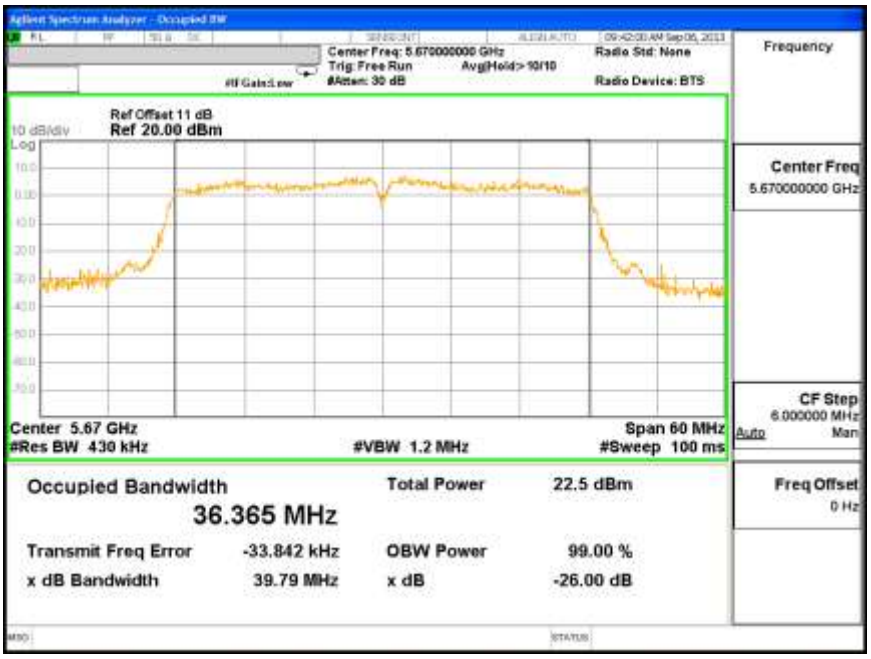
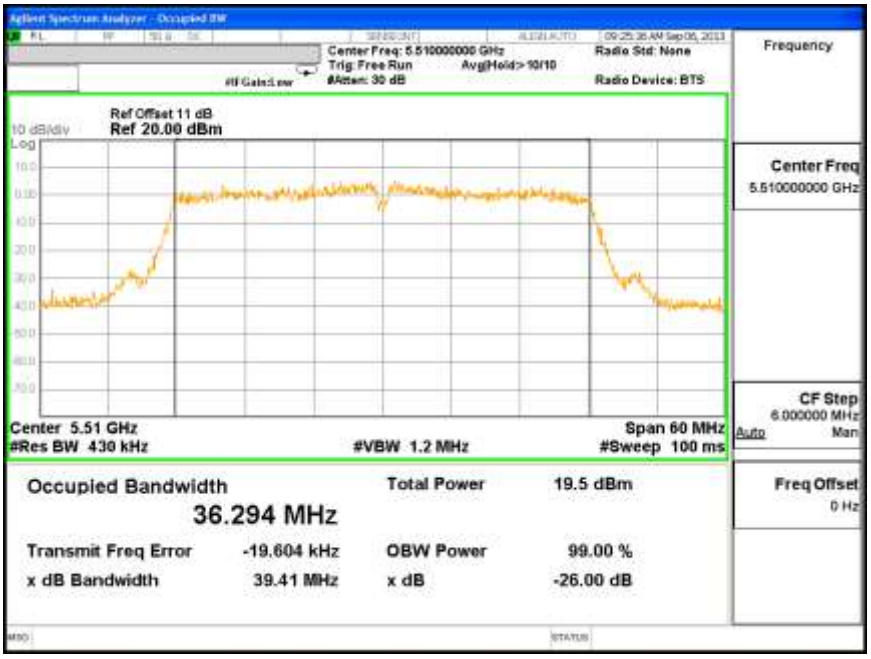
BANDWIDTH Chain 0 HIGH CH



26 dB BANDWIDTH, Chain 1

BANDWIDTH Chain 1 LOW CH



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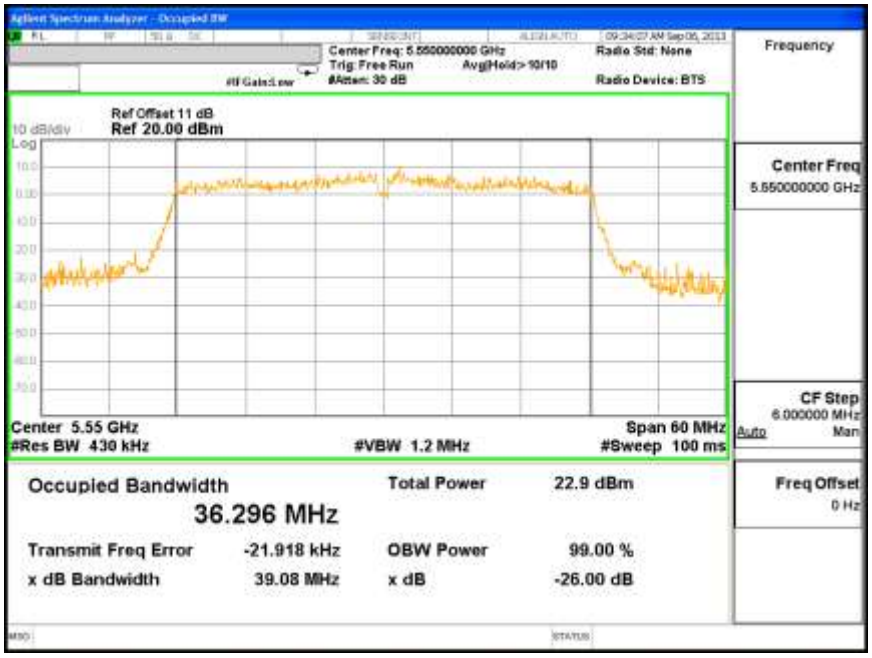
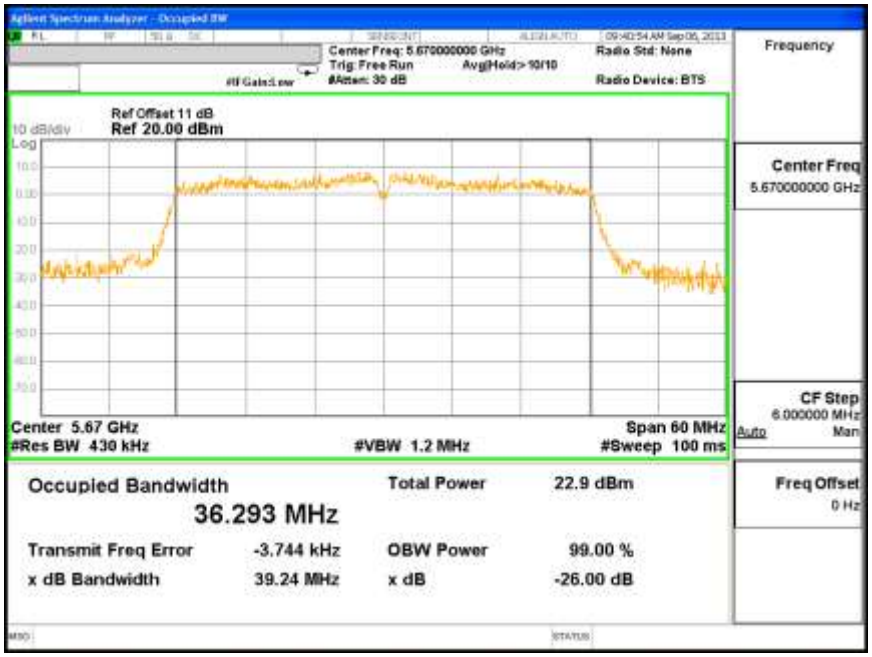
BANDWIDTH Chain 1 MID CH



BANDWIDTH Chain 1 HIGH CH



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8.6.2. 99% BANDWIDTH

LIMITS

None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5510	36.329	36.168
Mid	5550	36.187	36.048
High	5670	36.407	36.392

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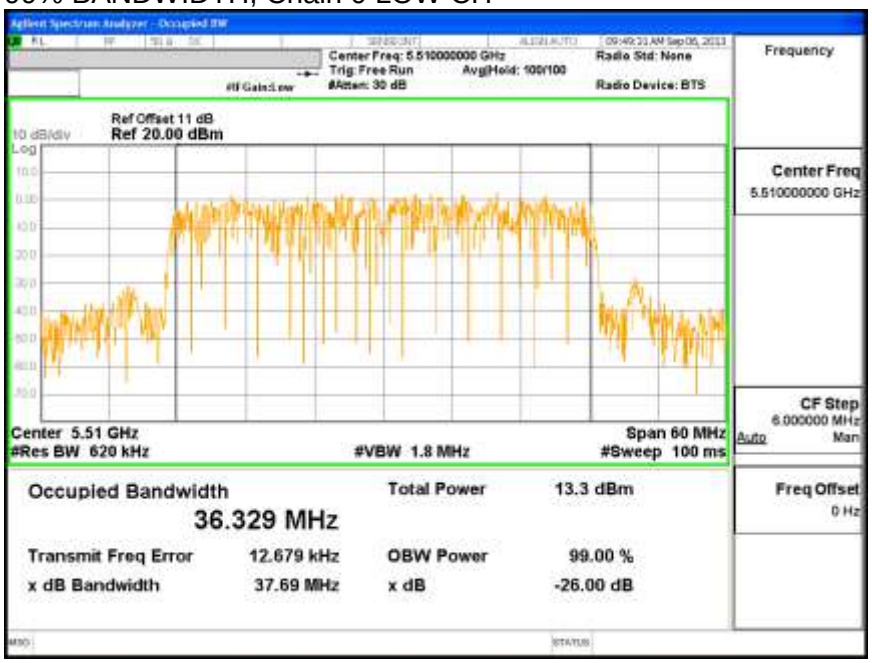
99% BANDWIDTH, Chain 0

99% BANDWIDTH, Chain 0 LOW CH



99% BANDWIDTH, Chain 0 MID CH

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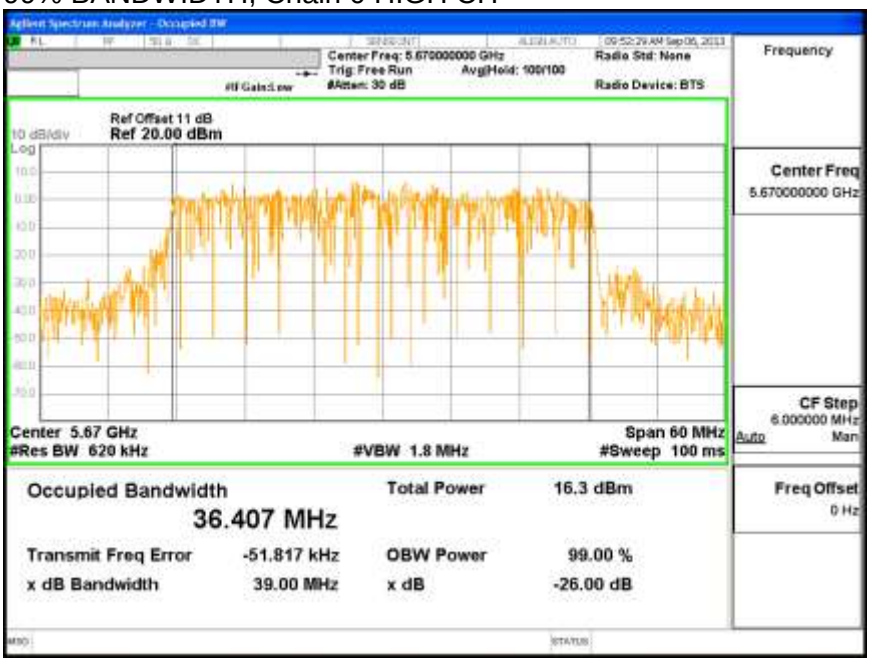
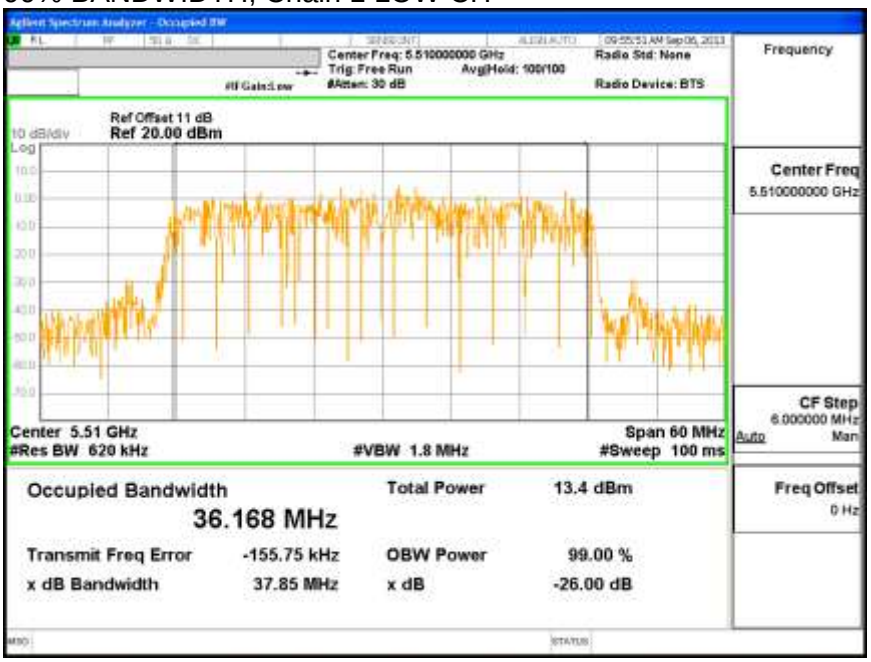
99% BANDWIDTH, Chain 0 HIGH CH



99% BANDWIDTH, Chain 1

99% BANDWIDTH, Chain 1 LOW CH



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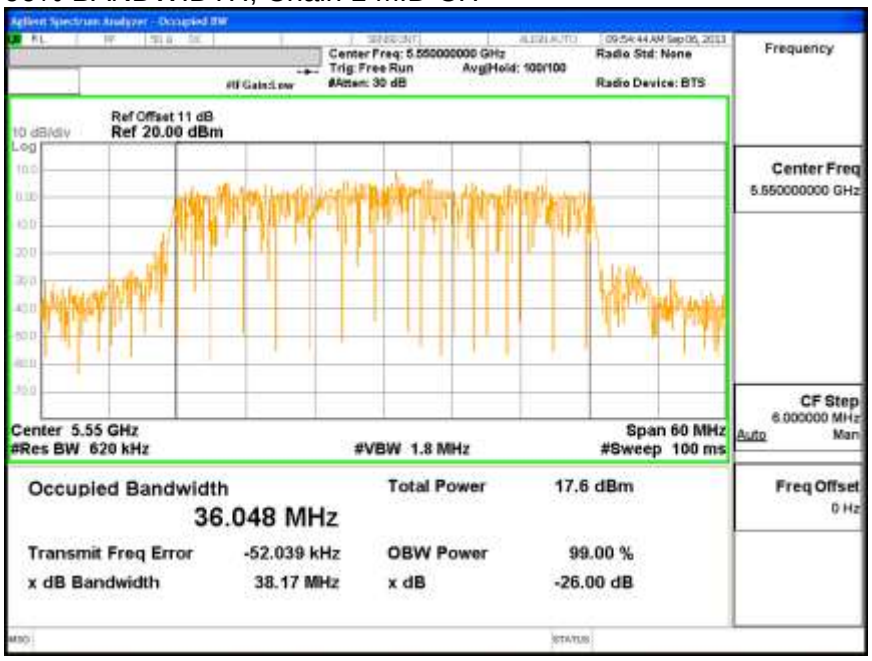
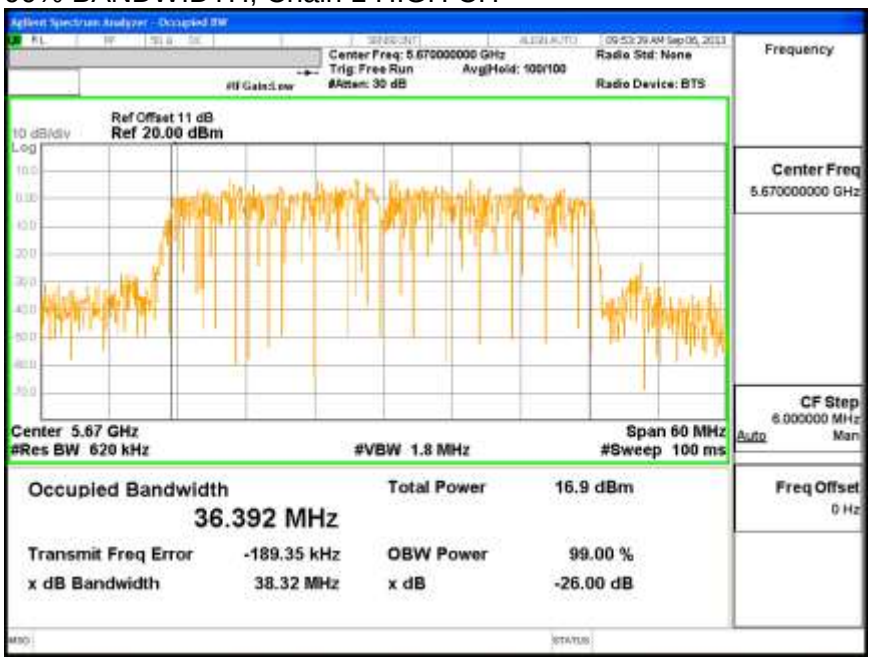
99% BANDWIDTH, Chain 1 MID CH



99% BANDWIDTH, Chain 1 HIGH CH



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

RESULTS

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5510	12.00	11.75	14.89
Mid	5550	15.50	15.48	18.50
High	5670	14.96	14.77	17.88

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8.6.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (1)

For the band 5.5–5.7 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or 11 dBm + 10 log B, where B is the 26–dB emission bandwidth in MHz. In addition, the peak power spectral density shall not exceed 11 dBm in any 1–MHz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the peak power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

IC RSS-210 A9.2 (1)

The maximum e.i.r.p. shall not exceed 200 mW or 10 + 10 log10 B, dBm, whichever power is less. B is the 99% emission bandwidth in MHz. The e.i.r.p. spectral density shall not exceed 10 dBm in any 1.0 MHz band.

DIRECTIONAL ANTENNA GAIN

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)
2.43	4.29	3.46

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Correlated Chains Directional Gain (dBi)
2.43	4.29	6.42

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RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Min 99% BW (MHz)	Uncorrelated Directional Gain (dBi)	Correlated Directional Gain (dBi)
Low	5510	39.4	36.2	3.46	6.42
Mid	5550	39.1	36.0	3.46	6.42
High	5670	39.2	36.4	3.46	6.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Power Limit (dBm)	FCC PPSD Limit (dBm)	IC PSD Limit (dBm)	PPSD Limit (dBm)
Low	5510	24.00	24.00	30.00	24.00	10.58	11.00	10.58
Mid	5550	24.00	24.00	30.00	24.00	10.58	11.00	10.58
High	5670	24.00	24.00	30.00	24.00	10.58	11.00	10.58

Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSD

Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	12.04	11.71	14.89	24.00	-9.11
Mid	5550	15.60	15.62	18.62	24.00	-5.38
High	5670	14.95	14.81	17.89	24.00	-6.11

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5510	-0.82	-1.05	2.08	10.58	-8.50
Mid	5550	2.96	2.82	5.90	10.58	-4.68
High	5670	2.00	2.01	5.01	10.58	-5.57

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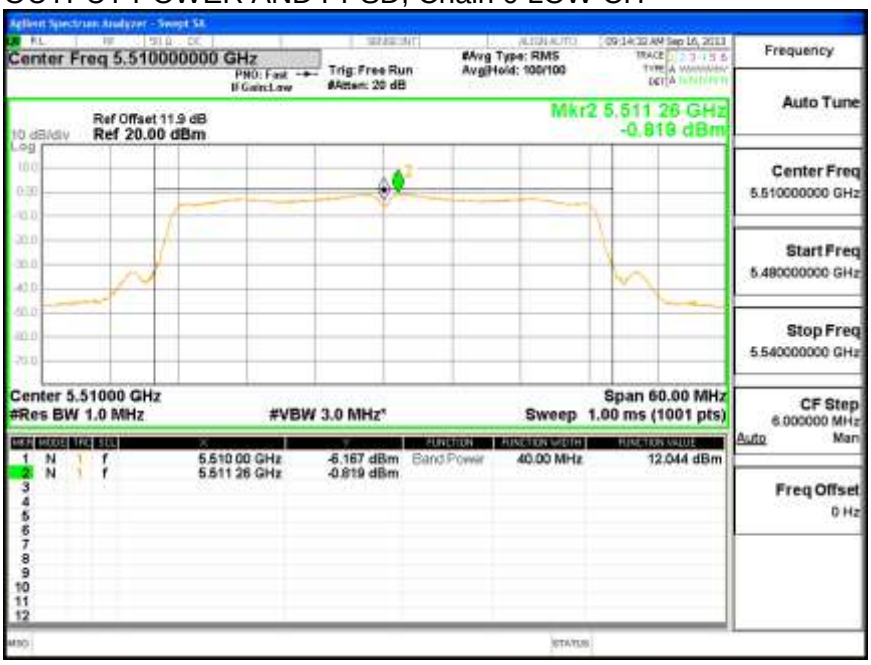
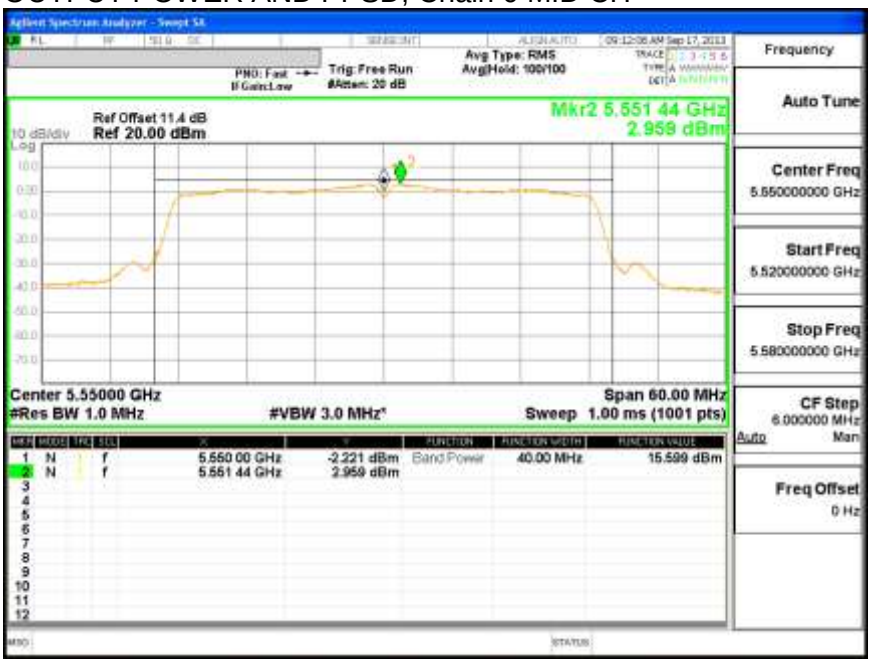
OUTPUT POWER AND PPSD, Chain 0

OUTPUT POWER AND PPSD, Chain 0 LOW CH



OUTPUT POWER AND PPSD, Chain 0 MID CH



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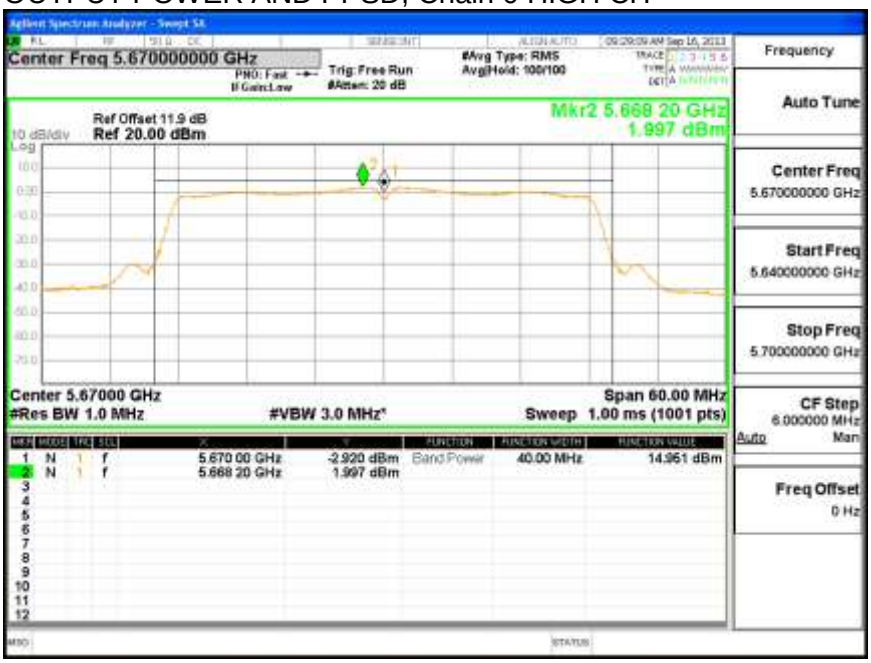
OUTPUT POWER AND PPSD, Chain 0 HIGH CH



OUTPUT POWER AND PPSD, Chain 1

OUTPUT POWER AND PPSD, Chain 1 LOW CH

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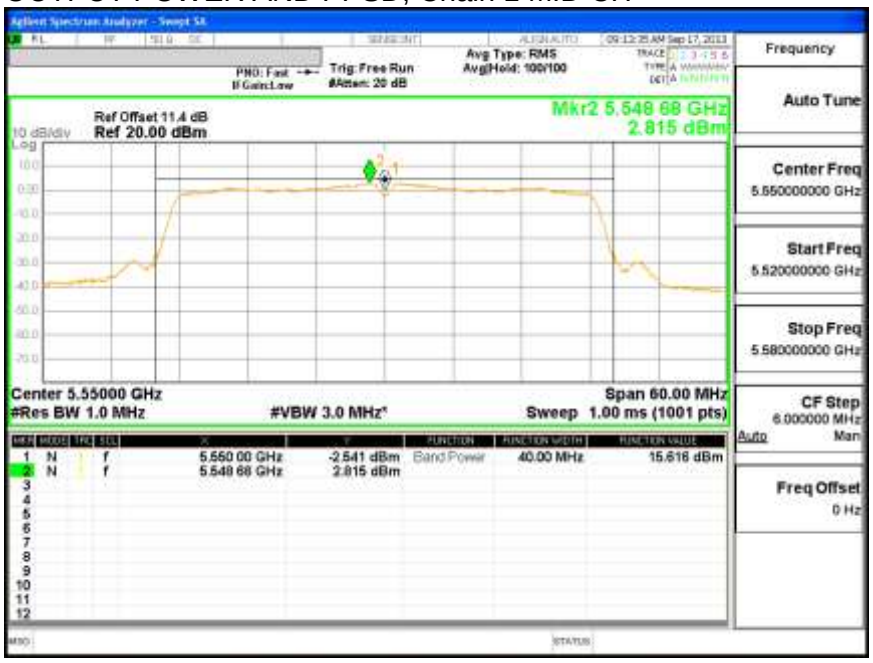
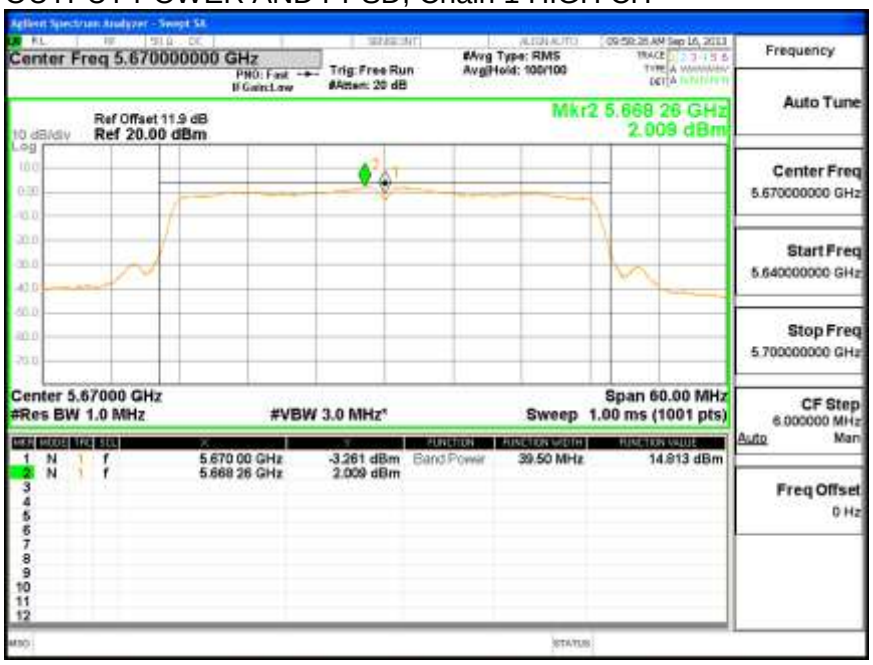
OUTPUT POWER AND PPSD, Chain 1 MID CH



OUTPUT POWER AND PPSD, Chain 1 HIGH CH



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8.6.5. PEAK EXCURSION

LIMITS

FCC §15.407 (a) (6)

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

RESULTS

RESULTS

Chain 0

Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5550	12.64	2.42	0.00	10.22	13	-2.78

Chain 1

Channel	Frequency (MHz)	PK Level (dBm)	PSD (dBm)	DCCF (dB)	Peak Excursion (dB)	Limit (dB)	Margin (dB)
Mid	5550	13.57	1.87	0.00	11.70	13	-1.30

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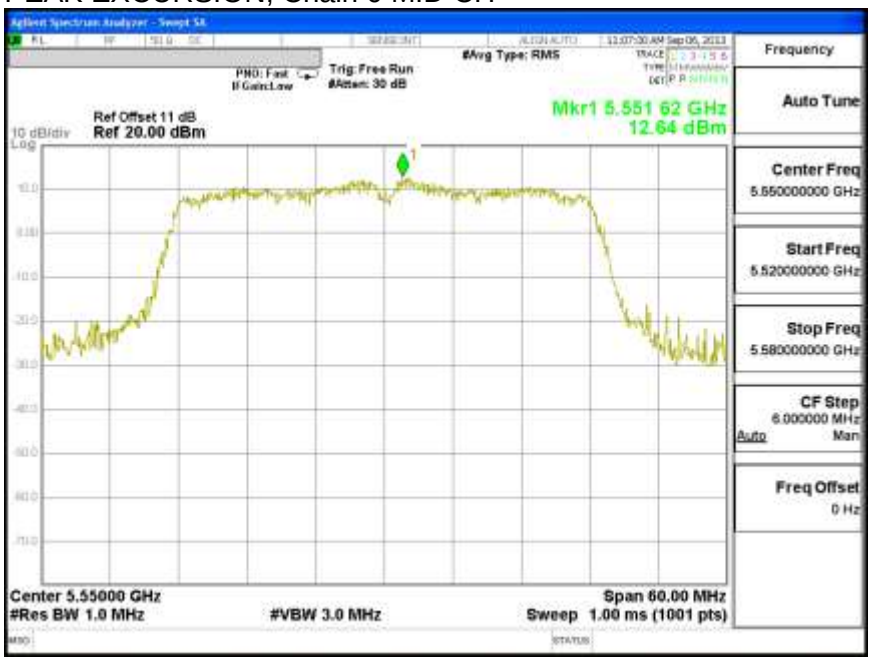
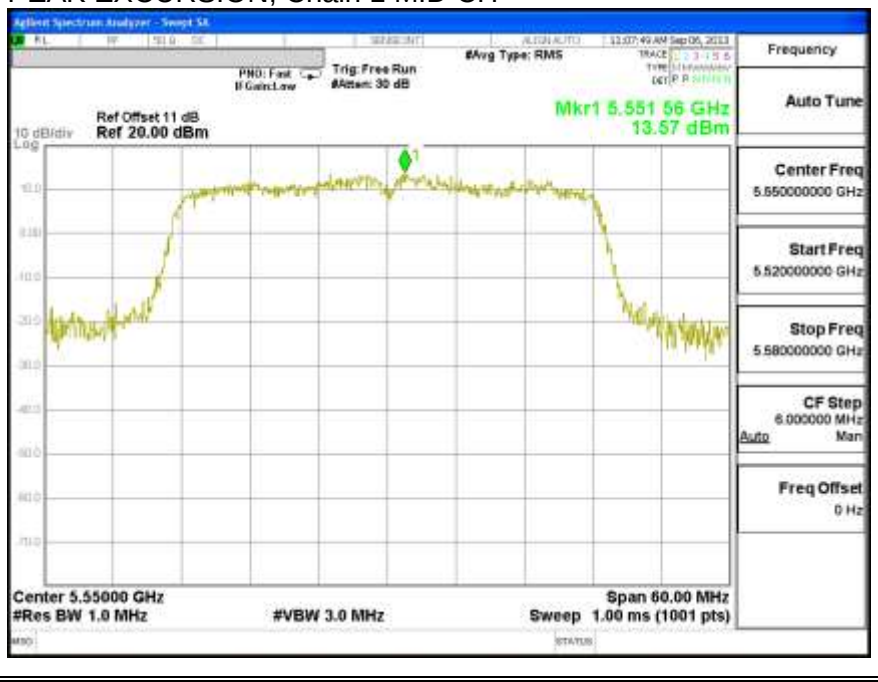
PEAK EXCURSION, Chain 0

PEAK EXCURSION, Chain 0 MID CH



PEAK EXCURSION, Chain 1

PEAK EXCURSION, Chain 1 MID CH



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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.

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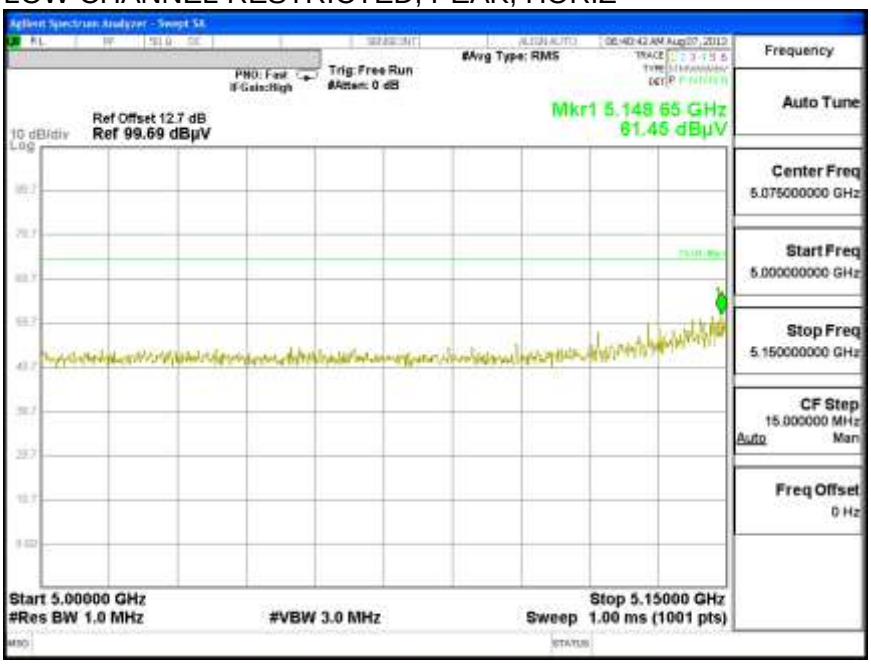
9.2. TRANSMITTER ABOVE 1 GHz

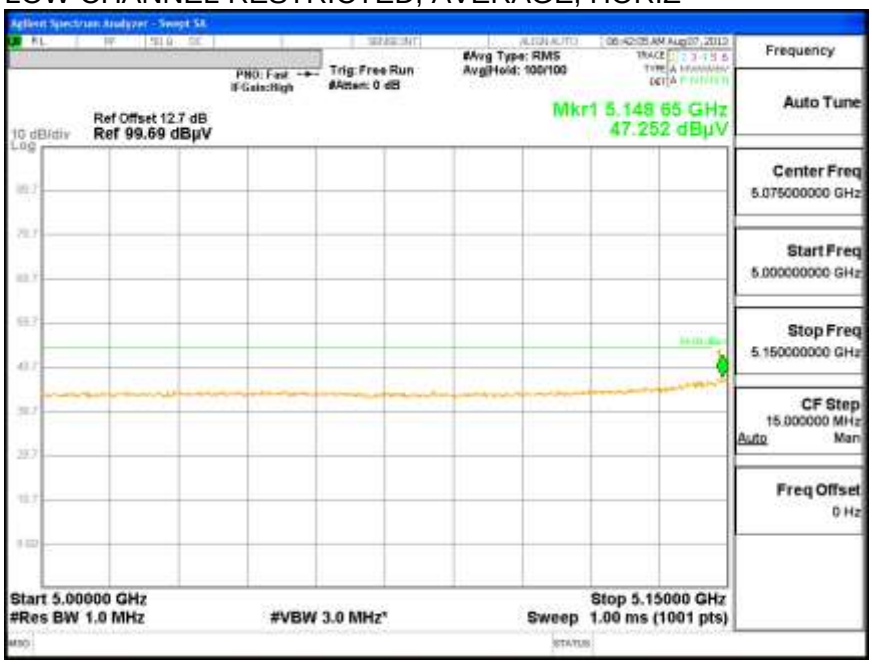
9.2.1. TX ABOVE 1 GHz 802.11a SISO MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK, HORIZ



LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



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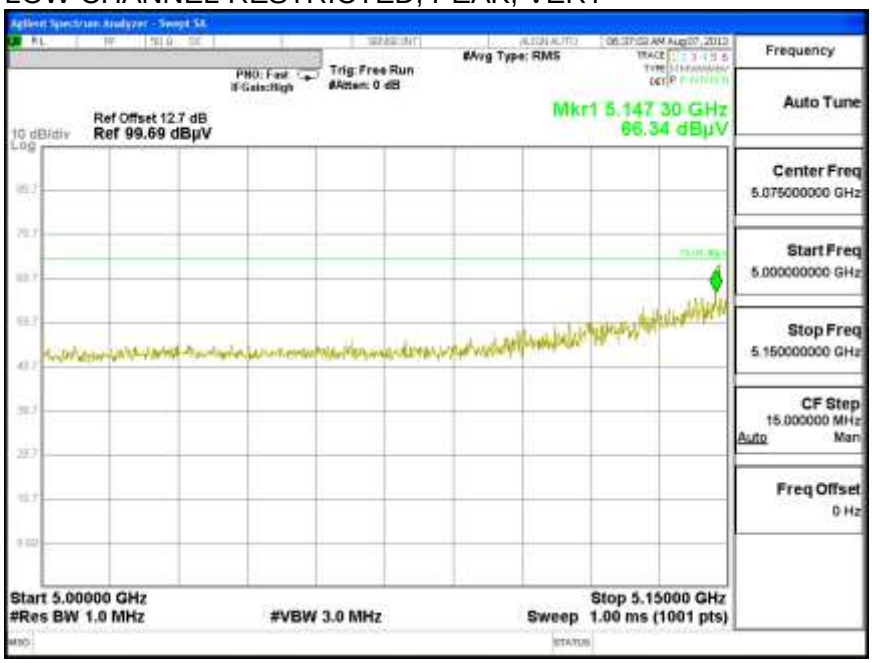
LOW CHANNEL RESTRICTED, PEAK, VERT



LOW CHANNEL RESTRICTED, AVERAGE, VERT

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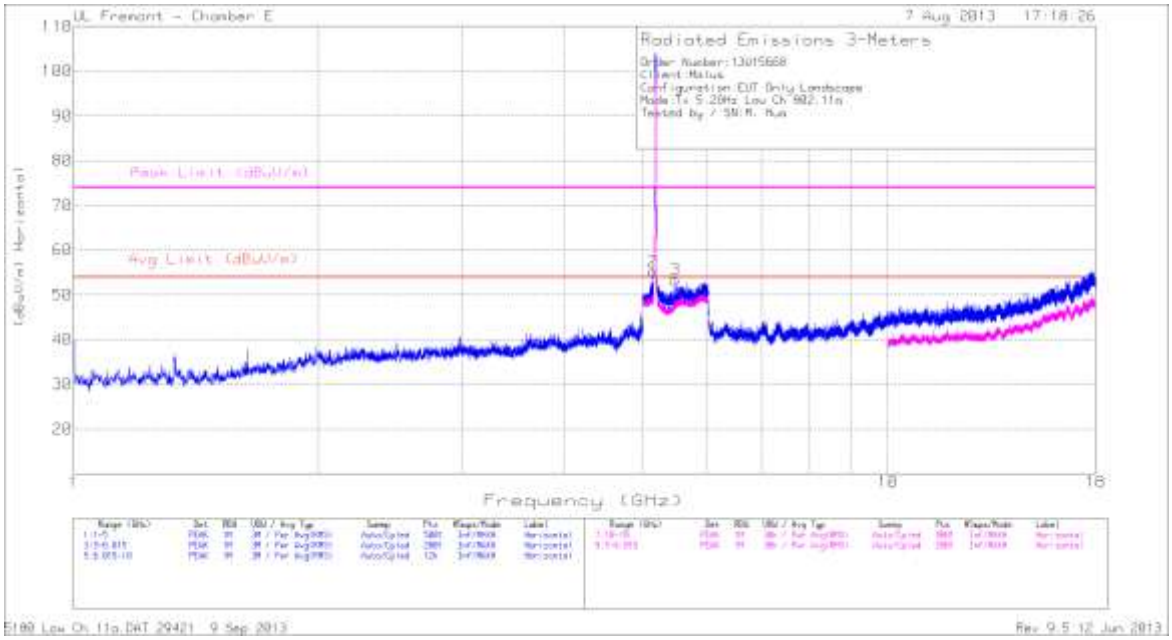
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT

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DATA

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
1.333	49.06	PK	28.5	-34.7	42.86	53.97	-11.11	74	-31.14	0-360	201	V
5.149	42.25	PK	34.5	-21.6	55.15	-	-	74	-18.85	0-360	200	H
*5.481	40.3	PK	34.8	-21.7	53.4	-	-	68.2	-14.8	0-360	200	H
5.103	39.57	PK	34.5	-21.8	52.27	-	-	74	-21.73	0-360	201	V
*5.527	39.75	PK	34.9	-21.4	53.25	-	-	68.2	-14.95	0-360	100	V
*5.959	38.59	PK	35.6	-20.9	53.29	-	-	68.2	-14.91	0-360	201	V
*9.719	35.01	PK	37.4	-25.7	46.71	-	-	68.2	-21.49	0-360	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.148	37.27	MAv1	34.6	-21.6	50.27	53.97	-3.7	-	-	91	217	H
5.109	28.62	MAv1	34.5	-21.8	41.32	53.97	-12.65	-	-	3	261	V

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

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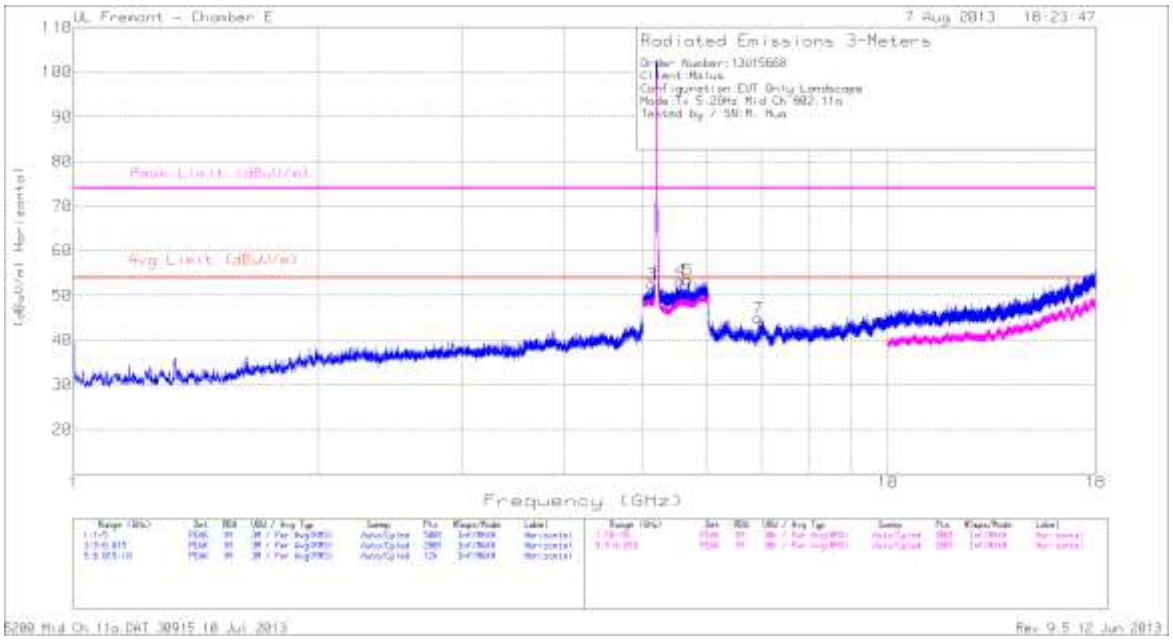
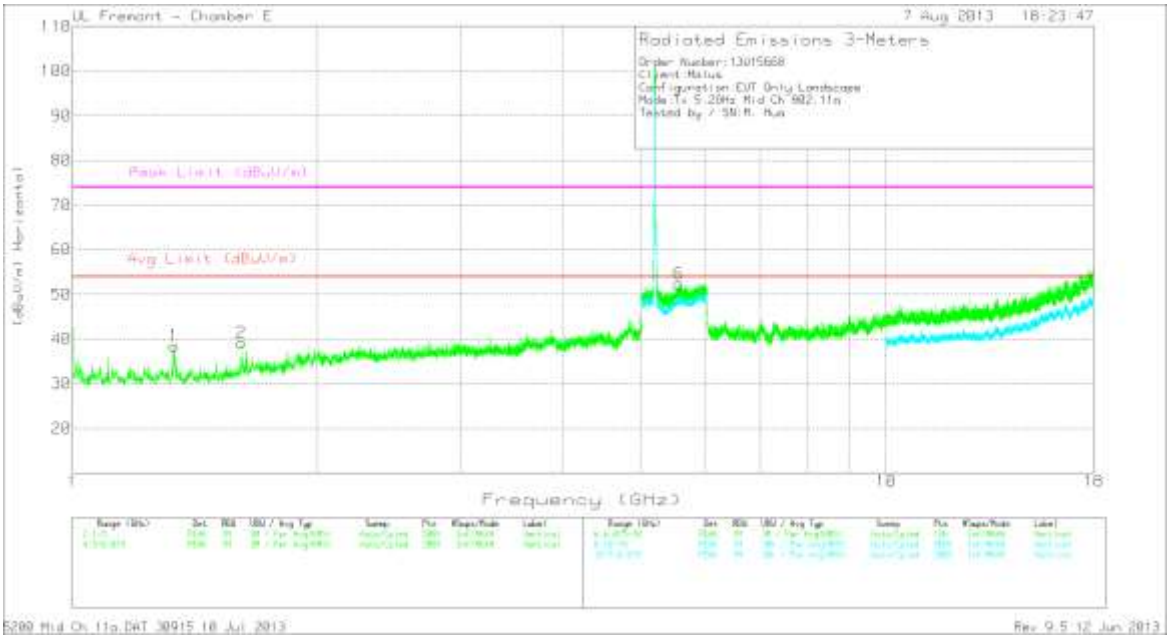
MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

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
1.333	44.67	PK	28.5	-34.7	38.47	53.97	-15.50	74	-35.53	0-360	201	V
1.612	44.35	PK	29	-34.2	39.15	53.97	-14.82	74	-34.85	0-360	201	V
5.13	39.71	PK	34.5	-21.7	52.51	-	-	74	-21.49	0-360	100	H
*5.568	39.82	PK	34.9	-21.4	53.32	-	-	62.8	-9.48	0-360	201	H
*5.683	39.74	PK	35.2	-21.5	53.44	-	-	62.8	-9.36	0-360	100	H
*5.559	38.84	PK	34.9	-21.3	52.44	-	-	62.8	-8.36	0-360	100	V
*6.934	38.57	PK	35.8	-29.5	44.87	-	-	62.8	-17.93	0-360	200	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.139	29.07	MAv1	34.5	-21.6	41.97	53.97	-12	-	-	54	395	H

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

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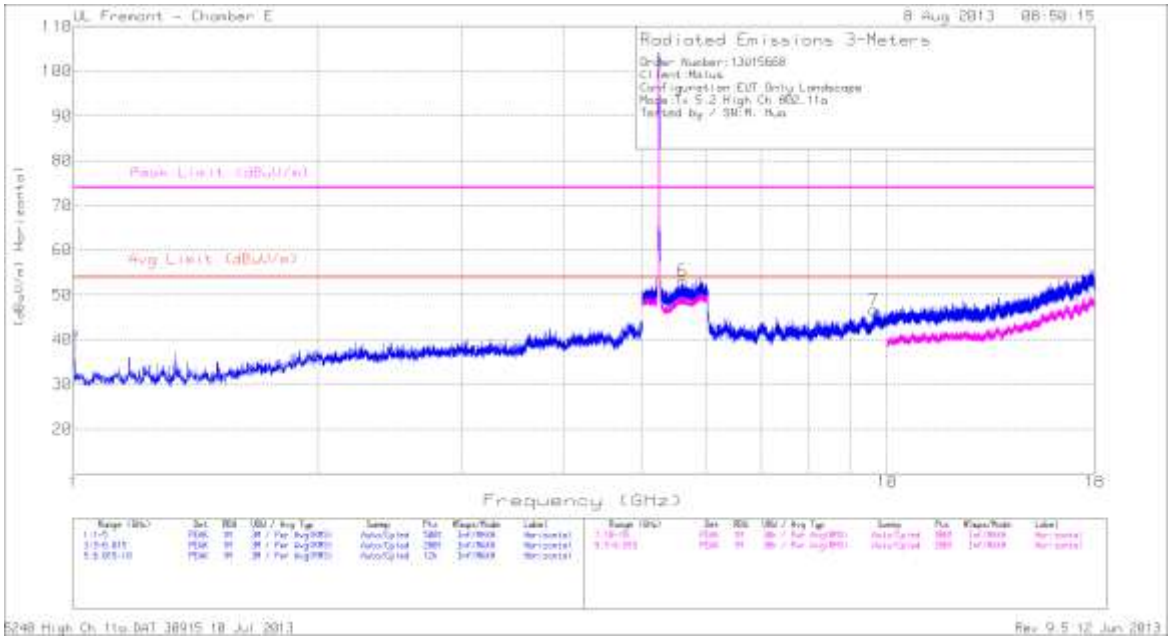
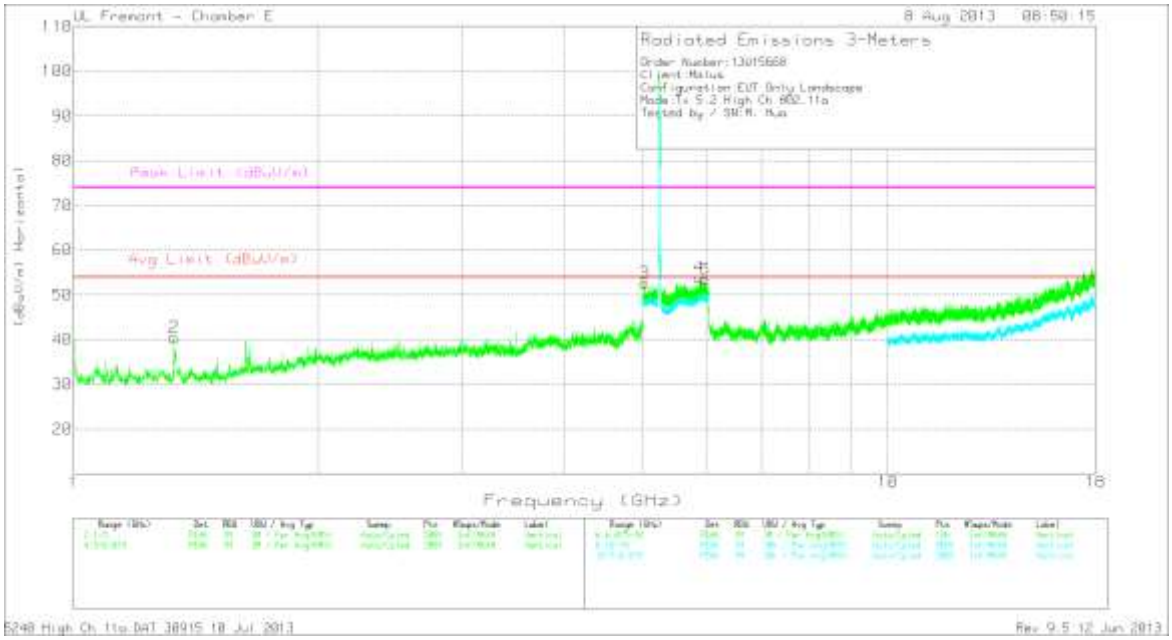
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

