
9.8. 802.11n HT40 2TX CDD MODE IN THE 5.3 GHz BAND

9.8.1. 26 dB BANDWIDTH

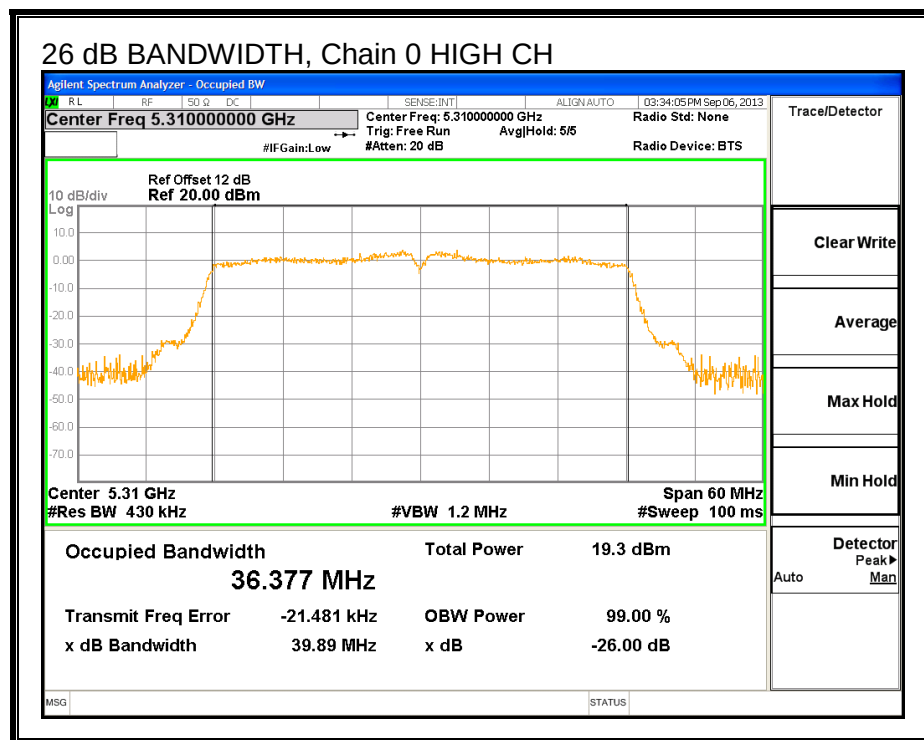
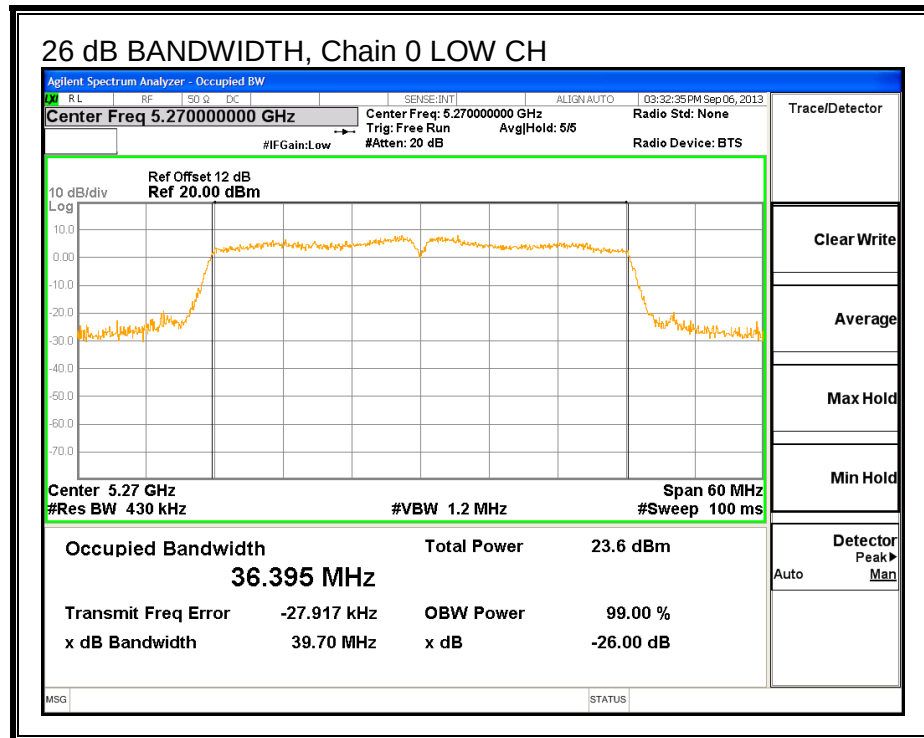
LIMITS

None; for reporting purposes only.

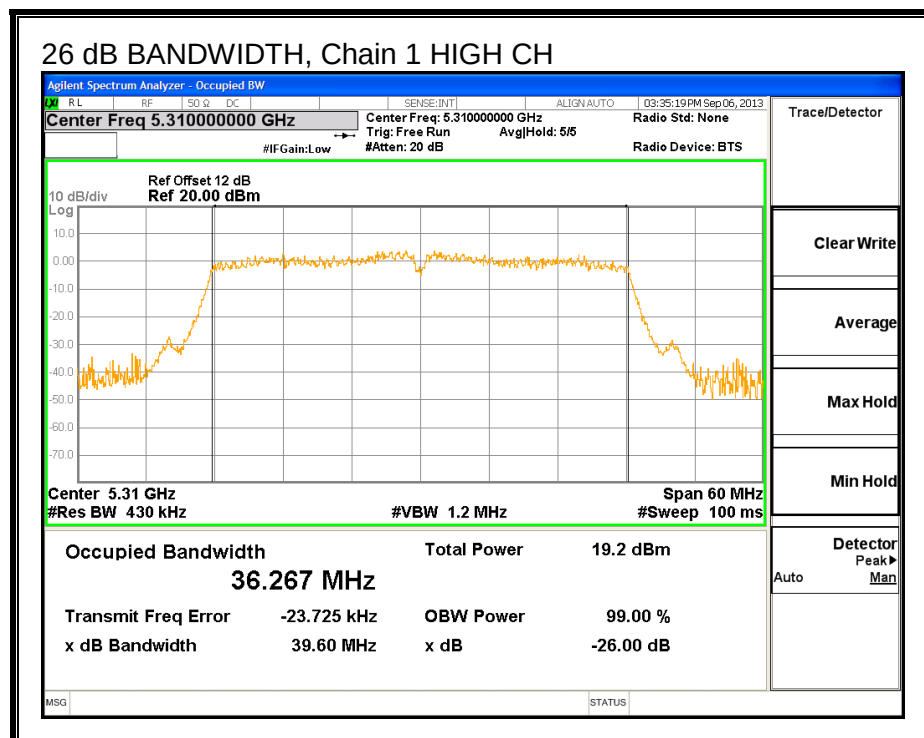
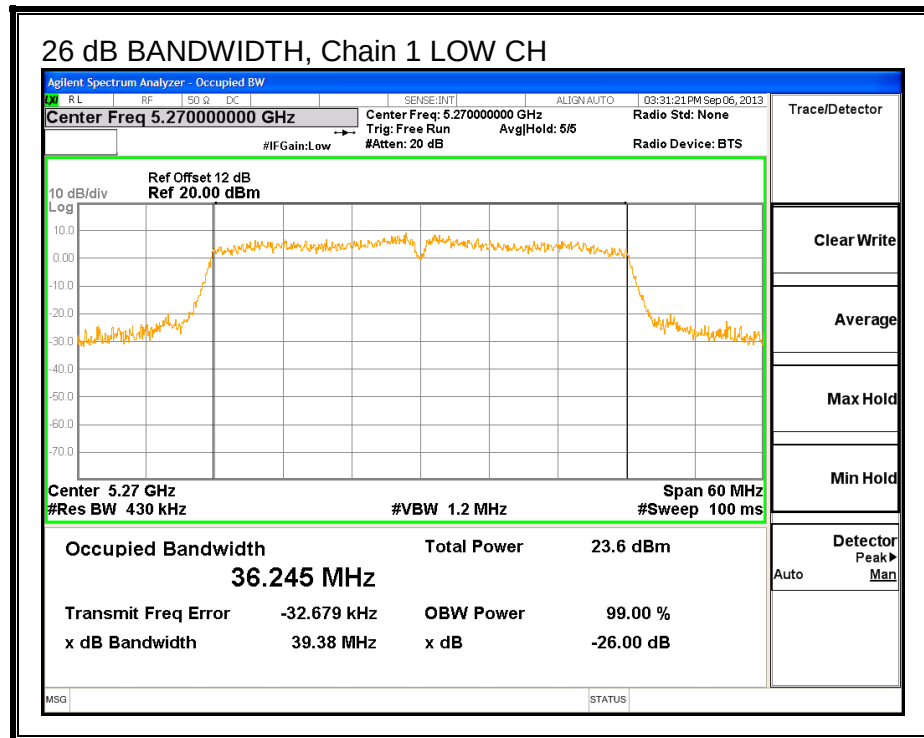
RESULTS

Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5270	39.70	39.38
High	5310	39.89	39.60

26 dB BANDWIDTH, Chain 0



26 dB BANDWIDTH, Chain 1



9.8.2. 99% BANDWIDTH

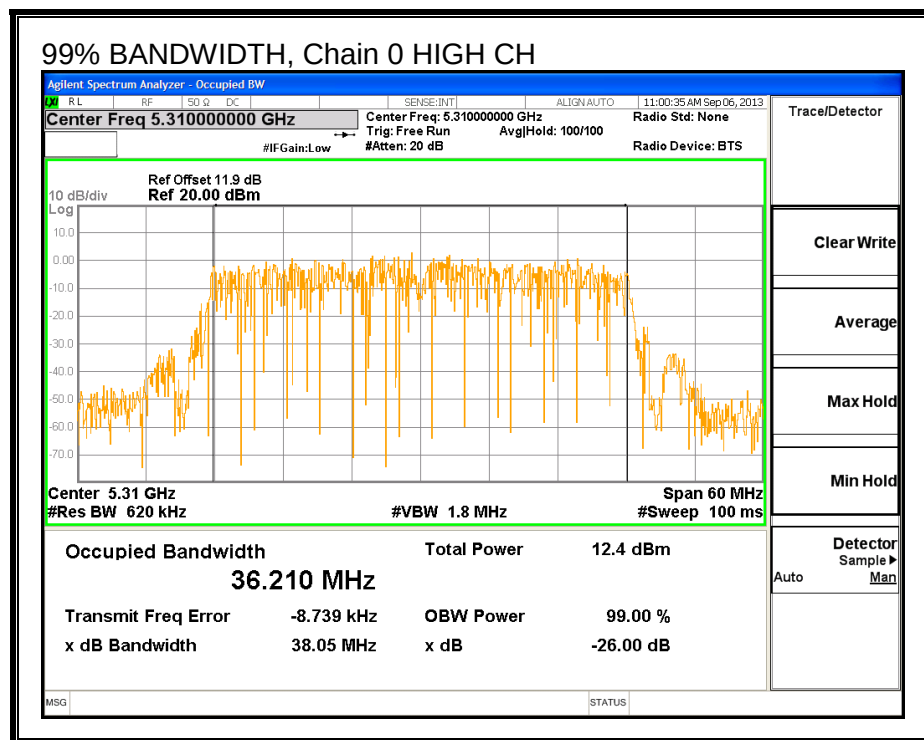
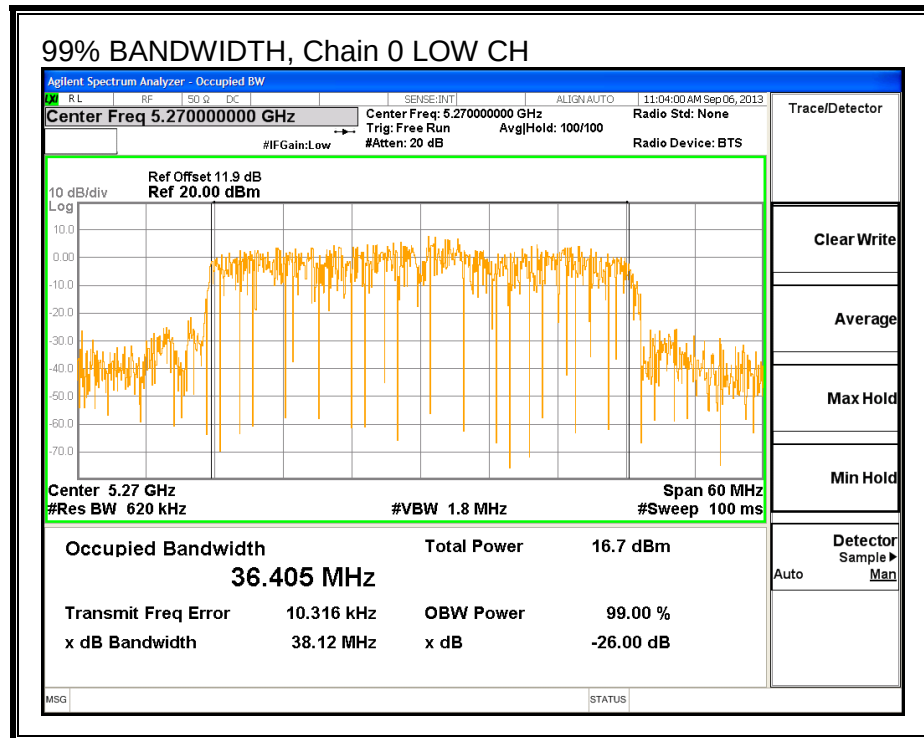
LIMITS

None; for reporting purposes only.

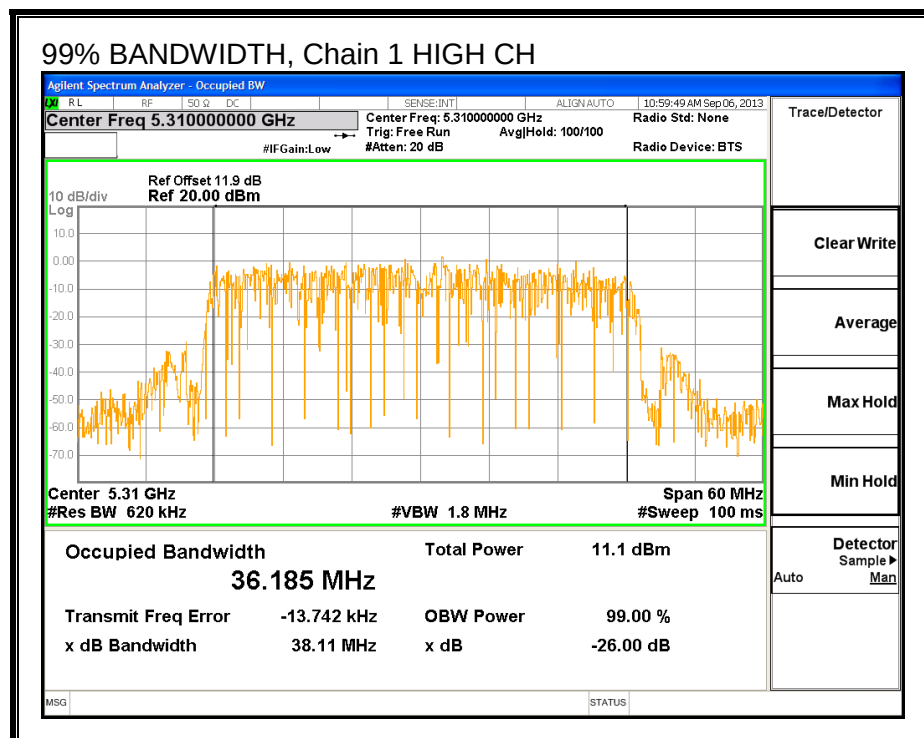
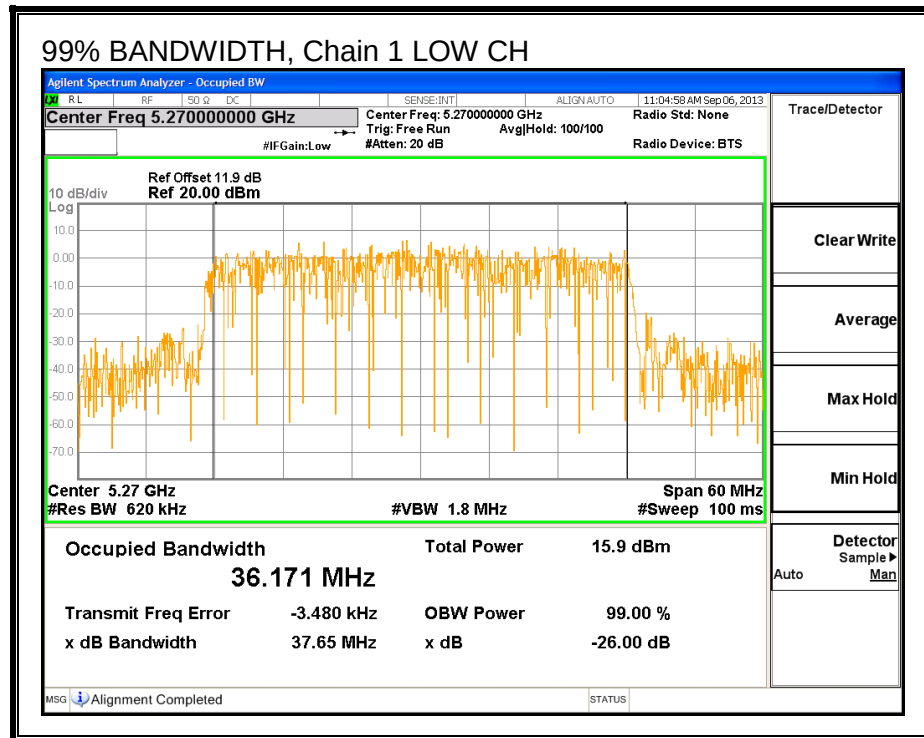
RESULTS

Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5270	36.405	36.171
High	5310	36.210	36.185

99% BANDWIDTH, Chain 0



99% BANDWIDTH, Chain 1



9.8.3. 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 11.9 dB (including 10 dB pad and 1.9 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	5270	15.85	15.70	18.79
High	5310	12.48	12.49	15.50

9.8.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.25–5.35 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26–dB emission bandwidth in MHz. In addition, the maximum 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.

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)
0.75	3.25	2.18

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)
0.75	3.25	5.10

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Uncorre Directio nal Gain (dBi)	Correlated Directional Gain (dBi)
Low	5270	39.4	2.18	5.10
High	5310	39.6	2.18	5.10

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	FCC PPSD Limit (dBm)
Low	5270	24.00	11.00
High	5310	24.00	11.00

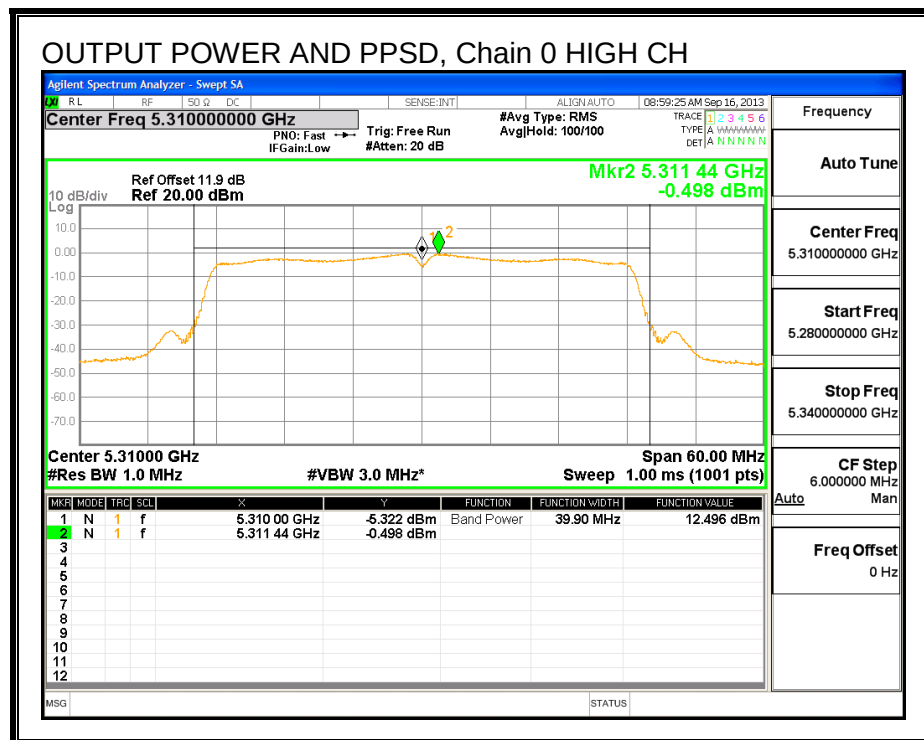
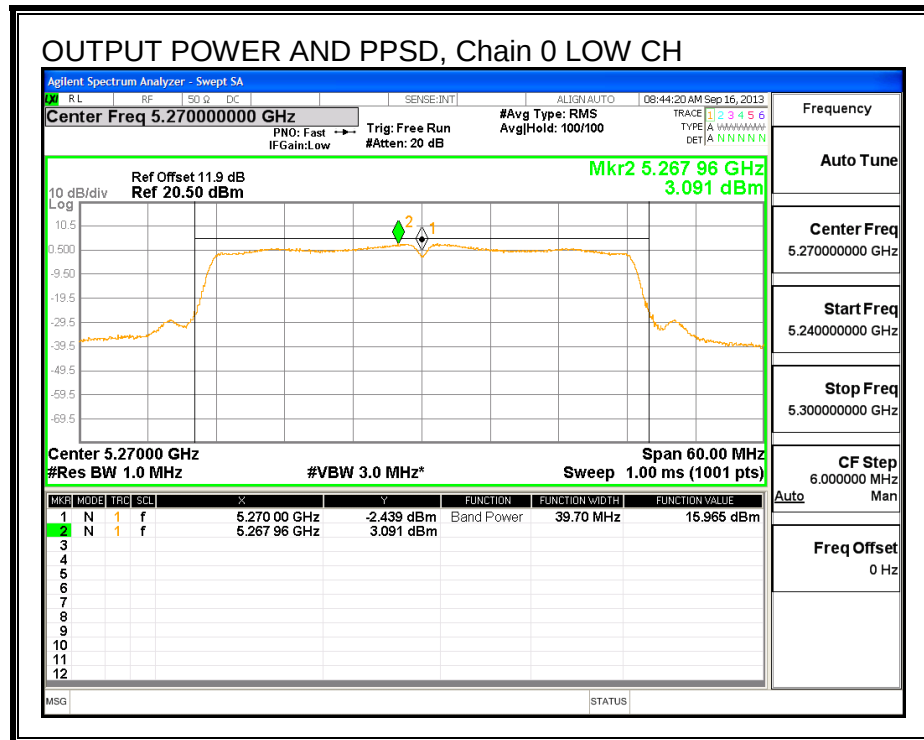
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPCD
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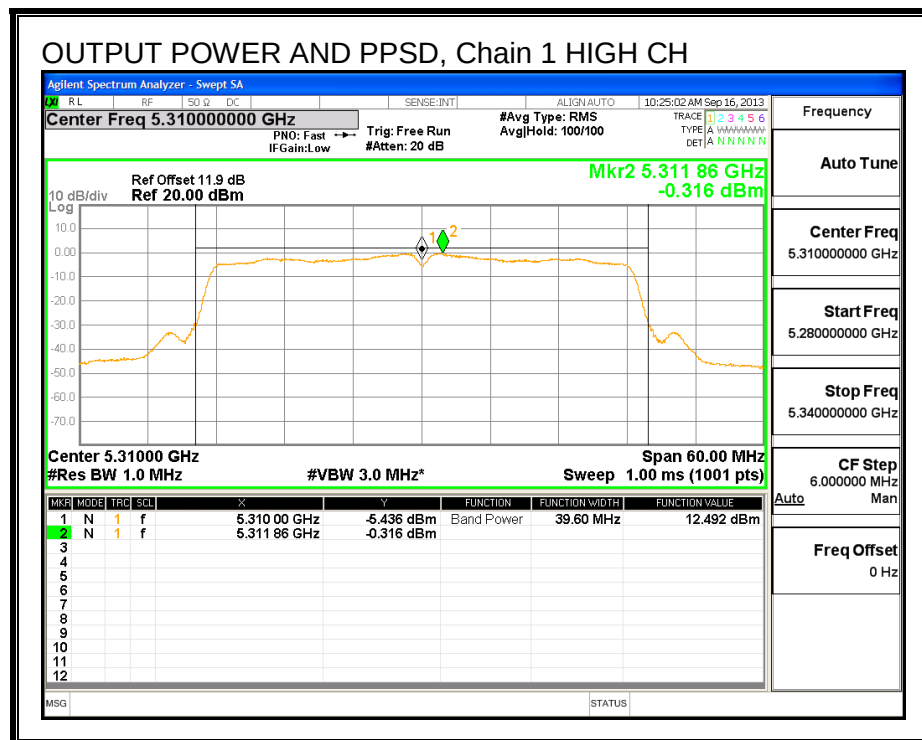
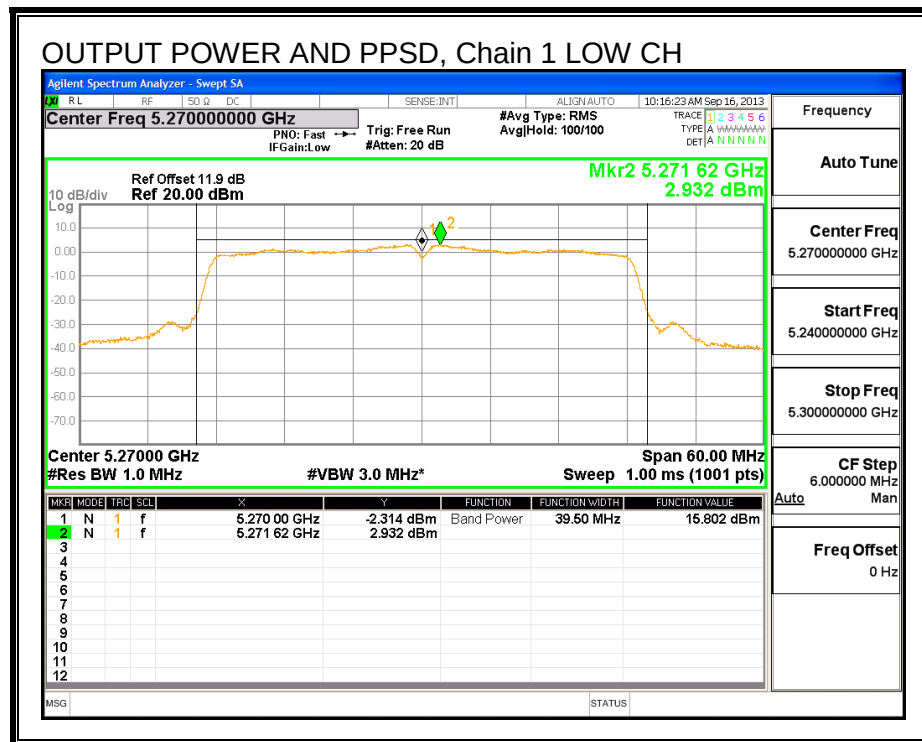
Output Power Results

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	5270	15.97	15.80	18.89	24.00	-5.11
High	5310	12.50	12.49	15.50	24.00	-8.50

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	5270	3.09	2.93	6.02	11.00	-4.98
High	5310	-0.50	-0.36	2.58	11.00	-8.42

OUTPUT POWER AND PPSD, Chain 0

OUTPUT POWER AND PPSD, Chain 1

9.9. 802.11a SISO MODE IN THE 5.6 GHz BAND

9.9.1. 26 dB BANDWIDTH

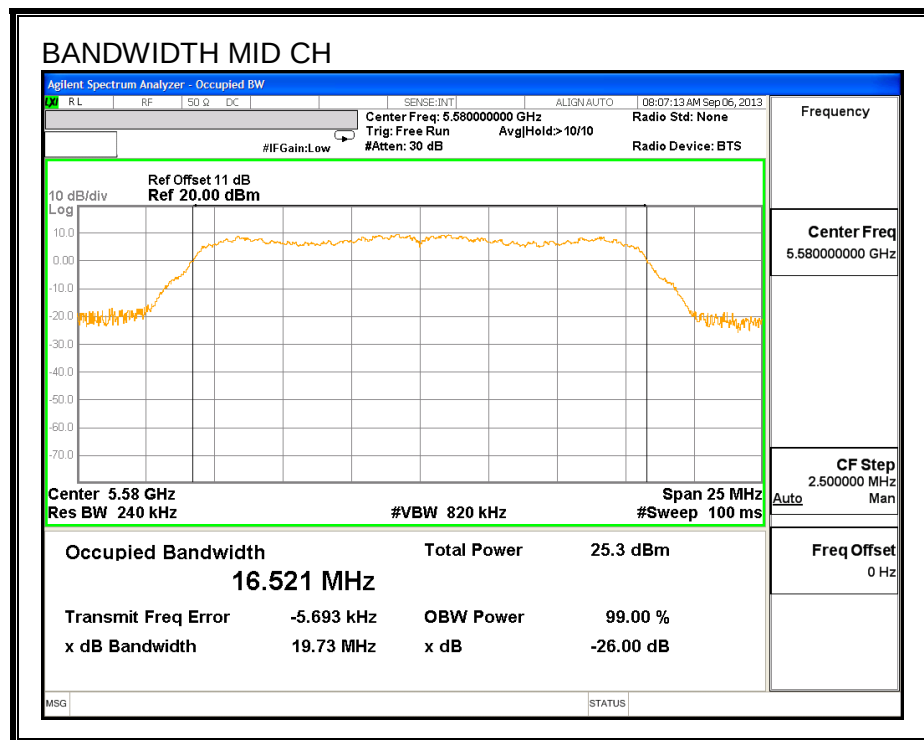
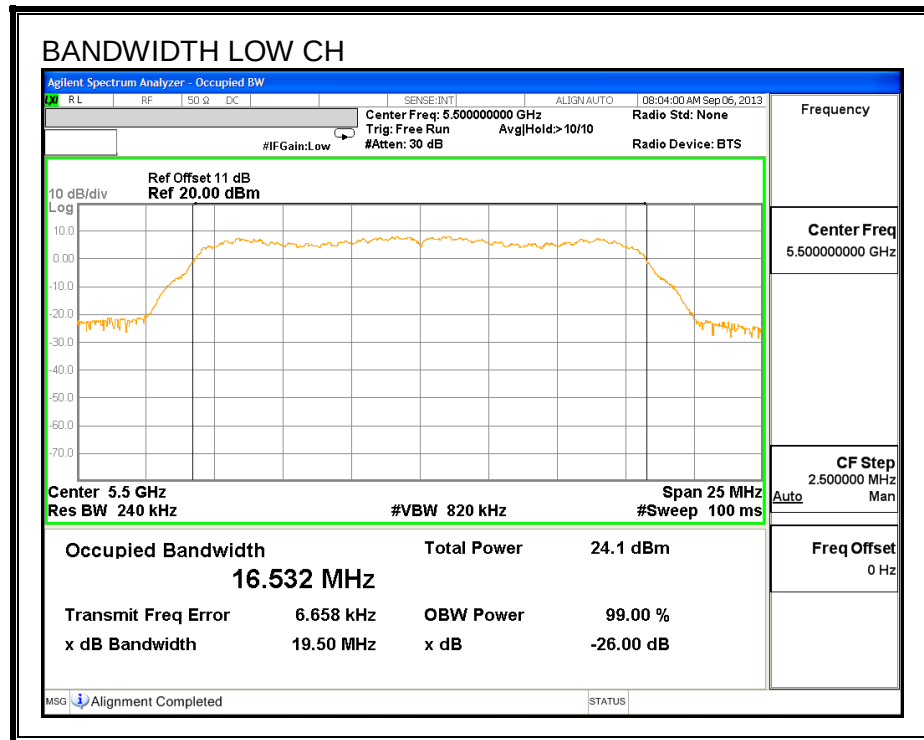
LIMITS

