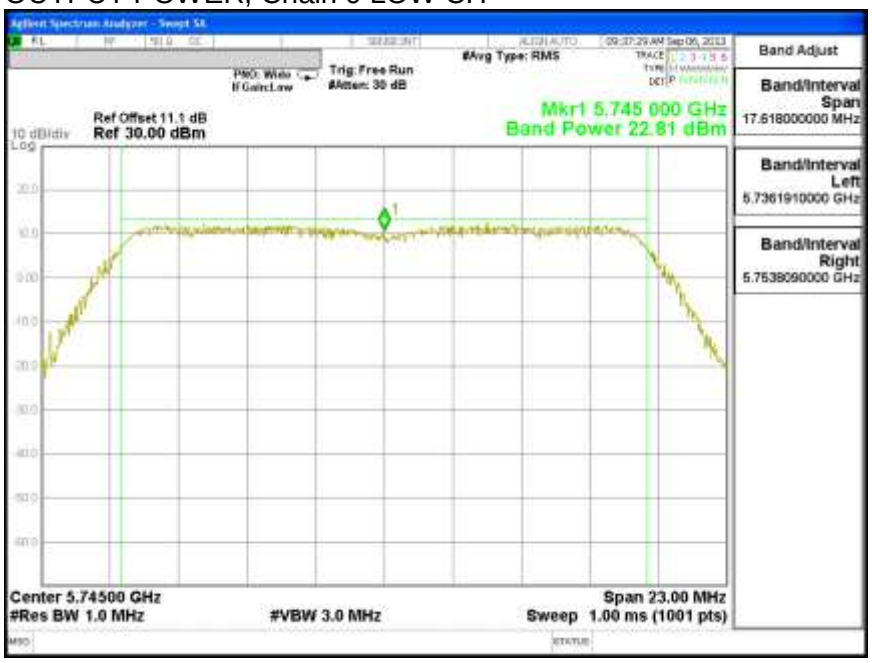
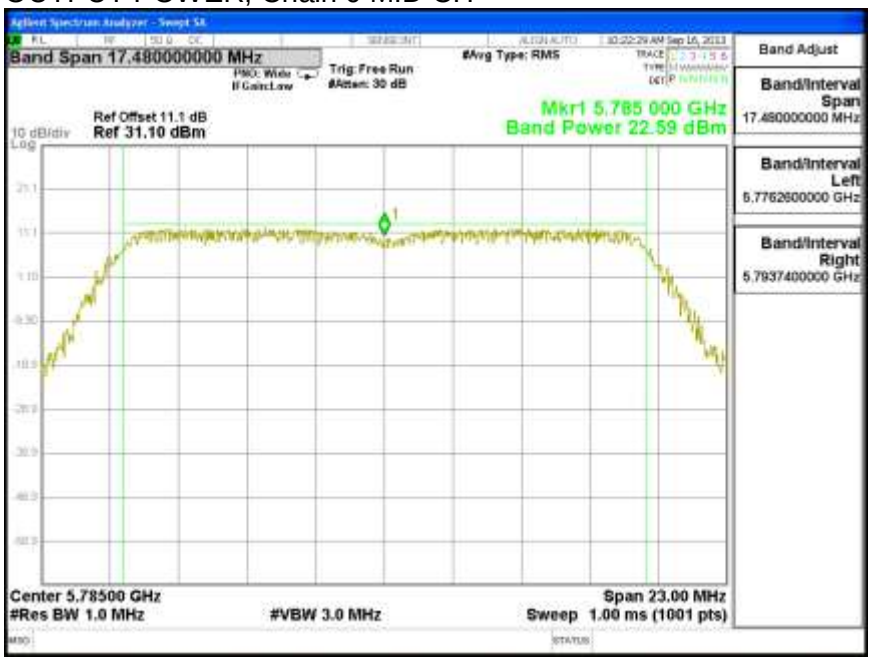
OUTPUT POWER, Chain 0

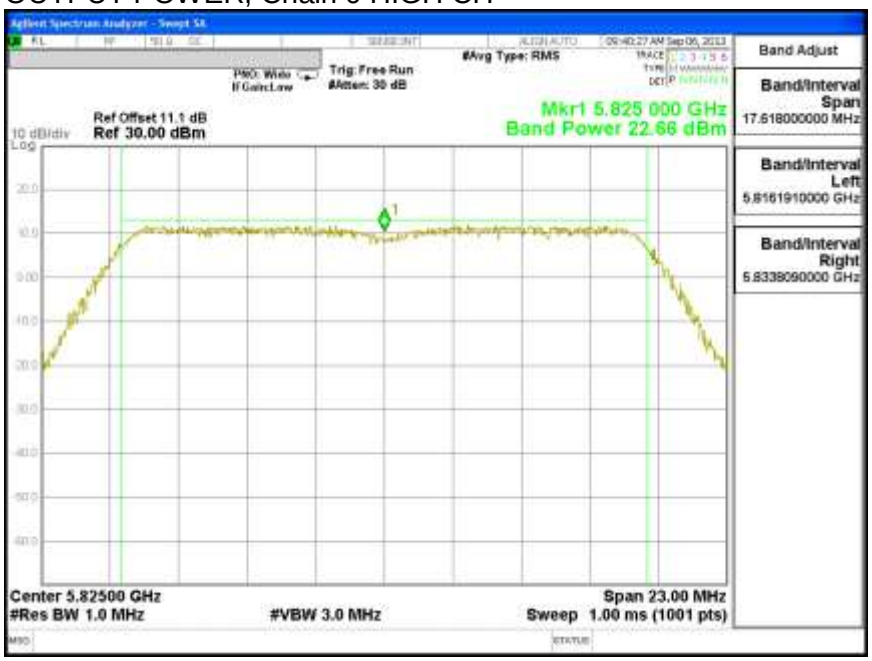
OUTPUT POWER, Chain 0 LOW CH



OUTPUT POWER, Chain 0 MID CH

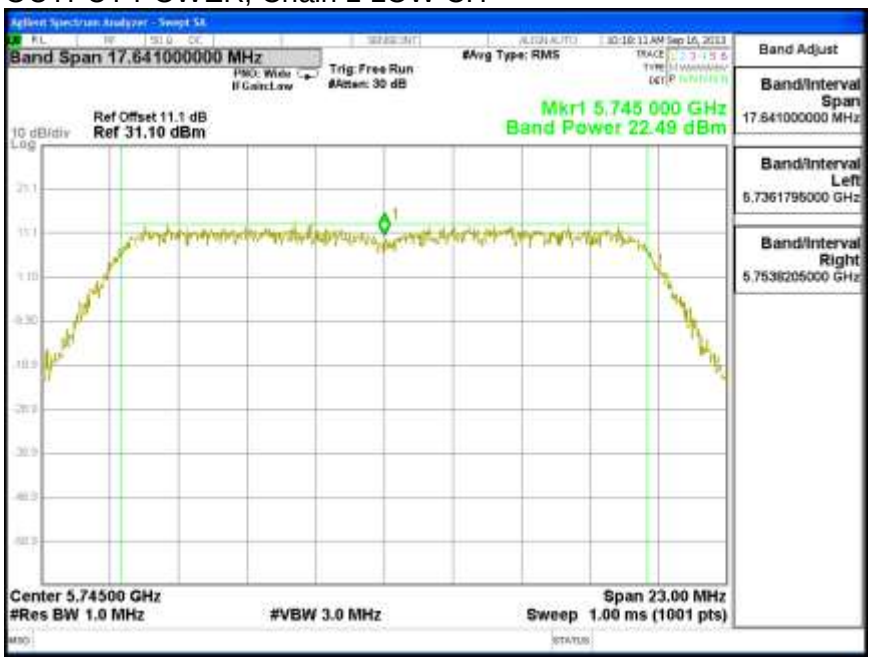


OUTPUT POWER, Chain 0 HIGH CH

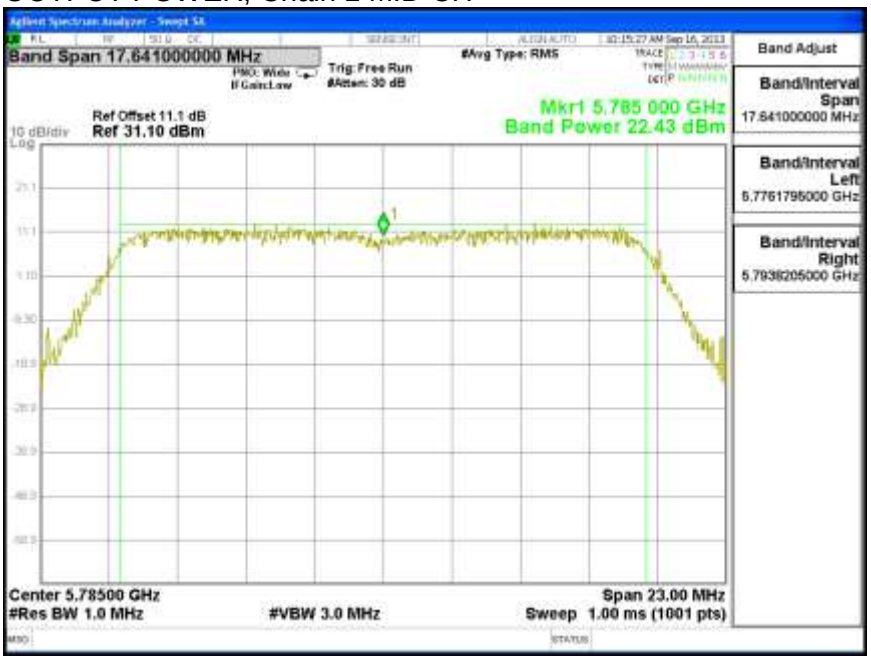


OUTPUT POWER, Chain 1

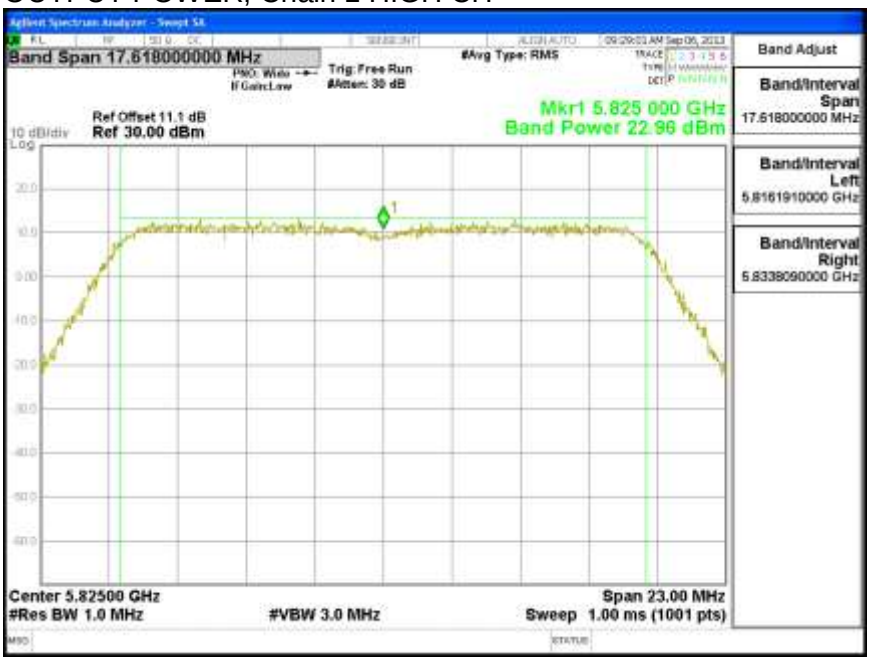
OUTPUT POWER, Chain 1 LOW CH



OUTPUT POWER, Chain 1 MID CH



OUTPUT POWER, Chain 1 HIGH CH



8.5.5. PSD

LIMITS

FCC §15.247

IC RSS-210 A8.2

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

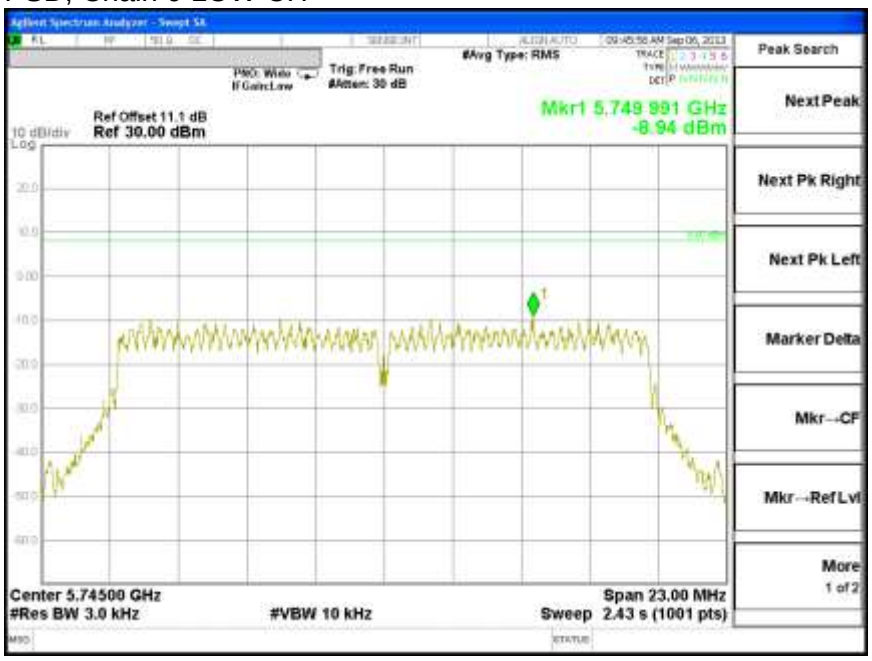
RESULTS

PSD Results

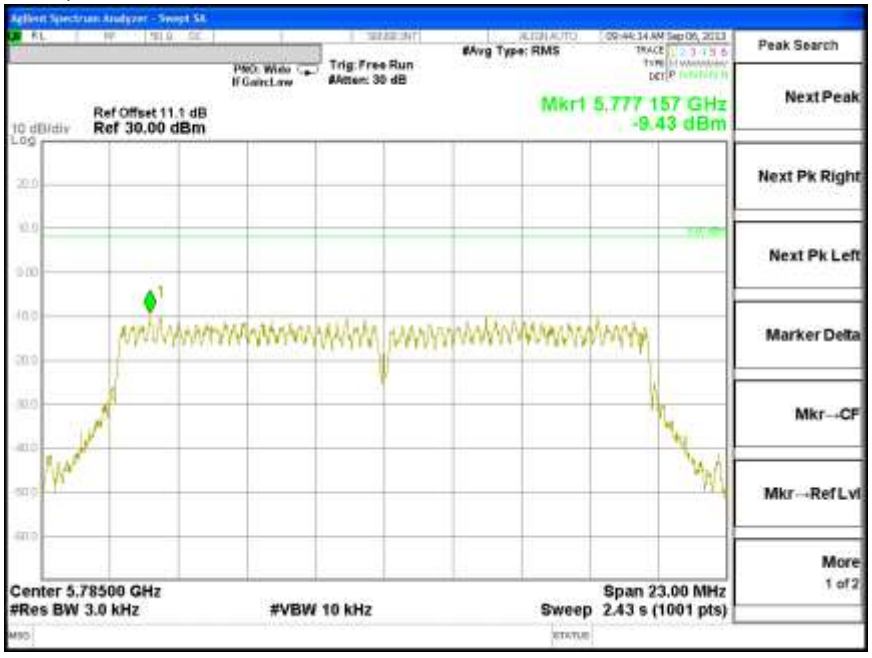
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	5745	-8.94	-10.51	-6.64	8.0	-14.6
Mid	5785	-9.43	-10.25	-6.81	8.0	-14.8
High	5825	-9.72	-9.44	-6.57	8.0	-14.6

PSD, Chain 0

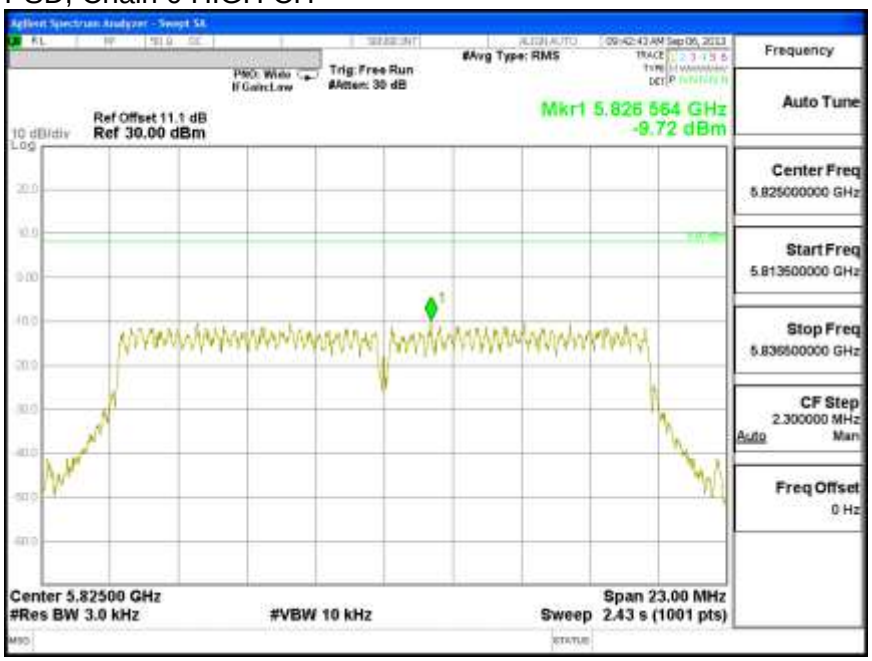
PSD, Chain 0 LOW CH



PSD, Chain 0 MID CH

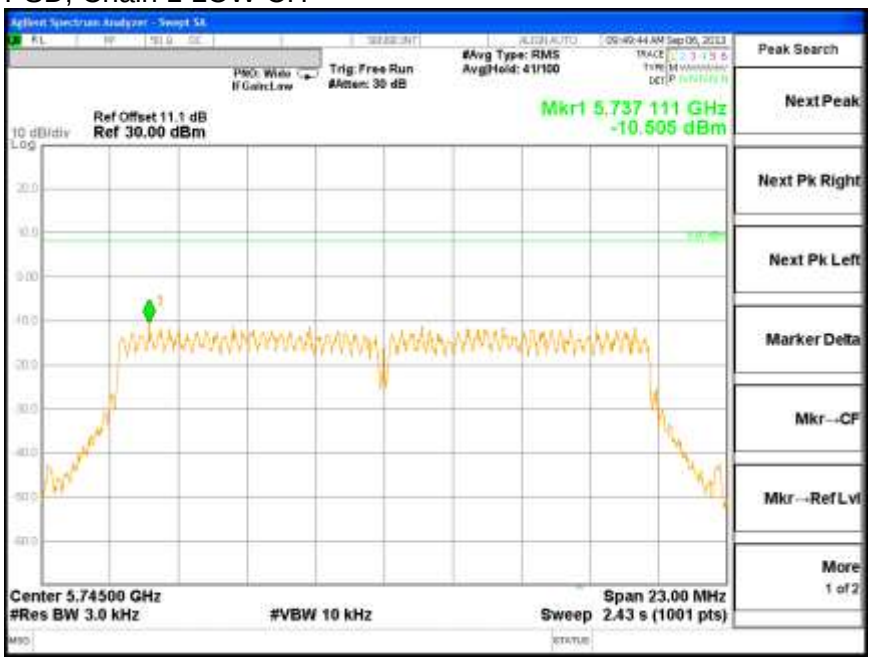


PSD, Chain 0 HIGH CH

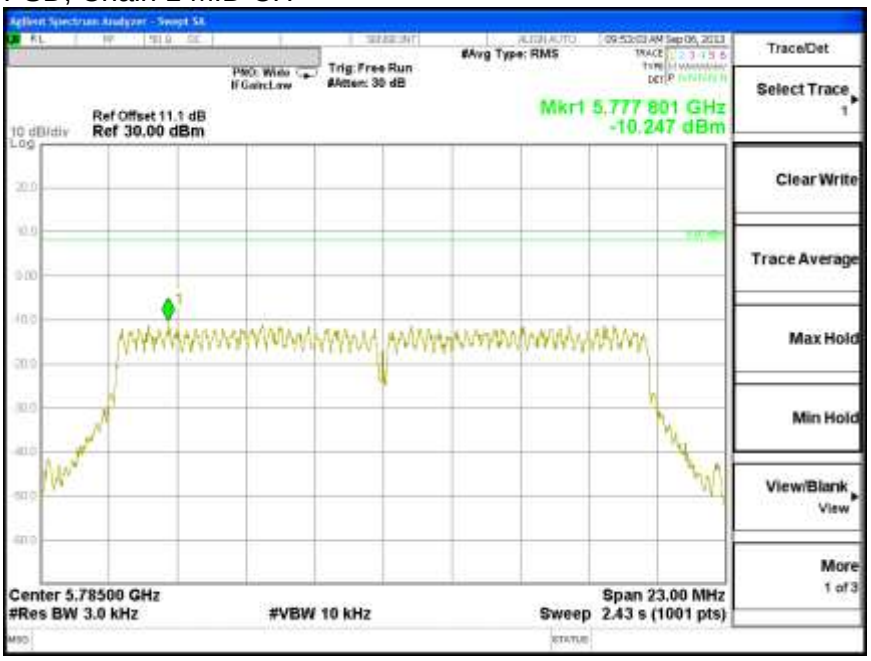


PSD, Chain 1

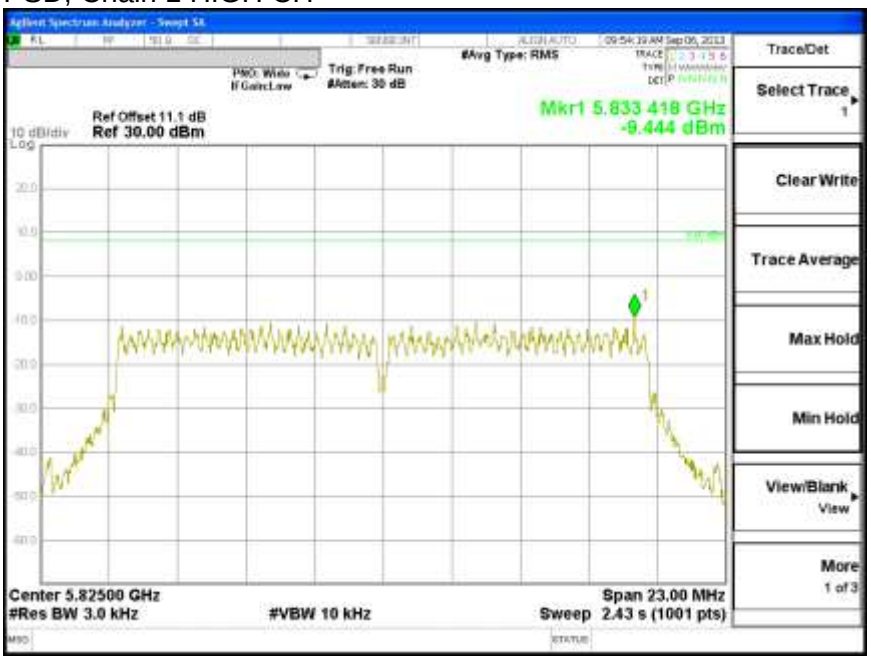
PSD, Chain 1 LOW CH



PSD, Chain 1 MID CH



PSD, Chain 1 HIGH CH



8.5.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

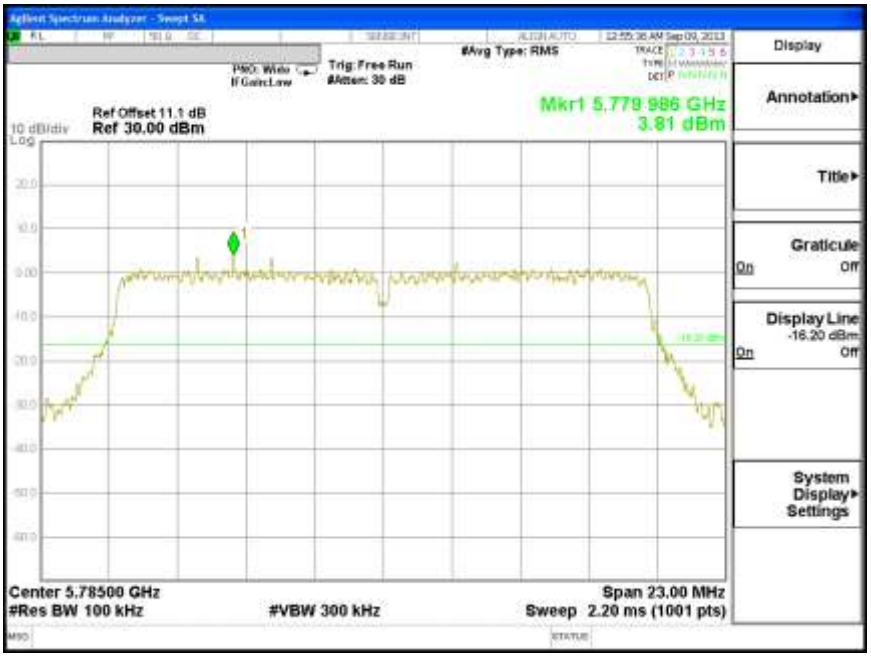
TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

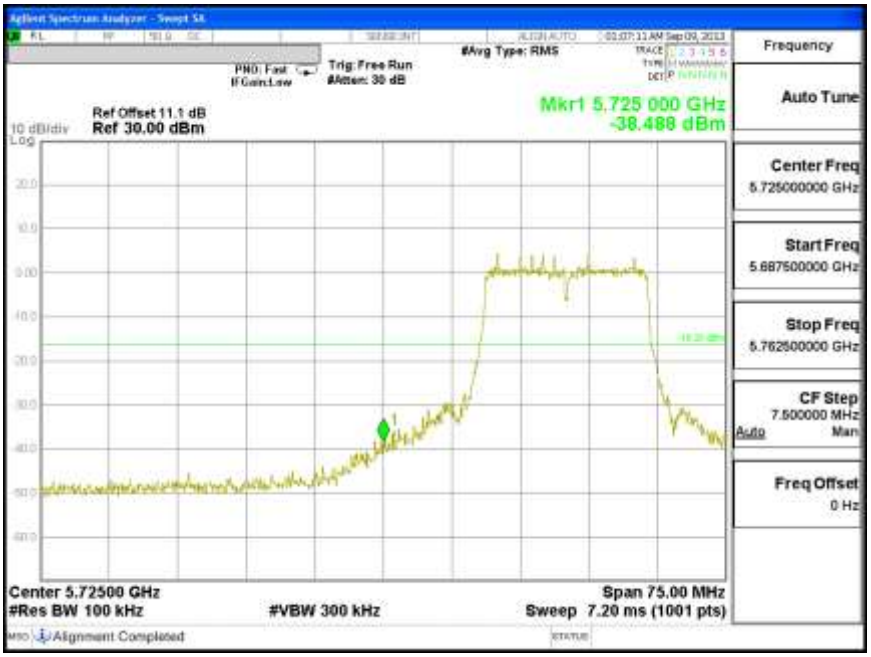
IN-BAND REFERENCE LEVEL, Chain 0

REFERENCE LEVEL Chain 0 MID CH



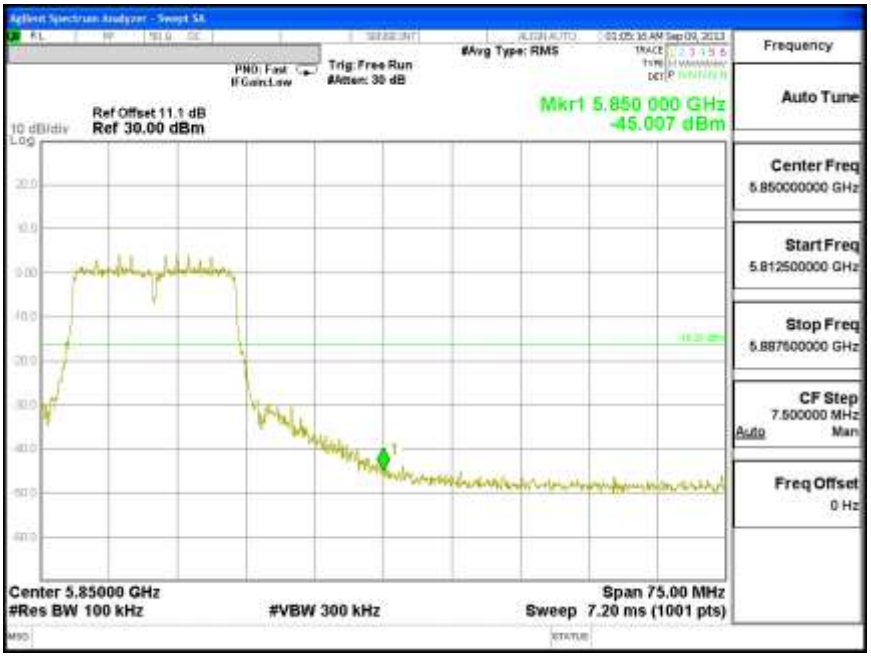
LOW CHANNEL BANDEDGE, Chain 0

AUTHORIZED BAND EDGE Chain 0 LOW CH



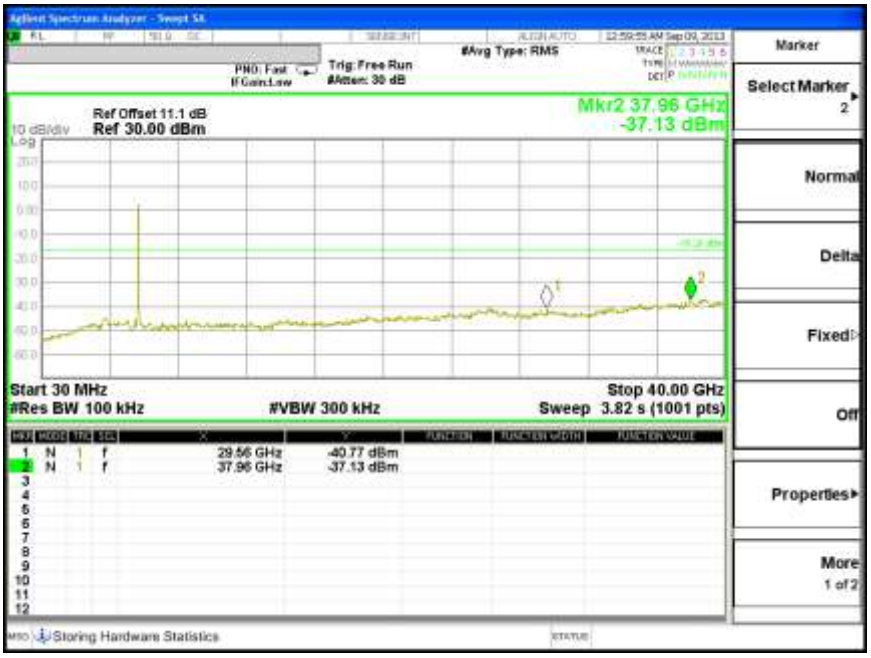
HIGH CHANNEL BANDEDGE, Chain 0

AUTHORIZED BAND EDGE Chain 0 HIGH CH

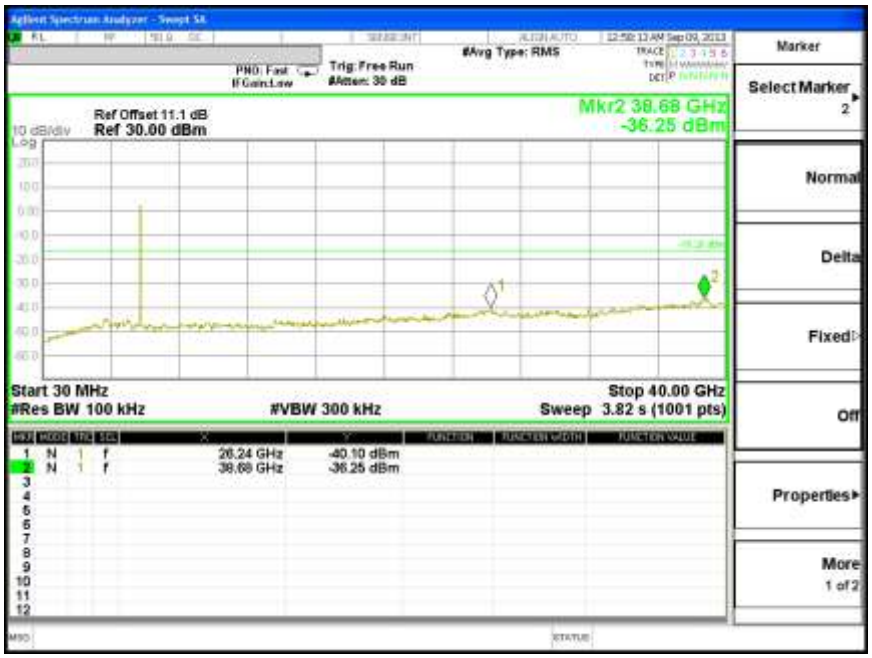


OUT-OF-BAND EMISSIONS, Chain 0

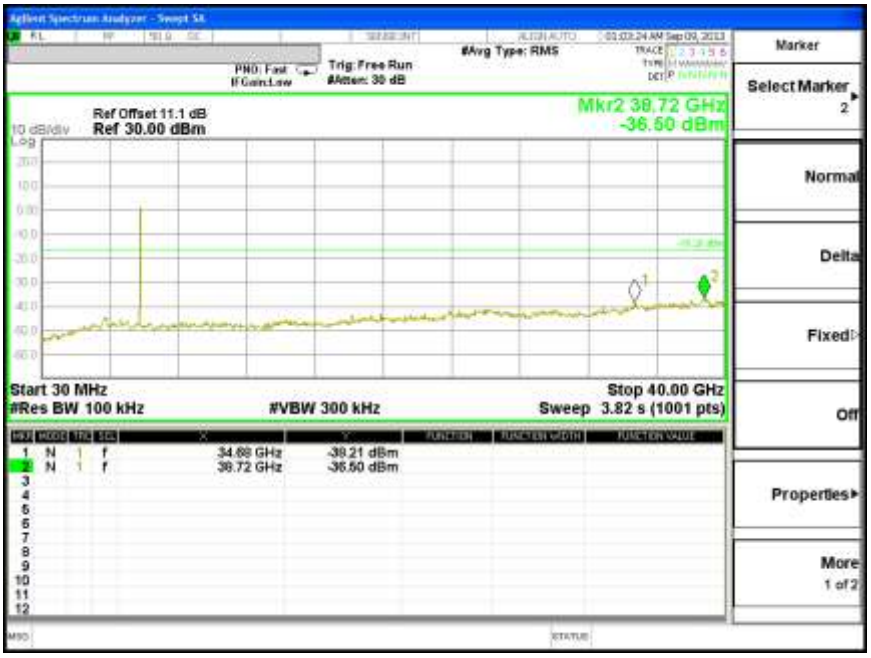
OUT OF BAND Chain 0 LOW CH



OUT OF BAND Chain 0 MID CH

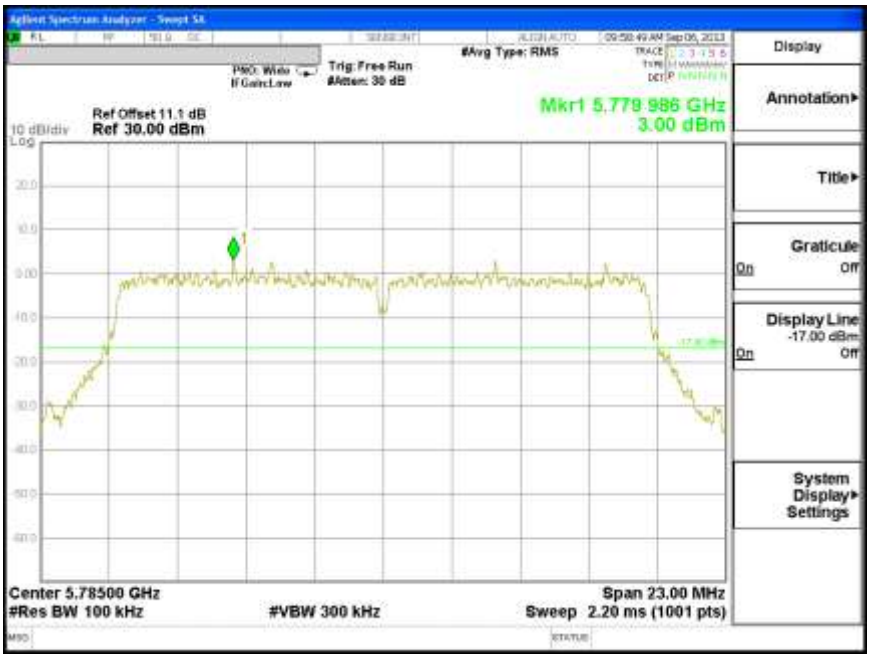


OUT OF BAND Chain 0 HIGH CH



IN-BAND REFERENCE LEVEL, Chain 1

REFERENCE LEVEL Chain 1 MID CH

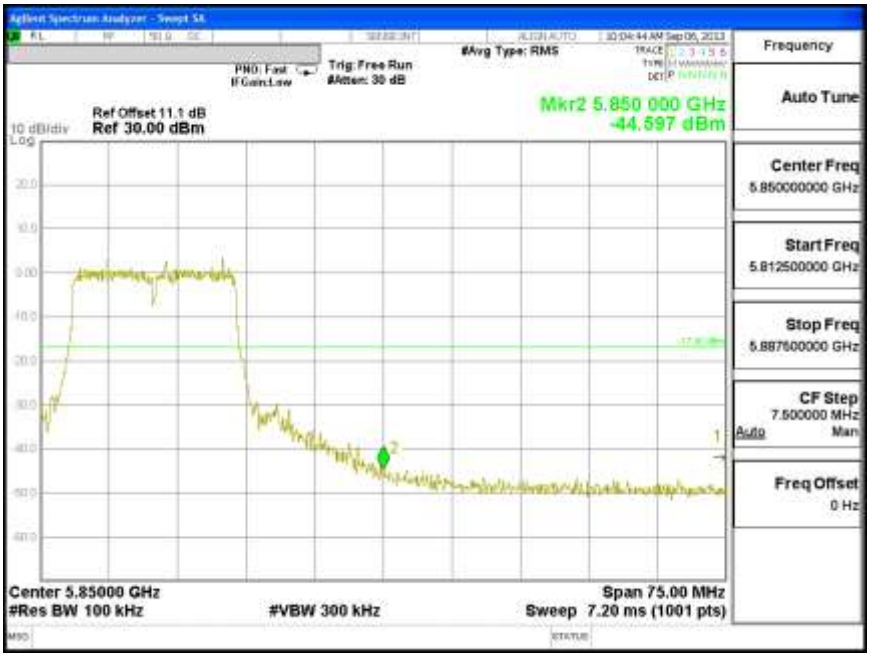


LOW CHANNEL BANDEDGE, Chain 1

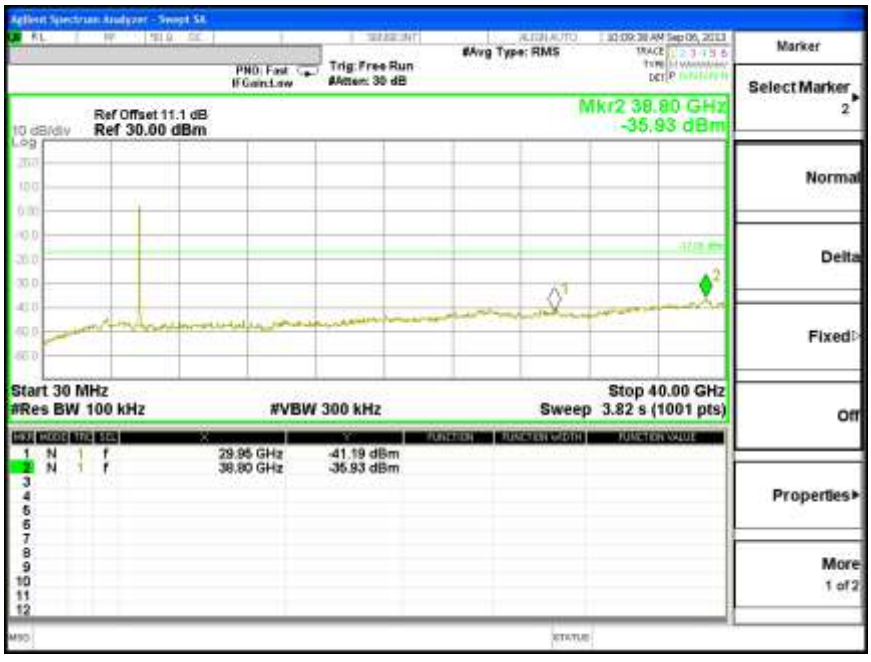
AUTHORIZED BAND EDGE Chain 1 LOW CH

HIGH CHANNEL BANDEDGE, Chain 1

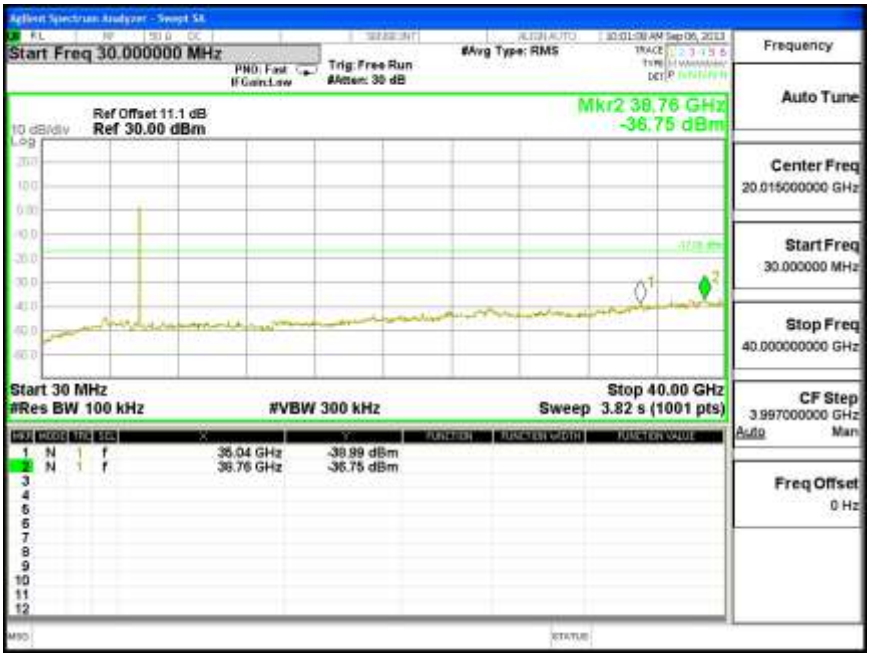
AUTHORIZED BAND EDGE Chain 1 HIGH CH



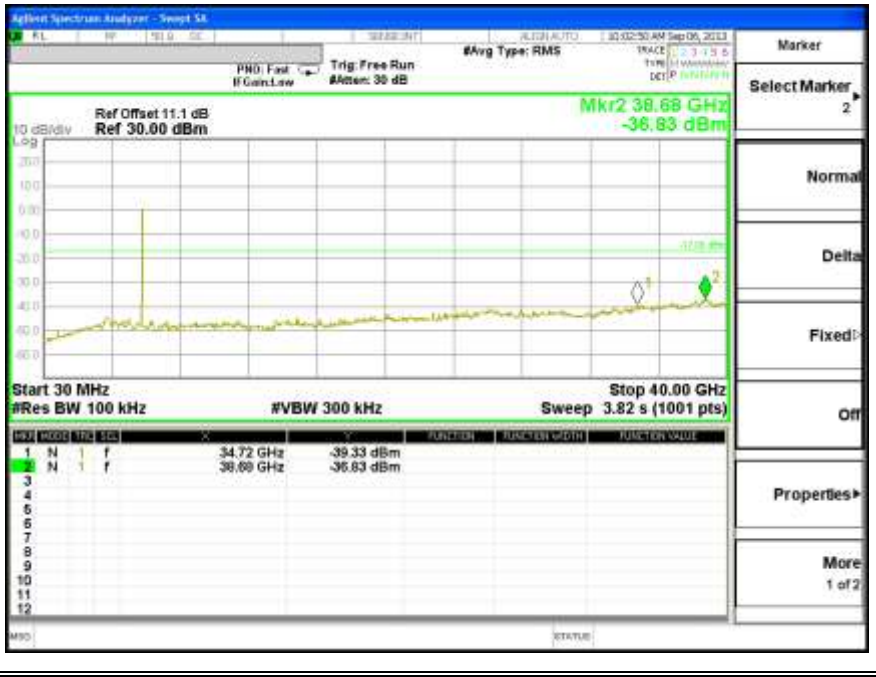
OUT OF BAND Chain 1 LOW CH



OUT OF BAND Chain 1 MID CH



OUT OF BAND Chain 1 HIGH CH



8.6. 802.11n HT40 SISO MODE IN THE 5.8 GHz BAND

8.6.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

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

TEST PROCEDURE

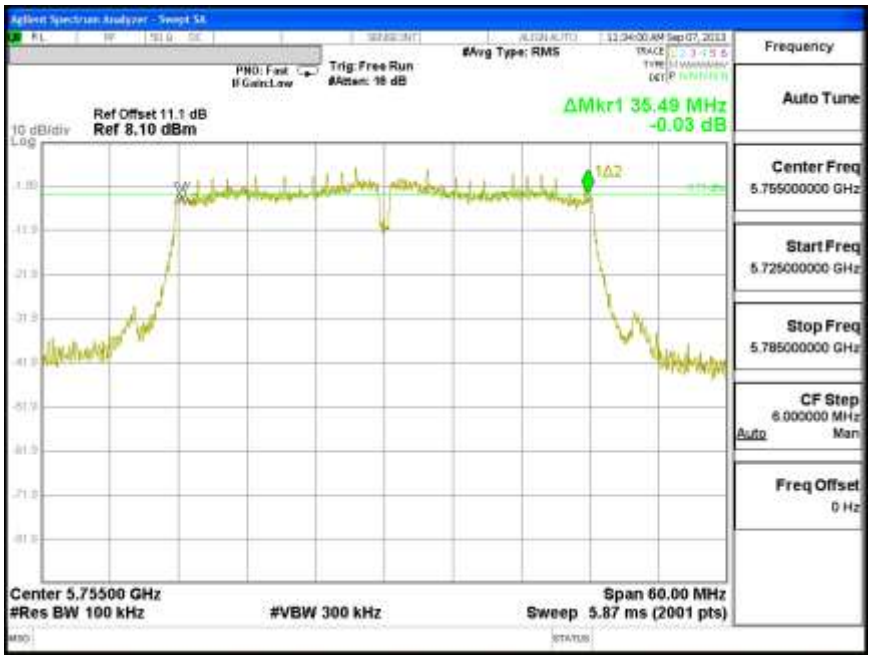
KDB 558074 D01 v01 “Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under 15.247”.