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
1.001	49.66	PK	27.7	-35.6	41.76	53.97	-12.21	74	-32.24	0-360	201	H
1.329	46.65	PK	28.5	-34.7	40.45	53.97	-13.52	74	-33.55	0-360	201	V
*5.604	39.53	PK	35	-21.4	53.13	-	-	62.8	-9.67	0-360	201	H
5.029	40.54	PK	34.3	-22.2	52.64	-	-	74	-21.36	0-360	100	V
*5.868	39.6	PK	35.5	-21.2	53.9	-	-	62.8	-8.90	0-360	201	V
*5.968	38.71	PK	35.6	-20.9	53.41	-	-	62.8	-9.39	0-360	201	V
9.634	35.45	PK	37.3	-26.1	46.65	53.97	-7.32	74	-27.35	0-360	100	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.023	28.5	MAv1	34.3	-22.2	40.6	53.97	-13.37	-	-	335	314	V

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

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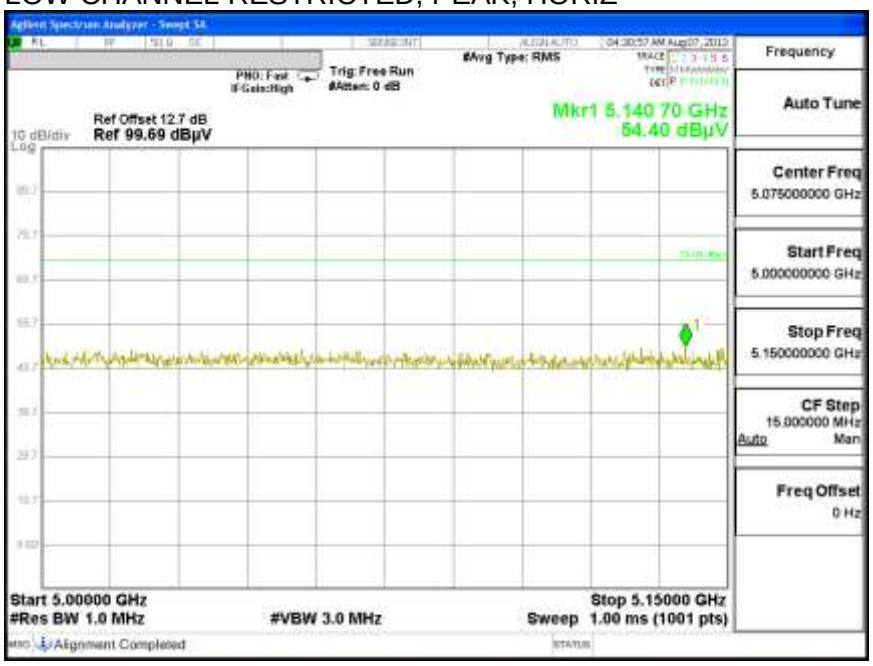
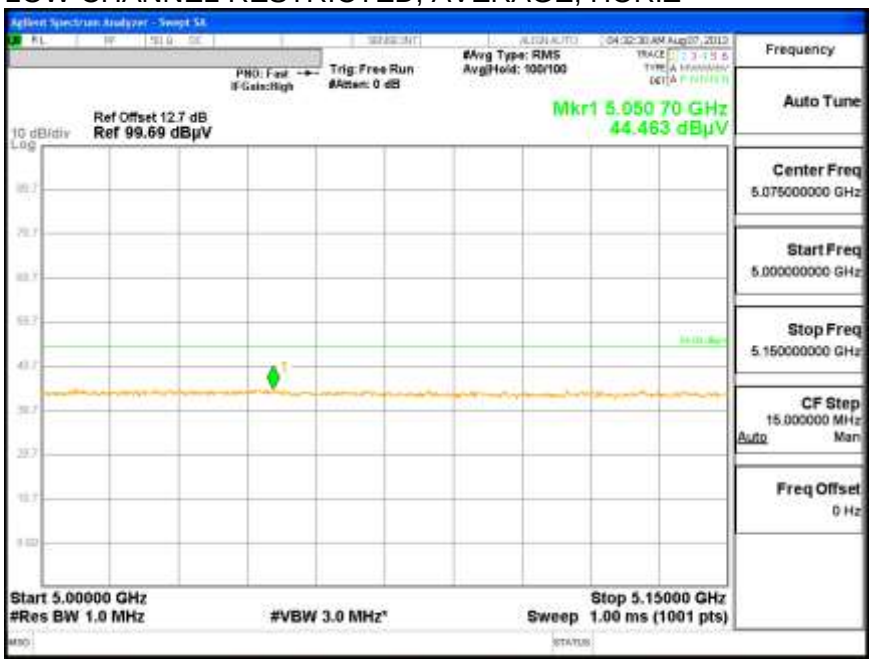
9.2.2. TX ABOVE 1 GHz 802.11n HT20 2TX CDD MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK, HORIZ



LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



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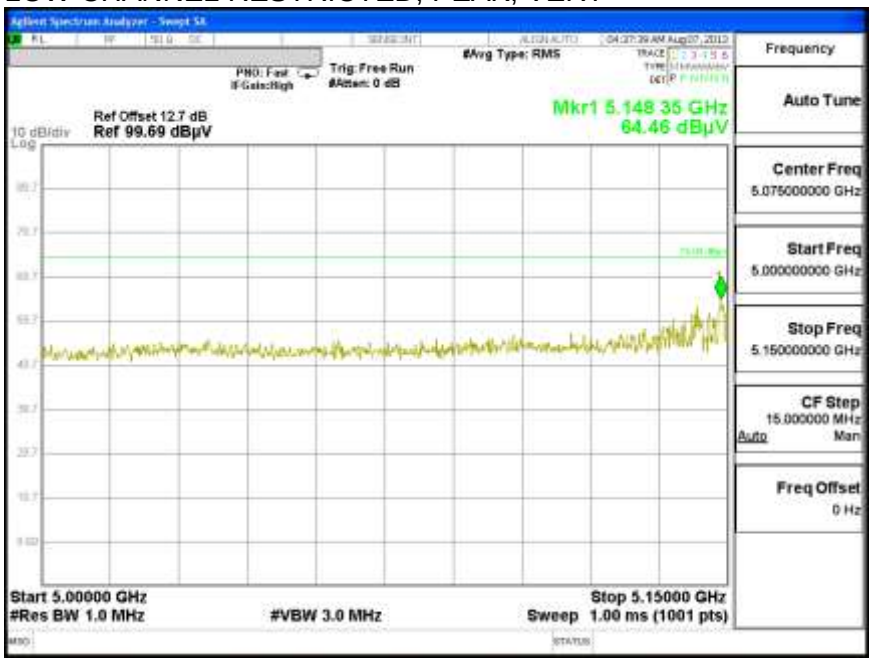
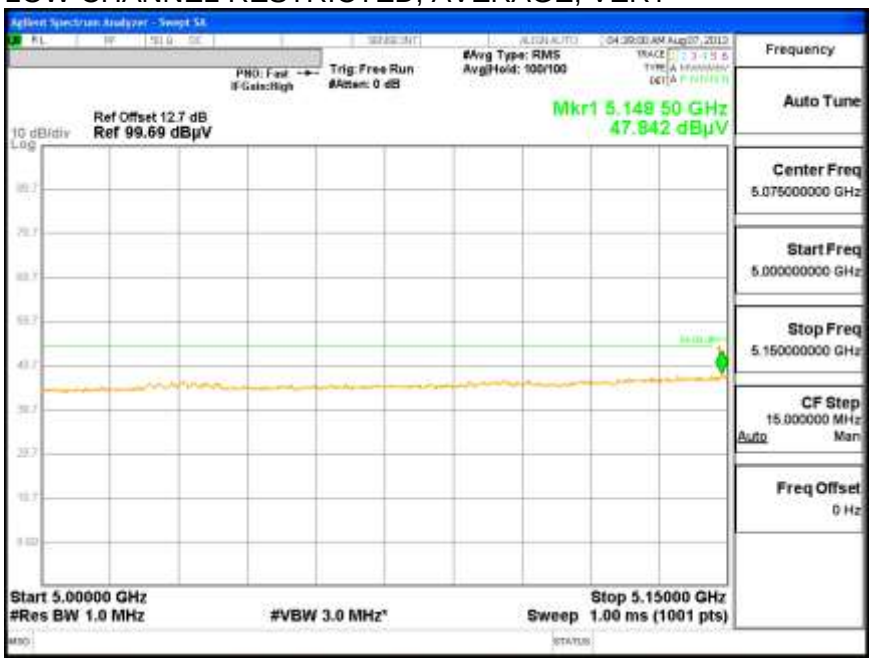
LOW CHANNEL RESTRICTED, PEAK, VERT



LOW CHANNEL RESTRICTED, AVERAGE, VERT



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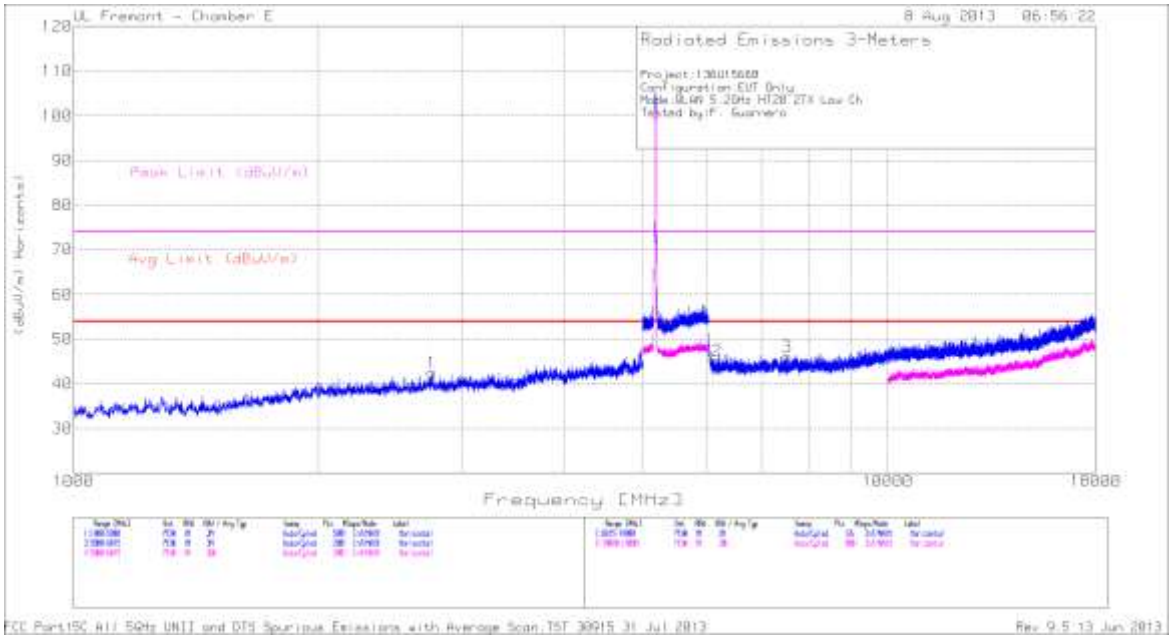
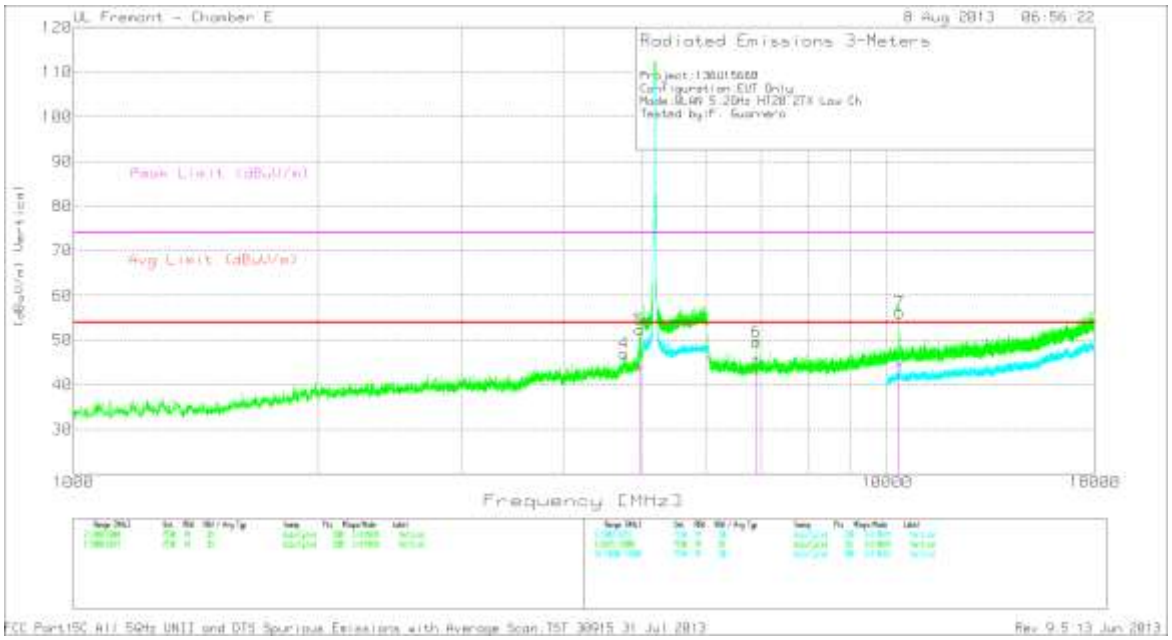
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	2.754	42.06	PK	33.2	-32.8	0	42.46	53.97	-11.51	74	-31.54	99	H
2	*6.176	39.57	PK	35.9	-30.4	0	45.07	-	-	68.2	-17.13	100	H
3	7.52	39.11	PK	36.1	-29.2	0	46.01	53.97	-7.96	74	-27.99	100	H
4	4.747	43.62	PK	34.4	-31	0	47.02	53.97	-6.95	74	-26.98	200	V
5	4.966	48.63	PK	34.4	-30.7	0	52.33	-	-	74	-21.67	200	V
*6	6.907	43.52	PK	35.9	-29.8	0	49.62	-	-	68.2	-18.58	200	V
*7	10.352	43.27	PK	38.3	-25.4	0	56.17	-	-	68.2	-12.03	200	V

PK - Peak detector

*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF 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
4.964	39.95	RMS	34.4	-30.7	.1	43.75	53.97	-10.22	-	-	143	219	V

RMS - RMS detection

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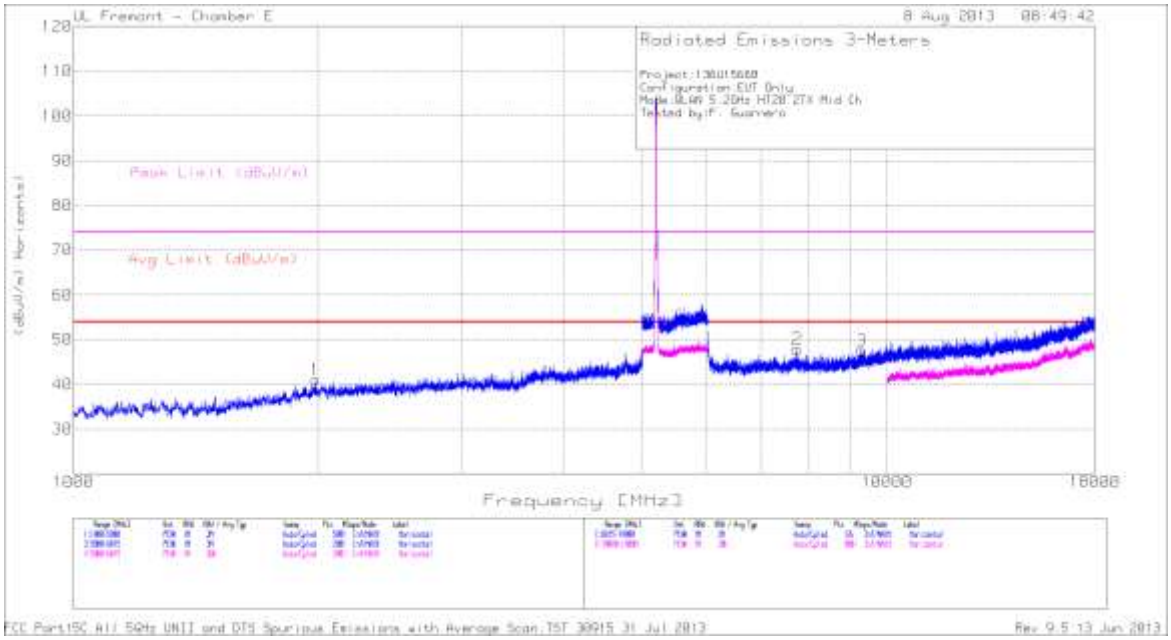
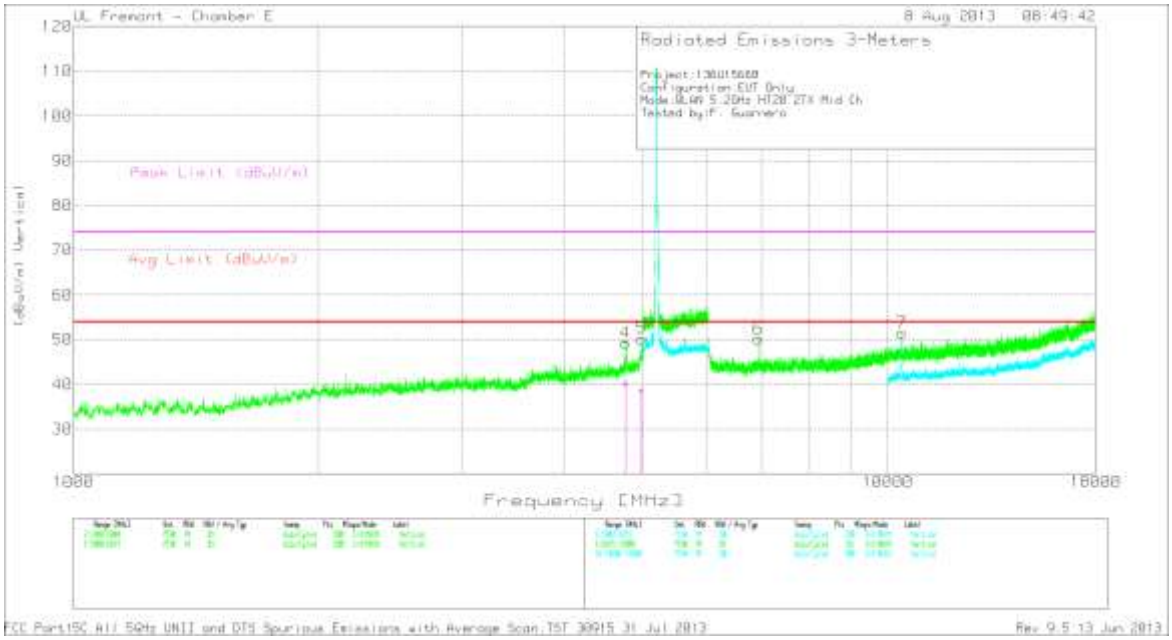
MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*1.982	42.57	PK	32	-33.6	0	40.97	-	-	68.2	-27.23	100	H
2	*7.756	40.39	PK	36.2	-28.7	0	47.89	-	-	68.2	-20.3	100	H
3	*9.299	36.48	PK	37.2	-26.1	0	47.58	-	-	68.2	-20.61	199	H
4	4.766	45.74	PK	34.4	-30.8	0	49.34	-	-	74	-24.66	199	V
5	4.984	45.97	PK	34.4	-30.1	0	50.27	-	-	74	-23.73	199	V
6	*6.934	43.83	PK	35.9	-29.5	0	50.23	-	-	68.2	-17.97	199	V
7	*10.405	38.19	PK	38.4	-25	0	51.59	-	-	68.2	-16.61	199	V

PK - Peak detector

*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/ Cbl 5GHz LPF 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
4.767	36.45	RMS	34.4	-30.8	.1	40.15	53.97	-13.82	-	-	332	326	V
4.983	34.18	RMS	34.4	-30.1	.1	38.58	53.97	-15.39	-	-	316	307	V

RMS - RMS detection

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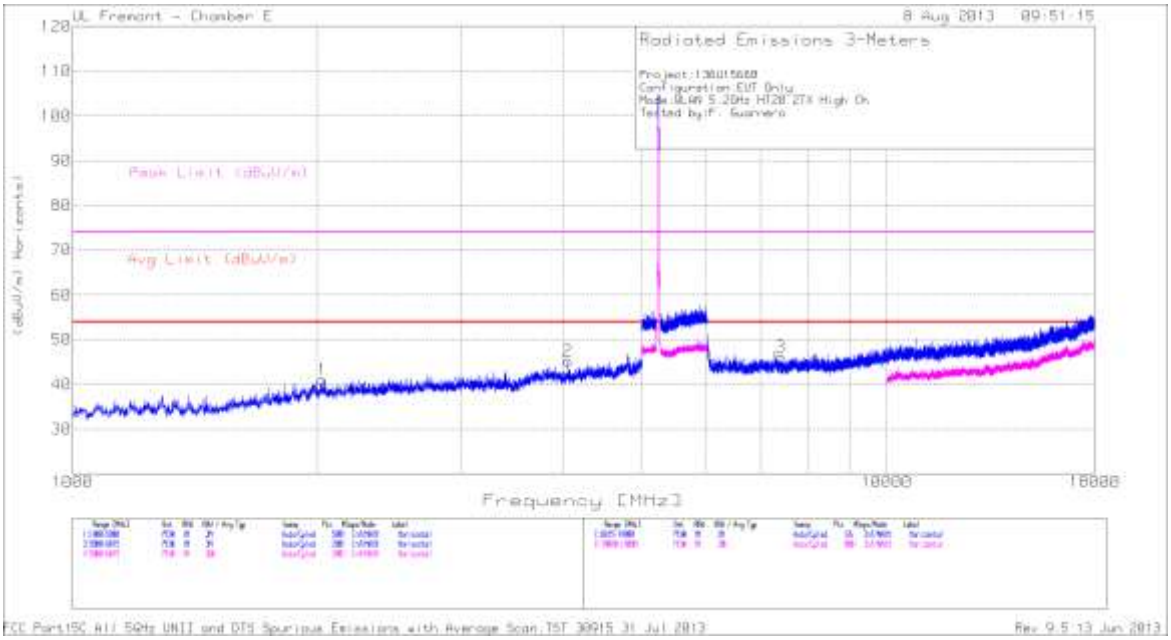
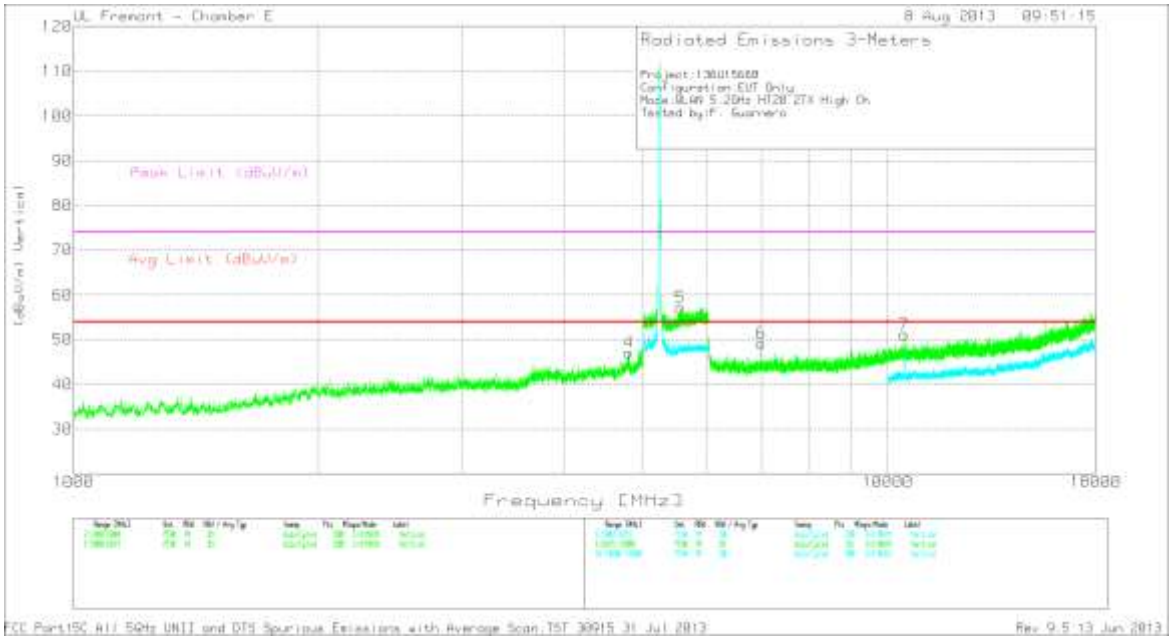
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	2.226	42.83	PK	32.1	-33.9	0	41.03	53.97	-12.94	74	-32.97	207	H
2	4.058	43.26	PK	33.8	-31.8	0	45.26	53.97	-8.71	74	-28.74	307	H
3	7.407	38.93	PK	36.1	-28.9	0	46.13	53.97	-7.84	74	-27.87	100	H

PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /10dB Pad (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	4.805	43.65	PK	34.4	-30.9	0	47.15	53.97	-6.82	74	-26.85	201	V
*5	5.565	43.53	PK	35	-21.4	0	57.13	-	-	68.2	--11.07	100	V
*6	6.988	42.37	PK	36	-29.2	0	49.17	-	-	68.2	-19.03	199	V
*7	10.474	38.22	PK	38.4	-25.5	0	51.12	-	-	68.2	-17.08	100	V

PK - Peak detector

*Not in Restricted Band

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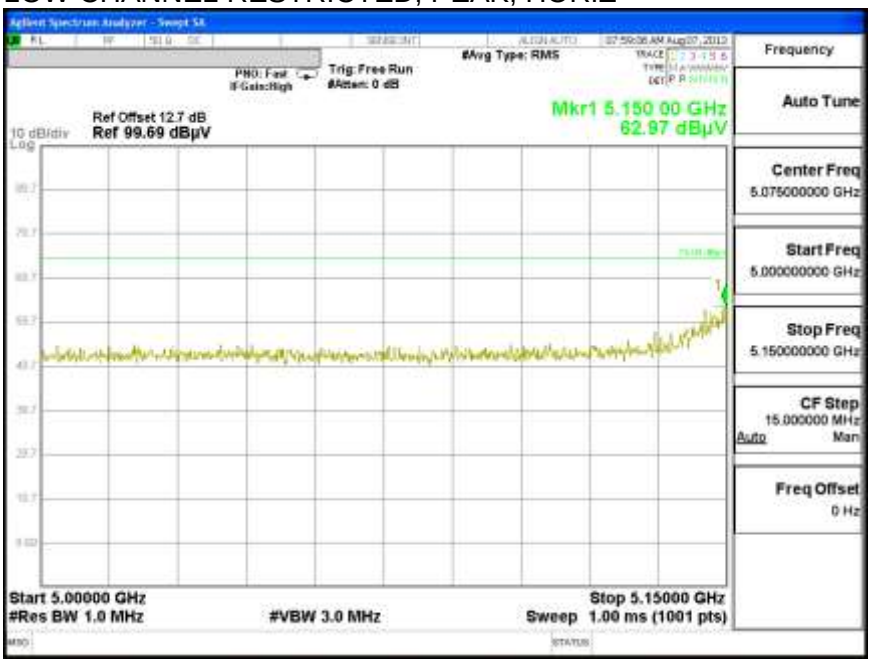
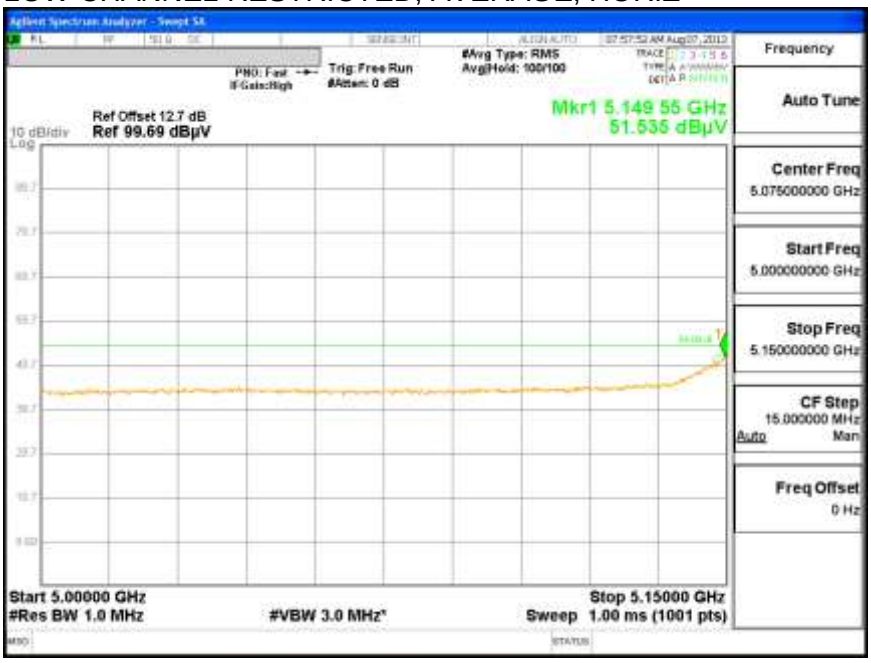
9.2.3. TX ABOVE 1 GHz 802.11n HT40 SISO MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK, HORIZ



LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



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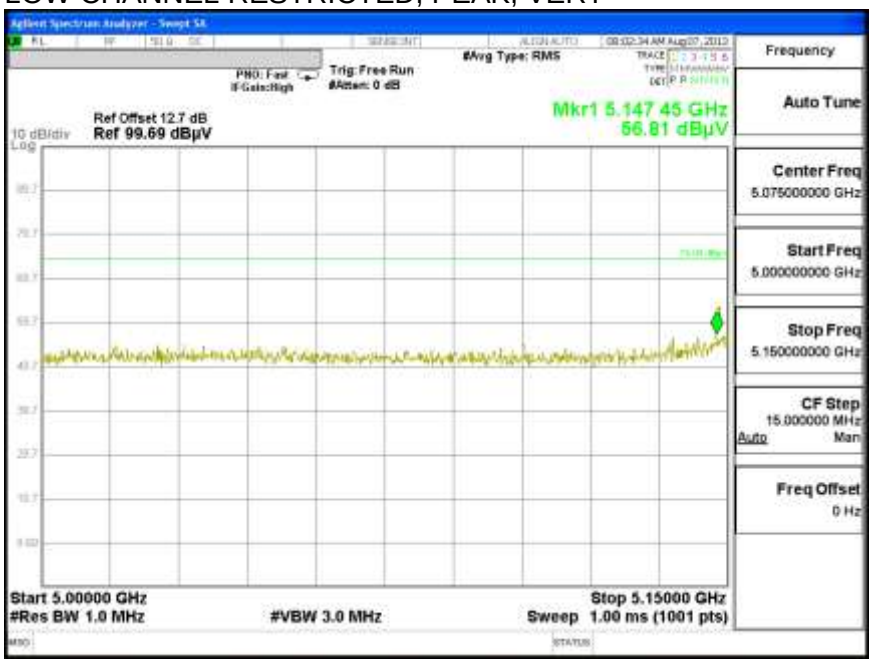
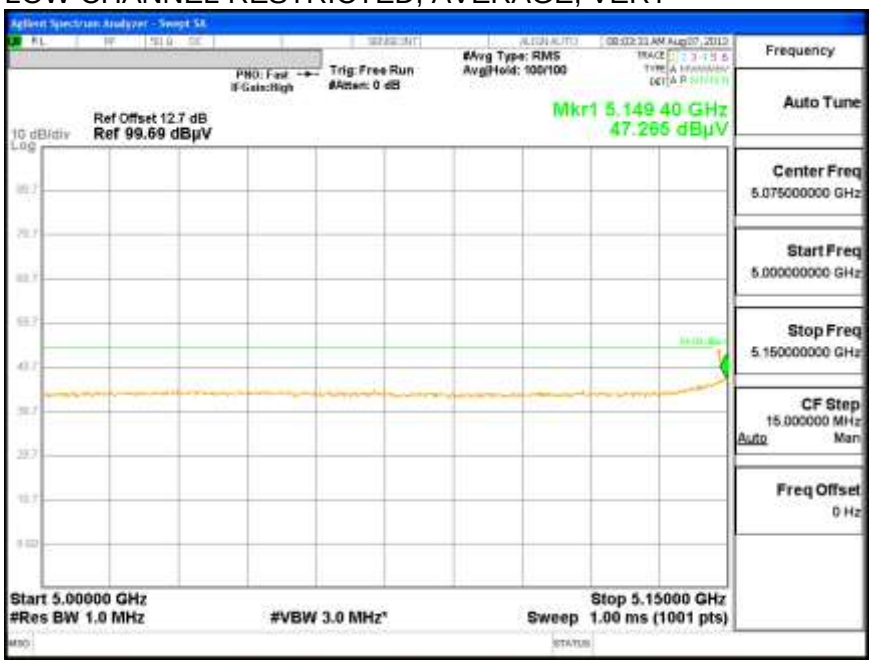
LOW CHANNEL RESTRICTED, PEAK, VERT



LOW CHANNEL RESTRICTED, AVERAGE, VERT



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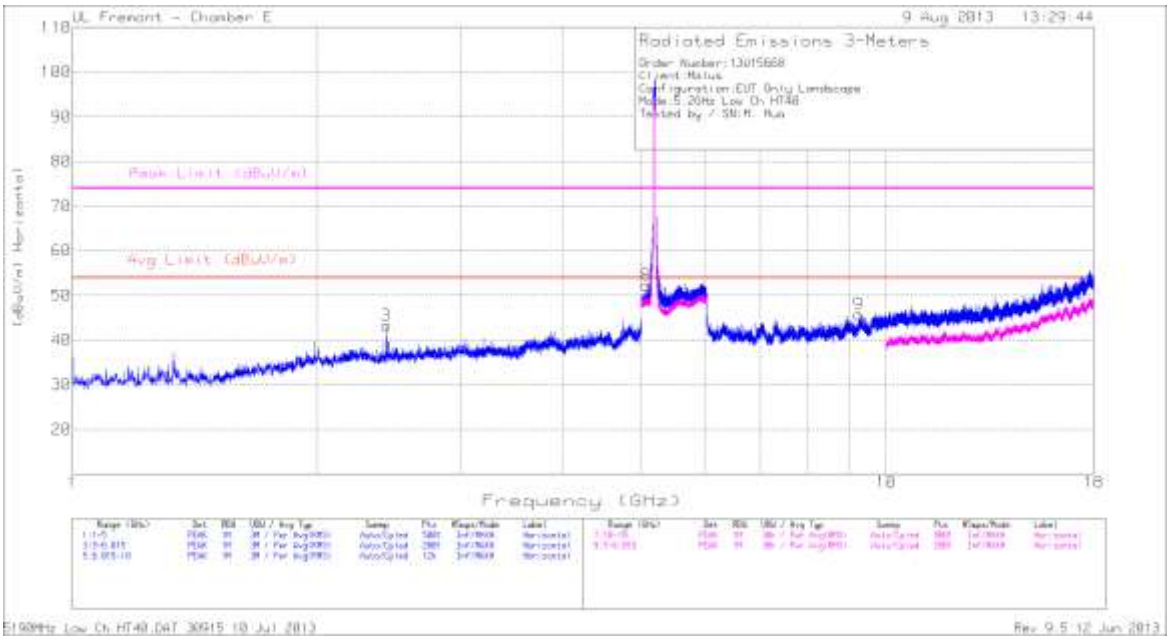
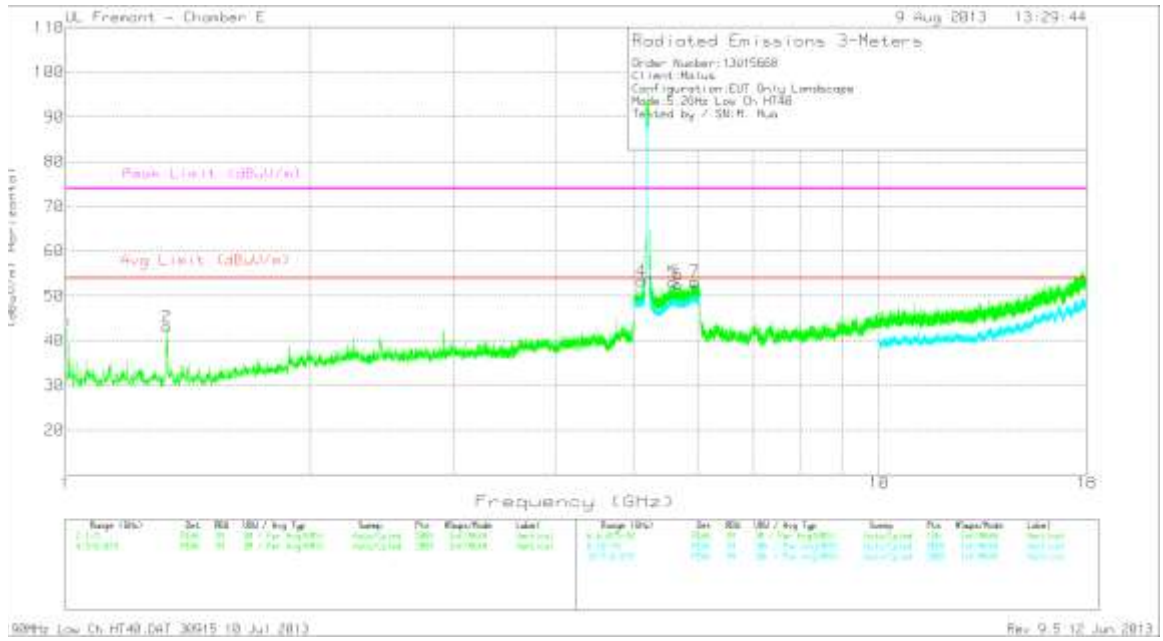
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

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
*2.433	44.39	PK	32.4	-33.5	43.29	-	-	68.2	-24.91	0-360	201	H
1.0	52.51	PK	27.7	-35.6	44.61	53.97	-9.36	74	-29.39	0-360	201	V
1.333	49.3	PK	28.5	-34.7	43.1	53.97	-10.87	74	-30.9	0-360	201	V
5.078	39.8	PK	34.4	-21.9	52.3	-	-	74	-21.7	0-360	201	H
5.102	40.58	PK	34.5	-21.8	53.28	-	-	74	-20.72	0-360	201	V
*5.584	39.42	PK	35	-21.4	53.02	-	-	68.2	-15.0	0-360	201	V
*5.934	38.51	PK	35.6	-21	53.11	-	-	68.2	-14.91	0-360	100	V
*9.248	35.58	PK	36.9	-26.7	45.78	-	-	68.2	-22.42	0-360	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.084	28.49	MAv1	34.4	-21.9	40.99	53.97	-12.98	-	-	52	339	H
5.098	28.58	MAv1	34.5	-21.8	41.28	53.97	-12.69	-	-	165	142	V

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

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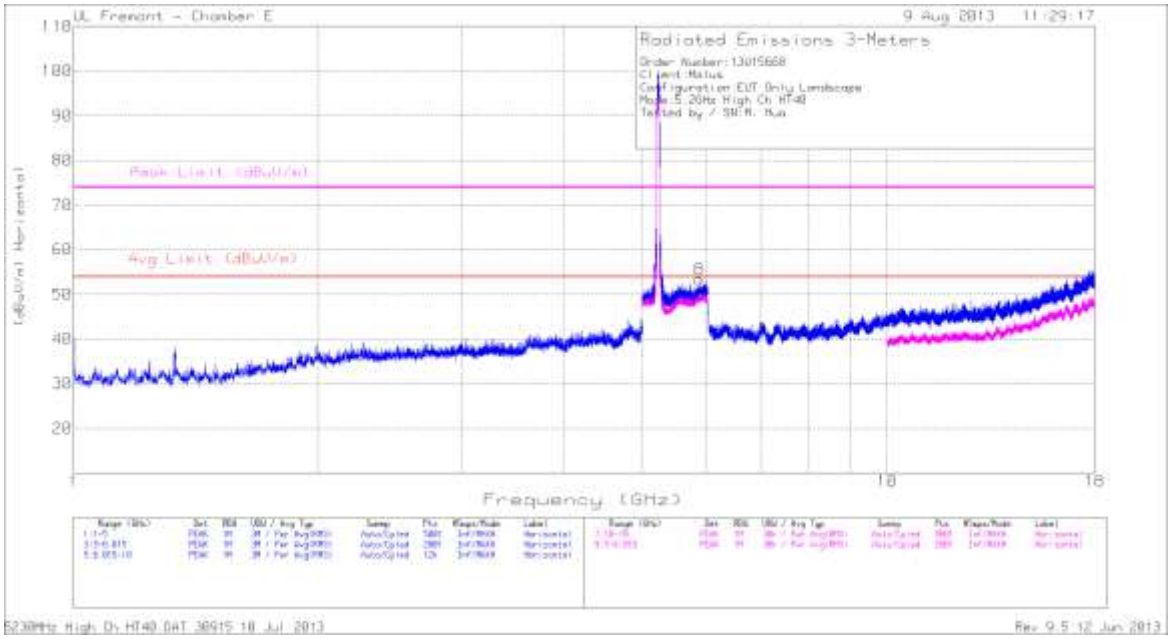
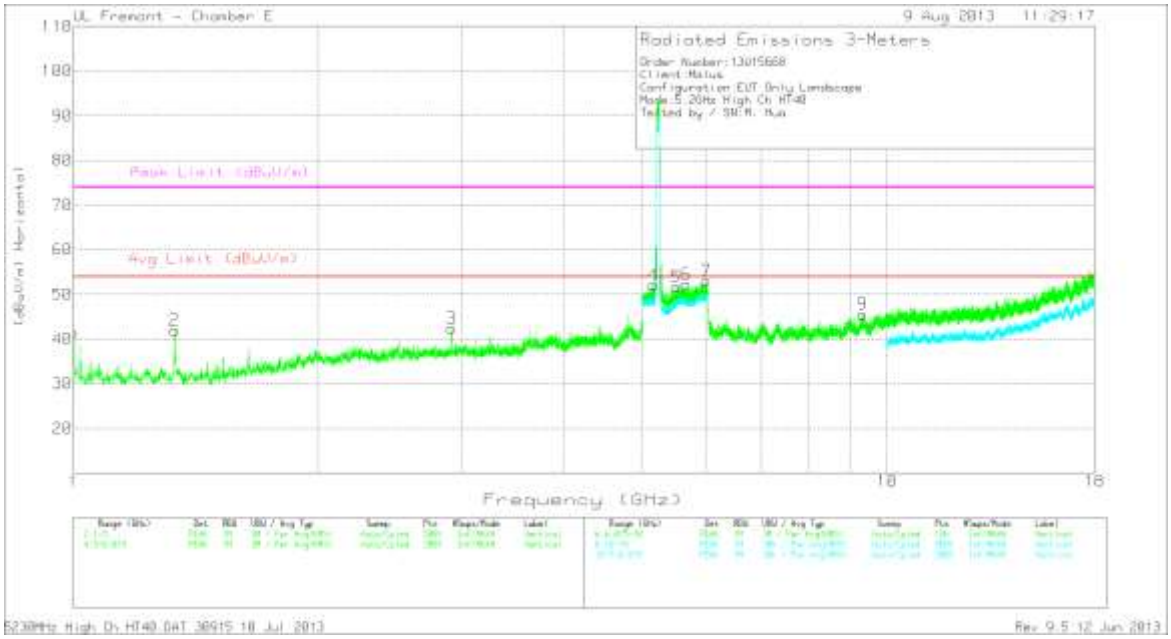
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

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
1.0	49.42	PK	27.7	-35.6	41.52	53.97	-12.45	74	-32.48	0-360	201	V
1.331	48.22	PK	28.5	-34.7	42.02	53.97	-11.95	74	-31.98	0-360	100	V
*2.916	42.93	PK	33	-33.5	42.43	-	-	68.2	-25.77	0-360	201	V
*5.876	38.96	PK	35.5	-21.1	53.36	-	-	68.2	-14.84	0-360	100	H
*5.16	39.08	PK	34.6	-21.6	52.08	-	-	68.2	-13.56	0-360	100	V
*5.507	38.44	PK	34.8	-21.6	51.64	-	-	68.2	-13.12	0-360	100	V
*6.001	38.37	PK	35.7	-21	53.07	-	-	68.2	-15.13	0-360	100	V
9.335	34.59	PK	37	-26	45.59	53.97	-8.38	74	-28.41	0-360	200	V

PK - Peak detector

*Not in Restricted Band

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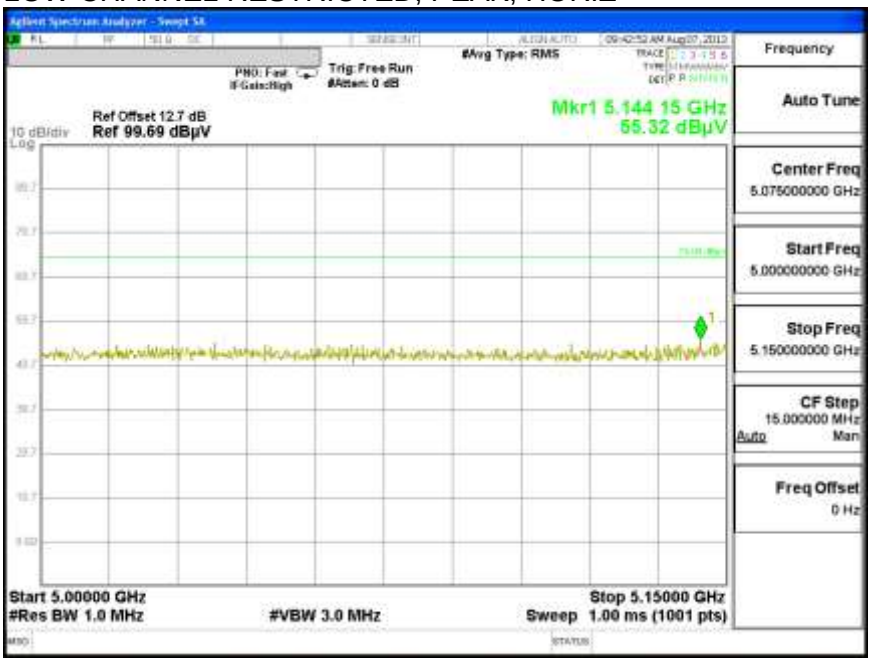
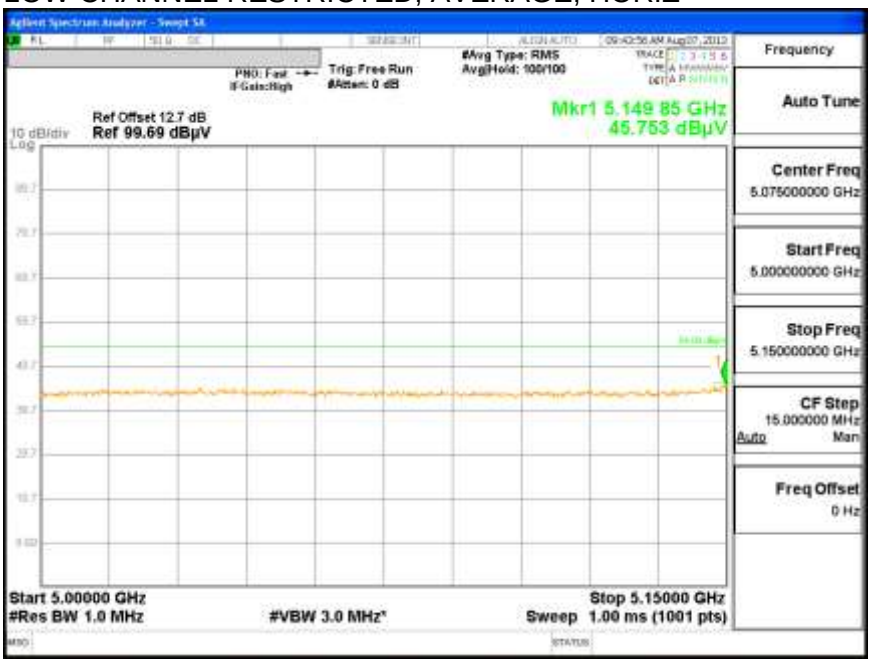
9.2.4. TX ABOVE 1 GHz 802.11n HT40 2TX CDD MODE IN THE 5.2 GHz BAND

RESTRICTED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED, PEAK, HORIZ



LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



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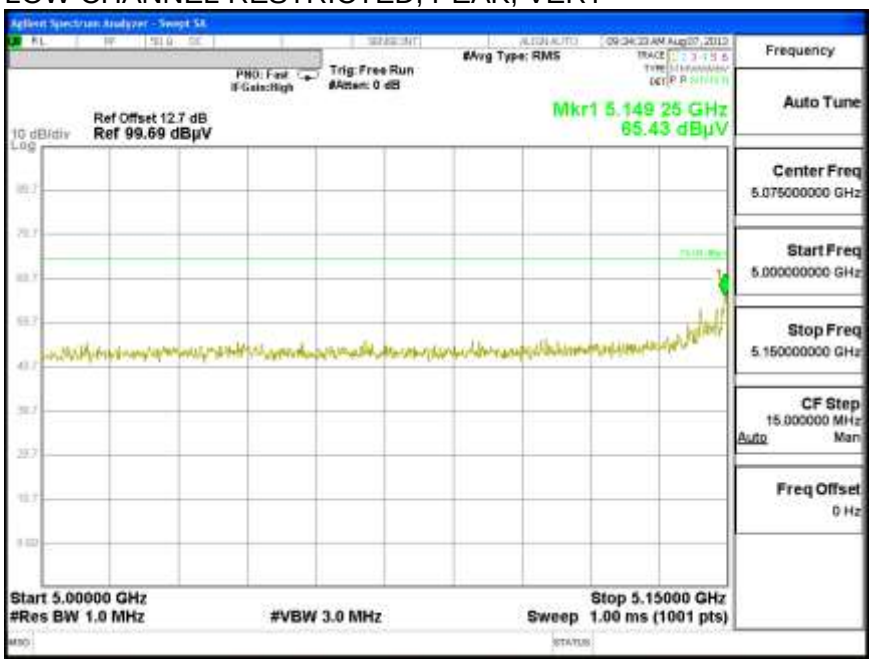
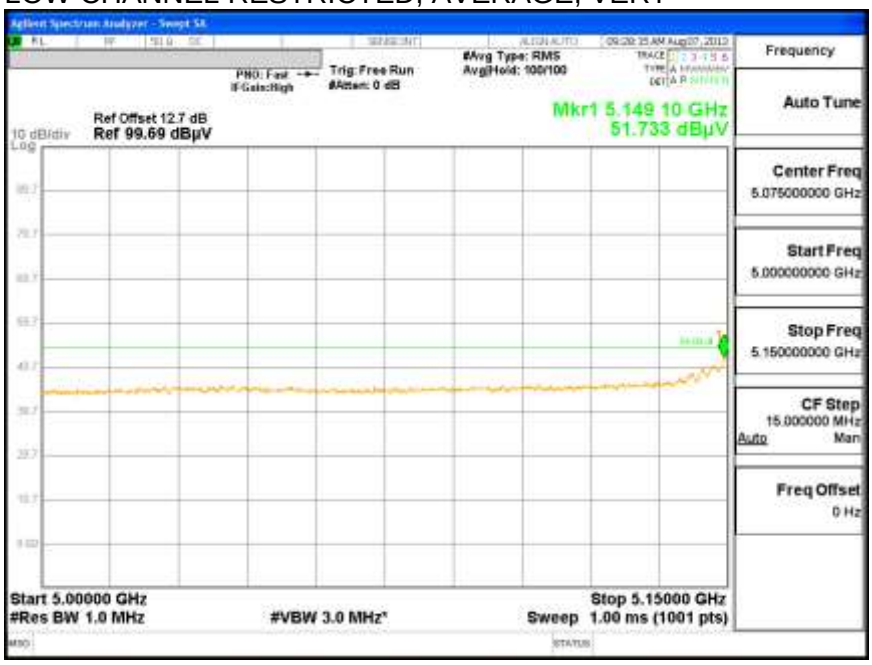
LOW CHANNEL RESTRICTED, PEAK, VERT



