



**FCC 47 CFR PART 15 SUBPART E
INDUSTRY CANADA RSS-210 ISSUE 8**

CERTIFICATION TEST REPORT

FOR

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

MODEL NUMBER: SM-N750S, SM-N750K, SM-N750L

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IC: 649E-SMN750KOR

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Revision History

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	2/6/14	Initial Issue	P. Kim
A	2/14/14	Updated equipment list; Updated 10.1.3 table name	P. Kim
B	2/21/14	Add KDB reference in EUT Description Section	D. Anderson

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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/ac, ANT & NFC

MODEL: SM-N750S, SM-N750K, SM-N750L

SERIAL NUMBER: FL-029-C (RADIATED)
FL-029-D (CONDUCTED)

DATE TESTED: JANUARY 27 – FEBRUARY 6, 2014

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart E	Pass
INDUSTRY CANADA RSS-210 Issue 8 Annex 8	Pass
INDUSTRY CANADA RSS-GEN Issue 3	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.

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Tested By:



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WiSE PROGRAM MANAGER
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CHARLES VERGONIO
Wise LAB TECHNICIAN
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 C63.10-2009, RSS-GEN Issue 3, RSS-210 Issue 8.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <http://www.ccsemc.com>.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

4.3. MEASUREMENT UNCERTAINTY

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

PARAMETER	UNCERTAINTY
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/ac + 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	13.65	23.17
5180-5240	802.11n HT20	13.57	22.75
5190-5230	802.11n HT40	13.38	21.78
5210	802.11ac HT80	10.55	11.35
5260-5320	802.11a	13.76	23.77
5260-5320	802.11n HT20	13.64	23.12
5270-5310	802.11n HT40	13.39	21.83
5290	802.11ac HT80	10.8	12.02
5500-5700	802.11a	13.68	23.33
5500-5700	802.11n HT20	13.69	23.39
5510-5670	802.11n HT40	13.36	21.68
5530	802.11ac HT80	10.58	11.43

5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an FPCB antenna, with a maximum gain of 3.46 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
802.11ac HT 80mode: MCS0

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

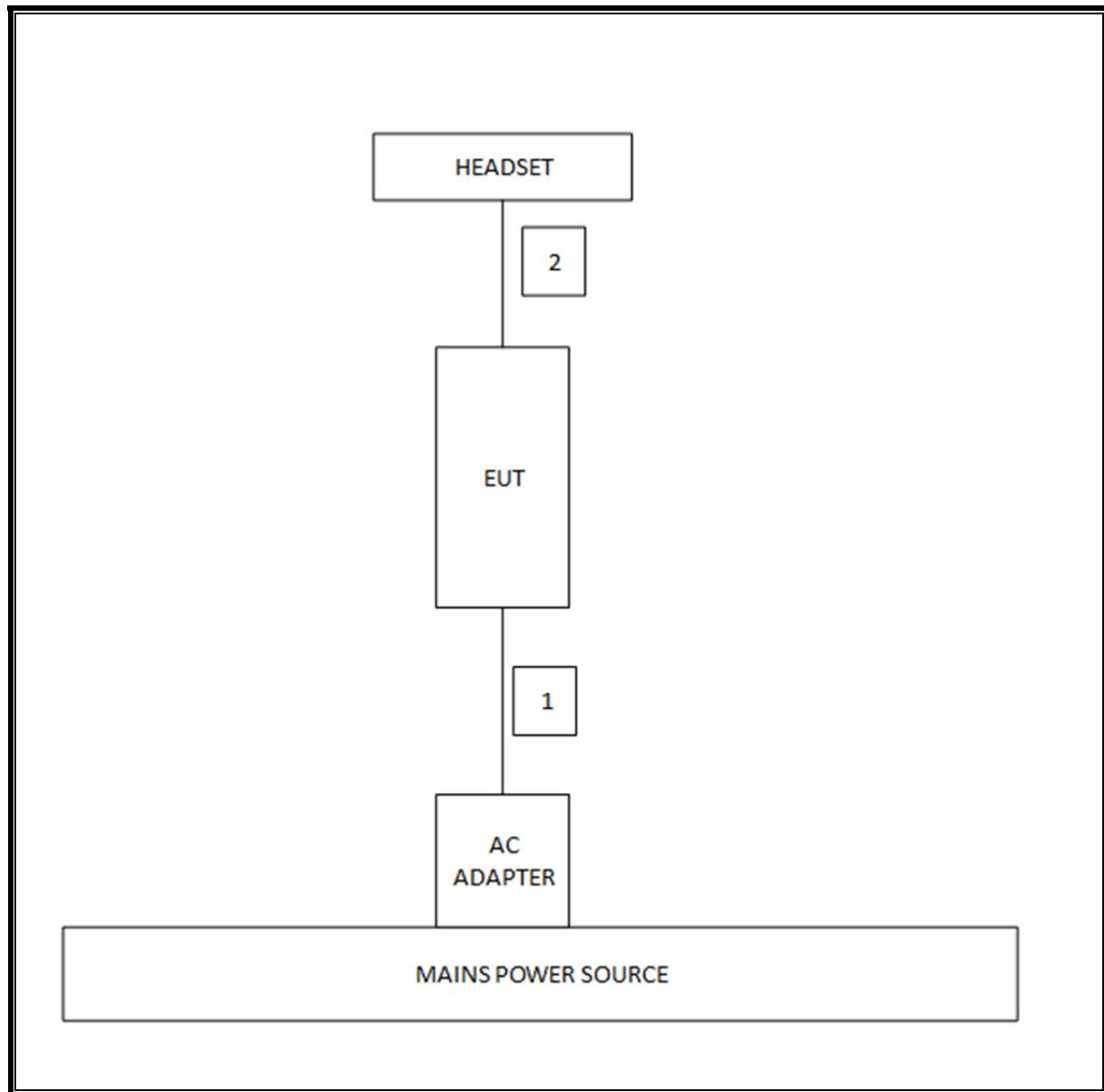
Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
AC Adapter	SAMSUNG	EP-TA11KWK	SE1D805AS/B-E	N/A
Earphone	SAMSUNG	N/A	N/A	N/A

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. Test software exercised the radio card.

SETUP DIAGRAM FOR TESTS

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

7. SUMMARY TABLE

FCC Part Section	Test Description	Test Limit	Test Condition	Test Result	Worst Case
15.247 (a)	Occupied Band width (26dB)	N/A	Conducted	Pass	83.4MHz
15.407 (a)(1)	TX Cond. Power 5.15-2.25	<17dBm or 4+10Log(OBW)		Pass	13.65dBm
15.407 (a)(2)	TX Cond. Power 5.25-5.35 & 5.47-5.725	<24dBm or 11+10Log(OBW)		Pass	13.76dBm
15.407 (a)(5)	PSD	<8dBm		Pass	2.09dBm
15.407 (a)(6)	Peak Excursion Ratio	13dB		Pass	8.81dB
15.207 (a)	AC Power Line conducted emissions	Section 10	Radiated	Pass	54.17dBuV
15.407 (b) & 15.209	Radiated Spurious Emission	< 54dBuV/m		Pass	50.9dBuV/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.

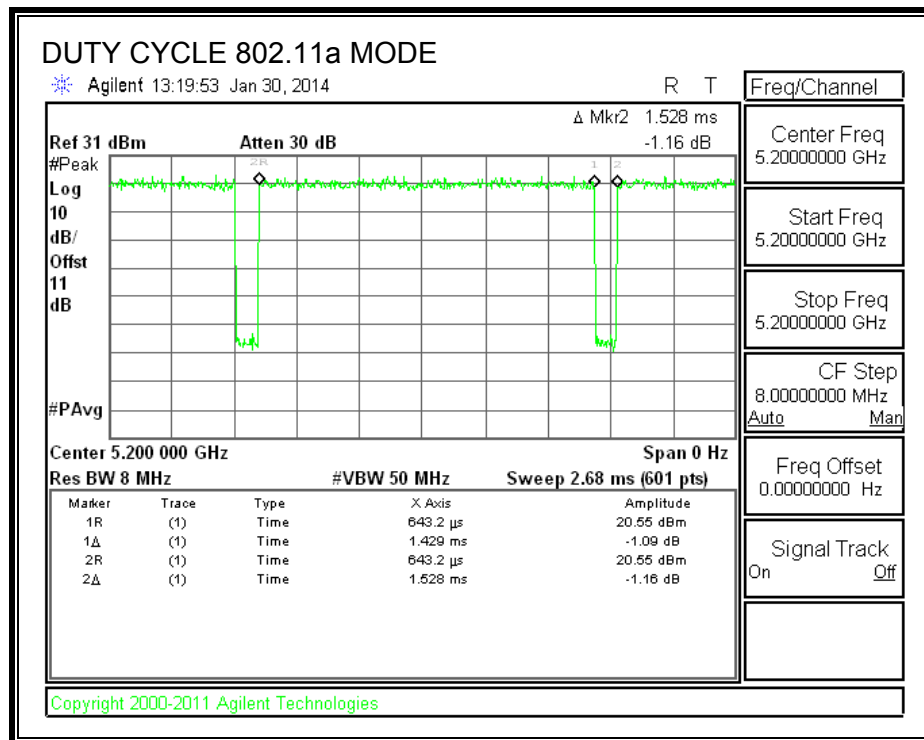
PROCEDURE

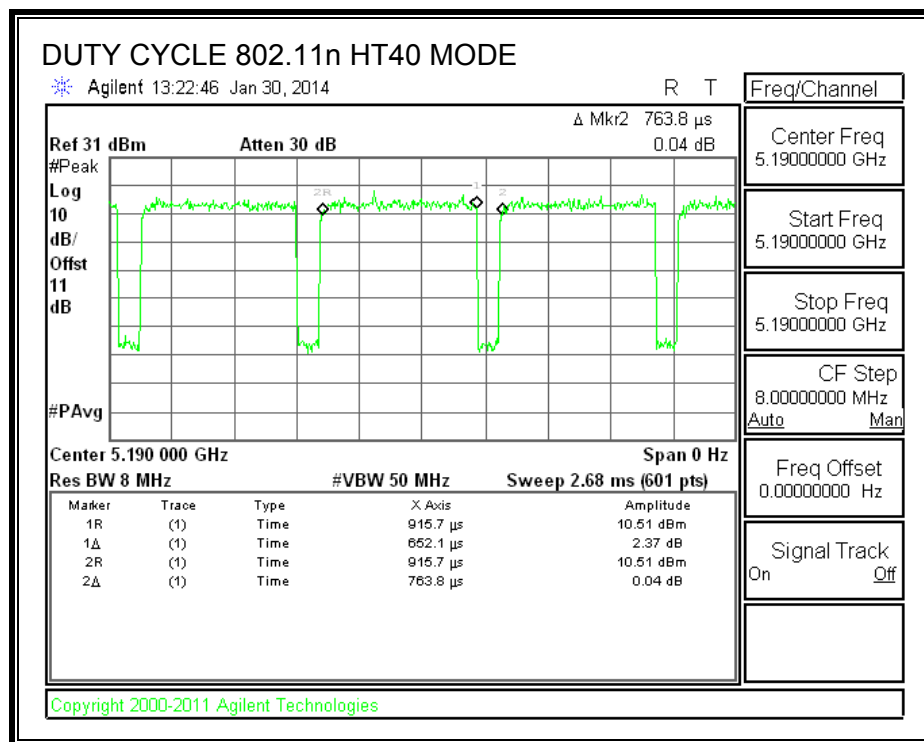
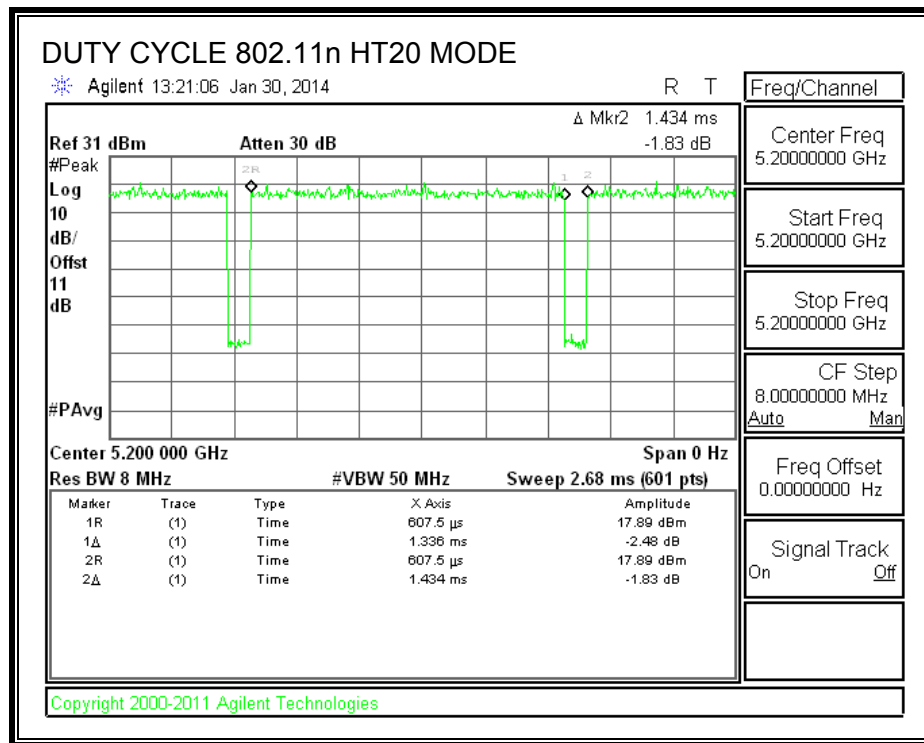
KDB 789033 Zero-Span Spectrum Analyzer Method.

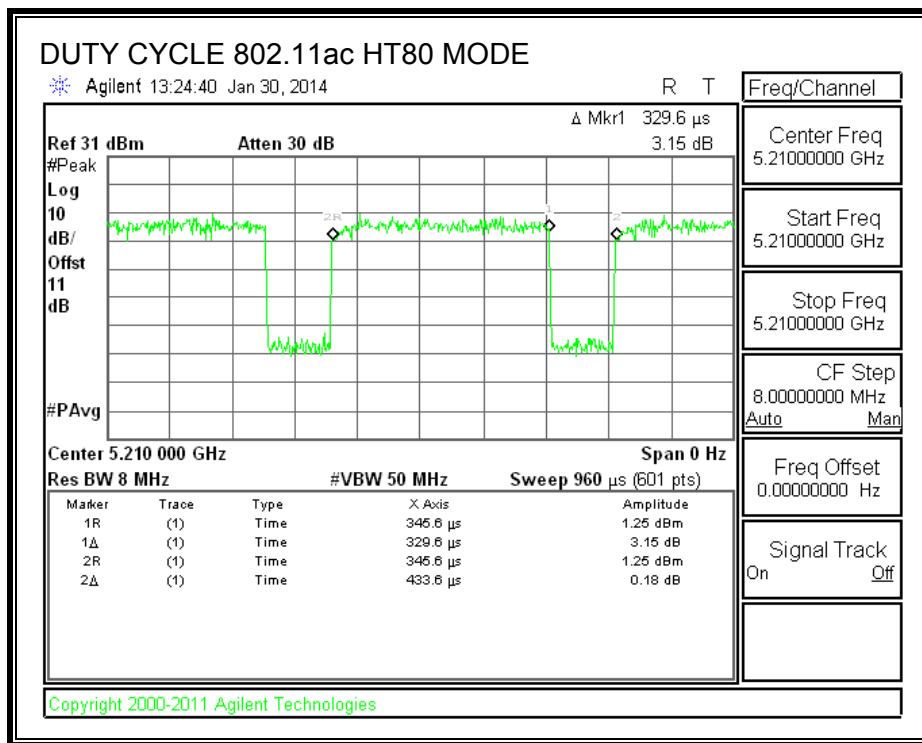
8.1. ON TIME AND DUTY CYCLE RESULTS

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	1.43	1.53	0.935	93.5%	0.29	0.700
802.11ac HT80	0.33	0	0.760	76.0%	1.19	3.034
802.11n HT20	1.34	1	0.932	93.2%	0.31	0.749
802.11n HT40	0.65	1	0.854	85.4%	0.69	1.534

8.2. DUTY CYCLE PLOTS







9. MEASUREMENT METHOD

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

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

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	21.29
Mid	5200	21.29
High	5240	21.25
Worst		21.29

10.1.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5180	21.50
Mid	5200	21.62
High	5240	21.67
Worst		21.67

10.1.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5190	40.200
Mid	5230	40.600
Worst		40.600

10.1.4. 802.11ac HT80 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5210	83.050

10.1.1. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	21.79
Mid	5300	21.78
High	5320	21.69
Worst		21.79

10.1.1. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5260	22.17
Mid	5300	22.17
High	5320	21.85
Worst		22.17

10.1.2. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Mid	5270	40.1
High	5310	40.2
Worst		40.2

10.1.3. 802.11ac HT80 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5290	82.470

10.1.4. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	21.670
Mid	5580	21.730
High	5700	21.800
Worst		21.800

10.1.5. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	22.070
Mid	5580	22.070
High	5700	22.000
Worst		22.070

10.1.6. 802.11n HT40 MODE IN THE 5.5 GHz BAND

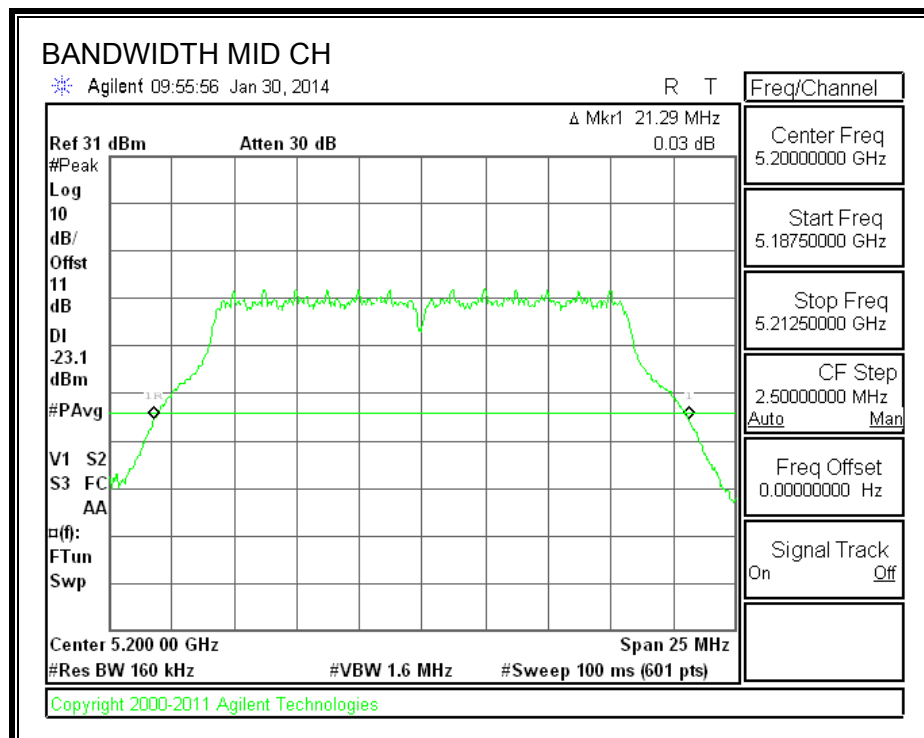
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	40.6
Mid	5550	40.5
High	5670	40.4
Worst		40.6

10.1.7. 802.11ac HT80 MODE IN THE 5.5 GHz BAND

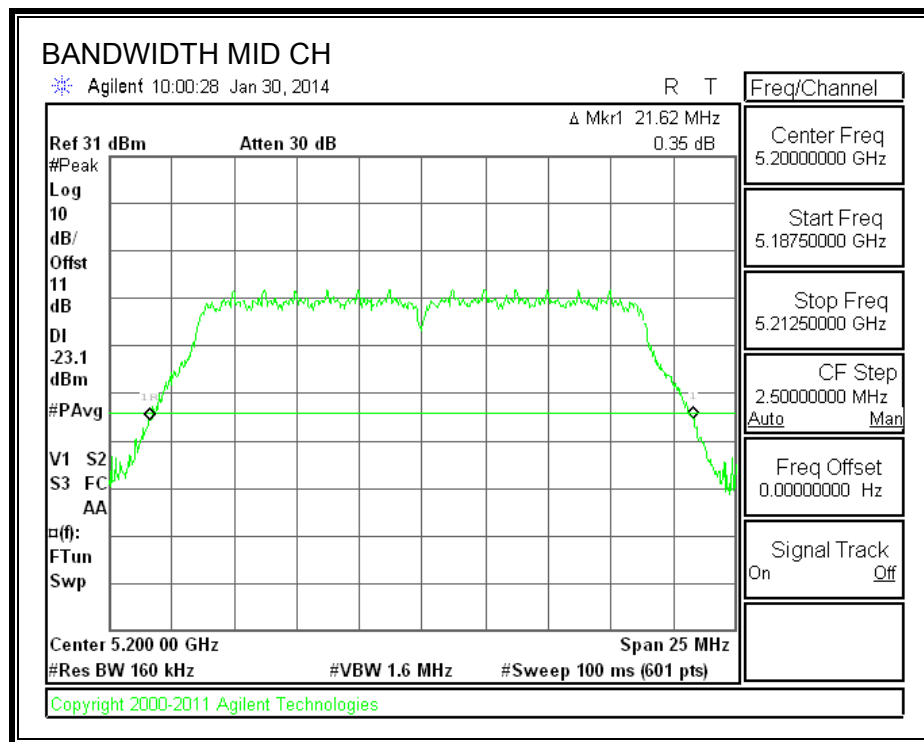
Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5530	83.420
Worst		83.4

10.1.8. PLOTS

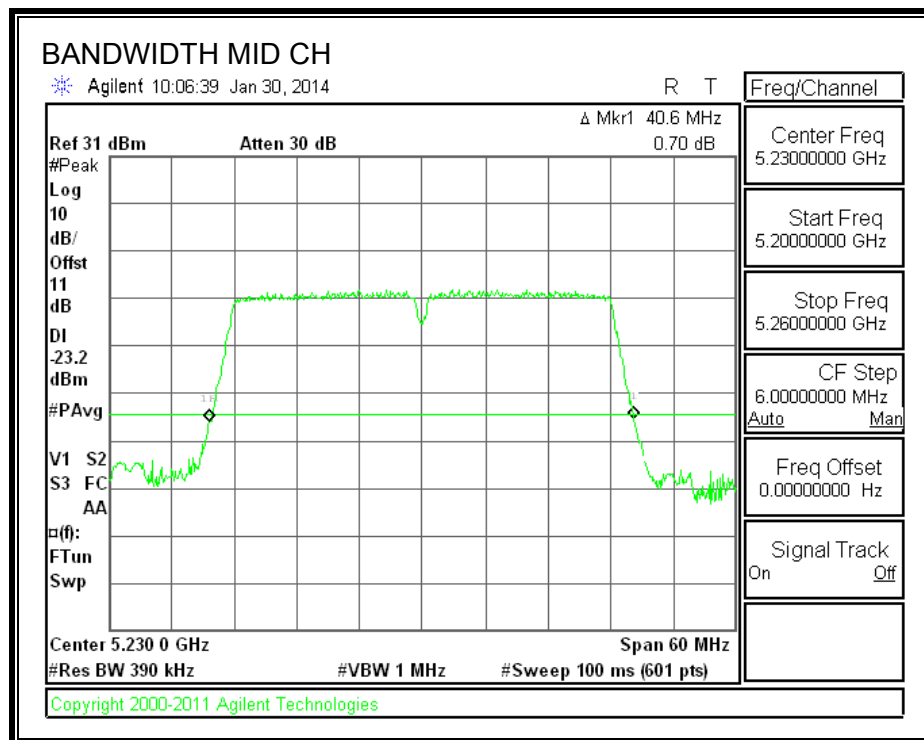
802.11a 5.2G 26 dB BANDWIDTH



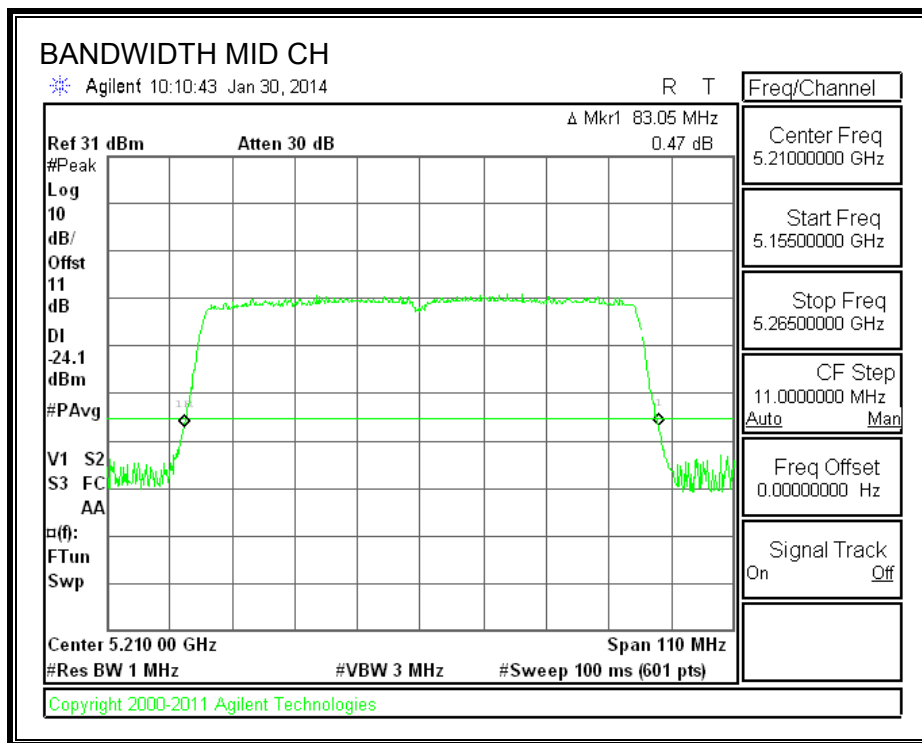
802.11n HT20 5.2G 26 dB BANDWIDTH



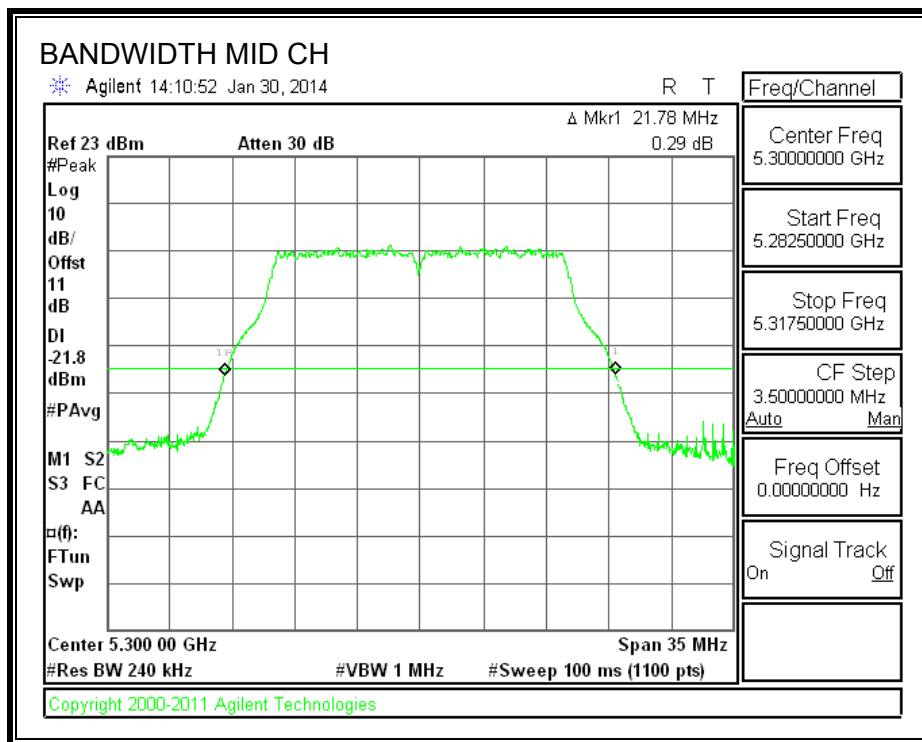
802.11n HT40 5.2G 26 dB BANDWIDTH



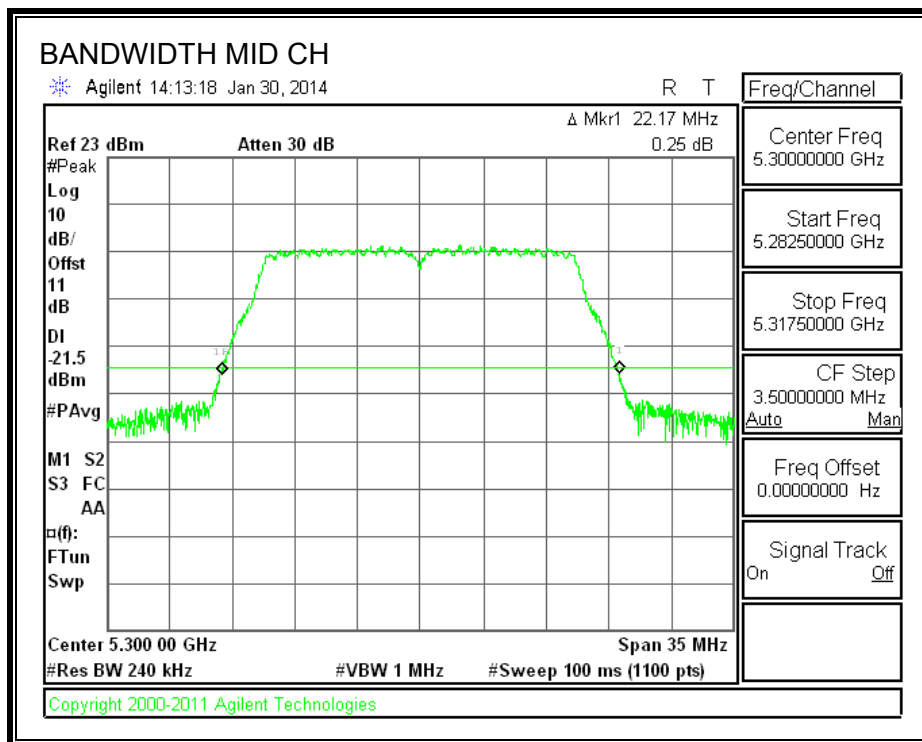
802.11ac HT80 5.2G 26 dB BANDWIDTH



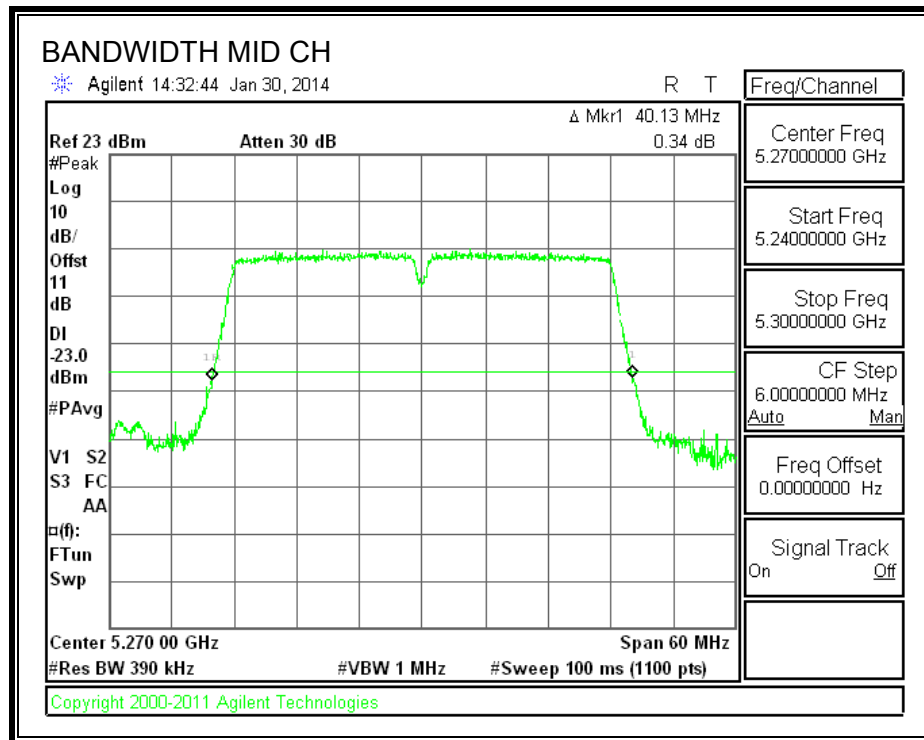
802.11a 5.3G 26 dB BANDWIDTH



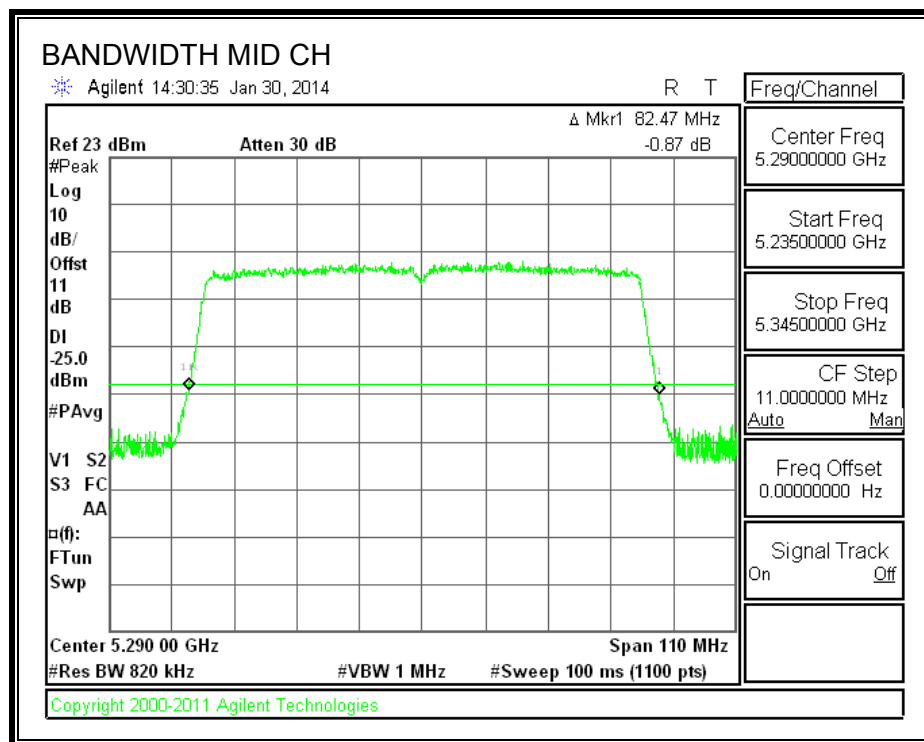
802.11n HT20 5.3G 26 dB BANDWIDTH

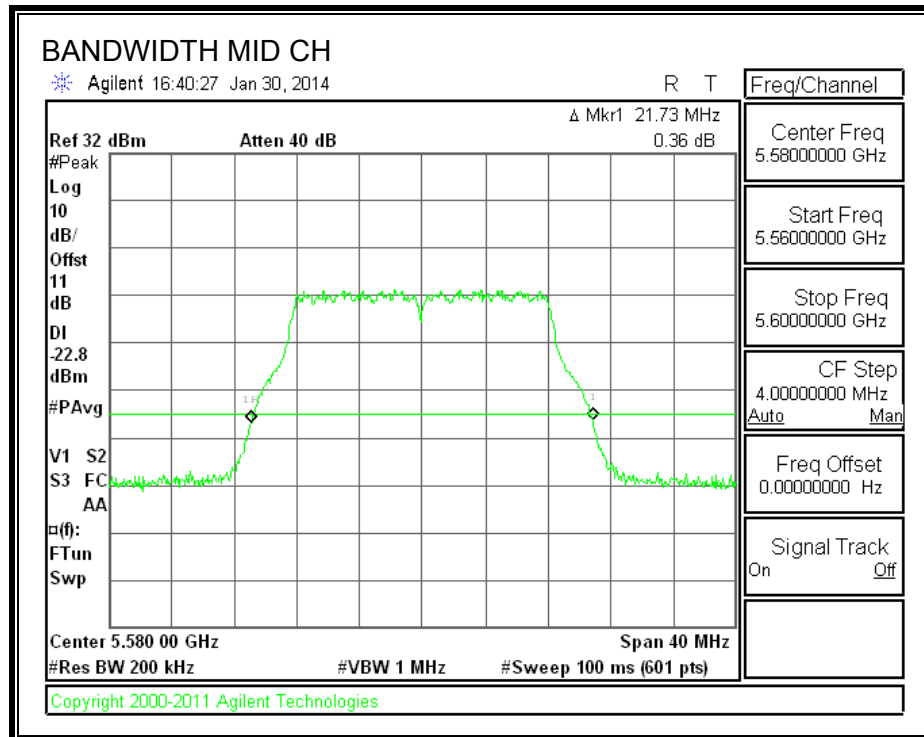
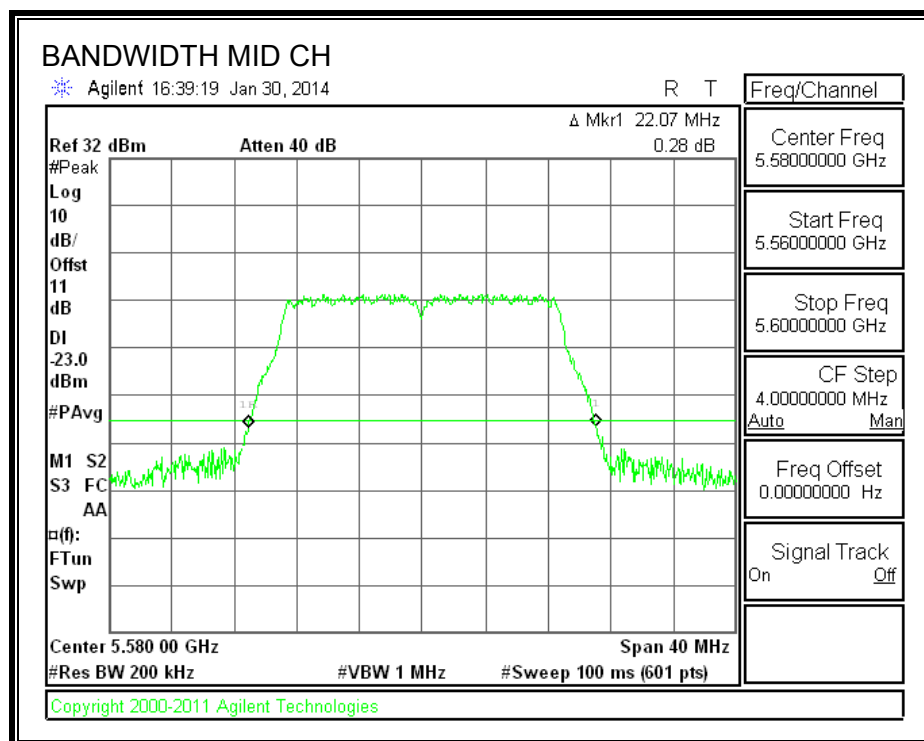


802.11n HT40 5.3G 26 dB BANDWIDTH

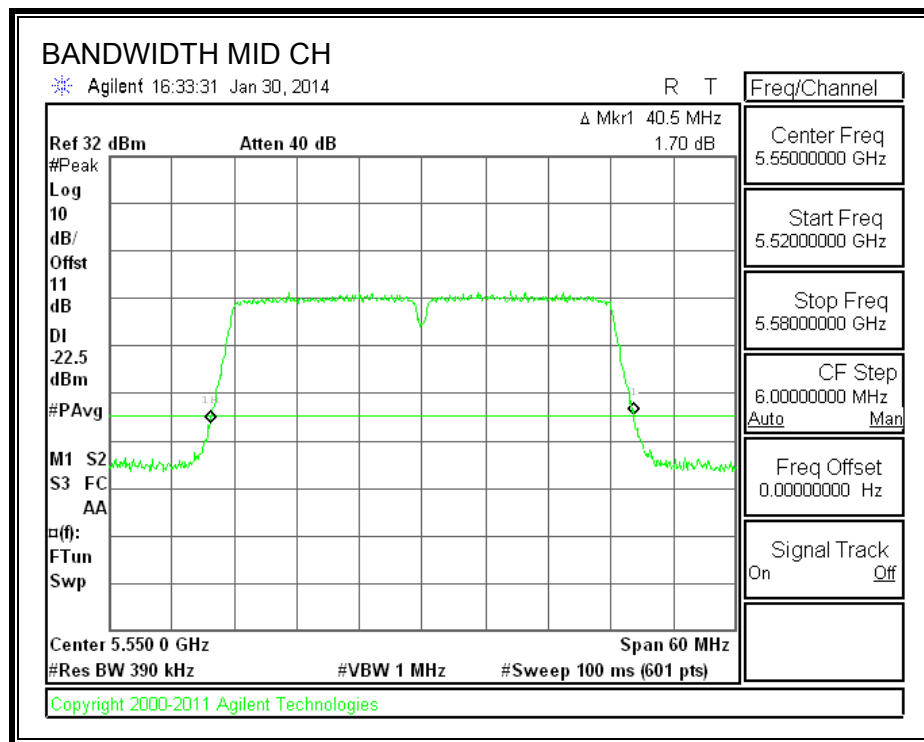


802.11ac HT80 5.3G 26 dB BANDWIDTH

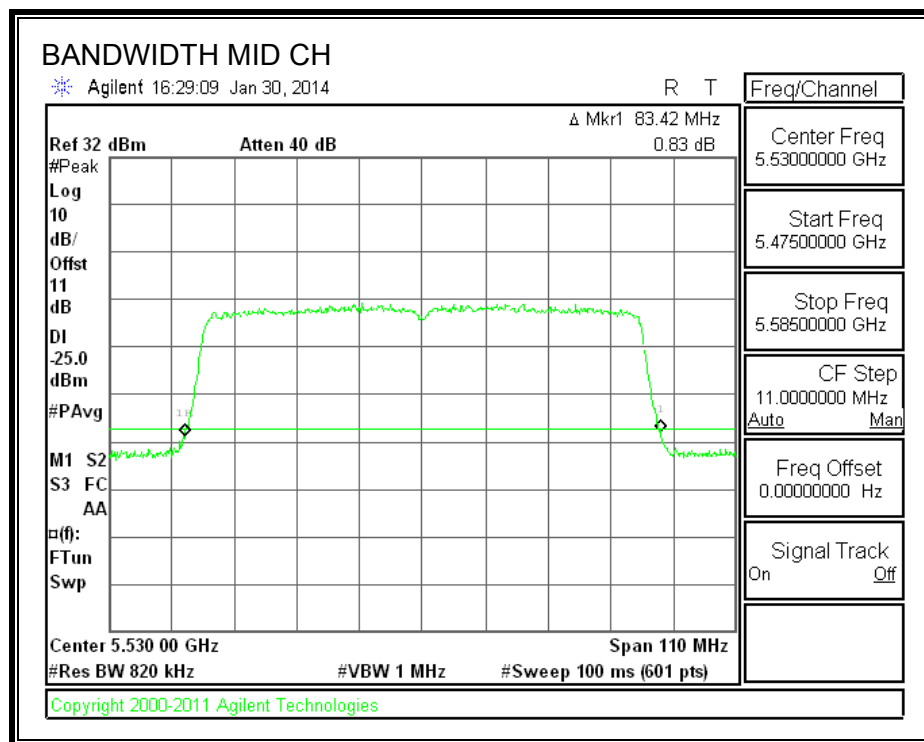


802.11a 5.5G 26 dB BANDWIDTH**802.11n HT20 5.5G 26 dB BANDWIDTH**

802.11n HT40 5.5G 26 dB BANDWIDTH



802.11ac HT80 5.5G 26 dB BANDWIDTH



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	16.50
Mid	5200	16.47
High	5240	16.51
Worst		16.51

10.2.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5180	17.73
Mid	5200	17.70
High	5240	17.68
Worst		17.73

10.2.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5190	36.270
Mid	5230	36.210
Worst		36.270

10.2.4. 802.11ac HT80 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5210	75.660

10.2.5. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	16.46
Mid	5300	16.47
High	5320	16.48
Worst		16.48

10.2.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5260	17.65
Mid	5300	17.65
High	5320	17.68
Worst		17.68

10.2.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Mid	5270	36.1
High	5310	36.1
Worst		36.1

10.2.8. 802.11ac HT80 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5290	75.499

10.2.9. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	16.596
Mid	5580	16.596
High	5700	16.592
Worst		16.596

10.2.10. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	17.778
Mid	5580	17.758
High	5700	17.772
Worst		17.778

10.2.11. 802.11n HT40 MODE IN THE 5.5 GHz BAND

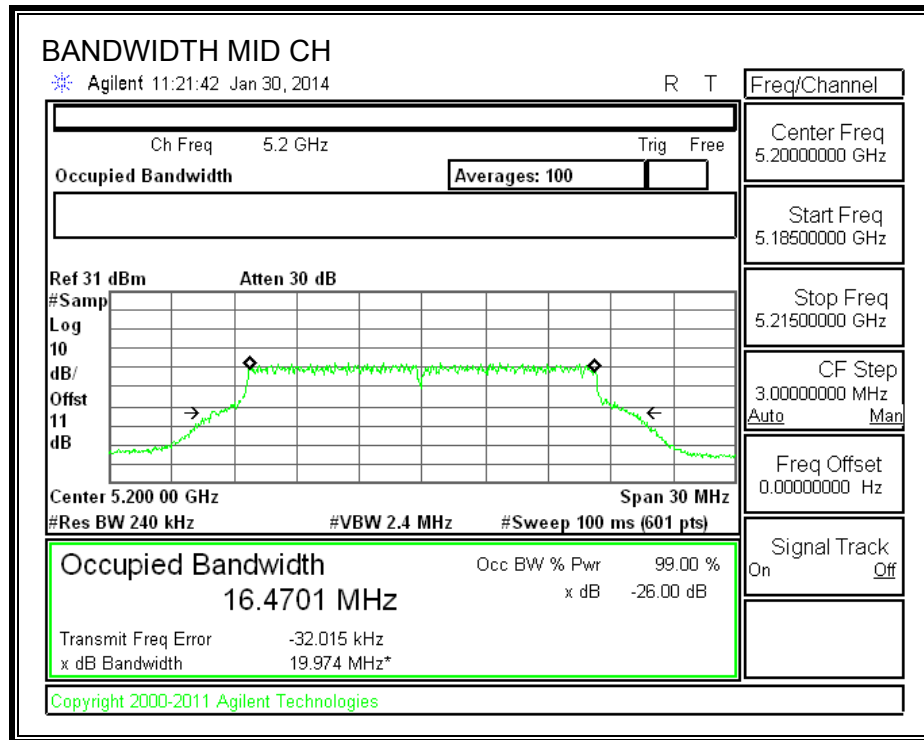
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5510	36.2
Mid	5550	36.2
High	5670	36.2
Worst		36.2

10.2.12. 802.11ac HT80 MODE IN THE 5.5 GHz BAND

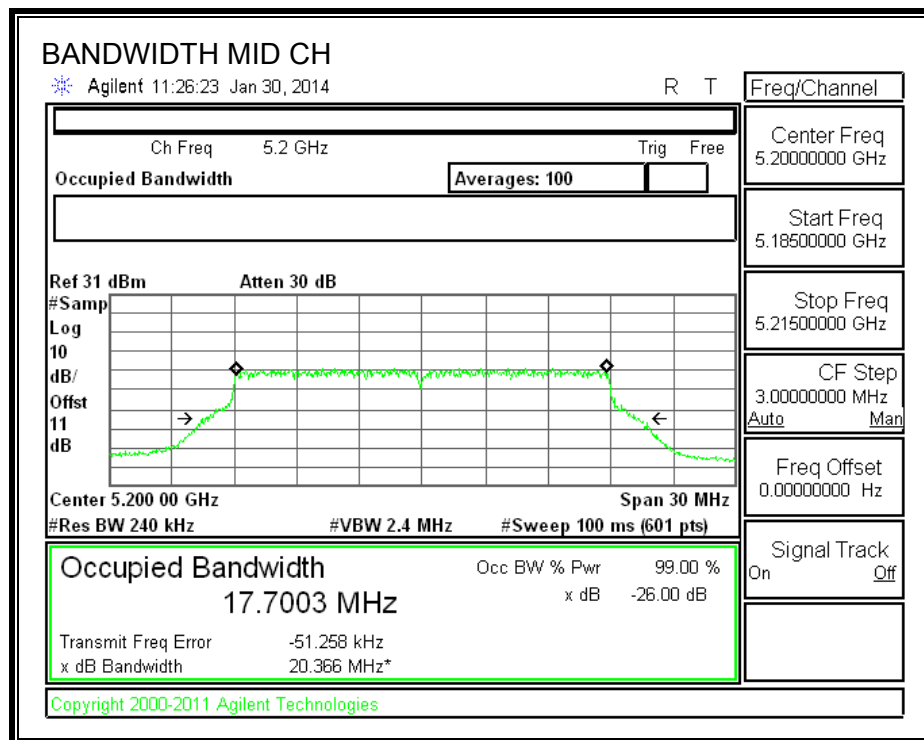
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5530	75.655
Worst		75.7

10.2.13. PLOTS

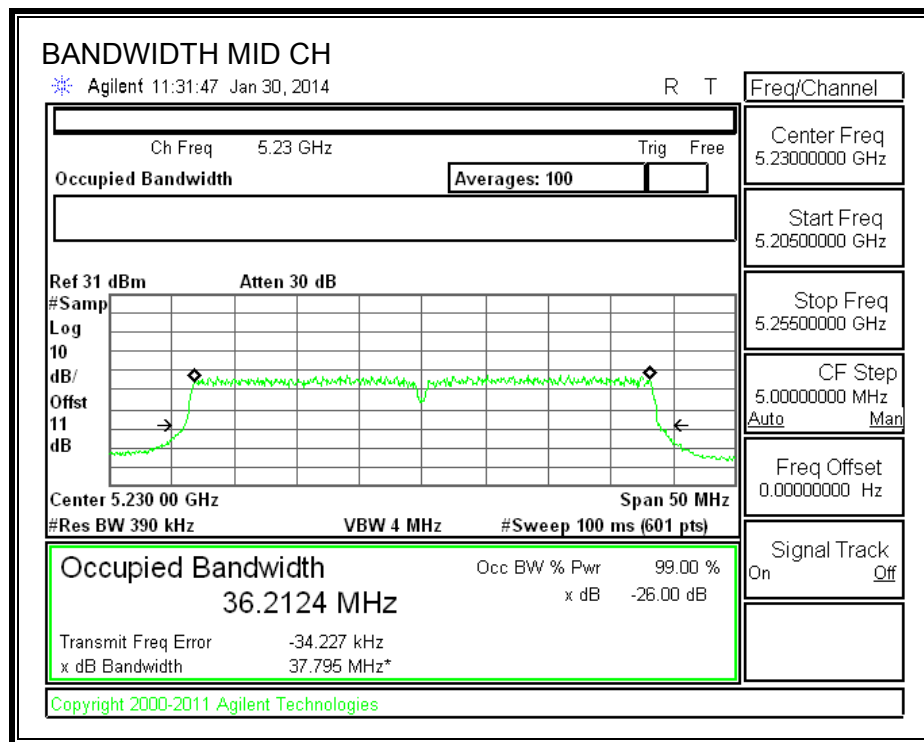
802.11a 5.2G 99% BANDWIDTH



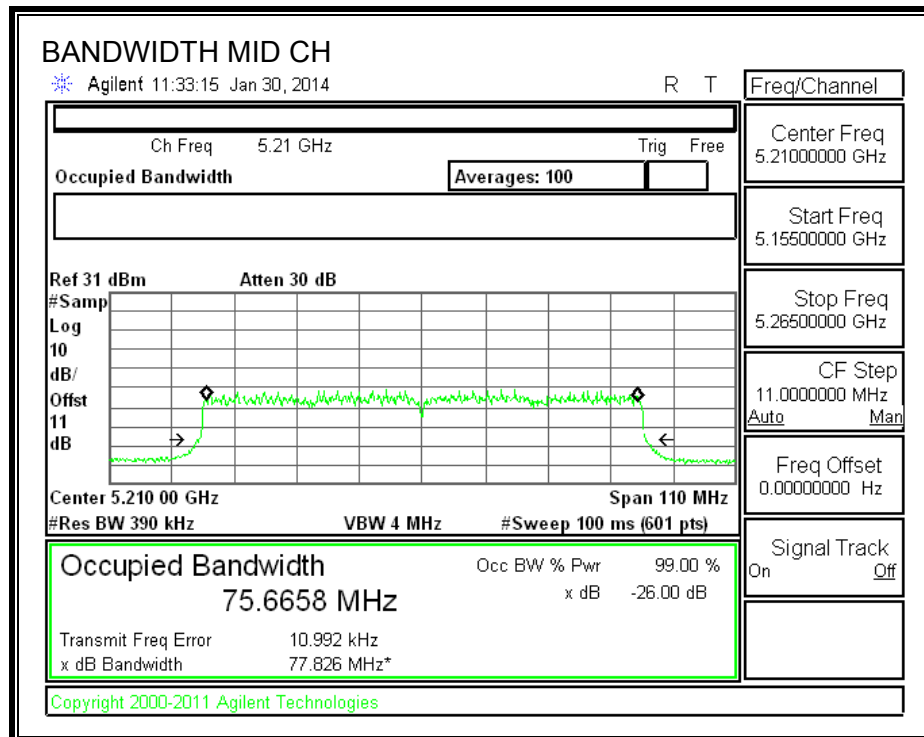
802.11n HT20 5.2G 99% BANDWIDTH

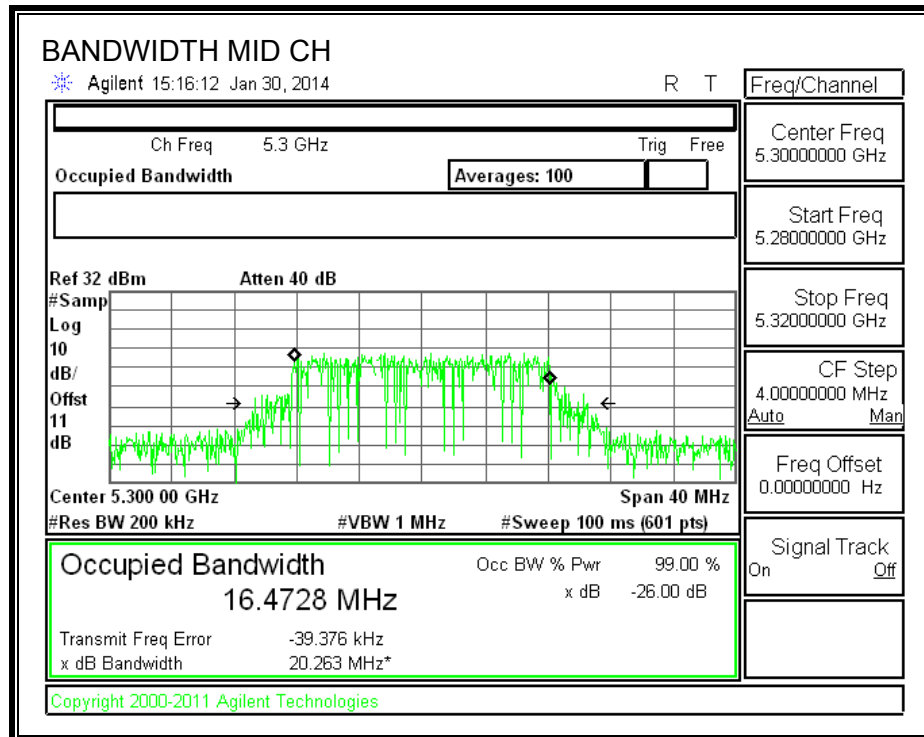
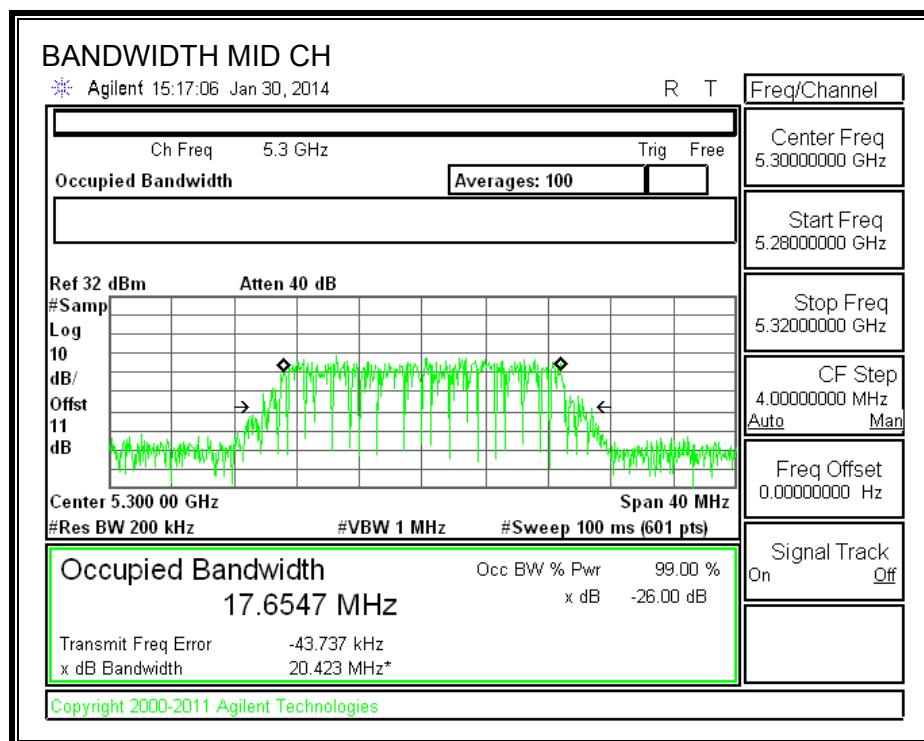


802.11n HT40 5.2G 99% BANDWIDTH

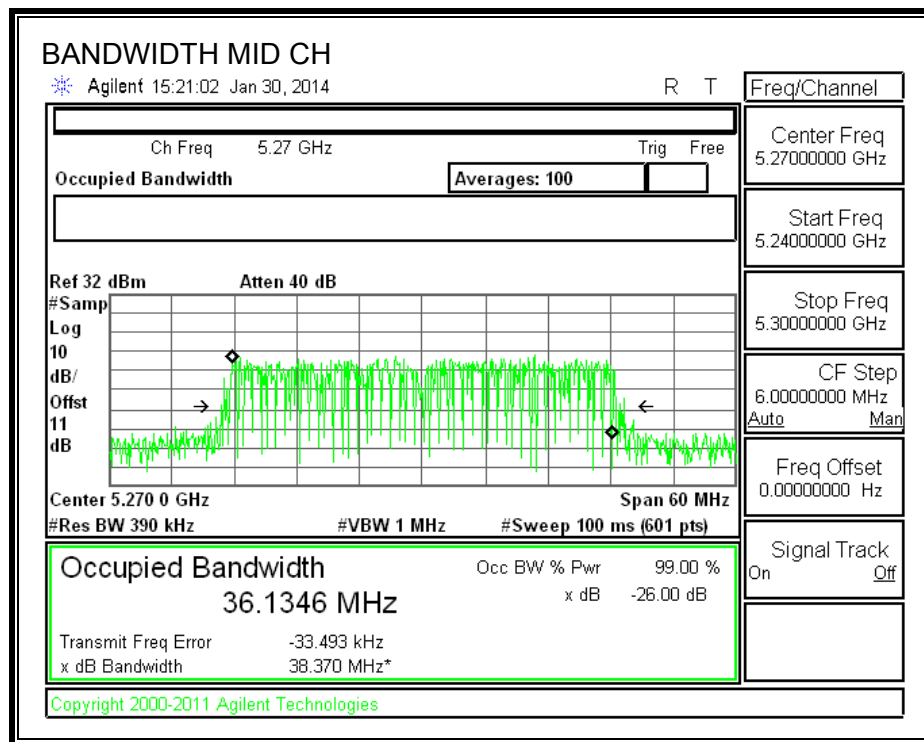


802.11ac HT80 5.2G 99% BANDWIDTH

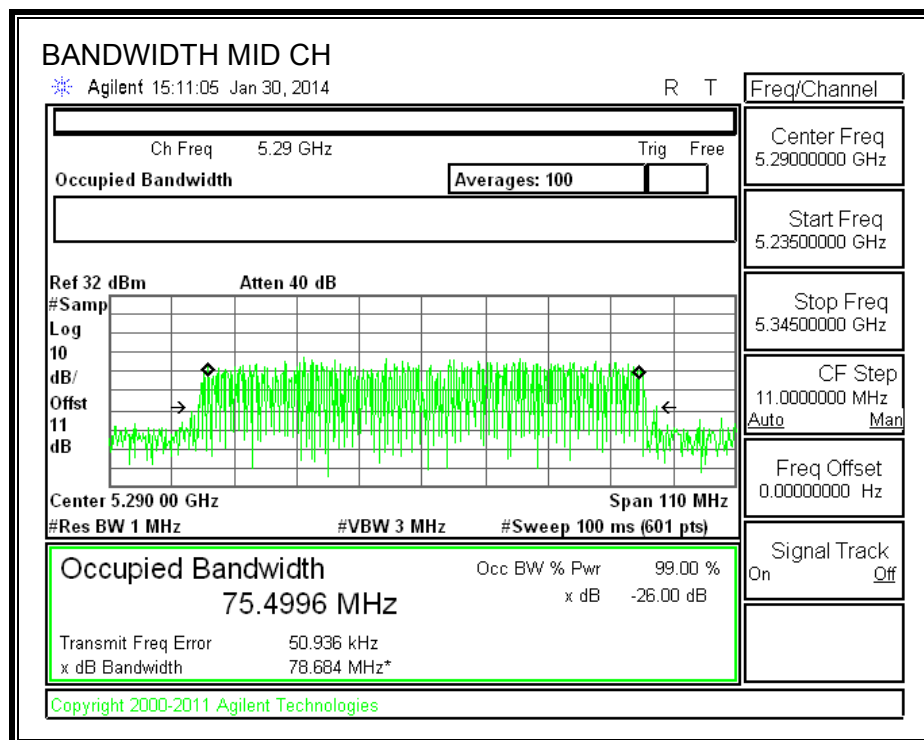


802.11a 5.3G 99% BANDWIDTH**802.11n HT20 5.3G 99% BANDWIDTH**

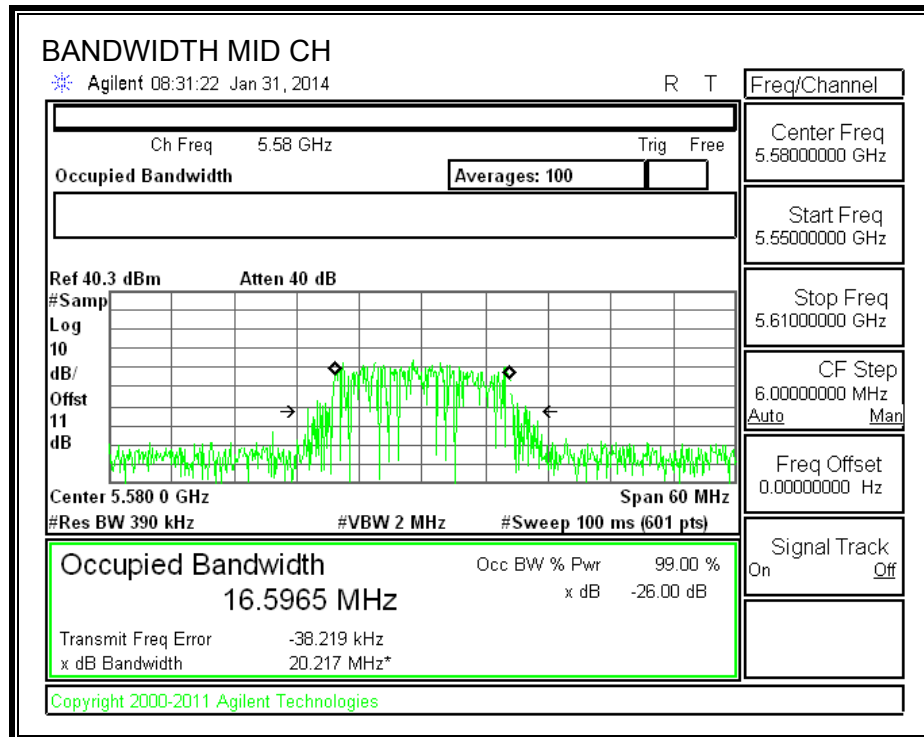
802.11n HT40 5.3G 99% BANDWIDTH



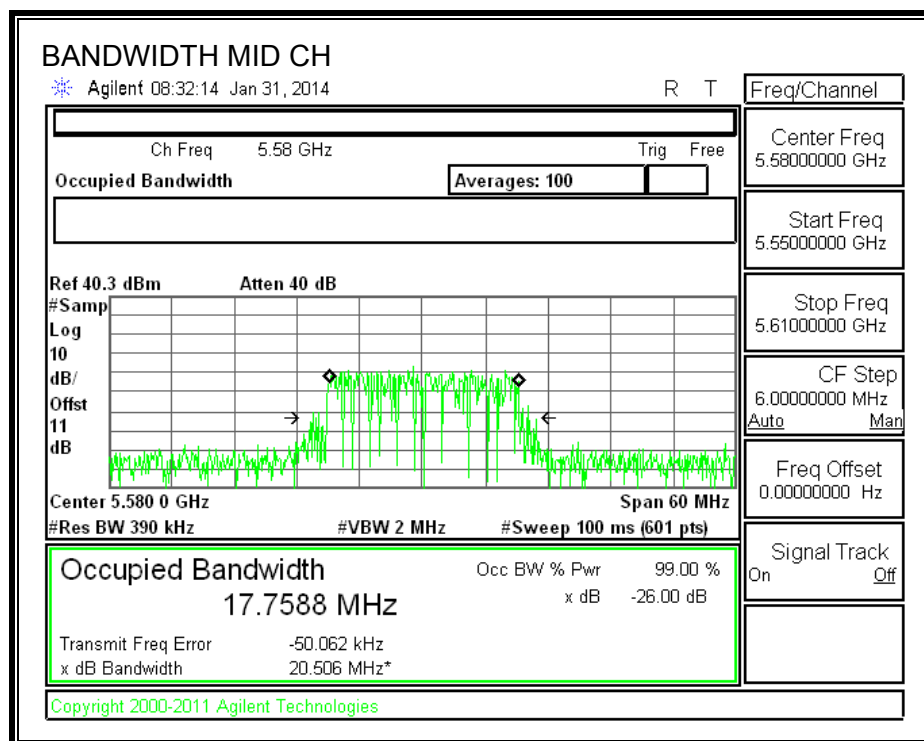
802.11ac HT80 5.3G 99% BANDWIDTH



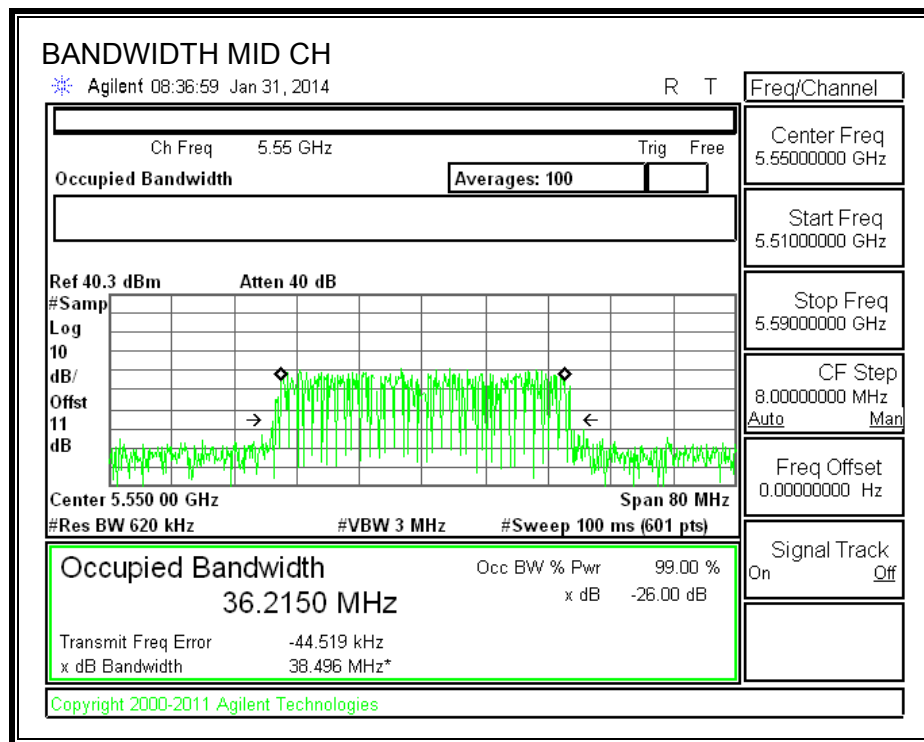
802.11a 5.5G 99% BANDWIDTH



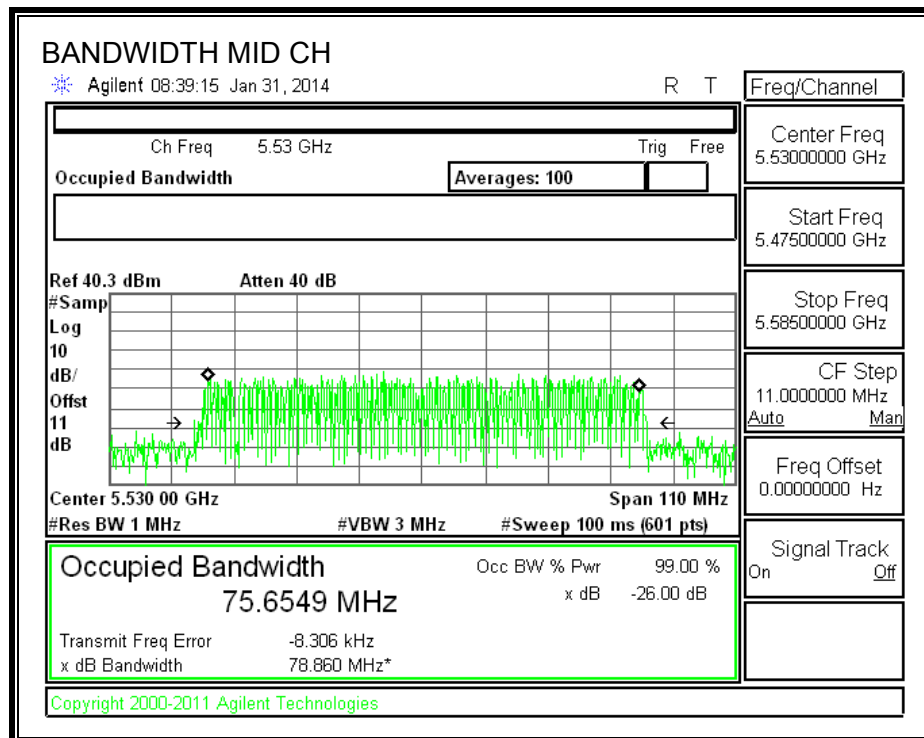
802.11n HT20 5.5G 99% BANDWIDTH



802.11n HT40 5.5G 99% BANDWIDTH



802.11ac HT80 5.5G 99% BANDWIDTH



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	12.20
Mid	5200	12.00
High	5240	12.20
Worst		12.20

10.3.2. 802.11n HT20 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5180	12.10
Mid	5200	12.00
High	5240	12.00
Worst		12.10

10.3.3. 802.11n HT40 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5190	11.900
Mid	5230	12.000
Worst		12.000

10.3.4. 802.11ac HT80 MODE IN THE 5.2 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5210	9.700

10.3.5. 802.11a MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5260	12.10
Mid	5300	12.00
High	5320	12.00
Worst		12.10

10.3.6. 802.11n HT20 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5260	12.00
Mid	5300	12.10
High	5320	12.00
Worst		12.10

10.3.7. 802.11n HT40 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5270	11.8
High	5310	11.9
Worst		11.9

10.3.8. 802.11ac HT80 MODE IN THE 5.3 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5290	9.500

10.3.9. 802.11a MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5500	12.300
Mid	5580	12.300
High	5700	12.100
Worst		12.300

10.3.10. 802.11n HT20 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5500	12.300
Mid	5580	12.200
High	5700	12.000
Worst		12.300

10.3.11. 802.11n HT40 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5510	12.0
Mid	5550	12.0
High	5670	11.8
Worst		12.0

10.3.12. 802.11ac HT80 MODE IN THE 5.5 GHz BAND

Channel	Frequency (MHz)	Avg Power (dBm)
Low	5530	9.800
High	5690	9.800
Worst		9.8

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 50 mW 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

FCC KDB 644545 D02(Alternative Guidance for 802 11ac V01) was followed to test 5.8GHz DTS band under UNII band.

