8.5.3. 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 10.7dB (including 10 dB pad and 0.7 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	5745	15.90	15.90	18.91
Mid	5785	15.90	15.80	18.86
High	5825	16.00	16.00	19.01

8.5.4. 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 6dBi. If transmitting antennas of directional gain greater than 6dBi 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 6dBi.

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)
4.21	3.92	4.07

RESULTS

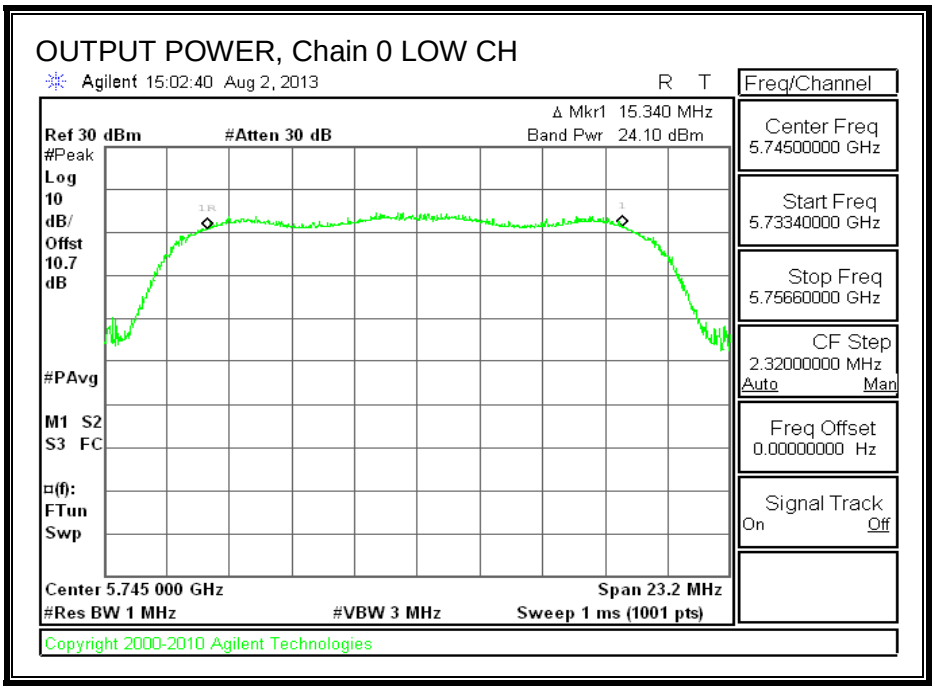
Limits

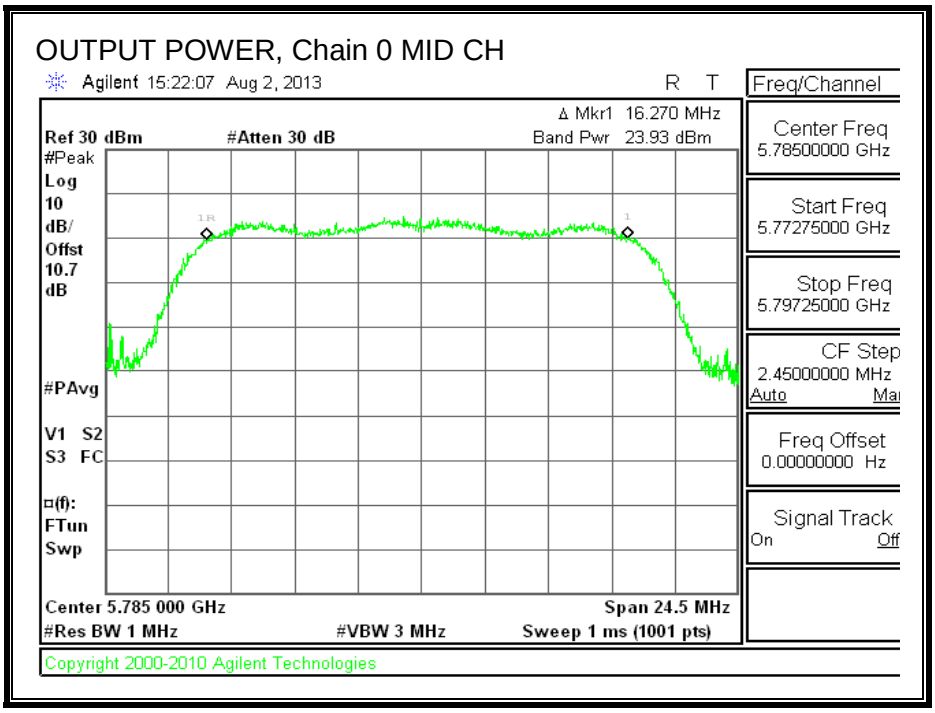
Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5745	4.07	30.00	30	36	30.00
Mid	5785	4.07	30.00	30	36	30.00
High	5825	4.07	30.00	30	36	30.00

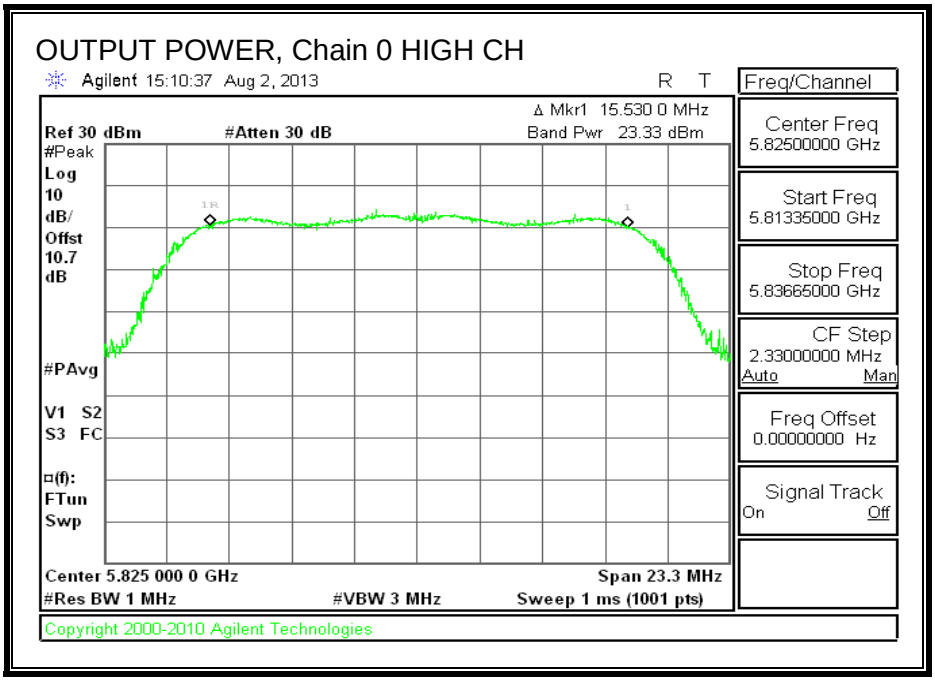
Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margi (dB)
Low	5745	24.10	24.12	27.12	30.00	-2.88
Mid	5785	23.93	23.34	26.66	30.00	-3.34
High	5825	23.33	24.06	26.72	30.00	-3.28

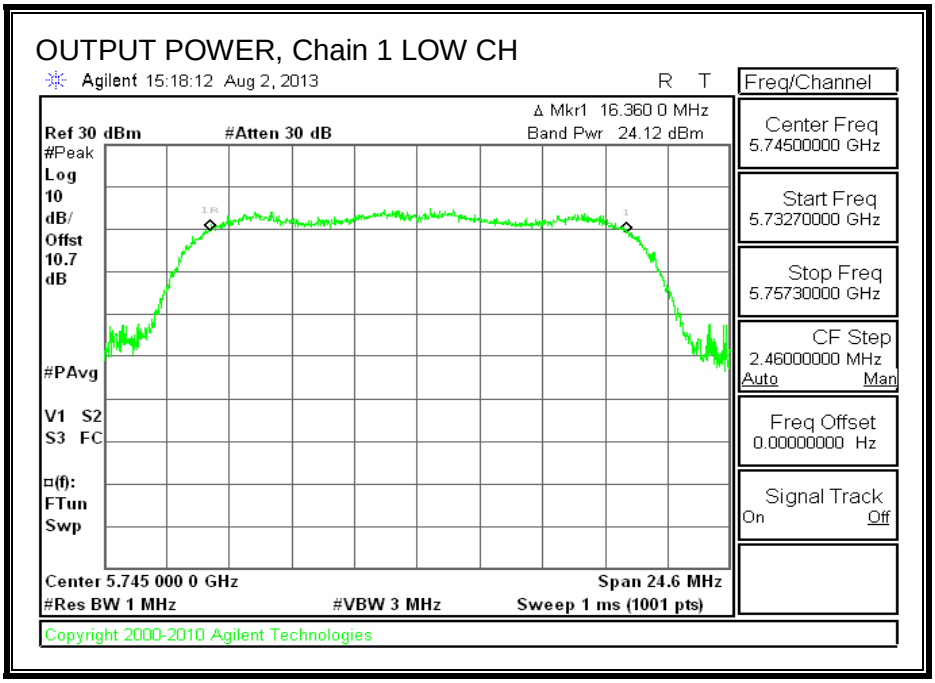
OUTPUT POWER, Chain 0



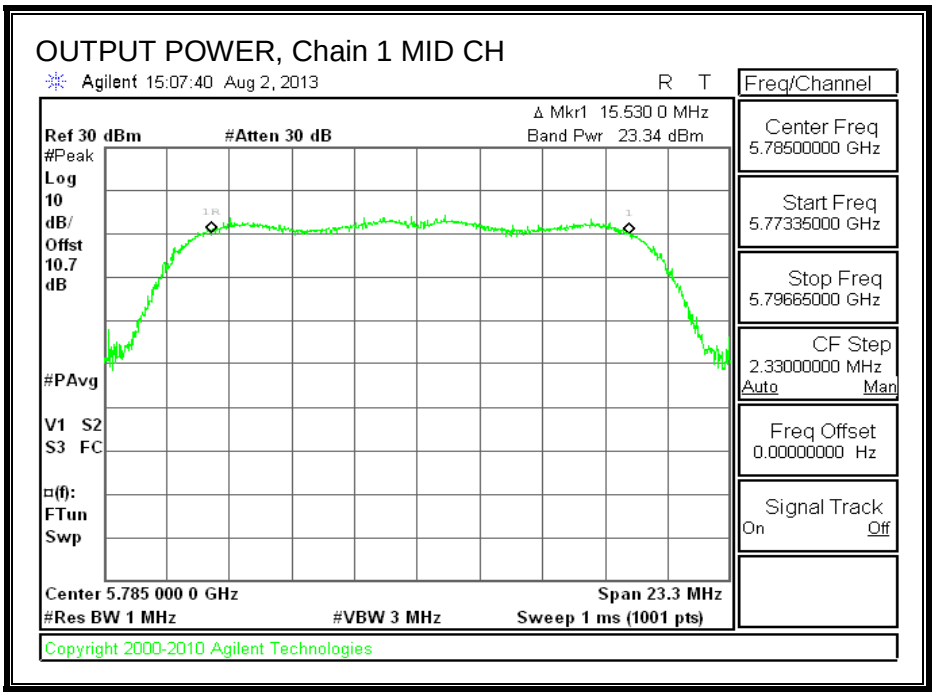




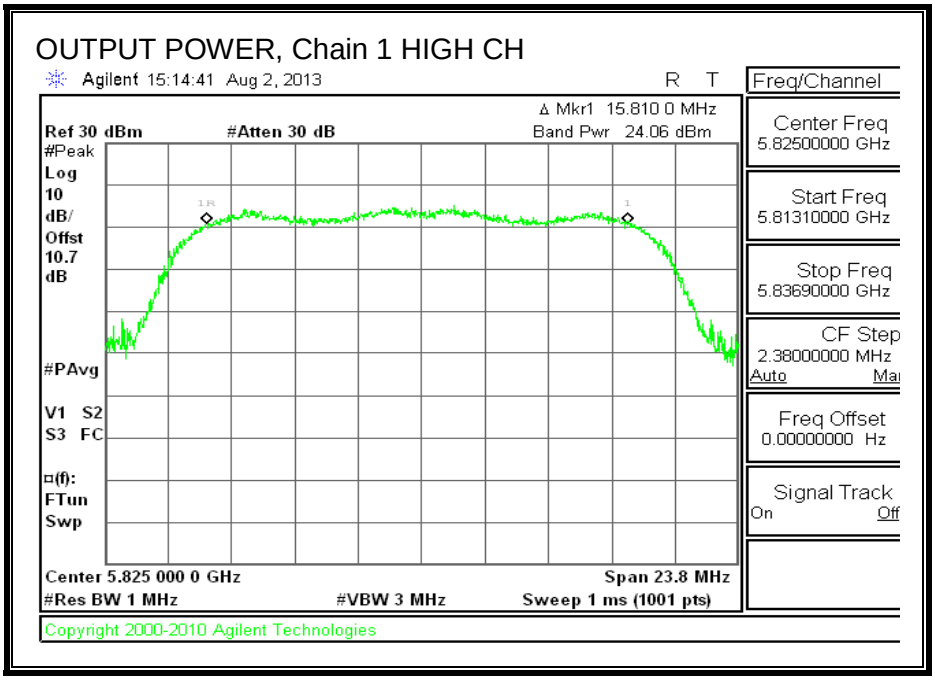
OUTPUT POWER, Chain 1



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

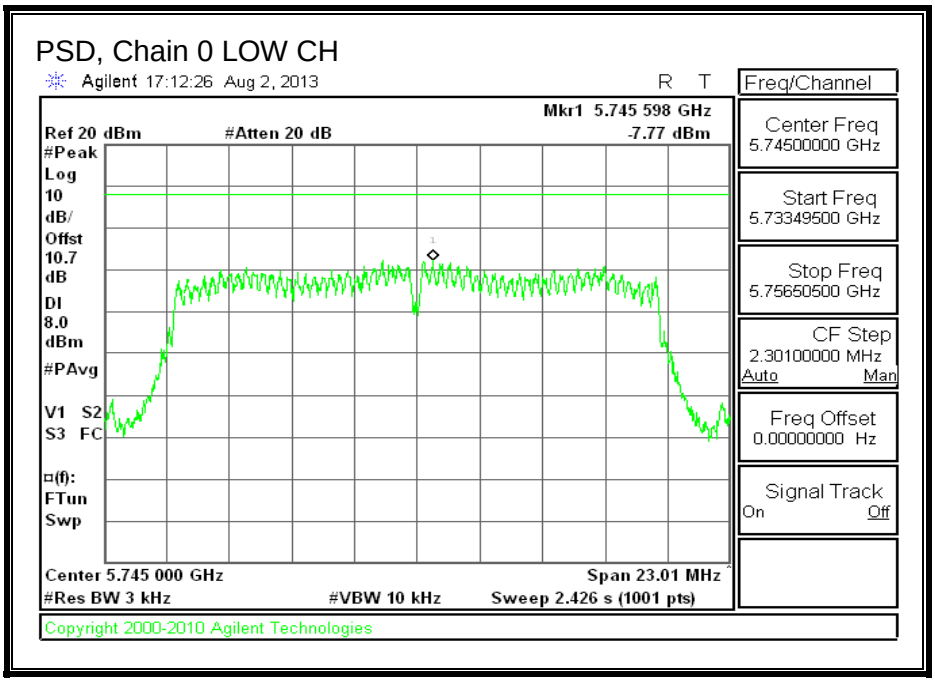
The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

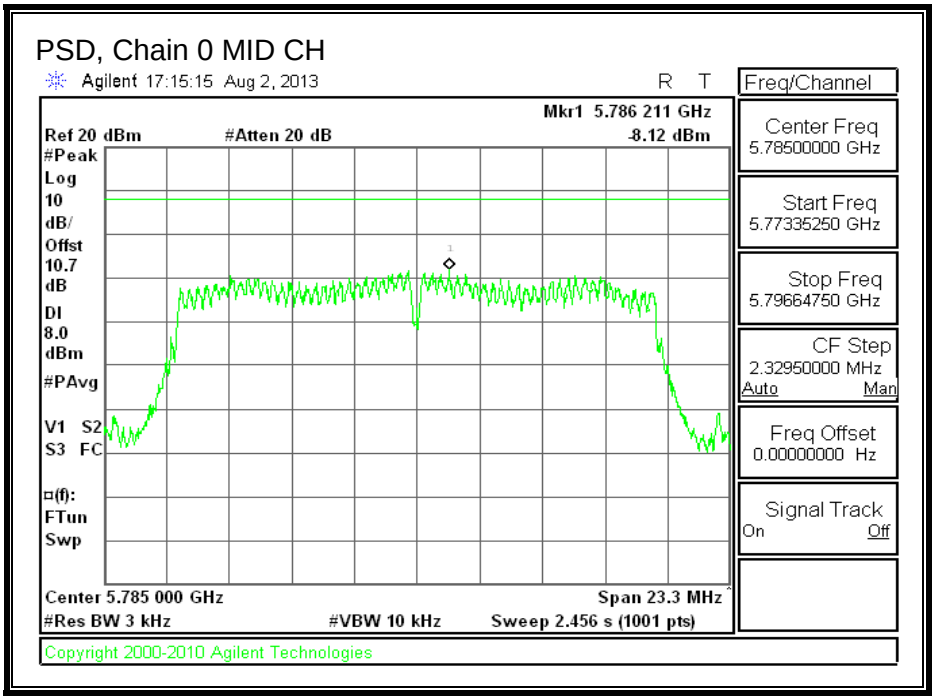
RESULTS

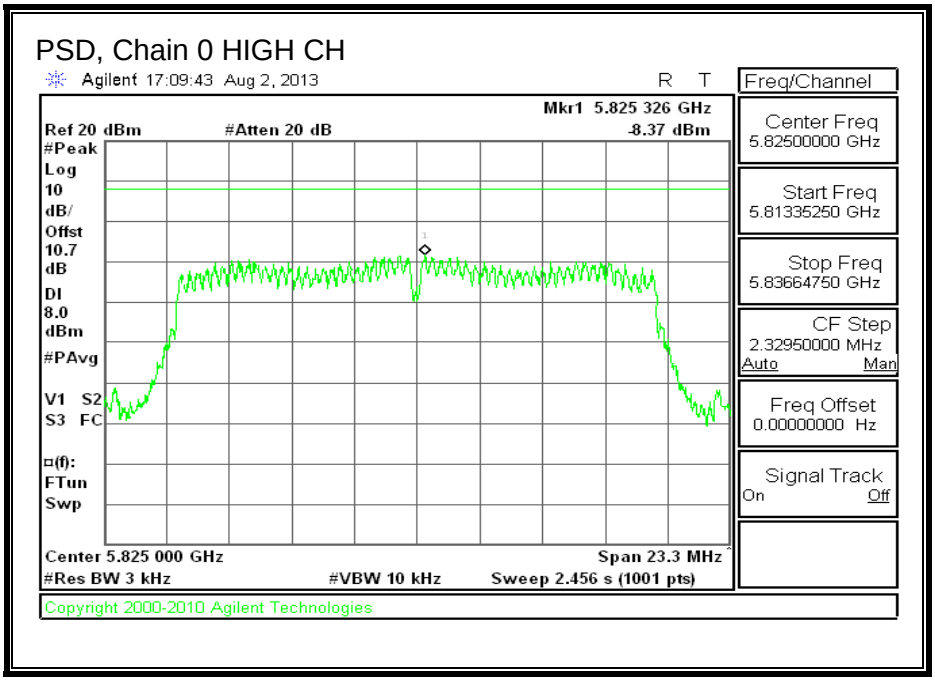
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	5745	-7.77	-7.92	-4.83	8.0	-12.8
Mid	5785	-8.12	-7.82	-4.96	8.0	-13.0
High	5825	-8.37	-7.25	-4.76	8.0	-12.8

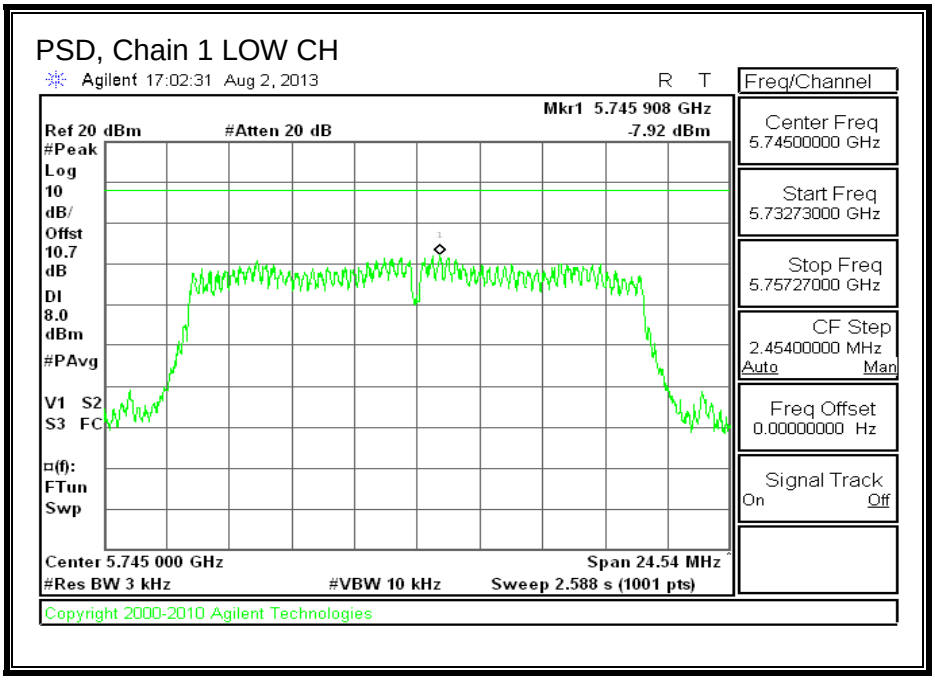
PSD, Chain 0



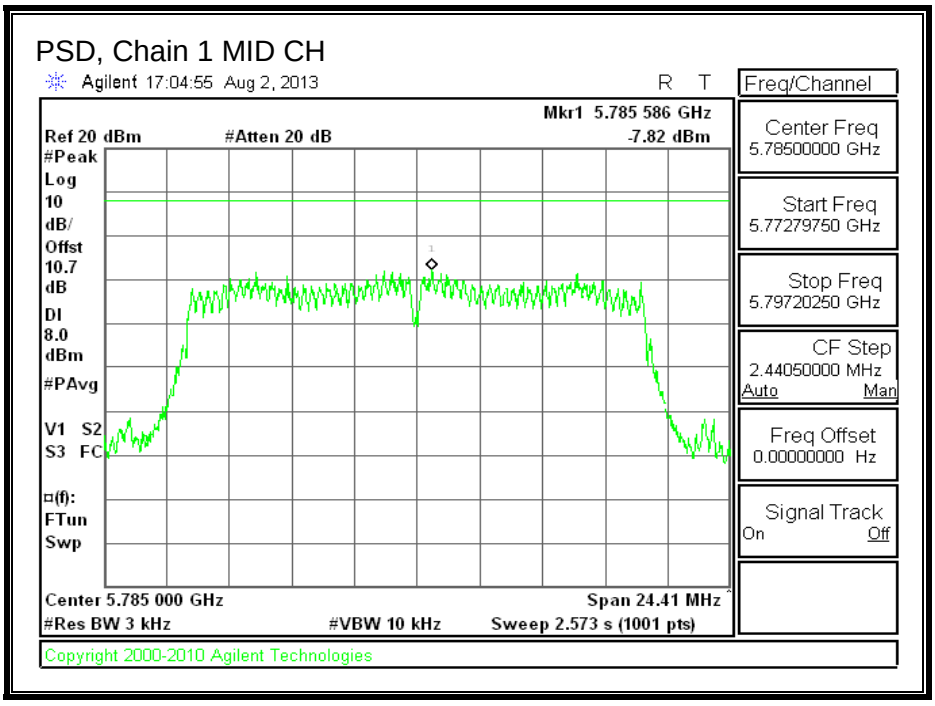




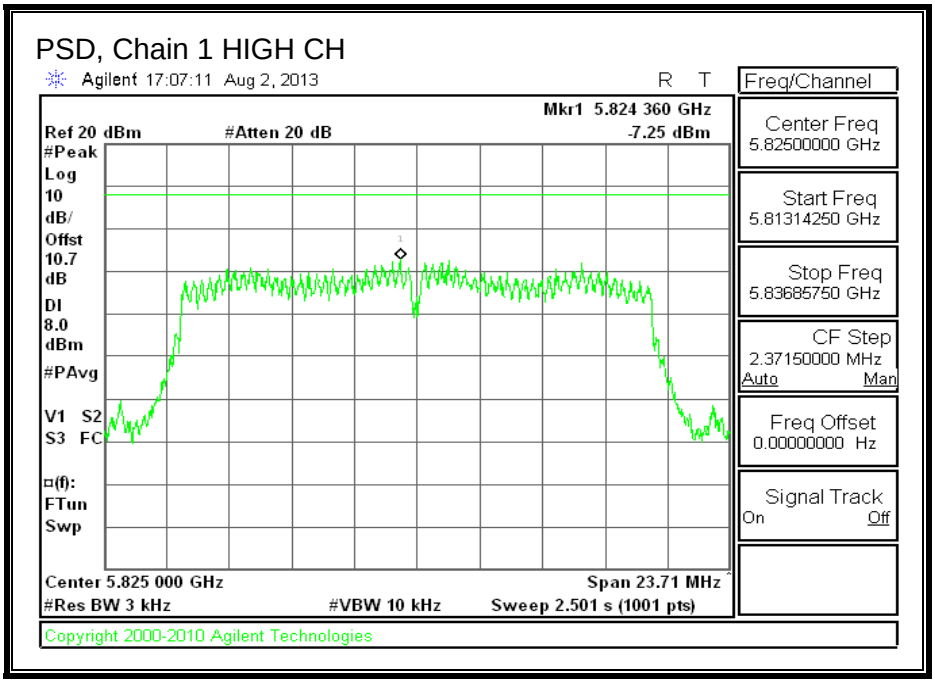
PSD, Chain 1



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

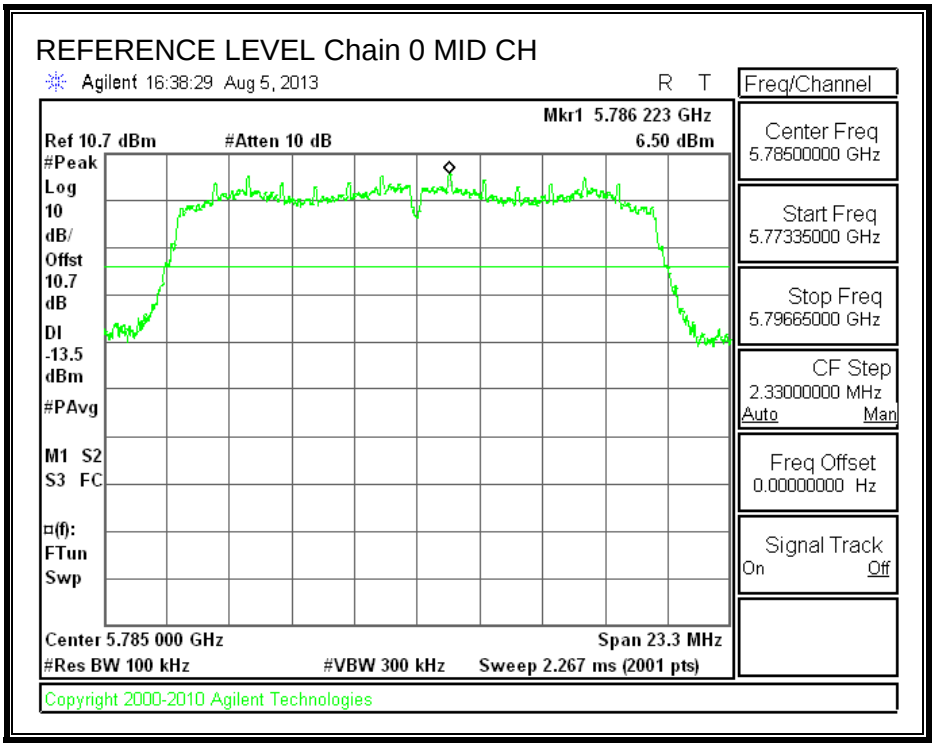
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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

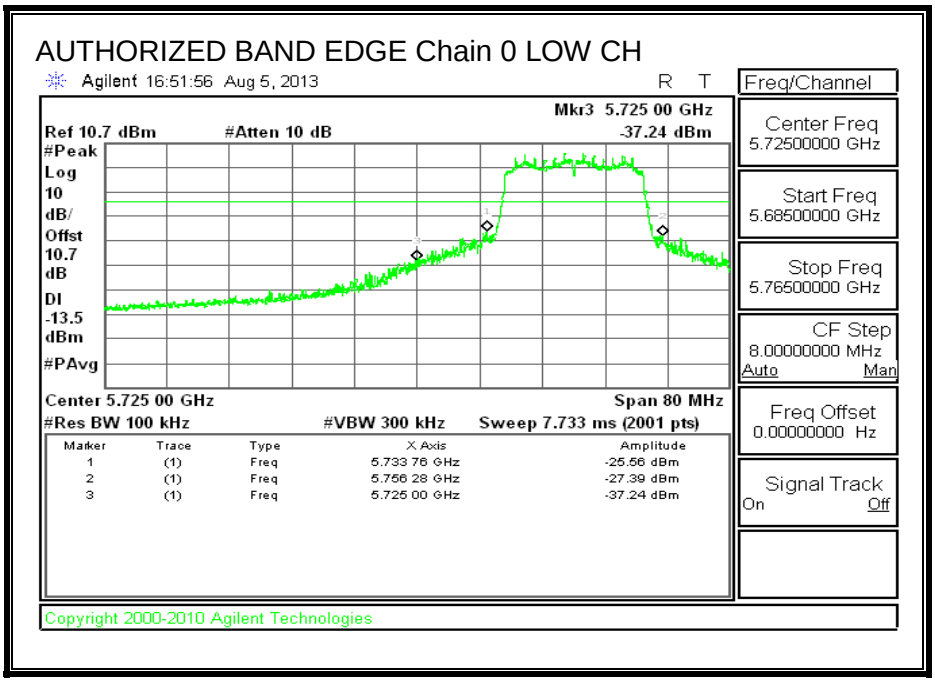
The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

