8.6. 802.11n HT20 SISO MODE IN THE 2.4 GHz BAND, CHAIN 1

8.6.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-247 (5.2) (1)

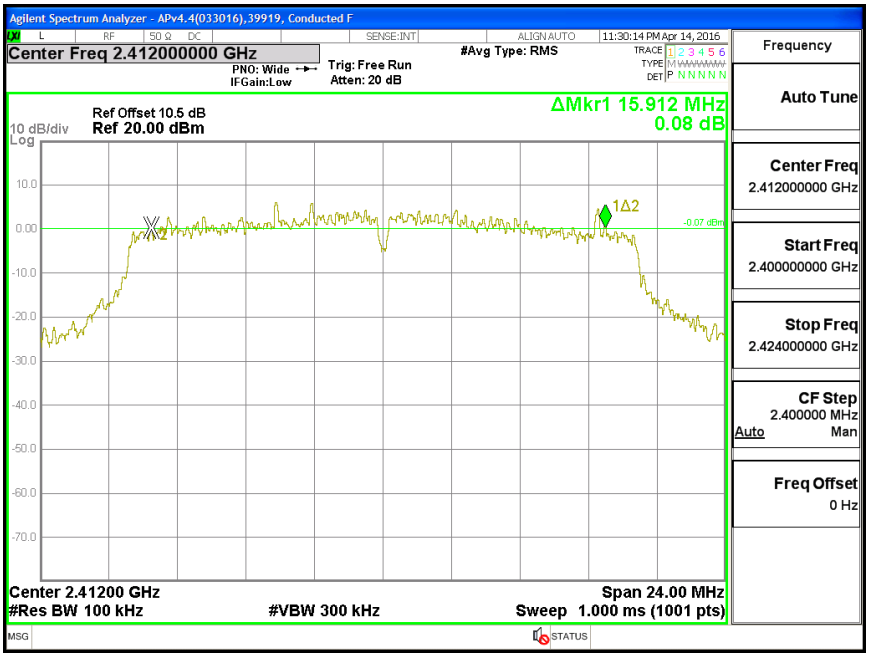
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

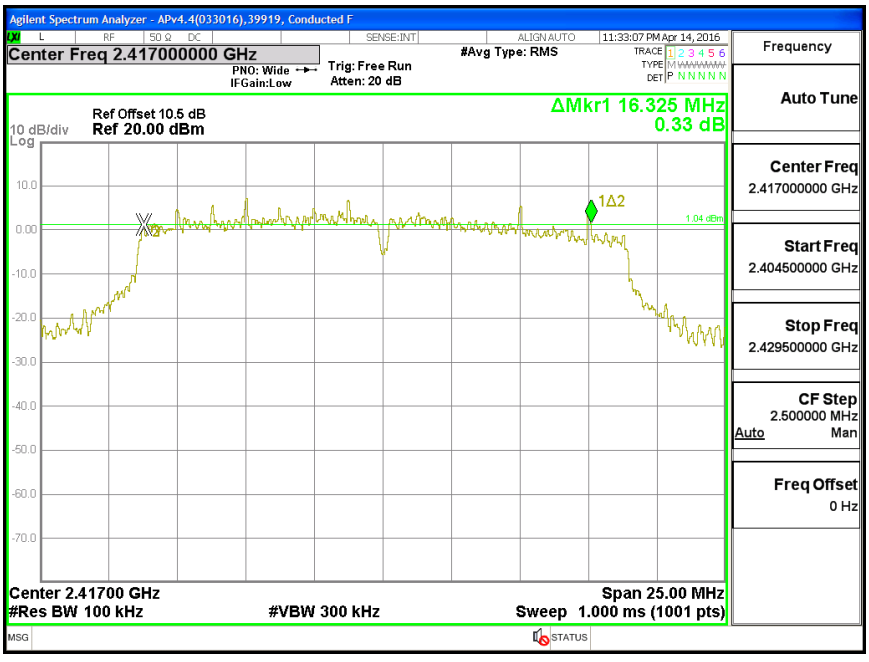
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low_1	2412	15.912	0.5
Low_2	2417	16.325	0.5
Mid_6	2437	16.692	0.5
High_10	2457	16.075	0.5
High_11	2462	16.350	0.5
High_12	2467	16.350	0.5
High_13	2472	16.350	0.5

6 dB BANDWIDTH

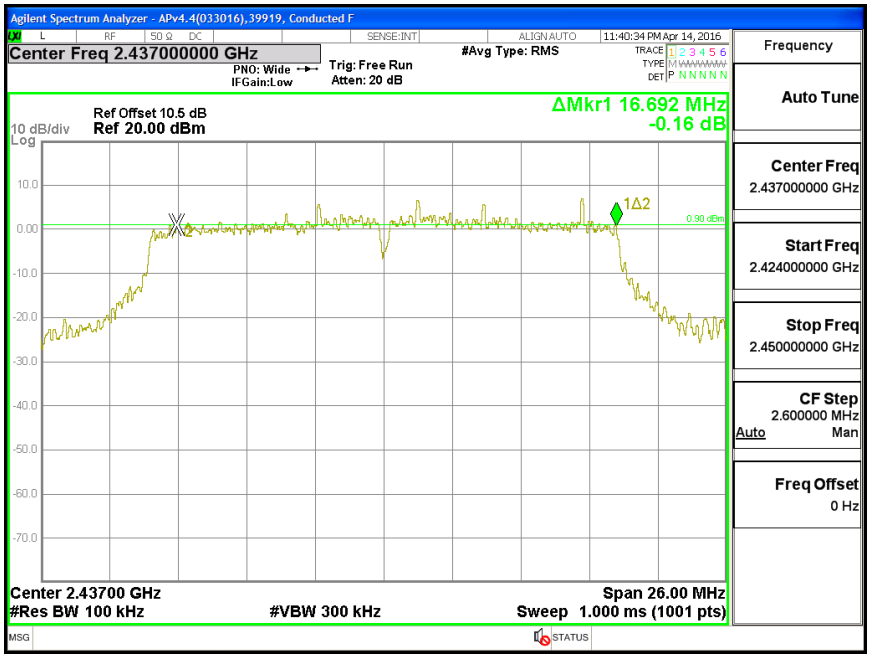
6 dB BANDWIDTH LOW CH 1



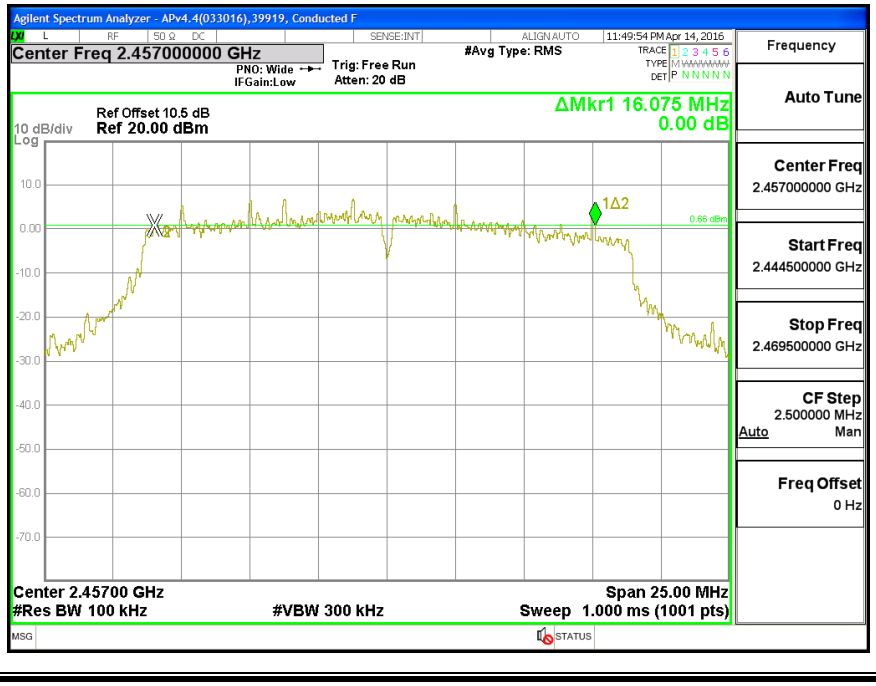
6 dB BANDWIDTH LOW CH 2



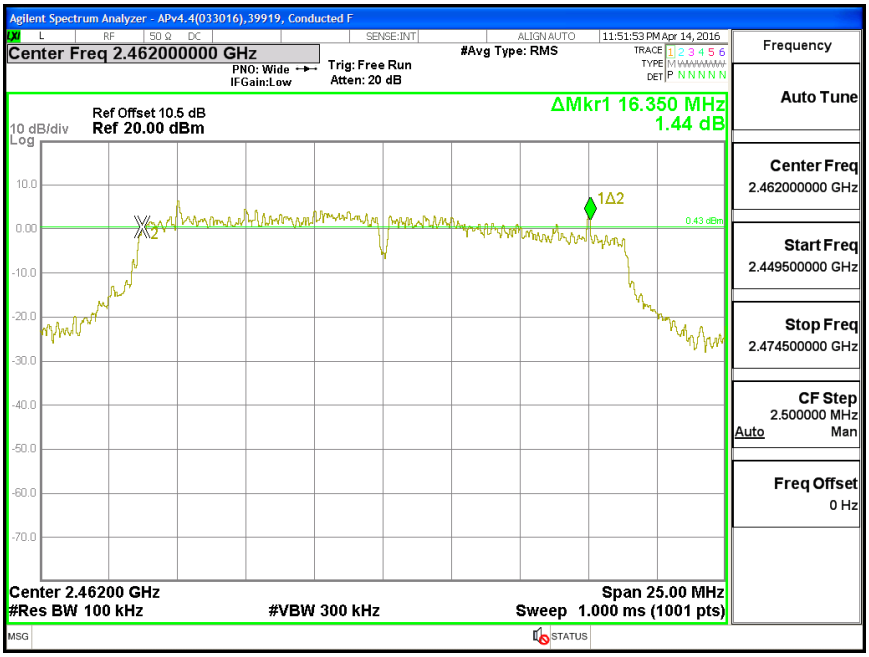
6 dB BANDWIDTH MID CH



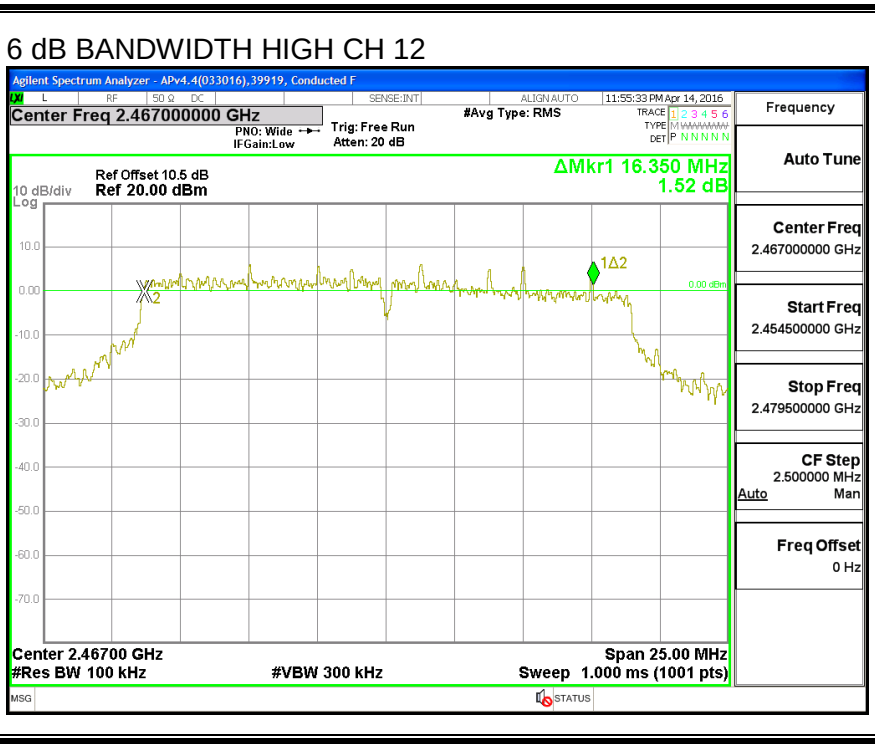
6 dB BANDWIDTH HIGH CH 10



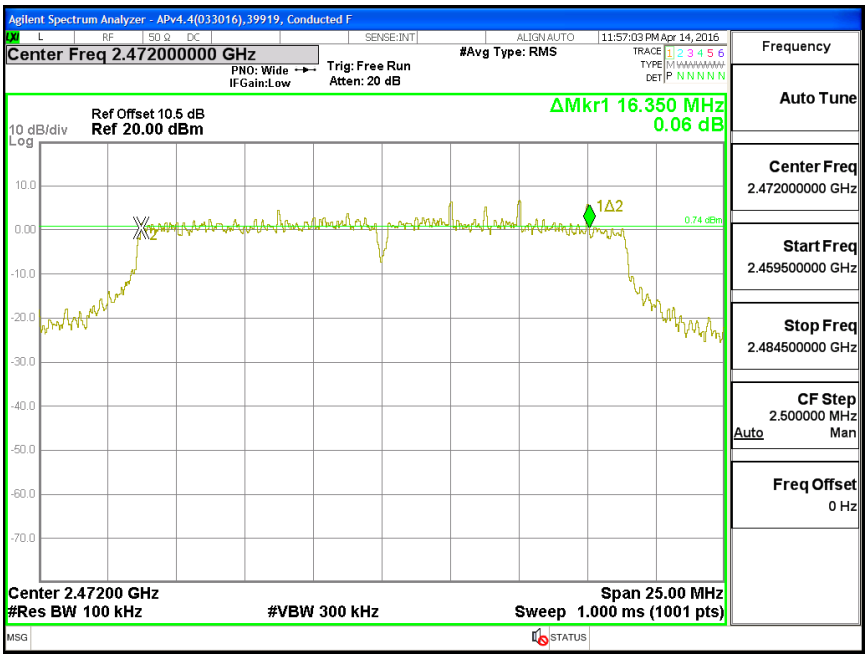
6 dB BANDWIDTH HIGH CH 11



6 dB BANDWIDTH HIGH CH 12



6 dB BANDWIDTH HIGH CH 13



8.6.2. 99% BANDWIDTH

LIMITS

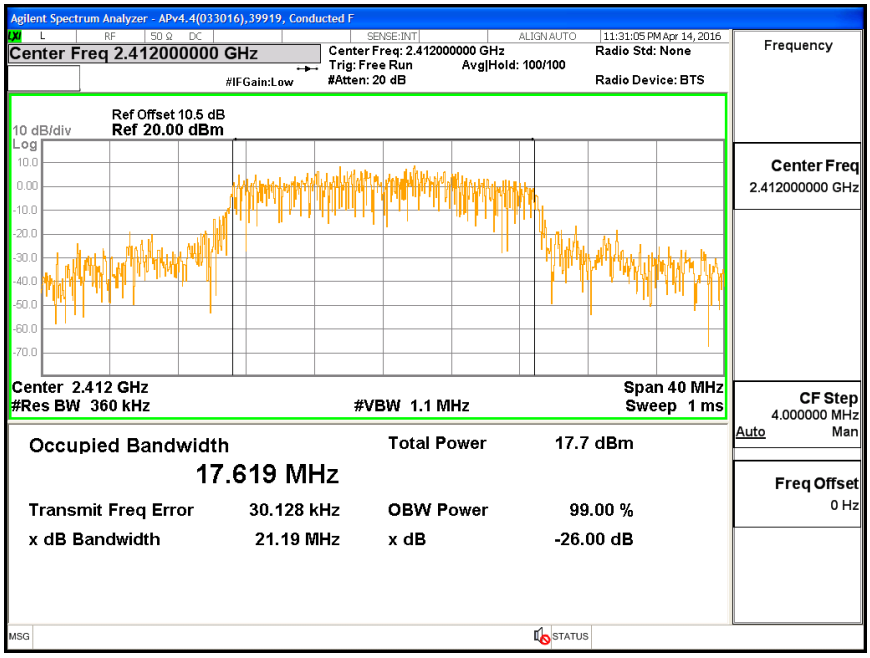
None; for reporting purposes only.

RESULTS

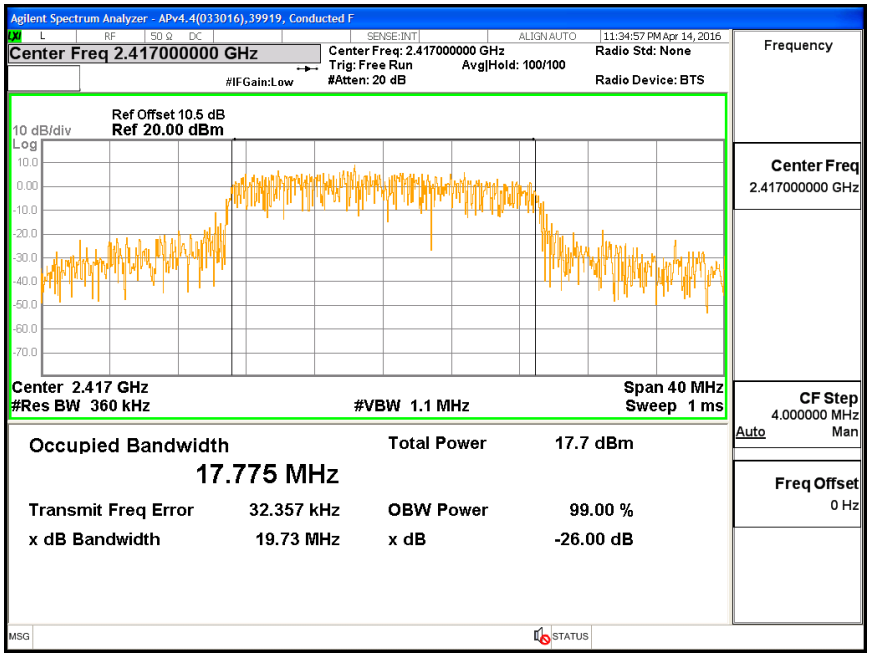
Channel	Frequency (MHz)	99% Bandwidth (MHz)
Low_1	2412	17.619
Low_2	2417	17.775
Mid_6	2437	18.050
High_10	2457	17.680
High_11	2462	17.701
High_12	2467	17.903
High_13	2472	17.728

99% BANDWIDTH

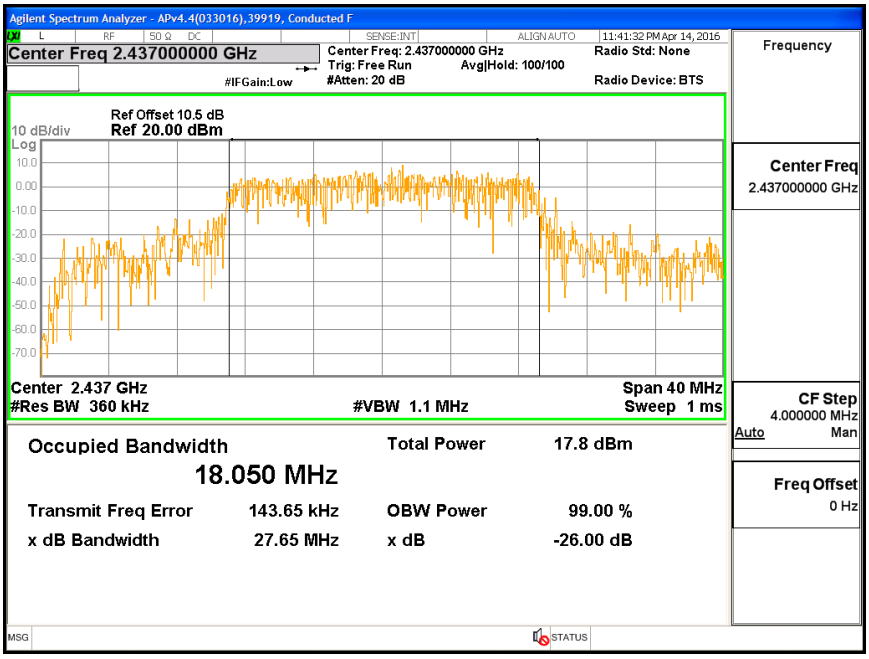
BANDWIDTH LOW CH 1



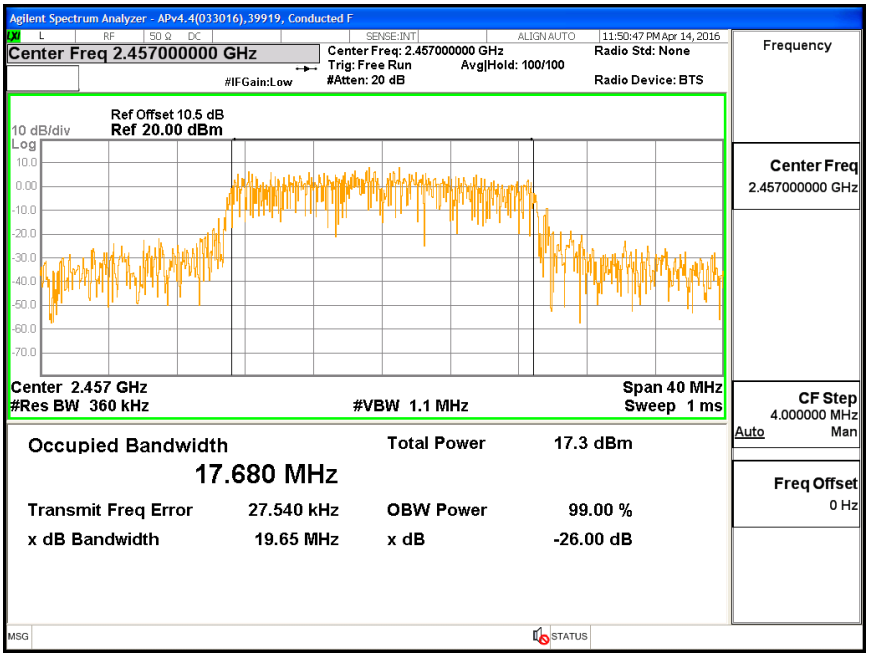
BANDWIDTH LOW CH 2



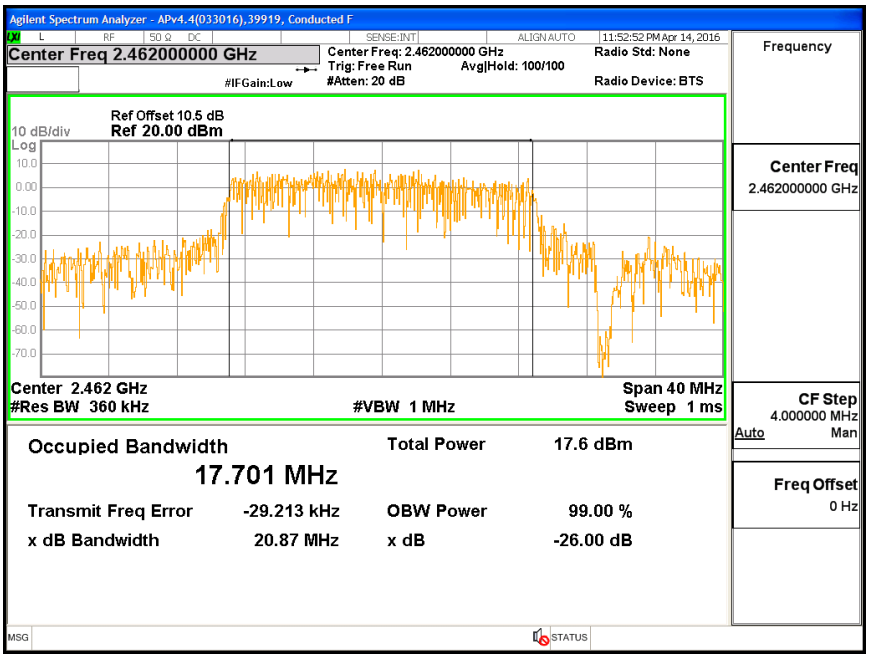
BANDWIDTH MID CH



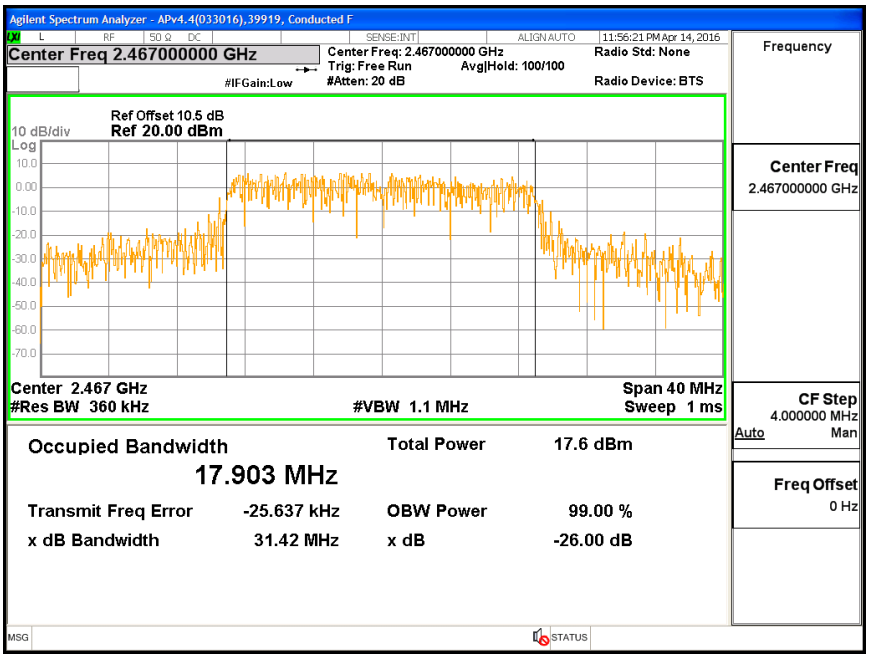
BANDWIDTH HIGH CH 10



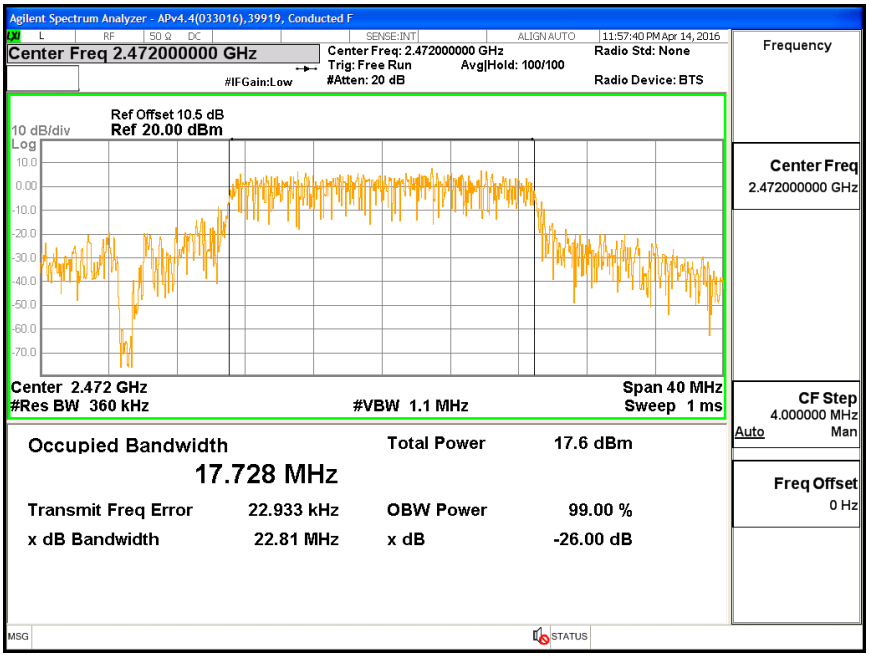
BANDWIDTH HIGH CH 11



BANDWIDTH HIGH CH 12



BANDWIDTH HIGH CH 13



8.6.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

ID:	39919	Date:	6/10/16

Channel	Frequency (MHz)	Power (dBm)
Low_1	2412	15.98
Low_2	2417	17.98
Mid_6	2437	18.93
High_10	2457	18.88
High_11	2462	14.89
High_12	2467	13.95
High_13	2472	5.00