LOW CHANNEL RESTRICTED, AVERAGE, VERT



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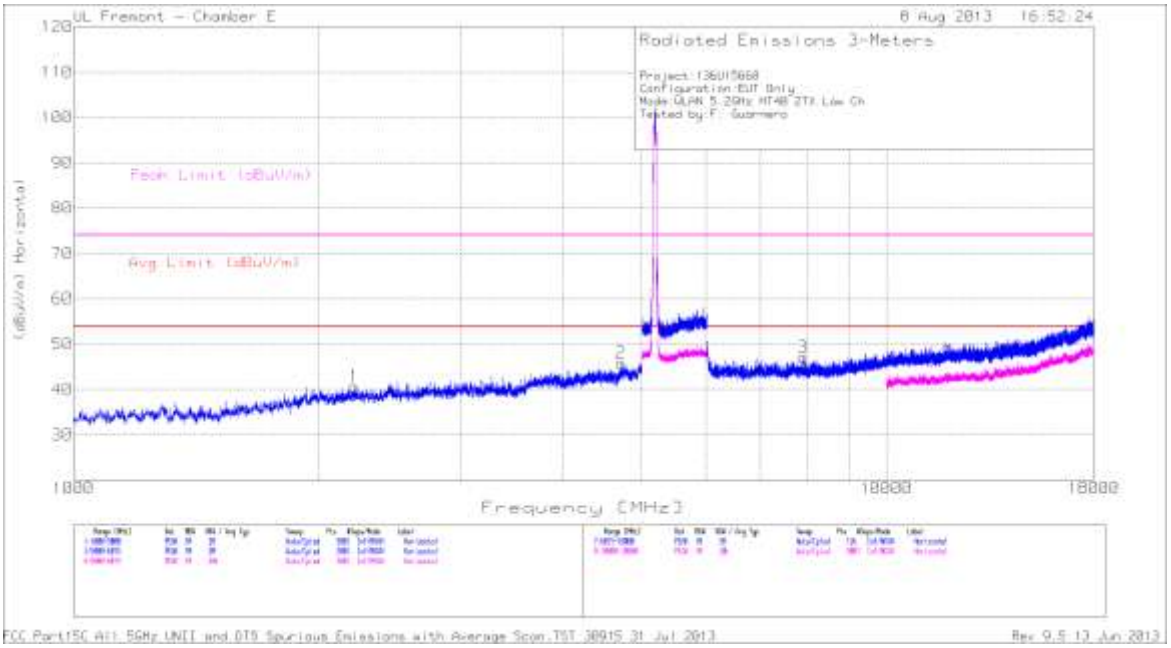
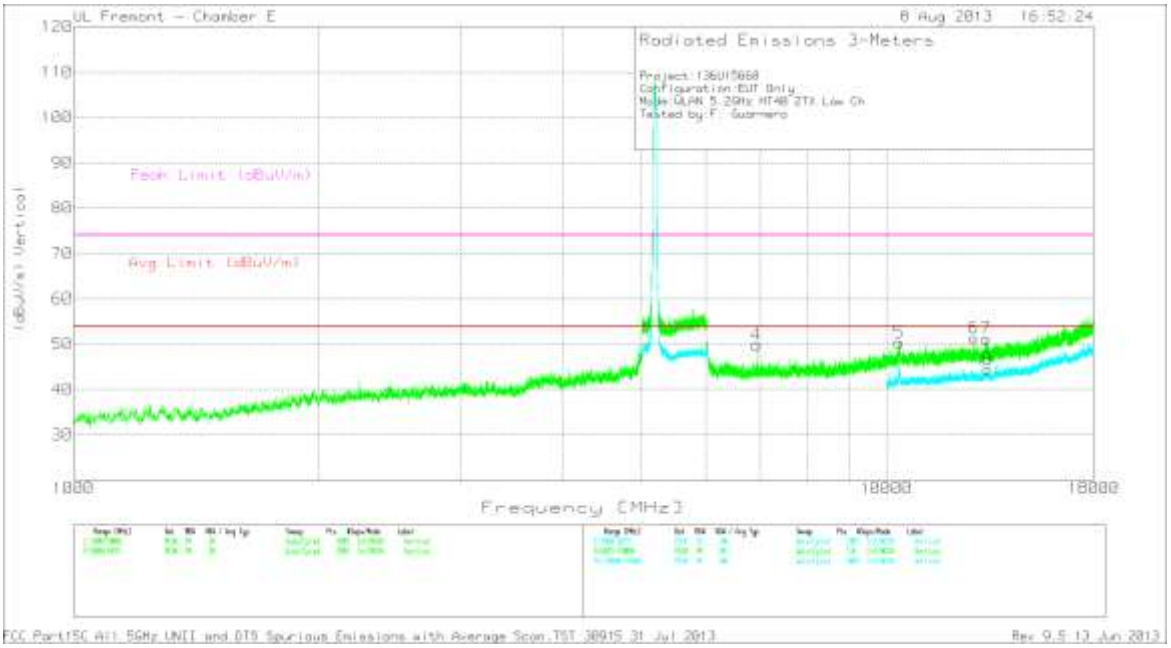
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	2.216	41.71	PK	32.4	-33.4	0	40.71	53.97	-13.26	74	-33.29	199	H
2	4.718	42.64	PK	34.4	-31.2	0	45.84	53.97	-8.13	74	-28.16	199	H
3	*7.907	39.03	PK	36.2	-28.1	0	47.13	-	-	68.2	-21.07	100	H

PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	*6.921	43.49	PK	35.9	-29.5	0	49.89	-	-	68.2	-18.31	199	V
5	*10.37	37.54	PK	38.3	-25.5	0	50.34	-	-	68.2	-15.87	199	V
6	*12.824	38.23	PK	39.2	-26.1	0	51.33	-	-	68.2	-16.87	100	V
7	13.25	37.7	PK	39	-25.5	0	51.2	-	-	74	-22.8	100	V
8	13.328	31.16	AV	39	-25.7	0	44.46	53.97	-9.51	-	-	100	V

PK - Peak detector

*Not in Restricted Band

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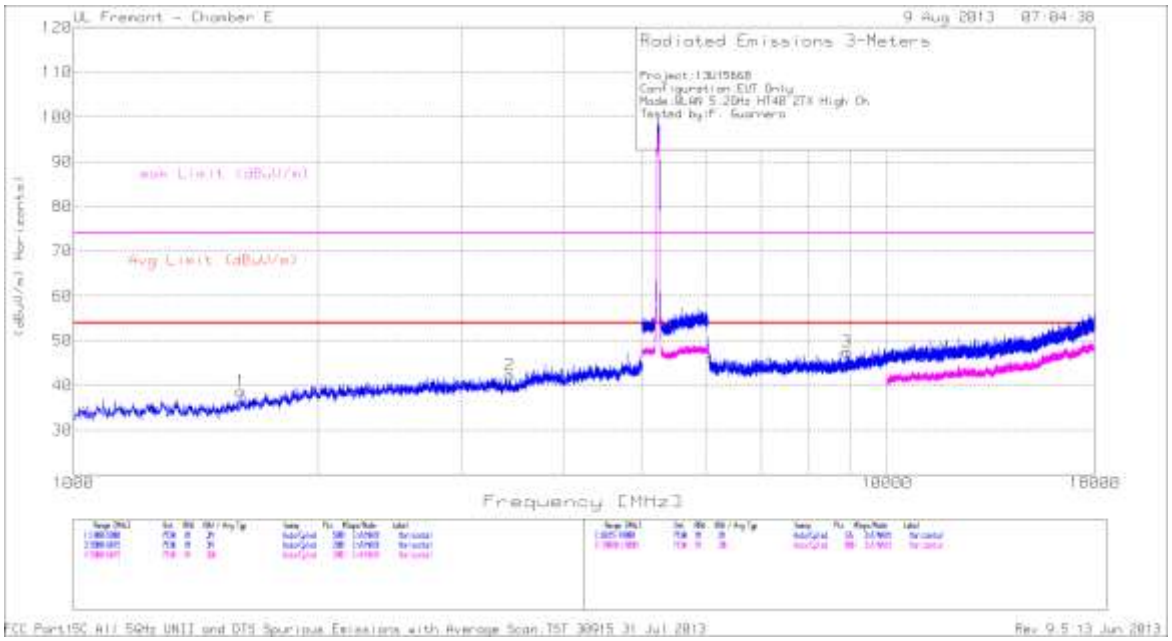
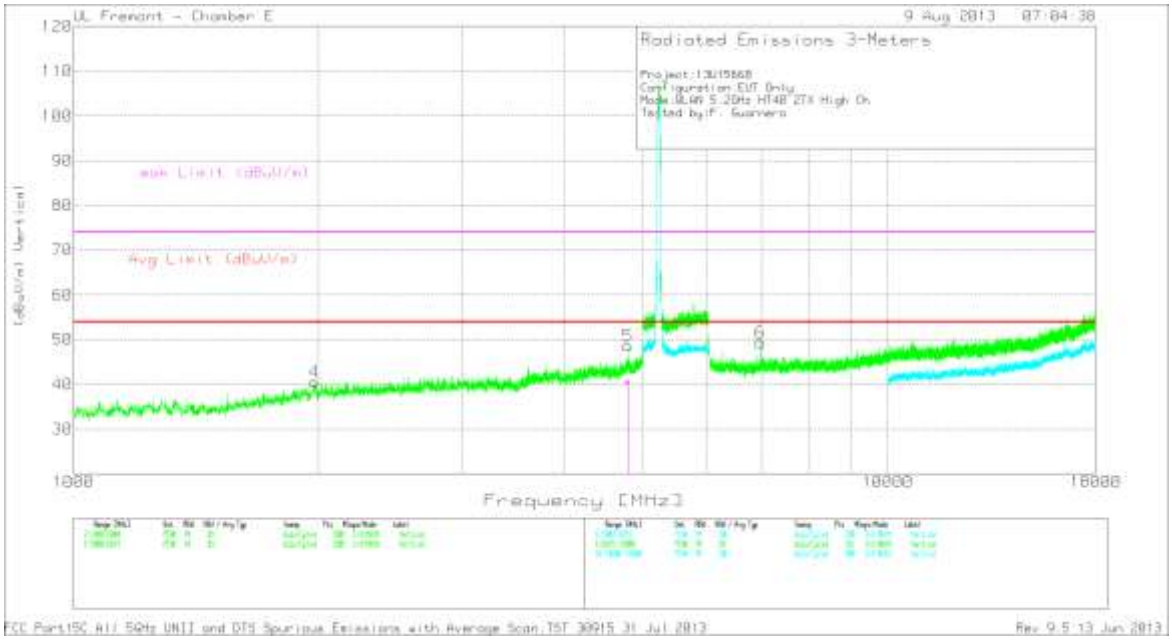
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Radiated Emissions

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	1.606	43.36	PK	29.5	-34.2	0	38.66	53.97	-15.31	74	-35.34	199	H
2	*3.438	42.01	PK	33.2	-32.9	0	42.31	-	-	68.2	-25.89	199	H
3	*8.927	38.07	PK	36.7	-27.2	0	47.57	-	-	68.2	-20.63	199	H

PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	*1.975	42.25	PK	31.9	-33.6	0	40.55	-	-	68.2	-27.65	100	V
5	4.794	44.99	PK	34.4	-30.8	0	48.59	-	-	74	-25.41	199	V
6	*6.974	42.47	PK	36	-29.1	0	49.37	-	-	68.2	--18.83	200	V

PK - Peak detector

*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF 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
4.794	36.7	RMS	34.4	-30.8	.1	40.4	53.97	-13.57	-	-	352	108	V

RMS - RMS detection

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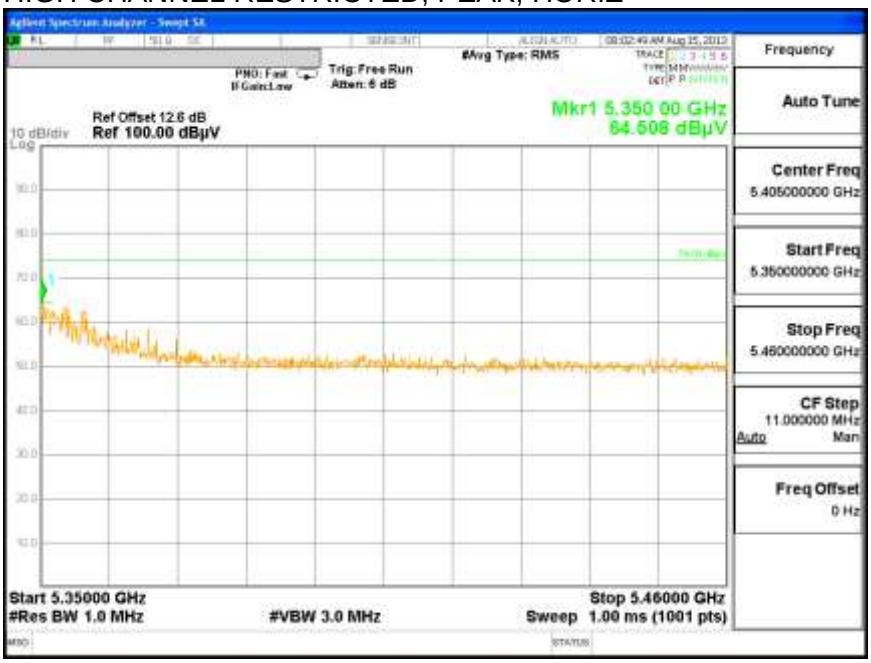
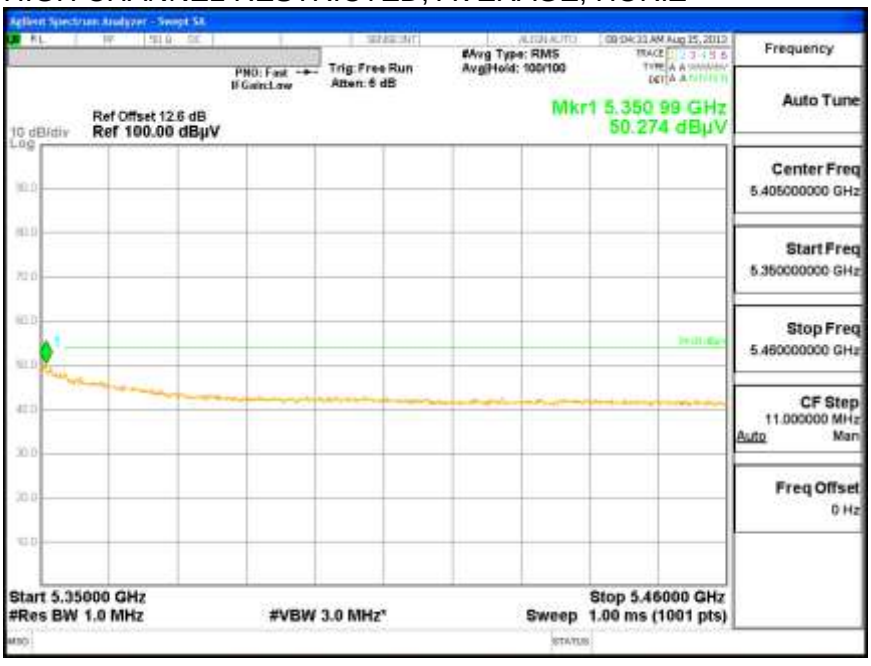
9.2.5. TX ABOVE 1 GHz 802.11a SISO MODE IN THE 5.3 GHz BAND

RESTRICTED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL RESTRICTED, PEAK, HORIZ



HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ



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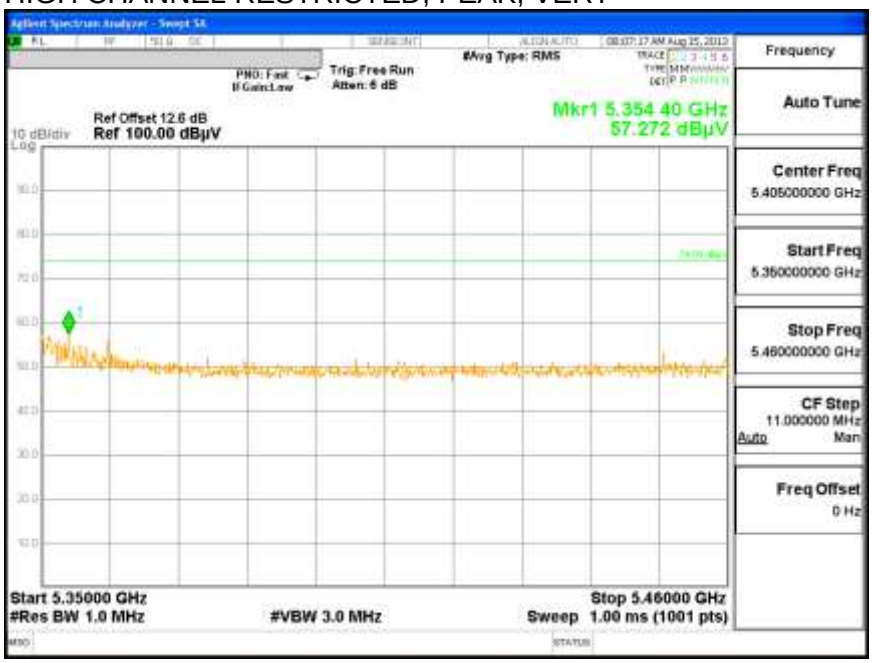
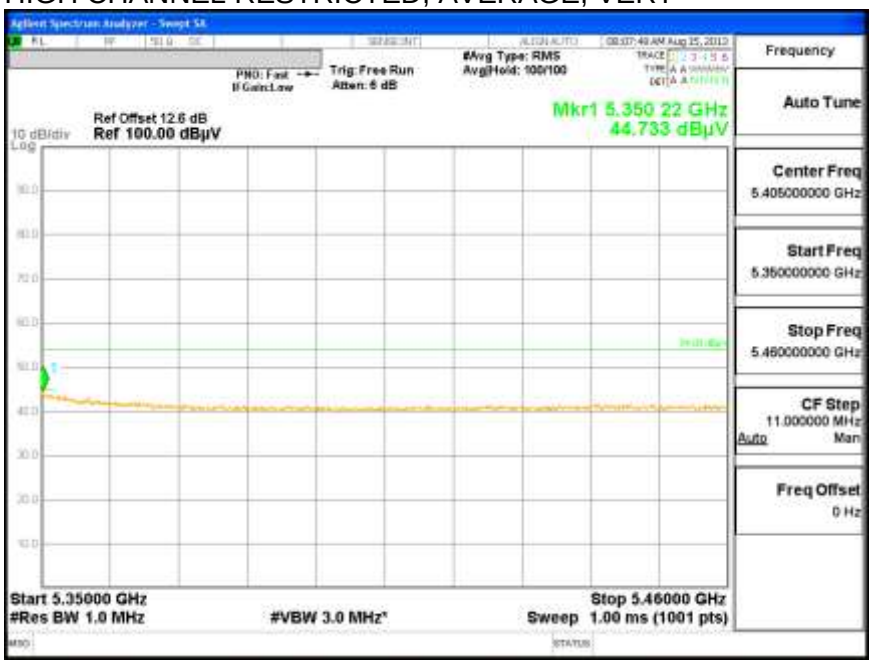
HIGH CHANNEL RESTRICTED, PEAK, VERT



HIGH CHANNEL RESTRICTED, AVERAGE, VERT



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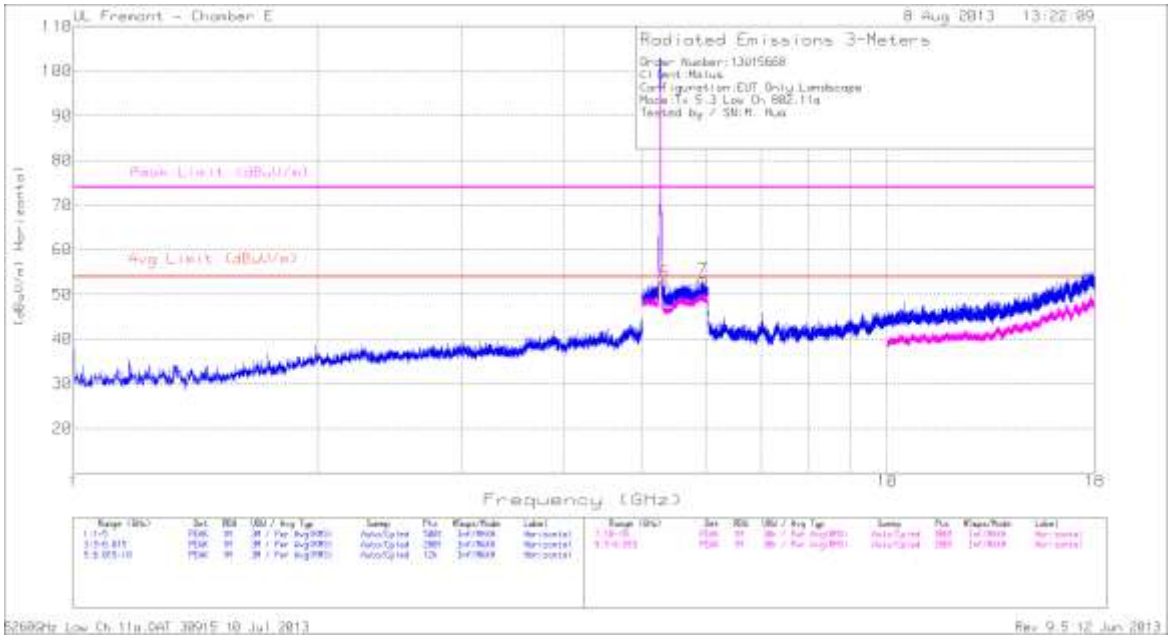
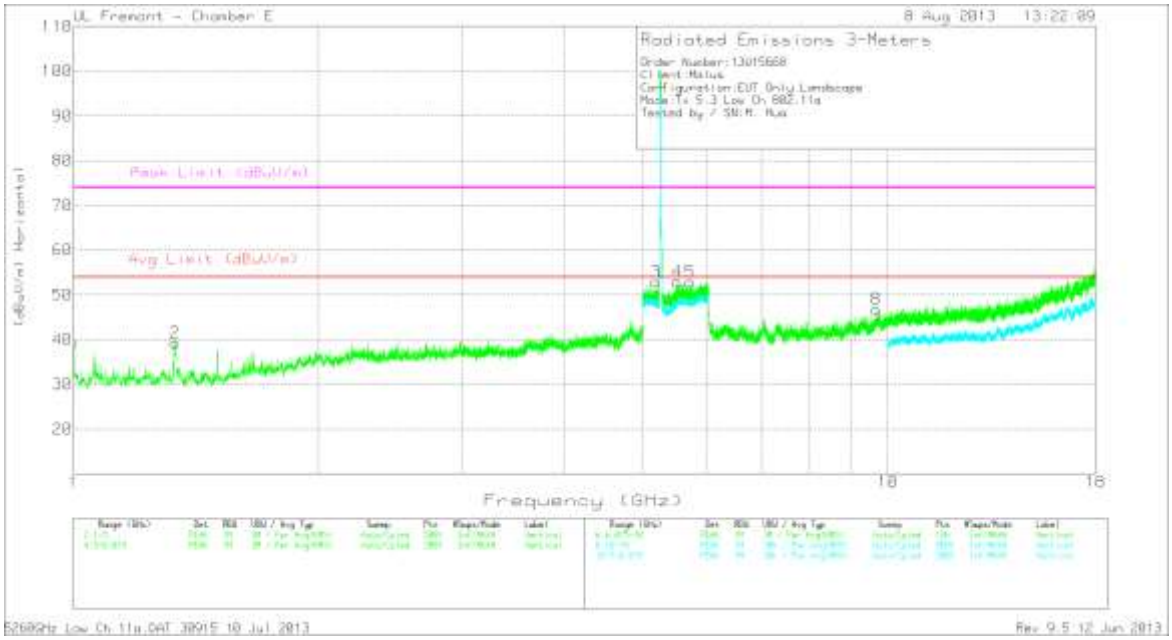
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

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
1.0	47.31	PK	27.7	-35.6	39.41	53.97	-14.56	74	-34.59	0-360	201	V
1.332	45.47	PK	28.5	-34.7	39.27	53.97	-14.7	74	-34.73	0-360	201	V
5.326	40.22	PK	34.7	-22.1	52.82	-	-	74	-21.18	0-360	201	H
*5.94	38.73	PK	35.6	-20.9	53.43	-	-	68.2	-14.77	0-360	201	H
*5.189	39.88	PK	34.6	-21.6	52.88	-	-	68.2	-15.32	0-360	100	V
*5.516	39.67	PK	34.8	-21.5	52.97	-	-	68.2	-15.23	0-360	200	V
*9.674	35.21	PK	37.3	-25.7	46.81	-	-	68.2	-21.39	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.321	28.59	MAv1	34.7	-22.1	41.19	53.97	-12.78	-	-	137	338	H

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

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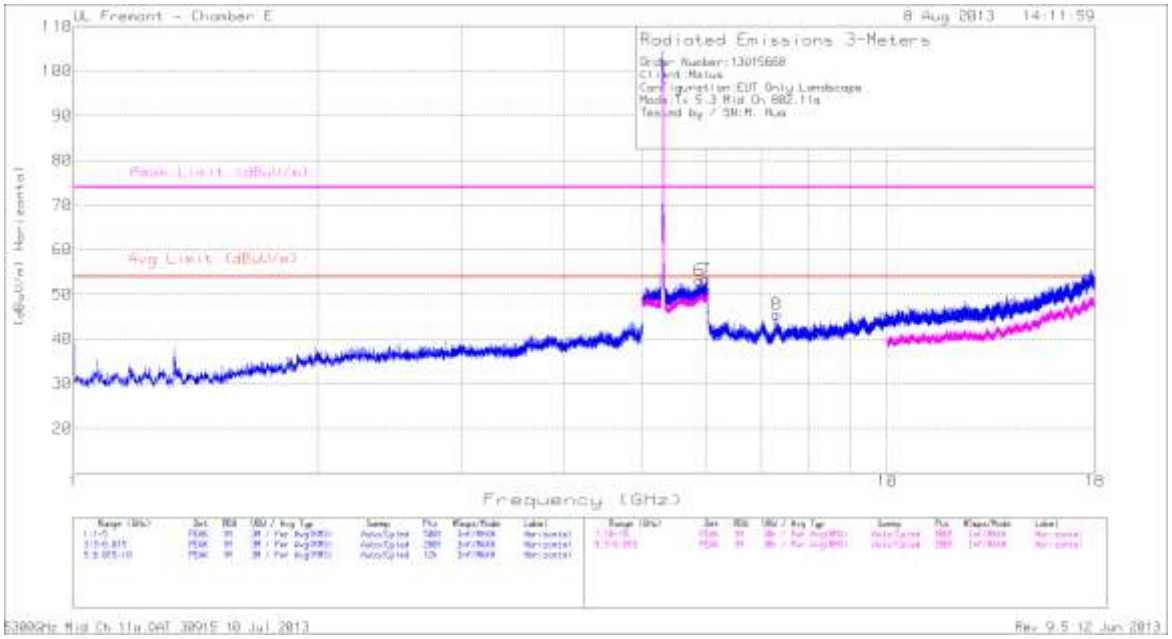
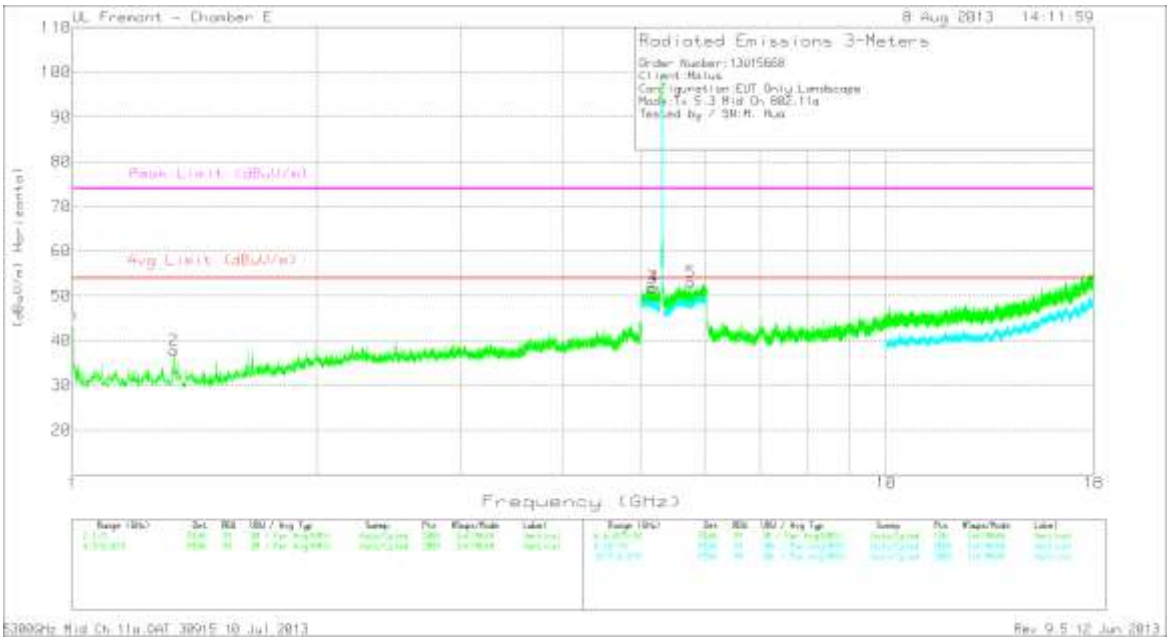
MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

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
1.0	53.93	PK	27.7	-35.6	46.03	53.97	-7.94	74	-27.97	0-360	201	V
1.332	44.03	PK	28.5	-34.7	37.83	53.97	-16.14	74	-36.17	0-360	100	V
*5.883	38.67	PK	35.5	-21	53.17	-	-	68.2	-15.03	0-360	201	H
*5.989	38.59	PK	35.7	-20.9	53.39	-	-	68.2	-14.81	0-360	201	H
5.149	38.88	PK	34.5	-21.6	51.78	-	-	74	-22.22	0-360	100	V
*5.188	38.91	PK	34.6	-21.6	51.91	-	-	68.2	-16.29	0-360	100	V
*5.757	39.46	PK	35.3	-21.7	53.06	-	-	68.2	-15.14	0-360	200	V
7.314	38.34	PK	35.9	-28.7	45.54	53.97	-8.43	74	-28.46	0-360	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.154	28.49	MAv1	34.5	-21.7	41.29	53.97	-12.68	-	-	316	156	V
5.19	28.39	MAv1	34.6	-21.6	41.39	53.97	-12.58	-	-	178	116	V

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

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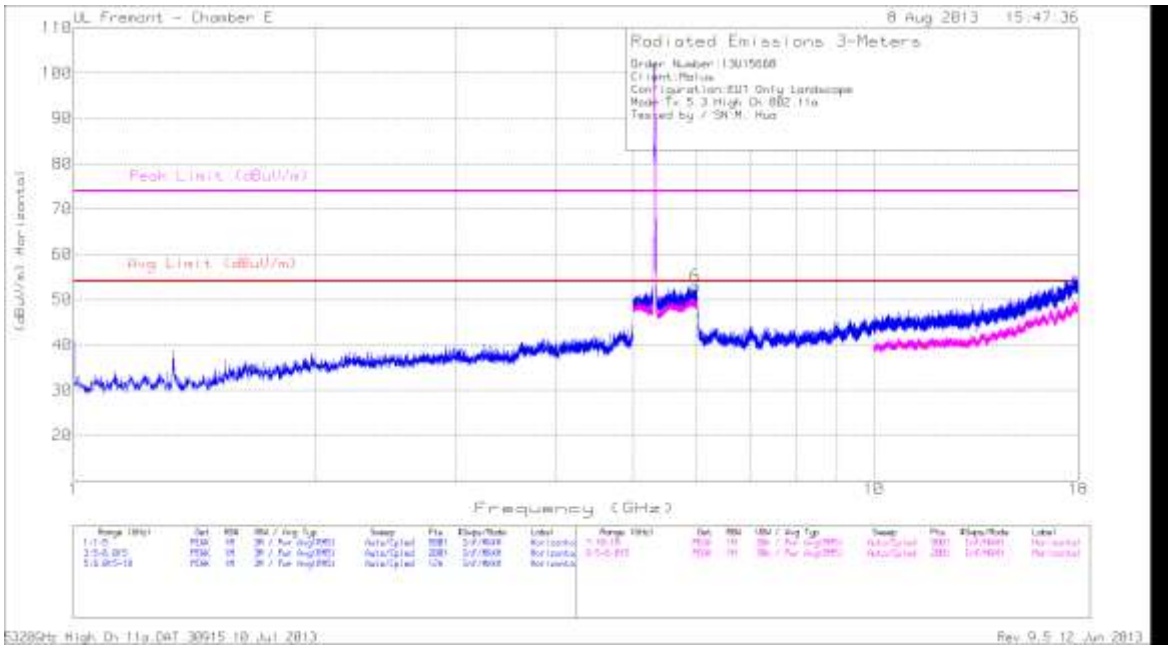
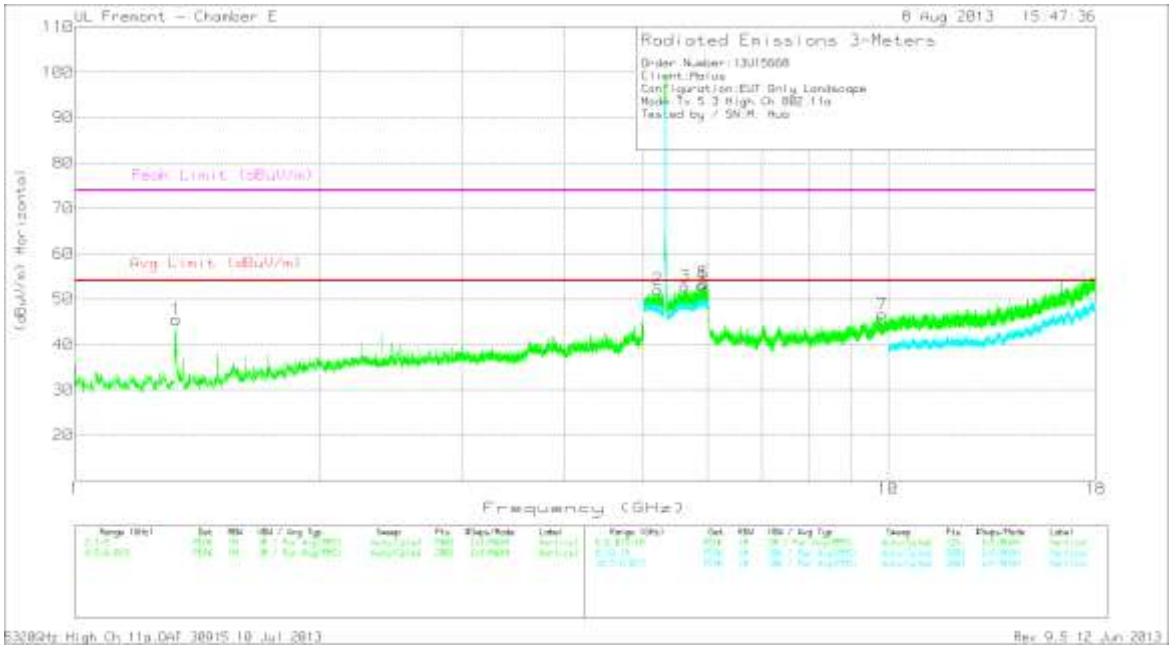
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

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
1.333	51.7	PK	28.5	-34.7	45.5	53.97	-8.47	74	-28.5	0-360	201	V
*5.99	38.13	PK	35.7	-20.9	52.93	-	-	68.2	-15.27	0-360	100	H
*5.211	39.09	PK	34.6	-21.6	52.09	-	-	68.2	-16.11	0-360	201	V
*5.629	39.06	PK	35.1	-21.4	52.76	-	-	68.2	-15.44	0-360	100	V
*5.908	38.22	PK	35.6	-20.8	53.02	-	-	68.2	-15.18	0-360	201	V
*5.935	38.76	PK	35.6	-21	53.36	-	-	68.2	-14.84	0-360	201	V
*9.831	35.5	PK	37.6	-26.5	46.6	-	-	68.2	-21.60	0-360	100	V

PK - Peak detector

*Not in Restricted Band

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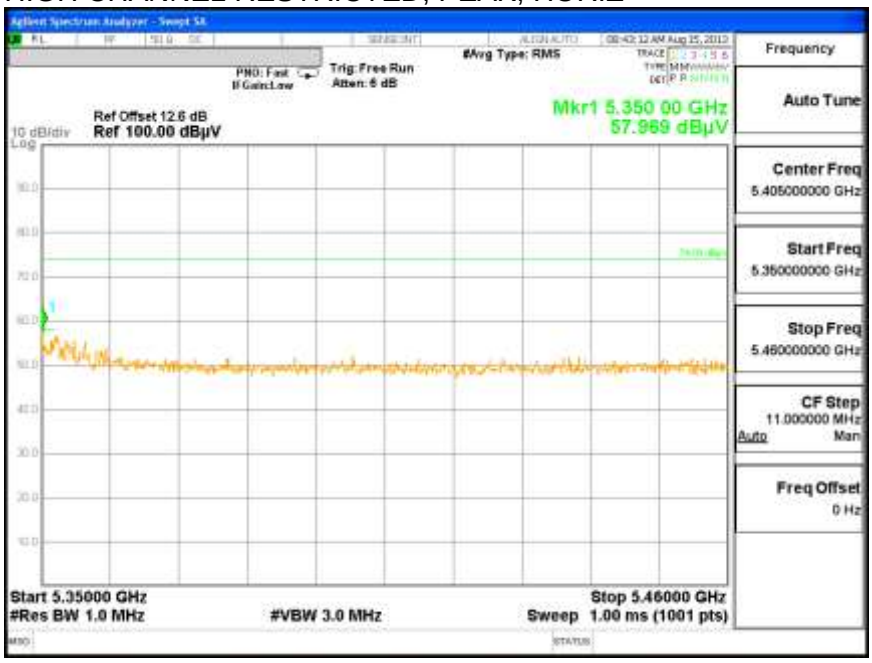
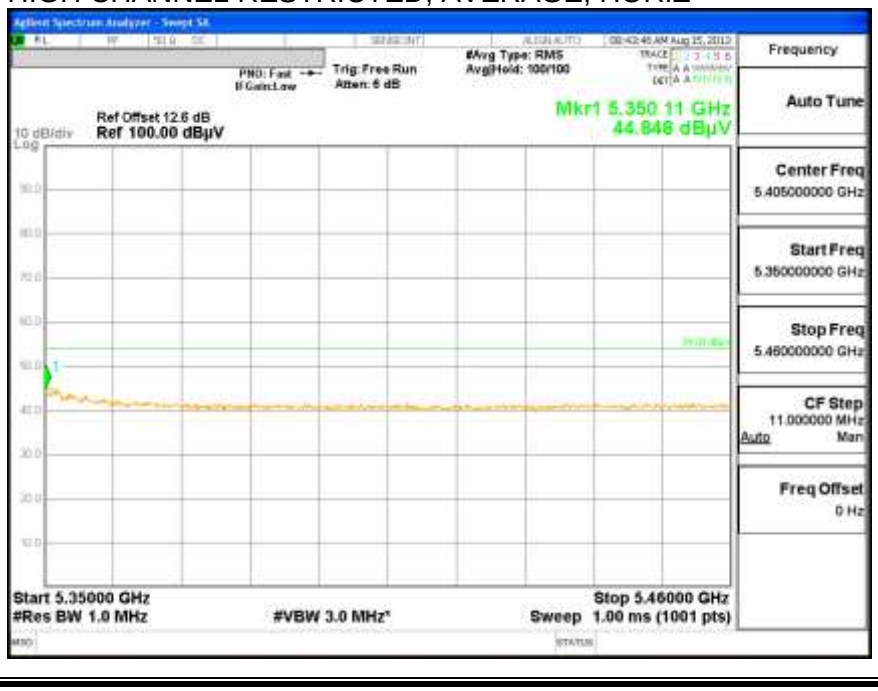
9.2.6. TX ABOVE 1 GHz 802.11n HT20 2TX CDD MODE IN THE 5.3 GHz BAND

RESTRICTED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL RESTRICTED, PEAK, HORIZ



HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ



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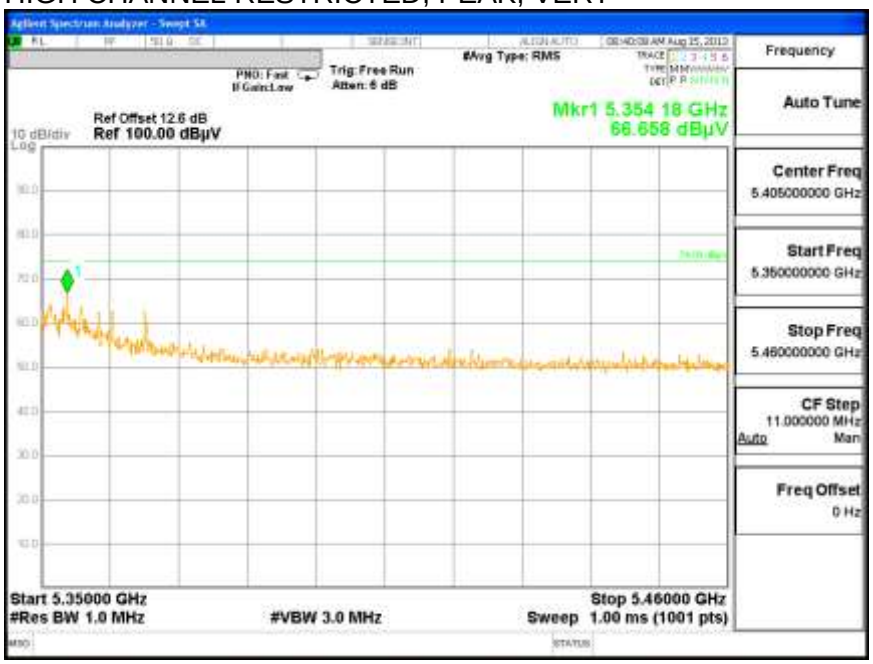
HIGH CHANNEL RESTRICTED, PEAK, VERT



HIGH CHANNEL RESTRICTED, AVERAGE, VERT

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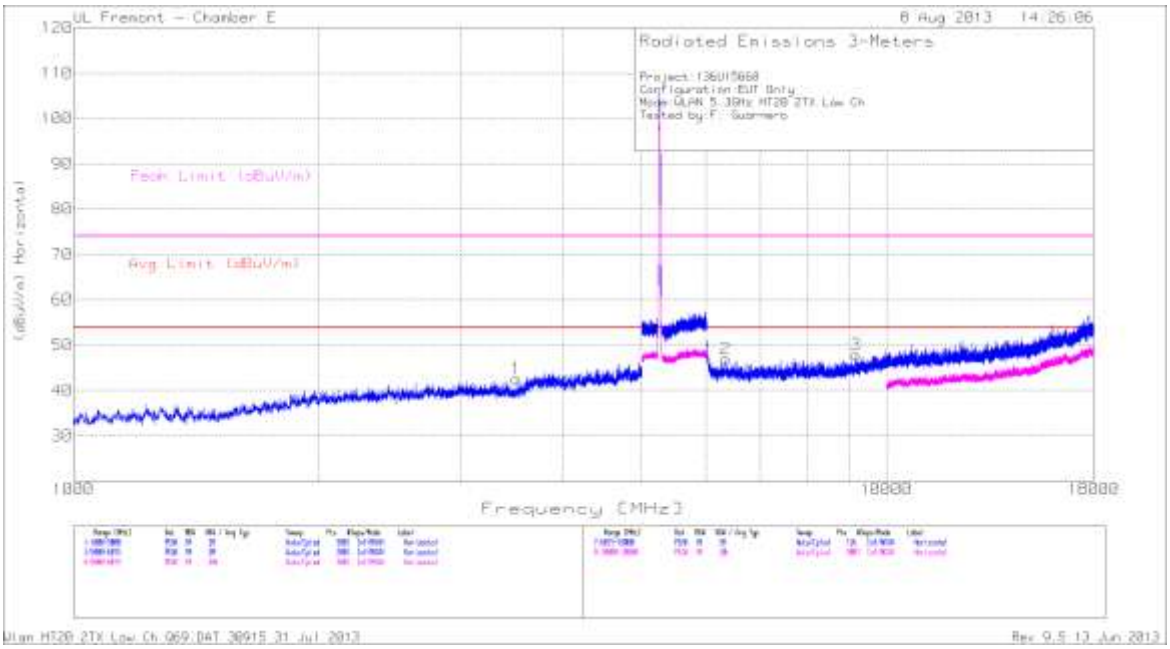
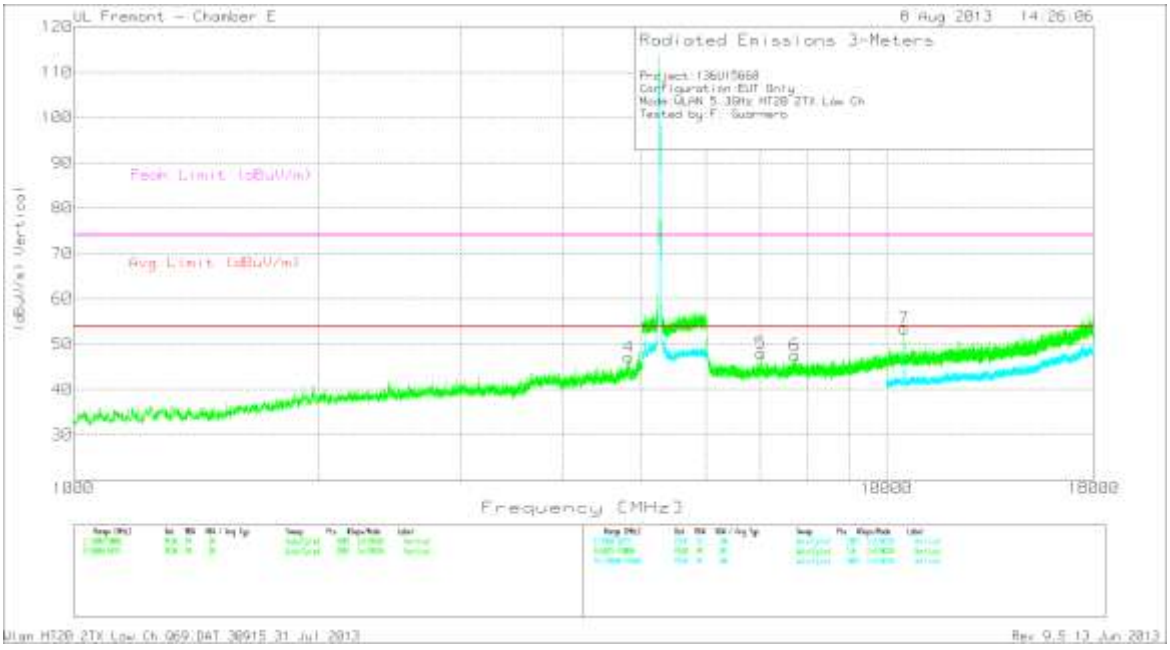
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*3.503	42.47	PK	33.1	-33	0	42.57	-	-	68.2	-25.63	199	H
2	*6.35	40.2	PK	35.9	-29.1	0	47	-	-	68.2	-21.2	100	H
3	9.174	37.85	PK	37	-27	0	47.85	53.97	-6.12	74	-26.15	100	H
4	4.822	43.43	PK	34.4	-30.7	0	47.13	53.97	-6.84	74	-26.87	200	V
5	7.014	41.06	PK	36	-29.1	0	47.96	53.97	-6.01	74	-26.04	200	V
6	7.724	40	PK	36.2	-28.7	0	47.5	53.97	-6.47	74	-26.5	100	V
7	*10.519	40.53	PK	38.4	-25.4	0	53.53	-	-	68.2	-14.67	200	V

PK - Peak detector

*Not in Restricted Band

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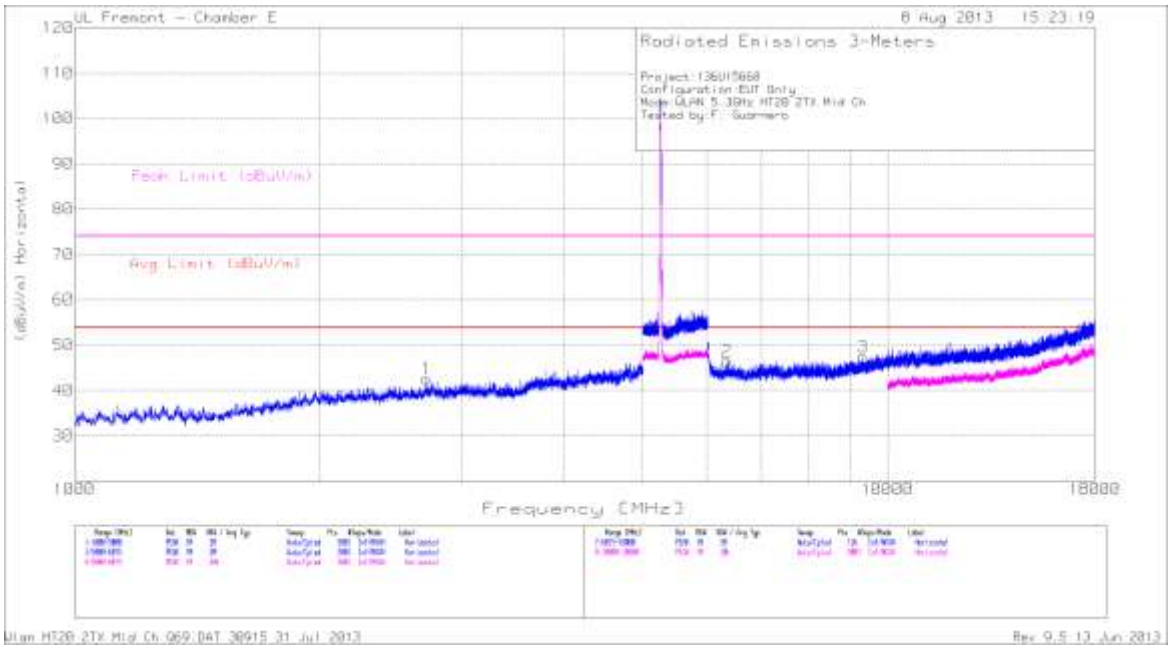
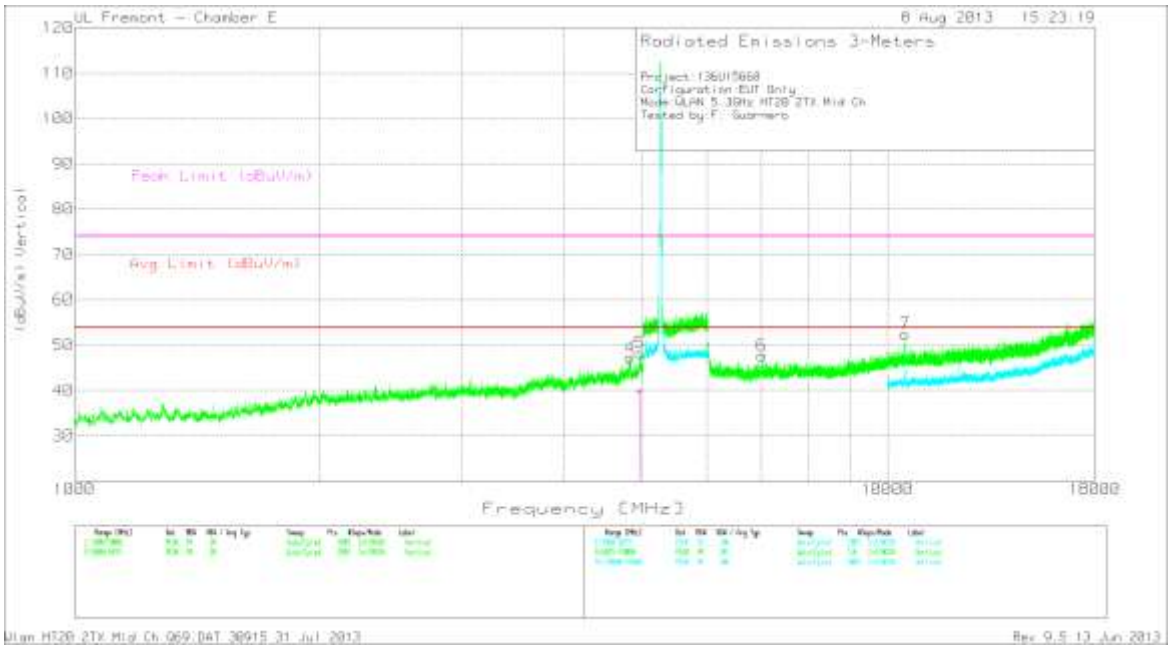
MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV /m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	2.71	42.44	PK	33.1	-33	0	42.54	53.97	-11.43	74	-31.46	213	H
4	4.823	43.58	PK	34.4	-30.7	0	47.28	53.97	-6.69	74	-26.72	200	V
5	4.962	43.63	PK	34.4	-30.8	0	47.23	-	-	74	-25.77	200	V

PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV /m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2	*6.35	39.64	PK	35.9	-29.1	0	46.44	-	-	68.2	-21.76	100	H
3	9.337	36.07	PK	37.2	-25.9	0	47.37	53.97	-6.6	74	-26.63	100	H
6	*7.014	40.83	PK	36	-29.1	0	47.73	-	-	68.2	-20.83	199	V
7	*10.517	39.46	PK	38.4	-25.4	0	52.46	-	-	68.2	-15.74	199	V

PK - Peak detector

*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF 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
4.961	36.06	RMS	34.4	-30.8	.1	39.76	53.97	-14.21	-	-	287	220	V

RMS - RMS detection

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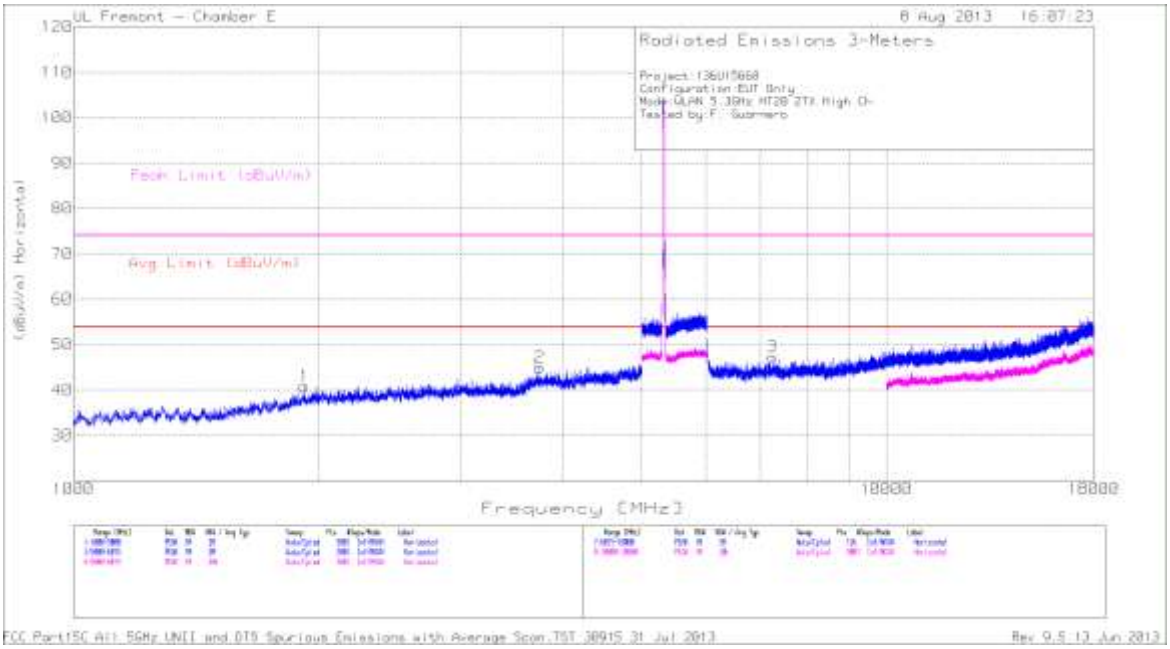
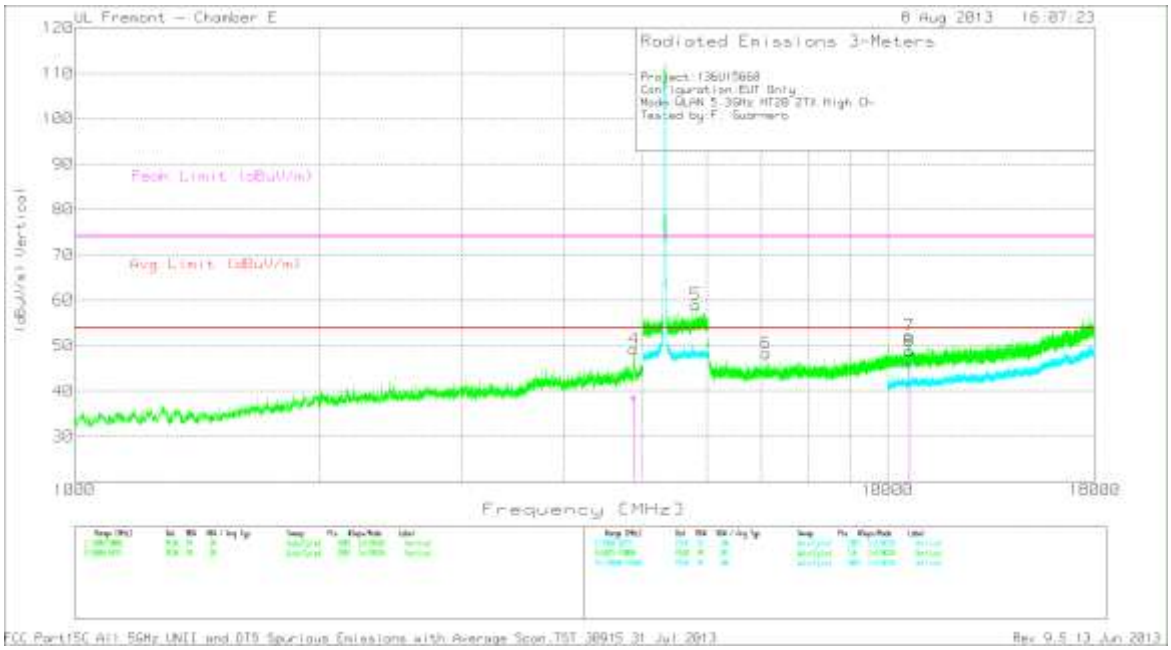
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*1.923	42.79	PK	31.6	-33.6	0	40.79	-	-	68.2	-27.22	100	H
2	3.743	43.98	PK	33.7	-32.7	0	44.98	53.97	-8.99	74	-29.02	200	H
3	*7.239	40.7	PK	36	-29.4	0	47.3	-	-	68.2	-20.7	100	H
4	4.878	45.81	PK	34.4	-31	0	49.21	-	-	74	-24.79	199	V
5	*5.816	44.87	PK	35.5	-21.4	0	58.97	-	-	68.2	-9.23	199	V
6	*7.094	41.72	PK	36	-29.4	0	48.32	-	-	68.2	-19.88	199	V
7	10.641	39.44	PK	38.5	-25.8	0	52.14	-	-	74	-21.86	100	V
8	10.643	35.12	PK (VB)	38.5	-25.8	0	47.82	53.97	-6.15	-	-	199	V

PK - Peak detector

*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF 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
4.877	35.04	RMS	34.4	-31	.1	38.54	53.97	-15.43	-	-	0	193	V
10.639	33.06	RMS	38.5	-25.8	.1	45.86	53.97	-8.11	-	-	196	167	V

RMS - RMS detection

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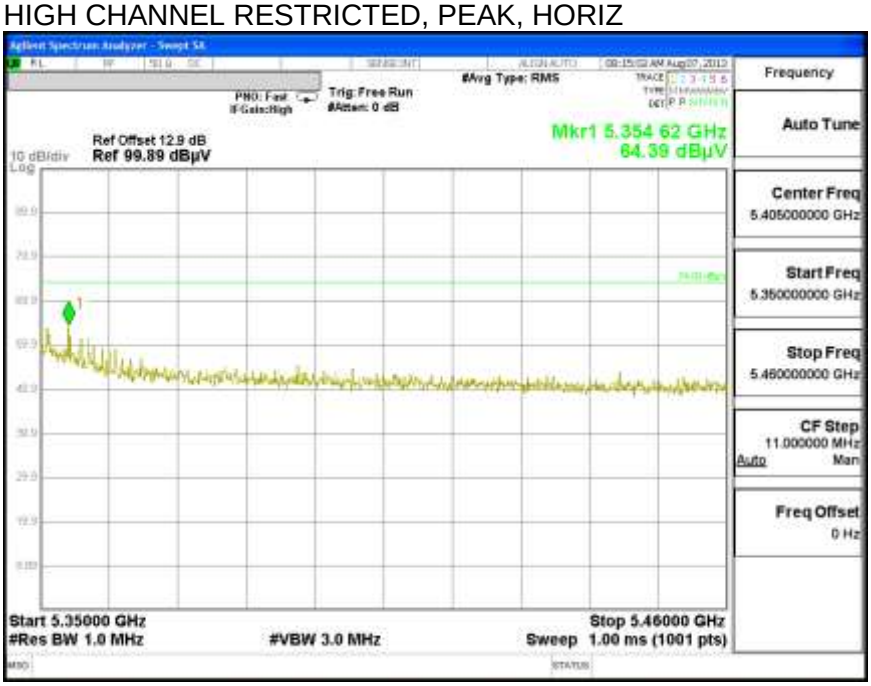
9.2.7. TX ABOVE 1 GHz 802.11n HT40 SISO MODE IN THE 5.3 GHz BAND

ESTRICTED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL RESTRICTED, PEAK, HORIZ



HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ

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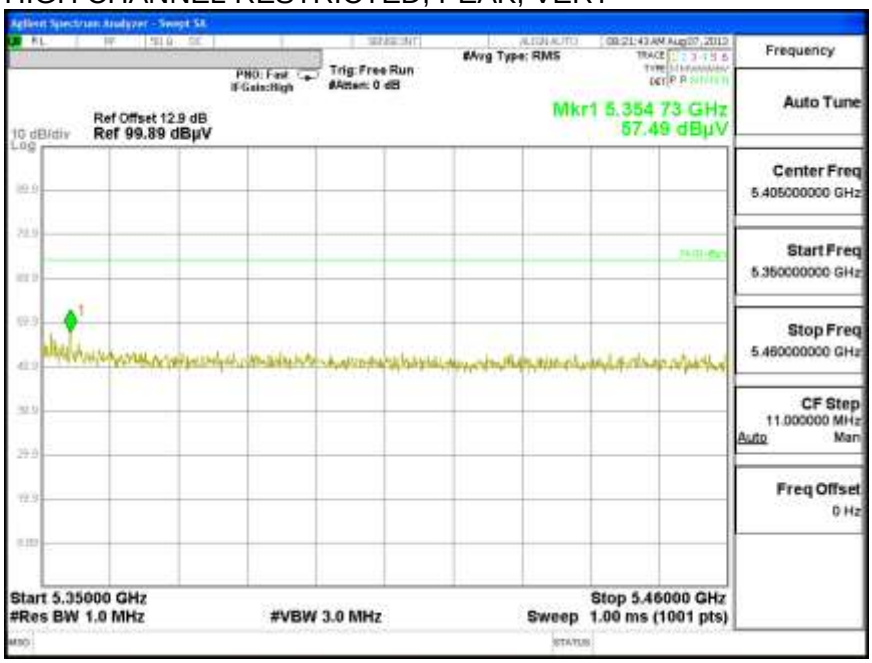
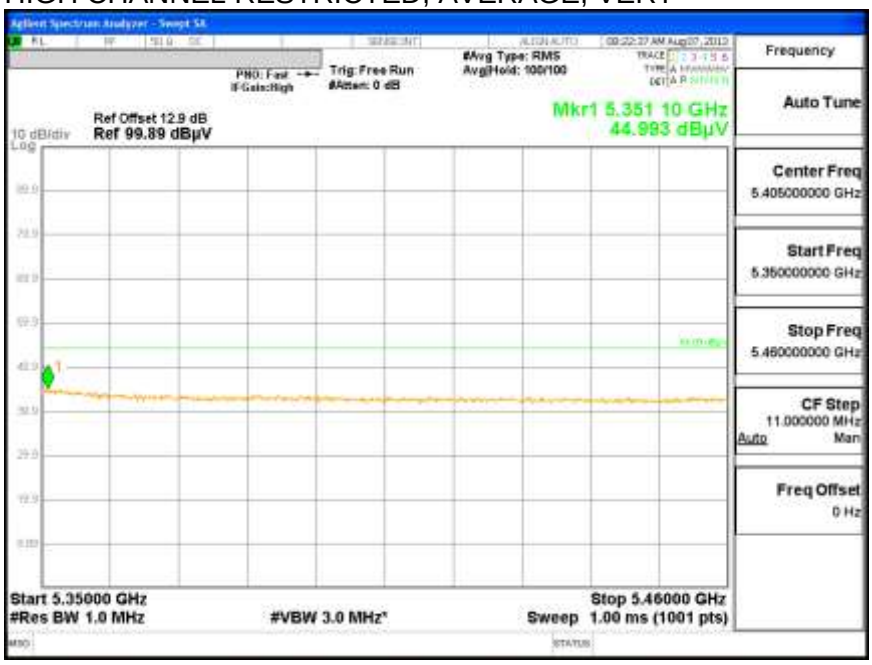
HIGH CHANNEL RESTRICTED, PEAK, VERT



HIGH CHANNEL RESTRICTED, AVERAGE, VERT



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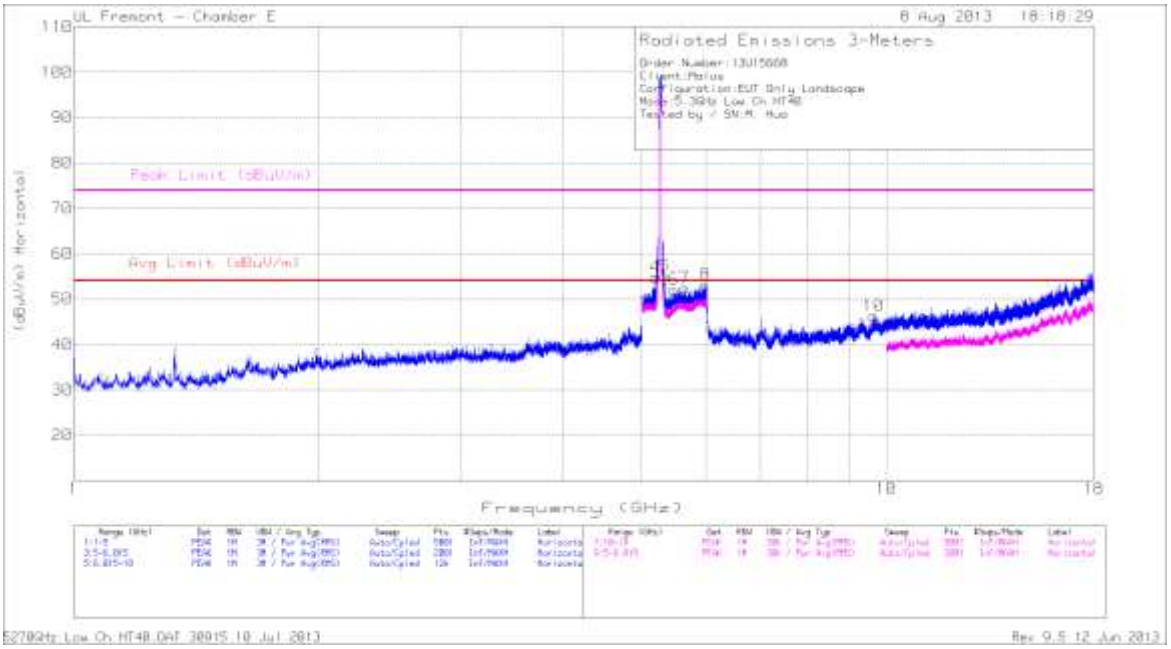
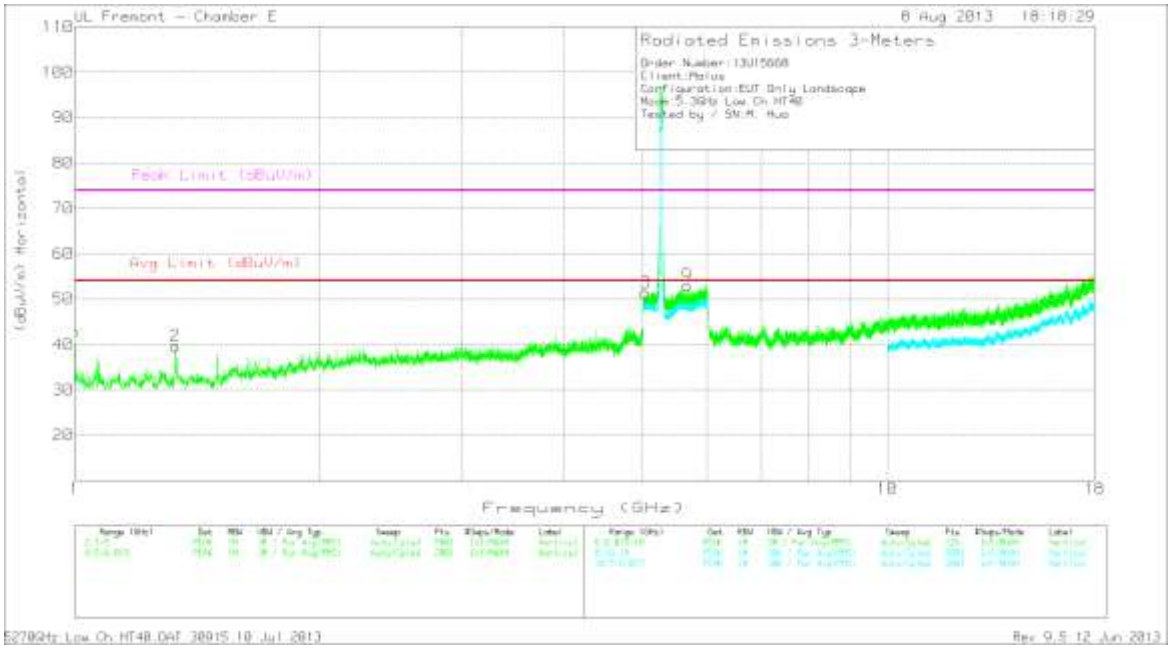
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

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
1.0	50.75	PK	27.7	-35.6	42.85	53.97	-11.12	74	-31.15	0-360	201	V
1.331	45.77	PK	28.5	-34.7	39.57	53.97	-14.4	74	-34.43	0-360	201	V
*5.196	41.87	PK	34.6	-21.6	54.87	-	-	68.2	-13.33	0-360	100	H
*5.337	42.43	PK	34.7	-22.1	55.03	-	-	68.2	-12.90	0-360	201	H
*5.649	38.81	PK	35.1	-21.5	52.41	-	-	68.2	-15.79	0-360	100	H
*5.991	38.37	PK	35.7	-20.9	53.17	-	-	68.2	-15.03	0-360	100	H
5.043	39.17	PK	34.4	-22.2	51.37	-	-	74	-22.63	0-360	100	V
*5.67	39.36	PK	35.1	-21.5	52.96	-	-	68.2	-15.24	0-360	201	V
*9.647	35.14	PK	37.3	-26.1	46.34	-	-	68.2	-21.86	0-360	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.038	28.56	MAv1	34.4	-22.2	40.76	53.97	-13.21	-	-	3	339	V

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

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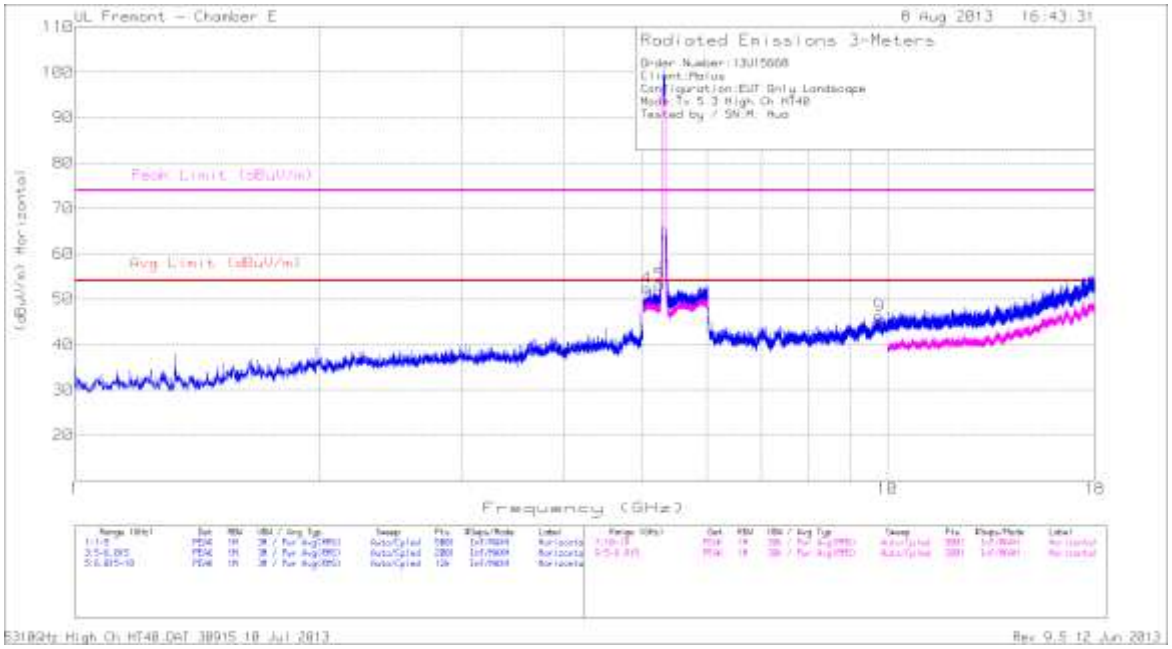
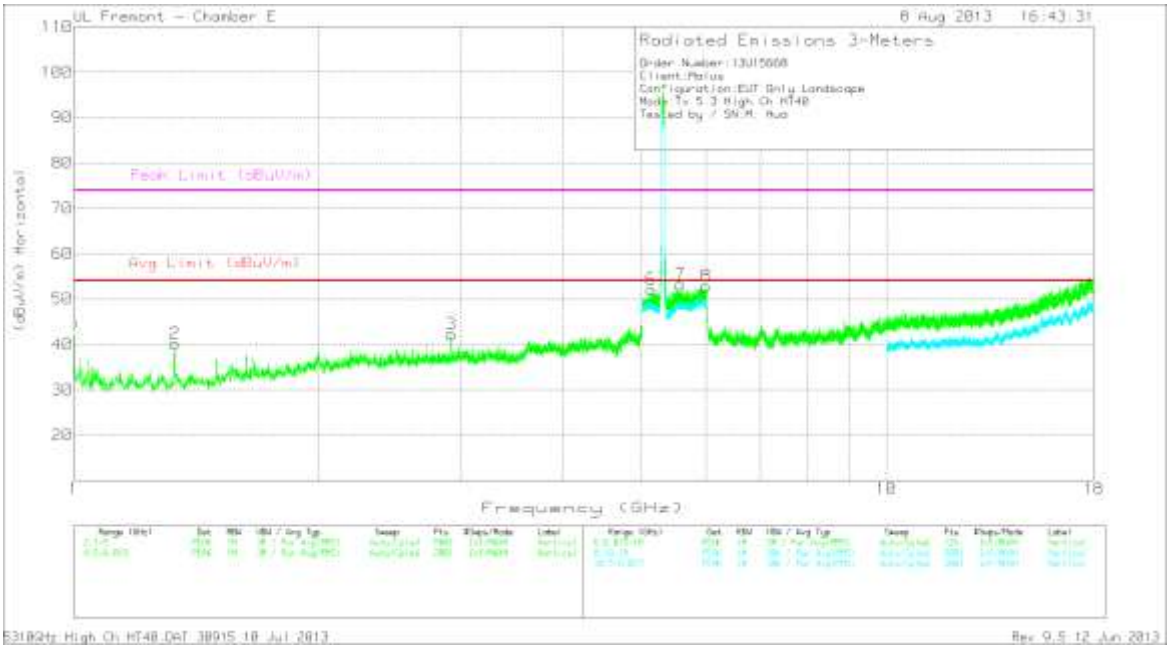
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

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
1.0	52.63	PK	27.7	-35.6	44.73	53.97	-9.24	74	-29.27	0-360	201	V
1.333	46.38	PK	28.5	-34.7	40.18	53.97	-13.79	74	-33.82	0-360	201	V
*2.916	42.76	PK	33	-33.5	42.26	-	-	68.2	-25.94	0-360	100	V
5.061	40.07	PK	34.4	-22.1	52.37	-	-	74	-21.63	0-360	201	H
*5.251	40.15	PK	34.7	-21.6	53.25	-	-	68.2	-14.95	0-360	100	H
5.137	39.31	PK	34.5	-21.7	52.11	-	-	74	-21.89	0-360	100	V
*5.582	39.62	PK	35	-21.4	53.22	-	-	68.2	-14.98	0-360	100	V
*9.78	34.72	PK	37.5	-26	46.22	-	-	68.2	-21.98	0-360	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.06	28.52	MAv1	34.4	-22.1	40.82	53.97	-13.15	-	-	257	224	H
5.145	28.5	MAv1	34.5	-21.6	41.4	53.97	-12.57	-	-	219	396	V

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

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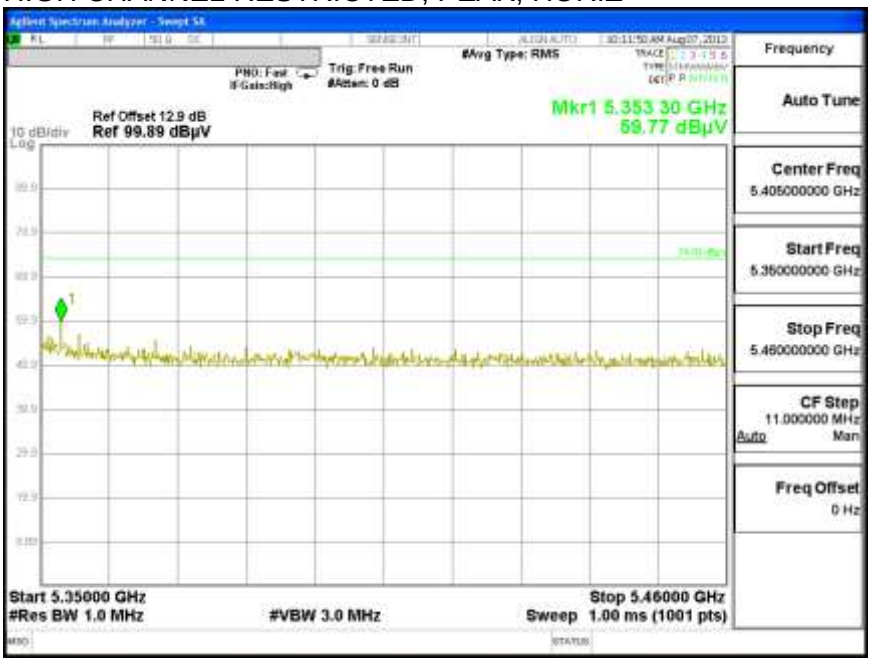
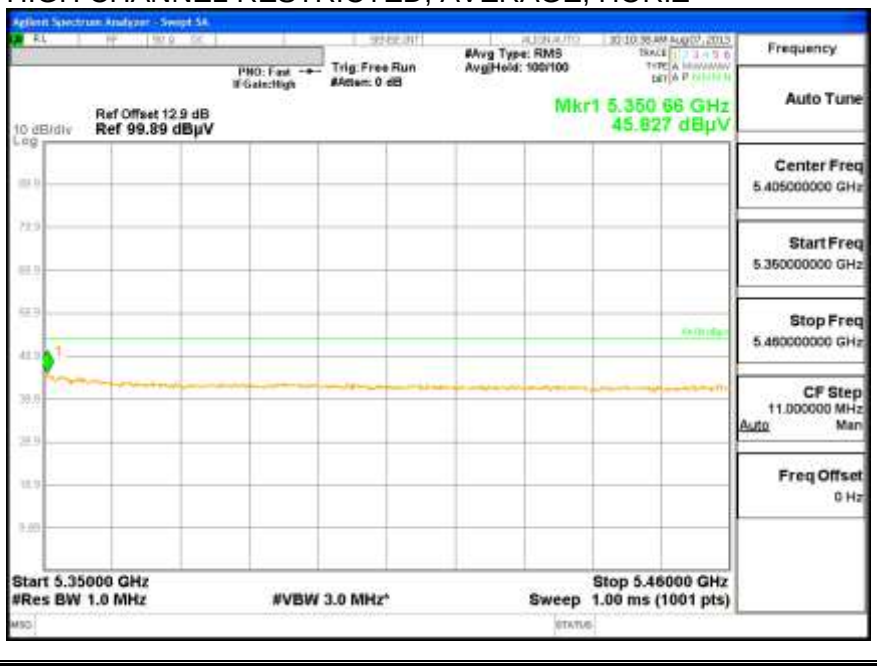
9.2.8. TX ABOVE 1 GHz 802.11n HT40 2TX CDD MODE IN THE 5.3 GHz BAND

ESTRICTED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL RESTRICTED, PEAK, HORIZ



HIGH CHANNEL RESTRICTED, AVERAGE, HORIZ



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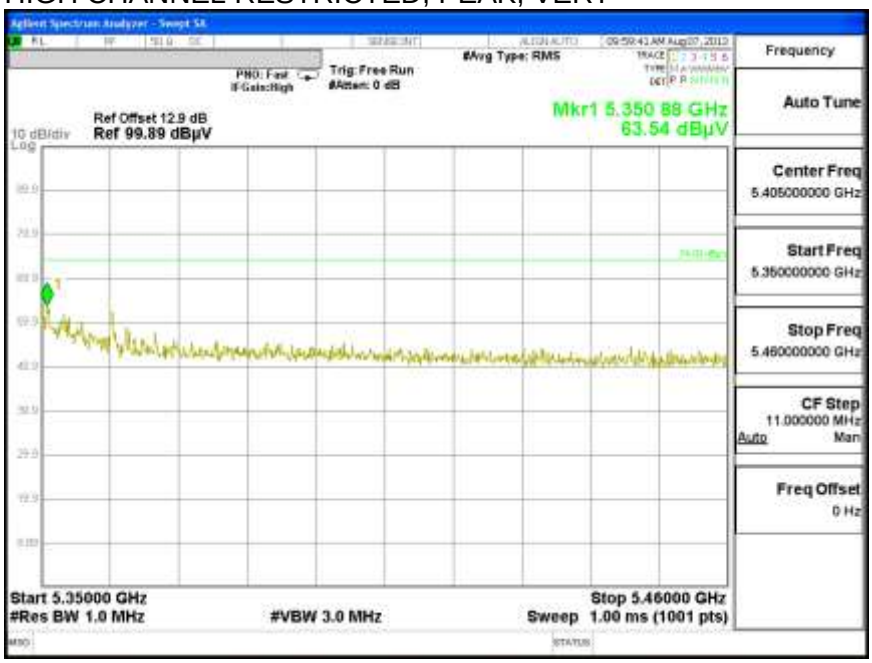
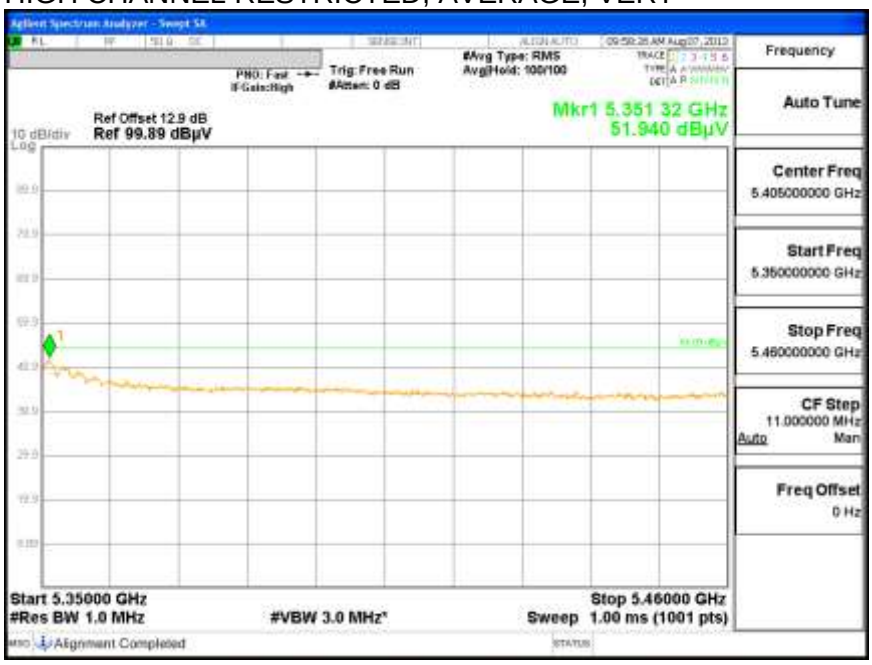
HIGH CHANNEL RESTRICTED, PEAK, VERT



HIGH CHANNEL RESTRICTED, AVERAGE, VERT



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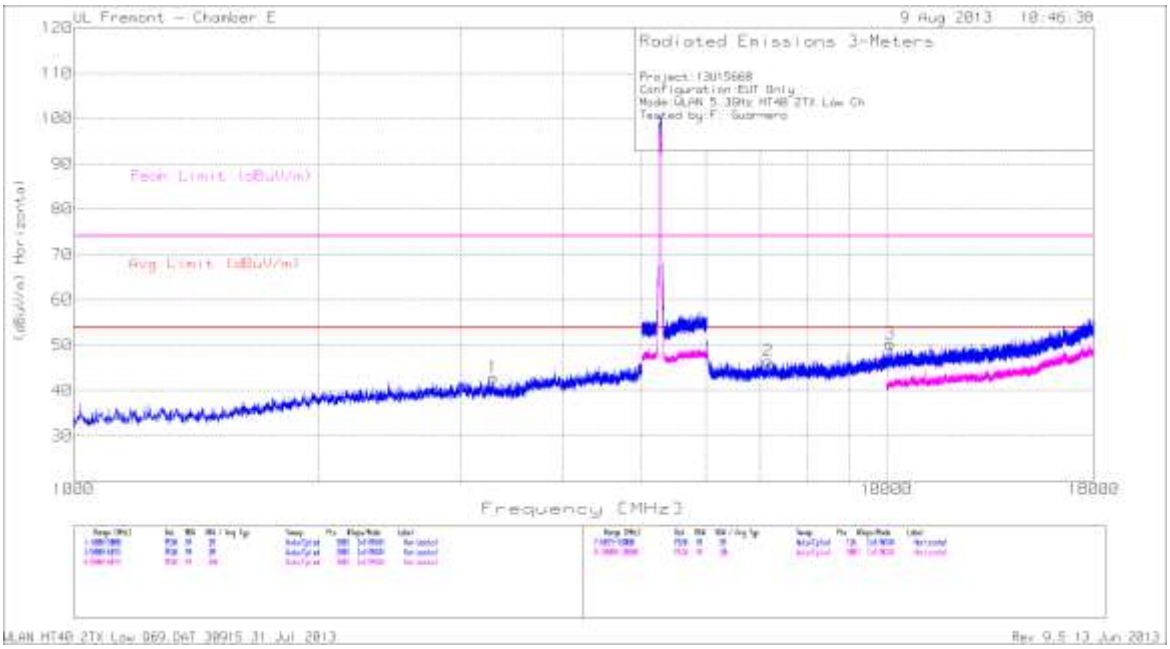
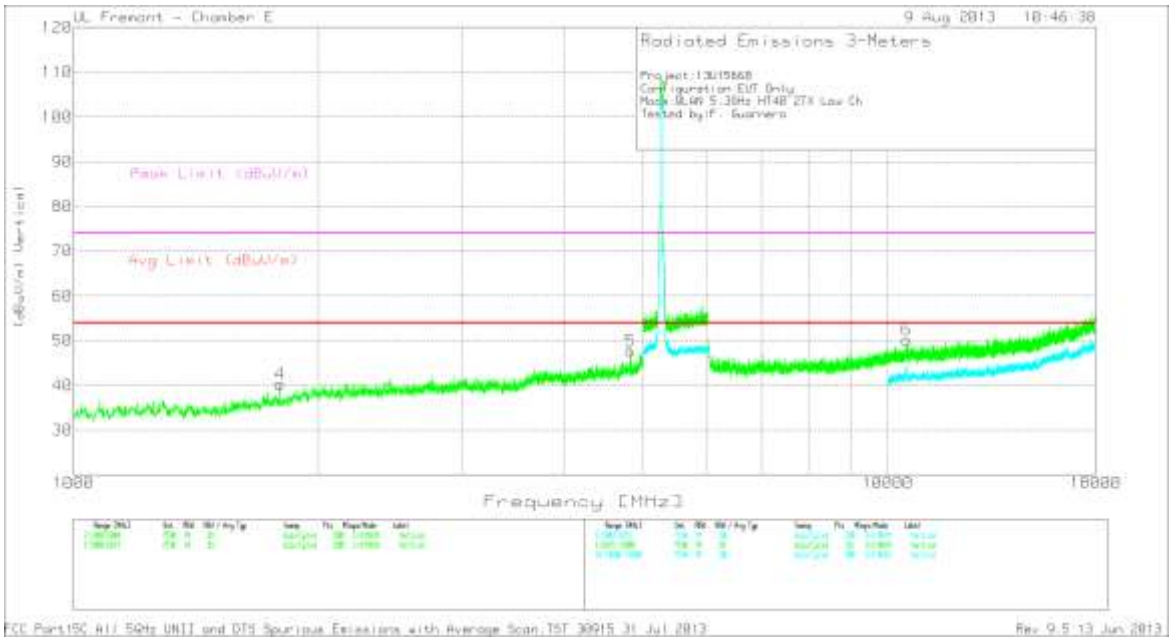
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*3.282	41.94	PK	33.4	-32.5	0	42.84	-	-	68.2	-25.36	100	H
2	*7.162	40.13	PK	36	-29.6	0	46.53	-	-	68.2	-21.67	100	H
3	*10.107	37.53	PK	38.2	-25.4	0	50.33	-	-	68.2	-17.87	100	H

PK - Peak detector

*Not in Restricted Band

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
5	4.832	44.07	PK	34.4	-30.8	0	47.67	53.97	-6.3	74	-26.33	199	V
4	*1.793	44.17	PK	30.8	-34.7	0	40.27	-	-	68.2	-27.93	100	V
6	*10.539	37.48	PK	38.4	-25.6	0	50.28	-	-	68.2	-17.92	100	V

PK - Peak detector

*Not in Restricted Band

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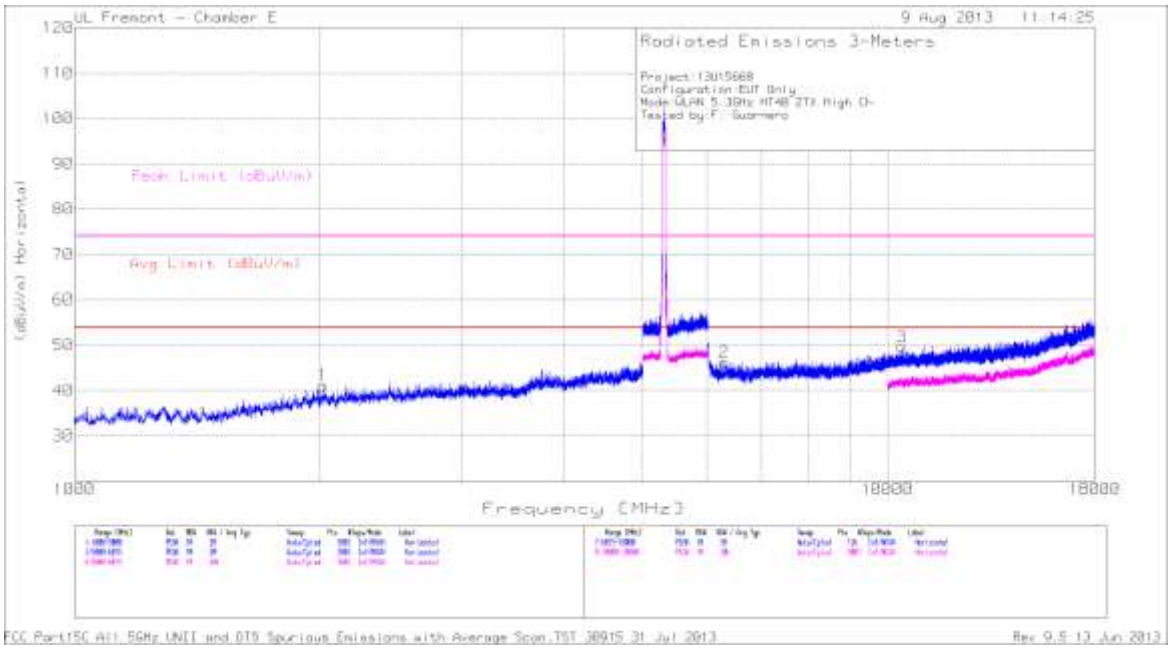
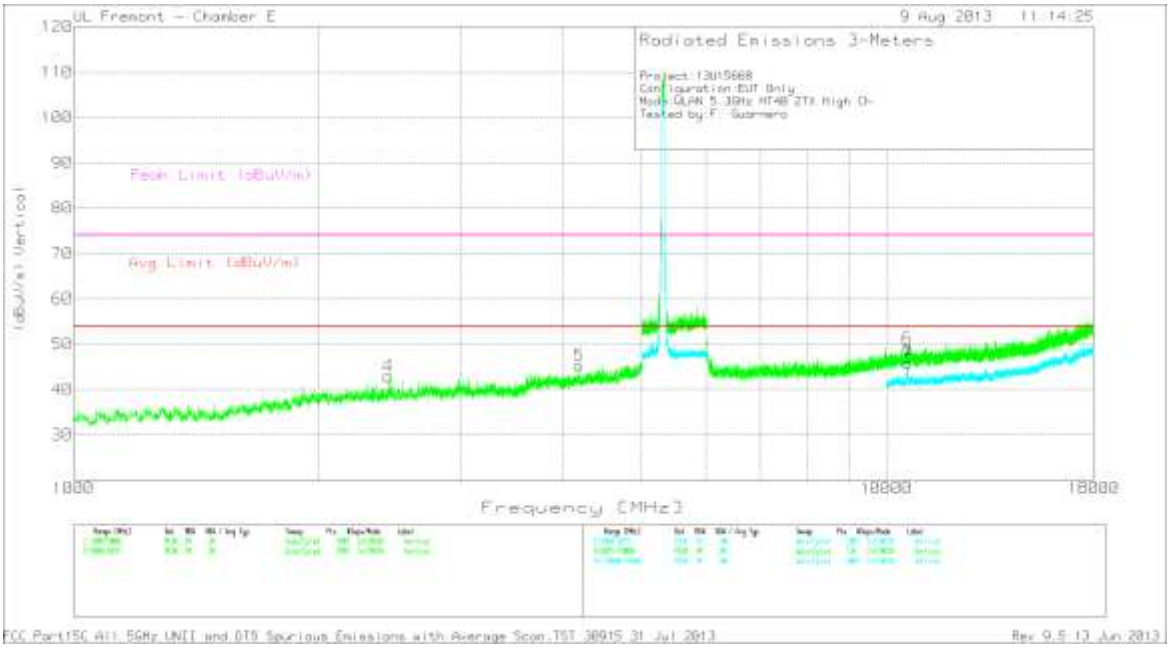
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*2.022	42.8	PK	32.1	-33.8	0	41.1	-	-	68.2	-27.1	199	H
2	*6.305	39.67	PK	35.9	-29.4	0	46.17	-	-	68.2	-22.03	199	H
3	*10.42	36.42	PK	38.4	-25.2	0	49.62	-	-	68.2	-18.58	100	H

PK - Peak detector

*Not in Restricted Band

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	*2.439	43.72	PK	32.6	-33.4	0	42.92	-	-	68.2	-25.28	200	V
5	4.189	43.45	PK	34	-32.2	0	45.25	53.97	-8.72	74	-28.75	100	V
6	10.622	36.27	PK	38.4	-25.7	0	48.97	-	-	74	-25.03	100	V
7	10.621	33.14	PK (VB)	38.4	-25.7	0	45.84	53.97	-8.13	-	-	100	V

PK - Peak detector

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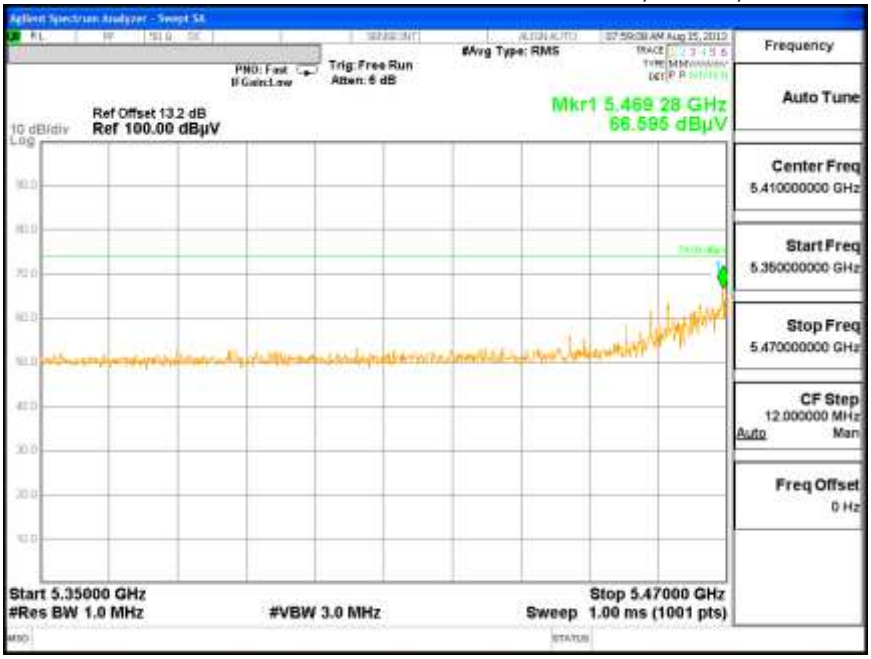
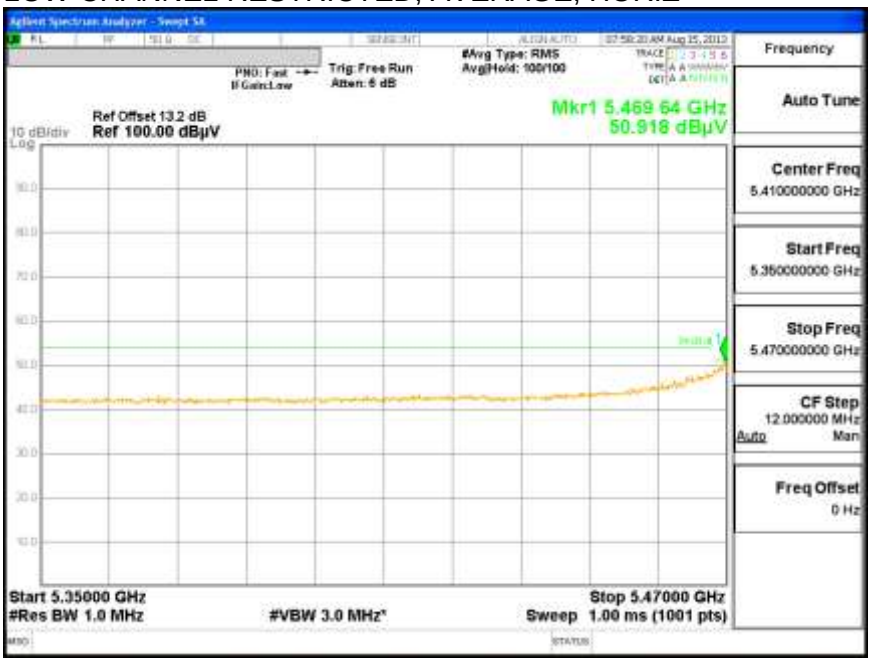
9.2.9. TX ABOVE 1 GHz 802.11a SISO MODE IN THE 5.6 GHz BAND

RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED & AUTHORIZED, PEAK, HORIZ



LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



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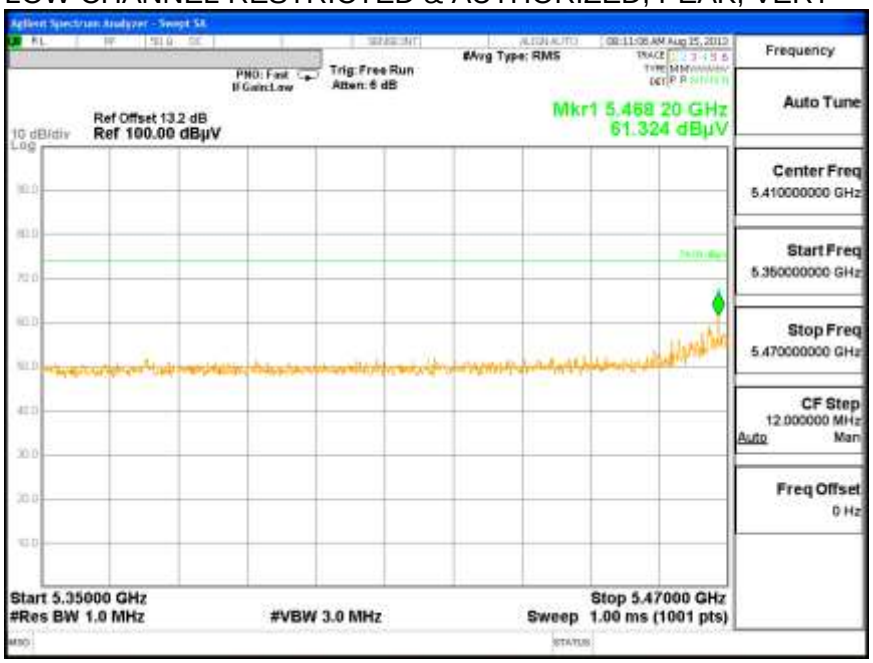
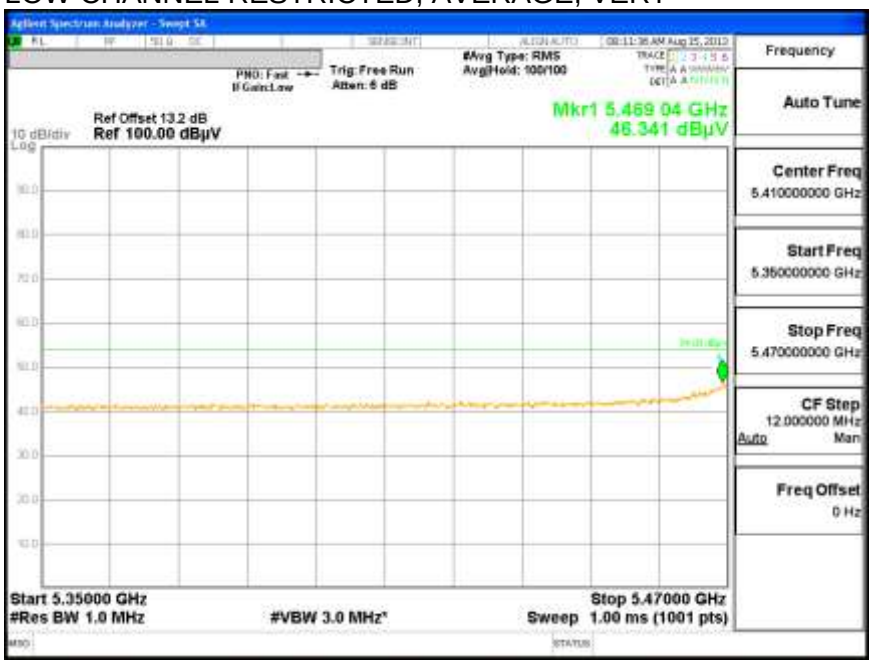
LOW CHANNEL RESTRICTED & AUTHORIZED, PEAK, VERT