RESULTS

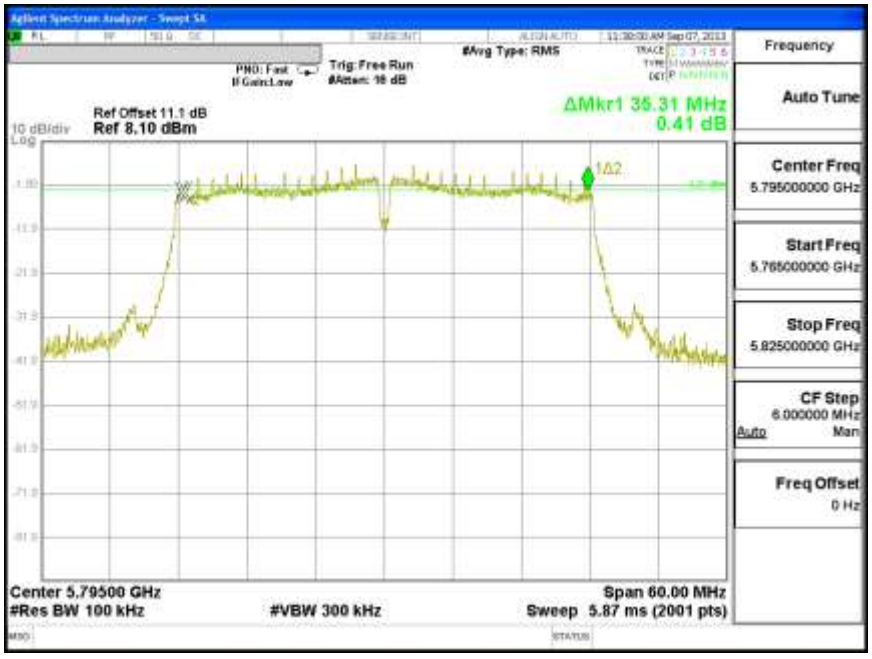
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	35.490	0.5
High	5795	35.310	0.5

6 dB BANDWIDTH

6 dB BANDWIDTH LOW CH



6 dB BANDWIDTH HIGH CH



8.6.2. 99% BANDWIDTH

LIMITS

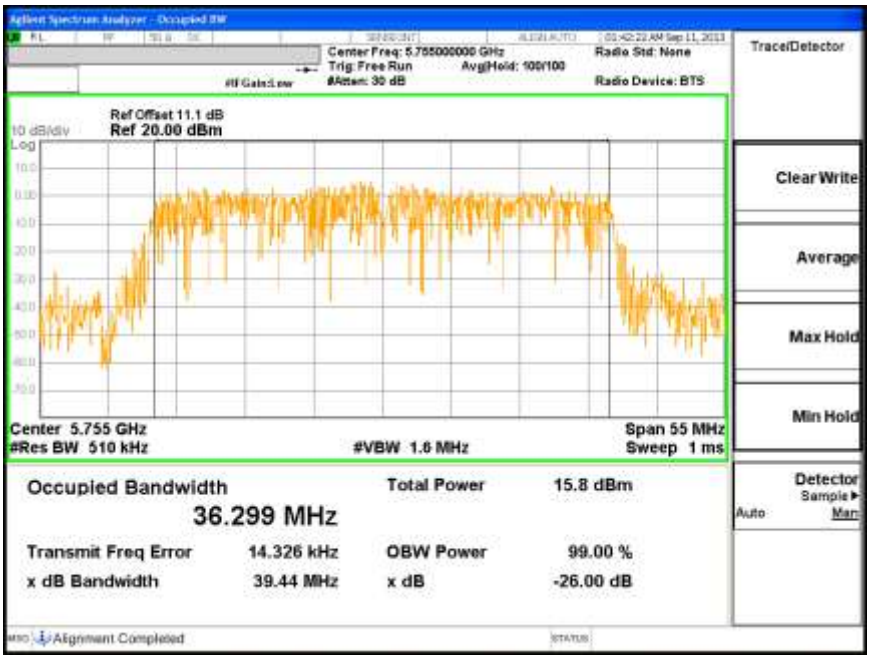
None; for reporting purposes only.

RESULTS

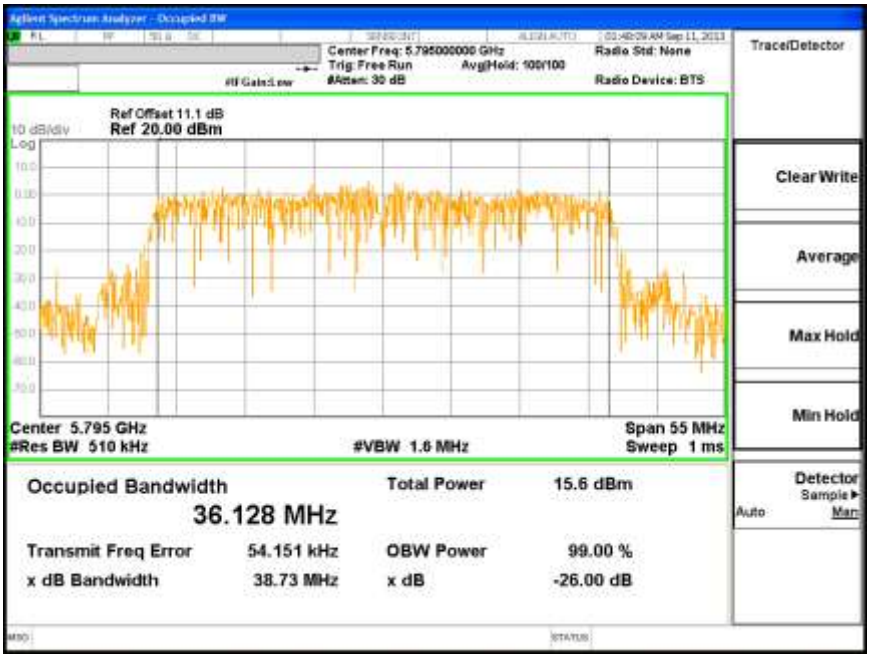
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.2990
High	5795	36.1280

99% BANDWIDTH

99% BANDWIDTH LOW CH



99% BANDWIDTH HIGH CH



8.6.3. 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 11.1 dB (including 10 dB pad and 1.1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Power (dBm)
Low	5755	15.50
High	5795	15.49

8.6.4. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Limits

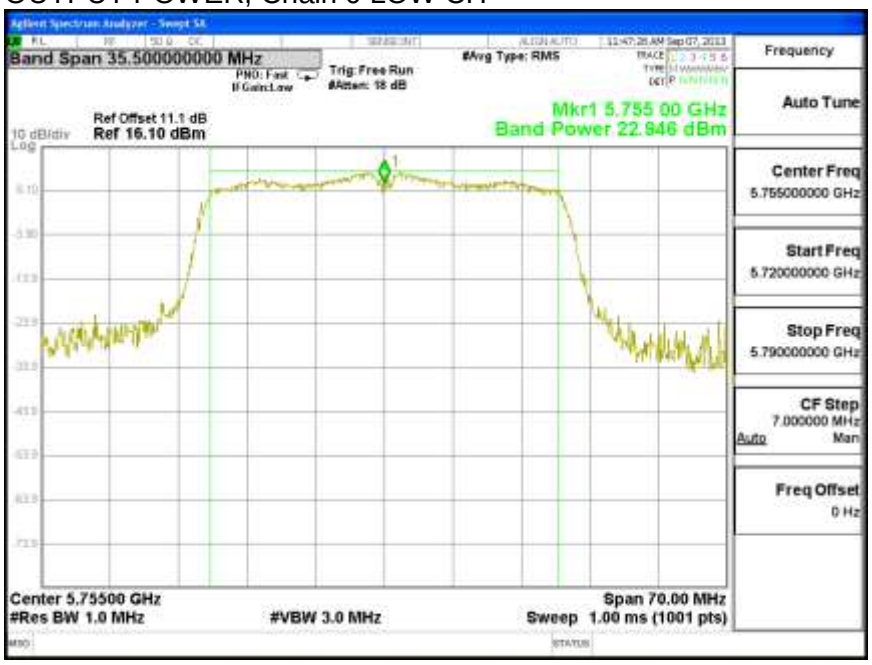
Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5755	3.76	30.00	30	36	30.00
High	5795	3.76	30.00	30	36	30.00

Results

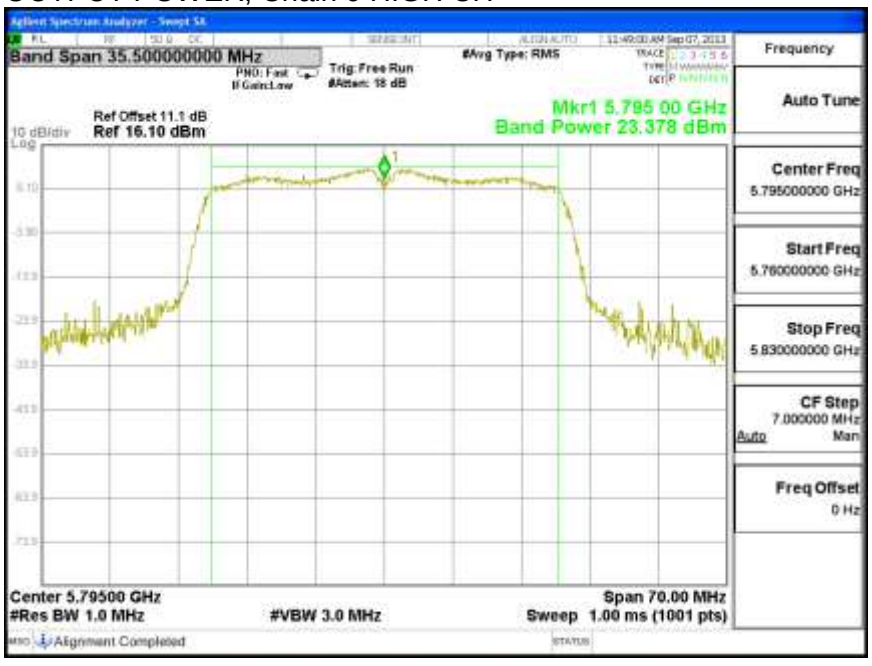
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	5755	22.95	22.95	30.00	-7.05
High	5795	23.38	23.38	30.00	-6.62

OUTPUT POWER, Chain 0

OUTPUT POWER, Chain 0 LOW CH



OUTPUT POWER, Chain 0 HIGH CH



8.6.5. PSD

LIMITS

FCC §15.247

IC RSS-210 A8.2

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

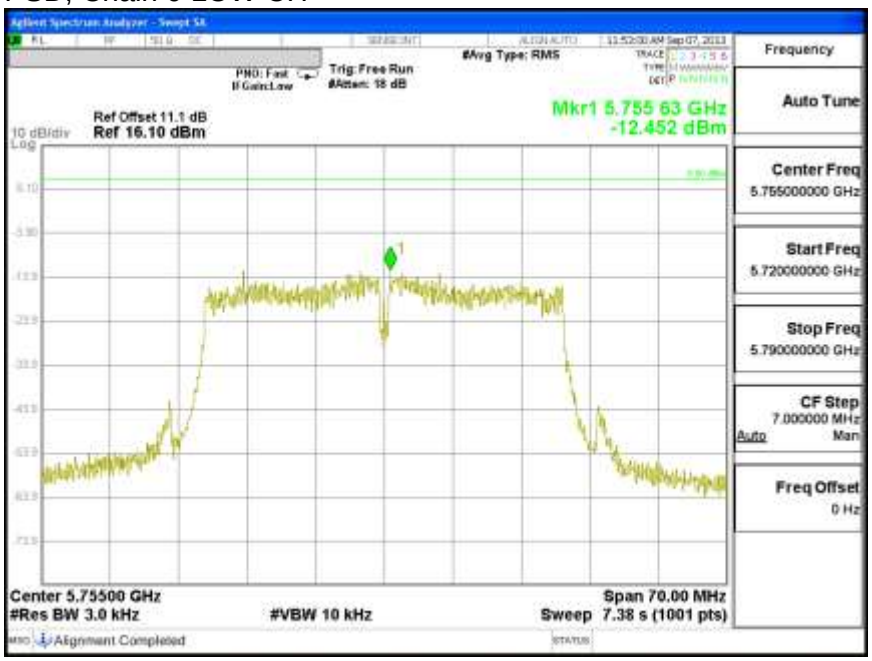
RESULTS

PSD Results

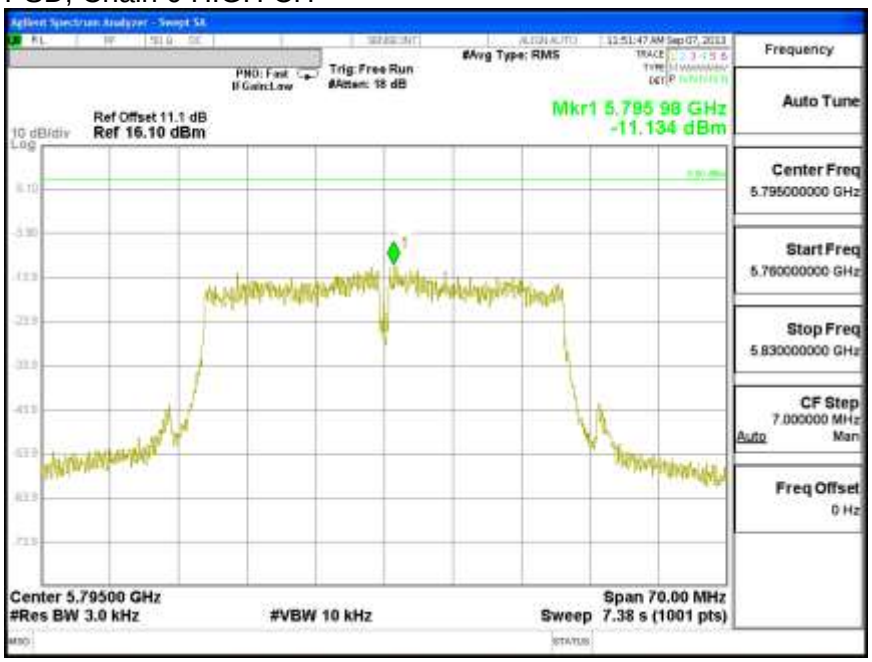
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	5755	-12.45	8.0	-20.5
High	5795	-11.13	8.0	-19.1

PSD, Chain 0

PSD, Chain 0 LOW CH



PSD, Chain 0 HIGH CH



8.6.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

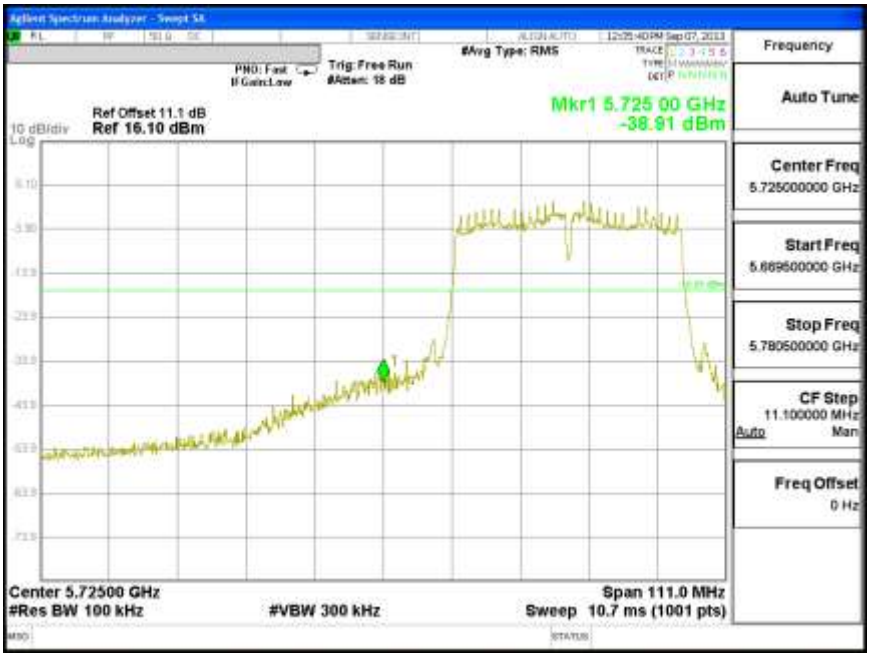
TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

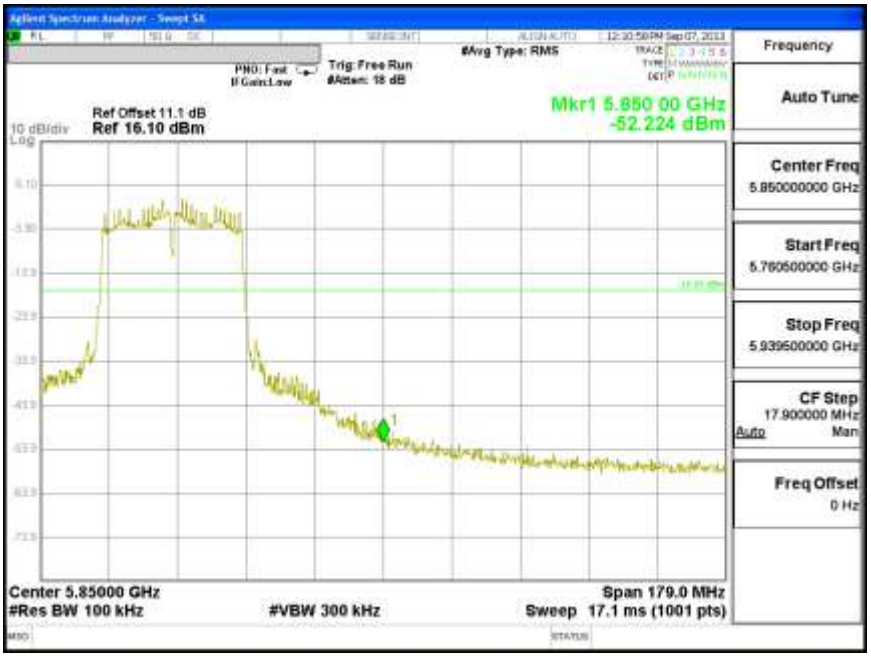
LOW CHANNEL BANDEDGE

AUTHORIZED BAND EDGE LOW CH



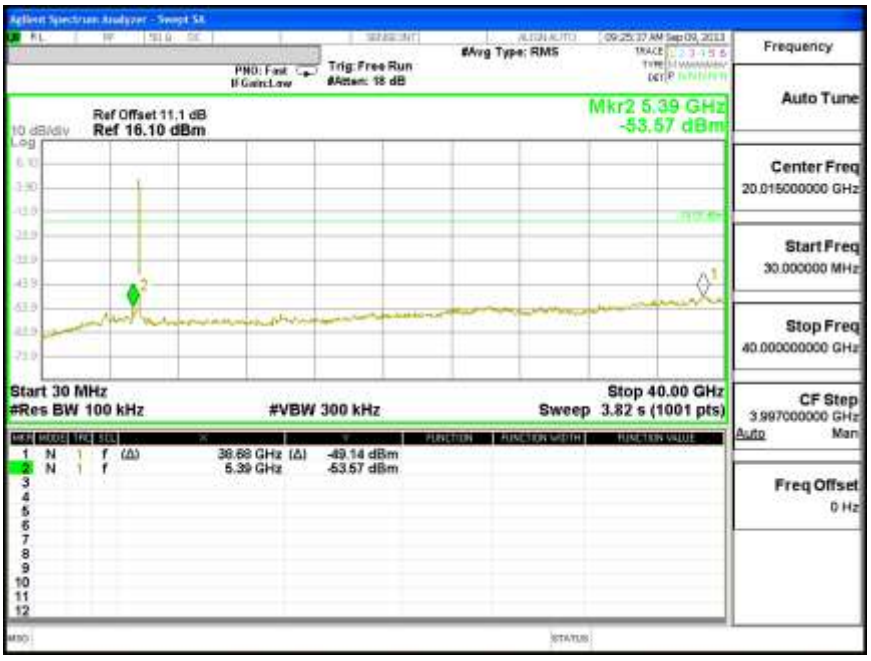
HIGH CHANNEL BANDEDGE

AUTHORIZED BAND EDGE HIGH CH

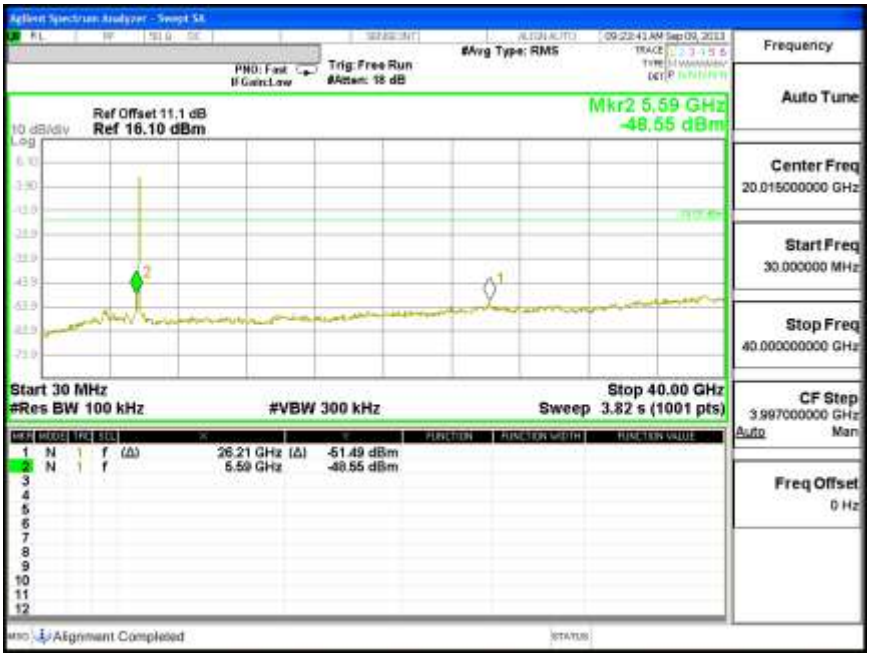


OUT-OF-BAND EMISSIONS

OUT OF BAND LOW CH



OUT OF BAND HIGH CH



8.7. 802.11n HT40 CDD 2TX MODE IN THE 5.8 GHz BAND

8.7.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

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

TEST PROCEDURE

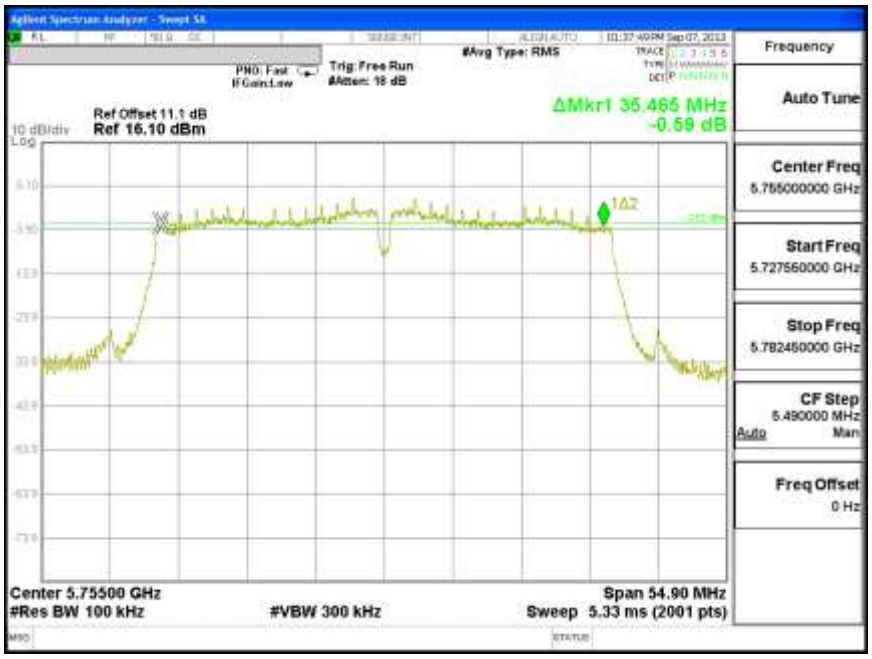
KDB 558074 D01 v01 "Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under 15.247".

RESULTS

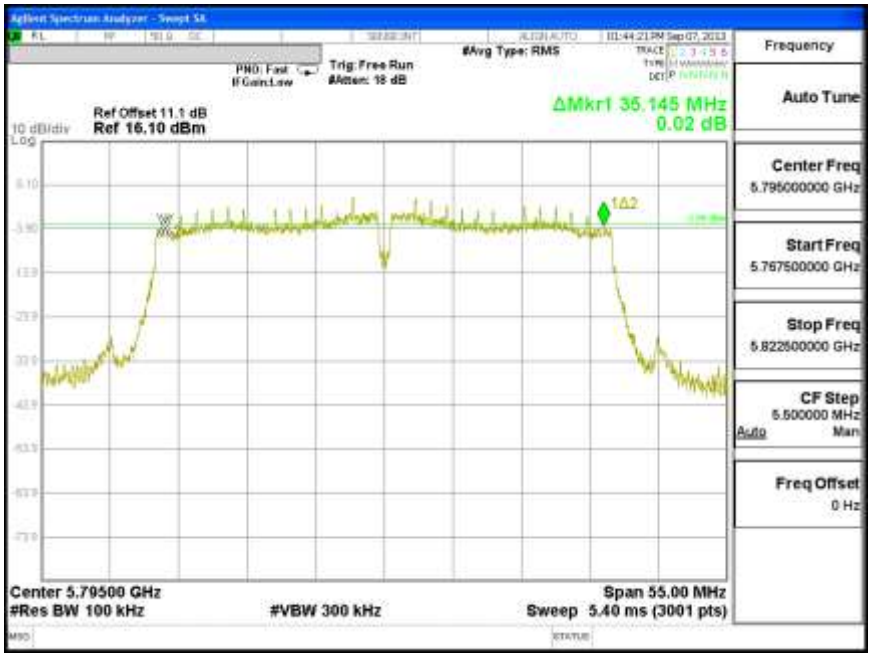
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5755	35.465	36.289	0.5
High	5795	35.145	35.658	0.5

6 dB BANDWIDTH, Chain 0

6 dB BANDWIDTH Chain 0 LOW CH

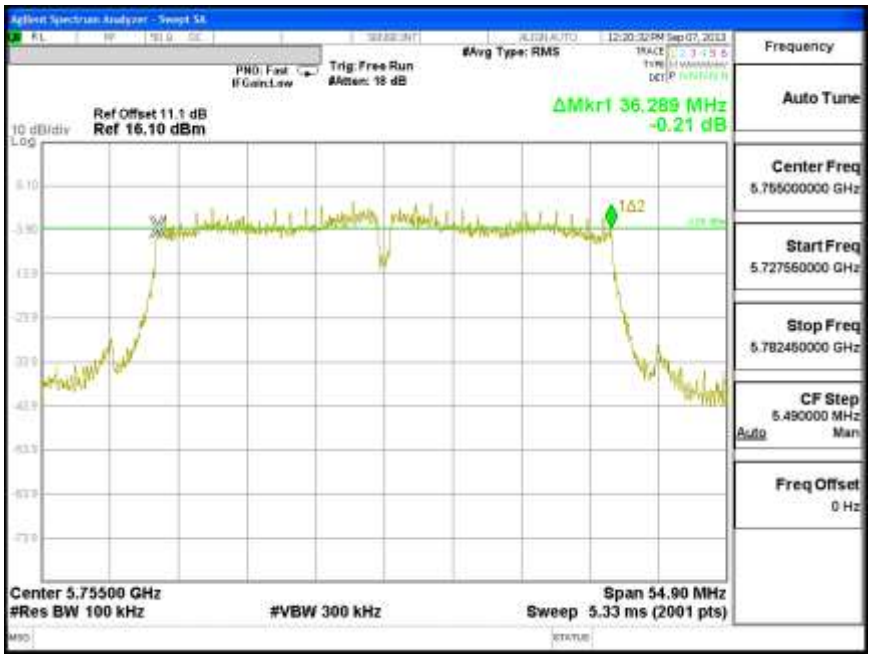


6 dB BANDWIDTH Chain 0 HIGH CH

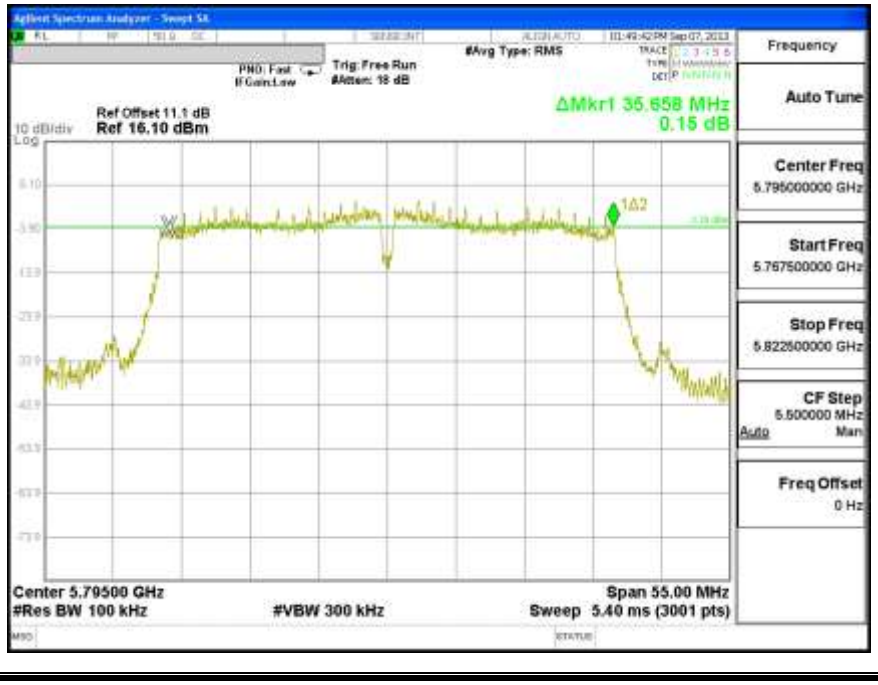


6 dB BANDWIDTH, Chain 1

6 dB BANDWIDTH Chain 1 LOW CH



6 dB BANDWIDTH Chain 1 HIGH CH



8.7.2. 99% BANDWIDTH

LIMITS

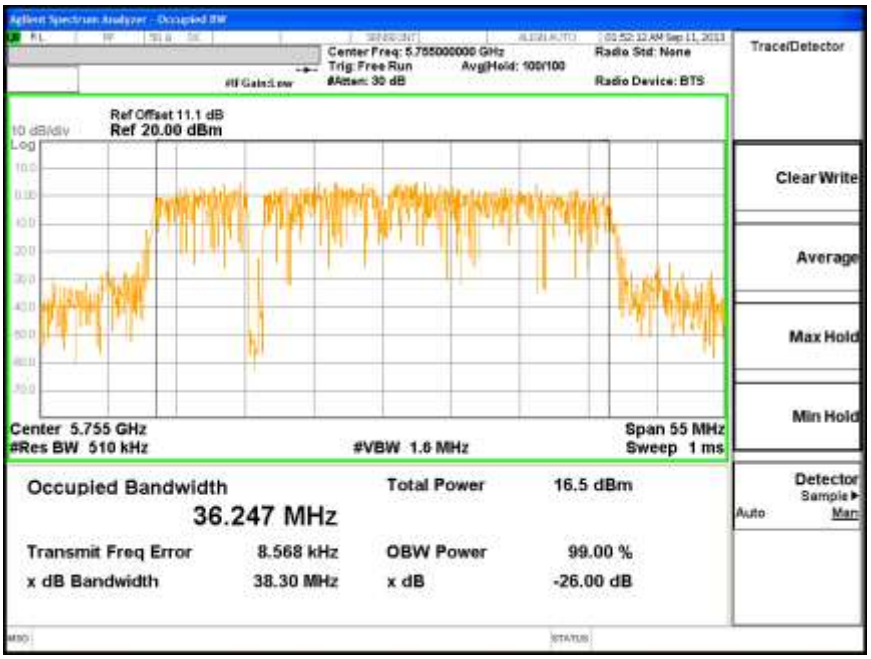
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5755	36.2470	36.1470
High	5795	36.2510	36.2870

99% BANDWIDTH, Chain 0

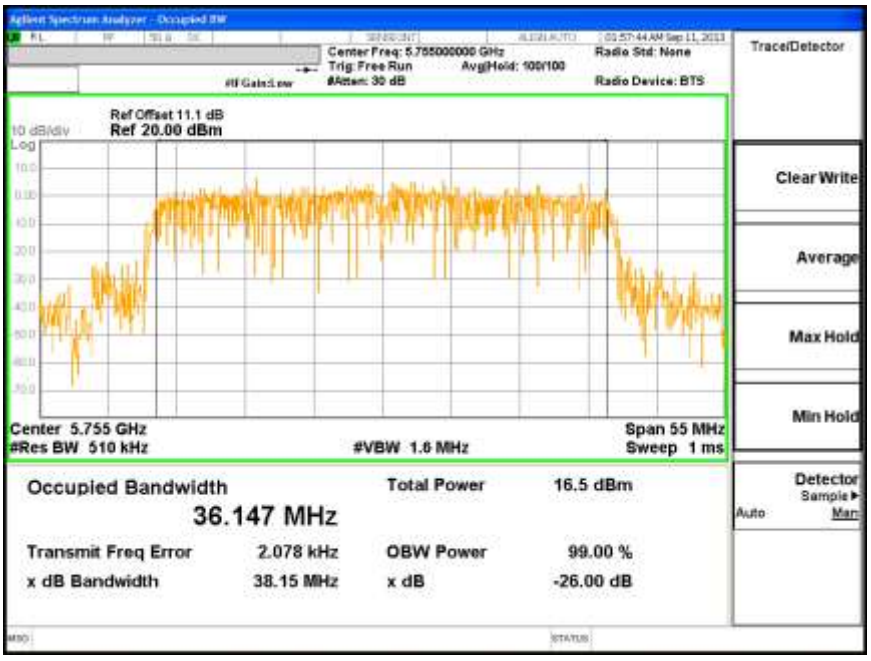
99% BANDWIDTH Chain 0 LOW CH



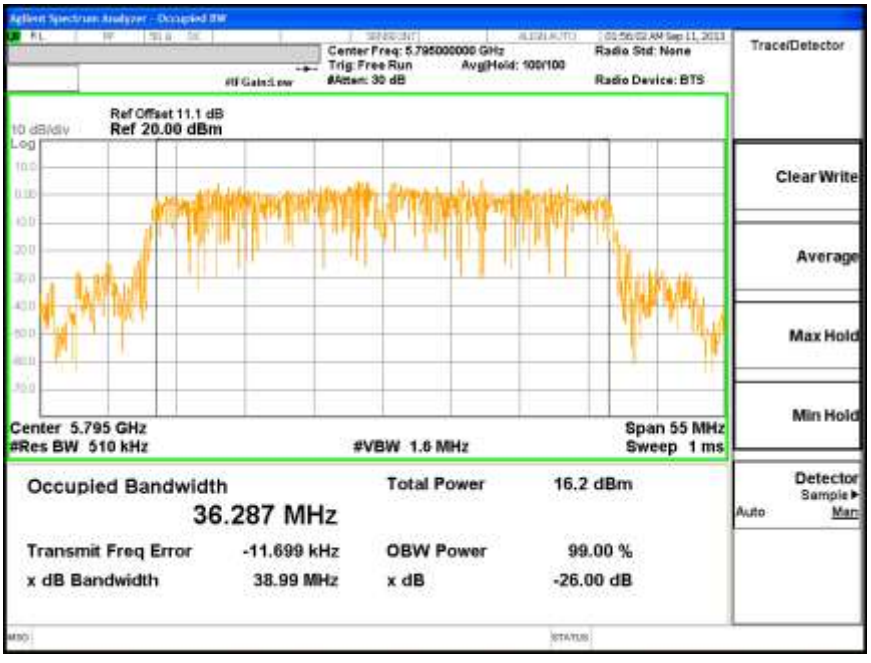
99% BANDWIDTH Chain 0 HIGH CH

99% BANDWIDTH, Chain 1

99% BANDWIDTH Chain 1 LOW CH



99% BANDWIDTH Chain 1 HIGH CH



8.7.3. 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 11.1 dB (including 10 dB pad and 1.1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5755	15.40	15.49	18.46
High	5795	15.50	15.50	18.51

8.7.4. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

The TX chains are uncorrelated and the antenna gain is unequal among the chains. The directional gain is:

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.68	3.76	3.25

RESULTS

Limits

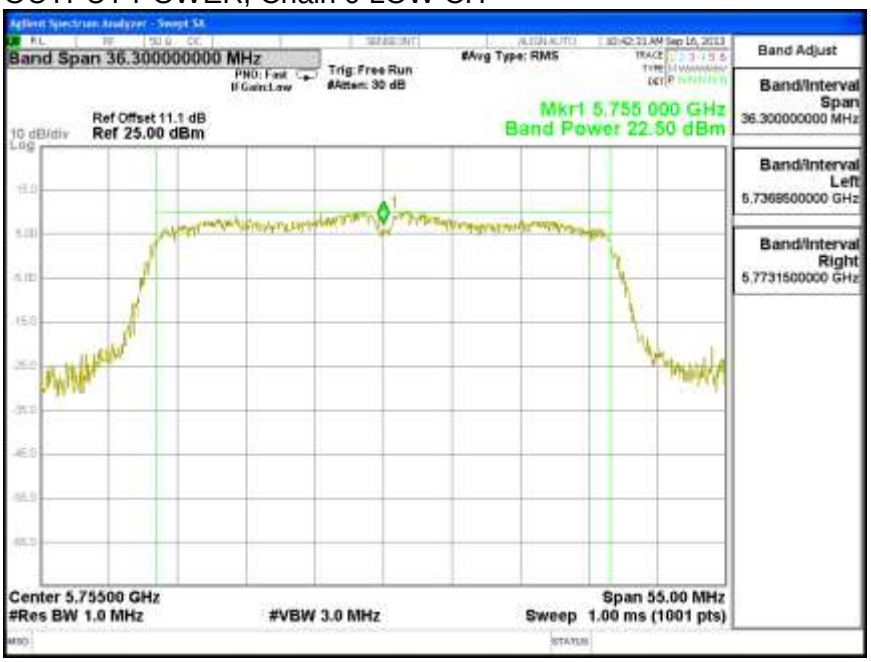
Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5755	3.25	30.00	30	36	30.00
High	5795	3.25	30.00	30	36	30.00

Results

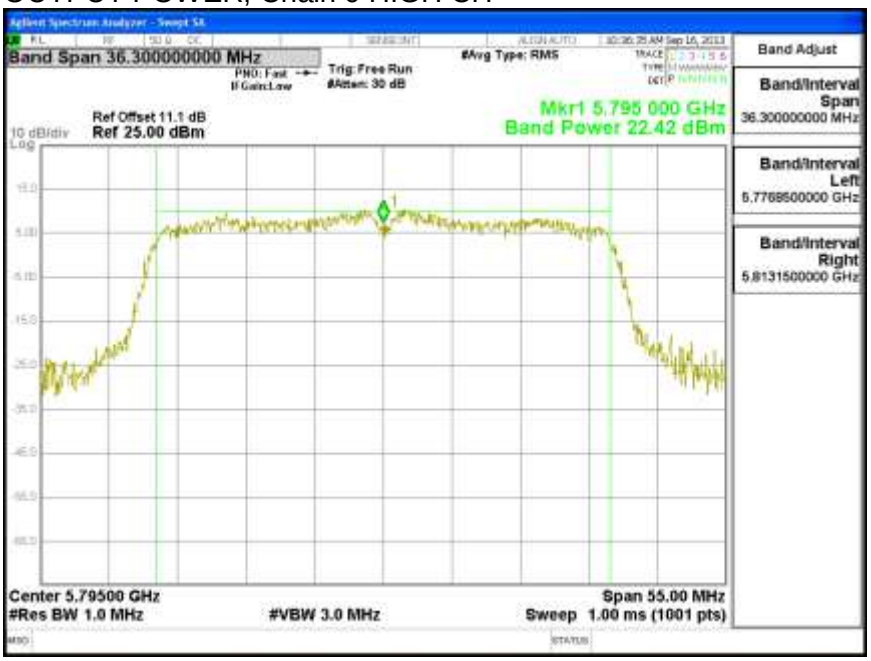
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margi (dB)
Low	5755	22.50	22.77	25.65	30.00	-4.35
High	5795	22.42	22.69	25.57	30.00	-4.43

