



FCC 47 CFR PART 15 SUBPART E

CERTIFICATION TEST REPORT

FOR

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

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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**



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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: SAMSUNG ELECTRONICS CO., LTD.

EUT DESCRIPTION: GSM/WCDMA/LTE Phone + Bluetooth, DTS/UNII a/b/g/n, ANT+ & NFC

MODEL: SM-G510F

SERIAL NUMBER: FL-253-D (CONDUCTED), FL-253-A (RADIATED)

DATE TESTED: JULY 1-24, 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
TEST ENGINEER
UL Verification Services Inc.

2. TEST METHODOLOGY

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

644545 D01 Guidance for IEEE 802.11ac v01r01; 644545 D02 Alternative Guidance for 802.11ac v01

3. FACILITIES AND ACCREDITATION

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

47173 Benicia Street	47266 Benicia Street
☐ Chamber A	☐ 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>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 18000 MHz	4.94 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

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

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range (MHz)	Mode	Output Power (dBm)	Output Power (mW)
5180 - 5240	802.11a	11.74	14.93
5180 - 5240	802.11n HT20	10.63	11.56
5190 - 5230	802.11n HT40	10.62	11.53
5260 - 5320	802.11a	11.73	14.89
5260 - 5320	802.11n HT20	10.65	11.61
5270 - 5310	802.11n HT40	10.77	11.94
5500 - 5700	802.11a	11.88	15.42
5500 - 5700	802.11n HT20	11.09	12.85
5510 - 5670	802.11n HT40	11.00	12.59
5745 - 5825	802.11a	11.81	15.17
5745 - 5825	802.11n HT20	10.90	12.30
5755 - 5795	802.11n HT40	10.93	12.39

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an FPCB antenna, with a maximum gain of 1.4 dBi.

5.4. WORST-CASE CONFIGURATION AND MODE

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

The fundamental of the EUT was investigated in three orthogonal orientations X,Y,Z, 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

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

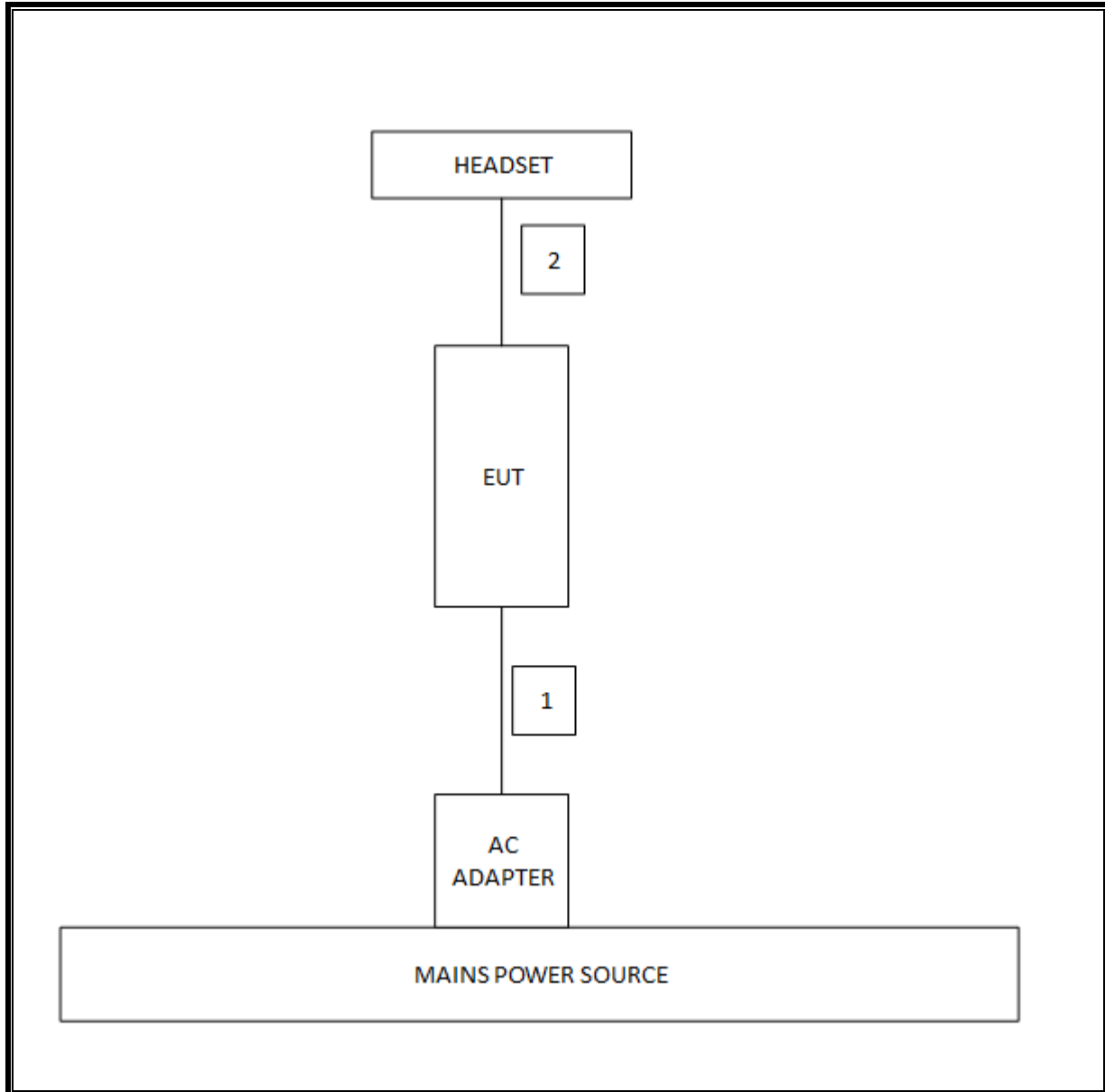
Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	SAMSUNG	ETA0U81EWE	N/A	N/A
Earphone	SAMSUNG	N/A	N/A	N/A

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.



6. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment List				
Description	Manufacturer	Model	Asset	Cal Due
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/20/14
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

7. SUMMARY TABLE

FCC Part Section	Test Description	Test Limit	Test Condition	Test Result	Worst Case
15.407	Occupied Band width (6dB)	>500KHz	Conducted	Pass	16.53MHz
15.407 (a)(1)	TX Cond. Power 5.15-5.25	<17dBm or $4+10\text{Log}(\text{OBW})$		Pass	11.74dBm
15.407 (a)(2)	TX Cond. Power 5.25-5.35 & 5.47-5.725; 5.725-5.825	<24dBm or $11+10\text{Log}(\text{OBW})$		Pass	11.88dBm
15.407 (a)(5)	PSD	<11dBm		Pass	0.45dBm
15.207 (a)	AC Power Line conducted emissions	Section 10	Radiated	Pass	43.34dBuV
15.407 (b) & 15.209	Radiated Spurious Emission	< 54dBuV/m		Pass	53.68dBuV/m
15.407 (h)(2)	Dynamic Frequency Selection	N/A	Radiated / Conducted	Pass	N/A

8. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

LIMITS

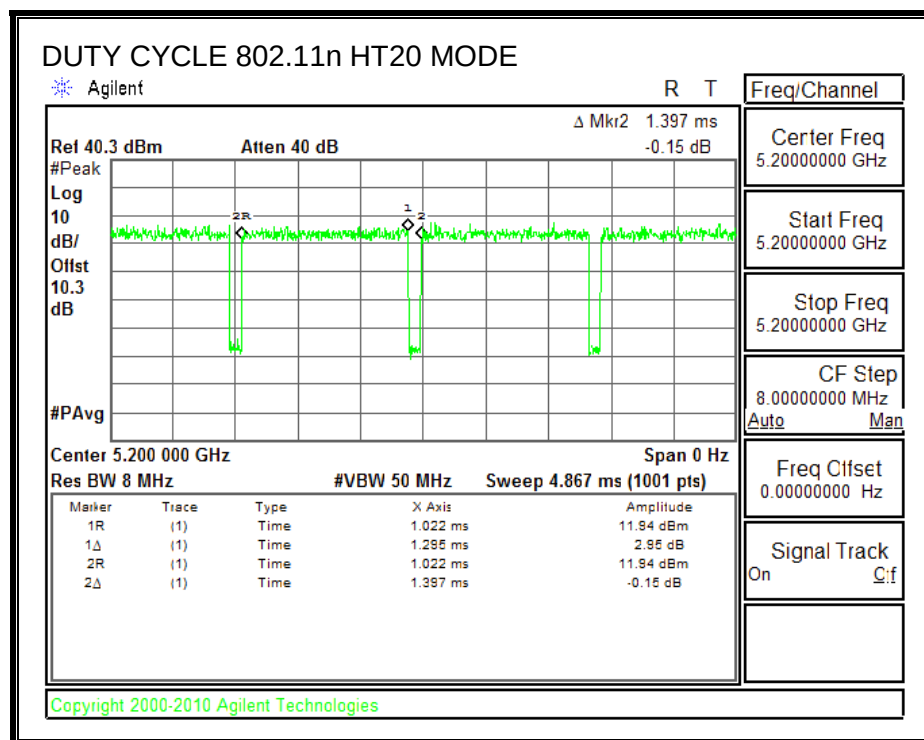
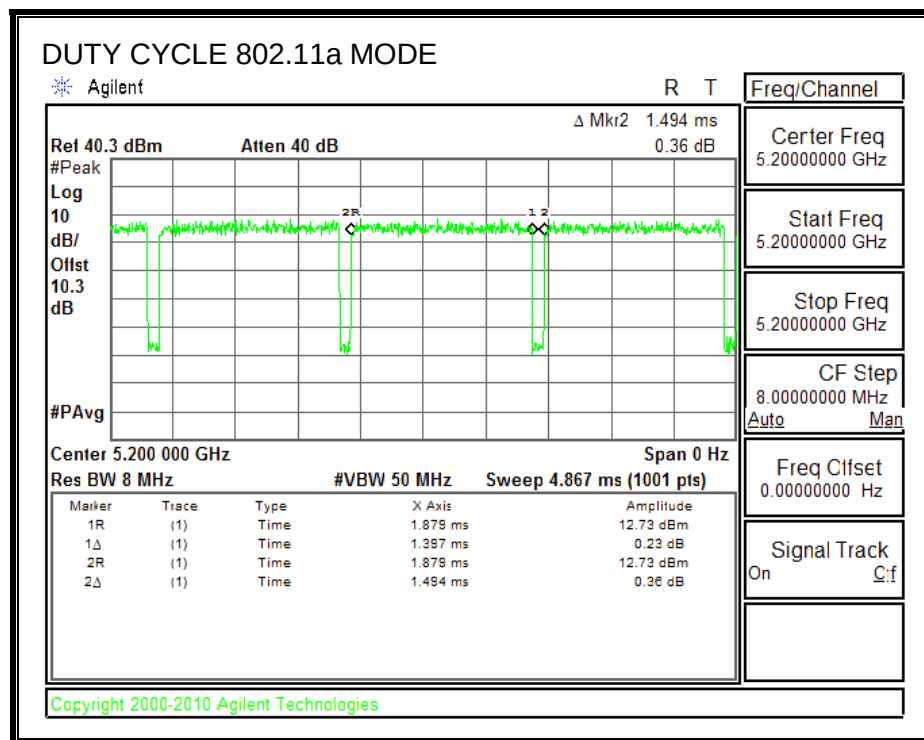
None; for reporting purposes only.

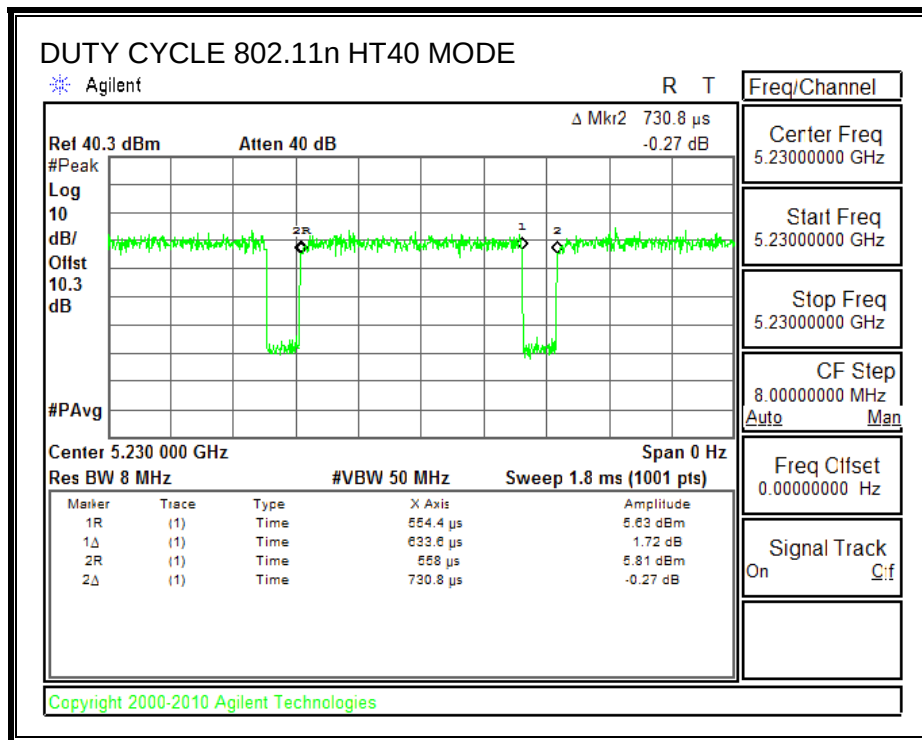
PROCEDURE

KDB 789033 Zero-Span Spectrum Analyzer Method.

8.1. 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	1.397	1.484	0.941	94.1%	0.26	0.716
802.11n HT20	1.295	1.397	0.927	92.7%	0.33	0.772
802.11n HT40	0.634	0.731	0.867	86.7%	0.62	1.578

8.2. DUTY CYCLE PLOTS



9. MEASUREMENT METHOD

789033 D01 General UNII Test Procedures v01r03

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.

10. ANTENNA PORT TEST RESULTS**10.1. 26 dB BANDWIDTH****LIMITS**

None; for reporting purposes only.

RESULTS**10.1.1. 802.11a MODE IN THE 5.2 GHz BAND**

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	31.73
Mid	5200	31.73
High	5240	31.88
Worst		31.88

10.1.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	32.70
Mid	5200	33.08
High	5240	32.78
Worst		33.08

10.1.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5190	65.02
Mid	5230	61.91
Worst		65.02

10.1.1. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	32.85
Mid	5300	32.18
High	5320	32.10
Worst		32.85

10.1.1. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	32.78
Mid	5300	32.40
High	5320	33.60
Worst		33.60

10.1.2. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5270	65.3
High	5310	64.1
Worst		65.3

10.1.3. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	28.43
Mid	5580	27.75
High	5700	23.40
Worst		28.43

10.1.4. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	23.78
Mid	5580	24.08
High	5700	25.05
Worst		25.05

10.1.5. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	44.25
Mid	5550	43.65
High	5670	45.90
Worst		45.90

10.1.6. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	23.03
Mid	5785	22.88
High	5825	22.88
Worst		23.03

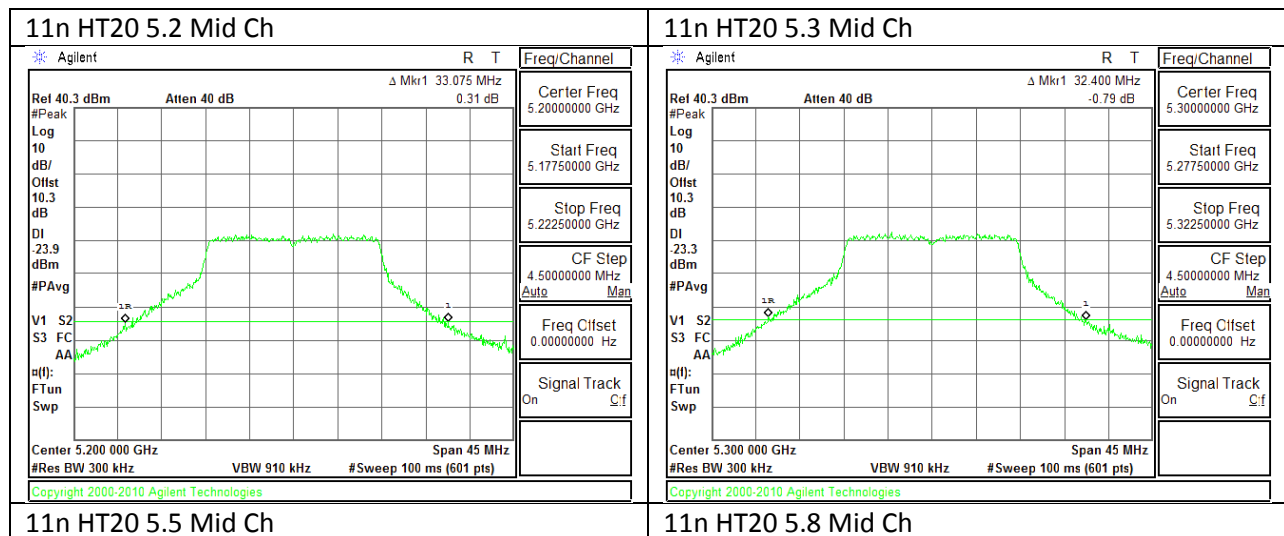
10.1.7. 802.11n HT20 MODE IN THE 5.8 GHz BAND

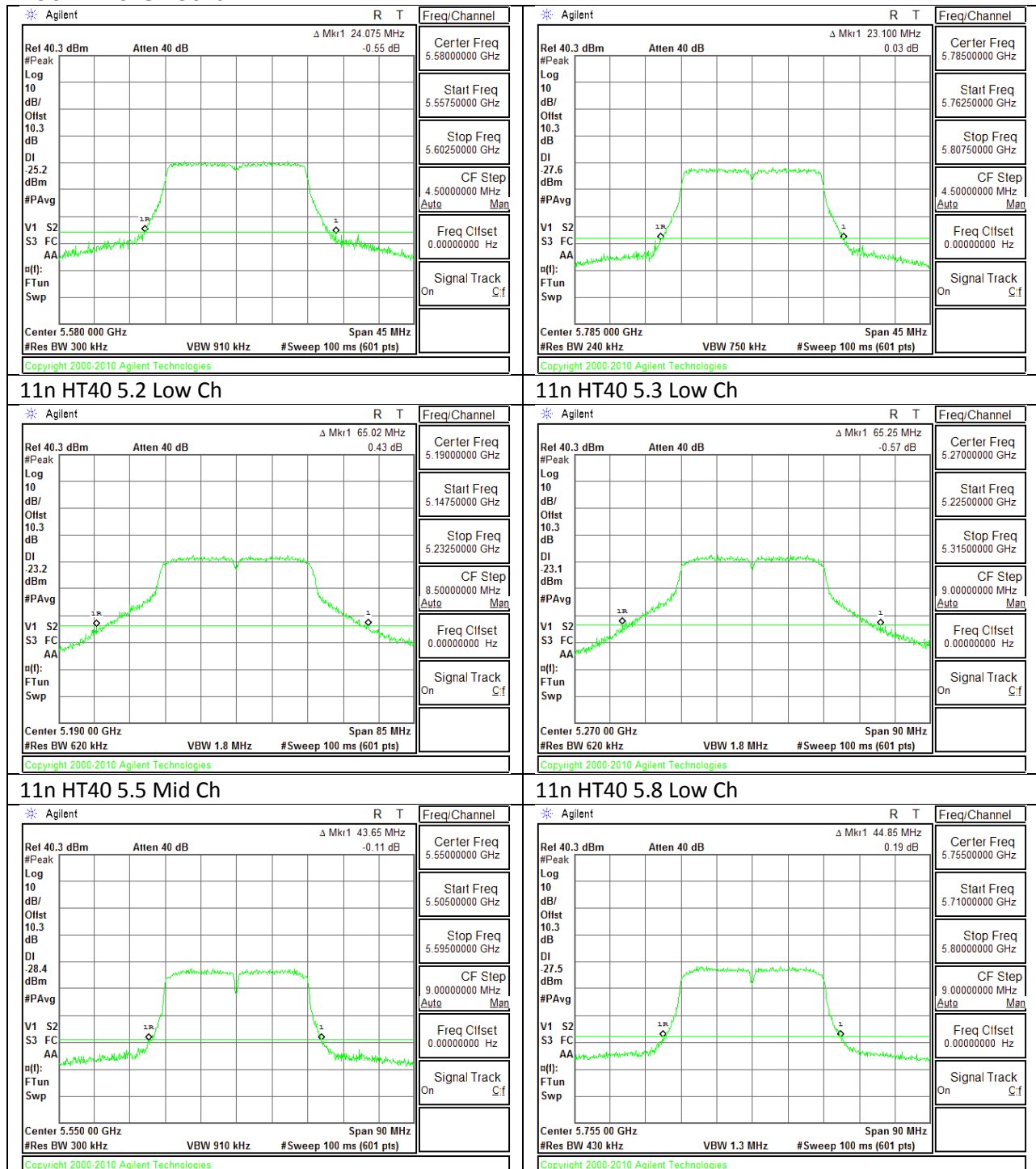
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5745	23.55
Mid	5785	23.10
High	5825	22.88
Worst		23.55

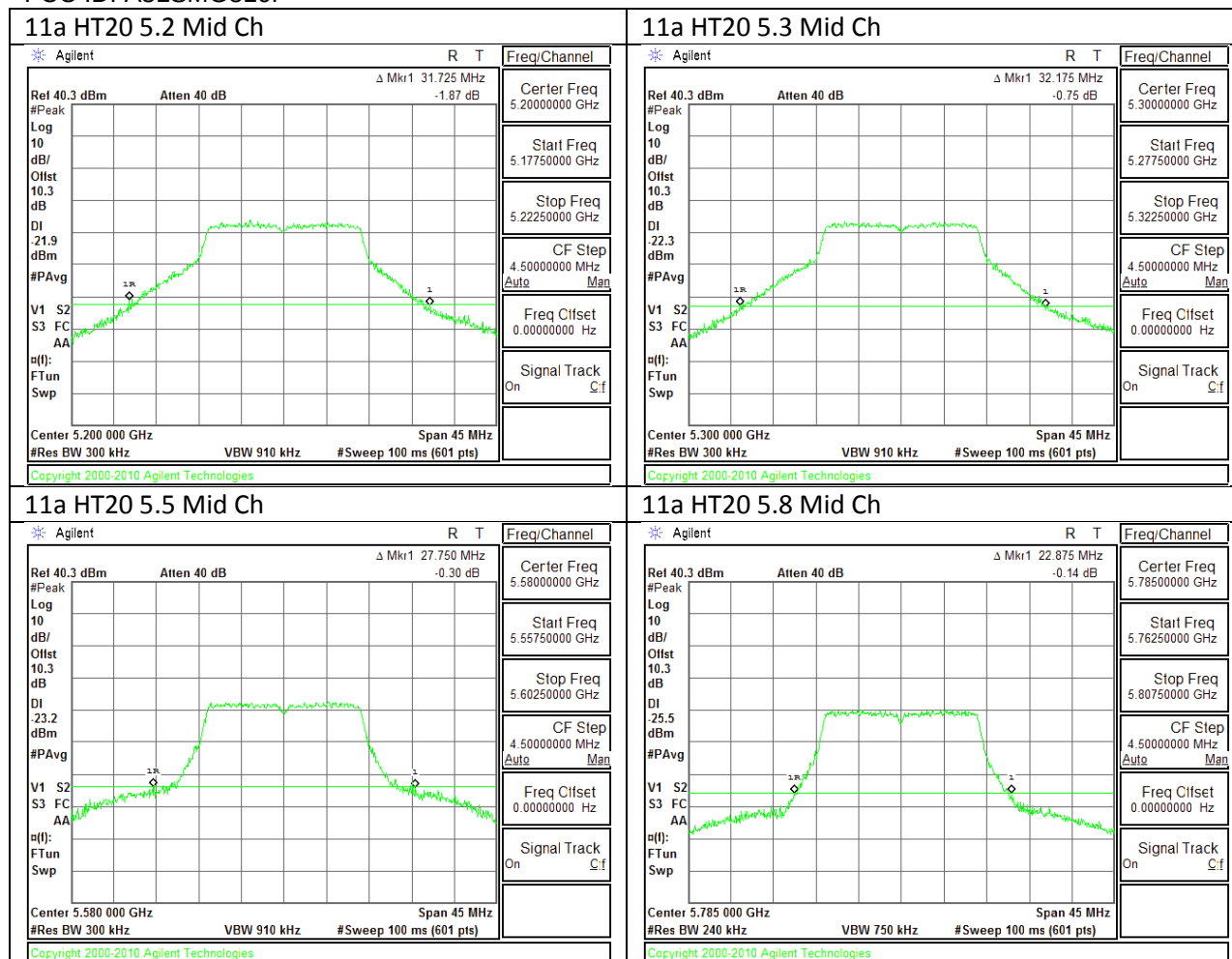
10.1.8. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5755	44.85
High	5795	45.00
Worst		45.00

10.1.1. 26 dB BANDWIDTH PLOTS







10.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

10.2.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	18.01
Mid	5200	17.95
High	5240	17.91
Worst		18.01

10.2.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	18.33
Mid	5200	18.31
High	5240	18.34
Worst		18.34

10.2.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5190	36.73
Mid	5230	36.78
Worst		36.78

10.2.4. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	18.15
Mid	5300	18.07
High	5320	18.16
Worst		18.16

10.2.5. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	18.32
Mid	5300	18.37
High	5320	18.35
Worst		18.37

10.2.6. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5270	36.76
High	5310	36.80
Worst		36.80

10.2.7. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	16.70
Mid	5580	16.70
High	5700	16.70
Worst		16.70

10.2.8. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	17.86
Mid	5580	17.88
High	5700	17.85
Worst		17.88

10.2.9. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5510	36.17
Mid	5550	36.10
High	5670	36.17
Worst		36.17

10.2.10. 802.11a MODE IN THE 5.8 GHz BAND

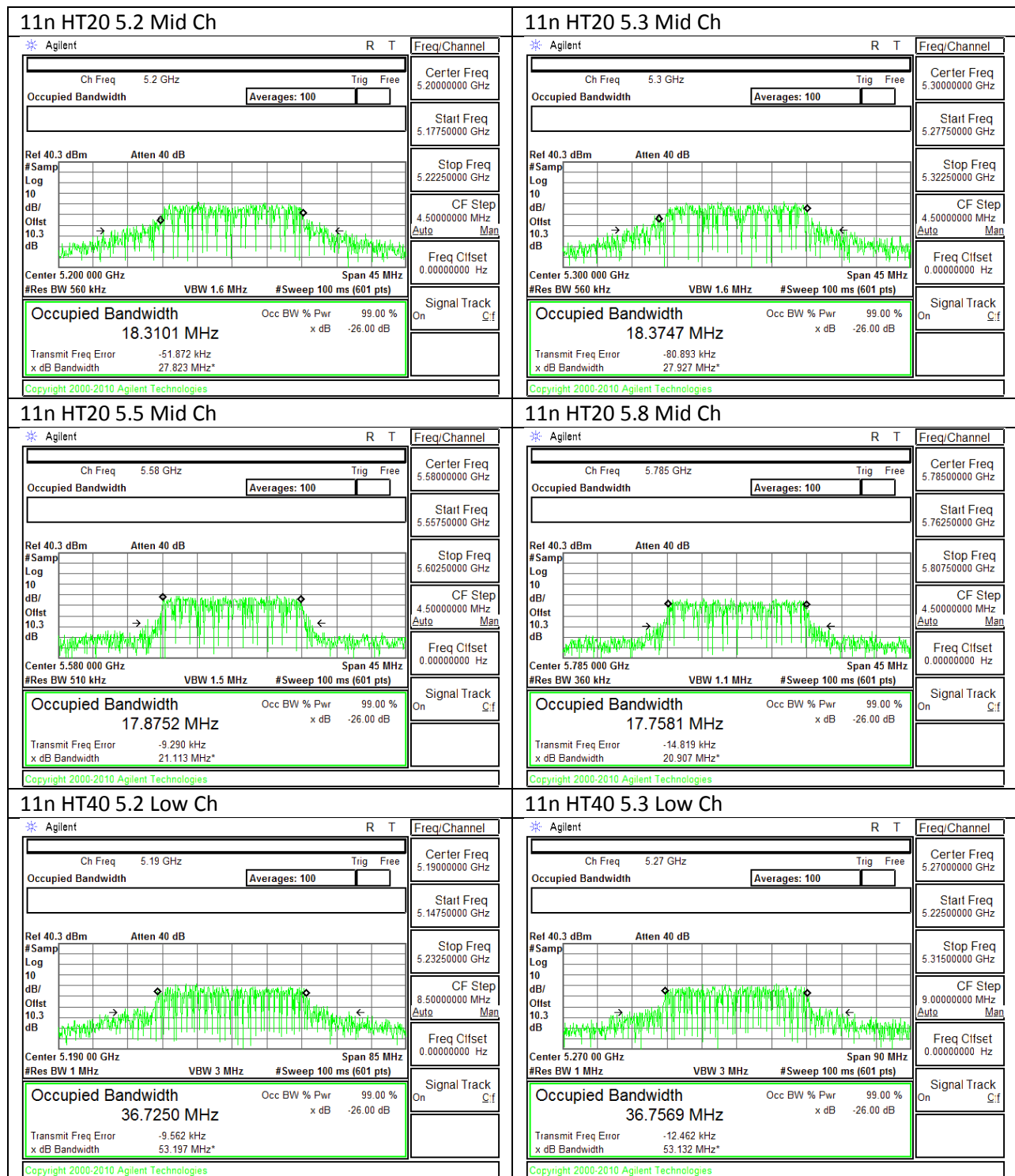
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	16.59
Mid	5785	16.59
High	5825	16.50
Worst		16.59

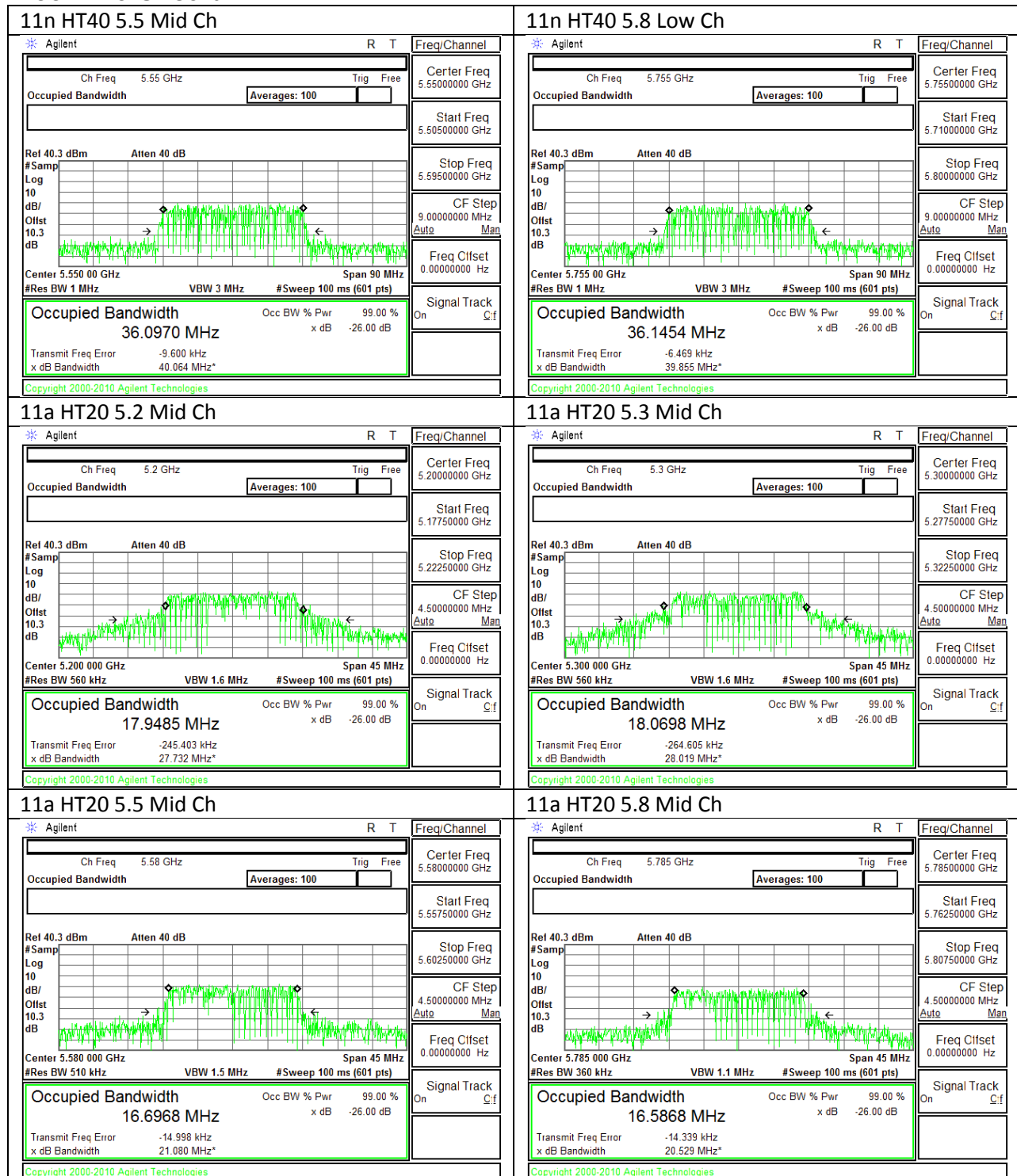
10.2.11. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5745	17.77
Mid	5785	17.76
High	5825	17.75
Worst		17.77

10.2.12. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.15
High	5795	36.18
Worst		36.18

10.2.1. 99% BANDWIDTH PLOTS



10.3. AVERAGE POWER**LIMITS**

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

10.3.1. 802.11a MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5180	11.80
Mid	5200	11.80
High	5240	11.70
Worst		11.80

10.3.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5180	10.50
Mid	5200	10.50
High	5240	10.50
Worst		10.50

10.3.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5190	10.50
Mid	5230	10.50
Worst		10.50

10.3.4. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5260	11.80
Mid	5300	11.80
High	5320	11.80
Worst		11.80

10.3.5. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5260	10.50
Mid	5300	10.50
High	5320	10.50
Worst		10.50

10.3.6. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5270	10.50
High	5310	10.50
Worst		10.50

10.3.7. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5500	12.00
Mid	5580	12.20
High	5700	12.40
Worst		12.40

10.3.8. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5500	10.00
Mid	5580	10.00
High	5700	10.30
Worst		10.30

10.3.9. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5510	9.90
Mid	5550	9.80
High	5670	10.10
Worst		10.10

10.3.10. 802.11a MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5745	12.50
Mid	5785	12.40
High	5825	12.50
Worst		12.50

10.3.11. 802.11n HT20 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5745	10.40
Mid	5785	10.50
High	5825	10.50
Worst		10.50

10.3.12. 802.11n HT40 MODE IN THE 5.8 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5755	10.50
High	5795	10.50
Worst		10.50

10.4. 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 50mW or $4 \text{ dBm} + 10 \log B$, where B is the 26–dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 4 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 $10 + 10 \log_{10} B$, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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

Test Methodology

RESULTS**10.4.1. 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	31.73	18.01	1.40
Mid	5200	31.73	17.95	1.40
High	5240	31.88	17.91	1.40

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	17.00	22.56	21.16	17.00	4.00	10.00	4.00
Mid	5200	17.00	22.54	21.14	17.00	4.00	10.00	4.00
High	5240	17.00	22.53	21.13	17.00	4.00	10.00	4.00

Duty Cycle CF (dB)	0.26	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	11.400	11.66	17.00	-5.34
Mid	5200	11.480	11.74	17.00	-5.26
High	5240	11.450	11.71	17.00	-5.29

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	0.110	0.37	4.00	-3.63
Mid	5200	0.140	0.40	4.00	-3.60
High	5240	0.100	0.36	4.00	-3.64

10.4.2. 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	32.70	18.33	1.40
Mid	5200	33.08	18.31	1.40
High	5240	32.78	18.34	1.40

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	17.00	22.63	21.23	17.00	4.00	10.00	4.00
Mid	5200	17.00	22.63	21.23	17.00	4.00	10.00	4.00
High	5240	17.00	22.63	21.23	17.00	4.00	10.00	4.00

Duty Cycle CF (dB)	0.33	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	10.260	10.59	17.00	-6.41
Mid	5200	10.300	10.63	17.00	-6.37
High	5240	10.190	10.52	17.00	-6.48

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	-1.330	-1.00	4.00	-5.00
Mid	5200	-1.400	-1.07	4.00	-5.07
High	5240	-1.520	-1.19	4.00	-5.19

10.4.3. 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	65.02	36.73	1.40
Mid	5230	61.91	36.78	1.40

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	17.00	23.00	21.60	17.00	4.00	10.00	4.00
Mid	5230	17.00	23.00	21.60	17.00	4.00	10.00	4.00
Duty Cycle CF (dB)		0.62	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	10.000	10.62	17.00	-6.38
Mid	5230	9.960	10.58	17.00	-6.42

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5190	-4.430	-3.81	4.00	-7.81
Mid	5230	-4.540	-3.92	4.00	-7.92

10.4.4. 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	32.85	18.15	1.40
Mid	5300	32.18	18.07	1.40
High	5320	32.10	18.16	1.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5260	24.00	23.59	29.59	23.59	11.00	11.00	11.00
Mid	5300	24.00	23.57	29.57	23.57	11.00	11.00	11.00
High	5320	24.00	23.59	29.59	23.59	11.00	11.00	11.00

Duty Cycle CF (dB)	0.26	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	11.47	11.73	23.59	-11.86
Mid	5300	11.47	11.73	23.57	-11.84
High	5320	11.37	11.63	23.59	-11.96

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	0.03	0.29	11.00	-10.71
Mid	5300	0.04	0.30	11.00	-10.70
High	5320	0.17	0.43	11.00	-10.57

10.4.5. 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	32.78	18.32	1.40
Mid	5300	32.40	18.37	1.40
High	5320	33.60	18.35	1.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5260	24.00	23.63	29.63	23.63	11.00	11.00	11.00
Mid	5300	24.00	23.64	29.64	23.64	11.00	11.00	11.00
High	5320	24.00	23.64	29.64	23.64	11.00	11.00	11.00

Duty Cycle CF (dB)	0.33	Included in Calculations of Corr'd Power & PSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5260	10.26	10.59	23.63	-13.04
Mid	5300	10.32	10.65	23.64	-12.99
High	5320	10.24	10.57	23.64	-13.07

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	-1.35	-1.02	11.00	-12.02
Mid	5300	-1.36	-1.03	11.00	-12.03
High	5320	-1.44	-1.11	11.00	-12.11

10.4.6. 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	65.30	36.76	1.40
High	5310	64.10	36.80	1.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	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)	0.62	Included in Calculations of Corr'd Power & PSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	10.15	10.77	24.00	-13.23
High	5310	10.04	10.66	24.00	-13.34

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5270	-4.38	-3.76	11.00	-14.76
High	5310	-4.58	-3.96	11.00	-14.96

10.4.7. 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	28.43	16.70	1.40
Mid	5580	27.75	16.70	1.40
High	5700	23.40	16.70	1.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5500	24.00	23.23	29.23	23.23	11.00	11.00	11.00
Mid	5580	24.00	23.23	29.23	23.23	11.00	11.00	11.00
High	5700	24.00	23.23	29.23	23.23	11.00	11.00	11.00

Duty Cycle CF (dB)	0.26	Included in Calculations of Corr'd Power & PPSP
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	11.62	11.88	23.23	-11.35
Mid	5580	11.51	11.77	23.23	-11.46
High	5700	11.42	11.68	23.23	-11.55

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	-0.11	0.15	11.00	-10.85
Mid	5580	-0.11	0.15	11.00	-10.85
High	5700	0.09	0.35	11.00	-10.65

10.4.8. 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	23.78	17.86	1.40
Mid	5580	24.08	17.88	1.40
High	5700	25.05	17.85	1.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5500	24.00	23.52	29.52	23.52	11.00	11.00	11.00
Mid	5580	24.00	23.52	29.52	23.52	11.00	11.00	11.00
High	5700	24.00	23.52	29.52	23.52	11.00	11.00	11.00

Duty Cycle CF (dB)	0.33	Included in Calculations of Corr'd Power & PSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	10.41	10.74	23.52	-12.78
Mid	5580	10.76	11.09	23.52	-12.43
High	5700	10.74	11.07	23.52	-12.45

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	-1.25	-0.92	11.00	-11.92
Mid	5580	-0.75	-0.42	11.00	-11.42
High	5700	-1.19	-0.86	11.00	-11.86

10.4.9. 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	44.25	36.17	1.40
Mid	5550	43.65	36.10	1.40
High	5670	45.90	36.17	1.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5510	24.00	24.00	30.00	24.00	11.00	11.00	11.00
Mid	5550	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)	0.62	Included in Calculations of Corr'd Power & PPSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	10.07	10.69	24.00	-13.31
Mid	5550	10.15	10.77	24.00	-13.23
High	5670	10.38	11.00	24.00	-13.00

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5510	-4.30	-3.68	11.00	-14.68
Mid	5550	-4.31	-3.69	11.00	-14.69
High	5670	-3.99	-3.37	11.00	-14.37

10.4.10. 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	23.03	16.59	1.40
Mid	5785	22.88	16.59	1.40
High	5825	22.88	16.50	1.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	24.00	29.20	35.20	24.00	11.00	17.00	11.00
Mid	5785	24.00	29.20	35.20	24.00	11.00	17.00	11.00
High	5825	24.00	29.17	35.17	24.00	11.00	17.00	11.00

Duty Cycle CF (dB)	0.26	Included in Calculations of Corr'd Power & PSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	11.40	11.66	24.00	-12.34
Mid	5785	11.40	11.66	24.00	-12.34
High	5825	11.55	11.81	24.00	-12.19

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	-0.37	-0.11	11.00	-11.11
Mid	5785	0.16	0.42	11.00	-10.58
High	5825	0.19	0.45	11.00	-10.55

10.4.11. 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	23.55	17.77	1.40
Mid	5785	23.10	17.76	1.40
High	5825	22.88	17.75	1.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5745	24.00	29.50	35.50	24.00	11.00	17.00	11.00
Mid	5785	24.00	29.49	35.49	24.00	11.00	17.00	11.00
High	5825	24.00	29.49	35.49	24.00	11.00	17.00	11.00

Duty Cycle CF (dB)	0.33	Included in Calculations of Corr'd Power & PSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5745	10.56	10.89	24.00	-13.11
Mid	5785	10.57	10.90	24.00	-13.10
High	5825	10.55	10.88	24.00	-13.12

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5745	-0.96	-0.63	11.00	-11.63
Mid	5785	-1.46	-1.13	11.00	-12.13
High	5825	-1.40	-1.07	11.00	-12.07

10.4.12. 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	44.85	36.15	1.40
High	5795	45.00	36.18	1.40

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5755	24.00	30.00	36.00	24.00	11.00	17.00	11.00
High	5795	24.00	30.00	36.00	24.00	11.00	17.00	11.00

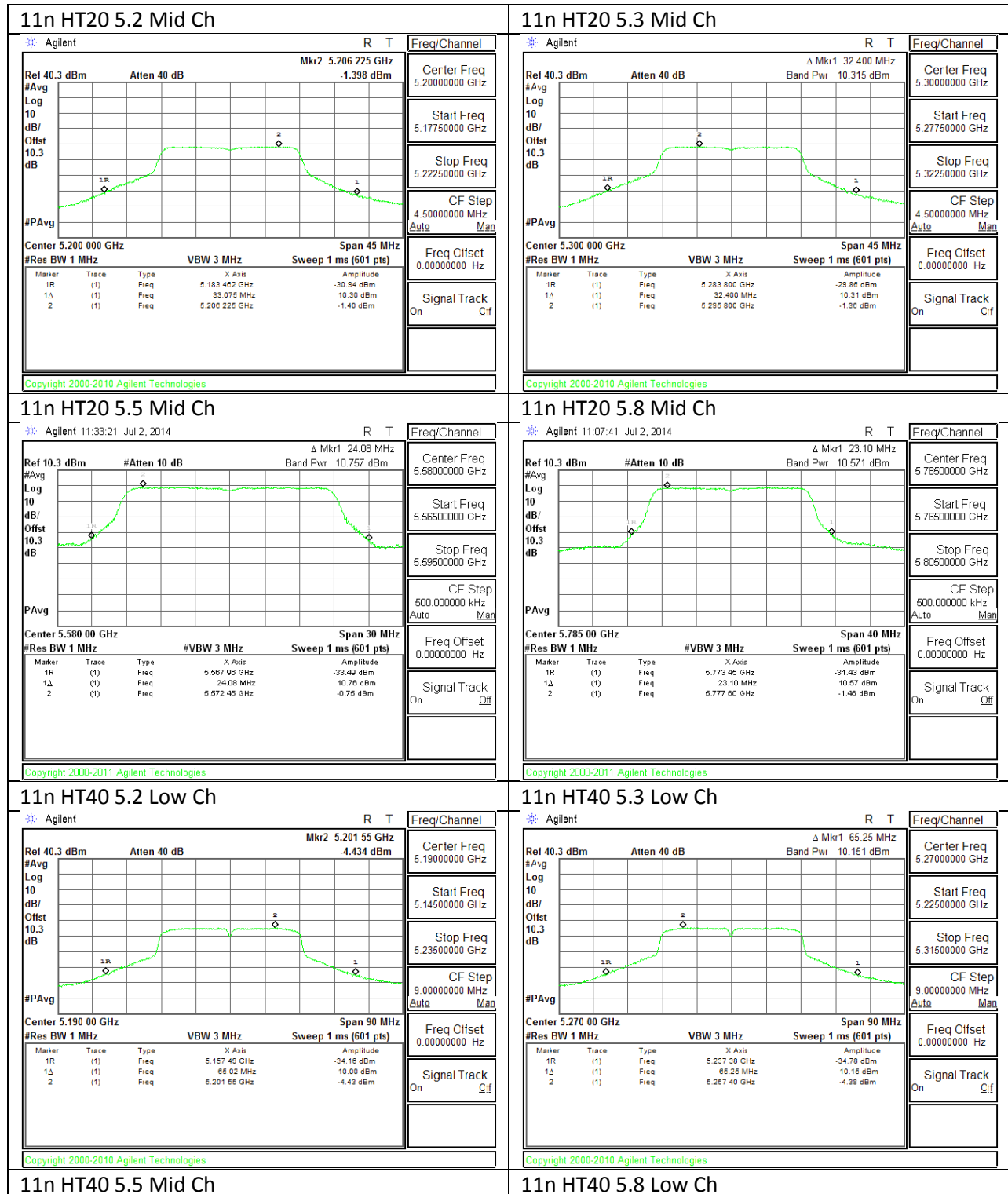
Duty Cycle CF (dB)	0.62	Included in Calculations of Corr'd Power & PPCD
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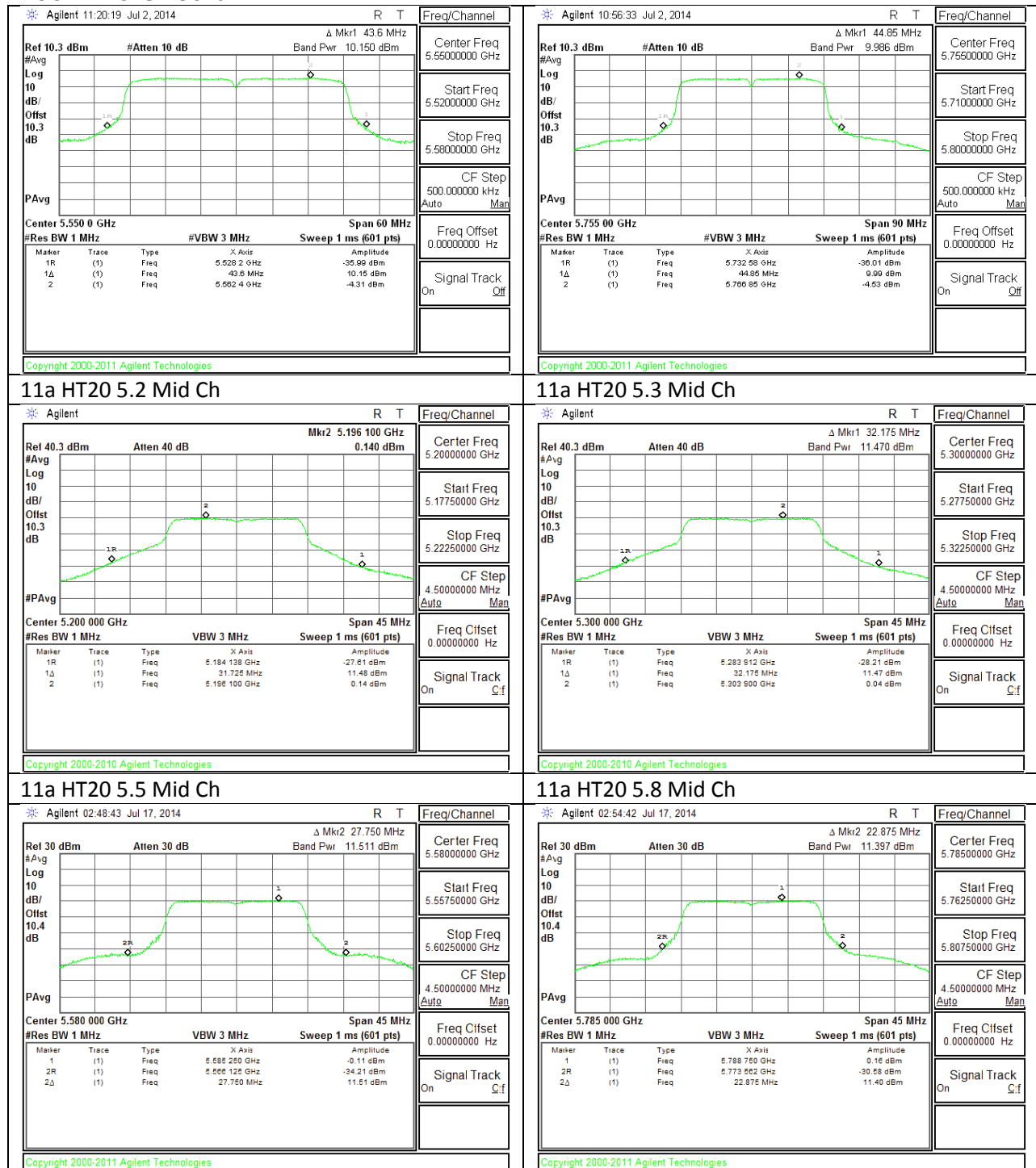
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5755	9.99	10.61	24.00	-13.39
High	5795	10.31	10.93	24.00	-13.07

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5755	-4.53	-3.91	11.00	-14.91
High	5795	-4.17	-3.55	11.00	-14.55

10.4.1. OUTPUT POWER AND PPSD PLOTS, Chain 0



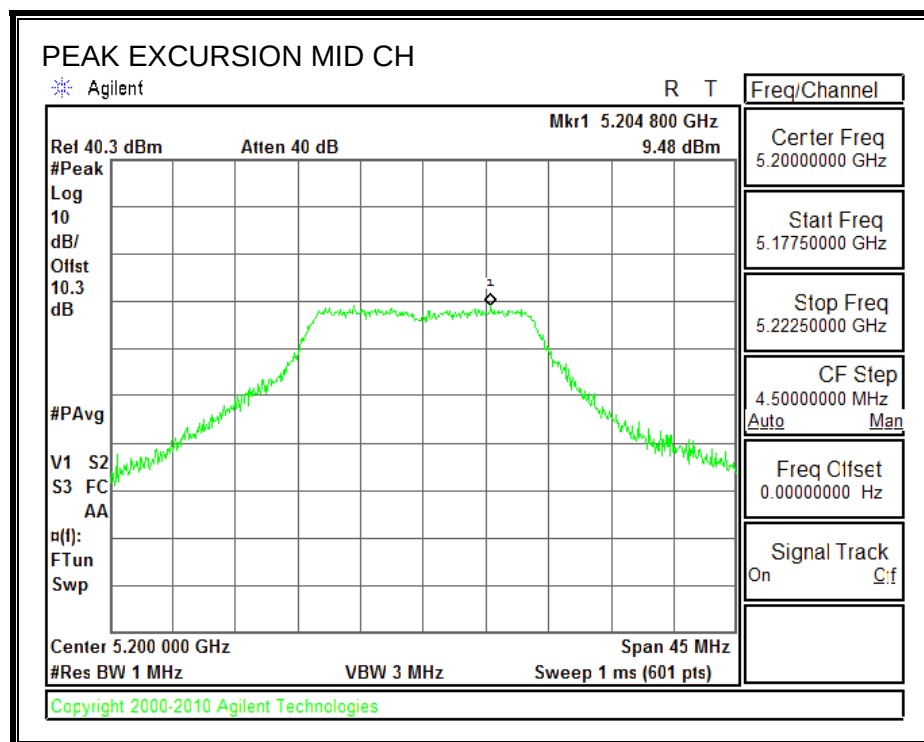
10.5. PEAK EXCURSION**LIMITS**

FCC §15.407 (a) (6)

The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

RESULTS**10.5.1. 802.11a MODE IN THE 5.2 GHz BAND**

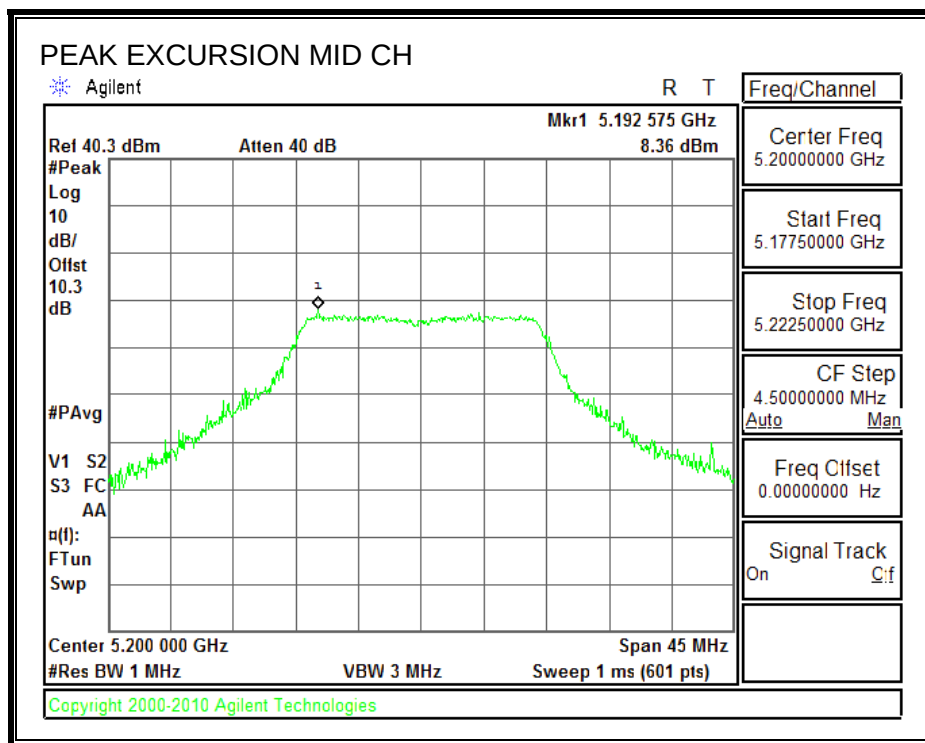
Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5200	9.480	0.14	0.26	9.08	13	-3.92

PEAK EXCURSION

10.5.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5200	8.360	-1.40	0.33	9.43	13	-3.57

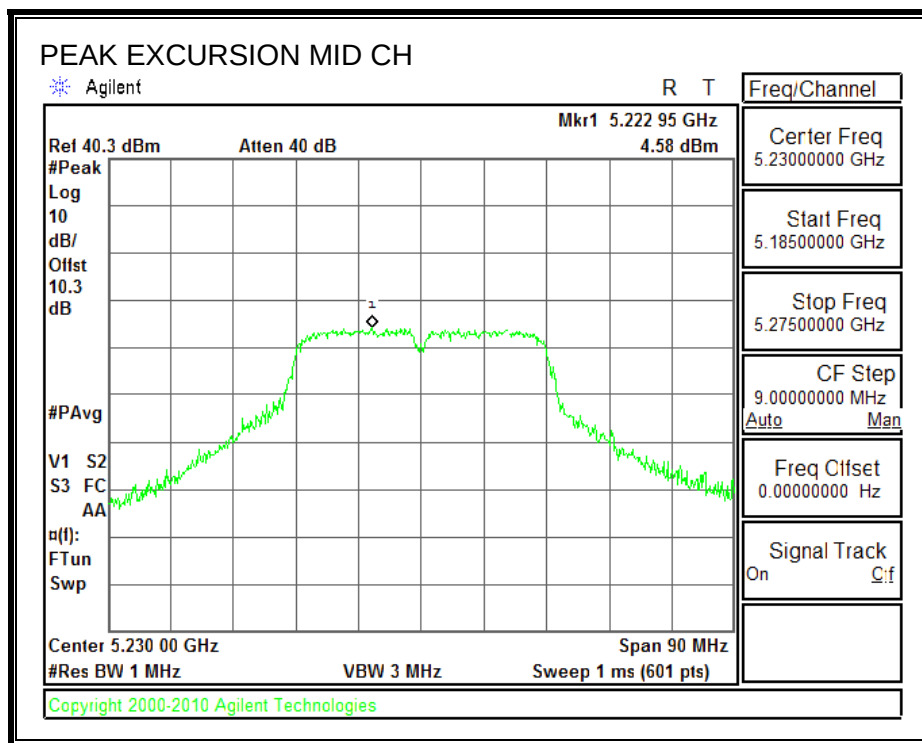
PEAK EXCURSION



10.5.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5230	4.580	-4.54	0.62	8.50	13	-4.50

PEAK EXCURSION



11. 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

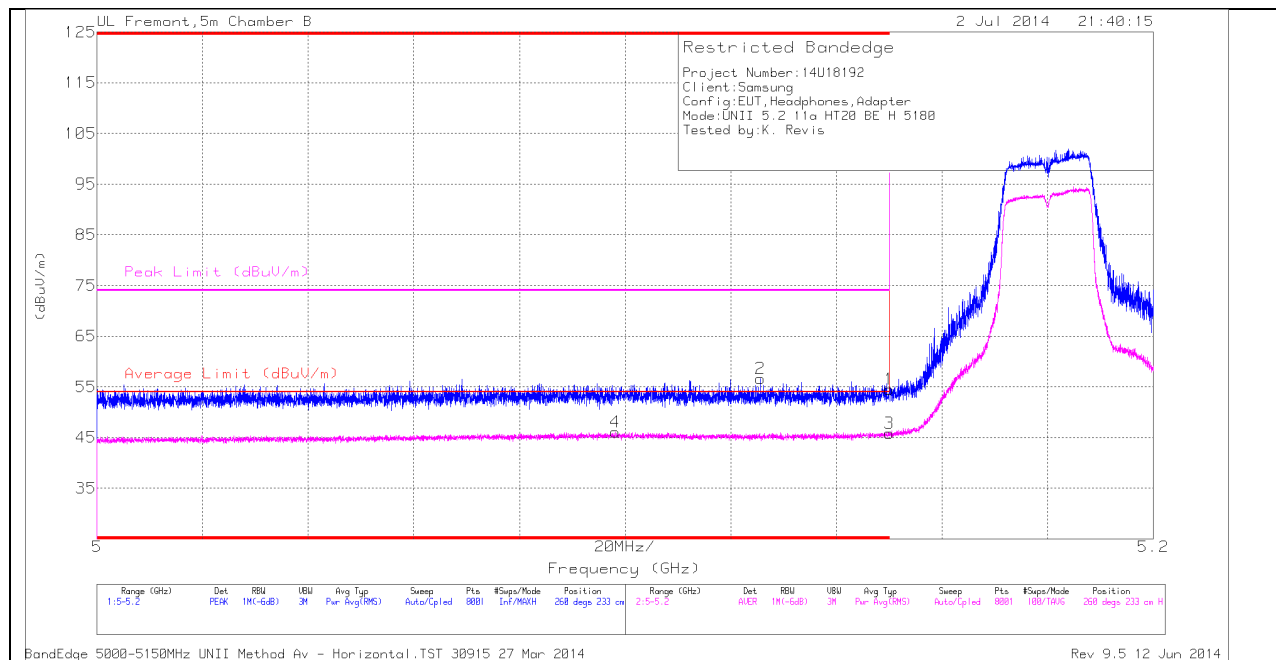
The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters.