LOW CHANNEL RESTRICTED, AVERAGE, VERT



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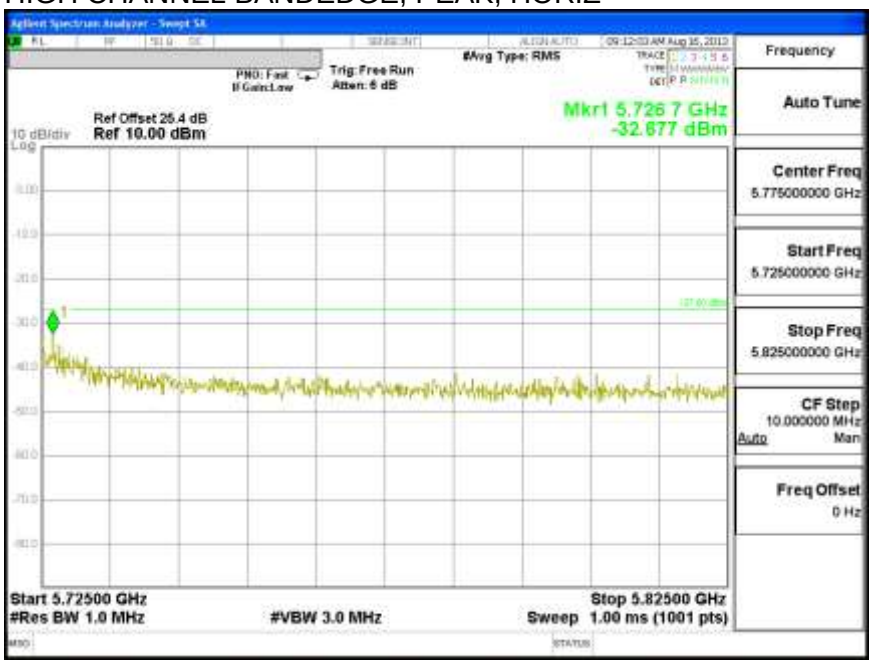
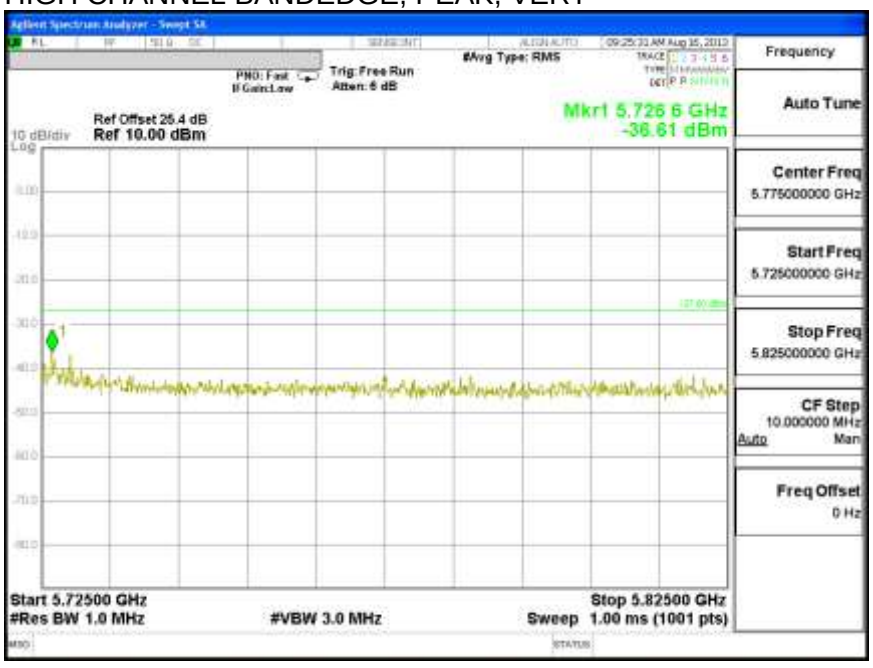
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT



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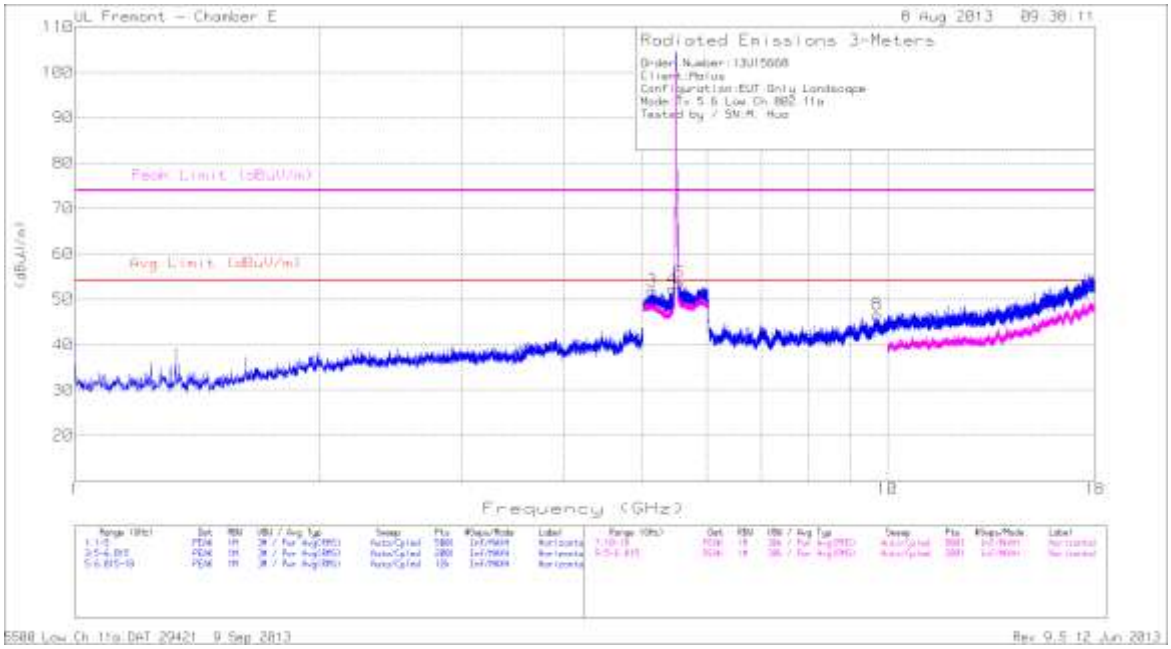
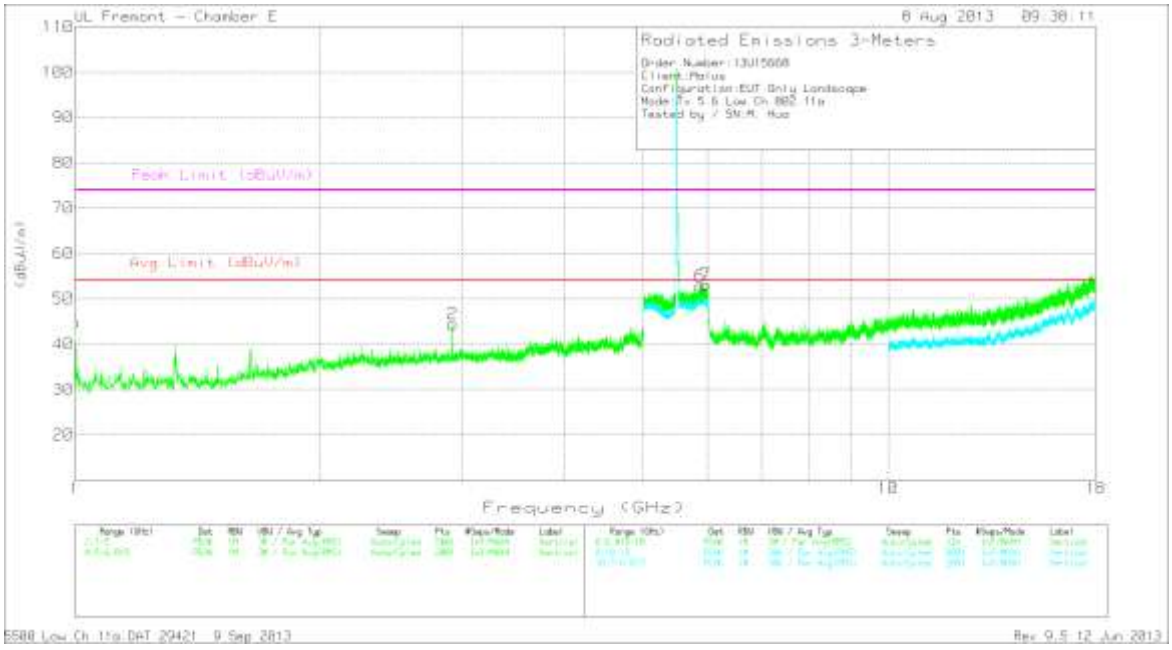
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



DATA

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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
1.001	52.73	PK	27.7	-35.6	44.83	53.97	-9.14	74	-29.17	0-360	200	V
*2.916	45	PK	33	-33.5	44.5	-	-	68.2	-23.7	0-360	200	V
5.139	38.93	PK	34.5	-21.6	51.83	-	-	74	-22.17	0-360	100	H
5.443	39.39	PK	34.8	-21.9	52.29	-	-	74	-21.71	0-360	201	H
*5.545	40.03	PK	34.9	-21.3	53.63	-	-	68.2	-14.57	0-360	201	H
*5.873	38.41	PK	35.5	-21.1	52.81	-	-	68.2	-15.39	0-360	100	V
*5.968	38.31	PK	35.6	-20.9	53.01	-	-	68.2	-15.19	0-360	200	V
*9.722	34.81	PK	37.4	-25.6	46.61	-	-	68.2	-21.59	0-360	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.137	28.33	MAv1	34.5	-21.7	41.13	53.97	-12.84	-	-	207	389	H
5.441	28.84	MAv1	34.8	-21.9	41.74	53.97	-12.23	-	-	169	262	H

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

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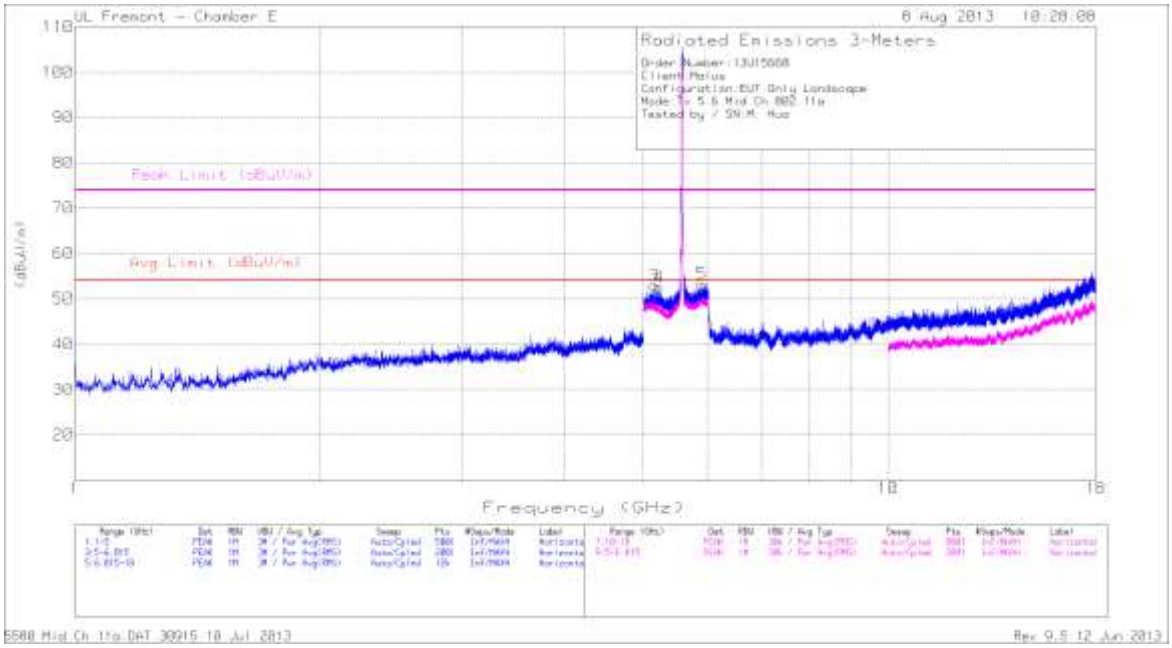
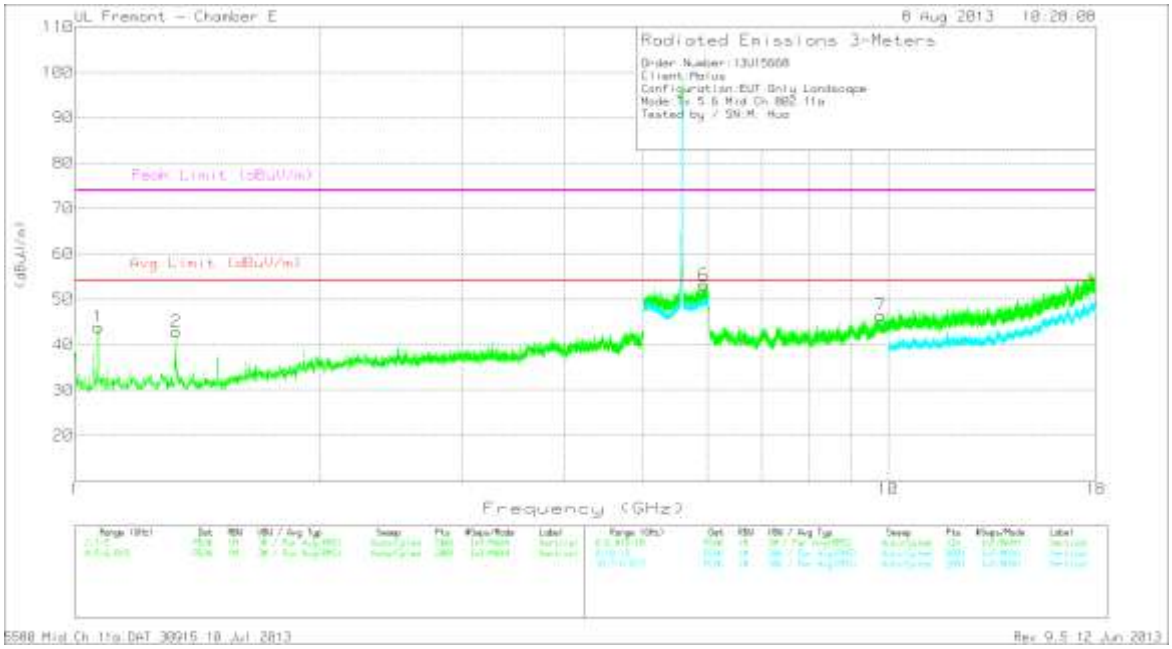
MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

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
1.069	51.38	PK	27.9	-35.4	43.88	53.97	-10.09	74	-30.12	0-360	200	V
1.333	49.07	PK	28.5	-34.7	42.87	53.97	-11.1	74	-31.13	0-360	200	V
*5.159	39.95	PK	34.6	-21.6	52.95	-	-	68.2	-15.25	0-360	100	H
5.037	39.29	PK	34.7	-21.5	52.49	-	-	74	-21.51	0-360	100	H
*5.901	38.75	PK	35.5	-21	53.25	-	-	68.2	-14.95	0-360	201	H
*5.936	38.54	PK	35.6	-21	53.14	-	-	68.2	-15.06	0-360	100	V
*9.791	34.99	PK	37.5	-26	46.49	-	-	68.2	-21.71	0-360	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.038	28.56	MAv1	34.4	-22.2	40.76	53.97	-13.21	-	-	3	339	V

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

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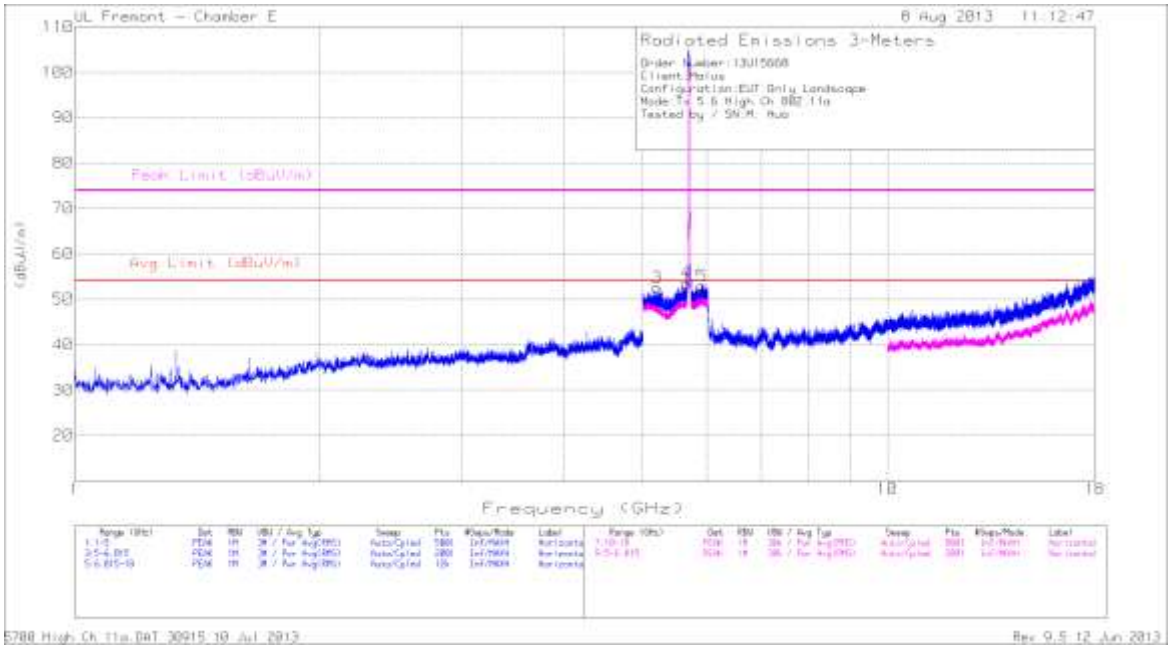
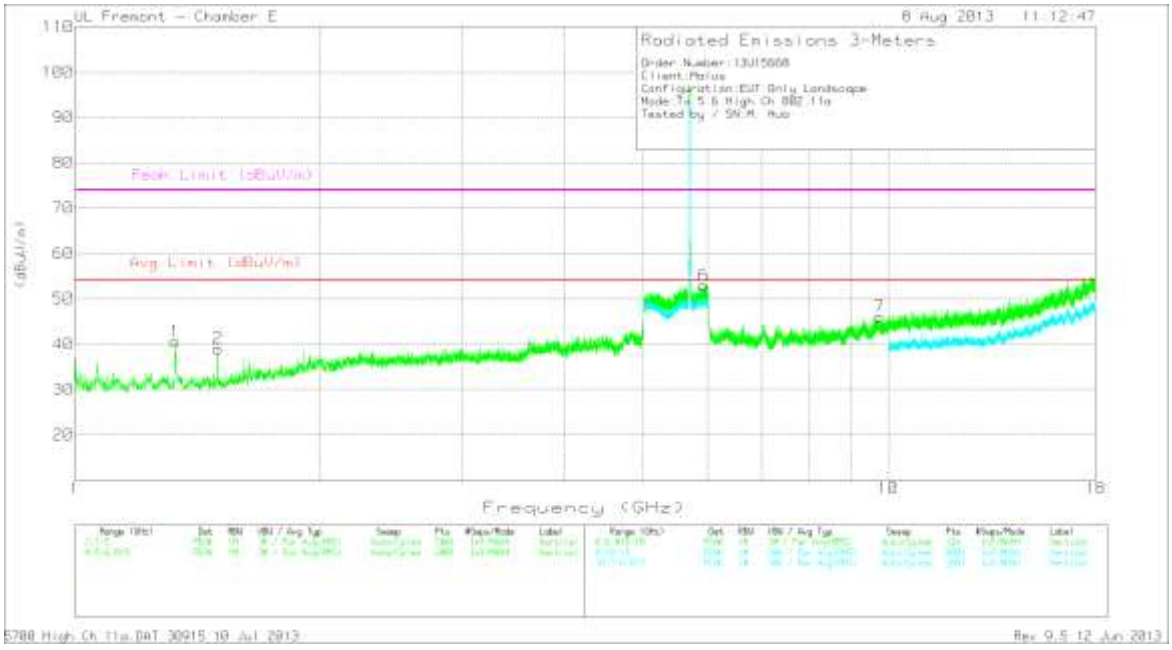
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

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
1.33	46.8	PK	28.5	-34.7	40.6	53.97	-13.37	74	-33.4	0-360	201	V
1.501	46.15	PK	28.2	-35.3	39.05	53.97	-14.92	74	-34.95	0-360	201	V
*5.208	39.54	PK	34.6	-21.6	52.54	-	-	68.2	-15.66	0-360	201	H
*5.662	40.05	PK	35.1	-21.5	53.65	-	-	68.2	-14.55	0-360	201	H
*5.918	38.23	PK	35.6	-20.9	52.93	-	-	68.2	-15.27	0-360	201	H
*5.938	38.35	PK	35.6	-21	52.95	-	-	68.2	-15.25	0-360	201	V
*9.764	34.57	PK	37.4	-25.9	46.07	-	-	68.2	-22.13	0-360	201	V

PK - Peak detector

*Not in Restricted Band

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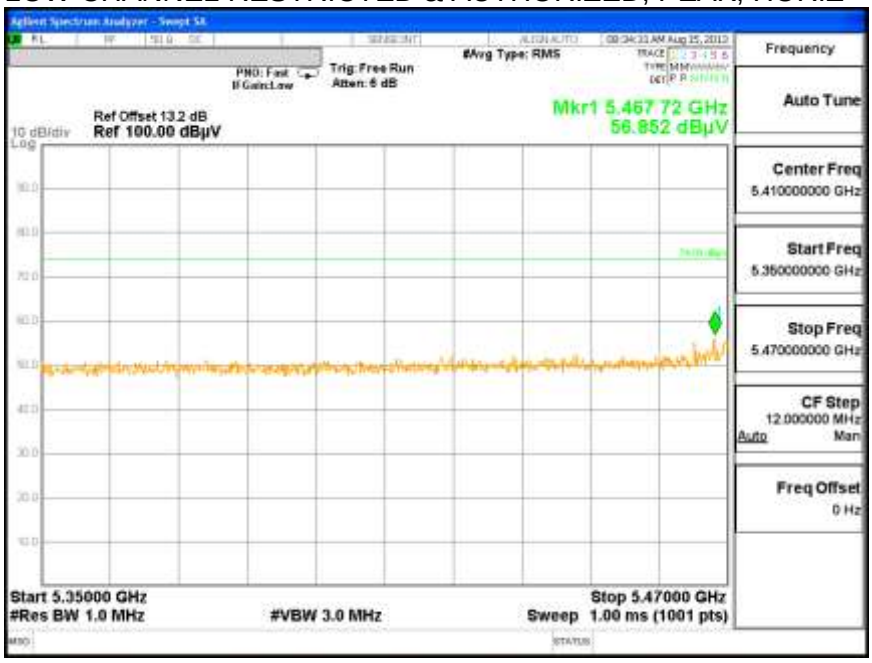
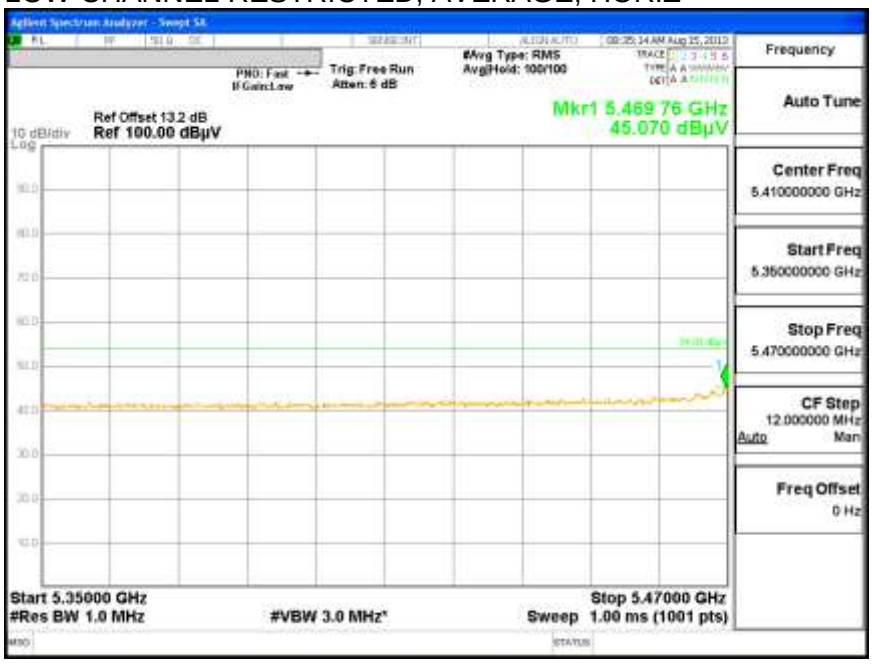
9.2.10. TX ABOVE 1 GHz 802.11n HT20 2TX CDD MODE IN THE 5.6 GHz BAND

RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED & AUTHORIZED, PEAK, HORIZ



LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



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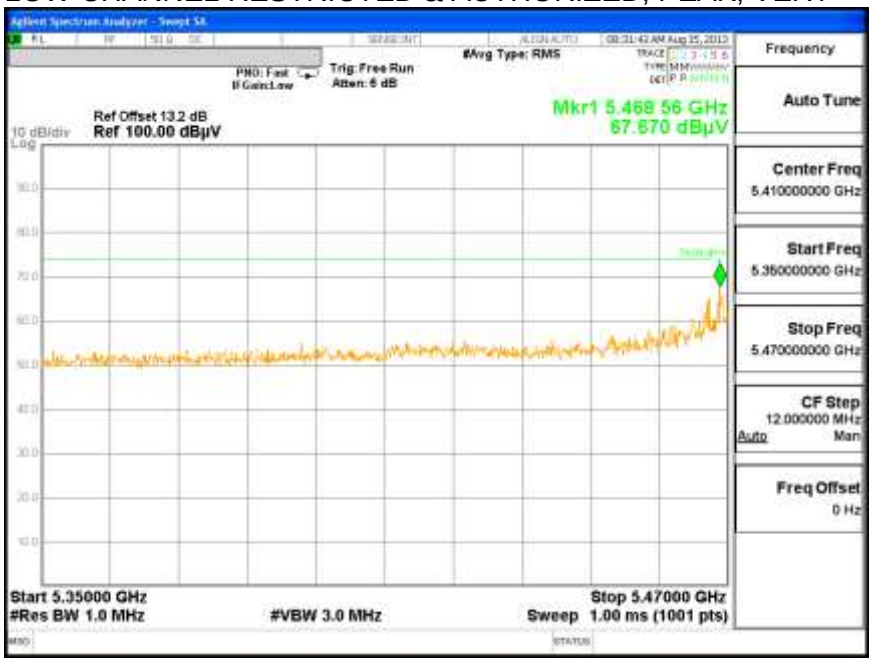
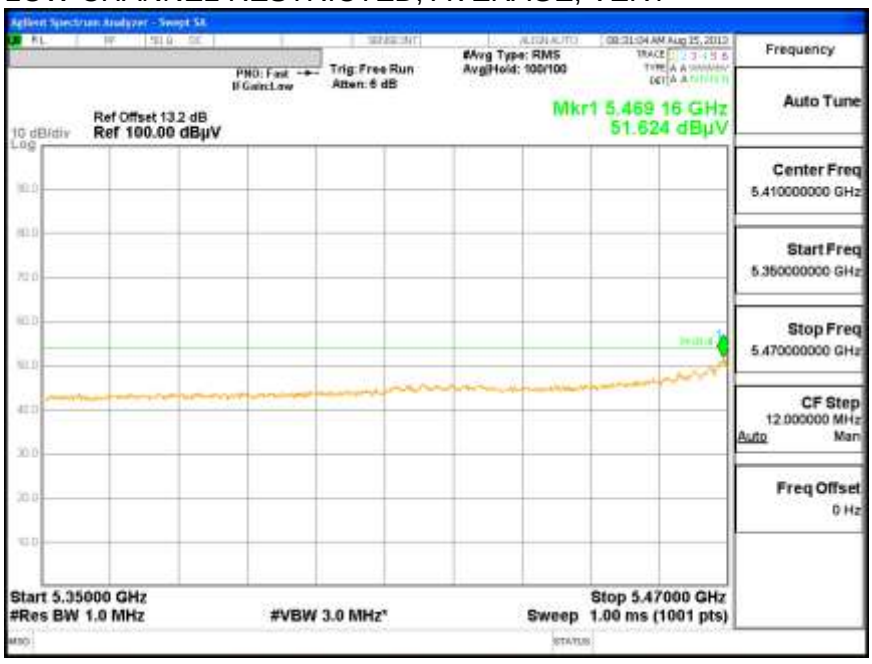
LOW CHANNEL RESTRICTED & AUTHORIZED, PEAK, VERT



LOW CHANNEL RESTRICTED, AVERAGE, VERT



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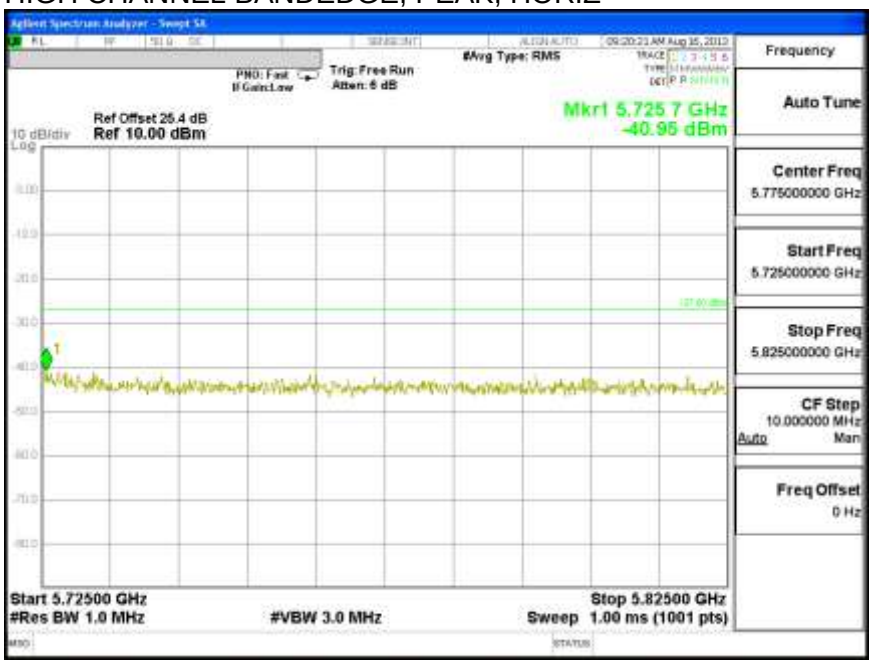
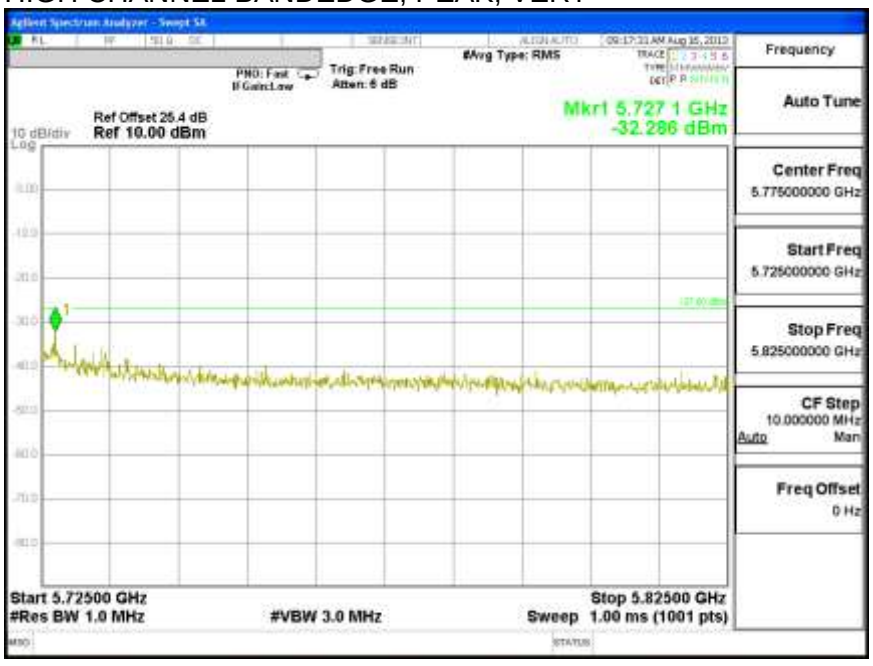
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT



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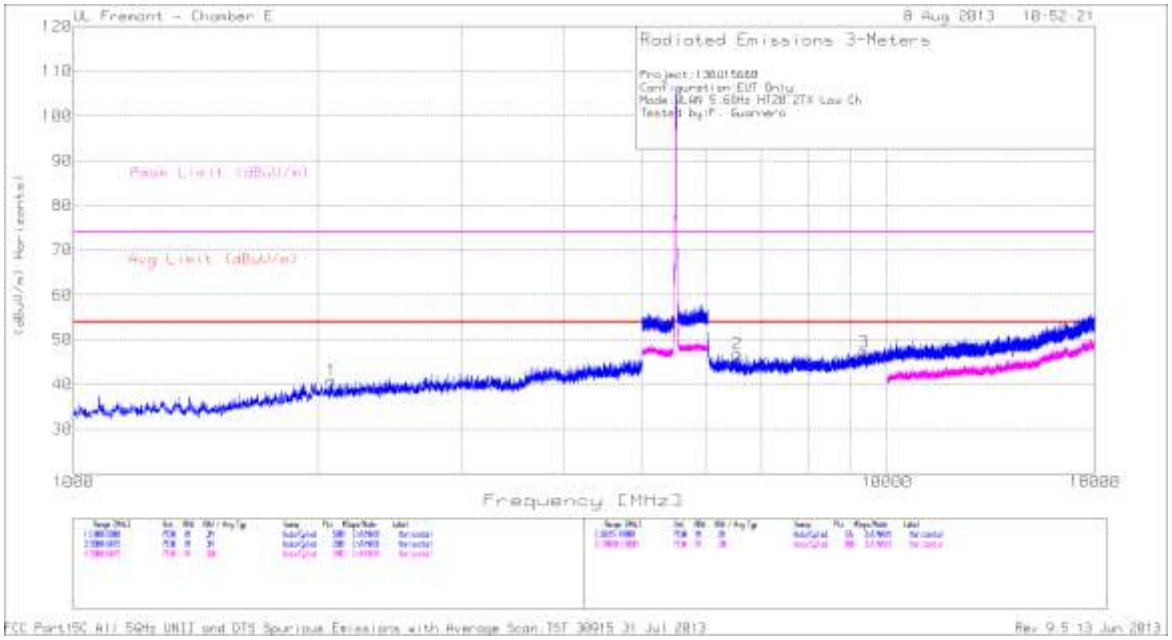
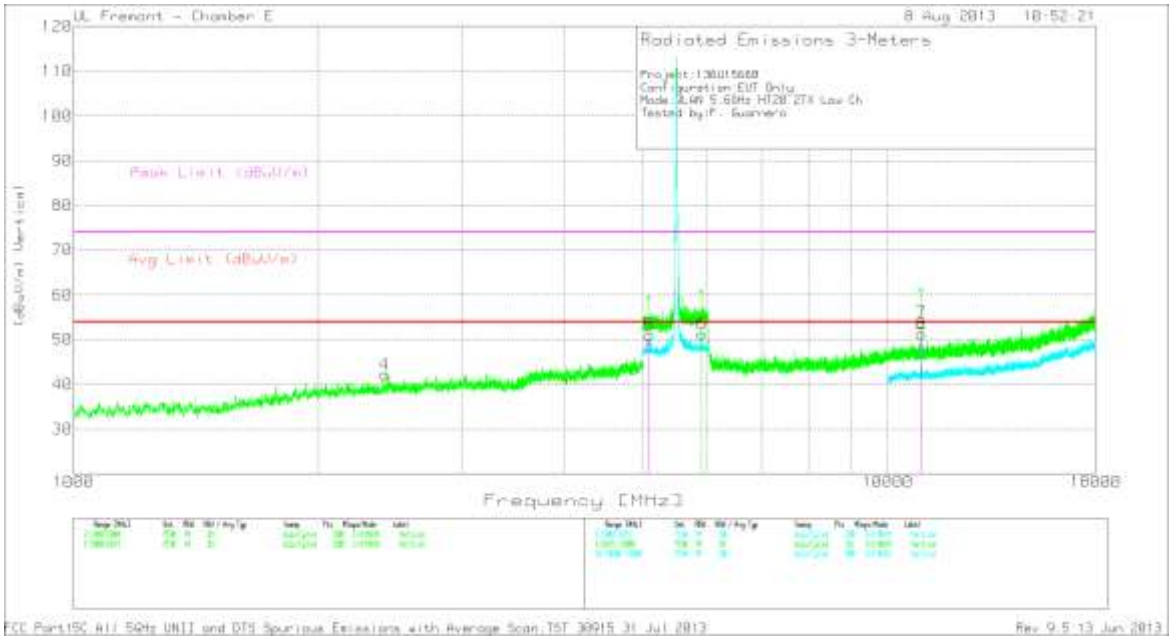
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*2.075	43.06	PK	32.2	-34.4	0	40.86	-	-	68.2	-27.34	199	H
2	*6.551	40.09	PK	35.8	-29.1	0	46.79	-	-	68.2	-21.41	199	H
3	9.372	36.1	PK	37.3	-26.2	0	47.2	53.97	-6.77	74	-26.8	100	H

PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /10dB Pad (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	*2.411	43.33	PK	32.6	-33.7	0	42.23	-	-	68.2	-25.97	100	V
5	5.093	38.3	PK	34.5	-21.8	0	51	-	-	74	-23	199	V
6	*5.908	36.44	PK	35.7	-20.9	0	51.24	-	-	68.2	-16.96	199	V
7	11	40.69	PK	38.5	-25.4	0	53.79	-	-	74	-20.21	199	V
8	11	38.26	PK (VB)	38.5	-25.5	0	51.26	53.97	-2.71	-	-	200	V

PK - Peak detector

*Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /10dB 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
5.093	36.39	RMS	34.5	-21.8	.1	49.19	53.97	-4.78	-	-	114	194	V
11	35.6	RMS	38.5	-25.5	.1	48.7	53.97	-5.27	-	-	209	142	V

RMS - RMS detection

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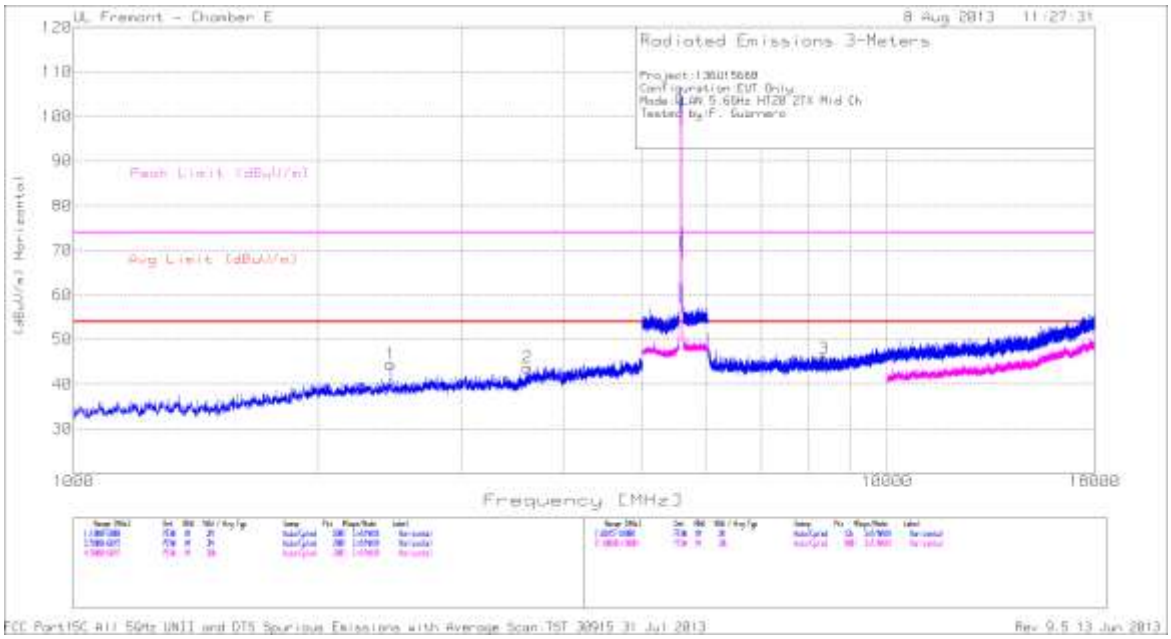
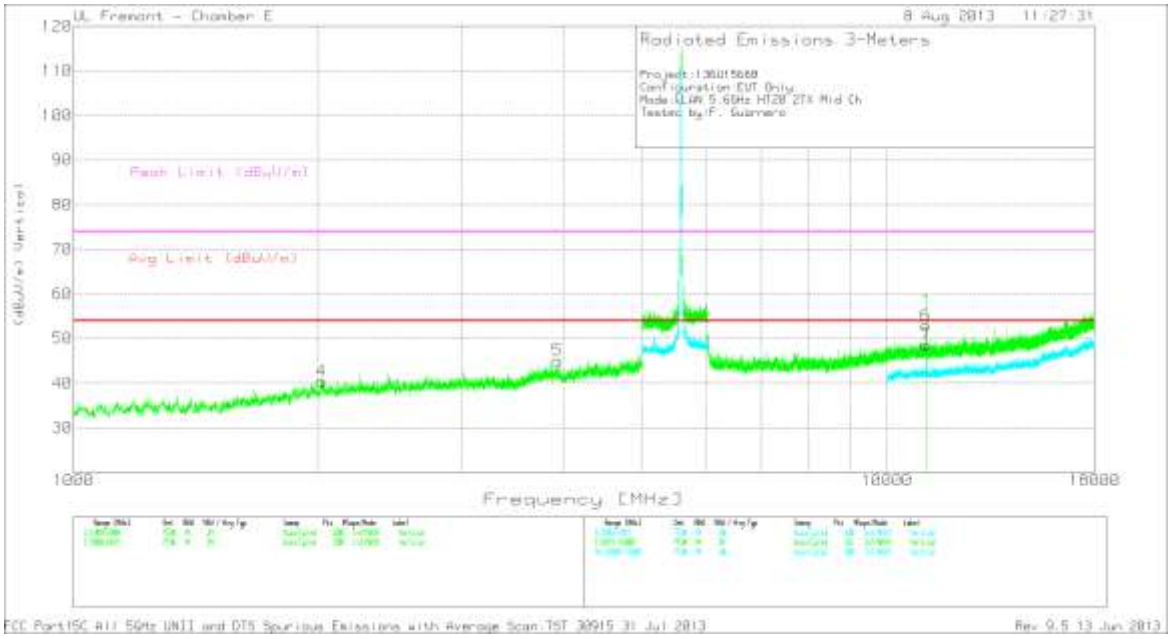
MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*2.453	45.28	PK	32.6	-33.4	0	44.48	-	-	68.2	-15.03	199	H
2	3.616	42.56	PK	33.4	-32.2	0	43.76	53.97	-10.21	74	-30.24	100	H
3	8.366	37.6	PK	36.2	-28	0	45.8	53.97	-8.17	74	-28.2	100	H

PK - Peak detector

*Not in Restricted Band

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	*2.018	42.05	PK	32.1	-33.7	0	40.45	-	-	68.2	-27.75	100	V
5	3.934	43.21	PK	33.8	-31.9	0	45.11	53.97	-8.86	74	-28.89	100	V
6	11.16	39.62	PK	38.6	-25.2	0	53.02	-	-	74	-20.98	199	V
7	11.16	35.19	PK (VB)	38.6	-25.2	0	48.59	53.97	-5.38	-	-	199	V

*Not in Restricted Band

Radiated Emissions

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (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
11.16	34.23	RMS	38.6	-25.2	.1	47.73	53.97	-6.24	-	-	-	138	V

RMS - RMS detection

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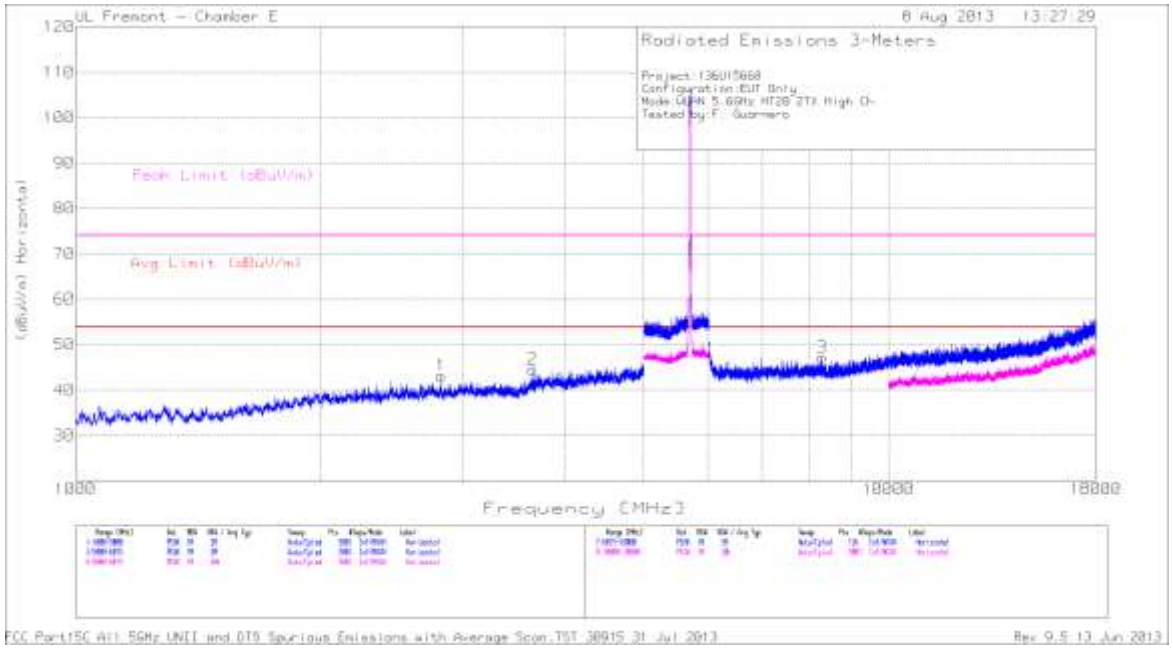
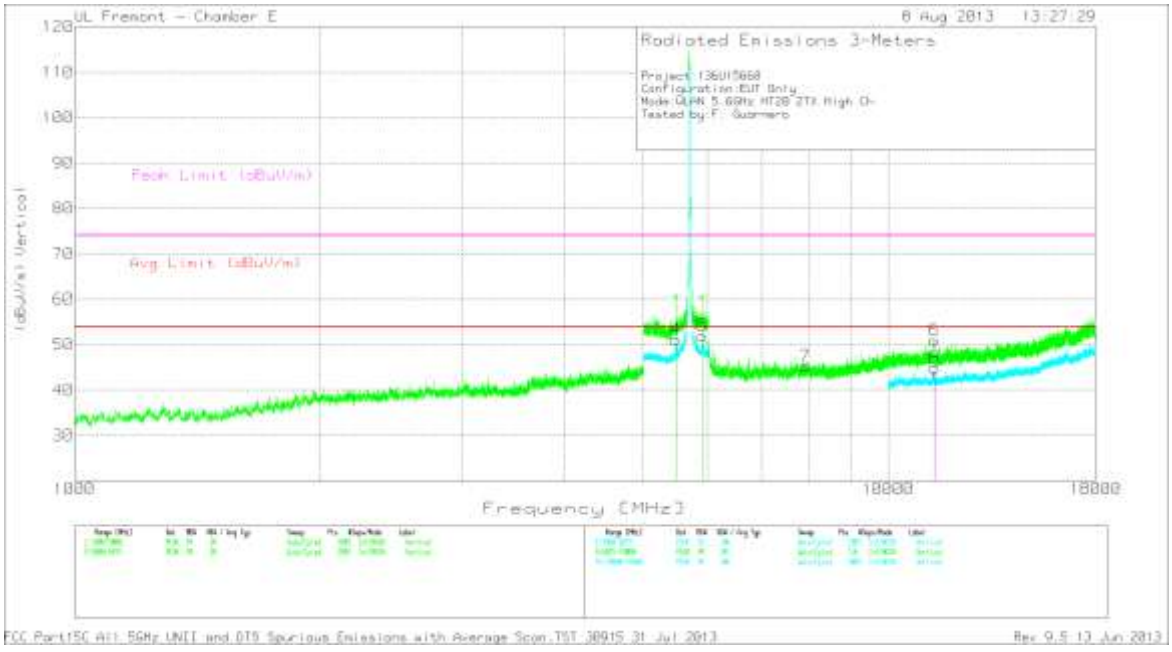
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	2.817	43.36	PK	33.2	-33.4	0	43.16	53.97	-10.81	74	-30.84	199	H
2	3.651	43.03	PK	33.5	-32	0	44.53	53.97	-9.44	74	-29.47	100	H
3	8.286	38.8	PK	36.2	-27.8	0	47.2	53.97	-6.77	74	-26.8	199	H

PK - Peak detector

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /10dB Pad (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	*5.483	38	PK	34.8	-21.7	0	51.1	-	-	68.2	-17.1	199	V
5	*5.911	37.01	PK	35.7	-20.8	0	51.91	-	-	68.2	-16.29	199	V
6	11.398	37.23	PK	38.7	-25	0	50.93	-	-	74	-23.07	199	V
7	*7.911	37.28	PK	36.2	-28.2	0	45.28	-	-	68.2	-22.92	100	V
8	11.407	31.13	PK	38.7	-24.9	0	44.93	53.97	-9.04	74	-29.07	100	V

PK - Peak detector

* Not in Restricted Band

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (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
11.4	29.56	RMS	38.7	-25	.1	43.36	53.97	-10.61	-	-	29	144	V

RMS - RMS detection

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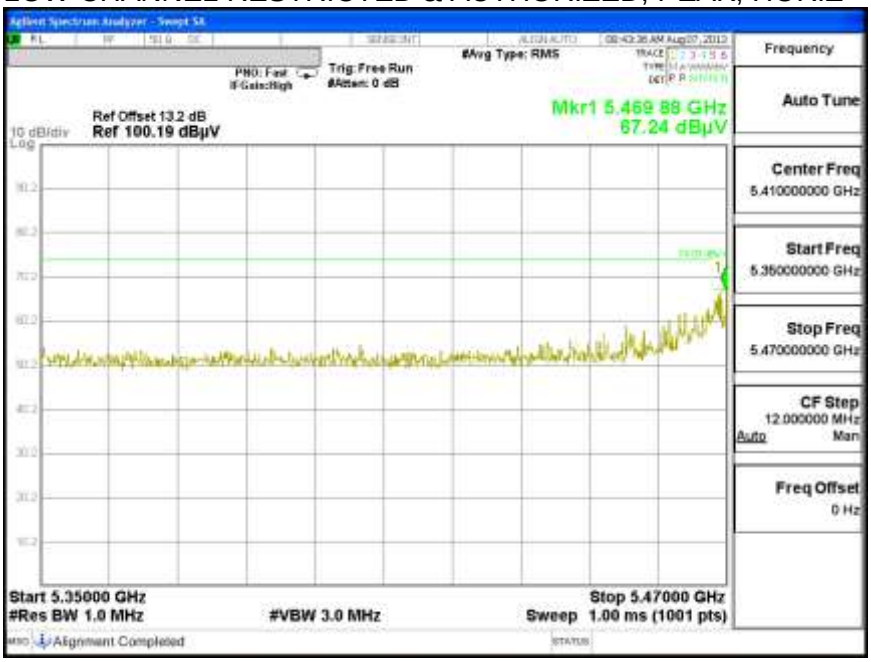
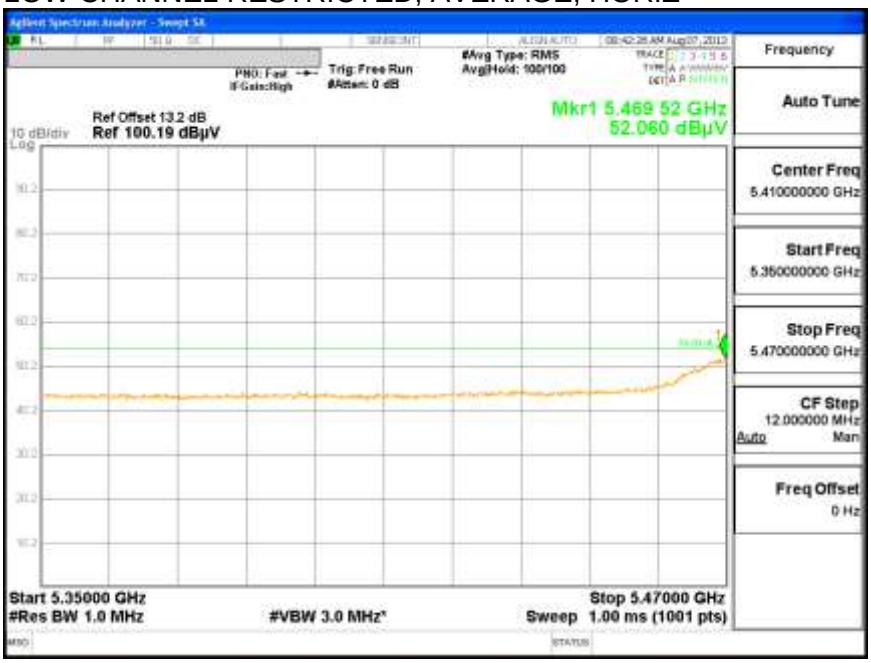
9.2.11. TX ABOVE 1 GHz 802.11n HT40 SISO MODE IN THE 5.6 GHz BAND

RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED & AUTHORIZED, PEAK, HORIZ



LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



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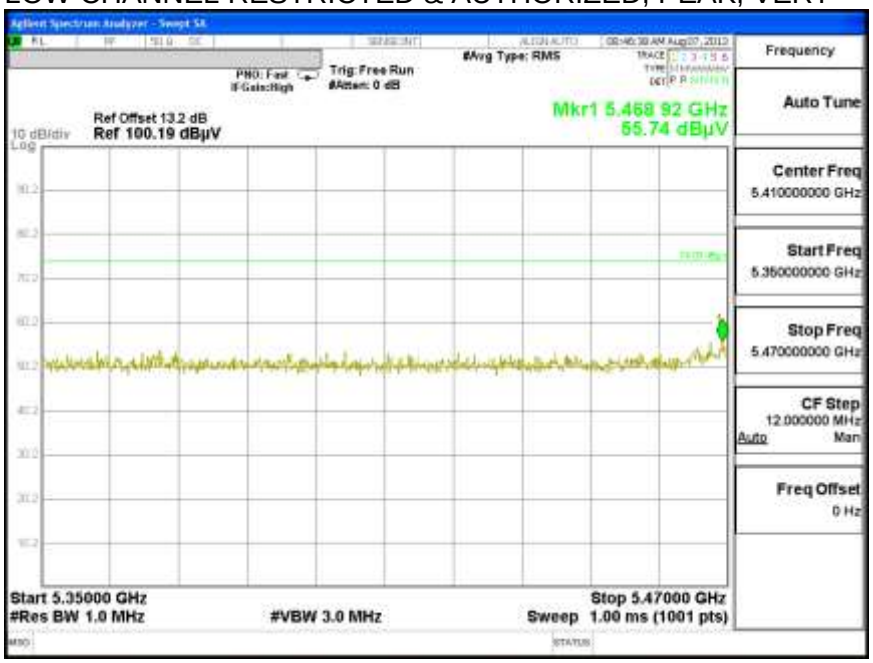
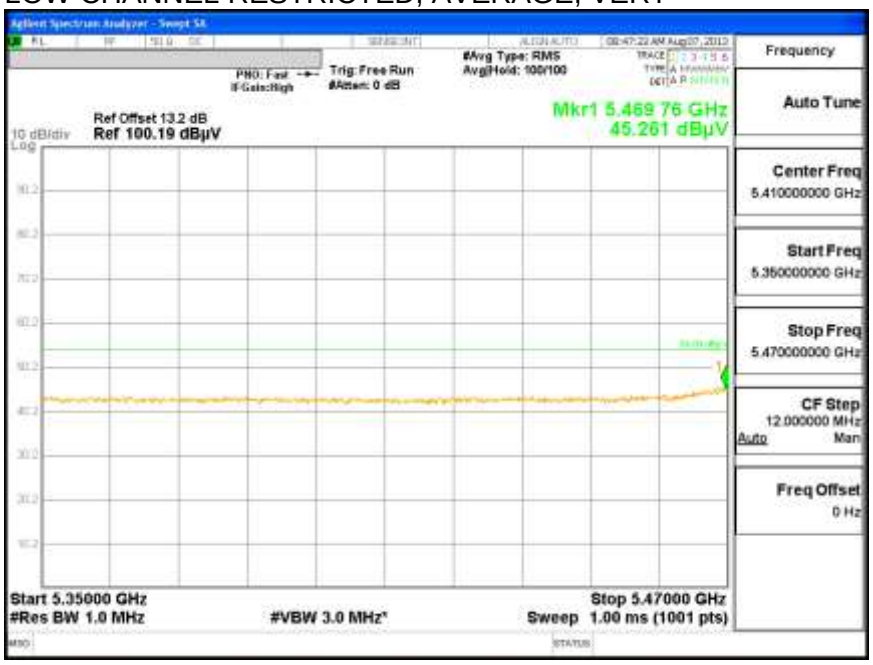
LOW CHANNEL RESTRICTED & AUTHORIZED, PEAK, VERT



LOW CHANNEL RESTRICTED, AVERAGE, VERT



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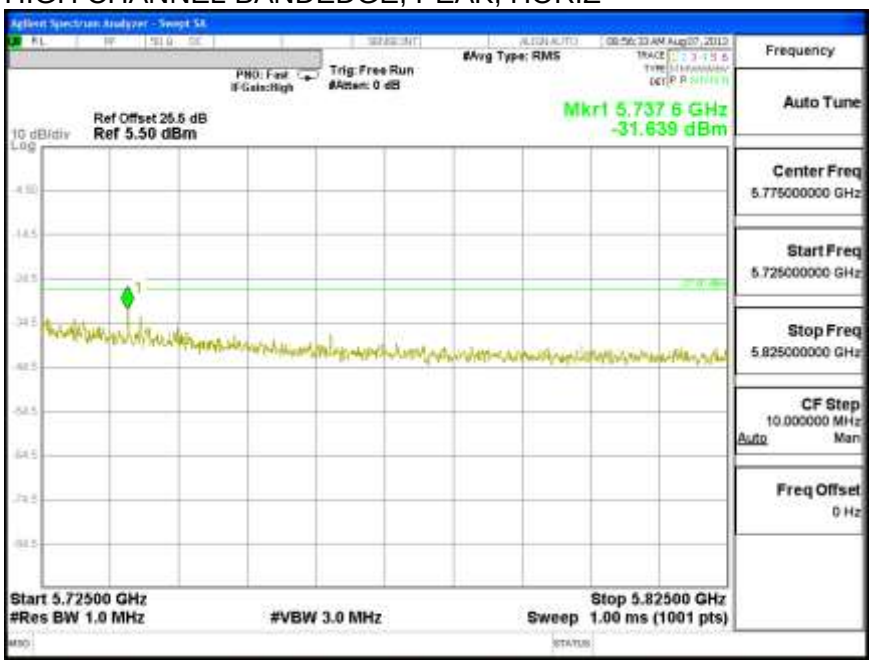
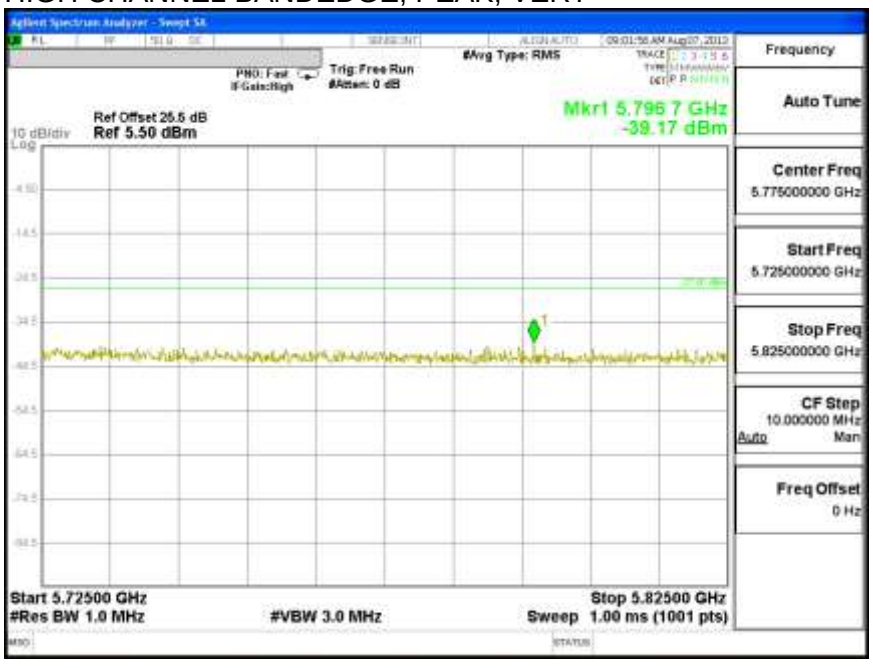
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT



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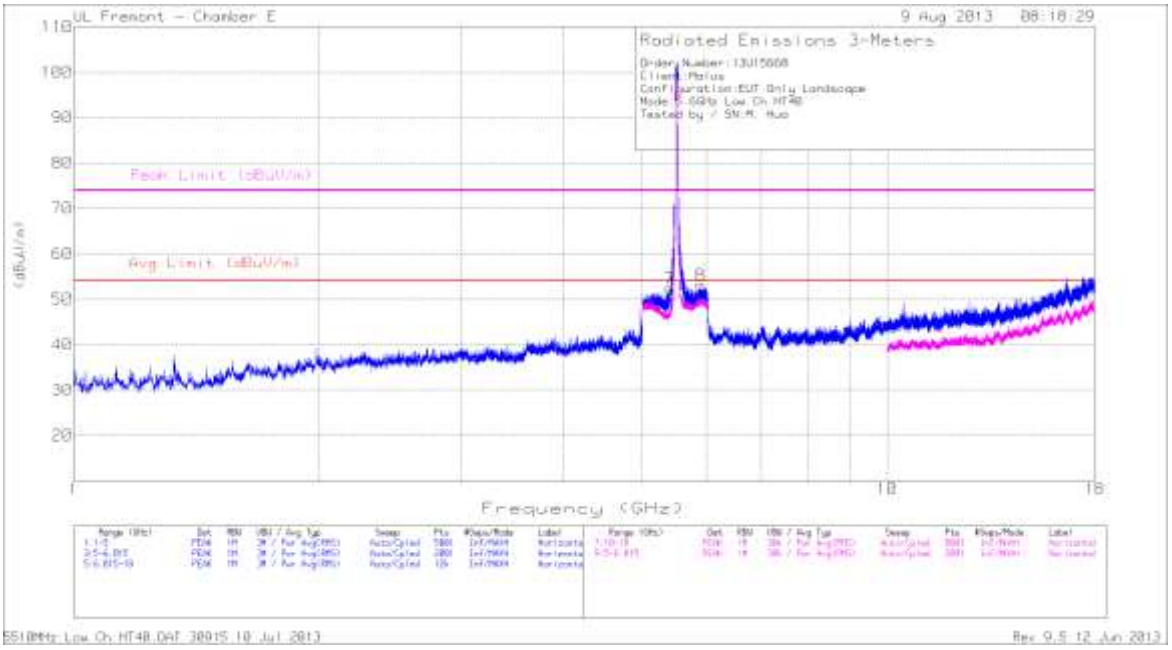
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT

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DATA

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
1.001	50	PK	27.7	-35.6	42.1	53.97	-11.87	74	-31.9	0-360	201	V
1.331	46.74	PK	28.5	-34.7	40.54	53.97	-13.43	74	-33.46	0-360	201	V
5.403	39.68	PK	34.8	-22.1	52.38	-	-	74	-21.62	0-360	201	H
*5.901	38.58	PK	35.5	-21	53.08	-	-	68.2	-15.12	0-360	100	H
5.10	39.79	PK	34.5	-21.8	52.49	-	-	74	-21.51	0-360	100	V
*5.192	39.31	PK	34.6	-21.6	52.31	-	-	68.2	-15.89	0-360	100	V
*5.845	38.25	PK	35.5	-21.3	52.45	-	-	68.2	-15.75	0-360	100	V
9.363	34.79	PK	37	-25.9	45.89	53.97	-8.08	74	-28.11	0-360	200	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
5.404	28.27	MAv1	34.8	-22.1	40.97	53.97	-13	-	-	135	387	H
5.093	28.36	MAv1	34.4	-21.8	40.96	53.97	-13.01	-	-	360	126	V

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

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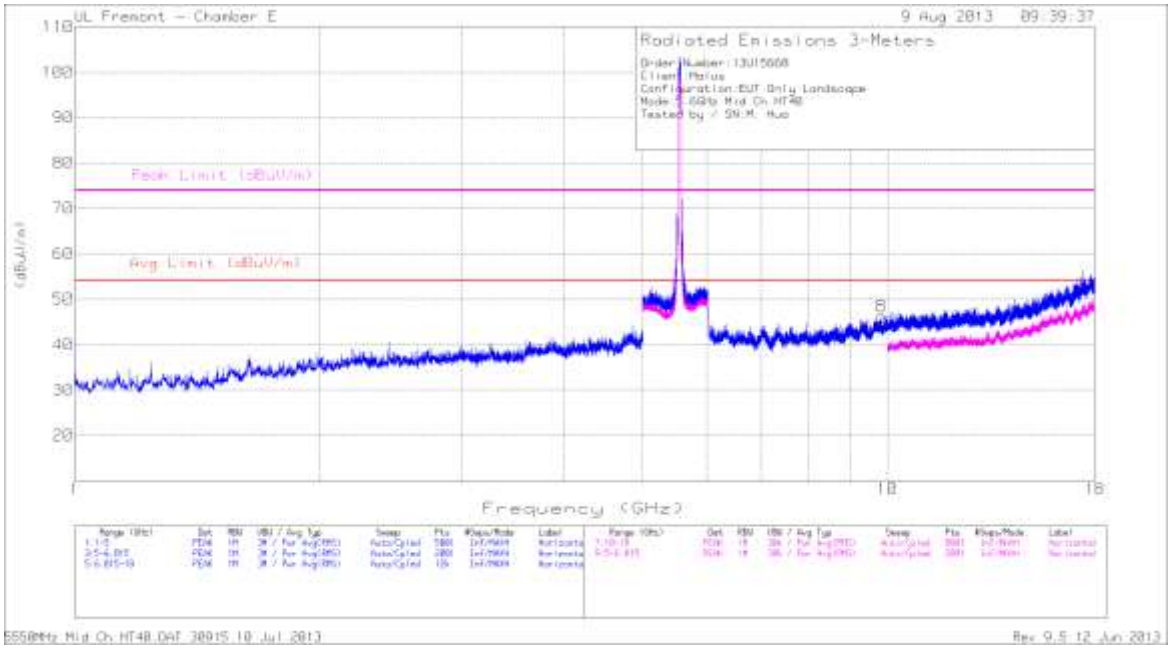
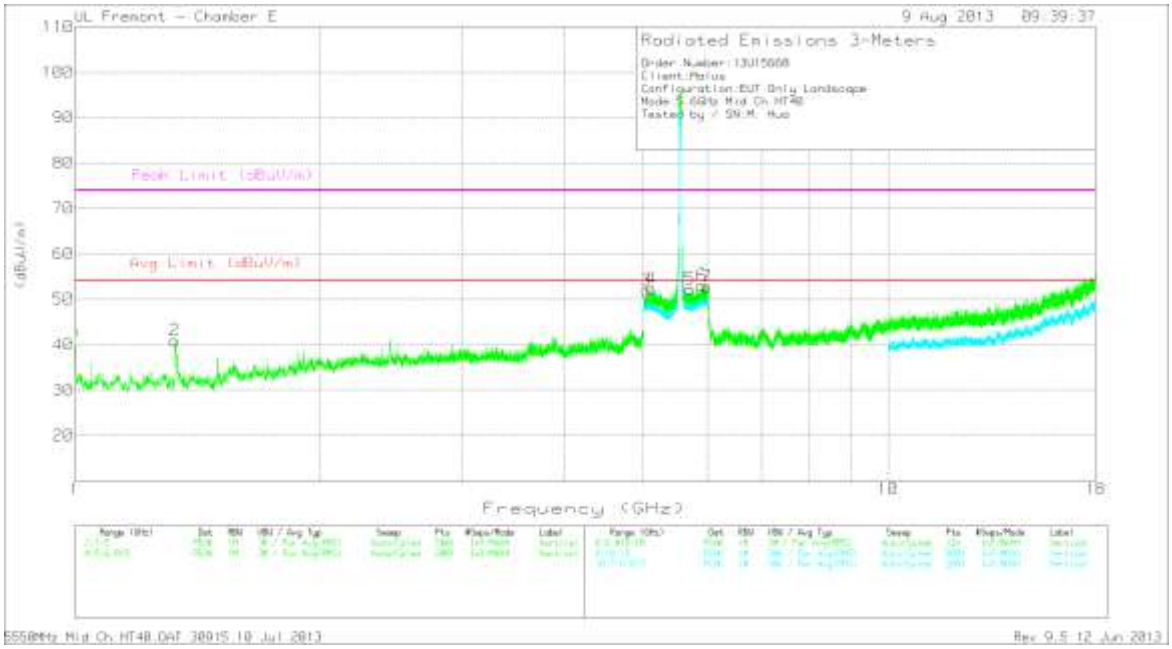
MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

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
1	50.99	PK	27.7	-35.6	43.09	53.97	-10.88	74	-30.91	0-360	201	V
1.328	47.12	PK	28.5	-34.7	40.92	53.97	-13.05	74	-33.08	0-360	100	V
5.046	39.79	PK	34.4	-22.2	51.99	-	-	74	-22.01	0-360	201	V
5.113	39.64	PK	34.5	-21.8	52.34	-	-	74	-21.66	0-360	201	V
*5.704	38.77	PK	35.2	-21.7	52.27	-	-	68.2	-15.93	0-360	201	V
*5.994	38	PK	35.7	-20.9	52.8	-	-	68.2	-15.40	0-360	100	V
*9.837	35.04	PK	37.6	-26.4	46.24	-	-	68.2	-21.96	0-360	100	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.043	28.54	MAv1	34.4	-22.2	40.74	53.97	-13.23	-	-	99	322	V
5.113	28.53	MAv1	34.5	-21.8	41.23	53.97	-12.74	-	-	165	100	V

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

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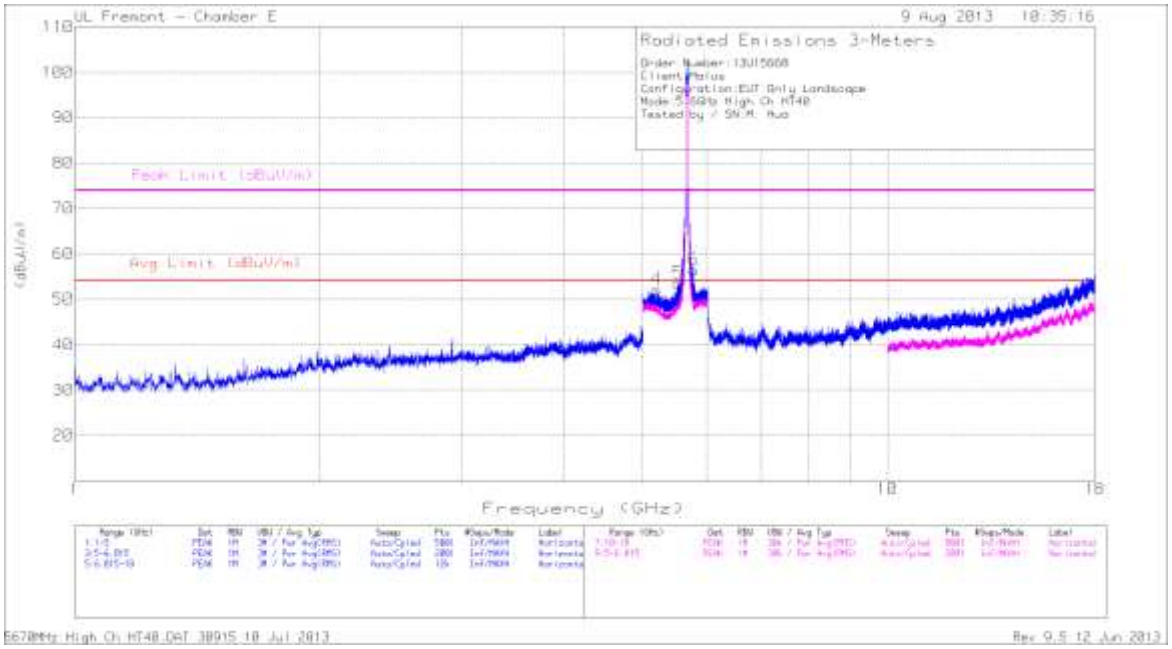
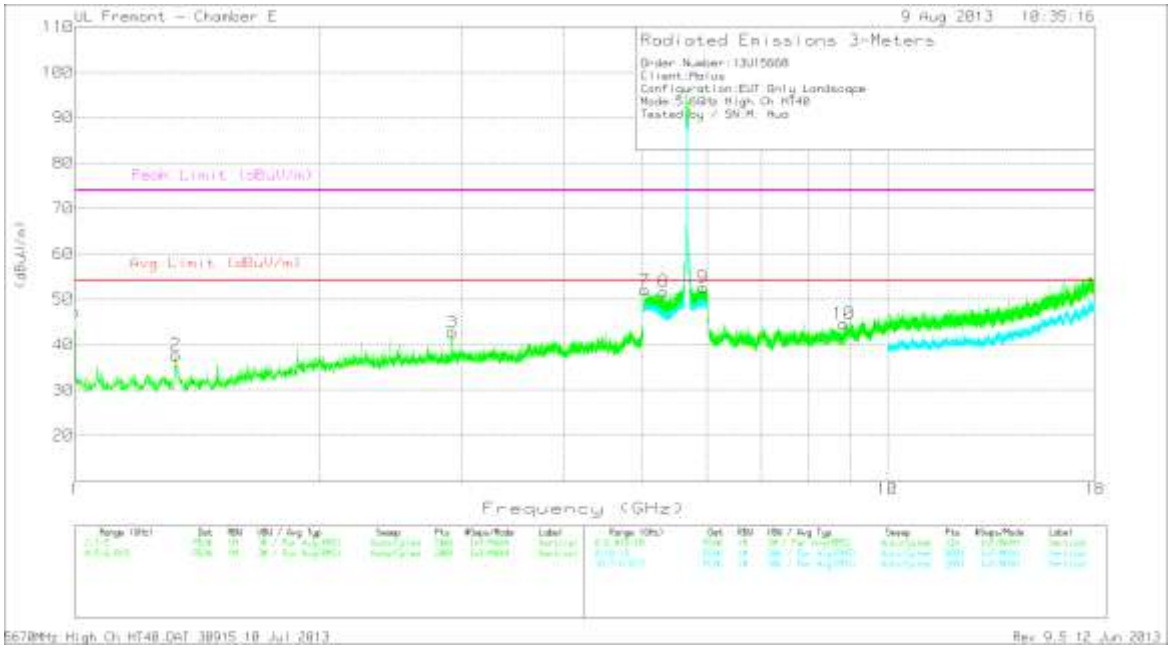
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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DATA

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
1.001	55.08	PK	27.7	-35.6	47.18	53.97	-6.79	74	-26.82	0-360	201	V
1.333	43.96	PK	28.5	-34.7	37.76	53.97	-16.21	74	-36.24	0-360	201	V
*2.916	43.23	PK	33	-33.5	42.73	-	-	68.2	-25.47	0-360	201	V
*5.203	39.16	PK	34.6	-21.6	52.16	-	-	68.2	-16.04	0-360	201	H
*5.527	40.01	PK	34.9	-21.4	53.51	-	-	68.2	-14.69	0-360	100	H
*5.78	42.96	PK	35.3	-21.8	56.46	-	-	68.2	-11.74	0-360	100	H
5.03	39.9	PK	34.3	-22.2	52	-	-	74	-22	0-360	201	V
*5.93	37.99	PK	35.6	-21	52.59	-	-	68.2	-15.61	0-360	100	V
*8.834	36.03	PK	36.5	-27.9	44.63	-	-	68.2	-23.57	0-360	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)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.023	28.51	MAv1	34.3	-22.2	40.61	53.97	-13.36	-	-	288	371	V

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

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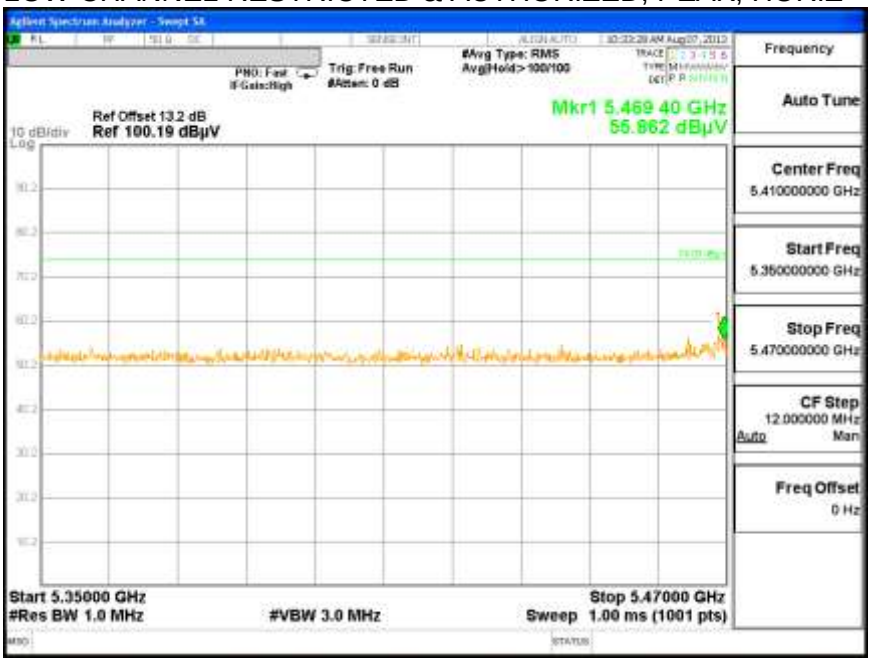
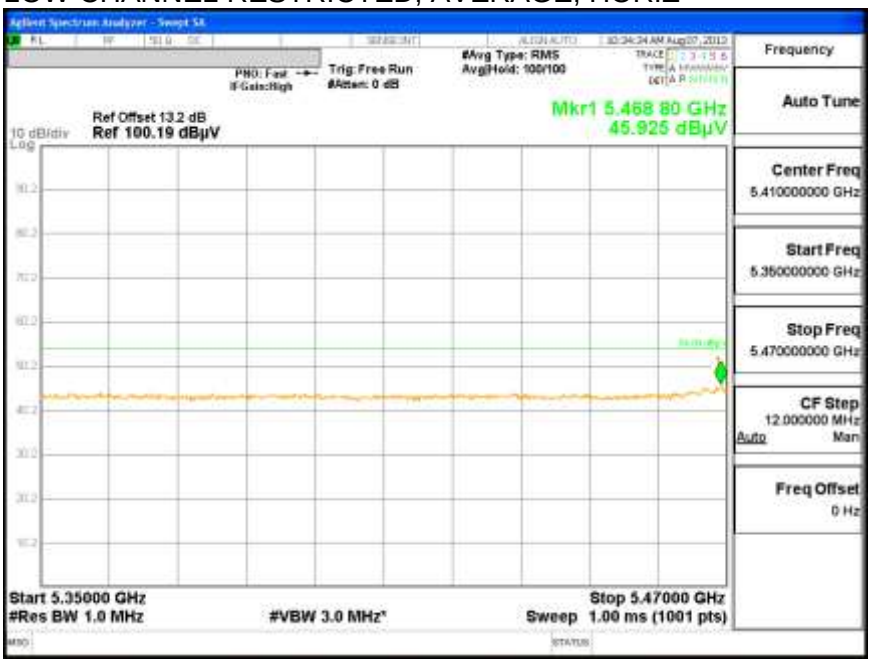
9.2.12. TX ABOVE 1 GHz 802.11n HT40 2TX CDD MODE IN THE 5.6 GHz BAND

RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)

LOW CHANNEL RESTRICTED & AUTHORIZED, PEAK, HORIZ



LOW CHANNEL RESTRICTED, AVERAGE, HORIZ



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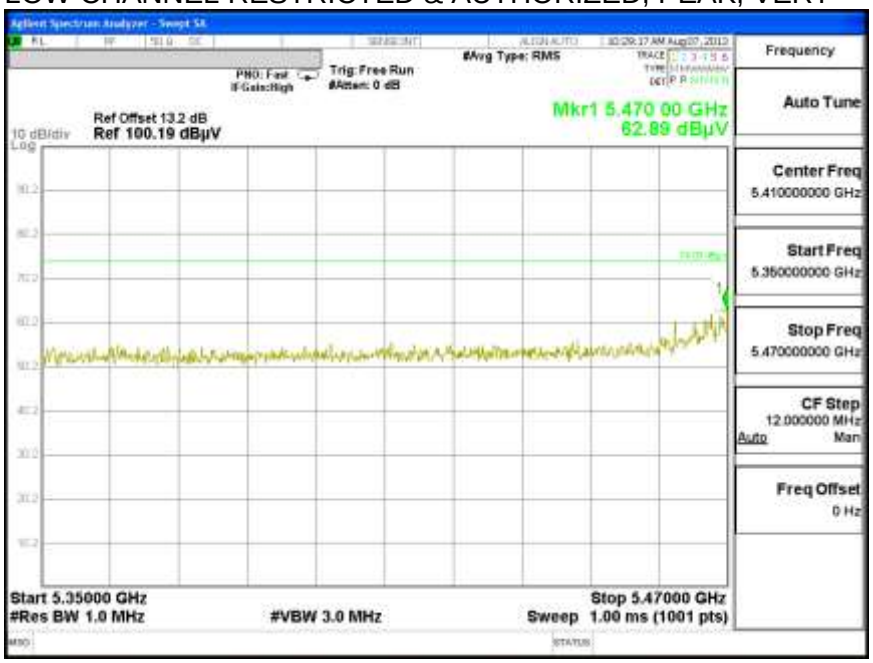
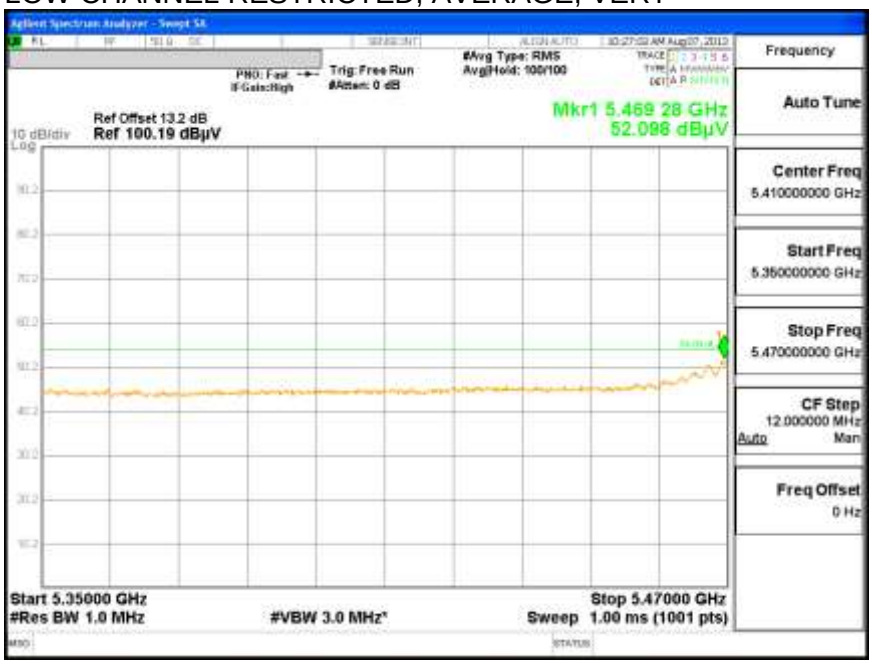
LOW CHANNEL RESTRICTED & AUTHORIZED, PEAK, VERT



LOW CHANNEL RESTRICTED, AVERAGE, VERT



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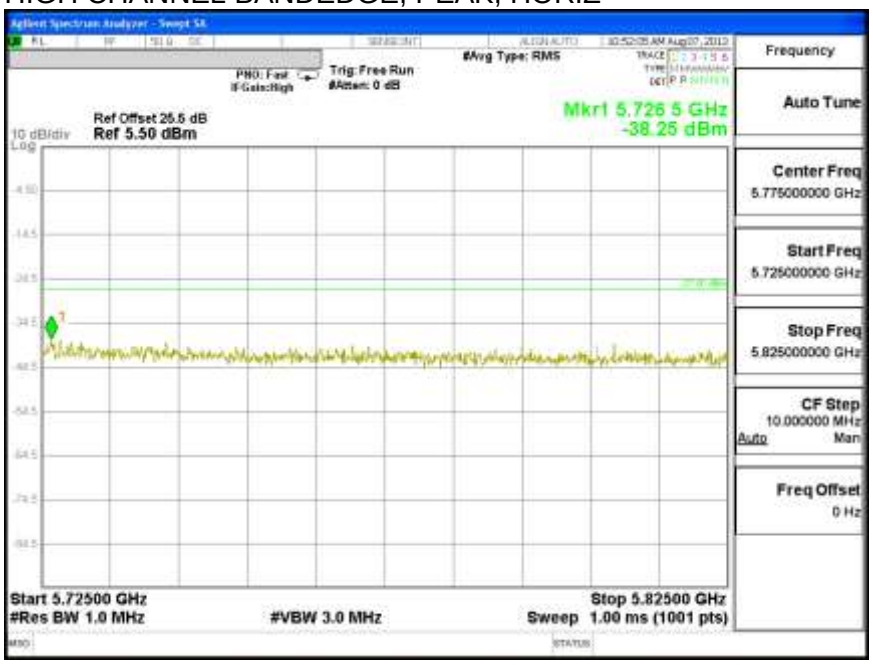
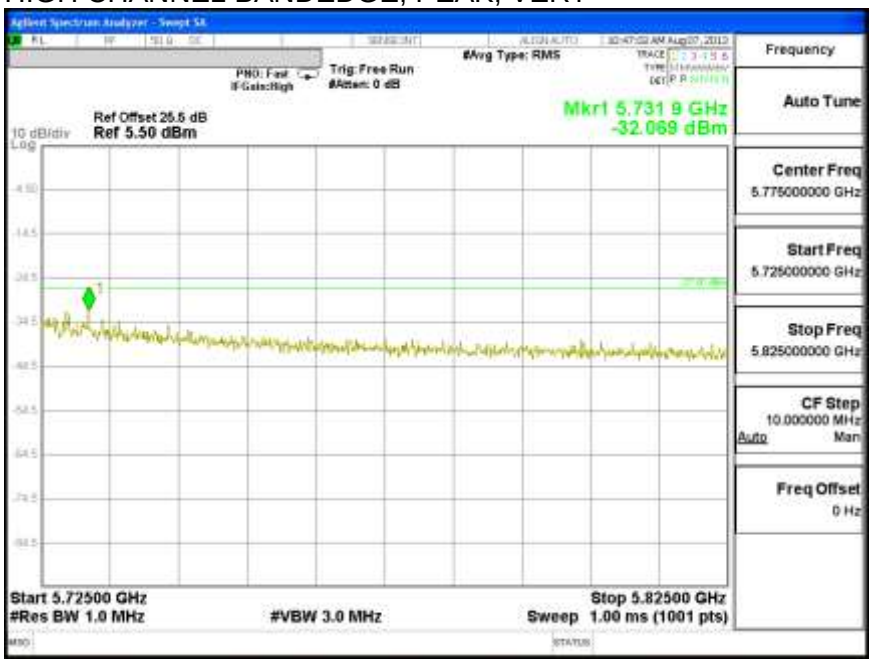
AUTHORIZED BANDEDGE (HIGH CHANNEL)

HIGH CHANNEL BANDEDGE, PEAK, HORIZ



HIGH CHANNEL BANDEDGE, PEAK, VERT



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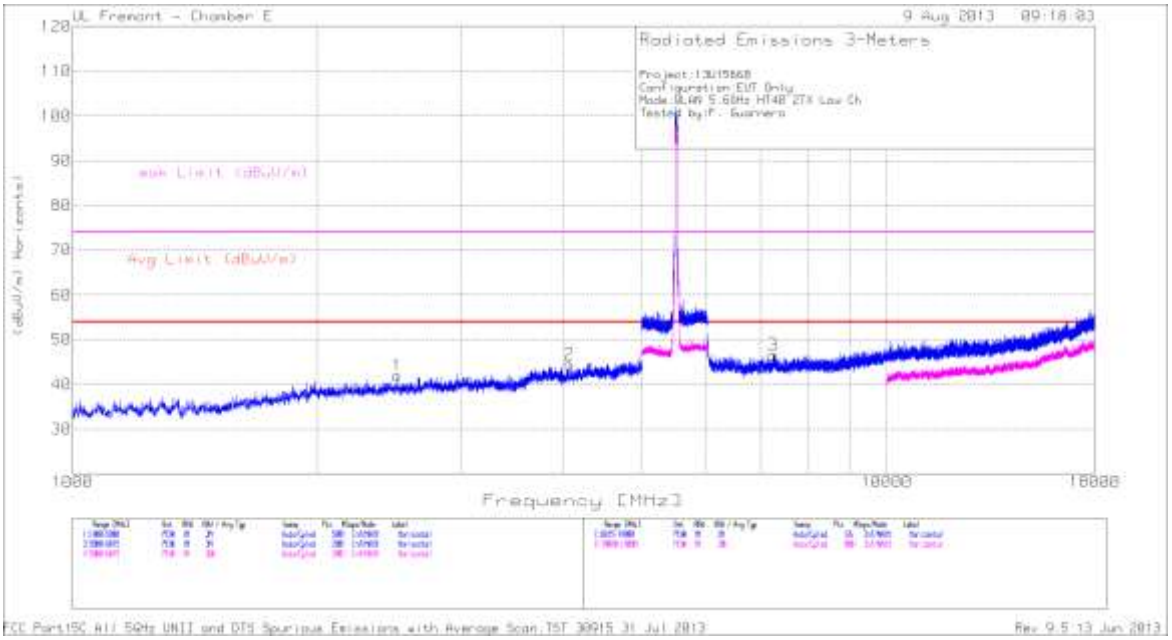
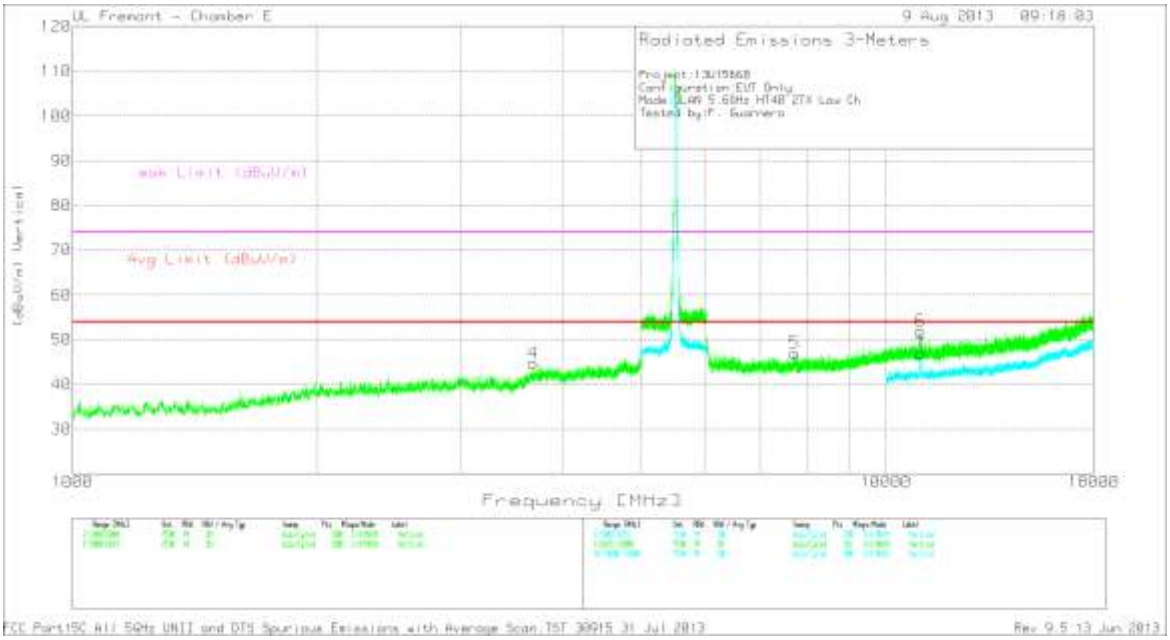
HARMONICS AND SPURIOUS EMISSIONS

LOW CHANNEL HORIZONTAL PLOT



LOW CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*2.505	42.47	PK	32.7	-33.2	0	41.97	-	-	68.2	-26.23	199	H
2	4.073	42.36	PK	33.9	-31.8	0	44.46	53.97	-9.51	74	-29.54	199	H
3	7.253	39.89	PK	36	-29.3	0	46.59	53.97	-7.38	74	-27.41	199	H

PK - Peak detector

* Not in Restricted Band

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	3.685	43.31	PK	33.5	-32	0	44.81	53.97	-9.16	74	-29.19	100	V
5	7.716	39.38	PK	36.2	-28.6	0	46.98	53.97	-6.99	74	-27.02	200	V
6	11.023	39.07	PK	38.5	-25.6	0	51.97	-	-	74	-22.03	200	V
7	11.014	33.89	PK (VB)	38.5	-25.5	0	46.89	53.97	-7.08	-	-	100	V

PK - Peak detector

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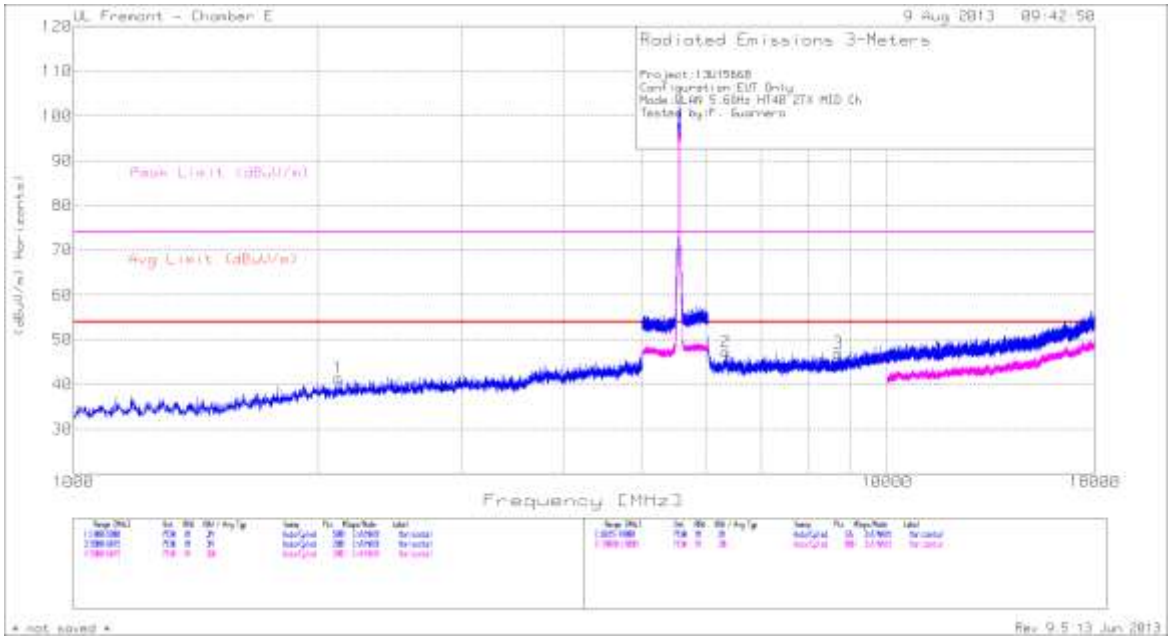
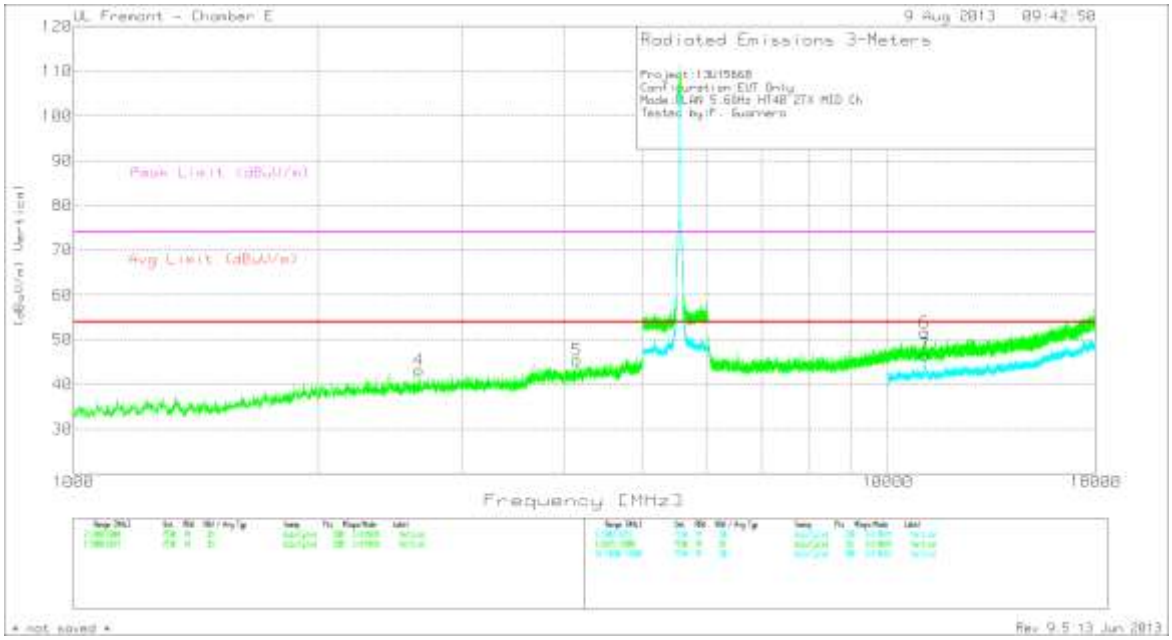
MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



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DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1	*2.117	43.57	PK	32.2	-34.4	0	41.37	-	-	68.2	-26.83	100	H
2	*6.338	40.68	PK	35.9	-29.3	0	47.28	-	-	68.2	-20.92	199	H
3	*8.712	38.02	PK	36.5	-27.6	0	46.92	-	-	68.2	-21.28	100	H

PK - Peak detector

* Not in Restricted Band

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /6GHz HPF (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	*2.654	43.88	PK	33	-33.7	0	43.18	-	-	68.2	-25.02	101	V
5	4.151	43.43	PK	33.9	-31.9	0	45.43	53.97	-8.54	74	-28.57	101	V
6	11.105	38.59	PK	38.5	-25.5	0	51.59	-	-	74	-22.41	100	V
7	11.098	33.61	PK (VB)	38.5	-25.5	0	46.61	53.97	-7.36	-	-	100	V

PK - Peak detector

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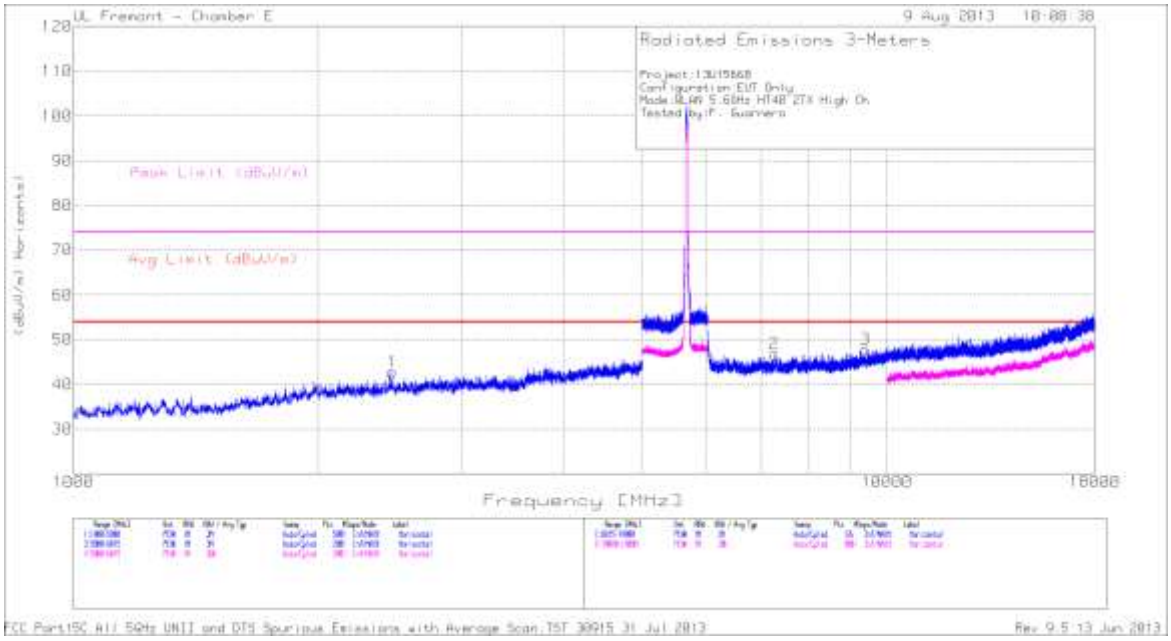
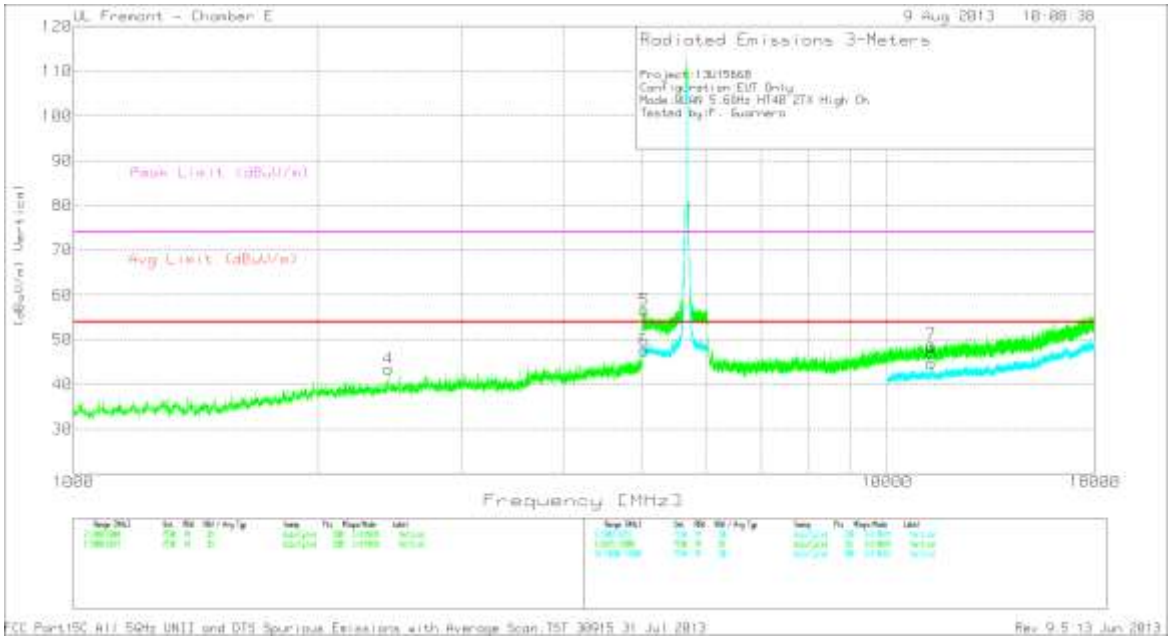
HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading	Det	AF T346 (dB/m)	Amp/Cb l 5GHz LPF dB	DC Corr [dB]	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity

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		(dBuV)					(dBuV/m)						
1	*2.466	43.12	PK	32.7	-33.1	0	42.72	-	-	68.2	-25.48	199	H
2	7.271	39.76	PK	36	-29	0	46.76	53.97	-7.21	74	-27.24	199	H
3	9.407	37.05	PK	37.4	-26.7	0	47.75	53.97	-6.22	74	-26.25	199	H

PK - Peak detector

* Not in Restricted Band

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl/10dB Pad (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	*2.439	44.29	PK	32.6	-33.4	0	43.49	-	-	68.2	-24.71	200	V
5	5.028	44.43	PK	34.4	-22.2	0	56.63	-	-	74	-17.37	199	V
6	5.029	35.41	PK (VB)	34.4	-22.2	0	47.61	53.97	-6.36	-	-	101	V
7	11.335	35.44	PK	38.6	-25.1	0	48.94	-	-	74	-25.06	199	V
8	11.337	31.16	PK (VB)	38.6	-25	0	44.76	53.97	-9.21	-	-	199	V