OUTPUT POWER, Chain 0

OUTPUT POWER, Chain 0 LOW CH

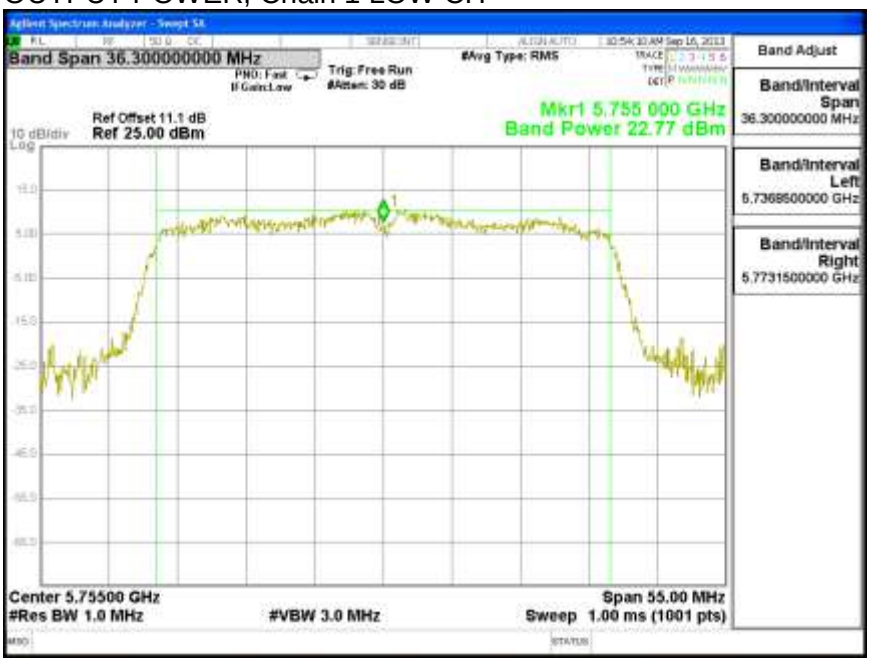


OUTPUT POWER, Chain 0 HIGH CH

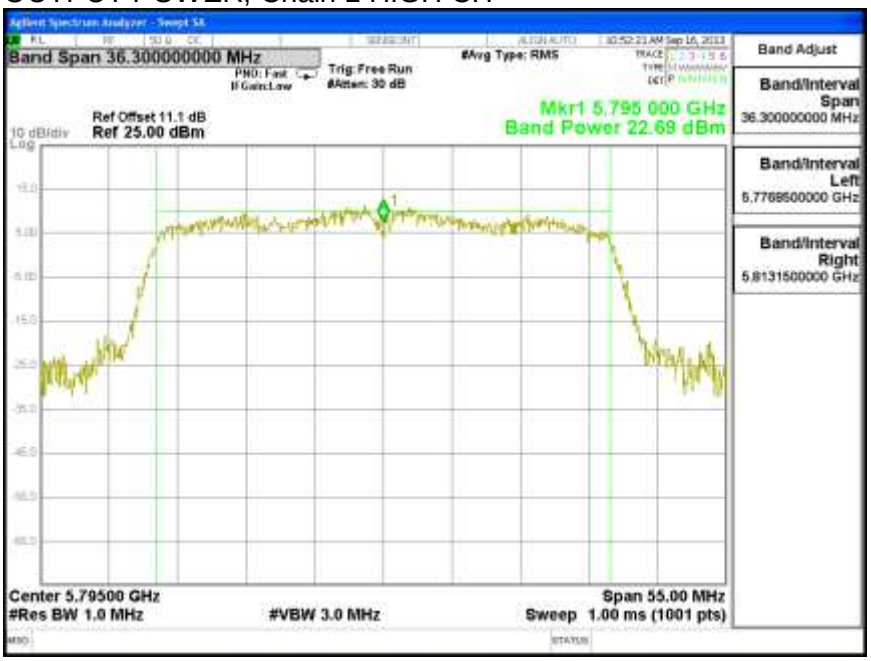


OUTPUT POWER, Chain 1

OUTPUT POWER, Chain 1 LOW CH



OUTPUT POWER, Chain 1 HIGH CH



8.7.5. PSD

LIMITS

FCC §15.247

IC RSS-210 A8.2

The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

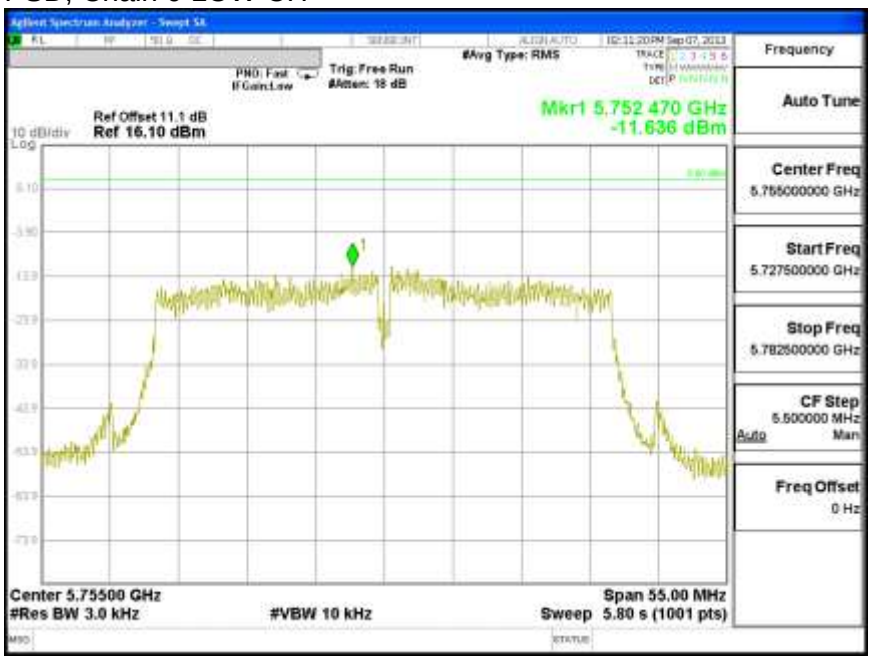
RESULTS

PSD Results

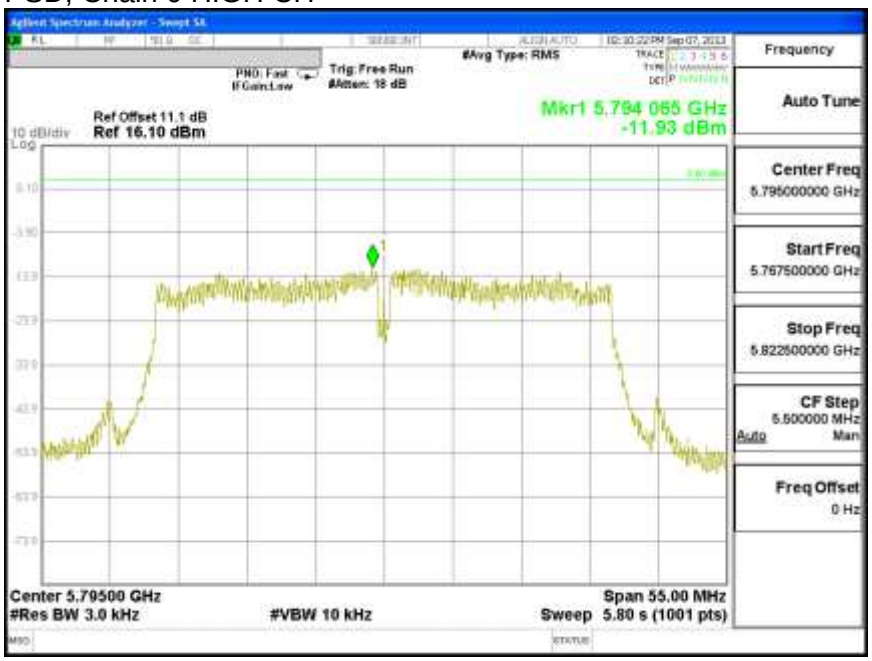
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	5755	-11.64	-10.94	-8.26	8.0	-16.3
High	5795	-11.93	-10.46	-8.13	8.0	-16.1

PSD, Chain 0

PSD, Chain 0 LOW CH

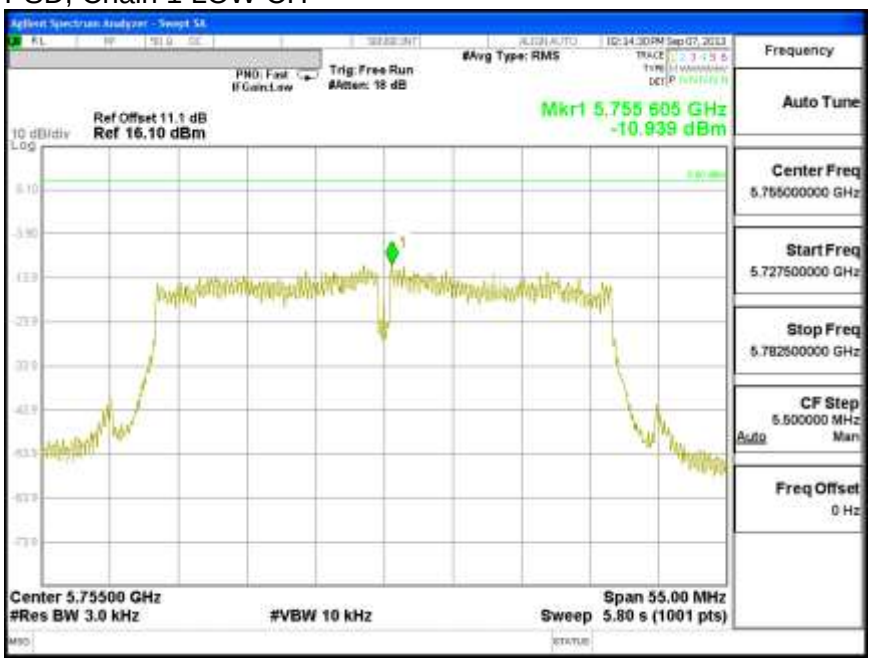


PSD, Chain 0 HIGH CH

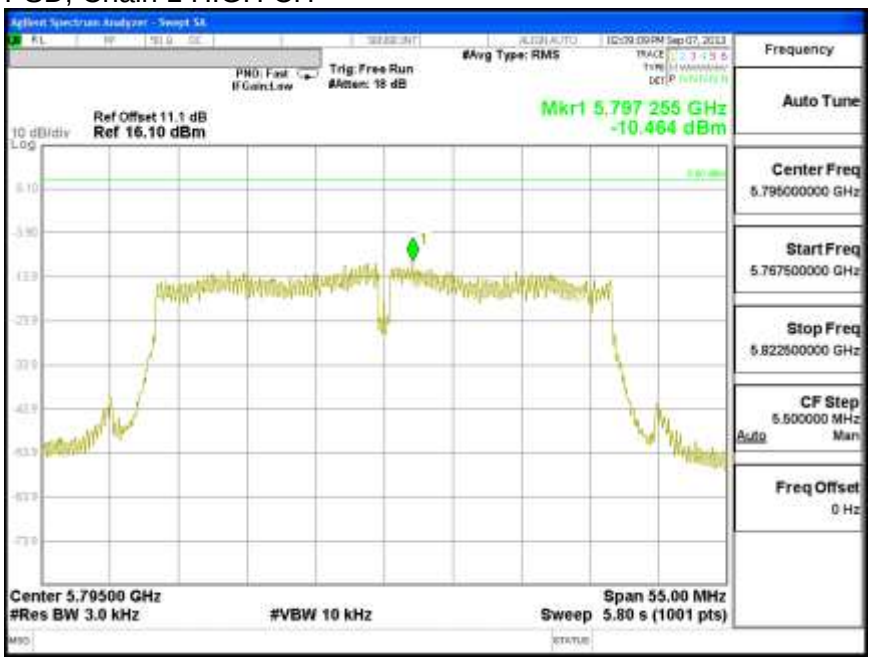


PSD, Chain 1

PSD, Chain 1 LOW CH



PSD, Chain 1 HIGH CH



8.7.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

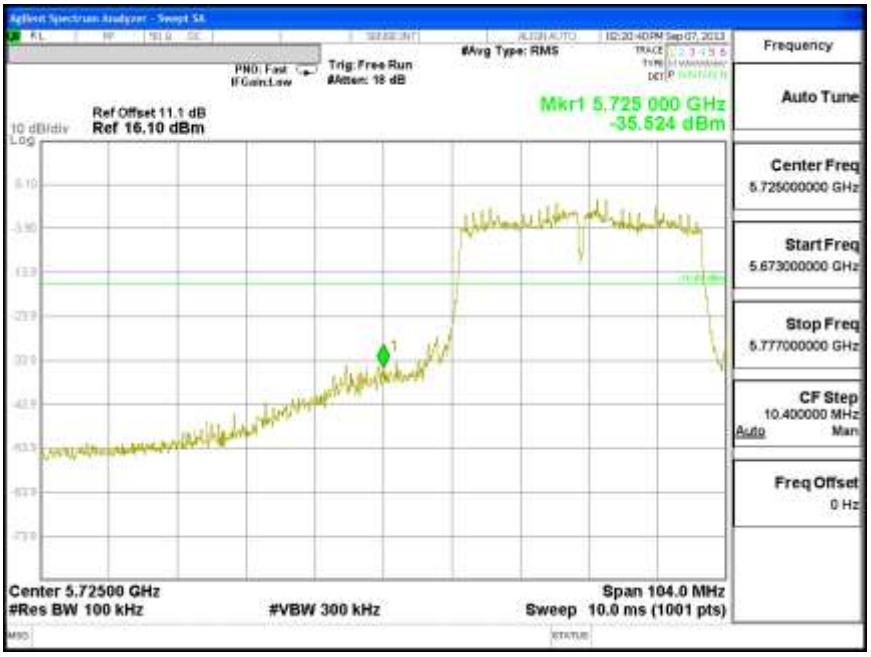
TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

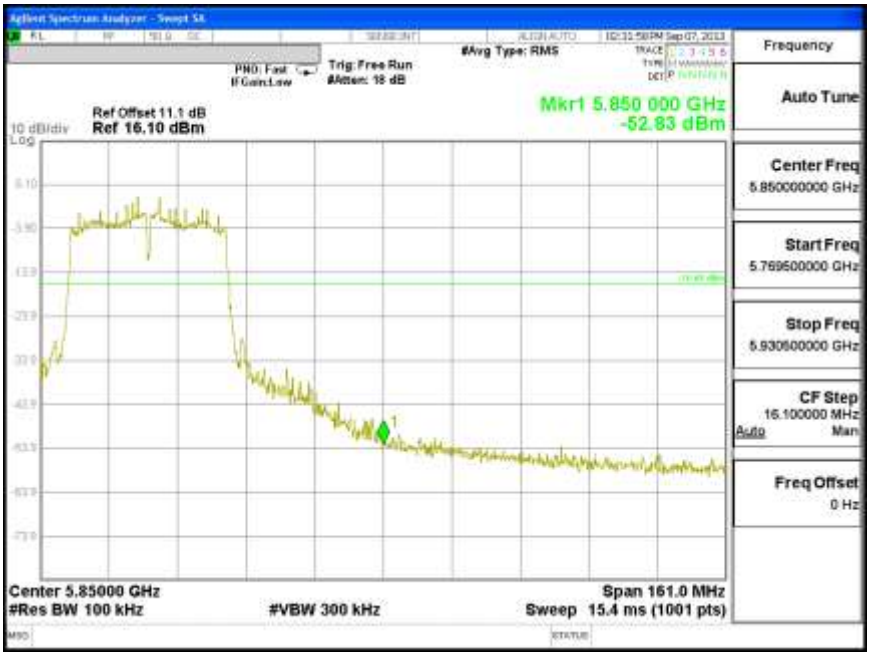
LOW CHANNEL BANDEDGE, Chain 0

AUTHORIZED BAND EDGE Chain 0 LOW CH



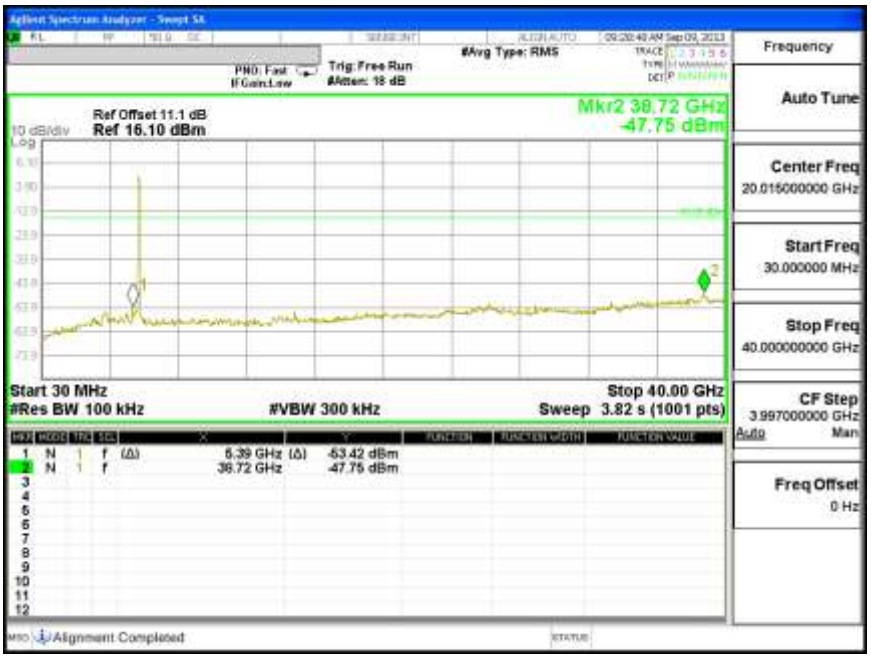
HIGH CHANNEL BANDEDGE, Chain 0

AUTHORIZED BAND EDGE Chain 0 HIGH CH

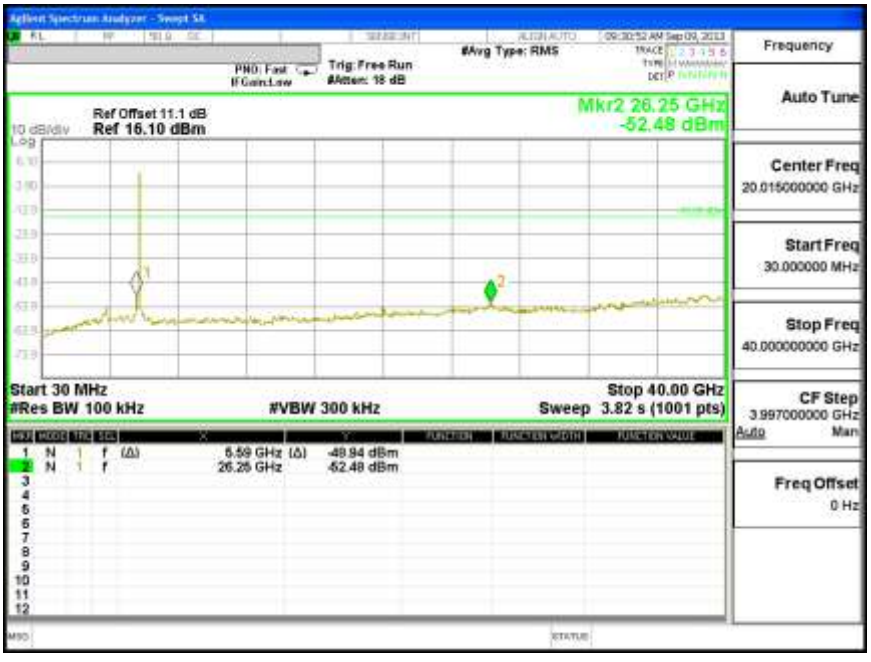


OUT-OF-BAND EMISSIONS, Chain 0

OUT OF BAND Chain 0 LOW CH

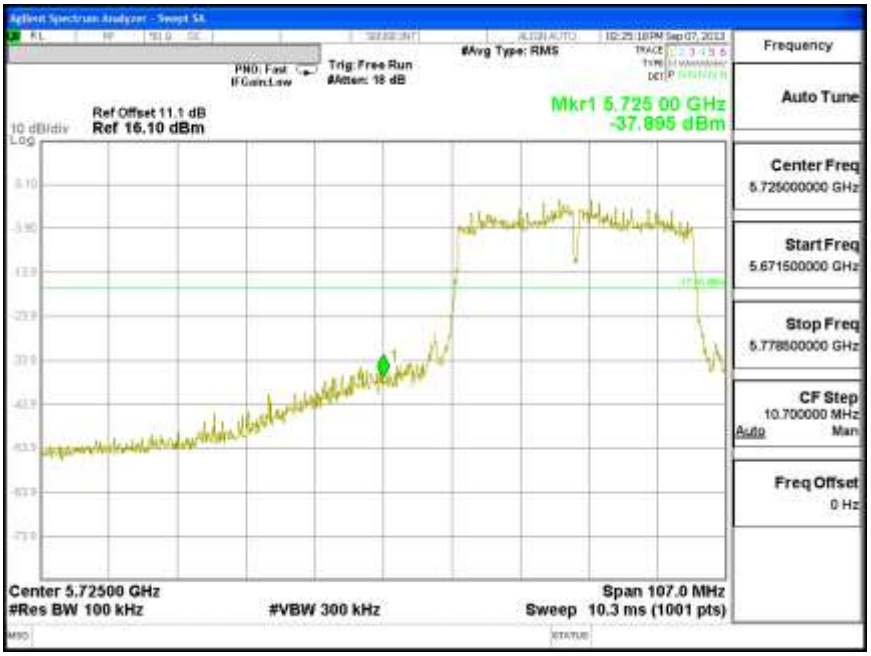


OUT OF BAND Chain 0 HIGH CH



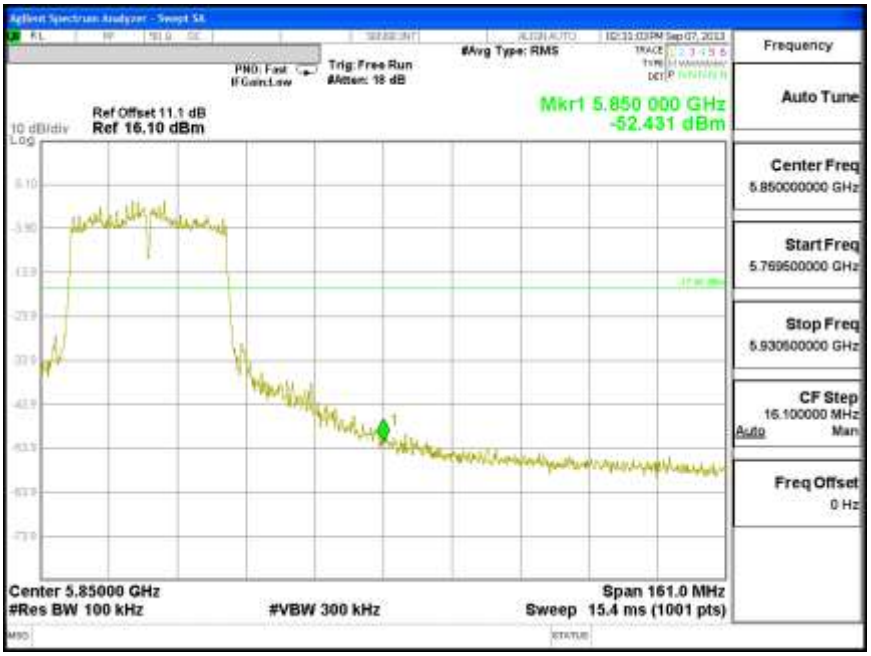
LOW CHANNEL BANDEDGE, Chain 1

AUTHORIZED BAND EDGE Chain 1 LOW CH

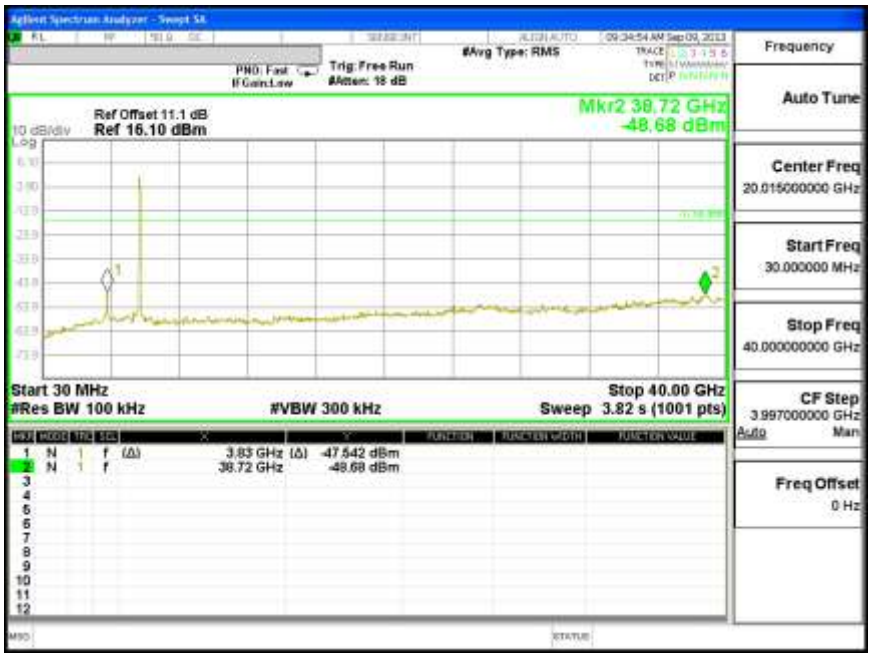


HIGH CHANNEL BANDEDGE, Chain 1

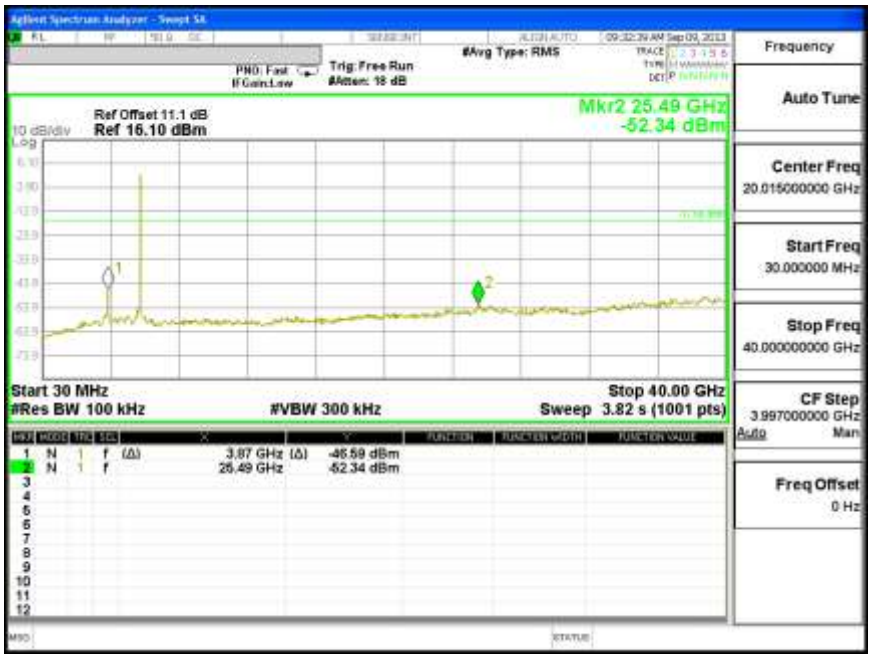
AUTHORIZED BAND EDGE Chain 1 HIGH CH



OUT OF BAND Chain 1 LOW CH



OUT OF BAND Chain 1 HIGH CH



9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-210 Clause 2.6 (Transmitter)

IC RSS-GEN Clause 6 (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 1 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.

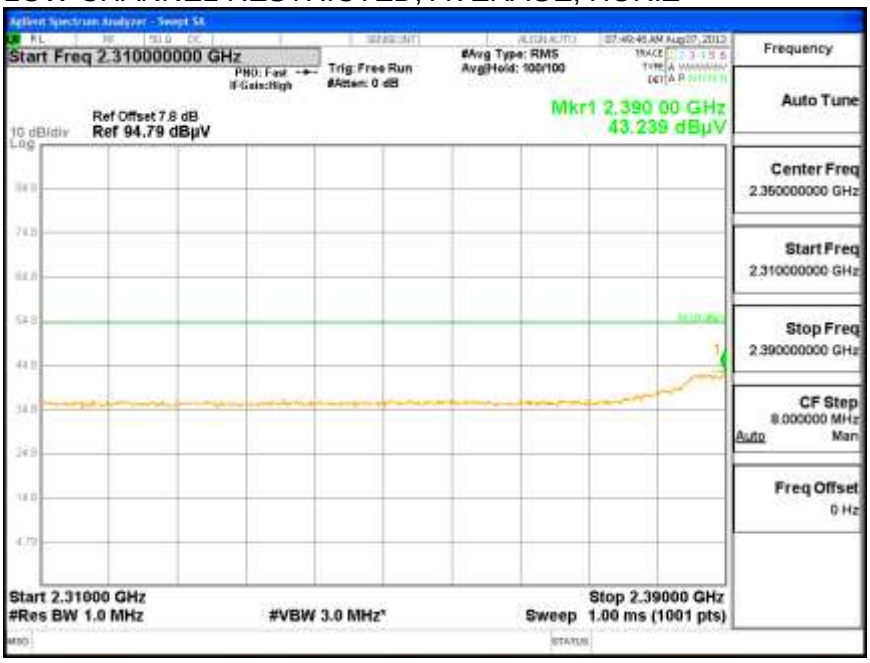
9.2. TRANSMITTER ABOVE 1 GHz

9.2.1. TX ABOVE 1 GHz 802.11b MODE IN THE 2.4 GHz BAND

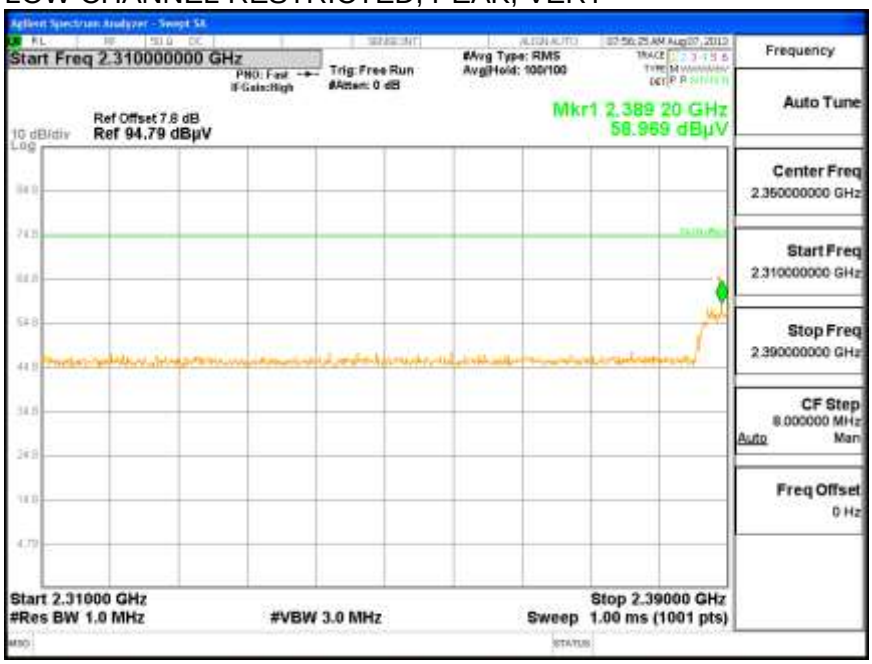
RESTRICTED BANDEDGE (LOW CHANNEL) CH1

LOW CHANNEL RESTRICTED, PEAK, HORIZ

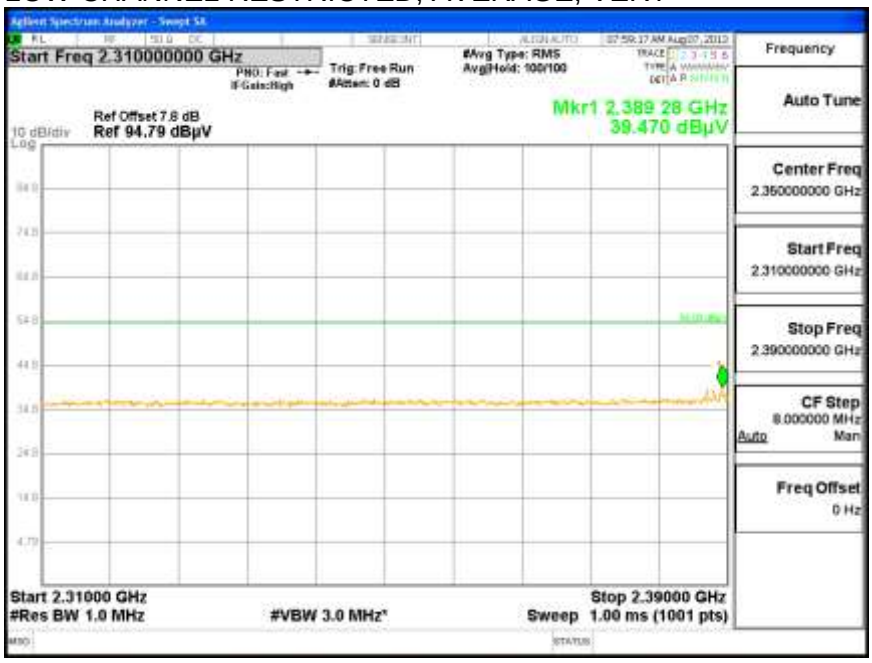
LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



LOW CHANNEL RESTRICTED, PEAK, VERT

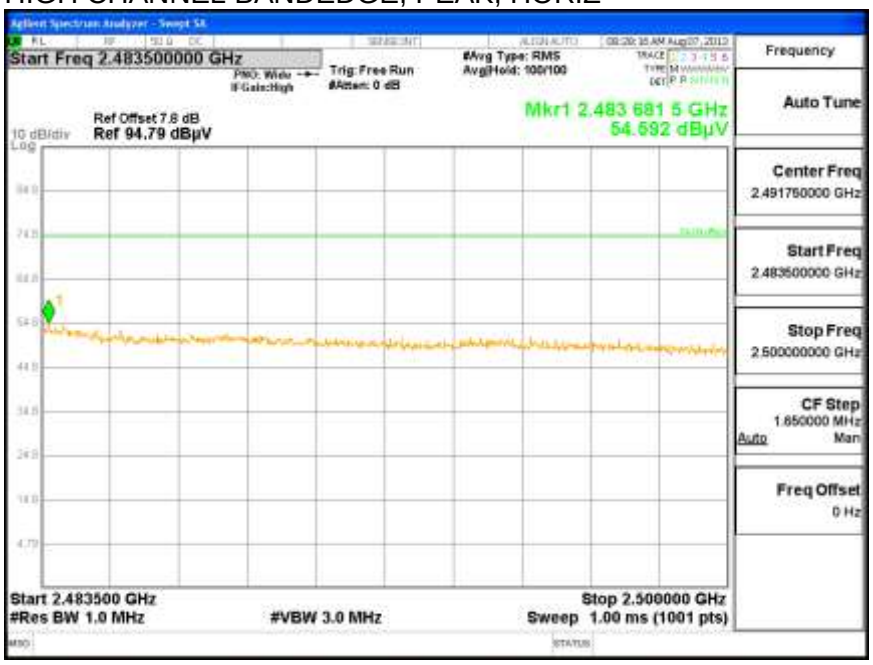


LOW CHANNEL RESTRICTED, AVERAGE, VERT

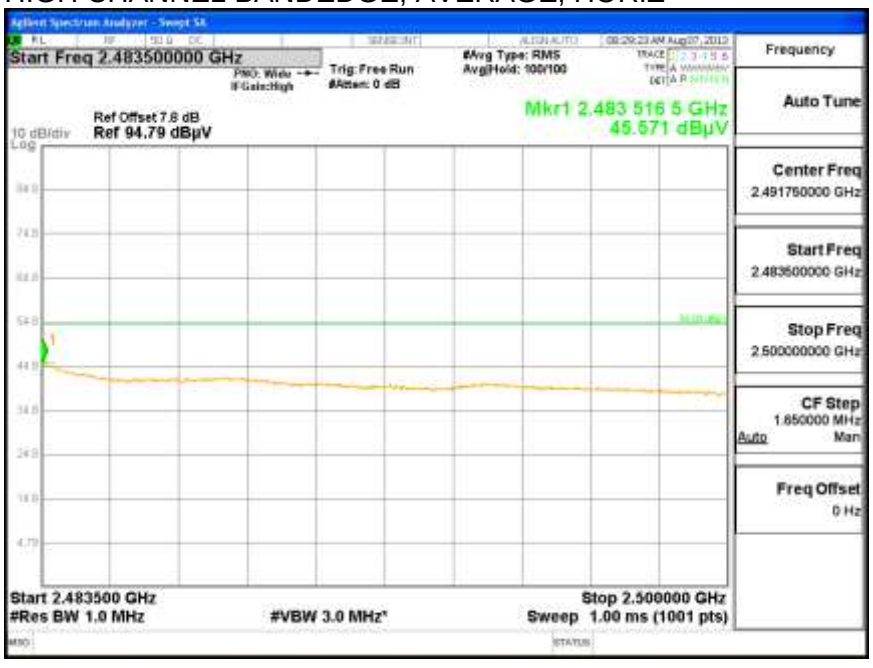


AUTHORIZED BANDEDGE (HIGH CHANNEL) CH11

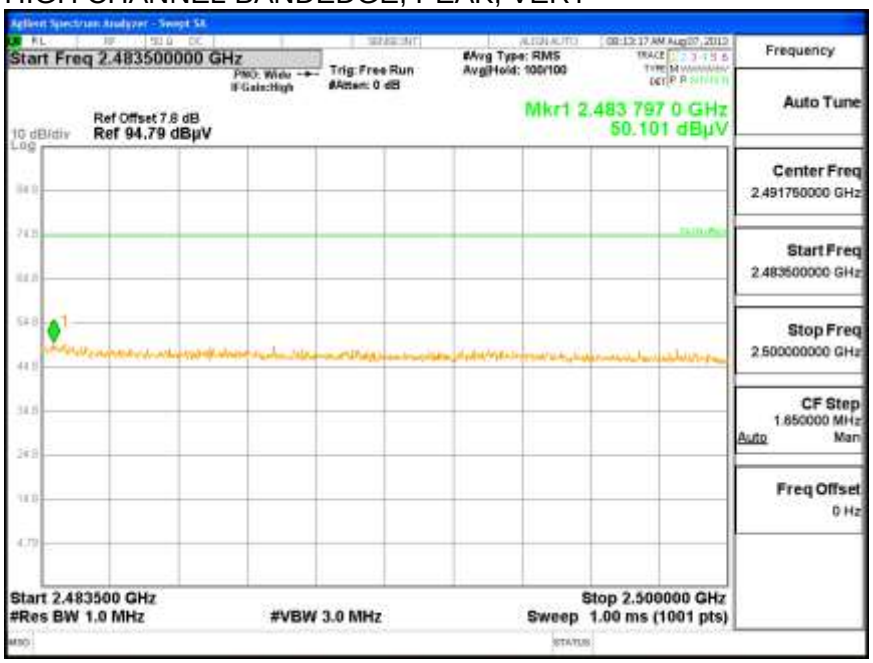
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



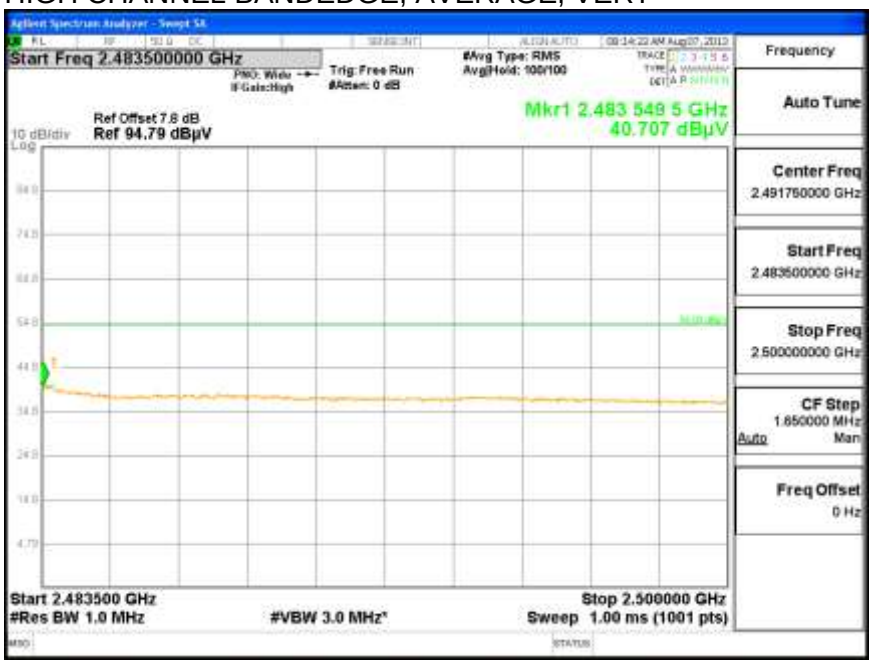
HIGH CHANNEL BANDEDGE, AVERAGE, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT

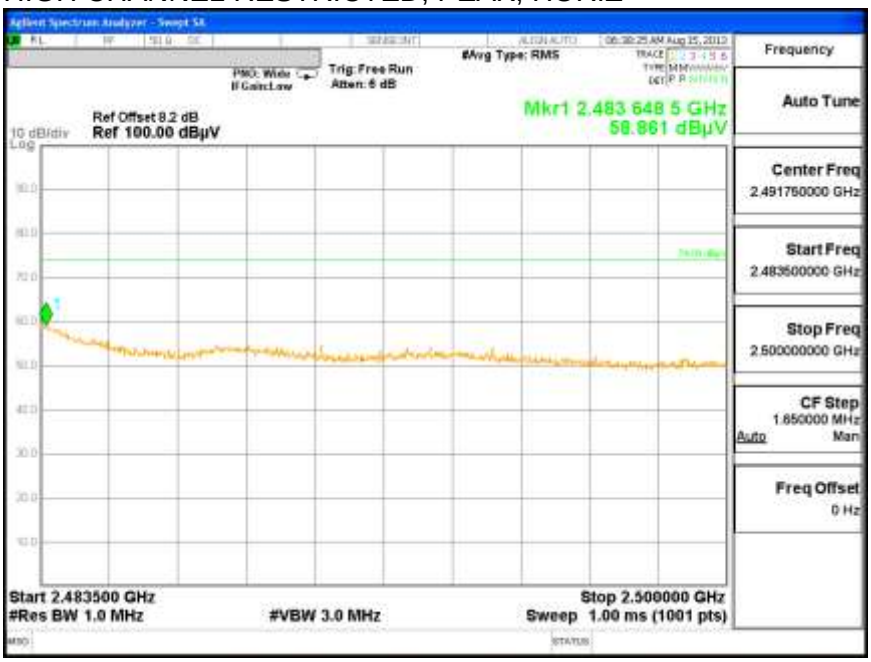


HIGH CHANNEL BANDEDGE, AVERAGE, VERT

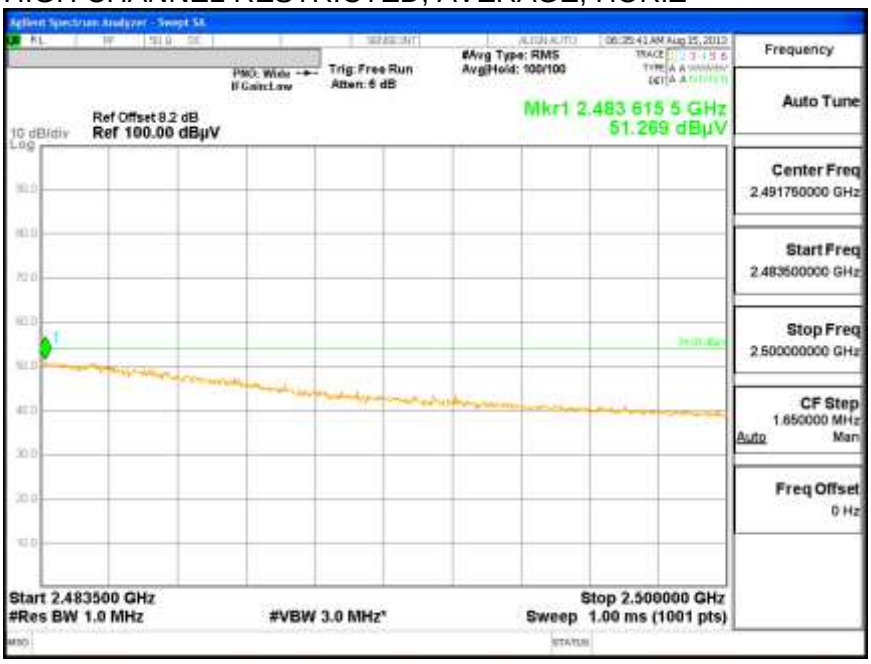


RESTRICTED BANDEDGE CH12

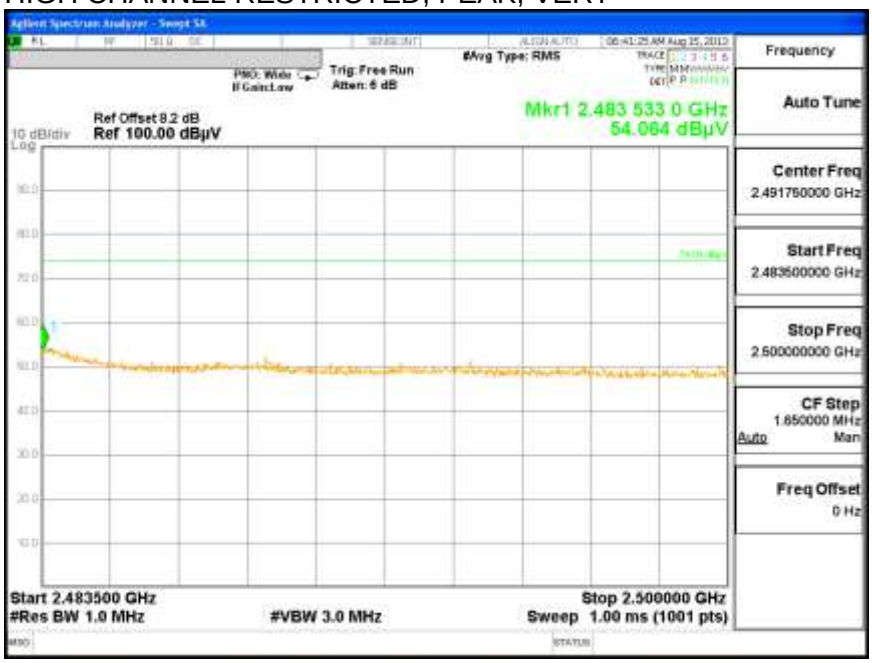
HIGH CHANNEL RESTRICTED, PEAK, HORIZ



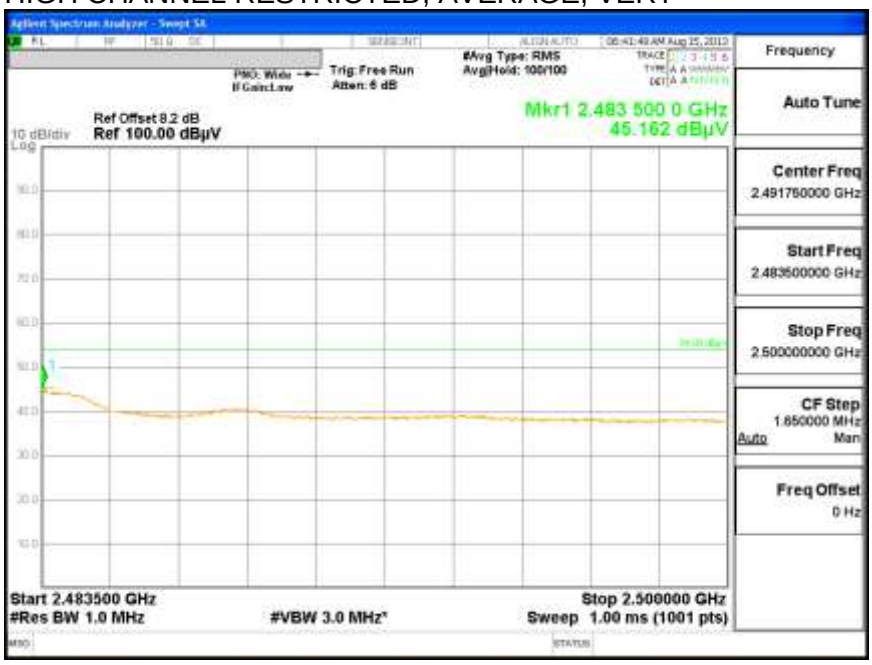
HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ