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.

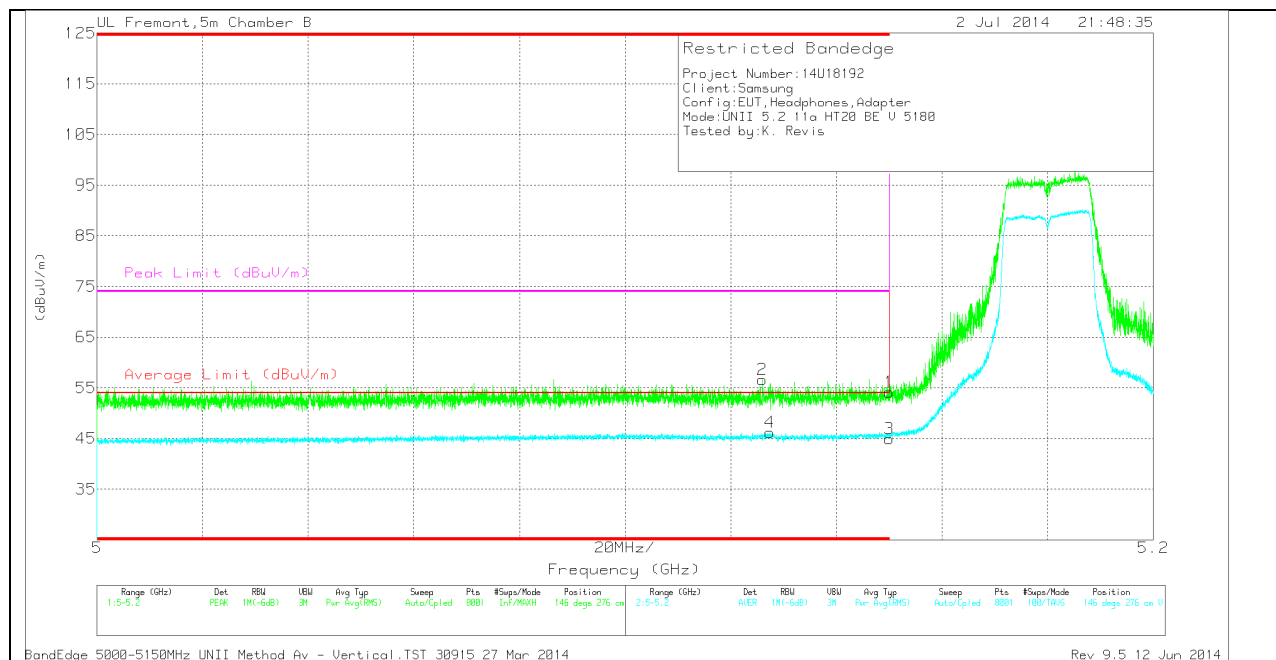
The spectrum from 1GHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

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.

11.1. 5.2 GHz**11.1.1. 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/FI tr/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
4	* 5.098	31.54	RMS	34.2	-20	.26	46.05	54	-7.95	-	-	260	233	H
2	* 5.126	42.57	PK	34.3	-20.2	0	56.67	-	-	74	-17.33	260	233	H
1	* 5.15	40.49	PK	34.3	-20.3	0	54.49	-	-	74	-19.51	260	233	H
3	* 5.15	31.5	RMS	34.3	-20.3	.26	45.81	54	-8.19	-	-	260	233	H

VERTICAL PEAK AND AVERAGE PLOT

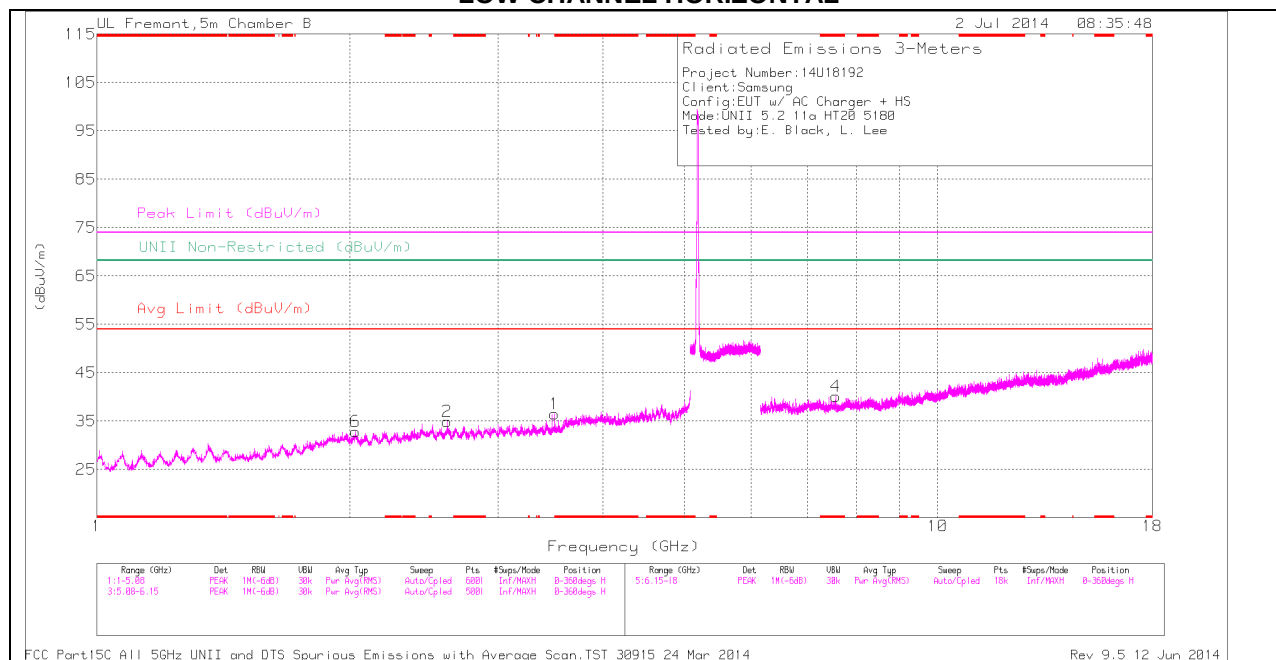


VERTICAL DATA

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.126	42.57	PK	34.3	-20.2	0	56.67	-	-	74	-17.33	146	276	V
4	* 5.127	31.76	RMS	34.3	-20.2	.26	46.17	54	-7.83	-	-	146	276	V
1	* 5.15	40.15	PK	34.3	-20.3	0	54.15	-	-	74	-19.85	146	276	V
3	* 5.15	30.6	RMS	34.3	-20.3	.26	44.91	54	-9.09	-	-	146	276	V

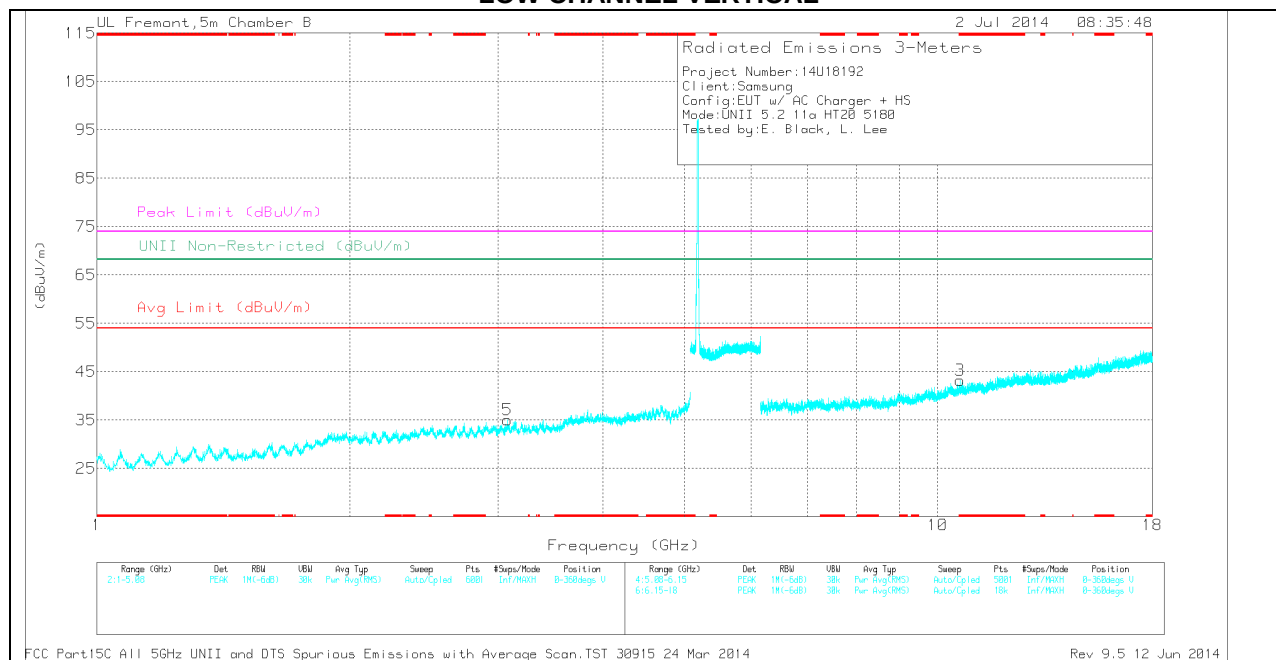
HARMONICS AND SPURIOUS EMISSIONS

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.501	35.34	PK	32.8	-31.7	0	36.44	-	-	74	-37.56	-	-	0-360	101	H
4	* 7.563	31.21	PK	35.6	-26.7	0	40.11	-	-	74	-33.89	-	-	0-360	200	H
3	* 10.628	27.66	PK	37.7	-22.1	0	43.26	-	-	74	-30.74	-	-	0-360	101	V
6	2.03	35	PK	31.3	-33.5	0	32.8	-	-	-	-	68.2	-35.4	0-360	200	H
2	2.609	35.28	PK	32.4	-32.7	0	34.98	-	-	-	-	68.2	-33.22	0-360	101	H
5	3.076	34.23	PK	32.9	-32.1	0	35.03	-	-	-	-	68.2	-33.17	0-360	101	V

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

PK - Peak detector

Radiated Emissions

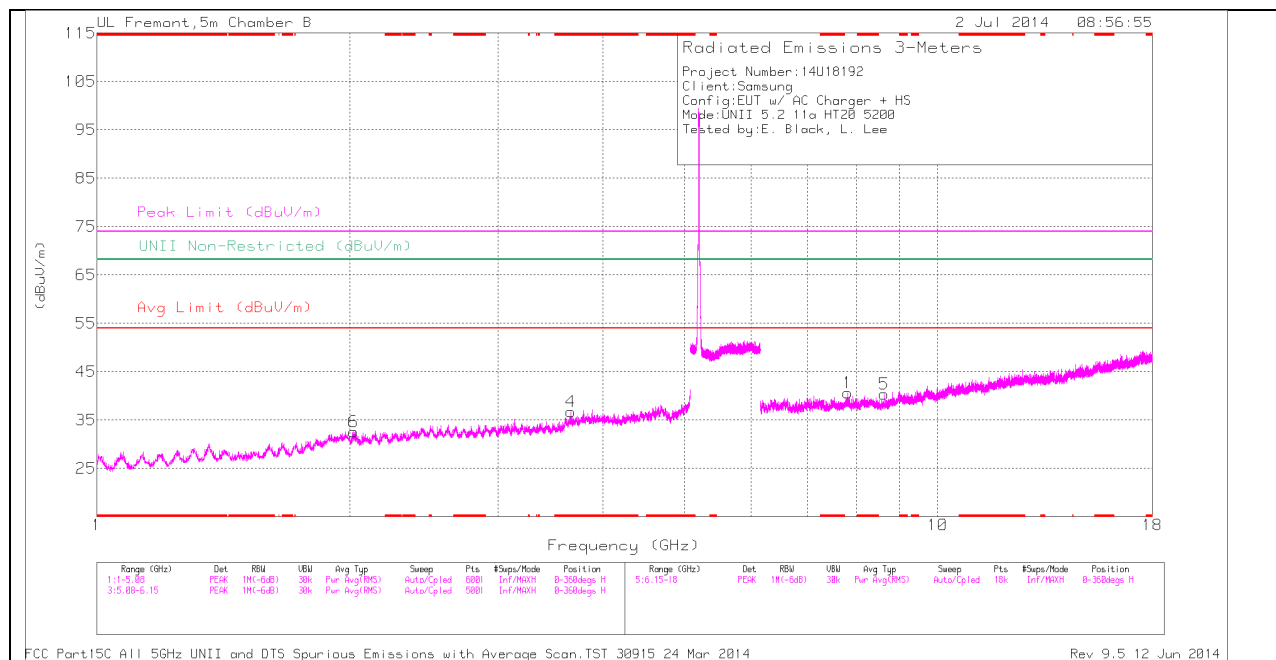
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.5	41.46	PK1	32.8	-31.7	0	42.56	-	-	74	-31.44	-	-	359	100	H
* 3.5	29.56	AD1	32.8	-31.7	.26	30.88	54	-23.12	-	-	-	-	359	100	H

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

PK1 - KDB789033 Method: Peak

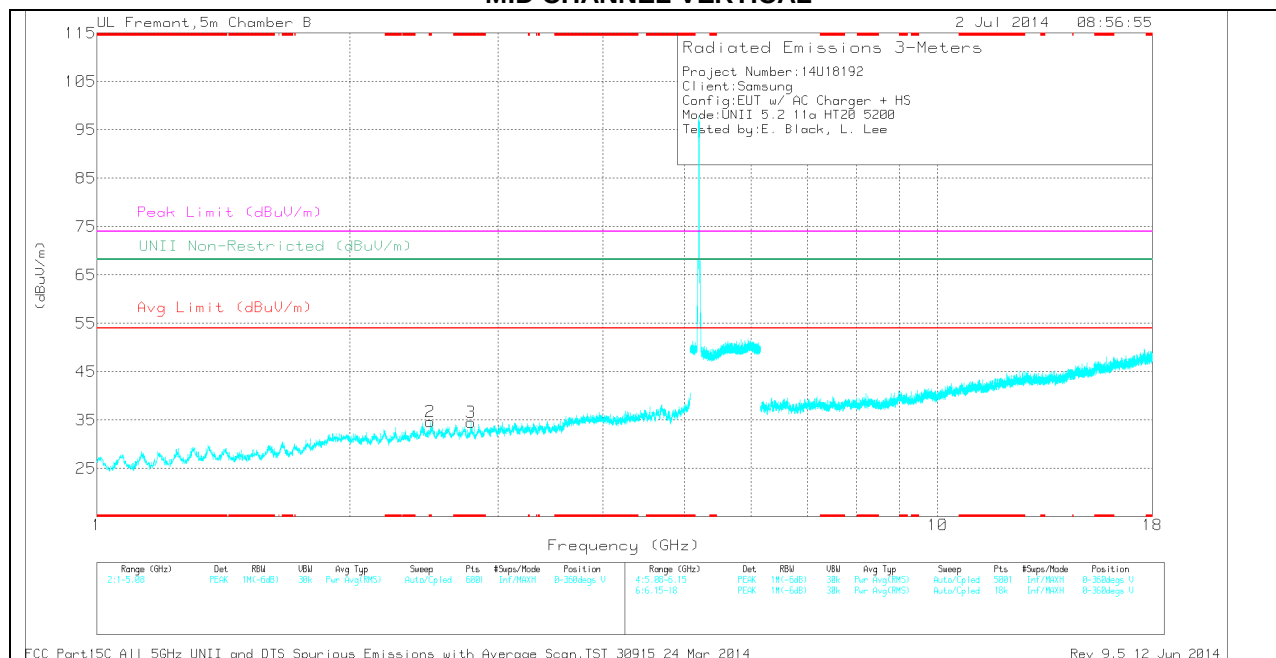
AD1 - KDB789033 Method: AD Primary Power Average

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 3.664	34.76	PK	33.3	-31.3	0	36.76	-	-	74	-37.24	-	-	0-360	200	H
2	* 2.491	34.57	PK	32.4	-32.3	0	34.67	-	-	74	-39.33	-	-	0-360	200	V
3	* 2.788	34.68	PK	32.3	-32.5	0	34.48	-	-	74	-39.52	-	-	0-360	101	V
6	2.02	34.67	PK	31.3	-33.4	0	32.57	-	-	-	-	68.2	-35.63	0-360	100	H
1	7.814	31.17	PK	35.7	-26.2	0	40.67	-	-	-	-	68.2	-27.53	0-360	101	H
5	8.638	30.21	PK	35.8	-25.6	0	40.41	-	-	-	-	68.2	-27.79	0-360	199	H

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

PK - Peak detector

Radiated Emissions

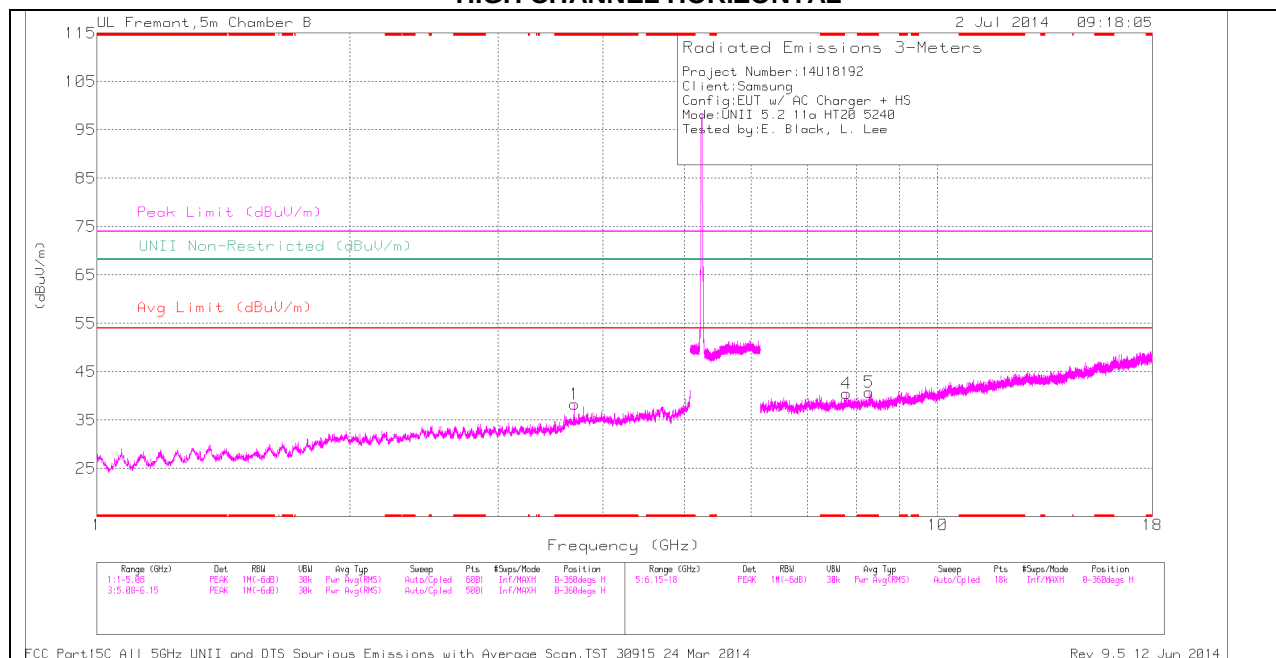
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.666	40.97	PK1	33.3	-31.3	0	42.97	-	-	74	-31.03	-	-	359	200	H
* 3.664	30.08	AD1	33.3	-31.3	.26	32.3	54	-21.7	-	-	-	-	359	200	H

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

PK1 - KDB789033 Method: Peak

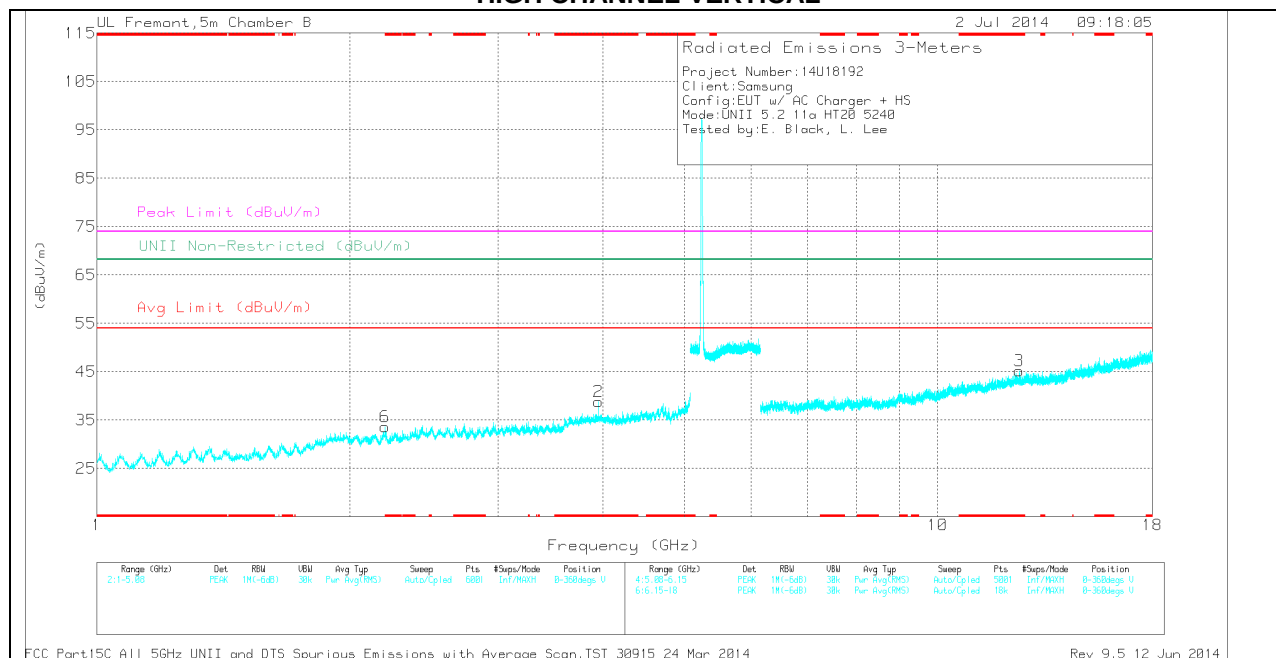
AD1 - KDB789033 Method: AD Primary Power Average

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.701	36.35	PK	33.3	-31.4	0	38.25	-	-	74	-35.75	-	-	0-360	200	H
2	* 3.949	35.83	PK	33.7	-30.7	0	38.83	-	-	74	-35.17	-	-	0-360	101	V
6	* 2.202	34.66	PK	31.3	-32.3	0	33.66	-	-	74	-40.34	-	-	0-360	101	V
5	* 8.28	31.62	PK	35.7	-26.6	0	40.72	-	-	74	-33.28	-	-	0-360	101	H
3	* 12.494	28	PK	39	-21.8	0	45.2	-	-	74	-28.8	-	-	0-360	200	V
4	7.792	31.33	PK	35.7	-26.5	0	40.53	-	-	-	-	68.2	-27.67	0-360	101	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/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.702	41.21	PK1	33.3	-31.4	0	43.11	-	-	74	-30.89	-	-	359	199	H
* 3.701	30.31	AD1	33.3	-31.4	.26	32.43	54	-21.57	-	-	-	-	359	199	H
* 3.948	40.62	PK1	33.7	-30.7	0	43.62	-	-	74	-30.38	-	-	359	102	V
* 3.949	29.98	AD1	33.7	-30.7	.26	33.2	54	-20.8	-	-	-	-	359	102	V

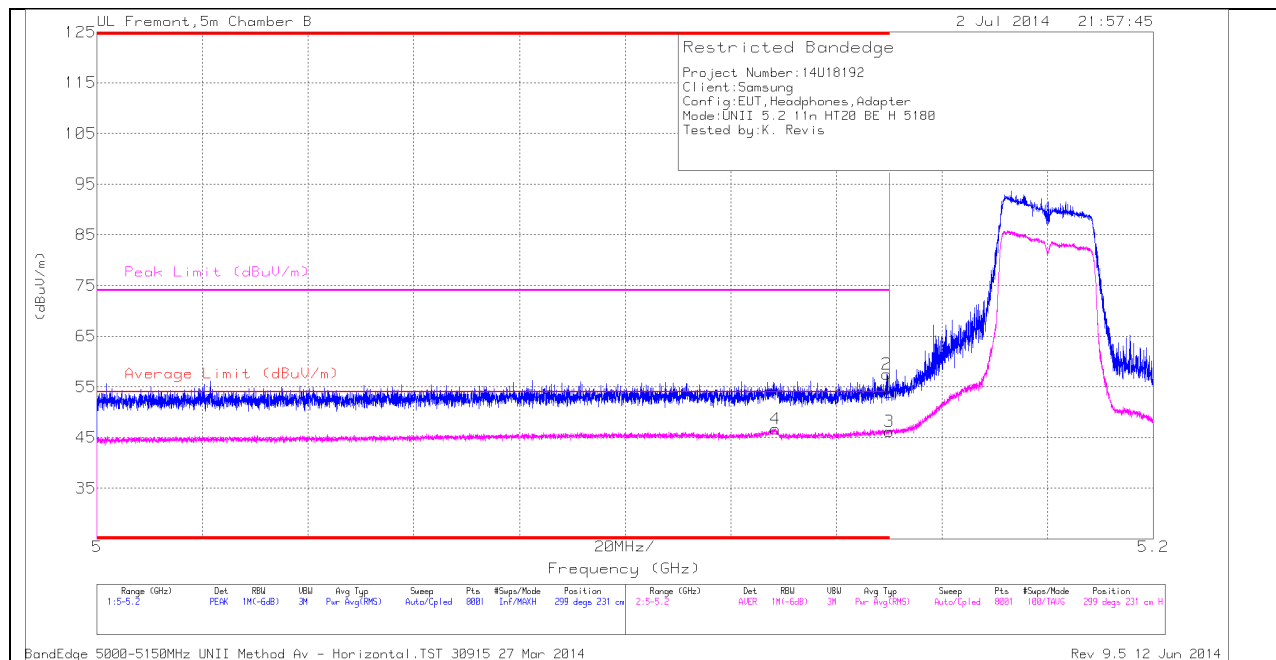
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

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

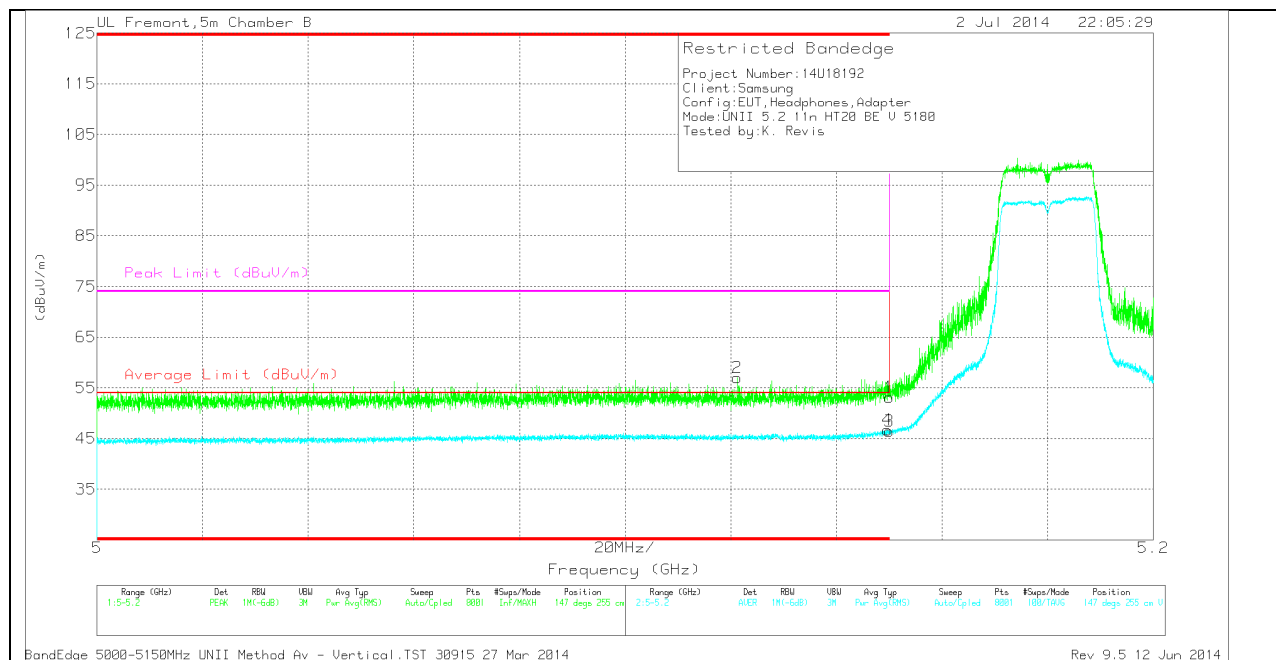
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/FI tr/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	39.85	PK	34.3	-20.3	0	53.85	-	-	74	-20.15	299	231	H
2	* 5.15	43.49	PK	34.3	-20.3	0	57.49	-	-	74	-16.51	299	231	H
3	* 5.15	31.87	RMS	34.3	-20.3	.33	46.18	54	-7.82	-	-	299	231	H
4	* 5.129	32.33	RMS	34.3	-20.2	.33	46.74	54	-7.26	-	-	299	231	H

VERTICAL PEAK AND AVERAGE PLOT

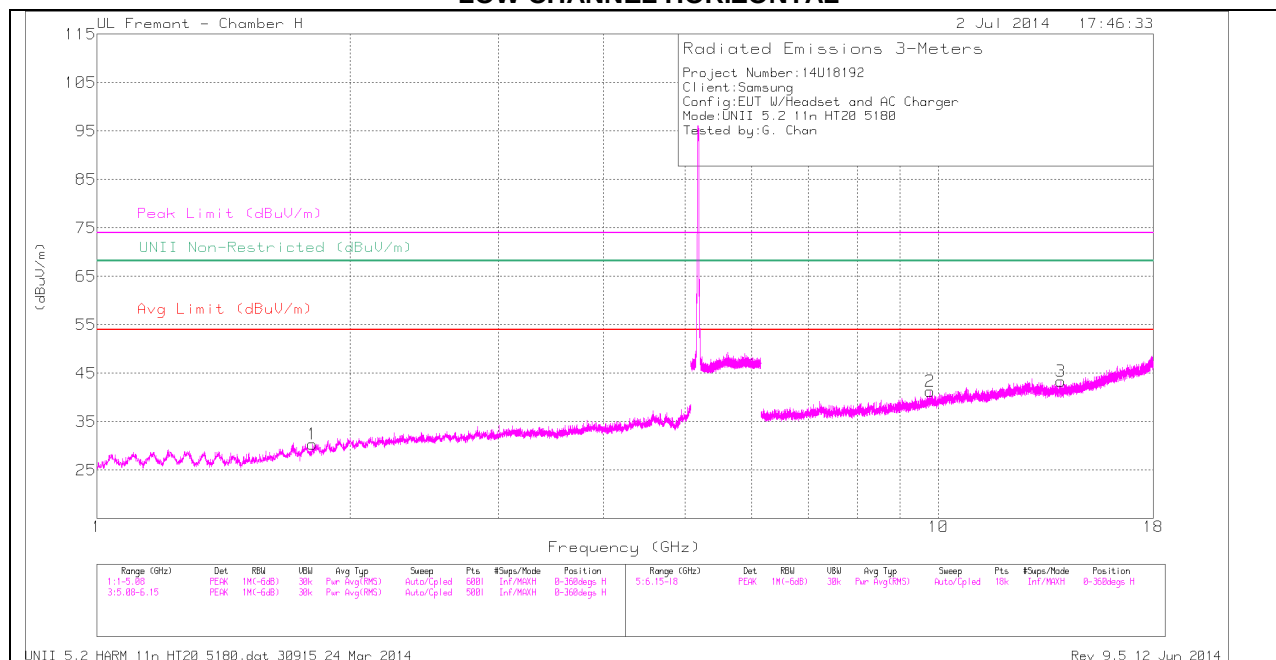


VERTICAL DATA

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	39.11	PK	34.3	-20.3	0	53.11	-	-	74	-20.89	147	255	V
2	* 5.121	42.9	PK	34.3	-20.2	0	57	-	-	74	-17	147	255	V
3	* 5.15	32.11	RMS	34.3	-20.3	.33	46.42	54	-7.58	-	-	147	255	V
4	* 5.15	32.33	RMS	34.3	-20.3	.33	46.64	54	-7.36	-	-	147	255	V

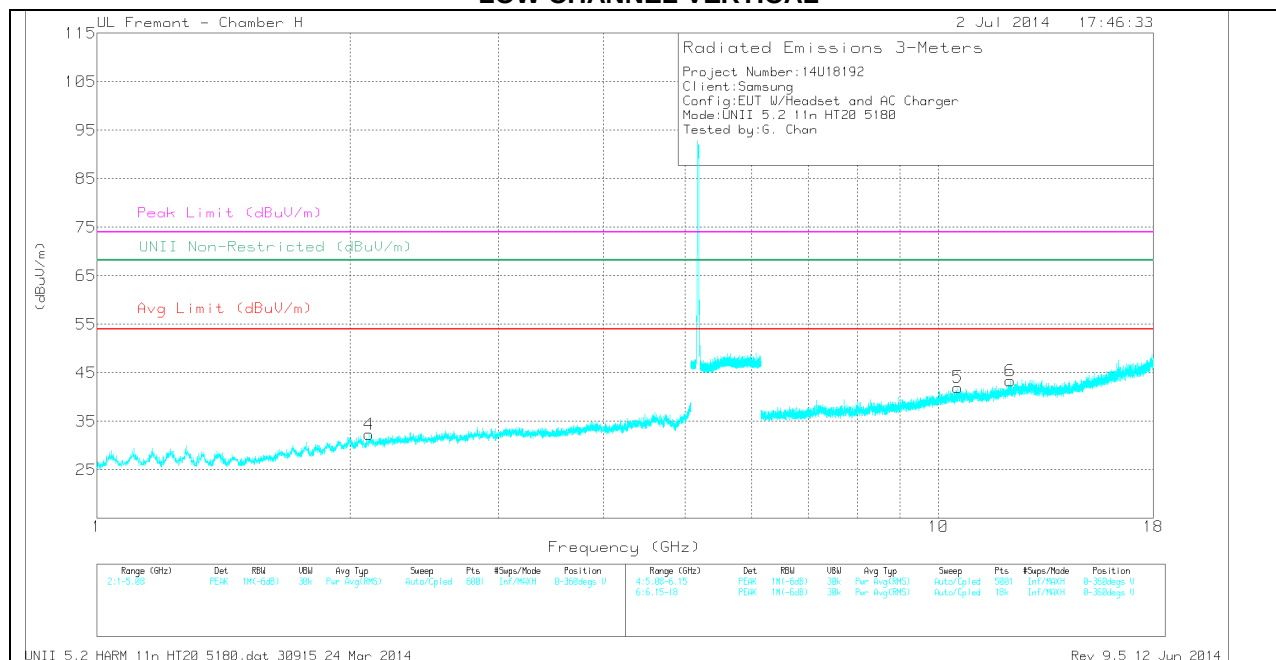
HARMONICS AND SPURIOUS EMISSIONS

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 12.169	29.75	PK	38.9	-25.3	0	43.35	-	-	74	-30.65	-	-	0-360	201	V
1	1.804	35.36	PK	30	-35	0	30.36	-	-	-	-	68.2	-37.84	0-360	100	H
4	2.104	35.33	PK	31.5	-34.5	0	32.33	-	-	-	-	68.2	-35.87	0-360	201	V
2	9.78	30.71	PK	36.9	-26.3	0	41.31	-	-	-	-	68.2	-26.89	0-360	100	H
5	10.549	29.4	PK	37.6	-25	0	42	-	-	-	-	68.2	-26.2	0-360	100	V
3	13.968	30.2	PK	39.2	-26	0	43.4	-	-	-	-	68.2	-24.8	0-360	100	H

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

PK - Peak detector

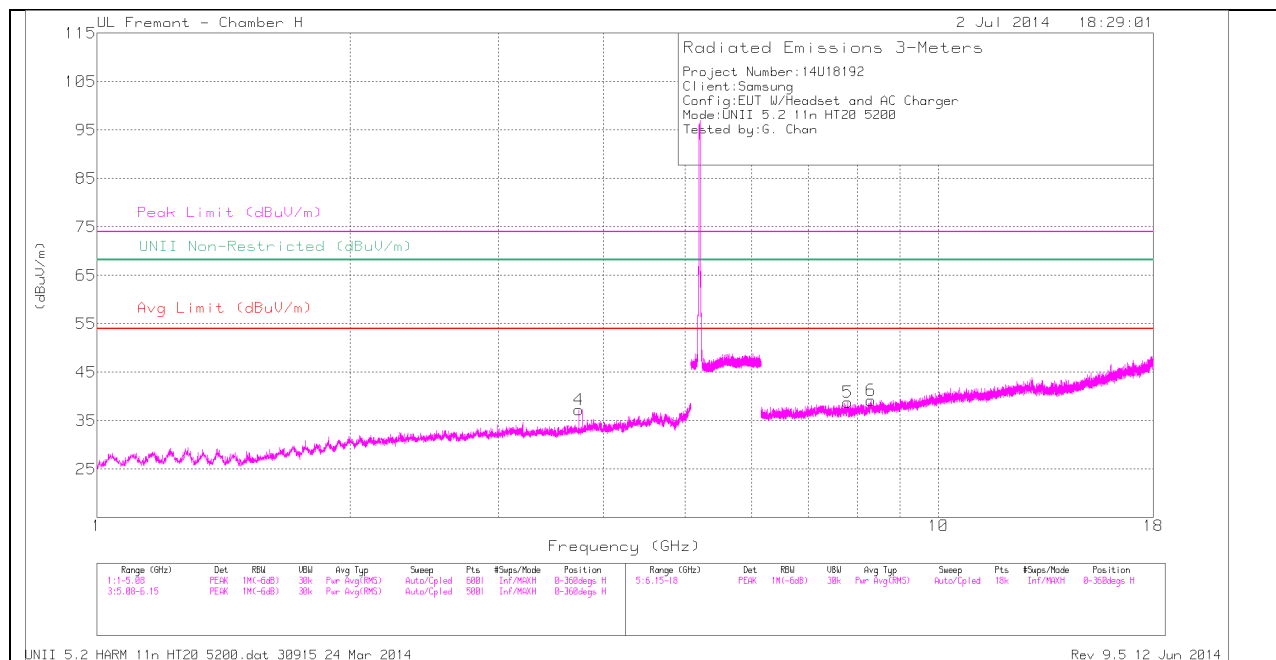
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 12.168	36.17	PK1	38.9	-25.3	0	49.77	-	-	74	-24.23	-	-	3	202	V
* 12.169	36.72	PK1	38.9	-25.3	0	50.32	-	-	74	-23.68	-	-	3	202	V
1.805	43.1	PK1	30	-35	0	38.1	-	-	-	-	68.2	-30.1	3	100	H
1.806	42.1	PK1	30.1	-35	0	37.2	-	-	-	-	68.2	-31	2	100	H
1.806	42.39	PK1	30.1	-35	0	37.49	-	-	-	-	68.2	-30.71	3	100	H
2.106	42.72	PK1	31.5	-34.5	0	39.72	-	-	-	-	68.2	-28.48	3	202	V
9.779	36.7	PK1	36.9	-26.3	0	47.3	-	-	-	-	68.2	-20.9	3	100	H
9.782	36.52	PK1	37	-26.3	0	47.22	-	-	-	-	68.2	-20.98	3	100	H
10.547	36.24	PK1	37.6	-25	0	48.84	-	-	-	-	68.2	-19.36	3	100	V
10.549	36.34	PK1	37.6	-25	0	48.94	-	-	-	-	68.2	-19.26	3	100	V
13.968	36.93	PK1	39.2	-26	0	50.13	-	-	-	-	68.2	-18.07	3	100	H
13.97	37	PK1	39.2	-26	0	50.2	-	-	-	-	68.2	-18	3	100	H

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

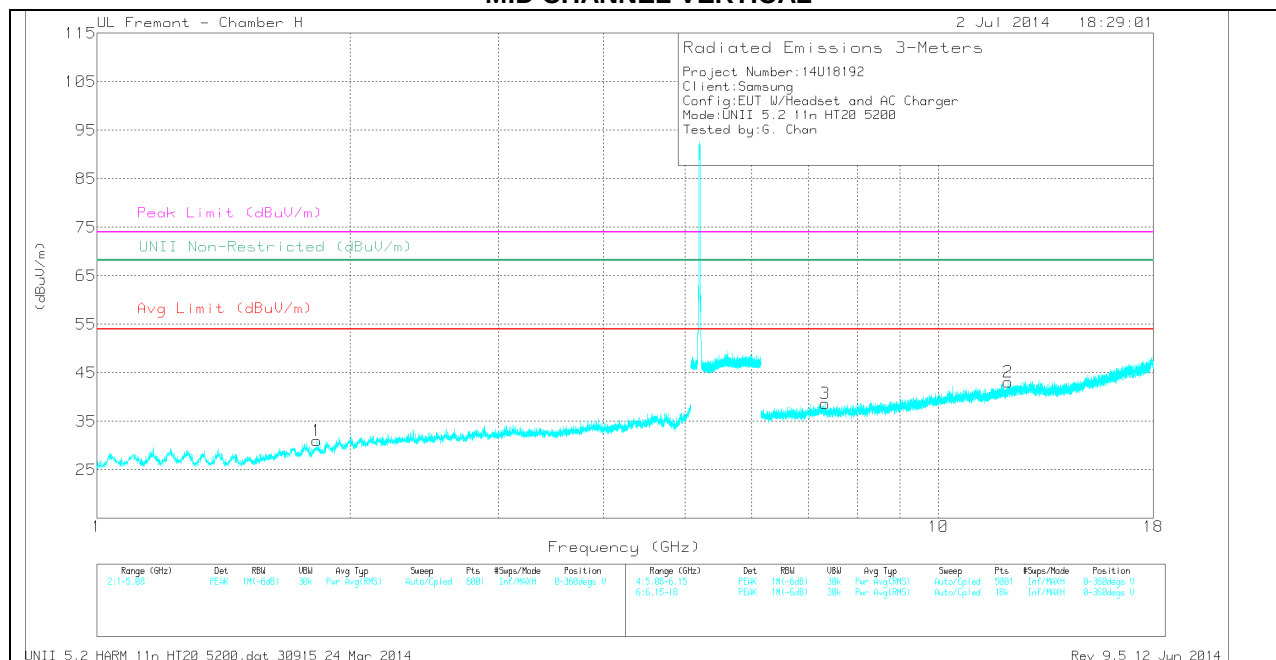
PK1 - KDB789033 Method: Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 3.737	37.09	PK	33.2	-33	0	37.29	-	-	74	-36.71	-	-	0-360	201	H
6	* 8.309	30.22	PK	36.1	-27.1	0	39.22	-	-	74	-34.78	-	-	0-360	100	H
2	* 12.105	29.25	PK	38.9	-25	0	43.15	-	-	74	-30.85	-	-	0-360	201	V
3	* 7.335	32.37	PK	36.2	-29.9	0	38.67	-	-	74	-35.33	-	-	0-360	201	V
1	1.824	35.87	PK	30.2	-35	0	31.07	-	-	-	-	68.2	-37.13	0-360	201	V
5	7.8	31.37	PK	36.1	-28.6	0	38.87	-	-	-	-	68.2	-29.33	0-360	100	H

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

PK - Peak detector

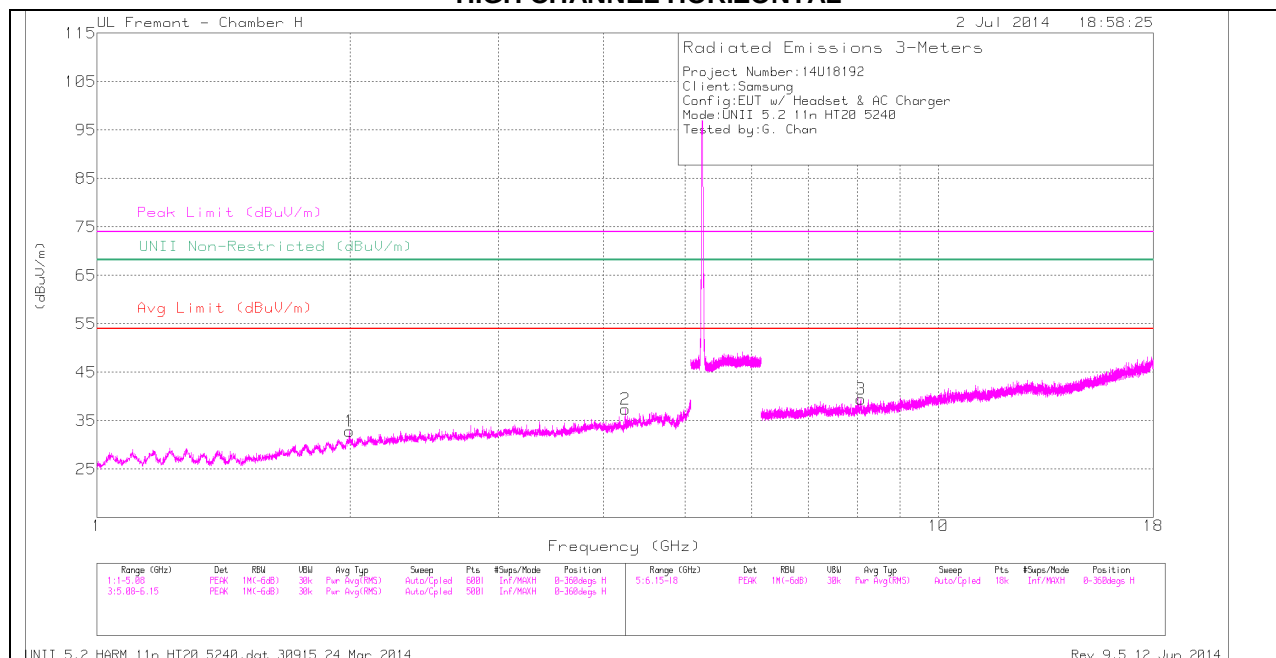
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.739	42.66	PK1	33.2	-33.1	0	42.76	-	-	74	-31.24	-	-	3	202	H
* 8.311	37.77	PK1	36.1	-27.1	0	46.77	-	-	74	-27.23	-	-	3	100	H
* 12.103	36.29	PK1	38.9	-25	0	50.19	-	-	74	-23.81	-	-	3	202	V
* 7.334	39.87	PK1	36.2	-29.9	0	46.17	-	-	74	-27.83	-	-	3	202	V
* 12.169	36.72	PK1	38.9	-25.3	0	50.32	-	-	74	-23.68	-	-	3	202	V
1.824	43.3	PK1	30.2	-35	0	38.5	-	-	-	-	68.2	-29.7	3	202	V
2.106	42.56	PK1	31.5	-34.5	0	39.56	-	-	-	-	68.2	-28.64	3	202	V
2.106	42.56	PK1	31.5	-34.5	0	39.56	-	-	-	-	68.2	-28.64	3	202	V
2.106	42.56	PK1	31.5	-34.5	0	39.56	-	-	-	-	68.2	-28.64	3	202	V
7.8	38.58	PK1	36.1	-28.6	0	46.08	-	-	-	-	68.2	-22.12	3	100	H
9.779	36.7	PK1	36.9	-26.3	0	47.3	-	-	-	-	68.2	-20.9	3	100	H
10.549	36.34	PK1	37.6	-25	0	48.94	-	-	-	-	68.2	-19.26	3	100	V
13.968	36.93	PK1	39.2	-26	0	50.13	-	-	-	-	68.2	-18.07	3	100	H

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

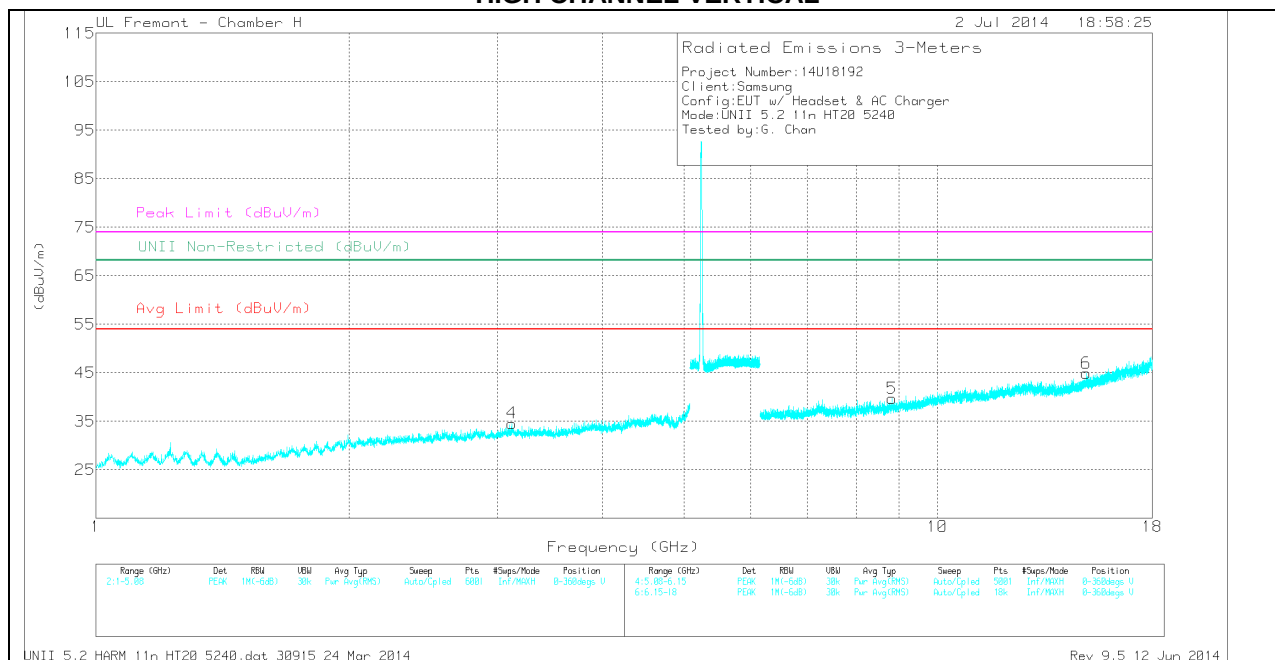
PK1 - KDB789033 Method: Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.242	36.83	PK	33.5	-32.9	0	37.43	-	-	74	-36.57	-	-	0-360	201	H
3	* 8.086	31.67	PK	36	-28.2	0	39.47	-	-	74	-34.53	-	-	0-360	201	H
1	1.997	36.09	PK	31.3	-34.5	0	32.89	-	-	-	-	68.2	-35.31	0-360	201	H
4	3.119	34.4	PK	32.8	-32.6	0	34.6	-	-	-	-	68.2	-33.6	0-360	201	V
5	8.832	30.41	PK	36.3	-27	0	39.71	-	-	-	-	68.2	-28.49	0-360	201	V
6	15.028	30	PK	40.6	-25.7	0	44.9	-	-	-	-	68.2	-23.3	0-360	201	V

