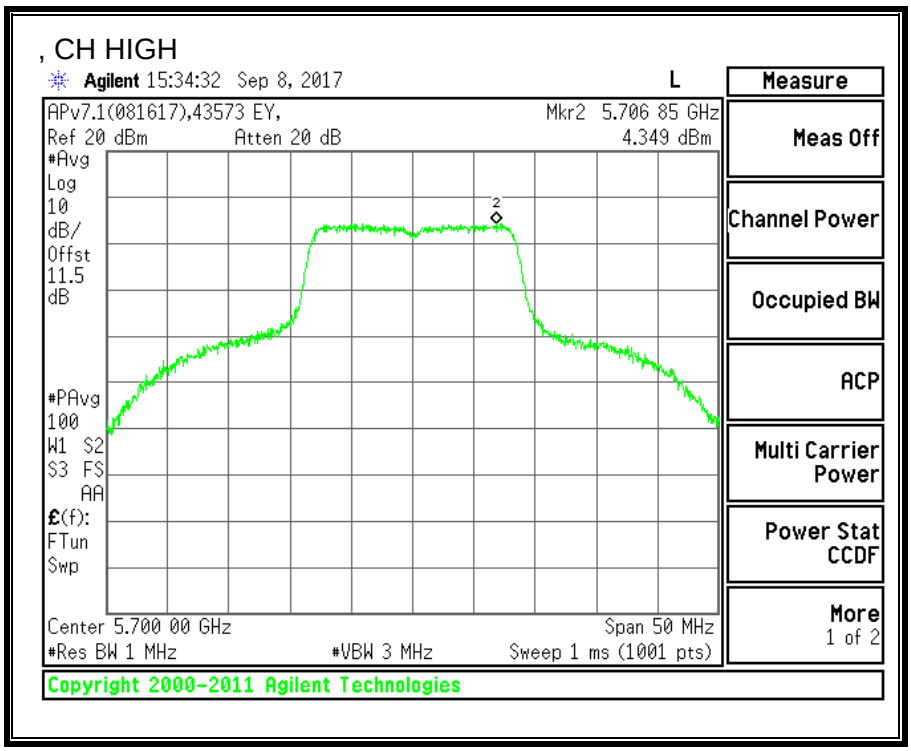
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	4.91	4.91	11.00	-6.09
Mid	5580	5.07	5.07	11.00	-5.93
High	5700	4.35	4.35	11.00	-6.65

, CH LOW



, CH MID





8.5. 11a MODE IN THE 5.8GHz BAND

8.5.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407 (e)

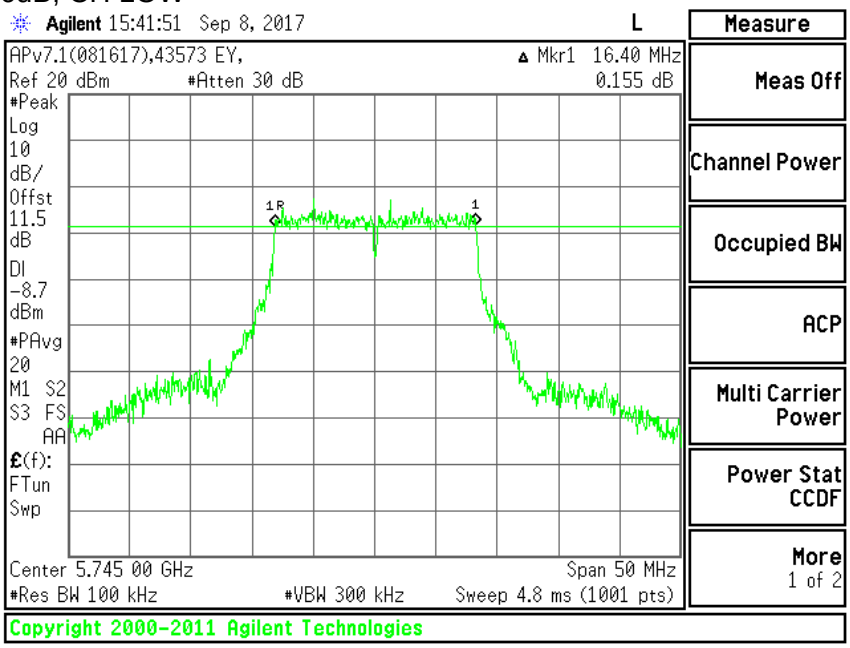
IC RSS-247 (6.2.4) (1)

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

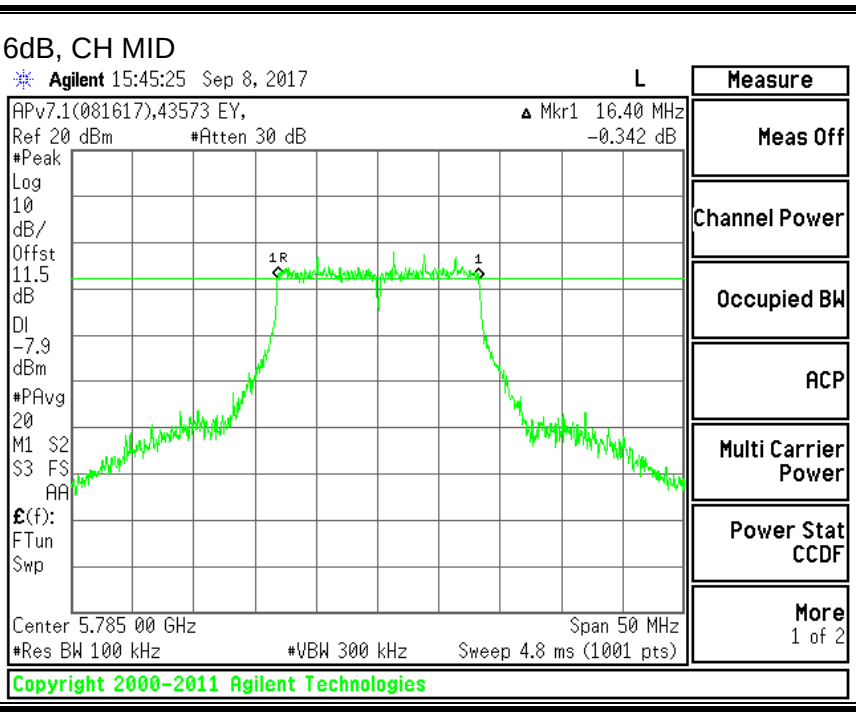
RESULTS

Channel	Frequency	6 dB BW (MHz)	Minimum Limit (MHz)
Low	5745	16.40	0.5
Mid	5785	16.40	0.5
High	5825	16.40	0.5

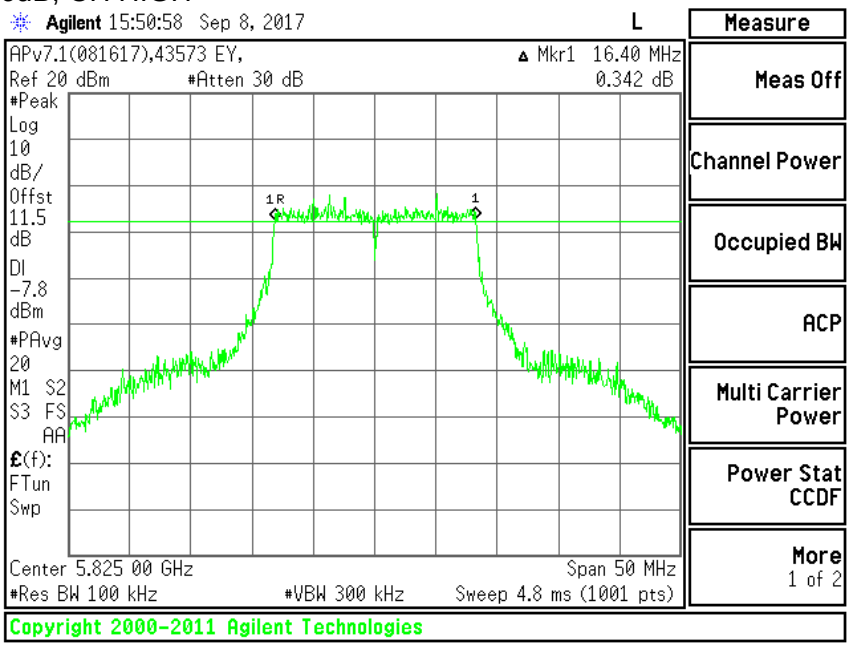
6dB, CH LOW



6dB, CH MID



6dB, CH HIGH



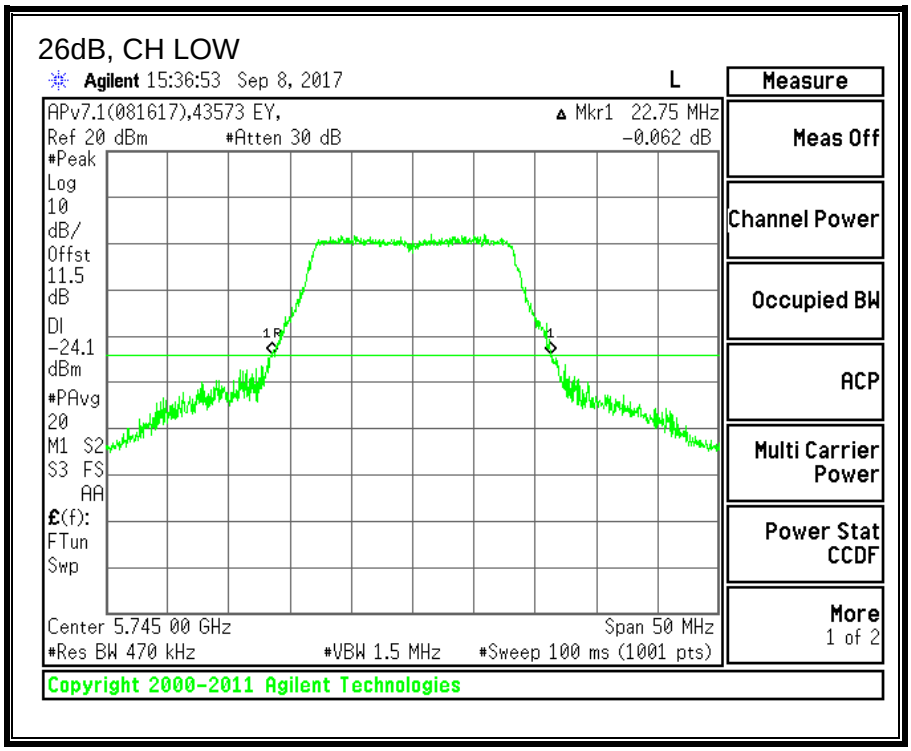
8.5.2. 26 dB BANDWIDTH

LIMITS

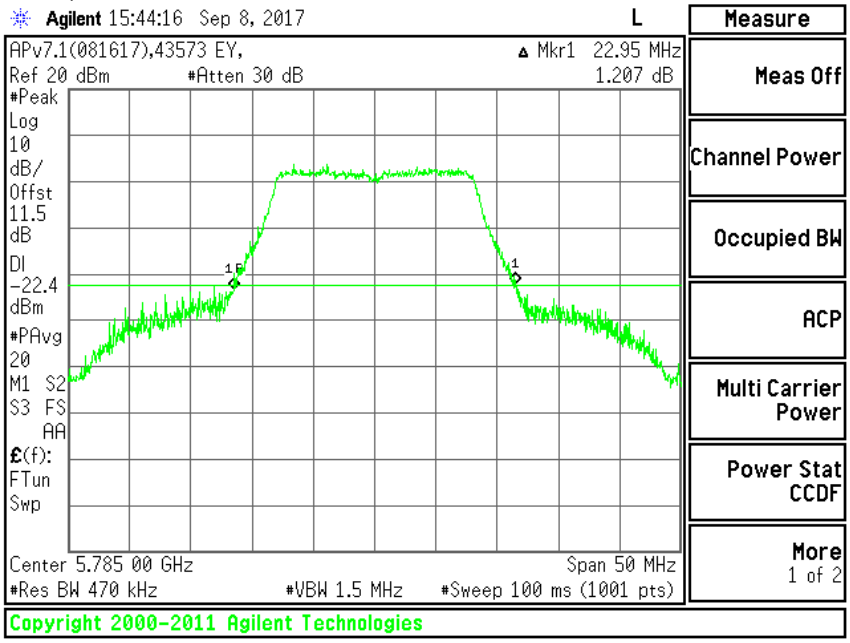
None; for reporting purposes only.

RESULTS

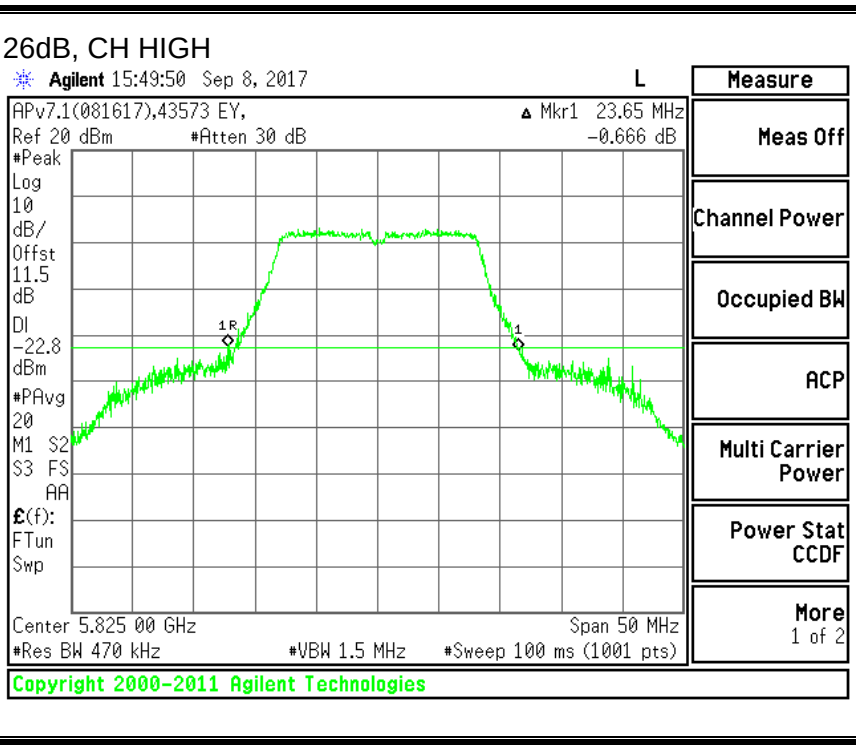
Channel	Frequency	26 dB BW (MHz)
Low	5745	22.75
Mid	5785	22.95
High	5825	23.65



26dB, CH MID



26dB, CH HIGH



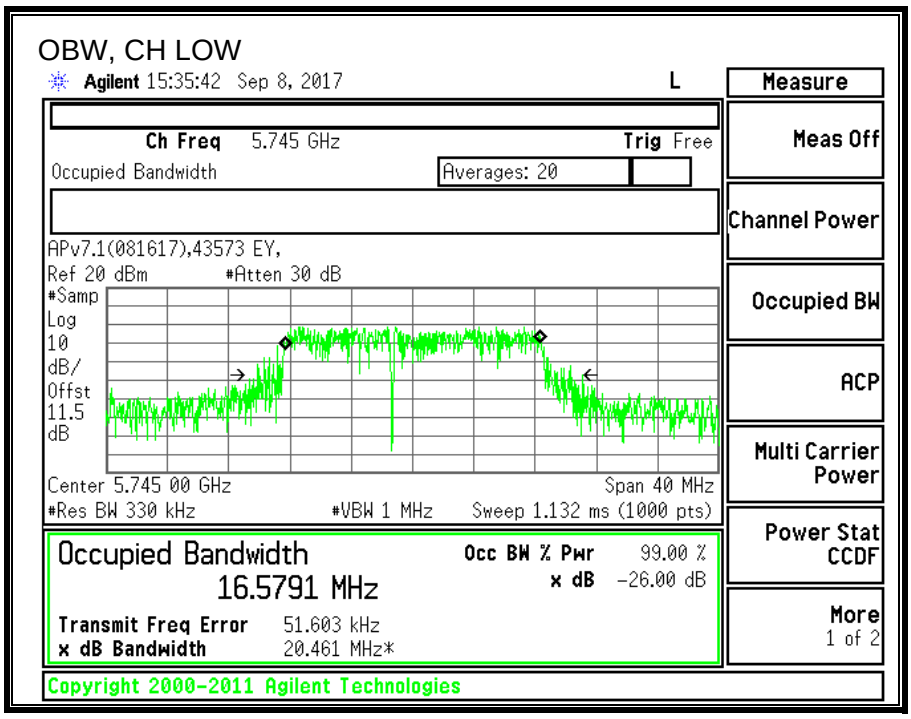
8.5.3. 99% BANDWIDTH

LIMITS

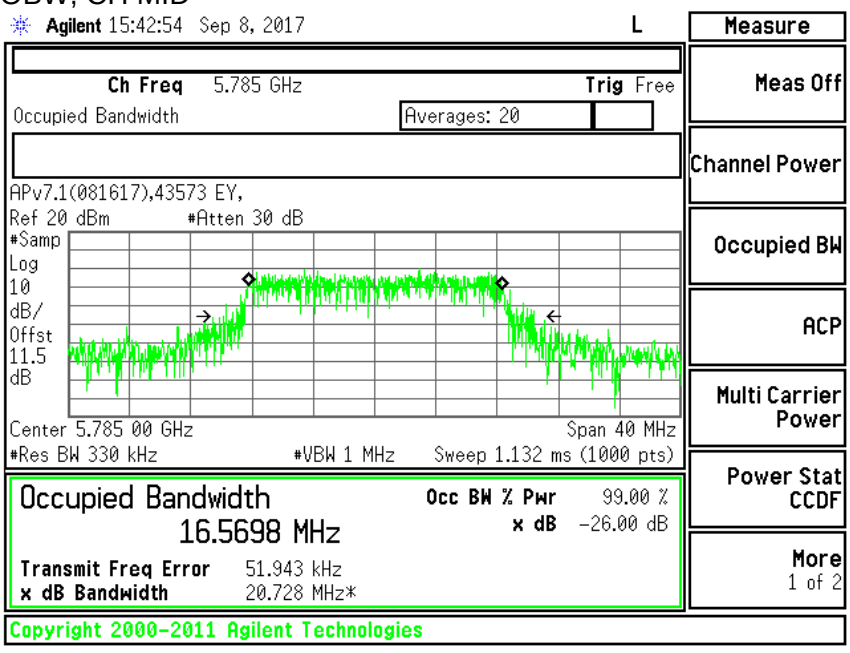
None; for reporting purposes only.

RESULTS

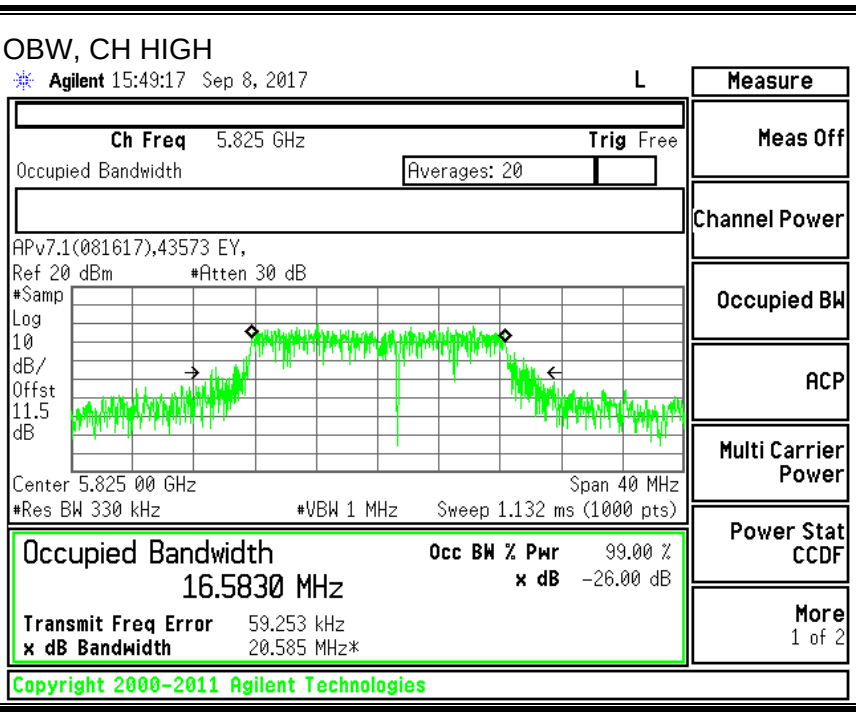
Channel	Frequency	99% BW (MHz)
Low	5745	16.5791
Mid	5785	16.5698
High	5825	16.5830



OBW, CH MID



OBW, CH HIGH



8.5.4. OUTPUT POWER AND 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.

RESULTS

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/IC Power Limit (dBm)	FCC/IC PSD Limit (dBm)
Low	5745	1.10	30.00	30.00
Mid	5785	1.10	30.00	30.00
High	5825	1.10	30.00	30.00

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

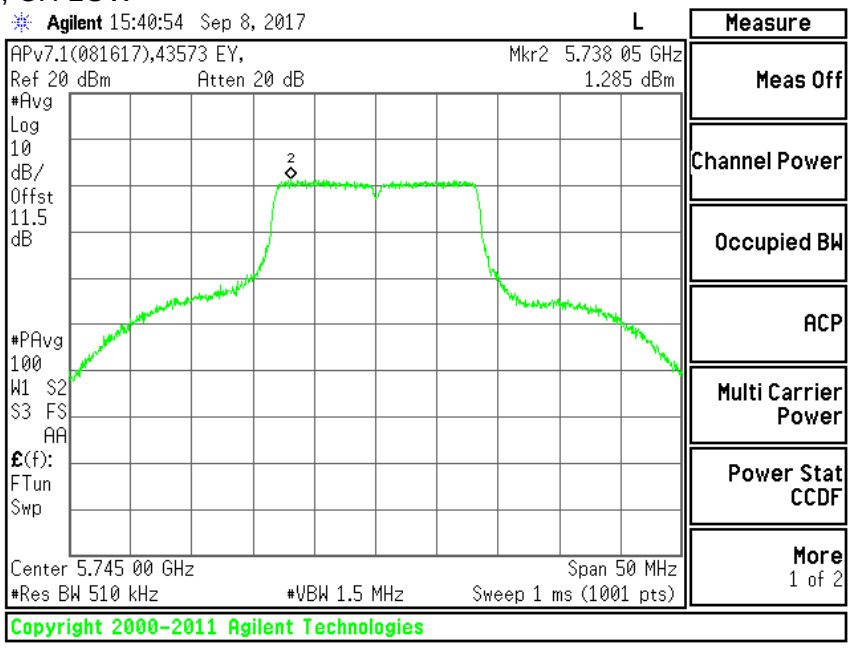
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	16.03	16.03	30.00	-13.97
Mid	5785	16.52	16.52	30.00	-13.48
High	5825	16.61	16.61	30.00	-13.39