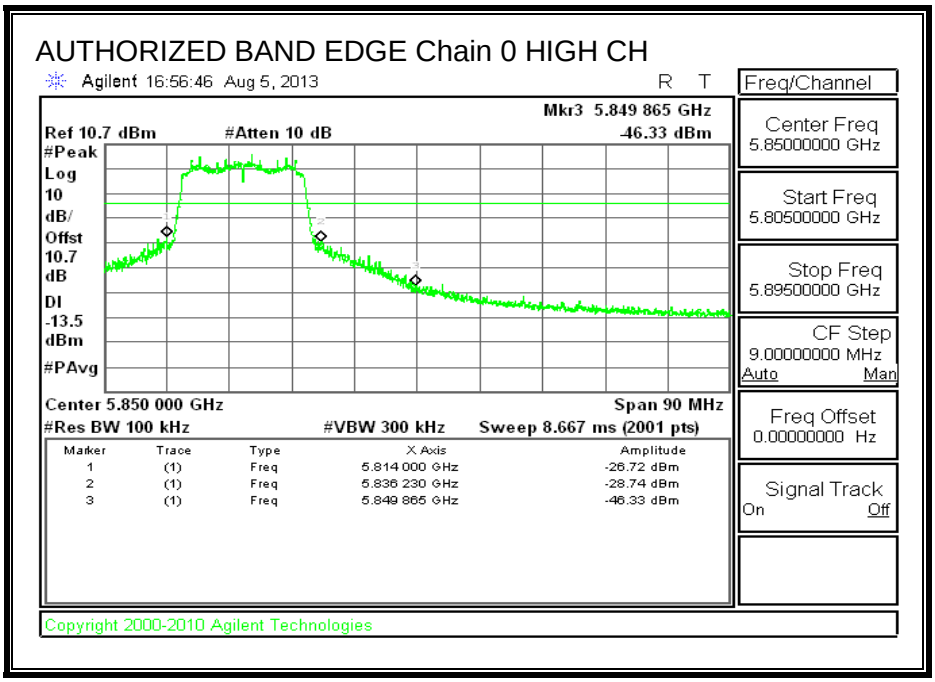
IN-BAND REFERENCE LEVEL, Chain 0



LOW CHANNEL BANDEDGE, Chain 0

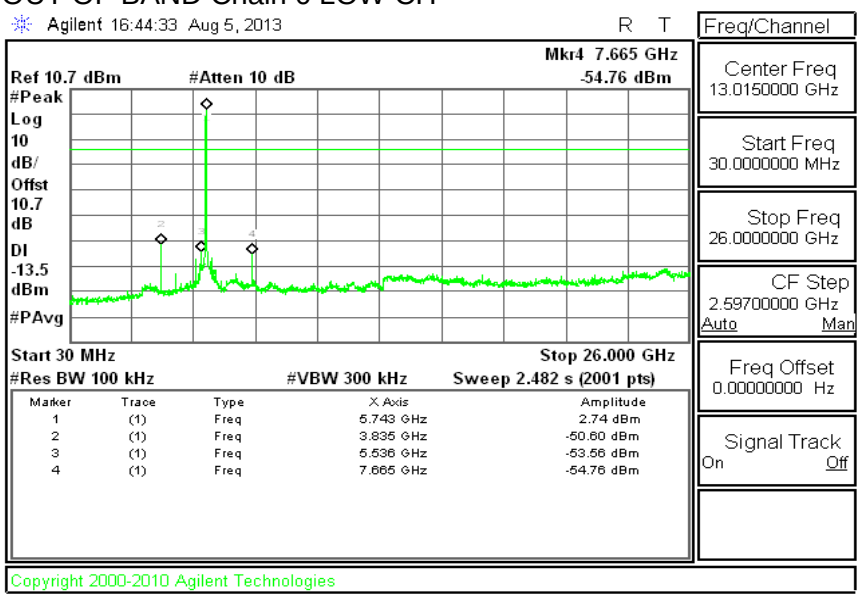


HIGH CHANNEL BANDEDGE, Chain 0

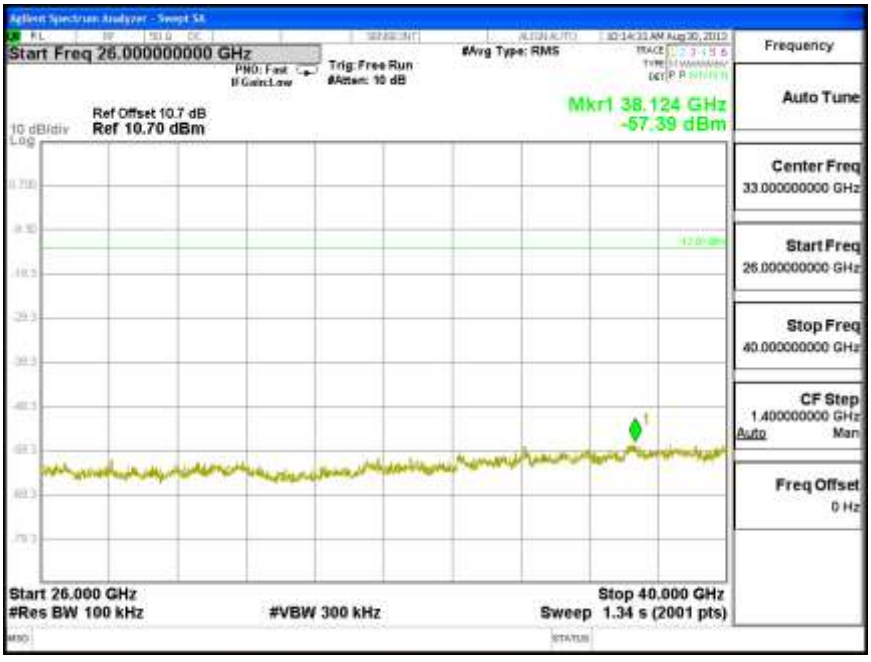


OUT-OF-BAND EMISSIONS, Chain 0

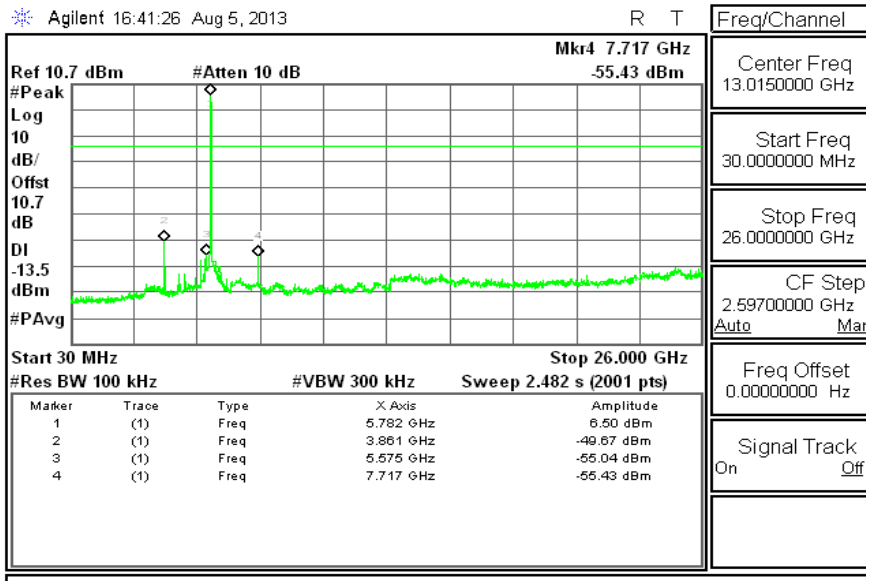
OUT OF BAND Chain 0 LOW CH



OUT OF BAND Chain 0 LOW CH

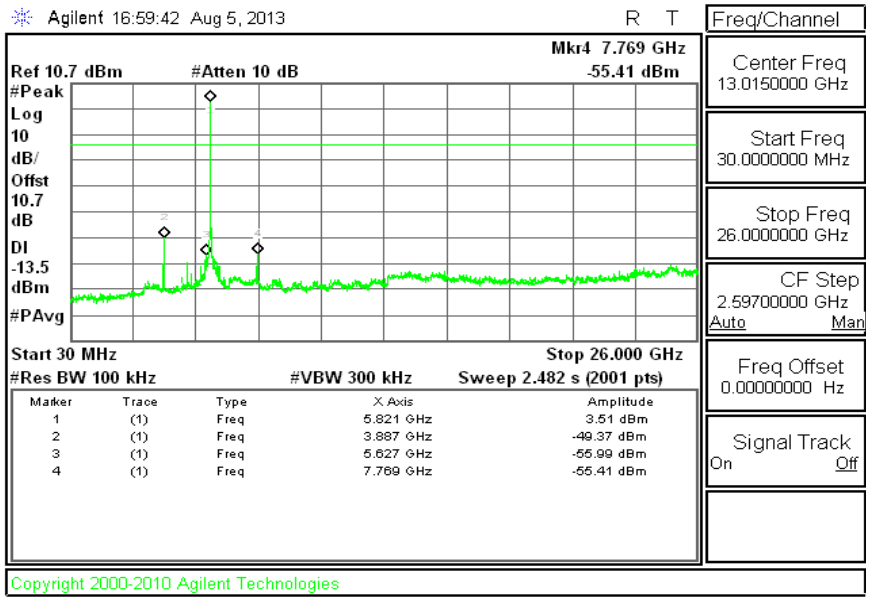


OUT OF BAND Chain 0 MID CH

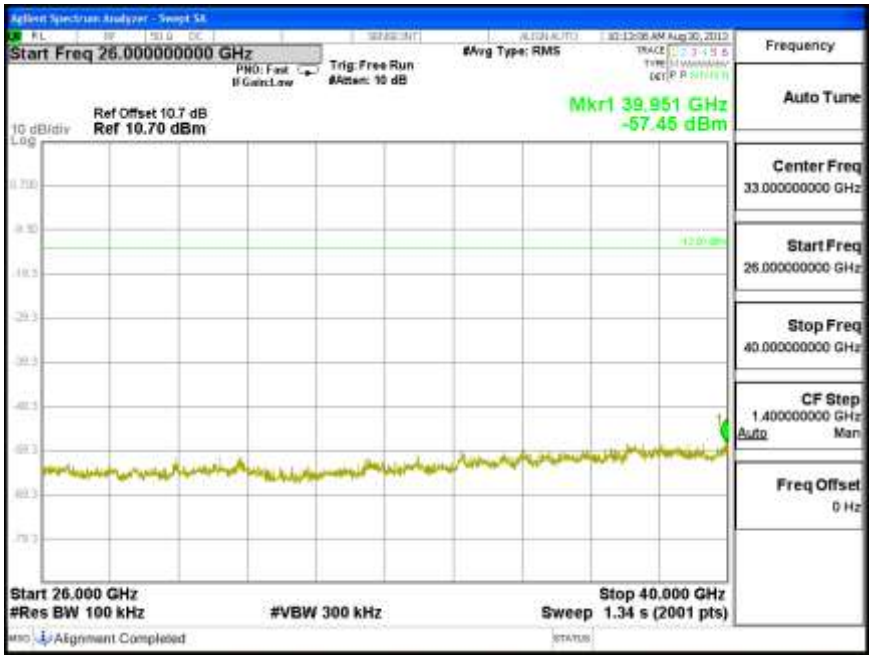


OUT OF BAND Chain 0 MID CH

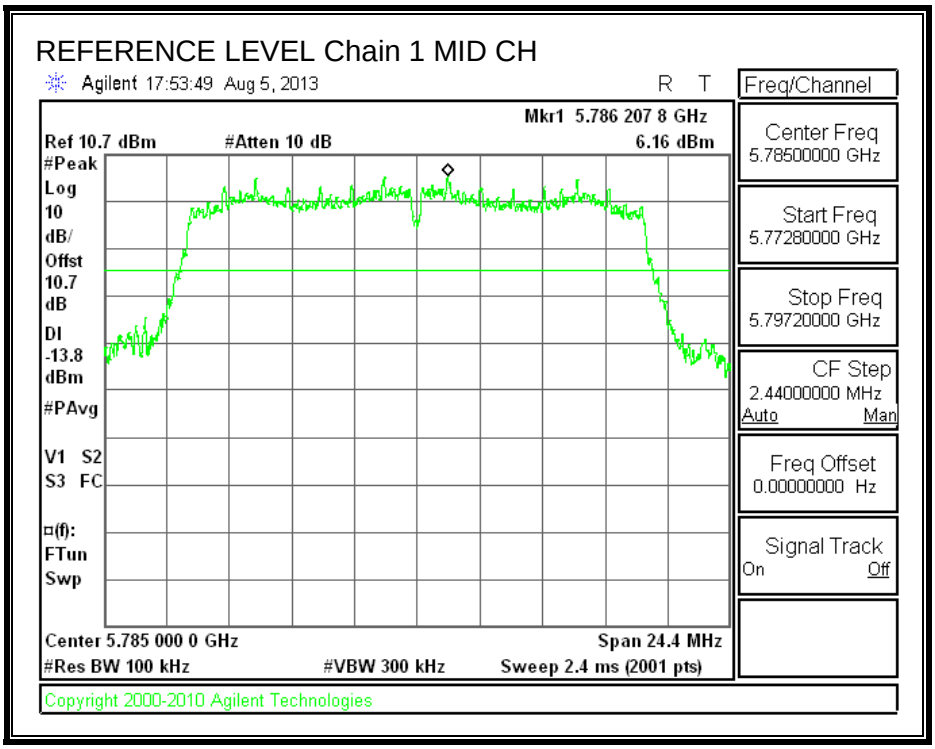
OUT OF BAND Chain 0 HIGH CH



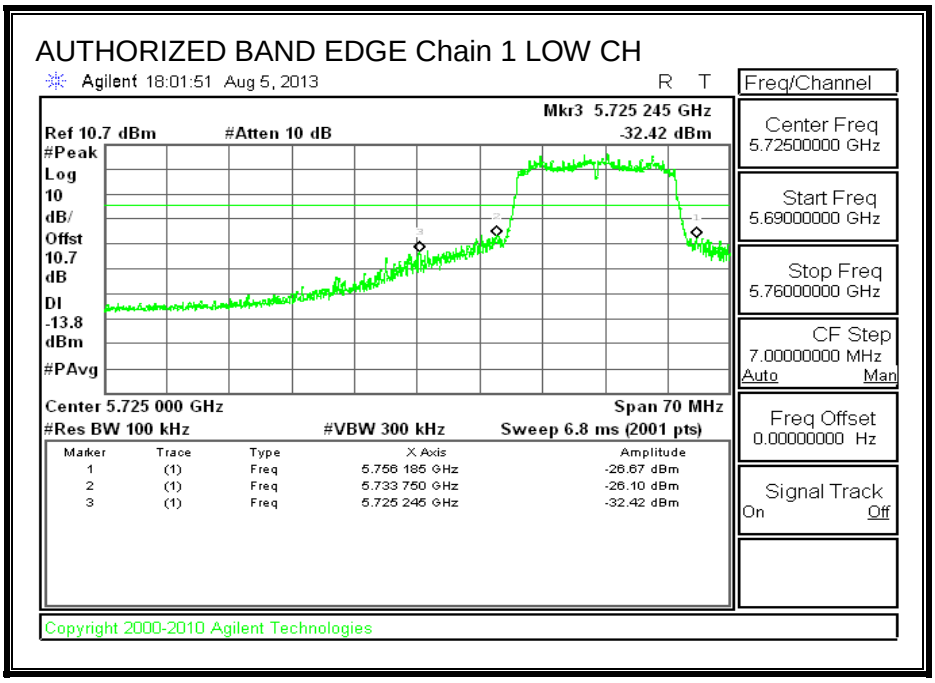
OUT OF BAND Chain 0 HIGH CH



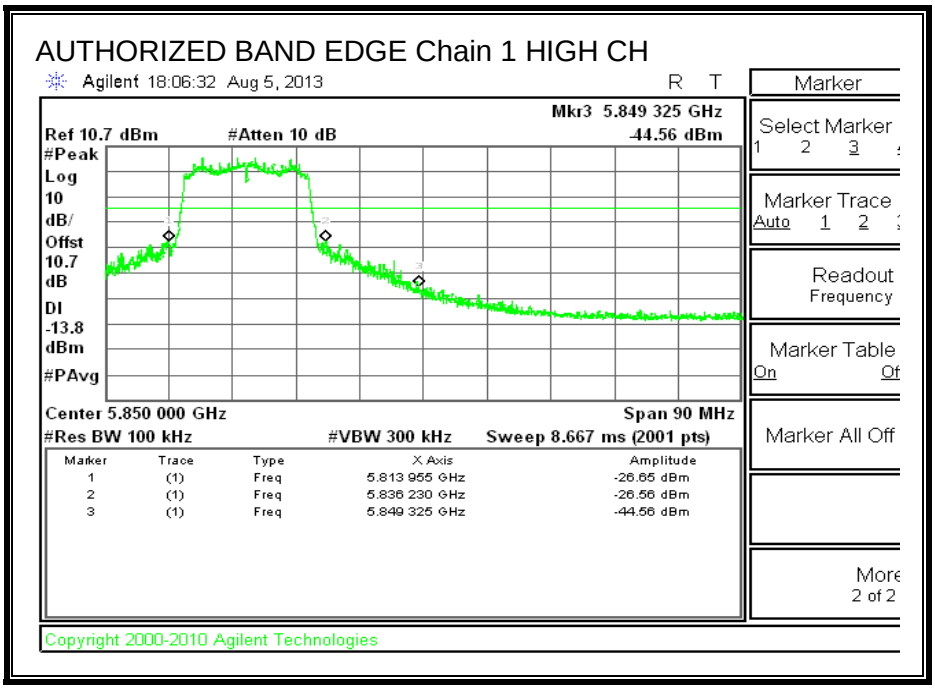
IN-BAND REFERENCE LEVEL, Chain 1



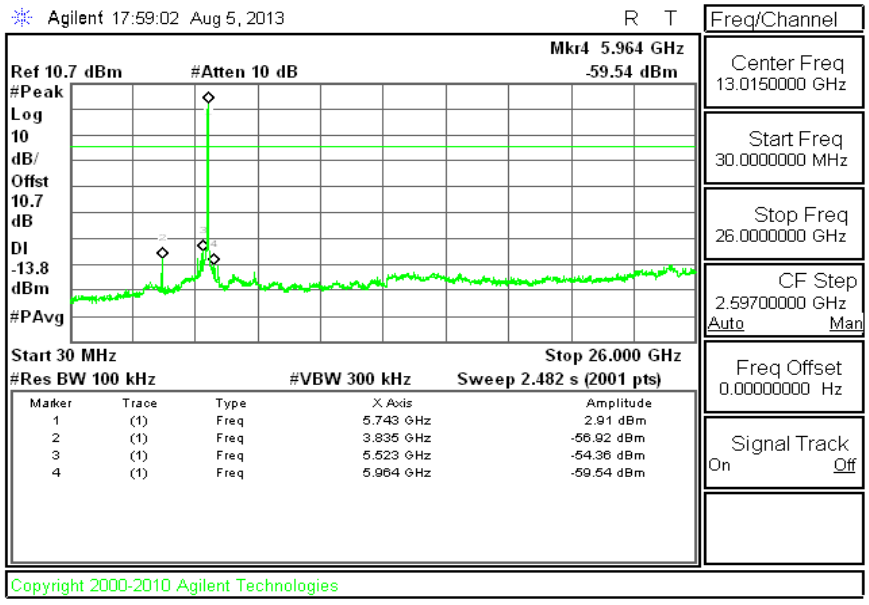
LOW CHANNEL BANDEDGE, Chain 1



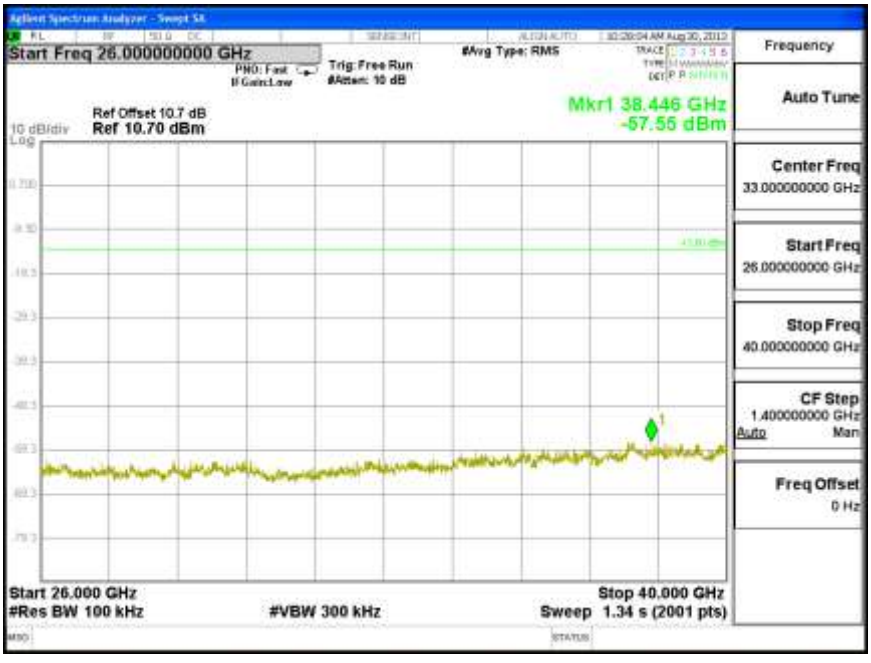
HIGH CHANNEL BANDEDGE, Chain 1



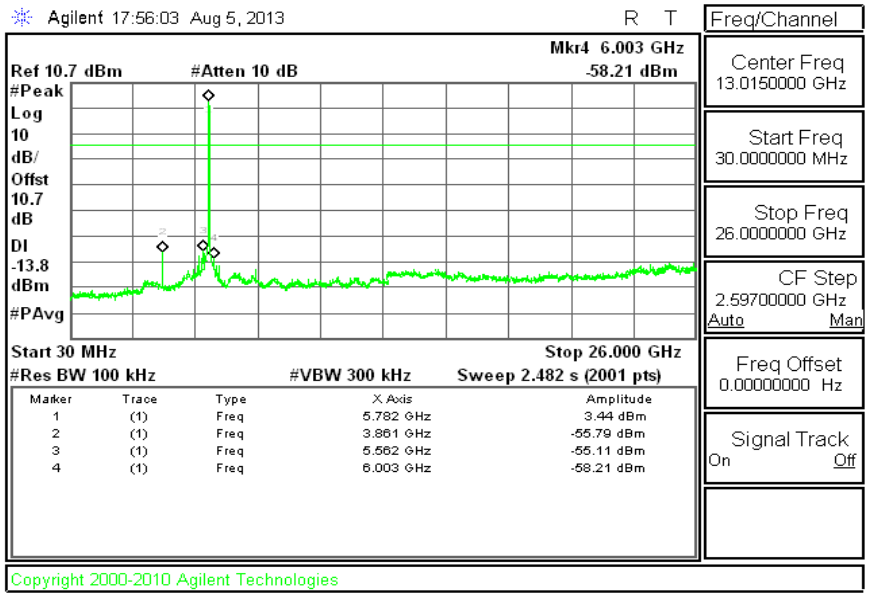
OUT OF BAND Chain 1 LOW CH



OUT OF BAND Chain 1 LOW CH

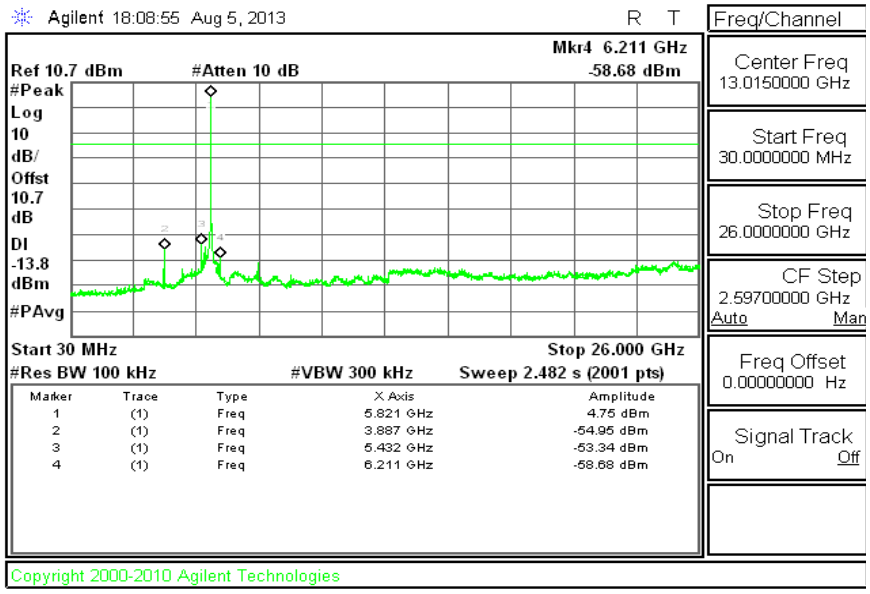


OUT OF BAND Chain 1 MID CH

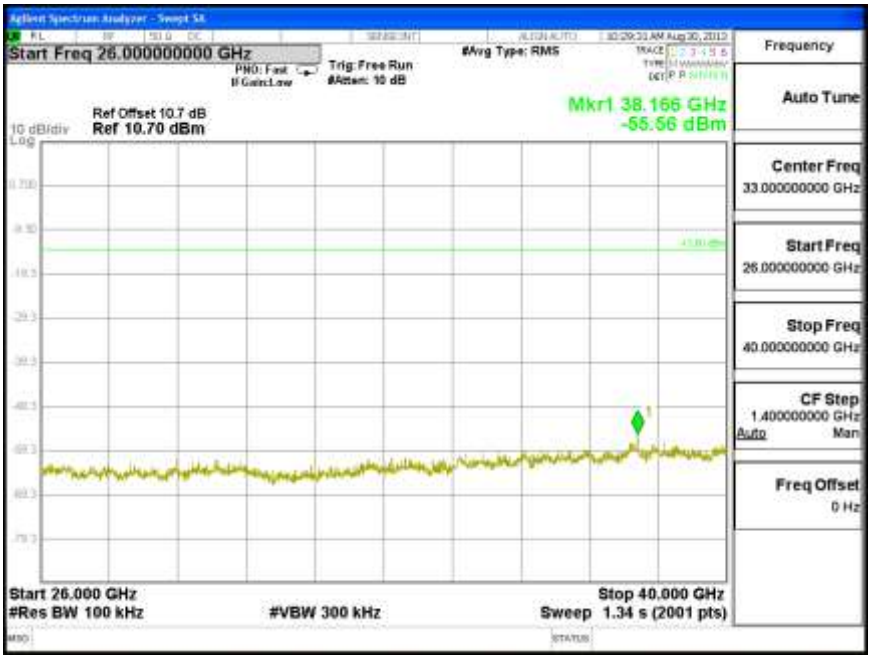


OUT OF BAND Chain 1 MID CH

OUT OF BAND Chain 1 HIGH CH



OUT OF BAND Chain 1 HIGH CH



8.6. 802.11n HT40 1TX 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.

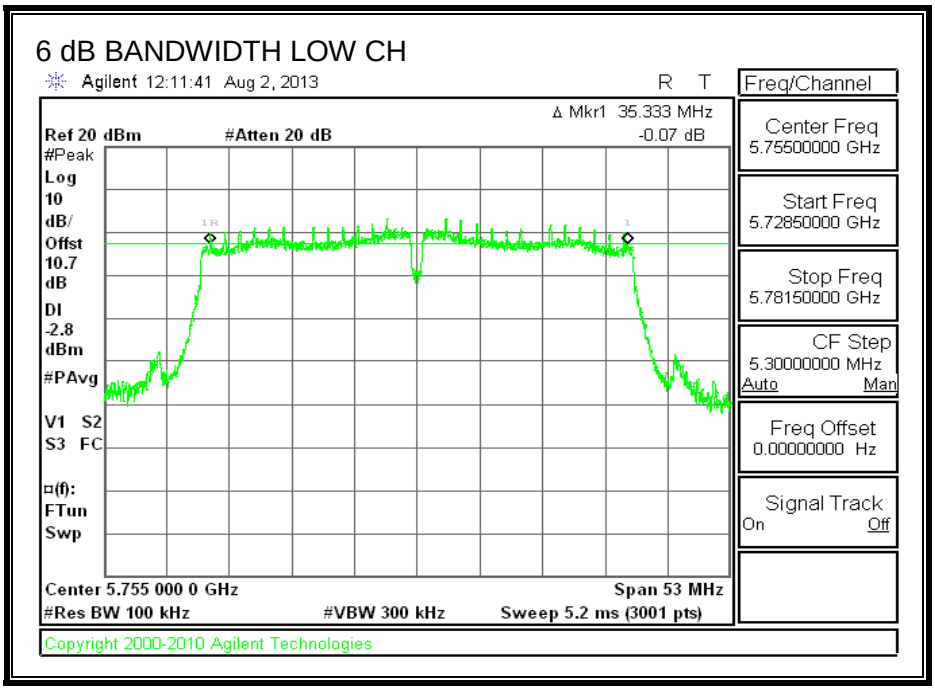
TEST PROCEDURE

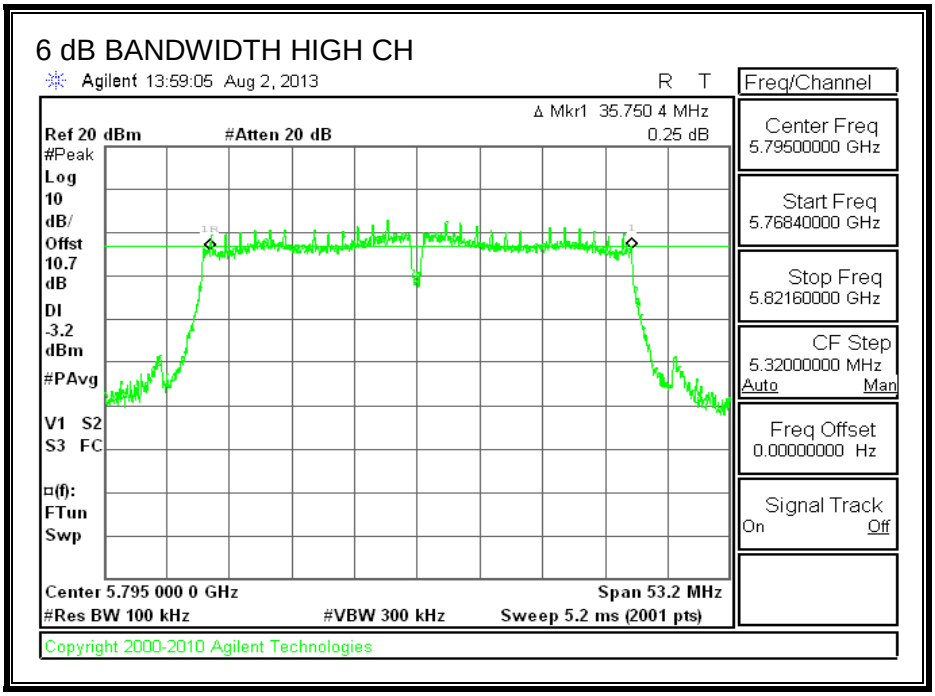
KDB 558074 D01 v01 “Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under 15.247”.

RESULTS

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low	5755	35.333	0.5
High	5795	35.750	0.5

6 dB BANDWIDTH





8.6.2. 99% BANDWIDTH

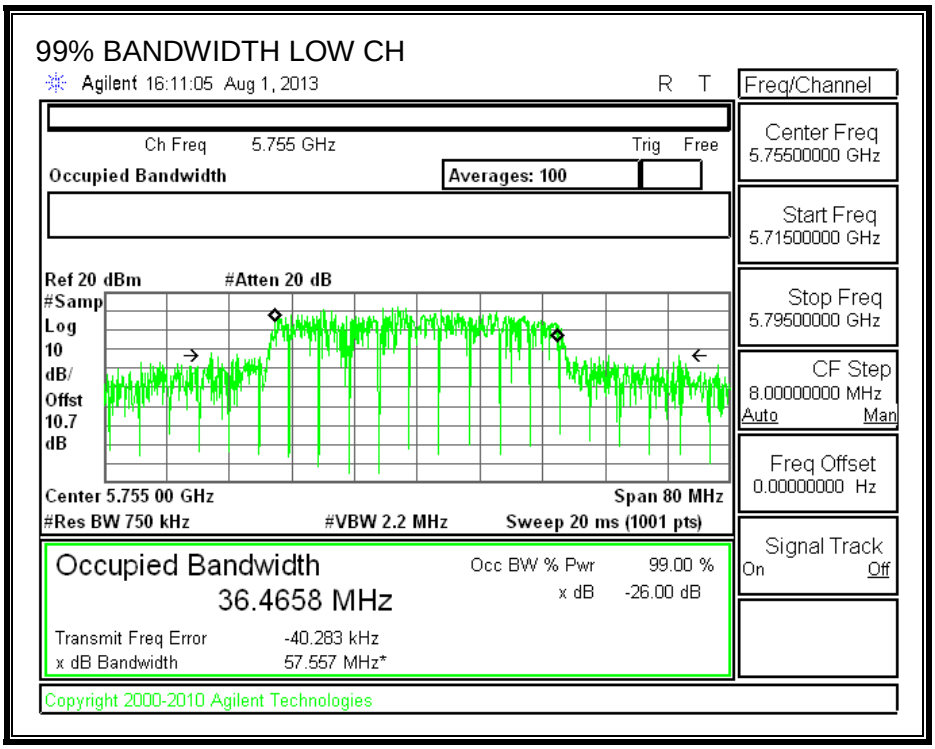
LIMITS

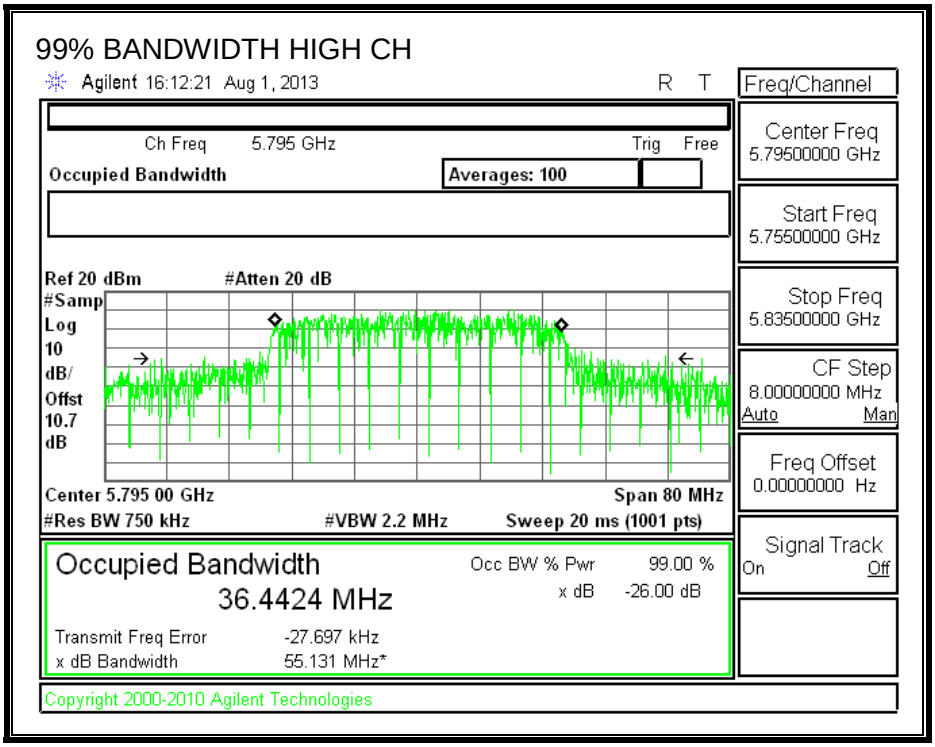
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5755	36.4658
High	5795	36.4424

99% BANDWIDTH





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 10.7 dB (including 10 dB pad and 0.7 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	16.00
High	5795	16.00

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

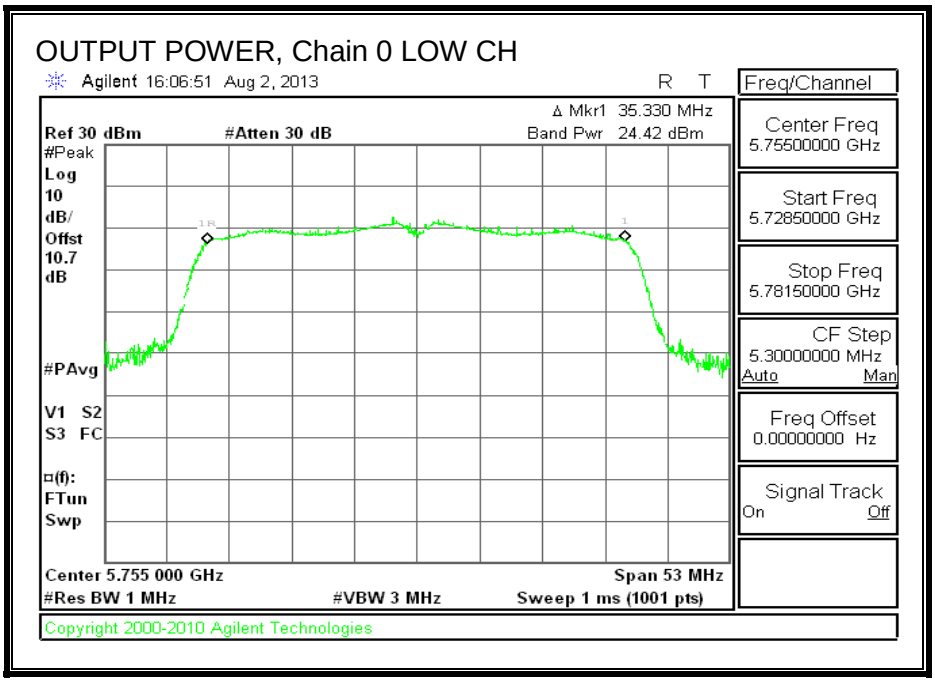
Limits

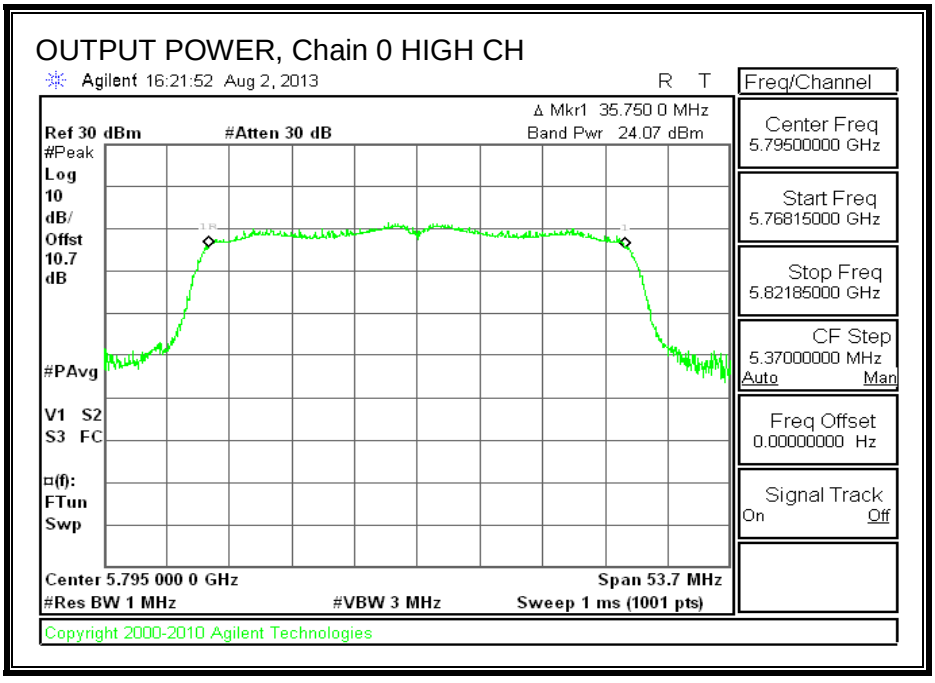
Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5755	4.21	30.00	30	36	30.00
High	5795	4.21	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	5755	24.42	24.42	30.00	-5.58
High	5795	24.07	24.07	30.00	-5.93

OUTPUT POWER, Chain 0





8.6.5. PSD

LIMITS

FCC §15.247

IC RSS-210 A8.2

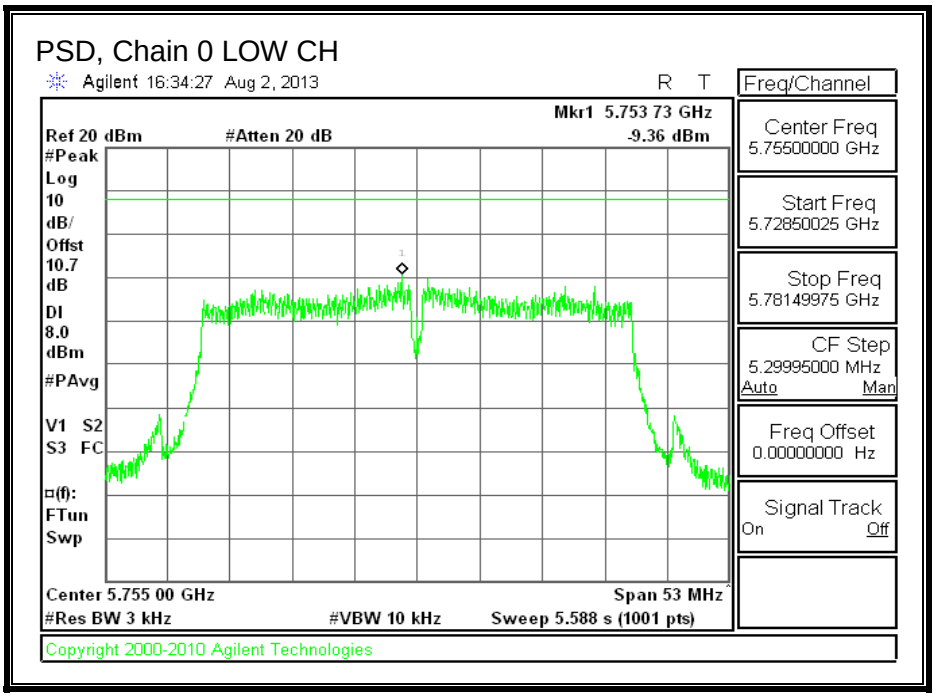
The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

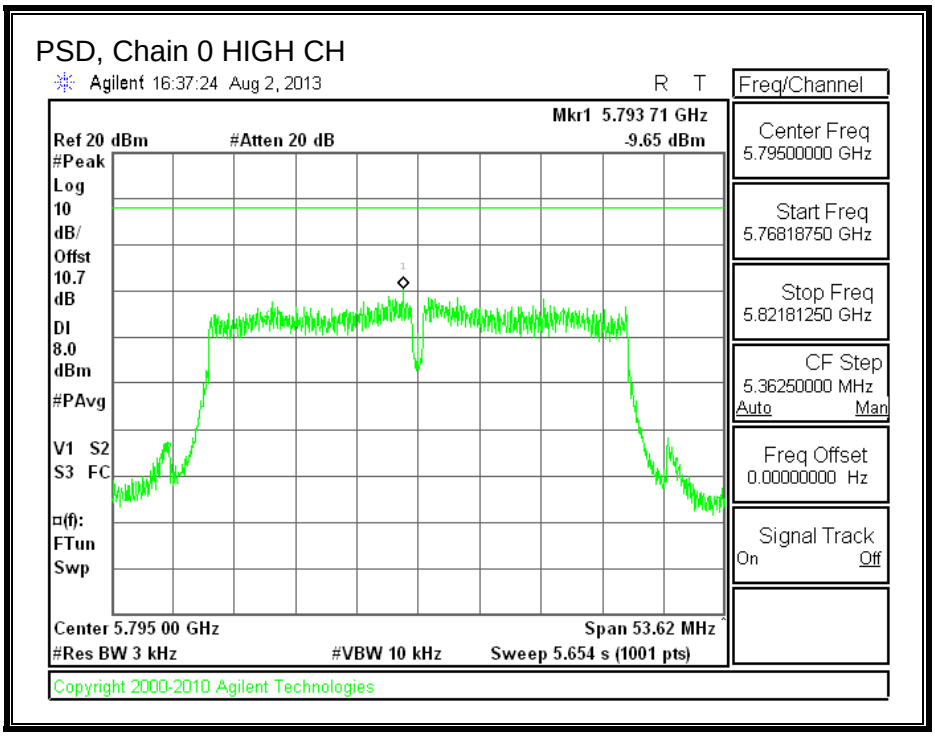
RESULTS

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Limit (dBm)	Margin (dB)
Low	5755	-9.36	8.0	-17.4
High	5795	-9.65	8.0	-17.7

PSD, Chain 0





8.6.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

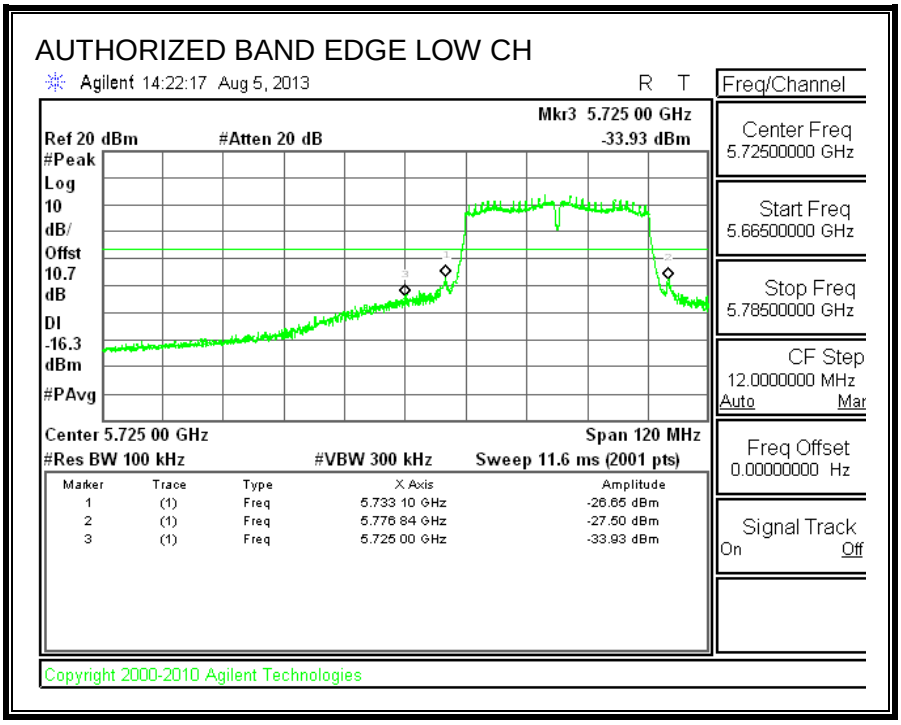
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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

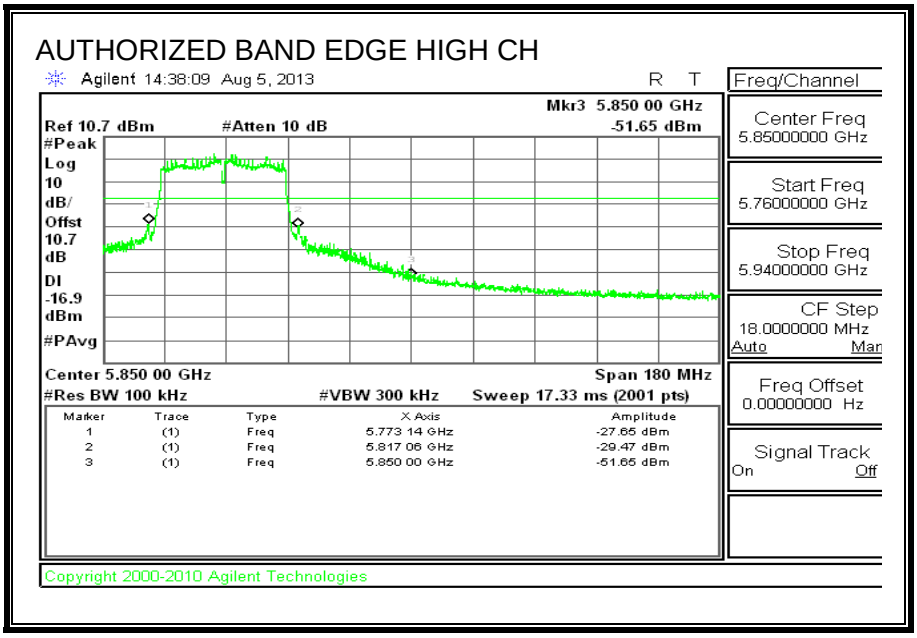
The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

LOW CHANNEL BANDEDGE

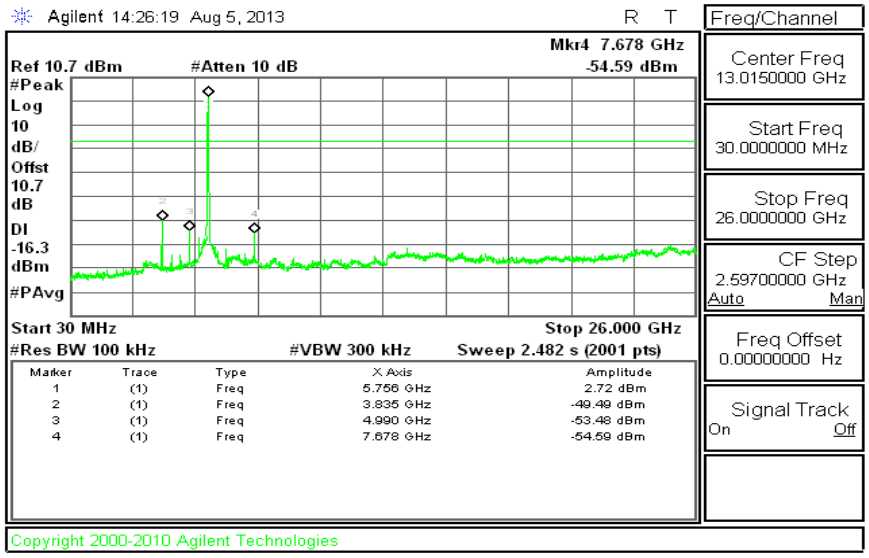


HIGH CHANNEL BANDEDGE



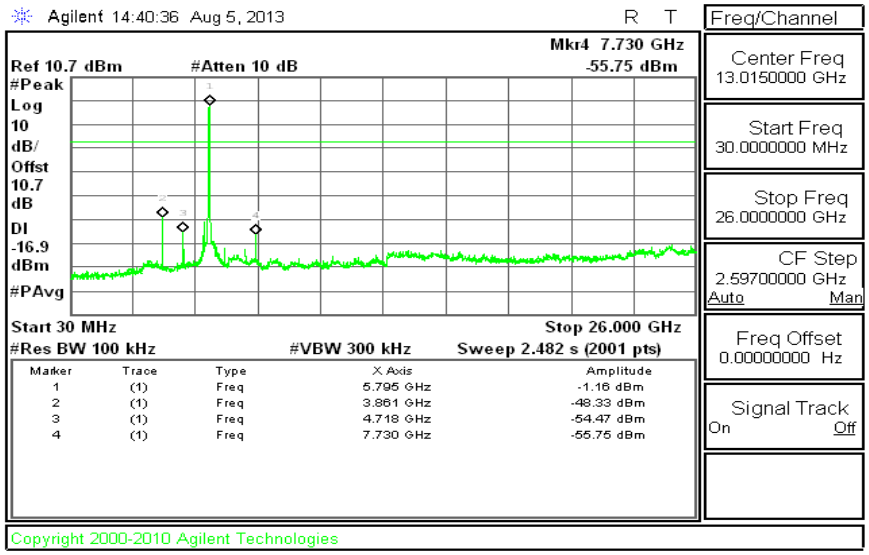
OUT-OF-BAND EMISSIONS

OUT OF BAND LOW CH

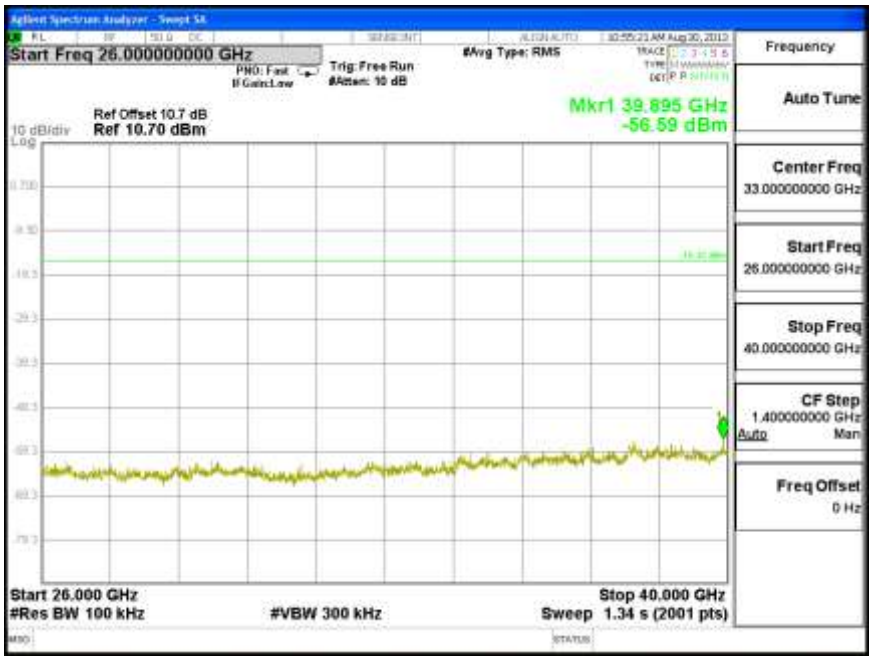


OUT OF BAND LOW CH

OUT OF BAND HIGH CH



OUT OF BAND HIGH CH



8.7. 802.11n HT40 2TX CDD 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.

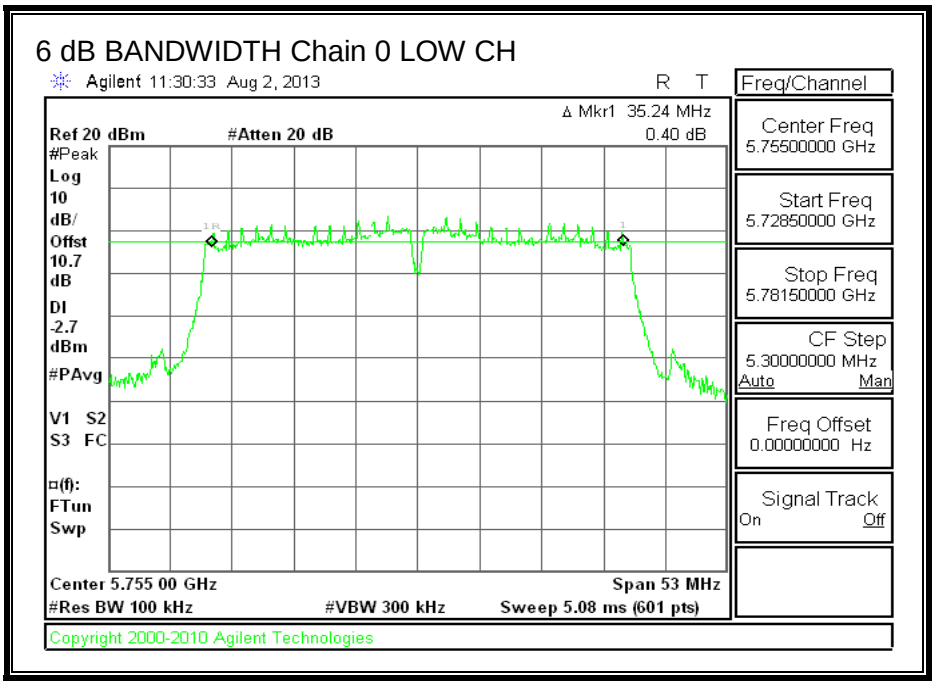
TEST PROCEDURE

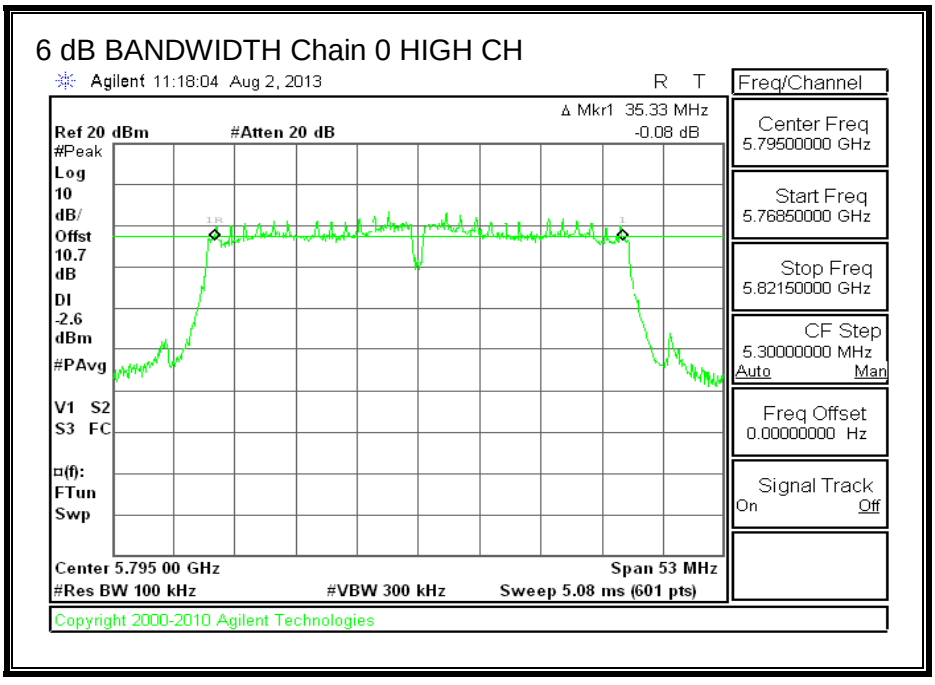
KDB 558074 D01 v01 "Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under 15.247".

RESULTS

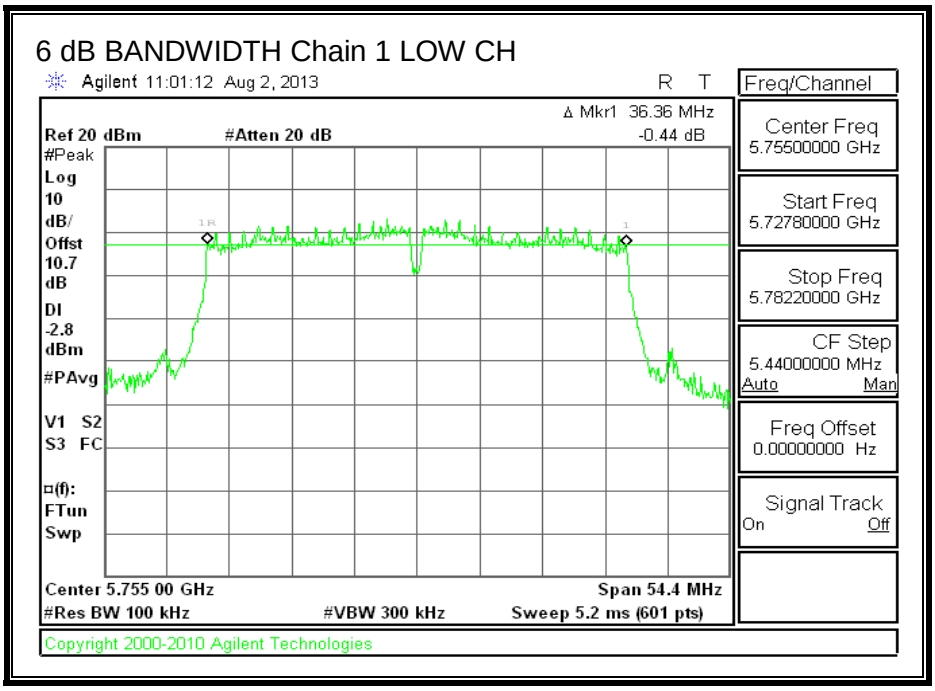
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low	5755	35.240	36.360	0.5
High	5795	35.330	36.360	0.5

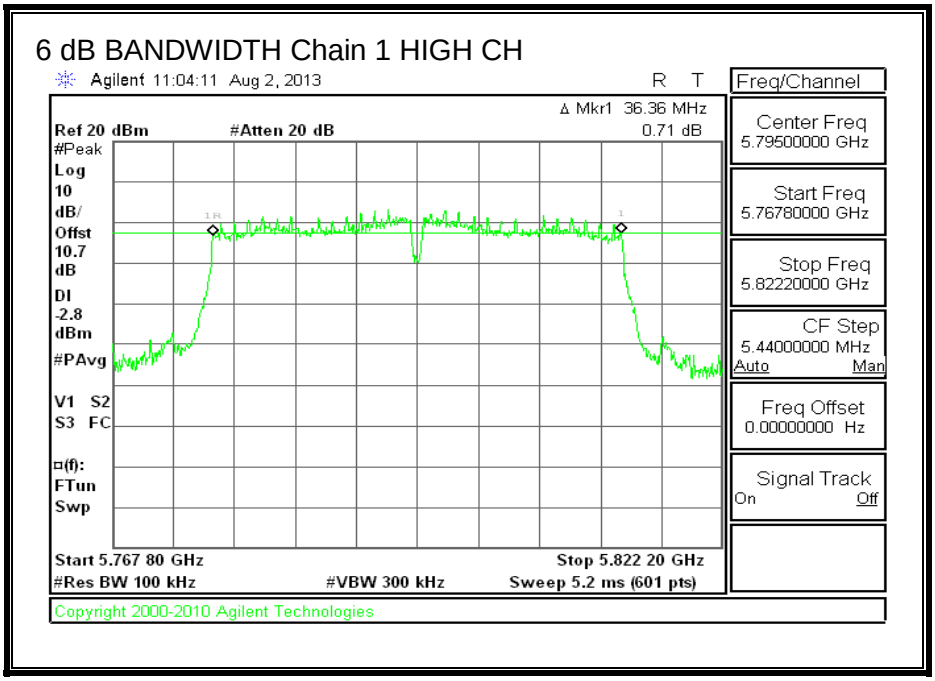
6 dB BANDWIDTH, Chain 0





6 dB BANDWIDTH, Chain 1





8.7.2. 99% BANDWIDTH

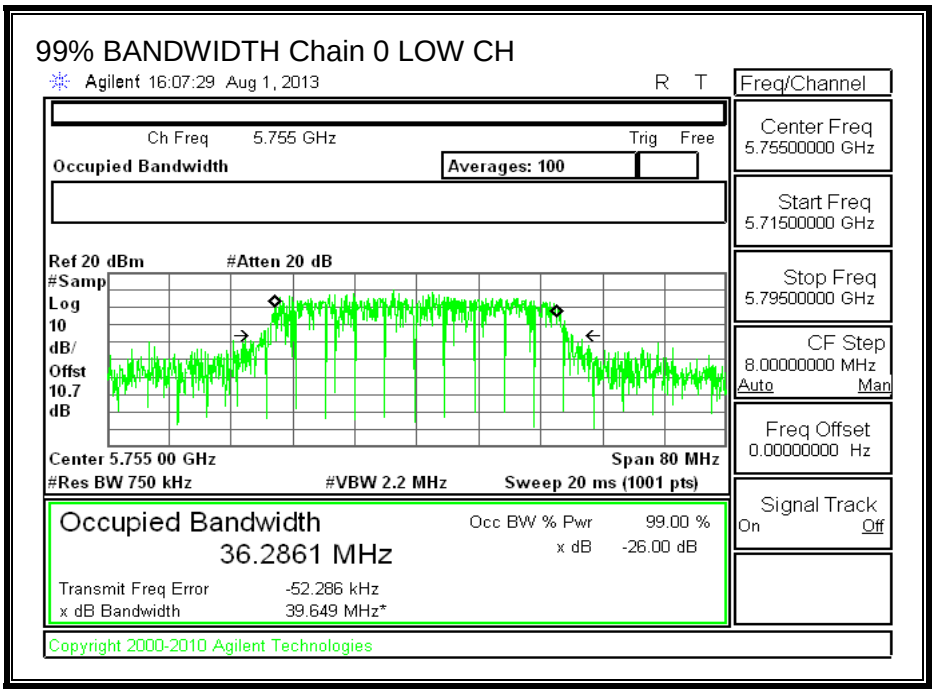
LIMITS

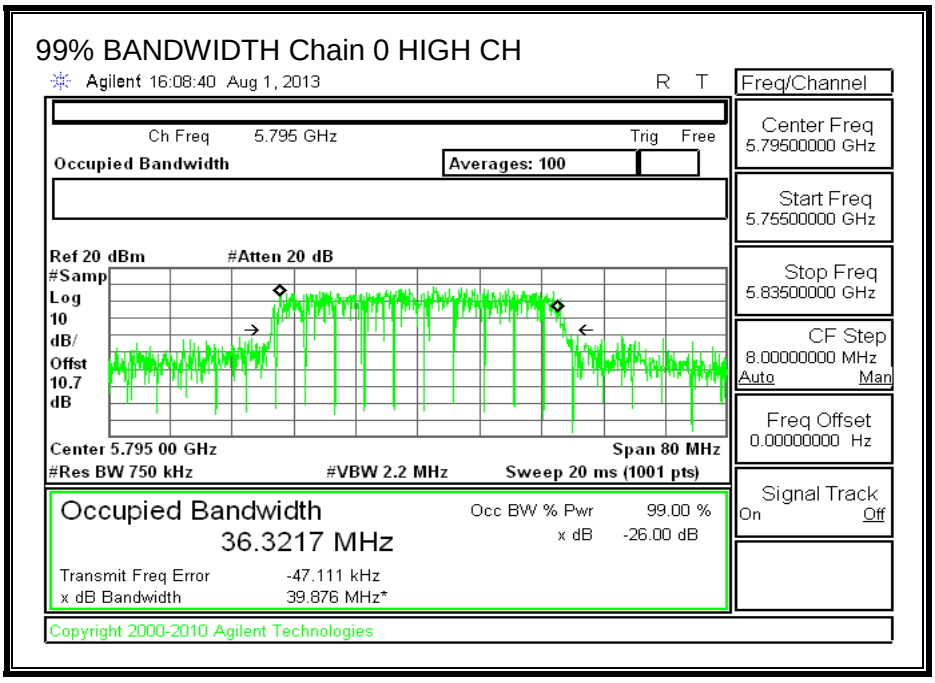
None; for reporting purposes only.