PK - Peak detector

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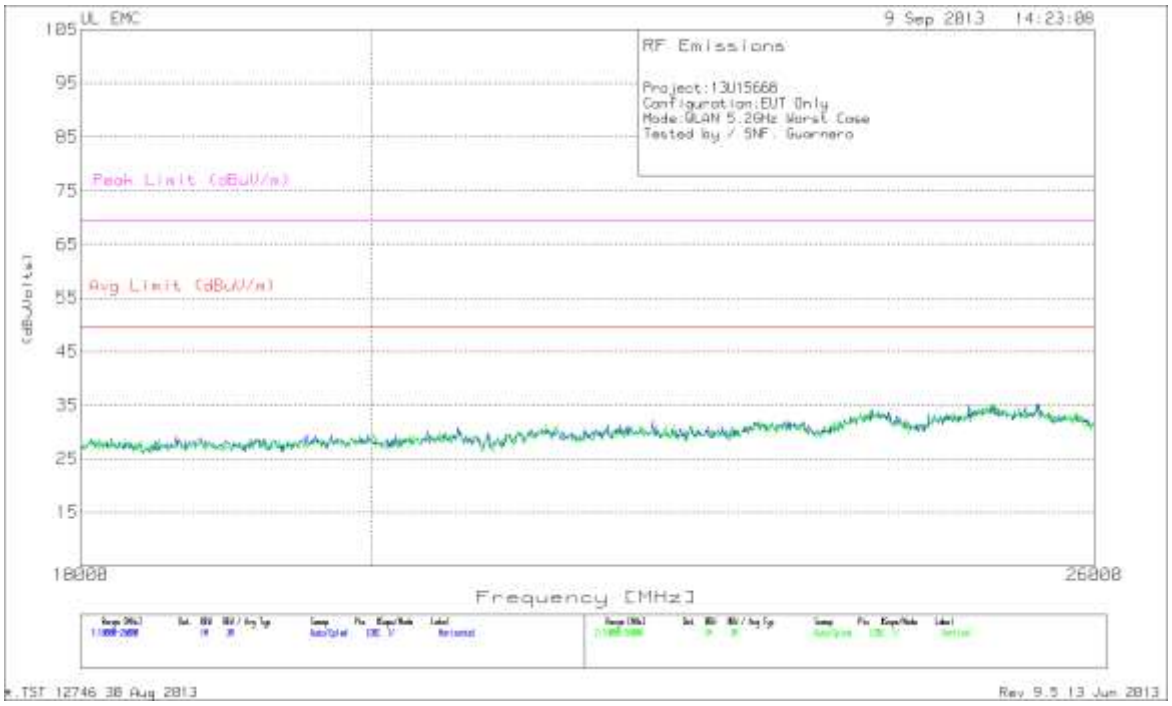
9.3. WORST-CASE ABOVE 18 GHz

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

5.2 GHz BAND



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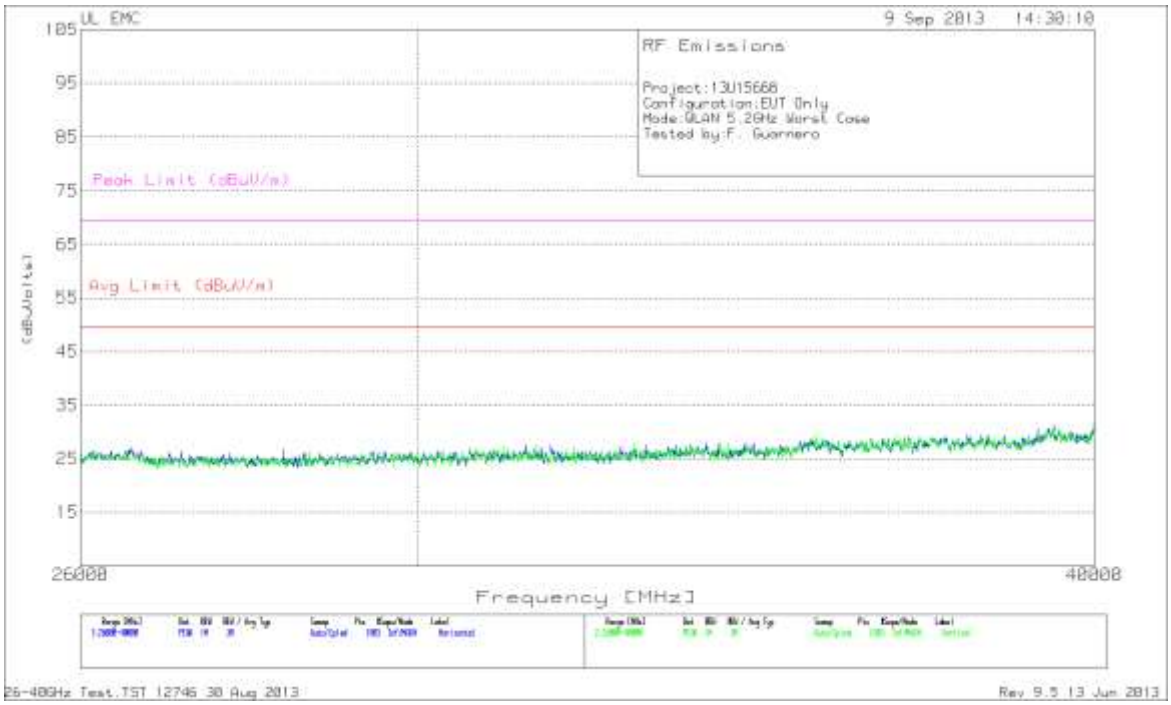
SPURIOUS EMISSIONS 26 TO 40 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

5.2 GHz BAND



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

5.3 GHz BAND

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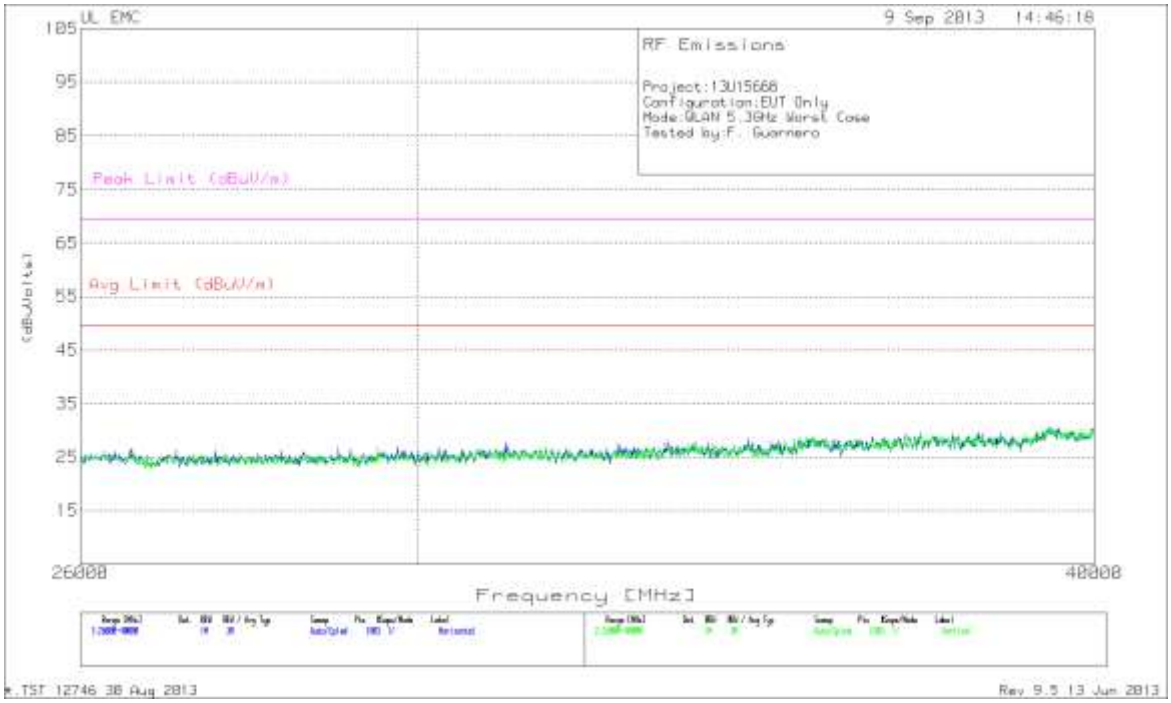
SPURIOUS EMISSIONS 26 TO 40 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

5.3 GHz BAND



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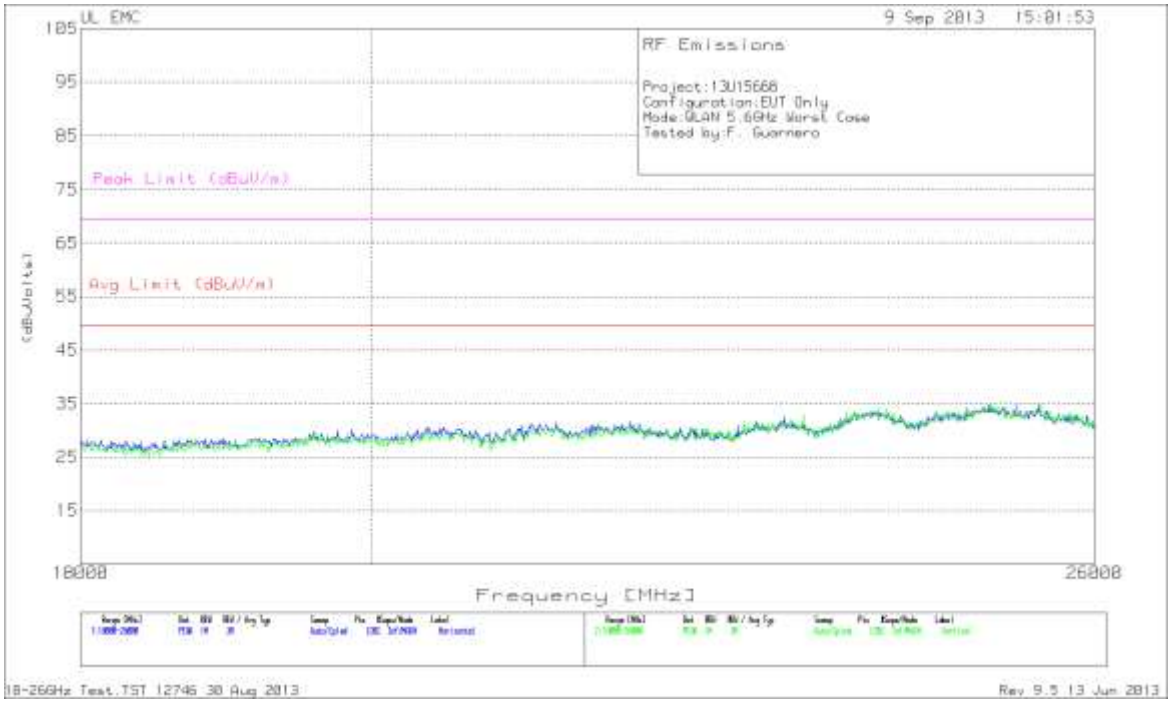
SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

5.6 GHz BAND



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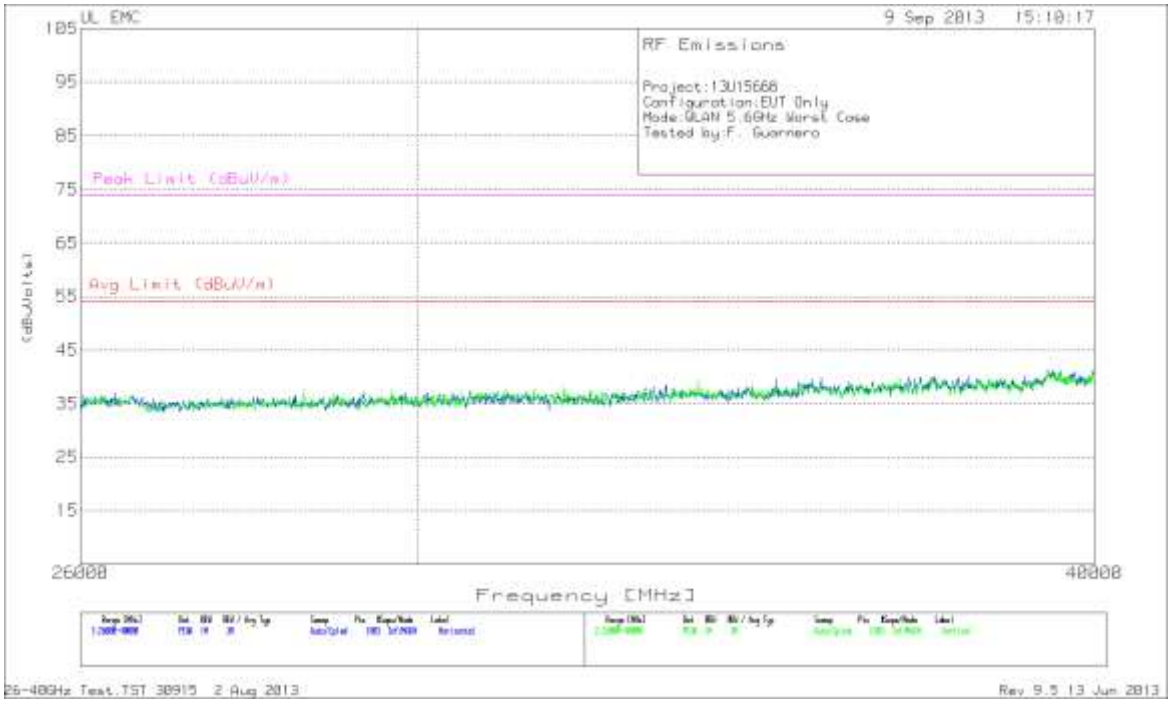
SPURIOUS EMISSIONS 26 TO 40 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)

5.6 GHz BAND



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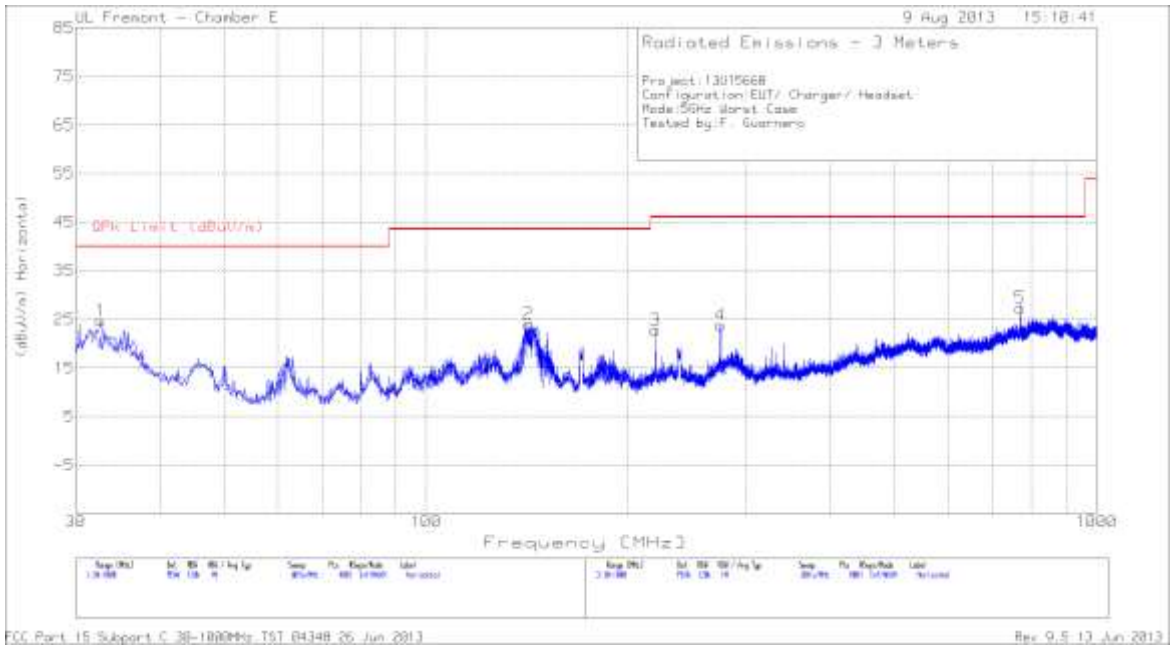
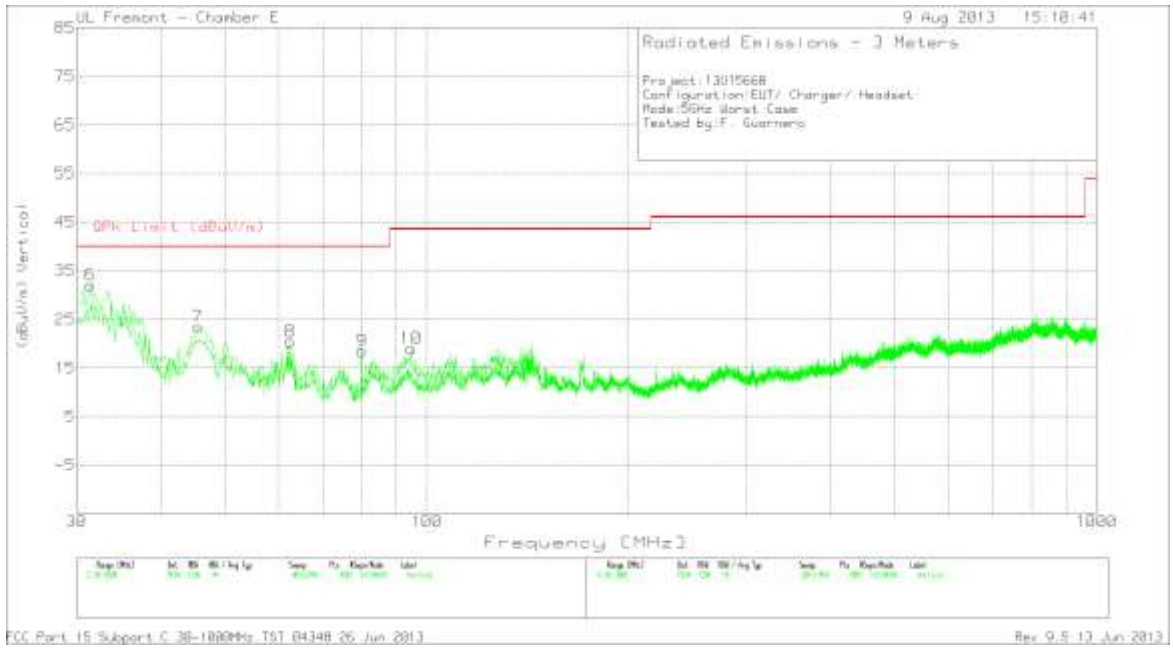
9.4. WORST-CASE BELOW 1 GHz

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

HORIZOTAL PLOT



VERTICAL PLOT



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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	32.6675	33.28	PK	19.2	-27.7	24.78	40	-15.22	300	H
2	142.035	38.36	PK	12.7	-27	24.06	43.52	-19.46	200	H
3	219.8775	39.23	PK	10.6	-27.1	22.73	46.02	-23.29	98	H
4	274.925	36.89	PK	13.3	-26.4	23.79	46.02	-22.23	98	H
5	769.5038	32.81	PK	20.5	-26	27.31	46.02	-18.71	100	H
6	31.455	39.74	PK	20	-27.7	32.04	40	-7.96	100	V
7	45.52	40.82	PK	10.1	-27.5	23.42	40	-16.58	100	V
8	62.495	40.76	PK	7.7	-28	20.46	40	-19.54	100	V
9	79.955	38.52	PK	7.7	-27.7	18.52	40	-21.48	400	V
10	94.7475	38.09	PK	8.5	-27.6	18.99	43.52	-24.53	100	V

PK - Peak detector

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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

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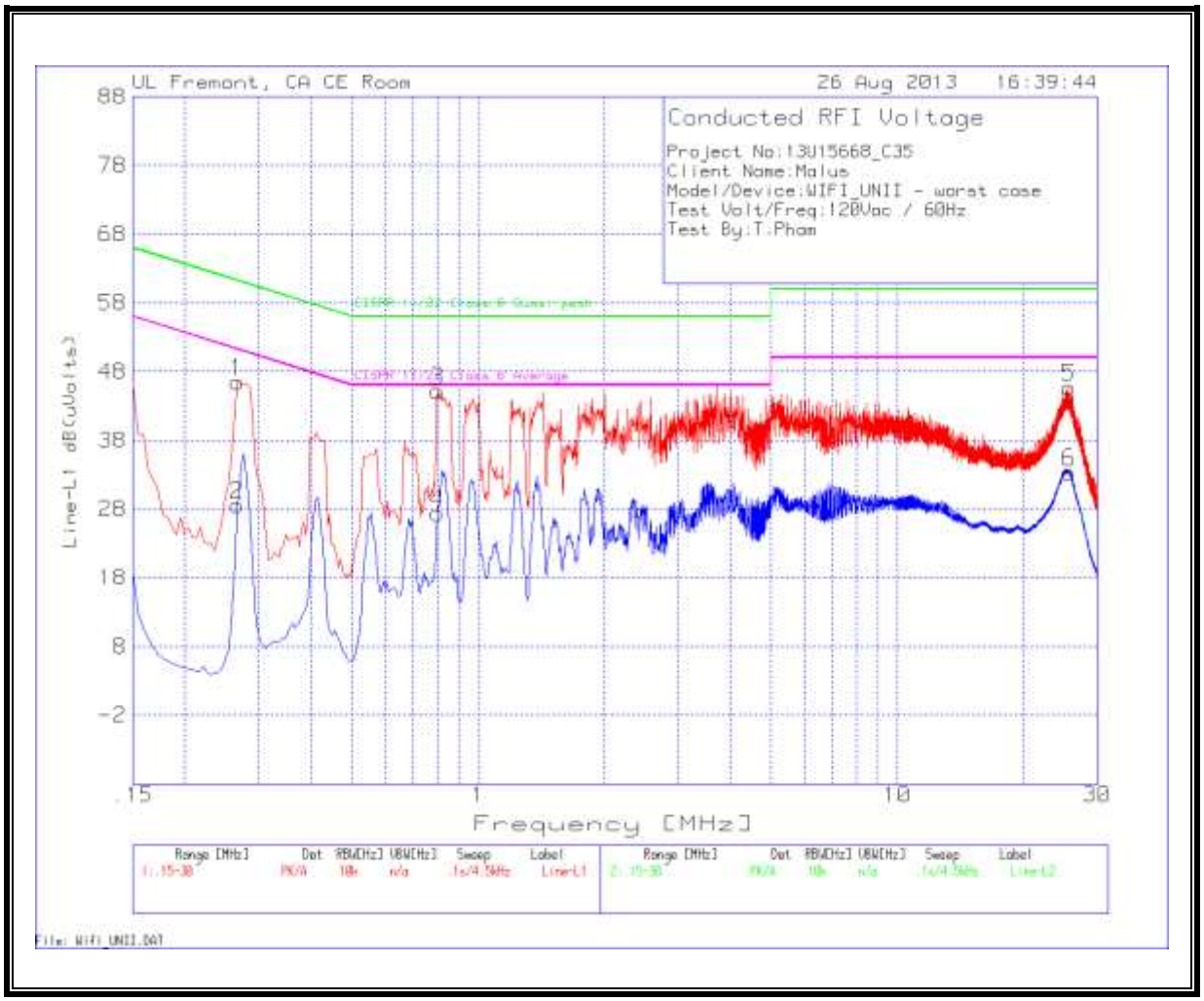
LINE 1 RESULTS



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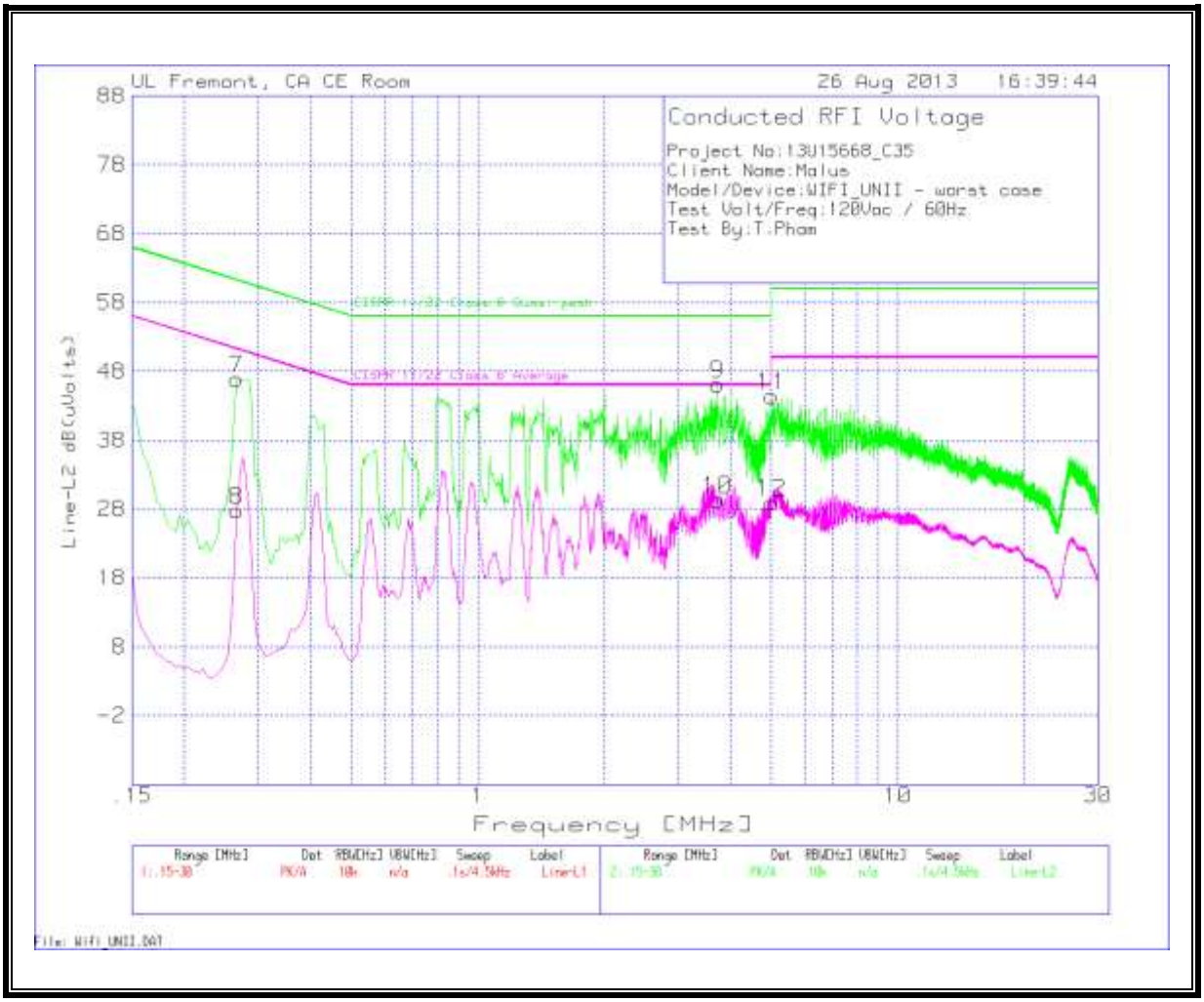
LINE 2 RESULTS



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WORST EMISSIONS 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	46.38	PK	.1	0	46.48	61.2	-14.72	-	-
2	.267	28.5	Av	.1	0	28.6	-	-	51.2	-22.6
3	.8025	45.05	PK	.1	0	45.15	56	-10.85	-	-
4	.8025	27.35	Av	.1	0	27.45	-	-	46	-18.55
5	25.7235	44.9	PK	.5	.3	45.7	60	-14.3	-	-
6	25.7235	32.55	Av	.5	.3	33.35	-	-	50	-16.65

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	46.78	PK	.1	0	46.88	61.2	-14.32	-	-
8	.267	27.74	Av	.1	0	27.84	-	-	51.2	-23.36
9	3.723	45.9	PK	.1	.1	46.1	56	-9.9	-	-
10	3.723	29.15	Av	.1	.1	29.35	-	-	46	-16.65
11	5.01225	44.24	PK	.1	.1	44.44	60	-15.56	-	-
12	5.01225	28.79	Av	.1	.1	28.99	-	-	50	-21.01

PK - Peak detector

Av - average detection

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11. DYNAMIC FREQUENCY SELECTION

11.1. OVERVIEW

11.1.1. LIMITS

INDUSTRY CANADA

IC RSS-210 is closely harmonized with FCC Part 15 DFS rules. The deviations are as follows:

RSS-210 Issue 7 A9.4 (b) (ii) **Channel Availability Check Time:** …

Additional requirements for the band 5600-5650 MHz: Until further notice, devices subject to this Section shall not be capable of transmitting in the band 5600-5650 MHz, so that Environment Canada weather radars operating in this band are protected.

RSS-210 Issue 7 A9.4 (b) (iv) **Channel closing time:** the maximum channel closing time is 260 ms.

FCC

§15.407 (h) and FCC 06-96 APPENDIX “COMPLIANCE MEASUREMENT PROCEDURES FOR UNLICENSED-NATIONAL INFORMATION INFRASTRUCTURE DEVCIES OPERATING IN THE 5250-5350 MHz AND 5470-5725 MHz BANDS INCORPORATING DYNAMIC FREQUENCY SELECTION”.

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Table 1: Applicability of DFS requirements prior to use of a channel

Requirement	Operational Mode		
	Master	Client (without radar detection)	Client (with radar detection)
Non-Occupancy Period	Yes	Not required	Yes
DFS Detection Threshold	Yes	Not required	Yes
Channel Availability Check Time	Yes	Not required	Not required
Uniform Spreading	Yes	Not required	Not required

Table 2: Applicability of DFS requirements during normal operation

Requirement	Operational Mode		
	Master	Client **(without DFS)**	Client **(with DFS)**
DFS Detection Threshold	Yes	Not required	Yes
Channel Closing Transmission Time	Yes	Yes	Yes
Channel Move Time	Yes	Yes	Yes

Table 3: Interference Threshold values, Master or Client incorporating In-Service Monitoring

Maximum Transmit Power	Value (see note)
≥ 200 milliwatt	-64 dBm
< 200 milliwatt	-62 dBm
Note 1: This is the level at the input of the receiver assuming a 0 dBi receive antenna Note 2: Throughout these test procedures an additional 1 dB has been added to the amplitude of the test transmission waveforms to account for variations in measurement equipment. This will ensure that the test signal is at or above the detection threshold level to trigger a DFS response.		

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Table 4: DFS Response requirement values

Parameter	Value
Non-occupancy period	30 minutes
Channel Availability Check Time	60 seconds
Channel Move Time	10 seconds
Channel Closing Transmission Time	200 milliseconds + approx. 60 milliseconds over remaining 10 second period
The instant that the *Channel Move Time* and the *Channel Closing Transmission Time* begins is as follows: For the Short pulse radar Test Signals this instant is the end of the *Burst*. For the Frequency Hopping radar Test Signal, this instant is the end of the last radar burst generated. For the Long Pulse radar Test Signal this instant is the end of the 12 second period defining the radar transmission. The Channel Closing Transmission Time is comprised of 200 milliseconds starting at the beginning of the Channel Move Time plus any additional intermittent control signals required to facilitate channel changes (an aggregate of approximately 60 milliseconds) during the remainder of the 10 second period. The aggregate duration of control signals will not count quiet periods in between transmissions.	

Table 5 – Short Pulse Radar Test Waveforms

Radar Type	Pulse Width (Microseconds)	PRI (Microseconds)	Pulses	Minimum Percentage of Successful Detection	Minimum Trials
1	1	1428	18	60%	30
2	1-5	150-230	23-29	60%	30
3	6-10	200-500	16-18	60%	30
4	11-20	200-500	12-16	60%	30
Aggregate (Radar Types 1-4)				80%	120

Table 6 – Long Pulse Radar Test Signal

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

Table 7 – Frequency Hopping Radar Test Signal

Radar Waveform	Pulse Width (µsec)	PRI (µsec)	Burst Length (ms)	Pulses per Hop	Hopping Rate (kHz)	Minimum Percentage of Successful Detection	Minimum Trials
6	1	333	300	9	.333	70%	30

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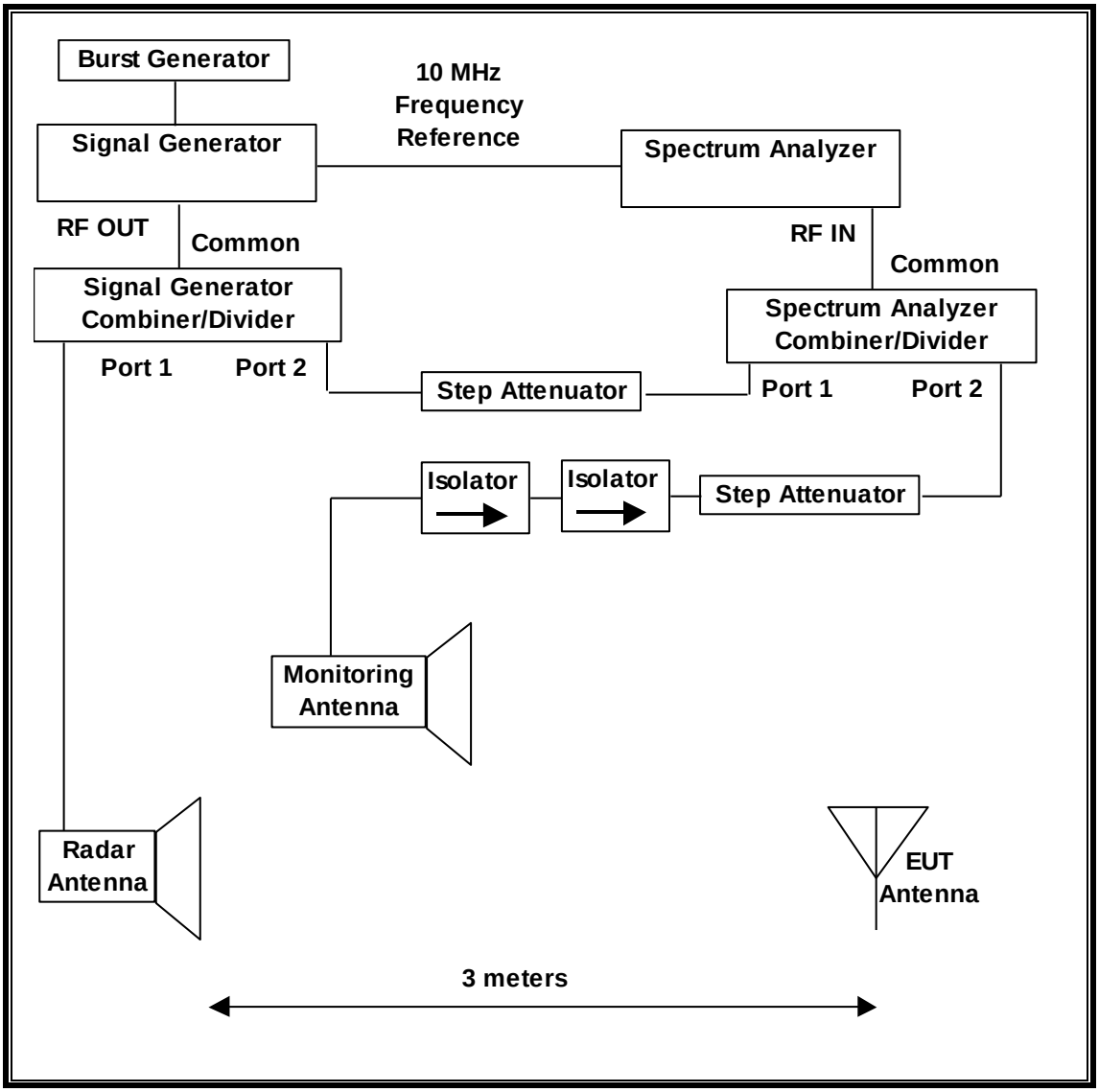
11.1.2. TEST AND MEASUREMENT SYSTEM

RADIATED METHOD SYSTEM BLOCK DIAGRAM



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SYSTEM OVERVIEW

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

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

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

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

SYSTEM CALIBRATION

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

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

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

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ADJUSTMENT OF DISPLAYED TRAFFIC LEVEL

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

TEST AND MEASUREMENT EQUIPMENT

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

TEST EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Asset Number**	**Cal Due**
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	C01178	09/18/13
Vector Signal Generator, 20GHz	Agilent / HP	E8267C	C01066	11/20/13
Spectrum Analyzer, 26.5 GHz	Agilent / HP	E4440A	95288	09/04/15
Vector Signal Generator, 6 GHz	Agilent / HP	E4438C	F00037	08/06/14

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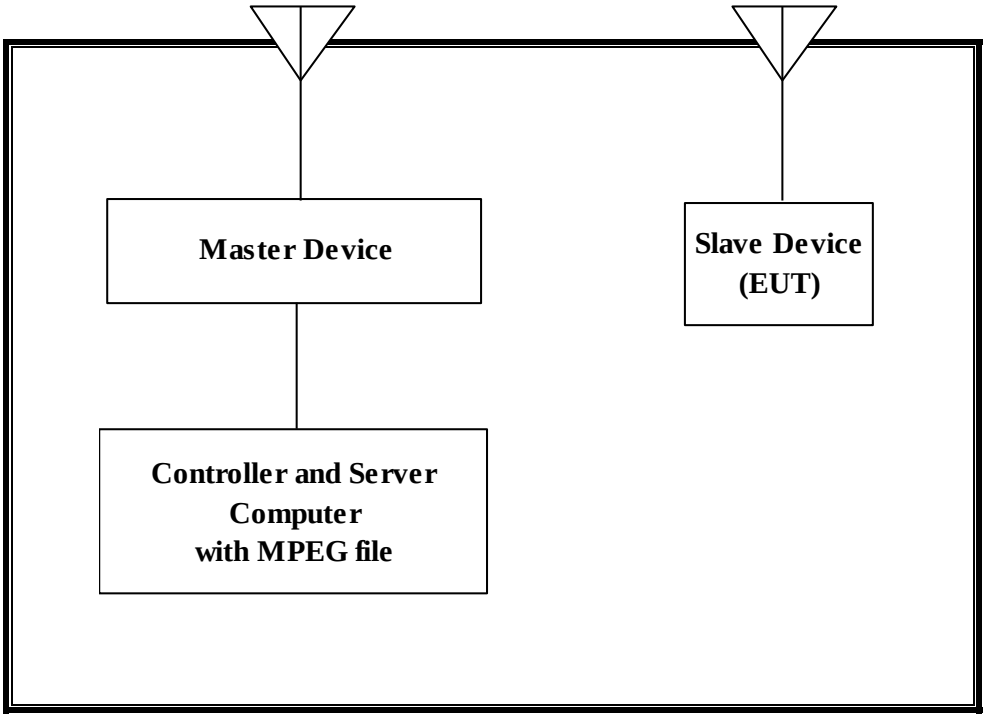
11.1.3. SETUP OF EUT (CLIENT MODE)

RADIATED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

The following support equipment was utilized for the DFS tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Wireless Access Point (Master Device)	Cisco	AIR-AP1252AG-A-K9	FTX130390D9	LDK102061
AC Adapter (AP)	Delta Electronics	EADP-45BB B	DTH1049902N	DoC
Notebook PC (Controller/Server)	Apple	MacBook Pro A1150	AOU257941	DoC
AC Adapter (Controller/Server PC)	Delta Electronics	A1330	MV952157KAGKA	DoC
Apple TV (Peer Slave Device)	Apple	A1469	V07JV1Z7FF54	BCGA1469
Video Display	Dell	U2410f	CN-0FJ525N-72872-1B5-AGAL	DoC
Wireless Access Point (Master Device)	Apple	A1470	DLXL4029FPLF	BCG-A1470

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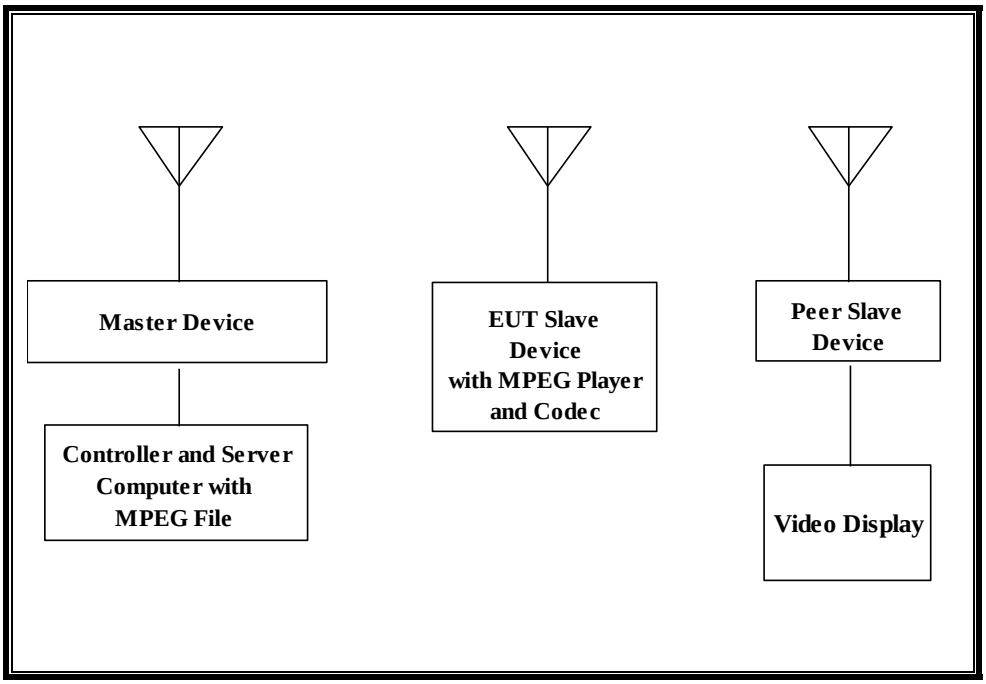
11.1.4. SETUP OF EUT (CLIENT-TO-CLIENT COMMUNICATIONS MODE)

RADIATED METHOD EUT TEST SETUP



SUPPORT EQUIPMENT

The following support equipment was utilized for the DFS tests documented in this report:

PERIPHERAL SUPPORT EQUIPMENT LIST				
Description	**Manufacturer**	**Model**	**Serial Number**	**FCC ID**
Wireless Access Point (Master Device)	Cisco	AIR-AP1252AG-A-K9	FTX130390D9	LDK102061
AC Adapter (AP)	Delta Electronics	EADP-45BB B	DTH1049902N	DoC
Notebook PC (Controller/Server)	Apple	MacBook Pro A1150	AOU257941	DoC
AC Adapter (Controller/Server PC)	Delta Electronics	A1330	MV952157KAGKA	DoC
Apple TV (Peer Slave Device)	Apple	A1469	V07JV1Z7FF54	BCGA1469
Video Display	Dell	U2410f	CN-0FJ525N-72872-1B5-AGAL	DoC
Wireless Access Point (Master Device)	Apple	A1470	DLXL4029FPLF	BCG-A1470

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11.1.5. DESCRIPTION OF EUT

The EUT operates over the 5250-5350 MHz and 5470-5725 MHz ranges.

The EUT is a Slave Device without Radar Detection.

The highest power level within these bands is 24.41 dBm EIRP in the 5250-5350 MHz band and 24.97 dBm EIRP in the 5470-5725 MHz band.

The only antenna assembly consists of 2 antennas with individual gains of 0.75 dBi and 3.26 dBi in the 5250-5350 MHz band and 2.43 dBi and 4.29 dBi in the 5470-5725 MHz band

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

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

The EUT uses one transmitter/receiver chain connected to an antenna to perform radiated tests.

WLAN traffic is generated by streaming the video file TestFile.mp2 “6 ½ Magic Hours” from the Master to the Slave in full motion video mode using Safari web browser.

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

The EUT utilizes the 802.11a/n architecture. Two nominal channel bandwidths of 20 MHz and 40 MHz are implemented.

The software installed in the EUT is 11B451.

UNIFORM CHANNEL SPREADING

This requirement is not applicable to Slave radio devices.

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OVERVIEW OF MASTER DEVICE WITH RESPECT TO §15.407 (h) REQUIREMENTS

The Master Device is a Cisco Access Point, FCC ID: LDK102061. The minimum antenna gain for the Master Device is 3.5 dBi.

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

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

The software installed in the (Cisco) access point is 12.4(25d)JA1.

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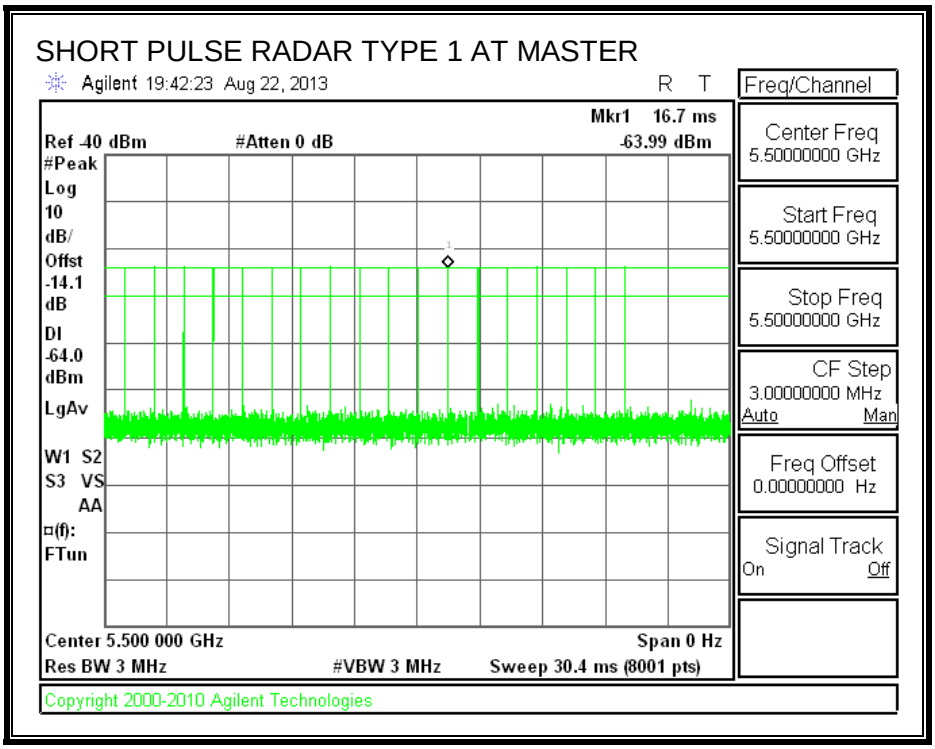
11.2. CLIENT MODE RESULTS FOR 20 MHz BANDWIDTH

11.2.1. TEST CHANNEL

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

11.2.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



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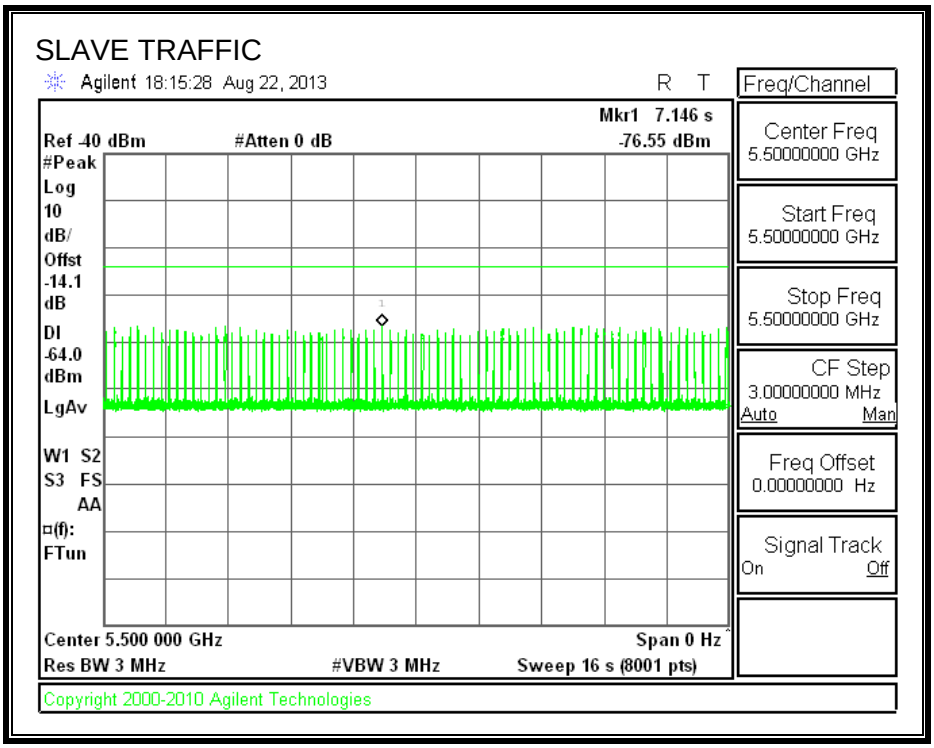
TRAFFIC



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11.2.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

11.2.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

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

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

RESULTS

Agency	Channel Move Time (sec)	Limit (sec)
FCC / IC	0.080	10

Agency	Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
FCC	0.0	60
IC	20.0	260

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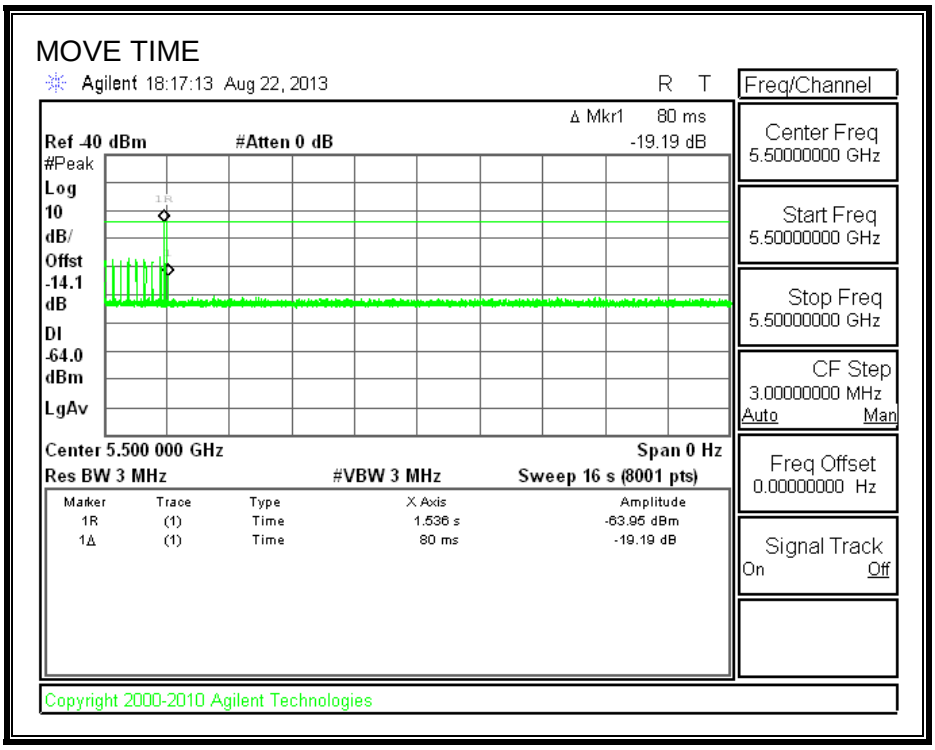
MOVE TIME



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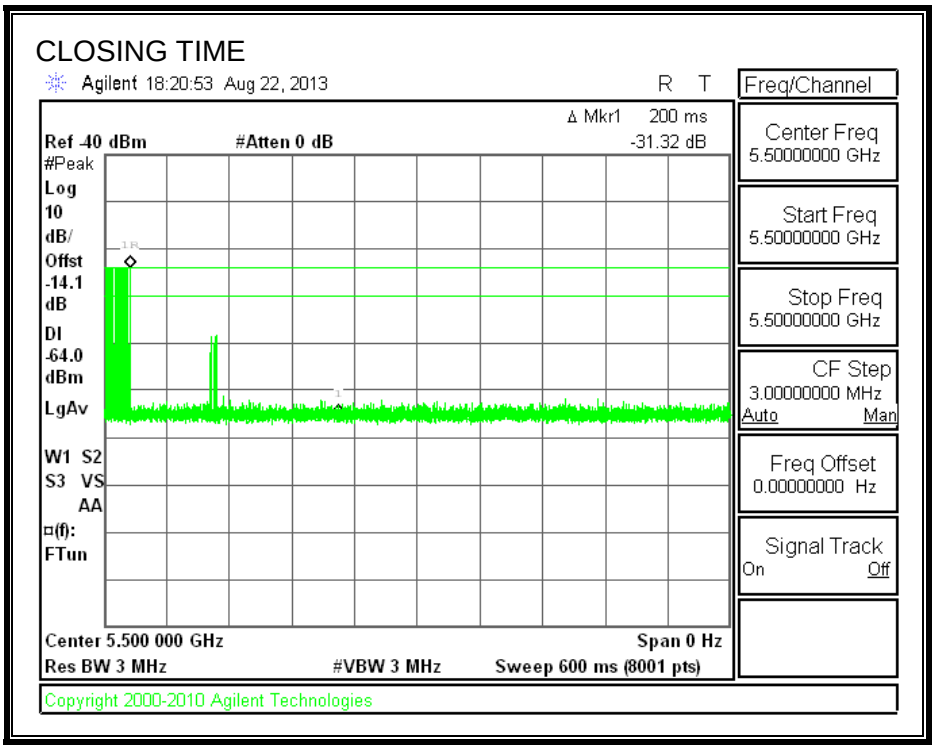
CHANNEL CLOSING TIME



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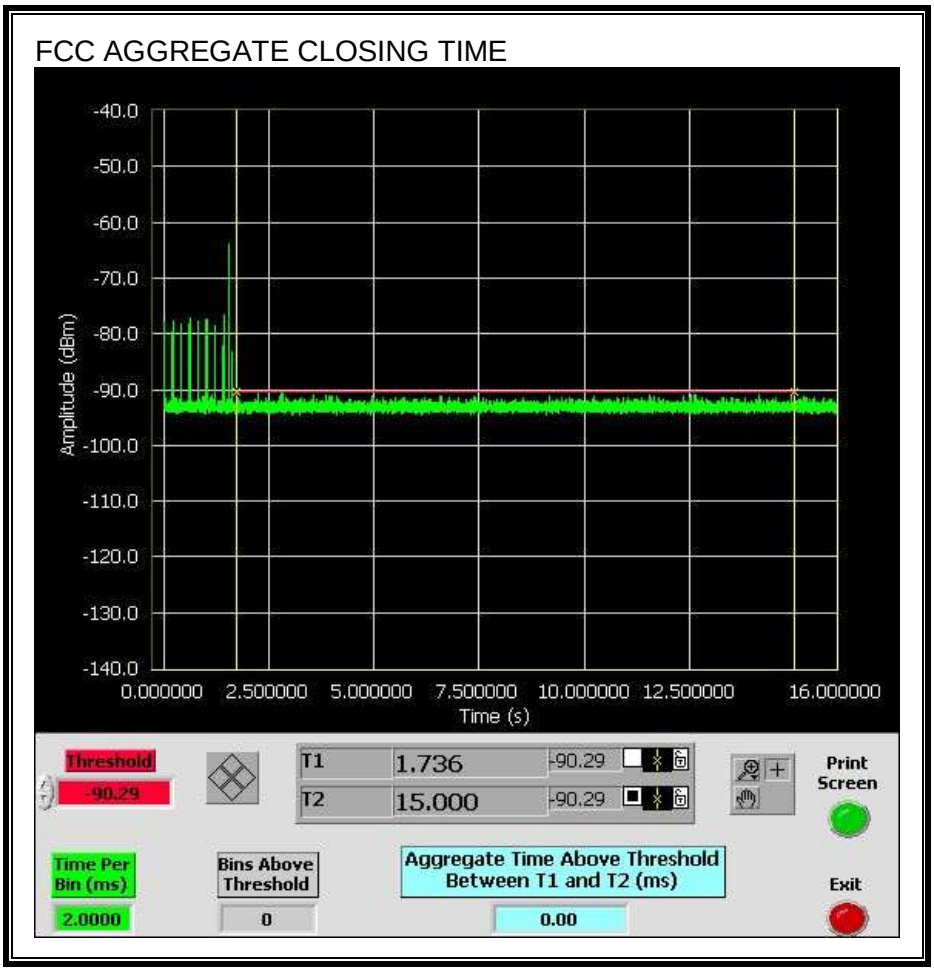
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the FCC aggregate monitoring period.