HIGH CHANNEL RESTRICTED, PEAK, VERT

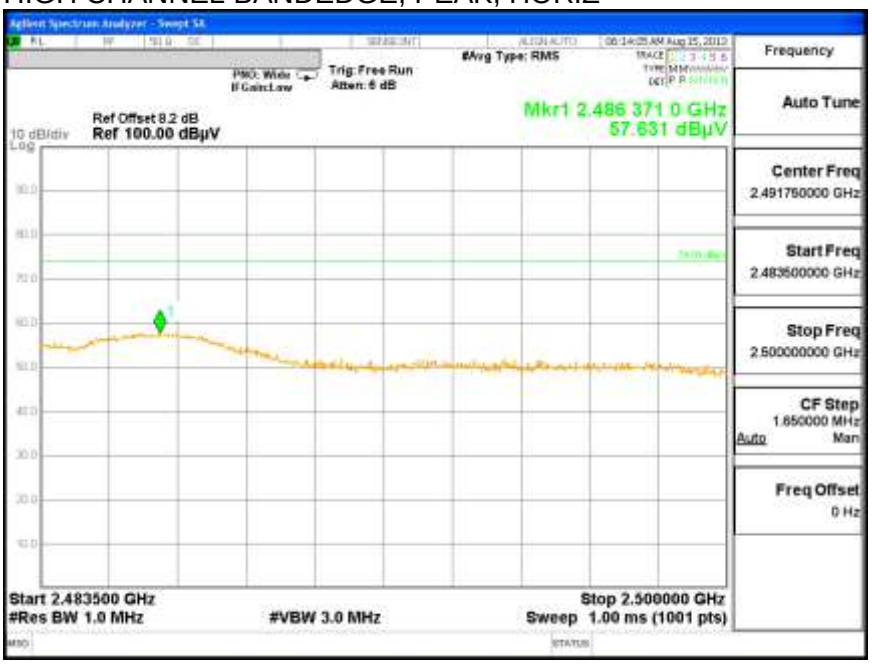


HIGH CHANNEL RESTRICTED, AVERAGE, VERT

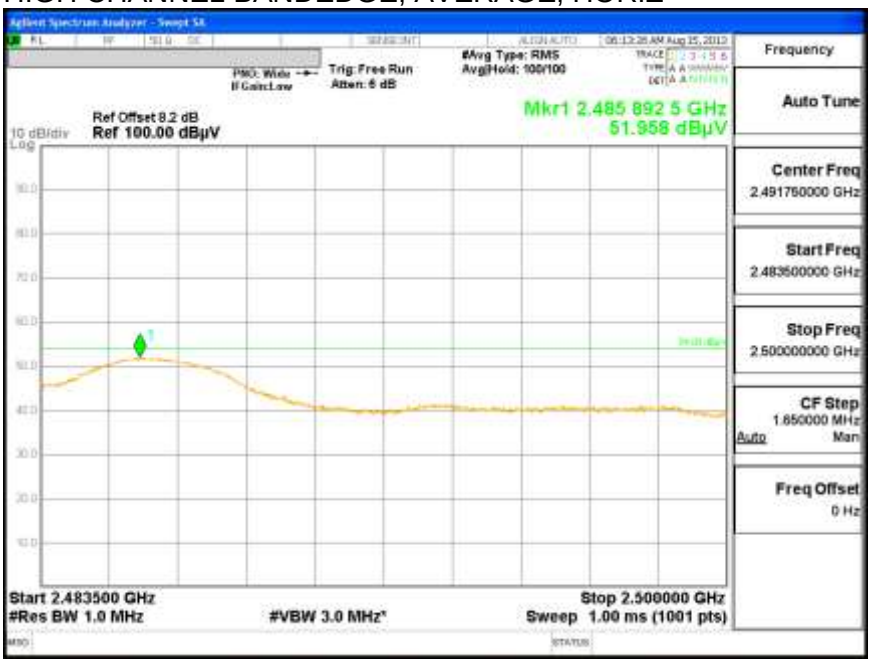


AUTHORIZED BANDEDGE CH13

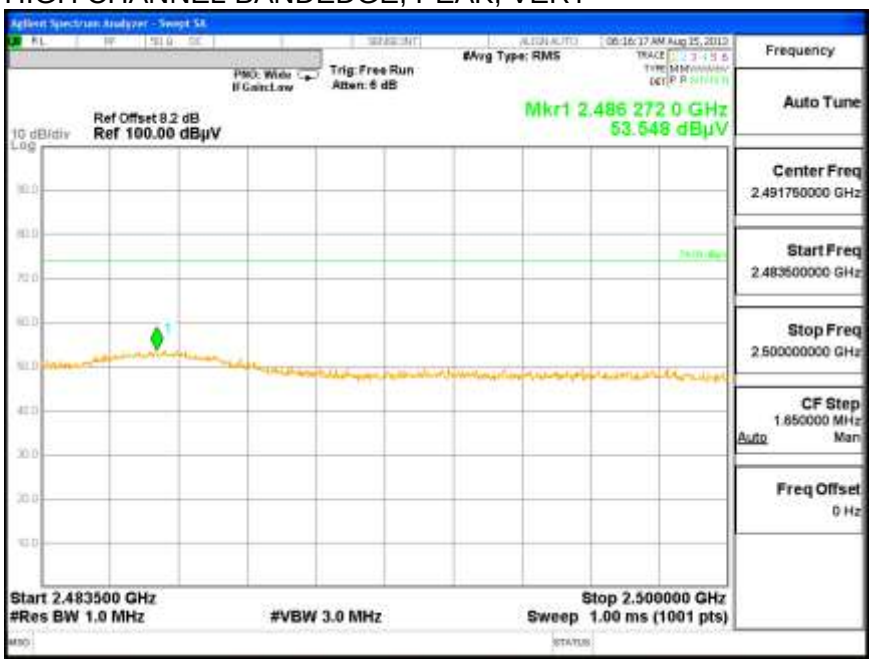
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



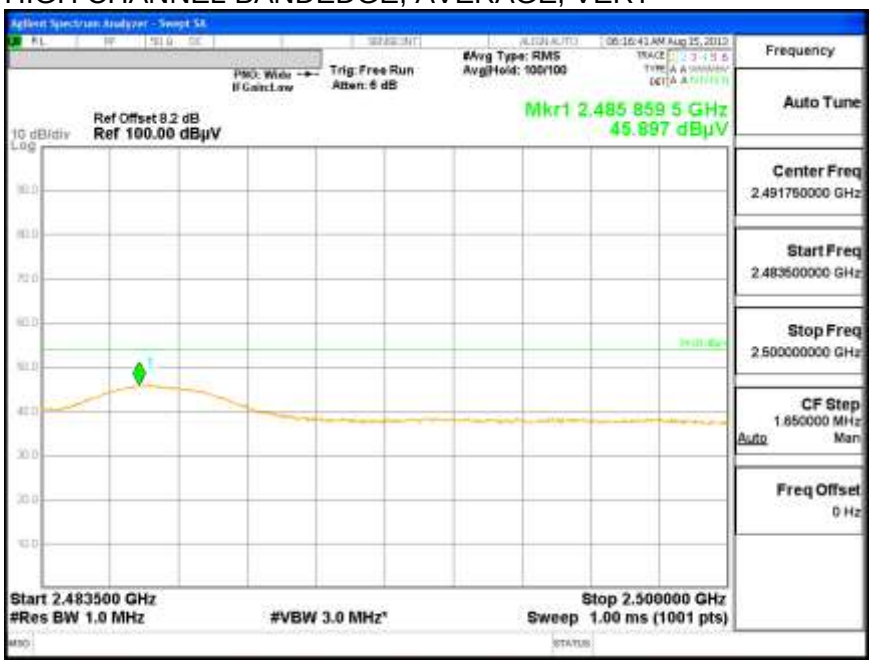
HIGH CHANNEL BANDEDGE, AVERAGE, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT

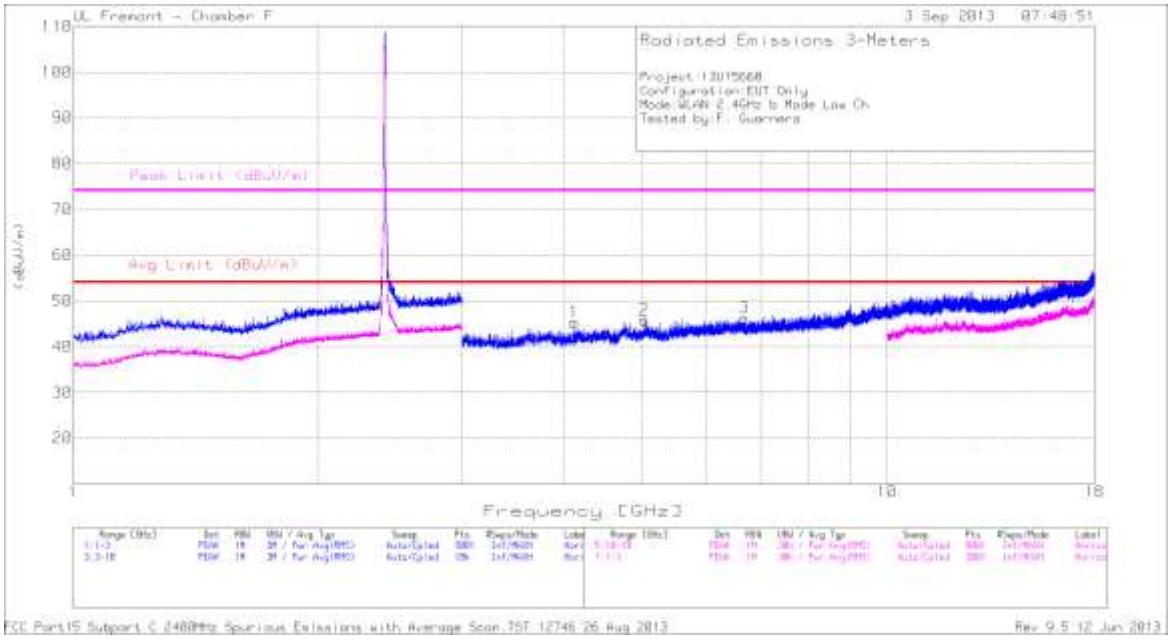


HIGH CHANNEL BANDEDGE, AVERAGE, VERT

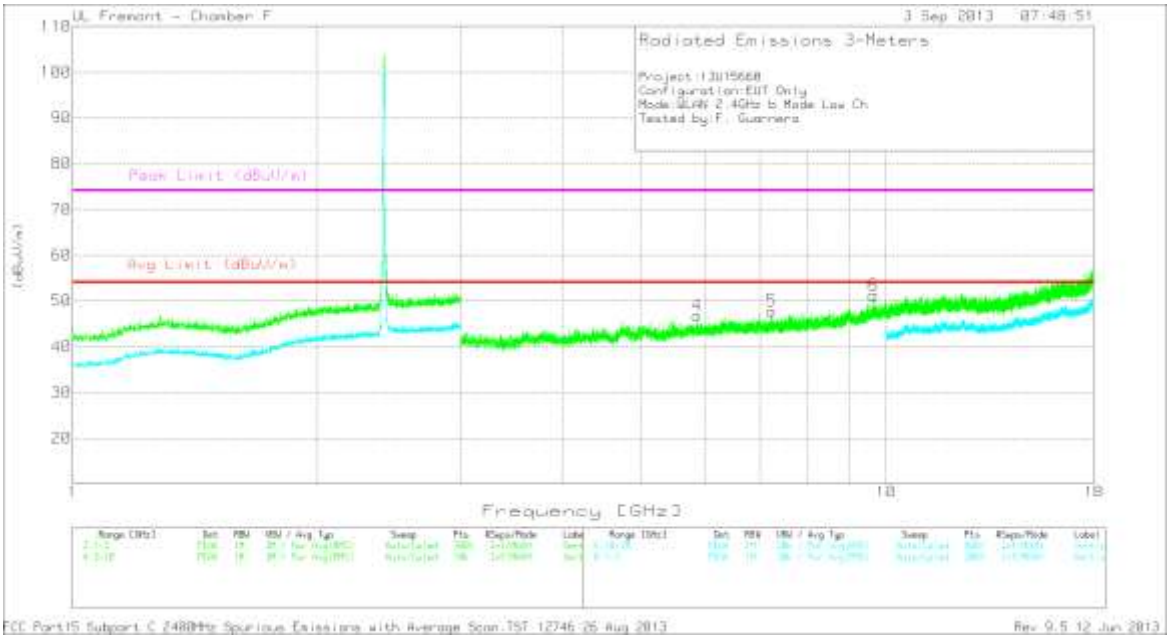


HARMONICS AND SPURIOUS EMISSIONS CH1

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

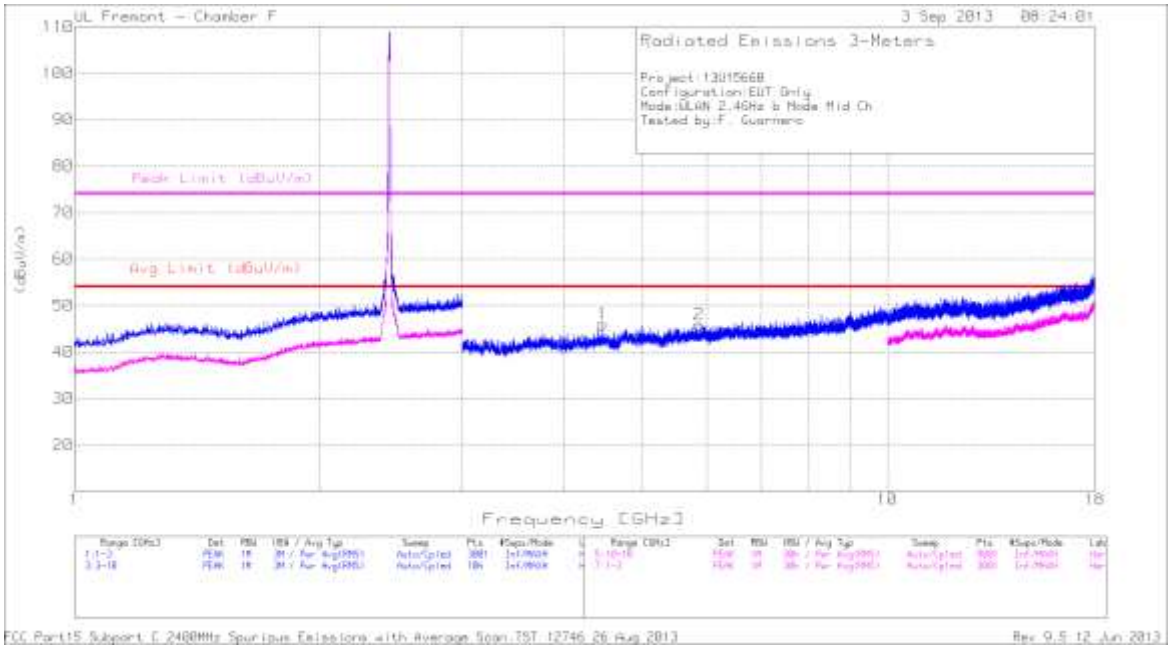
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /3GHz HPF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*4.126	40.69	PK	33.4	-28.8	45.29	-	-	-	-	0-360	100	H
2	5.036	39.41	PK	34.1	-27.7	45.81	53.97	-8.16	74	-28.19	0-360	199	H
3	*6.673	37.7	PK	35.8	-27.2	46.3	-	-	-	-	0-360	100	H
4	*5.858	39.21	PK	35.2	-27.6	46.81	-	-	-	-	0-360	201	V
5	*7.238	38.66	PK	35.7	-26.6	47.76	-	-	-	-	0-360	100	V
6	*9.648	36.64	PK	37.3	-22.7	51.24	-	-	-	-	0-360	100	V

PK - Peak detector

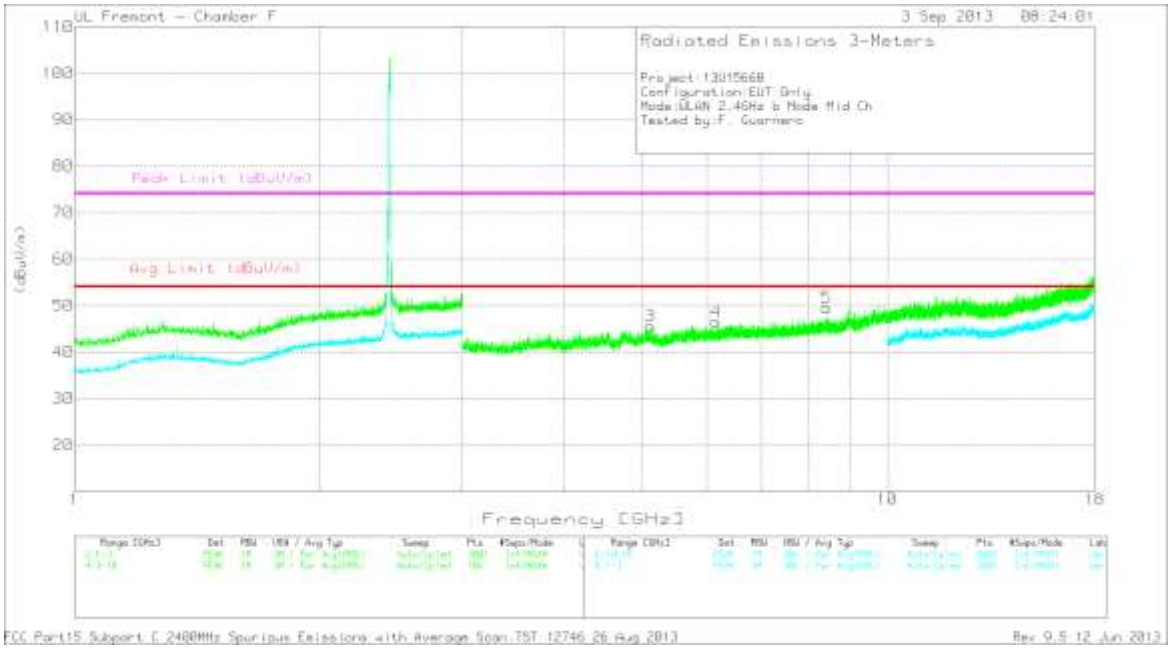
*Not in Restricted Band

HARMONICS AND SPURIOUS EMISSIONS CH6

MID CHANNEL HORITONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /3GHz HPF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*4.462	40.47	PK	33.8	-28.3	45.97	-	-	-	-	0-360	100	H
2	*5.867	38.5	PK	35.2	-27.8	45.9	-	-	-	-	0-360	100	H
3	5.108	38.54	PK	34.2	-27.2	45.54	53.97	-8.43	74	-28.46	0-360	101	V
4	*6.156	39.25	PK	35.4	-28.1	46.55	-	-	-	-	0-360	101	V
5	8.419	38.32	PK	36	-24.8	49.52	53.97	-4.45	74	-24.48	0-360	201	V

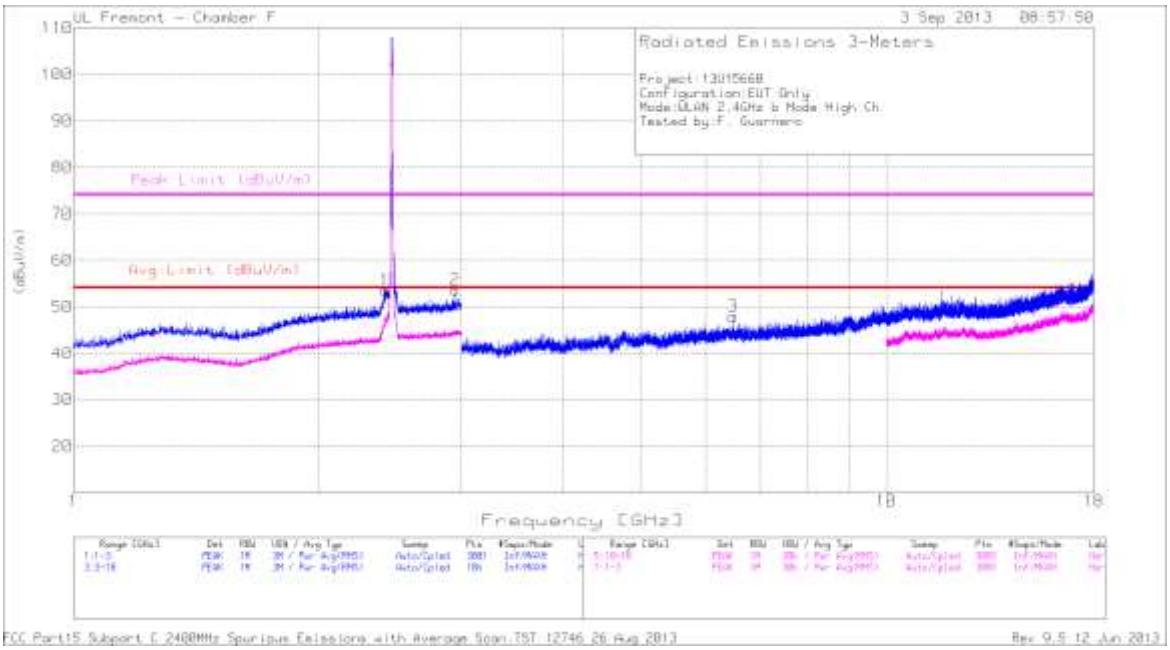
*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/ 3GHz HPF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
8.419	25.97	MAv1	36	-24.8	37.17	53.97	-16.8	-	-	12	286	V

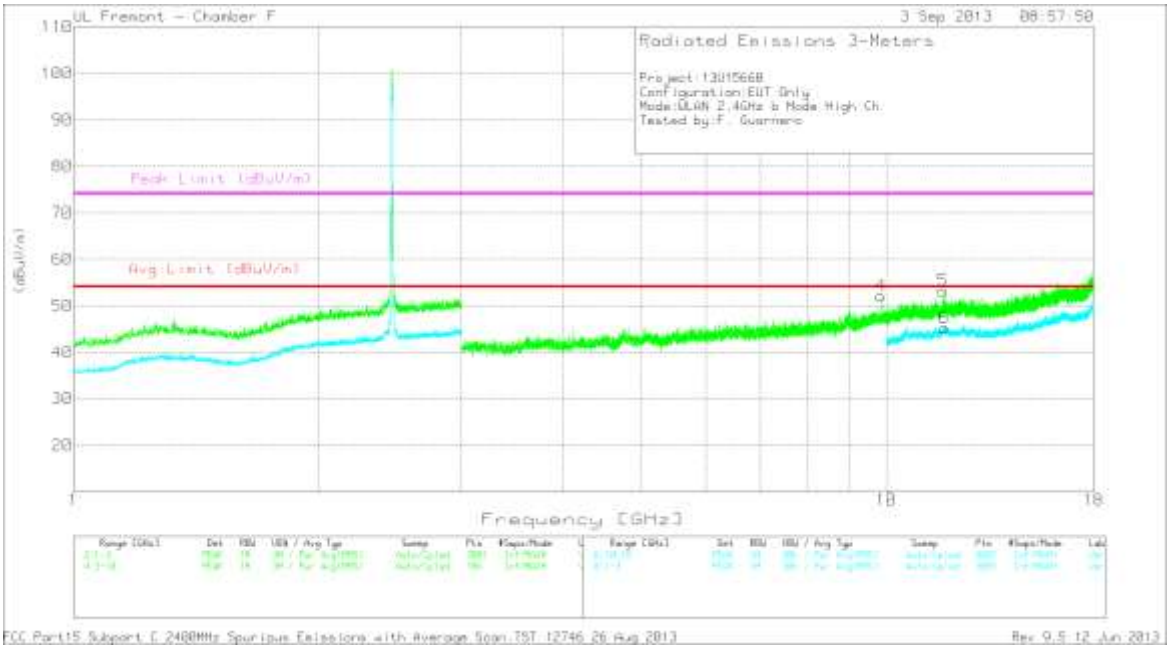
MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS CH11

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /10dB Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*2.415	43.93	PK	32.2	-22.5	53.63	-	-	-	-	0-360	100	H
2	*2.949	42.04	PK	33	-21.4	53.64	-	-	-	-	0-360	200	H
3	*6.479	39.06	PK	35.8	-26.9	47.96	-	-	-	-	0-360	100	H

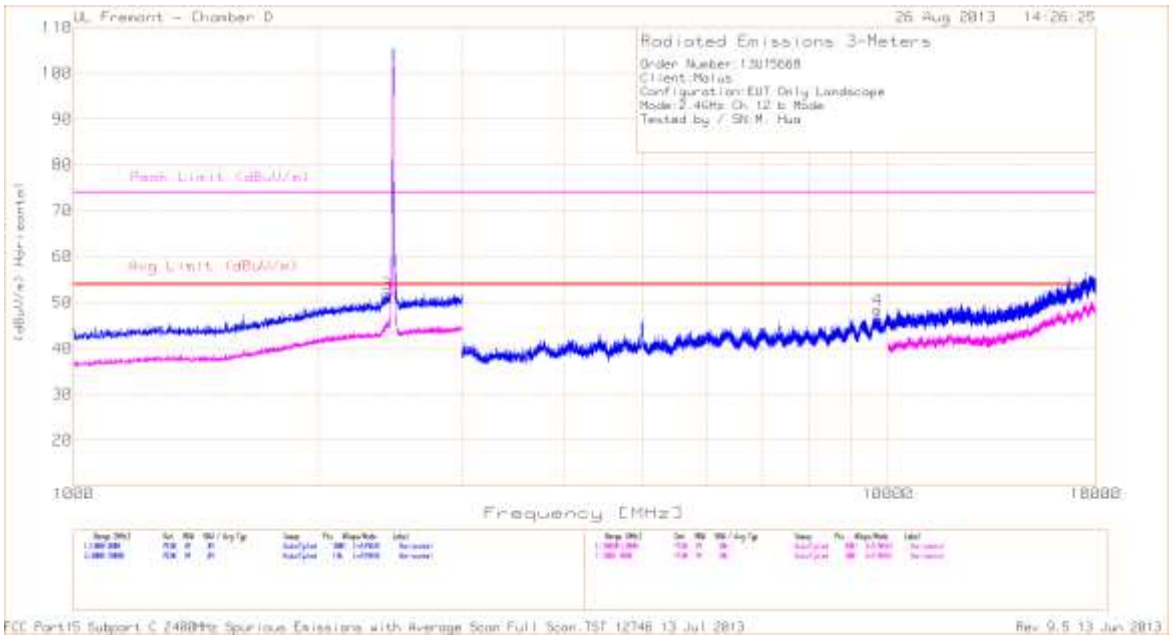
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /3GHz HPF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	*9.849	37.38	PK	37.6	-22.9	52.08	-	-	-	-	0-360	100	V
5	11.75	36.45	PK	39.2	-22.4	53.25	-	-	74	-20.75	0-360	100	V
6	11.785	28.26	PK (VB)	39.2	-22.2	45.26	53.97	-8.71	-	-	0-360	199	V

PK - Peak detector

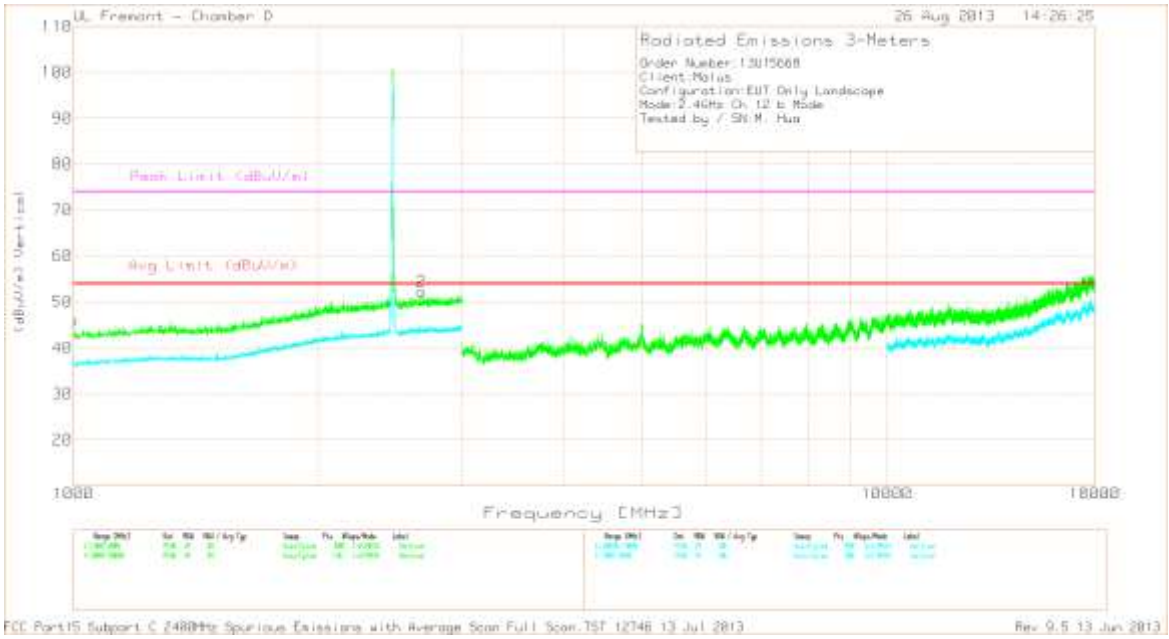
*Not in Restricted Band

HARMONICS AND SPURIOUS EMISSIONS CH12

CHANNEL 12 HORITONTAL PLOT



CHANNEL 12 VERTICAL PLOT



DATA

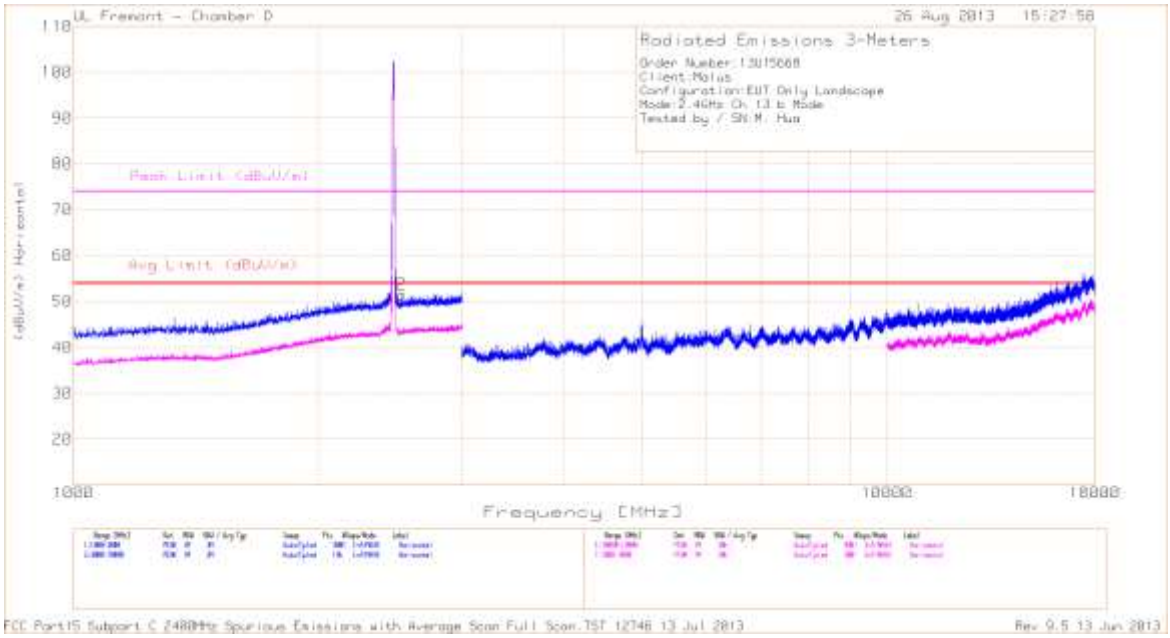
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T344 Ant Factor [dB/m]	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	1	44.64	PK	27.7	-26.2	46.14	53.97	-7.83	74	-27.86	300	V
2	*2.678	43.36	PK	32.8	-23.9	52.26	-	-	-	-	401	V
3	*2.425	43.76	PK	32.4	-24.3	51.86	-	-	-	-	201	H
4	*9.71	36.37	PK	37.4	-25.4	48.37	-	-	-	-	100	H

PK - Peak detector

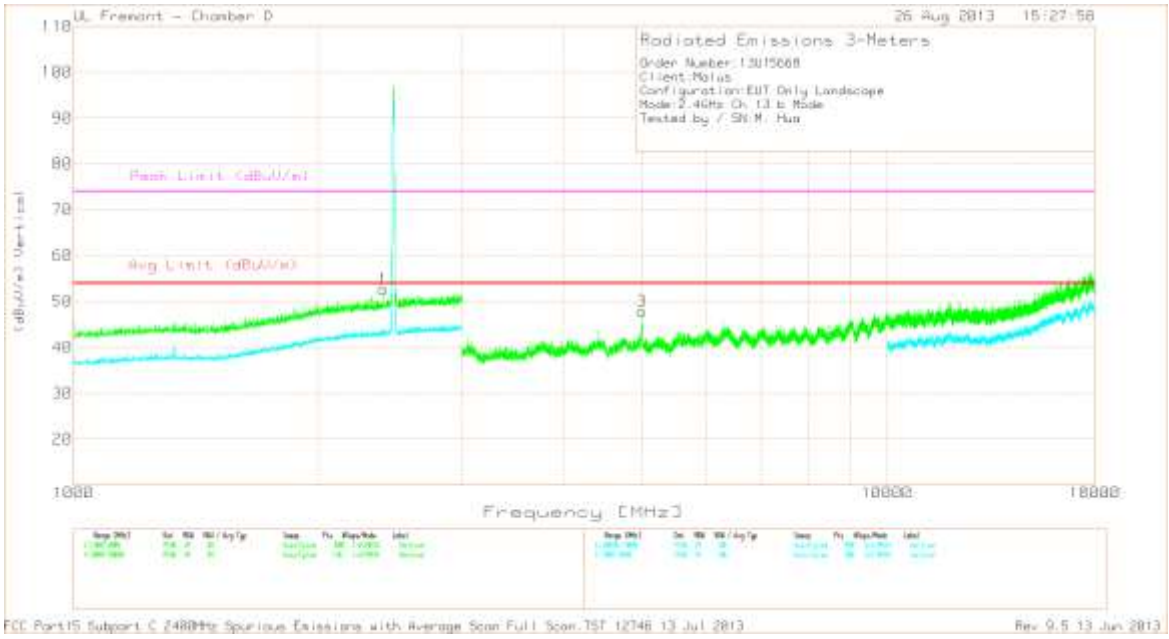
*Not in Restricted Band

HARMONICS AND SPURIOUS EMISSIONS CH13

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T344 Ant Factor [dB/m]	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	*2.53	43.16	PK	32.5	-24.1	51.56	-	-	-	-	100	H
1	*2.403	44.46	PK	32.4	-24.2	52.66	-	-	-	-	100	V
3	4.997	44.58	PK	34.3	-31	47.88	53.97	-6.09	74	-26.12	100	V

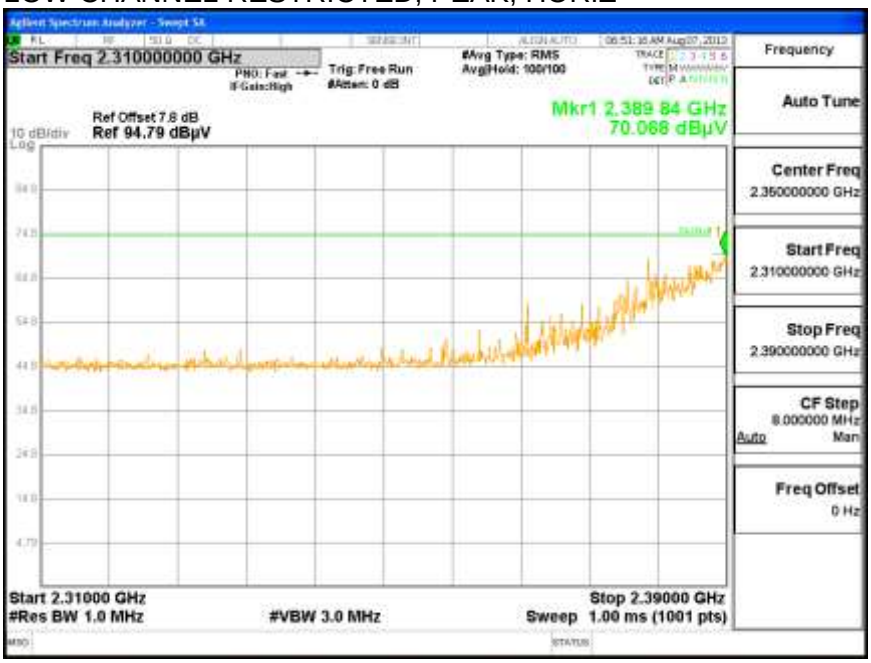
PK - Peak detector

*Not in Restricted Band

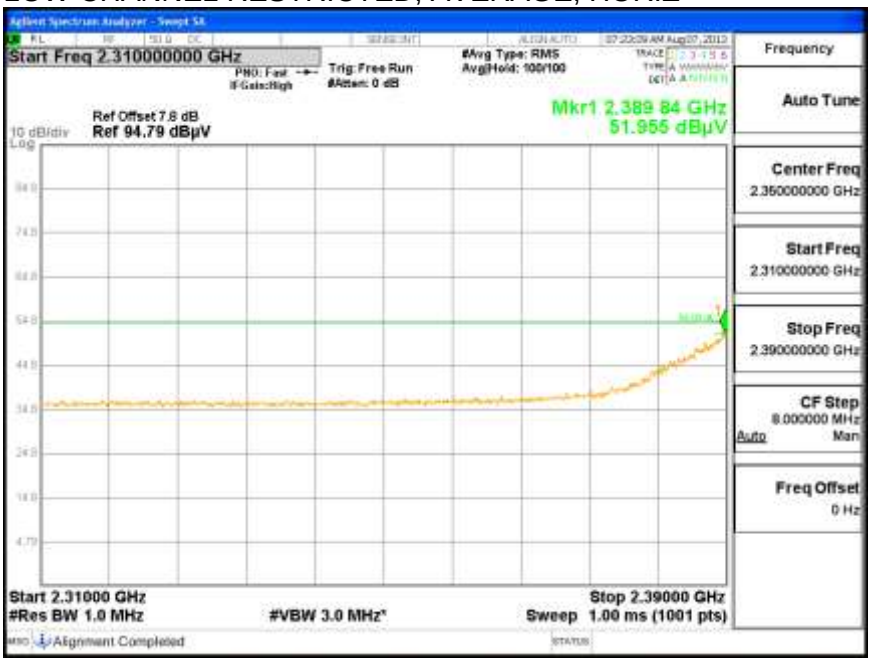
9.2.2. TX ABOVE 1 GHz 802.11g MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL) CH1