RESULTS

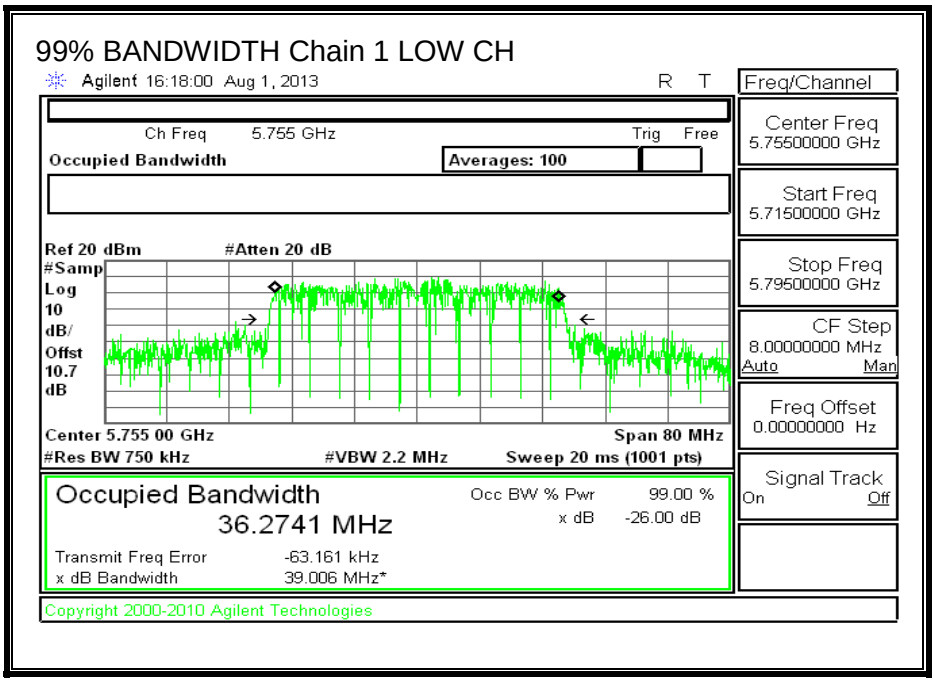
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5755	36.2861	36.2741
High	5795	36.3217	36.2715

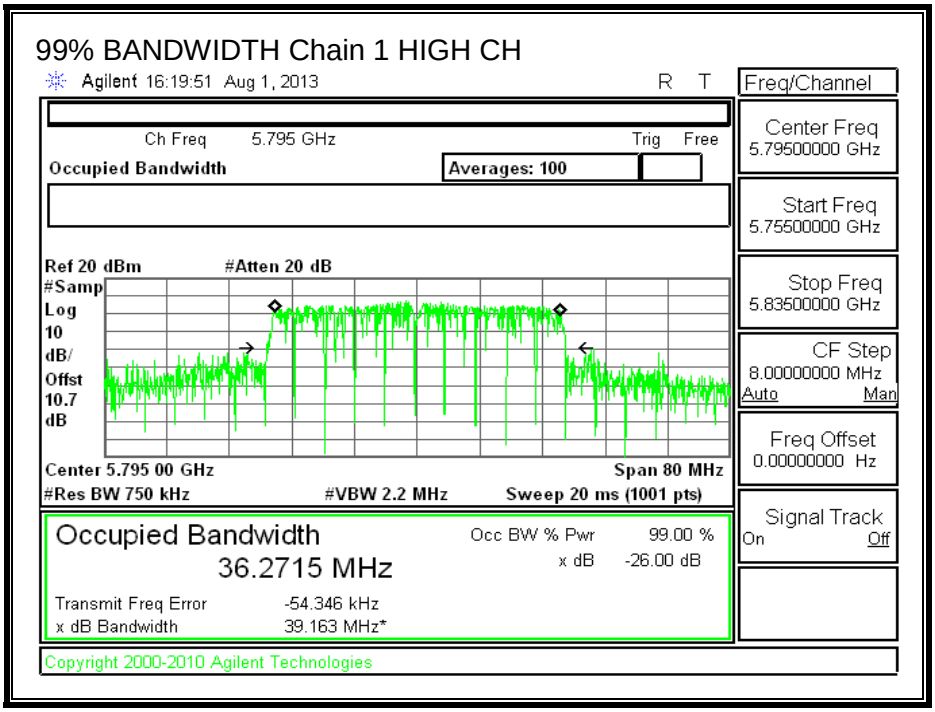
99% BANDWIDTH, Chain 0





99% BANDWIDTH, Chain 1





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 10.7 dB (including 10 dB pad and 0.7 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	16.00	15.90	18.96
High	5795	15.90	15.80	18.86

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)
4.21	3.92	4.07

RESULTS

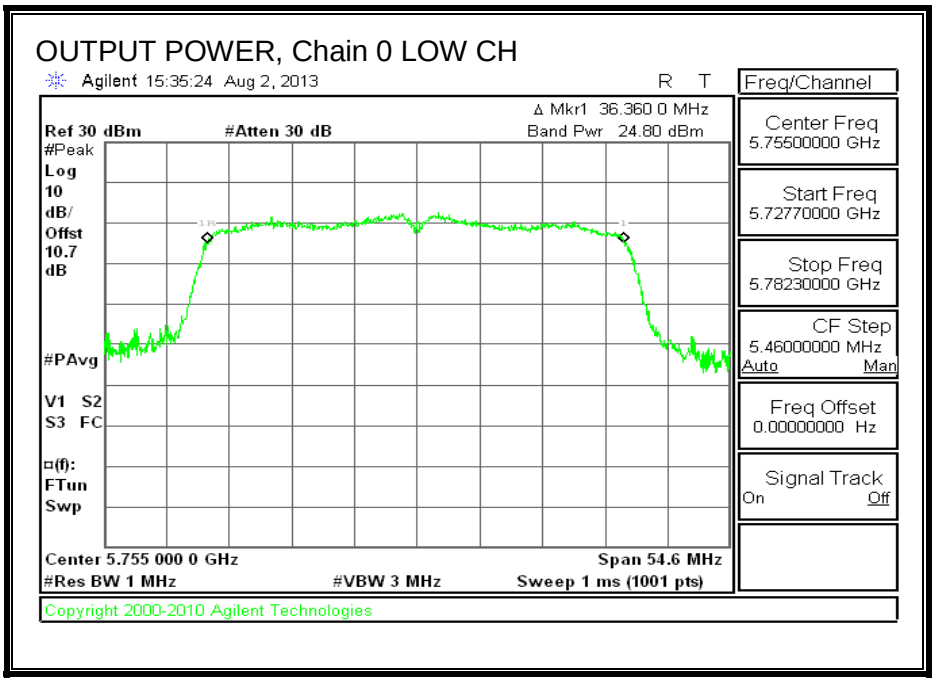
Limits

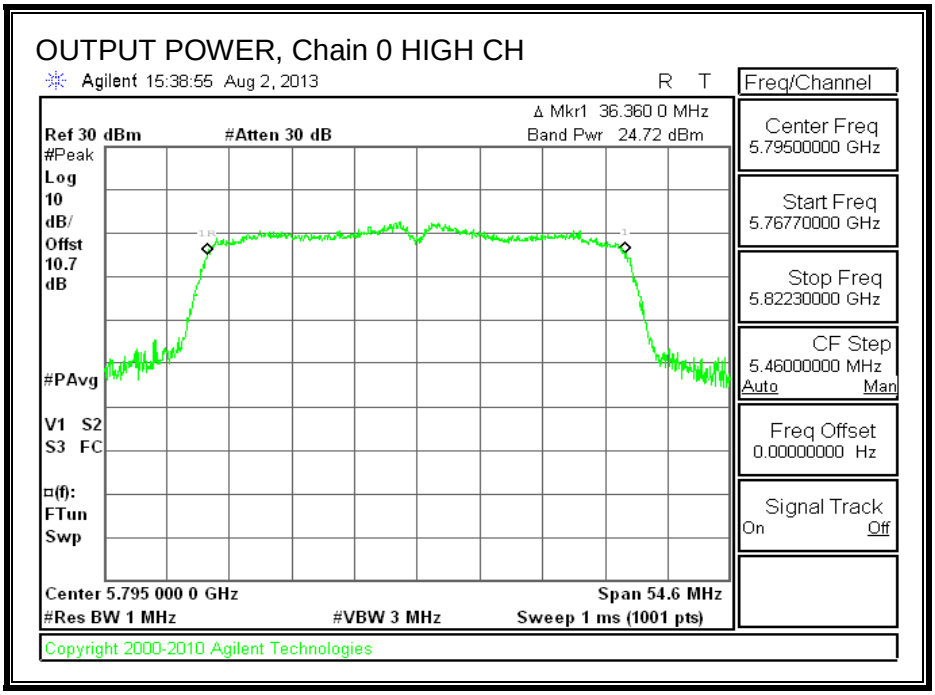
Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	5755	4.07	30.00	30	36	30.00
High	5795	4.07	30.00	30	36	30.00

Results

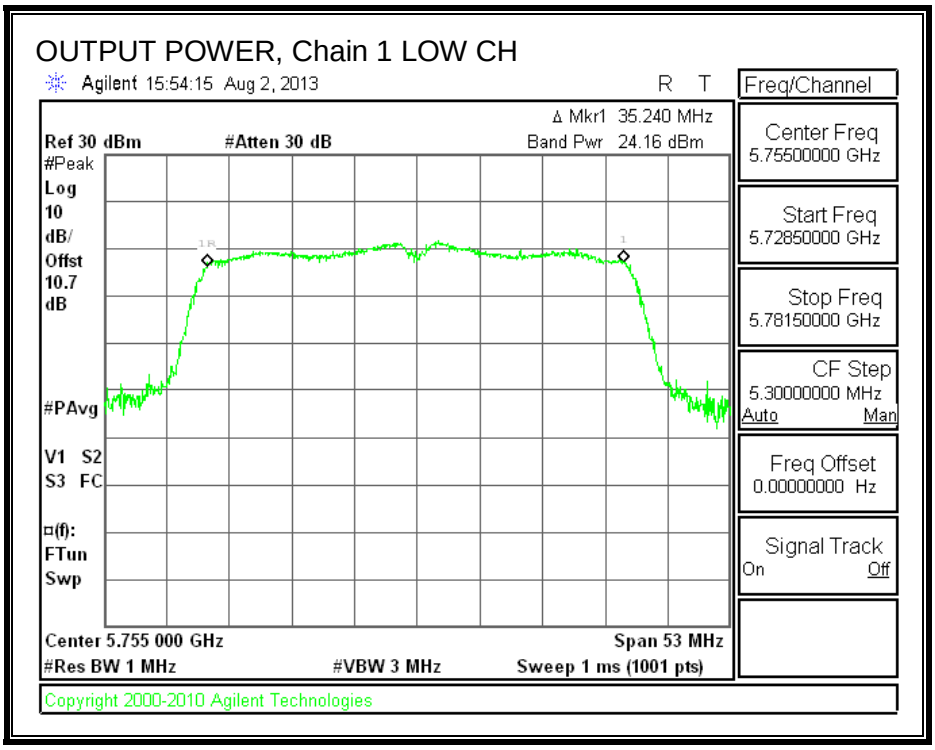
Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	5755	24.80	24.16	27.50	30.00	-2.50
High	5795	24.72	24.00	27.39	30.00	-2.61

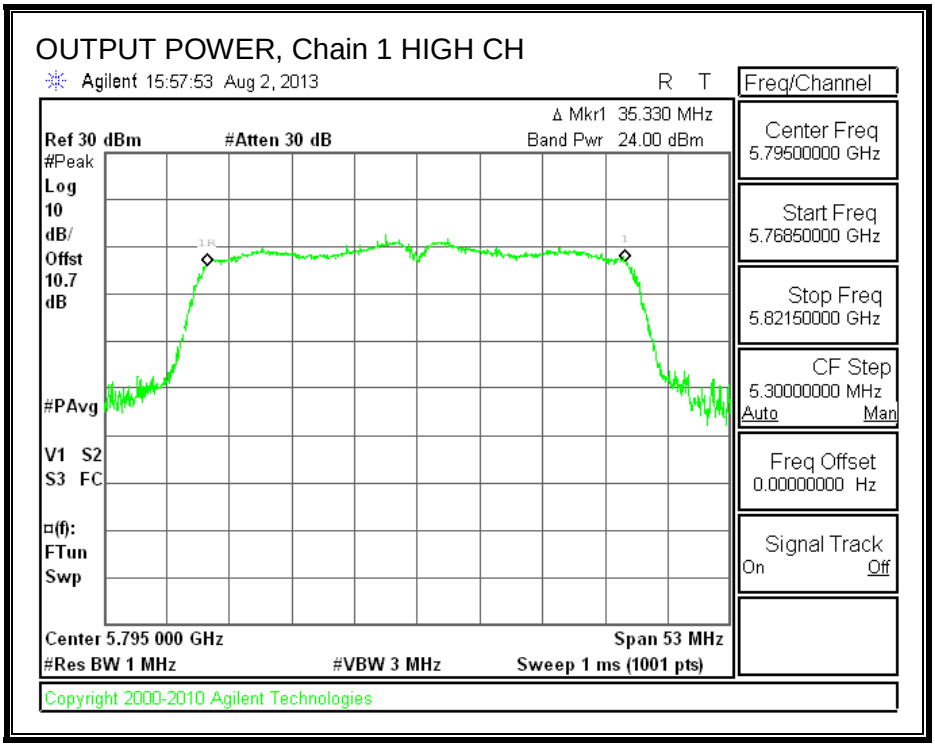
OUTPUT POWER, Chain 0





OUTPUT POWER, Chain 1





8.7.5. PSD

LIMITS

FCC §15.247

IC RSS-210 A8.2

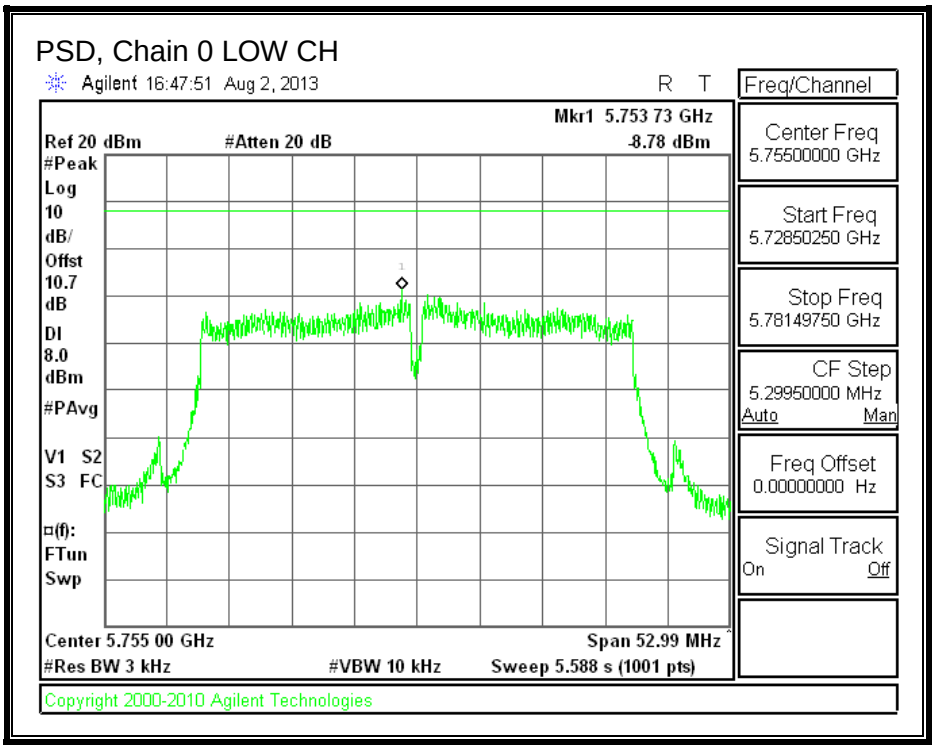
The power spectral density conducted from the transmitter to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

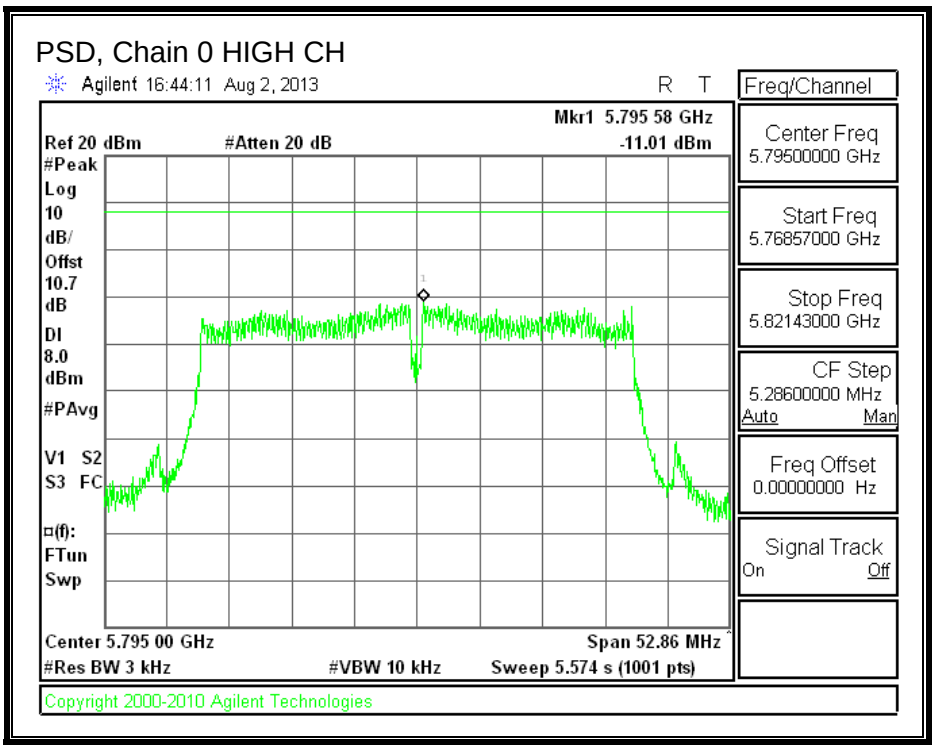
RESULTS

PSD Results

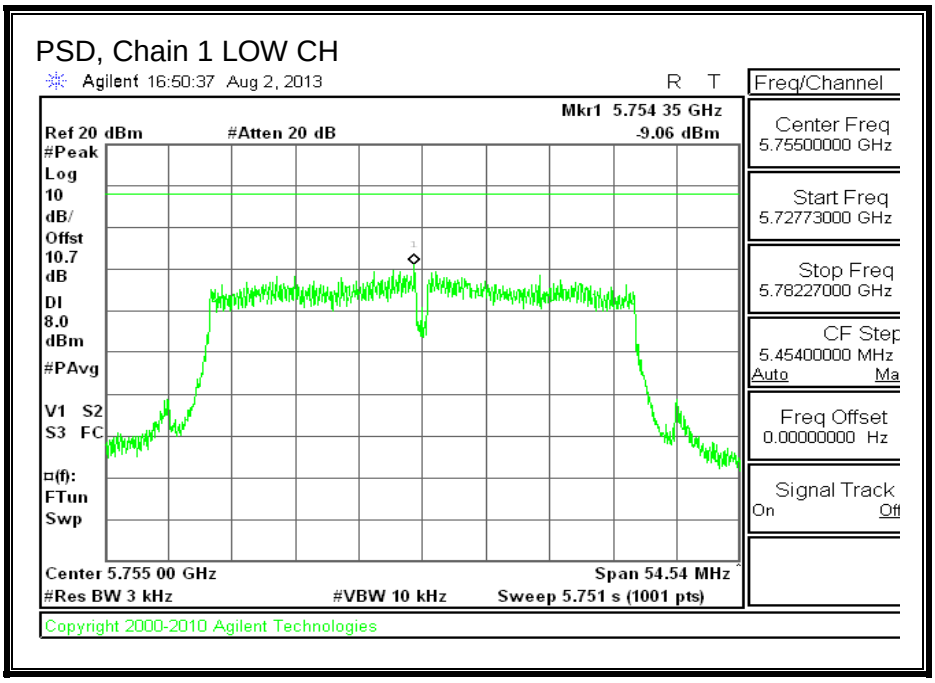
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total PSD (dBm)	Limit (dBm)	Margin (dB)
Low	5755	-8.78	-9.06	-5.91	8.0	-13.9
High	5795	-11.01	-11.48	-8.23	8.0	-16.2

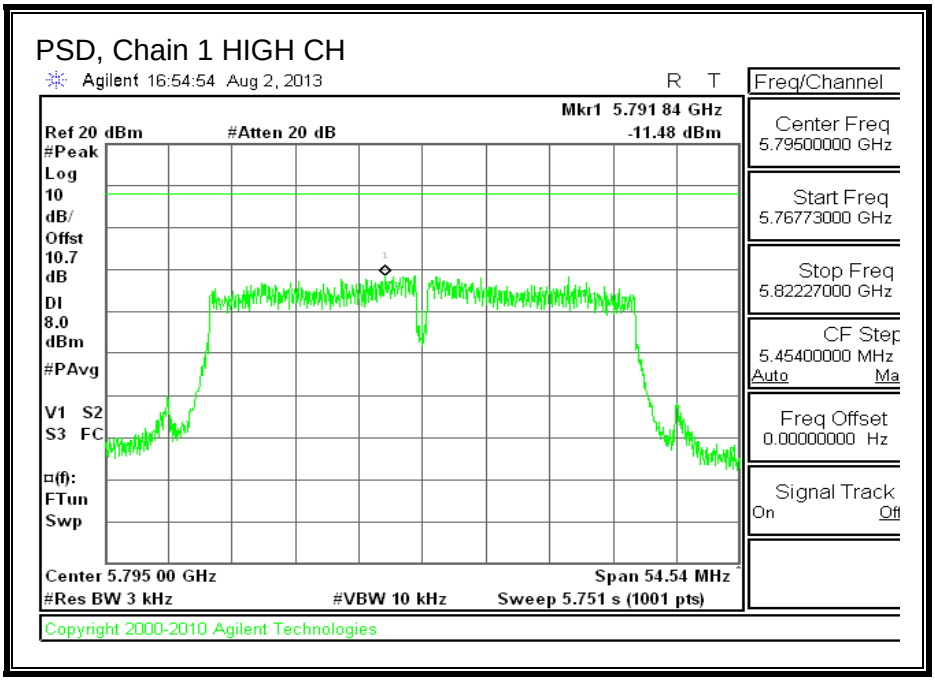
PSD, Chain 0





PSD, Chain 1





8.7.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

IC RSS-210 A8.5

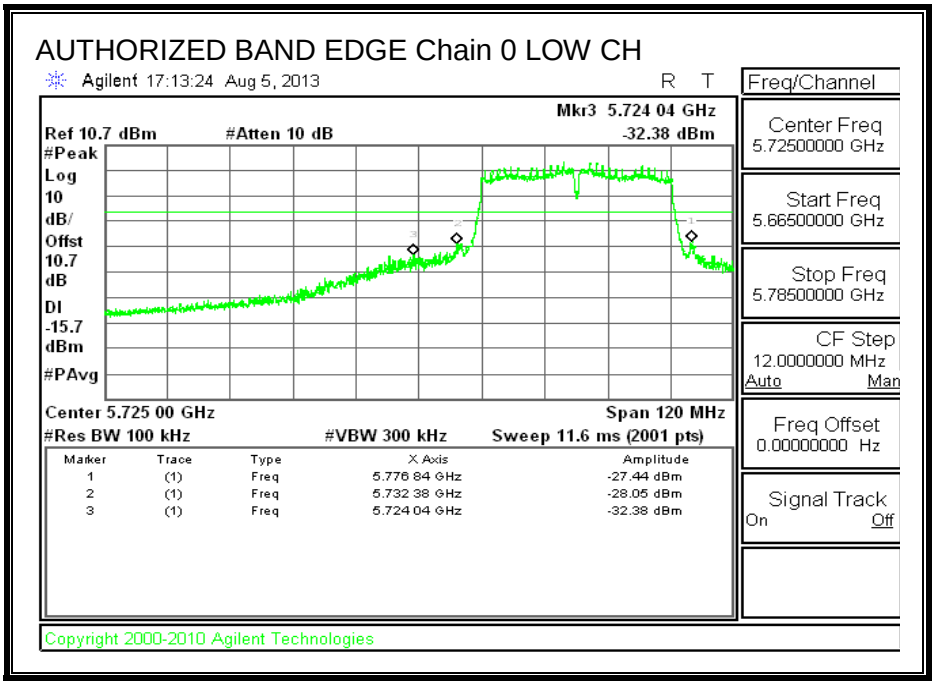
In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the 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

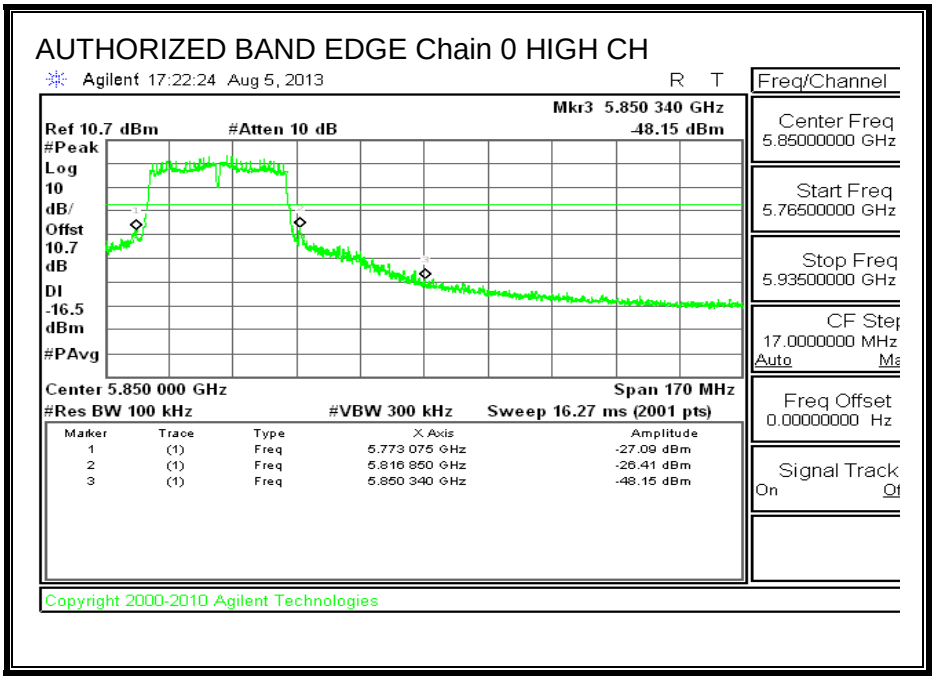
The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the in-band reference level, bandedge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

RESULTS

LOW CHANNEL BANDEDGE, Chain 0

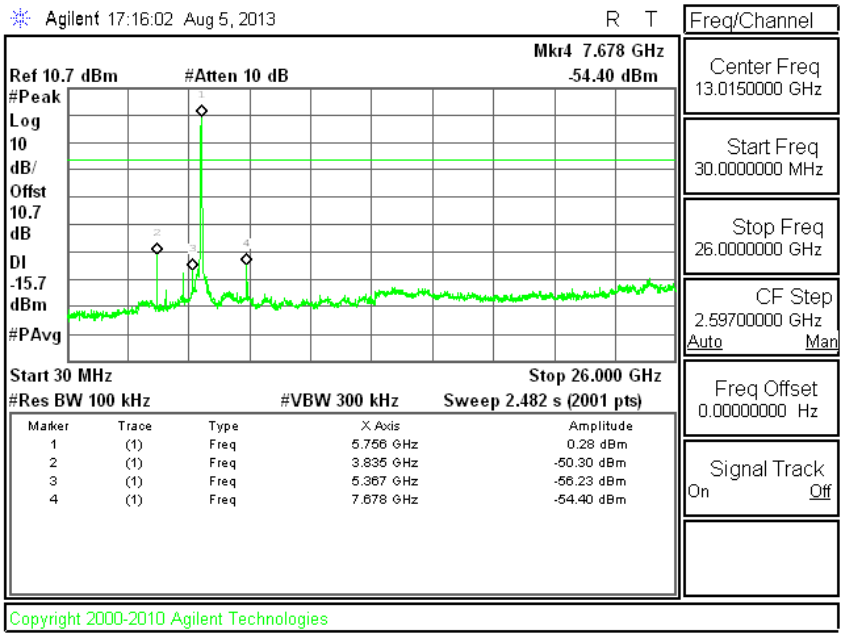


HIGH CHANNEL BANDEDGE, Chain 0

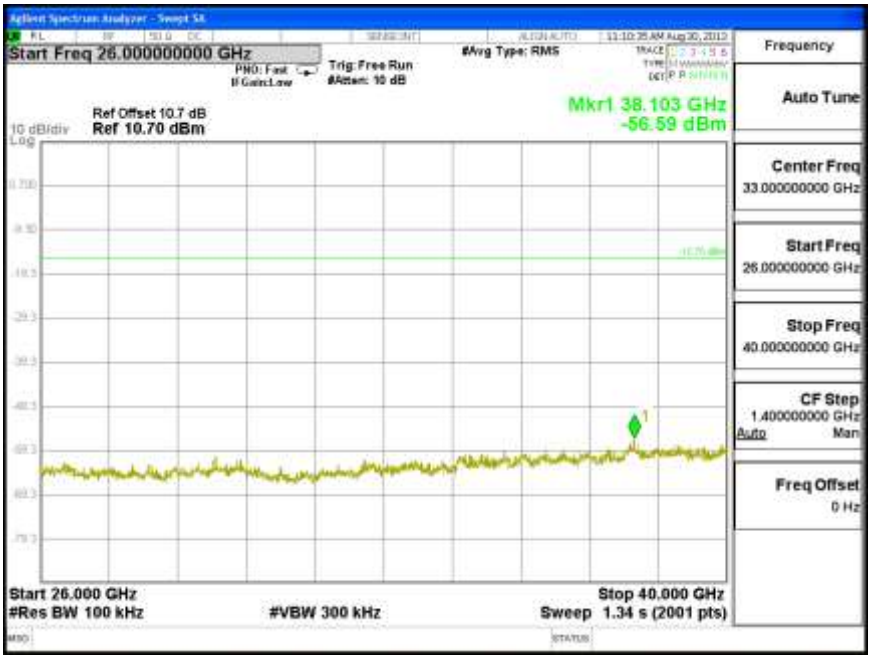


OUT-OF-BAND EMISSIONS, Chain 0

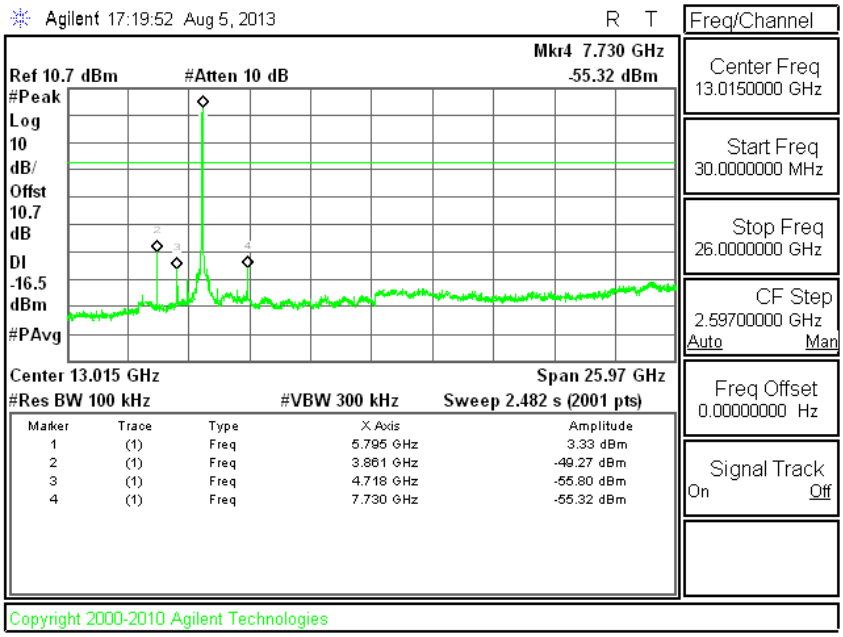
OUT OF BAND Chain 0 LOW CH



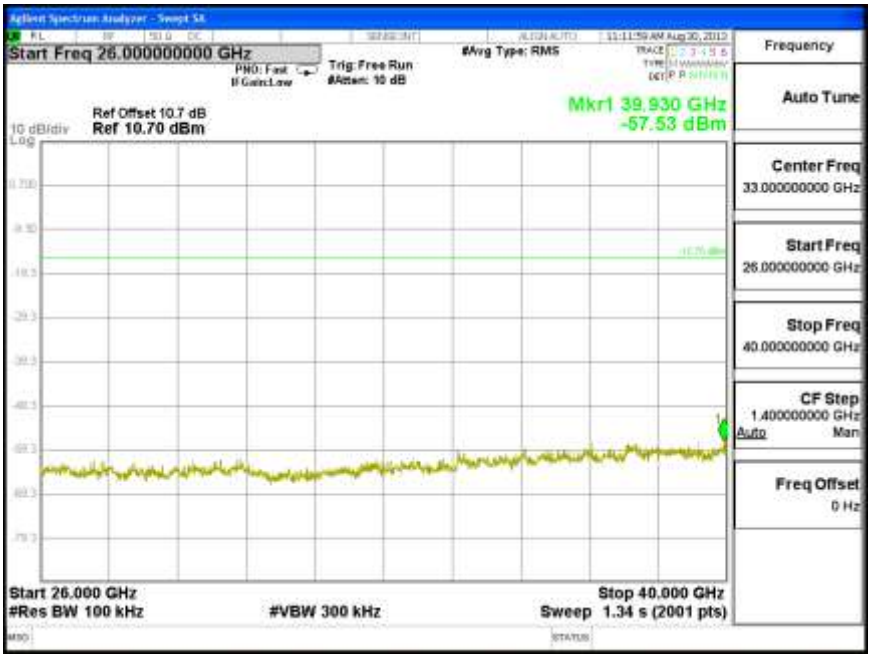
OUT OF BAND Chain 0 LOW CH



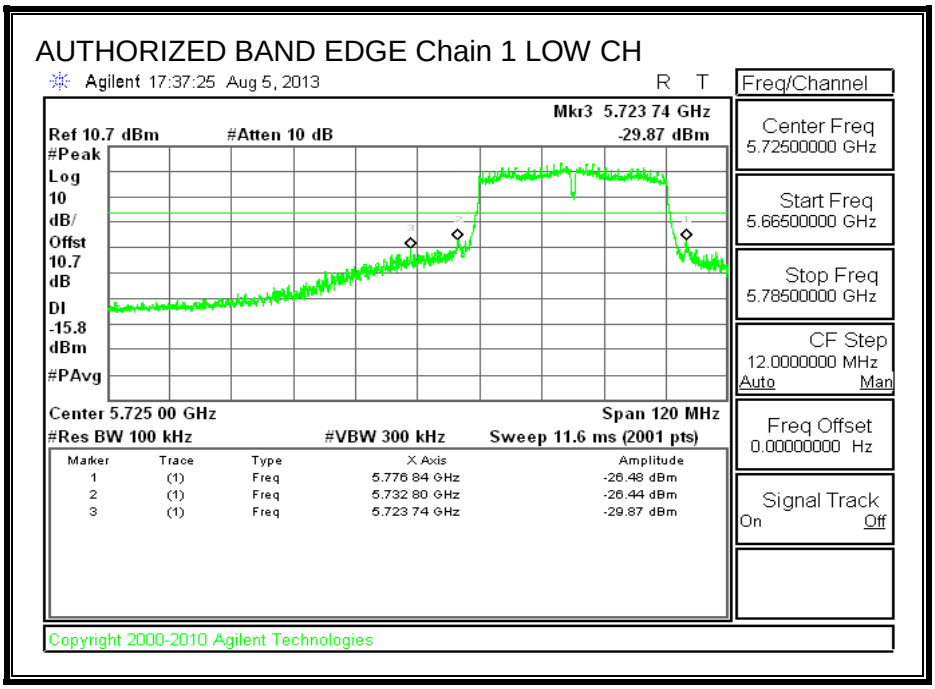
OUT OF BAND Chain 0 HIGH CH



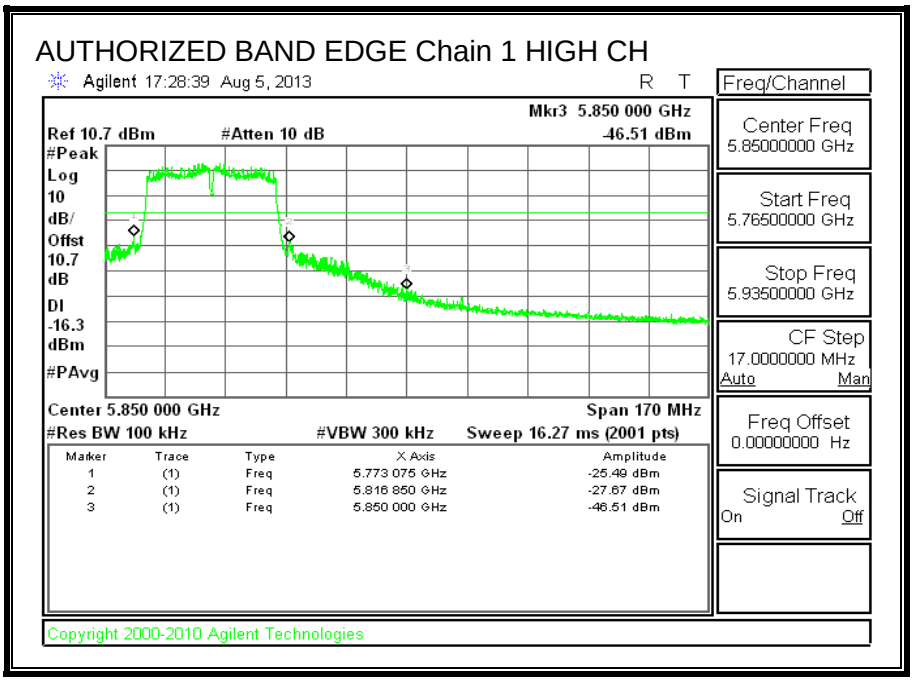
OUT OF BAND Chain 0 HIGH CH



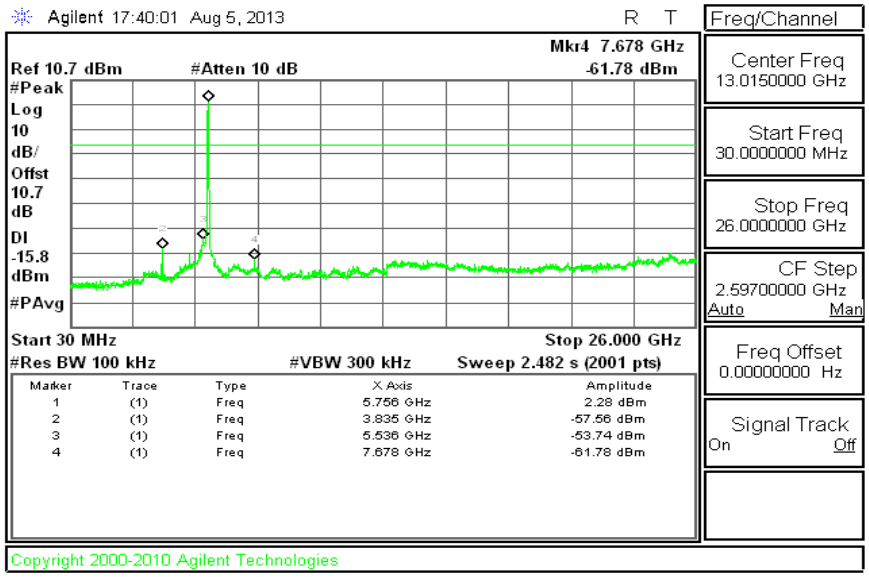
LOW CHANNEL BANDEDGE, Chain 1



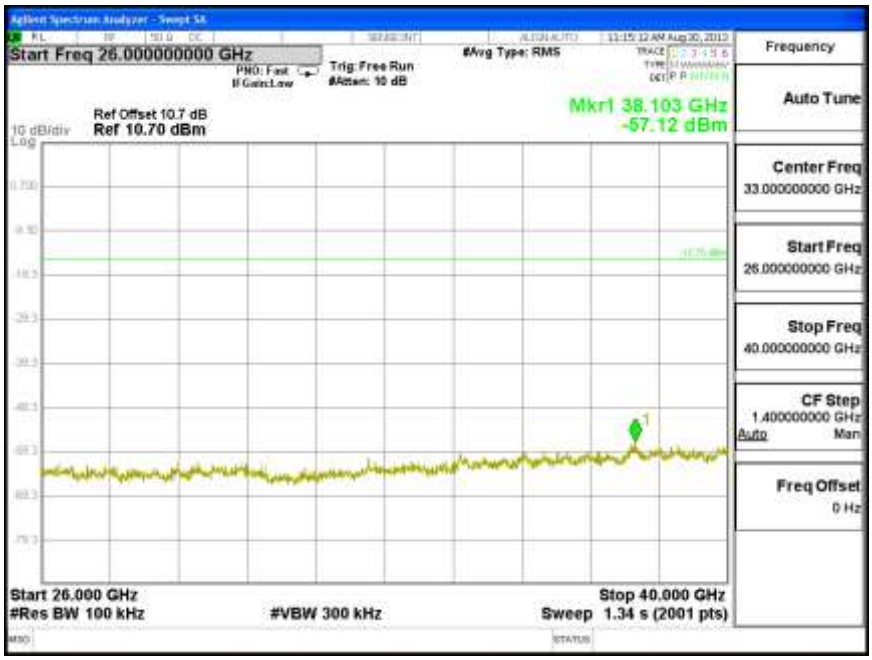
HIGH CHANNEL BANDEDGE, Chain 1



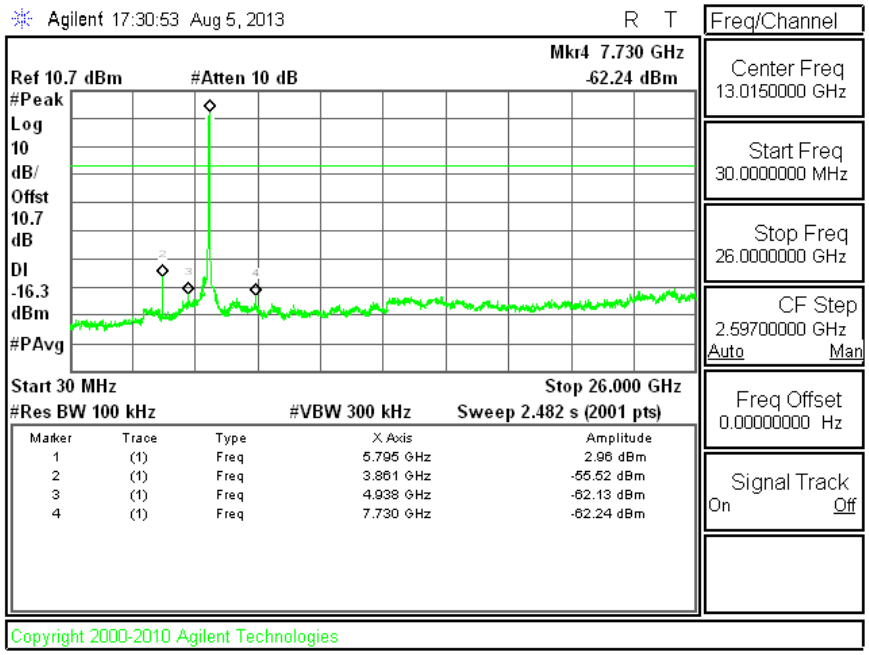
OUT OF BAND Chain 1 LOW CH



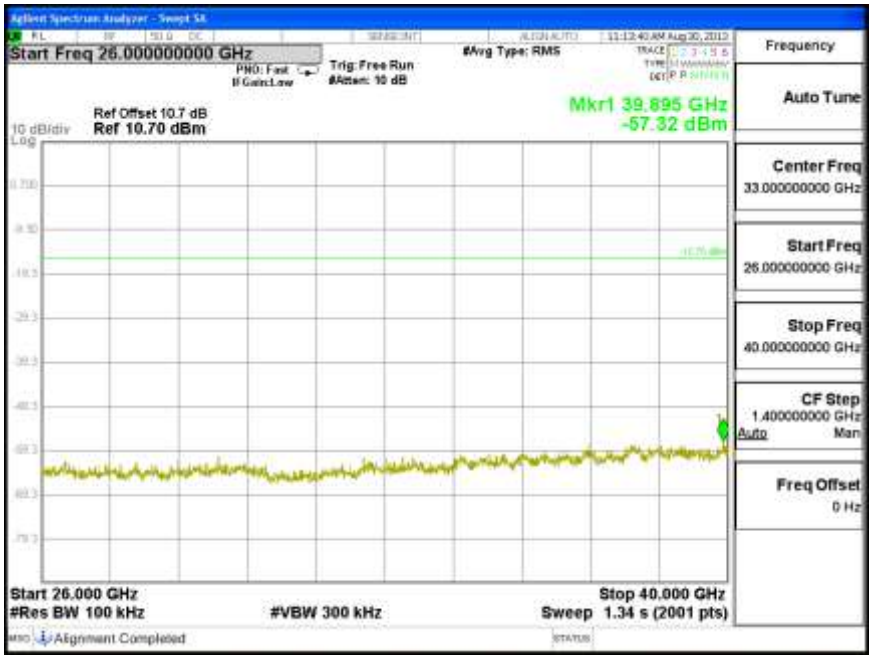
OUT OF BAND Chain 1 LOW CH



OUT OF BAND Chain 1 HIGH 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.