8.6.4. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-247 (5.4) (4)

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

DIRECTIONAL ANTENNA GAIN

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

RESULTS

ID:	39919	Date:	7/14/16

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low_1	2412	-1.25	30.00	30	36	30.00
Low_2	2417	-1.25	30.00	30	36	30.00
Mid_6	2437	-1.25	30.00	30	36	30.00
High_10	2457	-1.25	30.00	30	36	30.00
High_11	2462	-1.25	30.00	30	36	30.00
High_12	2467	-1.25	30.00	30	36	30.00
High_13	2472	-1.25	30.00	30	36	30.00

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

Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low_1	2412	24.10	24.10	30.00	-5.90
Low_2	2417	25.81	25.81	30.00	-4.19
Mid_6	2437	26.89	26.89	30.00	-3.11
High_10	2457	26.60	26.60	30.00	-3.40
High_11	2462	23.07	23.07	30.00	-6.93
High_12	2467	21.92	21.92	30.00	-8.08
High_13	2472	12.97	12.97	30.00	-17.03

8.6.5. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247

IC RSS-247 (5.2) (2)

For digitally modulated systems, the power spectral density conducted form the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 KHz band during any time interval of continuous transmissions.

RESULTS

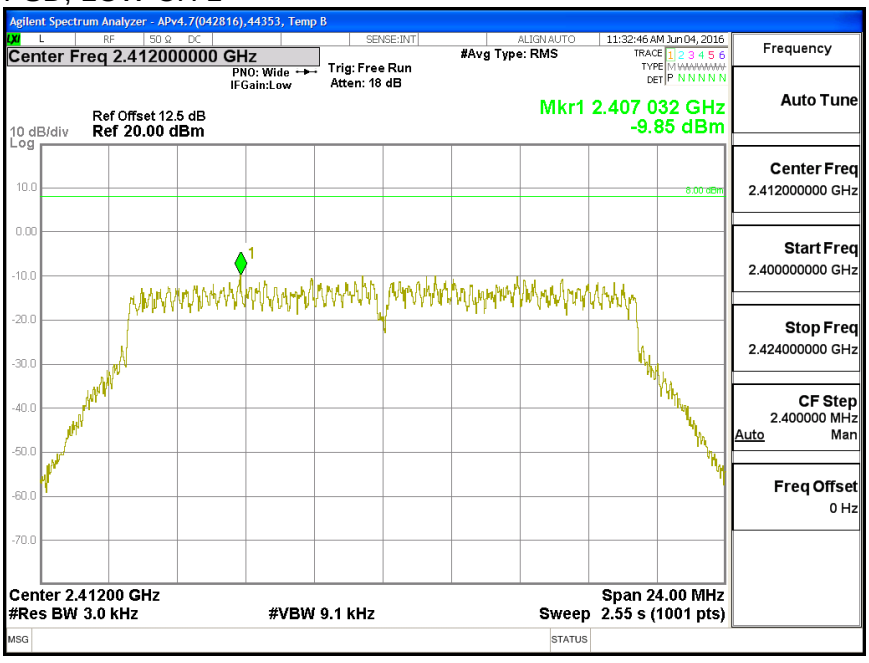
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

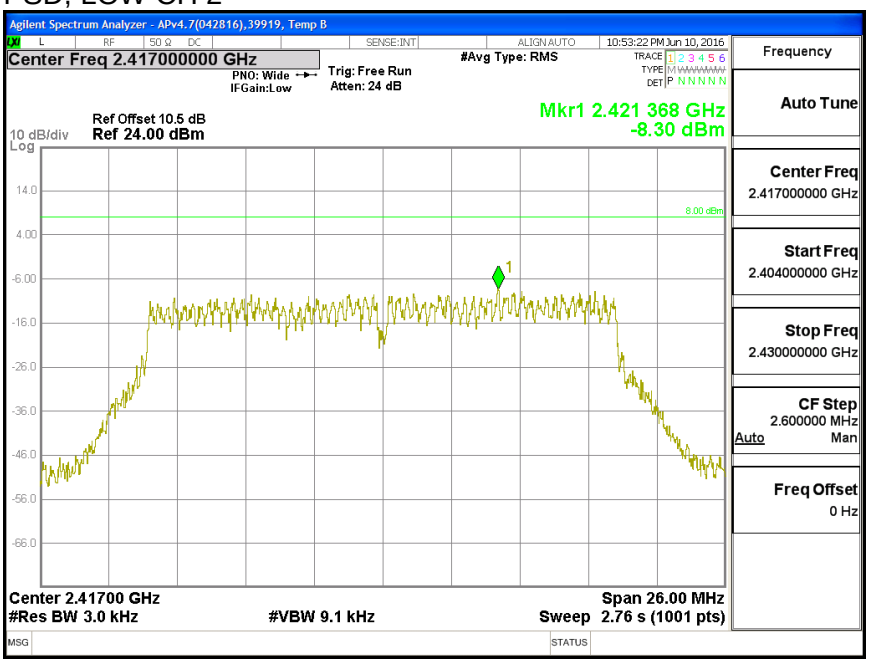
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low_1	2412	-9.85	-9.85	8.0	-17.9
Low_2	2417	-8.30	-8.30	8.0	-16.3
Mid_6	2437	-6.79	-6.79	8.0	-14.8
High_10	2457	-7.05	-7.05	8.0	-15.0
High_11	2462	-10.41	-10.41	8.0	-18.4
High_12	2467	-11.63	-11.63	8.0	-19.6
High_13	2472	-17.62	-17.62	8.0	-25.6

PSD

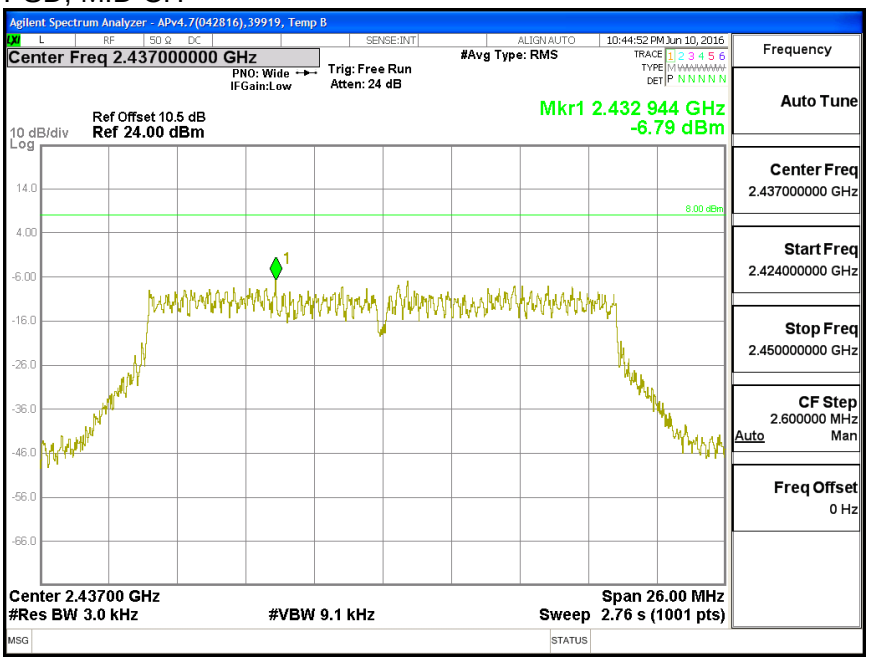
PSD, LOW CH 1



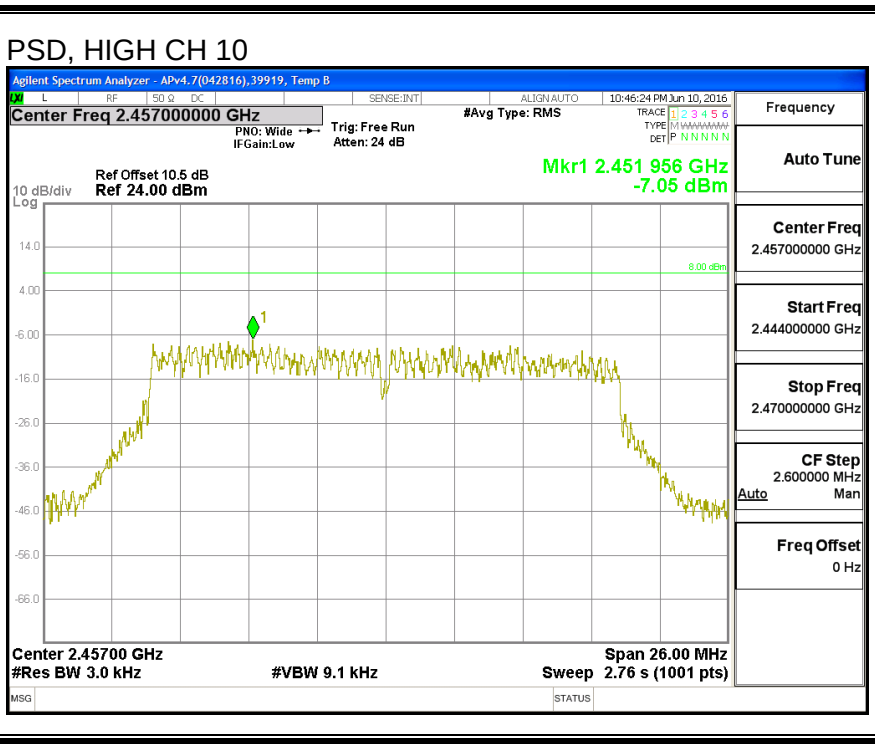
PSD, LOW CH 2



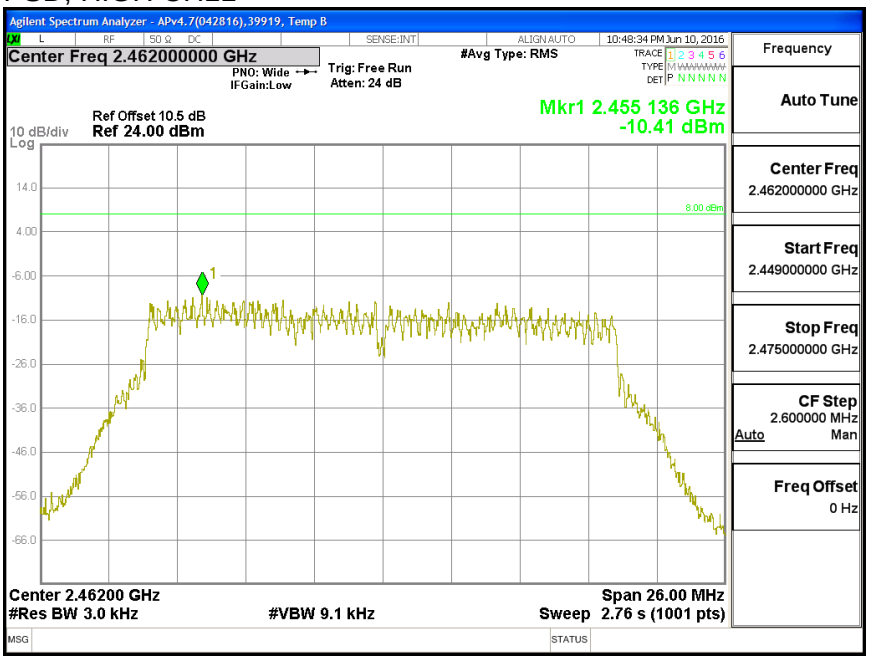
PSD, MID CH



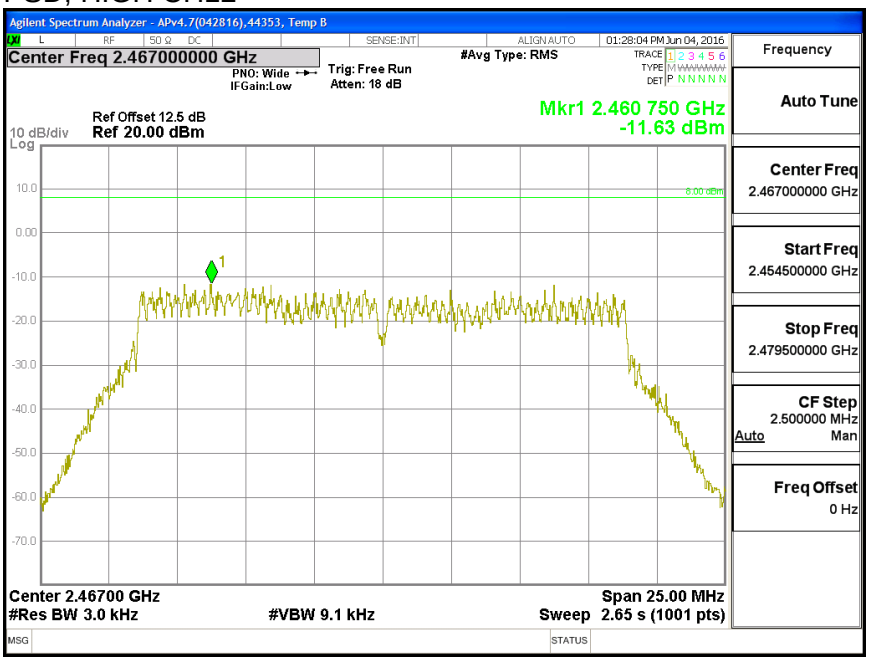
PSD, HIGH CH 10



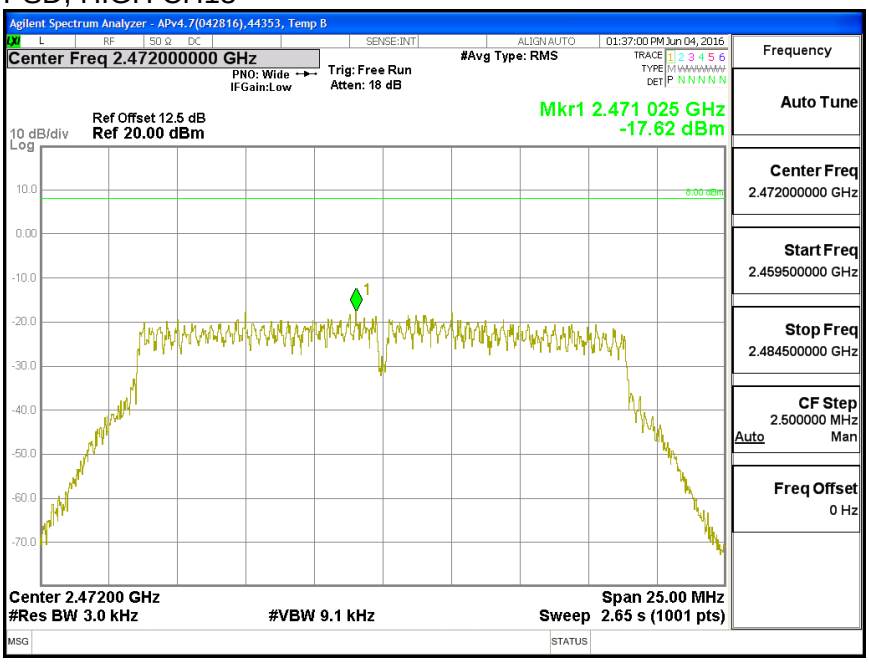
PSD, HIGH CH11



PSD, HIGH CH12



PSD, HIGH CH13



8.6.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

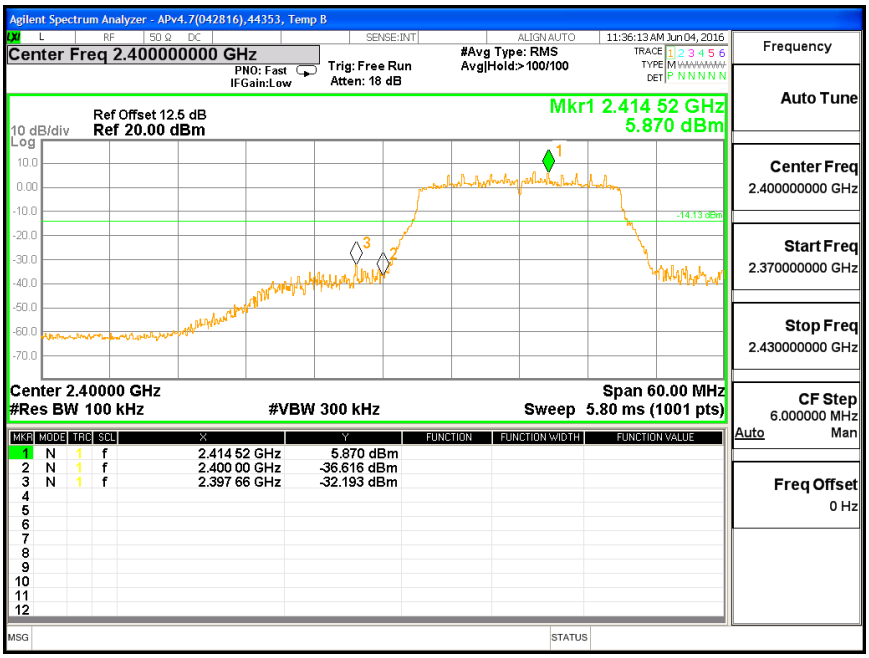
IC RSS-247 (5.5)