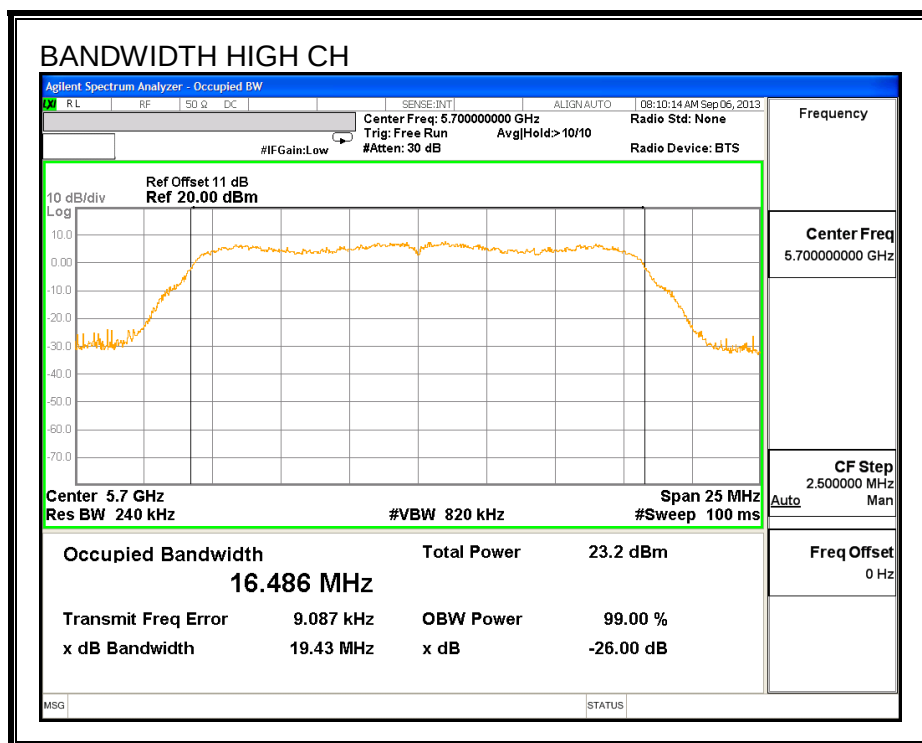
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5500	19.50
Mid	5580	19.73
High	5700	19.43

26 dB BANDWIDTH





9.9.2. 99% BANDWIDTH

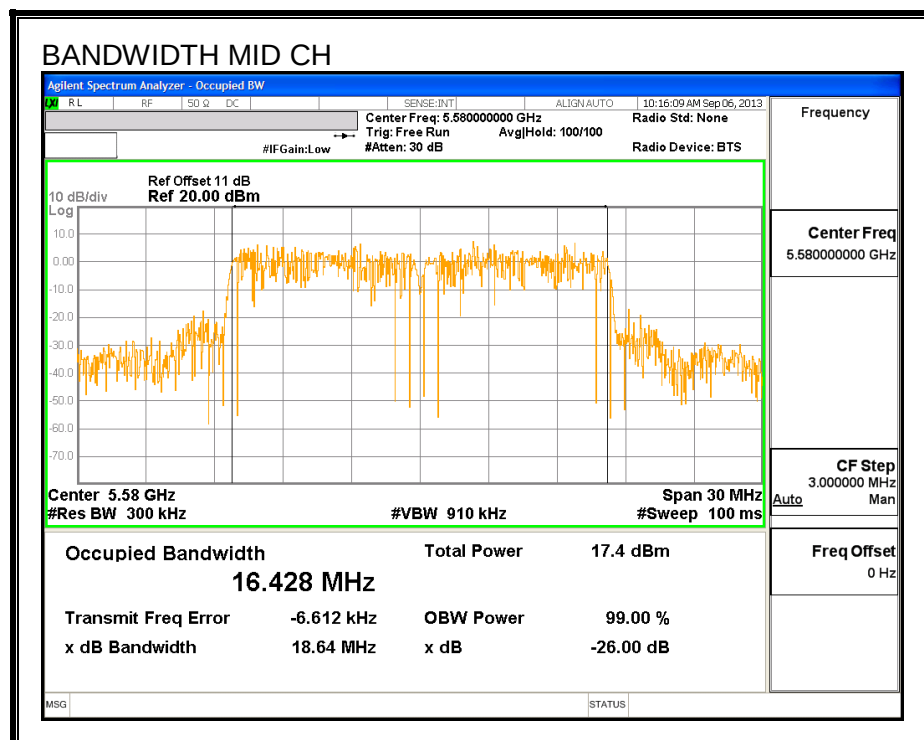
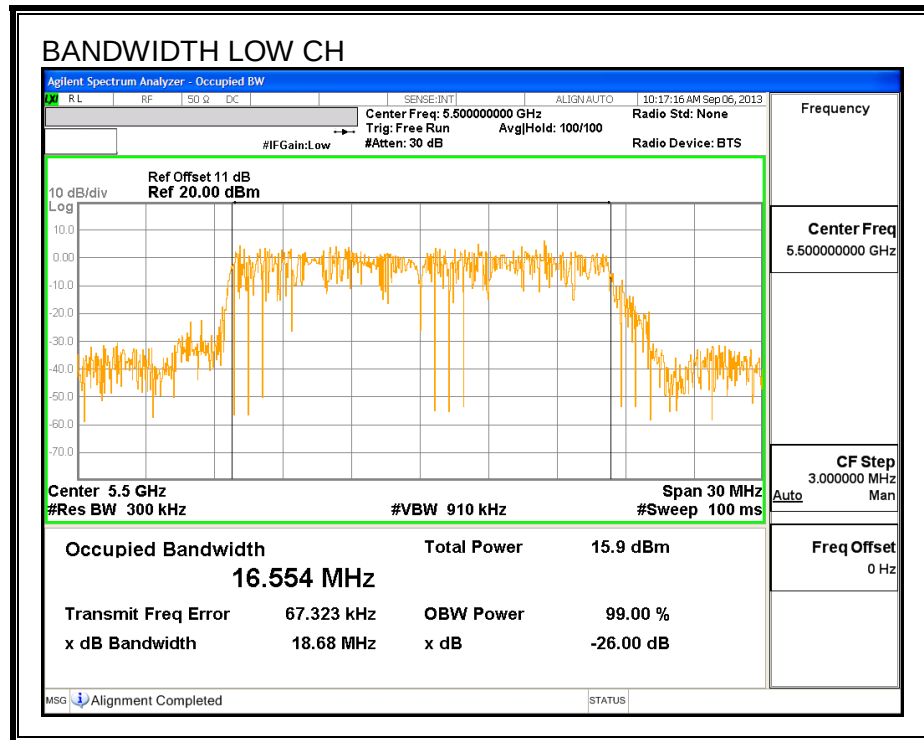
LIMITS

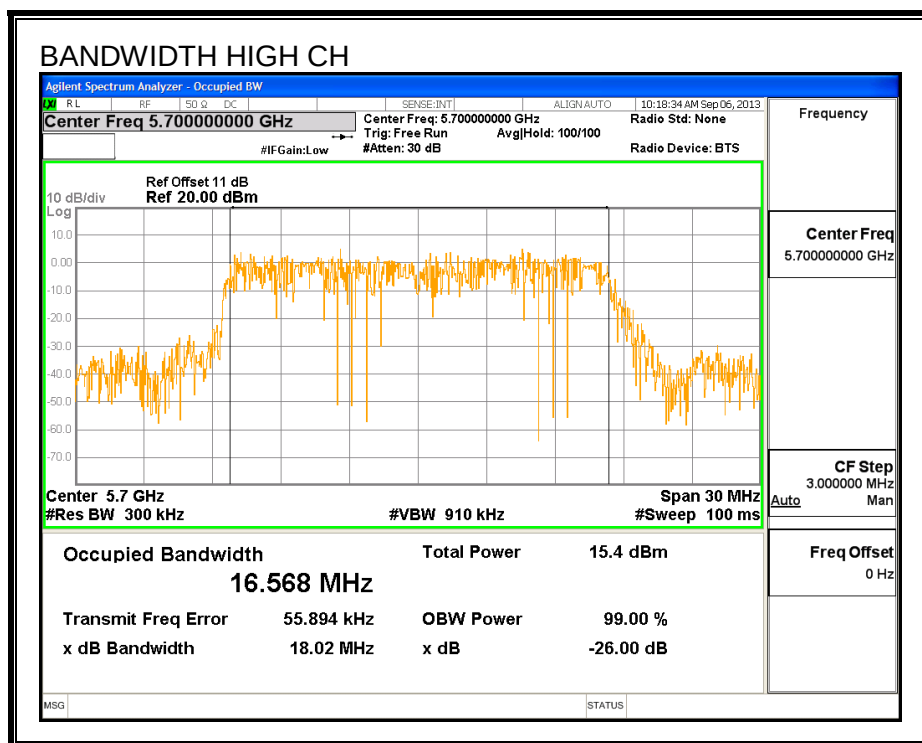
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5500	16.554
Mid	5580	16.428
High	5700	16.568

99% BANDWIDTH





9.9.3. 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

Channel	Frequency (MHz)	Power (dBm)
Low	5500	13.8
Mid	5580	15.5
High	5700	13.9

9.9.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26-dB emission bandwidth in MHz. In addition, the maximum 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.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directio Gain (dBi)
Low	5500	19.5	4.29
Mid	5580	19.7	4.29
High	5700	19.4	4.29

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	FCC PPSD Limit (dBm)
Low	5500	23.90	11.00
Mid	5580	23.95	11.00
High	5700	23.88	11.00

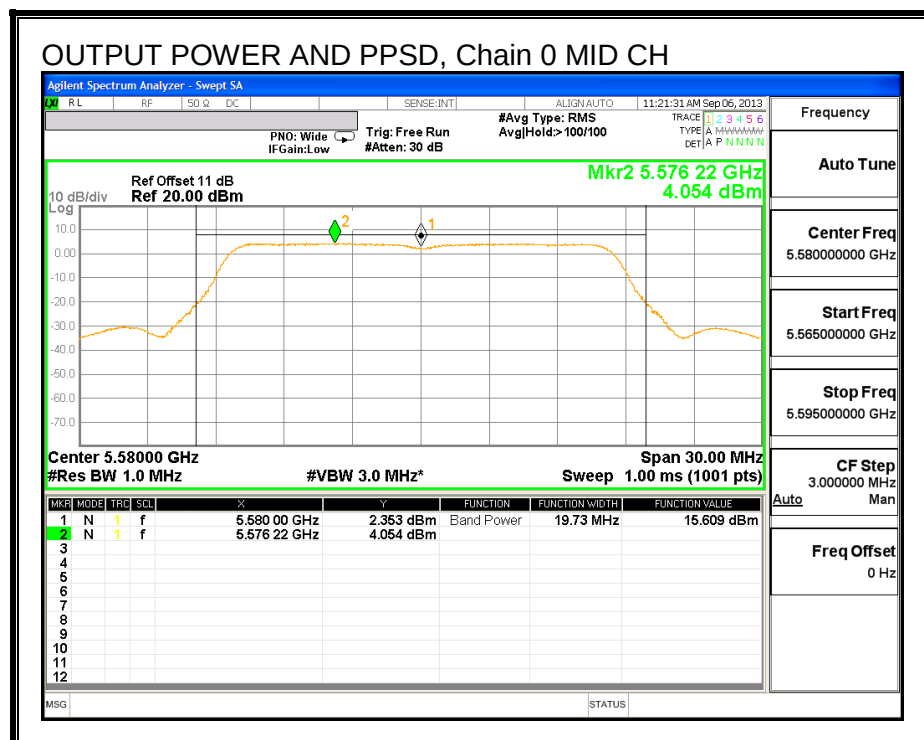
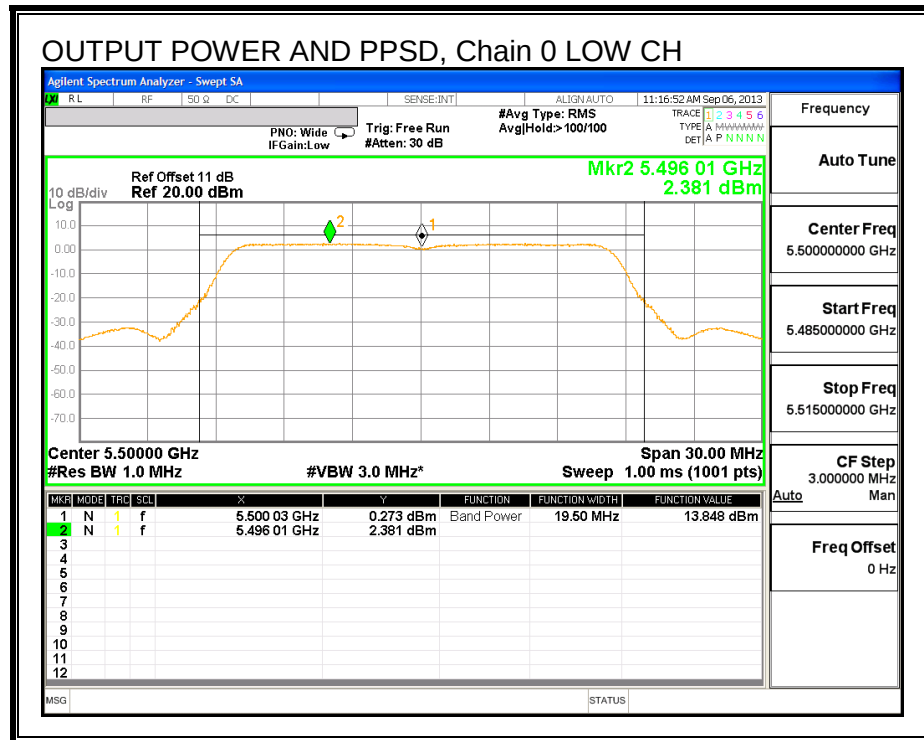
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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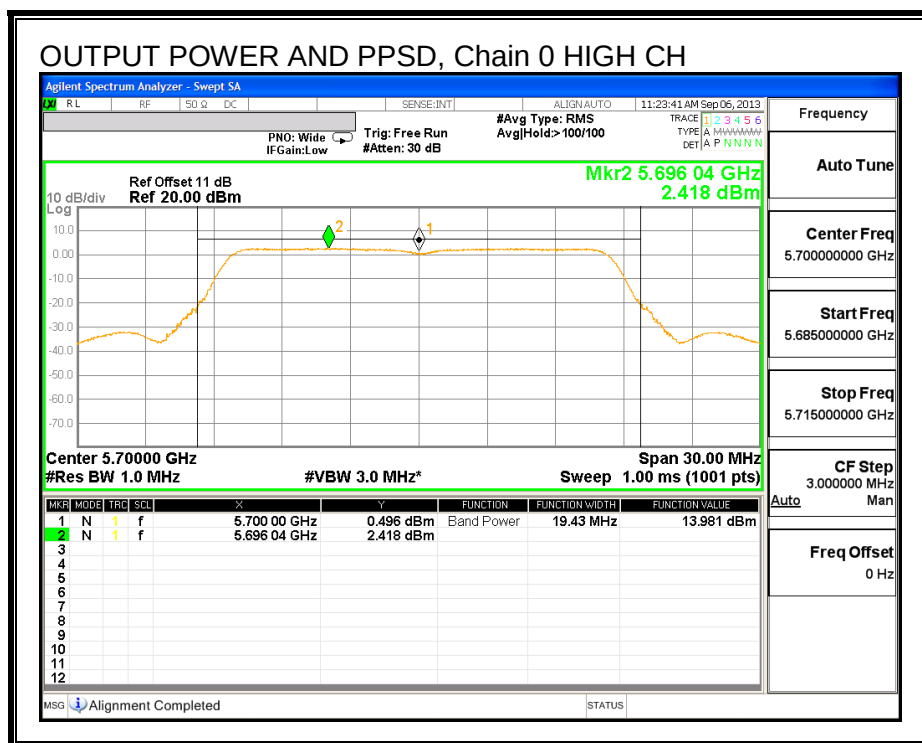
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5500	13.85	13.85	23.90	-10.05
Mid	5580	15.61	15.61	23.95	-8.34
High	5700	13.98	13.98	23.88	-9.90

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5500	2.38	2.38	11.00	-8.62
Mid	5580	4.05	4.05	11.00	-6.95
High	5700	2.42	2.42	11.00	-8.58

OUTPUT POWER AND PPSD, Chain 0



9.10. 802.11n HT20 2TX CDD MODE IN THE 5.6 GHz BAND

9.10.1. 26 dB BANDWIDTH

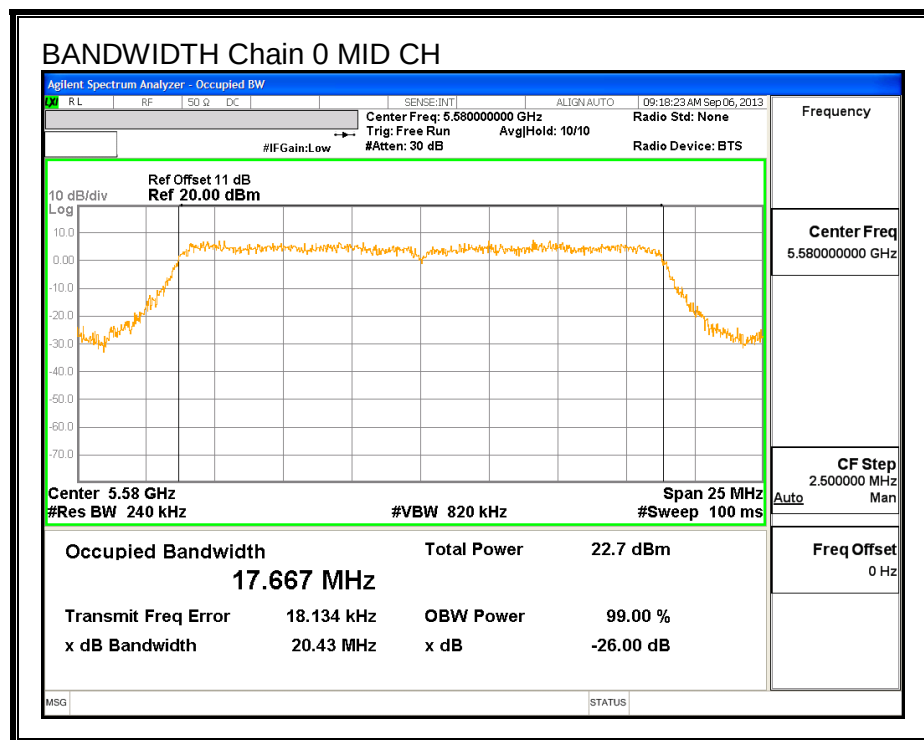
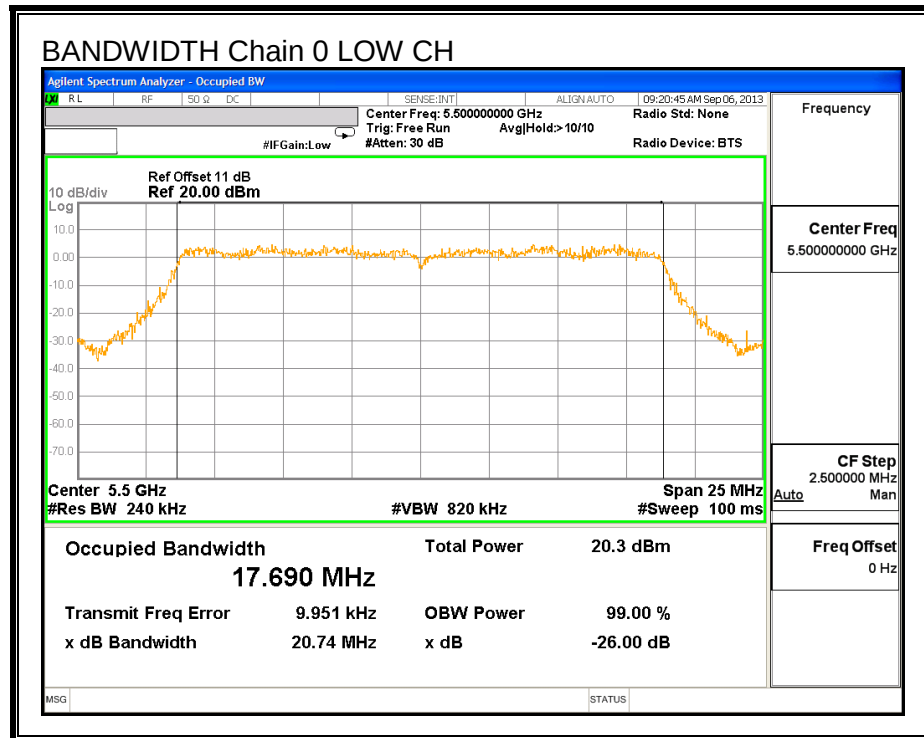
LIMITS

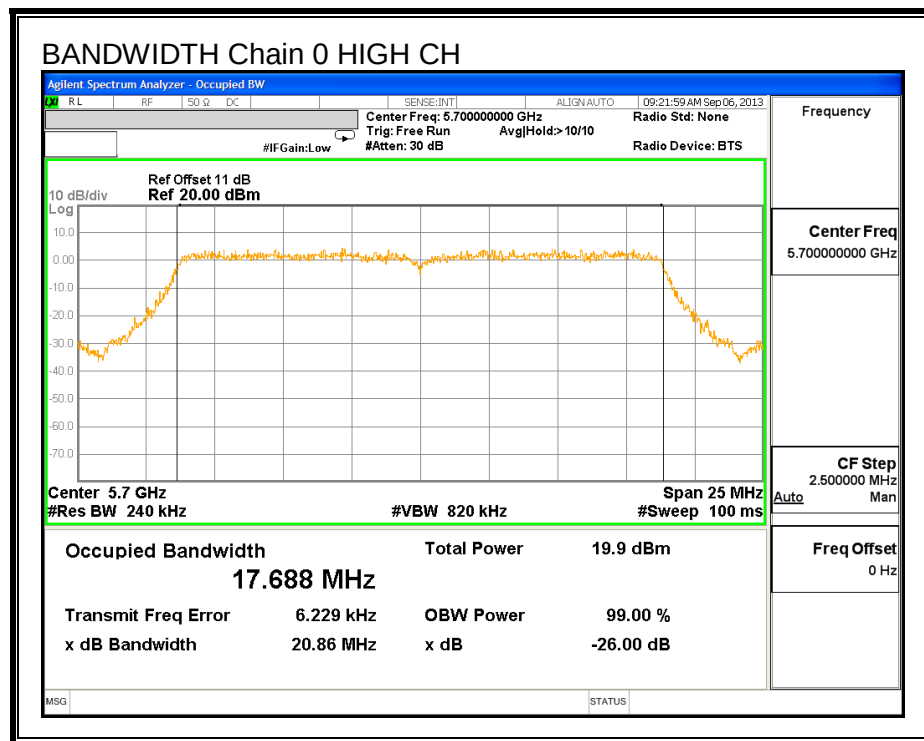
None; for reporting purposes only.

RESULTS

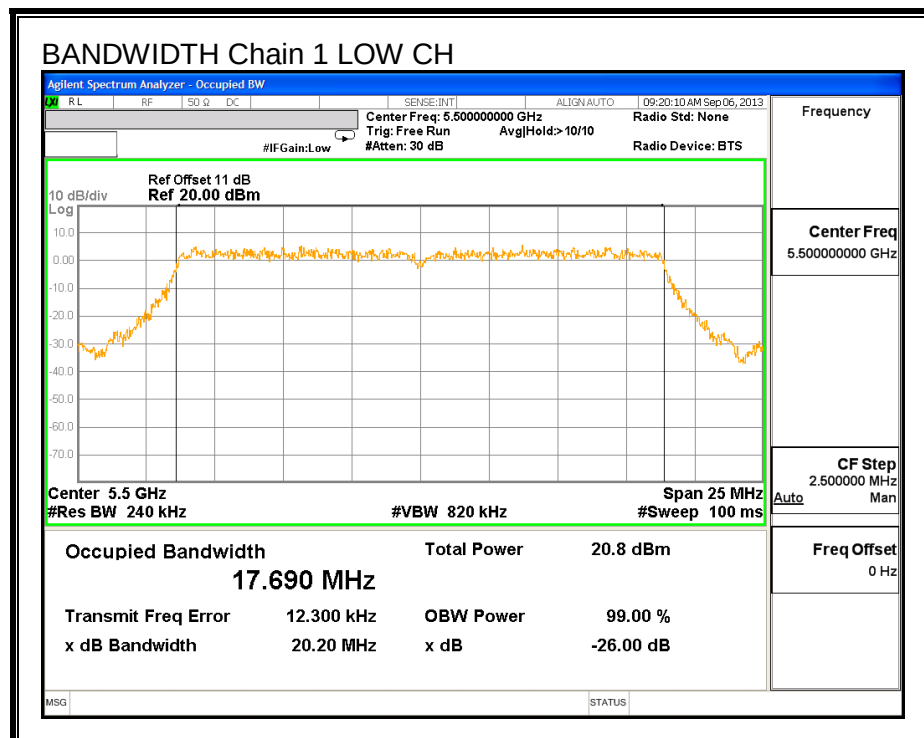
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5500	20.74	20.20
Mid	5580	20.43	20.24
High	5700	20.86	20.38

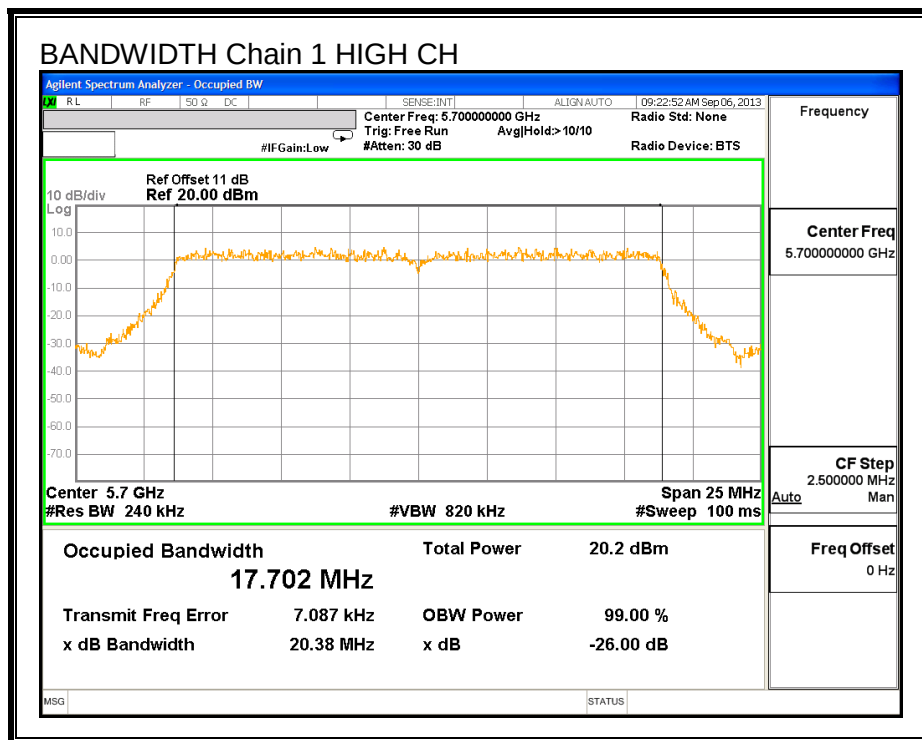
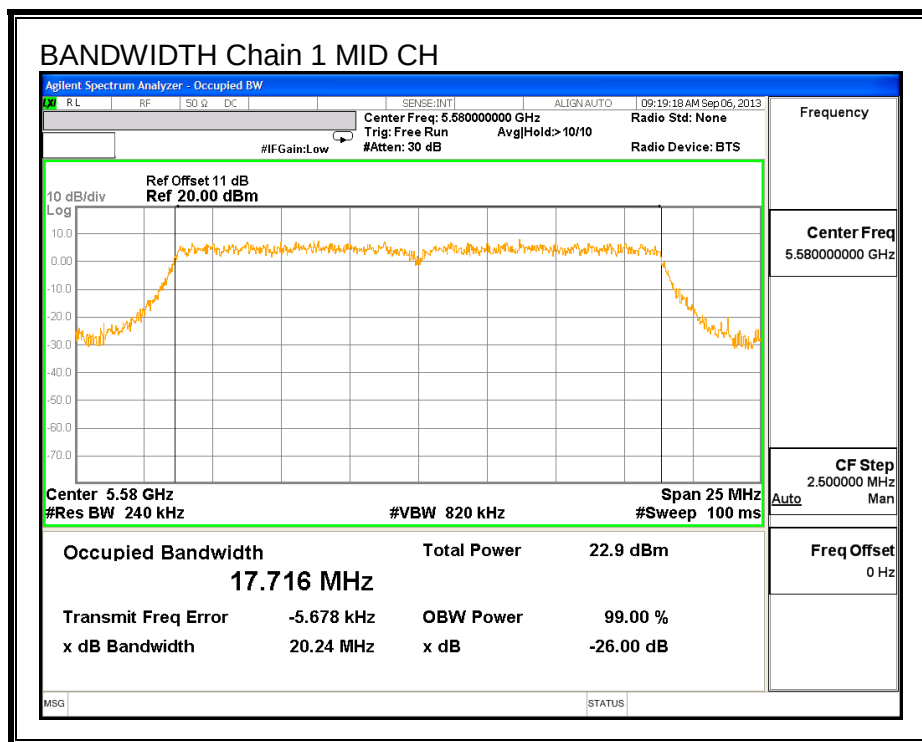
26 dB BANDWIDTH, Chain 0





26 dB BANDWIDTH, Chain 1





9.10.2. 99% BANDWIDTH

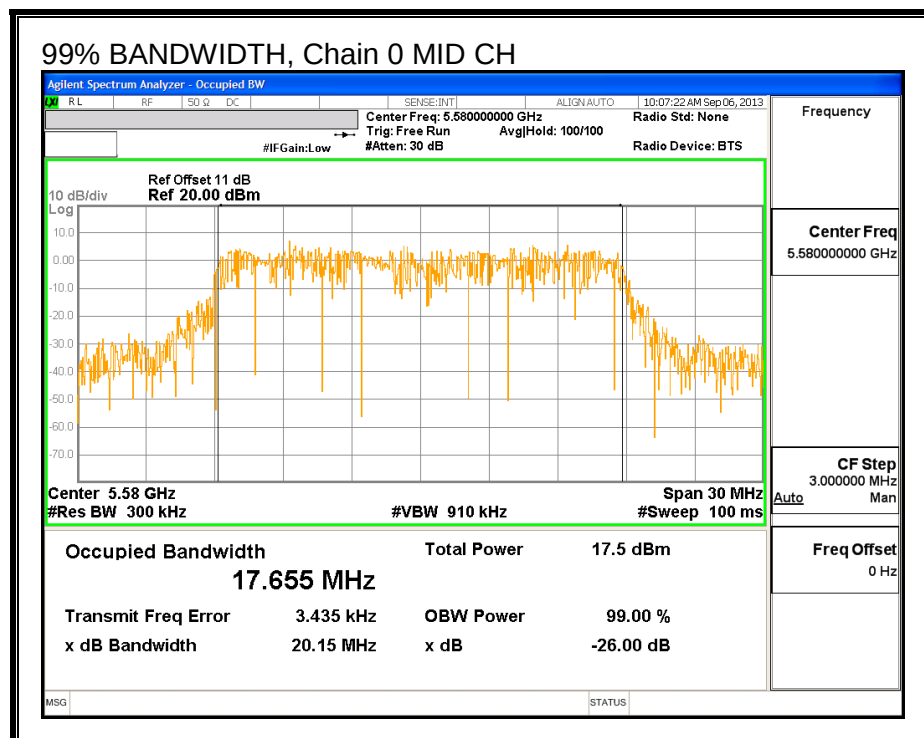
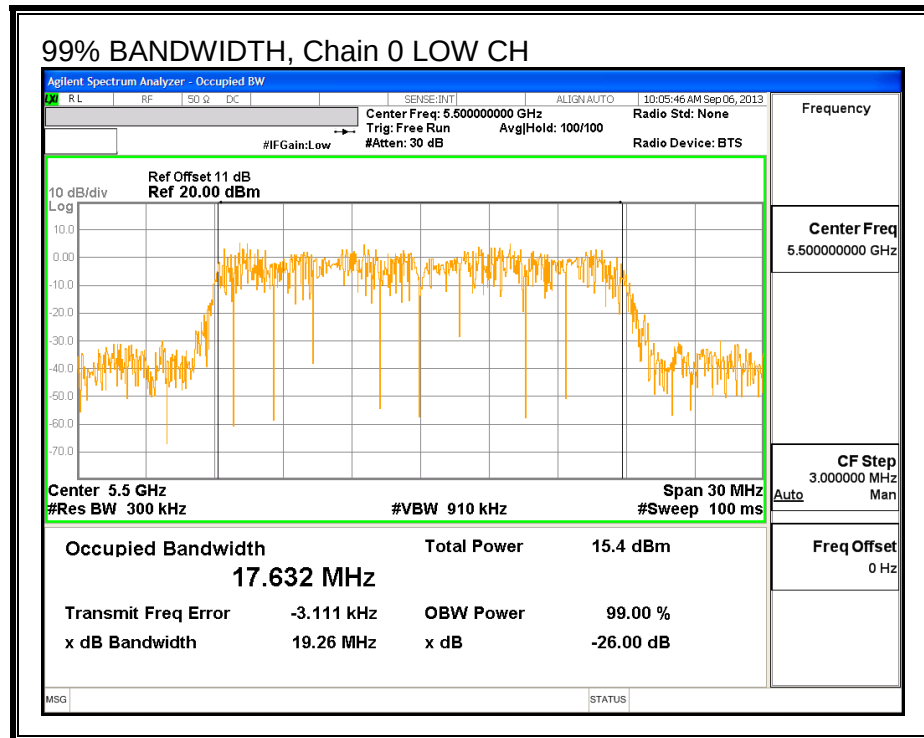
LIMITS

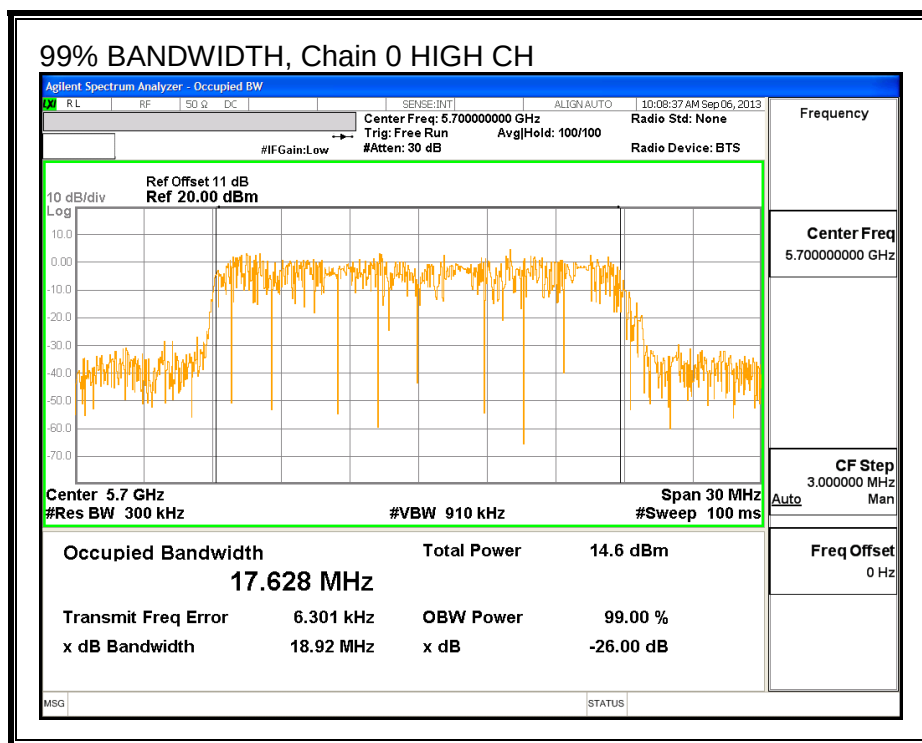
None; for reporting purposes only.

