FCC CFR47 PART 15 SUBPART E

CERTIFICATION TEST REPORT

FOR

GSM/WCDMA/LTE Phablet + Bluetooth, DTS/UNII a/b/g/n, ANT+ & NFC

MODEL NUMBER: SM-G7508Q

FCC ID: A3LSMG7508Q

REPORT NUMBER: 14U18167-5 REVISION B

ISSUE DATE: July 21, 2014

Prepared for
SAMSUNG ELECTRONICS CO., LTD.
416, MAETAN 3-DONG, YEONGTONG-GU
SUWON-CITY, GYEONGGI-DO 443-742, SOUTH KOREA

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
--	07/15/14	Initial Issue	P. Zhang
A	7/21/14	Updated page 16; statement of section 10.4; below 1GHz emission statement; AC line emission statement.	P. Zhang
B	7/28/14	Remove average power verification section 10.4; updated power measurement in section 10.5	P. Zhang

TABLE OF CONTENTS

ATTESTATION OF TEST RESULTS 6

1. TEST METHODOLOGY 7

2. FACILITIES AND ACCREDITATION 7

3. CALIBRATION AND UNCERTAINTY 7

3.1. MEASURING INSTRUMENT CALIBRATION 7

3.2. SAMPLE CALCULATION 7

3.3. MEASUREMENT UNCERTAINTY 8

4. EQUIPMENT UNDER TEST 9

4.1. DESCRIPTION OF EUT 9

4.2. MAXIMUM OUTPUT POWER 9

4.3. DESCRIPTION OF AVAILABLE ANTENNAS 9

4.4. WORST-CASE CONFIGURATION AND MODE 10

4.5. DESCRIPTION OF TEST SETUP 11

5. TEST AND MEASUREMENT EQUIPMENT 13

6. SUMMARY TABLE 14

7. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS 15

7.1. ON TIME AND DUTY CYCLE RESULTS 15

7.2. DUTY CYCLE PLOTS 16

8. MEASUREMENT METHOD 19

9. ANTENNA PORT TEST RESULTS 20

9.1. 6 dB BANDWIDTH 20

9.1.1. 802.11a MODE IN THE 5.8 GHz BAND 20

9.1.2. 802.11n HT20 MODE IN THE 5.8 GHz BAND 21

9.1.3. 802.11n HT40 MODE IN THE 5.8 GHz BAND 21

9.1.4. 6dB Bandwidth Plots 22

9.2. 26 dB BANDWIDTH 23

9.2.1. 802.11a MODE IN THE 5.2 GHz BAND 23

9.2.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND 23

9.2.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND 24

9.2.1. 802.11a MODE IN THE 5.3 GHz BAND 24

9.2.1. 802.11n HT20 MODE IN THE 5.3 GHz BAND 24

9.2.2. 802.11n HT40 MODE IN THE 5.3 GHz BAND 24

9.2.3. 802.11a MODE IN THE 5.5 GHz BAND 26
9.2.4. 802.11n HT20 MODE IN THE 5.5 GHz BAND 26
9.2.5. 802.11n HT40 MODE IN THE 5.5 GHz BAND 26
9.2.6. 802.11a MODE IN THE 5.8 GHz BAND 26
9.2.7. 802.11n HT20 MODE IN THE 5.8 GHz BAND 27
9.2.8. 802.11n HT40 MODE IN THE 5.8 GHz BAND 27
9.2.9. 26 dB BANDWIDTH PLOTS 28

9.3. 99% BANDWIDTH 30
9.3.1. 802.11a MODE IN THE 5.2 GHz BAND 30
9.3.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND 30
9.3.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND 30
9.3.4. 802.11a MODE IN THE 5.3 GHz BAND 31
9.3.5. 802.11n HT20 MODE IN THE 5.3 GHz BAND 31
9.3.6. 802.11n HT40 MODE IN THE 5.3 GHz BAND 31
9.3.7. 802.11a MODE IN THE 5.5 GHz BAND 31
9.3.8. 802.11n HT20 MODE IN THE 5.5 GHz BAND 32
9.3.9. 802.11n HT40 MODE IN THE 5.5 GHz BAND 32
9.3.10. 802.11a MODE IN THE 5.8 GHz BAND 32
9.3.11. 802.11n HT20 MODE IN THE 5.8 GHz BAND 33
9.3.12. 802.11n HT40 MODE IN THE 5.8 GHz BAND 33
9.3.13. 99% BANDWIDTH PLOTS 34

9.4. OUTPUT POWER AND PPSD 37
9.4.1. 802.11a MODE IN THE 5.2 GHz BAND 38
9.4.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND 39
9.4.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND 40
9.4.4. 802.11a MODE IN THE 5.3 GHz BAND 41
9.4.5. 802.11n HT20 MODE IN THE 5.3 GHz BAND 42
9.4.6. 802.11n HT40 MODE IN THE 5.3 GHz BAND 43
9.4.7. 802.11a MODE IN THE 5.5 GHz BAND 44
9.4.8. 802.11n HT20 MODE IN THE 5.5 GHz BAND 45
9.4.9. 802.11n HT40 MODE IN THE 5.5 GHz BAND 46
9.4.10. 802.11a MODE IN THE 5.8 GHz BAND 47
9.4.11. 802.11n HT20 MODE IN THE 5.8 GHz BAND 48
9.4.12. 802.11n HT40 MODE IN THE 5.8 GHz BAND 49
9.4.13. OUTPUT POWER AND PPSD PLOTS, Chain 0 50

10. TRANSMITTER ABOVE 1 GHz 52

10.1. 5.2 GHz 54
10.1.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND 54
10.1.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND 65
10.1.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND 76

10.2. 5.3 GHz 84
10.2.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.3 GHz BAND 84
10.2.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.3 GHz BAND 95
10.2.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.3 GHz BAND 106

10.3. 5.5-5.6 GHz 114

10.3.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.5 GHz BAND 114
10.3.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.5 GHz BAND.....127
10.3.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.5 GHz BAND.....140

10.4. 5.8 GHz.....153
10.4.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND 153
10.4.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND.....166
10.4.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND.....179

11. WORST-CASE BELOW 1 GHz (in the 5.2 GHz Band a mode mid CH) 189

12. AC POWER LINE CONDUCTED EMISSIONS.....192

13. DYNAMIC FREQUENCY SELECTION.....197

13.1. OVERVIEW.....197
13.1.1. LIMITS.....197
13.1.2. TEST AND MEASUREMENT SYSTEM.....202
13.1.3. SETUP OF EUT.....206
13.1.4. DESCRIPTION OF EUT 208

13.2. RESULTS FOR 20 MHz BANDWIDTH.....211
13.2.1. TEST CHANNEL 211
13.2.2. RADAR WAVEFORM AND TRAFFIC.....211
13.2.3. OVERLAPPING CHANNEL TESTS.....213
13.2.4. MOVE AND CLOSING TIME 213

13.3. RESULTS FOR 40 MHz BANDWIDTH.....218
13.3.1. TEST CHANNEL 218
13.3.2. RADAR WAVEFORM AND TRAFFIC.....218
13.3.3. OVERLAPPING CHANNEL TESTS.....221
13.3.4. MOVE AND CLOSING TIME 221
13.3.5. NON-OCCUPANCY PERIOD 226

14. SETUP PHOTOS.....227

UL VERIFICATION SERVICES INC. FORM NO: CCSUP4701I
47173 BENICIA STREET, FREMONT, CA 94538, USA TEL: (510) 771-1000 FAX: (510) 661-0888

ATTESTATION OF TEST RESULTS

COMPANY NAME:	**SAMSUNG ELECTRONICS CO., LTD.**
EUT DESCRIPTION:	**GSM/WCDMA/LTE Phablet + Bluetooth, DTS/UNII a/b/g/n, ANT+ & NFC**
MODEL:	**SM-G7508Q**
SERIAL NUMBER:	**FL-244-D (Conducted), FL-244-B(Radiated)**
DATE TESTED:	**JULY 1-15, 2014**

APPLICABLE STANDARDS	
STANDARD	**TEST RESULTS**
CFR 47 Part 15 Subpart E	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:

PENG ZHANG
CONSUMER TECHNOLOGY DIVISION
PROJECT LEAD
UL Verification Services Inc.

Tested By:

STEVEN TRAN
CONSUMER TECHNOLOGY DIVISION
LAB ENGINEER
UL Verification Services Inc.

1. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.4-2009

789033 D02 General UNII Test Procedures New Rules v01

2. FACILITIES AND ACCREDITATION

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

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

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

3. CALIBRATION AND UNCERTAINTY

3.1. 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.

3.2. 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

3.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 40000 MHz	4.94 dB

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

4. EQUIPMENT UNDER TEST

4.1. DESCRIPTION OF EUT

The EUT is a GSM/WCDMA/LTE Phablet + Bluetooth, DTS/UNII a/b/g/n, ANT+ & NFC.

4.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5180 - 5240	802.11a	13.26	21.18
5180 - 5240	802.11n HT20	12.48	17.70
5190 - 5230	802.11n HT40	12.06	16.07
5260 - 5320	802.11a	13.05	20.18
5260 - 5320	802.11n HT20	12.38	17.30
5270 - 5310	802.11n HT40	12.16	16.44
5500 - 5700	802.11a	13.5	22.39
5500 - 5700	802.11n HT20	12.37	17.26
5510 - 5670	802.11n HT40	11.96	15.70
5745 - 5825	802.11a	13.2	20.89
5745 - 5825	802.11n HT20	12.23	16.71
5755 - 5795	802.11n HT40	12.45	17.58

4.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an FPCB antenna, with a maximum gain of 1.02 dBi.

4.4. WORST-CASE CONFIGURATION AND MODE

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

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

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

802.11a mode: 6 Mbps

802.11n HT20mode: MCS0

802.11n HT40mode: MCS0

4.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
AC Adapter	Samsung	SM-G7508Q	N/A	N/A
Earphone	Samsung	SM-G7508Q	N/A	N/A

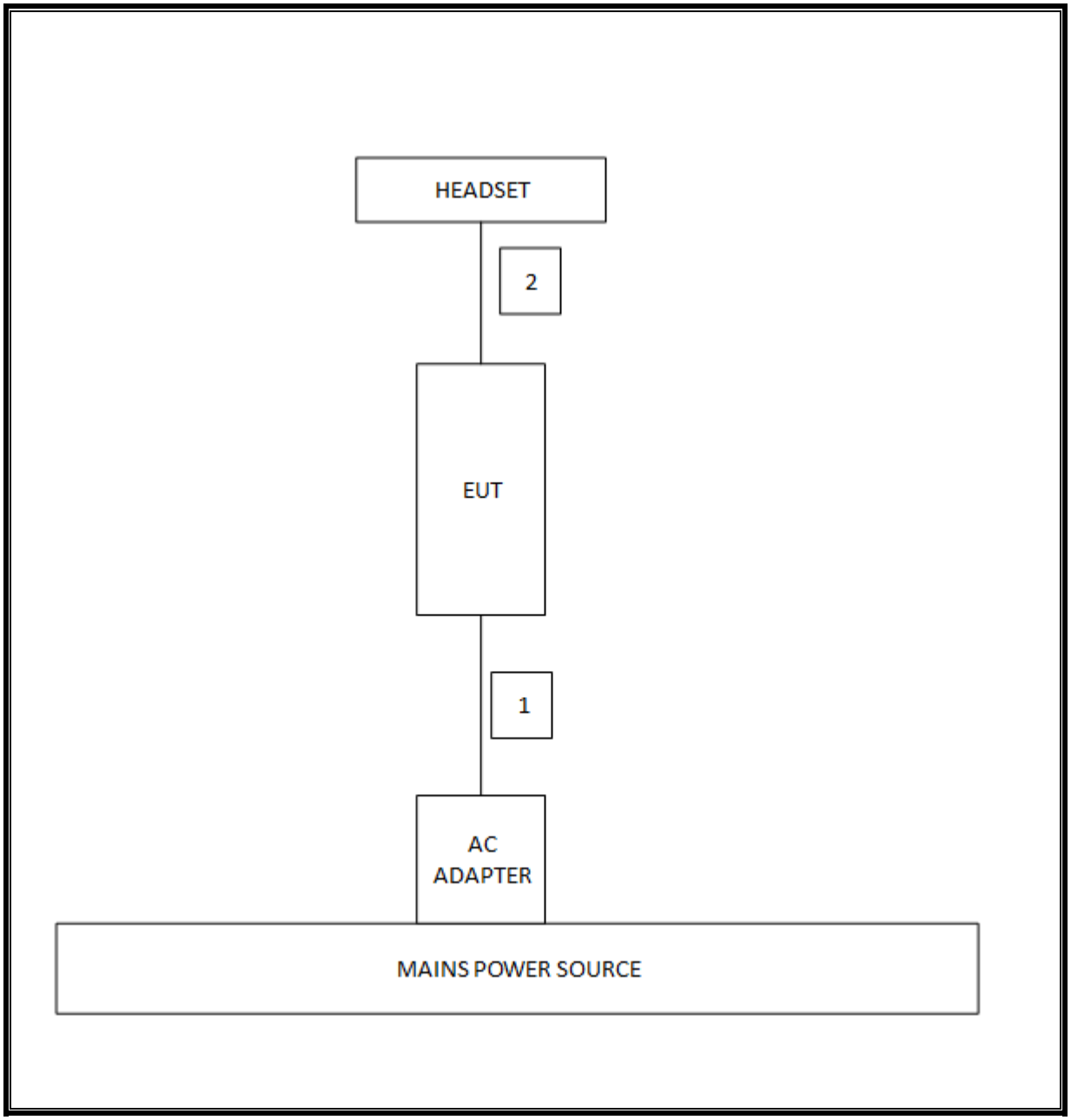
I/O CABLES

I/O Cable List						
Cable No	**Port**	**# of identical ports**	**Connector Type**	**Cable Type**	**Cable Length (m)**	**Remarks**
1	DC Power	1	Mini-USB	Shielded	1.2m	N/A
2	Audio	1	Mini-Jack	Unshielded	1.0m	N/A

TEST SETUP

The EUT is setup as a stand-alone device.

SETUP DIAGRAM FOR TESTS



5. 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**
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/20/15
Spectrum Analyzer,9KHz-40GHz	HP	8564E	C00986	04/01/15
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	1000741	08/13/14
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/18/14
Peak Power Meter	Agilent / HP	E4416A	C00963	12/13/14
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	12/13/14
Antenna, Horn, 1-18 GHz	ETS	3117	C01022	02/21/15
Antenna, Horn,18- 26 GHz	ARA	MWH-1826/B	C00946	11/12/14
Antenna, Horn, 26-40 GHz	ARA	MWH-2640	C00891	06/28/15
Antenna, Bilog, 30MHz-1 GHz	Sunol Sciences	JB1	T243	03/06/15
RF Preamplifier, 100KHz -> 1300MHz	HP	TBD	C00825	06/01/15
RF Preamplifier, 1GHz - 18GHz	Miteq	NSP4000-SP2	924343	03/23/15
RF Preamplifier, 1GHz - 26.5GHz	HP	8449B	F00351	06/27/15
AC Power Supply, 2,500VA 45-500Hz	Elgar-Ametek	CW2501M	F00013	CNR
RF Preamplifier, 1GHz - 40GHz	Miteq	NSP4000-SP2	C00990	08/20/14
Attenuator / Switch driver	HP	11713A	F00204	CNR
Low Pass Filter 3GHz	Micro-Tronics	LPS17541	F00219	05/23/15
High Pass Filter 5GHz	Micro-Tronics	HPS17542	F00222	05/22/15
High Pass Filter 6GHz	Micro-Tronics	HPM17543	F00224	05/22/15

6. SUMMARY TABLE

FCC Part Section	Test Description	Test Limit	Test Condition	Test Result	Worst Case
15.407 (e)	Occupied Band width (26dB)	N/A	Conducted	Pass	55.3 MHz
15.407 (a)(2)	TX Cond. Power5.15-5.25, 5.25-5.35 & 5.47-5.725	<24dBm or 11+10Log(OBW)		Pass	15.1dBm
15.407 (a)(3)	TX Cond. Power 5.725-5.825	< 30dBm or 17+10Log(OBW)		Pass	14.28 dBm
15.407 (a)(5)	PSD	<11dBm		Pass	3.94 dBm
15.207 (a)	AC Power Line conducted emissions	Section 10	Radiated	Pass	38.99 dBuV
15.407 (b) & 15.209	Radiated Spurious Emission	< 54dBuV/m		Pass	50.78 dBuV/m
15.407 (h)(2)	Dynamic Frequency Selection	N/A	Radiated / Conducted	Pass	N/A

7. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

LIMITS

None; for reporting purposes only.

PROCEDURE

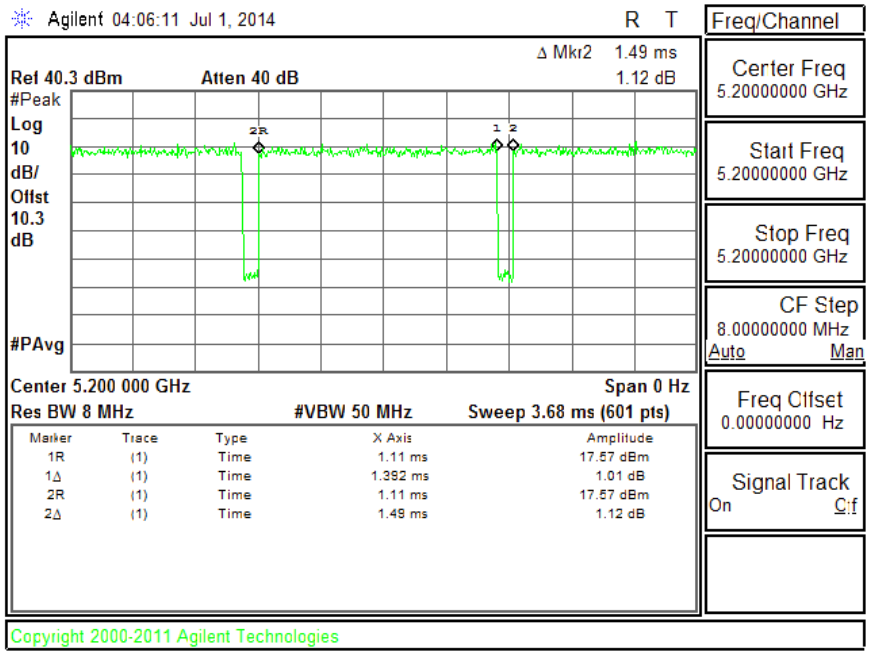
KDB 789033 Zero-Span Spectrum Analyzer Method.

7.1. ON TIME AND DUTY CYCLE RESULTS

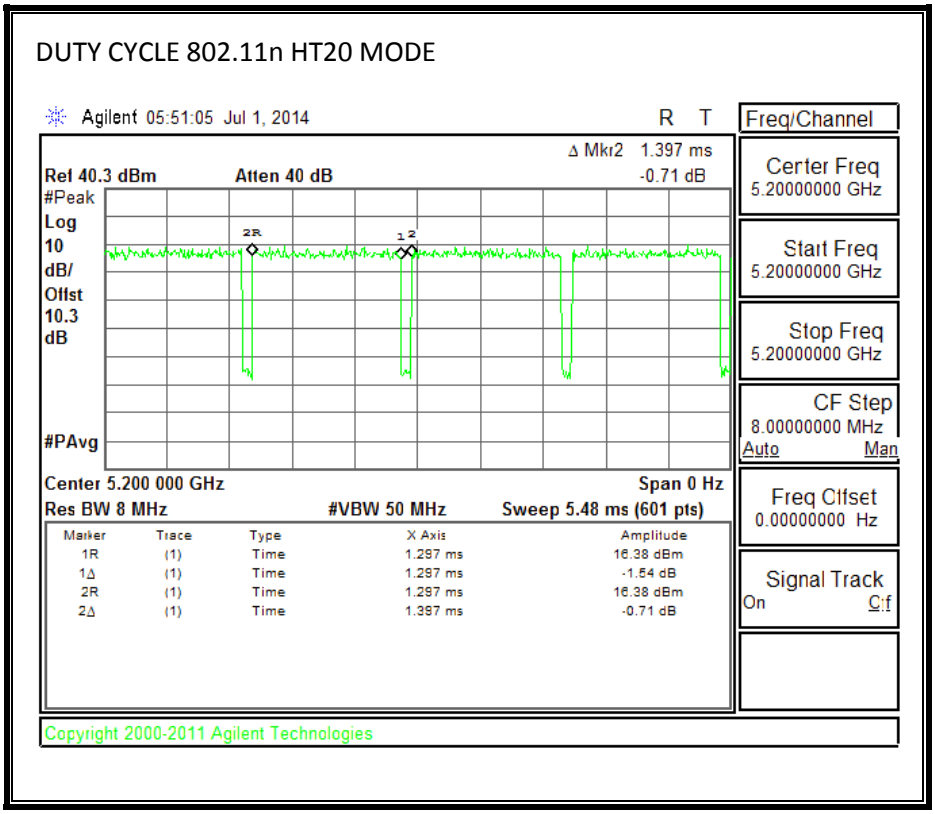
Mode	ON Time B (msec)	Period (msec)	Duty Cycle x (linear)	Duty Cycle (%)	Duty Cycle Correction Factor (dB)	1/T Minimum VBW (kHz)
802.11a	1.39	1.49	0.934	93.4%	0.30	0.718
802.11n HT20	1.30	1.40	0.928	92.8%	0.32	0.771
802.11n HT40	0.63	0.73	0.859	85.9%	0.66	1.595

7.2. DUTY CYCLE PLOTS

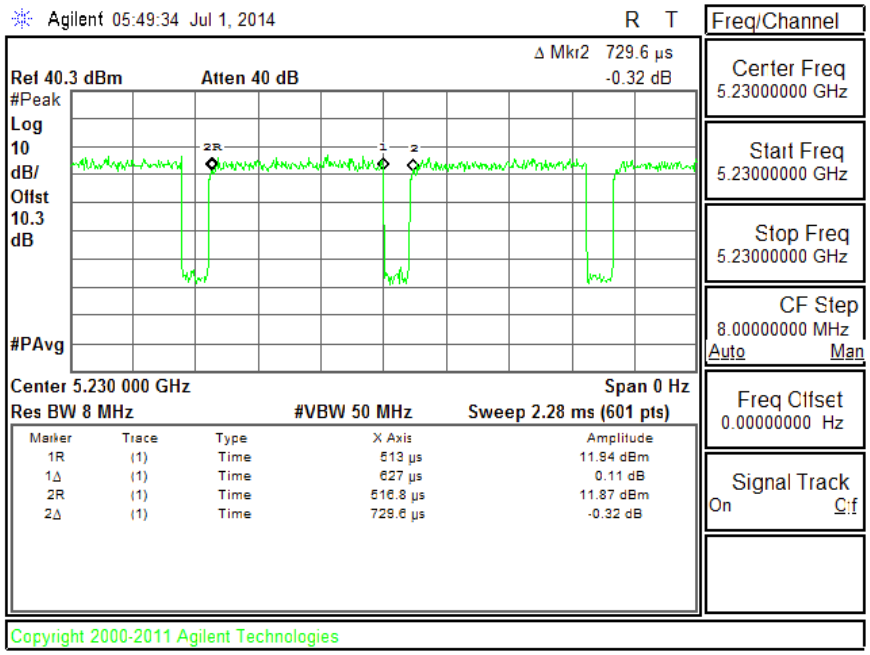
DUTY CYCLE 802.11a MODE



DUTY CYCLE 802.11n HT20 MODE



DUTY CYCLE 802.11n HT40 MODE



8. MEASUREMENT METHOD

The Duty Cycle is less than 98% and consistent therefore KDB 789033 Method SA-2 is used for .power and PPSD

The Duty Cycle is less than 98% and consistent, KDB 789033 Method AD with Power RMS Averaging and duty cycle correction is used.

9. ANTENNA PORT TEST RESULTS

9.1. 6 dB BANDWIDTH

LIMITS

FCC §15.407

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

TEST PROCEDURE

Reference to 789033 D02 General UNII Test Procedures New Rules v01: The transmitter output is connected to a spectrum analyzer with the RBW set to100KHz, the VBW >= 3 x RBW, peak detector and max hold.

RESULTS

9.1.1. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	16.57	0.5
Mid	5785	16.57	0.5
High	5825	16.57	0.5
Worst		16.57	

9.1.2. 802.11n HT20 MODE IN THE 5.8 GHz BAND

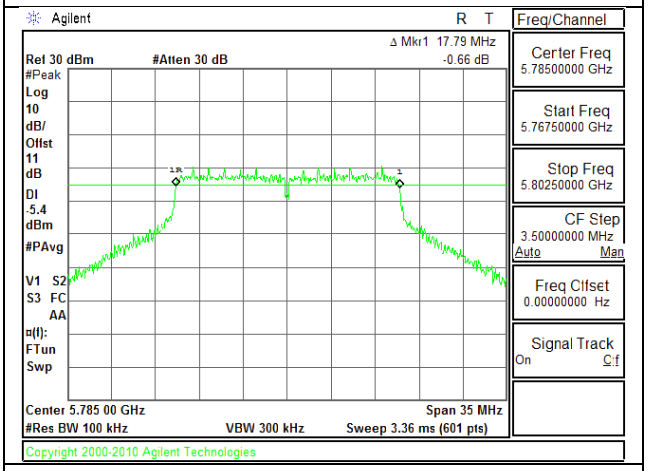
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5745	17.73	0.5
Mid	5785	17.79	0.5
High	5825	17.79	0.5
Worst		17.73	

9.1.3. 802.11n HT40 MODE IN THE 5.8 GHz BAND

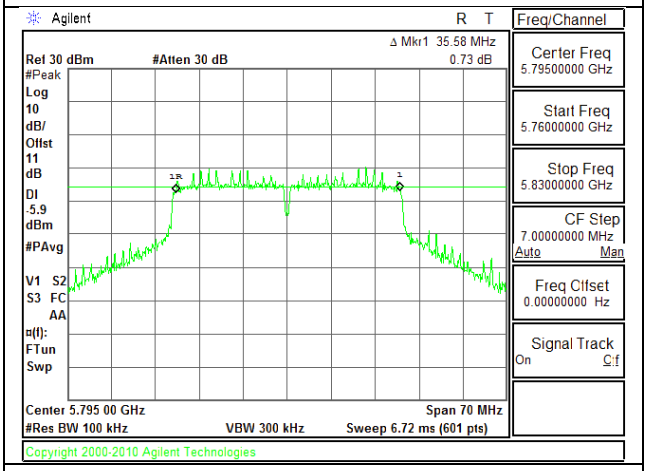
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	35.47	0.5
High	5795	35.58	0.5
Worst		35.47	0.5

9.1.4. 6dB Bandwidth Plots

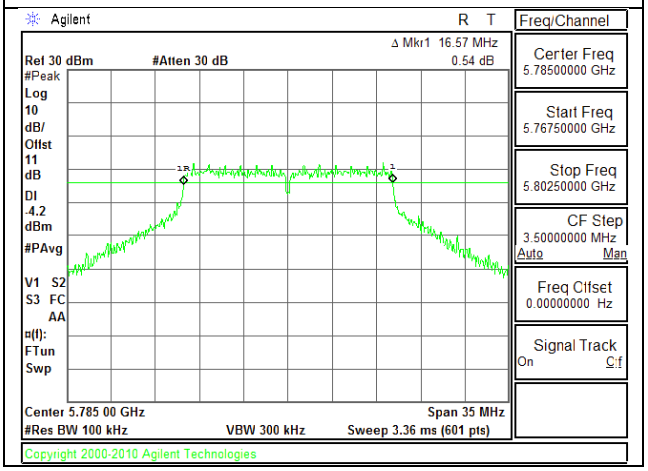
11n HT20 5.8 Mid Ch



11n HT40 5.8 Mid Ch



11a 5.8 Mid Ch



9.2. 26 dB BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

9.2.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	35.58
Mid	5200	31.00
High	5240	32.00
Worst		35.58

9.2.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	29.92
Mid	5200	25.50
High	5240	26.92
Worst		29.92

9.2.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26dB Bandwidth (MHz)
Low	5190	50.13
Mid	5230	54.93
Worst		54.93

9.2.1. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	25.35
Mid	5300	25.20
High	5320	26.33
Worst		26.33

9.2.1. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	23.25
Mid	5300	25.65
High	5320	24.75
Worst		25.65

9.2.2. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5270	44.2
High	5310	44.5
Worst		44.5

9.2.3. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	23.87
Mid	5580	24.53
High	5700	25.13
Worst		25.13

9.2.4. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	25.40
Mid	5580	24.00
High	5700	23.80
Worst		25.40

9.2.5. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	44.4
Mid	5590	47.3
High	5670	45.3
Worst		47.3

9.2.6. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	23.60
Mid	5785	23.60
High	5825	23.60
Worst		23.60

9.2.7. 802.11n HT20 MODE IN THE 5.8 GHz BAND

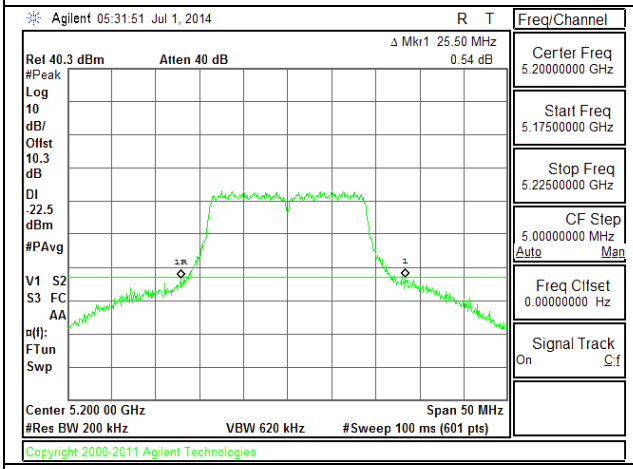
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	23.60
Mid	5785	23.60
High	5825	23.60
Worst		23.60

9.2.8. 802.11n HT40 MODE IN THE 5.8 GHz BAND

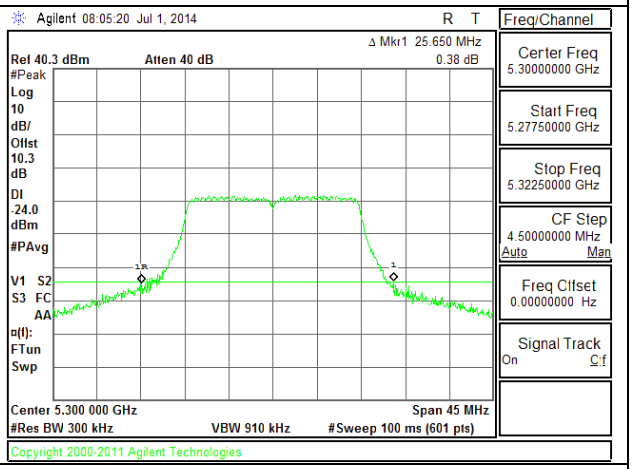
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	52.50
High	5795	55.34
Worst		55.34

9.2.9. 26 dB BANDWIDTH PLOTS

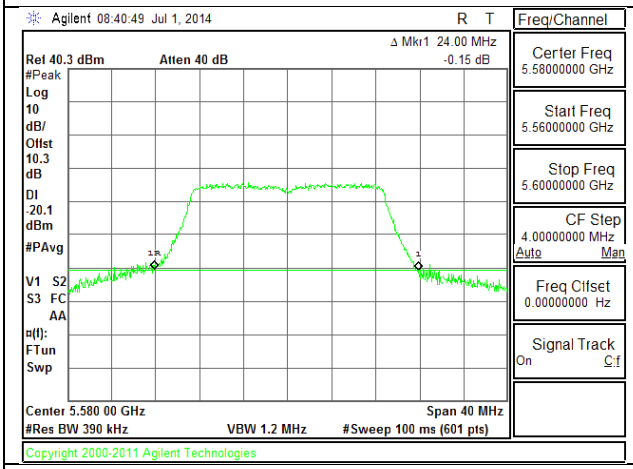
11n HT20 5.2 Mid Ch



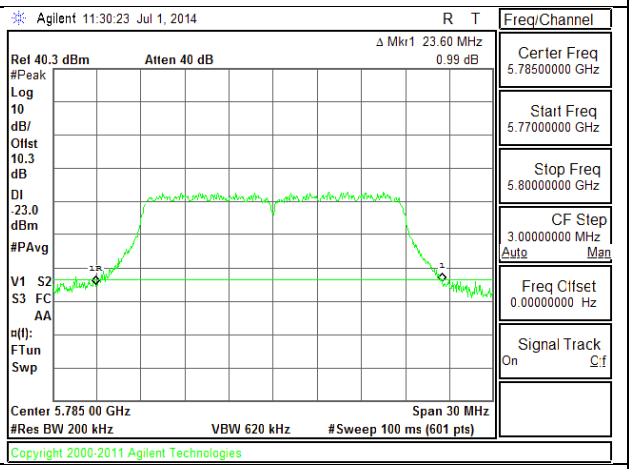
11n HT20 5.3 Mid Ch



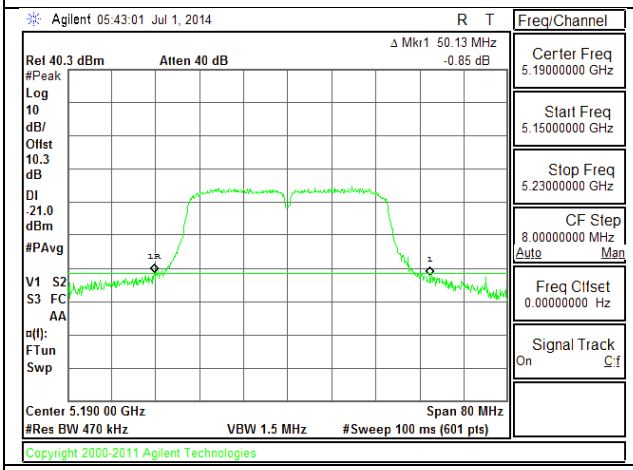
11n HT20 5.5 Mid Ch



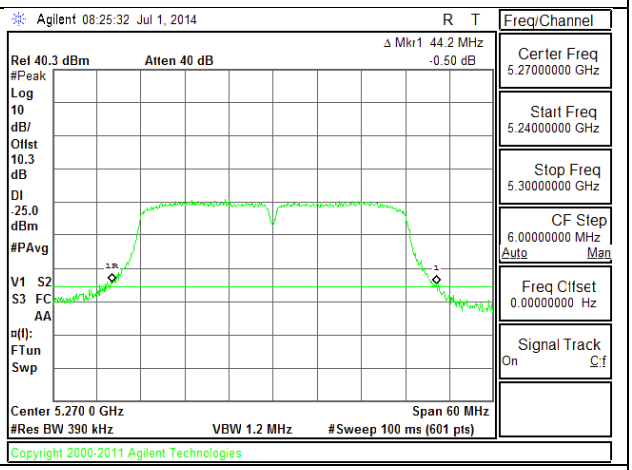
11n HT20 5.8 Mid Ch



11n HT40 5.2 Low Ch

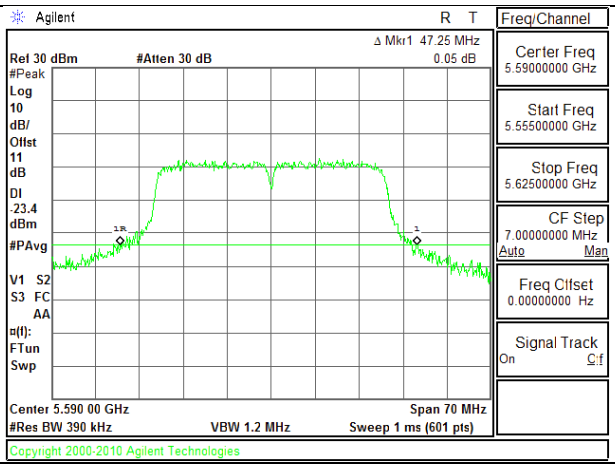


11n HT40 5.3 Low Ch

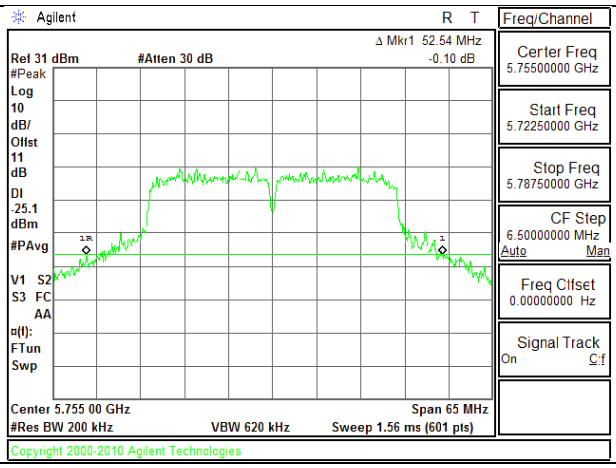


11n HT40 5.5 Mid Ch

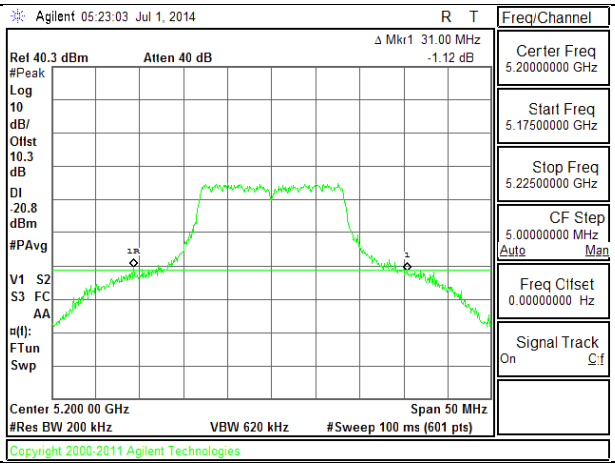
11n HT40 5.8 Low Ch



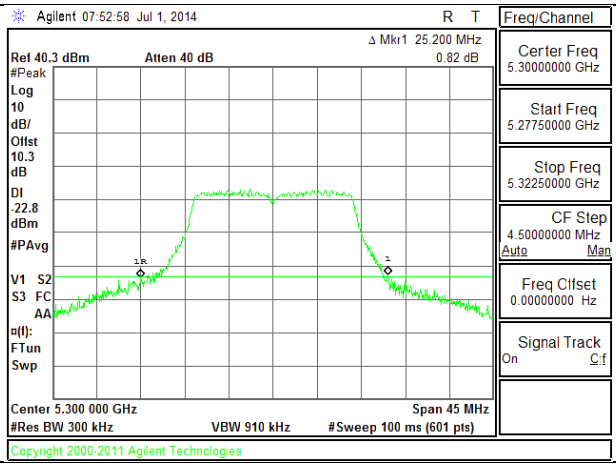
11a HT20 5.2 Mid Ch



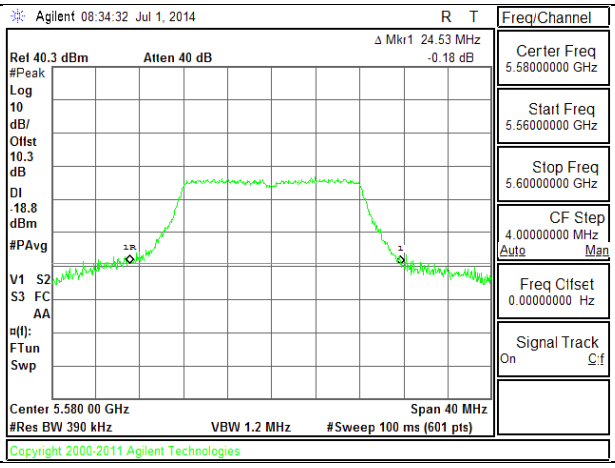
11a HT20 5.3 Mid Ch

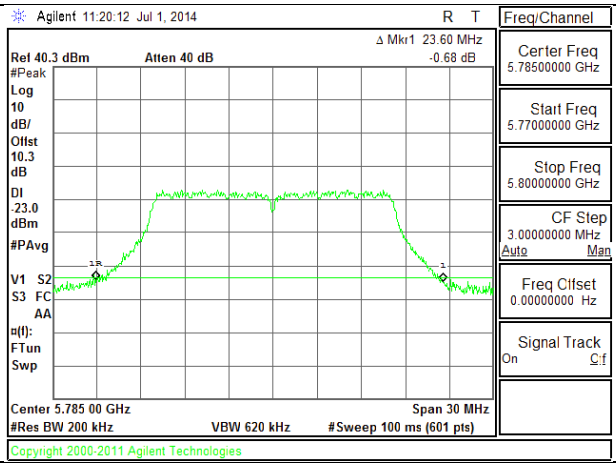


11a HT20 5.5 Mid Ch



11a HT20 5.8 Mid Ch





9.3. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

9.3.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	16.80
Mid	5200	16.82
High	5240	16.79
Worst		16.82

9.3.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	17.94
Mid	5200	17.93
High	5240	17.92
Worst		17.94

9.3.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5190	36.02
Mid	5230	36.00
Worst		36.02

9.3.4. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	16.54
Mid	5300	16.53
High	5320	16.55
Worst		16.55

9.3.5. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	17.71
Mid	5300	17.72
High	5320	17.71
Worst		17.72

9.3.6. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5270	35.93
High	5310	35.95
Worst		35.95

9.3.7. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	16.33
Mid	5580	16.54
High	5700	16.54
Worst		16.54

9.3.8. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	17.71
Mid	5580	17.73
High	5700	17.73
Worst		17.73

9.3.9. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5510	35.91
Mid	5590	36.22
High	5670	35.92
Worst		36.22

9.3.10. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	16.73
Mid	5785	16.73
High	5825	17.74
Worst		17.74

9.3.11. 802.11n HT20 MODE IN THE 5.8 GHz BAND

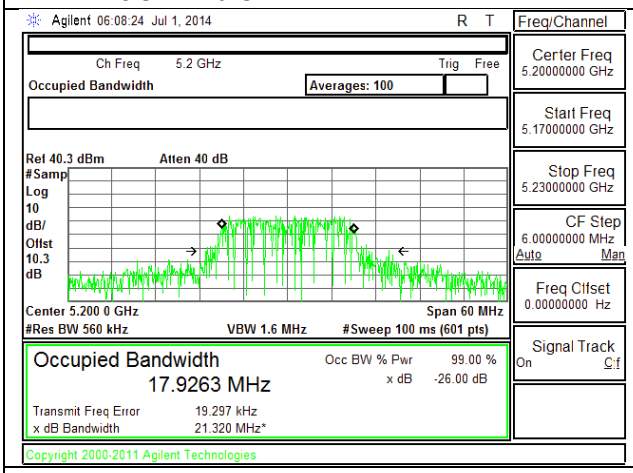
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.89
Mid	5785	17.89
High	5825	17.89
Worst		17.89

9.3.12. 802.11n HT40 MODE IN THE 5.8 GHz BAND

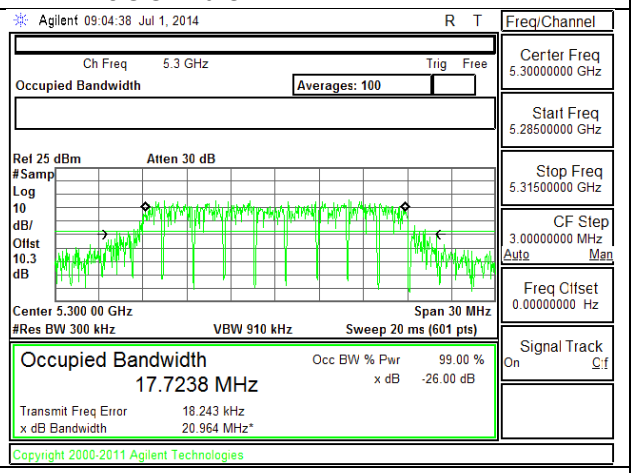
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.00
High	5795	36.60
Worst		36.60

9.3.13. 99% BANDWIDTH PLOTS

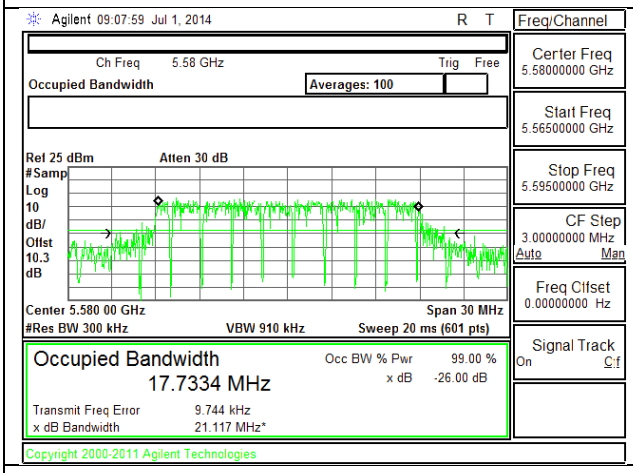
11n HT20 5.2 Mid Ch



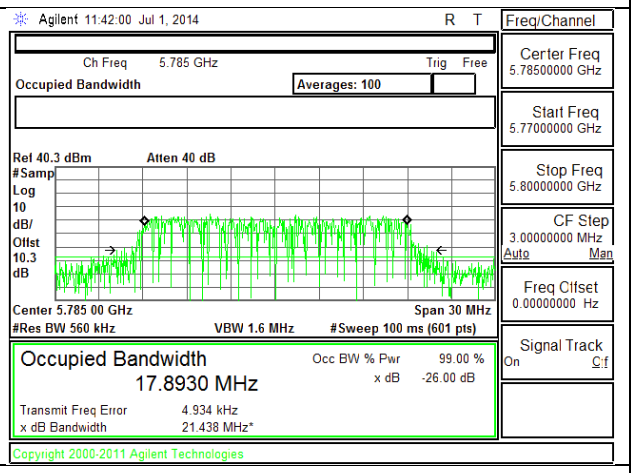
11n HT20 5.3 Mid Ch



11n HT20 5.5 Mid Ch

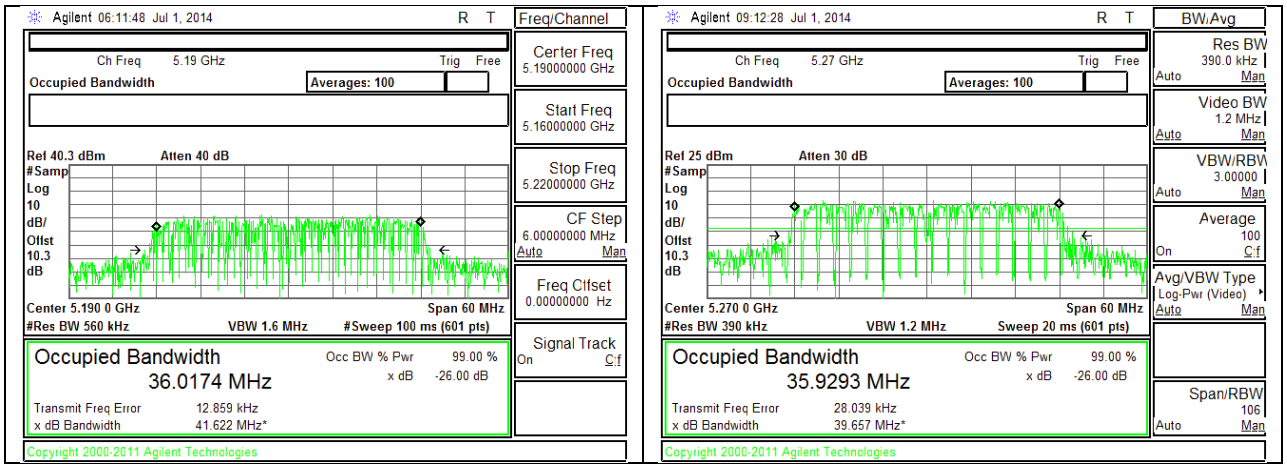


11n HT20 5.8 Mid Ch

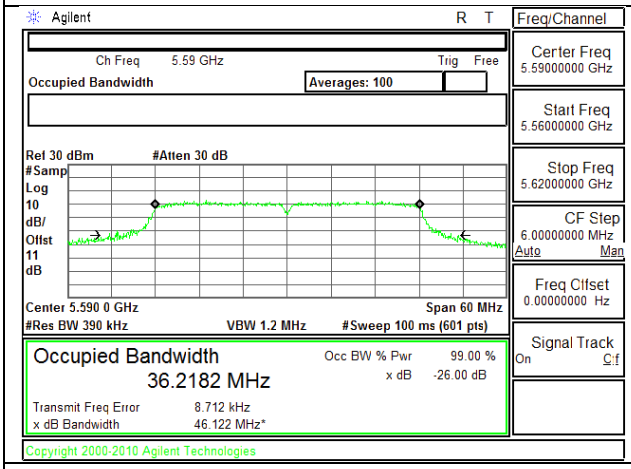


11n HT40 5.2 Low Ch

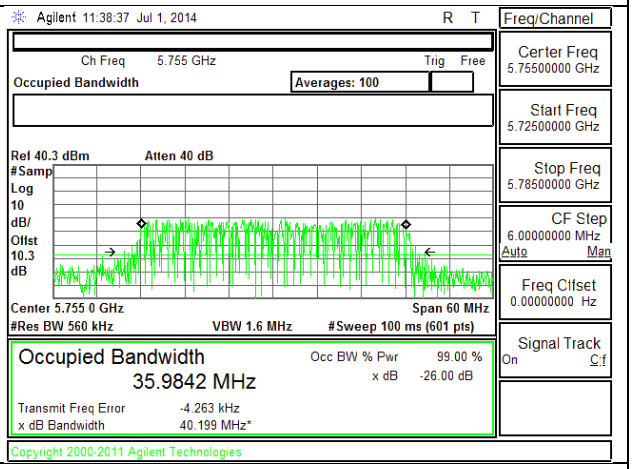
11n HT40 5.3 Low Ch



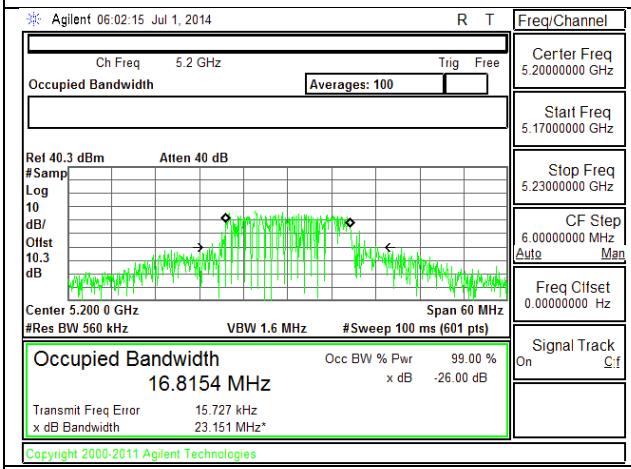
11n HT40 5.5 Mid Ch



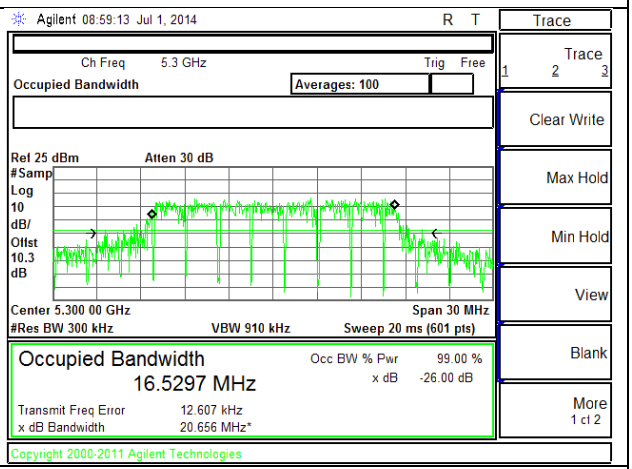
11n HT40 5.8 Low Ch



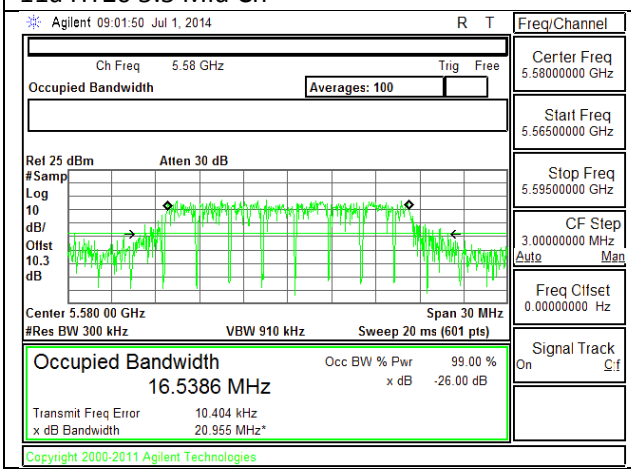
11a HT20 5.2 Mid Ch



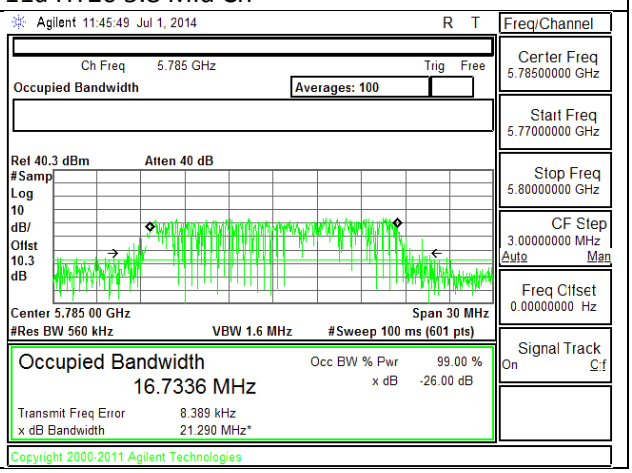
11a HT20 5.3 Mid Ch



11a HT20 5.5 Mid Ch



11a HT20 5.8 Mid Ch



9.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.15–5.25 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 peak 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-210 A9.2 (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.