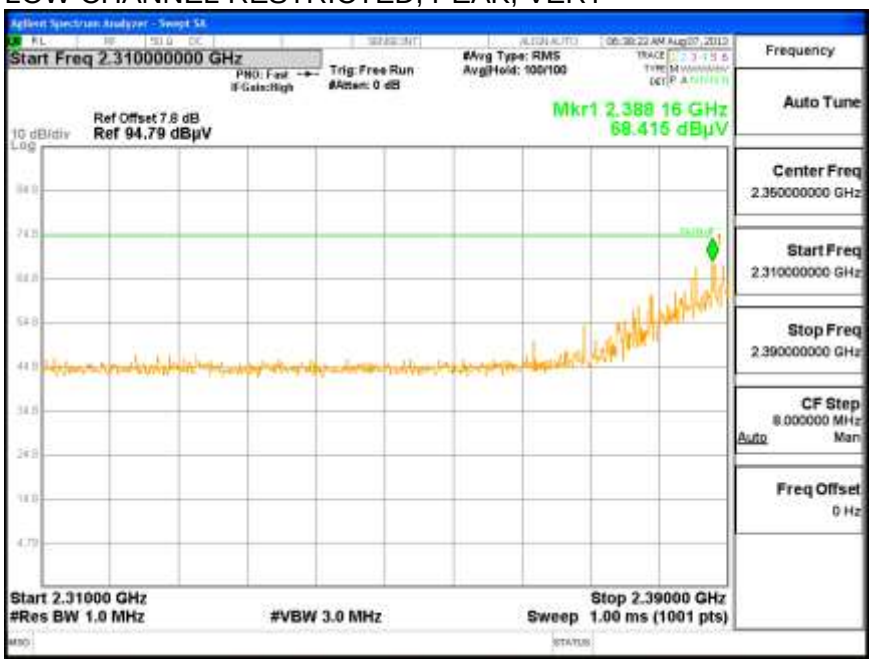
LOW CHANNEL RESTRICTED, PEAK, HORIZ



LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



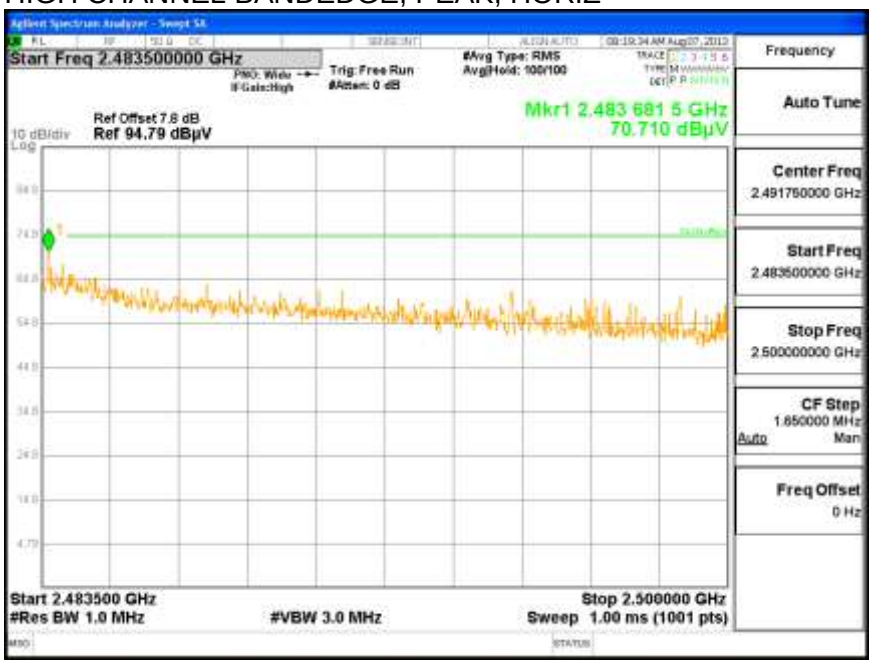
LOW CHANNEL RESTRICTED, PEAK, VERT



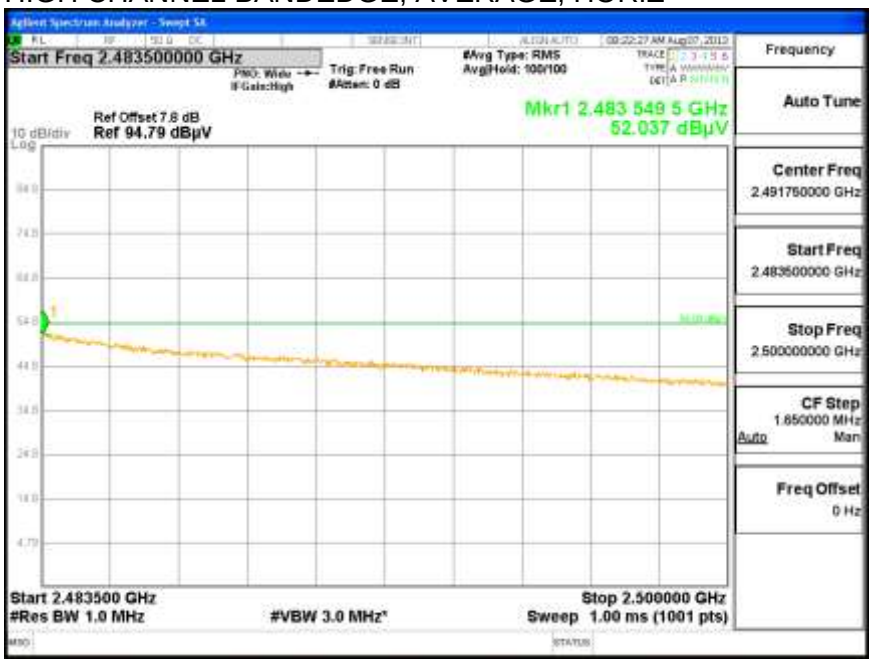
LOW CHANNEL RESTRICTED, AVERAGE, VERT

AUTHORIZED BANDEDGE (HIGH CHANNEL) CH11

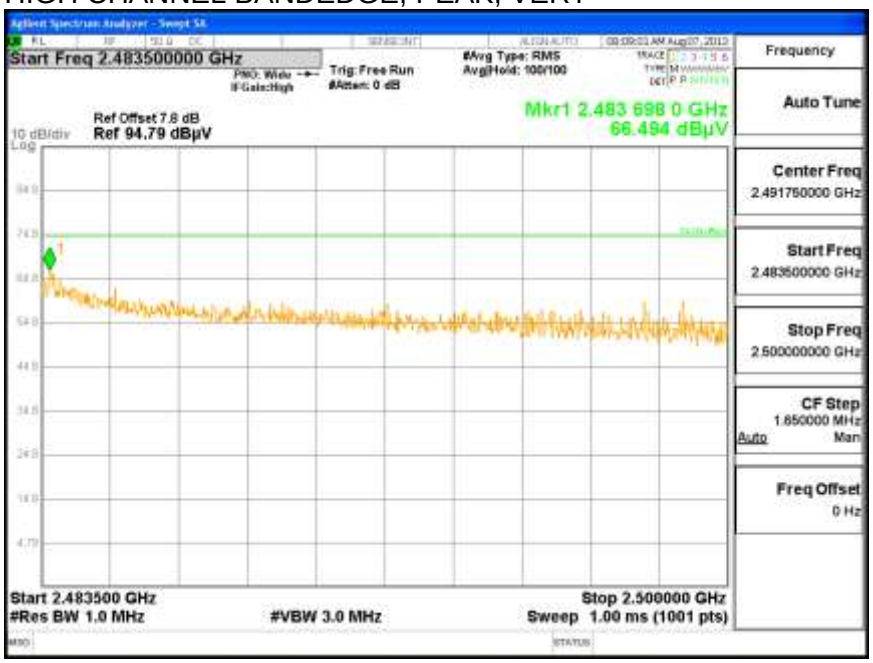
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



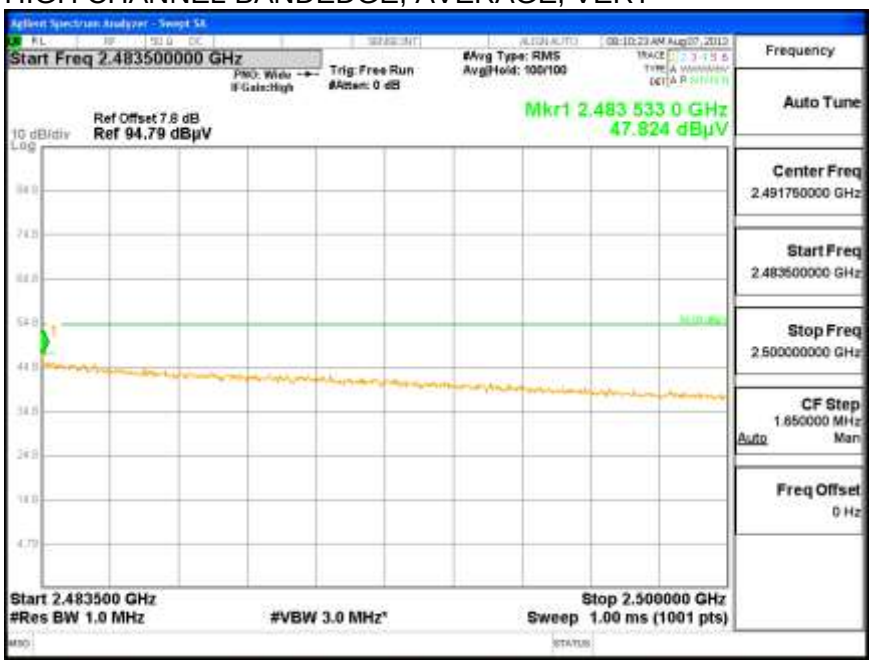
HIGH CHANNEL BANDEDGE, AVERAGE, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT

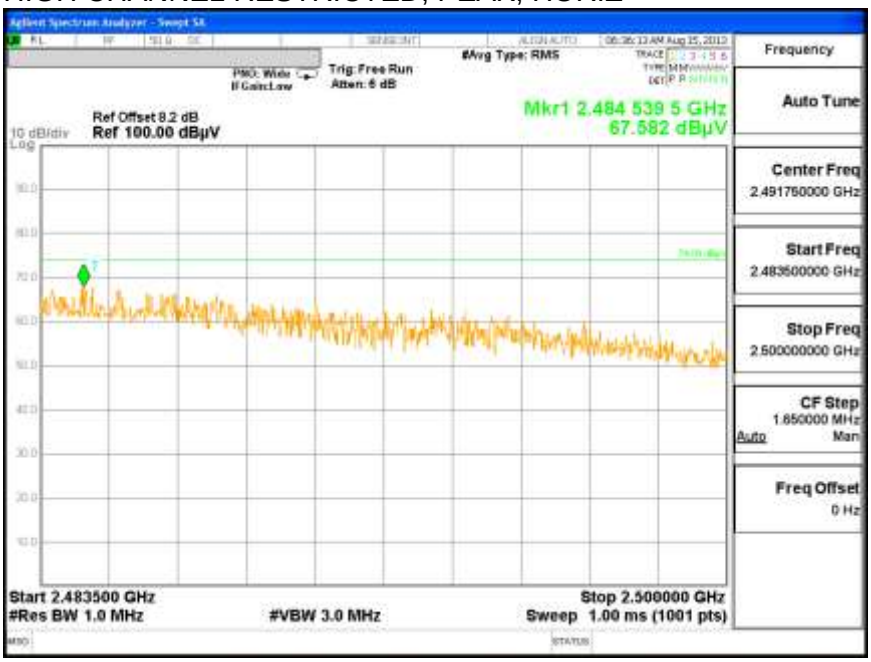


HIGH CHANNEL BANDEDGE, AVERAGE, VERT

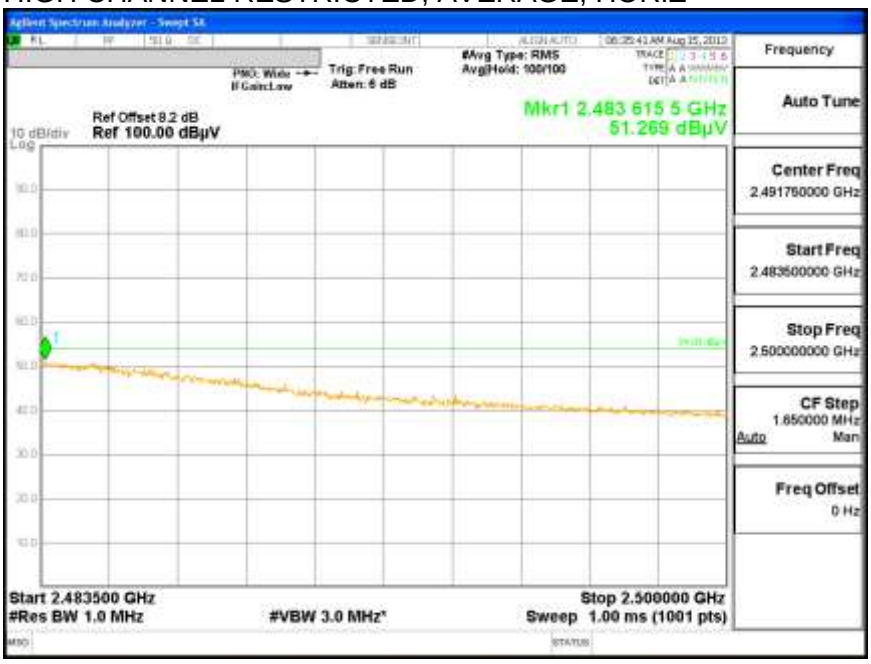


RESTRICTED BANDEDGE CH12

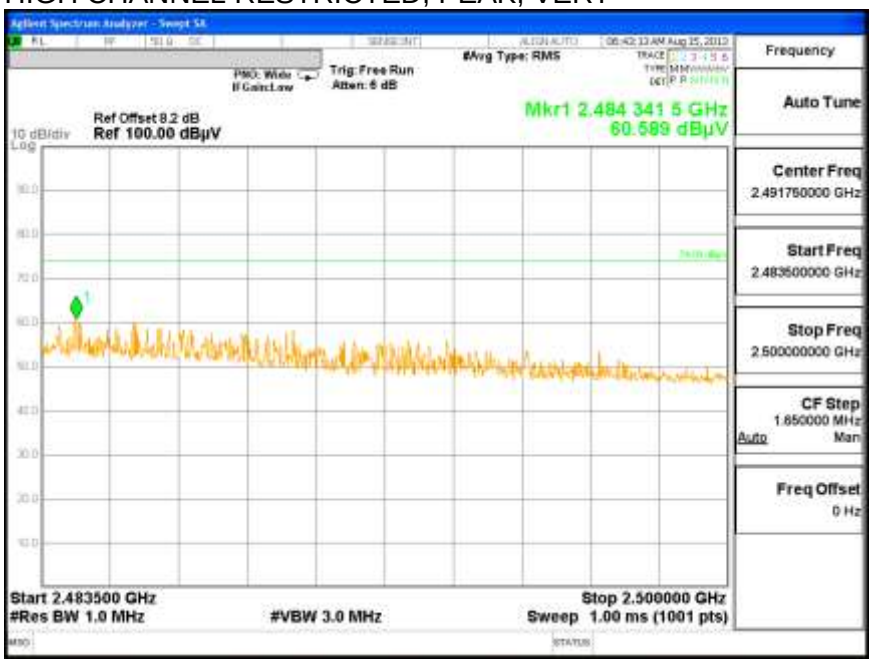
HIGH CHANNEL RESTRICTED, PEAK, HORIZ



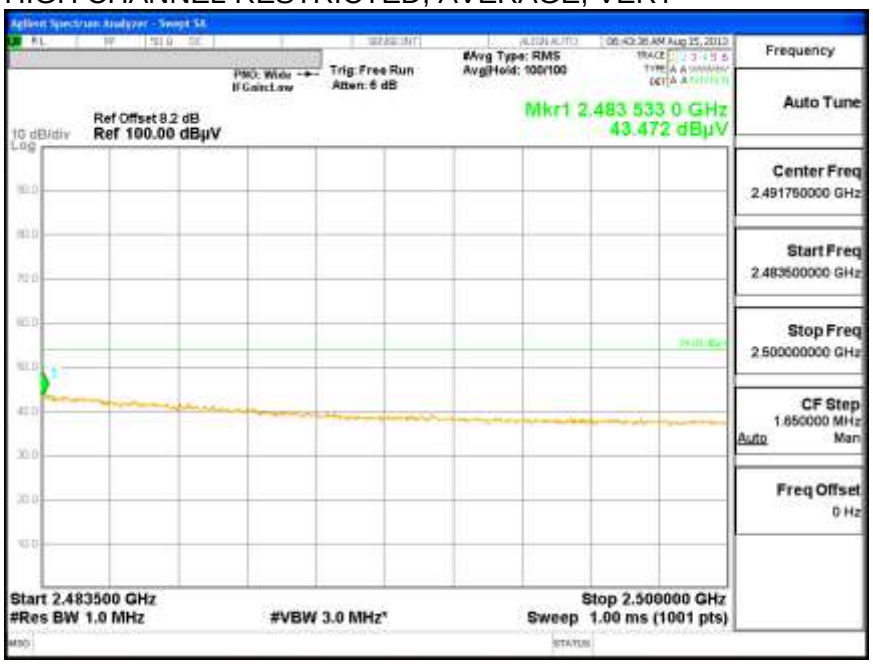
HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ



HIGH CHANNEL RESTRICTED, PEAK, VERT

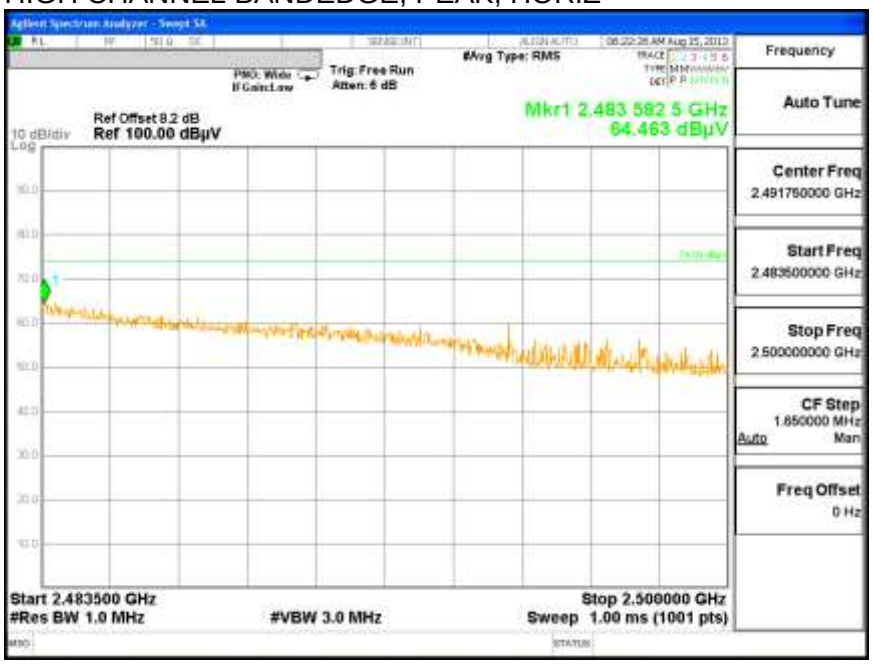


HIGH CHANNEL RESTRICTED, AVERAGE, VERT

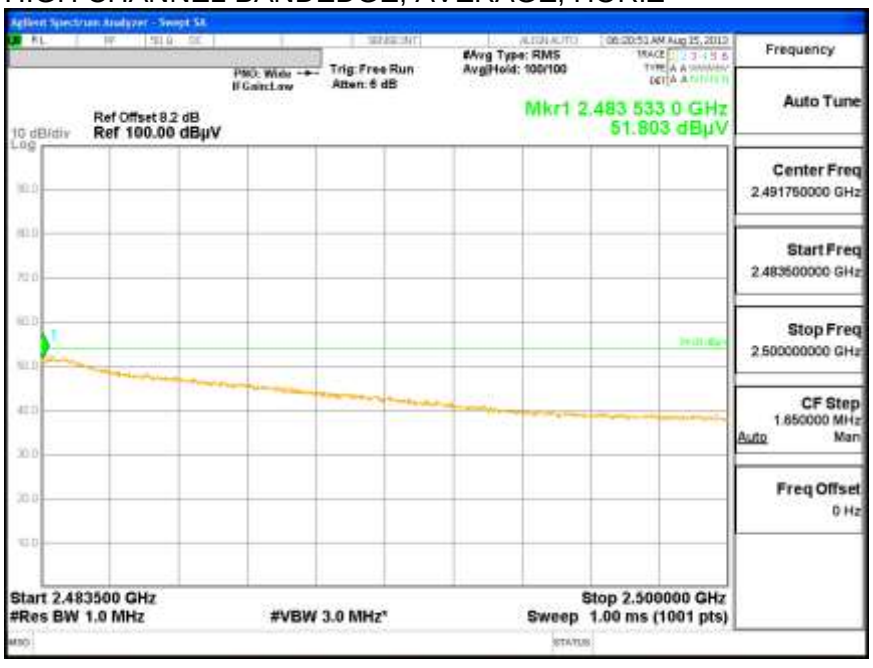


AUTHORIZED BANDEDGE CH13

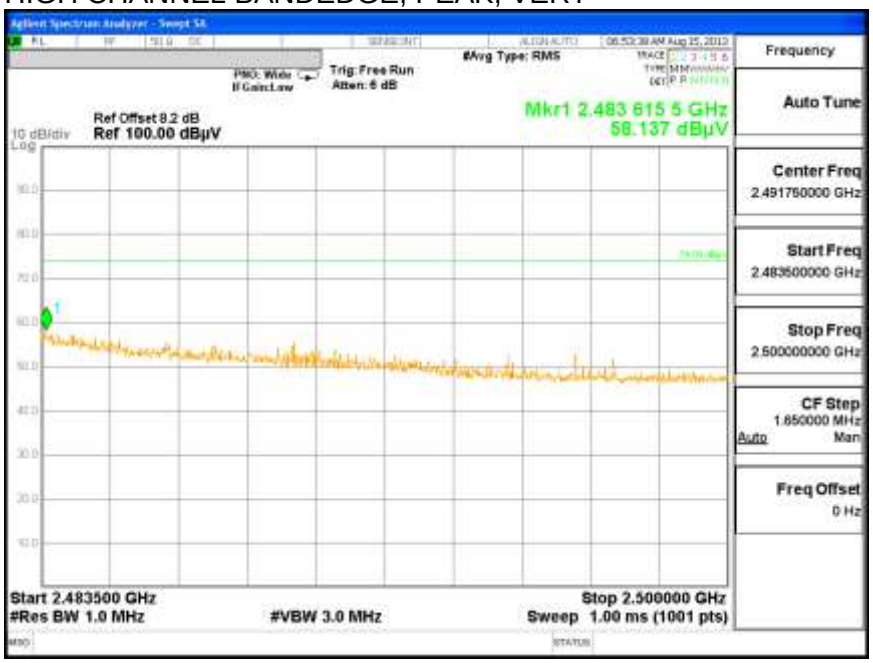
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



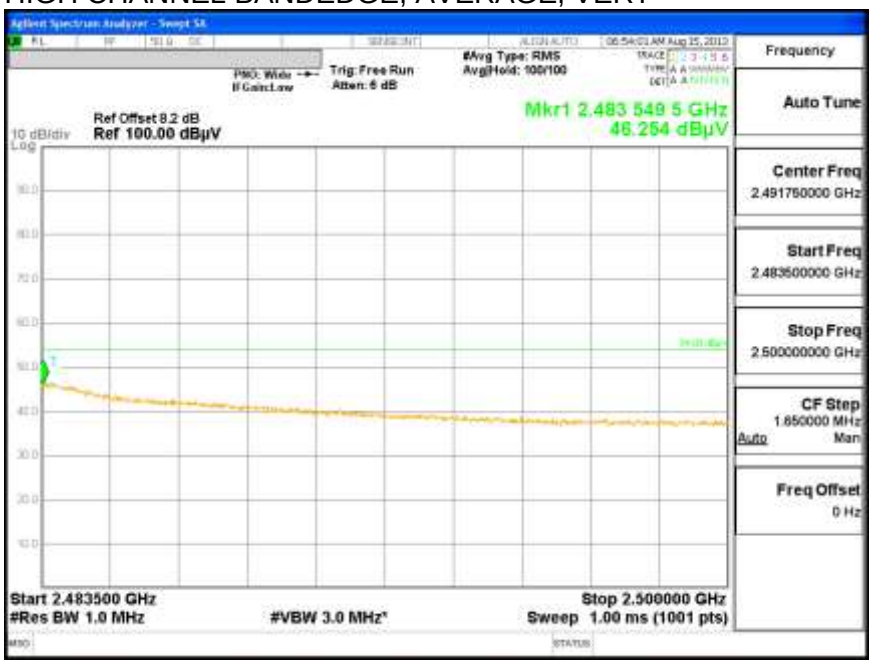
HIGH CHANNEL BANDEDGE, AVERAGE, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT

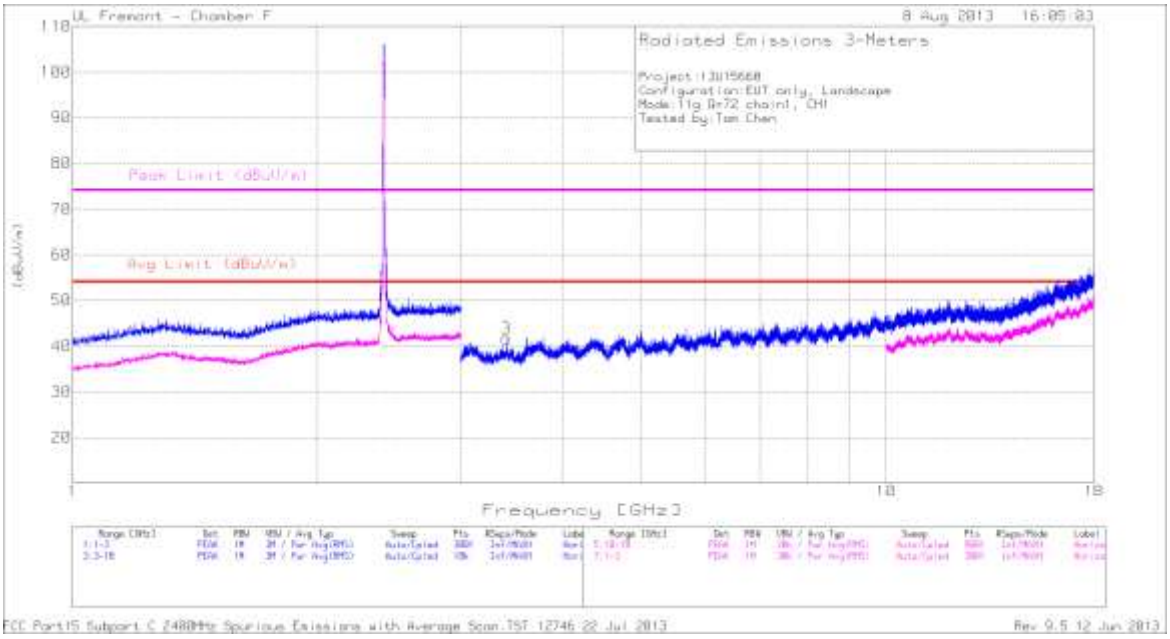


HIGH CHANNEL BANDEDGE, AVERAGE, VERT

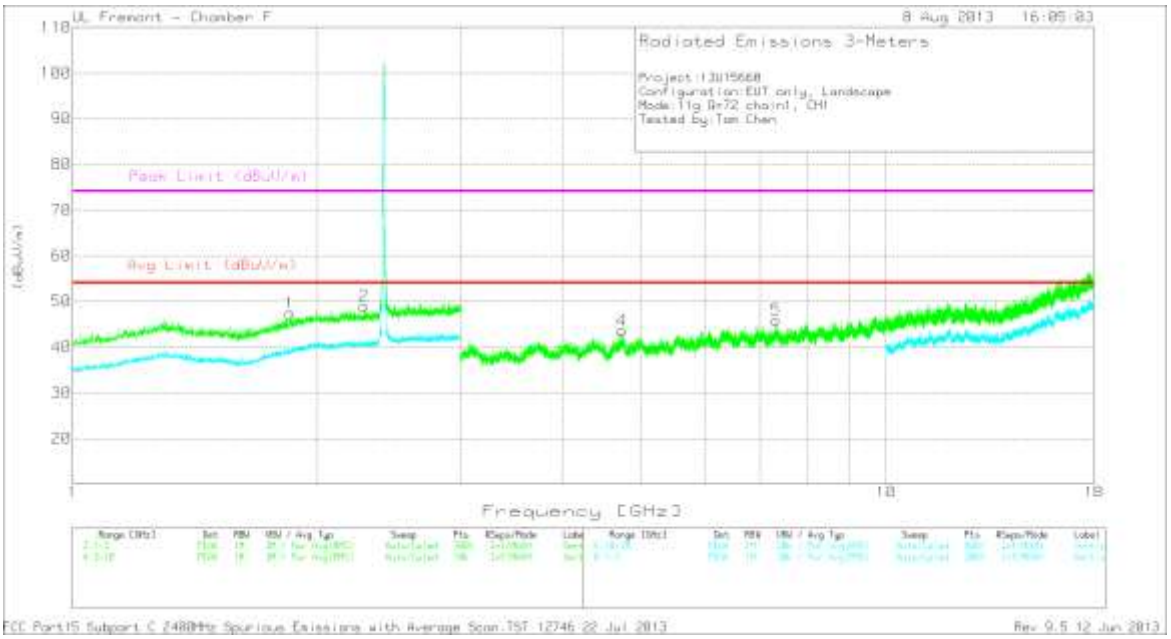


HARMONICS AND SPURIOUS EMISSIONS CH1

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

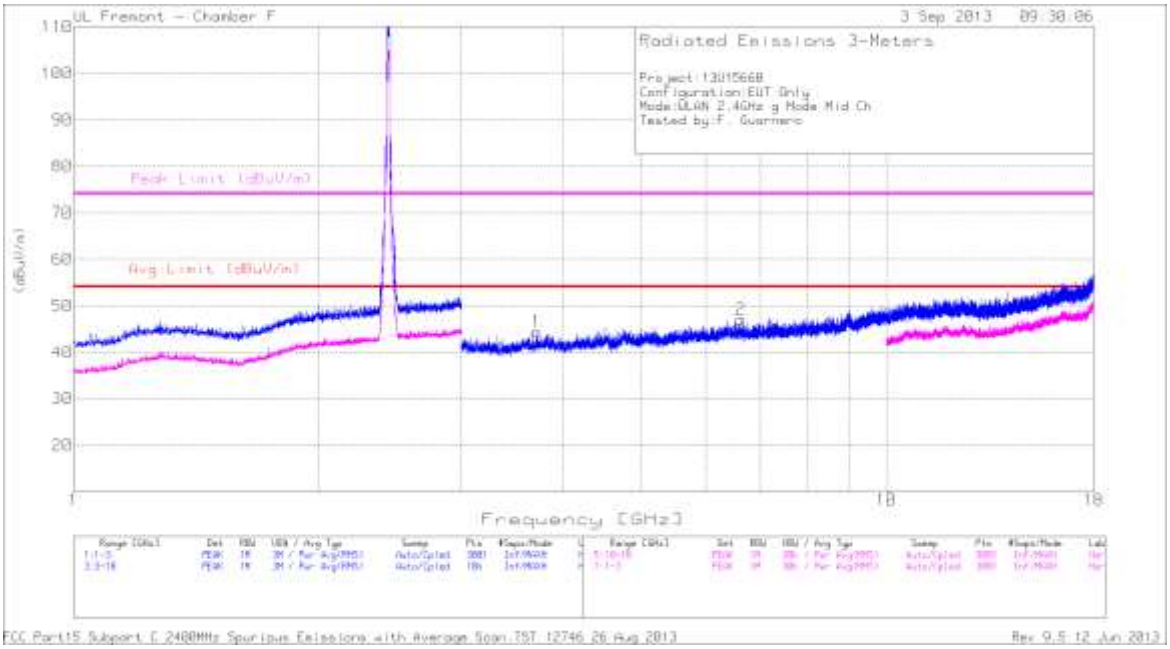
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	*1.852	41.58	PK	30.7	-24.9	0	47.38	-	-	-	-	0-360	100	V
2	2.283	41.31	PK	32	-24.4	0	48.91	53.97	-5.06	74	-25.09	0-360	100	V
3	*3.415	40.77	PK	33	-32.1	0	41.67	-	-	-	-	0-360	200	H
4	4.737	40.58	PK	34.1	-31.1	0	43.58	53.97	-10.39	74	-30.42	0-360	100	V
5	7.324	38.58	PK	35.7	-28.4	0	45.88	53.97	-8.09	74	-28.12	0-360	199	V

PK - Peak detector

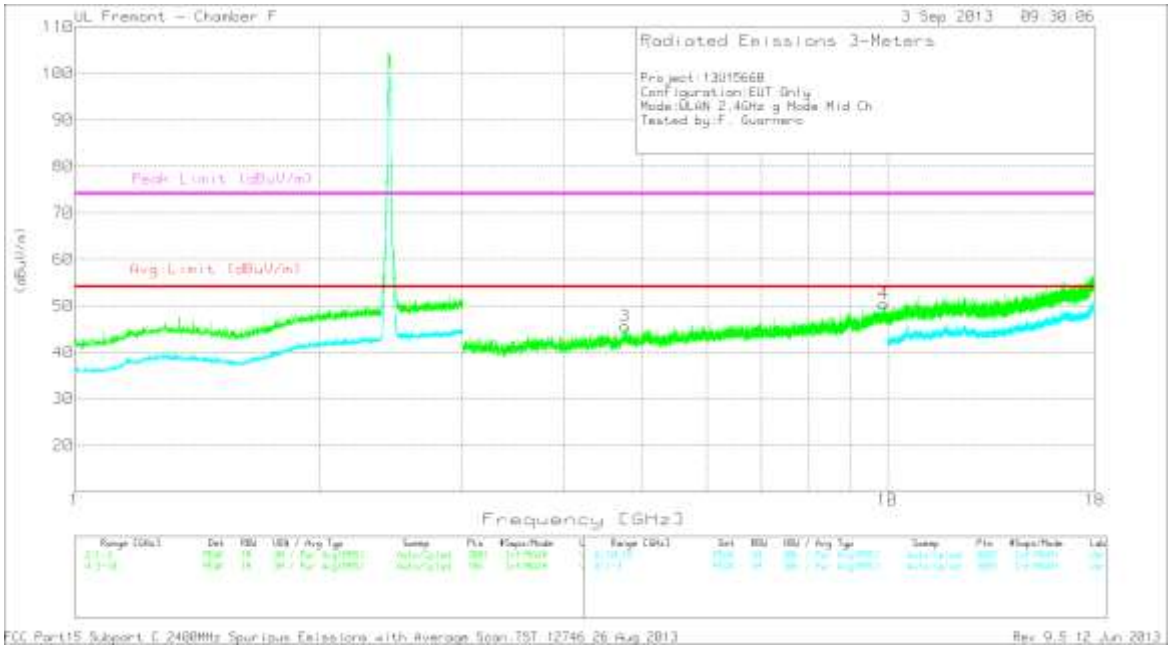
*Not in Restricted Band

HARMONICS AND SPURIOUS EMISSIONS CH6

MID CHANNEL HORITONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

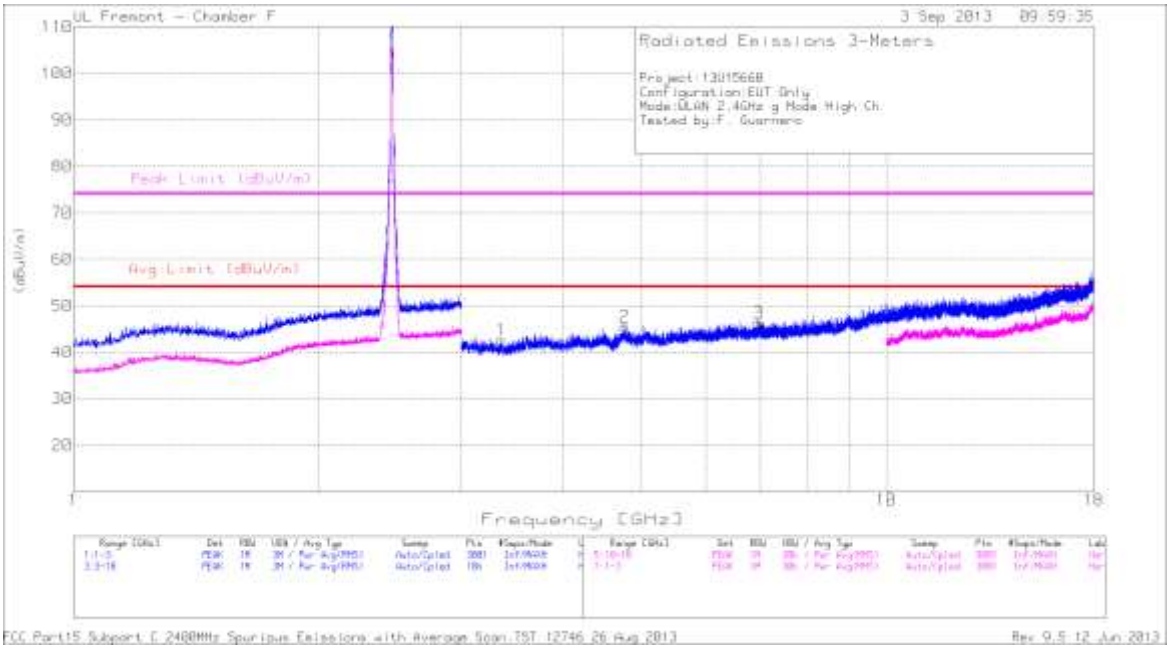
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /3GHz HPF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.715	40.3	PK	33.5	-29.4	44.4	53.97	-9.57	74	-29.6	0-360	101	H
2	*6.62	37.89	PK	35.8	-26.6	47.09	-	-	-	-	0-360	101	H
3	4.757	39.83	PK	34.1	-28.3	45.63	53.97	-8.34	74	-28.37	0-360	199	V
4	*9.901	35.31	PK	37.6	-22.5	50.41	-	-	-	-	0-360	100	V

PK - Peak detector

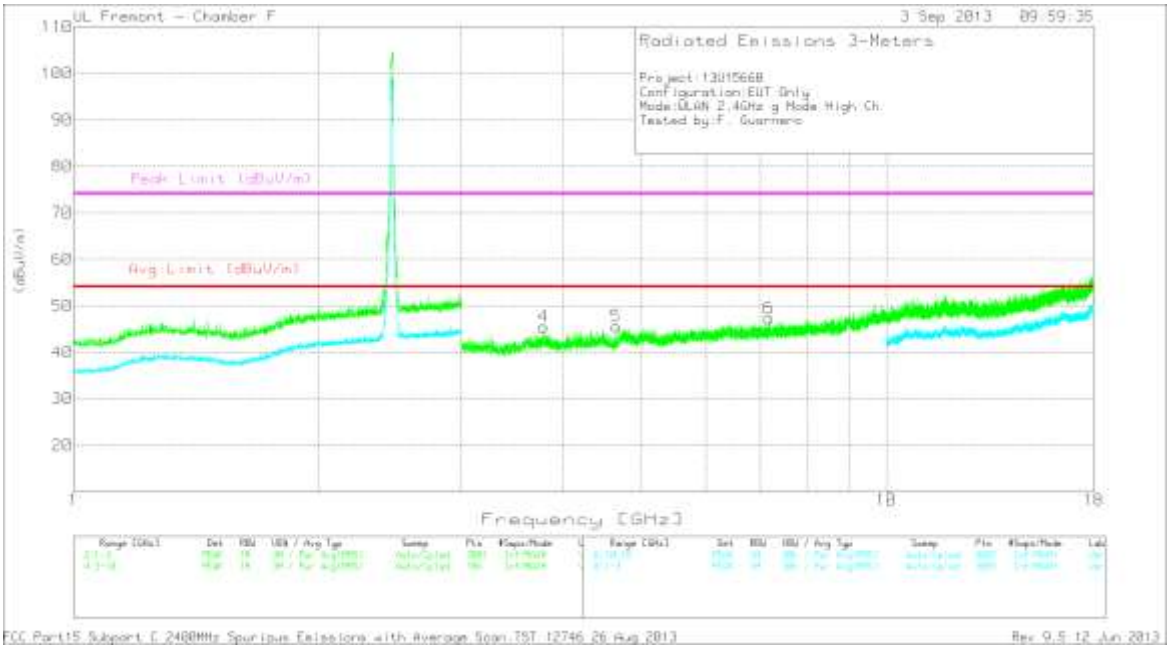
*Not in Restricted Band

HARMONICS AND SPURIOUS EMISSIONS CH11

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

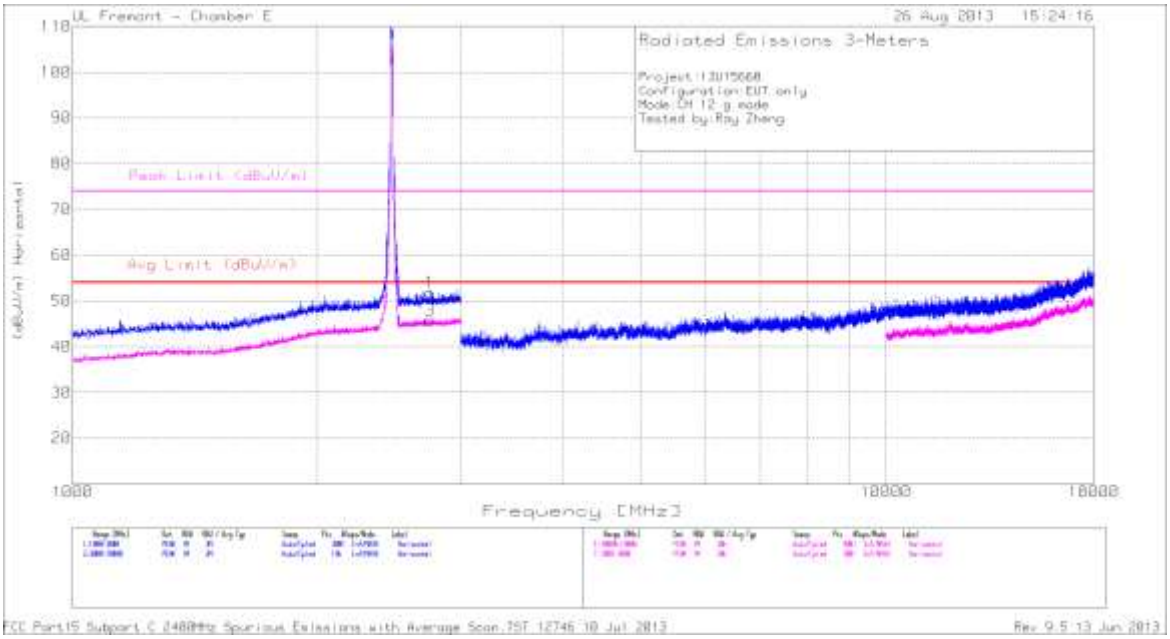
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /3GHz HPF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.361	39	PK	33	-29.4	42.6	53.97	-11.37	74	-31.4	0-360	100	H
2	4.772	39.52	PK	34.1	-28.1	45.52	53.97	-8.45	74	-28.48	0-360	100	H
3	*6.966	37.06	PK	35.7	-26.5	46.26	-	-	-	-	0-360	100	H
4	3.788	40.8	PK	33.6	-28.9	45.5	53.97	-8.47	74	-28.5	0-360	199	V
5	4.654	40.38	PK	34.1	-28.9	45.58	53.97	-8.39	74	-28.42	0-360	100	V
6	*7.171	38.14	PK	35.7	-26.5	47.34	-	-	-	-	0-360	199	V

