



FCC 47 CFR PART 15 SUBPART C

CERTIFICATION TEST REPORT

FOR

APPLE WATCH

MODEL NUMBER: A1554 & A1638

FCC ID: BCG-E2871

IC: 579C-E2871

REPORT NUMBER: 14U19371-E3, REVISION C

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Prepared for

APPLE, INC

1 INFINITE LOOP

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Prepared by

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NVLAP LAB CODE 200065-0

Revision History

Rev.	Issue Date	Revisions	Revised By
--	02/20/15	Initial Issue	C. Pang
B	02/27/15	Revised report to address TCB's questions	T. Chu
C	03/03/15	Revised report to address TCB's questions	T. Chu

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: APPLE
1 INFINITE LOOP
CUPERTINO, CA 95014, U.S.A.

EUT DESCRIPTION: APPLE WATCH

MODEL: A1554 & A1638

SERIAL NUMBER: FG7NQ0JJFY2H (ANTENNA 1 A1554 RADIATED)
FH7P304AG9JC (ANTENNA 2 A1554 RADIATED)
F4KNN00LGDKR (ANTENNA 1 A1638 RADIATED)

DATE TESTED: NOVEMBER 24, 2014 – FEBRUARY 11, 2015

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
CFR 47 Part 15 Subpart C	Pass
INDUSTRY CANADA RSS-210 Issue 8 Annex 8	Pass
INDUSTRY CANADA RSS-GEN Issue 4	Pass

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

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

Approved & Released For
UL Verification Services Inc. By:

Tested By:



CHIN PANG
SENIOR ENGINEER
UL VERIFICATION SERVICES INC.

FRANCISCO GUARNERO
EMC ENGINEER
UL VERIFICATION SERVICES INC.

2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.4-2009, RSS-GEN Issue 4, and 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. The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

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

The above test sites and facilities are covered under FCC Test Firm Registration # 208313. Chambers A through H are covered under Industry Canada company address code 2324B with site numbers 2324B-1 through 2324B-8, respectively

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

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

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

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

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

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 1000 MHz	± 4.94 dB
Radiated Disturbance, 1 to 6 GHz	± 3.86 dB
Radiated Disturbance, 6 to 18 GHz	± 4.23 dB
Radiated Disturbance, 18 to 26 GHz	± 5.30 dB
Radiated Disturbance, 26 to 40 GHz	± 5.23 dB

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

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is an Apple Watch with WLAN, Bluetooth and NFC support.

5.2. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes a Planar Inverted-F Antenna (PIFA) with a maximum gain as below table:

Frequency Band (GHz)	Model	Antenna 1 Gain (dBi)	Antenna 2 Gain (dBi)
2.4	A1554	-11.1	-11.1
	A1638	-11.1	

The EUT has two models, A1554 and A1638. Both models have one WiFi/BT antenna port. The antenna used in any given unit can be either antenna 1 or antenna 2 in case of Model A1554. On the other hand Model A1638 has Antenna 1 only.

5.3. SOFTWARE AND FIRMWARE

The firmware installed in the EUT during testing was 6.25.178.20

The test utility software used during testing was r503465 WLTEST

5.4. WORST-CASE CONFIGURATION AND MODE

EUT has 3 types of enclosures and various kinds of metallic and non-metallic wristbands. There are 2 types of metallic bands; Metal Links, and Metal Mesh. Worst case configuration was investigated; and it was found that the stainless steel enclosure and metal mesh wristband was the worst case. All testing are performed on the worst case.

The following configurations were investigated and EUT powered by AC/DC adapter was the worst-case scenario. AC power line and below 1G radiated tests were conducted on configuration 1.

Configuration	Descriptions
1	EUT powered by AC/DC adapter via USB cable with wireless charger
2	EUT powered by host PC via USB cable with wireless charger

Radiated emission, 30-1000MHz and 18-26GHz, and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

All testing was performed with the EUT in three orthogonal orientations X-orientation (flatbed), Y-orientation (landscape), and Z-orientation (portrait). It was found that Y-orientation (landscape) was the worst-case.

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

802.11b mode: 1 Mbps
802.11g mode: 6 Mbps
802.11n HT20 mode: MCS0

Since spurious emissions for Low, Mid and High channel have been made with the highest possible power that the EUT can be transmitted, channel 2 and 10 are covered.

5.5. DESCRIPTION OF TEST SETUP

SUPPORT EQUIPMENT

Support Equipment List				
Description	Manufacturer	Model	Serial Number	FCC ID
Laptop AC/DC adapter	Apple	A1343	N/A	N/A
Laptop	Apple	A1278	C02HJ0A7DTY4	NA
Wireless Charger	Apple	A1570	DLC451508N5FTPG3K	BCGA1570
AC/DC adapter	Apple	A1265	1X3276SZZ08QZ	N/A

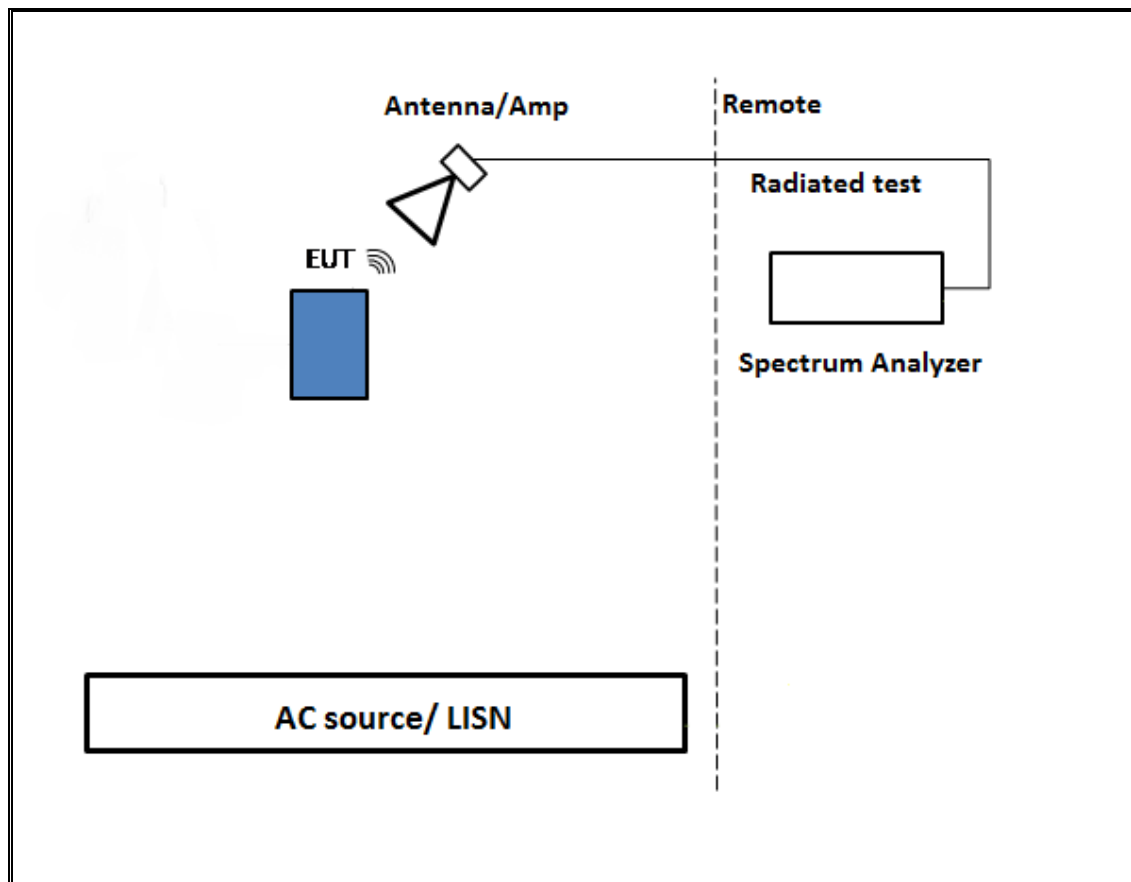
I/O CABLES (BELOW 1G RADIATED AND AC POWERLINE CONDUCTED TEST)

I/O Cable List						
Cable No	Port	# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
1	USB	1	USB	Un-Shielded	2	To AC/DC adapter

TEST SETUP- RADIATED ABOVE 1 GHz

The EUT was tested battery powered. Test software exercised the EUT.

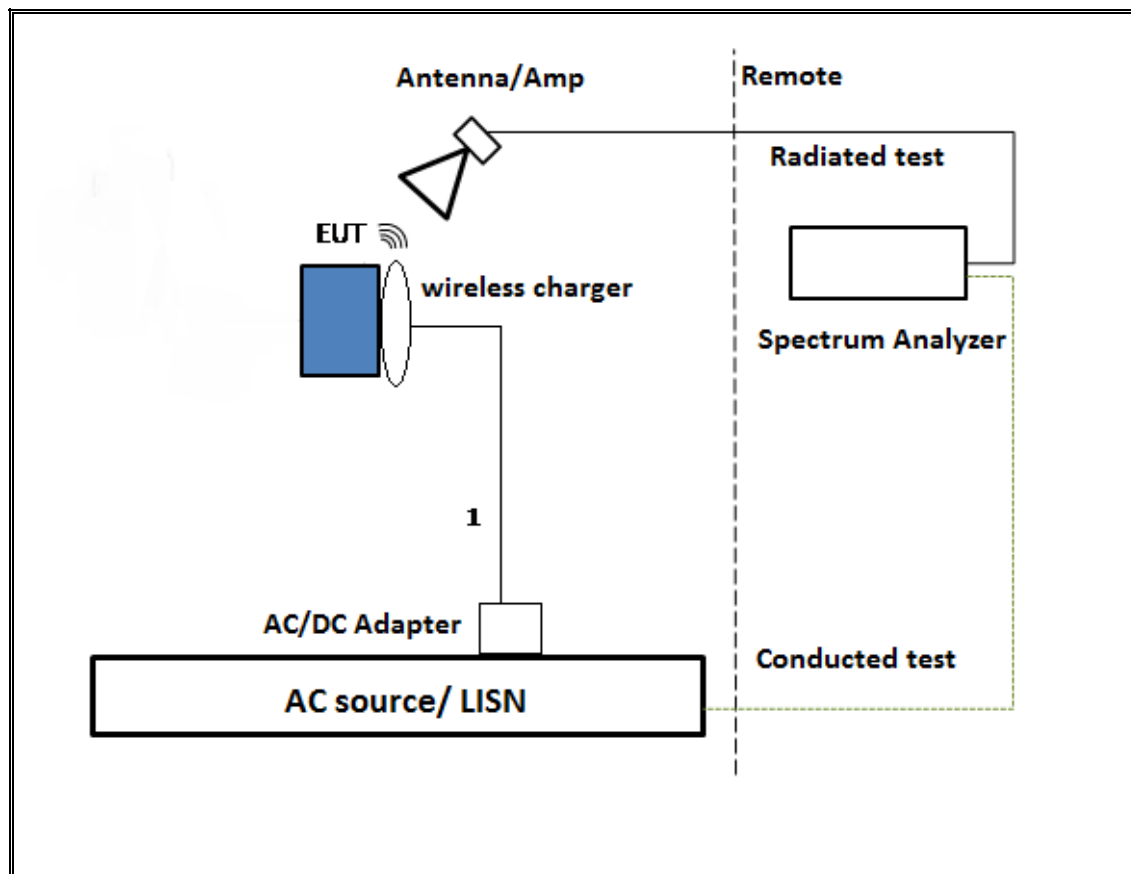
SETUP DIAGRAM



TEST SETUP- BELOW 1GHZ & AC LINE CONDUCTED TESTS

The EUT was powered by wireless charger. Test software exercised the EUT.

SETUP DIAGRAM



6. TEST AND MEASUREMENT EQUIPMENT

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

Test Equipment List				
Description	Manufacturer	Model	T #	Cal Due
PXA Signal Analyzer	Agilent	N9030A	T342	06/25/15
Power Meter	Agilent	N1911A	T382	04/09/15
Antenna, Horn 1-18GHz	ETS Lindgren	3117	T119	01/15/16
Antenna, Hybrid 30MHz to 2GHz	Sunol Sciences	JB3	T407	05/05/15
PXA Signal Analyzer 3Hz to 44GHz	Agilent	N9030A	T340	03/11/15
Amplifier, 10KHz to 1GHz	Sonoma	310N	T286	04/23/15
Amplifier, 1 to 18GHz	Miteq	AFS42-00101	T740	01/26/16
EMI Test Receiver, 9 kHz-7 GHz	R & S	ESCI 7	T284	09/16/15
LISN, 30 MHz	FCC	LISN-50/250-25-2	T24	01/16/16
Amplifier, 1 to 26.5 Ghz	Agilent	8449B	T404	03/25/15
Antenna, Horn 18 to 26.5GHz	ARA	SWH-28	T125	05/09/15
Spectrum Analyzer	Agilent	8564E	T106	08/06/15

7. MEASUREMENT METHODS

6 dB BW: KDB 558074 D01 v03r02, Section 8.1.

Output Power: KDB 558074 D01 v03r02, Section 9.2.3.1

Power Spectral Density: KDB 558074 D01 v03r02, Section 10.3.

Out-of-band emissions in non-restricted bands: KDB 558074 D01 v03r02, Section 11.0.

Out-of-band emissions in restricted bands: KDB 558074 D01 v03r02, Section 12.0

Band-edge: KDB 558074 D01 v03r02, Section 13.3.2.

8. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

LIMITS

None; for reporting purposes only.

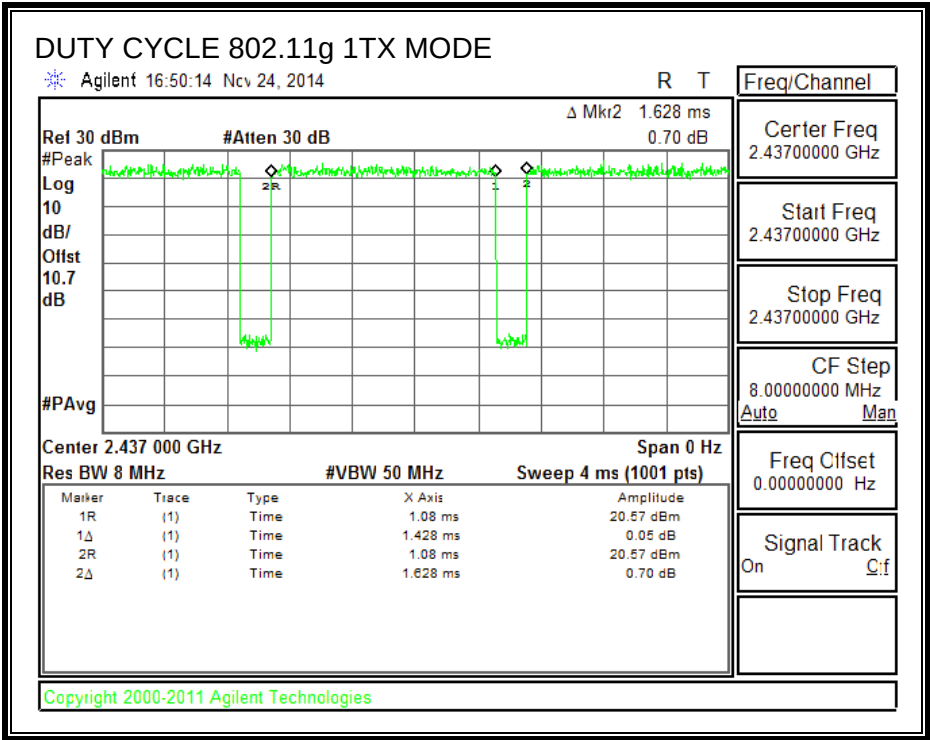
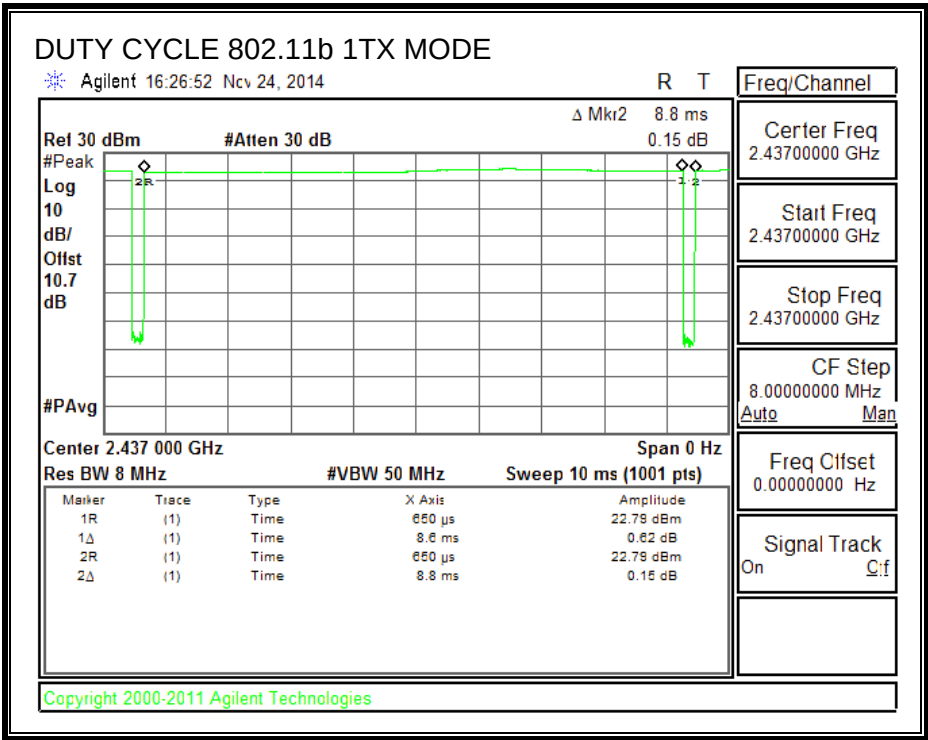
PROCEDURE

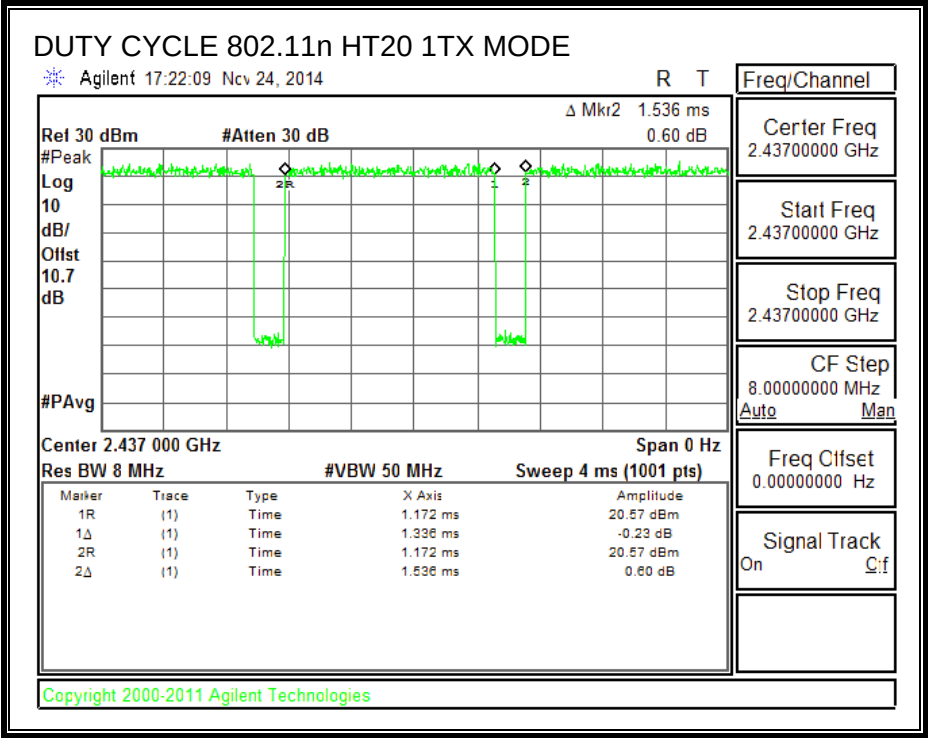
KDB 558074 Zero-Span Spectrum Analyzer Method.

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/B Minimum VBW (kHz)
2.4GHz Band						
802.11b 1TX	8.600	8.800	0.977	97.73%	0.10	0.116
802.11g 1TX	1.428	1.628	0.877	87.71%	0.57	0.700
802.11n HT20 1TX	1.336	1.536	0.870	86.98%	0.61	0.749

DUTY CYCLE PLOTS





9. ANTENNA PORT TEST RESULTS

Model A1554 and model A1638 are using identical electrical design as A1553. For all antenna port results, refer the DTS test report that has done by UL Verification Services Inc. The report and FCC ID numbers are 14U19383-E3C and BCG-E2870 respectively.

10. RADIATED TEST RESULTS

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN, Section 8.9 and 8.10.

IC RSS-GEN, Section 7 (Receiver)

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

TEST PROCEDURE

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

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

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 3 MHz for peak measurements and as applicable for average measurements.

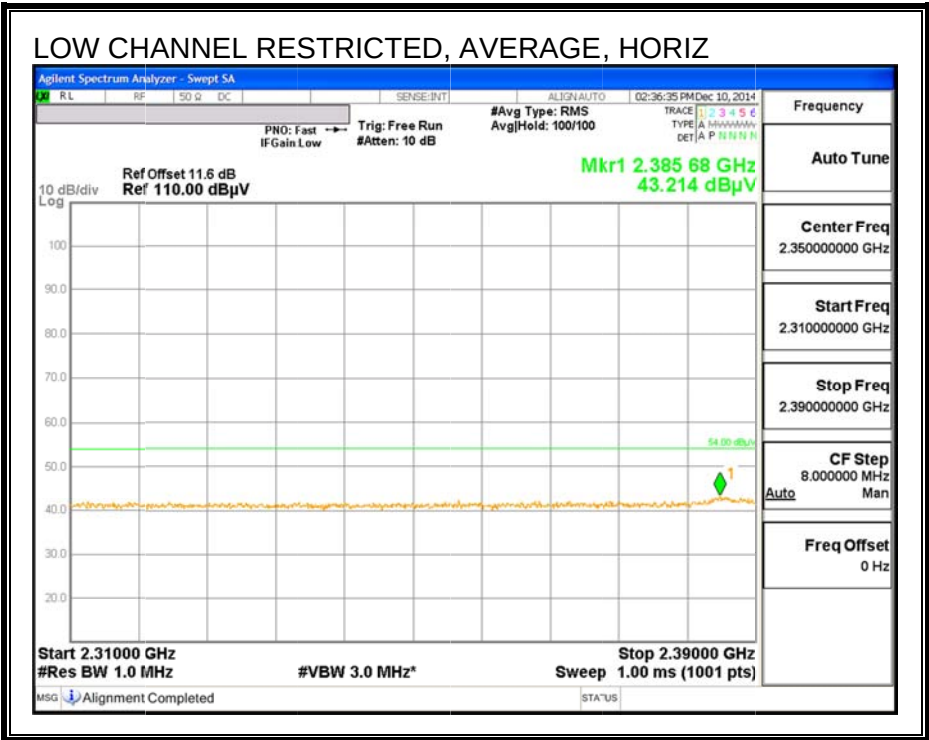
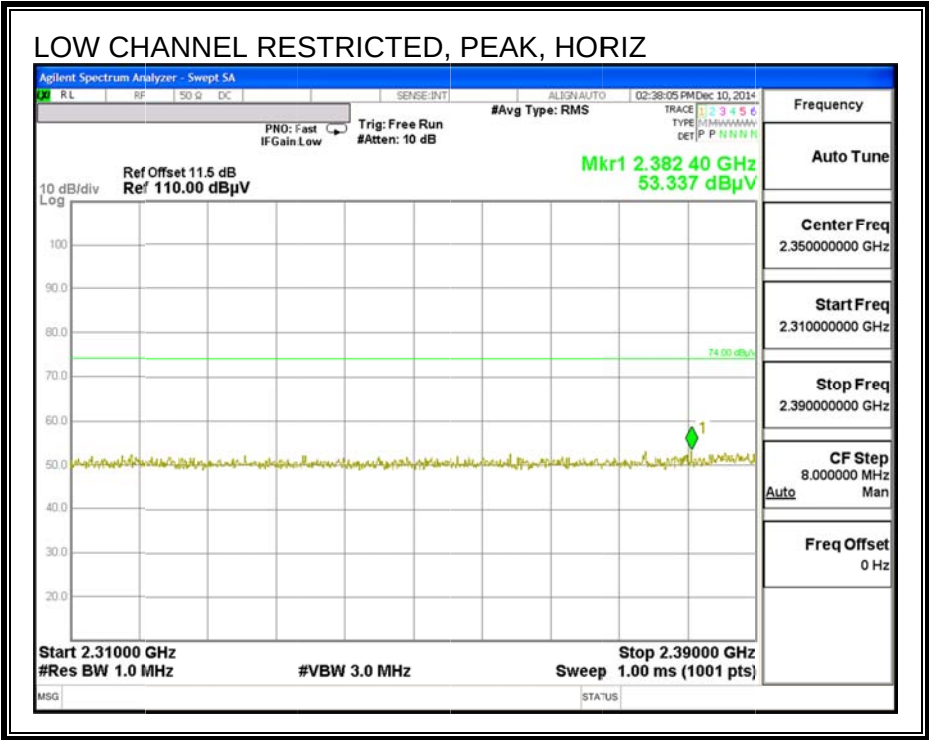
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

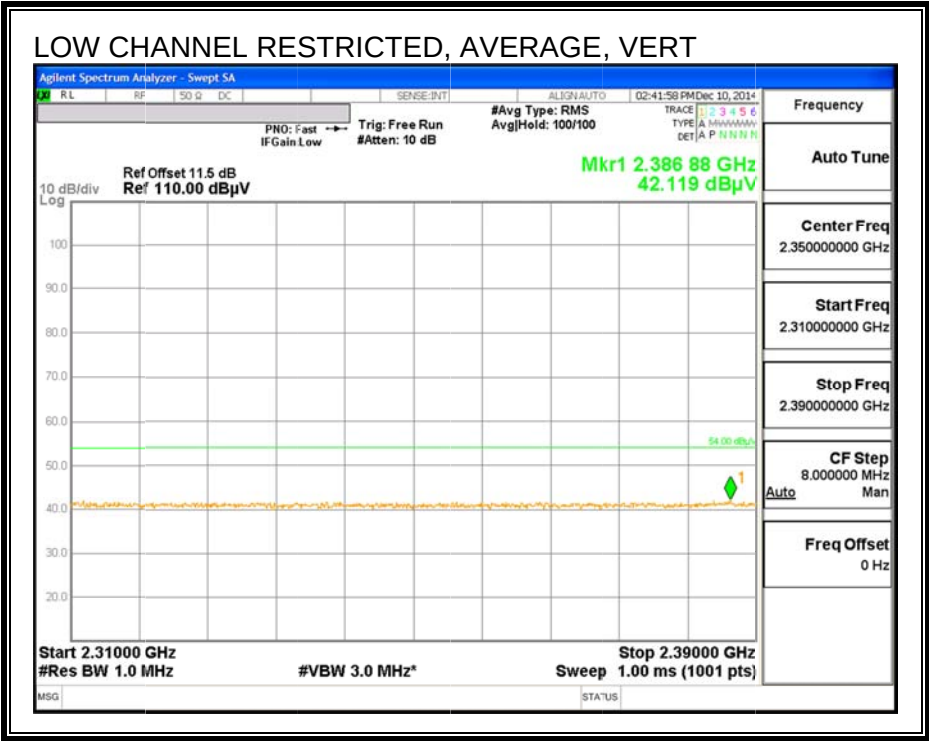
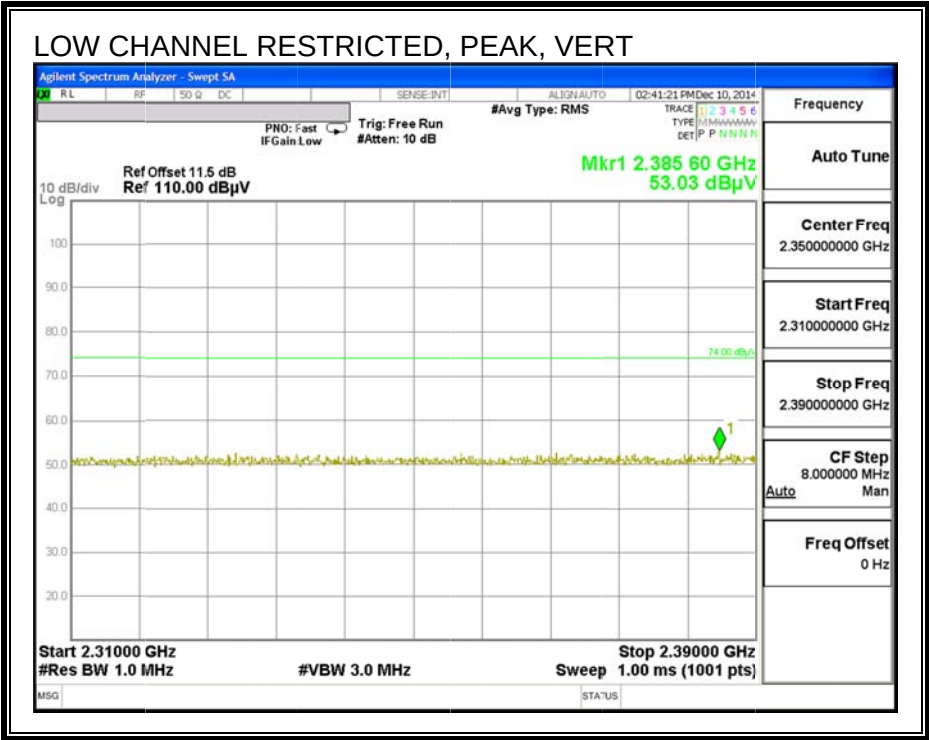
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

10.2. TX ABOVE 1 GHz A1554 ANTENNA 1

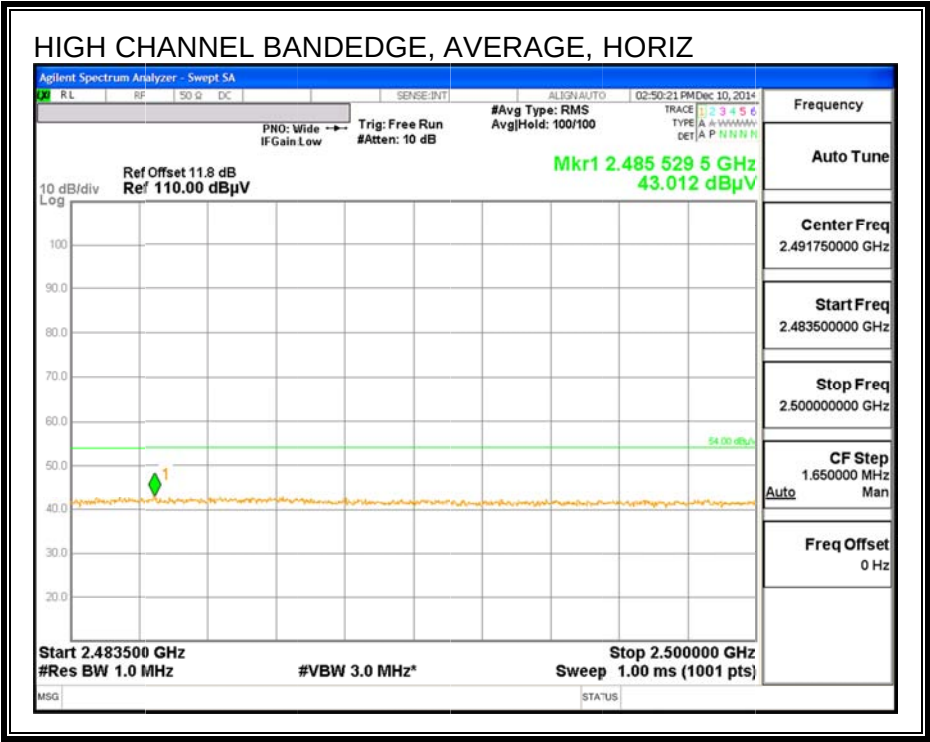
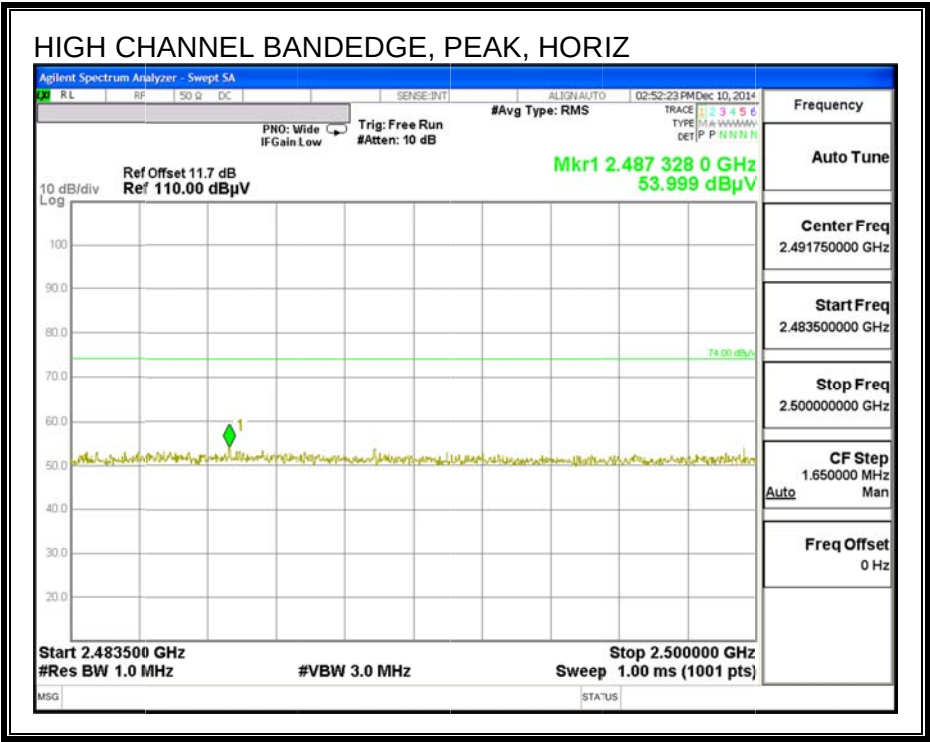
10.2.1. 802.11b 1Tx MODE IN THE 2.4 GHz BAND

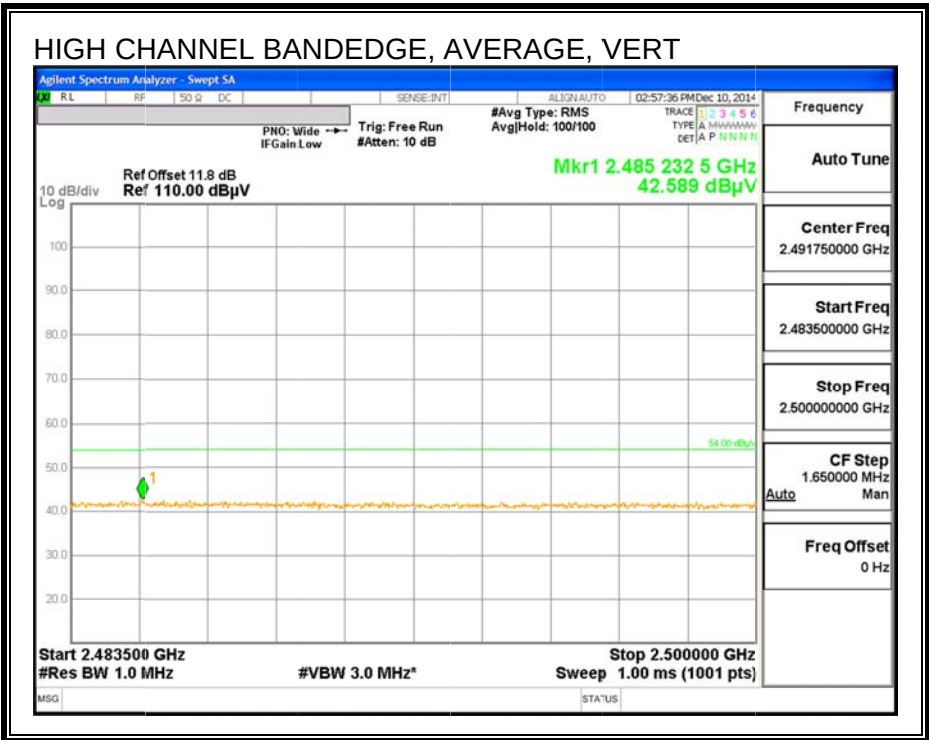
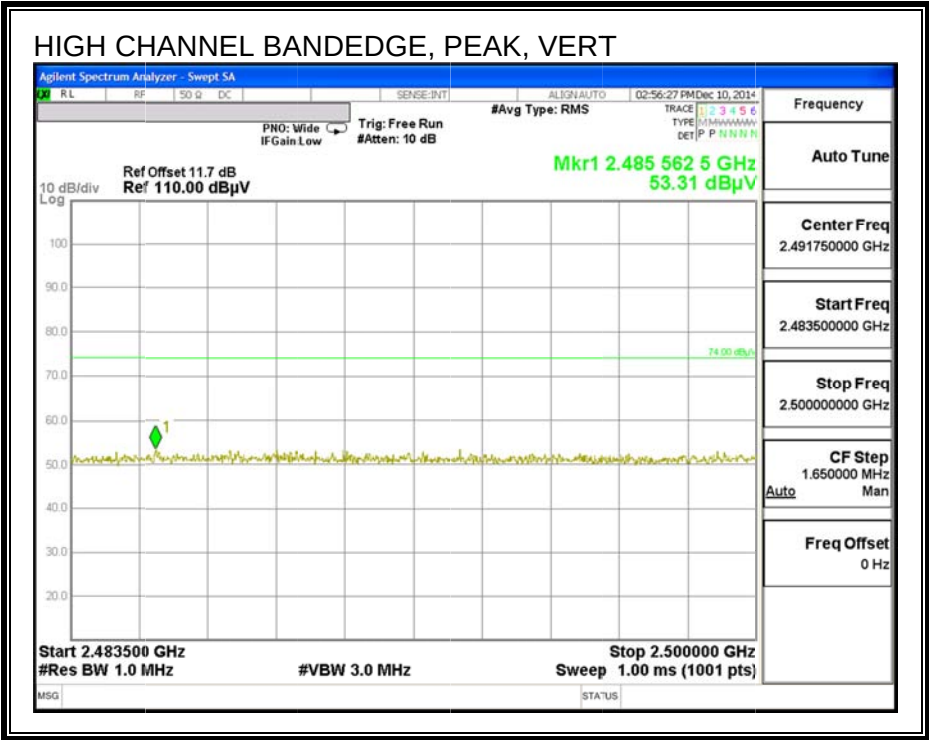
RESTRICTED BANDEDGE (LOW CHANNEL)

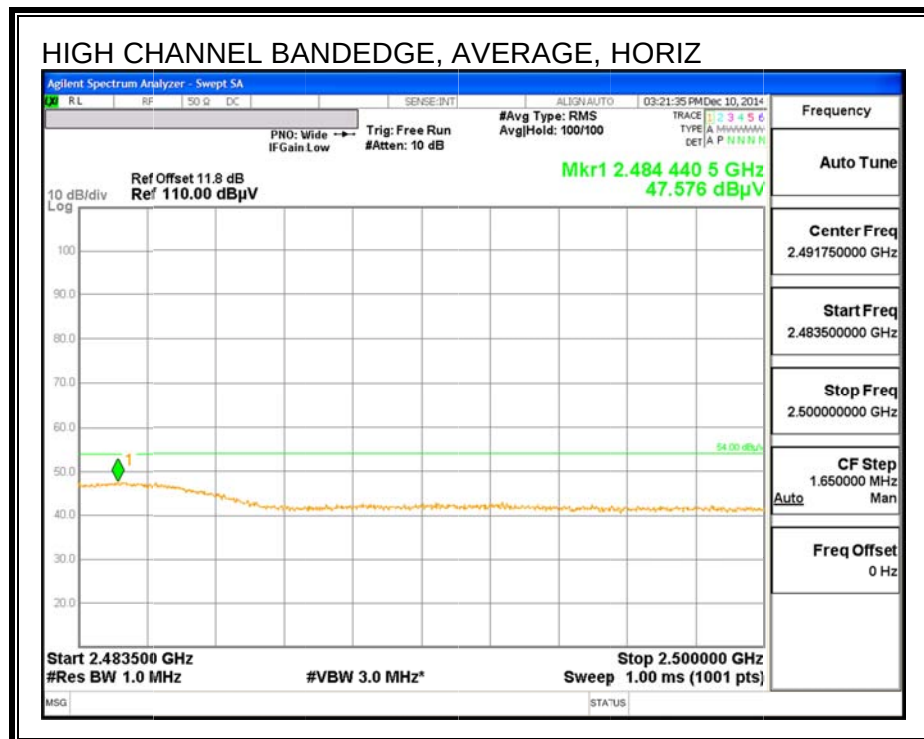
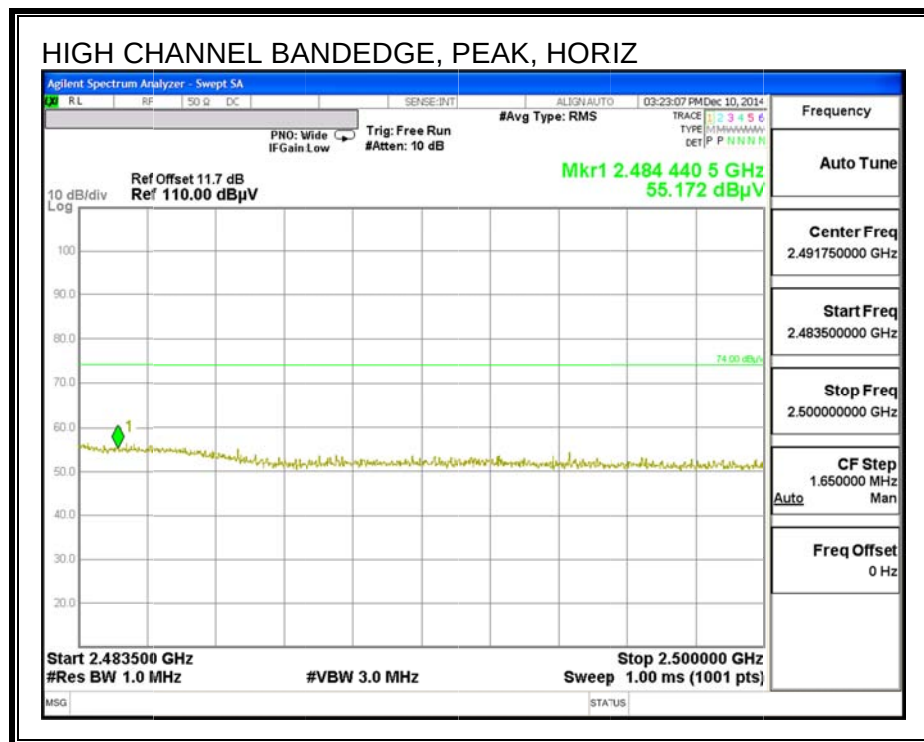