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

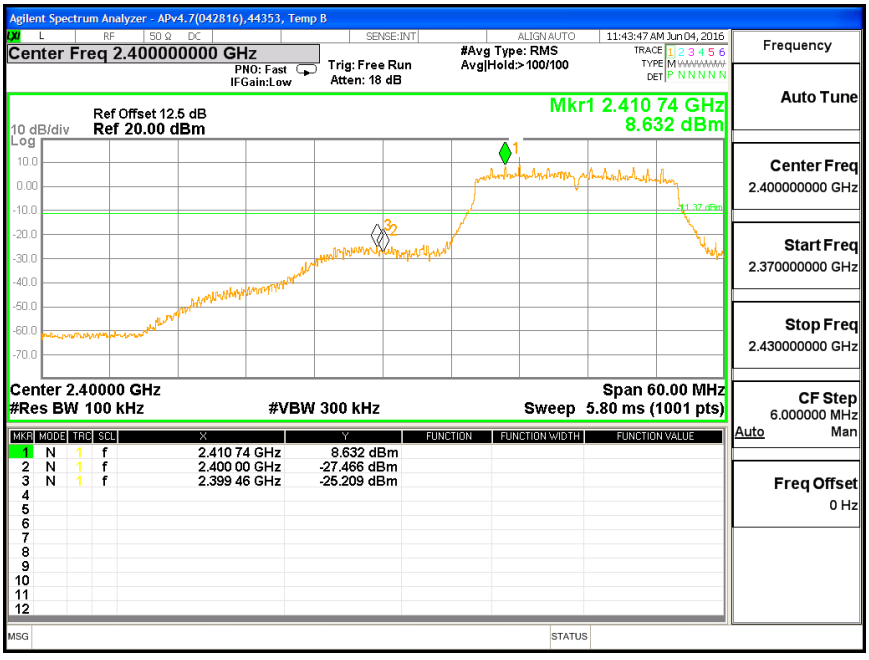
RESULTS

LOW CHANNEL BANDEDGE

AUTHORIZED BAND EDGE LOW CH 1

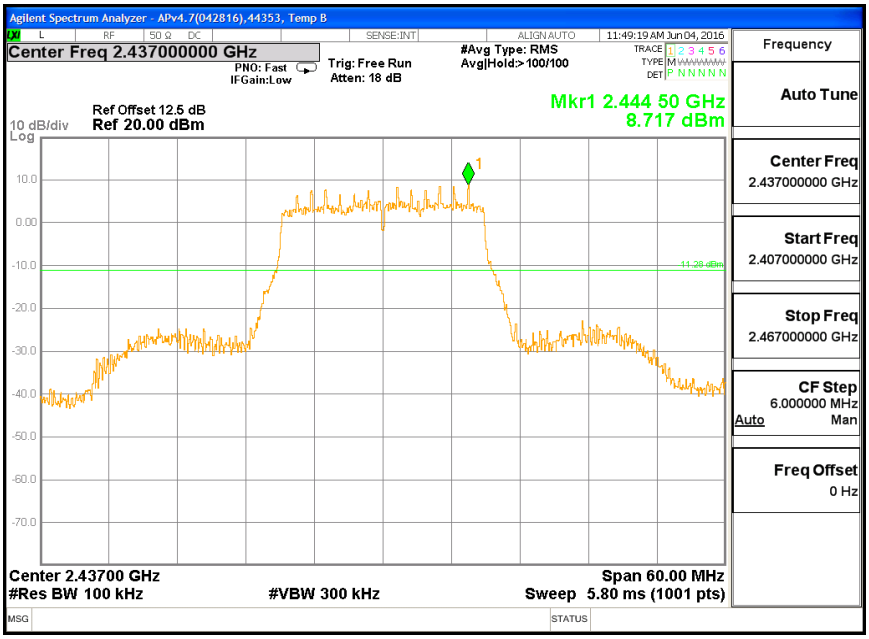


AUTHORIZED BAND EDGE LOW CH 2



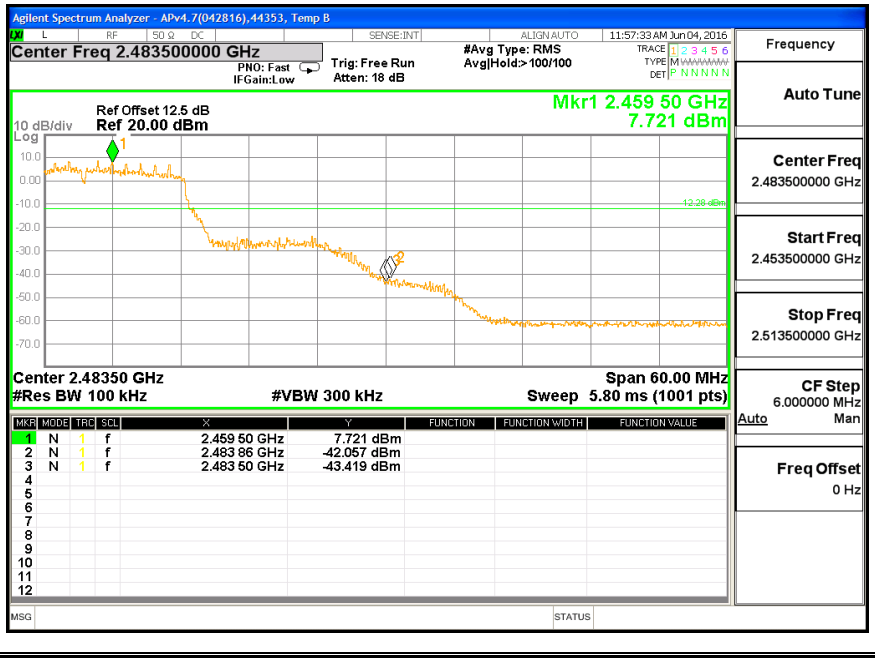
MID CHANNEL REFERENCE

REFERENCE MID CH

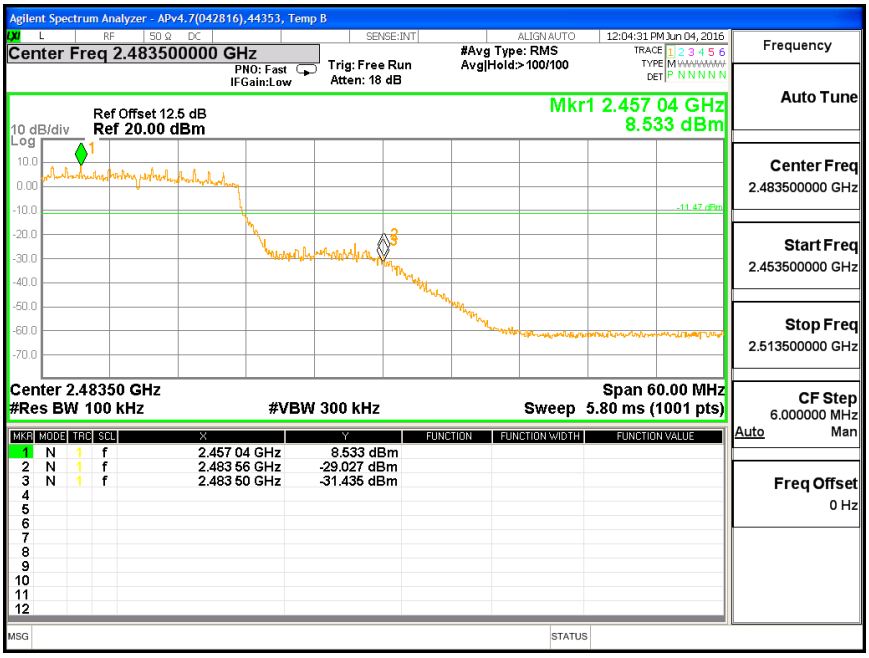


HIGH CHANNEL BANDEDGE

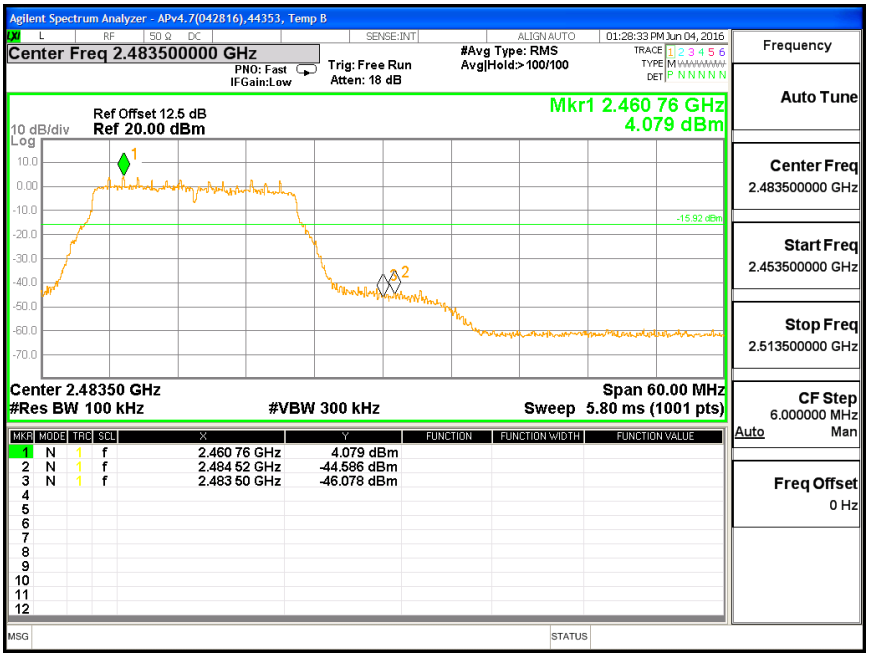
AUTHORIZED BAND EDGE HIGH CH 10



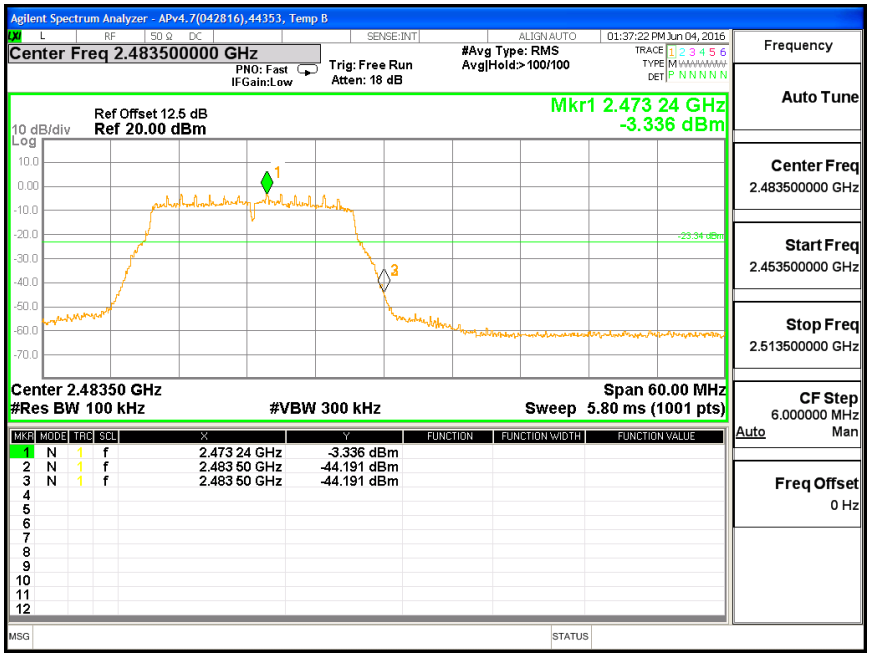
AUTHORIZED BAND EDGE HIGH CH 11



AUTHORIZED BAND EDGE HIGH CH 12

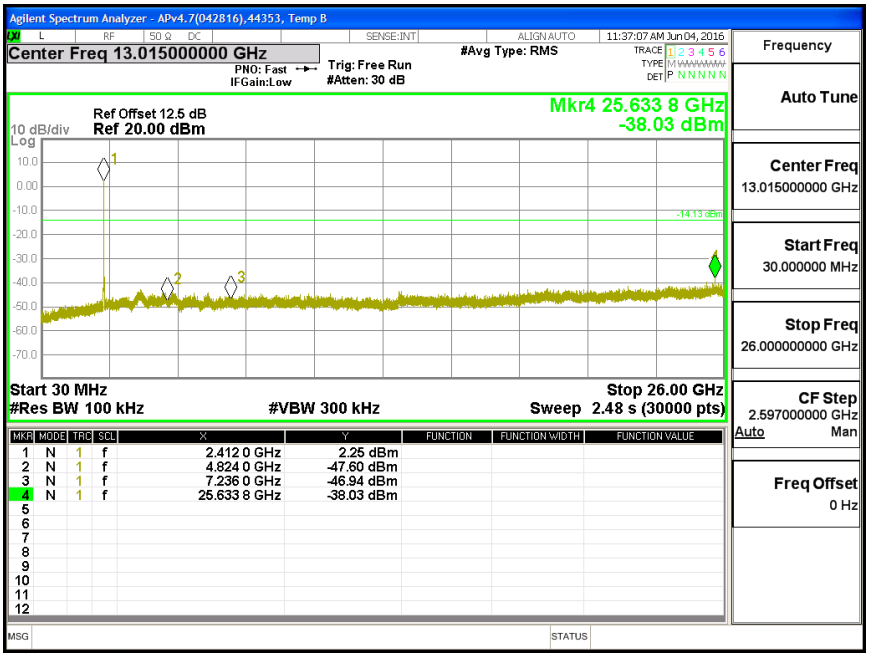


AUTHORIZED BAND EDGE HIGH CH13

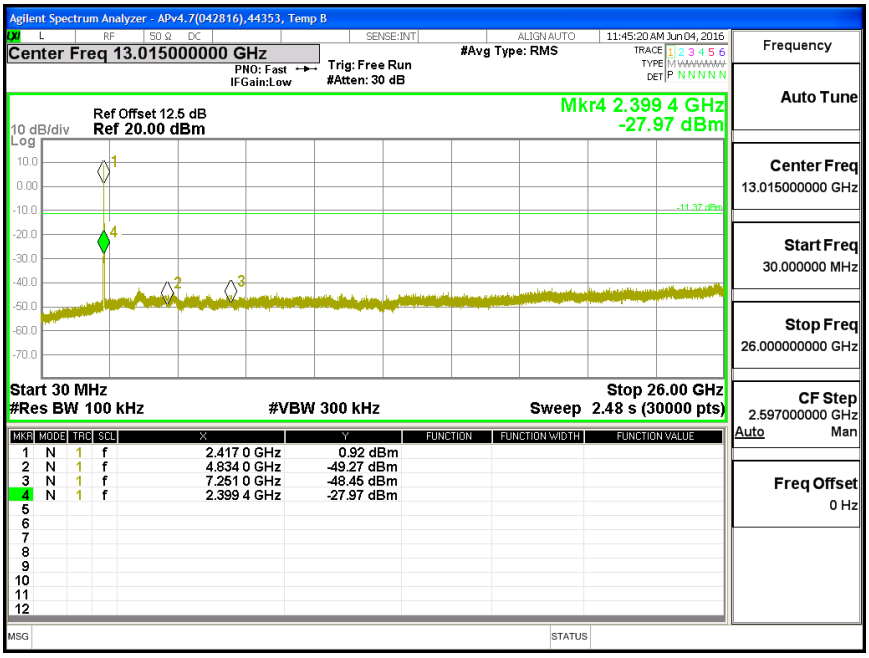


OUT-OF-BAND EMISSIONS

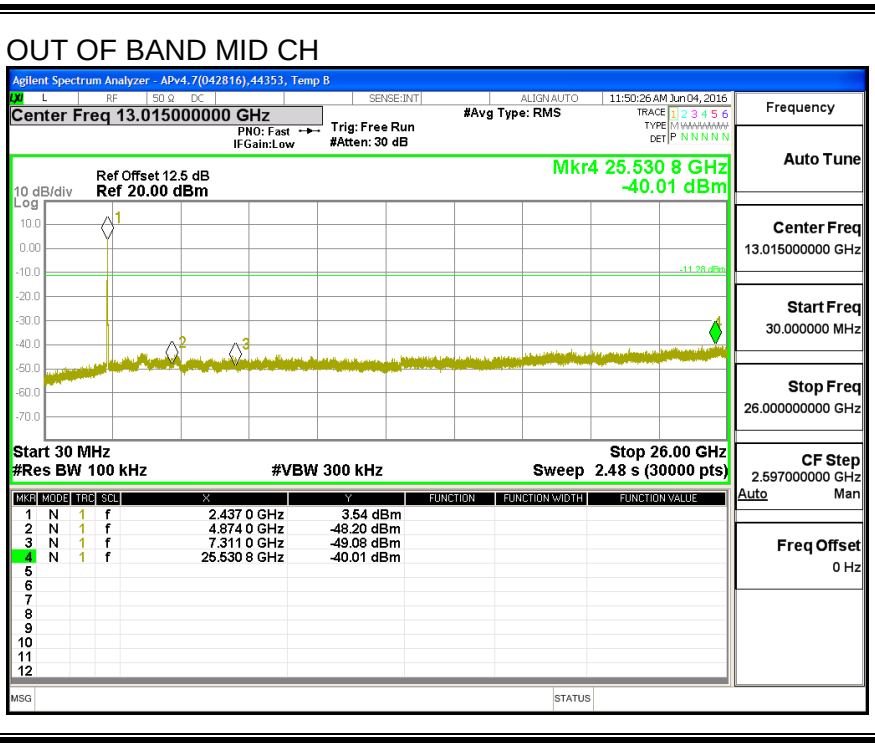
OUT OF BAND LOW CH 1



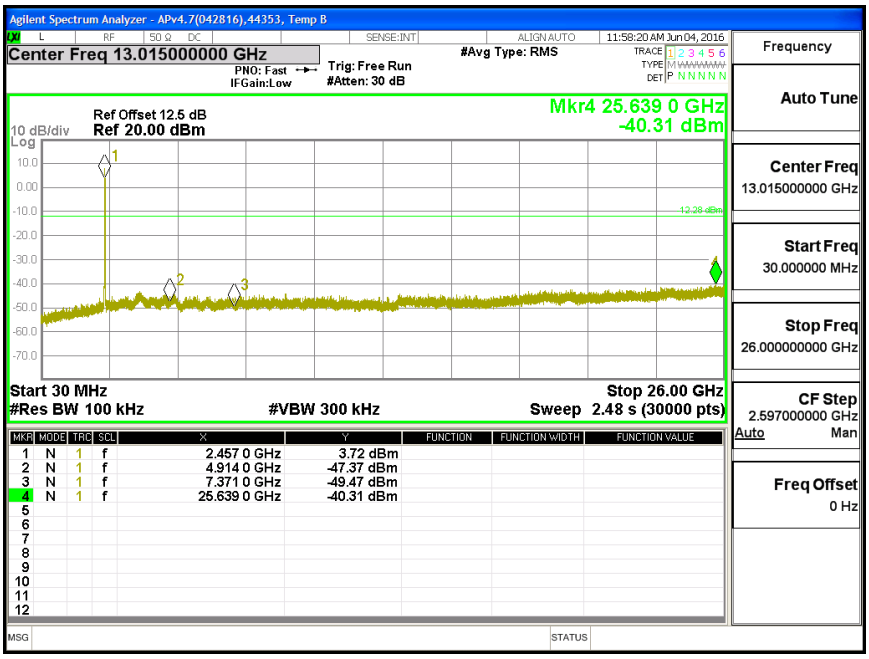
OUT OF BAND LOW CH 2



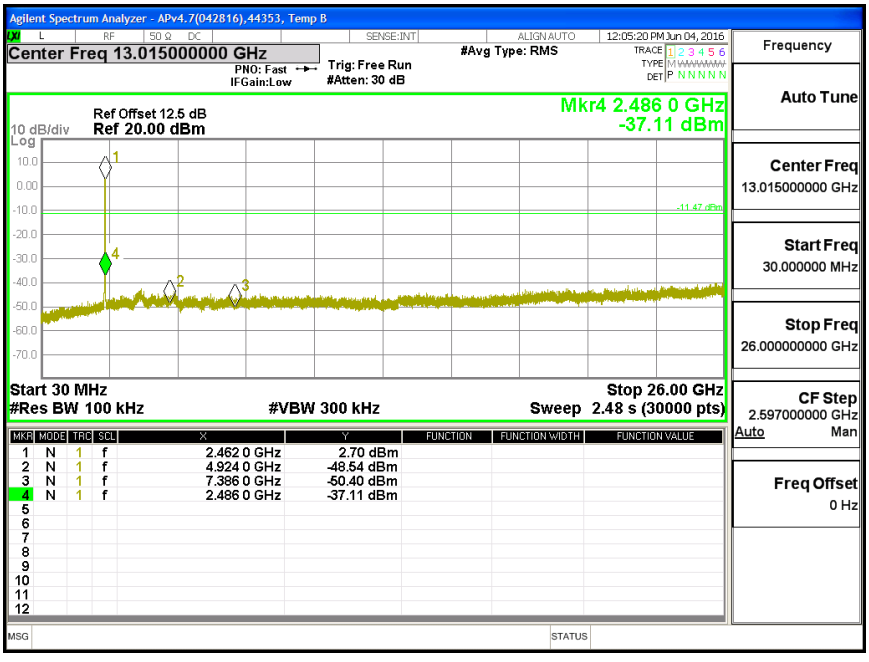
OUT OF BAND MID CH



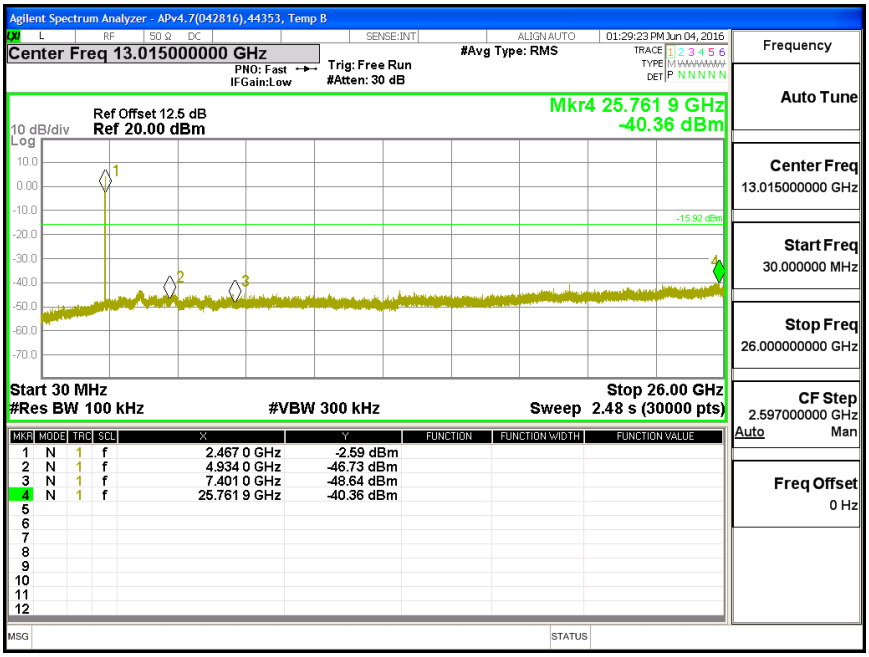
OUT OF BAND HIGH CH 10



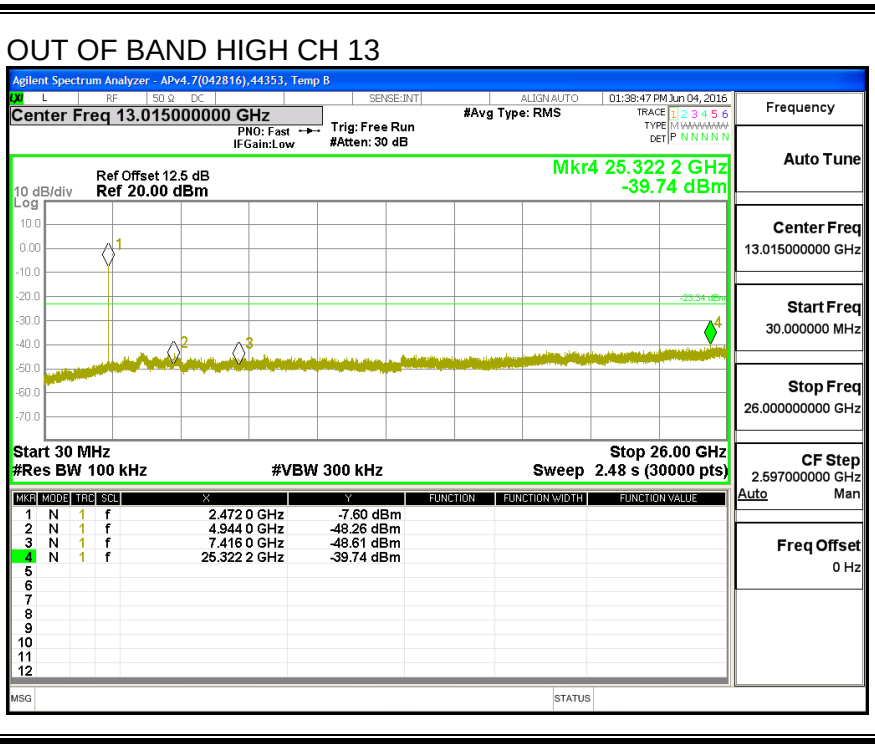
OUT OF BAND HIGH CH 11



OUT OF BAND HIGH CH 12



OUT OF BAND HIGH CH 13



8.7. 802.11n HT20 2Tx CDD MODE IN THE 2.4 GHz BAND

8.7.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-247 (5.2) (1)

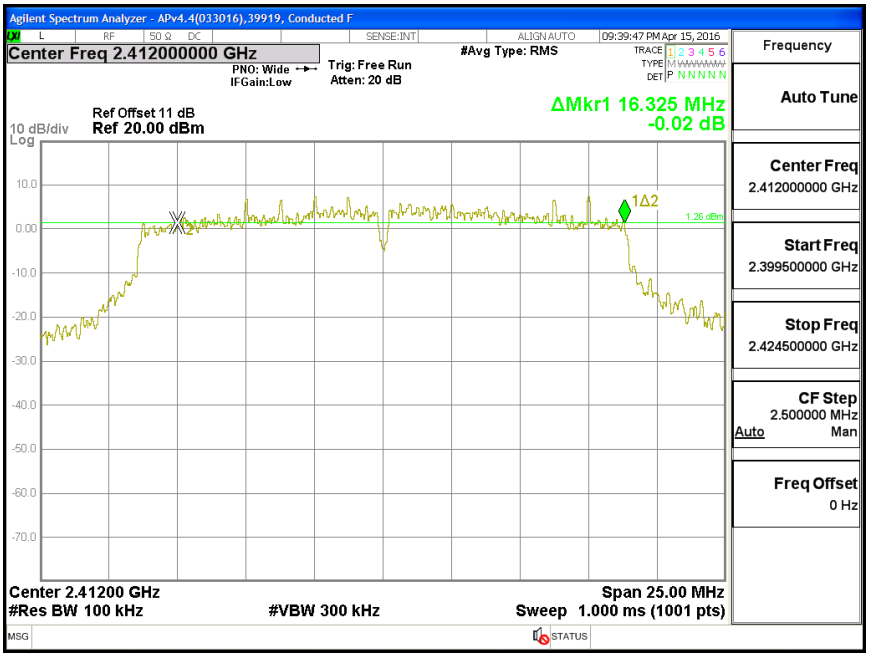
The minimum 6 dB bandwidth shall be at least 500 kHz.