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	21.250	16.500	3.46
Mid	5200	21.250	16.470	3.46
High	5240	21.250	16.510	3.46

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	22.17	18.71	17.00	4.00	10.00	4.00
Mid	5200	17.00	22.17	18.71	17.00	4.00	10.00	4.00
High	5240	17.00	22.18	18.72	17.00	4.00	10.00	4.00

Duty Cycle CF (dB)	0.29	Included in Calculations of Corr'd Power & PSD
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Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5180	13.106	13.40	17.00	-3.60
Mid	5200	13.107	13.40	17.00	-3.60
High	5240	13.269	13.56	17.00	-3.44

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	1.590	1.88	4.00	-2.12
Mid	5200	1.500	1.79	4.00	-2.21
High	5240	1.740	2.03	4.00	-1.97

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	21.500	17.730	3.46
Mid	5200	21.620	17.700	3.46
High	5240	21.670	17.680	3.46

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	22.49	19.03	17.00	4.00	10.00	4.00
Mid	5200	17.00	22.48	19.02	17.00	4.00	10.00	4.00
High	5240	17.00	22.47	19.01	17.00	4.00	10.00	4.00

Duty Cycle CF (dB)	0.32	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	13.186	13.51	17.00	-3.49
Mid	5200	13.128	13.45	17.00	-3.55
High	5240	13.245	13.57	17.00	-3.44

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5180	1.270	1.59	4.00	-2.41
Mid	5200	1.250	1.57	4.00	-2.43
High	5240	1.330	1.65	4.00	-2.35

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	40.2	36.270	3.46
Mid	5230	40.6	36.210	3.46

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	19.54	17.00	4.00	10.00	4.00
Mid	5230	17.00	23.00	19.54	17.00	4.00	10.00	4.00
Duty Cycle CF (dB)		0.69	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	12.694	13.38	17.00	-3.62
Mid	5230	12.639	13.33	17.00	-3.67

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5190	-2.010	-1.32	4.00	-5.32
Mid	5230	-2.080	-1.39	4.00	-5.39

10.4.4. 802.11ac HT80 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	5210	83.050	75.660	3.46

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	5210	17.00	23.00	19.54	17.00	4.00	10.00	4.00
Duty Cycle CF (dB)		1.19	Included in Calculations of Corr'd Power & PPSP					

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5210	9.363	10.55	17.00	-6.45

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5210	-8.090	-6.90	4.00	-10.90

10.4.5. 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	21.79	16.460	3.46
Mid	5300	21.78	16.470	3.46
High	5320	21.69	16.480	3.46

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	23.16	29.16	23.16	11.00	11.00	11.00
Mid	5300	24.00	23.17	29.17	23.17	11.00	11.00	11.00
High	5320	24.00	23.17	29.17	23.17	11.00	11.00	11.00

Duty Cycle CF (dB)	0.29	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	5260	13.466	13.76	23.16	-9.41
Mid	5300	13.278	13.57	23.17	-9.60
High	5320	13.255	13.55	23.17	-9.62

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	1.770	2.06	11.00	-8.94
Mid	5300	1.700	1.99	11.00	-9.01
High	5320	1.600	1.89	11.00	-9.11

10.4.6. 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	22.17	17.650	3.46
Mid	5300	22.17	17.650	3.46
High	5320	21.85	17.680	3.46

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	23.47	29.47	23.47	11.00	11.00	11.00
Mid	5300	24.00	23.47	29.47	23.47	11.00	11.00	11.00
High	5320	24.00	23.47	29.47	23.47	11.00	11.00	11.00

Duty Cycle CF (dB)	0.31	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	13.221	13.53	23.47	-9.94
Mid	5300	13.256	13.57	23.47	-9.90
High	5320	13.327	13.64	23.47	-9.84

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5260	1.280	1.59	11.00	-9.41
Mid	5300	1.370	1.68	11.00	-9.32
High	5320	1.330	1.64	11.00	-9.36

10.4.7. 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	40.1	36.100	3.46
High	5310	40.2	36.100	3.46

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	5270	17.00	23.00	19.54	17.00	4.00	10.00	4.00
High	5310	17.00	23.00	19.54	17.00	4.00	10.00	4.00
Duty Cycle CF (dB)		0.69	Included in Calculations of Corr'd Power & PPSD					

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5270	12.688	13.38	17.00	-3.62
High	5310	12.701	13.39	17.00	-3.61

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5270	-2.200	-1.51	4.00	-5.51
High	5310	-2.040	-1.35	4.00	-5.35

10.4.8. 802.11ac HT80 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	5290	82.47	75.499	3.46

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	5290	17.00	23.00	19.54	17.00	4.00	10.00	4.00

Duty Cycle CF (dB)	1.19	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	5290	9.613	10.80	17.00	-6.20

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5290	-7.980	-6.79	4.00	-10.79

10.4.9. 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	21.67	16.596	3.46
Mid	5580	21.73	16.596	3.46
High	5700	21.80	16.592	3.46

Limits

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

Duty Cycle CF (dB)	0.29	Included in Calculations of Corr'd Power & PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	13.385	13.68	23.20	-9.53
Mid	5580	13.222	13.51	23.20	-9.69
High	5700	12.983	13.27	23.20	-9.93

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	1.800	2.09	11.00	-8.91
Mid	5580	1.650	1.94	11.00	-9.06
High	5700	1.380	1.67	11.00	-9.33

10.4.10. 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	22.07	17.778	3.46
Mid	5580	22.07	17.758	3.46
High	5700	22.00	17.772	3.46

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	23.50	29.50	23.50	11.00	11.00	11.00
Mid	5580	24.00	23.49	29.49	23.49	11.00	11.00	11.00
High	5700	24.00	23.50	29.50	23.50	11.00	11.00	11.00

Duty Cycle CF (dB)	0.31	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	13.384	13.69	23.50	-9.80
Mid	5580	12.404	12.71	23.49	-10.78
High	5700	12.835	13.15	23.50	-10.35

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	1.520	1.83	11.00	-9.17
Mid	5580	0.750	1.06	11.00	-9.94
High	5700	0.880	1.19	11.00	-9.81

10.4.11. 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	40.6	36.200	3.46
Mid	5550	40.5	36.200	3.46
High	5670	40.4	36.200	3.46

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)	0.69	Included in Calculations of Corr'd Power & PSD
--------------------	------	--

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	12.669	13.36	24.00	-10.64
Mid	5550	12.416	13.11	24.00	-10.89
High	5670	12.273	12.96	24.00	-11.04

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5510	-2.070	-1.38	11.00	-12.38
Mid	5550	-2.330	-1.64	11.00	-12.64
High	5670	-2.510	-1.82	11.00	-12.82

10.4.12. 802.11ac HT80 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	5530	83.420	75.655	3.46

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	5530	24.00	24.00	30.00	24.00	11.00	11.00	11.00

Duty Cycle CF (dB)	1.19	Included in Calculations of Corr'd Power & PSD
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Output Power Results

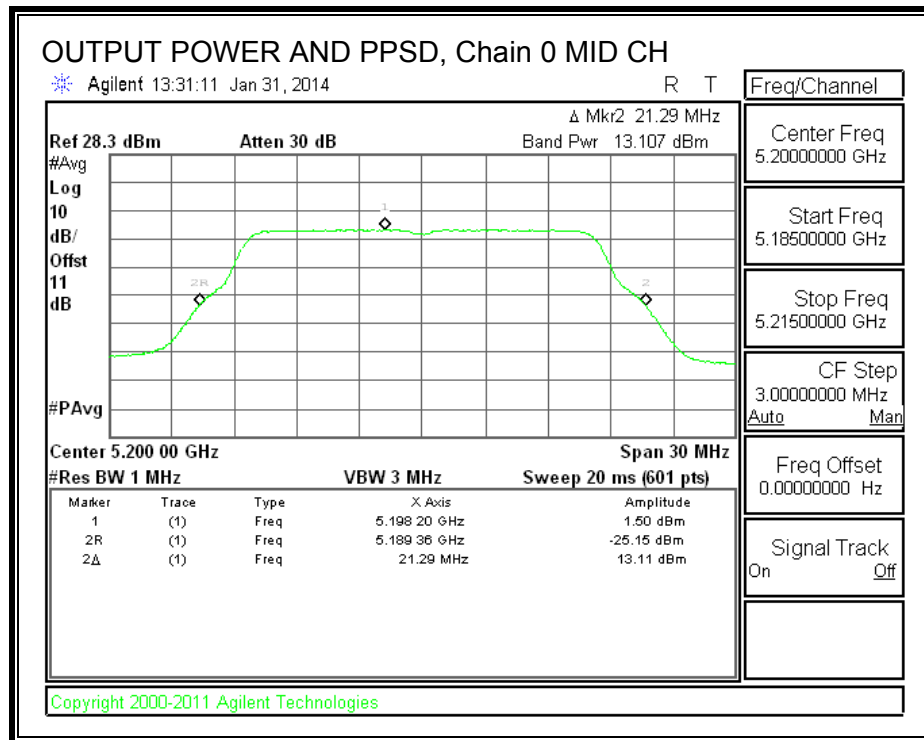
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5530	9.386	10.58	24.00	-13.42

PPSD Results

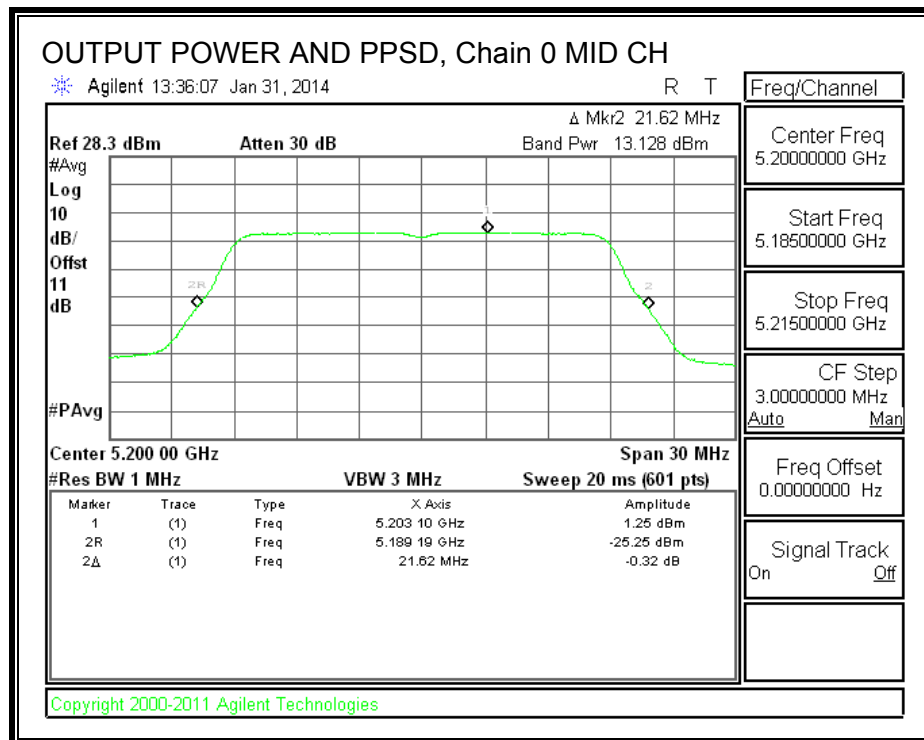
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5530	-8.280	-7.09	11.00	-18.09

10.4.13. PLOTS

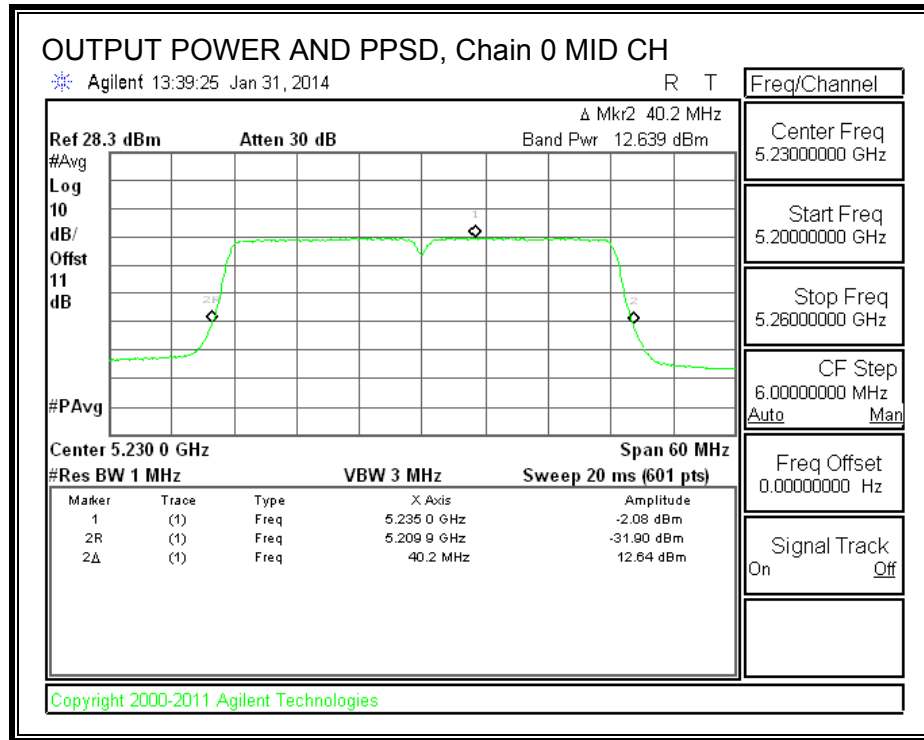
802.11a 5.2G OUTPUT POWER AND PPSD, Chain 0



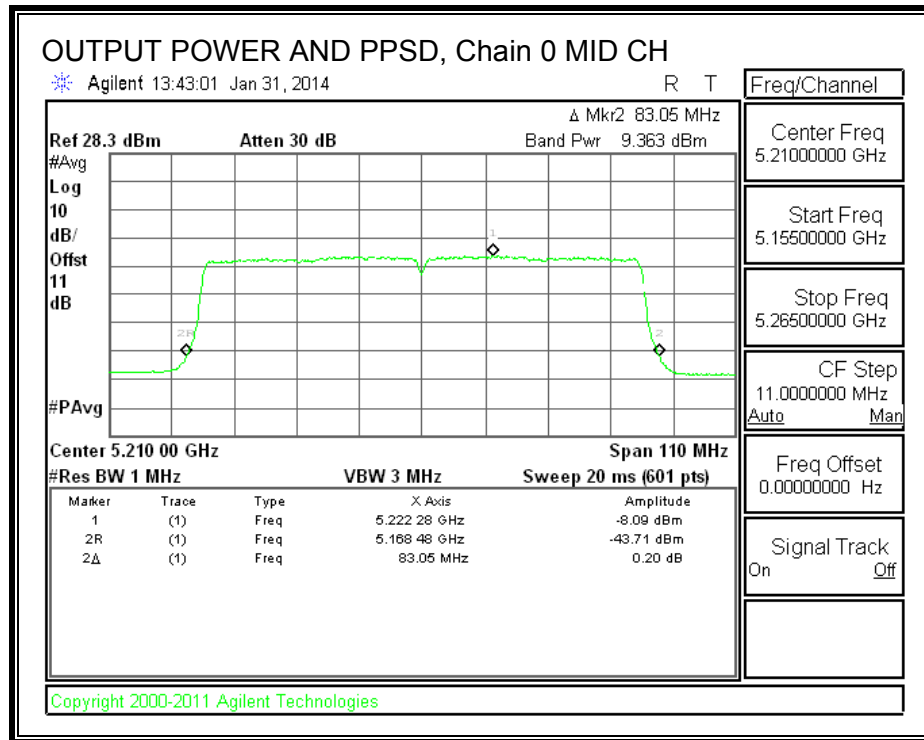
802.11n HT20 5.2G OUTPUT POWER AND PPSD, Chain 0



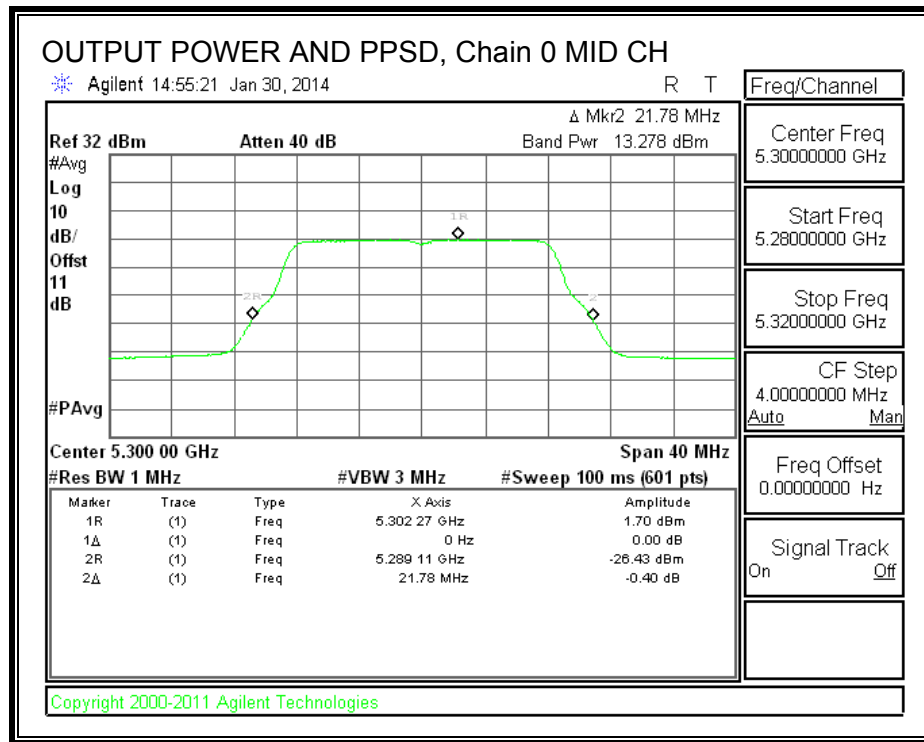
802.11n HT40 5.2G OUTPUT POWER AND PPSD, Chain 0



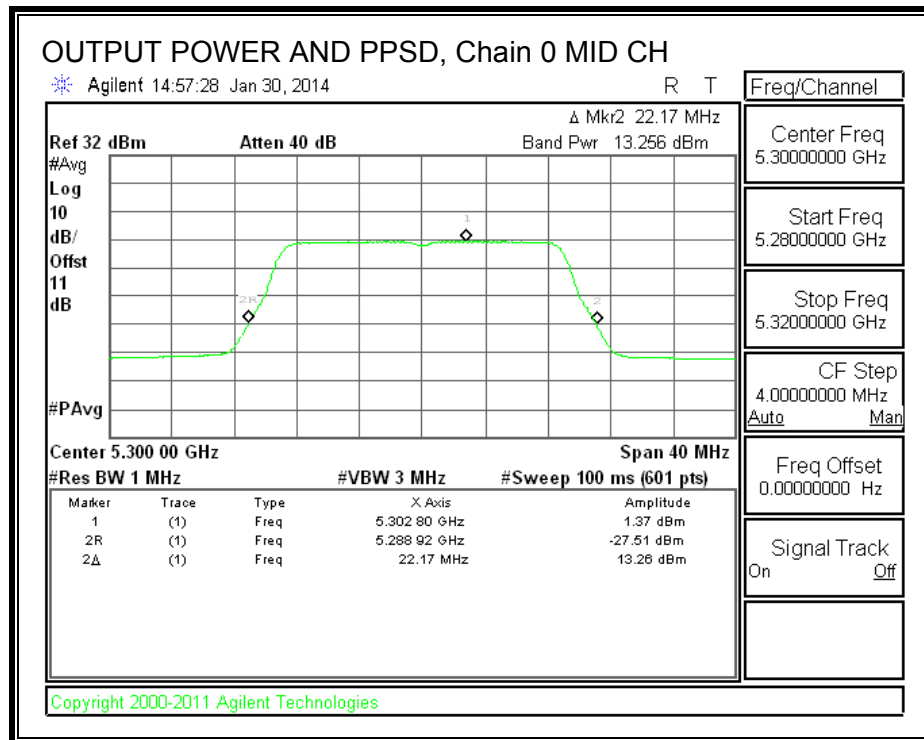
802.11ac HT80 5.2G OUTPUT POWER AND PPSD, Chain 0



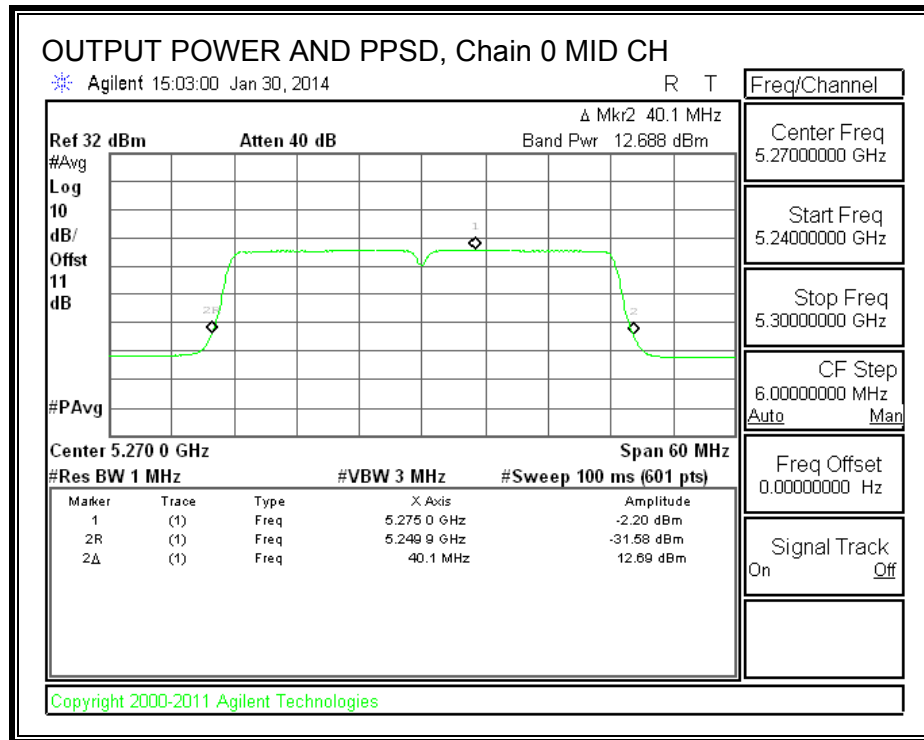
802.11a 5.3G OUTPUT POWER AND PPSD, Chain 0



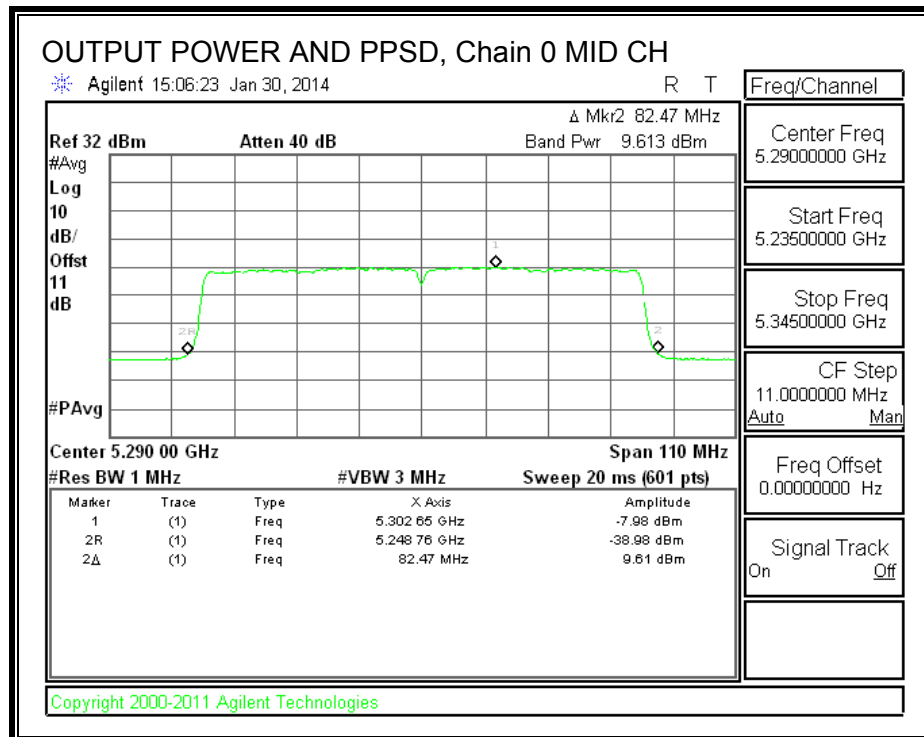
802.11n HT20 5.3G OUTPUT POWER AND PPSD, Chain 0



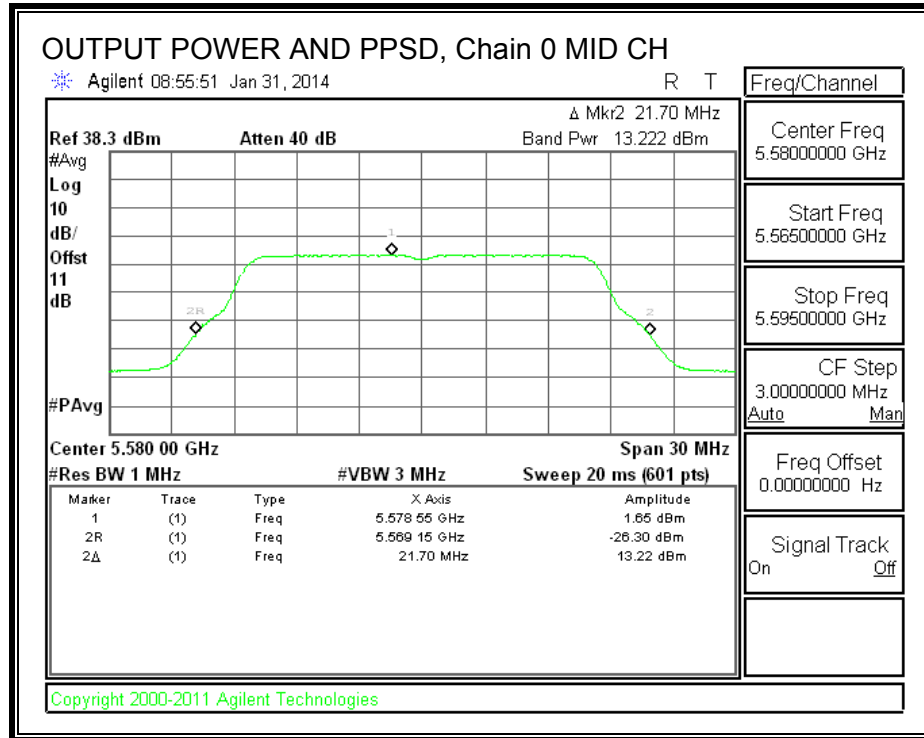
802.11n HT40 5.3G OUTPUT POWER AND PPSD, Chain 0



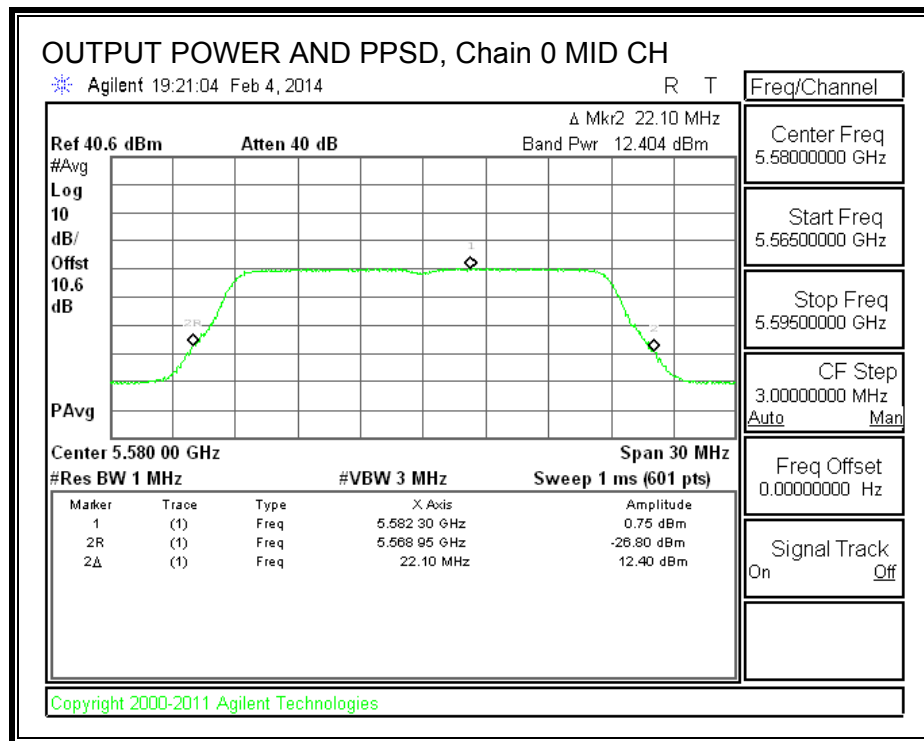
802.11ac HT80 5.3G OUTPUT POWER AND PPSD, Chain 0



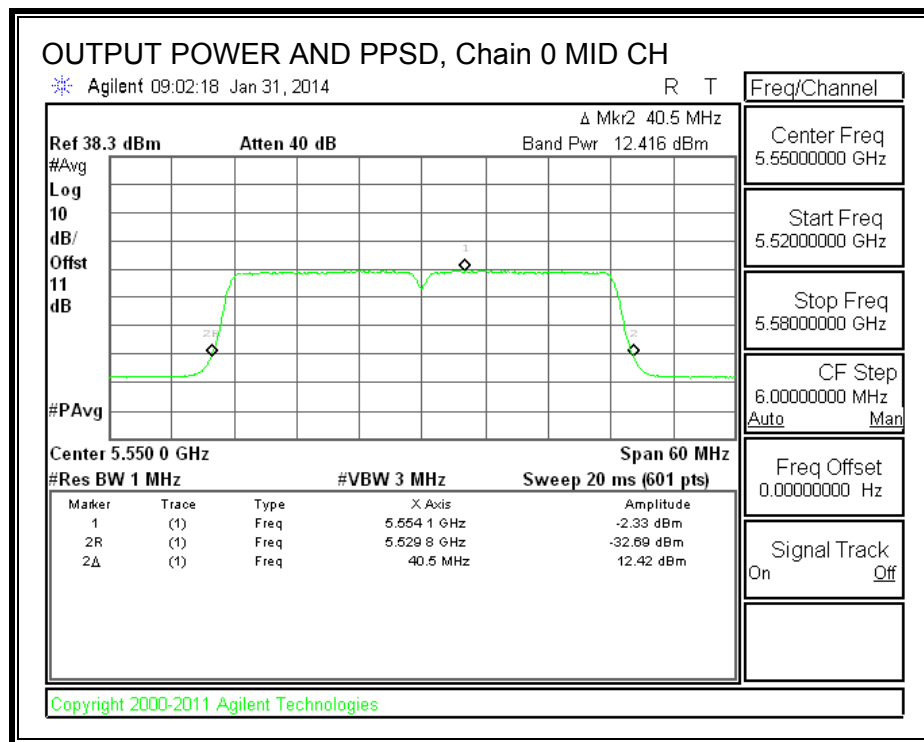
802.11a 5.5G OUTPUT POWER AND PPSD, Chain 0



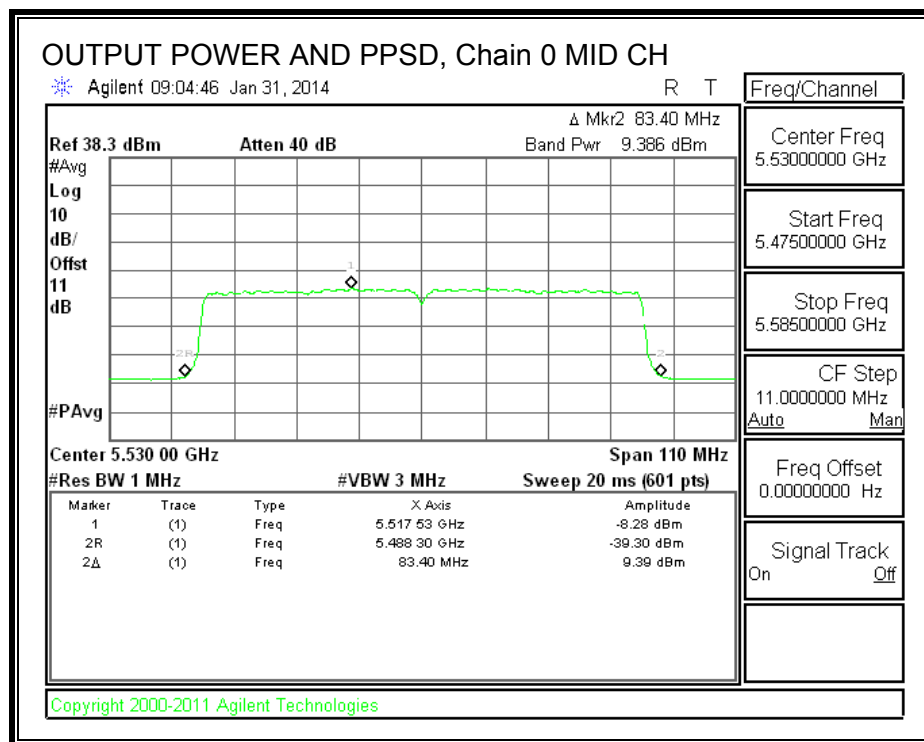
802.11n HT20 5.5G OUTPUT POWER AND PPSD, Chain 0



802.11n HT40 5.5G OUTPUT POWER AND PPSD, Chain 0



802.11ac HT80 5.5G OUTPUT POWER AND PPSD, Chain 0



11. PEAK EXCURSION

LIMITS

FCC §15.407 (a) (6)

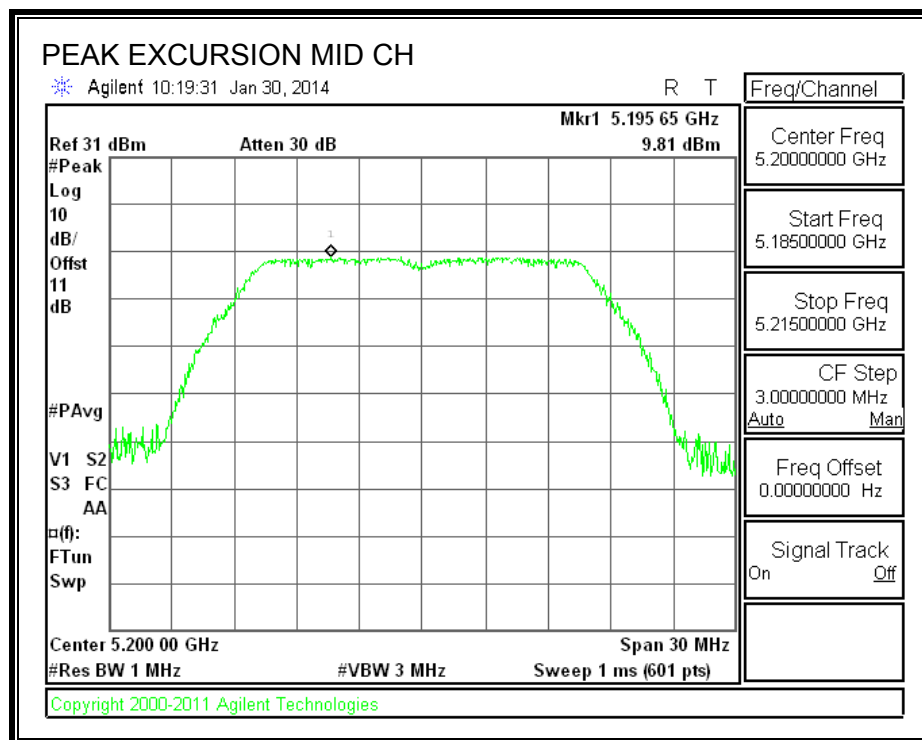
The ratio of the peak excursion of the modulation envelope (measured using a peak hold function) to the peak transmit power (measured as specified above) shall not exceed 13 dB across any 1 MHz bandwidth or the emission bandwidth whichever is less.

RESULTS

11.1.1. 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	9.810	1.50	0.29	8.02	13	-4.98

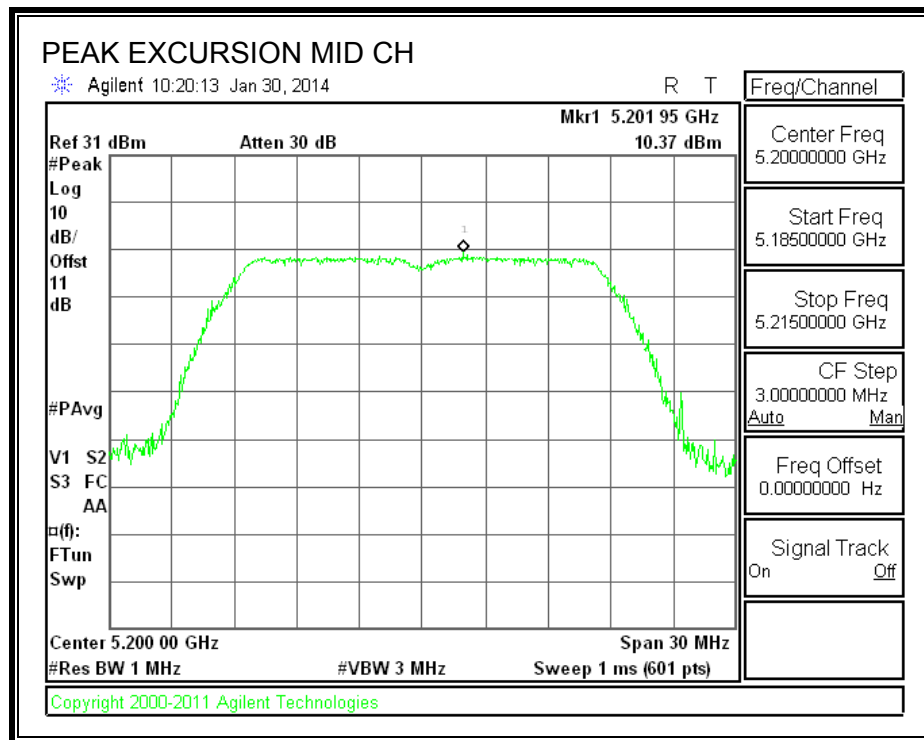
PEAK EXCURSION



11.1.1. 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	10.370	1.25	0.31	8.81	13	-4.19

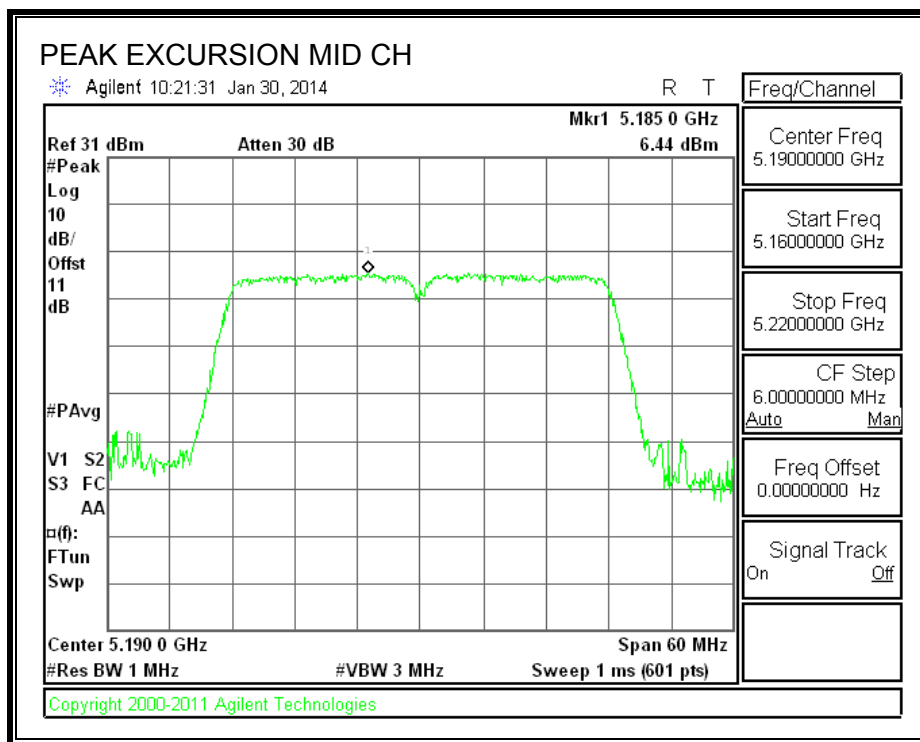
PEAK EXCURSION



11.1.1. 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)
Low	5190	6.440	-2.010	0.69	7.76	13	-5.24

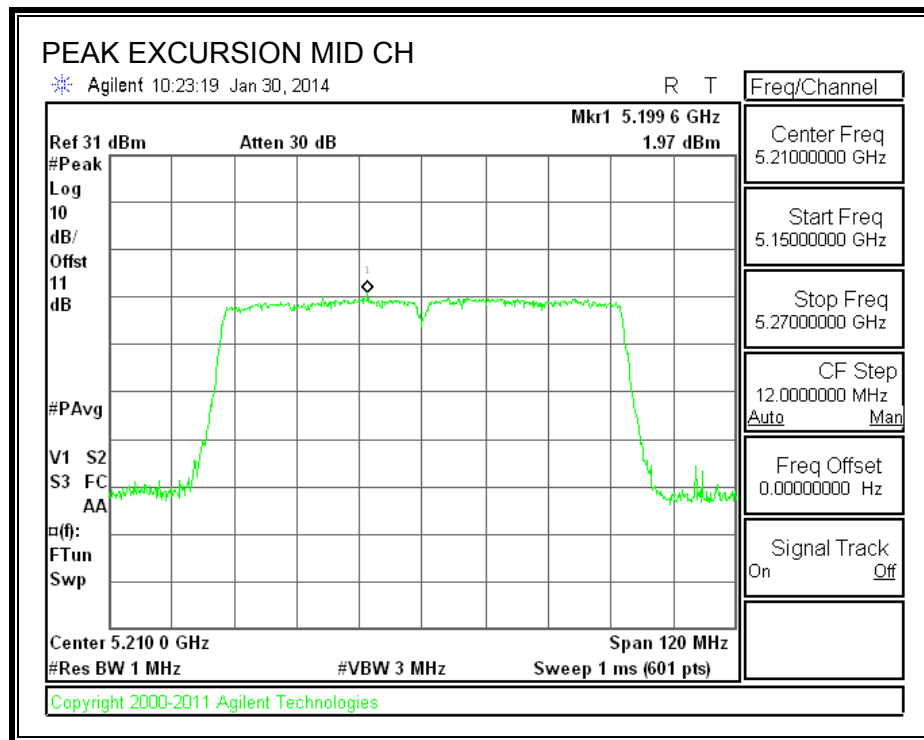
PEAK EXCURSION



11.1.1. 802.11ac HT80 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	5210	1.970	-8.09	1.19	8.87	13	-4.13

PEAK EXCURSION



12. 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.

Reference to KDB 789033 UNII part H) 6) d) Method VB:

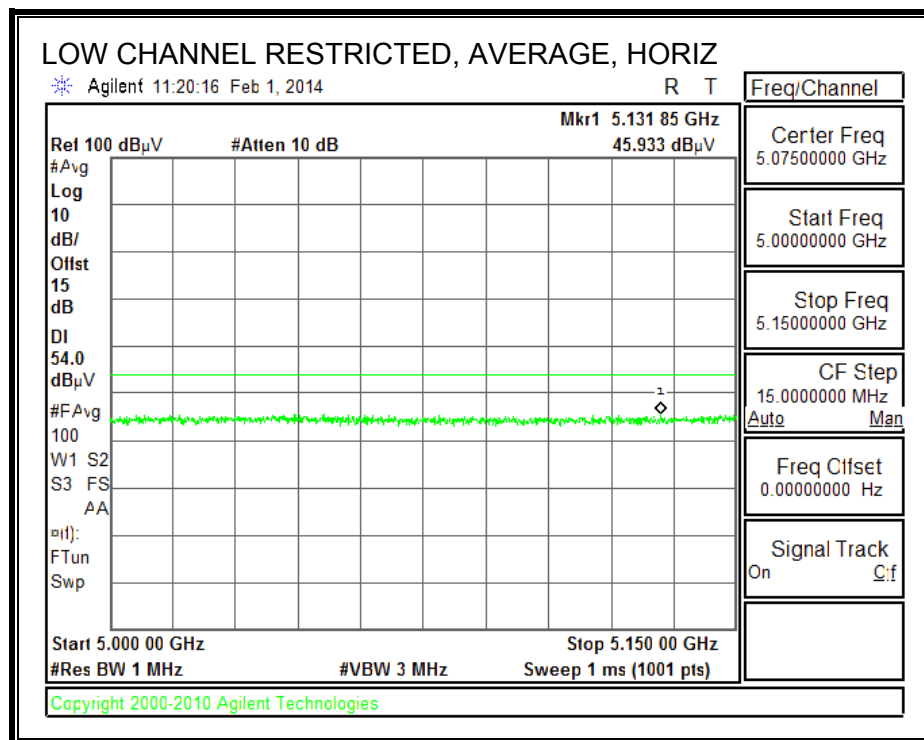
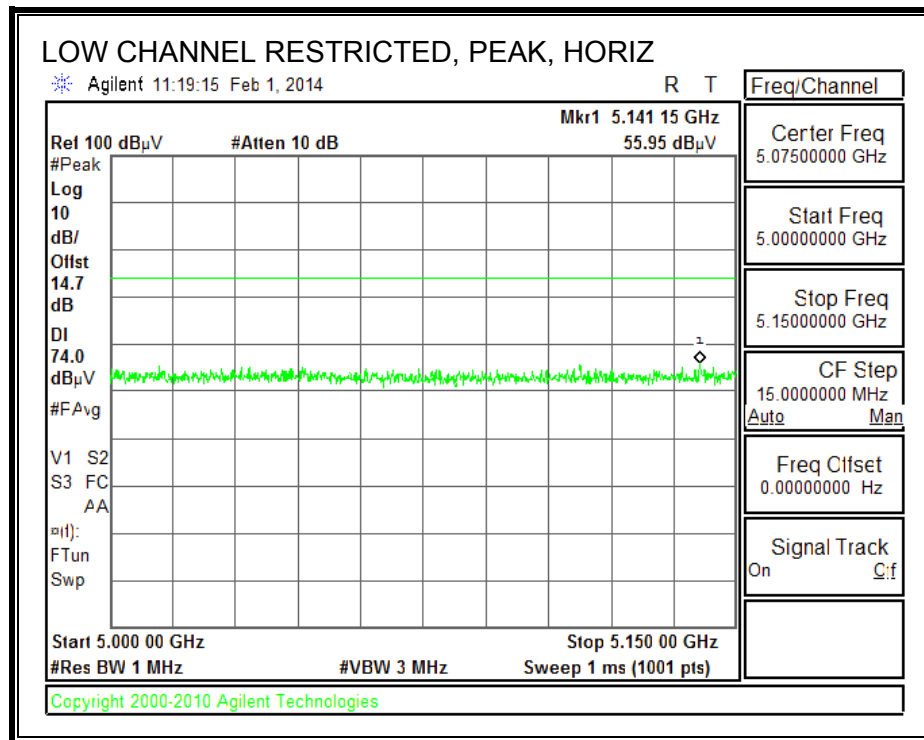
For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and add duty cycle factor to the reading offset for average measurements.

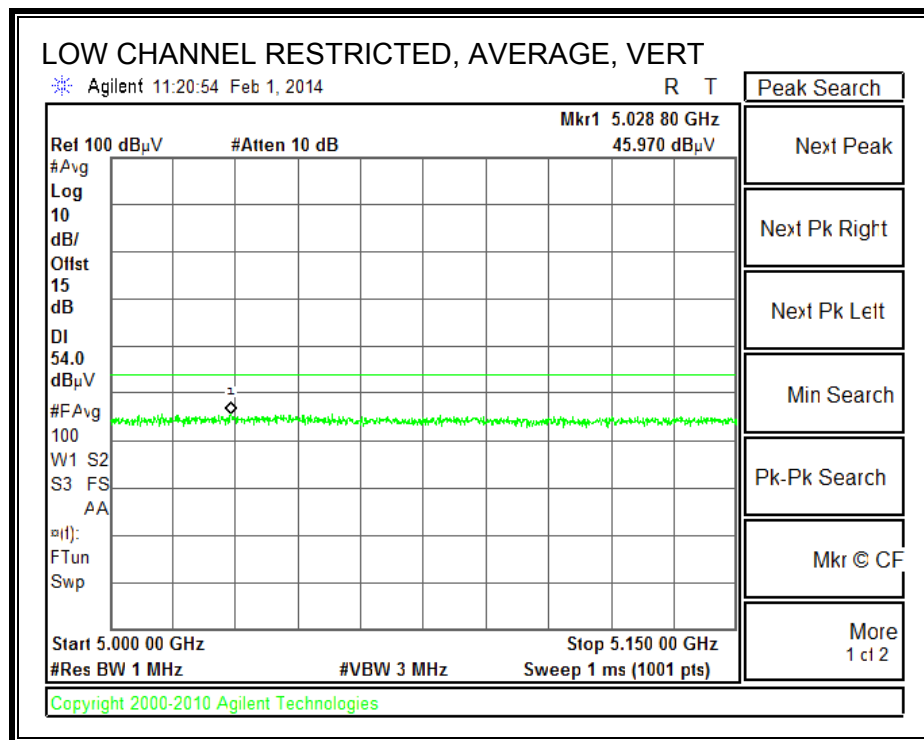
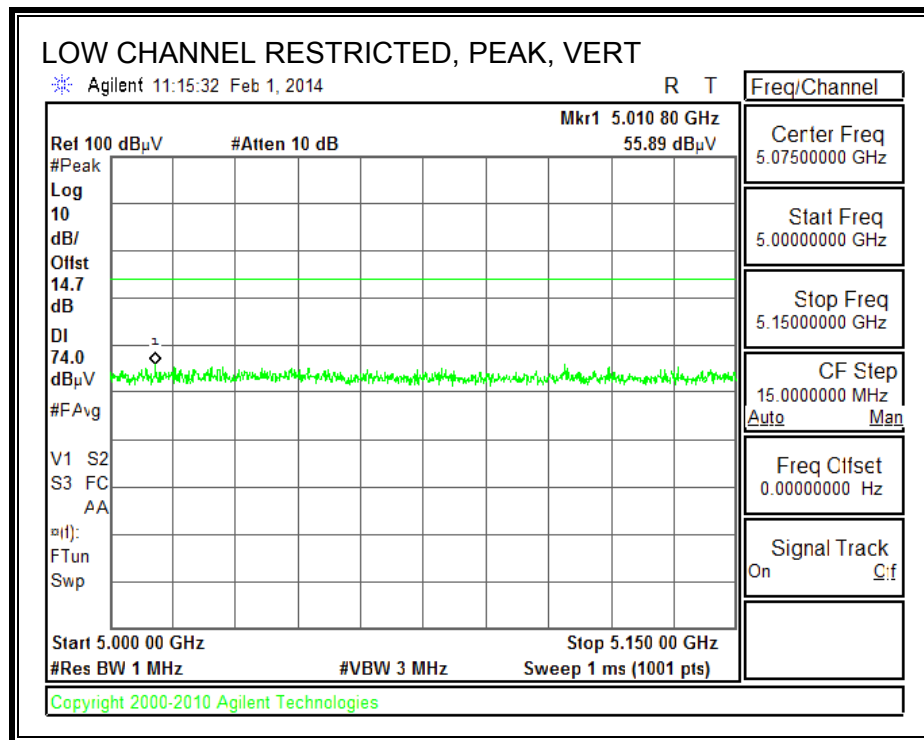
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

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.

12.1. 5.2 GHz

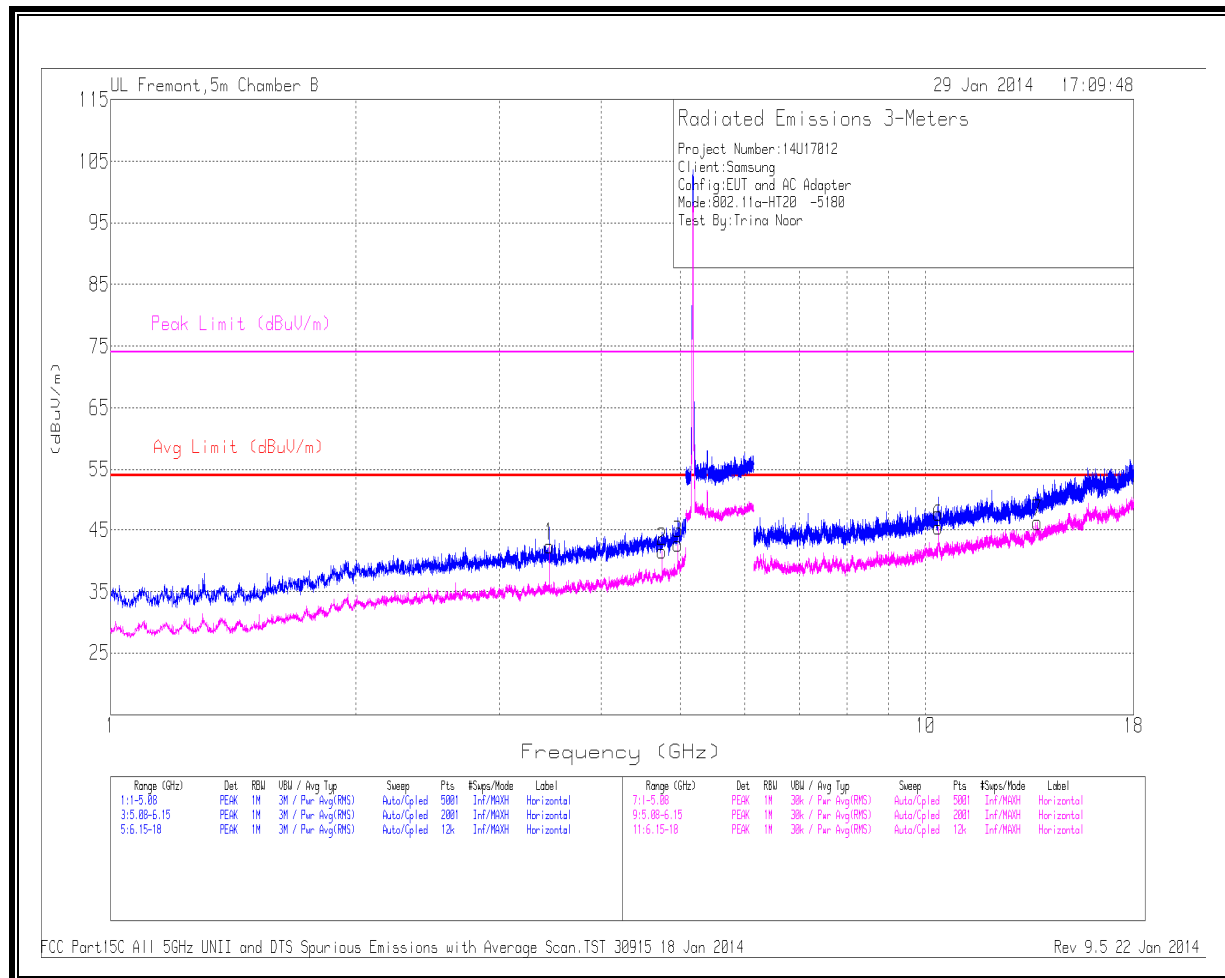
12.1.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)



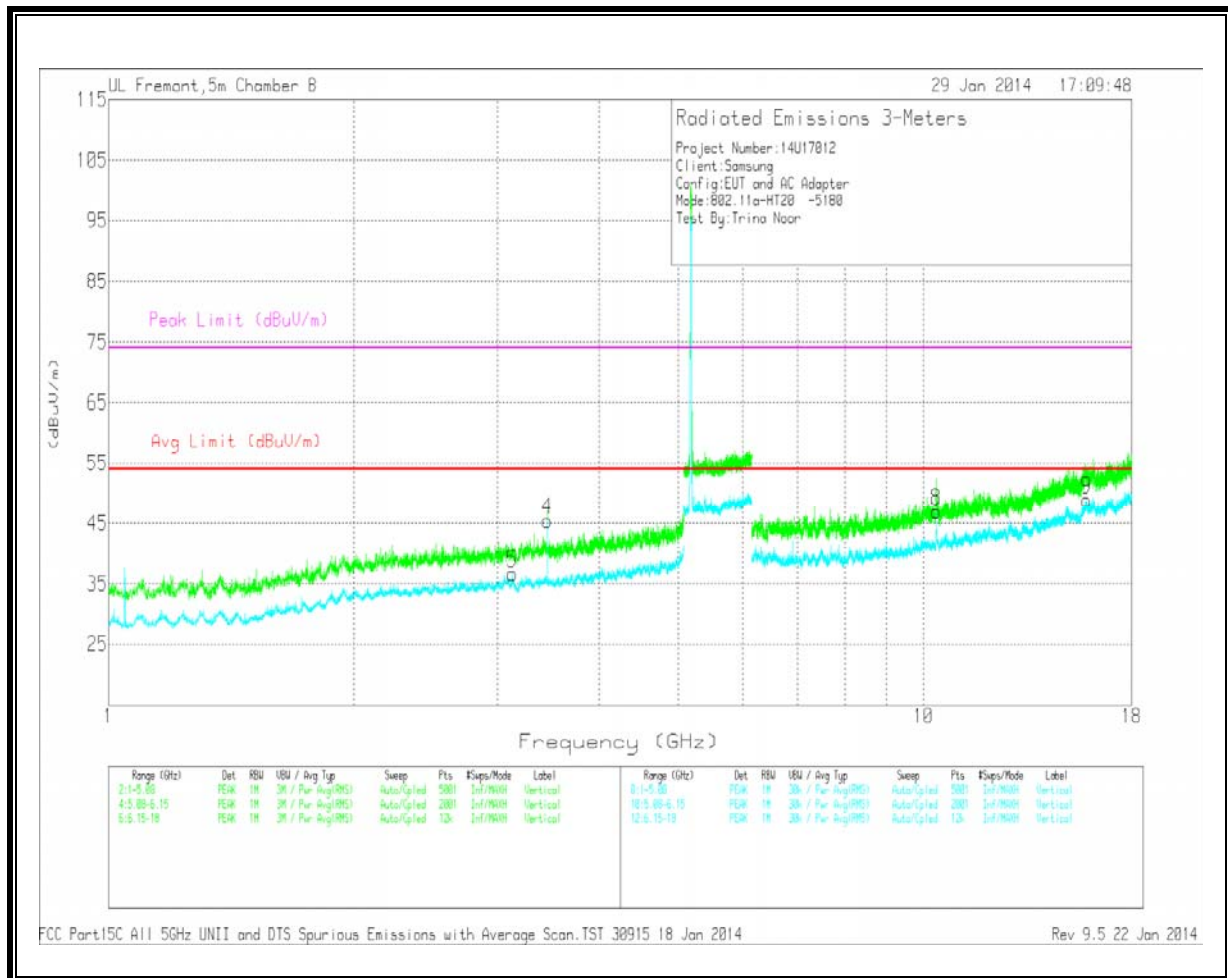


HARMONICS AND SPURIOUS EMISSIONS

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.