PK - Peak detector

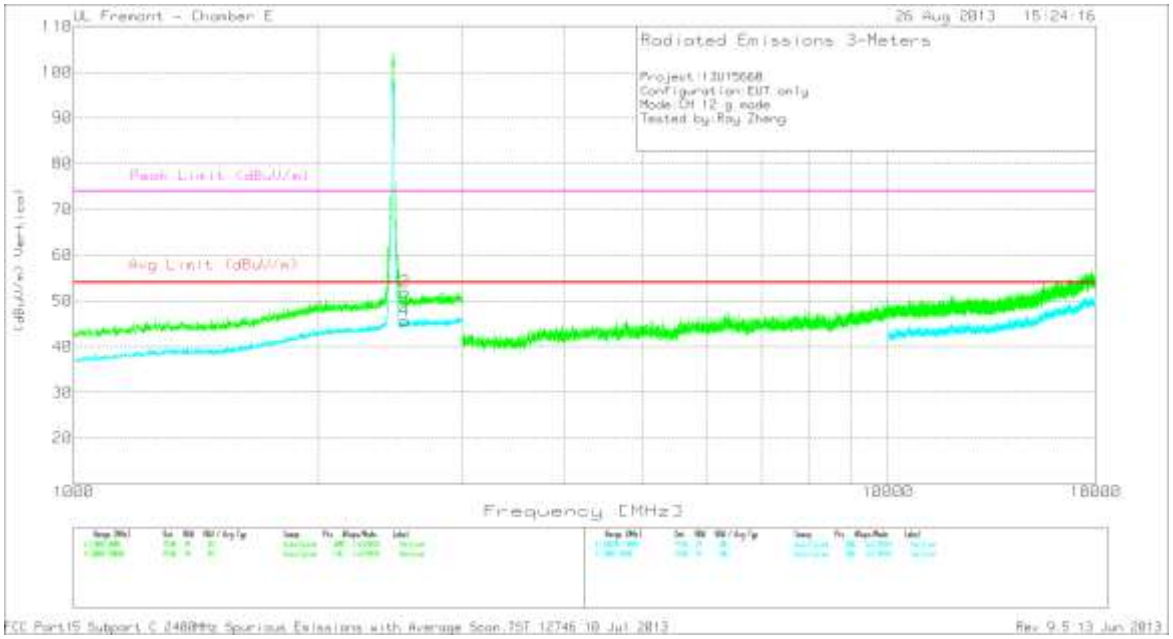
*Not in Restricted Band

HARMONICS AND SPURIOUS EMISSIONS CH12

CHANNEL 12 HORITONTAL PLOT



CHANNEL 12 VERTICAL PLOT



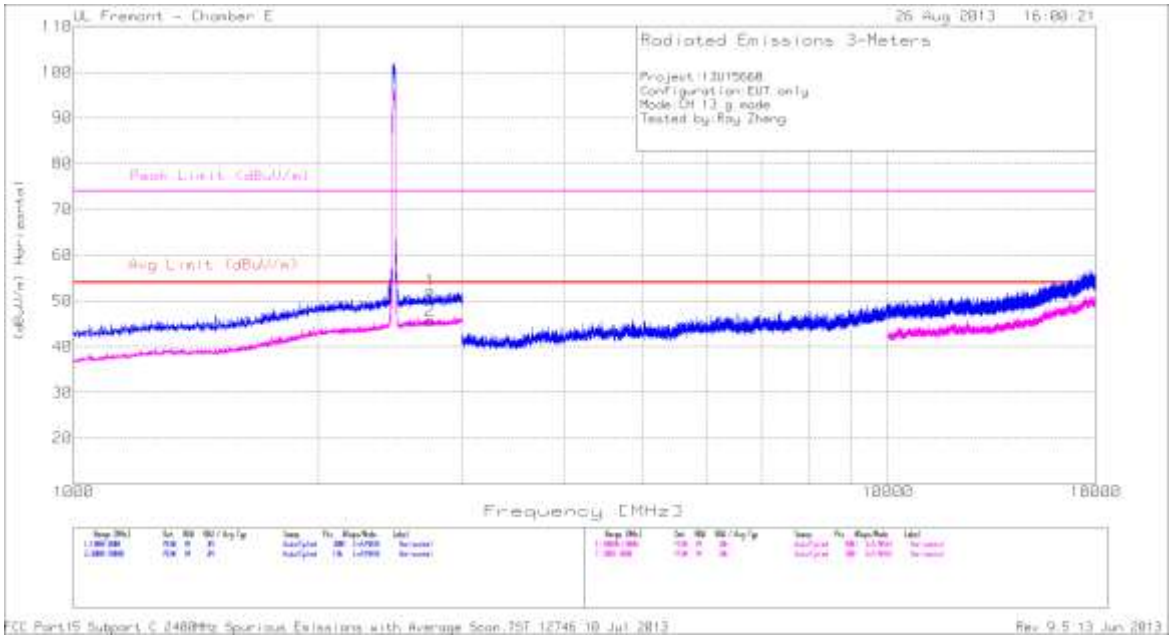
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 10dB Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	2.749	42.91	PK	33.2	-24.3	51.81	53.97	-	74	-22.19	99	H
2	2.551	43.42	PK	32.8	-24.2	52.02	53.97	-	74	-21.98	101	V
3	2.751	36.9	AVG	33.2	-24.3	45.8	53.97	-8.17	-	-	199	H
4	2.551	37.01	AVG	32.8	-24.2	45.61	53.97	-8.36	-	-	199	V

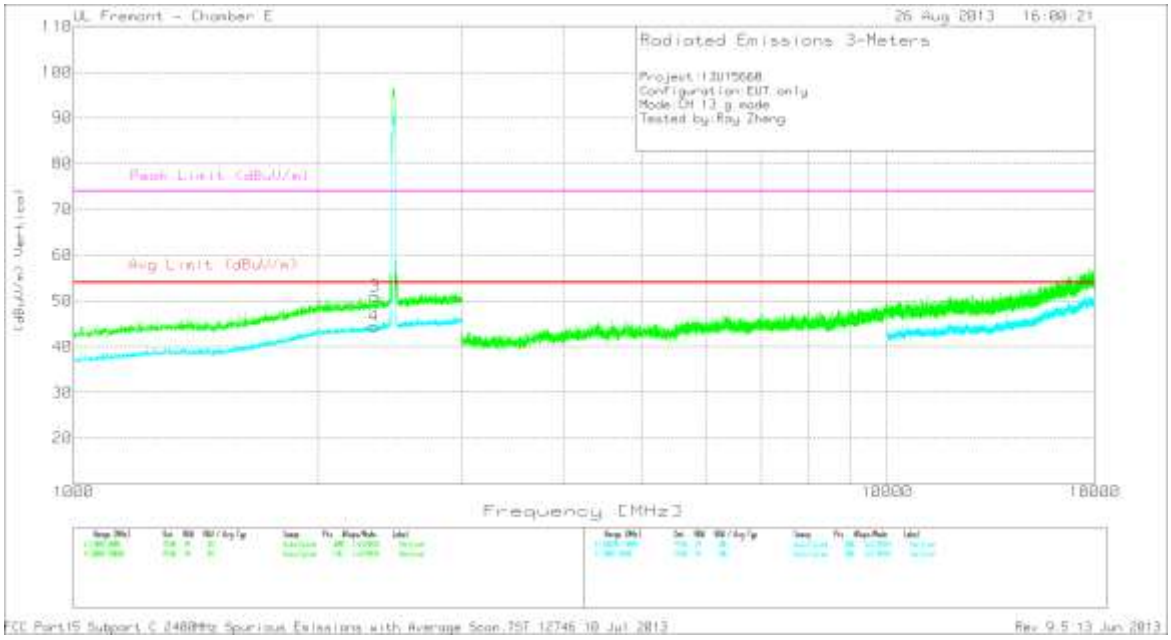
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS CH13

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

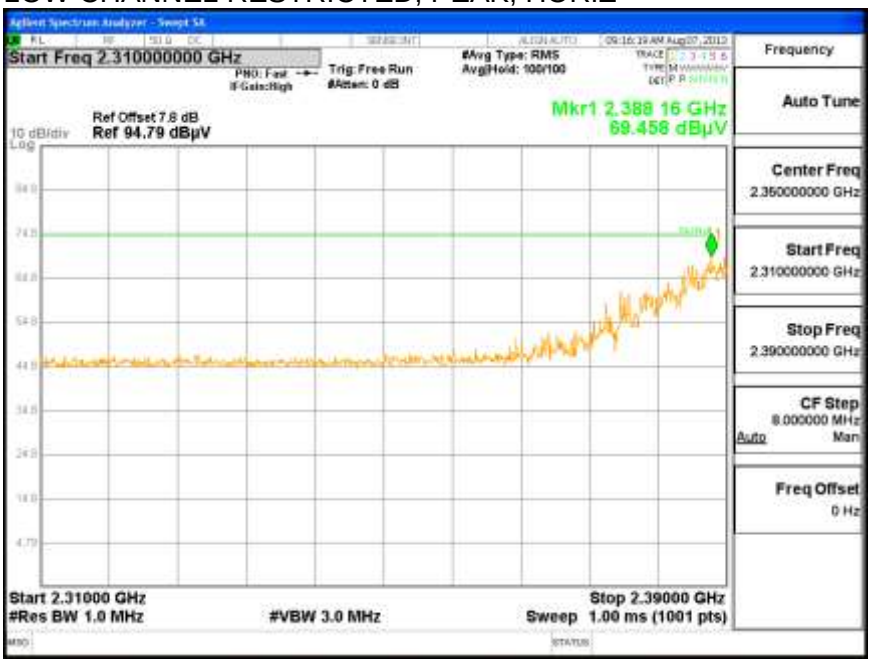
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 10dB Pad	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	2.742	43.38	PK	33.2	-24.4	52.18	-	-	74	-21.82	199	H
2	2.741	36.78	PK (VB)	33.2	-24.4	45.58	53.97	-8.39	-	-	199	H
3	2.347	43.64	PK	32.5	-25.1	51.04	-	-	74	-22.96	100	V
4	2.346	37.04	PK (VB)	32.5	-25.1	44.44	53.97	-9.53	-	-	199	V

PK - Peak detector

9.2.3. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 2.4 GHz BAND

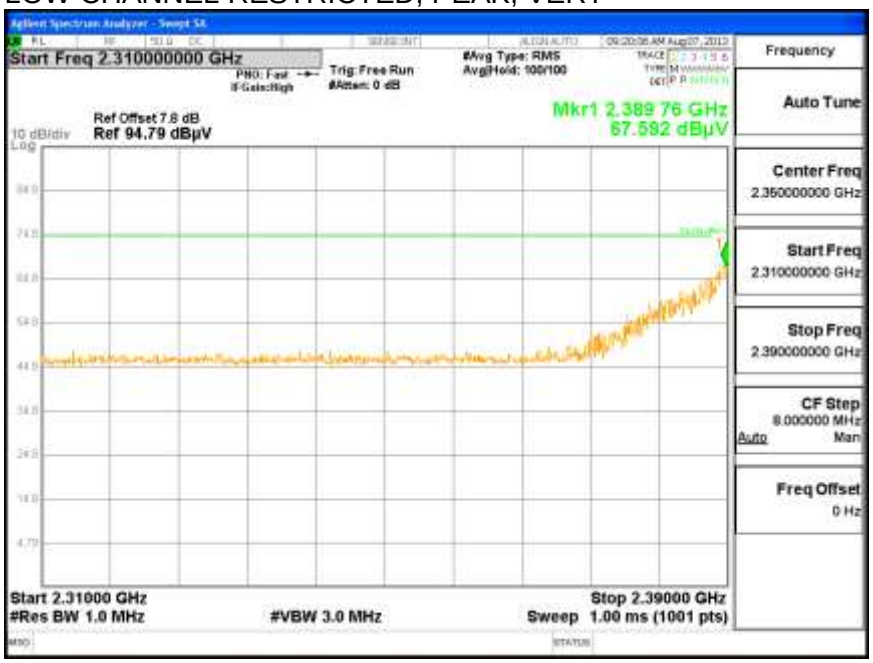
RESTRICTED BANDEDGE (LOW CHANNEL) CH1

LOW CHANNEL RESTRICTED, PEAK, HORIZ

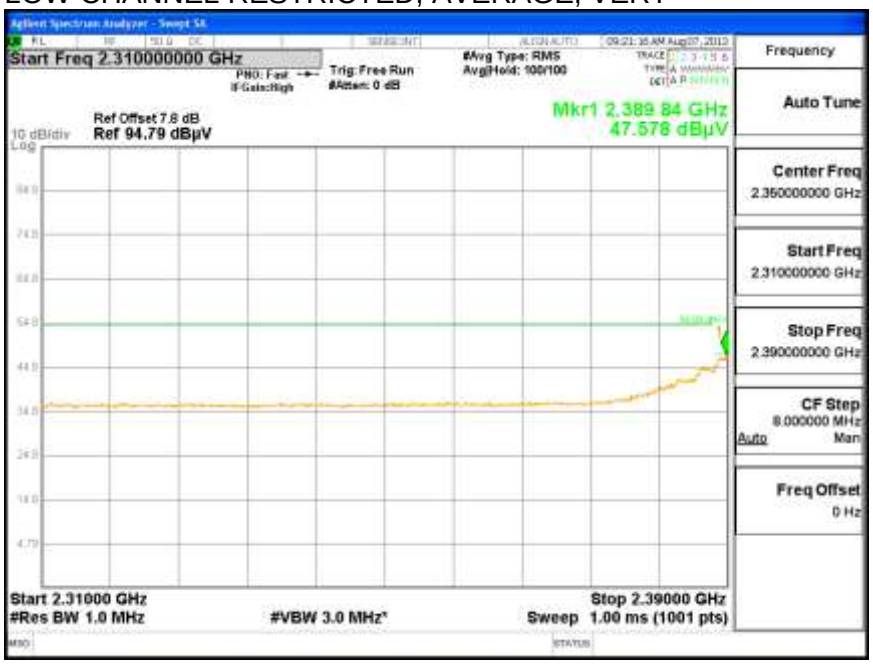


LOW CHANNEL RESTRICTED, AVERAGE, HORIZ

LOW CHANNEL RESTRICTED, PEAK, VERT

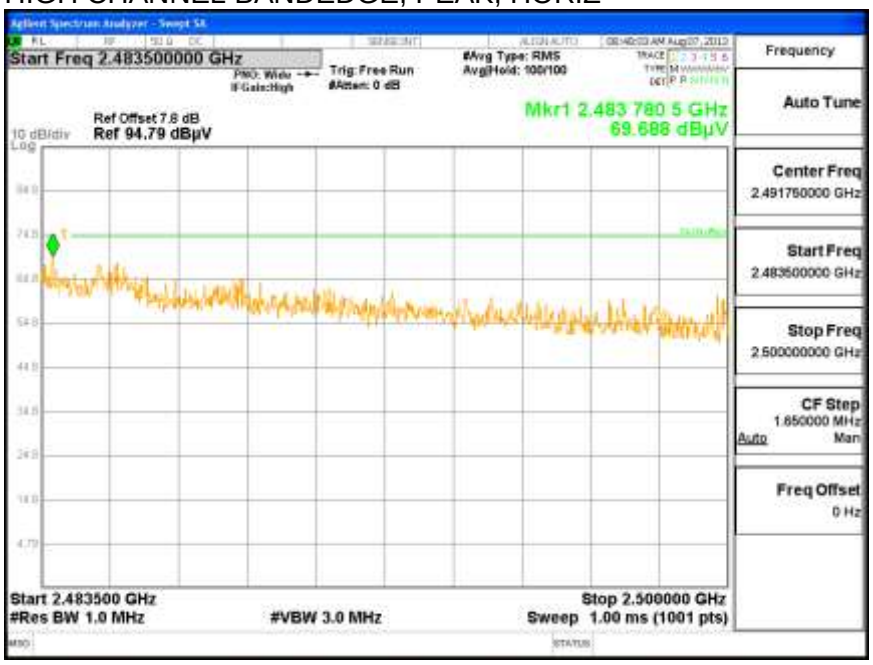


LOW CHANNEL RESTRICTED, AVERAGE, VERT



AUTHORIZED BANDEDGE (HIGH CHANNEL) CH11

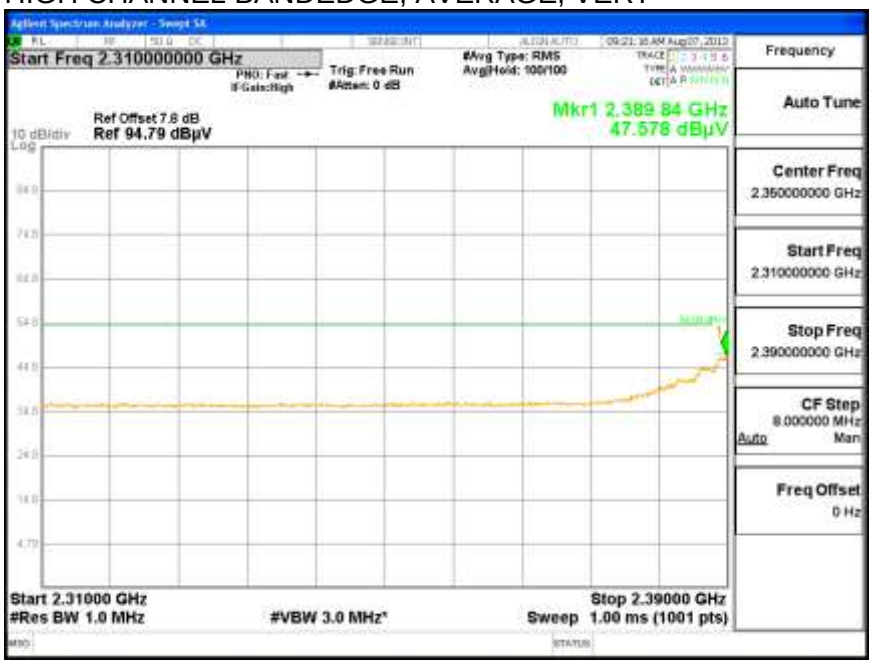
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



HIGH CHANNEL BANDEDGE, AVERAGE, HORIZ

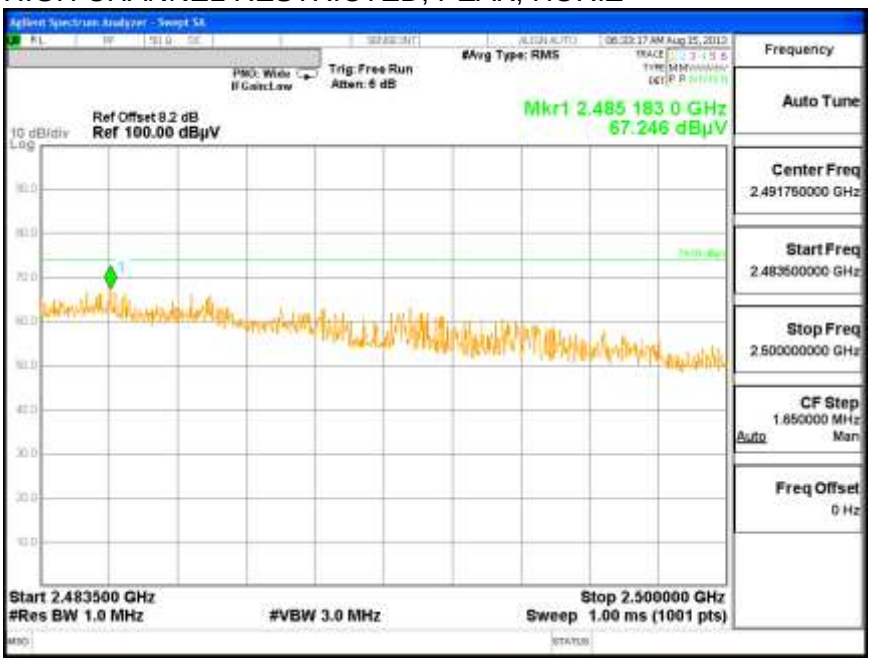
HIGH CHANNEL BANDEDGE, PEAK, VERT

HIGH CHANNEL BANDEDGE, AVERAGE, VERT

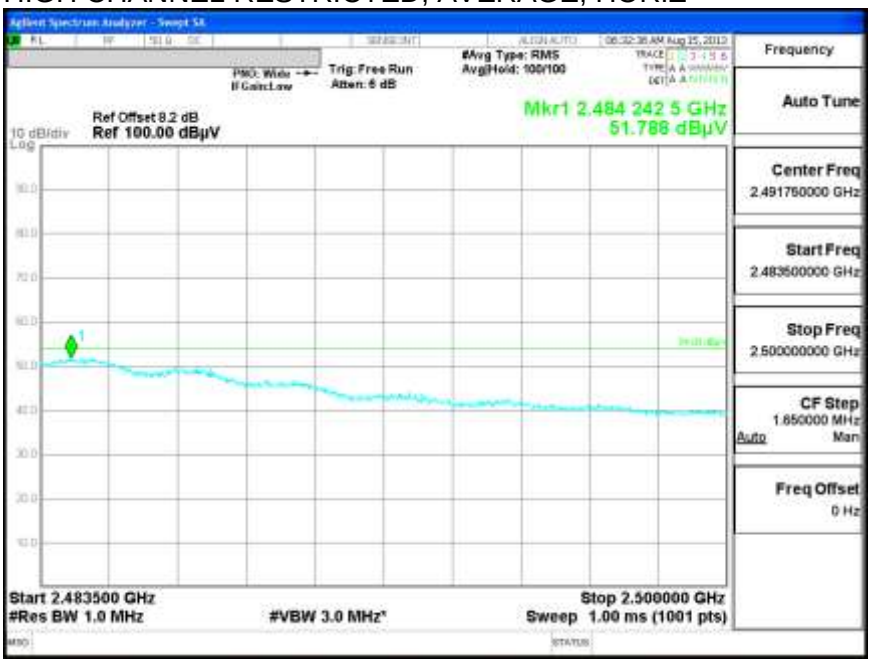


RESTRICTED BANDEDGE CH12

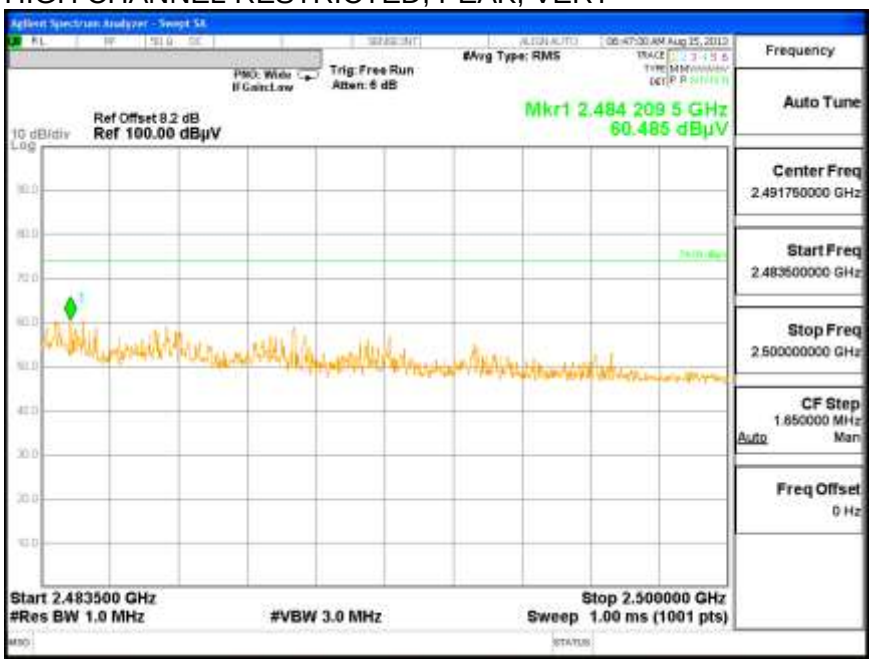
HIGH CHANNEL RESTRICTED, PEAK, HORIZ



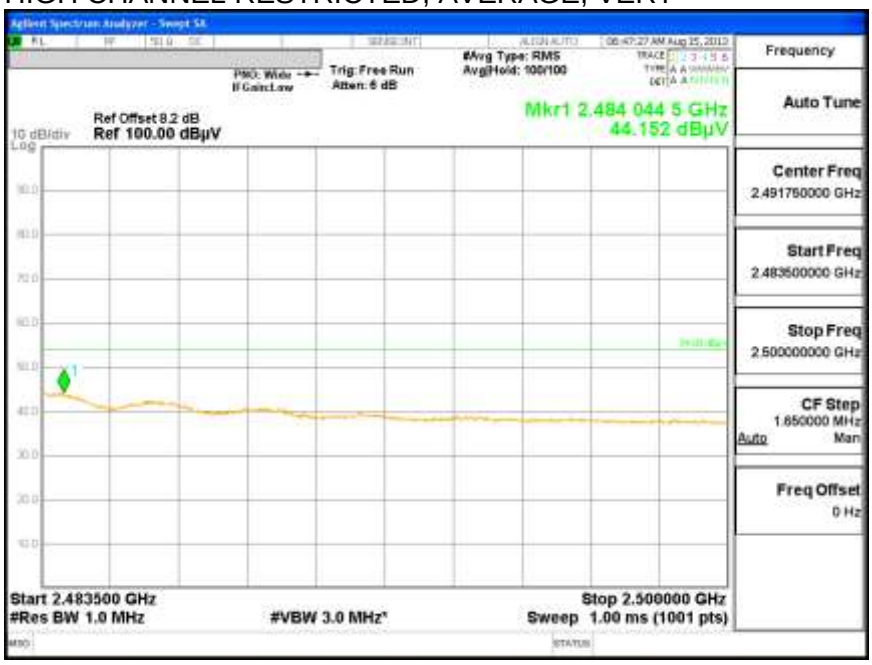
HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ



HIGH CHANNEL RESTRICTED, PEAK, VERT

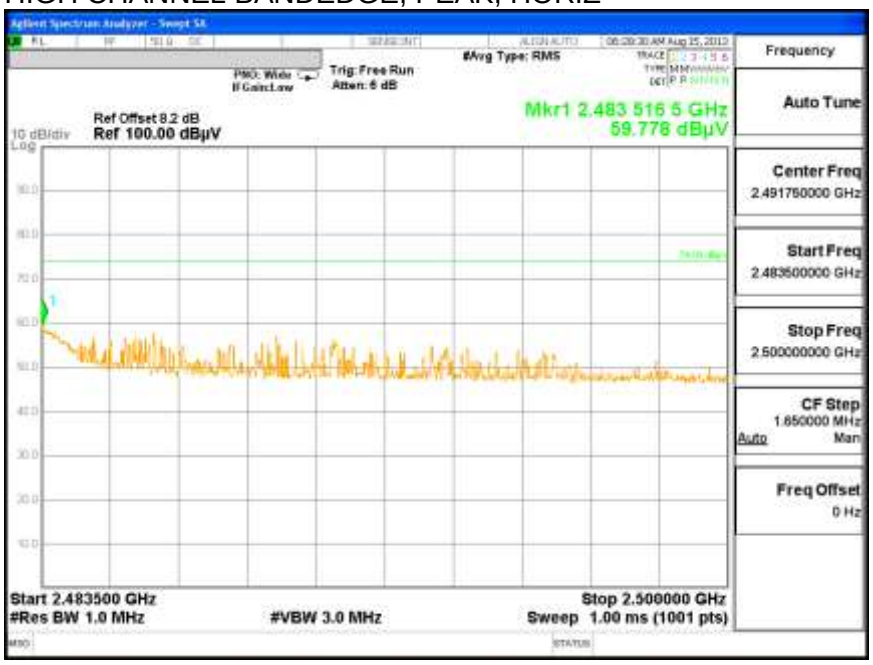


HIGH CHANNEL RESTRICTED, AVERAGE, VERT

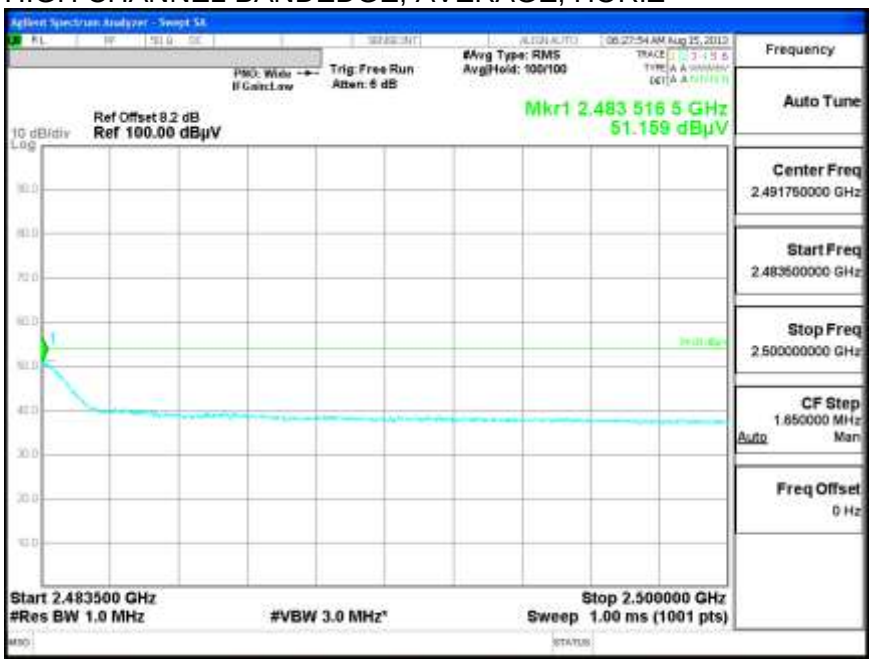


AUTHORIZED BANDEDGE CH13

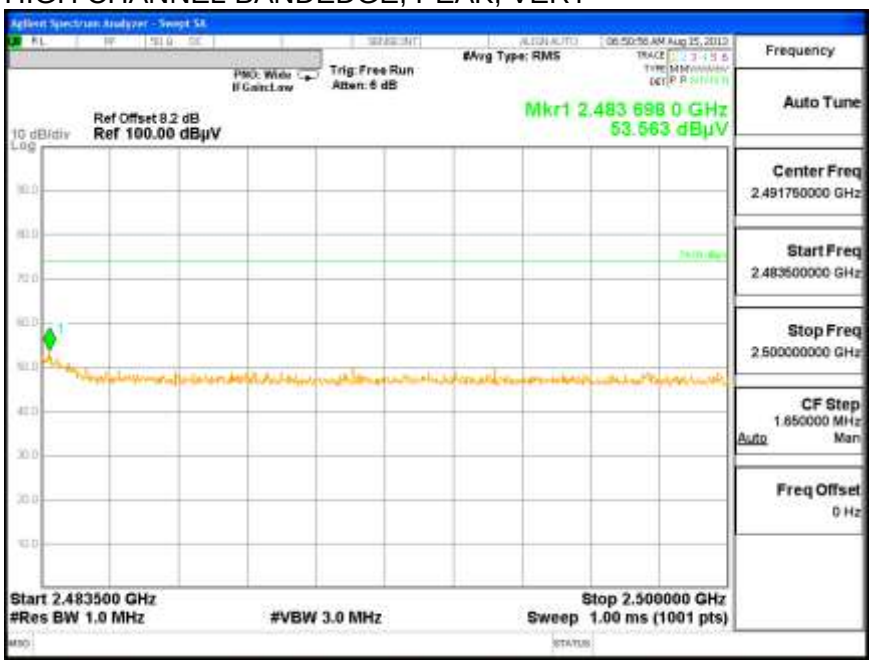
HIGH CHANNEL BANDEDGE, PEAK, HORIZ



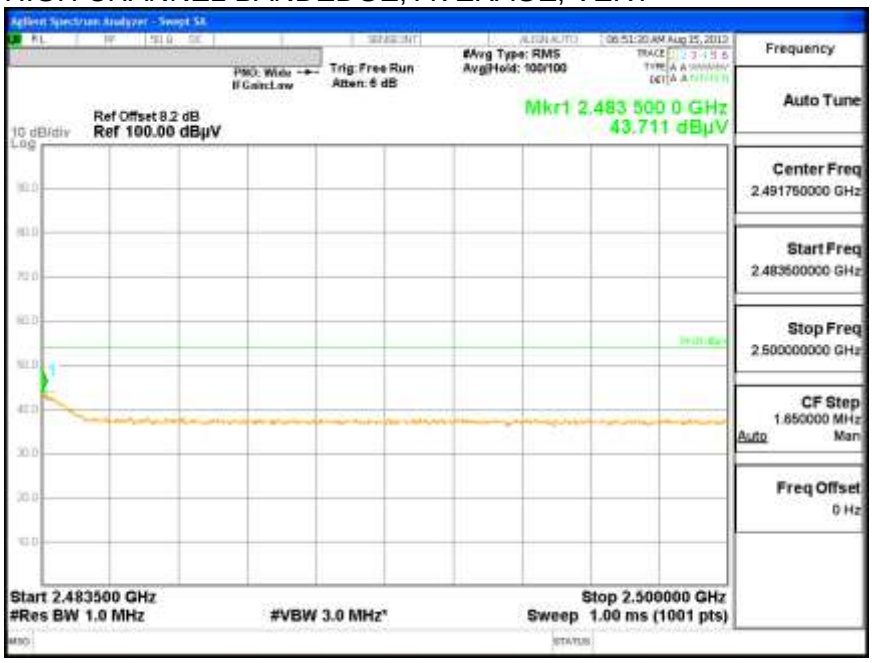
HIGH CHANNEL BANDEDGE, AVERAGE, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT

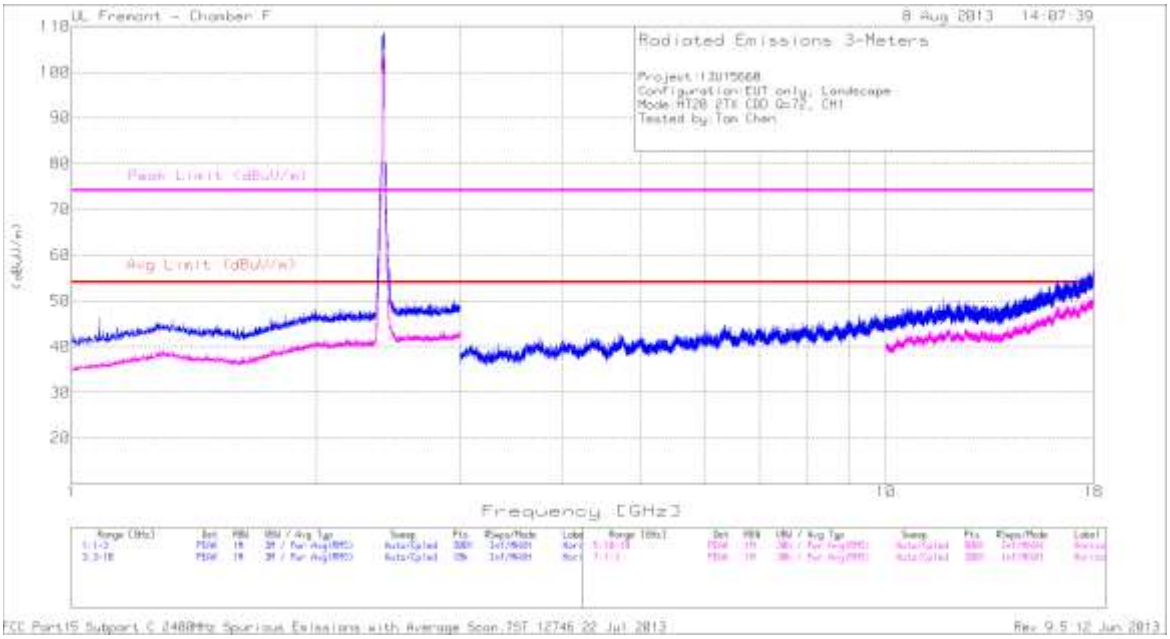


HIGH CHANNEL BANDEDGE, AVERAGE, VERT

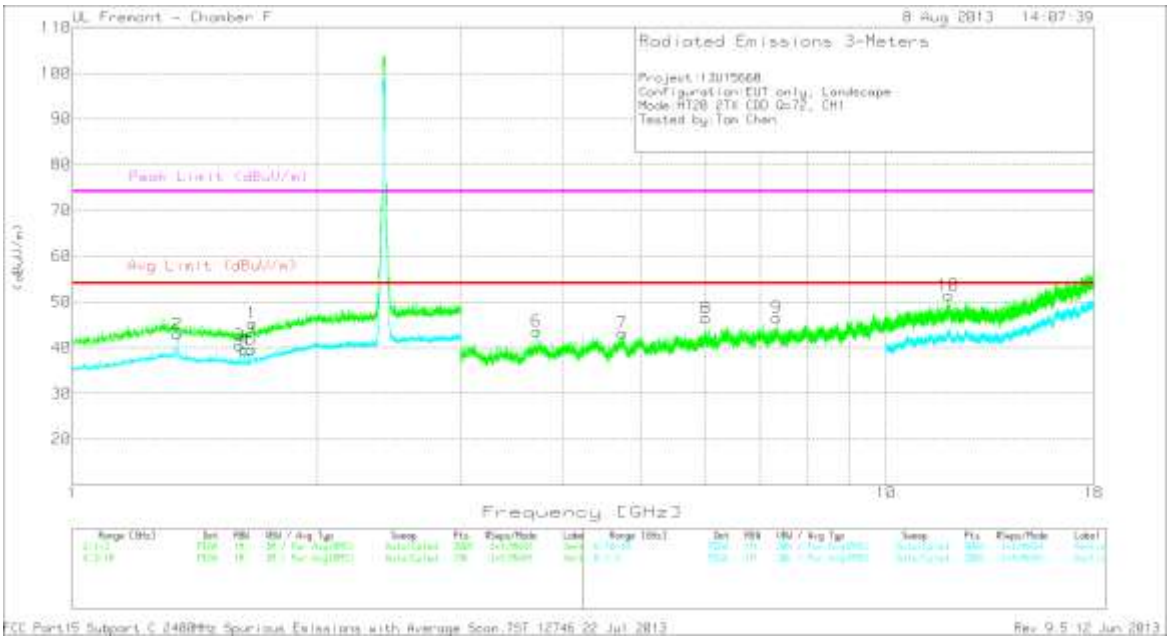


HARMONICS AND SPURIOUS EMISSIONS CH1

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

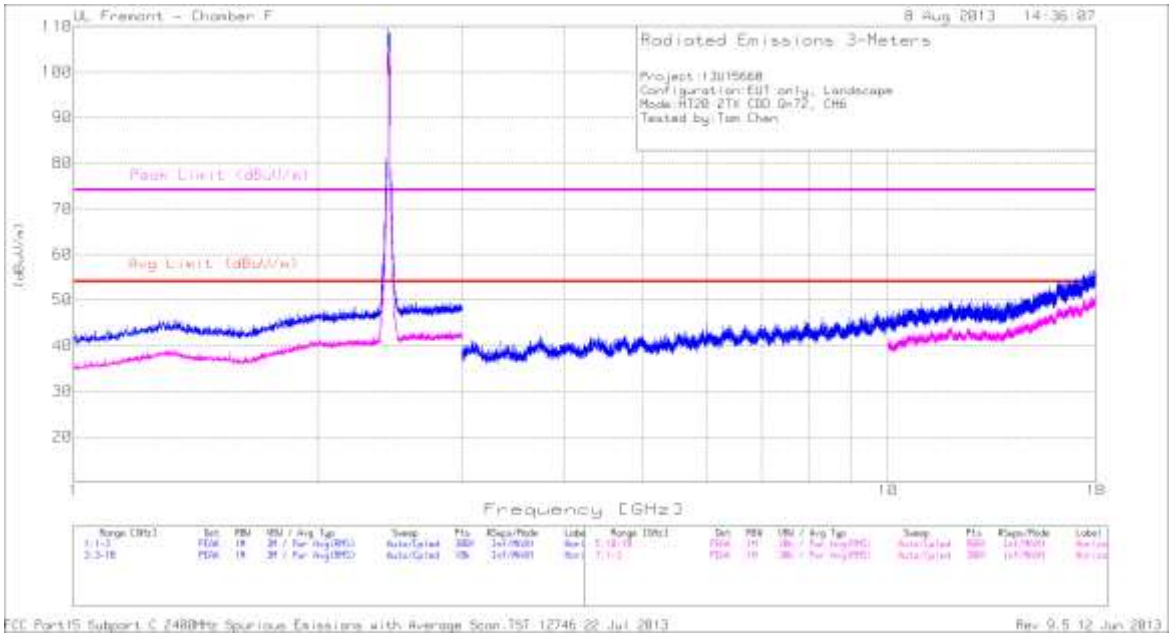
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.663	41.88	PK	28.6	-25.2	0	45.28	-	-	74	-28.72	0-360	199	V
6	3.718	41.63	PK	33.5	-31.5	0	43.63	53.97	-10.34	74	-30.37	0-360	199	V
7	4.738	40.21	PK	34.1	-31.1	0	43.21	53.97	-10.76	74	-30.79	0-360	199	V
8	*6.002	41.16	PK	35.3	-30	0	46.46	-	-	-		0-360	100	V
9	7.337	39.13	PK	35.7	-28.3	0	46.53	53.97	-7.44	74	-27.47	0-360	100	V
10	11.93	36.32	PK	39.3	-24.2	0	51.42	53.97	-2.55	74	-22.58	0-360	199	V
5	1.661	36.24	PK (VB)	28.6	-25.2	0	39.64	53.97	-14.33	-	-	0-360	199	V

PK - Peak detector

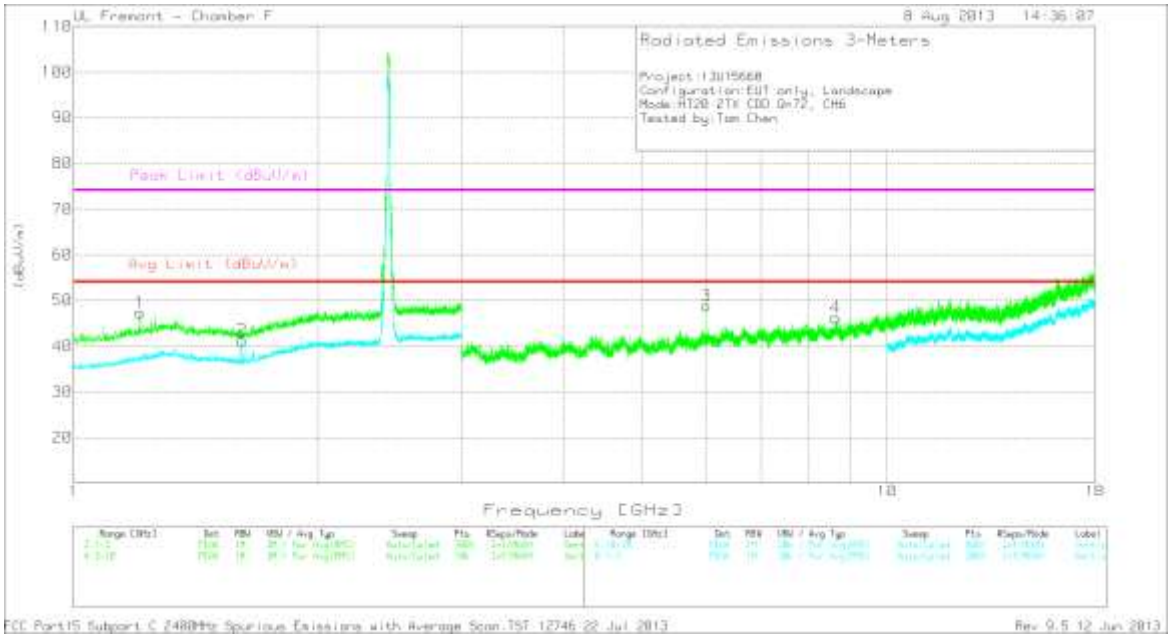
*Not in Restricted Band

HARMONICS AND SPURIOUS EMISSIONS CH6

MID CHANNEL HORITONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

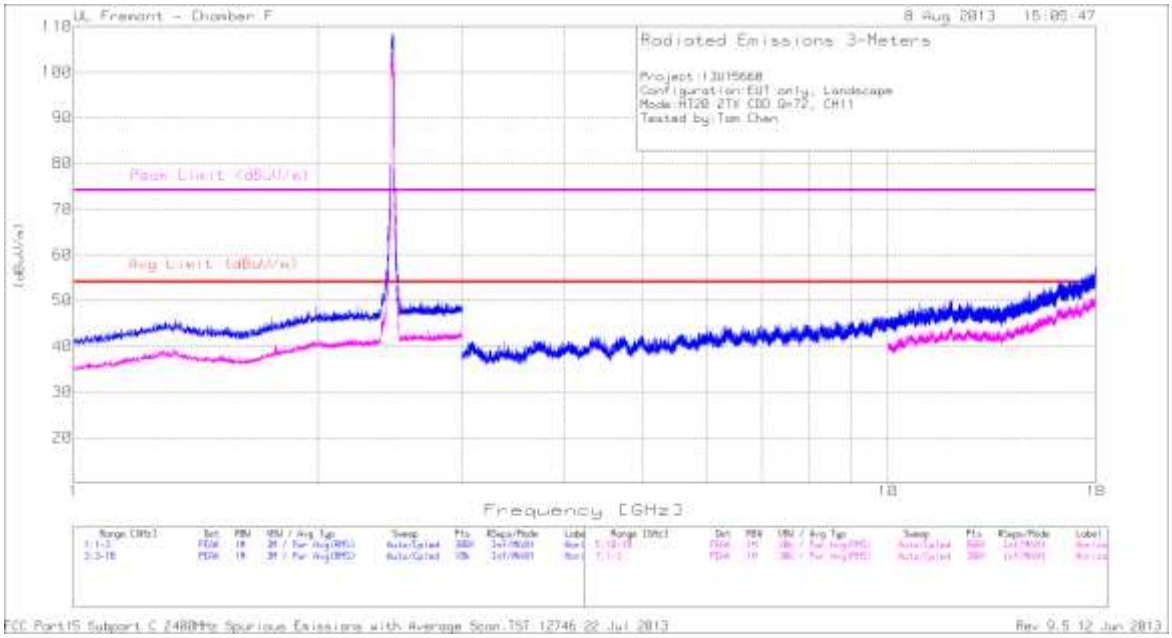
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.207	43.81	PK	29.3	-25.8	0	47.31	53.97	-6.66	74	-26.69	0-360	100	V
3	*6.001	43.53	PK	35.3	-30	0	48.83					0-360	199	V
4	*8.642	36.3	PK	36.1	-26.2	0	46.2					0-360	100	V
2	1.611	38.39	PK	28.1	-25.2	0	41.29	53.97	-12.68	74	-32.71	0-360	199	V