RESULTS

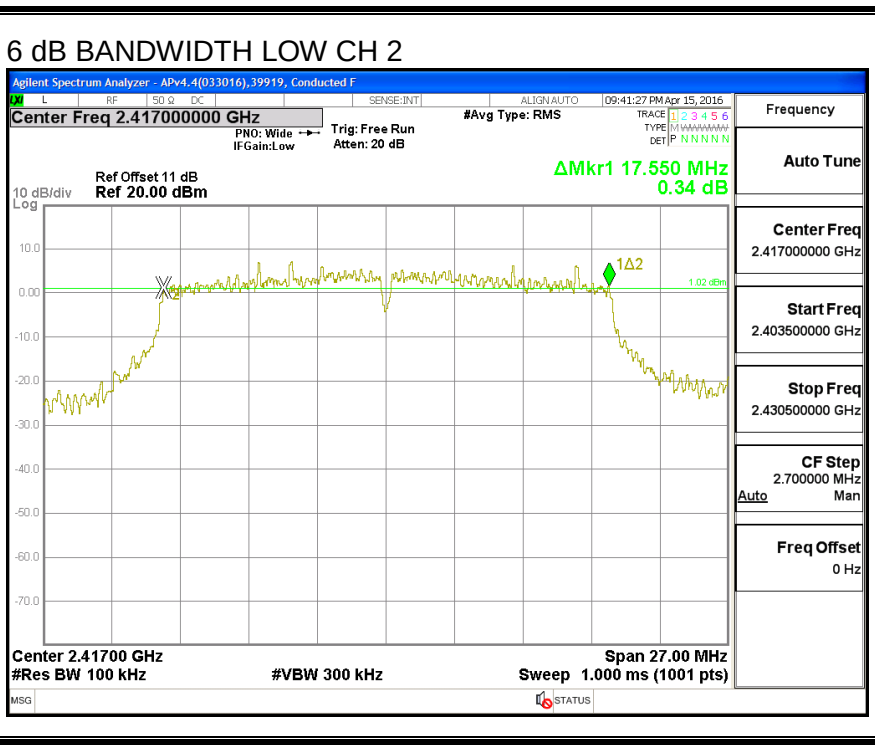
Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
Low_1	2412	16.325	16.926	0.5
Low_2	2417	17.550	16.300	0.5
Mid_6	2437	16.926	17.631	0.5
High_10	2457	17.056	16.375	0.5
High_11	2462	16.325	16.325	0.5
High_12	2467	17.334	16.692	0.5
High_13	2472	16.900	17.577	0.5

6 dB BANDWIDTH, Chain 0

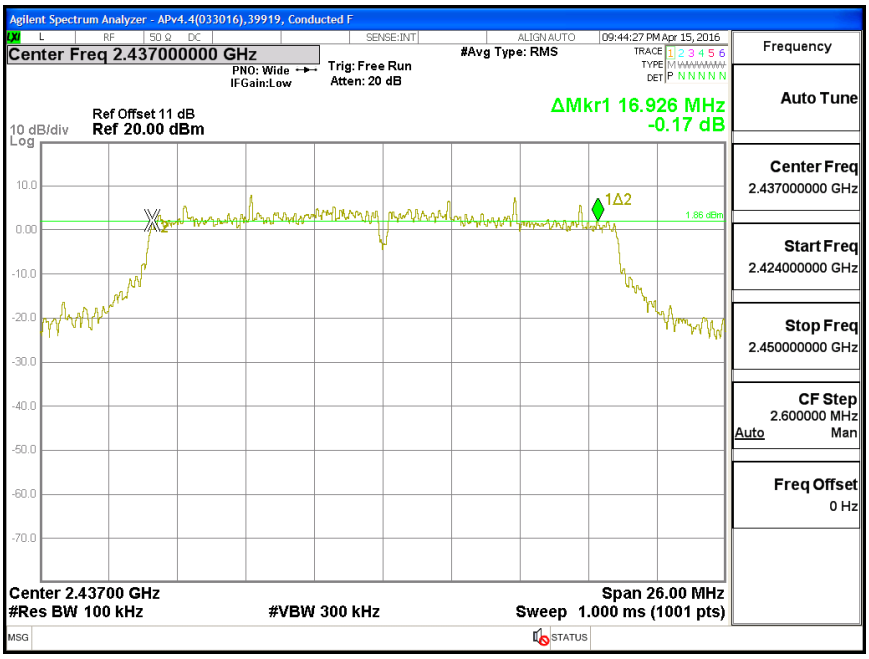
6 dB BANDWIDTH LOW CH 1



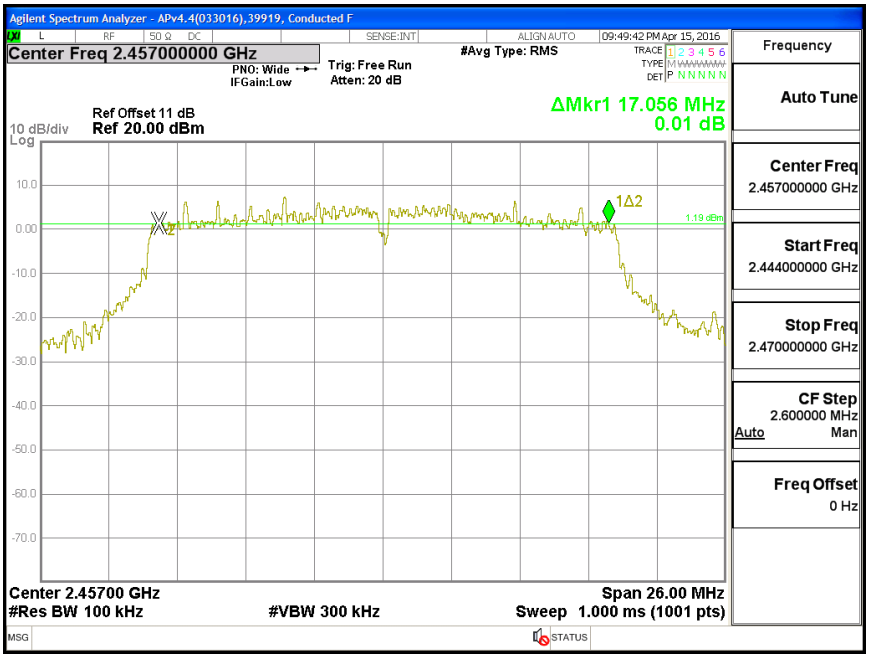
6 dB BANDWIDTH LOW CH 2



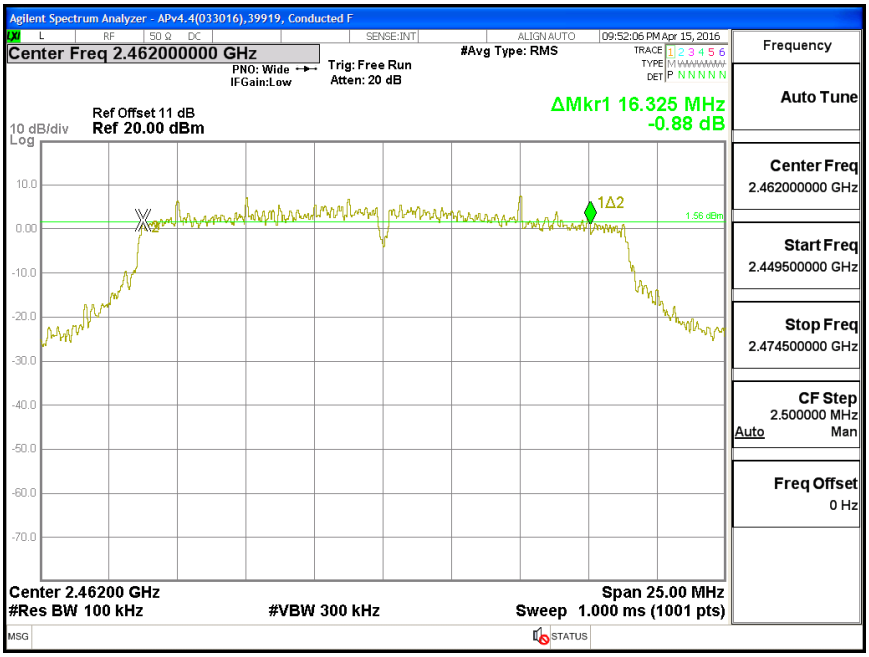
6 dB BANDWIDTH MID CH



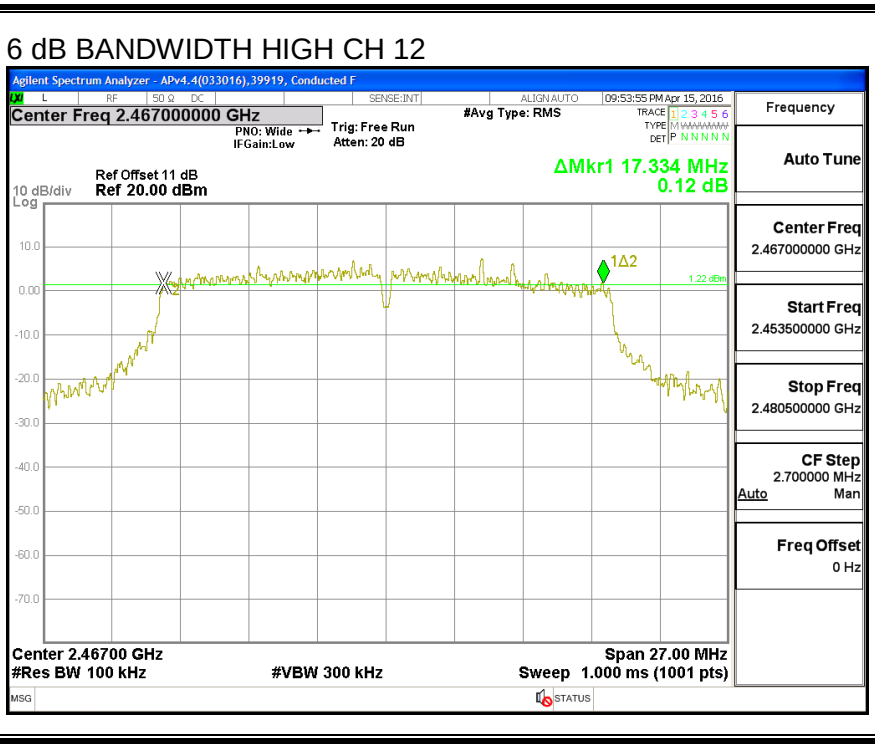
6 dB BANDWIDTH HIGH CH 10



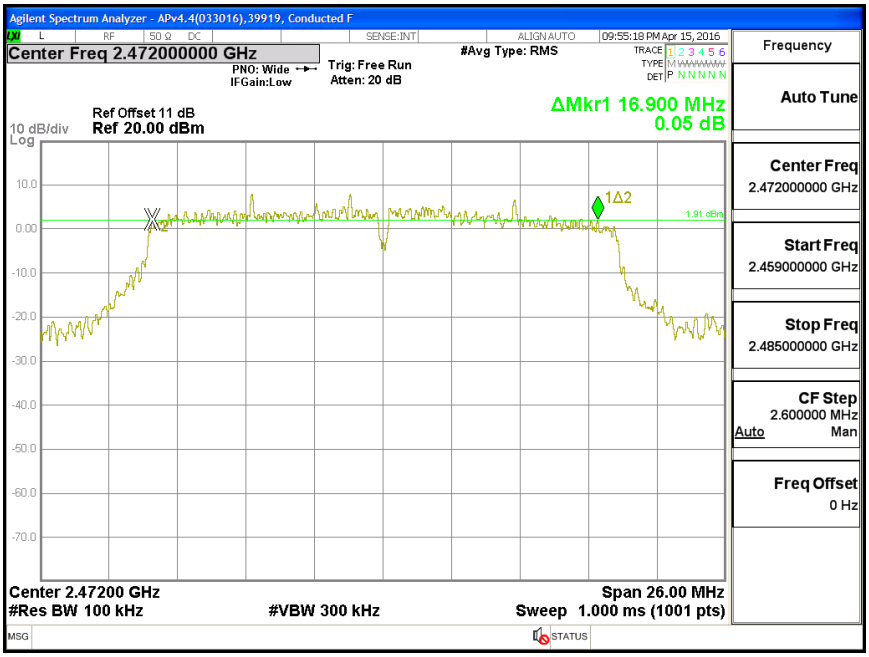
6 dB BANDWIDTH HIGH CH 11



6 dB BANDWIDTH HIGH CH 12

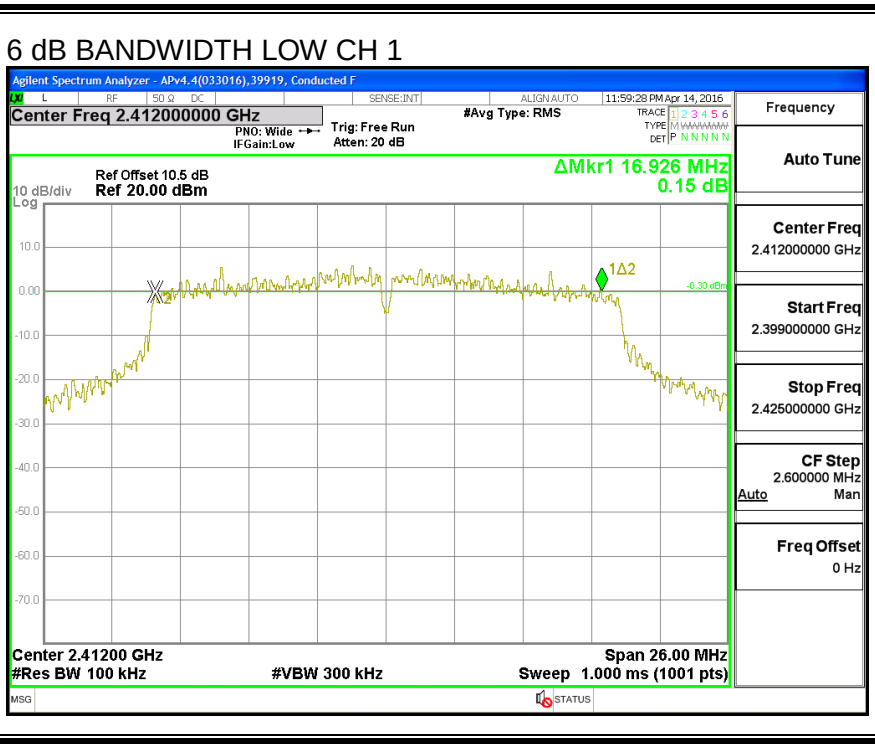


6 dB BANDWIDTH HIGH CH 13

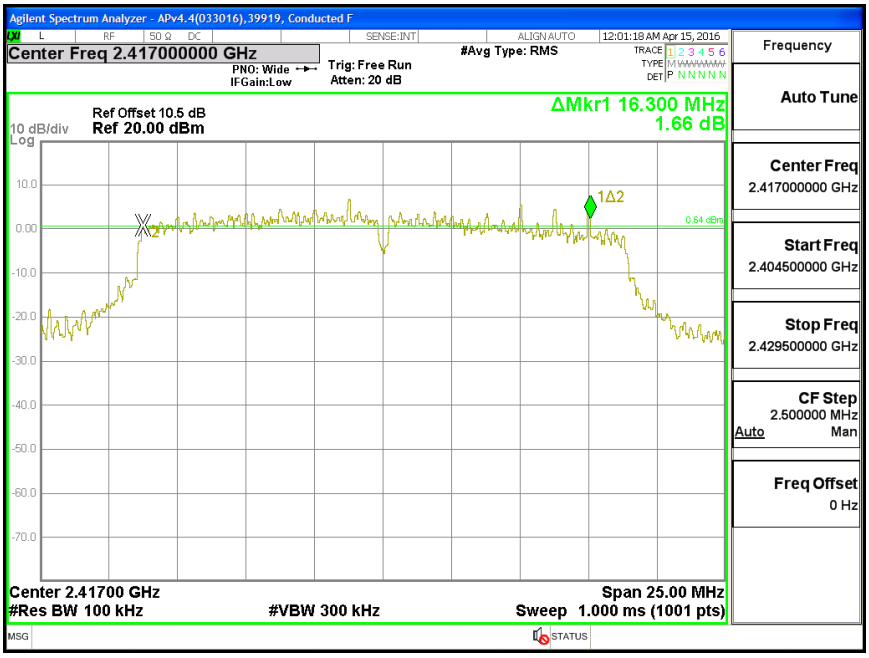


6 dB BANDWIDTH, Chain 1

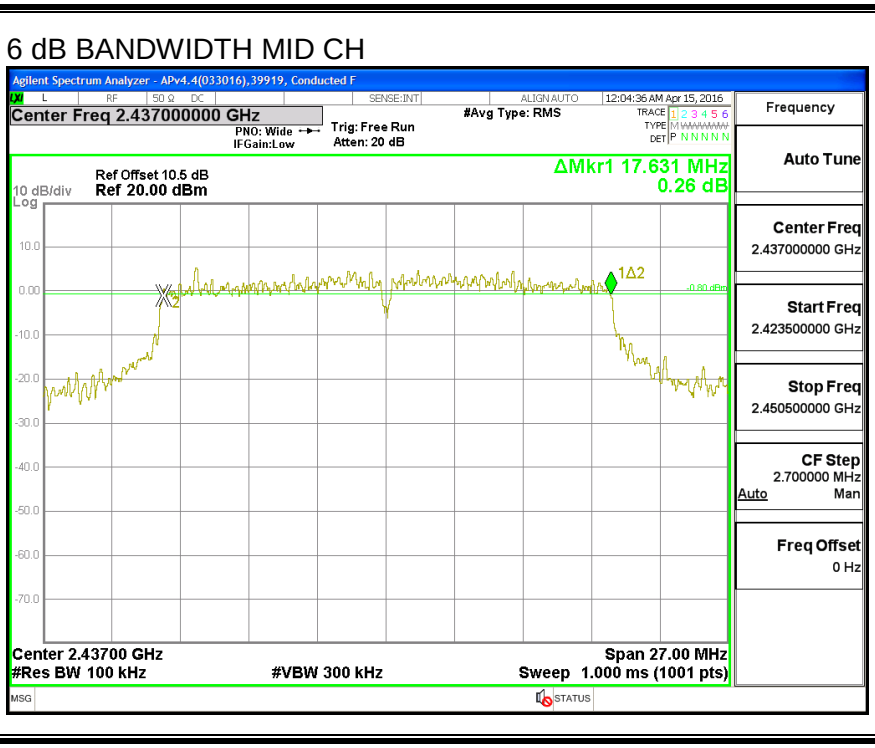
6 dB BANDWIDTH LOW CH 1



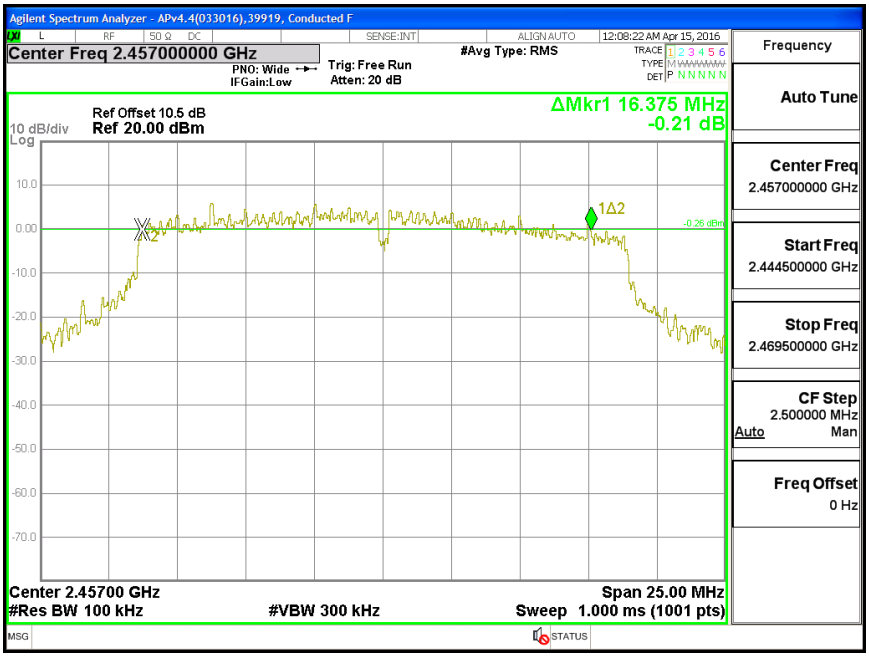
6 dB BANDWIDTH LOW CH 2



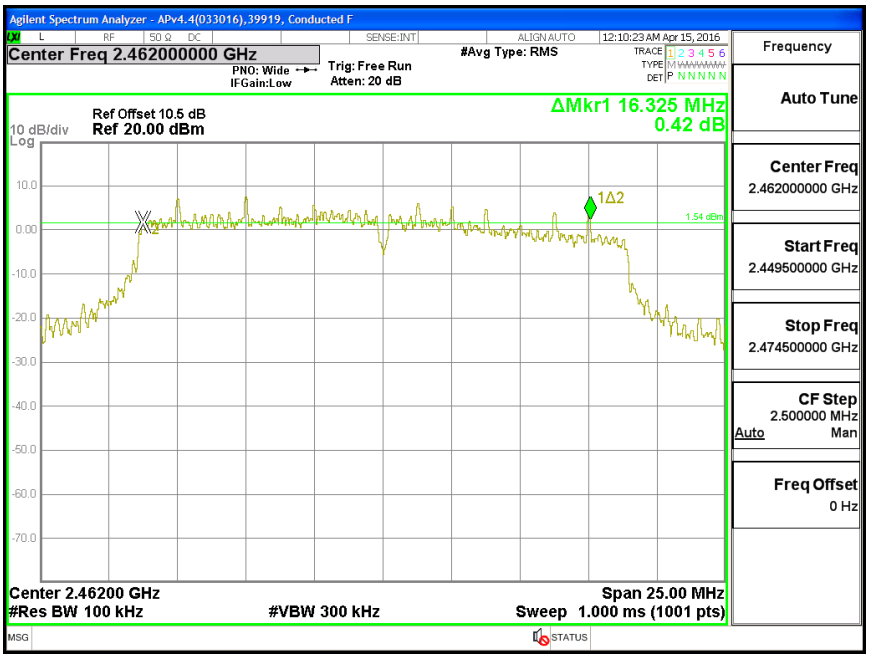
6 dB BANDWIDTH MID CH



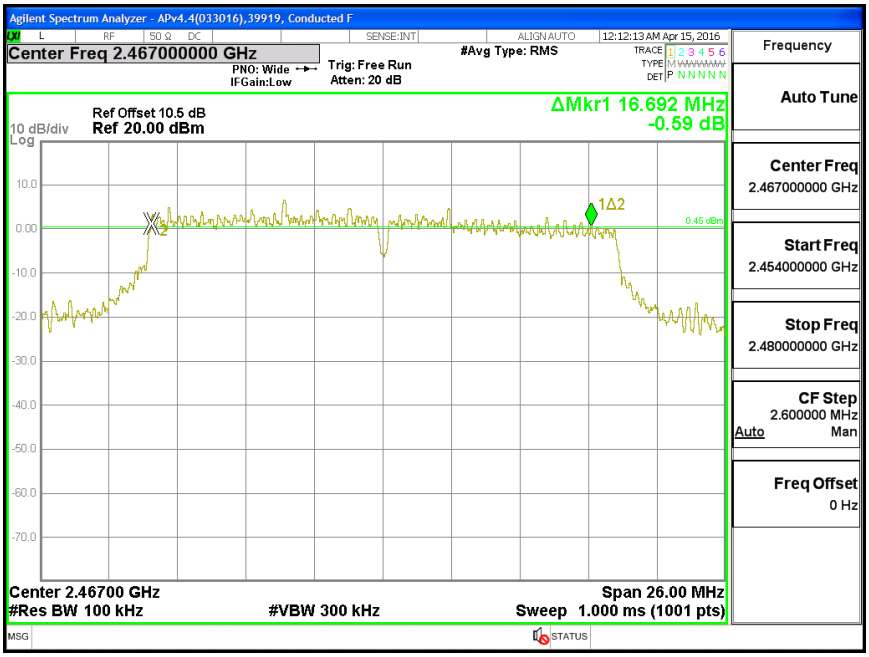
6 dB BANDWIDTH HIGH CH 10



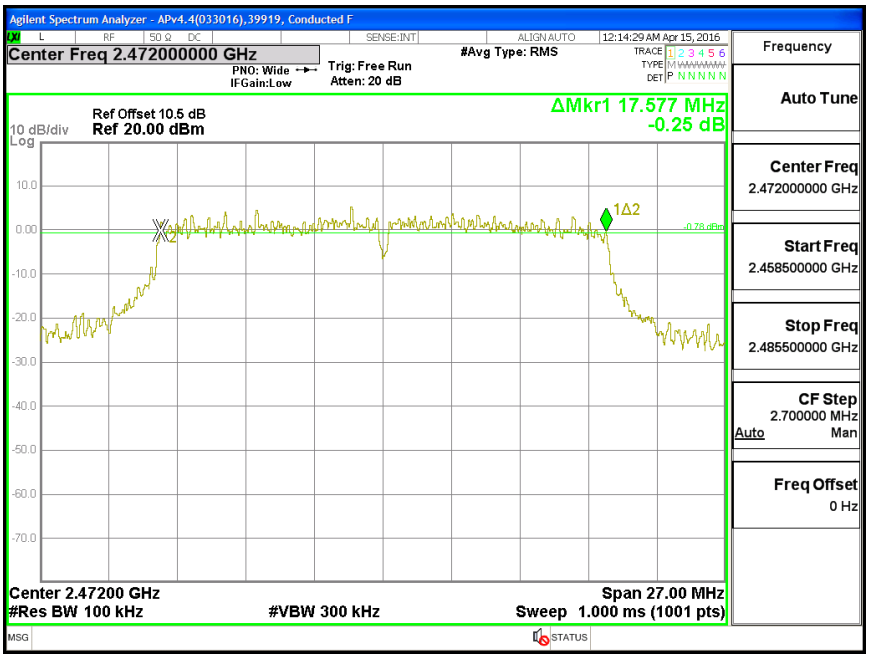
6 dB BANDWIDTH HIGH CH 11



6 dB BANDWIDTH HIGH CH 12



6 dB BANDWIDTH HIGH CH 13



8.7.2. 99% BANDWIDTH

LIMITS

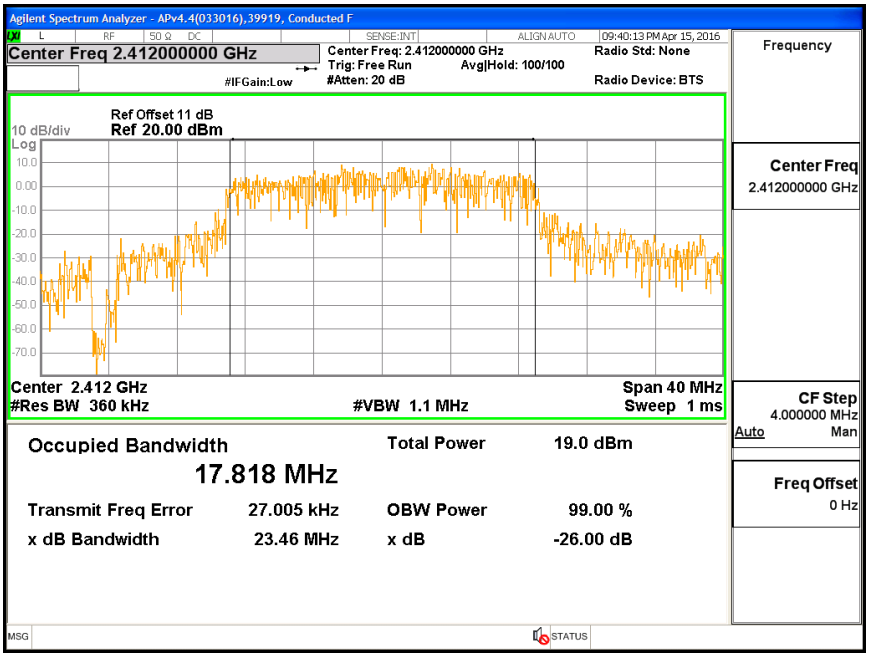
None; for reporting purposes only.