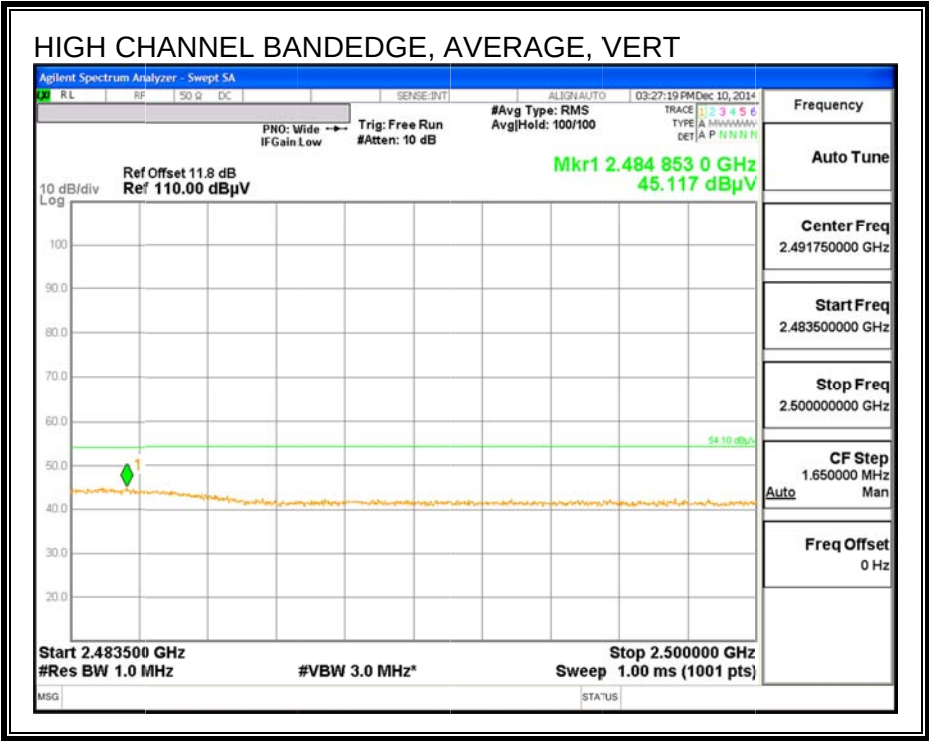
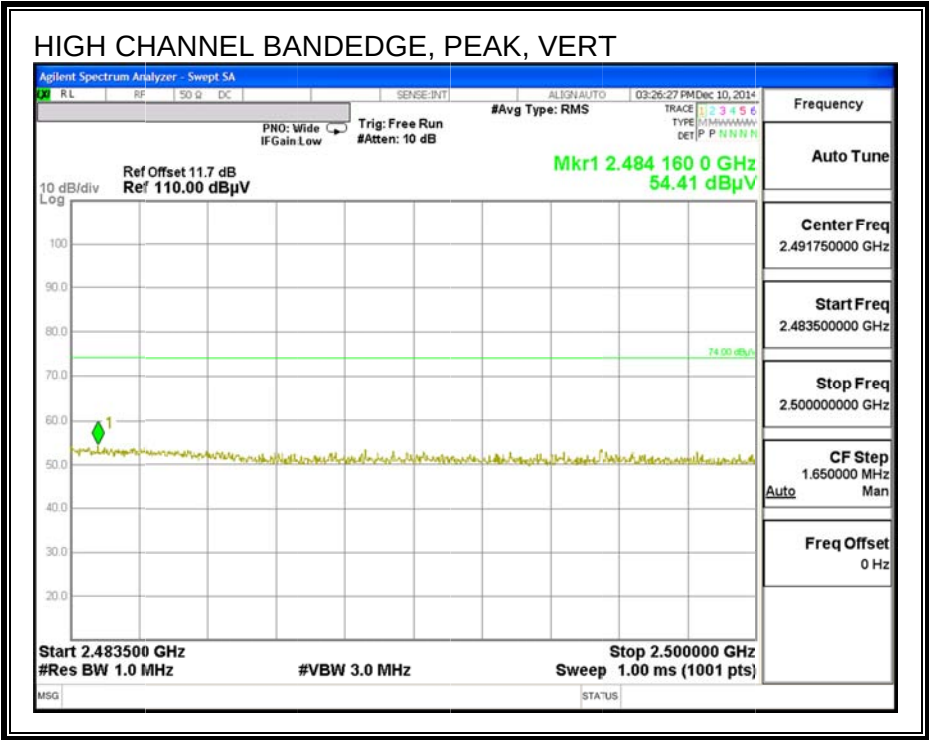


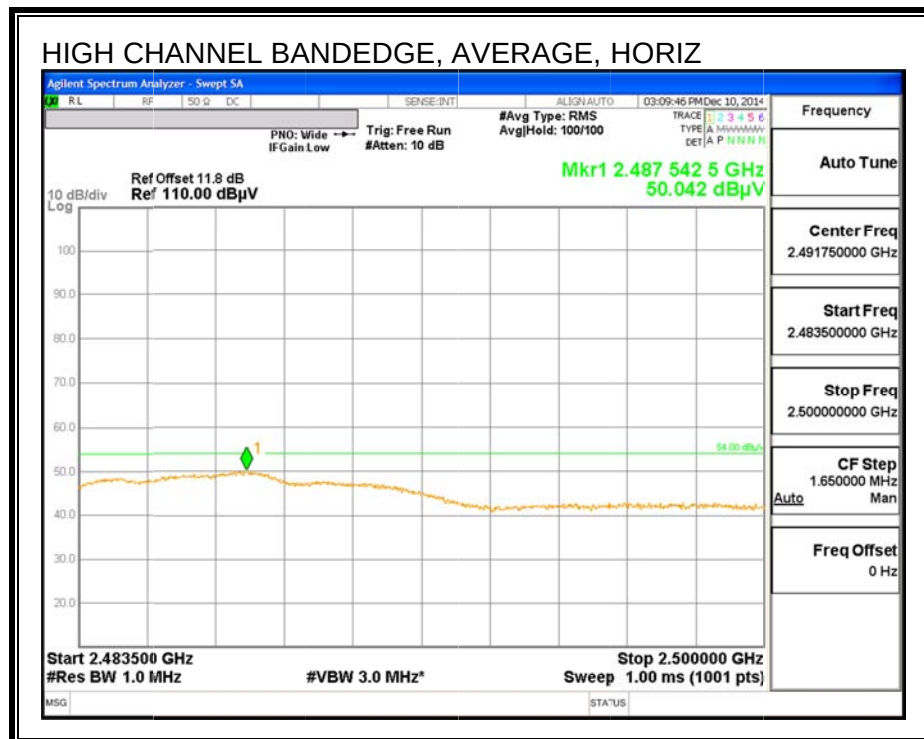
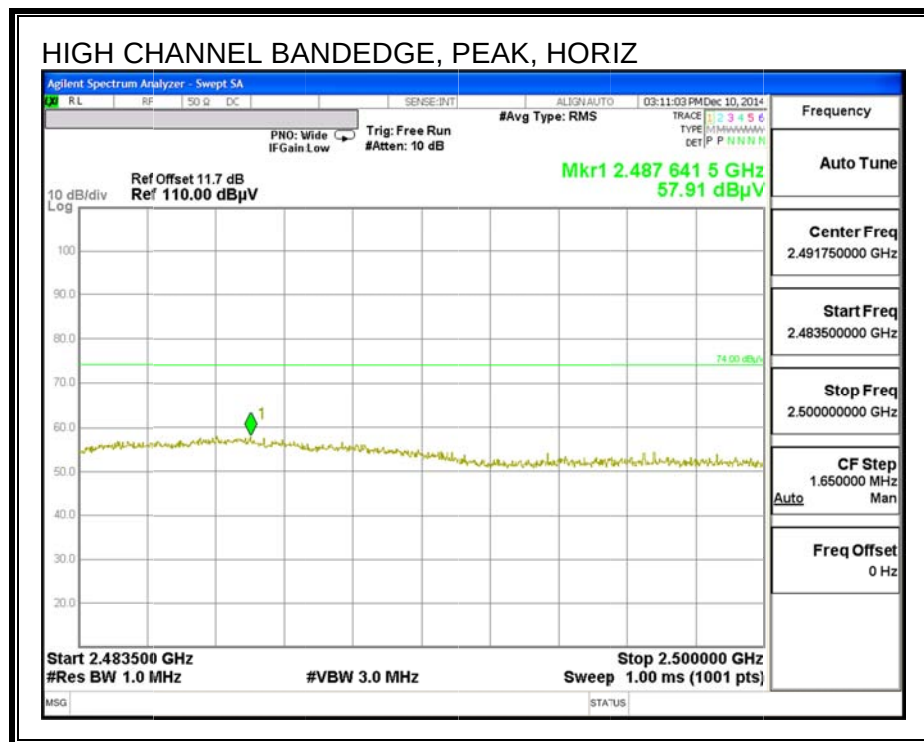
AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 11)

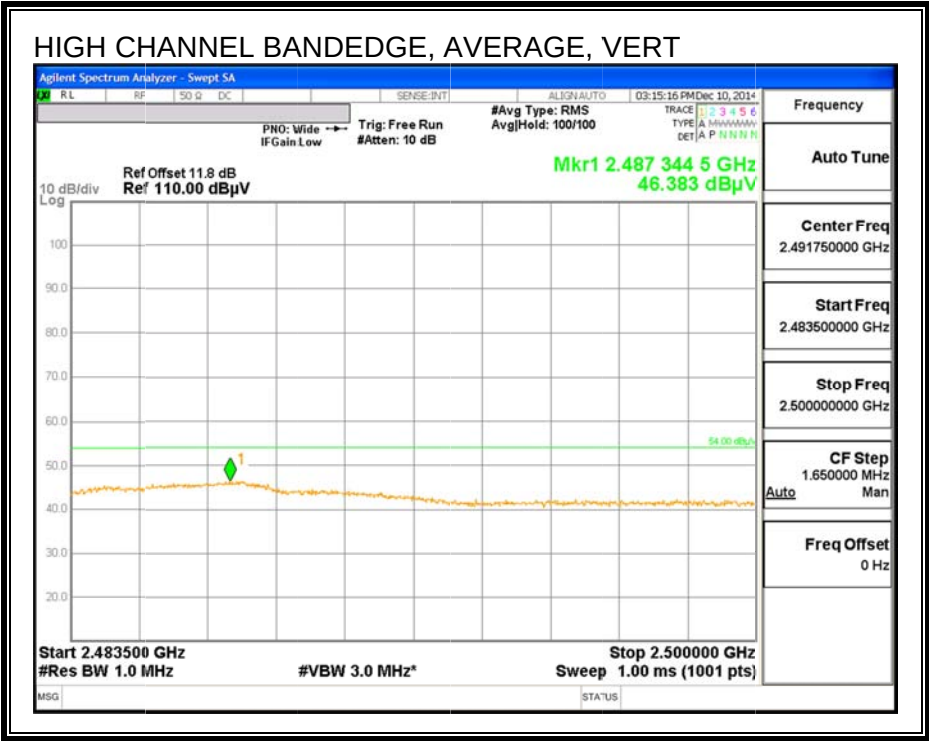
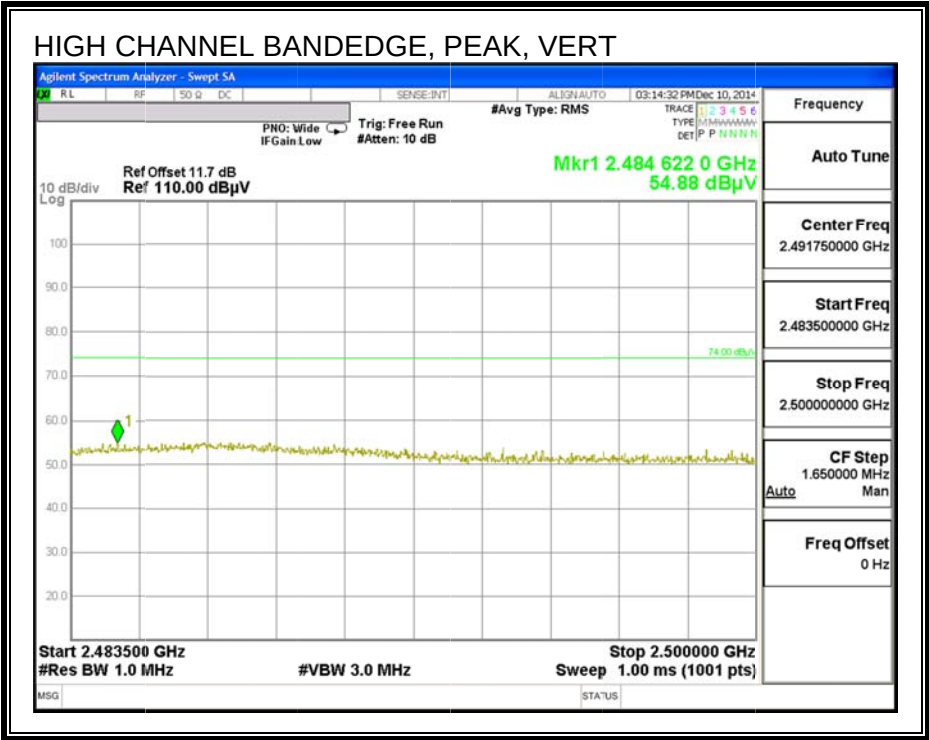




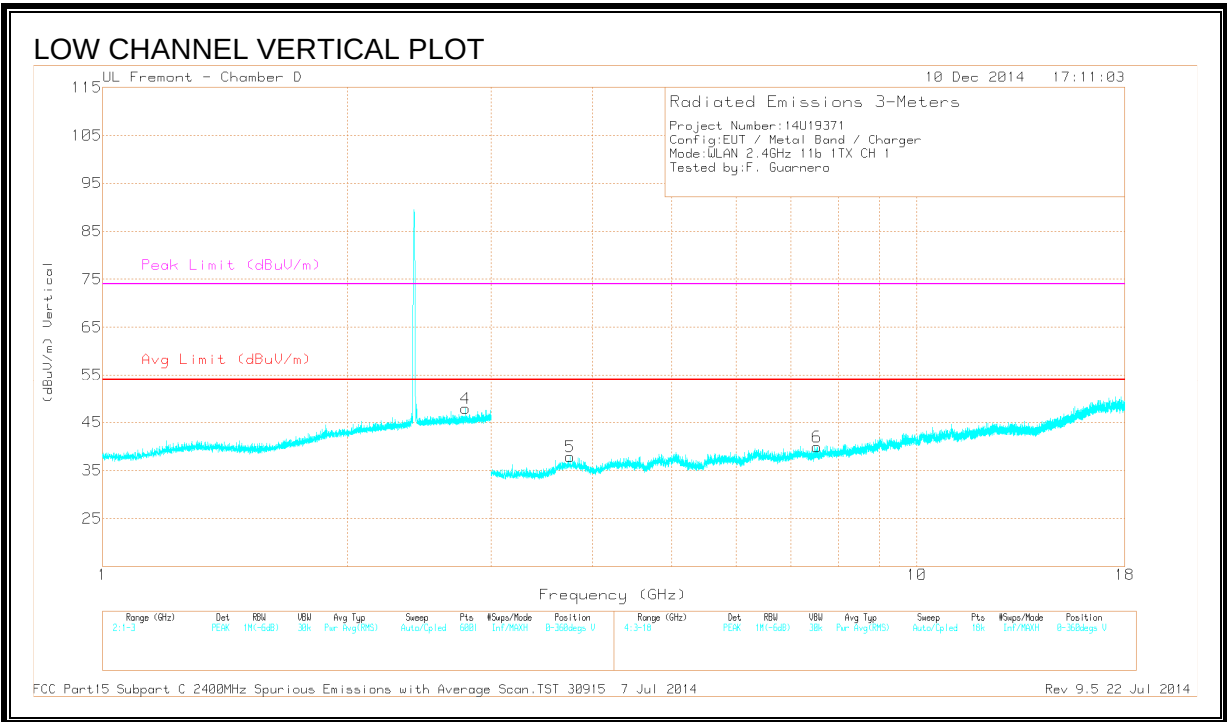
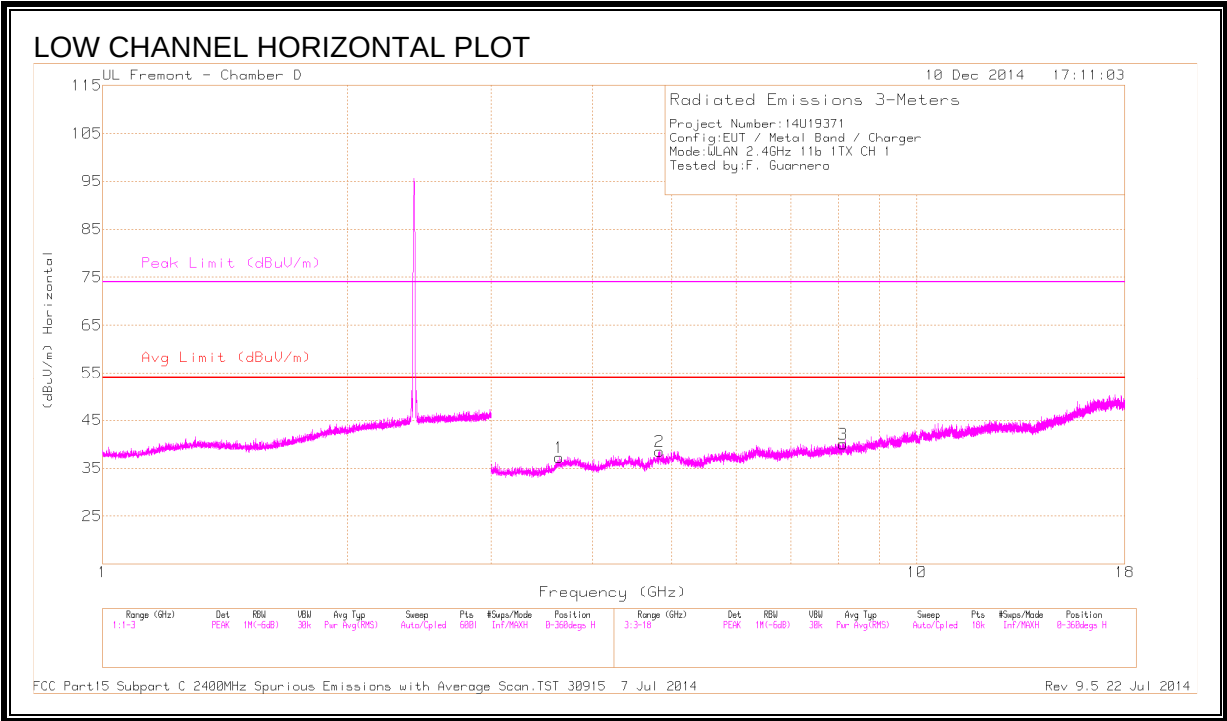








HARMONICS AND SPURIOUS EMISSIONS, CH 1



DATA

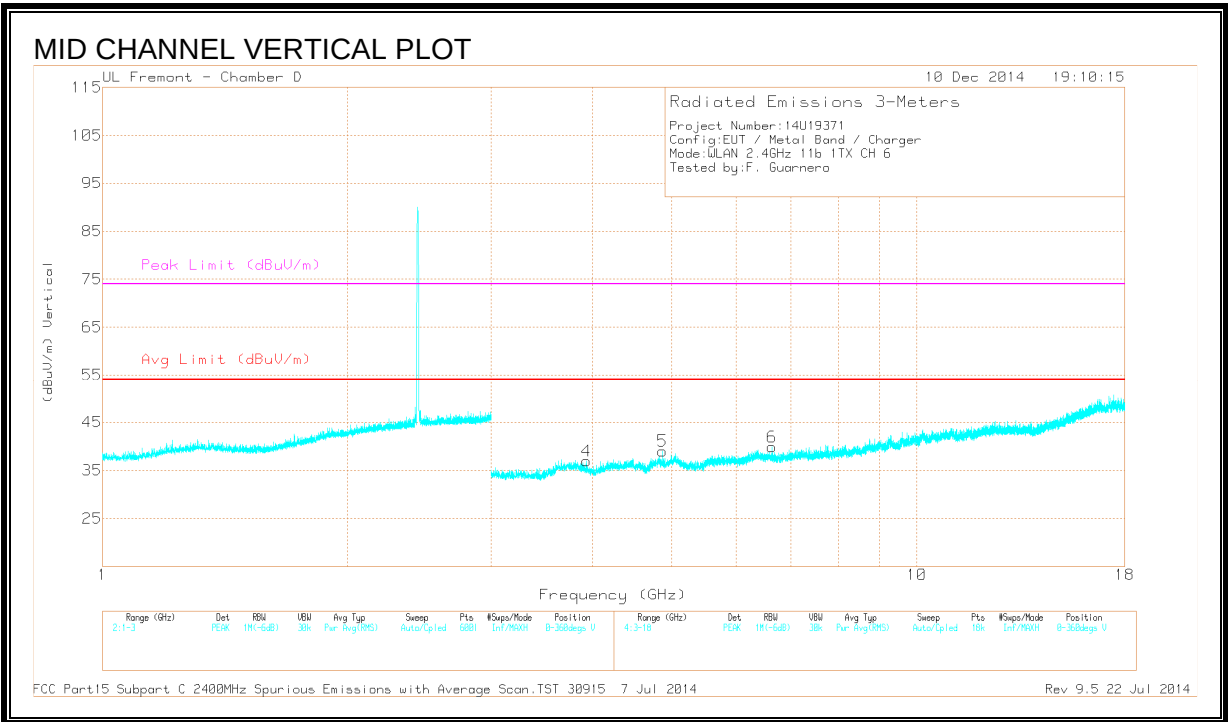
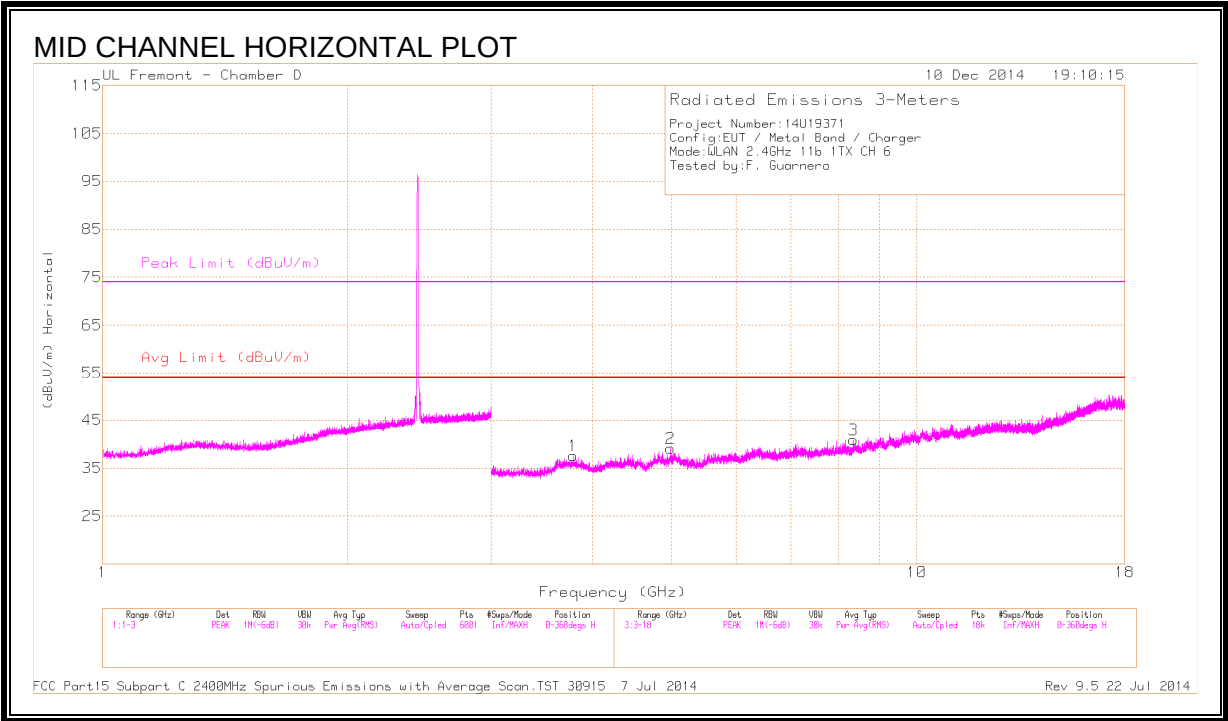
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.637	38.23	PK2	33.4	-28.8	0	42.83	-	-	74	-31.17	239	268	H
	* 3.638	27.45	MAv1	33.4	-28.8	.1	32.15	54	-21.85	-	-	239	268	H
2	* 8.124	34.87	PK2	35.7	-23.4	0	47.17	-	-	74	-26.83	252	271	H
	* 8.124	24.13	MAv1	35.7	-23.4	.1	36.53	54	-17.47	-	-	252	271	H
3	* 7.539	36.55	PK2	35.7	-24.7	0	47.55	-	-	74	-26.45	198	338	V
	* 7.539	24.67	MAv1	35.7	-24.7	.1	35.77	54	-18.23	-	-	198	338	V
4	* 2.791	42.28	PK2	32.5	-20.1	0	54.68	-	-	74	-19.32	193	341	V
	* 2.788	30.04	MAv1	32.5	-20.2	.1	42.44	54	-11.56	-	-	193	341	V
5	* 4.833	38.01	PK2	34.2	-27.3	0	44.91	-	-	74	-29.09	233	279	H
	* 4.831	26.77	MAv1	34.2	-27.3	.1	33.77	54	-20.23	-	-	233	279	H
6	* 3.749	37.99	PK2	33.3	-28.4	0	42.89	-	-	74	-31.11	162	330	V
	* 3.750	27.37	MAv1	33.3	-28.4	.1	32.37	54	-21.63	-	-	162	330	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, CH 6



DATA

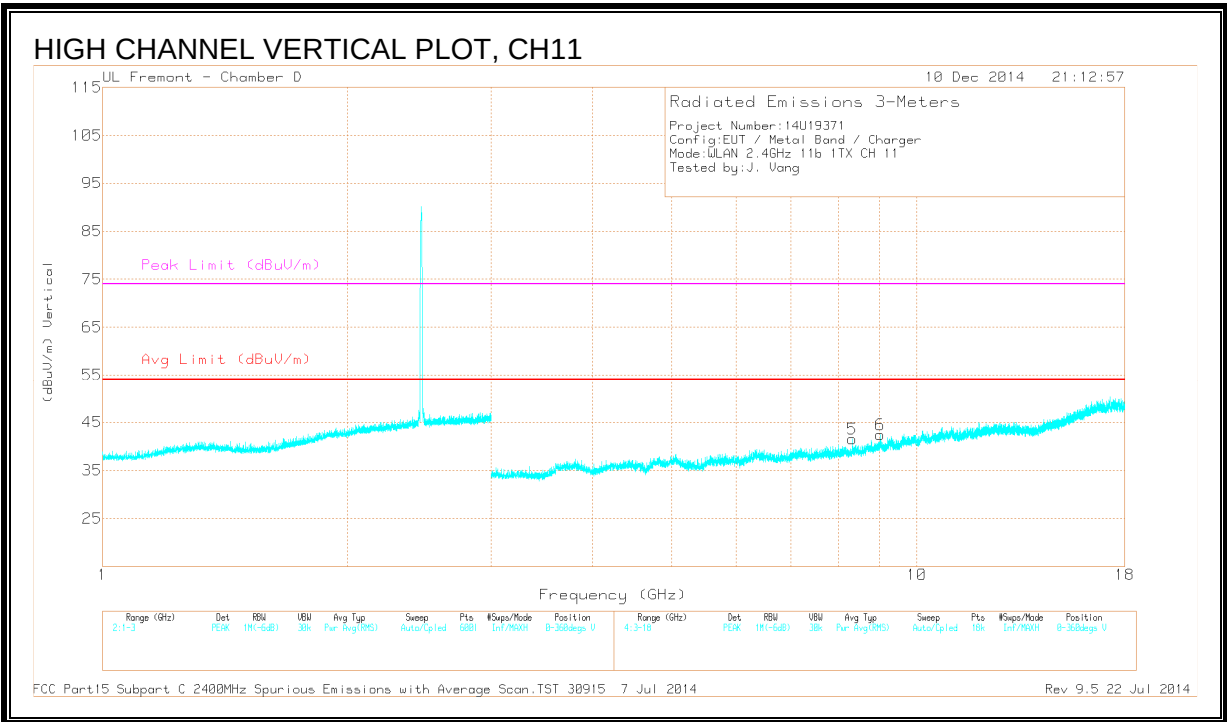
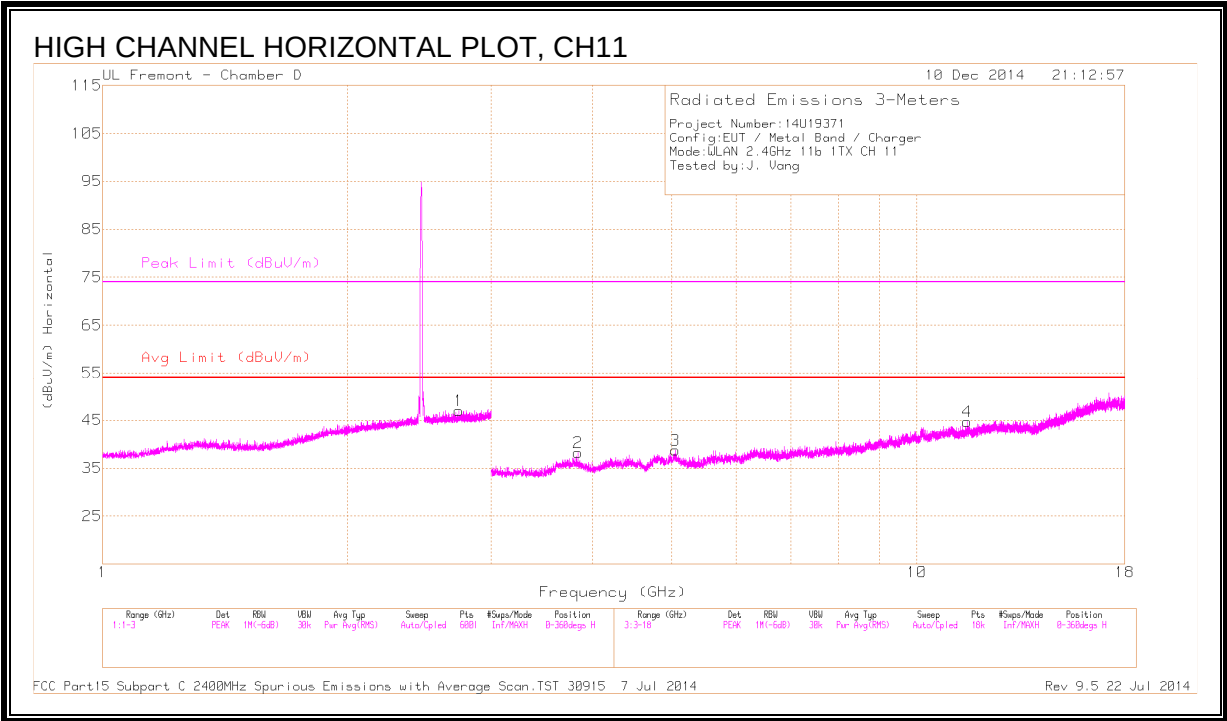
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.784	38.09	PK2	33.4	-28.3	0	43.19	-	-	74	-30.81	241	260	H
	* 3.783	27.46	MAv1	33.4	-28.3	.1	32.66	54	-21.34	-	-	241	260	H
2	* 4.981	37.52	PK2	34.2	-26.9	0	44.82	-	-	74	-29.18	233	277	H
	* 4.981	26.74	MAv1	34.2	-26.9	.1	34.14	54	-19.86	-	-	233	277	H
3	* 8.349	34.88	PK2	35.8	-23.4	0	47.28	-	-	74	-26.72	236	268	H
	* 8.350	24.25	MAv1	35.8	-23.4	.1	36.75	54	-17.25	-	-	236	268	H
4	* 3.927	38.22	PK2	33.5	-28.2	0	43.52	-	-	74	-30.48	107	169	V
	* 3.929	27.26	MAv1	33.5	-28.2	.1	32.66	54	-21.34	-	-	107	169	V
5	* 4.874	38.24	PK2	34.2	-27.8	0	44.64	-	-	74	-29.36	107	160	V
	* 4.874	27.09	MAv1	34.2	-27.8	.1	33.59	54	-20.41	-	-	107	160	V
6	6.644	36.76	PK2	35.6	-25.7	0	46.66	-	-	-	-	121	161	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, CH 11



DATA

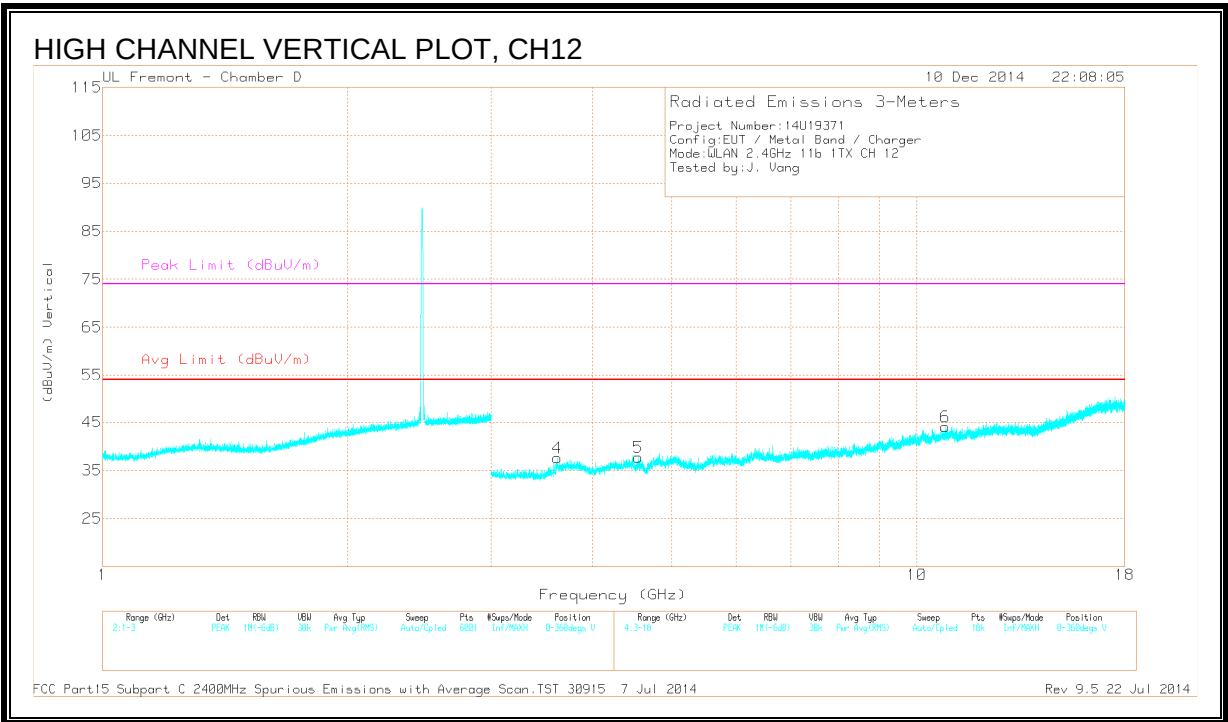
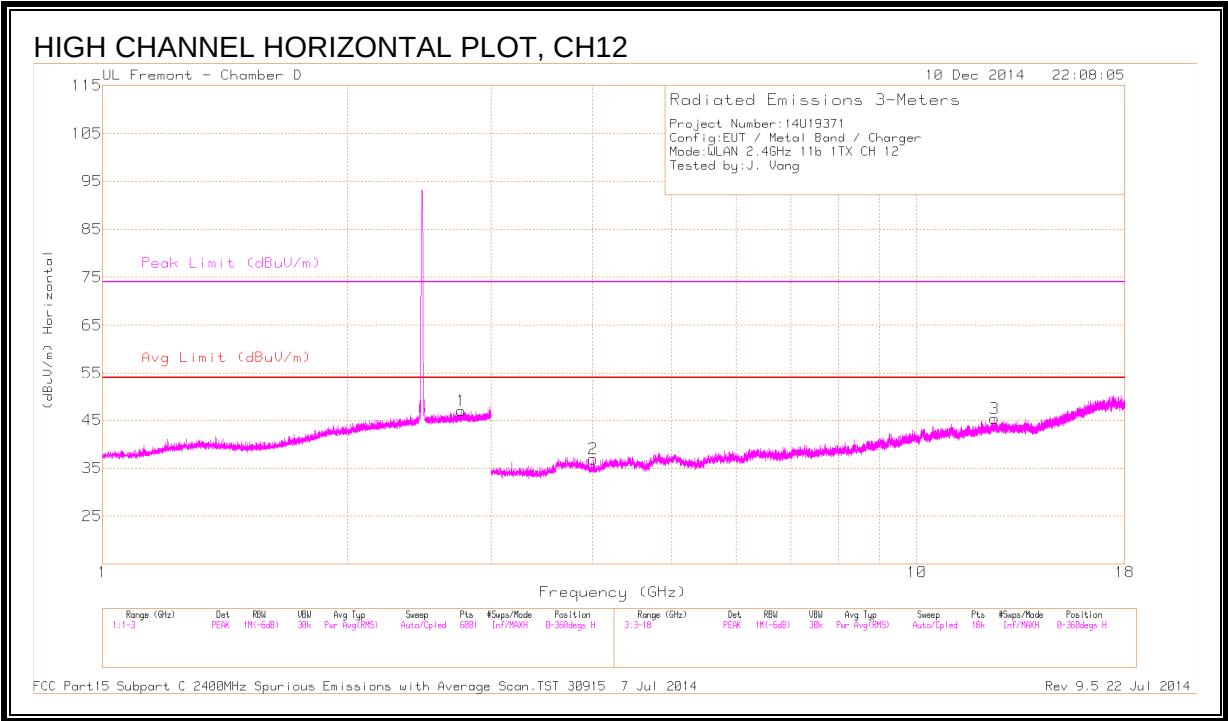
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.739	41.34	PK2	32.4	-20.3	0	53.44	-	-	74	-20.56	35	224	H
	* 2.736	29.74	MAv1	32.4	-20.3	.1	41.94	54	-12.06	-	-	35	224	H
2	* 3.837	39.32	PK2	33.4	-28.4	0	44.32	-	-	74	-29.68	126	276	H
	* 3.836	27.52	MAv1	33.4	-28.4	.1	32.62	54	-21.38	-	-	126	276	H
3	* 5.050	36.86	PK2	34.3	-26.3	0	44.86	-	-	74	-29.14	316	293	H
	* 5.050	25.92	MAv1	34.3	-26.3	.1	34.02	54	-19.98	-	-	316	293	H
4	* 11.536	33.74	PK2	38.2	-20.9	0	51.04	-	-	74	-22.96	11	244	H
	* 11.535	22.48	MAv1	38.2	-20.9	.1	39.88	54	-14.12	-	-	11	244	H
5	* 8.337	34.85	PK2	35.8	-23.7	0	46.95	-	-	74	-27.05	299	291	V
	* 8.333	23.88	MAv1	35.8	-23.8	.1	35.98	54	-18.02	-	-	299	291	V
6	* 9.013	34.90	PK2	36.2	-22.2	0	48.90	-	-	74	-25.10	97	386	V
	* 9.012	22.95	MAv1	36.2	-22.2	.1	37.05	54	-16.95	-	-	97	386	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, CH 12