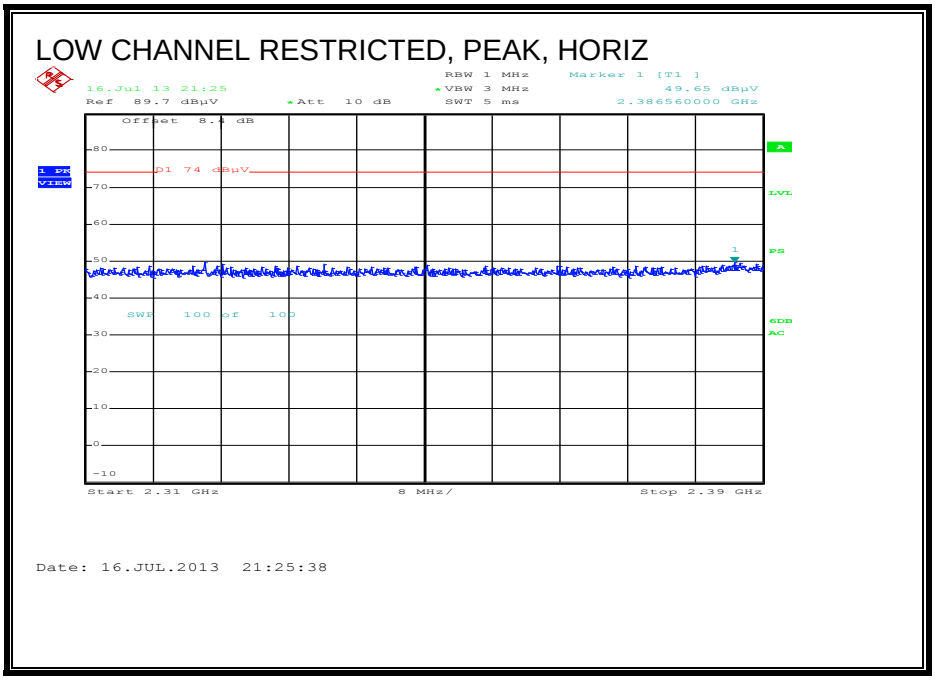
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

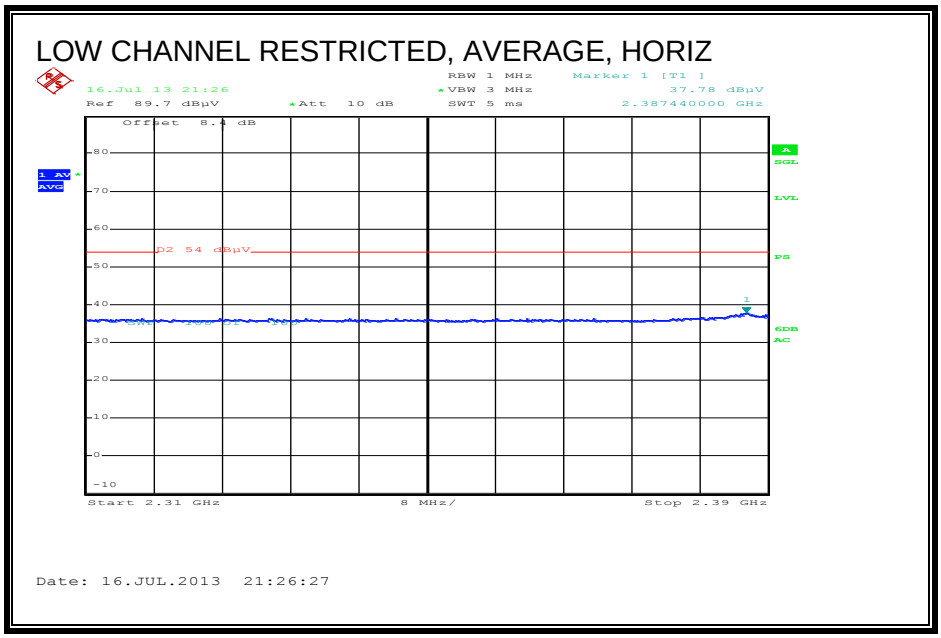
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

9.2. TRANSMITTER ABOVE 1 GHz

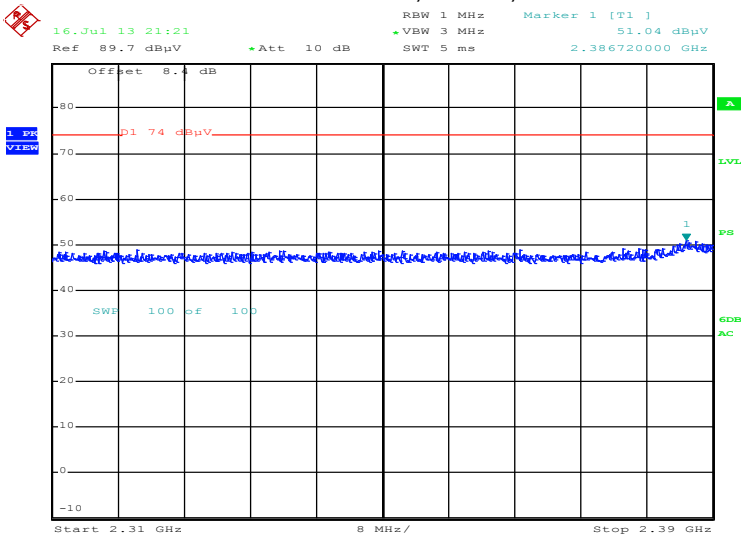
9.2.1. 802.11b MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL) CH1

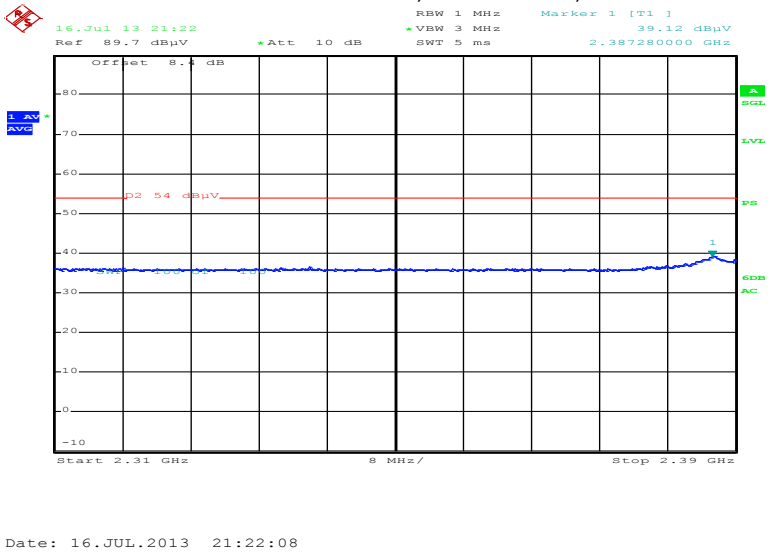




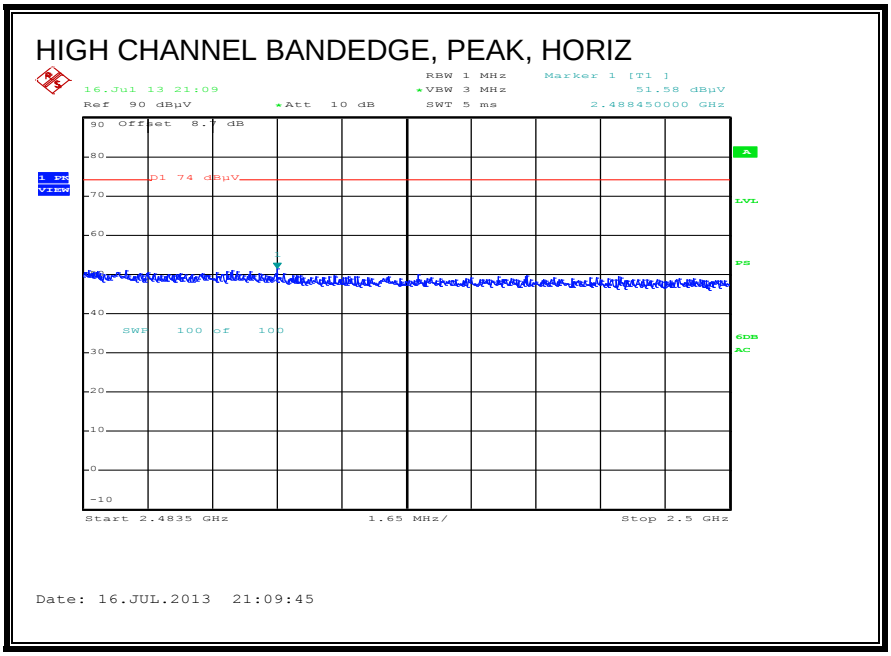
LOW CHANNEL RESTRICTED, PEAK, VERT

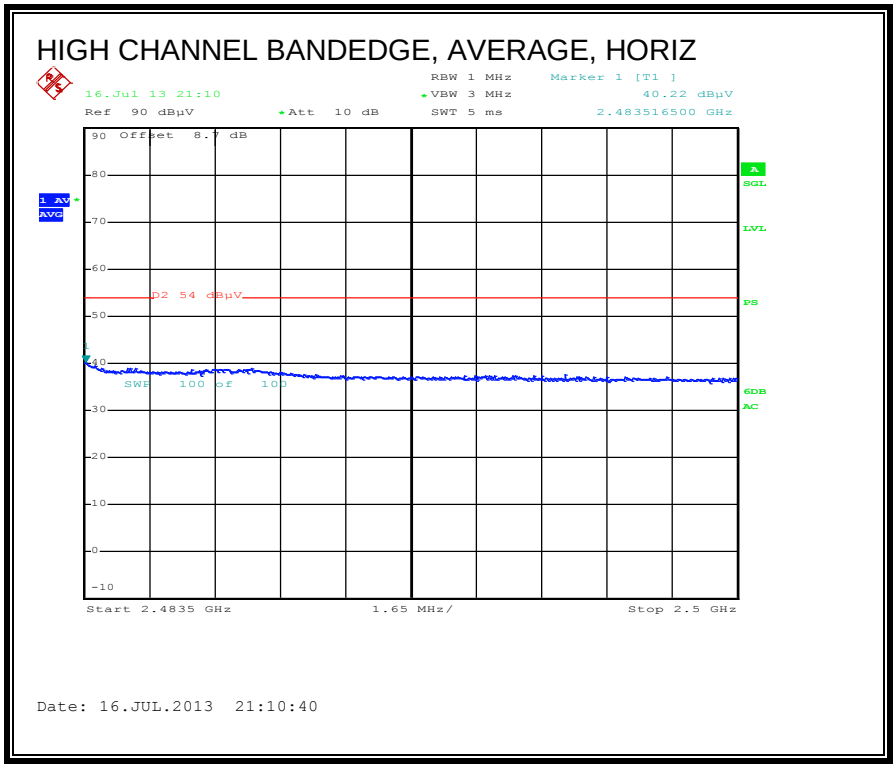


LOW CHANNEL RESTRICTED, AVERAGE, VERT

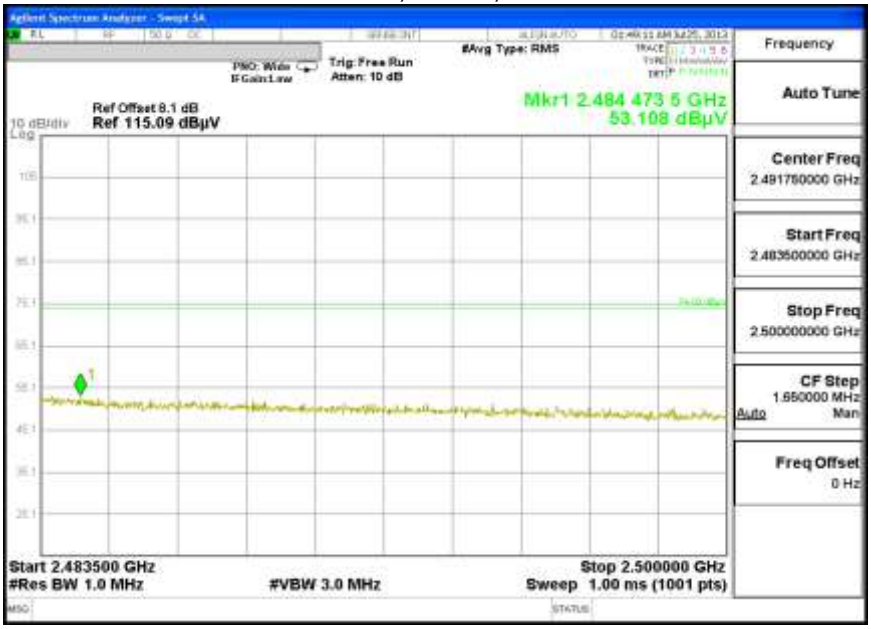


AUTHORIZED BANDEDGE (HIGH CHANNEL), CH11

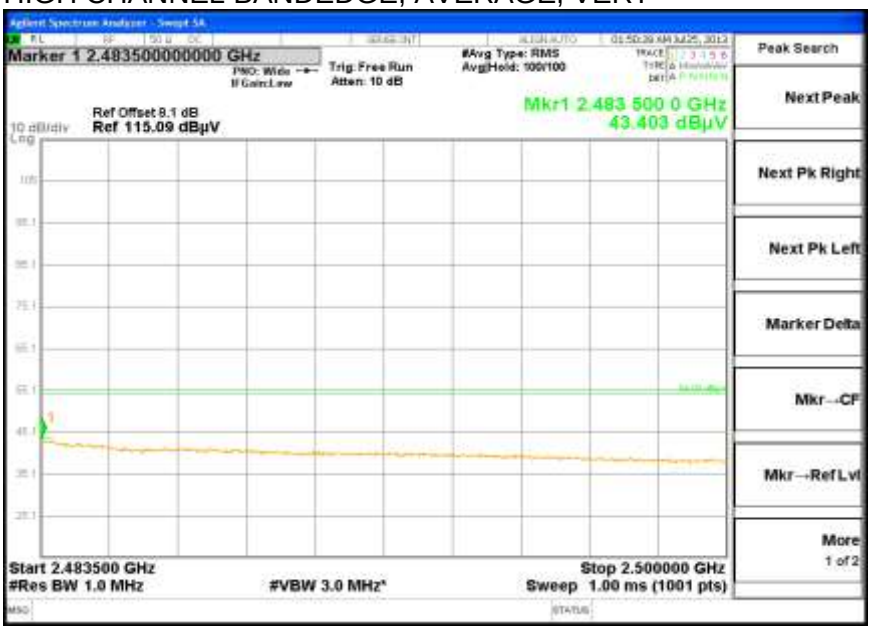




HIGH CHANNEL BANDEDGE, PEAK, VERT

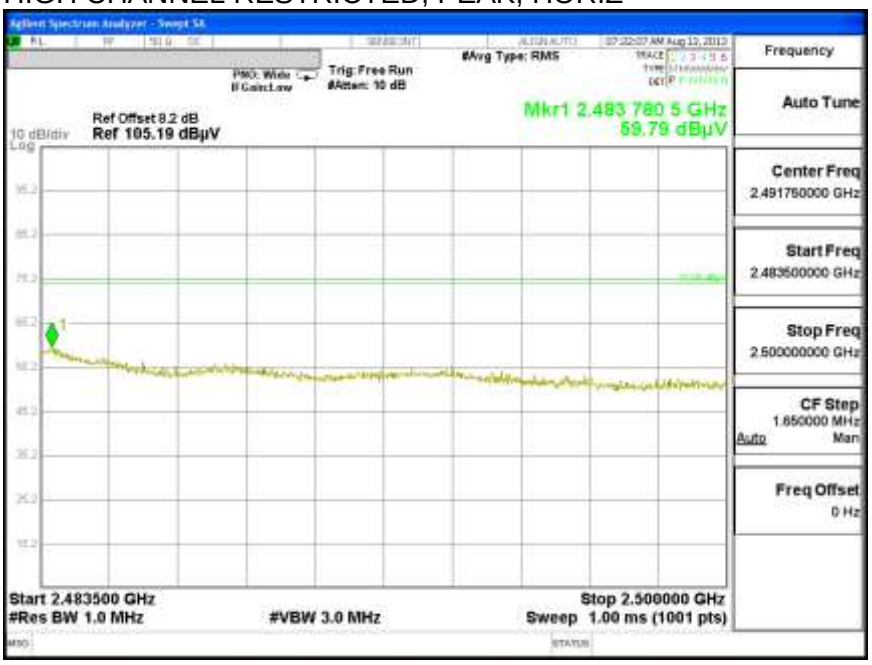


HIGH CHANNEL BANDEDGE, AVERAGE, VERT



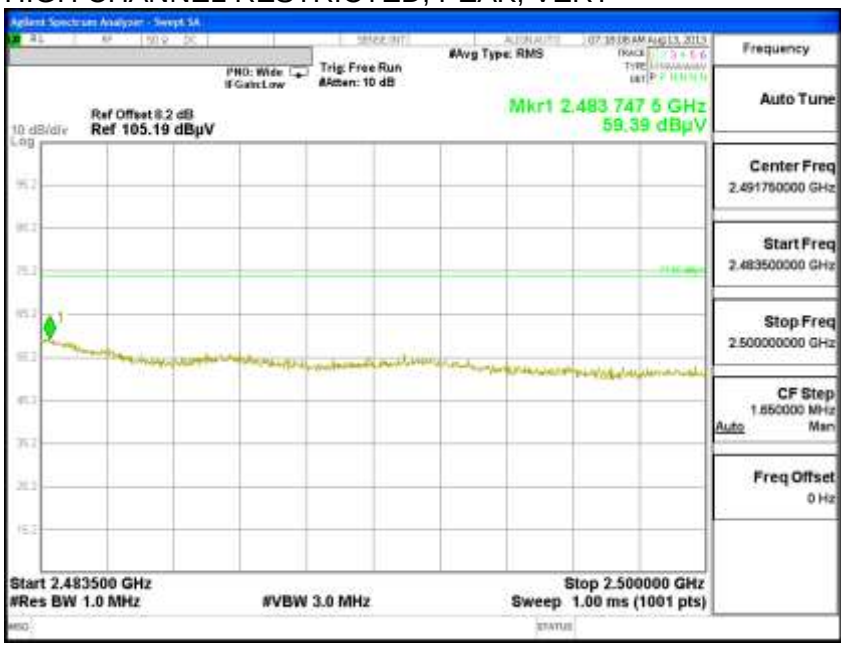
RESTRICTED BANDEDGE CH12

HIGH CHANNEL RESTRICTED, PEAK, HORIZ

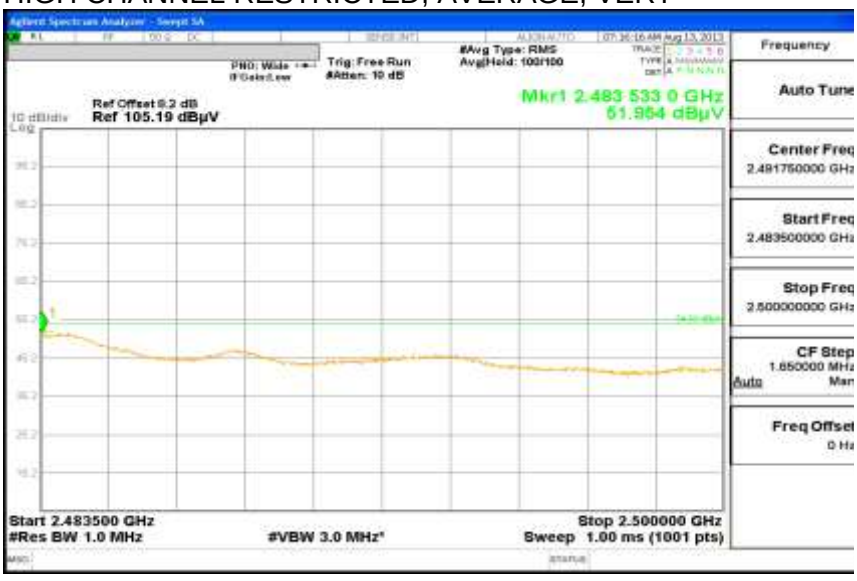


HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ

HIGH CHANNEL RESTRICTED, PEAK, VERT



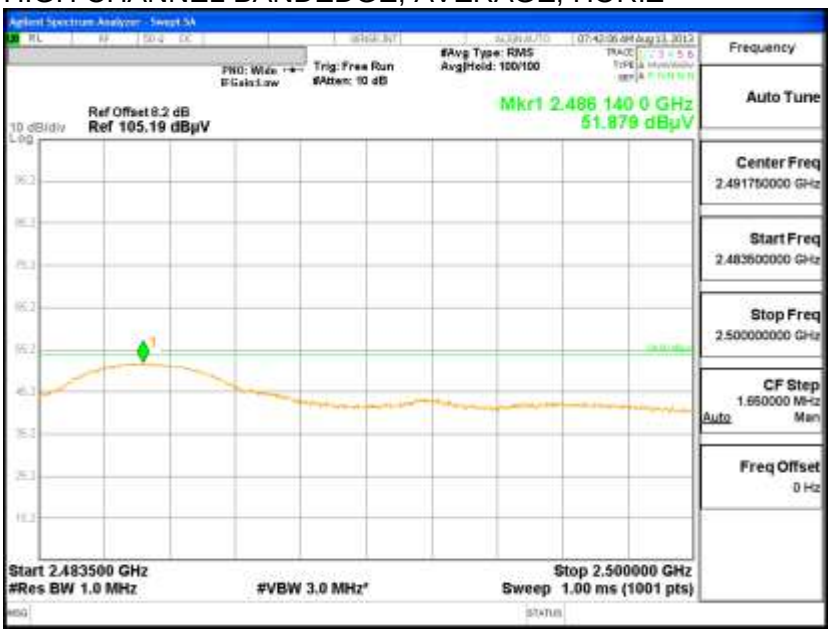
HIGH CHANNEL RESTRICTED, AVERAGE, VERT



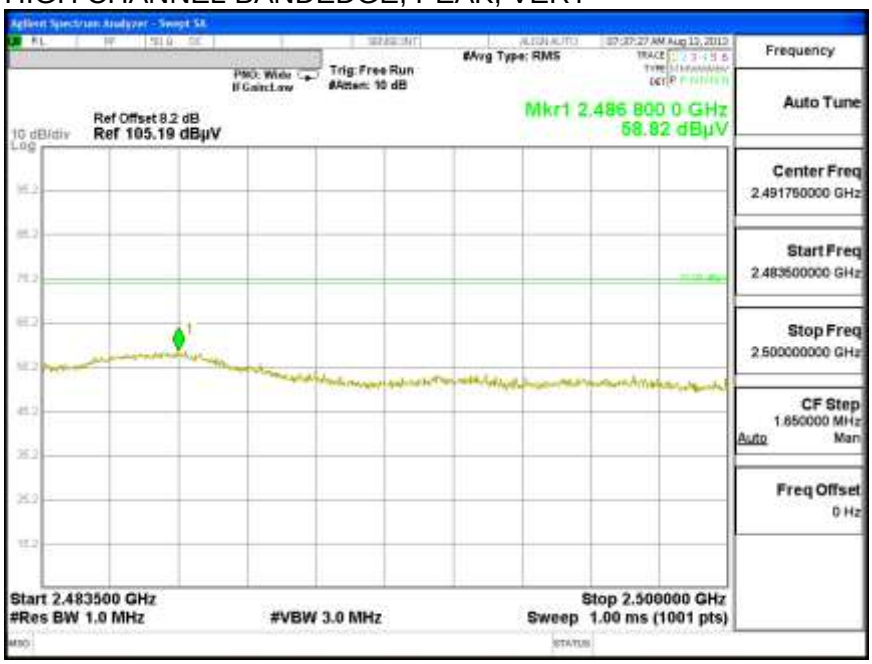
AUTHORIZED BANDEDGE CH13

HIGH CHANNEL BANDEDGE, PEAK, HORIZ

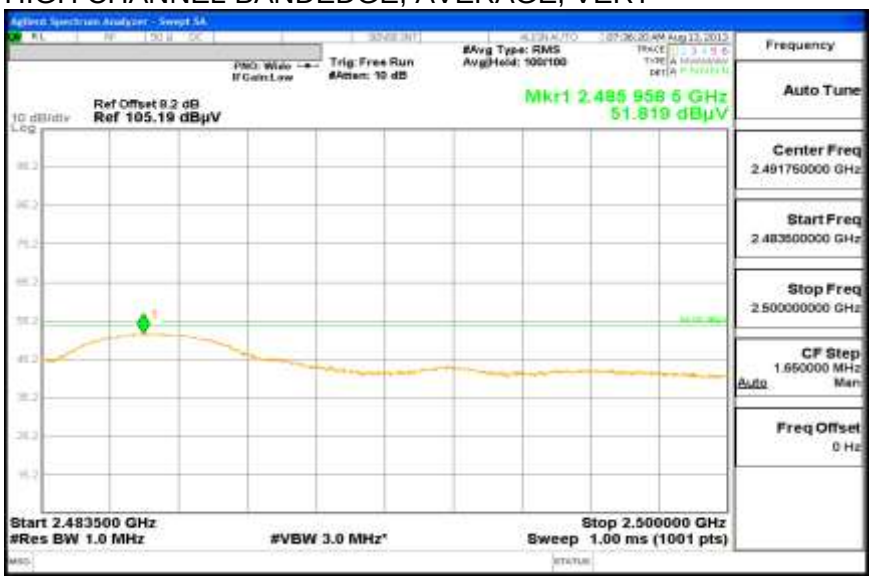
HIGH CHANNEL BANDEDGE, AVERAGE, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT

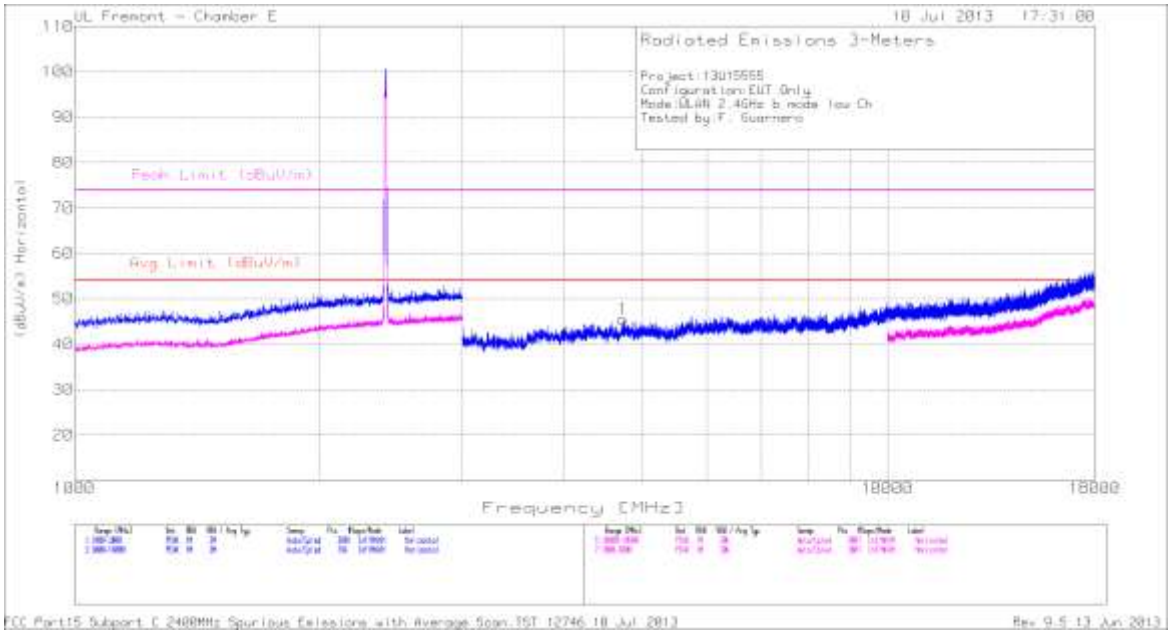


HIGH CHANNEL BANDEDGE, AVERAGE, VERT

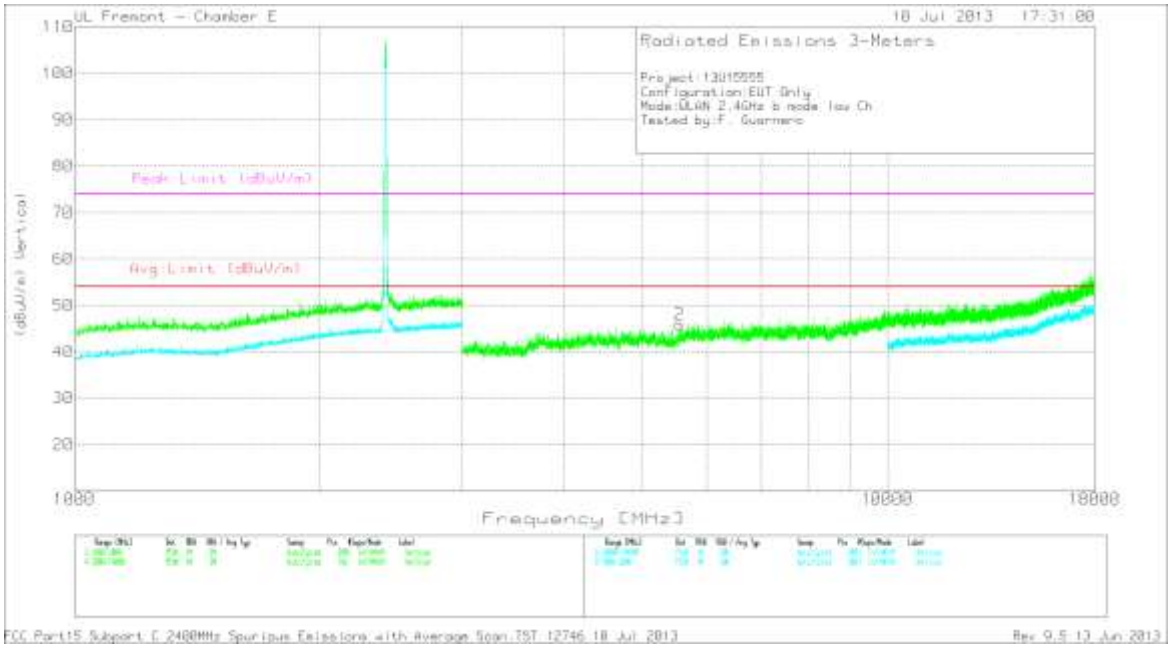


HARMONICS AND SPURIOUS EMISSIONS, CH1

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	4.73	42.02	PK	34.4	-31	45.42	53.97	-8.55	74	-28.58	199	H

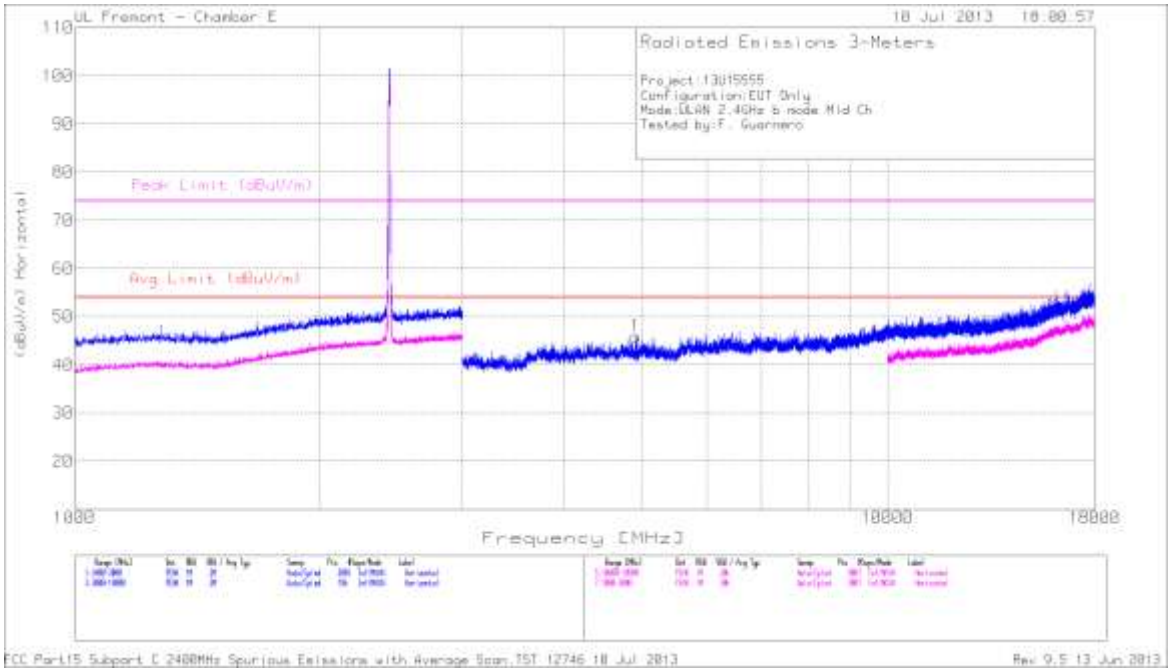
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	5.548	41.82	PK	34.9	-30.9	45.82	53.97	-8.15	74	-28.18	100	V

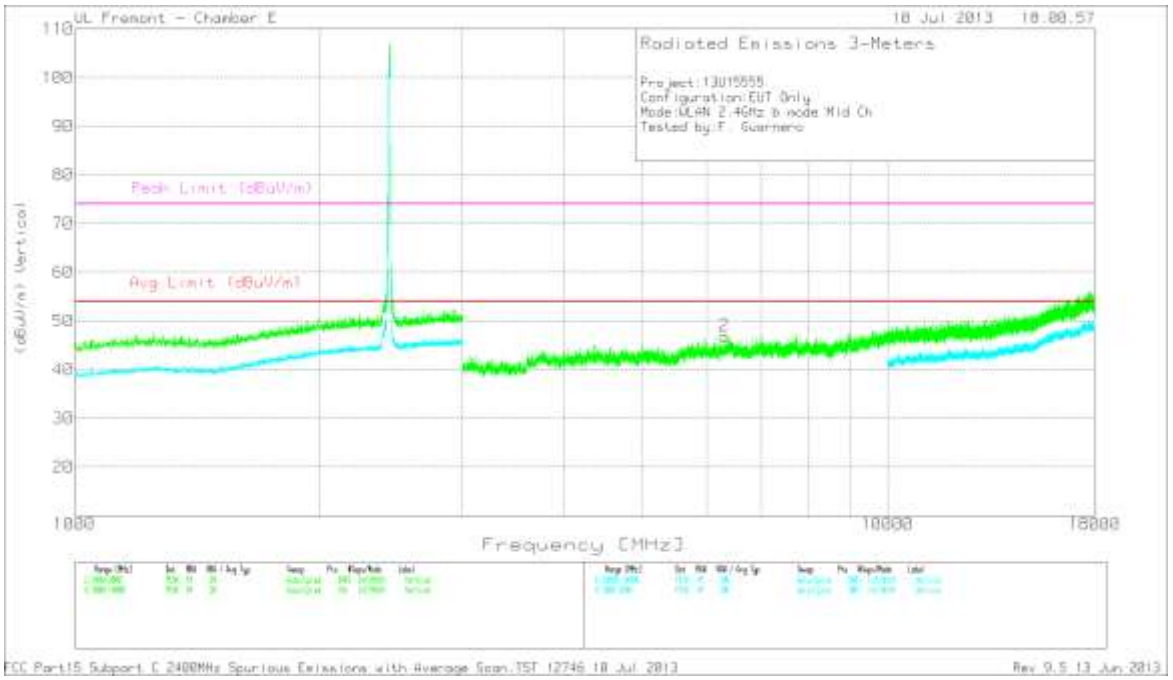
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS, CH 6

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	4.903	43.22	PK	34.4	-31.7	45.92	53.97	-8.05	74	-28.08	199	H

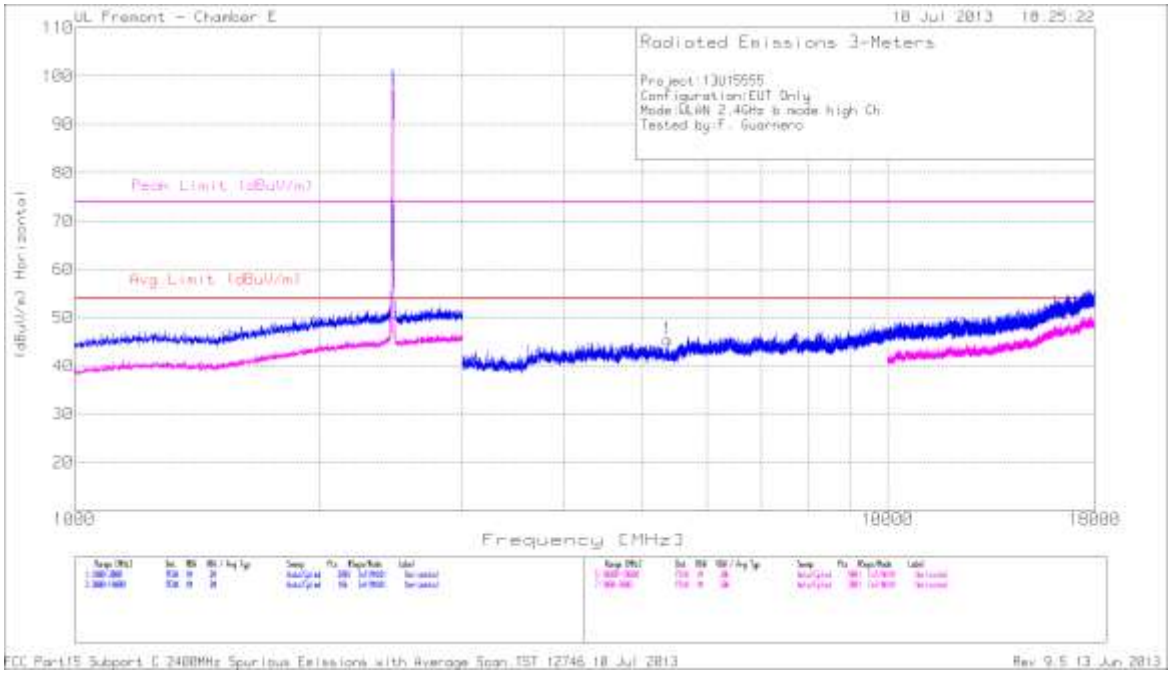
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	6.305	40.35	PK	35.9	-29.4	46.85	53.97	-7.12	74	-27.15	199	V

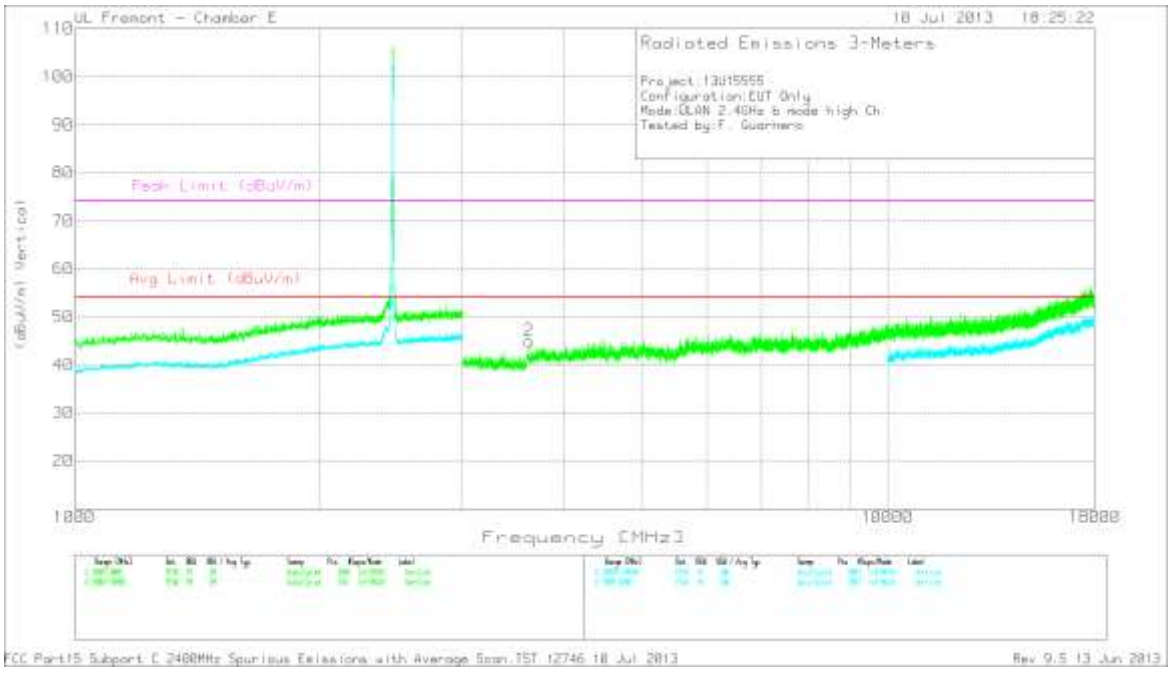
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS, CH11

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	5.367	41.62	PK	34.7	-30.9	45.42	53.97	-8.55	74	-28.58	100	H

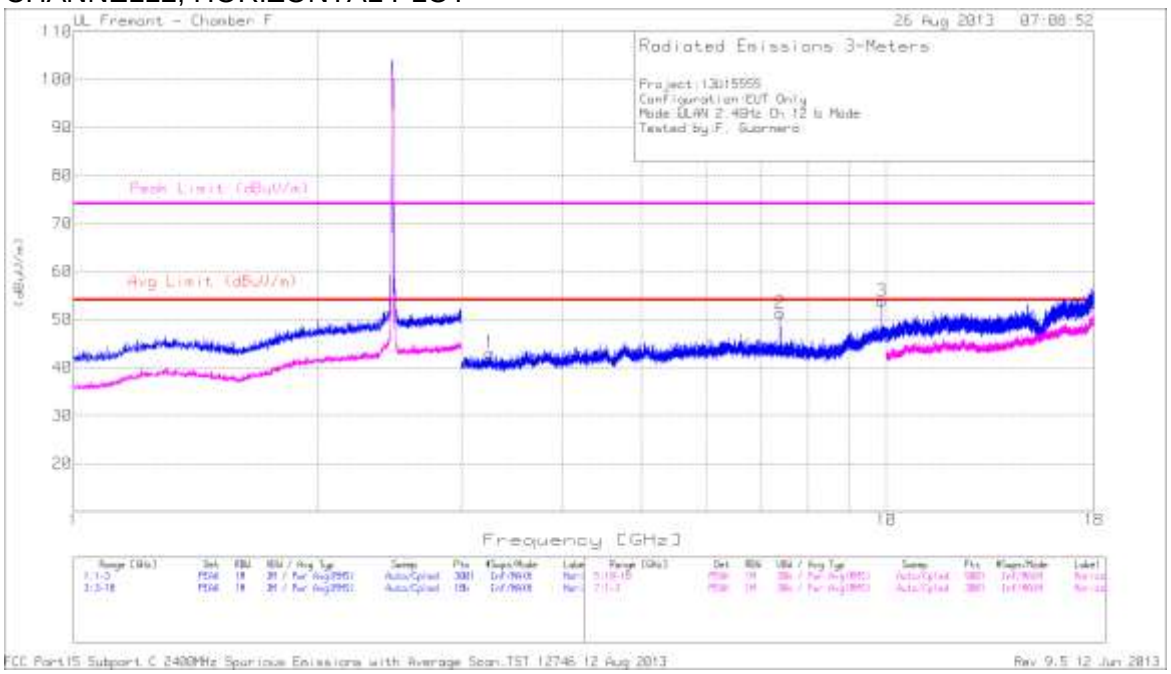
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	3.624	43.92	PK	33.4	-32.4	44.92	53.97	-9.05	74	-29.08	199	V

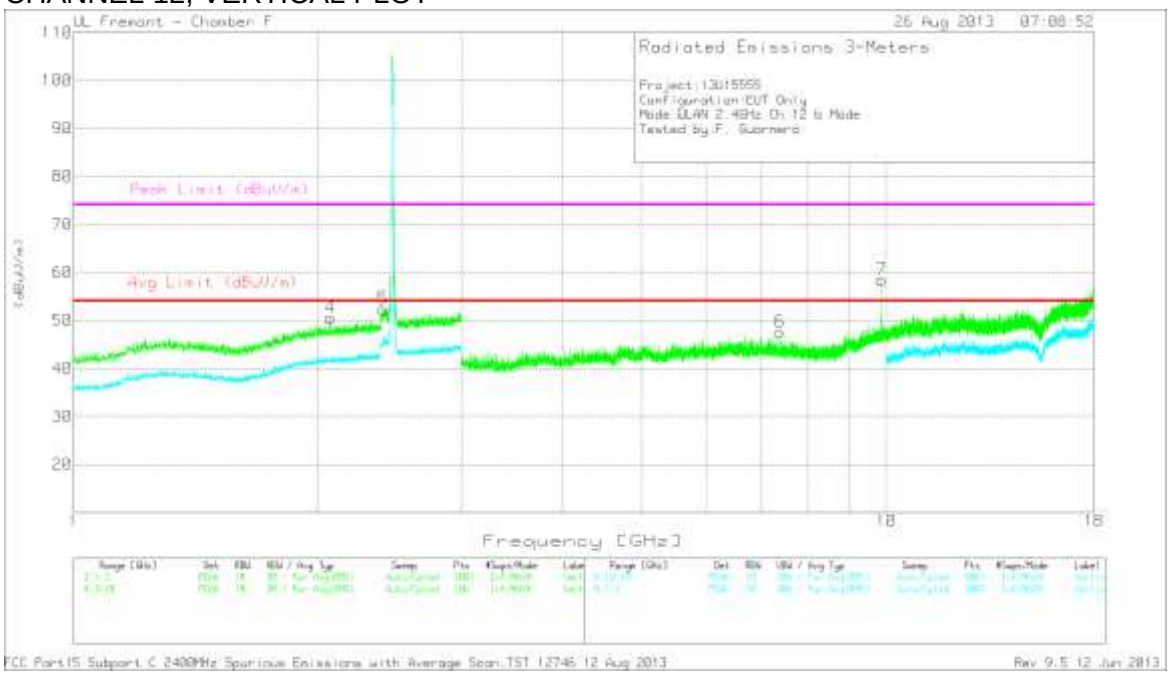
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS, CH12