RESULTS

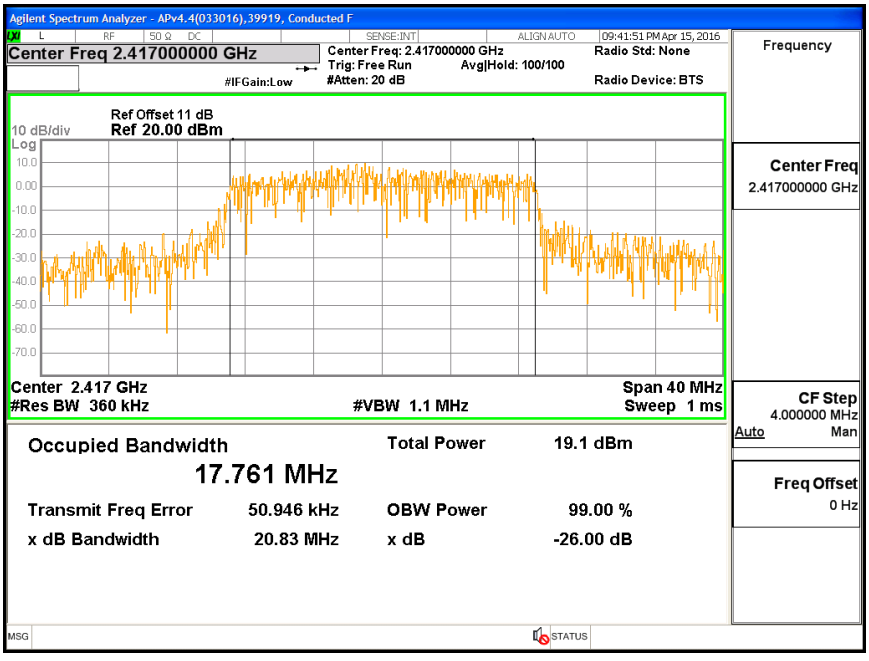
Channel	Frequency (MHz)	99% BW Chain 0 (MHz)	99% BW Chain 1 (MHz)
Low_1	2412	17.818	17.623
Low_2	2417	17.761	17.773
Mid_6	2437	17.747	17.641
High_10	2457	17.728	17.609
High_11	2462	17.698	17.710
High_12	2467	17.826	17.879
High_13	2472	17.730	17.718