DATA

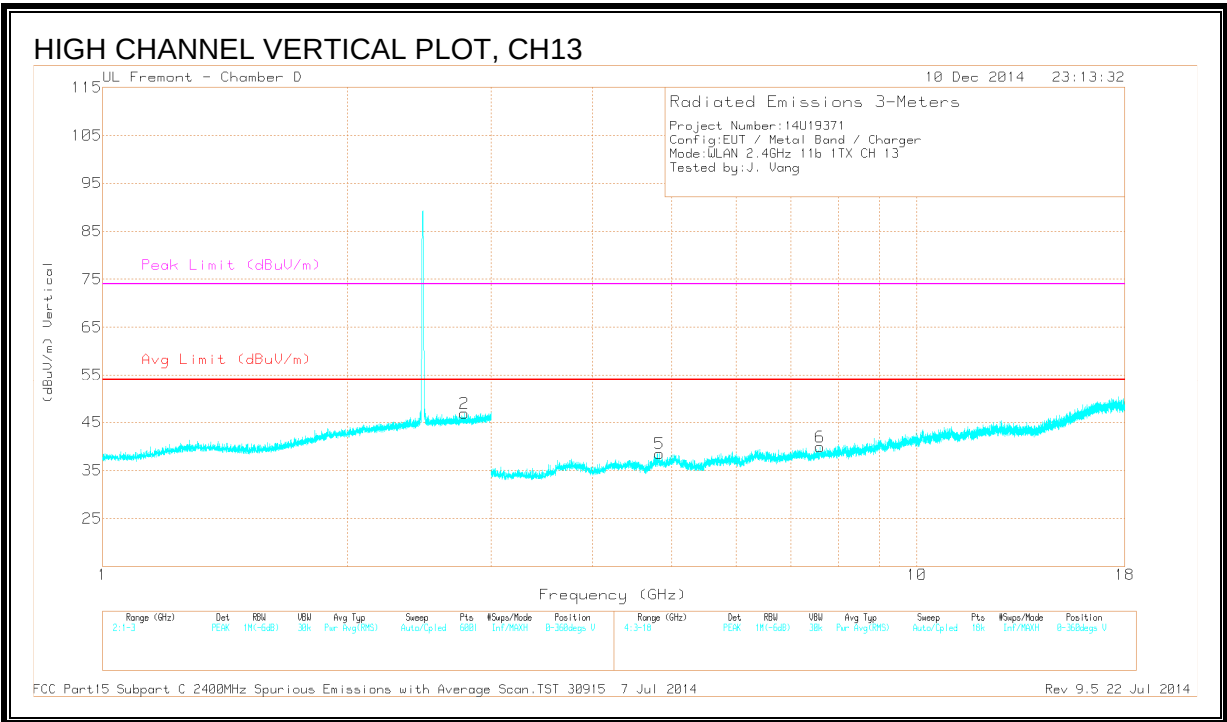
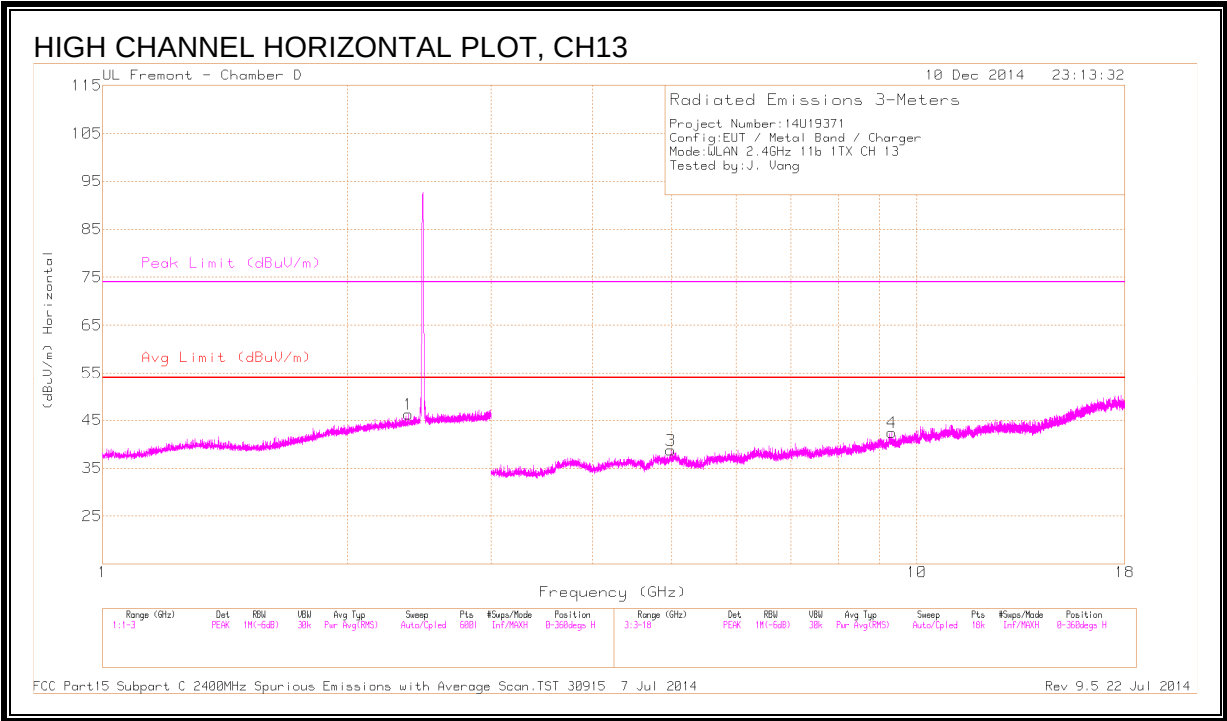
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Ftr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.754	41.21	PK2	32.5	-20.3	0	53.41	-	-	74	-20.59	355	255	H
	* 2.756	29.70	MAV1	32.5	-20.3	.1	42.00	54	-12.00	-	-	355	255	H
2	* 4.008	38.69	PK2	33.4	-28.3	0	43.79	-	-	74	-30.21	262	375	H
	* 4.009	26.68	MAV1	33.4	-28.3	.1	31.88	54	-22.12	-	-	262	375	H
3	* 12.463	34.00	PK2	39.2	-21.1	0	52.10	-	-	74	-21.90	298	233	H
	* 12.465	22.78	MAV1	39.2	-21.1	.1	40.98	54	-13.02	-	-	298	233	H
4	* 3.613	37.99	PK2	33.5	-28.6	0	42.89	-	-	74	-31.11	5	286	V
	* 3.616	26.90	MAV1	33.5	-28.6	.1	31.90	54	-22.10	-	-	5	286	V
5	* 4.545	37.67	PK2	34.0	-27.6	0	44.07	-	-	74	-29.93	25	230	V
	* 4.544	26.65	MAV1	34.0	-27.6	.1	33.15	54	-20.85	-	-	25	230	V
6	* 10.842	33.71	PK2	38.1	-21.1	0	50.71	-	-	74	-23.29	339	242	V
	* 10.839	22.23	MAV1	38.1	-21.2	.1	39.23	54	-14.77	-	-	339	242	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAV1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, CH 13



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.374	41.55	PK2	32.1	-20.6	0	53.05	-	-	74	-20.95	274	110	H
	* 2.375	29.71	MAv1	32.1	-20.6	.1	41.31	54	-12.69	-	-	274	110	H
2	* 2.784	41.56	PK2	32.5	-20.2	0	53.86	-	-	74	-20.14	252	182	V
	* 2.783	29.74	MAv1	32.5	-20.2	.1	42.14	54	-11.86	-	-	252	182	V
3	* 4.985	37.04	PK2	34.2	-26.9	0	44.34	-	-	74	-29.66	9	137	H
	* 4.984	25.94	MAv1	34.2	-26.9	.1	33.34	54	-20.66	-	-	9	137	H
4	* 9.311	33.75	PK2	36.4	-21.2	0	48.95	-	-	74	-25.05	53	155	H
	* 9.309	22.61	MAv1	36.4	-21.2	.1	37.91	54	-16.09	-	-	53	155	H
5	* 4.832	37.68	PK2	34.2	-27.3	0	44.58	-	-	74	-29.42	105	230	V
	* 4.830	26.28	MAv1	34.2	-27.3	.1	33.28	54	-20.72	-	-	105	230	V
6	* 7.607	35.66	PK2	35.7	-25.0	0	46.36	-	-	74	-27.64	203	384	V
	* 7.606	24.62	MAv1	35.7	-25.0	.1	35.42	54	-18.58	-	-	203	384	V

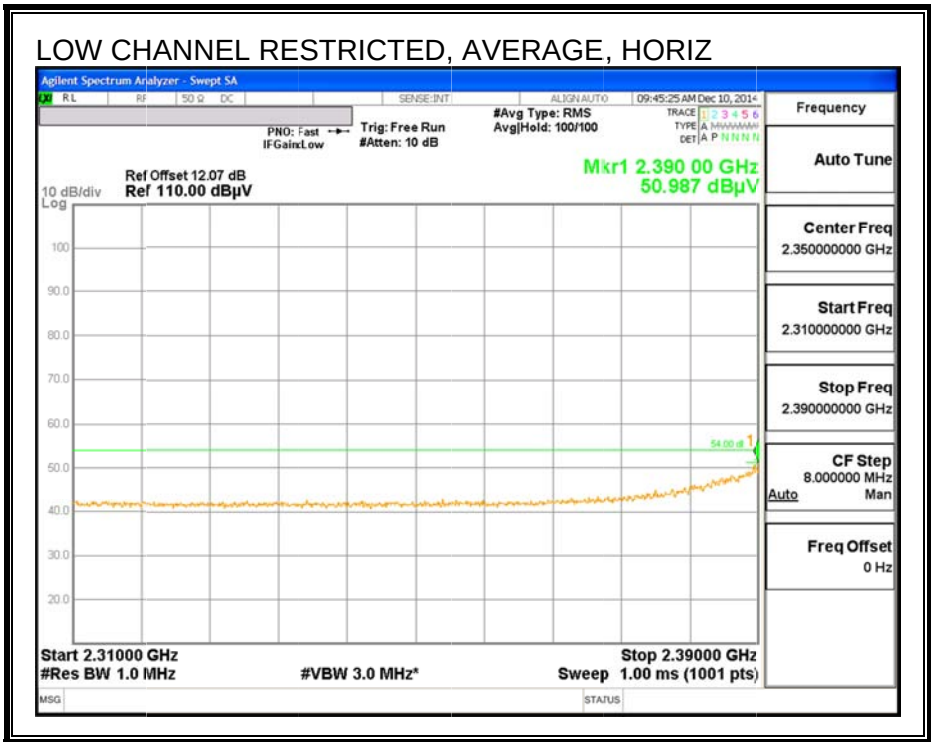
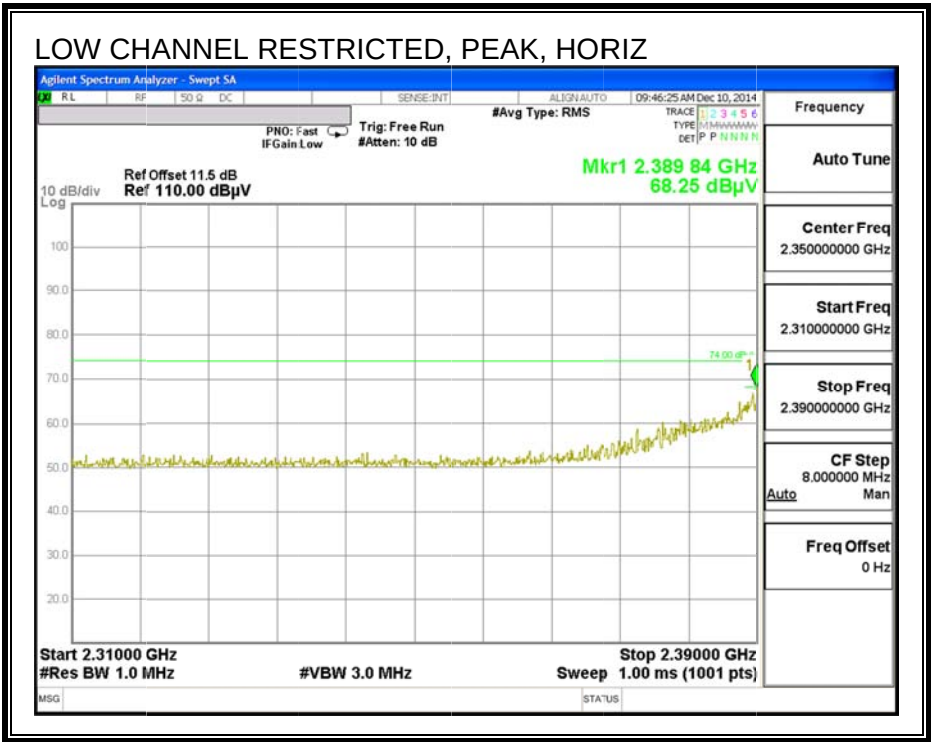
* - indicates frequency in CFR15.205/IC8.10 Restricted Band

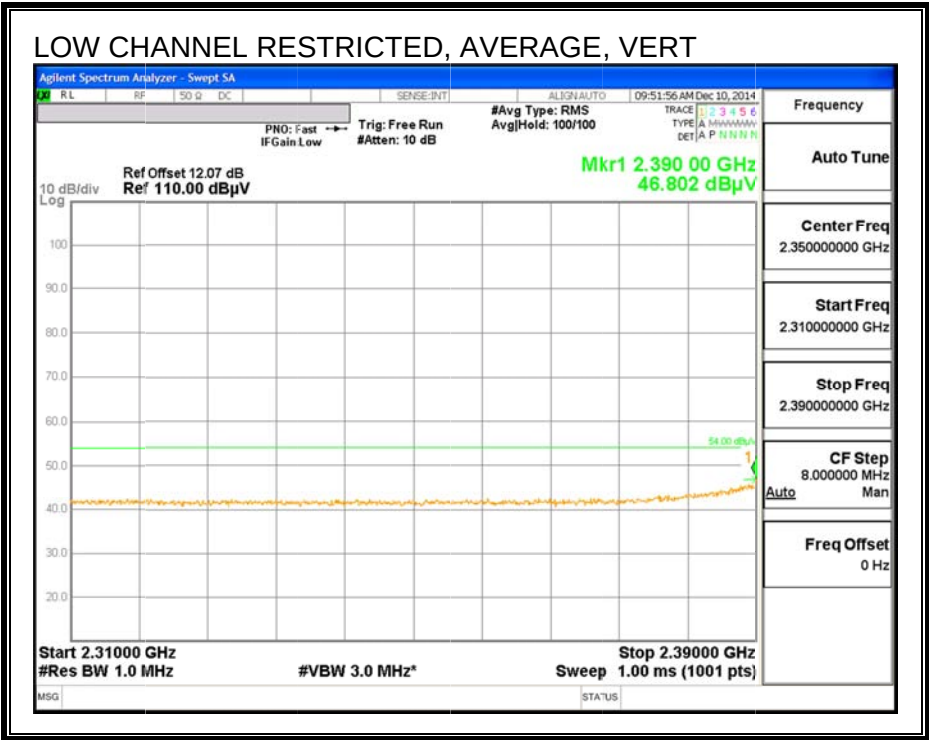
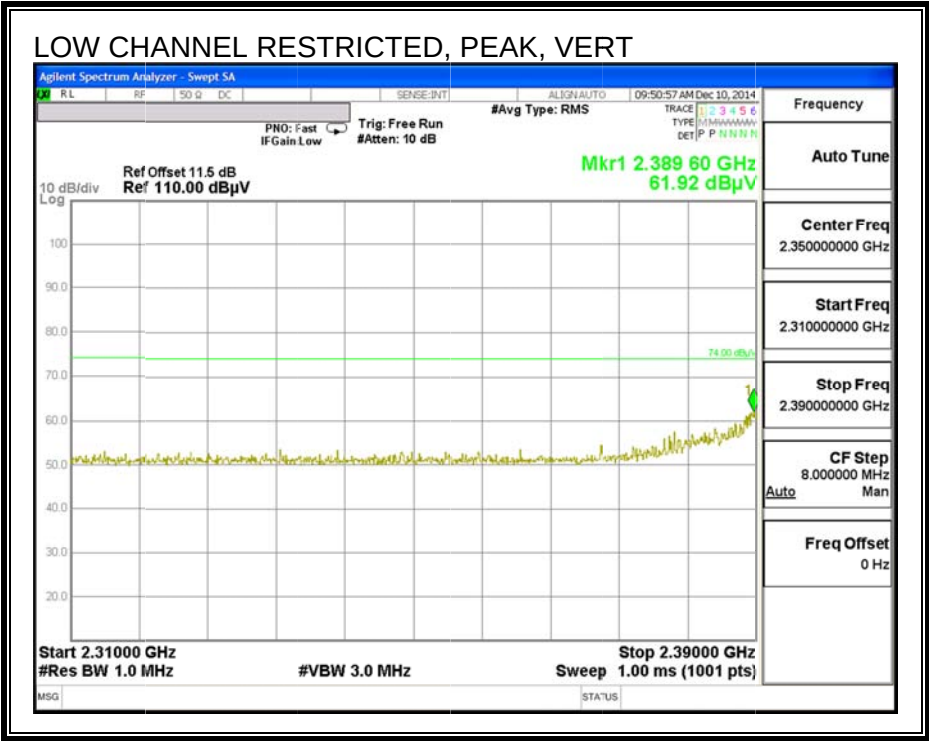
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

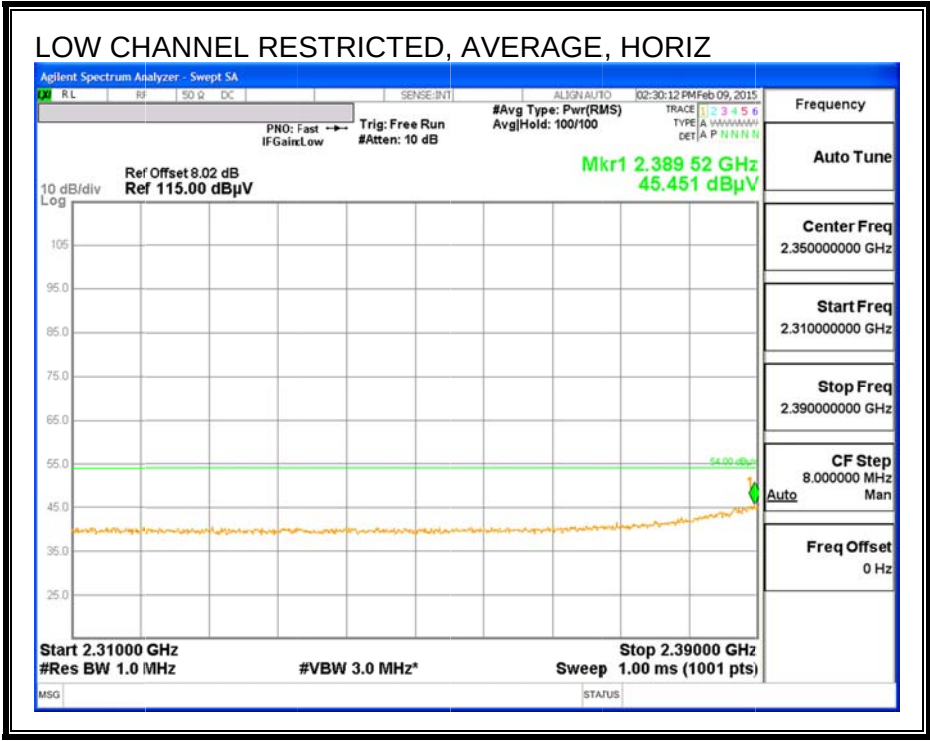
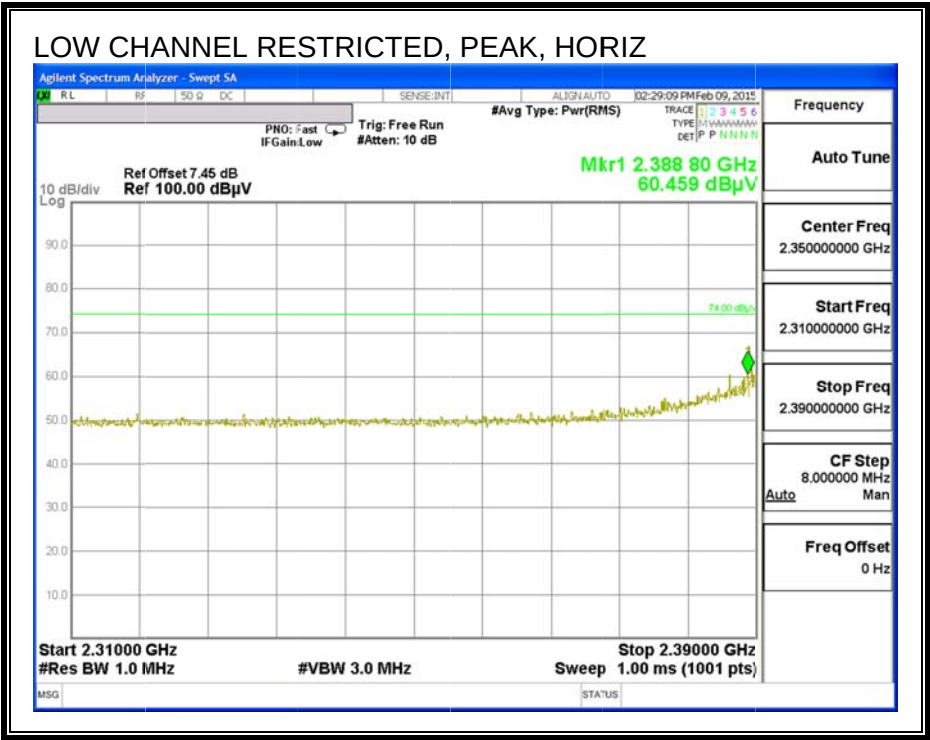
10.2.2. 802.11g 1Tx MODE IN THE 2.4 GHz BAND

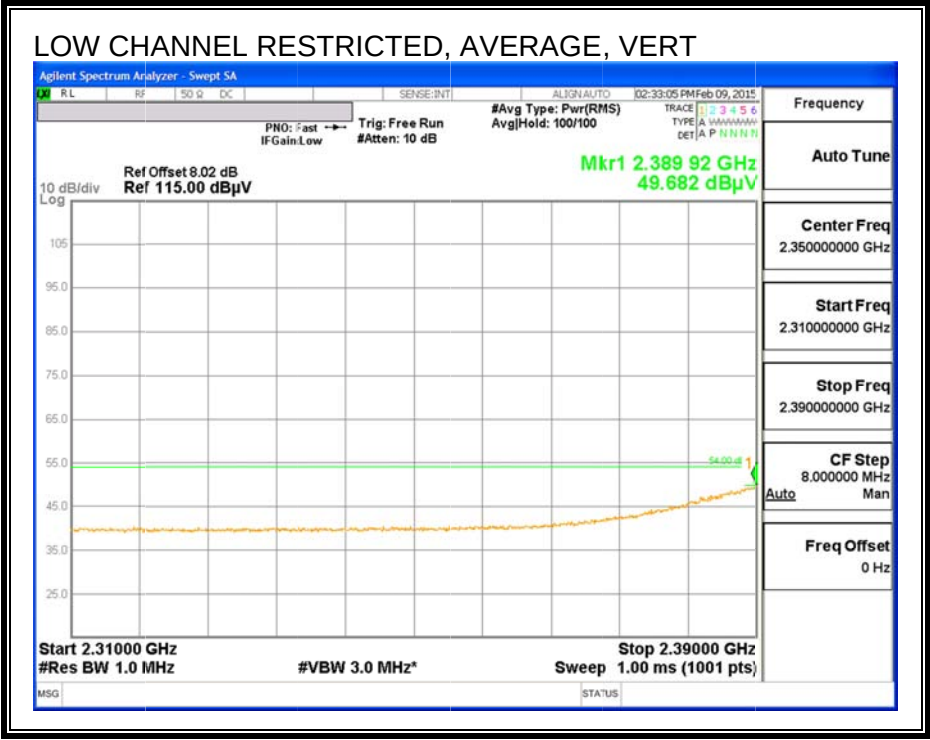
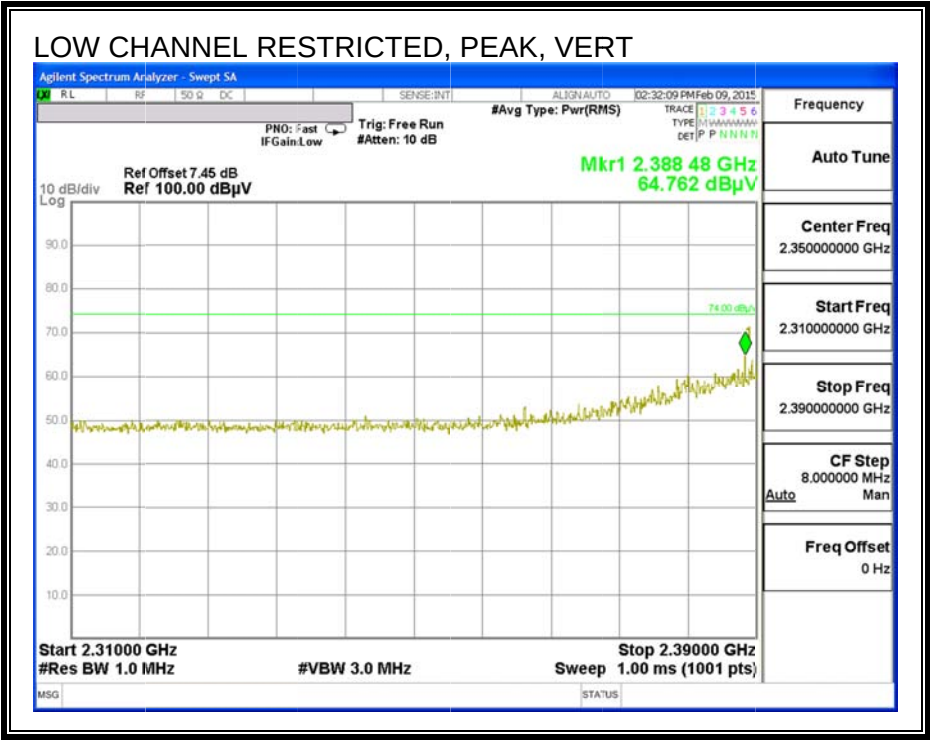
RESTRICTED BANDEDGE (LOW CHANNEL, Channel 1)



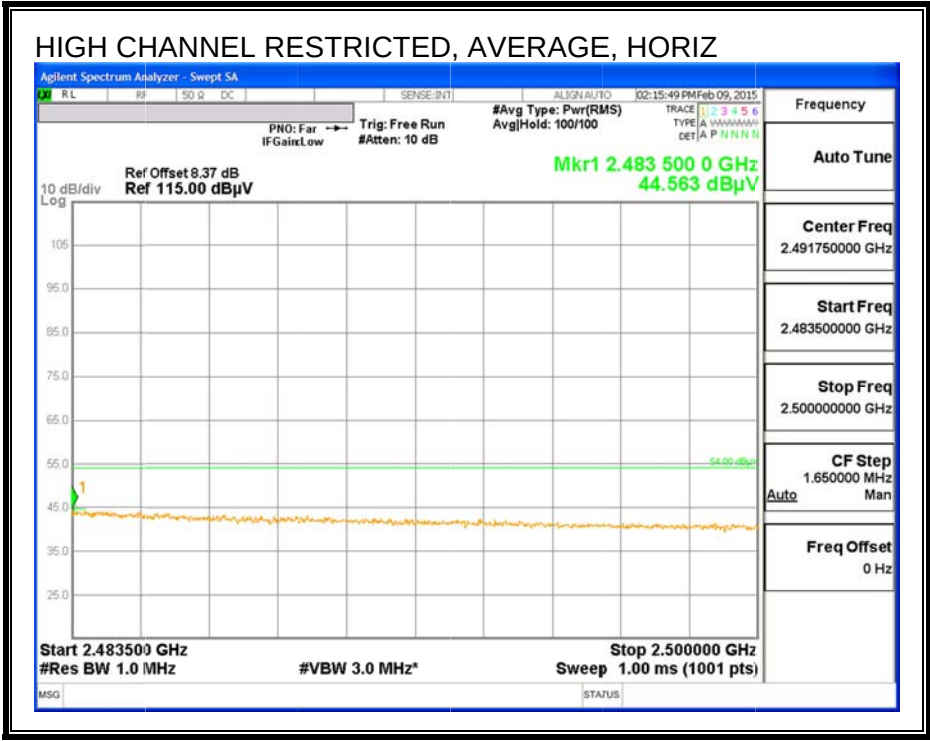
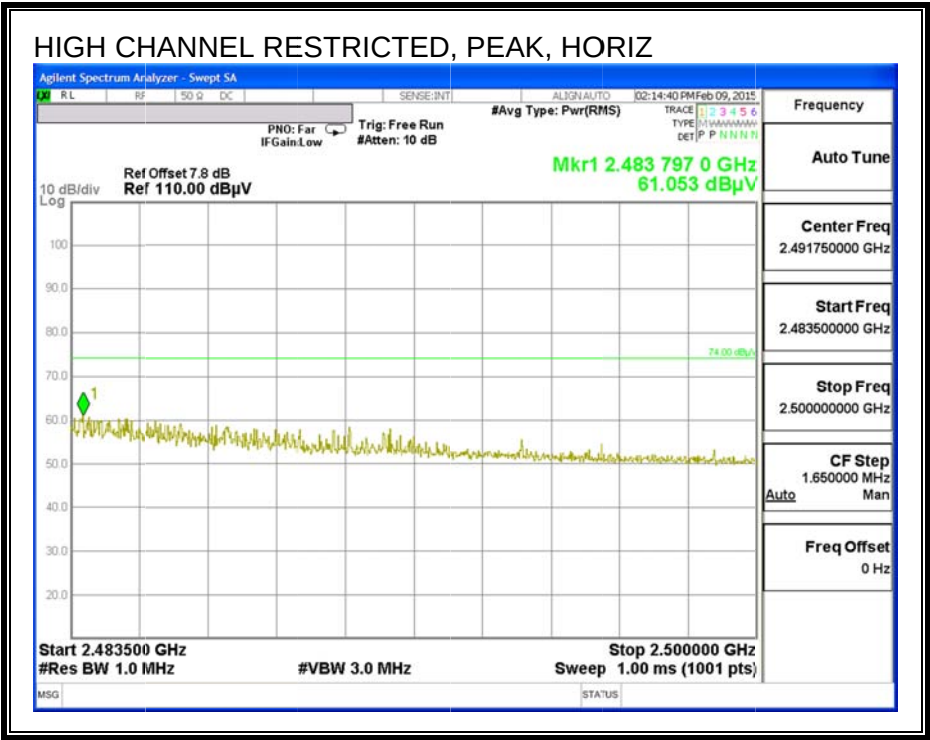


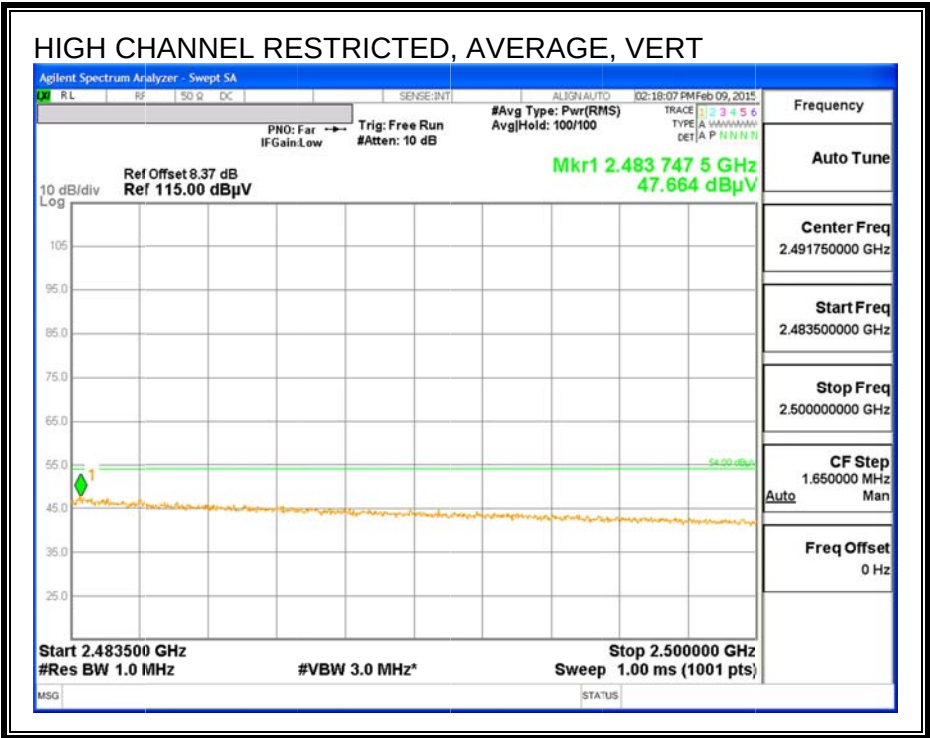
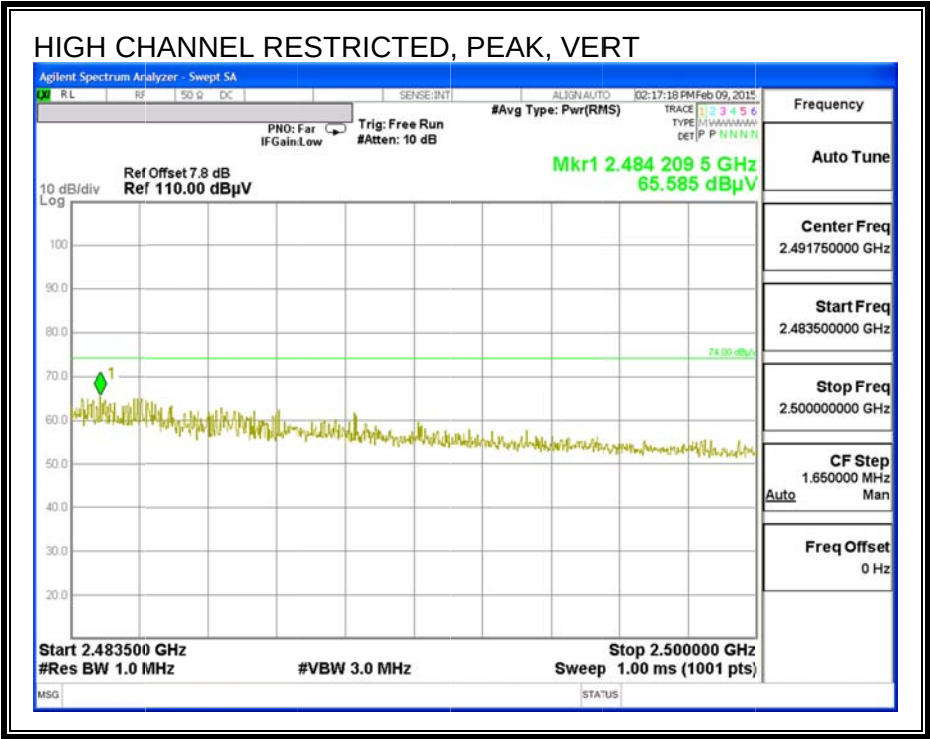
RESTRICTED BANDEDGE (LOW CHANNEL, Channel 2)



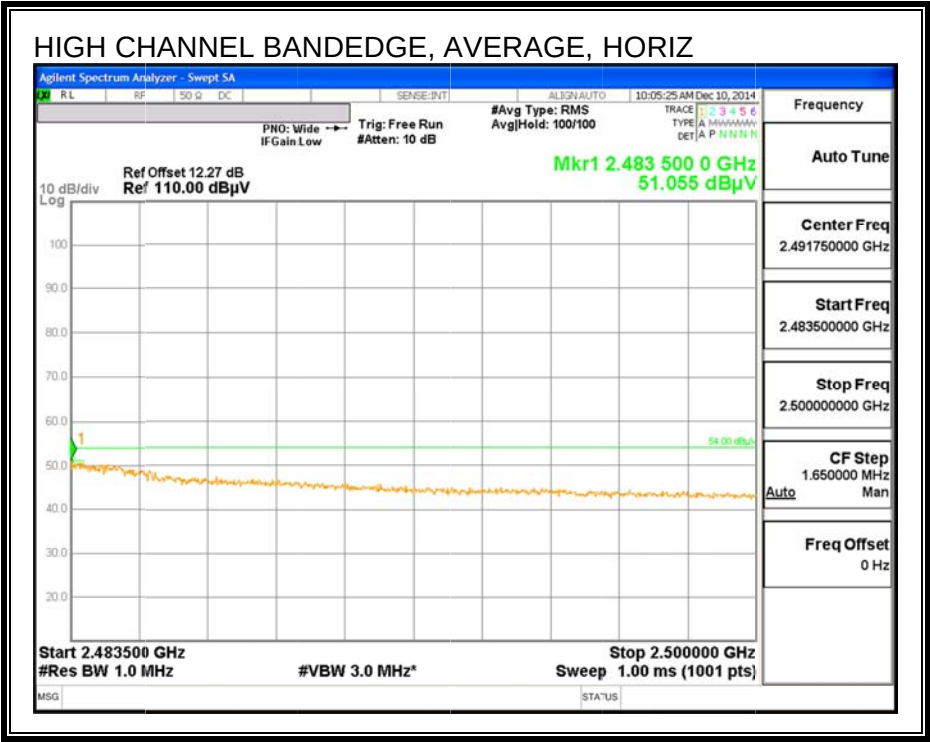
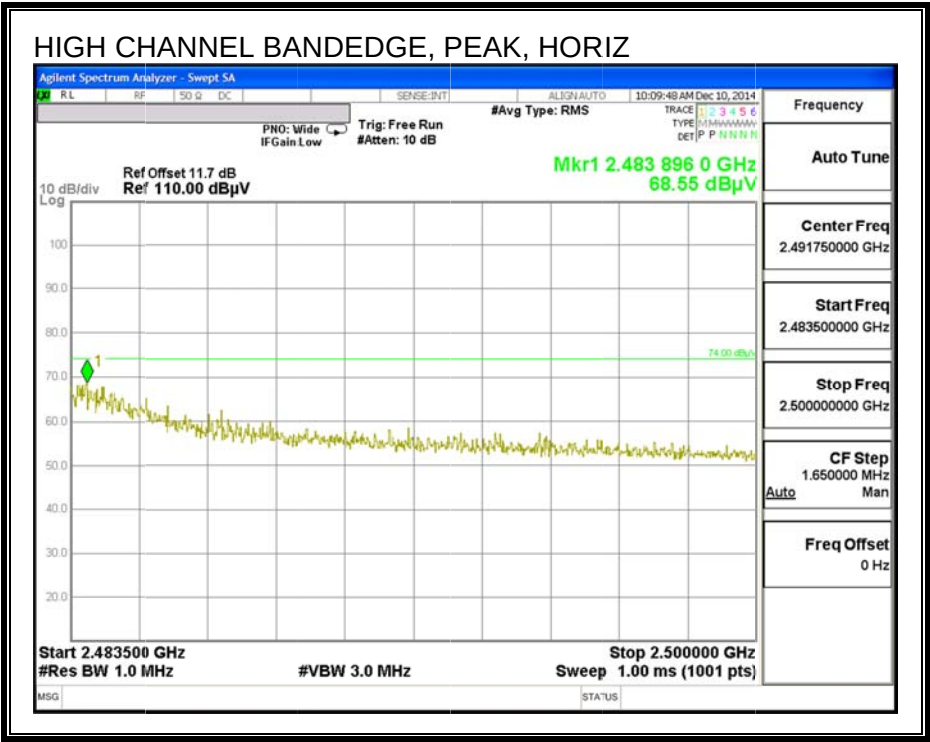


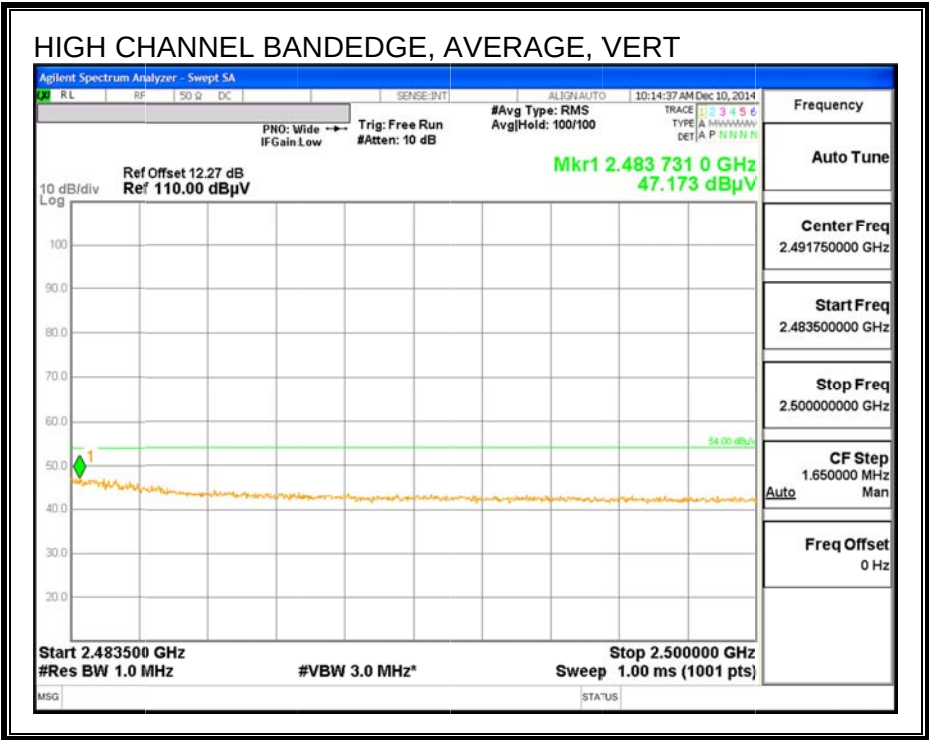
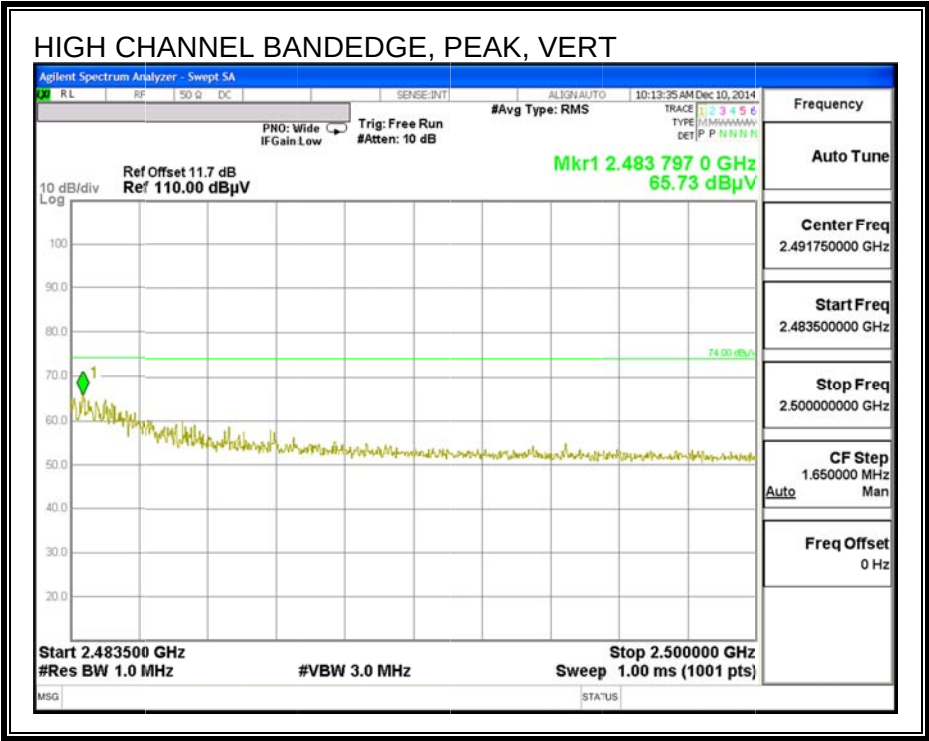
RESTRICTED BANDEDGE (HIGH CHANNEL, Channel 10)