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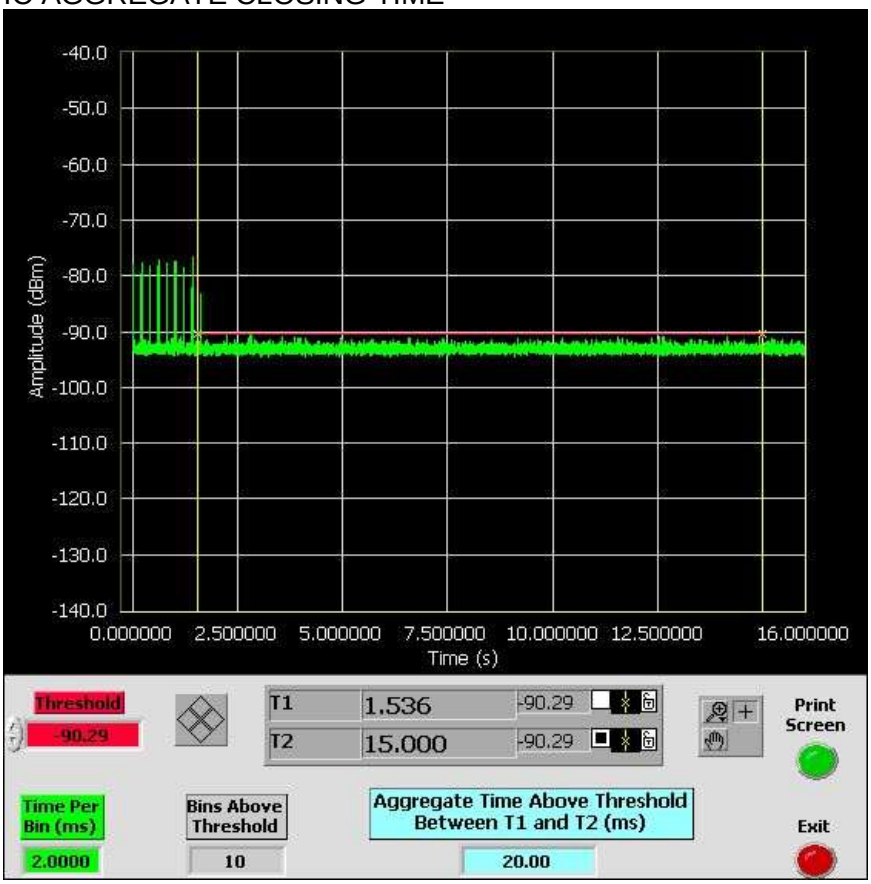
Only intermittent transmissions are observed during the IC aggregate monitoring period.

IC AGGREGATE CLOSING TIME



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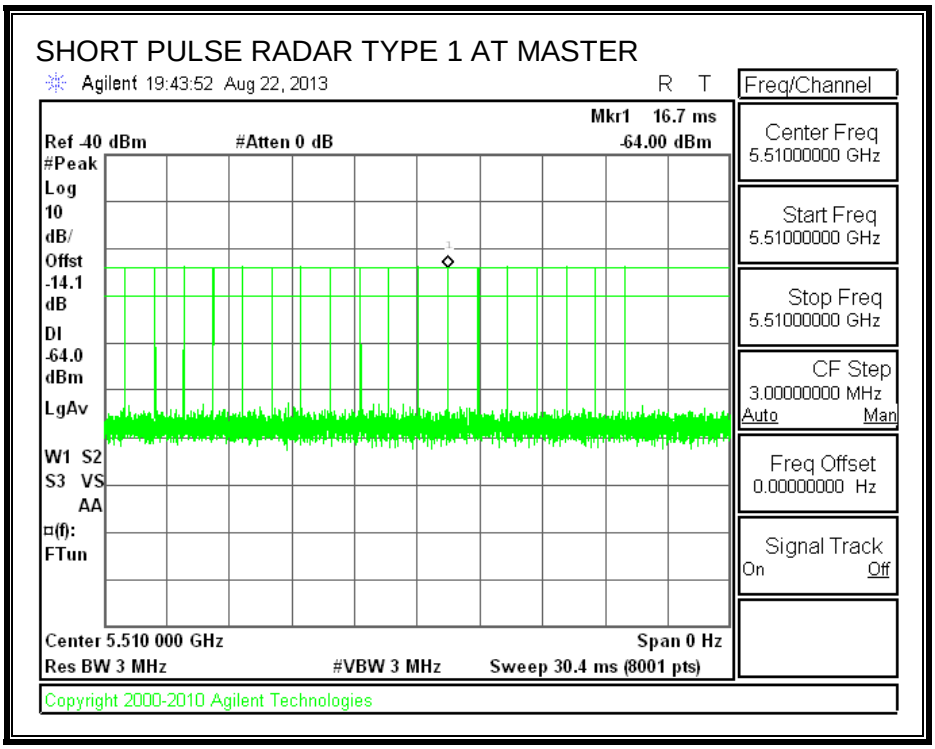
11.3. CLIENT MODE RESULTS FOR 40 MHz BANDWIDTH

11.3.1. TEST CHANNEL

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

11.3.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



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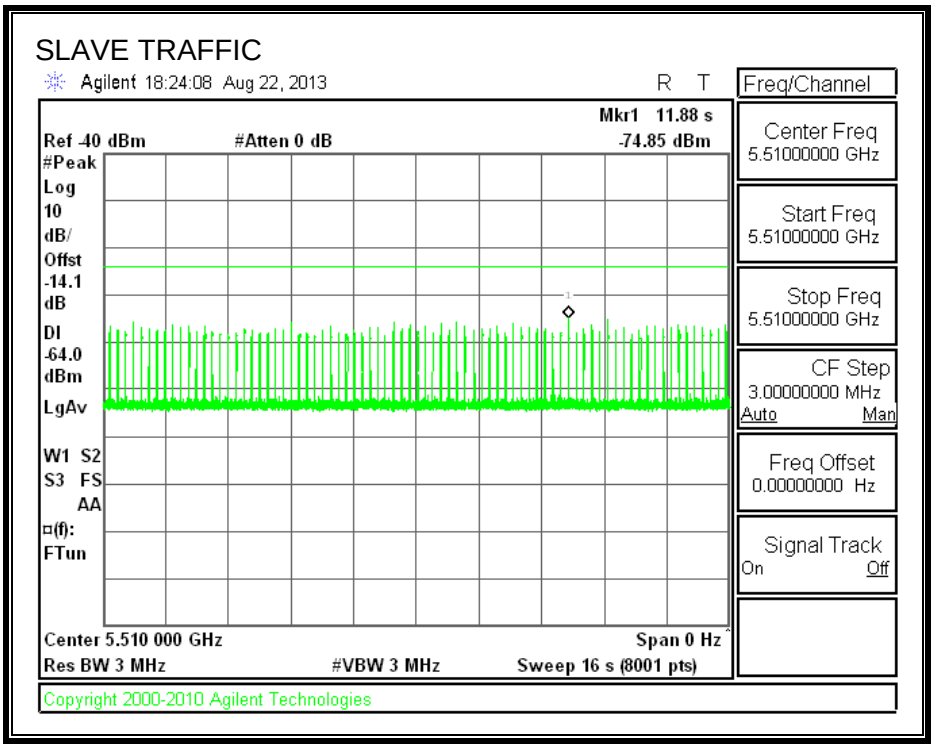
TRAFFIC



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11.3.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

11.3.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

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

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

RESULTS

Agency	Channel Move Time (sec)	Limit (sec)
FCC / IC	0.216	10

Agency	Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
FCC	2.0	60
IC	36.0	260

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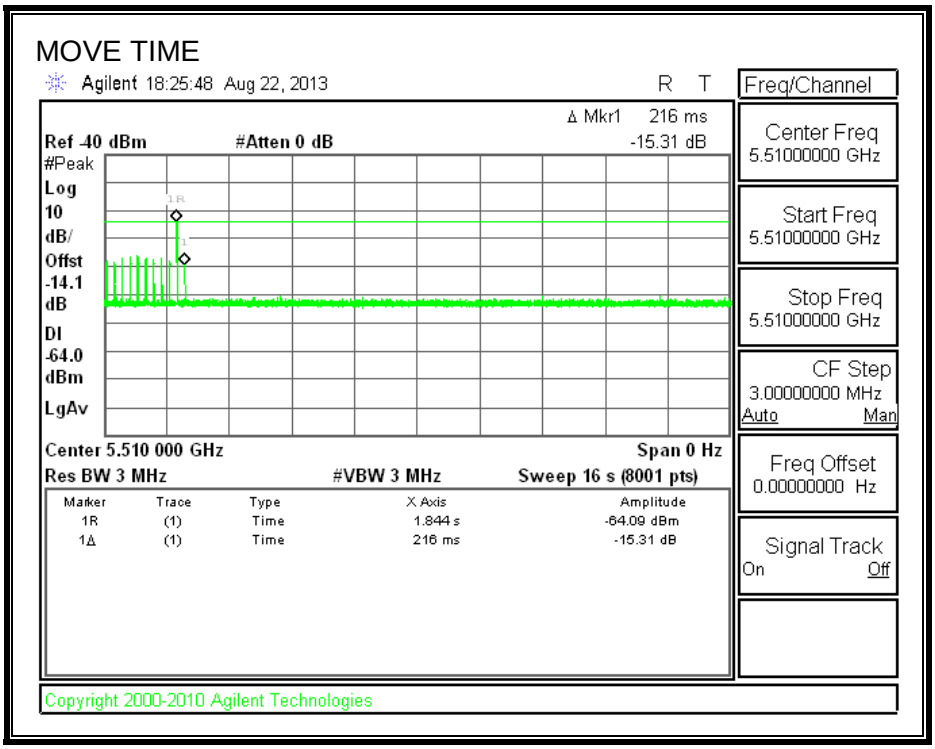
MOVE TIME



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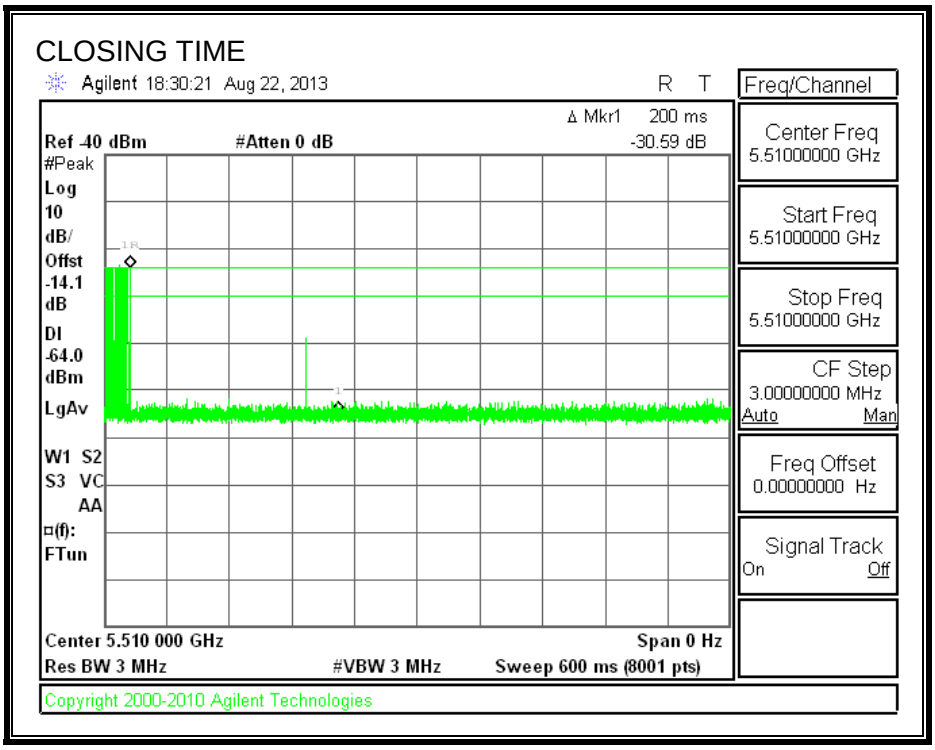
CHANNEL CLOSING TIME



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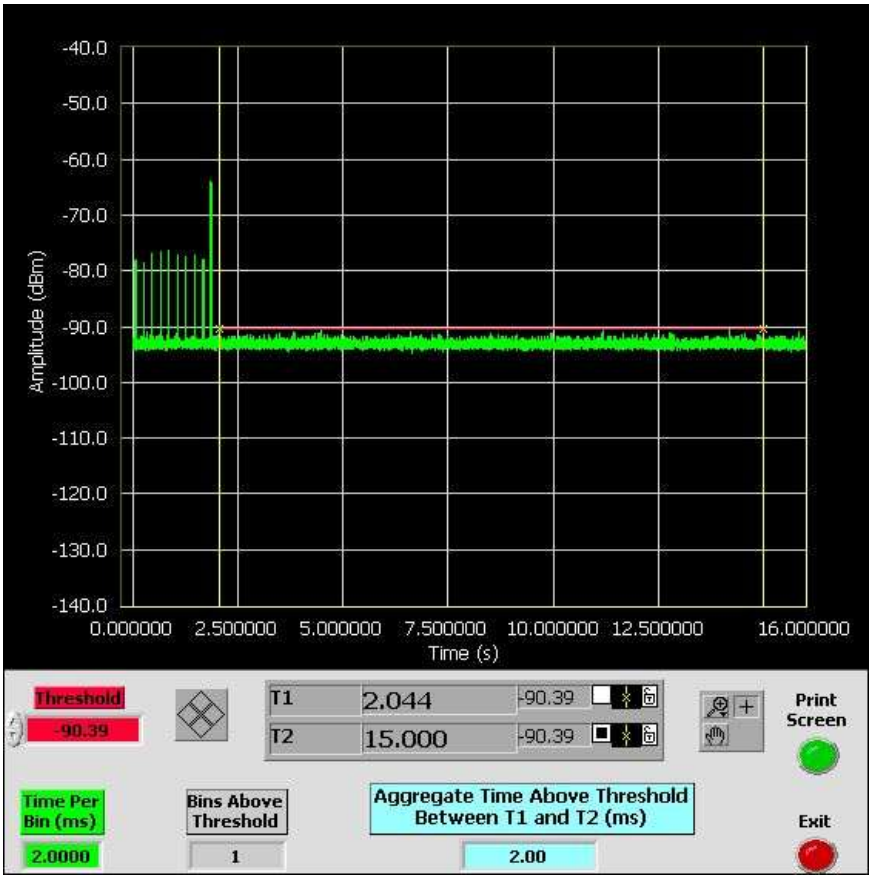
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

Only intermittent transmissions are observed during the FCC aggregate monitoring period.

FCC AGGREGATE CLOSING TIME



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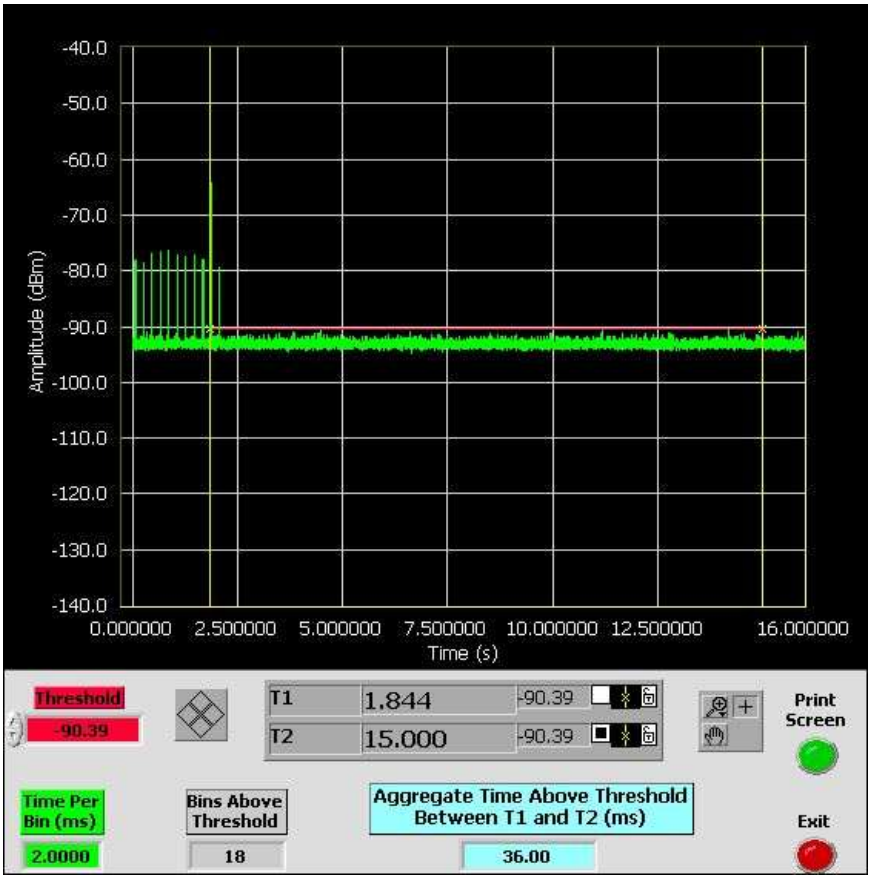
Only intermittent transmissions are observed during the IC aggregate monitoring period.

IC AGGREGATE CLOSING TIME



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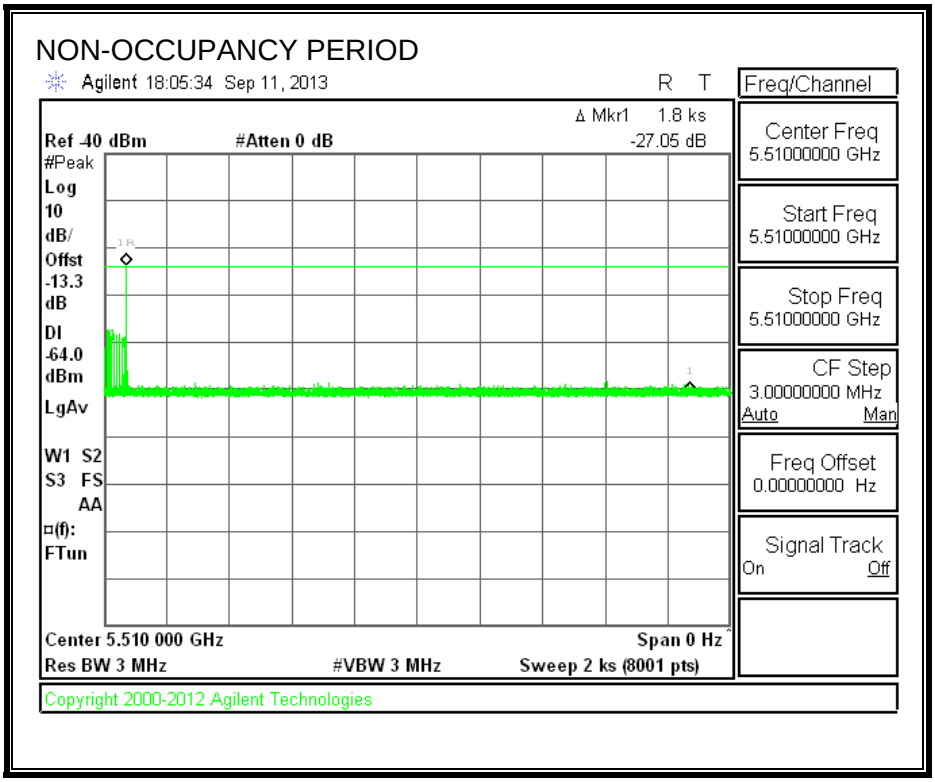
11.3.5. NON-OCCUPANCY PERIOD

RESULTS

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



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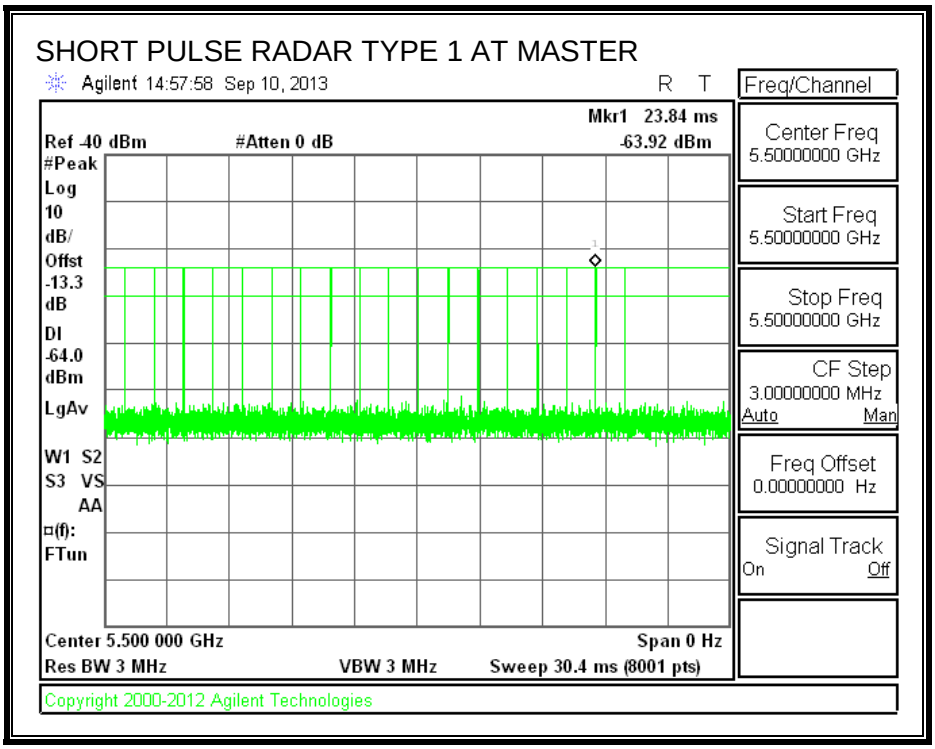
11.4. CLIENT-TO-CLIENT COMMUNICATIONS MODE RESULTS FOR 20 MHz BANDWIDTH

11.4.1. TEST CHANNEL

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

11.4.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



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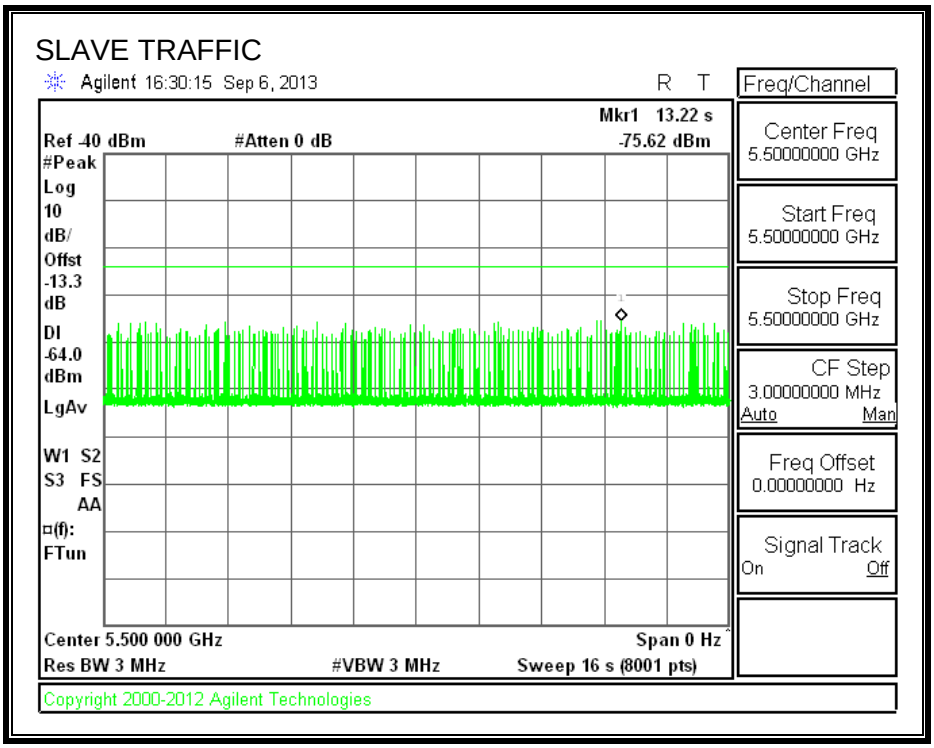
TRAFFIC



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11.4.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

11.4.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

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

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

RESULTS

Agency	Channel Move Time (sec)	Limit (sec)
FCC / IC	0.000	10

Agency	Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
FCC	0.0	60
IC	0.0	260

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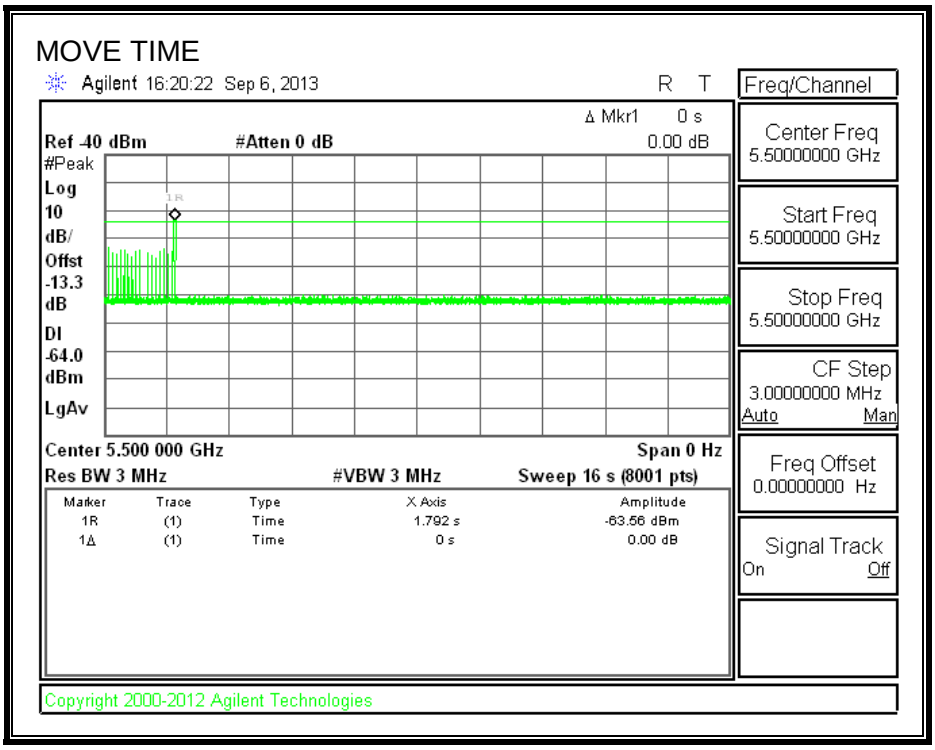
MOVE TIME



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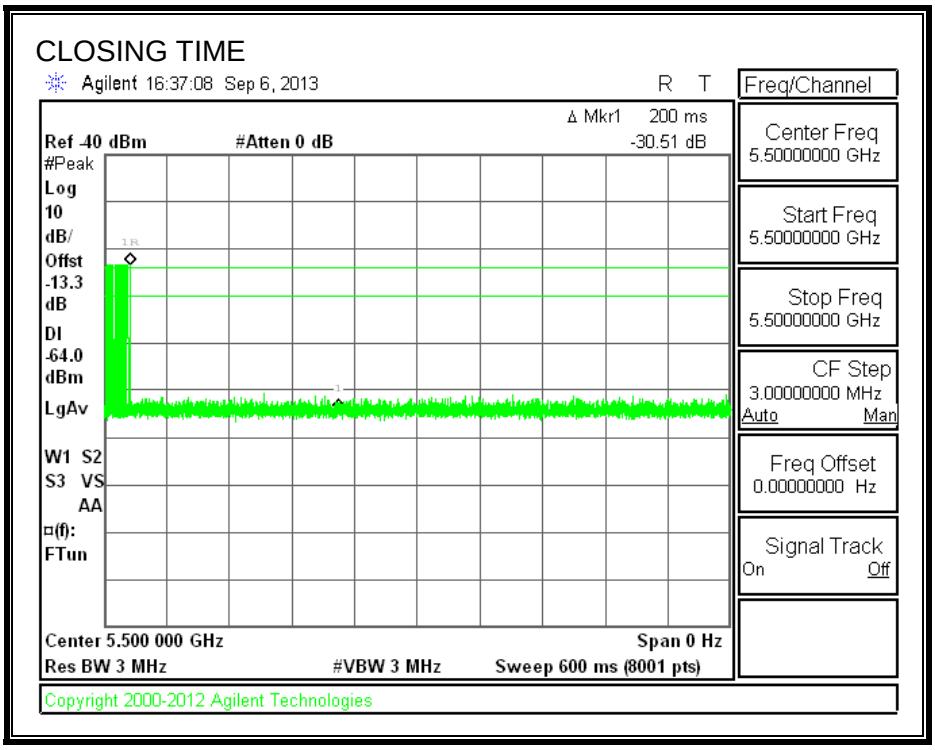
CHANNEL CLOSING TIME



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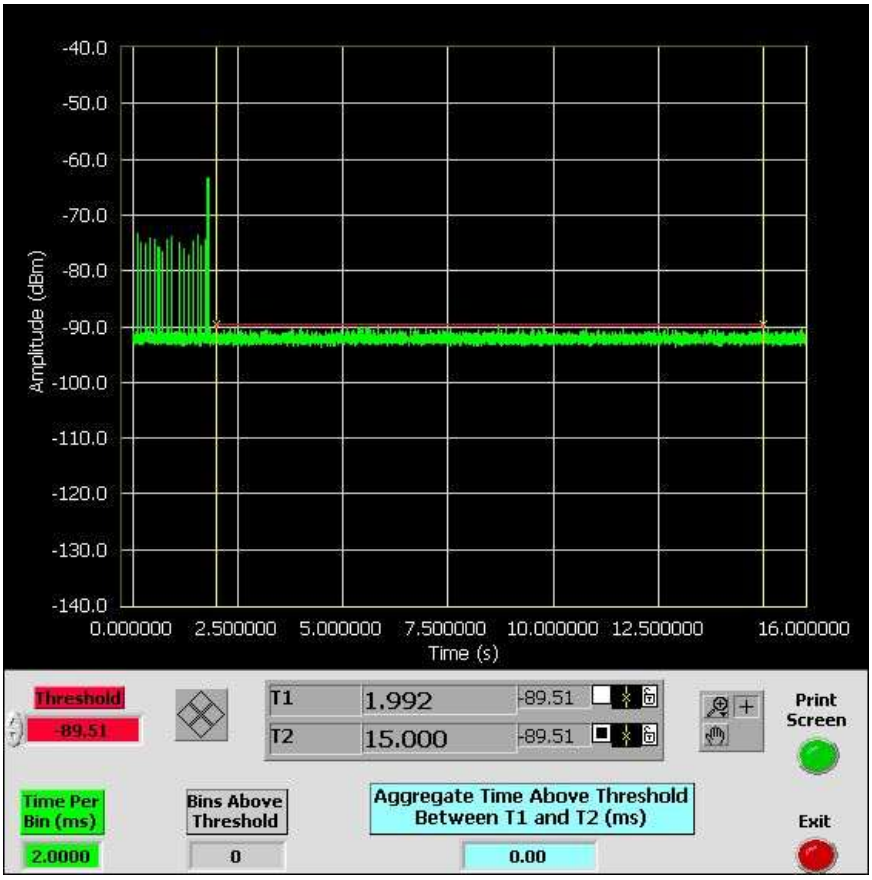
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the FCC aggregate monitoring period.

FCC AGGREGATE CLOSING TIME



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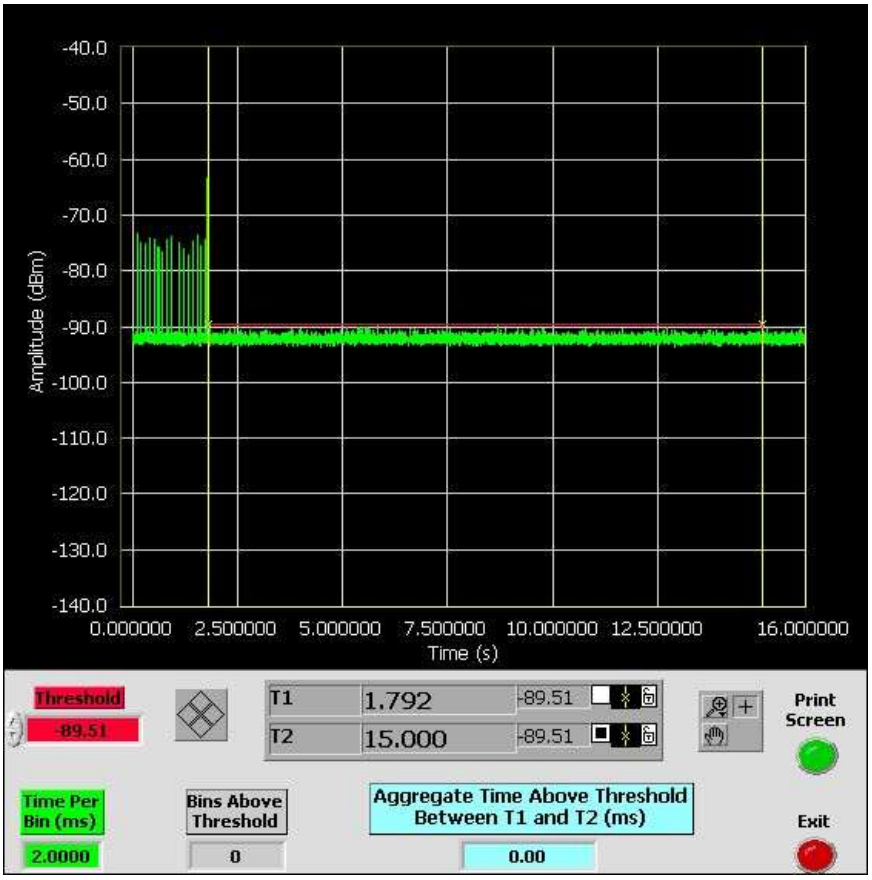
Only transmissions are observed during the IC aggregate monitoring period.

IC AGGREGATE CLOSING TIME



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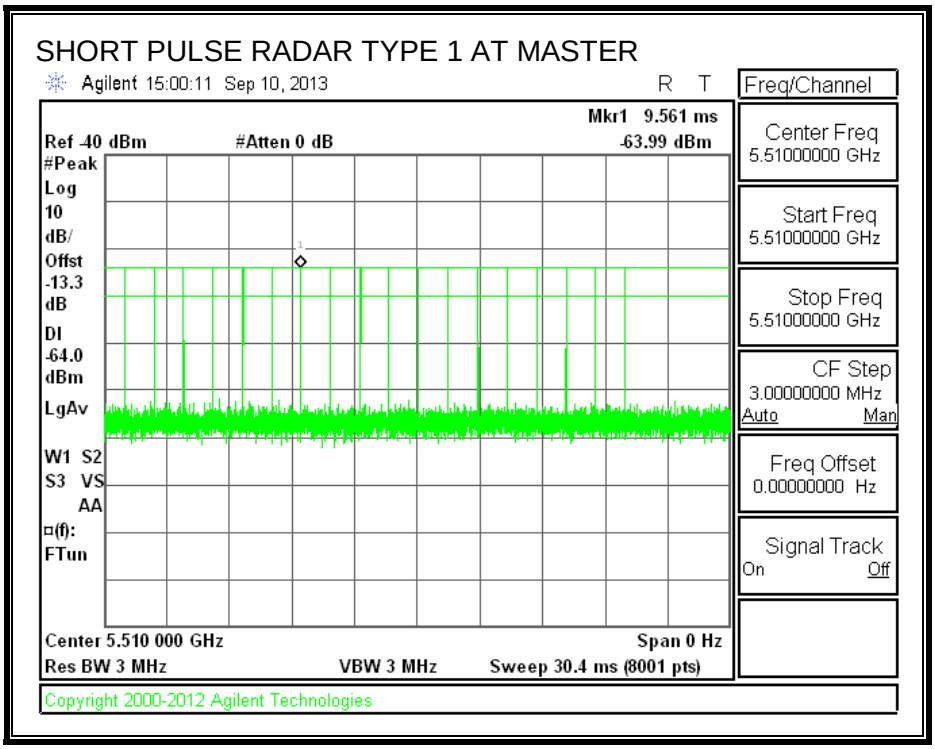
11.5. CLIENT-TO-CLIENT COMMUNICATIONS MODE RESULTS FOR 40 MHz BANDWIDTH

11.5.1. TEST CHANNEL

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

11.5.2. RADAR WAVEFORM AND TRAFFIC

RADAR WAVEFORM



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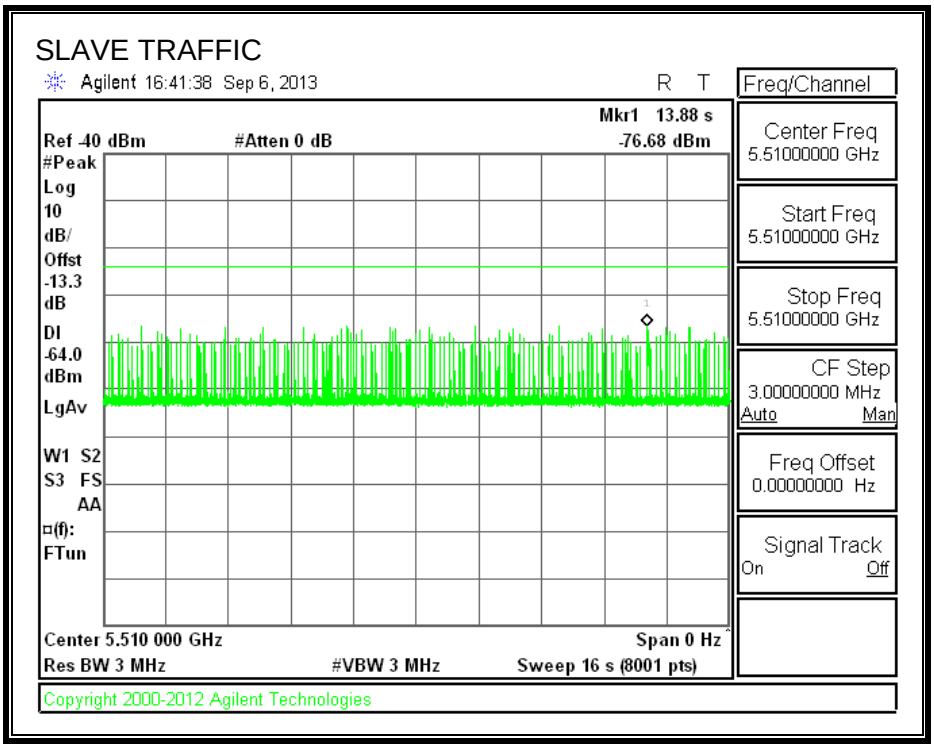
TRAFFIC



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11.5.3. OVERLAPPING CHANNEL TESTS

RESULTS

These tests are not applicable.

11.5.4. MOVE AND CLOSING TIME

REPORTING NOTES

The reference marker is set at the end of last radar pulse.

The delta marker is set at the end of the last WLAN transmission following the radar pulse. This delta is the channel move time.

The aggregate channel closing transmission time is calculated as follows:

Aggregate Transmission Time =
(Number of analyzer bins showing transmission) * (dwell time per bin)

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

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

RESULTS

Agency	Channel Move Time (sec)	Limit (sec)
FCC / IC	0.070	10

Agency	Aggregate Channel Closing Transmission Time (msec)	Limit (msec)
FCC	0.0	60
IC	30.0	260

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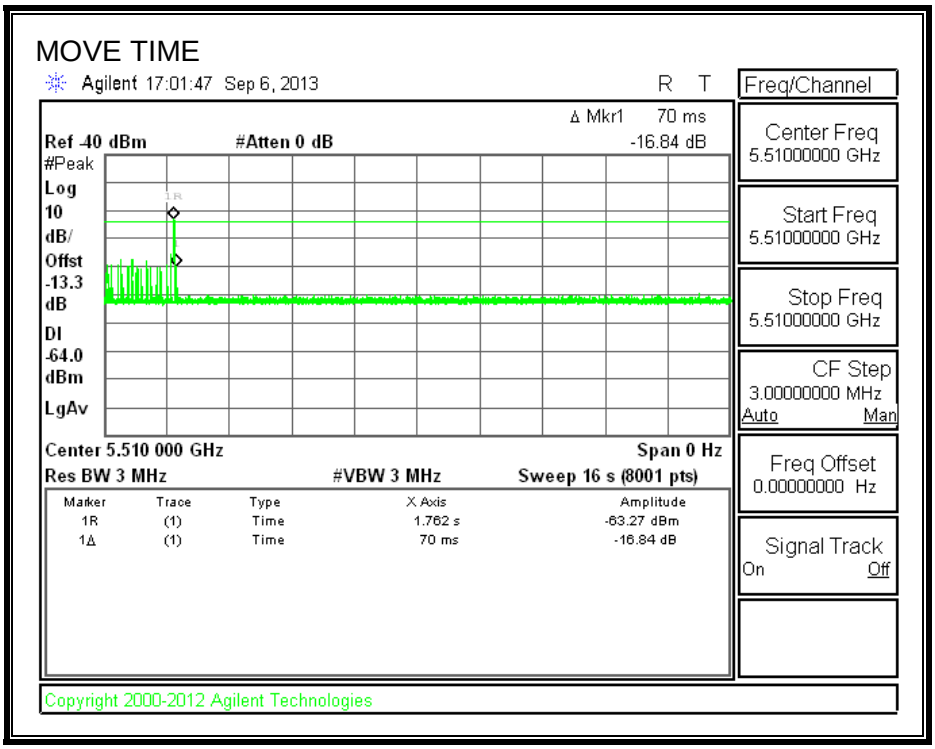
MOVE TIME



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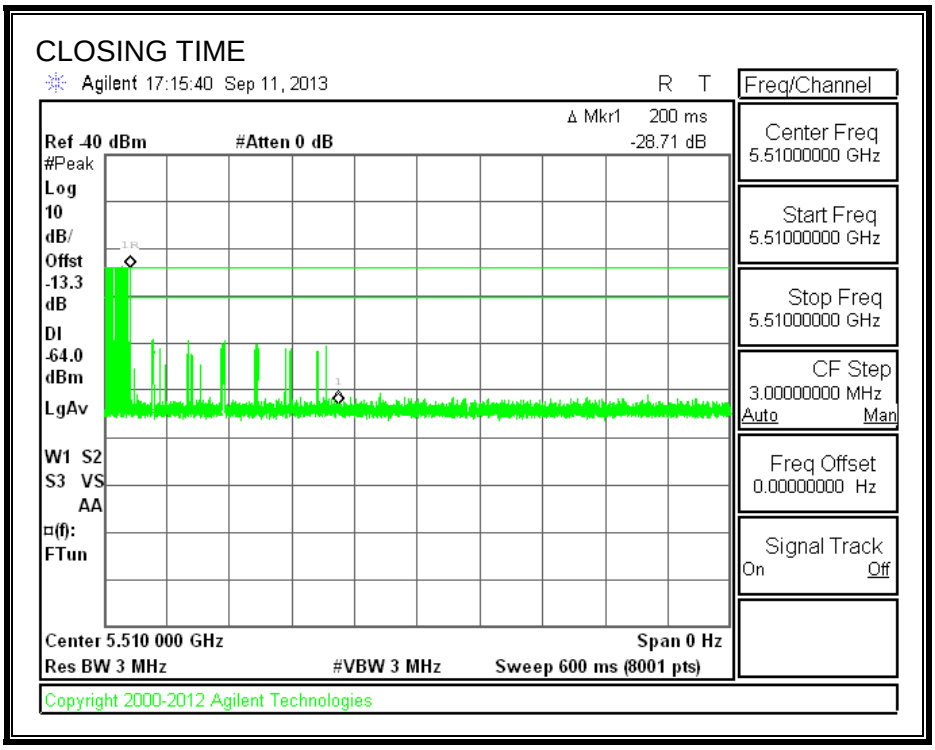
CHANNEL CLOSING TIME



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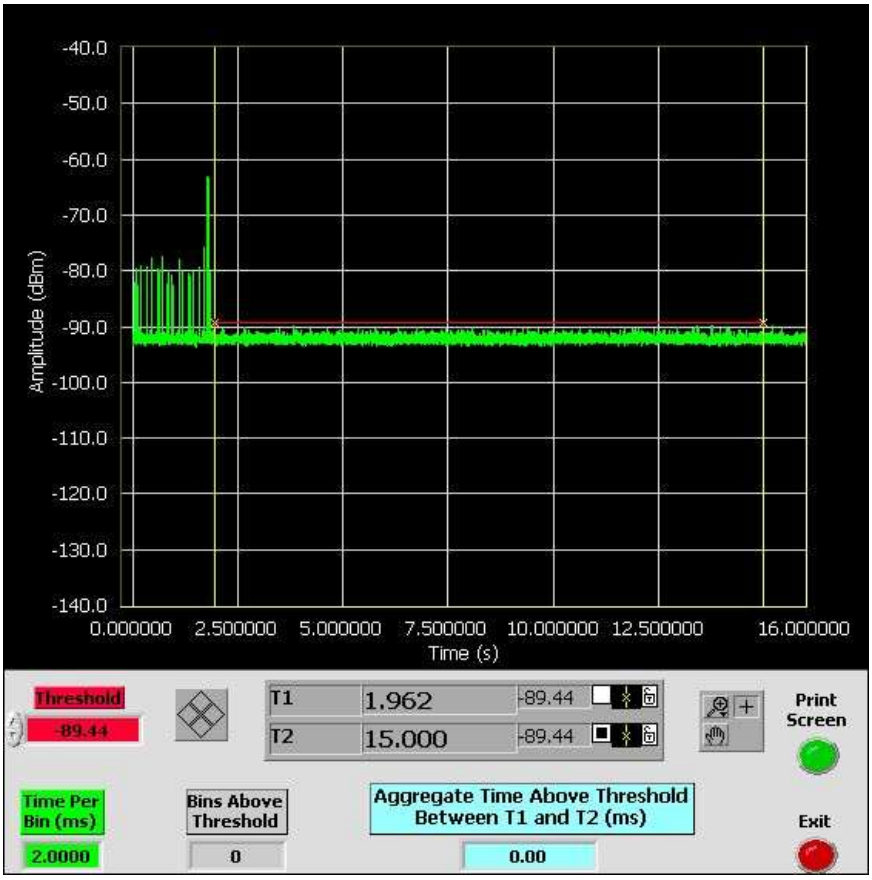
AGGREGATE CHANNEL CLOSING TRANSMISSION TIME

No transmissions are observed during the FCC aggregate monitoring period.

FCC AGGREGATE CLOSING TIME



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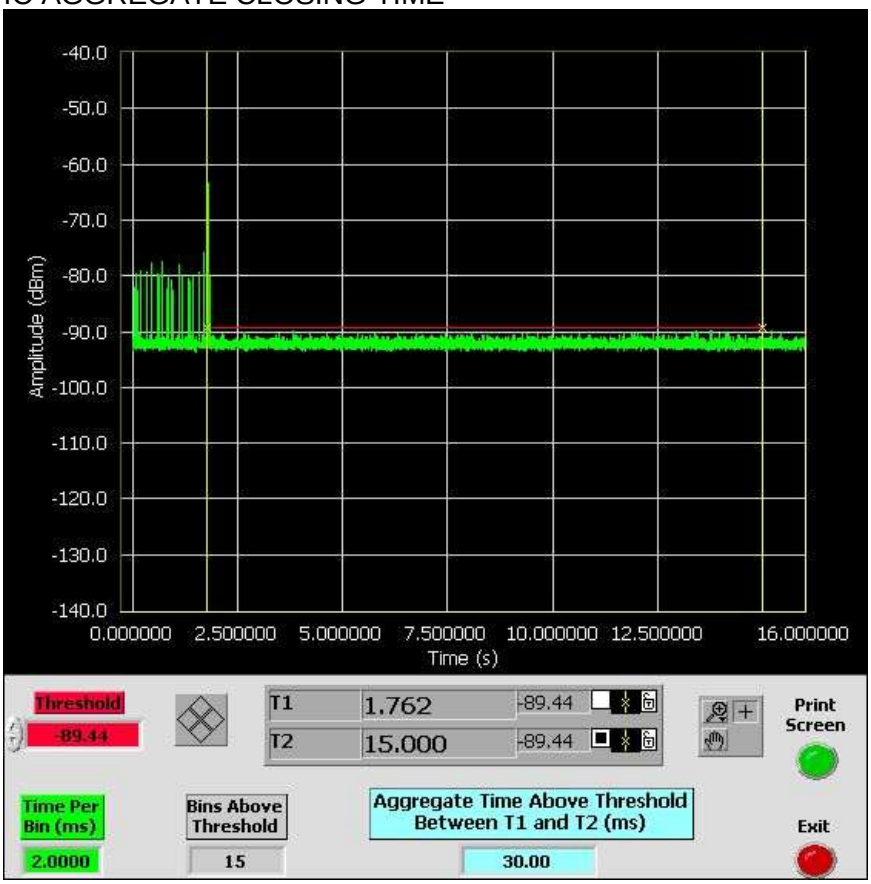
Only intermittent transmissions are observed during the IC aggregate monitoring period.

IC AGGREGATE CLOSING TIME



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