99% BANDWIDTH, Chain 0

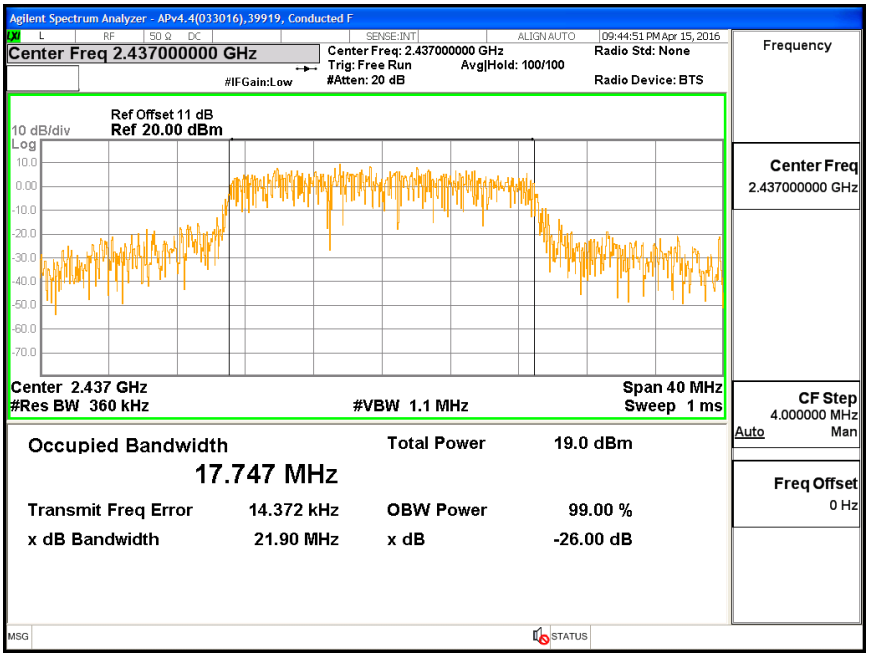
99% BANDWIDTH LOW CH 1



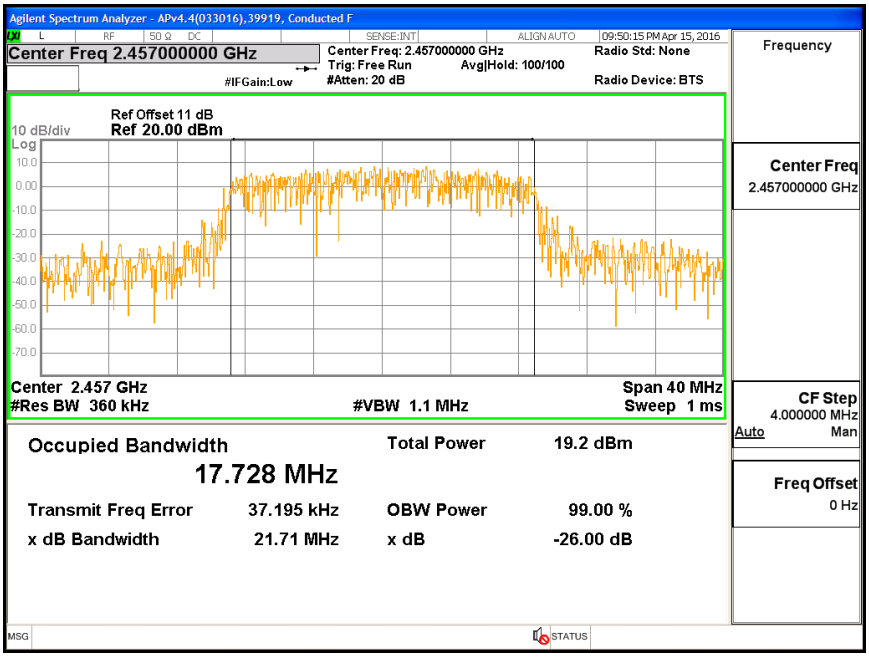
99% BANDWIDTH LOW CH 2



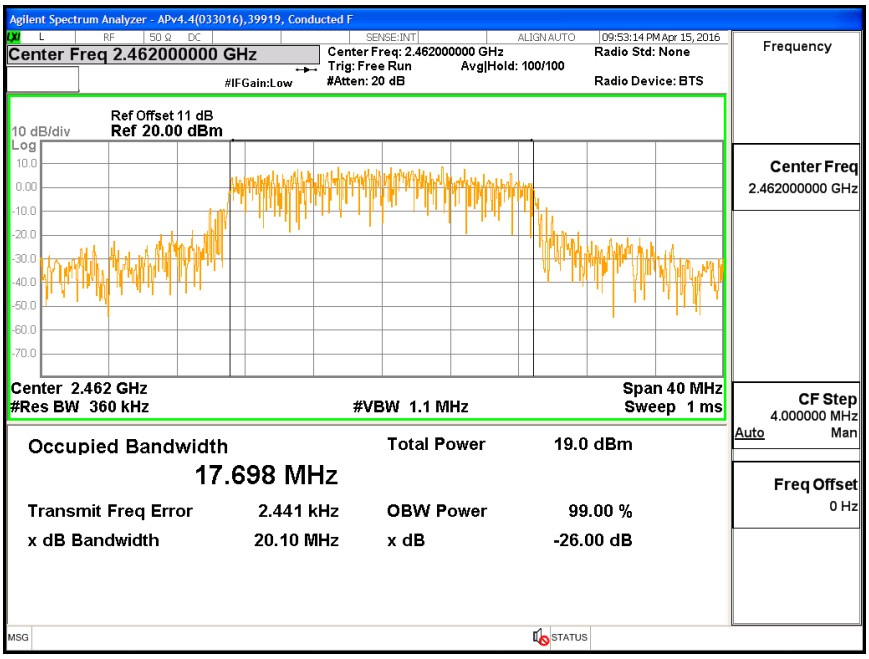
99% BANDWIDTH MID CH



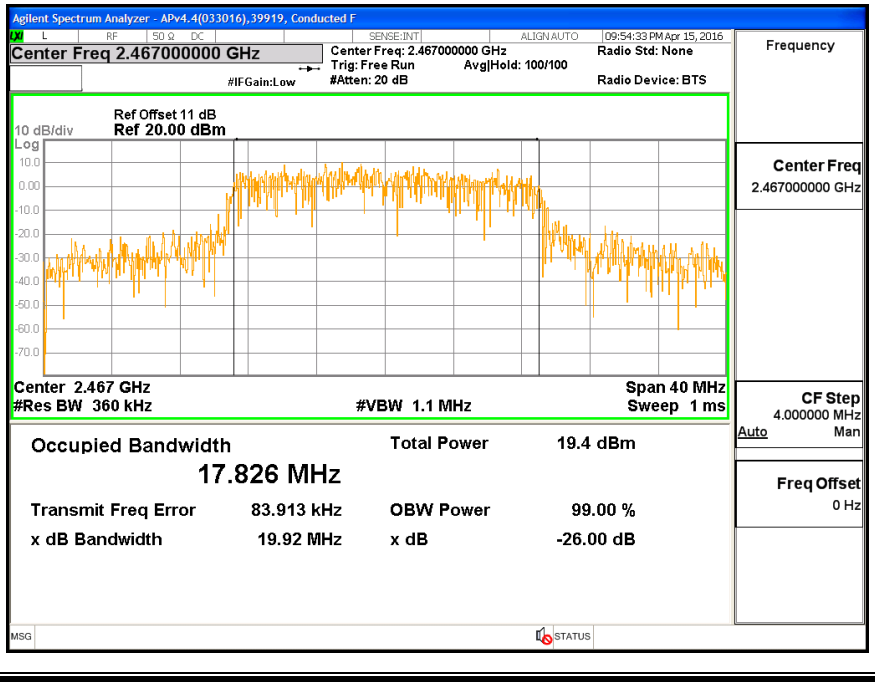
99% BANDWIDTH HIGH CH 10

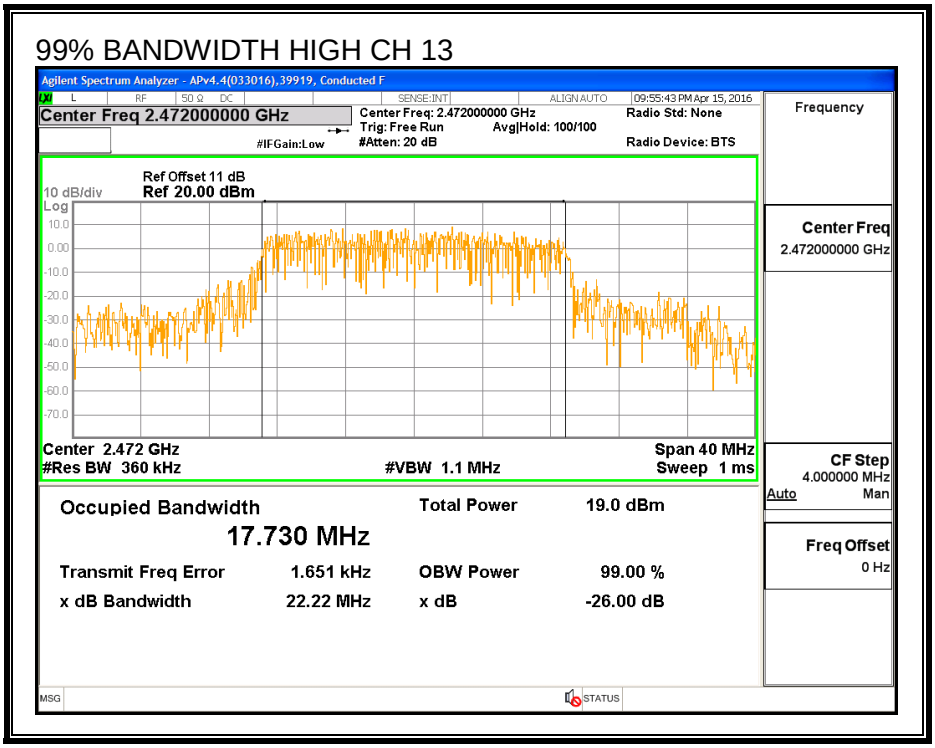


99% BANDWIDTH HIGH CH 11

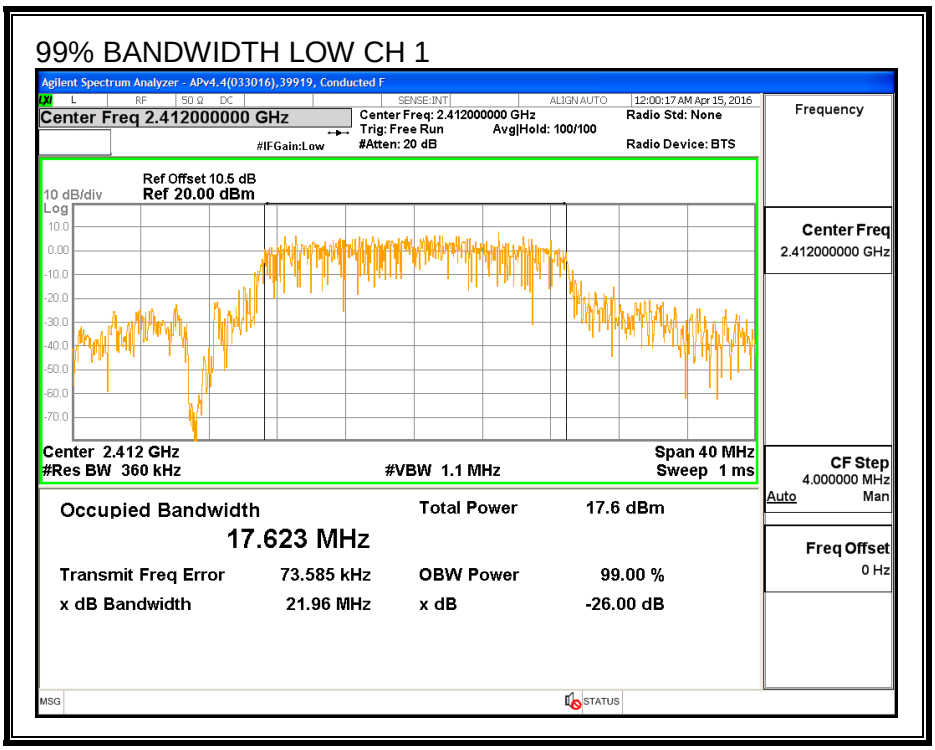


99% BANDWIDTH HIGH CH 12

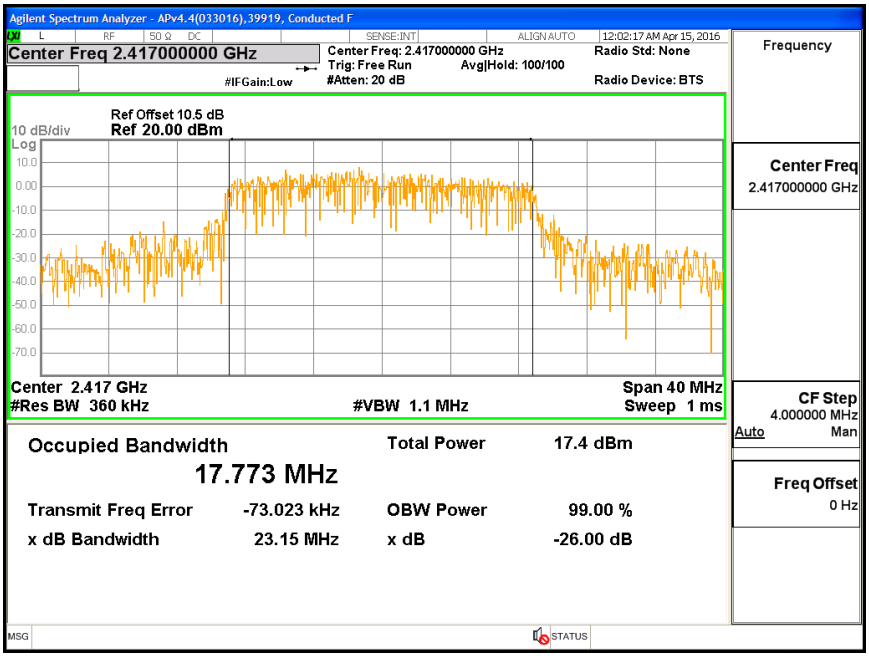




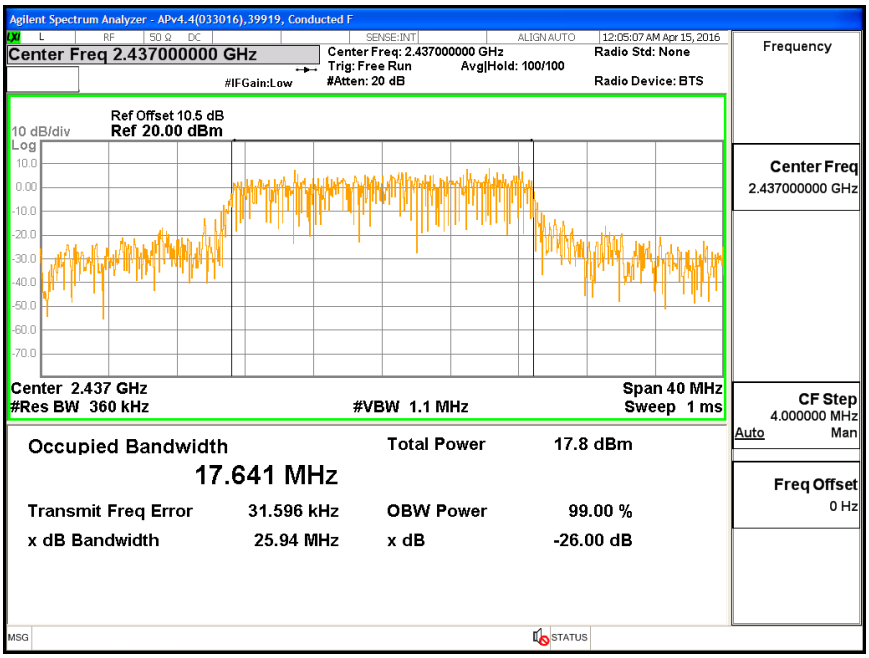
99% BANDWIDTH, Chain 1



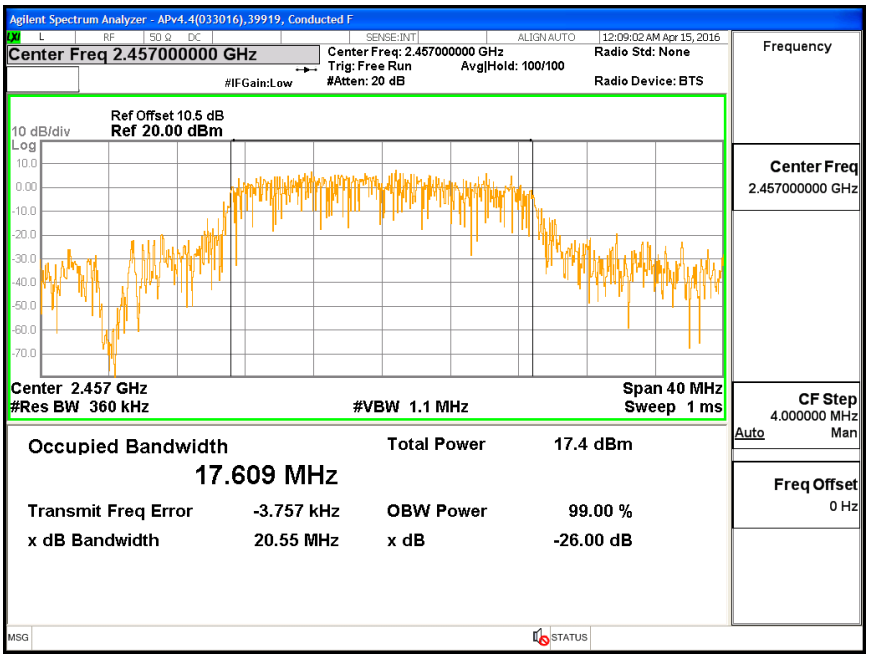
99% BANDWIDTH LOW CH 2



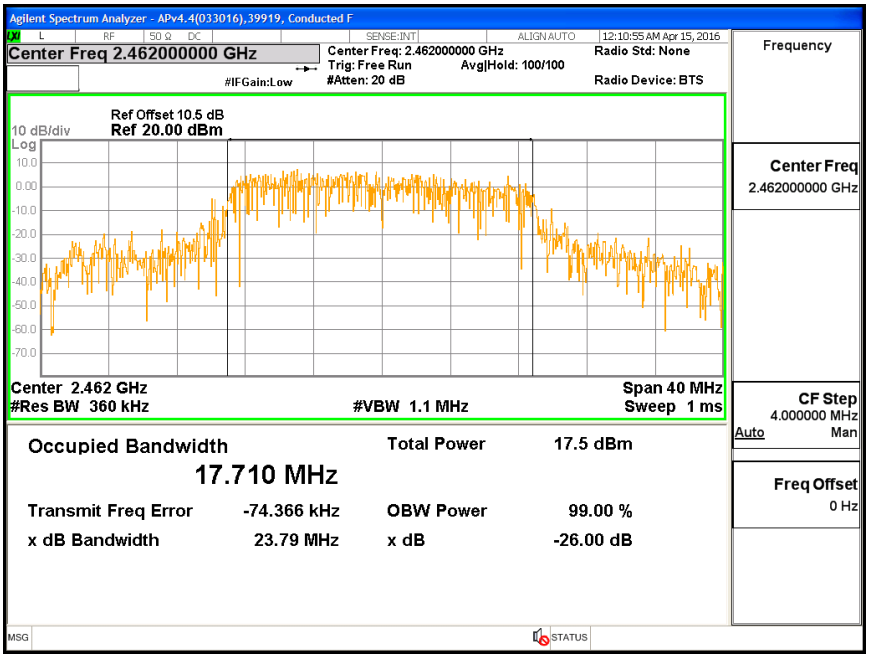
99% BANDWIDTH MID CH



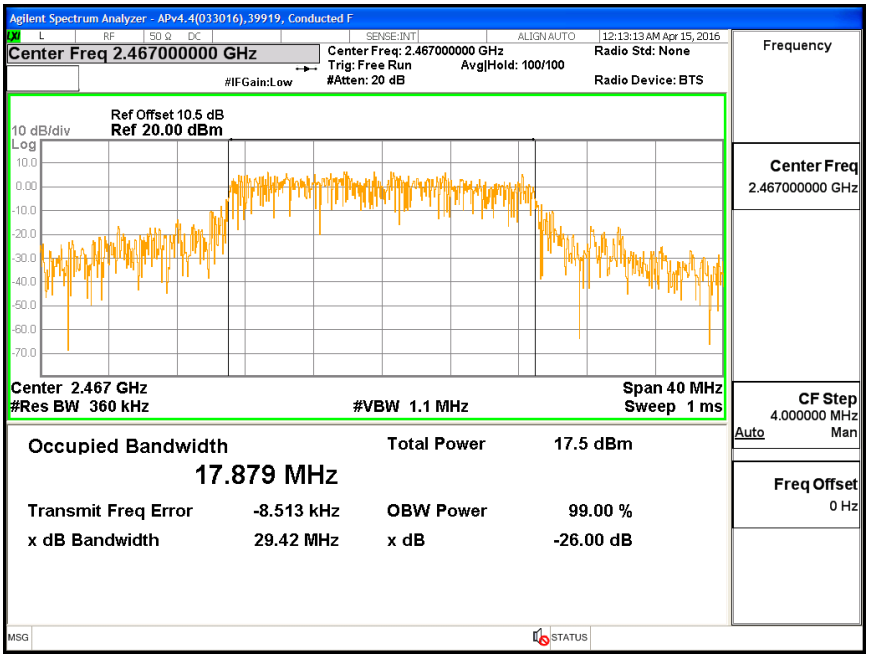
99% BANDWIDTH HIGH CH 10



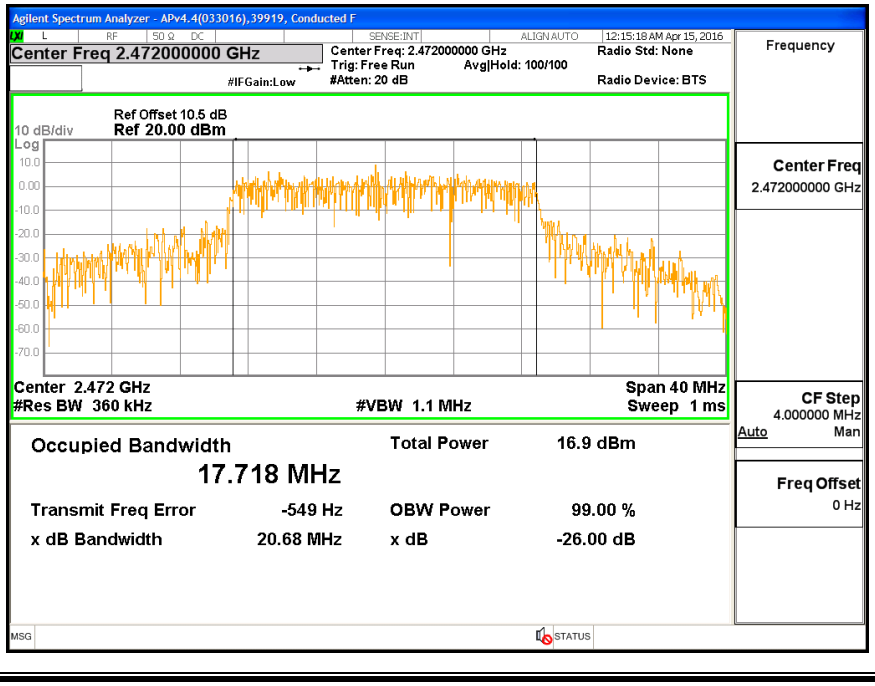
99% BANDWIDTH HIGH CH 11



99% BANDWIDTH HIGH CH 12



99% BANDWIDTH HIGH CH 13



8.7.3. AVERAGE POWER

LIMITS

None; for reporting purposes only.

RESULTS

ID:	39919	Date:	6/10/16

Channel	Frequency (MHz)	Chain 0 Power (dBm)	Chain 1 Power (dBm)	Total Power (dBm)
Low_1	2412	15.49	15.44	18.48
Low_2	2417	17.96	17.90	20.94
Mid_6	2437	18.89	18.80	21.86
High_10	2457	17.45	17.40	20.44
High_11	2462	14.46	14.39	17.44
High_12	2467	12.93	12.89	15.92
High_13	2472	4.90	4.83	7.88

8.7.4. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-247 (5.4) (4)

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

DIRECTIONAL ANTENNA GAIN

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

Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
-2.54	-1.25	-1.85

RESULTS

ID:	39919	Date:	7/14/16

Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
2412	-1.85	30.00	30	36	30.00
2417	-1.85	30.00	30	36	30.00
2422	-1.85	30.00	30	36	30.00
2437	-1.85	30.00	30	36	30.00
2457	-1.85	30.00	30	36	30.00
2462	-1.85	30.00	30	36	30.00
2467	-1.85	30.00	30	36	30.00
2472	-1.85	30.00	30	36	30.00

ycle CF (dB)	0.00	Included in Calculations of Corr'd Power

Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margi (dB)
2412	22.27	22.17	25.23	30.00	-4.77
2417	24.58	24.41	27.51	30.00	-2.49
2437	25.74	25.63	28.70	30.00	-1.30
2457	25.09	24.99	28.05	30.00	-1.95
2462	22.17	22.04	25.12	30.00	-4.88
2467	20.87	20.74	23.82	30.00	-6.18
2472	12.61	12.53	15.58	30.00	-14.42

8.7.5. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247

IC RSS-247 (5.2) (2)

For digitally modulated systems, the power spectral density conducted form the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 KHz band during any time interval of continuous transmissions.

RESULTS

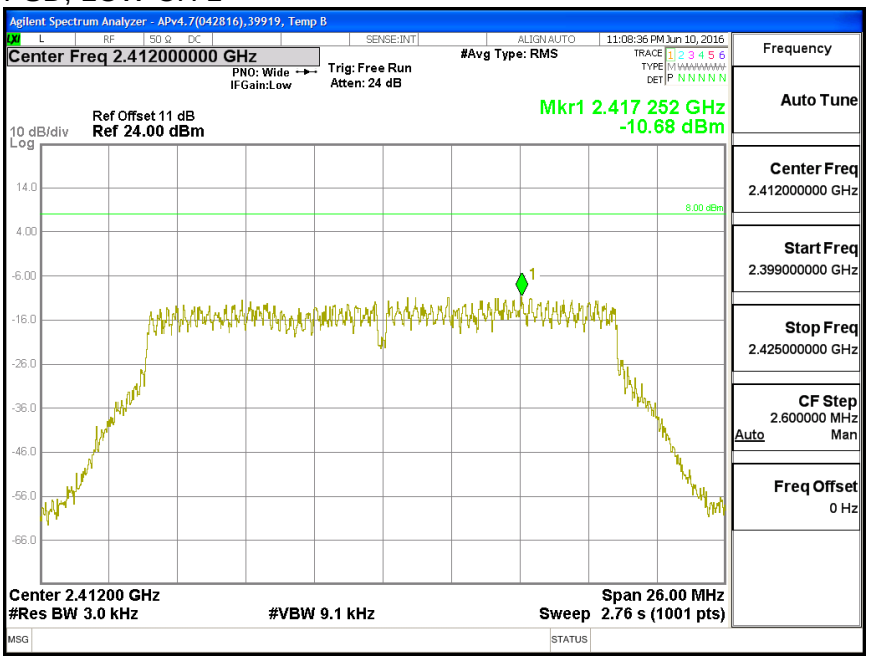
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

PSD Results

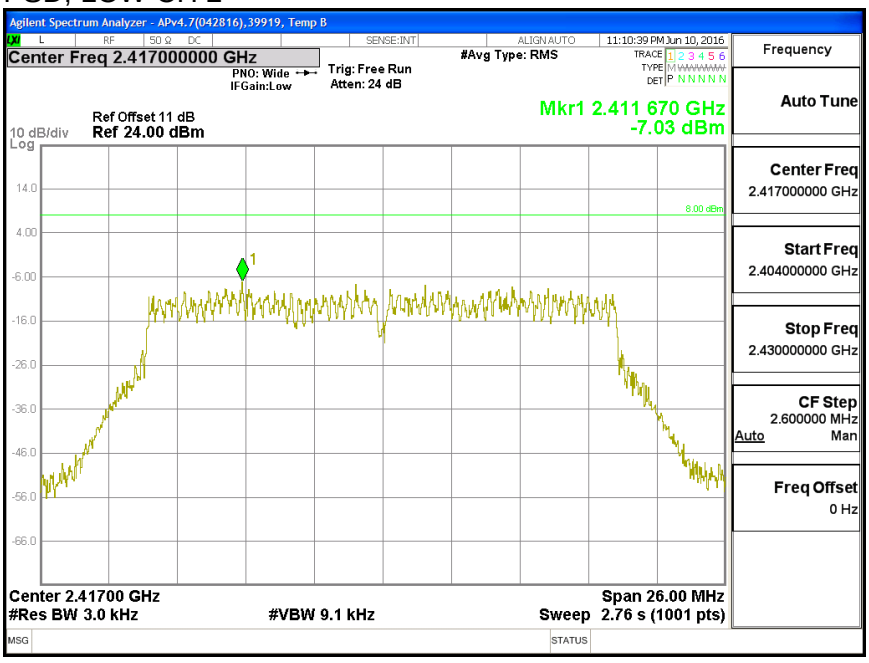
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low_1	2412	-10.68	-10.76	-7.71	8.0	-15.7
Low_2	2417	-7.03	-7.15	-4.08	8.0	-12.1
Mid_6	2437	-6.76	-6.88	-3.81	8.0	-11.8
High_10	2457	-8.20	-8.21	-5.20	8.0	-13.2
High_11	2462	-11.92	-12.33	-9.11	8.0	-17.1
High_12	2467	-12.13	-12.28	-9.19	8.0	-17.2
High_13	2472	-20.61	-21.21	-17.89	8.0	-25.9