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

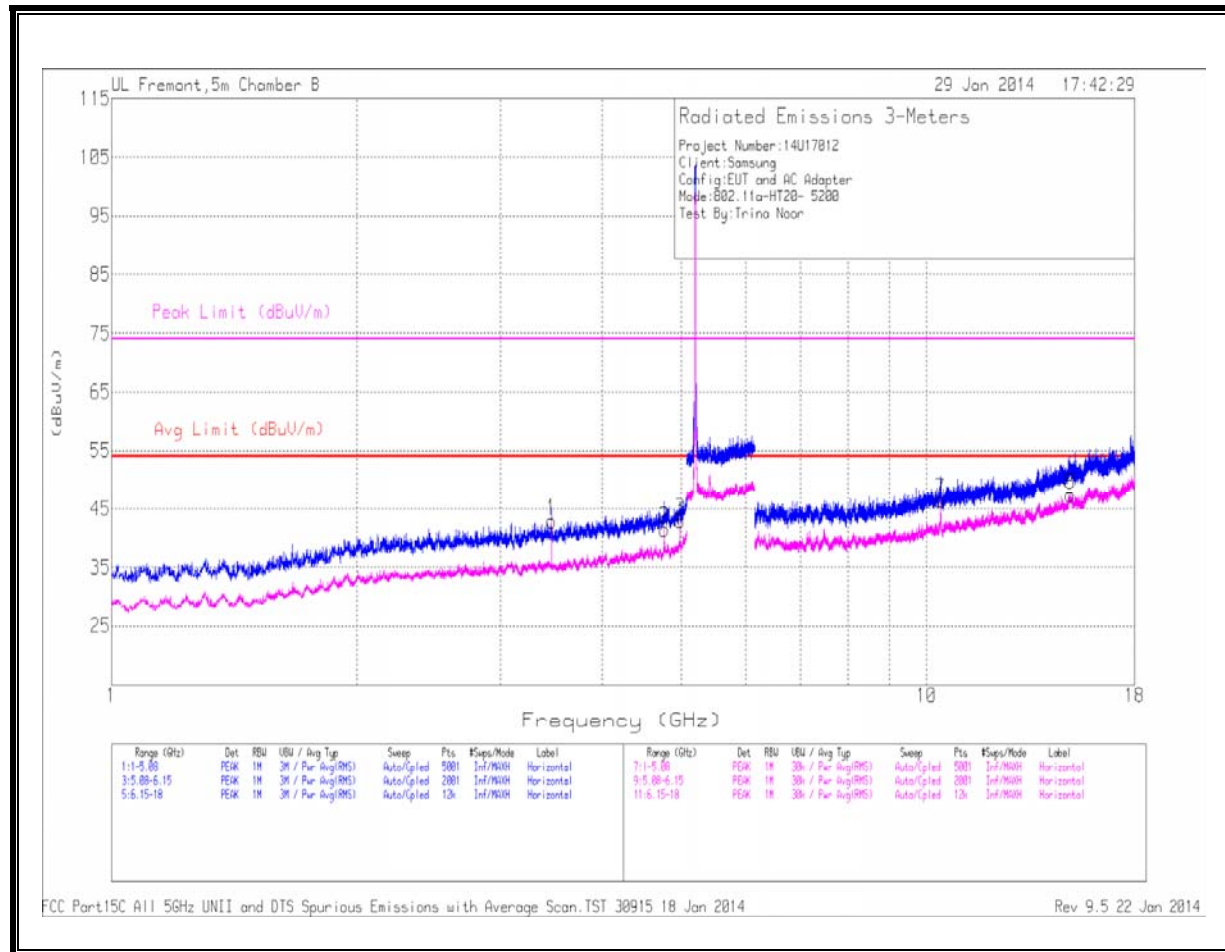
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5	3.129	35.38	Avg	33.2	-31.9	36.68	54	-17.32	-	-	0-360	202	V
4	3.453	43.62	Avg	33.2	-31.3	45.52	54	-8.48	-	-	0-360	202	V
1	3.454	40.52	Avg	33.2	-31.3	42.42	54	-11.58	-	-	0-360	99	H
2	4.749	36.68	Avg	34.7	-29.8	41.58	54	-12.42	-	-	0-360	99	H
3	4.964	36.85	Avg	34.6	-28.7	42.75	54	-11.25	-	-	0-360	201	H
6	10.362	30.46	Avg	38.1	-23.1	45.46	54	-8.54	-	-	0-360	202	H
8	10.362	32.01	Avg	38.1	-23.1	47.01	54	-6.99	-	-	0-360	99	V
7	13.711	28.87	Avg	39.1	-21.7	46.27	54	-7.73	-	-	0-360	202	H
9	15.849	27.57	Avg	41.4	-20	48.97	54	-5.03	-	-	0-360	99	V

Avg - Video bandwidth < Resolution bandwidth

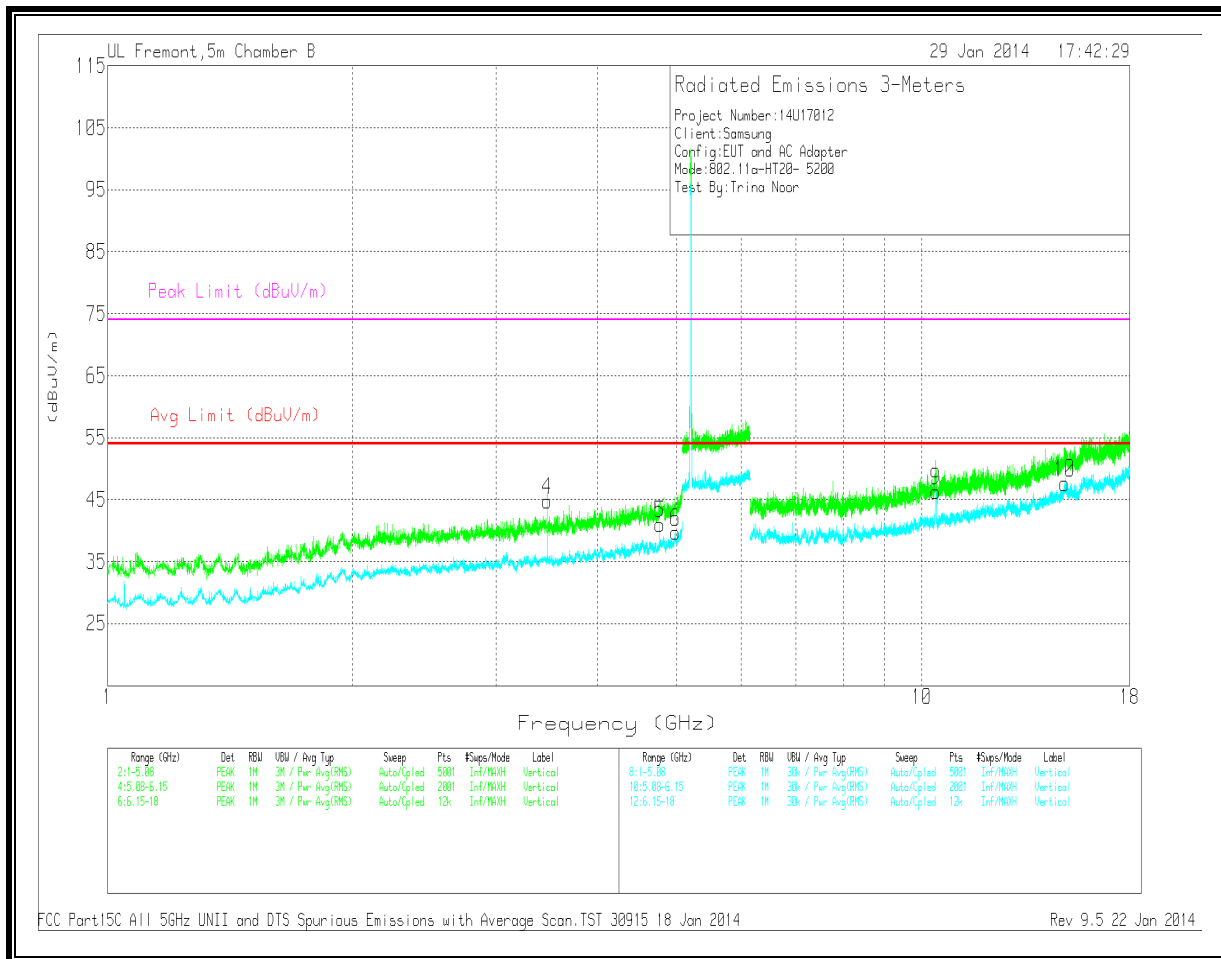
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18 Jan 2014 Rev 9.5
22 Jan 2014

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.



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

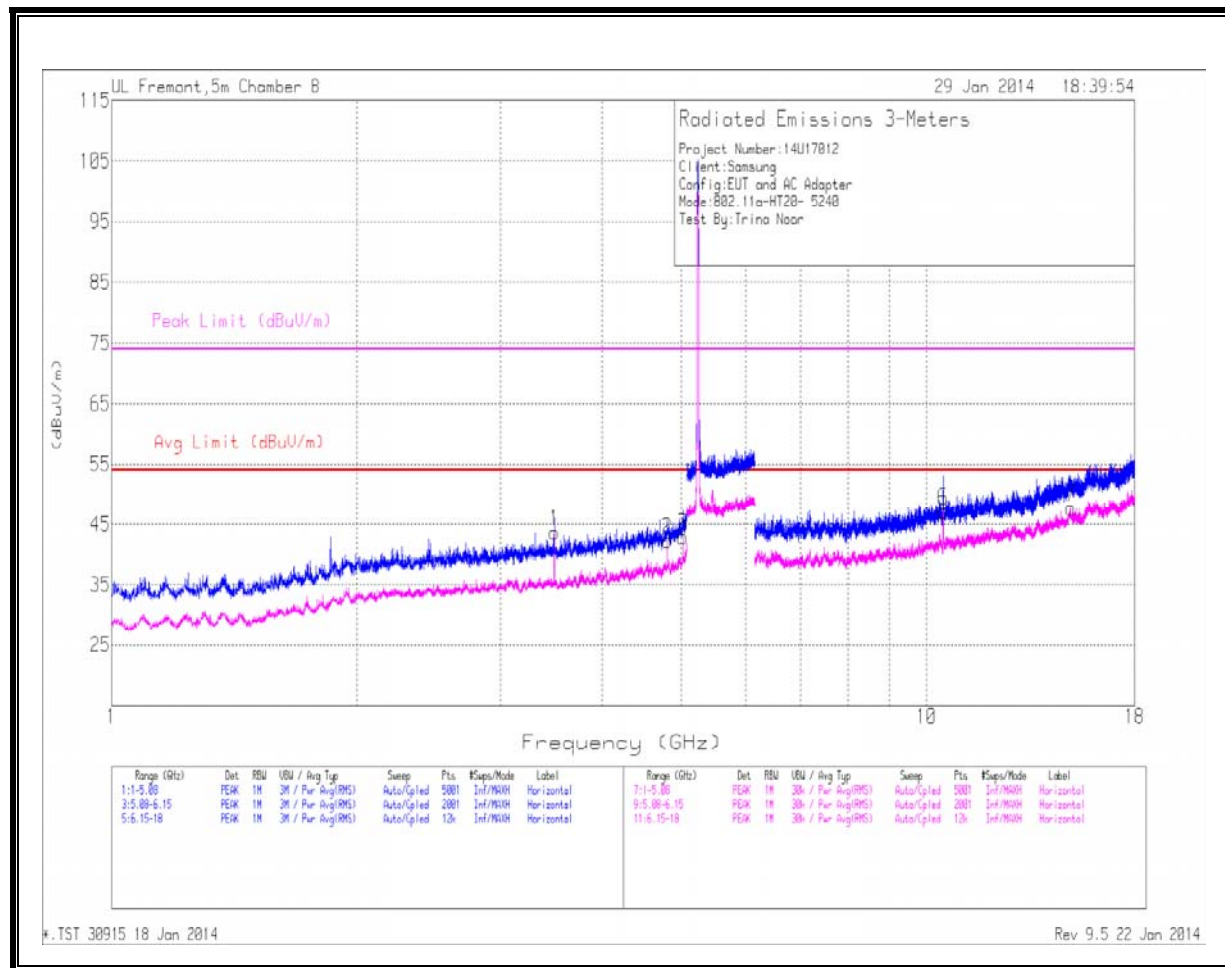
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.467	41.21	Avg	33.2	-31.5	42.91	54	-11.09	-	-	0-360	99	H
4	3.467	43.13	Avg	33.2	-31.5	44.83	54	-9.17	-	-	0-360	202	V
2	4.767	36.24	Avg	34.7	-29.4	41.54	54	-12.46	-	-	0-360	99	H
5	4.767	35.77	Avg	34.7	-29.4	41.07	54	-12.93	-	-	0-360	202	V
3	4.983	36.65	Avg	34.6	-28.3	42.95	54	-11.05	-	-	0-360	201	H
6	4.984	33.46	Avg	34.6	-28.3	39.76	54	-14.24	-	-	0-360	202	V
7	10.397	31.48	Avg	38.1	-23.1	46.48	54	-7.52	-	-	0-360	99	H
9	10.403	31.44	Avg	38.1	-23.2	46.34	54	-7.66	-	-	0-360	202	V
10	14.971	28.06	Avg	40	-20.4	47.66	54	-6.34	-	-	0-360	99	V
8	15.012	27.5	Avg	40	-20.1	47.4	54	-6.6	-	-	0-360	99	H

Avg - Video bandwidth < Resolution bandwidth

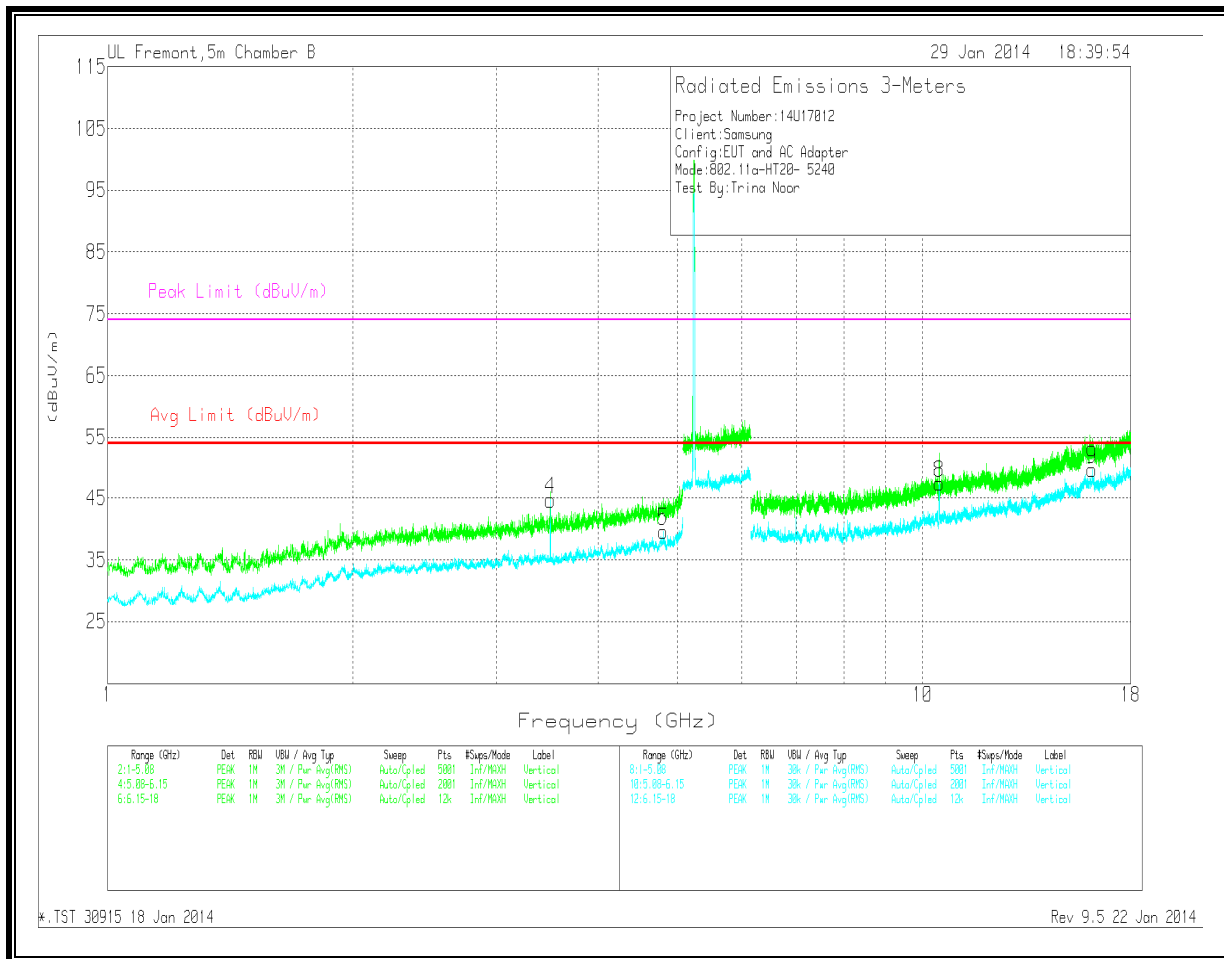
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18 Jan 2014 Rev 9.5
22 Jan 2014

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.



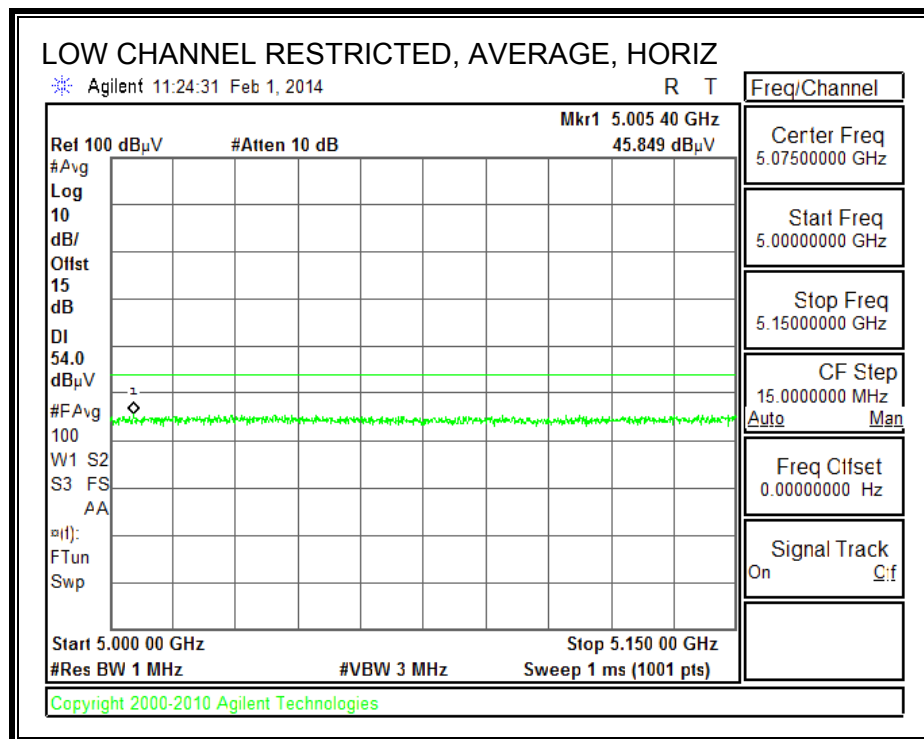
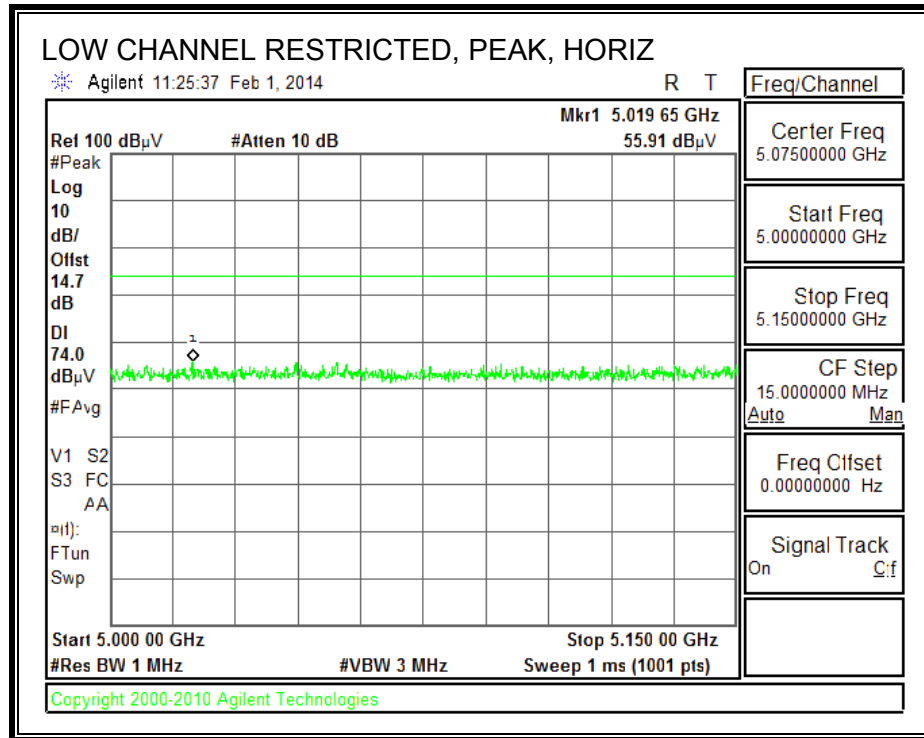
Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

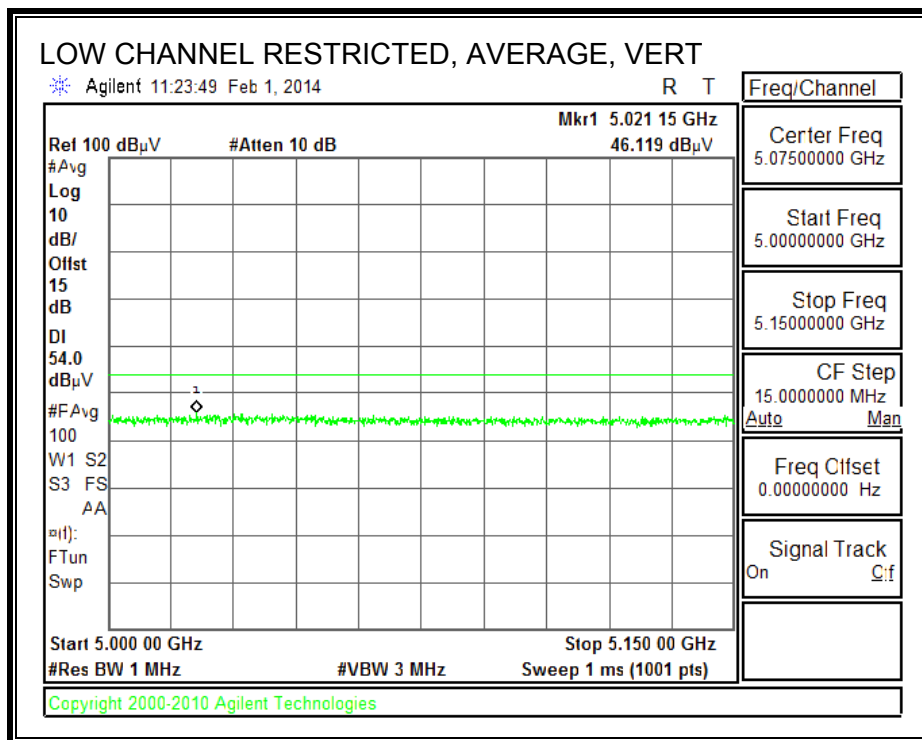
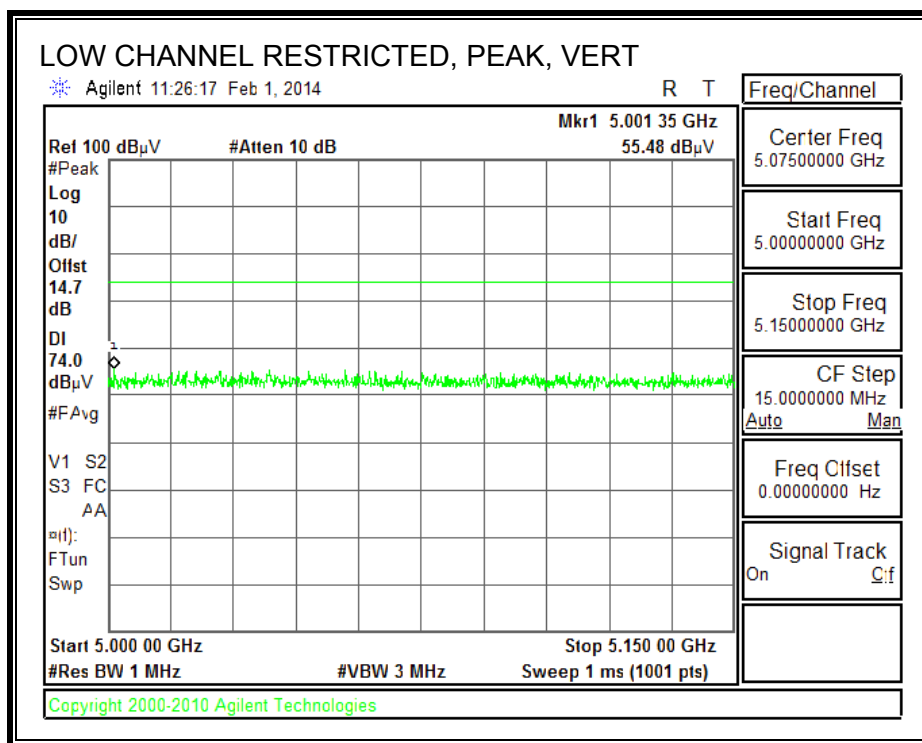
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.494	42.39	Avg	33.2	-31.9	43.69	54	-10.31	-	-	0-360	99	H
4	3.494	43.43	Avg	33.2	-31.9	44.73	54	-9.27	-	-	0-360	202	V
2	4.803	36.79	Avg	34.7	-29.2	42.29	54	-11.71	-	-	0-360	99	H
5	4.803	34.09	Avg	34.7	-29.2	39.59	54	-14.41	-	-	0-360	202	V
3	5.021	37.1	Avg	34.6	-28.8	42.9	54	-11.1	-	-	0-360	202	H
6	10.479	32.85	Avg	38.2	-23.8	47.25	54	-6.75	-	-	0-360	99	H
8	10.482	33.08	Avg	38.2	-23.8	47.48	54	-6.52	-	-	0-360	99	V
7	15.022	27.9	Avg	40	-20.1	47.8	54	-6.2	-	-	0-360	99	H
9	16.138	28.08	Avg	41.5	-19.8	49.78	54	-4.22	-	-	0-360	99	V

Avg - Video bandwidth < Resolution bandwidth

*.TST 30915 18 Jan 2014 Rev 9.5 22 Jan 2014

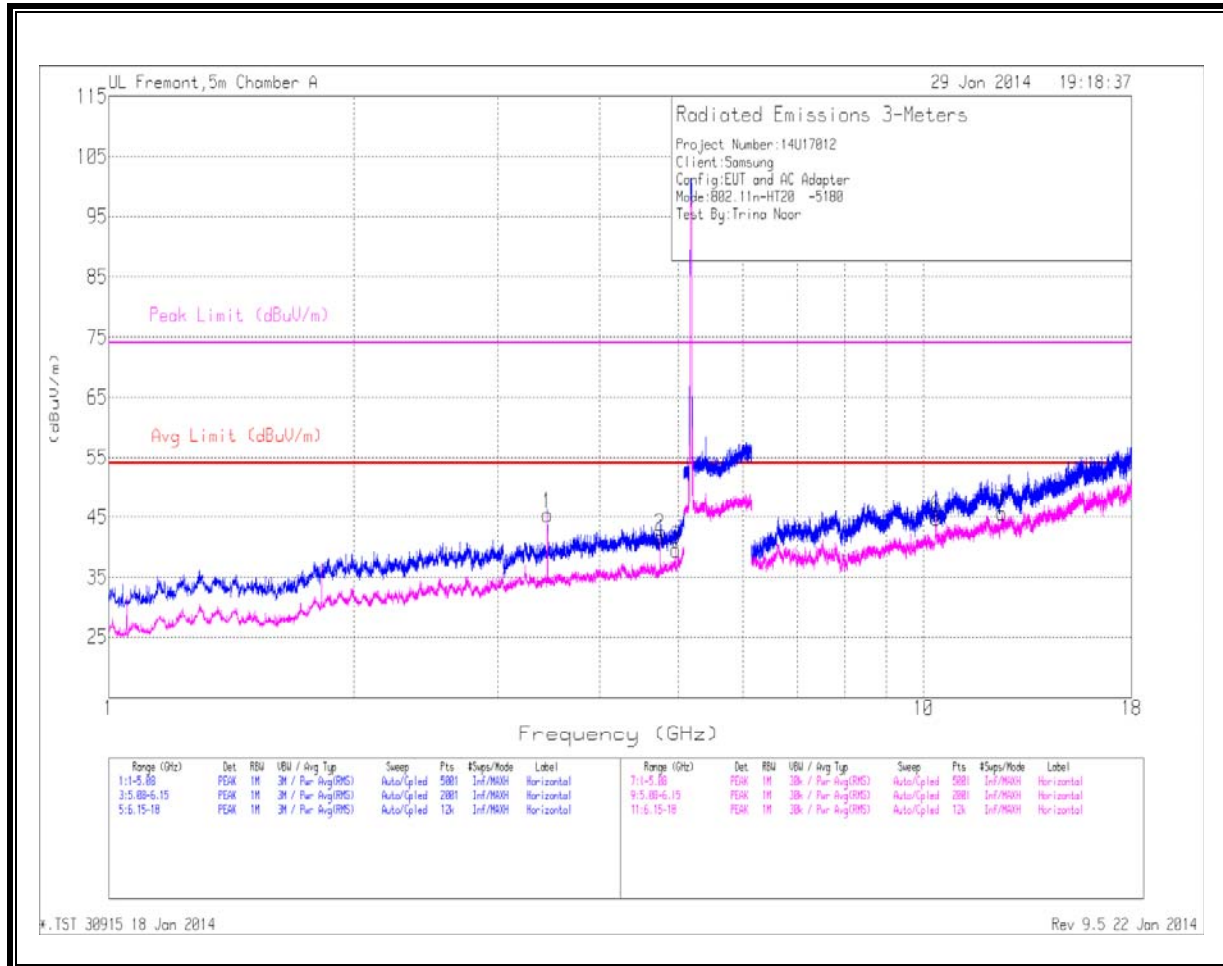
**12.1.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND
RESTRICTED BANDEDGE (LOW CHANNEL)**



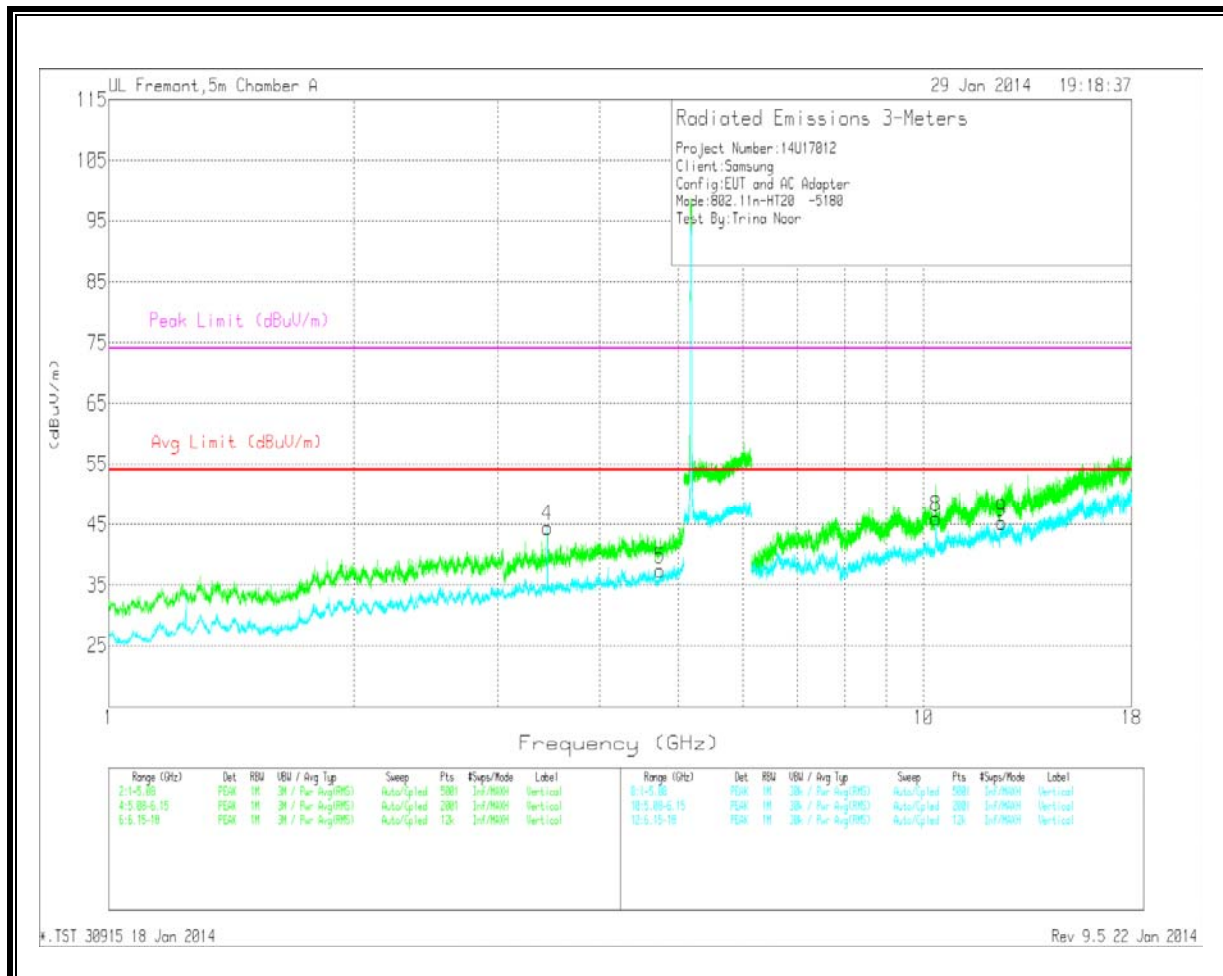


HARMONICS AND SPURIOUS EMISSIONS

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.



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

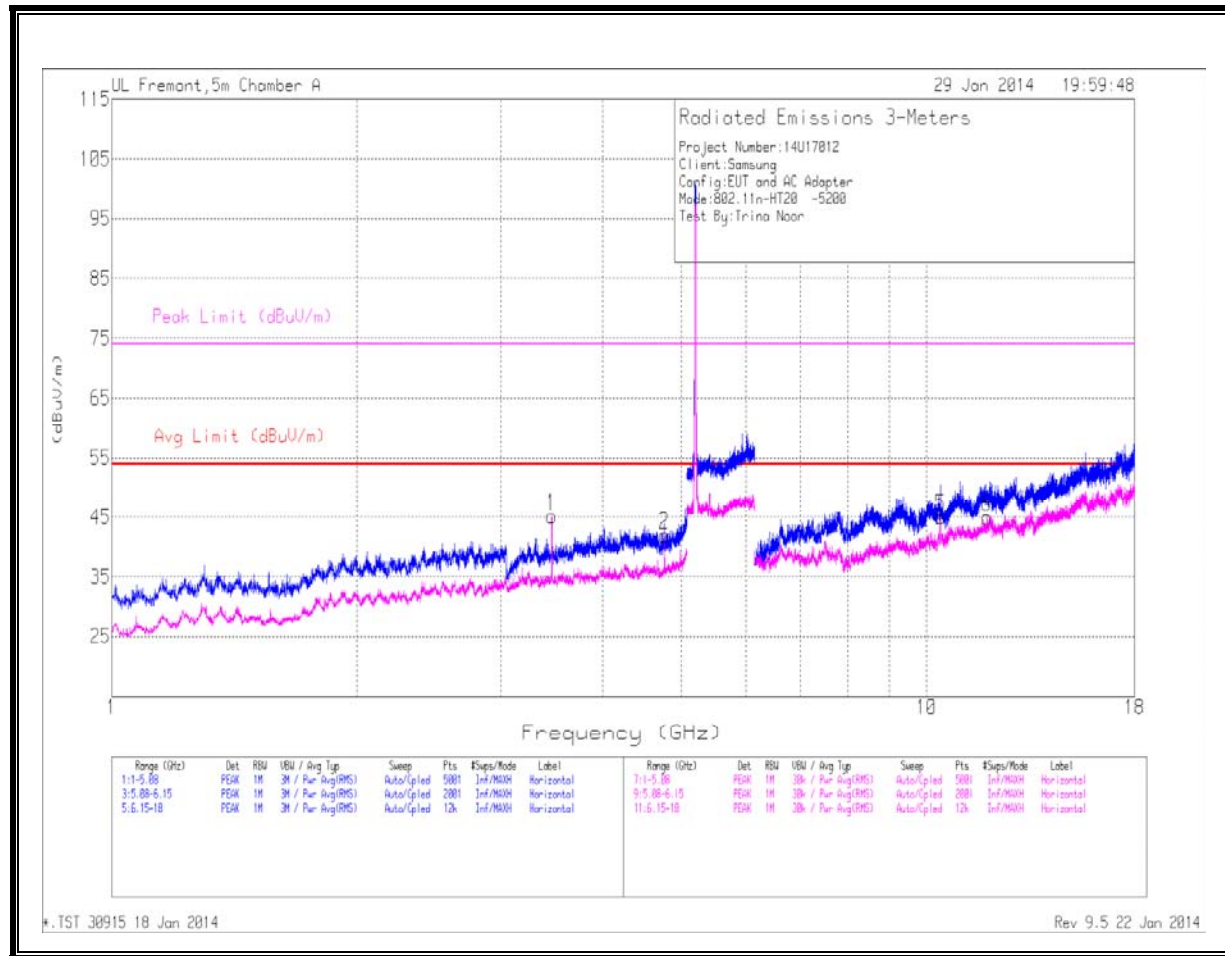
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.454	43.92	Avg	33.1	-31.6	45.42	54	-8.58	-	-	0-360	200	H
4	3.454	43.04	Avg	33.1	-31.6	44.54	54	-9.46	-	-	0-360	101	V
2	4.748	37.92	Avg	33.9	-30.1	41.72	54	-12.28	-	-	0-360	200	H
5	4.748	33.62	Avg	33.9	-30.1	37.42	54	-16.58	-	-	0-360	201	V
3	4.964	34.77	Avg	33.9	-29.1	39.57	54	-14.43	-	-	0-360	100	H
8	10.356	31.08	Avg	37.4	-22.4	46.08	54	-7.92	-	-	0-360	101	V
6	10.36	29.97	Avg	37.4	-22.5	44.87	54	-9.13	-	-	0-360	200	H
9	12.467	28.02	Avg	39.1	-21.8	45.32	54	-8.68	-	-	0-360	101	V
7	12.475	28.82	Avg	39.1	-22.2	45.72	54	-8.28	-	-	0-360	200	H

Avg - Video bandwidth < Resolution bandwidth

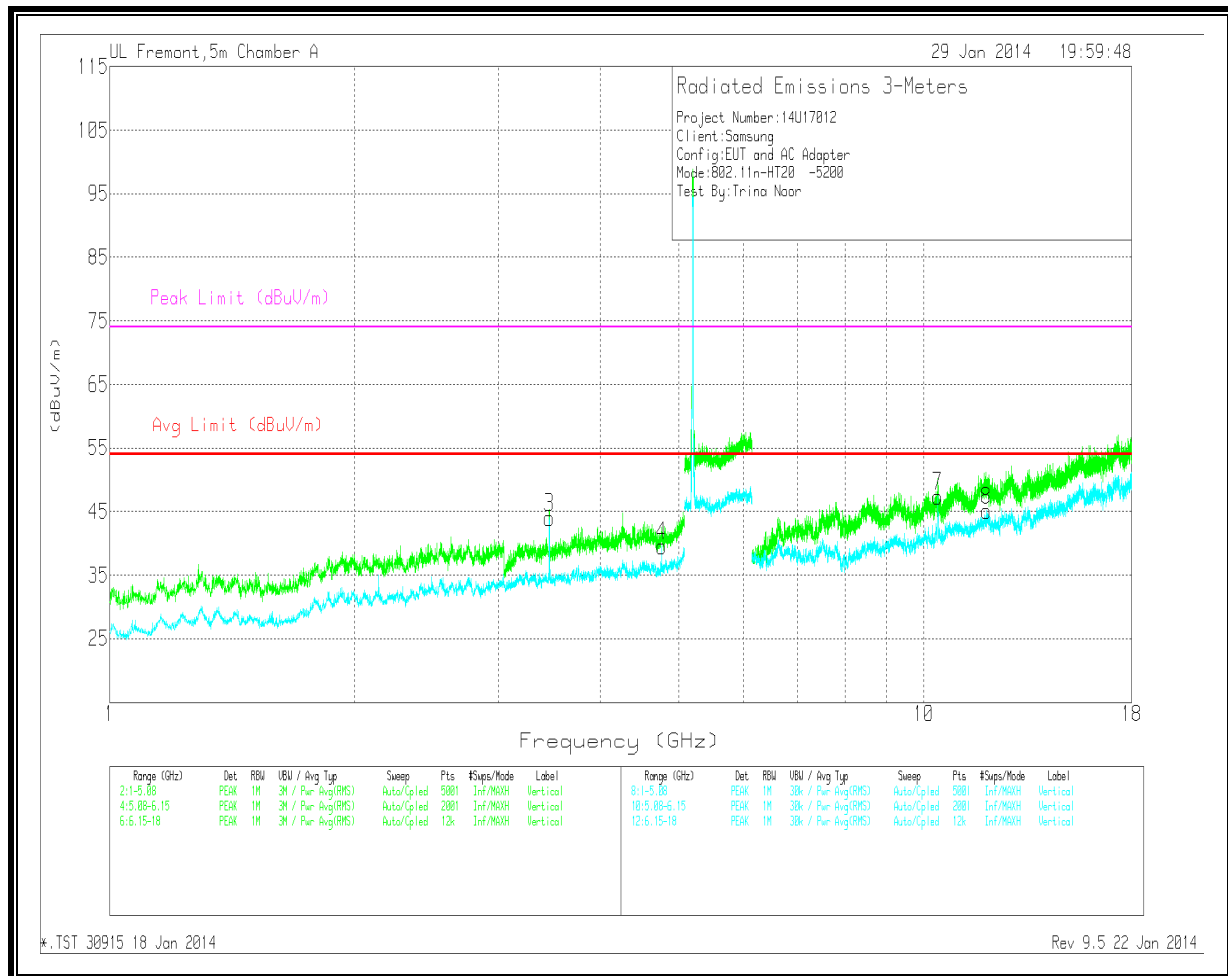
*.TST 30915 18 Jan 2014 Rev 9.5 22 Jan 2014

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.



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

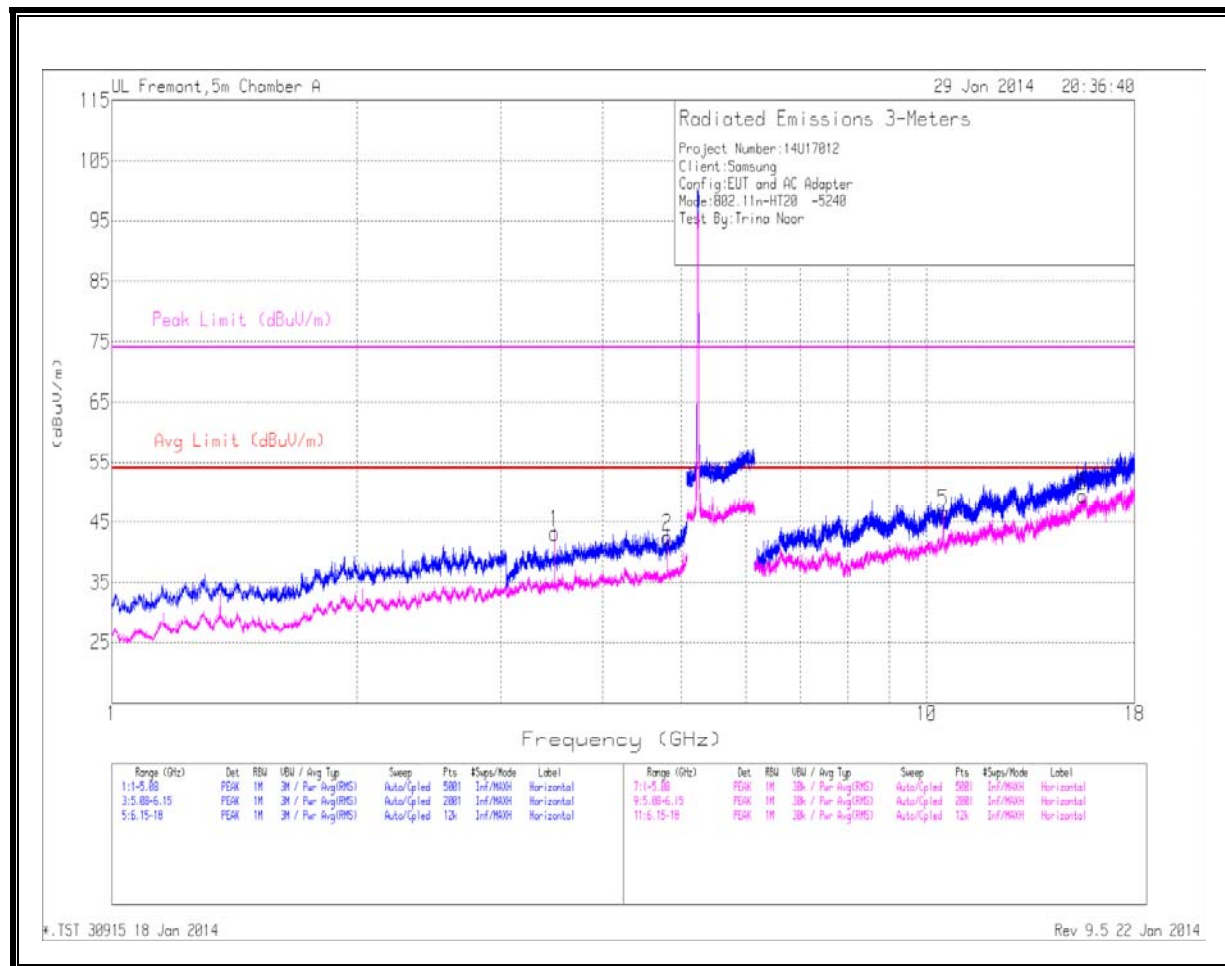
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.467	43.28	Avg	33.1	-31.2	45.18	54	-8.82	-	-	0-360	200	H
3	3.467	42.14	Avg	33.1	-31.2	44.04	54	-9.96	-	-	0-360	200	V
2	4.767	37.96	Avg	33.9	-29.9	41.96	54	-12.04	-	-	0-360	200	H
4	4.767	35.56	Avg	33.9	-29.9	39.56	54	-14.44	-	-	0-360	200	V
5	10.398	30.25	Avg	37.4	-22.6	45.05	54	-8.95	-	-	0-360	200	H
7	10.399	32.59	Avg	37.4	-22.6	47.39	54	-6.61	-	-	0-360	201	V
6	11.86	28.38	Avg	38.7	-22.1	44.98	54	-9.02	-	-	0-360	200	H
8	11.942	28.63	Avg	38.7	-22.2	45.13	54	-8.87	-	-	0-360	201	V

Avg - Video bandwidth < Resolution bandwidth

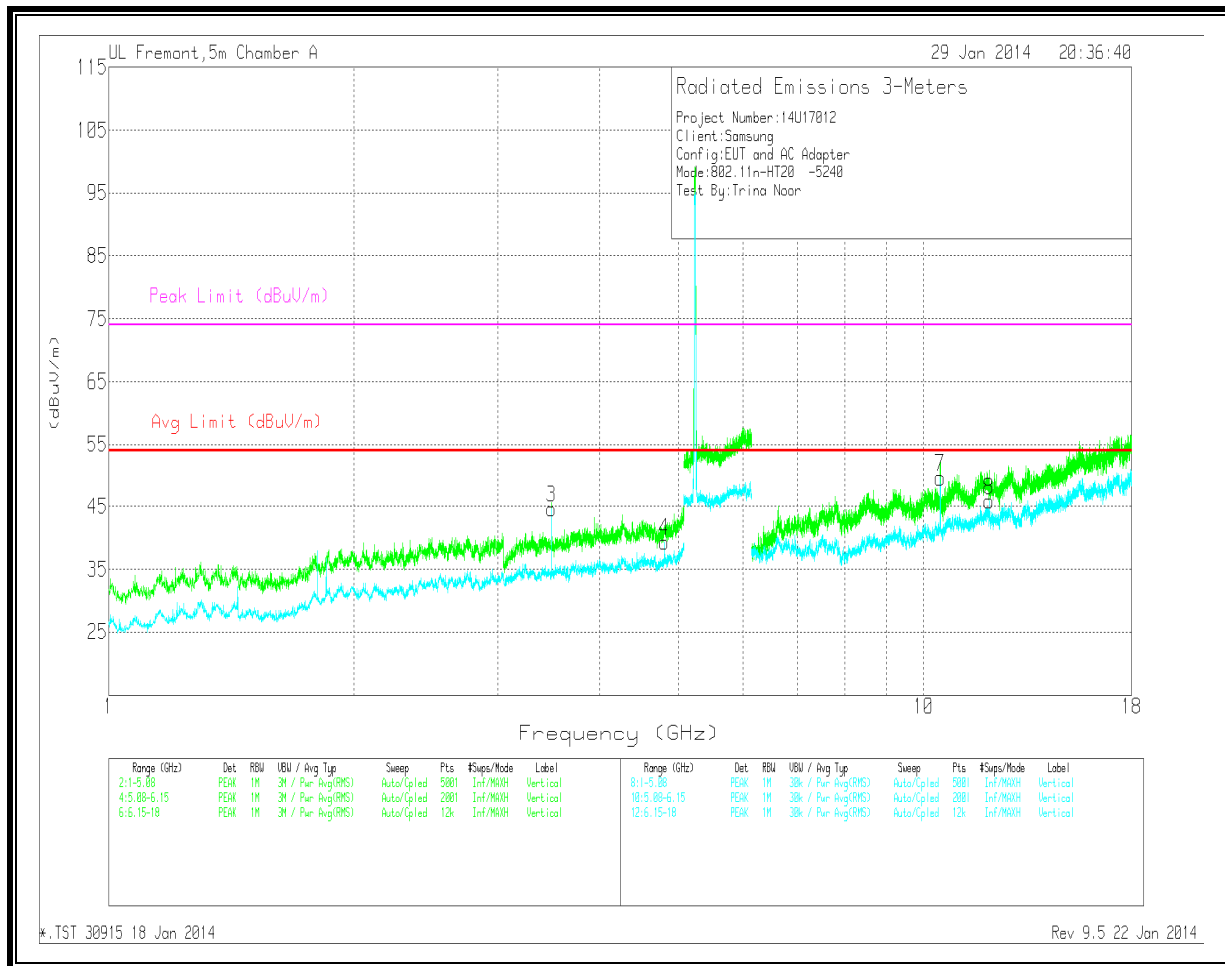
*.TST 30915 18 Jan 2014 Rev 9.5 22 Jan 2014

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.



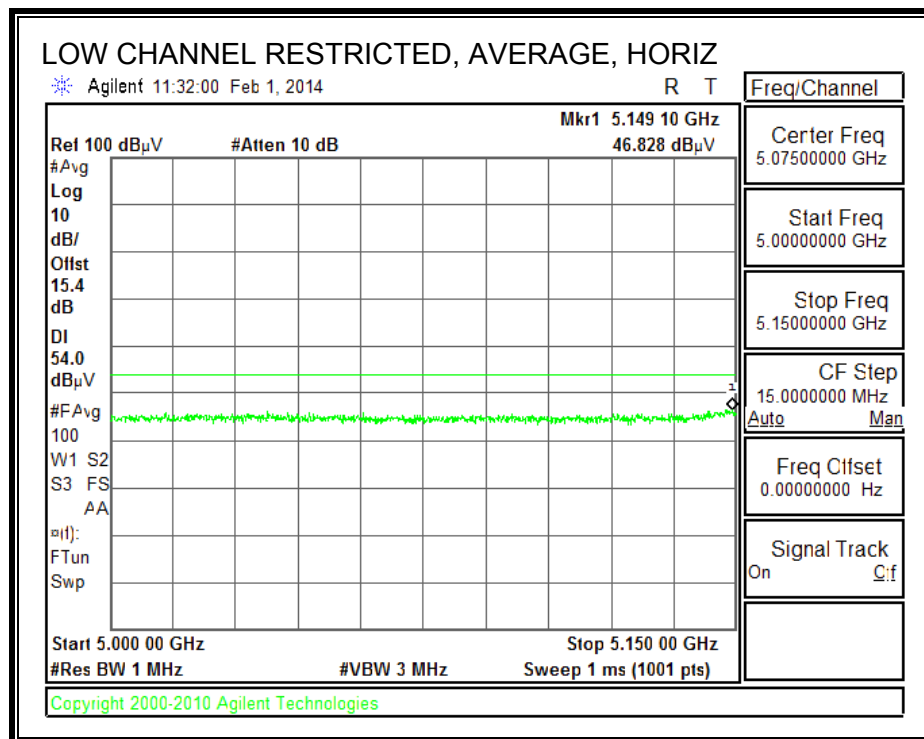
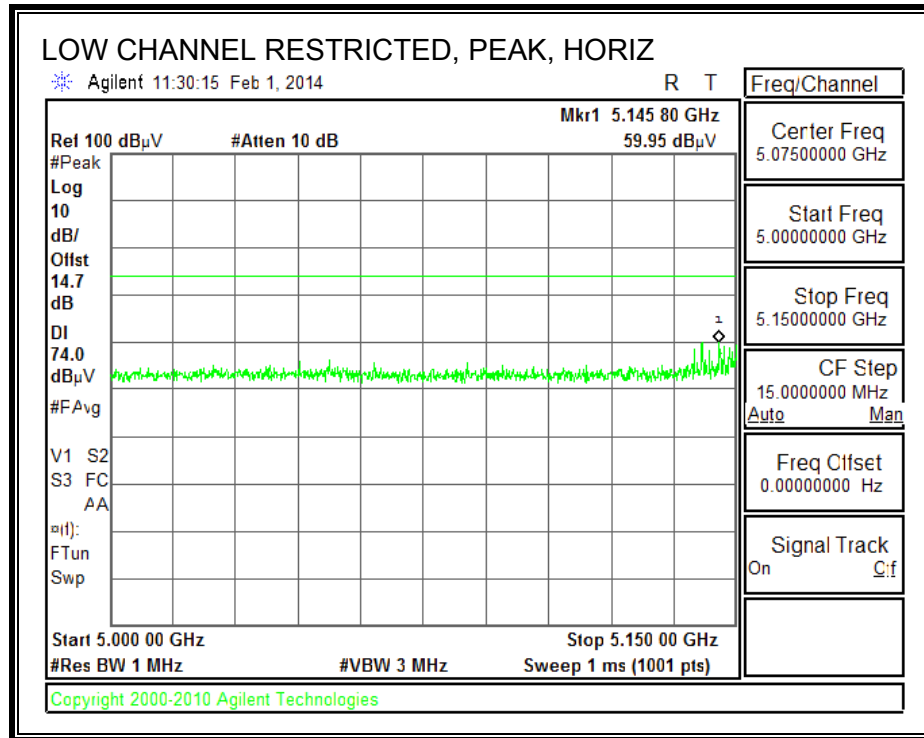
Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

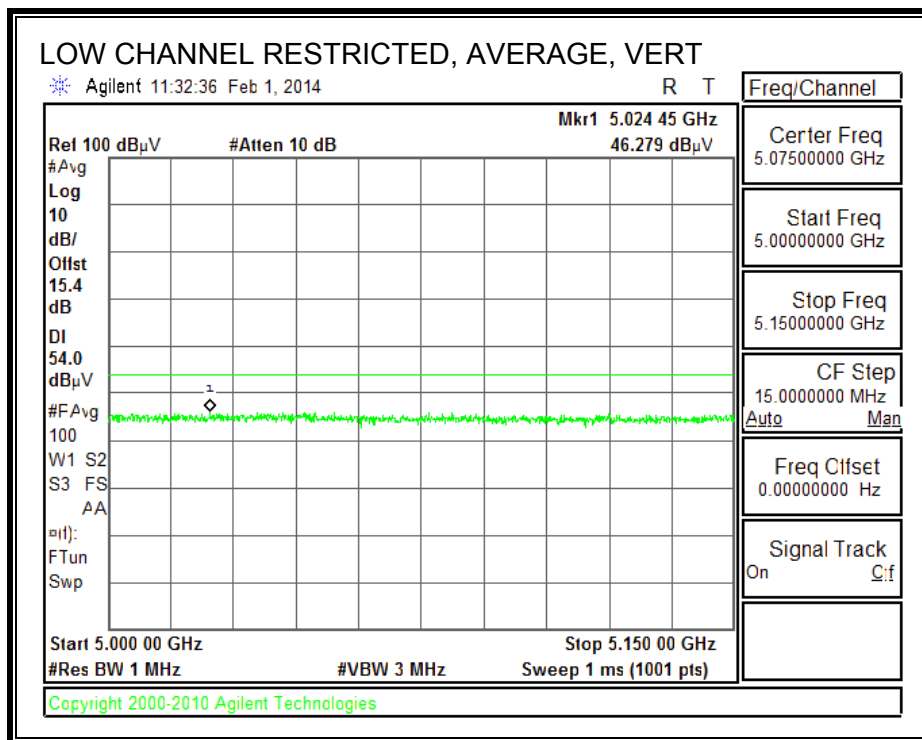
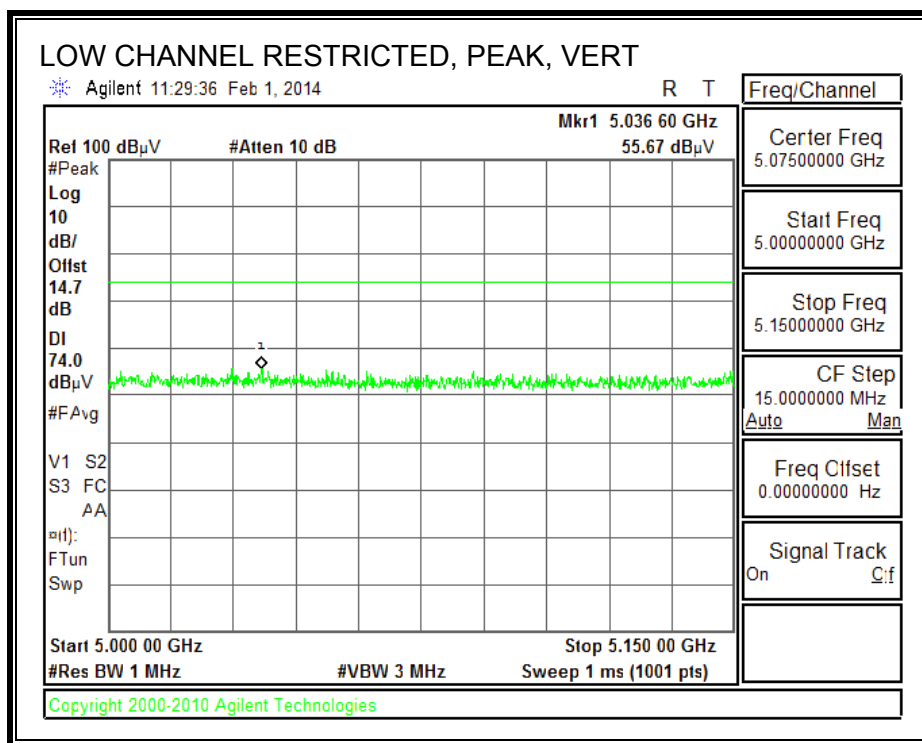
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F lter/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.493	41.71	Avg	33.1	-31.6	43.21	54	-10.79	-	-	0-360	200	H
3	3.493	43.19	Avg	33.1	-31.6	44.69	54	-9.31	-	-	0-360	100	V
2	4.803	37.76	Avg	33.9	-29.1	42.56	54	-11.44	-	-	0-360	200	H
4	4.803	34.52	Avg	33.9	-29.1	39.32	54	-14.68	-	-	0-360	201	V
7	10.478	34.63	Avg	37.5	-22.4	49.73	54	-4.27	-	-	0-360	200	V
5	10.48	31.82	Avg	37.5	-22.6	46.72	54	-7.28	-	-	0-360	200	H
8	12.03	28.92	Avg	38.8	-21.8	45.92	54	-8.08	-	-	0-360	200	V
6	15.538	30.54	Avg	40.6	-21.6	49.54	54	-4.46	-	-	0-360	101	H

Avg - Video bandwidth < Resolution bandwidth

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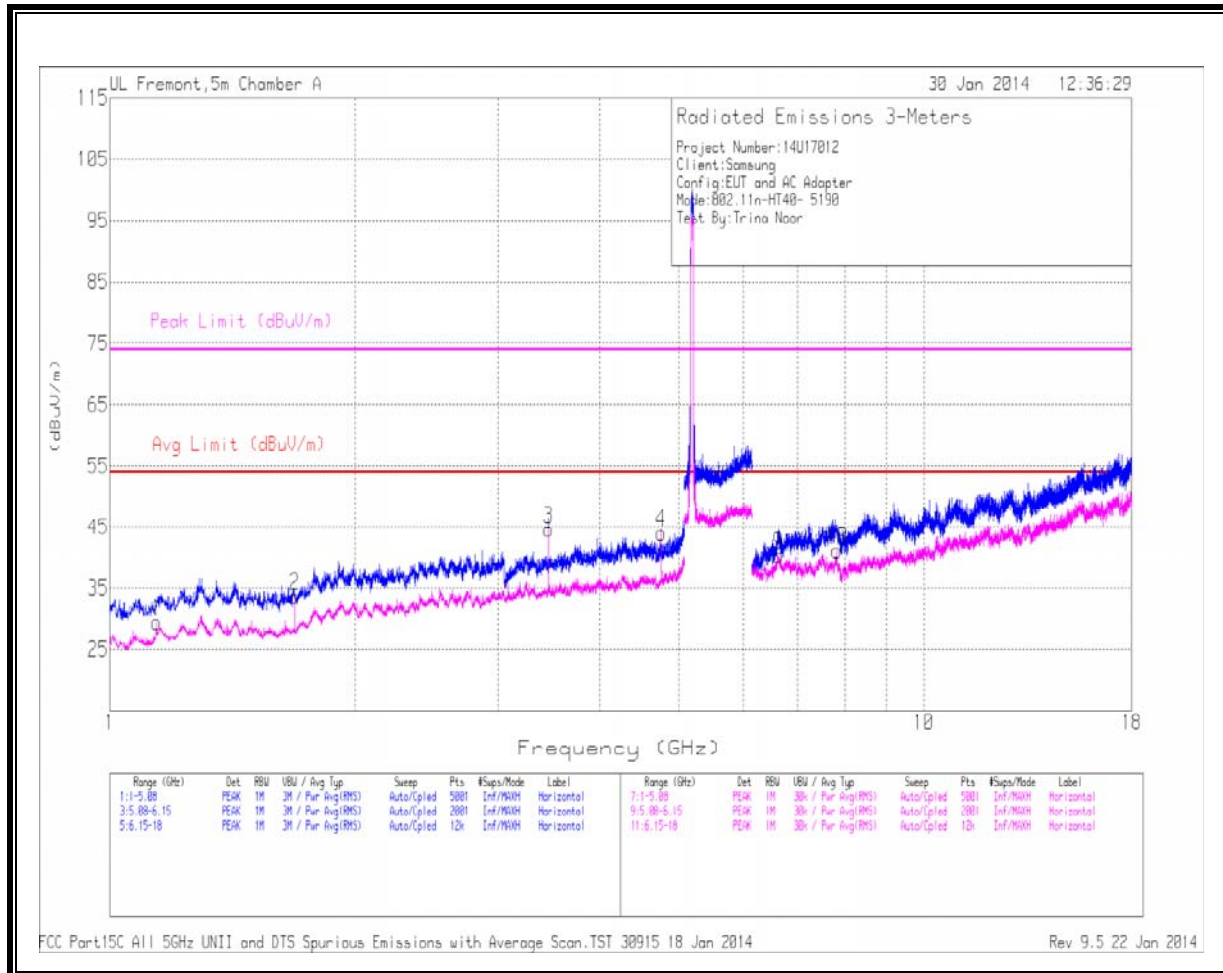
12.1.3. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.2 GHz BAND
RESTRICTED BANDEDGE (LOW CHANNEL)



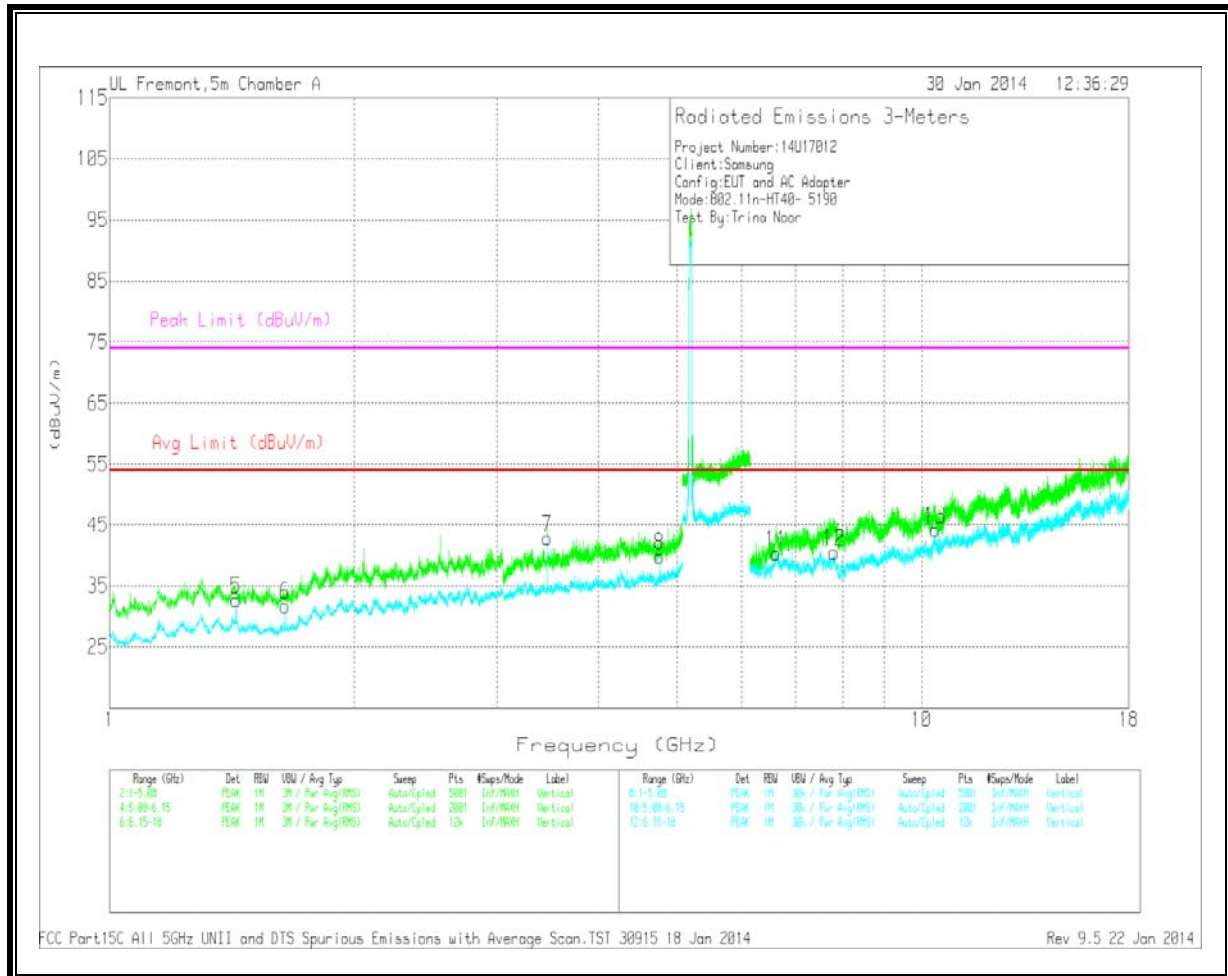


HARMONICS AND SPURIOUS EMISSIONS

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.