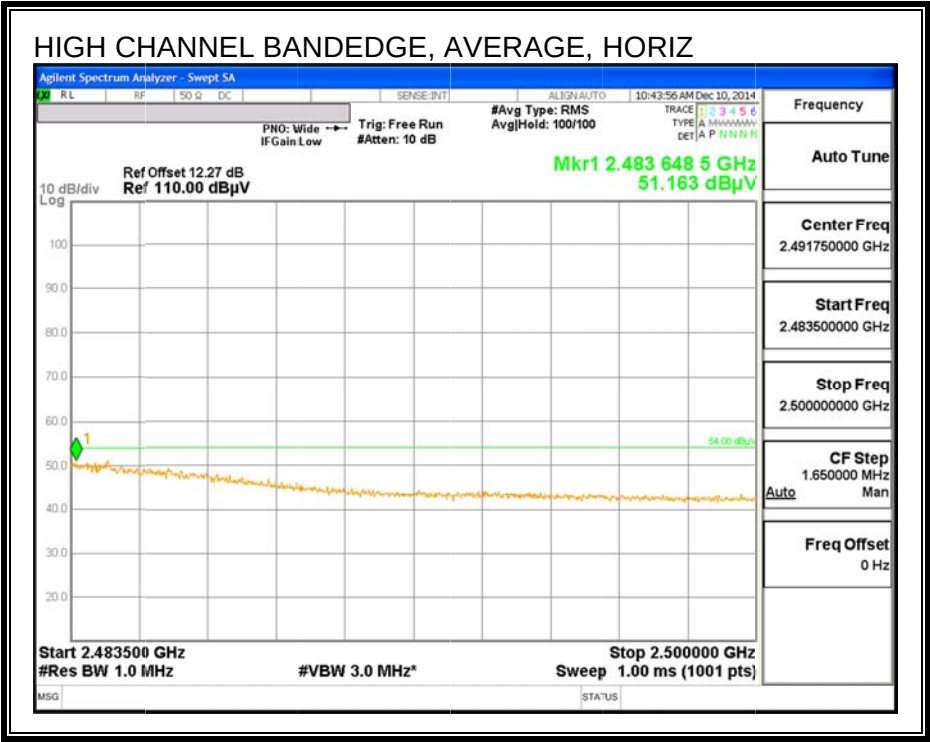
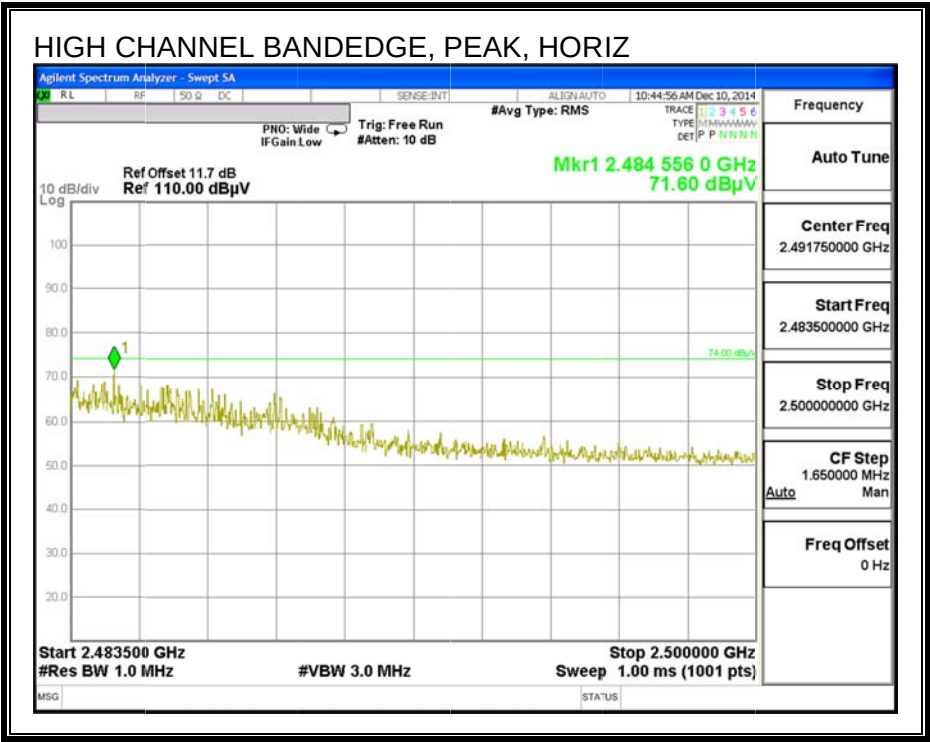


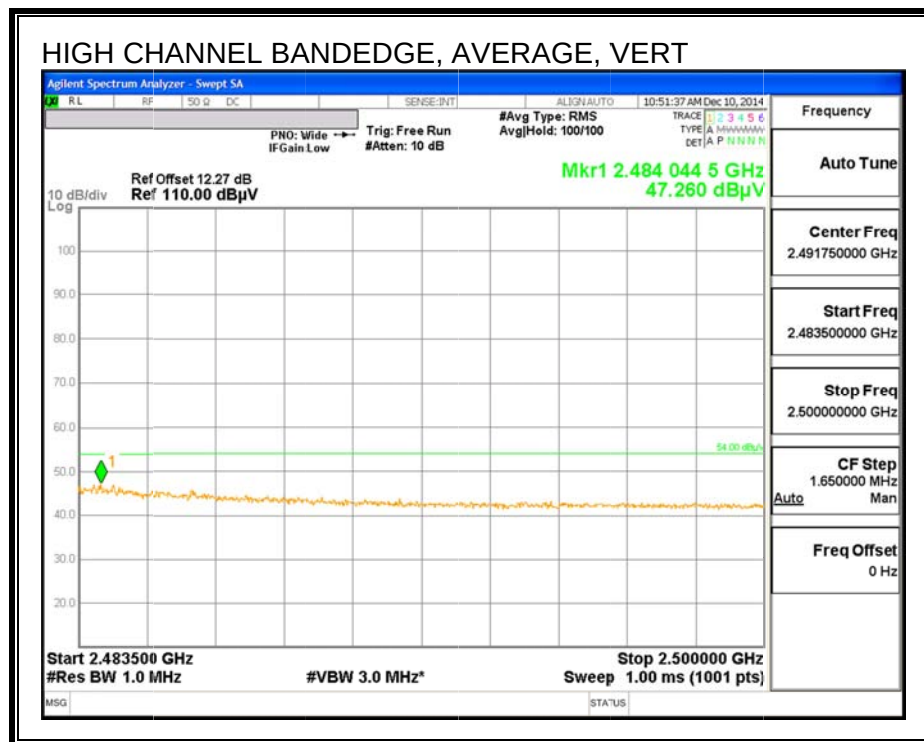
AUTHORIZED BANDEDGE (HIGH CHANNEL, Channel 11)



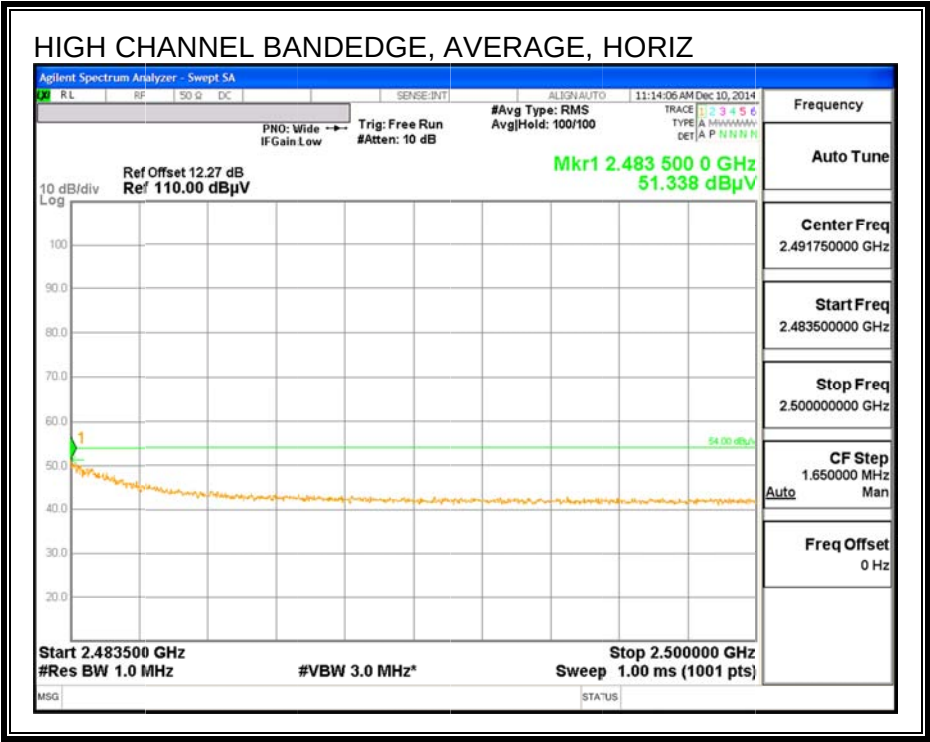
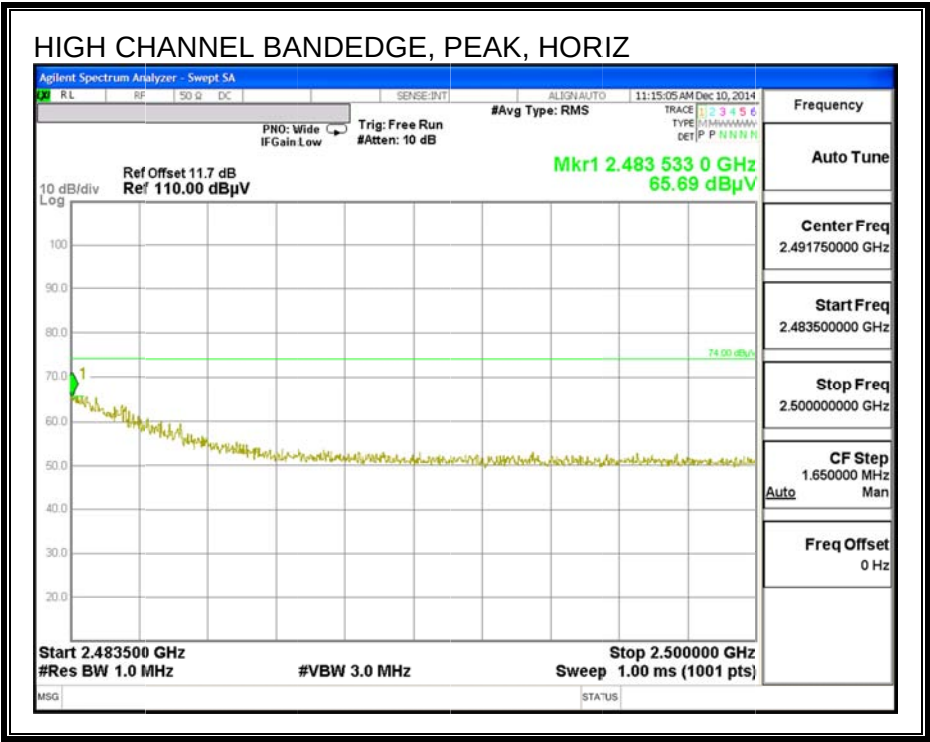


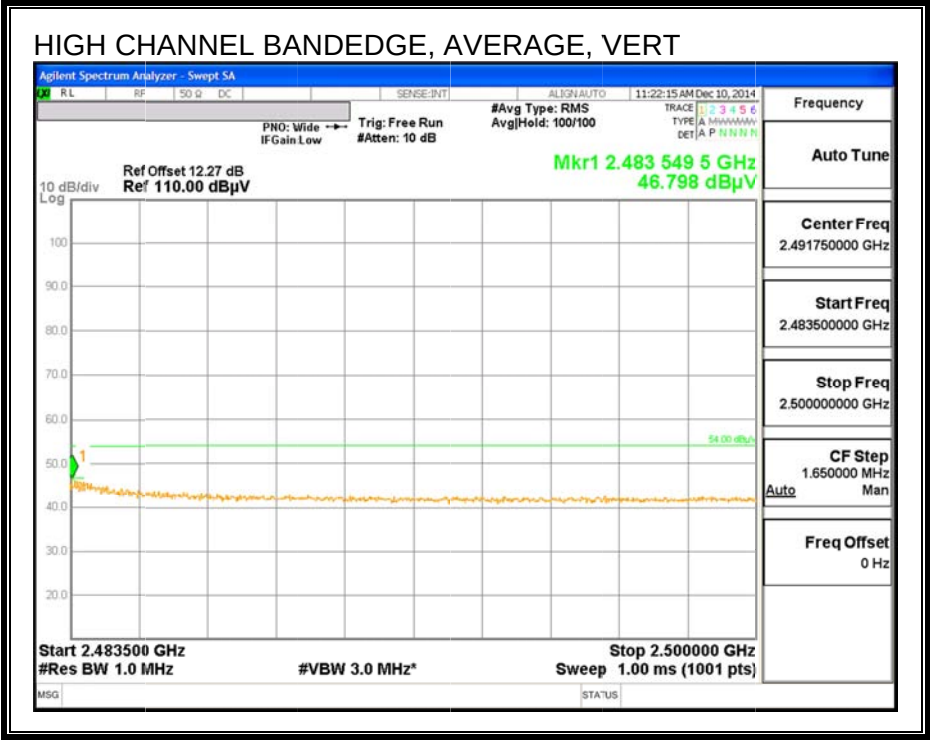
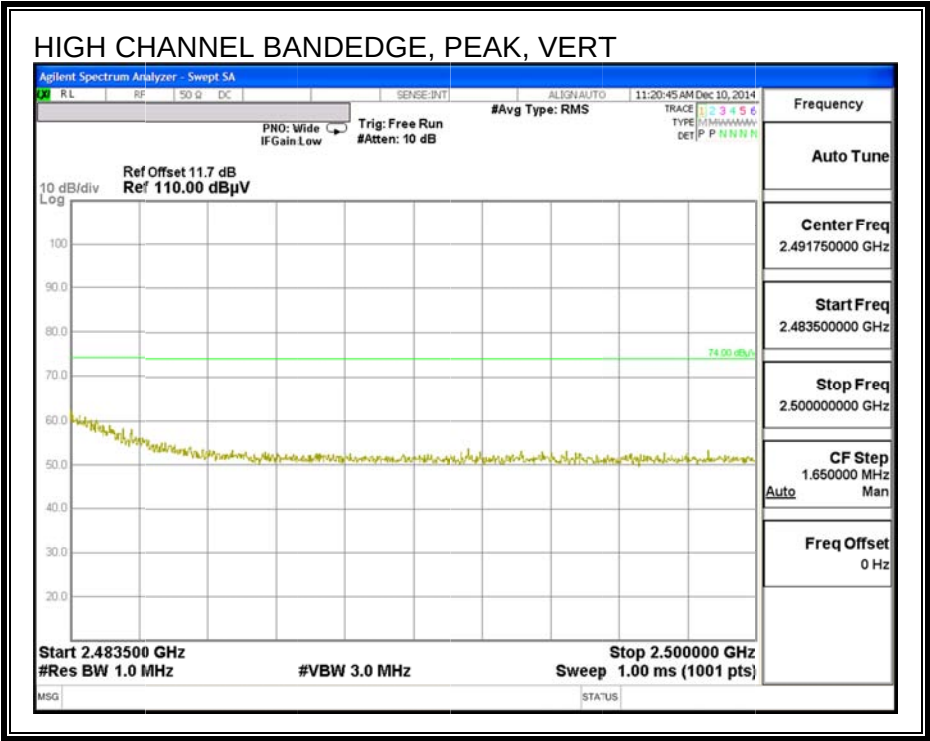
AUTHORIZED BANDEDGE (HIGH CHANNEL, Channel 12)



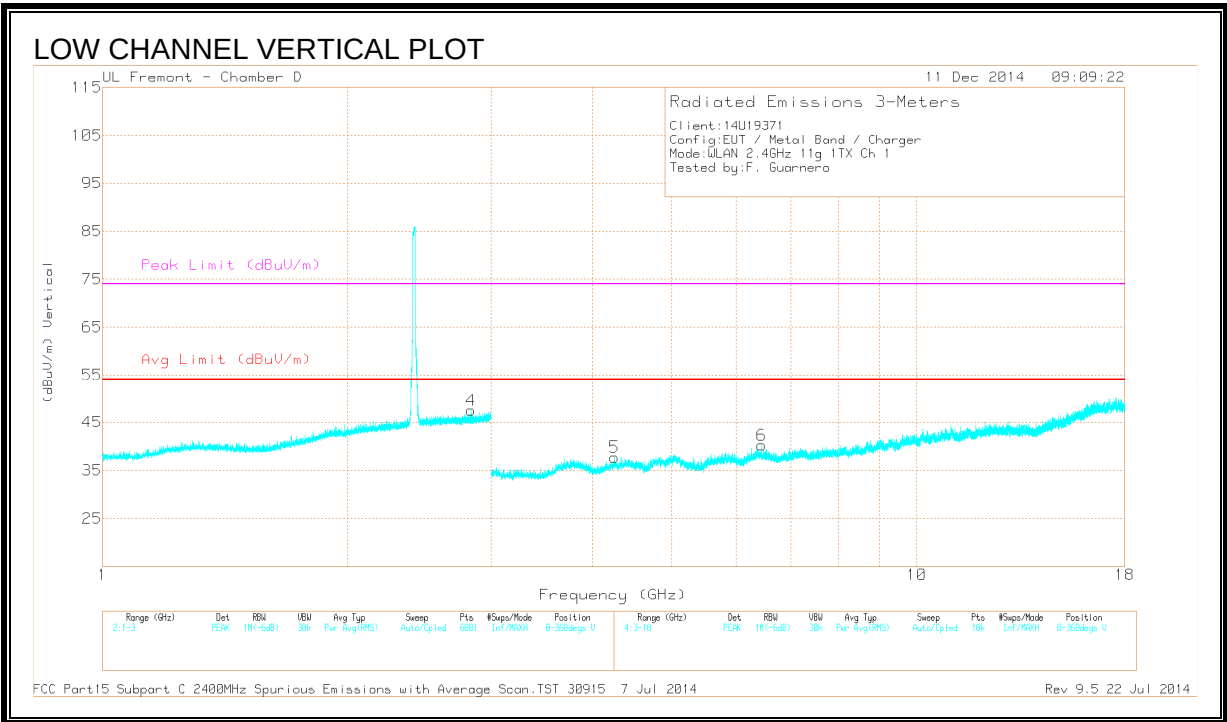
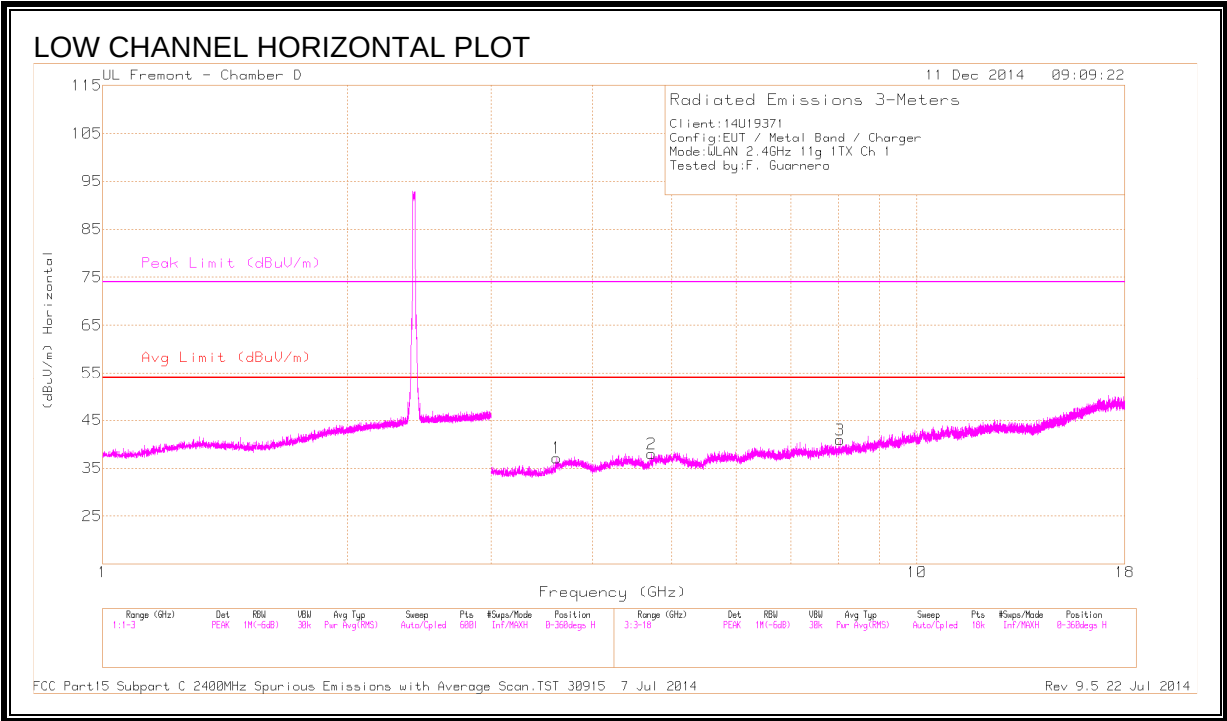


AUTHORIZED BANDEDGE (HIGH CHANNEL, Channel 13)





HARMONICS AND SPURIOUS EMISSIONS, Channel 1



DATA

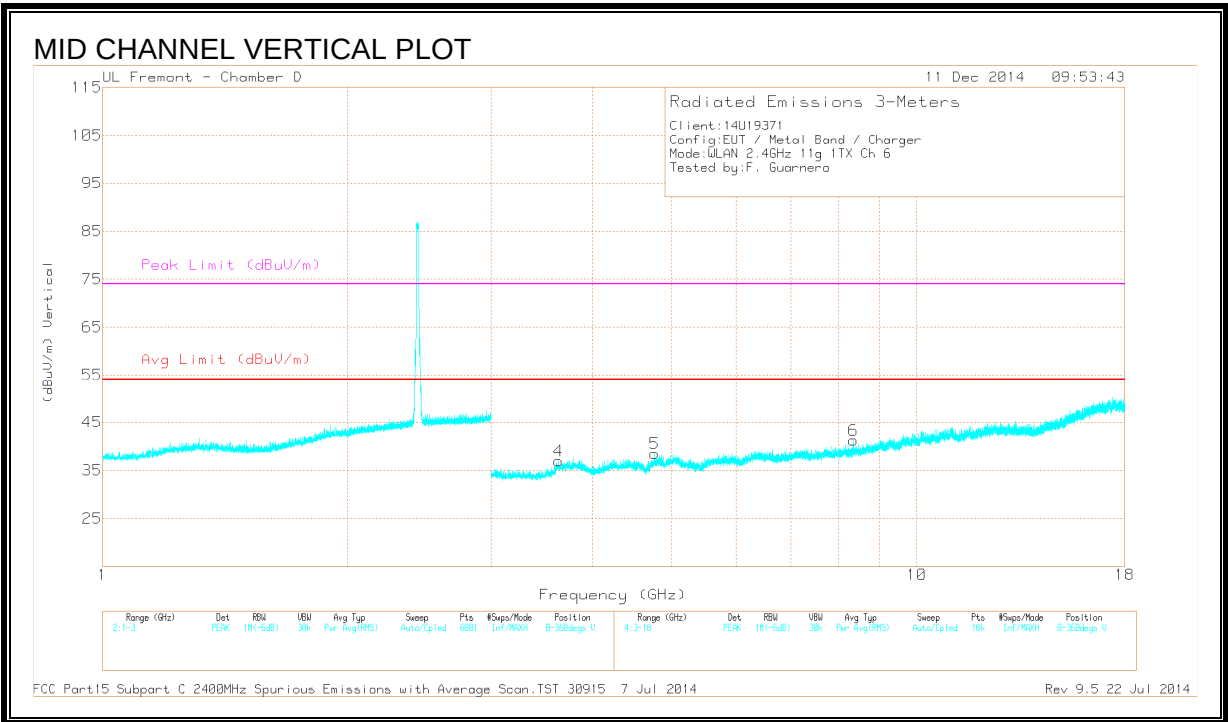
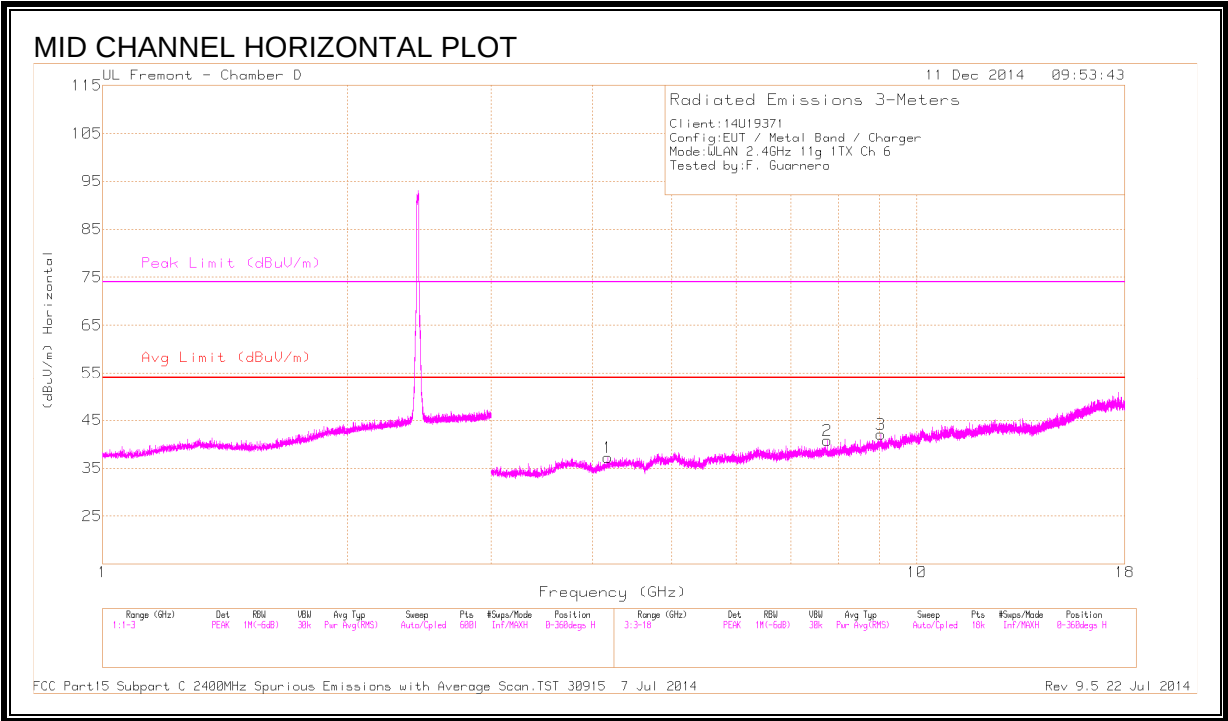
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.610	38.50	PK2	33.5	-28.5	0	43.50	-	-	74	-30.50	242	265	H
	* 3.610	27.59	MAv1	33.5	-28.5	.57	33.16	54	-20.84	-	-	242	265	H
2	* 4.724	37.58	PK2	34.1	-27.3	0	44.38	-	-	74	-29.62	226	278	H
	* 4.723	27.16	MAv1	34.1	-27.3	.57	34.53	54	-19.47	-	-	226	278	H
3	* 8.049	35.63	PK2	35.8	-24.1	0	47.33	-	-	74	-26.67	248	265	H
	* 8.050	24.73	MAv1	35.8	-24.0	.57	37.10	54	-16.90	-	-	248	265	H
4	* 2.832	41.07	PK2	32.5	-20.1	0	53.47	-	-	74	-20.53	98	330	V
	* 2.832	29.51	MAv1	32.5	-20.1	.57	42.48	54	-11.52	-	-	98	330	V
5	* 4.249	37.28	PK2	33.6	-27.7	0	43.18	-	-	74	-30.82	171	339	V
	* 4.249	26.98	MAv1	33.6	-27.7	.57	33.45	54	-20.55	-	-	171	339	V
6	6.445	36.98	PK2	35.6	-26.2	0	46.38	-	-	-	-	151	332	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, Channel 6



DATA

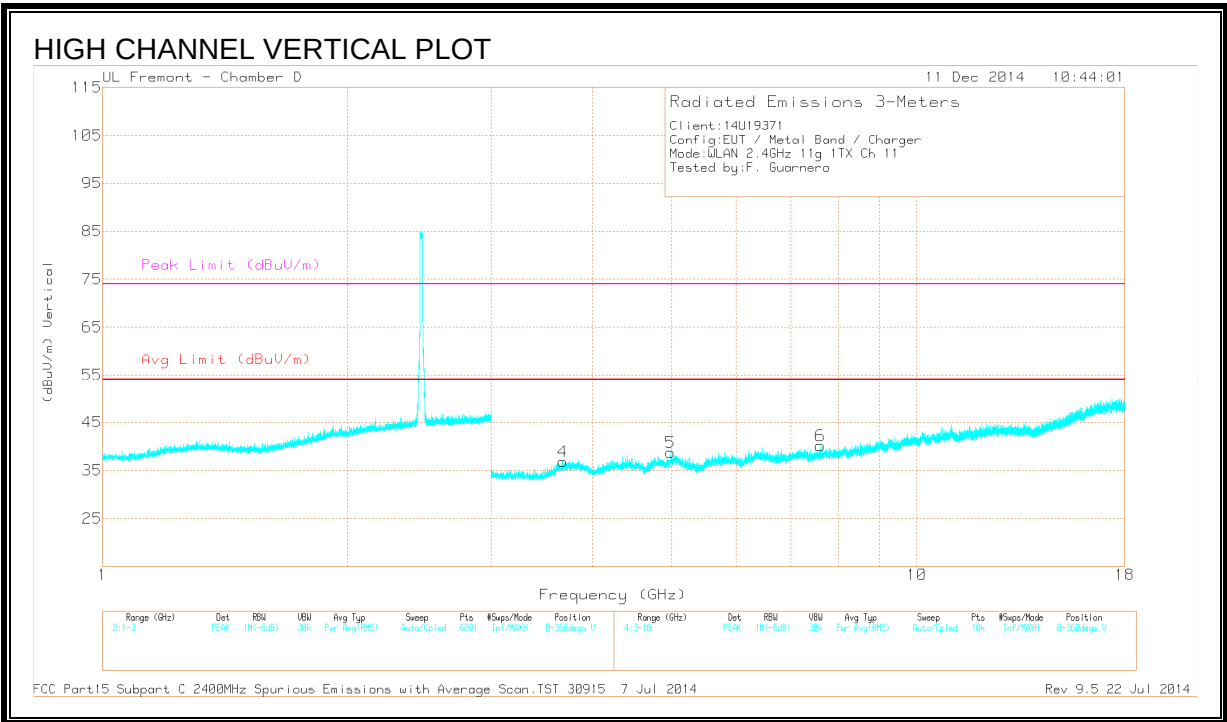
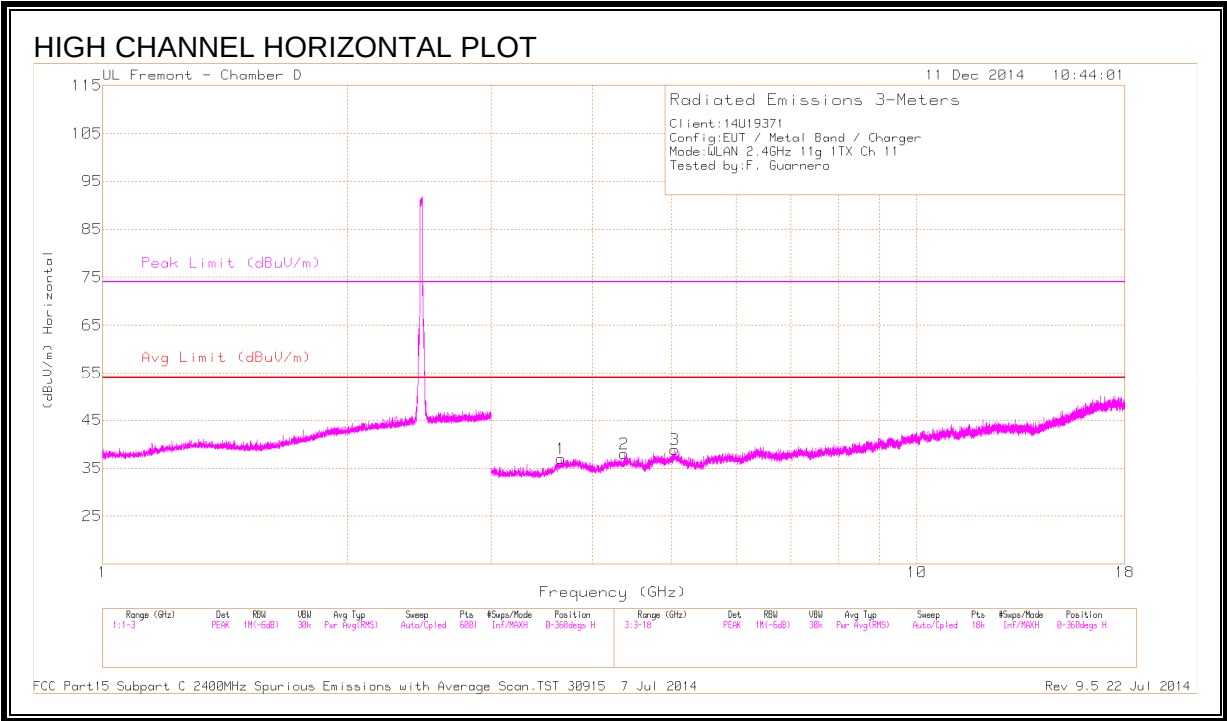
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.174	37.72	PK2	33.5	-27.6	0	43.62	-	-	74	-30.38	247	269	H
	* 4.173	26.87	MAv1	33.5	-27.6	.57	33.34	54	-20.66	-	-	247	269	H
2	7.765	36.32	PK2	35.8	-24.3	0	47.82	-	-	-	-	0	243	H
3	* 9.025	33.81	PK2	36.2	-21.6	0	48.41	-	-	74	-25.59	238	263	H
	* 9.027	23.41	MAv1	36.2	-21.6	.57	38.58	54	-15.42	-	-	238	263	H
4	* 3.631	38.39	PK2	33.4	-28.7	0	43.09	-	-	74	-30.91	338	325	V
	* 3.631	27.01	MAv1	33.4	-28.7	.57	32.28	54	-21.72	-	-	338	325	V
5	* 4.764	37.72	PK2	34.2	-26.9	0	45.02	-	-	74	-28.98	56	330	V
	* 4.764	26.38	MAv1	34.2	-26.9	.57	34.25	54	-19.75	-	-	56	330	V
6	* 8.353	35.44	PK2	35.8	-23.4	0	47.84	-	-	74	-26.16	336	336	V
	* 8.352	23.64	MAv1	35.8	-23.4	.57	36.61	54	-17.39	-	-	336	336	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, Channel 11



DATA

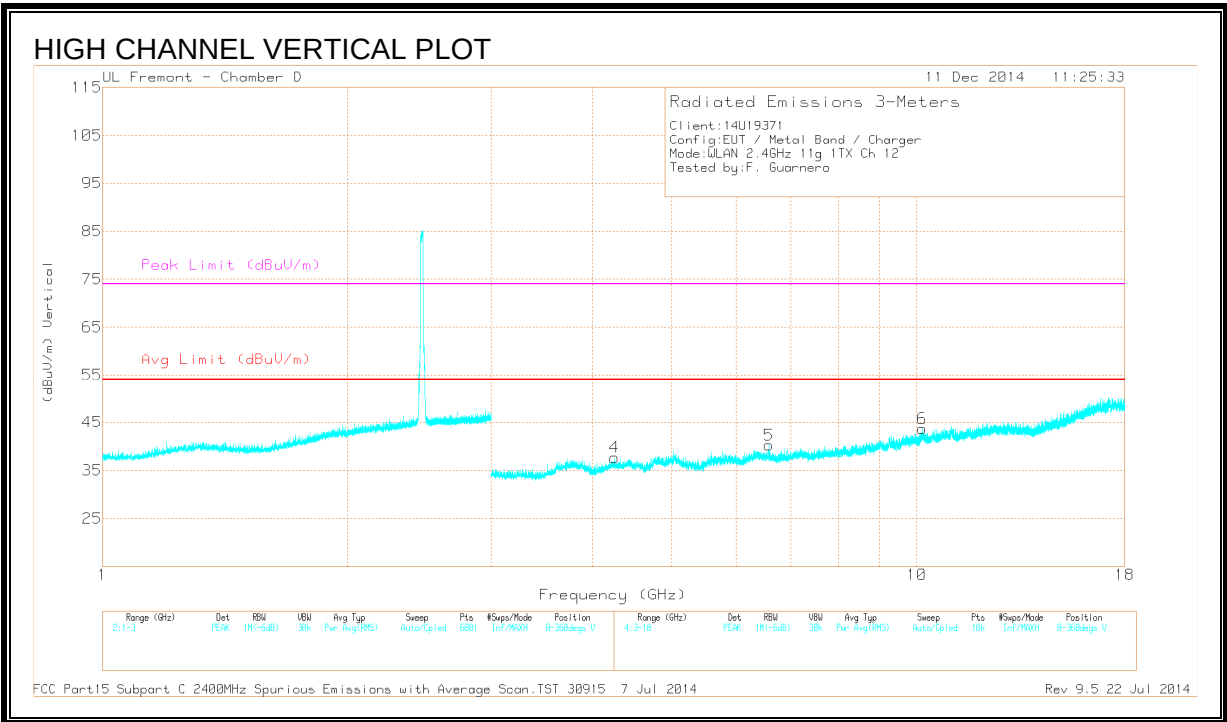
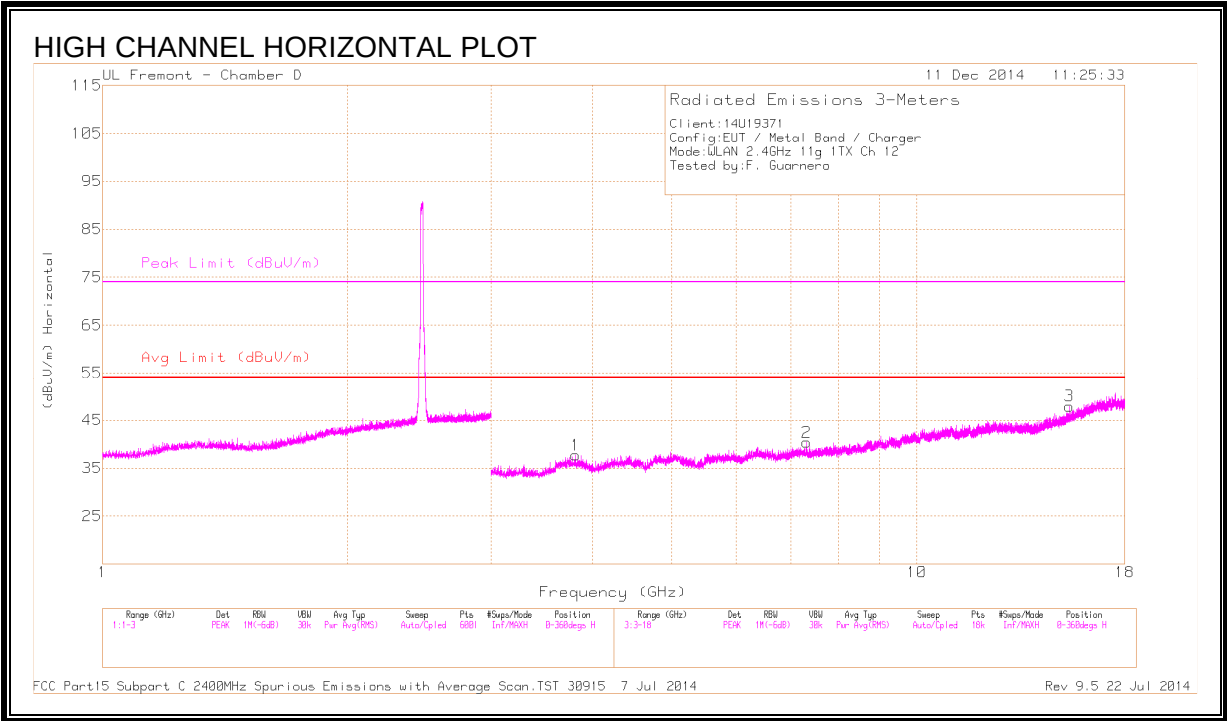
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.657	38.48	PK2	33.3	-28.9	0	42.88	-	-	74	-31.12	240	270	H
	* 3.659	27.62	MAv1	33.3	-28.9	.57	32.59	54	-21.41	-	-	240	270	H
2	* 4.375	37.57	PK2	33.8	-28.2	0	43.17	-	-	74	-30.83	248	279	H
	* 4.373	27.26	MAv1	33.8	-28.2	.57	33.43	54	-20.57	-	-	248	279	H
3	* 5.045	37.40	PK2	34.3	-26.2	0	45.50	-	-	74	-28.50	236	266	H
	* 5.047	26.53	MAv1	34.3	-26.3	.57	35.10	54	-18.90	-	-	236	266	H
4	* 3.673	38.54	PK2	33.3	-28.9	0	42.94	-	-	74	-31.06	175	175	V
	* 3.674	27.71	MAv1	33.3	-28.9	.57	32.68	54	-21.32	-	-	175	175	V
5	* 4.981	37.79	PK2	34.2	-27.0	0	44.99	-	-	74	-29.01	186	182	V
	* 4.981	26.54	MAv1	34.2	-26.9	.57	34.41	54	-19.59	-	-	186	182	V
6	* 7.609	36.28	PK2	35.7	-24.9	0	47.08	-	-	74	-26.92	180	173	V
	* 7.609	25.21	MAv1	35.7	-24.9	.57	36.58	54	-17.42	-	-	180	173	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, Channel 12