Test Methodology

RESULTS

9.4.1. 802.11a MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5180	35.58	16.80	1.02
Mid	5200	31.00	16.82	1.02
High	5240	32.00	16.79	1.02

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	23.25	22.23	22.23	11.00	10.00	10.00
Mid	5200	24.00	23.26	22.24	22.24	11.00	10.00	10.00
High	5240	24.00	23.25	22.23	22.23	11.00	10.00	10.00

Duty Cycle CF (dB)	0.30	Included in Calculations of Corr'd Power & 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	12.841	13.14	22.23	-9.09
Mid	5200	12.835	13.14	22.24	-9.10
High	5240	12.963	13.26	22.23	-8.97

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	2.450	2.75	10.00	-7.25
Mid	5200	3.640	3.94	10.00	-6.06
High	5240	2.780	3.08	10.00	-6.92

9.4.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5180	29.92	17.94	1.02
Mid	5200	25.50	17.93	1.02
High	5240	26.92	17.92	1.02

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	23.54	22.52	22.52	11.00	10.00	10.00
Mid	5200	24.00	23.54	22.52	22.52	11.00	10.00	10.00
High	5240	24.00	23.53	22.51	22.51	11.00	10.00	10.00

Duty Cycle CF (dB)	0.32	Included in Calculations of Corr'd Power & 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	12.160	12.48	22.52	-10.04
Mid	5200	11.190	11.51	22.52	-11.01
High	5240	11.720	12.04	22.51	-10.47

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	2.510	2.83	10.00	-7.17
Mid	5200	1.540	1.86	10.00	-8.14
High	5240	2.220	2.54	10.00	-7.46

9.4.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5190	50.13	36.02	1.02
Mid	5230	54.93	36.00	1.02

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	5190	24.00	23.00	21.98	21.98	11.00	10.00	10.00
Mid	5230	24.00	23.00	21.98	21.98	11.00	10.00	10.00
Duty Cycle CF (dB)		0.66	Included in Calculations of Corr'd Power & PPSD					

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5190	11.400	12.06	21.98	-9.92
Mid	5230	11.390	12.05	21.98	-9.93

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5190	-0.990	-0.33	10.00	-10.33
Mid	5230	-1.140	-0.48	10.00	-10.48

9.4.4. 802.11a MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5260	25.35	16.54	1.02
Mid	5300	25.20	16.53	1.02
High	5320	26.33	16.55	1.02

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	23.19	29.19	23.19	11.00	11.00	11.00
Mid	5300	24.00	23.18	29.18	23.18	11.00	11.00	11.00
High	5320	24.00	23.19	29.19	23.19	11.00	11.00	11.00

Duty Cycle CF (dB)	0.30	Included in Calculations of Corr'd Power & 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	12.541	12.84	23.19	-10.34
Mid	5300	12.754	13.05	23.18	-10.13
High	5320	12.353	12.65	23.19	-10.53

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	2.710	3.01	11.00	-7.99
Mid	5300	3.050	3.35	11.00	-7.65
High	5320	2.610	2.91	11.00	-8.09

9.4.5. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5260	23.25	17.71	1.02
Mid	5300	25.65	17.72	1.02
High	5320	24.75	17.71	1.02

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	23.48	29.48	23.48	11.00	11.00	11.00
Mid	5300	24.00	23.48	29.48	23.48	11.00	11.00	11.00
High	5320	24.00	23.48	29.48	23.48	11.00	11.00	11.00

Duty Cycle CF (dB)	0.32	Included in Calculations of Corr'd Power & 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	11.925	12.25	23.48	-11.24
Mid	5300	12.063	12.38	23.48	-11.10
High	5320	11.879	12.20	23.48	-11.28

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	1.940	2.26	11.00	-8.74
Mid	5300	2.100	2.42	11.00	-8.58
High	5320	1.940	2.26	11.00	-8.74

9.4.6. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5270	44.20	35.93	1.02
High	5310	44.50	35.95	1.02

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	5270	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5310	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.66	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	11.50	12.16	24.00	-11.85
High	5310	11.30	11.96	24.00	-12.04

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5270	-1.29	-0.63	11.00	-11.63
High	5310	-1.49	-0.83	11.00	-11.83

9.4.7. 802.11a MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5500	23.87	16.33	1.02
Mid	5580	24.53	16.54	1.02
High	5700	25.13	16.54	1.02

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	23.13	29.13	23.13	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)	0.30	Included in Calculations of Corr'd Power & 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	13.084	13.38	23.13	-9.75
Mid	5580	13.189	13.49	23.19	-9.70
High	5700	12.653	12.95	23.19	-10.23

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	1.460	1.76	11.00	-9.24
Mid	5580	1.570	1.87	11.00	-9.13
High	5700	1.080	1.38	11.00	-9.62

9.4.8. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5500	25.40	17.71	1.02
Mid	5580	24.00	17.73	1.02
High	5700	23.80	17.73	1.02

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	23.48	29.48	23.48	11.00	11.00	11.00
Mid	5580	24.00	23.49	29.49	23.49	11.00	11.00	11.00
High	5700	24.00	23.49	29.49	23.49	11.00	11.00	11.00

Duty Cycle CF (dB)	0.32	Included in Calculations of Corr'd Power & 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	12.045	12.37	23.48	-11.12
Mid	5580	11.488	11.81	23.49	-11.68
High	5700	11.803	12.12	23.49	-11.36

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	0.150	0.47	11.00	-10.53
Mid	5580	0.400	0.72	11.00	-10.28
High	5700	-0.060	0.26	11.00	-10.74

9.4.9. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5510	44.40	35.91	1.02
Mid	5590	47.25	36.22	1.02
High	5670	45.30	35.92	1.02

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	5510	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid	5590	24.00	24.00	30.00	24.00	11.00	11.00	11.00
High	5670	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	0.66	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	11.199	11.86	24.00	-12.14
Mid	5590	11.302	11.96	24.00	-12.04
High	5670	11.196	11.86	24.00	-12.14

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5510	-3.590	-2.93	11.00	-13.93
Mid	5590	-2.500	-1.84	11.00	-12.84
High	5670	-2.510	-1.85	11.00	-12.85

9.4.10. 802.11a MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5745	23.60	16.73	1.02
Mid	5785	23.60	16.73	1.02
High	5825	23.60	17.73	1.02

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	5745	30.00	29.23	35.23	29.23	30.00	17.00	17.00
Mid	5785	30.00	29.23	35.23	29.23	30.00	17.00	17.00
High	5825	30.00	29.49	35.49	29.49	30.00	17.00	17.00

Duty Cycle CF (dB)	0.30	Included in Calculations of Corr'd Power & 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	12.89	13.19	29.23	-16.04
Mid	5785	12.53	12.83	29.23	-16.40
High	5825	12.50	12.80	29.49	-16.69

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	1.59	17.00	-15.41
Mid	5785	0.88	1.18	17.00	-15.82
High	5825	0.81	1.11	17.00	-15.89

9.4.11. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5745	23.60	17.89	1.02
Mid	5785	23.60	17.89	1.02
High	5825	23.60	17.89	1.02

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	5745	30.00	29.53	35.53	29.53	30.00	17.00	17.00
Mid	5785	30.00	29.53	35.53	29.53	30.00	17.00	17.00
High	5825	30.00	29.53	35.53	29.53	30.00	17.00	17.00

Duty Cycle CF (dB)	0.32	Included in Calculations of Corr'd Power & 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	11.91	12.23	29.53	-17.30
Mid	5785	11.64	11.96	29.53	-17.56
High	5825	11.67	11.99	29.53	-17.54

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	-0.08	0.24	17.00	-16.76
Mid	5785	0.70	1.02	17.00	-15.98
High	5825	-0.25	0.07	17.00	-16.93

9.4.12. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Directional Gain (dBi)
Low	5755	52.5	36.0	1.02
High	5795	55.3	36.6	1.02

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	5755	30.00	30.00	36.00	30.00	30.00	17.00	17.00
High	5795	30.00	30.00	36.00	30.00	30.00	17.00	17.00

Duty Cycle CF (dB)	0.66	Included in Calculations of Corr'd Power & PPSD

Output Power Results

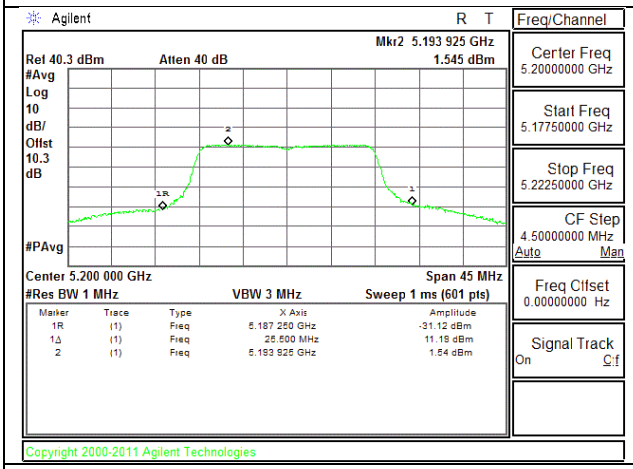
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	11.79	12.45	30.00	-17.55
High	5795	11.62	12.28	30.00	-17.72

PPSD Results

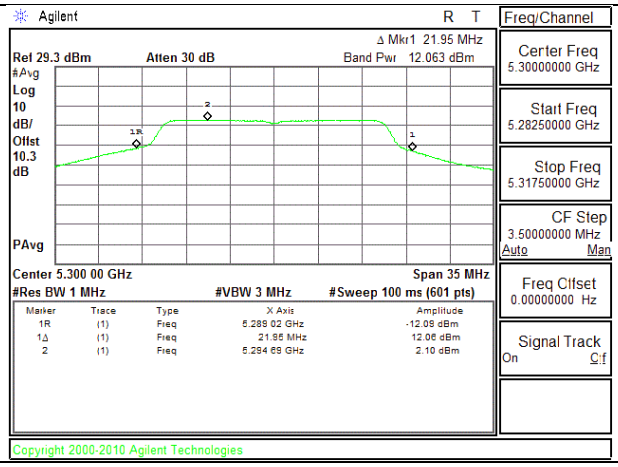
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5755	-1.61	-0.95	17.00	-17.95
High	5795	-0.75	-0.09	17.00	-17.09

9.4.13. OUTPUT POWER AND PPSD PLOTS, Chain 0

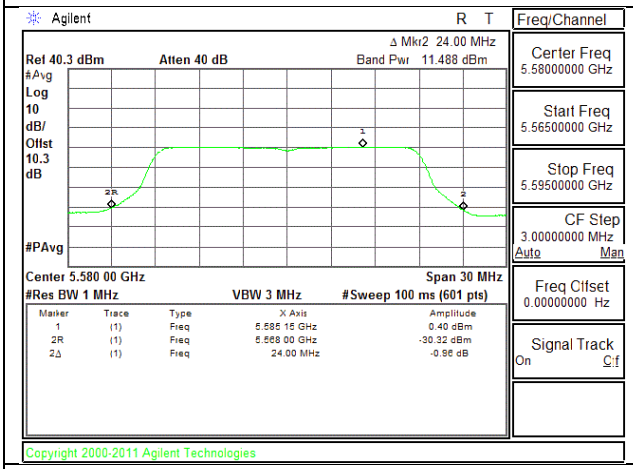
11n HT20 5.2 Mid Ch



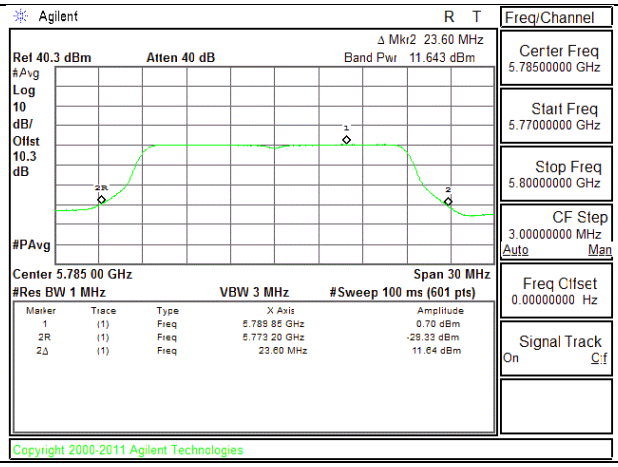
11n HT20 5.3 Mid Ch



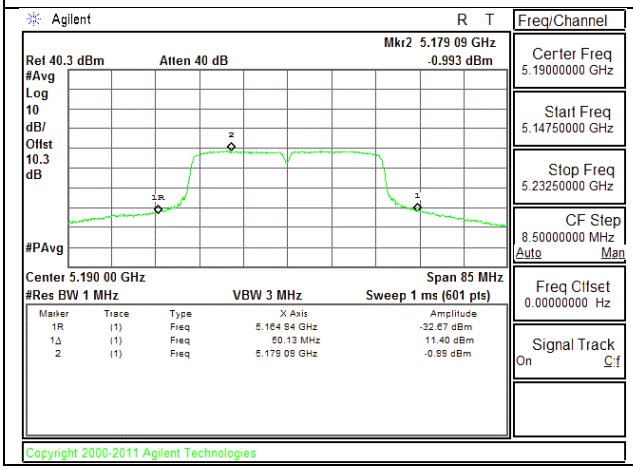
11n HT20 5.5 Mid Ch



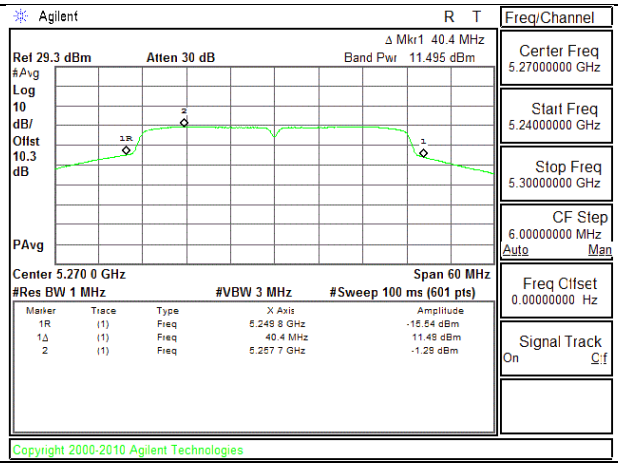
11n HT20 5.8 Mid Ch



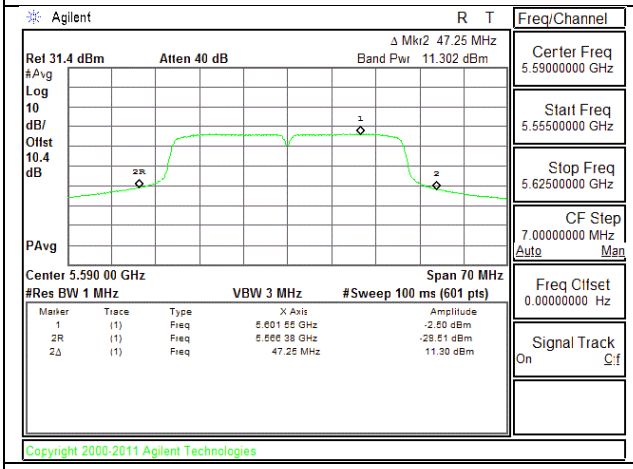
11n HT40 5.2 Low Ch



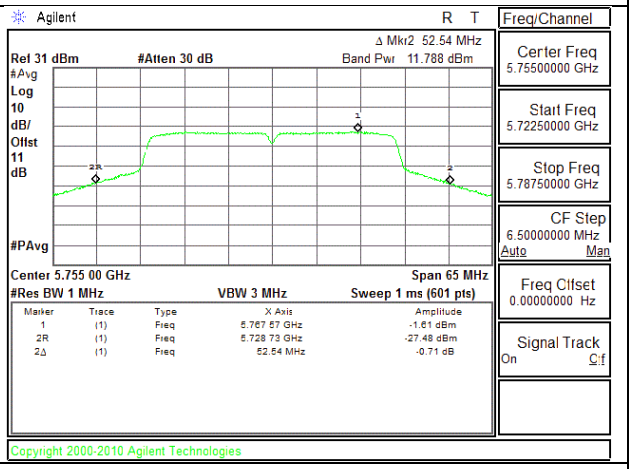
11n HT40 5.3 Low Ch



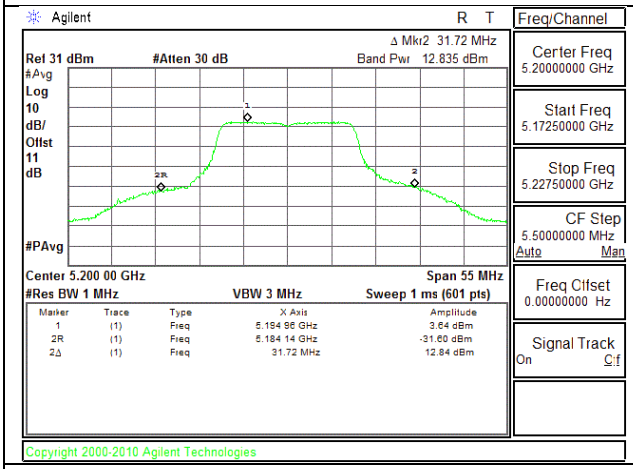
11n HT40 5.5 Mid Ch



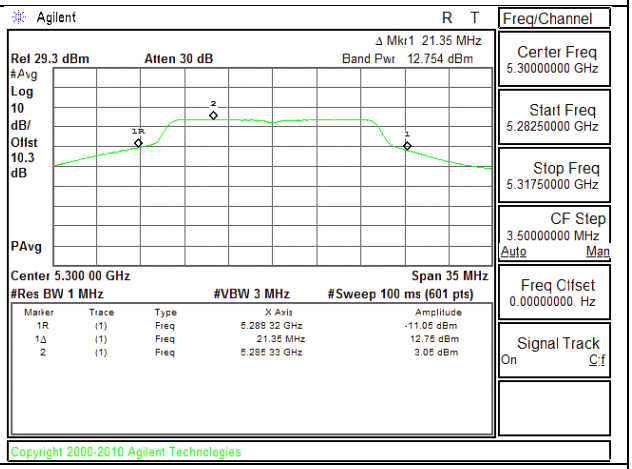
11n HT40 5.8 Low Ch



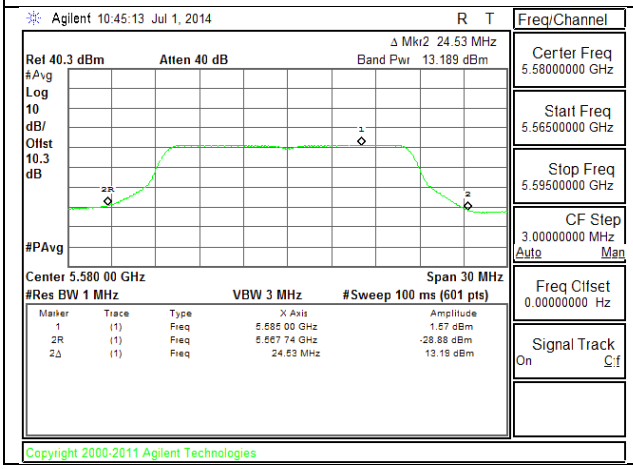
11a HT20 5.2 Mid Ch



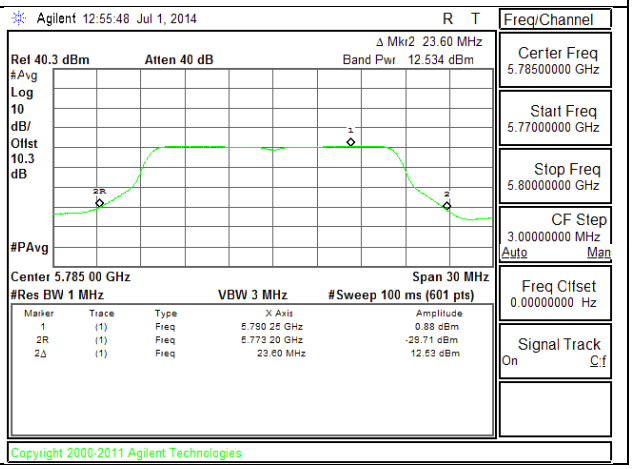
11a HT20 5.3 Mid Ch



11a HT20 5.5 Mid Ch



11a HT20 5.8 Mid Ch



10. TRANSMITTER ABOVE 1 GHz

LIMITS

FCC §15.205 and §15.209

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

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor to the reading offset for average measurements.

The spectrum from 1GHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

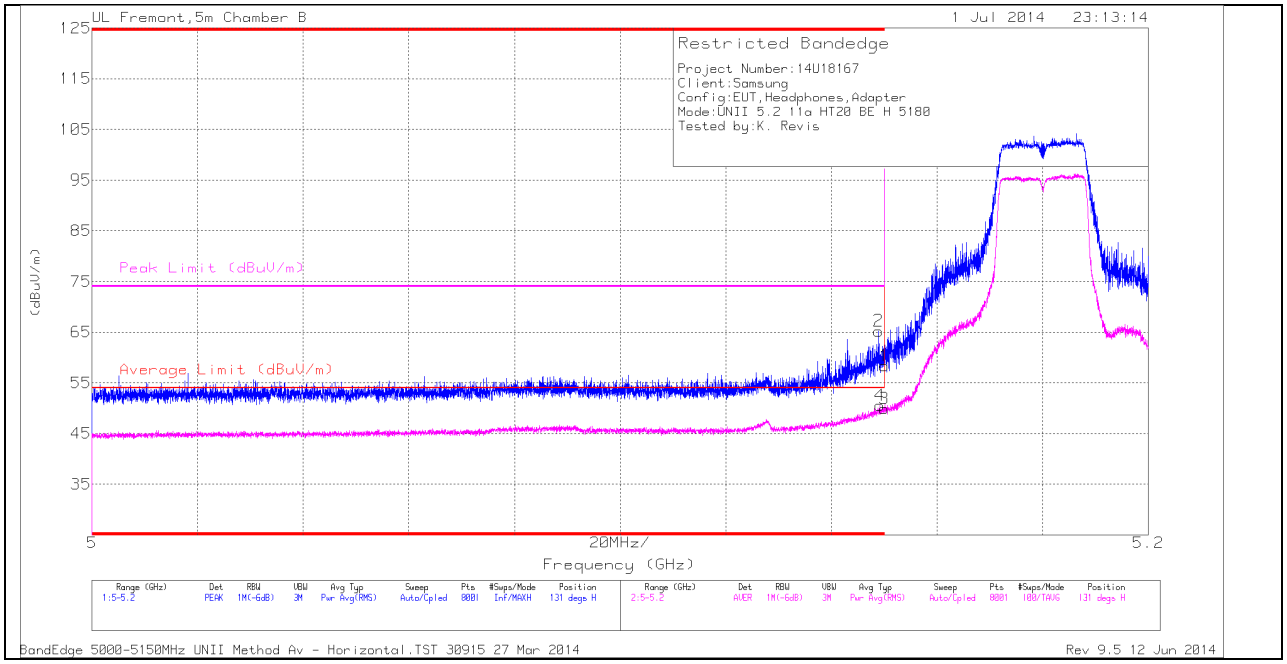
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

10.1. 5.2 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

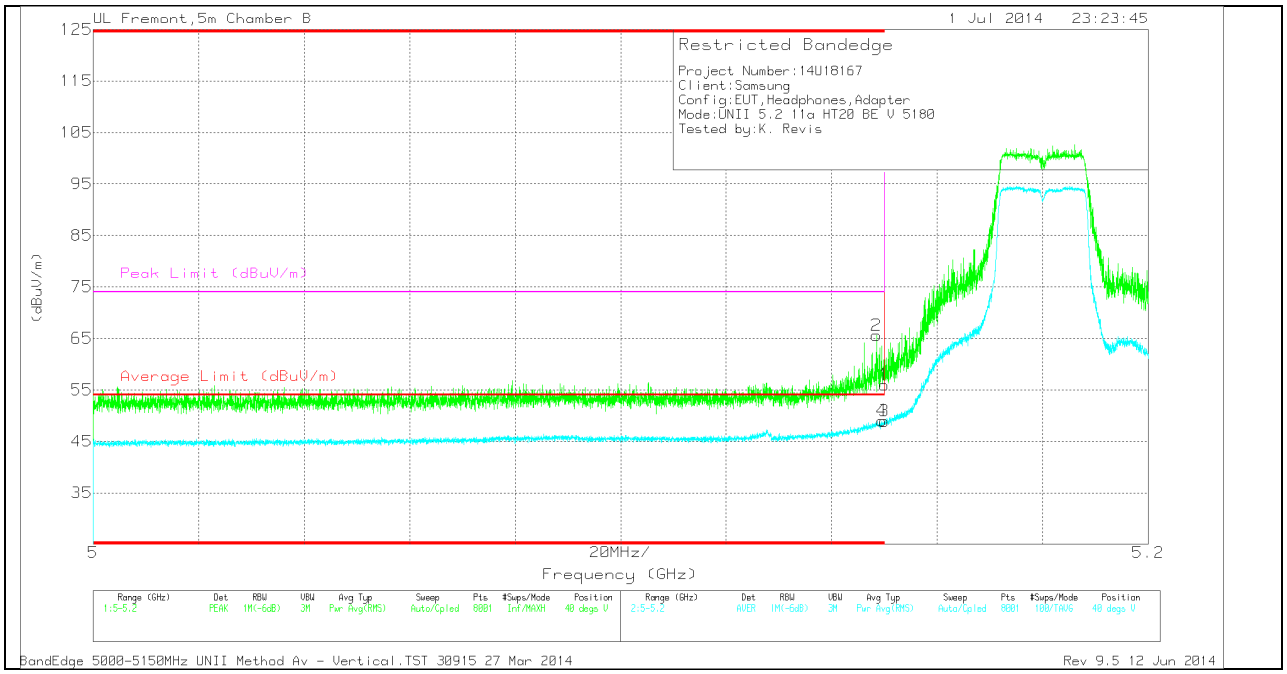
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	44.4	PK	34.3	-20.3	0	58.4	-	-	74	-15.6	131	245	H
2	* 5.149	51.25	PK	34.3	-20.3	0	65.25	-	-	74	-8.75	131	245	H
3	* 5.15	35.67	RMS	34.3	-20.3	.3	49.97	54	-4.03	-	-	131	245	H
4	* 5.149	36.25	RMS	34.3	-20.3	.3	50.55	54	-3.45	-	-	131	245	H

VERTICAL PEAK AND AVERAGE PLOT



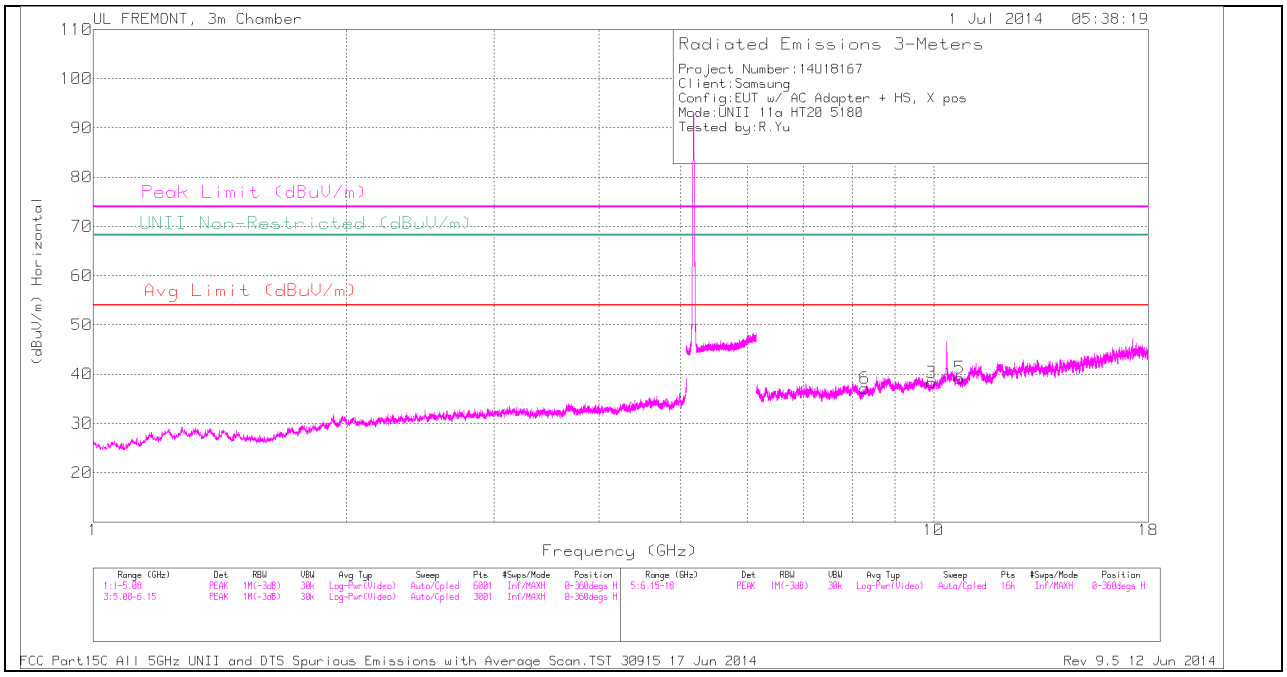
VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	41.97	PK	34.3	-20.3	0	55.97	-	-	74	-18.03	40	269	V
2	* 5.148	51.61	PK	34.3	-20.3	0	65.61	-	-	74	-8.39	40	269	V
3	* 5.15	34.63	RMS	34.3	-20.3	.3	48.93	54	-5.07	-	-	40	269	V
4	* 5.149	34.7	RMS	34.3	-20.3	.3	49	54	-5	-	-	40	269	V

UL VERIFICATION SERVICES INC.
47173 BENICIA STREET, FREMONT, CA 94538, USA
TEL: (510) 771-1000
FORM NO: CCSUP4701I
FAX: (510) 661-0888

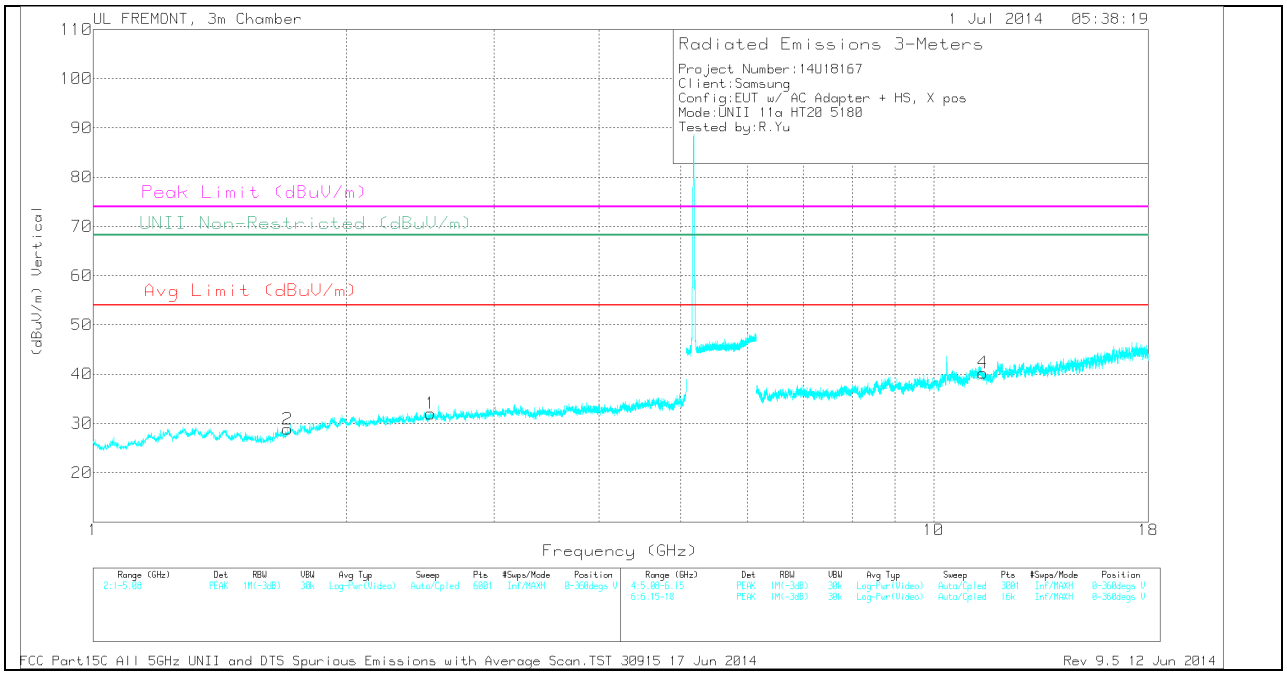
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
2	1.704	31.81	PK	29.1	-32.1	28.81	-	-	74	-45.19	-	-	0-360	200	V
1	2.521	31.8	PK	32.4	-32.2	32	-	-	-	-	68.2	-36.2	0-360	100	V
6	8.278	28.64	PK	35.8	-27.3	37.14	-	-	74	-36.86	-	-	0-360	200	H
3	9.937	27.51	PK	36.9	-26.1	38.31	-	-	-	-	68.2	-29.89	0-360	200	H
5	10.731	26.71	PK	37.9	-25.4	39.21	-	-	74	-34.79	-	-	0-360	200	H
4	11.451	27.97	PK	38.2	-25.9	40.27	-	-	74	-33.73	-	-	0-360	100	V

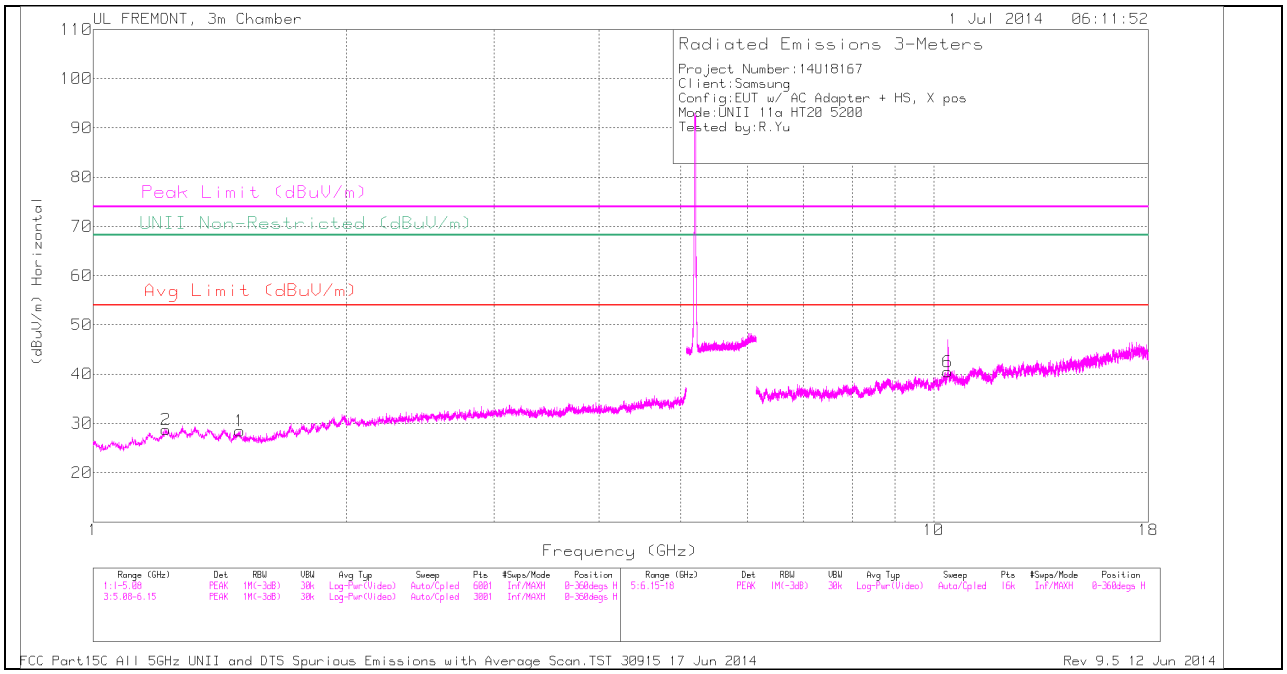
PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
1.705	41.05	PK2	29.1	-32.1	38.05	-	-	74	-35.95	-	-	360	200	V
2.521	41.51	PK2	32.4	-32.2	41.71	-	-	-	-	68.2	-26.49	360	100	V
3.005	41.08	PK2	32.9	-31.8	42.18	-	-	-	-	68.2	-26.02	360	100	H
8.28	38.52	PK2	35.8	-27.2	47.12	-	-	74	-26.88	-	-	360	200	H
9.936	37.84	PK2	36.9	-26	48.74	-	-	-	-	68.2	-19.46	360	200	H
10.73	36.79	PK2	37.9	-25.4	49.29	-	-	74	-24.71	-	-	360	200	H

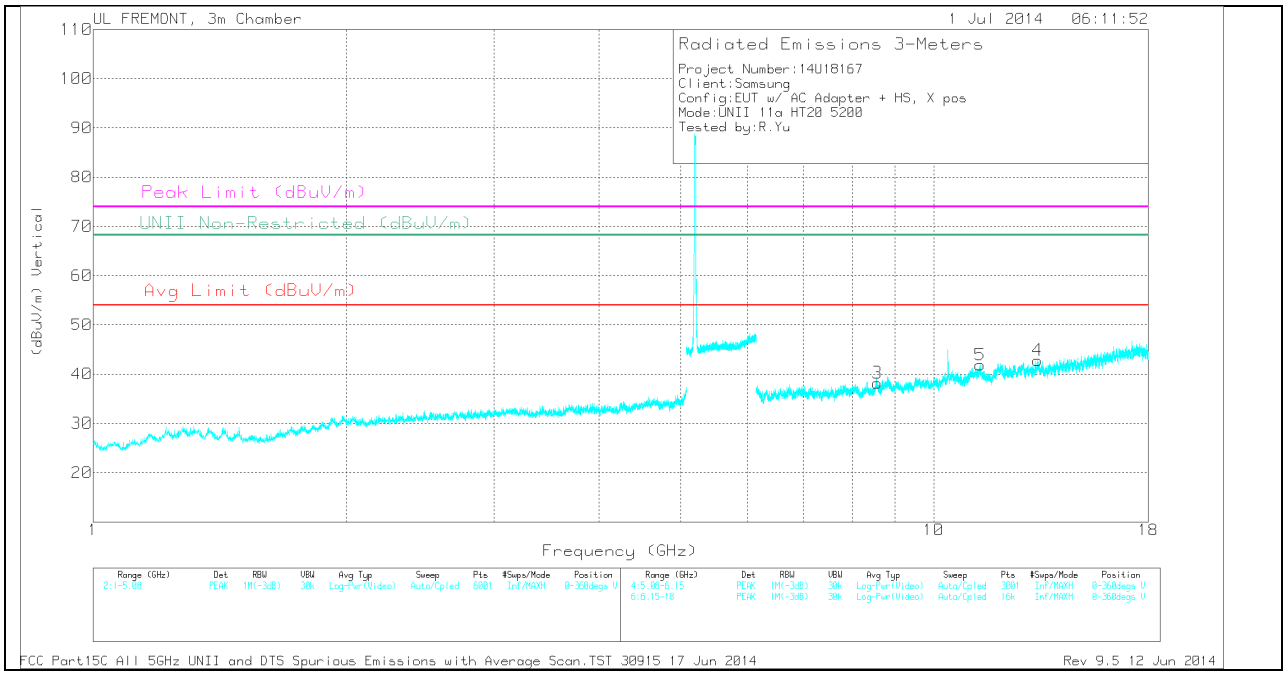
PK2 - KDB558074 Method: Maximum Peak

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
2	1.221	32.43	PK	29.5	-33.2	0	28.73	-	-	74	-45.27	-	-	0-360	200	H
1	1.495	32.75	PK	28.6	-32.9	0	28.45	-	-	74	-45.55	-	-	0-360	200	H
3	8.57	28.49	PK	35.8	-26.1	0	38.19	-	-	-	-	68.2	-30.01	0-360	100	V
6	10.386	28.95	PK	37.3	-25.8	0	40.45	-	-	-	-	68.2	-27.75	0-360	100	H
5	11.358	29.44	PK	38.1	-25.7	0	41.84	-	-	74	-32.16	-	-	0-360	200	V
4	13.294	30.4	PK	39.2	-26.8	0	42.8	-	-	74	-31.2	-	-	0-360	100	V

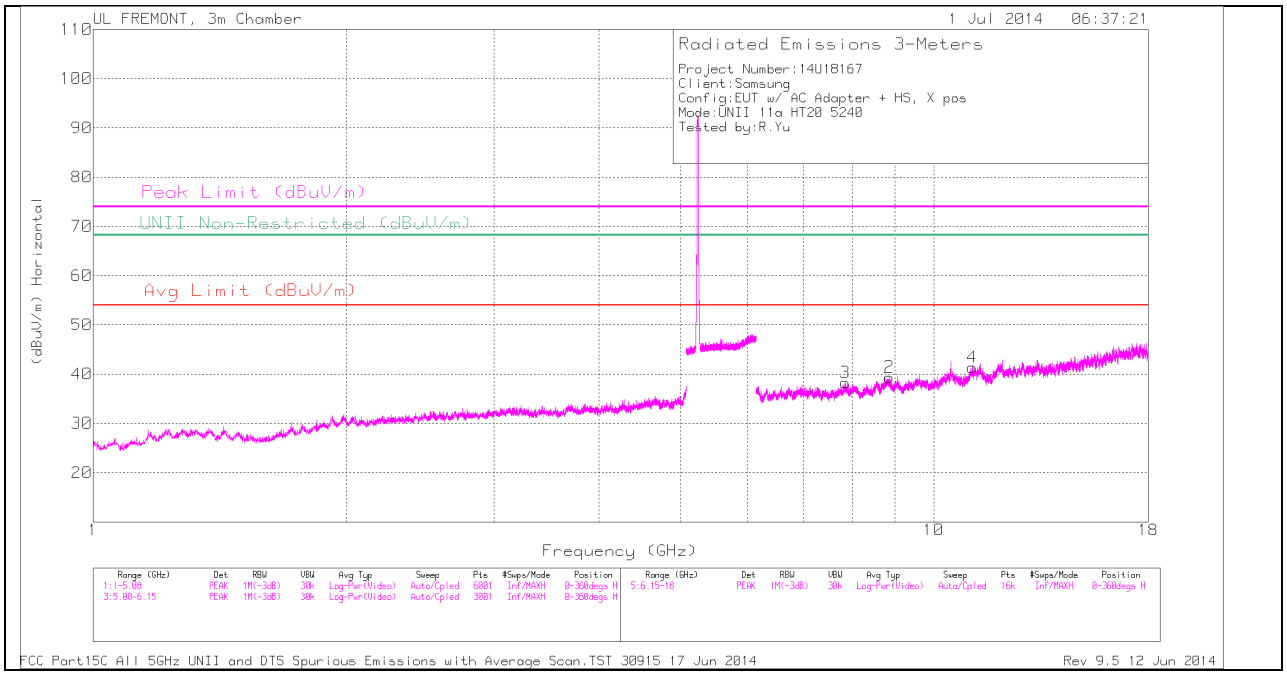
PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
1.22	42.23	PK2	29.4	-33.2	0	38.43	-	-	74	-35.57	-	-	360	200	H
1.495	41.7	PK2	28.6	-32.8	0	37.5	-	-	74	-36.5	-	-	360	200	H
3.076	41.07	PK2	33	-32.1	0	41.97	-	-	-	-	68.2	-26.23	360	100	H
8.57	38.1	PK2	35.8	-26.2	0	47.7	-	-	-	-	68.2	-20.5	360	100	V
10.388	36.89	PK2	37.3	-25.9	0	48.29	-	-	-	-	68.2	-19.91	360	100	H
13.296	39.17	PK2	39.2	-26.8	0	51.57	-	-	74	-22.43	-	-	360	100	V

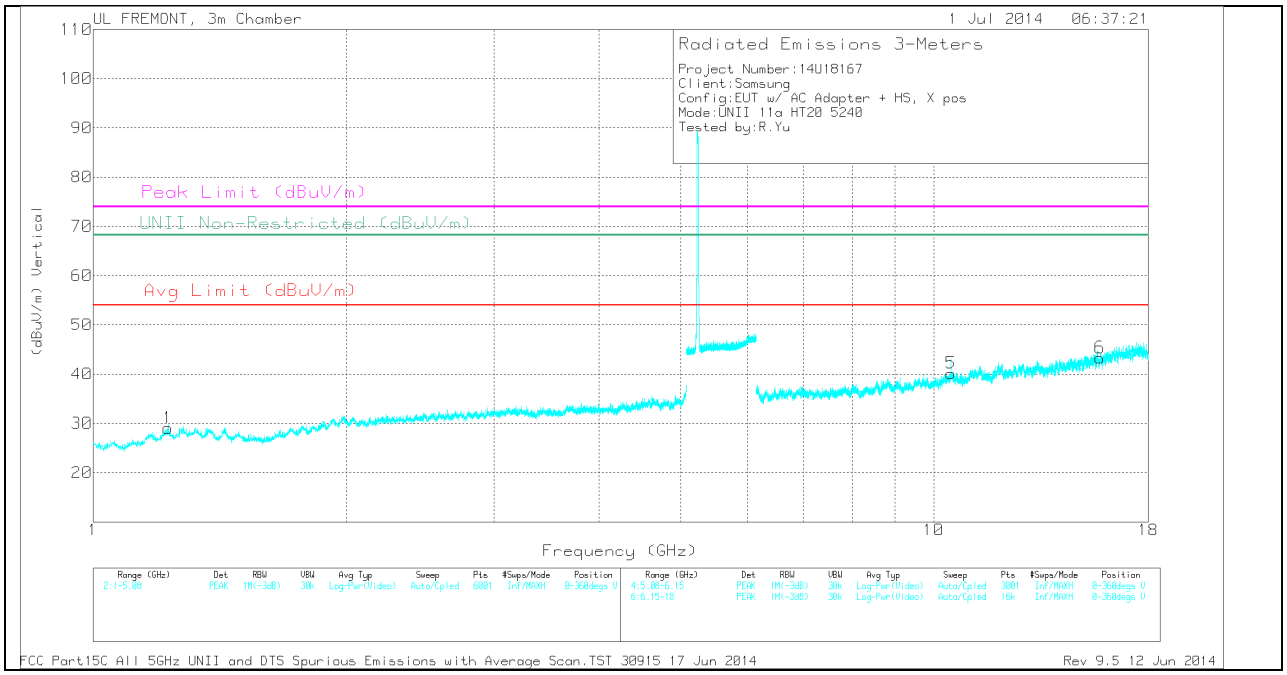
PK2 - KDB558074 Method: Maximum Peak

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	1.227	32.85	PK	29.5	-33.3	0	29.05	-	-	74	-44.95	-	-	0-360	200	V
3	7.847	30.3	PK	35.8	-27.8	0	38.3	-	-	-	-	68.2	-29.9	0-360	200	H
2	8.855	29.87	PK	36	-26.5	0	39.37	-	-	-	-	68.2	-28.83	0-360	100	H
5	10.476	28.35	PK	37.5	-25.7	0	40.15	-	-	-	-	68.2	-28.05	0-360	200	V
4	11.111	28.63	PK	37.9	-25.2	0	41.33	-	-	74	-32.67	-	-	0-360	100	H
6	15.756	29.63	PK	40.4	-26.7	0	43.33	-	-	74	-30.67	-	-	0-360	200	V

PK - Peak detector

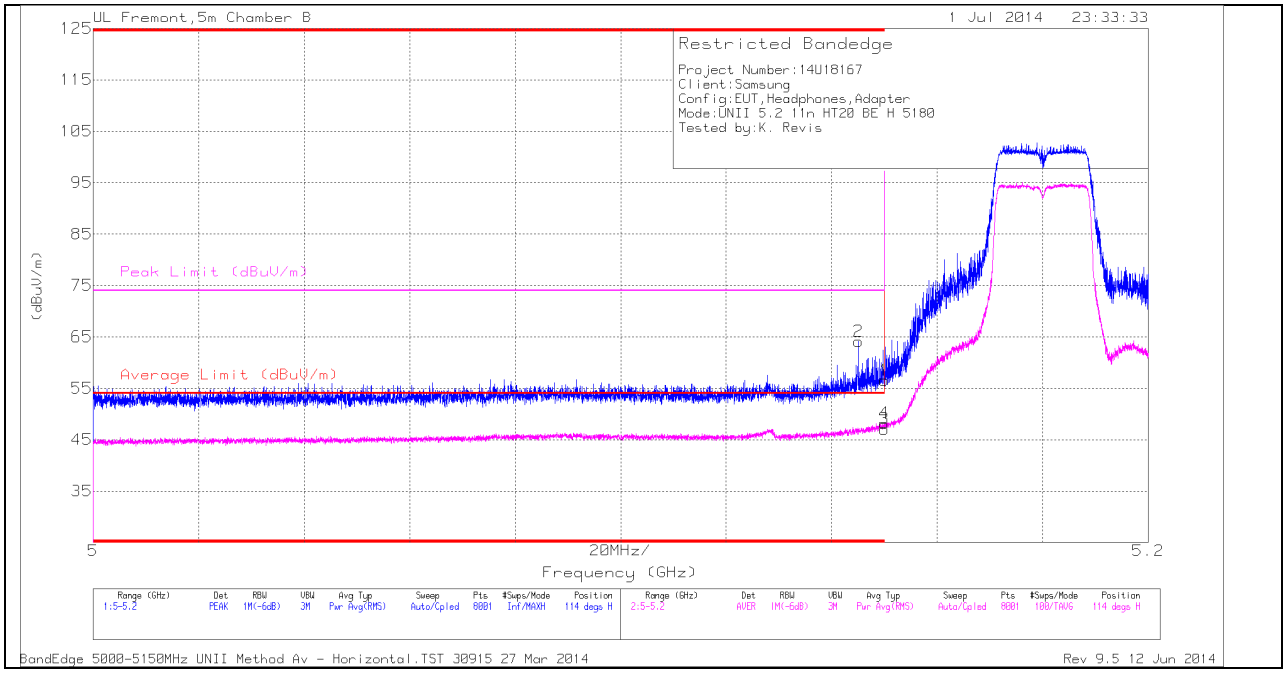
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
1.228	42.25	PK2	29.5	-33.3	0	38.45	-	-	74	-35.55	-	-	360	200	V
3.015	41.53	PK2	33	-31.9	0	42.63	-	-	-	-	68.2	-25.57	360	100	H
7.845	38.46	PK2	35.8	-27.8	0	46.46	-	-	-	-	68.2	-21.74	360	200	H
8.857	37.97	PK2	36	-26.4	0	47.57	-	-	-	-	68.2	-20.63	360	100	H
10.477	37.24	PK2	37.5	-25.7	0	49.04	-	-	-	-	68.2	-19.16	360	200	V
11.11	37.42	PK2	37.9	-25.3	0	50.02	-	-	74	-23.98	-	-	360	100	H

PK2 - KDB558074 Method: Maximum Peak

10.1.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

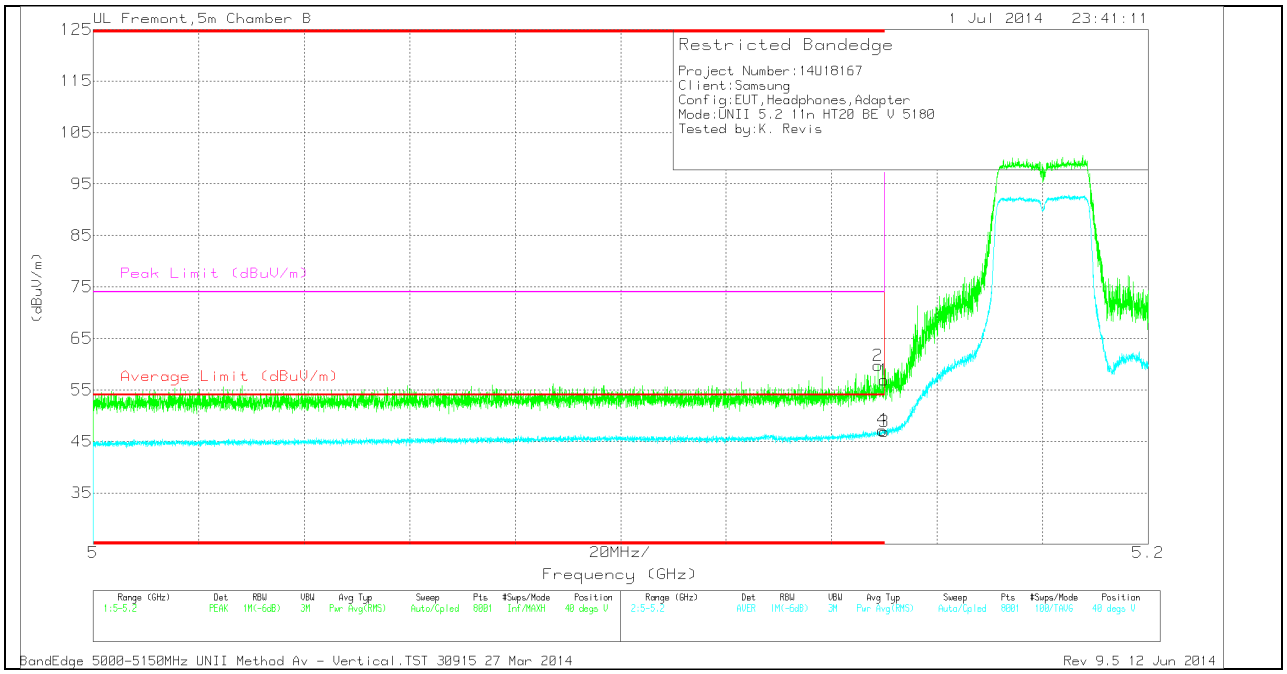
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
2	* 5.145	50	PK	34.3	-20.2	0	64.1	-	-	74	-9.9	114	266	H
1	* 5.15	42.56	PK	34.3	-20.3	0	56.56	-	-	74	-17.44	114	266	H
3	* 5.15	32.79	RMS	34.3	-20.3	.32	47.11	54	-6.89	-	-	114	266	H
4	* 5.15	33.84	RMS	34.3	-20.3	.32	48.16	54	-5.84	-	-	114	266	H

VERTICAL PEAK AND AVERAGE PLOT

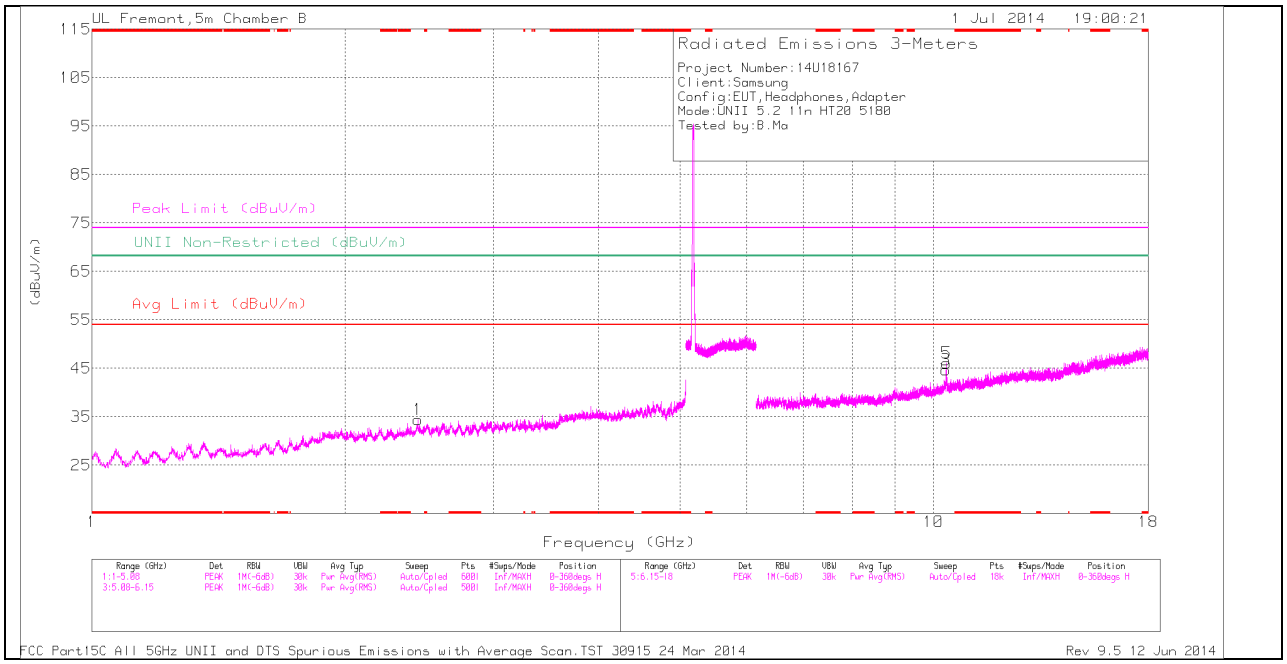


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.149	45.73	PK	34.3	-20.3	0	59.73	-	-	74	-14.27	40	240	V
1	* 5.15	42.93	PK	34.3	-20.3	0	56.93	-	-	74	-17.07	40	240	V
3	* 5.15	32.57	RMS	34.3	-20.3	.32	46.89	54	-7.11	-	-	40	240	V
4	* 5.15	32.88	RMS	34.3	-20.3	.32	47.2	54	-6.8	-	-	40	240	V

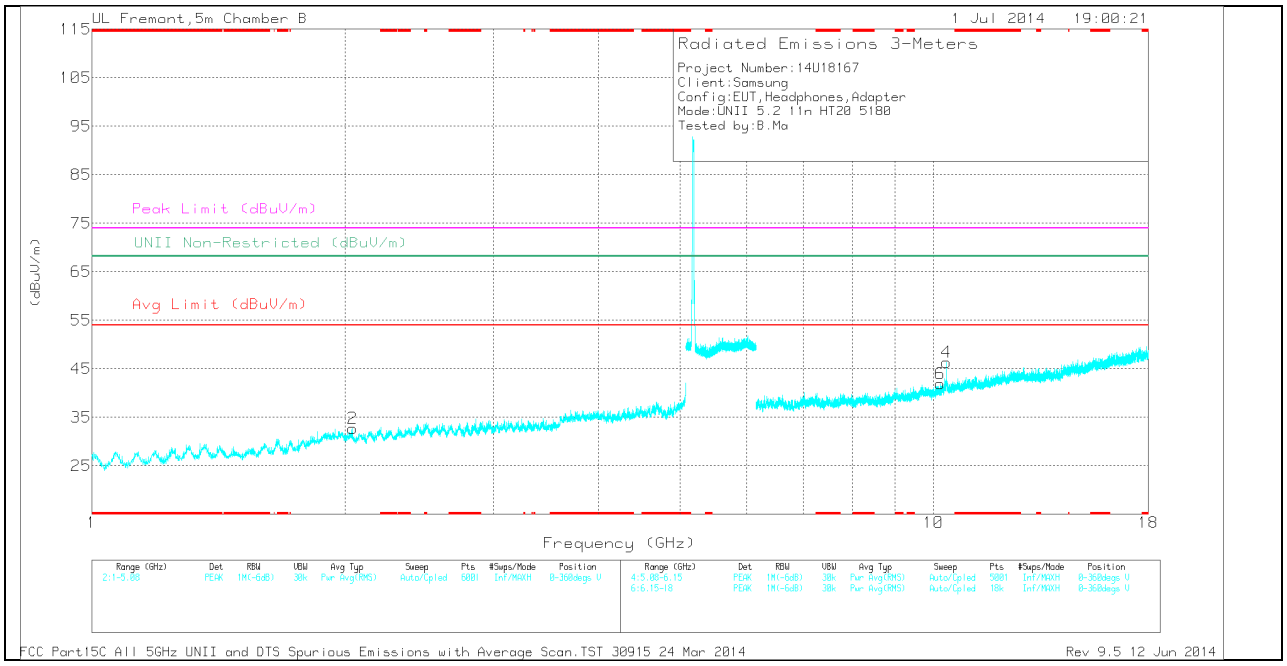
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL

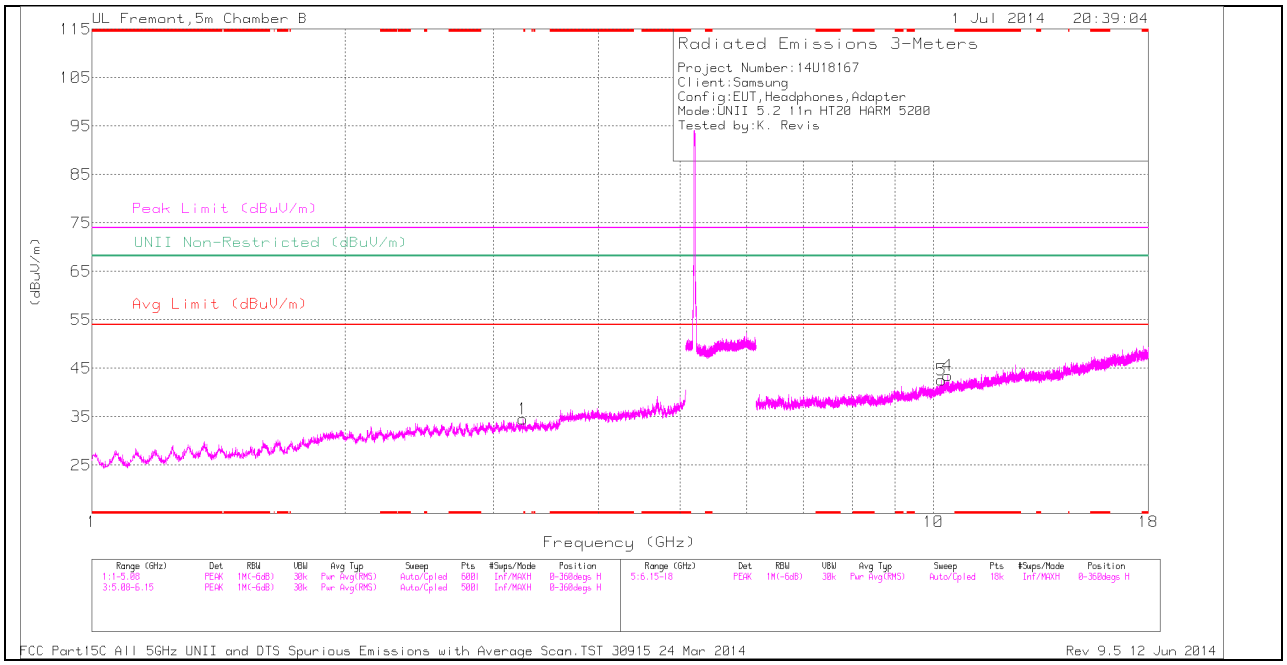


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

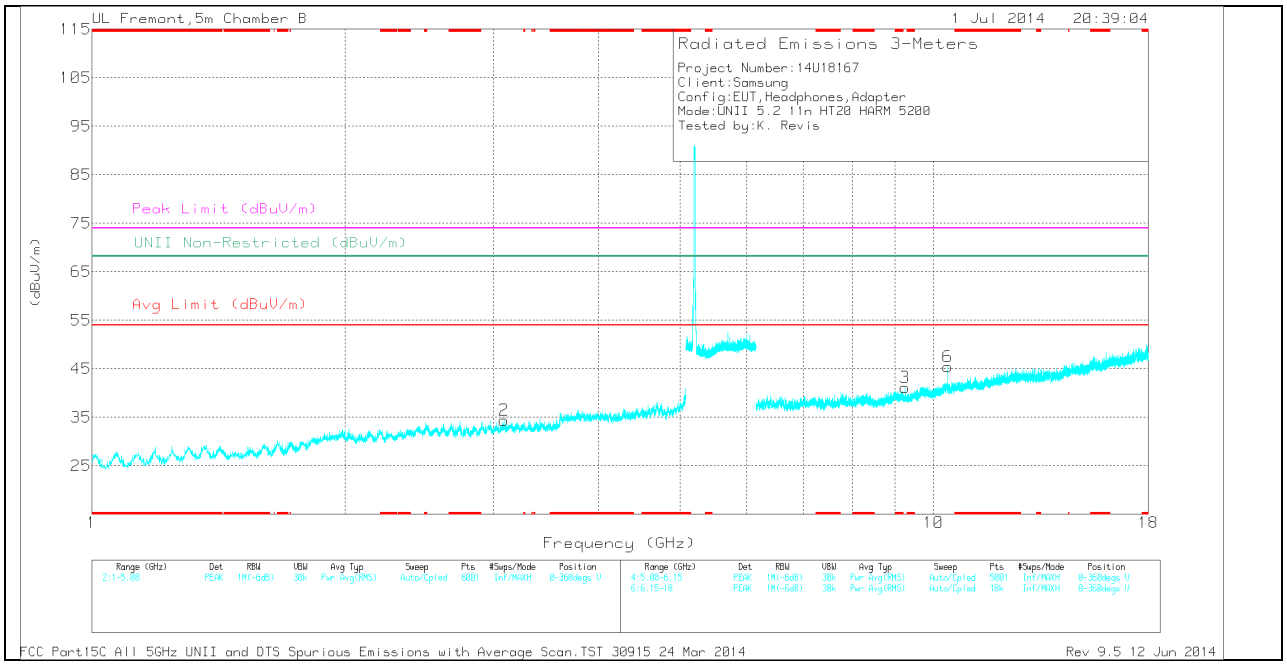
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	2.04	35.01	PK	31.3	-33.6	0	32.71	-	-	-	-	68.2	-35.49	0-360	200	V
1	2.44	34.35	PK	32.3	-32.3	0	34.35	-	-	-	-	68.2	-33.85	0-360	200	H
6	10.185	28.66	PK	37.1	-23.8	0	41.96	-	-	-	-	68.2	-26.24	0-360	200	V
3	10.349	30.4	PK	37.2	-22.9	0	44.7	-	-	-	-	68.2	-23.5	0-360	200	H
5	10.36	31.57	PK	37.2	-22.7	0	46.07	-	-	-	-	68.2	-22.13	0-360	200	H
4	10.36	31.89	PK	37.2	-22.7	0	46.39	-	-	-	-	68.2	-21.81	0-360	101	V

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL

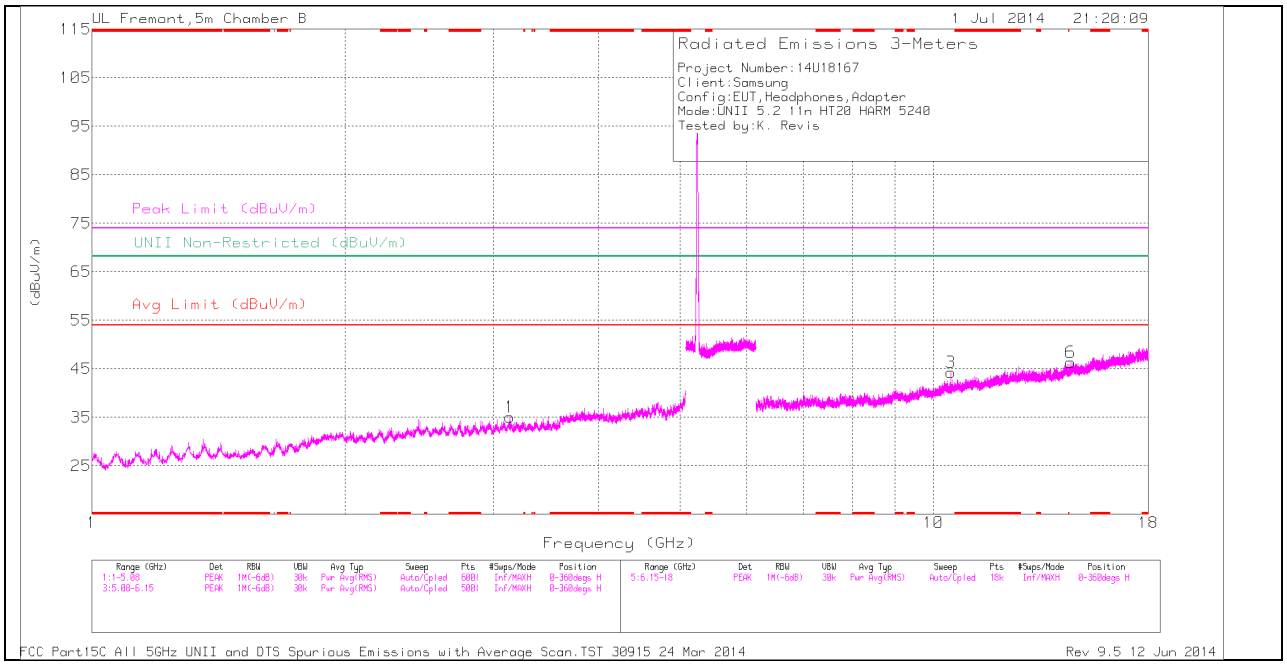


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

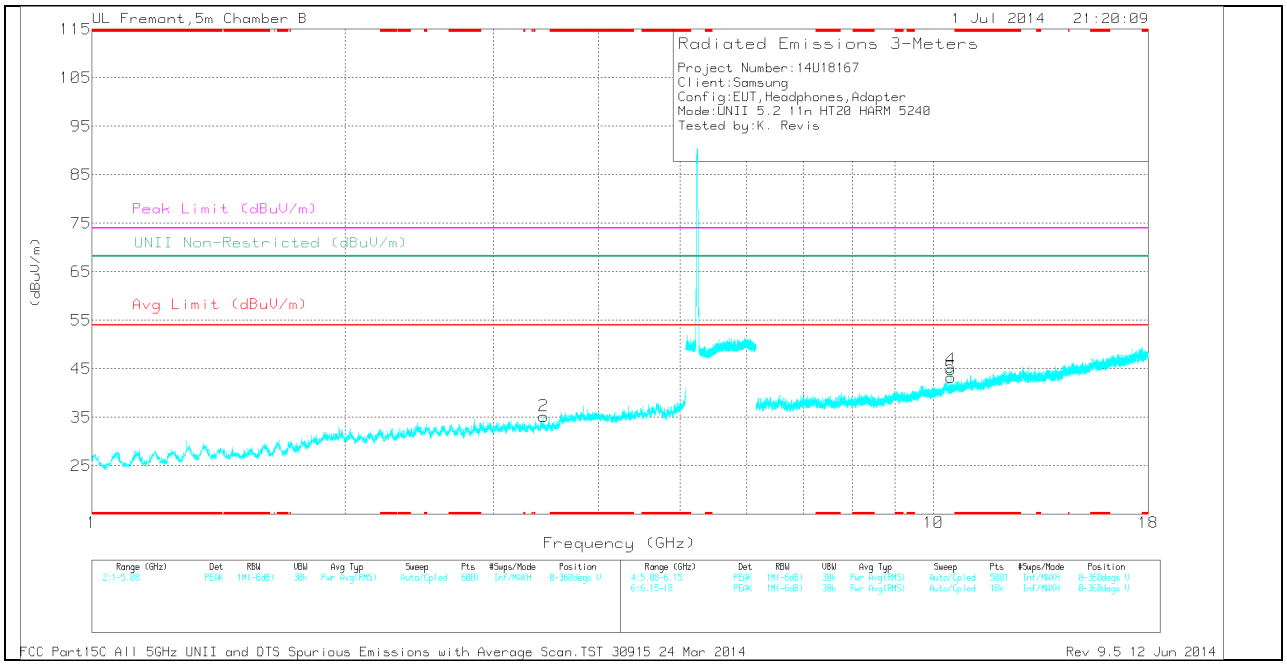
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	3.088	33.6	PK	32.9	-32.1	0	34.4	-	-	-	-	68.2	-33.8	0-360	200	V
1	3.251	33.75	PK	32.8	-32	0	34.55	-	-	-	-	68.2	-33.65	0-360	200	H
3	9.254	29.4	PK	36.4	-24.7	0	41.1	-	-	-	-	68.2	-27.1	0-360	200	V
5	10.226	29.07	PK	37.1	-23.6	0	42.57	-	-	-	-	68.2	-25.63	0-360	101	H
4	10.4	29.15	PK	37.3	-23	0	43.45	-	-	-	-	68.2	-24.75	0-360	200	H
6	10.4	31.13	PK	37.3	-23	0	45.43	-	-	-	-	68.2	-22.77	0-360	101	V

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



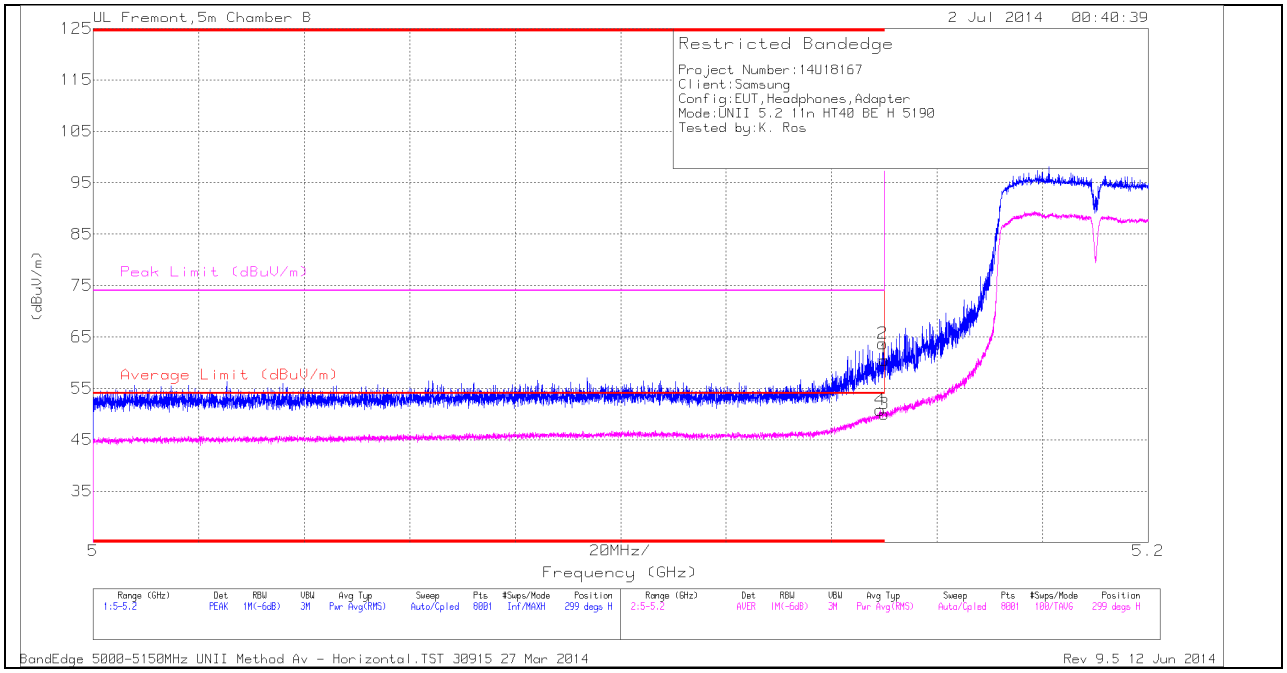
Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	3.135	33.9	PK	32.8	-31.7	0	35	-	-	-	-	68.2	-33.2	0-360	200	H
2	3.444	33.55	PK	32.8	-31.1	0	35.25	-	-	-	-	68.2	-32.95	0-360	101	V
3	10.48	30.23	PK	37.4	-23.3	0	44.33	-	-	-	-	68.2	-23.87	0-360	101	H
4	10.48	30.82	PK	37.4	-23.3	0	44.92	-	-	-	-	68.2	-23.28	0-360	199	V
5	10.489	29.16	PK	37.4	-23.3	0	43.26	-	-	-	-	68.2	-24.94	0-360	199	V
6	14.553	27.63	PK	39.3	-20.6	0	46.33	-	-	-	-	68.2	-21.87	0-360	199	H

10.1.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

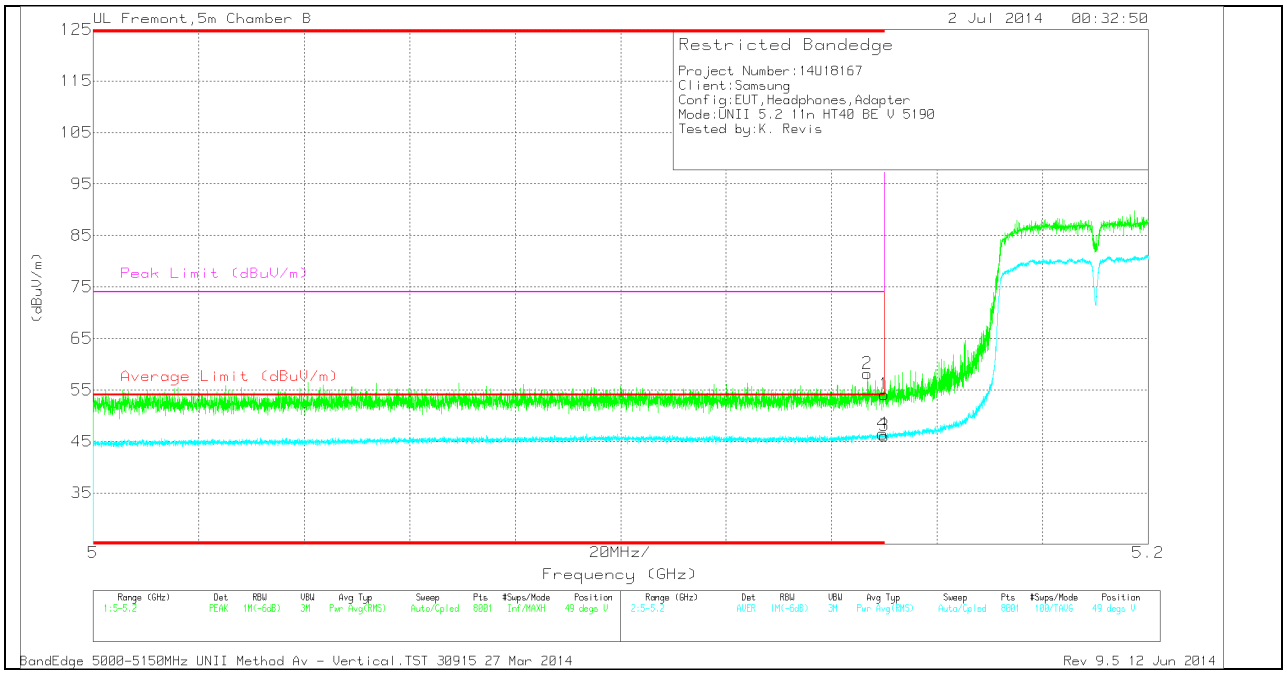
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 5.15	46.49	PK	34.3	-20.3	0	60.49	-	-	74	-13.51	299	206	H
2	* 5.15	49.71	PK	34.3	-20.3	0	63.71	-	-	74	-10.29	299	206	H
3	* 5.15	35.53	RMS	34.3	-20.3	.66	50.02	54	-3.98	-	-	299	206	H
4	* 5.149	36.29	RMS	34.3	-20.3	.66	50.78	54	-3.22	-	-	299	206	H

VERTICAL PEAK AND AVERAGE PLOT

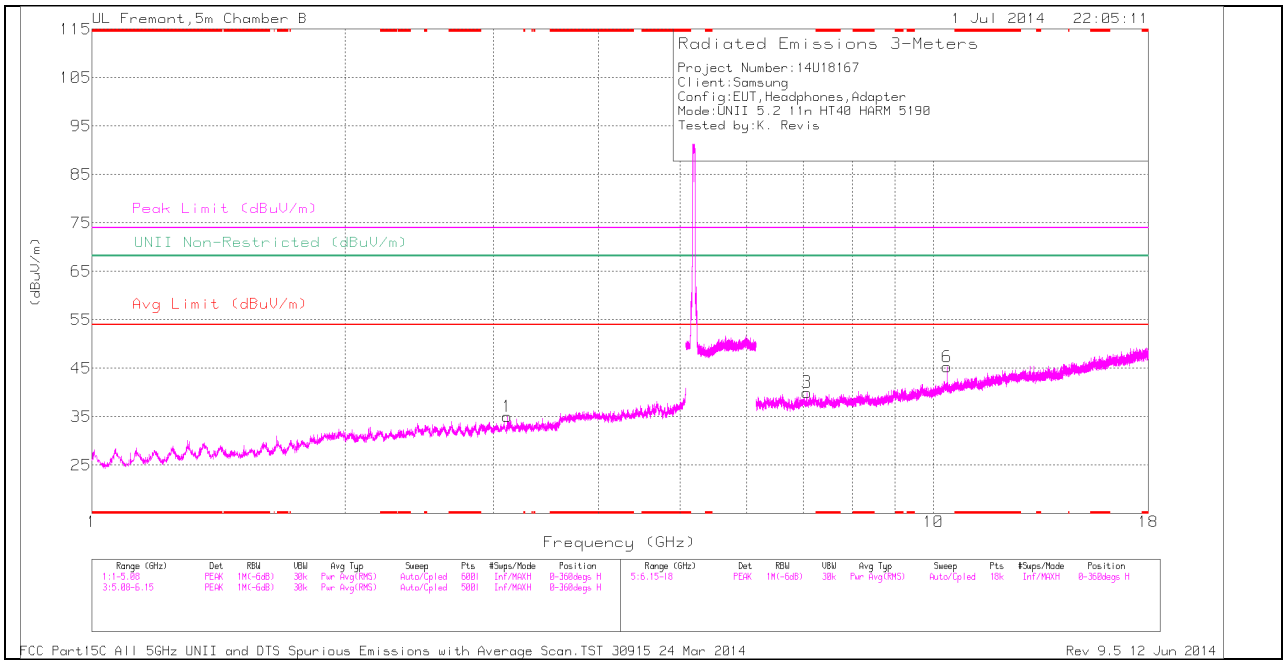


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	40.17	PK	34.3	-20.3	0	54.17	-	-	74	-19.83	49	185	V
2	* 5.147	44.18	PK	34.3	-20.3	0	58.18	-	-	74	-15.82	49	185	V
3	* 5.15	31.81	RMS	34.3	-20.3	.66	46.11	54	-7.89	-	-	49	185	V
4	* 5.15	32.19	RMS	34.3	-20.3	.66	46.49	54	-7.51	-	-	49	185	V

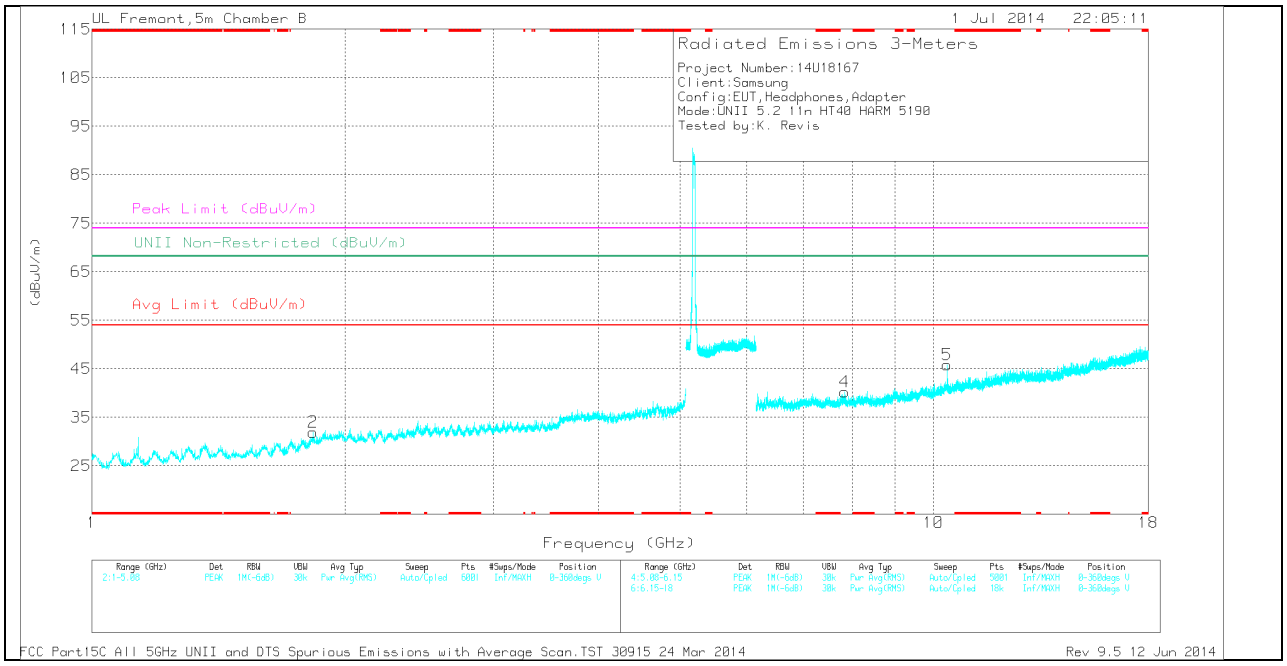
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL

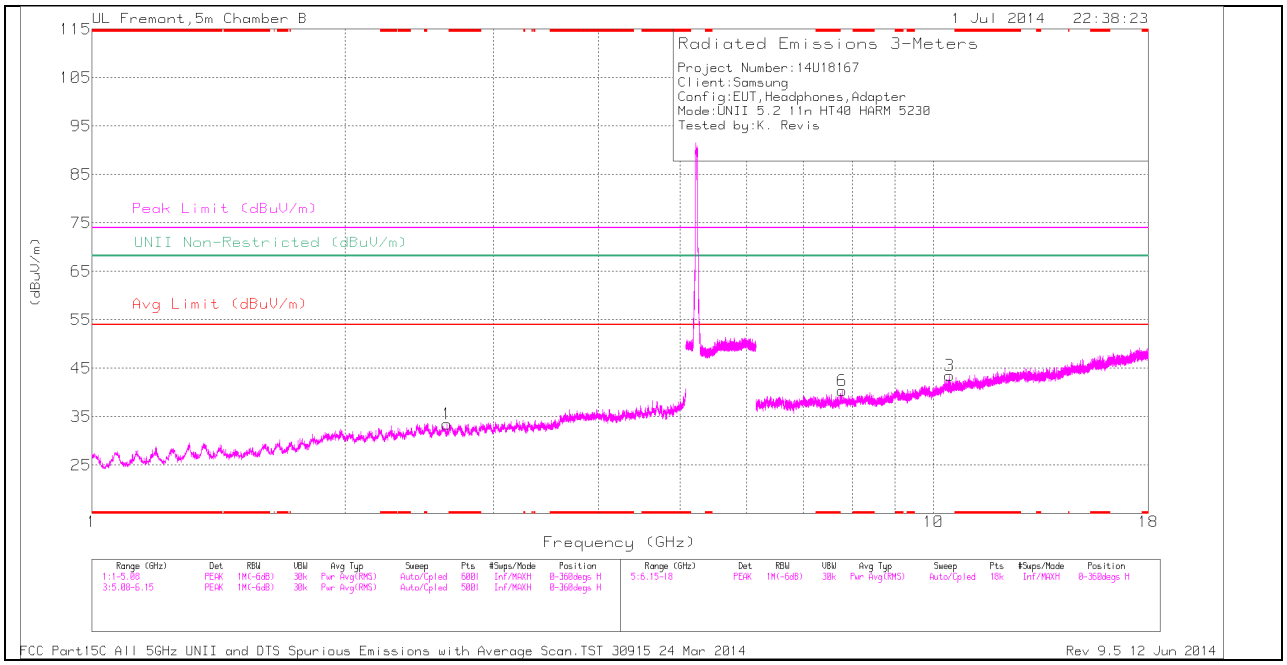


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

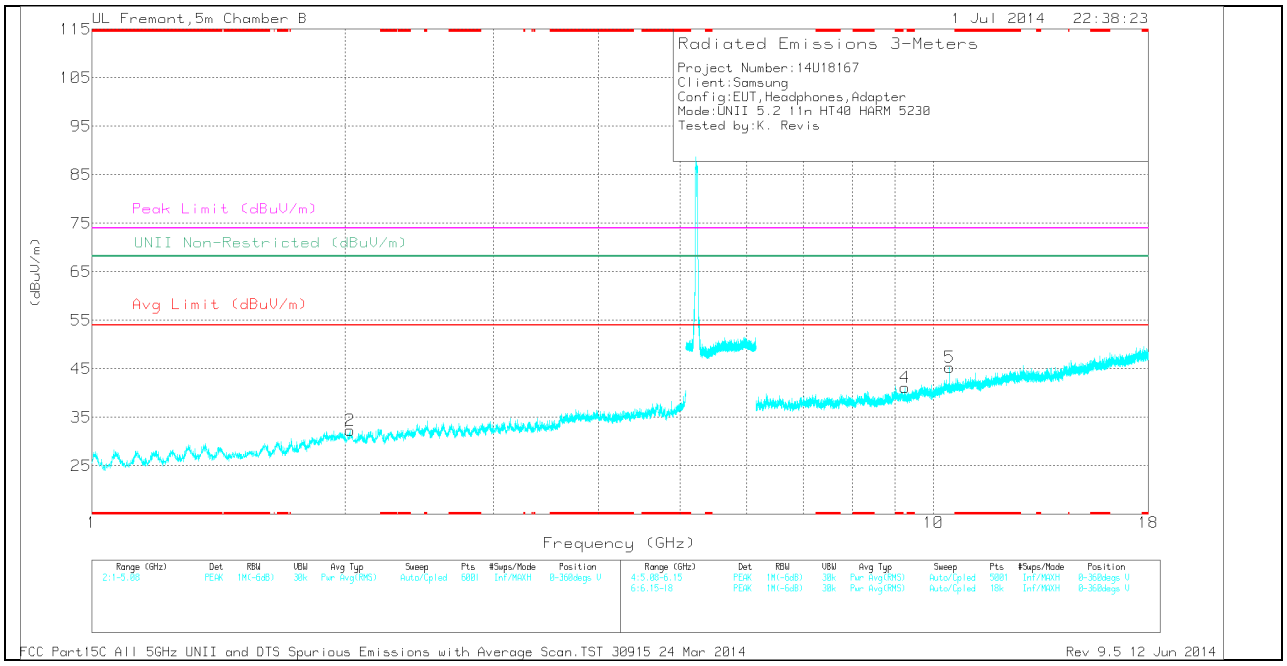
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	1.832	35.13	PK	30.5	-33.7	0	31.93	-	-	-	-	68.2	-36.27	0-360	101	V
1	3.115	34.08	PK	32.9	-31.9	0	35.08	-	-	-	-	68.2	-33.12	0-360	199	H
3	7.077	32.75	PK	35.6	-28.3	0	40.05	-	-	-	-	68.2	-28.15	0-360	101	H
4	7.84	30.82	PK	35.7	-26.3	0	40.22	-	-	-	-	68.2	-27.98	0-360	200	V
6	10.38	30.74	PK	37.3	-22.7	0	45.34	-	-	-	-	68.2	-22.86	0-360	101	H
5	10.38	31.21	PK	37.3	-22.7	0	45.81	-	-	-	-	68.2	-22.39	0-360	101	V

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

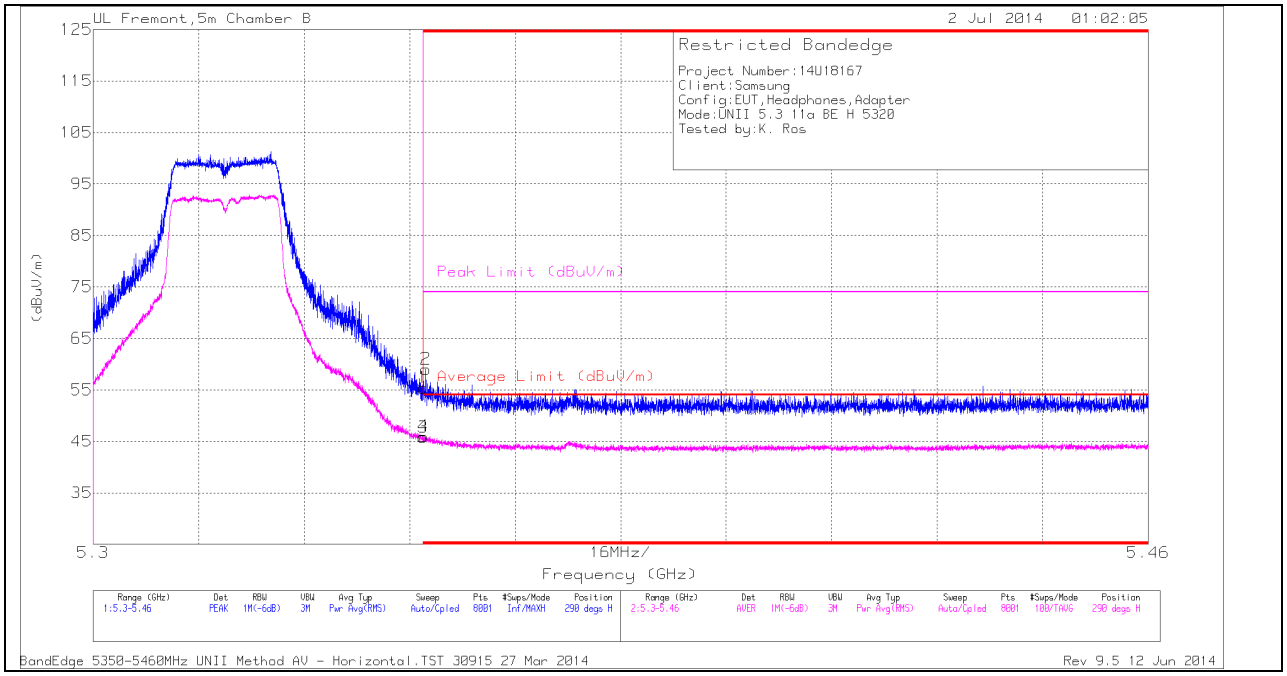
MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
2	2.025	34.48	PK	31.3	-33.4	0	32.38	-	-	-	-	68.2	-35.82	0-360	199	V
1	2.642	33.45	PK	32.4	-32.3	0	33.55	-	-	-	-	68.2	-34.65	0-360	199	H
6	7.789	31.15	PK	35.7	-26.5	0	40.35	-	-	-	-	68.2	-27.85	0-360	101	H
4	9.254	29.43	PK	36.4	-24.7	0	41.13	-	-	-	-	68.2	-27.07	0-360	199	V
3	10.46	29.5	PK	37.4	-23.4	0	43.5	-	-	-	-	68.2	-24.7	0-360	101	H
5	10.46	31.27	PK	37.4	-23.4	0	45.27	-	-	-	-	68.2	-22.93	0-360	199	V

10.2. 5.3 GHz

10.2.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

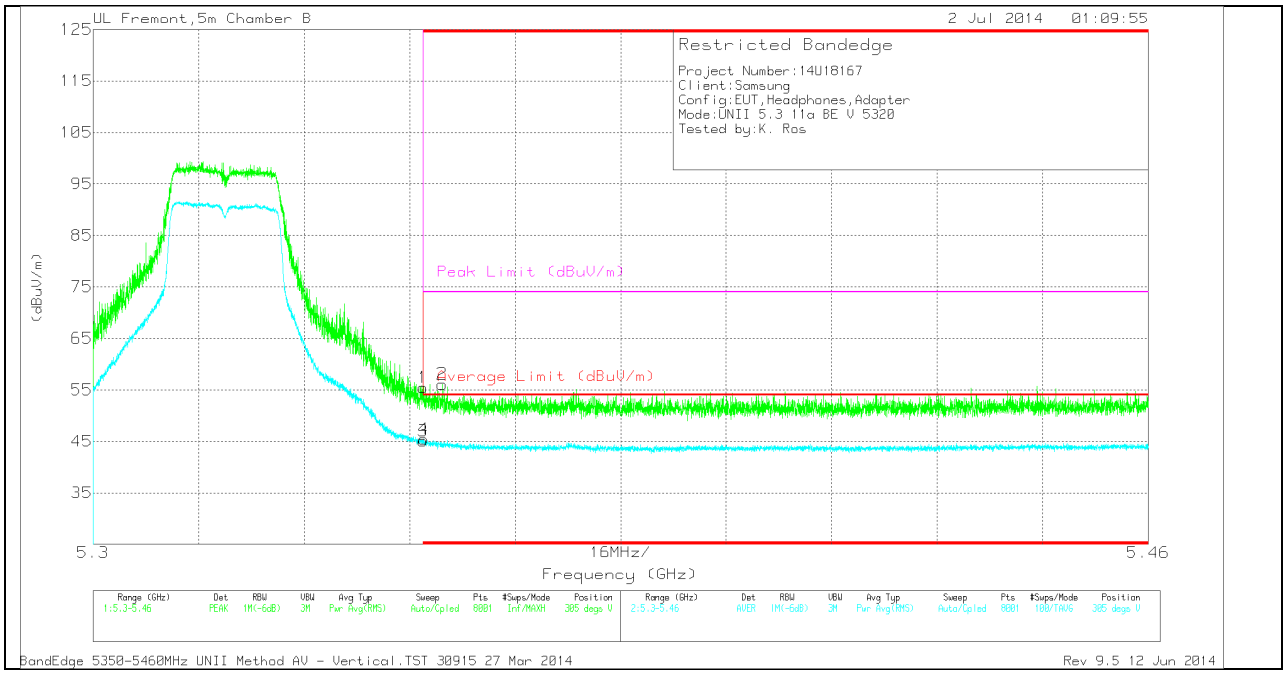
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	40.81	PK	34.5	-19.9	0	55.41	-	-	74	-18.59	290	219	H
2	* 5.35	44.54	PK	34.5	-20	0	59.04	-	-	74	-14.96	290	219	H
3	* 5.35	30.96	RMS	34.5	-19.9	.3	45.78	54	-8.22	-	-	290	219	H
4	* 5.35	31.13	RMS	34.5	-19.9	.3	45.95	54	-8.05	-	-	290	219	H

VERTICAL PEAK AND AVERAGE PLOT

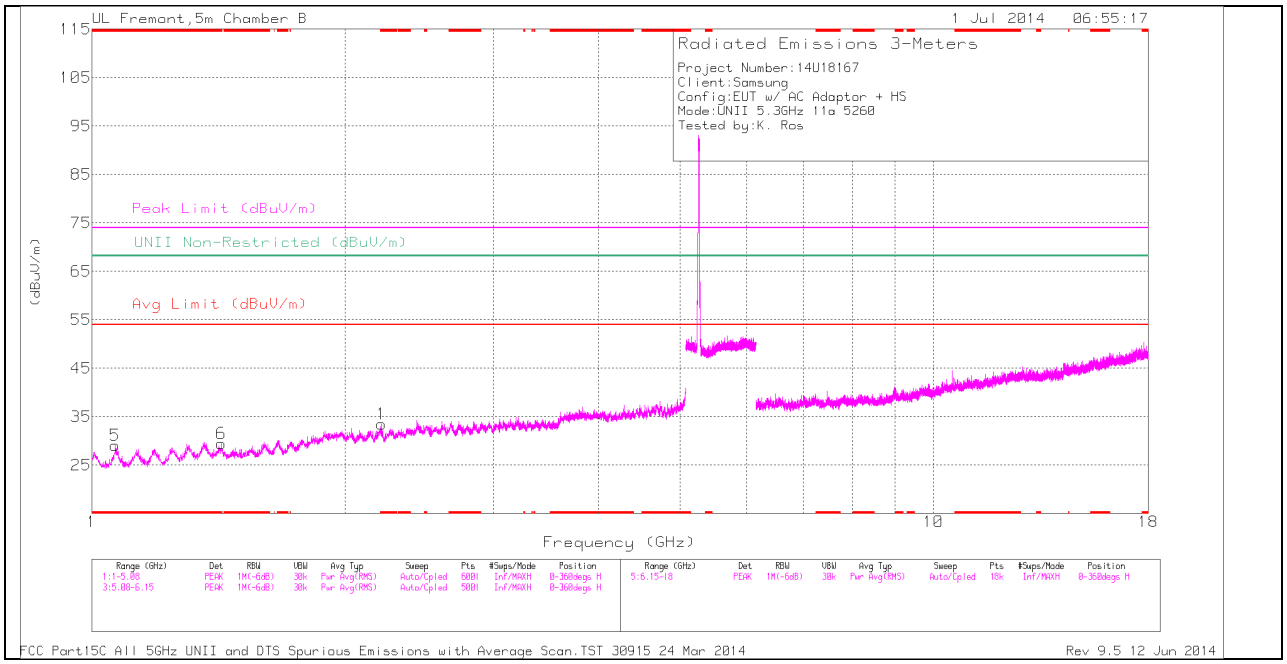


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	40.85	PK	34.5	-19.9	0	55.45	-	-	74	-18.55	305	271	V
3	* 5.35	30.23	RMS	34.5	-19.9	.3	45.05	54	-8.95	-	-	305	271	V
4	* 5.35	30.62	RMS	34.5	-19.9	.3	45.44	54	-8.56	-	-	305	271	V
2	* 5.353	41.61	PK	34.5	-20	0	56.11	-	-	74	-17.89	305	271	V

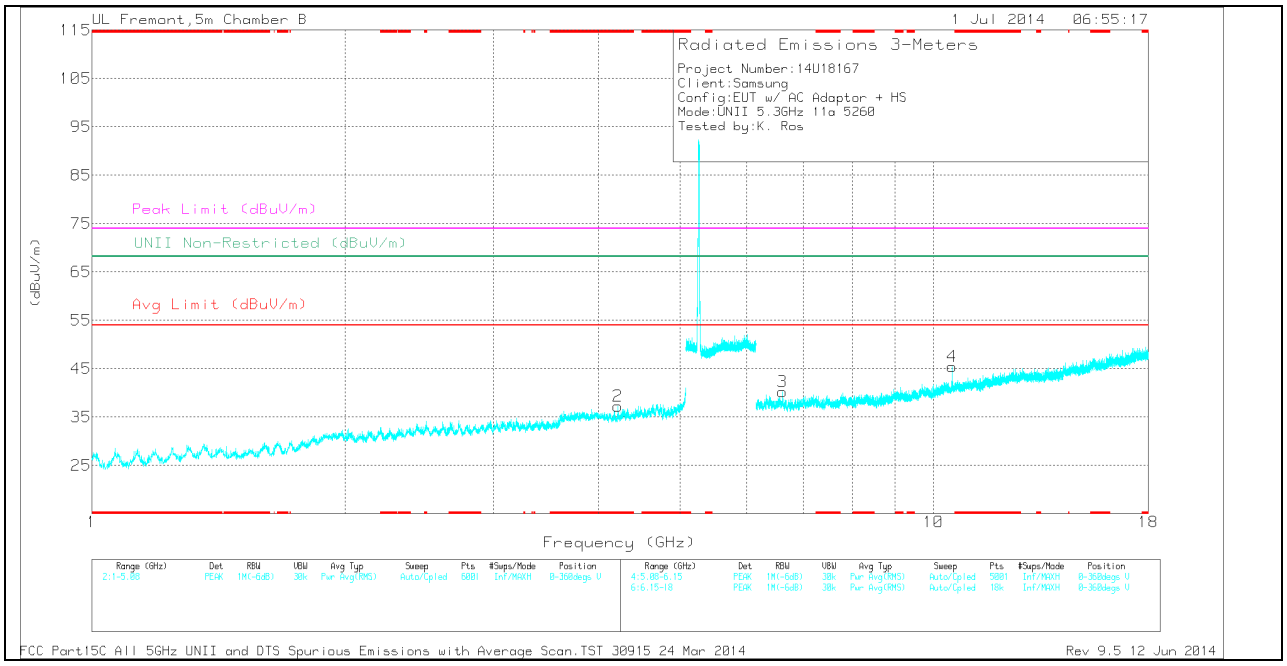
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 2.209	34.6	PK	31.3	-32.4	33.5	-	-	74	-40.5	-	-	0-360	99	H
5	* 1.066	36.2	PK	27.3	-34.4	29.1	-	-	74	-44.9	-	-	0-360	206	H
6	* 1.425	35.17	PK	28.4	-34.1	29.47	-	-	74	-44.53	-	-	0-360	206	H
2	* 4.215	34.21	PK	33.6	-30.6	37.21	-	-	74	-36.79	-	-	0-360	195	V
3	6.611	32.2	PK	35.7	-27.6	40.3	-	-	-	-	68.2	-27.9	0-360	193	V
4	10.52	31.05	PK	37.5	-23.1	45.45	-	-	-	-	68.2	-22.75	0-360	193	V

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

PK - Peak detector

Radiated Emissions

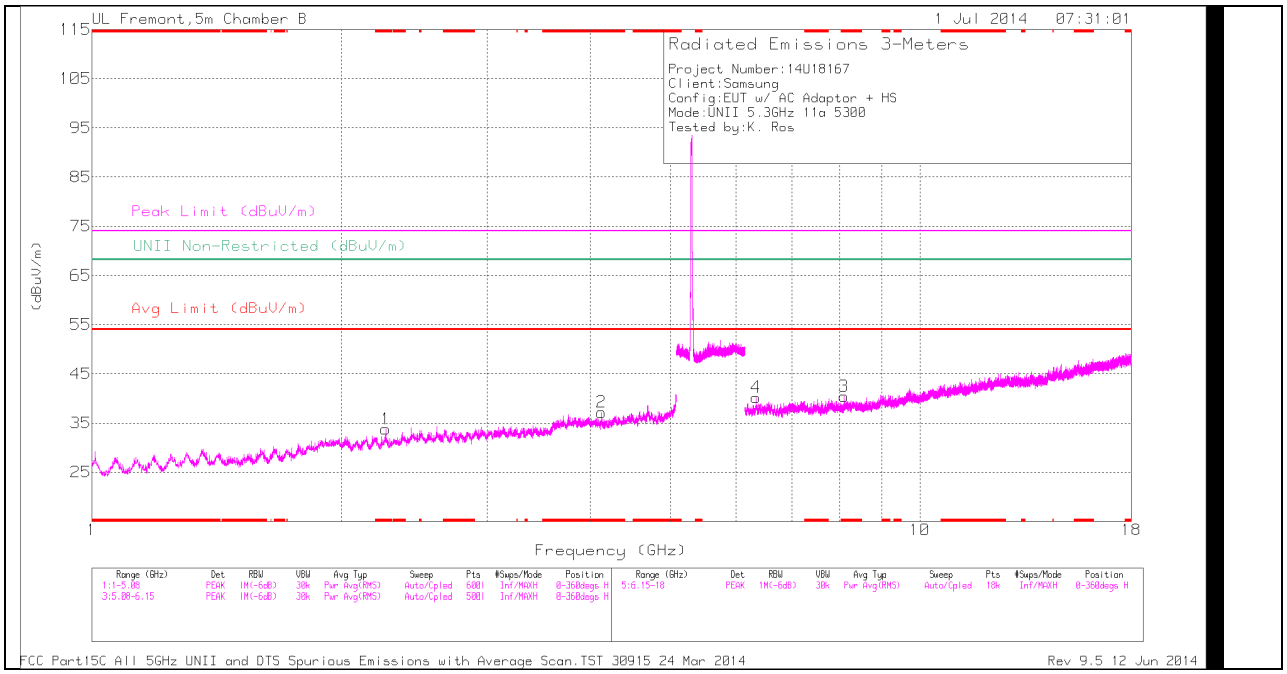
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.067	43.2	PK1	27.3	-34.4	36.1	-	-	74	-37.9	-	-	1	200	H
* 2.21	41.57	PK1	31.3	-32.4	40.47	-	-	74	-33.53	-	-	1	100	H
* 4.216	40.28	PK1	33.6	-30.6	43.28	-	-	74	-30.72	-	-	1	201	V
6.612	38.67	PK1	35.7	-27.6	46.77	-	-	-	-	68.2	-21.43	1	186	V
10.52	35.38	PK1	37.5	-23.1	49.78	-	-	-	-	68.2	-18.42	1	200	V

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

PK1 - KDB789033 Method: Peak

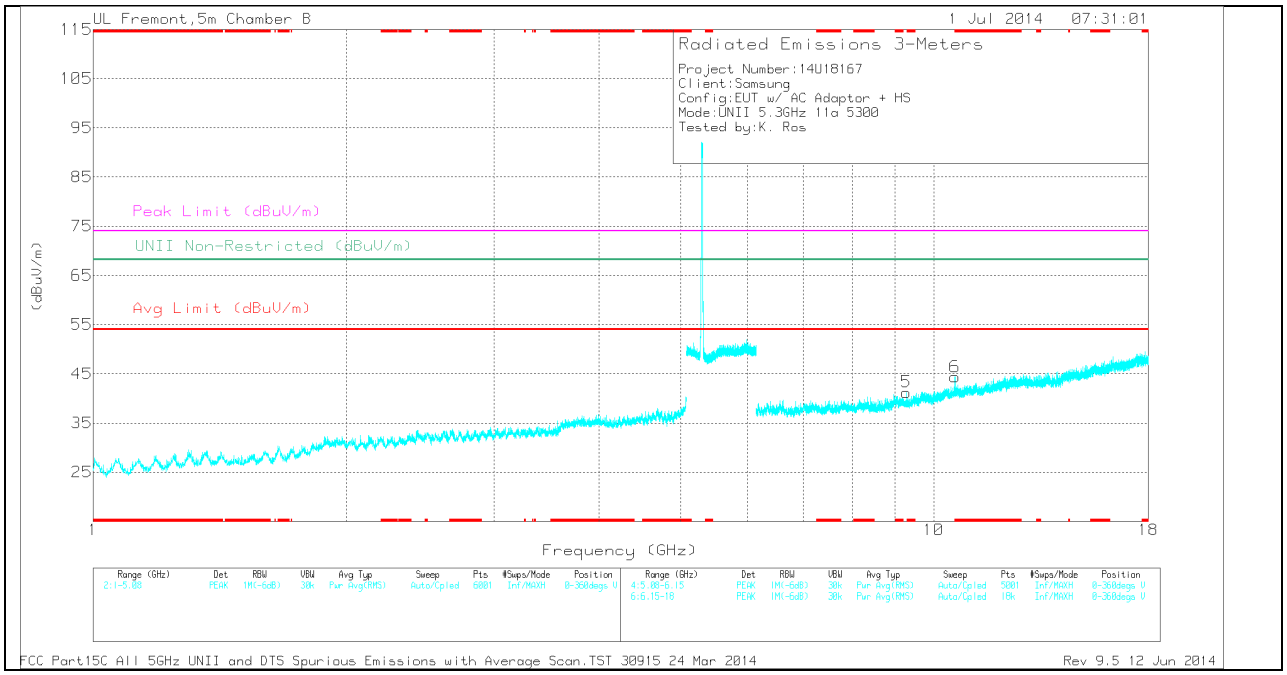
AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 2.263	35.15	PK	31.5	-32.9	0	33.75	-	-	74	-40.25	-	-	0-360	206	H
2	* 4.126	34.47	PK	33.6	-30.9	0	37.17	-	-	74	-36.83	-	-	0-360	99	H
3	* 8.105	31.19	PK	35.7	-26.5	0	40.39	-	-	74	-33.61	-	-	0-360	99	H
4	6.34	32.2	PK	35.5	-27.5	0	40.2	-	-	-	-	68.2	-28	0-360	206	H
5	9.277	29.56	PK	36.4	-24.7	0	41.26	-	-	-	-	68.2	-26.94	0-360	195	V
6	10.599	29.4	PK	37.7	-22.7	0	44.4	-	-	-	-	68.2	-23.8	0-360	99	V

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

PK - Peak detector

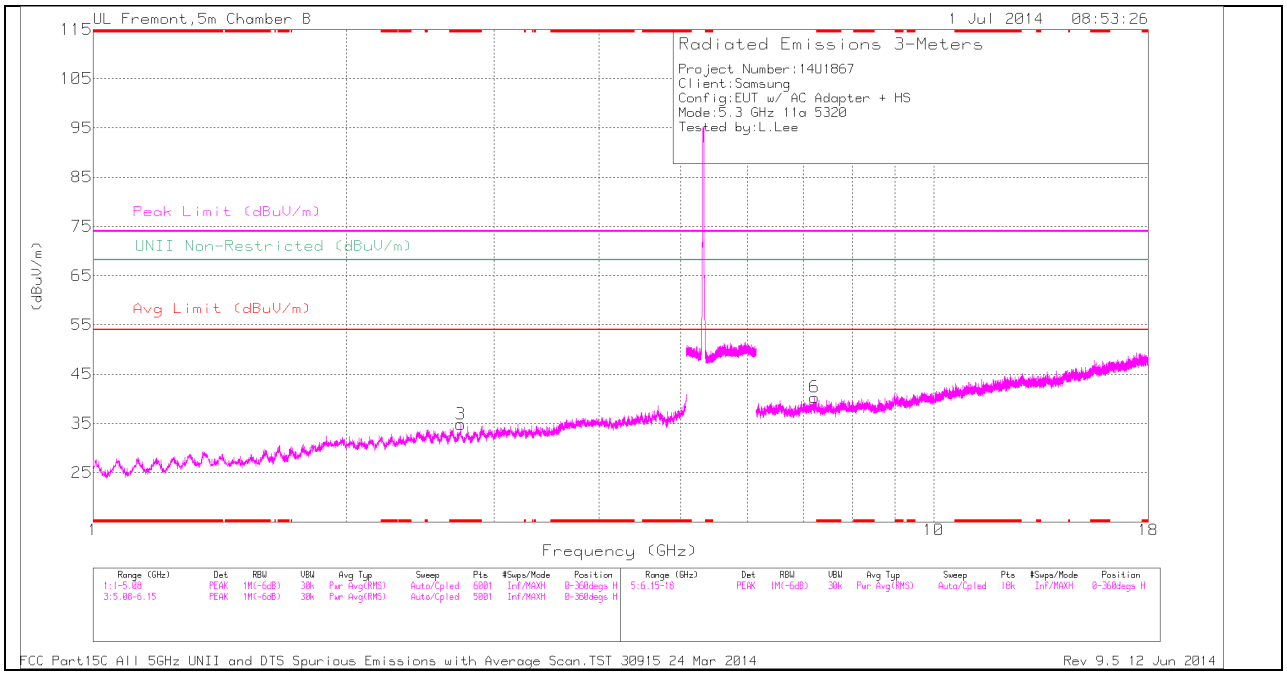
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
* 2.264	42.1	PK1	31.5	-32.9	0	40.7	-	-	74	-33.3	-	-	1	214	H
* 4.126	40.87	PK1	33.6	-30.9	0	43.57	-	-	74	-30.43	-	-	1	100	H
* 8.107	38.43	PK1	35.7	-26.5	0	47.63	-	-	74	-26.37	-	-	1	100	H
6.34	39.07	PK1	35.5	-27.5	0	47.07	-	-	-	-	68.2	-21.13	1	214	H
9.277	35.78	PK1	36.4	-24.7	0	47.48	-	-	-	-	68.2	-20.72	1	187	V
10.599	36.02	PK1	37.7	-22.7	0	51.02	-	-	-	-	68.2	-17.18	1	100	V