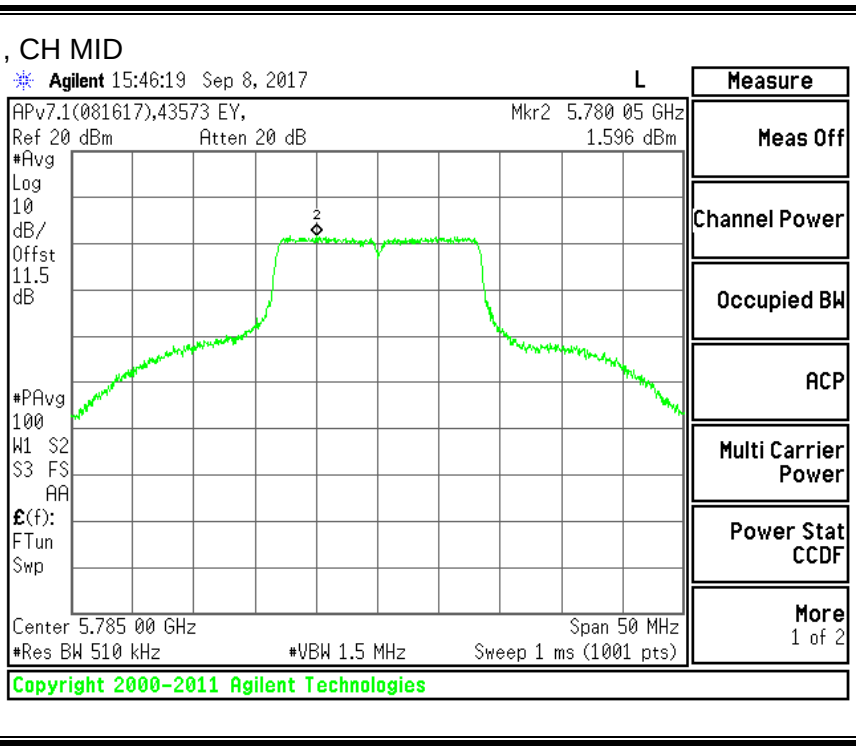
PPSD Results

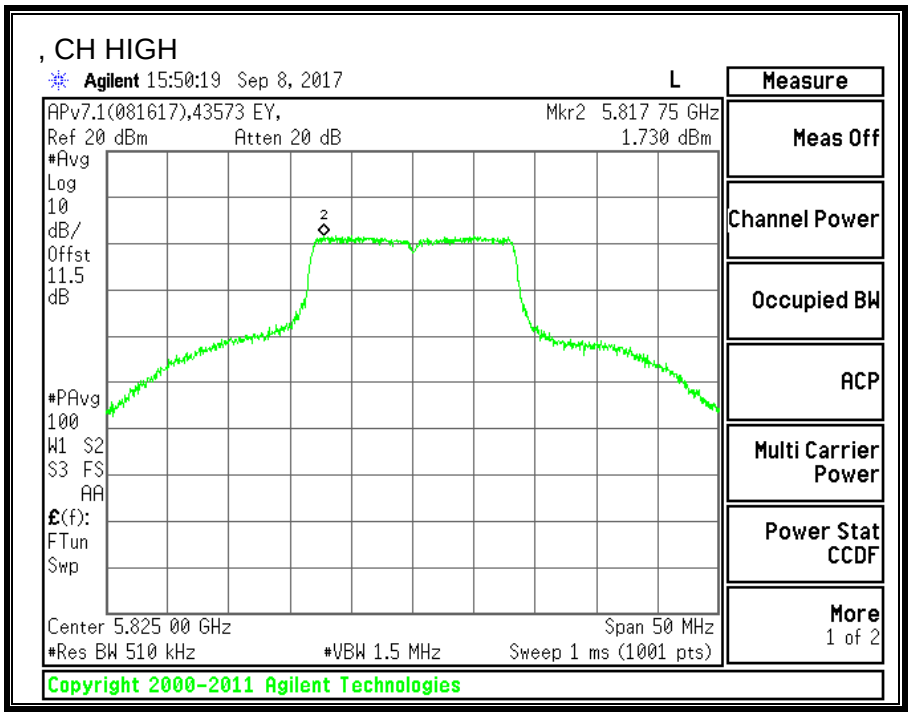
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	1.29	1.29	30.00	-28.72
Mid	5785	1.60	1.60	30.00	-28.40
High	5825	1.73	1.73	30.00	-28.27

, CH LOW



, CH MID





9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

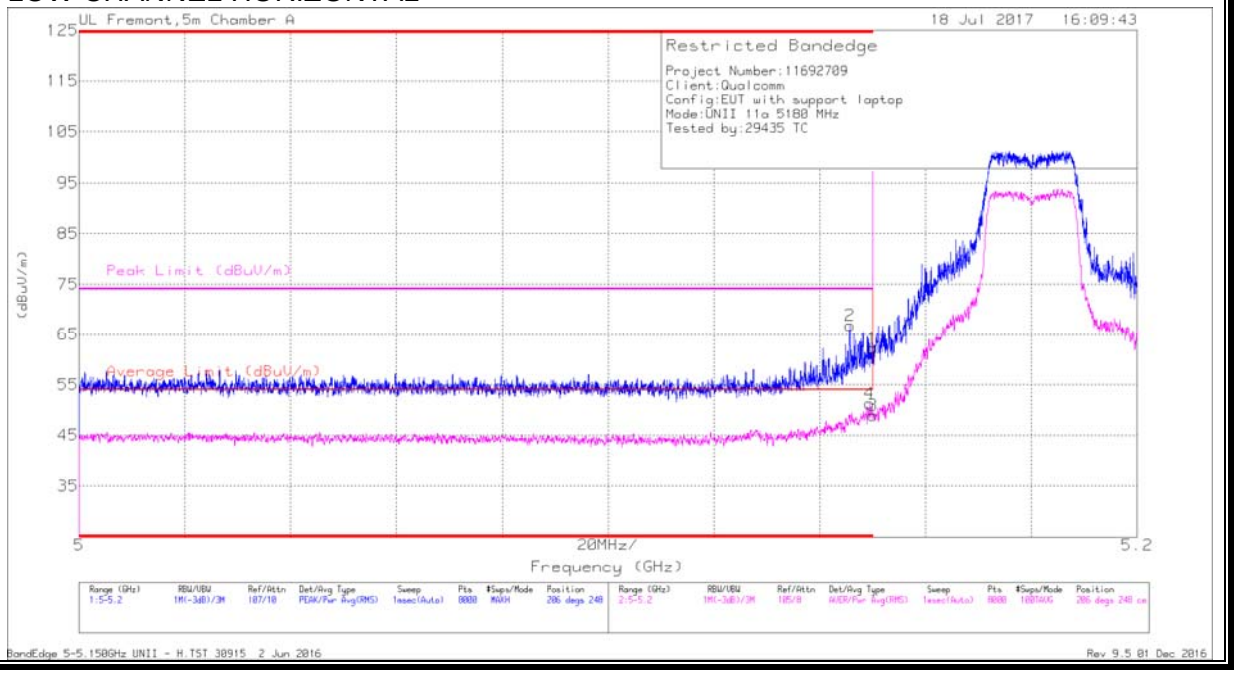
FCC §15.205 and §15.209
IC RSS-GEN, Section 8.9 and 8.10.

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

9.1.1. 11a 1TX MODE IN THE 5.2GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL

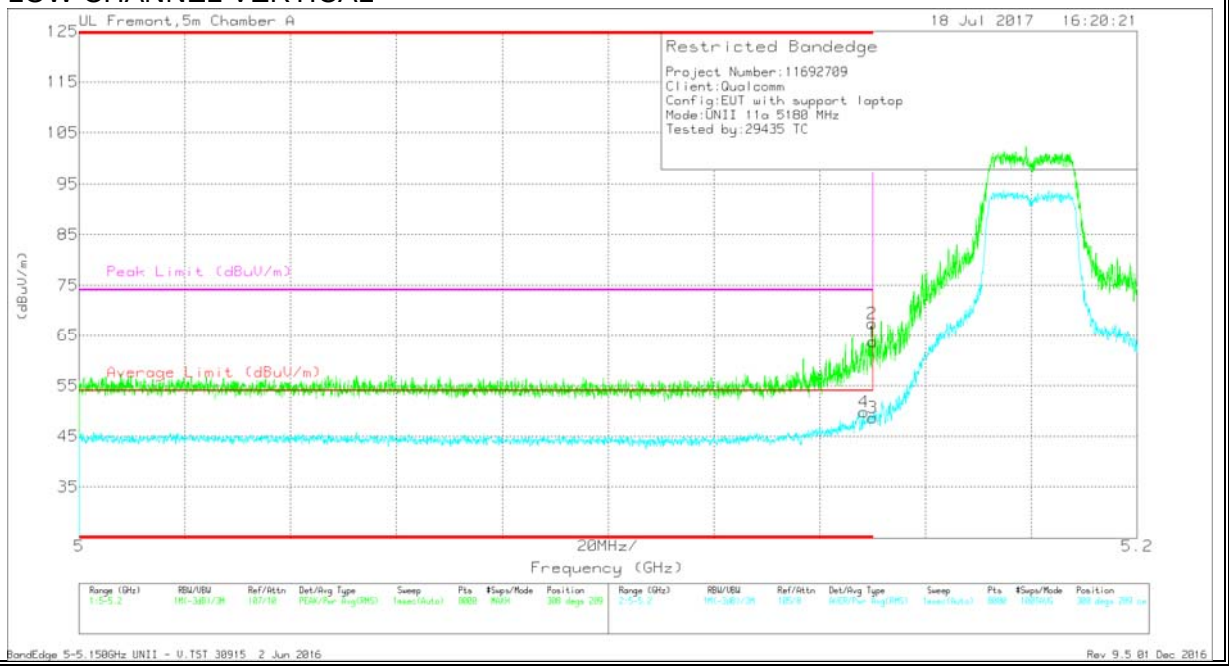


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (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	* 5.15	45.79	Pk	34.4	-18	62.19	-	-	74	-11.81	206	248	H
2	* 5.146	50.41	Pk	34.4	-18	66.81	-	-	74	-7.19	206	248	H
3	* 5.15	32.47	RMS	34.4	-18	48.87	54	-5.13	-	-	206	248	H
4	* 5.149	34.88	RMS	34.4	-18	51.28	54	-2.72	-	-	206	248	H

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

LOW CHANNEL VERTICAL



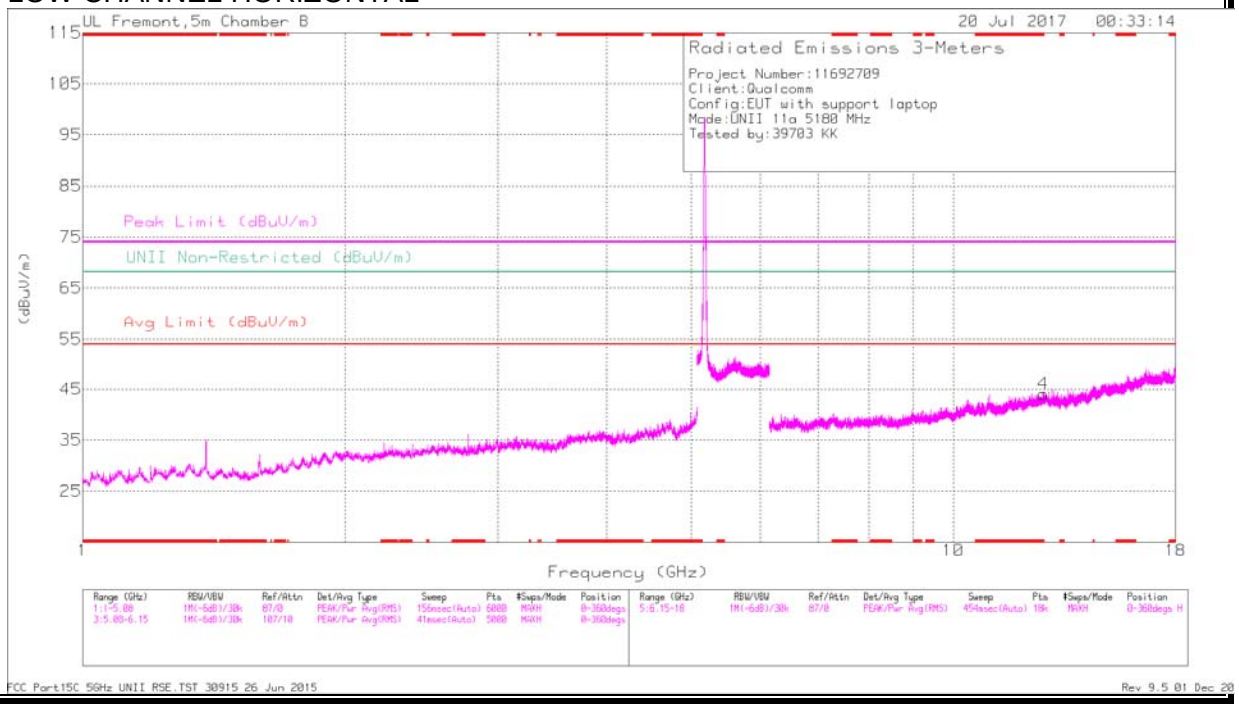
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (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	* 5.15	47.33	Pk	34.4	-18	63.73	-	-	74	-10.27	308	289	V
2	* 5.15	51.06	Pk	34.4	-18	67.46	-	-	74	-6.54	308	289	V
3	* 5.15	32.33	RMS	34.4	-18	48.73	54	-5.27	-	-	308	289	V
4	* 5.148	33.42	RMS	34.4	-18	49.82	54	-4.18	-	-	308	289	V

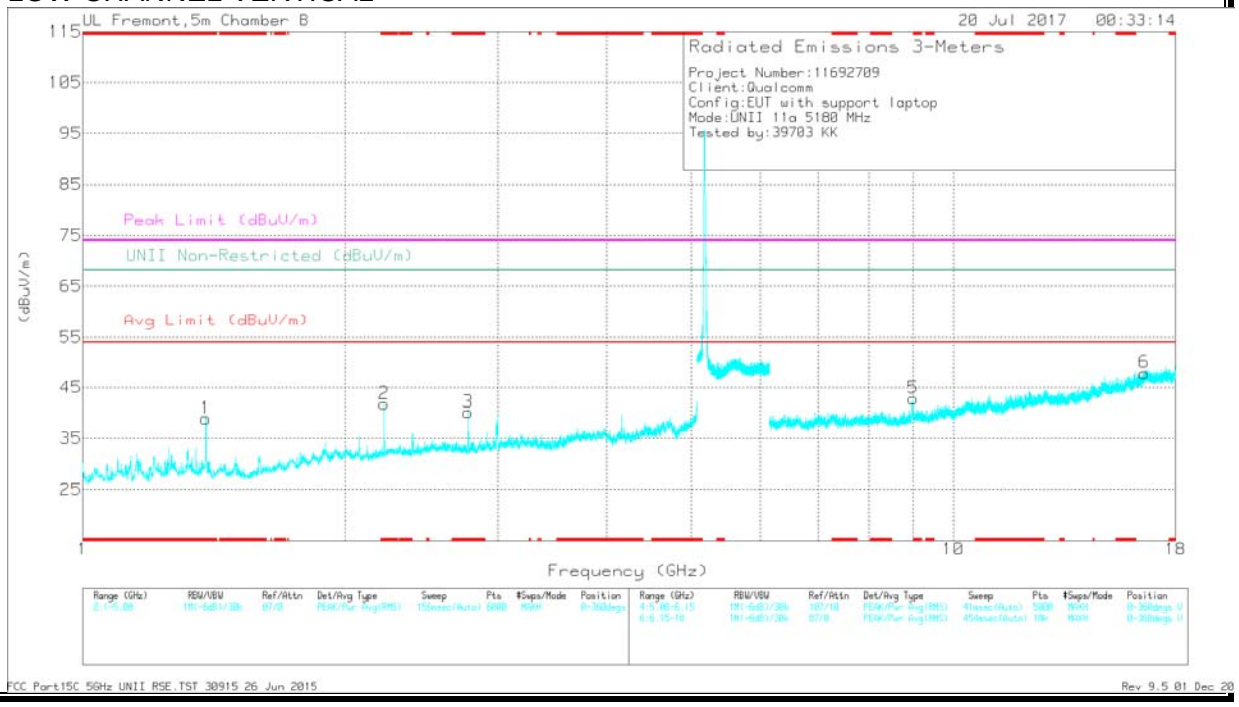
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Radiated Emissions

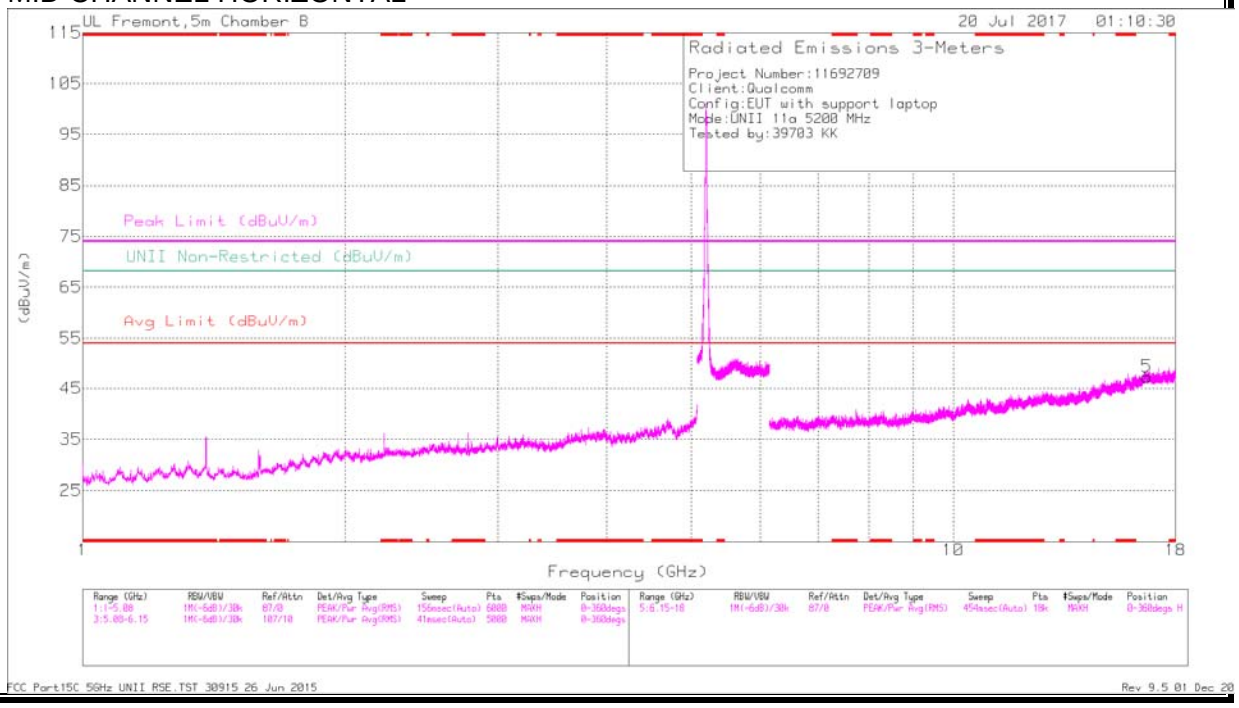
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.387	48.89	PK-U	28.4	-33.3	43.99	-	-	74	-30.01	-	-	127	137	V
* 1.386	43.5	ADR	28.4	-33.3	38.6	54	-15.4	-	-	-	-	127	137	V
* 2.22	42.07	PK-U	31.7	-32.4	41.37	-	-	74	-32.63	-	-	1	179	V
* 2.22	30.07	ADR	31.7	-32.4	29.37	54	-24.63	-	-	-	-	1	179	V
* 2.772	46.34	PK-U	32.3	-32.3	46.34	-	-	74	-27.66	-	-	161	119	V
* 2.772	37.73	ADR	32.3	-32.3	37.73	54	-16.27	-	-	-	-	161	119	V
* 12.69	32.75	PK-U	39.3	-22.1	49.95	-	-	74	-24.05	-	-	15	119	H
* 12.693	21.15	ADR	39.3	-22.2	38.25	54	-15.75	-	-	-	-	15	119	H
16.57	31.57	PK-U	42	-20	53.57	-	-	-	-	68.2	-14.63	15	201	V
16.57	20.93	ADR	42	-20	42.93	-	-	-	-	-	-	15	201	V

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

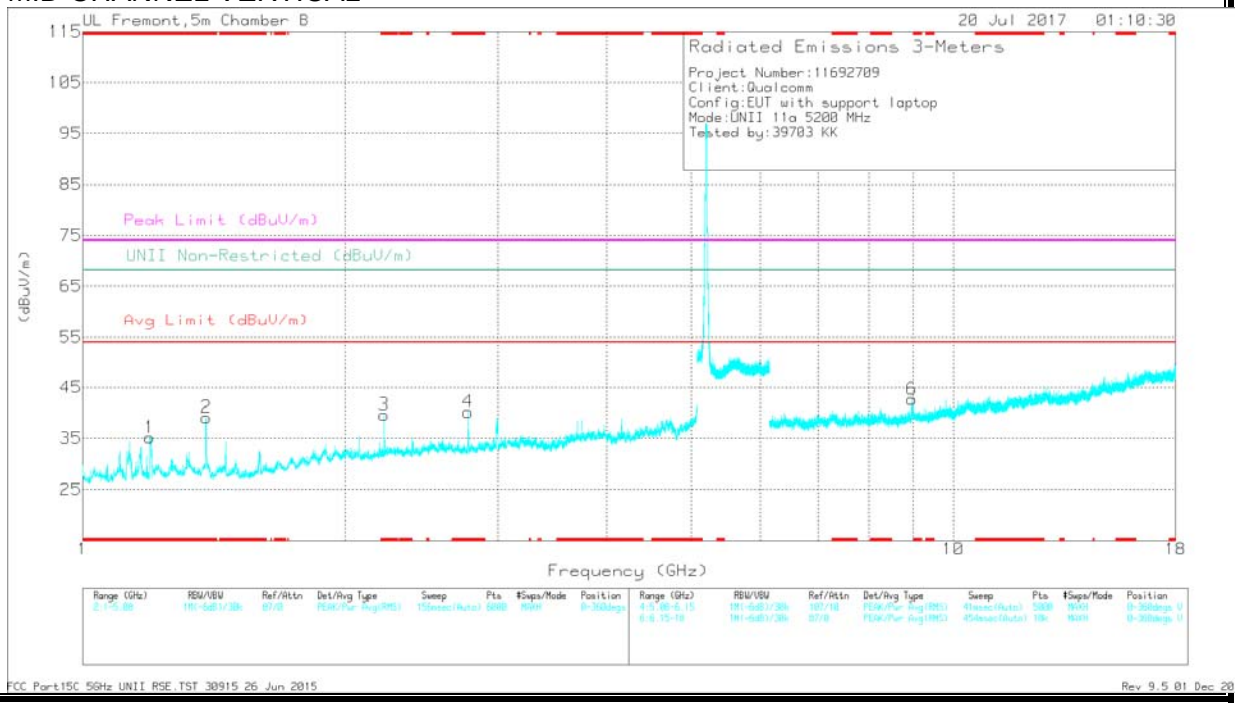
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Radiated Emissions