DATA

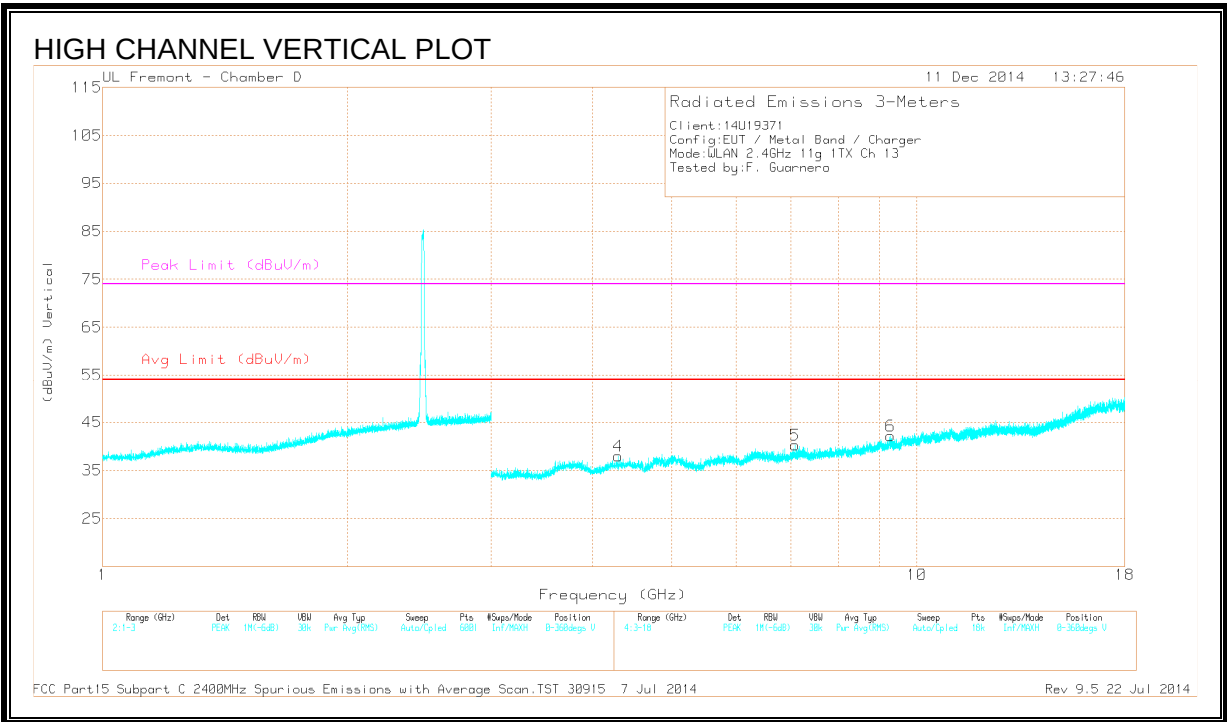
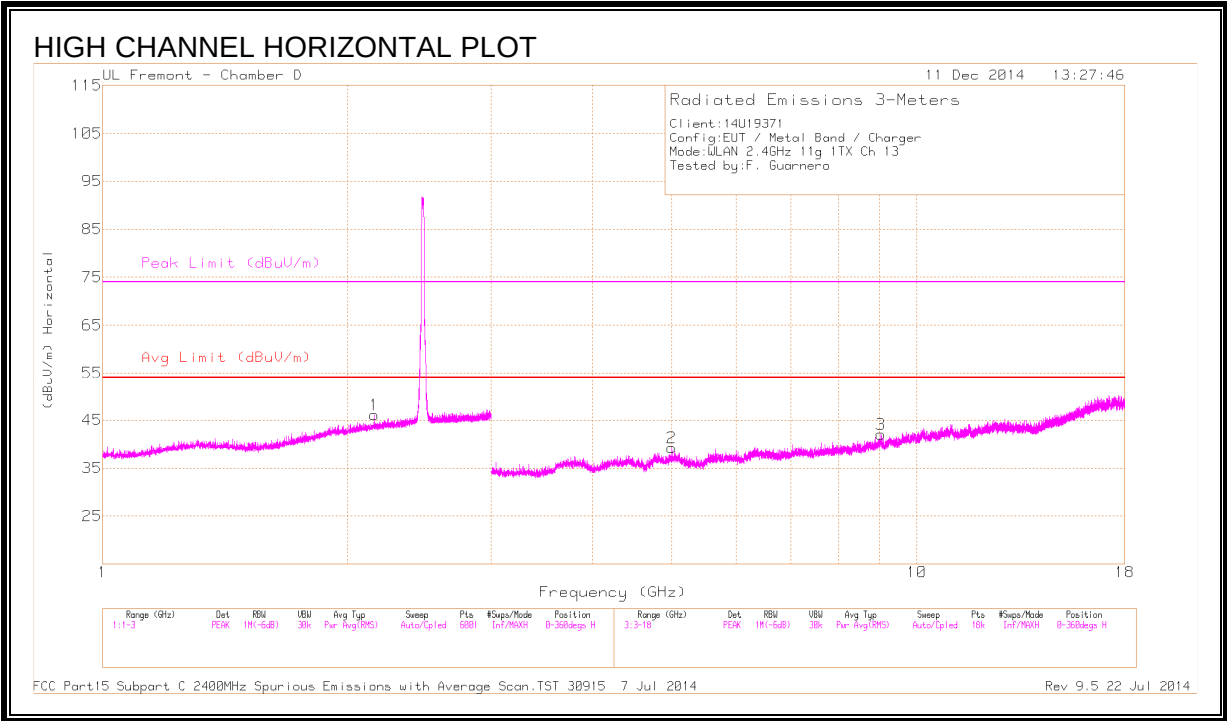
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.806	39.01	PK2	33.4	-28.1	0	44.31	-	-	74	-29.69	68	271	H
	* 3.808	27.85	MAv1	33.4	-28.1	.57	33.72	54	-20.28	-	-	68	271	H
2	* 7.328	35.93	PK2	35.7	-24.9	0	46.73	-	-	74	-27.27	59	298	H
	* 7.328	24.62	MAv1	35.7	-24.9	.57	35.99	54	-18.01	-	-	59	298	H
3	* 15.383	34.72	PK2	40.5	-21.3	0	53.92	-	-	74	-20.08	311	377	H
	* 15.381	23.42	MAv1	40.4	-21.3	.57	43.09	54	-10.91	-	-	311	377	H
4	* 4.255	37.74	PK2	33.6	-27.8	0	43.54	-	-	74	-30.46	232	326	V
	* 4.256	26.44	MAv1	33.6	-27.8	.57	32.81	54	-21.19	-	-	232	326	V
5	6.584	36.06	PK2	35.6	-25.6	0	46.06	-	-	-	-	236	323	V
6	10.158	33.25	PK2	37.2	-20.0	0	50.45	-	-	-	-	240	318	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, Channel 13



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	2.157	41.39	PK2	31.6	-20.8	0	52.19	-	-	-	-	50	264	H
2	* 5.004	37.01	PK2	34.2	-26.6	0	44.61	-	-	74	-29.39	213	281	H
	* 5.004	26.27	MAv1	34.2	-26.6	.57	34.44	54	-19.56	-	-	213	281	H
3	* 9.035	33.64	PK2	36.2	-21.7	0	48.14	-	-	74	-25.86	252	266	H
	* 9.038	23.26	MAv1	36.2	-21.7	.57	38.33	54	-15.67	-	-	252	266	H
4	* 4.298	37.74	PK2	33.7	-28.3	0	43.14	-	-	74	-30.86	257	329	V
	* 4.298	26.59	MAv1	33.7	-28.3	.57	32.56	54	-21.44	-	-	257	329	V
5	7.084	36.35	PK2	35.6	-25.2	0	46.75	-	-	-	-	345	329	V
6	9.277	34.41	PK2	36.4	-21.1	0	49.71	-	-	-	-	330	336	V

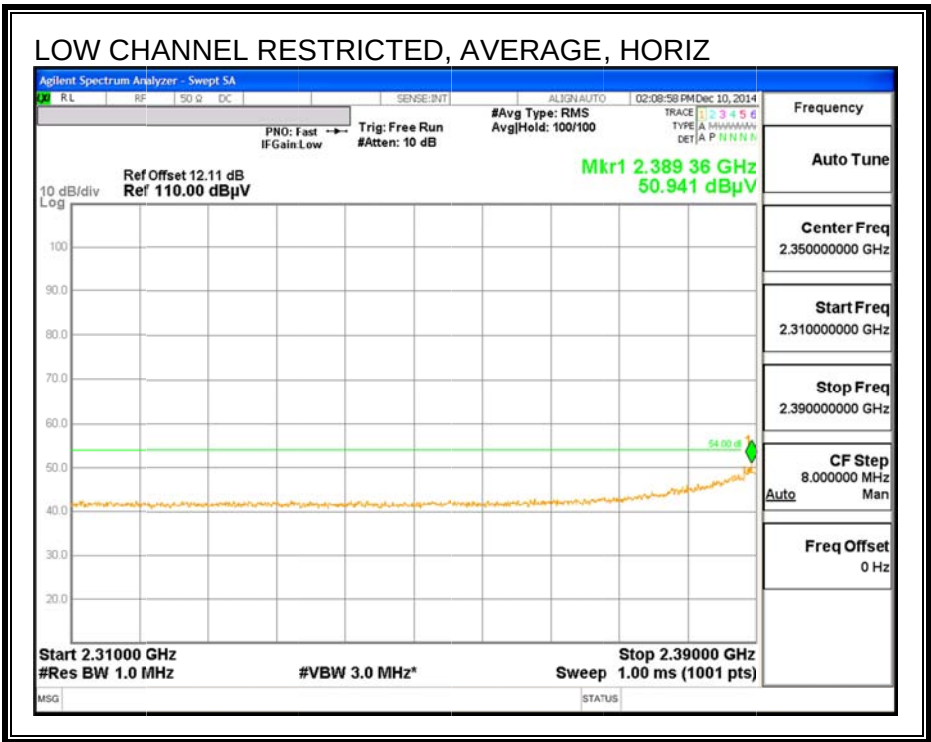
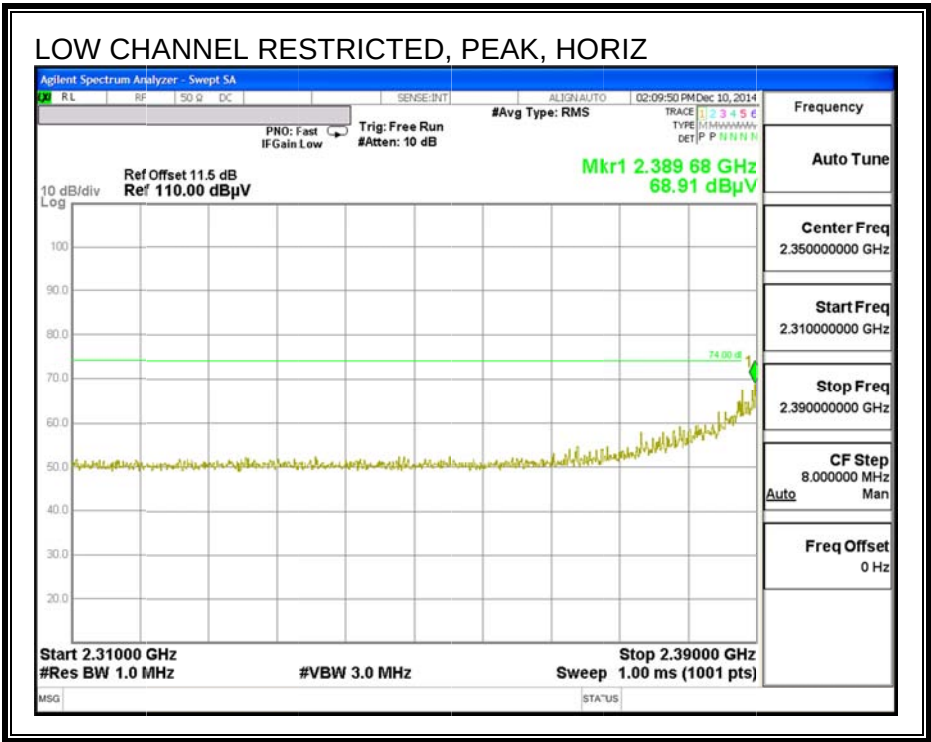
* - indicates frequency in CFR15.205/IC8.10 Restricted Band

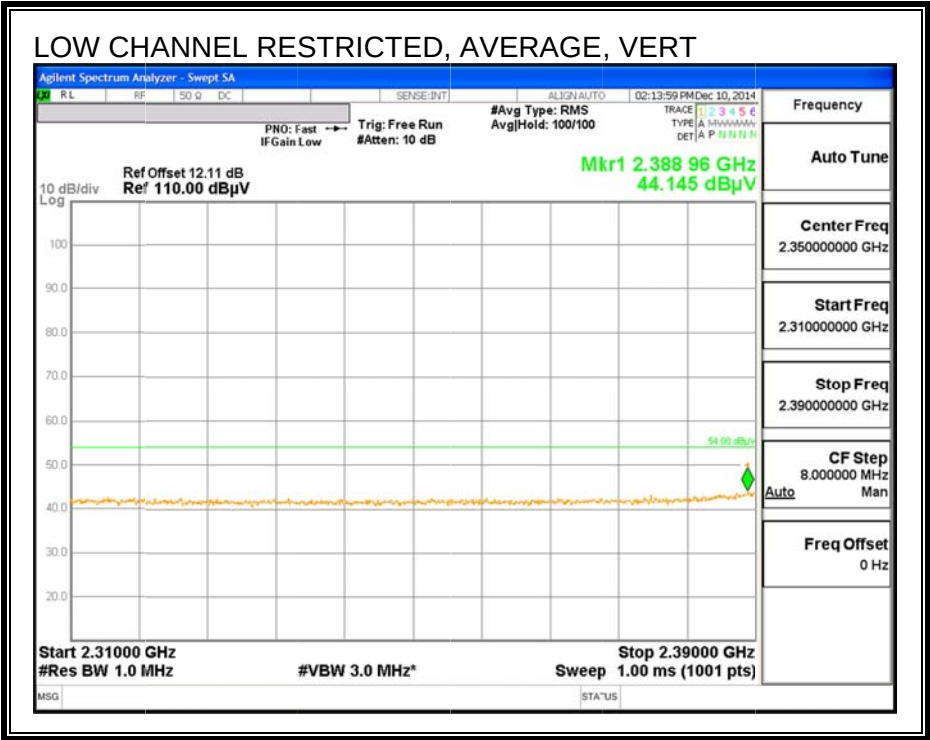
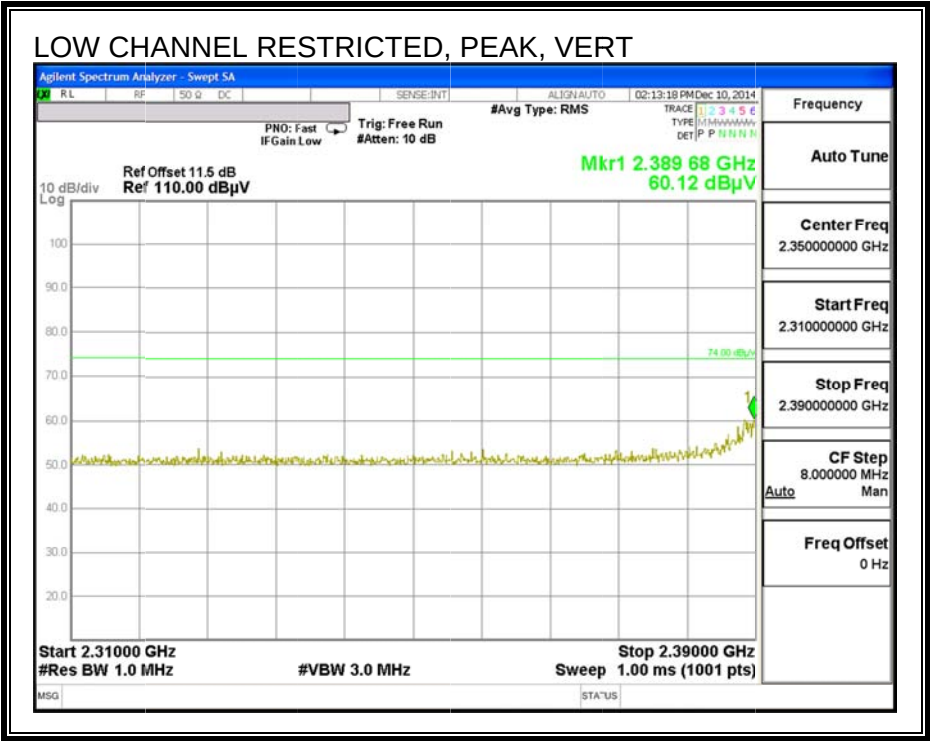
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

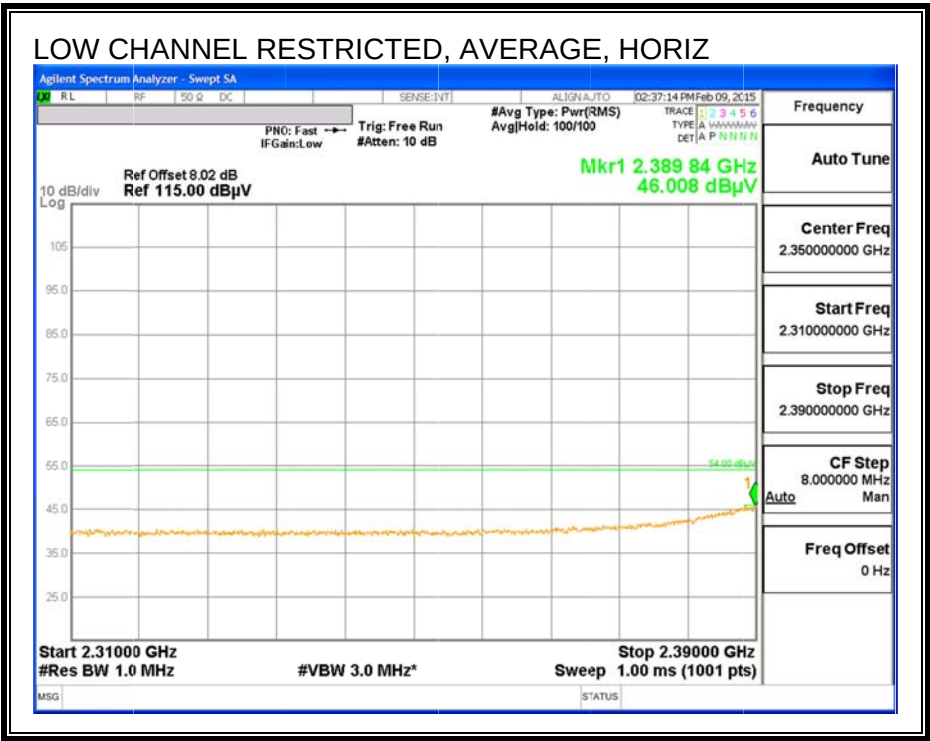
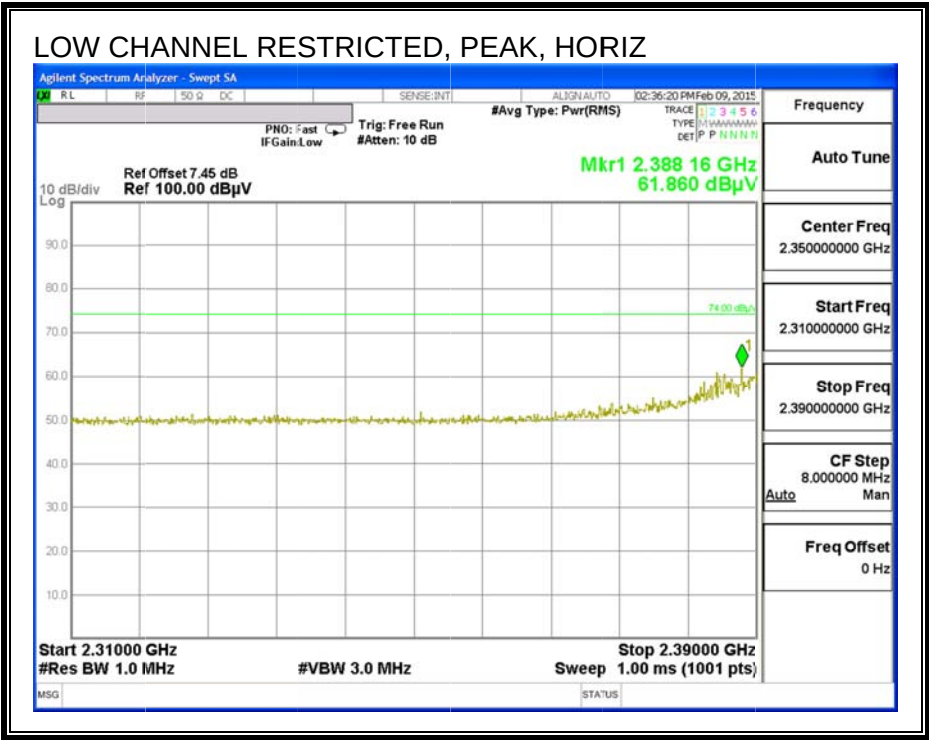
10.2.3. 802.11n HT20 1Tx MODE IN THE 2.4 GHz BAND

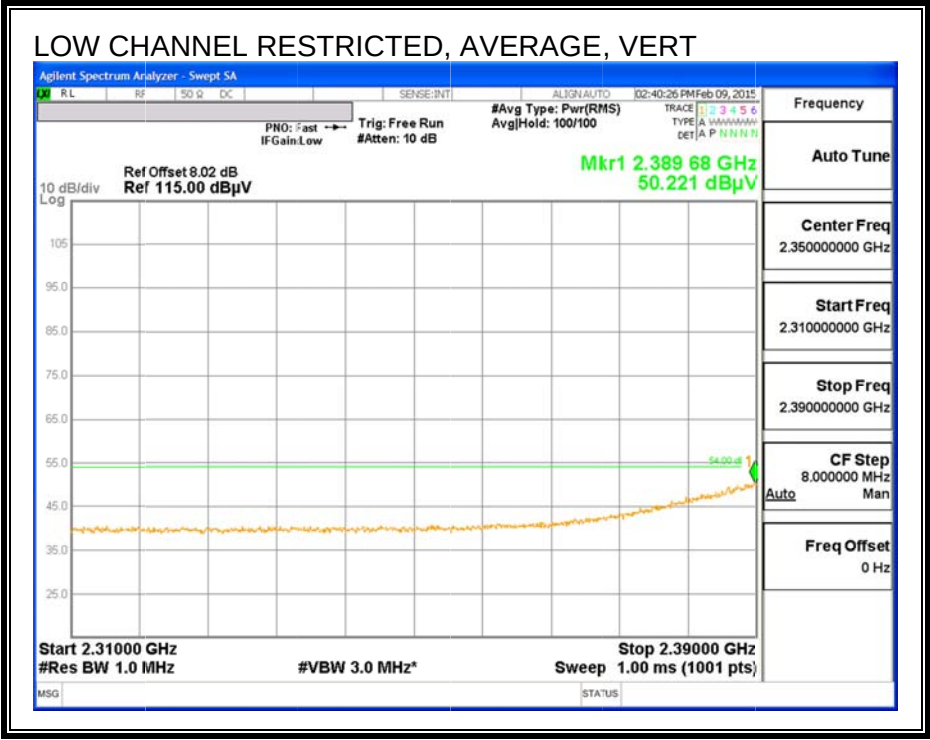
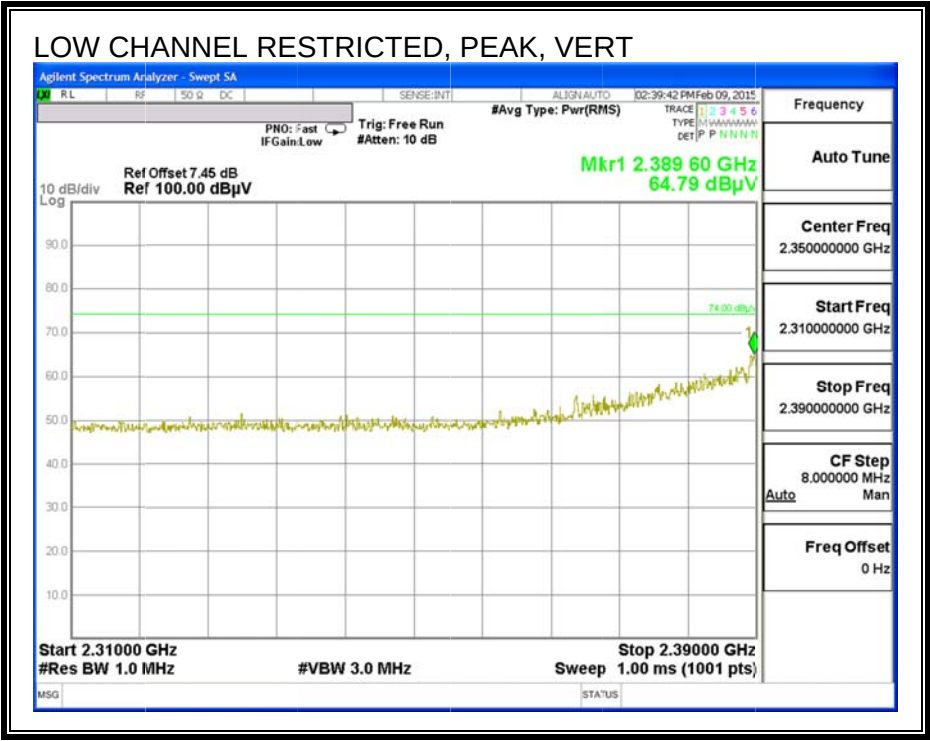
RESTRICTED BANDEDGE (LOW CHANNEL, Channel 1)

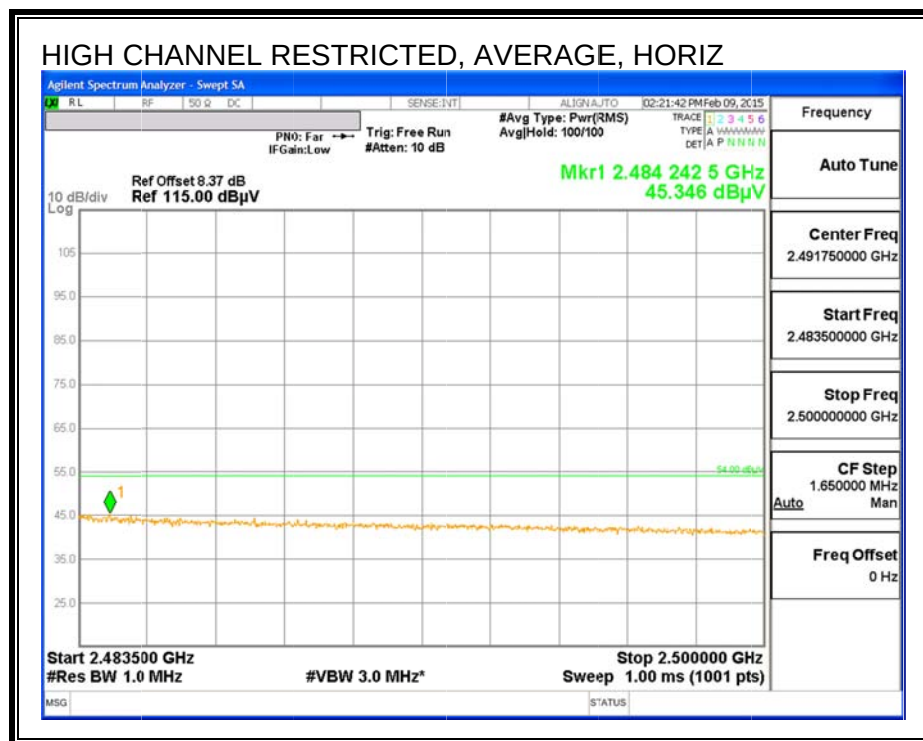
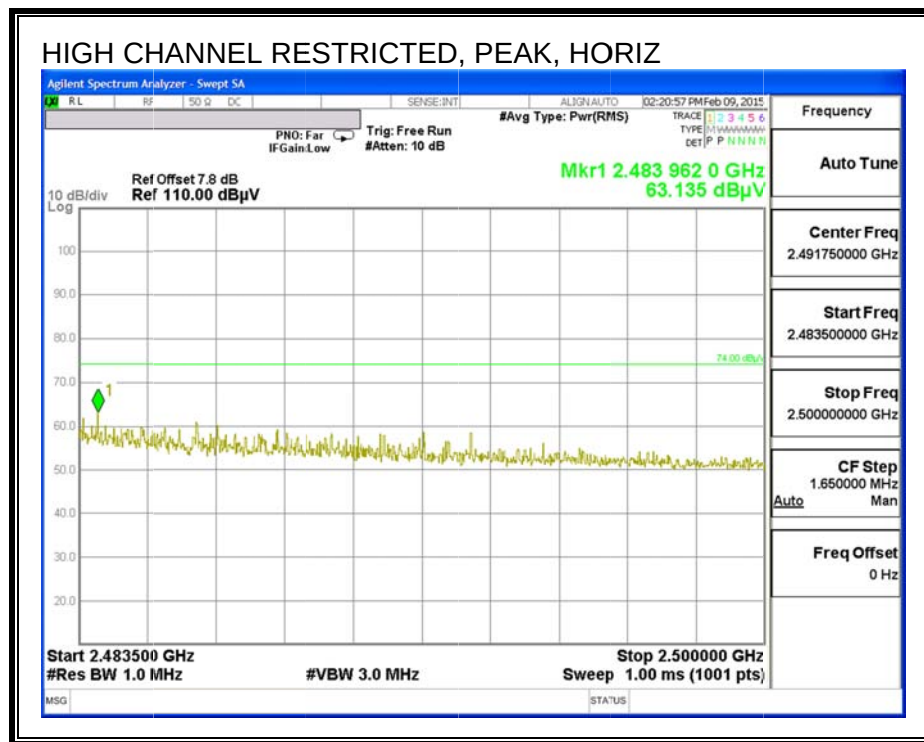


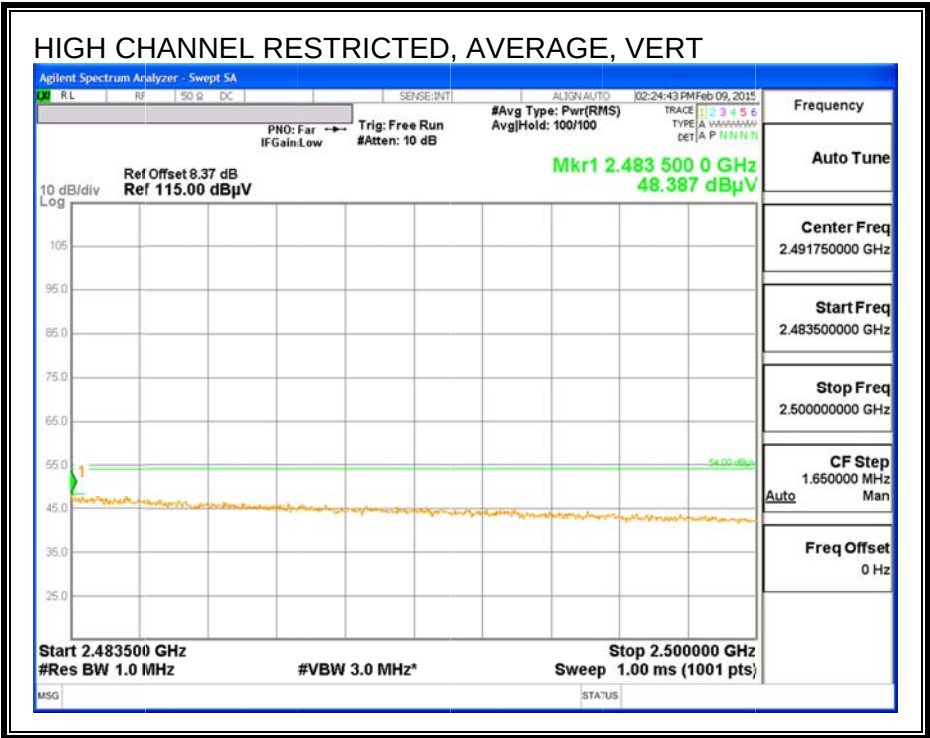
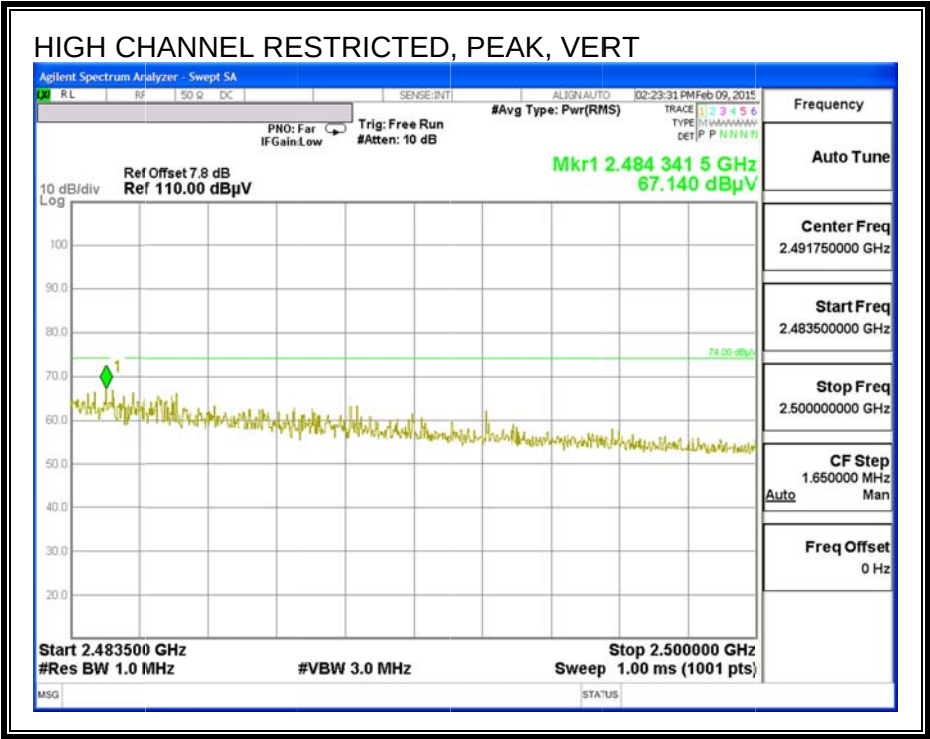


RESTRICTED BANDEDGE (LOW CHANNEL, Channel 2)

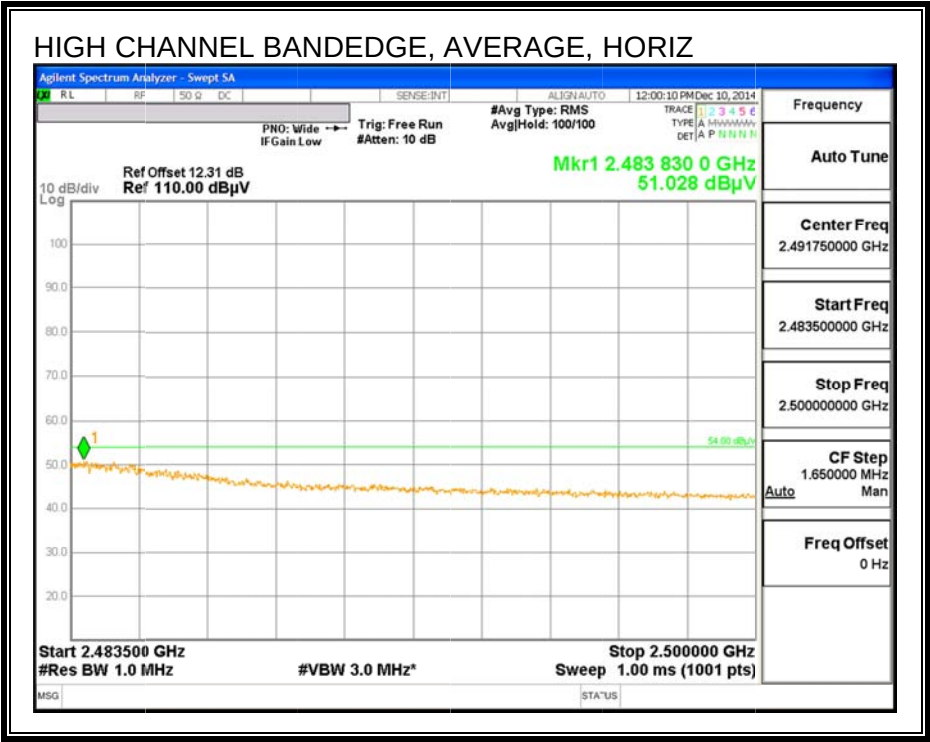
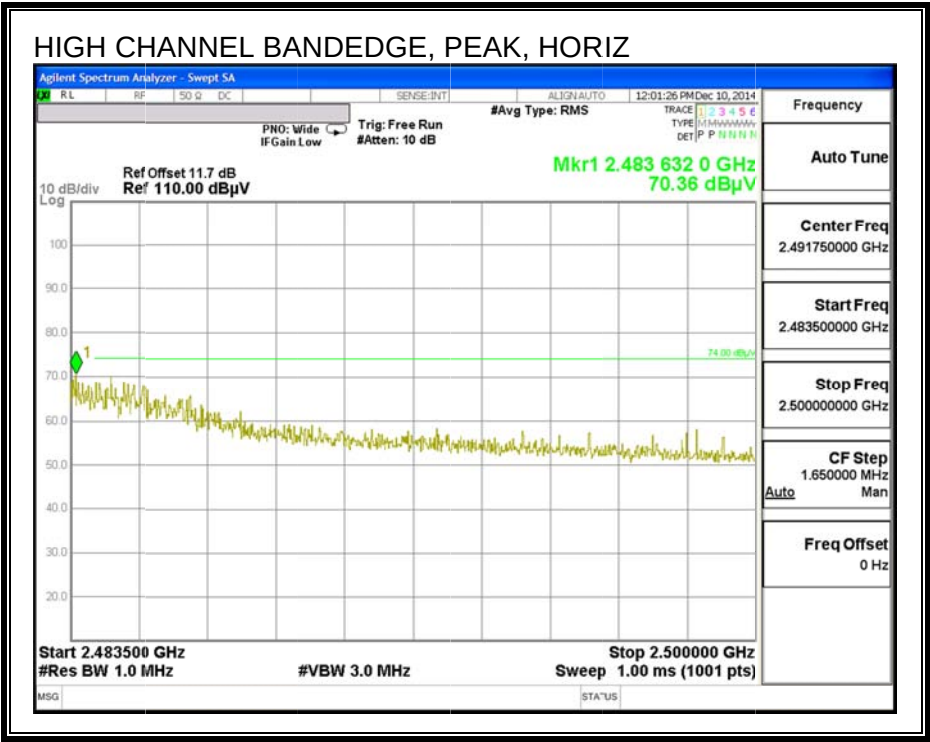


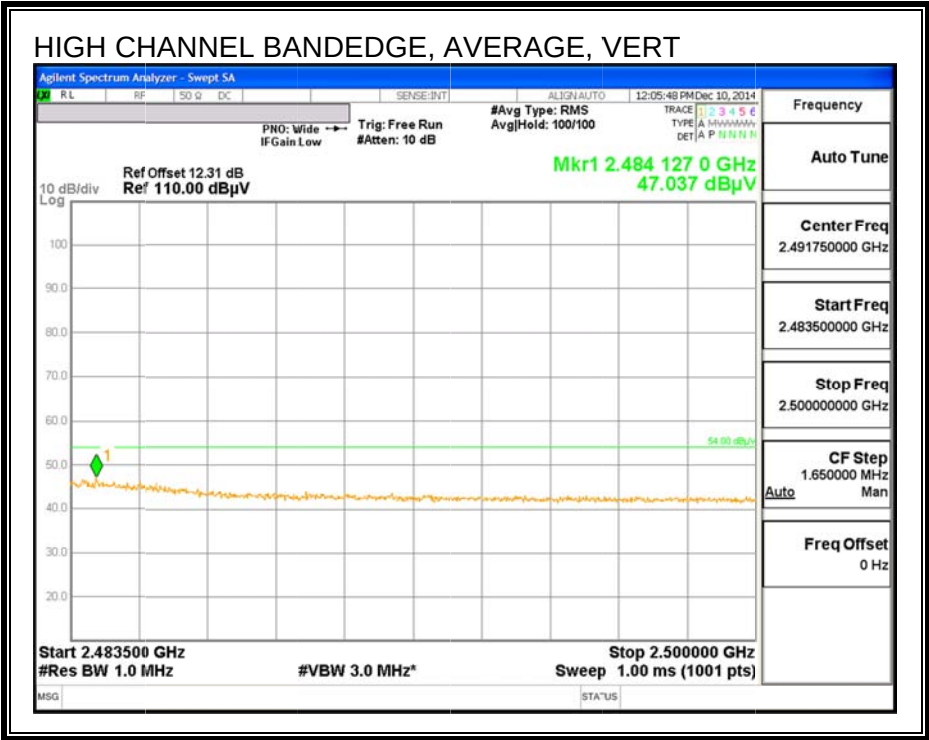
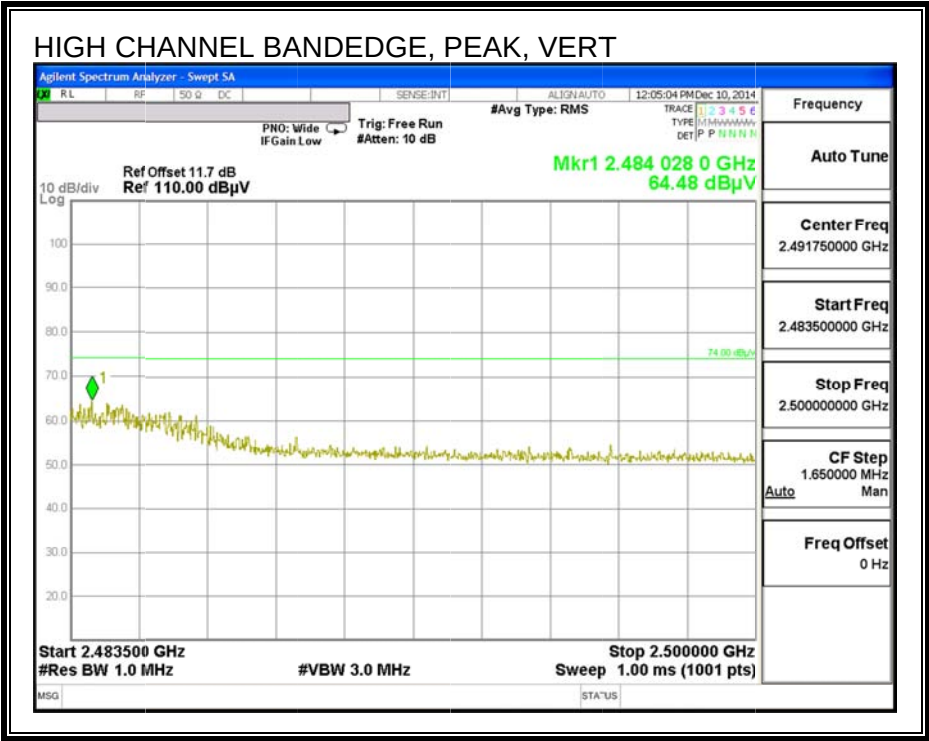