CHANNEL12, HORIZONTAL PLOT



CHANNEL 12, 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	3.255	38.91	PK	33.1	-29	43.01	53.97	-10.96	74	-30.99	0-360	199	H
2	7.4	28.44	PK	35.7	-26.9	37.24	53.97	-16.73	74	-36.76	106	250	H
*3	9.868	39.62	PK	37.6	-23.4	53.82	--	--	--	--	0-360	100	H

PK - Peak detector

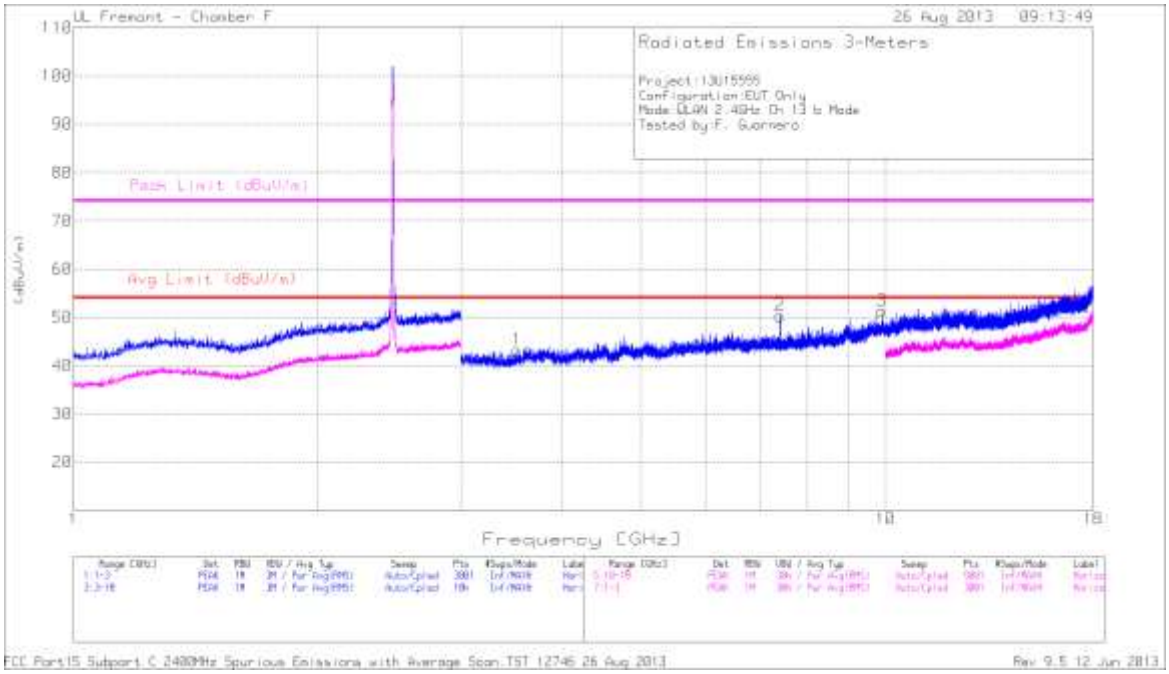
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
*4	2.071	41.57	PK	31.6	-22.7	50.47	--	--	--	--	0-360	100	V
*5	2.405	42.85	PK	32.1	-22.6	52.35	--	--	--	--	0-360	201	V
6	7.401	38.8	PK	35.7	-26.9	47.6	53.97	-6.37	74	-26.4	0-360	201	V
*7	9.868	44.24	PK	37.6	-23.4	58.44			--	--	0-360	201	V

*Not in Restricted Band

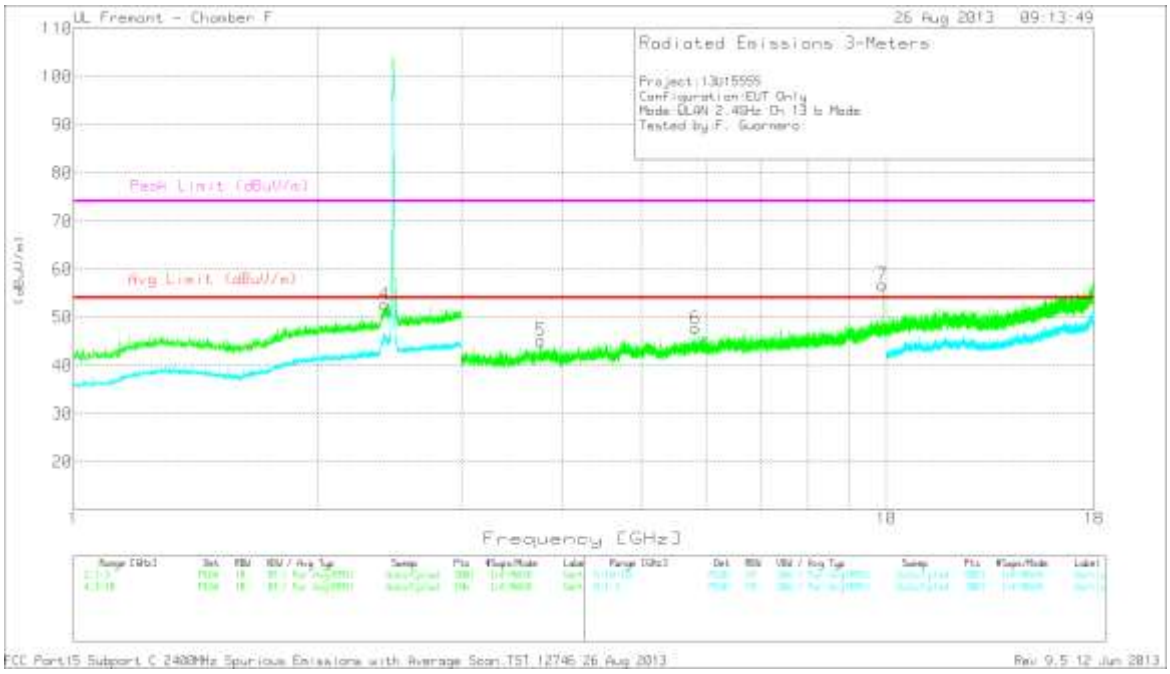
AV - Average detection

HARMONICS AND SPURIOUS EMISSIONS, CH13

CHANNEL 13 HORIZONTAL PLOT



CHANNEL 13 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	3.517	38.63	PK	33.3	-28.7	43.23	53.97	-10.74	74	-30.77	0-360	100	H
2	7.417	34.32	PK	35.8	-26.2	43.92	53.97	-10.05	74	-23.66	245	136	H
*3	9.888	36.33	PK	37.6	-22.6	51.33	--	--	--	--	0-360	199	H

PK - Peak detector

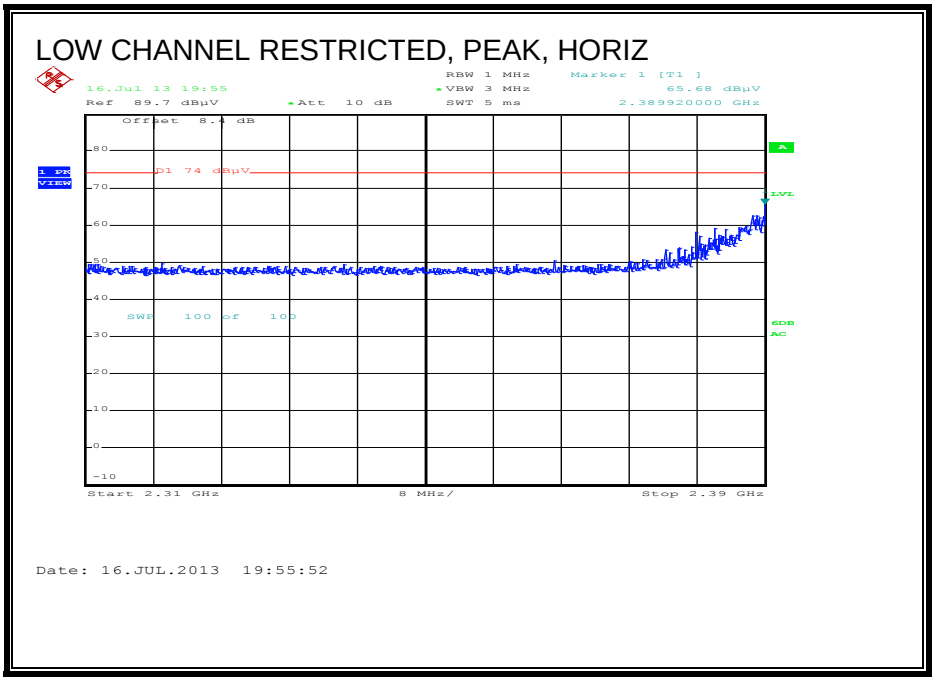
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /3GHz HPF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
*4	2.417	42.95	PK	32.2	-22.5	52.65	--	--	--	--	0-360	200	V
5	3.757	40.76	PK	33.6	-29.2	45.16	53.97	-8.81	74	-28.84	0-360	101	V
6	5.826	40.1	PK	35.1	-27.5	47.7	53.97	-6.27	74	-26.3	0-360	200	V
*7	9.888	41.75	PK	37.6	-22.6	56.75	--	--	--	--	0-360	101	V

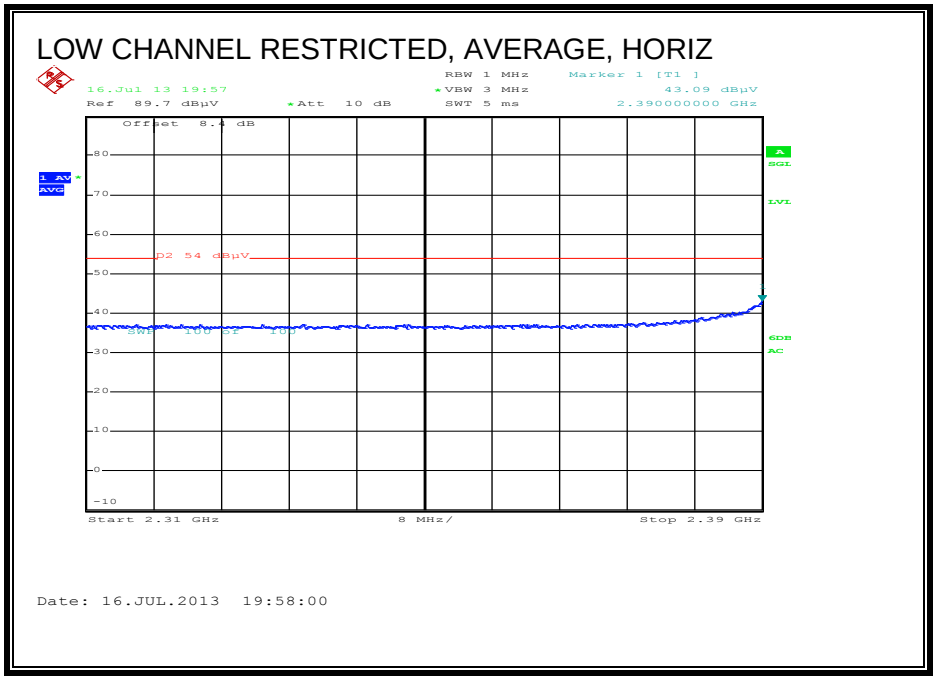
*Not in restricted Band

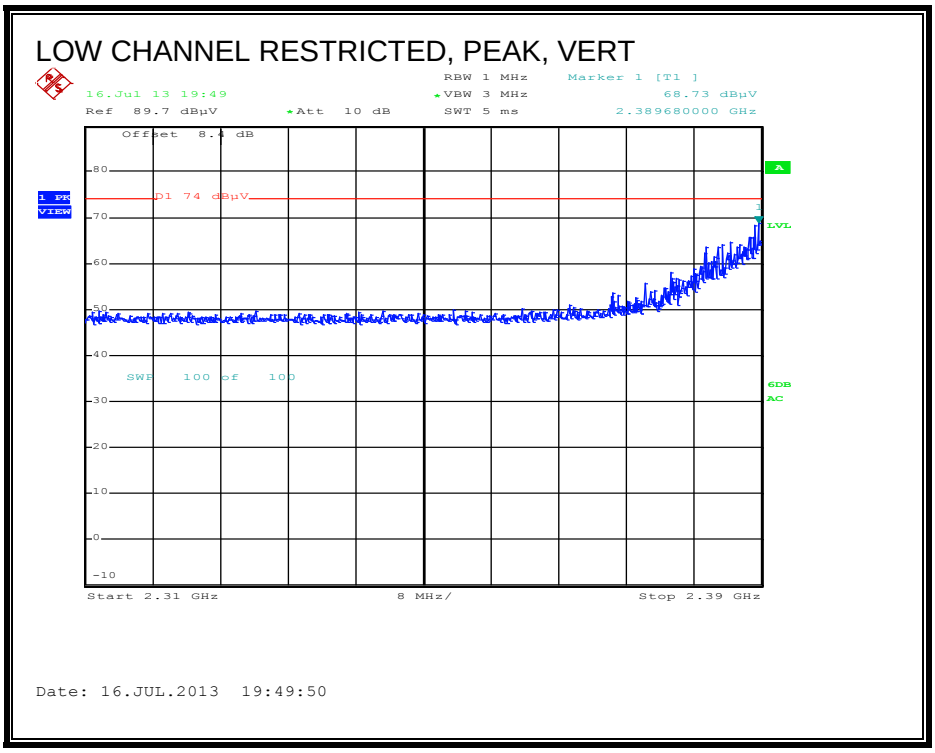
MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

9.2.2. 802.11g MODE IN THE 2.4 GHz BAND

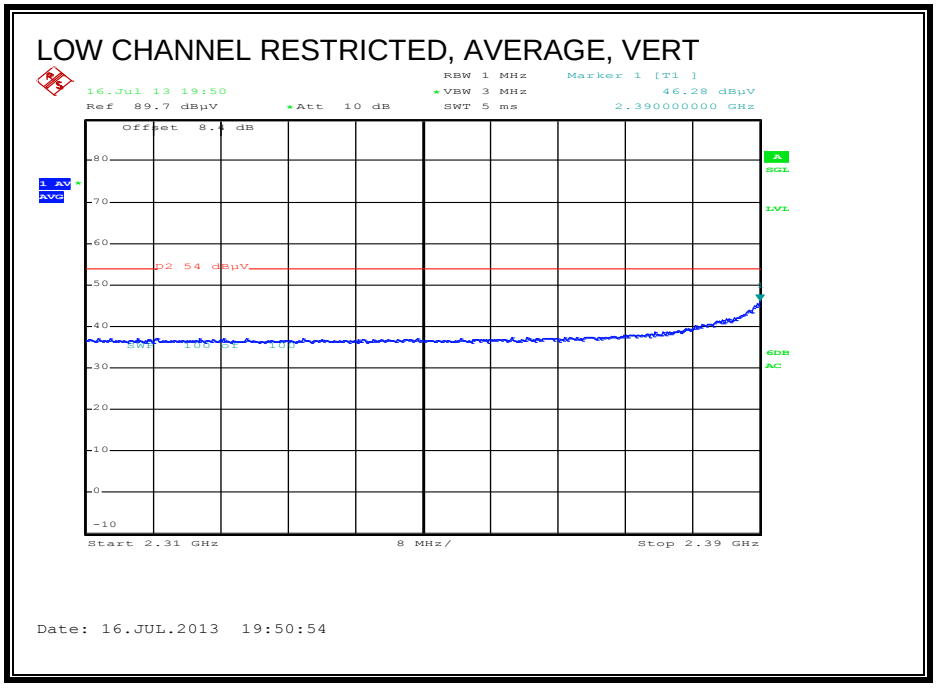
RESTRICTED BANDEDGE (LOW CHANNEL) CH 1



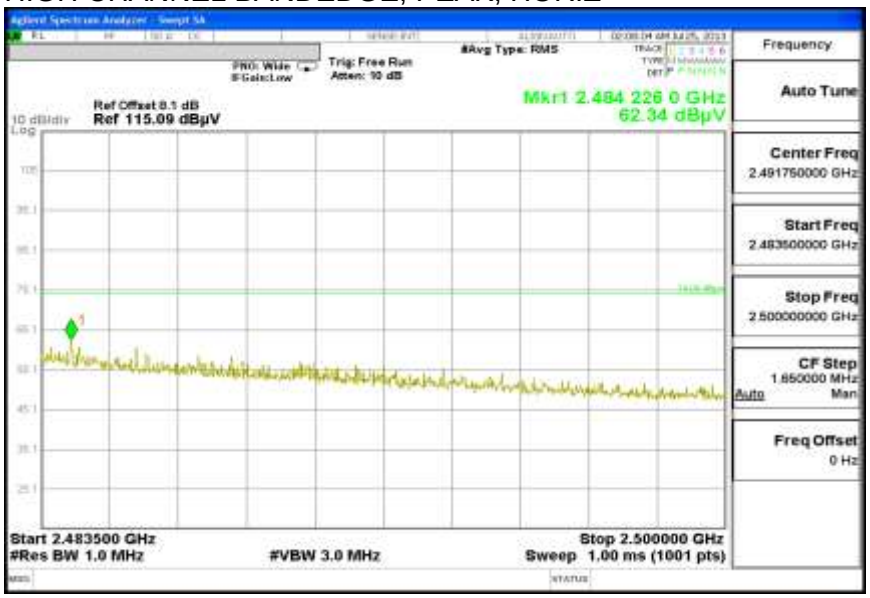




AUTHORIZED BANDEDGE (HIGH CHANNEL), CH 11

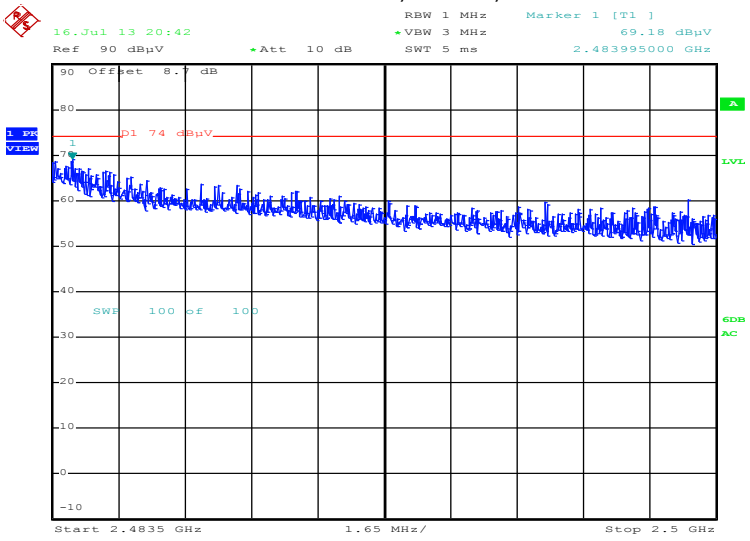


HIGH CHANNEL BANDEDGE, PEAK, HORIZ



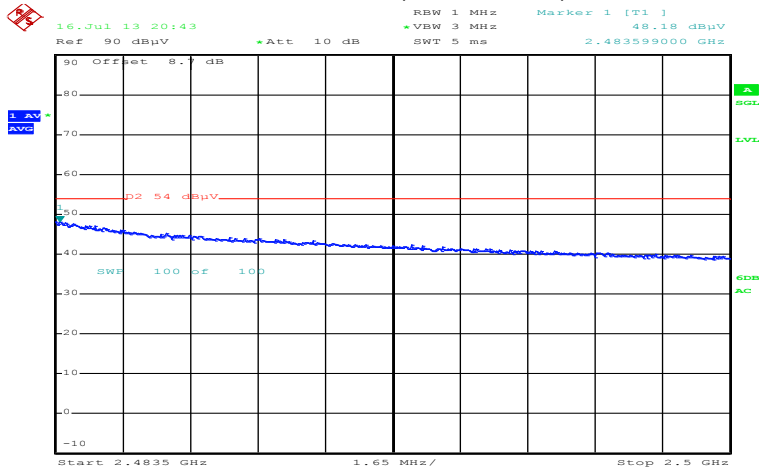
HIGH CHANNEL BANDEDGE, AVERAGE, HORIZ

HIGH CHANNEL BANDEDGE, PEAK, VERT



Date: 16.JUL.2013 20:42:08

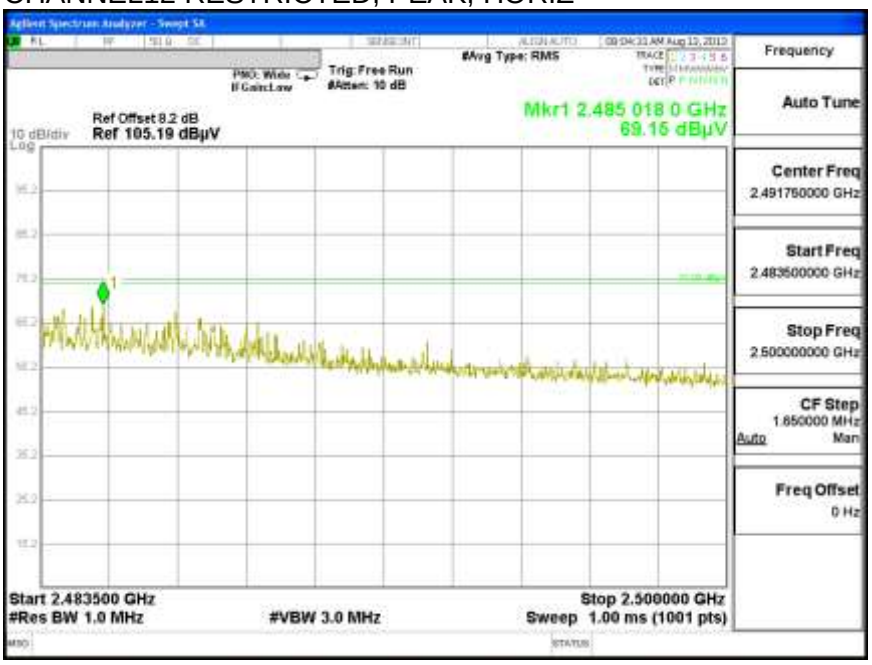
HIGH CHANNEL BANDEDGE, AVERAGE, VERT



Date: 16.JUL.2013 20:43:04

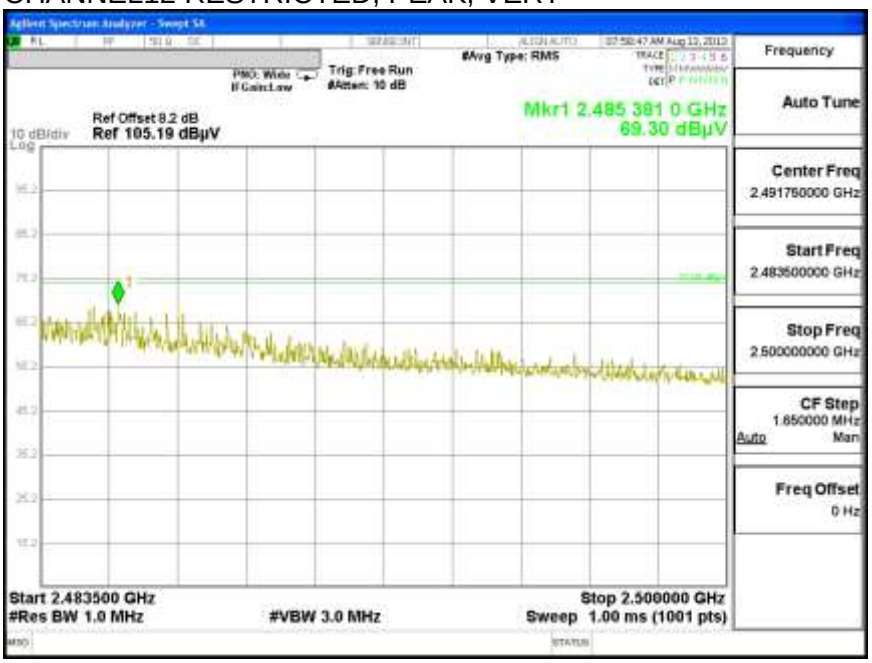
RESTRICTED BANDEDGE, CH 12

CHANNEL12 RESTRICTED, PEAK, HORIZ



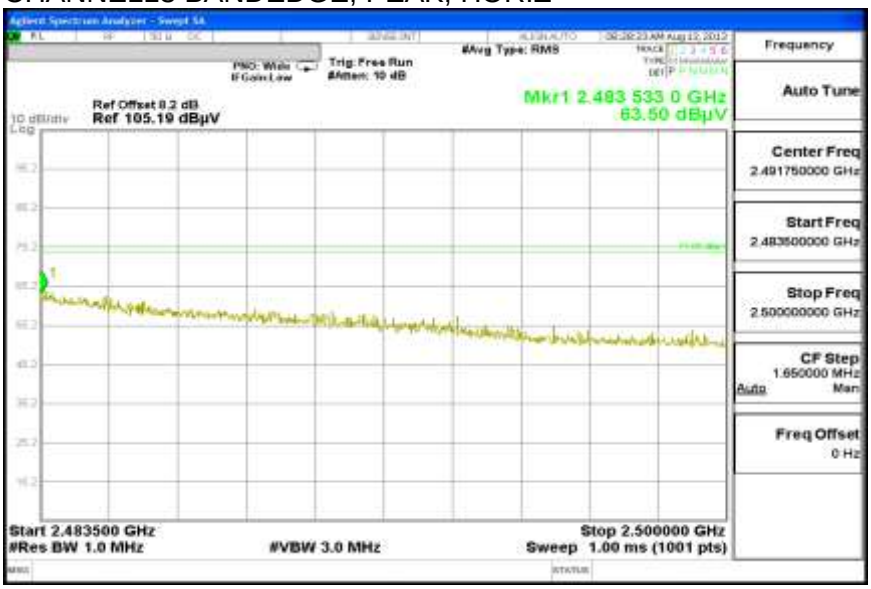
CHANNEL12 RESTRICTED, AVERAGE, HORIZ

CHANNEL12 RESTRICTED, PEAK, VERT



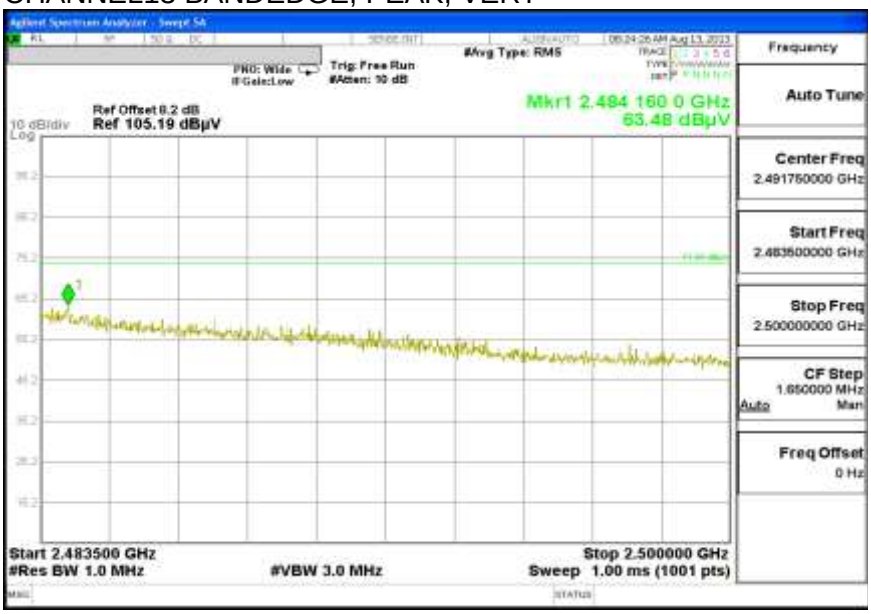
CHANNEL12 RESTRICTED, AVERAGE, VERT

CHANNEL13 BANDEDGE, PEAK, HORIZ



CHANNEL13 BANDEDGE, AVERAGE, HORIZ

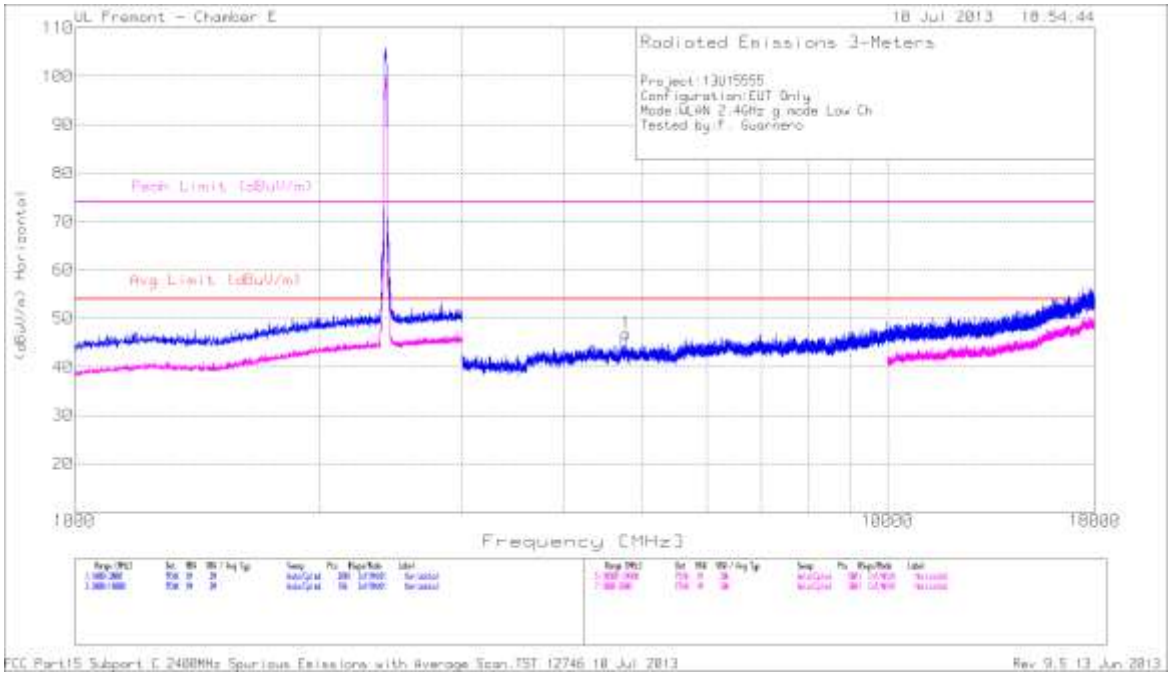
CHANNEL13 BANDEDGE, PEAK, VERT



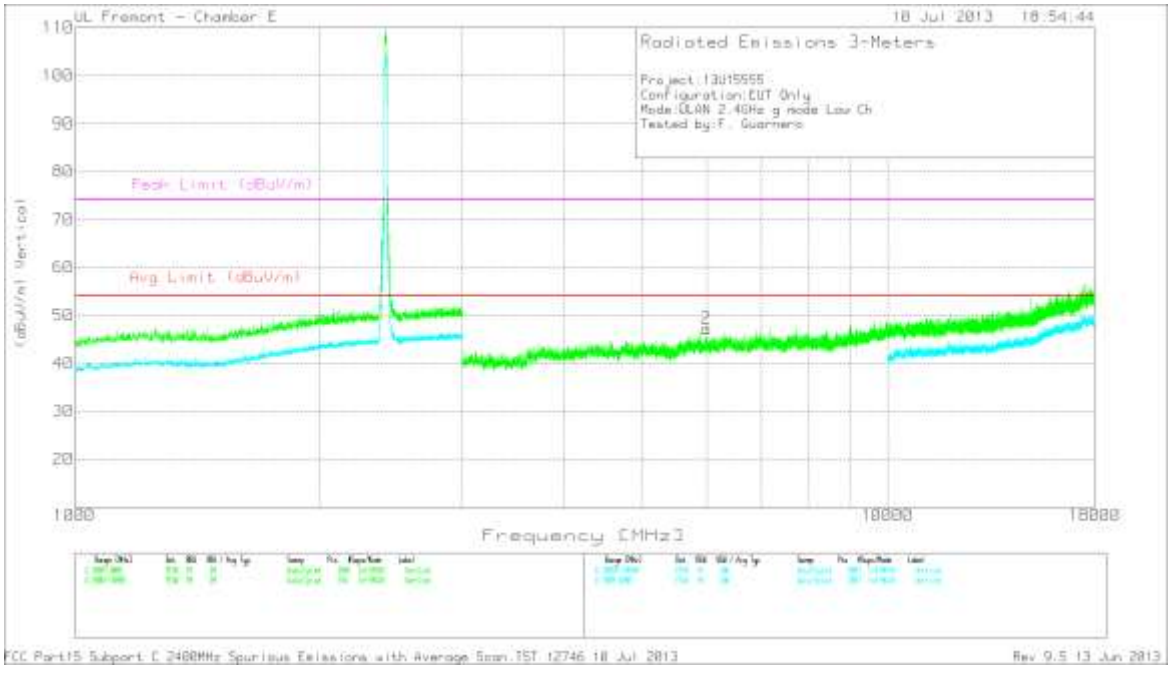
CHANNEL13 BANDEDGE, AVERAGE, VERT

HARMONICS AND SPURIOUS EMISSIONS, CH 1

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	4.772	43.88	PK	34.4	-31.4	46.88	53.97	-7.09	74	-27.12	199	H

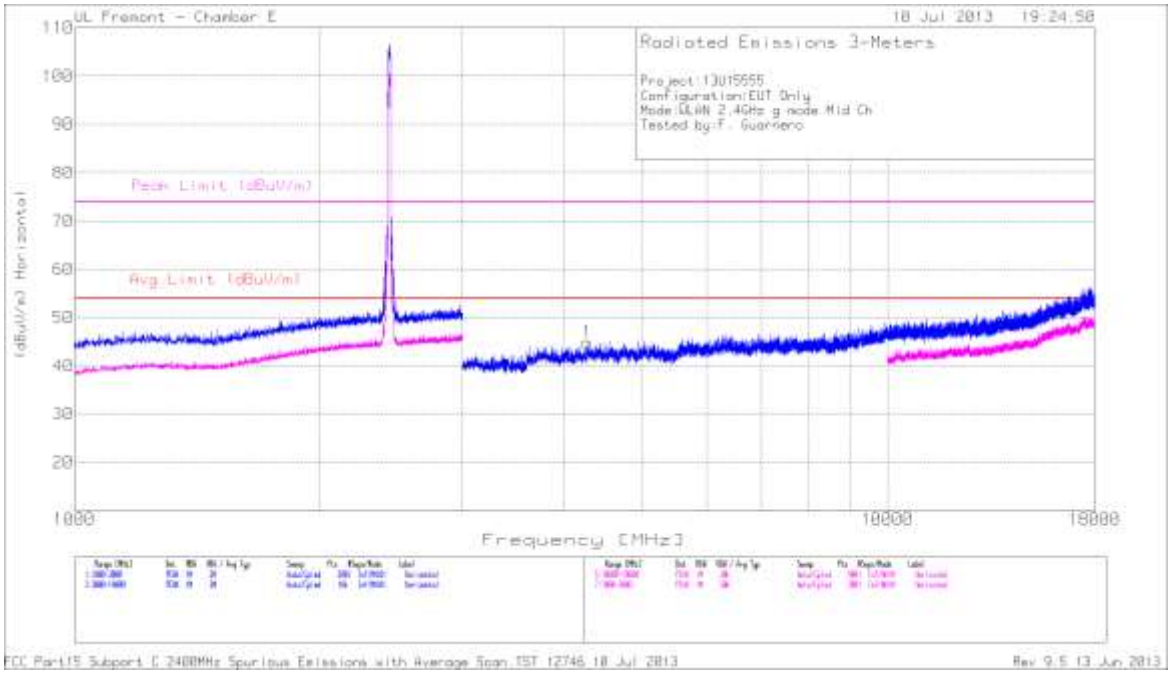
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	5.991	41.38	PK	35.8	-30	47.18	53.97	-6.79	74	-26.82	101	V

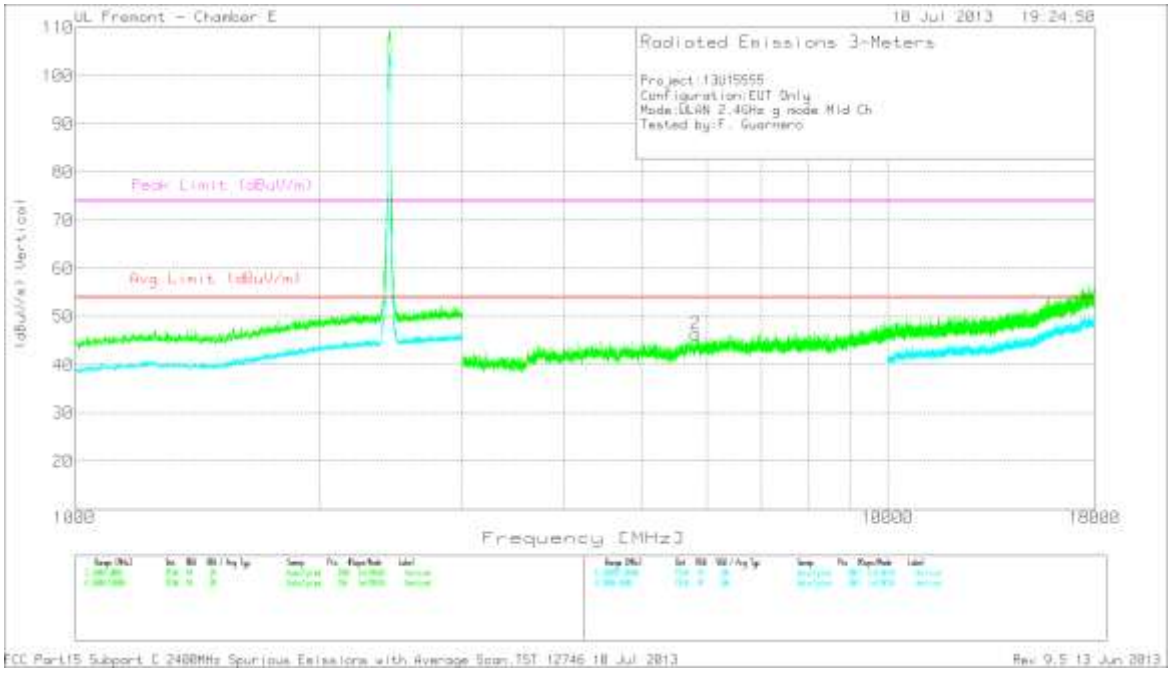
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS, CH 6

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	4.273	42.76	PK	34	-31.9	44.86	53.97	-9.11	74	-29.14	199	H

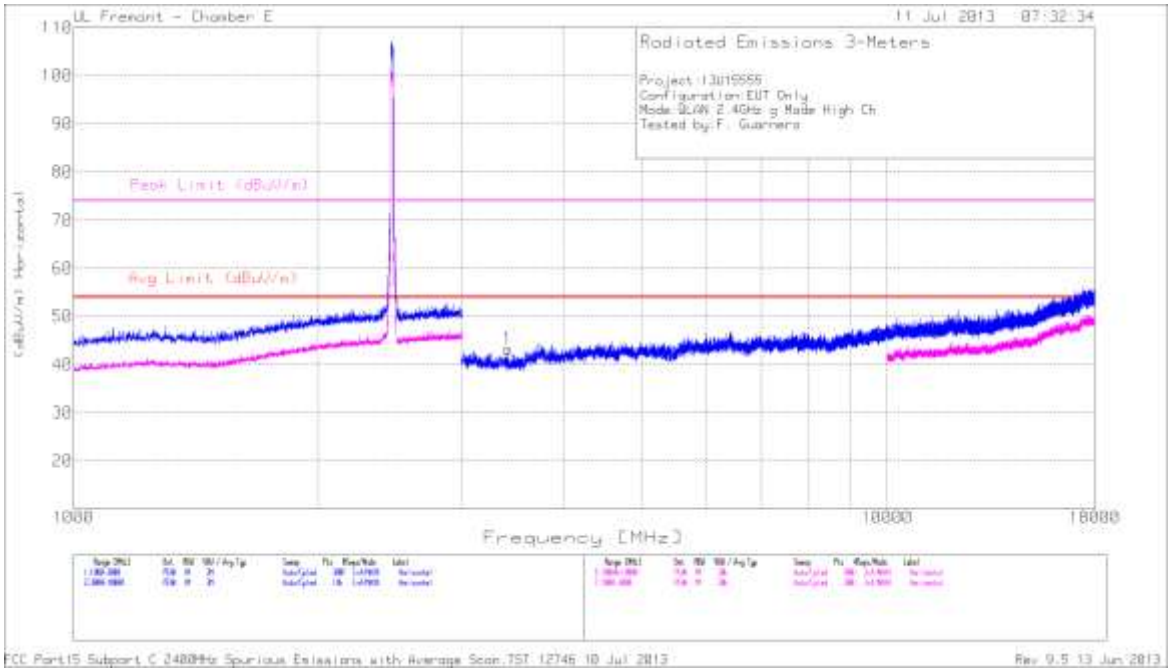
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	5.815	41.68	PK	35.5	-30.8	46.38	53.97	-7.59	74	-27.62	199	V

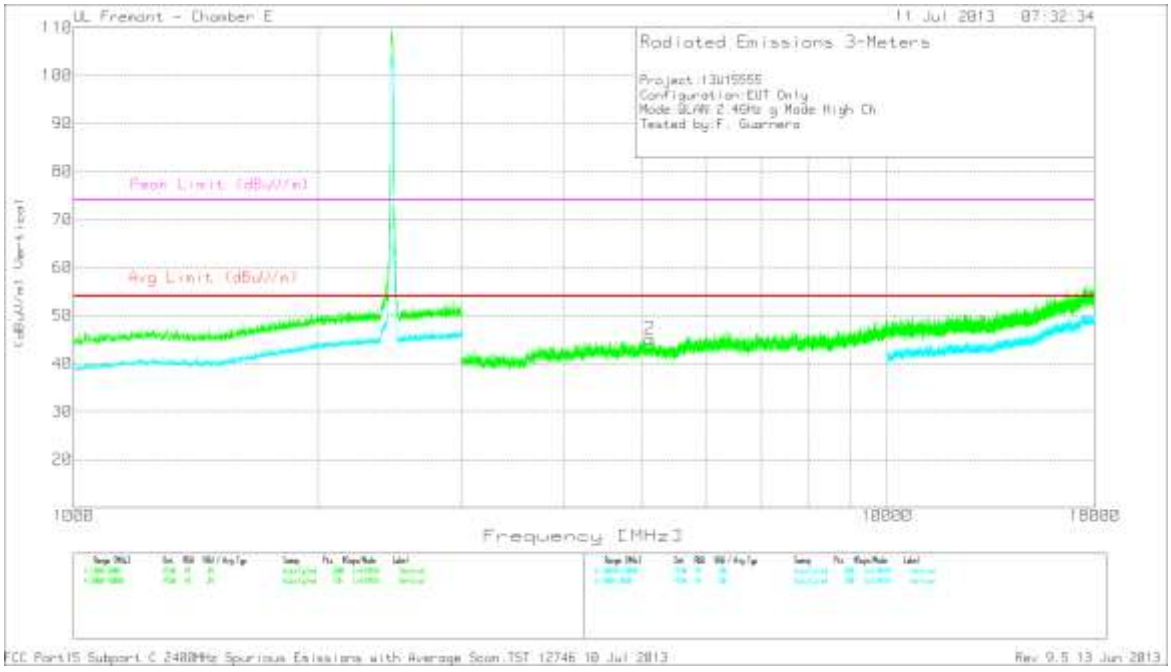
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS, CH 11

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	3.418	42.08	PK	33.2	-32.1	43.18	53.97	-10.79	74	-30.82	100	H

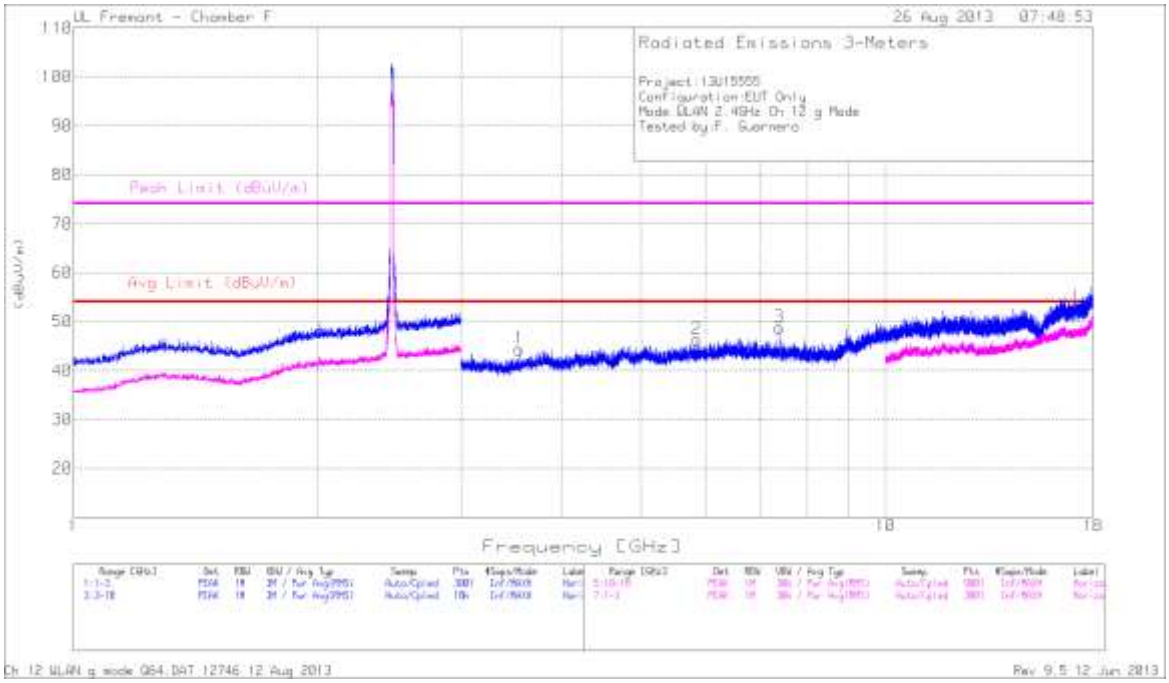
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	5.107	41.75	PK	34.5	-31.1	45.15	53.97	-8.82	74	-28.85	199	V