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

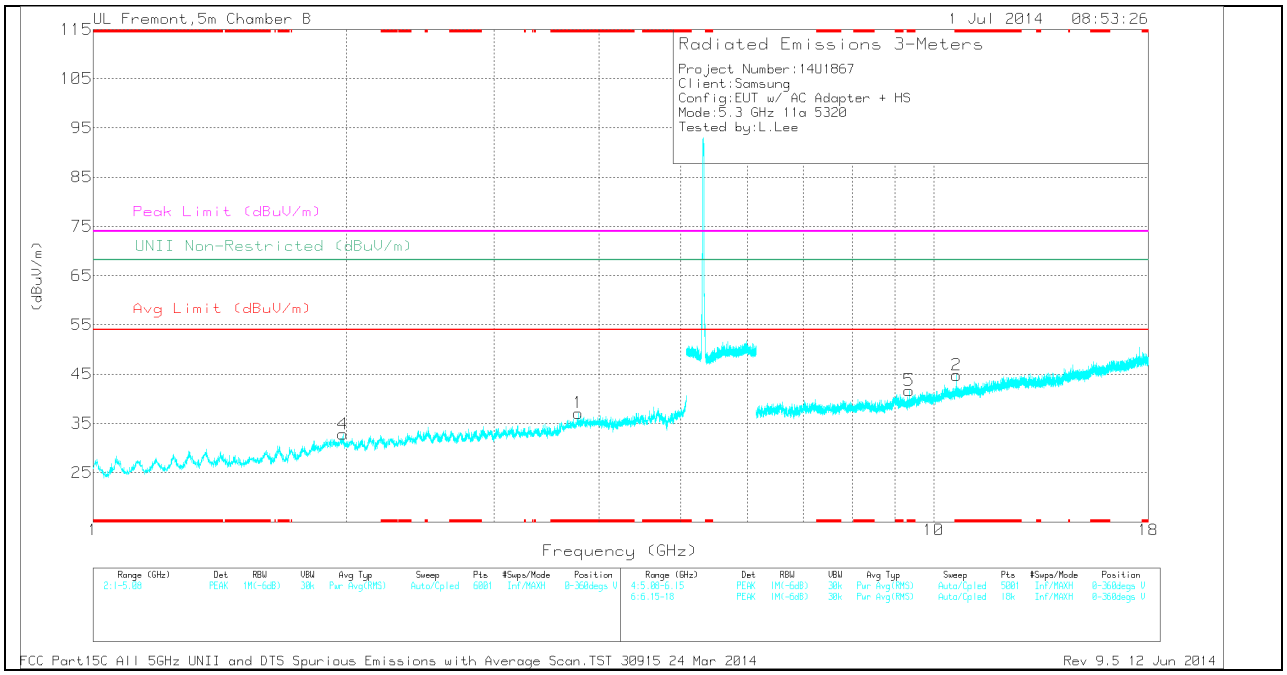
PK1 - KDB789033 Method: Peak

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
3	* 2.738	34.71	PK	32.2	-32.1	34.81	-	-	74	-39.19	-	-	0-360	206	H
1	* 3.778	34.4	PK	33.6	-30.9	37.1	-	-	74	-36.9	-	-	0-360	195	V
2	* 10.64	29.29	PK	37.7	-22.2	44.79	-	-	74	-29.21	-	-	0-360	193	V
5	* 9.349	30.17	PK	36.5	-25	41.67	-	-	74	-32.33	-	-	0-360	99	V
4	1.983	34.41	PK	31.3	-32.9	32.81	-	-	-	-	68.2	-35.39	0-360	99	V
6	7.213	31.09	PK	35.5	-26.3	40.29	-	-	-	-	68.2	-27.91	0-360	99	H

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

PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
* 2.738	41.28	PK1	32.2	-32.1	41.38	-	-	74	-32.62	-	-	359	214	H
* 3.777	41.67	PK1	33.6	-30.9	44.37	-	-	74	-29.63	-	-	359	203	V
* 10.641	34.5	PK1	37.7	-22.3	49.9	-	-	74	-24.1	-	-	359	185	V
* 9.348	36.63	PK1	36.5	-25	48.13	-	-	74	-25.87	-	-	359	100	V

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

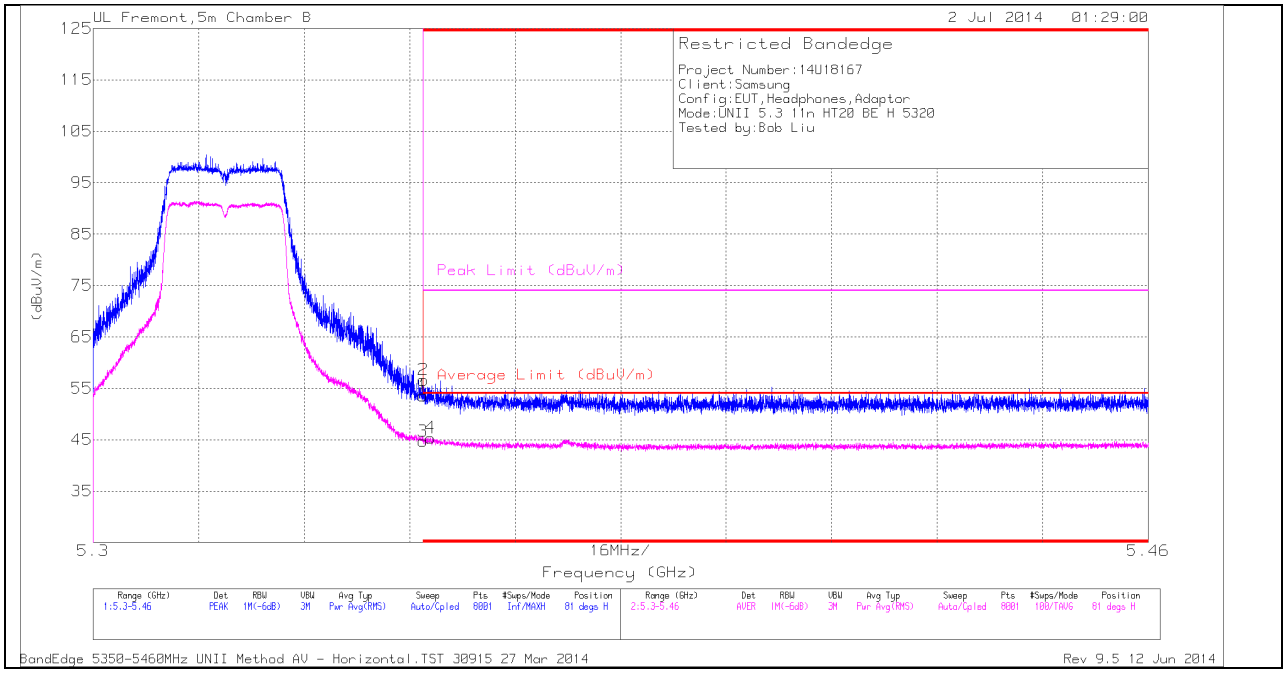
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

10.2.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.3 GHz BAND

AUTHORIZED BANDEDGE (HIGH CHANNEL)

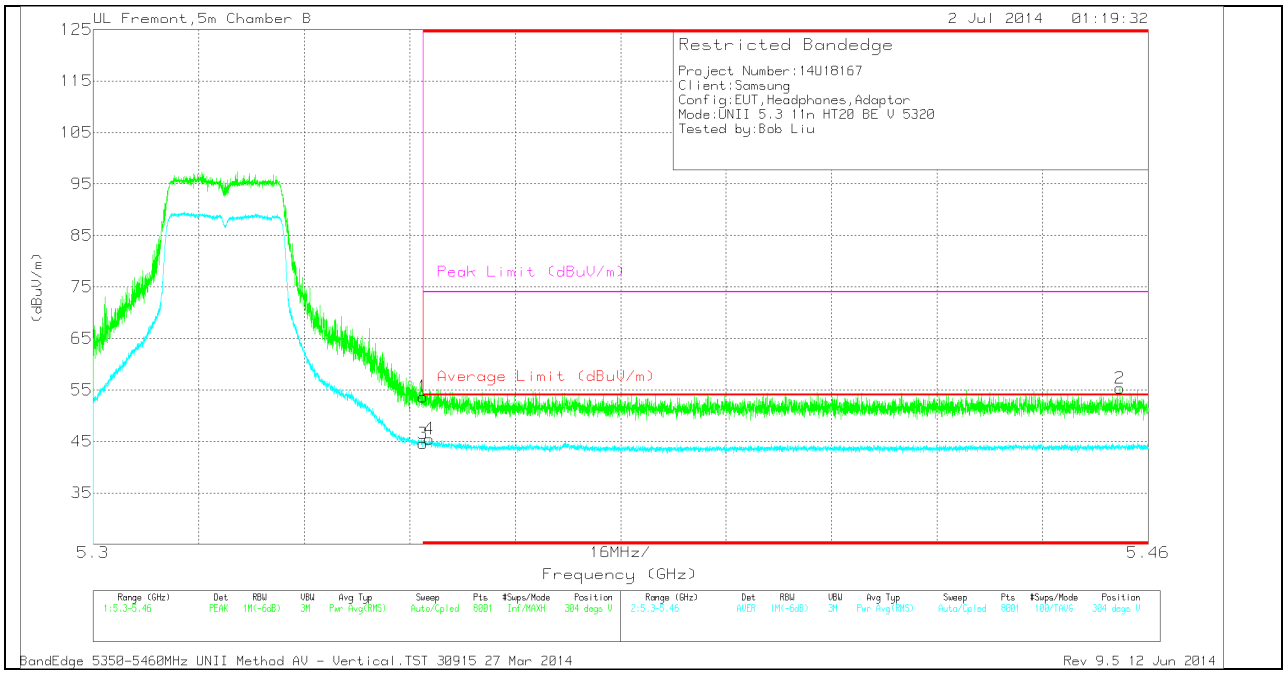
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	38.98	PK	34.5	-19.9	0	53.58	-	-	74	-20.42	81	270	H
2	* 5.35	42.03	PK	34.5	-19.9	0	56.63	-	-	74	-17.37	81	270	H
3	* 5.35	29.86	RMS	34.5	-19.9	.32	44.7	54	-9.3	-	-	81	270	H
4	* 5.351	30.62	RMS	34.5	-20	.32	45.36	54	-8.64	-	-	81	270	H

VERTICAL PEAK AND AVERAGE PLOT

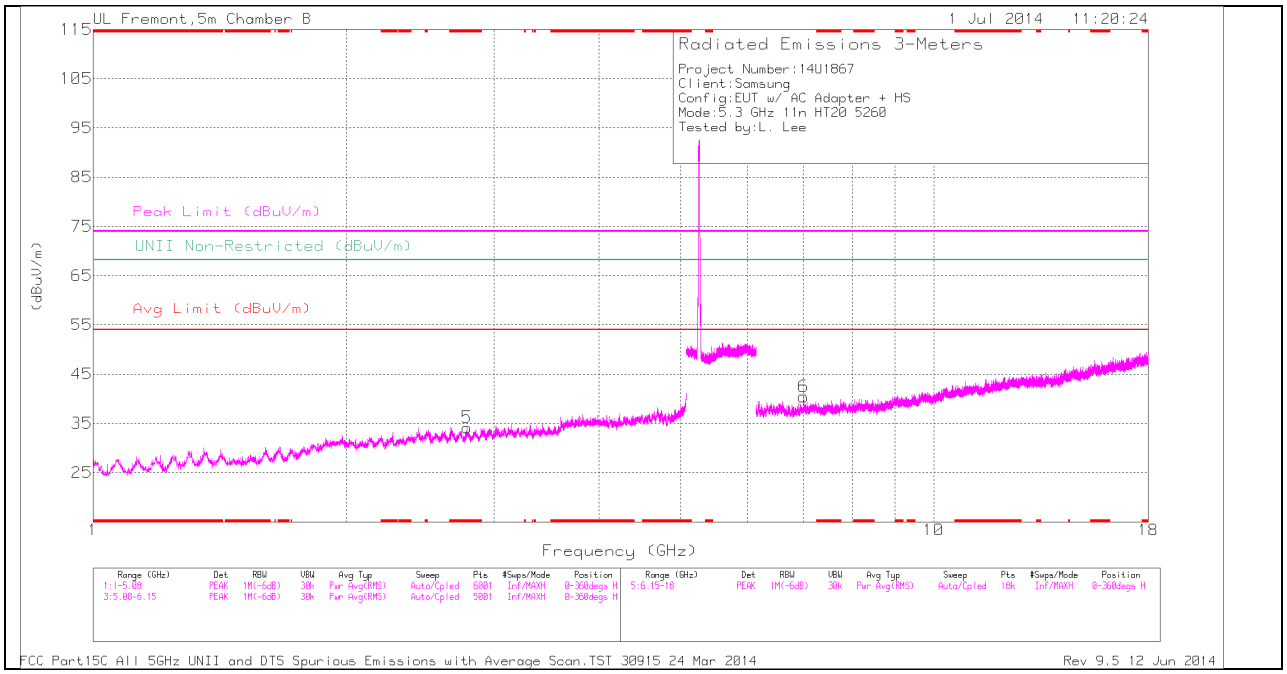


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	39.07	PK	34.5	-19.9	0	53.67	-	-	74	-20.33	304	268	V
3	* 5.35	29.73	RMS	34.5	-19.9	.32	44.55	54	-9.45	-	-	304	268	V
4	* 5.351	30.75	RMS	34.5	-20	.32	45.47	54	-8.53	-	-	304	268	V
2	* 5.456	40.91	PK	34.5	-20.1	0	55.31	-	-	74	-18.69	304	268	V

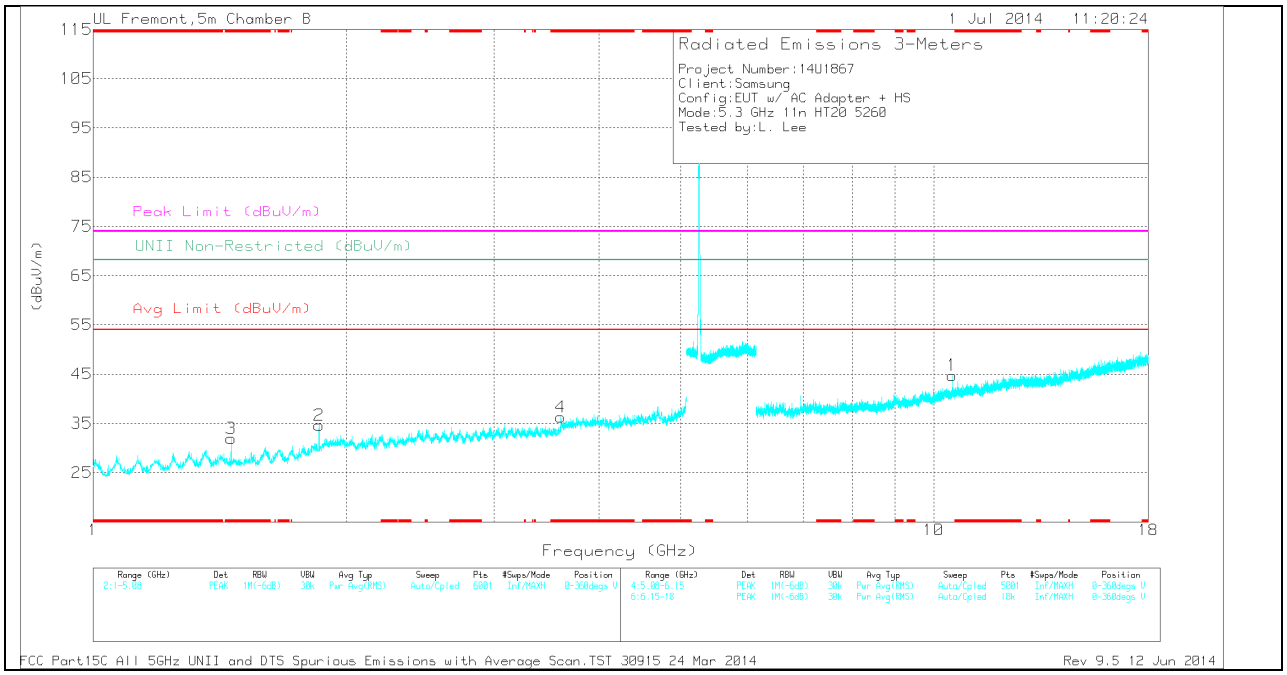
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL

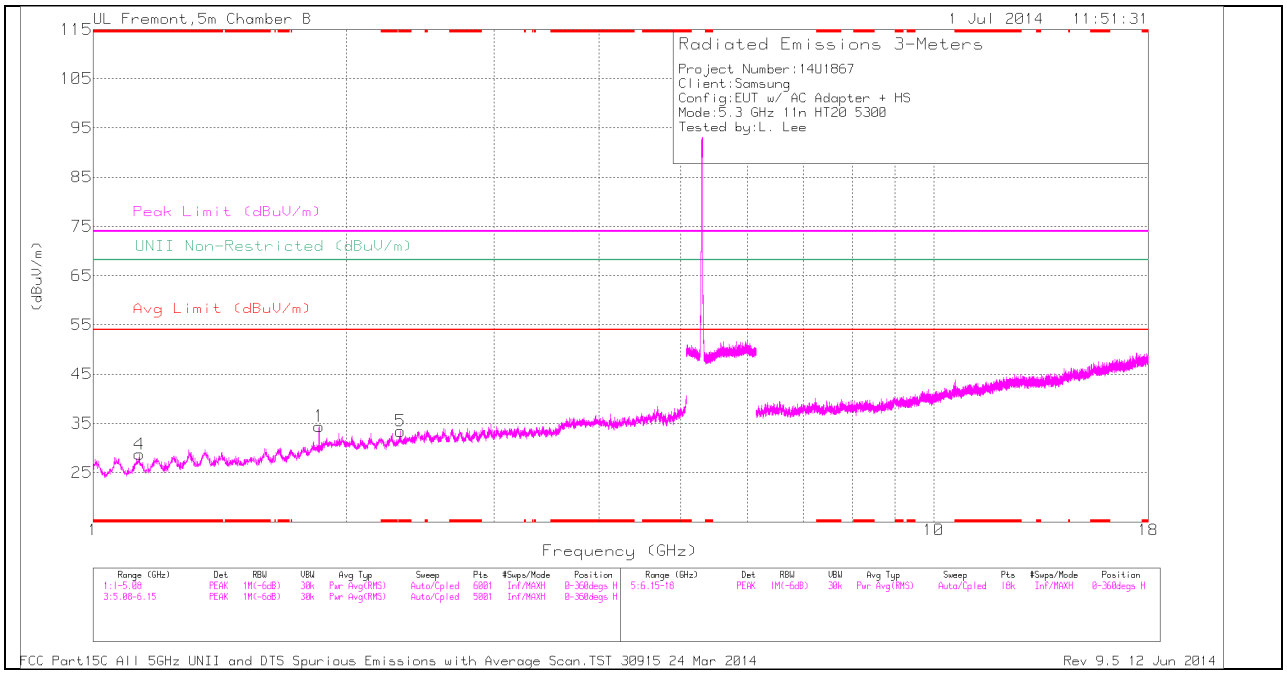


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

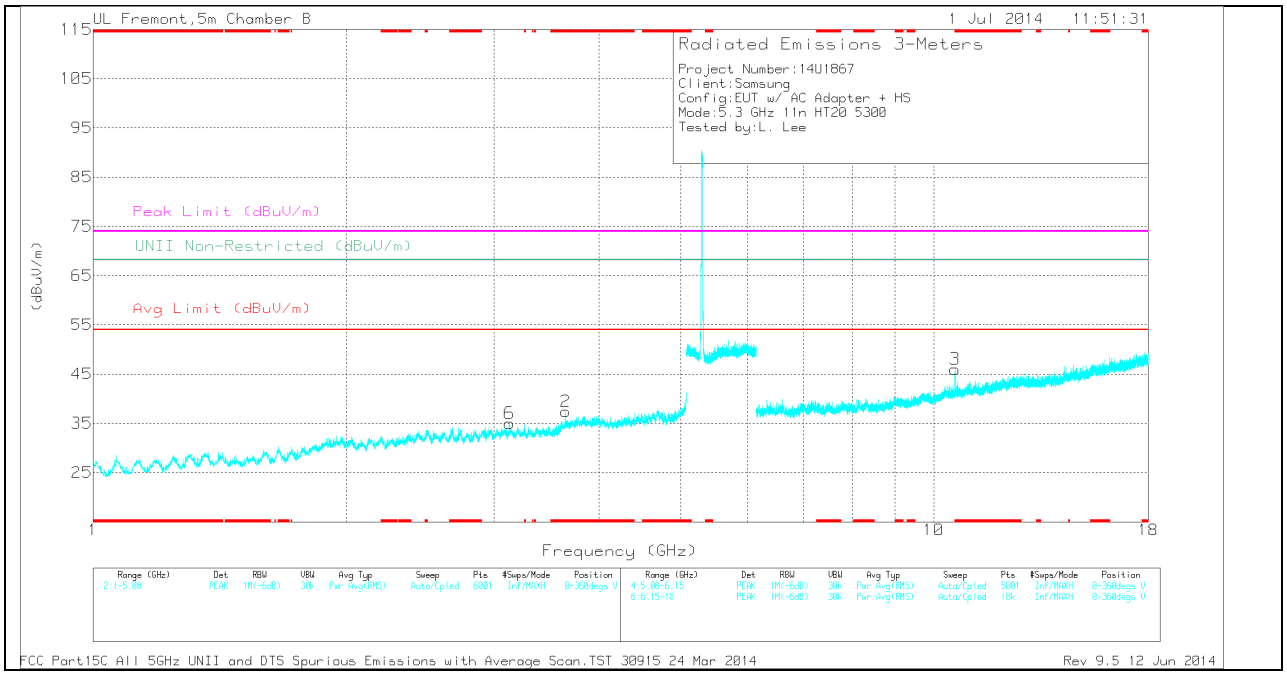
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 2.786	34.33	PK	32.3	-32.5	34.13	-	-	74	-39.87	-	-	0-360	99	H
3	* 1.46	38.23	PK	28.2	-34.5	31.93	-	-	74	-42.07	-	-	0-360	99	V
4	* 3.6	34.45	PK	33.1	-31.3	36.25	-	-	74	-37.75	-	-	0-360	195	V
2	1.857	37.3	PK	30.7	-33.4	34.6	-	-	-	-	68.2	-33.6	0-360	99	V
6	7.002	31.83	PK	35.6	-27	40.43	-	-	-	-	68.2	-27.77	0-360	99	H
1	10.52	30.34	PK	37.5	-23.1	44.74	-	-	-	-	68.2	-23.46	0-360	99	V

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL

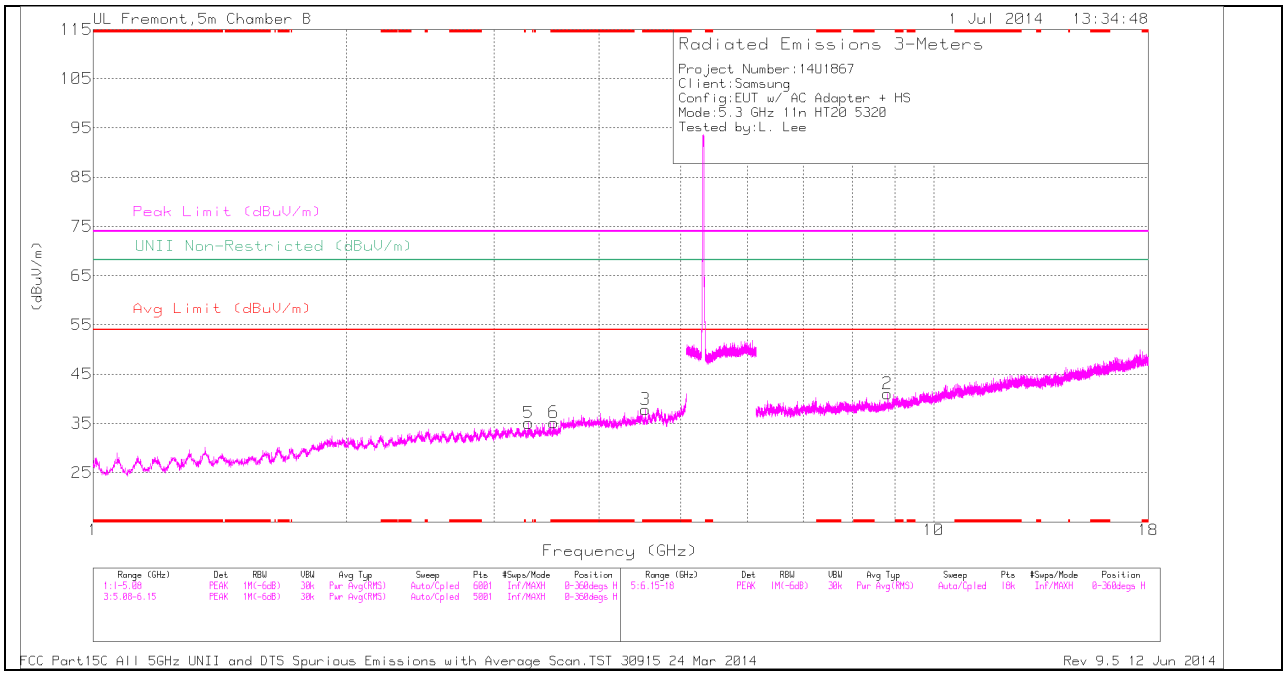


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

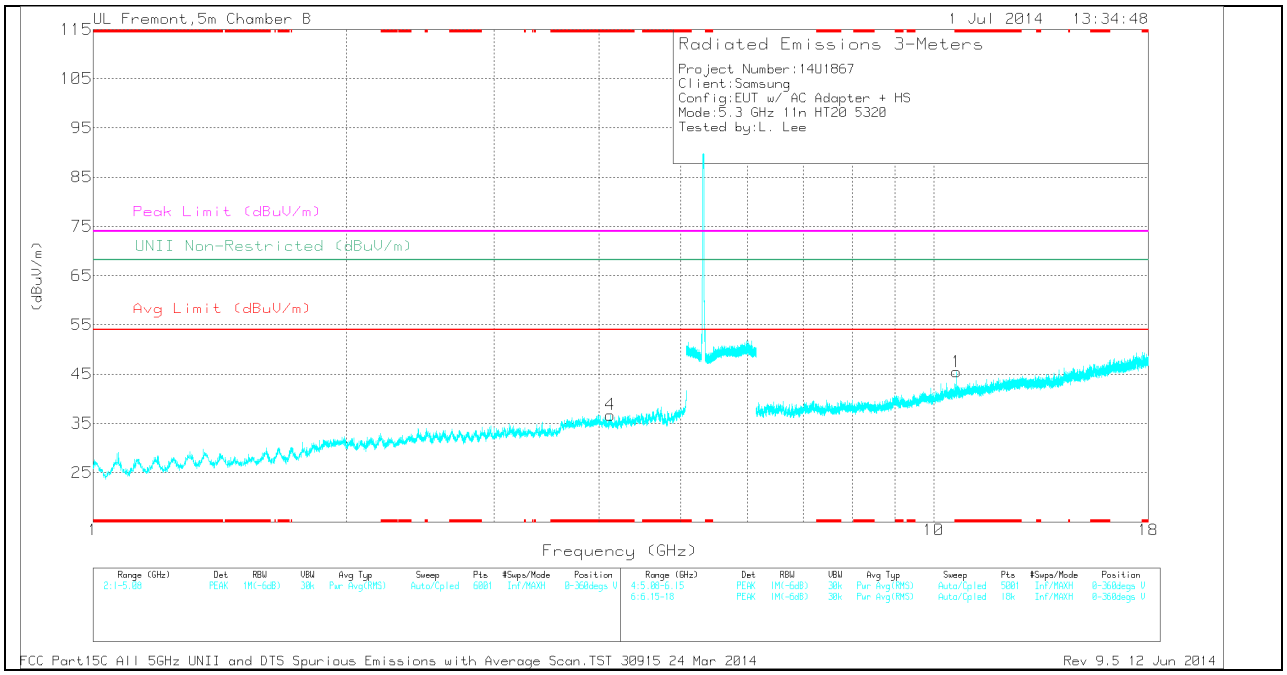
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 1.135	35.61	PK	27.7	-34.6	28.71	-	-	74	-45.29	-	-	0-360	99	H
5	* 2.32	35.02	PK	31.7	-33.3	33.42	-	-	74	-40.58	-	-	0-360	99	H
2	* 3.648	35.42	PK	33.2	-31.2	37.42	-	-	74	-36.58	-	-	0-360	195	V
3	* 10.6	31.02	PK	37.7	-22.7	46.02	-	-	74	-27.98	-	-	0-360	99	V
1	1.857	37.08	PK	30.7	-33.4	34.38	-	-	-	-	68.2	-33.82	0-360	99	H
6	3.128	33.91	PK	32.8	-31.7	35.01	-	-	-	-	68.2	-33.19	0-360	99	V

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



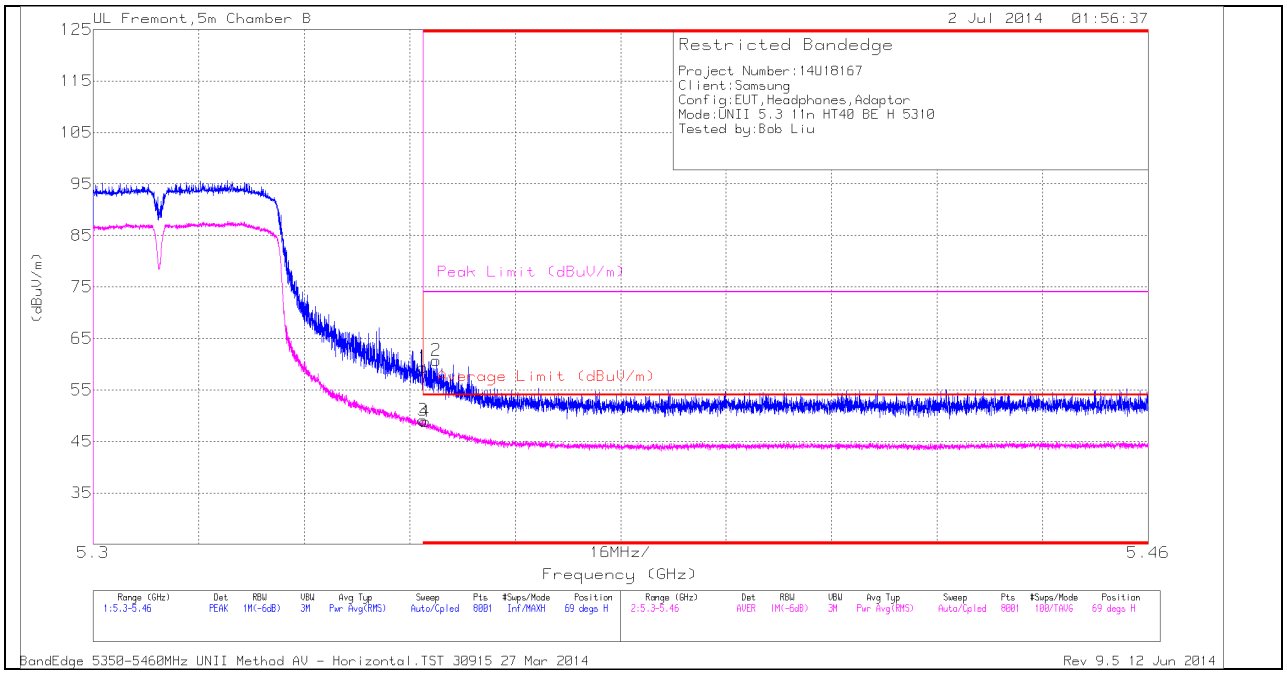
Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
3	* 4.542	34.53	PK	34.1	-30.8	0	37.83	-	-	74	-36.17	-	-	0-360	99	H
6	* 3.532	34.17	PK	32.9	-31.9	0	35.17	-	-	74	-38.83	-	-	0-360	99	H
4	* 4.126	34.02	PK	33.6	-30.9	0	36.72	-	-	74	-37.28	-	-	0-360	99	V
1	* 10.64	29.98	PK	37.7	-22.2	0	45.48	-	-	74	-28.52	-	-	0-360	99	V
5	3.298	33.87	PK	32.8	-31.6	0	35.07	-	-	-	-	68.2	-33.13	0-360	206	H
2	8.815	30.55	PK	36	-25.5	0	41.05	-	-	-	-	68.2	-27.15	0-360	206	H

10.2.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)

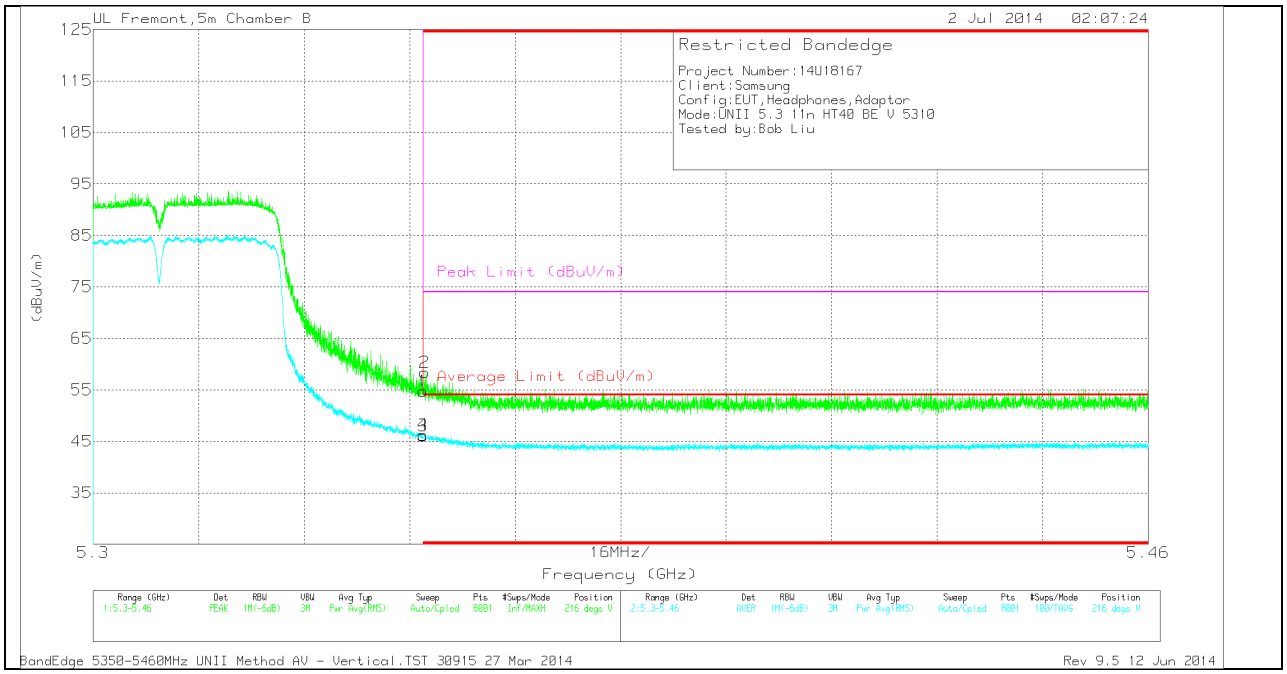
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	44.83	PK	34.5	-19.9	0	59.43	-	-	74	-14.57	69	248	H
3	* 5.35	34.03	RMS	34.5	-19.9	.66	49.12	54	-4.88	-	-	69	248	H
4	* 5.35	33.85	RMS	34.5	-20	.66	48.84	54	-5.16	-	-	69	248	H
2	* 5.352	46.24	PK	34.5	-20	0	60.74	-	-	74	-13.26	69	248	H

VERTICAL PEAK AND AVERAGE PLOT

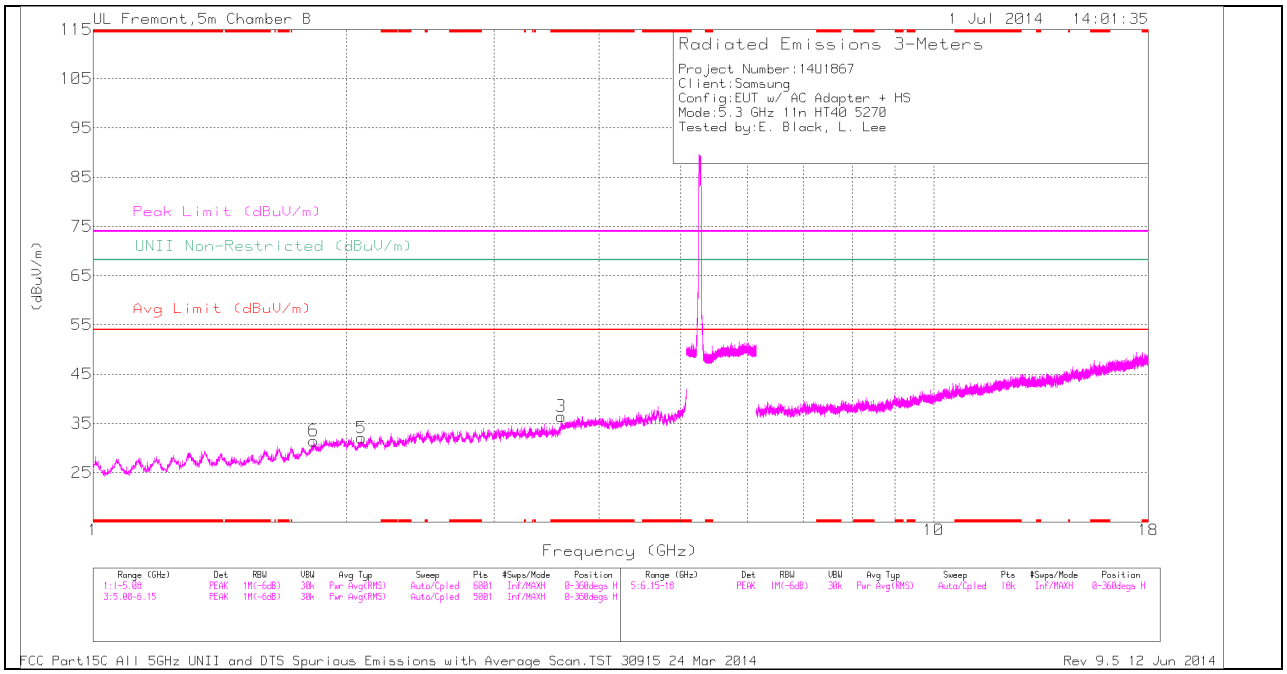


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	40.13	PK	34.5	-19.9	0	54.73	-	-	74	-19.27	216	330	V
2	* 5.35	43.8	PK	34.5	-19.9	0	58.4	-	-	74	-15.6	216	330	V
3	* 5.35	30.98	RMS	34.5	-19.9	.66	46.07	54	-7.93	-	-	216	330	V
4	* 5.35	31.17	RMS	34.5	-19.9	.66	46.26	54	-7.74	-	-	216	330	V

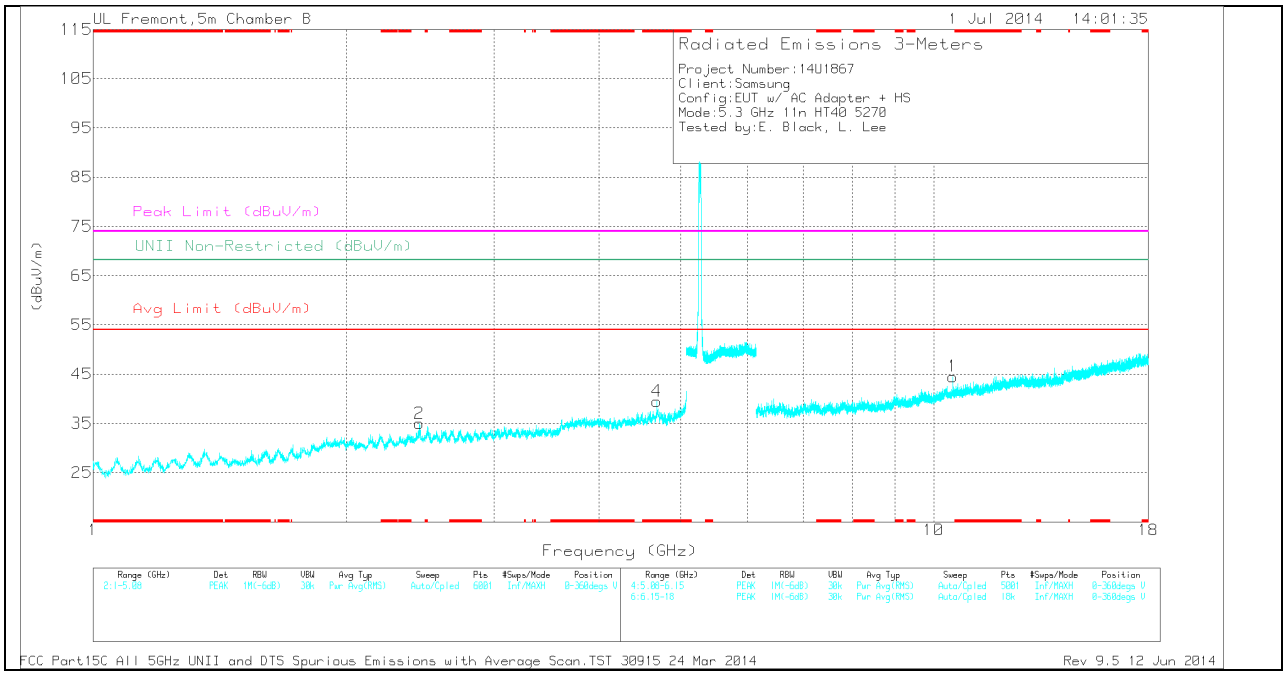
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL

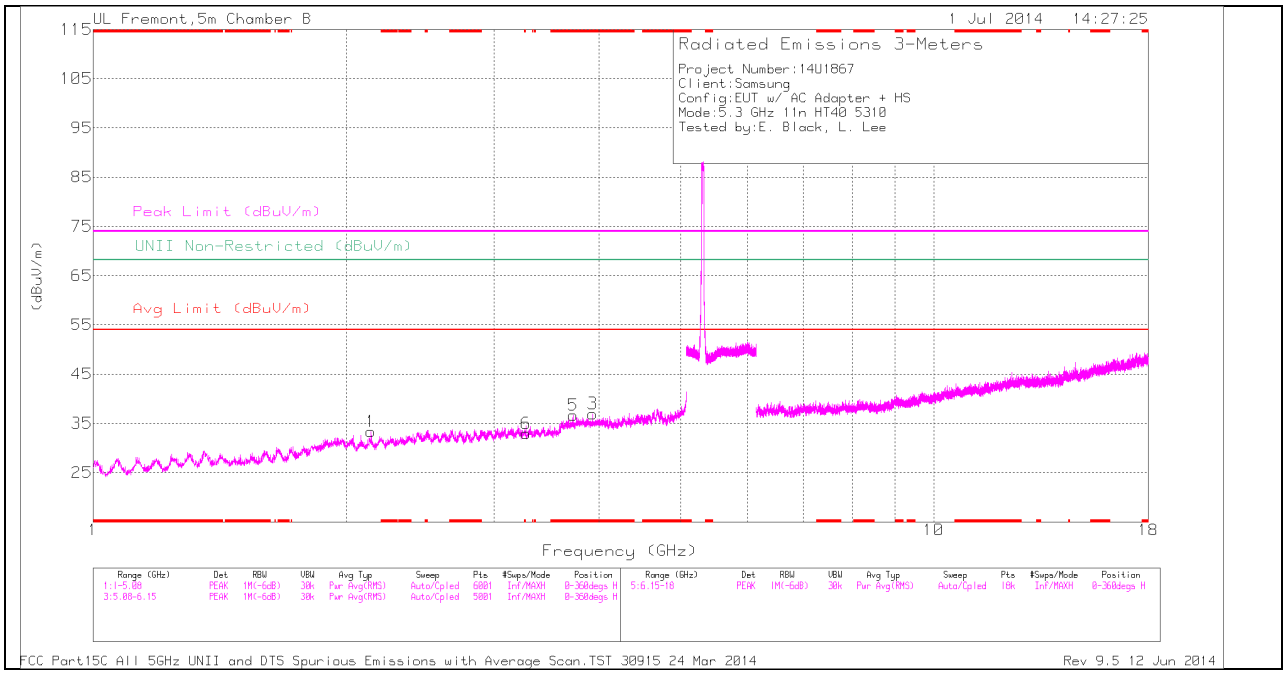


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

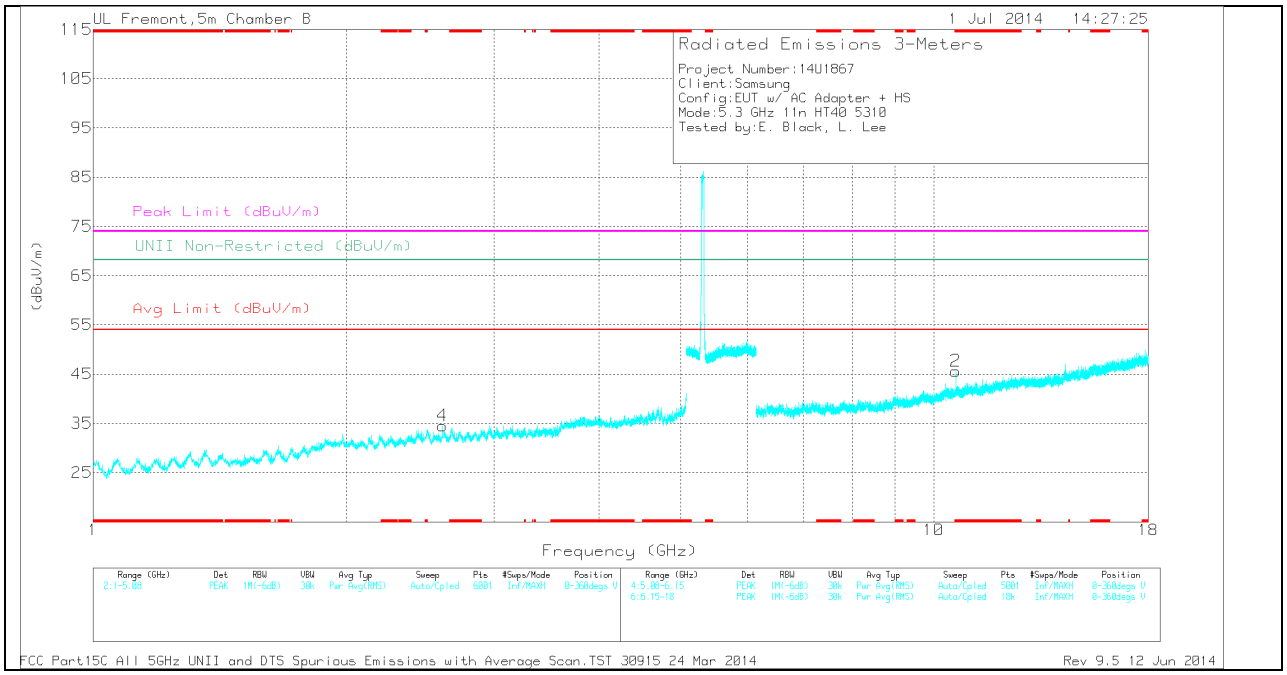
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 3.605	34.52	PK	33.1	-31.2	0	36.42	-	-	74	-37.58	-	-	0-360	99	H
4	* 4.687	35.08	PK	34.2	-29.8	0	39.48	-	-	74	-34.52	-	-	0-360	196	V
6	1.83	34.77	PK	30.4	-33.7	0	31.47	-	-	-	-	68.2	-36.73	0-360	99	H
5	2.085	34.46	PK	31.3	-33.7	0	32.06	-	-	-	-	68.2	-36.14	0-360	206	H
2	2.445	35.07	PK	32.3	-32.4	0	34.97	-	-	-	-	68.2	-33.23	0-360	196	V
1	10.54	29.91	PK	37.5	-22.9	0	44.51	-	-	-	-	68.2	-23.69	0-360	99	V

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

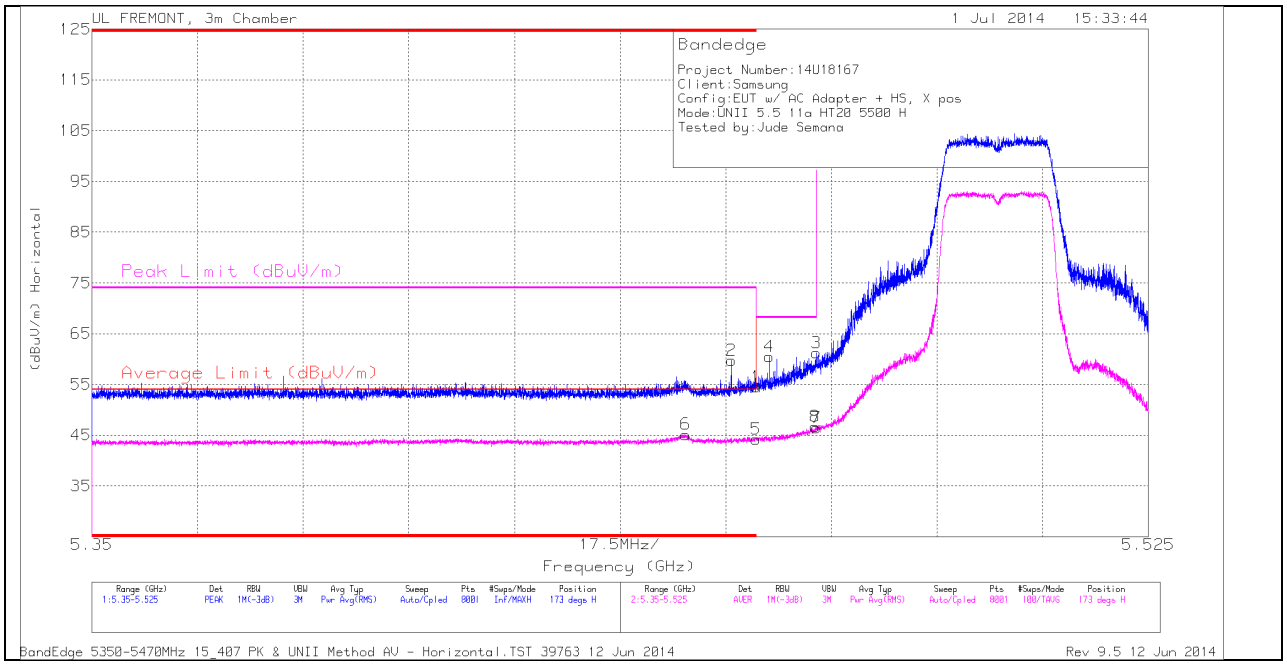
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 3.929	34.36	PK	33.7	-31.1	0	36.96	-	-	74	-37.04	-	-	0-360	99	H
5	* 3.726	34.46	PK	33.4	-31.2	0	36.66	-	-	74	-37.34	-	-	0-360	99	H
2	* 10.62	30.13	PK	37.7	-22.2	0	45.63	-	-	74	-28.37	-	-	0-360	99	V
1	2.142	34.93	PK	31.3	-32.9	0	33.33	-	-	-	-	68.2	-34.87	0-360	206	H
4	2.605	34.82	PK	32.5	-32.8	0	34.52	-	-	-	-	68.2	-33.68	0-360	99	V
6	3.275	31.96	PK	32.8	-31.8	0	32.96	-	-	-	-	68.2	-35.24	0-360	206	H

10.3. 5.5-5.6 GHz

10.3.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.5 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

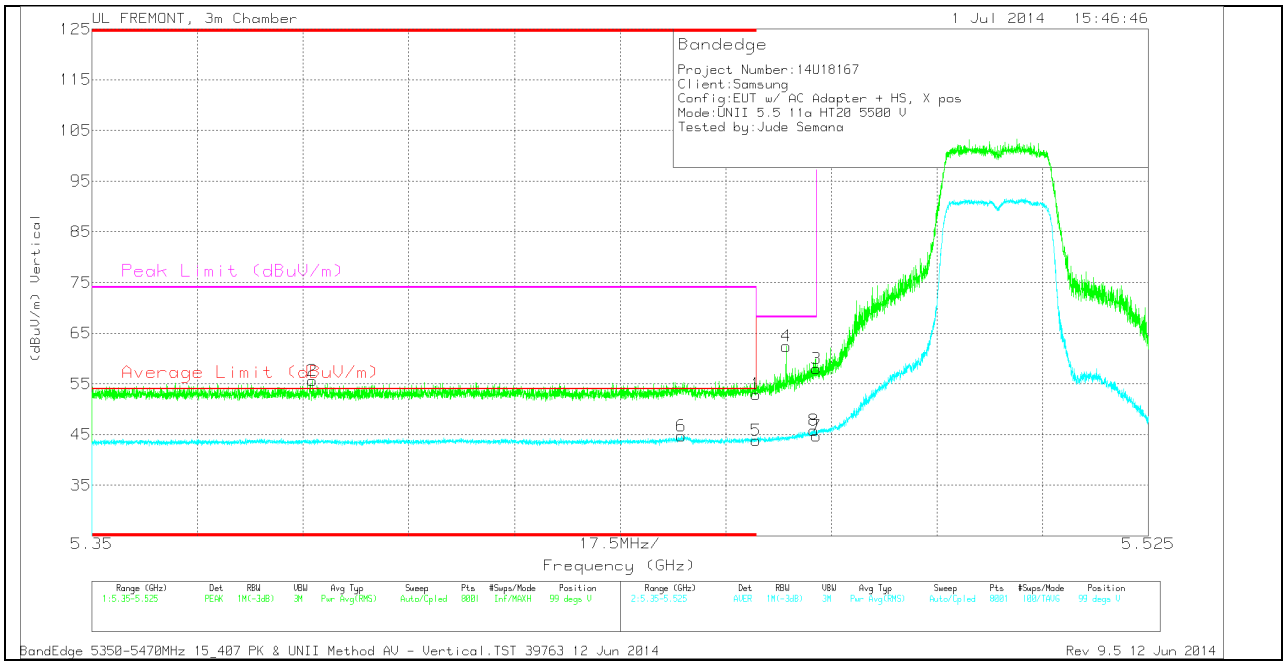
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 5.46	41.1	PK	34.8	-21.4	0	54.5	-	-	74	-19.5	173	370	H
2	* 5.456	46.3	PK	34.8	-21.4	0	59.7	-	-	74	-14.3	173	370	H
5	* 5.46	30.52	RMS	34.8	-21.4	.3	44.22	54	-9.78	-	-	173	370	H
6	* 5.448	31.44	RMS	34.8	-21.4	.3	45.14	54	-8.86	-	-	173	370	H
4	5.462	47.04	PK	34.8	-21.4	0	60.44	-	-	68.2	-7.76	173	370	H
3	5.47	47.72	PK	34.8	-21.3	0	61.22	-	-	68.2	-6.98	173	370	H
7	5.47	32.6	RMS	34.8	-21.3	.3	46.4	-	-	-	-	173	370	H
8	5.47	32.89	RMS	34.8	-21.3	.3	46.69	-	-	-	-	173	370	H

VERTICAL PEAK AND AVERAGE PLOT

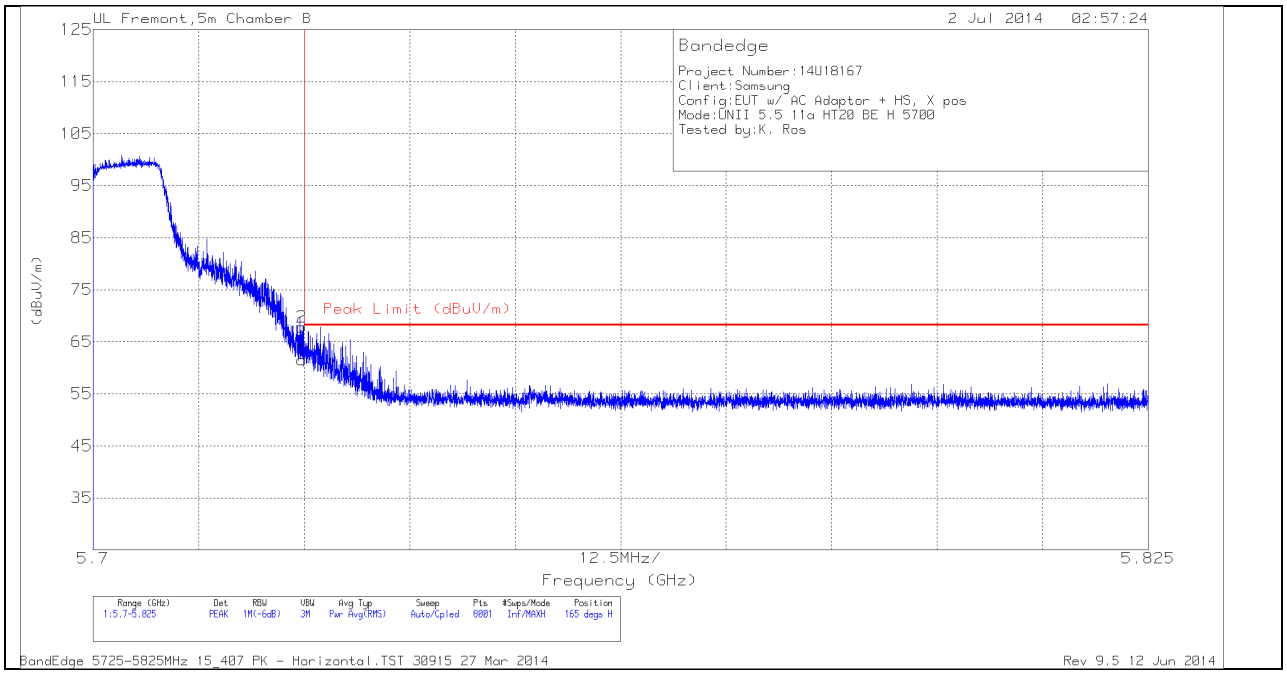


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.387	42.38	PK	34.6	-21.4	0	55.58	-	-	74	-18.42	99	368	V
6	* 5.448	30.99	RMS	34.8	-21.4	.3	44.69	54	-9.31	-	-	99	368	V
1	* 5.46	39.56	PK	34.8	-21.4	0	52.96	-	-	74	-21.04	99	368	V
5	* 5.46	30.17	RMS	34.8	-21.4	.3	43.87	54	-10.13	-	-	99	368	V
4	5.465	49	PK	34.8	-21.4	0	62.4	-	-	68.2	-5.8	99	368	V
3	5.47	44.47	PK	34.8	-21.3	0	57.97	-	-	68.2	-10.23	99	368	V
7	5.47	30.95	RMS	34.8	-21.3	.3	44.75	-	-	-	-	99	368	V
8	5.47	32.06	RMS	34.8	-21.3	.3	45.86	-	-	-	-	99	368	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