RESULTS

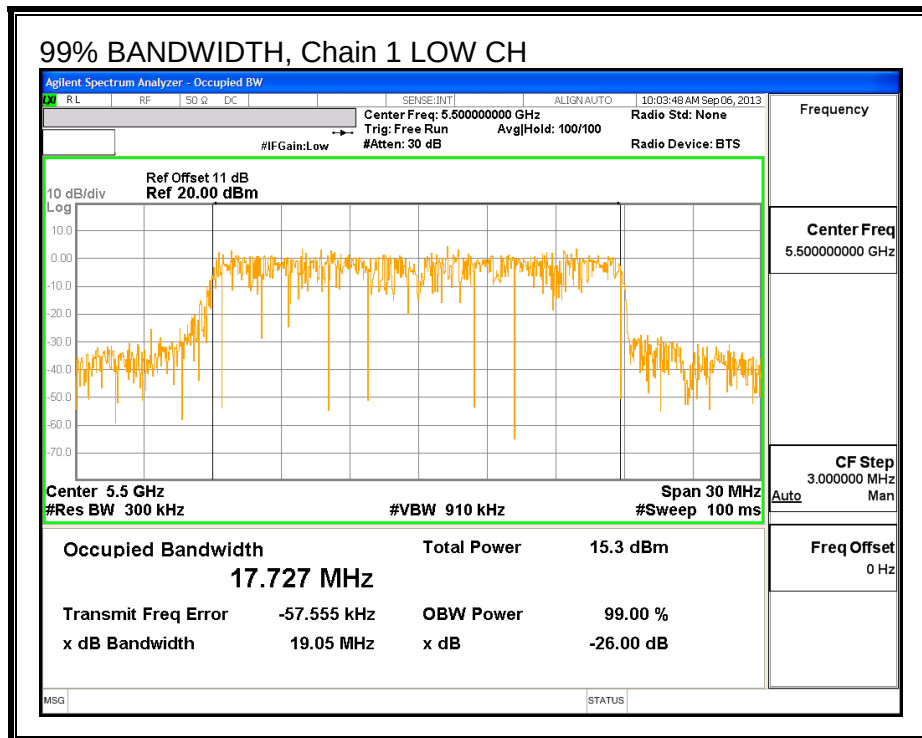
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5500	17.632	17.727
Mid	5580	17.655	17.833
High	5700	17.628	17.623

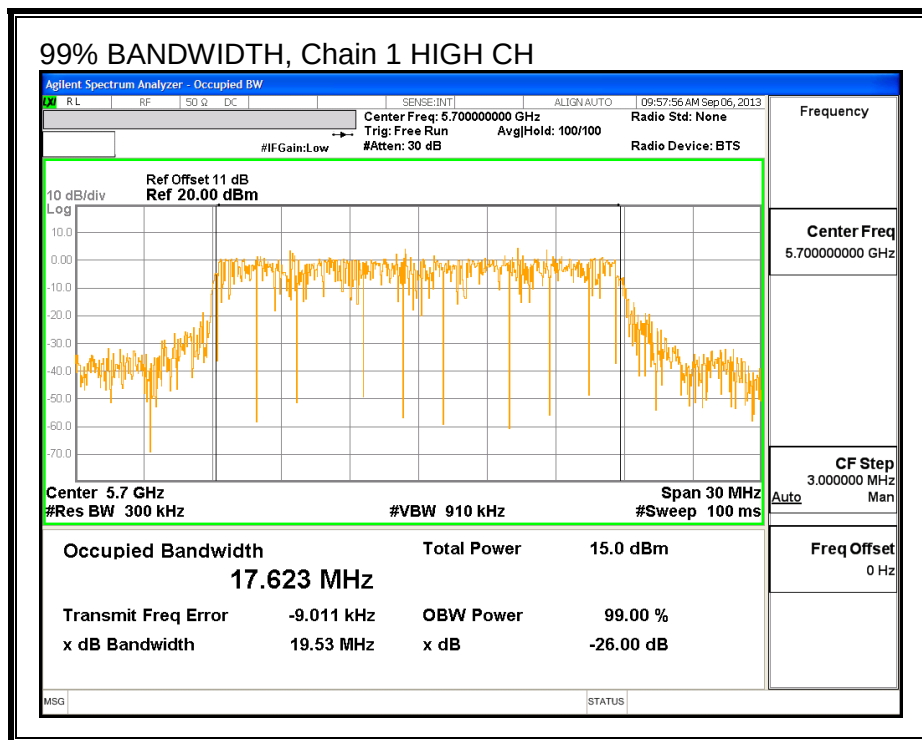
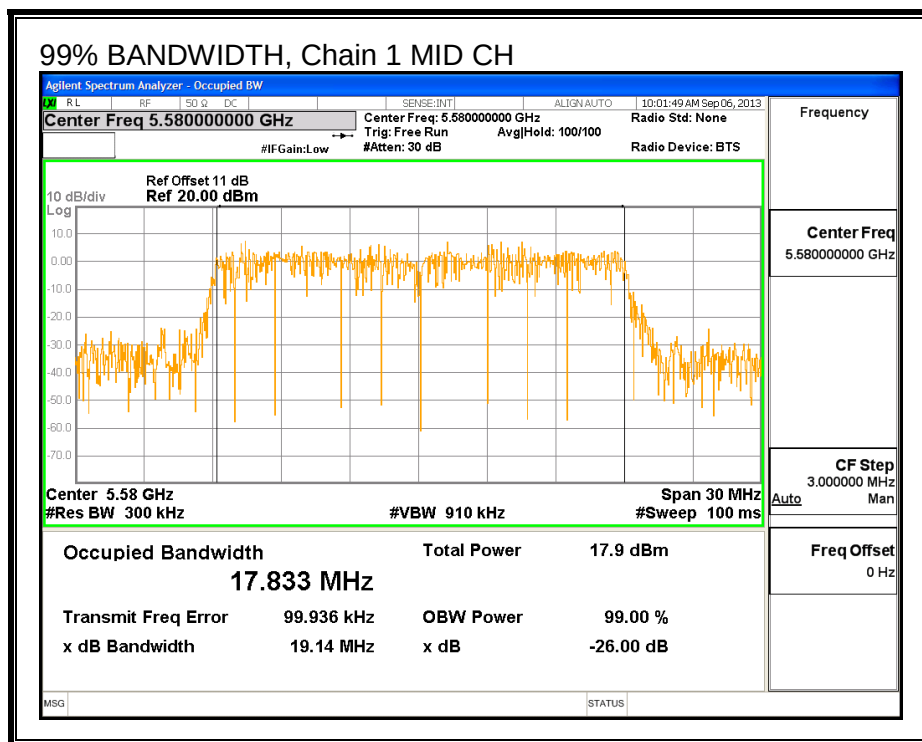
99% BANDWIDTH, Chain 0





99% BANDWIDTH, Chain 1





9.10.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1 dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

Average Power Results

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low	5500	13.30	13.40	16.36
Mid	5580	15.30	15.40	18.36
High	5700	12.83	13.00	15.93

9.10.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 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 maximum 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.

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

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Uncorre Directio Gain (dBi)	Correlated Directional Gain (dBi)
Low	5500	20.2	3.46	6.42
Mid	5580	20.2	3.46	6.42
High	5700	20.4	3.46	6.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	FCC PPSD Limit (dBm)
Low	5500	24.00	10.58
Mid	5580	24.00	10.58
High	5700	24.00	10.58

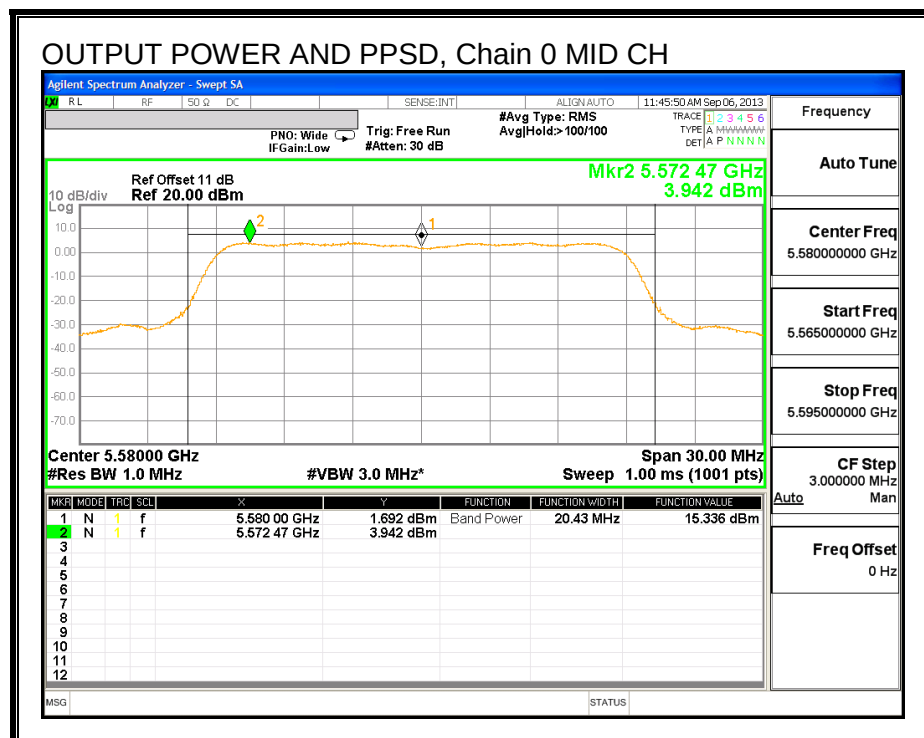
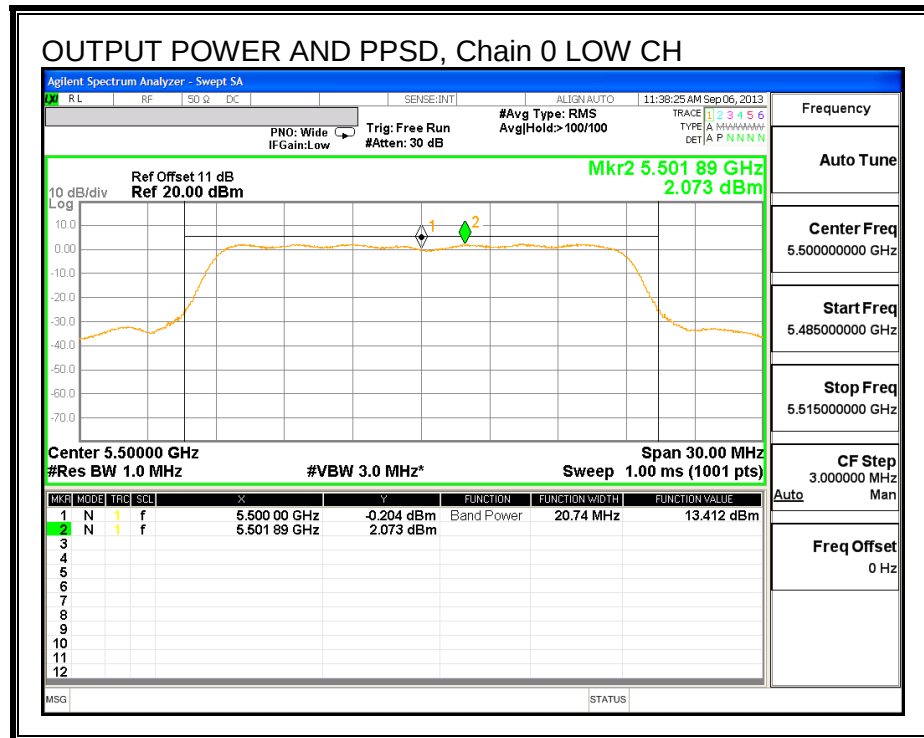
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PPSP
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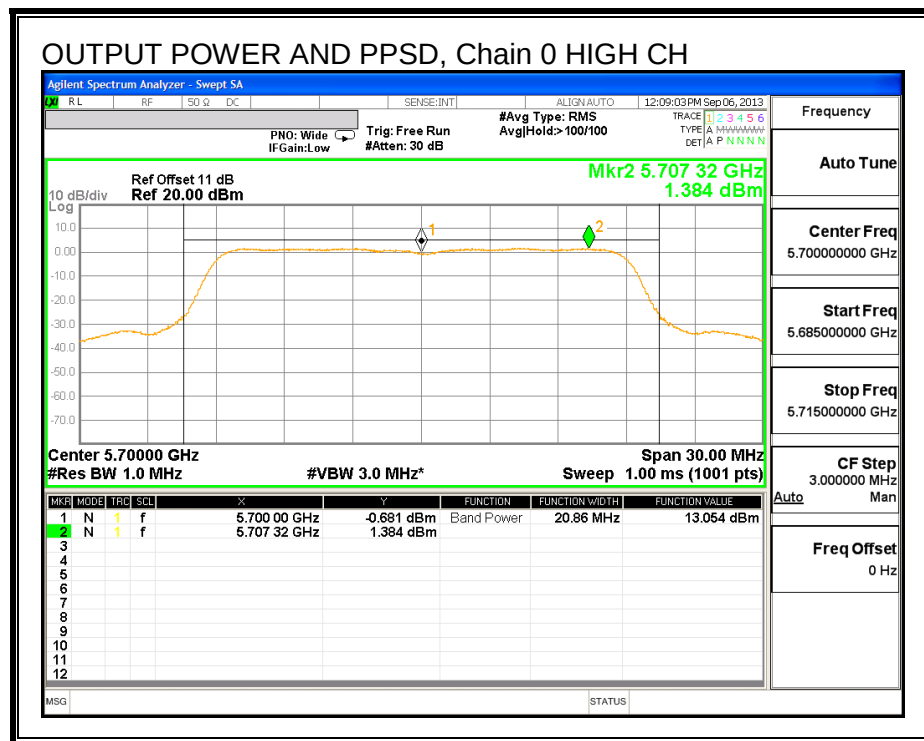
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margi n (dB)
Low	5500	13.41	13.82	16.63	24.00	-7.37
Mid	5580	15.34	15.55	18.46	24.00	-5.54
High	5700	13.05	13.11	16.09	24.00	-7.91

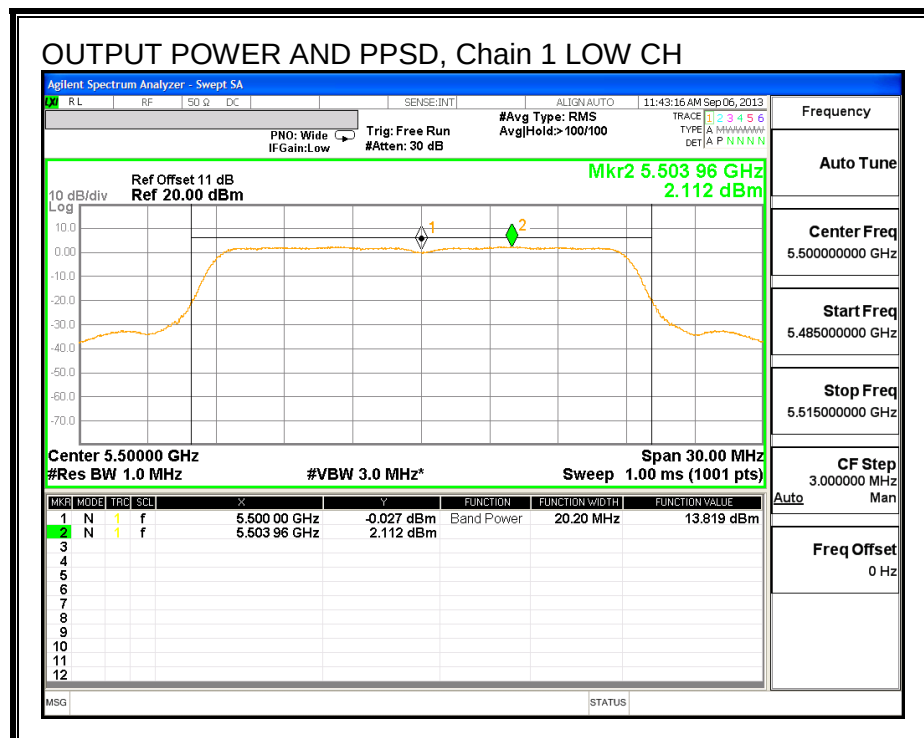
PPSD Results

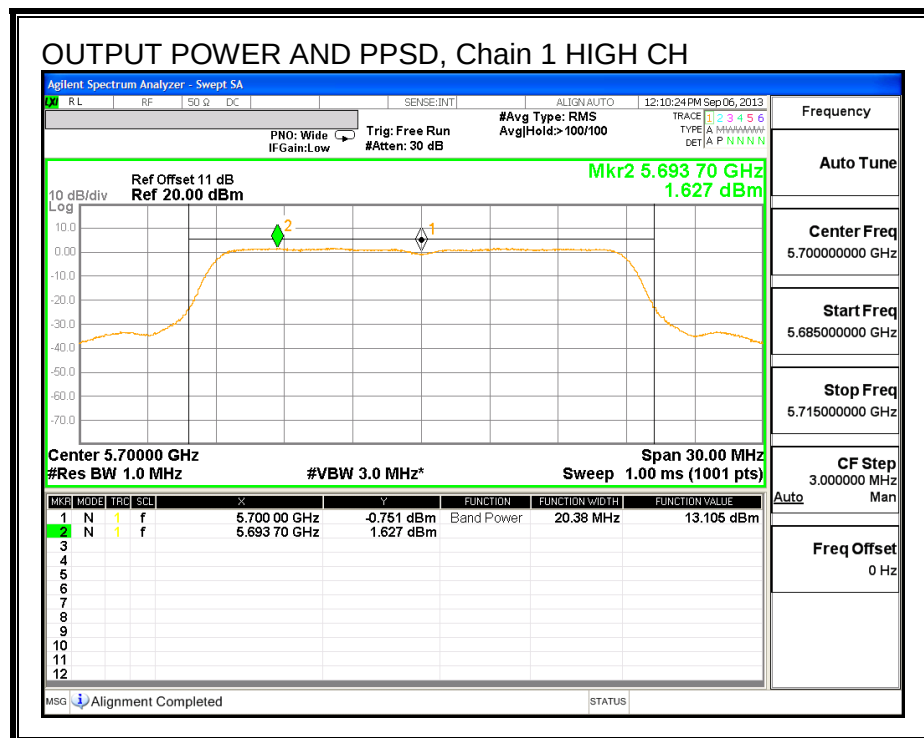
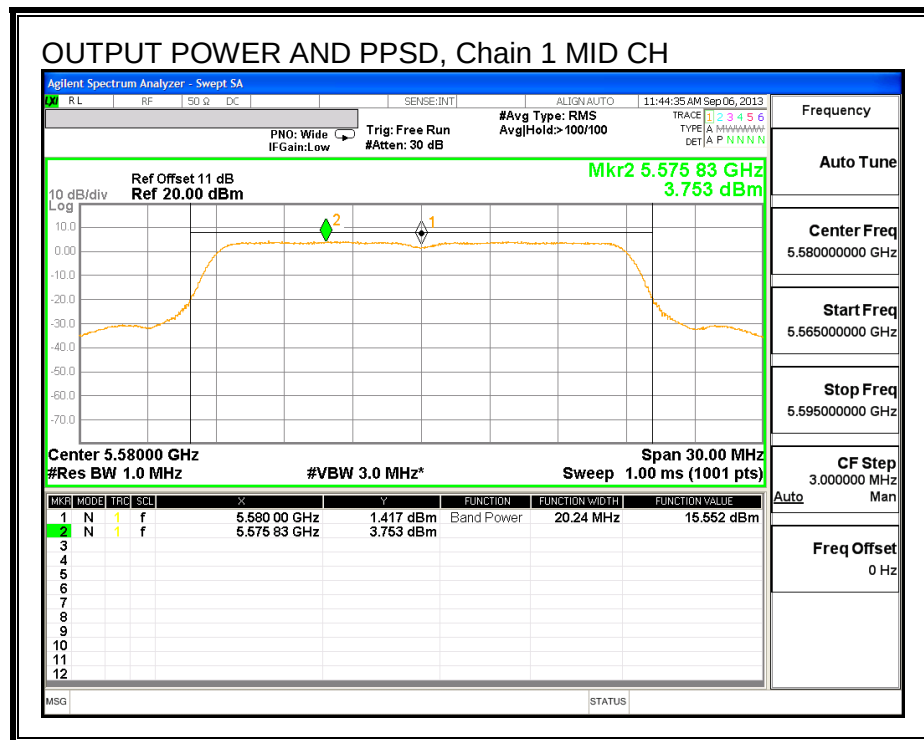
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margi n (dB)
Low	5500	2.07	2.11	5.10	10.58	-5.48
Mid	5580	3.94	3.75	6.86	10.58	-3.72
High	5700	1.38	1.63	4.52	10.58	-6.06

OUTPUT POWER AND PPSD, Chain 0



OUTPUT POWER AND PPSD, Chain 1





9.11. 802.11n HT40 SISO MODE IN THE 5.6 GHz BAND

9.11.1. 26 dB BANDWIDTH

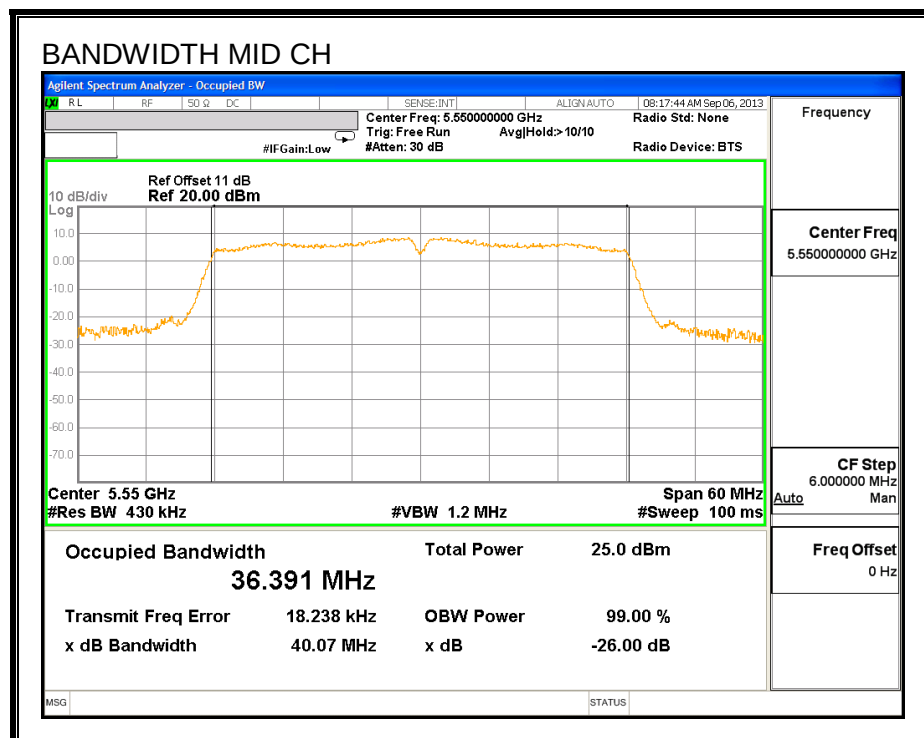
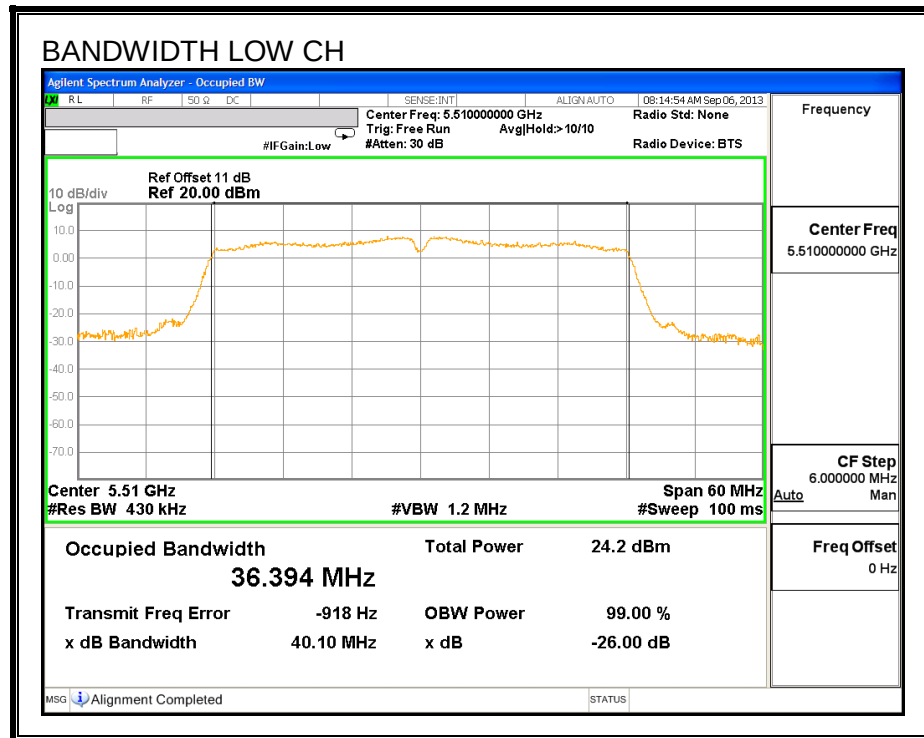
LIMITS

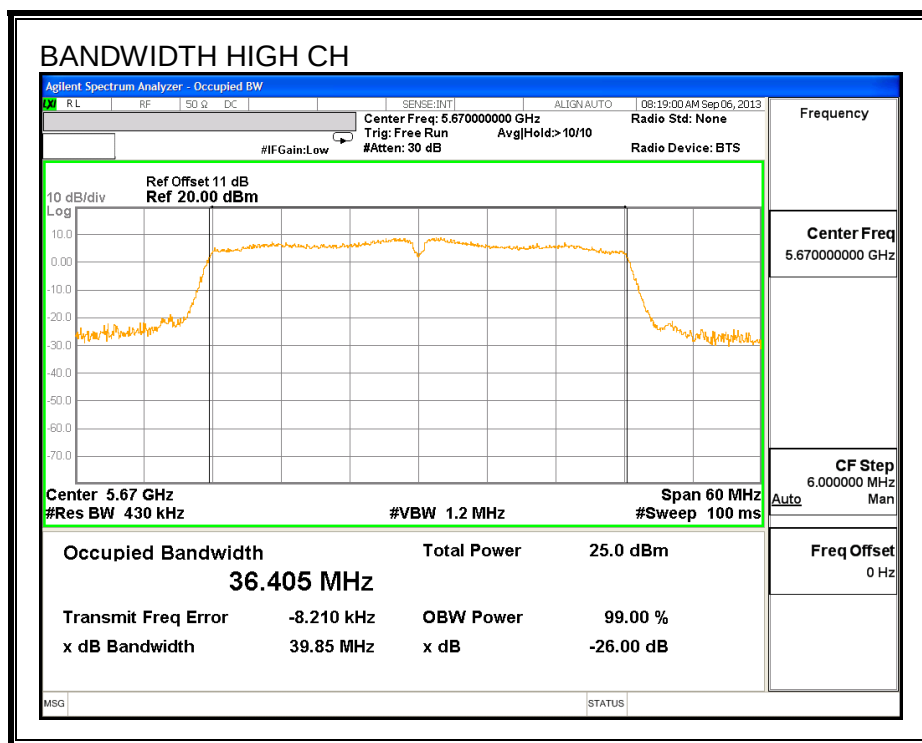
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	26 dB Bandwidth (MHz)
Low	5510	40.10
Mid	5550	40.07
High	5670	39.85

26 dB BANDWIDTH





9.11.2. 99% BANDWIDTH

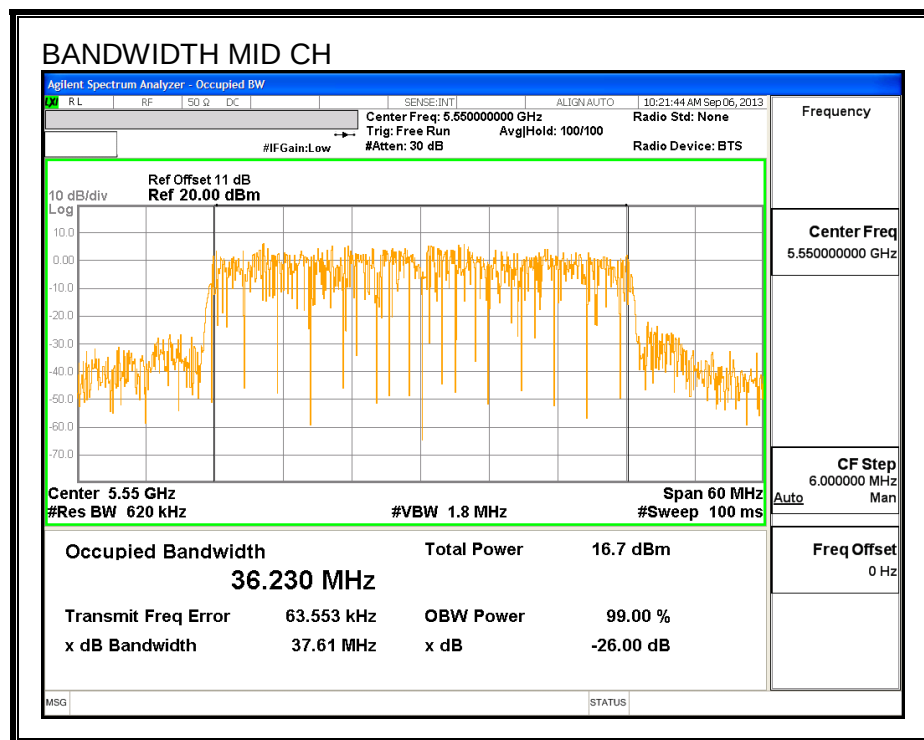
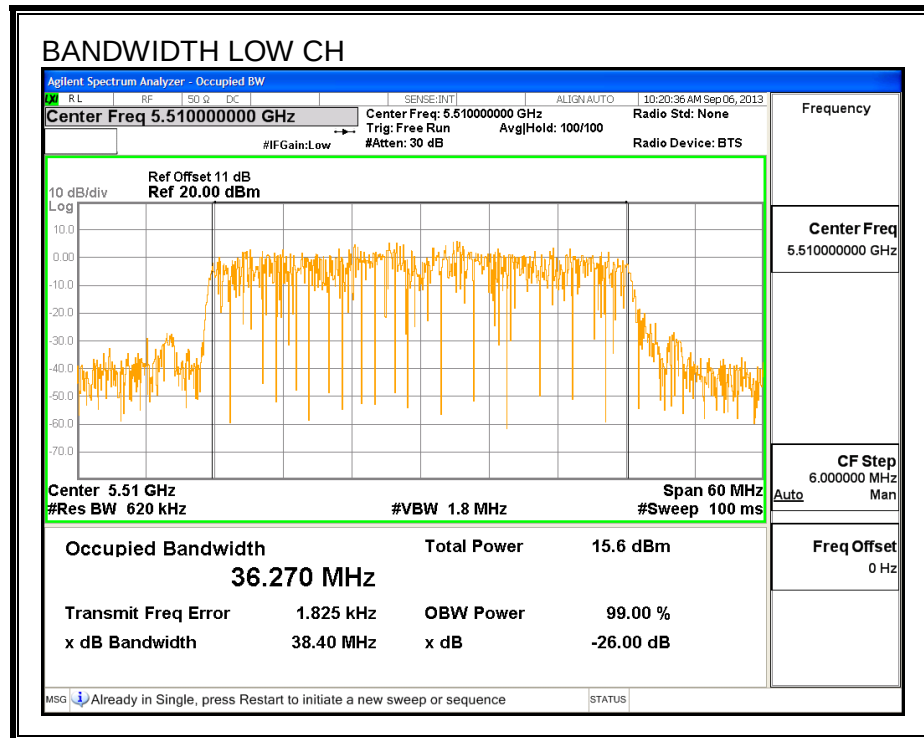
LIMITS

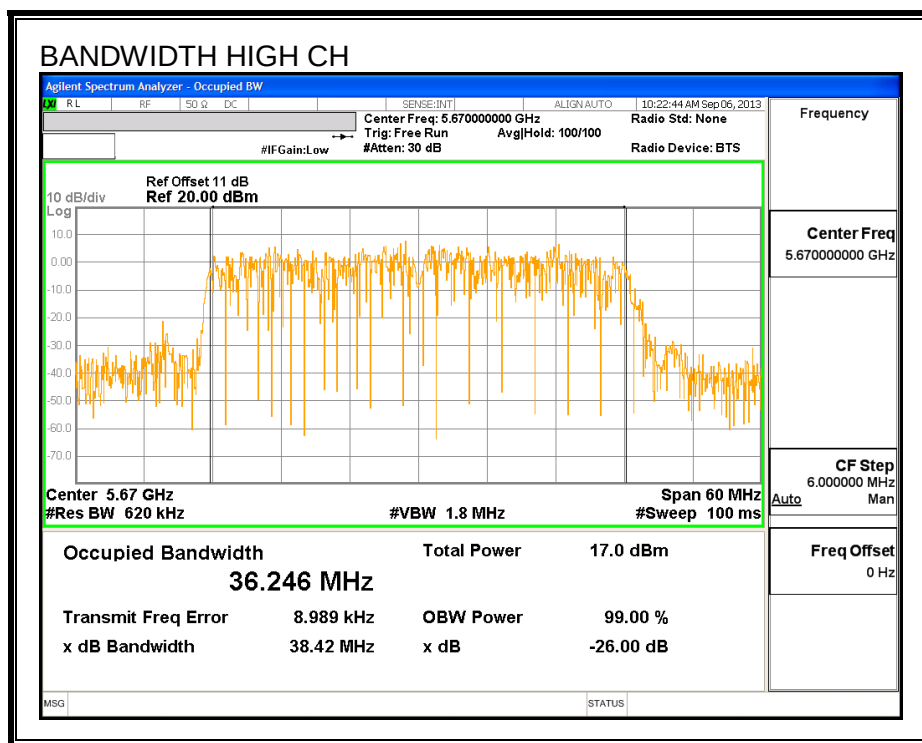
None; for reporting purposes only.