PK - Peak detector

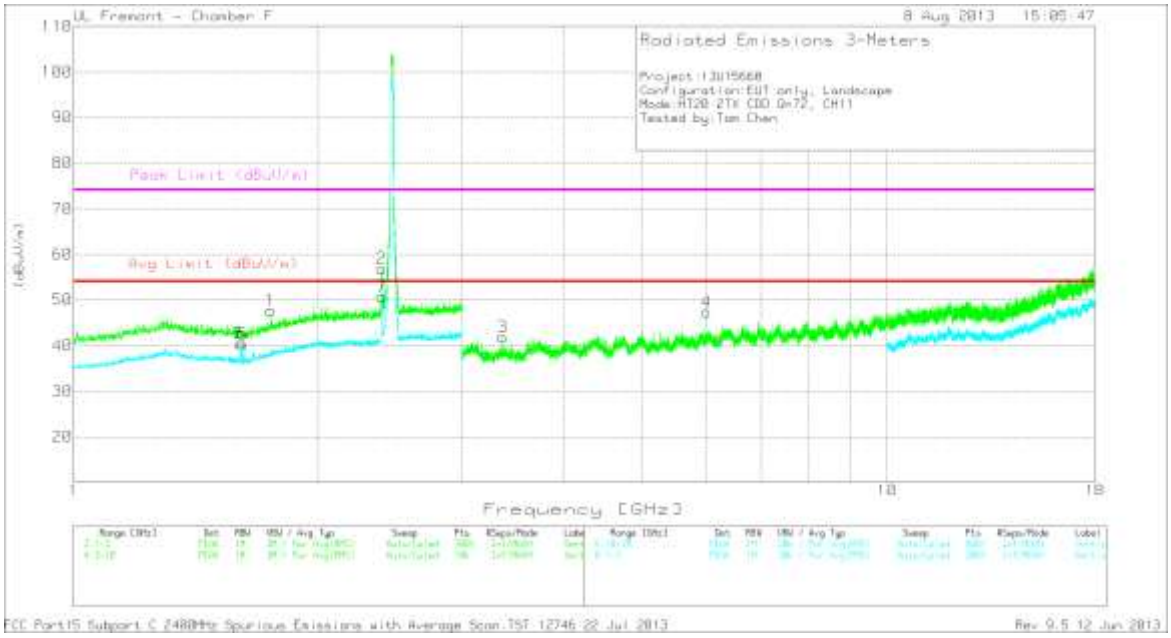
*Not in Restricted Band

HARMONICS AND SPURIOUS EMISSIONS CH11

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	1.747	43.18	PK	29.5	-25	0	47.68	53.97	-6.29	74	-26.32	0-360	100	V
2	2.39	49.05	PK	32.1	-24.3	0	56.85	-	-	74	-17.15	0-360	199	V
3	*3.368	41.01	PK	33	-32.1	0	41.91	-	-	-	-	0-360	199	V
4	*6.001	42.09	PK	35.3	-30	0	47.39	-	-	-	-	0-360	199	V
7	2.392	42.96	PK (VB)	32.1	-24.3	0	50.76	53.97	-3.21	-	-	0-360	100	V

PK - Peak detector

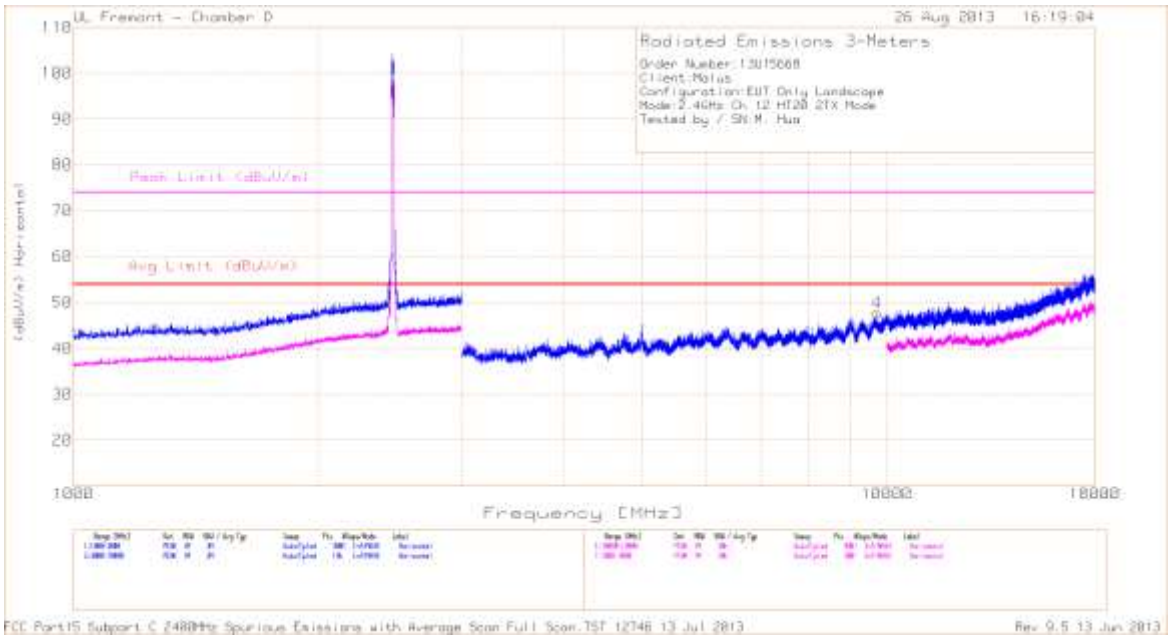
*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.385	26.61	Av	32.1	-24.3	.1	34.51	53.97	-19.46	-	-	54	272	V

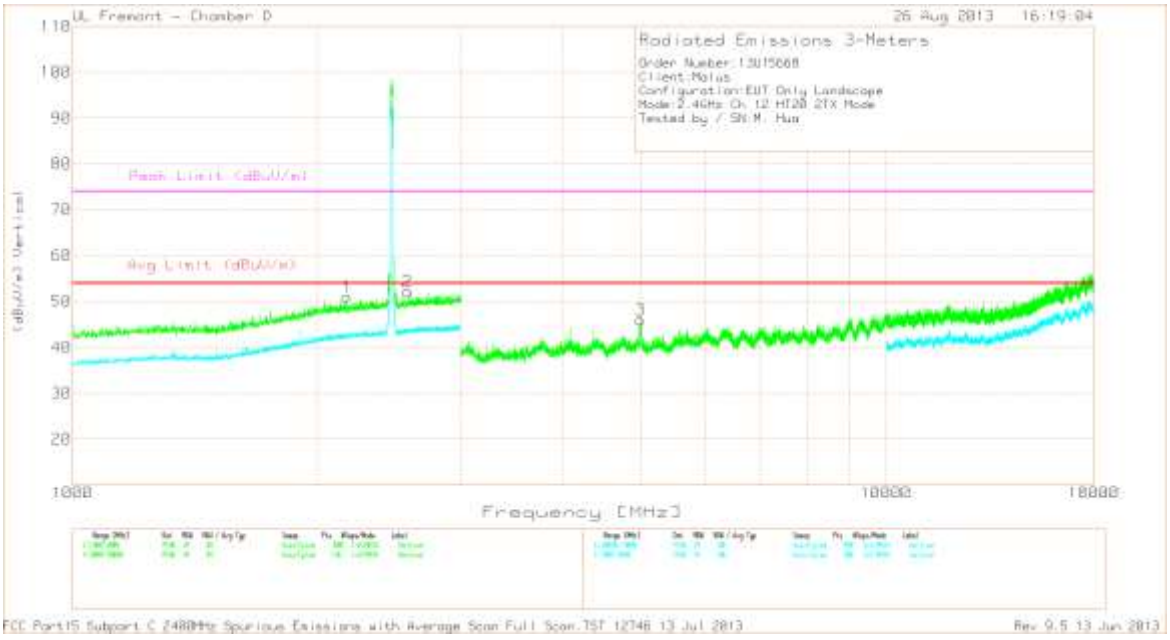
Av - average detection

HARMONICS AND SPURIOUS EMISSIONS CH12

CHANNEL 12 HORITONTAL PLOT



CHANNEL 12 VERTICAL PLOT



DATA

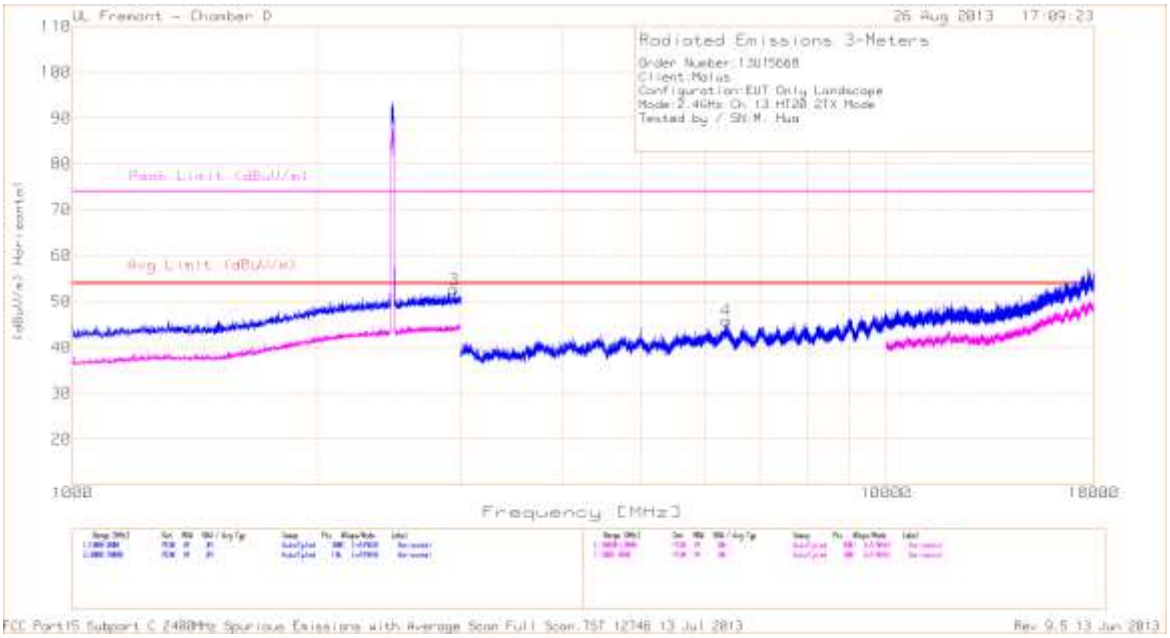
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T344 Ant Factor [dB/m]	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*2.174	43.31	PK	32.2	-24.5	51.01					100	V
2	*2.581	43.43	PK	32.6	-23.9	52.13					100	V
4	*9.722	35.8	PK	37.4	-25.5	47.7	-	-	-	-	301	H
3	4.99	42.67	PK	34.3	-31	45.97	53.97	-8	74	-28.03	301	V

PK - Peak detector

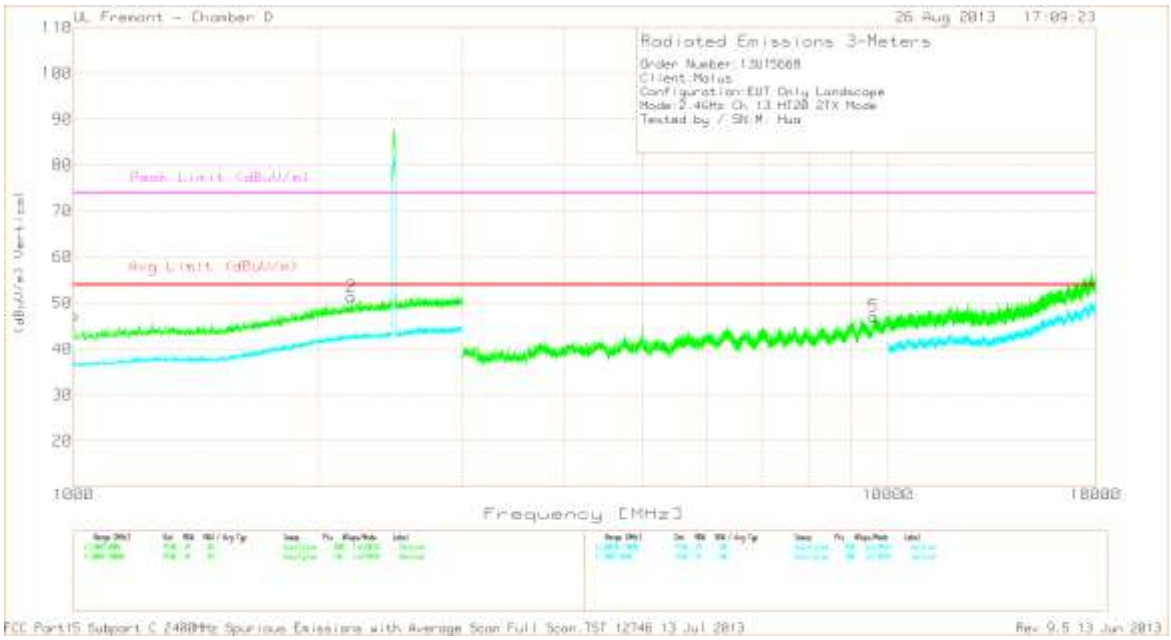
*Not in Restricted Band

HARMONICS AND SPURIOUS EMISSIONS CH13

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	T344 Ant Factor [dB/m]	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
3	*2.944	43.22	PK	33.1	-23.7	52.62	-	-	-	-	201	H
1	1.001	45.82	PK	27.7	-26.2	47.32	53.97	-6.65	74	-26.68	301	V
2	2.195	43.68	PK	32.2	-24.5	51.38	53.97	-2.59	74	-22.62	100	V
4	*6.365	38.93	PK	35.9	-29	45.83	-	-	-	-	100	H
5	*9.603	35.07	PK	37.3	-25.3	47.07	-	-	-	-	401	V

PK - Peak detector

*Not in Restricted Band

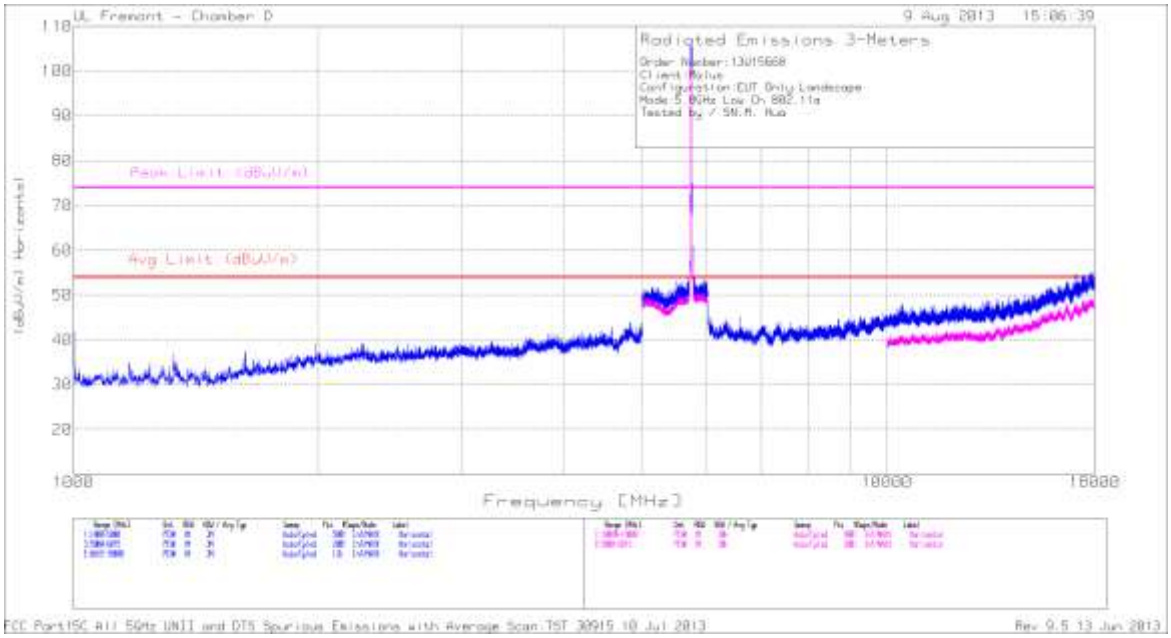
Frequency (GHz)	Meter Reading (dBuV)	Det	T344 Ant Factor [dB/m]	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2.949	30.67	MAv1	33.1	-23.8	39.97	53.97	-14	-	-	187	213	H
2.193	30.72	MAv1	32.2	-24.5	38.42	53.97	-15.55	-	-	29	195	V

MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

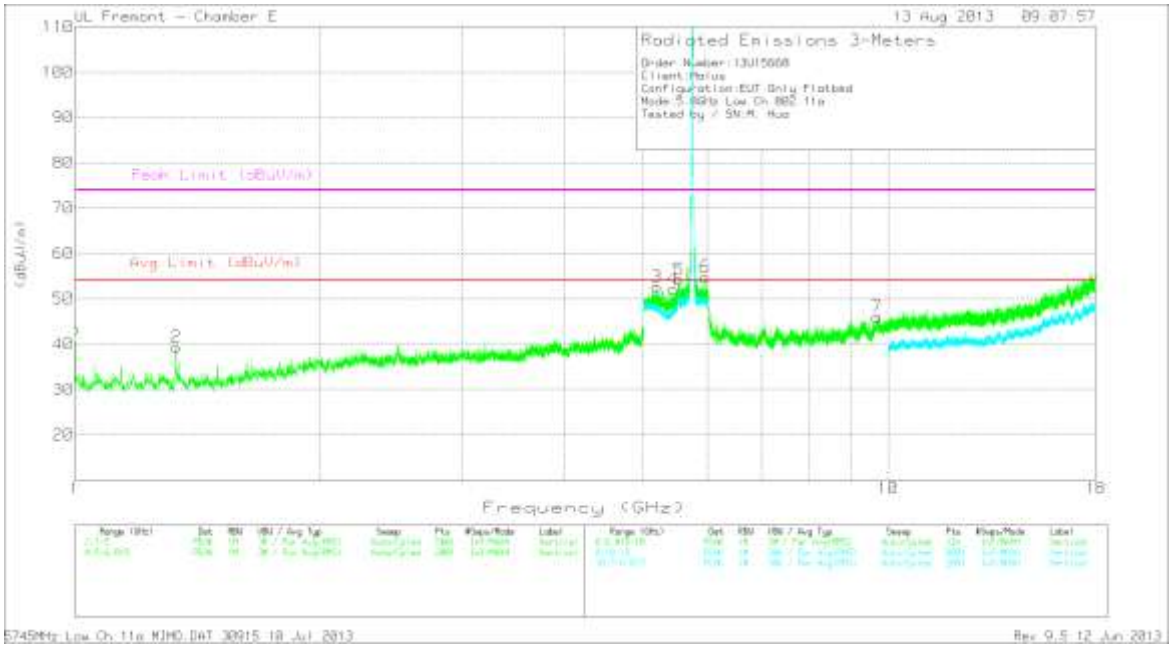
9.2.4. TX ABOVE 1 GHz 802.11a MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS CH149

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	49.85	PK	27.7	-35.6	41.95	53.97	-12.02	74	-32.05	200	V
1.33	43.72	PK	28.5	-34.7	37.52	53.97	-16.45	74	-36.48	100	V
5.143	38.9	PK	34.5	-21.6	51.8	53.97	-2.17	74	-22.2	201	V
*5.493	40.07	PK	34.8	-21.7	53.17	-	-	-	-	100	V
*5.565	39.41	PK	34.9	-21.4	52.91	-	-	-	-	100	V
*5.985	38.32	PK	35.7	-20.9	53.12	-	-	-	-	100	V
*9.762	34.89	PK	37.4	-25.9	46.39	-	-	-	-	201	V

PK - Peak detector

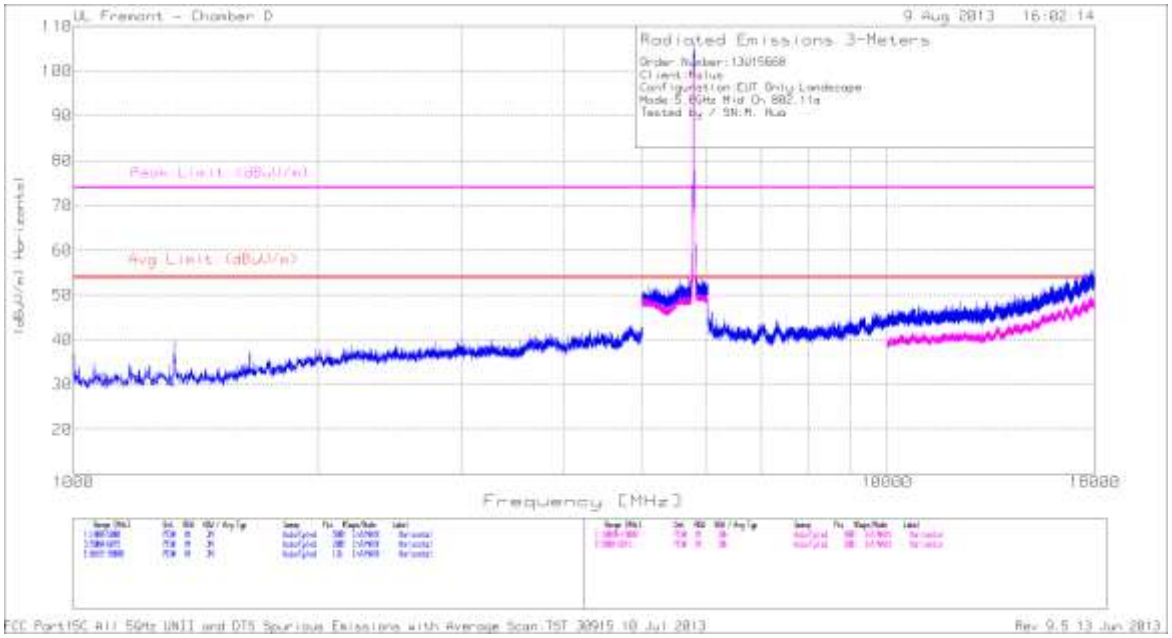
*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.146	28.51	MAv1	34.5	-21.6	41.41	53.97	-12.56	-	-	65	127	V

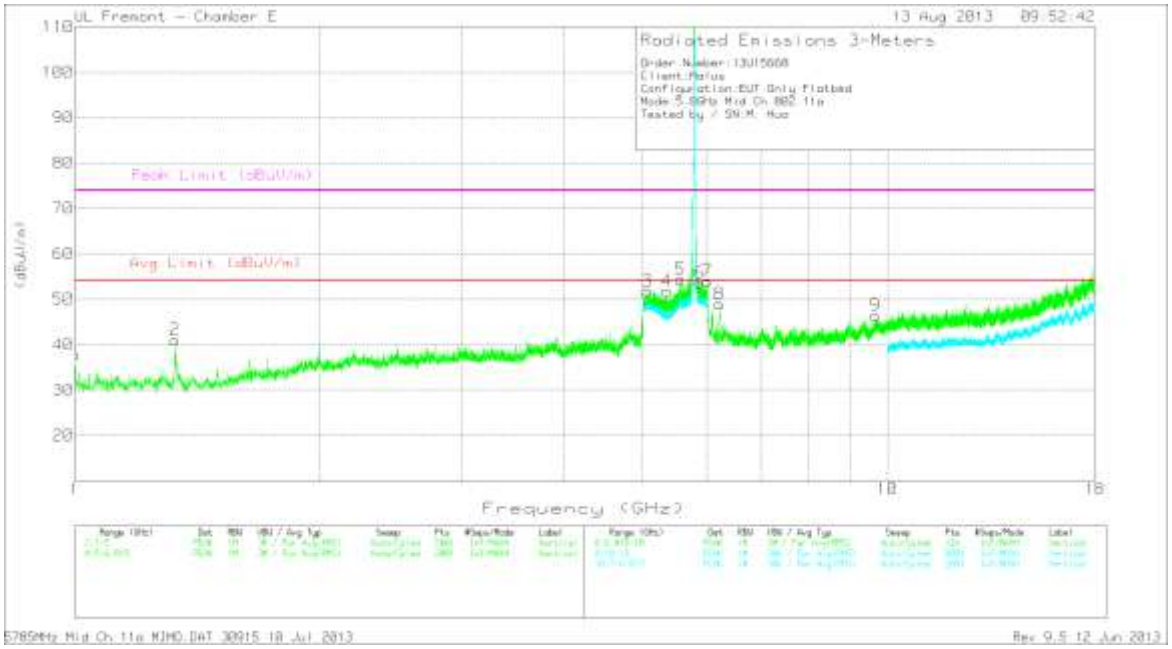
MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS CH157

MID CHANNEL HORITONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	50.81	PK	27.7	-35.6	42.91	-	-	74	-31.09	201	V
1.332	48.02	PK	28.5	-34.7	41.82	-	-	74	-32.18	201	V
5.064	39.94	PK	34.9	-21.4	53.44	-	-	74	-22.15	201	V
5.356	40.15	PK	35.2	-21.5	53.85	-	-	74	-22.18	100	V
*5.565	38.47	PK	35.6	-21	53.07	-	-	-	-	201	V
*5.87	39.87	PK	34.7	-21.7	52.87	-	-	-	-	200	V
*5.991	38.47	PK	35.6	-20.8	53.27	-	-	-	-	100	V
*6.215	43.16	PK	36	-30.2	48.96	-	-	-	-	100	V
*9.675	35.94	PK	37	-26.1	46.84	-	-	-	-	100	V

PK - Peak detector

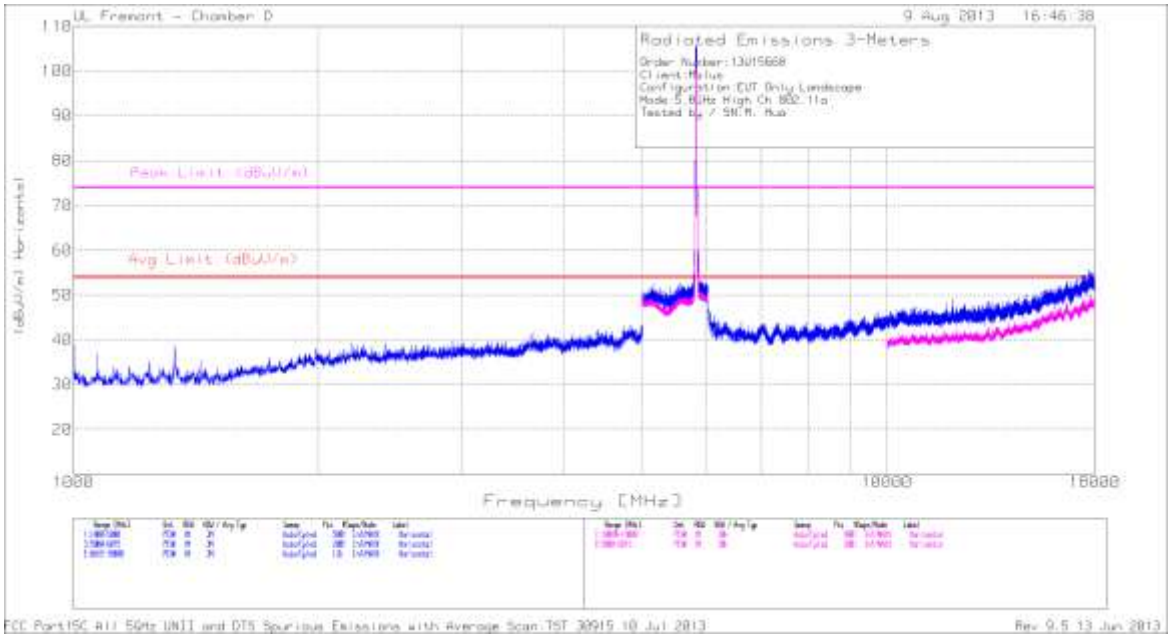
*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.06	28.44	MAv1	34.4	-22.1	40.74	53.97	-13.23			133	266	V
5.357	30.82	MAv1	34.7	-22.2	43.32	53.97	-10.65			61	242	V

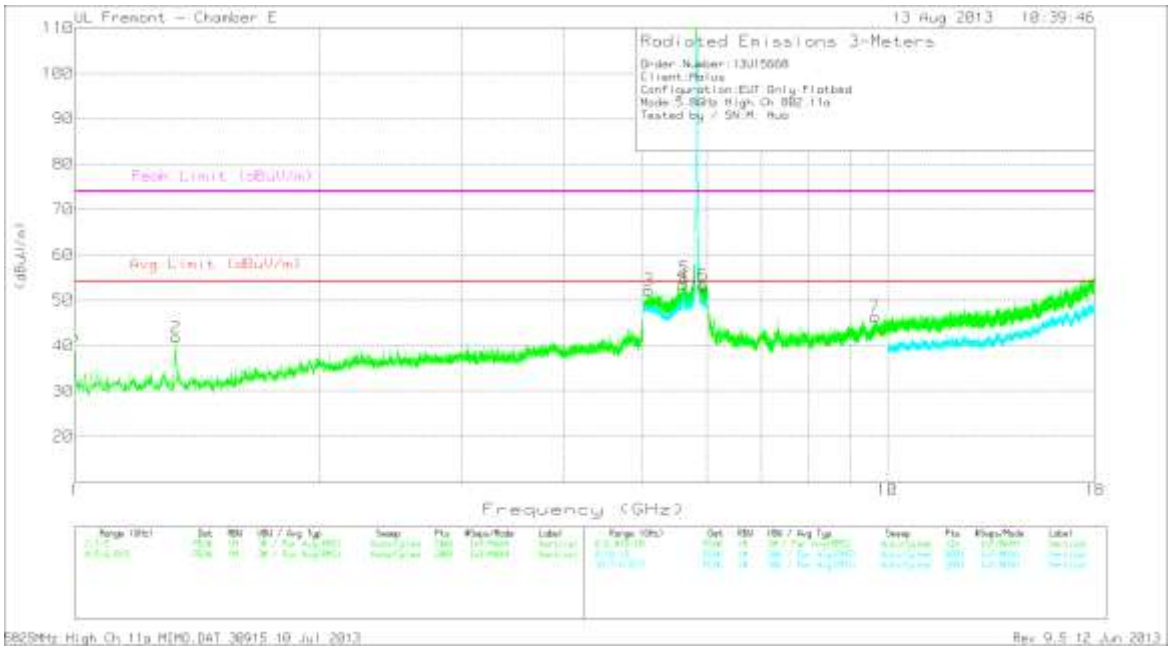
MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS CH165

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	50.03	PK	27.7	-35.6	42.13	53.97	-11.84	74	-31.87	201	V
1.331	48.1	PK	28.5	-34.7	41.9	53.97	-12.07	74	-32.1	201	V
5.155	39.69	PK	34.5	-21.7	52.49	53.97	-1.48	74	-21.51	100	V
5.422	39.12	PK	34.8	-22	51.92	53.97	-2.05	74	-22.08	100	V
*5.571	39.31	PK	34.9	-21.4	52.81	-	-	-	-	100	V
*5.984	37.78	PK	35.7	-20.9	52.58	-	-	-	-	200	V
*9.741	34.72	PK	37.4	-25.7	46.42	-	-	-	-	201	V

PK - Peak detector

*Not in Restricted Band

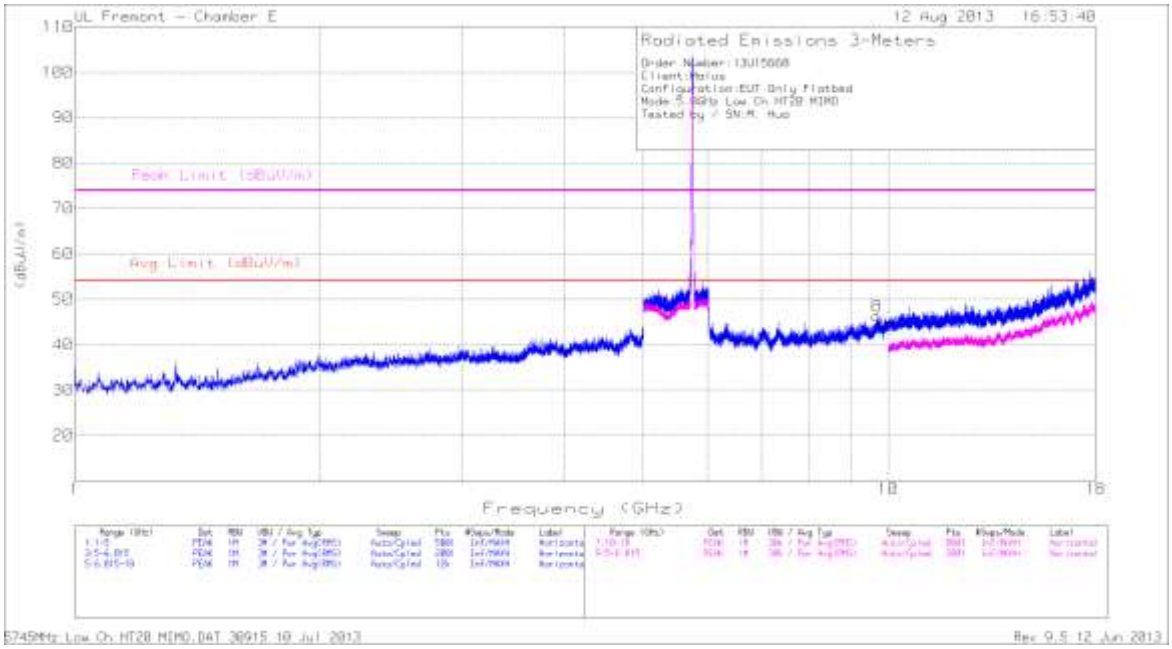
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.162	28.39	MAv1	34.6	-21.6	41.39	53.97	-12.58	-	-	359	364	V
5.425	27.87	MAv1	34.8	-22	40.67	53.97	-13.3	-	-	150	300	V

MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

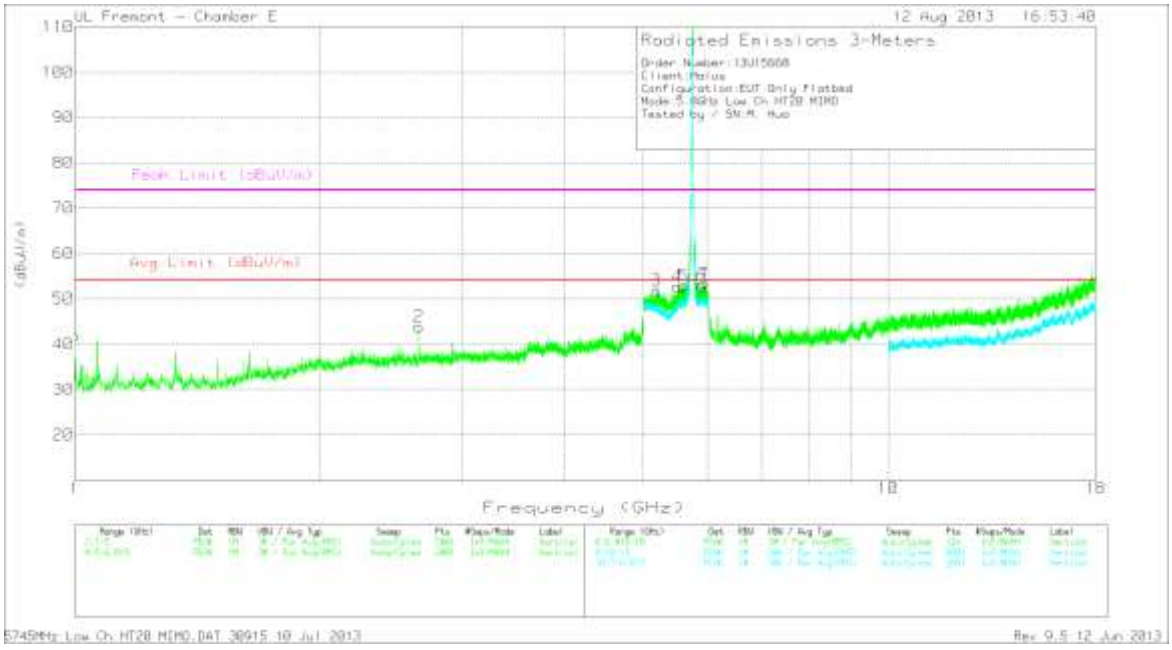
9.2.5. TX ABOVE 1 GHz 802.11n HT20 2TX CDD MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS CH149

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1.0	51.94	PK	27.7	-35.6	44.04	53.97	-9.93	74	-29.96	200	V
*2.65	44.99	PK	32.7	-33.8	43.89	-	-	-	-	100	V
5.184	38.63	PK	34.6	-21.6	51.63	53.97	-2.34	74	-22.37	201	V
*5.553	39.84	PK	34.9	-21.3	53.44	-	-	-	-	201	V
*5.916	38.22	PK	35.6	-20.9	52.92	-	-	-	-	100	V
*5.936	38.96	PK	35.6	-21	53.56	-	-	-	-	100	V
*9.643	34.69	PK	37.3	-26.1	45.89	-	-	-	-	201	H

PK - Peak detector

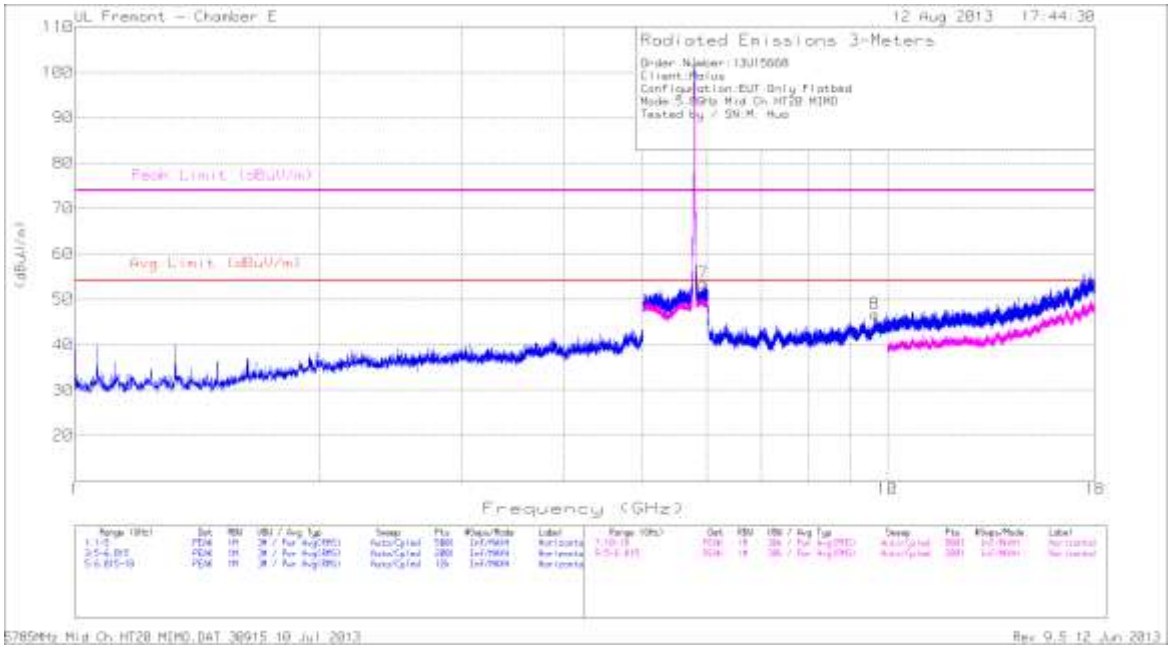
*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.178	28.38	MAv1	34.6	-21.5	41.48	53.97	-12.49	-	-	92	212	V

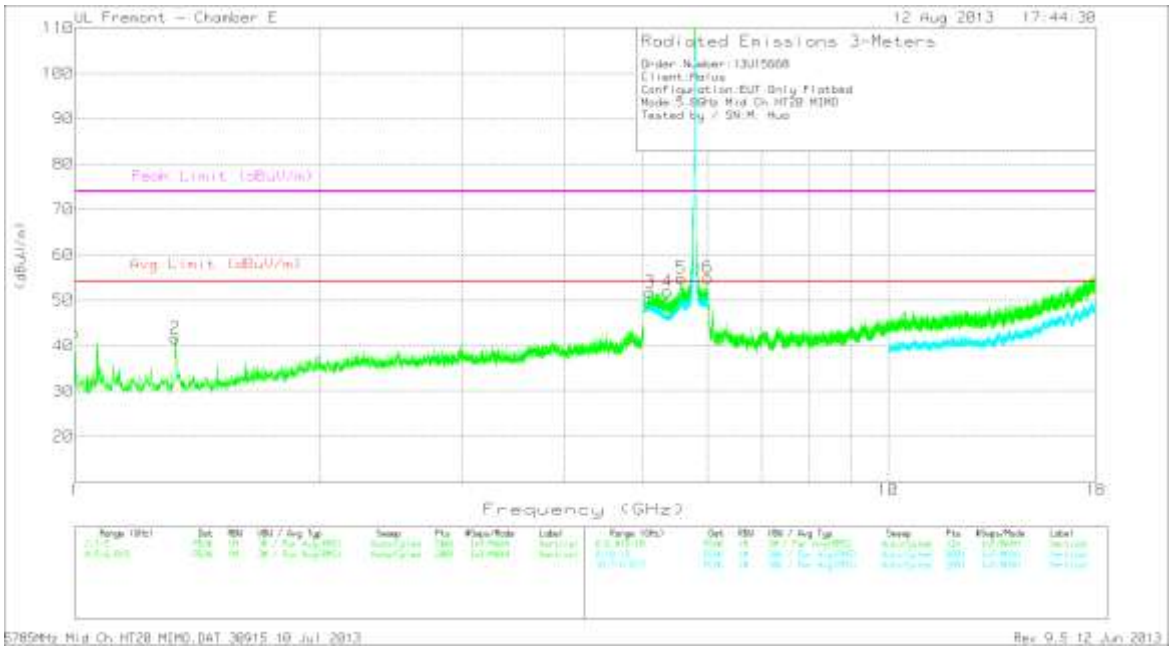
MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS CH157

MID CHANNEL HORITONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

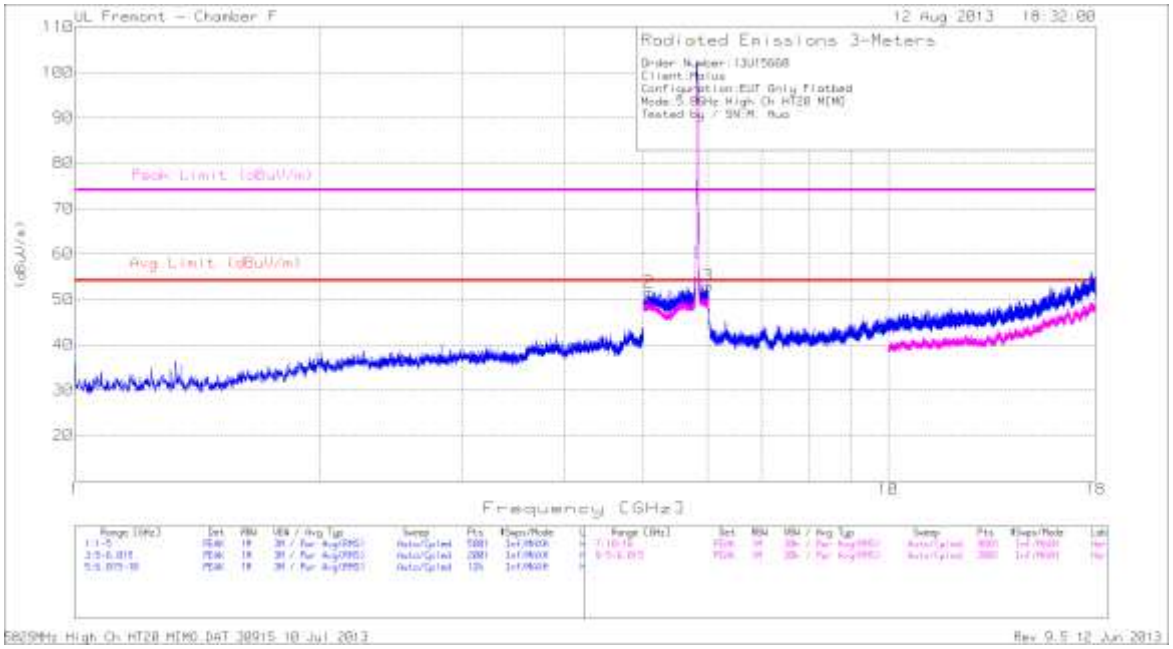
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	51.94	PK	27.7	-35.6	44.04	53.97	-9.93	74	-29.96	200	V
1.329	48.93	PK	28.5	-34.7	42.73	53.97	-11.24	74	-31.27	100	V
*5.184	38.63	PK	34.6	-21.6	51.63	-	-	-	-	201	V
*5.553	39.84	PK	34.9	-21.3	53.44	-	-	-	-	201	V
*5.568	41.39	PK	34.9	-21.4	54.89	-	-	-	-	100	V
*5.936	38.96	PK	35.6	-21	53.56	-	-	-	-	100	H
*6.001	40.37	PK	35.7	-21	55.07	-	-	-	-	100	V
*9.643	34.69	PK	37.3	-26.1	45.89	-	-	-		201	H