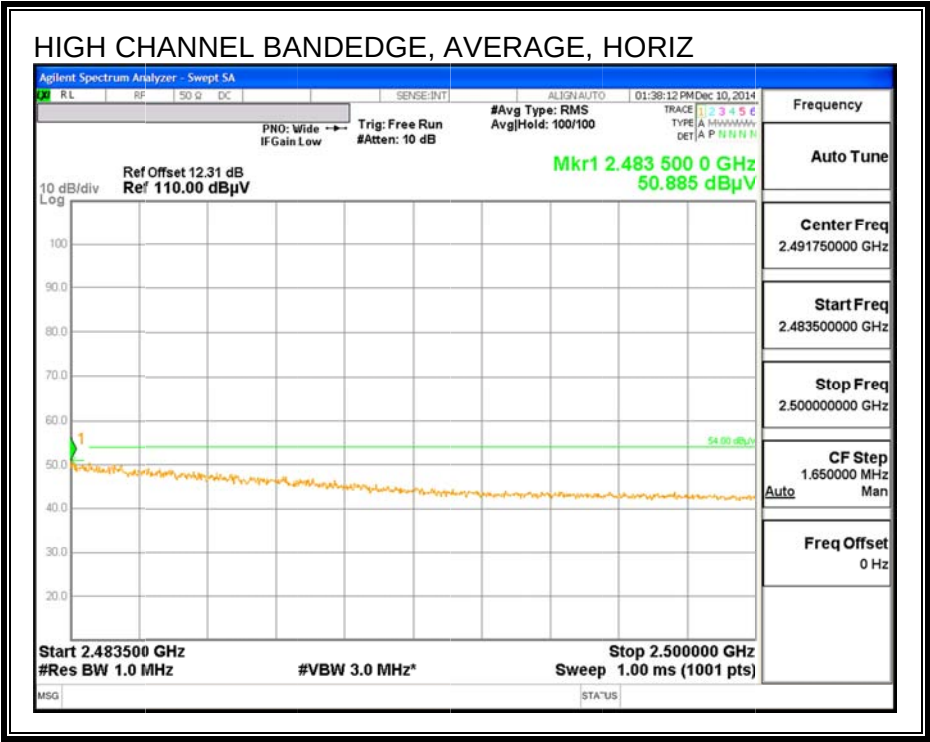
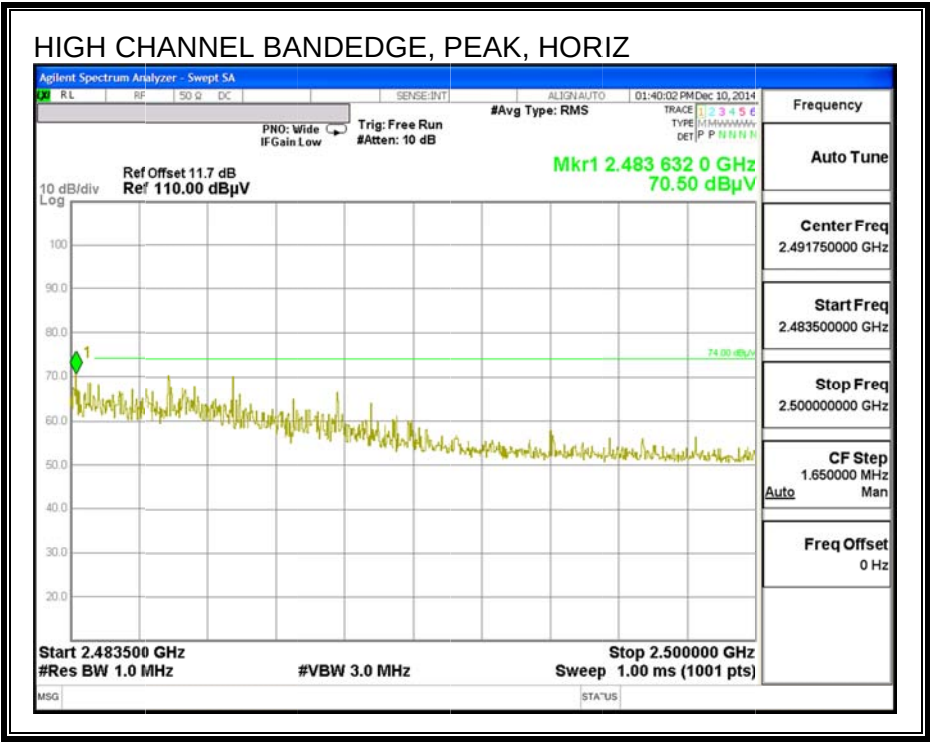


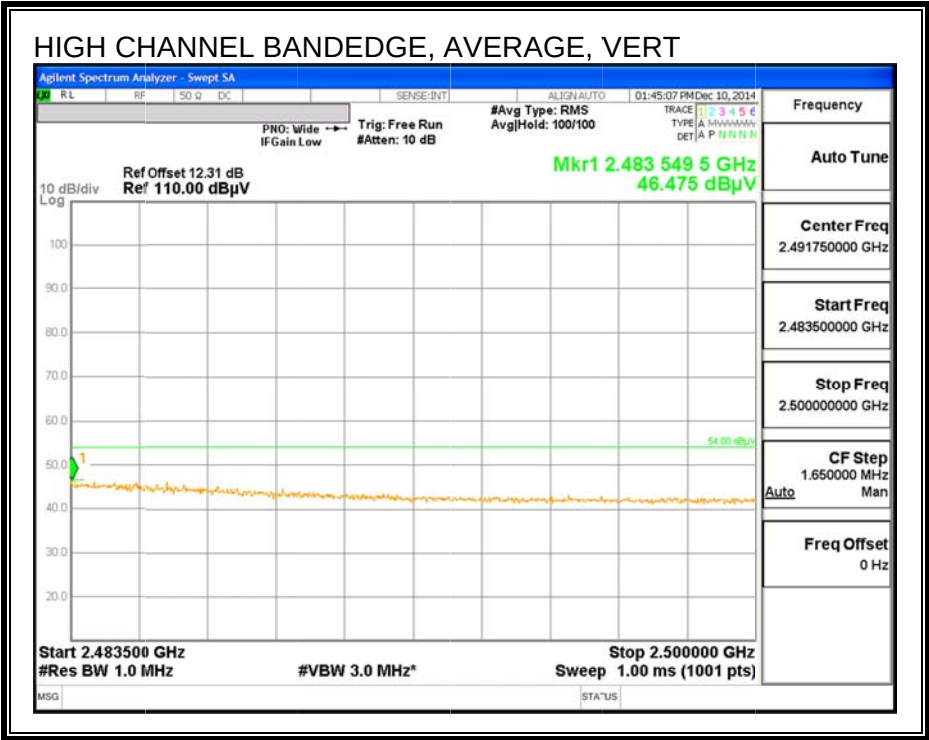
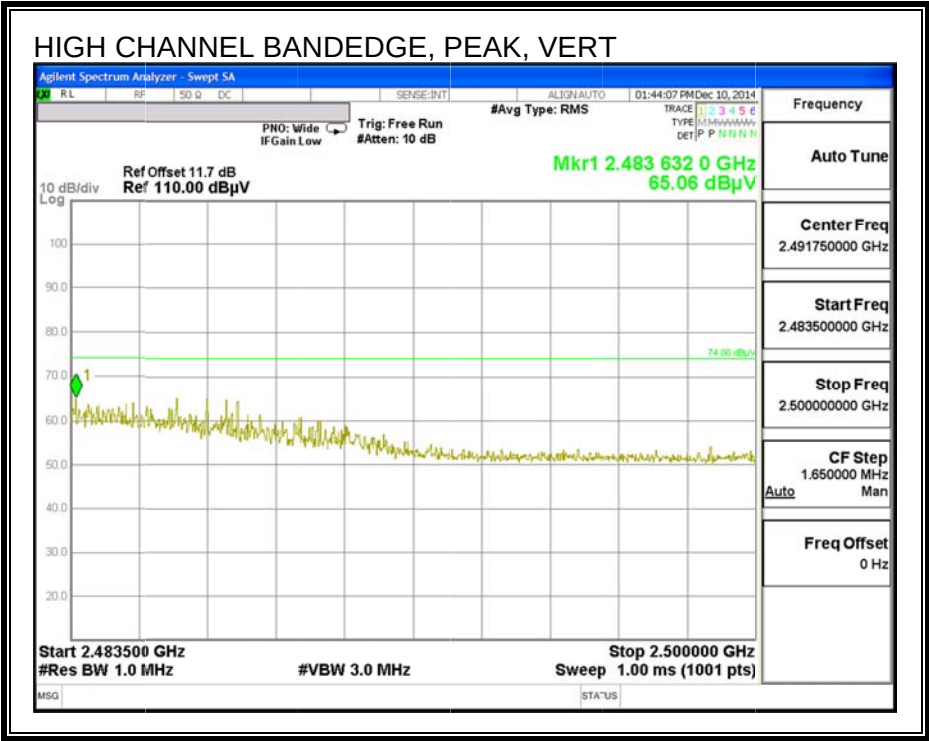
AUTHORIZED BANDEDGE (HIGH CHANNEL, Channel 11)



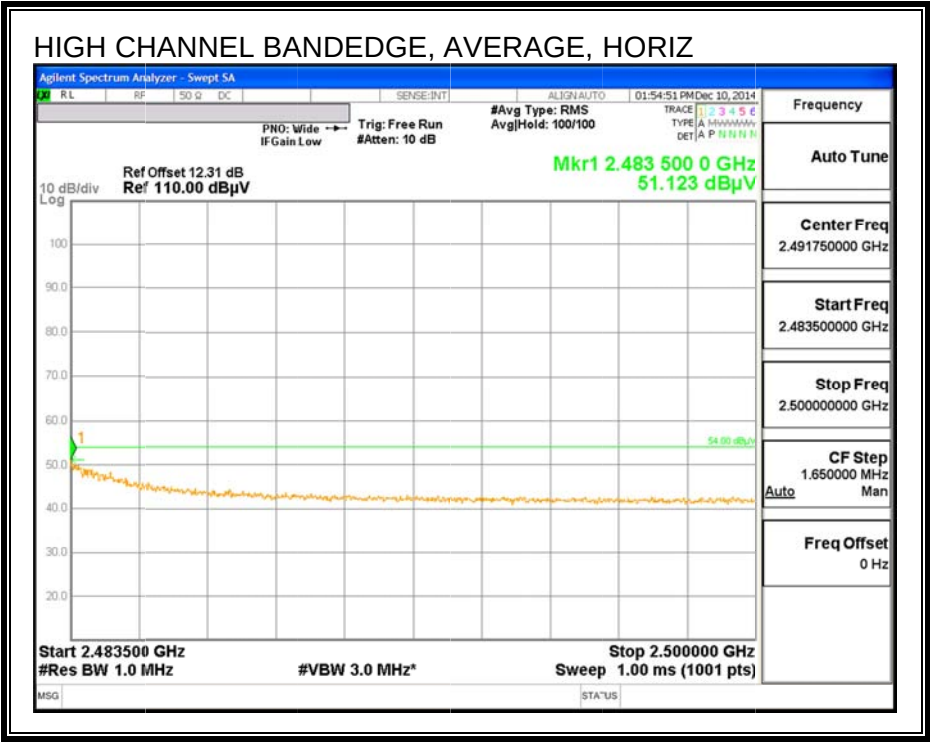
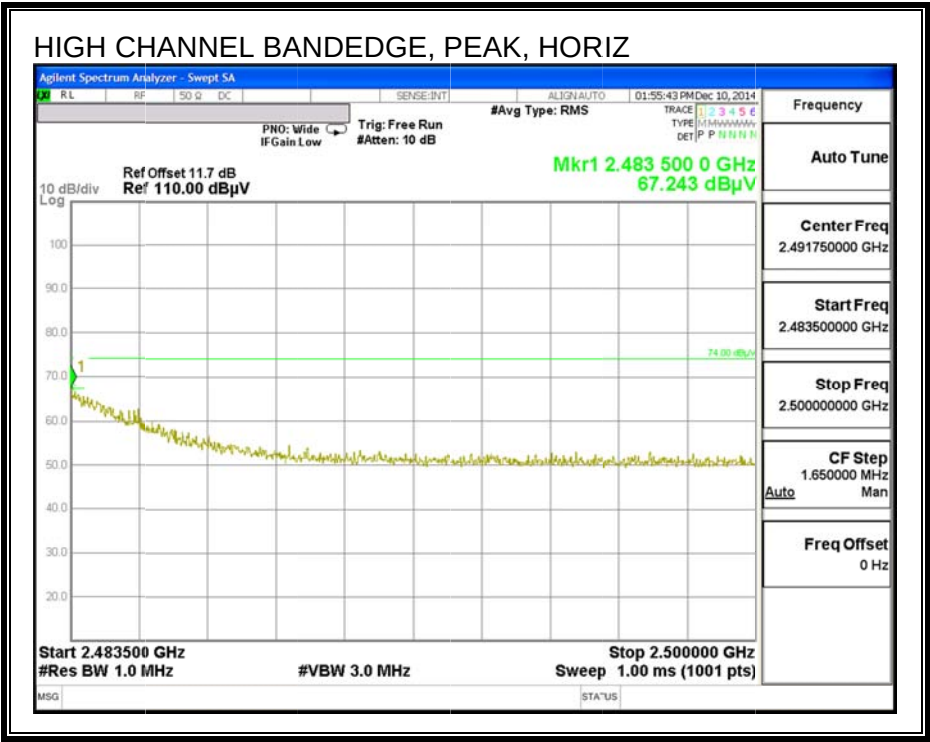


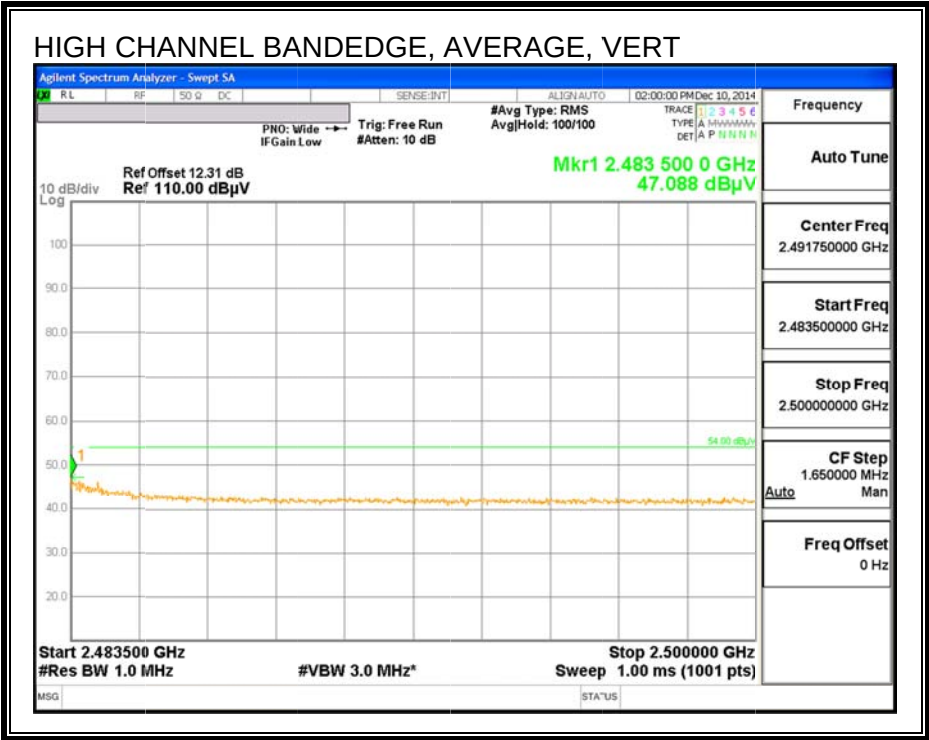
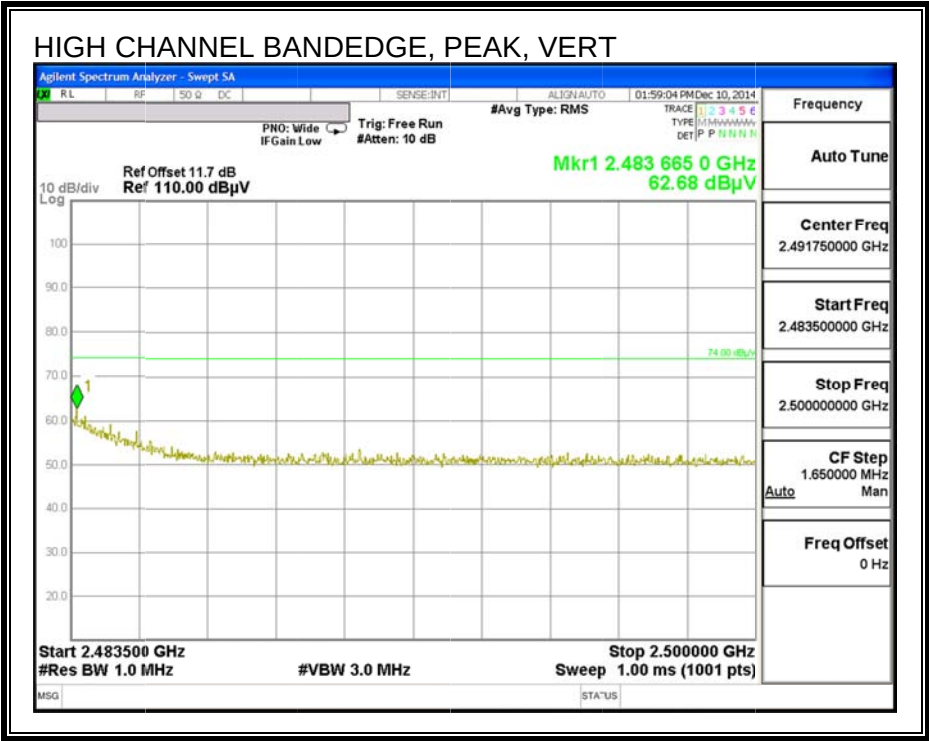
AUTHORIZED BANDEDGE (HIGH CHANNEL, Channel 12)



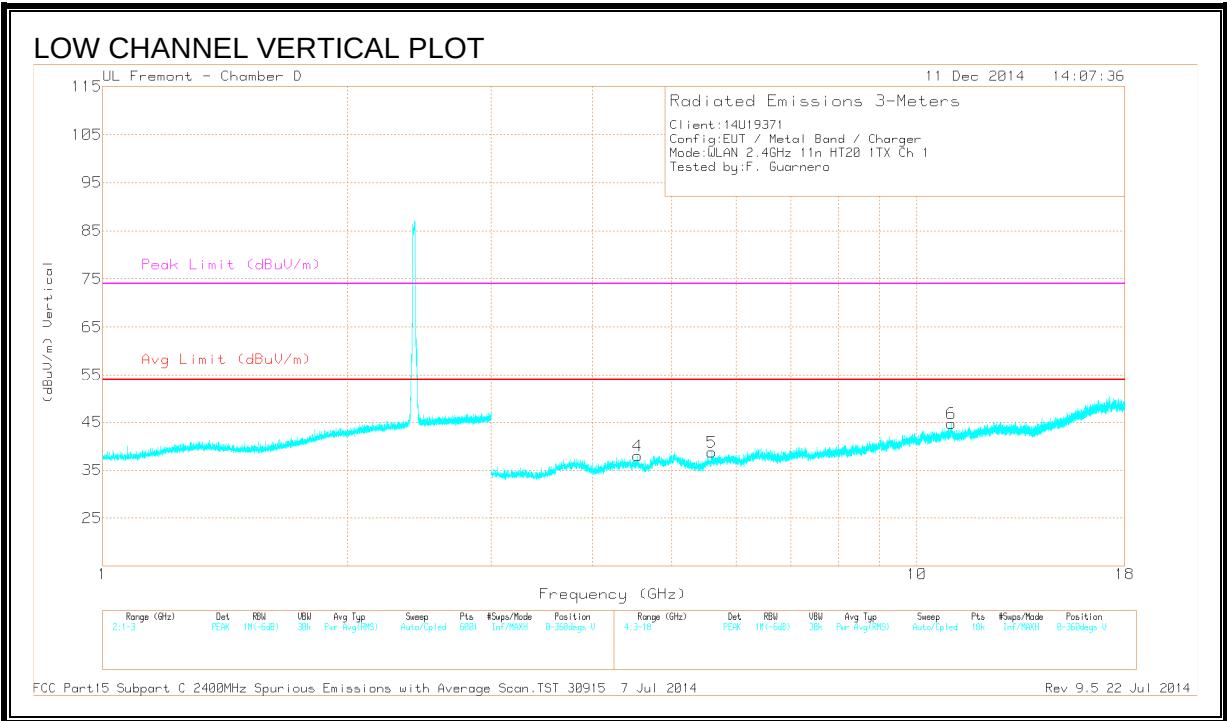
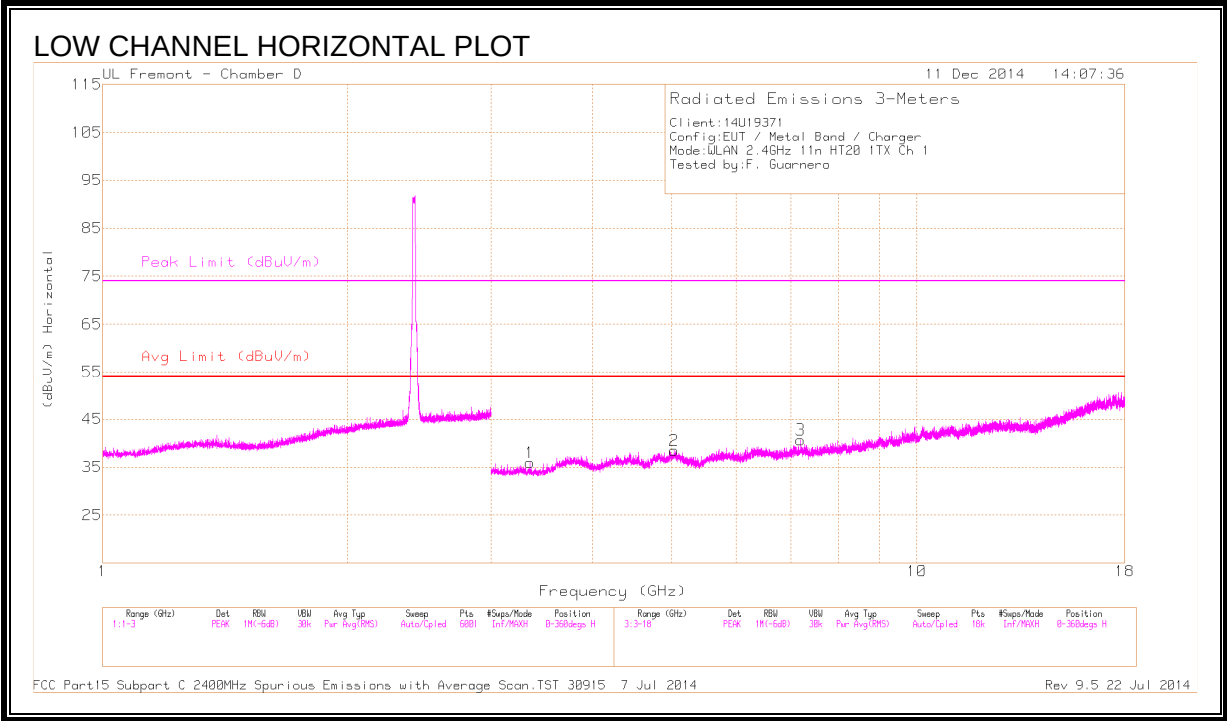


AUTHORIZED BANDEDGE (HIGH CHANNEL, Channel 13)





HARMONICS AND SPURIOUS EMISSIONS, Channel 1



DATA

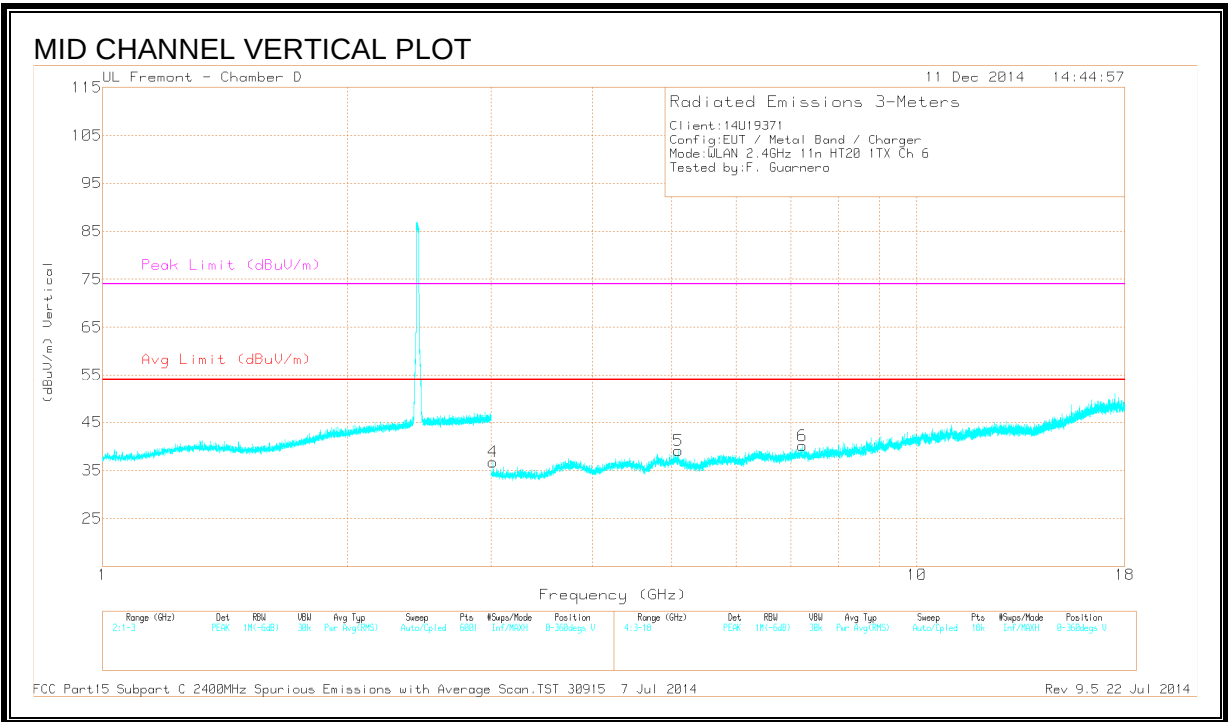
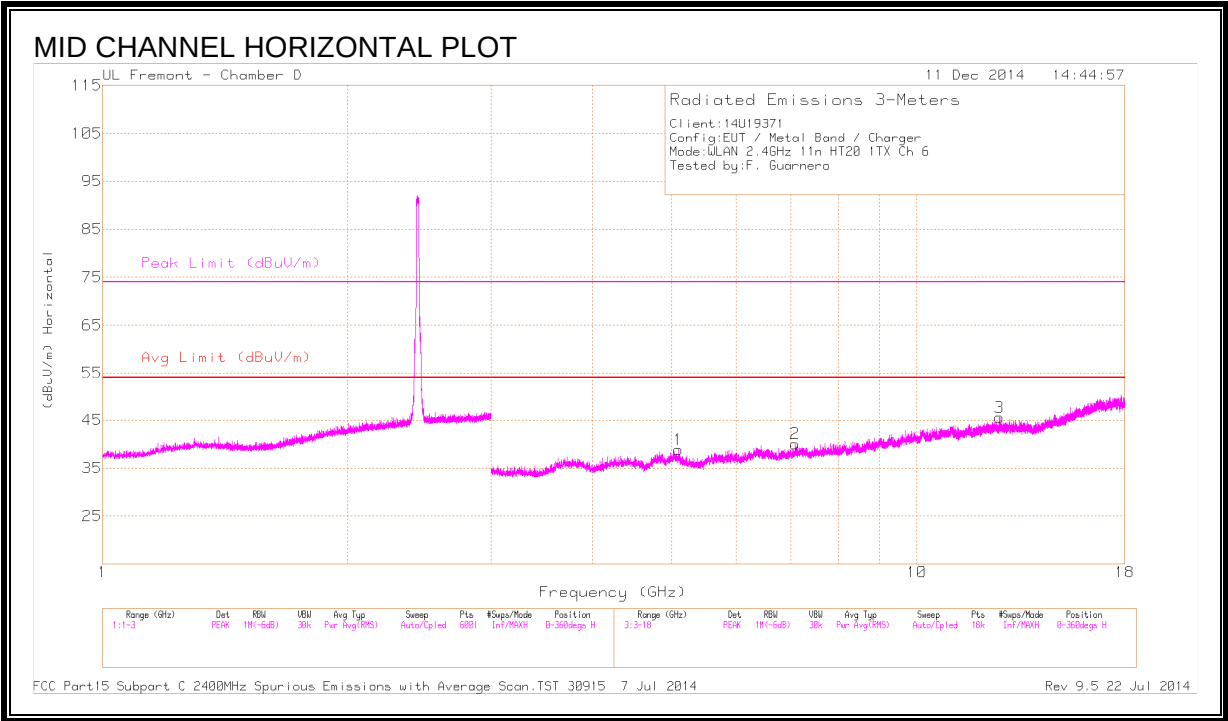
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.349	38.72	PK2	32.7	-28.6	0	42.82	-	-	74	-31.18	253	249	H
	* 3.349	27.76	MAv1	32.7	-28.6	.61	32.47	54	-21.53	-	-	253	249	H
2	* 5.031	37.07	PK2	34.2	-26.2	0	45.07	-	-	74	-28.93	180	235	H
	* 5.034	25.77	MAv1	34.2	-26.2	.61	34.38	54	-19.62	-	-	180	235	H
3	7.198	36.37	PK2	35.7	-24.8	0	47.27	-	-	-	-	210	261	H
4	* 4.542	37.52	PK2	34.0	-27.6	0	43.92	-	-	74	-30.08	59	314	V
	* 4.544	26.56	MAv1	34.0	-27.6	.61	33.57	54	-20.43	-	-	59	314	V
5	5.599	37.27	PK2	34.5	-26.6	0	45.17	-	-	-	-	144	322	V
6	* 11.034	33.51	PK2	38.1	-20.4	0	51.21	-	-	74	-22.79	134	309	V
	* 11.035	22.43	MAv1	38.1	-20.4	.61	40.74	54	-13.26	-	-	134	309	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, Channel 6



DATA

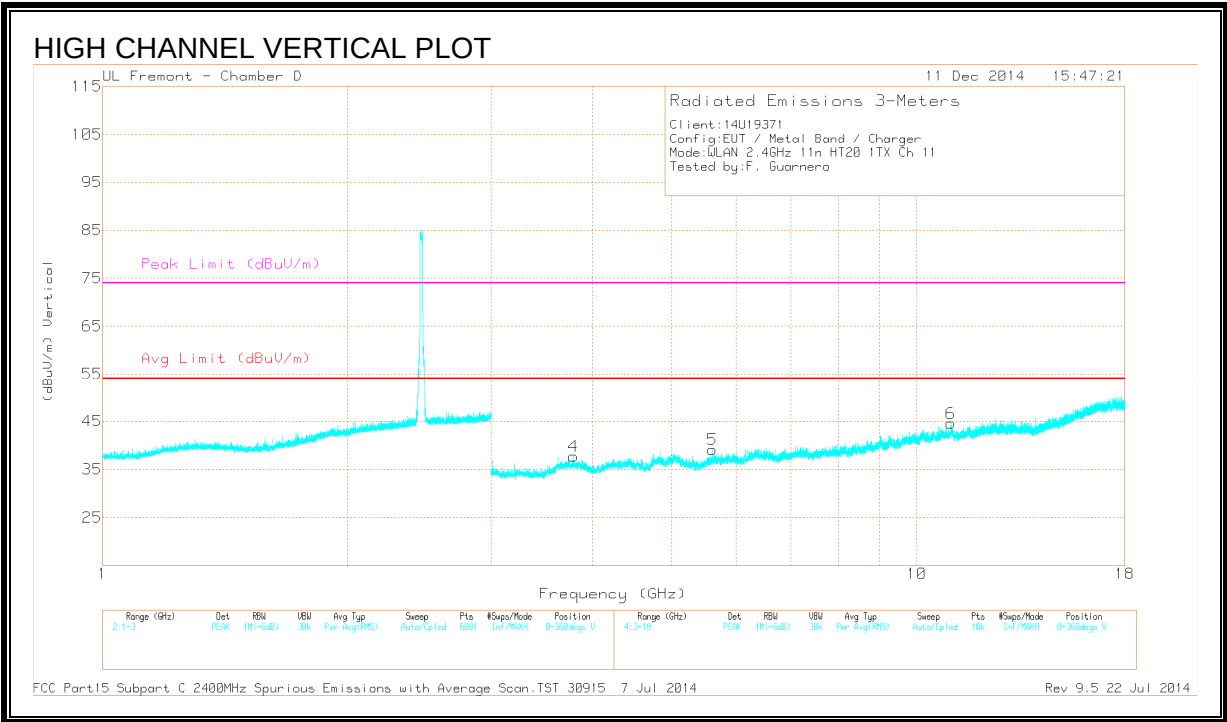
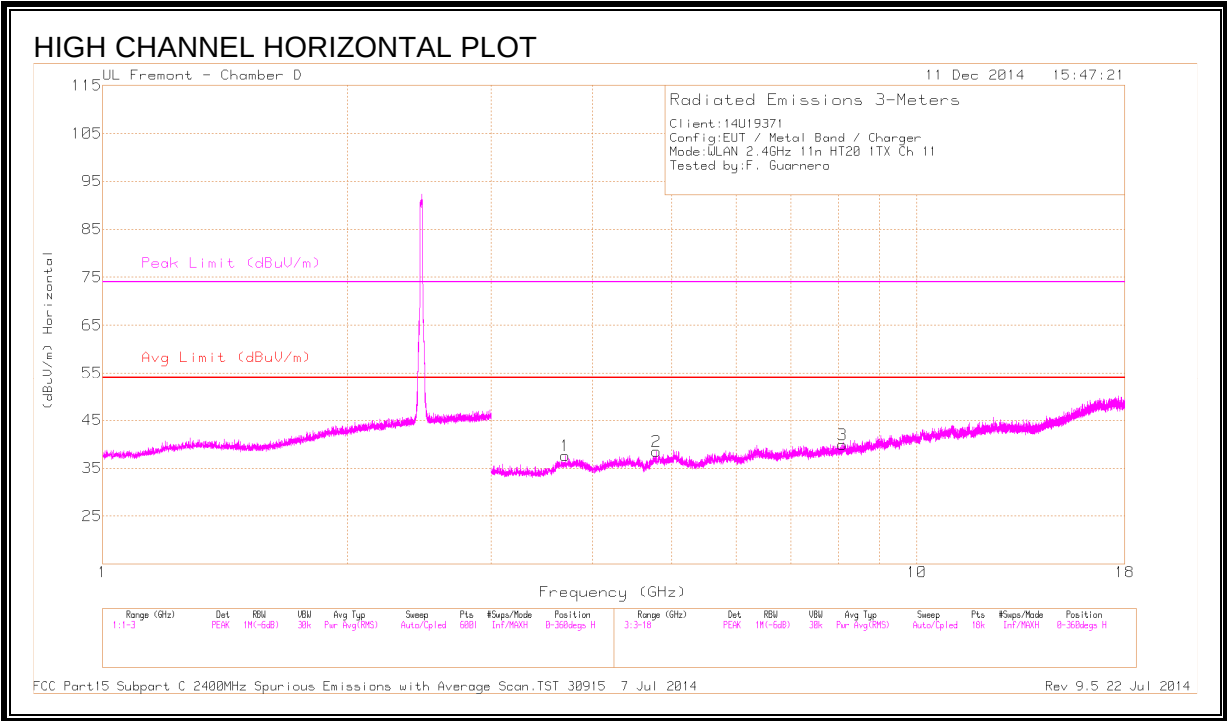
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 5.095	37.62	PK2	34.3	-26.9	0	45.02	-	-	74	-28.98	336	297	H
	* 5.095	26.38	MAv1	34.3	-26.9	.61	34.39	54	-19.61	-	-	336	297	H
2	7.091	35.93	PK2	35.6	-25.3	0	46.23	-	-	-	-	214	172	H
3	* 12.635	33.72	PK2	39.3	-21.4	0	51.62	-	-	74	-22.38	320	260	H
	* 12.637	22.98	MAv1	39.3	-21.4	.61	41.49	54	-12.51	-	-	320	260	H
4	3.016	38.51	PK2	32.7	-28.1	0	43.11	-	-	-	-	265	320	V
5	* 5.091	38.06	PK2	34.3	-26.8	0	45.56	-	-	74	-28.44	255	241	H
	* 5.094	27.04	MAv1	34.3	-26.9	.61	35.05	54	-18.95	-	-	255	241	H
6	7.237	36.50	PK2	35.7	-25.0	0	47.20	-	-	-	-	178	320	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, Channel 11



DATA

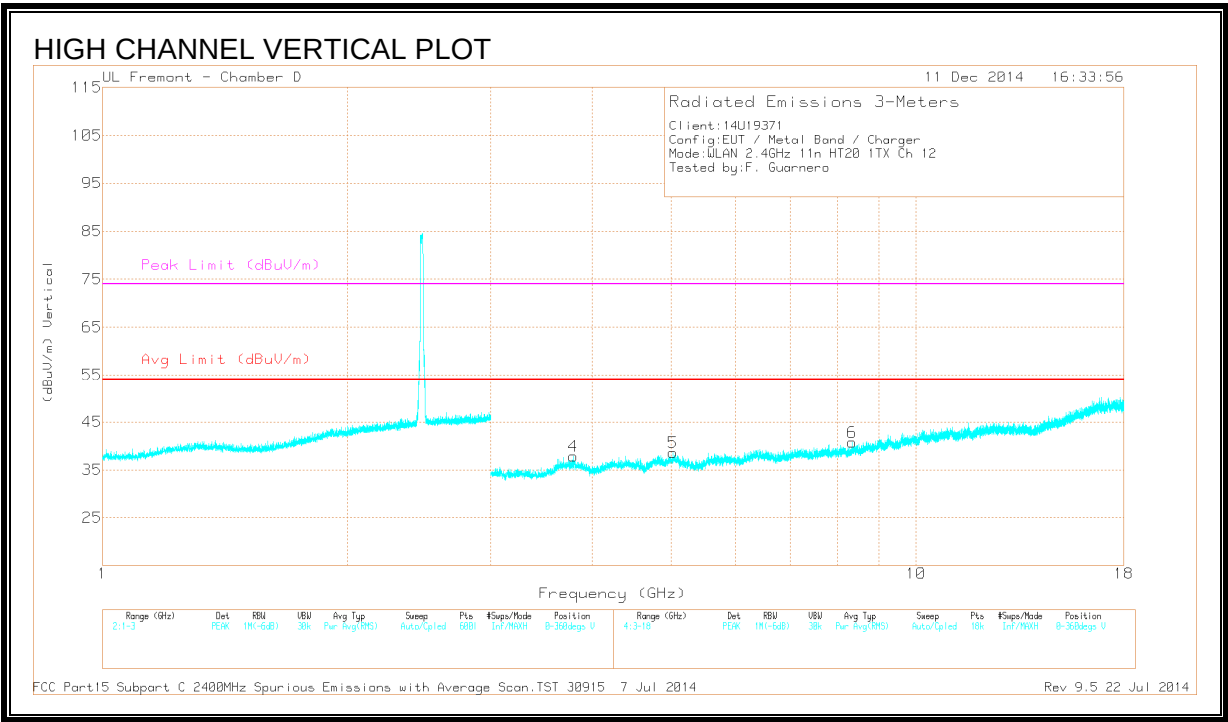
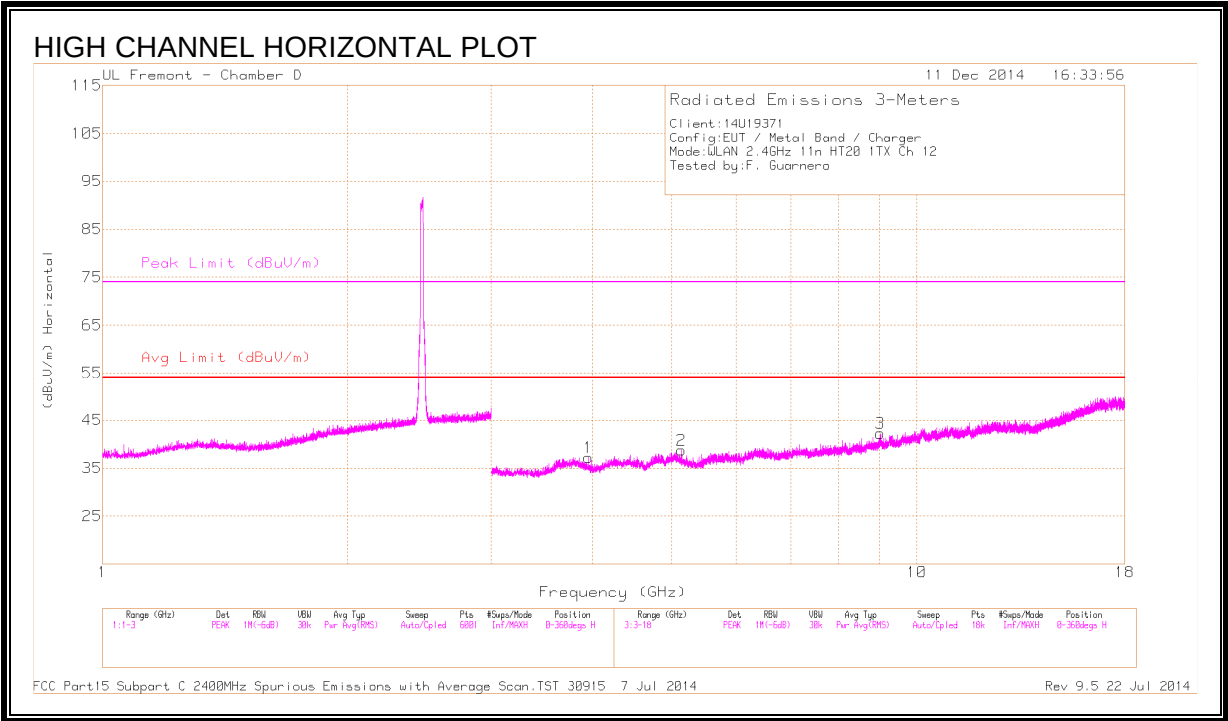
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Filt/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.702	38.43	PK2	33.2	-28.7	0	42.93	-	-	74	-31.07	255	250	H
	* 3.703	27.69	MAv1	33.2	-28.7	.61	32.80	54	-21.20	-	-	255	250	H
2	* 4.787	38.07	PK2	34.2	-26.9	0	45.37	-	-	74	-28.63	250	258	H
	* 4.788	27.02	MAv1	34.2	-26.9	.61	34.93	54	-19.07	-	-	250	258	H
3	* 8.108	34.94	PK2	35.7	-23.5	0	47.14	-	-	74	-26.86	241	267	H
	* 8.107	24.38	MAv1	35.7	-23.6	.61	37.09	54	-16.91	-	-	241	267	H
4	* 3.786	38.38	PK2	33.4	-28.3	0	43.48	-	-	74	-30.52	216	342	V
	* 3.785	27.54	MAv1	33.4	-28.3	.61	33.25	54	-20.75	-	-	216	342	V
5	5.606	37.37	PK2	34.5	-26.7	0	45.17	-	-	-	-	58	320	V
6	* 10.998	33.93	PK2	38.1	-21.0	0	51.03	-	-	74	-22.97	161	323	V
	* 10.999	23.19	MAv1	38.1	-21.0	.61	40.90	54	-13.10	-	-	161	323	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, Channel 12