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

PK - Peak detector

Radiated Emissions

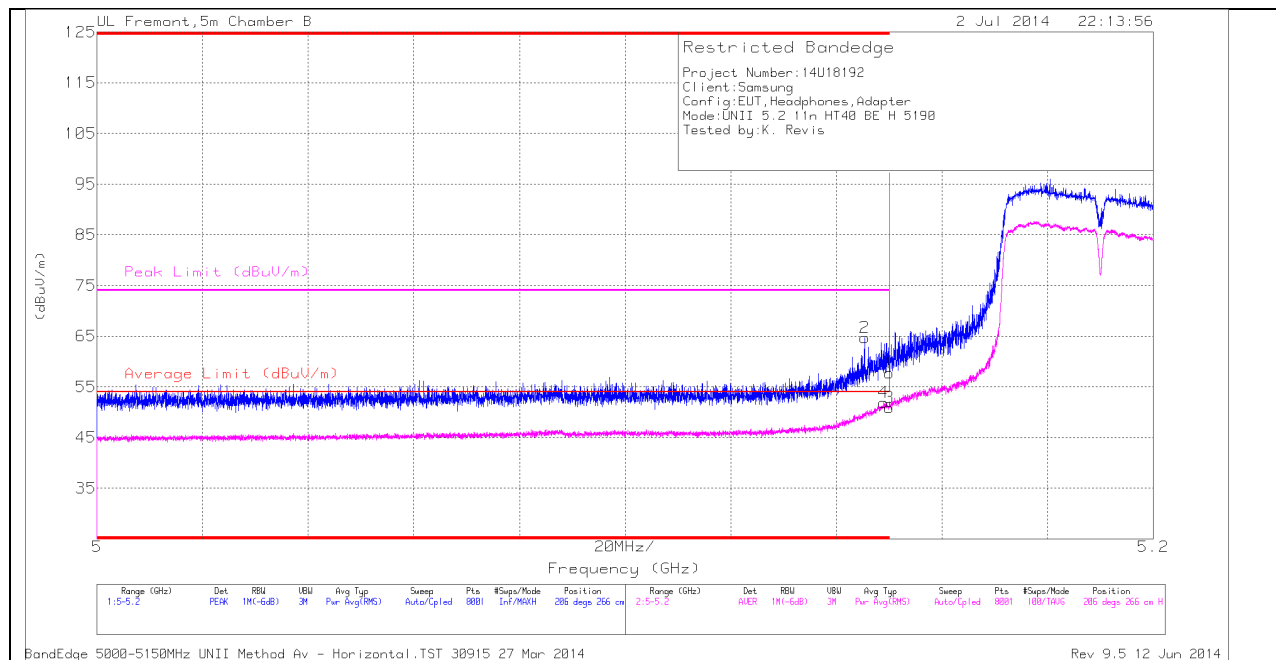
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.242	41.73	PK1	33.5	-32.9	0	42.33	-	-	74	-31.67	-	-	3	202	H
* 8.088	38.31	PK1	36	-28.2	0	46.11	-	-	74	-27.89	-	-	3	202	H
* 12.169	36.72	PK1	38.9	-25.3	0	50.32	-	-	74	-23.68	-	-	3	202	V
1.998	43.58	PK1	31.3	-34.5	0	40.38	-	-	-	-	68.2	-27.82	3	202	H
2.106	42.56	PK1	31.5	-34.5	0	39.56	-	-	-	-	68.2	-28.64	3	202	V
2.106	42.56	PK1	31.5	-34.5	0	39.56	-	-	-	-	68.2	-28.64	3	202	V
2.106	42.56	PK1	31.5	-34.5	0	39.56	-	-	-	-	68.2	-28.64	3	202	V
3.12	41.23	PK1	32.8	-32.6	0	41.43	-	-	-	-	68.2	-26.77	3	202	V
8.833	37.7	PK1	36.3	-27	0	47	-	-	-	-	68.2	-21.2	3	202	V
9.779	36.7	PK1	36.9	-26.3	0	47.3	-	-	-	-	68.2	-20.9	3	100	H
10.549	36.34	PK1	37.6	-25	0	48.94	-	-	-	-	68.2	-19.26	3	100	V
13.968	36.93	PK1	39.2	-26	0	50.13	-	-	-	-	68.2	-18.07	3	100	H
15.029	36.58	PK1	40.6	-25.8	0	51.38	-	-	-	-	68.2	-16.82	3	202	V

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

PK1 - KDB789033 Method: Peak

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

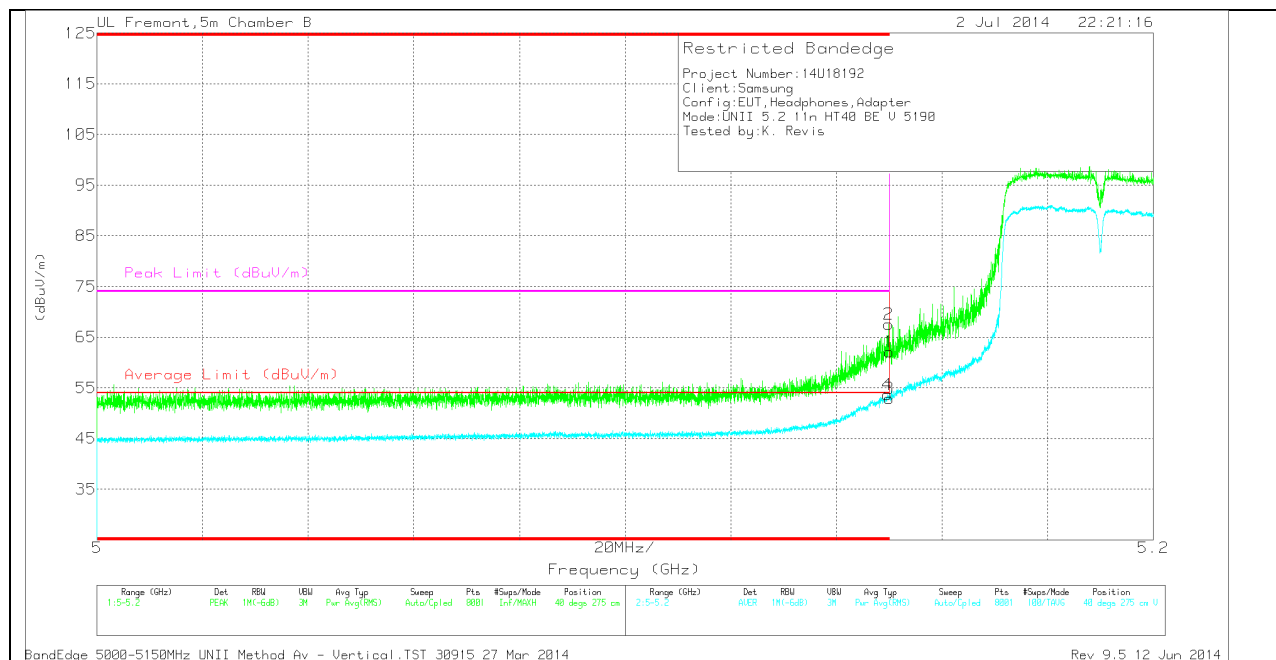
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/FI tr/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	43.79	PK	34.3	-20.3	0	57.79	-	-	74	-16.21	206	266	H
2	* 5.145	50.56	PK	34.3	-20.2	0	64.66	-	-	74	-9.34	206	266	H
3	* 5.15	36.32	RMS	34.3	-20.3	.62	50.95	54	-3.05	-	-	206	266	H
4	* 5.149	37.3	RMS	34.3	-20.3	.62	51.93	54	-2.07	-	-	206	266	H

VERTICAL PEAK AND AVERAGE PLOT

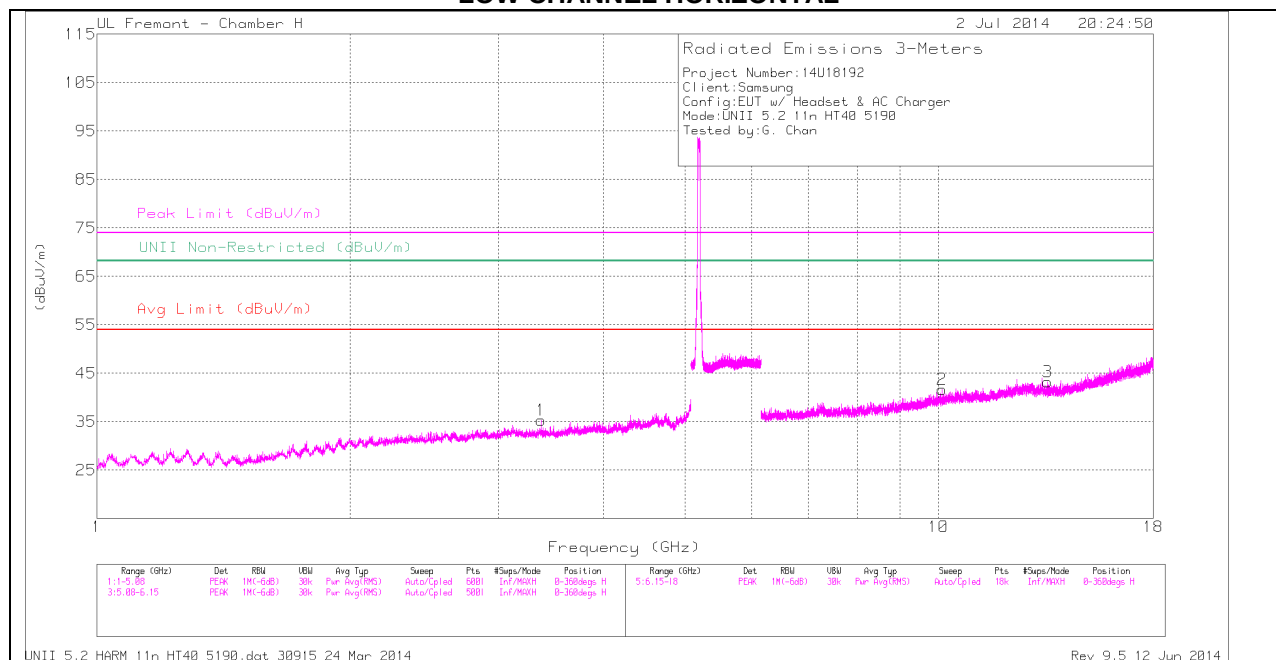


VERTICAL DATA

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.15	48.13	PK	34.3	-20.3	0	62.13	-	-	74	-11.87	40	275	V
2	* 5.15	53.53	PK	34.3	-20.3	0	67.53	-	-	74	-6.47	40	275	V
3	* 5.15	38.32	RMS	34.3	-20.3	.62	52.95	54	-1.05	-	-	40	275	V
4	* 5.15	39.05	RMS	34.3	-20.3	.62	53.68	54	-.32	-	-	40	275	V

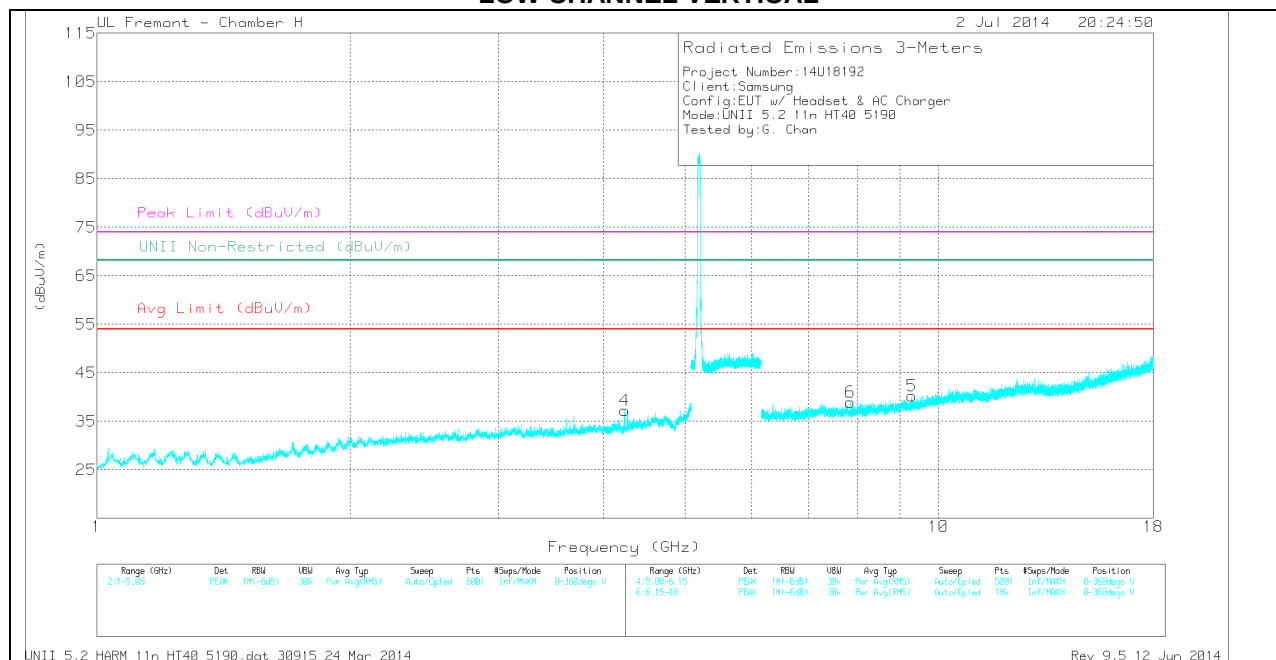
HARMONICS AND SPURIOUS EMISSIONS

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 4.235	36.66	PK	33.5	-32.9	0	37.26	-	-	74	-36.74	-	-	0-360	201	V
1	3.37	35.43	PK	32.9	-33	0	35.33	-	-	-	-	68.2	-32.87	0-360	201	H
6	7.852	31.56	PK	36.1	-28.7	0	38.96	-	-	-	-	68.2	-29.24	0-360	100	V
5	9.295	30.37	PK	36.6	-26.7	0	40.27	-	-	-	-	68.2	-27.93	0-360	100	V
2	10.096	30.17	PK	37.3	-25.8	0	41.67	-	-	-	-	68.2	-26.53	0-360	100	H
3	13.473	30.23	PK	39.1	-26.1	0	43.23	-	-	-	-	68.2	-24.97	0-360	100	H

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

PK - Peak detector

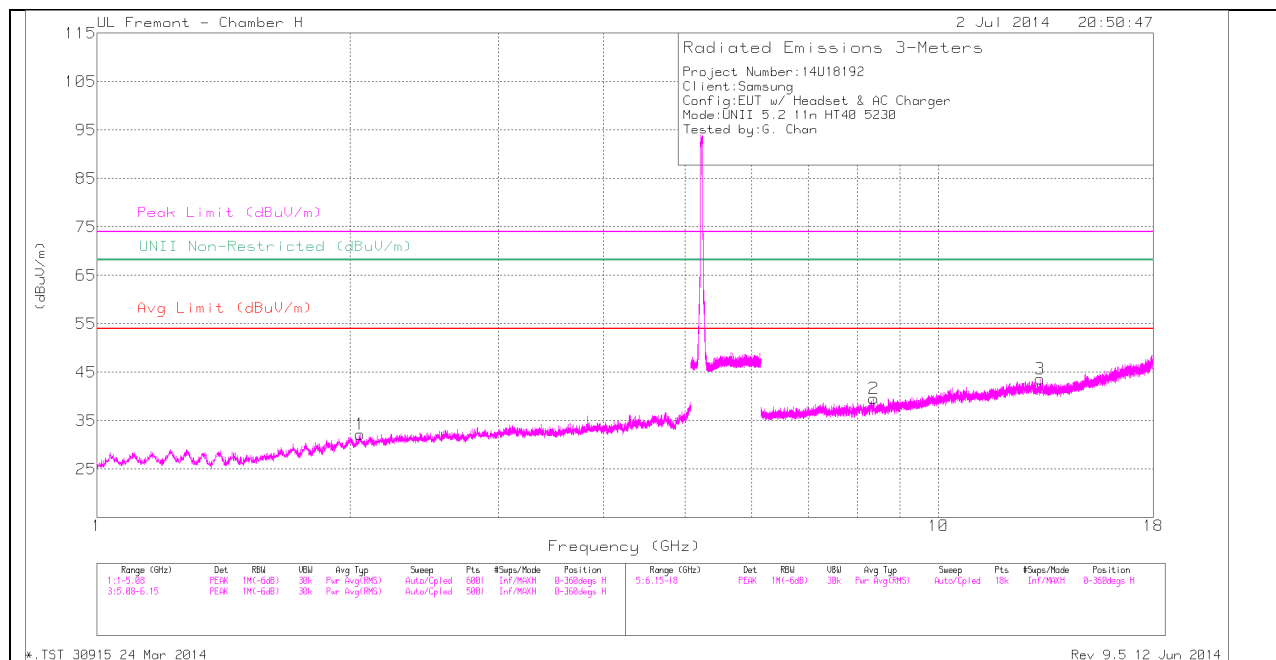
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.234	41.58	PK1	33.5	-32.9	0	42.18	-	-	74	-31.82	-	-	3	202	V
3.369	41.53	PK1	32.9	-33	0	41.43	-	-	-	-	68.2	-26.77	3	202	H
7.852	38.82	PK1	36.1	-28.7	0	46.22	-	-	-	-	68.2	-21.98	3	100	V
9.296	38	PK1	36.6	-26.7	0	47.9	-	-	-	-	68.2	-20.3	3	100	V
10.097	36.99	PK1	37.3	-25.8	0	48.49	-	-	-	-	68.2	-19.71	3	100	H
13.474	36.57	PK1	39.1	-26.1	0	49.57	-	-	-	-	68.2	-18.63	3	100	H

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

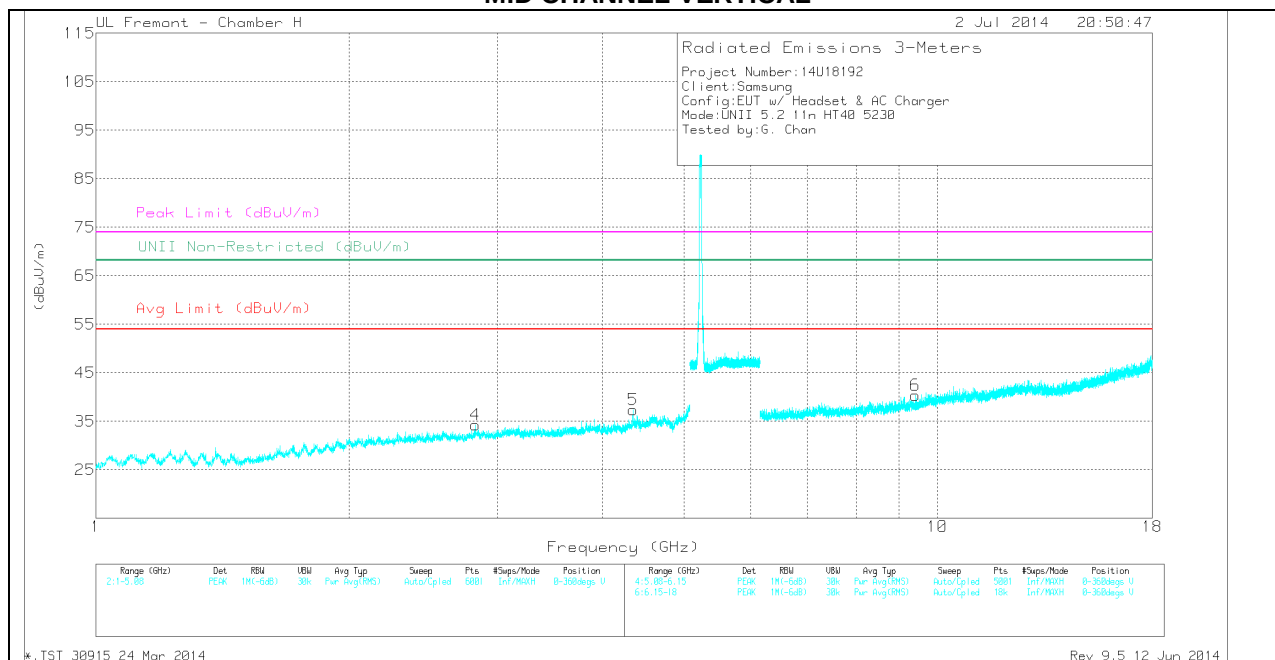
PK1 - KDB789033 Method: Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.826	34.74	PK	32.5	-33	0	34.24	-	-	74	-39.76	-	-	0-360	201	V
5	* 4.346	35.11	PK	33.7	-31.4	0	37.41	-	-	74	-36.59	-	-	0-360	201	V
2	* 8.38	31.32	PK	36.1	-27.8	0	39.62	-	-	74	-34.38	-	-	0-360	201	H
6	* 9.406	30.75	PK	36.7	-27.1	0	40.35	-	-	74	-33.65	-	-	0-360	100	V
1	2.055	35.23	PK	31.4	-34.4	0	32.23	-	-	-	-	68.2	-35.97	0-360	100	H
3	13.214	30.13	PK	39.1	-25.6	0	43.63	-	-	-	-	68.2	-24.57	0-360	100	H

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

PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.827	41.7	PK1	32.5	-33	0	41.2	-	-	74	-32.8	-	-	3	202	V
* 4.345	40.88	PK1	33.7	-31.3	0	43.28	-	-	74	-30.72	-	-	3	202	V
* 8.379	38.27	PK1	36.1	-27.8	0	46.57	-	-	74	-27.43	-	-	3	202	H
* 9.408	37.4	PK1	36.7	-27.1	0	47	-	-	74	-27	-	-	3	100	V
2.054	43.08	PK1	31.4	-34.4	0	40.08	-	-	-	-	68.2	-28.12	3	100	H
13.214	37.21	PK1	39.1	-25.6	0	50.71	-	-	-	-	68.2	-17.49	3	100	H

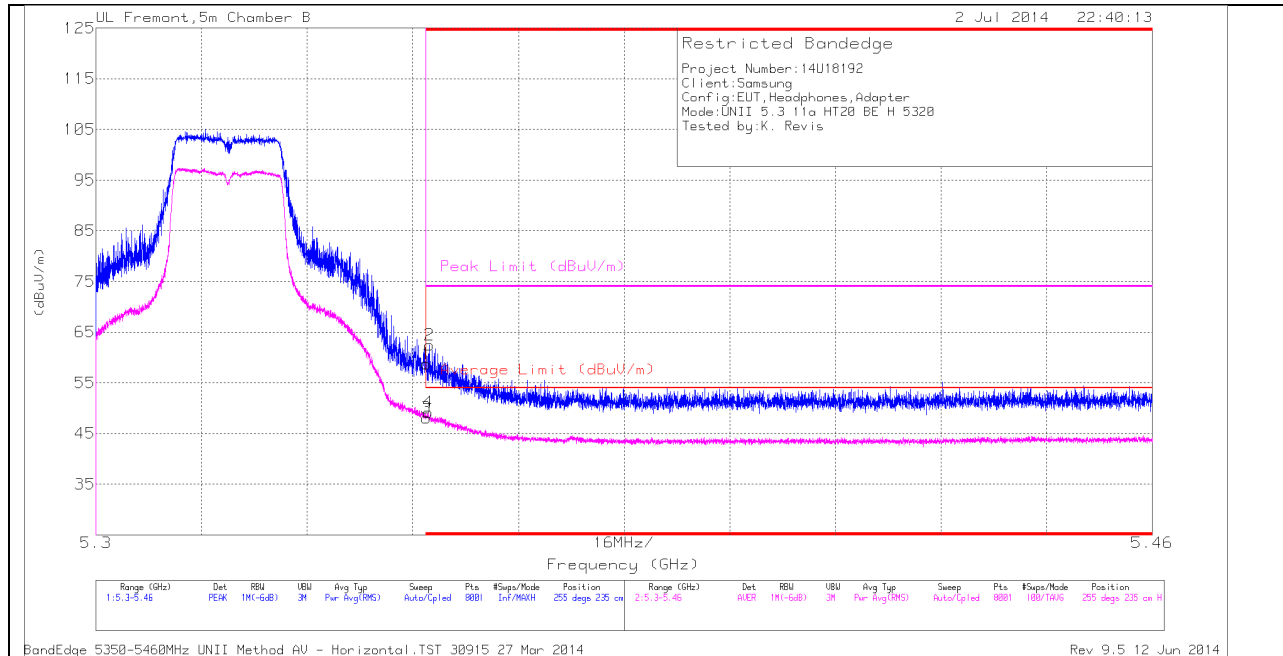
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

11.2. 5.3 GHz

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

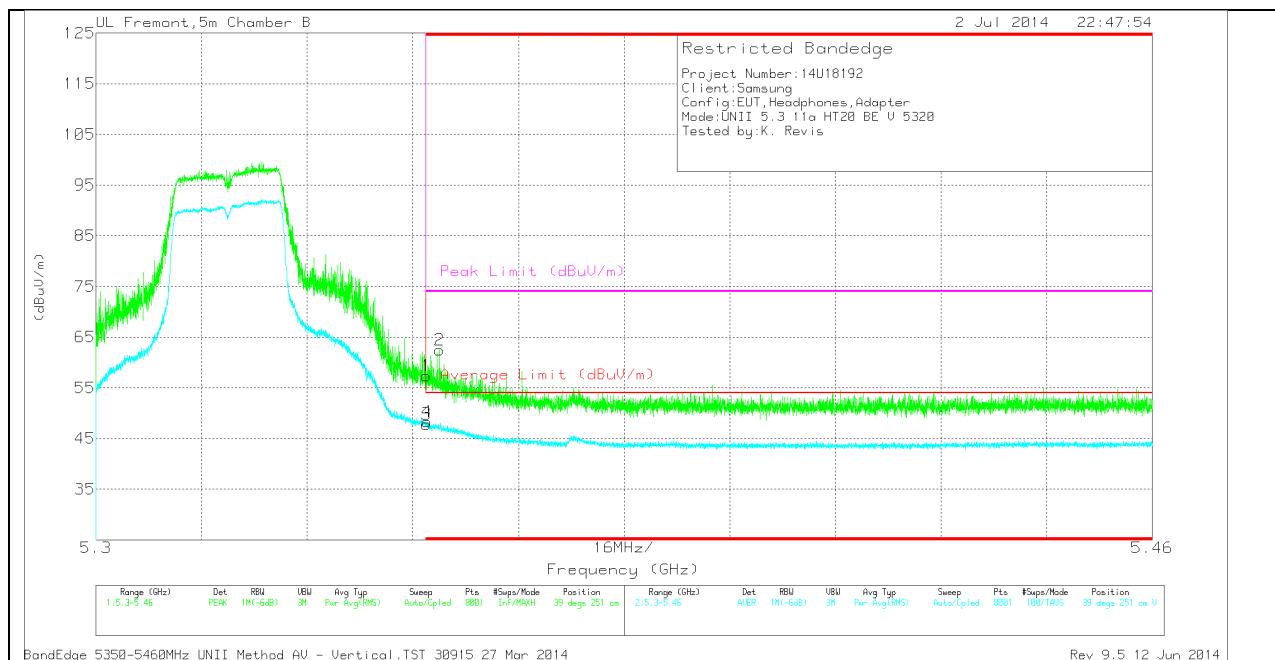
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/FI tr/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	44.16	PK	34.5	-19.9	0	58.76	-	-	74	-15.24	255	235	H
2	* 5.351	47.98	PK	34.5	-20	0	62.48	-	-	74	-11.52	255	235	H
3	* 5.35	33.14	RMS	34.5	-19.9	.26	48.05	54	-5.95	-	-	255	235	H
4	* 5.35	34.39	RMS	34.5	-20	.26	49.2	54	-4.8	-	-	255	235	H

VERTICAL PEAK AND AVERAGE PLOT

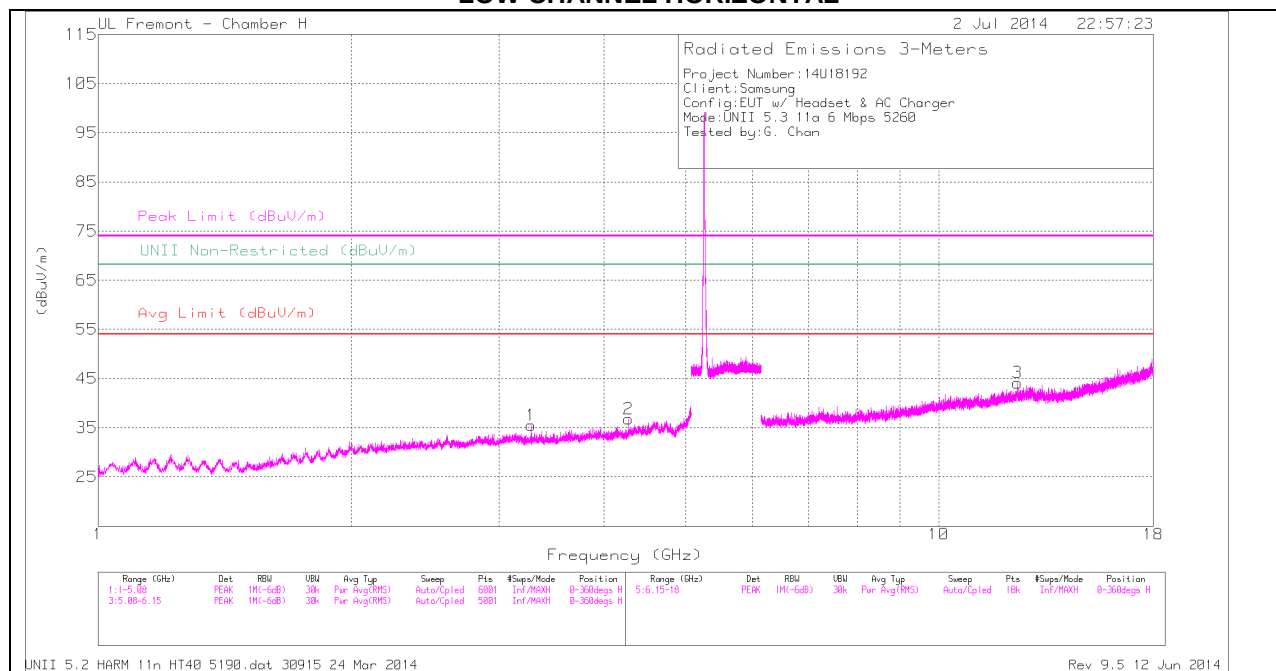


VERTICAL DATA

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	42.82	PK	34.5	-19.9	0	57.42	-	-	74	-16.58	39	251	V
2	* 5.352	47.96	PK	34.5	-20	0	62.46	-	-	74	-11.54	39	251	V
3	* 5.35	32.96	RMS	34.5	-19.9	.26	47.87	54	-6.13	-	-	39	251	V
4	* 5.35	33.34	RMS	34.5	-19.9	.26	48.25	54	-5.75	-	-	39	251	V

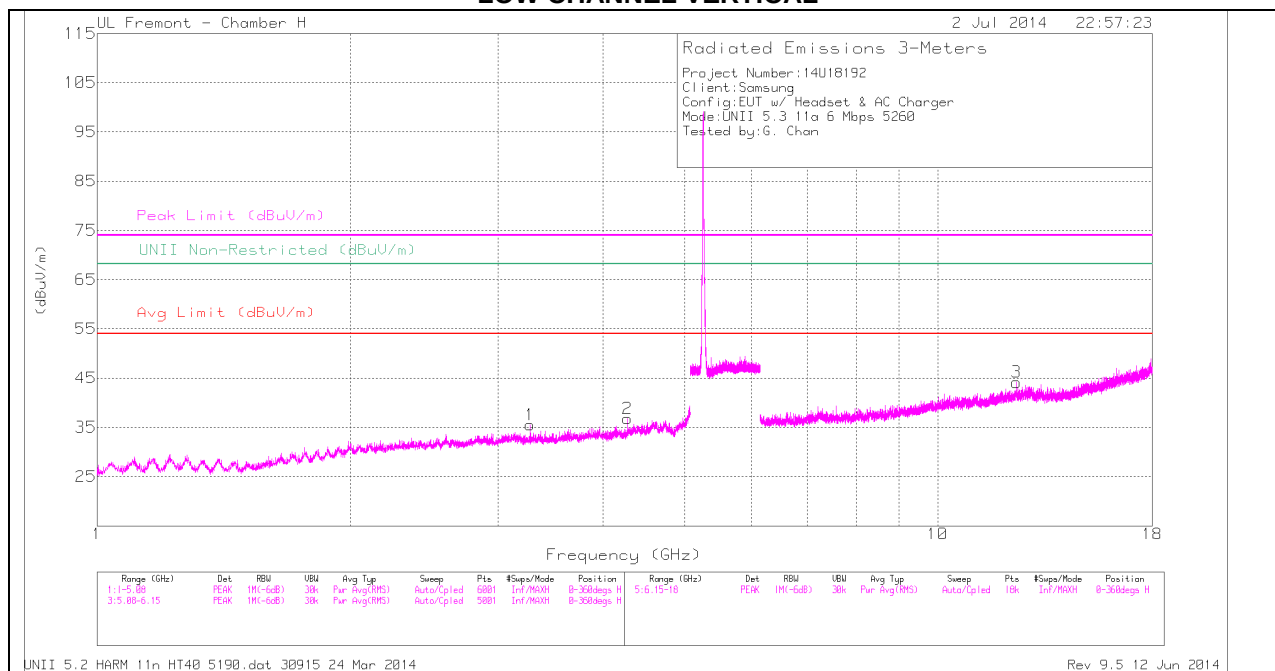
HARMONICS AND SPURIOUS EMISSIONS

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 T863 (dB/m)	Amp/Cbl/Filt r/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	* 4.277	35.18	PK	33.6	-32	0	36.78	-	-	74	-37.22	-	-	0-360	201	H
4	* 2.678	35.43	PK	32.3	-34.1	0	33.63	-	-	74	-40.37	-	-	0-360	100	V
3	* 12.404	30.25	PK	39.1	-25.2	0	44.15	-	-	74	-29.85	-	-	0-360	201	H
1	3.277	36.17	PK	32.9	-33.6	0	35.47	-	-	-	-	68.2	-32.73	0-360	99	H
5	9.746	30.4	PK	36.9	-26.2	0	41.1	-	-	-	-	68.2	-27.1	0-360	201	V
6	14.934	30.93	PK	40.5	-26.3	0	45.13	-	-	-	-	68.2	-23.07	0-360	100	V

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

PK - Peak detector

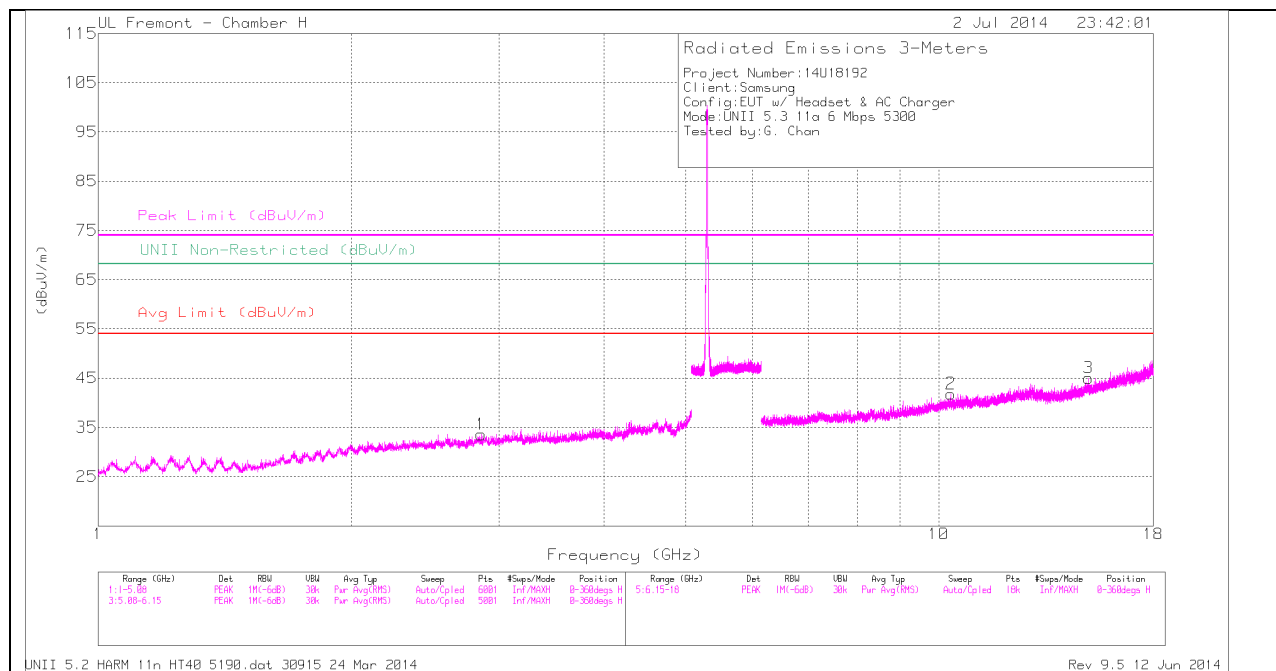
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filt r/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
* 4.278	41.63	PK1	33.6	-32	0	43.23	-	-	74	-30.77	-	-	0	202	H
* 2.676	42.24	PK1	32.3	-34.1	0	40.44	-	-	74	-33.56	-	-	0	100	V
* 12.404	36.36	PK1	39.1	-25.2	0	50.26	-	-	74	-23.74	-	-	0	202	H
3.275	41.6	PK1	32.9	-33.6	0	40.9	-	-	-	-	68.2	-27.3	0	100	H
9.747	37.31	PK1	36.9	-26.2	0	48.01	-	-	-	-	68.2	-20.19	0	202	V
14.935	37.74	PK1	40.5	-26.3	0	51.94	-	-	-	-	68.2	-16.26	0	100	V

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

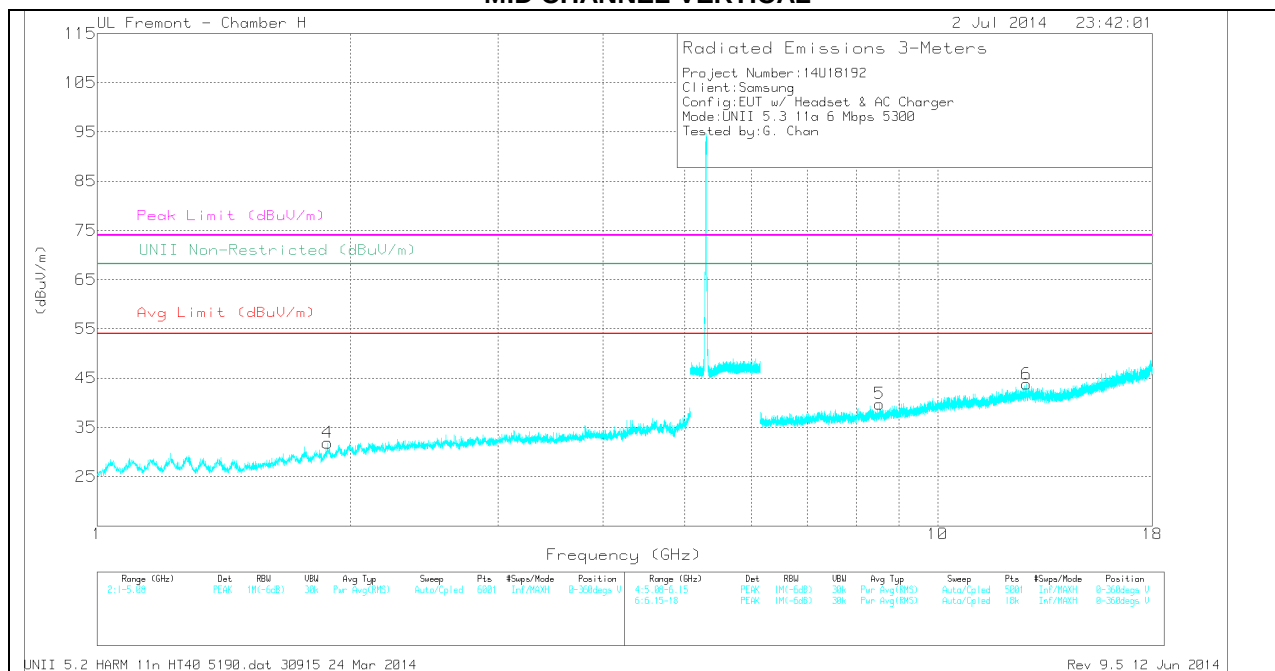
PK1 - KDB789033 Method: Peak

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 T863 (dB/m)	Amp/Cbl/Filt r/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	* 2.856	34.05	PK	32.5	-33	0	33.55	-	-	74	-40.45	-	-	0-360	201	H
4	1.88	36.17	PK	30.5	-34.8	0	31.87	-	-	-	-	68.2	-36.33	0-360	100	V
5	8.53	31.59	PK	36.1	-27.9	0	39.79	-	-	-	-	68.2	-28.41	0-360	201	V
2	10.337	29.5	PK	37.5	-25.2	0	41.8	-	-	-	-	68.2	-26.4	0-360	100	H
6	12.747	29.92	PK	39.3	-25.4	0	43.82	-	-	-	-	68.2	-24.38	0-360	201	V
3	15.08	30.23	PK	40.7	-25.9	0	45.03	-	-	-	-	68.2	-23.17	0-360	201	H

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

PK - Peak detector

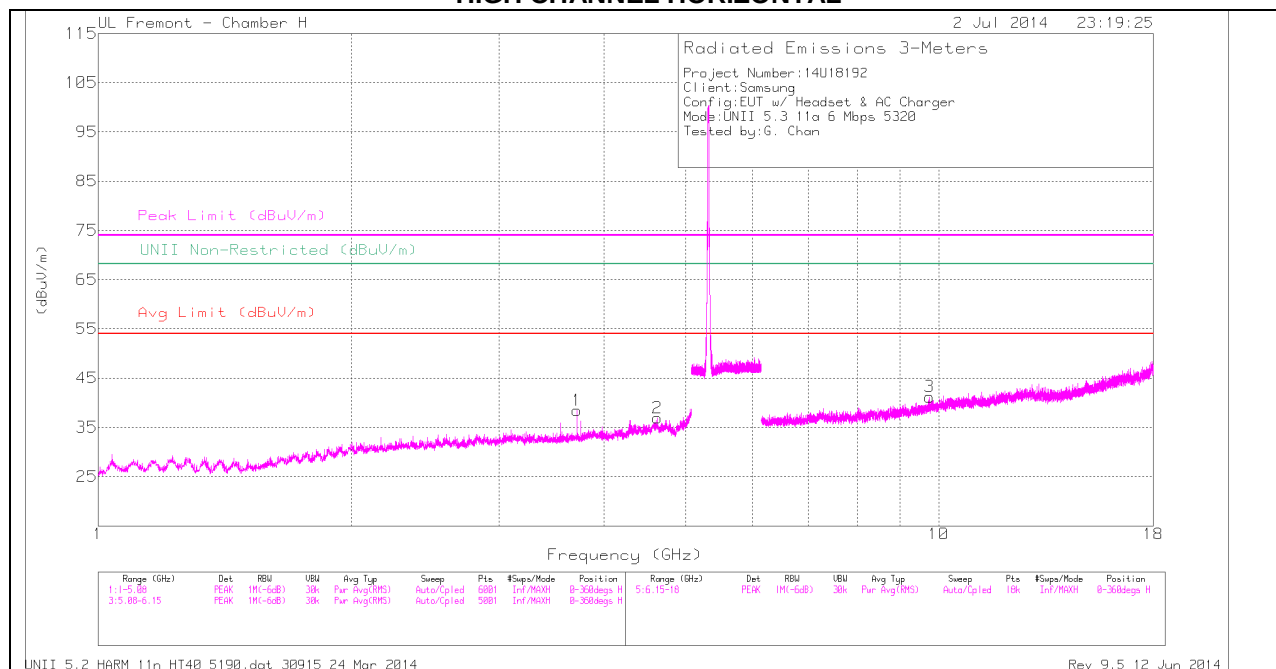
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filt r/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
* 2.854	42.03	PK1	32.5	-33	0	41.53	-	-	74	-32.47	-	-	2	202	H
1.88	43.09	PK1	30.5	-34.8	0	38.79	-	-	-	-	68.2	-29.41	2	100	V
8.531	38.1	PK1	36.1	-27.9	0	46.3	-	-	-	-	68.2	-21.9	2	202	V
10.338	36.83	PK1	37.5	-25.2	0	49.13	-	-	-	-	68.2	-19.07	2	100	H
12.749	36.47	PK1	39.3	-25.3	0	50.47	-	-	-	-	68.2	-17.73	2	202	V
15.078	36.65	PK1	40.7	-25.9	0	51.45	-	-	-	-	68.2	-16.75	2	202	H

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

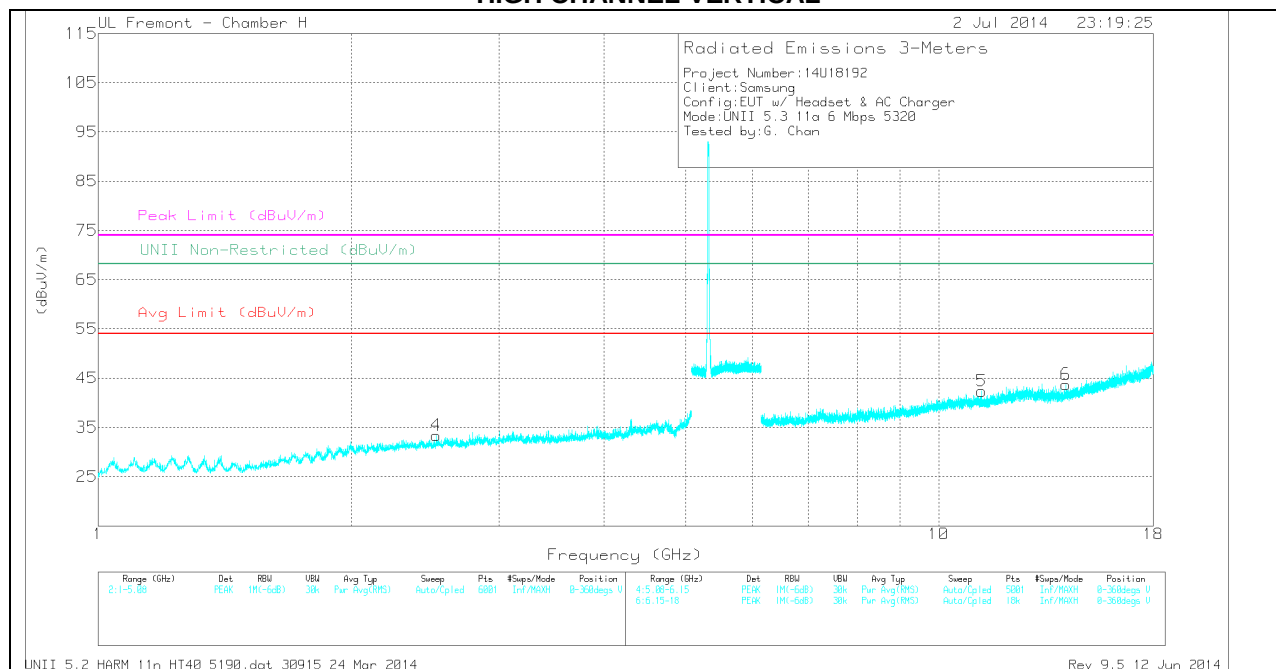
PK1 - KDB789033 Method: Peak

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 T863 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.712	37.92	PK	33.1	-32.6	0	38.42	-	-	74	-35.58	-	-	0-360	201	H
2	* 4.626	34.69	PK	34.2	-32	0	36.89	-	-	74	-37.11	-	-	0-360	201	H
5	* 11.253	29.96	PK	37.9	-25.5	0	42.36	-	-	74	-31.64	-	-	0-360	100	V
4	2.527	35.08	PK	32.2	-33.9	0	33.38	-	-	-	-	68.2	-34.82	0-360	100	V
3	9.752	30.5	PK	36.9	-26.2	0	41.2	-	-	-	-	68.2	-27	0-360	201	H
6	14.177	31	PK	39.3	-26.6	0	43.7	-	-	-	-	68.2	-24.5	0-360	201	V

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

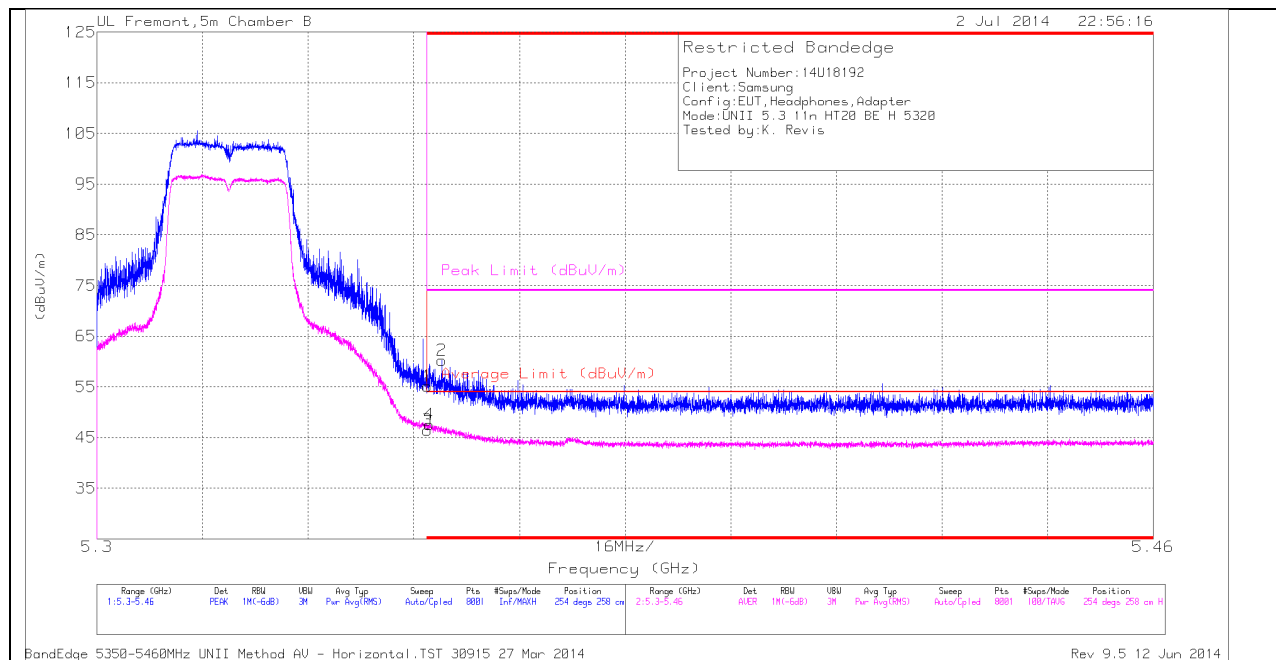
PK - Peak detector

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.714	41.05	PK1	33.1	-32.6	0	41.55	-	-	74	-32.45	-	-	3	202	H
* 4.626	42.07	PK1	34.2	-32	0	44.27	-	-	74	-29.73	-	-	3	202	H
* 11.251	37.2	PK1	37.9	-25.6	0	49.5	-	-	74	-24.5	-	-	3	100	V
2.528	42.4	PK1	32.2	-33.9	0	40.7	-	-	-	-	68.2	-27.5	3	100	V
9.751	37.42	PK1	36.9	-26.2	0	48.12	-	-	-	-	68.2	-20.08	3	202	H
14.175	37.09	PK1	39.3	-26.6	0	49.79	-	-	-	-	68.2	-18.41	3	202	V

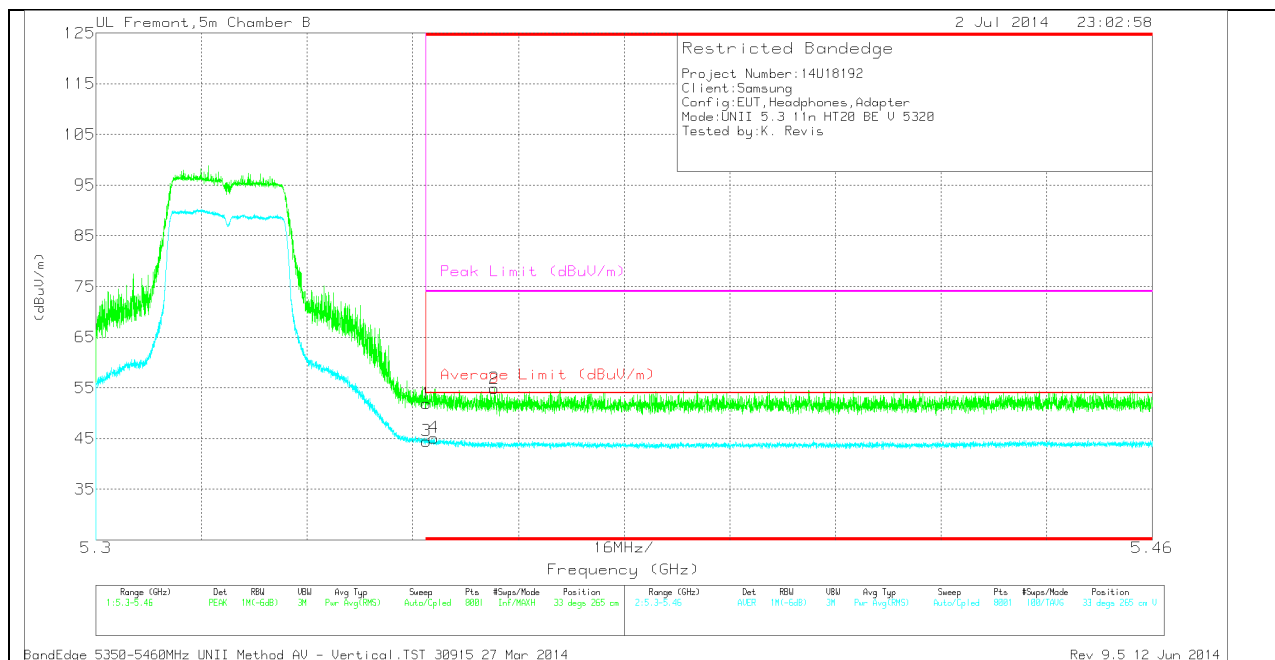
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