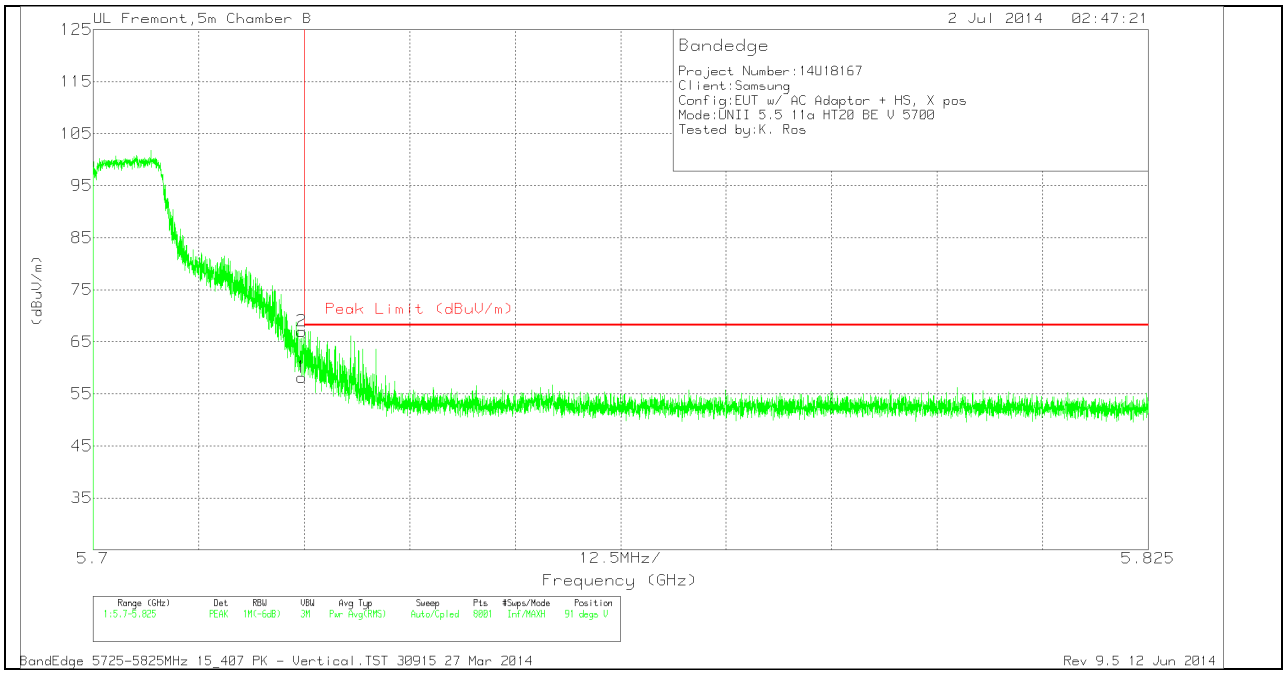
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	46.81	PK	34.6	-19.9	0	61.51	-	-	165	268	H
2	5.725	53.12	PK	34.6	-19.9	0	67.82	-	-	165	268	H

VERTICAL PEAK AND AVERAGE PLOT

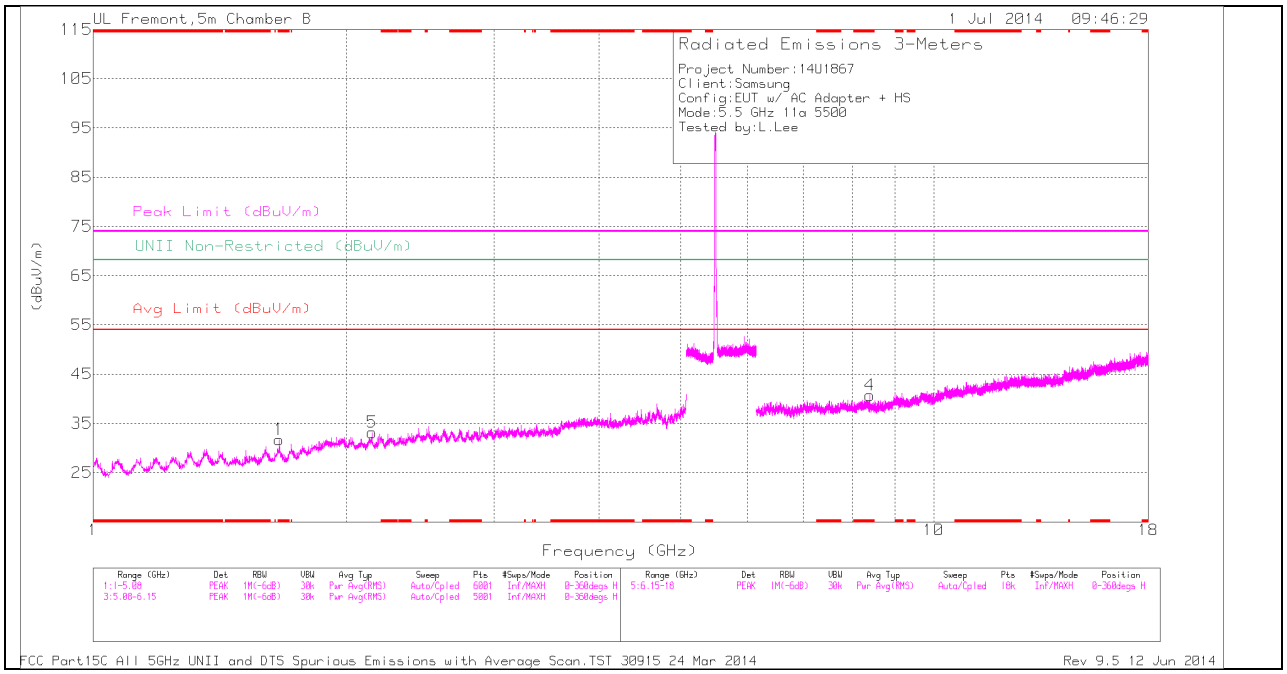


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	43.48	PK	34.6	-19.9	0	58.18	-	-	91	271	V
2	5.725	52.32	PK	34.6	-19.9	0	67.02	-	-	91	271	V

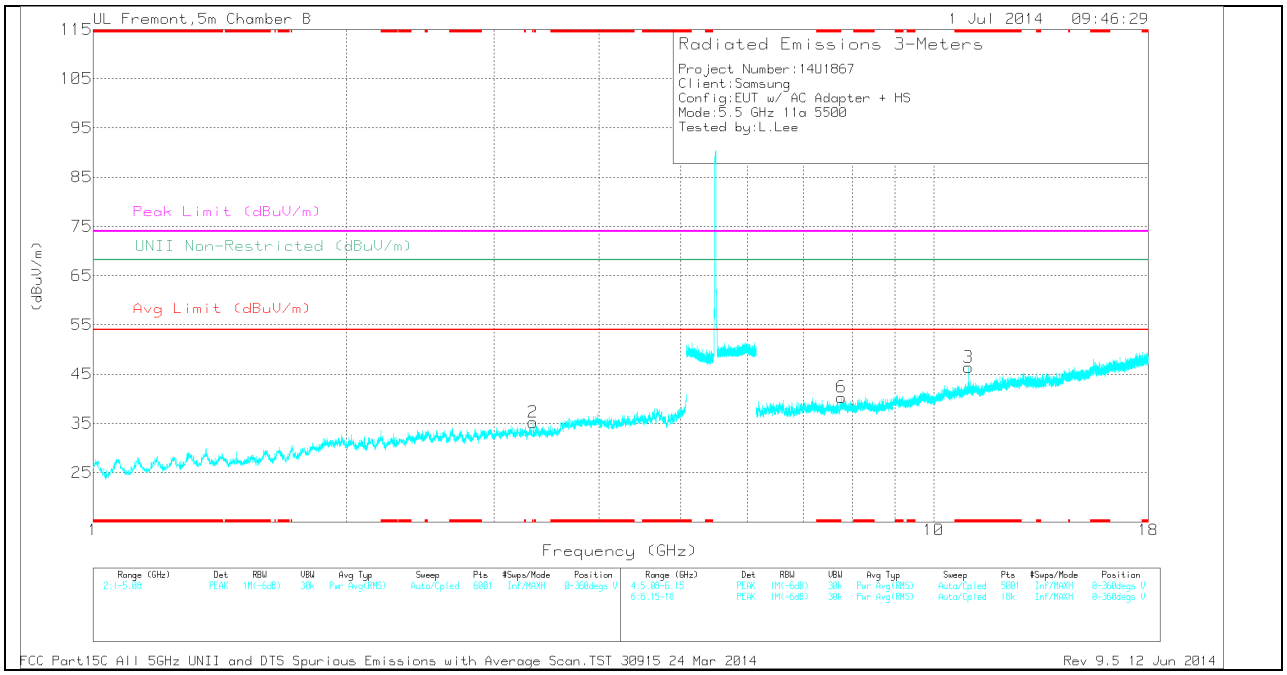
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 1.666	35.82	PK	28.9	-33	31.72	-	-	74	-42.28	-	-	0-360	99	H
2	* 3.337	34.01	PK	32.8	-31.6	35.21	-	-	74	-38.79	-	-	0-360	99	V
4	* 8.393	30.8	PK	35.8	-25.9	40.7	-	-	74	-33.3	-	-	0-360	206	H
3	* 11	30.98	PK	37.8	-22.4	46.38	-	-	74	-27.62	-	-	0-360	99	V
5	2.146	34.65	PK	31.3	-32.8	33.15	-	-	-	-	68.2	-35.05	0-360	206	H
6	7.769	31	PK	35.7	-26.4	40.3	-	-	-	-	68.2	-27.9	0-360	195	V

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

PK - Peak detector

Radiated Emissions

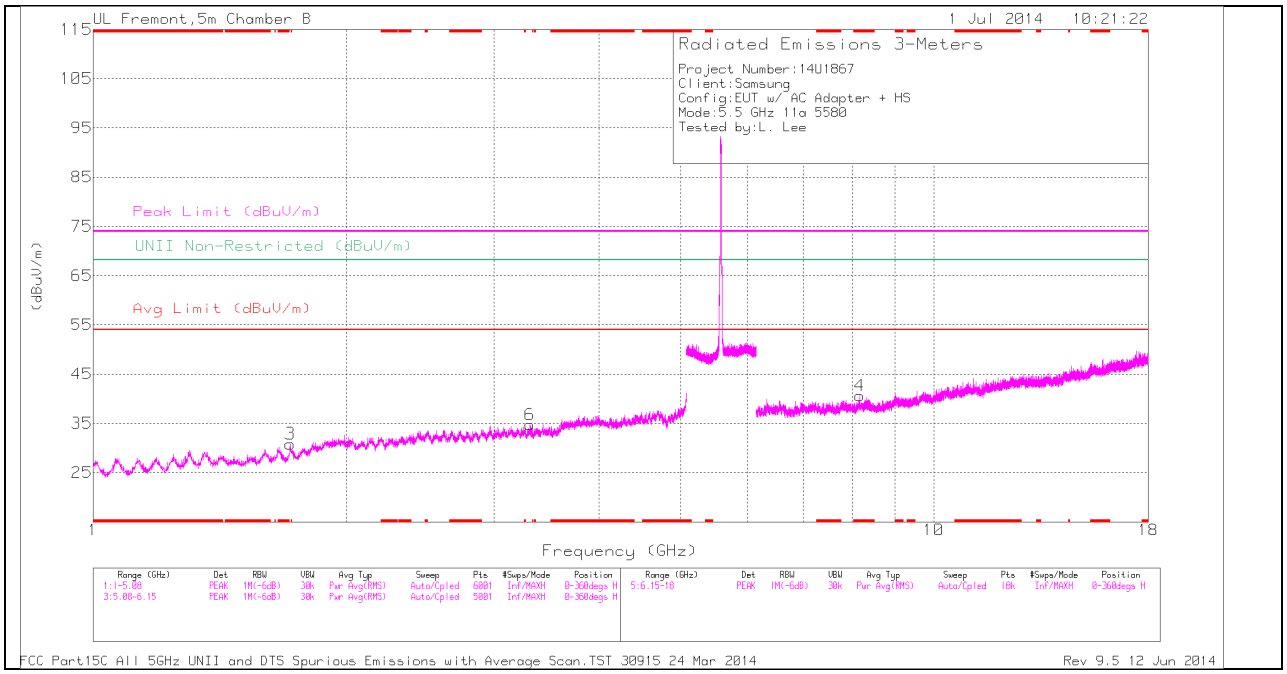
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.668	42.23	PK1	28.9	-33	38.13	-	-	74	-35.87	-	-	359	100	H
* 3.337	40.52	PK1	32.8	-31.6	41.72	-	-	74	-32.28	-	-	359	100	V
* 8.393	36.98	PK1	35.8	-25.9	46.88	-	-	74	-27.12	-	-	359	213	H
* 11	36.46	PK1	37.8	-22.4	51.86	-	-	74	-22.14	-	-	359	100	V
2.147	41.71	PK1	31.3	-32.8	40.21	-	-	-	-	68.2	-27.99	359	213	H
7.771	38.01	PK1	35.7	-26.3	47.41	-	-	-	-	68.2	-20.79	359	190	V

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

PK1 - KDB789033 Method: Peak

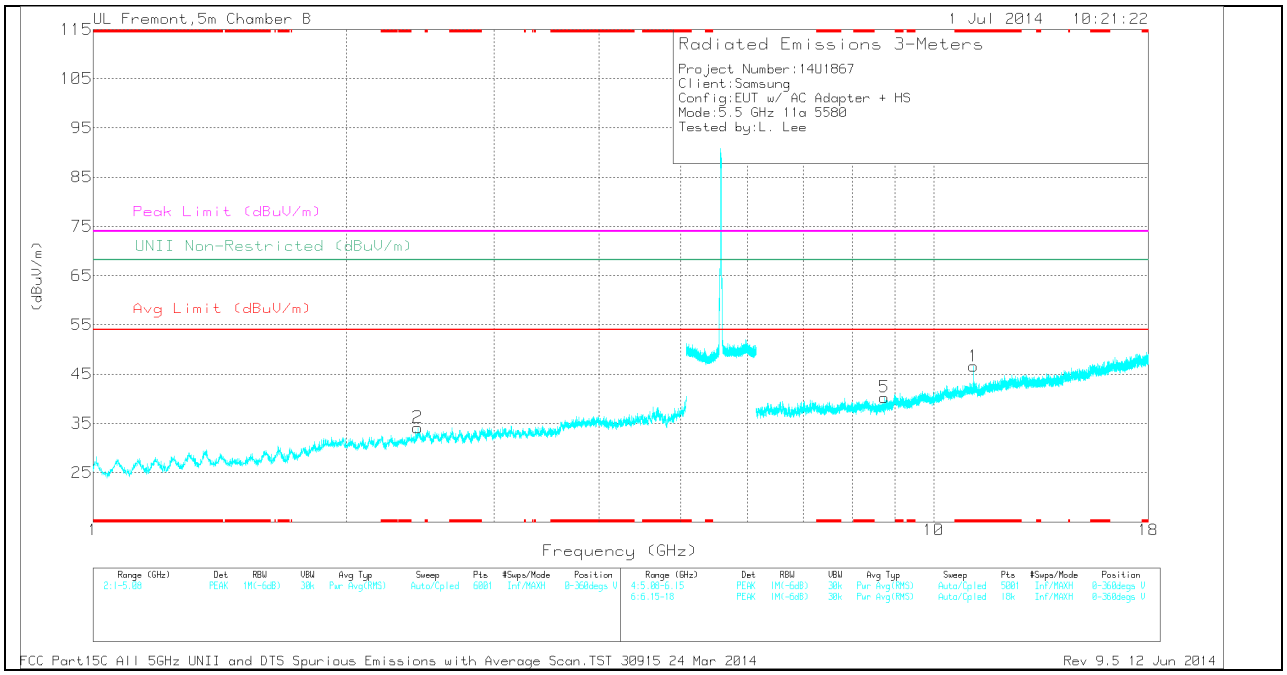
AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
4	* 8.169	31.22	PK	35.7	-26.3	40.62	-	-	74	-33.38	-	-	0-360	99	H
1	* 11.16	30.9	PK	37.9	-22.2	46.6	-	-	74	-27.4	-	-	0-360	99	V
3	1.716	35.12	PK	29.2	-33.5	30.82	-	-	-	-	68.2	-37.38	0-360	99	H
2	2.433	34.15	PK	32.2	-32.2	34.15	-	-	-	-	68.2	-34.05	0-360	195	V
6	3.307	33.55	PK	32.8	-31.6	34.75	-	-	-	-	68.2	-33.45	0-360	99	H
5	8.737	30.19	PK	35.9	-25.8	40.29	-	-	-	-	68.2	-27.91	0-360	99	V

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

PK - Peak detector

Radiated Emissions

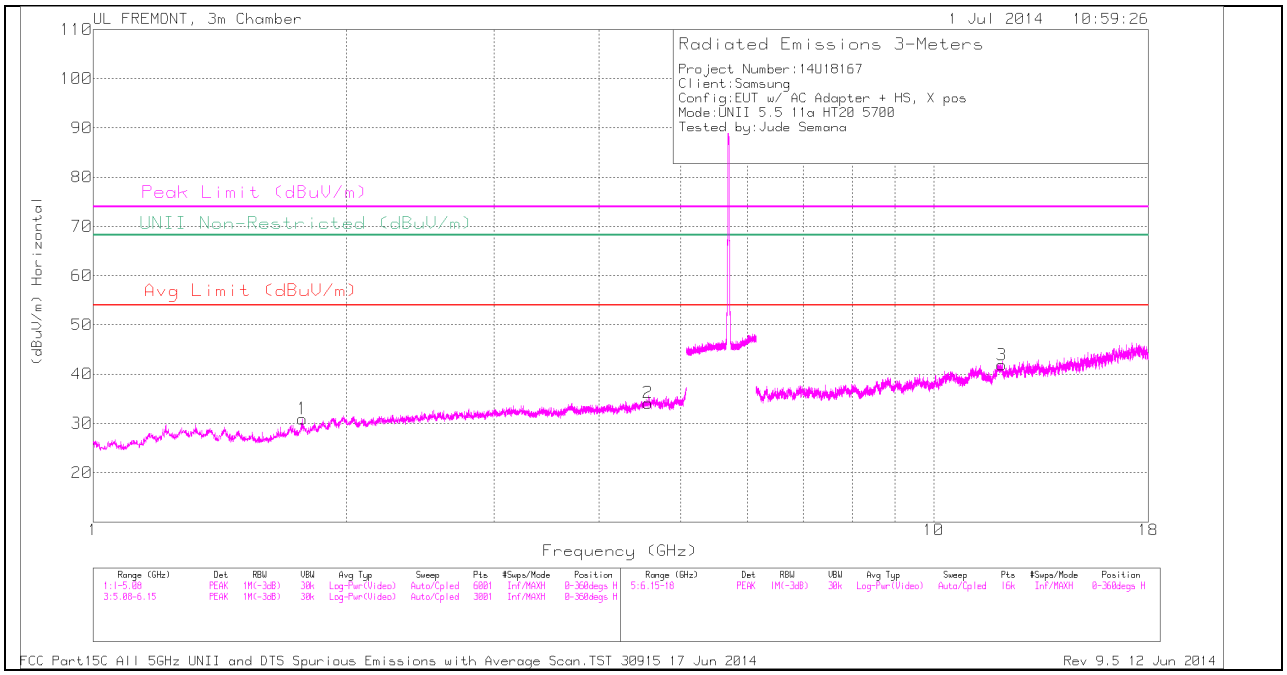
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 8.17	38.51	PK1	35.7	-26.3	47.91	-	-	74	-26.09	-	-	359	100	H
* 11.16	34.66	PK1	37.9	-22.2	50.36	-	-	74	-23.64	-	-	359	100	V
1.714	42.53	PK1	29.2	-33.5	38.23	-	-	-	-	68.2	-29.97	359	100	H
2.434	41.73	PK1	32.2	-32.2	41.73	-	-	-	-	68.2	-26.47	359	203	V
3.309	40.95	PK1	32.8	-31.6	42.15	-	-	-	-	68.2	-26.05	359	100	H
8.737	36.32	PK1	35.9	-25.8	46.42	-	-	-	-	68.2	-21.78	359	100	V

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

PK1 - KDB789033 Method: Peak

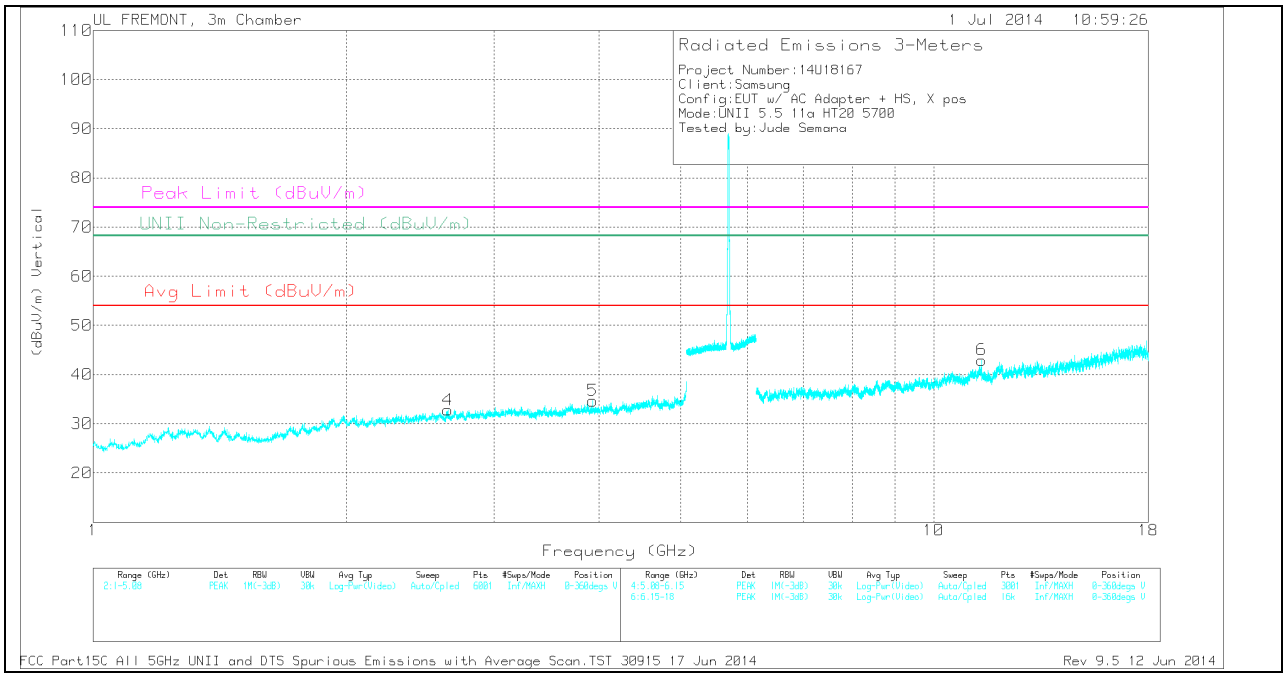
AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	1.775	33.42	PK	29.9	-32.4	0	30.92	-	-	-	-	68.2	-37.28	0-360	200	H
4	2.643	32.6	PK	32.6	-32.4	0	32.8	-	-	-	-	68.2	-35.4	0-360	200	V
5	3.931	32.77	PK	33.3	-31.4	0	34.67	-	-	74	-39.33	-	-	0-360	100	V
2	4.571	30.95	PK	34	-30.8	0	34.15	-	-	74	-39.85	-	-	0-360	100	H
6	11.4	30.86	PK	38.1	-26	0	42.96	-	-	74	-31.04	-	-	0-360	100	V
3	12.048	28.97	PK	39.1	-26.2	0	41.87	-	-	74	-32.13	-	-	0-360	100	H

PK - Peak detector

Radiated Emissions

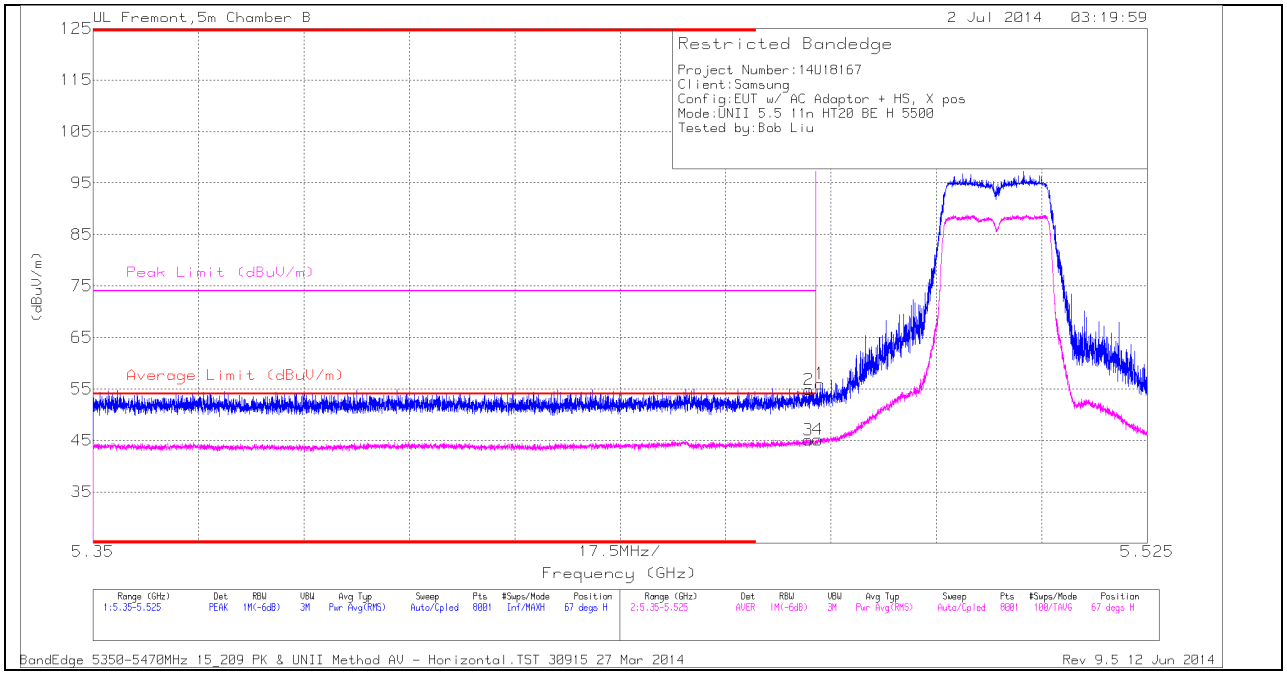
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
11.4	39.12	PK1	38.1	-26	0	51.22	-	-	74	-22.78	-	-	32	158	V
11.4	38.8	PK2	38.1	-26	0	50.9	-	-	74	-23.1	-	-	32	158	V

PK1 - KDB789033 Method: Peak

PK2 - KDB558074 Method: Maximum Peak

10.3.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

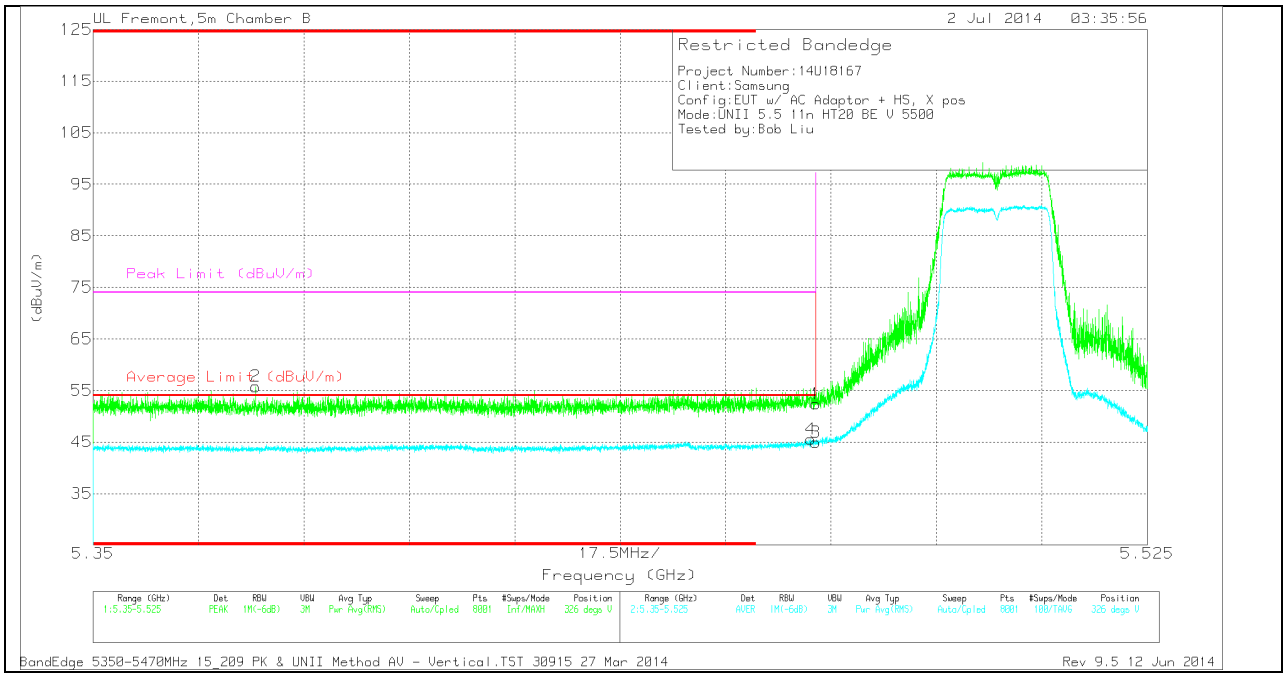
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
2	5.469	40.33	PK	34.5	-20	0	54.83	-	-	74	-19.17	67	289	H
3	5.469	30.31	RMS	34.5	-20	.32	45.05	54	-8.95	-	-	67	289	H
4	5.47	30.42	RMS	34.5	-20	.32	45.16	-	-	-	-	67	289	H
1	5.471	41.48	PK	34.5	-20	0	55.98	-	-	-	-	67	289	H

VERTICAL PEAK AND AVERAGE PLOT

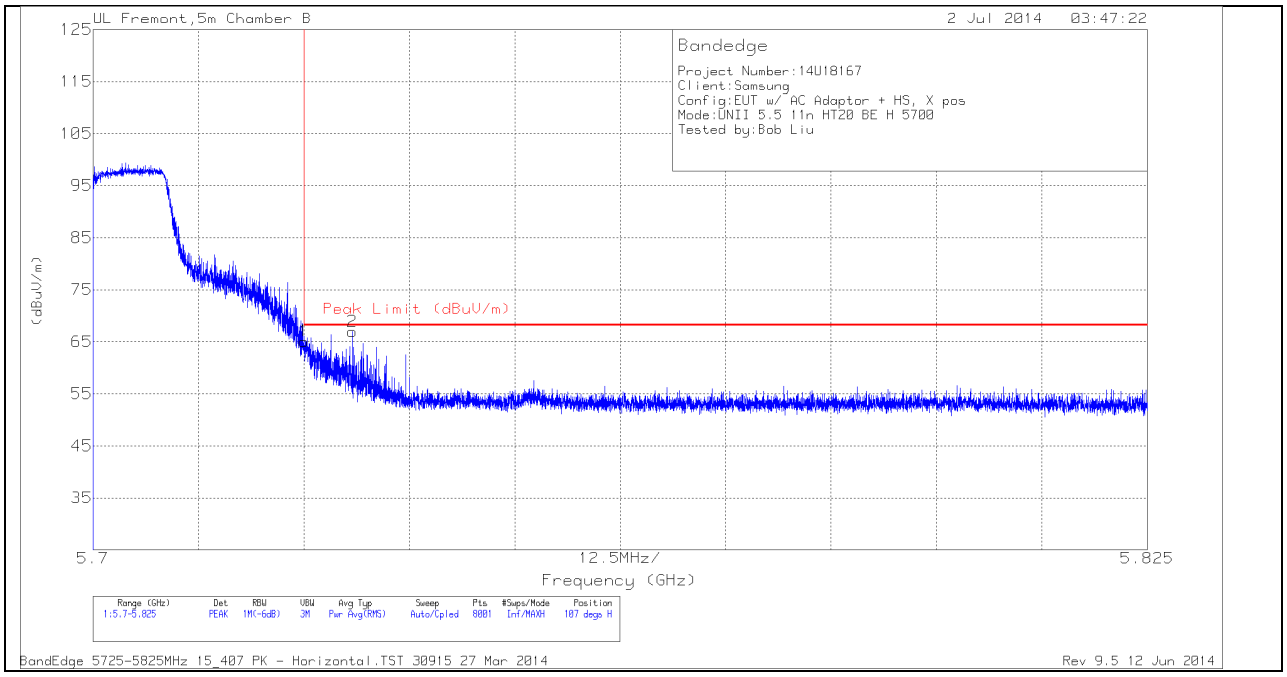


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.377	41.27	PK	34.5	-20	0	55.77	-	-	74	-18.23	326	267	V
4	5.469	30.82	RMS	34.5	-20	.32	45.56	54	-8.44	-	-	326	267	V
1	5.47	37.88	PK	34.5	-20	0	52.38	-	-	74	-21.62	326	267	V
3	5.47	30.18	RMS	34.5	-20	.32	44.92	54	-9.08	-	-	326	267	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

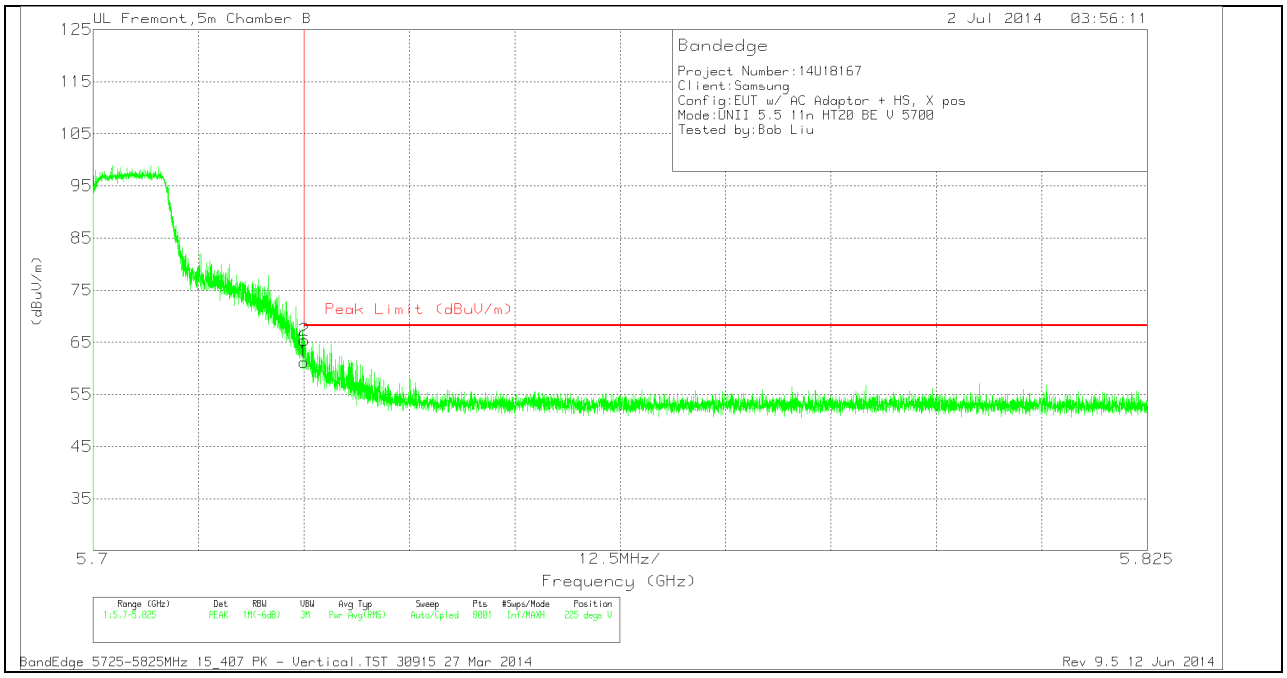
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	50.39	PK	34.6	-19.9	0	65.09	68.2	-3.11	107	239	H
2	5.731	52.17	PK	34.6	-19.8	0	66.97	68.2	-1.23	107	239	H

VERTICAL PEAK AND AVERAGE PLOT

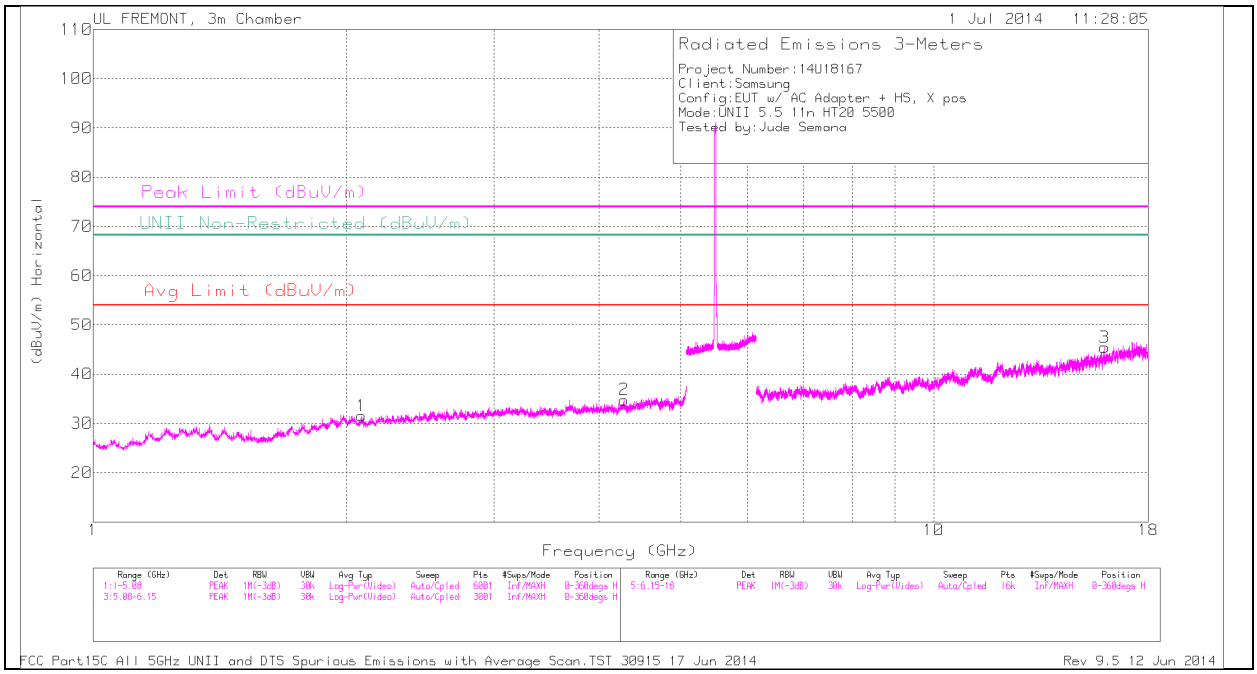


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	46.51	PK	34.6	-19.9	0	61.21	68.2	-6.99	225	317	V
2	5.725	50.71	PK	34.6	-19.9	0	65.41	68.2	-2.79	225	317	V

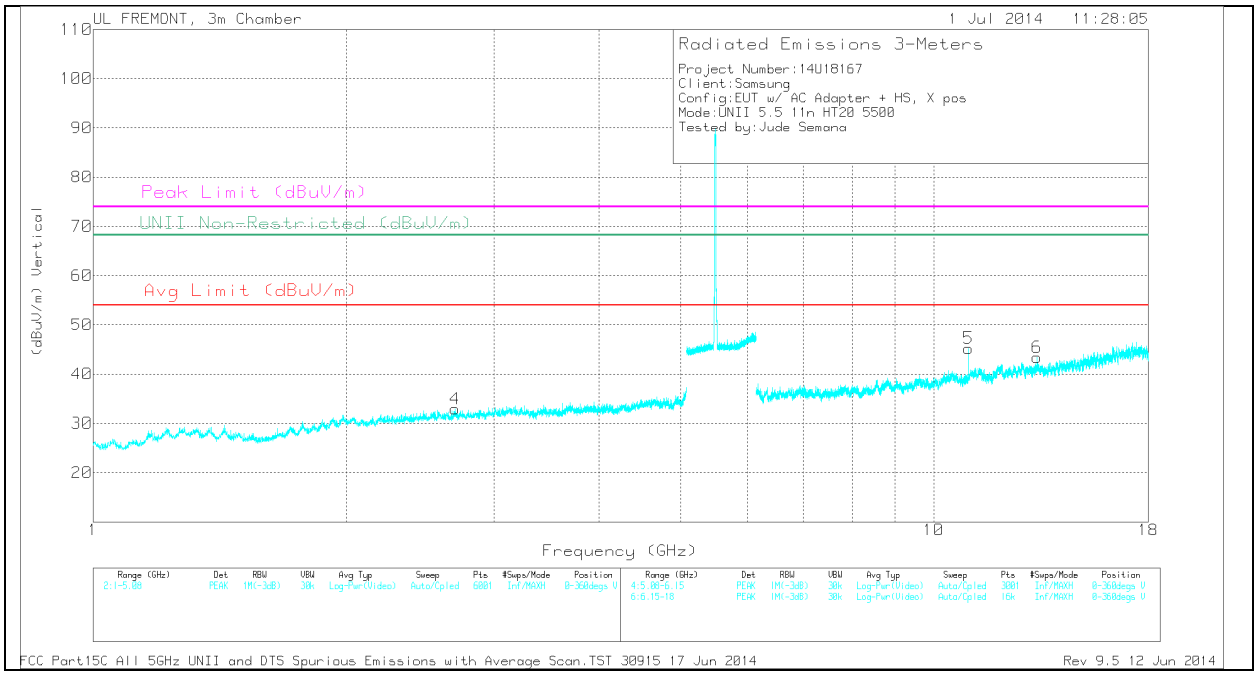
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL

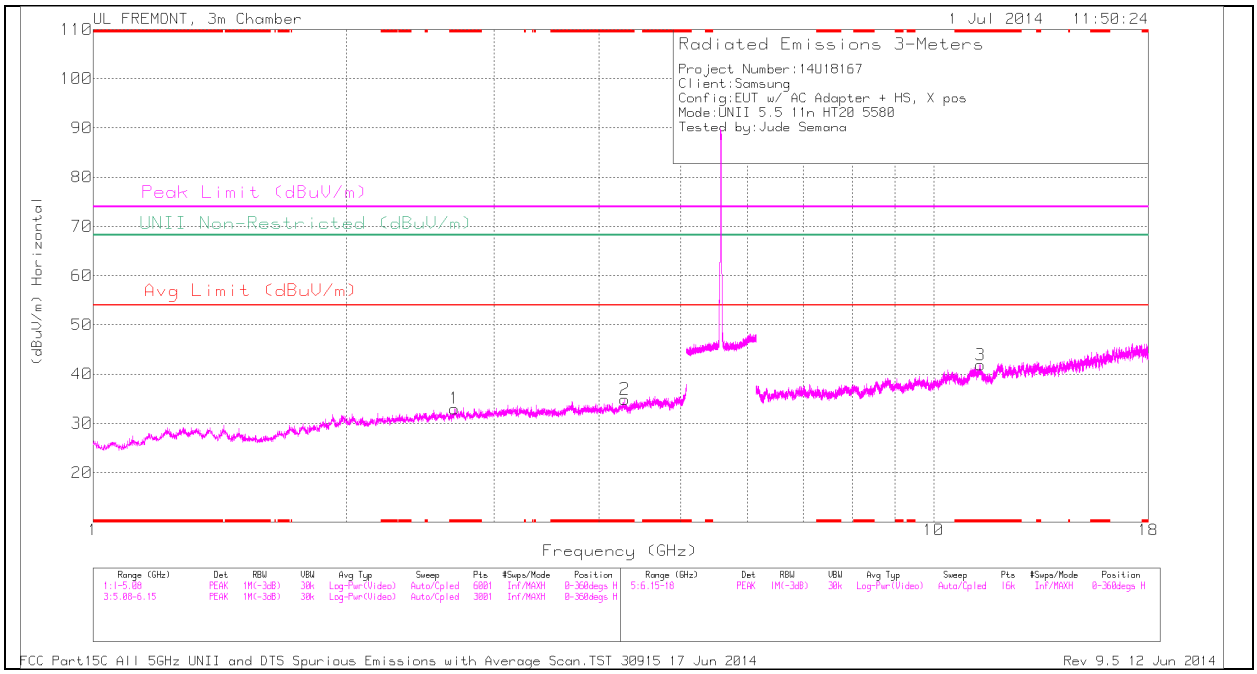


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

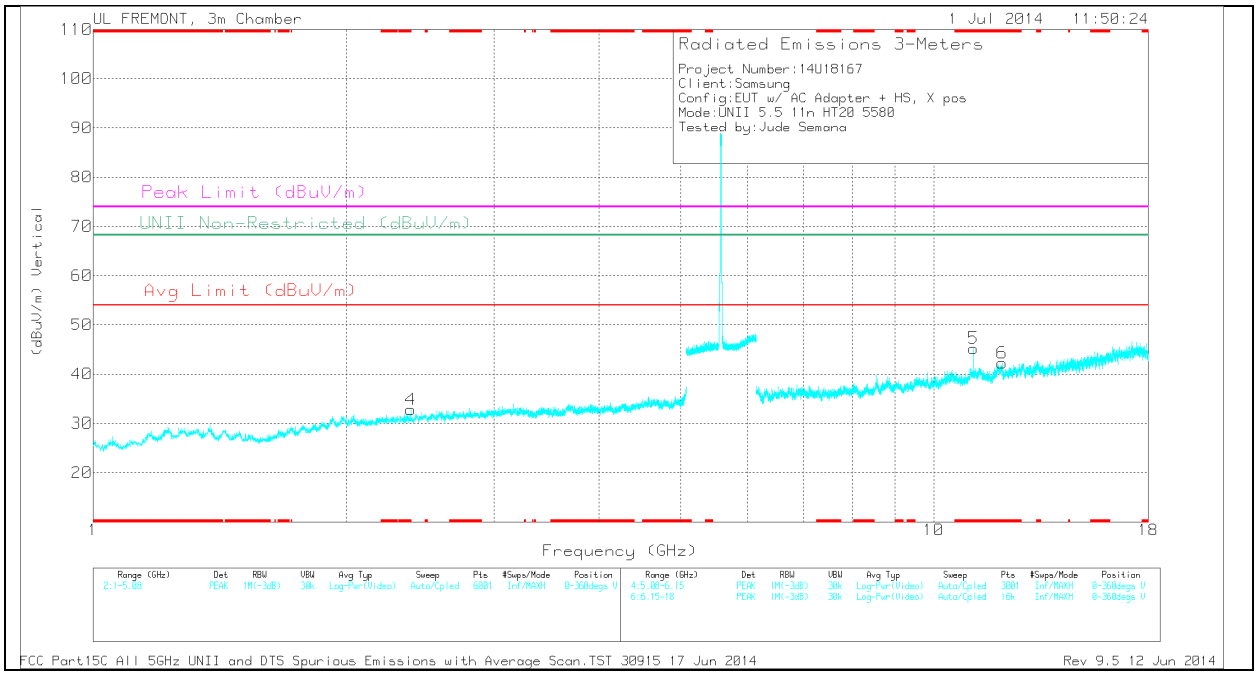
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.085	32.84	PK	31.5	-32.8	0	31.54	-	-	-	-	68.2	-36.66	0-360	100	H
4	2.697	32.52	PK	32.6	-32.2	0	32.92	-	-	74	-41.08	-	-	0-360	100	V
2	4.281	31.58	PK	33.6	-30.4	0	34.78	-	-	74	-39.22	-	-	0-360	200	H
5	11	32.72	PK	37.9	-25.4	0	45.22	-	-	74	-28.78	-	-	0-360	100	V
6	13.274	30.4	PK	39.1	-26.1	0	43.4	-	-	74	-30.6	-	-	0-360	100	V
3	15.965	30.54	PK	40.5	-25.6	0	45.44	-	-	74	-28.56	-	-	0-360	100	H

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL

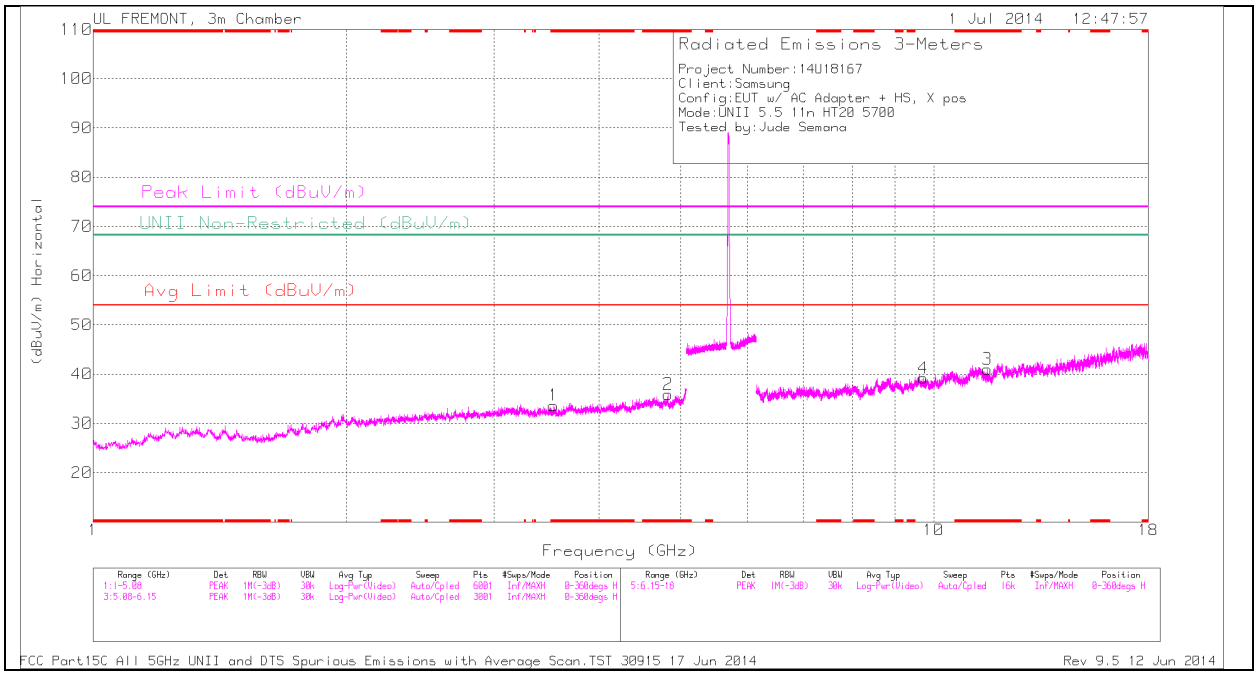


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

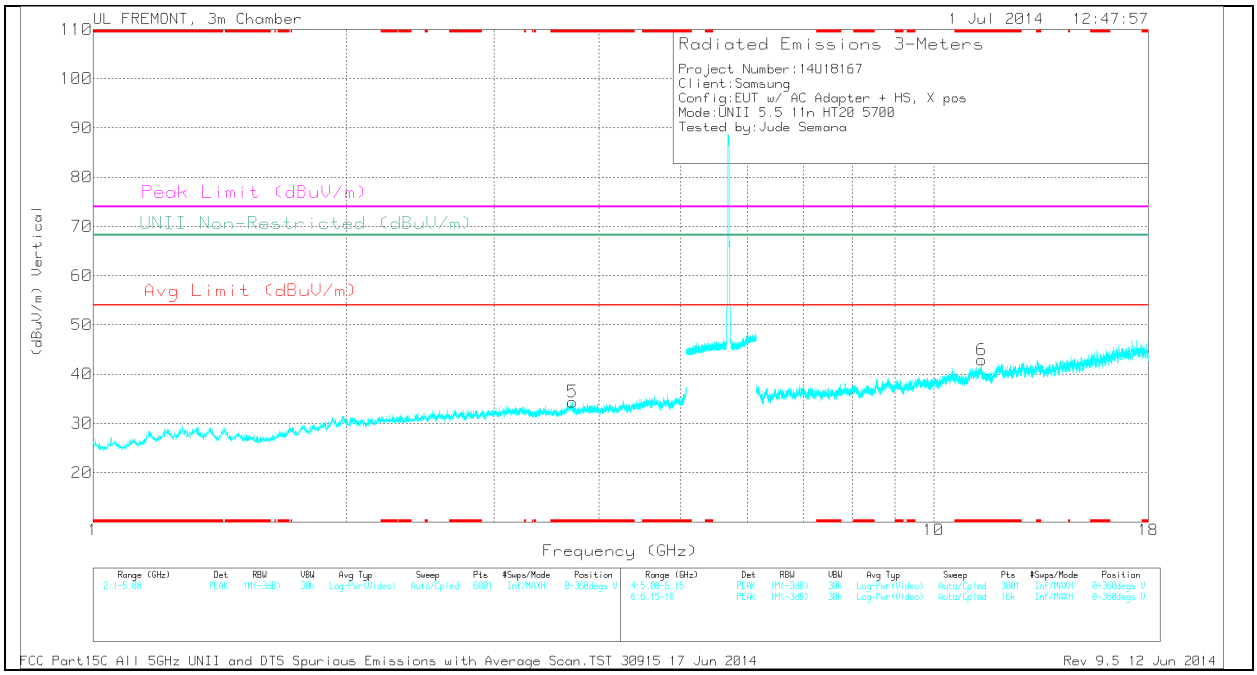
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.69	32.7	PK	32.6	-32.3	0	33	-	-	74	-41	-	-	0-360	200	H
2	* 4.289	31.77	PK	33.6	-30.5	0	34.87	-	-	74	-39.13	-	-	0-360	100	H
4	* 2.388	33.28	PK	32.1	-32.6	0	32.78	-	-	74	-41.22	-	-	0-360	200	V
3	* 11.364	29.64	PK	38.1	-25.9	0	41.84	-	-	74	-32.16	-	-	0-360	200	H
5	* 11.16	33.12	PK	37.9	-25.8	0	45.22	-	-	74	-28.78	-	-	0-360	100	V
6	* 12.061	29.53	PK	39.1	-26.4	0	42.23	-	-	74	-31.77	-	-	0-360	200	V