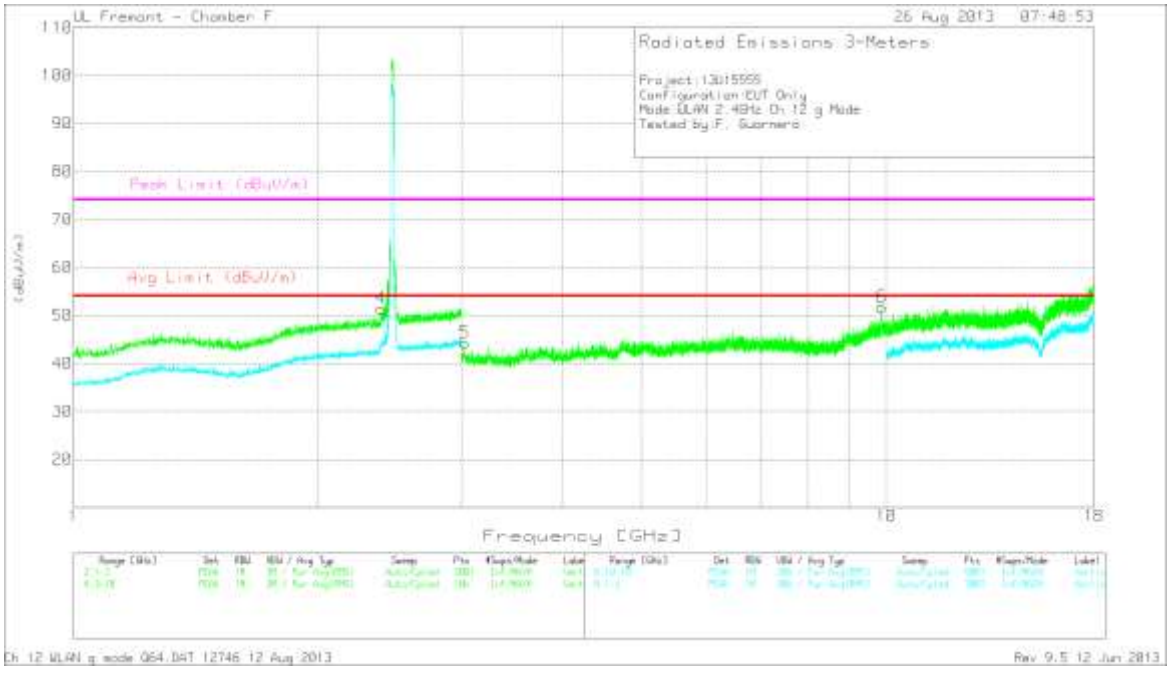
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS, CH 12

CHANNEL12 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	3.54	39.94	PK	33.4	-29	44.34	--	--	--	--	0-360	101	H
*2	5.858	38.83	PK	35.2	-27.7	46.33	--	--	--	--	0-360	200	H
3	7.399	39.93	PK	35.7	-26.9	48.73	53.97	-5.24	74	-25.27	0-360	200	H

PK - Peak detector

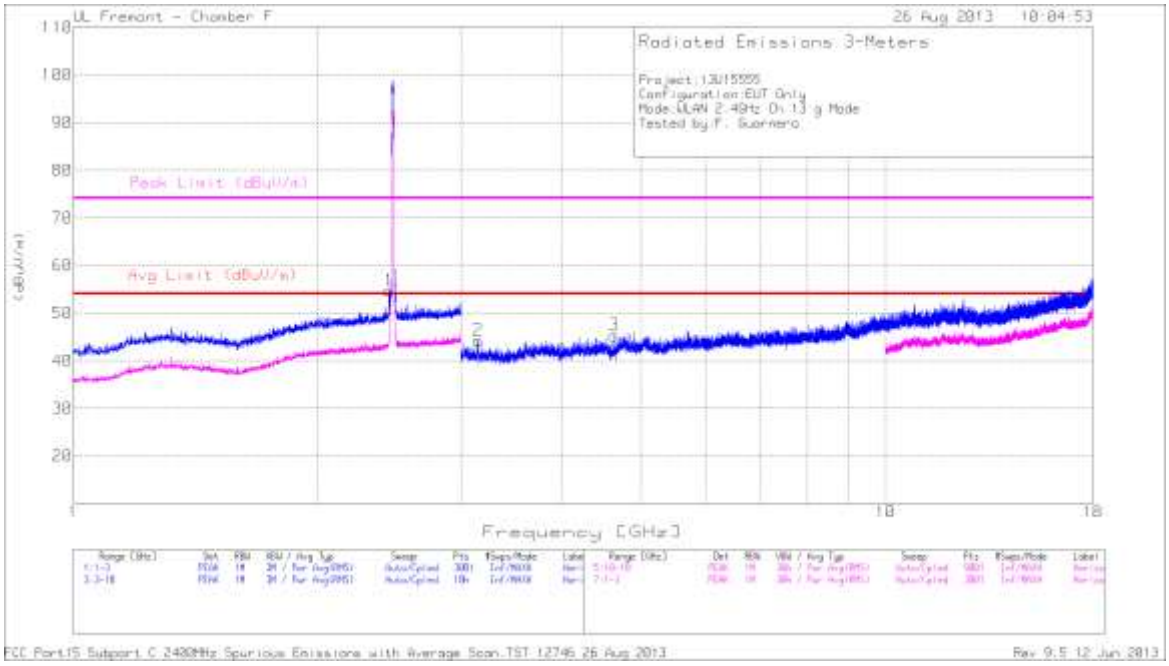
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	2.39	41.84	PK	32.1	-22.5	51.44	53.97	-2.53	74	-22.56	0-360	199	V
*5	3.03	40.05	PK	33.2	-29	44.25	--	--	--	--	0-360	100	V
*6	9.87	37.52	PK	37.6	-23.4	51.72	--	--	--	--	0-360	199	V

*Not in restricted Band

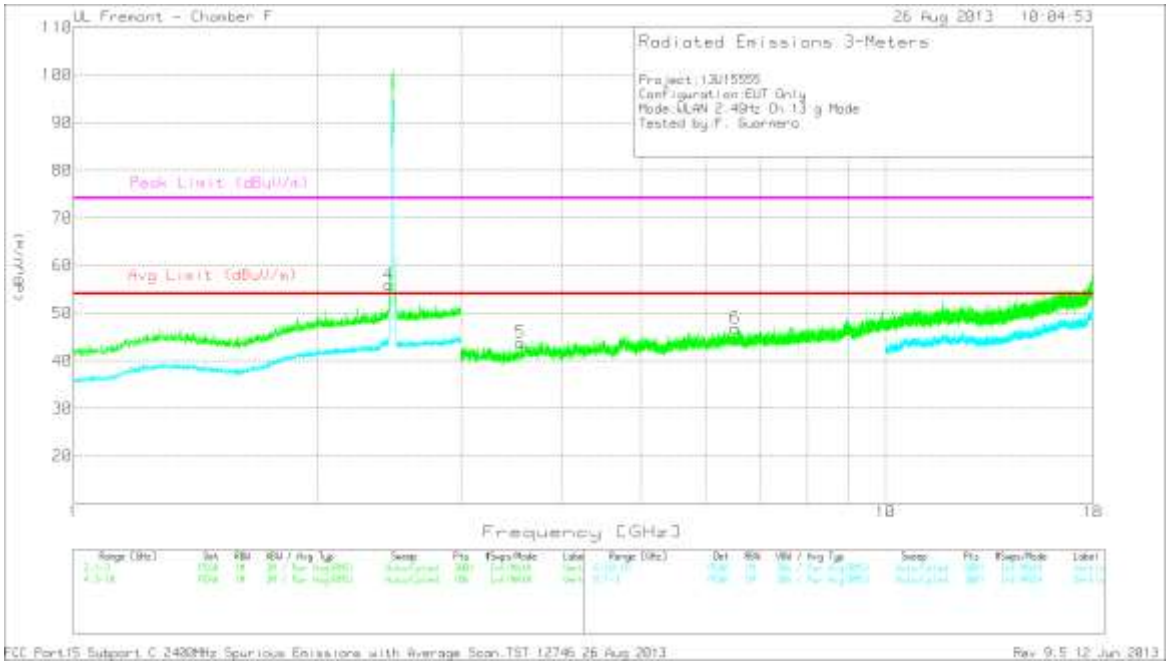
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS, CH 13

CHANNEL13 HORIZONTAL PLOT



CHANNEL13 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	2.447	44.75	PK	32.3	-22.4	54.65	--	--	--	--	0-360	357	H
2	3.151	40.55	PK	33.3	-29.6	44.25	53.97	-9.72	74	-29.75	0-360	199	H
3	4.632	40.07	PK	34.1	-28.9	45.27	53.97	-8.7	74	-28.73	0-360	199	H

PK - Peak detector

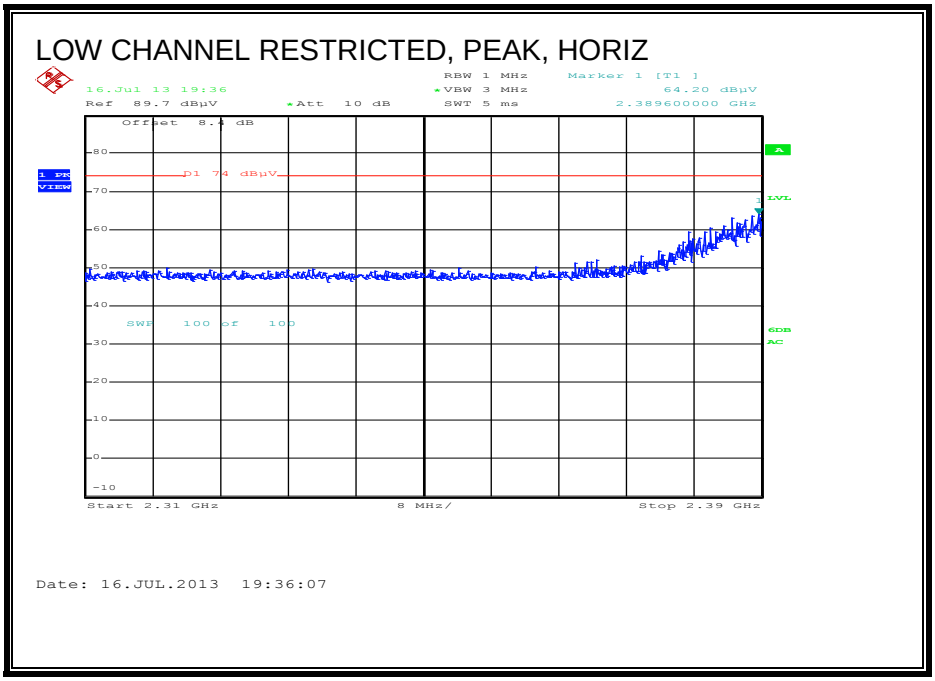
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /3GHz HPF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
*4	2.444	46.03	PK	32.3	-22.4	55.93	--	--	--	--	0-360	200	V
5	3.55	38.86	PK	33.5	-28.6	43.76	53.97	-10.21	74	-30.24	0-360	100	V
*6	6.532	38.43	PK	35.8	-27.4	46.83	--	--	--	--	0-360	201	V

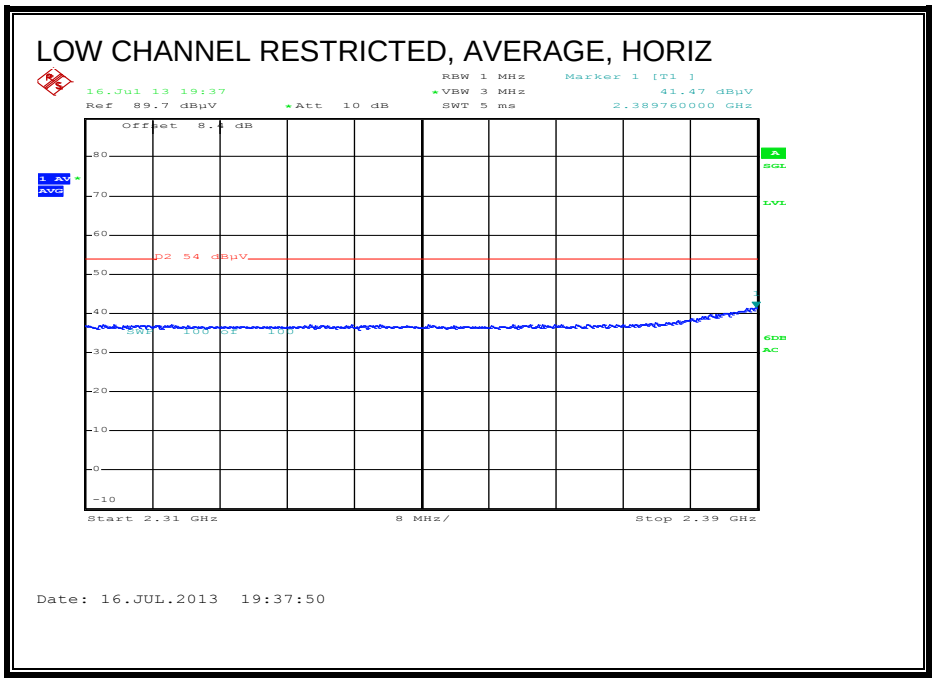
*Not in Restricted Band

PK - Peak detector

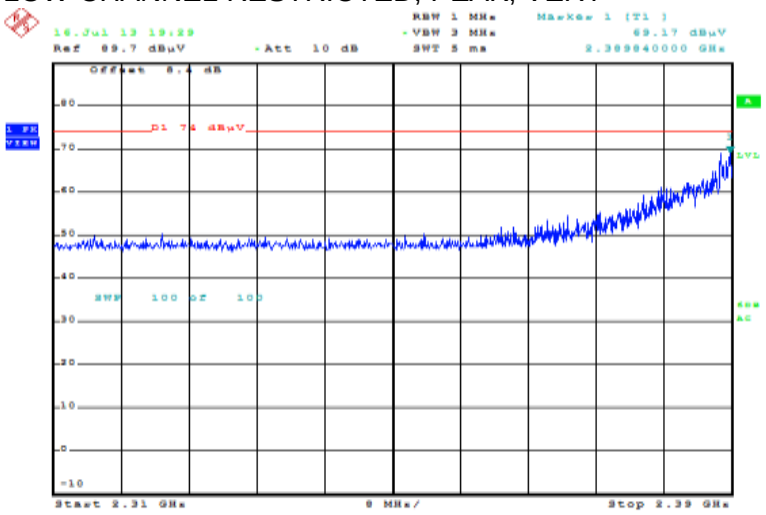
9.2.3. 802.11n HT20 2TX CDD MODE IN THE 2.4 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL) CH 1



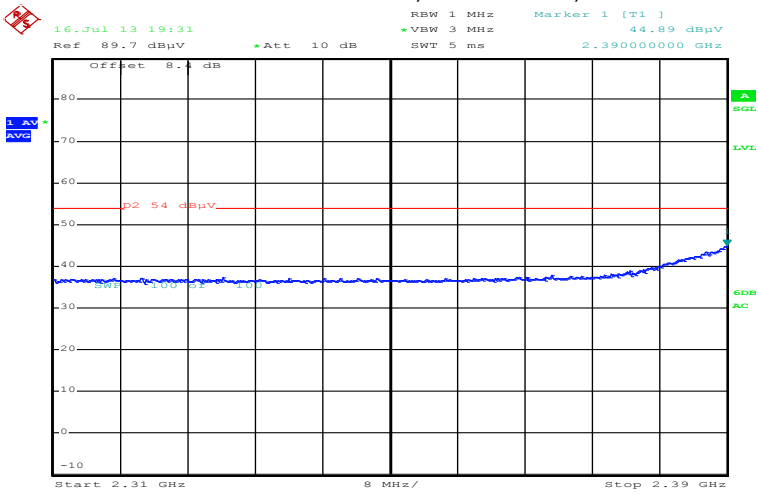


LOW CHANNEL RESTRICTED, PEAK, VERT



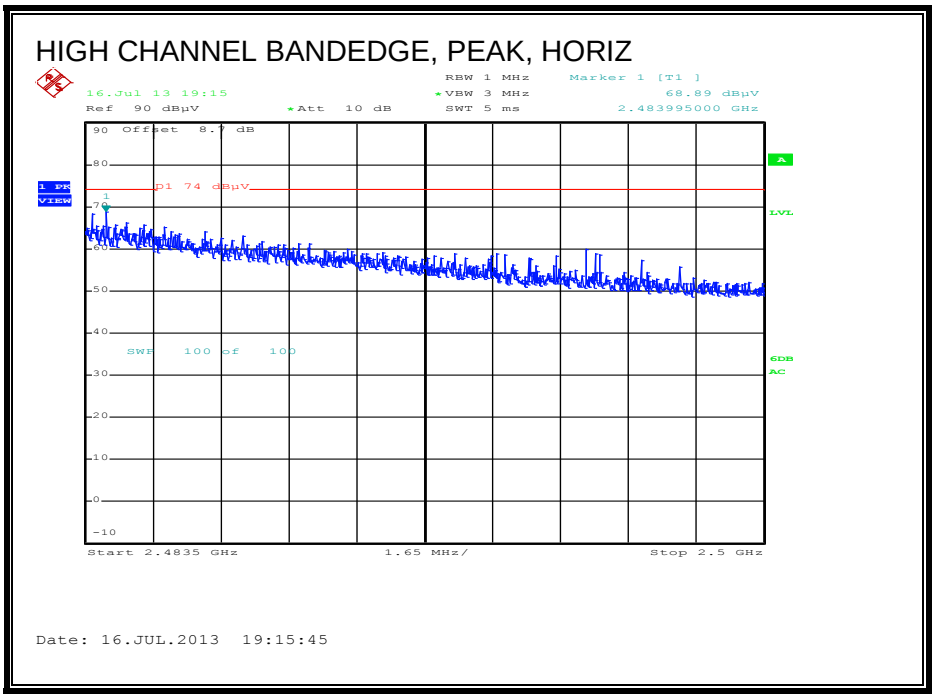
Date: 16.JUL.2013 19:29:37

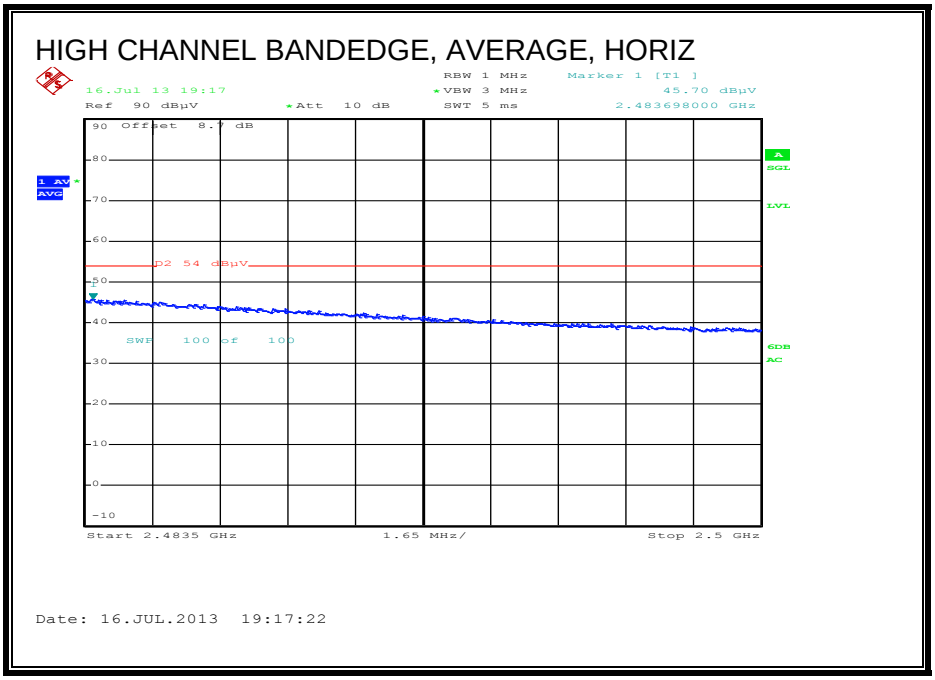
LOW CHANNEL RESTRICTED, AVERAGE, VERT



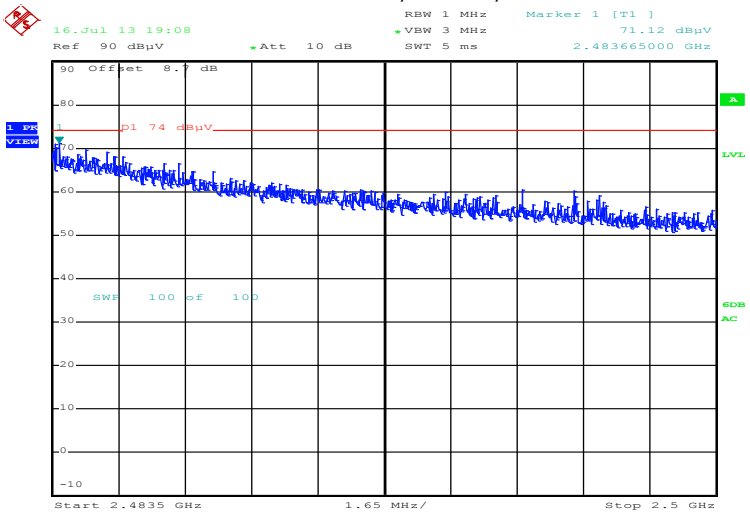
Date: 16.JUL.2013 19:31:27

AUTHORIZED BANDEDGE (HIGH CHANNEL), CH 11



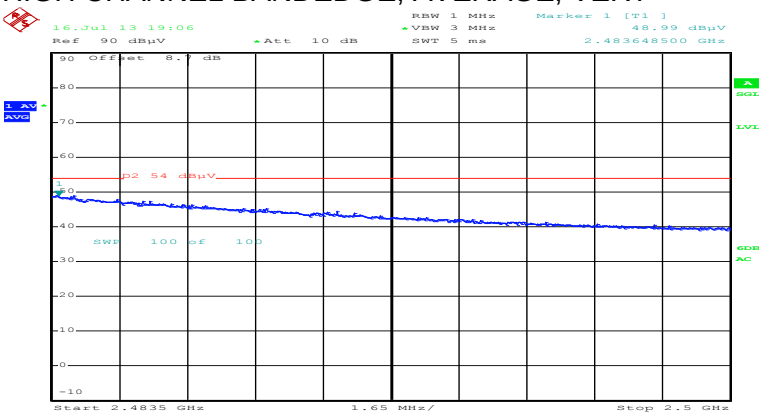


HIGH CHANNEL BANDEDGE, PEAK, VERT



Date: 16.JUL.2013 19:08:46

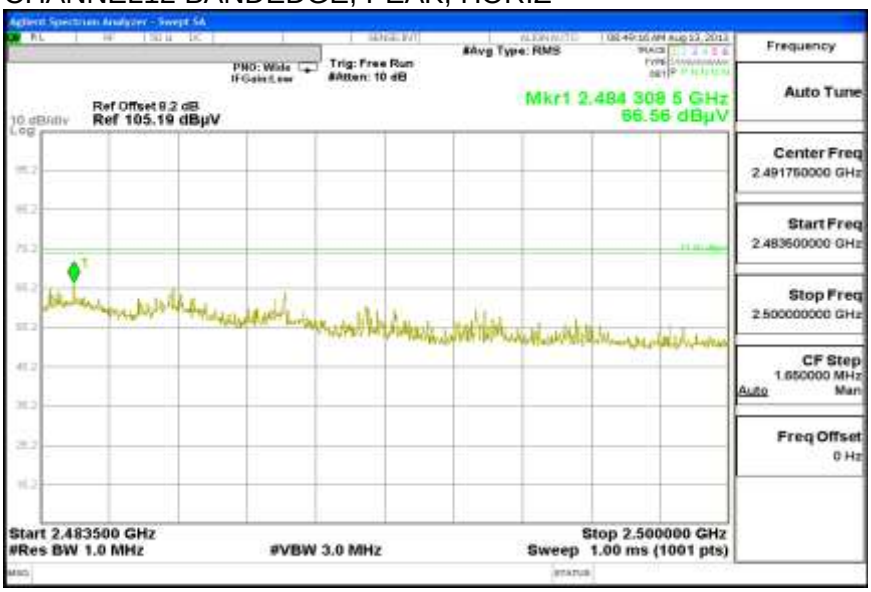
HIGH CHANNEL BANDEDGE, AVERAGE, VERT



Date: 16.JUL.2013 19:06:31

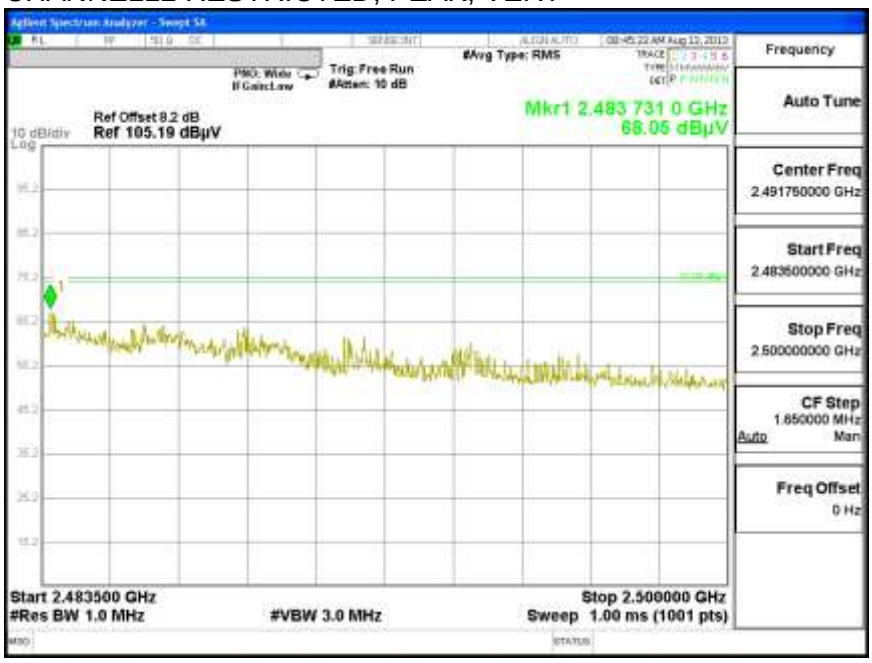
RESTRICTED BANDEDGE, CH 12

CHANNEL12 BANDEDGE, PEAK, HORIZ

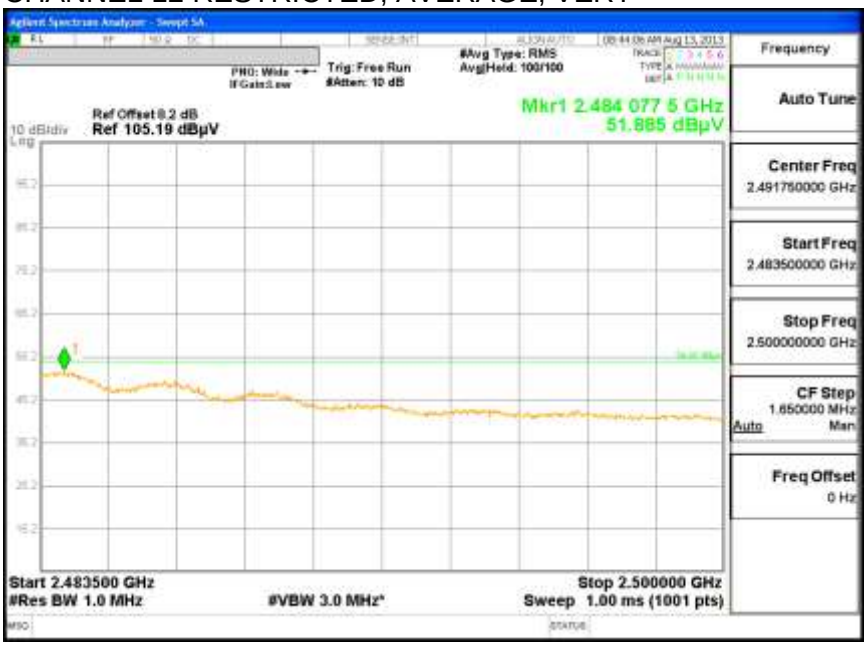


CHANNEL12 BANDEDGE, AVERAGE, HORIZ

CHANNEL12 RESTRICTED, PEAK, VERT

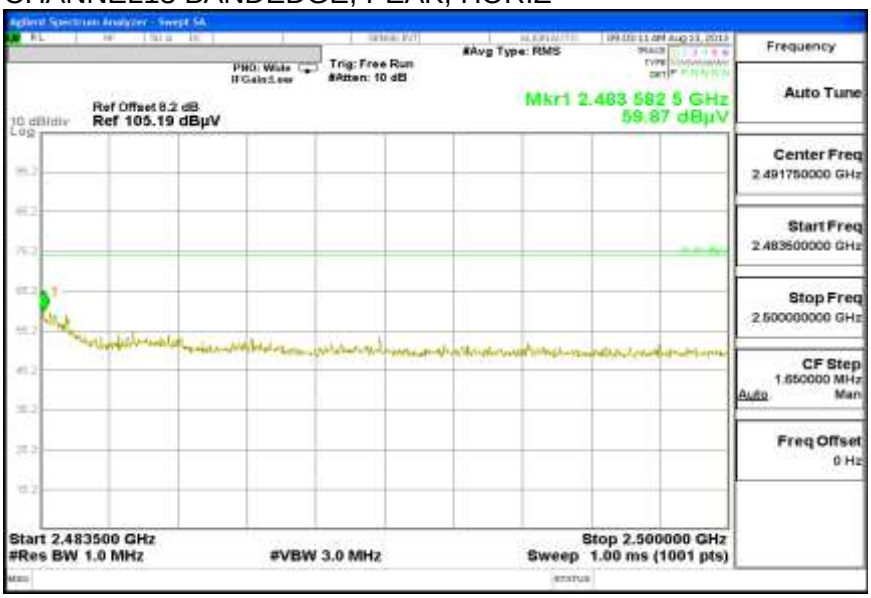


CHANNEL 12 RESTRICTED, AVERAGE, VERT

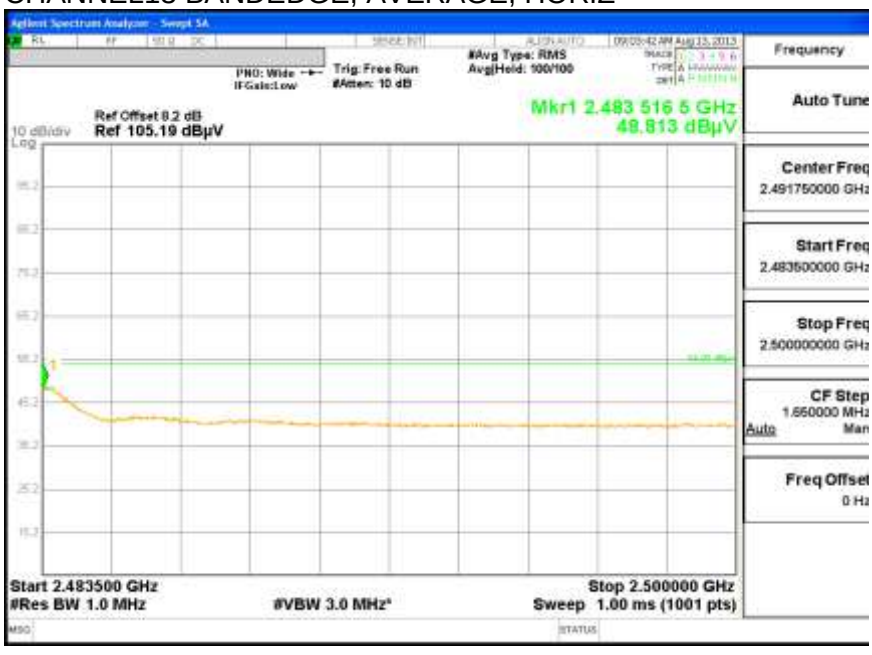


AUTHORIZED BANDEDGE, CH 13

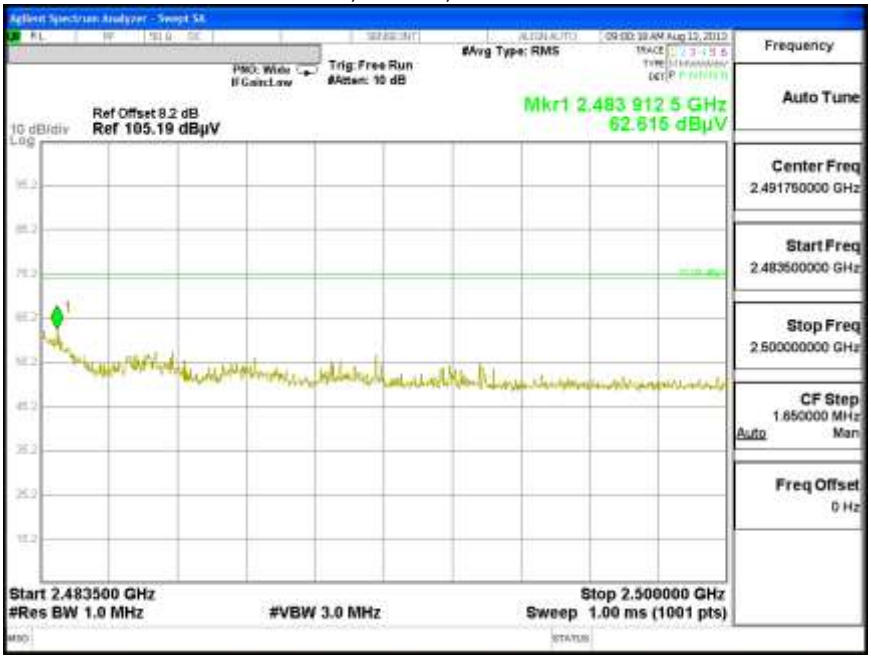
CHANNEL13 BANDEDGE, PEAK, HORIZ



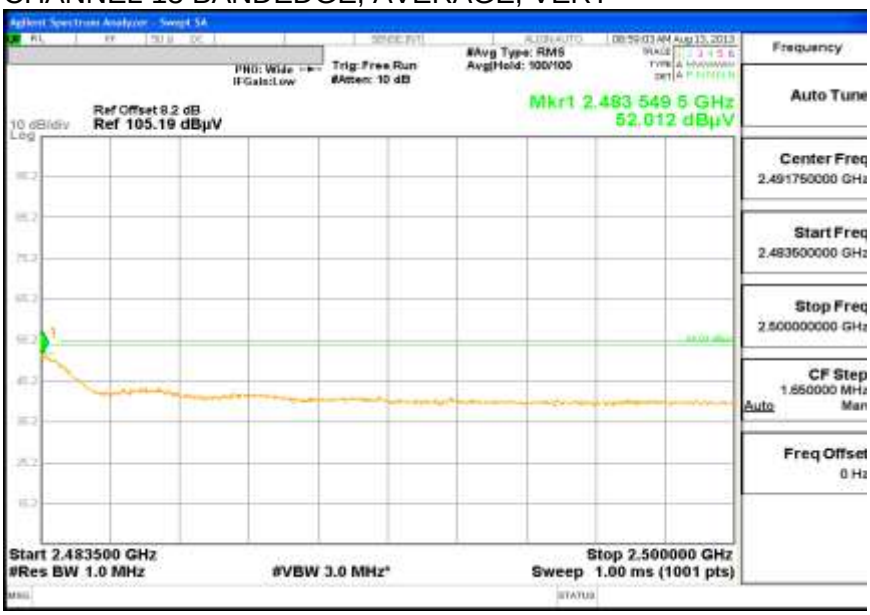
CHANNEL13 BANDEDGE, AVERAGE, HORIZ



CHANNEL13 BANDEDGE, PEAK, VERT

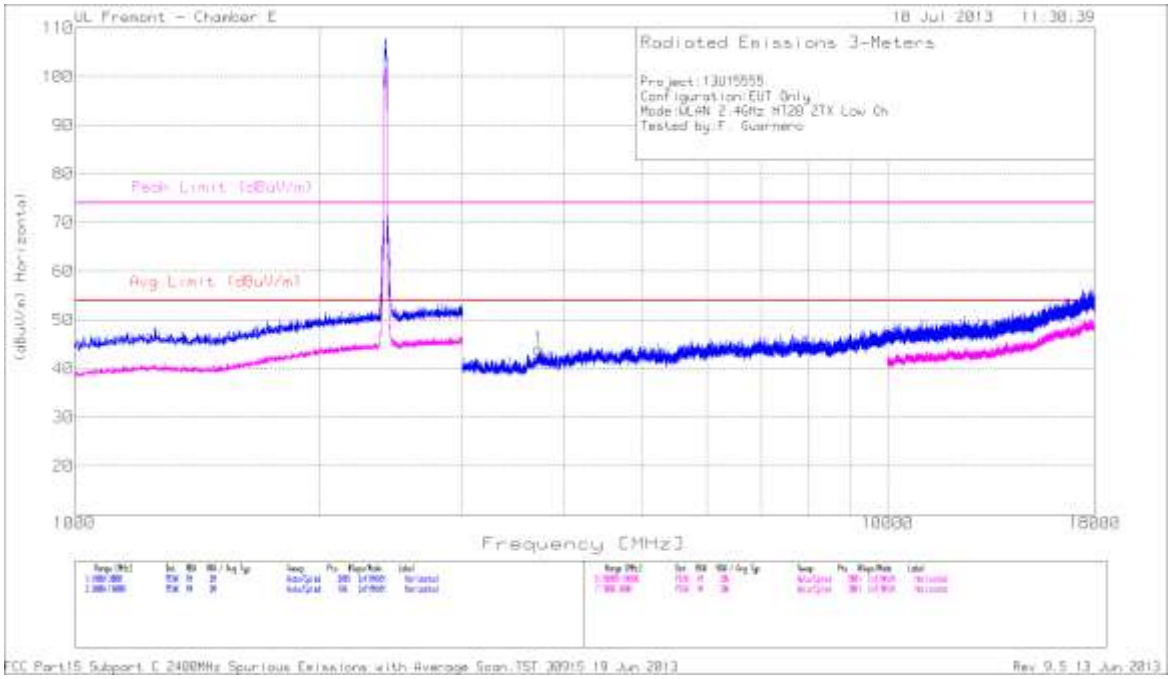


CHANNEL 13 BANDEDGE, AVERAGE, VERT

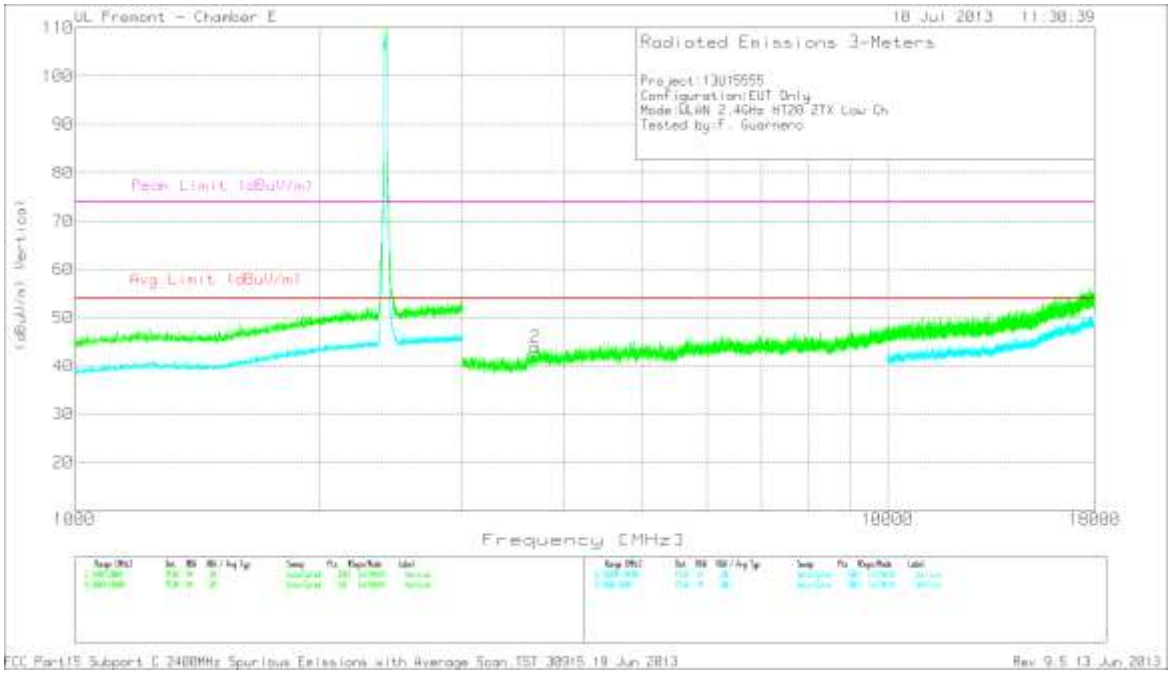


HARMONICS AND SPURIOUS EMISSIONS, CH 1

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	3.725	41.94	PK	33.6	-31.5	44.04	53.97	-9.93	74	-29.96	199	H

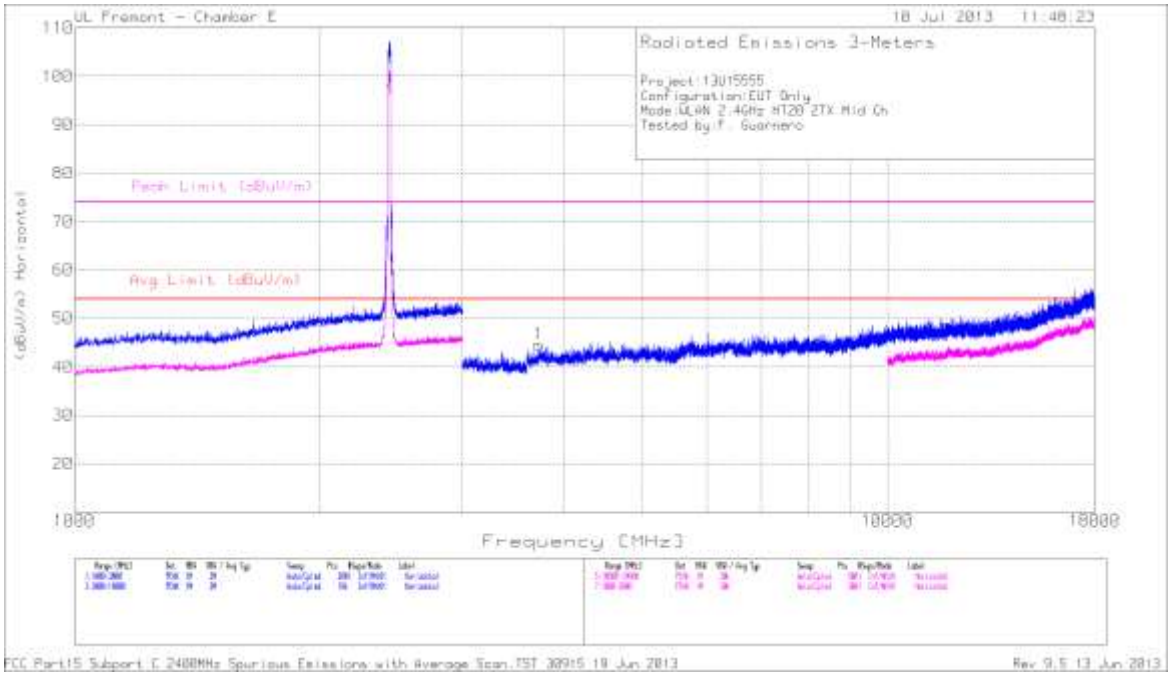
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	3.692	42.12	PK	33.6	-31.9	43.82	53.97	-10.15	74	-30.18	199	V

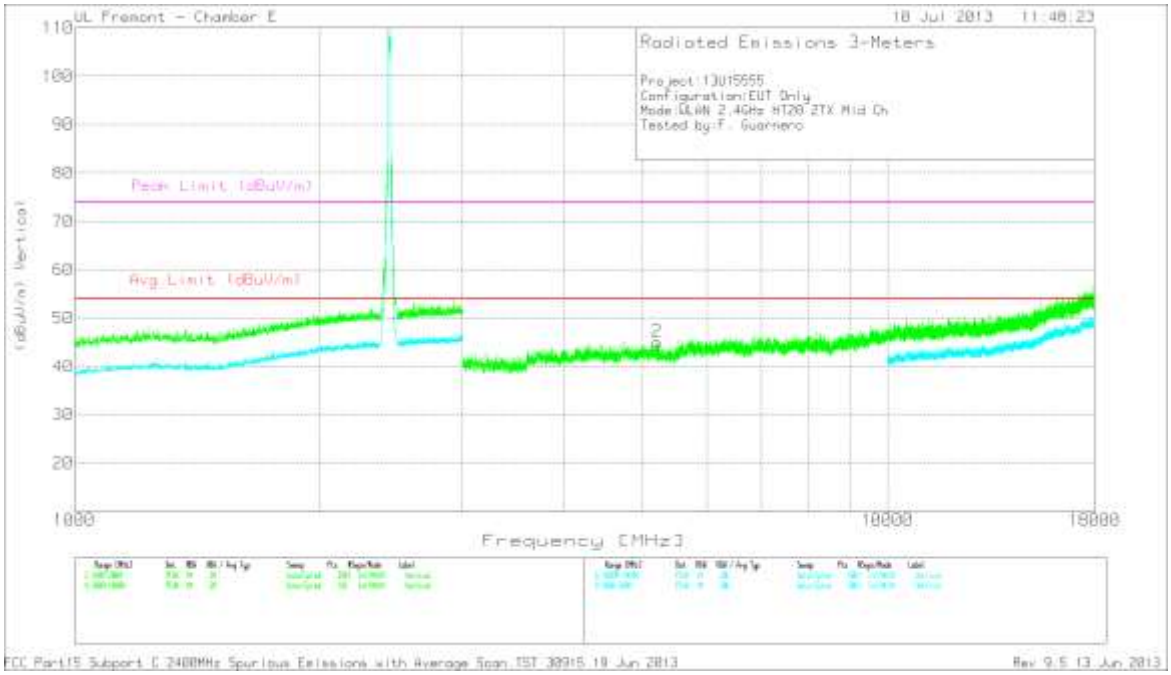
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS, CH 6

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	3.723	42.42	PK	33.6	-31.4	44.62	53.97	-9.35	74	-29.38	199	H