11.2.2. 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/FI tr/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	40.49	PK	34.5	-19.9	0	55.09	-	-	74	-18.91	254	258	H
2	* 5.352	45.77	PK	34.5	-20	0	60.27	-	-	74	-13.73	254	258	H
3	* 5.35	31.57	RMS	34.5	-19.9	.33	46.48	54	-7.52	-	-	254	258	H
4	* 5.35	32.68	RMS	34.5	-19.9	.33	47.59	54	-6.41	-	-	254	258	H

VERTICAL PEAK AND AVERAGE PLOT

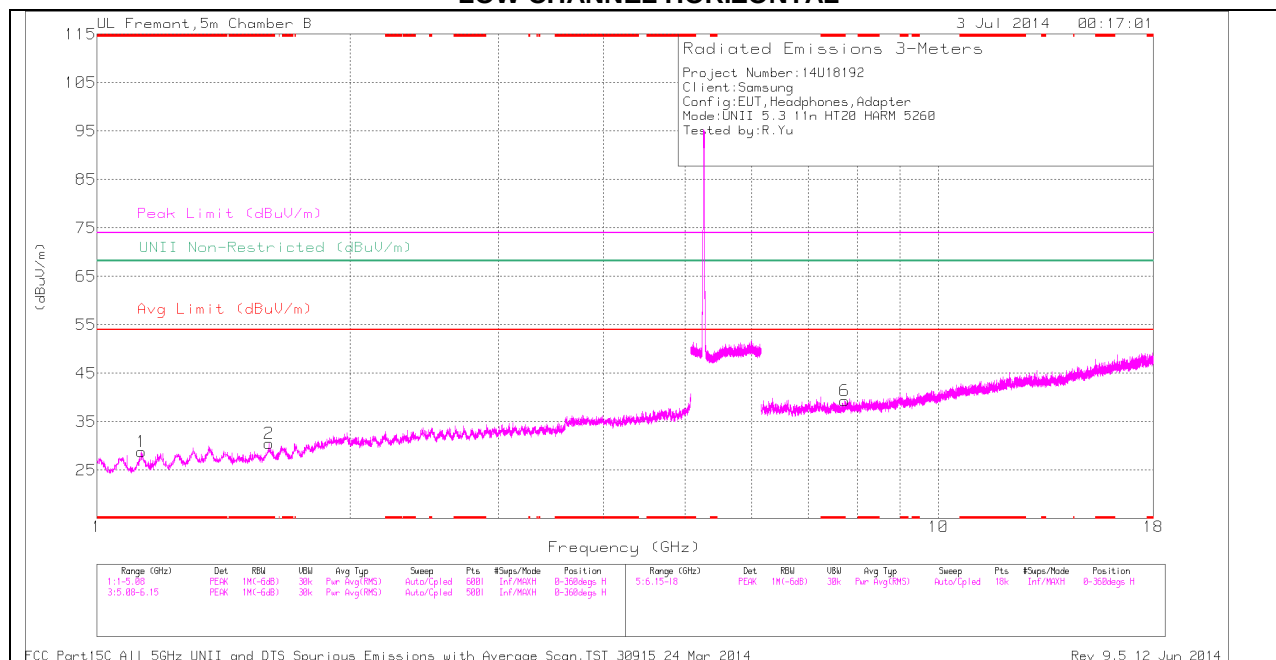


VERTICAL DATA

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	37.25	PK	34.5	-19.9	0	51.85	-	-	74	-22.15	33	265	V
2	* 5.36	40.28	PK	34.5	-19.9	0	54.88	-	-	74	-19.12	33	265	V
3	* 5.35	29.61	RMS	34.5	-19.9	.33	44.52	54	-9.48	-	-	33	265	V
4	* 5.351	30.33	RMS	34.5	-20	.33	45.14	54	-8.86	-	-	33	265	V

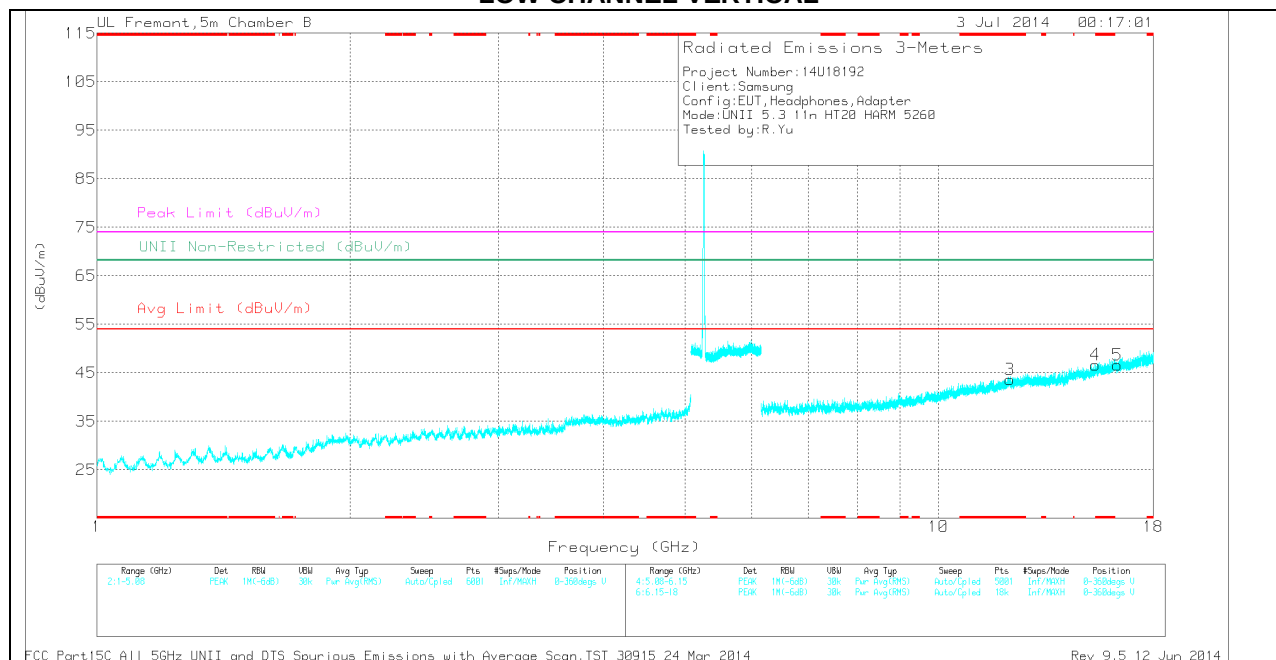
HARMONICS AND SPURIOUS EMISSIONS

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filt 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	* 1.13	35.77	PK	27.6	-34.6	28.77	-	-	74	-45.23	-	-	0-360	206	H
2	* 1.602	35.1	PK	28.5	-33.1	30.5	-	-	74	-43.5	-	-	0-360	99	H
6	* 7.741	30.76	PK	35.7	-27.1	39.36	-	-	74	-34.64	-	-	0-360	206	H
3	* 12.149	26.05	PK	38.9	-21.3	43.65	-	-	74	-30.35	-	-	0-360	192	V
4	* 15.352	26.67	PK	40.2	-20.2	46.67	-	-	74	-27.33	-	-	0-360	99	V
5	16.309	25.34	PK	41.2	-19.9	46.64	-	-	-	-	68.2	-21.56	0-360	99	V

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

PK - Peak detector

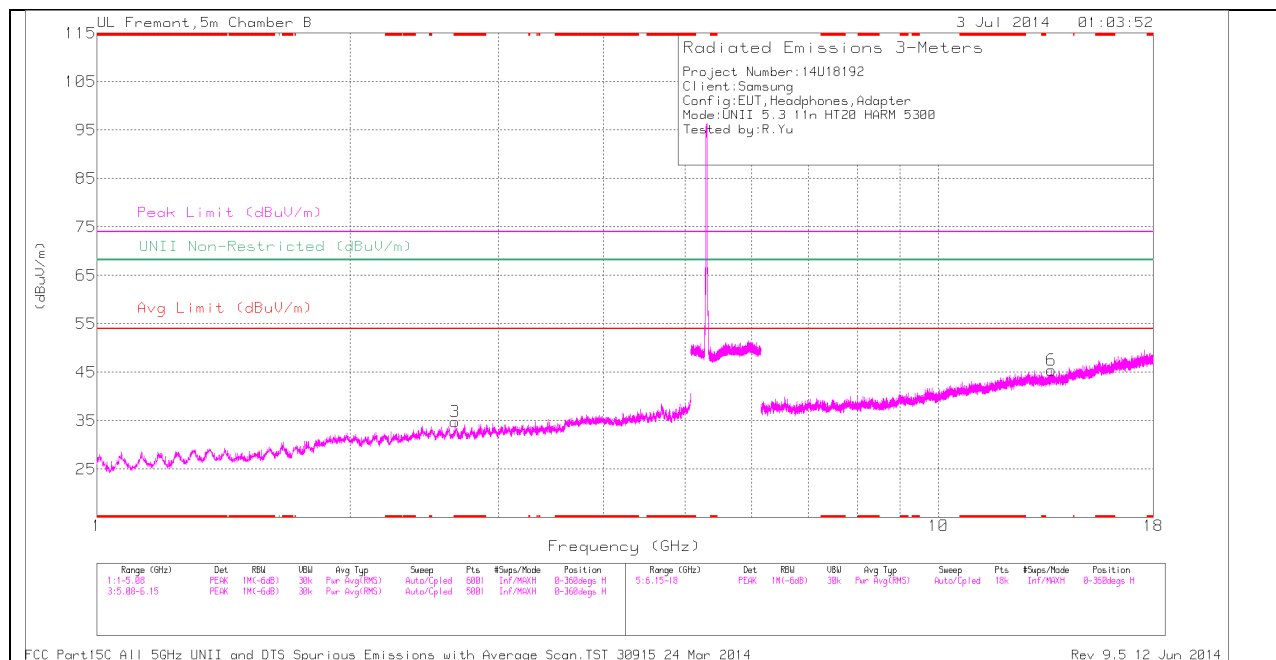
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filt 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
* 1.13	50.87	PK2	27.6	-34.6	43.87	-	-	74	-30.13	-	-	360	400	H
* 1.13	43.68	PK2	27.6	-34.6	36.68	-	-	74	-37.32	-	-	360	400	H
* 1.128	44.05	PK2	27.6	-34.6	37.05	-	-	74	-36.95	-	-	360	200	H
* 1.602	42.11	PK2	28.5	-33.1	37.51	-	-	74	-36.49	-	-	360	100	H
* 7.742	38.1	PK2	35.7	-27.1	46.7	-	-	74	-27.3	-	-	360	213	H
* 12.149	34.12	PK2	38.9	-21.3	51.72	-	-	74	-22.28	-	-	360	186	V
* 15.352	34.65	PK2	40.2	-20.3	54.55	-	-	74	-19.45	-	-	360	100	V

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

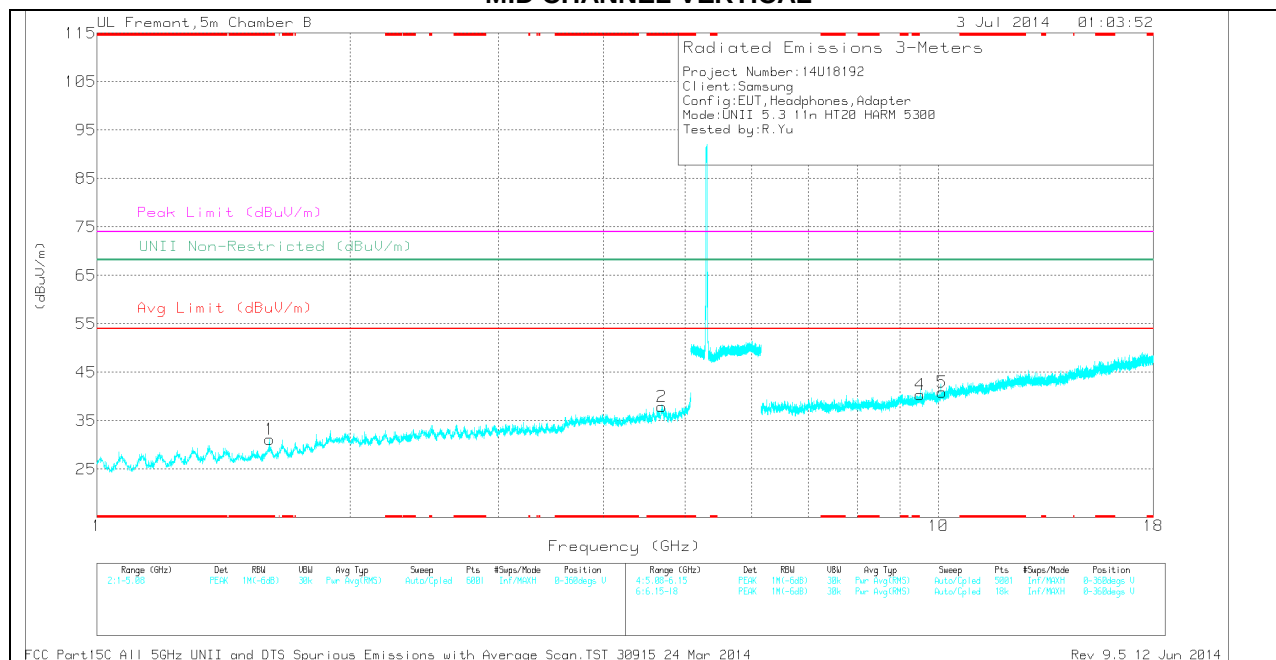
PK2 - KDB558074 Method: Maximum Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 2.664	34.46	PK	32.3	-32	34.76	-	-	74	-39.24	-	-	0-360	206	H
1	* 1.603	35.87	PK	28.5	-33.2	31.17	-	-	74	-42.83	-	-	0-360	99	V
2	* 4.688	33.47	PK	34.2	-29.8	37.87	-	-	74	-36.13	-	-	0-360	99	V
4	9.514	28.01	PK	36.6	-24.2	40.41	-	-	-	-	68.2	-27.79	0-360	99	V
5	10.092	26.75	PK	37.1	-23	40.85	-	-	-	-	68.2	-27.35	0-360	195	V
6	13.624	27.97	PK	38.8	-21.3	45.47	-	-	-	-	68.2	-22.73	0-360	206	H

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

PK - Peak detector

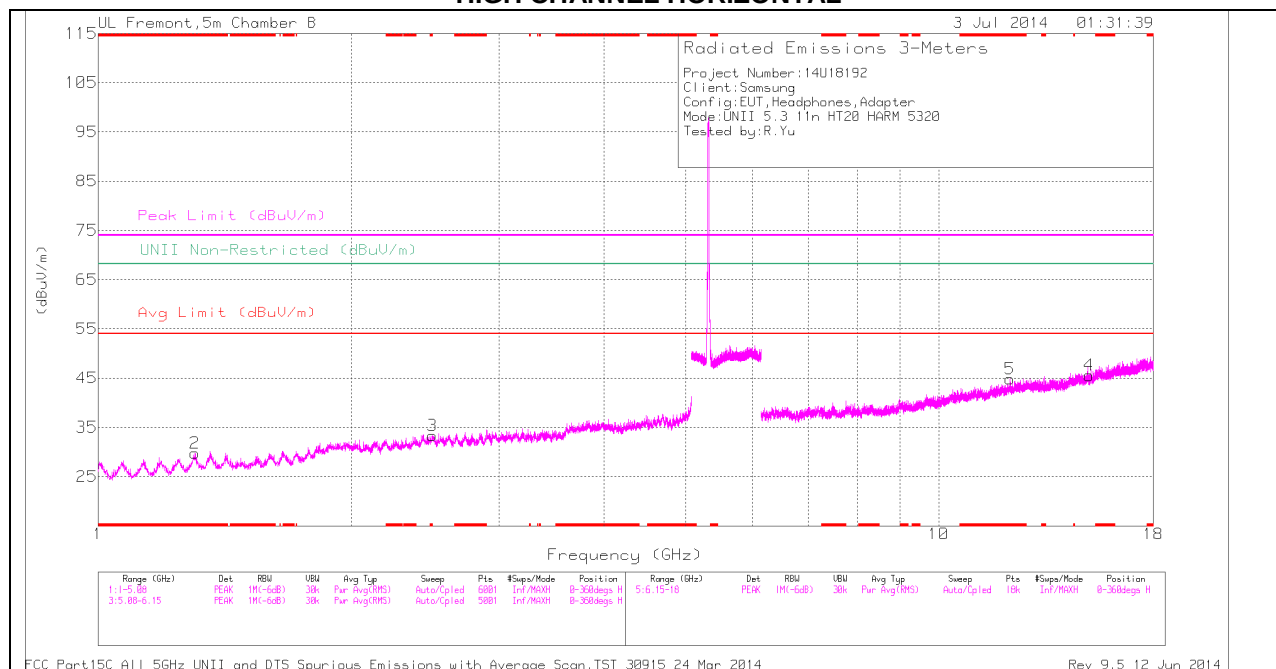
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.662	41.38	PK2	32.3	-32.1	41.58	-	-	74	-32.42	-	-	360	213	H
* 1.602	42.63	PK2	28.5	-33.1	38.03	-	-	74	-35.97	-	-	360	100	V
* 4.687	41.33	PK2	34.2	-29.8	45.73	-	-	74	-28.27	-	-	360	100	V
3.034	41.17	PK2	32.8	-32.2	41.77	-	-	-	-	68.2	-26.43	360	100	H
13.625	34.88	PK2	38.8	-21.3	52.38	-	-	-	-	68.2	-15.82	360	213	H

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

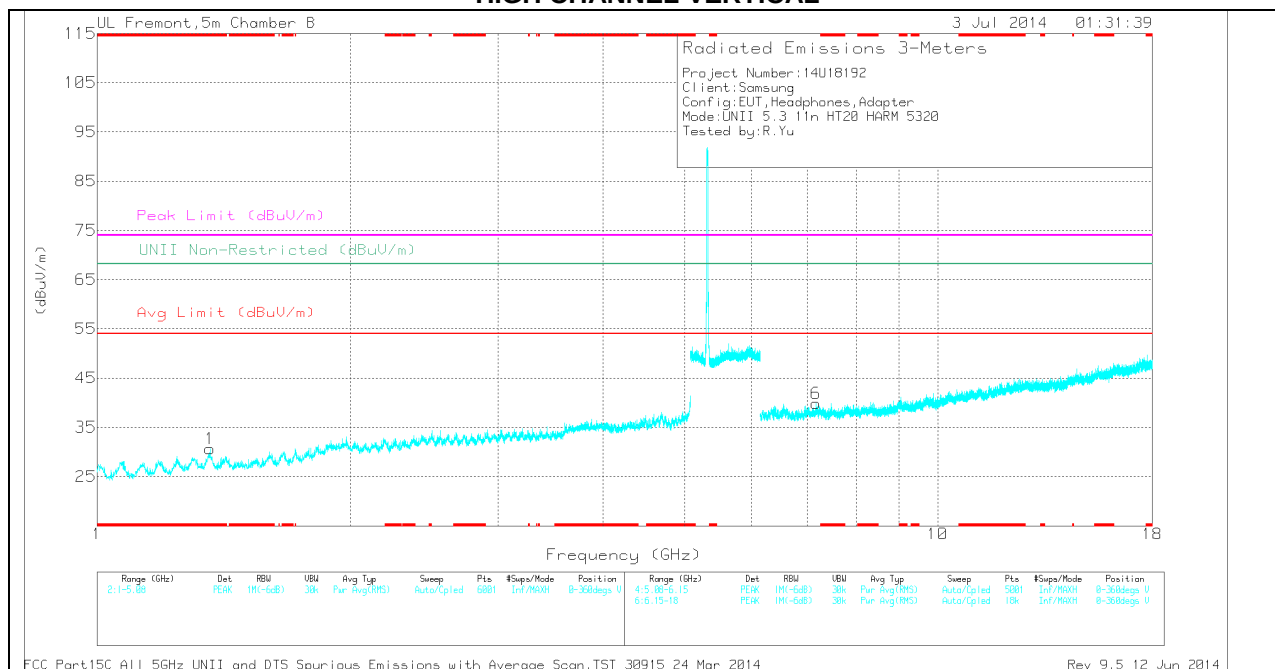
PK2 - KDB558074 Method: Maximum Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 1.305	35.24	PK	28.8	-34.3	0	29.74	-	-	74	-44.26	-	-	0-360	206	H
3	* 2.499	33.22	PK	32.4	-32.3	0	33.32	-	-	74	-40.68	-	-	0-360	206	H
1	* 1.362	35.75	PK	28.6	-33.7	0	30.65	-	-	74	-43.35	-	-	0-360	99	V
5	* 12.148	27.22	PK	38.9	-21.3	0	44.82	-	-	74	-29.18	-	-	0-360	206	H
6	7.17	31.15	PK	35.6	-26.9	0	39.85	-	-	-	-	68.2	-28.35	0-360	195	V
4	15.102	25.75	PK	39.8	-20	0	45.55	-	-	-	-	68.2	-22.65	0-360	206	H

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

PK - Peak detector

Radiated Emissions

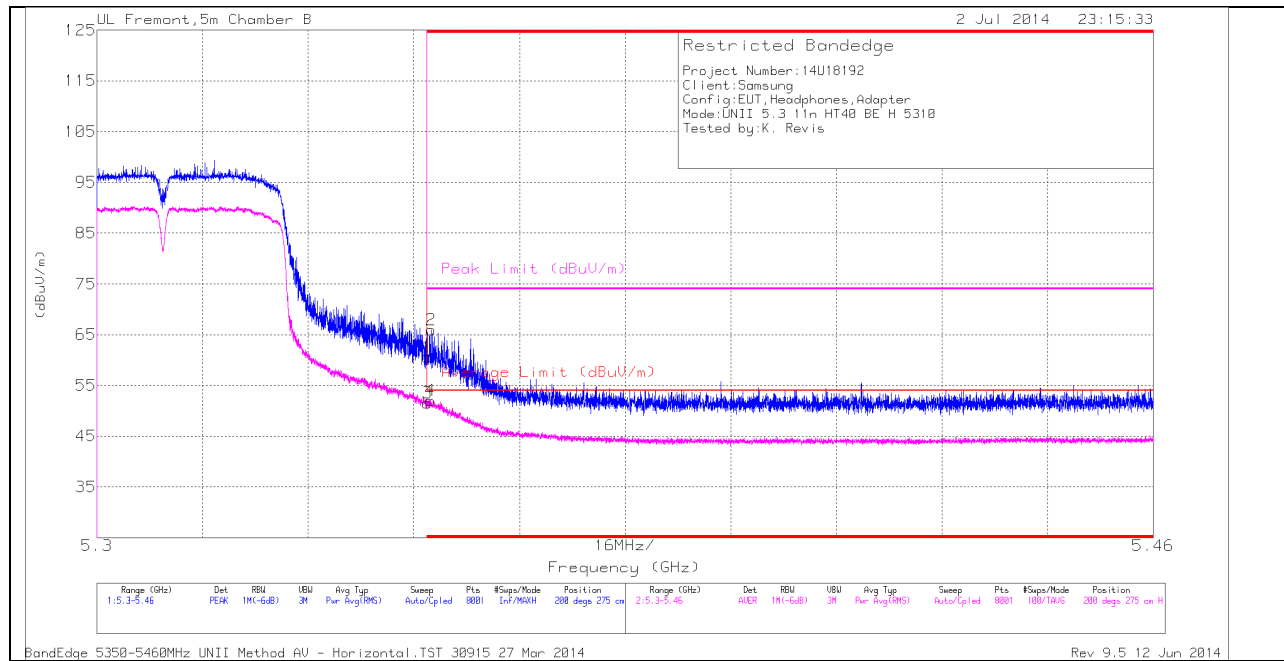
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.306	43.15	PK2	28.8	-34.3	0	37.65	-	-	74	-36.35	-	-	359	213	H
* 2.5	42.06	PK2	32.4	-32.3	0	42.16	-	-	74	-31.84	-	-	359	201	H
* 1.363	42.52	PK2	28.6	-33.7	0	37.42	-	-	74	-36.58	-	-	359	100	V
* 12.15	33.67	PK2	38.9	-21.3	0	51.27	-	-	74	-22.73	-	-	359	201	H
3.032	40.95	PK2	32.8	-32.2	0	41.55	-	-	-	-	68.2	-26.65	359	100	H
15.103	34.1	PK2	39.8	-20	0	53.9	-	-	-	-	68.2	-14.3	359	213	H

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

PK2 - KDB558074 Method: Maximum Peak

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

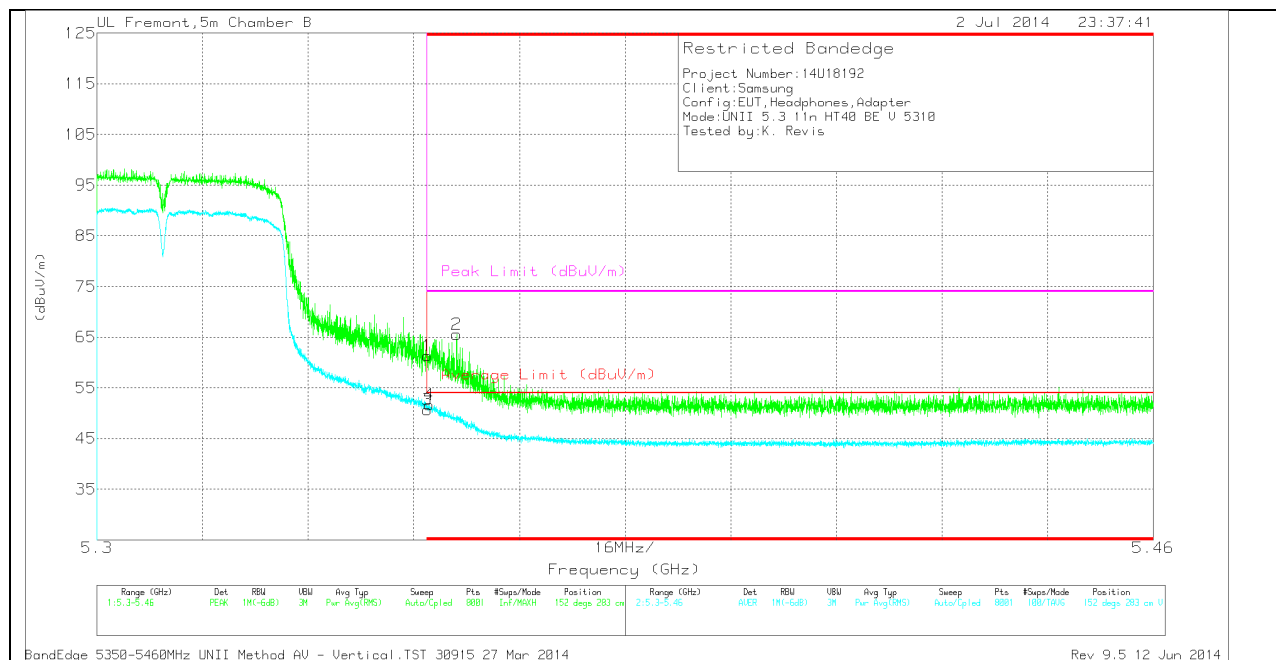
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cb/Fltr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	45.94	PK	34.5	-19.9	0	60.54	-	-	74	-13.46	200	275	H
2	* 5.351	51.38	PK	34.5	-20	0	65.88	-	-	74	-8.12	200	275	H
3	* 5.35	36.25	RMS	34.5	-19.9	.62	51.48	54	-2.52	-	-	200	275	H
4	* 5.351	36.93	RMS	34.5	-20	.62	52.06	54	-1.94	-	-	200	275	H

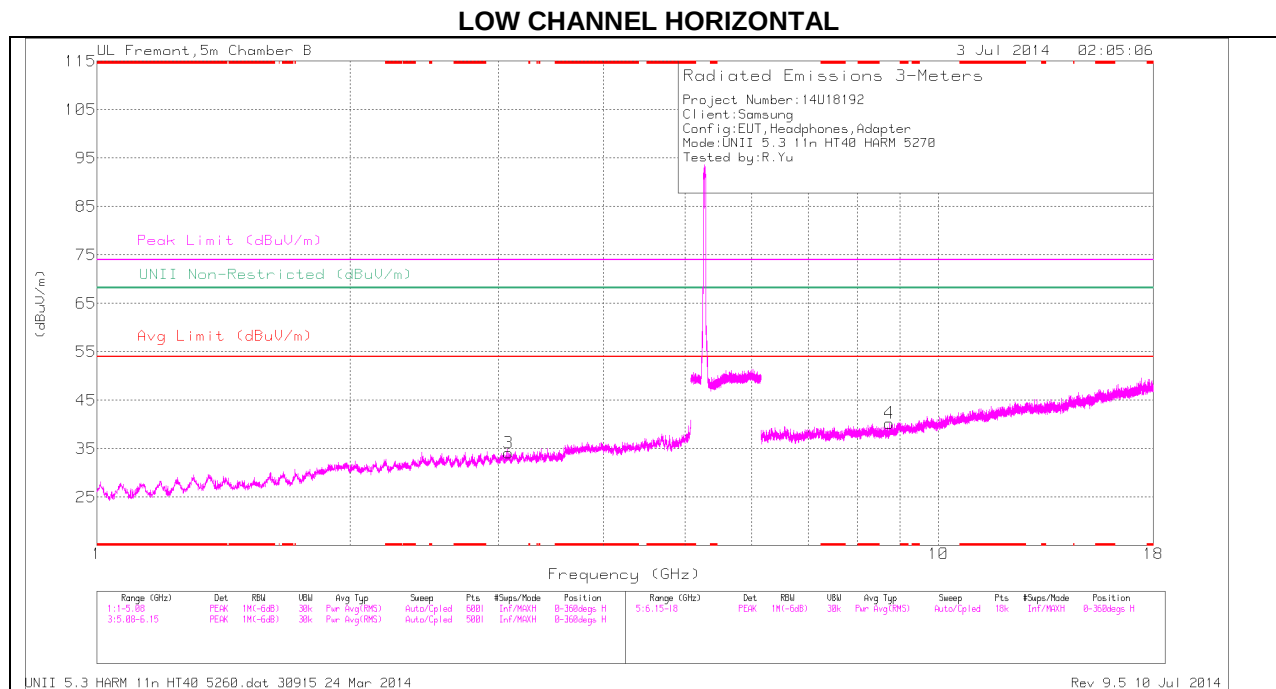
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

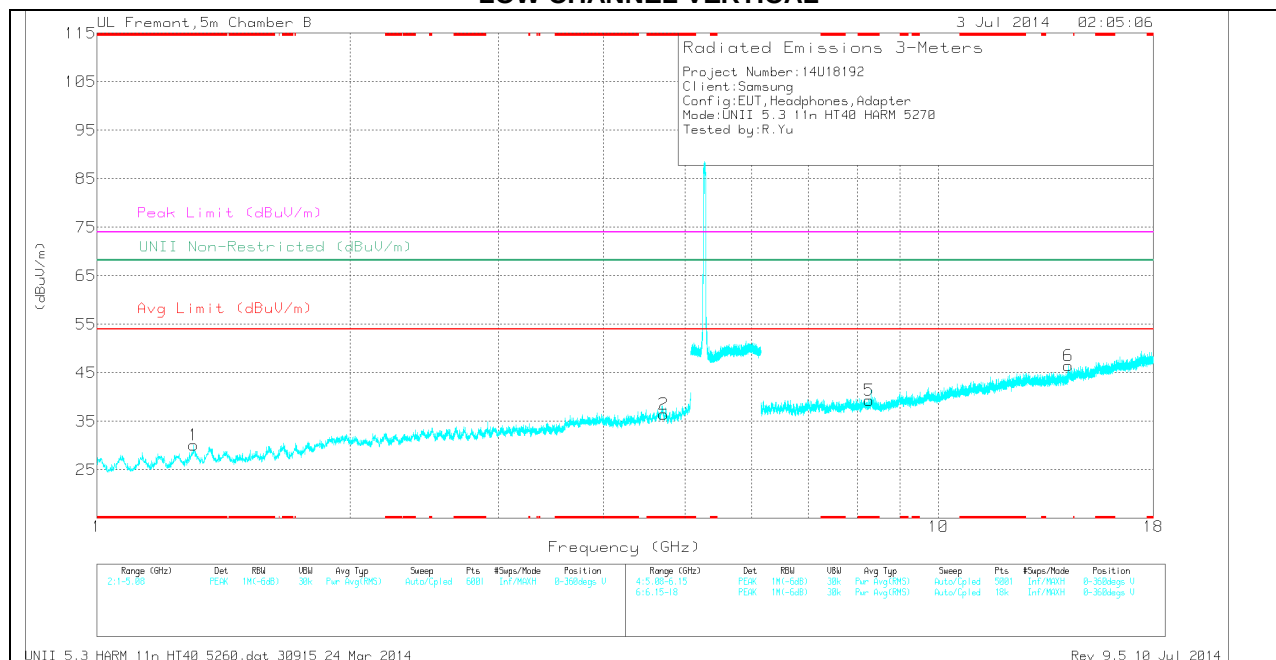
Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.35	46.72	PK	34.5	-19.9	0	61.32	-	-	74	-12.68	152	283	V
2	* 5.354	51.11	PK	34.5	-20	0	65.61	-	-	74	-8.39	152	283	V
3	* 5.35	35.48	RMS	34.5	-19.9	.62	50.71	54	-3.29	-	-	152	283	V
4	* 5.35	36.56	RMS	34.5	-20	.62	51.69	54	-2.31	-	-	152	283	V

HARMONICS AND SPURIOUS EMISSIONS



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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.303	35.64	PK	28.8	-34.3	0	30.14	-	-	74	-43.86	-	-	0-360	99	V
2	* 4.718	32.17	PK	34.2	-29.9	0	36.47	-	-	74	-37.53	-	-	0-360	195	V
5	* 8.268	30.04	PK	35.7	-26.4	0	39.34	-	-	74	-34.66	-	-	0-360	99	V
3	3.086	33.39	PK	32.9	-32.1	0	34.19	-	-	-	-	68.2	-34.01	0-360	206	H
4	8.74	30.21	PK	35.9	-25.8	0	40.31	-	-	-	-	68.2	-27.89	0-360	99	H
6	14.277	27.55	PK	39	-20.1	0	46.45	-	-	-	-	68.2	-21.75	0-360	99	V

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

PK - Peak detector

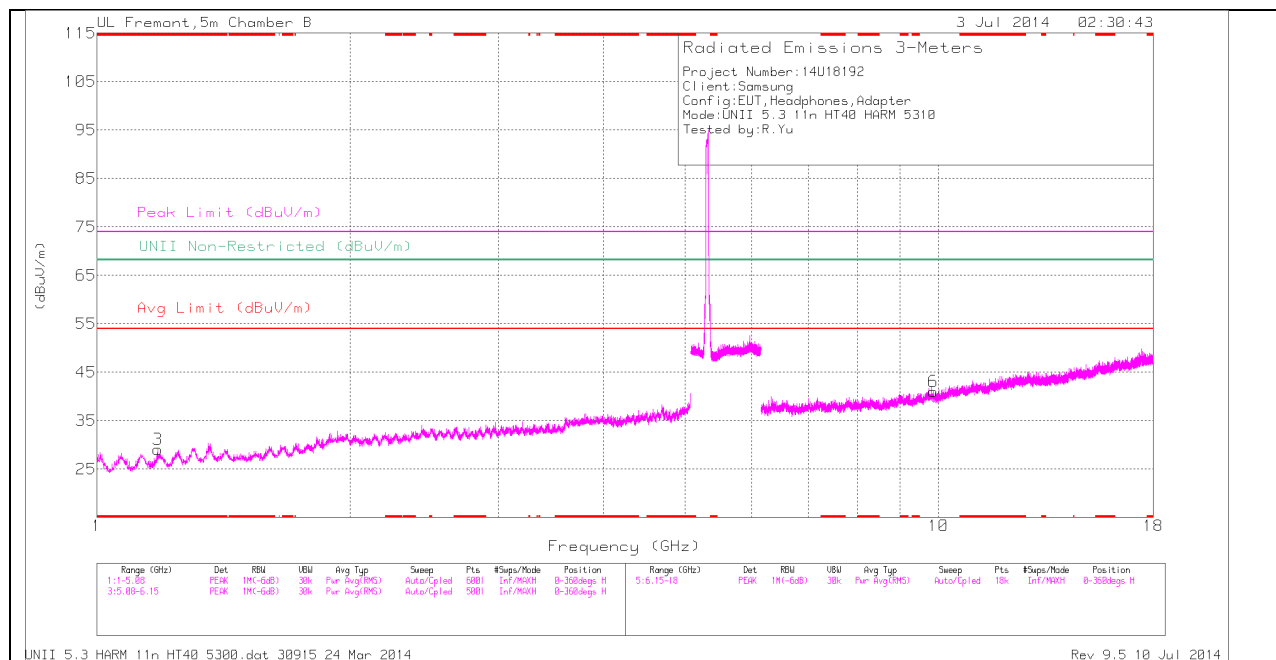
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.304	42.88	PK2	28.8	-34.3	0	37.38	-	-	74	-36.62	-	-	359	100	V
* 4.719	40.54	PK2	34.2	-29.9	0	44.84	-	-	74	-29.16	-	-	359	203	V
* 8.27	37.23	PK2	35.7	-26.5	0	46.43	-	-	74	-27.57	-	-	359	100	V
3.031	41.66	PK2	32.8	-32.1	0	42.36	-	-	-	-	68.2	-25.84	359	100	H
3.086	41.16	PK2	32.9	-32.1	0	41.96	-	-	-	-	68.2	-26.24	359	213	H
8.739	36.74	PK2	35.9	-25.8	0	46.84	-	-	-	-	68.2	-21.36	359	100	H

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

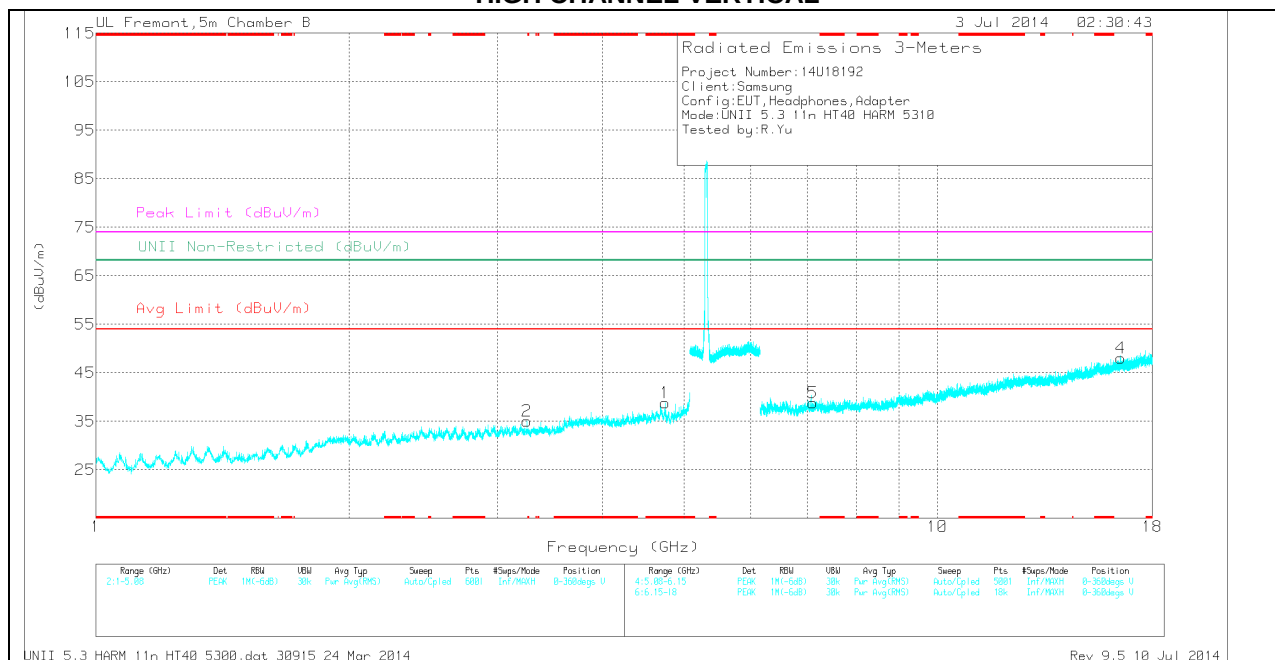
PK2 - KDB558074 Method: Maximum Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 1.181	35.73	PK	28	-34.7	0	29.03	-	-	74	-44.97	-	-	0-360	206	H
1	* 4.751	34.31	PK	34.2	-29.7	0	38.81	-	-	74	-35.19	-	-	0-360	99	V
2	3.253	34.31	PK	32.8	-32	0	35.11	-	-	-	-	68.2	-33.09	0-360	99	V
5	7.114	31.43	PK	35.6	-28.2	0	38.83	-	-	-	-	68.2	-29.37	0-360	99	V
6	9.863	28.17	PK	37	-24.1	0	41.07	-	-	-	-	68.2	-27.13	0-360	99	H
4	16.522	26.46	PK	41.4	-19.8	0	48.06	-	-	-	-	68.2	-20.14	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/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.182	42.89	PK2	28	-34.7	0	36.19	-	-	74	-37.81	-	-	359	213	H
* 4.75	41.56	PK2	34.2	-29.7	0	46.06	-	-	74	-27.94	-	-	359	100	V
3.04	40.71	PK2	32.8	-32.2	0	41.31	-	-	-	-	68.2	-26.89	359	100	H
3.254	41.63	PK2	32.8	-32	0	42.43	-	-	-	-	68.2	-25.77	359	100	V
9.863	35.57	PK2	37	-24.1	0	48.47	-	-	-	-	68.2	-19.73	359	100	H
16.521	32.38	PK2	41.4	-19.8	0	53.98	-	-	-	-	68.2	-14.22	359	203	V

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

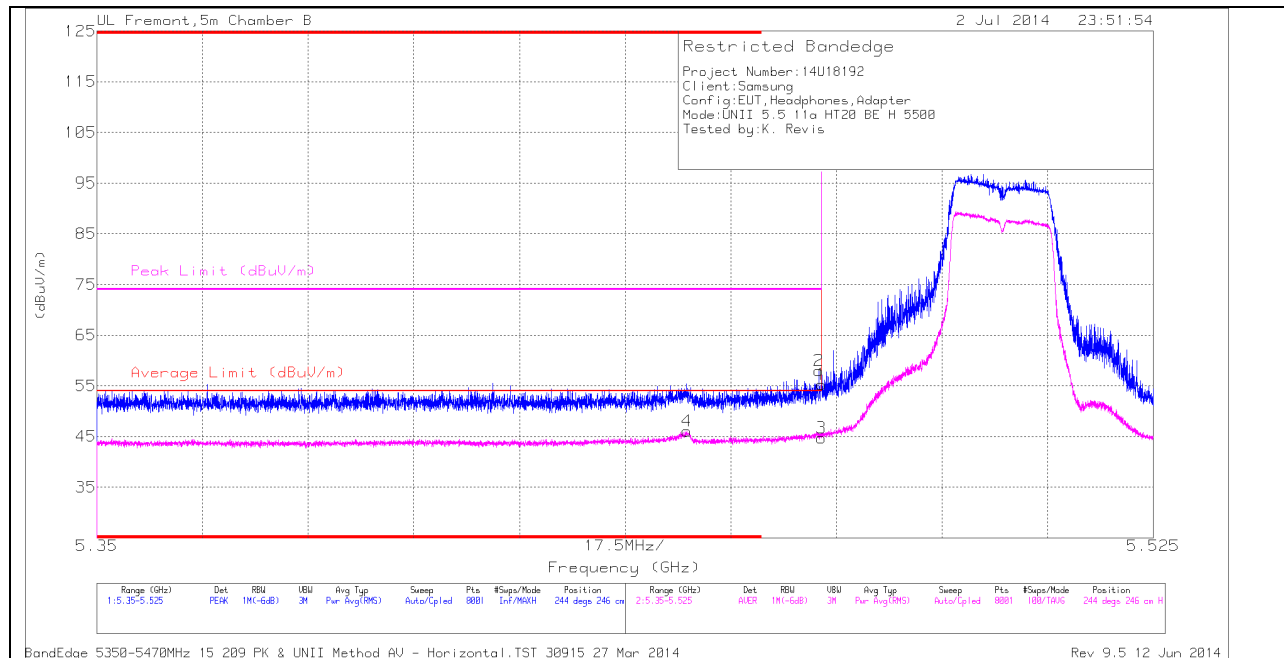
PK2 - KDB558074 Method: Maximum Peak

11.3. 5.5-5.6 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)

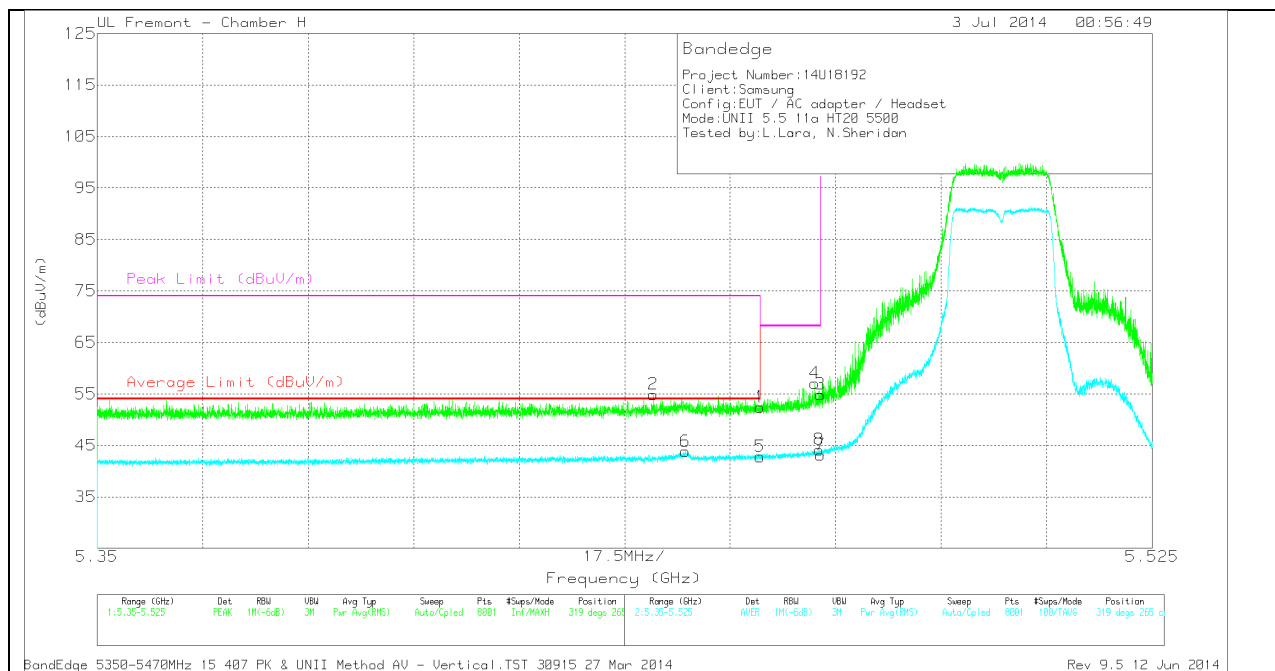
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 5.448	31.38	RMS	34.5	-20.1	.26	46.1	54	-7.9	-	-	244	246	H
1	5.47	40.79	PK	34.5	-20	0	55.29	-	-	74	-18.71	244	246	H
2	5.47	43.49	PK	34.5	-20	0	57.99	-	-	74	-16.01	244	246	H
3	5.47	29.92	RMS	34.5	-20	.26	44.74	54	-9.26	-	-	244	246	H

VERTICAL PEAK AND AVERAGE PLOT

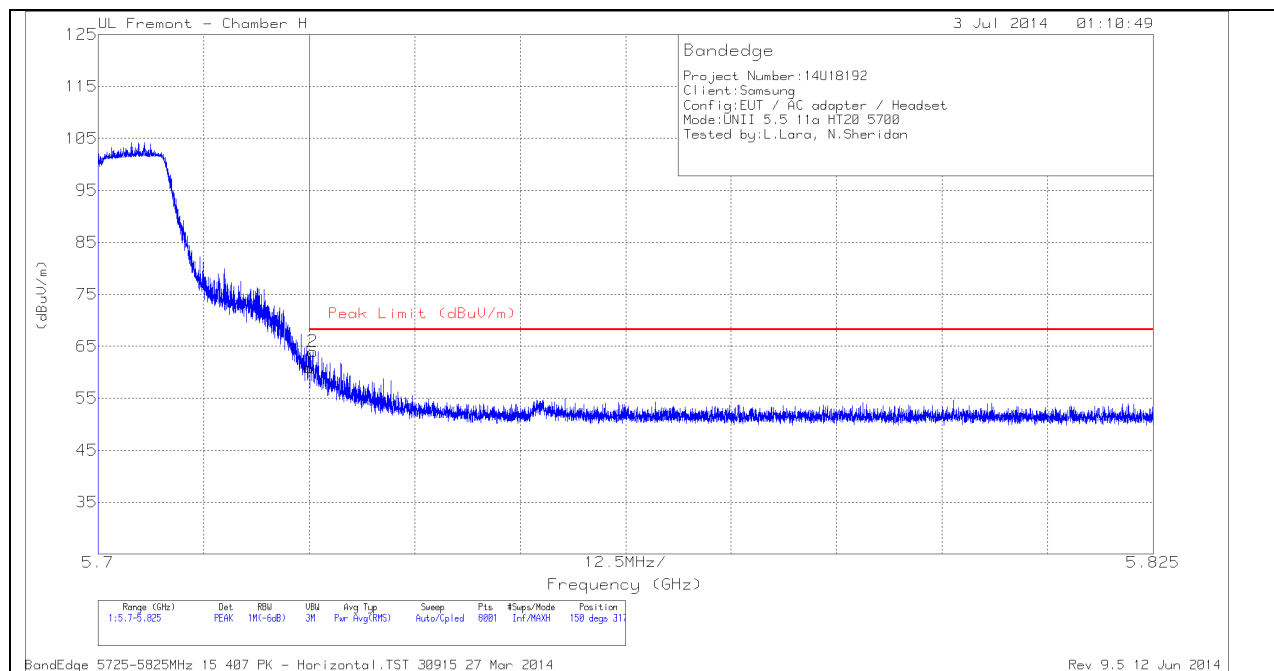


VERTICAL DATA

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	39.95	PK	35	-22.5	0	52.45	-	-	74	-21.55	319	265	V
2	* 5.442	42.4	PK	35	-22.5	0	54.9	-	-	74	-19.1	319	265	V
5	* 5.46	30	RMS	35	-22.5	.26	42.82	54	-11.18	-	-	319	265	V
6	* 5.448	31.01	RMS	35	-22.5	.26	43.83	54	-10.17	-	-	319	265	V
4	5.469	44.38	PK	35.1	-22.4	0	57.08	-	-	68.2	-11.12	319	265	V
3	5.47	42.21	PK	35.1	-22.4	0	54.91	-	-	68.2	-13.29	319	265	V
7	5.47	30.12	RMS	35.1	-22.4	.26	43.14	-	-	-	-	319	265	V
8	5.47	31.13	RMS	35.1	-22.4	.26	44.15	-	-	-	-	319	265	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

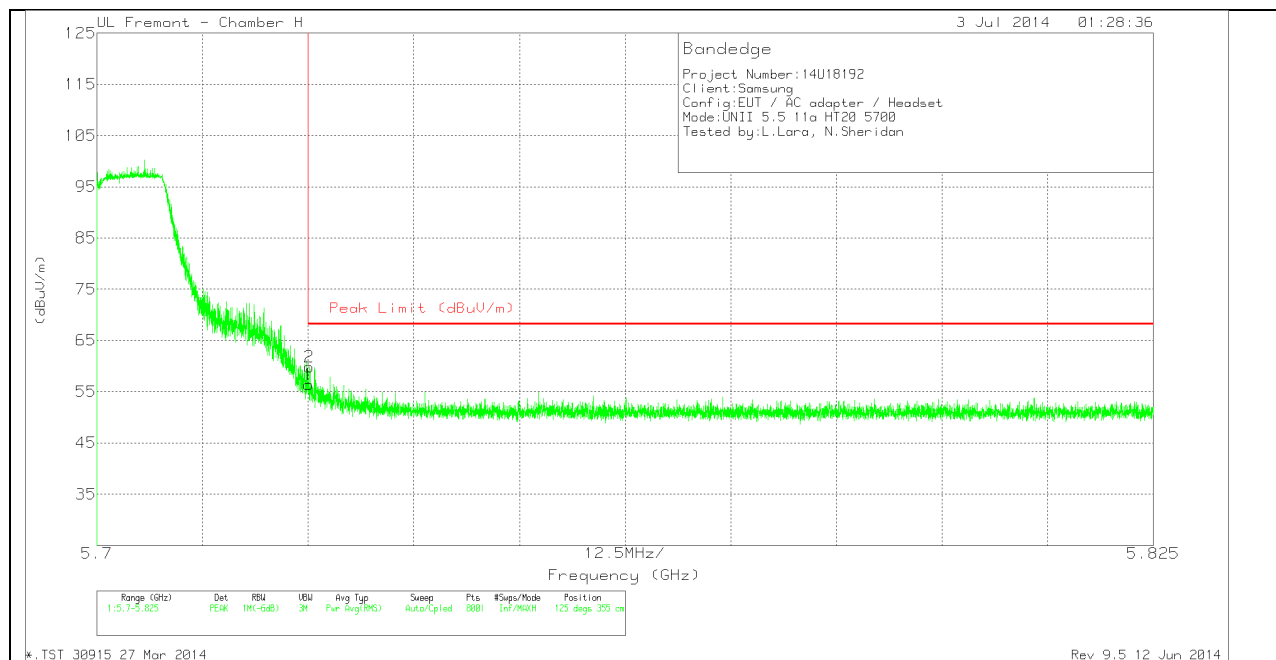
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	48.3	PK	35	-22.4	60.9	68.2	-7.3	150	317	H
2	5.725	51.38	PK	35	-22.4	63.98	68.2	-4.22	150	317	H