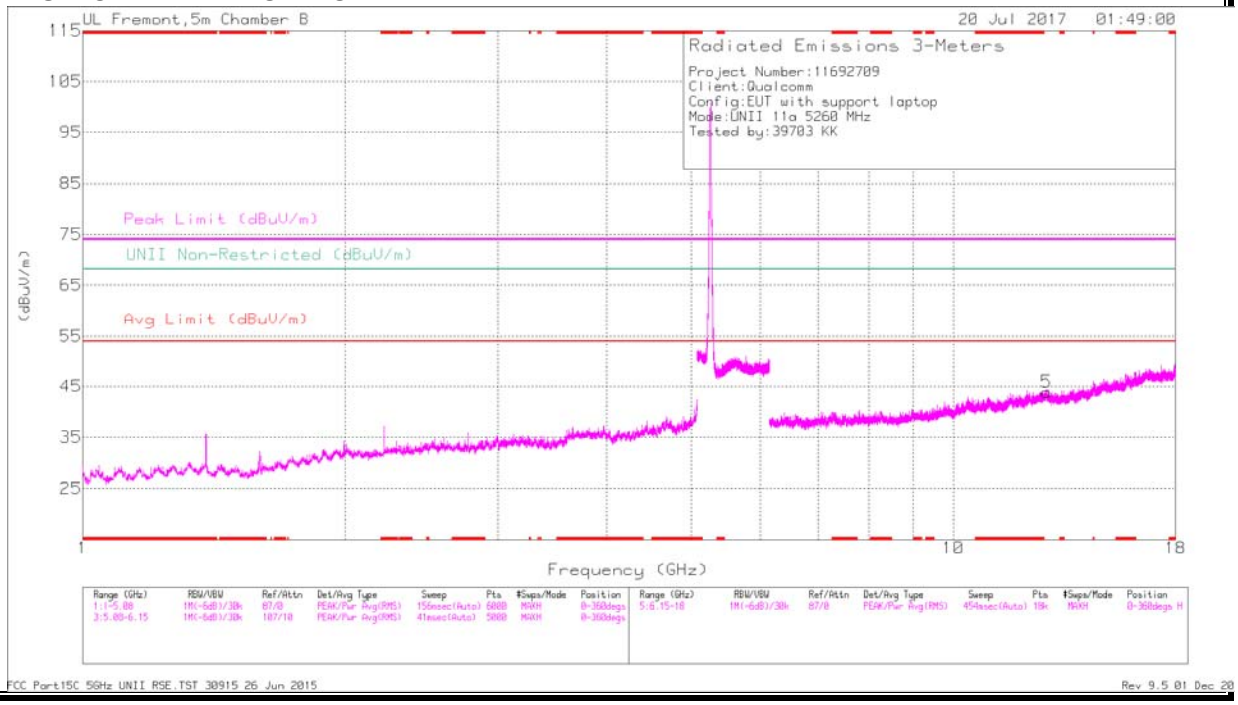
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.194	53.61	PK-U	27.9	-34.1	47.41	-	-	74	-26.59	-	-	123	157	V
* 1.196	30.62	ADR	27.9	-34.1	24.42	54	-29.58	-	-	-	-	123	157	V
* 1.386	48.93	PK-U	28.4	-33.3	44.03	-	-	74	-29.97	-	-	132	134	V
* 1.386	43.34	ADR	28.4	-33.3	38.44	54	-15.56	-	-	-	-	132	134	V
* 2.22	46.17	PK-U	31.7	-32.4	45.47	-	-	74	-28.53	-	-	104	137	V
* 2.22	37.77	ADR	31.7	-32.4	37.07	54	-16.93	-	-	-	-	104	137	V
* 2.771	46.21	PK-U	32.3	-32.3	46.21	-	-	74	-27.79	-	-	160	110	V
* 2.772	38.09	ADR	32.3	-32.3	38.09	54	-15.91	-	-	-	-	160	110	V
8.96	34.83	PK-U	36.2	-25.1	45.93	-	-	-	-	68.2	-22.27	224	263	V
8.961	24.07	ADR	36.2	-25.1	35.17	-	-	-	-	-	-	224	263	V
16.685	20.4	ADR	42.2	-19.5	43.1	-	-	-	-	-	-	224	199	H
16.687	30.88	PK-U	42.2	-19.5	53.58	-	-	-	-	68.2	-14.62	224	199	H

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

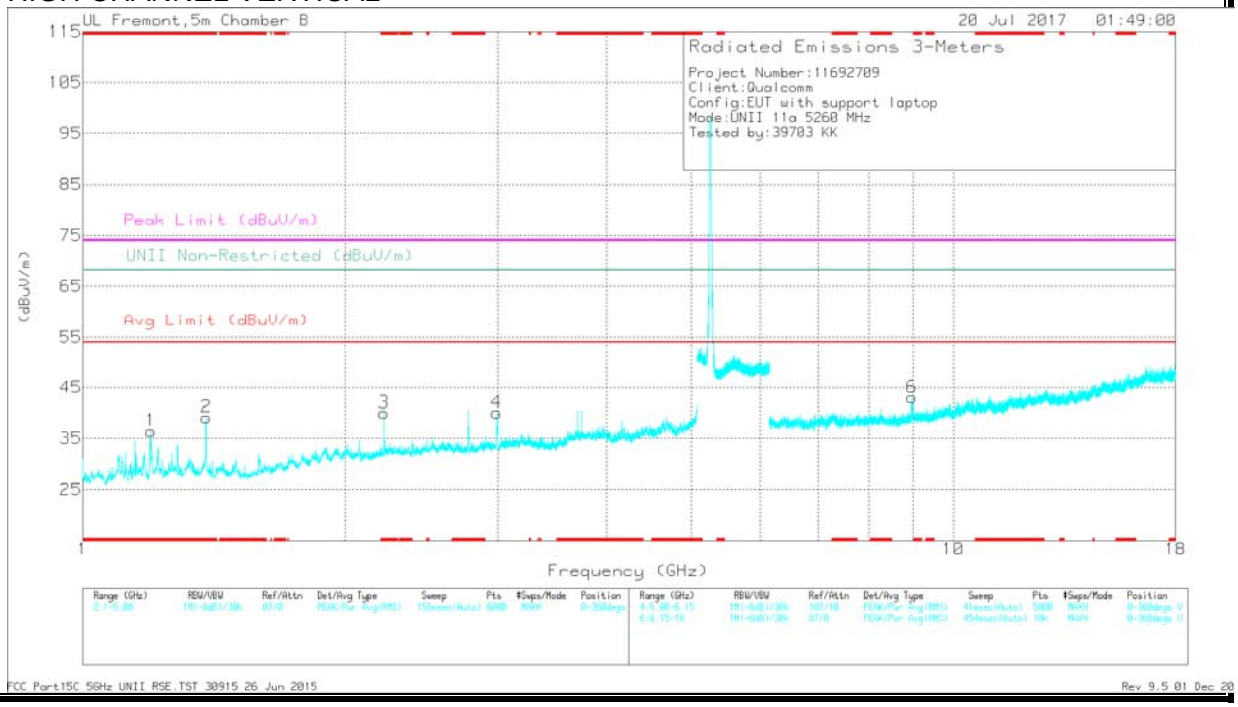
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.198	55.15	PK-U	28	-34.1	49.05	-	-	74	-24.95	-	-	155	214	V
* 1.198	30.65	ADR	28	-34.1	24.55	54	-29.45	-	-	-	-	155	214	V
* 2.22	45.06	PK-U	31.7	-32.4	44.36	-	-	74	-29.64	-	-	117	244	V
* 2.22	31.73	ADR	31.7	-32.4	31.03	54	-22.97	-	-	-	-	117	244	V
2.987	46.55	PK-U	32.7	-31.6	47.65	-	-	-	-	68.2	-20.55	109	108	V
2.987	32.01	ADR	32.7	-31.6	33.11	-	-	-	-	-	-	109	108	V
8.96	34.67	PK-U	36.2	-25.1	45.77	-	-	-	-	68.2	-22.43	346	296	V
8.96	24.07	ADR	36.2	-25.1	35.17	-	-	-	-	-	-	346	296	V
12.796	32.18	PK-U	39.4	-21.8	49.78	-	-	-	-	68.2	-18.42	354	127	H
12.797	21.14	ADR	39.4	-21.8	38.74	-	-	-	-	-	-	354	127	H

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

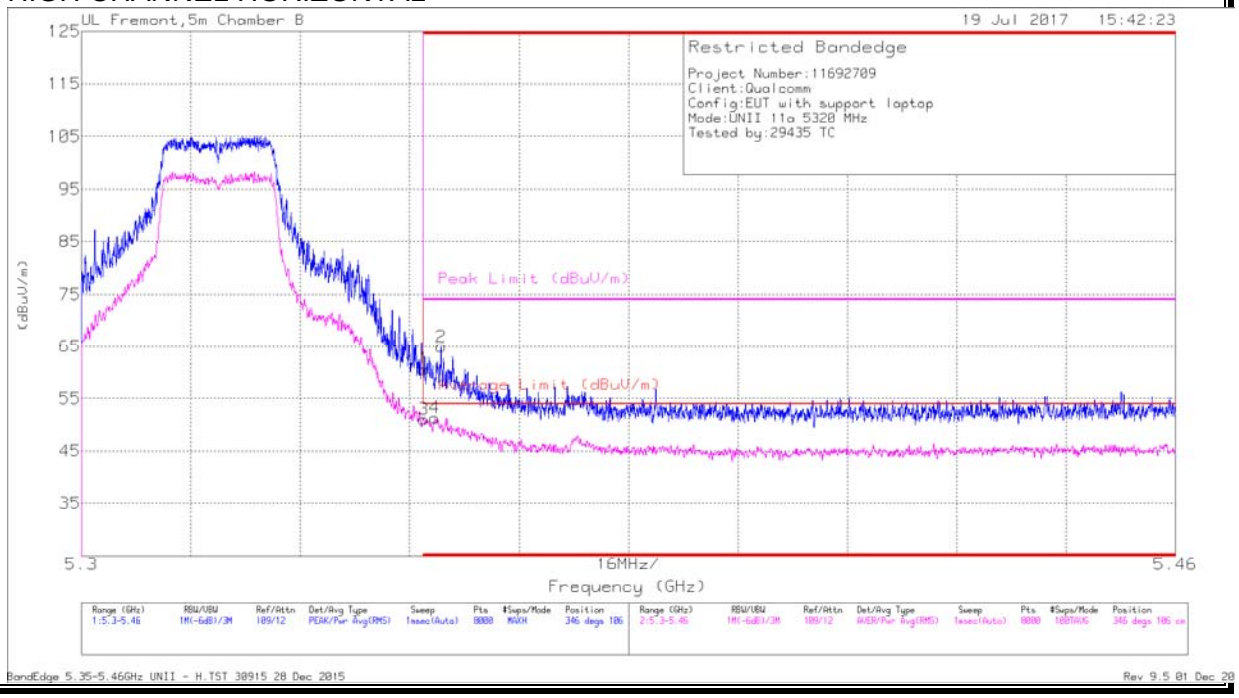
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.1.2. 11a 1TX MODE IN THE 5.3GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL

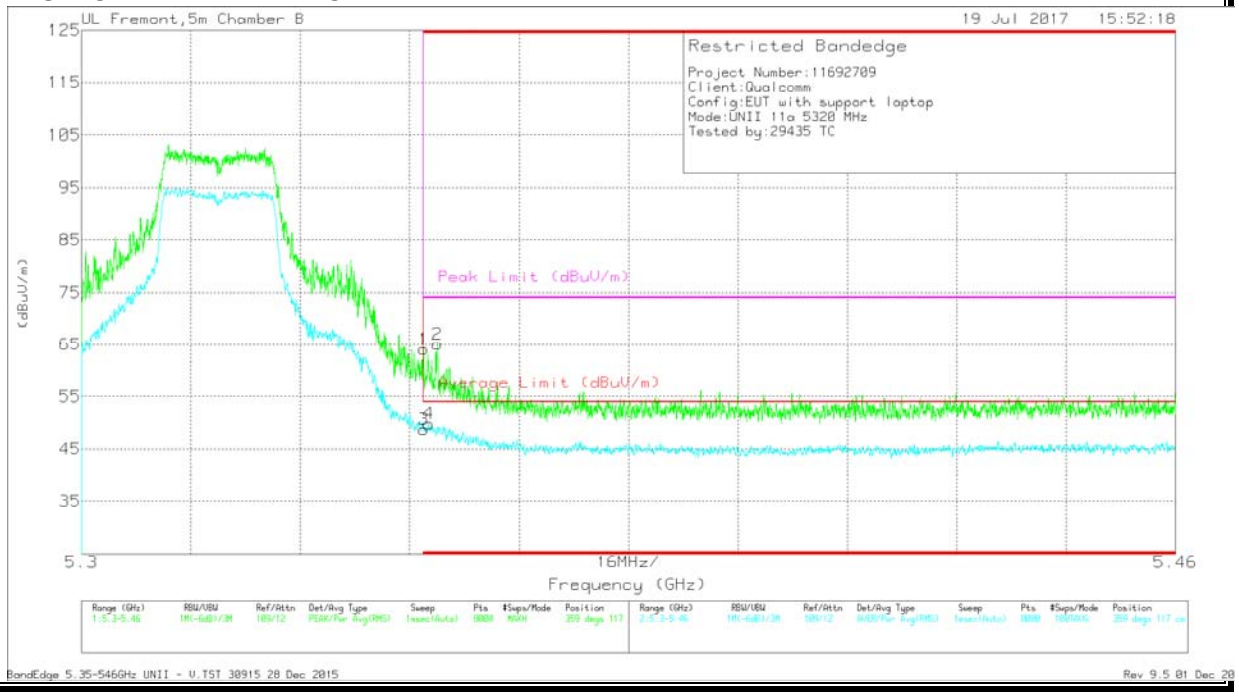


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (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	44.16	Pk	34.9	-18.5	60.56	-	-	74	-13.44	346	106	H
3	* 5.35	34.62	RMS	34.9	-18.5	51.02	54	-2.98	-	-	346	106	H
4	* 5.352	34.79	RMS	34.9	-18.4	51.29	54	-2.71	-	-	346	106	H
2	* 5.353	48.38	Pk	34.9	-18.3	64.98	-	-	74	-9.02	346	106	H

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

HIGH CHANNEL VERTICAL



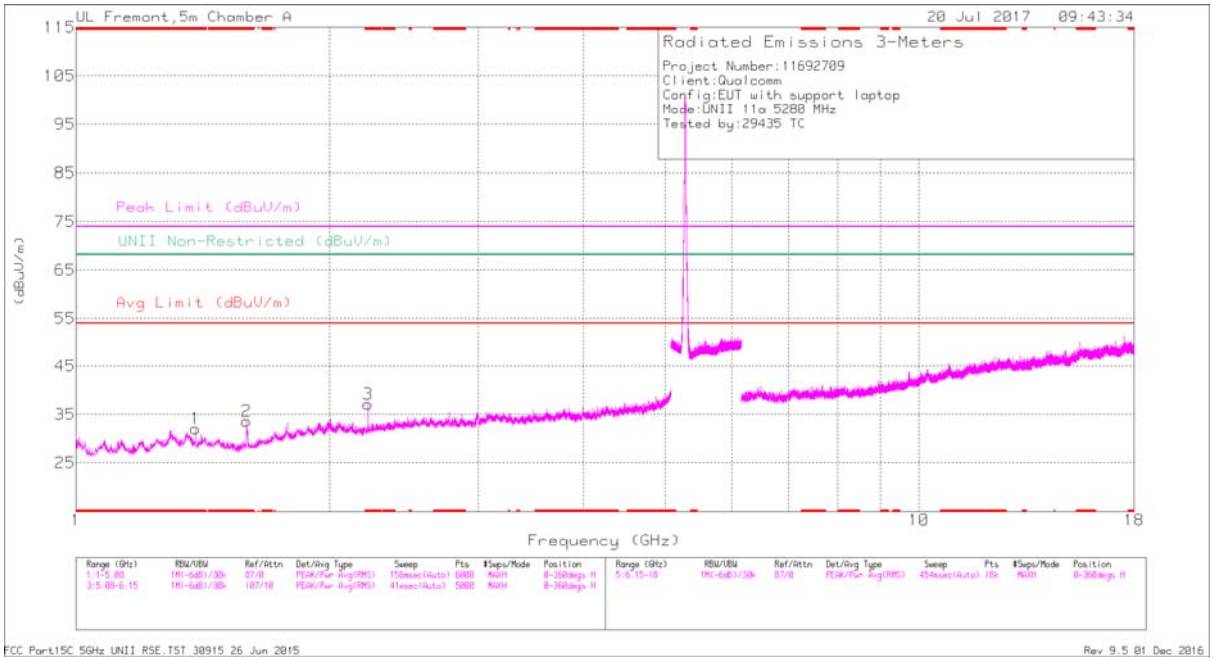
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Ant Gain [dBi]	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	47.68	Pk	34.9	-18.5	0	64.08	-	-	74	-9.92	359	117	V
3	* 5.35	32.32	RMS	34.9	-18.5	0	48.72	54	-5.28	-	-	359	117	V
4	* 5.351	33.34	RMS	34.9	-18.5	0	49.74	54	-4.26	-	-	359	117	V
2	* 5.352	48.54	Pk	34.9	-18.4	0	65.04	-	-	74	-8.96	359	117	V

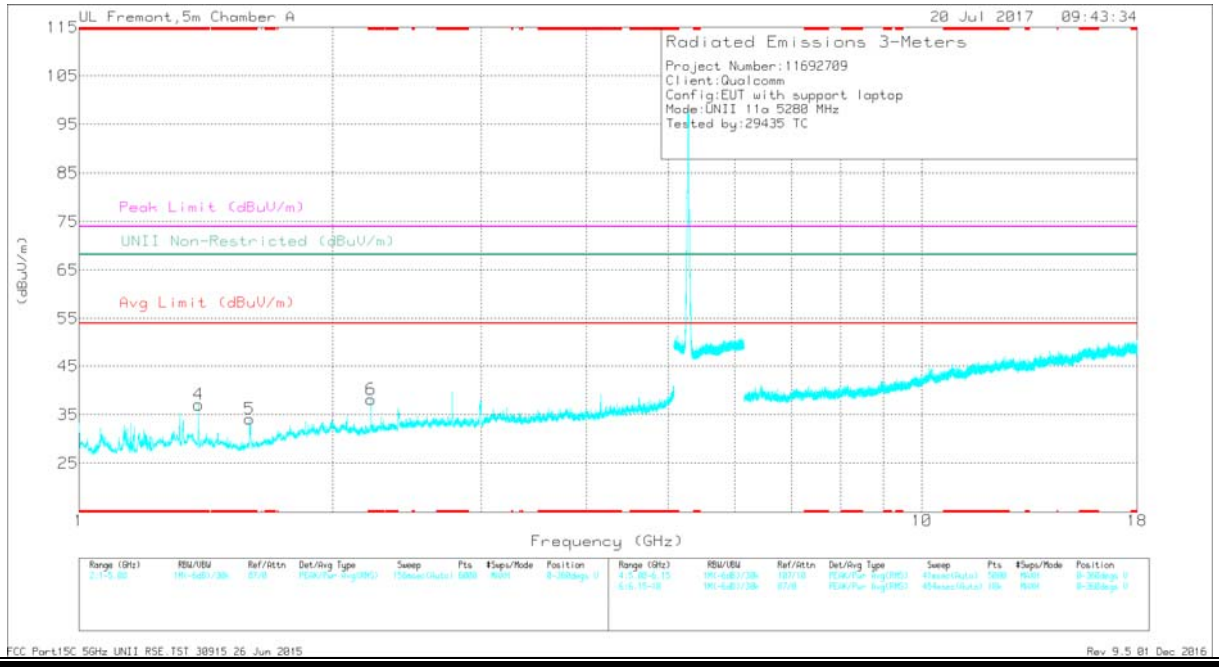
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Radiated Emissions