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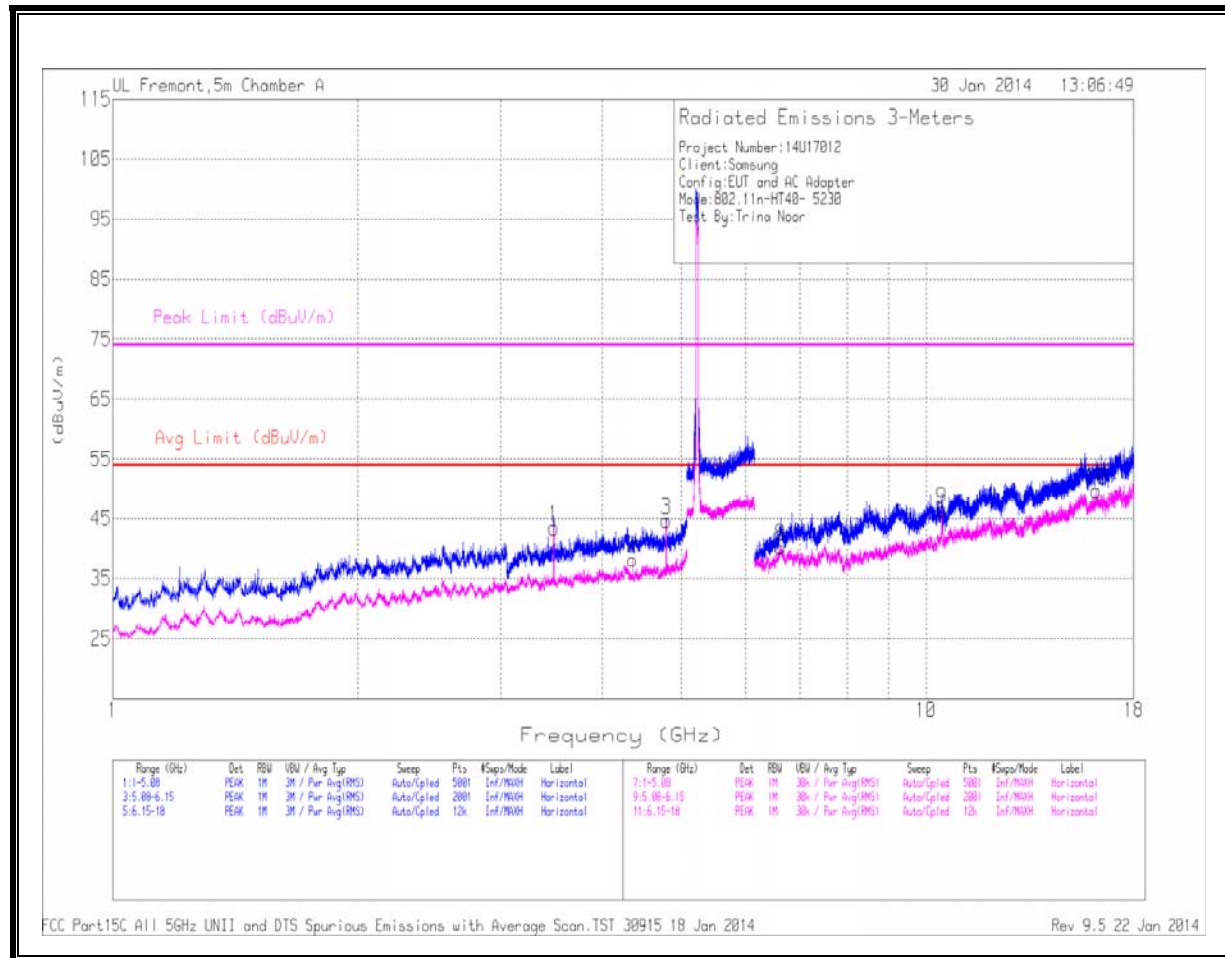
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.142	37.47	Avg	28.6	-36.6	29.47	54	-24.53	-	-	0-360	101	H
5	1.432	39.18	Avg	29.5	-36	32.68	54	-21.32	-	-	0-360	101	V
6	1.645	39.04	Avg	28.8	-36.1	31.74	54	-22.26	-	-	0-360	101	V
2	1.688	40.66	Avg	29.3	-36.3	33.66	54	-20.34	-	-	0-360	200	H
3	3.46	42.92	Avg	33.1	-31.4	44.62	54	-9.38	-	-	0-360	200	H
7	3.46	41.13	Avg	33.1	-31.4	42.83	54	-11.17	-	-	0-360	200	V
4	4.758	40.12	Avg	33.9	-30	44.02	54	-9.98	-	-	0-360	200	H
8	4.758	35.94	Avg	33.9	-30	39.84	54	-14.16	-	-	0-360	200	V
11	6.622	30.77	Avg	35.5	-25.9	40.37	54	-13.63	-	-	0-360	201	V
9	6.634	30.73	Avg	35.5	-25.9	40.33	54	-13.67	-	-	0-360	200	H
12	7.807	29.7	Avg	35.5	-24.7	40.5	54	-13.5	-	-	0-360	100	V
10	7.822	29.97	Avg	35.5	-24.3	41.17	54	-12.83	-	-	0-360	200	H
13	10.393	29.49	Avg	37.4	-22.7	44.19	54	-9.81	-	-	0-360	201	V

Avg - Video bandwidth < Resolution bandwidth

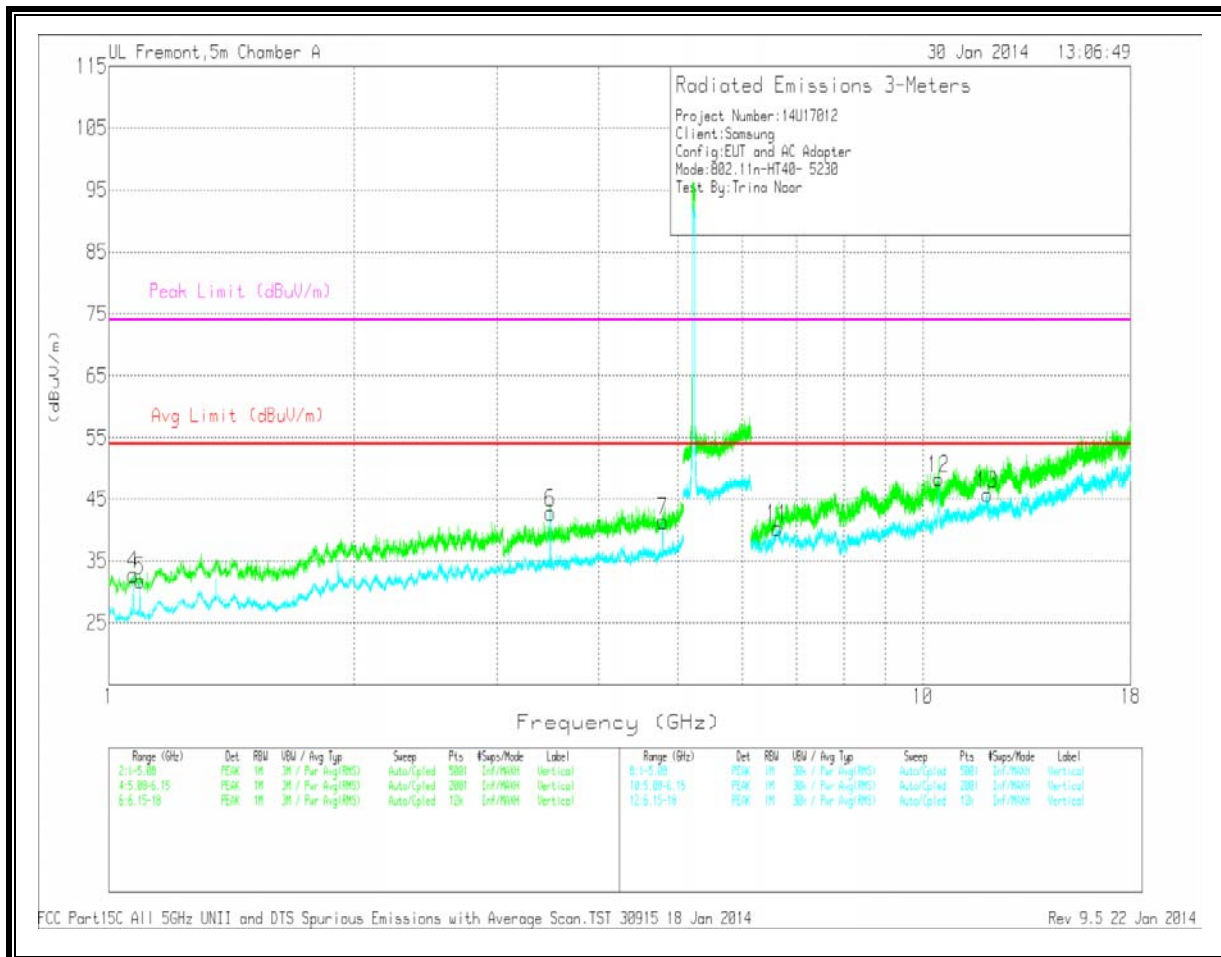
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18 Jan 2014 Rev 9.5
22 Jan 2014

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.



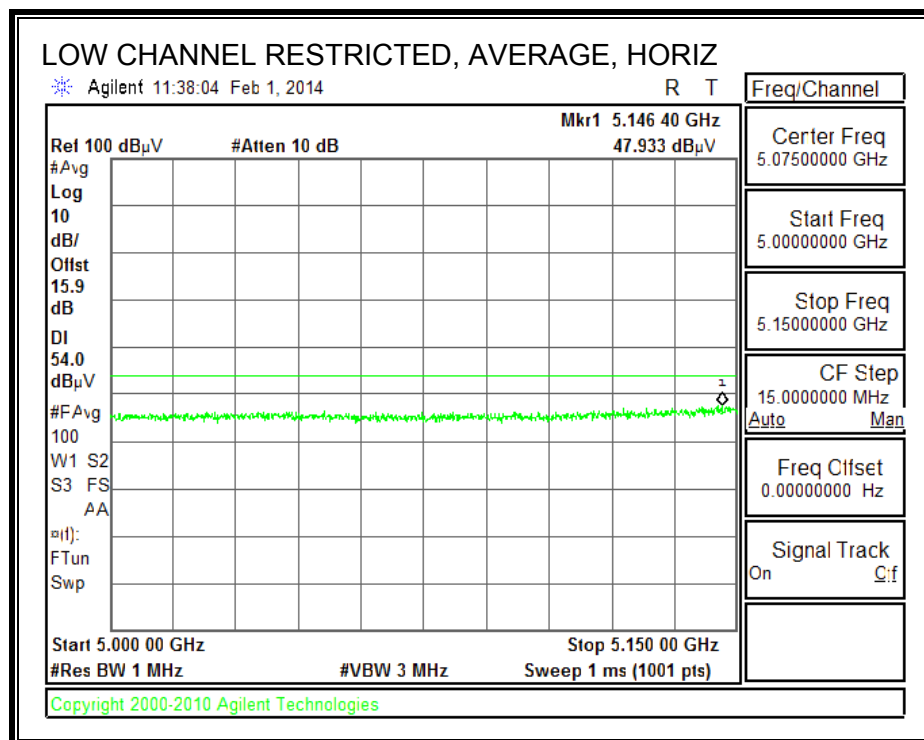
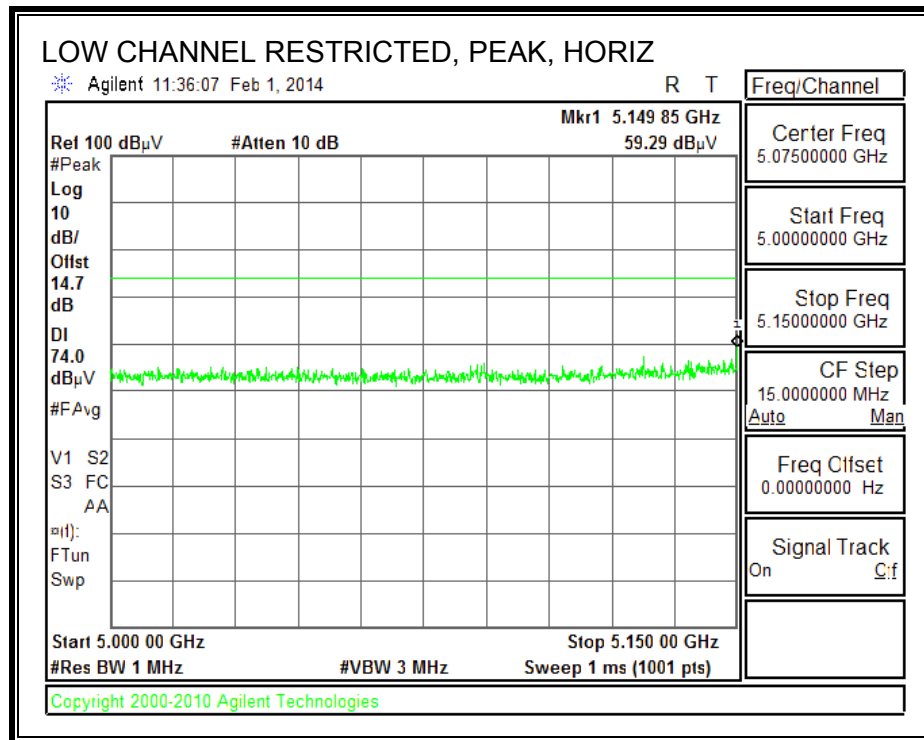
Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

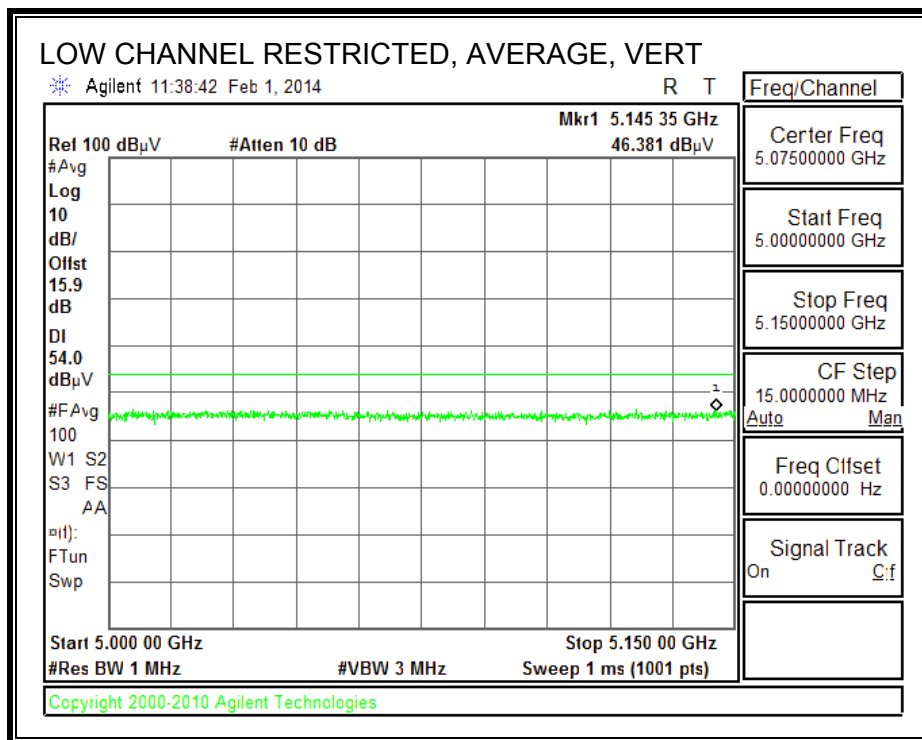
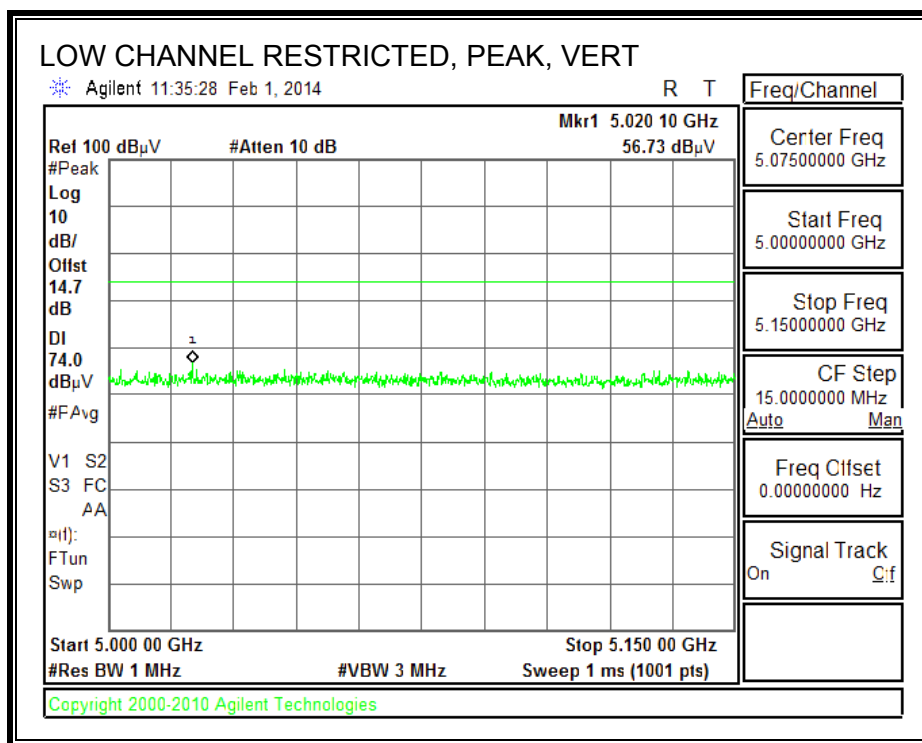
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	1.071	42.14	Avg	28	-37.4	32.74	54	-21.26	-	-	0-360	200	V
5	1.092	41.11	Avg	27.9	-37.2	31.81	54	-22.19	-	-	0-360	101	V
1	3.486	42.1	Avg	33.1	-31.7	43.5	54	-10.5	-	-	0-360	200	H
6	3.486	41.38	Avg	33.1	-31.7	42.78	54	-11.22	-	-	0-360	200	V
2	4.358	35.41	Avg	33.6	-30.8	38.21	54	-15.79	-	-	0-360	200	H
3	4.794	40.23	Avg	33.9	-29.4	44.73	54	-9.27	-	-	0-360	200	H
7	4.794	36.94	Avg	33.9	-29.4	41.44	54	-12.56	-	-	0-360	200	V
8	6.624	30.54	Avg	35.5	-25.8	40.24	54	-13.76	-	-	0-360	200	H
11	6.628	30.58	Avg	35.5	-25.8	40.28	54	-13.72	-	-	0-360	101	V
9	10.454	31.17	Avg	37.5	-22.2	46.47	54	-7.53	-	-	0-360	200	H
12	10.458	33.04	Avg	37.5	-22.2	48.34	54	-5.66	-	-	0-360	201	V
13	11.997	28.93	Avg	38.8	-22	45.73	54	-8.27	-	-	0-360	101	V
10	16.199	29.66	Avg	40.7	-20.6	49.76	54	-4.24	-	-	0-360	101	H

Avg - Video bandwidth < Resolution bandwidth

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18 Jan 2014 Rev 9.5
22 Jan 2014

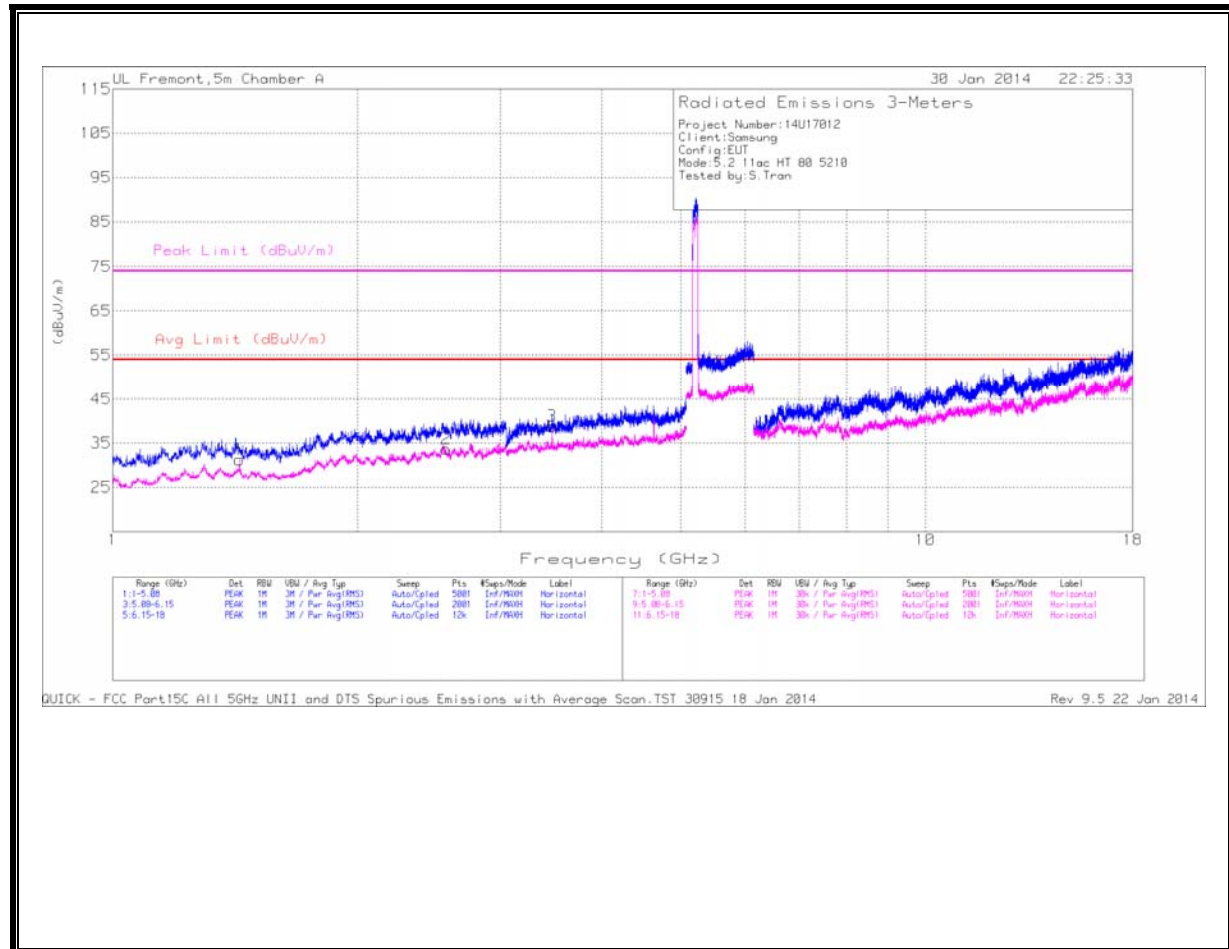
12.1.4. TX ABOVE 1 GHz 802.11AC HT80 MODE IN THE 5.2 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)



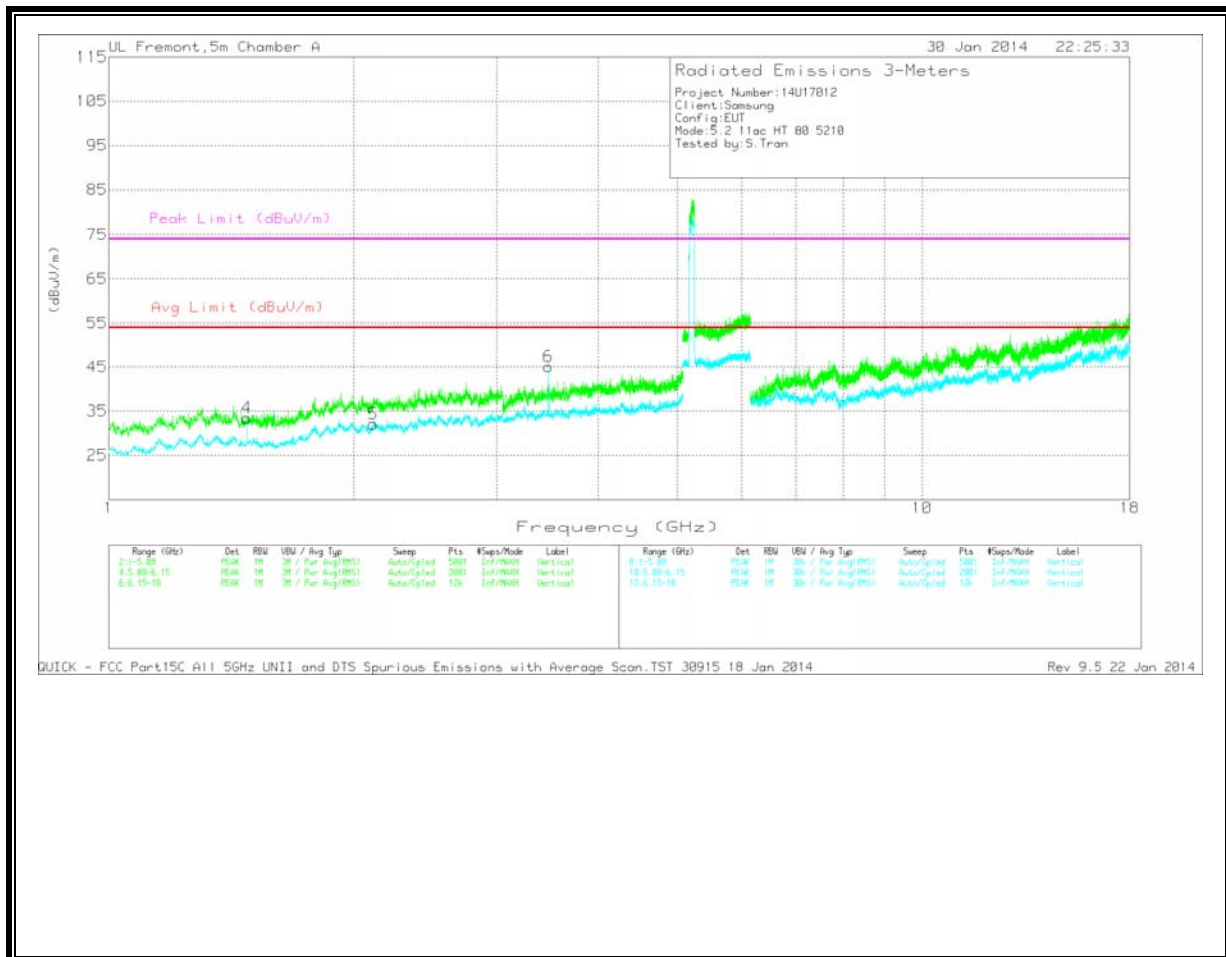


HARMONICS AND SPURIOUS EMISSIONS

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.



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MID CHANNEL DATA

Trace Markers

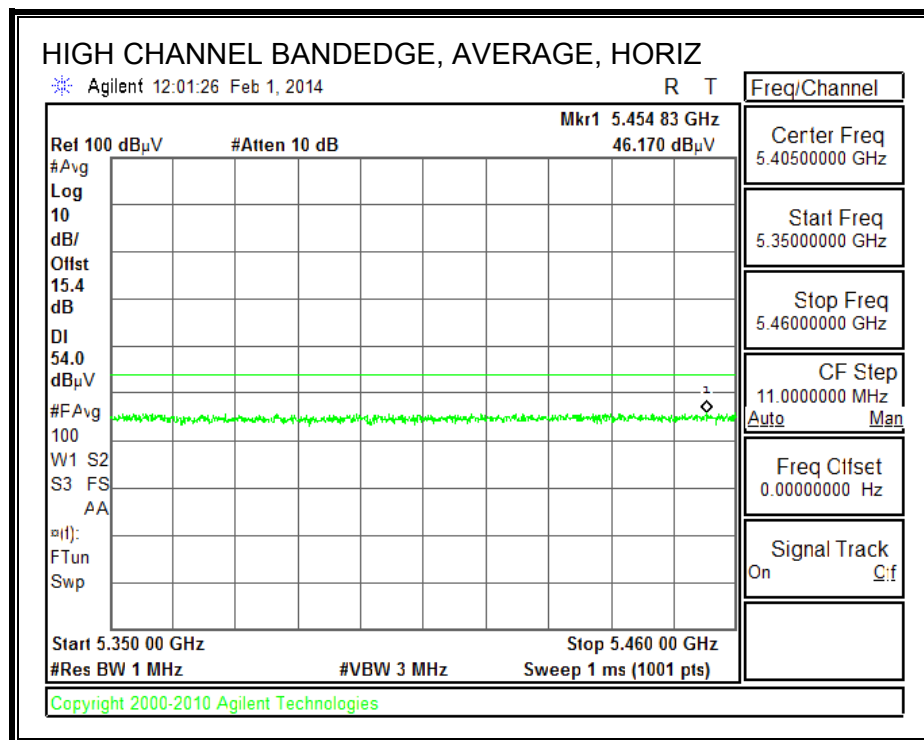
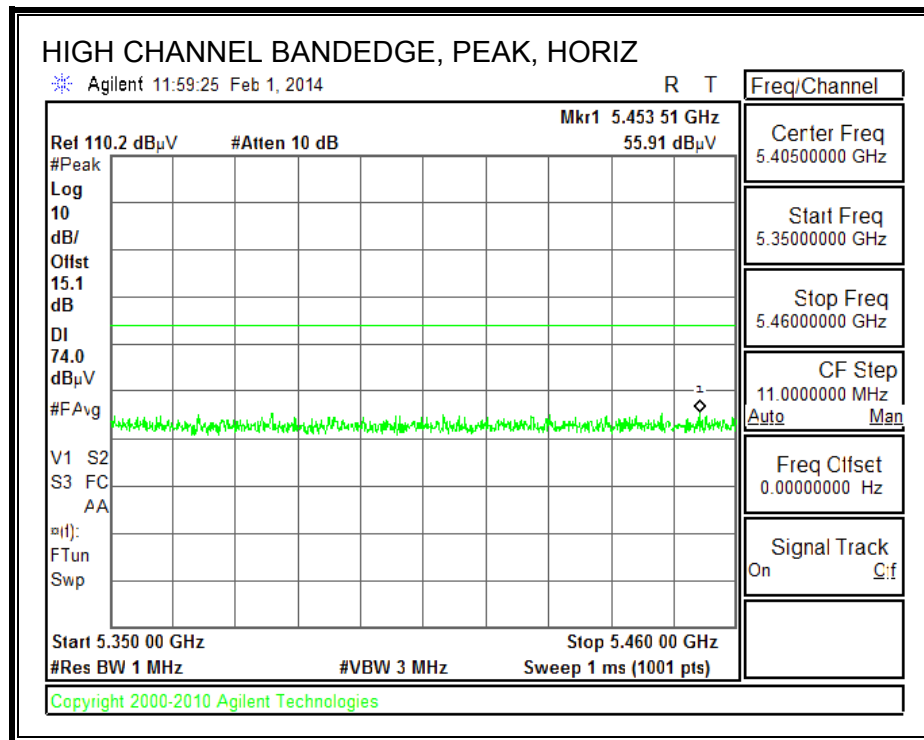
Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	AzimuthA zimuth(D egs)	Height (cm)	Polarity
1	1.432	37.74	Avg	29.5	-36	31.24	54	-22.76	-	-	0-360	100	H
4	1.478	40.05	Avg	29.1	-35.7	33.45	54	-20.55	-	-	0-360	100	V
5	2.115	34.55	Avg	31.6	-34.1	32.05	54	-21.95	-	-	0-360	100	V
2	2.572	33.8	Avg	32.7	-32.8	33.7	54	-20.3	-	-	0-360	100	H
3	3.473	37.07	Avg	33.1	-31.4	38.77	54	-15.23	-	-	0-360	100	H
6	3.473	43.36	Avg	33.1	-31.4	45.06	54	-8.94	-	-	0-360	100	V

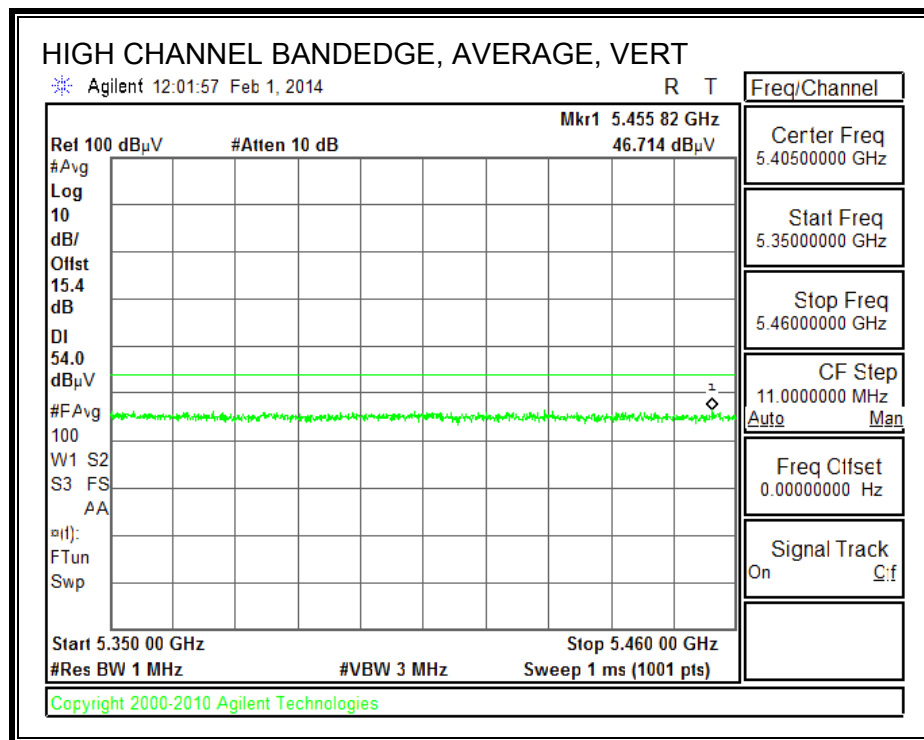
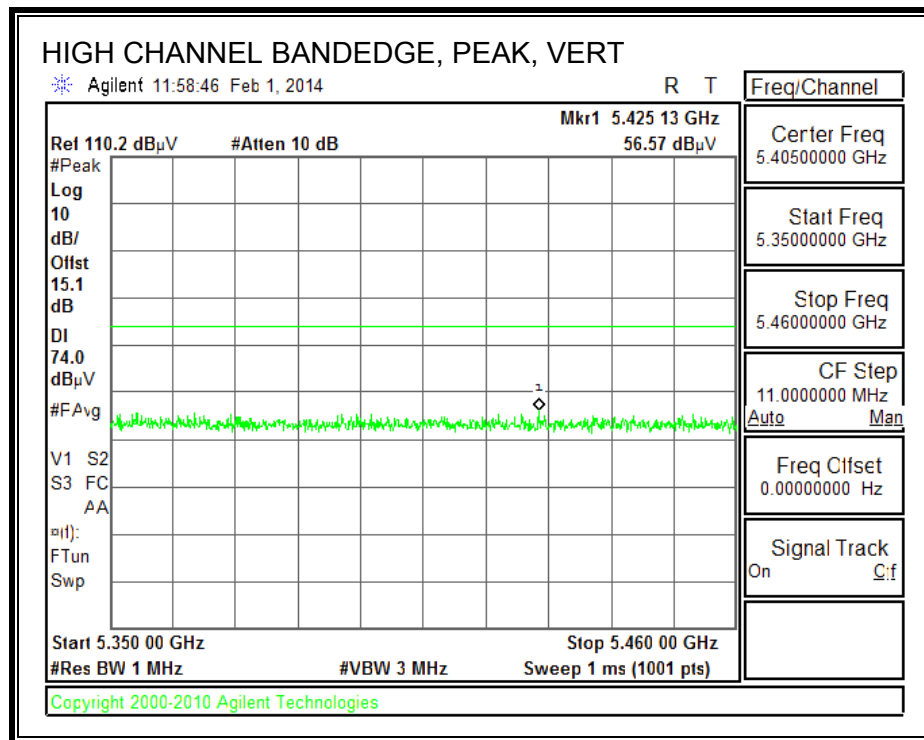
Avg - Video bandwidth < Resolution bandwidth

QUICK - FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST
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12.2. 5.3 GHz

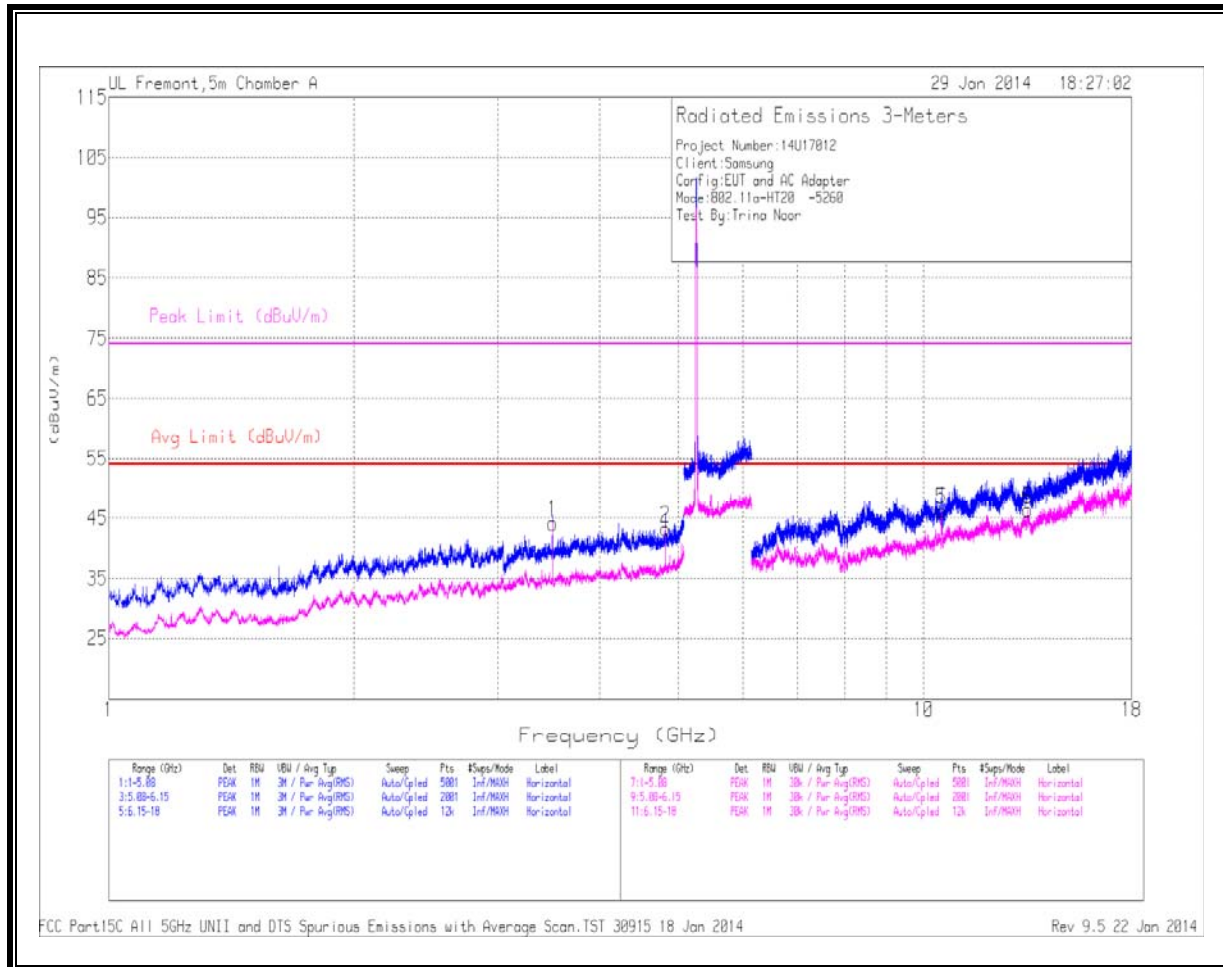
12.2.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)



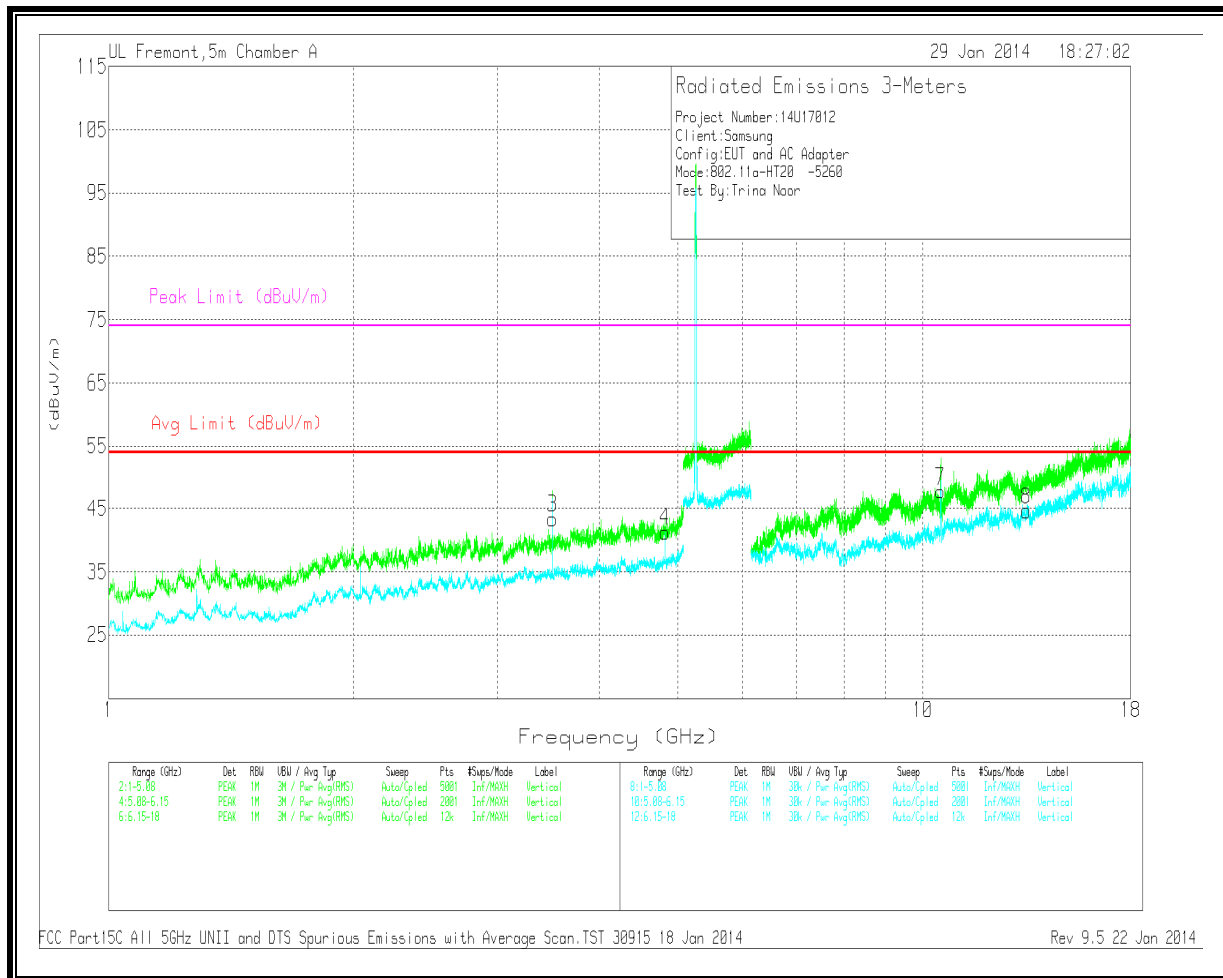


HARMONICS AND SPURIOUS EMISSIONS

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.



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

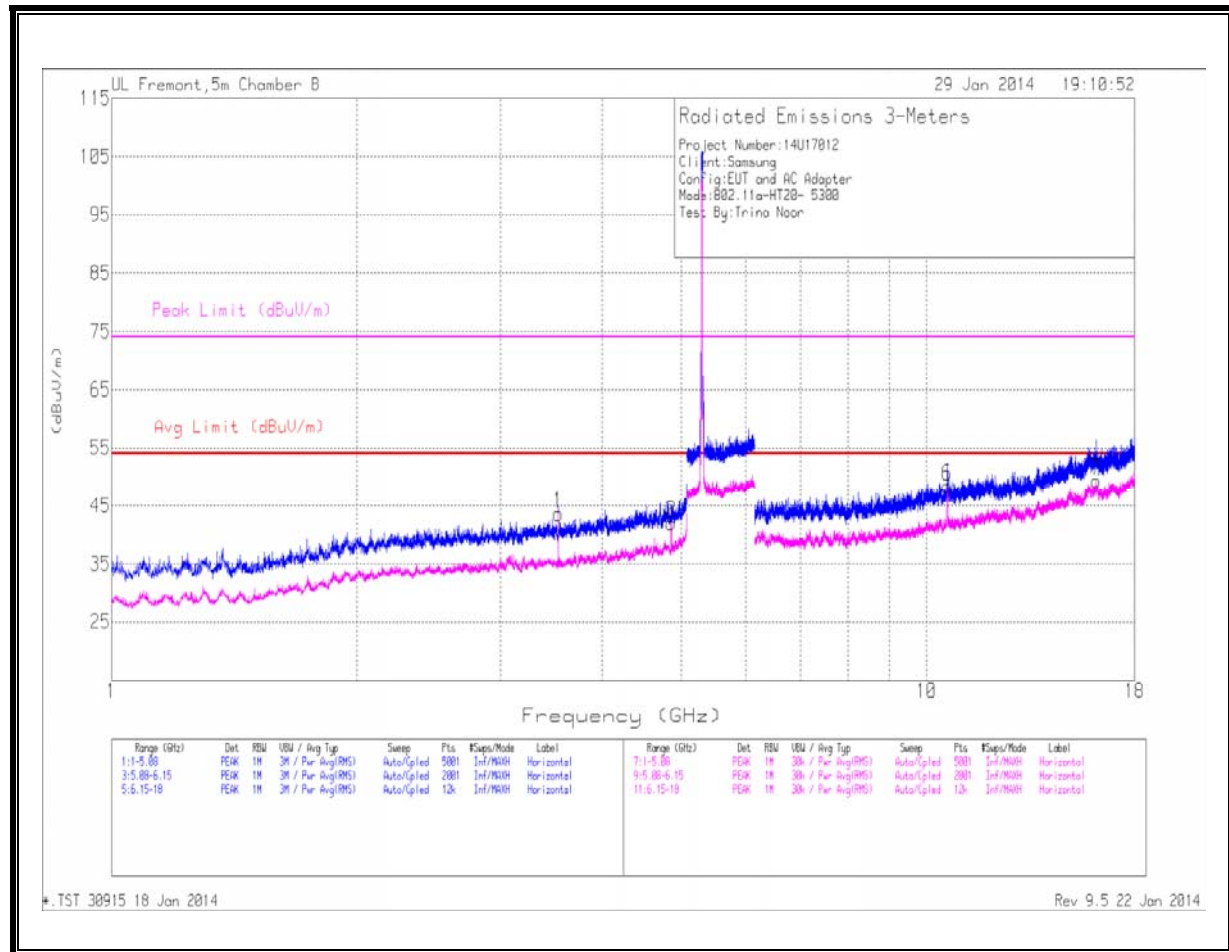
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.507	42.89	Avg	33.1	-31.8	44.19	54	-9.81	-	-	0-360	200	H
3	3.508	42.12	Avg	33.1	-31.8	43.42	54	-10.58	-	-	0-360	200	V
2	4.822	38.62	Avg	33.9	-29.3	43.22	54	-10.78	-	-	0-360	200	H
4	4.822	36.72	Avg	33.9	-29.3	41.32	54	-12.68	-	-	0-360	200	V
7	10.511	33.57	Avg	37.5	-23.2	47.87	54	-6.13	-	-	0-360	201	V
5	10.52	31.75	Avg	37.6	-23	46.35	54	-7.65	-	-	0-360	200	H
8	13.404	28.71	Avg	39.1	-23.1	44.71	54	-9.29	-	-	0-360	201	V
6	13.427	29.61	Avg	39	-22.2	46.41	54	-7.59	-	-	0-360	200	H

Avg - Video bandwidth < Resolution bandwidth

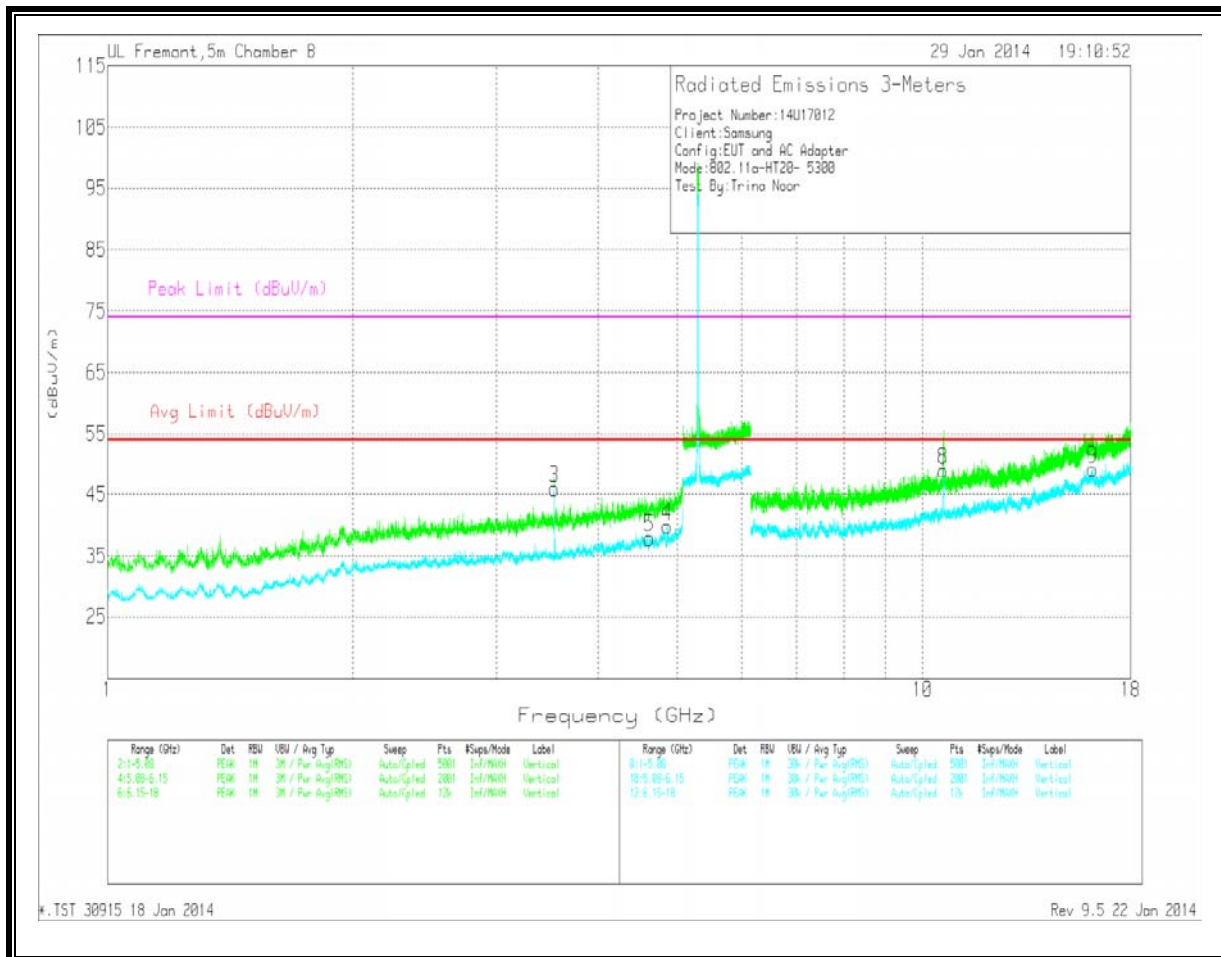
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18 Jan 2014 Rev 9.5
22 Jan 2014

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.



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

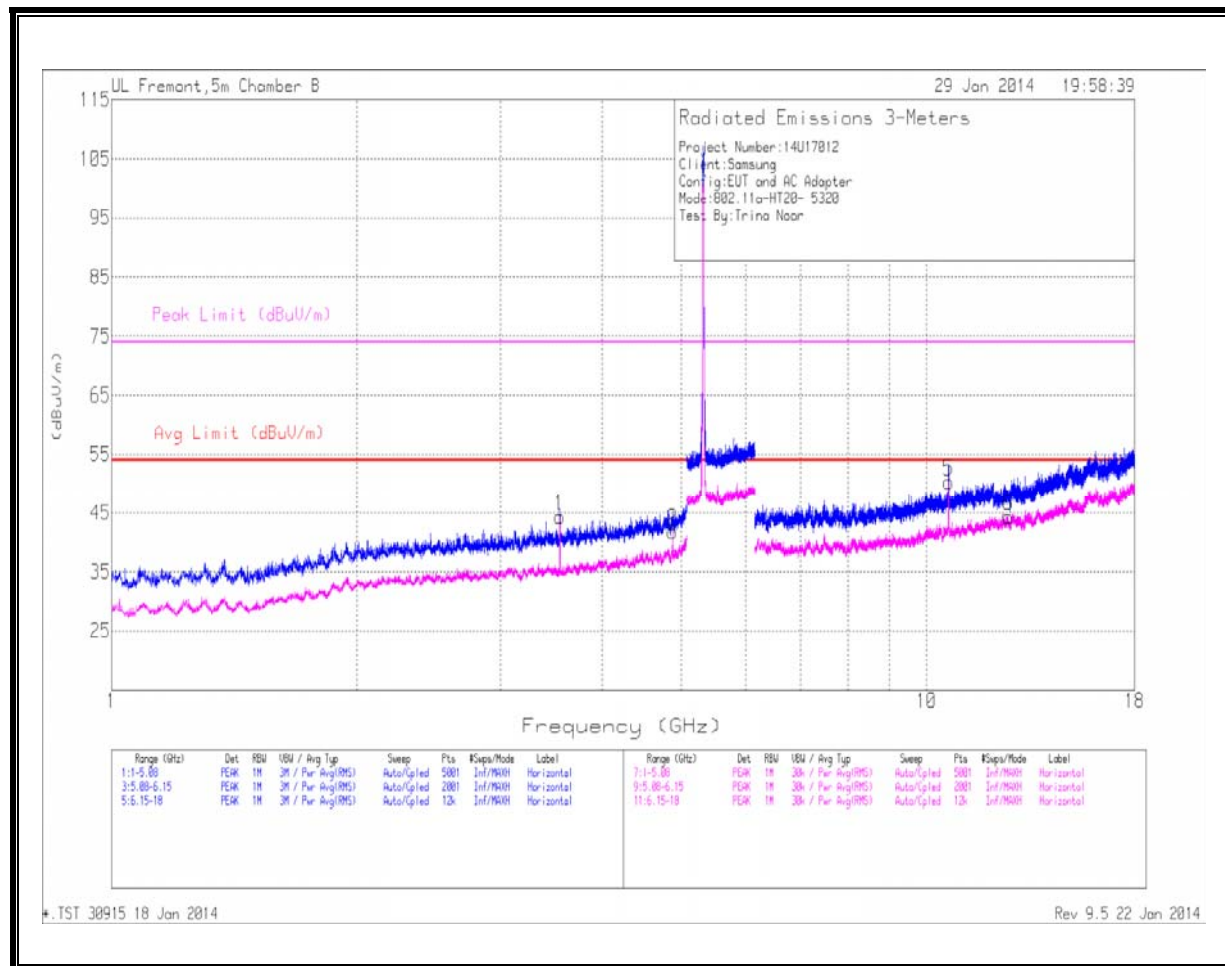
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.534	42.3	Avg	33.3	-32	43.6	54	-10.4	-	-	0-360	99	H
3	3.534	44.69	Avg	33.3	-32	45.99	54	-8.01	-	-	0-360	202	V
5	4.621	32.79	Avg	34.6	-29.5	37.89	54	-16.11	-	-	0-360	202	V
2	4.858	37.62	Avg	34.7	-30.3	42.02	54	-11.98	-	-	0-360	99	H
4	4.859	35.35	Avg	34.7	-30.3	39.75	54	-14.25	-	-	0-360	202	V
8	10.593	34.02	Avg	38.2	-23.2	49.02	54	-4.98	-	-	0-360	99	V
6	10.599	33.42	Avg	38.2	-23.2	48.42	54	-5.58	-	-	0-360	201	H
7	16.155	27.58	Avg	41.5	-19.7	49.38	54	-4.62	-	-	0-360	99	H
9	16.163	27.64	Avg	41.5	-19.9	49.24	54	-4.76	-	-	0-360	202	V

Avg - Video bandwidth < Resolution bandwidth

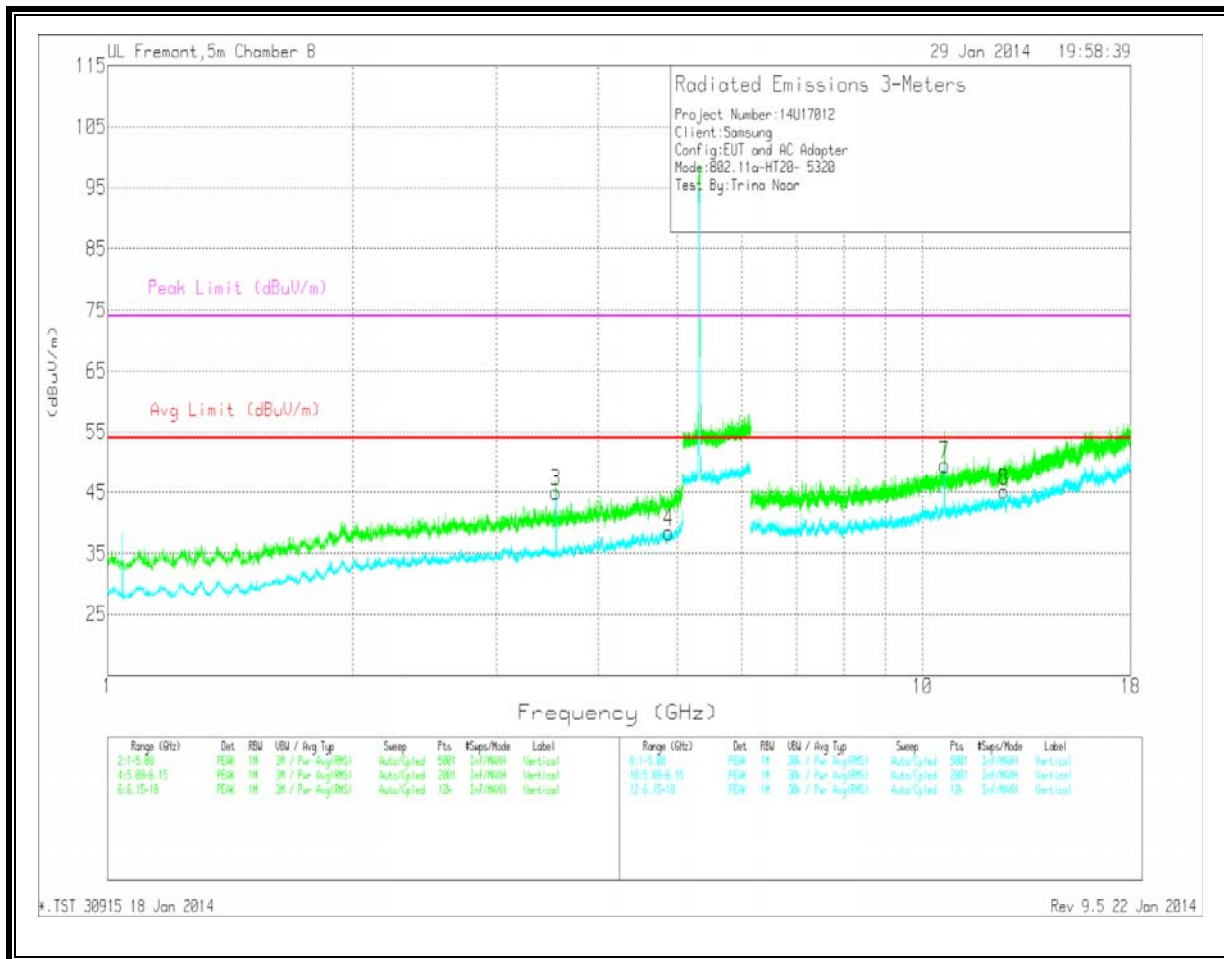
*.TST 30915 18 Jan 2014 Rev 9.5 22 Jan 2014

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.