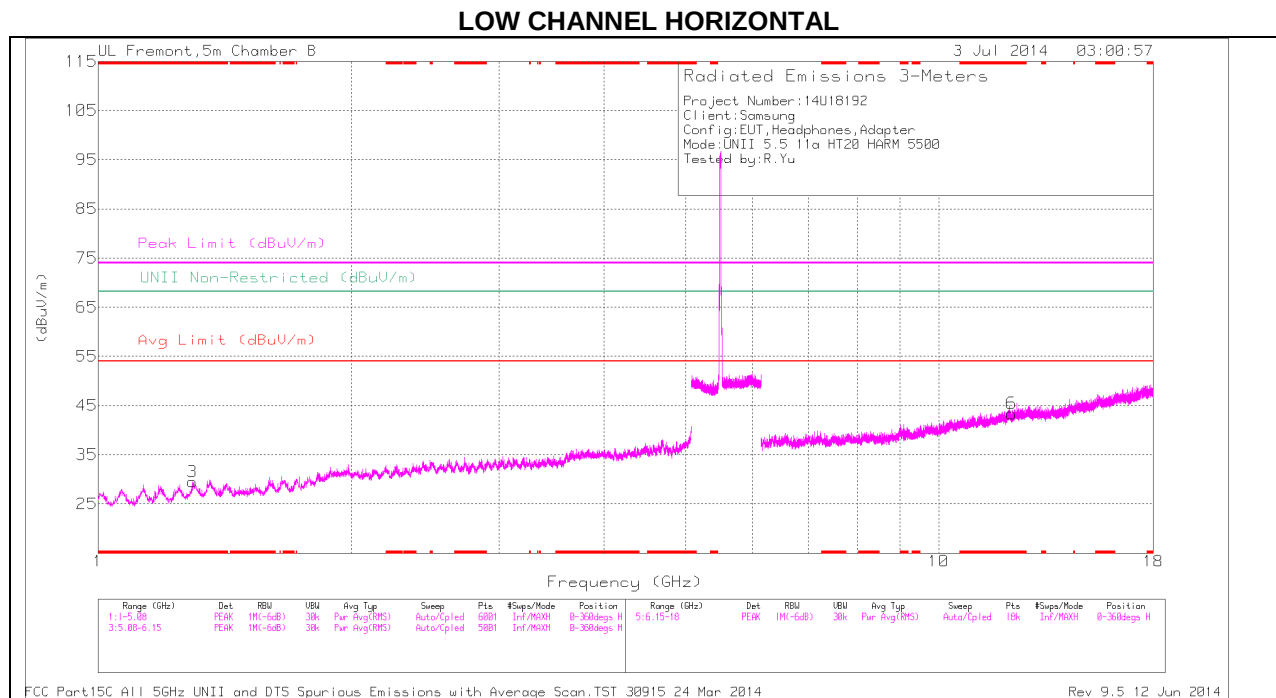
VERTICAL PEAK AND AVERAGE PLOT



VERTICAL DATA

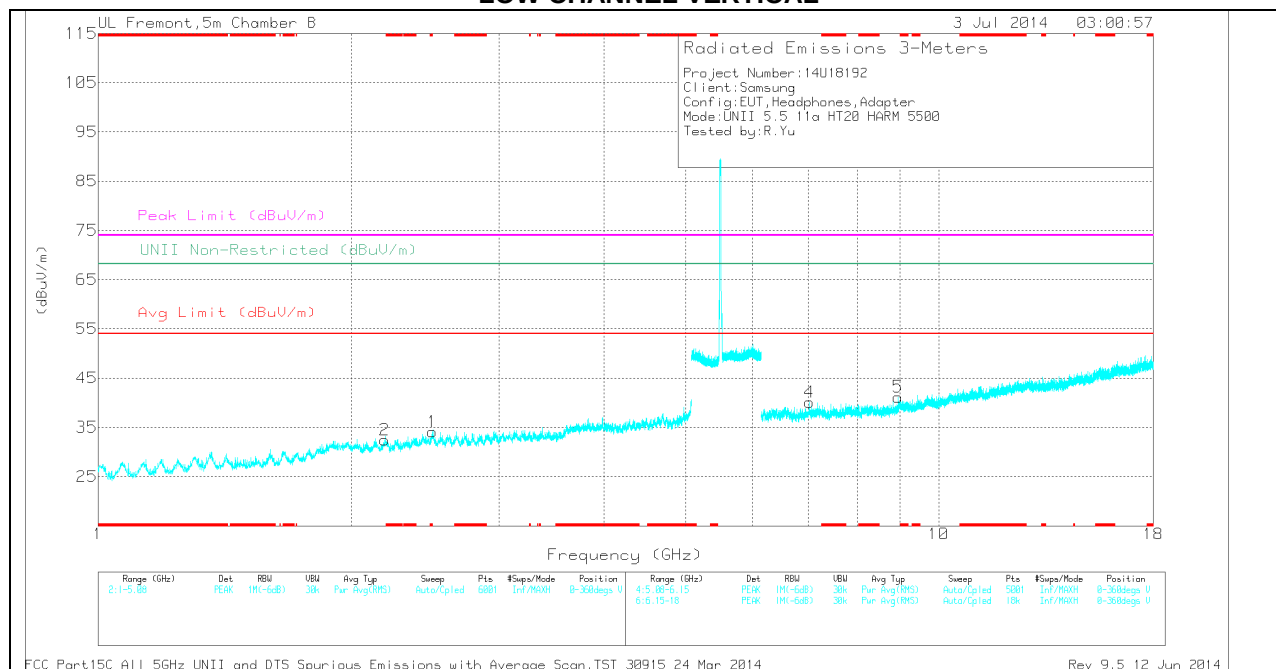
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	43.76	PK	35	-22.4	0	56.36	68.2	-11.84	125	355	V
2	5.725	47.24	PK	35	-22.4	0	59.84	68.2	-8.36	125	355	V

HARMONICS AND SPURIOUS EMISSIONS



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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 1.294	35.08	PK	28.8	-34.4	0	29.48	-	-	74	-44.52	-	-	0-360	99	H
1	* 2.498	34.01	PK	32.4	-32.3	0	34.11	-	-	74	-39.89	-	-	0-360	99	V
6	* 12.206	26.37	PK	38.9	-21.9	0	43.37	-	-	74	-30.63	-	-	0-360	206	H
2	2.193	33.53	PK	31.3	-32.4	0	32.43	-	-	-	-	68.2	-35.77	0-360	194	V
4	7.015	31.67	PK	35.6	-27.2	0	40.07	-	-	-	-	68.2	-28.13	0-360	99	V
5	8.944	30.46	PK	36.1	-25.4	0	41.16	-	-	-	-	68.2	-27.04	0-360	194	V

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

PK - Peak detector

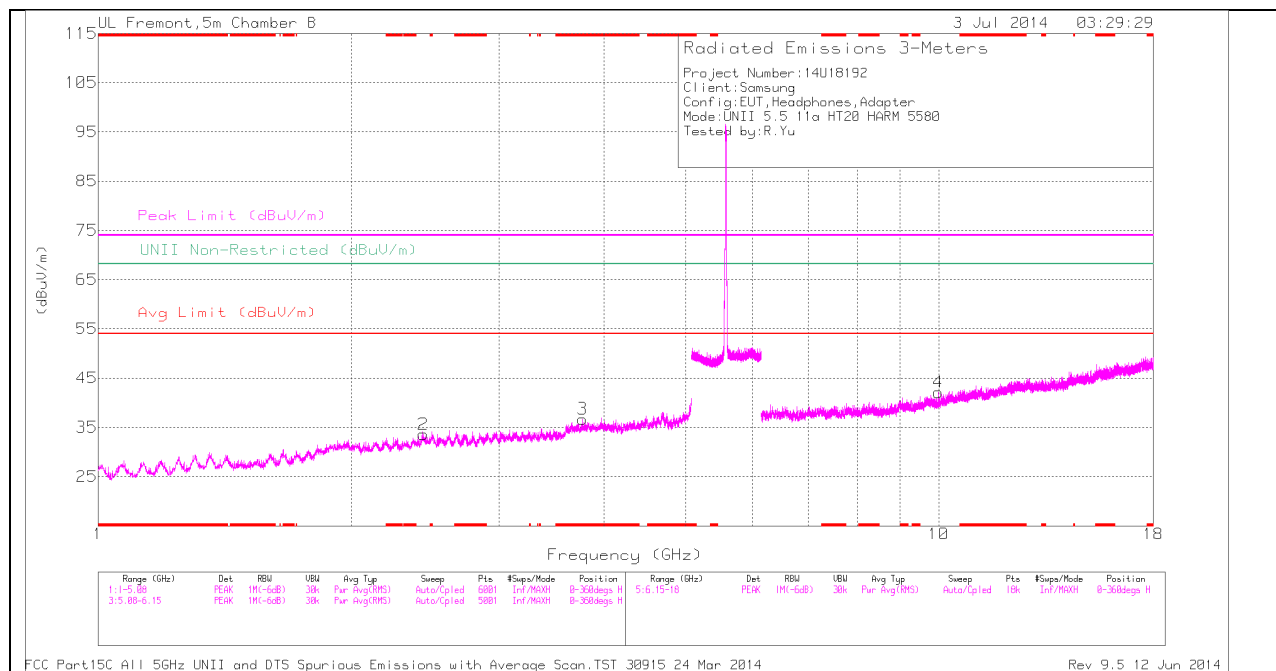
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.296	42.94	PK2	28.8	-34.4	0	37.34	-	-	74	-36.66	-	-	359	100	H
* 2.497	42.28	PK2	32.4	-32.3	0	42.38	-	-	74	-31.62	-	-	359	100	V
* 12.207	33.69	PK2	38.9	-21.9	0	50.69	-	-	74	-23.31	-	-	359	207	H
2.191	41.94	PK2	31.3	-32.4	0	40.84	-	-	-	-	68.2	-27.36	359	203	V
3.039	41.19	PK2	32.8	-32.2	0	41.79	-	-	-	-	68.2	-26.41	359	100	H
7.016	38.58	PK2	35.6	-27.2	0	46.98	-	-	-	-	68.2	-21.22	359	100	V

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

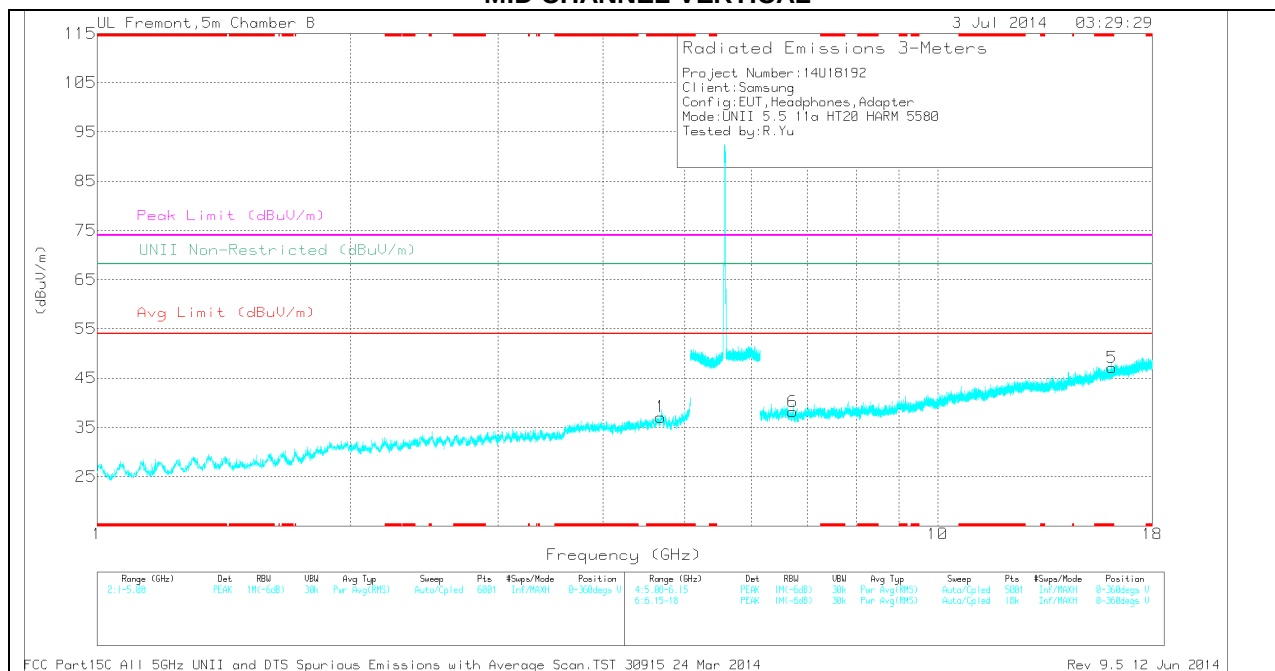
PK2 - KDB558074 Method: Maximum Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 3.769	34.09	PK	33.5	-30.9	0	36.69	-	-	74	-37.31	-	-	0-360	99	H
1	* 4.681	32.7	PK	34.2	-29.8	0	37.1	-	-	74	-36.9	-	-	0-360	99	V
5	* 16.113	26.3	PK	41	-20.2	0	47.1	-	-	74	-26.9	-	-	0-360	99	V
2	2.438	33.48	PK	32.3	-32.2	0	33.58	-	-	-	-	68.2	-34.62	0-360	99	H
6	6.725	31	PK	35.7	-28.5	0	38.2	-	-	-	-	68.2	-30	0-360	194	V
4	9.996	28.61	PK	37	-23.5	0	42.11	-	-	-	-	68.2	-26.09	0-360	99	H

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

PK - Peak detector

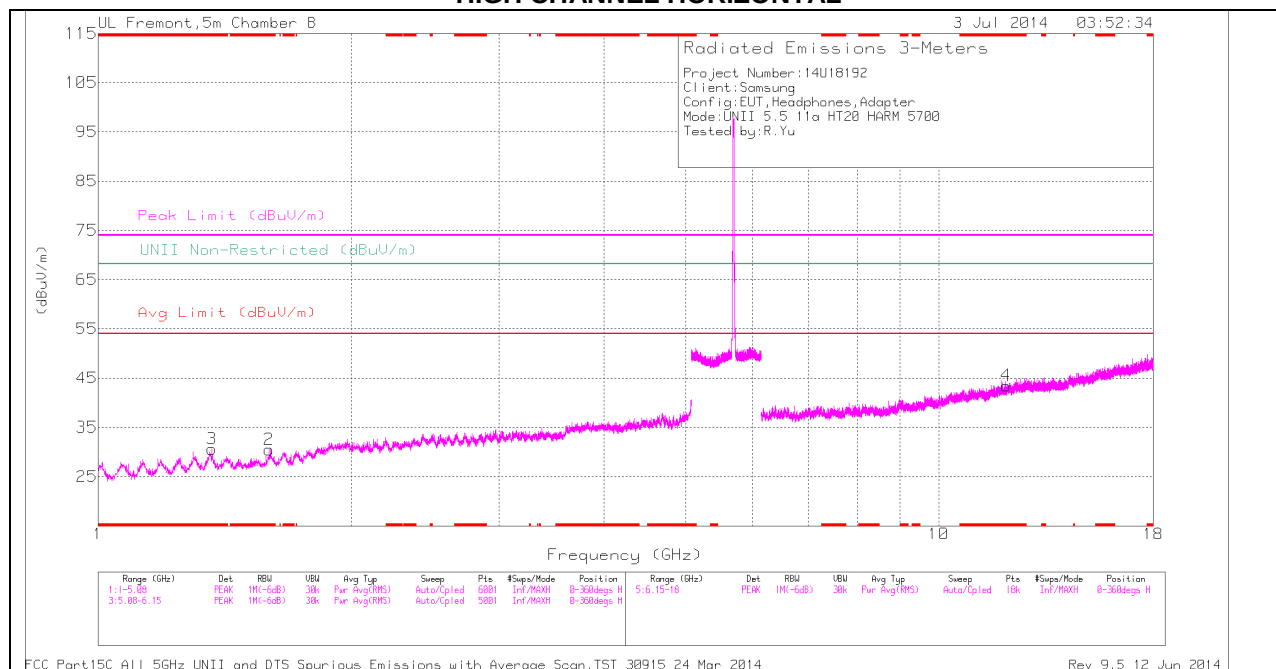
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 3.768	40.39	PK2	33.5	-30.9	0	42.99	-	-	74	-31.01	-	-	359	100	H
* 4.681	40.71	PK2	34.2	-29.8	0	45.11	-	-	74	-28.89	-	-	359	100	V
* 16.112	33.32	PK2	41	-20.2	0	54.12	-	-	74	-19.88	-	-	359	100	V
2.437	41.12	PK2	32.3	-32.2	0	41.22	-	-	-	-	68.2	-26.98	359	100	H
3.041	41.1	PK2	32.8	-32.2	0	41.7	-	-	-	-	68.2	-26.5	359	100	H
9.995	35.06	PK2	37	-23.5	0	48.56	-	-	-	-	68.2	-19.64	359	100	H

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

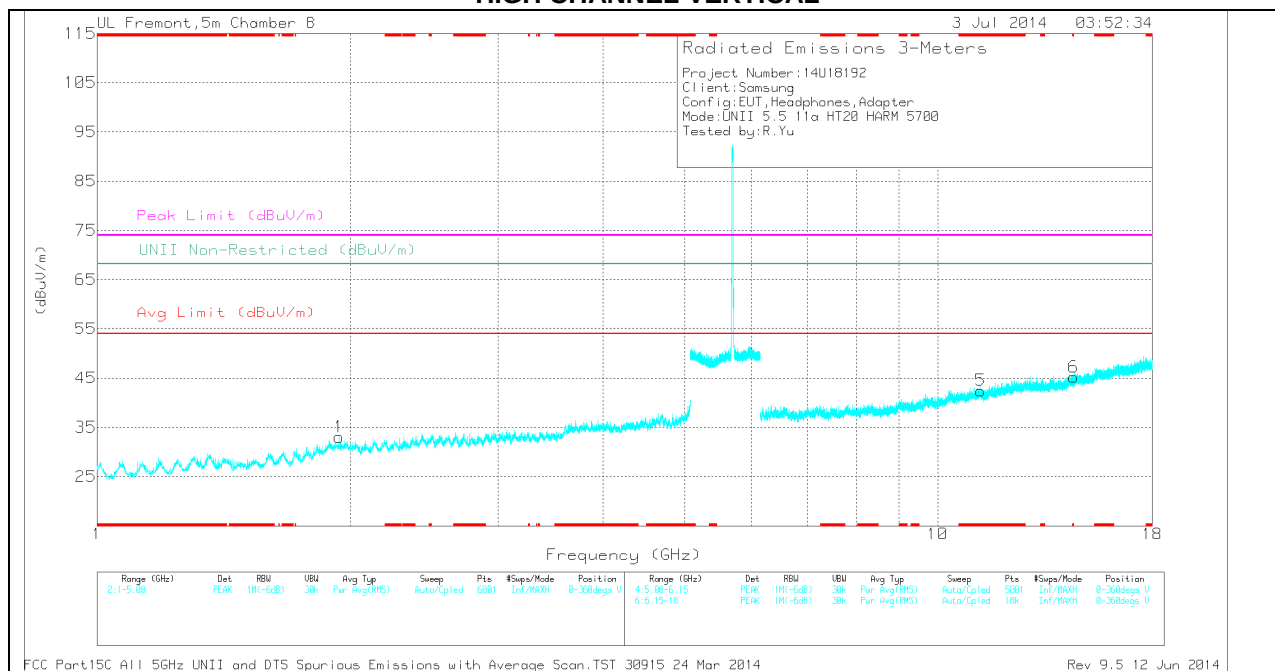
PK2 - KDB558074 Method: Maximum Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 1.598	35.07	PK	28.5	-33.1	0	30.47	-	-	74	-43.53	-	-	0-360	206	H
3	* 1.367	35.81	PK	28.6	-33.8	0	30.61	-	-	74	-43.39	-	-	0-360	99	H
4	* 12.031	26.87	PK	38.8	-22.2	0	43.47	-	-	74	-30.53	-	-	0-360	206	H
5	* 11.243	26.27	PK	37.9	-21.7	0	42.47	-	-	74	-31.53	-	-	0-360	99	V
1	1.941	34.53	PK	31.2	-32.7	0	33.03	-	-	-	-	68.2	-35.17	0-360	99	V
6	14.51	26.7	PK	39.3	-20.8	0	45.2	-	-	-	-	68.2	-23	0-360	99	V

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

PK - Peak detector

Radiated Emissions

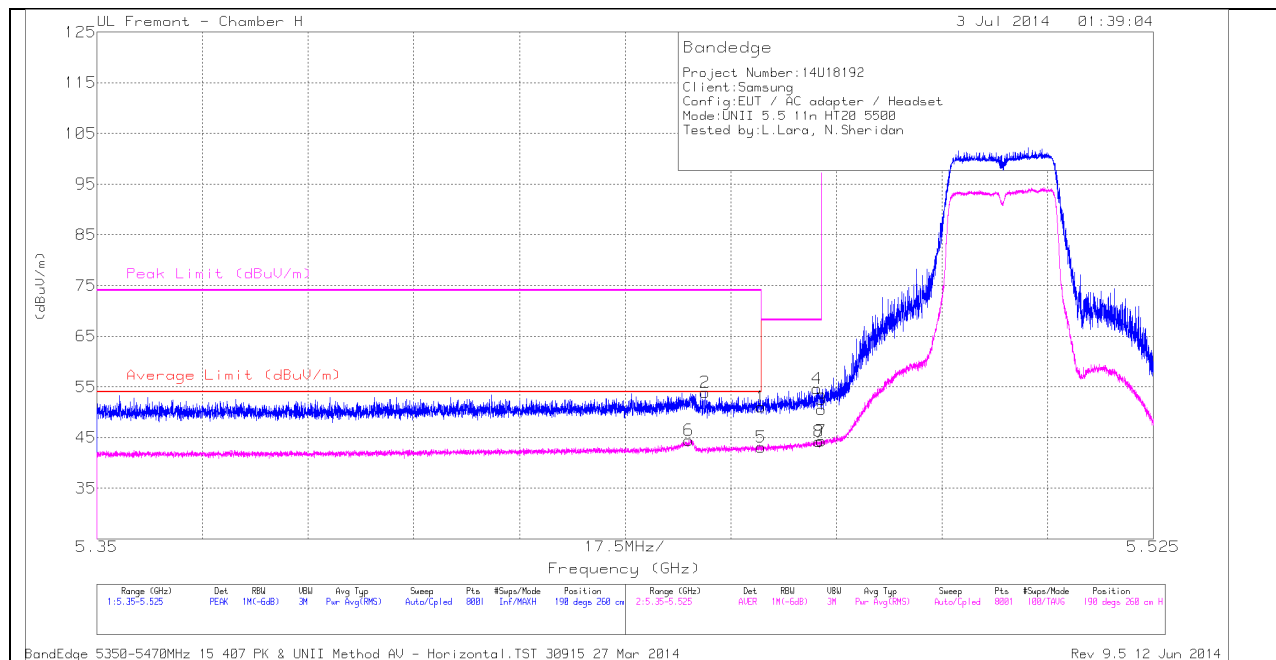
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.599	42.25	PK2	28.5	-33.1	0	37.65	-	-	74	-36.35	-	-	359	213	H
* 1.365	42.92	PK2	28.6	-33.8	0	37.72	-	-	74	-36.28	-	-	359	100	H
* 12.03	34.2	PK2	38.8	-22.2	0	50.8	-	-	74	-23.2	-	-	359	214	H
* 11.241	34.75	PK2	37.9	-21.7	0	50.95	-	-	74	-23.05	-	-	359	100	V
1.942	41.52	PK2	31.2	-32.7	0	40.02	-	-	-	-	68.2	-28.18	359	100	V
3.04	41.1	PK2	32.8	-32.2	0	41.7	-	-	-	-	68.2	-26.5	359	100	H

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

PK2 - KDB558074 Method: Maximum Peak

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

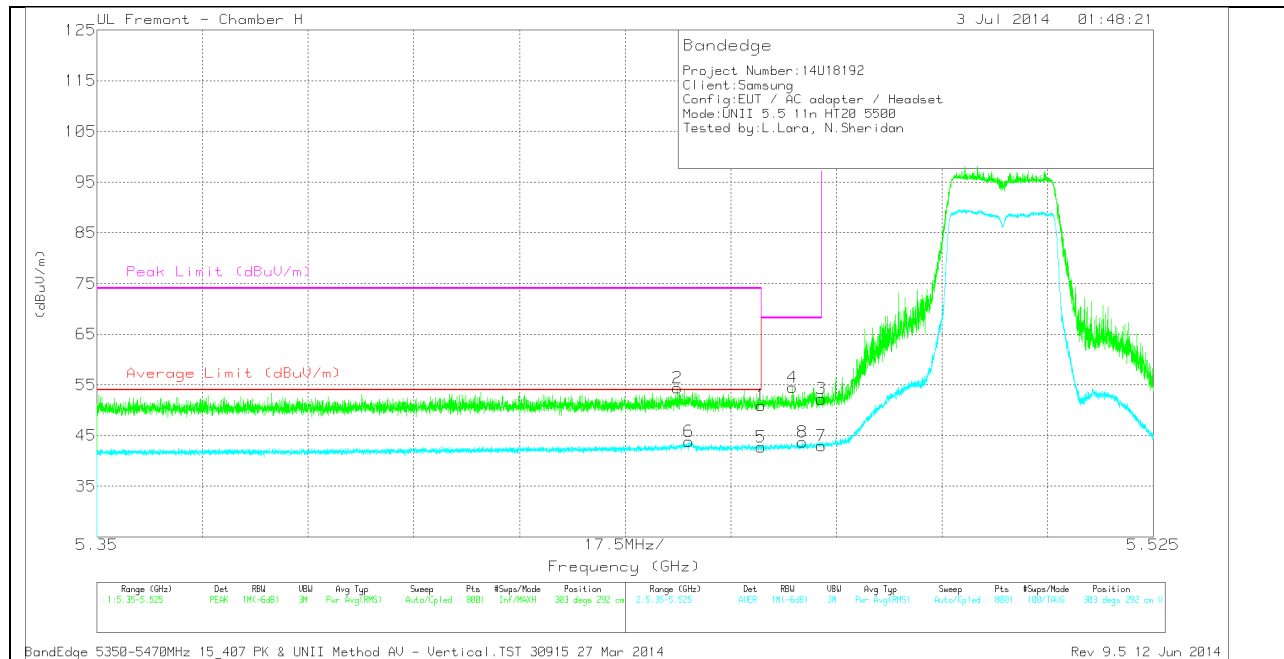
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dBm)	Amp/Cbl/FI tr/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	38.59	PK	35	-22.5	0	51.09	-	-	74	-22.91	190	260	H
2	* 5.451	41.41	PK	35	-22.5	0	53.91	-	-	74	-20.09	190	260	H
5	* 5.46	30.27	RMS	35	-22.5	.33	43.08	54	-10.92	-	-	190	260	H
6	* 5.448	31.66	RMS	35	-22.5	.33	44.47	54	-9.53	-	-	190	260	H
4	5.469	41.88	PK	35.1	-22.4	0	54.58	-	-	68.2	-13.62	190	260	H
3	5.47	37.86	PK	35.1	-22.4	0	50.56	-	-	68.2	-17.64	190	260	H
7	5.47	31.35	RMS	35.1	-22.4	.33	44.36	-	-	-	-	190	260	H
8	5.47	31.24	RMS	35.1	-22.4	.33	44.25	-	-	-	-	190	260	H

VERTICAL PEAK AND AVERAGE PLOT

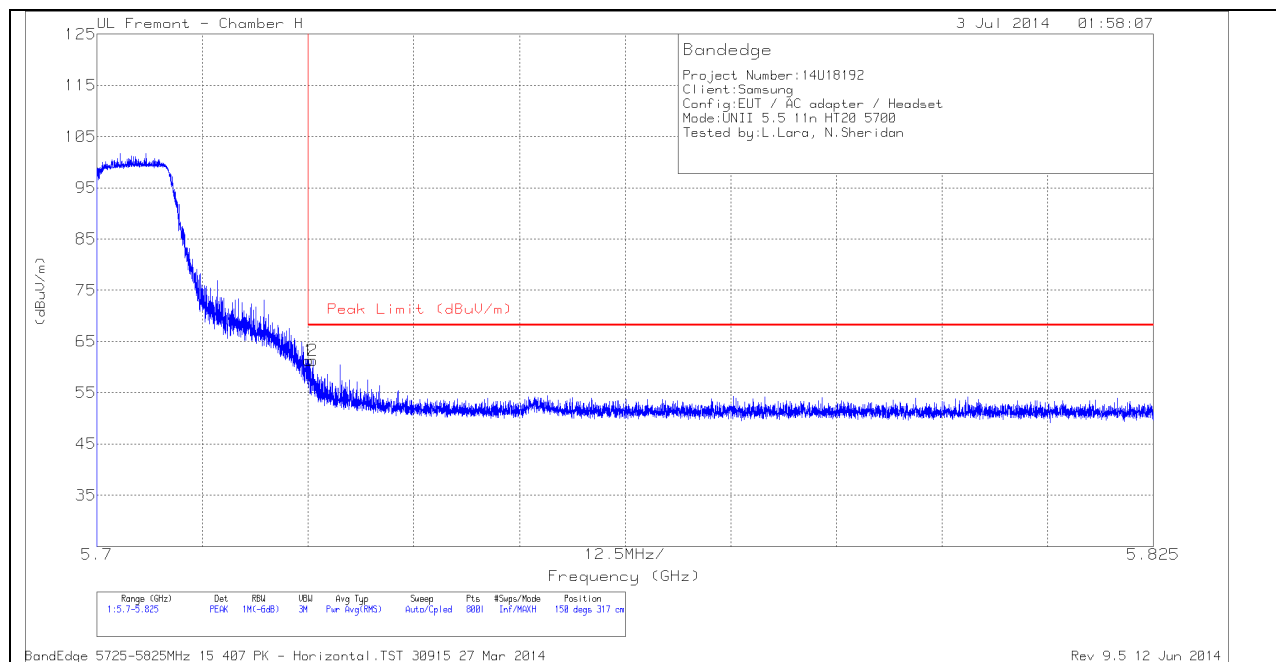


VERTICAL DATA

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.46	38.47	PK	35	-22.5	0	50.97	-	-	74	-23.03	303	292	V
2	* 5.446	41.84	PK	35	-22.5	0	54.34	-	-	74	-19.66	303	292	V
5	* 5.46	29.95	RMS	35	-22.5	.33	42.76	54	-11.24	-	-	303	292	V
6	* 5.448	31.06	RMS	35	-22.5	.33	43.87	54	-10.13	-	-	303	292	V
4	5.465	41.89	PK	35	-22.4	0	54.49	-	-	68.2	-13.71	303	292	V
8	5.467	30.82	RMS	35	-22.4	.33	43.73	-	-	-	-	303	292	V
3	5.47	39.52	PK	35.1	-22.4	0	52.22	-	-	68.2	-15.98	303	292	V
7	5.47	29.99	RMS	35.1	-22.4	.33	43	-	-	-	-	303	292	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

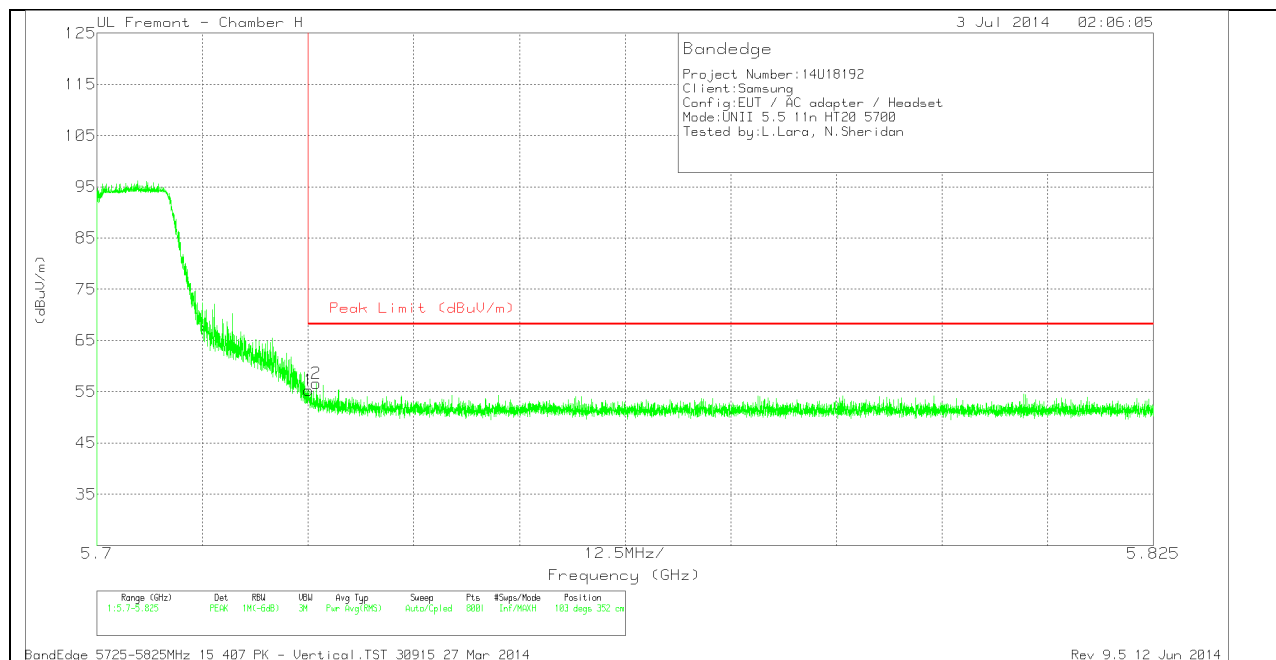
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	48.69	PK	35	-22.4	0	61.29	68.2	-6.91	150	317	H
2	5.726	48.69	PK	35	-22.4	0	61.29	68.2	-6.91	150	317	H

VERTICAL PEAK AND AVERAGE PLOT

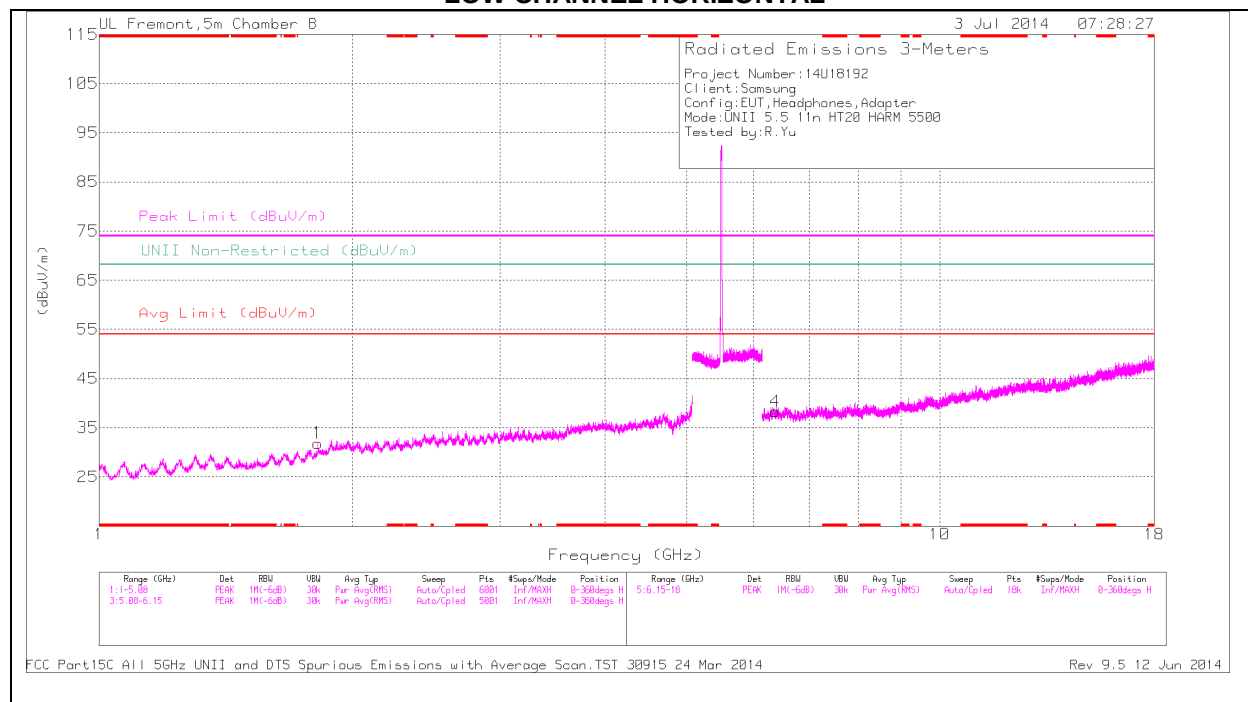


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	42.63	PK	35	-22.4	0	55.23	68.2	-12.97	103	352	V
2	5.726	44.07	PK	35	-22.4	0	56.67	68.2	-11.53	103	352	V

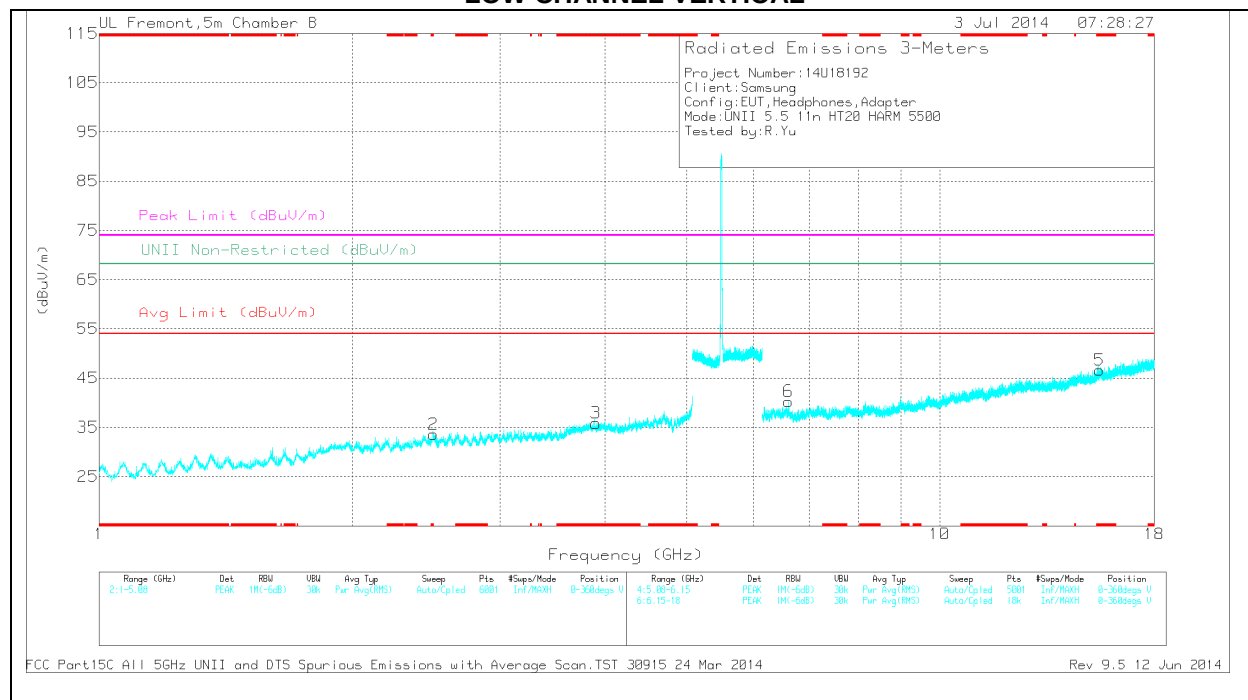
HARMONICS AND SPURIOUS EMISSIONS

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.499	33.5	PK	32.4	-32.3	0	33.6	-	-	74	-40.4	-	-	0-360	99	V
3	* 3.9	33.53	PK	33.8	-31.5	0	35.83	-	-	74	-38.17	-	-	0-360	194	V
5	* 15.497	25.81	PK	40.4	-19.6	0	46.61	-	-	74	-27.39	-	-	0-360	99	V
1	1.82	35.35	PK	30.3	-33.8	0	31.85	-	-	-	-	68.2	-36.35	0-360	209	H
4	6.376	30.52	PK	35.6	-27.8	0	38.32	-	-	-	-	68.2	-29.88	0-360	99	H
6	6.613	32.26	PK	35.7	-27.7	0	40.26	-	-	-	-	68.2	-27.94	0-360	99	V

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

PK - Peak detector

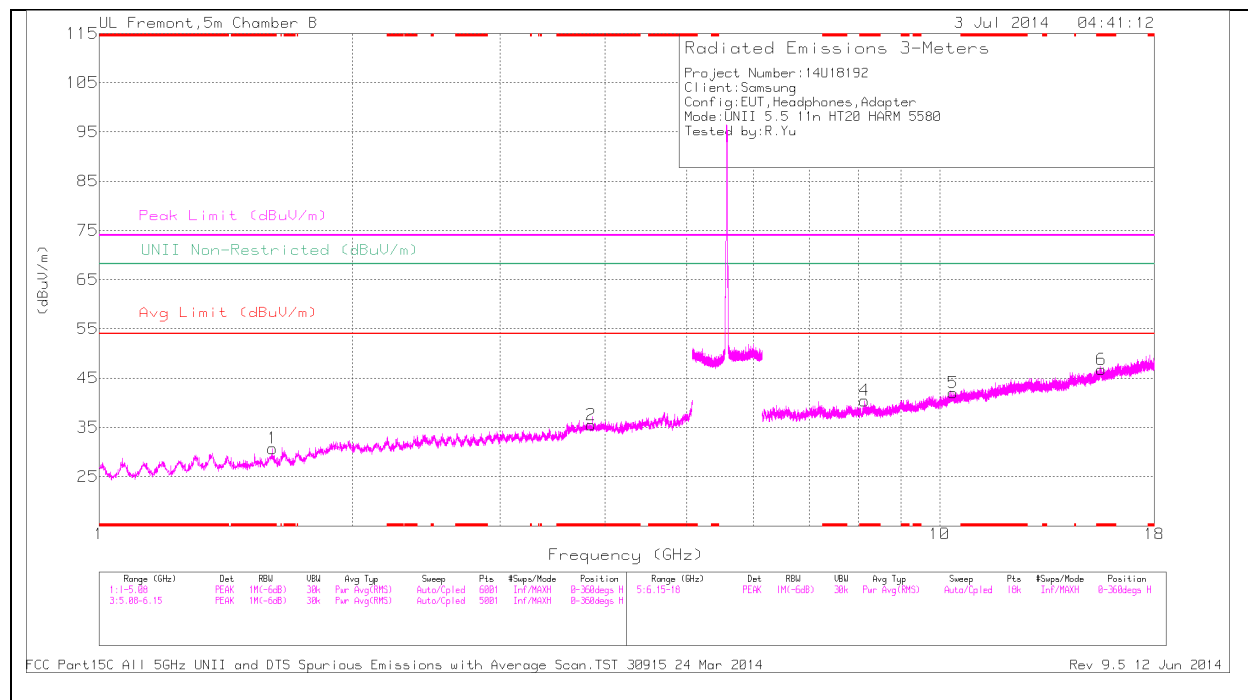
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 2.5	41.86	PK2	32.4	-32.3	0	41.96	-	-	74	-32.04	-	-	359	100	V
* 3.901	41.66	PK2	33.8	-31.5	0	43.96	-	-	74	-30.04	-	-	359	203	V
* 15.495	33.73	PK2	40.4	-19.6	0	54.53	-	-	74	-19.47	-	-	359	100	V
1.821	42.57	PK2	30.4	-33.8	0	39.17	-	-	-	-	68.2	-29.03	359	217	H
3.039	40.72	PK2	32.8	-32.2	0	41.32	-	-	-	-	68.2	-26.88	359	100	H
6.375	39.07	PK2	35.6	-27.8	0	46.87	-	-	-	-	68.2	-21.33	359	100	H

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

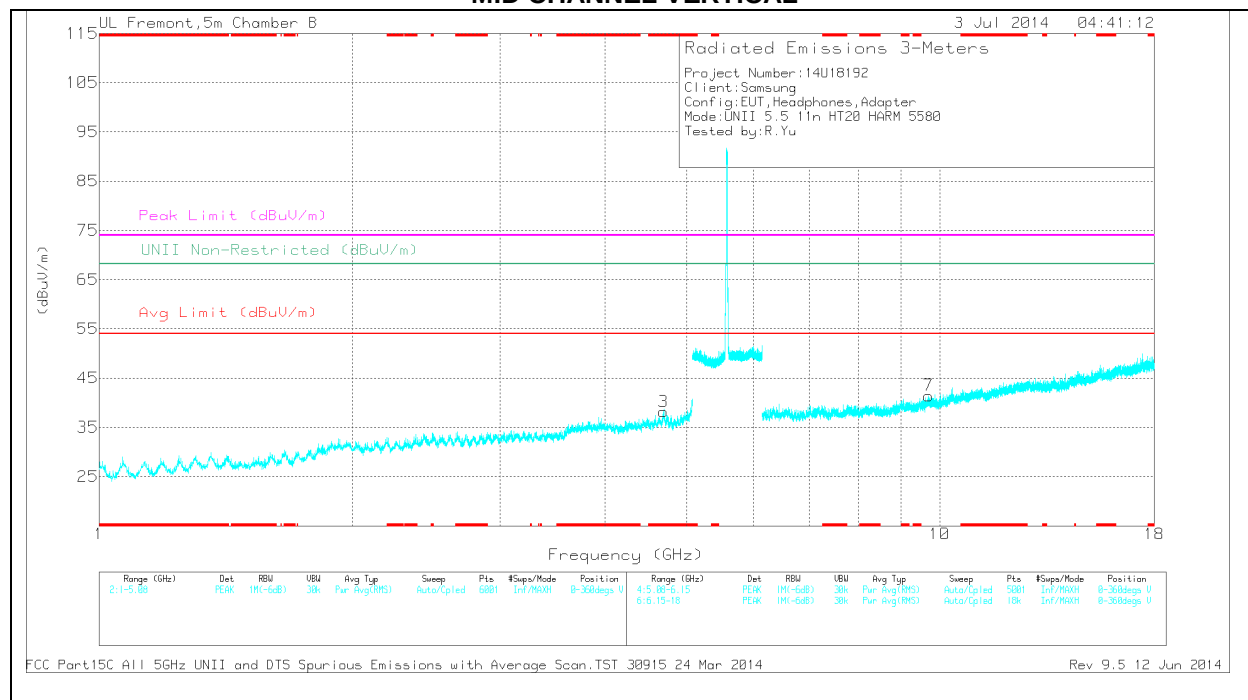
PK2 - KDB558074 Method: Maximum Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filt r/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	* 1.608	35.32	PK	28.5	-33.1	0	30.72	-	-	74	-43.28	-	-	0-360	99	H
2	* 3.85	33.1	PK	33.7	-31.3	0	35.5	-	-	74	-38.5	-	-	0-360	99	H
3	* 4.692	33.79	PK	34.2	-29.8	0	38.19	-	-	74	-35.81	-	-	0-360	194	V
4	* 8.142	31.03	PK	35.7	-26.3	0	40.43	-	-	74	-33.57	-	-	0-360	208	H
6	* 15.581	25.72	PK	40.5	-19.5	0	46.72	-	-	74	-27.28	-	-	0-360	99	H
7	9.7	28.15	PK	36.9	-23.6	0	41.45	-	-	-	-	68.2	-26.75	0-360	99	V
5	10.381	27.39	PK	37.3	-22.7	0	41.99	-	-	-	-	68.2	-26.21	0-360	99	H

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

PK - Peak detector

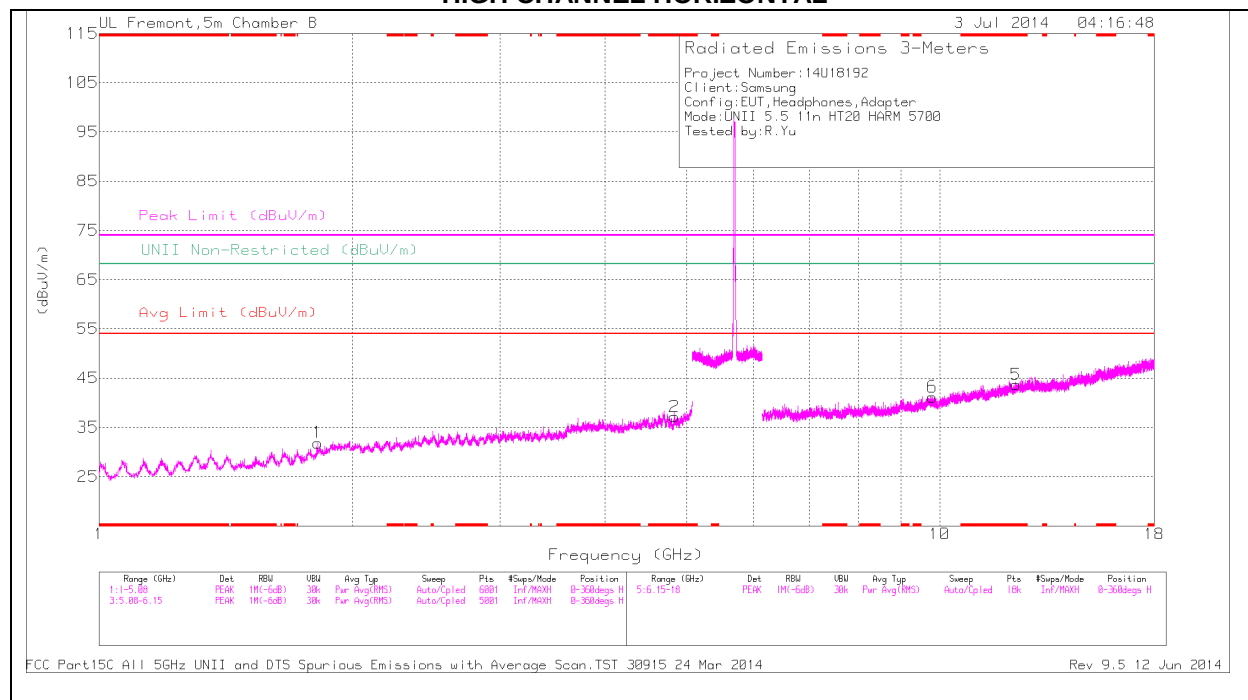
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Filt r/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
* 1.609	43.22	PK2	28.5	-33.1	0	38.62	-	-	74	-35.38	-	-	359	100	H
* 3.849	41.03	PK2	33.7	-31.3	0	43.43	-	-	74	-30.57	-	-	359	100	H
* 4.691	41.74	PK2	34.2	-29.8	0	46.14	-	-	74	-27.86	-	-	359	189	V
* 8.14	37.48	PK2	35.7	-26.3	0	46.88	-	-	74	-27.12	-	-	359	214	H
3.04	41.32	PK2	32.8	-32.2	0	41.92	-	-	-	-	68.2	-26.28	359	100	H
10.38	35.35	PK2	37.3	-22.7	0	49.95	-	-	-	-	68.2	-18.25	359	100	H

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

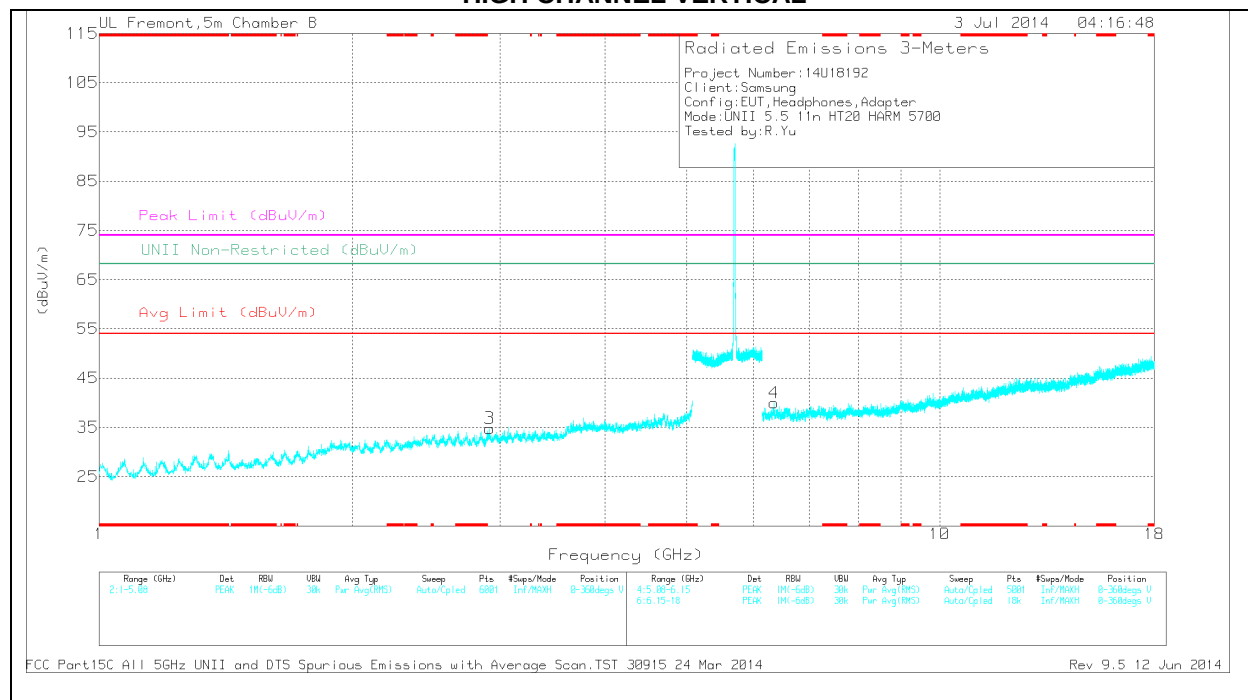
PK2 - KDB558074 Method: Maximum Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 4.837	33.06	PK	34.2	-30.1	0	37.16	-	-	74	-36.84	-	-	0-360	99	H
5	* 12.324	26.37	PK	39	-21.7	0	43.67	-	-	74	-30.33	-	-	0-360	99	H
1	1.821	35.26	PK	30.4	-33.8	0	31.86	-	-	-	-	68.2	-36.34	0-360	206	H
3	2.915	34.08	PK	32.7	-32	0	34.78	-	-	-	-	68.2	-33.42	0-360	99	V
4	6.351	32.18	PK	35.6	-27.8	0	39.98	-	-	-	-	68.2	-28.22	0-360	195	V
6	9.802	28.17	PK	36.9	-23.9	0	41.17	-	-	-	-	68.2	-27.03	0-360	206	H