PSD, Chain 0

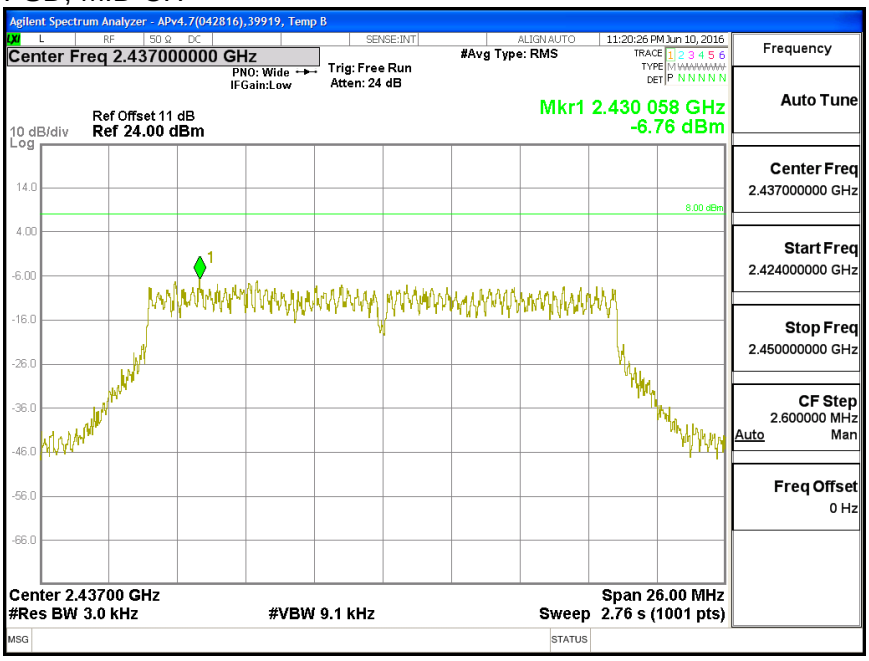
PSD, LOW CH 1



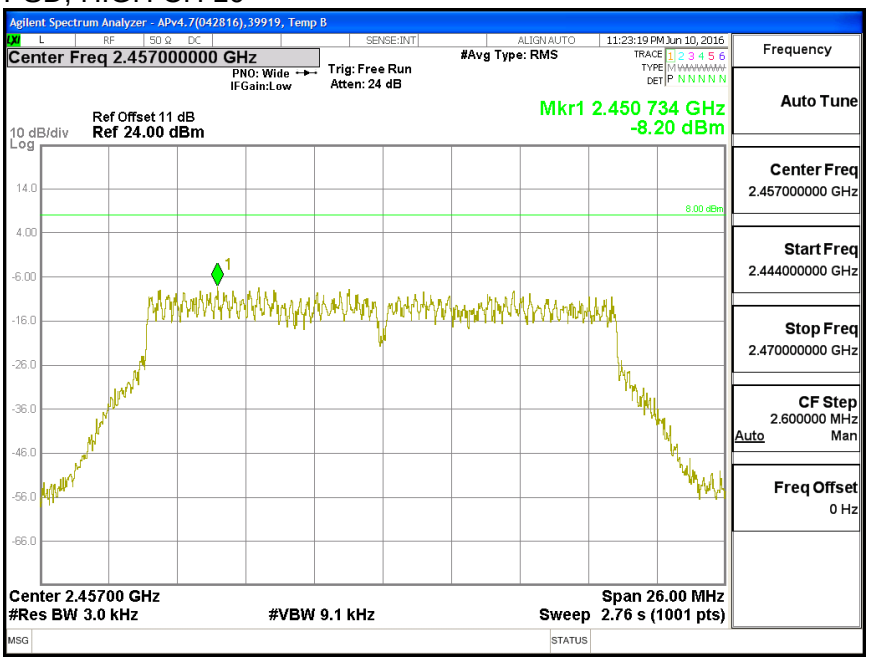
PSD, LOW CH 2



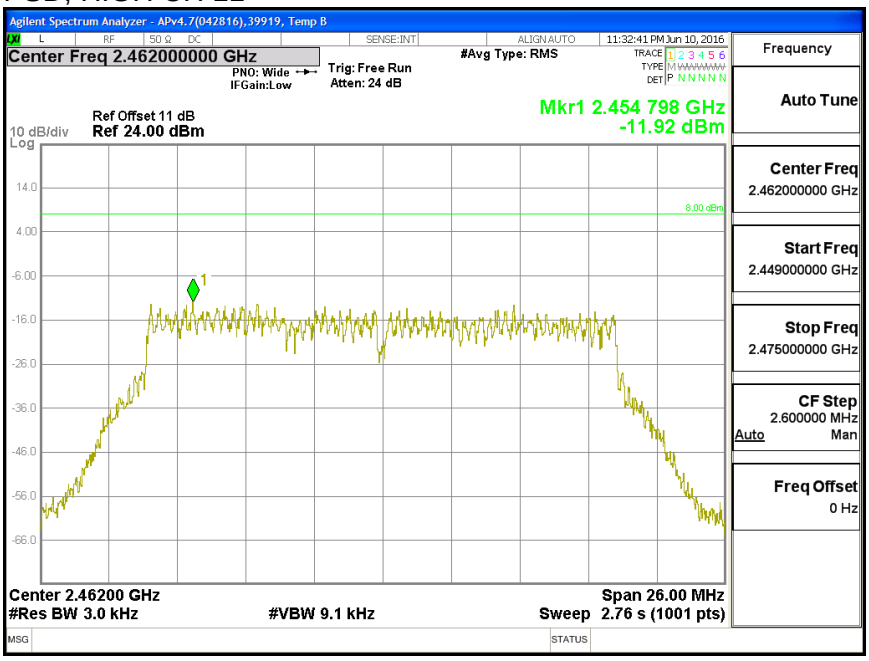
PSD, MID CH



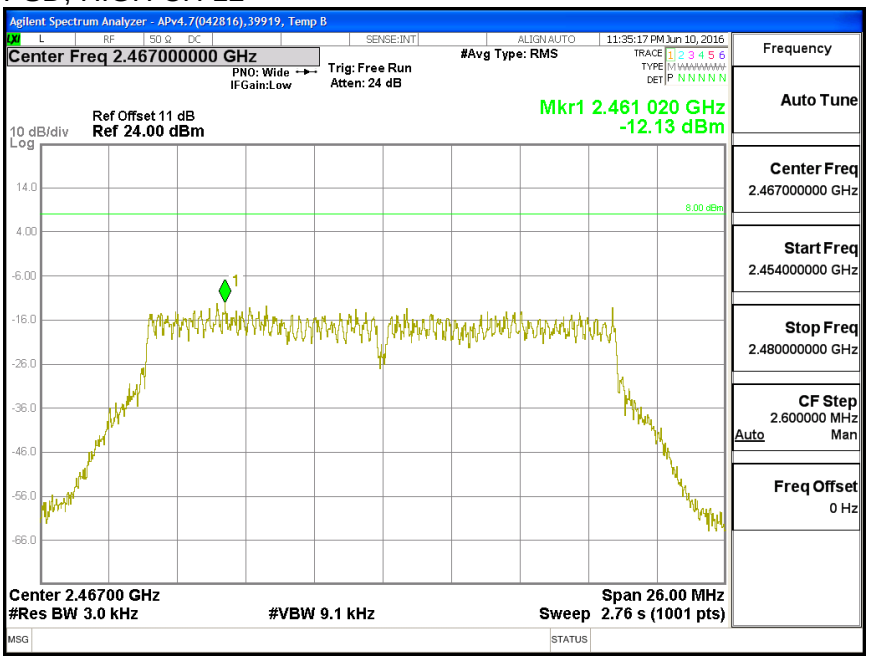
PSD, HIGH CH 10



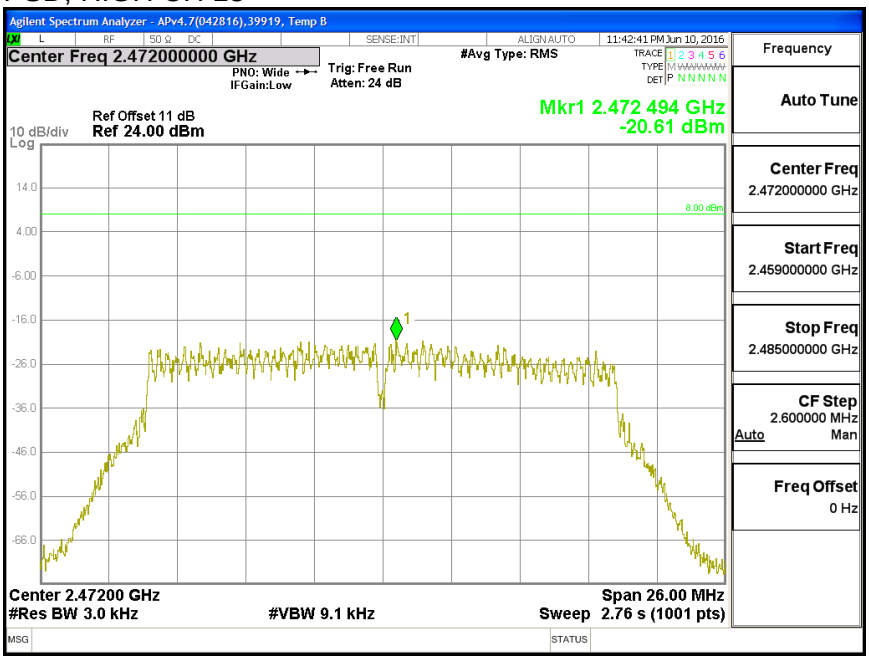
PSD, HIGH CH 11



PSD, HIGH CH 12

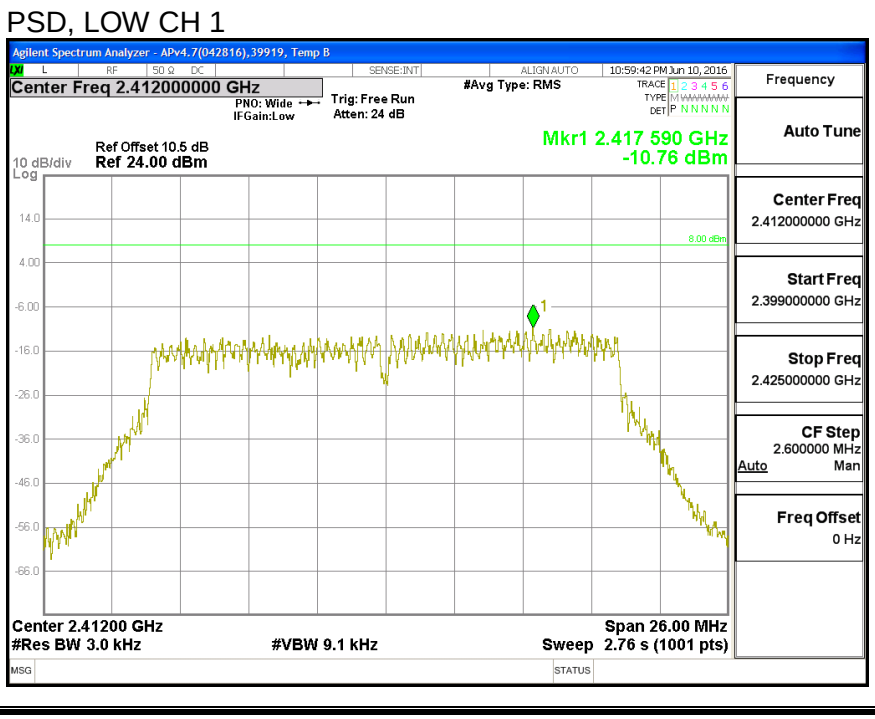


PSD, HIGH CH 13

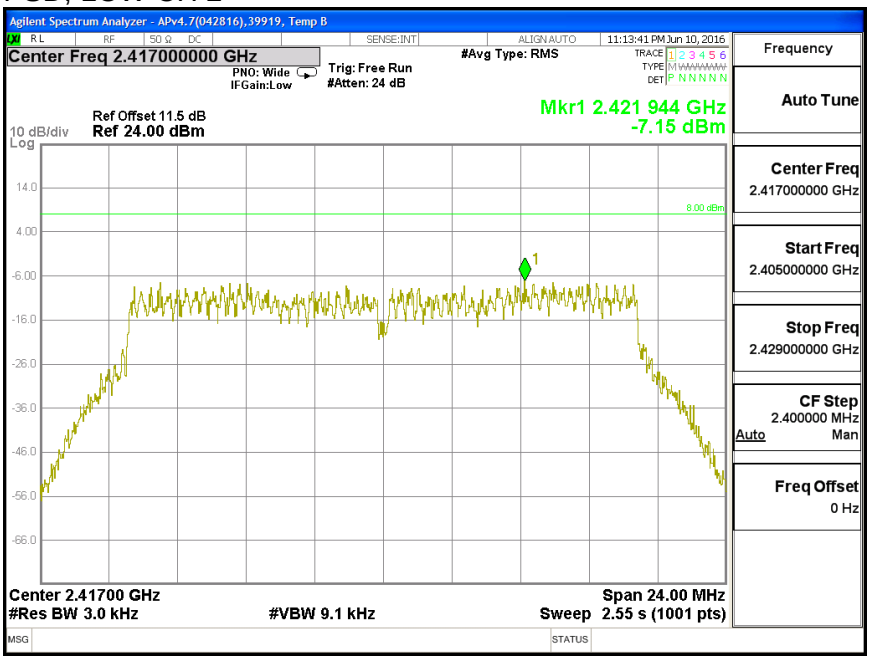


PSD, Chain 1

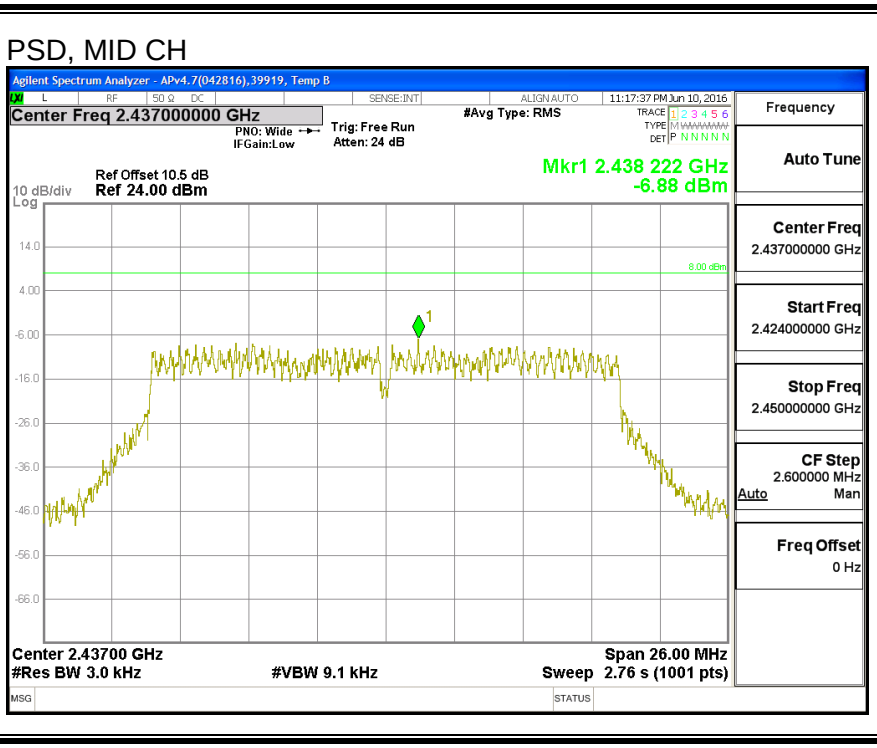
PSD, LOW CH 1



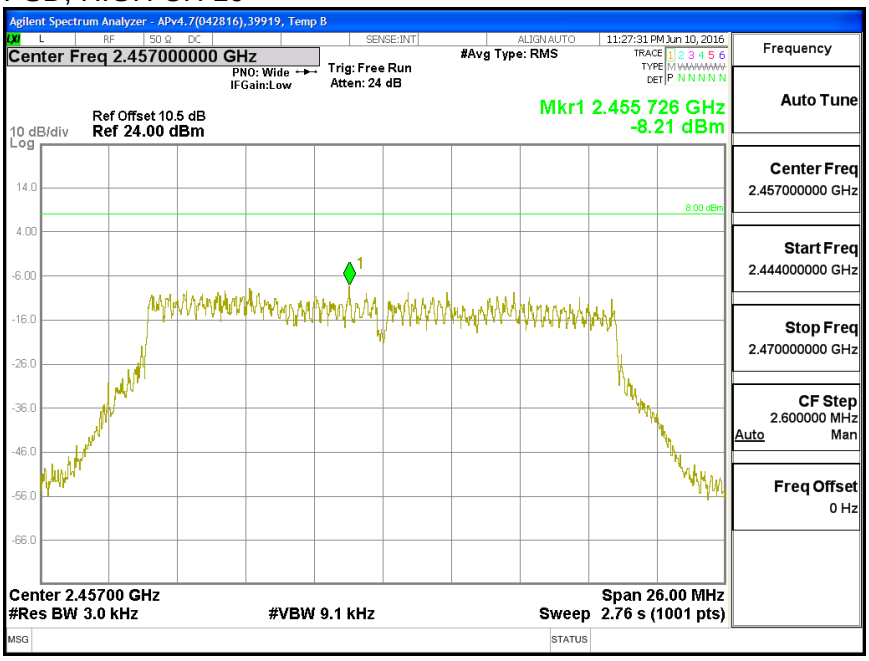
PSD, LOW CH 2



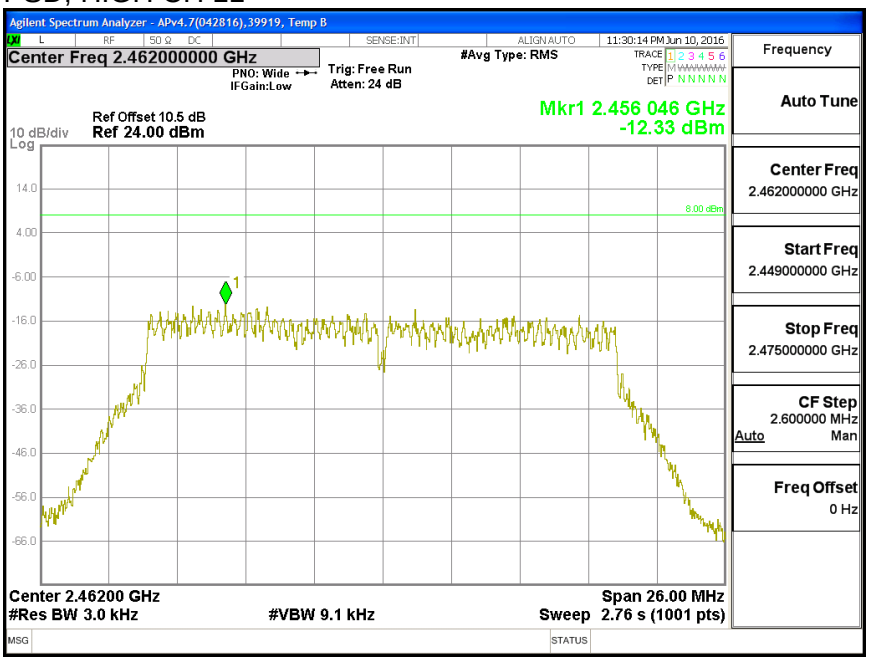
PSD, MID CH



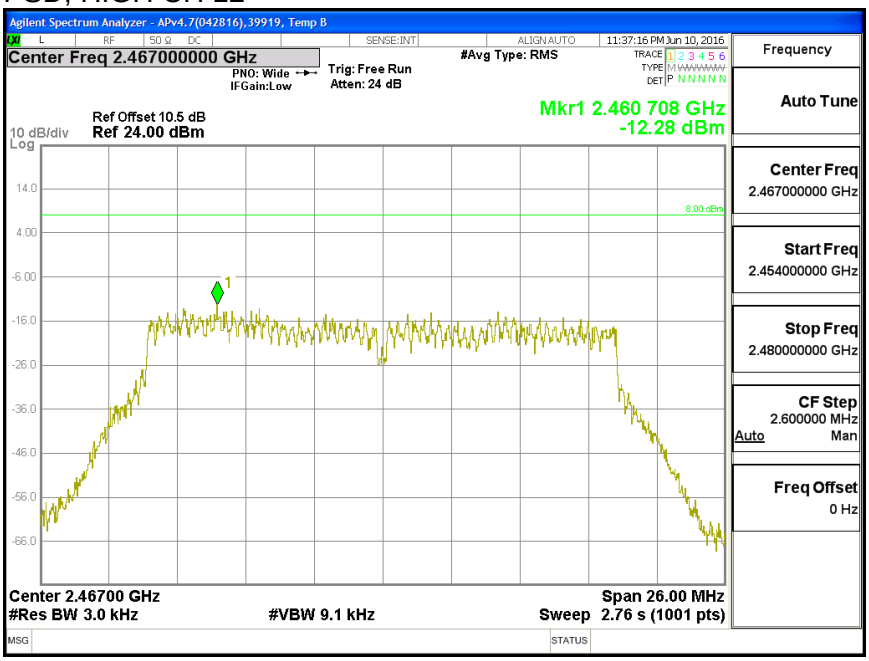
PSD, HIGH CH 10



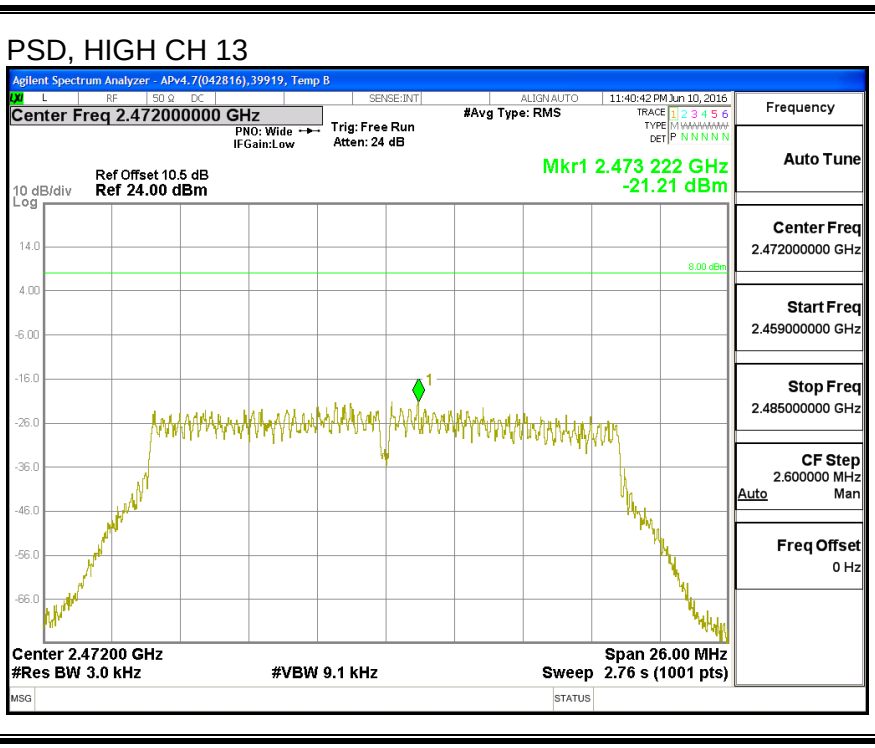
PSD, HIGH CH 11



PSD, HIGH CH 12



PSD, HIGH CH 13



8.7.6. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

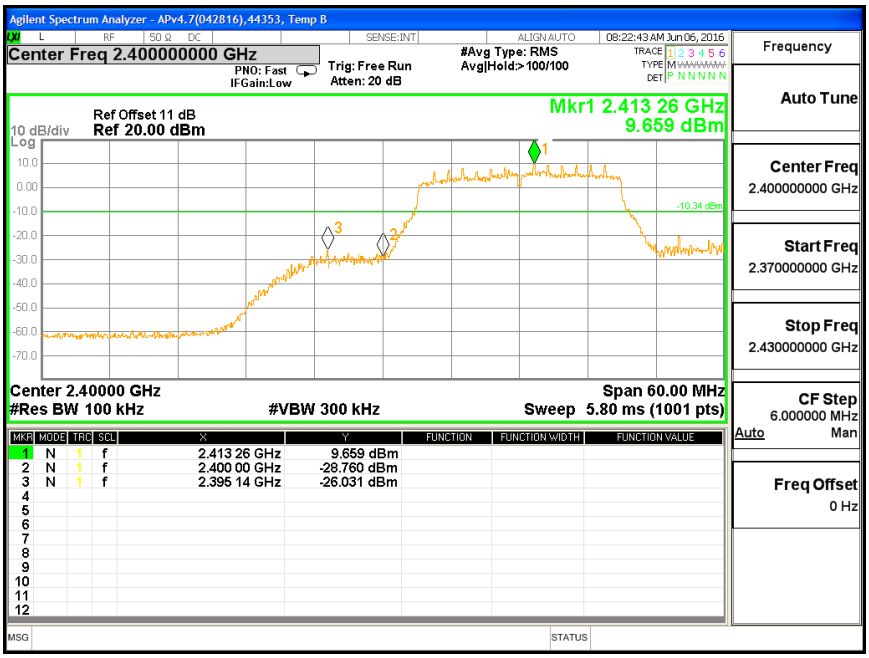
IC RSS-247 (5.5)