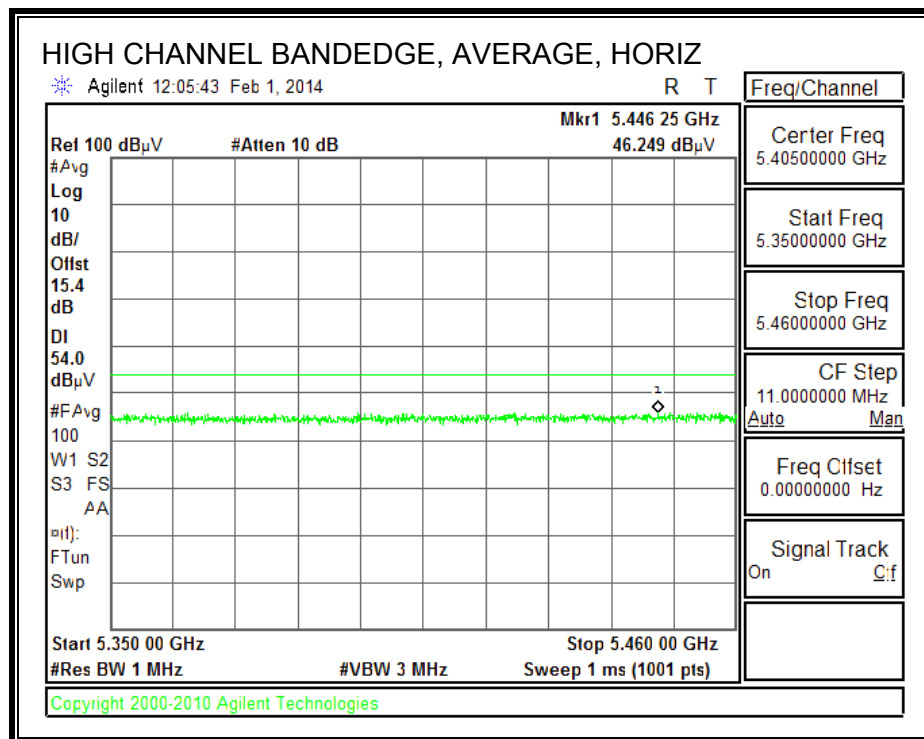
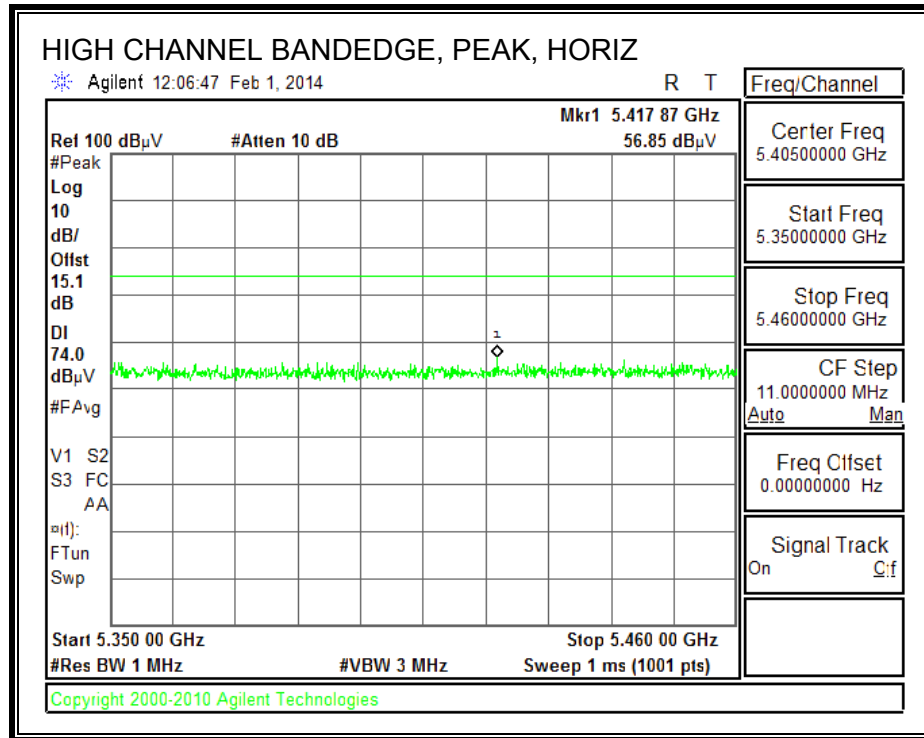
Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

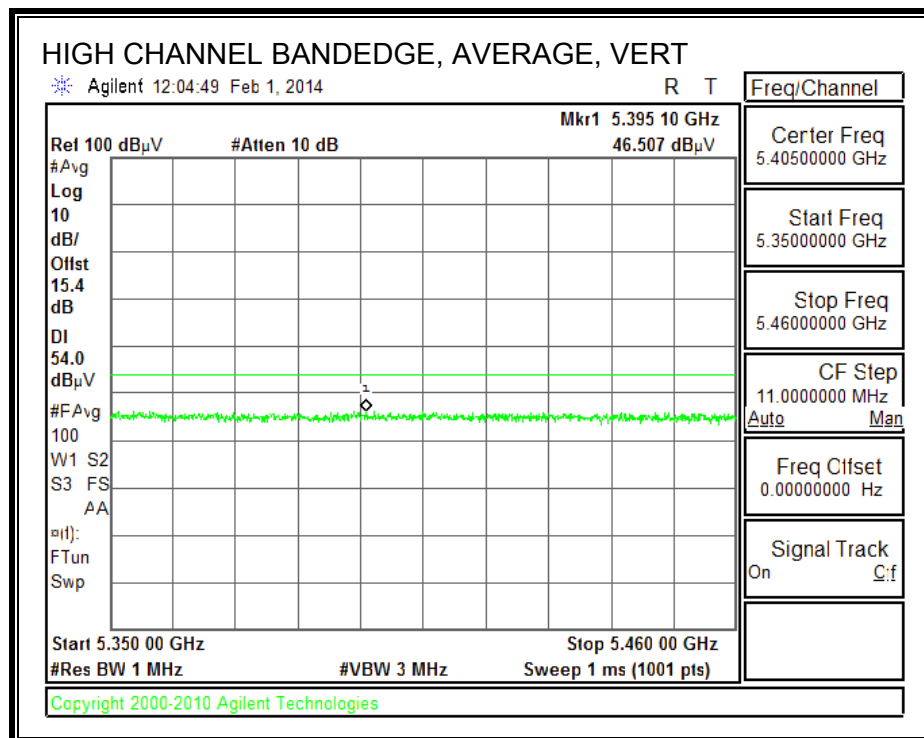
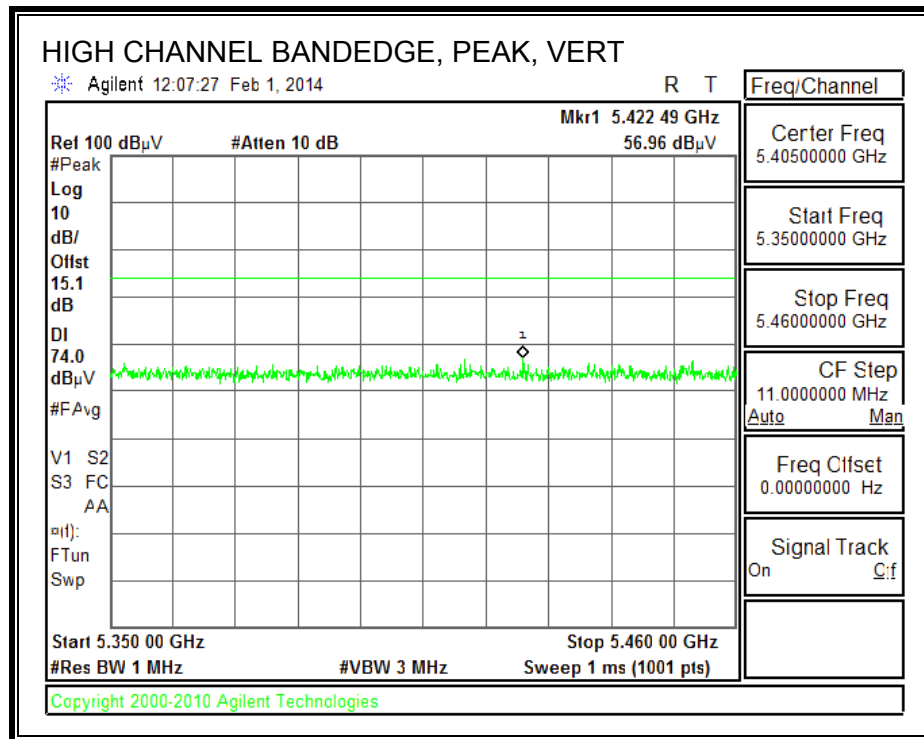
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/F ltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.547	42.85	Avg	33.3	-31.8	44.35	54	-9.65	-	-	0-360	99	H
3	3.547	43.59	Avg	33.3	-31.8	45.09	54	-8.91	-	-	0-360	99	V
2	4.877	37.34	Avg	34.6	-30.1	41.84	54	-12.16	-	-	0-360	99	H
4	4.882	33.74	Avg	34.6	-29.9	38.44	54	-15.56	-	-	0-360	202	V
5	10.642	35.26	Avg	38.3	-23.2	50.36	54	-3.64	-	-	0-360	201	H
7	10.643	34.5	Avg	38.3	-23.2	49.6	54	-4.4	-	-	0-360	202	V
8	12.583	28.98	Avg	39.2	-23	45.18	54	-8.82	-	-	0-360	99	V
6	12.595	28.21	Avg	39.2	-23	44.41	54	-9.59	-	-	0-360	99	H

Avg - Video bandwidth < Resolution bandwidth

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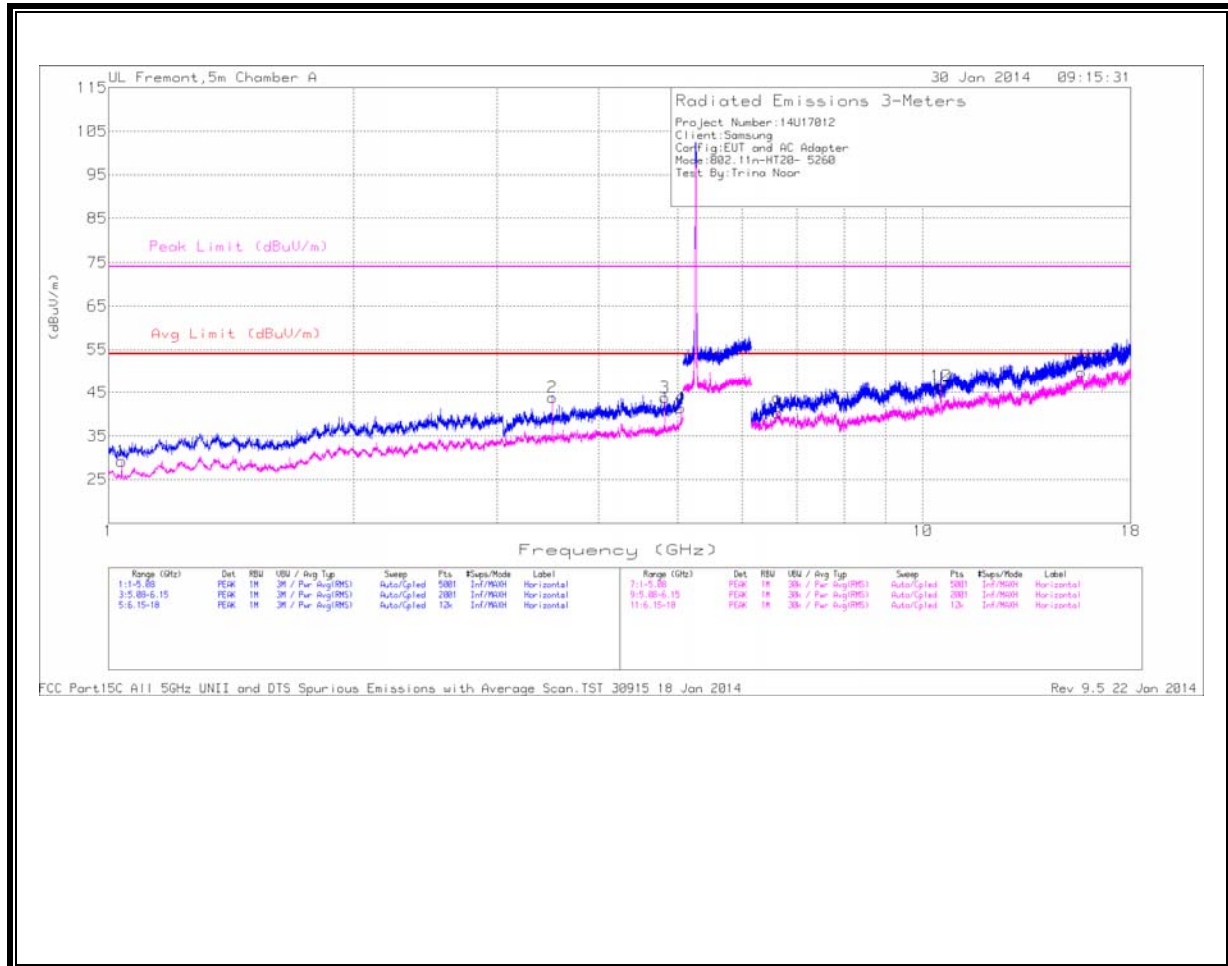
**12.2.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.3 GHz BAND
AUTHORIZED BANDEDGE (HIGH CHANNEL)**



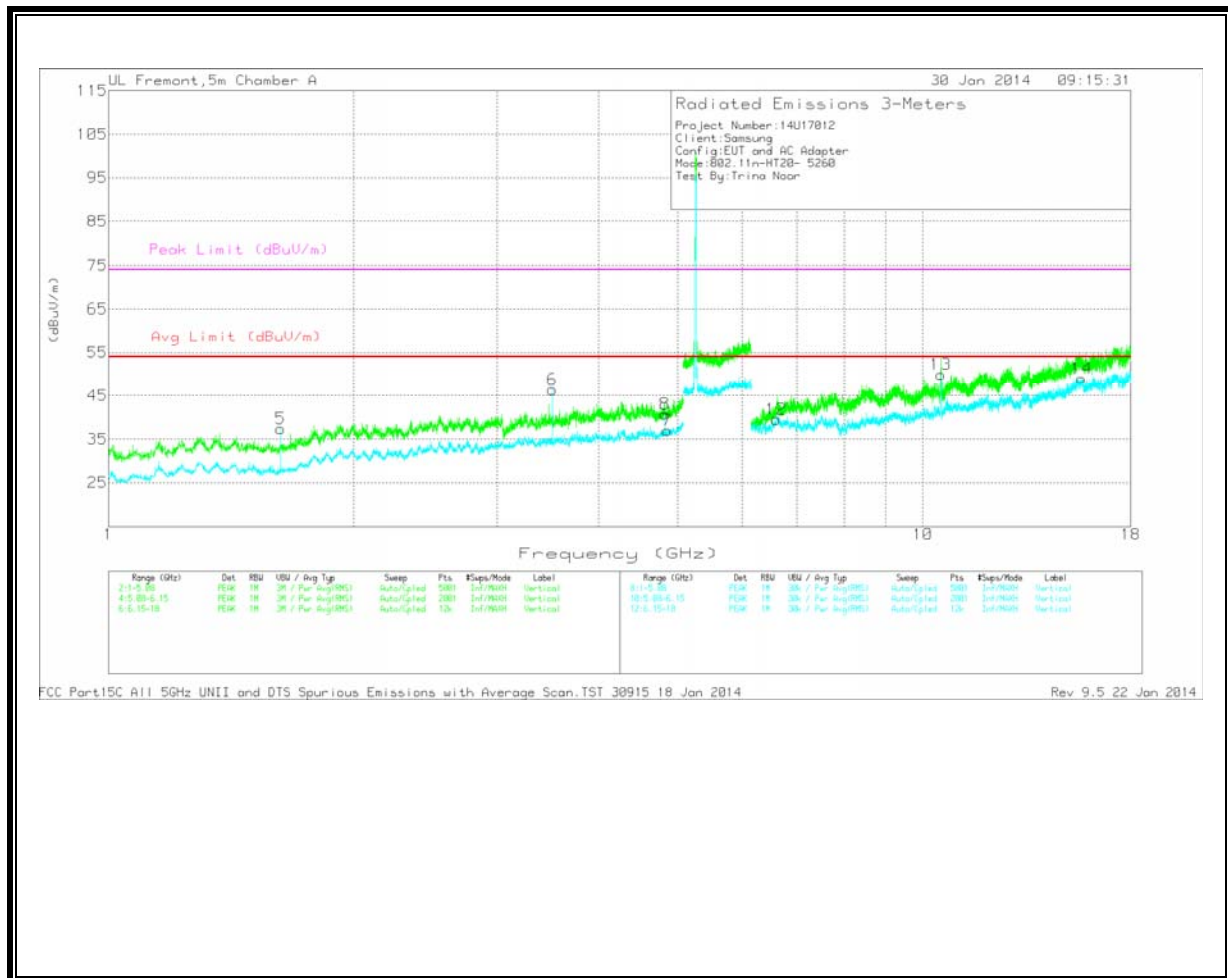


HARMONICS AND SPURIOUS EMISSIONS

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.



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

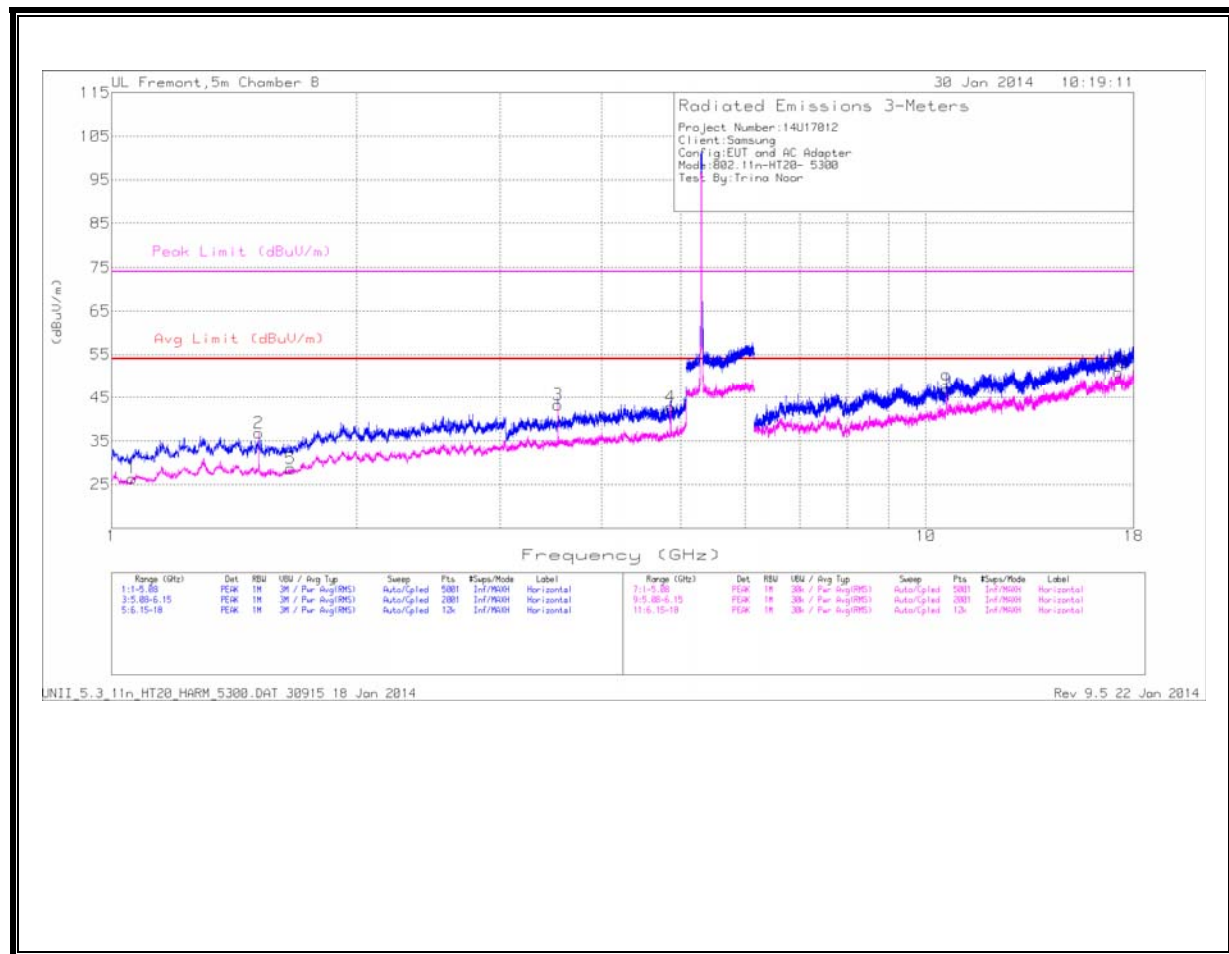
Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.038	38.83	Avg	28	-37.6	29.23	54	-24.77	-	-	0-360	200	H
5	1.626	44.5	Avg	28.6	-35.7	37.4	54	-16.6	-	-	0-360	100	V
2	3.507	42.54	Avg	33.1	-31.8	43.84	54	-10.16	-	-	0-360	200	H
6	3.507	45.1	Avg	33.1	-31.8	46.4	54	-7.6	-	-	0-360	200	V
3	4.821	39.2	Avg	33.9	-29.3	43.8	54	-10.2	-	-	0-360	200	H
8	4.821	36.15	Avg	33.9	-29.3	40.75	54	-13.25	-	-	0-360	200	V
7	4.857	32.92	Avg	34	-29.9	37.02	54	-16.98	-	-	0-360	100	V
4	5.041	35.31	Avg	33.9	-27.8	41.41	54	-12.59	-	-	0-360	200	H
12	6.603	30.35	Avg	35.5	-26.3	39.55	54	-14.45	-	-	0-360	200	V
9	6.633	30.73	Avg	35.5	-25.9	40.33	54	-13.67	-	-	0-360	200	H
13	10.52	35.38	Avg	37.6	-23	49.98	54	-4.02	-	-	0-360	200	V
10	10.528	31.65	Avg	37.6	-22.7	46.55	54	-7.45	-	-	0-360	200	H
14	15.661	28.91	Avg	40.4	-20.3	49.01	54	-4.99	-	-	0-360	200	V
11	15.664	29.61	Avg	40.4	-20.2	49.81	54	-4.19	-	-	0-360	100	H

Avg - Video bandwidth < Resolution bandwidth

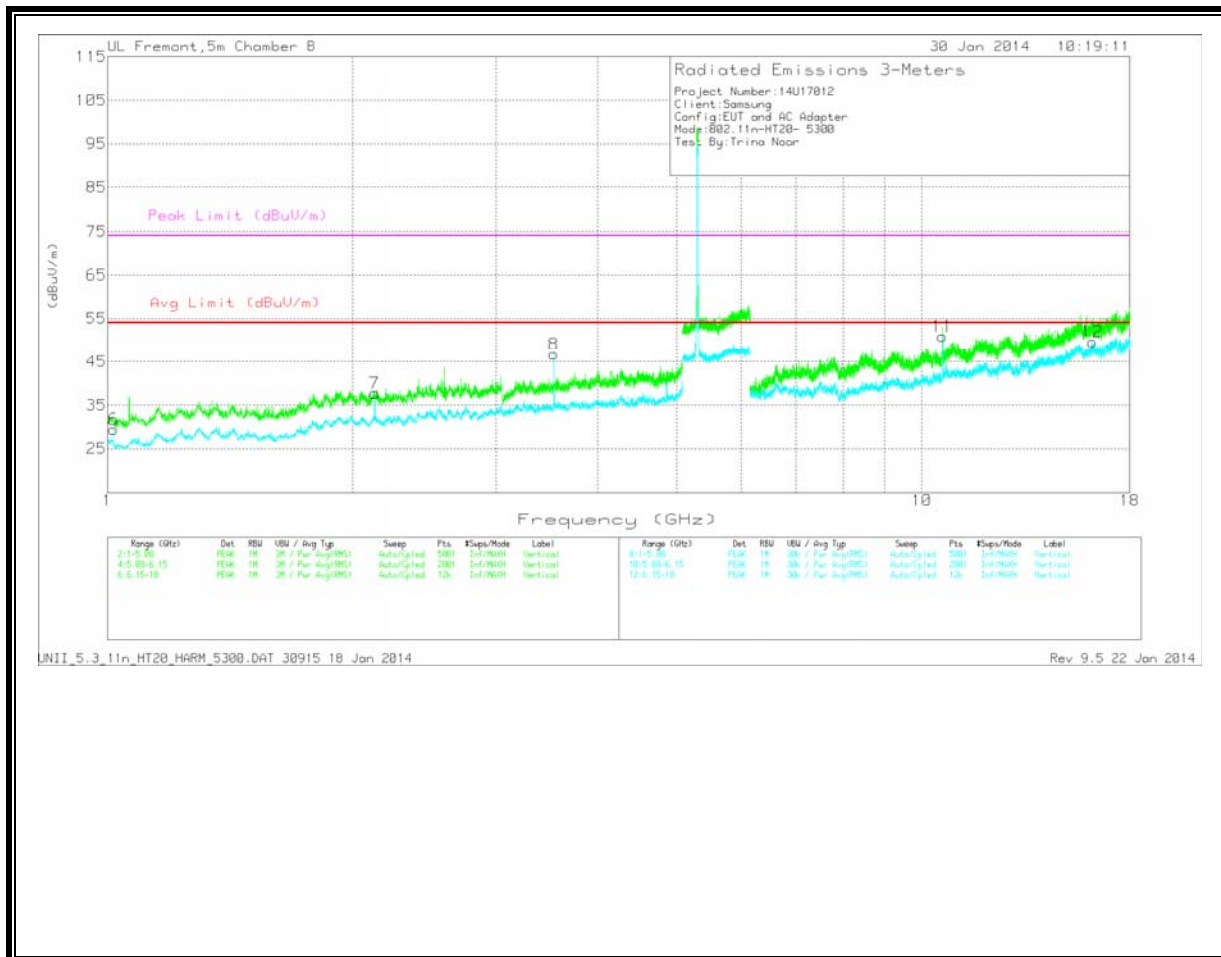
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18
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MID CHANNEL

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.



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

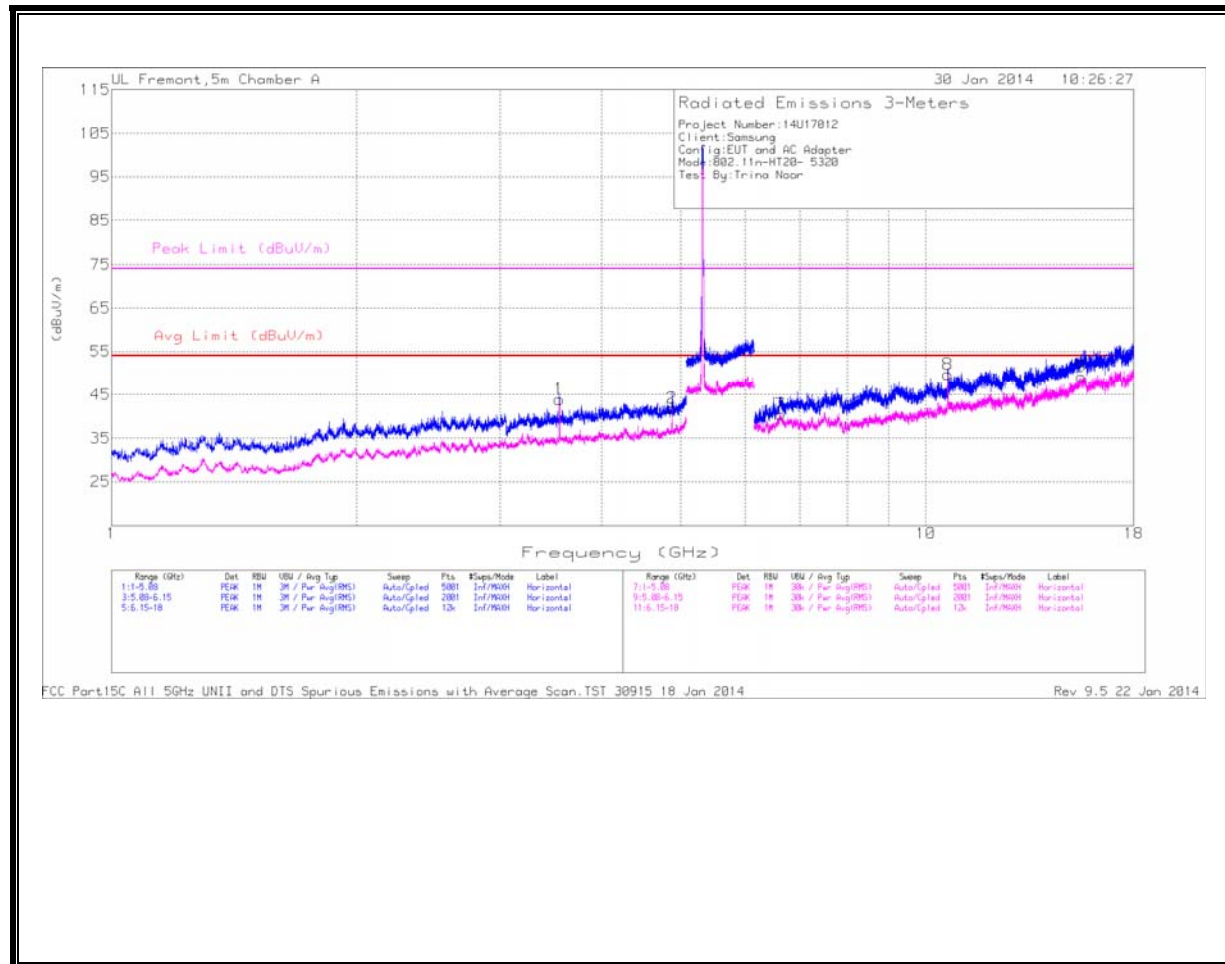
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	1.017	39.62	Avg	28.1	-38.3	29.42	54	-24.58	-	-	0-360	201	V
1	1.06	35.82	Avg	28	-37.4	26.42	54	-27.58	-	-	0-360	200	H
2	1.516	43.64	Avg	28.8	-35.6	36.84	54	-17.16	-	-	0-360	101	H
5	1.659	36.07	Avg	29	-36.4	28.67	54	-25.33	-	-	0-360	101	H
7	2.129	40.33	Avg	31.6	-34.2	37.73	54	-16.27	-	-	0-360	100	V
3	3.534	41.94	Avg	33.1	-31.7	43.34	54	-10.66	-	-	0-360	200	H
8	3.534	45.33	Avg	33.1	-31.7	46.73	54	-7.27	-	-	0-360	201	V
4	4.858	38.71	Avg	34	-29.9	42.81	54	-11.19	-	-	0-360	200	H
9	10.599	32.49	Avg	37.8	-23.3	46.99	54	-7.01	-	-	0-360	200	H
11	10.599	36.4	Avg	37.8	-23.3	50.9	54	-3.1	-	-	0-360	201	V
12	16.198	29.52	Avg	40.7	-20.6	49.62	54	-4.38	-	-	0-360	201	V
10	17.235	29.89	Avg	40.9	-19.9	50.89	54	-3.11	-	-	0-360	200	H

Avg - Video bandwidth < Resolution bandwidth

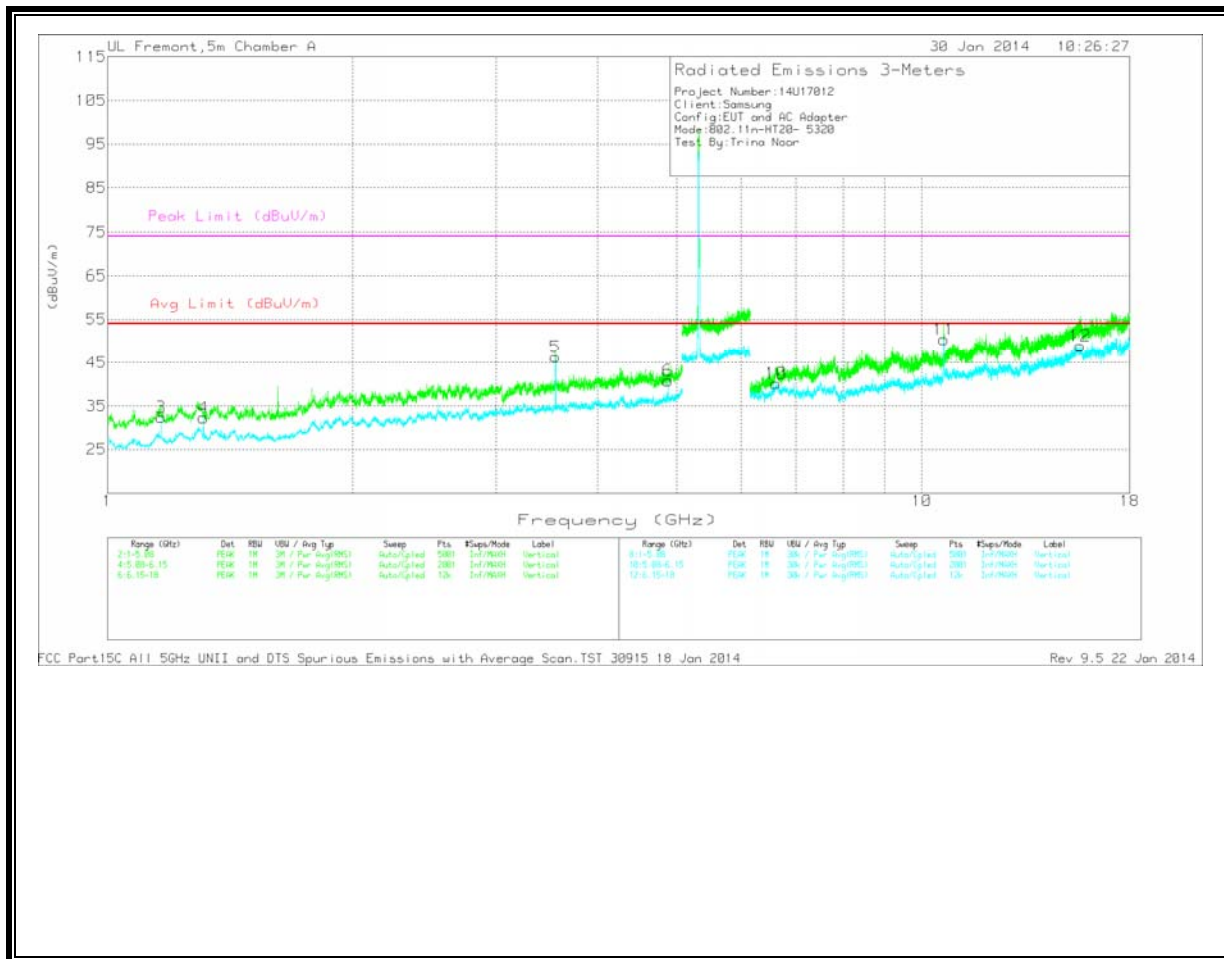
UNII_5.3_11n_HT20_HARM_5300.DAT 30915 18 Jan 2014 Rev 9.5 22 Jan 2014

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.



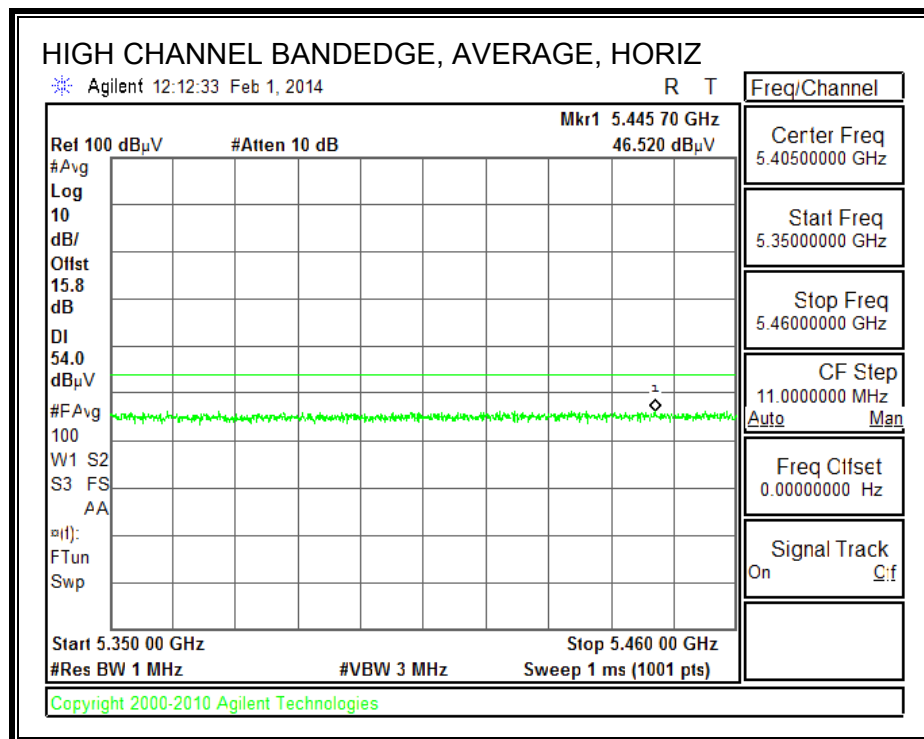
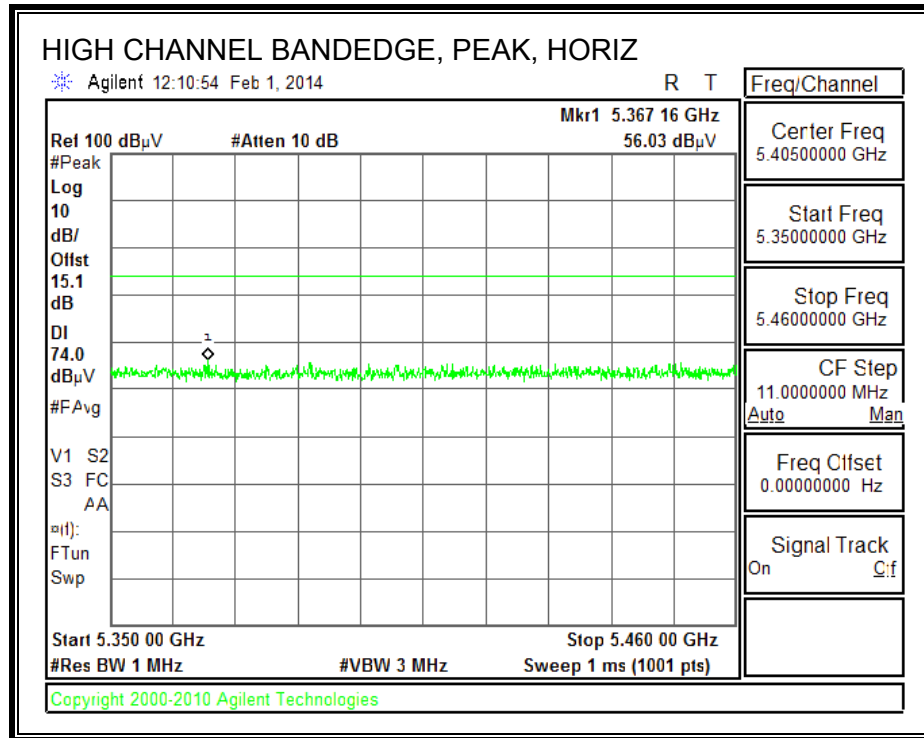
Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

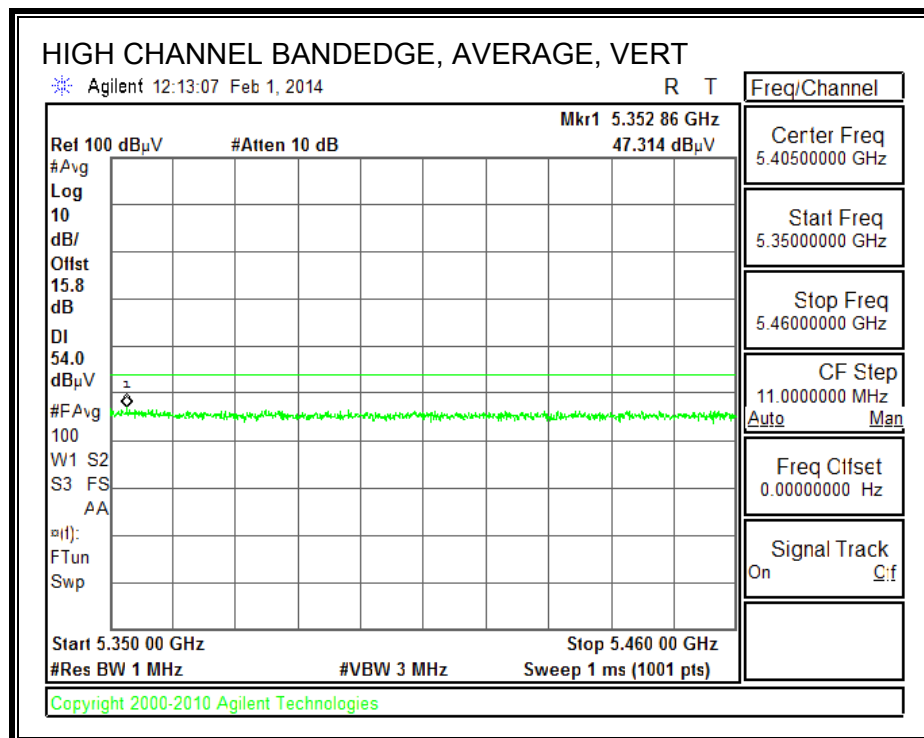
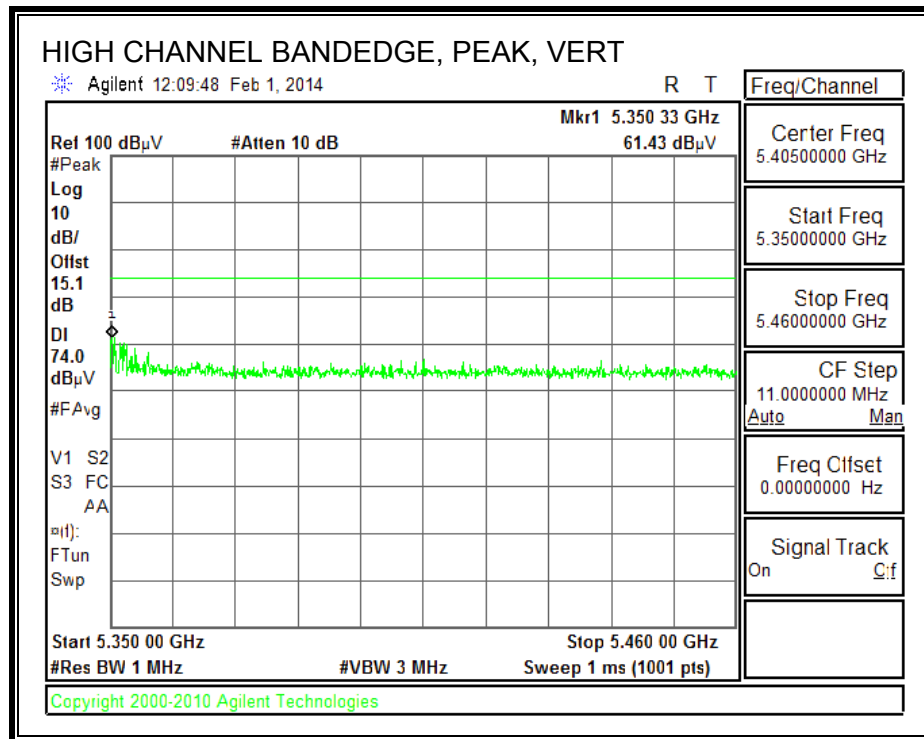
Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	1.163	40.28	Avg	28.9	-36.8	32.38	54	-21.62	-	-	0-360	200	V
4	1.311	39.19	Avg	30.2	-37.1	32.29	54	-21.71	-	-	0-360	200	V
1	3.547	42.1	Avg	33.1	-31.3	43.9	54	-10.1	-	-	0-360	100	H
5	3.547	44.55	Avg	33.1	-31.3	46.35	54	-7.65	-	-	0-360	200	V
2	4.877	36.58	Avg	34	-28.7	41.88	54	-12.12	-	-	0-360	200	H
6	4.877	35.51	Avg	34	-28.7	40.81	54	-13.19	-	-	0-360	200	V
10	6.622	30.59	Avg	35.5	-25.9	40.19	54	-13.81	-	-	0-360	100	V
7	6.632	30.75	Avg	35.5	-25.8	40.45	54	-13.55	-	-	0-360	200	H
8	10.64	34.96	Avg	37.8	-23	49.76	54	-4.24	-	-	0-360	200	H
11	10.645	35.53	Avg	37.8	-22.9	50.43	54	-3.57	-	-	0-360	201	V
9	15.526	29.58	Avg	40.6	-21	49.18	54	-4.82	-	-	0-360	200	H
12	15.64	28.91	Avg	40.5	-20.5	48.91	54	-5.09	-	-	0-360	100	V

Avg - Video bandwidth < Resolution bandwidth

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Jan 2014 Rev 9.5 22 Jan 2014

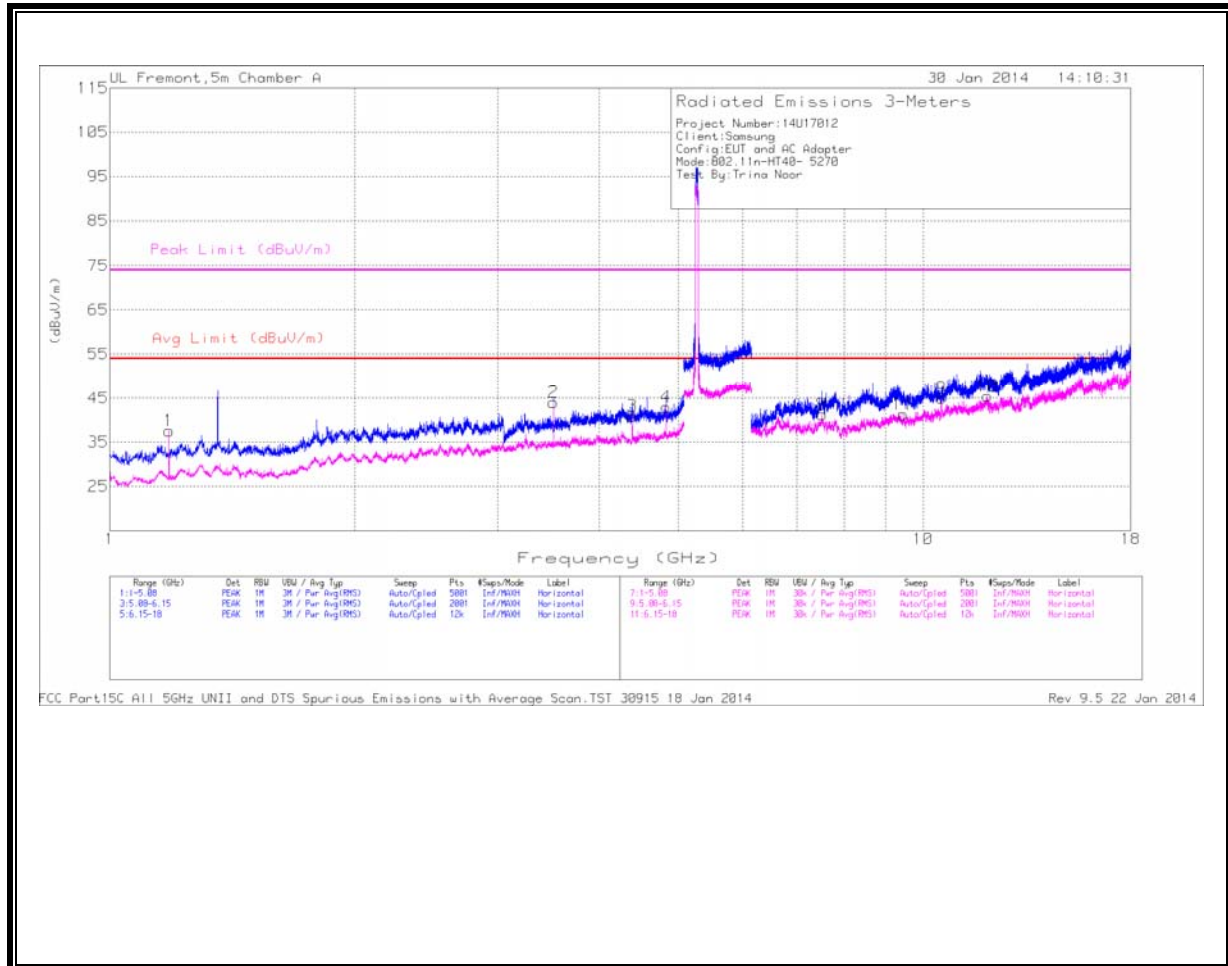
**12.2.5. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.3 GHz BAND
AUTHORIZED BANDEDGE (HIGH CHANNEL)**



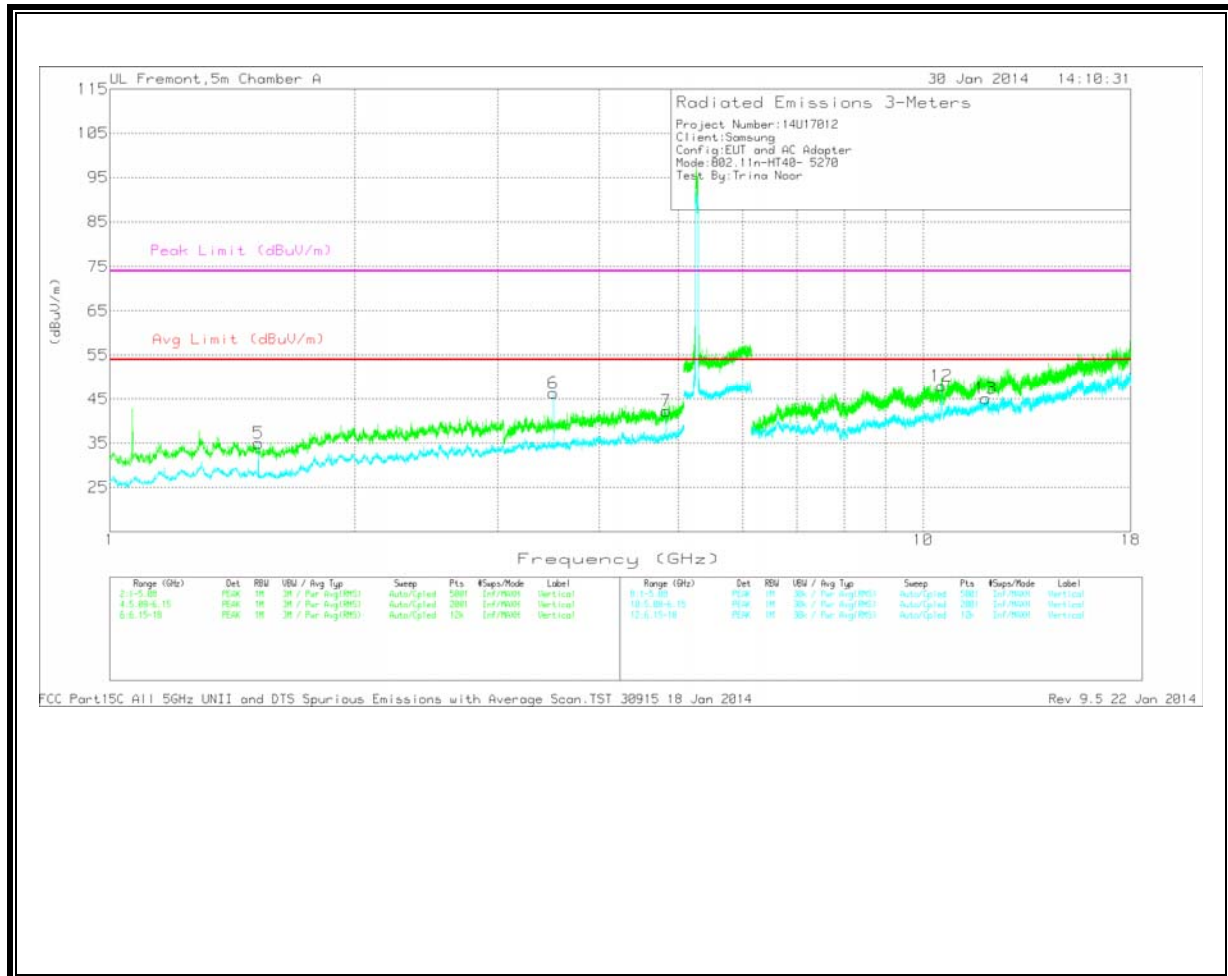


HARMONICS AND SPURIOUS EMISSIONS

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.



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

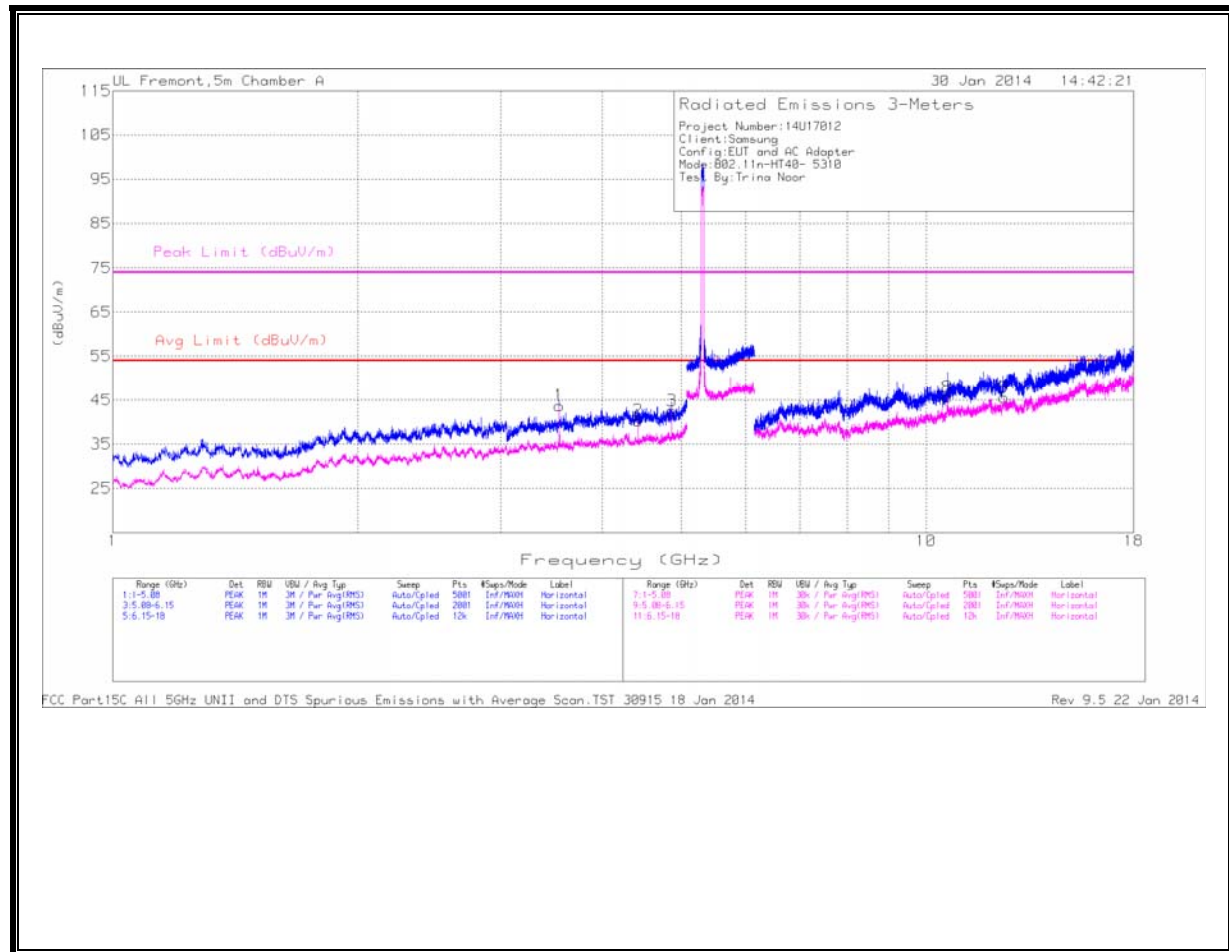
Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.183	45.18	Avg	29.2	-36.8	37.58	54	-16.42	-	-	0-360	200	H
5	1.524	41.77	Avg	28.8	-35.6	34.97	54	-19.03	-	-	0-360	101	V
2	3.513	43.11	Avg	33.1	-32.2	44.01	54	-9.99	-	-	0-360	200	H
6	3.513	45.43	Avg	33.1	-32.2	46.33	54	-7.67	-	-	0-360	201	V
3	4.391	37.19	Avg	33.6	-29.9	40.89	54	-13.11	-	-	0-360	200	H
4	4.831	38.53	Avg	33.9	-29.5	42.93	54	-11.07	-	-	0-360	200	H
7	4.831	37.86	Avg	33.9	-29.5	42.26	54	-11.74	-	-	0-360	201	V
8	7.513	30.55	Avg	35.4	-24.7	41.25	54	-12.75	-	-	0-360	200	H
11	9.453	29.59	Avg	36.5	-24.8	41.29	54	-12.71	-	-	0-360	101	H
12	10.535	33.08	Avg	37.6	-22.7	47.98	54	-6.02	-	-	0-360	201	V
9	10.541	30.23	Avg	37.6	-22.9	44.93	54	-9.07	-	-	0-360	200	H
13	11.944	28.5	Avg	38.7	-22.1	45.1	54	-8.9	-	-	0-360	201	V
10	11.997	28.64	Avg	38.8	-22	45.44	54	-8.56	-	-	0-360	101	H

Avg - Video bandwidth < Resolution bandwidth

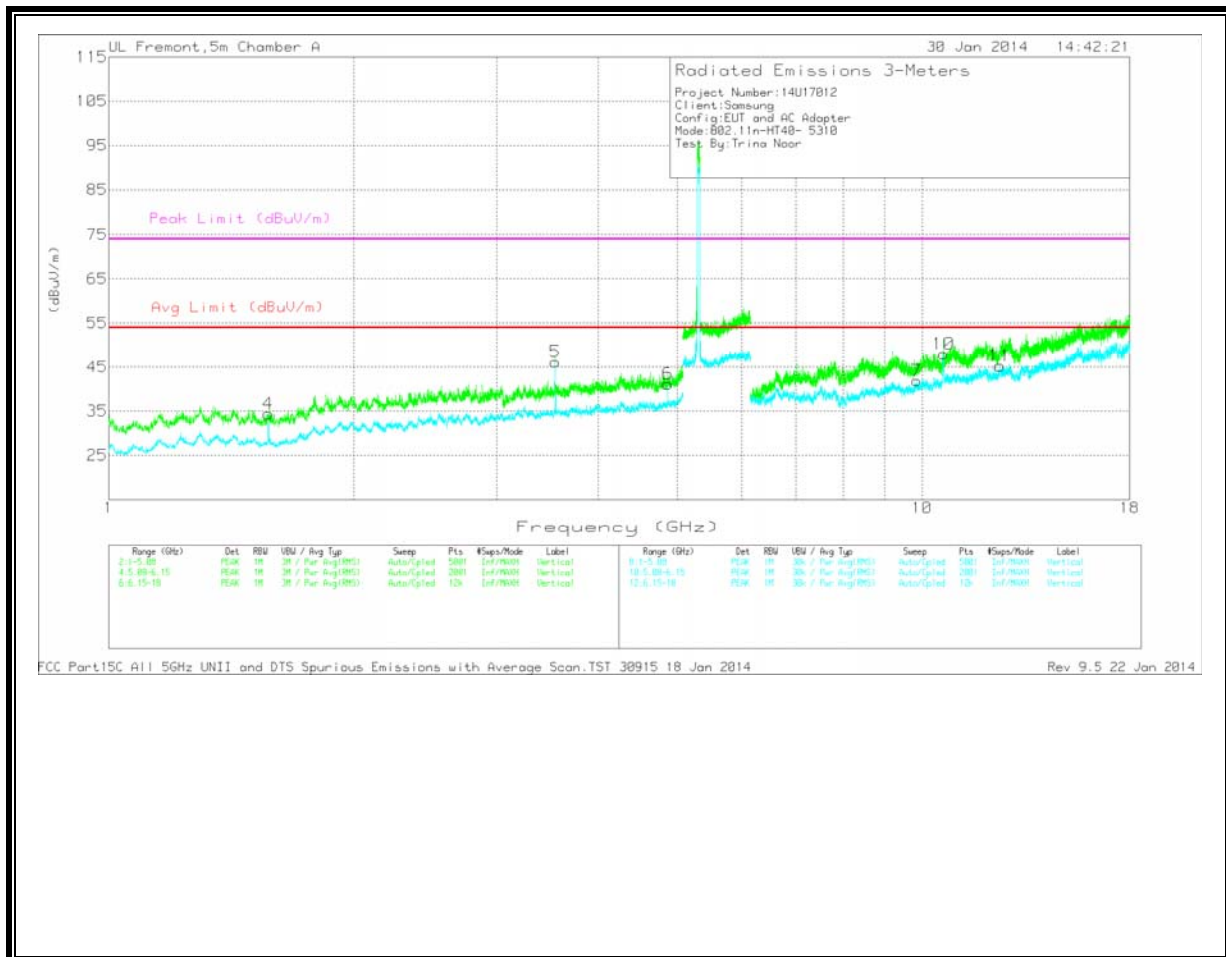
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18
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MID CHANNEL

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.