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

PK - Peak detector

Radiated Emissions

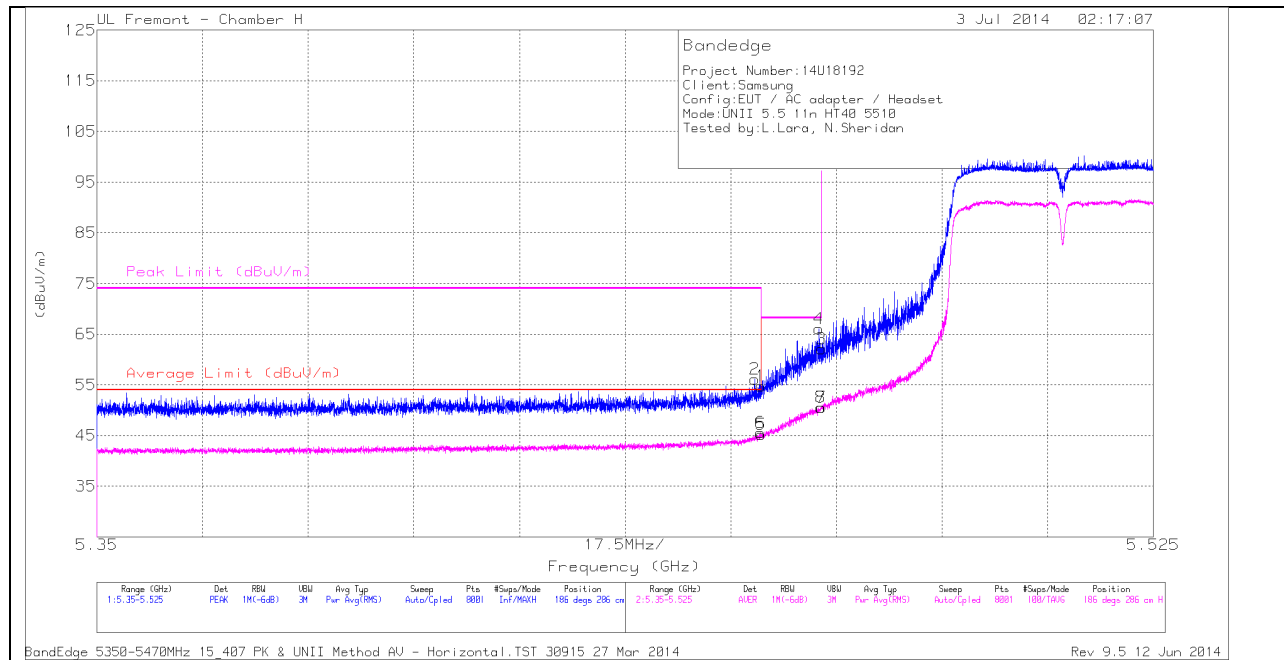
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.835	39.49	PK2	34.2	-30.1	0	43.59	-	-	74	-30.41	-	-	359	100	H
* 12.322	34.47	PK2	39	-21.7	0	51.77	-	-	74	-22.23	-	-	359	100	H
1.821	42.33	PK2	30.4	-33.8	0	38.93	-	-	-	-	68.2	-29.27	359	214	H
2.915	41.91	PK2	32.7	-32	0	42.61	-	-	-	-	68.2	-25.59	359	100	V
3.041	40.68	PK2	32.8	-32.2	0	41.28	-	-	-	-	68.2	-26.92	359	100	H
9.802	35.53	PK2	36.9	-23.9	0	48.53	-	-	-	-	68.2	-19.67	359	213	H

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

PK2 - KDB558074 Method: Maximum Peak

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

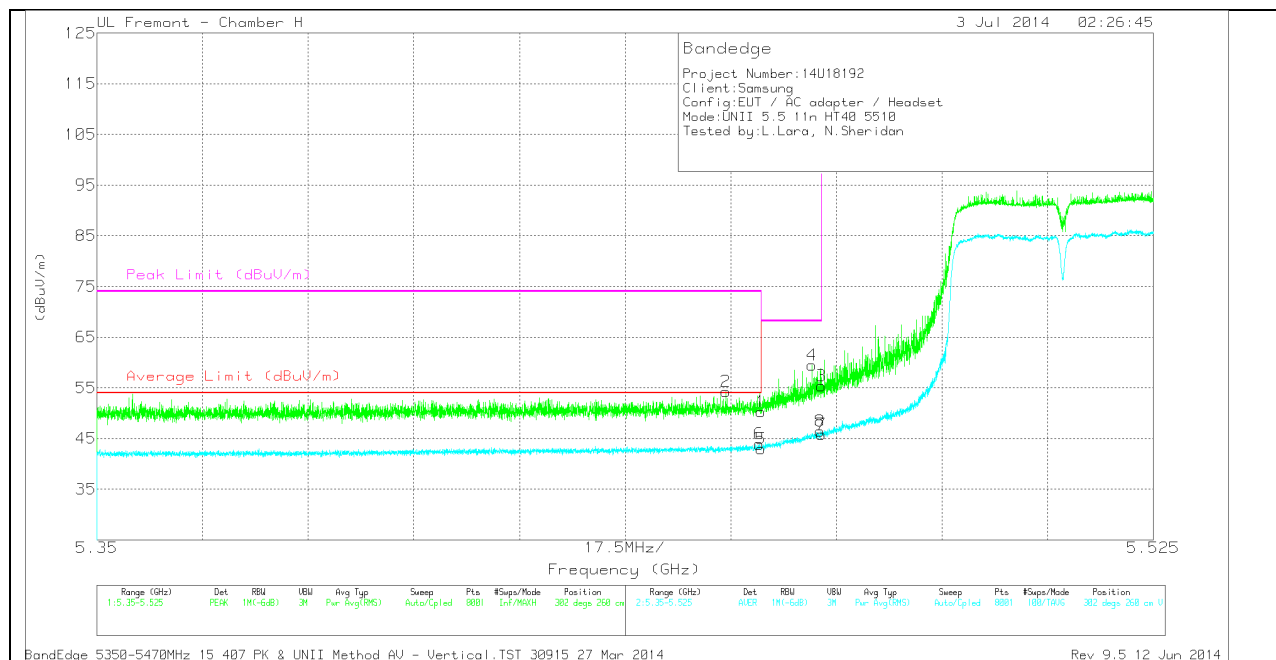
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/FI tr/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	42.27	PK	35	-22.5	0	54.77	-	-	74	-19.23	186	286	H
2	* 5.459	43.64	PK	35	-22.5	0	56.14	-	-	74	-17.86	186	286	H
5	* 5.46	32.05	RMS	35	-22.5	.62	45.18	54	-8.82	-	-	186	286	H
6	* 5.46	32.42	RMS	35	-22.5	.62	45.55	54	-8.45	-	-	186	286	H
3	5.47	49.34	PK	35.1	-22.4	0	62.04	-	-	68.2	-6.16	186	286	H
4	5.47	53.32	PK	35.1	-22.4	0	66.02	-	-	68.2	-2.18	186	286	H
7	5.47	37.16	RMS	35.1	-22.4	.62	50.49	-	-	-	-	186	286	H
8	5.47	37.18	RMS	35.1	-22.4	.62	50.51	-	-	-	-	186	286	H

VERTICAL PEAK AND AVERAGE PLOT

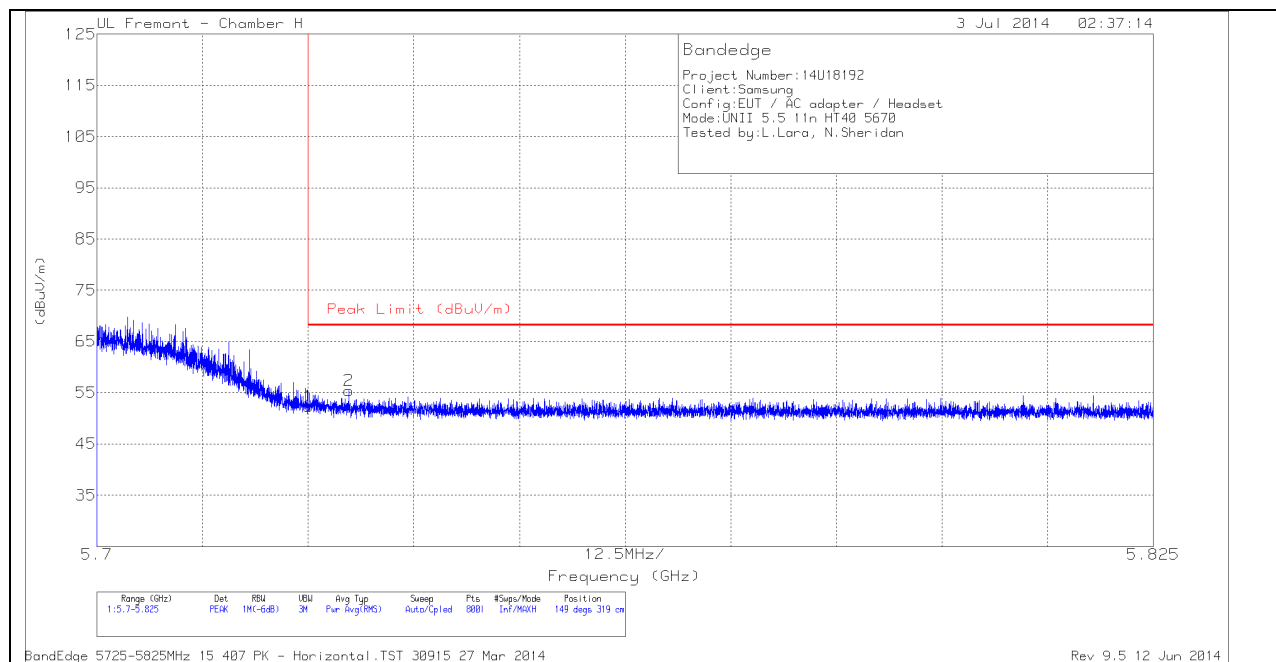


VERTICAL DATA

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	DC Corr (dB)	Correcte d Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 5.454	41.74	PK	35	-22.5	0	54.24	-	-	74	-19.76	302	260	V
1	* 5.46	37.78	PK	35	-22.5	0	50.28	-	-	74	-23.72	302	260	V
5	* 5.46	29.78	RMS	35	-22.5	.62	42.91	54	-11.09	-	-	302	260	V
6	* 5.46	30.77	RMS	35	-22.5	.62	43.9	54	-10.1	-	-	302	260	V
4	5.468	46.93	PK	35	-22.4	0	59.53	-	-	68.2	-8.67	302	260	V
3	5.47	42.65	PK	35.1	-22.4	0	55.35	-	-	68.2	-12.85	302	260	V
7	5.47	32.47	RMS	35.1	-22.4	.62	45.8	-	-	-	-	302	260	V
8	5.47	33.1	RMS	35.1	-22.4	.62	46.43	-	-	-	-	302	260	V

AUTHORIZED BANDEDGE (HIGH CHANNEL)

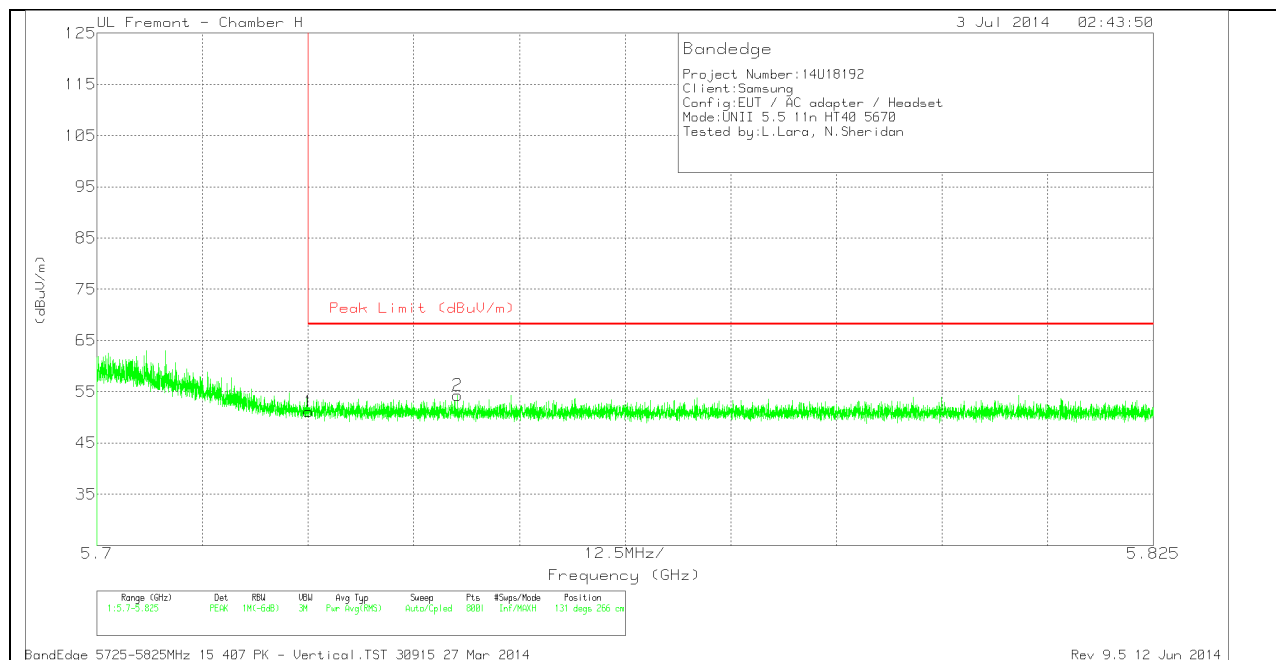
HORIZONTAL PEAK AND AVERAGE PLOT



HORIZONTAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	39.68	PK	35	-22.4	0	52.28	68.2	-15.92	149	319	H
2	5.73	42.8	PK	35	-22.4	0	55.4	68.2	-12.8	149	319	H

VERTICAL PEAK AND AVERAGE PLOT

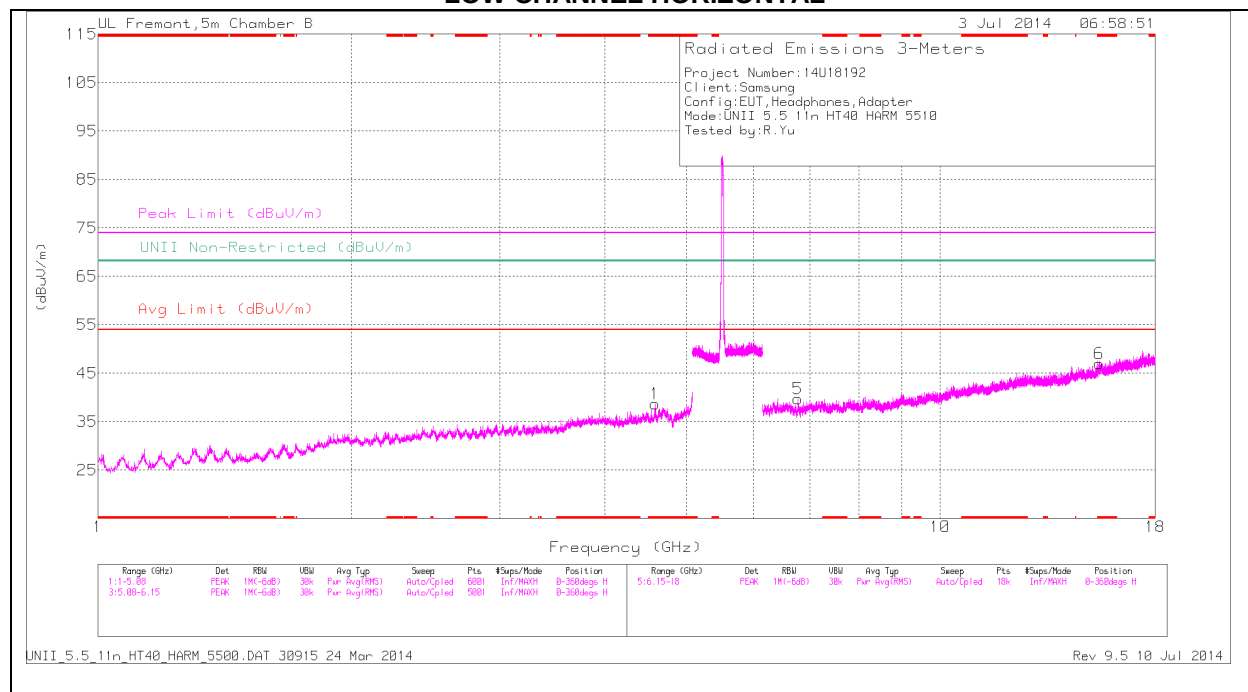


VERTICAL DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.725	38.45	PK	35	-22.4	0	51.05	68.2	-17.15	131	266	V
2	5.743	41.65	PK	35	-22.3	0	54.35	68.2	-13.85	131	266	V

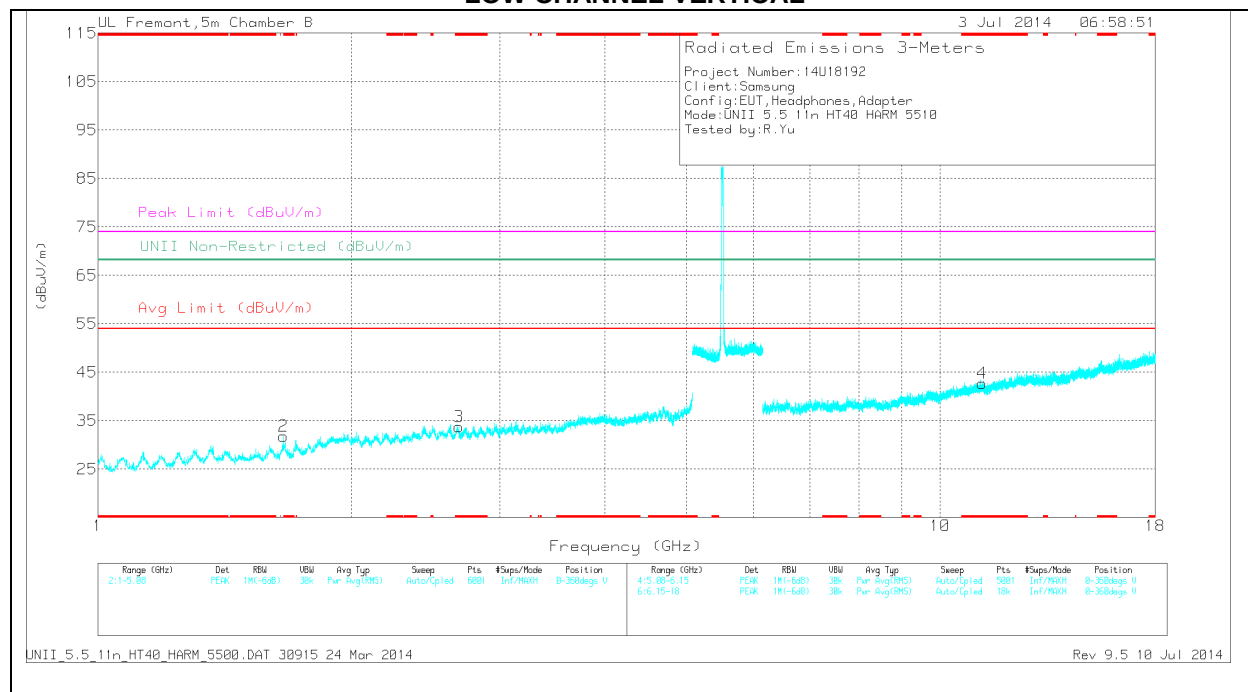
HARMONICS AND SPURIOUS EMISSIONS

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.59	34.74	PK	34.1	-30.1	0	38.74	-	-	74	-35.26	-	-	0-360	206	H
2	* 1.661	36	PK	28.8	-33	0	31.8	-	-	74	-42.2	-	-	0-360	99	V
3	* 2.684	33.39	PK	32.2	-31.8	0	33.79	-	-	74	-40.21	-	-	0-360	195	V
6	* 15.448	26.97	PK	40.4	-20.4	0	46.97	-	-	74	-27.03	-	-	0-360	206	H
4	* 11.206	26.77	PK	37.9	-22	0	42.67	-	-	74	-31.33	-	-	0-360	99	V
5	6.776	32.08	PK	35.7	-28	0	39.78	-	-	-	-	68.2	-28.42	0-360	99	H

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

PK - Peak detector

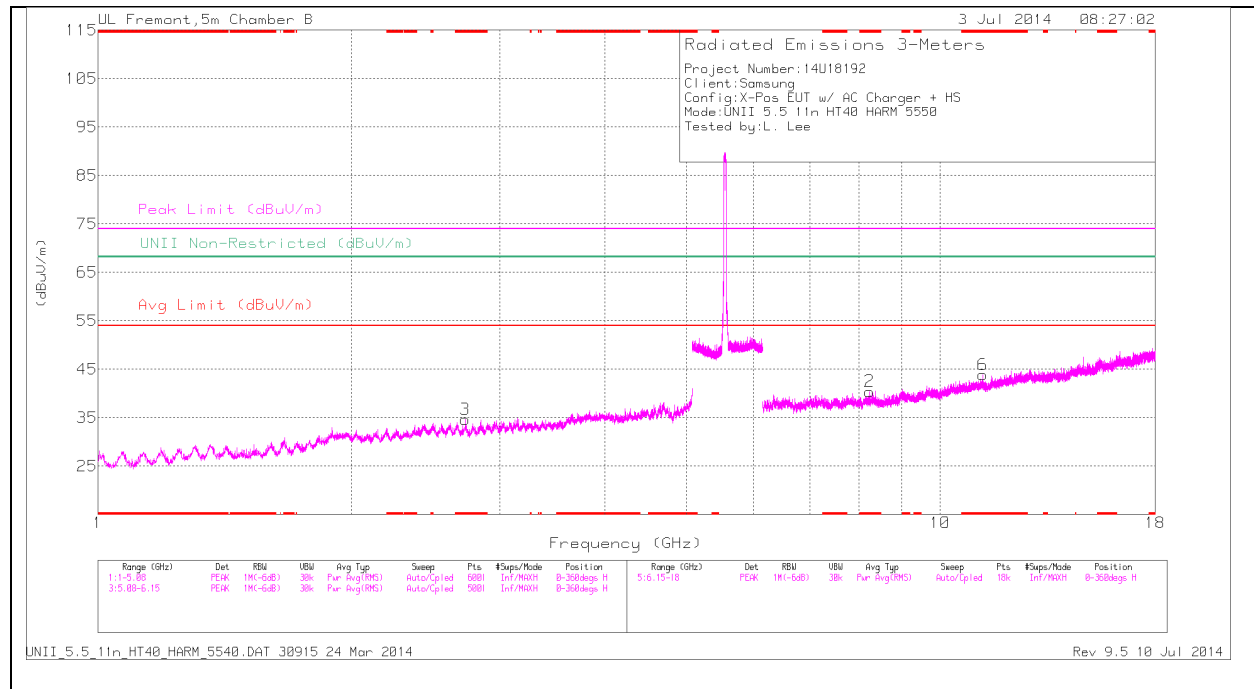
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 4.589	41.58	PK2	34.1	-30.1	0	45.58	-	-	74	-28.42	-	-	359	213	H
* 1.661	42.95	PK2	28.8	-33	0	38.75	-	-	74	-35.25	-	-	359	100	V
* 2.683	40.18	PK2	32.2	-31.8	0	40.58	-	-	74	-33.42	-	-	359	188	V
* 15.448	34.18	PK2	40.4	-20.4	0	54.18	-	-	74	-19.82	-	-	359	213	H
3.039	41.08	PK2	32.8	-32.2	0	41.68	-	-	-	-	68.2	-26.52	359	100	H
6.776	38.78	PK2	35.7	-28	0	46.48	-	-	-	-	68.2	-21.72	359	100	H

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

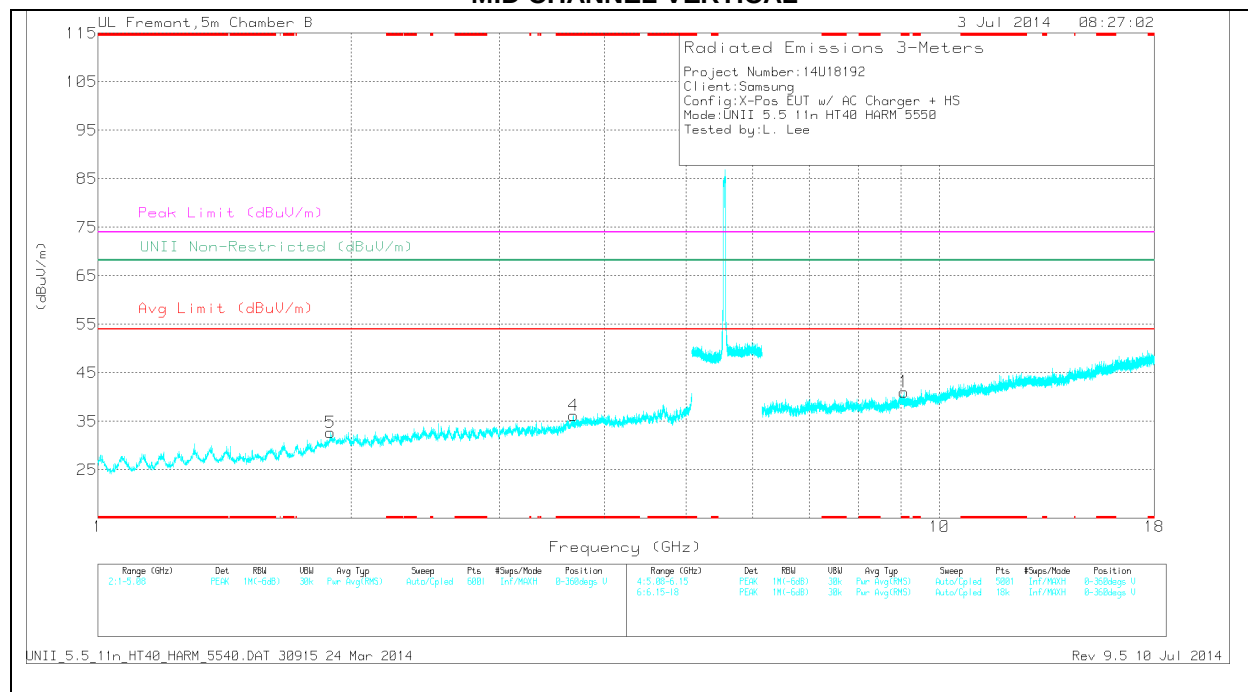
PK2 - KDB558074 Method: Maximum Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 2.73	34.52	PK	32.2	-32	0	34.72	-	-	74	-39.28	-	-	0-360	99	H
4	* 3.673	34.22	PK	33.3	-31.3	0	36.22	-	-	74	-37.78	-	-	0-360	99	V
2	* 8.243	31.04	PK	35.7	-26.3	0	40.44	-	-	74	-33.56	-	-	0-360	206	H
6	* 11.231	27.64	PK	37.9	-21.7	0	43.84	-	-	74	-30.16	-	-	0-360	99	H
1	* 9.072	29.99	PK	36.3	-25.2	0	41.09	-	-	74	-32.91	-	-	0-360	195	V
5	1.889	34.66	PK	31	-32.9	0	32.76	-	-	-	-	68.2	-35.44	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/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.661	42.95	PK2	28.8	-33	0	38.75	-	-	74	-35.25	-	-	359	100	V
* 2.683	40.18	PK2	32.2	-31.8	0	40.58	-	-	74	-33.42	-	-	359	188	V
* 11.231	34.28	PK1	37.9	-21.7	0	50.48	-	-	74	-23.52	-	-	231	349	H
* 11.23	22.7	AD1	37.9	-21.7	0	38.9	54	-15.1	-	-	-	-	231	349	H
* 15.448	34.18	PK2	40.4	-20.4	0	54.18	-	-	74	-19.82	-	-	359	213	H
6.776	38.78	PK2	35.7	-28	0	46.48	-	-	-	-	68.2	-21.72	359	100	H

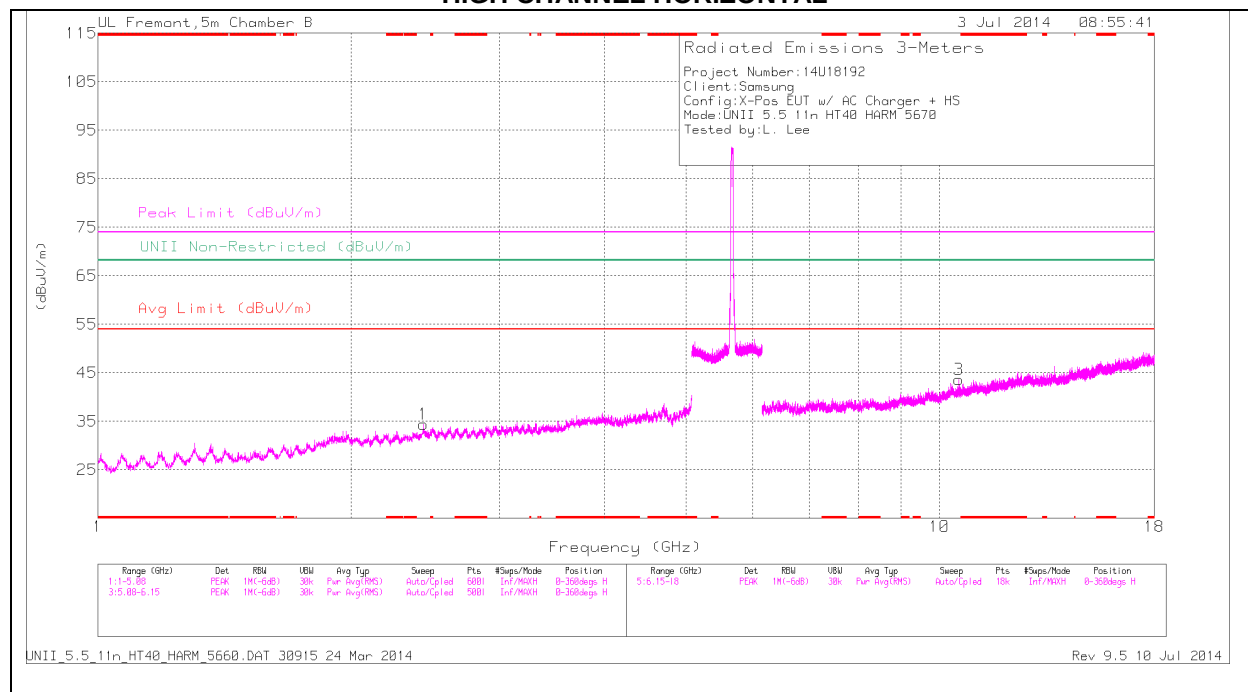
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

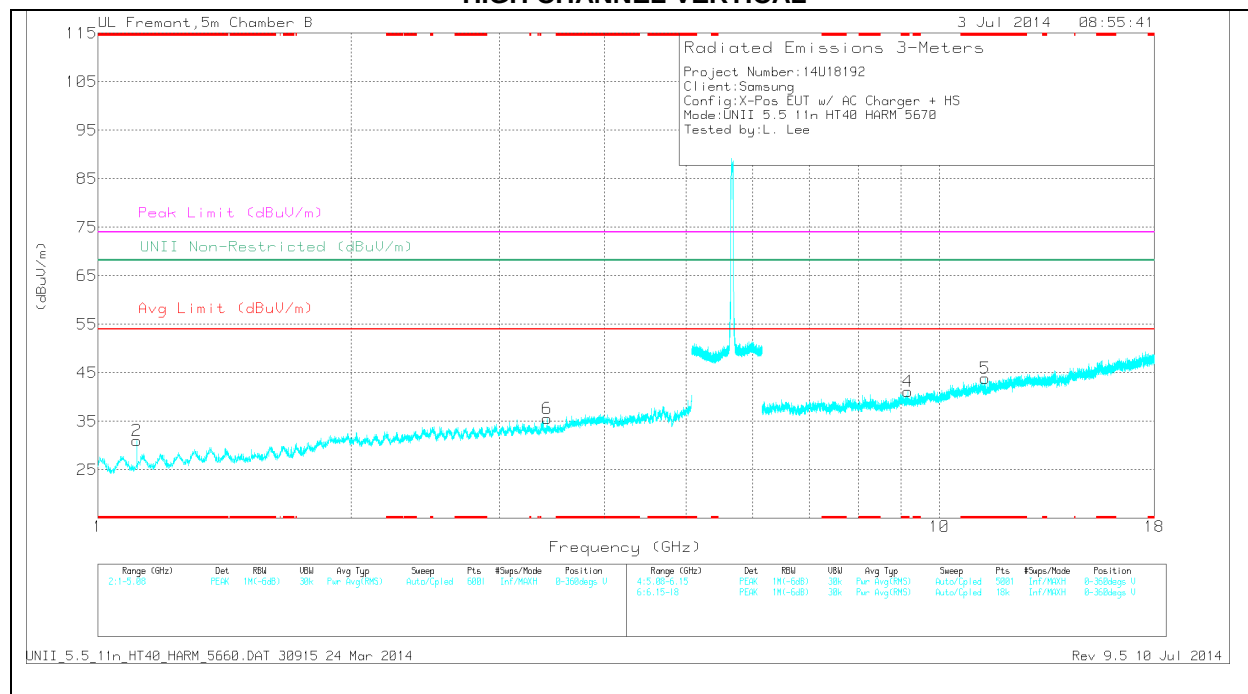
PK2 - KDB558074 Method: Maximum Peak

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 1.112	38.14	PK	27.5	-34.6	0	31.04	-	-	74	-42.96	-	-	0-360	99	V
4	* 9.169	29.44	PK	36.3	-24.6	0	41.14	-	-	74	-32.86	-	-	0-360	195	V
5	* 11.339	28.37	PK	38	-22.5	0	43.87	-	-	74	-30.13	-	-	0-360	195	V
1	2.438	34.31	PK	32.3	-32.2	0	34.41	-	-	-	-	68.2	-33.79	0-360	99	H
6	3.42	33.94	PK	32.8	-31.2	0	35.54	-	-	-	-	68.2	-32.66	0-360	195	V
3	10.535	28.98	PK	37.5	-22.9	0	43.58	-	-	-	-	68.2	-24.62	0-360	99	H

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

PK - Peak detector

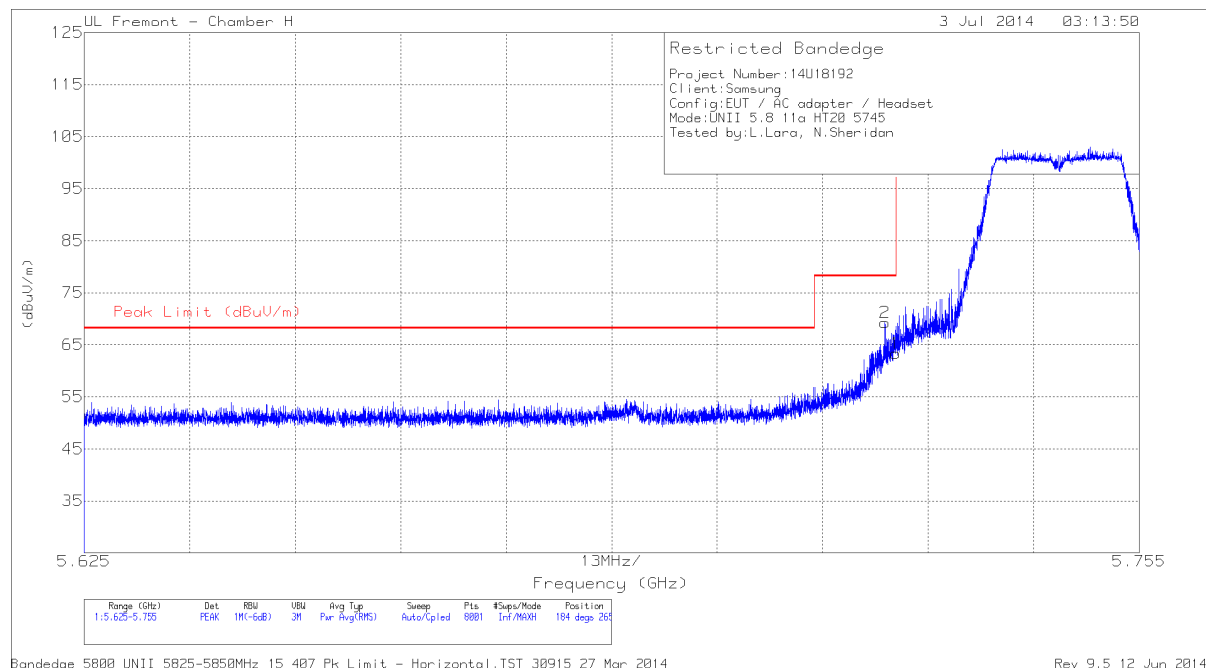
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.112	41.67	PK1	27.5	-34.6	0	34.57	-	-	74	-39.43	-	-	6	221	V
* 1.114	29.89	AD1	27.5	-34.6	.62	23.09	54	-30.91	-	-	-	-	6	221	V
* 1.661	42.95	PK2	28.8	-33	0	38.75	-	-	74	-35.25	-	-	359	100	V
* 2.683	40.18	PK2	32.2	-31.8	0	40.58	-	-	74	-33.42	-	-	359	188	V
* 15.448	34.18	PK2	40.4	-20.4	0	54.18	-	-	74	-19.82	-	-	359	213	H
6.776	38.78	PK2	35.7	-28	0	46.48	-	-	-	-	68.2	-21.72	359	100	H

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

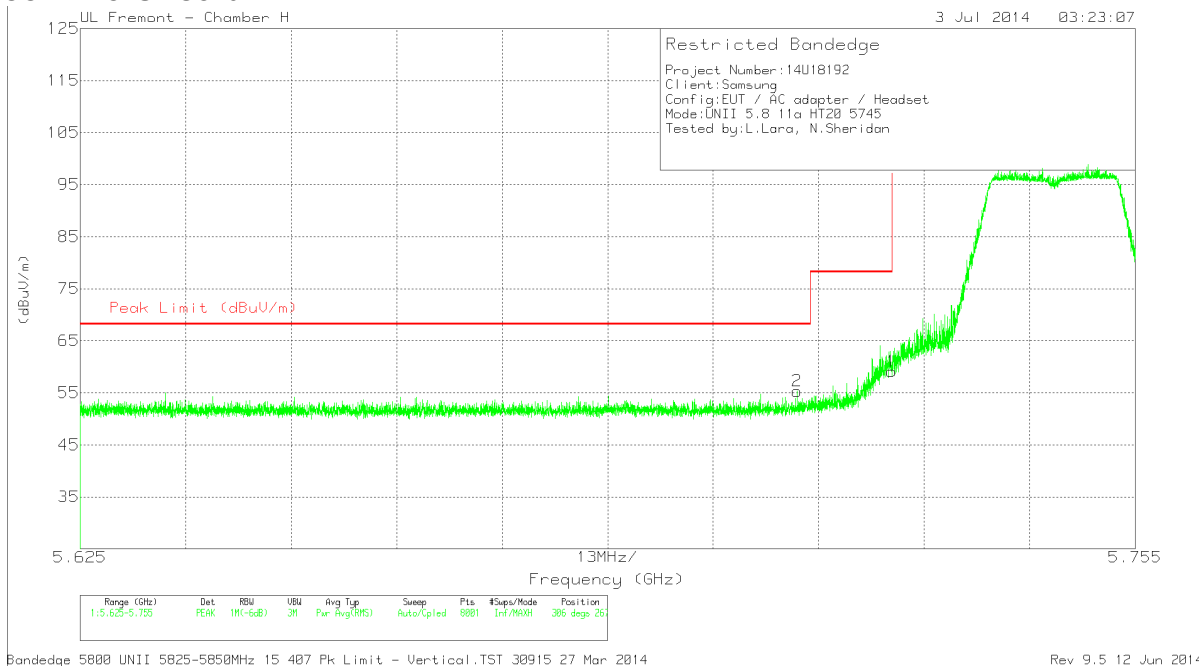
PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

11.4. 5.8 GHz**11.4.1. 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 T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.724	56.77	PK	35	-22.5	0	69.27	78.2	-8.93	184	265	H
1	5.725	50.72	PK	35	-22.4	0	63.32	78.2	-14.88	184	265	H

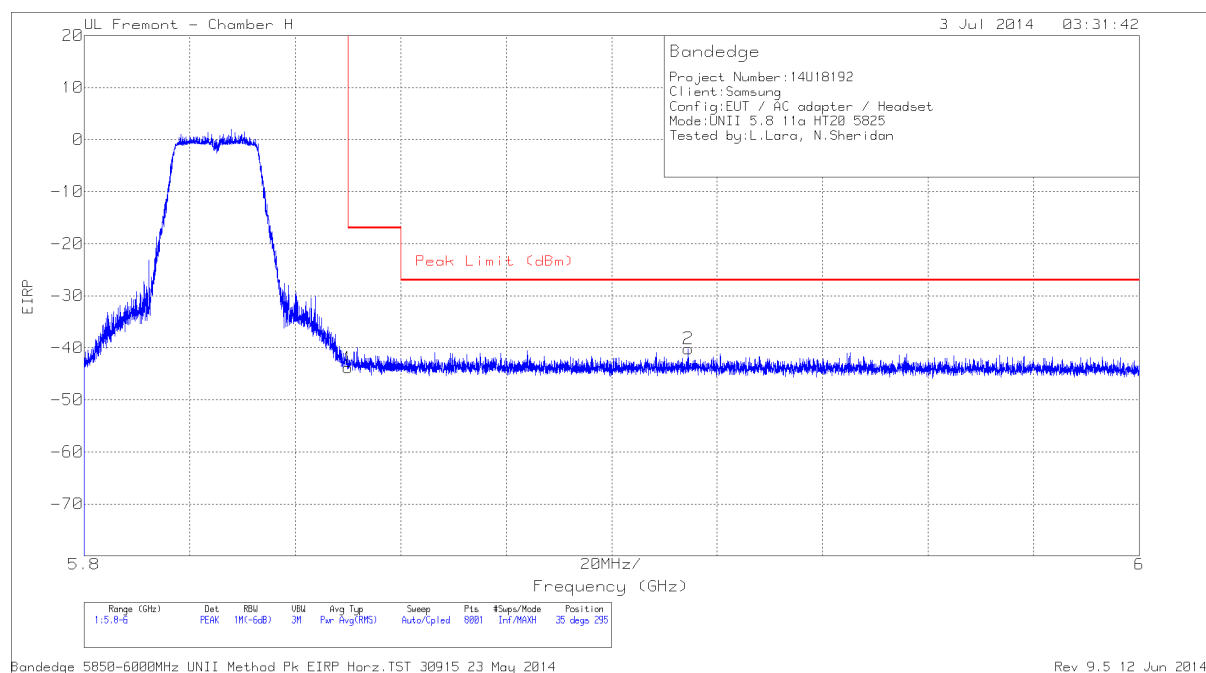
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.713	42.72	PK	35	-22.4	0	55.32	68.2	-12.88	306	267	V
1	5.725	46.51	PK	35	-22.4	0	59.11	78.2	-19.09	306	267	V

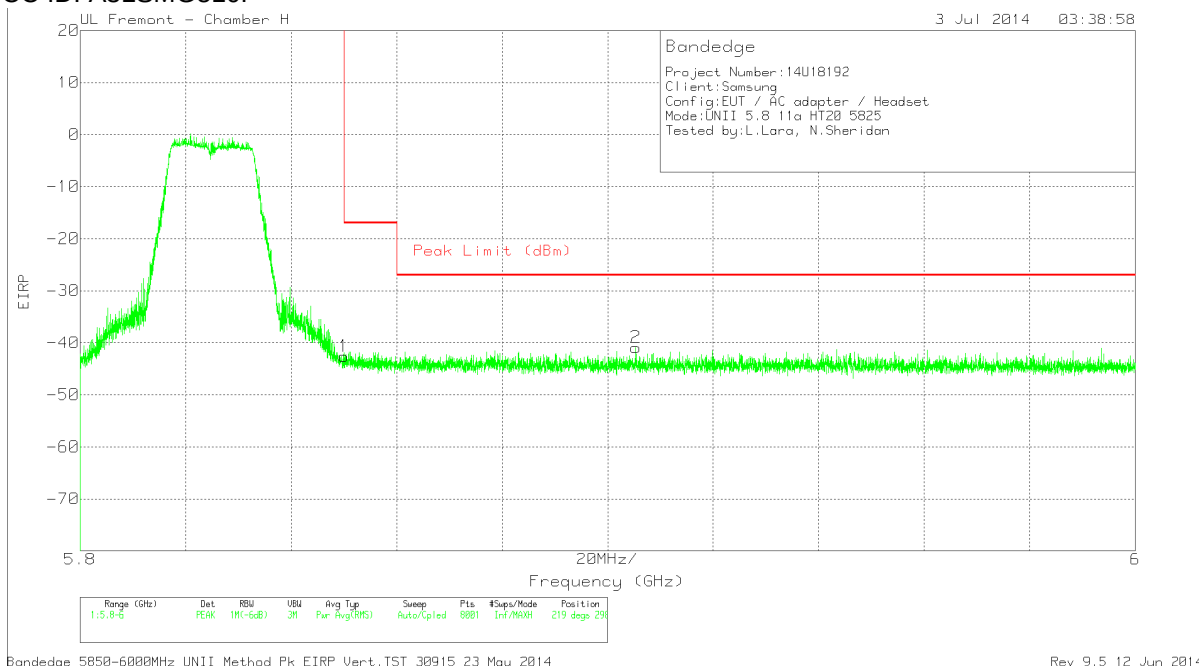
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-68.55	PK	35.1	-22.2	11.8	-43.85	-17	-26.85	35	295	H
2	5.915	-64.86	PK	35.1	-22.2	11.8	-40.16	-27	-13.16	35	295	H

PK - Peak detector

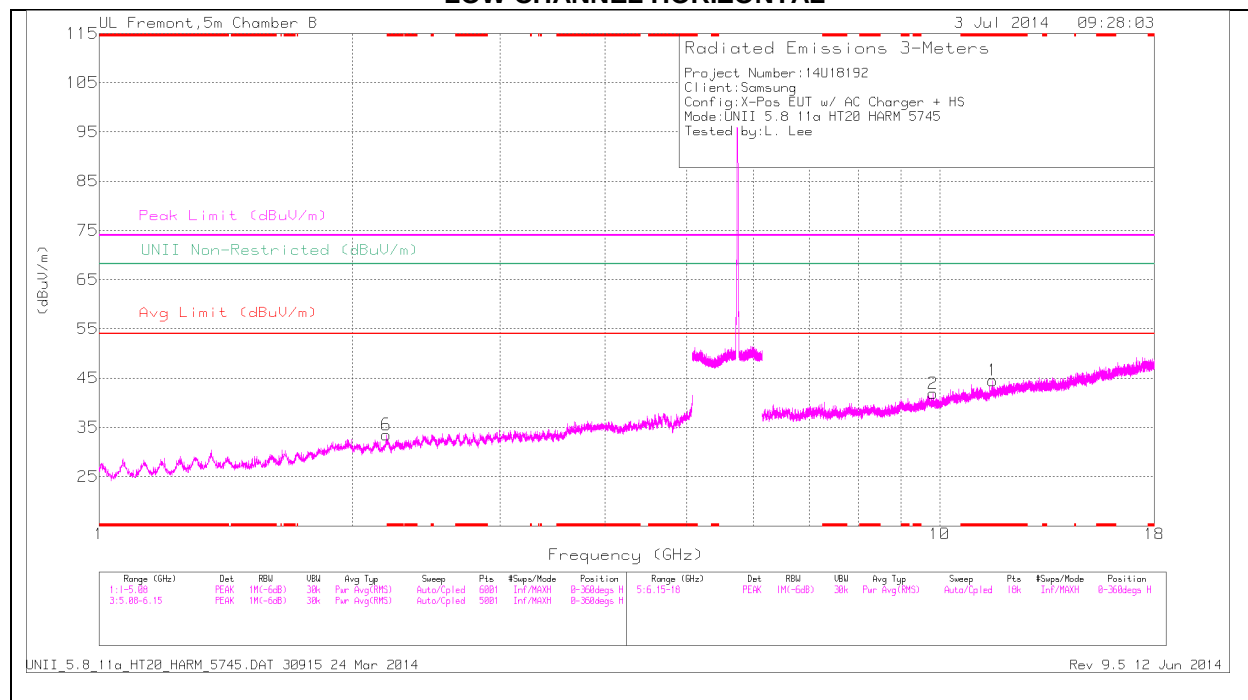


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-67.3	PK	35.1	-22.2	11.8	-42.6	-17	-25.6	219	298	V
2	5.905	-65.59	PK	35.1	-22.2	11.8	-40.89	-27	-13.89	219	298	V

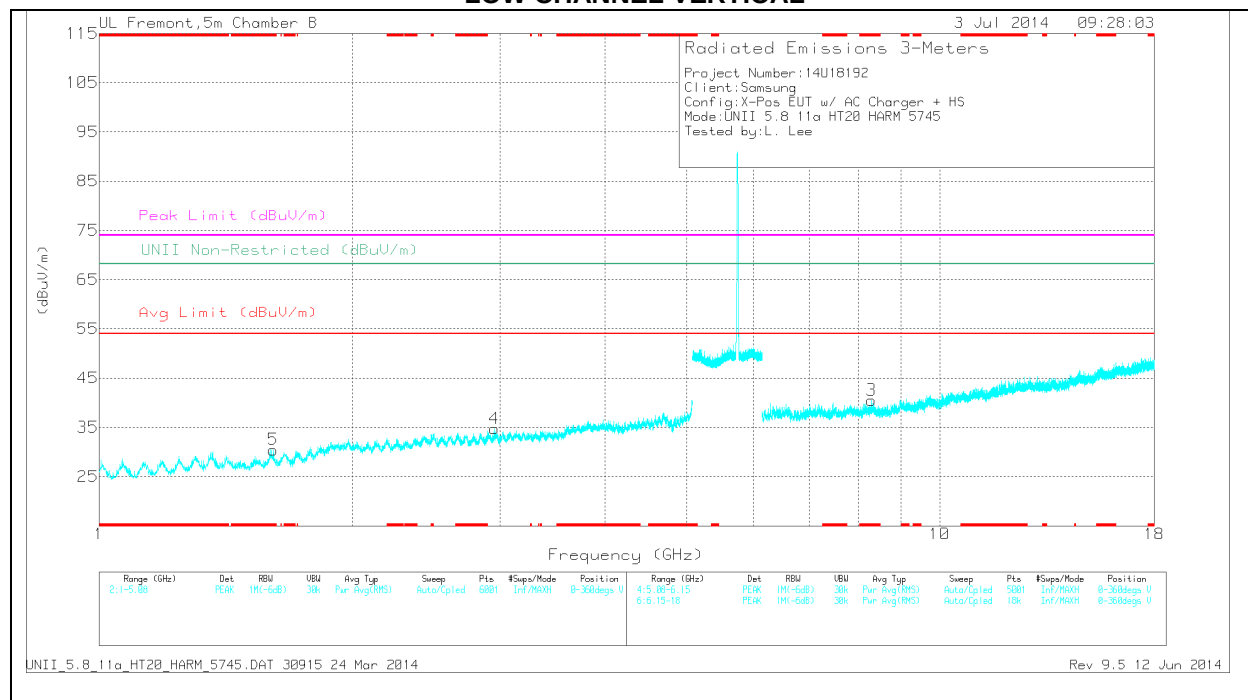
PK - Peak detector

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 1.612	34.95	PK	28.6	-33.1	0	30.45	-	-	74	-43.55	-	-	0-360	195	V
1	* 11.567	28.32	PK	38.1	-21.9	0	44.52	-	-	74	-29.48	-	-	0-360	99	H
3	* 8.295	30.91	PK	35.7	-26.1	0	40.51	-	-	74	-33.49	-	-	0-360	195	V
6	2.196	34.58	PK	31.3	-32.4	0	33.48	-	-	-	-	68.2	-34.72	0-360	99	H
4	2.952	33.91	PK	32.7	-31.9	0	34.71	-	-	-	-	68.2	-33.49	0-360	195	V
2	9.819	28.78	PK	36.9	-23.8	0	41.88	-	-	-	-	68.2	-26.32	0-360	206	H

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

PK - Peak detector

Radiated Emissions

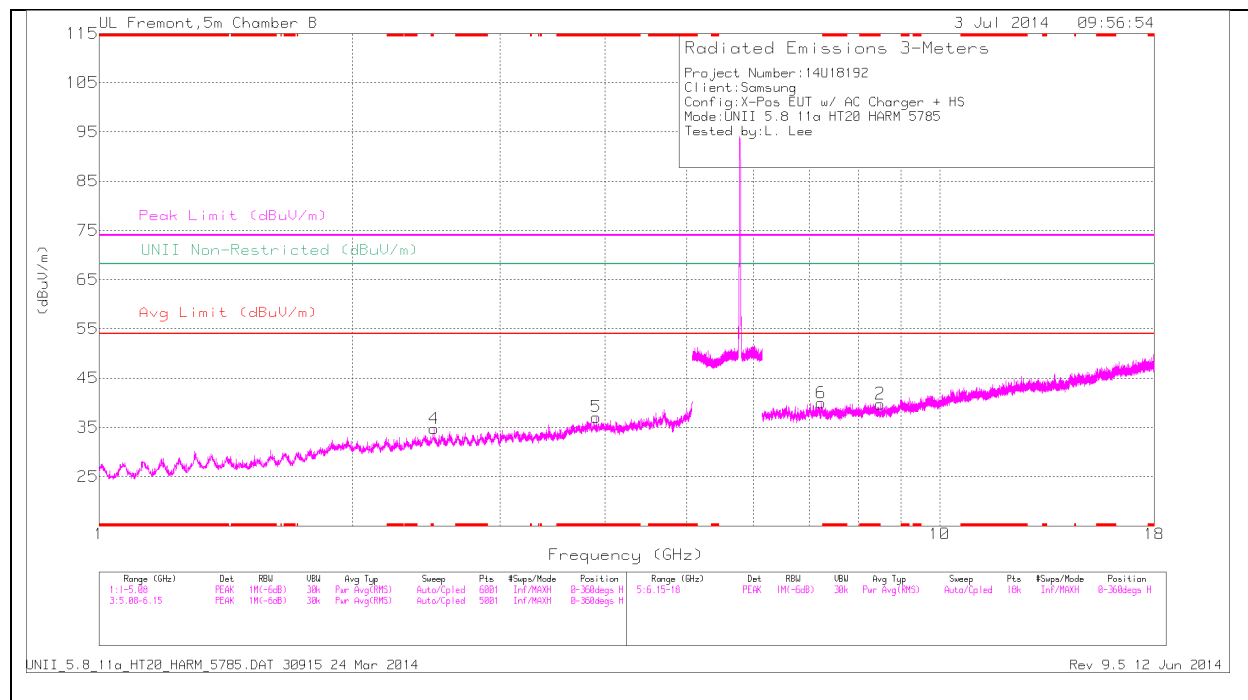
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 11.568	34.64	PK1	38.1	-21.9	0	50.84	-	-	74	-23.16	-	-	179	296	H
* 11.567	23.02	AD1	38.1	-21.9	.26	39.52	54	-14.48	-	-	-	-	179	296	H
3.493	40.92	PK1	32.8	-31.6	0	42.12	-	-	-	-	68.2	-26.08	1	207	H
3.493	29.51	AD1	32.8	-31.6	.26	31.01	-	-	-	-	-	-	1	207	H
7.756	38.47	PK1	35.7	-26.7	0	47.47	-	-	-	-	68.2	-20.73	1	203	V
7.756	27.59	AD1	35.7	-26.7	.26	36.89	-	-	-	-	-	-	1	203	V