RESULTS

Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low	5510	36.270
Mid	5550	36.230
High	5670	36.246

99% BANDWIDTH





9.11.3. 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

Channel	Frequency (MHz)	Power (dBm)
Low	5510	13.8
Mid	5550	15.5
High	5670	15.4

9.11.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 GHz, the maximum conducted output power over the frequency band of operation shall not exceed the lesser of 250 mW or $11 \text{ dBm} + 10 \log B$, where B is the 26-dB emission bandwidth in MHz. In addition, the maximum 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.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Directio Gain (dBi)
Low	5510	40.1	4.29
Mid	5550	40.1	4.29
High	5670	39.9	4.29

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	FCC PPSD Limit (dBm)
Low	5510	24.00	11.00
Mid	5550	24.00	11.00
High	5670	24.00	11.00

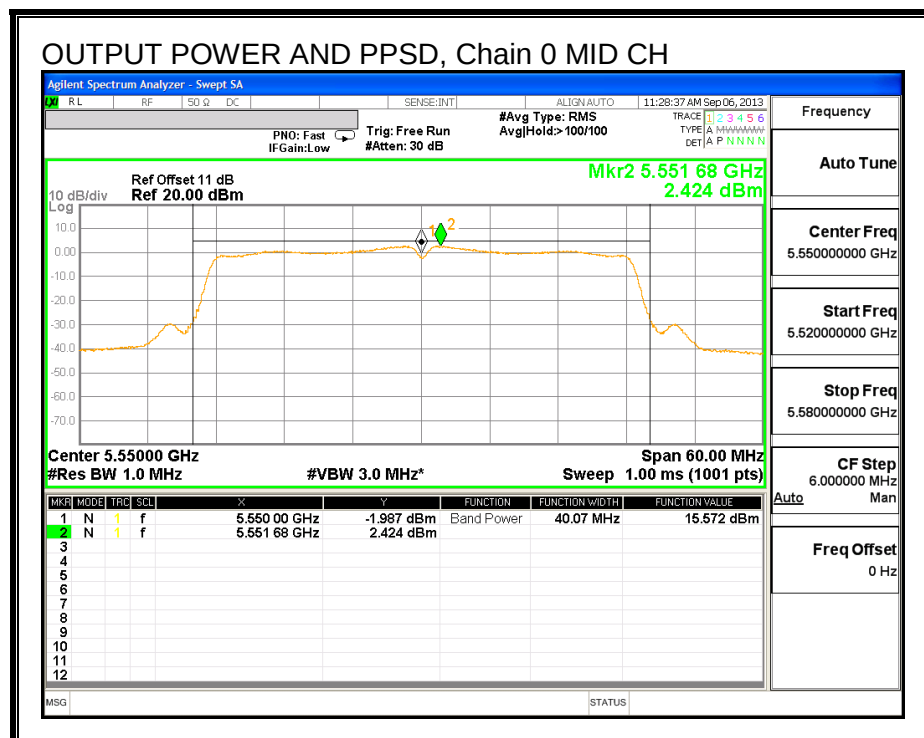
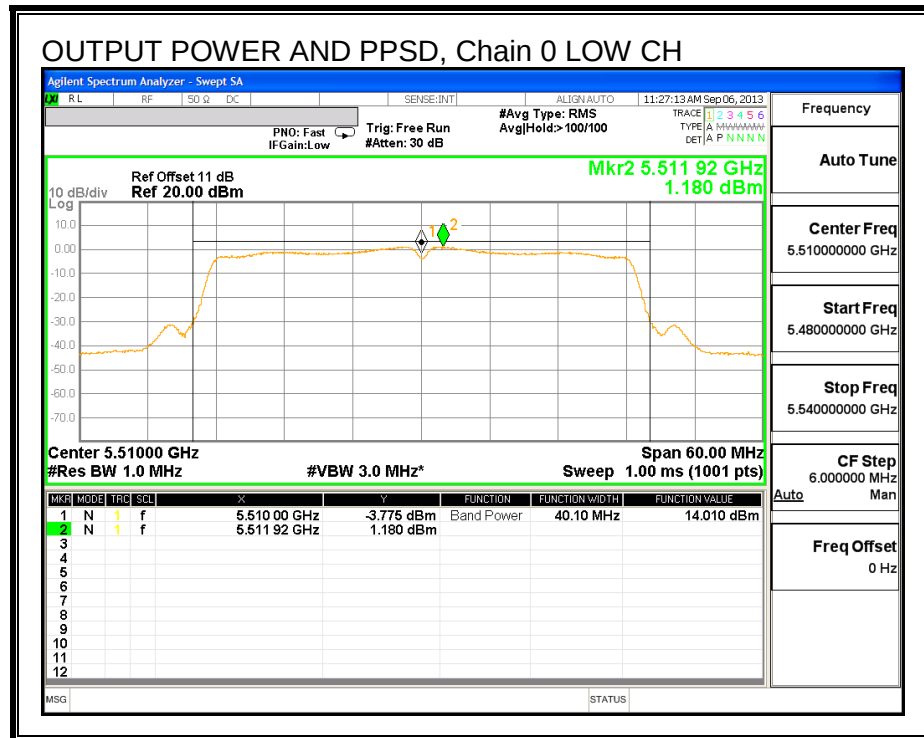
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power & PSD
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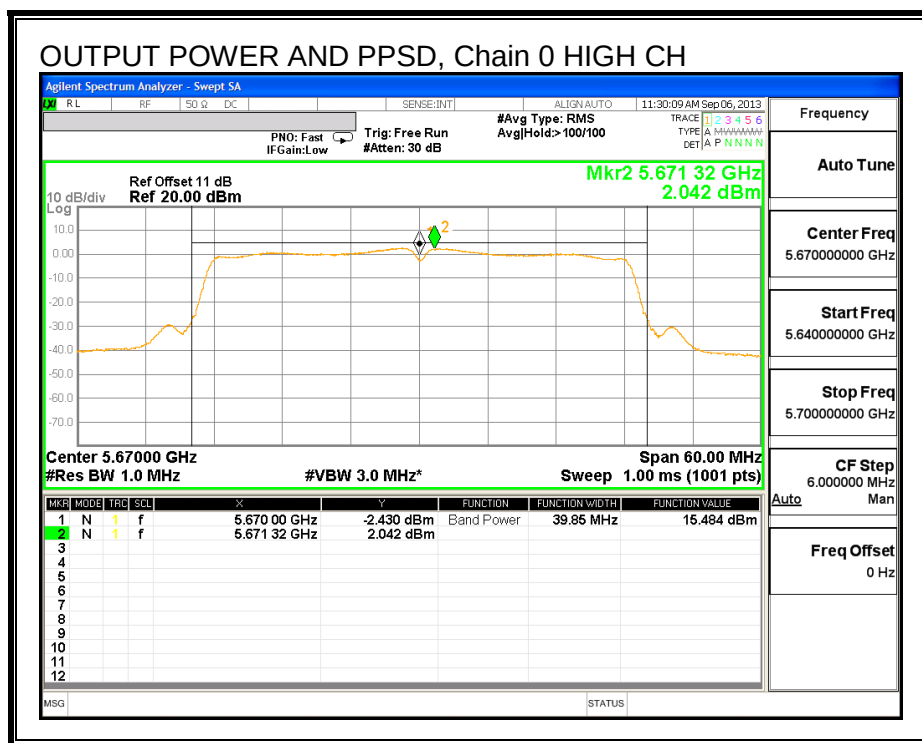
Output Power Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Power Margin (dB)
Low	5510	14.01	14.01	24.00	-9.99
Mid	5550	15.57	15.57	24.00	-8.43
High	5670	15.48	15.48	24.00	-8.52

PPSD Results

Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5510	1.18	1.18	11.00	-9.82
Mid	5550	2.42	2.42	11.00	-8.58
High	5670	2.04	2.04	11.00	-8.96

OUTPUT POWER AND PPSD, Chain 0



9.12. 802.11n HT40 2TX CDD MODE IN THE 5.6 GHz BAND

9.12.1. 26 dB BANDWIDTH

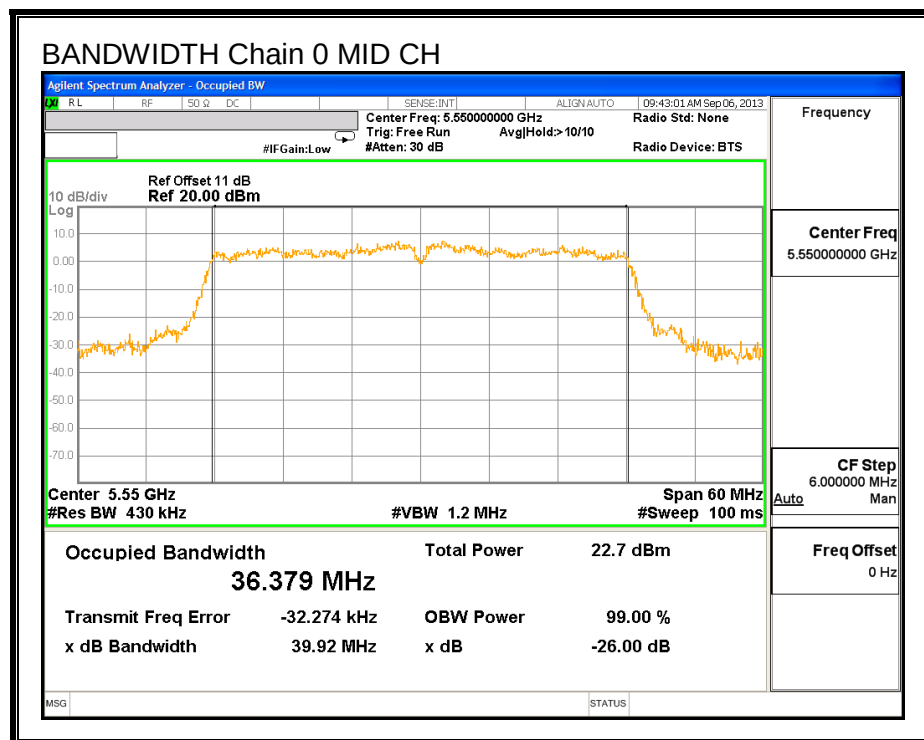
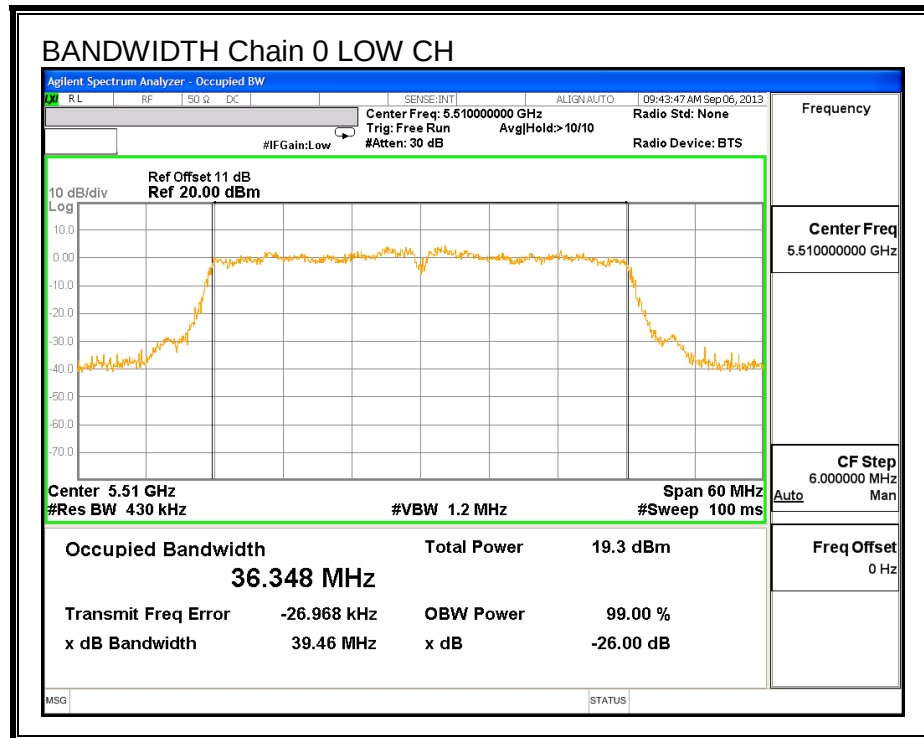
LIMITS

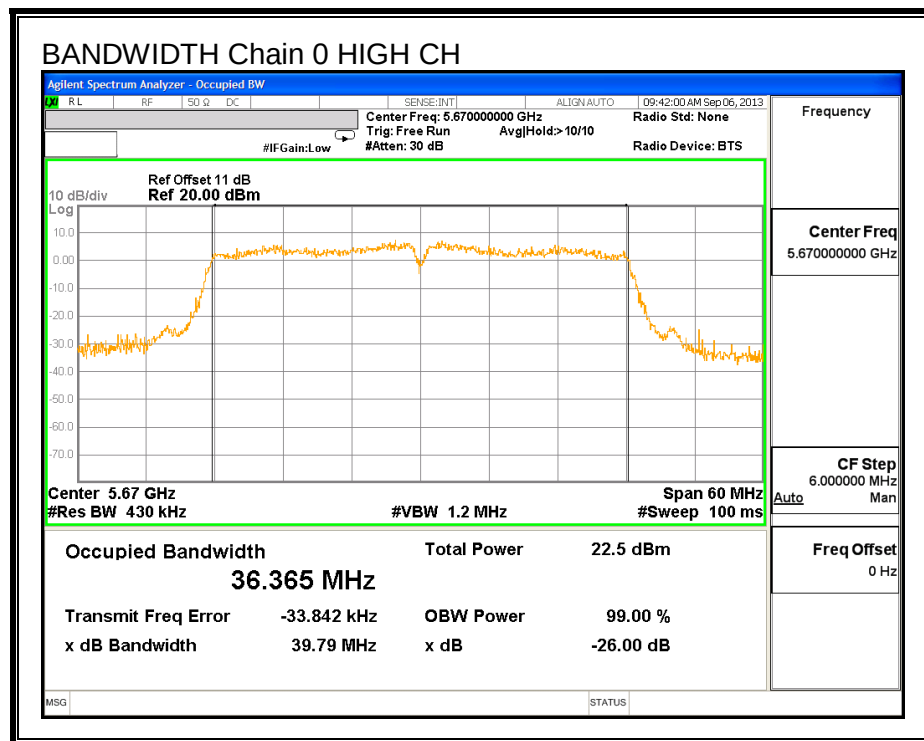
None; for reporting purposes only.

RESULTS

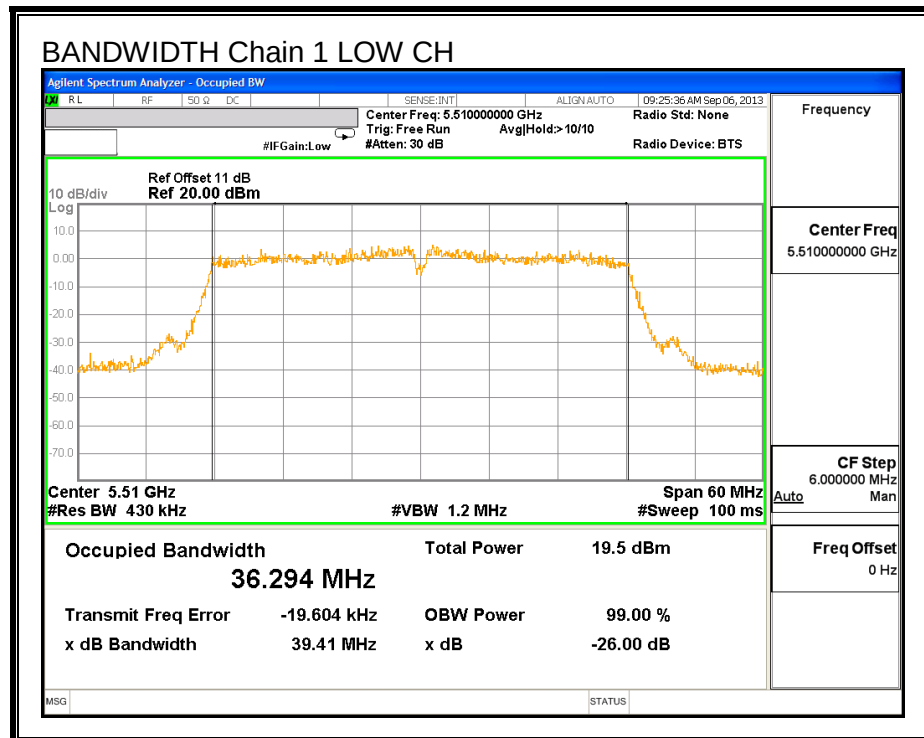
Channel	Frequency (MHz)	26 dB BW Chain 0 (MHz)	26 dB BW Chain 1 (MHz)
Low	5510	39.46	39.41
Mid	5550	39.92	39.08
High	5670	39.79	39.24

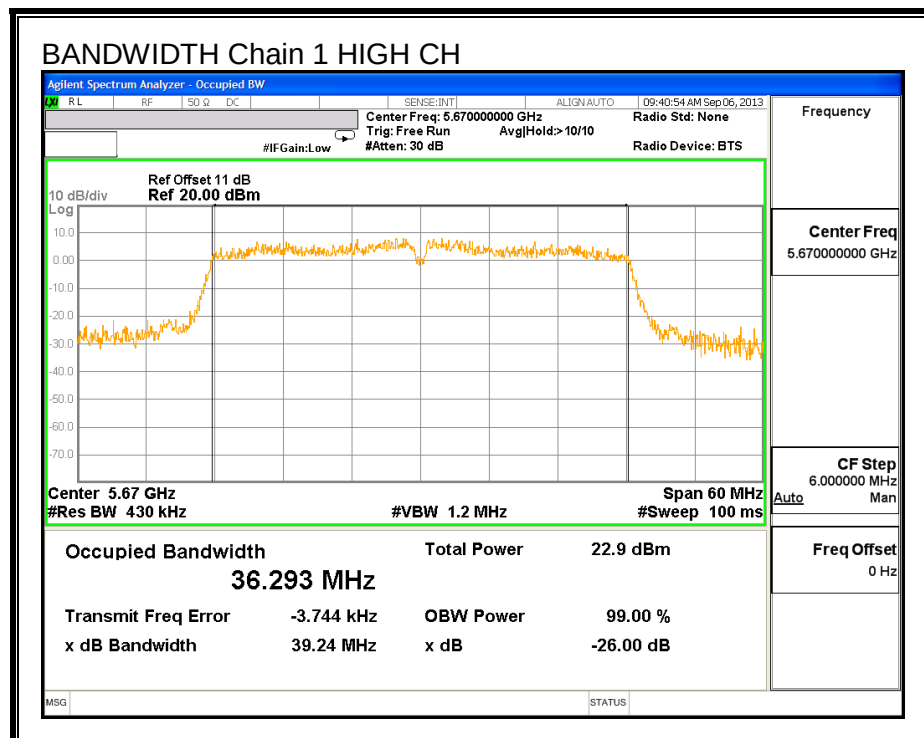
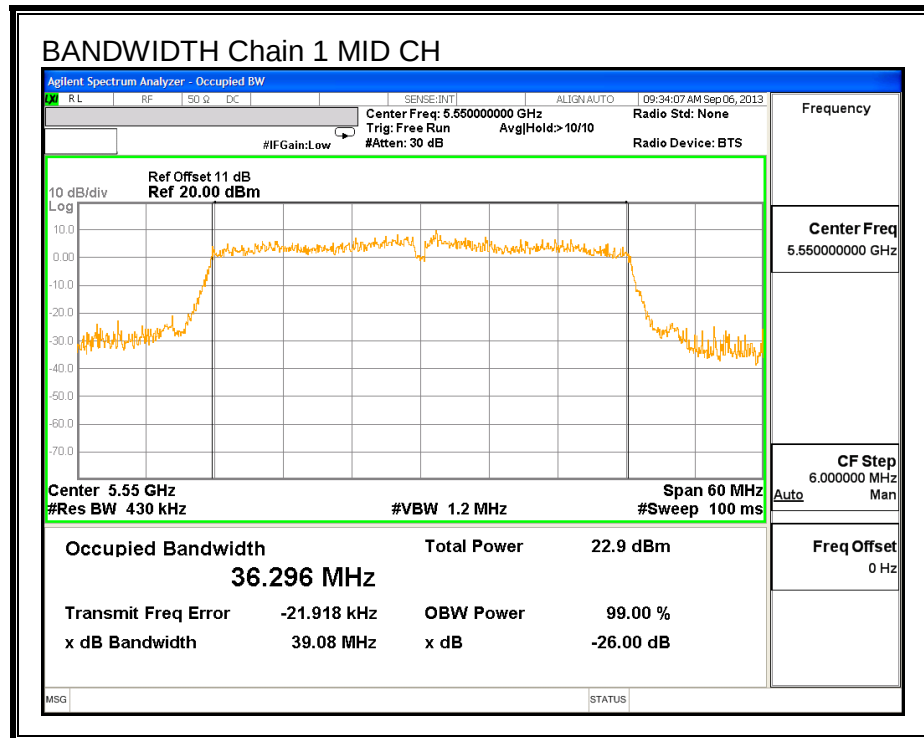
26 dB BANDWIDTH, Chain 0





26 dB BANDWIDTH, Chain 1





9.12.2. 99% BANDWIDTH

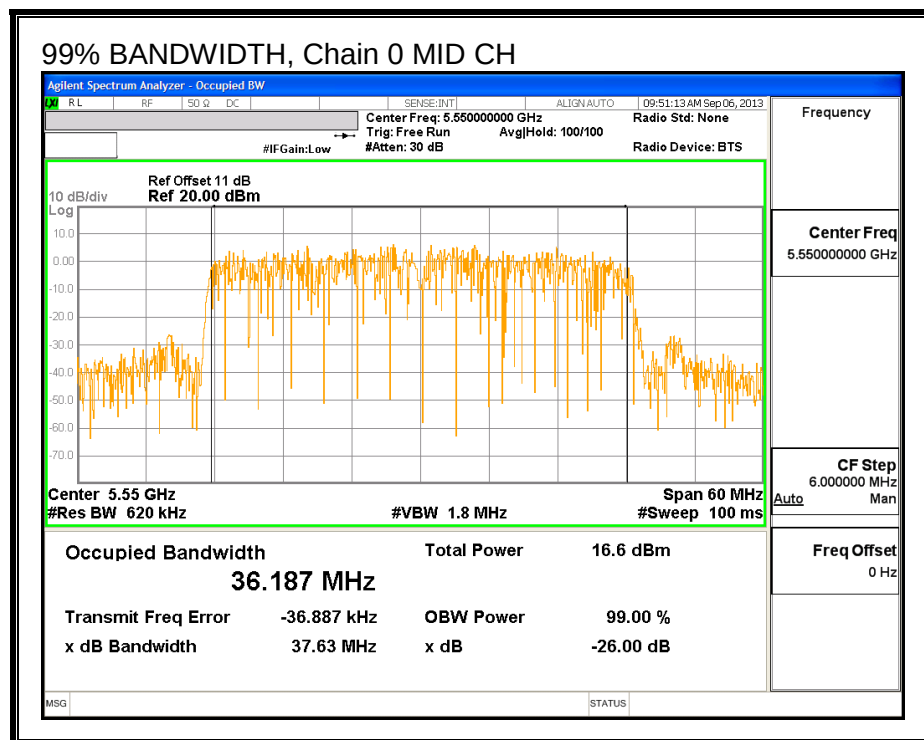
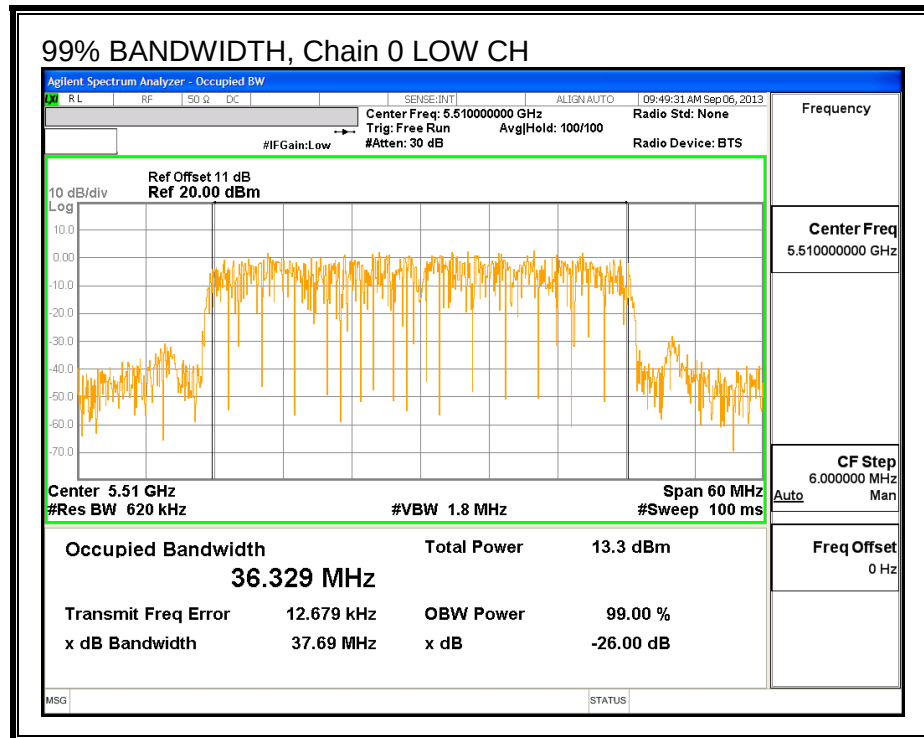
LIMITS

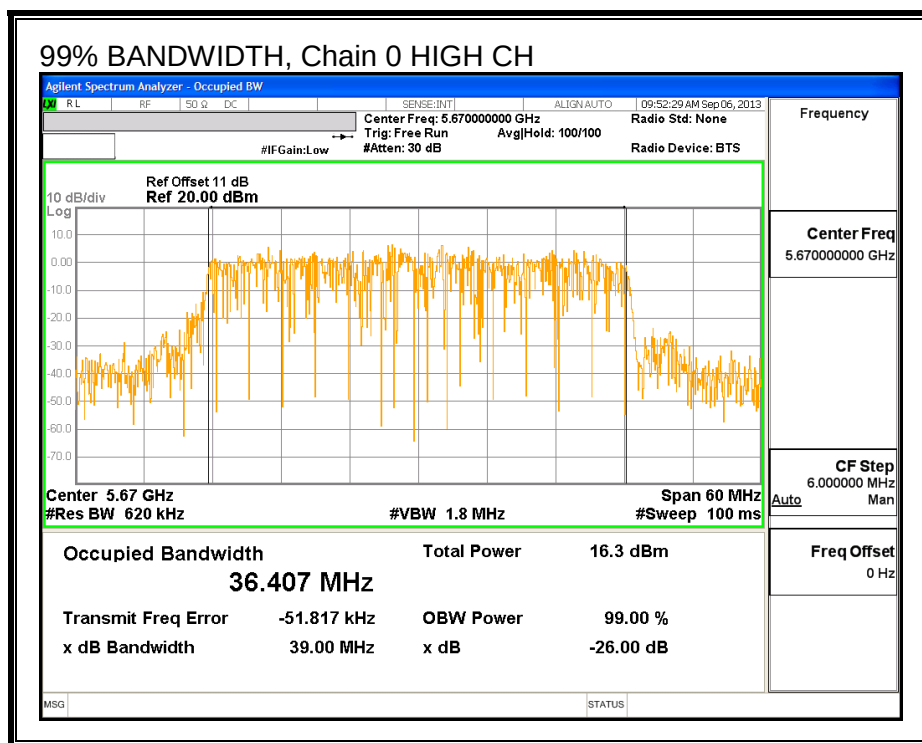
None; for reporting purposes only.