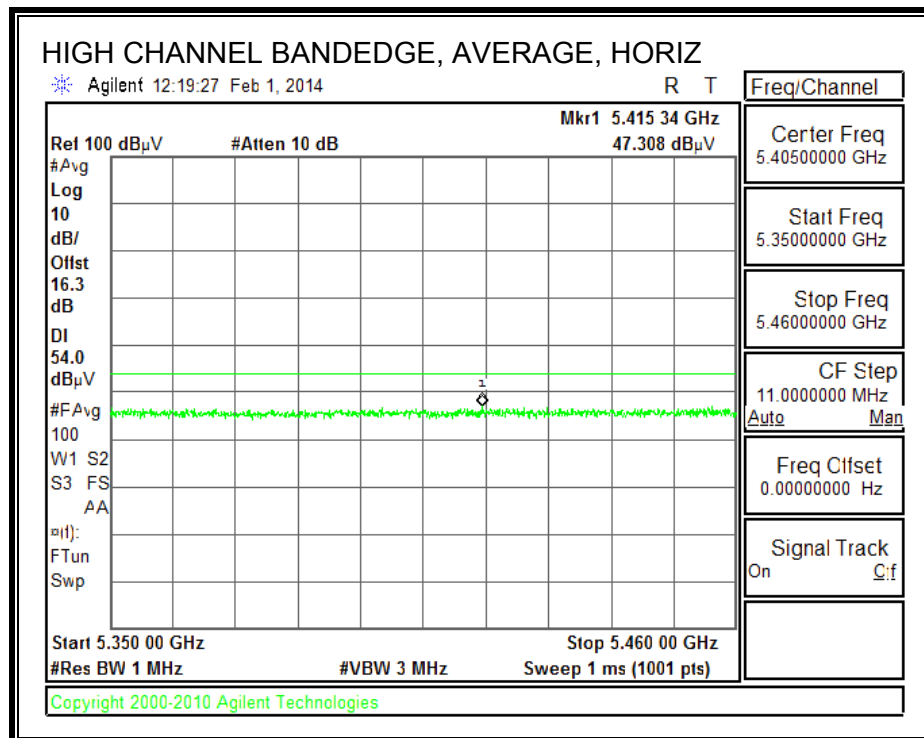
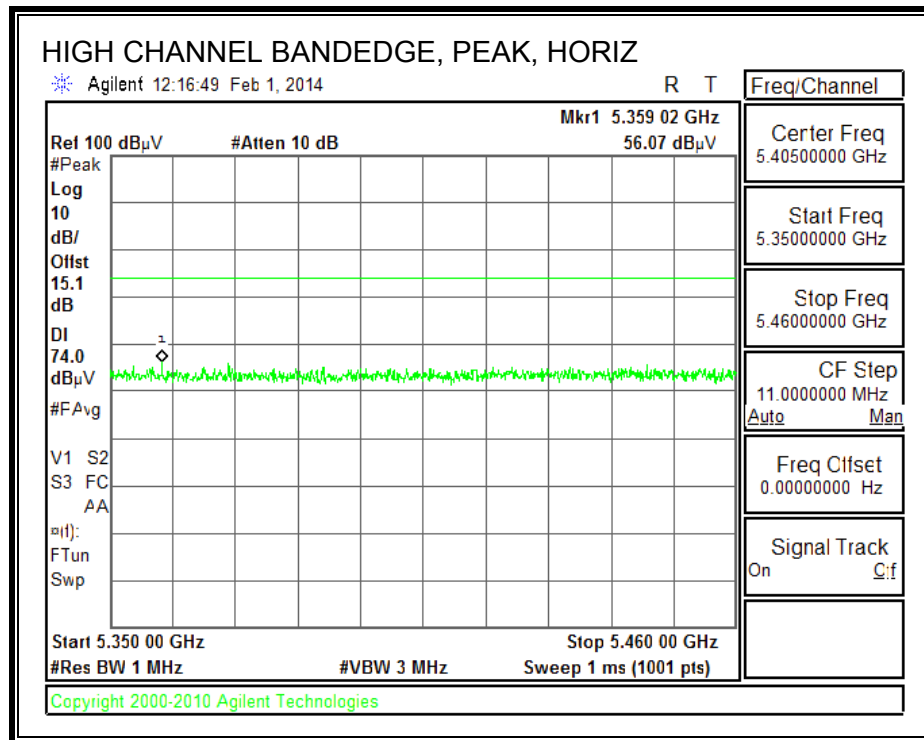
Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

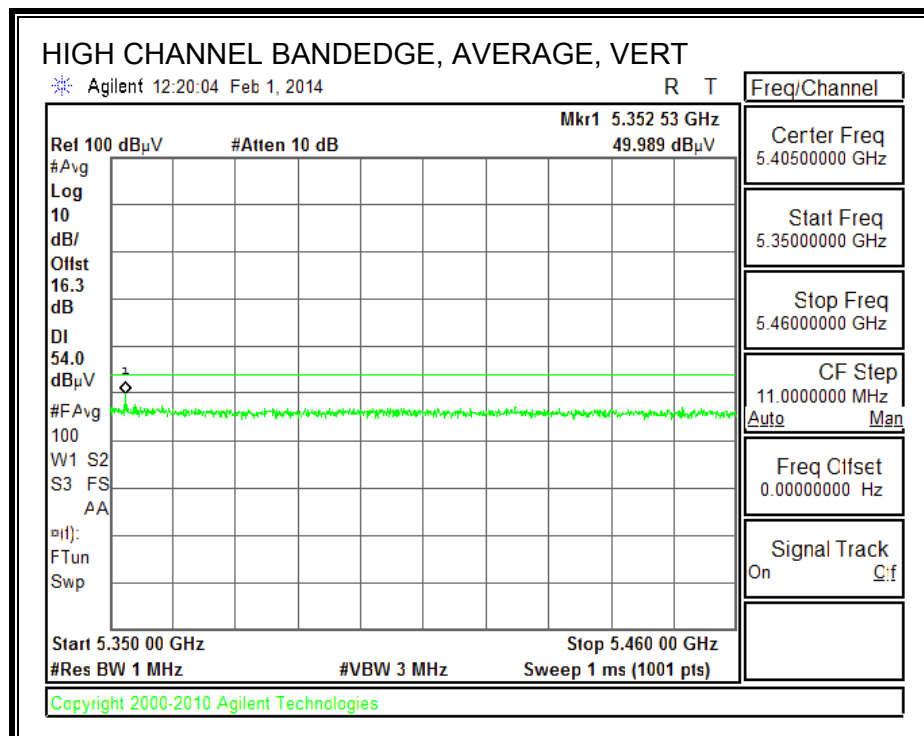
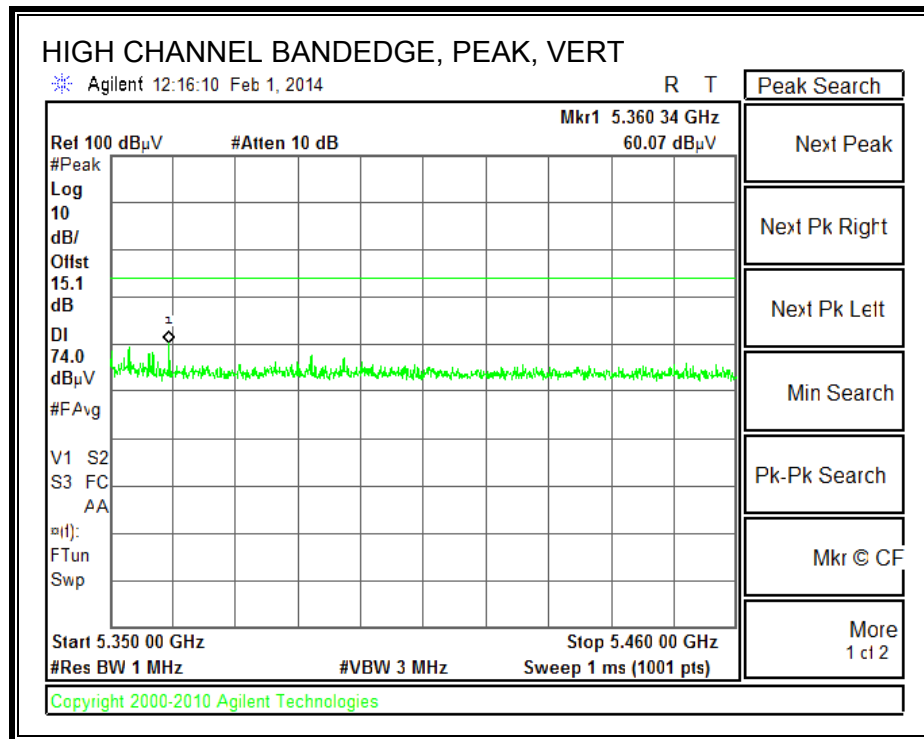
Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	1.571	41.7	Avg	28.5	-35.8	34.4	54	-19.6	-	-	0-360	200	V
1	3.54	42.3	Avg	33.1	-31.7	43.7	54	-10.3	-	-	0-360	200	H
5	3.54	44.75	Avg	33.1	-31.7	46.15	54	-7.85	-	-	0-360	200	V
2	4.425	37.06	Avg	33.6	-30.4	40.26	54	-13.74	-	-	0-360	200	H
3	4.868	37.92	Avg	34	-29.4	42.52	54	-11.48	-	-	0-360	200	H
6	4.868	36.56	Avg	34	-29.4	41.16	54	-12.84	-	-	0-360	200	V
7	9.854	27.86	Avg	37	-23	41.86	54	-12.14	-	-	0-360	200	V
8	10.626	29.75	Avg	37.8	-21.9	45.65	54	-8.35	-	-	0-360	200	H
10	10.627	32.11	Avg	37.8	-21.9	48.01	54	-5.99	-	-	0-360	200	V
9	12.464	28.27	Avg	39.1	-21.8	45.57	54	-8.43	-	-	0-360	200	H
11	12.468	28.06	Avg	39.1	-21.9	45.26	54	-8.74	-	-	0-360	100	V

Avg - Video bandwidth < Resolution bandwidth

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18
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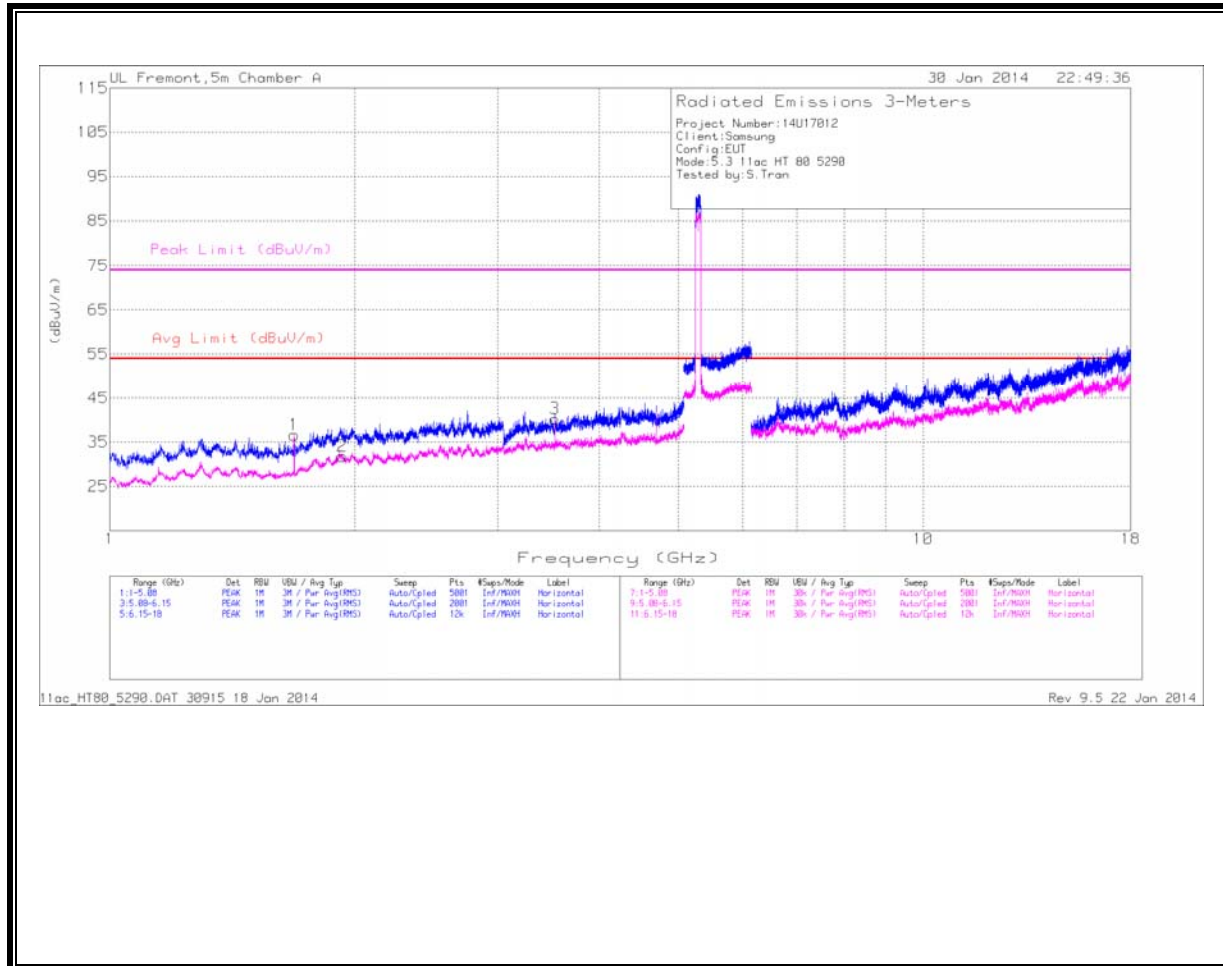
12.2.7. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.3 GHz BAND AUTHORIZED BANDEDGE (HIGH CHANNEL)



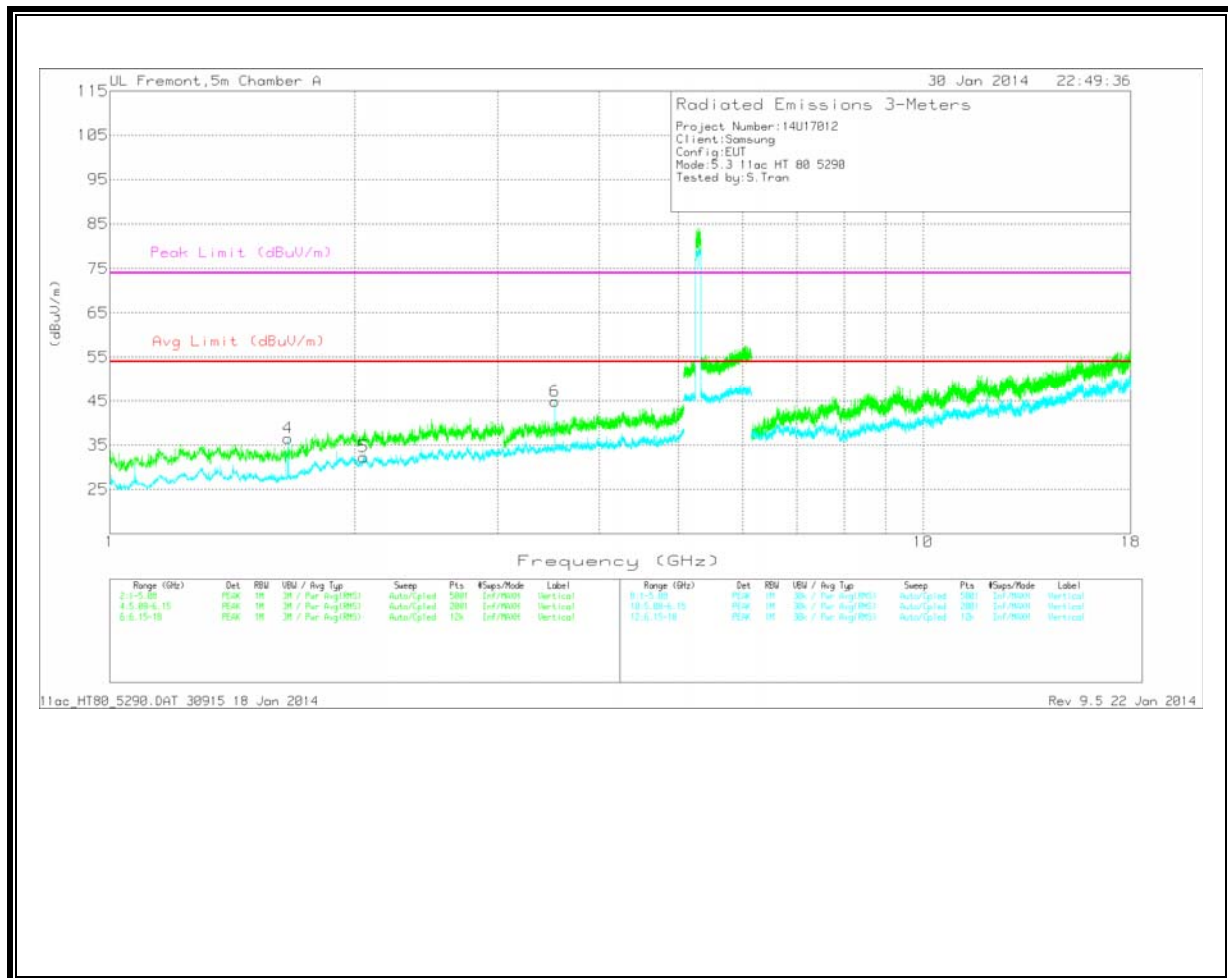


HARMONICS AND SPURIOUS EMISSIONS

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.



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

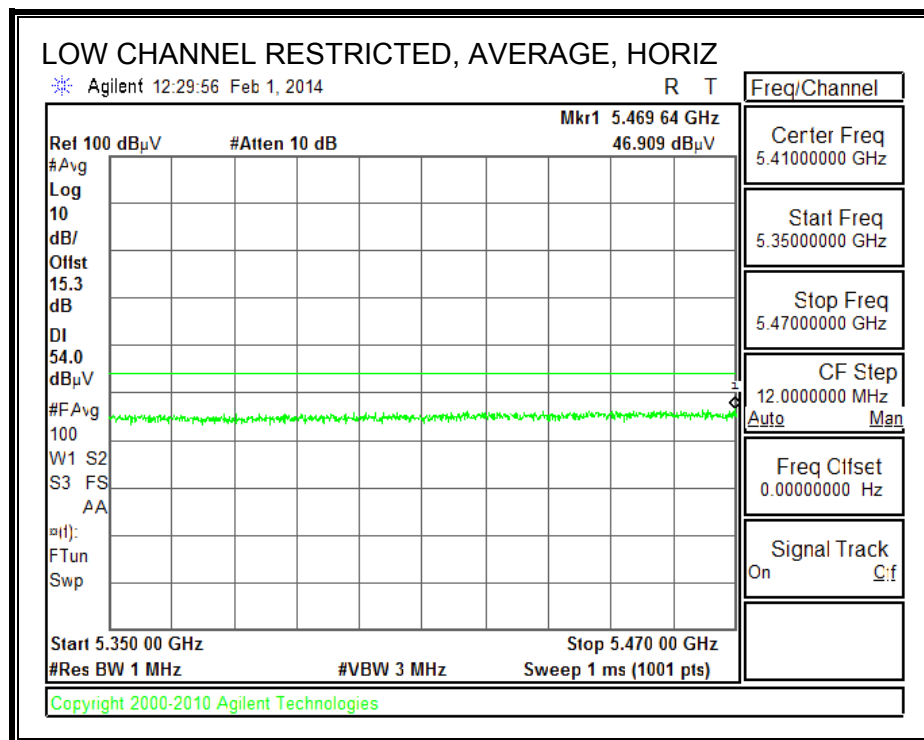
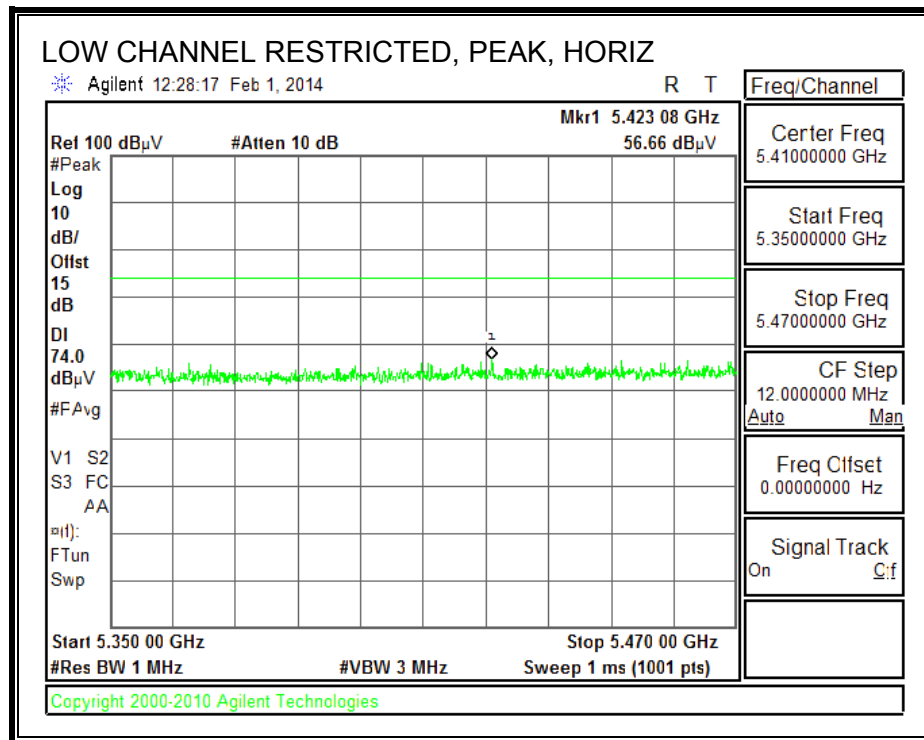
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	1.656	43.93	Avg	28.9	-36.3	36.53	54	-17.47	-	-	0-360	100	V
1	1.686	43.64	Avg	29.2	-36.2	36.64	54	-17.36	-	-	0-360	100	H
2	1.933	34.62	Avg	31.8	-34.6	31.82	54	-22.18	-	-	0-360	100	H
5	2.052	35.51	Avg	31.7	-34.9	32.31	54	-21.69	-	-	0-360	100	V
3	3.527	38.87	Avg	33.1	-31.7	40.27	54	-13.73	-	-	0-360	100	H
6	3.527	43.5	Avg	33.1	-31.7	44.9	54	-9.1	-	-	0-360	100	V

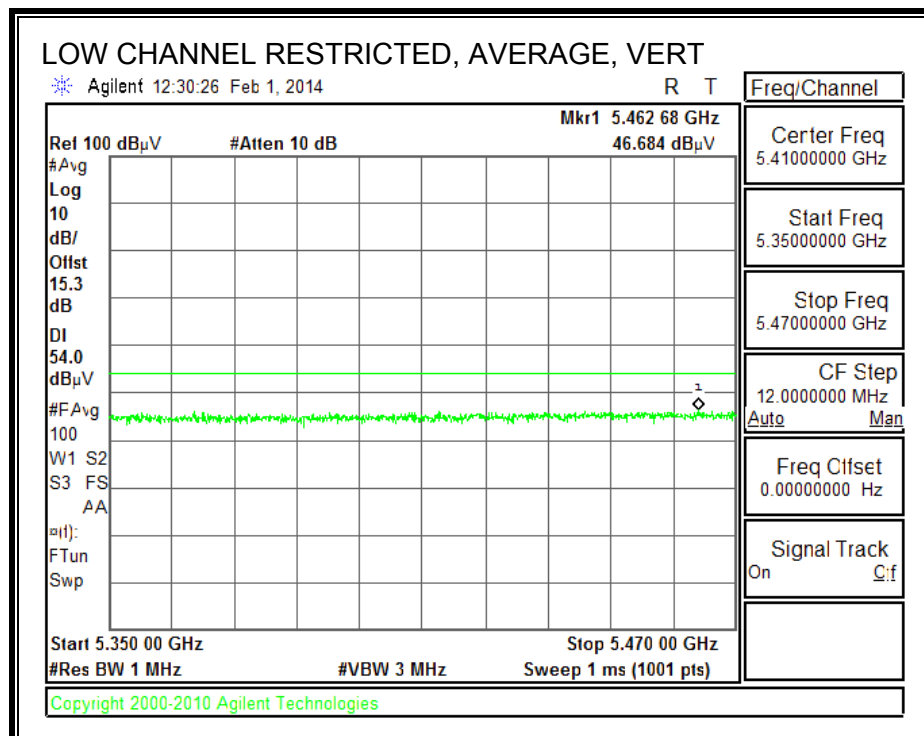
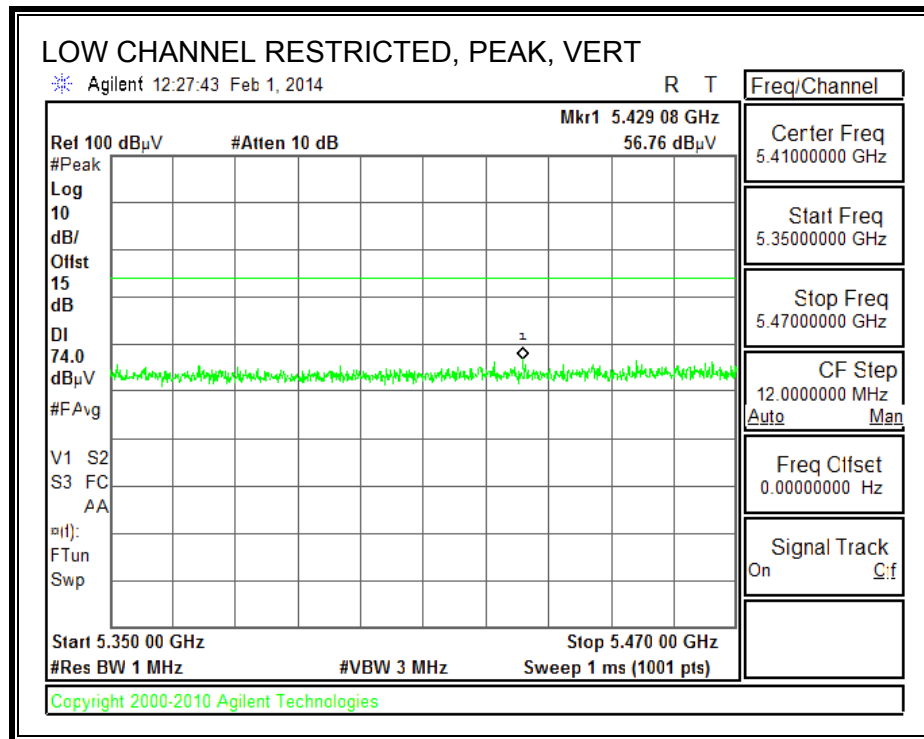
Avg - Video bandwidth < Resolution bandwidth

11ac_HT80_5290.DAT 30915 18 Jan 2014 Rev 9.5 22 Jan 2014

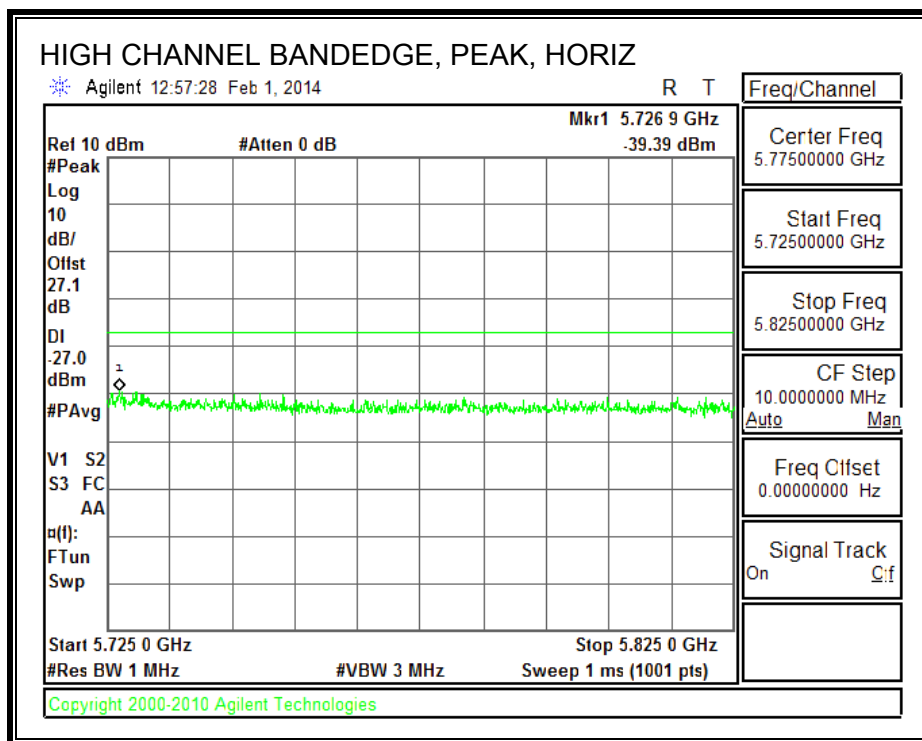
12.3. 5.5-5.6 GHz

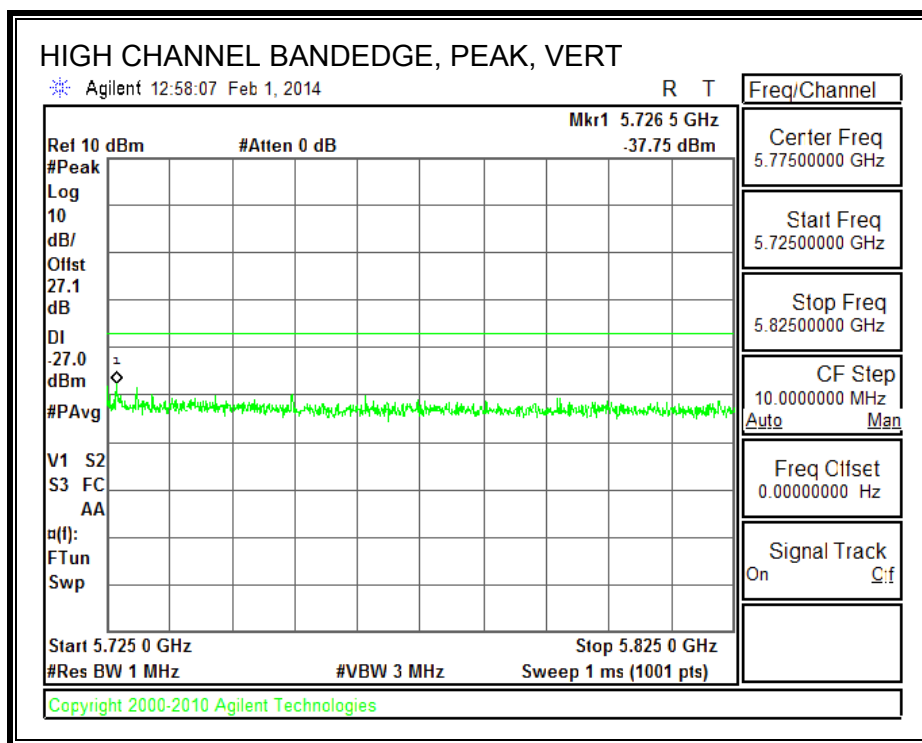
12.3.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.5 GHz BAND RESTRICTED BANDEDGE (LOW CHANNEL)





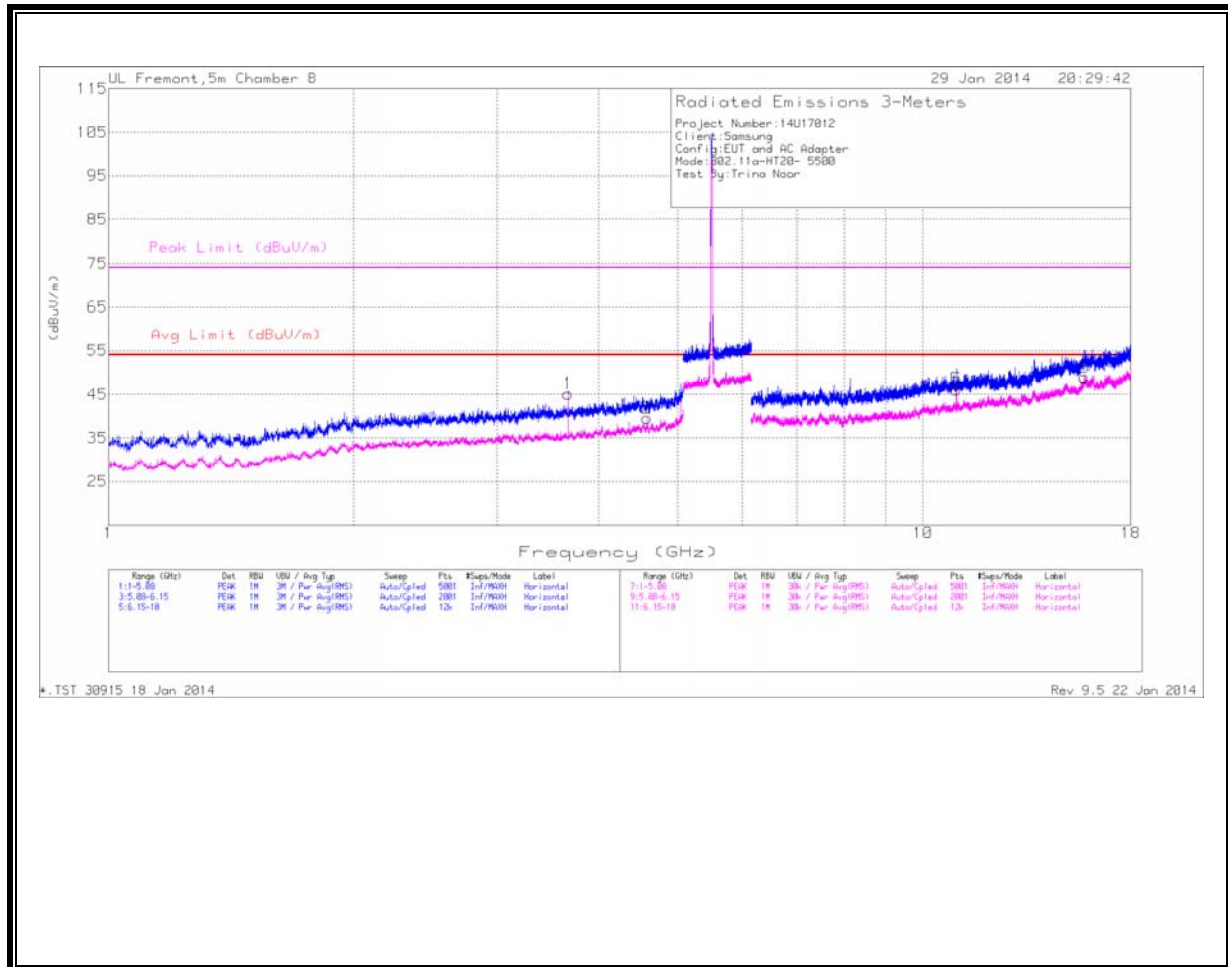
AUTHORIZED BANDEDGE (HIGH CHANNEL)



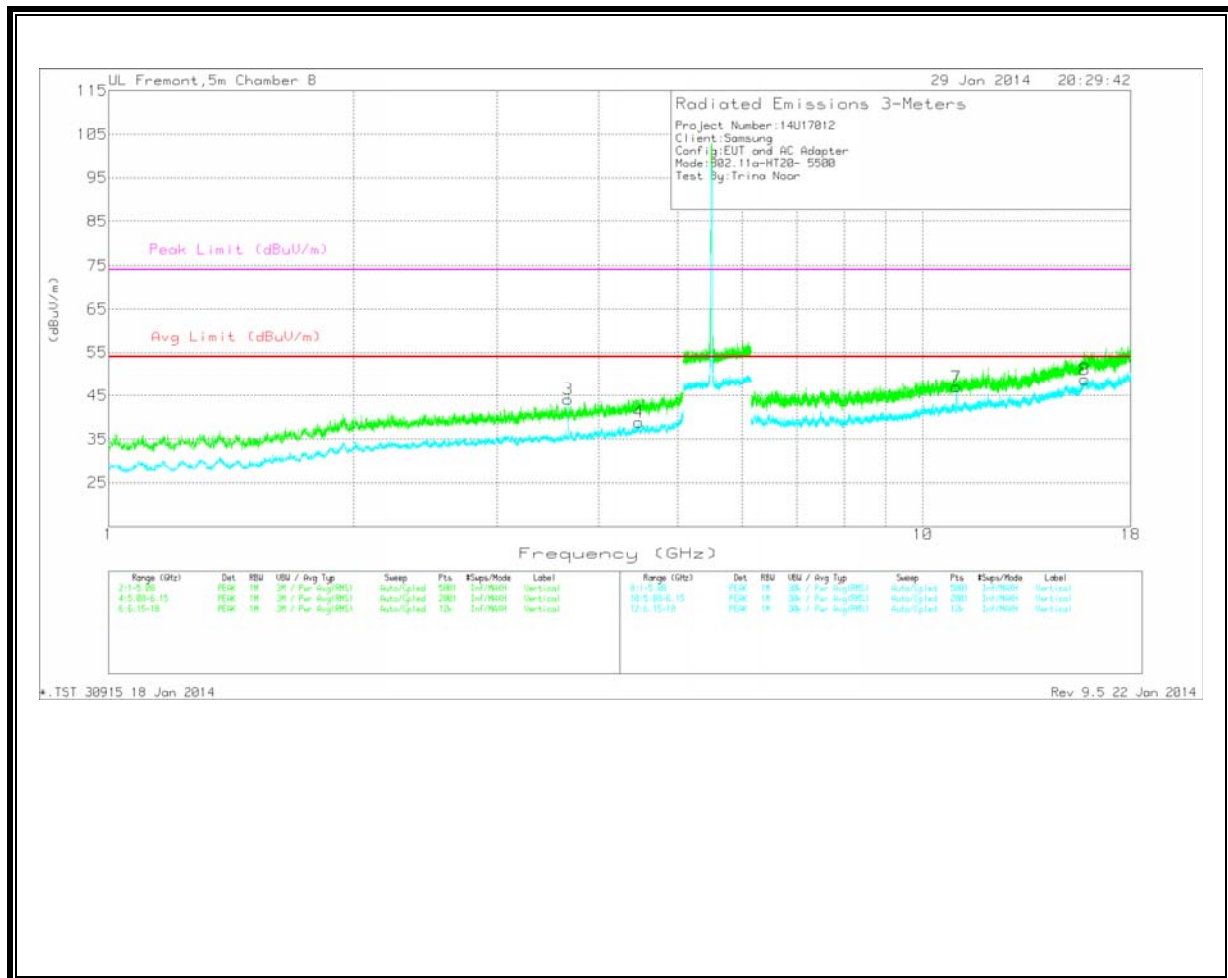


HARMONICS AND SPURIOUS EMISSIONS

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.



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

LOW CHANNEL DATA

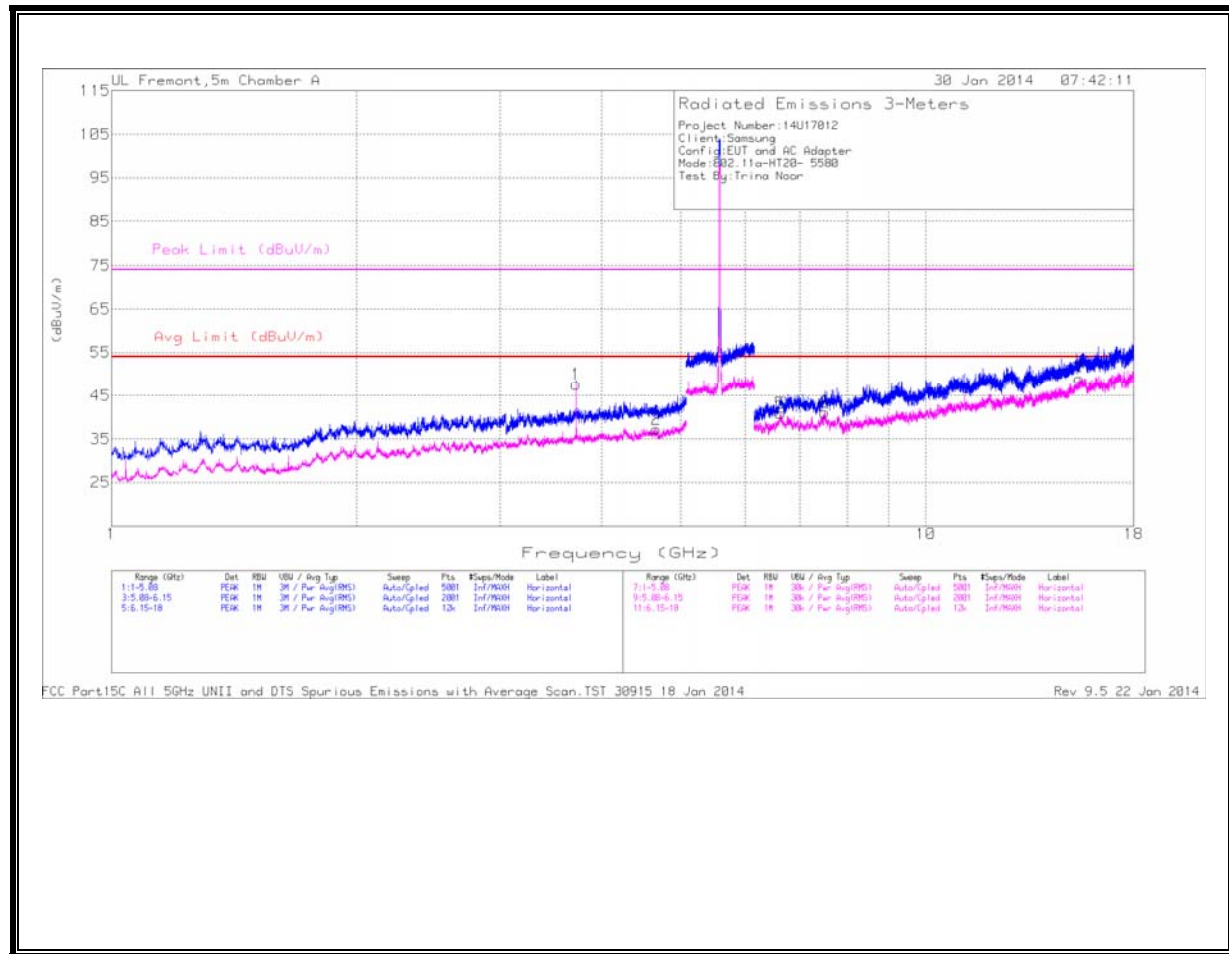
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T345 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.667	42.65	Avg	33.6	-31.1	45.15	54	-8.85	-	-	0-360	202	H
3	3.667	41.63	Avg	33.6	-31.1	44.13	54	-9.87	-	-	0-360	99	V
4	4.478	34.08	Avg	34.5	-29.7	38.88	54	-15.12	-	-	0-360	202	V
2	4.583	35.18	Avg	34.6	-30.2	39.58	54	-14.42	-	-	0-360	202	H
5	10.996	31.11	Avg	38.3	-23.3	46.11	54	-7.89	-	-	0-360	202	H
7	10.998	32.02	Avg	38.3	-23.3	47.02	54	-6.98	-	-	0-360	99	V
6	15.784	27.8	Avg	41.3	-20.2	48.9	54	-5.1	-	-	0-360	202	H
8	15.809	27.39	Avg	41.4	-20	48.79	54	-5.21	-	-	0-360	99	V

Avg - Video bandwidth < Resolution bandwidth

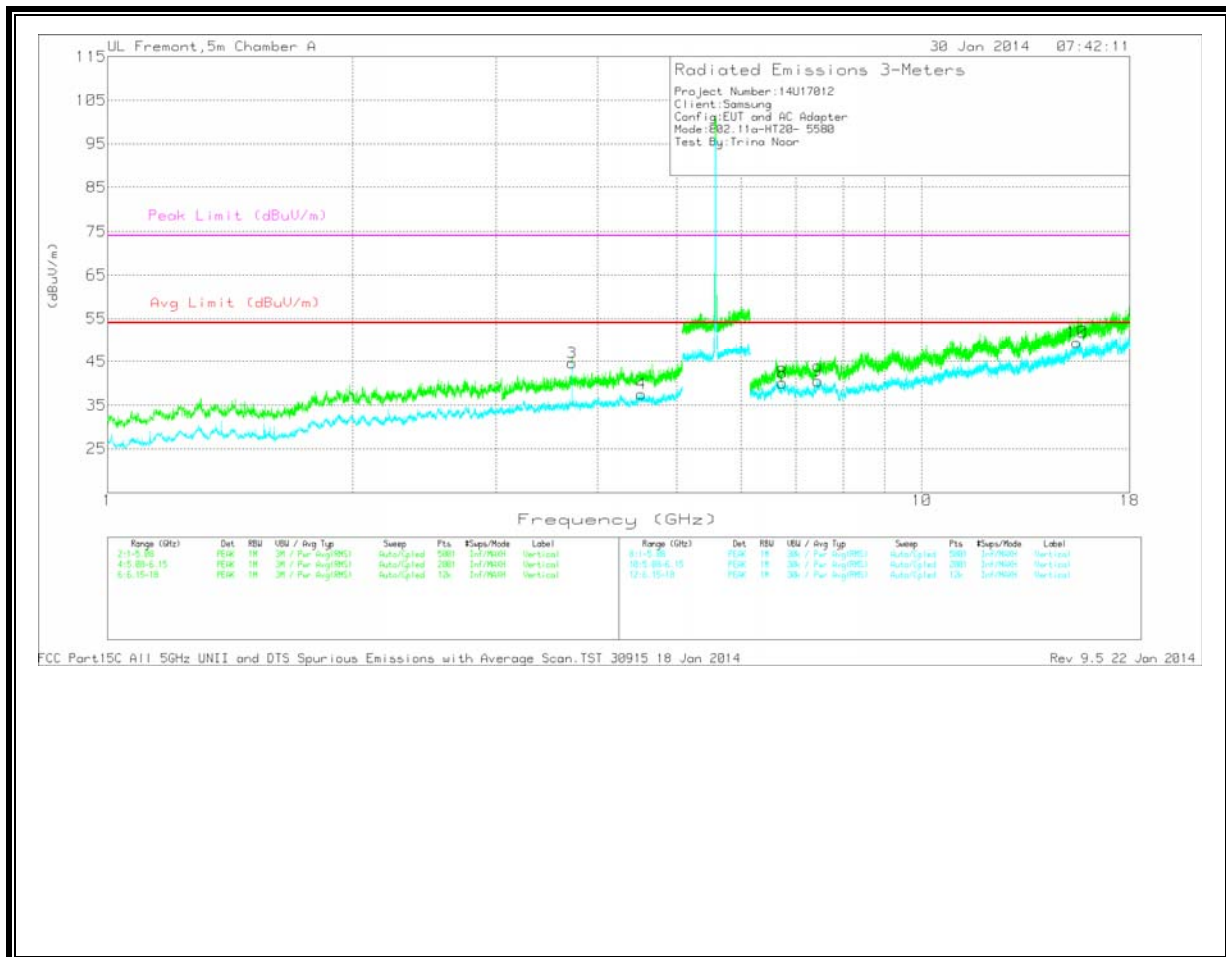
*.TST 30915 18 Jan 2014 Rev 9.5 22 Jan 2014

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.



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

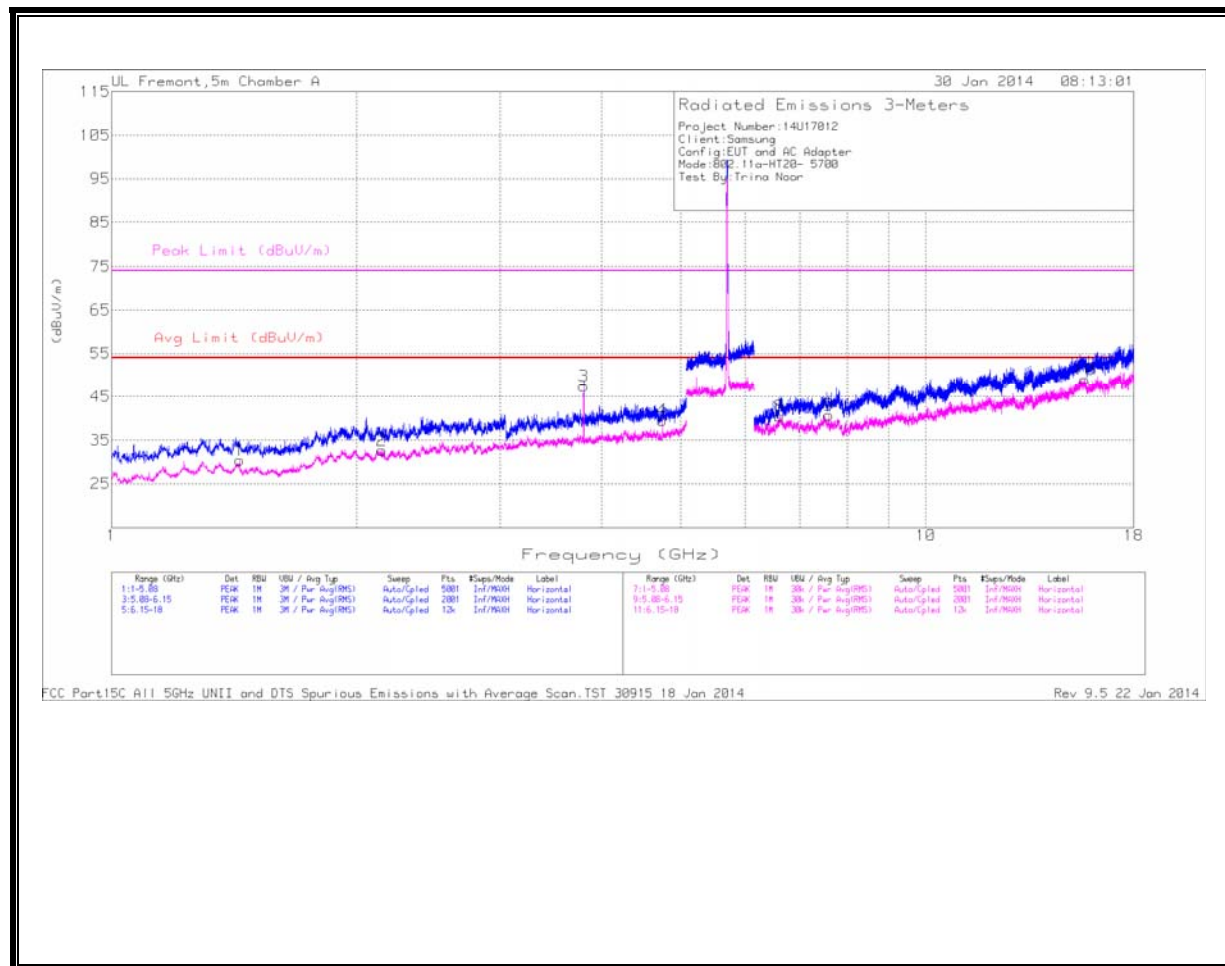
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.72	44.66	Avg	33.3	-30.3	47.66	54	-6.34	-	-	0-360	200	H
3	3.72	41.67	Avg	33.3	-30.3	44.67	54	-9.33	-	-	0-360	201	V
4	4.523	33.47	Avg	33.8	-29.7	37.57	54	-16.43	-	-	0-360	100	V
2	4.668	33.27	Avg	33.9	-29.9	37.27	54	-16.73	-	-	0-360	200	H
5	6.632	31.16	Avg	35.5	-25.8	40.86	54	-13.14	-	-	0-360	100	H
8	6.743	32.54	Avg	35.4	-27.8	40.14	54	-13.86	-	-	0-360	200	V
9	7.449	31.66	Avg	35.4	-26.5	40.56	54	-13.44	-	-	0-360	200	V
6	7.515	30.4	Avg	35.4	-24.7	41.1	54	-12.9	-	-	0-360	100	H
7	15.434	29.86	Avg	40.7	-21.6	48.96	54	-5.04	-	-	0-360	200	H
10	15.501	30.55	Avg	40.6	-21.6	49.55	54	-4.45	-	-	0-360	101	V

Avg - Video bandwidth < Resolution bandwidth

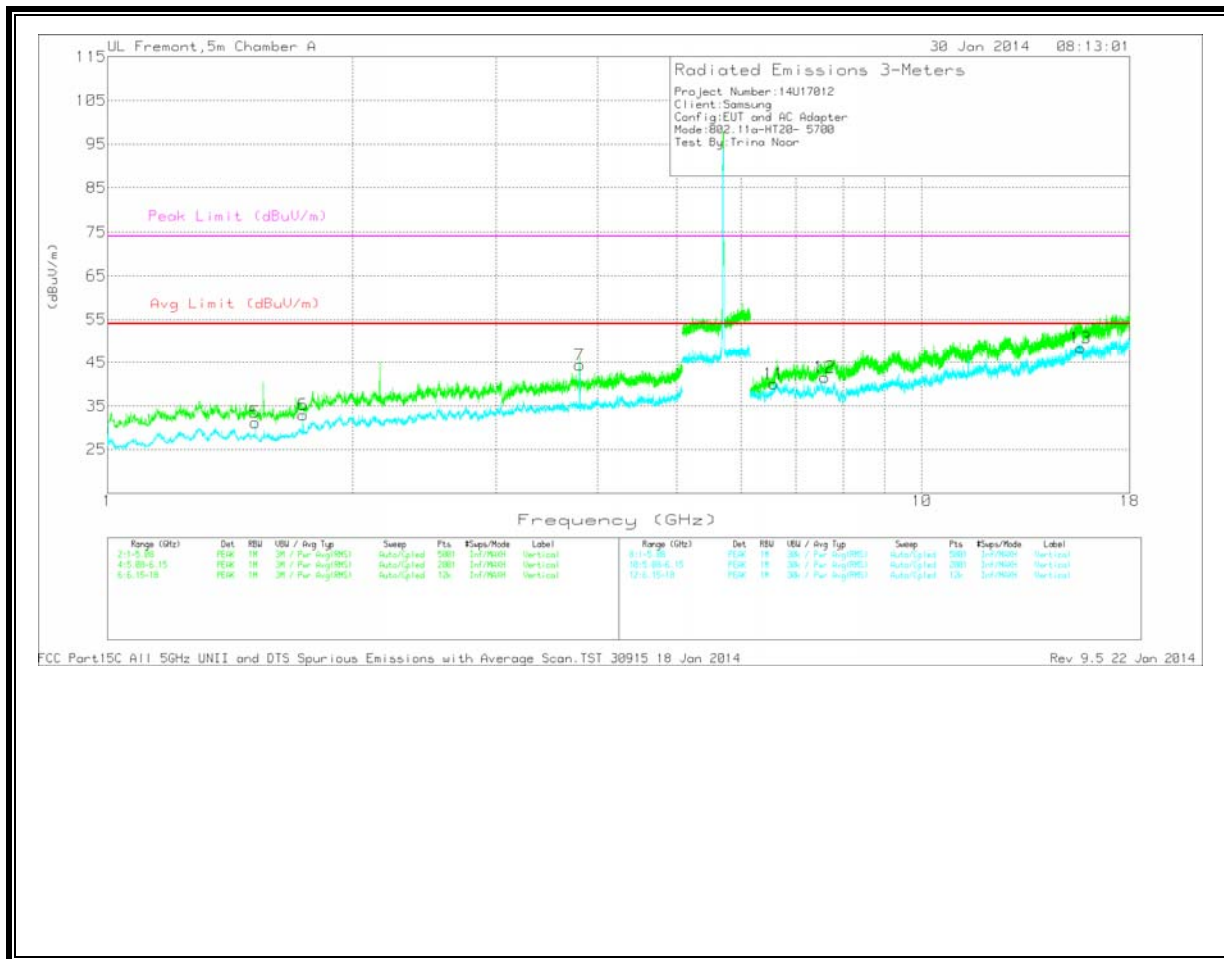
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18
Jan 2014 Rev 9.5 22 Jan 2014

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.



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

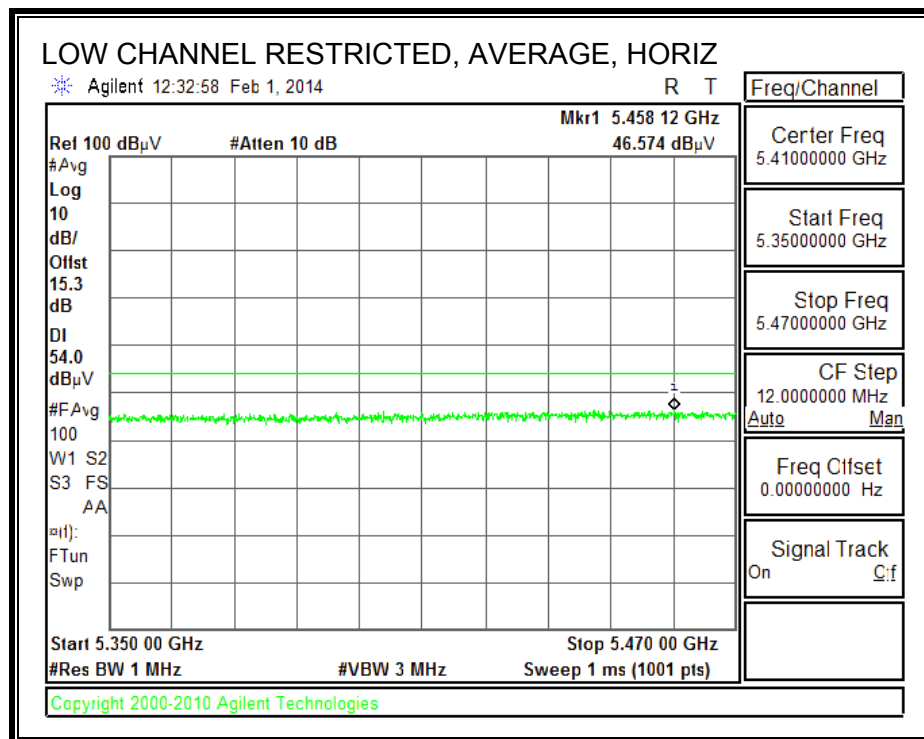
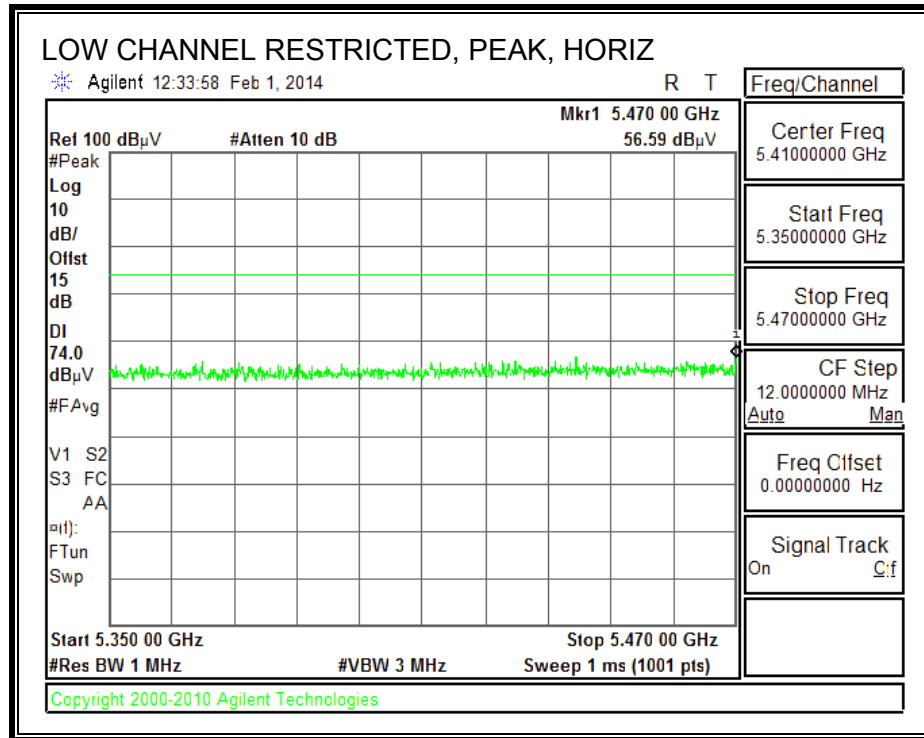
Marker	Frequenc y (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filtr/Pad (dB)	Correcte d Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.437	36.8	Avg	29.5	-35.9	30.4	54	-23.6	-	-	0-360	100	H
5	1.518	38.01	Avg	28.8	-35.6	31.21	54	-22.79	-	-	0-360	101	V
6	1.738	38.46	Avg	29.8	-35.3	32.96	54	-21.04	-	-	0-360	101	V
2	2.147	34.87	Avg	31.6	-33.8	32.67	54	-21.33	-	-	0-360	200	H
3	3.8	45.28	Avg	33.5	-31.3	47.48	54	-6.52	-	-	0-360	200	H
7	3.801	42.35	Avg	33.5	-31.4	44.45	54	-9.55	-	-	0-360	200	V
4	4.75	35.77	Avg	33.9	-30.1	39.57	54	-14.43	-	-	0-360	200	H
11	6.582	31.26	Avg	35.5	-26.7	40.06	54	-13.94	-	-	0-360	100	V
8	6.619	30.81	Avg	35.5	-25.8	40.51	54	-13.49	-	-	0-360	200	H
9	7.6	31.61	Avg	35.5	-26.4	40.71	54	-13.29	-	-	0-360	200	H
12	7.6	32.47	Avg	35.5	-26.4	41.57	54	-12.43	-	-	0-360	201	V
13	15.671	28.56	Avg	40.4	-20.5	48.46	54	-5.54	-	-	0-360	201	V
10	15.673	29.19	Avg	40.4	-20.6	48.99	54	-5.01	-	-	0-360	100	H

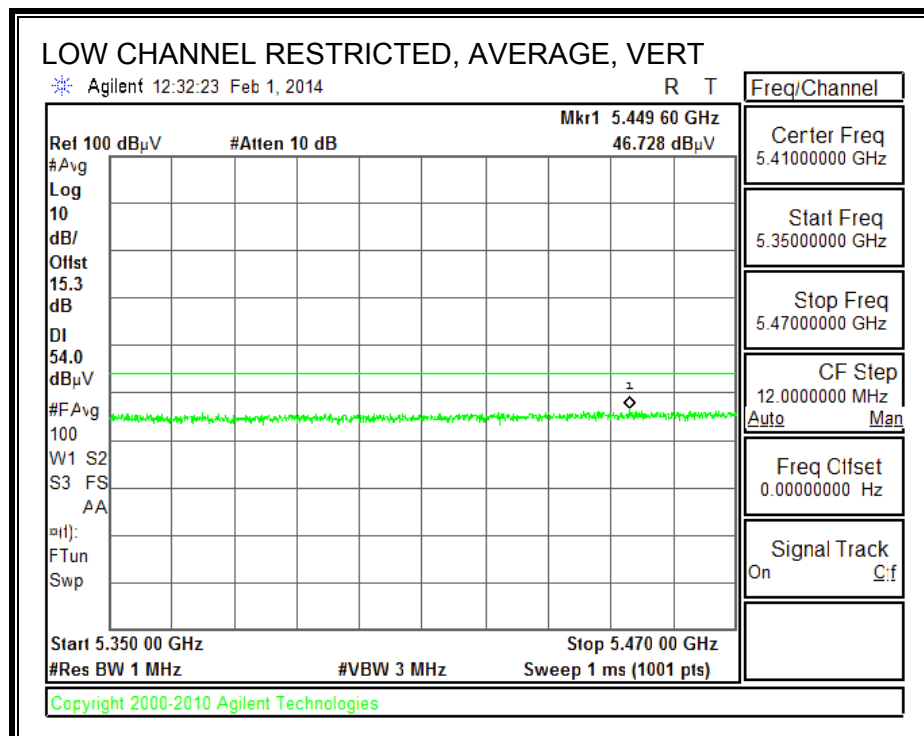
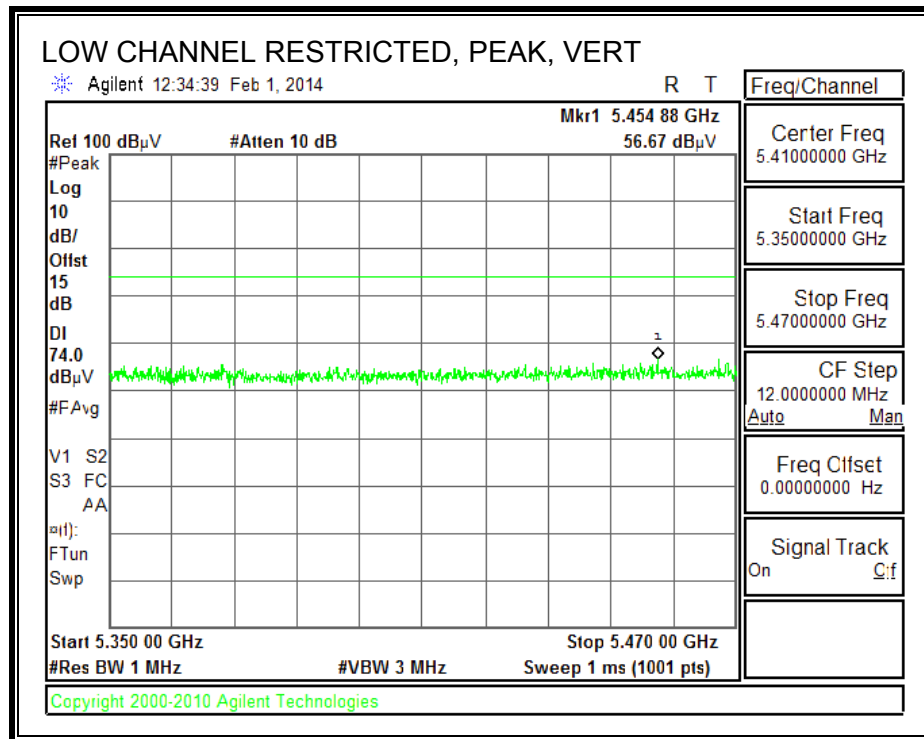
Avg - Video bandwidth < Resolution bandwidth

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18

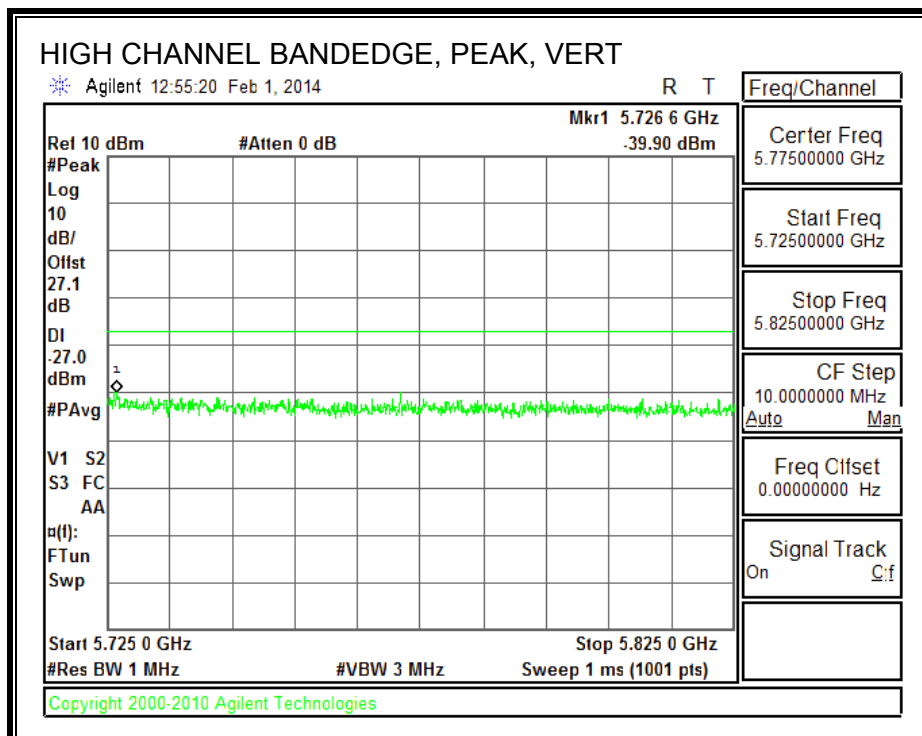
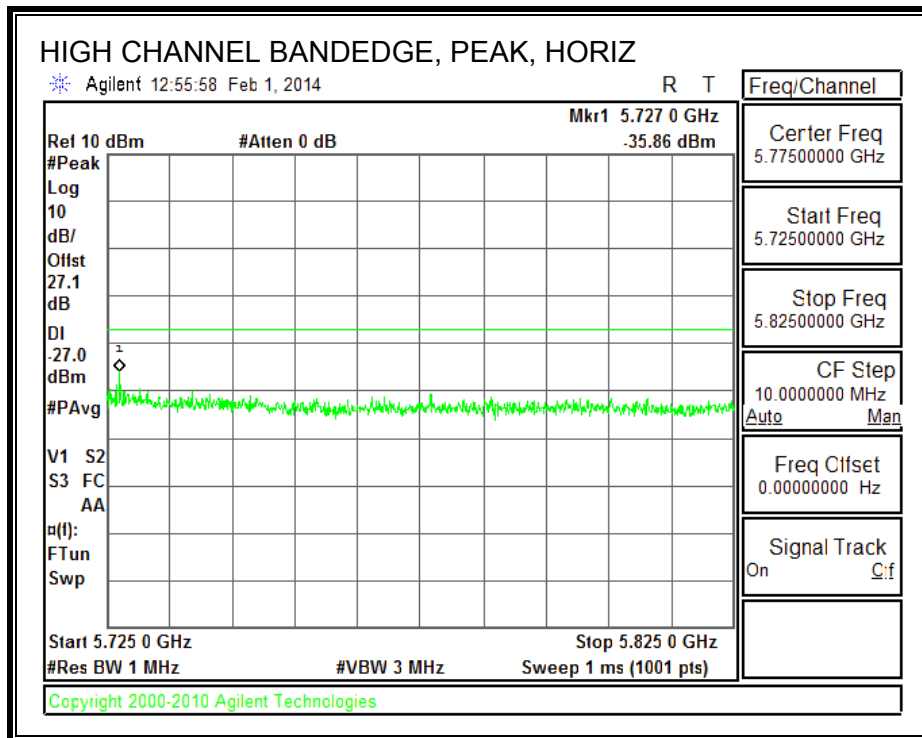
Jan 2014 Rev 9.5 22 Jan 2014

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



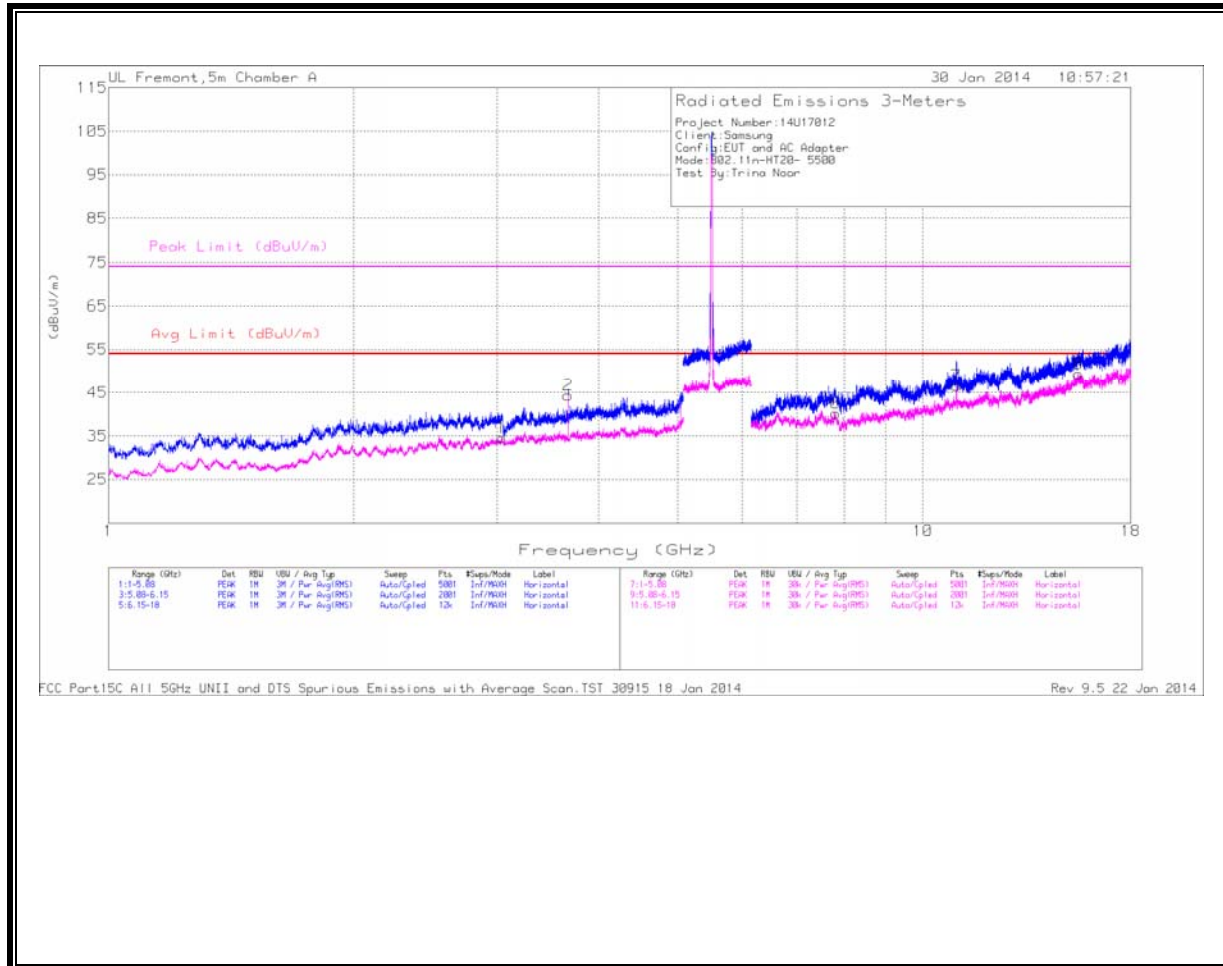


AUTHORIZED BANDEDGE (HIGH CHANNEL)

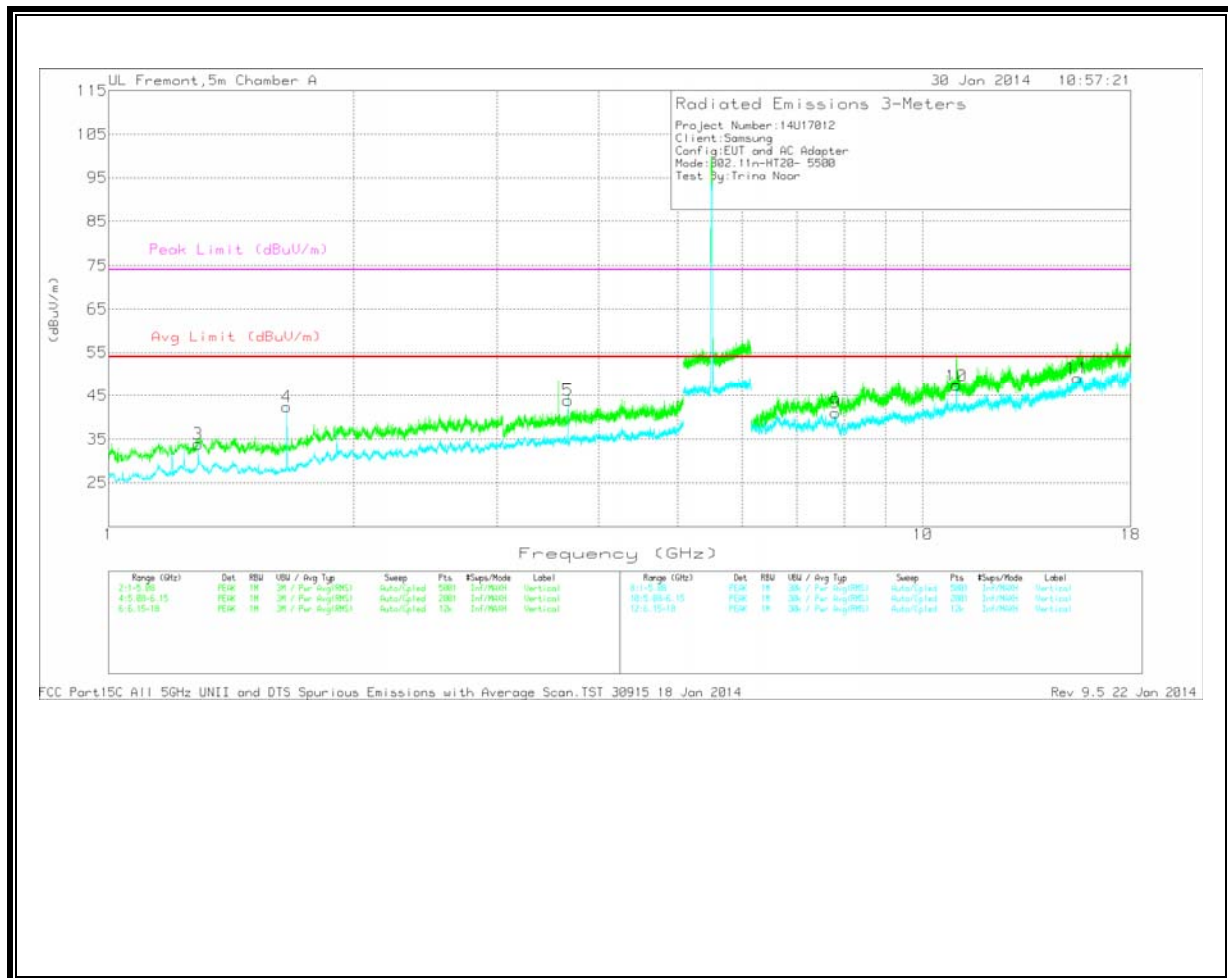


HARMONICS AND SPURIOUS EMISSIONS

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.