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

PK1 - KDB789033 Method: Peak

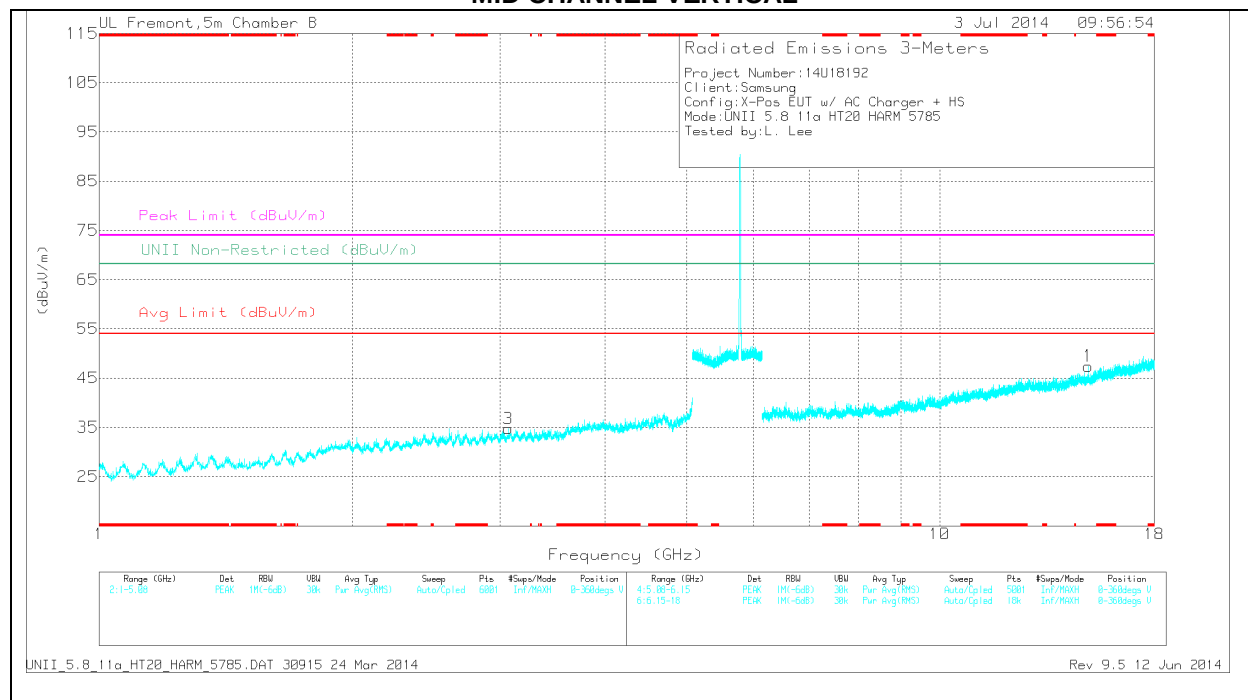
AD1 - KDB789033 Method: AD Primary Power Average

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr /Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	* 3.902	34.8	PK	33.8	-31.5	37.1	-	-	74	-36.9	-	-	0-360	99	H
2	* 8.495	29.95	PK	35.8	-26	39.75	-	-	74	-34.25	-	-	0-360	99	H
4	2.503	34.73	PK	32.4	-32.4	34.73	-	-	-	-	68.2	-33.47	0-360	206	H
3	3.069	34.12	PK	32.8	-32.2	34.72	-	-	-	-	68.2	-33.48	0-360	99	V
6	7.231	30.58	PK	35.5	-26.1	39.98	-	-	-	-	68.2	-28.22	0-360	99	H
1	15.028	27.73	PK	39.7	-20	47.43	-	-	-	-	68.2	-20.77	0-360	194	V

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

PK - Peak detector

Radiated Emissions

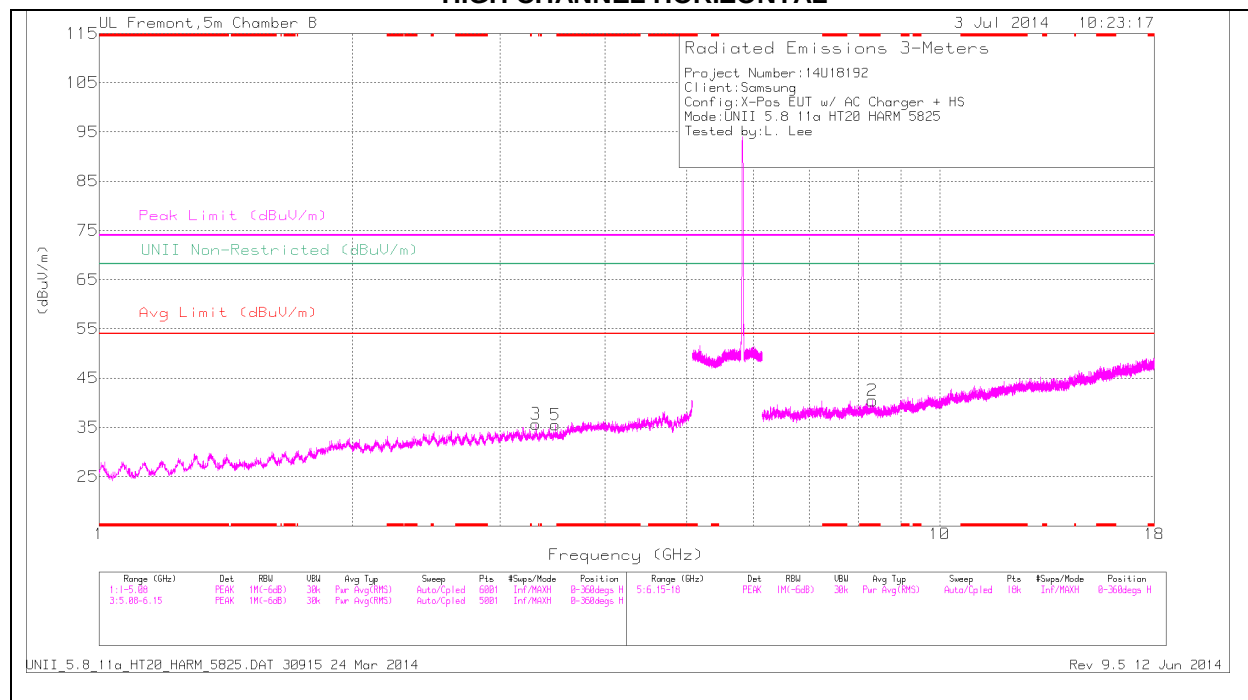
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr /Pad (dB)	DC factor	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 8.497	37.83	PK1	35.8	-26		47.63	-	-	74	-26.37	-	-	220	356	H
* 8.496	25.46	AD1	35.8	-26	.26	35.26	54	-18.74	-	-	-	-	220	356	H
* 11.567	23.02	AD1	38.1	-21.9	.26	39.22	54	-14.78	-	-	-	-	179	296	H
3.491	29.57	AD1	32.8	-31.6	.26	30.77	-	-	-	-	-	-	360	207	H

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

PK1 - KDB789033 Method: Peak

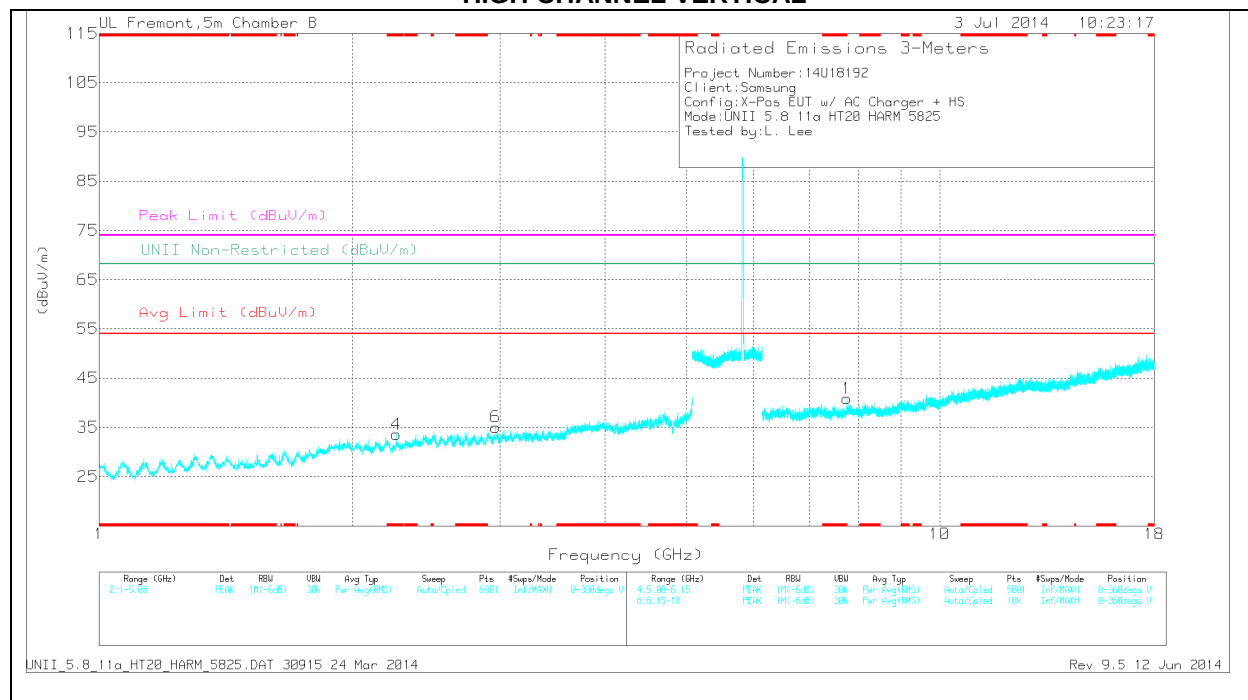
AD1 - KDB789033 Method: AD Primary Power Average

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.259	34.97	PK	31.5	-32.9	0	33.57	-	-	74	-40.43	-	-	0-360	194	V
2	* 8.316	30.64	PK	35.7	-25.9	0	40.44	-	-	74	-33.56	-	-	0-360	206	H
6	2.963	34.26	PK	32.7	-31.9	0	35.06	-	-	-	-	68.2	-33.14	0-360	99	V
3	3.311	34.55	PK	32.8	-31.7	0	35.65	-	-	-	-	68.2	-32.55	0-360	99	H
5	3.492	34.28	PK	32.8	-31.6	0	35.48	-	-	-	-	68.2	-32.72	0-360	206	H
1	7.756	31.86	PK	35.7	-26.7	0	40.86	-	-	-	-	68.2	-27.34	0-360	194	V

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

PK - Peak detector

Radiated Emissions

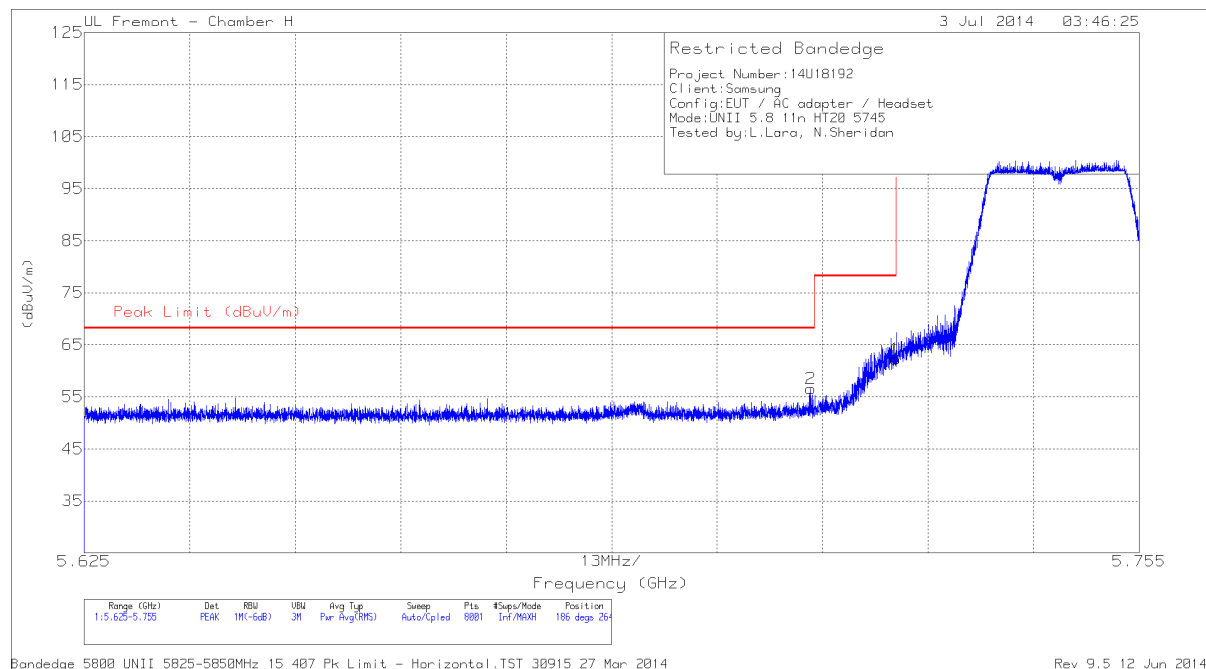
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3.493	40.92	PK1	32.8	-31.6	0	42.12	-	-	-	-	68.2	-26.08	1	207	H
3.493	29.51	AD1	32.8	-31.6	.26	31.01	-	-	-	-	-	-	1	207	H
7.755	37.86	PK1	35.7	-26.7	0	46.86	-	-	-	-	68.2	-21.34	360	203	V
7.757	27.34	AD1	35.7	-26.7	.26	36.64	-	-	-	-	-	-	360	203	V

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

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

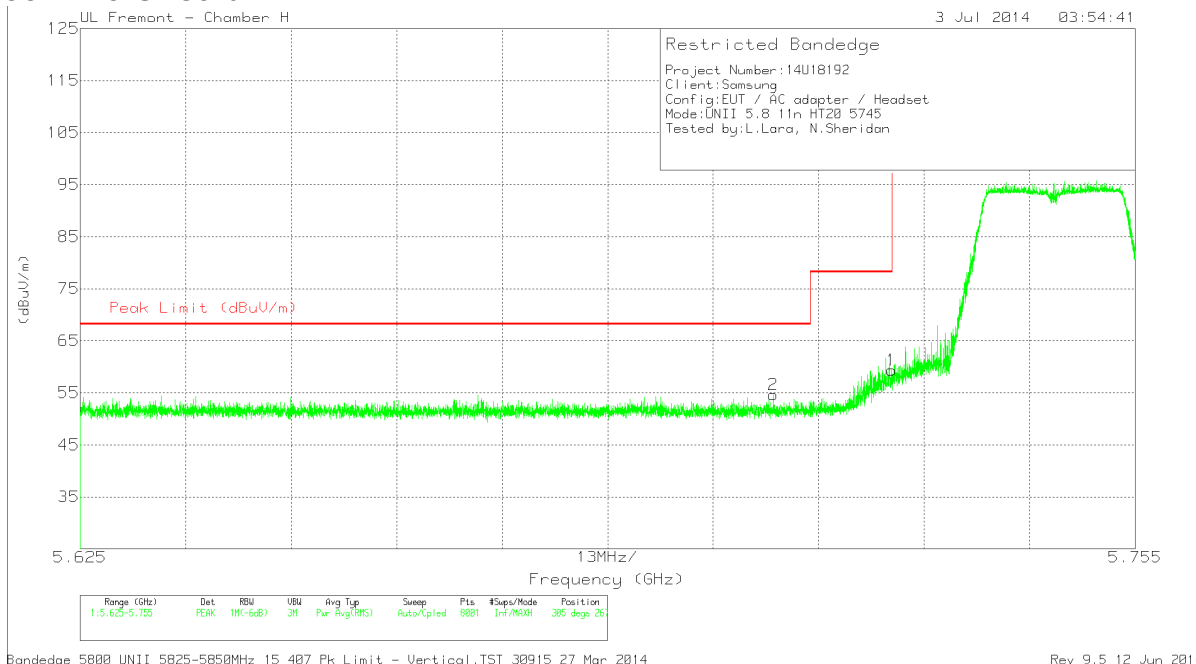
11.4.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.715	43.97	PK	35	-22.4	56.57	68.2	-11.63	186	264	H
1	5.725	49.62	PK	35	-22.4	62.22	78.2	-15.98	186	264	H

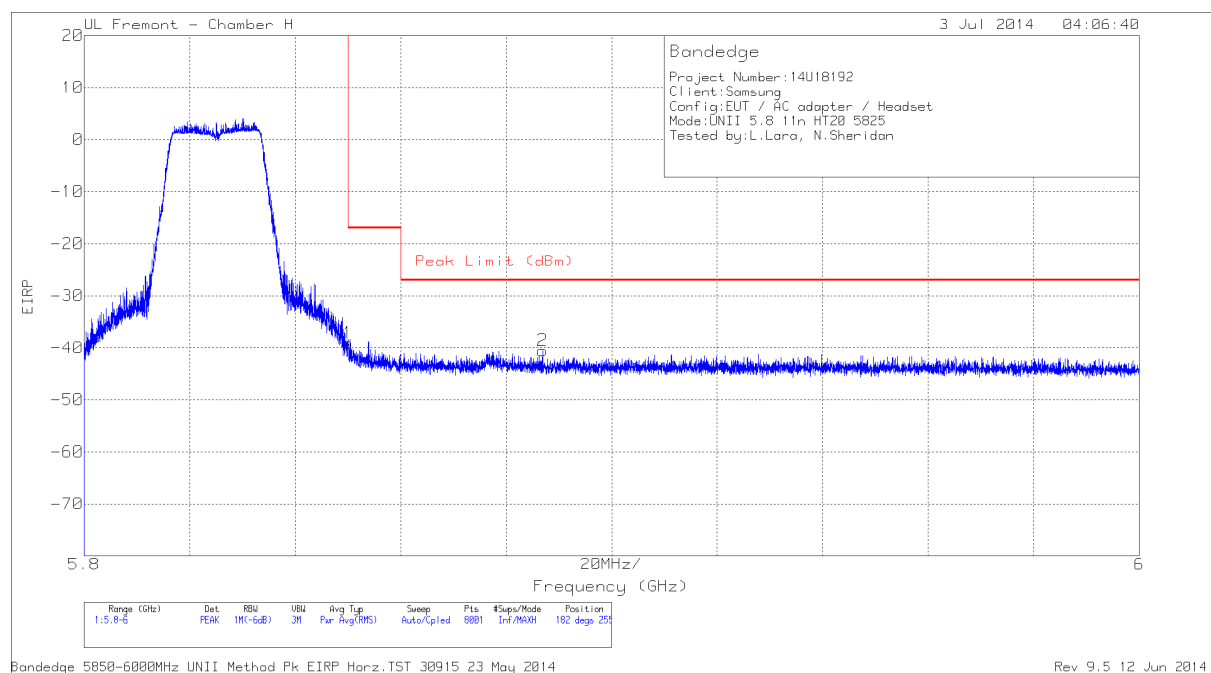
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.71	42.03	PK	35	-22.4	54.63	68.2	-13.57	305	267	V
1	5.725	46.76	PK	35	-22.4	59.36	78.2	-18.84	305	267	V

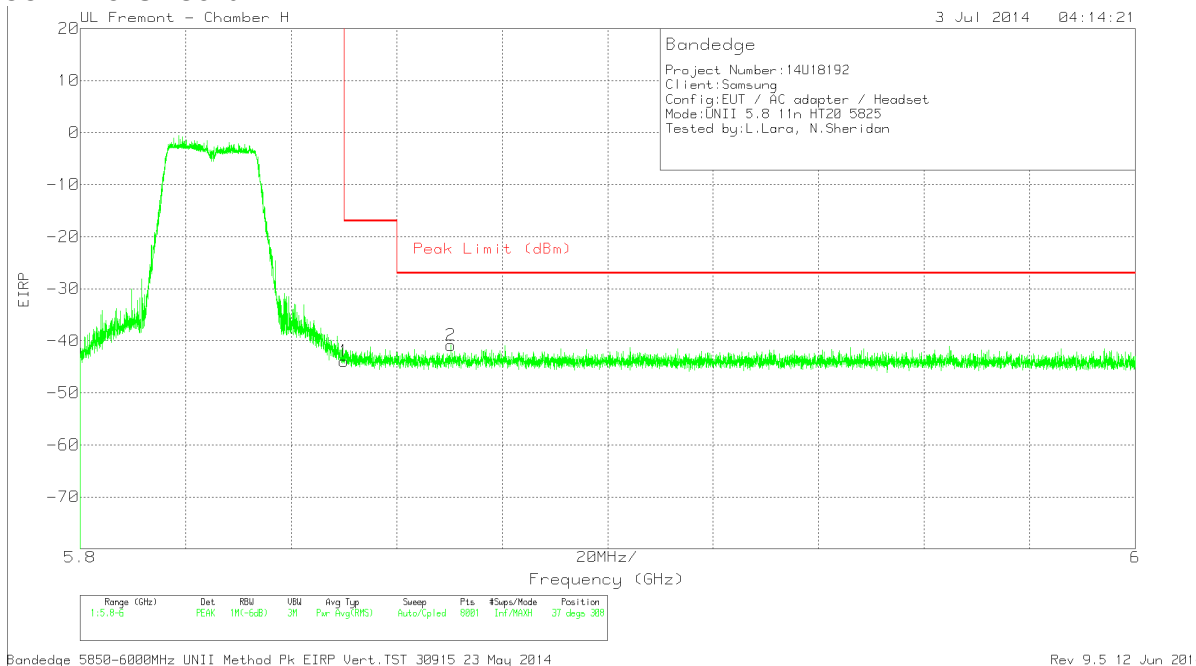
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-63.78	PK	35.1	-22.2	11.8	-39.08	-17	-22.08	182	255	H
2	5.887	-65.25	PK	35.1	-22.2	11.8	-40.55	-27	-13.55	182	255	H

PK - Peak detector

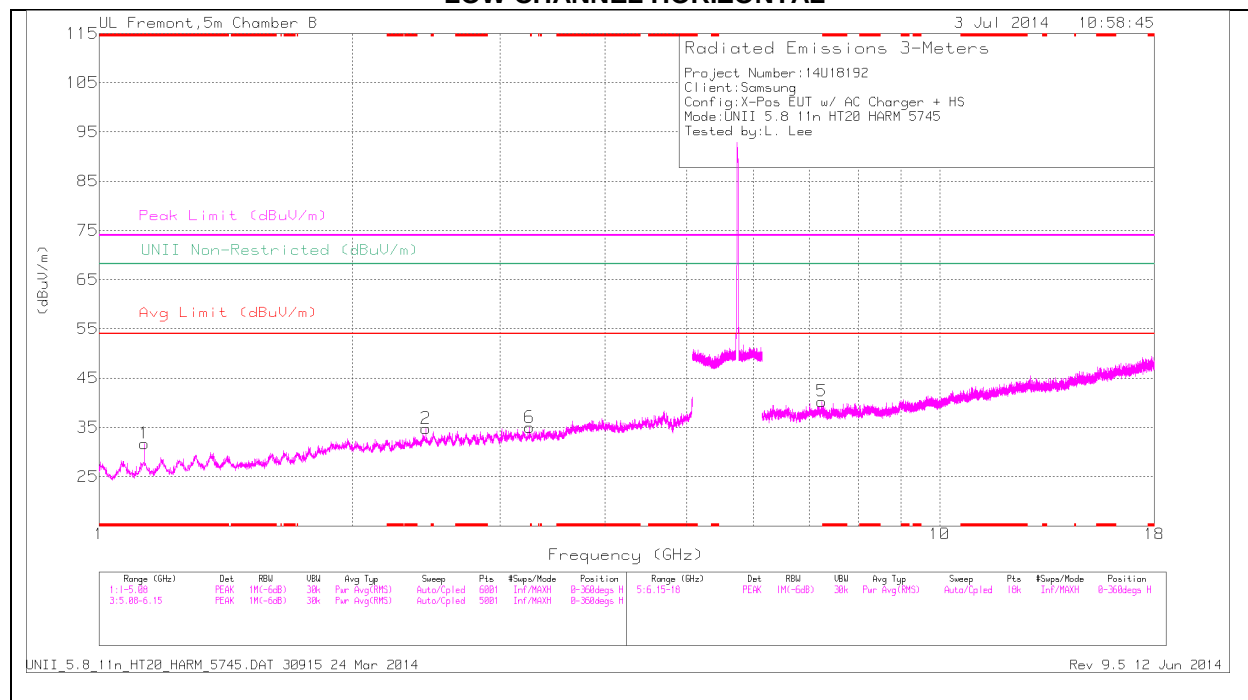


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-68.63	PK	35.1	-22.2	11.8	-43.93	-17	-26.93	37	308	V
2	5.87	-65.56	PK	35.1	-22.2	11.8	-40.86	-27	-13.86	37	308	V

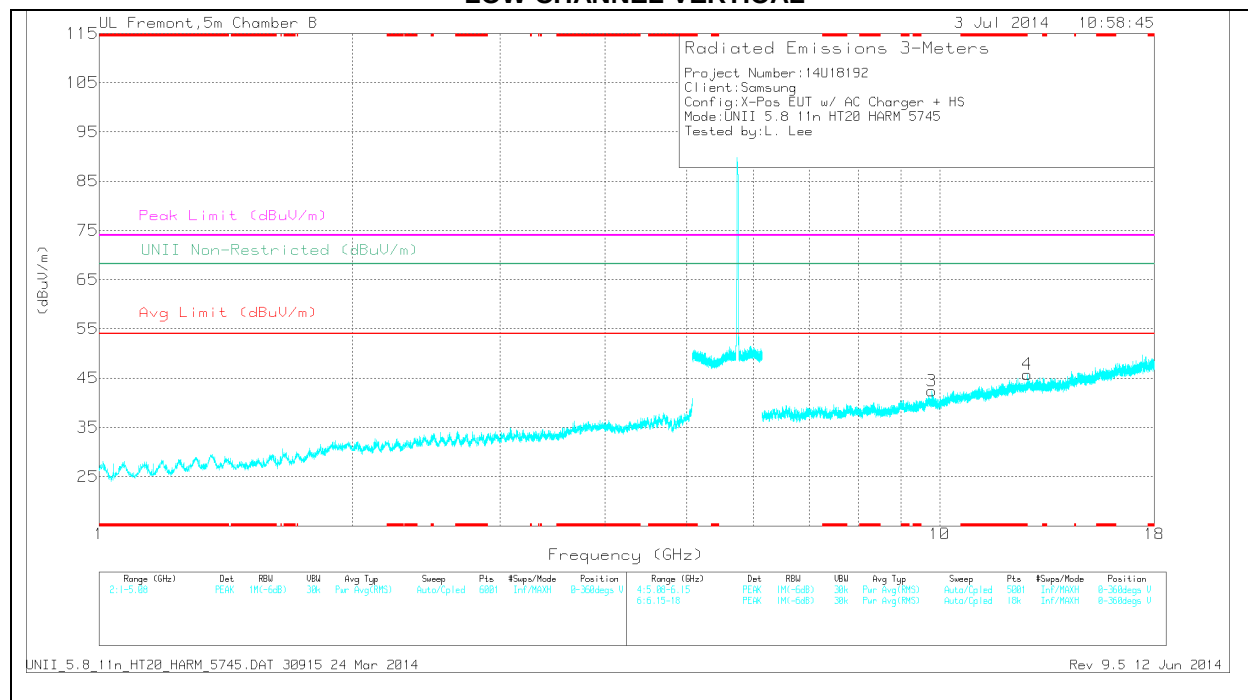
PK - Peak detector

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.132	38.73	PK	27.6	-34.6	0	31.73	-	-	74	-42.27	-	-	0-360	206	H
2	2.447	34.86	PK	32.3	-32.4	0	34.76	-	-	-	-	68.2	-33.44	0-360	99	H
6	3.254	34.22	PK	32.8	-32	0	35.02	-	-	-	-	68.2	-33.18	0-360	99	H
5	7.238	30.9	PK	35.6	-26.2	0	40.3	-	-	-	-	68.2	-27.9	0-360	99	H
3	9.791	29.28	PK	36.9	-23.8	0	42.38	-	-	-	-	68.2	-25.82	0-360	99	V
4	12.713	27.87	PK	39.2	-21.3	0	45.77	-	-	-	-	68.2	-22.43	0-360	195	V

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

PK - Peak detector

Radiated Emissions

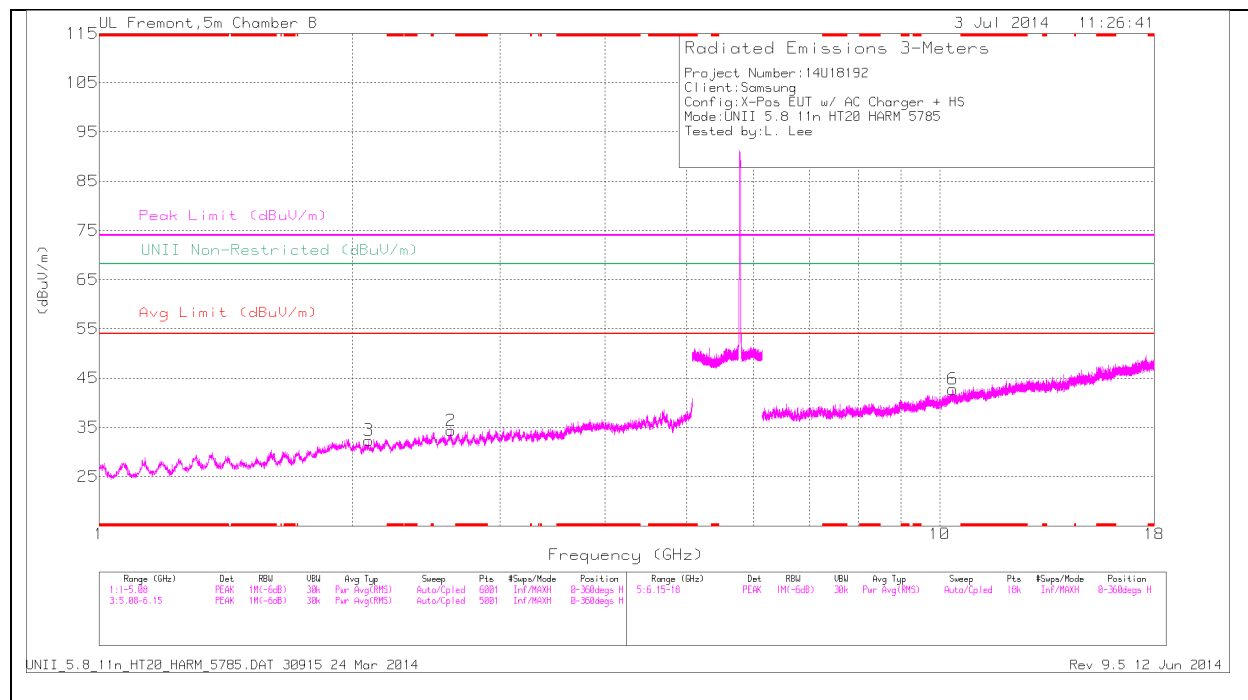
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.132	42.96	PK1	27.6	-34.6	0	35.96	-	-	74	-38.04	-	-	354	319	H
* 1.131	31.42	AD1	27.6	-34.6	.33	24.72	54	-29.28	-	-	-	-	354	319	H
3.493	40.92	PK1	32.8	-31.6	0	42.12	-	-	-	-	68.2	-26.08	1	207	H
3.493	29.51	AD1	32.8	-31.6	.33	31.01	-	-	-	-	-	-	1	207	H
7.756	38.47	PK1	35.7	-26.7	0	47.47	-	-	-	-	68.2	-20.73	1	203	V
7.756	27.59	AD1	35.7	-26.7	.33	36.89	-	-	-	-	-	-	1	203	V

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

PK1 - KDB789033 Method: Peak

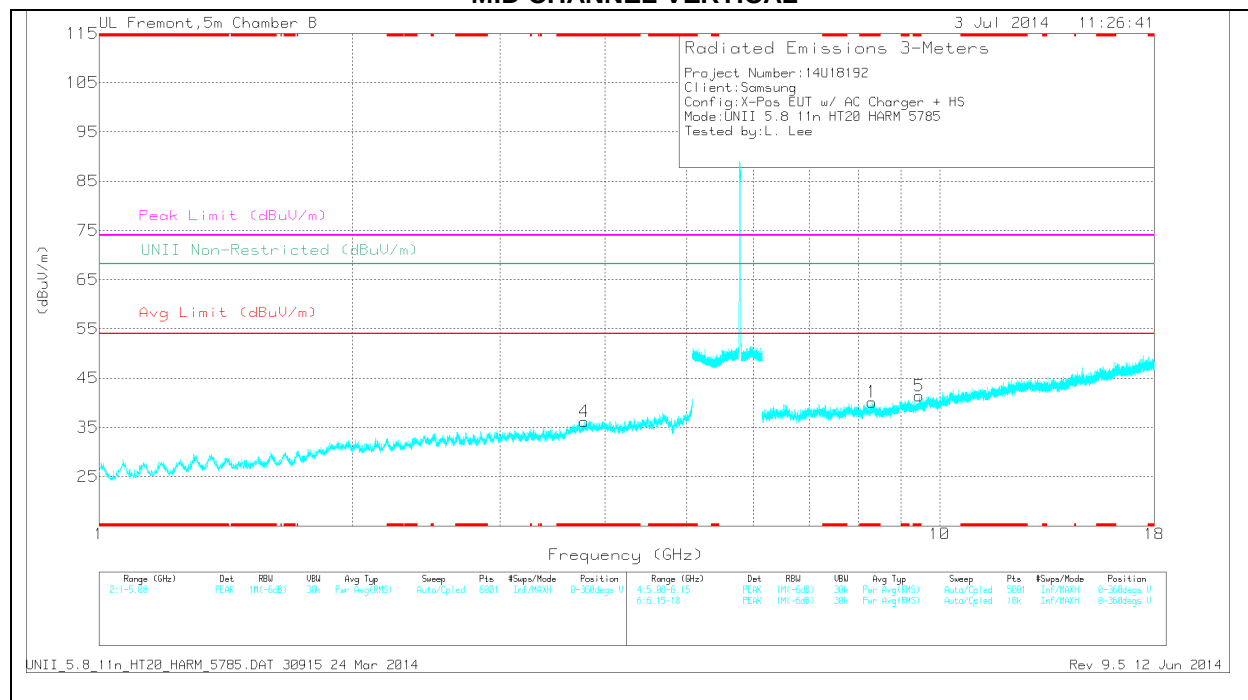
AD1 - KDB789033 Method: AD Primary Power Average

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 3.779	33.47	PK	33.6	-30.9	0	36.17	-	-	74	-37.83	-	-	0-360	194	V
1	* 8.305	30.35	PK	35.7	-25.9	0	40.15	-	-	74	-33.85	-	-	0-360	99	V
5	* 9.457	28.78	PK	36.6	-24	0	41.38	-	-	74	-32.62	-	-	0-360	194	V
3	2.094	34.76	PK	31.2	-33.6	0	32.36	-	-	-	-	68.2	-35.84	0-360	99	H
2	2.623	34.55	PK	32.4	-32.6	0	34.35	-	-	-	-	68.2	-33.85	0-360	99	H
6	10.365	28.03	PK	37.3	-22.6	0	42.73	-	-	-	-	68.2	-25.47	0-360	206	H

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

PK - Peak detector

Radiated Emissions

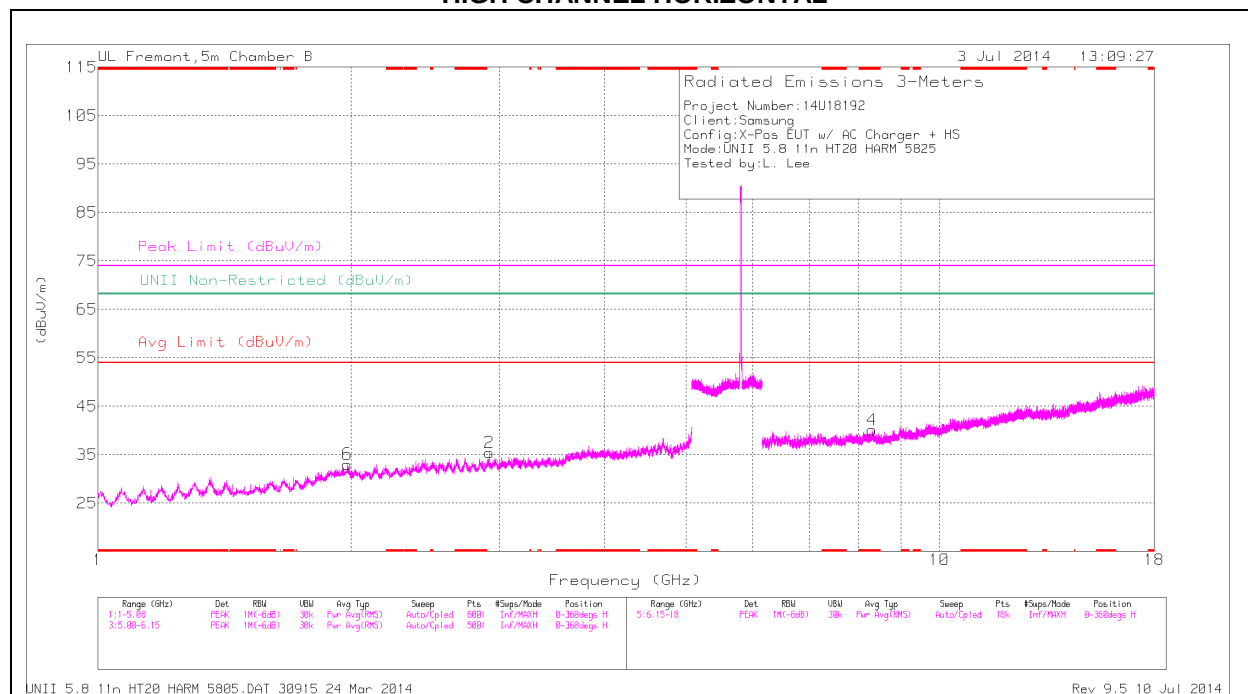
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 9.455	35.04	PK1	36.6	-24	0	47.64	-	-	74	-26.36	-	-	359	188	V
* 9.455	24.58	AD1	36.6	-24	.33	37.48	54	-16.52	-	-	-	-	359	188	V

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

PK1 - KDB789033 Method: Peak

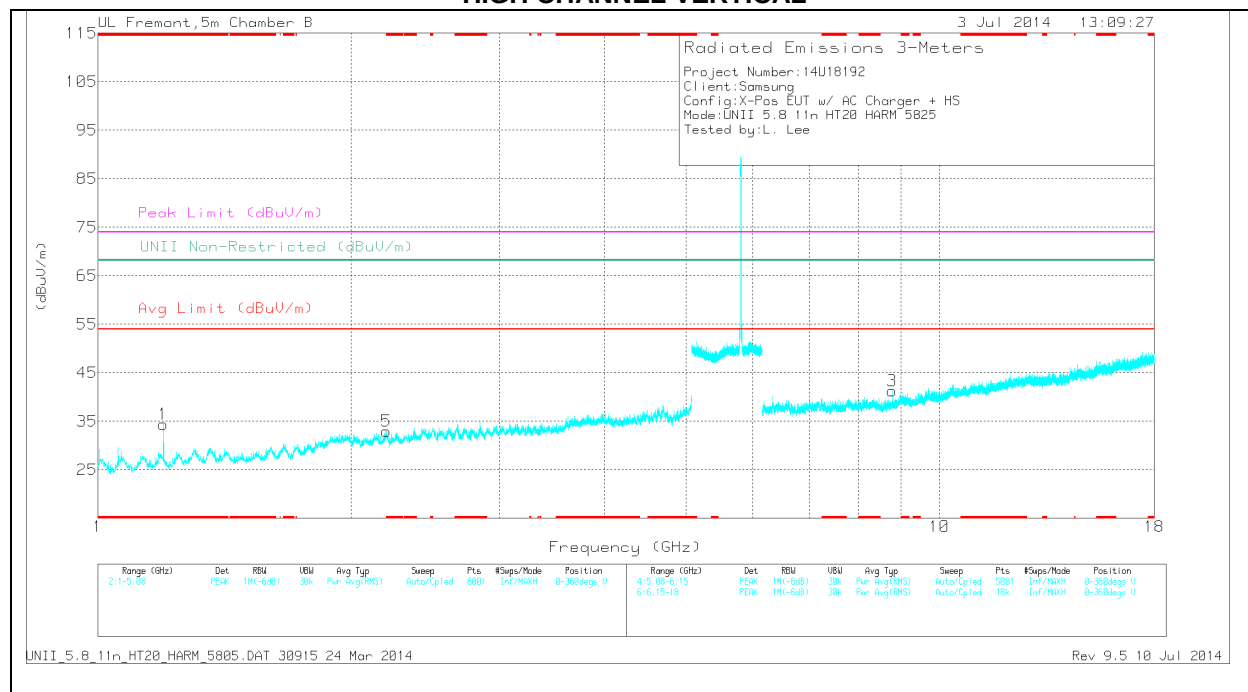
AD1 - KDB789033 Method: AD Primary Power Average

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.197	40.96	PK	28.2	-34.8	0	34.36	-	-	74	-39.64	-	-	0-360	99	V
5	* 2.202	33.98	PK	31.3	-32.3	0	32.98	-	-	74	-41.02	-	-	0-360	99	V
4	* 8.32	30.43	PK	35.7	-26	0	40.13	-	-	74	-33.87	-	-	0-360	99	H
6	1.979	34.54	PK	31.3	-32.8	0	33.04	-	-	-	-	68.2	-35.16	0-360	99	H
2	2.919	34.72	PK	32.7	-32	0	35.42	-	-	-	-	68.2	-32.78	0-360	99	H
3	8.791	30.61	PK	36	-25.3	0	41.31	-	-	-	-	68.2	-26.89	0-360	99	V

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

PK - Peak detector

Radiated Emissions

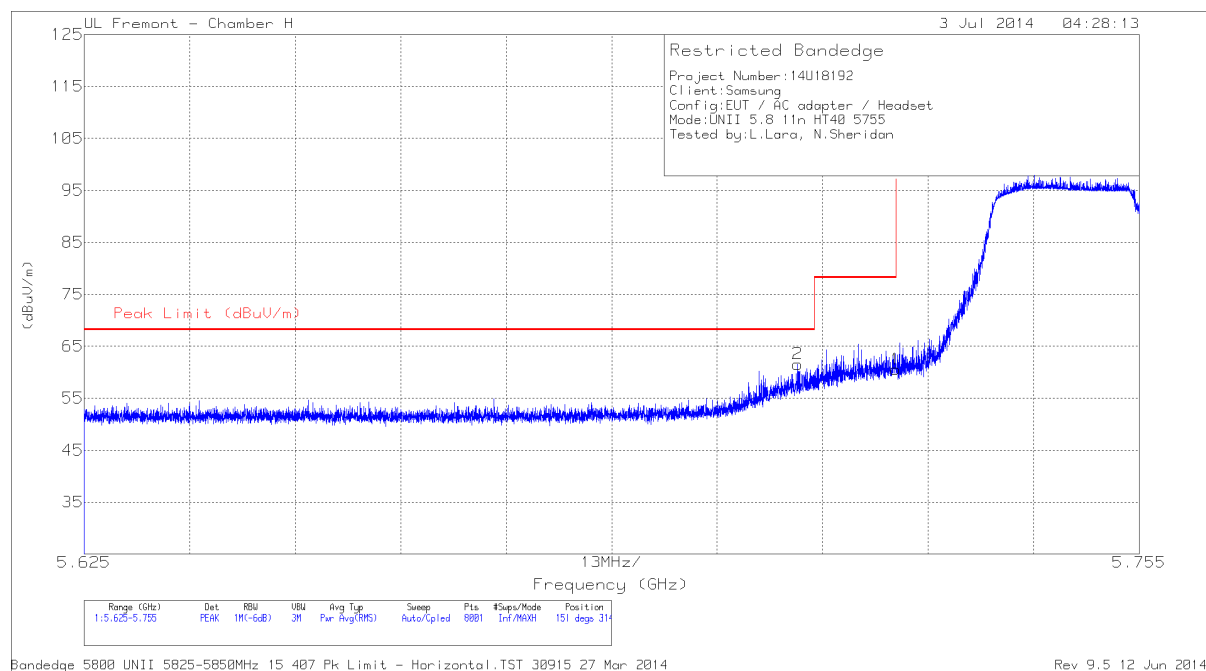
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 1.195	42.2	PK1	28.2	-34.8	0	35.6	-	-	74	-38.4	-	-	1	100	V
* 1.195	31.25	AD1	28.2	-34.8	.33	24.95	54	-29.05	-	-	-	-	1	100	V
* 1.661	42.95	PK2	28.8	-33	0	38.75	-	-	74	-35.25	-	-	359	100	V
* 2.683	40.18	PK2	32.2	-31.8	0	40.58	-	-	74	-33.42	-	-	359	188	V
* 15.448	34.18	PK2	40.4	-20.4	0	54.18	-	-	74	-19.82	-	-	359	213	H
6.776	38.78	PK2	35.7	-28	0	46.48	-	-	-	-	68.2	-21.72	359	100	H

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

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

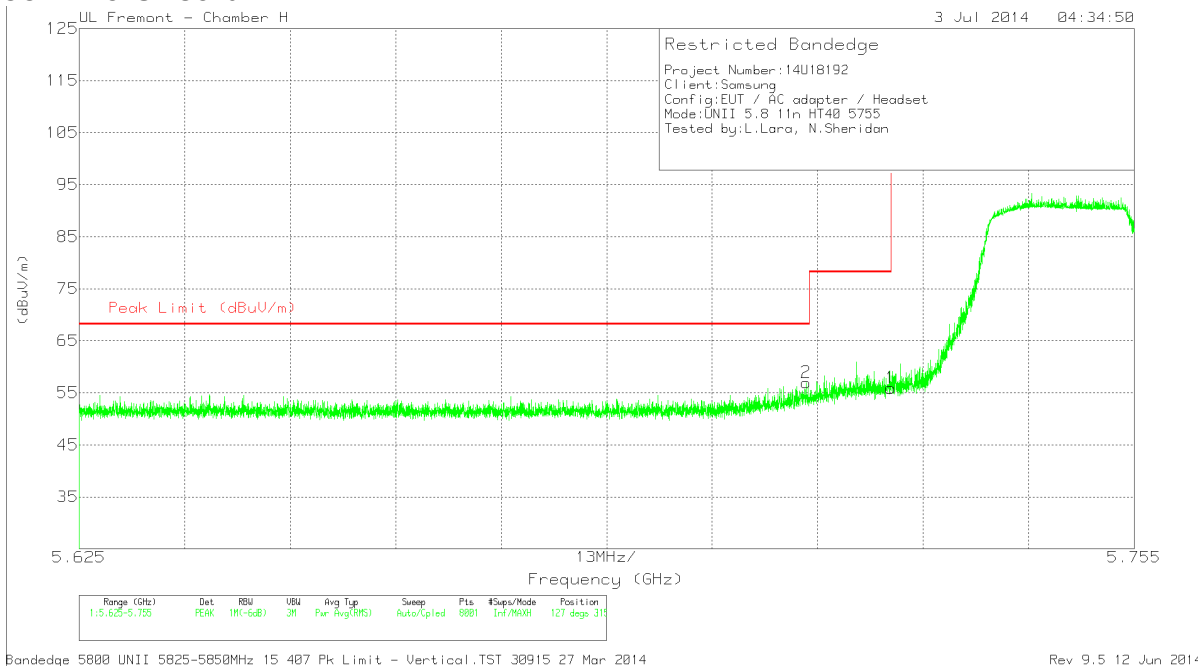
11.4.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.8 GHz BAND HARMONICS AND SPURIOUS EMISSIONS



Trace Markers

Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cb/FI tr/Pad (dB)	Correcte d Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.713	48.99	PK	35	-22.4	61.59	68.2	-6.61	151	314	H
1	5.725	47.94	PK	35	-22.4	60.54	78.2	-17.66	151	314	H

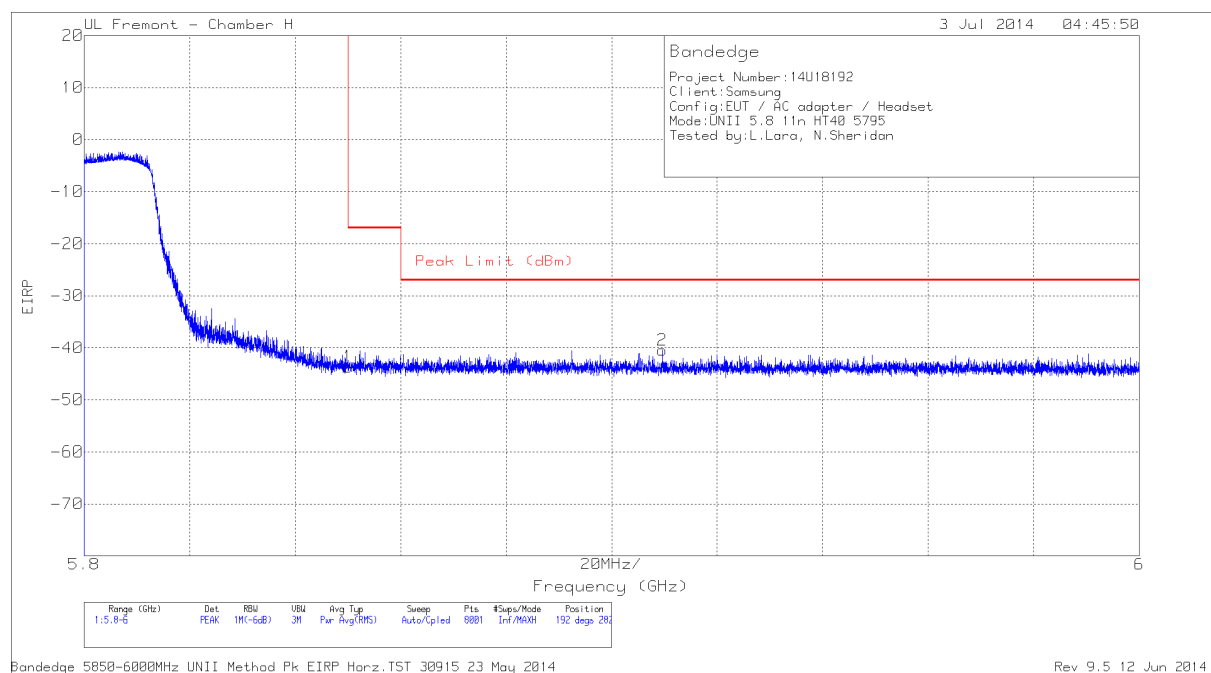
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T863 (dB/m)	Amp/Cbl/FI tr/Pad (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	5.715	44.38	PK	35	-22.4	56.98	68.2	-11.22	127	315	V
1	5.725	43.32	PK	35	-22.4	55.92	78.2	-22.28	127	315	V

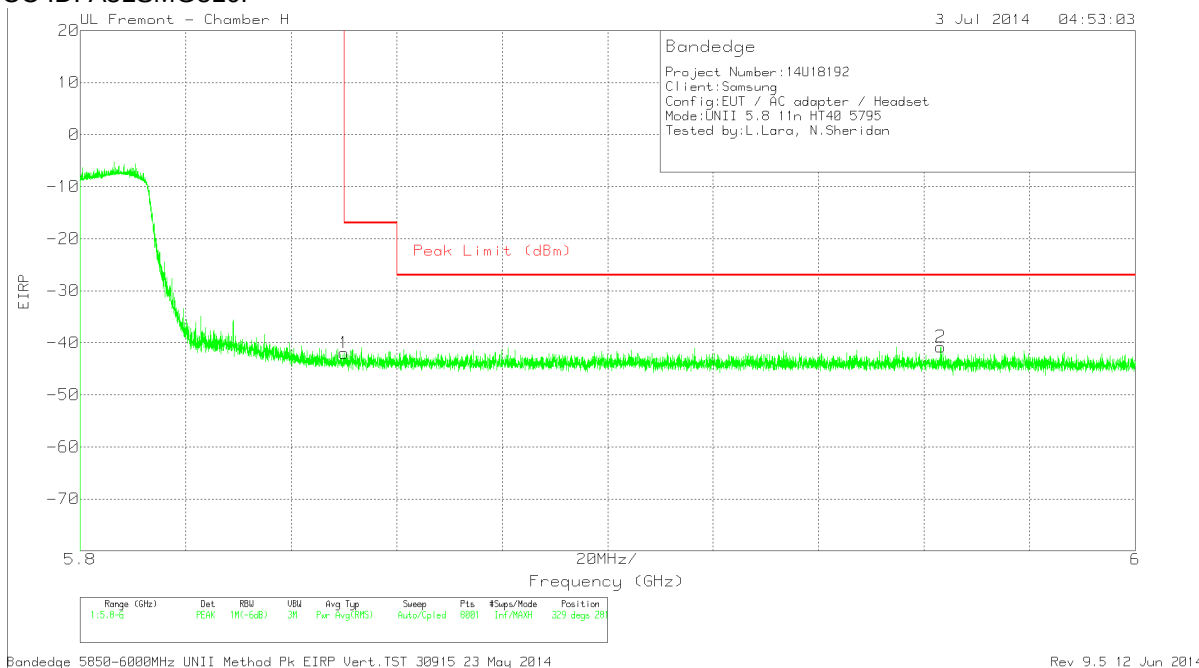
PK - Peak detector



Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-68.35	PK	35.1	-22.2	11.8	-43.65	-17	-26.65	192	282	H
2	5.91	-65.18	PK	35.1	-22.2	11.8	-40.48	-27	-13.48	192	282	H