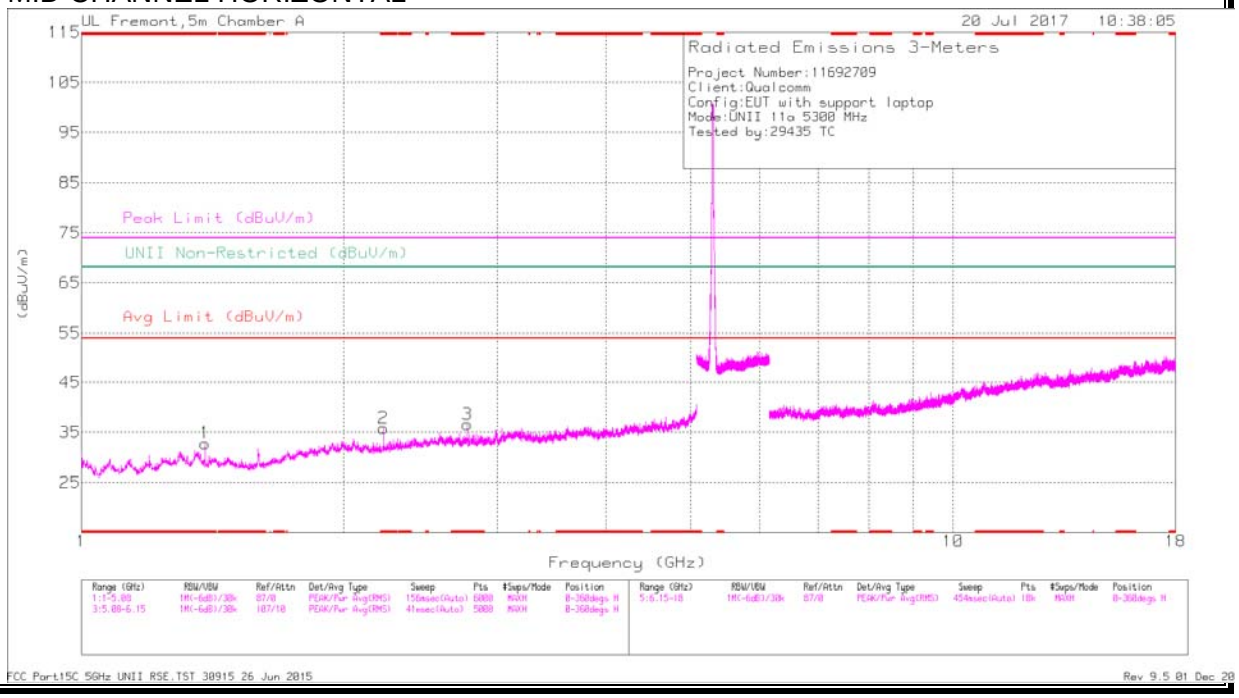
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.386	43.75	PK-U	28.9	-32.7	0	39.95	-	-	74	-34.05	-	-	140	302	H
* 1.386	36.21	ADR	28.9	-32.7	0	32.41	54	-21.59	-	-	-	-	140	302	H
* 1.594	43.52	PK-U	28.1	-33	0	38.62	-	-	74	-35.38	-	-	334	130	H
* 1.593	29.04	ADR	28.1	-33	0	24.14	54	-29.86	-	-	-	-	334	130	H
* 2.22	43.79	PK-U	31.3	-32.4	0	42.69	-	-	74	-31.31	-	-	202	371	H
* 2.22	29.67	ADR	31.3	-32.4	0	28.57	54	-25.43	-	-	-	-	202	371	H
* 1.386	44.74	PK-U	28.9	-32.7	0	40.94	-	-	74	-33.06	-	-	360	111	V
* 1.386	38.01	ADR	28.9	-32.7	0	34.21	54	-19.79	-	-	-	-	360	111	V
* 1.594	46.49	PK-U	28.1	-33	0	41.59	-	-	74	-32.41	-	-	10	221	V
* 1.594	29.69	ADR	28.1	-33	0	24.79	54	-29.21	-	-	-	-	10	221	V
* 2.22	44.75	PK-U	31.3	-32.4	0	43.65	-	-	74	-30.35	-	-	96	390	V
* 2.22	30.57	ADR	31.3	-32.4	0	29.47	54	-24.53	-	-	-	-	96	390	V

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

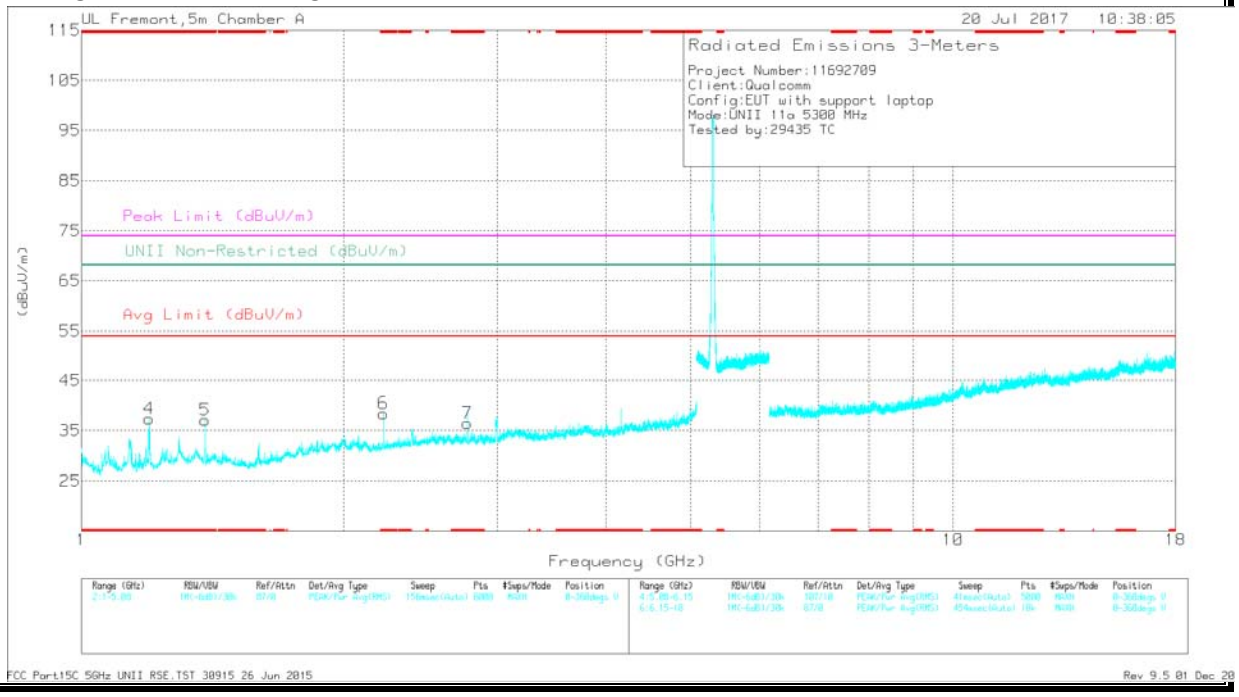
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Radiated Emissions

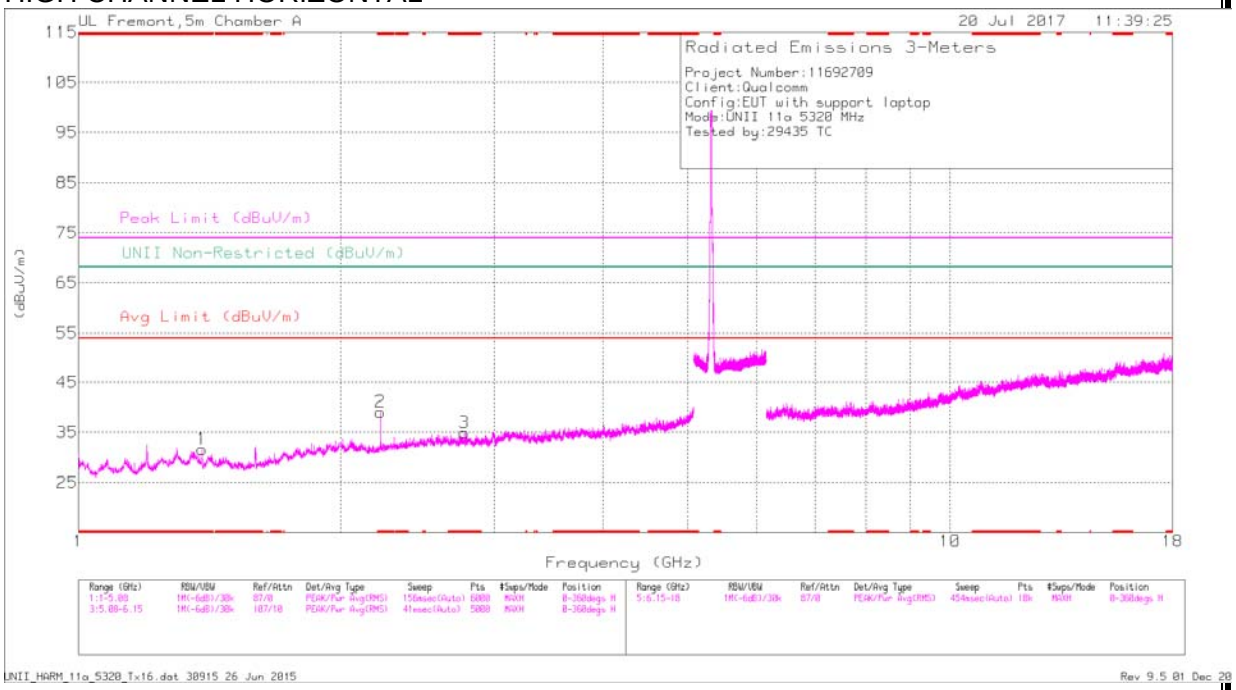
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.386	43.99	PK-U	28.9	-32.7	0	40.19	-	-	74	-33.81	-	-	310	374	H
* 1.386	36.87	ADR	28.9	-32.7	0	33.07	54	-20.93	-	-	-	-	310	374	H
* 2.22	42.92	PK-U	31.3	-32.4	0	41.82	-	-	74	-32.18	-	-	135	198	H
* 2.22	28.98	ADR	31.3	-32.4	0	27.88	54	-26.12	-	-	-	-	135	198	H
* 2.772	43.18	PK-U	32.3	-31.1	0	44.38	-	-	74	-29.62	-	-	282	359	H
* 2.772	33.7	ADR	32.3	-31.1	0	34.9	54	-19.1	-	-	-	-	282	359	H
* 1.198	53.38	PK-U	28.2	-33.7	0	47.88	-	-	74	-26.12	-	-	0	171	V
* 1.196	30.52	ADR	28.2	-33.6	0	25.12	54	-28.88	-	-	-	-	0	171	V
* 1.386	45.36	PK-U	28.9	-32.7	0	41.56	-	-	74	-32.44	-	-	358	104	V
* 1.386	38.28	ADR	28.9	-32.7	0	34.48	54	-19.52	-	-	-	-	358	104	V
* 2.22	44.97	PK-U	31.3	-32.4	0	43.87	-	-	74	-30.13	-	-	343	143	V
* 2.22	30.73	ADR	31.3	-32.4	0	29.63	54	-24.37	-	-	-	-	343	143	V
* 2.772	44.29	PK-U	32.3	-31.1	0	45.49	-	-	74	-28.51	-	-	185	233	V
* 2.772	34.73	ADR	32.3	-31.1	0	35.93	54	-18.07	-	-	-	-	185	233	V

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

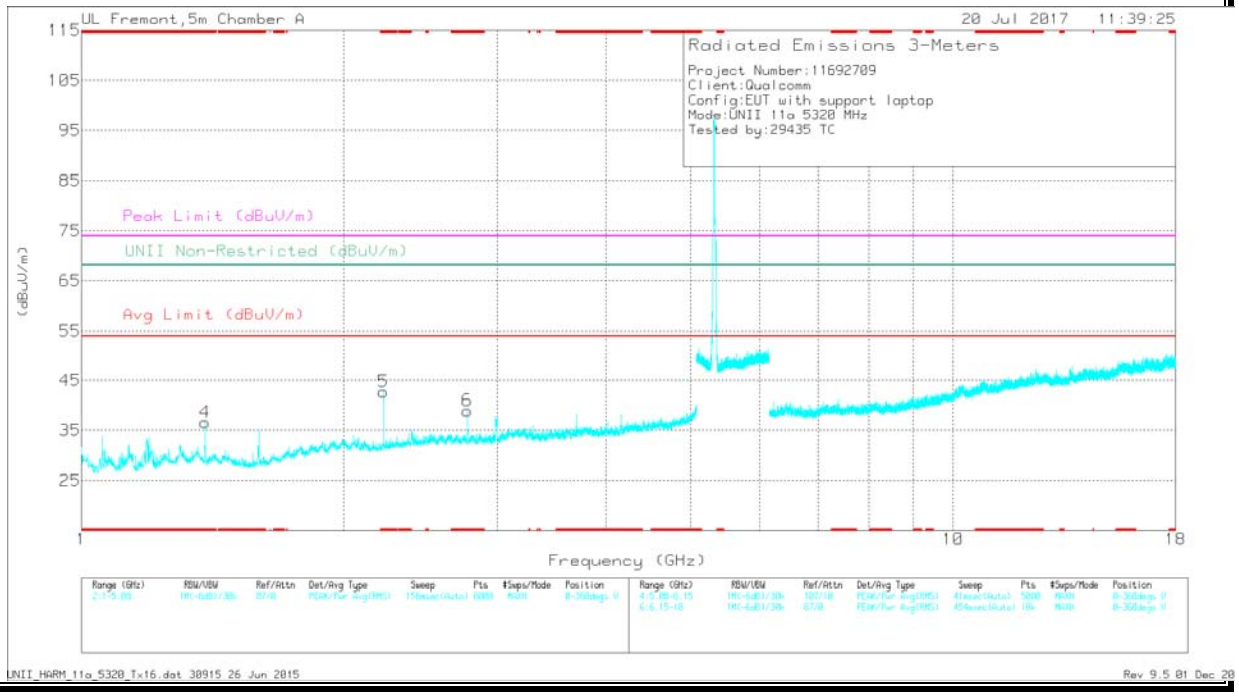
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.386	43.92	PK-U	28.9	-32.7	40.12	-	-	74	-33.88	-	-	127	396	H
* 1.386	36.32	ADR	28.9	-32.7	32.52	54	-21.48	-	-	-	-	127	396	H
* 2.22	42.27	PK-U	31.3	-32.4	41.17	-	-	74	-32.83	-	-	205	160	H
* 2.22	29.21	ADR	31.3	-32.4	28.11	54	-25.89	-	-	-	-	205	160	H
* 2.772	43.16	PK-U	32.3	-31.1	44.36	-	-	74	-29.64	-	-	295	364	H
* 2.772	33.97	ADR	32.3	-31.1	35.17	54	-18.83	-	-	-	-	295	364	H
* 1.386	45.58	PK-U	28.9	-32.7	41.78	-	-	74	-32.22	-	-	4	102	V
* 1.386	38.47	ADR	28.9	-32.7	34.67	54	-19.33	-	-	-	-	4	102	V
* 2.22	44	PK-U	31.3	-32.4	42.9	-	-	74	-31.1	-	-	342	132	V
* 2.22	30.4	ADR	31.3	-32.4	29.3	54	-24.7	-	-	-	-	342	132	V
* 2.772	43.9	PK-U	32.3	-31.1	45.1	-	-	74	-28.9	-	-	49	102	V
* 2.772	34.67	ADR	32.3	-31.1	35.87	54	-18.13	-	-	-	-	49	102	V

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

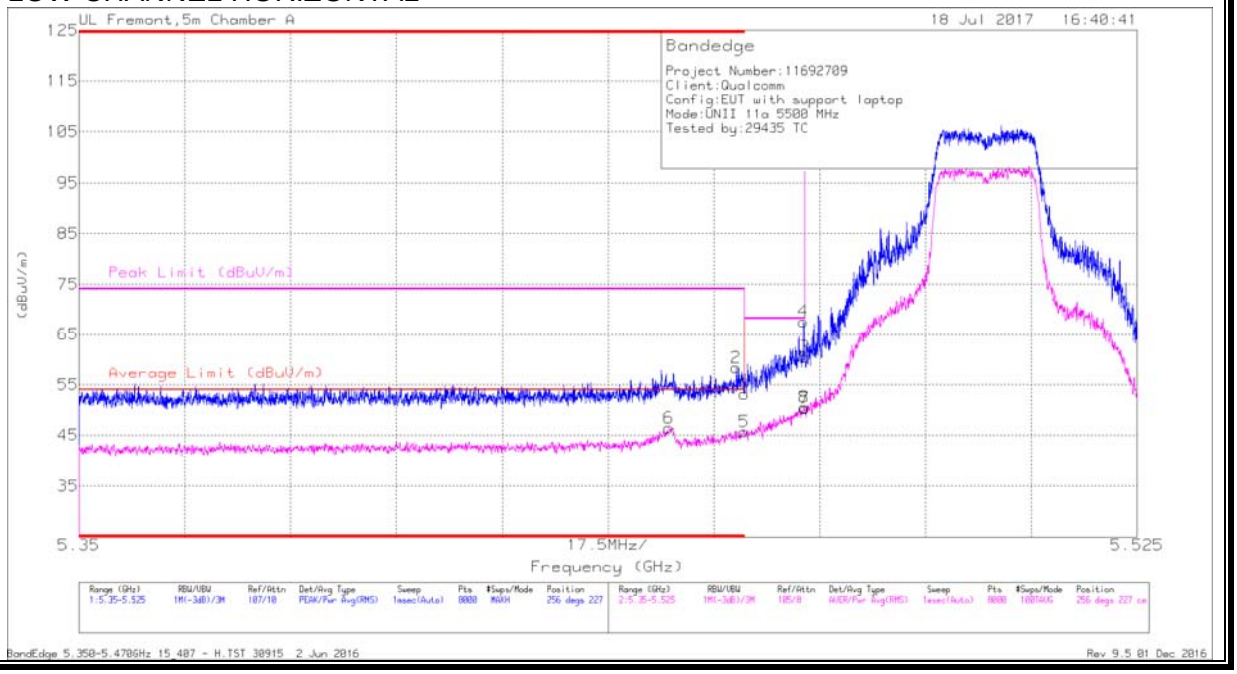
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.1.3. 11a 1TX MODE IN THE 5.6GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL

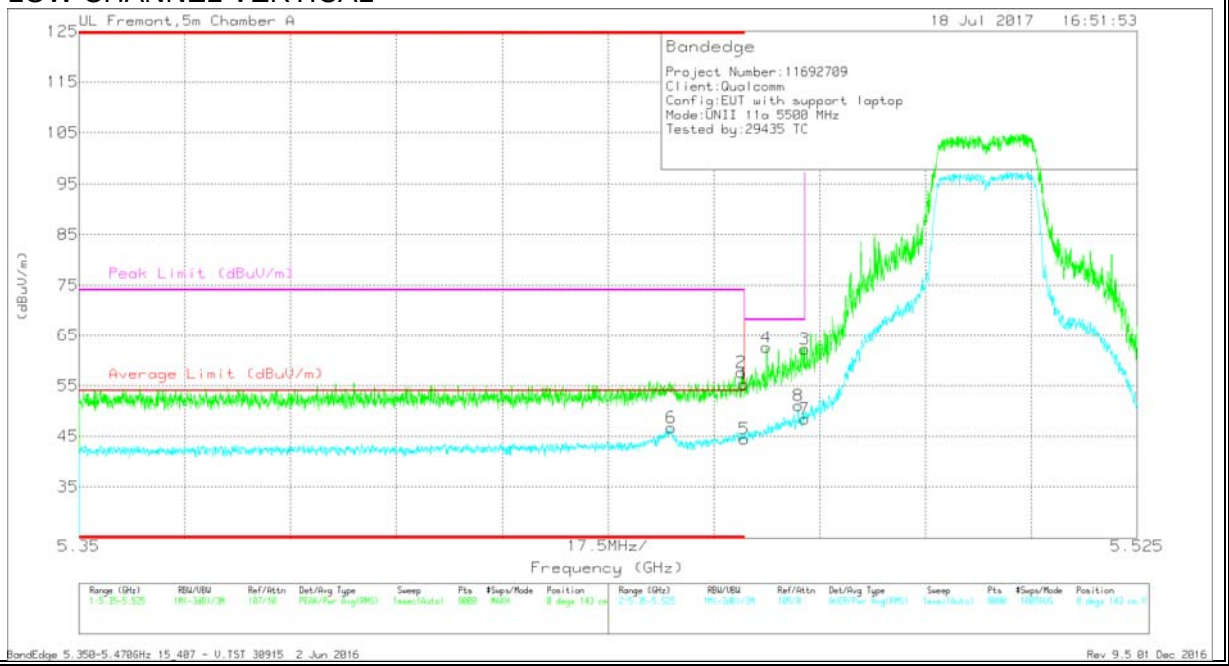


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (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	* 5.46	36.8	Pk	34.7	-18.4	53.1	-	-	74	-20.9	256	227	H
2	* 5.459	42.11	Pk	34.7	-18.4	58.41	-	-	74	-15.59	256	227	H
5	* 5.46	29.37	RMS	34.7	-18.4	45.67	54	-8.33	-	-	256	227	H
6	* 5.448	30.08	RMS	34.7	-18.3	46.48	54	-7.52	-	-	256	227	H
3	5.47	43.93	Pk	34.8	-18.2	60.53	-	-	68.2	-7.67	256	227	H
4	5.47	51.01	Pk	34.8	-18.2	67.61	-	-	68.2	-.59	256	227	H
7	5.47	33.72	RMS	34.8	-18.2	50.32	-	-	-	-	256	227	H
8	5.47	33.88	RMS	34.8	-18.2	50.48	-	-	-	-	256	227	H

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

LOW CHANNEL VERTICAL



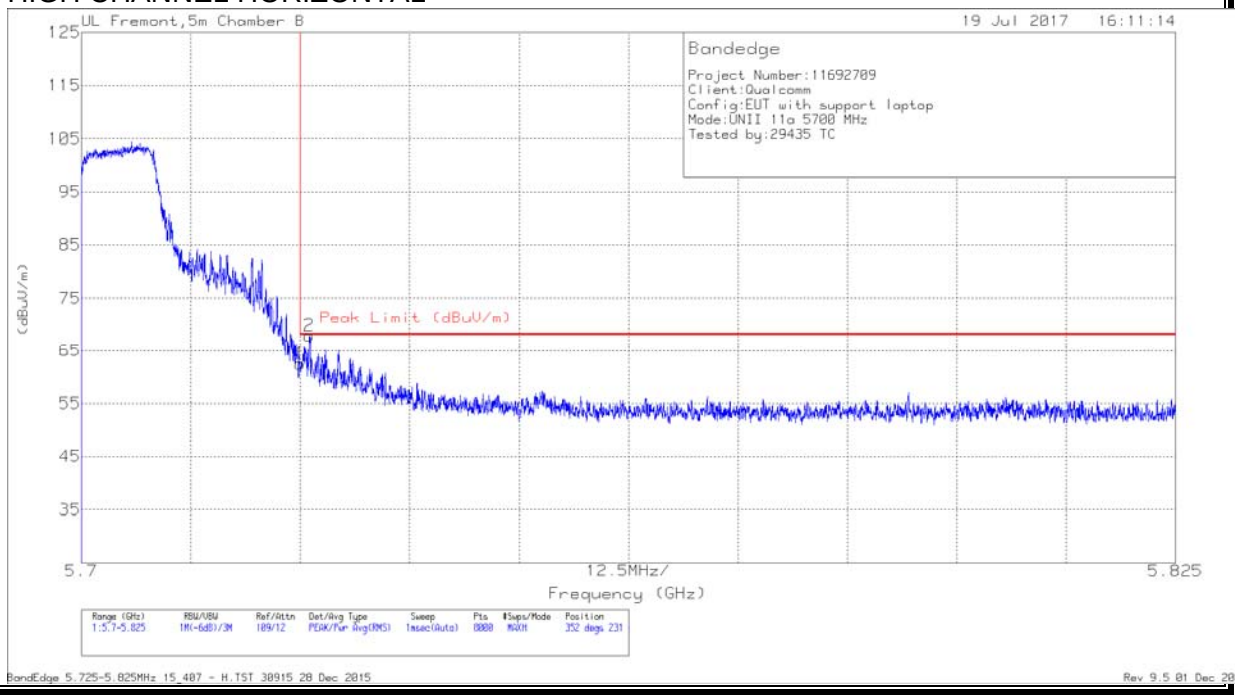
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (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	* 5.46	39	Pk	34.7	-18.4	55.3	-	-	74	-18.7	0	143	V
2	* 5.46	41.3	Pk	34.7	-18.4	57.6	-	-	74	-16.4	0	143	V
5	* 5.46	28.15	RMS	34.7	-18.4	44.45	54	-9.55	-	-	0	143	V
6	* 5.448	30.33	RMS	34.7	-18.3	46.73	54	-7.27	-	-	0	143	V
4	5.464	46.16	Pk	34.7	-18.3	62.56	-	-	68.2	-5.64	0	143	V
8	5.469	34.43	RMS	34.8	-18.2	51.03	-	-	-	-	0	143	V
3	5.47	45.67	Pk	34.8	-18.2	62.27	-	-	68.2	-5.93	0	143	V
7	5.47	31.81	RMS	34.8	-18.2	48.41	-	-	-	-	0	143	V