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

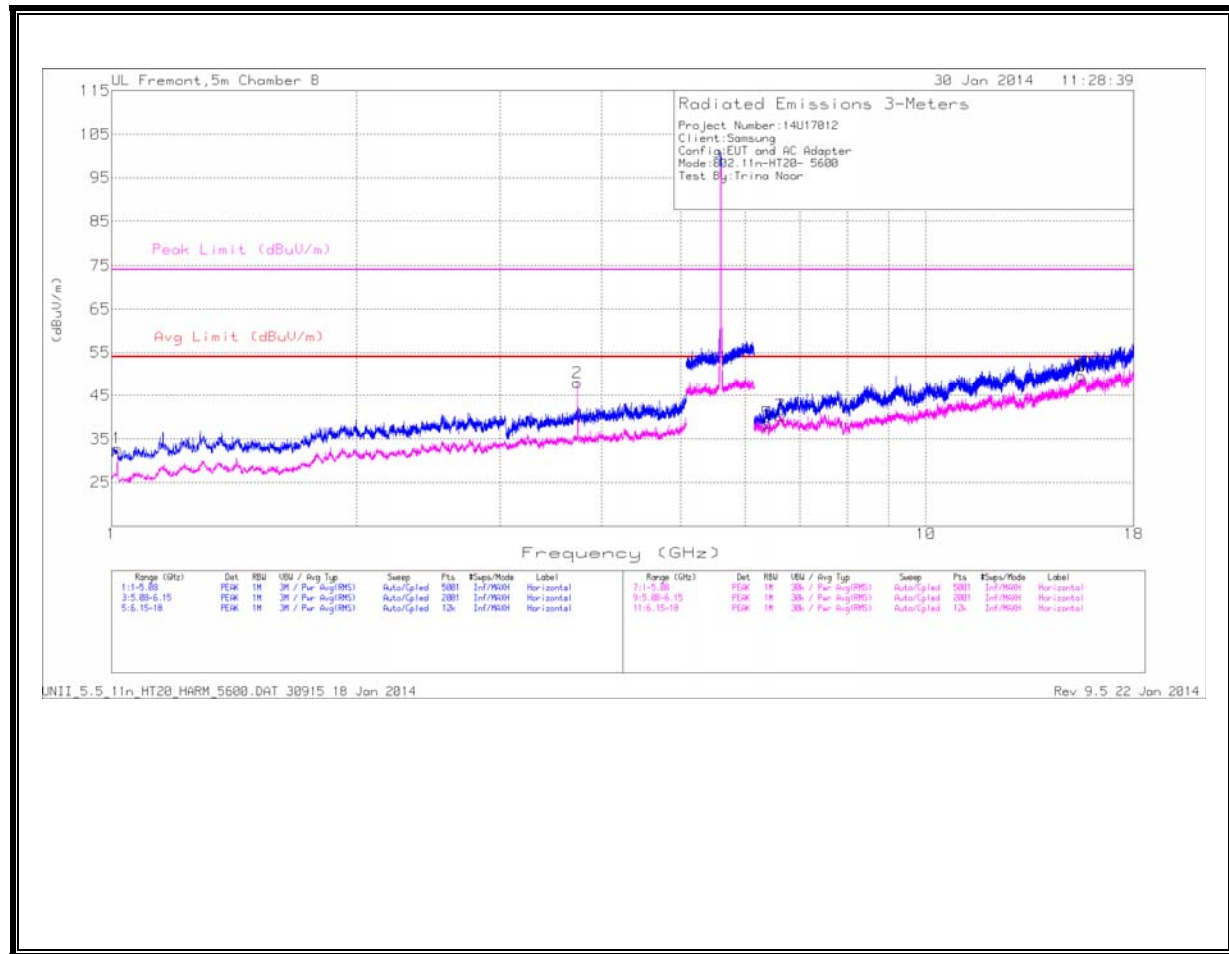
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	1.288	40.54	Avg	30.2	-36.9	33.84	54	-20.16	-	-	0-360	100	V
4	1.655	49.78	Avg	28.9	-36.3	42.38	54	-11.62	-	-	0-360	100	V
1	3.042	33.41	Avg	32.7	-31.5	34.61	54	-19.39	-	-	0-360	101	H
2	3.667	43.41	Avg	33.2	-32.2	44.41	54	-9.59	-	-	0-360	200	H
5	3.667	42.88	Avg	33.2	-32.2	43.88	54	-10.12	-	-	0-360	200	V
9	7.81	30.15	Avg	35.5	-24.6	41.05	54	-12.95	-	-	0-360	200	V
6	7.819	29.01	Avg	35.5	-24.3	40.21	54	-13.79	-	-	0-360	200	H
7	10.998	31.43	Avg	37.8	-22.6	46.63	54	-7.37	-	-	0-360	200	H
10	10.998	32.15	Avg	37.8	-22.6	47.35	54	-6.65	-	-	0-360	200	V
11	15.483	30.04	Avg	40.6	-21.5	49.14	54	-4.86	-	-	0-360	101	V
8	15.524	29.9	Avg	40.6	-21.1	49.4	54	-4.6	-	-	0-360	101	H

Avg - Video bandwidth < Resolution bandwidth

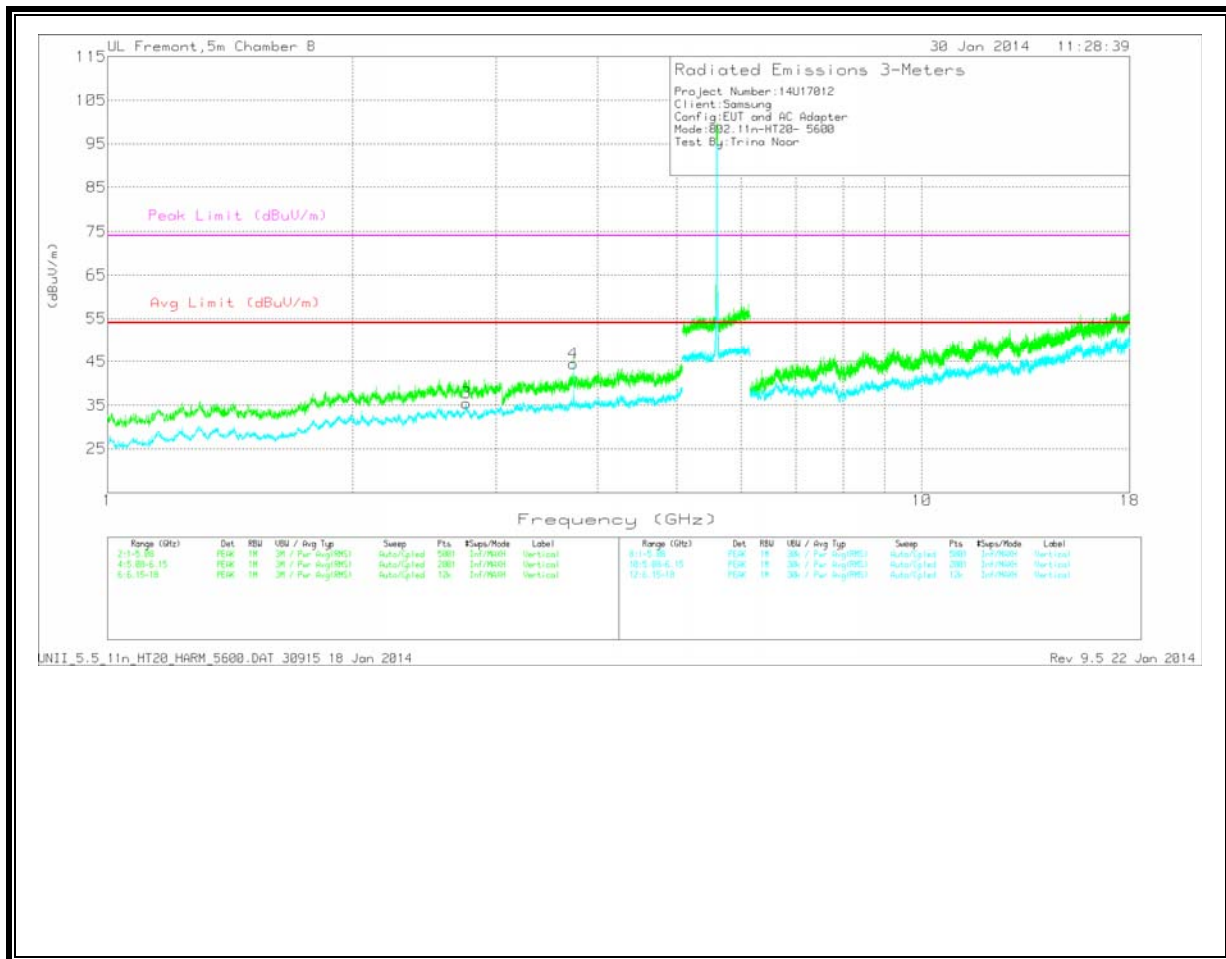
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18
Jan 2014 Rev 9.5 22 Jan 2014

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.



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

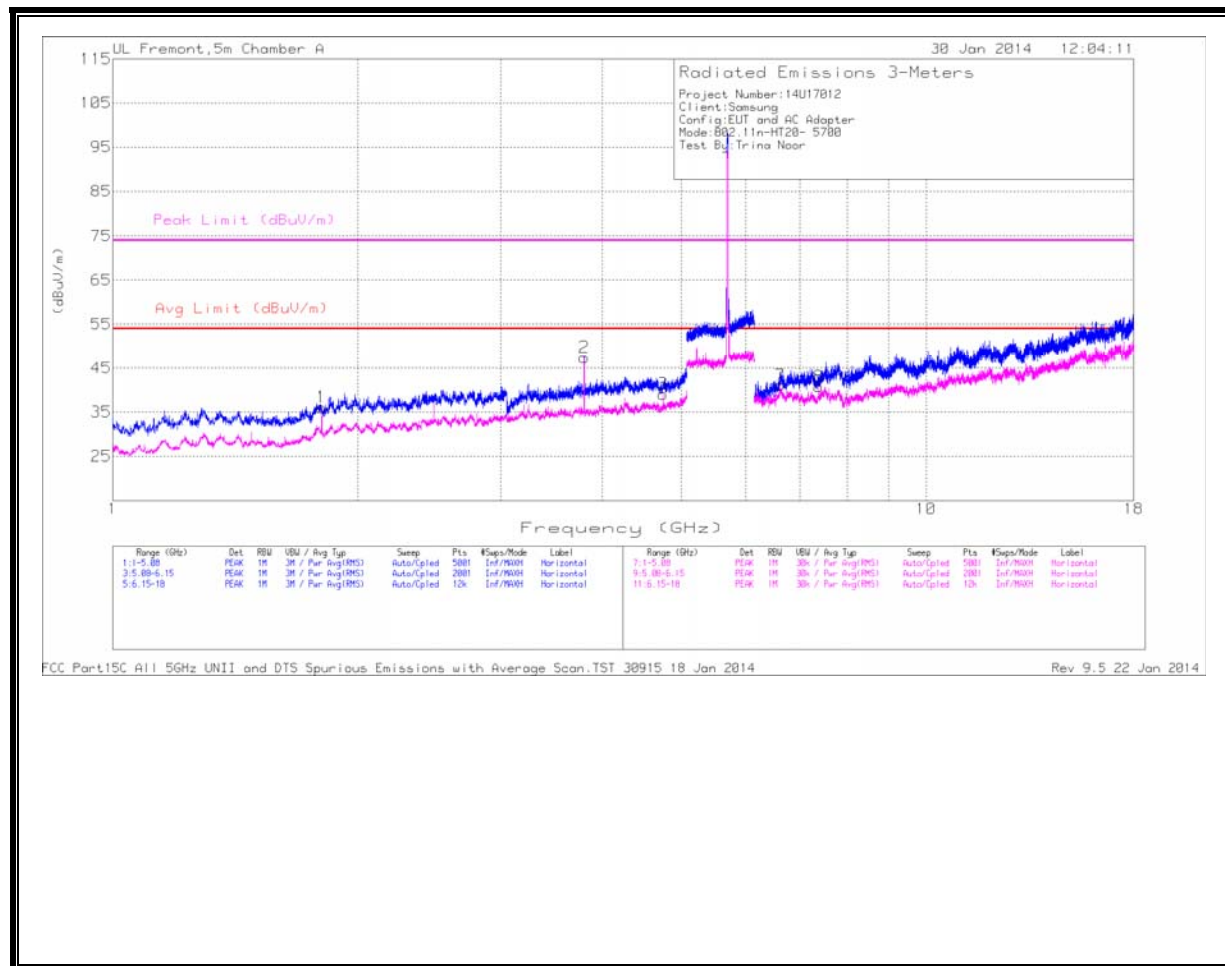
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.016	42.92	Avg	28.1	-38.2	32.82	54	-21.18	-	-	0-360	101	H
3	2.758	34.79	Avg	32.6	-31.9	35.49	54	-18.51	-	-	0-360	201	V
2	3.734	44.54	Avg	33.4	-29.9	48.04	54	-5.96	-	-	0-360	200	H
4	3.734	41.05	Avg	33.4	-29.9	44.55	54	-9.45	-	-	0-360	101	V
5	6.388	30.24	Avg	35.5	-27.1	38.64	54	-15.36	-	-	0-360	200	H
7	6.632	30.64	Avg	35.5	-25.8	40.34	54	-13.66	-	-	0-360	200	H
6	15.528	30.2	Avg	40.6	-21.2	49.6	54	-4.4	-	-	0-360	101	H
8	15.528	30.2	Avg	40.6	-21.2	49.6	54	-4.4	-	-	0-360	101	H

Avg - Video bandwidth < Resolution bandwidth

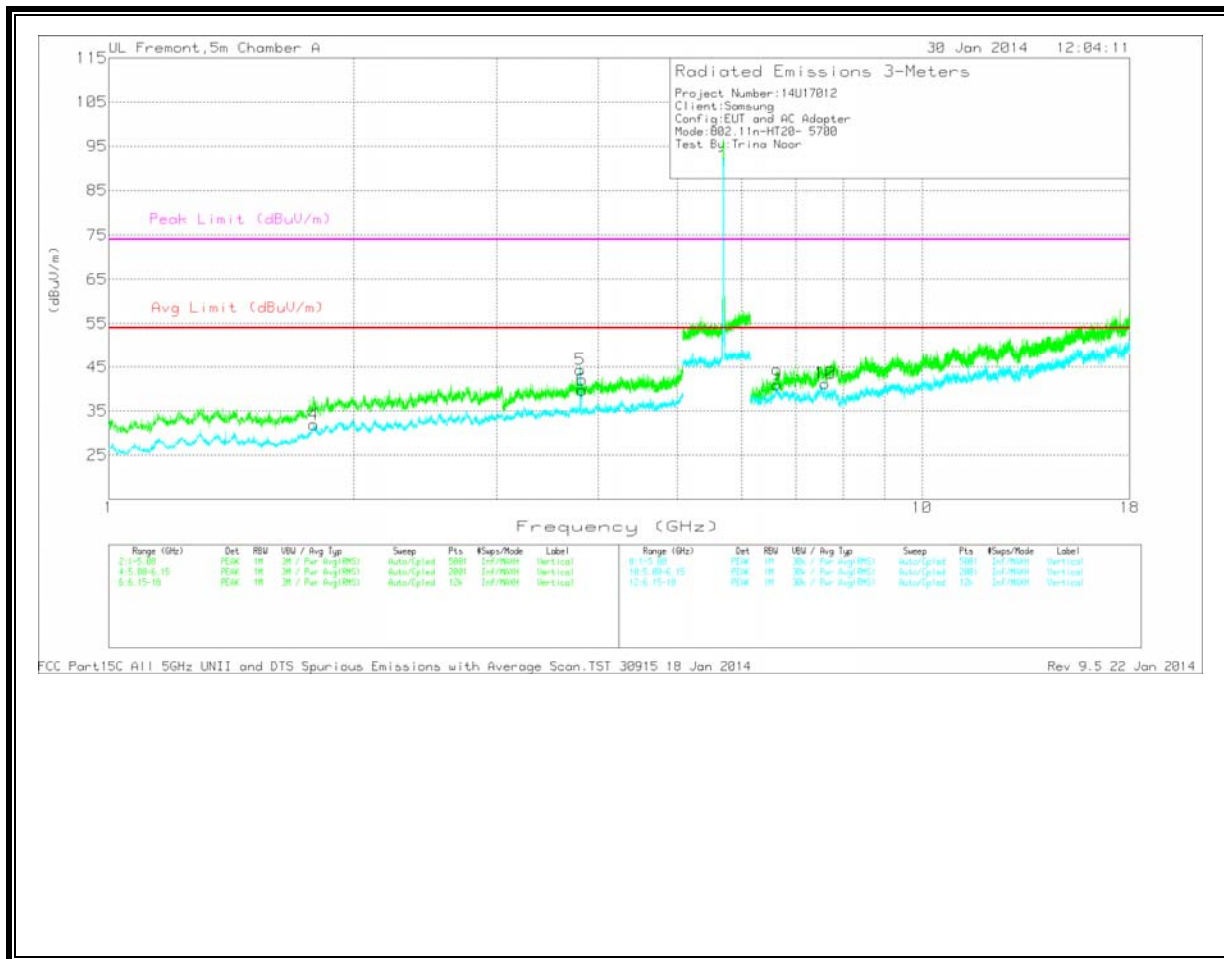
UNII_5.5_11n_HT20_HARM_5600.DAT 30915 18 Jan 2014 Rev 9.5 22 Jan 2014

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.



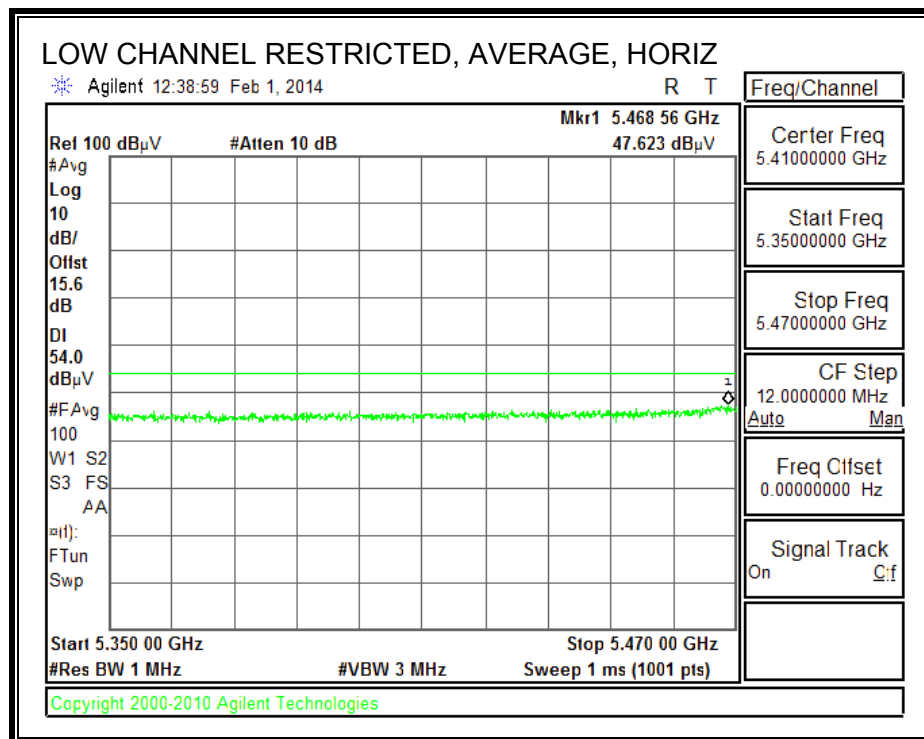
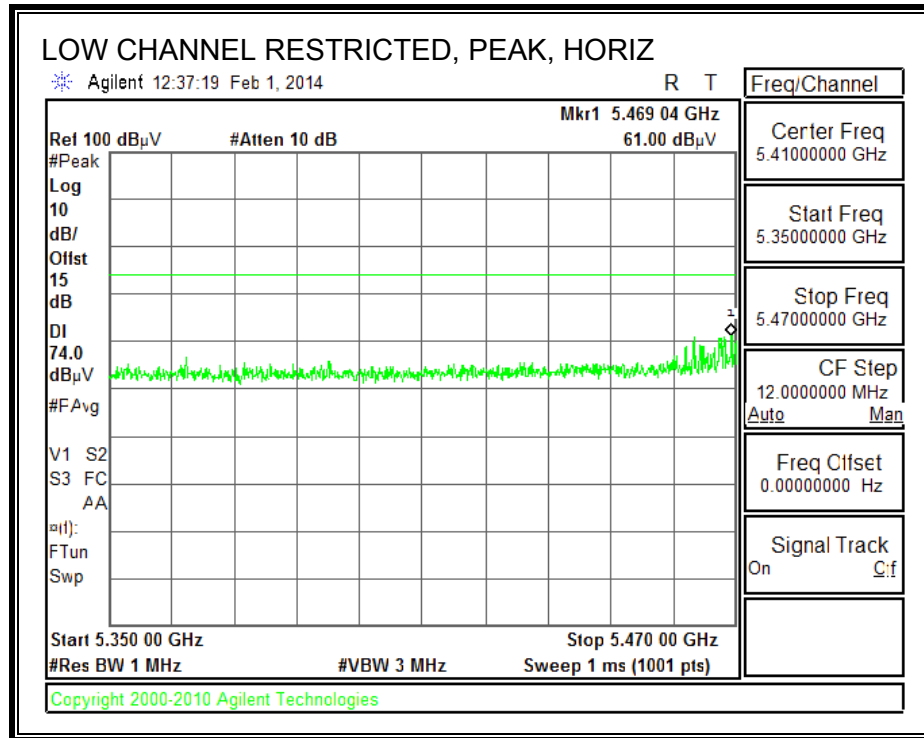
Note: Emission was scanned up to 40GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

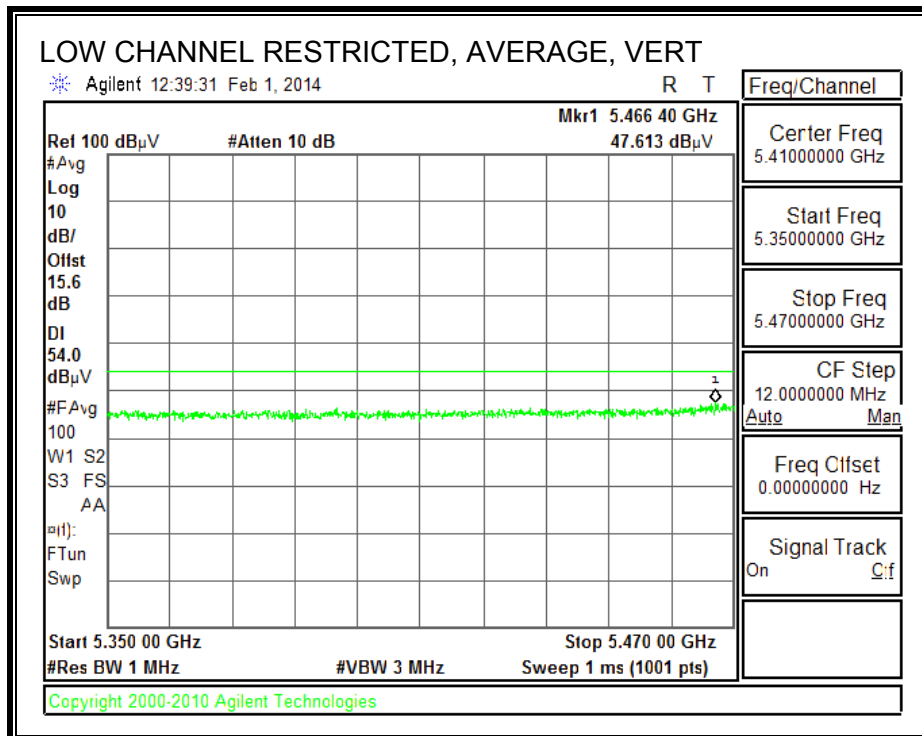
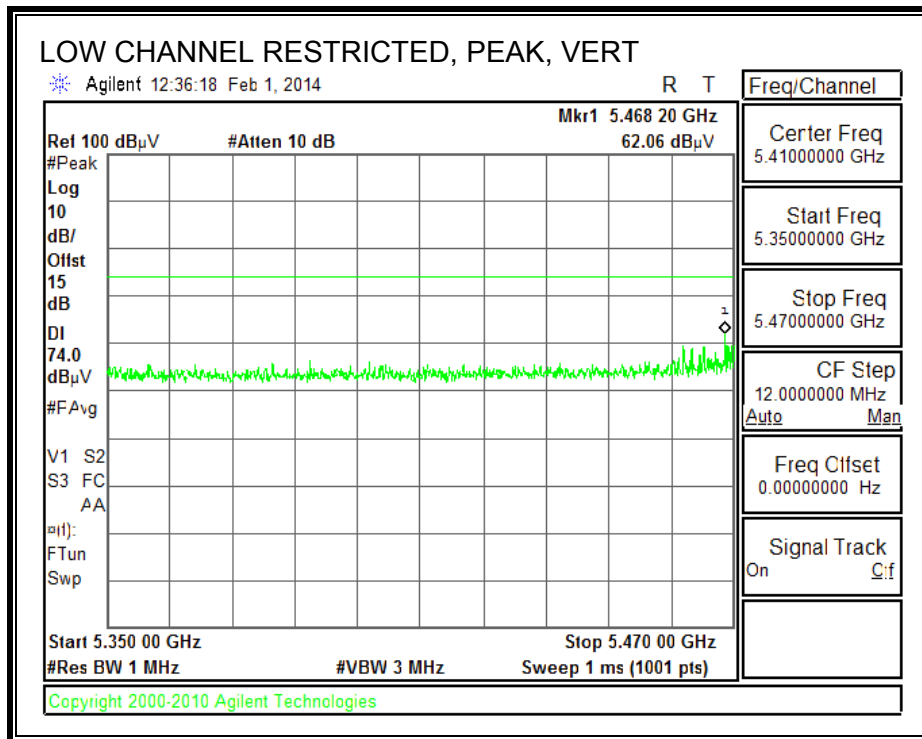
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	1.787	35.84	Avg	30.4	-34.3	31.94	54	-22.06	-	-	0-360	100	V
1	1.806	39.85	Avg	30.6	-34.4	36.05	54	-17.95	-	-	0-360	200	H
2	3.8	45.19	Avg	33.5	-31.3	47.39	54	-6.61	-	-	0-360	200	H
5	3.8	42.18	Avg	33.5	-31.3	44.38	54	-9.62	-	-	0-360	100	V
6	3.818	37.38	Avg	33.5	-31.1	39.78	54	-14.22	-	-	0-360	100	V
3	4.75	35.27	Avg	33.9	-30.1	39.07	54	-14.93	-	-	0-360	200	H
7	6.62	31.34	Avg	35.5	-25.8	41.04	54	-12.96	-	-	0-360	200	H
9	6.631	31.25	Avg	35.5	-25.8	40.95	54	-13.05	-	-	0-360	101	V
8	7.38	31.86	Avg	35.4	-26.5	40.76	54	-13.24	-	-	0-360	200	H
10	7.6	32.12	Avg	35.5	-26.4	41.22	54	-12.78	-	-	0-360	200	V

Avg - Video bandwidth < Resolution bandwidth

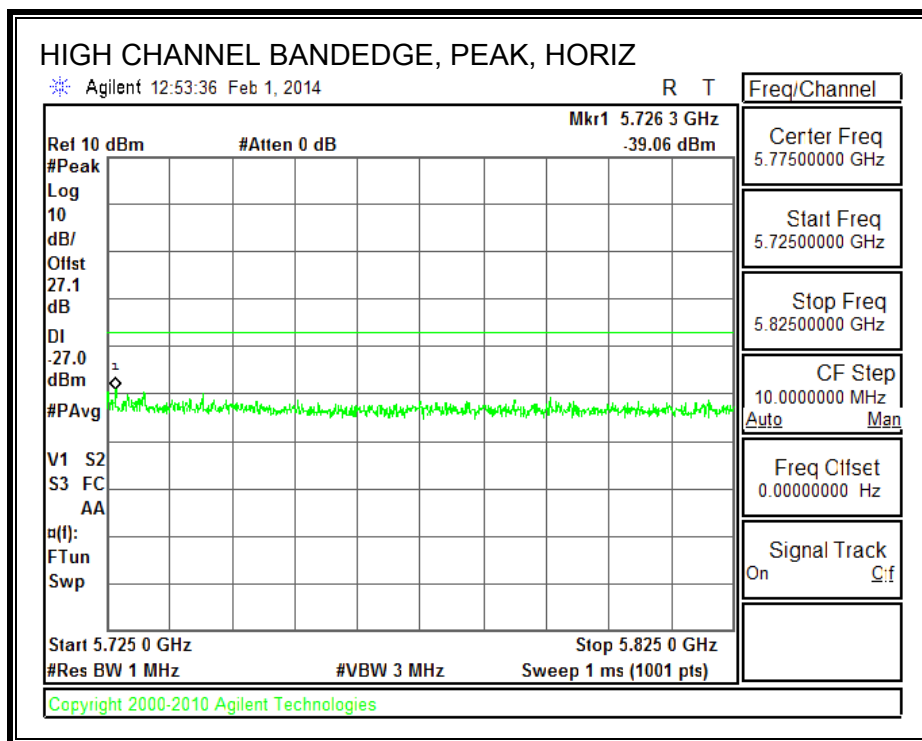
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18
Jan 2014 Rev 9.5 22 Jan 2014

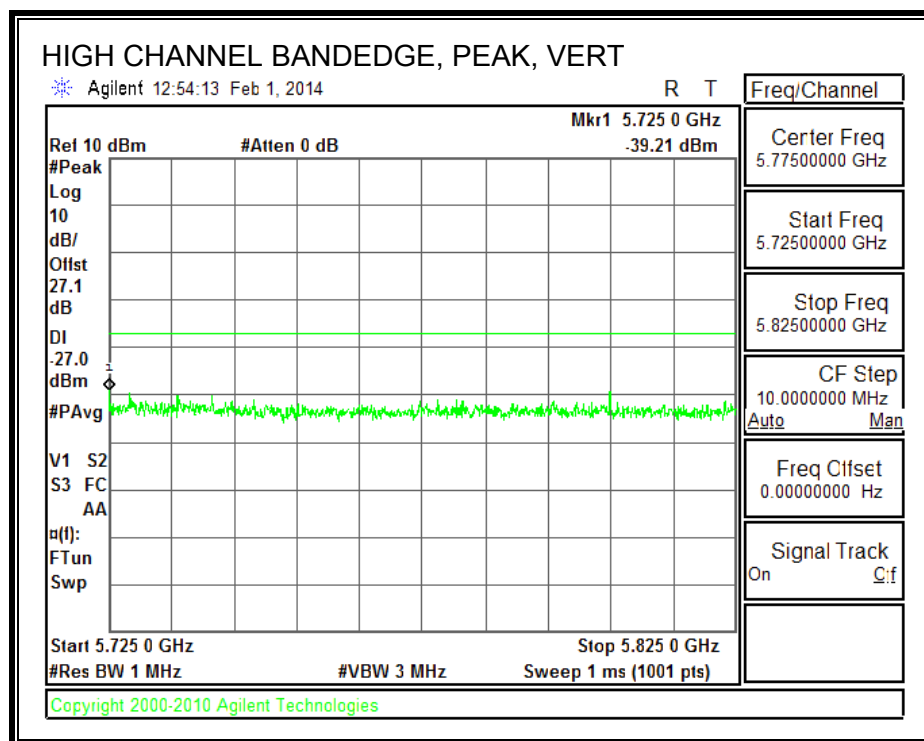
**12.3.5. TX ABOVE 1 GHz 802.11n HT40 MODE IN THE 5.5 GHz BAND
RESTRICTED BANDEDGE (LOW CHANNEL)**





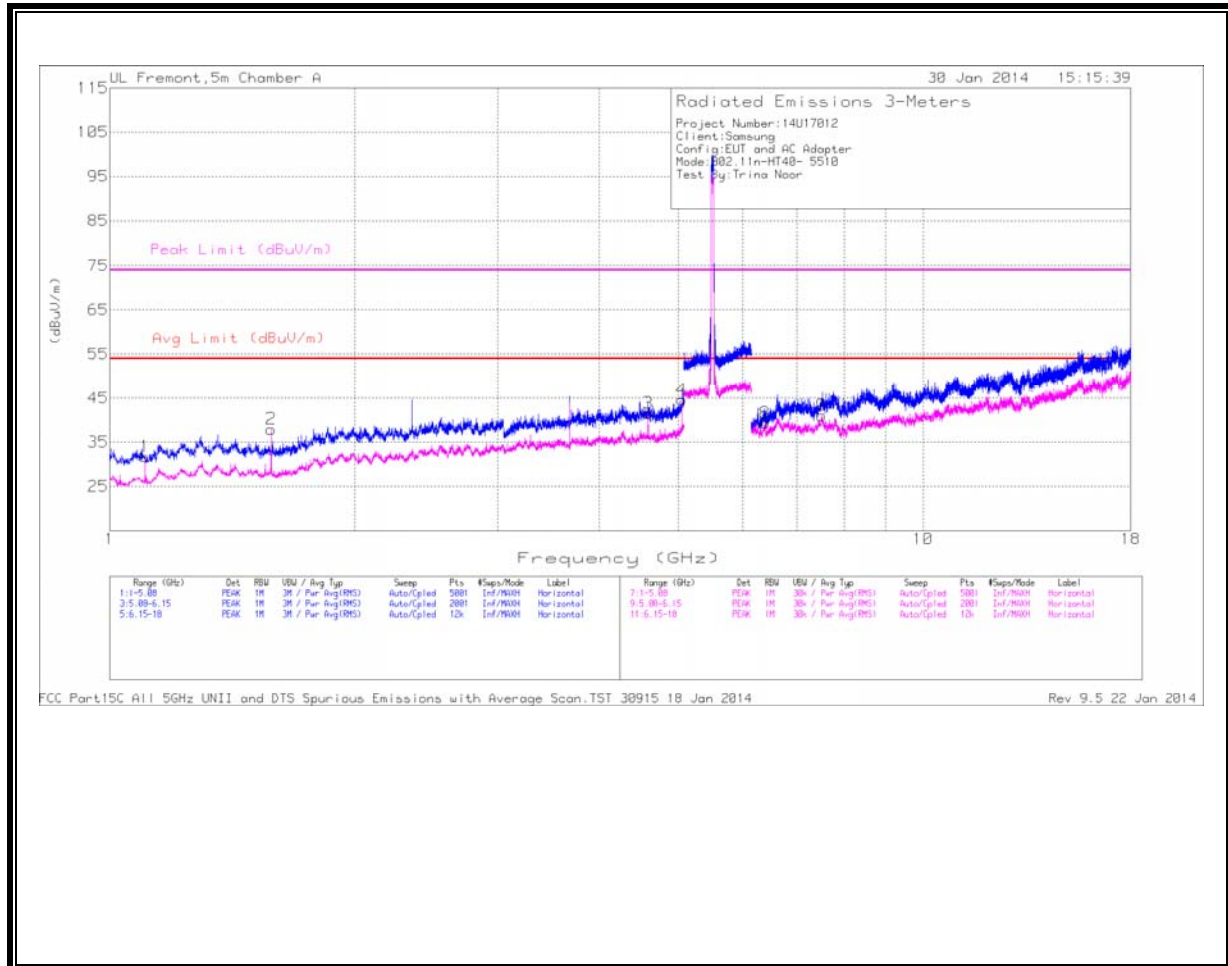
AUTHORIZED BANDEDGE (HIGH CHANNEL)



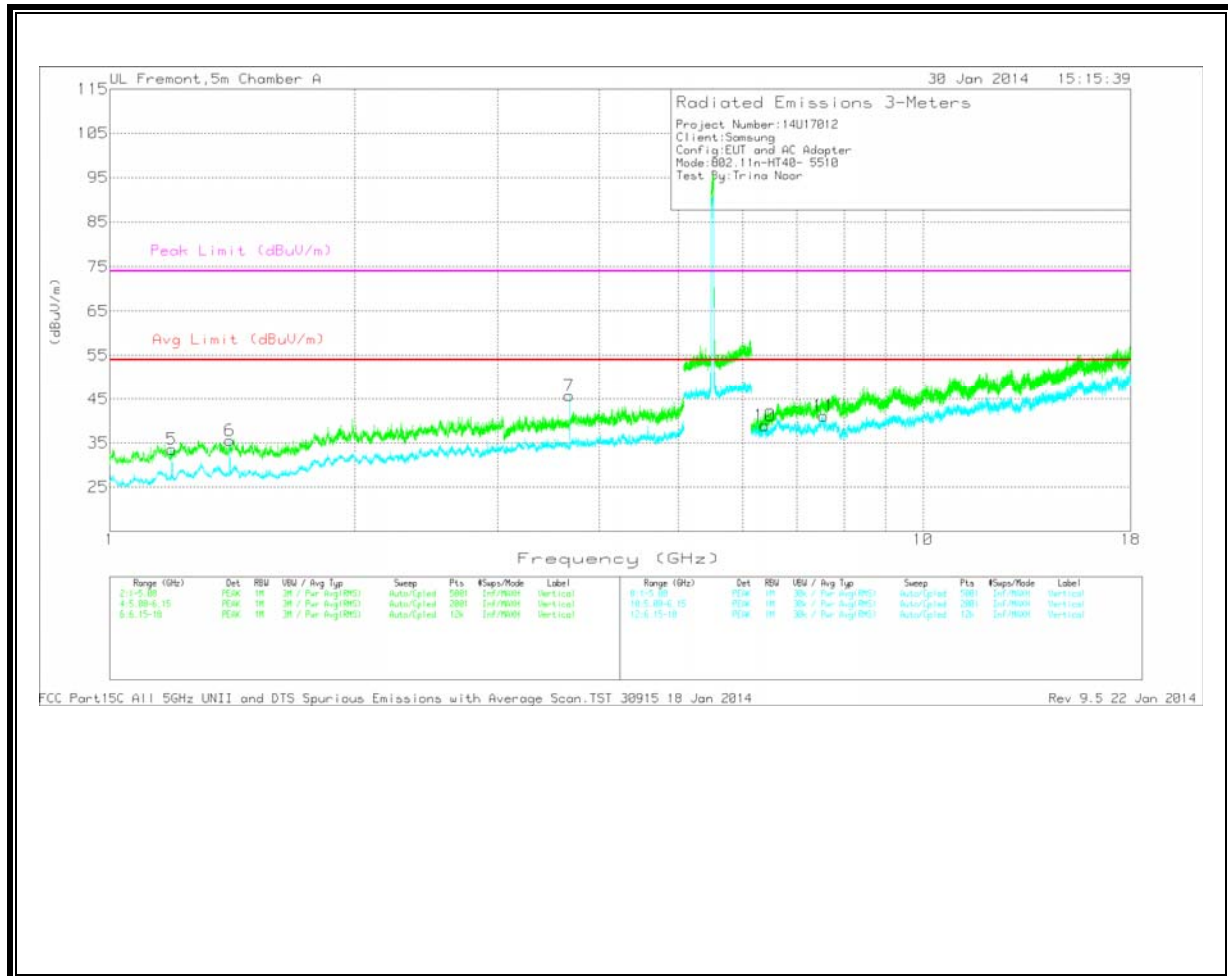


HARMONICS AND SPURIOUS EMISSIONS

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.



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

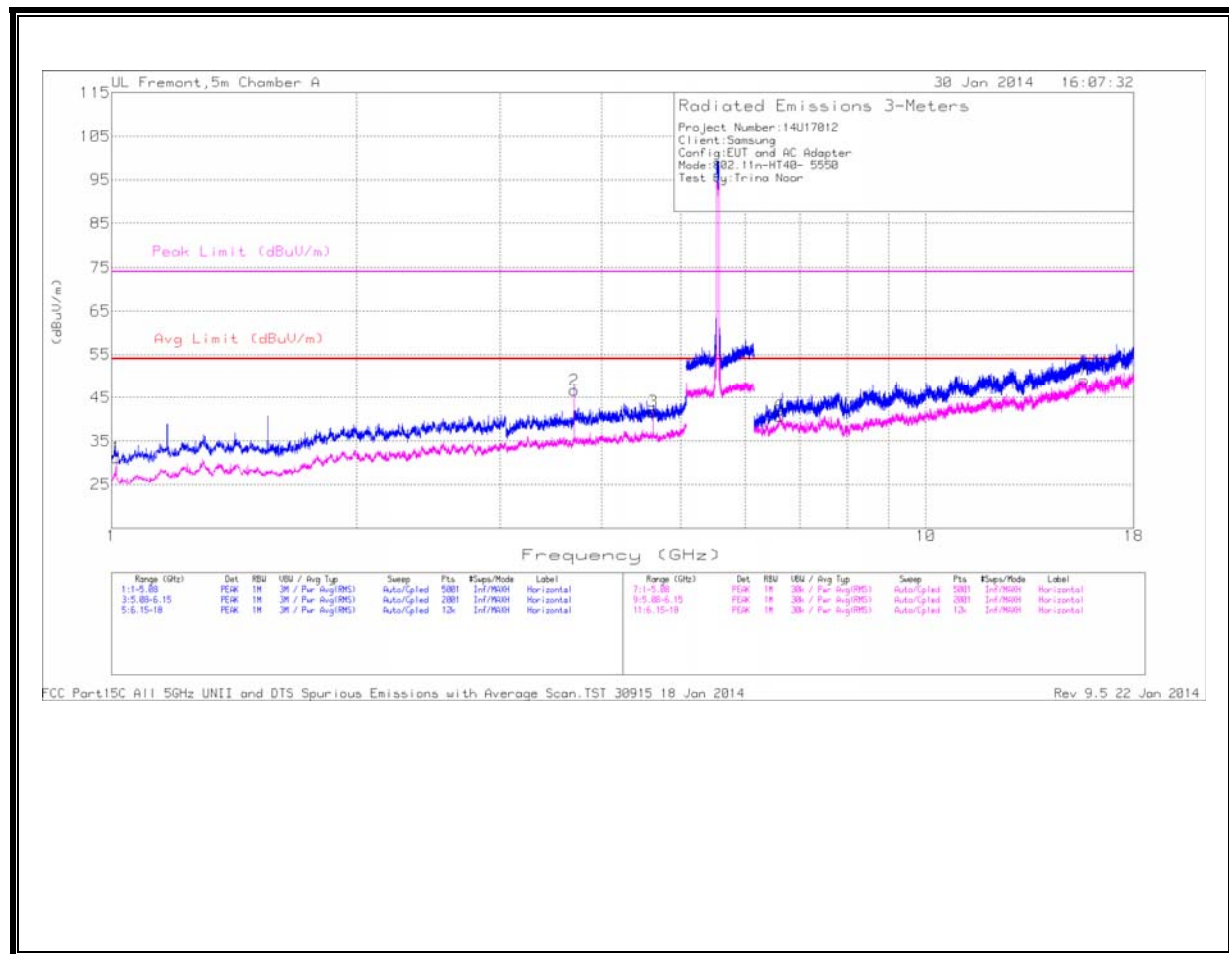
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.105	40.42	Avg	28	-36.7	31.72	54	-22.28	-	-	0-360	101	H
5	1.193	40.87	Avg	29.4	-36.7	33.57	54	-20.43	-	-	0-360	201	V
6	1.405	42.36	Avg	29.8	-36.6	35.56	54	-18.44	-	-	0-360	101	V
2	1.58	45.24	Avg	28.4	-35.7	37.94	54	-16.06	-	-	0-360	101	H
7	3.673	44.35	Avg	33.2	-31.8	45.75	54	-8.25	-	-	0-360	201	V
3	4.592	37.09	Avg	33.9	-29.5	41.49	54	-12.51	-	-	0-360	101	H
4	5.051	38.02	Avg	34	-27.4	44.62	54	-9.38	-	-	0-360	200	H
10	6.388	30.55	Avg	35.5	-27.1	38.95	54	-15.05	-	-	0-360	201	V
8	6.393	30.98	Avg	35.5	-27.2	39.28	54	-14.72	-	-	0-360	200	H
9	7.51	30.27	Avg	35.4	-24.7	40.97	54	-13.03	-	-	0-360	200	H
11	7.548	31.41	Avg	35.4	-25.7	41.11	54	-12.89	-	-	0-360	201	V

Avg - Video bandwidth < Resolution bandwidth

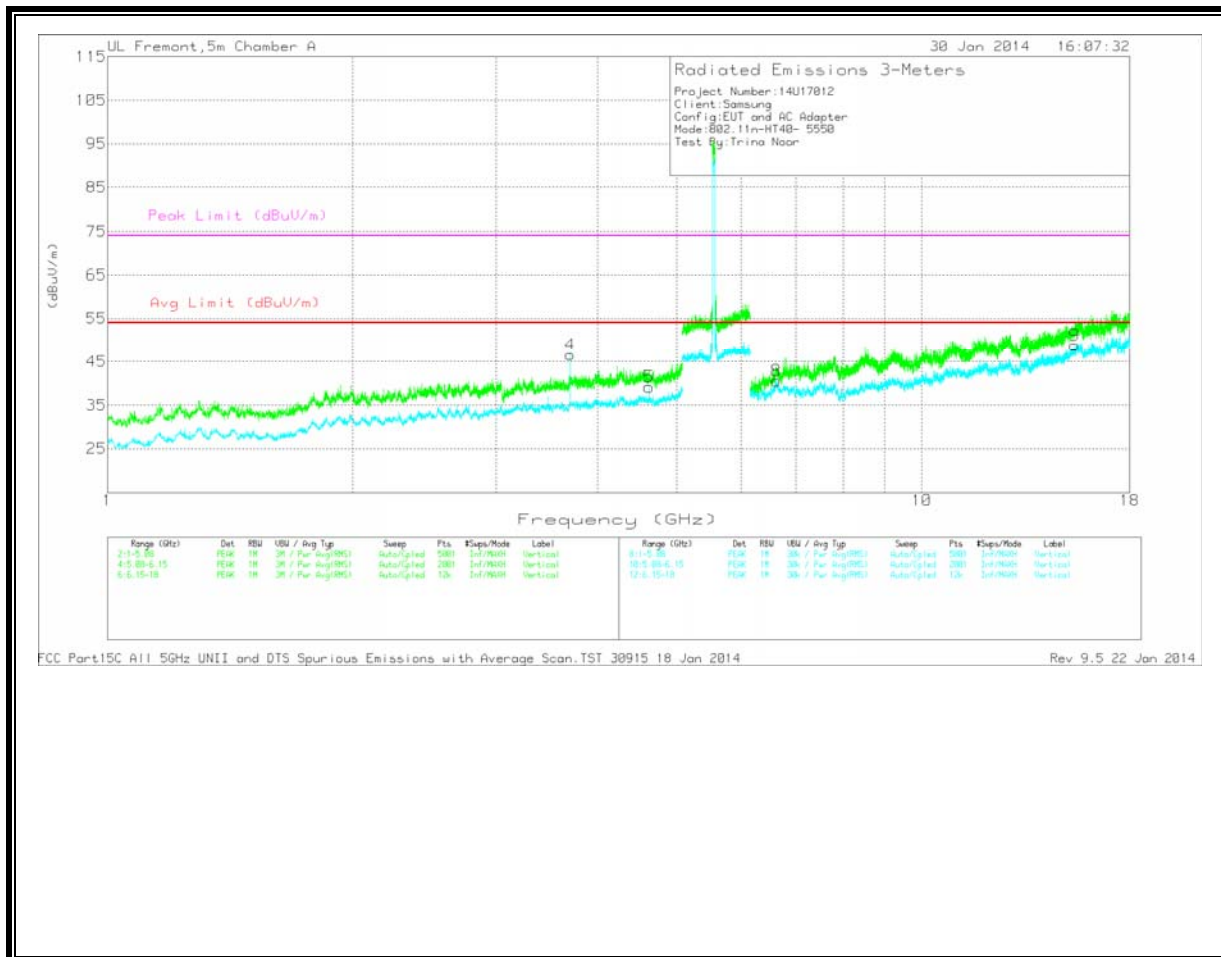
FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18
Jan 2014 Rev 9.5 22 Jan 2014

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.



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 T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.013	40.98	Avg	28.1	-37.9	31.18	54	-22.82	-	-	0-360	101	H
2	3.7	43.77	Avg	33.3	-30.4	46.67	54	-7.33	-	-	0-360	200	H
4	3.7	43.72	Avg	33.3	-30.4	46.62	54	-7.38	-	-	0-360	200	V
3	4.625	37.58	Avg	33.9	-29.7	41.78	54	-12.22	-	-	0-360	101	H
5	4.625	34.94	Avg	33.9	-29.7	39.14	54	-14.86	-	-	0-360	200	V
6	6.627	30.99	Avg	35.5	-25.8	40.69	54	-13.31	-	-	0-360	101	H
8	6.63	30.86	Avg	35.5	-25.8	40.56	54	-13.44	-	-	0-360	200	V
9	15.406	29.71	Avg	40.7	-21.6	48.81	54	-5.19	-	-	0-360	101	V
7	15.642	29.13	Avg	40.5	-20.5	49.13	54	-4.87	-	-	0-360	200	H

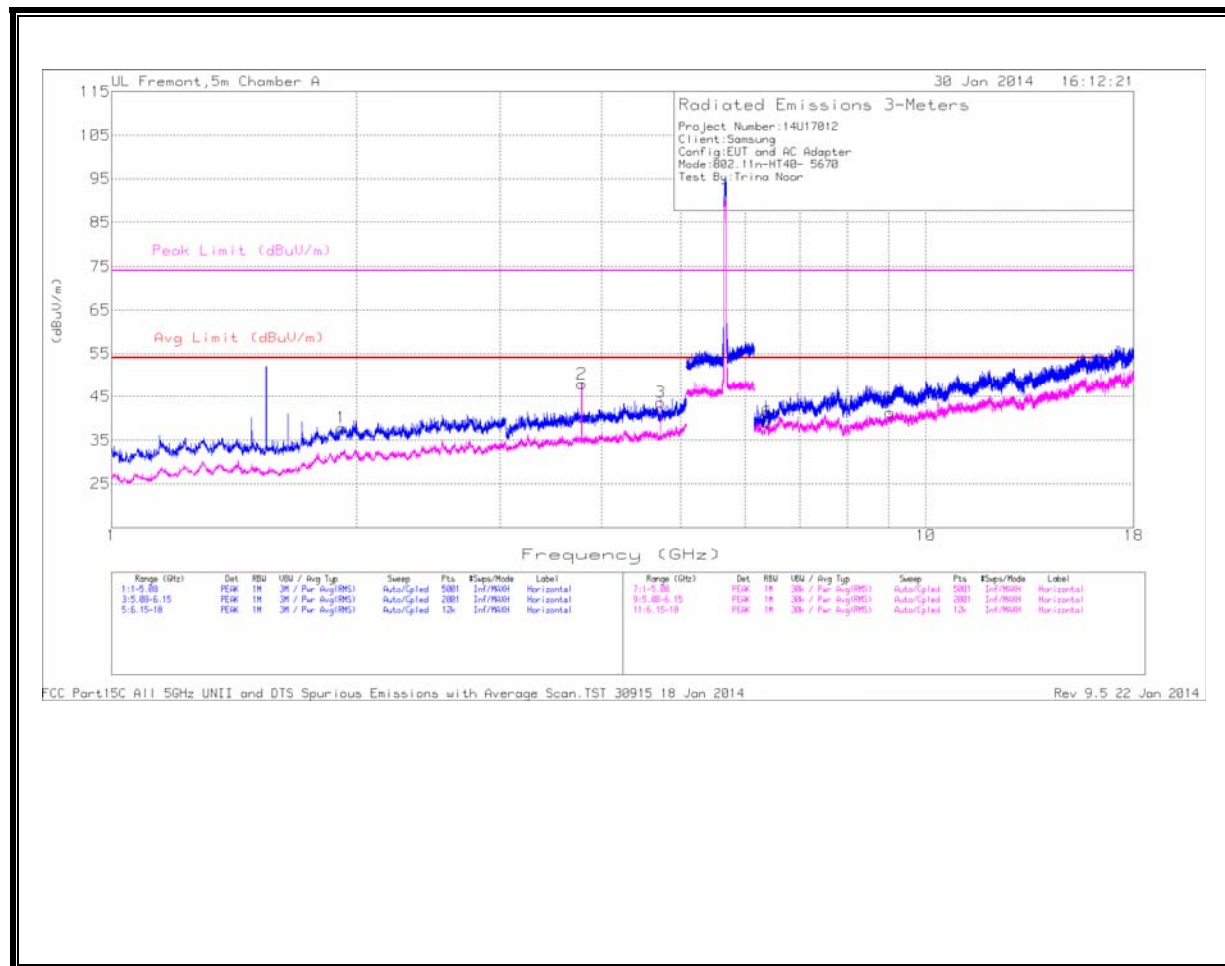
Avg - Video bandwidth < Resolution bandwidth

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18

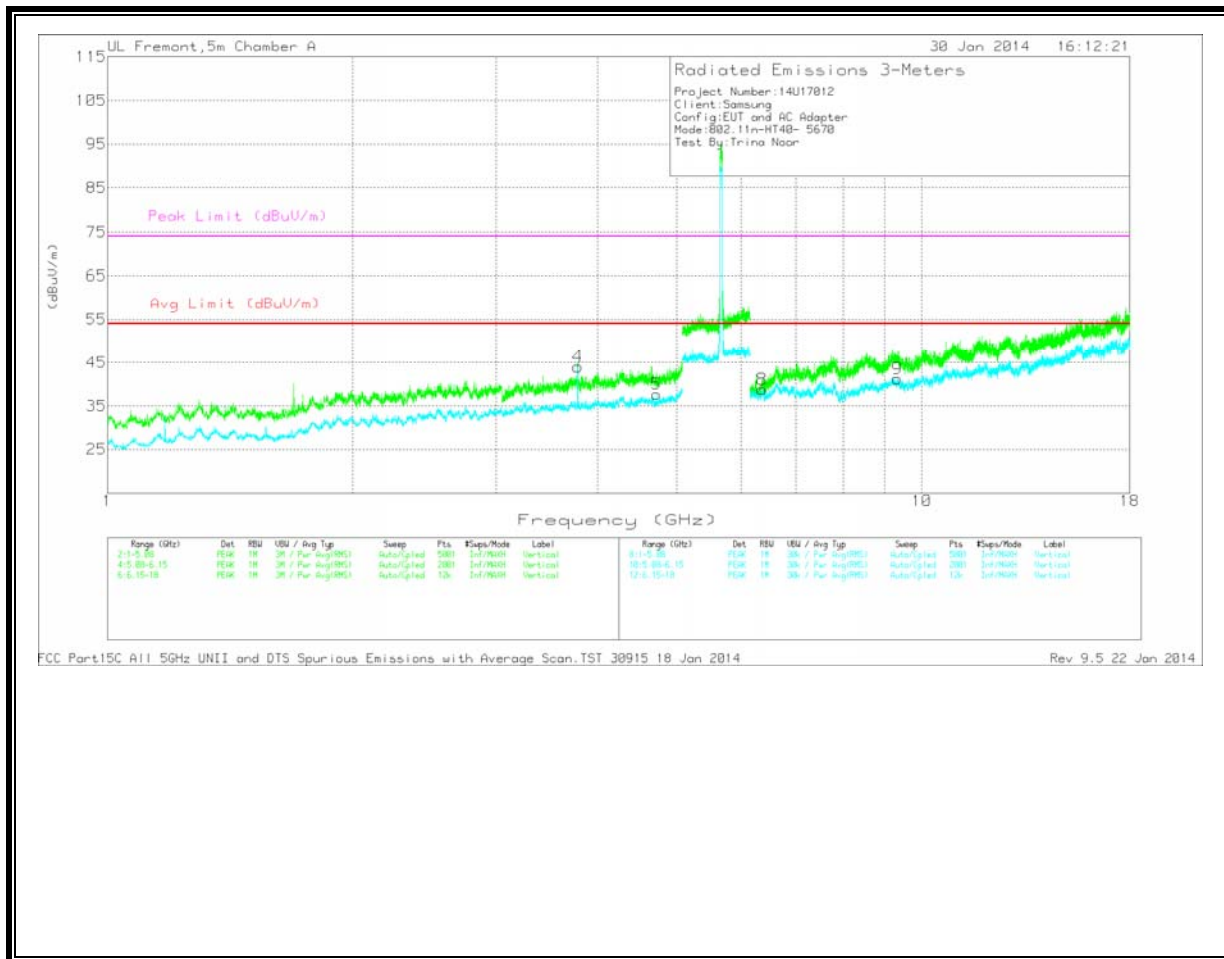
Jan 2014 Rev 9.5 22 Jan 2014

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.