RESULTS

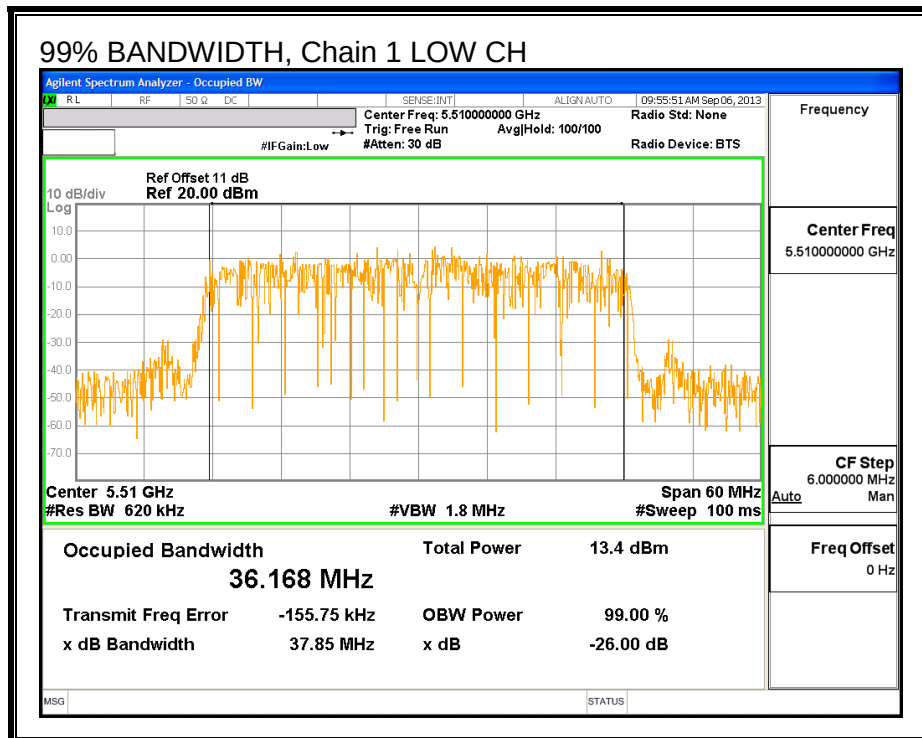
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low	5510	36.329	36.168
Mid	5550	36.187	36.048
High	5670	36.407	36.392

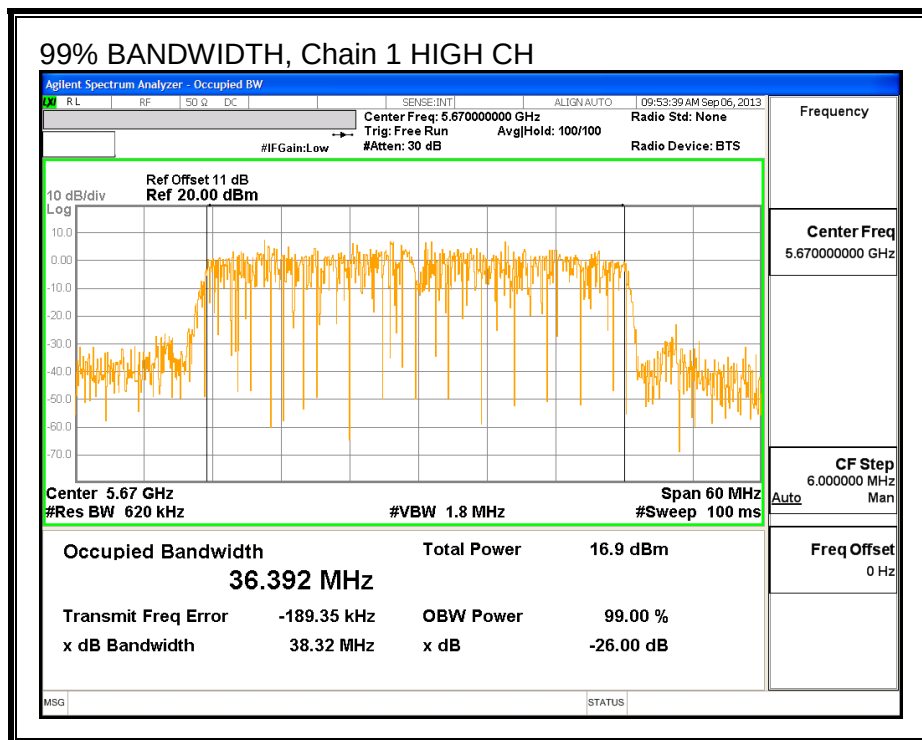
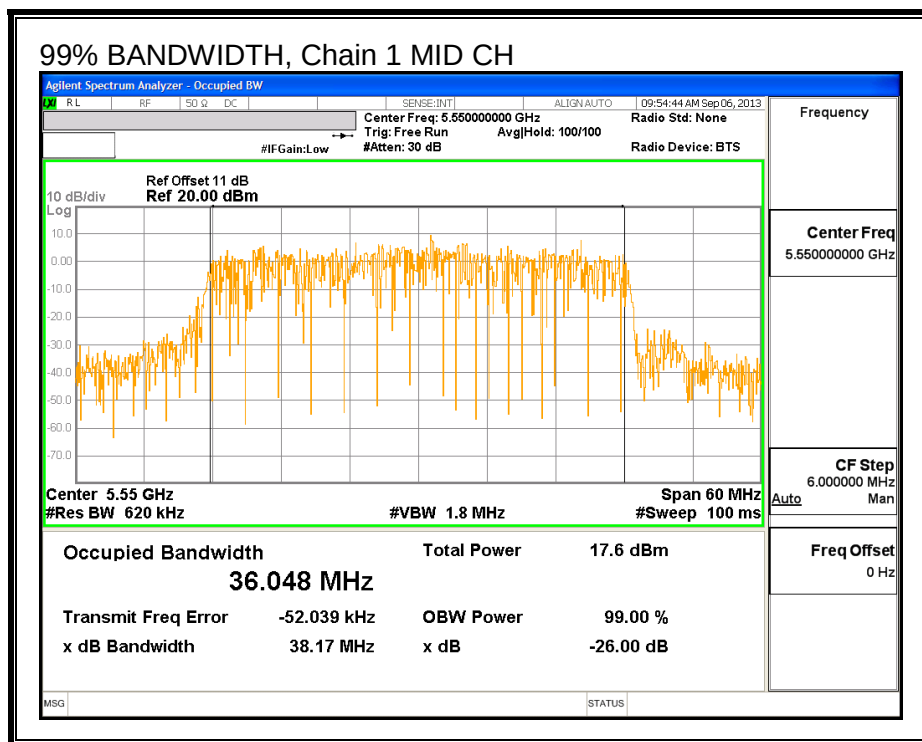
99% BANDWIDTH, Chain 0





99% BANDWIDTH, Chain 1





9.12.3. 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

9.12.4. OUTPUT POWER AND PPSD

LIMITS

FCC §15.407 (a) (2)

For the band 5.47–5.725 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 maximum 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.

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

RESULTS

Bandwidth and Antenna Gain

Channel	Frequency (MHz)	Min 26 dB BW (MHz)	Uncorre Directional Gain (dBi)	Correlated Directional Gain (dBi)
Low	5510	39.4	3.46	6.42
Mid	5550	39.1	3.46	6.42
High	5670	39.2	3.46	6.42

Limits

Channel	Frequency (MHz)	FCC Power Limit (dBm)	FCC PPSD Limit (dBm)
Low	5510	24.00	10.58
Mid	5550	24.00	10.58
High	5670	24.00	10.58

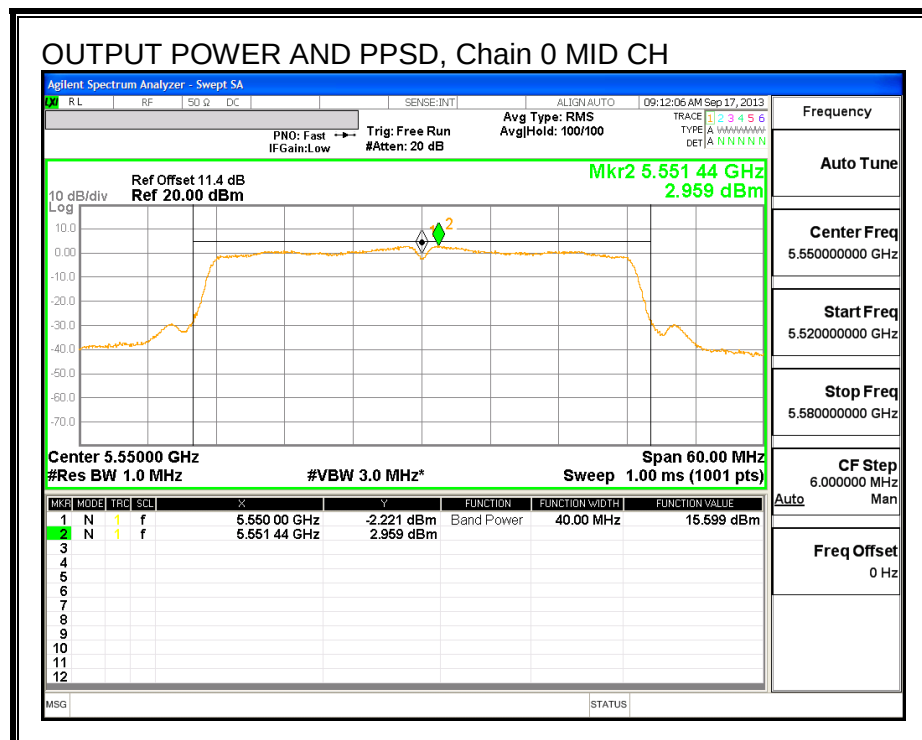
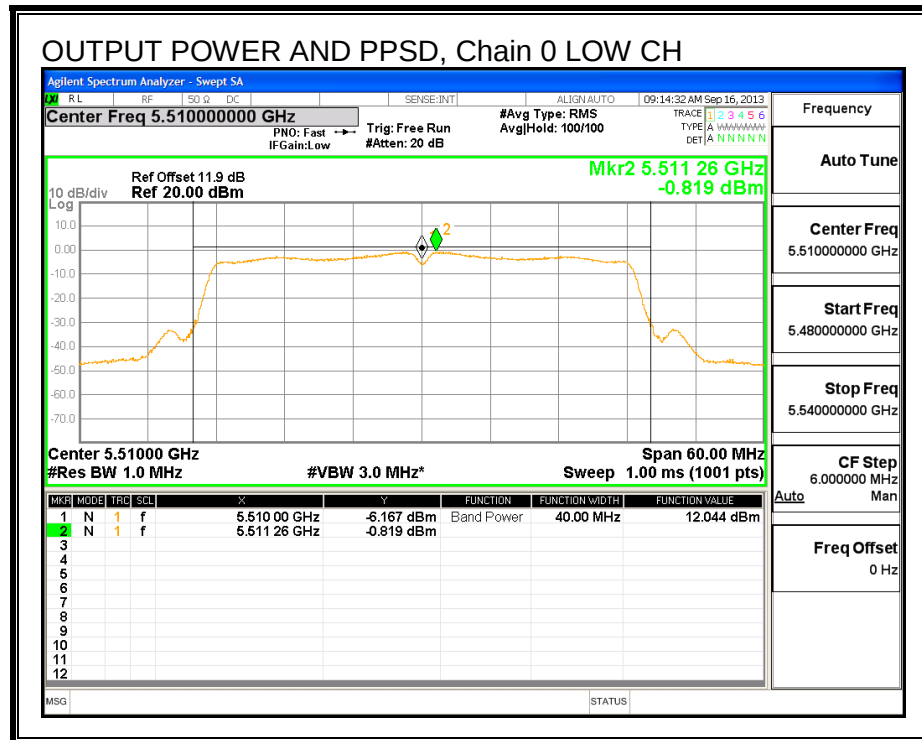
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd Power &PPSD
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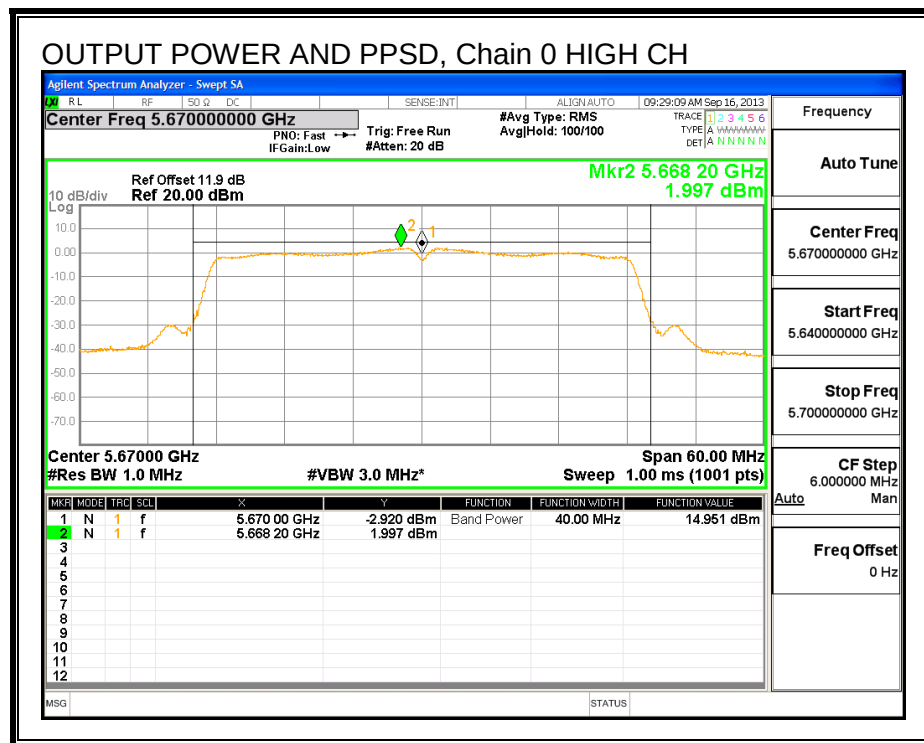
Output Power Results

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

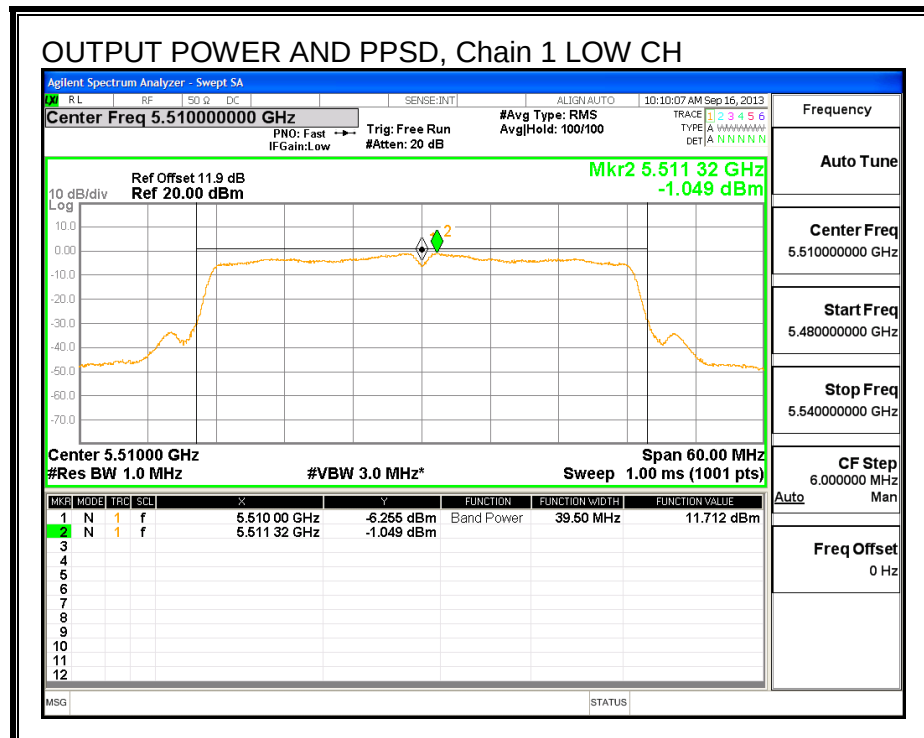
PPSD Results

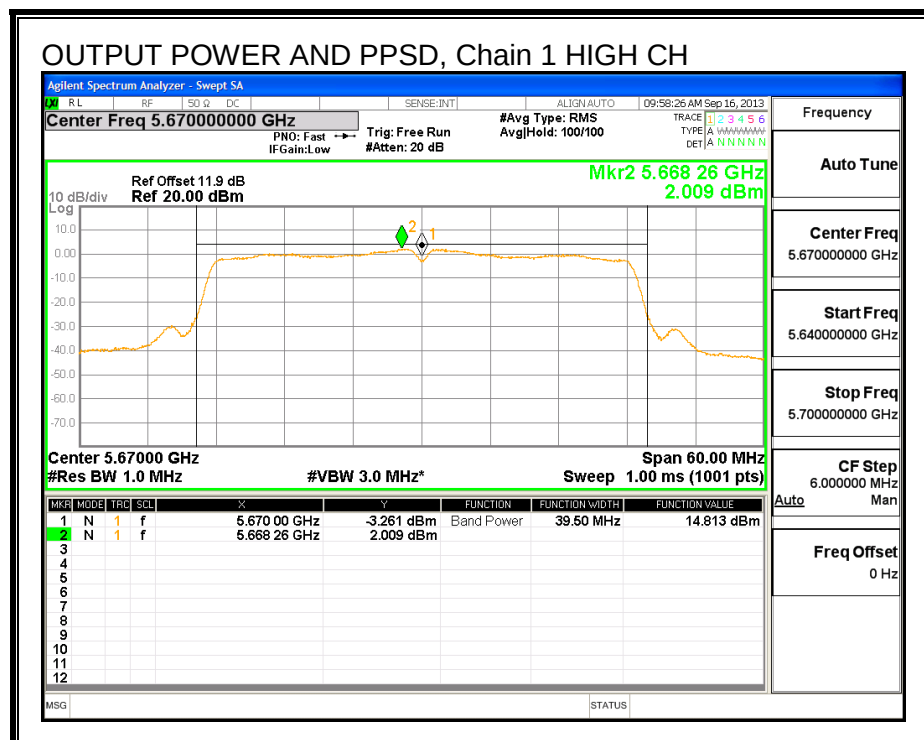
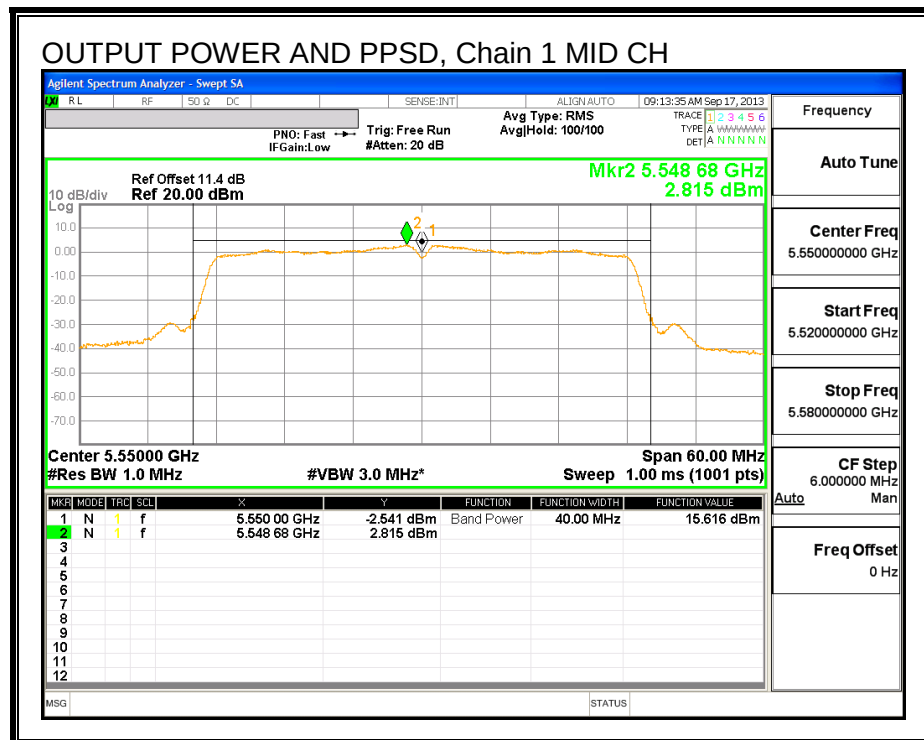
Channel	Frequency (MHz)	Chain 0 Meas PPSD (dBm)	Chain 1 Meas PPSD (dBm)	Total Corr'd PPSD (dBm)	PPSD Limit (dBm)	PPSD Margin (dB)
Low	5510	-0.82	-1.05	2.08	10.58	-8.50
Mid	5550	2.96	2.82	5.90	10.58	-4.68
High	5670	2.00	2.01	5.01	10.58	-5.57

OUTPUT POWER AND PPSP, Chain 0



OUTPUT POWER AND PPSD, Chain 1





10. RADIATED TEST RESULTS (MODEL: A1489)

10.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

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

TEST PROCEDURE

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

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

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.

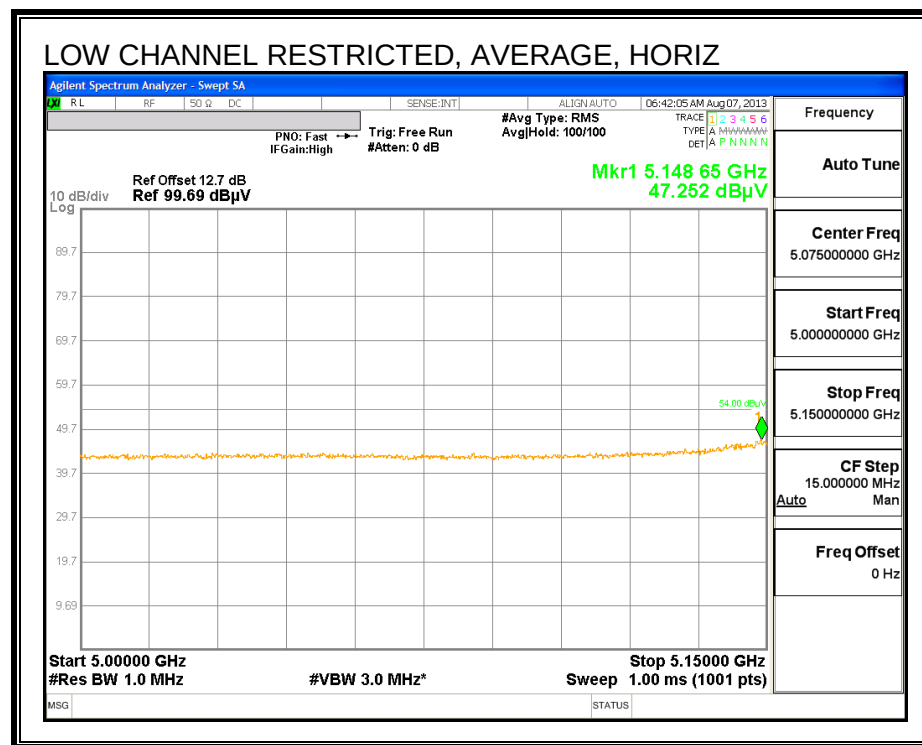
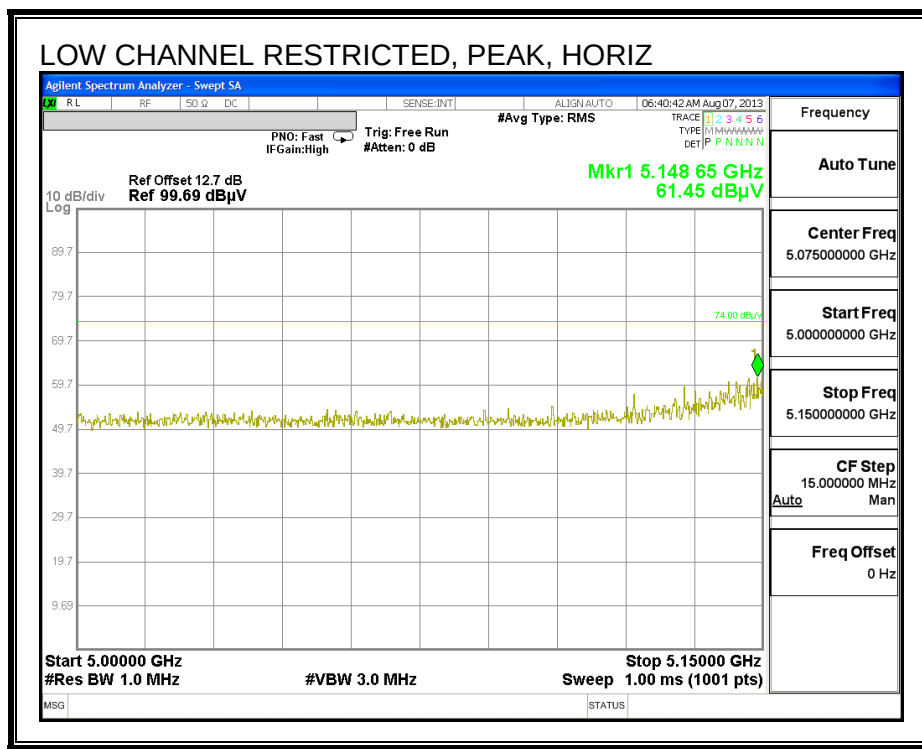
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

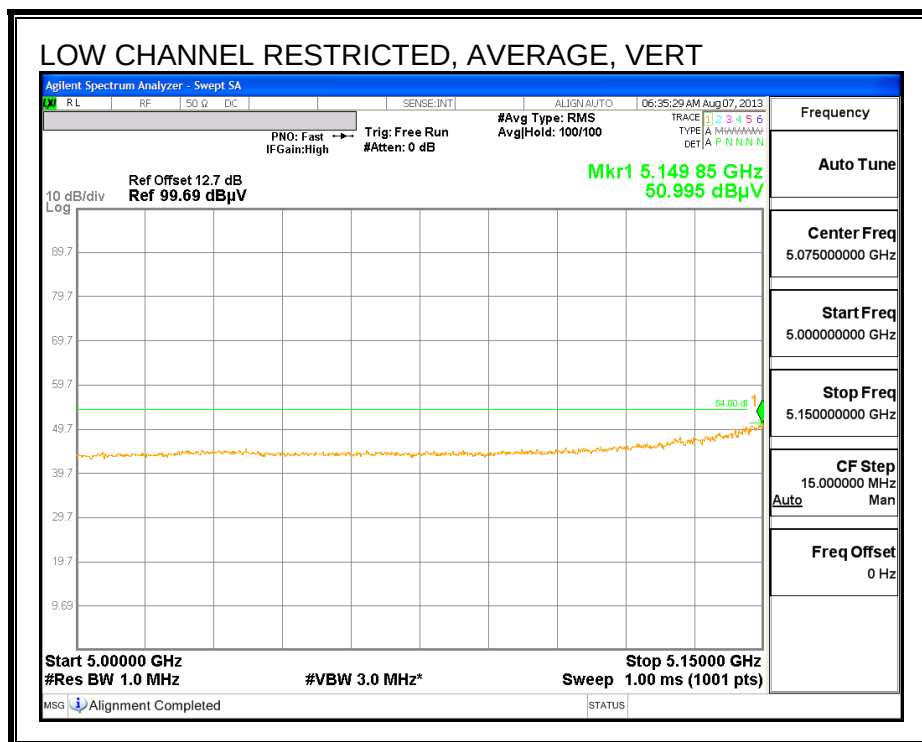
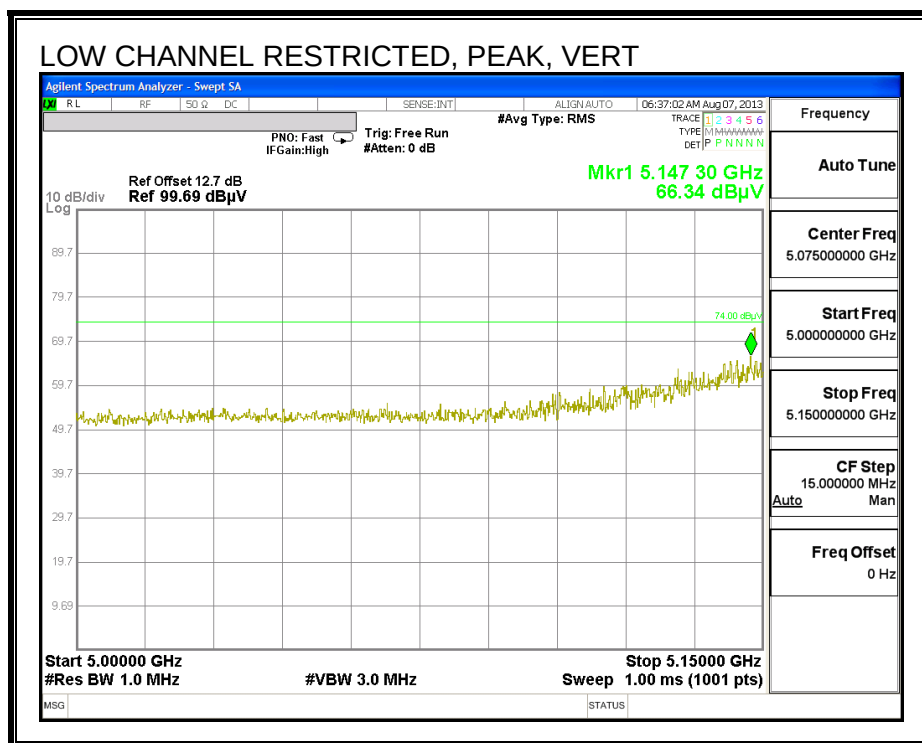
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

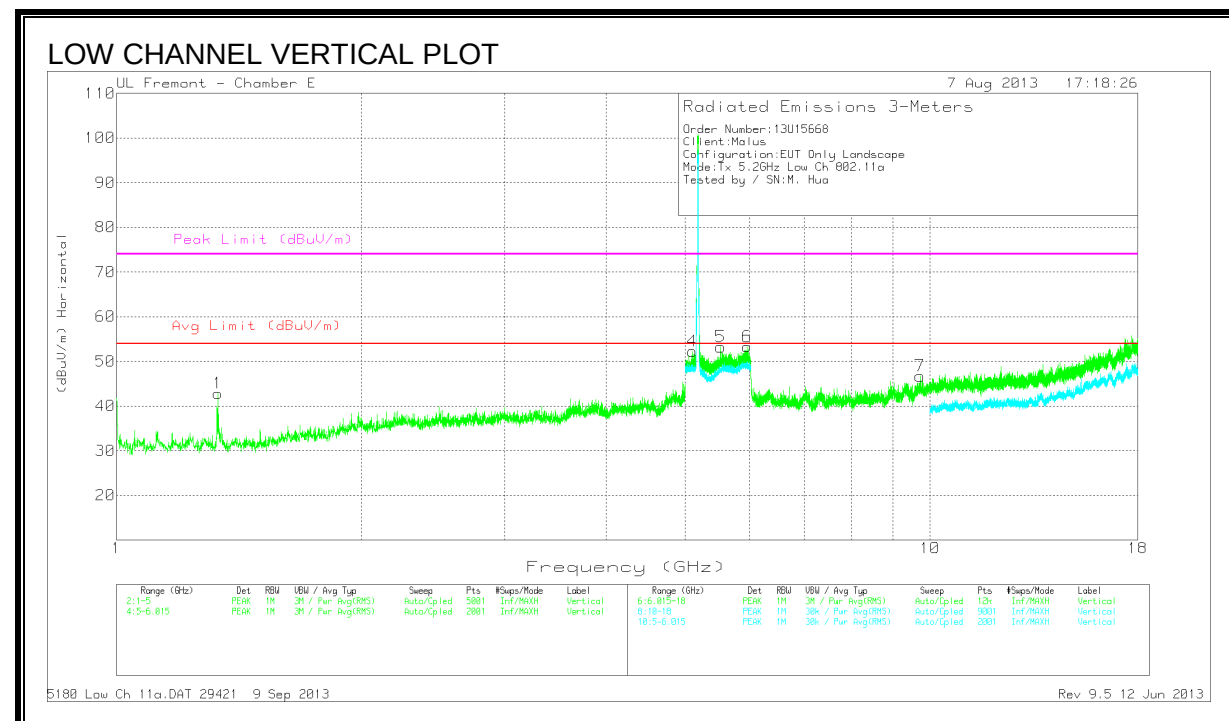
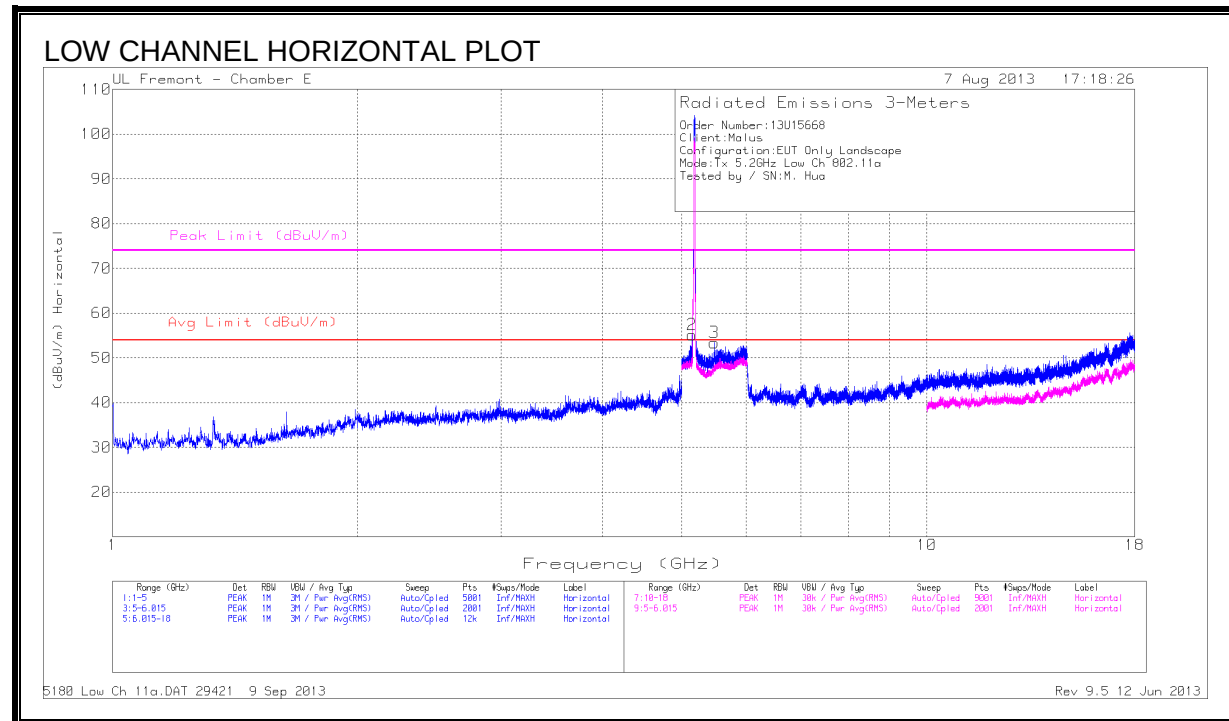
10.2. TRANSMITTER ABOVE 1 GHz