PK - Peak detector

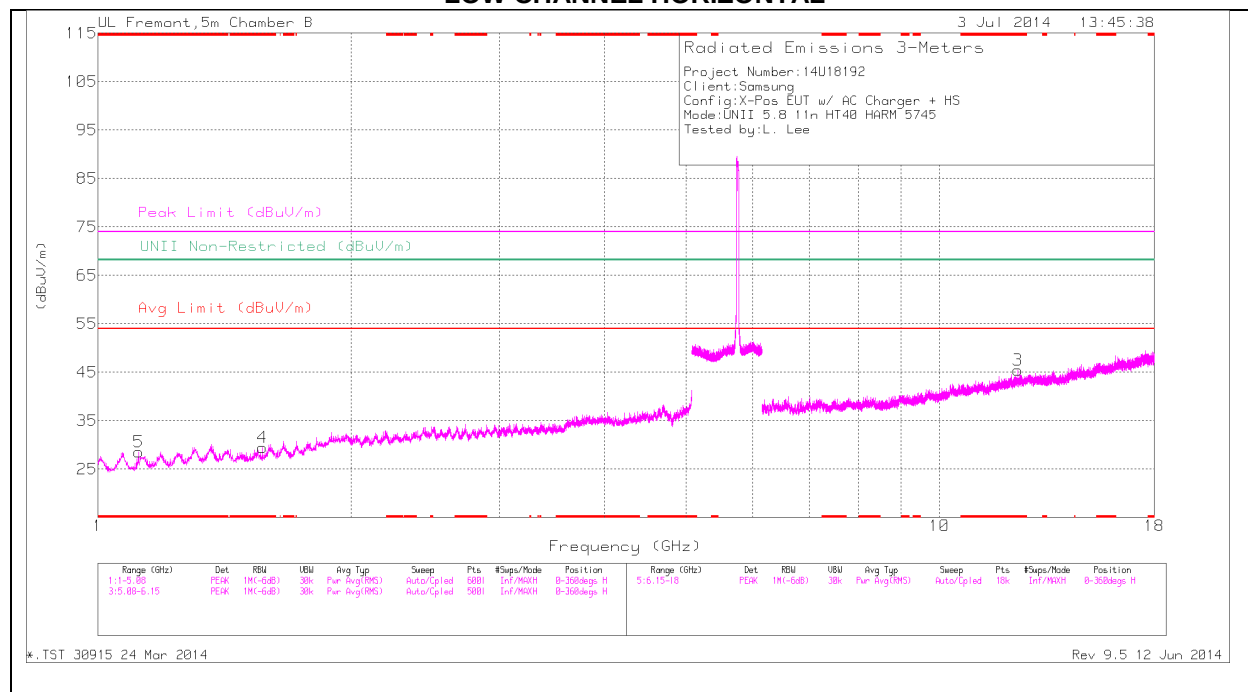


Trace Markers

Marker	Frequency (GHz)	Meter Reading (dBm)	Det	AF T863 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Conversion Factor (dB)	Corrected Reading EIRP	Peak Limit (dBm)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	5.85	-66.65	PK	35.1	-22.2	11.8	-41.95	-17	-24.95	329	281	V
2	5.963	-65.59	PK	35.2	-22.2	11.8	-40.79	-27	-13.79	329	281	V

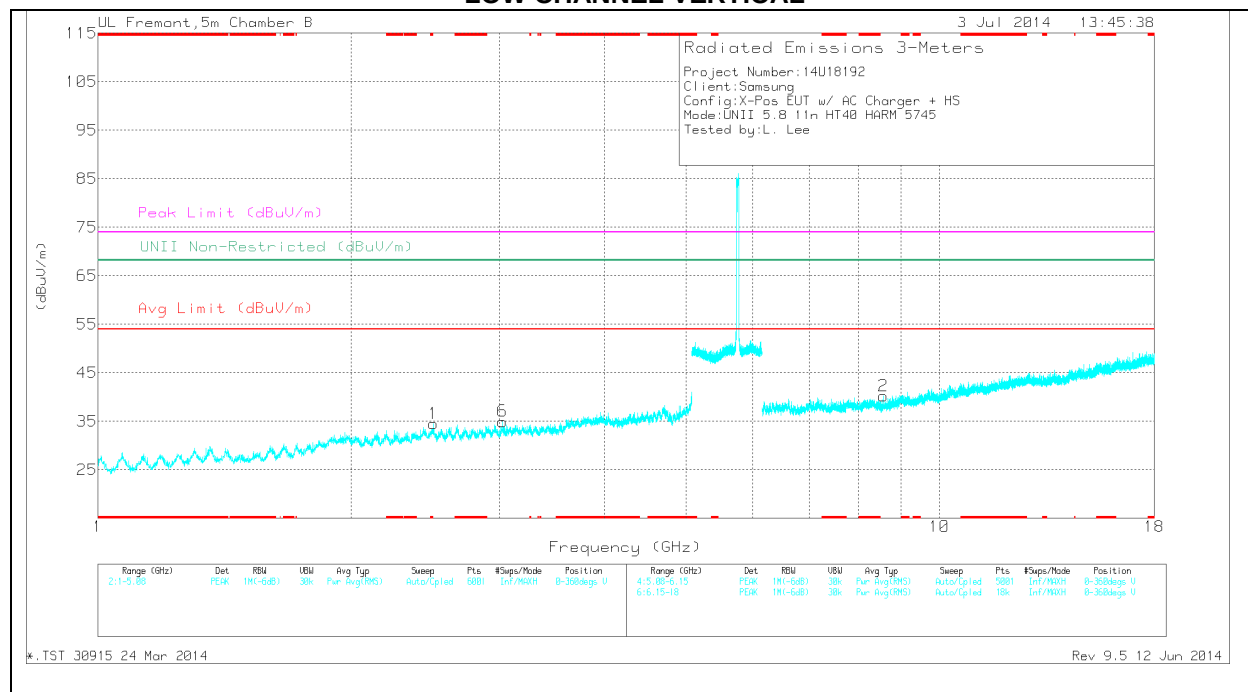
PK - Peak detector

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 1.569	34.89	PK	28.3	-33.7	0	29.49	-	-	74	-44.51	-	-	0-360	206	H
5	* 1.118	35.53	PK	27.5	-34.5	0	28.53	-	-	74	-45.47	-	-	0-360	99	H
3	* 12.397	27.83	PK	39	-21.4	0	45.43	-	-	74	-28.57	-	-	0-360	99	H
1	2.505	34.48	PK	32.4	-32.4	0	34.48	-	-	-	-	68.2	-33.72	0-360	99	V
6	3.026	34.29	PK	32.8	-32.1	0	34.99	-	-	-	-	68.2	-33.21	0-360	99	V
2	8.571	30.42	PK	35.8	-26	0	40.22	-	-	-	-	68.2	-27.98	0-360	196	V

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

PK - Peak detector

Radiated Emissions

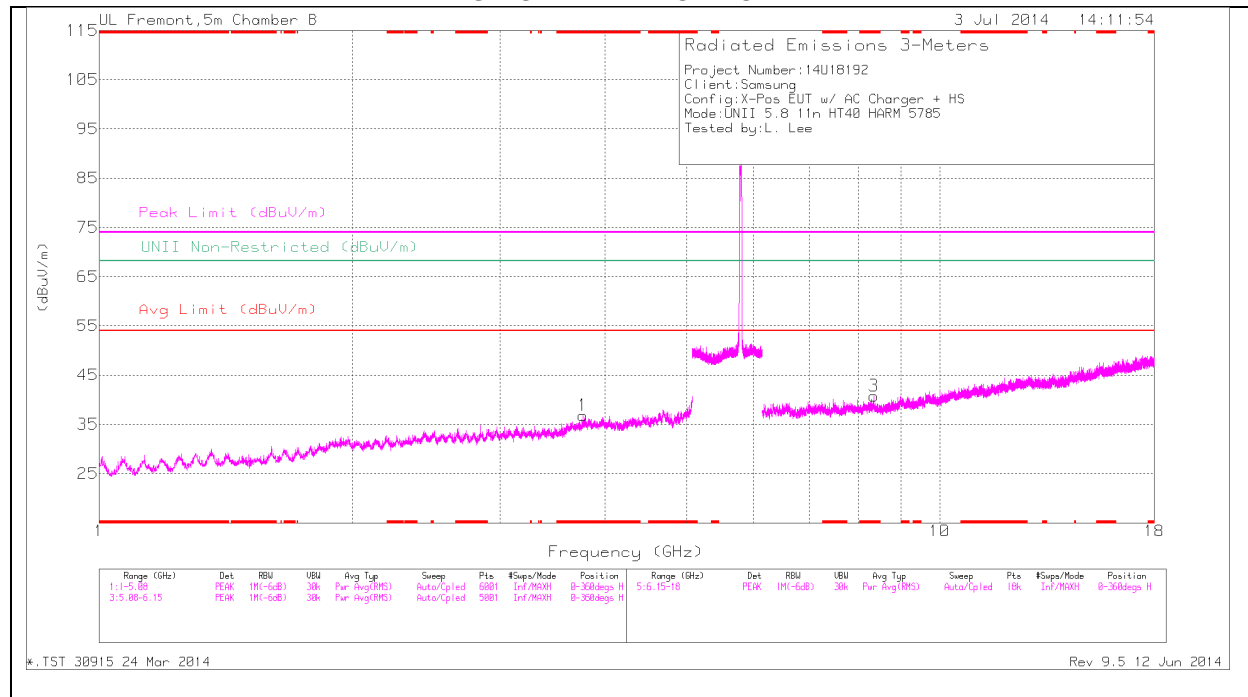
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 12.398	34.12	PK1	39	-21.4	0	51.72	-	-	74	-22.28	-	-	1	100	H
* 12.397	23.51	AD1	39	-21.4	.62	41.71	54	-12.29	-	-	-	-	1	100	H

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

PK1 - KDB789033 Method: Peak

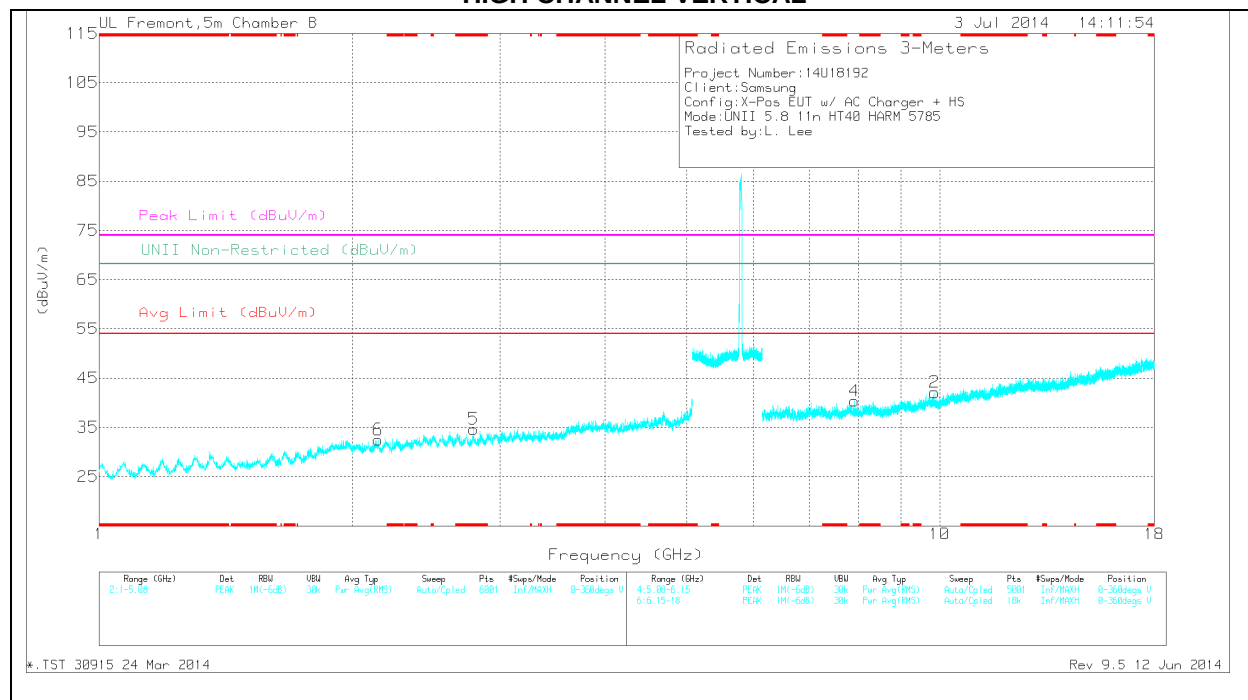
AD1 - KDB789033 Method: AD Primary Power Average

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

TRACE MARKERS

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.766	34.32	PK	33.5	-31	0	36.82	-	-	74	-37.18	-	-	0-360	99	H
5	* 2.791	34.85	PK	32.3	-32.5	0	34.65	-	-	74	-39.35	-	-	0-360	99	V
3	* 8.349	31.08	PK	35.7	-26	0	40.78	-	-	74	-33.22	-	-	0-360	99	H
6	2.149	33.96	PK	31.3	-32.8	0	32.46	-	-	-	-	68.2	-35.74	0-360	196	V
4	7.921	31.84	PK	35.7	-27.2	0	40.34	-	-	-	-	68.2	-27.86	0-360	196	V
2	9.861	29.19	PK	37	-24.1	0	42.09	-	-	-	-	68.2	-26.11	0-360	99	V

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

PK - Peak detector

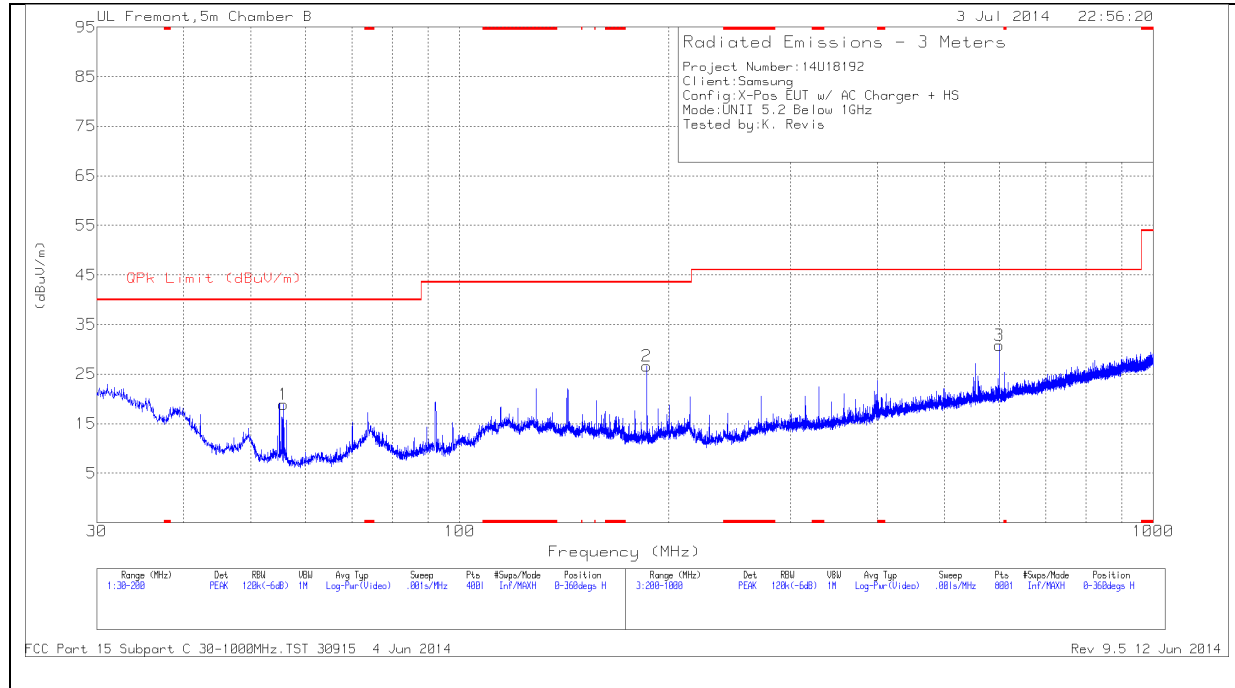
Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	UNII Non-Restricted (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
* 8.348	38.46	PK1	35.7	-26	0	48.16	-	-	74	-25.84	-	-	1	100	H
* 8.348	26.81	AD1	35.7	-26	.62	37.11	54	-16.89	-	-	-	-	1	100	H

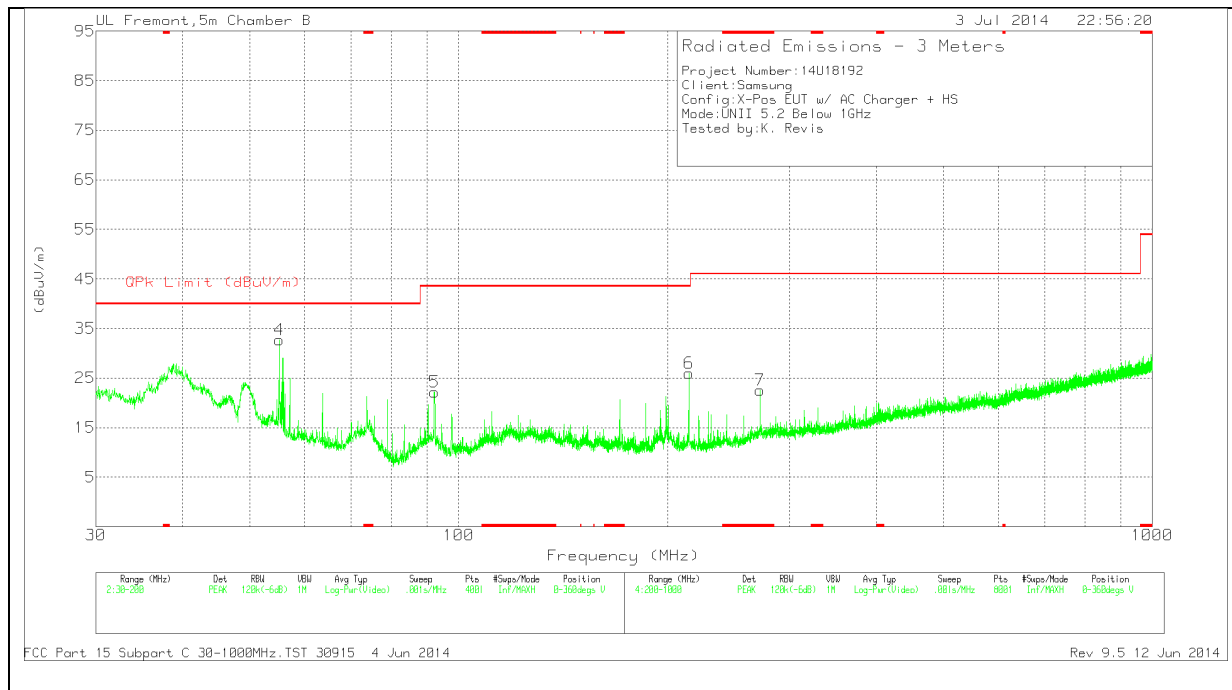
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK1 - KDB789033 Method: Peak

AD1 - KDB789033 Method: AD Primary Power Average

12. WORST-CASE BELOW 1 GHz (in the 5.2 GHz Band)**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)**

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



Below 1G Data

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
7	* 272	35.44	PK	13.3	-26.2	0	22.54	46.02	-23.48	0-360	200	V
4	55.1175	54	PK	7.2	-28.5	0	32.7	40	-7.3	0-360	100	V
1	55.755	40.22	PK	7.2	-28.5	0	18.92	40	-21.08	0-360	200	H
5	92.2625	42.11	PK	8.2	-28.1	0	22.21	43.52	-21.31	0-360	100	V
2	186.145	42.73	PK	10.9	-27	0	26.63	43.52	-16.89	0-360	100	H
6	214.8	42.14	PK	10.6	-26.8	0	25.94	43.52	-17.58	0-360	200	V
3	600	37.67	PK	18.4	-25.3	0	30.77	46.02	-15.25	0-360	300	H

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

PK - Peak detector

13. 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

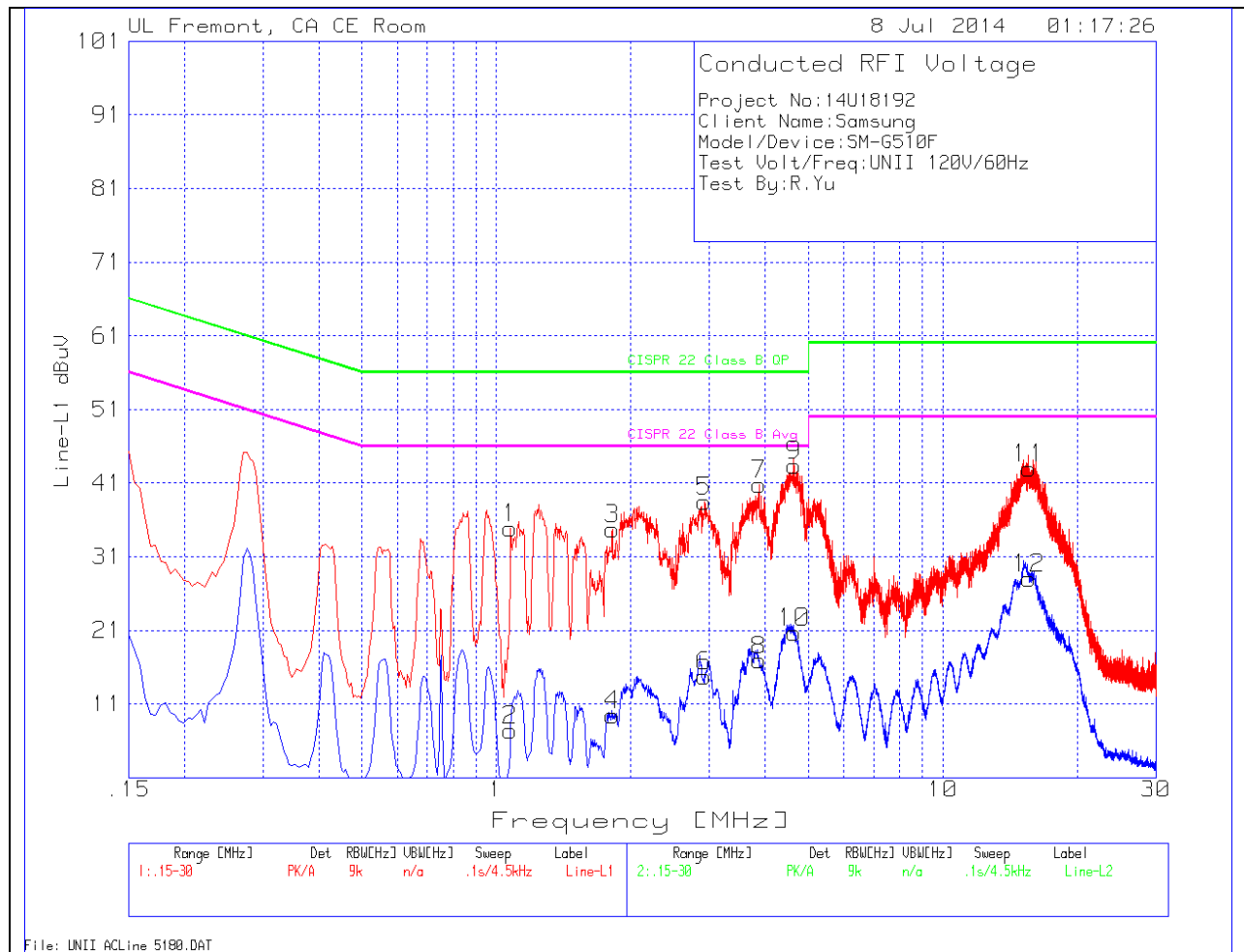
The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

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

LINE 1 PLOT



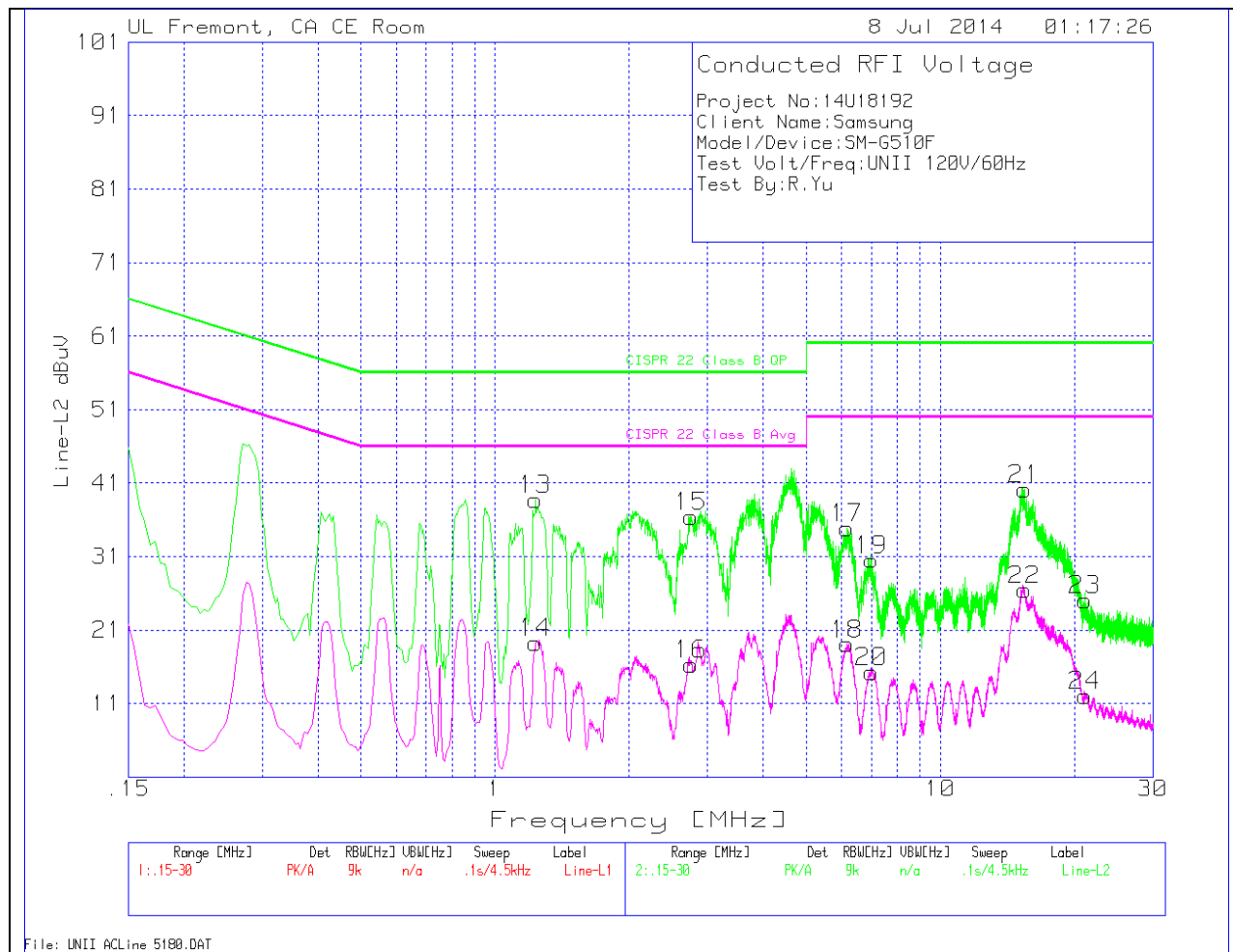
LINE 1 RESULTS

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	1.077	34.68	PK	.2	0	34.88	56	-21.12	-	-
2	1.077	7.19	Av	.2	0	7.39	-	-	46	-38.61
3	1.8195	34.45	PK	.2	.1	34.75	56	-21.25	-	-
4	1.8195	9.19	Av	.2	.1	9.49	-	-	46	-36.51
5	2.9265	38.17	PK	.2	.1	38.47	56	-17.53	-	-
6	2.9265	14.49	Av	.2	.1	14.79	-	-	46	-31.21
7	3.8715	40.53	PK	.2	.1	40.83	56	-15.17	-	-
8	3.8715	16.58	Av	.2	.1	16.88	-	-	46	-29.12
9	4.6545	43.04	PK	.2	.1	43.34	56	-12.66	-	-
10	4.6545	20.34	Av	.2	.1	20.64	-	-	46	-25.36
11	15.6165	42.45	PK	.3	.2	42.95	60	-17.05	-	-
12	15.6165	27.54	Av	.3	.2	28.04	-	-	50	-21.96

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	1.2345	38.47	PK	.2	.1	38.77	56	-17.23	-	-
14	1.2345	18.92	Av	.2	.1	19.22	-	-	46	-26.78
15	2.7555	36.14	PK	.2	.1	36.44	56	-19.56	-	-
16	2.7555	16.04	Av	.2	.1	16.34	-	-	46	-29.66
17	6.1755	34.54	PK	.2	.1	34.84	60	-25.16	-	-
18	6.1755	18.77	Av	.2	.1	19.07	-	-	50	-30.93
19	7.0035	30.24	PK	.2	.1	30.54	60	-29.46	-	-
20	7.0035	14.97	Av	.2	.1	15.27	-	-	50	-34.73
21	15.432	39.65	PK	.3	.2	40.15	60	-19.85	-	-
22	15.432	25.92	Av	.3	.2	26.42	-	-	50	-23.58
23	21.129	24.61	PK	.3	.2	25.11	60	-34.89	-	-
24	21.129	11.53	Av	.3	.2	12.03	-	-	50	-37.97

PK - Peak detector

Av - average detection

14. DYNAMIC FREQUENCY SELECTION

14.1. OVERVIEW

14.1.1. 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) and FCC 06-96 APPENDIX "COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVICES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION".

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
<i>Non-occupancy period</i>	30 minutes
<i>Channel Availability Check Time</i>	60 seconds
<i>Channel Move Time</i>	10 seconds
<i>Channel Closing Transmission Time</i>	200 milliseconds + approx. 60 milliseconds over remaining 10 second period
The instant that the <i>Channel Move Time</i> and the <i>Channel Closing Transmission Time</i> begins is as follows: For the Short pulse radar Test Signals this instant is the end of the <i>Burst</i>. 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

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.

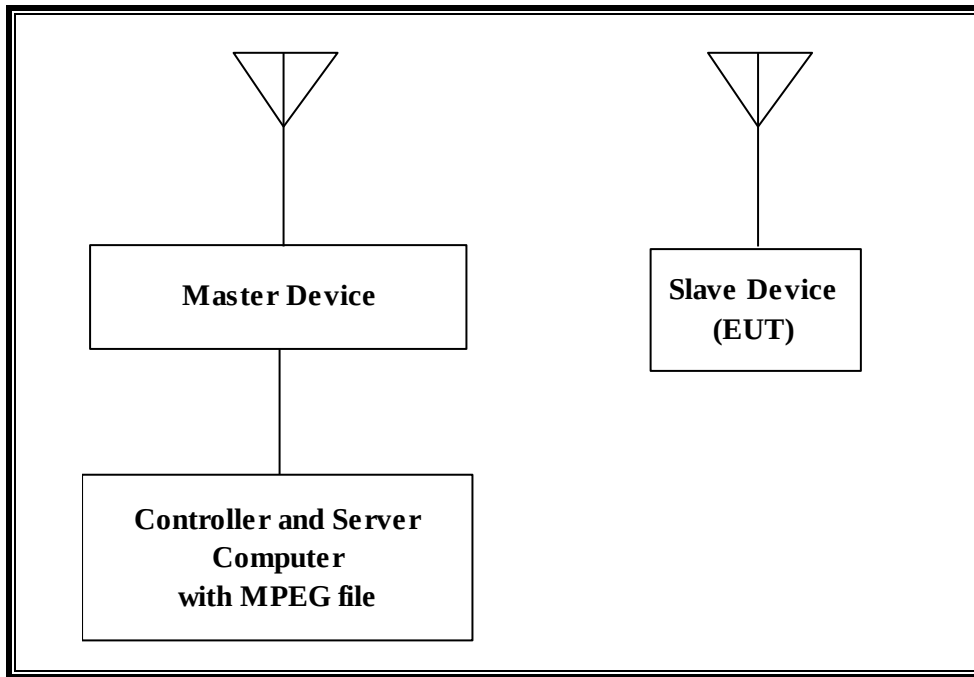
TEST AND MEASUREMENT EQUIPMENT

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

14.1.3. 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

14.1.4. 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 11.73dBm EIRP in the 5250-5350 MHz band and 11.88 dBm EIRP in the 5470-5725 MHz band.

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

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 MX 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 $> 23\text{dBm}$ (EIRP). Therefore the required interference threshold level is -64 dBm . After correction for procedural adjustments, the required radiated threshold at the antenna port is $-64 + 1 = -63\text{ dBm}$.

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.

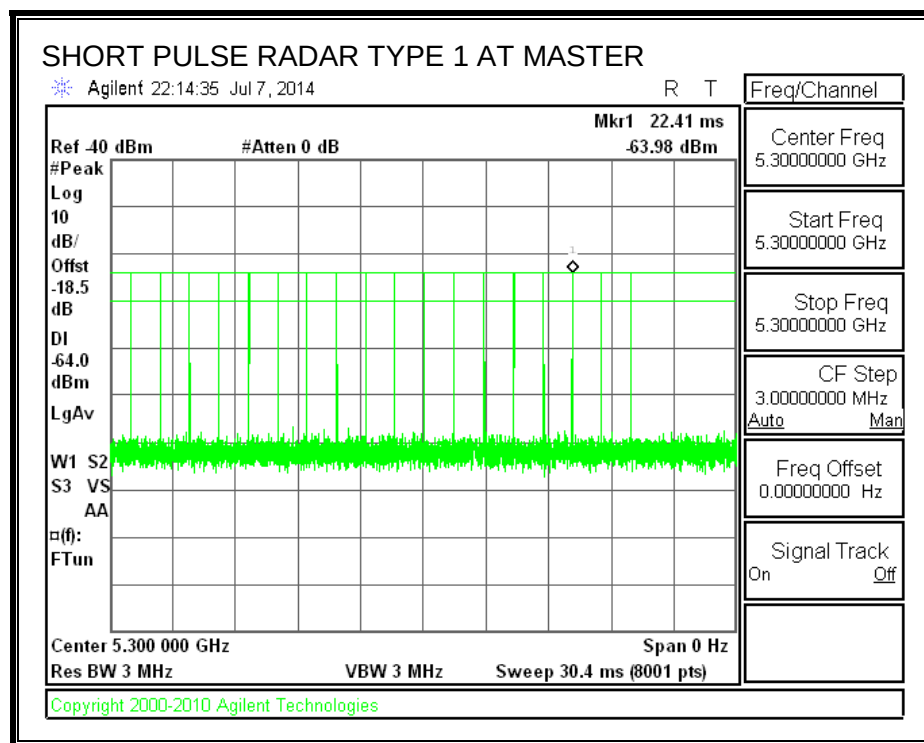
14.2. RESULTS FOR 20 MHz BANDWIDTH

14.2.1. TEST CHANNEL

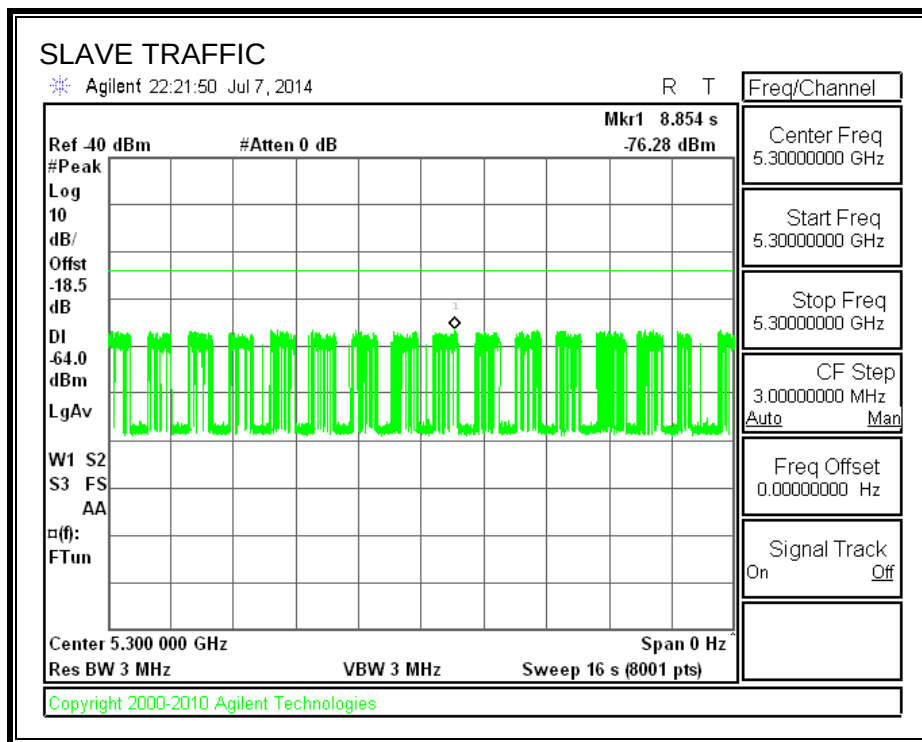
All tests were performed at a channel center frequency of 5300 MHz in this report. Since the channel 100 frequency of 5500 MHz cannot connected for test.

14.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



14.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

14.2.4. 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)

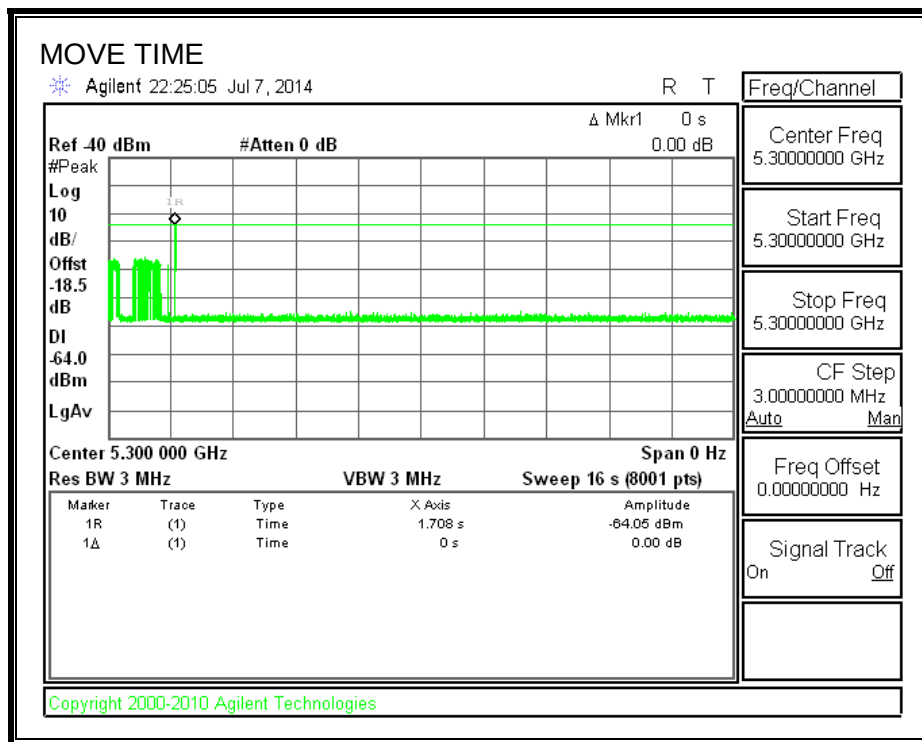
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

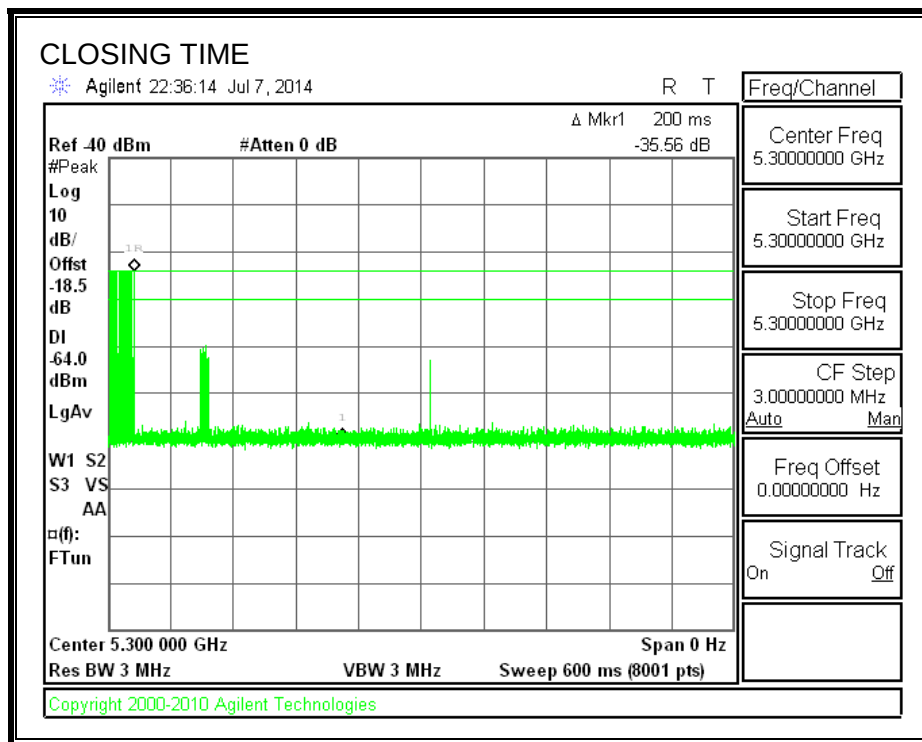
Channel Move Time (sec)	Limit (sec)
0.000	10

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

MOVE TIME

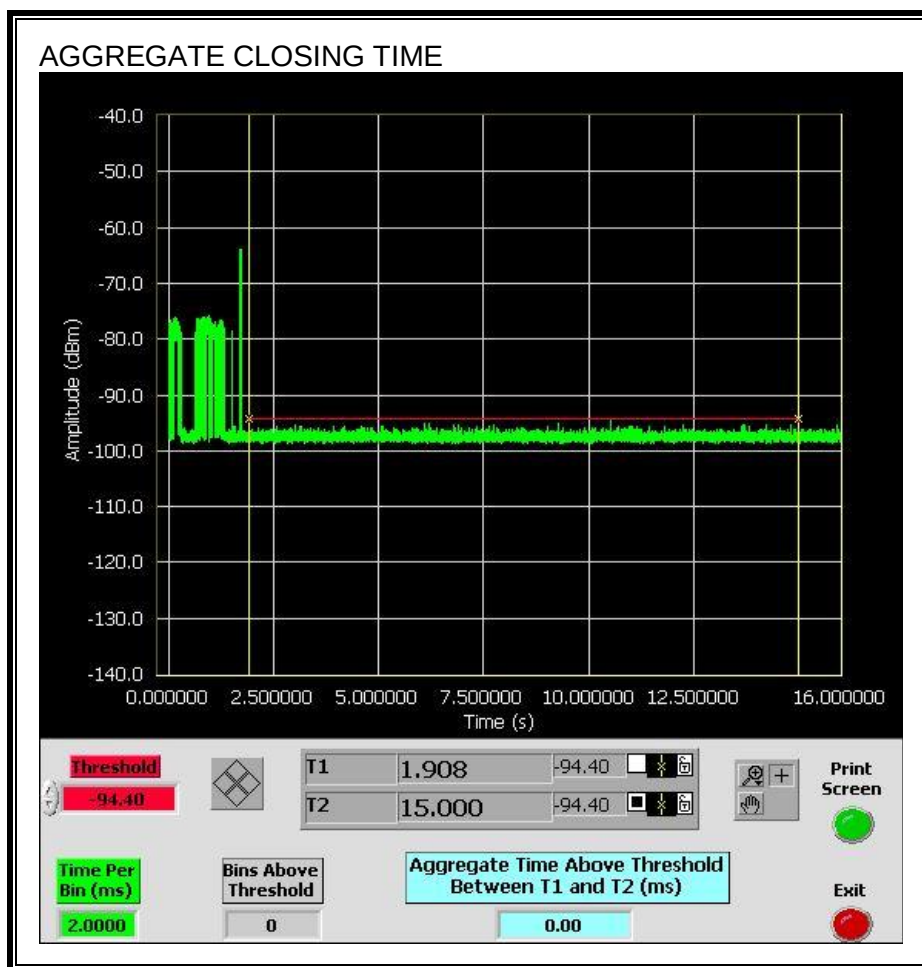


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



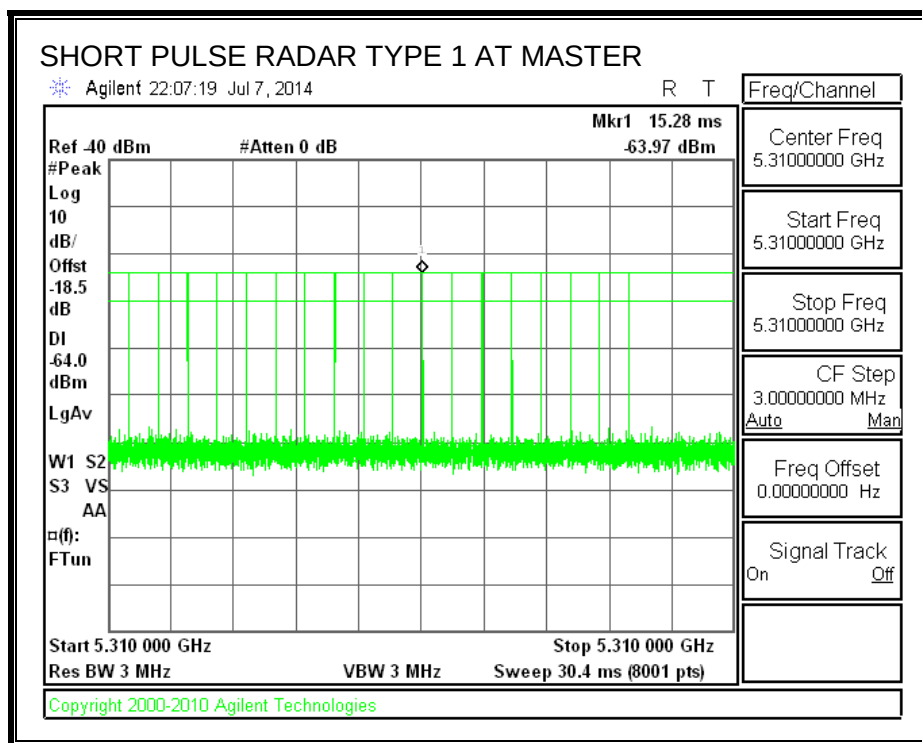
14.3. RESULTS FOR 40 MHz BANDWIDTH

14.3.1. TEST CHANNEL

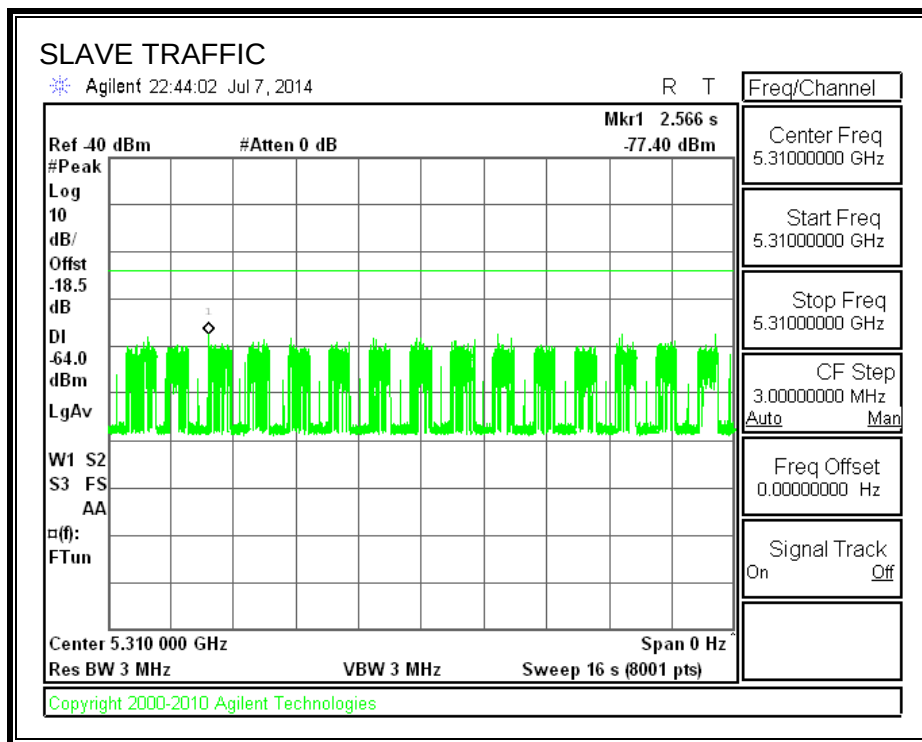
All tests were performed at a channel center frequency of 5310 MHz.

14.3.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



14.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

14.3.4. 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)

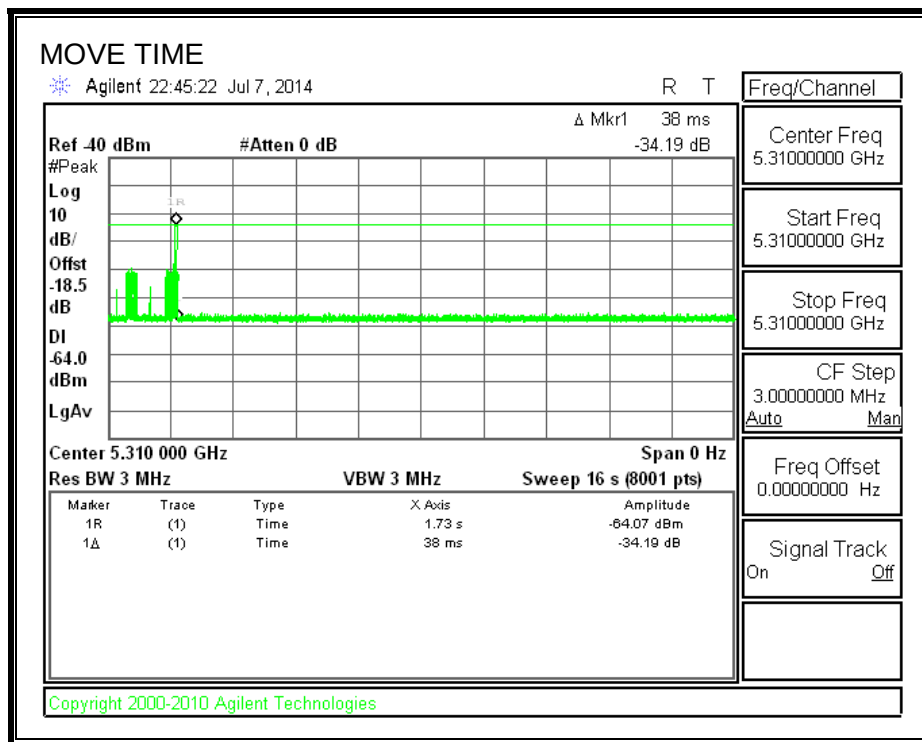
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

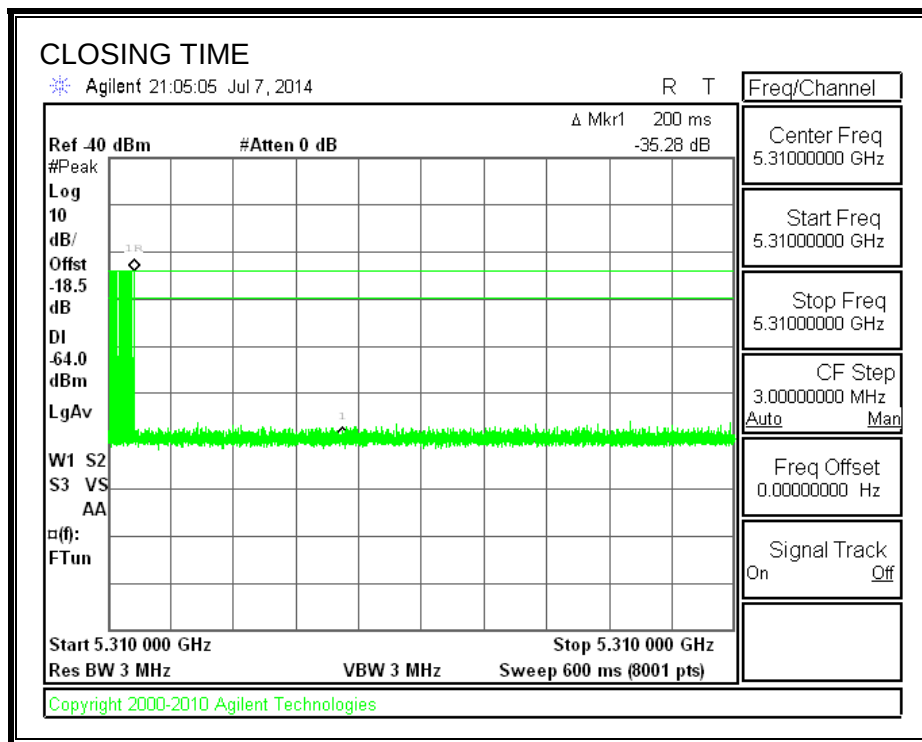
Channel Move Time (sec)	Limit (sec)
0.038	10

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

MOVE TIME

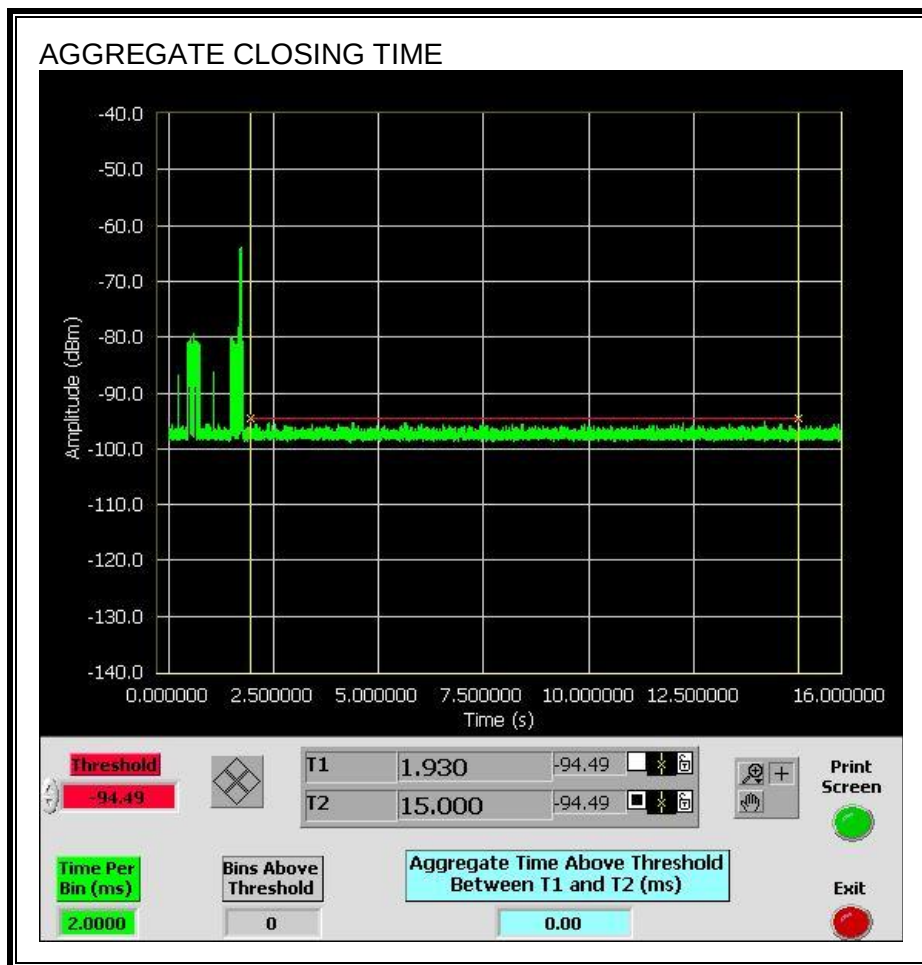


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



14.3.5. NON-OCCUPANCY PERIOD

RESULTS

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