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

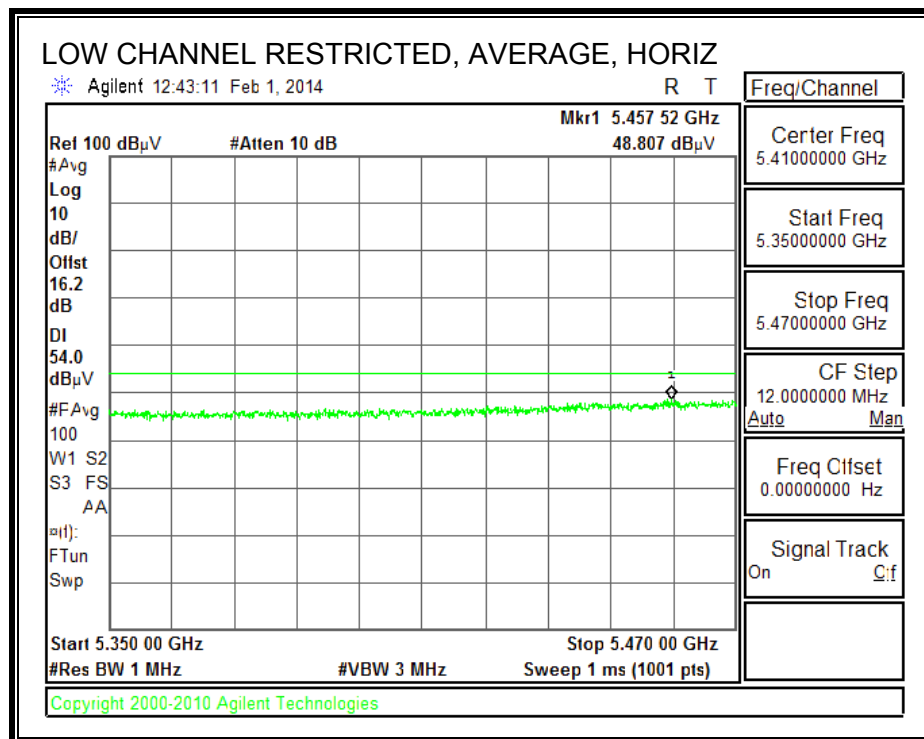
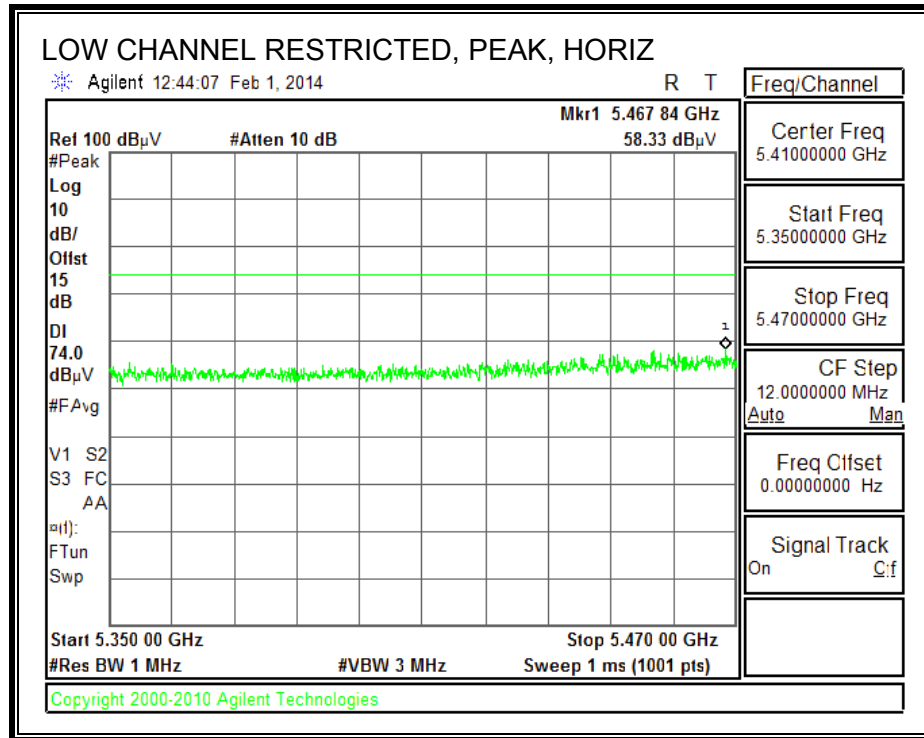
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.916	40.55	PK	31.7	-34.4	37.85	54	-16.15	74	-36.15	0-360	101	H
2	3.78	45.49	Avg	33.5	-31	47.99	54	-6.01	-	-	0-360	200	H
4	3.78	41.55	Avg	33.5	-31	44.05	54	-9.95	-	-	0-360	100	V
3	4.725	39.89	Avg	33.9	-30.1	43.69	54	-10.31	-	-	0-360	200	H
5	4.725	33.92	Avg	33.9	-30.1	37.72	54	-16.28	-	-	0-360	200	V
8	6.365	30.26	Avg	35.5	-27	38.76	54	-15.24	-	-	0-360	200	V
6	6.387	30.69	Avg	35.5	-27.1	39.09	54	-14.91	-	-	0-360	100	H
7	9.036	31.13	Avg	35.9	-25.7	41.33	54	-12.67	-	-	0-360	100	H
9	9.333	30.06	Avg	36.3	-25.1	41.26	54	-12.74	-	-	0-360	100	V

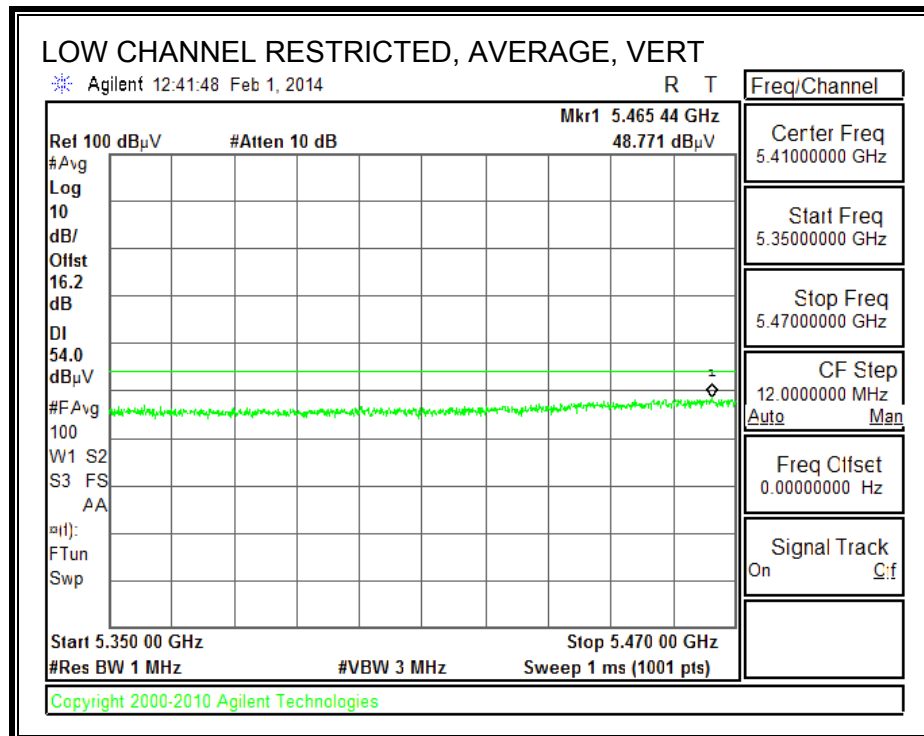
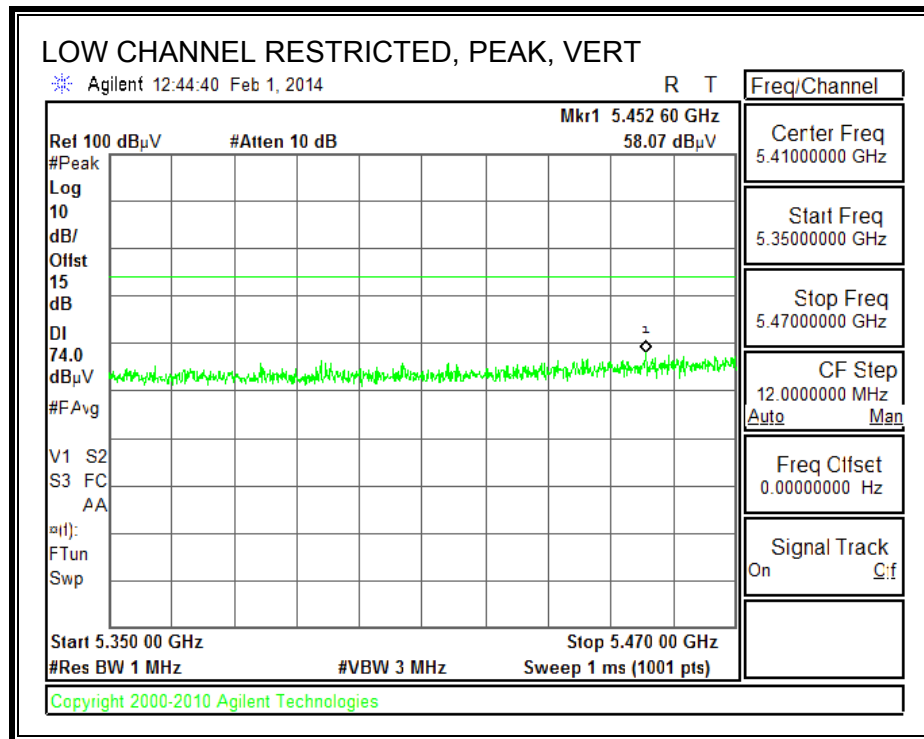
PK - Peak detector

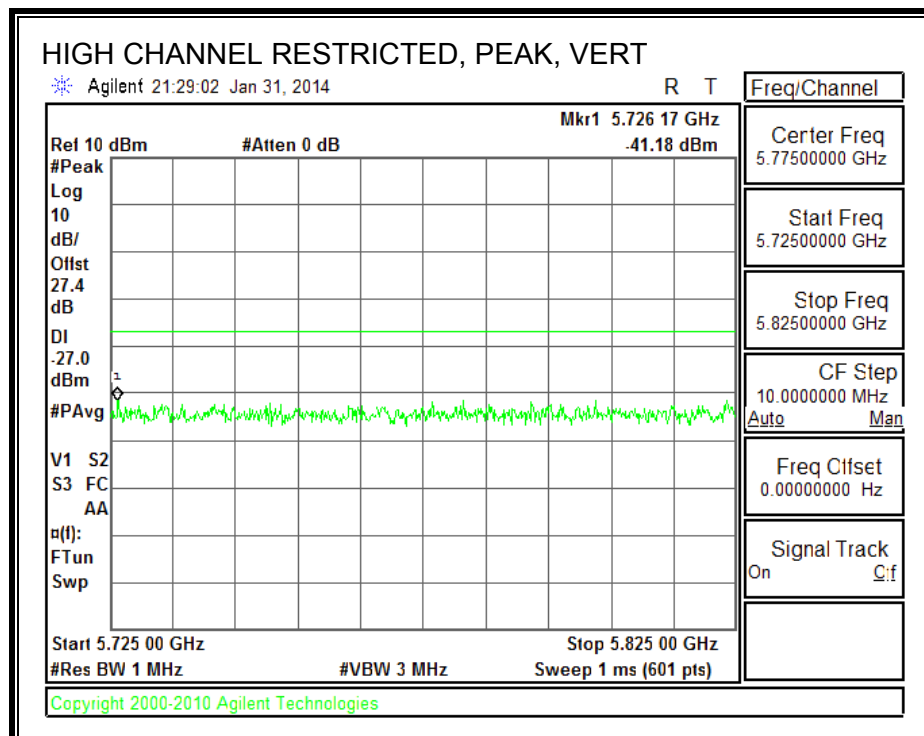
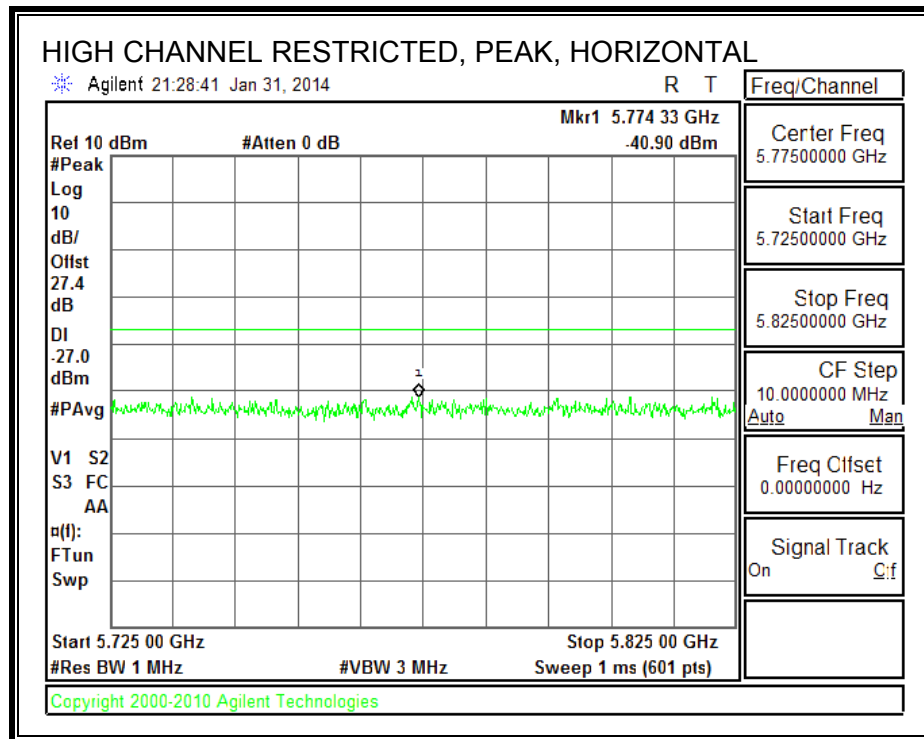
Avg - Video bandwidth < Resolution bandwidth

FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 18
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**12.3.7. TX ABOVE 1 GHz 802.11ac HT80 MODE IN THE 5.5 GHz BAND
RESTRICTED BANDEDGE (LOW CHANNEL)**

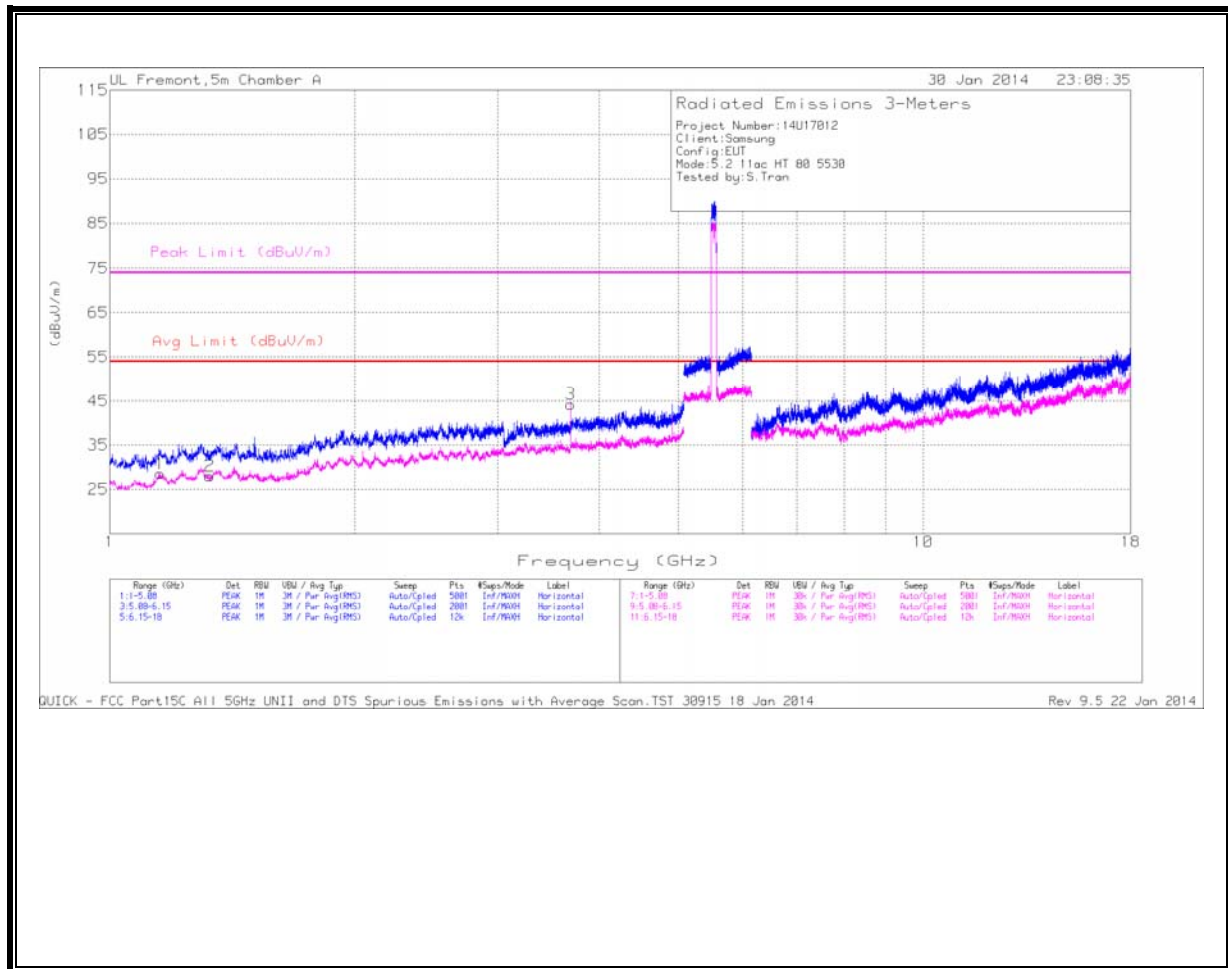




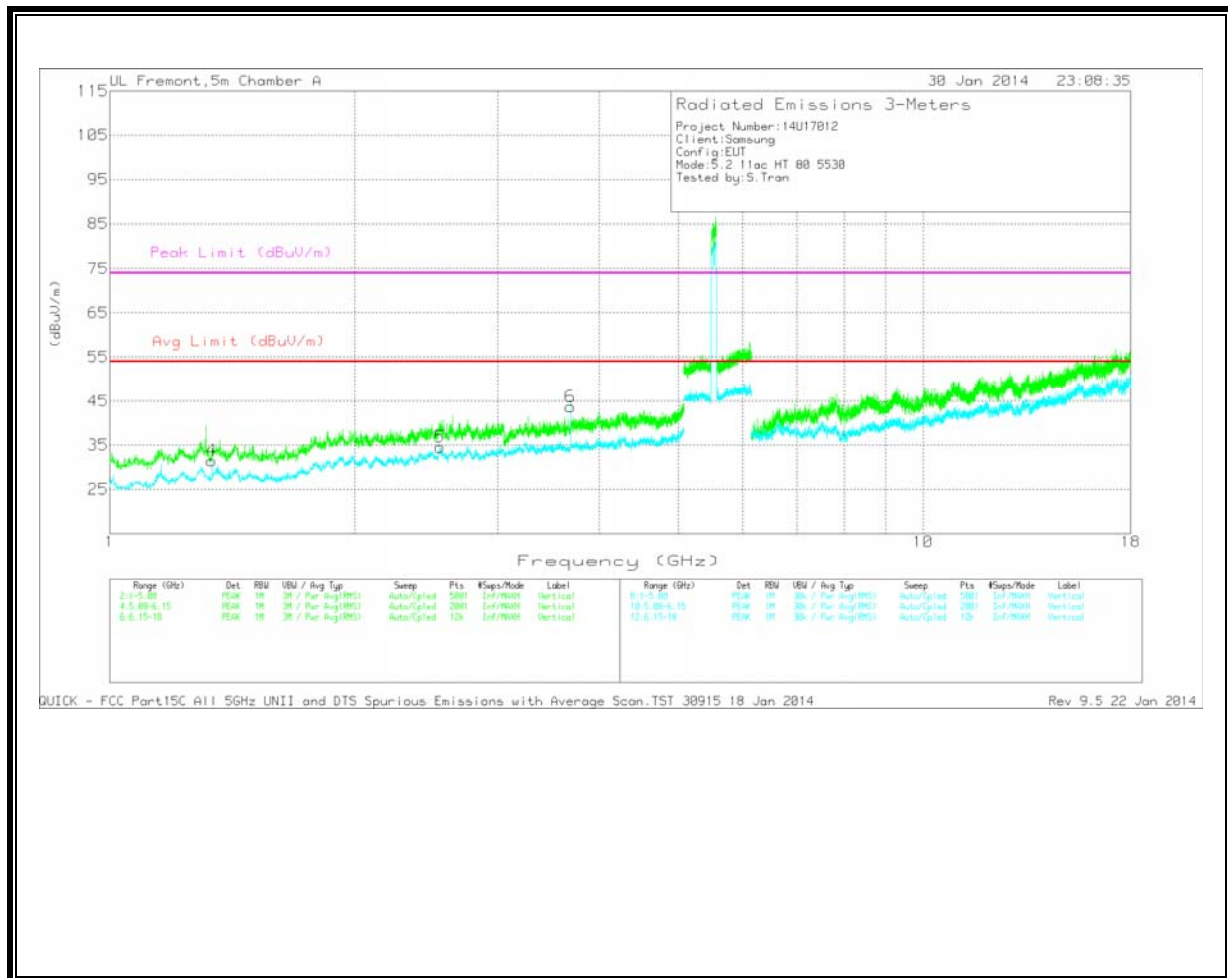


HARMONICS AND SPURIOUS EMISSIONS

**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.



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 T136 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.154	36.47	Avg	28.8	-36.7	28.57	54	-25.43	-	-	0-360	100	H
2	1.327	35.12	Avg	30.2	-37.3	28.02	54	-25.98	-	-	0-360	100	H
4	1.335	38.18	Avg	30.1	-36.8	31.48	54	-22.52	-	-	0-360	100	V
5	2.547	34.63	Avg	32.6	-32.7	34.53	54	-19.47	-	-	0-360	100	V
6	3.686	41.51	Avg	33.3	-31.1	43.71	54	-10.29	-	-	0-360	100	V
3	3.687	41.95	Avg	33.3	-31	44.25	54	-9.75	-	-	0-360	100	H

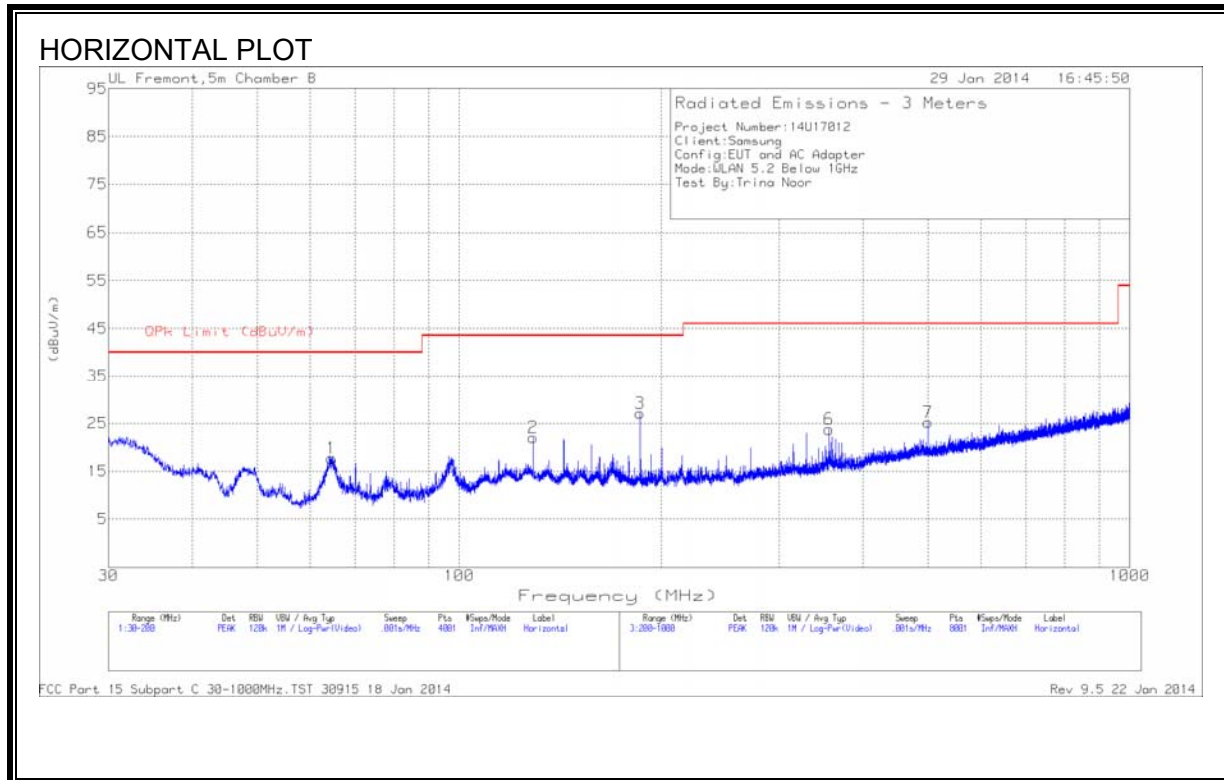
Avg - Video bandwidth < Resolution bandwidth

QUICK - FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST

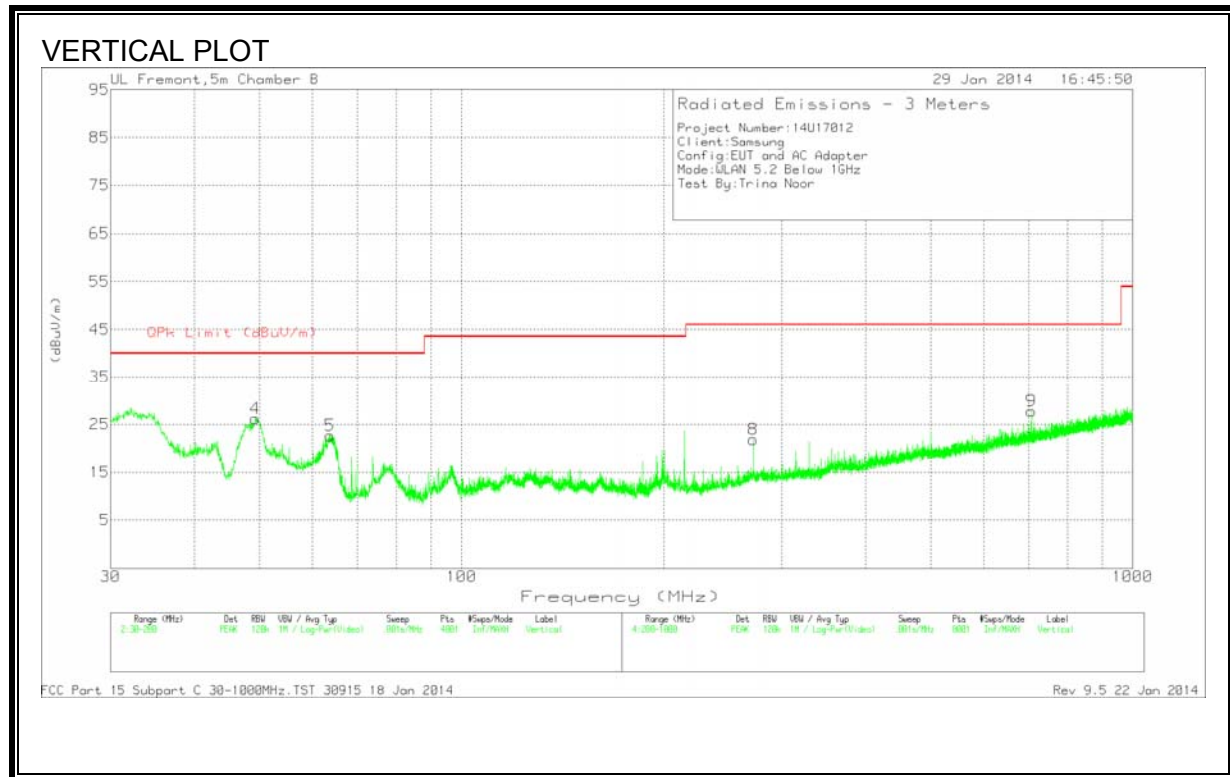
30915 18 Jan 2014 Rev 9.5 22 Jan 2014

13. WORST-CASE BELOW 1 GHz (in the 5.3 GHz Band)

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



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



Worst Case Data

Marker	Frequenc y (MHz)	Meter Reading (dBuV)	Det	AF T243 (dB/m)	Amp/Cbl (dB)	Correcte d Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 128.855	35.97	PK	13.9	-27.8	22.07	43.52	-21.45	0-360	200	H
8	* 272	34.85	PK	13.3	-26.3	21.85	46.02	-24.17	0-360	101	V
4	49.295	46.9	PK	7.9	-28.6	26.2	40	-13.8	0-360	101	V
5	63.66	43.65	PK	7.5	-28.5	22.65	40	-17.35	0-360	101	V
1	64.5525	38.6	PK	7.6	-28.5	17.7	40	-22.3	0-360	200	H
3	186.145	43.21	PK	11	-27.1	27.11	43.52	-16.41	0-360	100	H
6	355.9	35.07	PK	14.5	-25.8	23.77	46.02	-22.25	0-360	101	H
7	500.1	33.63	PK	17.5	-25.9	25.23	46.02	-20.79	0-360	200	H
9	706.5	32.21	PK	20.3	-24.7	27.81	46.02	-18.21	0-360	101	V

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

PK - Peak detector

FCC Part 15 Subpart C 30-1000MHz.TST 30915 18 Jan 2014 Rev 9.5 22 Jan 2014

14. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

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

^{*} Decreases with the logarithm of the frequency.

TEST PROCEDURE

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

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

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

RESULTS

6 WORST EMISSIONS

Line-L1 .15 - 30MHz

Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L1 (dB)	LC Cables 1&3 (dB)	Corrected Reading dB(uVolts)	CISPR 11/22 Class B Quasi-peak	Margin to Limit (dB)	CISPR 11/22 Class B Average	Margin to Limit (dB)
1	.1635	45.03	PK	1.2	0	46.23	65.3	-19.07	-	-
2	.1635	26.18	Av	1.2	0	27.38	-	-	55.3	-27.92
3	.8205	49.39	PK	.3	0	49.69	56	-6.31	-	-
4	.8205	27.67	Av	.3	0	27.97	-	-	46	-18.03
5	13.245	47.19	PK	.2	.2	47.59	60	-12.41	-	-
6	13.245	28.42	Av	.2	.2	28.82	-	-	50	-21.18

Line-L2 .15 - 30MHz

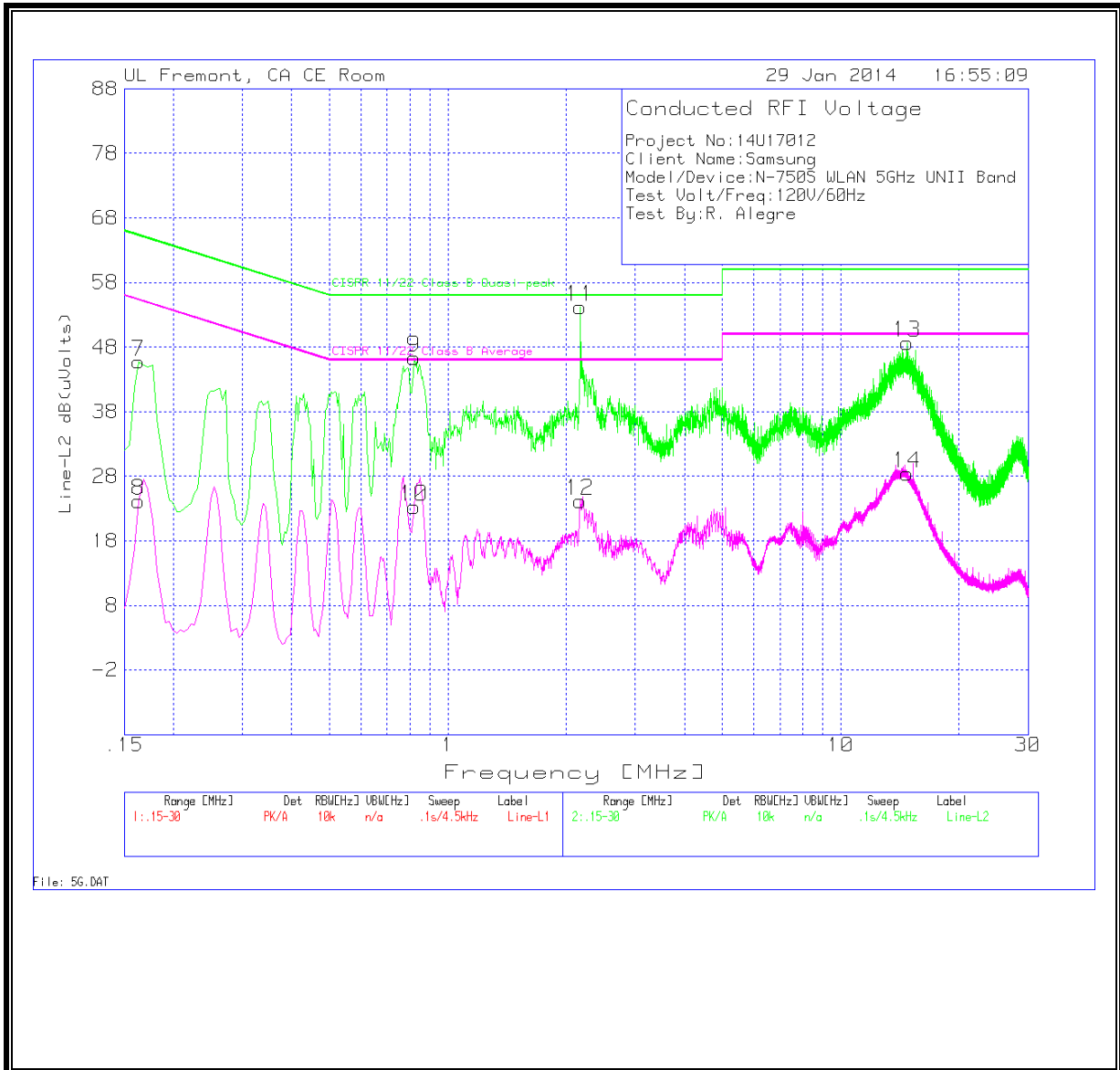
Trace Markers

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	T24 IL L2 (dB)	LC Cables 2&3 (dB)	Corrected Reading dB(uVolts)	CISPR 11/22 Class B Quasi-peak	Margin to Limit (dB)	CISPR 11/22 Class B Average	Margin to Limit (dB)
7	.1635	44.47	PK	1.3	0	45.77	65.3	-19.53	-	-
8	.1635	22.86	Av	1.3	0	24.16	-	-	55.3	-31.14
9	.8205	46.11	PK	.3	0	46.41	56	-9.59	-	-
10	.8205	23.03	Av	.3	0	23.33	-	-	46	-22.67
11	2.175	53.87	PK	.2	.1	54.17	56	-1.83	-	-
12	2.175	23.87	Av	.2	.1	24.17	-	-	46	-21.83
13	14.7885	48.19	PK	.3	.2	48.69	60	-11.31	-	-
14	14.7885	27.95	Av	.3	.2	28.45	-	-	50	-21.55

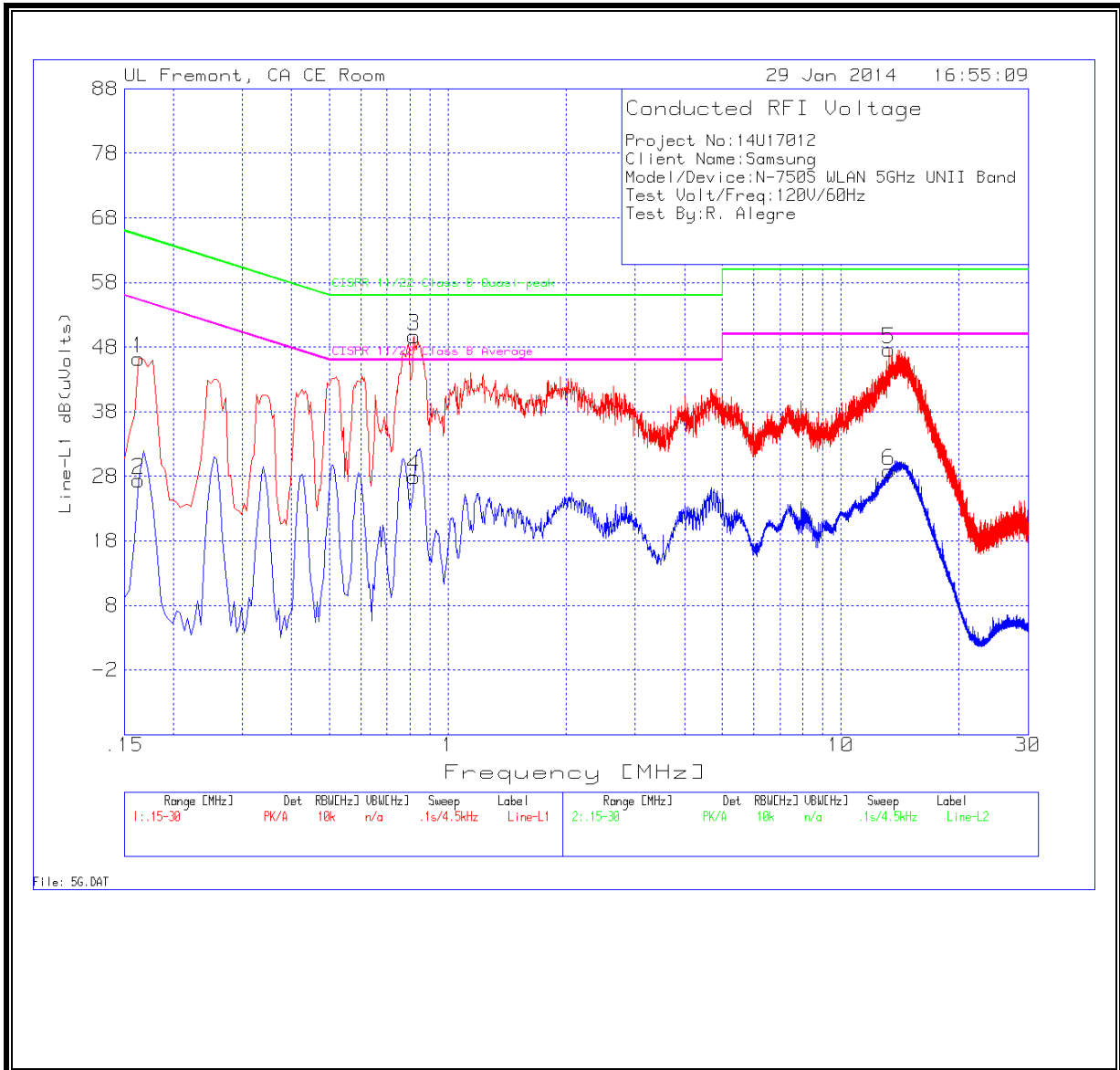
PK - Peak detector

Av - average detection

LINE 1 RESULTS



LINE 2 RESULTS



15. DYNAMIC FREQUENCY SELECTION

15.1. OVERVIEW

15.1.1. 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 DEVCIES 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

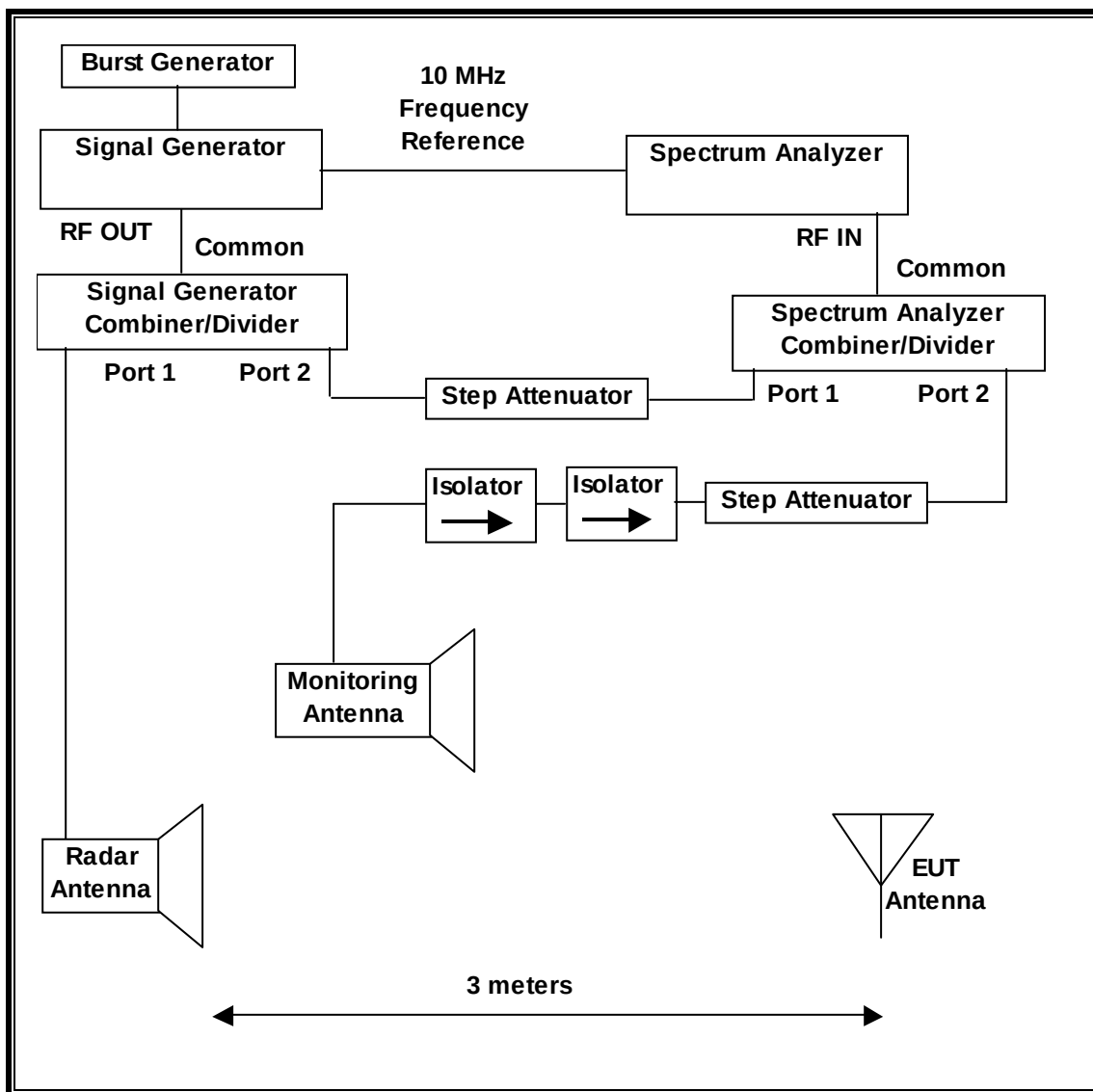
Radar Waveform	Bursts	Pulses per Burst	Pulse Width (μsec)	Chirp Width (MHz)	PRI (μsec)	Minimum Percentage of Successful Detection	Minimum Trials
5	8-20	1-3	50-100	5-20	1000-2000	80%	30

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

15.1.2. TEST AND MEASUREMENT SYSTEM

RADIATED METHOD SYSTEM BLOCK DIAGRAM



SYSTEM OVERVIEW

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

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

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

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

SYSTEM CALIBRATION

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

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

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

ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

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

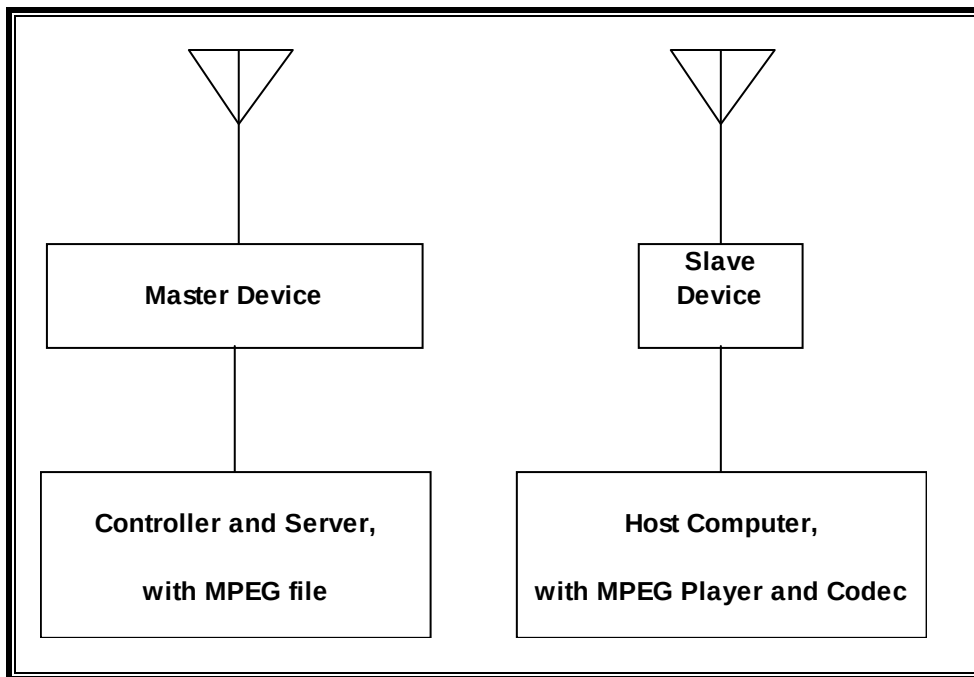
TEST AND MEASUREMENT EQUIPMENT

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

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

15.1.3. 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

15.1.4. 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 17.22 dBm EIRP in the 5250-5350 MHz band and 17.15 dBm EIRP in the 5470-5725 MHz band.

The only antenna assembly utilized with the EUT has a gain of 3.46 dBi.

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

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

The EUT uses neo 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 1.7.22 media player.

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

The EUT utilizes the 802.11ac architecture. Three nominal channel bandwidths are implemented: 20 MHz, 40 MHz and 80 MHz. However, pursuant to FCC KDB Publication 848637, "Client devices with 80 MHz BW mode can be tested with an approved master operating in 40 MHz BW mode". Therefore, 80MHz BW DFS testing was not performed and has been excluded from this report.

The software installed in the access point is revision 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.

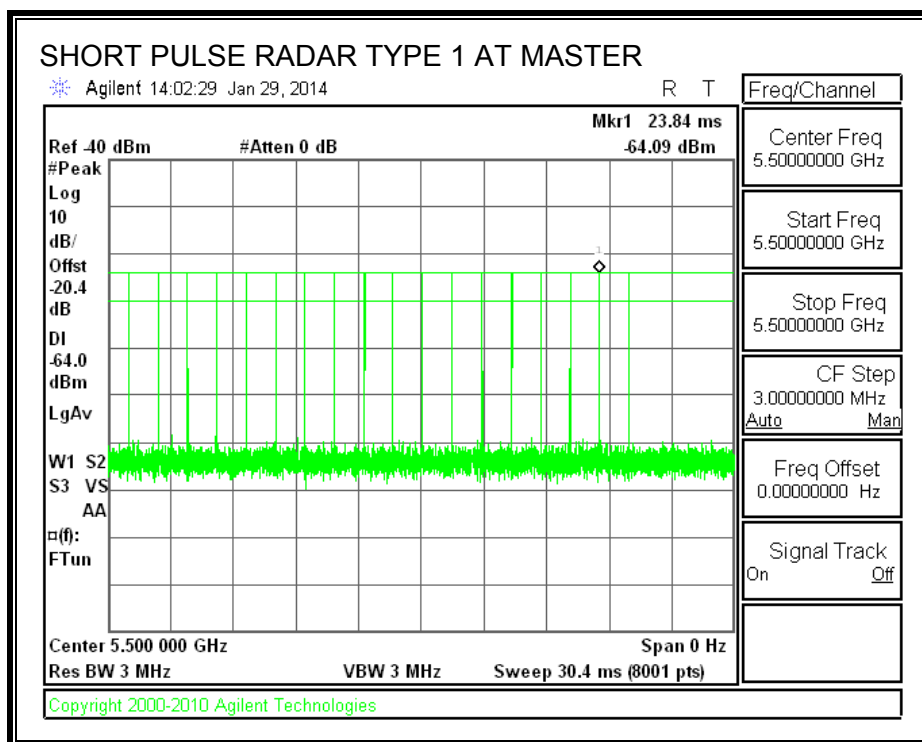
15.2. RESULTS FOR 20 MHz BANDWIDTH

15.2.1. TEST CHANNEL

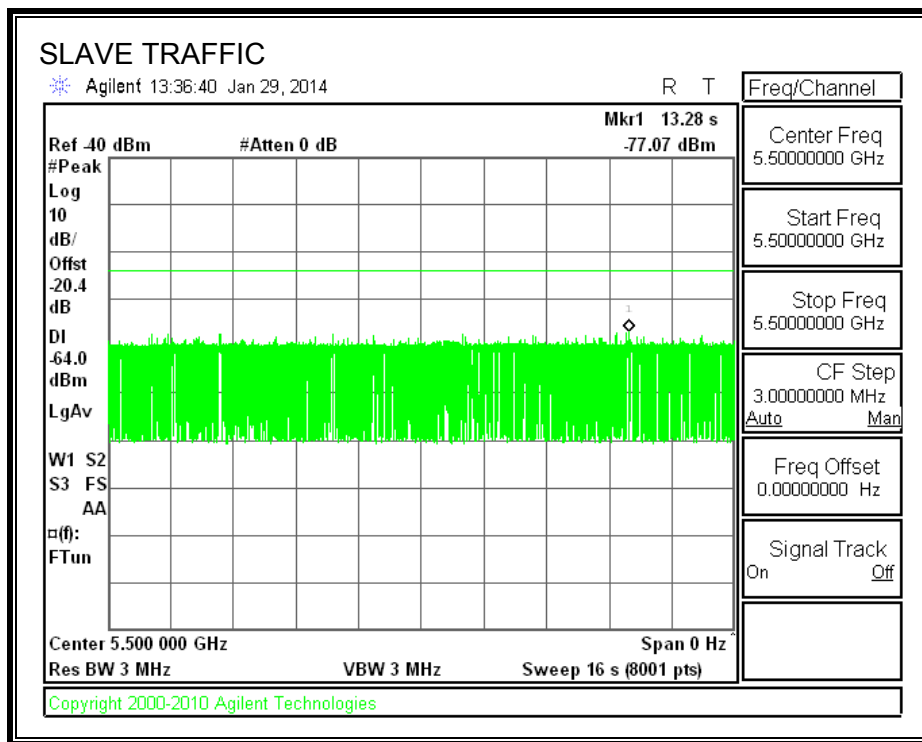
All tests were performed at a channel center frequency of 5500 MHz.

15.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



15.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

15.2.4. 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)

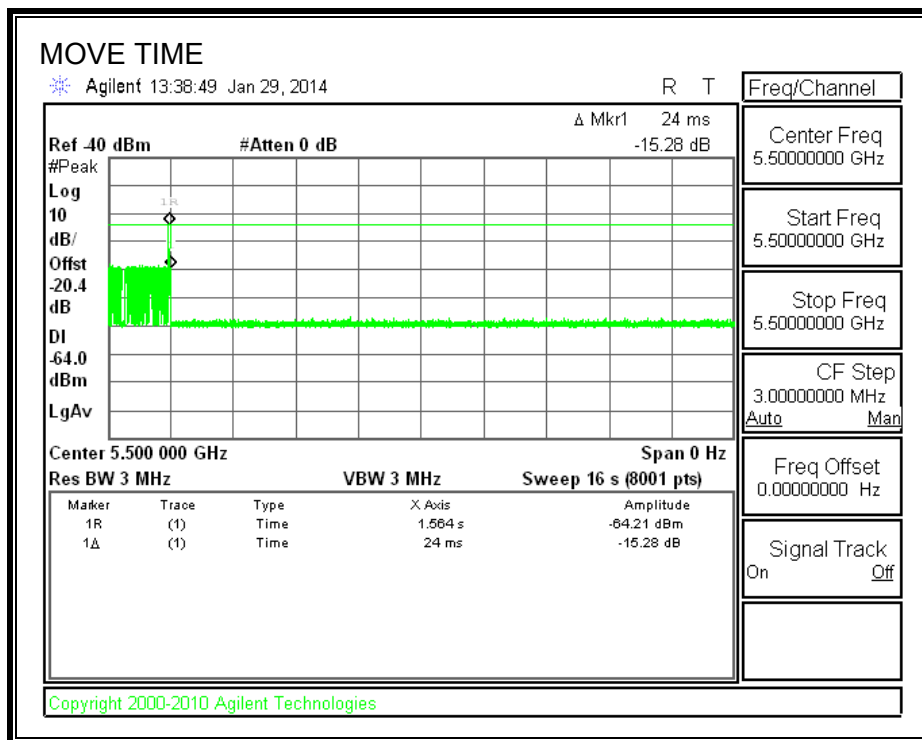
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

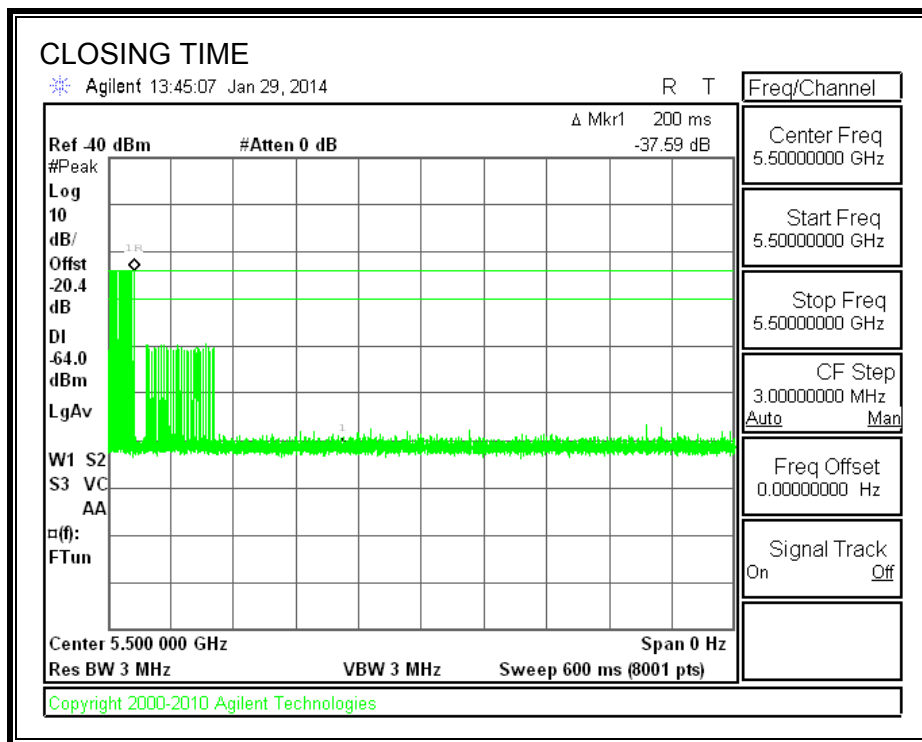
Channel Move Time (sec)	Limit (sec)
0.024	10

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

MOVE TIME

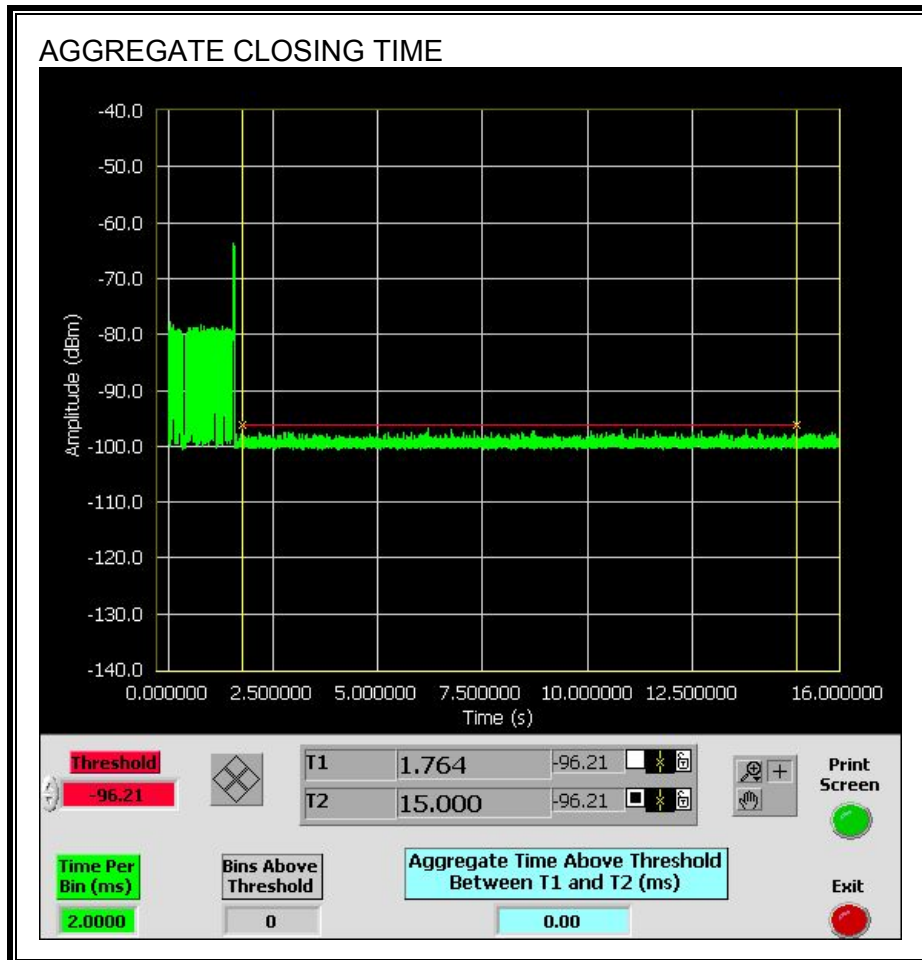


CHANNEL CLOSING TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the aggregate monitoring period.



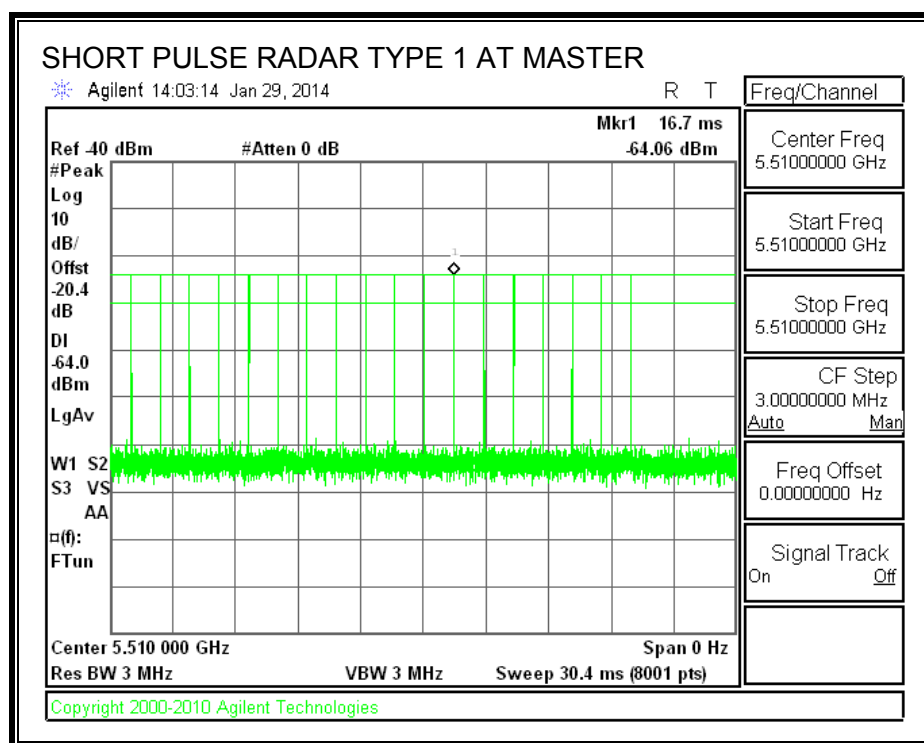
15.3. RESULTS FOR 40 MHz BANDWIDTH

15.3.1. TEST CHANNEL

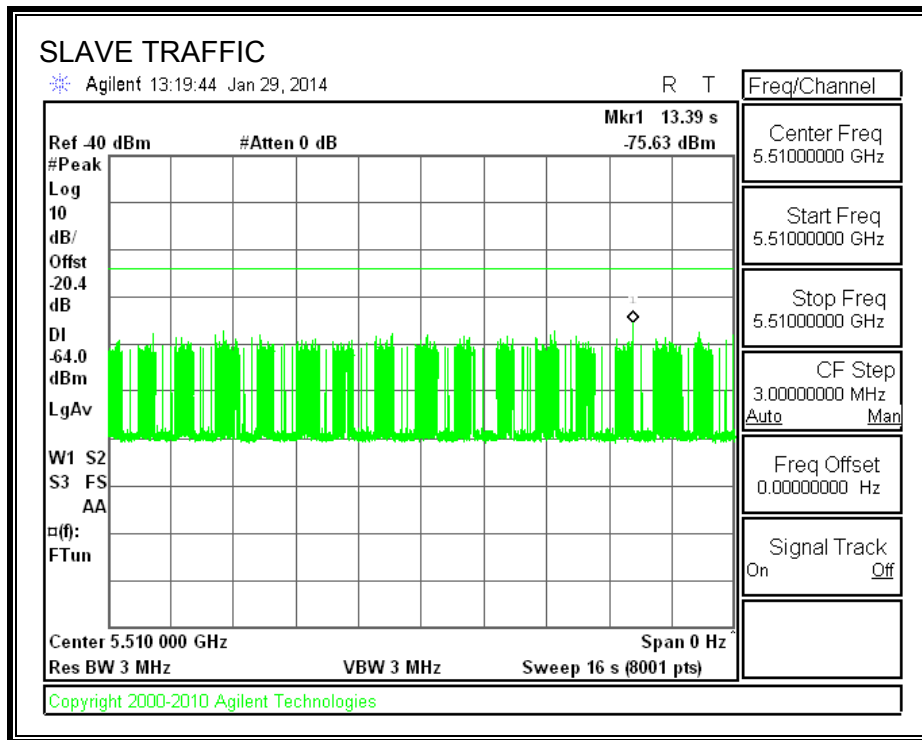
All tests were performed at a channel center frequency of 5510 MHz.

15.3.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



TRAFFIC



15.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

15.3.4. 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)

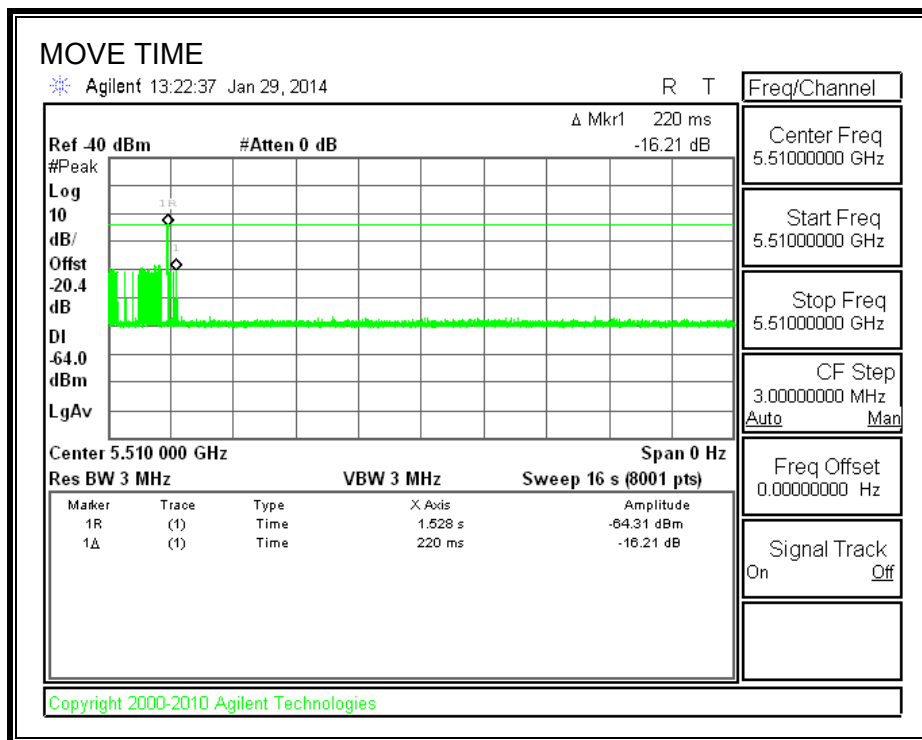
The observation period over which the aggregate time is calculated begins at (Reference Marker + 200 msec) and ends no earlier than (Reference Marker + 10 sec).

RESULTS

Channel Move Time (sec)	Limit (sec)
0.220	10

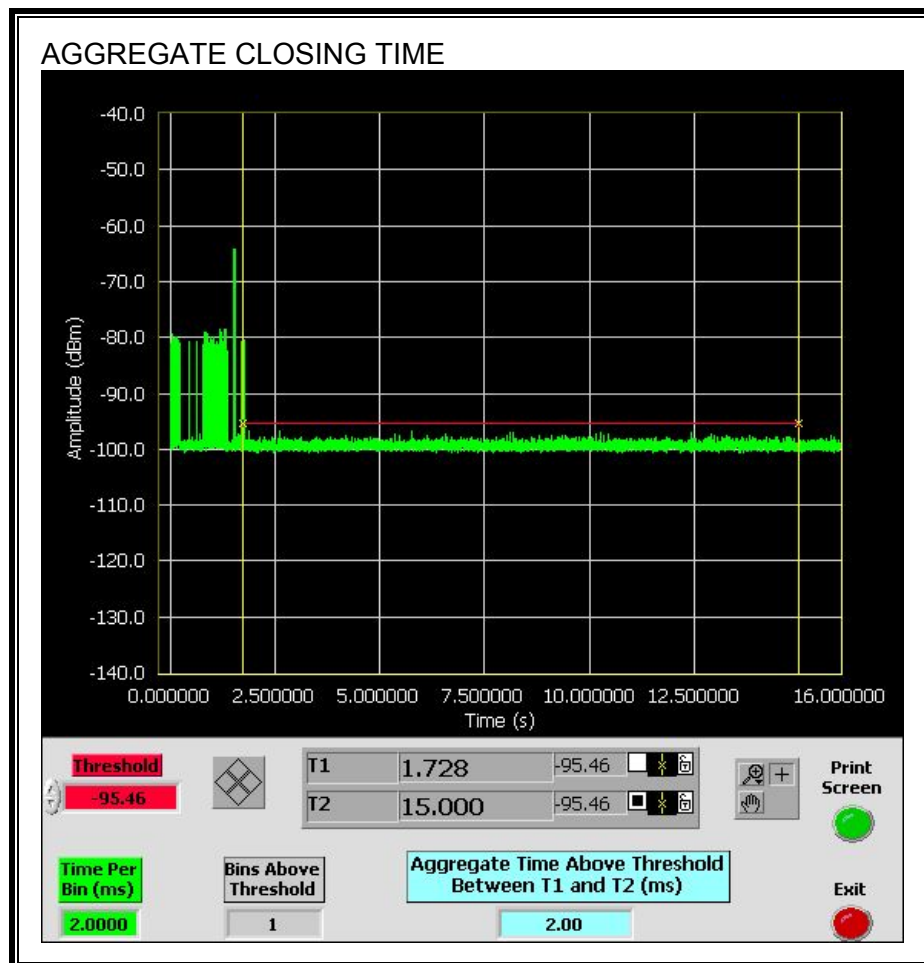
Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
2.0	60

MOVE TIME



AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the aggregate monitoring period.



15.3.5. NON-OCCUPANCY PERIOD

RESULTS

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