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

RESTRICTED BANDEDGE (LOW CHANNEL)





HARMONICS AND SPURIOUS EMISSIONS

DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Filtr/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

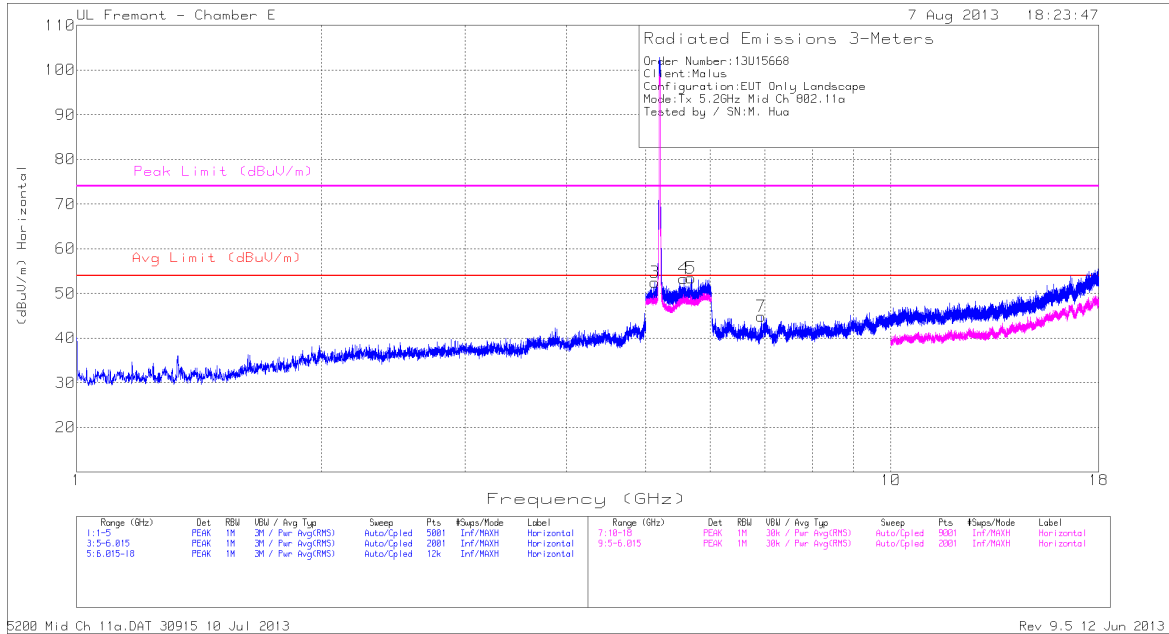
PK - Peak detector

*Not in Restricted Band

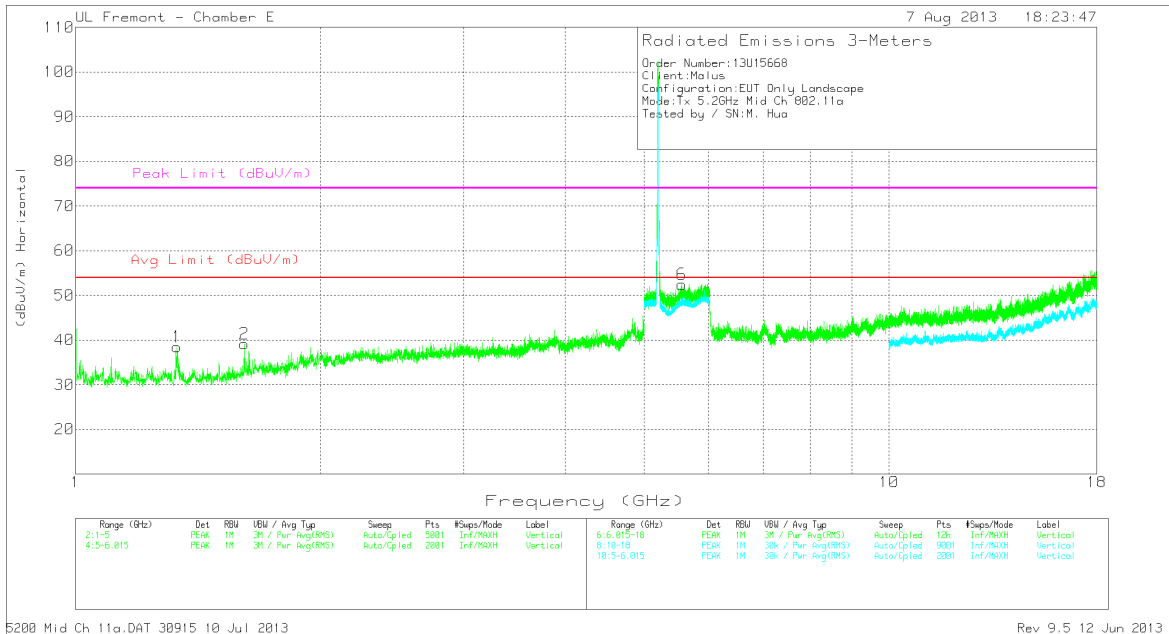
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.148	37.27	MAv1	34.6	-21.6	50.27	53.97	-3.7	-	-	91	217	H
5.109	28.62	MAv1	34.5	-21.8	41.32	53.97	-12.65	-	-	3	261	V

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

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

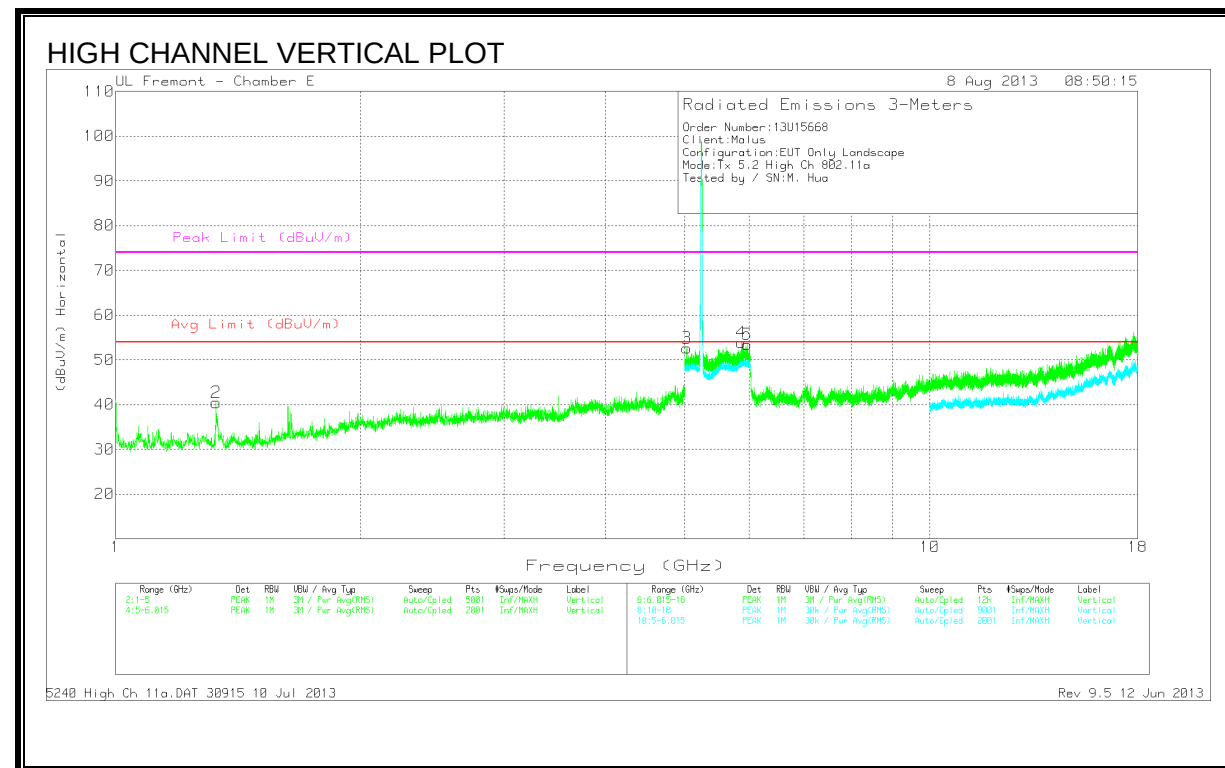
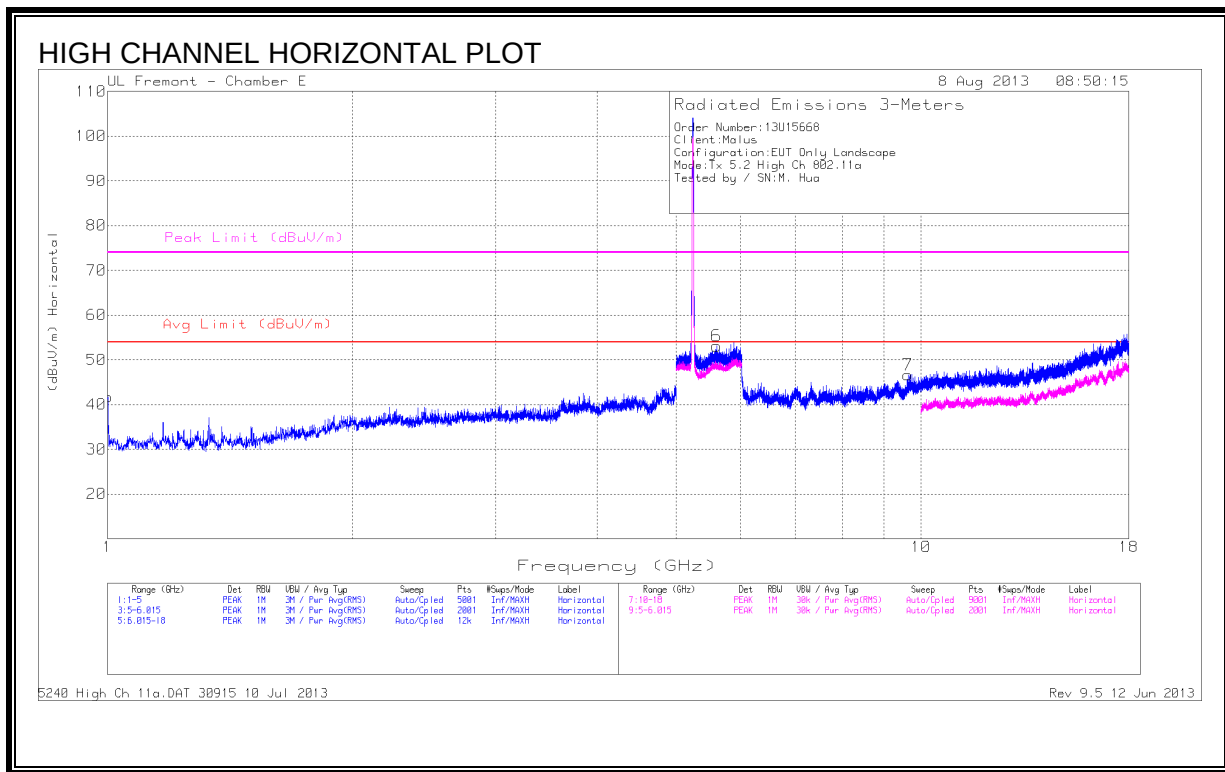
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.333	44.67	PK	28.5	-34.7	38.47	53.97	-15.50	74	-35.53	0-360	201	V
1.612	44.35	PK	29	-34.2	39.15	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/ Filtr/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



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Filtr/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

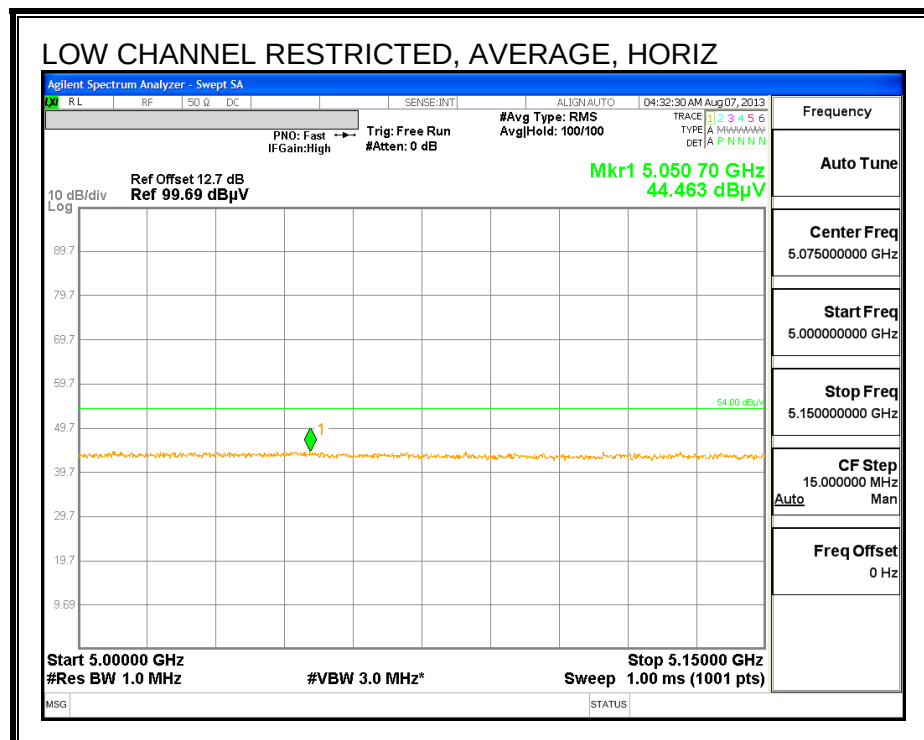
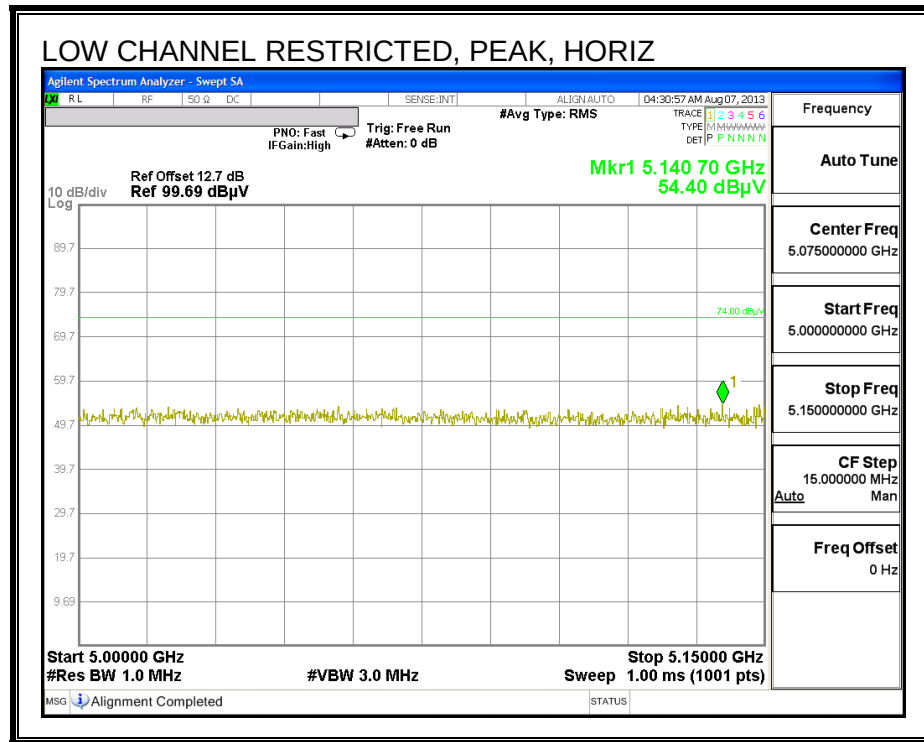
*Not in Restricted Band

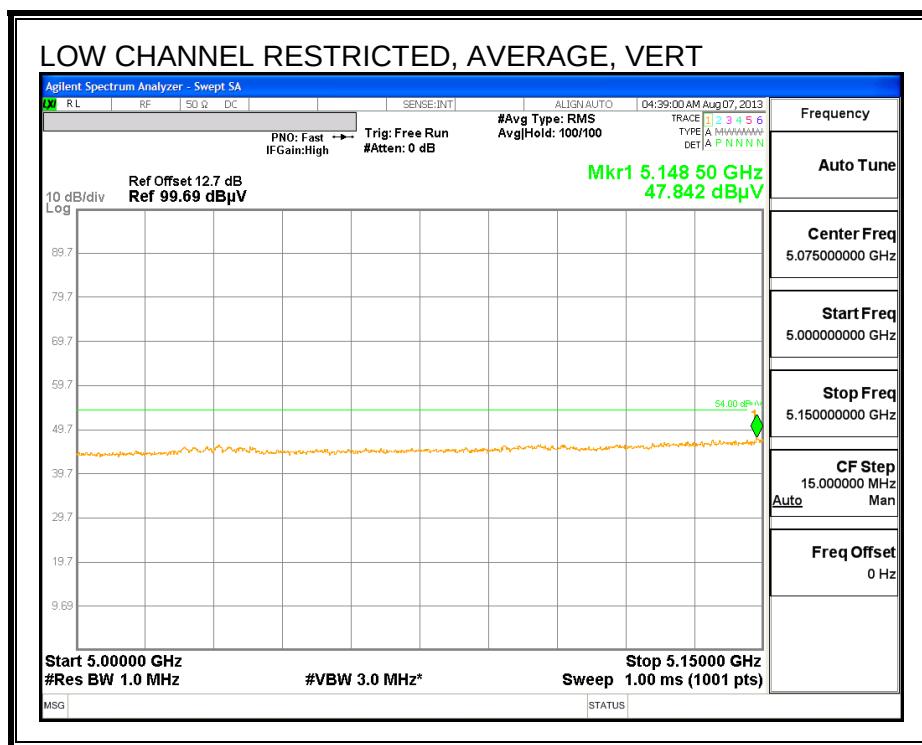
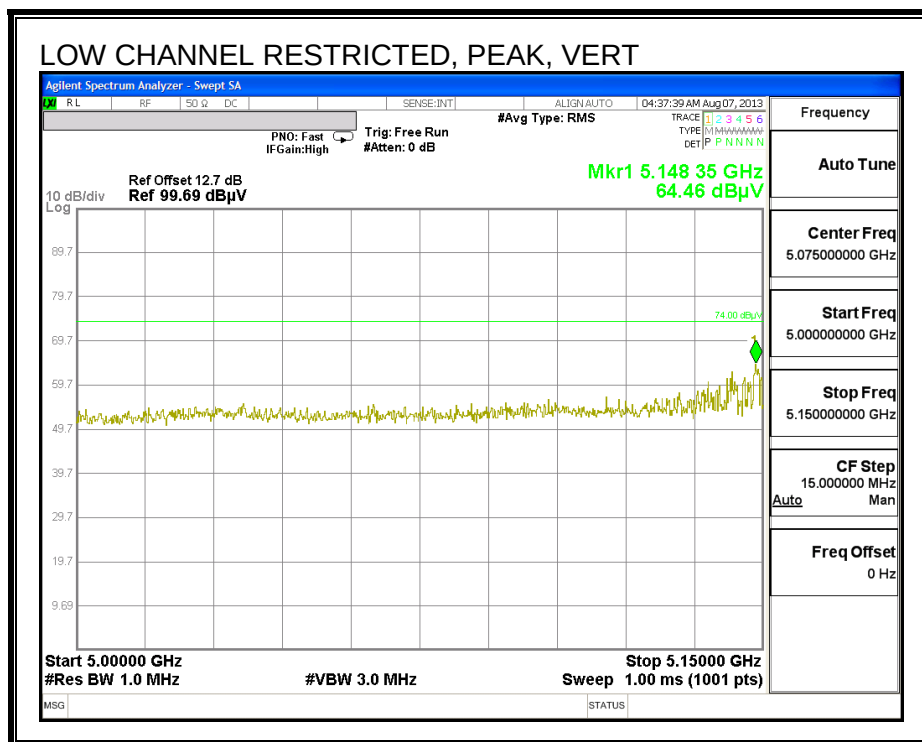
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.023	28.5	MAV1	34.3	-22.2	40.6	53.97	-13.37	-	-	335	314	V

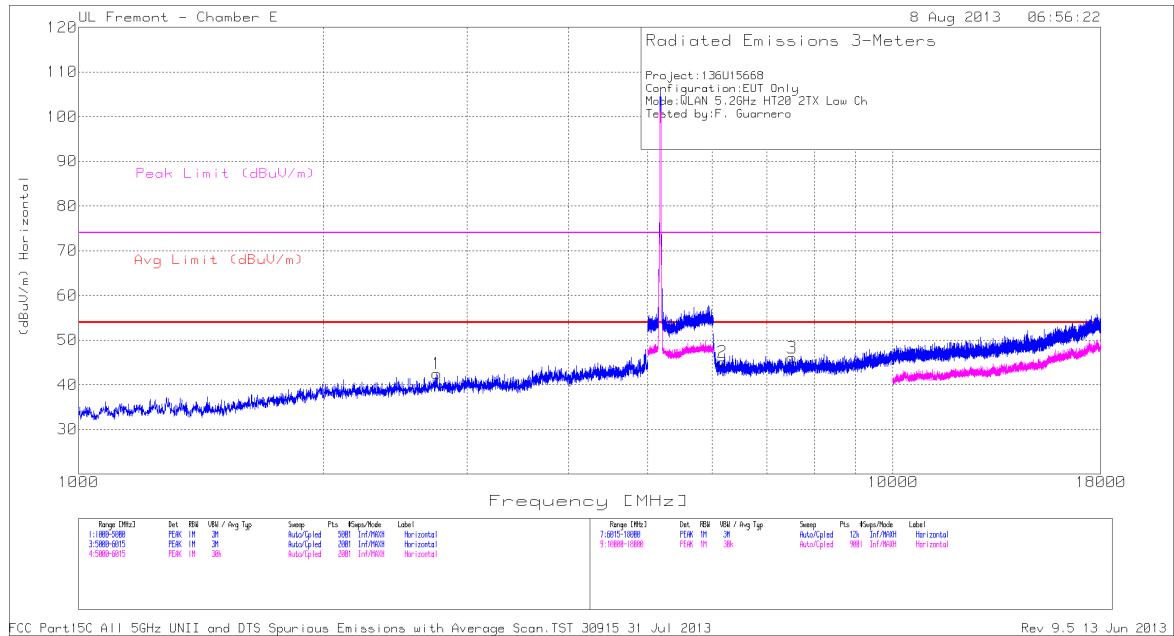
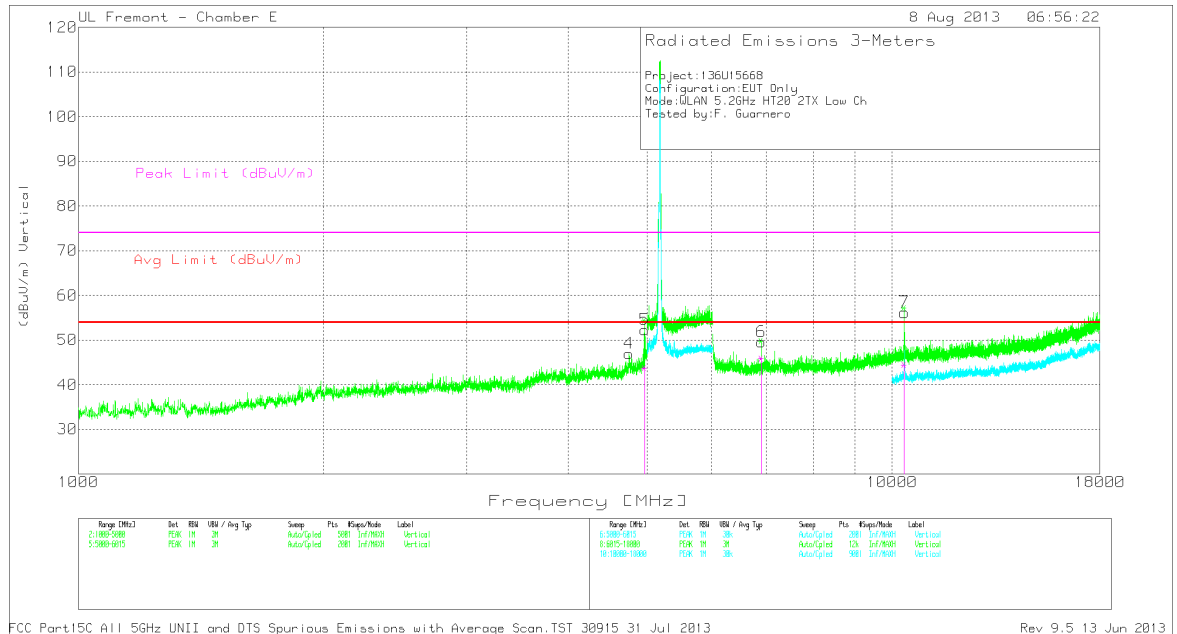
MAV1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

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

RESTRICTED BANEDGE (LOW CHANNEL)





HARMONICS AND SPURIOUS EMISSIONS**LOW CHANNEL HORIZONTAL PLOT****LOW CHANNEL VERTICAL PLOT**

DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 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

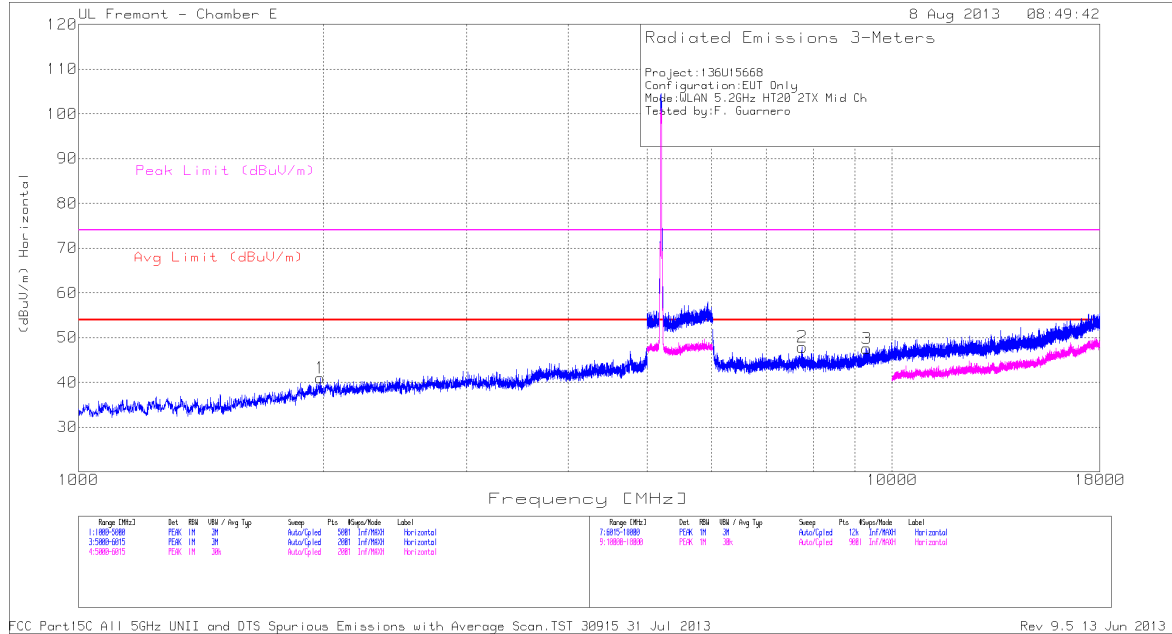
PK - Peak detector

*Not in Restricted Band

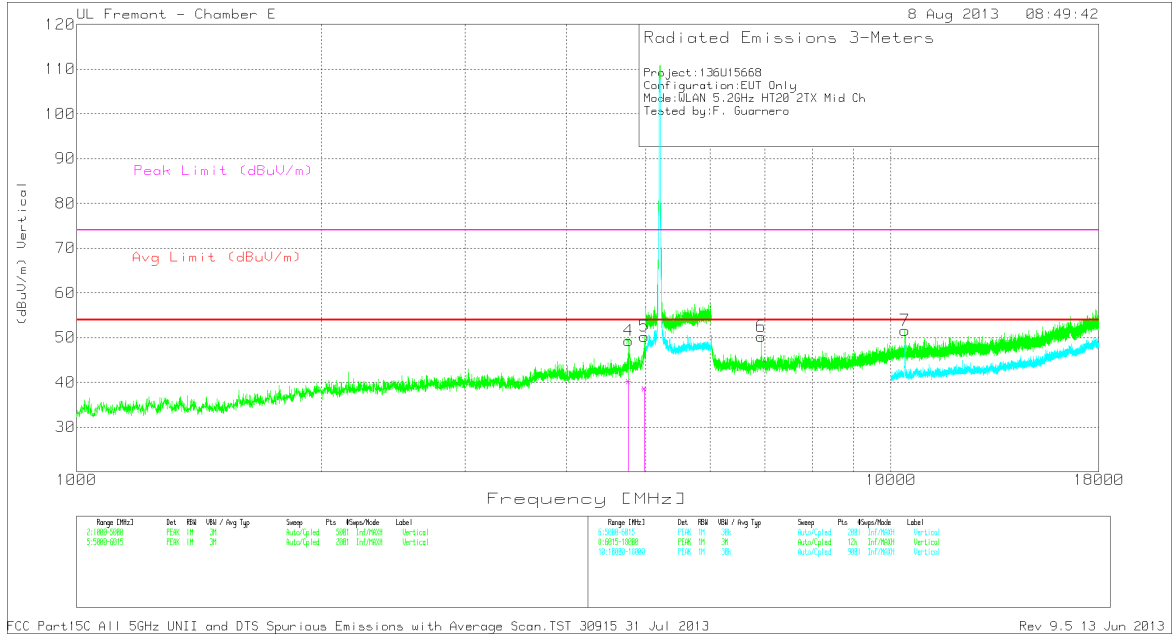
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4.964	39.95	RMS	34.4	-30.7	.1	43.75	53.97	-10.22	-	-	143	219	V

RMS - RMS detection

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	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