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

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL



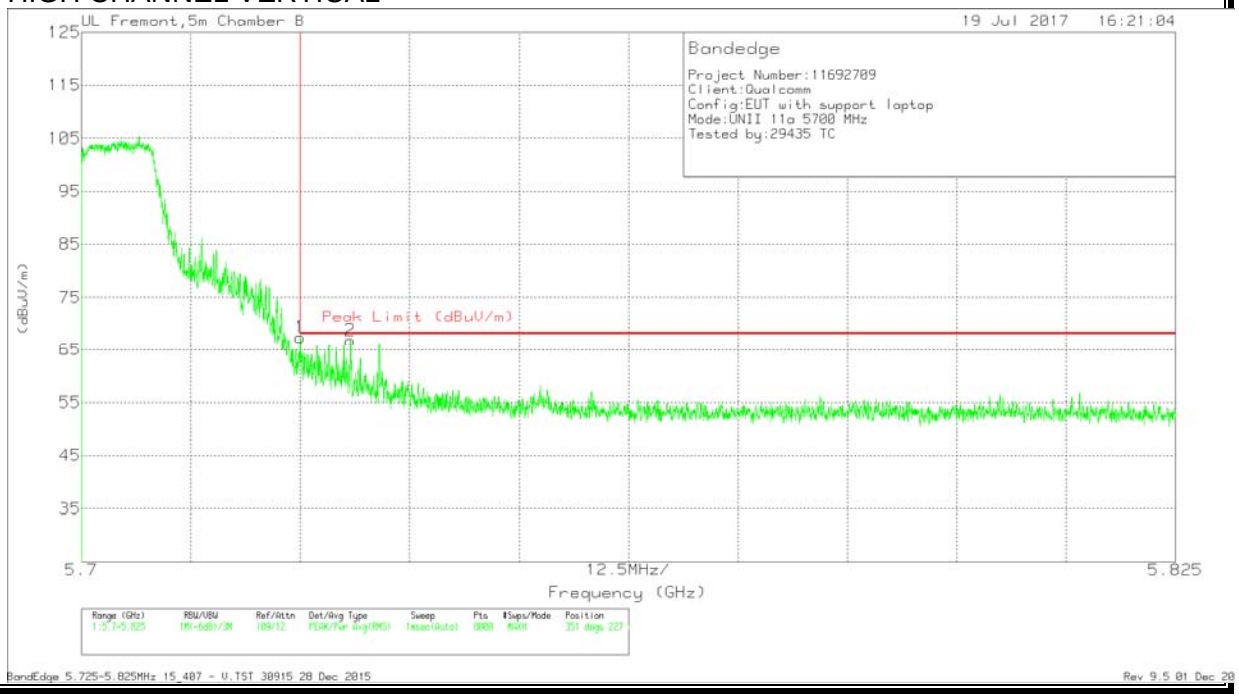
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	47.03	Pk	35	-19.5	62.53	68.2	-5.67	352	231	H
2	5.726	52.39	Pk	35	-19.5	67.89	68.2	-.31	352	231	H

Pk - Peak detector

BandEdge 5.725-5.825MHz 15_407 - H.TST 30915 28 Dec 2015

HIGH CHANNEL VERTICAL



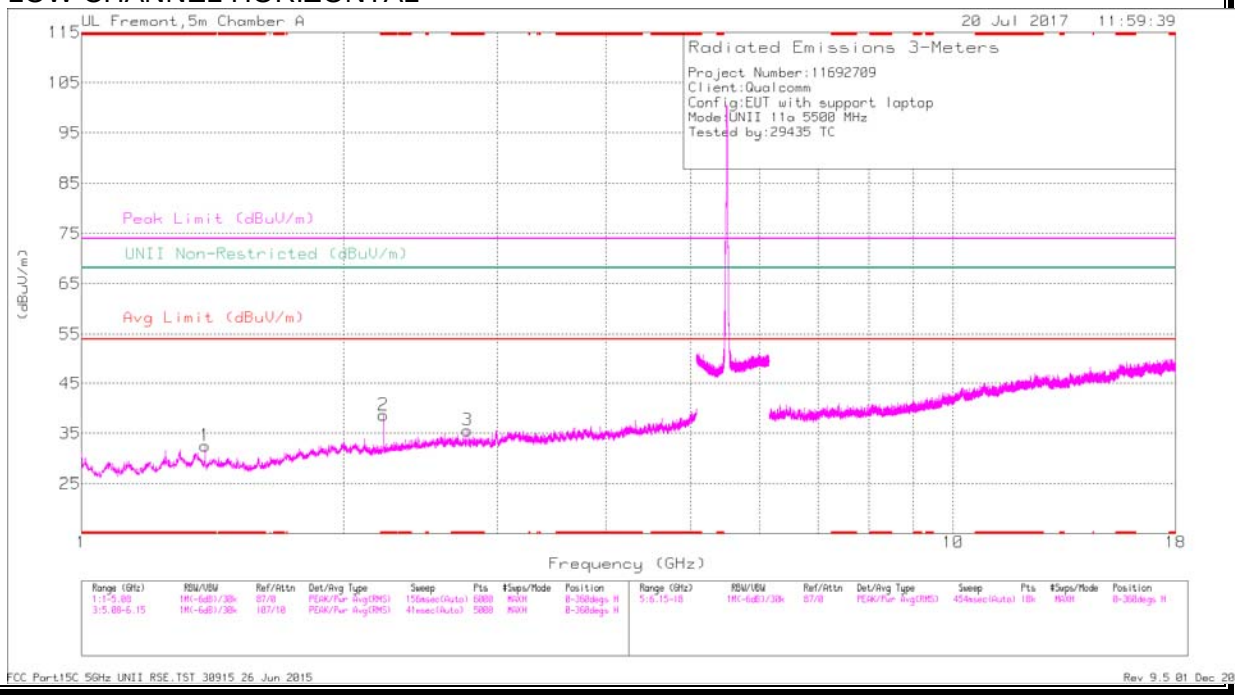
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	51.89	Pk	35	-19.5	67.39	68.2	-.81	351	227	V
2	5.731	51.28	Pk	35	-19.5	66.78	68.2	-1.42	351	227	V

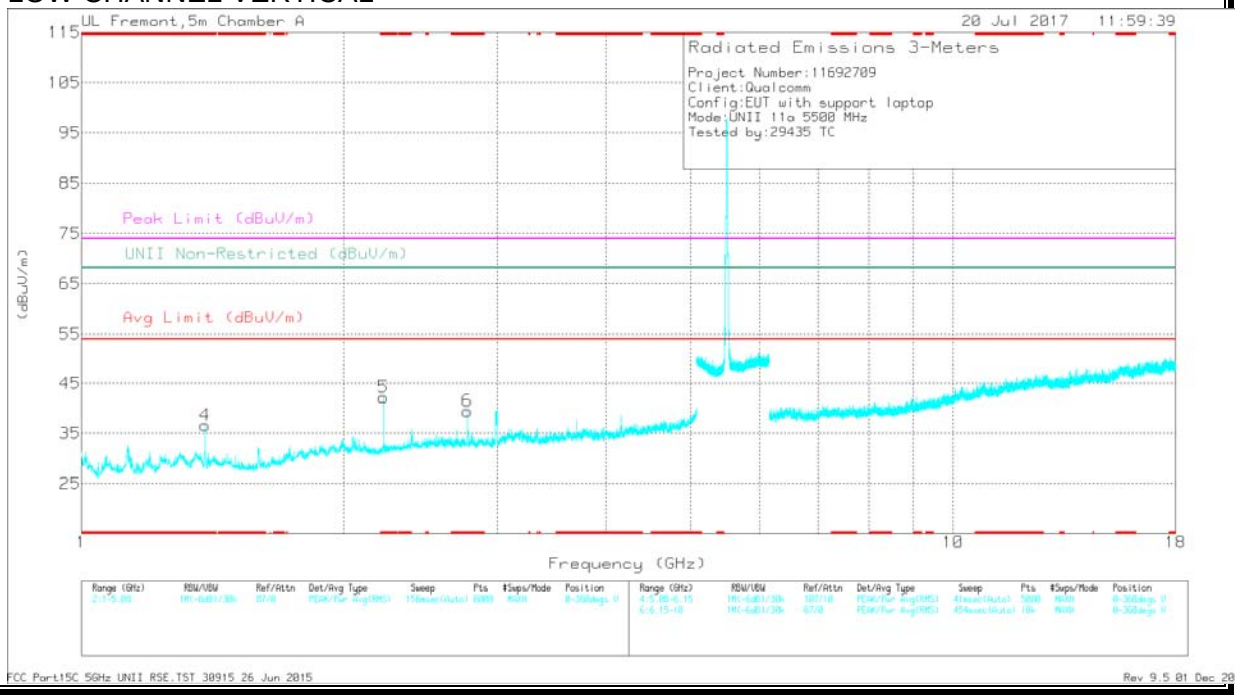
Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Radiated Emissions

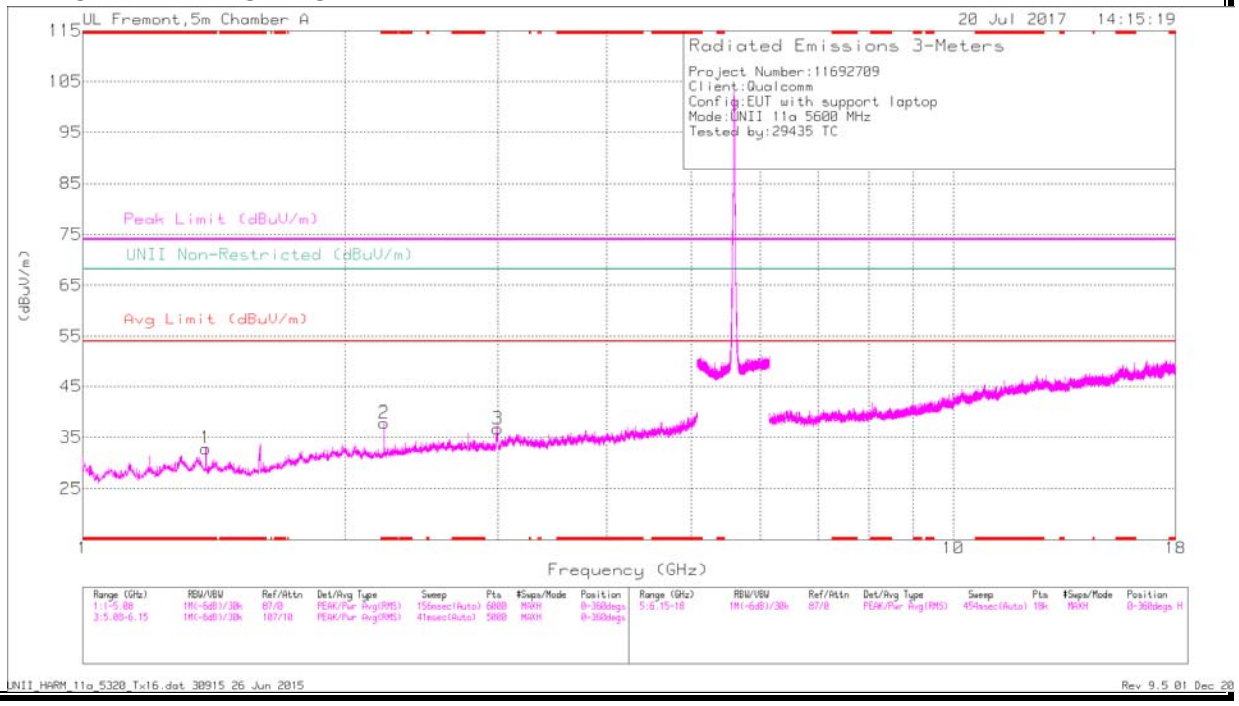
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.386	43.94	PK-U	28.9	-32.7	40.14	-	-	74	-33.86	-	-	131	390	H
* 1.386	36.38	ADR	28.9	-32.7	32.58	54	-21.42	-	-	-	-	131	390	H
* 2.22	45.4	PK-U	31.3	-32.4	44.3	-	-	74	-29.7	-	-	208	245	H
* 2.22	28.84	ADR	31.3	-32.4	27.74	54	-26.26	-	-	-	-	208	245	H
* 2.772	42.46	PK-U	32.3	-31.1	43.66	-	-	74	-30.34	-	-	151	209	H
* 2.772	31.99	ADR	32.3	-31.1	33.19	54	-20.81	-	-	-	-	151	209	H
* 1.386	45.2	PK-U	28.9	-32.7	41.4	-	-	74	-32.6	-	-	0	102	V
* 1.386	37.95	ADR	28.9	-32.7	34.15	54	-19.85	-	-	-	-	0	102	V
* 2.22	44	PK-U	31.3	-32.4	42.9	-	-	74	-31.1	-	-	342	132	V
* 2.22	30.4	ADR	31.3	-32.4	29.3	54	-24.7	-	-	-	-	342	132	V
* 2.772	43.9	PK-U	32.3	-31.1	45.1	-	-	74	-28.9	-	-	49	102	V
* 2.772	34.67	ADR	32.3	-31.1	35.87	54	-18.13	-	-	-	-	49	102	V

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

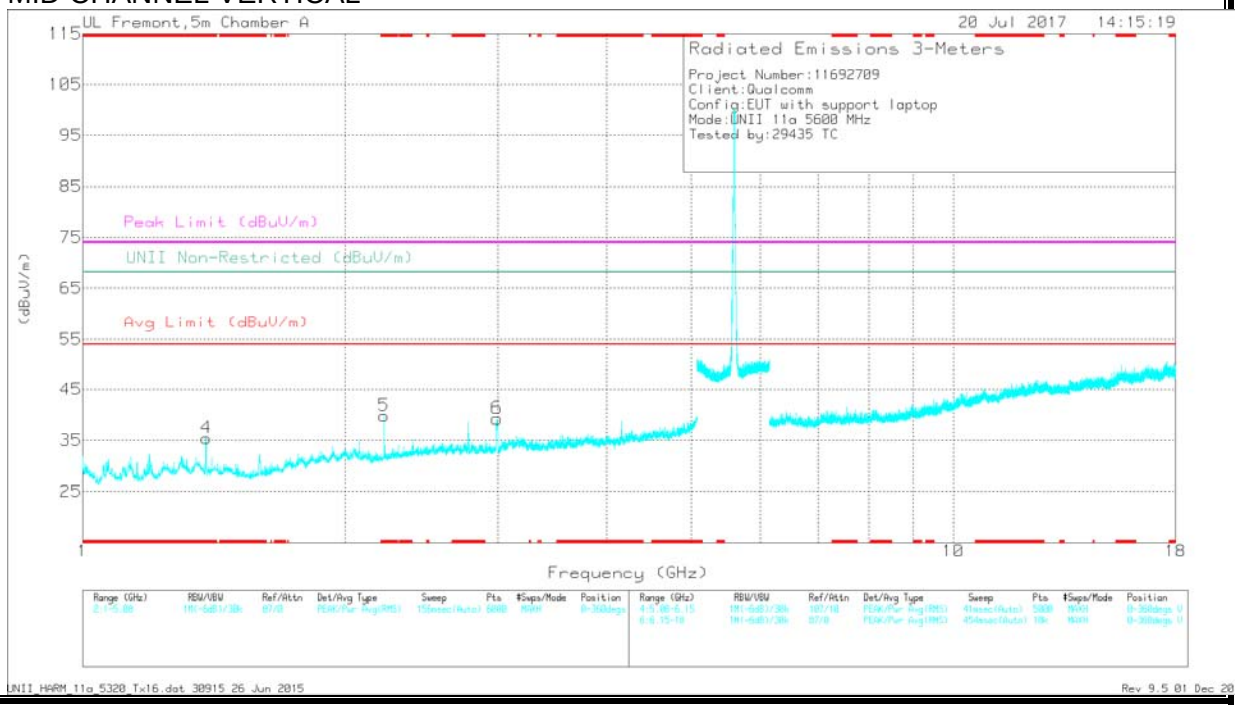
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Radiated Emissions

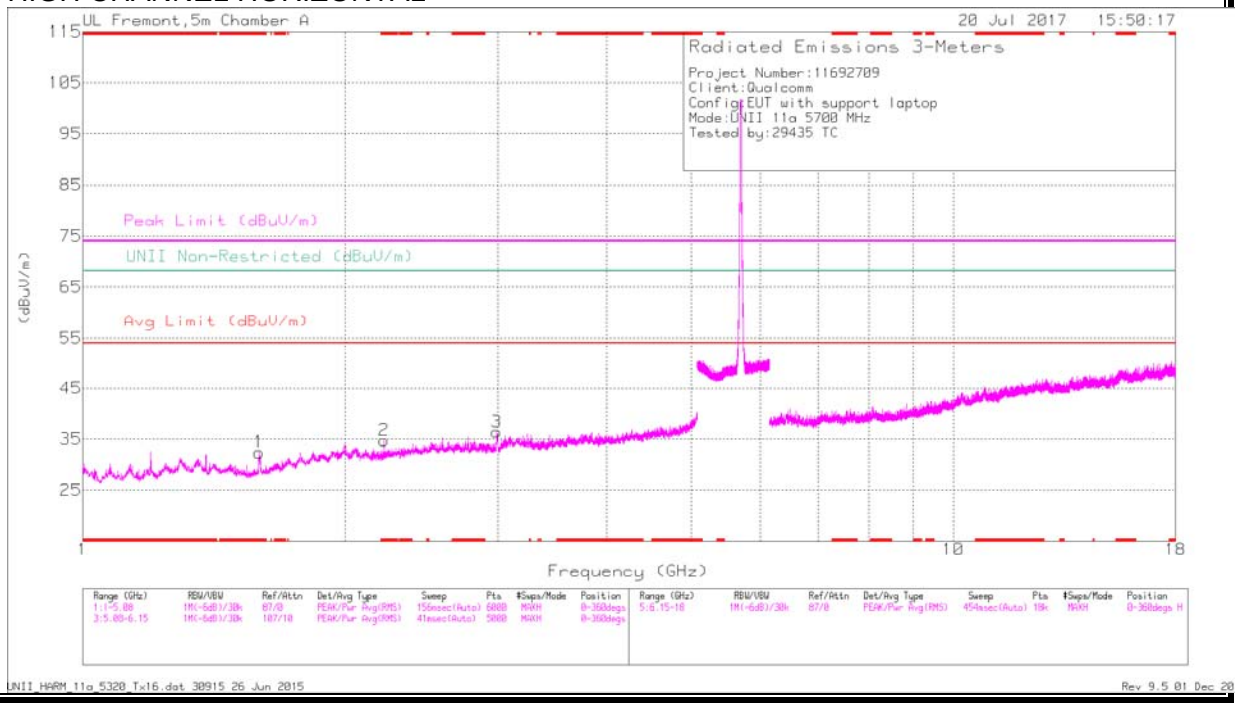
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.386	43.9	PK-U	28.9	-32.7	40.1	-	-	74	-33.9	-	-	147	297	H
* 1.386	36.57	ADR	28.9	-32.7	32.77	54	-21.23	-	-	-	-	147	297	H
* 2.22	44.16	PK-U	31.3	-32.4	43.06	-	-	74	-30.94	-	-	212	299	H
* 2.22	30.62	ADR	31.3	-32.4	29.52	54	-24.48	-	-	-	-	212	299	H
* 1.386	44.41	PK-U	28.9	-32.7	40.61	-	-	74	-33.39	-	-	5	106	V
* 1.386	37.71	ADR	28.9	-32.7	33.91	54	-20.09	-	-	-	-	5	106	V
* 2.22	45.51	PK-U	31.3	-32.4	44.41	-	-	74	-29.59	-	-	341	113	V
* 2.22	32	ADR	31.3	-32.4	30.9	54	-23.1	-	-	-	-	341	113	V
2.991	45.97	PK-U	32.3	-31.1	47.17	-	-	-	-	68.2	-21.03	0	101	V
2.991	31.59	ADR	32.3	-31.1	32.79	-	-	-	-	-	-	0	101	V
2.998	29.9	ADR	32.3	-31.2	31	-	-	-	-	-	-	254	209	H
2.999	44.46	PK-U	32.3	-31.2	45.56	-	-	-	-	68.2	-22.64	254	209	H