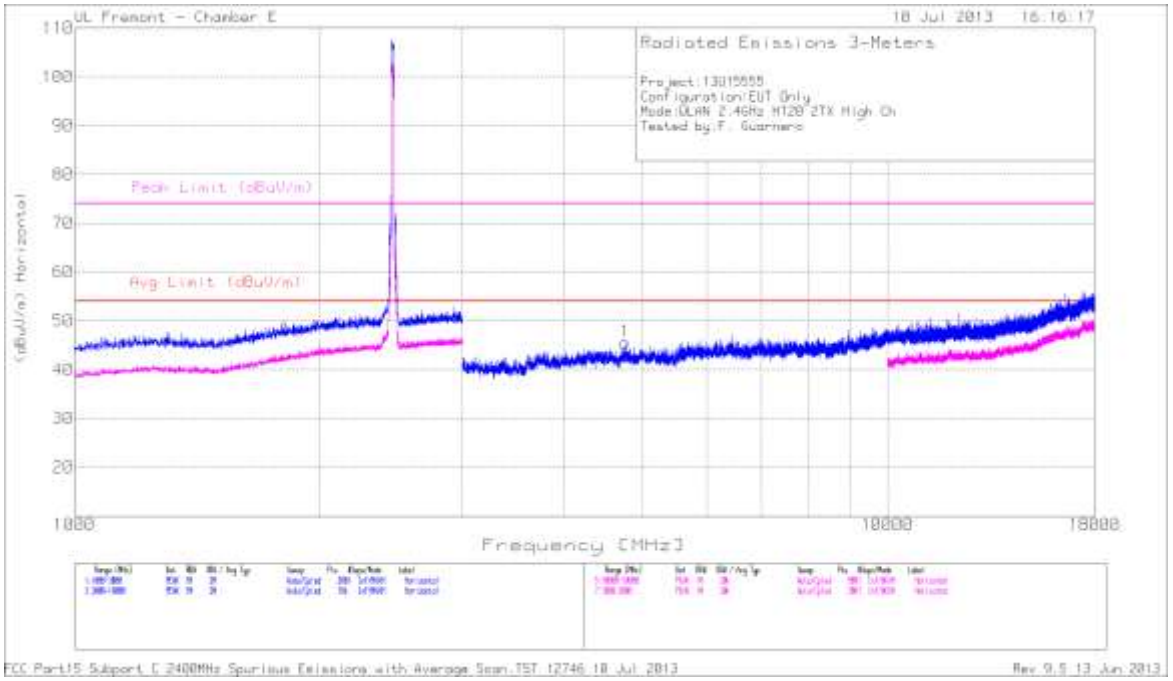
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	5.208	41.43	PK	34.6	-31	45.03	53.97	-8.94	74	-28.97	199	V

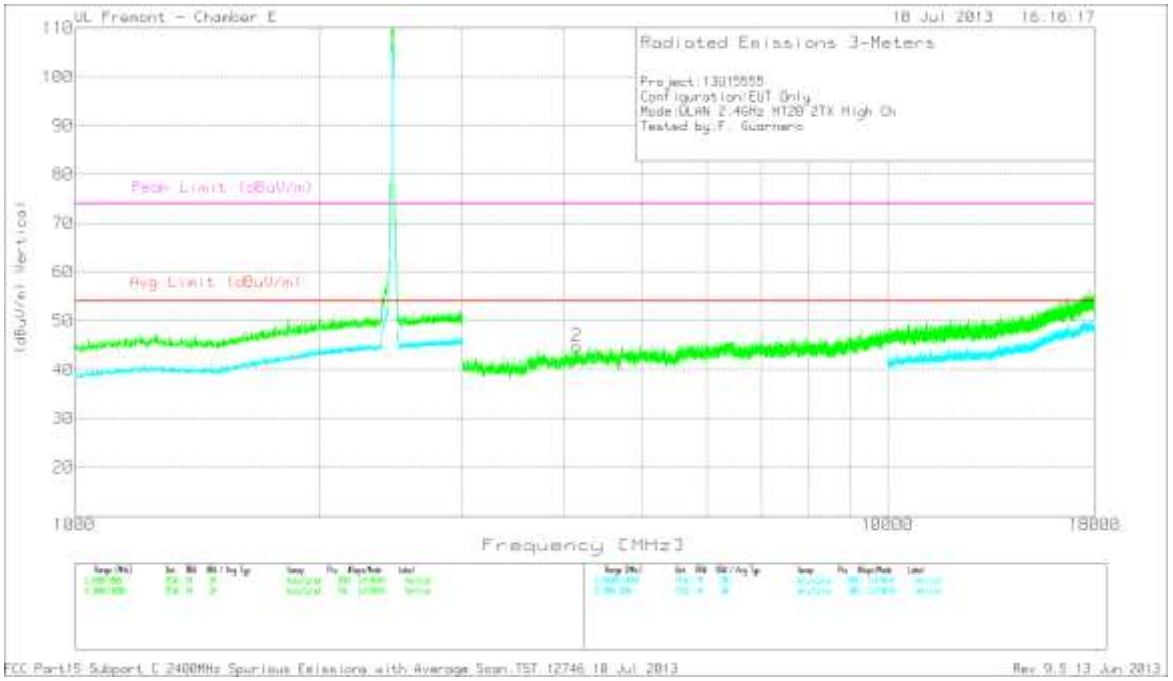
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS, CH 11

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	4.758	42.64	PK	34.4	-31.4	45.64	53.97	-8.33	74	-28.36	101	H

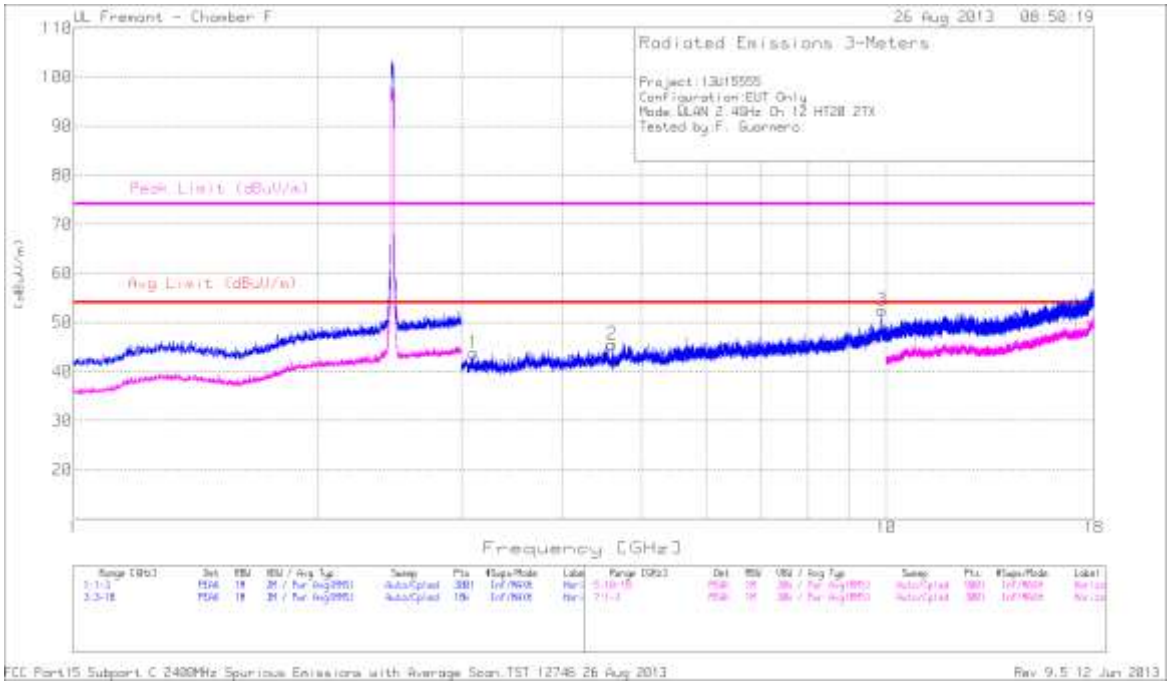
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 3GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	4.148	42.88	PK	33.9	-32	44.78	53.97	-9.19	74	-29.22	100	V

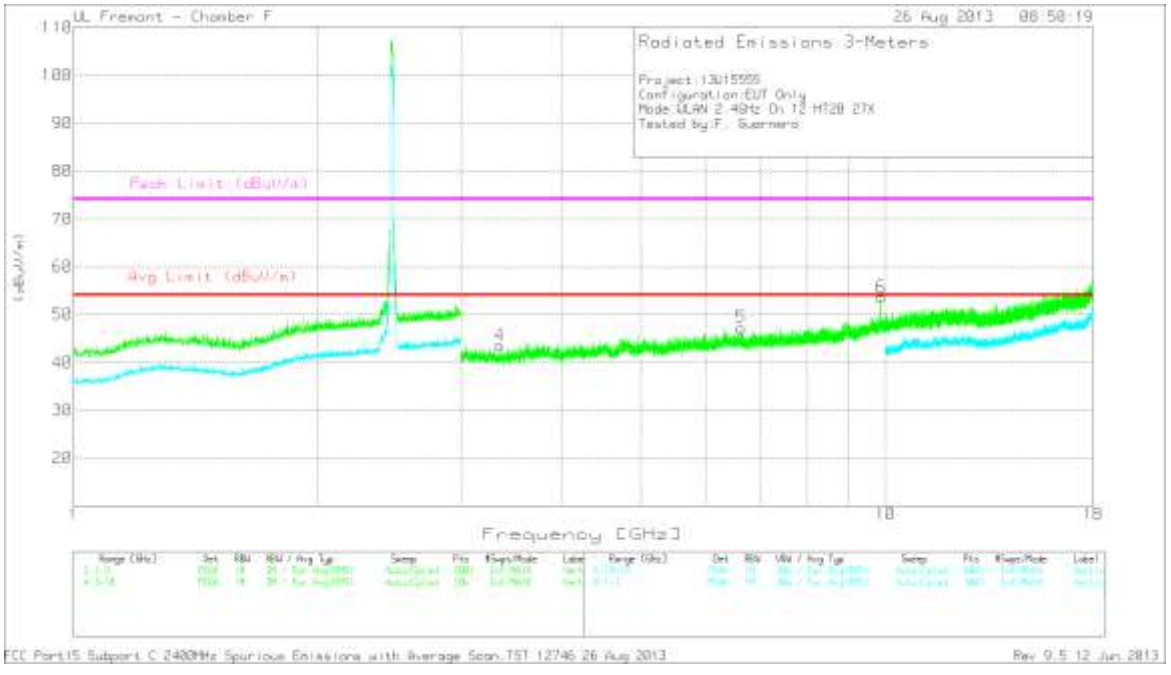
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS, CH 12

CHANNEL12 HORIZONTAL PLOT



CHANNEL12 VERTICAL PLOT



DATA

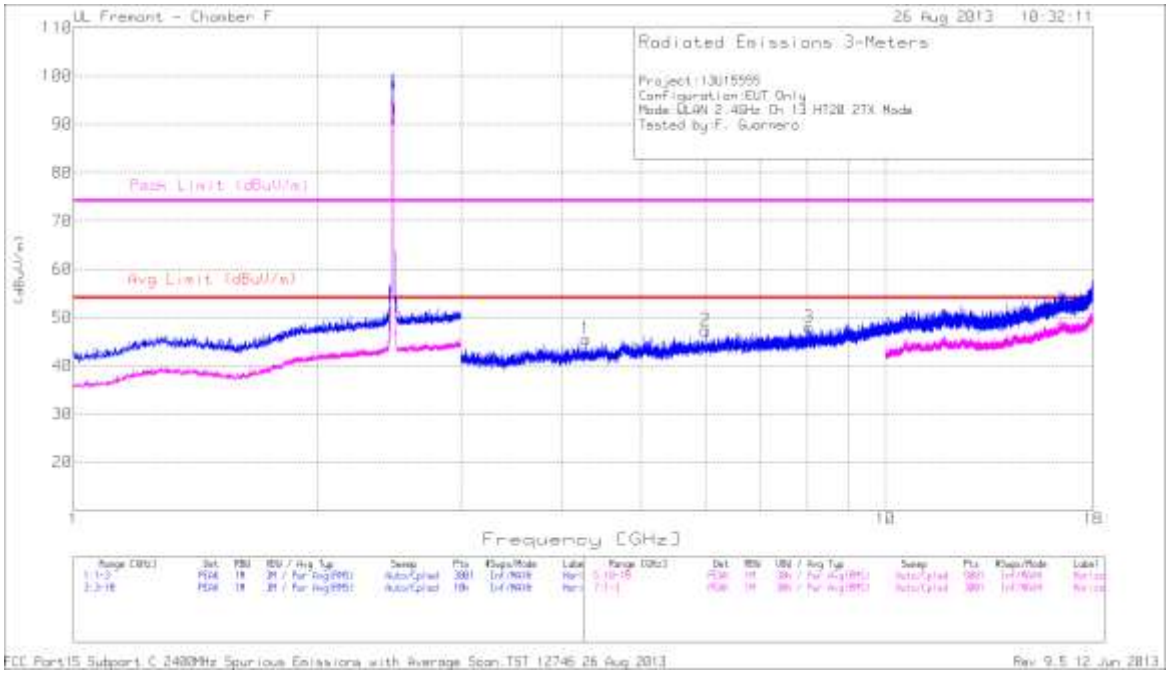
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (dB/m)	Amp/Cbl /3GHz HPF	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	3.105	40.13	PK	33.3	-29.7	43.73	53.97	-10.24	74	-30.27	0-360	199	H
2	4.6	39.96	PK	34	-28.4	45.56	53.97	-8.41	74	-28.44	0-360	199	H
*3	9.874	37.59	PK	37.6	-22.7	52.49	--	--	--	--	0-360	100	H
4	3.348	39.84	PK	33	-29.4	43.44	53.97	-10.53	74	-30.56	0-360	101	V
*5	6.636	38.24	PK	35.8	-26.8	47.24	--	--	--	--	0-360	101	V
*6	9.874	38.65	PK	37.6	-22.7	53.55	--	--	--	--	0-360	201	V

*Not in Restricted Band

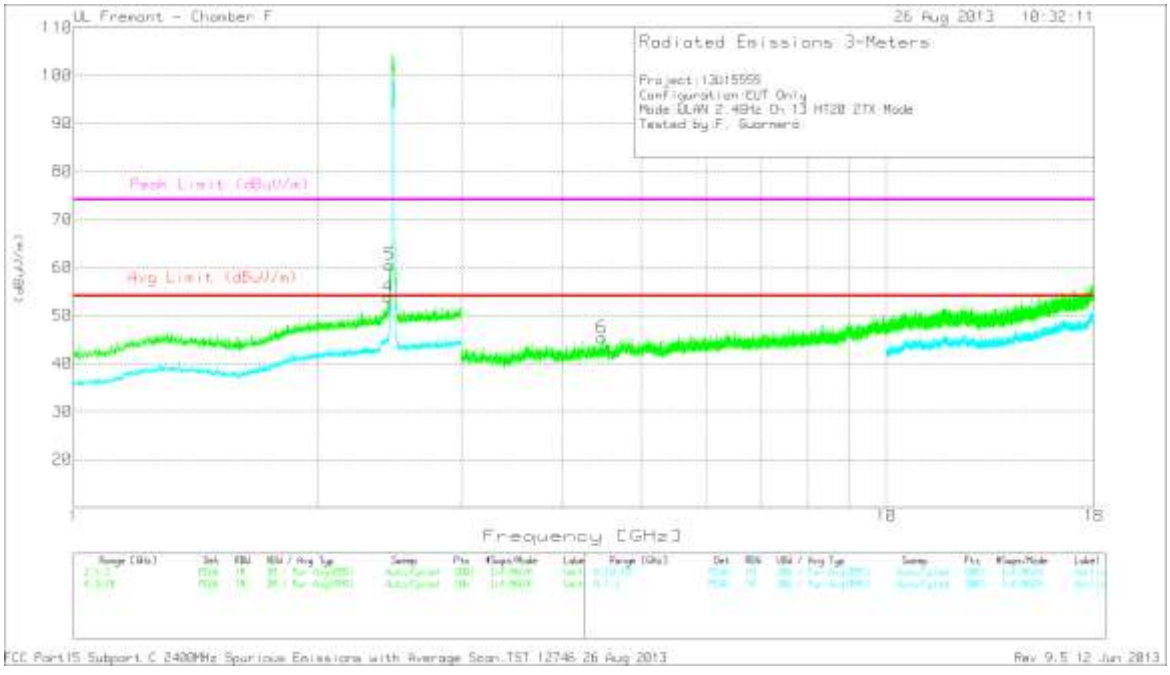
PK - Peak detector

HARMONICS AND SPURIOUS EMISSIONS, CH 13

CHANNEL13 HORIZONTAL PLOT



CHANNEL13 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	4.278	40.87	PK	33.5	-28.9	45.47	53.97	-8.5	74	-28.53	0-360	100	H
2	6.005	39.38	PK	35.3	-27.4	47.28	53.97	-6.69	74	-26.72	0-360	199	H
3	8.052	37.01	PK	36	-25.1	47.91	53.97	-6.06	74	-26.09	0-360	100	H

PK - Peak detector

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	2.439	44.05	PK	32.3	-22.5	53.85	--	-	--	--	0-360	200	V
*5	2.451	50.62	PK	32.3	-22.4	60.52	--	--	--	--	0-360	101	V
*6	4.467	39.75	PK	33.9	-28.3	45.35	--	--	--	--	0-360	200	V

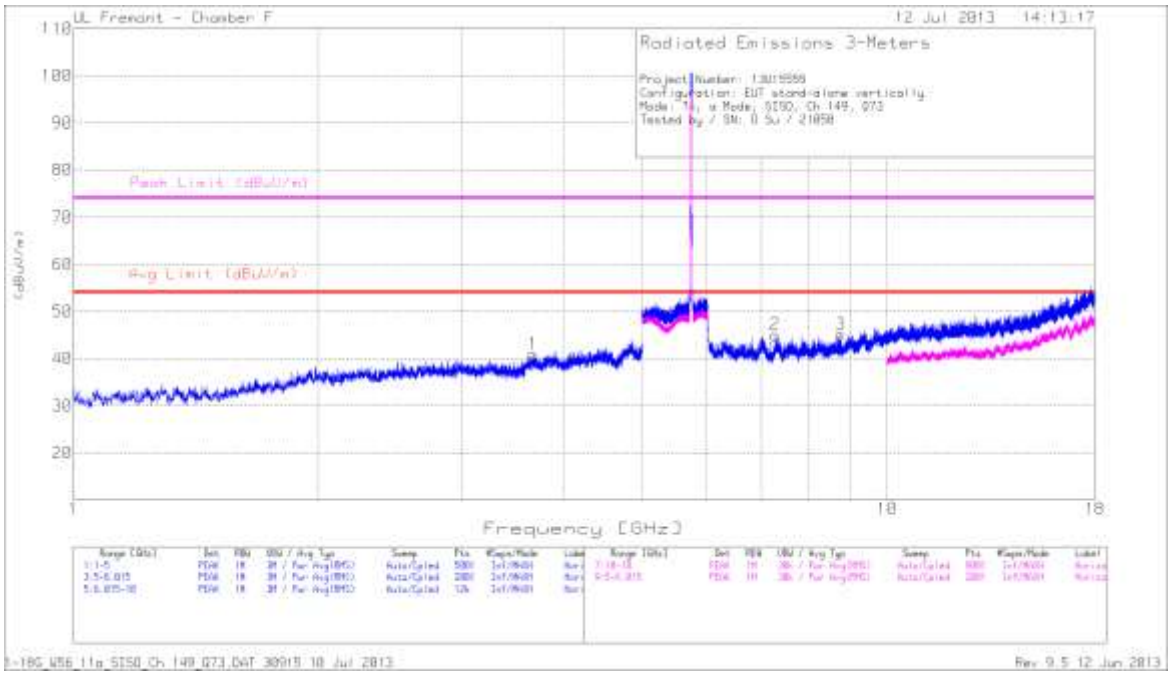
*Not in Restricted Band

PK - Peak detector

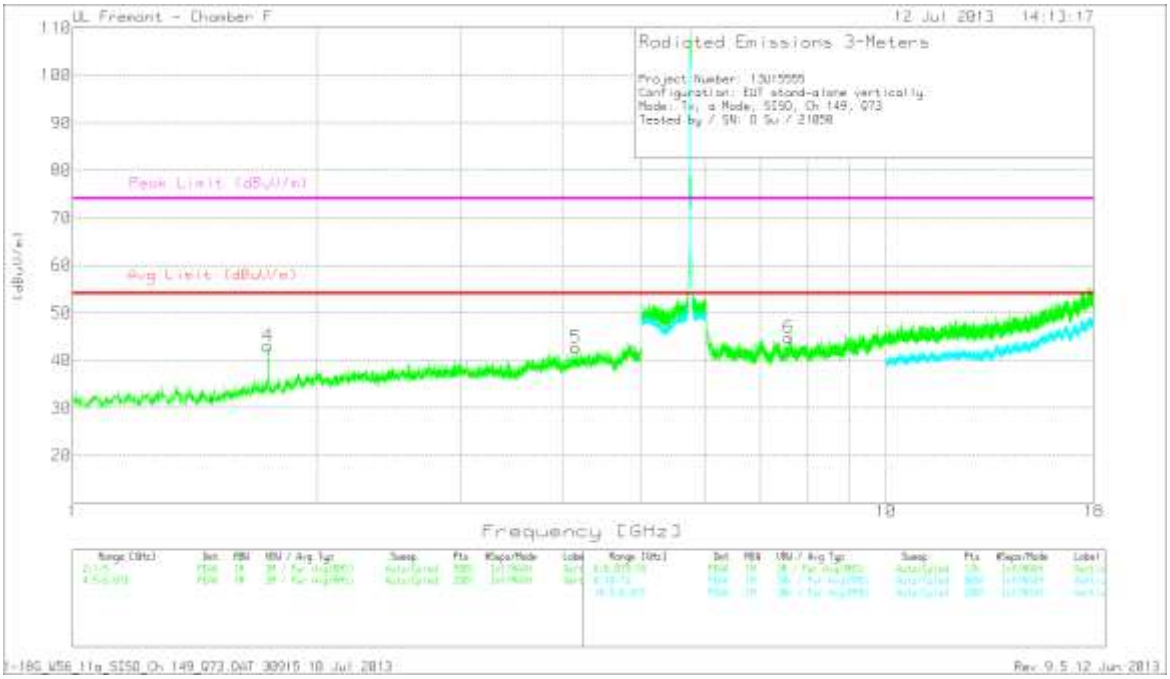
9.2.4. 802.11a MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



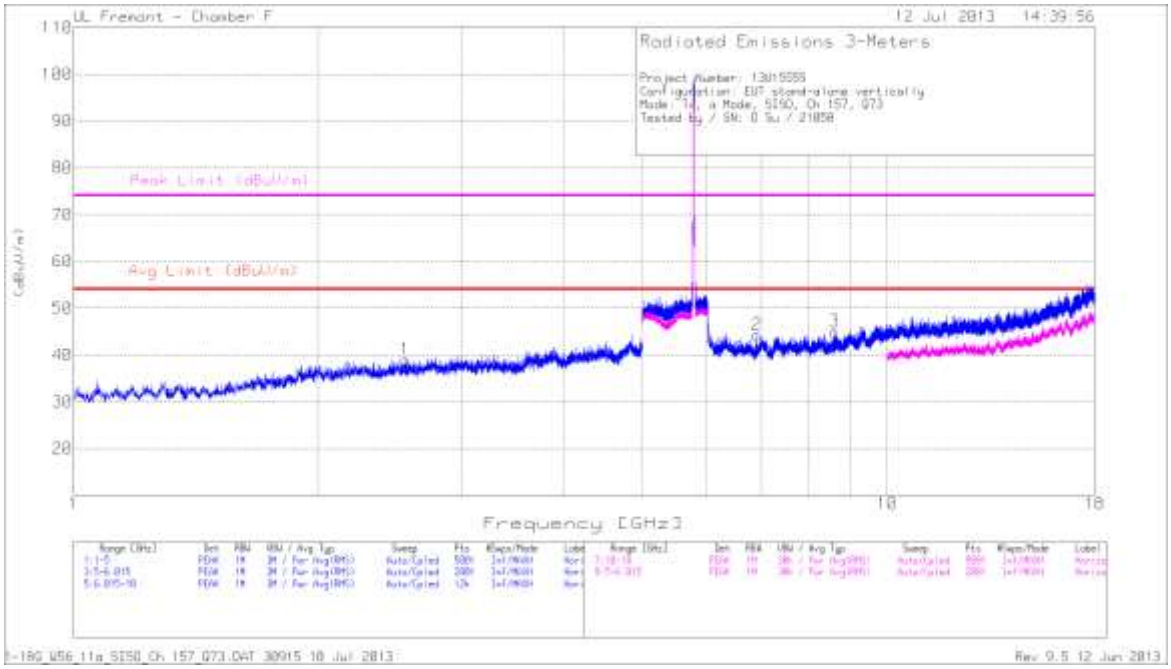
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	3.673	39.37	PK	33.5	-32	40.87	53.97	-13.1	74	-33.13	0-360	201	H
4	*1.738	46.97	PK	30.4	-34.4	42.97	--	--	--	--	0-360	200	V
5	4.156	40.56	PK	33.9	-31.8	42.66	53.97	-11.31	74	-31.34	0-360	100	V
2	7.288	38.03	PK	36	-29	45.03	53.97	-8.94	74	-28.97	0-360	201	H
3	*8.774	36.47	PK	36.6	-28	45.07	--	--	--	--	0-360	100	H
6	7.598	37.37	PK	36.1	-28.7	44.77	53.97	-9.2	74	-29.23	0-360	201	V

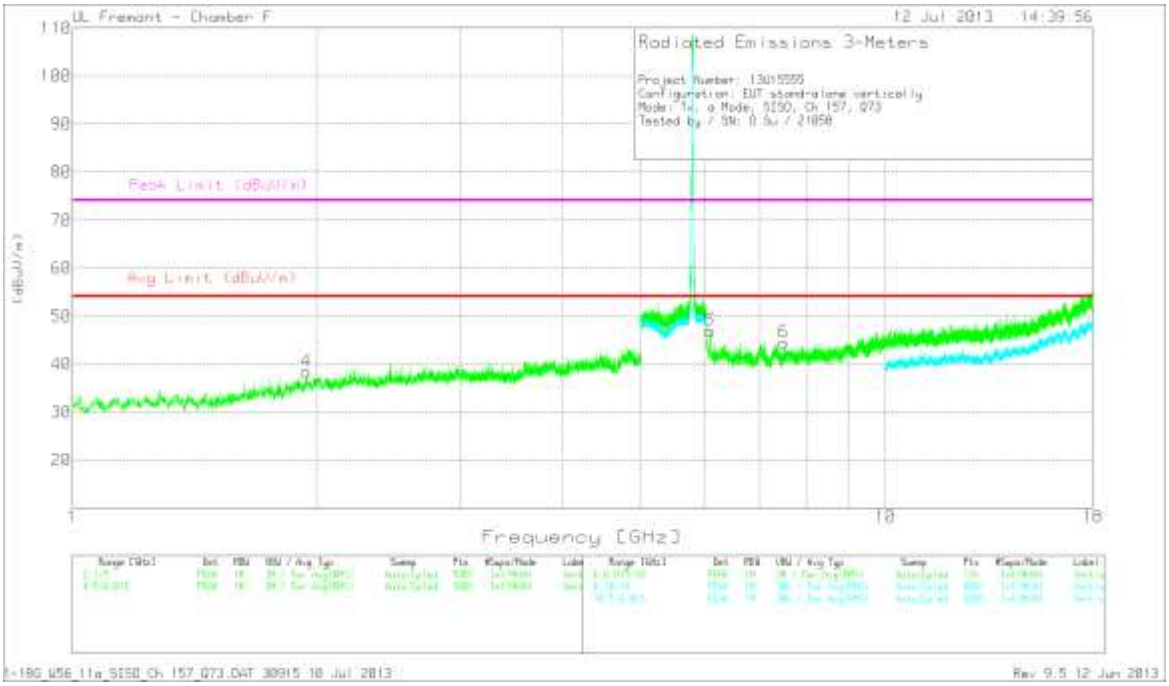
*Not in Restricted Band

PK - Peak detector

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



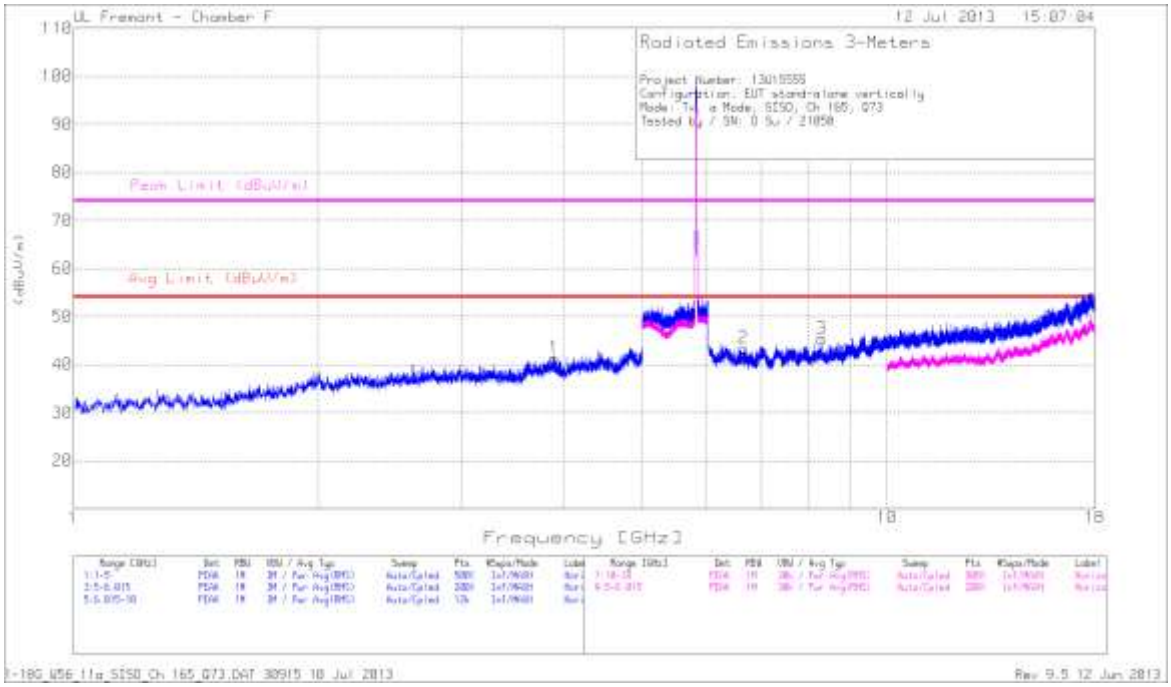
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	*2.558	39.84	PK	32.8	-33.6	39.04	--	--	--	--	0-360	100	H
4	*1.938	40.19	PK	31.7	-33.5	38.39	--	--	--	--	0-360	100	V
2	*6.917	37.84	PK	35.9	-29.5	44.24	--	--	--	--	0-360	201	H
3	*8.626	36.18	PK	36.4	-27.6	44.98	--	--	--	--	0-360	100	H
5	*6.087	40.34	PK	35.8	-29.2	46.94	--	--	--	--	0-360	100	V
6	7.5	37.69	PK	36.1	-29.3	44.49	53.97	-9.48	74	-29.51	0-360	201	V

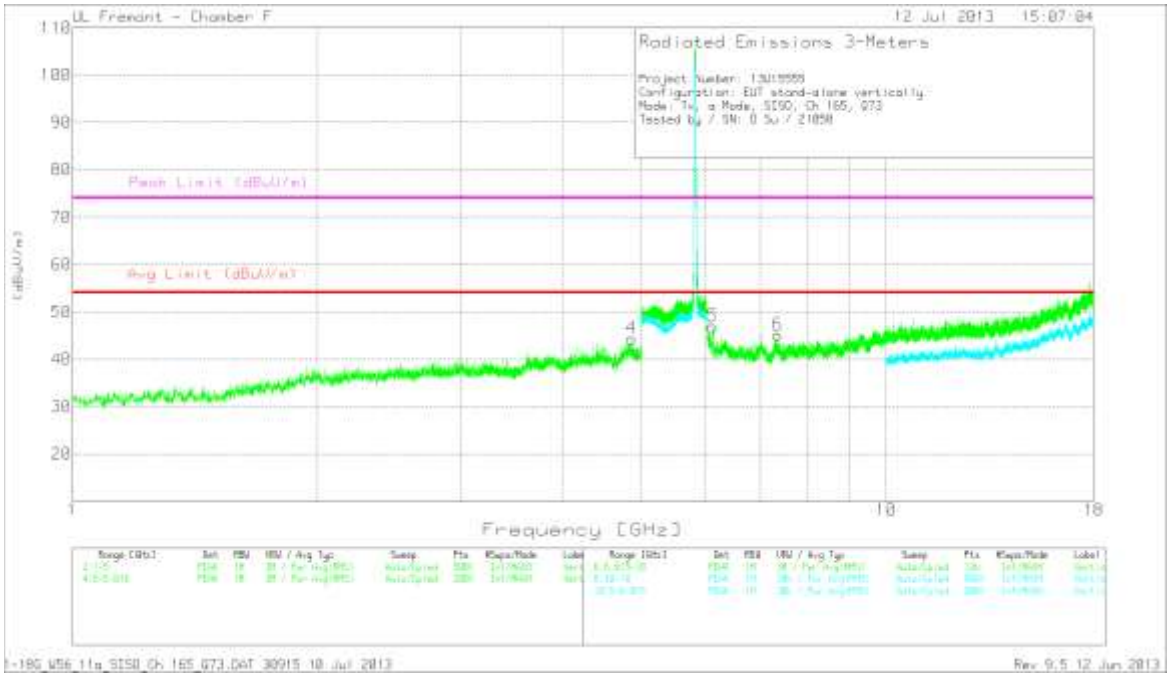
*Not in Restricted Band

PK - Peak detector

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (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	3.898	39.24	PK	33.8	-31.7	41.34	53.97	-12.63	74	-32.66	0-360	100	H
4	4.869	40.83	PK	34.4	-30.9	44.33	53.97	-9.64	74	-29.67	0-360	201	V
2	*6.66	37.41	PK	35.8	-29.8	43.41	--	--	--	--	0-360	201	H
3	8.308	36.95	PK	36.2	-27.8	45.35	53.97	-8.62	74	-28.65	0-360	201	H
5	*6.124	41.03	PK	35.8	-29.9	46.93	--	--	--	--	0-360	100	V
6	7.358	37.76	PK	36	-28.6	45.16	53.97	-8.81	74	-28.84	0-360	100	V

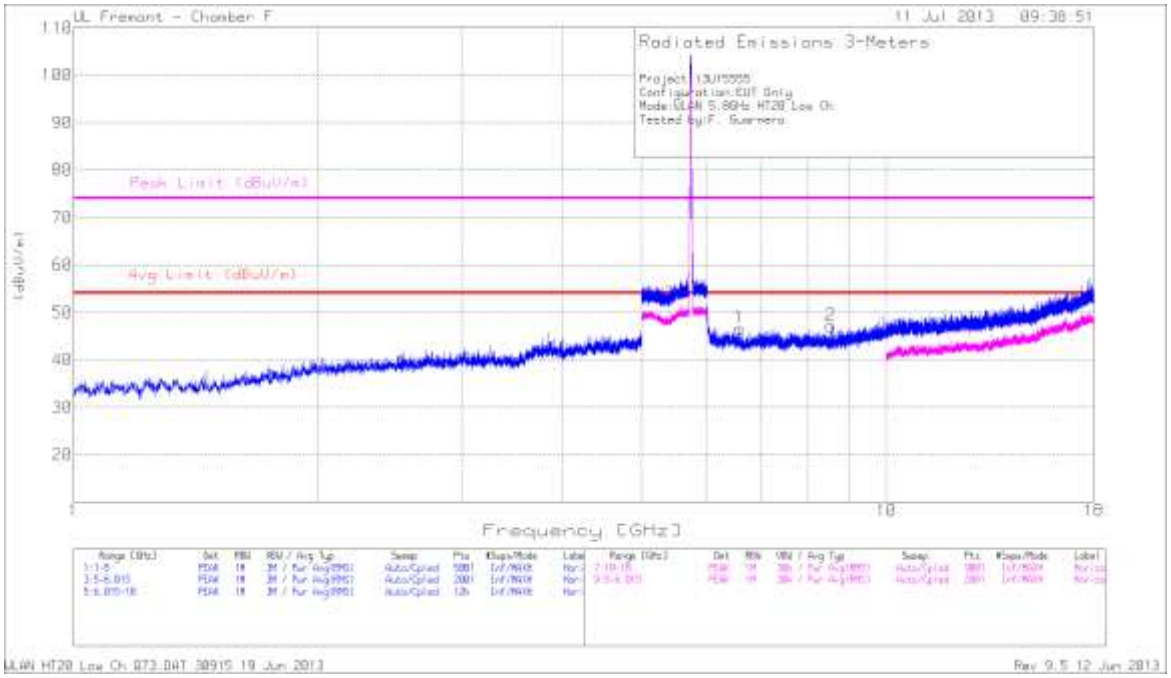
*Not in Restricted Band

PK - Peak detector

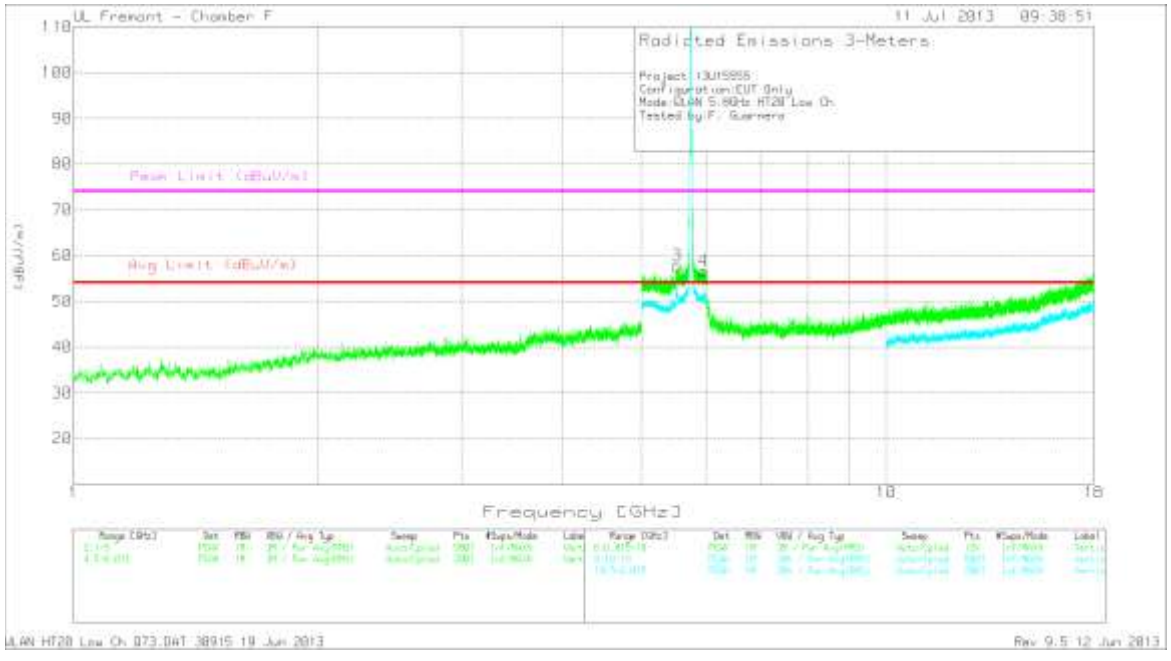
9.2.5. 802.11n HT20 2TX CDD MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	6.598	40.08	PK	35.8	-29.2	46.68	53.97	-7.29	74	-27.32	0-360	199	H
2	8.542	38.22	PK	36.3	-27.4	47.12	53.97	-6.85	74	-26.88	0-360	199	H

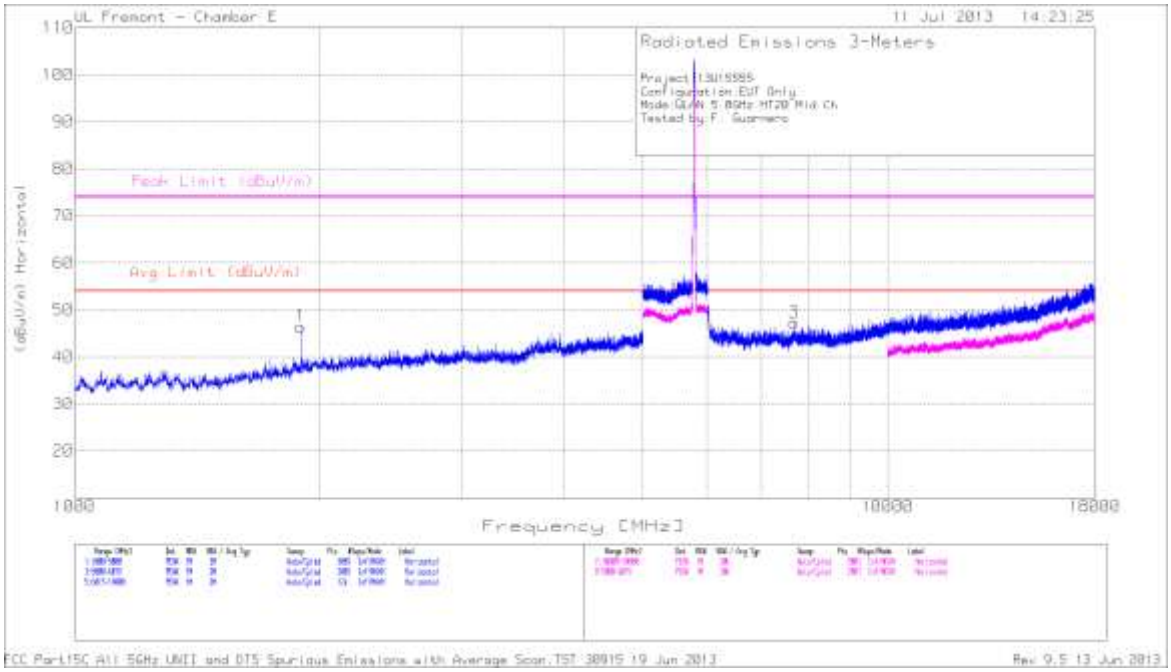
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /10dB Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
*3	5.527	44.24	PK	34.9	-21.4	57.74	-	-	-	-	0-360	199	V
*4	5.958	41.77	PK	35.7	-20.9	56.57	-	-	-	-	0-360	199	V

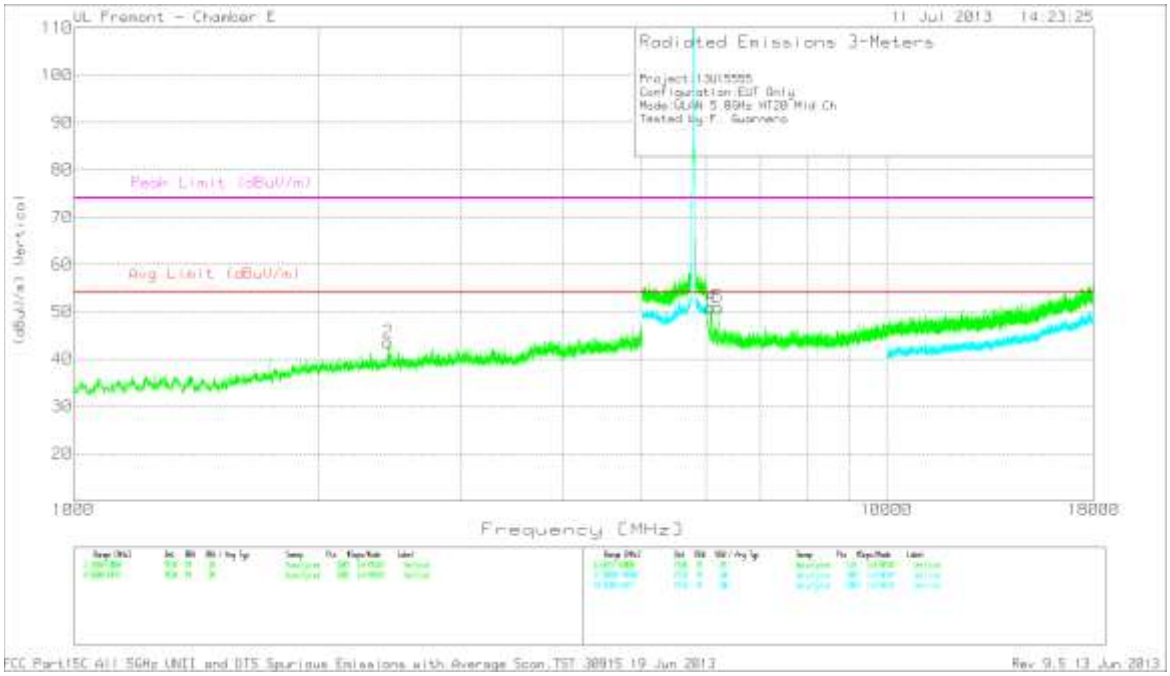
*Not in Restricted Band

PK - Peak detector

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*1.897	48.82	PK	31.4	-33.8	46.42	--	--	--	--	199	H
3	7.676	39.78	PK	36.2	-28.7	47.28	53.97	-6.69	74	-26.72	199	H

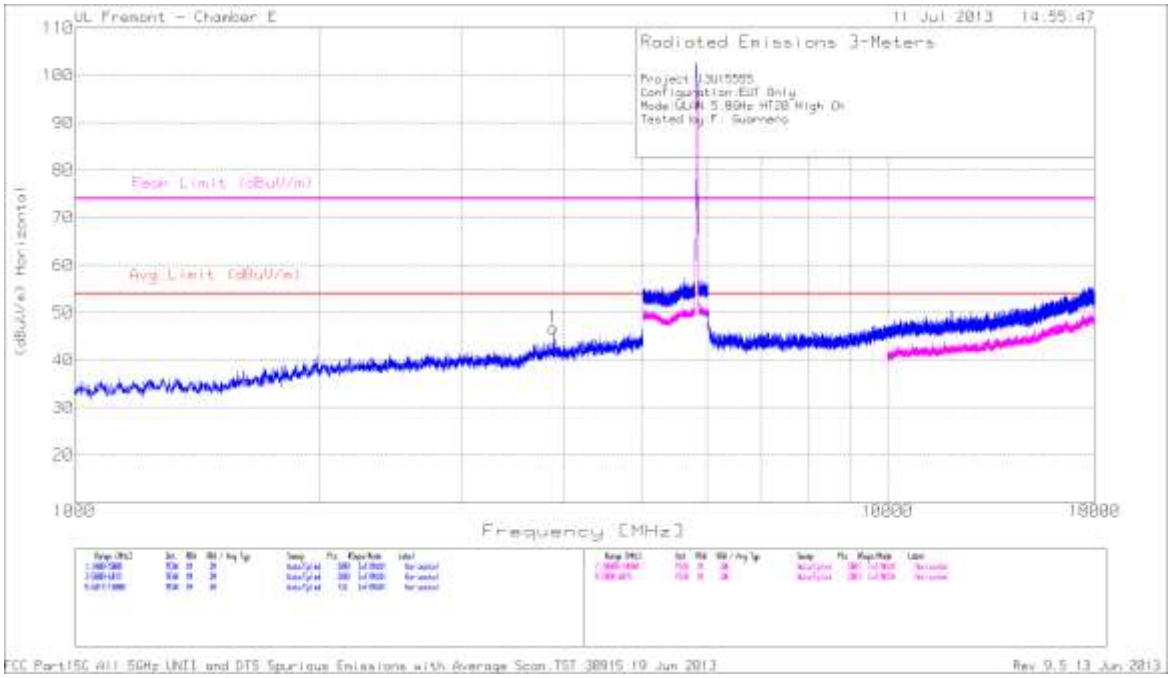
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 6GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	2.439	44.33	PK	32.6	-33.4	43.53	53.97	-10.44	74	-30.47	199	V
4*	6.079	44.26	PK	35.8	-29.2	50.86	--	--	--	--	199	V
5*	6.213	45.2	PK	35.9	-30.2	50.9	--	--	--	--	199	V