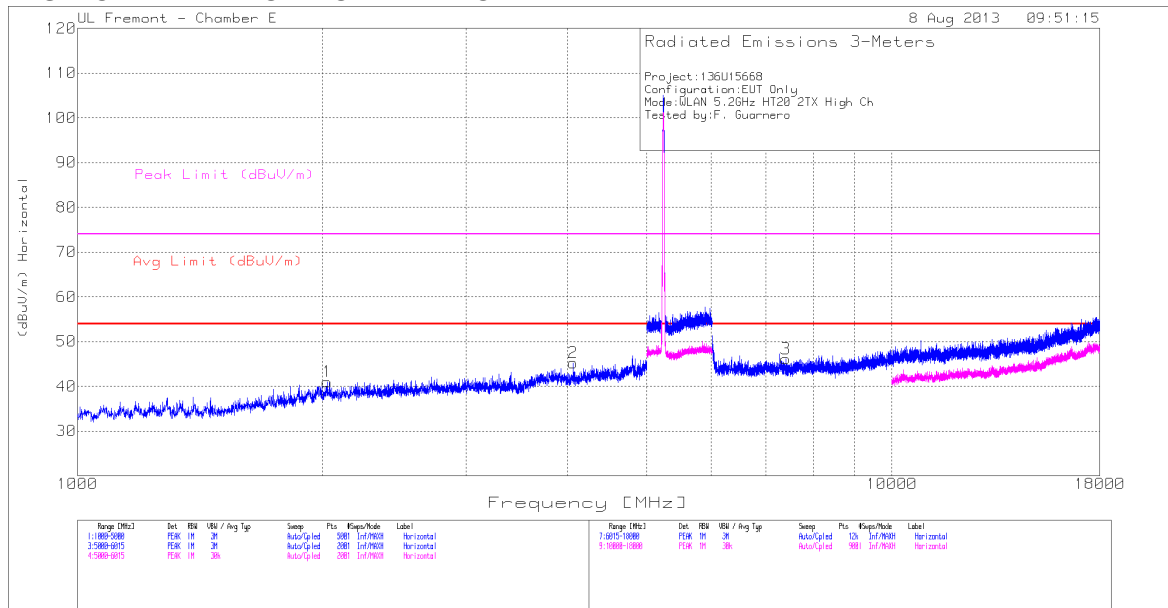
PK - Peak detector

*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

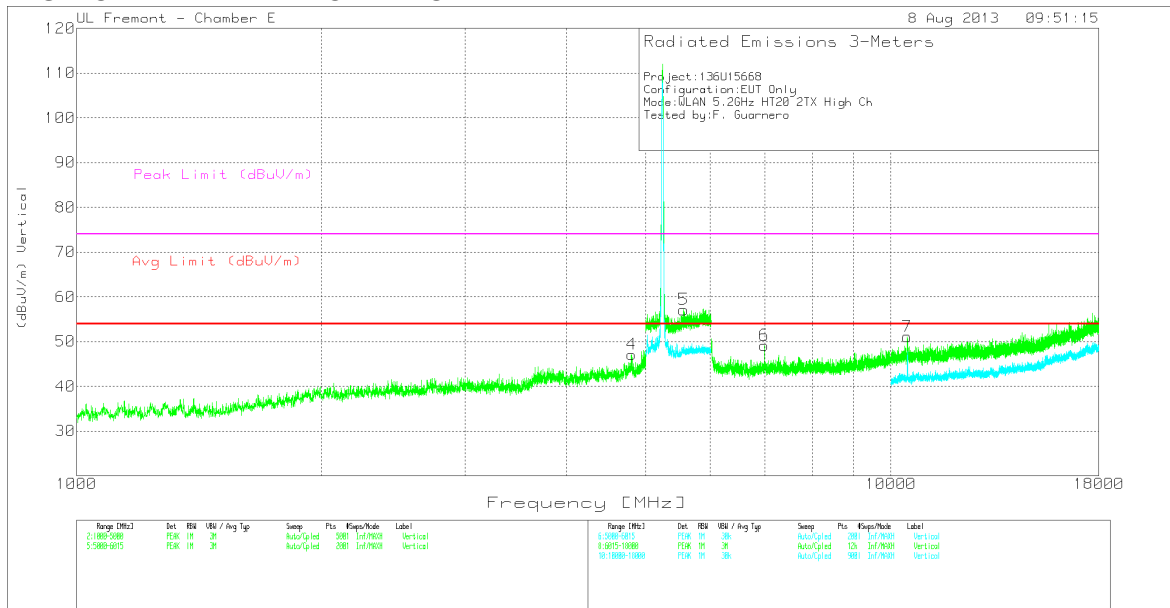
HIGH CHANNEL HORIZONTAL PLOT



FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 31 Jul 2013

Rev 9.5 13 Jun 2013

HIGH CHANNEL VERTICAL PLOT



FCC Part15C All 5GHz UNII and DTS Spurious Emissions with Average Scan.TST 30915 31 Jul 2013

Rev 9.5 13 Jun 2013

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

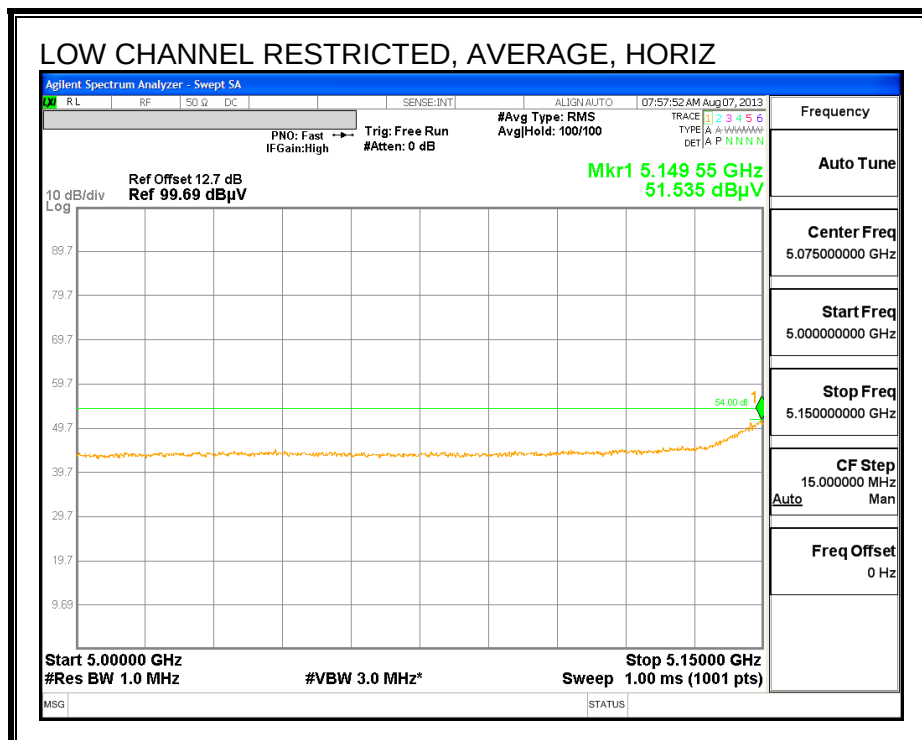
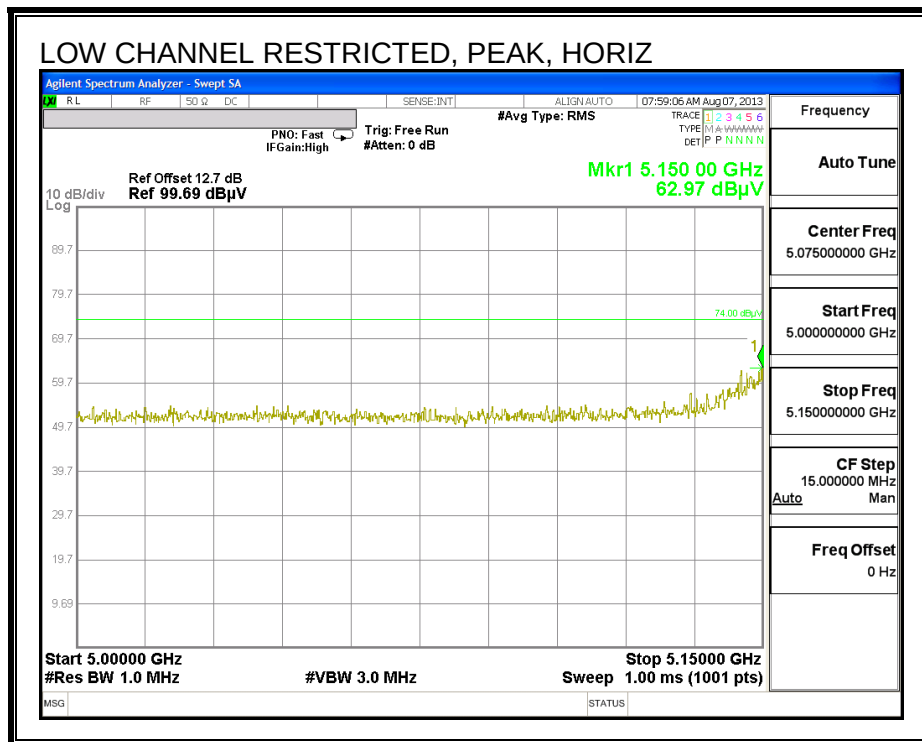
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl /10dB Pad (dB)	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/ m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
4	4.805	43.65	PK	34.4	-30.9	0	47.15	53.97	-6.82	74	-26.85	201	V
*5	5.565	43.53	PK	35	-21.4	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

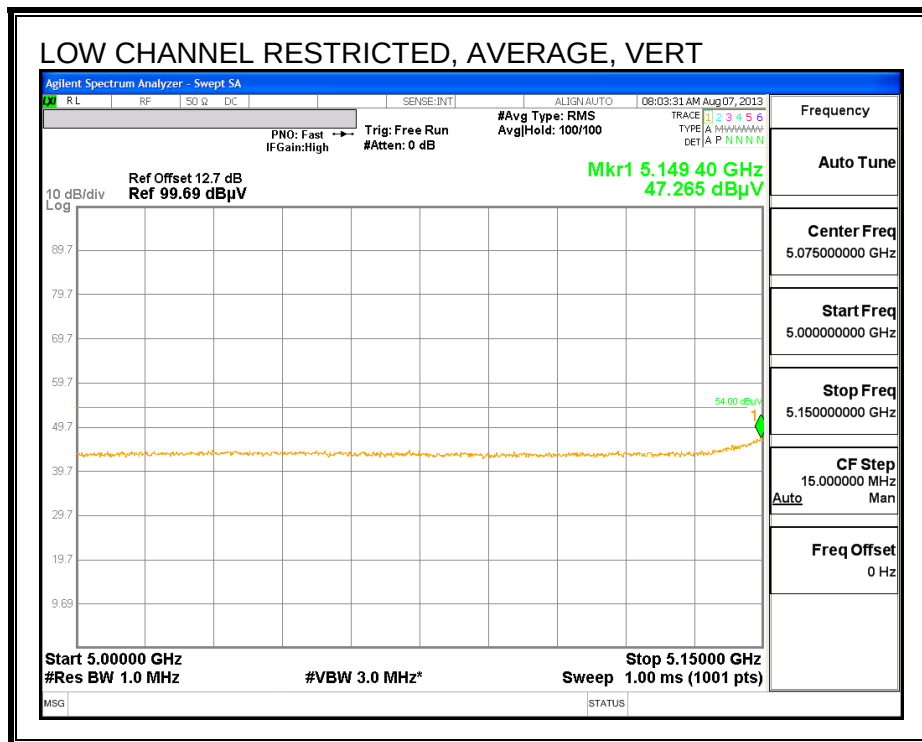
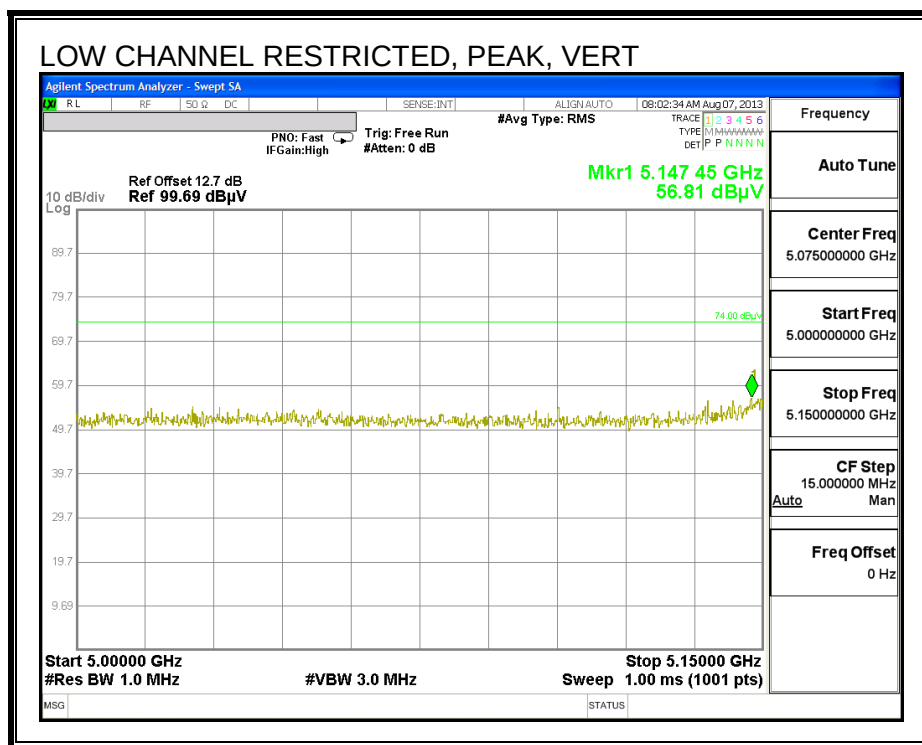
PK - Peak detector

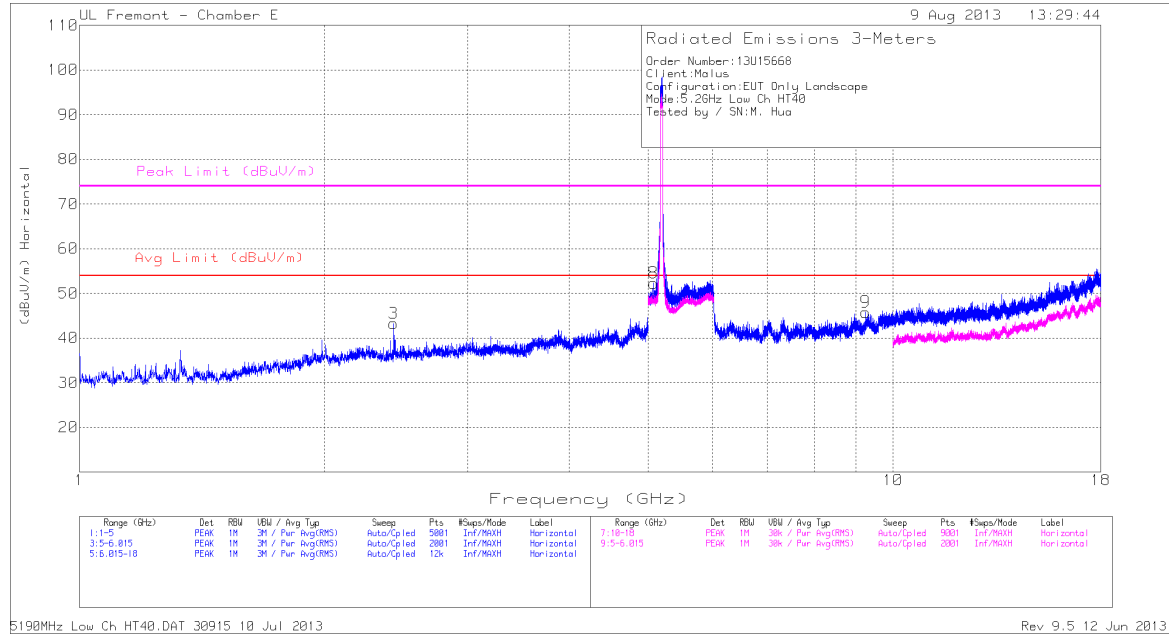
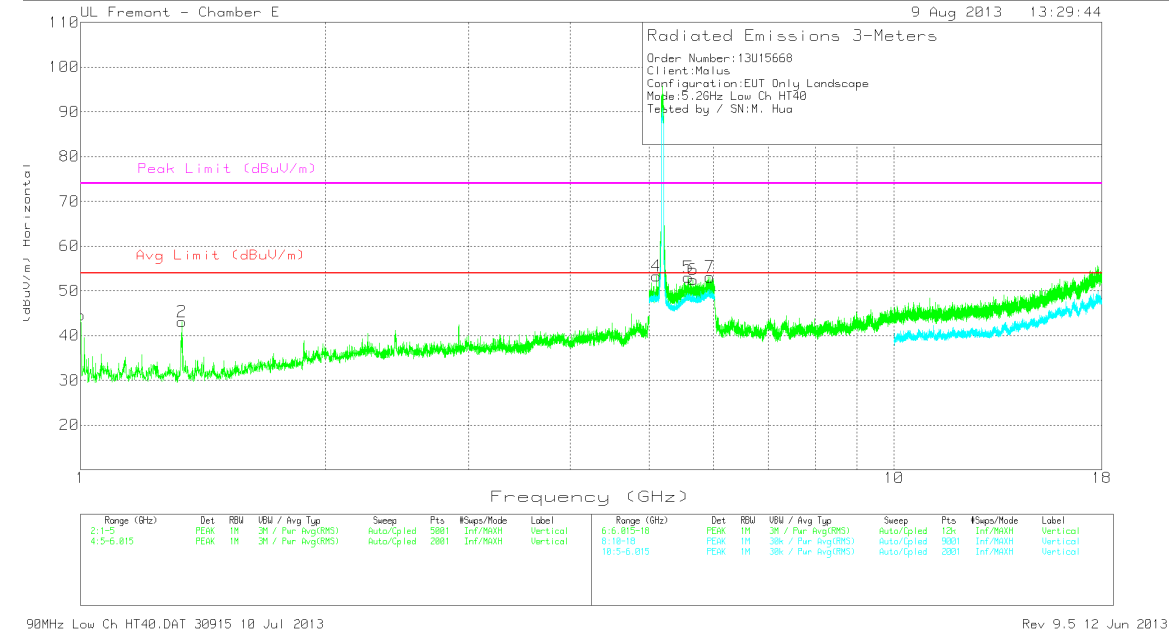
*Not in Restricted Band

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

RESTRICTED BANEDGE (LOW CHANNEL)





HARMONICS AND SPURIOUS EMISSIONS**LOW CHANNEL HORIZONTAL PLOT****LOW CHANNEL VERTICAL PLOT**

DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Filtr/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

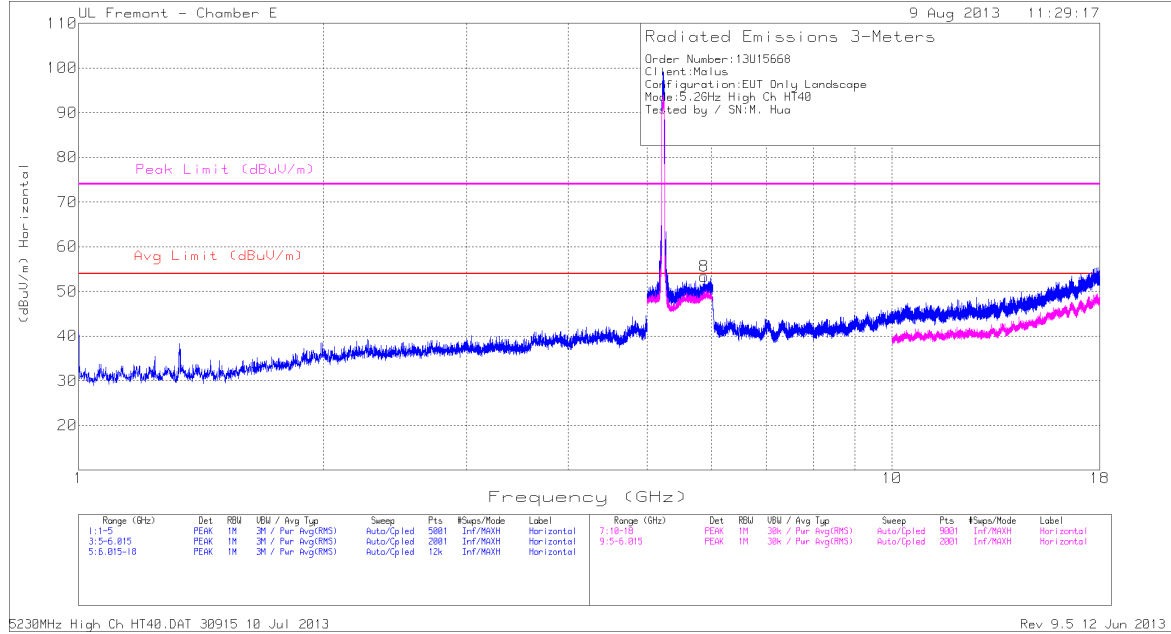
PK - Peak detector

*Not in Restricted Band

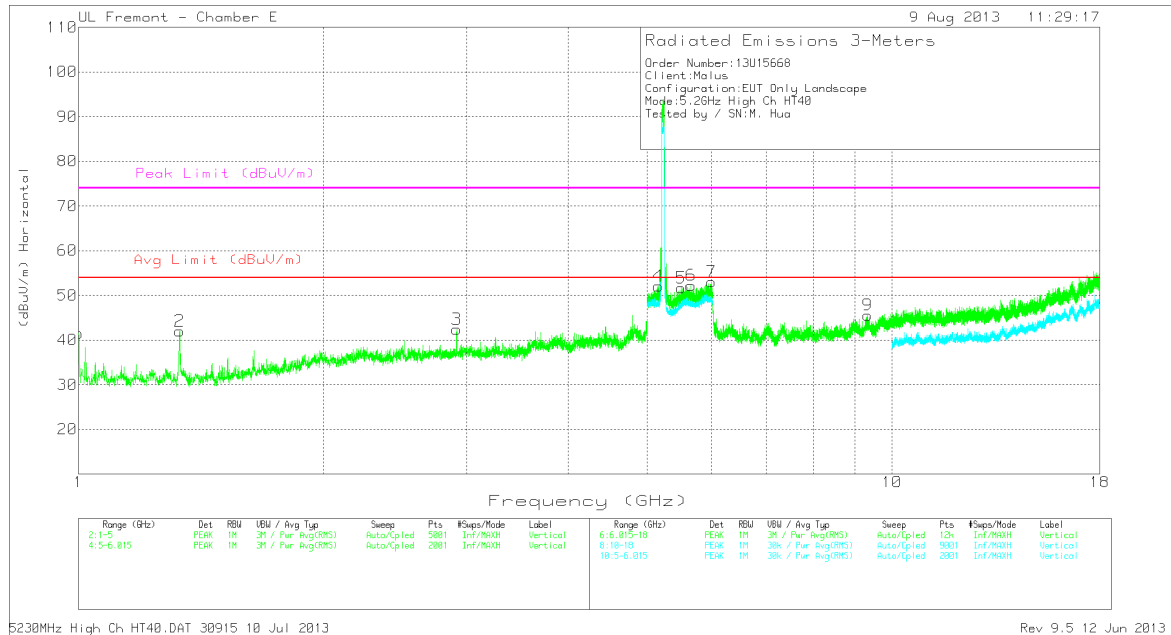
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.084	28.49	MAv1	34.4	-21.9	40.99	53.97	-12.98	-	-	52	339	H
5.098	28.58	MAv1	34.5	-21.8	41.28	53.97	-12.69	-	-	165	142	V

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

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

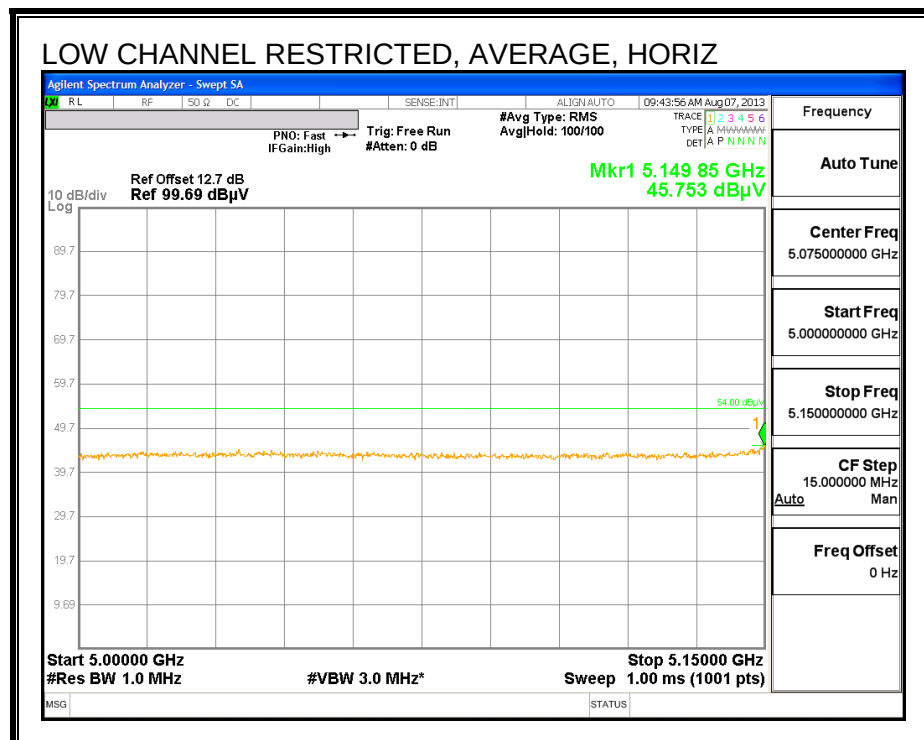
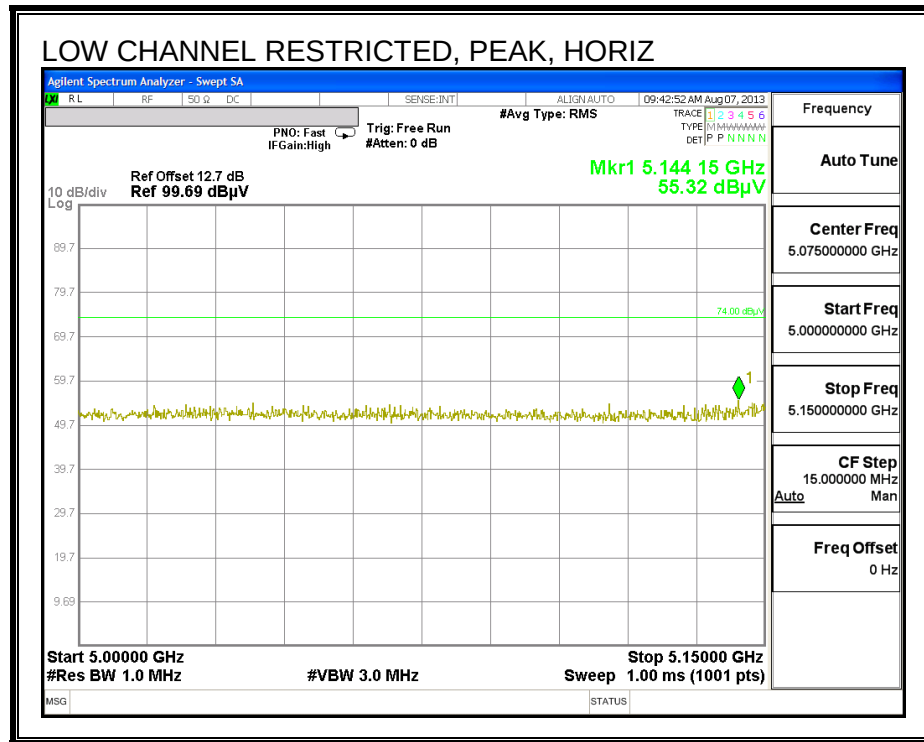
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1.0	49.42	PK	27.7	-35.6	41.52	53.97	-12.45	74	-32.48	0-360	201	V
1.331	48.22	PK	28.5	-34.7	42.02	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

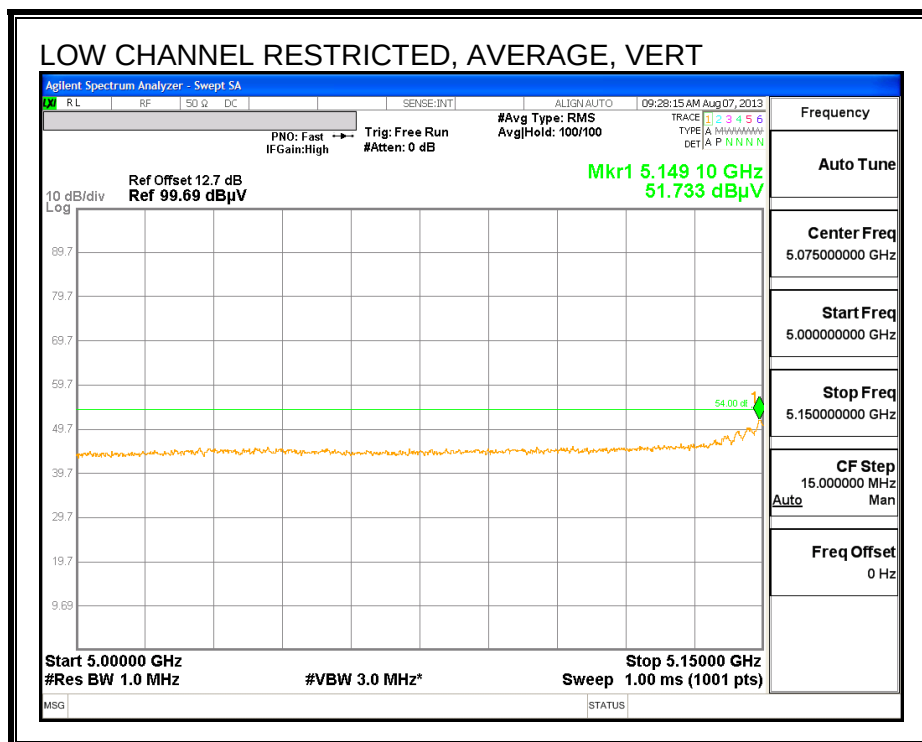
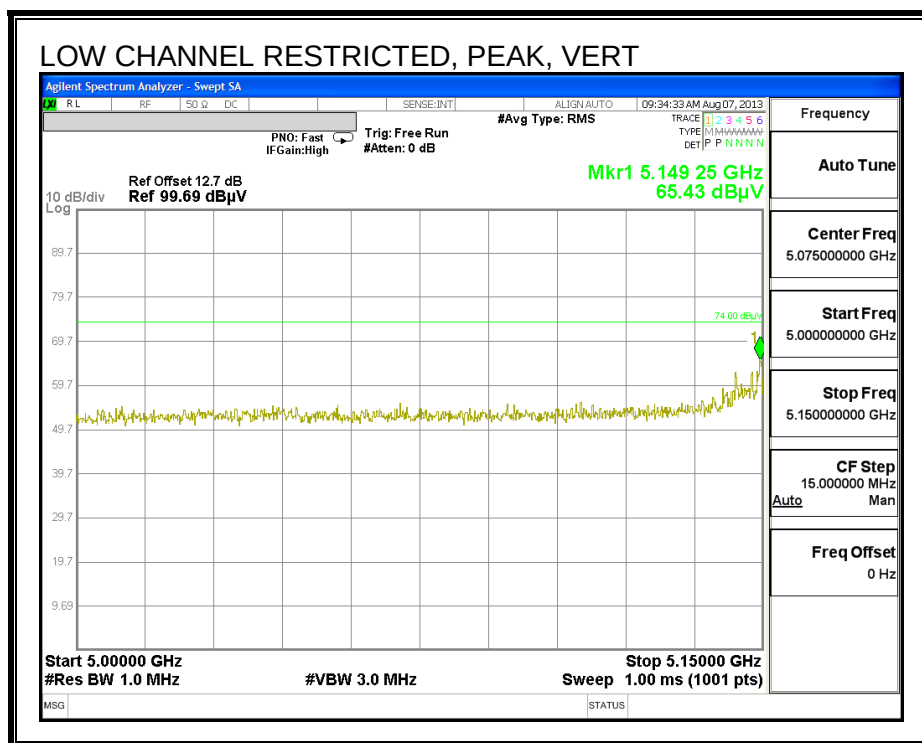
PK - Peak detector