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



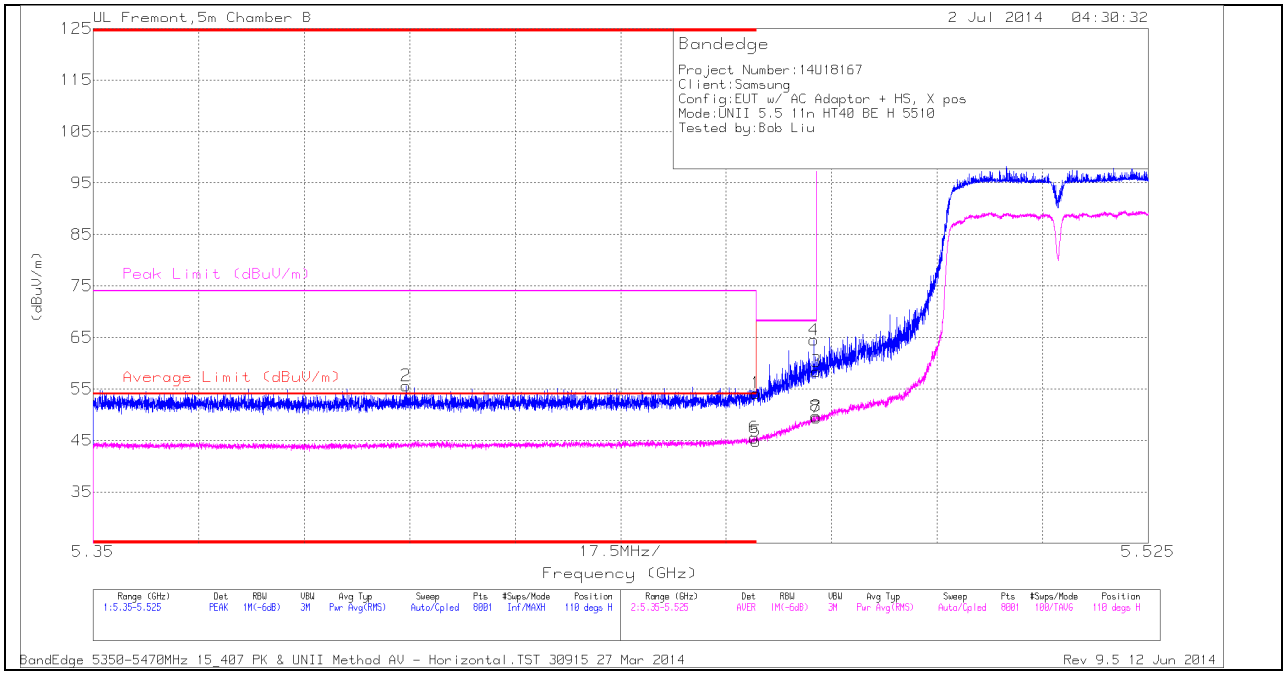
Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 3.53	32.43	PK	33	-31.8	0	33.63	-	-	74	-40.37	-	-	0-360	200	H
2	* 4.832	32.09	PK	34	-30.2	0	35.89	-	-	74	-38.11	-	-	0-360	200	H
5	* 3.721	32.27	PK	33.2	-31.1	0	34.37	-	-	74	-39.63	-	-	0-360	200	V
3	* 11.579	28.6	PK	38.4	-26	0	41	-	-	74	-33	-	-	0-360	100	H
6	* 11.399	30.79	PK	38.1	-26	0	42.89	-	-	74	-31.11	-	-	0-360	100	V
4	9.723	28.37	PK	36.9	-26.1	0	39.17	-	-	-	-	68.2	-29.03	0-360	100	H

10.3.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)

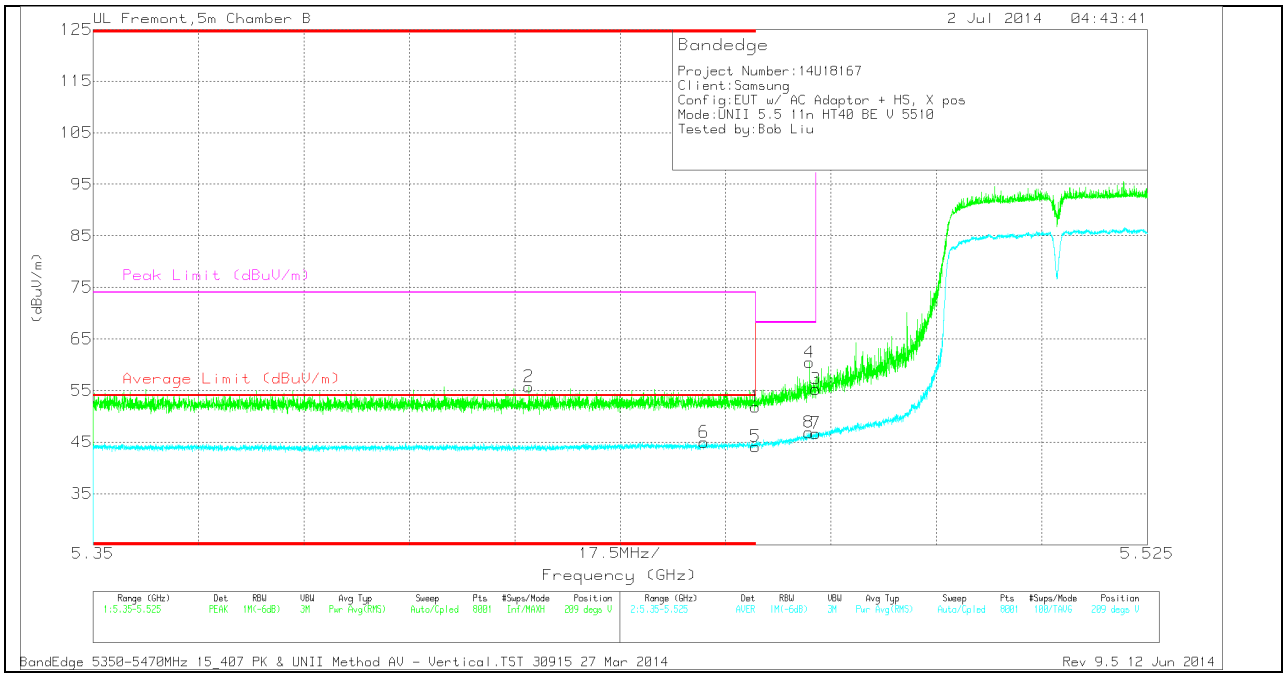
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 5.46	39.77	PK	34.5	-20.1	0	54.17	-	-	74	-19.83	110	281	H
2	* 5.402	41.2	PK	34.5	-20.1	0	55.6	-	-	74	-18.4	110	281	H
5	* 5.46	29.91	RMS	34.5	-20.1	.66	44.8	54	-9.2	-	-	110	281	H
6	* 5.46	30.62	RMS	34.5	-20.1	.66	45.51	54	-8.49	-	-	110	281	H
3	5.47	43.92	PK	34.5	-20	0	58.42	-	-	68.2	-9.78	110	281	H
4	5.47	49.99	PK	34.5	-20	0	64.49	-	-	68.2	-3.71	110	281	H
7	5.47	34.44	RMS	34.5	-20	.66	49.43	-	-	-	-	110	281	H
8	5.47	34.72	RMS	34.5	-20	.66	49.71	-	-	-	-	110	281	H

VERTICAL PEAK AND AVERAGE PLOT

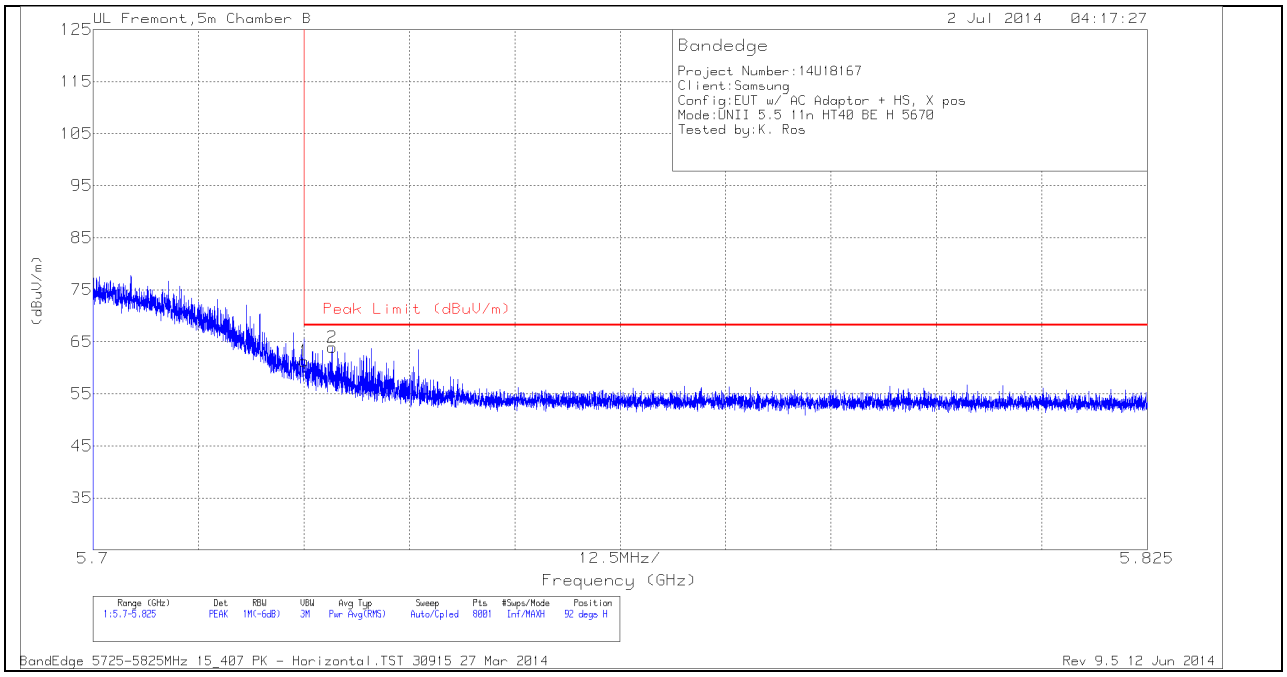


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.422	41.33	PK	34.5	-20.1	0	55.73	-	-	74	-18.27	209	305	V
6	* 5.451	30.08	RMS	34.5	-20.1	.66	44.97	54	-9.03	-	-	209	305	V
1	* 5.46	37.45	PK	34.5	-20.1	0	51.85	-	-	74	-22.15	209	305	V
5	* 5.46	29.25	RMS	34.5	-20.1	.66	44.14	54	-9.86	-	-	209	305	V
4	5.469	45.97	PK	34.5	-20	0	60.47	-	-	68.2	-7.73	209	305	V
8	5.469	31.86	RMS	34.5	-20	.66	46.85	-	-	-	-	209	305	V
3	5.47	40.78	PK	34.5	-20	0	55.28	-	-	68.2	-12.92	209	305	V
7	5.47	31.69	RMS	34.5	-20	.66	46.68	-	-	-	-	209	305	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

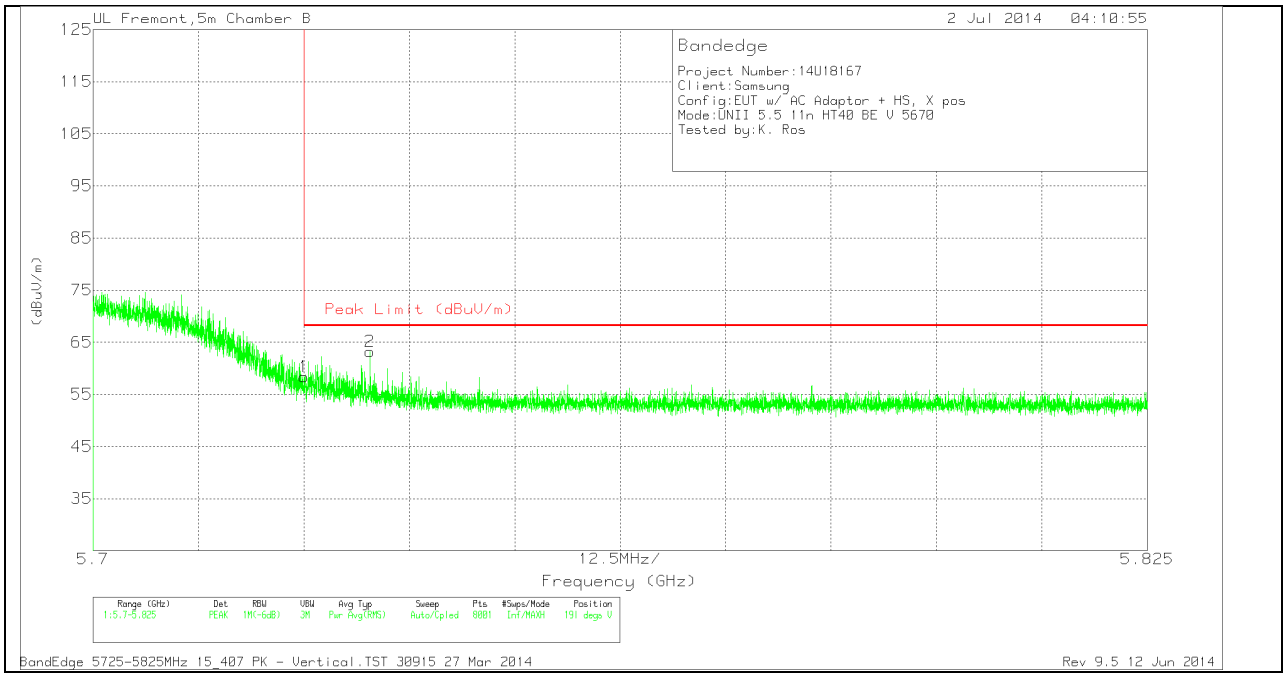
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height(cm)	Polarity
1	5.725	46.6	PK	34.6	-19.9	0	61.3	68.2	-6.9	92	285	H
2	5.728	49.15	PK	34.6	-19.8	0	63.95	68.2	-4.25	92	285	H

VERTICAL PEAK AND AVERAGE PLOT

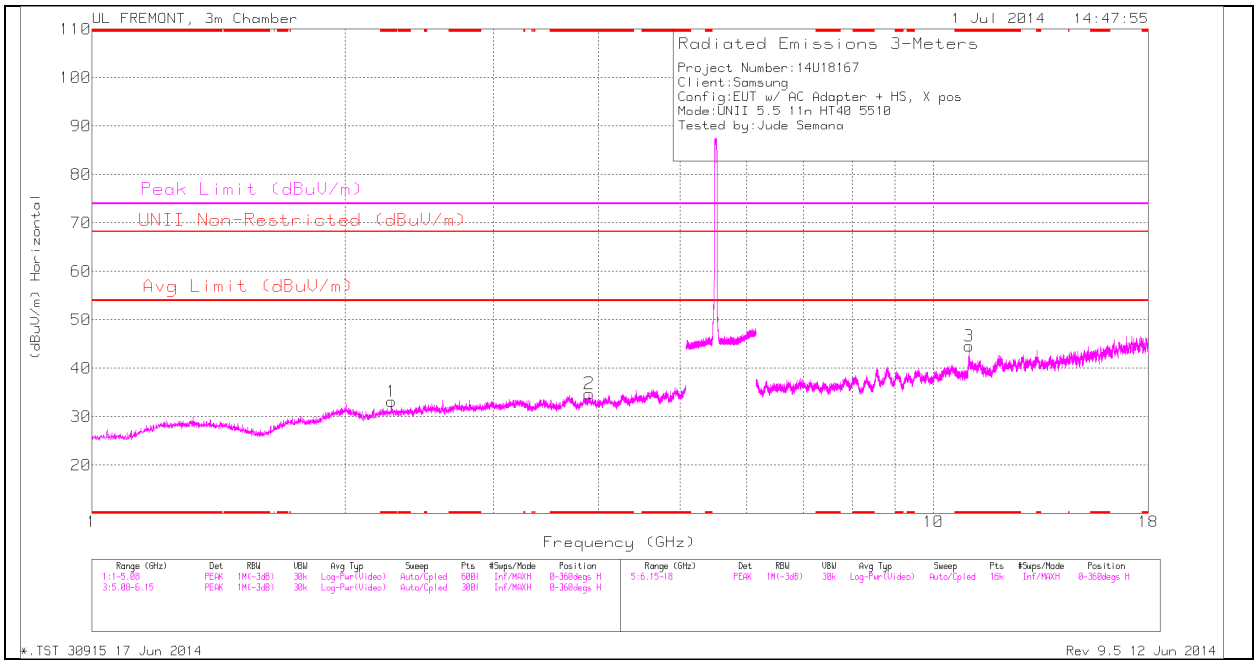


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	43.66	PK	34.6	-19.9	0	58.36	68.2	-9.84	191	310	V
2	5.733	48.4	PK	34.6	-19.8	0	63.2	68.2	-5	191	310	V

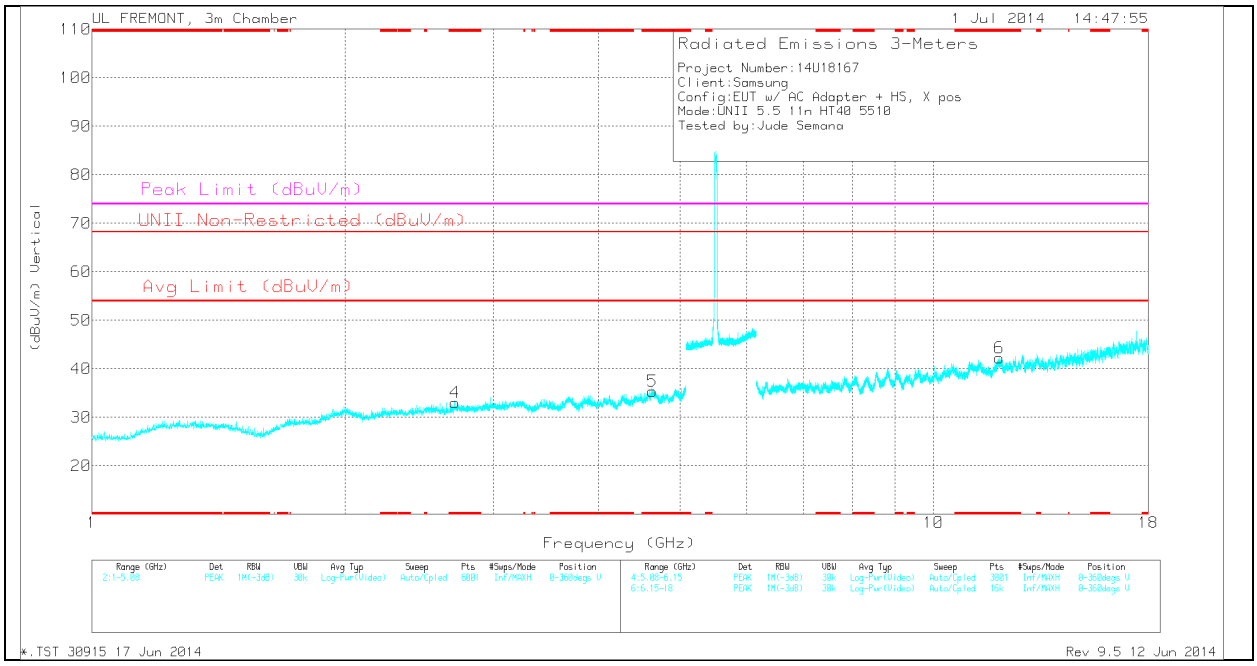
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL

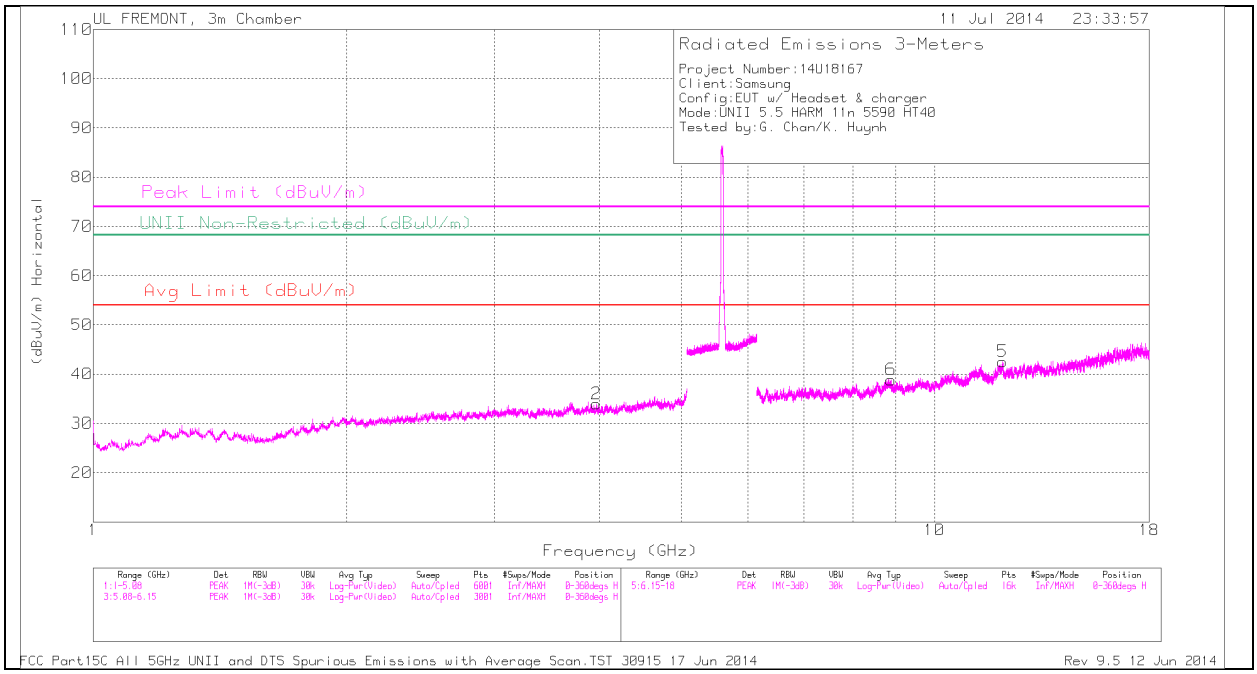


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

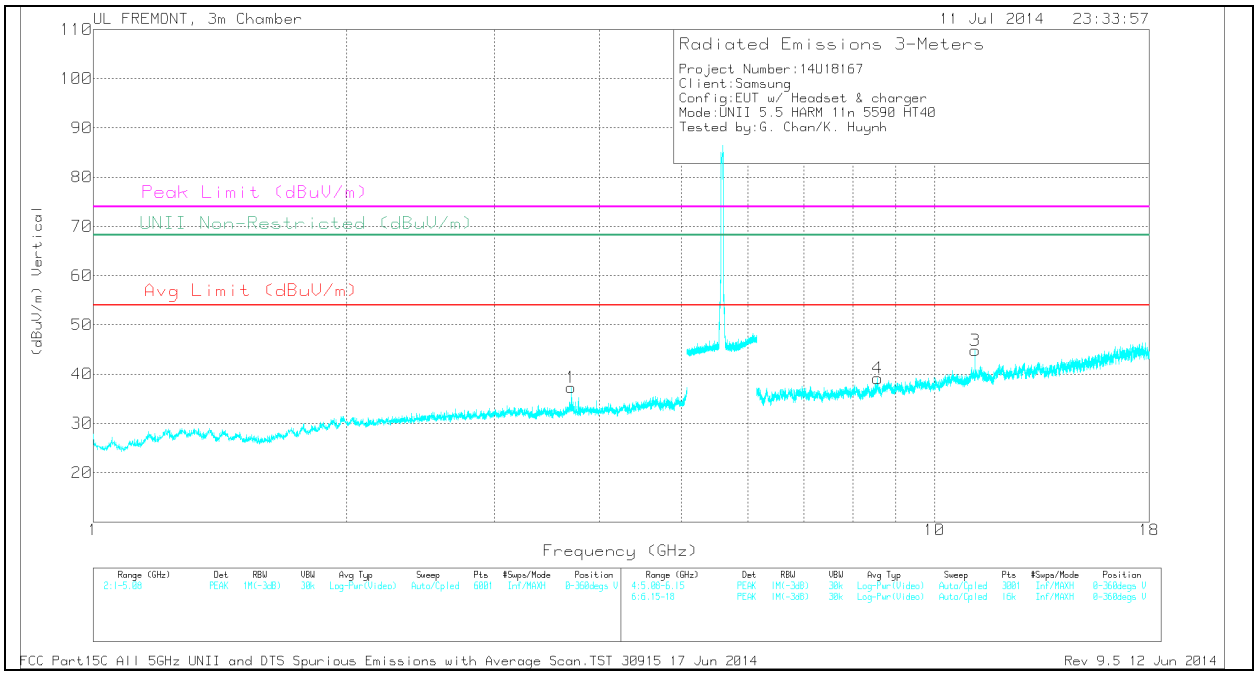
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.269	33.52	PK	31.8	-32.2	0	33.12	-	-	74	-40.88	-	-	0-360	200	H
2	* 3.899	32.49	PK	33.2	-30.9	0	34.79	-	-	74	-39.21	-	-	0-360	200	H
4	* 2.699	32.49	PK	32.6	-32.1	0	32.99	-	-	74	-41.01	-	-	0-360	200	V
5	* 4.637	31.52	PK	34.1	-30.2	0	35.42	-	-	74	-38.58	-	-	0-360	100	V
3	* 11.021	32.19	PK	37.9	-25.5	0	44.59	-	-	74	-29.41	-	-	0-360	200	H
6	* 11.975	29.61	PK	39	-26.3	0	42.31	-	-	74	-31.69	-	-	0-360	200	V

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	3.702	34.78	PK	33.2	-30.7	0	37.28	-	-	74	-36.72	-	-	0-360	100	V
2	3.966	32.07	PK	33.3	-31.4	0	33.97	-	-	74	-40.03	-	-	0-360	100	H
4	8.562	29.54	PK	35.8	-26.2	0	39.14	-	-	-	-	68.2	-29.06	0-360	200	V
6	8.878	29.37	PK	36	-26.5	0	38.87	-	-	-	-	68.2	-29.33	0-360	100	H
3	11.18	32.69	PK	37.9	-25.8	0	44.79	-	-	74	-29.21	-	-	0-360	100	V
5	12.046	29.63	PK	39.1	-26.2	0	42.53	-	-	74	-31.47	-	-	0-360	100	H

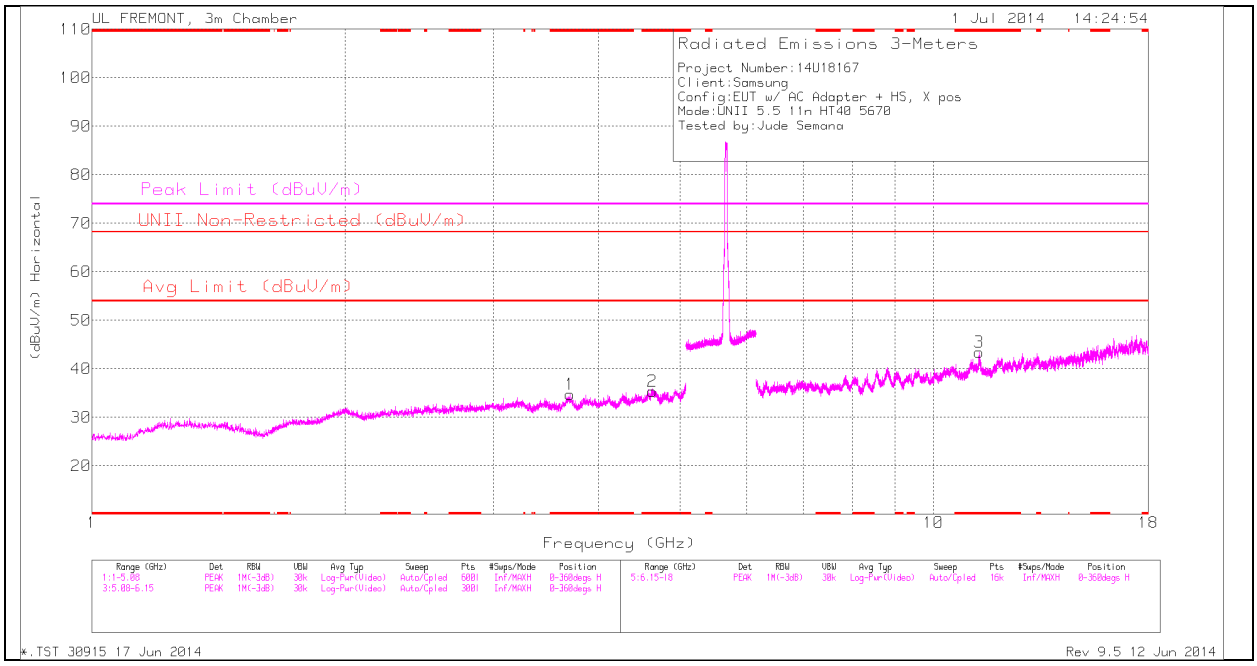
PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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
3.702	40.63	PK1	33.2	-30.7	0	43.13	-	-	74	-30.87	-	-	360	100	V
3.965	41.4	PK1	33.3	-31.4	0	43.3	-	-	74	-30.7	-	-	360	100	H
8.56	37.56	PK1	35.8	-26.1	0	47.26	-	-	-	-	68.2	-20.94	360	200	V
8.878	37.65	PK1	36	-26.5	0	47.15	-	-	-	-	68.2	-21.05	360	100	H
11.18	37.27	PK1	37.9	-25.8	0	49.37	-	-	74	-24.63	-	-	360	100	V
12.048	37.88	PK1	39.1	-26.2	0	50.78	-	-	74	-23.22	-	-	360	100	H

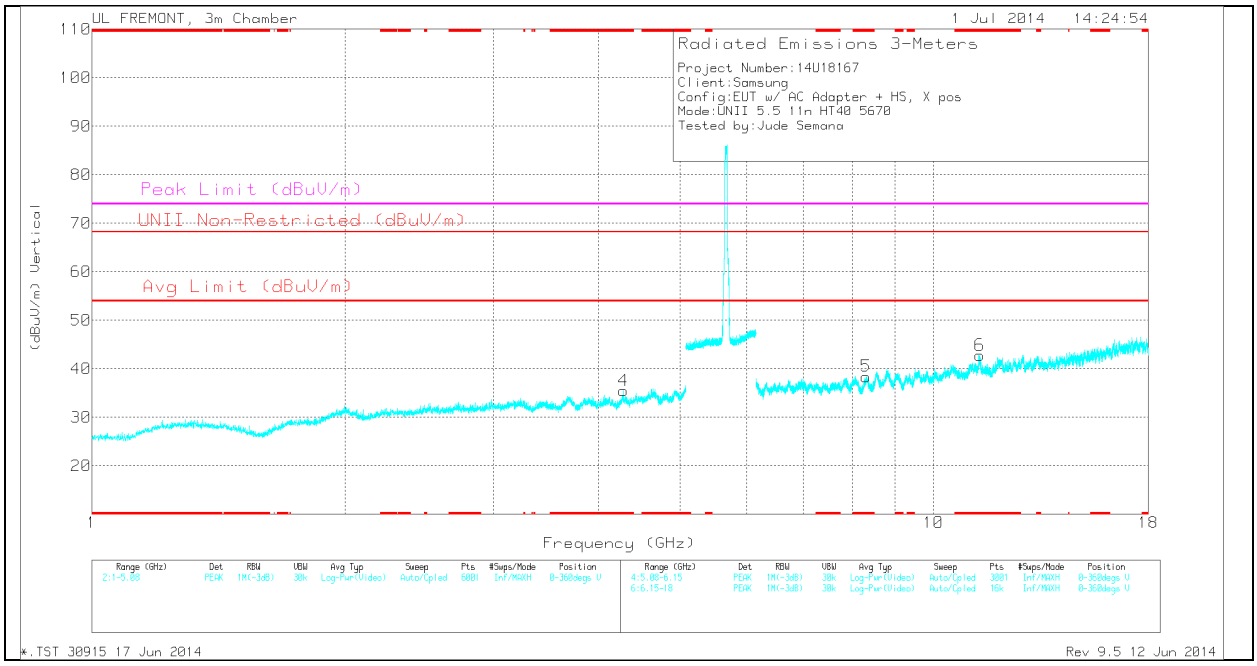
PK1 - KDB789033 Method: Peak

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



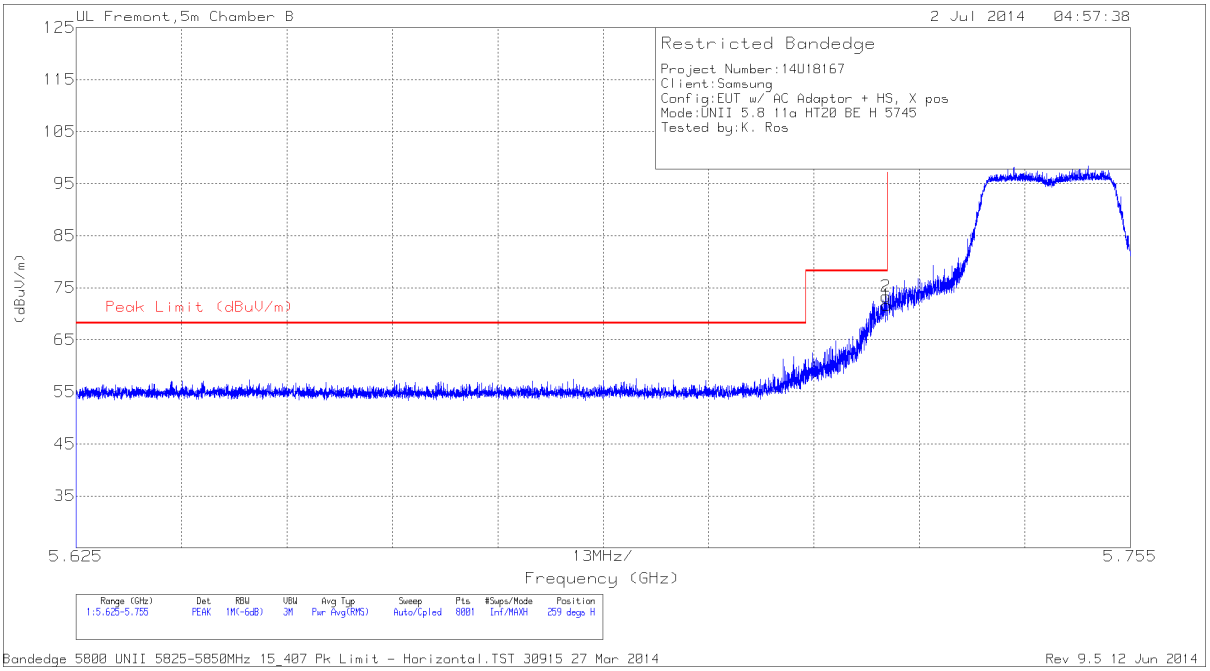
Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (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	* 3.701	32.26	PK	33.2	-30.7	0	34.76	-	-	74	-39.24	-	-	0-360	200	H
2	* 4.638	31.53	PK	34.1	-30.2	0	35.43	-	-	74	-38.57	-	-	0-360	100	H
4	* 4.279	32.31	PK	33.6	-30.4	0	35.51	-	-	74	-38.49	-	-	0-360	200	V
3	* 11.333	30.87	PK	38	-25.5	0	43.37	-	-	74	-30.63	-	-	0-360	200	H
5	* 8.32	29.33	PK	35.8	-26.7	0	38.43	-	-	74	-35.57	-	-	0-360	200	V
6	* 11.35	30.54	PK	38	-25.7	0	42.84	-	-	74	-31.16	-	-	0-360	200	V

10.4. 5.8 GHz

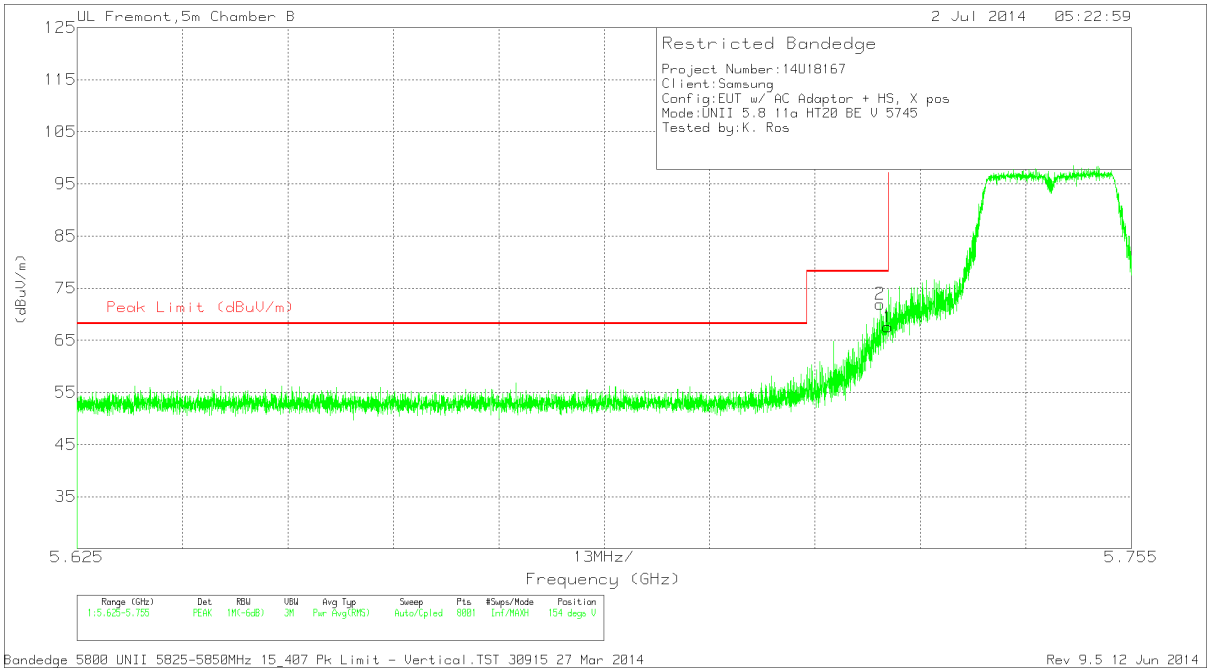
10.4.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	56.93	PK	34.6	-19.9	0	71.63	78.2	-6.57	259	281	H
2	5.725	58.63	PK	34.6	-19.9	0	73.33	78.2	-4.87	259	281	H

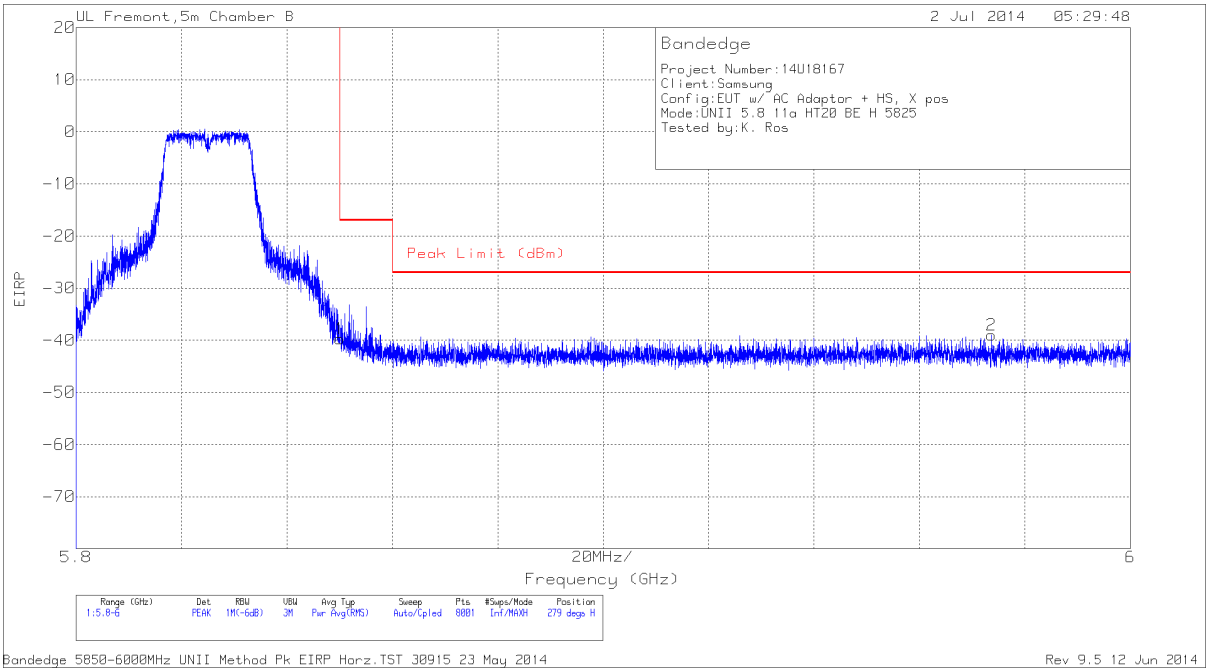
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.724	57.27	PK	34.6	-19.9	0	71.97	78.2	-6.23	154	228	V
1	5.725	52.87	PK	34.6	-19.9	0	67.57	78.2	-10.63	154	228	V

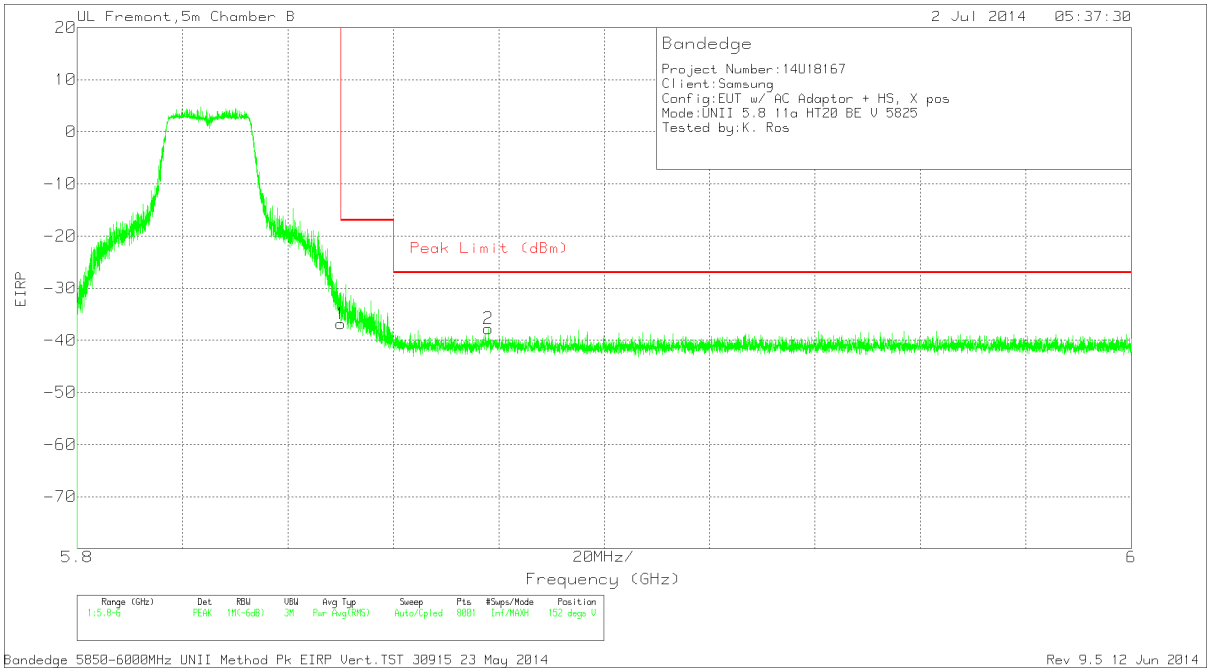
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (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	-66.52	PK	34.8	-19.8	11.8	0	-39.72	-17	-22.72	279	253	H
2	5.974	-66.61	PK	35.2	-19.4	11.8	0	-39.01	-27	-12.01	279	253	H

PK - Peak detector

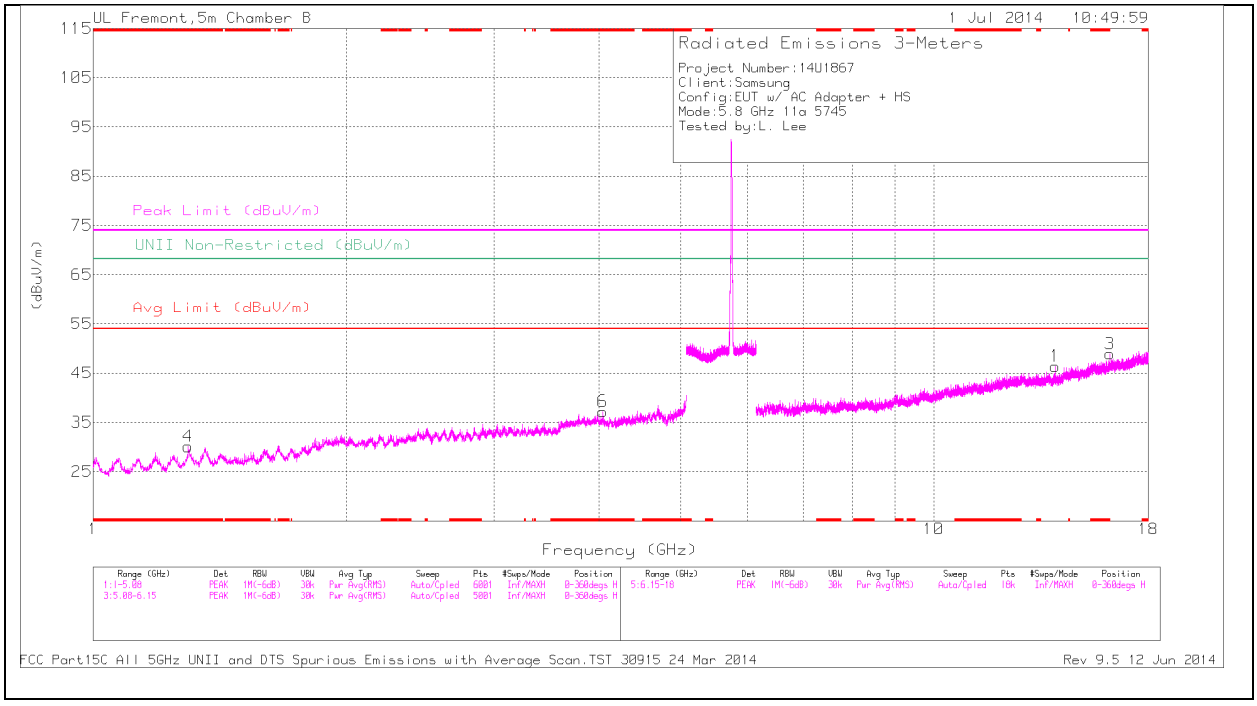


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (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	-63.65	PK	34.8	-19.8	11.8	0	-36.85	-17	-19.85	152	248	V
2	5.878	-64.97	PK	34.9	-19.5	11.8	0	-37.77	-27	-10.77	152	248	V

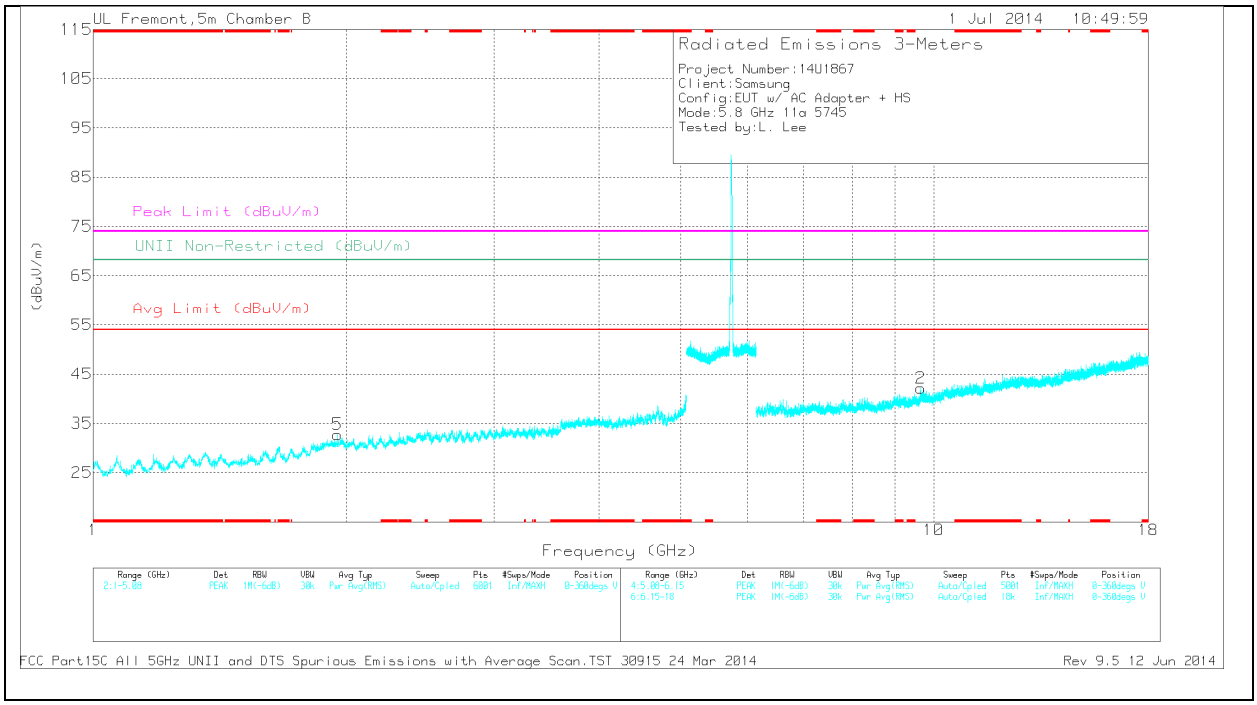
PK - Peak detector

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
4	* 1.298	35.7	PK	28.8	-34.4	30.1	-	-	74	-43.9	-	-	0-360	99	H
6	* 4.038	32.99	PK	33.6	-29.4	37.19	-	-	74	-36.81	-	-	0-360	99	H
5	1.955	34.43	PK	31.2	-32.9	32.73	-	-	-	-	68.2	-35.47	0-360	99	V
2	9.651	29.42	PK	36.8	-24.1	42.12	-	-	-	-	68.2	-26.08	0-360	193	V
1	13.942	28.59	PK	38.6	-20.8	46.39	-	-	-	-	68.2	-21.81	0-360	99	H
3	16.204	27.52	PK	41.1	-19.7	48.92	-	-	-	-	68.2	-19.28	0-360	99	H

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

PK - Peak detector

Radiated Emissions

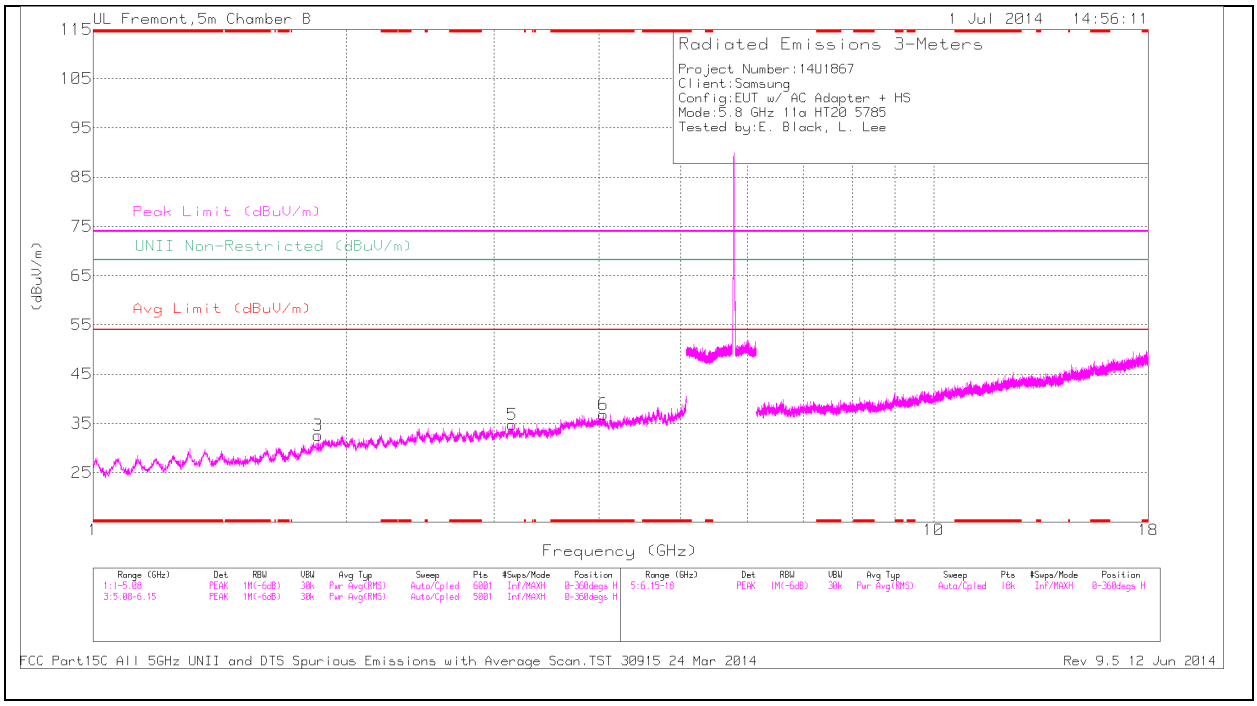
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	DC factor	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.299	42.54	PK1	28.8	-34.4	0	36.94	-	-	74	-37.06	-	-	359	100	H
* 4.038	39.54	PK1	33.6	-29.5	0	43.64	-	-	74	-30.36	-	-	359	100	H
1.957	41.6	PK1	31.2	-32.9	0	39.9	-	-	-	-	68.2	-28.3	359	100	V
9.652	35.47	PK1	36.8	-24.1	0	48.17	-	-	-	-	68.2	-20.03	359	199	V
13.94	23.36	AD1	38.6	-20.8	0.32	41.16	-	-	-	-	-	-	359	100	H
13.942	34.53	PK1	38.6	-20.8	0	52.33	-	-	-	-	68.2	-15.87	359	100	H
16.203	33.38	PK1	41.1	-19.7	0	54.78	-	-	-	-	68.2	-13.42	359	100	H

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

PK1 - KDB789033 Method: Peak

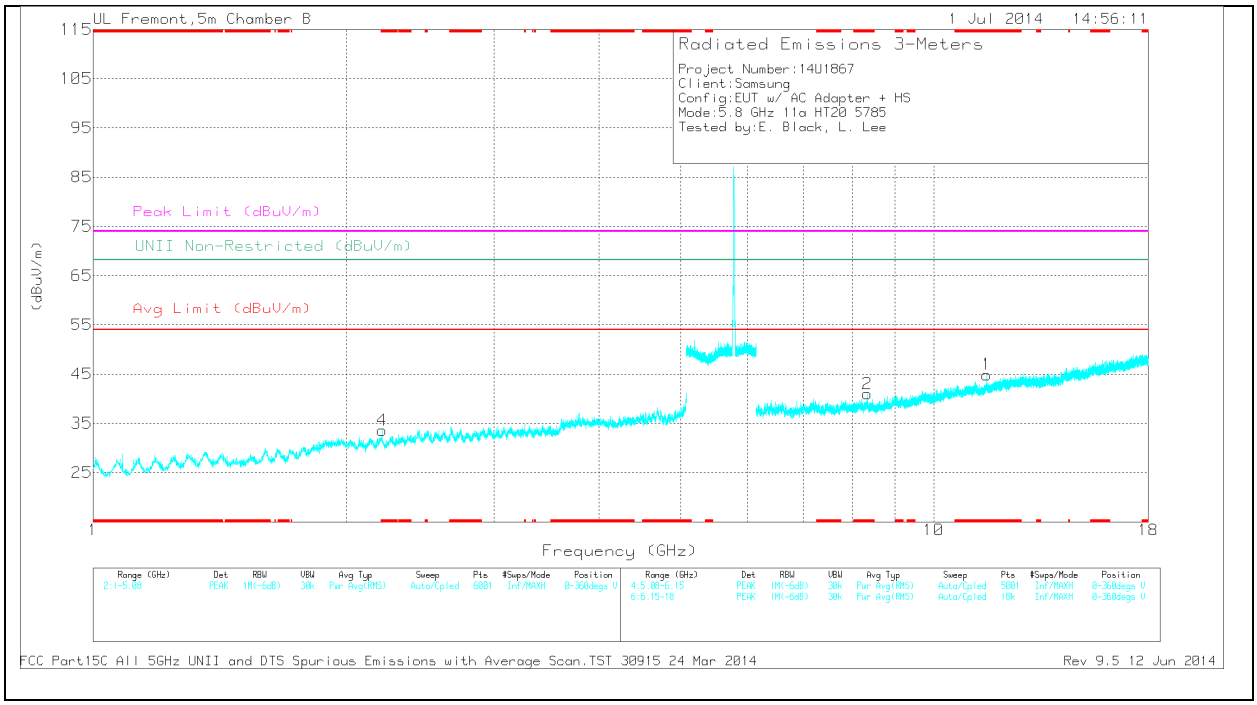
AD1 - KDB789033 Method: AD Primary Power Average

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
6	* 4.046	32.8	PK	33.6	-29.6	0	36.8	-	-	74	-37.2	-	-	0-360	206	H
4	* 2.208	34.7	PK	31.3	-32.4	0	33.6	-	-	74	-40.4	-	-	0-360	196	V
1	* 11.57	28.7	PK	38.1	-21.9	0	44.9	-	-	74	-29.1	-	-	0-360	196	V
2	* 8.341	31.29	PK	35.7	-26	0	40.99	-	-	74	-33.01	-	-	0-360	196	V
3	1.851	35.44	PK	30.6	-33.5	0	32.54	-	-	-	-	68.2	-35.66	0-360	206	H
5	3.155	33.52	PK	32.8	-31.6	0	34.72	-	-	-	-	68.2	-33.48	0-360	99	H