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

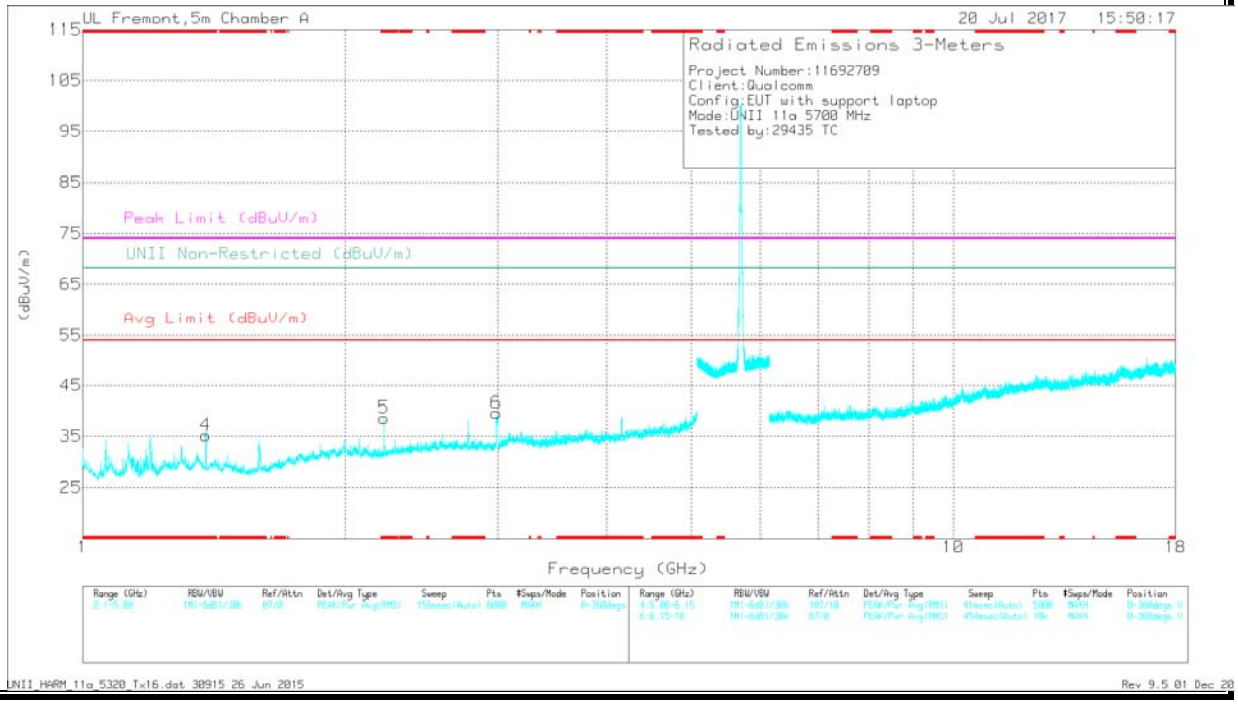
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.597	46.52	PK-U	28.2	-32.9	41.82	-	-	74	-32.18	-	-	337	102	H
* 1.594	30.37	ADR	28.1	-33	25.47	54	-28.53	-	-	-	-	337	102	H
* 2.22	42.77	PK-U	31.3	-32.4	41.67	-	-	74	-32.33	-	-	190	340	H
* 2.22	28.99	ADR	31.3	-32.4	27.89	54	-26.11	-	-	-	-	190	340	H
* 1.386	45.33	PK-U	28.9	-32.7	41.53	-	-	74	-32.47	-	-	14	155	V
* 1.386	38.04	ADR	28.9	-32.7	34.24	54	-19.76	-	-	-	-	14	155	V
* 2.22	45.11	PK-U	31.3	-32.4	44.01	-	-	74	-29.99	-	-	355	125	V
* 2.22	30.11	ADR	31.3	-32.4	29.01	54	-24.99	-	-	-	-	355	125	V
2.985	41.79	PK-U	32.3	-31.1	42.99	-	-	-	-	68.2	-25.21	315	132	V
2.987	29.03	ADR	32.3	-31.1	30.23	-	-	-	-	-	-	315	132	V
2.989	44.68	PK-U	32.3	-31.1	45.88	-	-	-	-	68.2	-22.32	257	242	H
2.989	30.14	ADR	32.3	-31.1	31.34	-	-	-	-	-	-	257	242	H

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

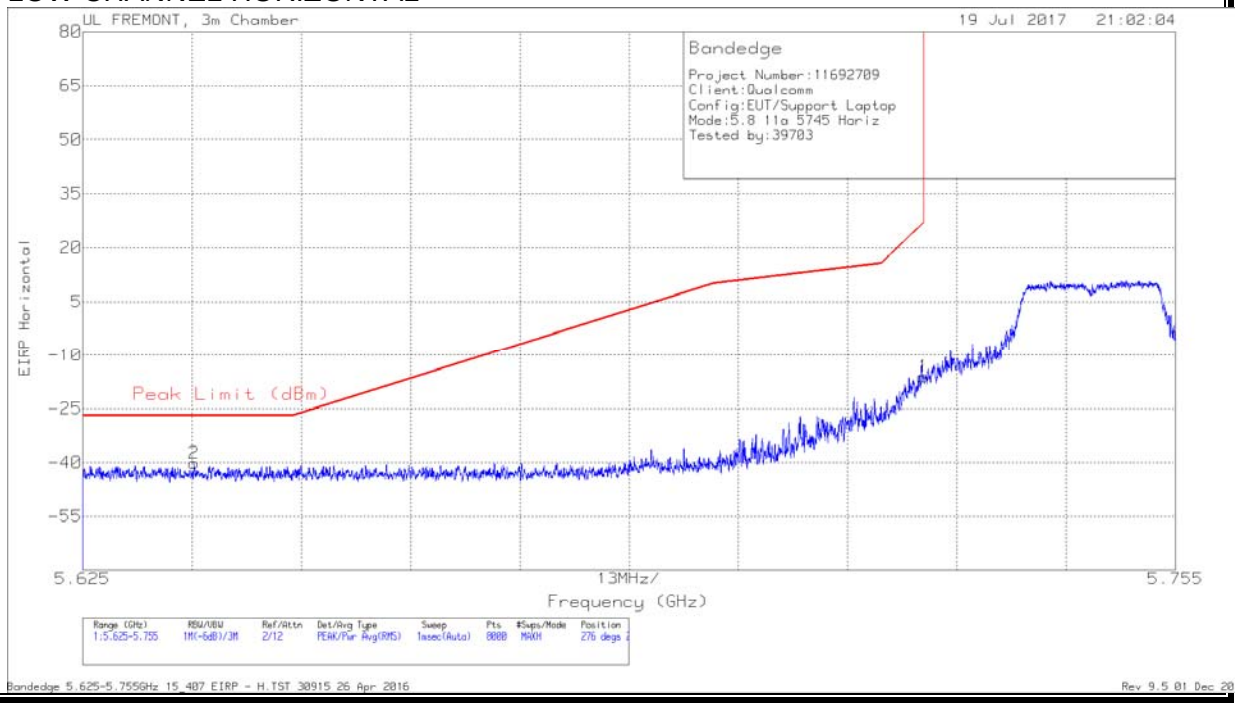
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.1.4. 11a 1TX MODE IN THE 5.8GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL HORIZONTAL

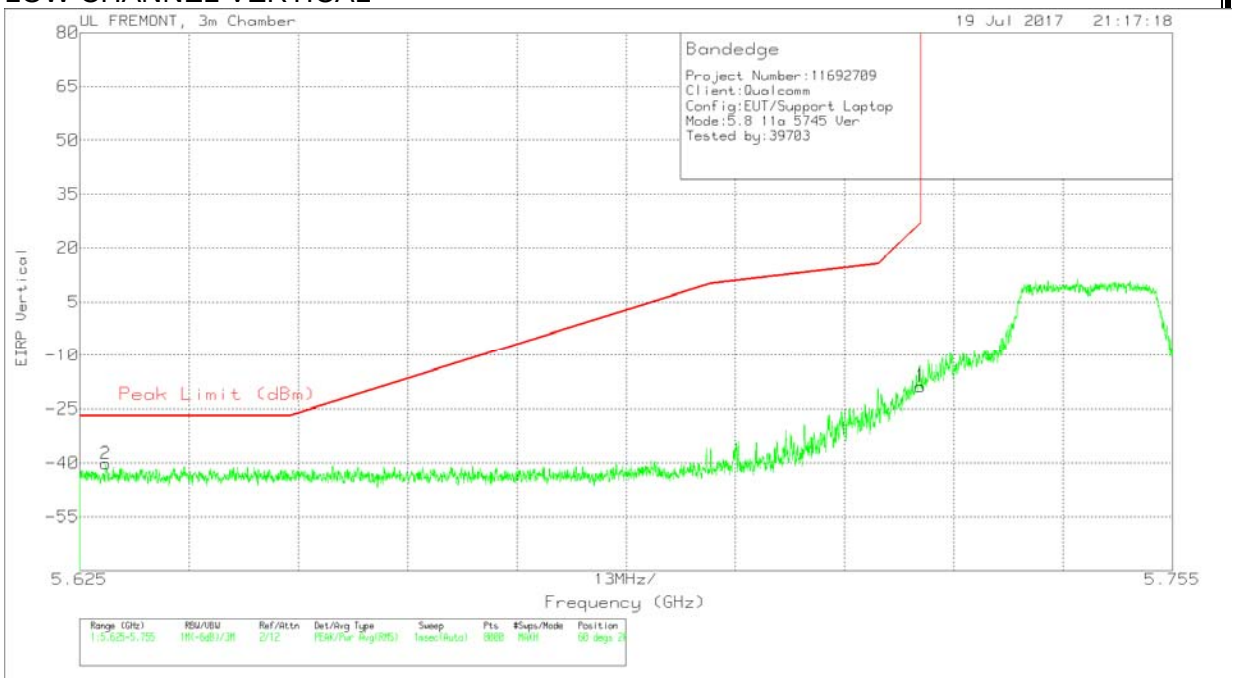


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.638	-67.71	Pk	34.6	-18.9	11.8	-40.21	-27	-13.00	276	210	H
1	5.725	-43.72	Pk	34.7	-18.9	11.8	-16.12	27	-43.12	276	210	H

Pk - Peak detector

LOW CHANNEL VERTICAL



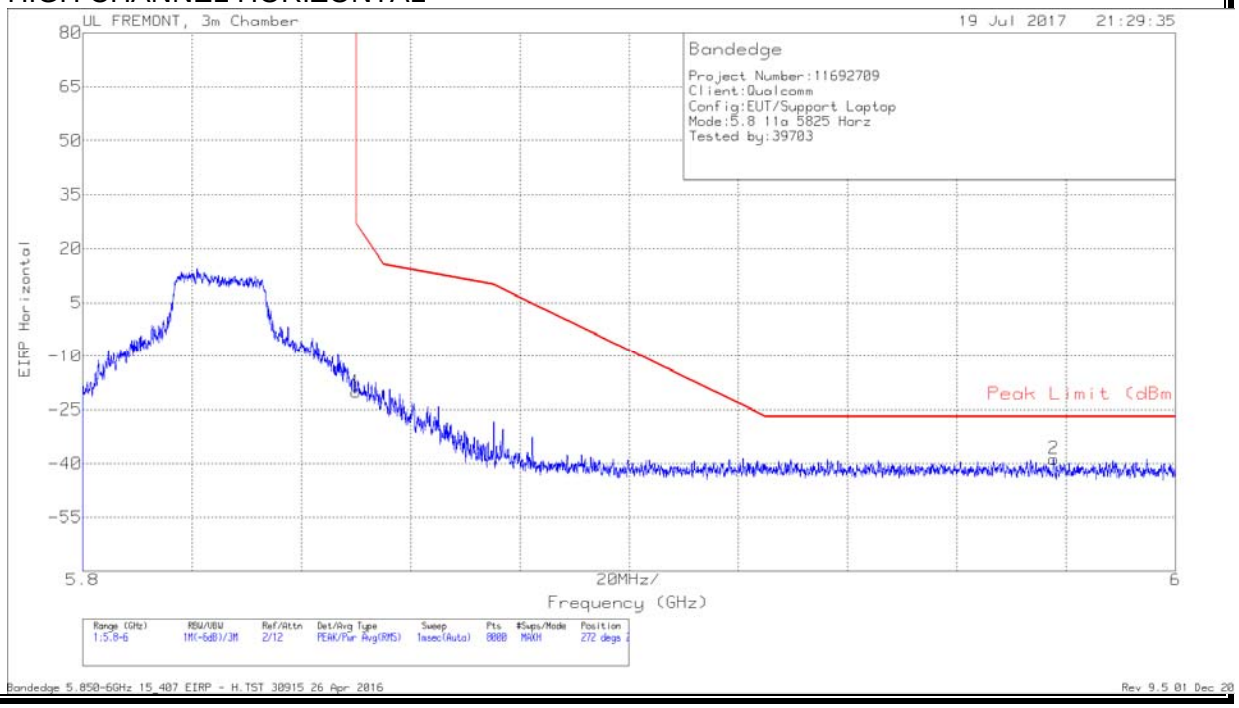
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.628	-67.76	Pk	34.6	-18.9	11.8	-40.26	-27	-13.26	60	203	V
1	5.725	-46.37	Pk	34.7	-18.9	11.8	-18.77	27	-45.77	60	203	V

Pk - Peak detector

AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL HORIZONTAL

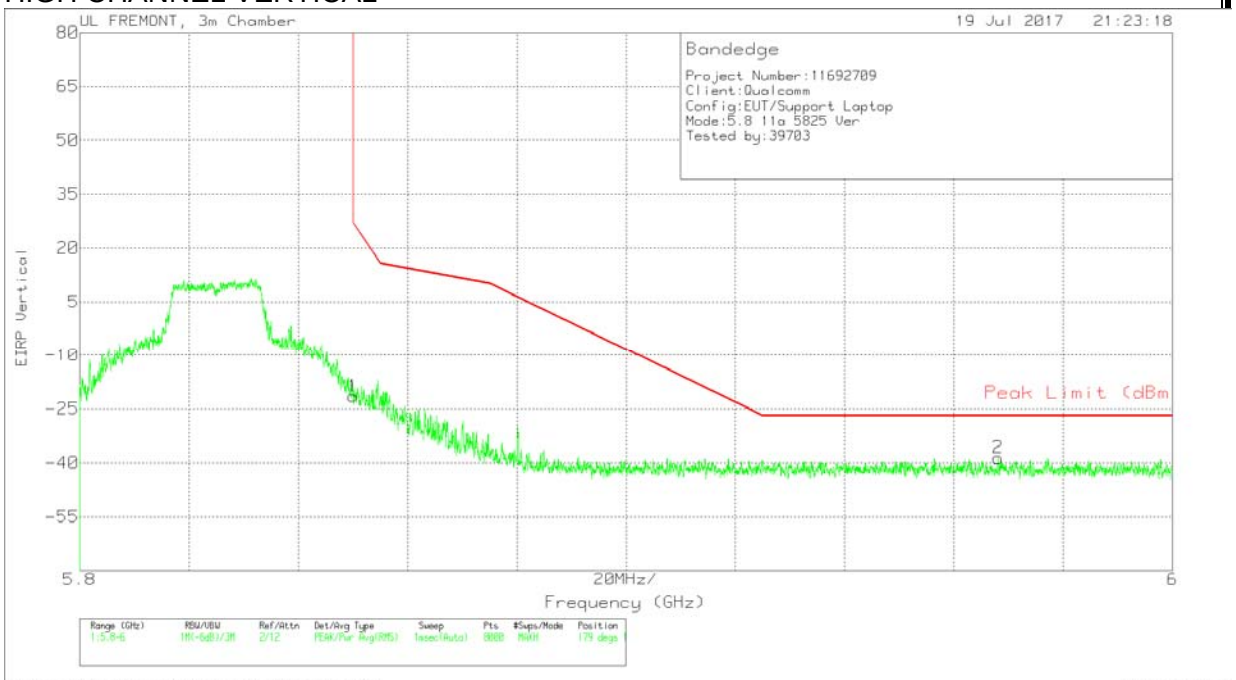


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-48.05	Pk	34.8	-18.6	11.8	-20.05	27	-47.05	272	228	H
2	5.978	-67.38	Pk	35.1	-18.2	11.8	-38.68	-27	-11.68	272	228	H

Pk - Peak detector

HIGH CHANNEL VERTICAL



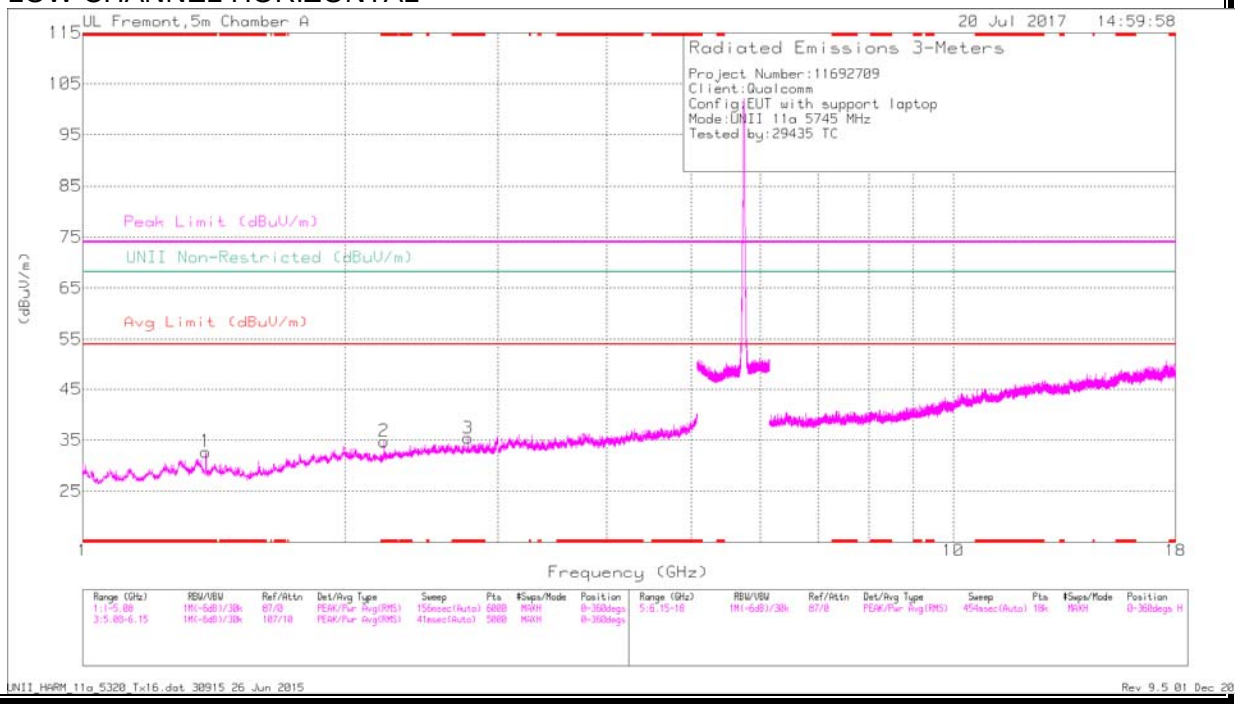
Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T712 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-49.56	Pk	34.8	-18.6	11.8	-21.56	27	-48.56	179	173	V
2	5.968	-67.26	Pk	35.1	-18.3	11.8	-38.66	-27	-11.66	179	173	V

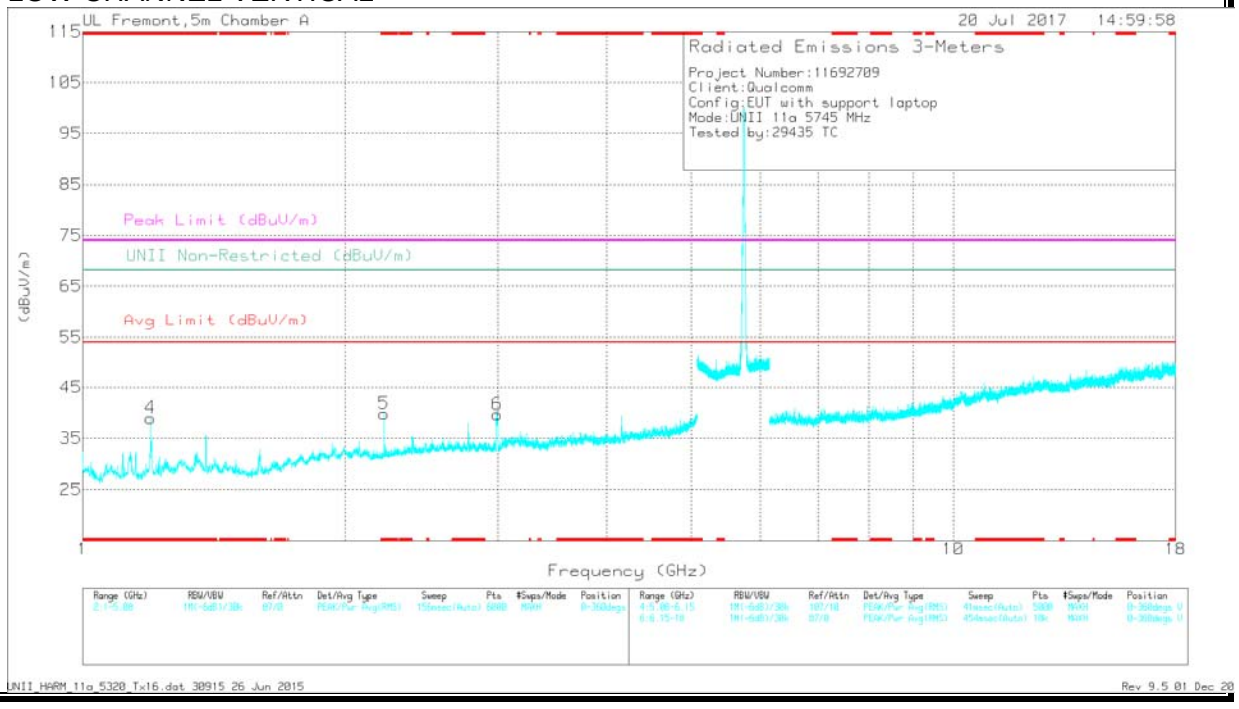
Pk - Peak detector

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



Radiated Emissions

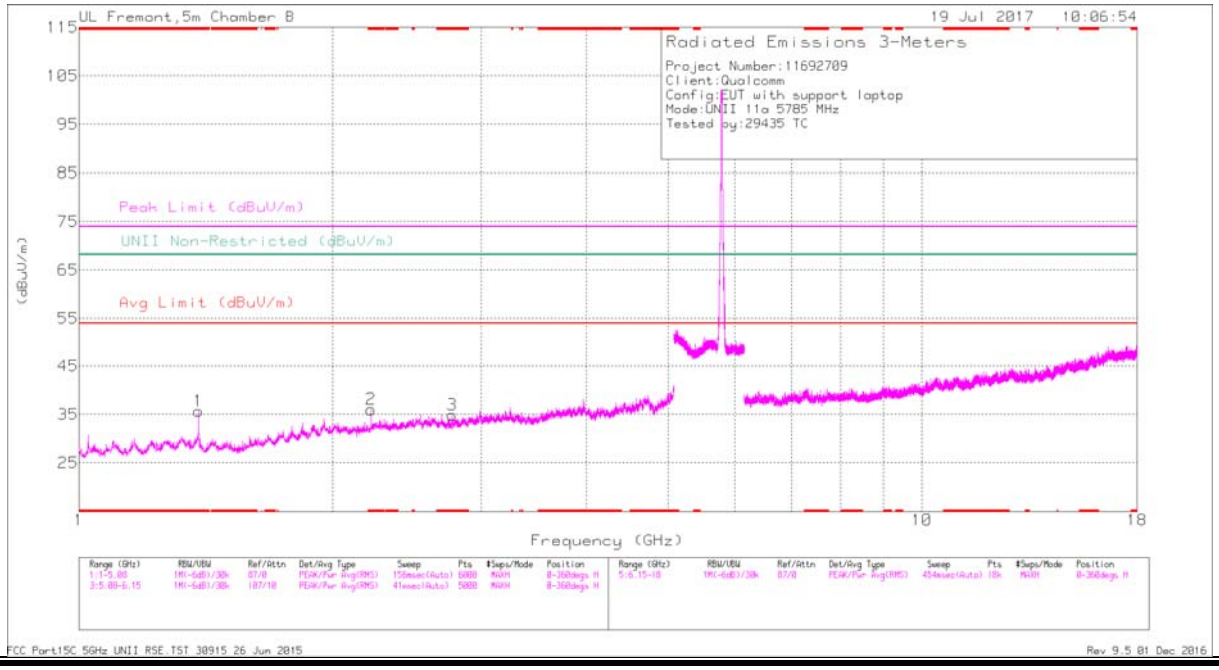
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.386	43.87	PK-U	28.9	-32.7	40.07	-	-	74	-33.93	-	-	147	286	H
* 1.386	36.33	ADR	28.9	-32.7	32.53	54	-21.47	-	-	-	-	147	286	H
* 2.22	43.11	PK-U	31.3	-32.4	42.01	-	-	74	-31.99	-	-	357	197	H
* 2.22	29.07	ADR	31.3	-32.4	27.97	54	-26.03	-	-	-	-	357	197	H
* 2.771	42.42	PK-U	32.3	-31.1	43.62	-	-	74	-30.38	-	-	316	366	H
* 2.772	32.75	ADR	32.3	-31.1	33.95	54	-20.05	-	-	-	-	316	366	H
* 1.198	57.21	PK-U	28.2	-33.7	51.71	-	-	74	-22.29	-	-	39	186	V
* 1.195	31	ADR	28.1	-33.7	25.4	54	-28.6	-	-	-	-	39	186	V
* 2.22	46.16	PK-U	31.3	-32.4	45.06	-	-	74	-28.94	-	-	354	125	V
* 2.22	37.44	ADR	31.3	-32.4	36.34	54	-17.66	-	-	-	-	354	125	V
2.995	30.42	ADR	32.3	-31.1	31.62	-	-	-	-	-	-	356	127	V
2.997	44.53	PK-U	32.3	-31.1	45.73	-	-	-	-	68.2	-22.47	356	127	V