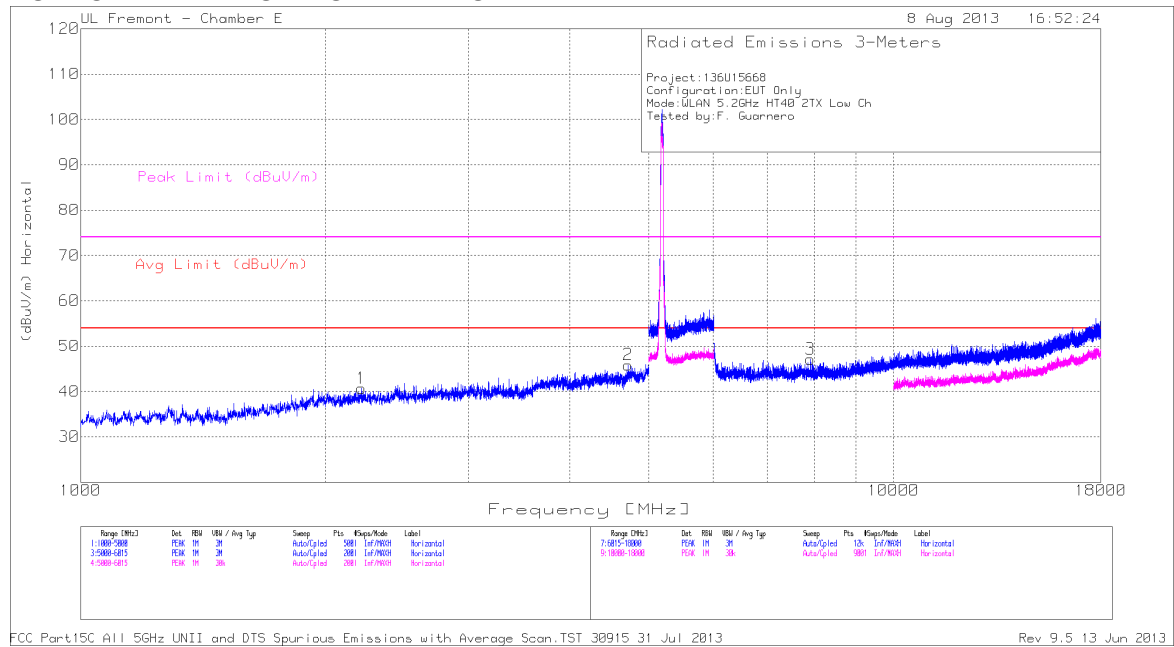
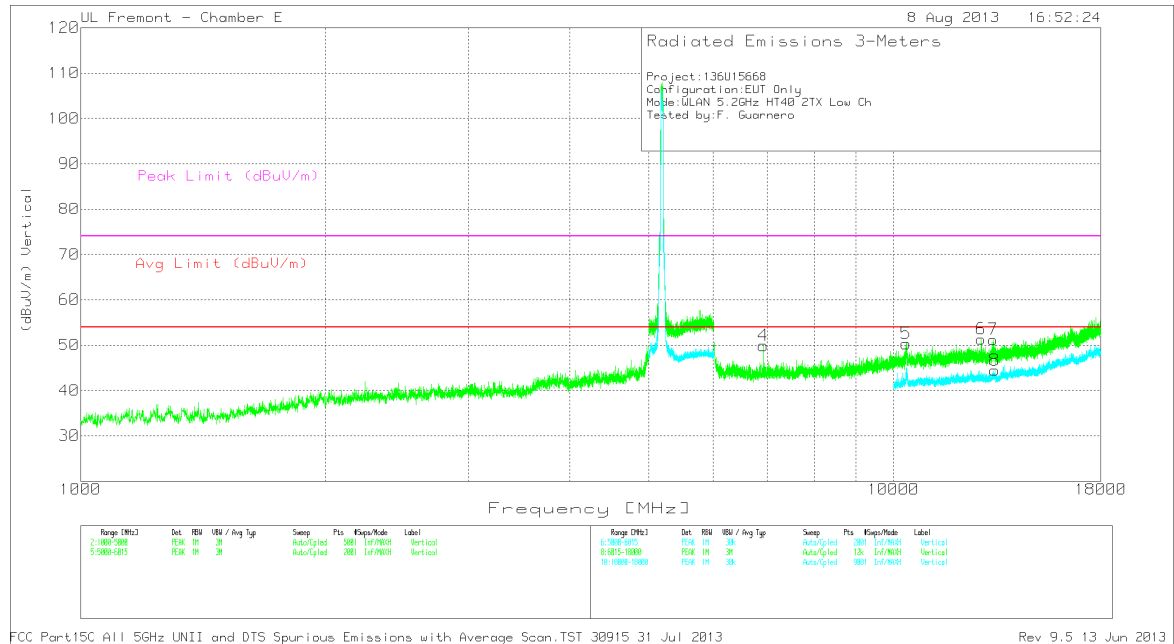
*Not in Restricted Band

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

RESTRICTED BANEDGE (LOW CHANNEL)





HARMONICS AND SPURIOUS EMISSIONS**LOW CHANNEL HORIZONTAL PLOT****LOW CHANNEL VERTICAL PLOT**

DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 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

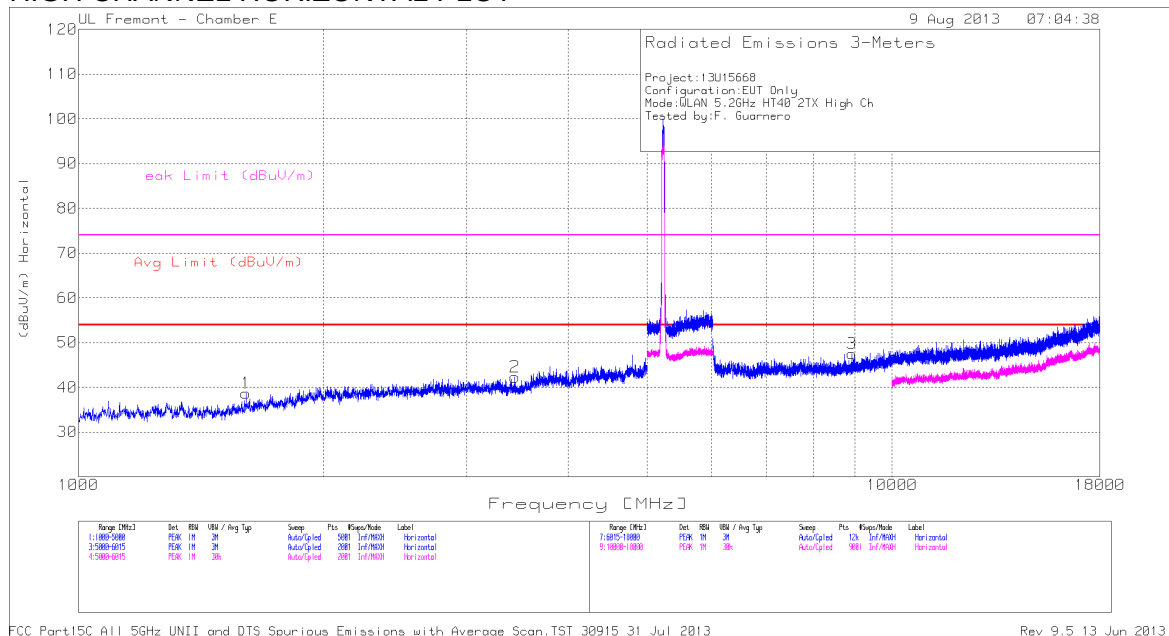
PK - Peak detector

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

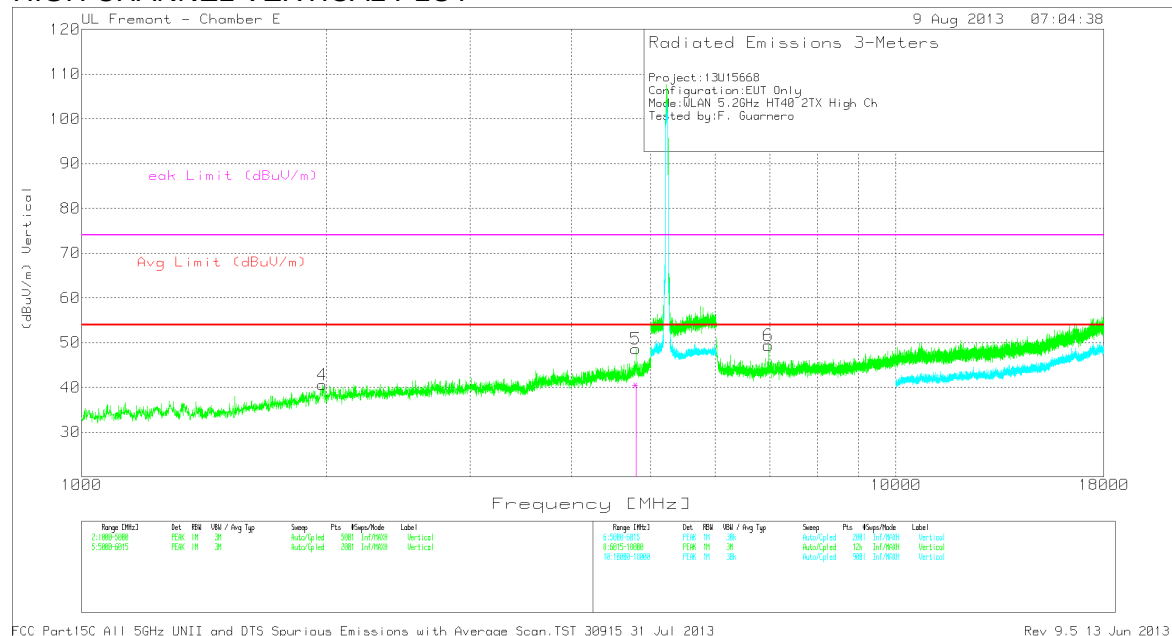
PK - Peak detector

*Not in Restricted Band

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



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

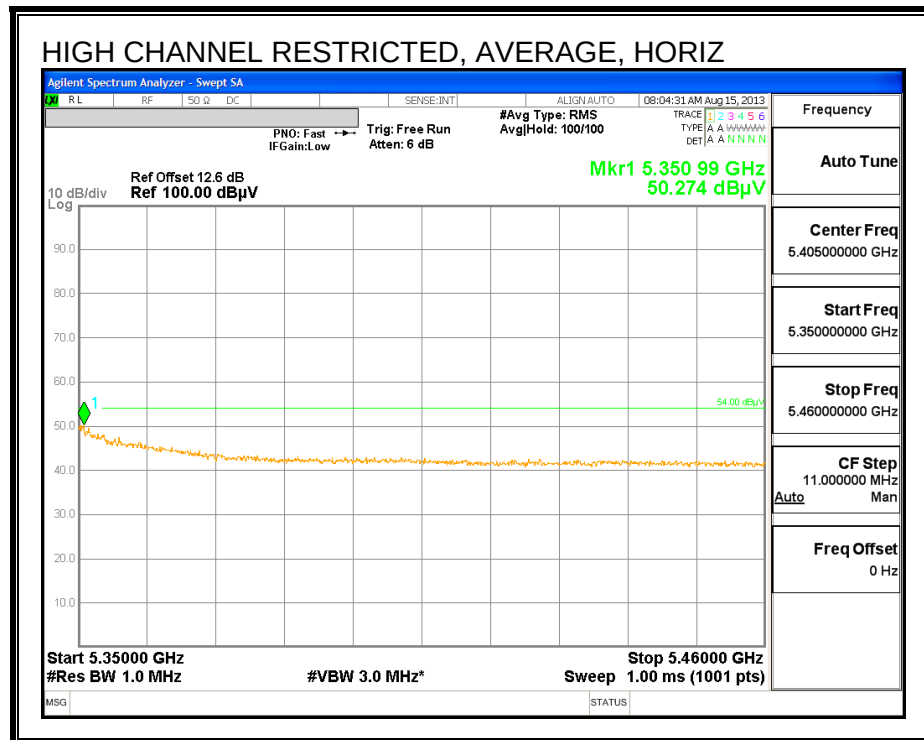
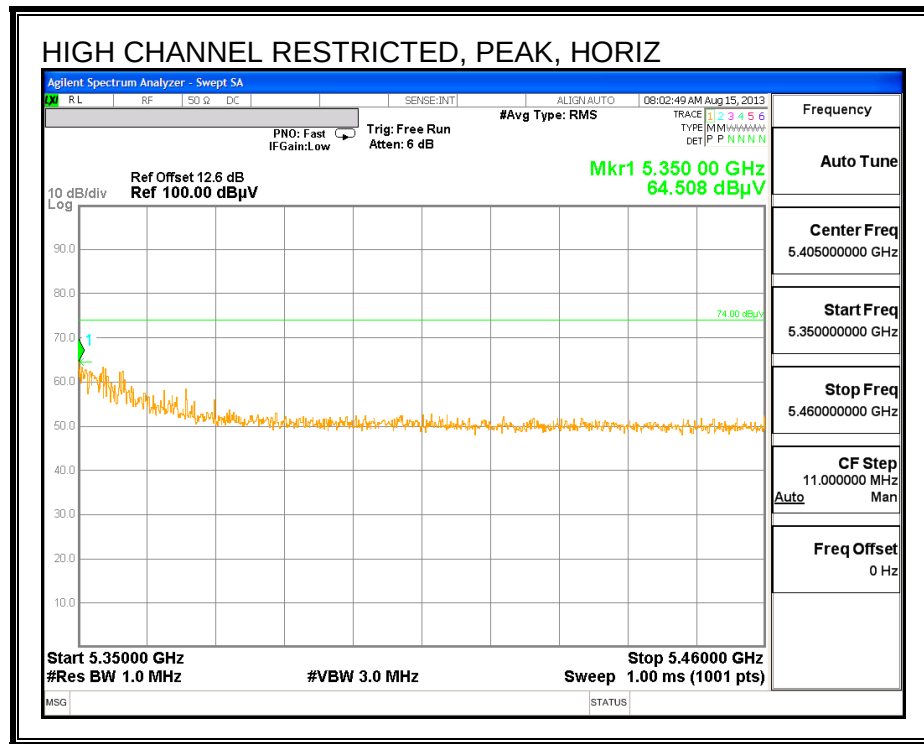
*Not in Restricted Band

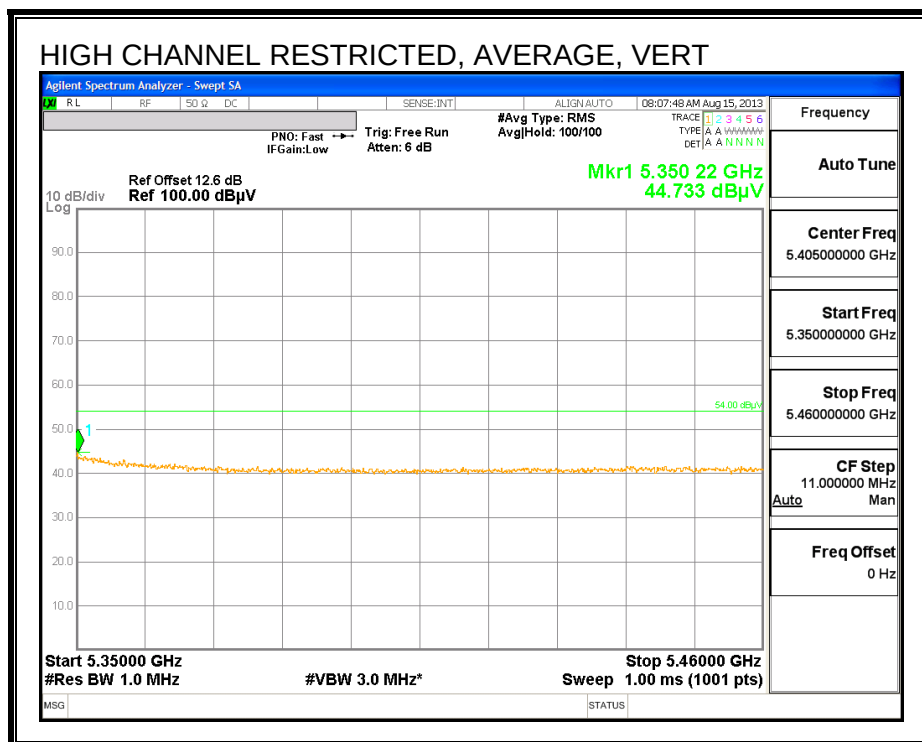
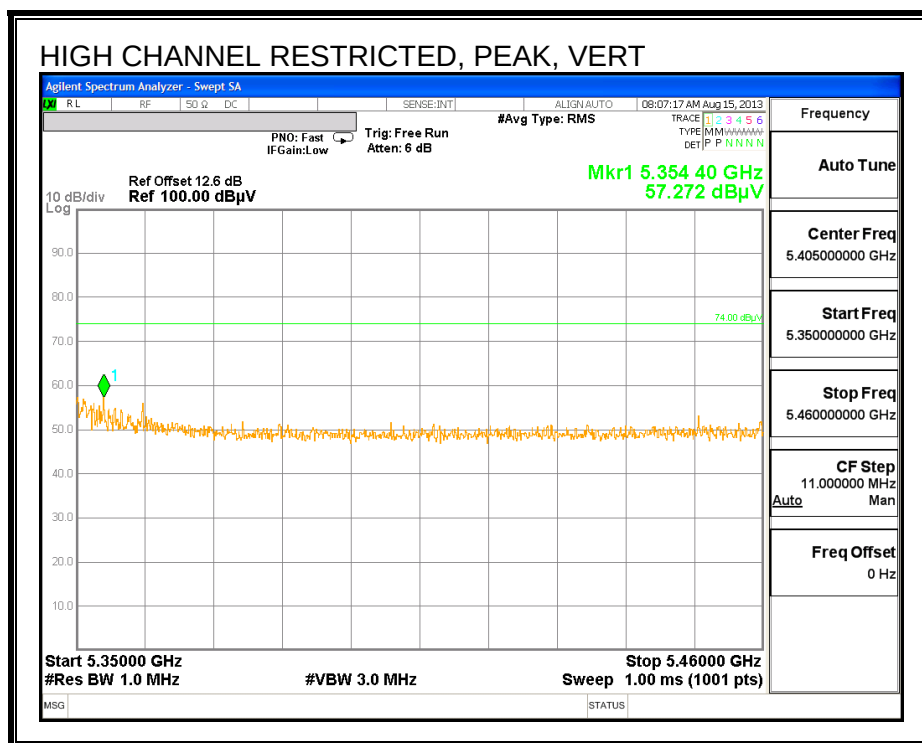
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T346 (dB/m)	Amp/Cbl 5GHz LPF dB	DC Corr [dB]	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4.794	36.7	RMS	34.4	-30.8	.1	40.4	53.97	-13.57	-	-	352	108	V

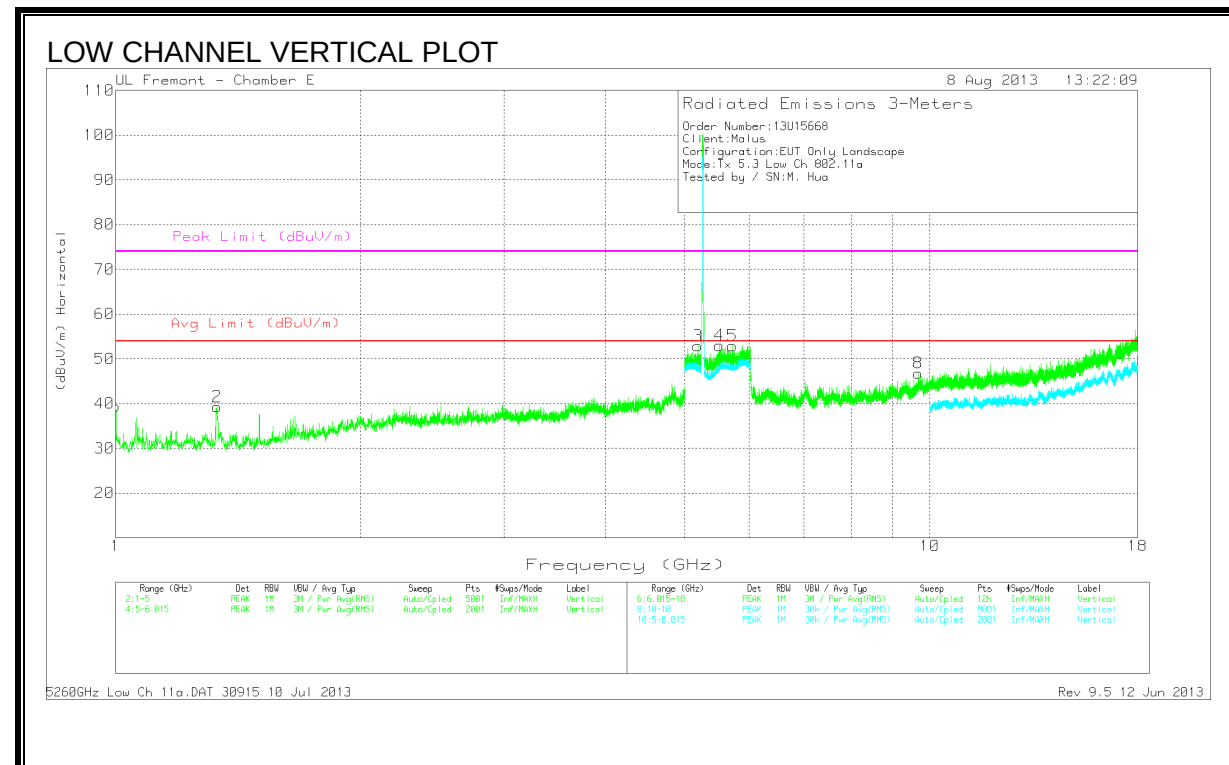
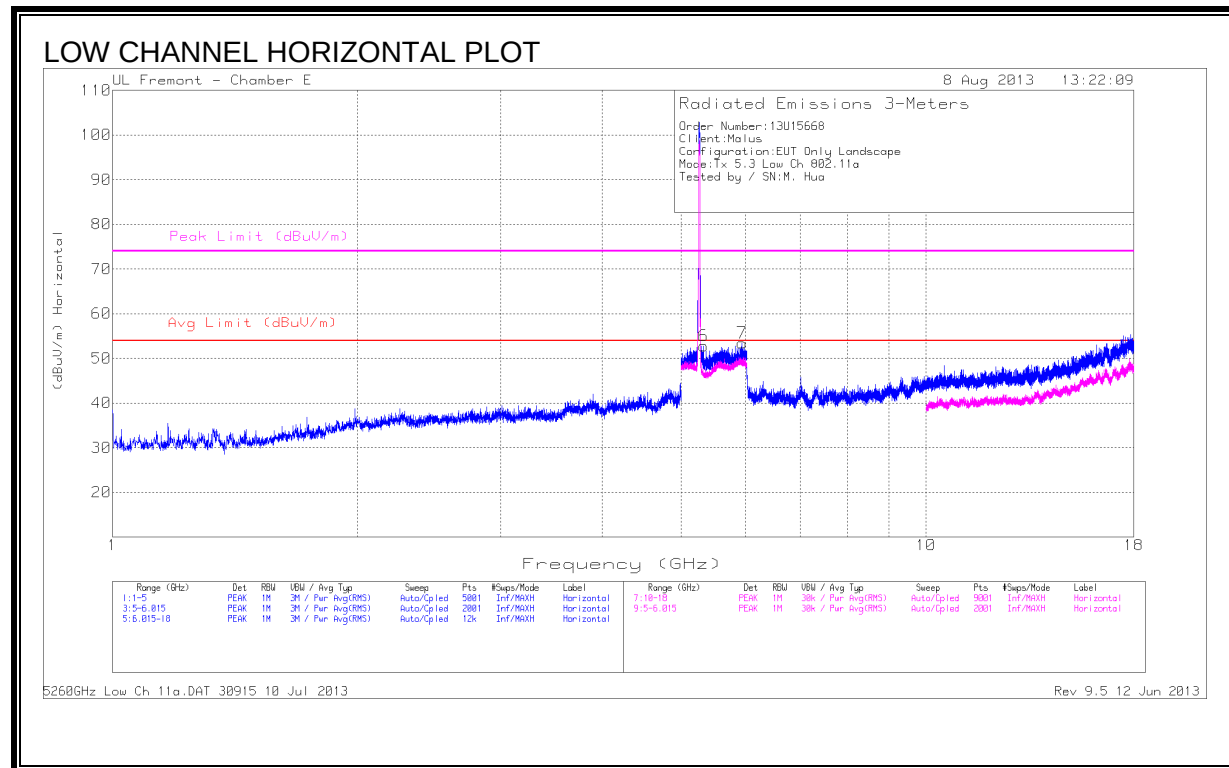
RMS - RMS detection

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

RESTRICTED BANDEDGE (HIGH CHANNEL)





HARMONICS AND SPURIOUS EMISSIONS

DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Fitr/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

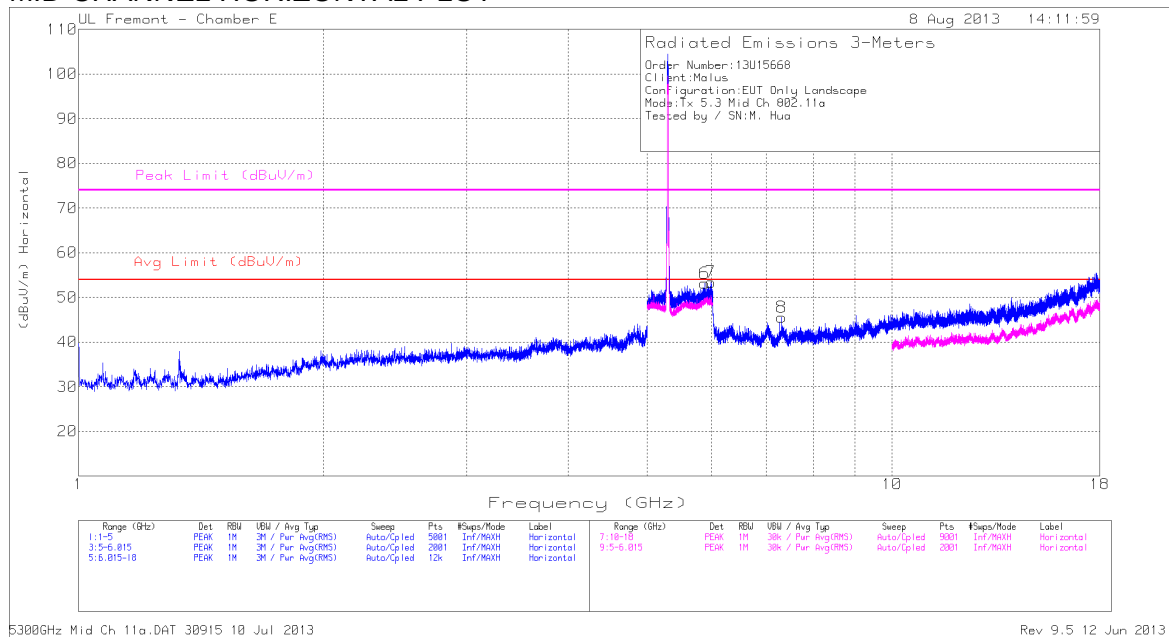
PK - Peak detector

*Not in Restricted Band

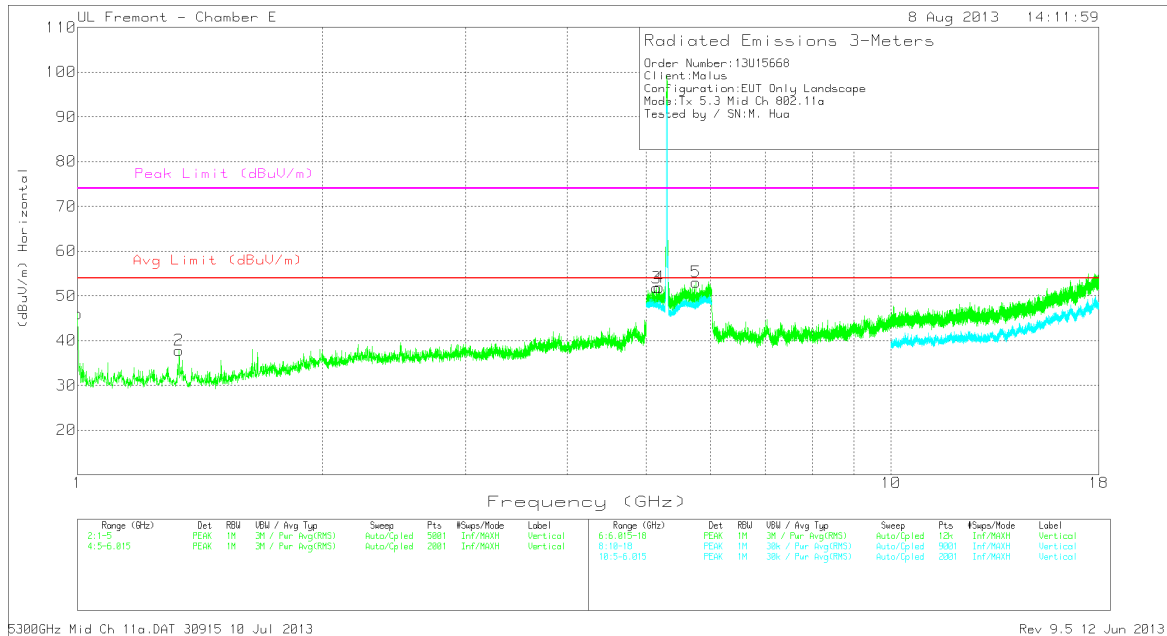
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.321	28.59	MAv1	34.7	-22.1	41.19	53.97	-12.78	-	-	137	338	H

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

MID CHANNEL HORIZONTAL PLOT



MID CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Filtr/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

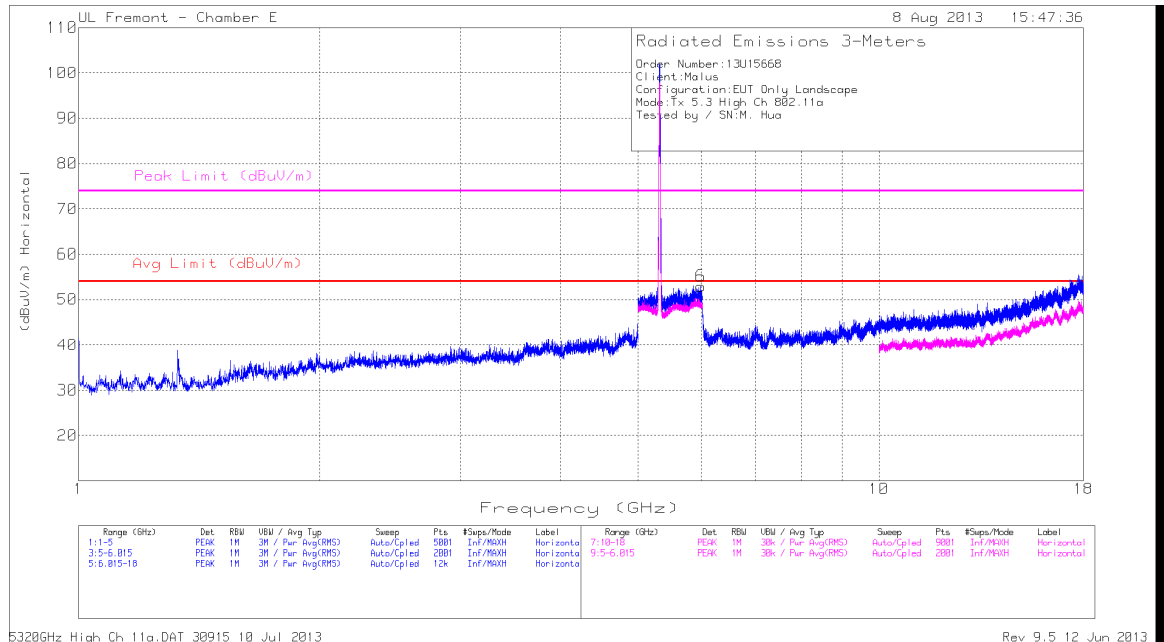
PK - Peak detector

*Not in Restricted Band

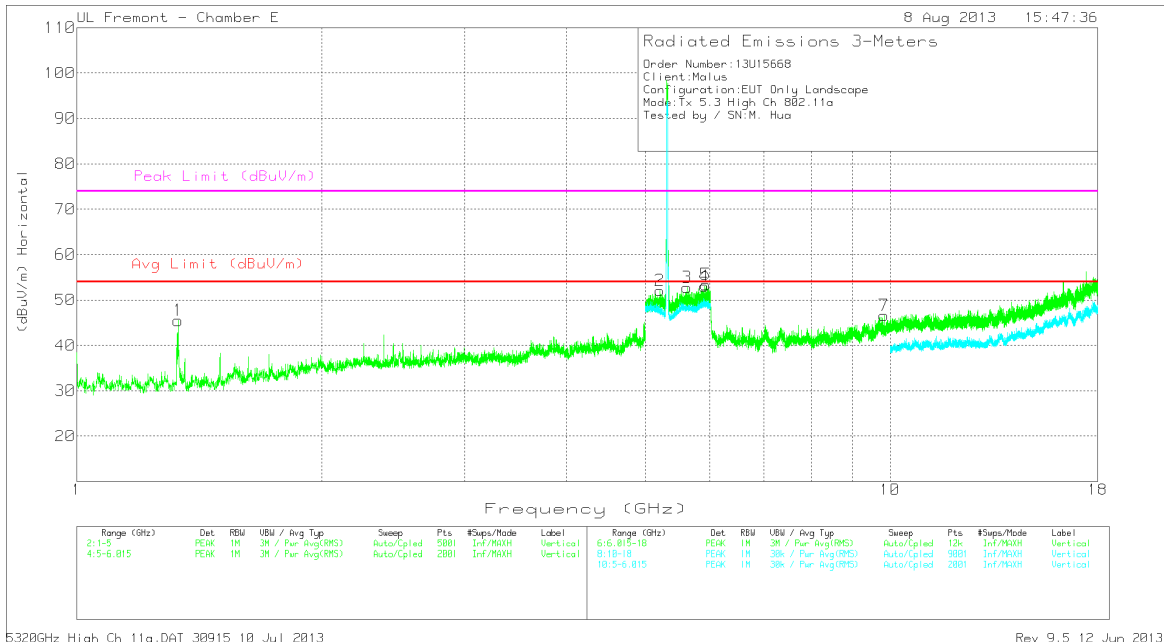
Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Av Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
5.154	28.49	MAv1	34.5	-21.7	41.29	53.97	-12.68	-	-	316	156	V
5.19	28.39	MAv1	34.6	-21.6	41.39	53.97	-12.58	-	-	178	116	V

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

HIGH CHANNEL HORIZONTAL PLOT



HIGH CHANNEL VERTICAL PLOT



DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (db/m)	Amp/Cbl/ Fitr/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