DATA

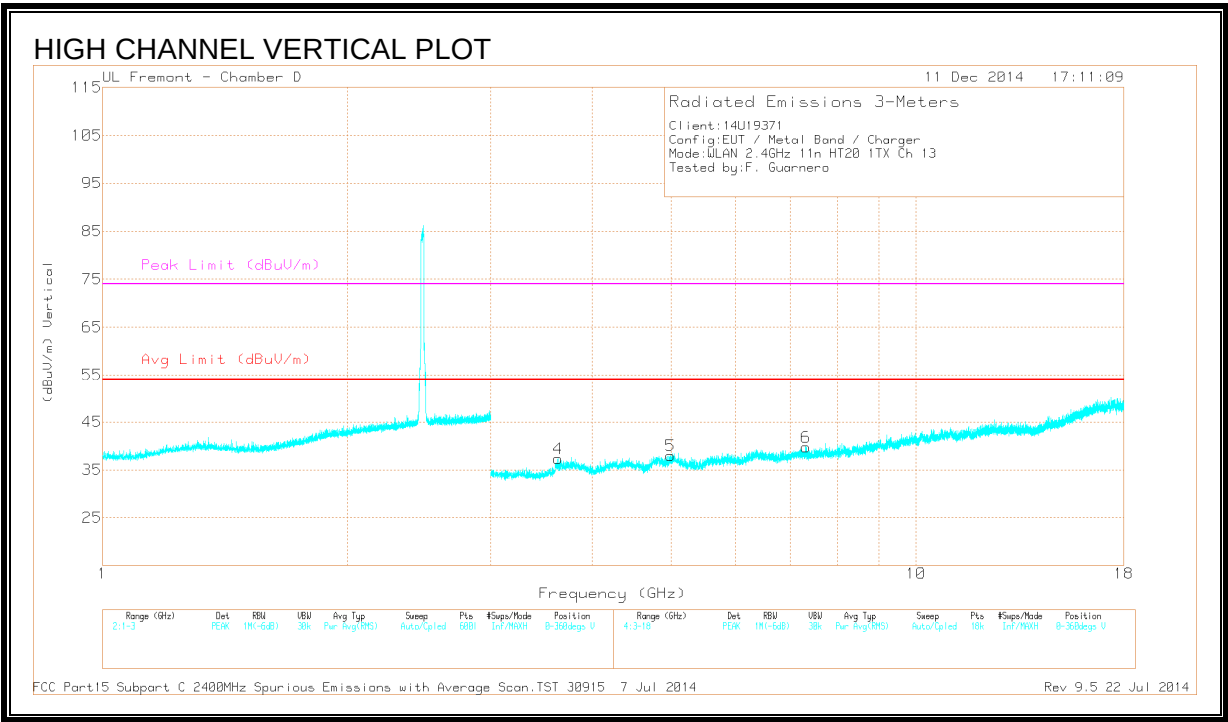
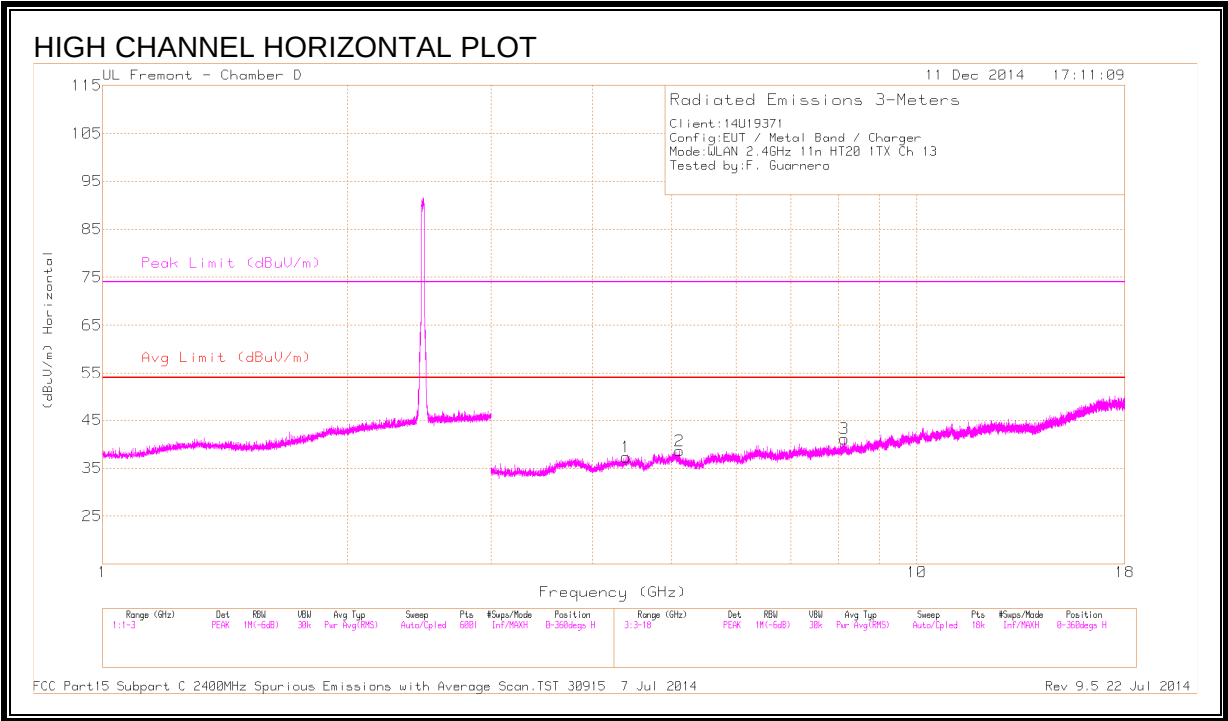
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.948	38.31	PK2	33.5	-28.3	0	43.51	-	-	74	-30.49	332	263	H
	* 3.949	27.11	MAv1	33.5	-28.3	.61	32.92	54	-21.08	-	-	332	263	H
2	* 5.142	38.34	PK2	34.3	-27.8	0	44.84	-	-	74	-29.16	313	272	H
	* 5.142	26.79	MAv1	34.3	-27.8	.61	33.90	54	-20.10	-	-	313	272	H
3	* 9.015	34.01	PK2	36.2	-22.0	0	48.21	-	-	74	-25.79	324	256	H
	* 9.013	22.95	MAv1	36.2	-22.1	.61	37.66	54	-16.34	-	-	324	256	H
4	* 3.794	38.73	PK2	33.4	-28.2	0	43.93	-	-	74	-30.07	137	304	V
	* 3.794	27.65	MAv1	33.4	-28.2	.61	33.46	54	-20.54	-	-	137	304	V
5	* 5.027	37.11	PK2	34.2	-26.2	0	45.11	-	-	74	-28.89	127	317	V
	* 5.026	26.10	MAv1	34.2	-26.2	.61	34.71	54	-19.29	-	-	127	317	V
6	* 8.350	35.01	PK2	35.8	-23.4	0	47.41	-	-	74	-26.59	139	332	V
	* 8.347	24.37	MAv1	35.8	-23.5	.61	37.28	54	-16.72	-	-	139	332	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, Channel 13



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cb/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.391	38.02	PK2	33.9	-28.2	0	43.72	-	-	74	-30.28	127	261	H
	* 4.390	26.40	MAv1	33.9	-28.2	.61	32.71	54	-21.29	-	-	127	261	H
2	* 5.108	38.55	PK2	34.3	-27.2	0	45.65	-	-	74	-28.35	118	251	H
	* 5.111	26.57	MAv1	34.3	-27.3	.61	34.18	54	-19.82	-	-	118	251	H
3	* 8.150	35.18	PK2	35.8	-23.4	0	47.58	-	-	74	-26.42	122	233	H
	* 8.149	23.58	MAv1	35.8	-23.4	.61	36.59	54	-17.41	-	-	122	233	H
4	* 3.629	38.11	PK2	33.4	-28.7	0	42.81	-	-	74	-31.19	301	336	V
	* 3.628	27.56	MAv1	33.4	-28.7	.61	32.87	54	-21.13	-	-	301	336	V
5	* 4.991	37.00	PK2	34.2	-26.8	0	44.40	-	-	74	-29.60	287	330	V
	* 4.990	26.46	MAv1	34.2	-26.8	.61	34.47	54	-19.53	-	-	287	330	V
6	* 7.319	36.16	PK2	35.7	-24.8	0	47.06	-	-	74	-26.94	292	339	V
	* 7.320	25.33	MAv1	35.7	-24.8	.61	36.84	54	-17.16	-	-	292	339	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

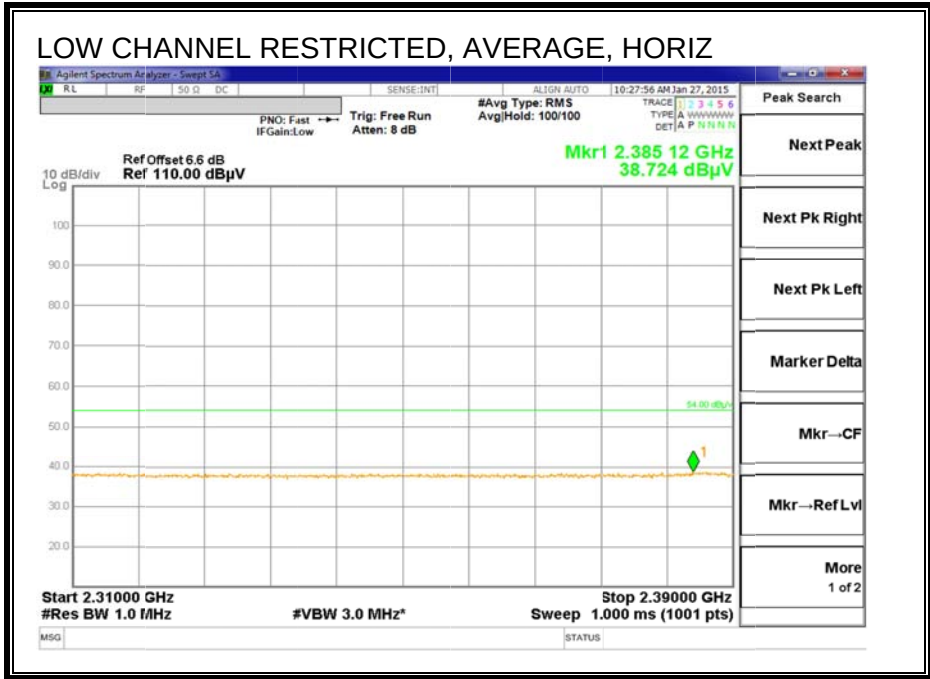
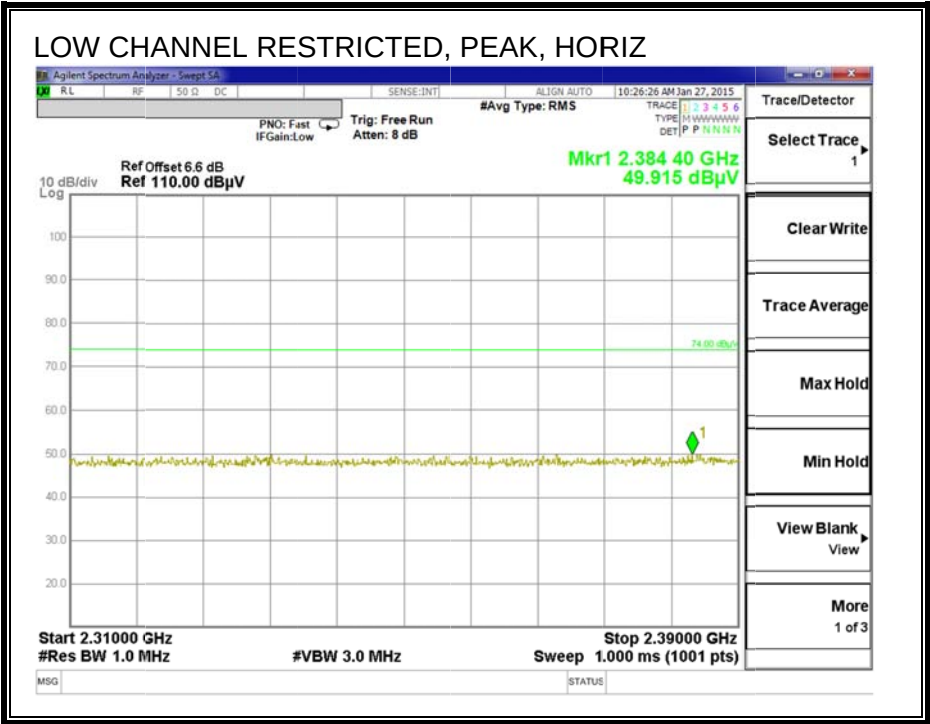
PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

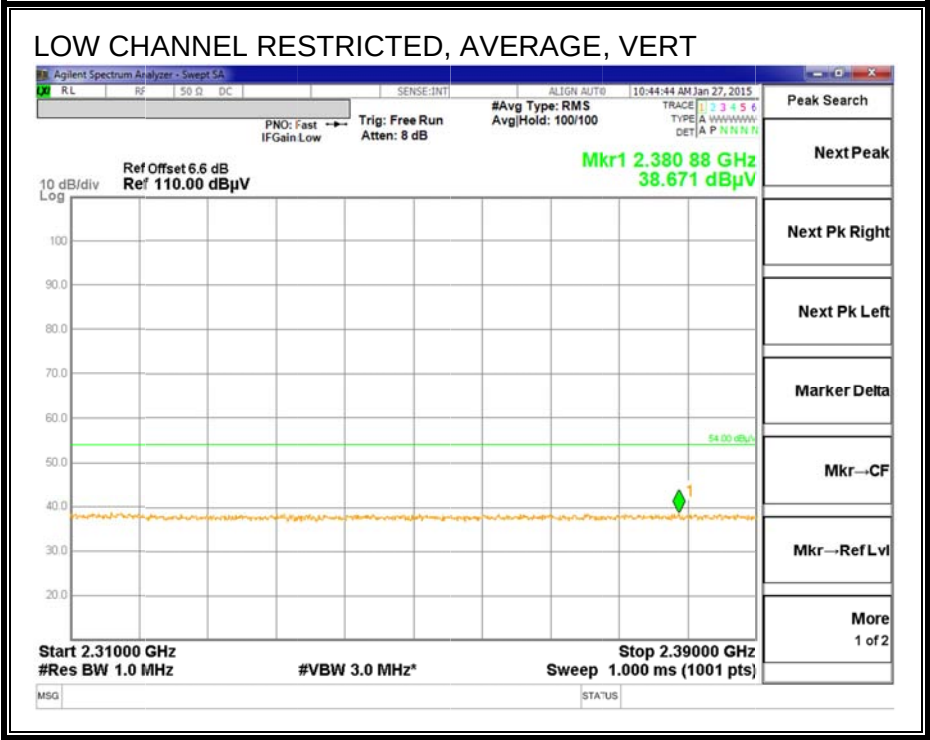
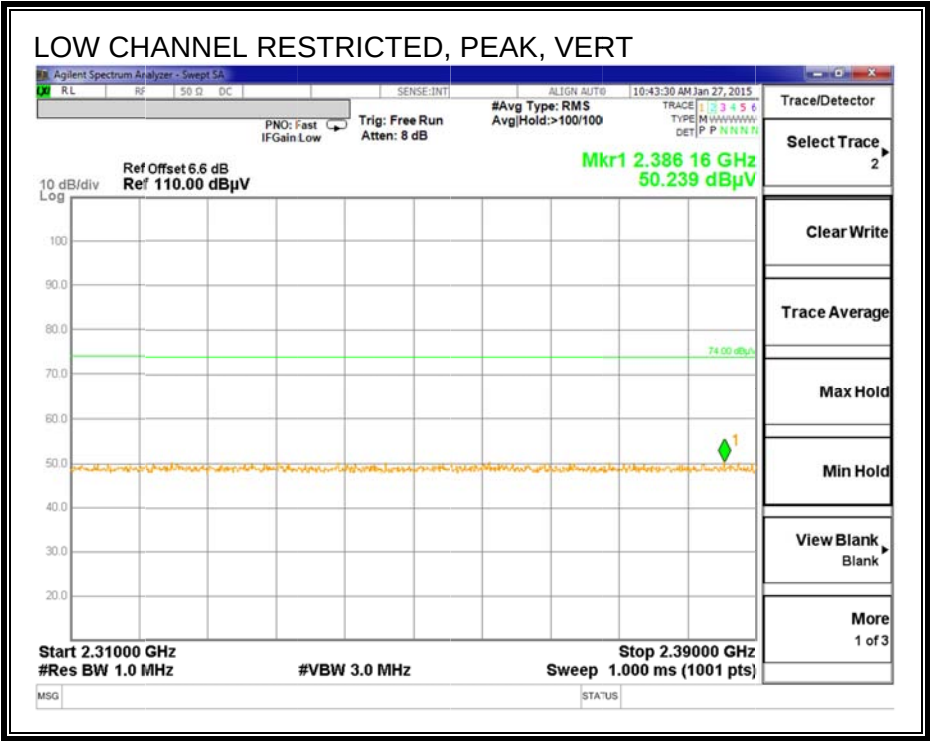
10.3. TX ABOVE 1 GHz A1554 ANTENNA 2

10.3.1. 802.11b 1Tx MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

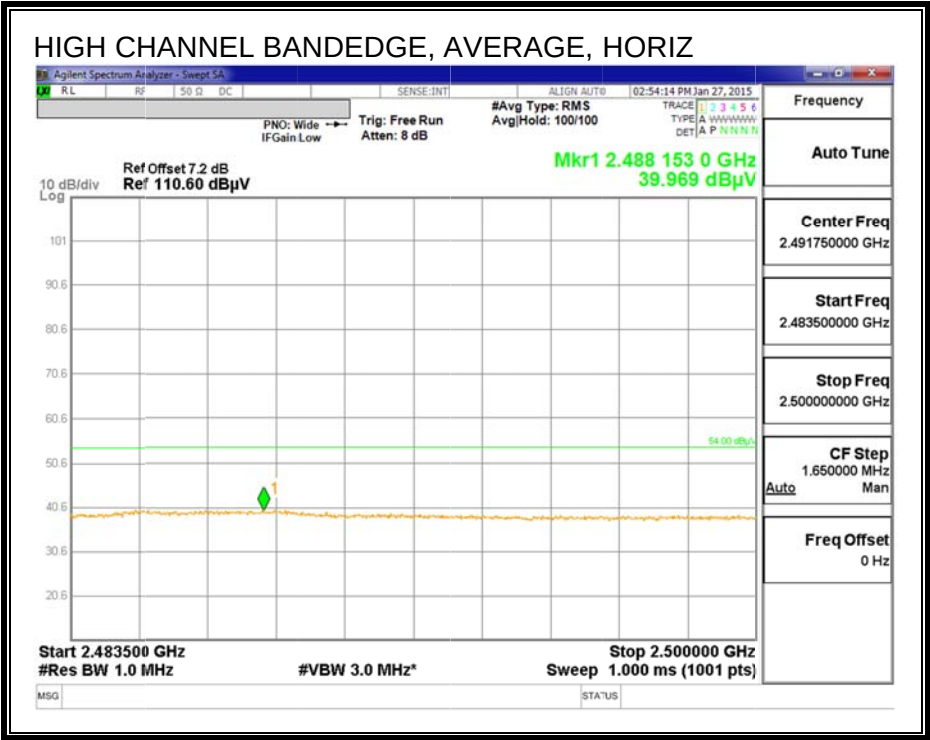
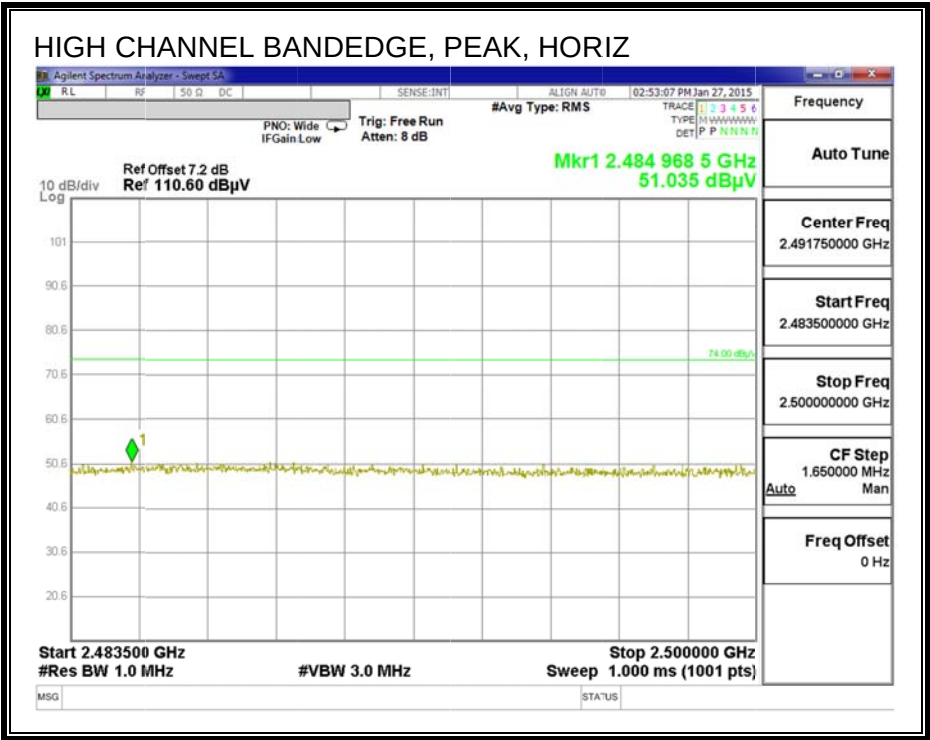


AVG READING: 38.724 + 0.10 = 38.824

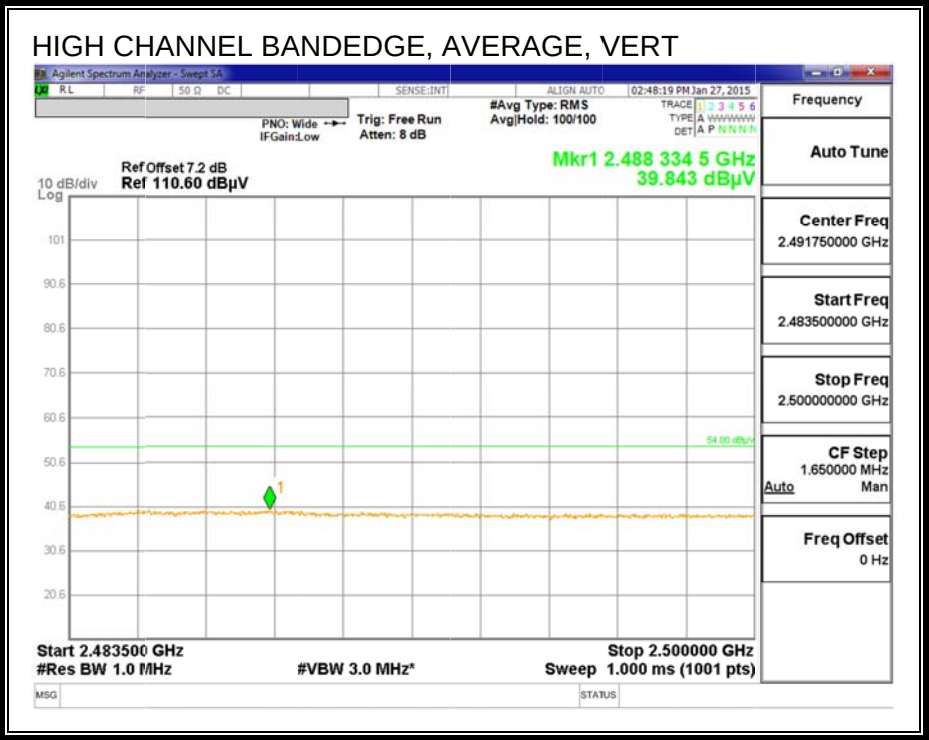
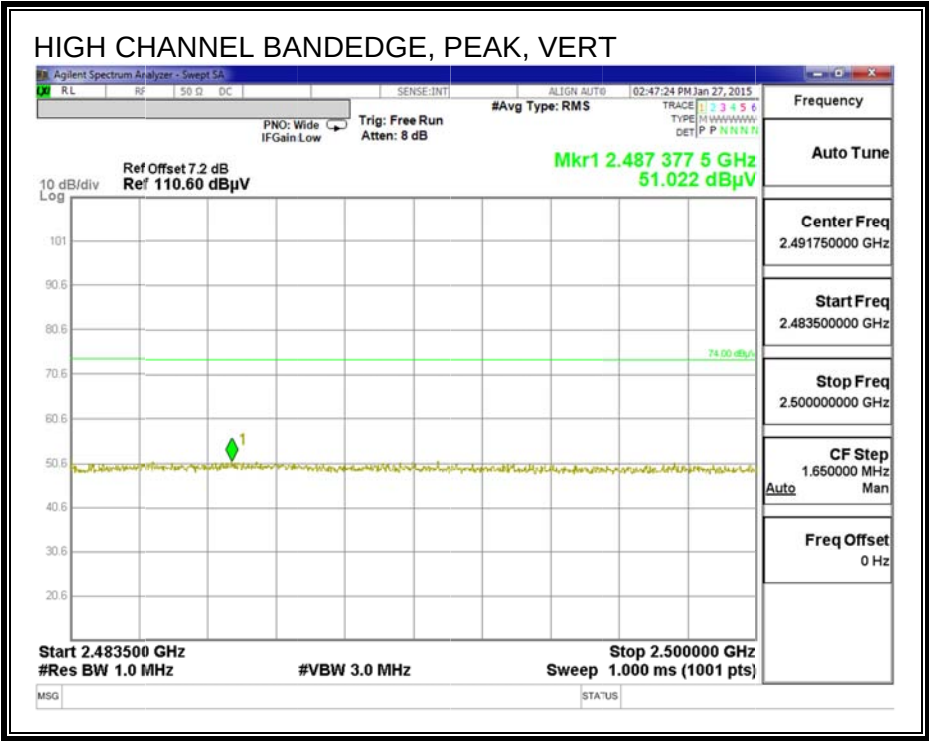


AVG READING: $38.671 + 0.10 = 38.771$

AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 11)

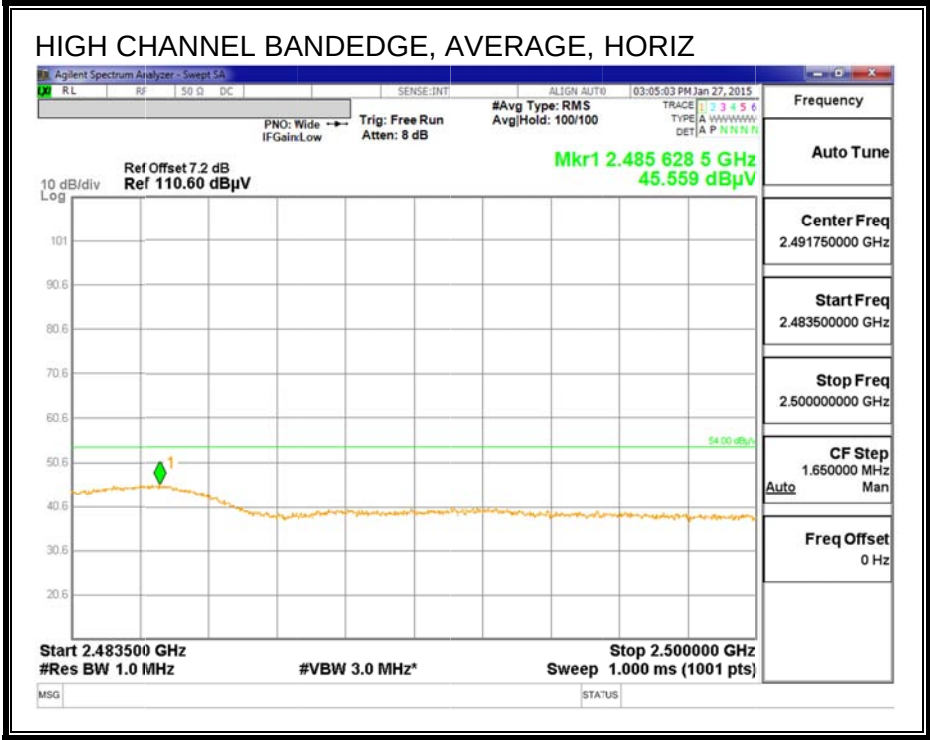
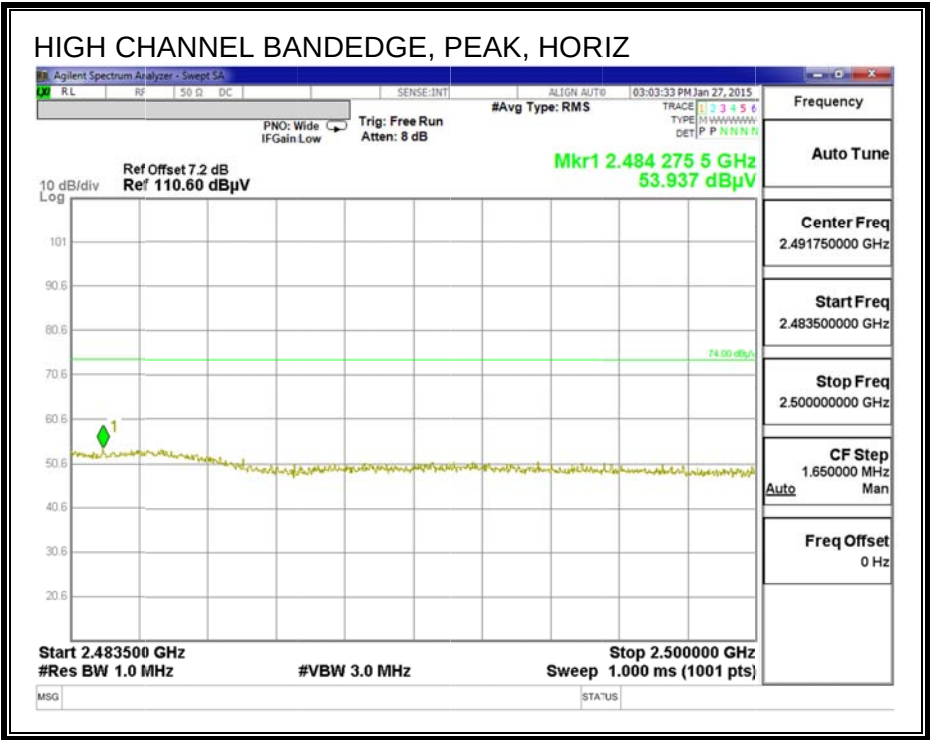


AVG READING: $39.969 + 0.10 = 40.069$

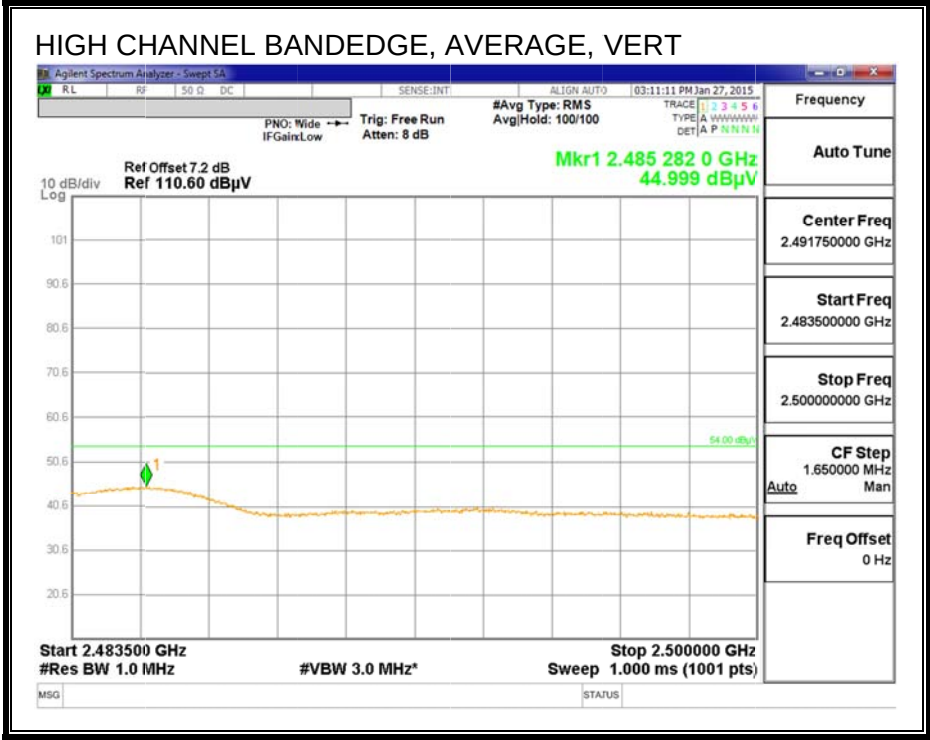
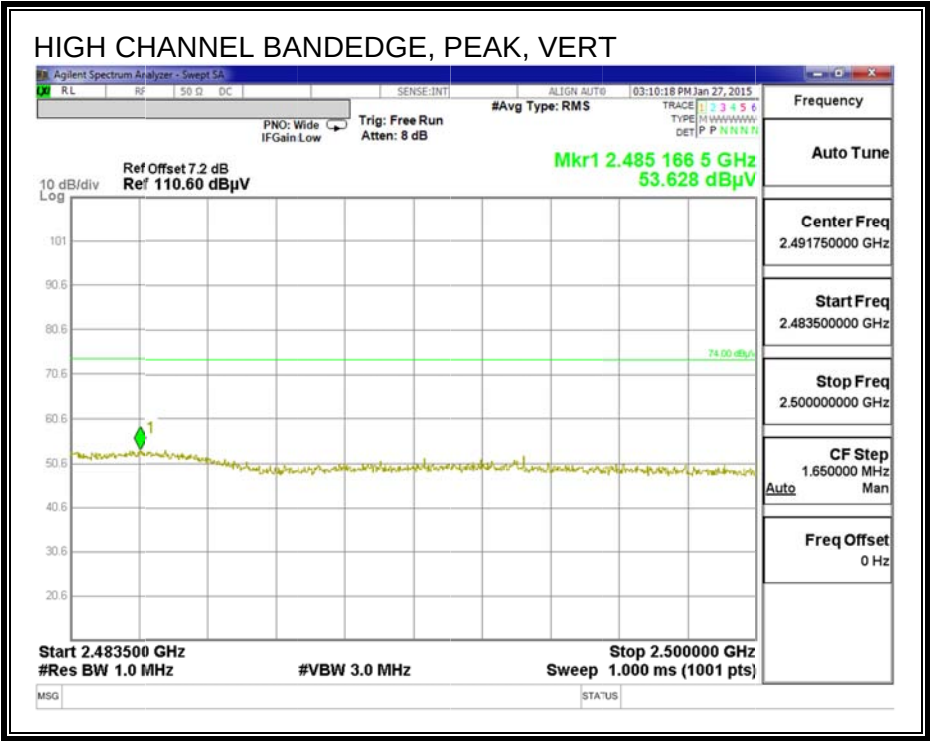


AVG READING: 39.843 + 0.10 = 39.943

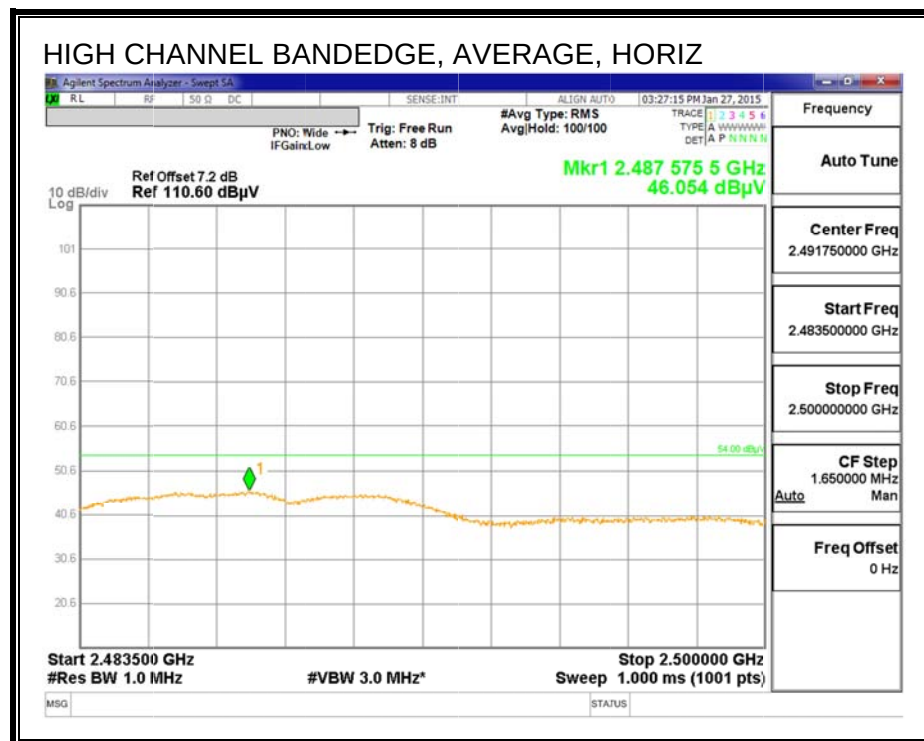
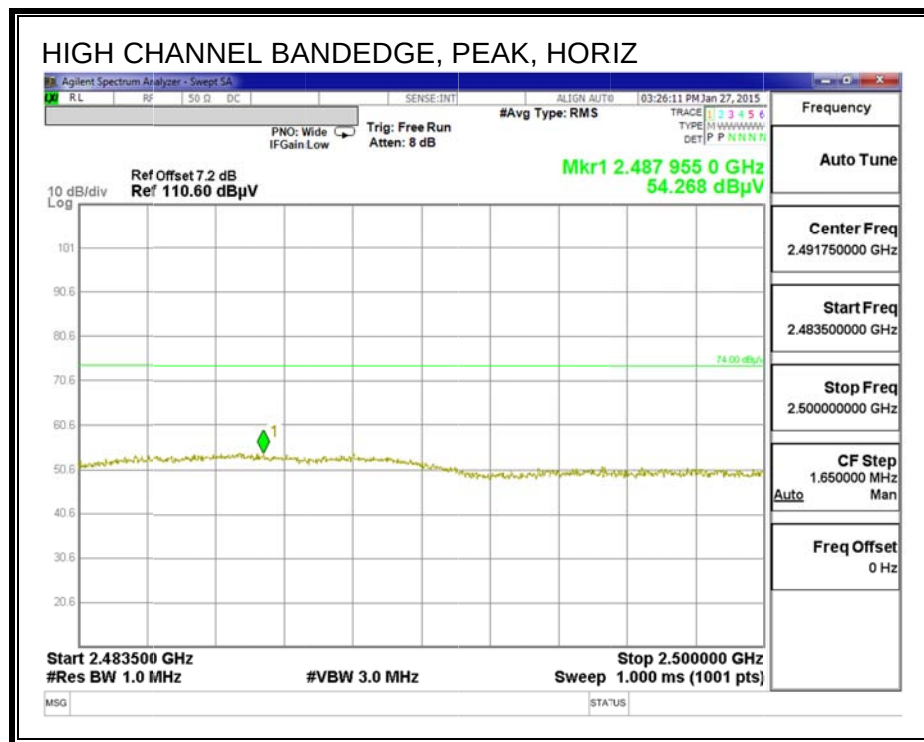
AUTHORIZED BANDEDGE (HIGH CHANNEL, CH 12)