PK - Peak detector

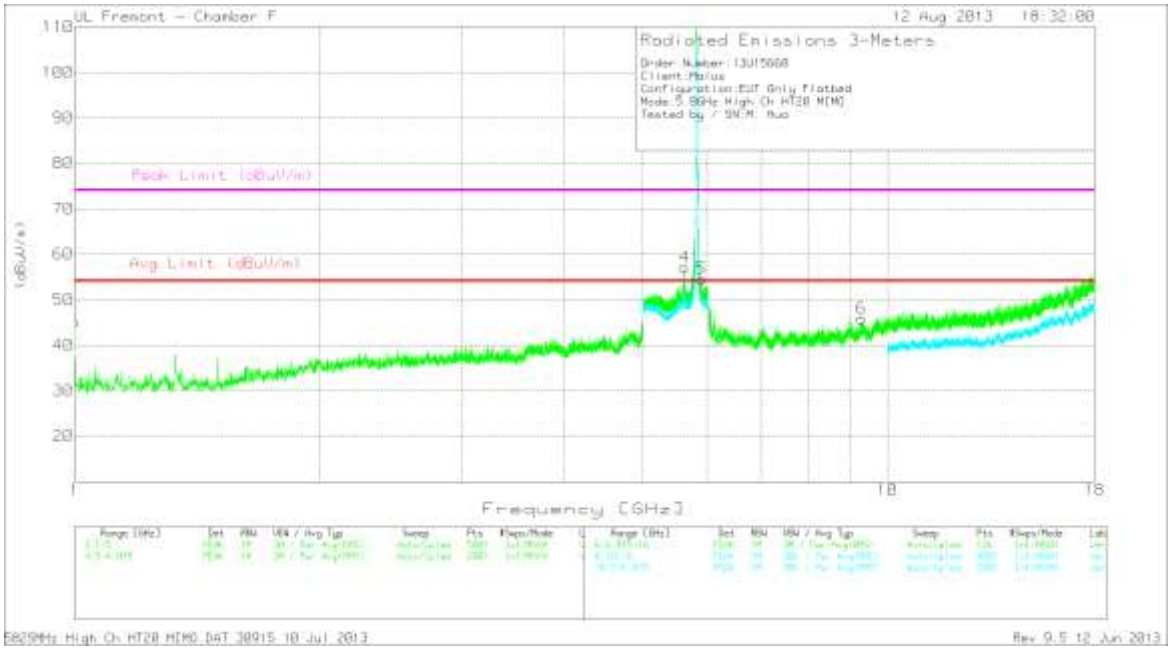
*Not in Restricted Band

HARMONICS AND SPURIOUS EMISSIONS CH165

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl /Fltr/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	53.08	PK	27.7	-35.6	45.18	53.97	-8.79	74	-28.82	0-360	201	V
2	5.082	39.05	PK	34.4	-21.9	51.55	53.97	-2.42	74	-22.45	0-360	100	H
3	*6.006	38.39	PK	35.7	-21.1	52.99	-	-	-	-	0-360	201	H
4	*5.632	43.41	PK	35.1	-21.4	57.11	-	-	-	-	0-360	201	V
5	*5.902	40.08	PK	35.5	-21	54.58	-	-	-	-	0-360	201	V
6	9.295	35.07	PK	37	-26.2	45.87	**53.97**	**-8.13**	74	-28.13	0-360	100	V

PK - Peak detector

*Not in Restricted Band

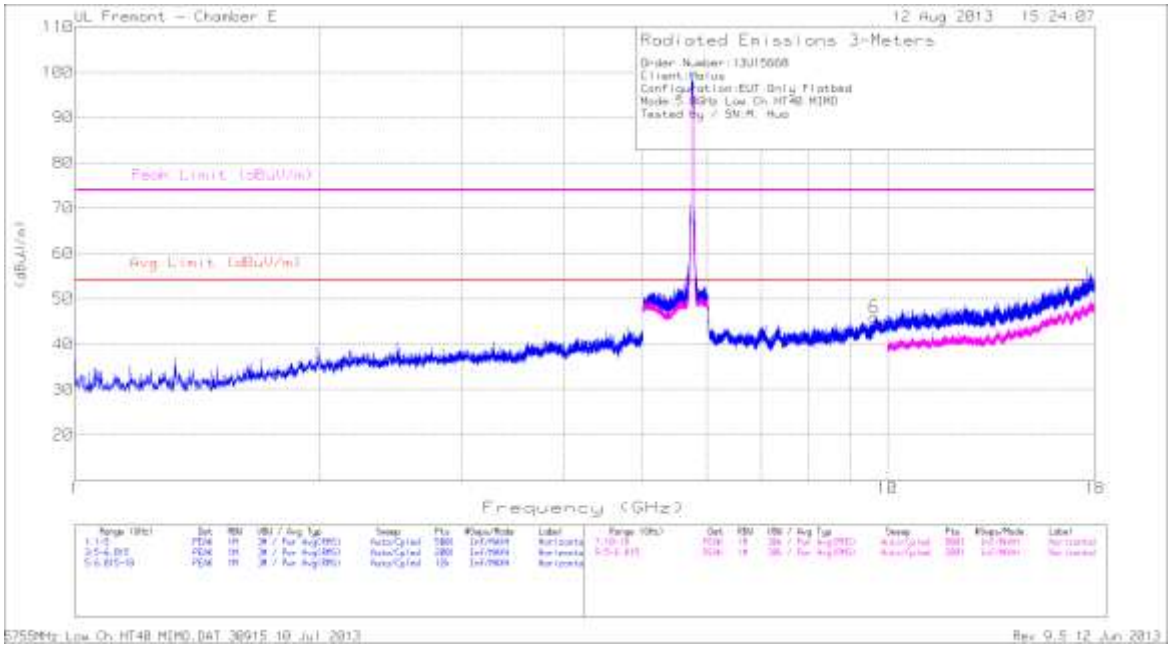
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.082	30.02	MAv1	34.4	-21.9	42.52	53.97	-11.45	-	-	337	340	V

MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

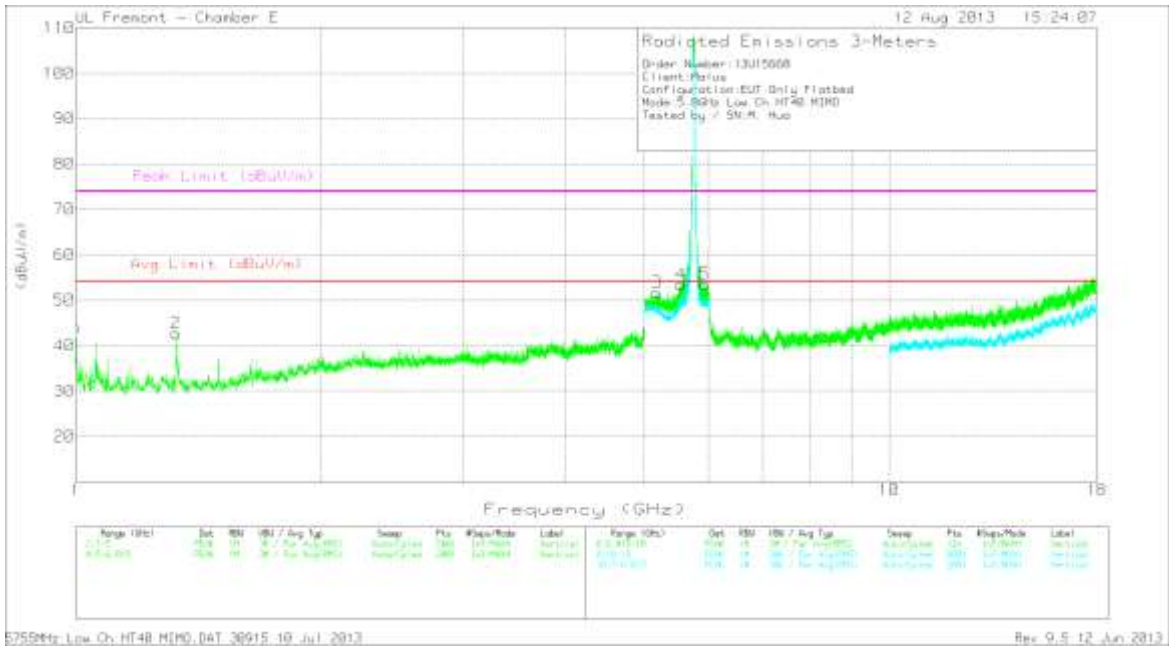
9.2.6. TX ABOVE 1 GHz 802.11n HT40 MIMO MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS CH151

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	50.28	PK	27.7	-35.6	42.38	53.97	-11.59	74	-31.62	201	V
1.33	48	PK	28.5	-34.7	41.8	53.97	-12.17	74	-32.2	201	V
5.142	39.12	PK	34.5	-21.6	52.02	53.97	-1.95	74	-21.98	100	V
*5.6	39.56	PK	35	-21.3	53.26	-	-	-	-	200	V
*5.901	39.98	PK	35.5	-21	54.48	-	-	-	-	200	V
*9.668	34.02	PK	37.3	-25.7	45.62	-	-	-	-	201	H

PK - Peak detector

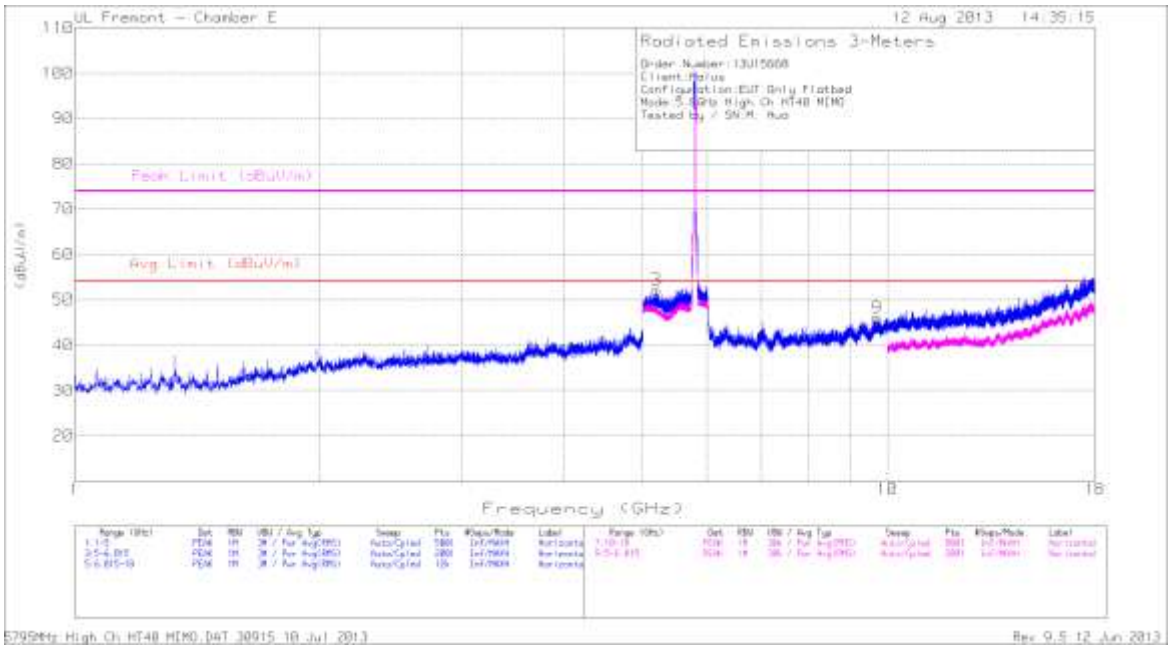
*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.146	28.41	MAv1	34.5	-21.6	41.31	53.97	-12.66	-	-	337	340	V

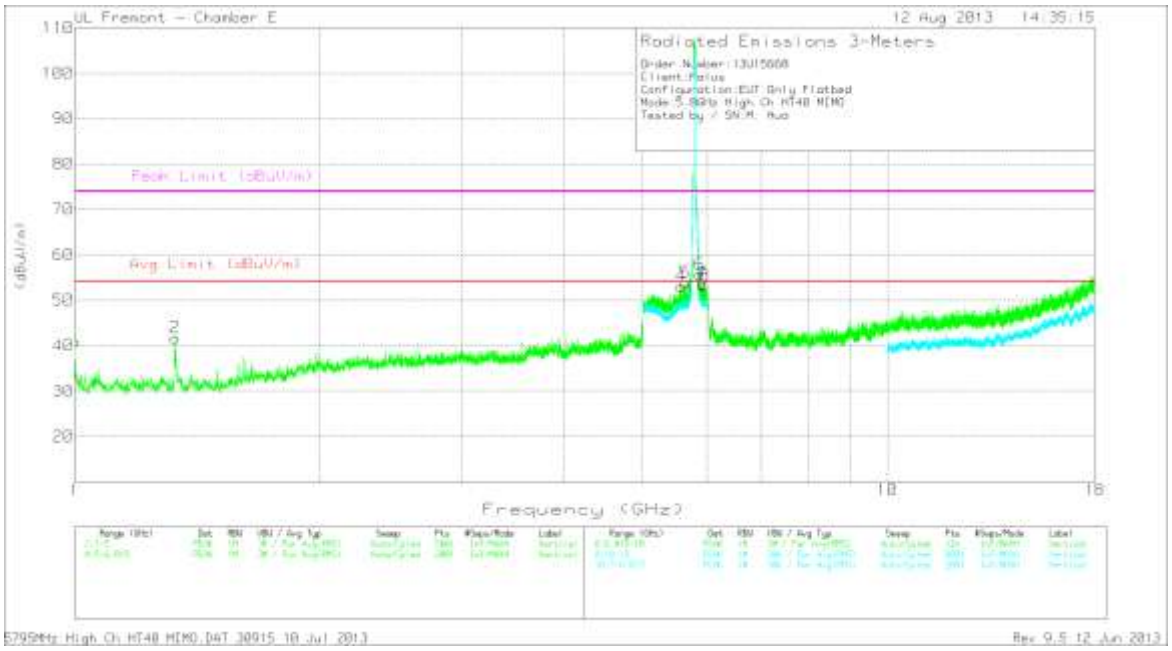
MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS CH159

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1.00	51.03	PK	27.7	-35.6	43.13	53.97	-10.84	74	-30.87	200	V
1.332	47.62	PK	28.5	-34.7	41.42	53.97	-12.55	74	-32.58	100	V
*5.198	39.05	PK	35.5	-21.1	53.45	-	-	-	-	100	H
*5.278	39.23	PK	34.7	-21.8	52.13	-	-	-	-	100	V
*5.566	39.05	PK	34.9	-21.4	52.55	-	-	-	-	201	V
*5.874	41.35	PK	35.5	-21.1	55.75	-	-	-	-	201	V
*5.904	38.94	PK	35.5	-21	53.44	-	-	-	-	100	V
*5.969	39.2	PK	35.7	-20.9	54	-	-	-	-	100	V
*9.733	34.62	PK	37.4	-25.7	46.32	-	-	-	-	200	H

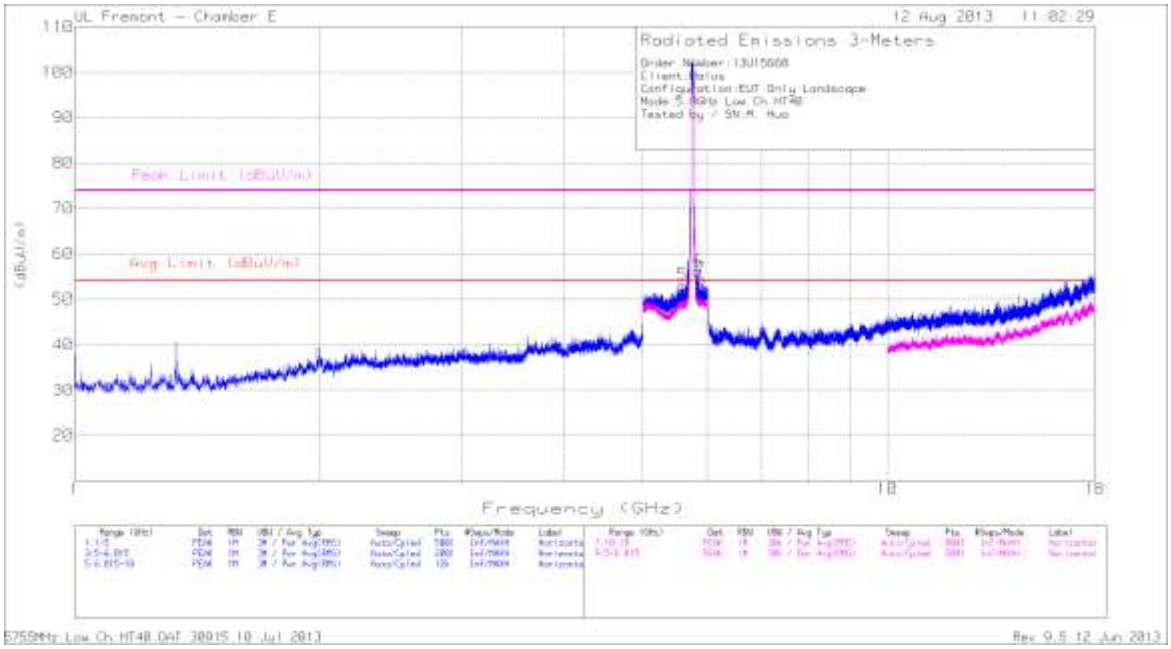
PK - Peak detector

*Not in Restricted Band

9.2.7. TX ABOVE 1 GHz 802.11n HT40 SISO MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS CH151

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT

DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	50.28	PK	27.7	-35.6	42.38	53.97	-11.59	74	-31.62	201	V
1.33	48	PK	28.5	-34.7	41.8	53.97	-12.17	74	-32.2	201	V
*5.6	39.56	PK	35	-21.3	53.26	-	-	-	-	200	H
*5.849	42.03	PK	35.5	-21.3	56.23	-	-	-	-	200	H
*5.901	39.98	PK	35.5	-21	54.48	-	-	-	-	200	H
5.142	39.12	PK	34.5	-21.6	52.02	-	-	74	-21.98	100	V
*5.515	39.07	PK	34.8	-21.6	52.27	-	-	-	-	200	V
*9.668	34.02	PK	37.3	-25.7	45.62	-	-	-	-	201	H

PK - Peak detector

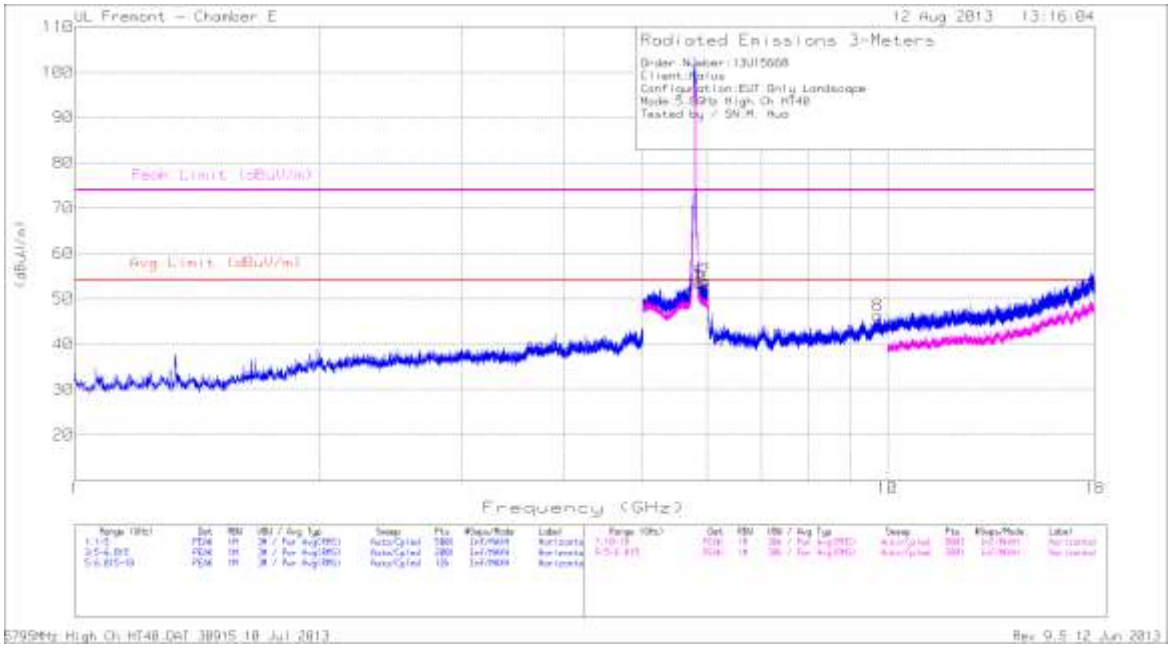
*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.146	28.41	MAv1	34.5	-21.6	41.31	53.97	-12.66	-	-	337	340	V

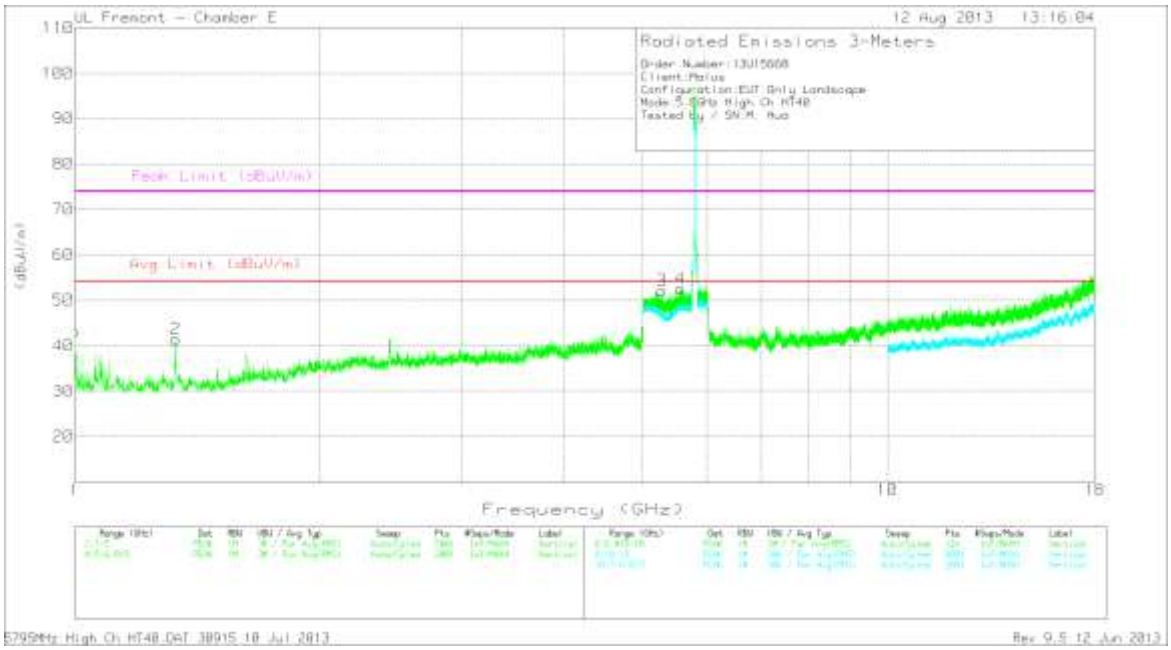
MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS CH159

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1.00	51.03	PK	27.7	-35.6	43.13	53.97	-10.84	74	-30.87	200	V
1.332	47.62	PK	28.5	-34.7	41.42	53.97	-12.55	74	-32.58	100	V
*5.876	39.05	PK	35.5	-21.1	53.45	-	-	-	-	100	H
*5.904	39.23	PK	34.7	-21.8	52.13	-	-	-	-	100	H
*5.969	39.05	PK	34.9	-21.4	52.55	-	-	-	-	201	H
*5.278	41.35	PK	35.5	-21.1	55.75	-	-	-	-	201	V
*5.566	38.94	PK	35.5	-21	53.44	-	-	-	-	100	V
*9.733	34.62	PK	37.4	-25.7	46.32	-	-	-	-	200	H

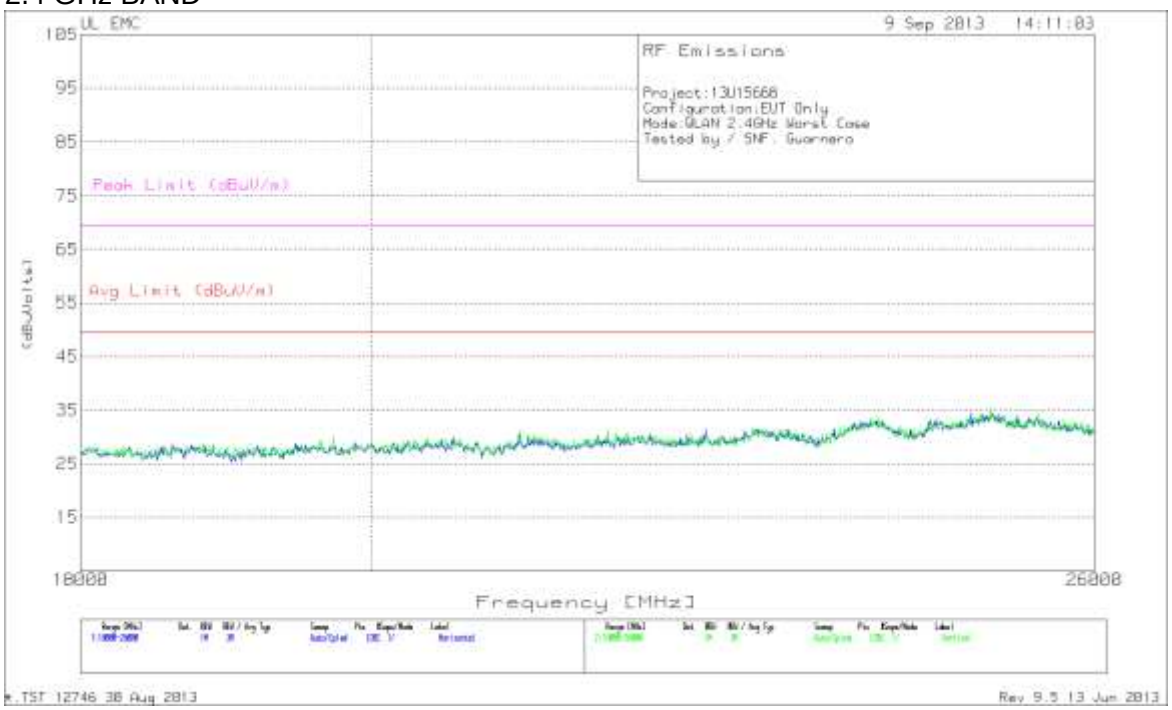
PK - Peak detector

*Not in Restricted Band

9.3. WORST-CASE ABOVE 18 GHz

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

2.4 GHz BAND

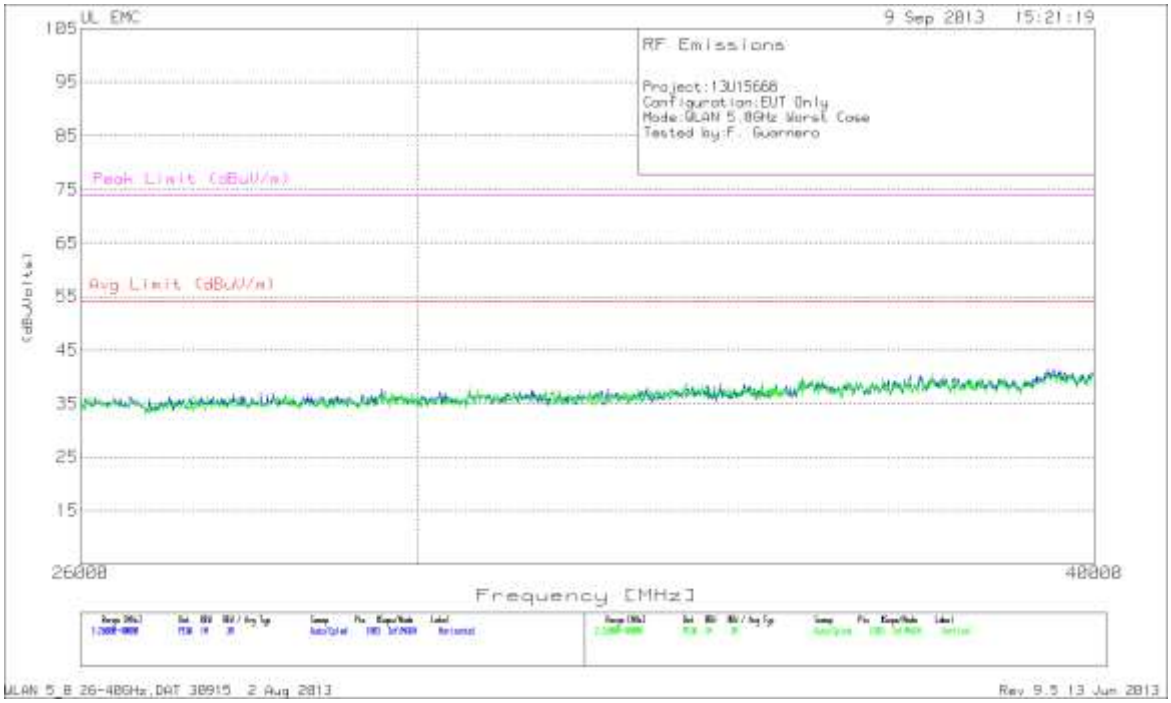


SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

5.8 GHz BAND

SPURIOUS EMISSIONS 26 TO 40 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

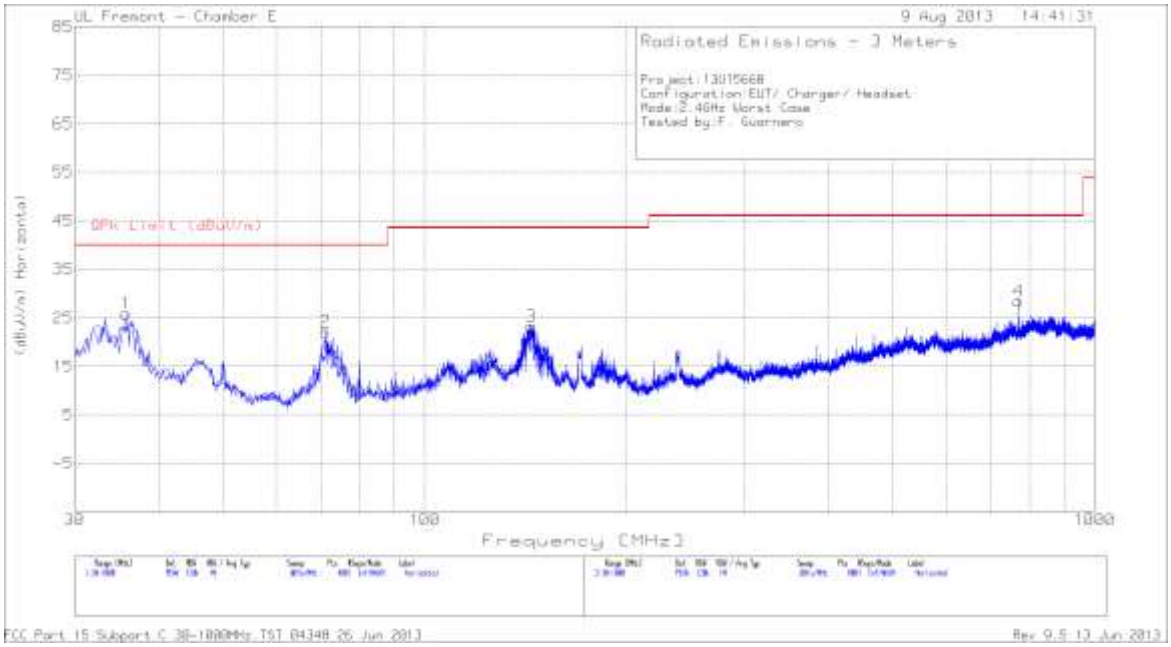
5.8 GHz BAND



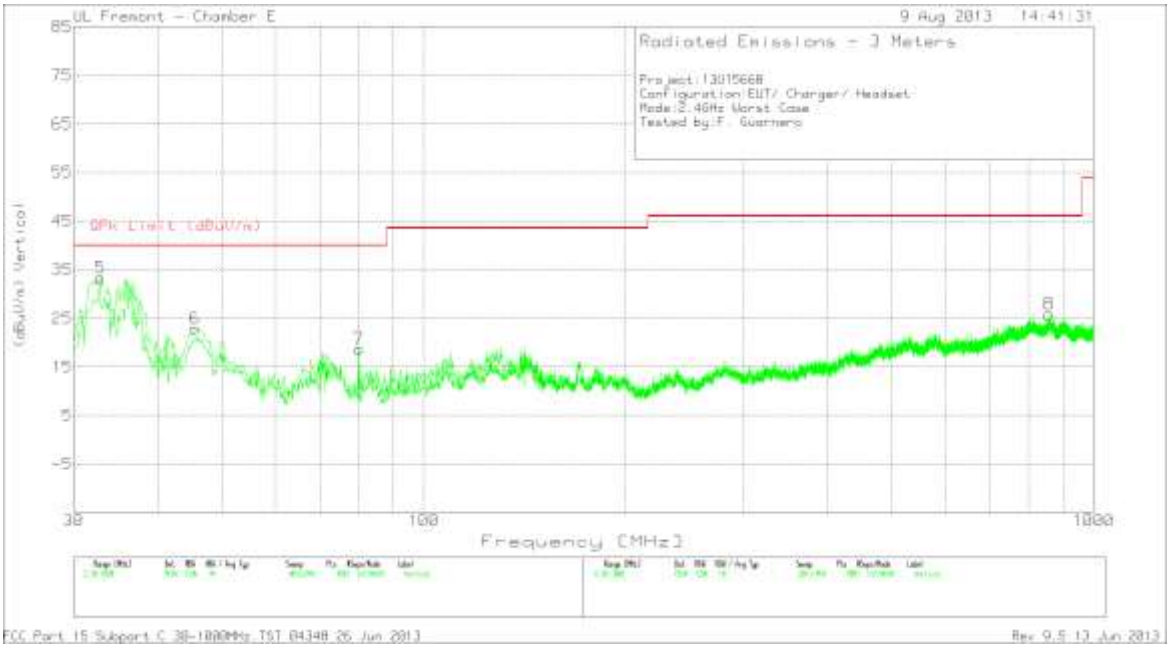
9.4. WORST-CASE BELOW 1 GHz

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

HORIZONTAL PLOT



VERTICAL PLOT



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T408 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	35.82	36.38	PK	17	-27.5	25.88	40	-14.12	200	H
2	71.1038	41.94	PK	8.3	-28.1	22.14	40	-17.86	400	H
3	144.0963	37.82	PK	12.5	-27.1	23.22	43.52	-20.3	100	H
4	769.625	33.91	PK	20.5	-26	28.41	46.02	-17.61	98	H
5	32.91	41.96	PK	19	-27.6	33.36	40	-6.64	100	V
6	45.52	40.32	PK	10.1	-27.5	22.92	40	-17.08	100	V
7	79.955	38.66	PK	7.7	-27.7	18.66	40	-21.34	100	V
8	857.5313	29.56	PK	21.7	-25.4	25.86	46.02	-20.16	400	V

PK - Peak detector

10. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 7.2.2

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

* Decreases with the logarithm of the frequency.

TEST PROCEDURE

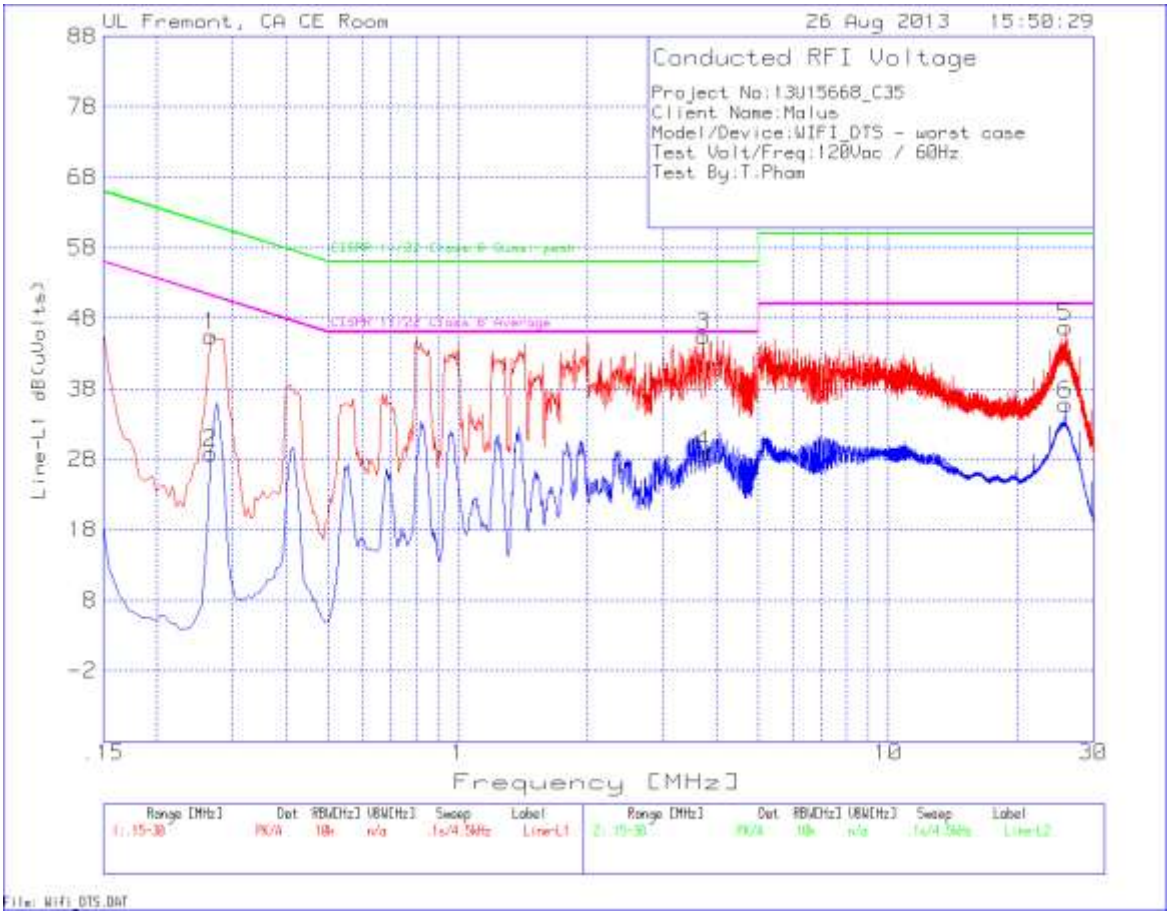
The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.4.

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

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

RESULTS

LINE 1



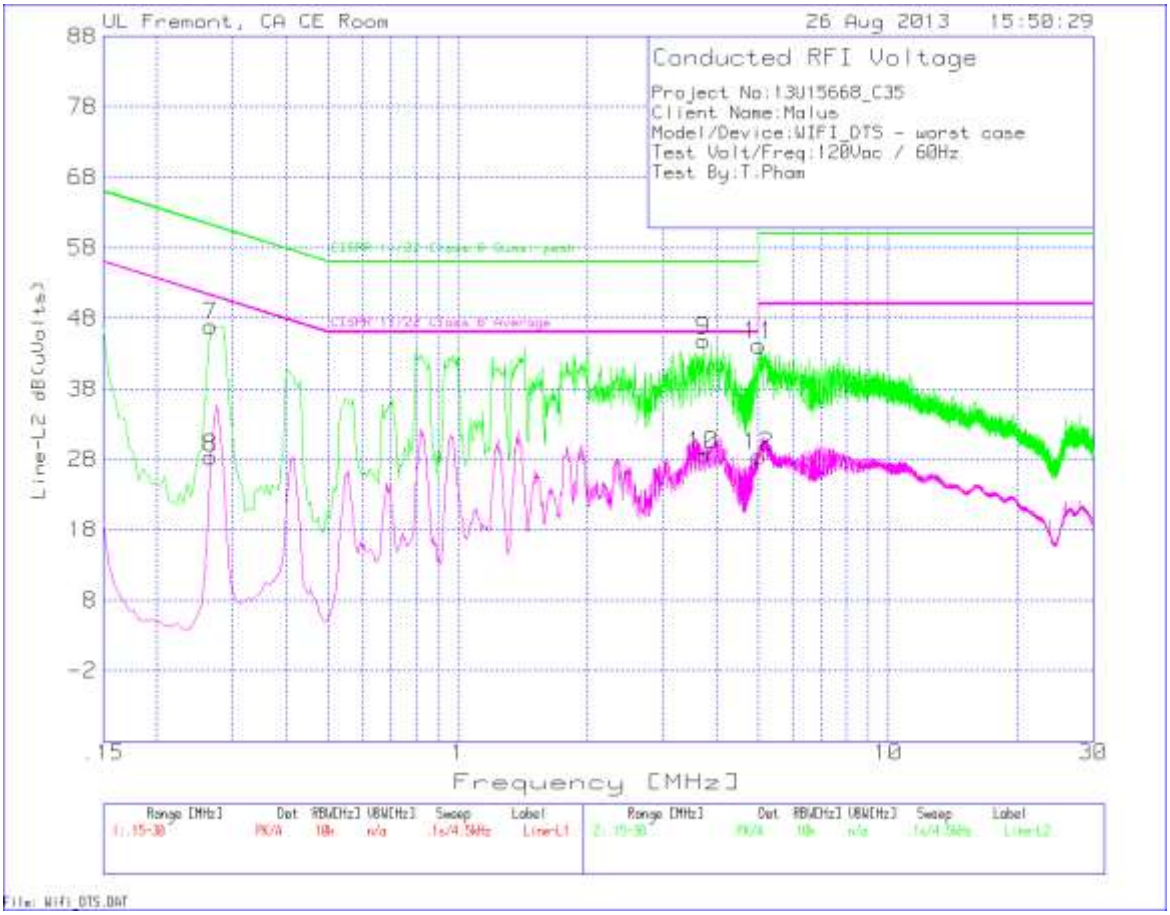
DATA

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	.267	45.33	PK	.1	0	45.43	61.2	-15.77	-	-
2	.267	28.77	Av	.1	0	28.87	-	-	51.2	-22.33
3	3.723	45.25	PK	.1	.1	45.45	56	-10.55	-	-
4	3.723	28.46	Av	.1	.1	28.66	-	-	46	-17.34
5	25.7865	45.92	PK	.5	.3	46.72	60	-13.28	-	-
6	25.7865	35.01	Av	.5	.3	35.81	-	-	50	-14.19

LINE 2



DATA

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	.267	46.76	PK	.1	0	46.86	61.2	-14.34	-	-
8	.267	28.14	Av	.1	0	28.24	-	-	51.2	-22.96
9	3.723	44.57	PK	.1	.1	44.77	56	-11.23	-	-
10	3.723	28.38	Av	.1	.1	28.58	-	-	46	-17.42
11	5.01	44	PK	.1	.1	44.2	60	-15.8	-	-
12	5.01	28.26	Av	.1	.1	28.46	-	-	50	-21.54

PK - Peak detector
Av - average detection