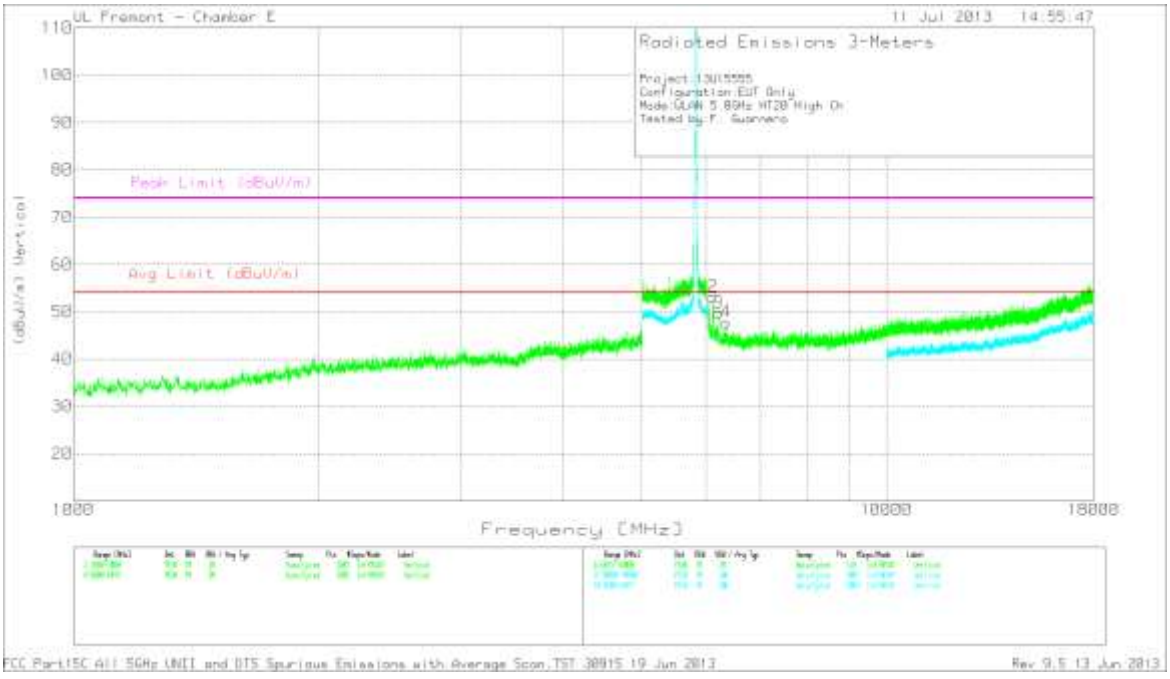
*Not in Restricted Band

PK - Peak detector

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	3.884	44.62	PK	33.8	-31.7	46.72	53.97	-7.25	74	-27.28	300	H

PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 6GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2*	6.124	47.21	PK	35.8	-29.9	53.11	--	--	--	--	199	V
3*	6.214	43.95	PK	35.9	-30.2	49.65	--	--	--	--	199	V
4*	6.355	40.85	PK	35.9	-29	47.75	--	--	--	--	199	V

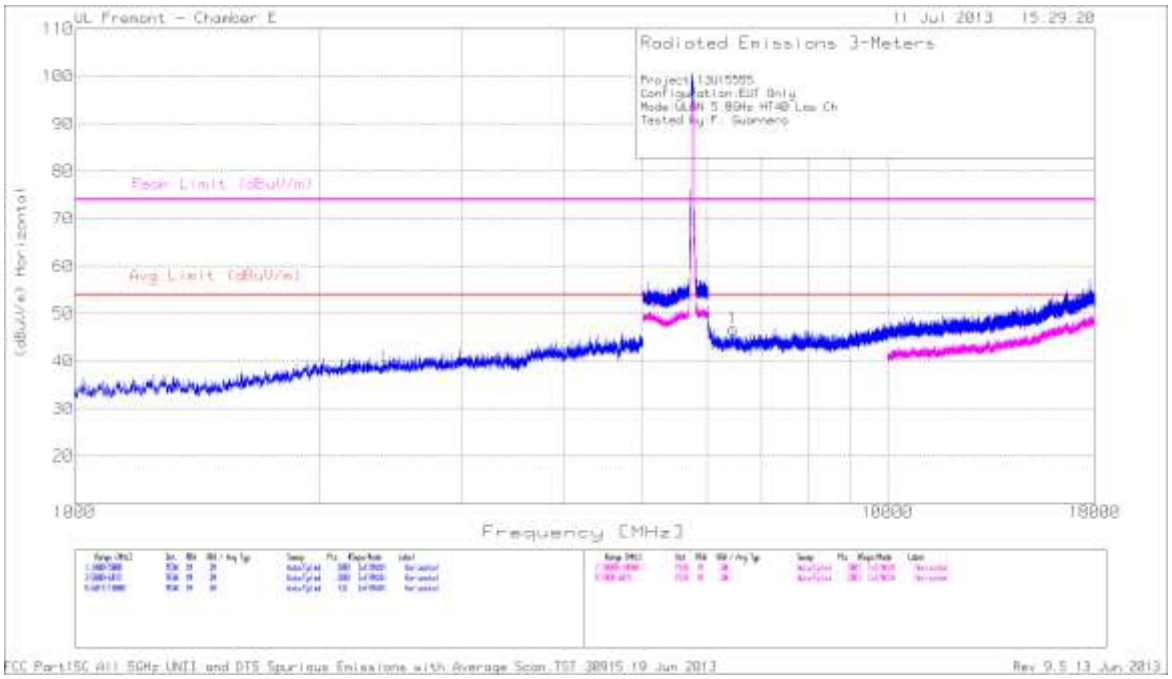
*Not in Restricted Band

PK - Peak detector

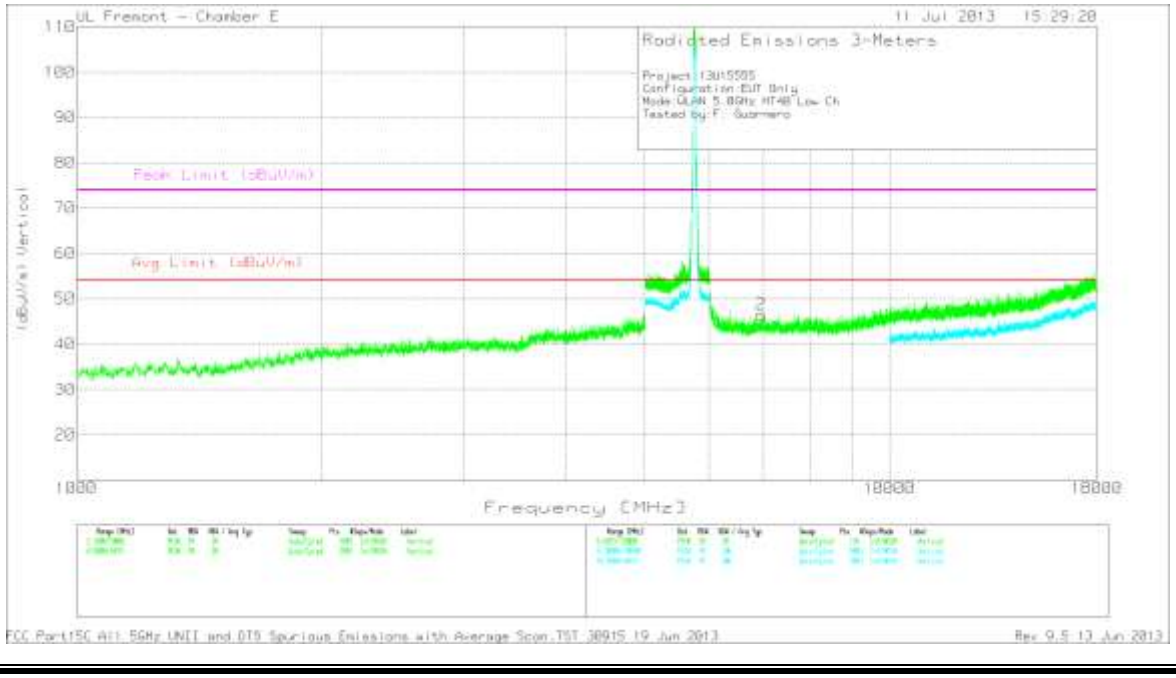
9.2.6. 802.11n HT40 MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 6GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*6.456	41.14	PK	35.8	-30.2	46.74	--	--	--	--	199	H

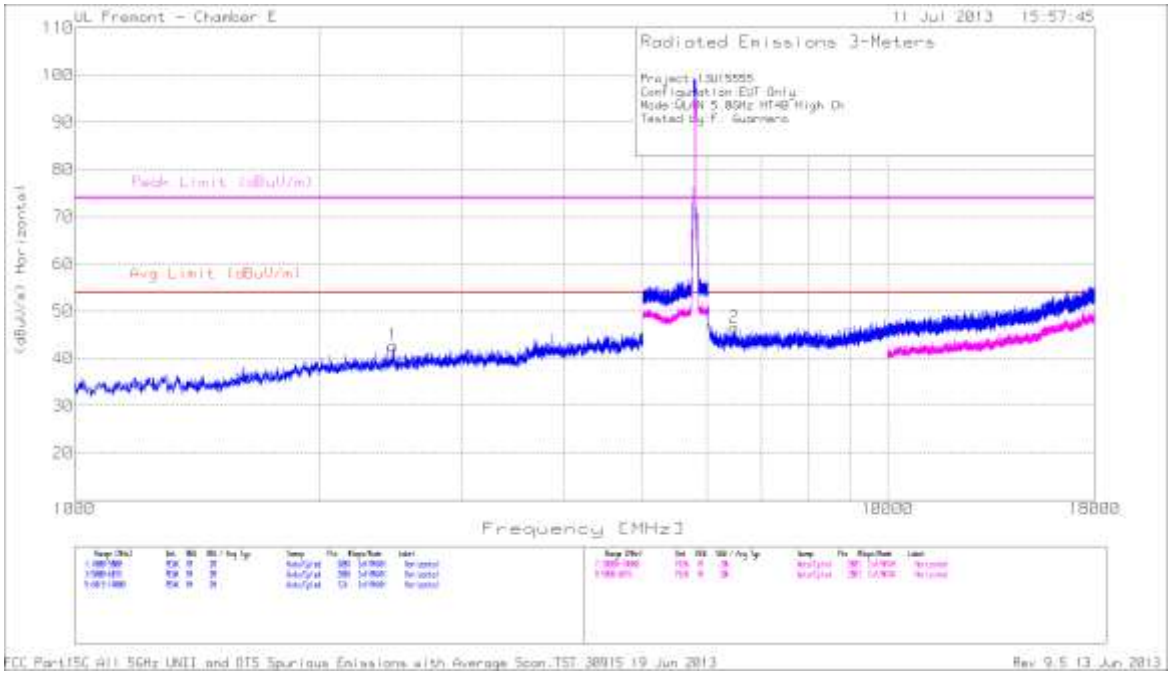
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 6GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	*6.958	39.87	PK	36	-29.3	46.57	--	--	--	--	199	V

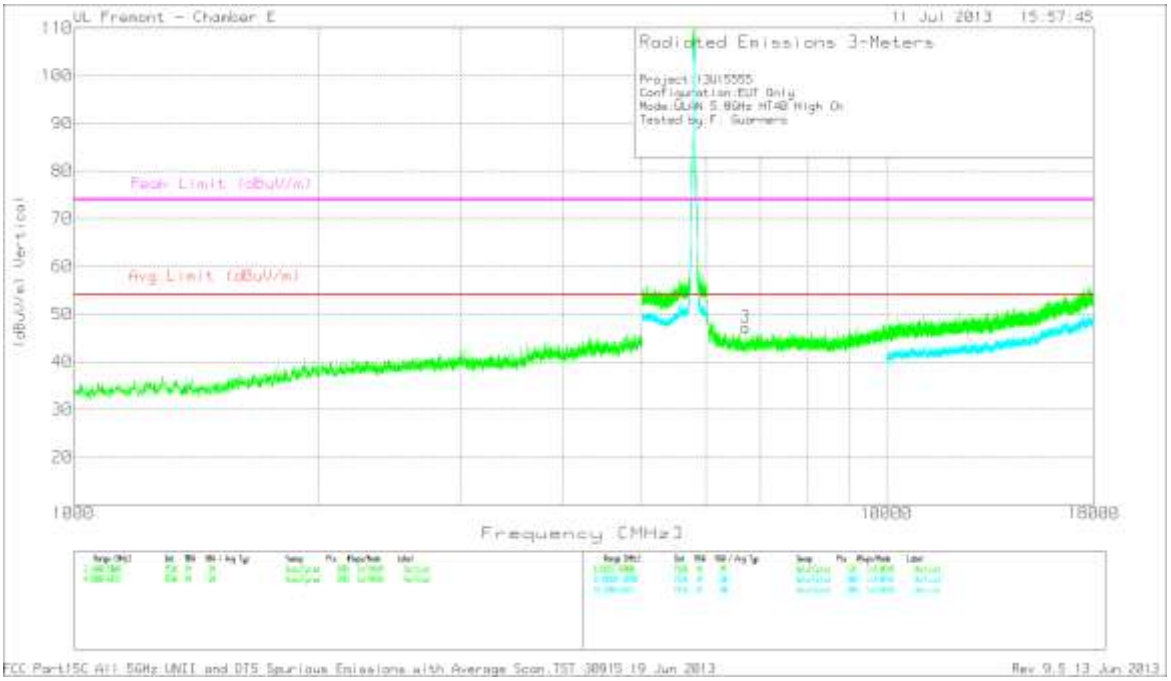
*Not in Restricted Band

PK - Peak detector

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*2.466	43.07	PK	32.7	-33.1	42.67	--	--	--	--	199	H
2	*6.487	40.23	PK	35.8	-29.5	46.53	--	--	--	--	199	H

PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/ 6GHz HPF (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
3	*6.714	41.49	PK	35.8	-30.1	47.19	--	--	--	--	199	V

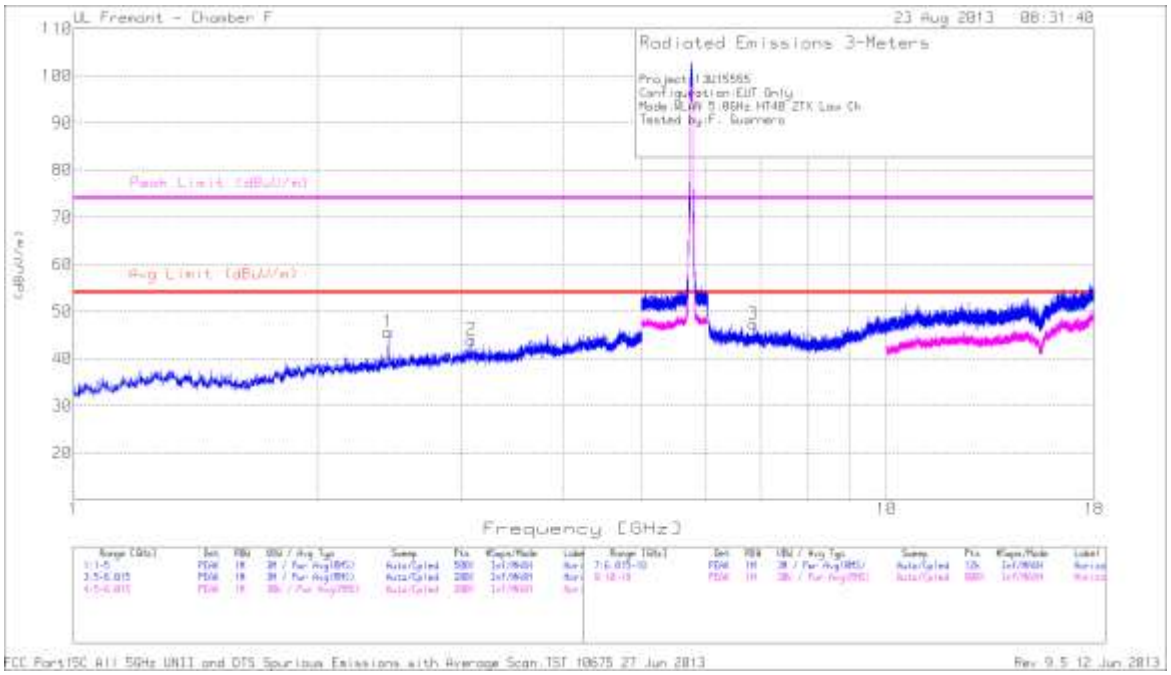
*Not in Restricted Band

PK - Peak detector

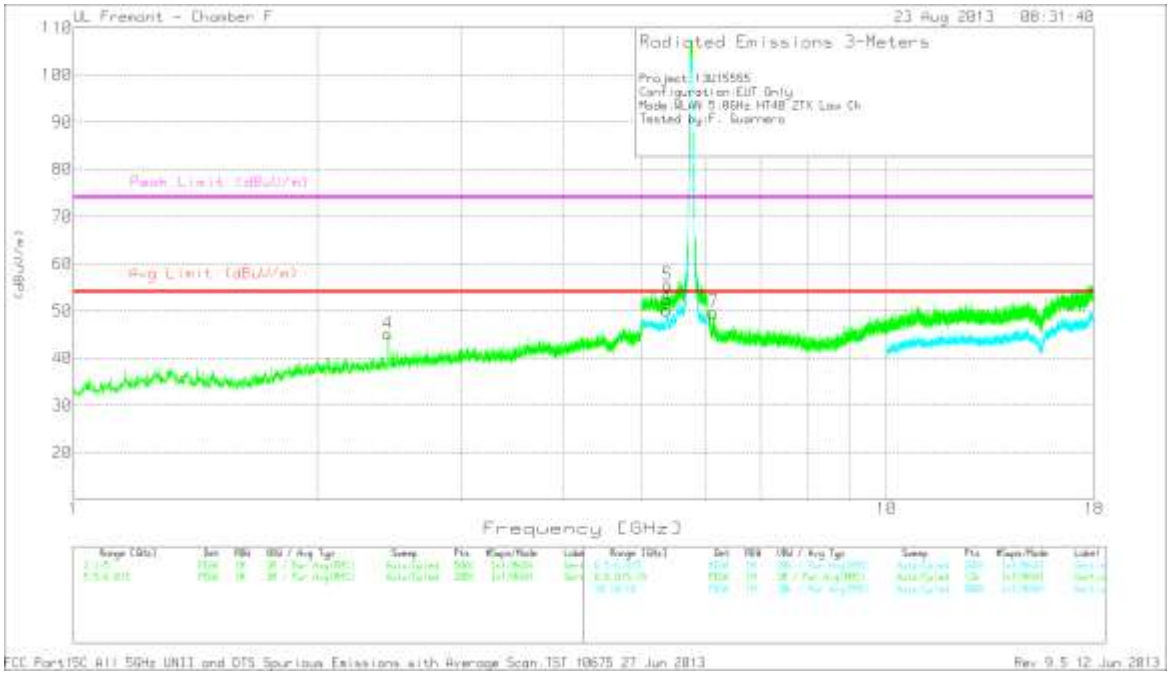
9.2.7. 802.11n HT40 2TX CDD MODE IN THE 5.8 GHz BAND

HARMONICS AND SPURIOUS EMISSIONS

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)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
*1	2.438	44.32	PK	32.3	-31	45.62	--	--	--	--	0-360	199	H
*2	3.087	40.11	PK	33.3	-29.4	44.01	--	--	--	--	0-360	98	H
*3	6.858	38.42	PK	35.7	-26.8	47.32	--	--	--	--	0-360	100	H

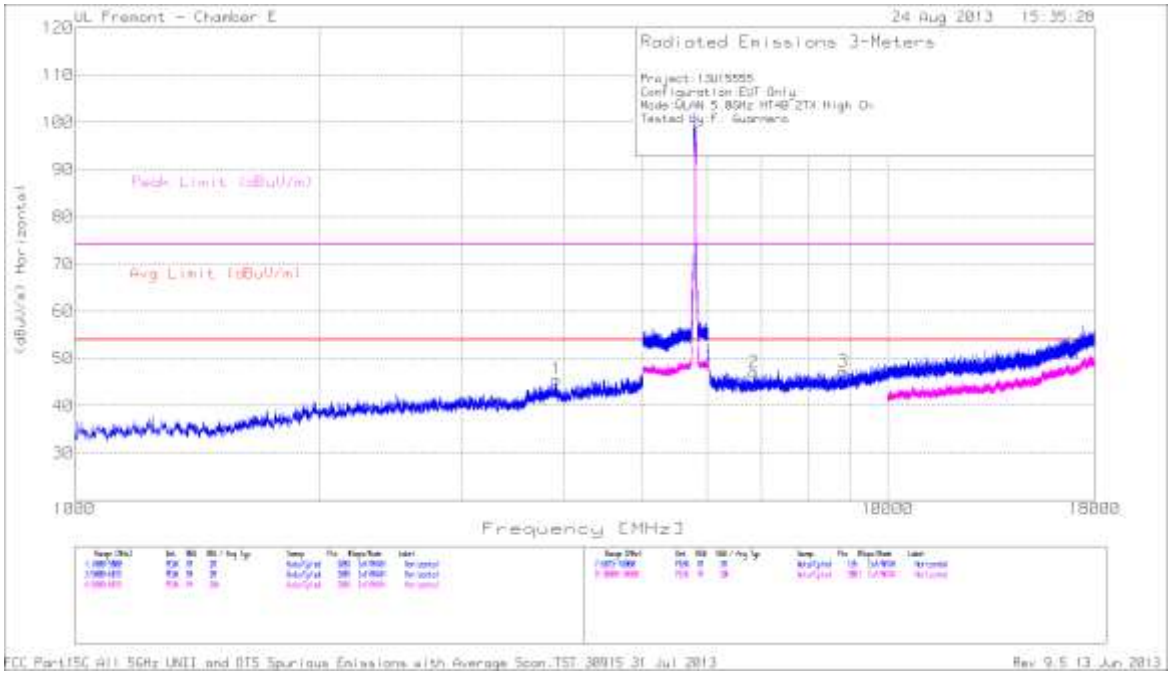
PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T120 (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
*4	2.438	43.98	PK	32.3	-31.1	45.18	--	--	--	---	0-360	200	V
5	5.383	40.47	PK	34.6	-19.5	55.57			74	-18.43	0-360	199	V
6	5.372	35.01	PK (VB)	34.6	-19.5	50.11	53.97	-3.86	--	--	0-360	200	V
*7	6.13	40.22	PK	35.4	-25.9	49.72	--	--	--	--	0-360	201	V

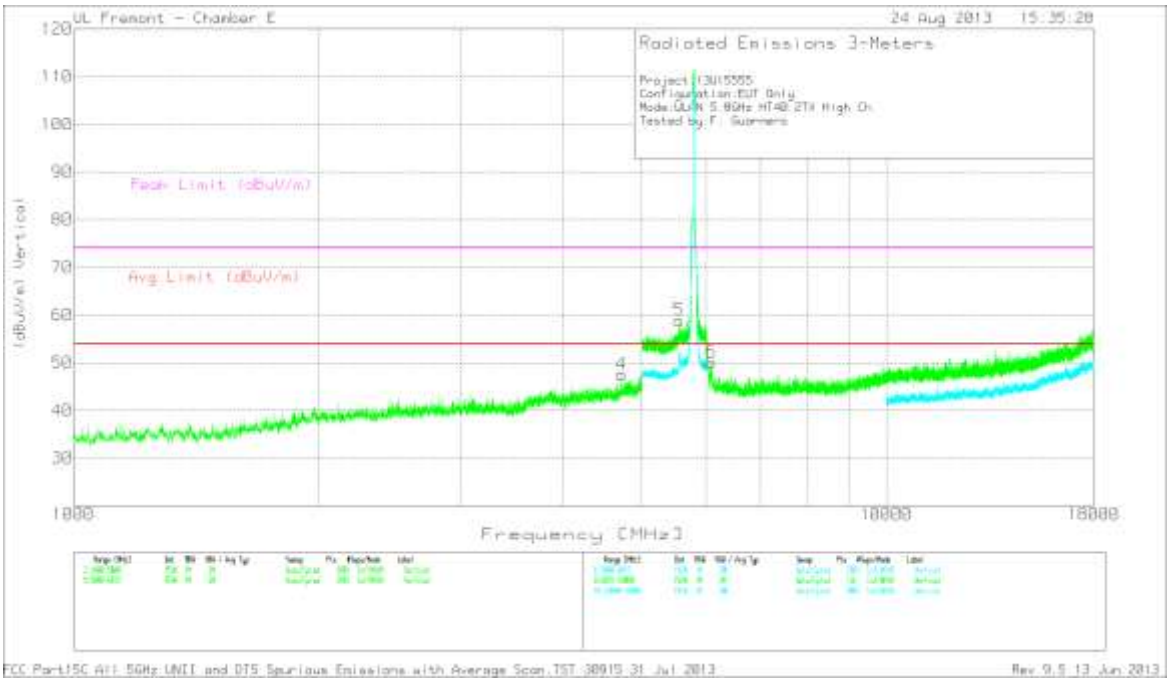
*Not in Restricted Band

PK - Peak detector

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /5GHz LPF	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	3.916	42.87	PK	33.8	-31.1	0	45.57	53.97	-8.4	74	-28.43	100	H
*2	6.859	40.62	PK	35.9	-29.5	0	47.02	--	--	--	--	100	H
*3	8.818	38.14	PK	36.7	-27.6	0	47.24	--	--	--	--	100	H

PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /10dB Pad	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	4.722	43.79	PK	34.4	-30.7	0	47.49	53.97	-6.48	74	-26.51	101	V
*5	5.557	44.75	PK	34.9	-20.8	0	58.85			--	--	100	V
*6	6.09	42.85	PK	35.8	-28.6	0	50.05	--	--	--	--	100	V

*Not in Restricted Band

PK - Peak detector

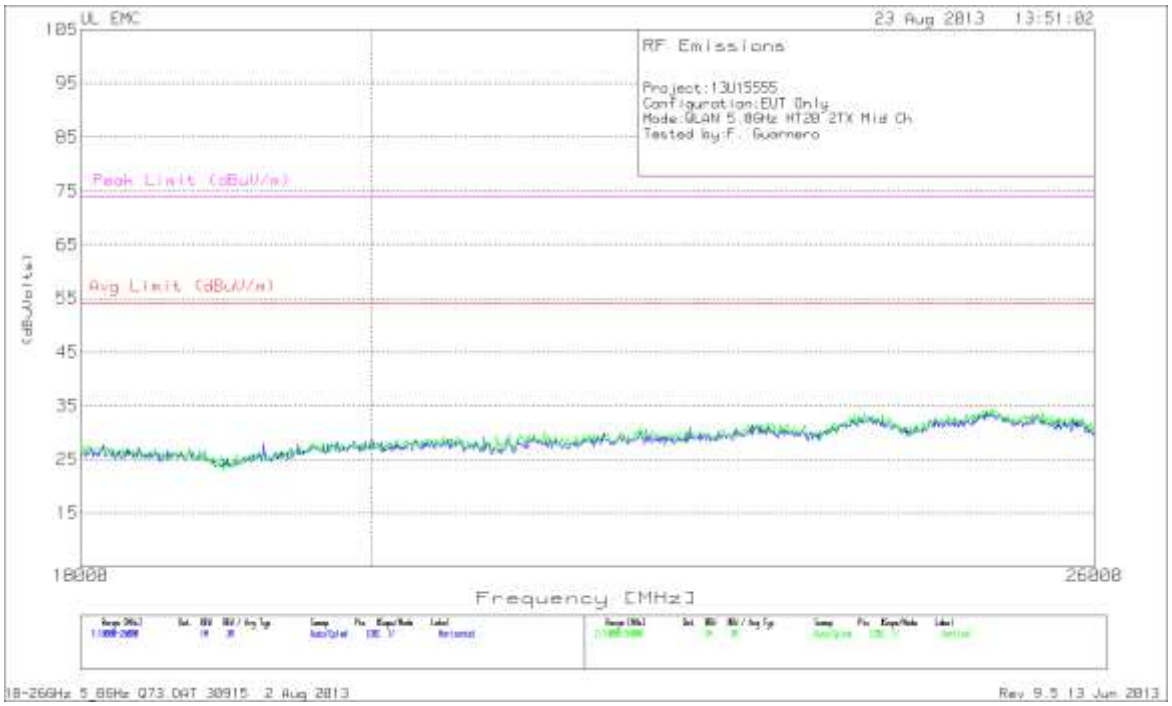
9.3. WORST-CASE ABOVE 18 GHz

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

2.4 GHz BAND

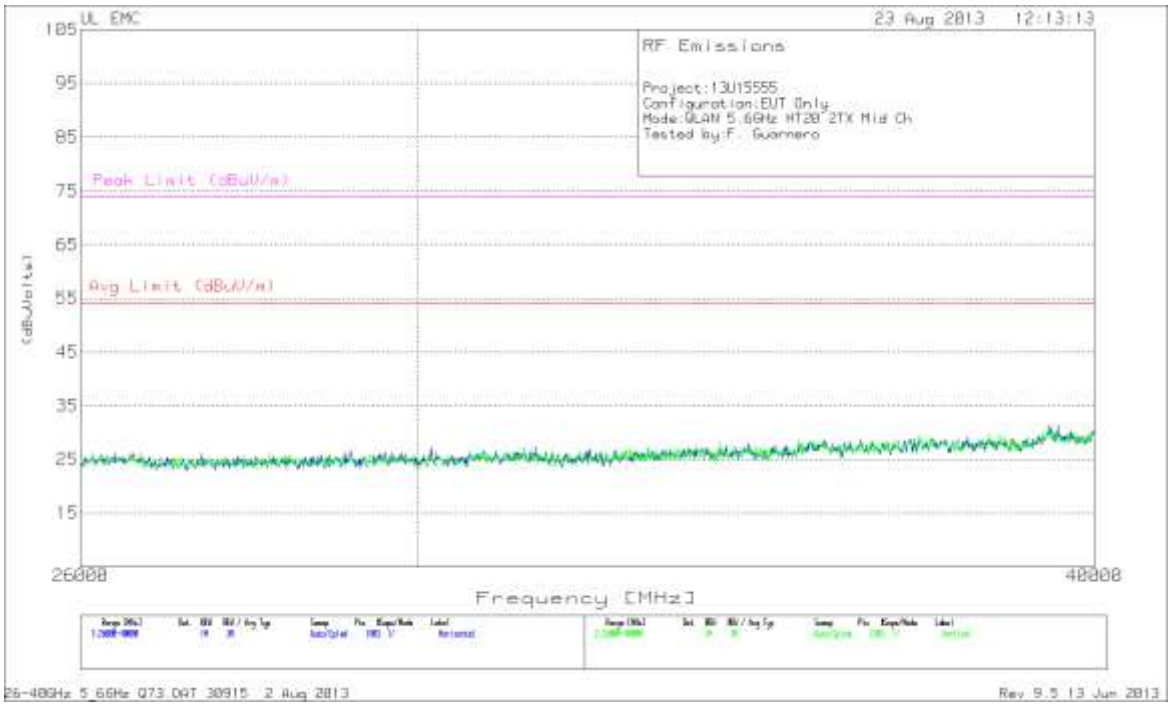
SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

5.8 GHz BAND



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

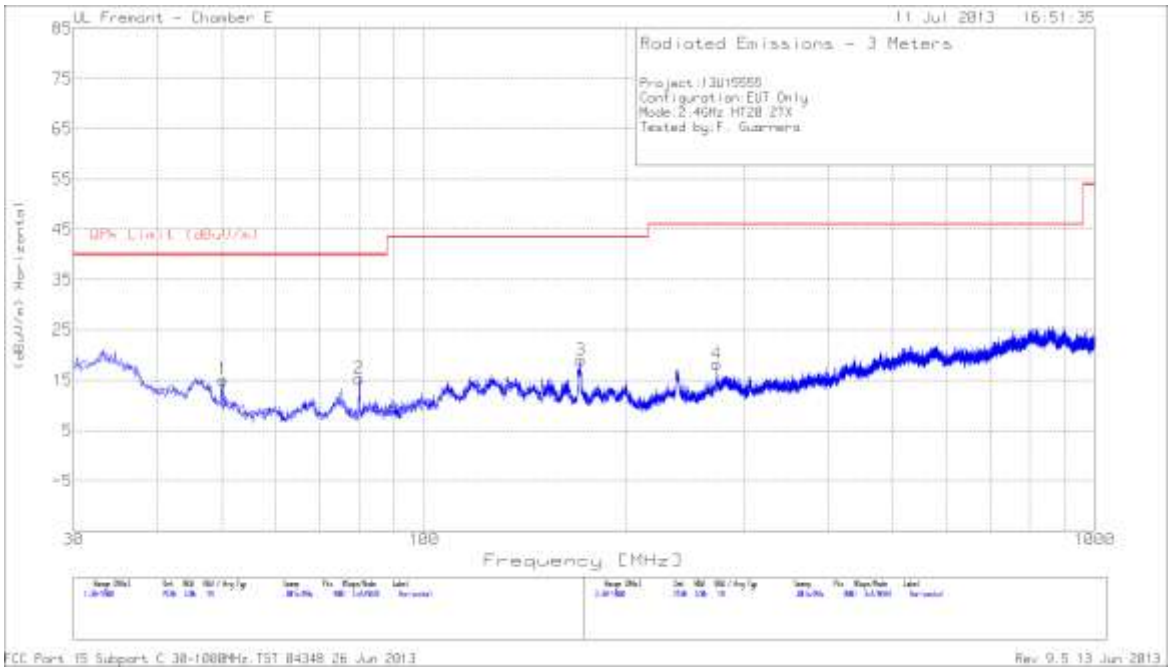
5.8 GHz BAND



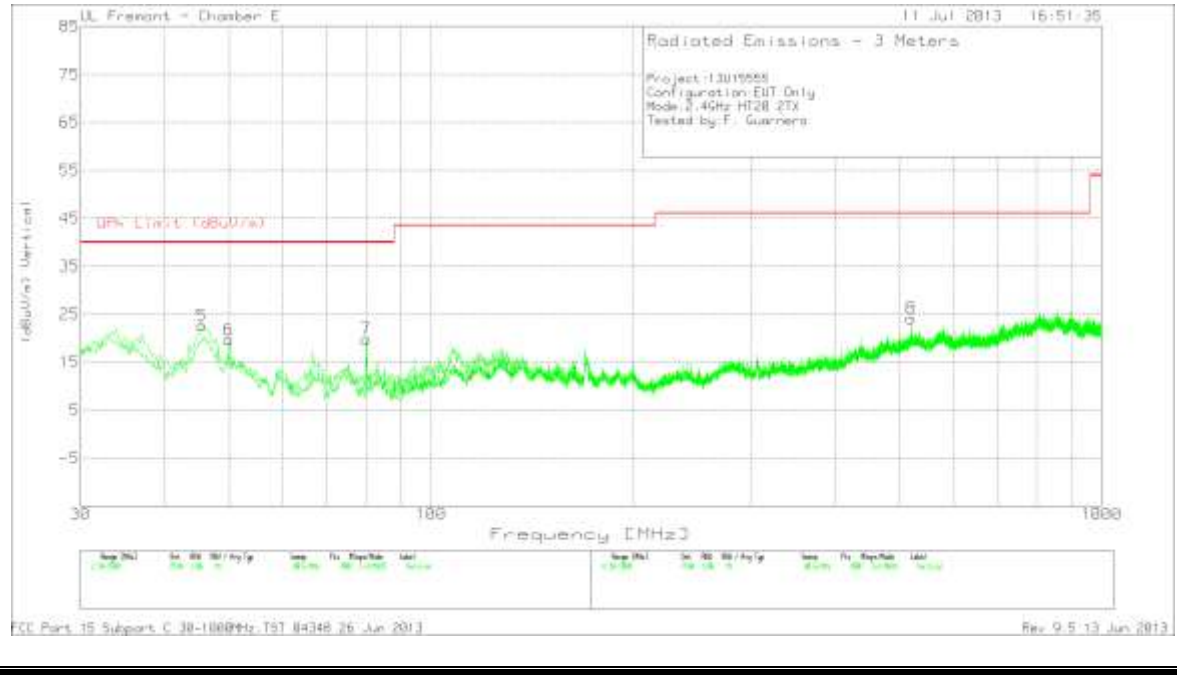
9.4. WORST-CASE BELOW 1 GHz

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

HORIZONTAL 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	50.1275	34.87	PK	7.9	-27.7	15.07	40	-24.93	200	H
2	79.955	35.3	PK	7.7	-27.7	15.3	40	-24.7	400	H
3	171.135	34.57	PK	11.7	-27.3	18.97	43.52	-24.55	98	H
4	273.2275	31.51	PK	13.2	-26.5	18.21	46.02	-27.81	100	H
5	45.52	40.01	PK	10.1	-27.5	22.61	40	-17.39	100	V
6	49.885	39.47	PK	7.9	-27.7	19.67	40	-20.33	100	V
7	79.955	39.75	PK	7.7	-27.7	19.75	40	-20.25	100	V
8	519.1225	31.93	PK	18.1	-25.9	24.13	46.02	-21.89	100	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.

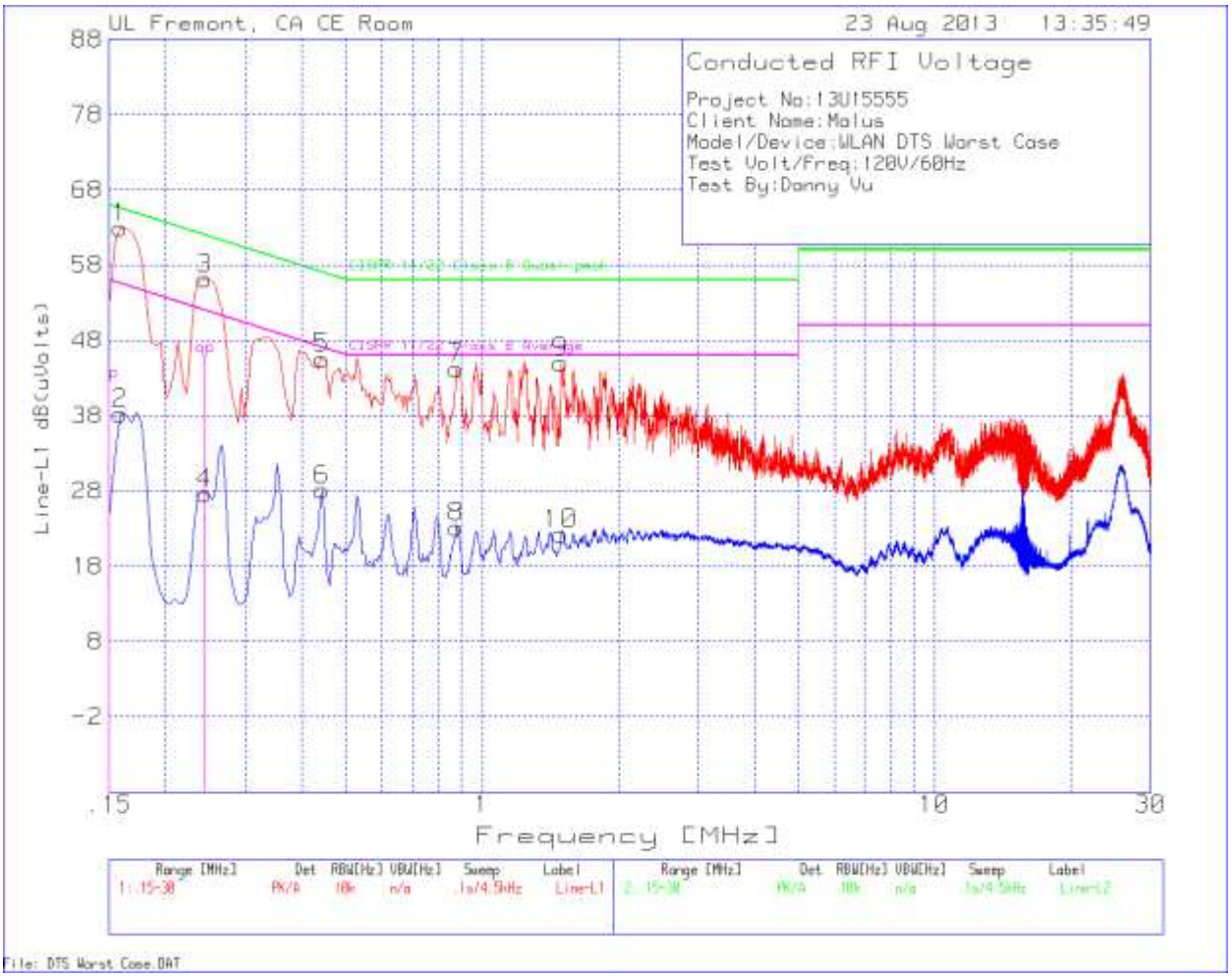
TEST PROCEDURE

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



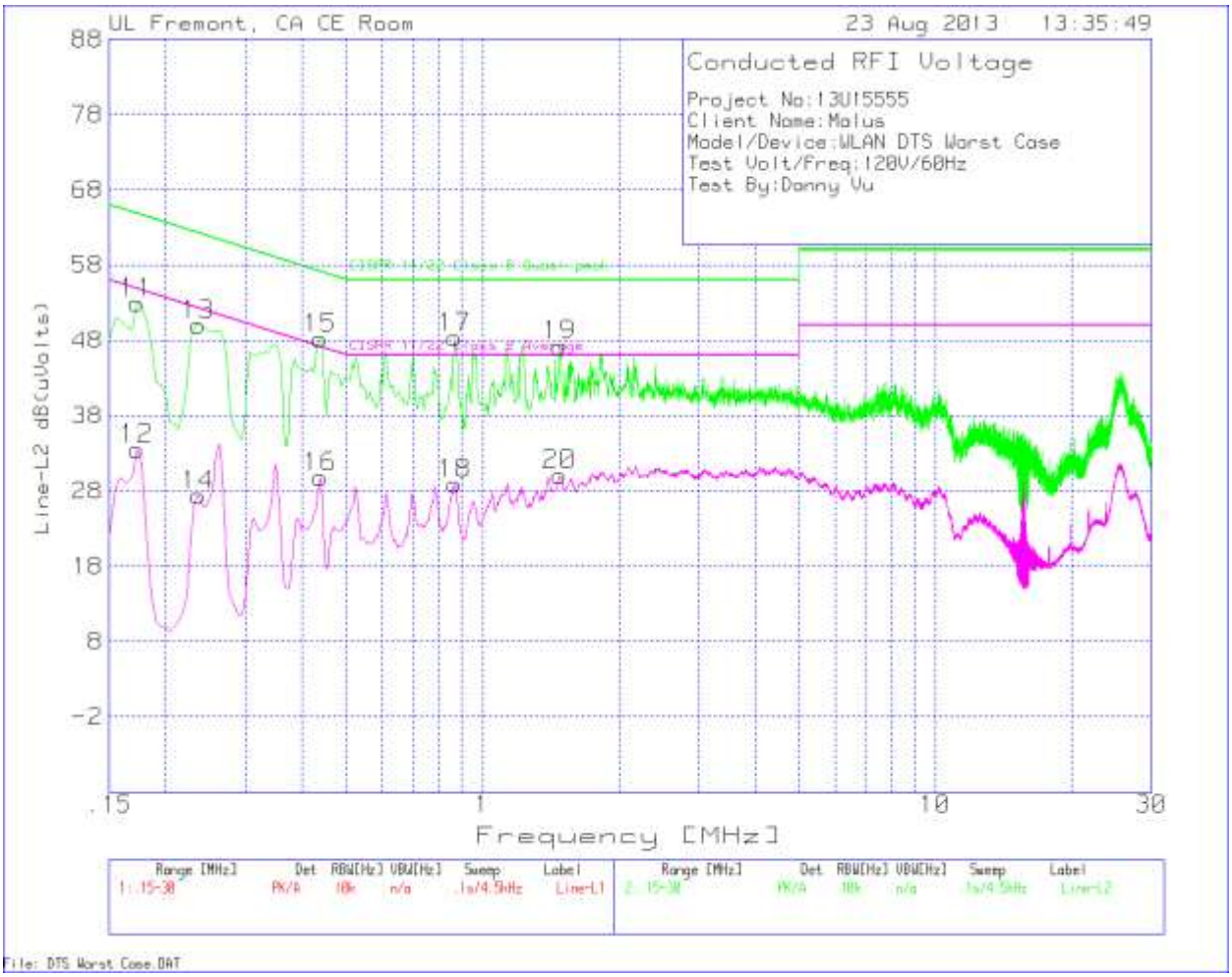
Line-L1 .15 - 30MHz

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	.159	62.84	PK	.1	0	62.94	65.5	-2.56	-	-
2	.159	38.18	Av	.1	0	38.28	-	-	55.5	-17.22
3	.2445	56.09	PK	.1	0	56.19	61.9	-5.71	-	-
4	.2445	27.53	Av	.1	0	27.63	-	-	51.9	-24.27
5	.4425	45.49	PK	.1	0	45.59	57	-11.41	-	-
6	.4425	28.04	Av	.1	0	28.14	-	-	47	-18.86
7	.879	44.14	PK	.1	0	44.24	56	-11.76	-	-
8	.879	23.04	Av	.1	0	23.14	-	-	46	-22.86
9	1.491	44.83	PK	.1	.1	45.03	56	-10.97	-	-
10	1.491	22.04	Av	.1	.1	22.24	-	-	46	-23.76

Quasi-Peak Emissions

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)
.15	42.54	QP	.1	0	42.64	66	-23.36	-	-
.2445	45.82	QP	.1	0	45.92	61.9	-15.98	-	-



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)
11	.1725	52.8	PK	.1	0	52.9	64.8	-11.9	-	-
12	.1725	33.46	Av	.1	0	33.56	-	-	54.8	-21.24
13	.2355	49.87	PK	.1	0	49.97	62.3	-12.33	-	-
14	.2355	27.31	Av	.1	0	27.41	-	-	52.3	-24.89
15	.438	48.1	PK	.1	0	48.2	57.1	-8.9	-	-
16	.438	29.72	Av	.1	0	29.82	-	-	47.1	-17.28
17	.87	48.27	PK	.1	0	48.37	56	-7.63	-	-
18	.87	28.75	Av	.1	0	28.85	-	-	46	-17.15
19	1.4775	47.06	PK	.1	.1	47.26	56	-8.74	-	-
20	1.4775	29.91	Av	.1	.1	30.11	-	-	46	-15.89

PK - Peak detector

Av - average detection