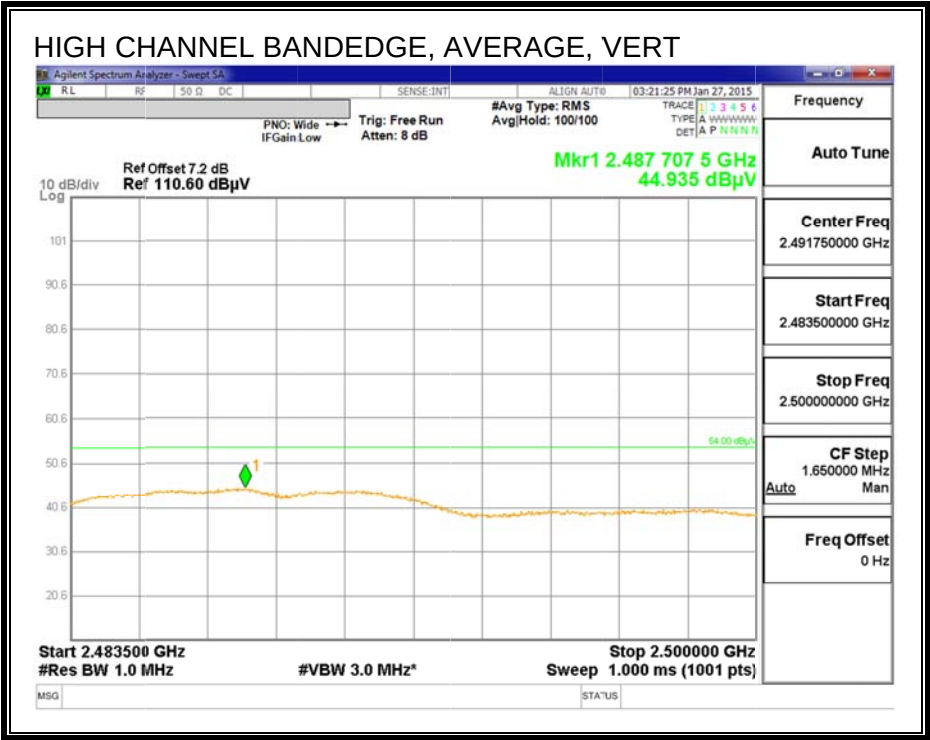
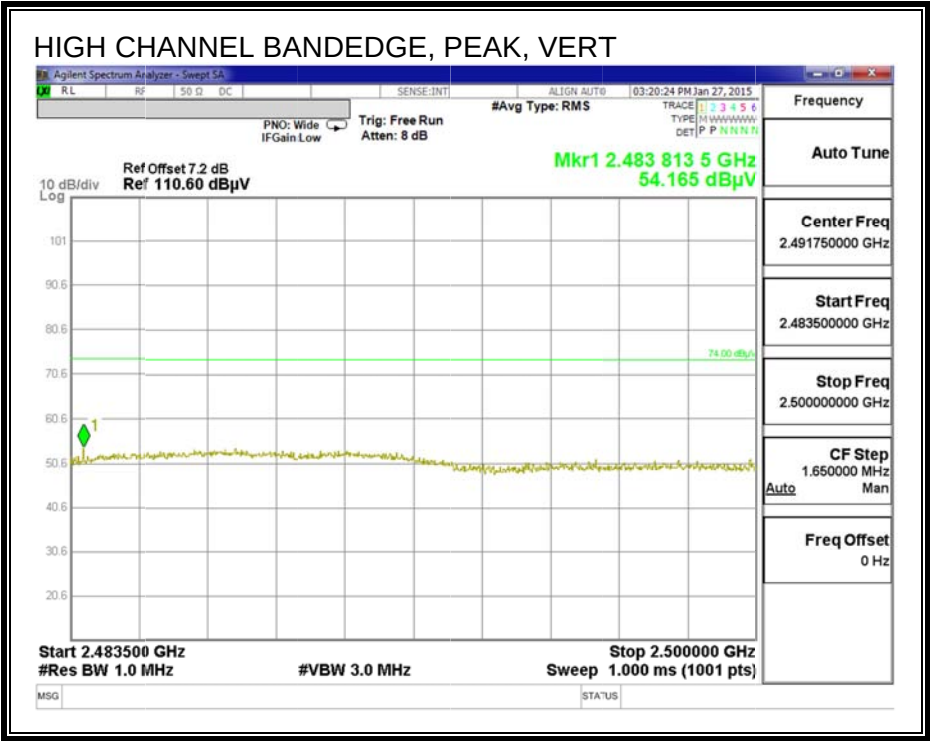


AVG READING: 45.559 + 0.10 = 45.659



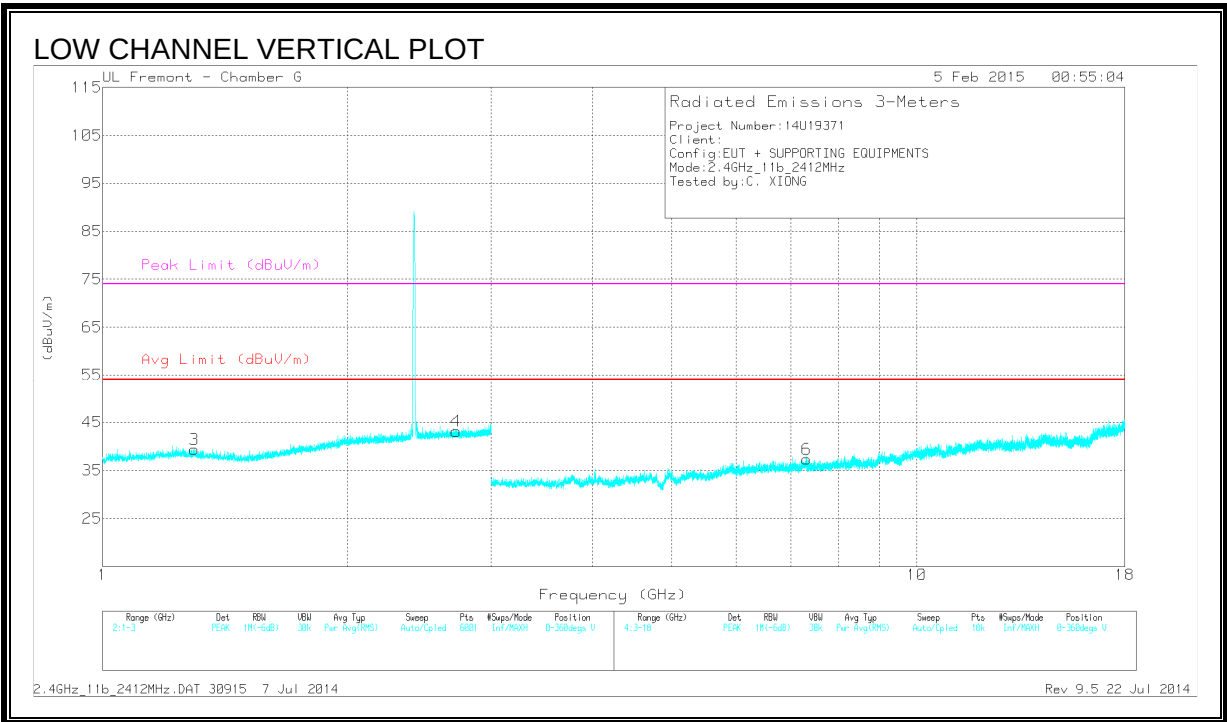
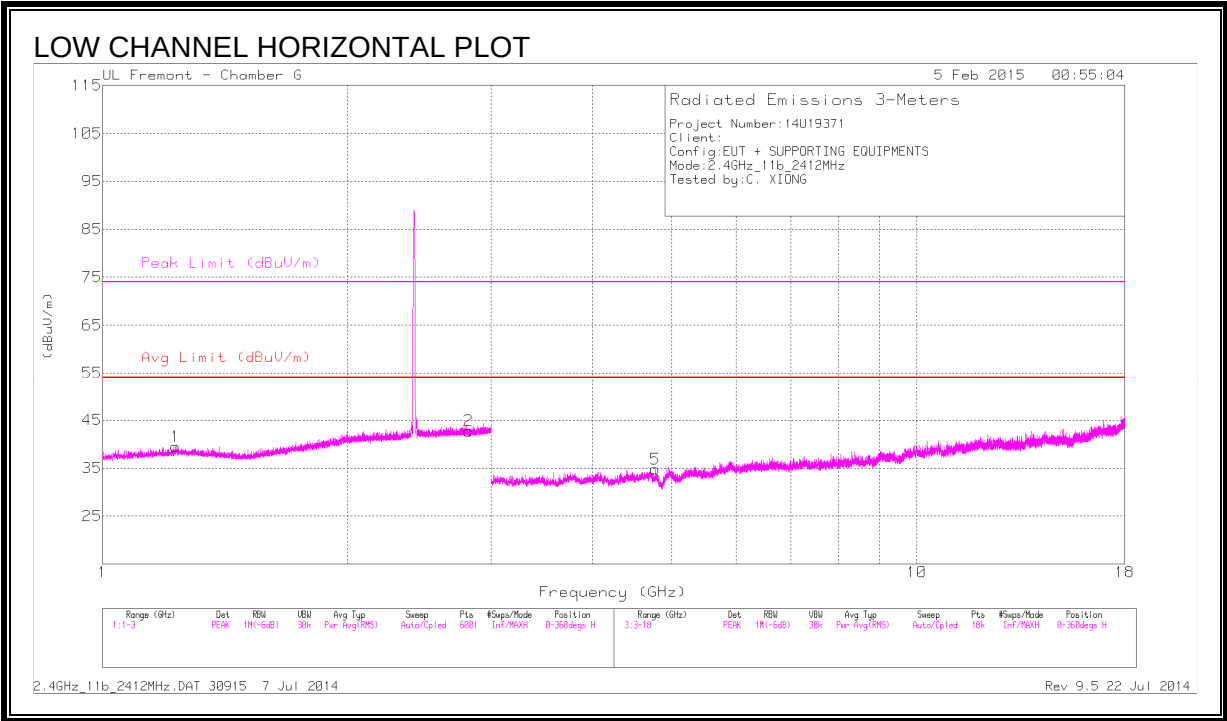
AVG READING: 44.999 + 0.10 = 45.099





AVG READING: $44.935 + 0.10 = 45.035$

HARMONICS AND SPURIOUS EMISSIONS, CH 1



DATA

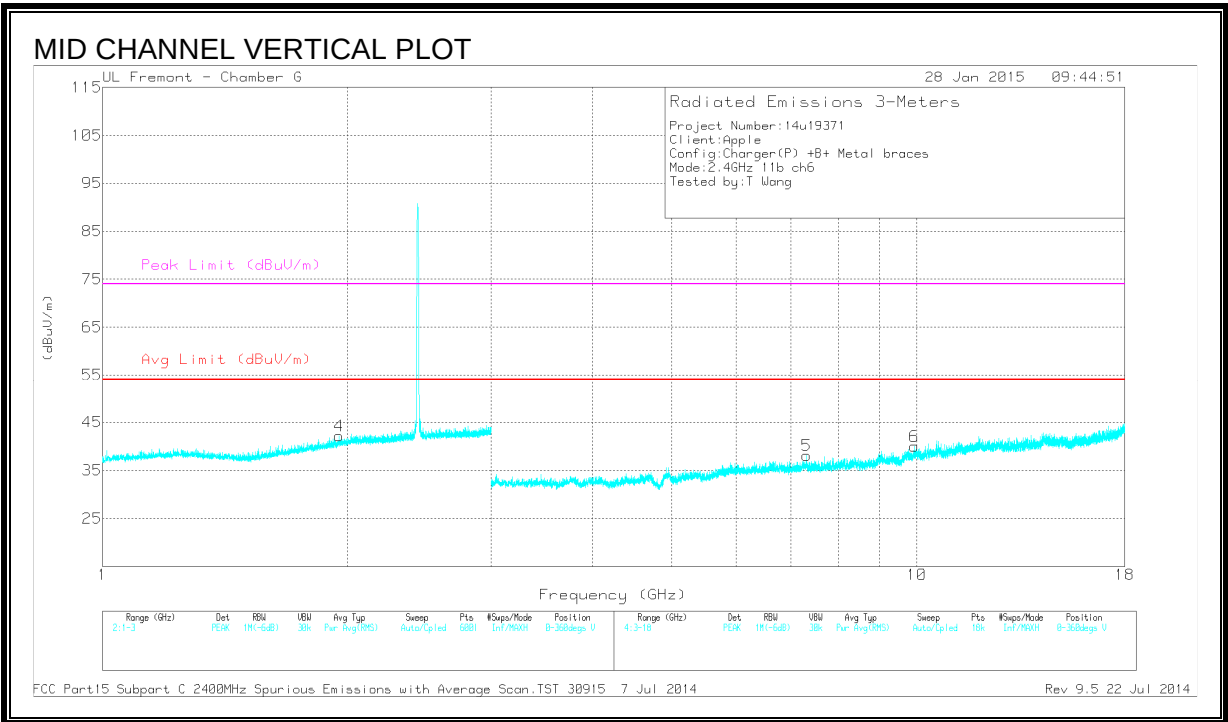
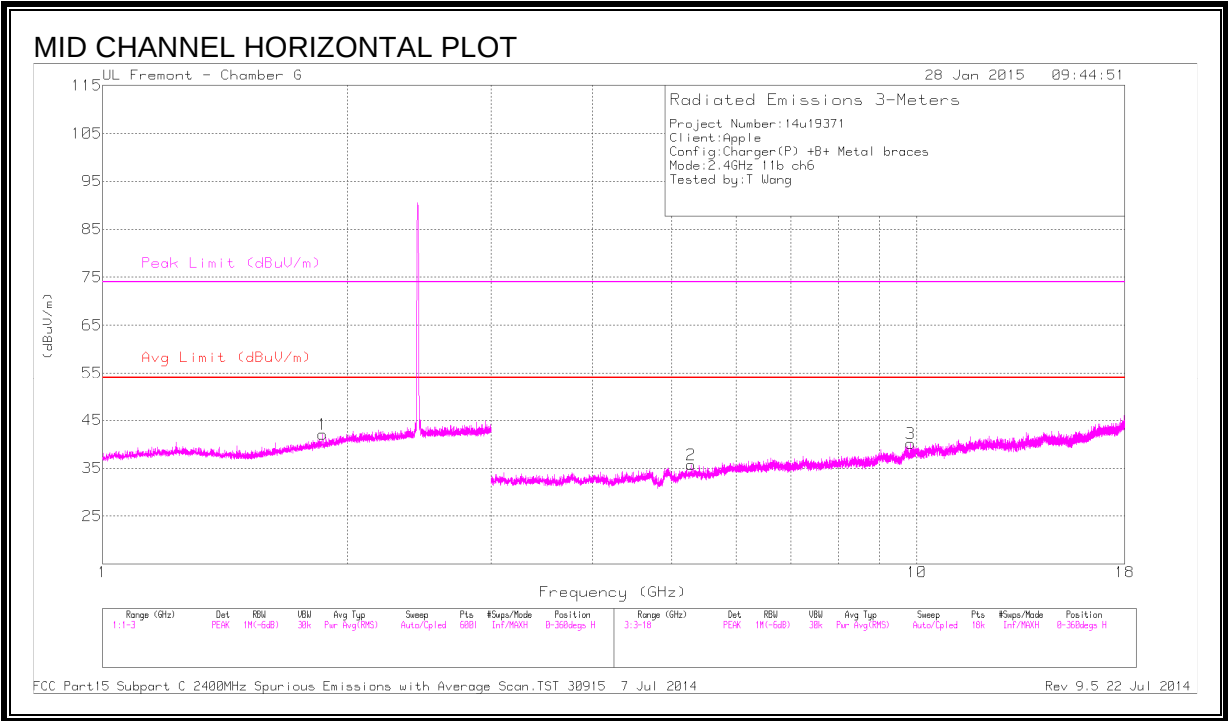
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.228	43.93	PK2	29.1	-26.0	0	47.03	-	-	74	-26.97	17	126	H
	* 1.228	32.63	MAv1	29.1	-26.0	.1	35.83	54	-18.17	-	-	17	126	H
2	* 2.816	43.39	PK2	32.3	-24.8	0	50.89	-	-	74	-23.11	56	116	H
	* 2.818	32.06	MAv1	32.3	-24.8	.1	39.66	54	-14.34	-	-	56	116	H
3	* 1.294	43.67	PK2	29.0	-26.0	0	46.67	-	-	74	-27.33	78	132	V
	* 1.297	32.59	MAv1	29.0	-26.0	.1	35.69	54	-18.31	-	-	78	132	V
4	* 2.718	43.53	PK2	32.2	-24.8	0	50.93	-	-	74	-23.07	65	108	V
	* 2.719	32.12	MAv1	32.2	-24.8	.1	39.62	54	-14.38	-	-	65	108	V
5	* 4.769	41.28	PK2	34.1	-33.1	0	42.28	-	-	74	-31.72	108	153	H
	* 4.770	30.15	MAv1	34.1	-33.1	.1	31.25	54	-22.75	-	-	108	153	H
6	* 7.319	40.71	PK2	35.6	-31.1	0	45.21	-	-	74	-28.79	111	202	V
	* 7.318	29.27	MAv1	35.6	-31.1	.1	33.87	54	-20.13	-	-	111	202	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, CH 6



DATA

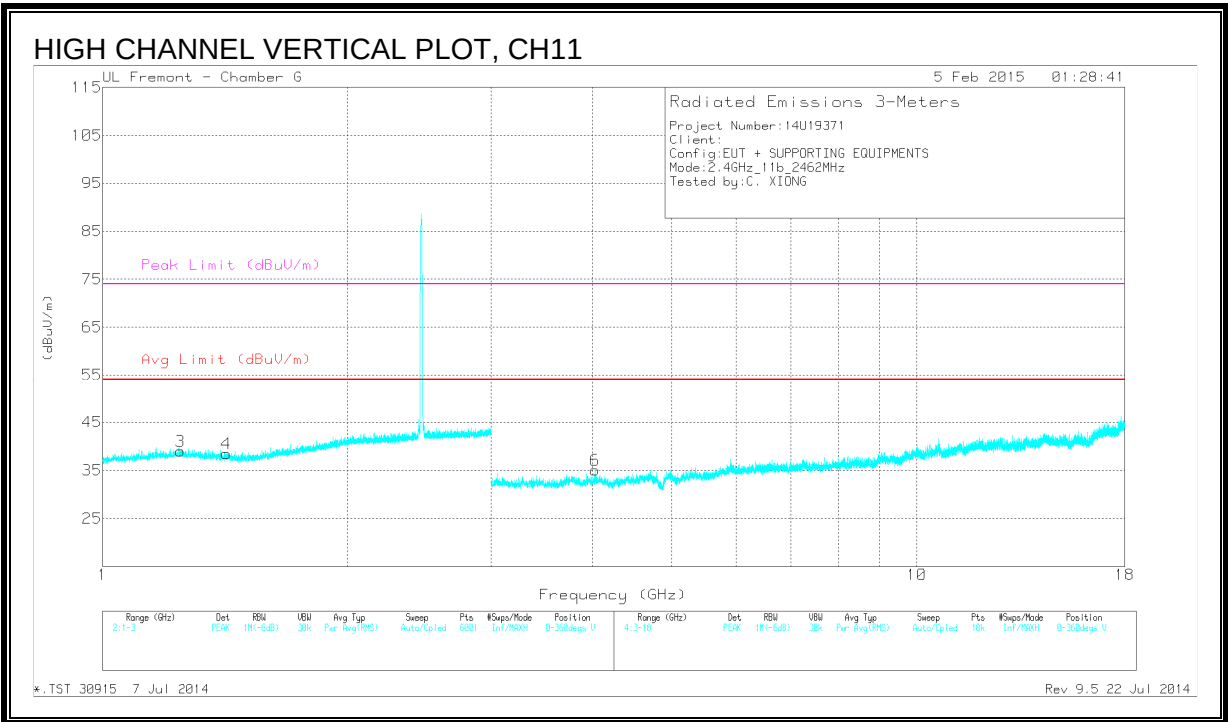
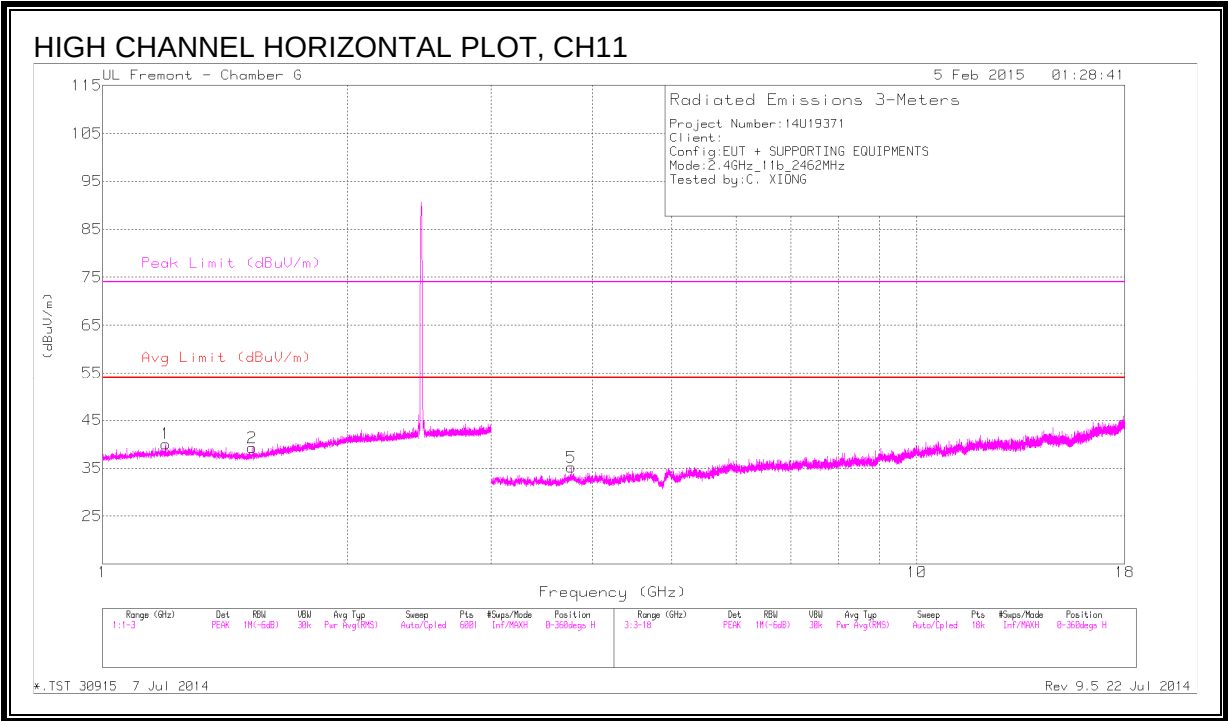
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.864	41.33	PK2	30.4	-25.5	0	46.23	-	-	-	-	77	101	H
2	5.284	37.44	PK2	34.5	-33.1	0	38.84	-	-	-	-	66	101	H
3	9.831	34.76	PK2	37.1	-28.8	0	43.06	-	-	-	-	77	105	H
4	1.949	42.23	PK2	31.0	-25.4	0	47.83	-	-	-	-	216	211	V
5	* 7.326	36.22	PK2	35.6	-31.2	0	40.62	-	-	74	-33.38	220	208	V
	* 7.328	25.28	MAv1	35.6	-31.2	.1	29.78	54	-24.22	-	-	220	208	V
6	9.921	34.03	PK2	37.3	-27.7	0	43.63	-	-	-	-	213	201	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, CH 11



DATA

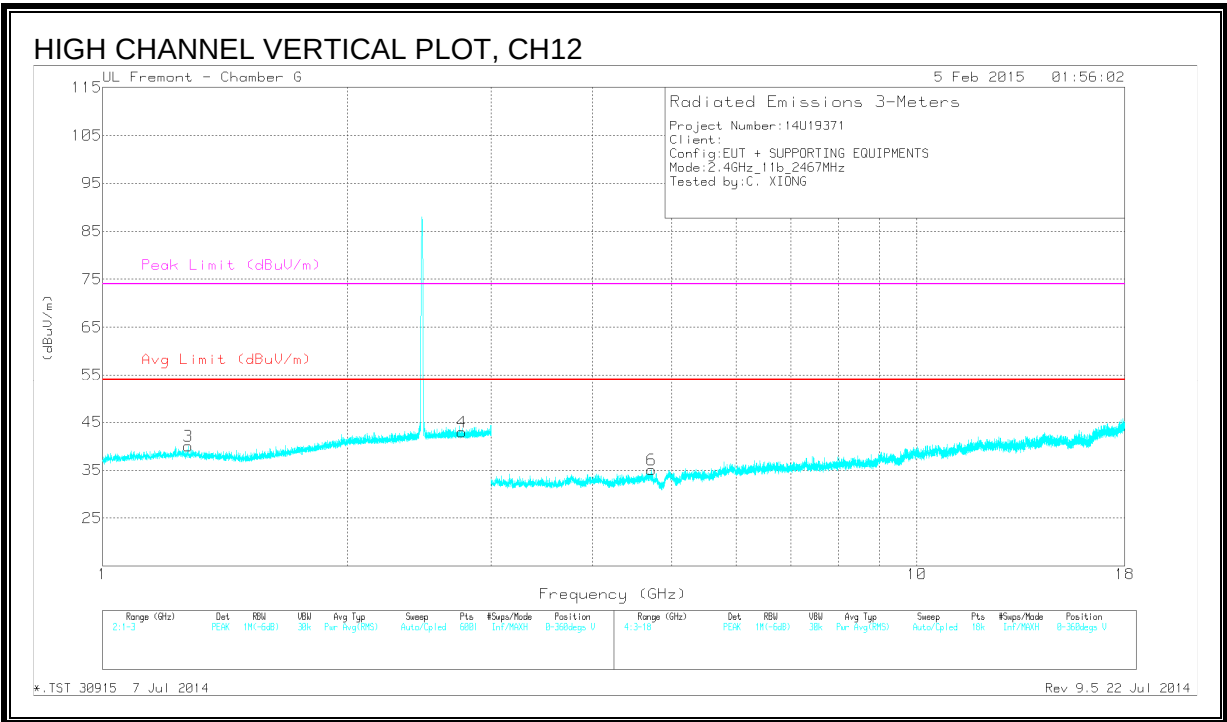
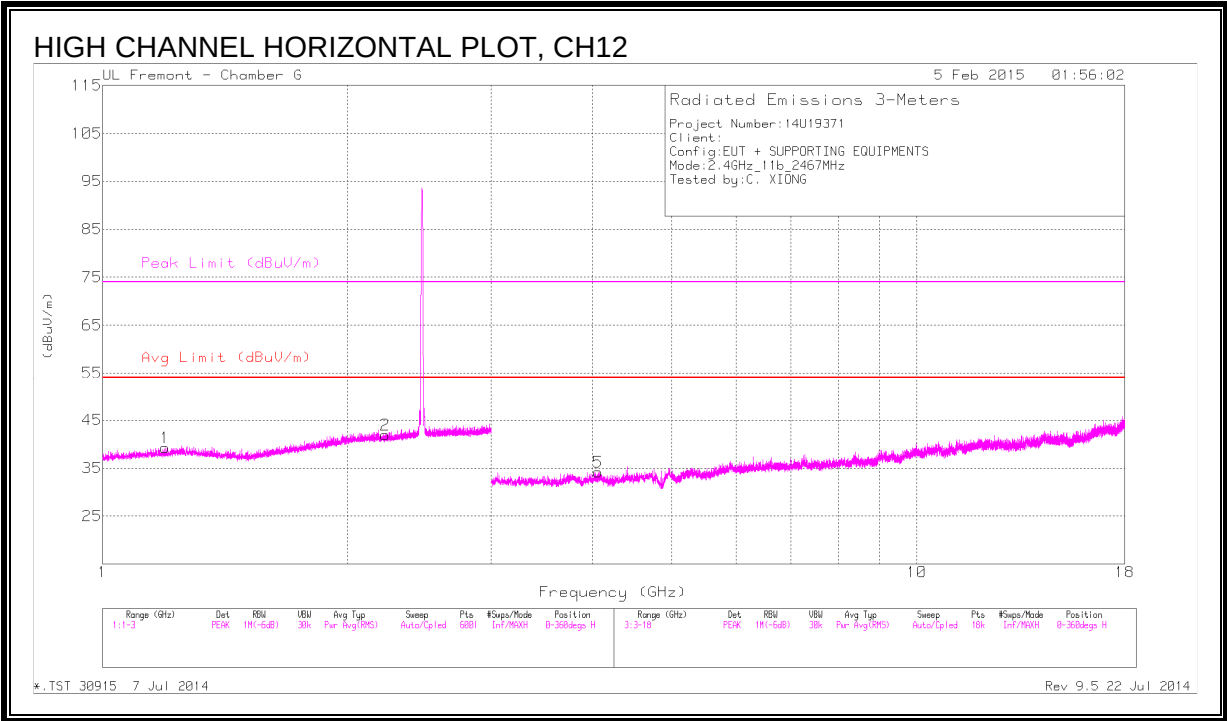
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.194	44.22	PK2	28.9	-26.0	0	47.12	-	-	74	-26.88	42	174	H
	* 1.195	32.63	MAv1	28.9	-26.0	.1	35.63	54	-18.37	-	-	42	174	H
2	* 1.527	44.08	PK2	28.1	-25.6	0	46.58	-	-	74	-27.42	57	126	H
	* 1.527	32.35	MAv1	28.1	-25.6	.1	34.95	54	-19.05	-	-	57	126	H
3	* 1.245	44.36	PK2	29.2	-26.1	0	47.46	-	-	74	-26.54	102	111	V
	* 1.246	32.73	MAv1	29.2	-26.1	.1	35.93	54	-18.07	-	-	102	111	V
4	* 1.418	44.15	PK2	28.3	-25.7	0	46.75	-	-	74	-27.25	75	201	V
	* 1.420	32.50	MAv1	28.3	-25.7	.1	35.20	54	-18.80	-	-	75	201	V
5	* 3.766	41.90	PK2	32.9	-32.3	0	42.50	-	-	74	-31.50	87	141	H
	* 3.766	30.17	MAv1	32.9	-32.3	.1	30.87	54	-23.13	-	-	87	141	H
6	* 4.023	41.34	PK2	33.4	-32.7	0	42.04	-	-	74	-31.96	131	158	V
	* 4.022	30.18	MAv1	33.4	-32.7	.1	30.98	54	-23.02	-	-	131	158	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, CH 12



DATA

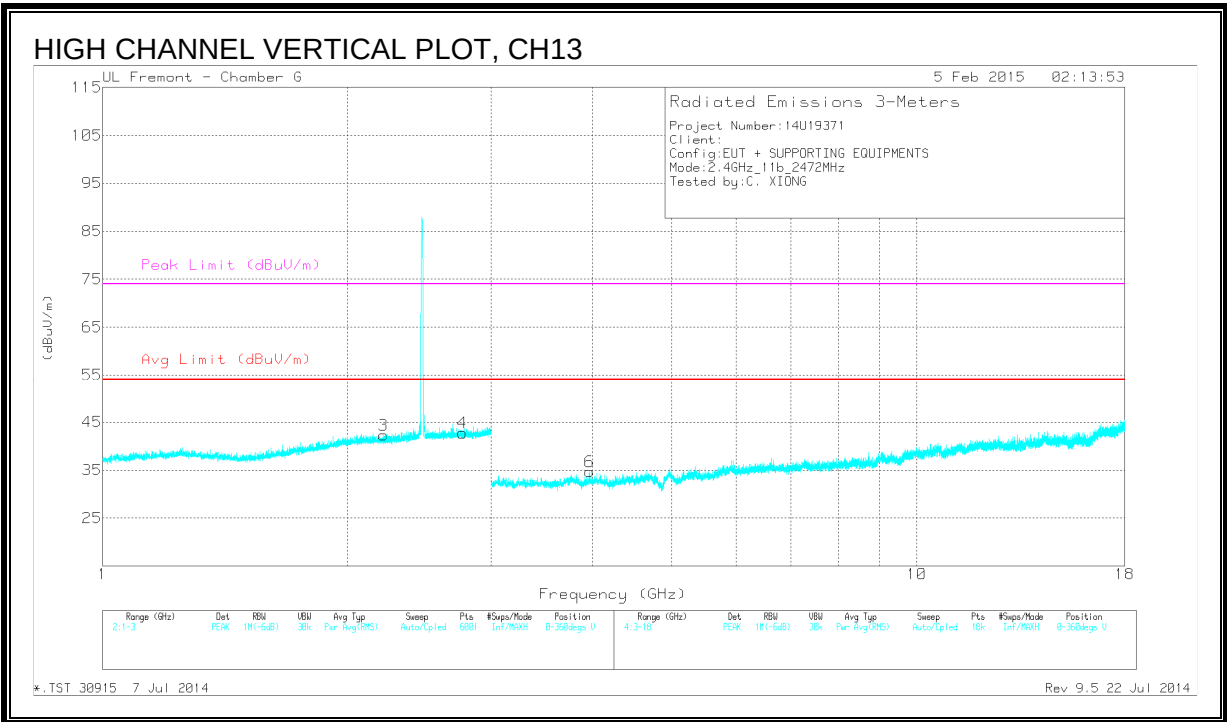
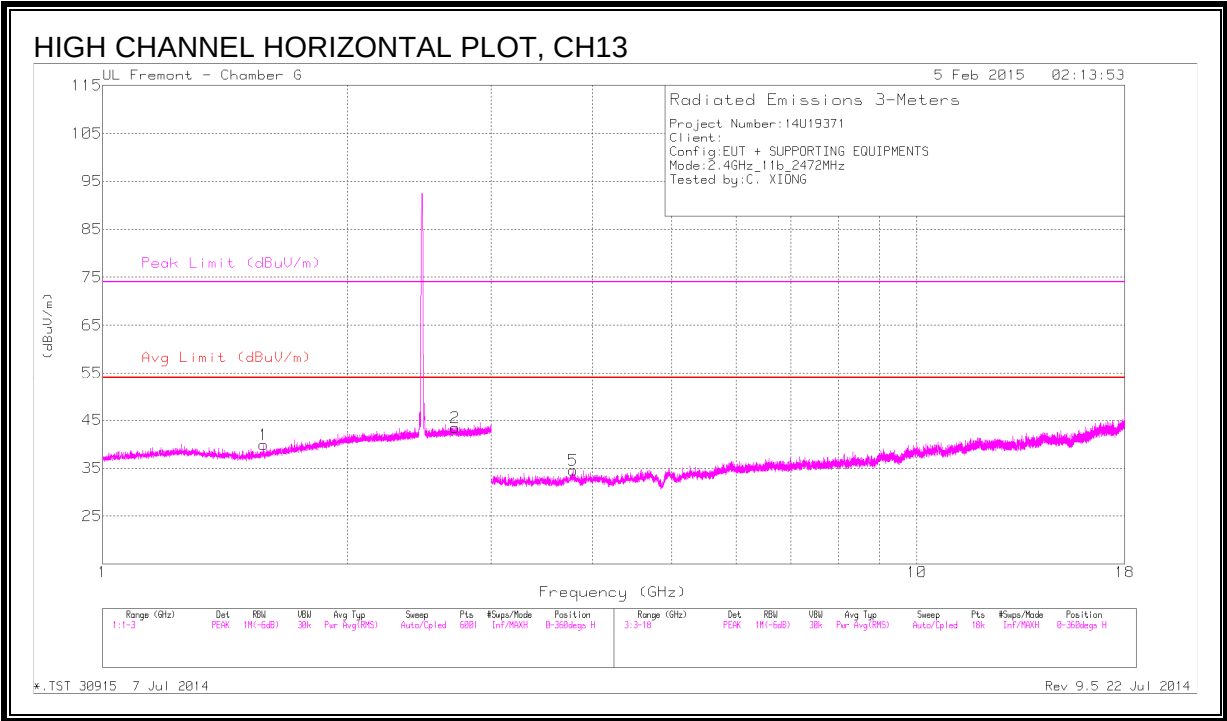
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.192	43.85	PK2	28.9	-26.0	0	46.75	-	-	74	-27.25	102	211	H
	* 1.193	32.53	MAv1	28.9	-26.0	.1	35.53	54	-18.47	-	-	102	211	H
2	* 2.225	43.63	PK2	31.5	-25.1	0	50.03	-	-	74	-23.97	137	176	H
	* 2.224	32.17	MAv1	31.5	-25.1	.1	38.67	54	-15.33	-	-	137	176	H
3	* 1.275	43.95	PK2	29.1	-26.1	0	46.95	-	-	74	-27.05	57	133	V
	* 1.274	32.58	MAv1	29.1	-26.1	.1	35.68	54	-18.32	-	-	57	133	V
4	* 2.765	43.39	PK2	32.2	-24.8	0	50.79	-	-	74	-23.21	94	204	V
	* 2.764	32.24	MAv1	32.2	-24.8	.1	39.74	54	-14.26	-	-	94	204	V
5	* 4.063	41.95	PK2	33.4	-32.7	0	42.65	-	-	74	-31.35	205	141	H
	* 4.062	29.99	MAv1	33.4	-32.8	.1	30.69	54	-23.31	-	-	205	141	H
6	* 4.721	42.16	PK2	34.1	-33.2	0	43.06	-	-	74	-30.94	46	136	V
	* 4.722	30.36	MAv1	34.1	-33.2	.1	31.36	54	-22.64	-	-	46	136	V

* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS, CH 13



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T862 (dB/m)	Amp/Cbl/ Fitr/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.577	44.14	PK2	28.4	-25.5	0	47.04	-	-	74	-26.96	39	154	H
	* 1.577	32.33	MAv1	28.4	-25.5	.1	35.33	54	-18.67	-	-	39	154	H
2	* 2.709	43.37	PK2	32.2	-24.8	0	50.77	-	-	74	-23.23	115	121	H
	* 2.710	32.11	MAv1	32.2	-24.8	.1	39.61	54	-14.39	-	-	115	121	H
3	* 2.212	43.94	PK2	31.5	-25.1	0	50.34	-	-	74	-23.66	76	215	V
	* 2.213	32.11	MAv1	31.5	-25.1	.1	38.61	54	-15.39	-	-	76	215	V
4	* 2.765	43.80	PK2	32.2	-24.8	0	51.20	-	-	74	-22.80	54	144	V
	* 2.765	32.11	MAv1	32.2	-24.8	.1	39.61	54	-14.39	-	-	54	144	V
5	* 3.784	42.73	PK2	33.0	-32.8	0	42.93	-	-	74	-31.07	233	177	H
	* 3.784	30.82	MAv1	33.0	-32.8	.1	31.12	54	-22.88	-	-	233	177	H
6	* 3.961	42.30	PK2	33.3	-33.1	0	42.50	-	-	74	-31.50	147	239	V
	* 3.960	30.57	MAv1	33.3	-33.1	.1	30.87	54	-23.13	-	-	147	239	V

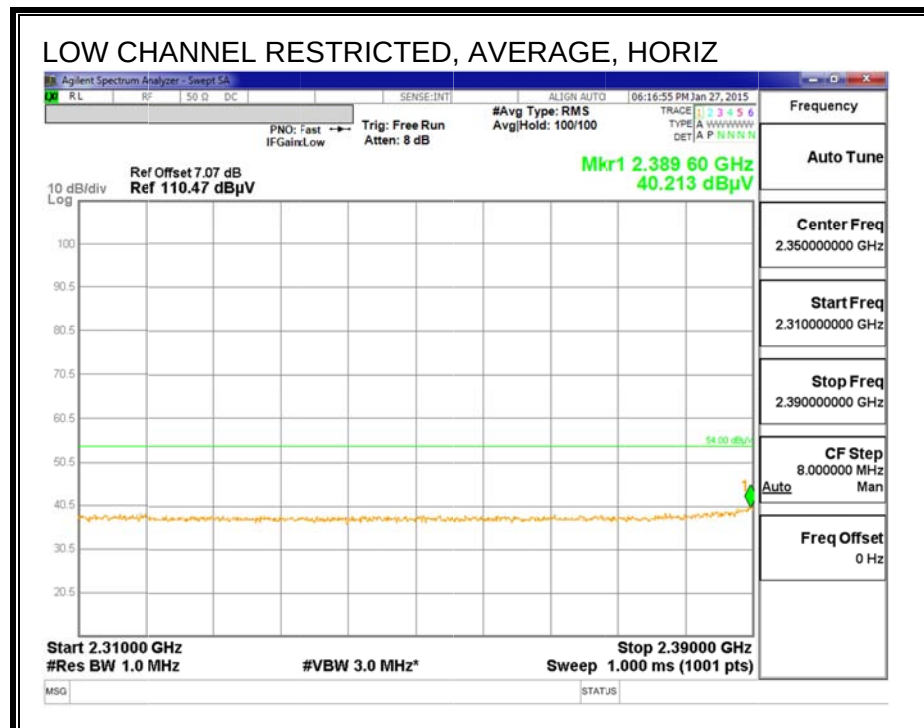
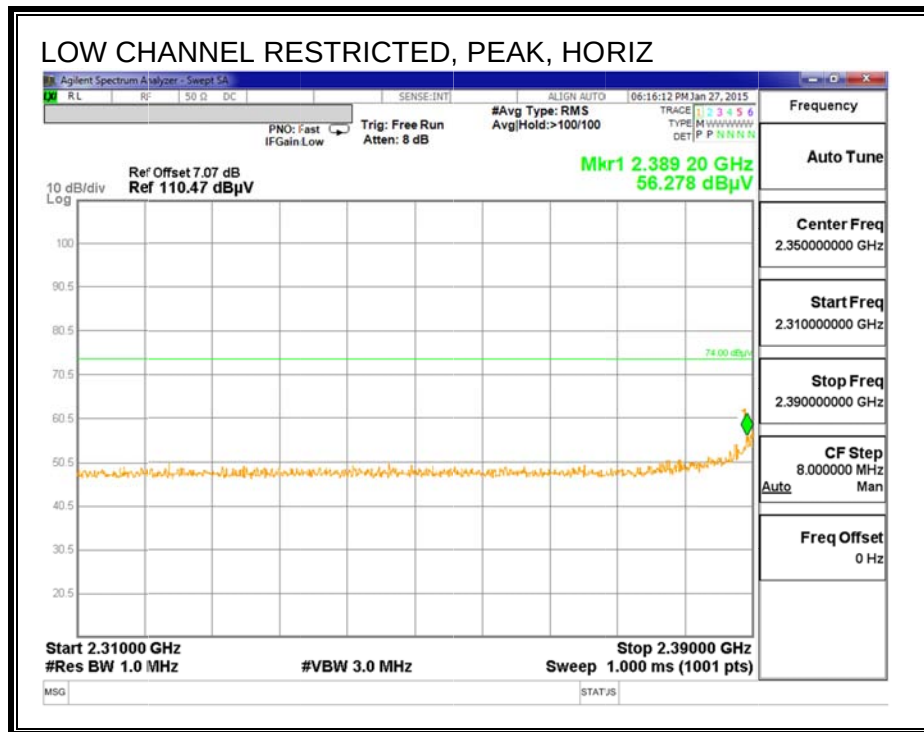
* - indicates frequency in CFR15.205/IC8.10 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average

10.3.2. 802.11g 1Tx MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL, Channel 1)



AVG READING: $40.213 + 0.57 = 40.783$