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

PK - Peak detector

Radiated Emissions

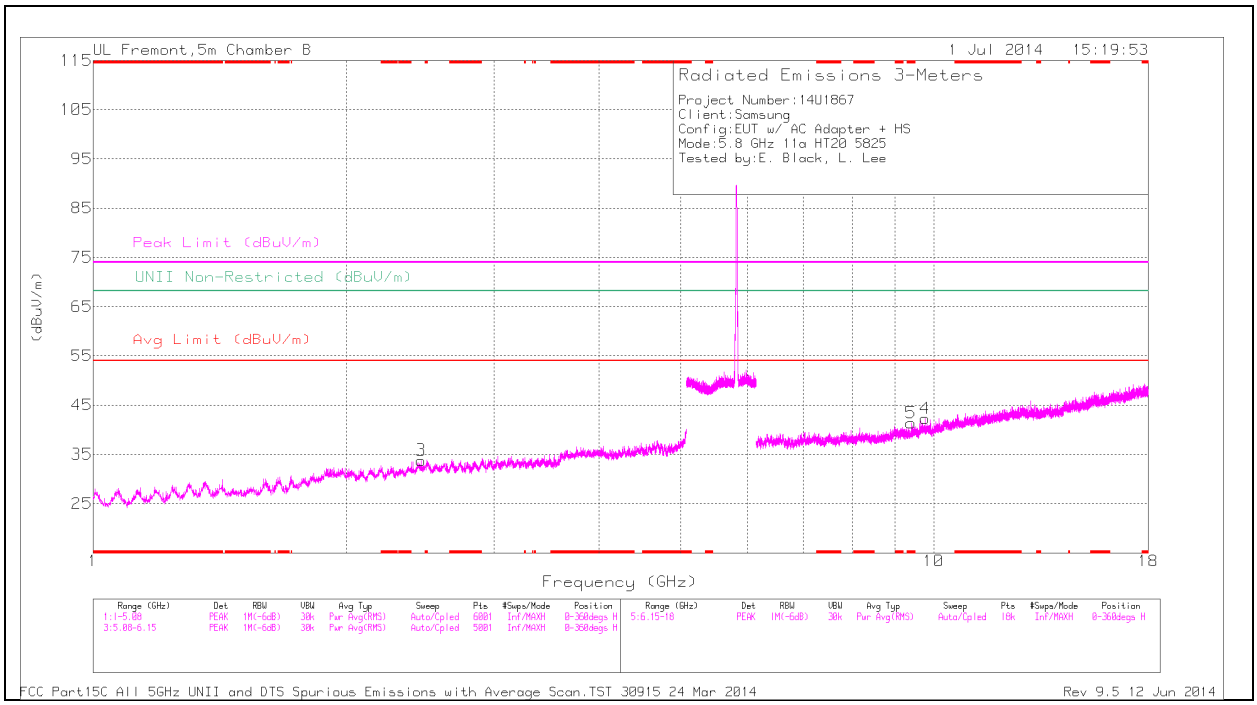
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.57	35.3	PK1	38.1	-21.9	0	51.5	-	-	74	-22.5	-	-	0	203	V
* 11.57	24.72	AD1	38.1	-21.9	.32	41.14	54	-12.86	-	-	-	-	0	203	V

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

PK1 - KDB789033 Method: Peak

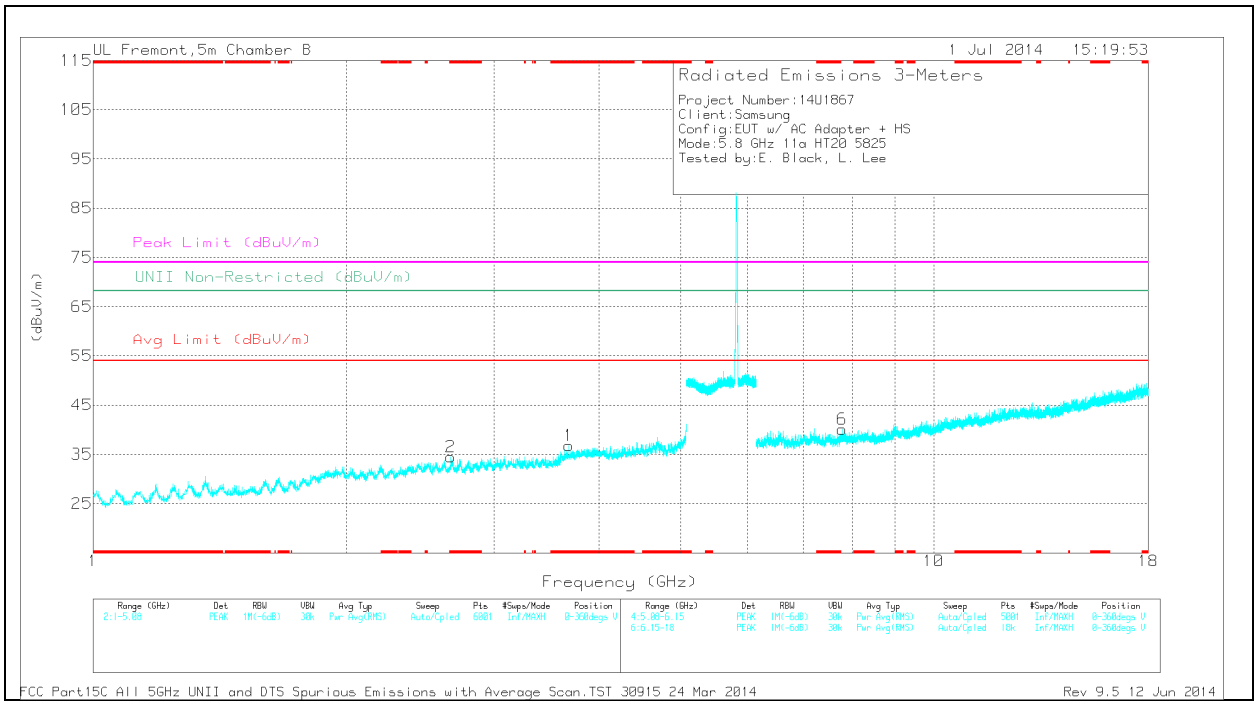
AD1 - KDB789033 Method: AD Primary Power Average

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 3.683	34.79	PK	33.3	-31.3	0	36.79	-	-	74	-37.21	-	-	0-360	99	V
2	* 2.663	34.18	PK	32.3	-32	0	34.48	-	-	74	-39.52	-	-	0-360	195	V
5	* 9.399	29.37	PK	36.5	-24.5	0	41.37	-	-	74	-32.63	-	-	0-360	99	H
3	2.457	33.85	PK	32.3	-32.4	0	33.75	-	-	-	-	68.2	-34.45	0-360	206	H
6	7.783	30.69	PK	35.7	-26.3	0	40.09	-	-	-	-	68.2	-28.11	0-360	196	V
4	9.764	29.05	PK	36.9	-23.7	0	42.25	-	-	-	-	68.2	-25.95	0-360	206	H

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

PK - Peak detector

Radiated Emissions

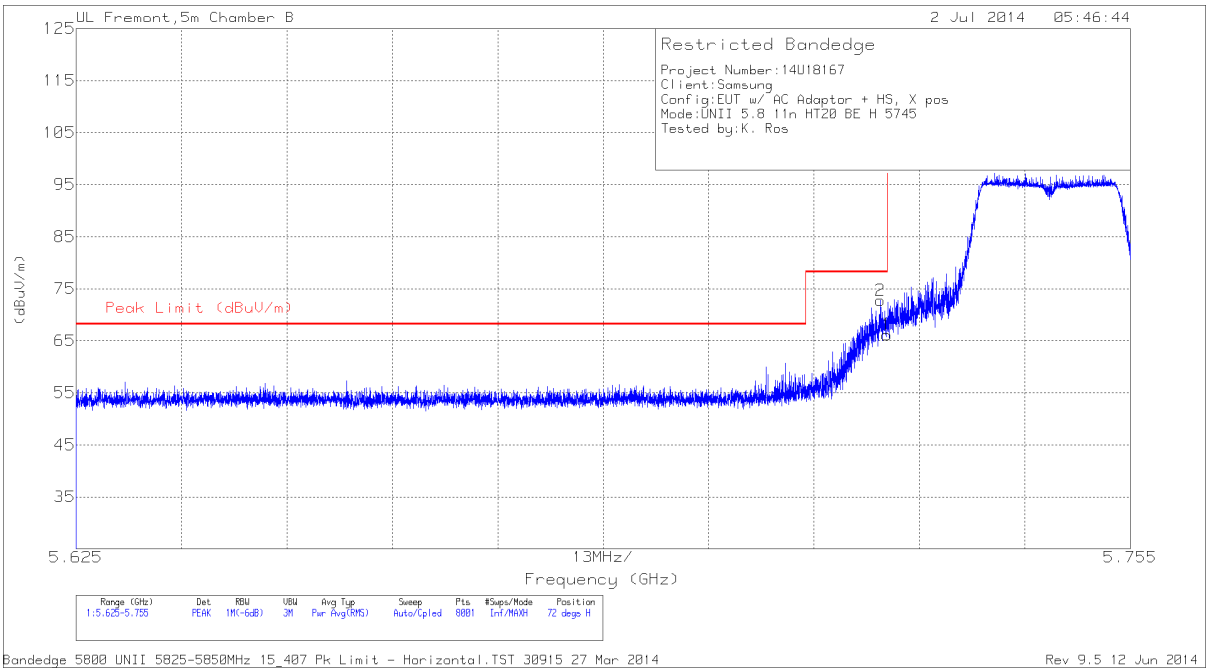
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 9.399	36.47	PK1	36.5	-24.5	0	48.47	-	-	74	-25.53	-	-	1	100	H
* 9.4	24.85	AD1	36.5	-24.5	.32	37.07	54	-16.93	-	-	-	-	1	100	H

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

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

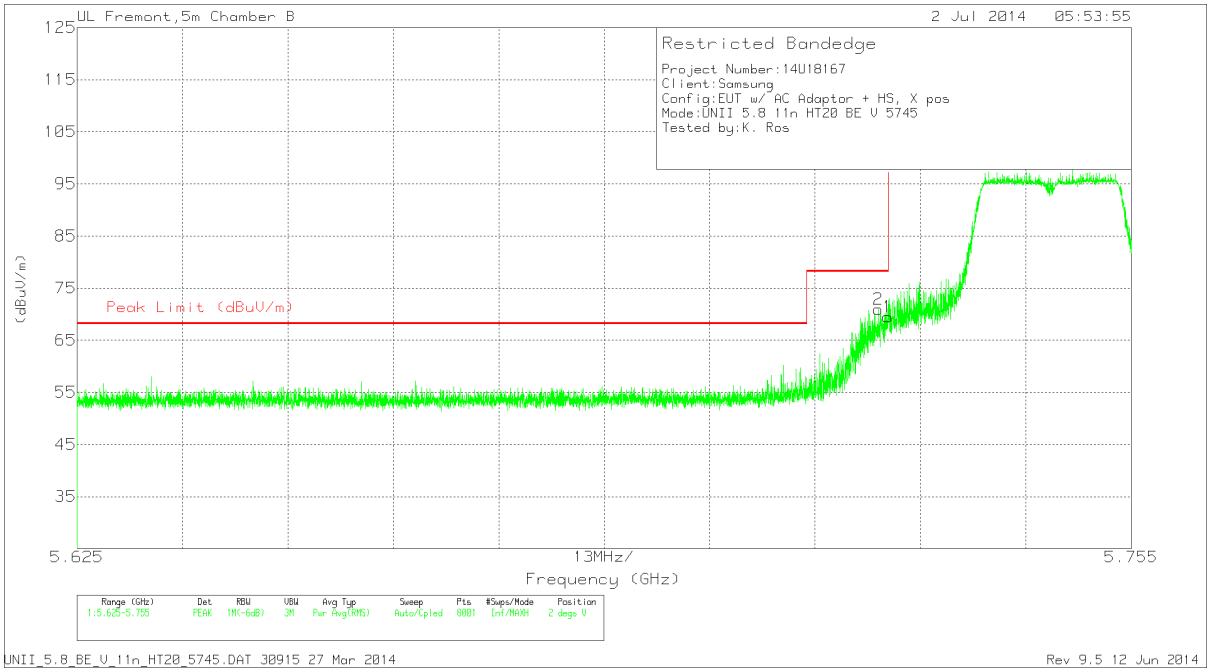
10.4.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.724	58.04	PK	34.6	-19.9	0	72.74	78.2	-5.46	72	247	H
1	5.725	51.46	PK	34.6	-19.9	0	66.16	78.2	-12.04	72	247	H

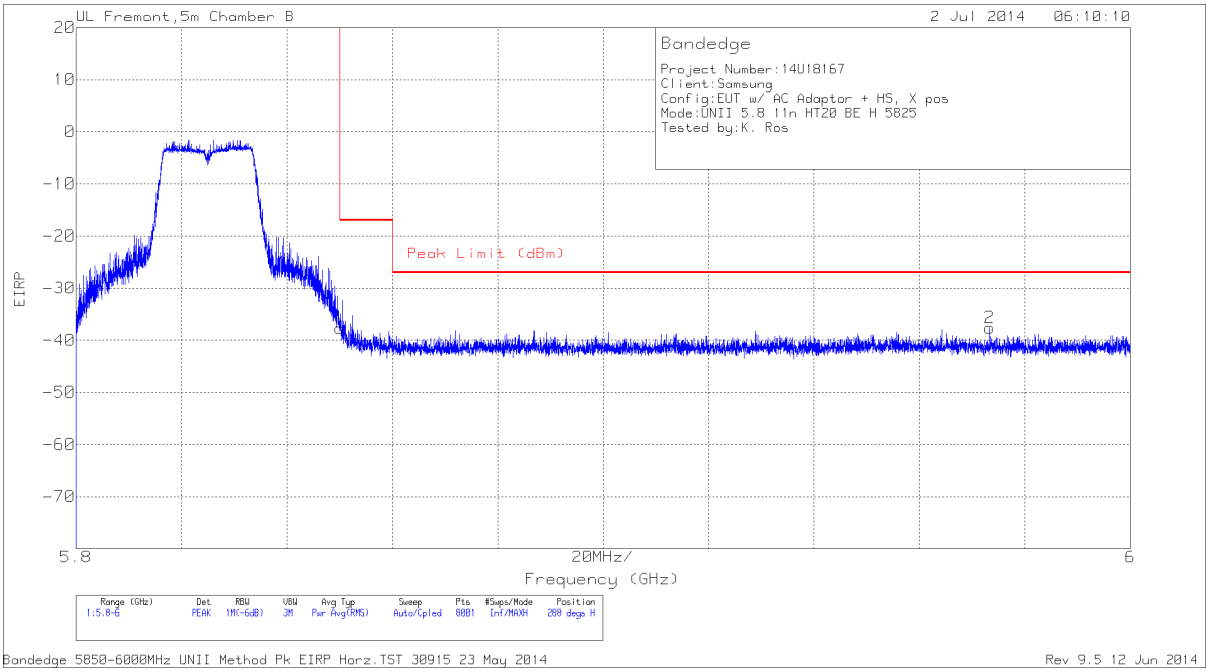
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.724	56.26	PK	34.6	-19.9	0	70.96	78.2	-7.24	2	297	V
1	5.725	54.81	PK	34.6	-19.9	0	69.51	78.2	-8.69	2	297	V

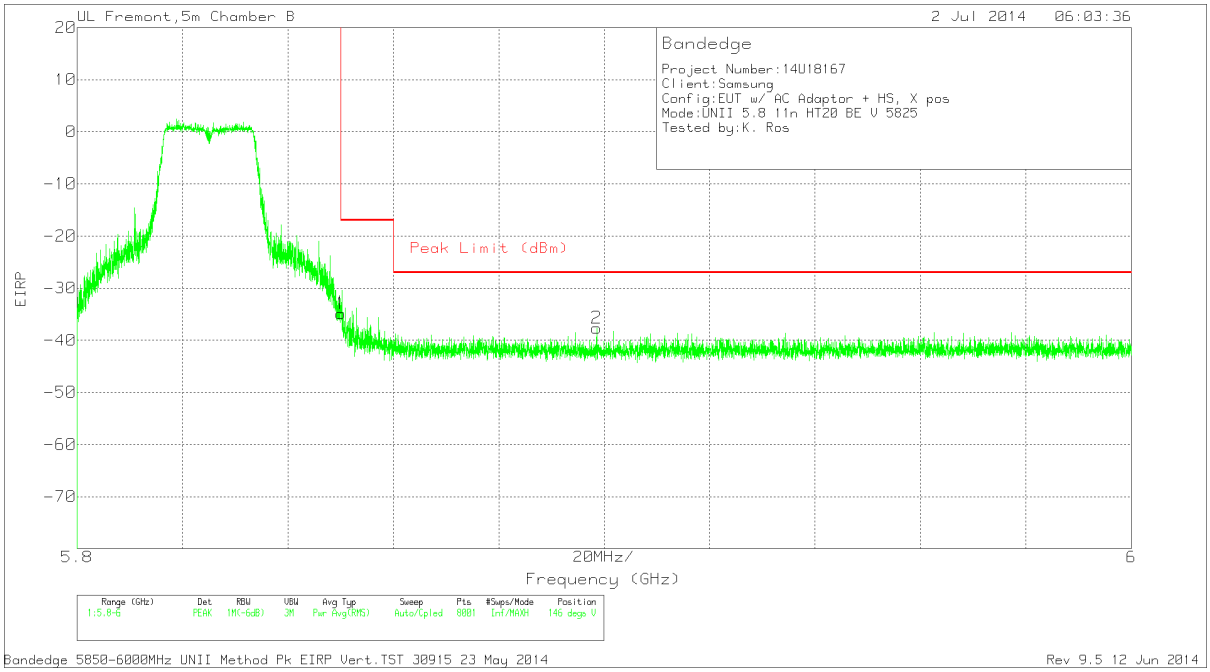
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (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	-64.41	PK	34.8	-19.8	11.8	0	-37.61	-17	-20.61	288	268	H
2	5.973	-65.19	PK	35.2	-19.4	11.8	0	-37.59	-27	-10.59	288	268	H

PK - Peak detector

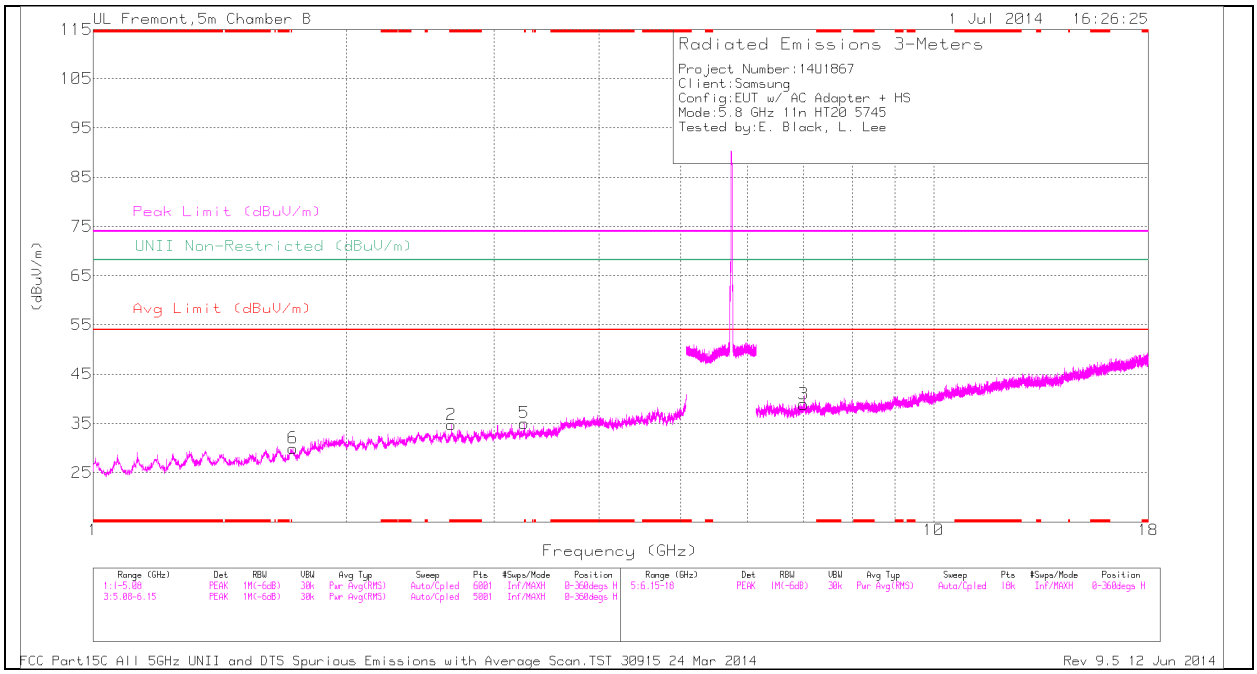


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (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	-61.66	PK	34.8	-19.8	11.8	0	-34.86	-17	-17.86	146	247	V
2	5.899	-64.74	PK	34.9	-19.6	11.8	0	-37.64	-27	-10.64	146	247	V

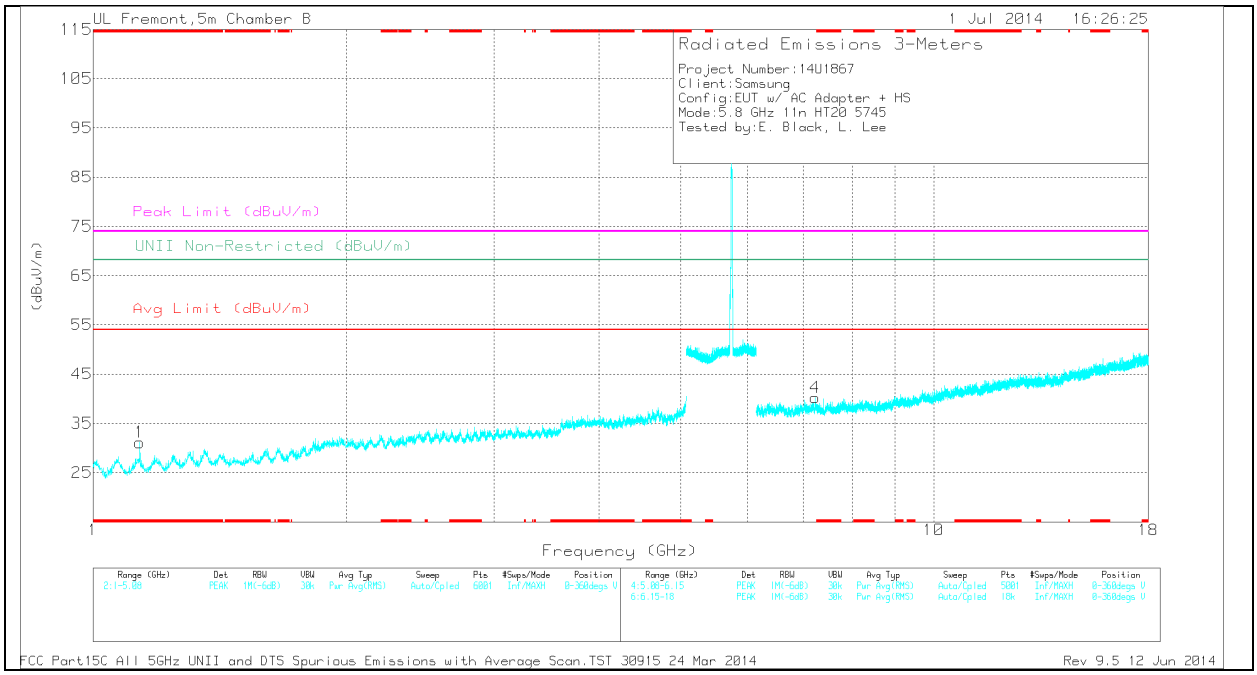
PK - Peak detector

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL

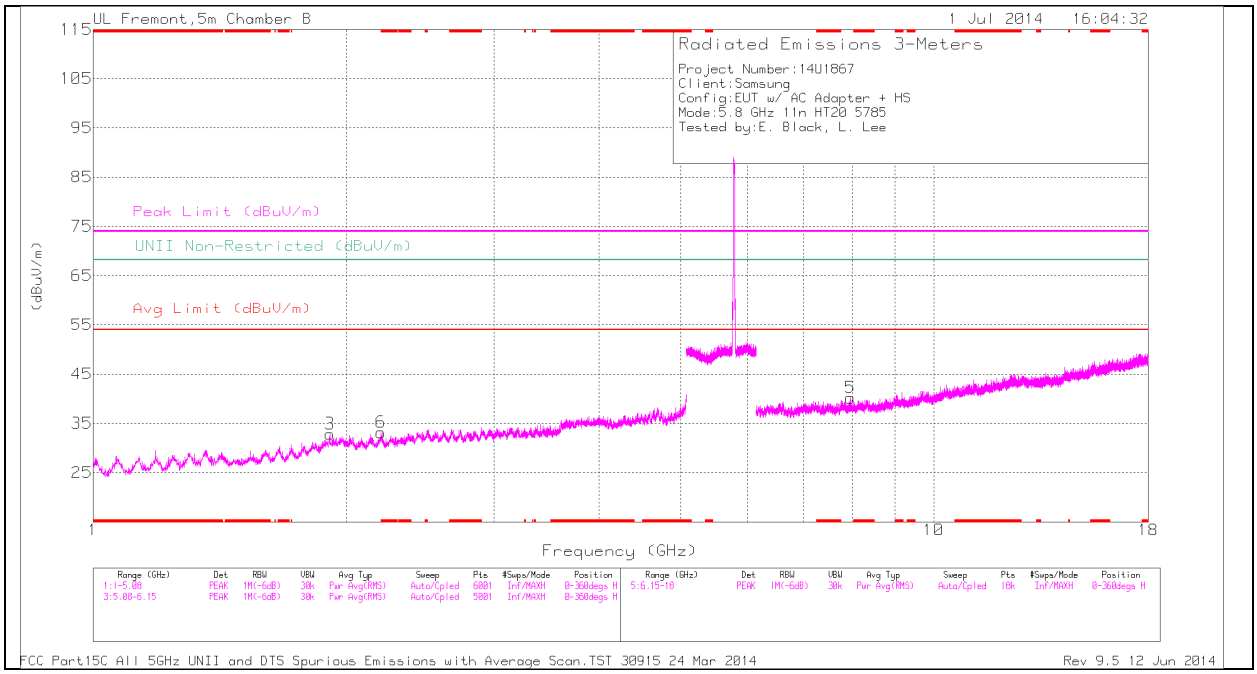


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

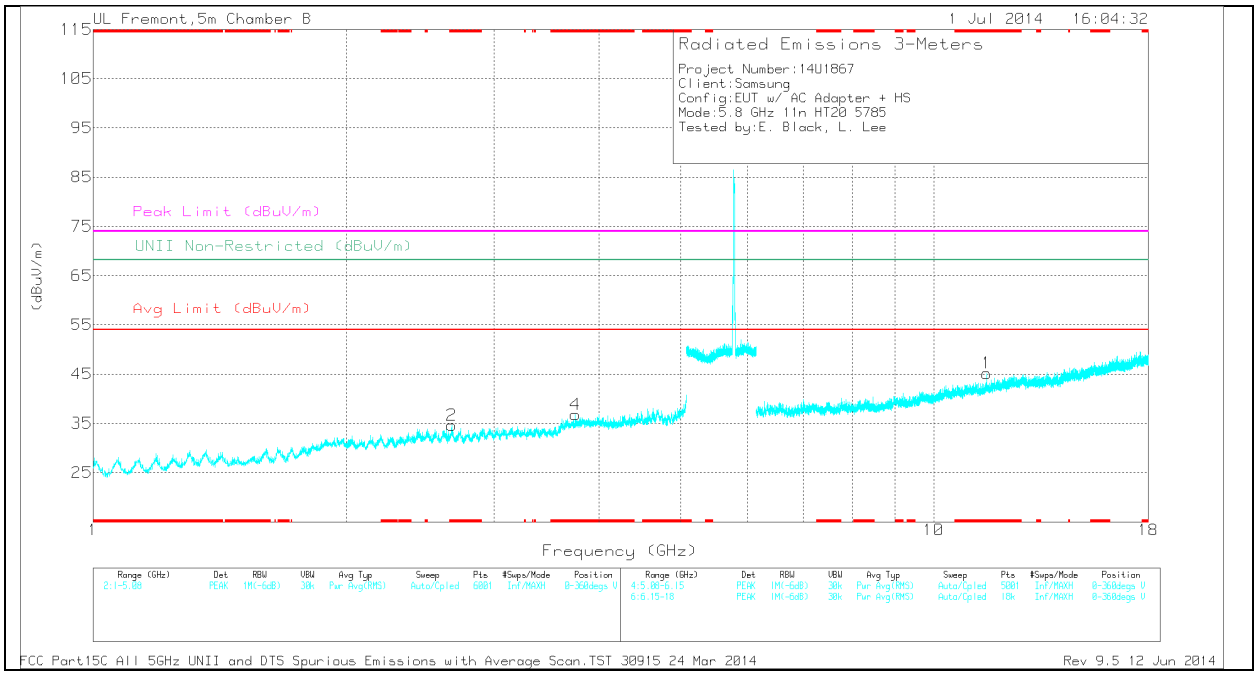
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.667	34.35	PK	32.3	-31.9	0	34.75	-	-	74	-39.25	-	-	0-360	206	H
1	* 1.137	38.11	PK	27.7	-34.7	0	31.11	-	-	74	-42.89	-	-	0-360	99	V
6	1.73	34.24	PK	29.4	-33.7	0	29.94	-	-	-	-	68.2	-38.26	0-360	206	H
5	3.26	34.16	PK	32.8	-31.9	0	35.06	-	-	-	-	68.2	-33.14	0-360	206	H
3	7.001	30.3	PK	35.6	-27	0	38.9	-	-	-	-	68.2	-29.3	0-360	206	H
4	7.229	30.81	PK	35.5	-26.1	0	40.21	-	-	-	-	68.2	-27.99	0-360	99	V

MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL VERTICAL

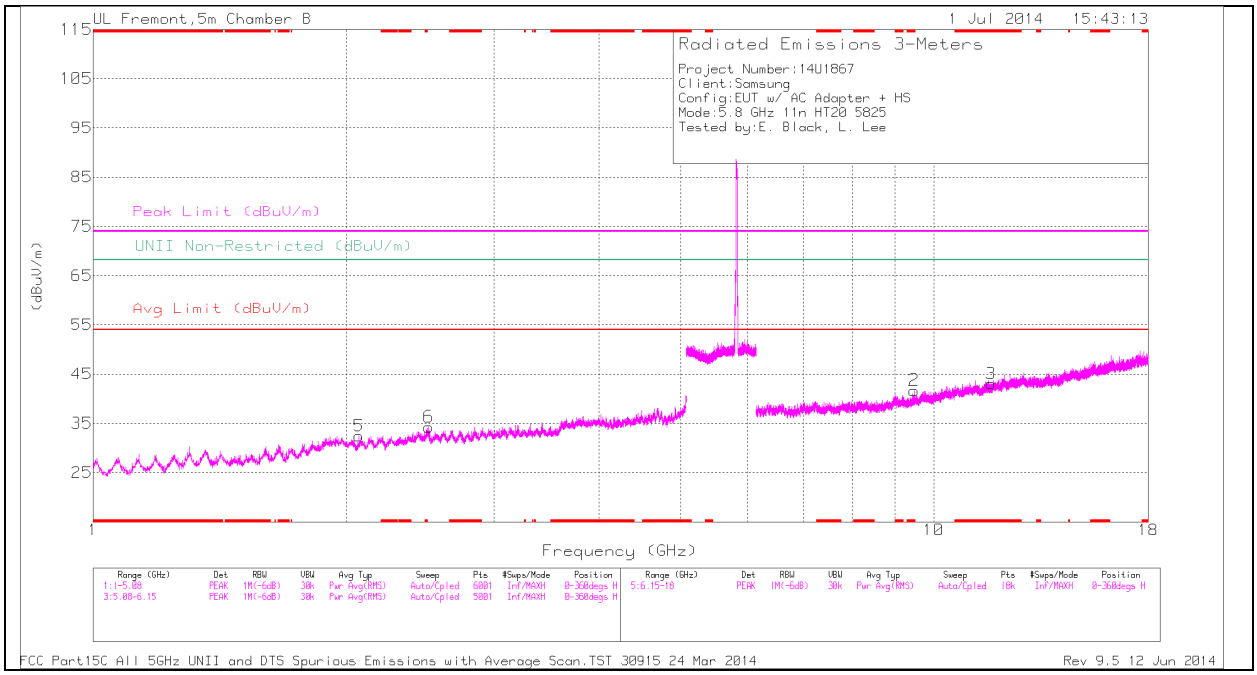


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

MID CHANNEL DATA

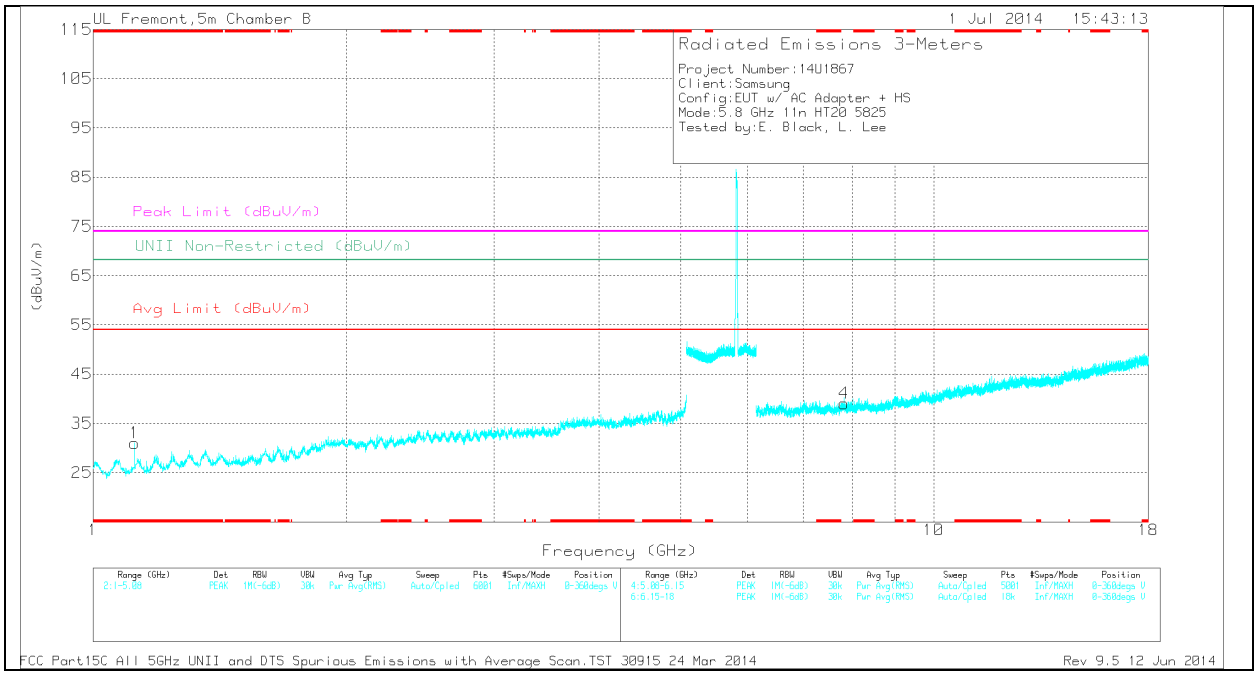
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 2.202	34.15	PK	31.3	-32.3	0	33.15	-	-	74	-40.85	-	-	0-360	99	H
2	* 2.671	34.22	PK	32.3	-31.9	0	34.62	-	-	74	-39.38	-	-	0-360	194	V
4	* 3.748	34.47	PK	33.5	-31.2	0	36.77	-	-	74	-37.23	-	-	0-360	194	V
1	* 11.57	28.96	PK	38.1	-21.9	0	45.16	-	-	74	-28.84	-	-	0-360	195	V
3	1.915	34.55	PK	31.1	-32.8	0	32.85	-	-	-	-	68.2	-35.35	0-360	99	H
5	7.964	31.39	PK	35.7	-26.9	0	40.19	-	-	-	-	68.2	-28.01	0-360	99	H

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL

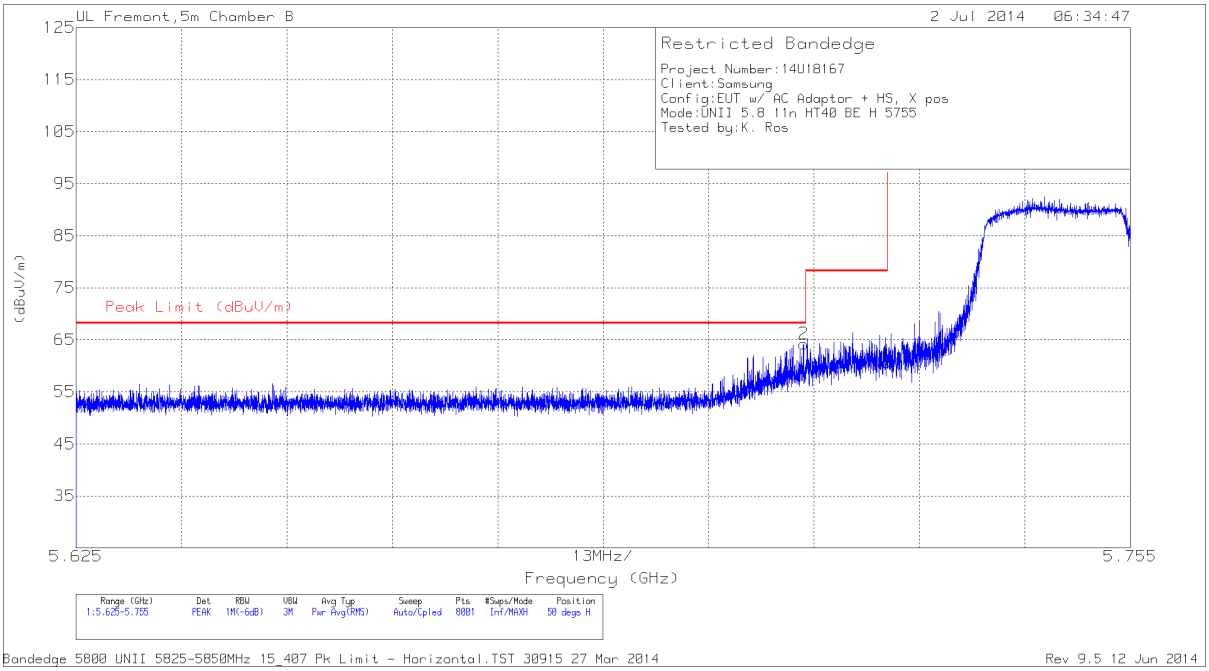


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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	* 1.12	38.09	PK	27.5	-34.6	0	30.99	-	-	74	-43.01	-	-	0-360	99	V
2	* 9.479	29.29	PK	36.6	-24.2	0	41.69	-	-	74	-32.31	-	-	0-360	206	H
3	* 11.711	26.91	PK	38.2	-22.1	0	43.01	-	-	74	-30.99	-	-	0-360	99	H
5	2.071	34.94	PK	31.3	-33.8	0	32.44	-	-	-	-	68.2	-35.76	0-360	206	H
6	2.506	34.27	PK	32.4	-32.4	0	34.27	-	-	-	-	68.2	-33.93	0-360	206	H
4	7.821	29.43	PK	35.7	-26.1	0	39.03	-	-	-	-	68.2	-29.17	0-360	195	V

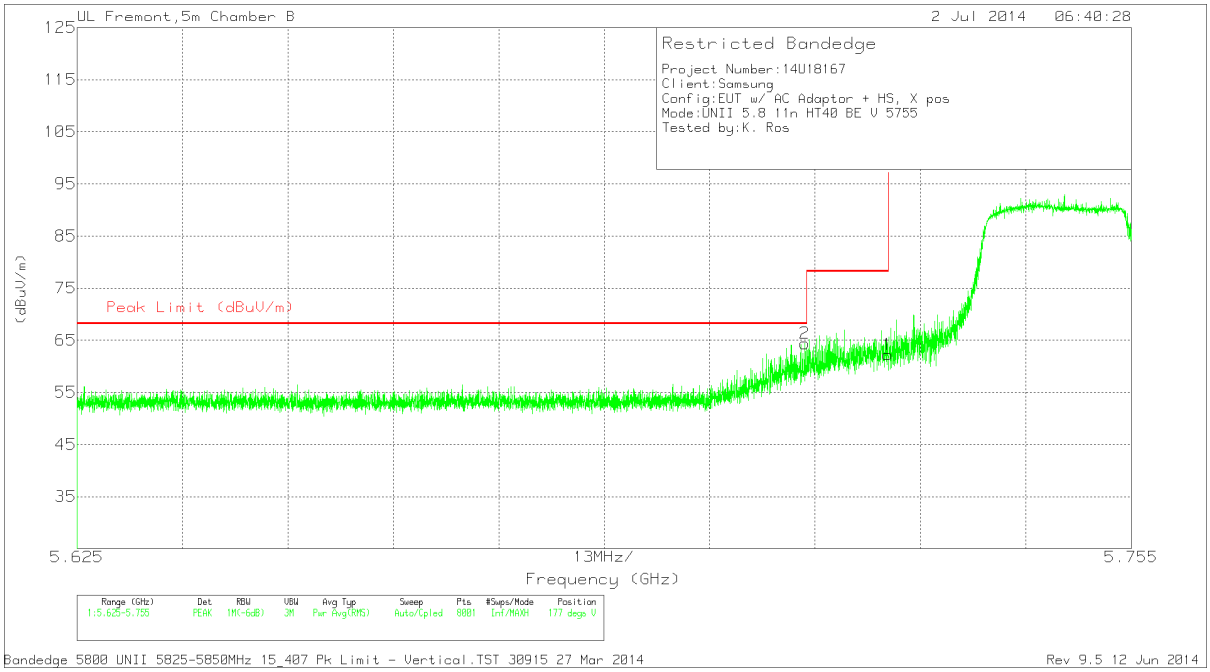
10.4.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.715	49.72	PK	34.5	-20	0	64.22	68.2	-3.98	50	285	H
1	5.725	46.04	PK	34.6	-19.9	0	60.74	78.2	-17.46	50	285	H

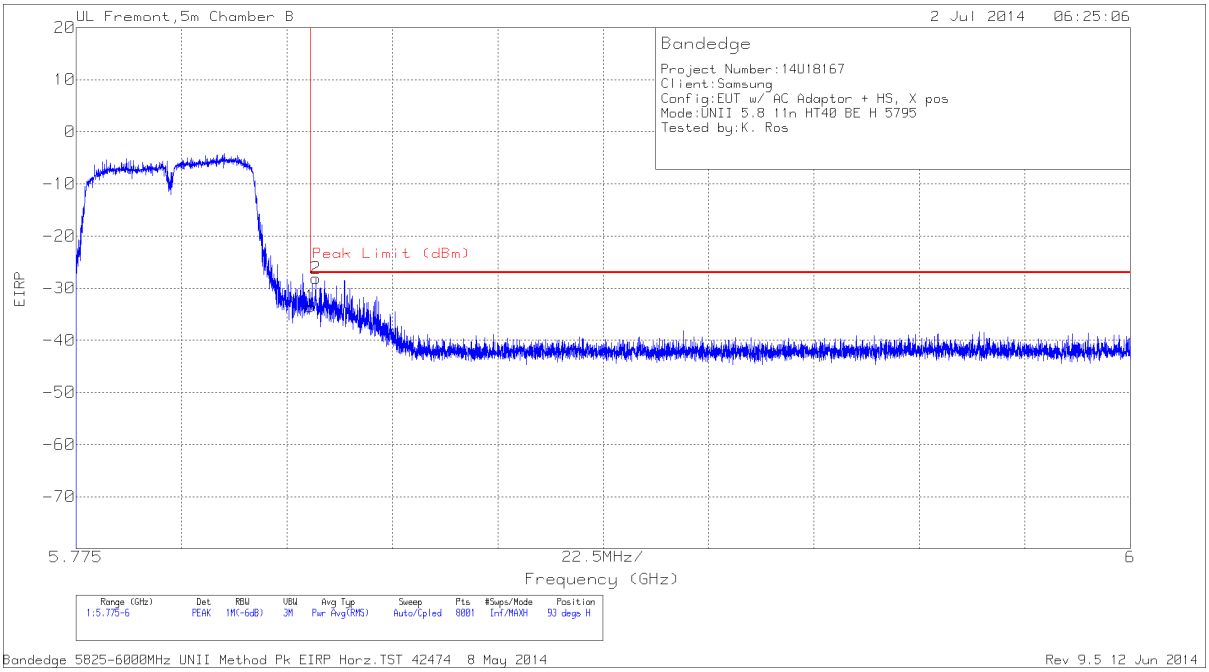
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	CorrectedReading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.715	49.89	PK	34.5	-20	0	64.39	68.2	-3.81	177	253	V
1	5.725	47.56	PK	34.6	-19.9	0	62.26	78.2	-15.94	177	253	V

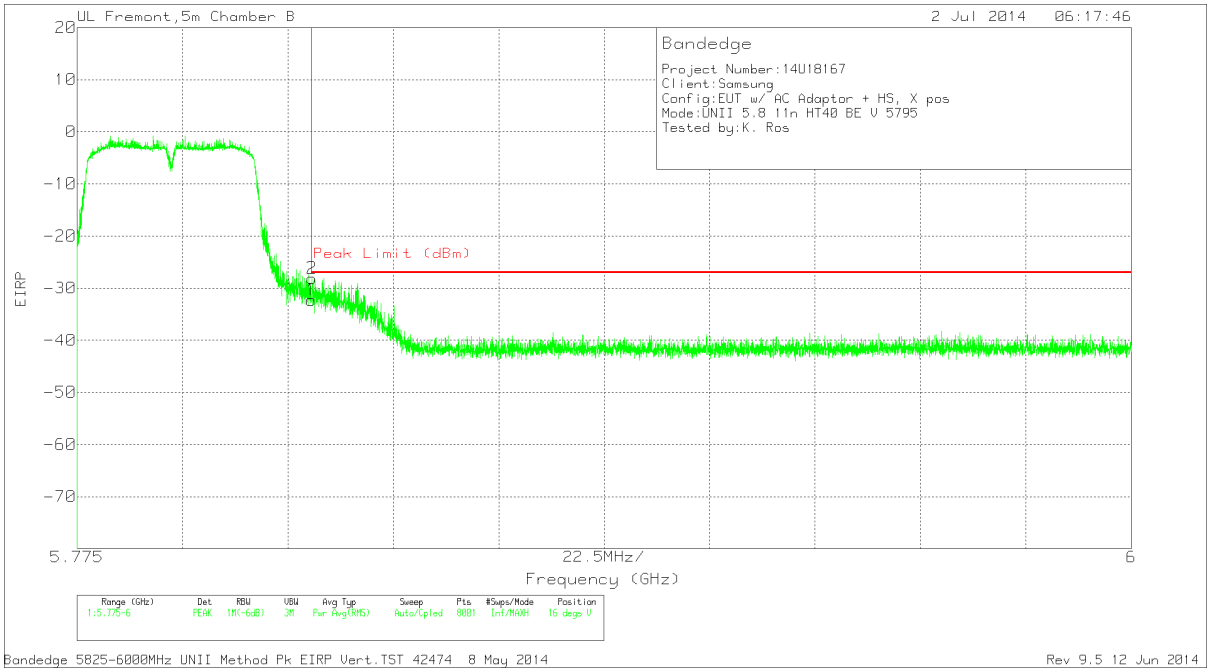
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Conversio n Factor (dB)	DC Corr (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.825	-60.23	PK	34.8	-19.9	11.8	0	-33.53	-27	-6.53	93	279	H
2	5.826	-54.9	PK	34.8	-19.8	11.8	0	-28.1	-27	-1.1	93	279	H

PK - Peak detector

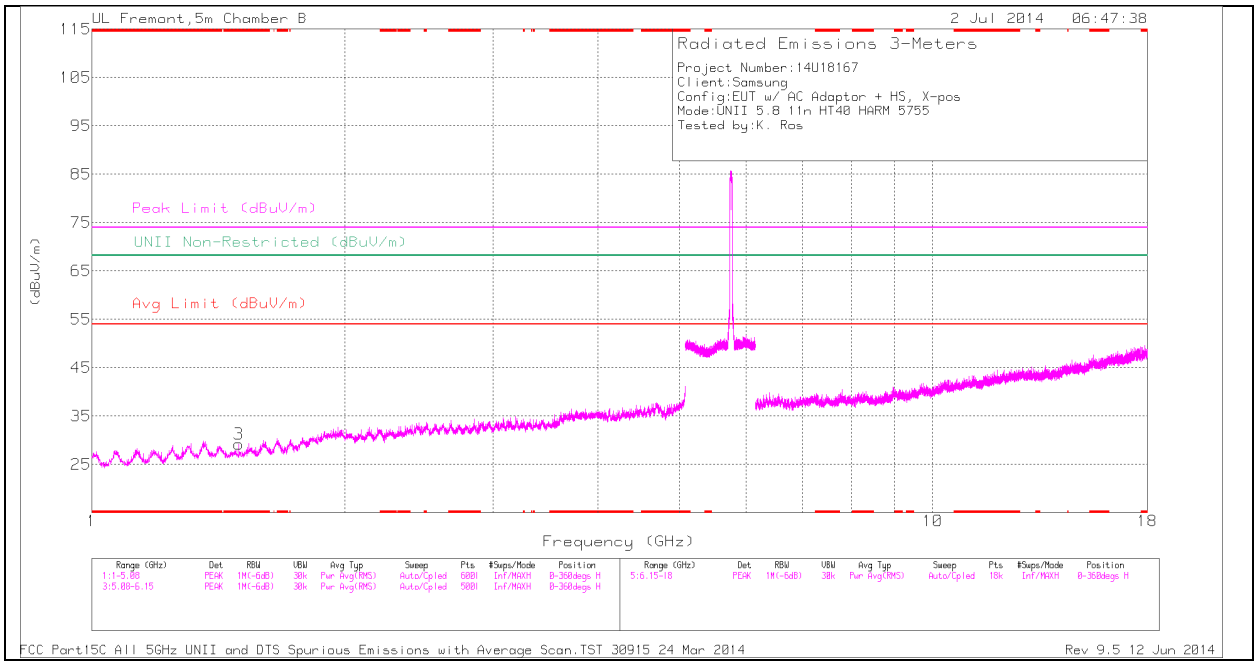


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T345 (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	5.825	-58.98	PK	34.8	-19.9	11.8	0	-32.28	-27	-5.28	16	290	V
2	5.825	-54.8	PK	34.8	-19.9	11.8	0	-28.1	-27	-1.1	16	290	V

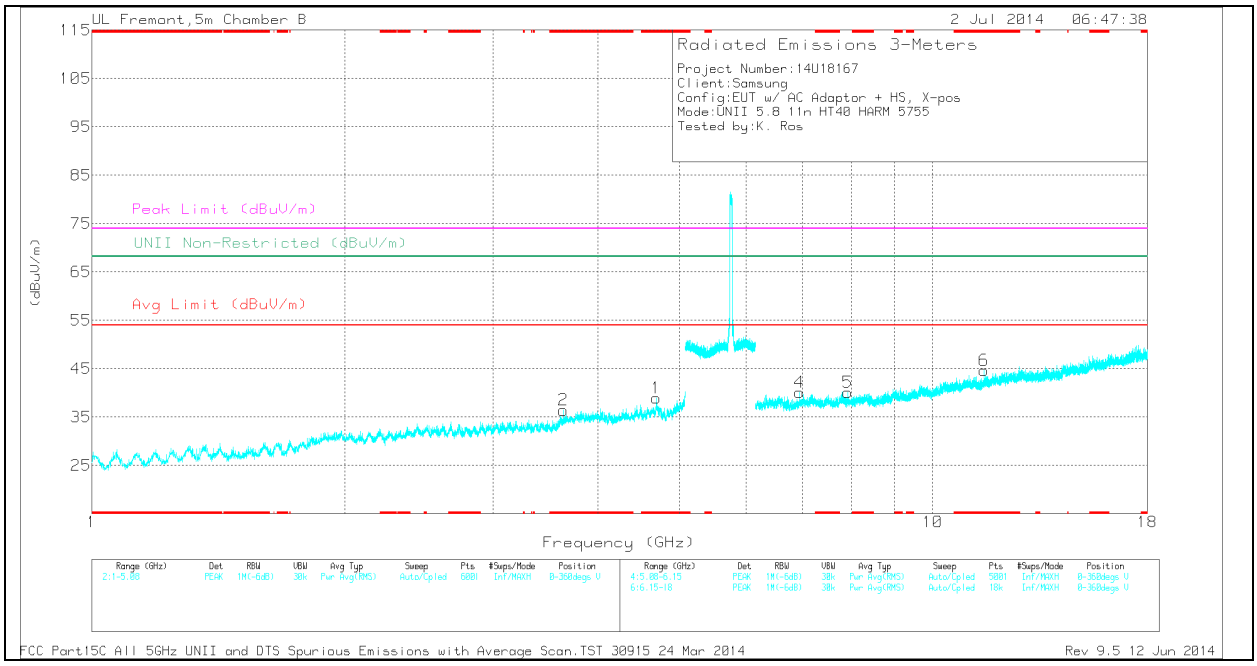
PK - Peak detector

LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL VERTICAL

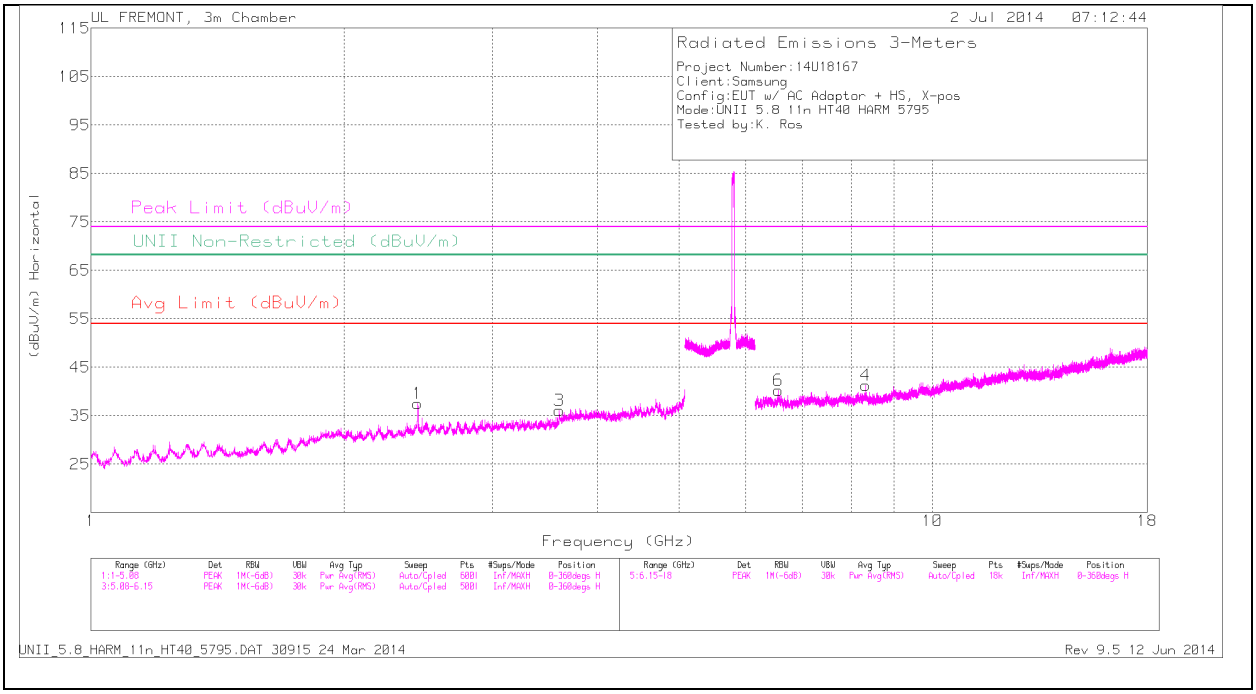


Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

LOW CHANNEL DATA

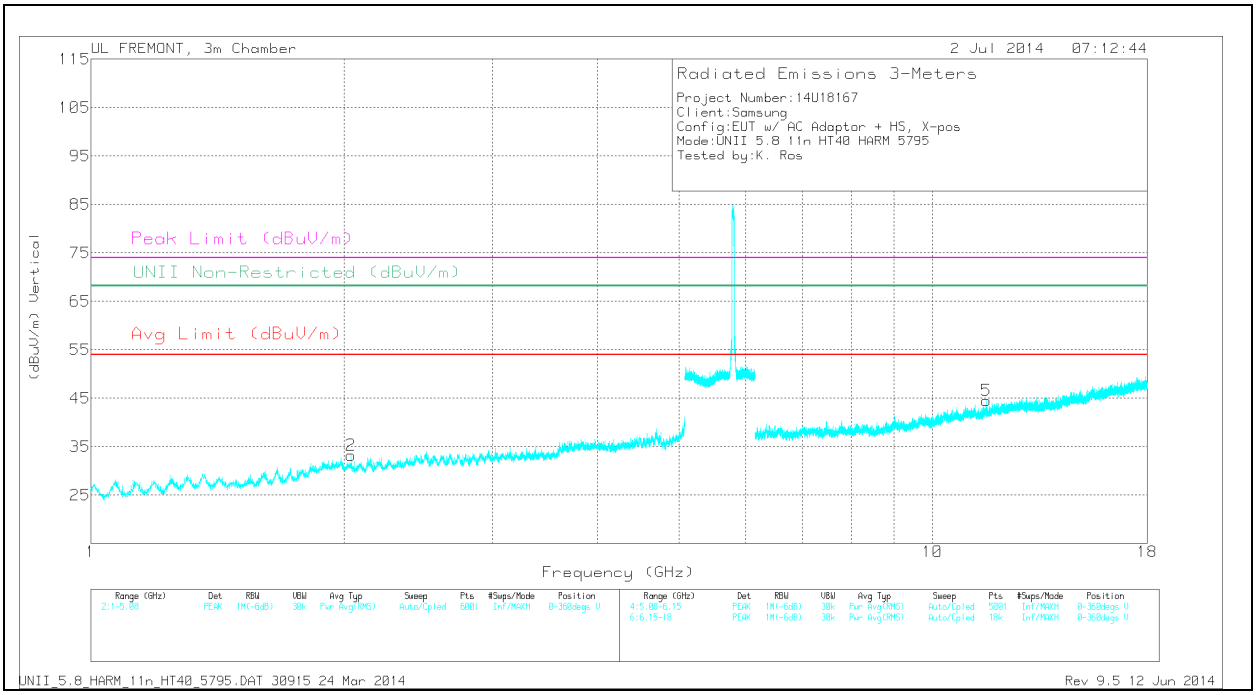
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 1.495	35.89	PK	27.9	-34.6	0	29.19	-	-	74	-44.81	-	-	0-360	199	H
6	* 11.51	28.68	PK	38.1	-22.1	0	44.68	-	-	74	-29.32	-	-	0-360	199	V
2	* 3.638	34.42	PK	33.2	-31.2	0	36.42	-	-	74	-37.58	-	-	0-360	101	V
1	* 4.691	34.56	PK	34.2	-29.8	0	38.96	-	-	74	-35.04	-	-	0-360	199	V
4	6.947	31.76	PK	35.6	-27.3	0	40.06	-	-	-	-	68.2	-28.14	0-360	101	V
5	7.925	31.49	PK	35.7	-27.1	0	40.09	-	-	-	-	68.2	-28.11	0-360	101	V

HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL VERTICAL



Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

HIGH CHANNEL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (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
2	2.038	35.58	PK	31.3	-33.6	0	33.28	-	-	-	-	68.2	-34.92	0-360	200	V
1	2.446	37.64	PK	32.3	-32.4	0	37.54	-	-	-	-	68.2	-30.66	0-360	200	H
3	3.602	34.21	PK	33.1	-31.2	0	36.11	-	-	74	-37.89	-	-	0-360	200	H
6	6.554	32.19	PK	35.7	-27.6	0	40.29	-	-	-	-	68.2	-27.91	0-360	199	H
4	8.336	31.57	PK	35.7	-26	0	41.27	-	-	74	-32.73	-	-	0-360	101	H
5	11.59	28.5	PK	38.1	-22.1	0	44.5	-	-	74	-29.5	-	-	0-360	199	V

PK - Peak detector

Radiated Emissions

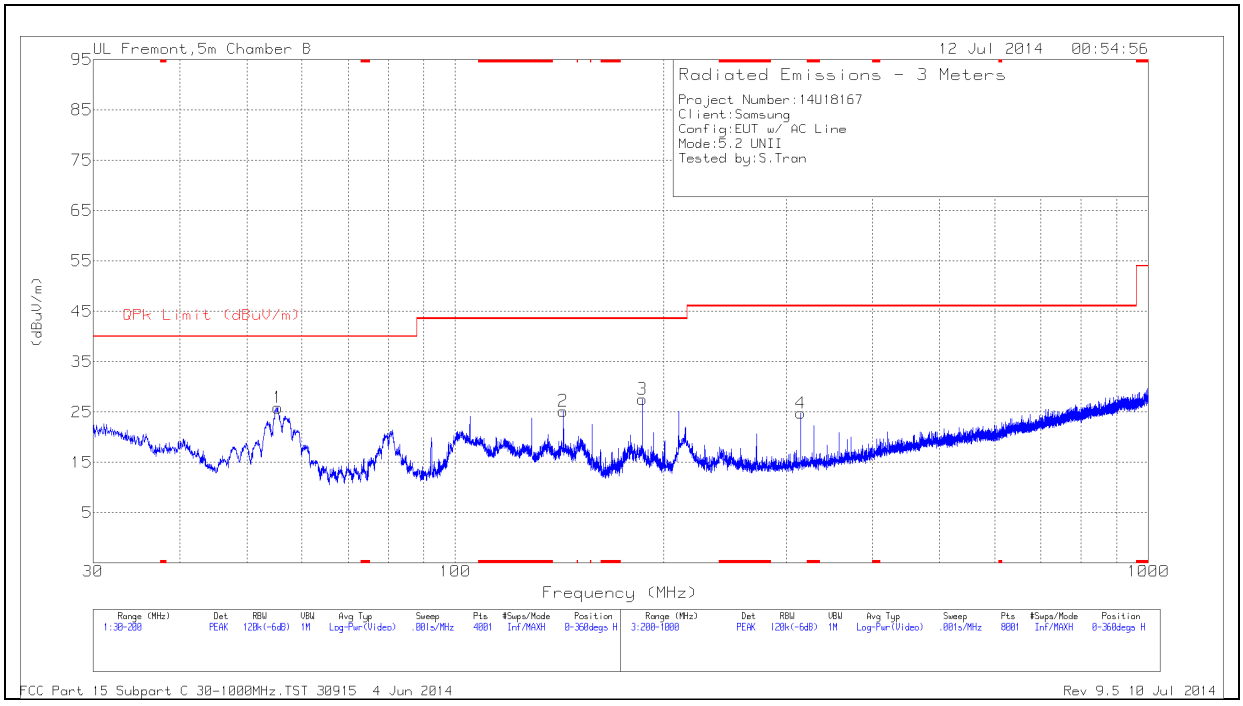
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.447	43.57	PK1	32.3	-32.4	0	43.47	-	-	-	-	68.2	-24.73	360	199	H
2.447	29.92	AD1	32.3	-32.4	.66	30.31	-	-	-	-	-	-	360	199	H

PK1 - KDB789033 Method: Peak

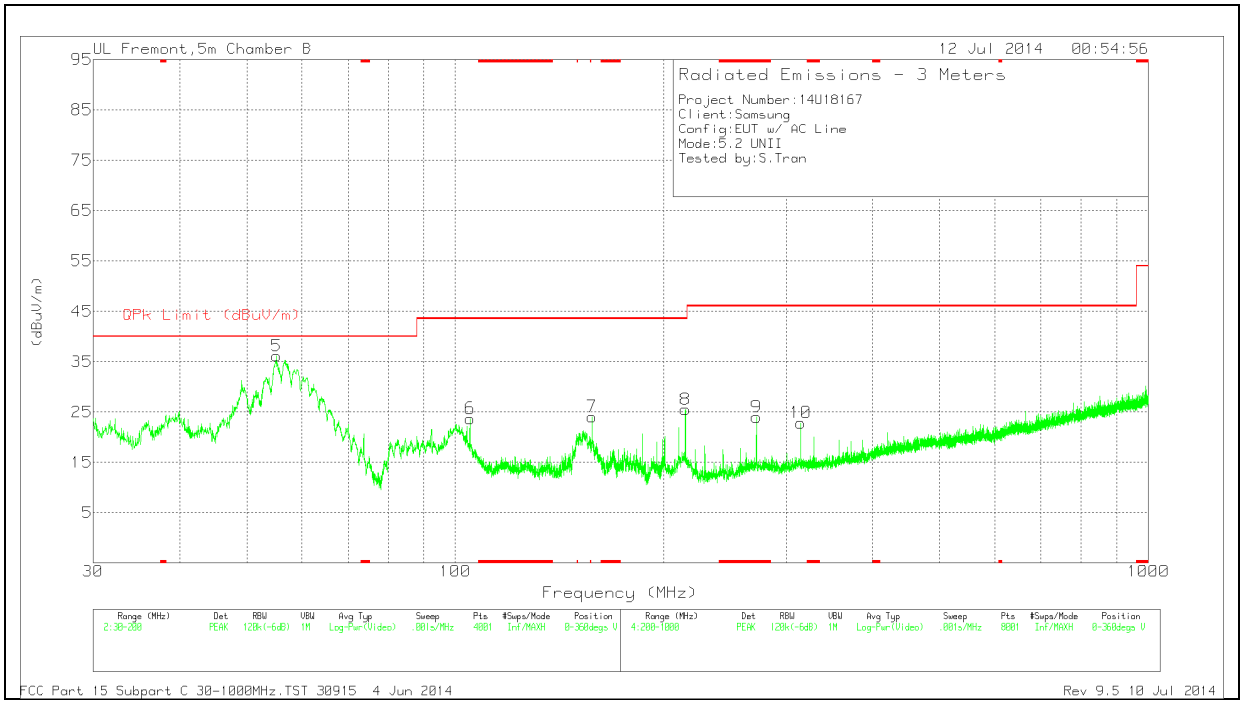
AD1 - KDB789033 Method: AD Primary Power Average

11. WORST-CASE BELOW 1 GHz (in the 5.2 GHz Band a mode mid CH)

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



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



Below 1G Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
9	* 272	36.89	PK	13.3	-26.2	23.99	46.02	-22.03	0-360	200	V
5	55.2025	57.43	PK	7.2	-28.5	36.13	40	-3.87	0-360	101	V
1	55.4575	47.15	PK	7.2	-28.5	25.85	40	-14.15	0-360	400	H
6	105.0125	40.19	PK	11.5	-28	23.69	43.52	-19.83	0-360	101	V
2	143.1775	39.97	PK	12.7	-27.5	25.17	43.52	-18.35	0-360	200	H
7	157.5	39.28	PK	12.2	-27.4	24.08	43.52	-19.44	0-360	101	V
3	186.145	43.65	PK	10.9	-27	27.55	43.52	-15.97	0-360	101	H
8	214.8	41.72	PK	10.6	-26.8	25.52	43.52	-18	0-360	200	V
4	315	36.87	PK	13.8	-25.9	24.77	46.02	-21.25	0-360	101	H
10	315	34.95	PK	13.8	-25.9	22.85	46.02	-23.17	0-360	200	V

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

PK - Peak detector

FCC Part 15 Subpart C 30-1000MHz.TST 30915 4 Jun 2014

Rev 9.5 10 Jul 2014

12. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

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

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

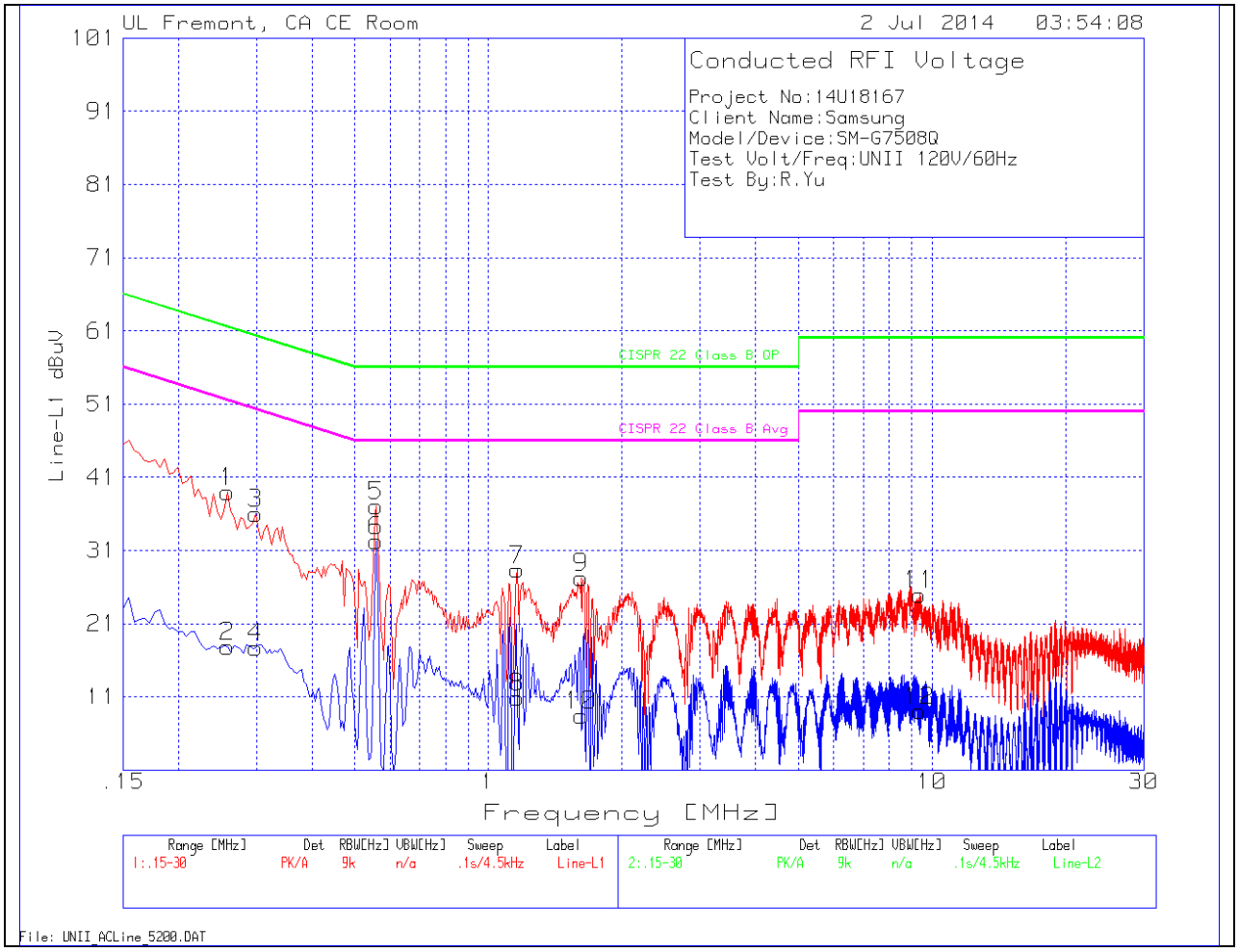
The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

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

RESULTS

6 WORST EMISSIONS(5.2GHz band a mode mid CH)

LINE 1 PLOT



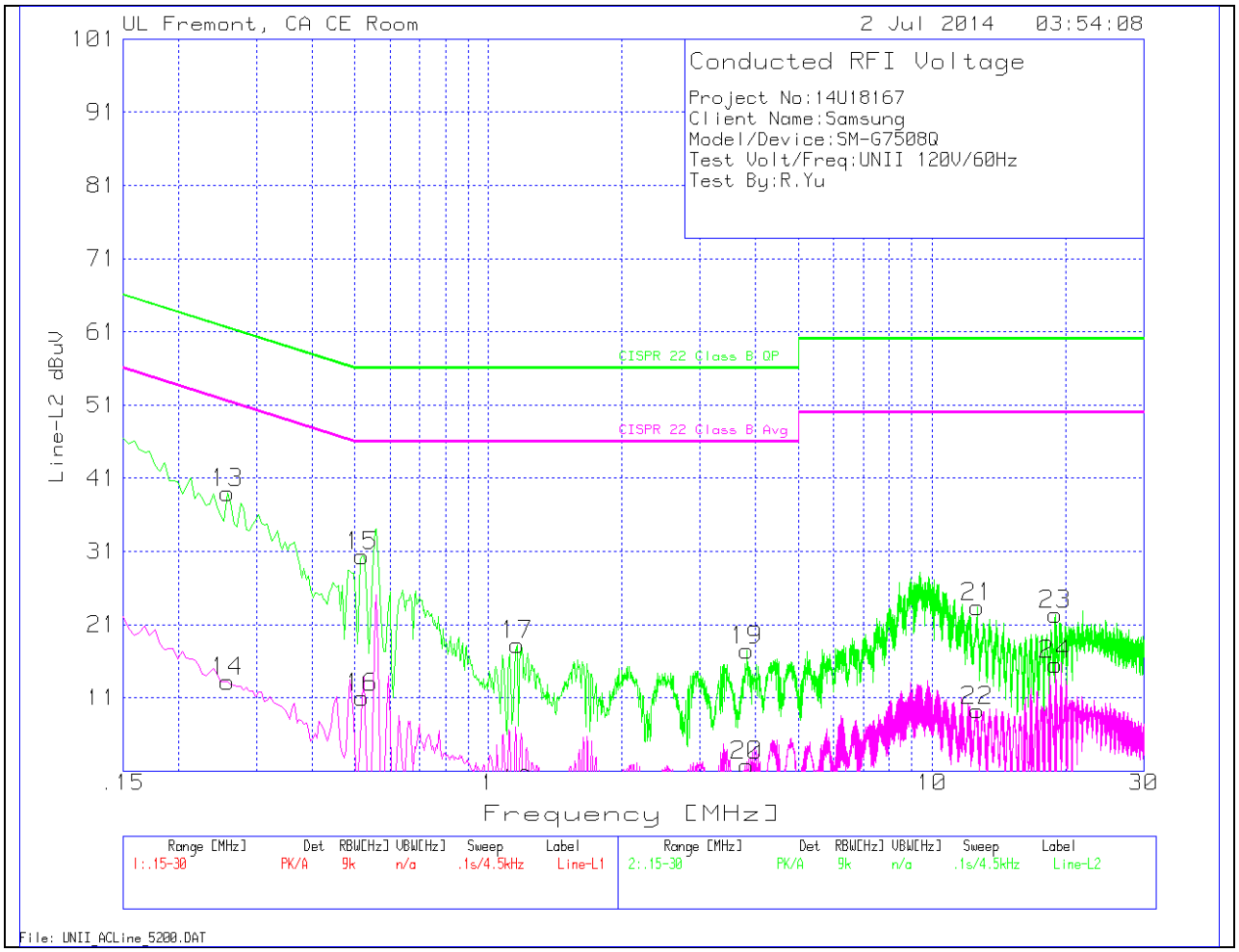
LINE 1 RESULTS

Line-L1 .15 - 30MHz

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1 (dB)	LC Cables 1&3 (dB)	Corrected Reading dBuV	CISPR 22 Class B QP	Margin to Limit (dB)	CISPR 22 Class B Avg	Margin to Limit (dB)
1	.258	38.29	PK	.7	0	38.99	61.5	-22.51	-	-
2	.258	17.19	Av	.7	0	17.89	-	-	51.5	-33.61
3	.2985	35.48	PK	.6	0	36.08	60.3	-24.22	-	-
4	.2985	17.07	Av	.6	0	17.67	-	-	50.3	-32.63
5	.5595	36.79	PK	.3	0	37.09	56	-18.91	-	-
6	.5595	31.93	Av	.3	0	32.23	-	-	46	-13.77
7	1.1625	28.05	PK	.2	.1	28.35	56	-27.65	-	-
8	1.1625	10.64	Av	.2	.1	10.94	-	-	46	-35.06
9	1.617	26.94	PK	.2	.1	27.24	56	-28.76	-	-
10	1.617	8.11	Av	.2	.1	8.41	-	-	46	-37.59
11	9.366	24.59	PK	.2	.2	24.99	60	-35.01	-	-
12	9.366	8.62	Av	.2	.2	9.02	-	-	50	-40.98

LINE 2 PLOT



LINE 2 RESULTS

Line-L2 .15 - 30MHz

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2 (dB)	LC Cables 2&3 (dB)	Corrected Reading dBuV	CISPR 22 Class B QP	Margin to Limit (dB)	CISPR 22 Class B Avg	Margin to Limit (dB)
13	.258	38.25	PK	.7	0	38.95	61.5	-22.55	-	-
14	.258	12.52	Av	.7	0	13.22	-	-	51.5	-38.28
15	.519	30	PK	.4	0	30.4	56	-25.6	-	-
16	.519	10.57	Av	.4	0	10.97	-	-	46	-35.03
17	1.1625	17.99	PK	.3	0	18.29	56	-37.71	-	-
18	1.1625	-2.48	Av	.3	0	-2.18	-	-	46	-48.18
19	3.831	17.13	PK	.2	.1	17.43	56	-38.57	-	-
20	3.831	1.39	Av	.2	.1	1.69	-	-	46	-44.31
21	12.6285	22.88	PK	.3	.2	23.38	60	-36.62	-	-
22	12.6285	8.77	Av	.3	.2	9.27	-	-	50	-40.73
23	18.96	21.82	PK	.3	.2	22.32	60	-37.68	-	-
24	18.96	15	Av	.3	.2	15.5	-	-	50	-34.5

PK - Peak detector

Av - average detection

13. DYNAMIC FREQUENCY SELECTION

13.1. OVERVIEW

13.1.1. LIMITS

INDUSTRY CANADA

IC RSS-210 is closely harmonized with FCC Part 15 DFS rules. The deviations are as follows:

RSS-210 Issue 7 A9.4 (b) (ii) **Channel Availability Check Time:** …

Additional requirements for the band 5600-5650 MHz: Until further notice, devices subject to this Section shall not be capable of transmitting in the band 5600-5650 MHz, so that Environment Canada weather radars operating in this band are protected.

FCC

§15.407 (h), FCC KDB 905462 D02 “COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION” and KDB 905462 D03 “U-NII CLIENT DEVICES WITHOUT RADAR DETECTION CAPABILITY”.

Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode		
	Master	Client (without radar detection)	Client (with radar detection)
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
Uniform Spreading	Yes	Not required	Not required

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master	Client **(without DFS)**	Client **(with DFS)**
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes

Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see note)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 dBm

Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna

Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.

Table 4: DFS Response requirement values

Parameter	Value
Non-occupancy period	30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds
Channel Closing Transmission Time	200 milliseconds + approx. 60 milliseconds over remaining 10 second period

The instant that the *Channel Move Time* and the *Channel Closing Transmission Time* begins is as follows:

For the Short pulse radar Test Signals this instant is the end of the *Burst*.

For the Frequency Hopping radar Test Signal, this instant is the end of the last radar burst generated.

For the Long Pulse radar Test Signal this instant is the end of the 12-second period defining the radar transmission.

The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate channel changes (an aggregate of approximately 60 milliseconds) during the remainder of the 10-second period. The aggregate duration of control signals will not count quiet periods in between transmissions.

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (Microseconds)	PRI (Microseconds)	Pulses	Minimum Percentage of Successful Detection	Minimum Trials
1	1	1428	18	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30

Aggregate (Radar Types 1-4)	80%	120

Table 6 – Long Pulse Radar Test Signal

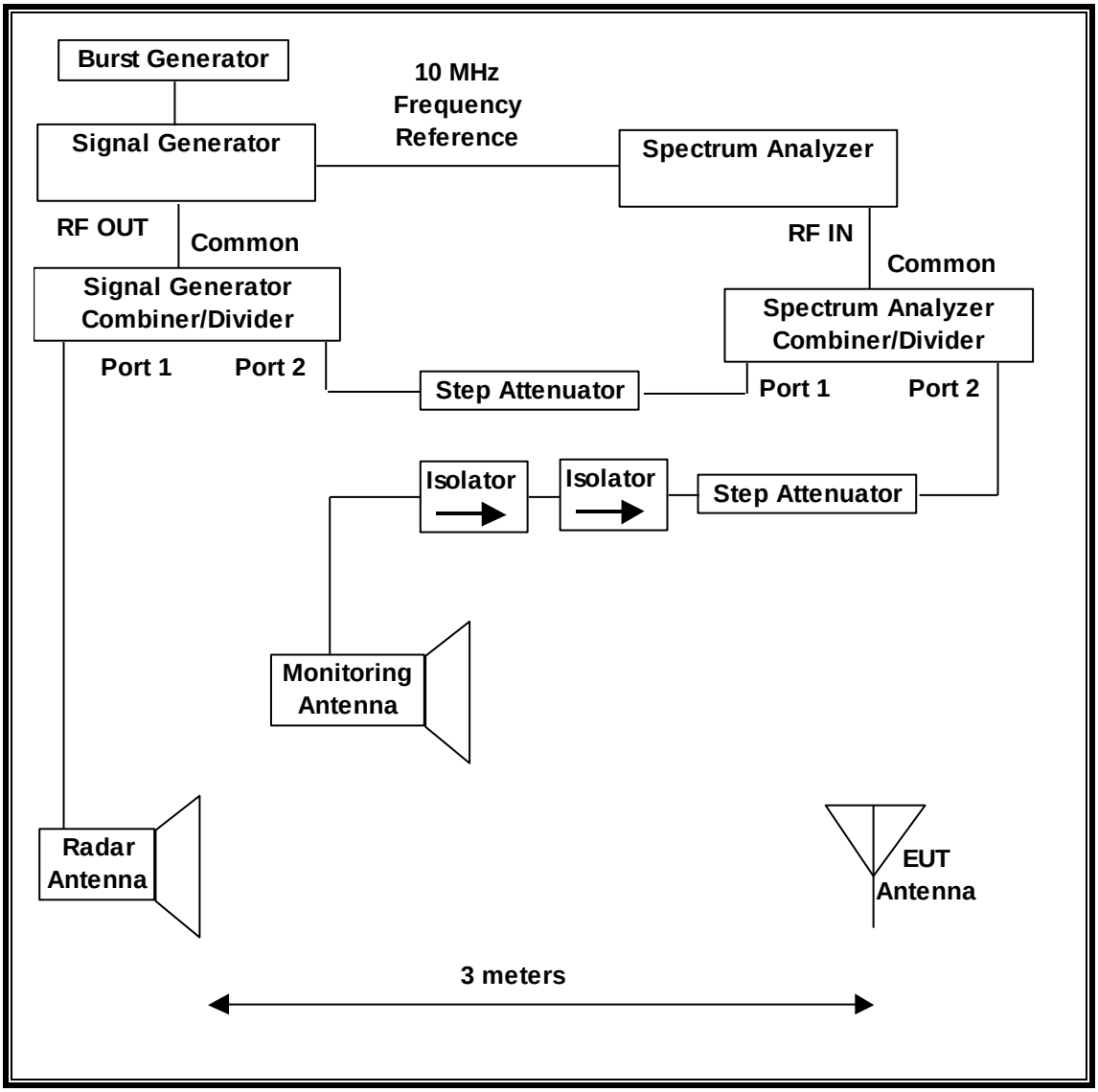
Radar Waveform	Bursts	Pulses per Burst	Pulse Width (µsec)	Chirp Width (MHz)	PRI (µsec)	Minimum Percentage of Successful Detection	Minimum Trials
5	8-20	1-3	50-100	5-20	1000-2000	80%	30

Table 7 – Frequency Hopping Radar Test Signal

Radar Waveform	Pulse Width (µsec)	PRI (µsec)	Burst Length (ms)	Pulses per Hop	Hopping Rate (kHz)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	300	9	.333	70%	30

13.1.2. TEST AND MEASUREMENT SYSTEM

RADIATED METHOD SYSTEM BLOCK DIAGRAM



SYSTEM OVERVIEW

The short pulse and long pulse signal generating system utilizes the NTIA software. The Vector Signal Generator has been validated by the NTIA. The hopping signal generating system utilizes the CCS simulated hopping method and system, which has been validated by the DoD, FCC and NTIA. The software selects waveform parameters from within the bounds of the signal type on a random basis using uniform distribution.

The short pulse types 2, 3 and 4, and the long pulse type 5 parameters are randomized at run-time.

The hopping type 6 pulse parameters are fixed while the hopping sequence is based on the August 2005 NTIA Hopping Frequency List. The initial starting point randomized at run-time and each subsequent starting point is incremented by 475. Each frequency in the 100-length segment is compared to the boundaries of the EUT Detection Bandwidth and the software creates a hopping burst pattern in accordance with Section 7.4.1.3 Method #2 Simulated Frequency Hopping Radar Waveform Generating Subsystem of FCC 06-96 APPENDIX. The frequency of the signal generator is incremented in 1 MHz steps from F_L to F_H for each successive trial. This incremental sequence is repeated as required to generate a minimum of 30 total trials and to maintain a uniform frequency distribution over the entire Detection Bandwidth.

The signal monitoring equipment consists of a spectrum analyzer. The aggregate ON time is calculated by multiplying the number of bins above a threshold during a particular observation period by the dwell time per bin, with the analyzer set to peak detection and max hold.

SYSTEM CALIBRATION

A 50-ohm load is connected in place of the spectrum analyzer, and the spectrum analyzer is connected to a horn antenna via a coaxial cable, with the reference level offset set to (horn antenna gain – coaxial cable loss). The signal generator is set to CW mode. The amplitude of the signal generator is adjusted to yield a level of –64 dBm as measured on the spectrum analyzer.

Without changing any of the instrument settings, the spectrum analyzer is reconnected to the Common port of the Spectrum Analyzer Combiner/Divider. The Reference Level Offset of the spectrum analyzer is adjusted so that the displayed amplitude of the signal is –64 dBm.

The spectrum analyzer displays the level of the signal generator as received at the antenna ports of the Master Device. The interference detection threshold may be varied from the calibrated value of –64 dBm and the spectrum analyzer will still indicate the level as received by the Master Device.

ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

A link is established between the Master and Slave and the distance between the units is adjusted as needed to provide a suitable received level at the Master and Slave devices. The video test file is streamed to generate WLAN traffic. The monitoring antenna is adjusted so that the WLAN traffic level, as displayed on the spectrum analyzer, is at lower amplitude than the radar detection threshold.

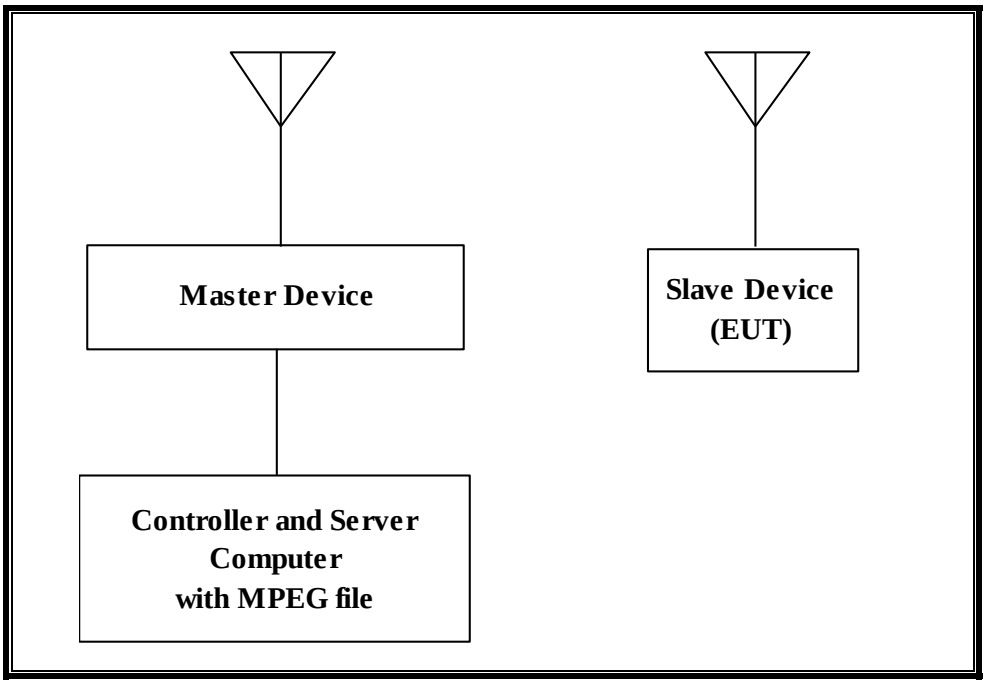
TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Asset Number**	**Cal Due**
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01178	09/10/14
Vector Signal Generator, 20GHz	Agilent / HP	E8267C	C01066	09/12/14

13.1.3. SETUP OF EUT

RADIATED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

The following support equipment was utilized for the DFS tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Wireless Access Point	Cisco	AIR-AP1252AG-A-K9	FTX120690N2	LDK102061
AC Adapter (AP)	Delta Electronics	EADP-45BB B	DTH112490BD	DoC
Notebook PC (Controller/Server)	Dell	PP18L	10657517725	DoC
AC Adapter (Controller/Server PC)	Dell	LA65SN0-00	CN-ODF263-71615-6AU-1019	DoC

13.1.4. DESCRIPTION OF EUT

The EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges excluding the 5600-5650 MHz range.

The EUT is a Slave Device without Radar Detection.

The highest power level within these bands is 12.6 dBm EIRP in the 5250-5350 MHz band and 13.5 dBm EIRP in the 5470-5725 MHz band.

The only antenna assembly utilized with the EUT has a gain of 1.02 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

The EUT uses one transmitter/receiver chain connected to an antenna to perform radiated tests.

WLAN traffic is generated by streaming the video file TestFile.mp2 “6 ½ Magic Hours” from the Master to the Slave in full motion video mode using MP4 Player version 1.7.21 media play.

TPC is not required since the maximum EIRP is less than 500 mW (27 dBm).

The EUT utilizes the 802.11a/n architecture. Two nominal channel bandwidths are implemented: 20 MHz and 40 MHz.

The software installed in the access point is 12.4(25d)JA1.

UNIFORM CHANNEL SPREADING

This requirement is not applicable to Slave radio devices.

OVERVIEW OF MASTER DEVICE WITH RESPECT TO §15.407 (h) REQUIREMENTS

The Master Device is a Cisco Access Point, FCC ID: LDK102061. The minimum antenna gain for the Master Device is 3.5 dBi.

The rated output power of the Master unit is > 23dBm (EIRP). Therefore the required interference threshold level is –64 dBm. After correction for procedural adjustments, the required radiated threshold at the antenna port is –64 + 1 = -63 dBm.

The calibrated radiated DFS Detection Threshold level is set to –64 dBm. The tested level is lower than the required level hence it provides a margin to the limit.

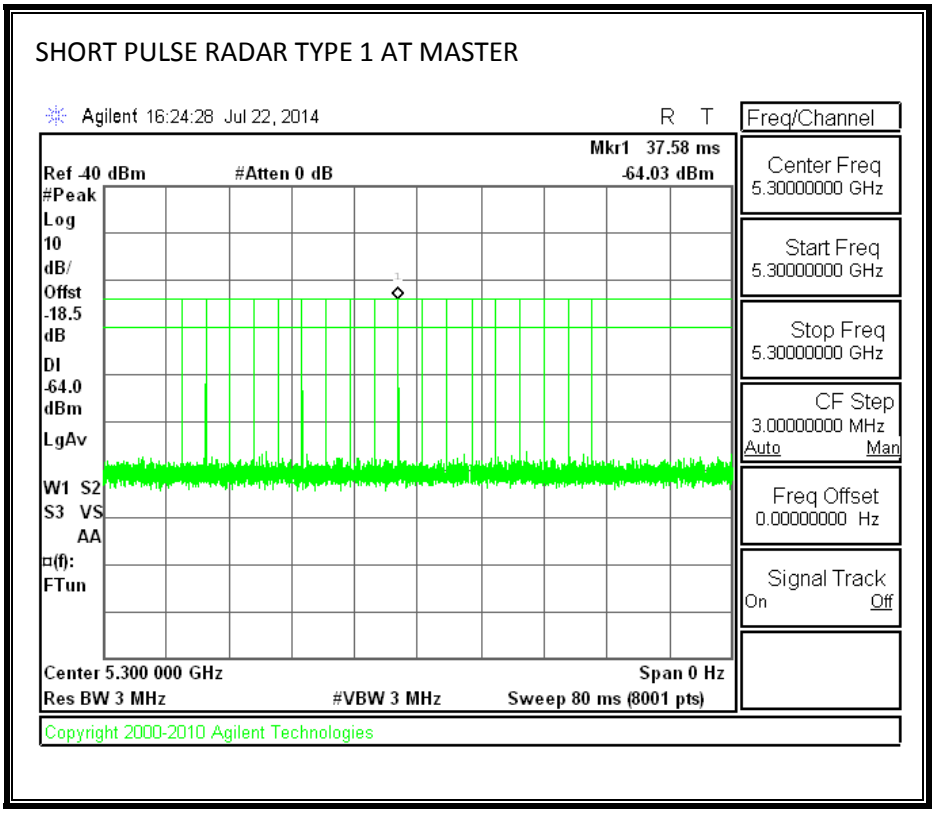
13.2. RESULTS FOR 20 MHz BANDWIDTH

13.2.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5300 MHz.

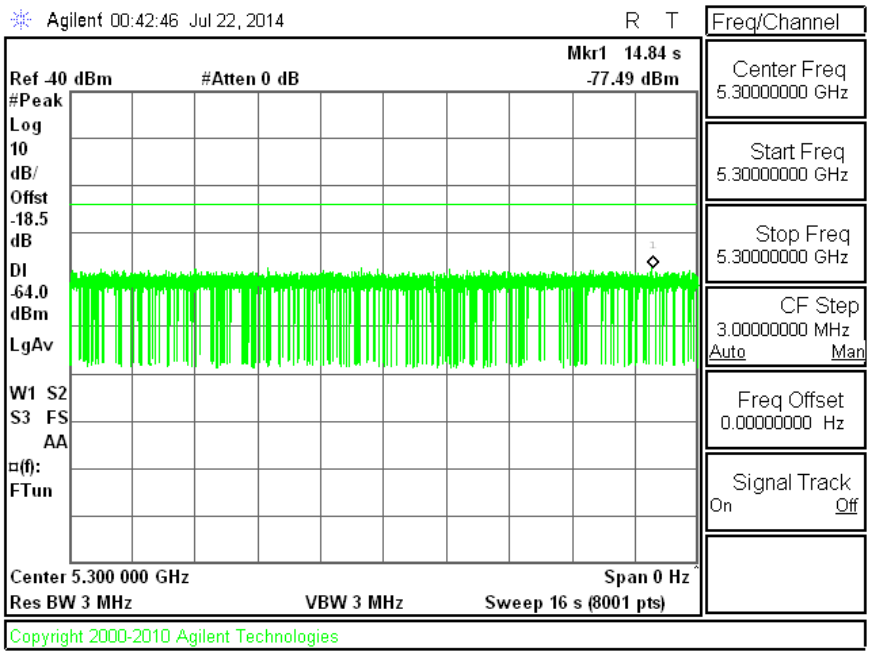
13.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC

SLAVE TRAFFIC



13.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

13.2.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =

(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

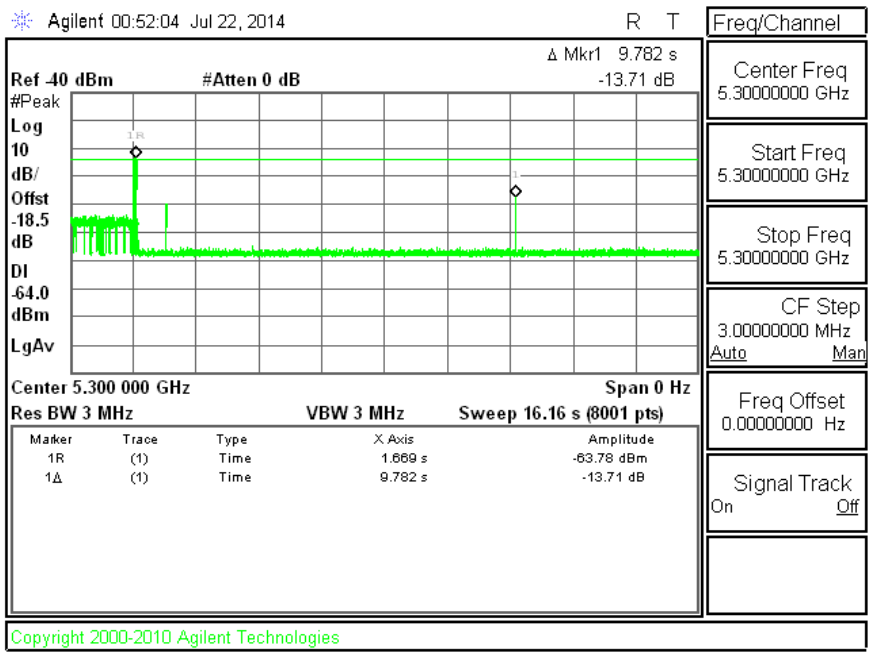
RESULTS

Channel Move Time (sec)	Limit (sec)
9.654	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
12.0	60

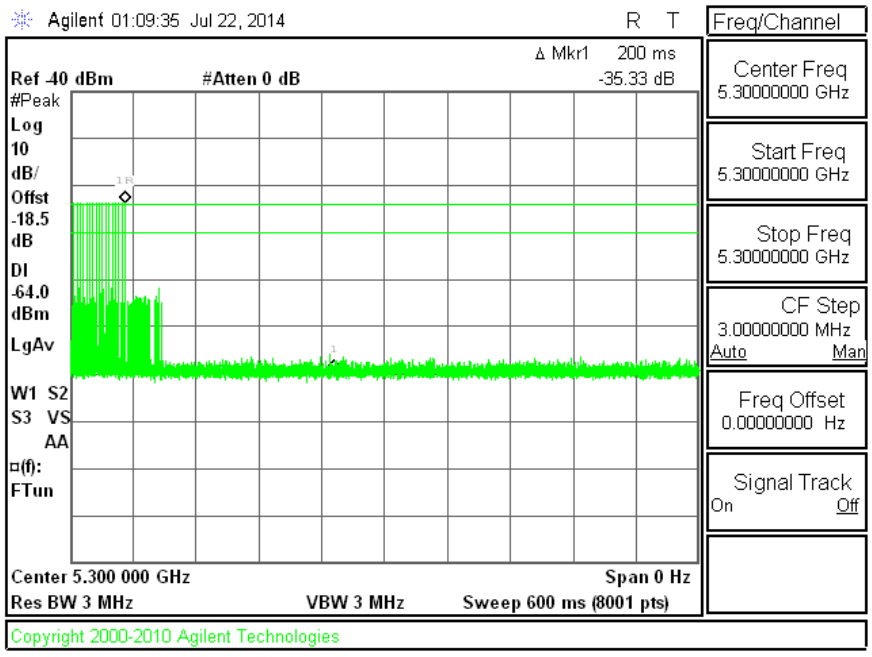
MOVE TIME

MOVE TIME



CHANNEL CLOSING TIME

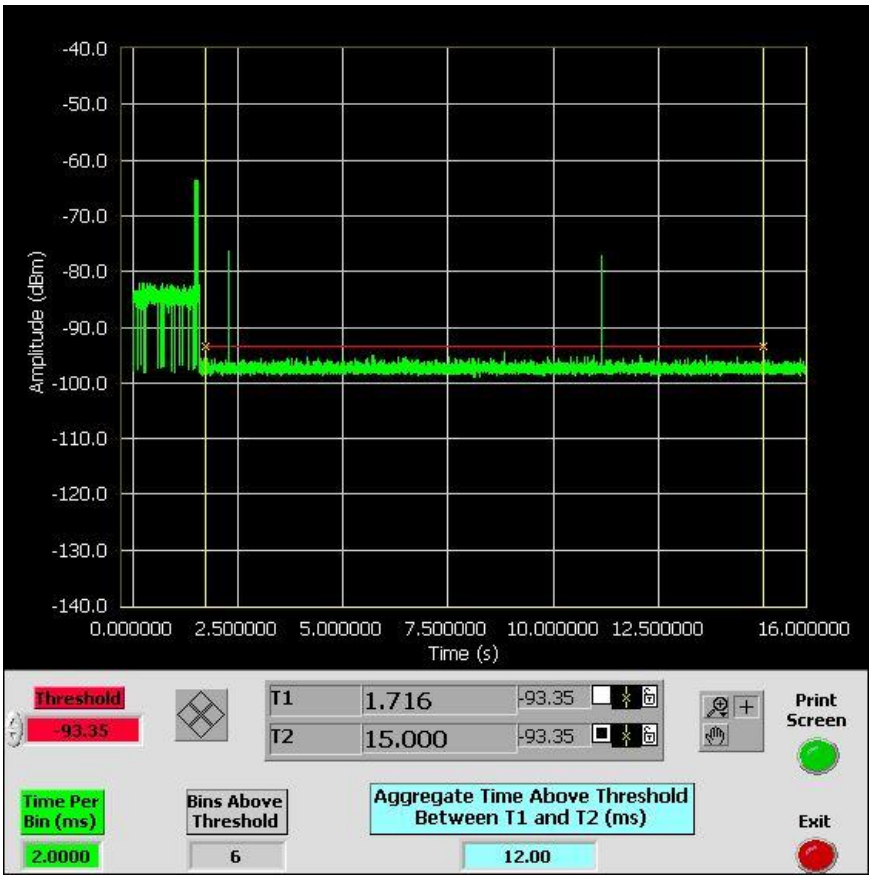
CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.

AGGREGATE CLOSING TIME



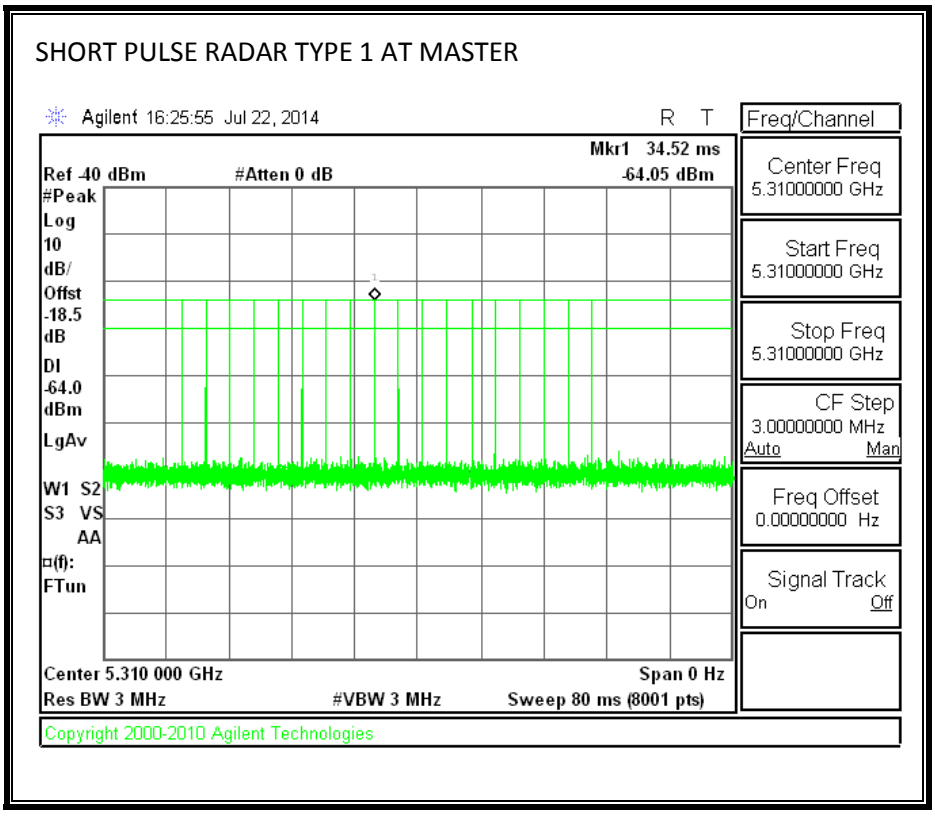
13.3. RESULTS FOR 40 MHz BANDWIDTH

13.3.1. TEST CHANNEL

All tests were performed at a channel center frequency of 5310 MHz.

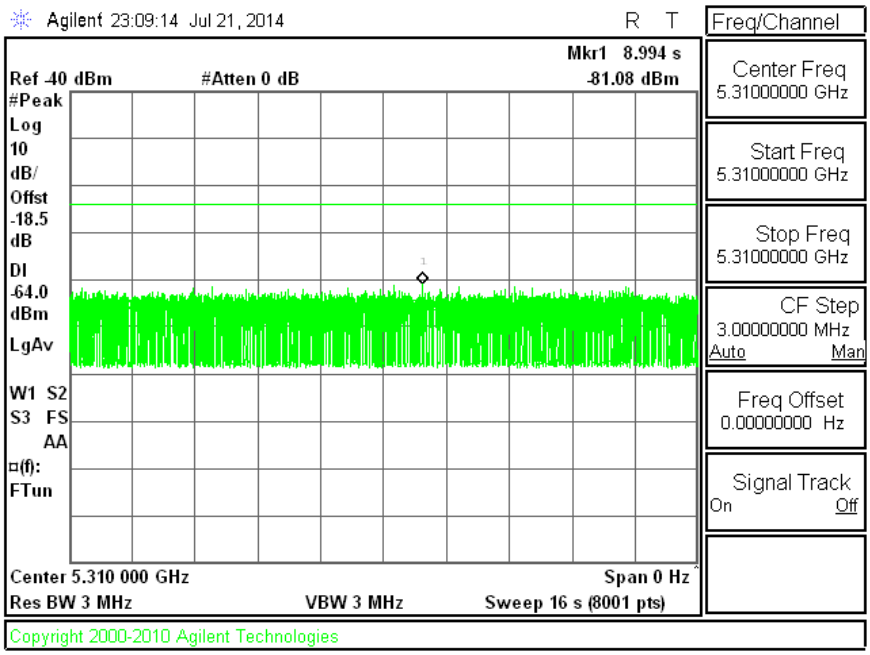
13.3.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC

SLAVE TRAFFIC



13.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

13.3.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =

(Number of analyzer bins showing transmission) * (dwell time per bin)

The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

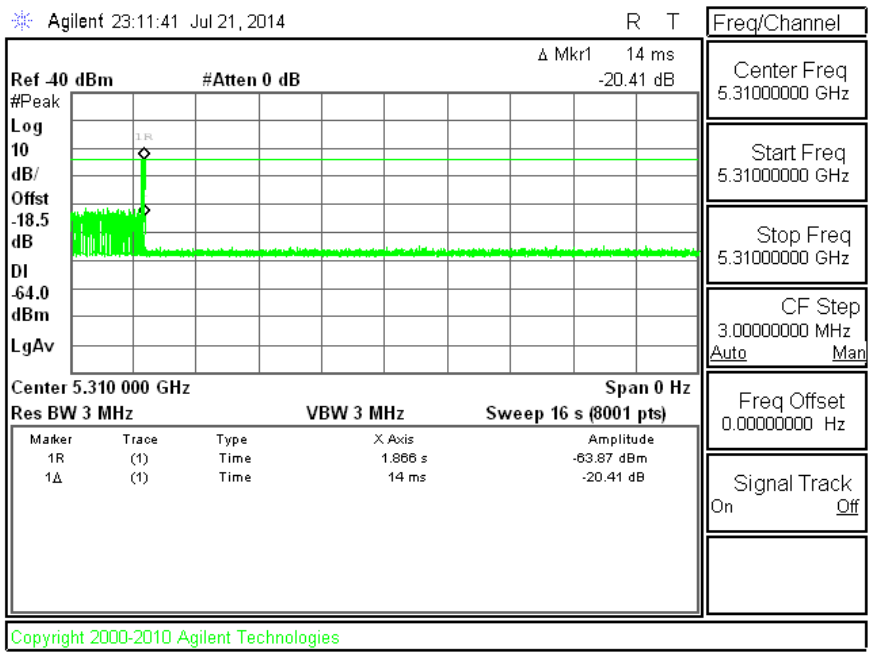
RESULTS

Channel Move Time (sec)	Limit (sec)
0.014	10

Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
0.0	60

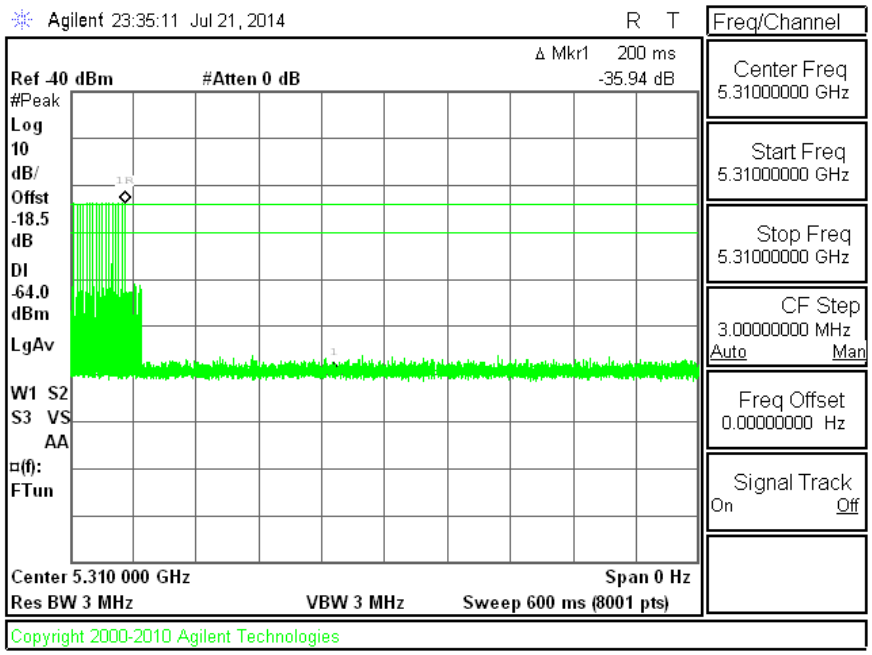
MOVE TIME

MOVE TIME



CHANNEL CLOSING TIME

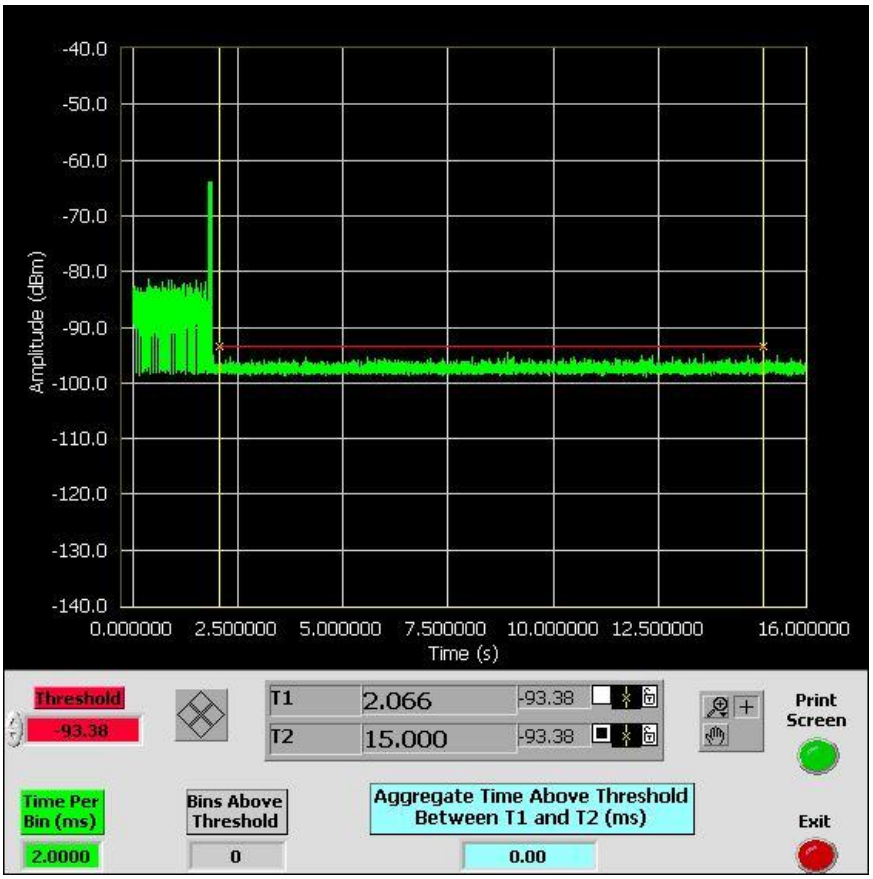
CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.

AGGREGATE CLOSING TIME



13.3.5. NON-OCCUPANCY PERIOD

RESULTS

No EUT transmissions were observed on the test channel during the 30-minute observation time.

NON-OCCUPANCY PERIOD