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

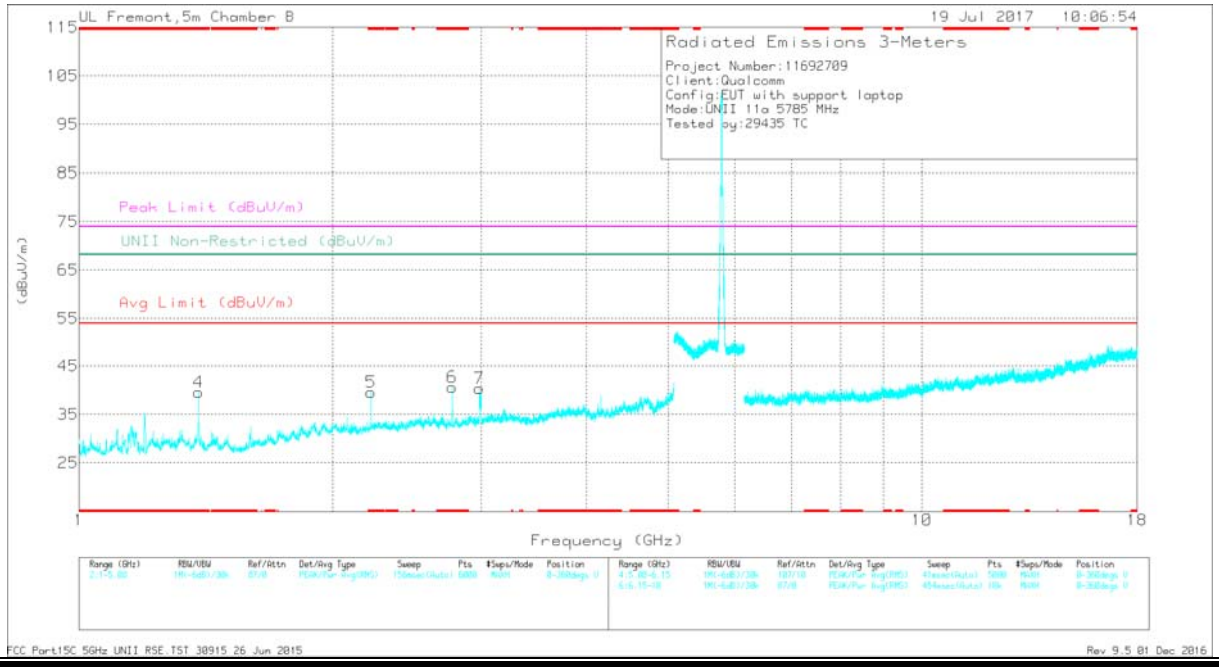
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



Radiated Emissions

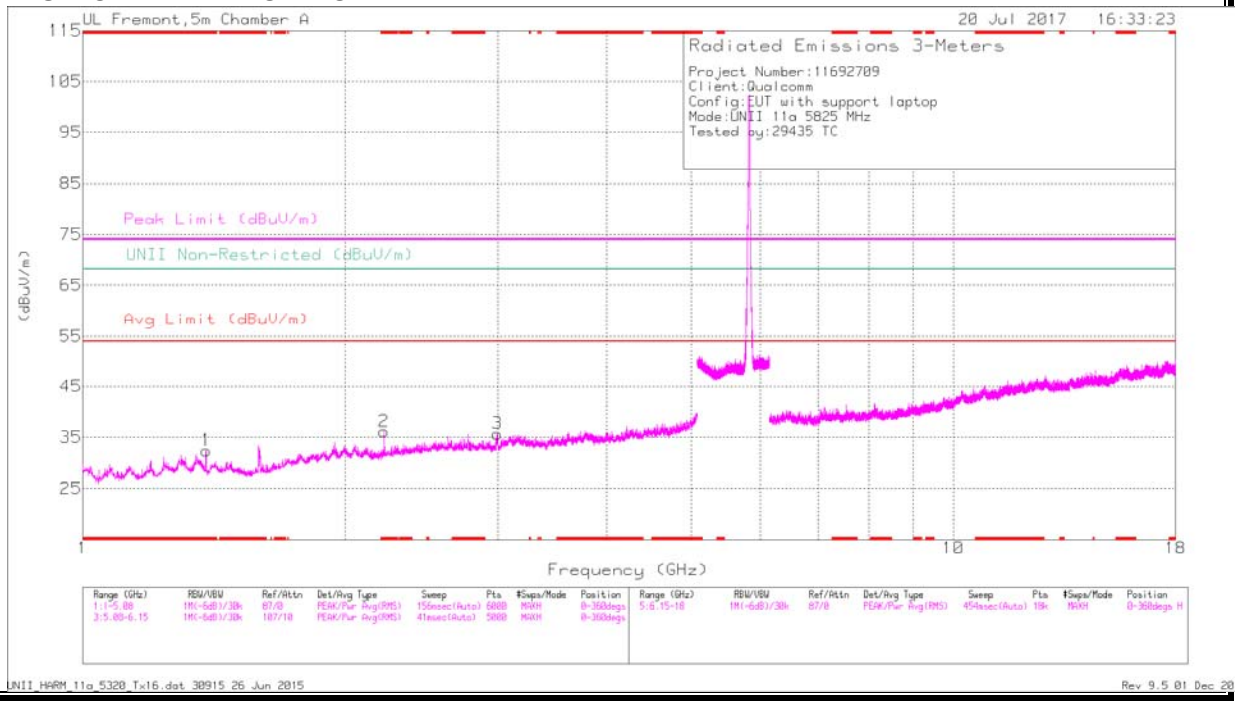
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.386	46.68	PK-U	28.4	-33.3	0	41.78	-	-	74	-32.22	-	-	46	197	H
* 1.386	39.08	ADR	28.4	-33.3	0	34.18	54	-19.82	-	-	-	-	46	197	H
* 2.22	43.74	PK-U	31.7	-32.4	0	43.04	-	-	74	-30.96	-	-	213	368	H
* 2.22	29.54	ADR	31.7	-32.4	0	28.84	54	-25.16	-	-	-	-	213	368	H
* 2.772	42.48	PK-U	32.3	-32.3	0	42.48	-	-	74	-31.52	-	-	79	370	H
* 2.772	31.42	ADR	32.3	-32.3	0	31.42	54	-22.58	-	-	-	-	79	370	H
* 1.386	49.39	PK-U	28.4	-33.3	0	44.49	-	-	74	-29.51	-	-	307	146	V
* 1.386	43.05	ADR	28.4	-33.3	0	38.15	54	-15.85	-	-	-	-	307	146	V
* 2.22	46.18	PK-U	31.7	-32.4	0	45.48	-	-	74	-28.52	-	-	168	252	V
* 2.22	31.59	ADR	31.7	-32.4	0	30.89	54	-23.11	-	-	-	-	168	252	V
* 2.772	46.18	PK-U	32.3	-32.3	0	46.18	-	-	74	-27.82	-	-	345	119	V
* 2.772	37.98	ADR	32.3	-32.3	0	37.98	54	-16.02	-	-	-	-	345	119	V
2.987	46.83	PK-U	32.7	-31.6	0	47.93	-	-	-	-	68.2	-20.27	296	105	V
2.987	32.1	ADR	32.7	-31.6	0	33.2	-	-	-	-	-	-	296	105	V

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

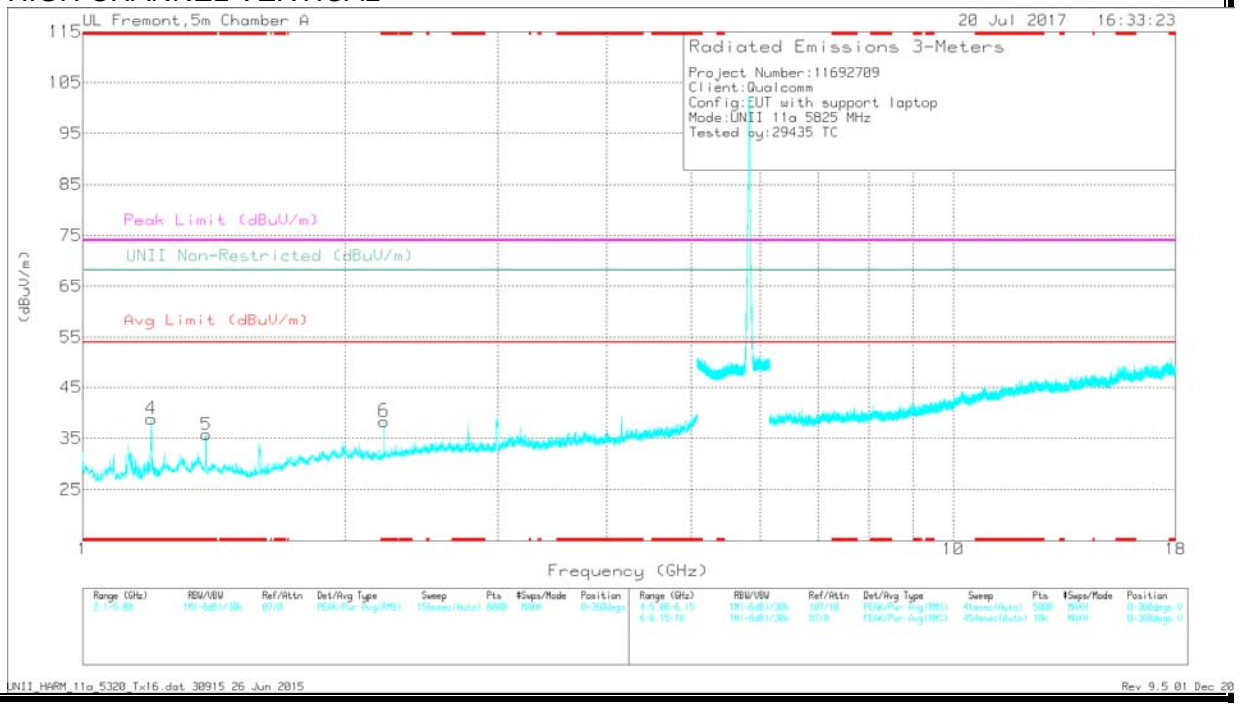
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.386	42.24	PK-U	28.9	-32.7	38.44	-	-	74	-35.56	-	-	322	173	H
* 1.386	32.92	ADR	28.9	-32.7	29.12	54	-24.88	-	-	-	-	322	173	H
* 2.222	39.83	PK-U	31.3	-32.3	38.83	-	-	74	-35.17	-	-	298	180	H
* 2.22	28.61	ADR	31.3	-32.4	27.51	54	-26.49	-	-	-	-	298	180	H
* 1.197	56.09	PK-U	28.2	-33.7	50.59	-	-	74	-23.41	-	-	32	296	V
* 1.198	31.2	ADR	28.2	-33.7	25.7	54	-28.3	-	-	-	-	32	296	V
* 1.201	55.04	PK-U	28.2	-33.7	49.54	-	-	74	-24.46	-	-	32	296	V
* 1.198	31.02	ADR	28.2	-33.7	25.52	54	-28.48	-	-	-	-	32	296	V
* 1.386	43.9	PK-U	28.9	-32.7	40.1	-	-	74	-33.9	-	-	360	135	V
* 1.386	36.53	ADR	28.9	-32.7	32.73	54	-21.27	-	-	-	-	360	135	V
* 2.22	44.63	PK-U	31.3	-32.4	43.53	-	-	74	-30.47	-	-	30	139	V
* 2.22	30.51	ADR	31.3	-32.4	29.41	54	-24.59	-	-	-	-	30	139	V
2.992	29.1	ADR	32.3	-31.1	30.3	-	-	-	-	-	-	228	235	H
2.993	42.69	PK-U	32.3	-31.1	43.89	-	-	-	-	68.2	-24.31	228	235	H

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

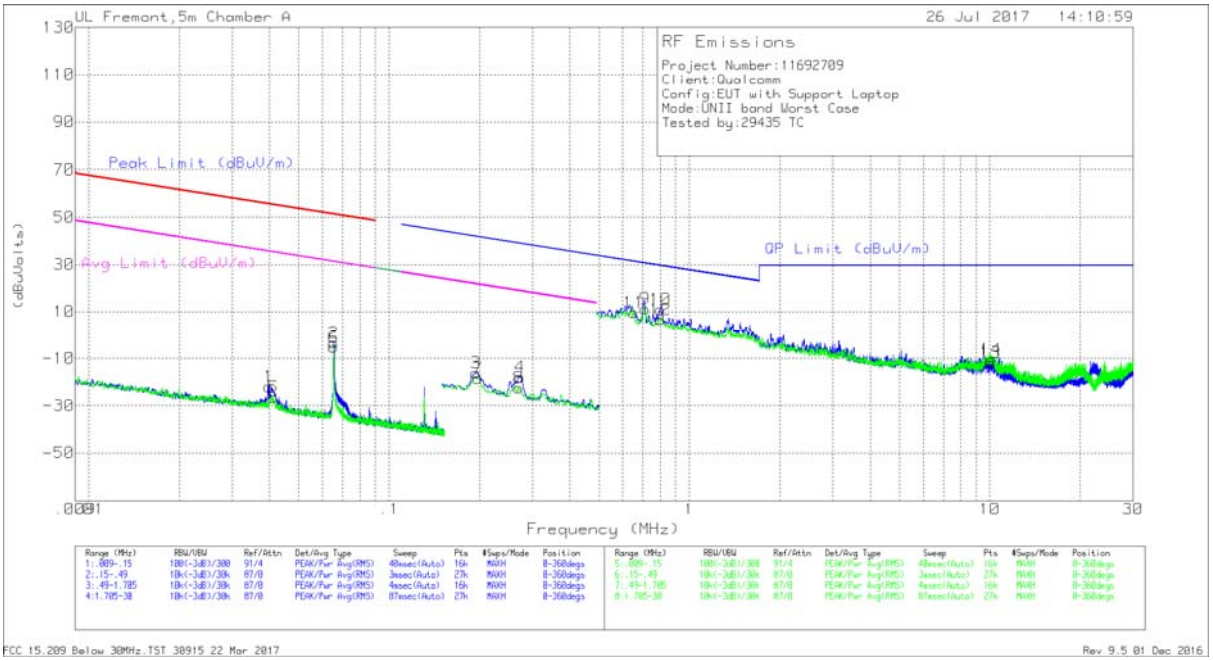
PK-U - U-NII: Maximum Peak

ADR - U-NII AD primary method, RMS average

9.2. WORST CASE BELOW 30 MHz

SPURIOUS EMISSIONS BELOW 30 MHz (WORST-CASE CONFIGURATION)

HORIZONTAL AND VERTICAL PLOT



NOTE: KDB 414788 OATS and Chamber Correlation Justification

- Based on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.
- OATs and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuVolts)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.03982	45.12	Pk	12.9	.1	-80	-21.88	55.58	-77.46	35.58	-57.46	-	-	-	-	0-360
5	.04115	40.68	Pk	12.8	.1	-80	-26.42	55.3	-81.72	35.3	-61.72	-	-	-	-	0-360
6	.06529	62.88	Pk	11.9	.1	-80	-5.12	51.29	-56.41	31.29	-36.41	-	-	-	-	0-360
2	.06549	64.74	Pk	11.9	.1	-80	-3.26	51.26	-54.52	31.26	-34.52	-	-	-	-	0-360
3	.19458	52.18	Pk	11.6	.1	-80	-16.12	-	-	-	-	41.84	-57.96	21.84	-37.96	0-360
7	.19729	49.74	Pk	11.6	.1	-80	-18.56	-	-	-	-	41.72	-60.28	21.72	-40.28	0-360
8	.27	45.84	Pk	11.6	.1	-80	-22.46	-	-	-	-	38.99	-61.45	18.99	-41.45	0-360
4	.27275	50.42	Pk	11.6	.1	-80	-17.88	-	-	-	-	38.9	-56.78	18.9	-36.78	0-360

Pk - Peak detector

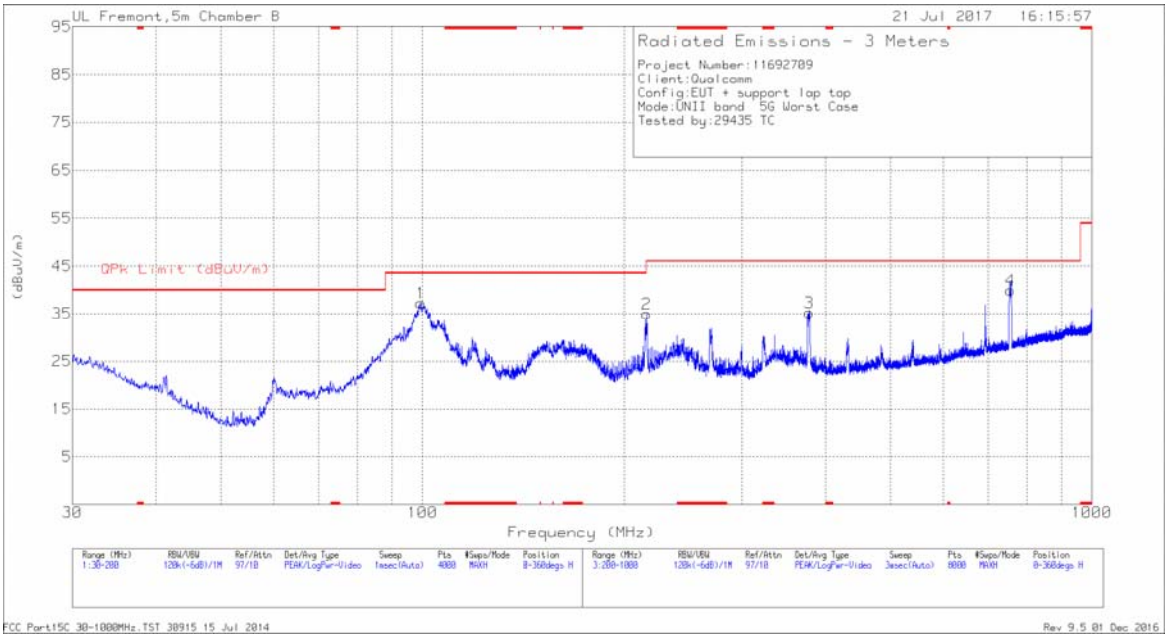
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna (dB/m)	Cbl (dB)	Dist Corr 30m	Corrected Reading (dBuVolts)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
11	.65272	37.86	Pk	11.6	.1	-40	9.56	31.32	-21.76	0-360
9	.712	39.63	Pk	11.6	.1	-40	11.33	30.56	-19.23	0-360
12	.80012	35.15	Pk	11.6	.1	-40	6.85	29.55	-22.7	0-360
10	.80016	39.41	Pk	11.6	.1	-40	11.11	29.55	-18.44	0-360
13	10.00988	16.84	Pk	10.8	.4	-40	-11.96	29.5	-41.46	0-360
14	10.05546	18.16	Pk	10.8	.4	-40	-10.64	29.5	-40.14	0-360

Pk - Peak detector

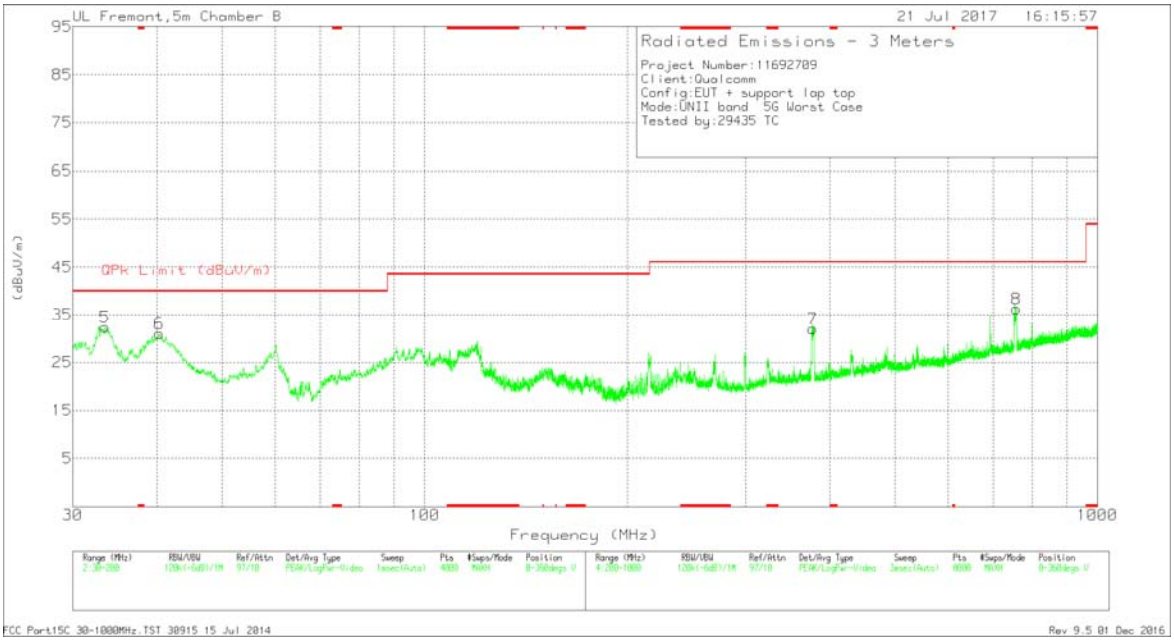
9.3. WORST-CASE 30 – 1000 MHz

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

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Trace Markers

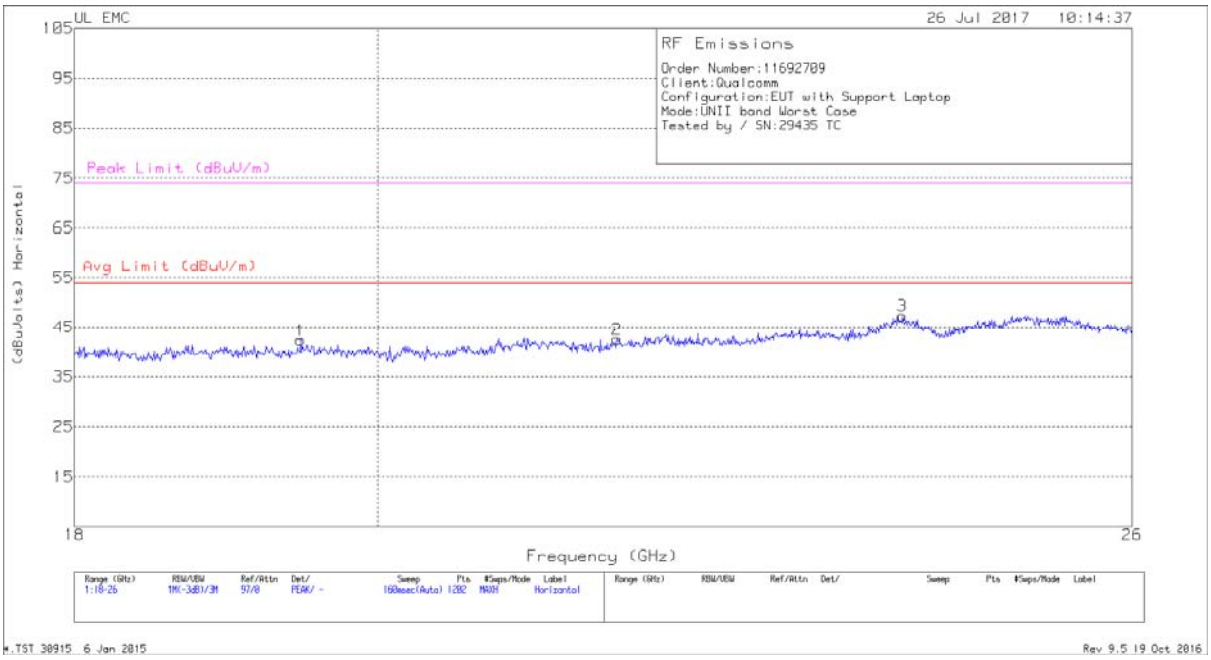
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T408 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	30.2976	30.32	Pk	25.1	-27.3	28.12	40	-11.88	0-360	100	V
1	51.8932	36.71	Pk	11.3	-26.9	21.11	40	-18.89	0-360	400	H
2	63.6687	36.45	Pk	11.8	-26.7	21.55	40	-18.45	0-360	300	H
5	66.602	43.28	Pk	12	-26.7	28.58	40	-11.42	0-360	100	V
6	93.6815	47.65	Pk	12.4	-26.4	33.65	43.52	-9.87	0-360	100	V
3	94.4467	39.16	Pk	12.6	-26.4	25.36	43.52	-18.16	0-360	300	H

Pk - Peak detector

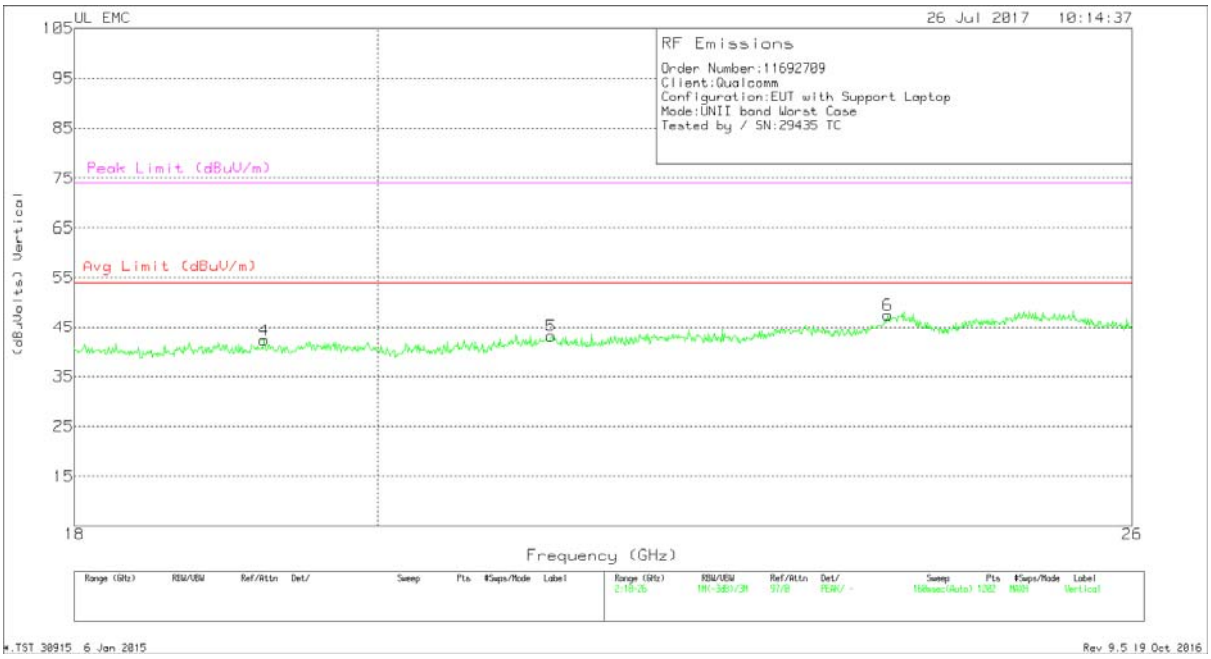
9.4. WORST-CASE 18 to 26 GHz

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

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Trace Markers

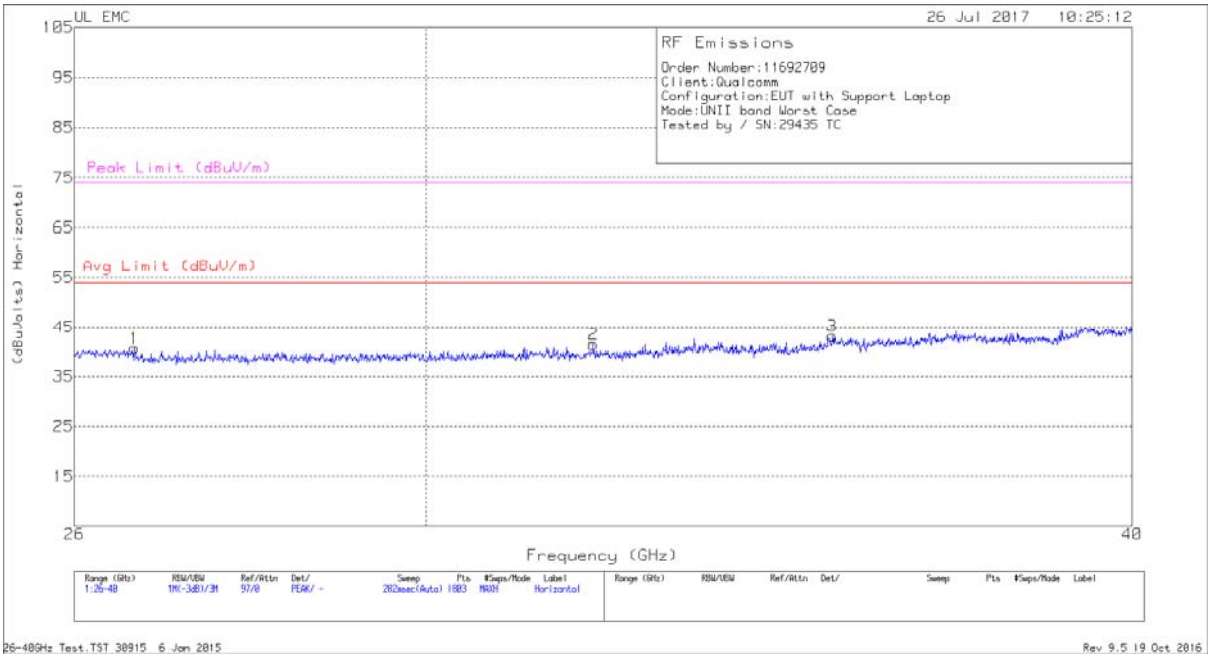
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T449 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	19.472	41.13	Pk	32.7	-22	-9.5	42.3333	54	-11.6667	74	-31.6667
2	21.737	40.1	Pk	33.2	-21.3	-9.5	42.5	54	-11.5	74	-31.5
3	24.002	43.13	Pk	33.9	-20.2	-9.5	47.3333	54	-6.66667	74	-26.6667
4	19.226	40.93	Pk	32.6	-21.7	-9.5	42.3333	54	-11.6667	74	-31.6667
5	21.244	40.97	Pk	33	-21.3	-9.5	43.1667	54	-10.8333	74	-30.83333
6	23.882	42.9	Pk	33.9	-19.8	-9.5	47.5	54	-6.5	74	-26.5

Pk - Peak detector

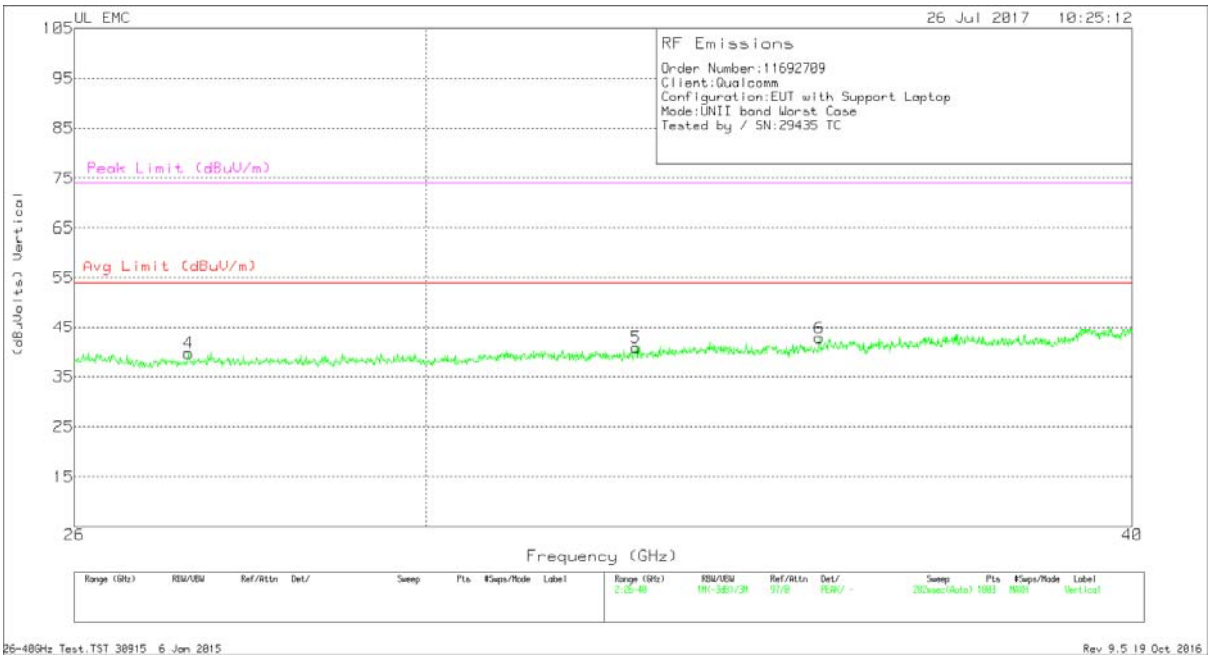
9.5. WORST-CASE 26 to 40 GHz

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

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T90 AF (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	26.645	46.07	Pk	35.4	-31.3	-9.5	40.6667	54	-13.3333	74	-33.3333
2	32.114	47.9	Pk	36.3	-33.2	-9.5	41.5	54	-12.5	74	-32.5
3	35.401	48.97	Pk	37.8	-34.1	-9.5	43.1667	54	-10.8333	74	-30.8333
4	27.235	45.27	Pk	35.6	-31.7	-9.5	39.6667	54	-14.33333	74	-34.33333
5	32.681	47.33	Pk	36.5	-33.5	-9.5	40.8333	54	-13.16667	74	-33.16667
6	35.214	48.93	Pk	37.6	-34.2	-9.5	42.83333	54	-11.16667	74	-31.1667

Pk - Peak detector

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

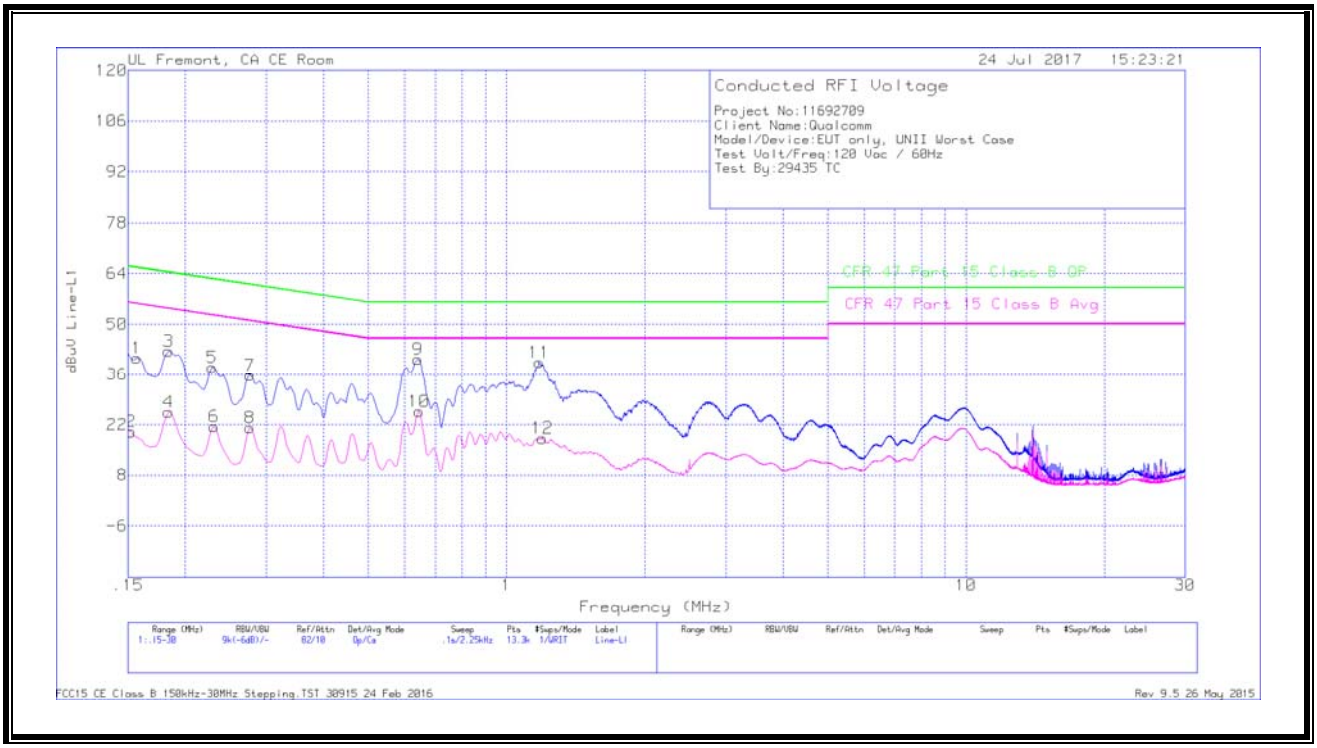
FCC §15.207 (a)
RSS-Gen 8.8

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

*Decreases with the logarithm of the frequency.

RESULTS

LINE 1 RESULTS



WORST EMISSIONS

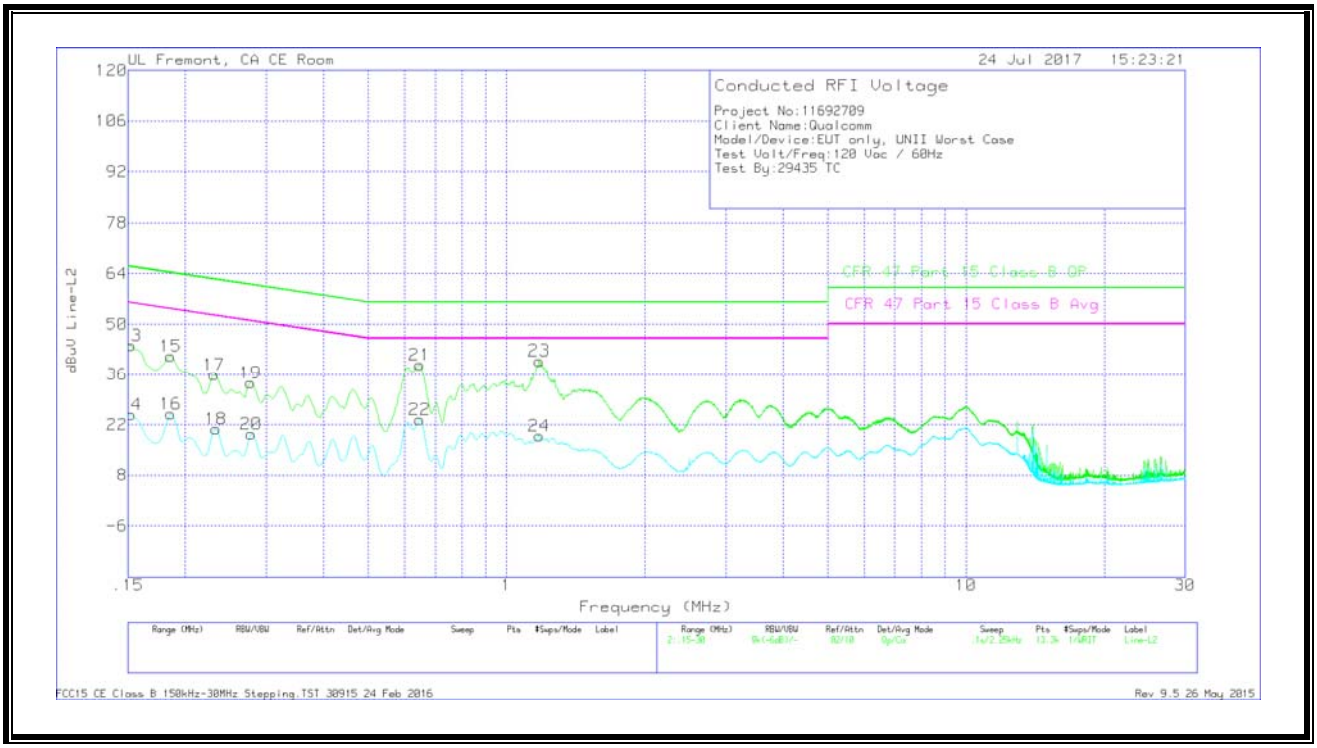
Range 1: Line-L1 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L1	LC Cables C1&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
1	.15675	30.39	Qp	.1	.1	10.1	40.69	65.63	-24.94	-	-
2	.15225	9.72	Ca	.1	.1	10.1	20.02	-	-	55.88	-35.86
3	.18375	32.39	Qp	0	.1	10.1	42.59	64.31	-21.72	-	-
4	.18375	15.22	Ca	0	.1	10.1	25.42	-	-	54.31	-28.89
5	.22875	27.78	Qp	0	.1	10.1	37.98	62.49	-24.51	-	-
6	.231	11.36	Ca	0	.1	10.1	21.56	-	-	52.41	-30.85
7	.276	25.52	Qp	0	.1	10.1	35.72	60.94	-25.22	-	-
8	.276	10.88	Ca	0	.1	10.1	21.08	-	-	50.94	-29.86
9	.6405	30.1	Qp	0	.1	10.1	40.3	56	-15.7	-	-
10	.645	15.4	Ca	0	.1	10.1	25.6	-	-	46	-20.4
11	1.17825	29.21	Qp	0	.1	10.1	39.41	56	-16.59	-	-
12	1.19625	8.07	Ca	0	.1	10.1	18.27	-	-	46	-27.73

Qp - Quasi-Peak detector

Ca - CISPR average detection

LINE 2 RESULTS



WORST EMISSIONS

Range 2: Line-L2 .15 - 30MHz

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN L2	LC Cables C2&C3	Limiter (dB)	Corrected Reading dBuV	CFR 47 Part 15 Class B QP	QP Margin (dB)	CFR 47 Part 15 Class B Avg	Av(CISPR) Margin (dB)
13	.15225	33.95	Qp	0	0	10.1	44.05	65.88	-21.83	-	-
14	.15225	14.63	Ca	0	0	10.1	24.73	-	-	55.88	-31.15
15	.186	30.89	Qp	0	.1	10.1	41.09	64.21	-23.12	-	-
16	.186	14.79	Ca	0	.1	10.1	24.99	-	-	54.21	-29.22
17	.231	25.68	Qp	0	.1	10.1	35.88	62.41	-26.53	-	-
18	.23325	10.63	Ca	0	.1	10.1	20.83	-	-	52.33	-31.5
19	.27713	23.43	Qp	0	.1	10.1	33.63	60.9	-27.27	-	-
20	.27825	9.2	Ca	0	.1	10.1	19.4	-	-	50.87	-31.47
21	.64725	28.51	Qp	0	.1	10.1	38.71	56	-17.29	-	-
22	.64725	13.24	Ca	0	.1	10.1	23.44	-	-	46	-22.56
23	1.17825	29.63	Qp	0	.1	10.1	39.83	56	-16.17	-	-
24	1.17825	8.7	Ca	0	.1	10.1	18.9	-	-	46	-27.1

Qp - Quasi-Peak detector

Ca - CISPR average detection