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

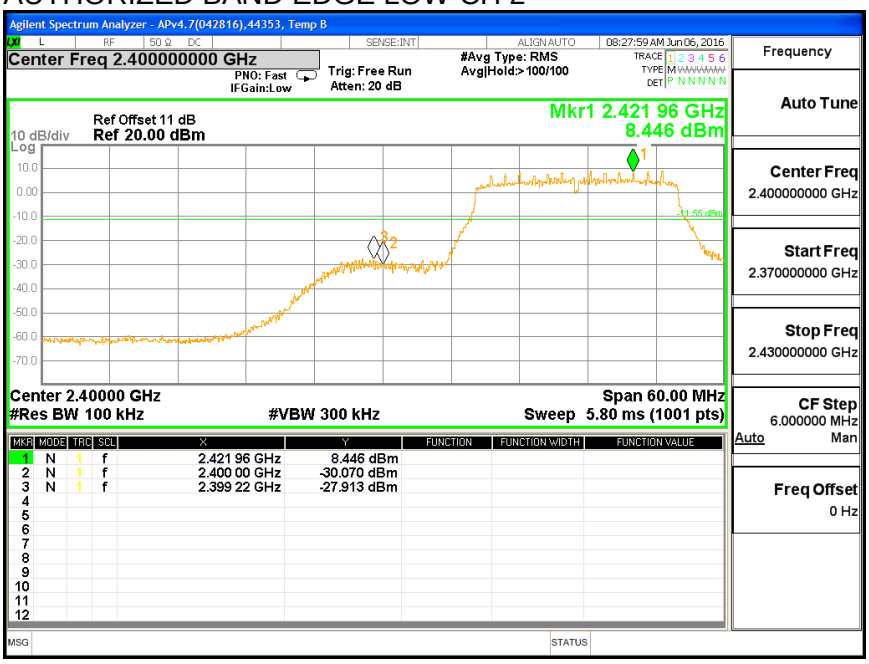
RESULTS

LOW CHANNEL BANDEDGE, Chain 0

AUTHORIZED BAND EDGE LOW CH 1

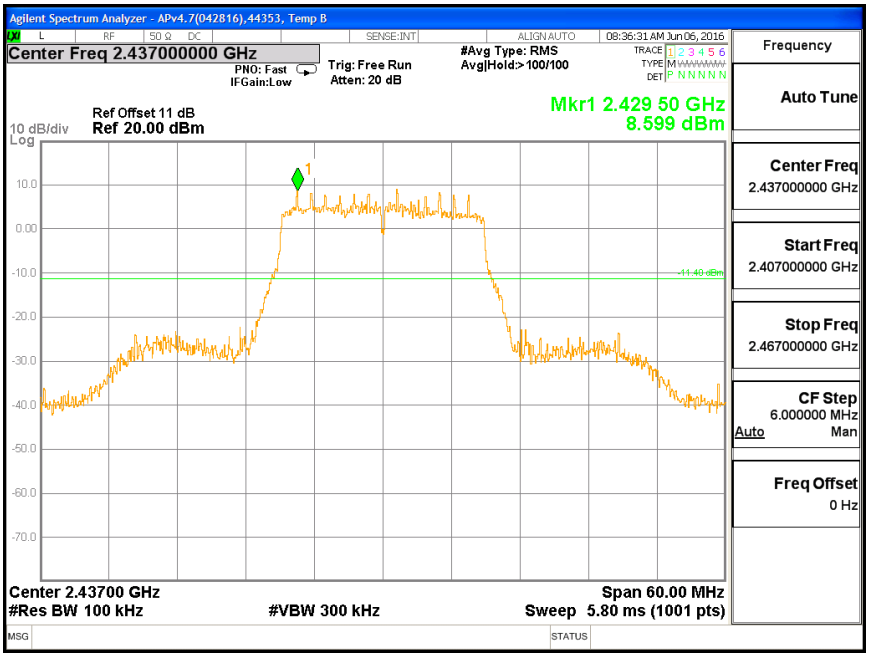


AUTHORIZED BAND EDGE LOW CH 2



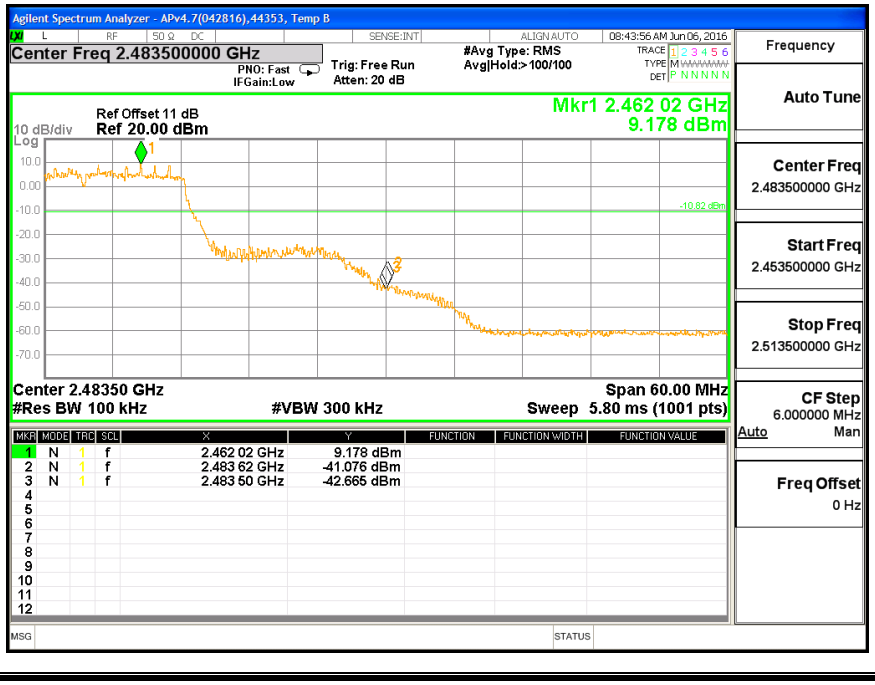
MID CHANNEL REFERENCE, Chain 0

REFERENCE MID CH

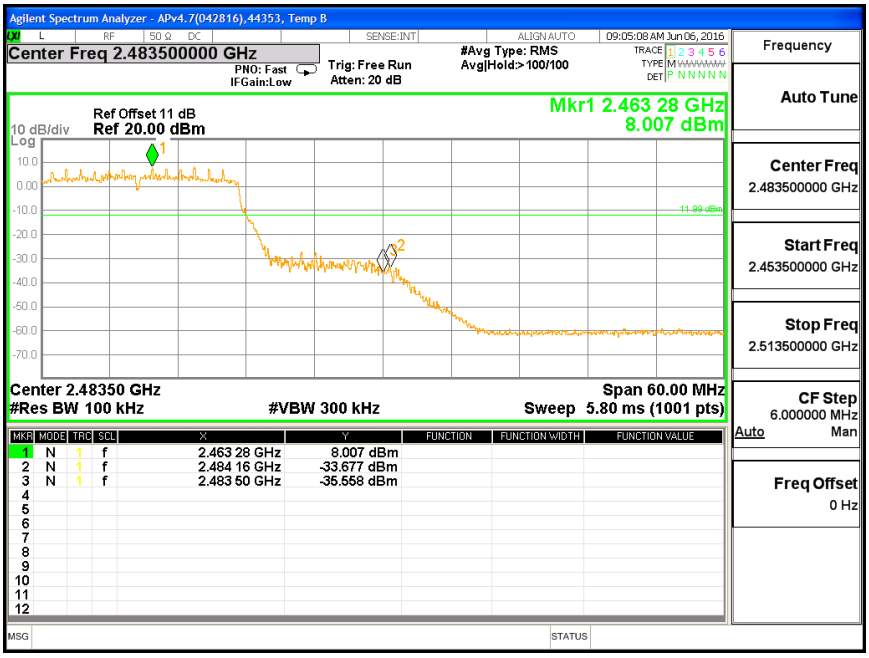


HIGH CHANNEL BANDEDGE, Chain 0

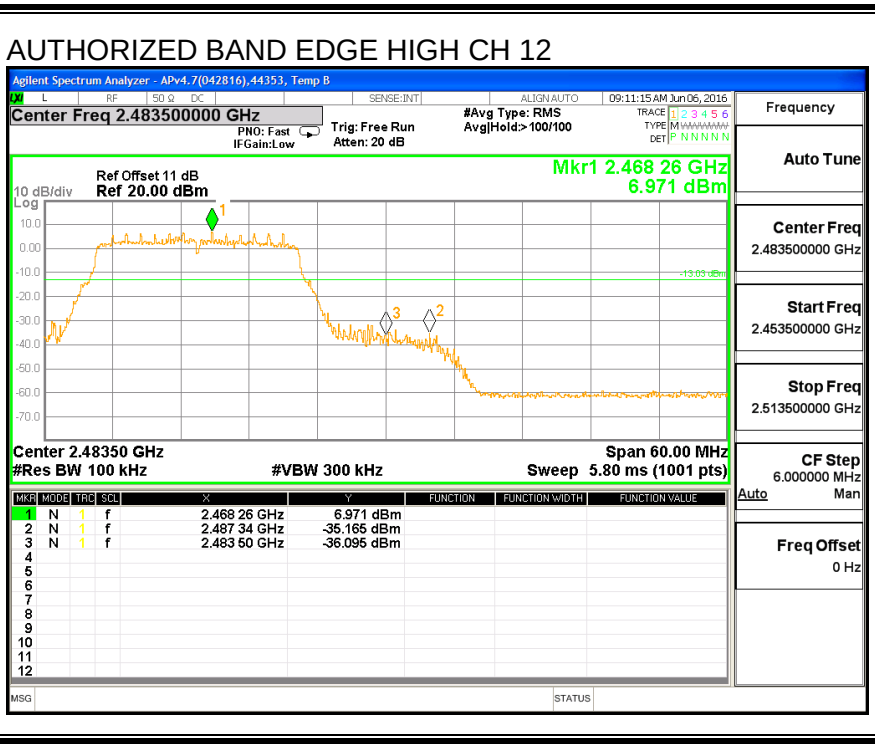
AUTHORIZED BAND EDGE HIGH CH 10



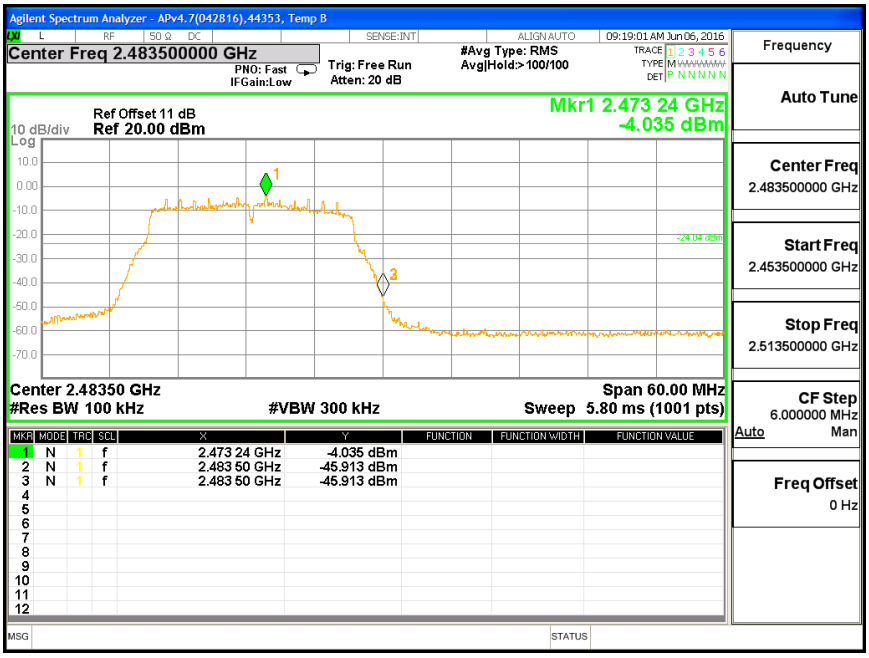
AUTHORIZED BAND EDGE HIGH CH 11



AUTHORIZED BAND EDGE HIGH CH 12

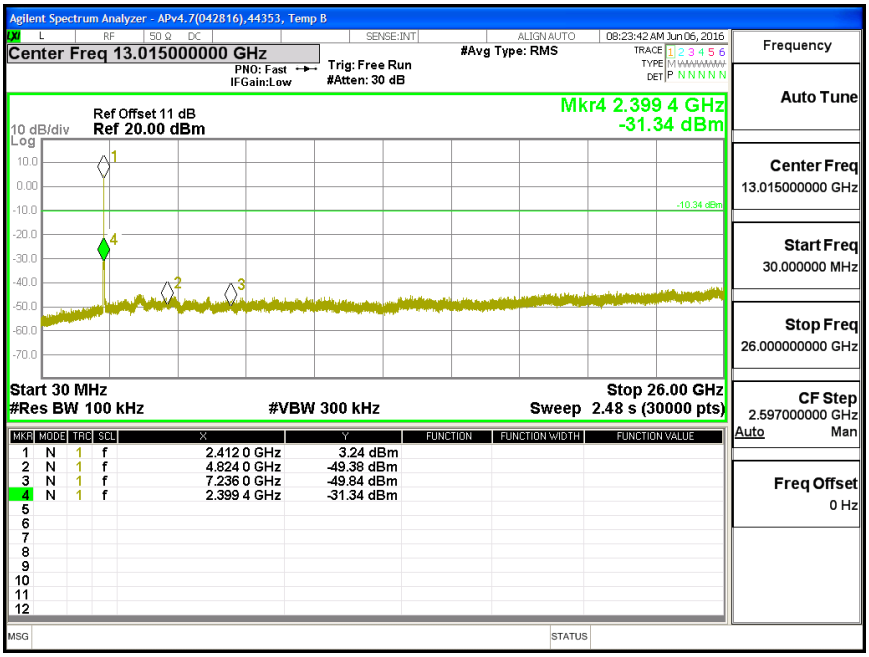


AUTHORIZED BAND EDGE HIGH CH 13

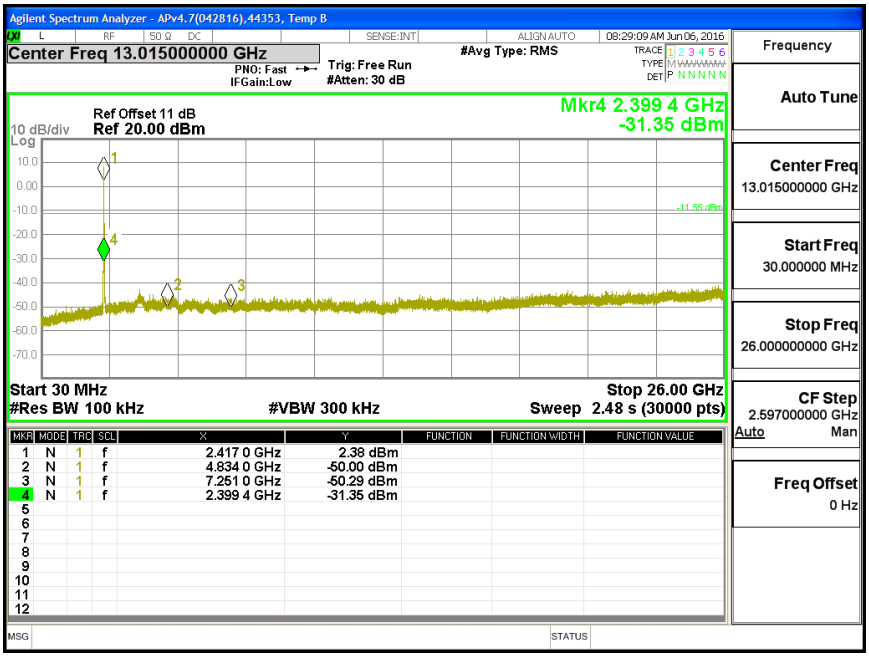


OUT-OF-BAND EMISSIONS, Chain 0

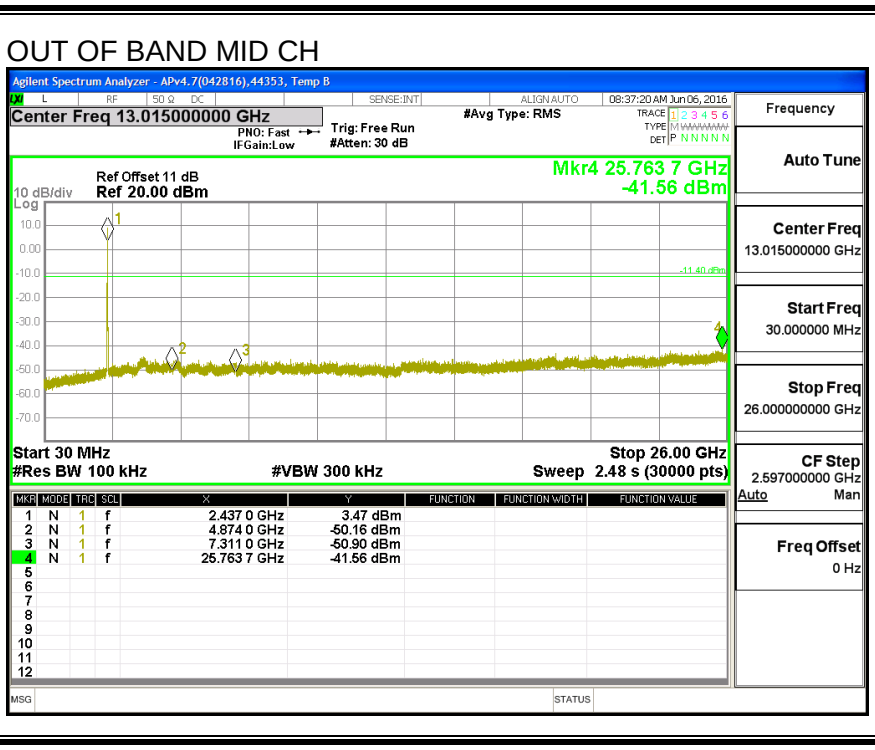
OUT OF BAND LOW CH 1



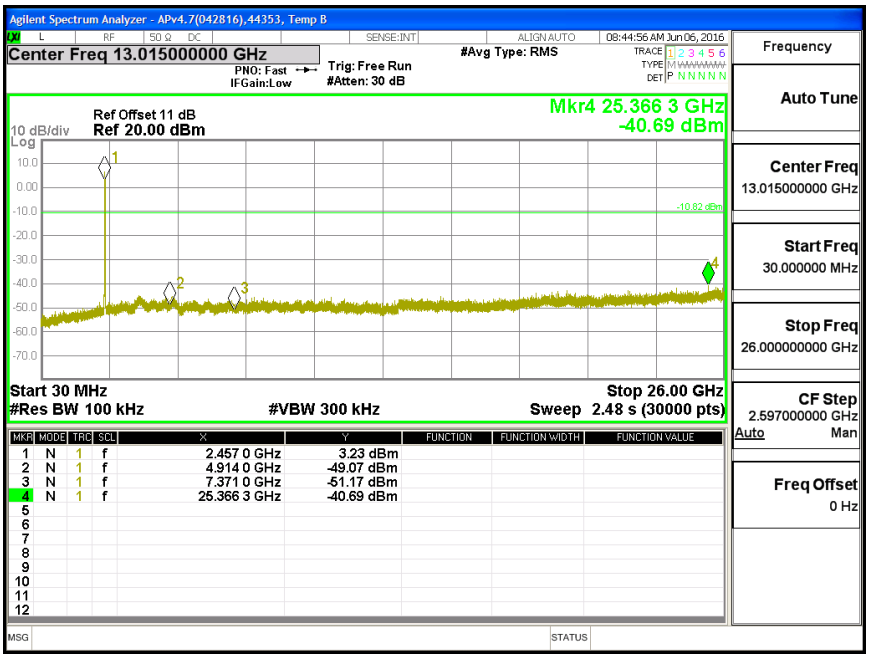
OUT OF BAND LOW CH 2



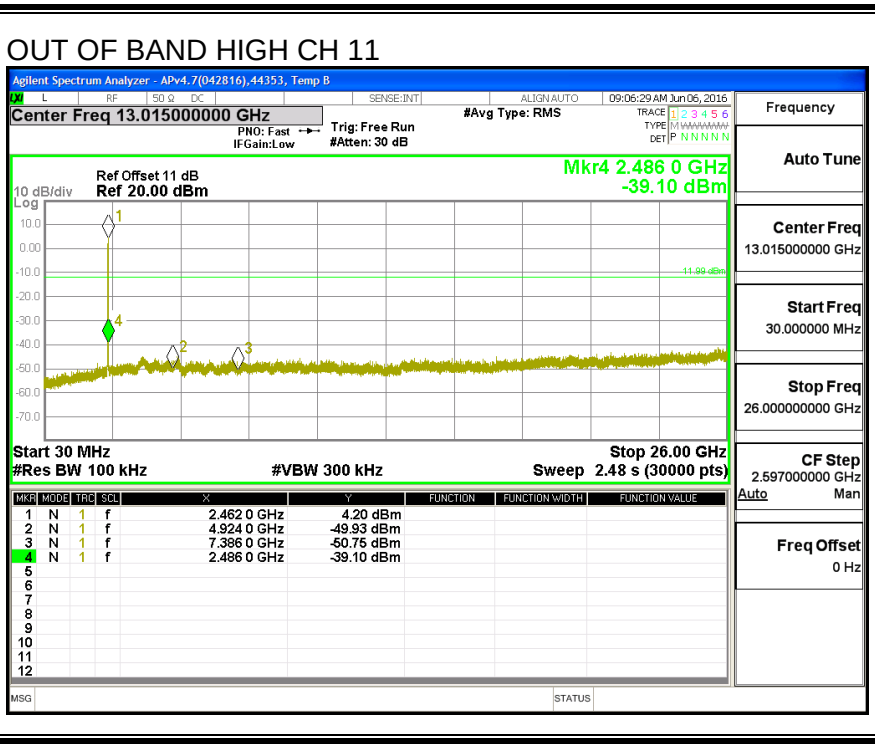
OUT OF BAND MID CH



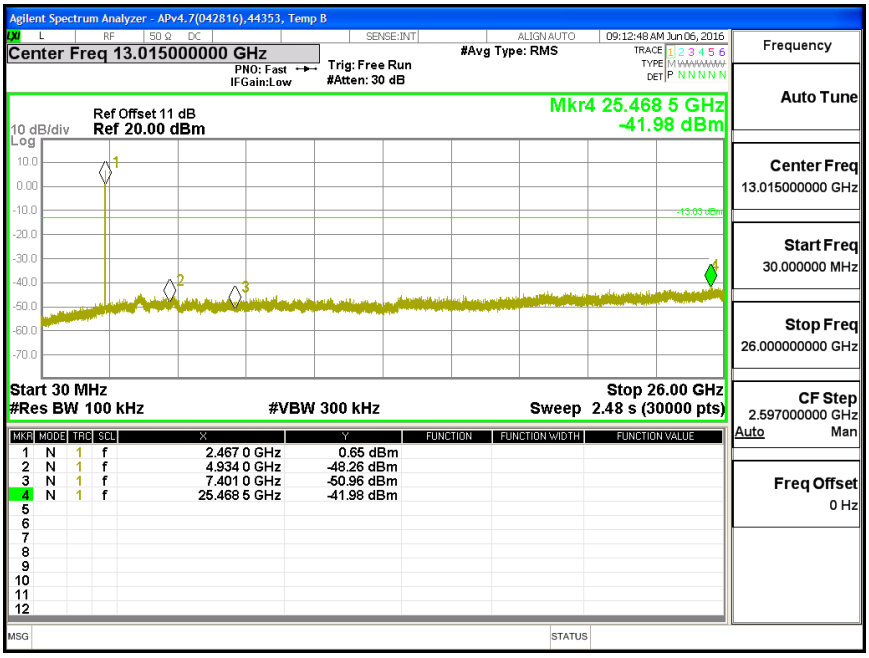
OUT OF BAND HIGH CH 10



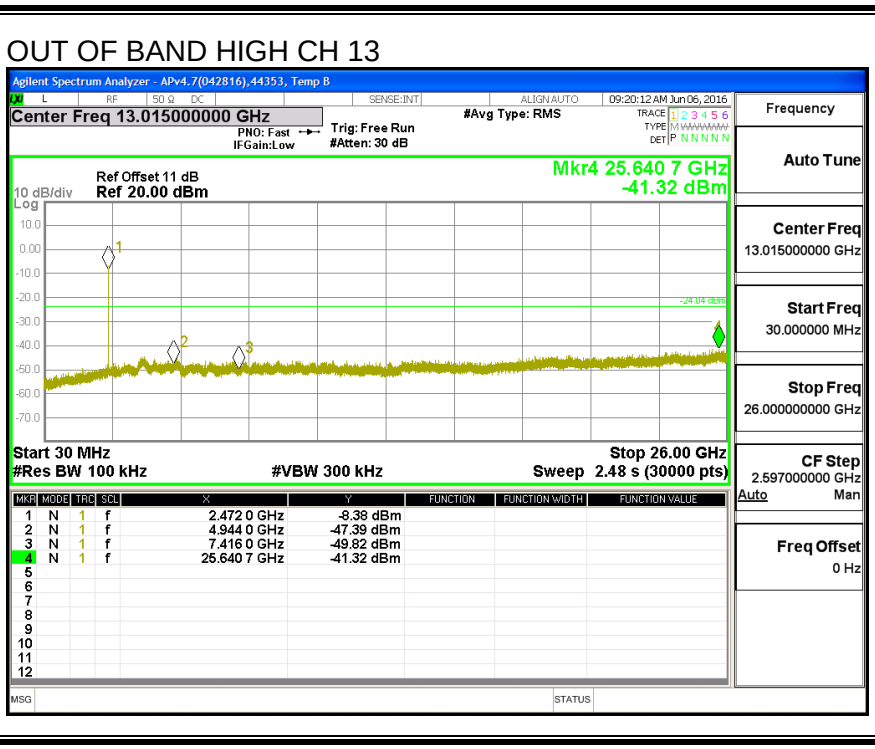
OUT OF BAND HIGH CH 11



OUT OF BAND HIGH CH 12

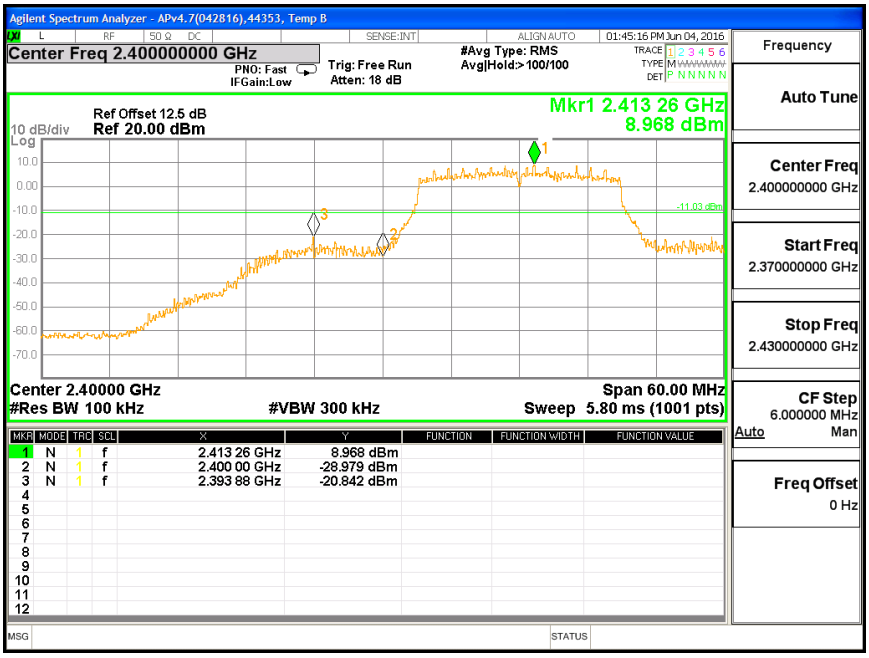


OUT OF BAND HIGH CH 13

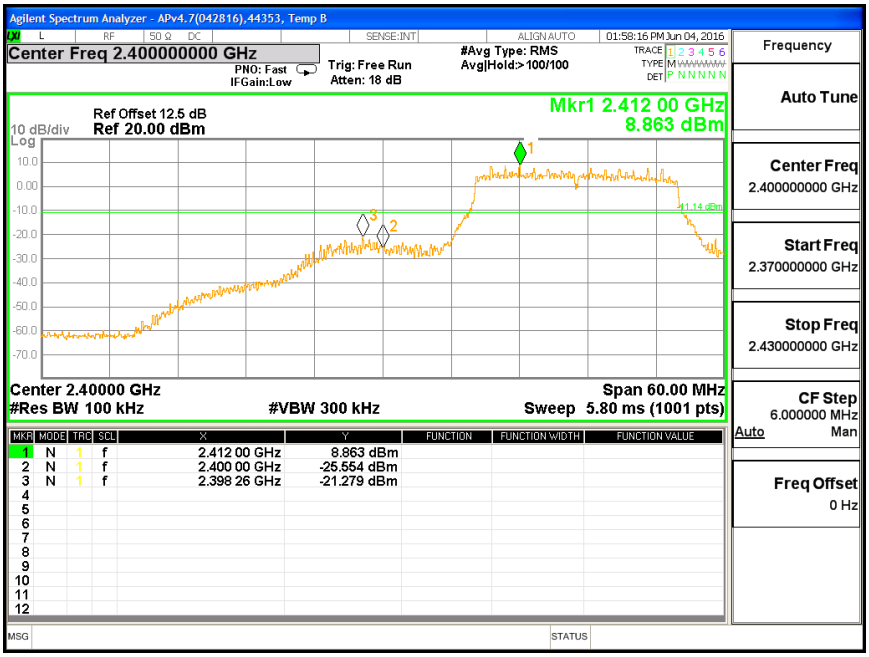


LOW CHANNEL BANDEDGE, Chain 1

AUTHORIZED BAND EDGE LOW CH 1

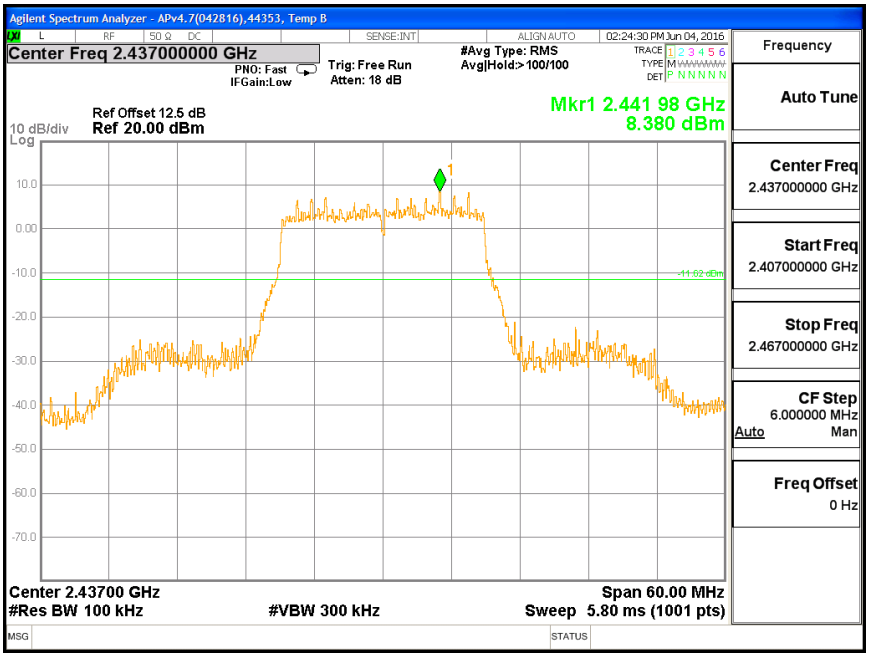


AUTHORIZED BAND EDGE LOW CH 2



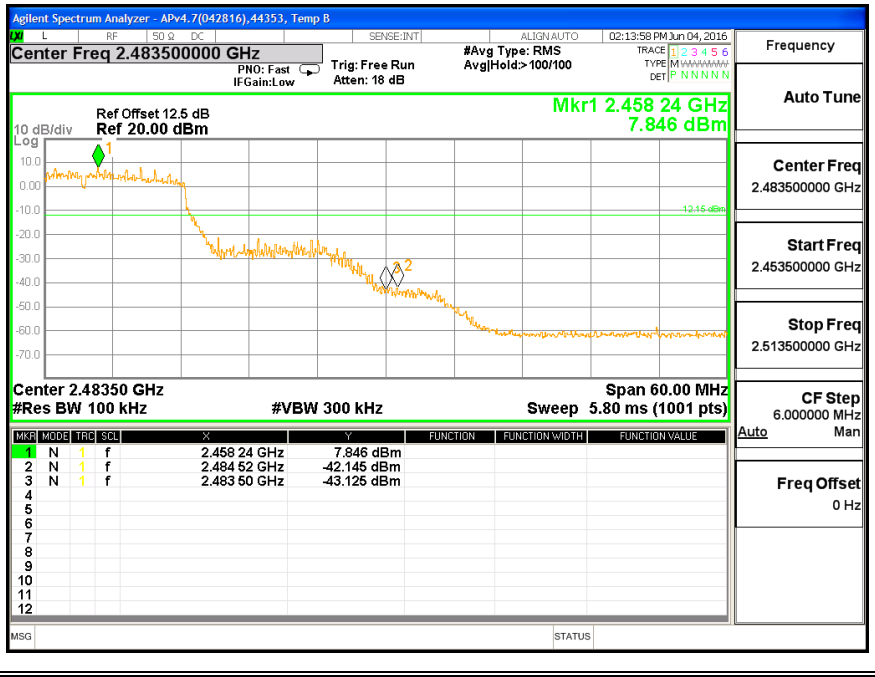
MID CHANNEL REFERENCE, Chain 1

REFERENCE MID CH

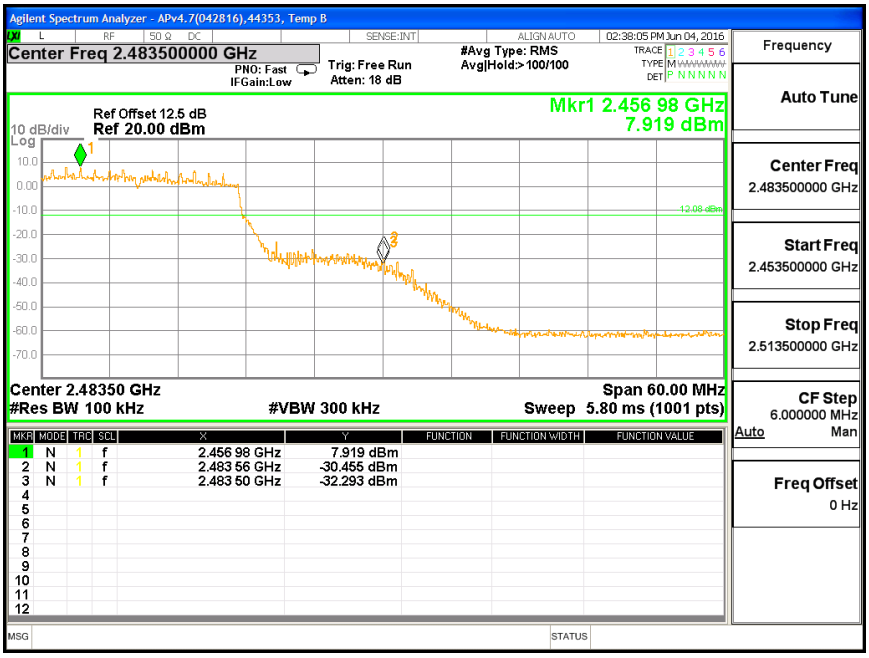


HIGH CHANNEL BANDEDGE, Chain 1

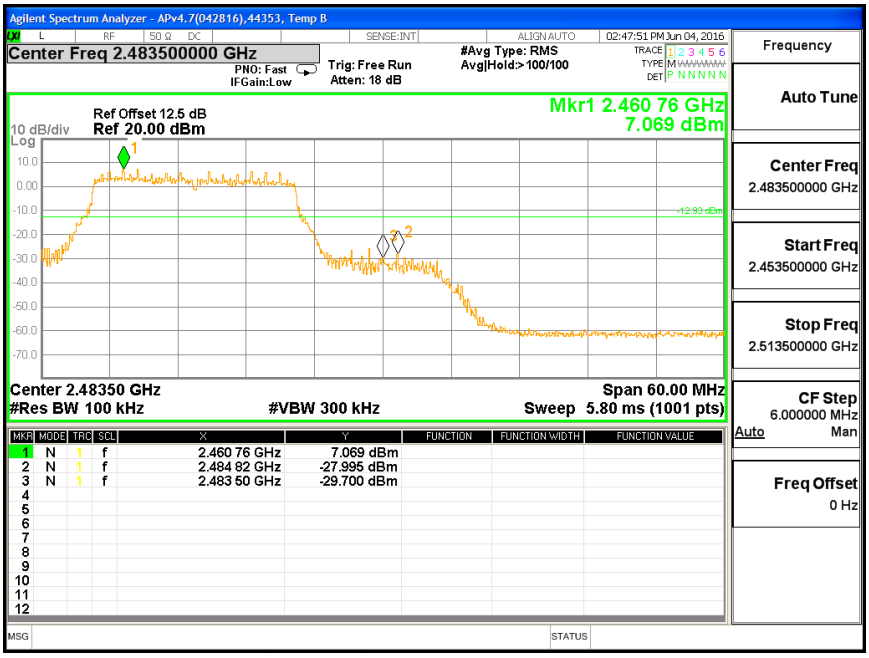
AUTHORIZED BAND EDGE HIGH CH 10



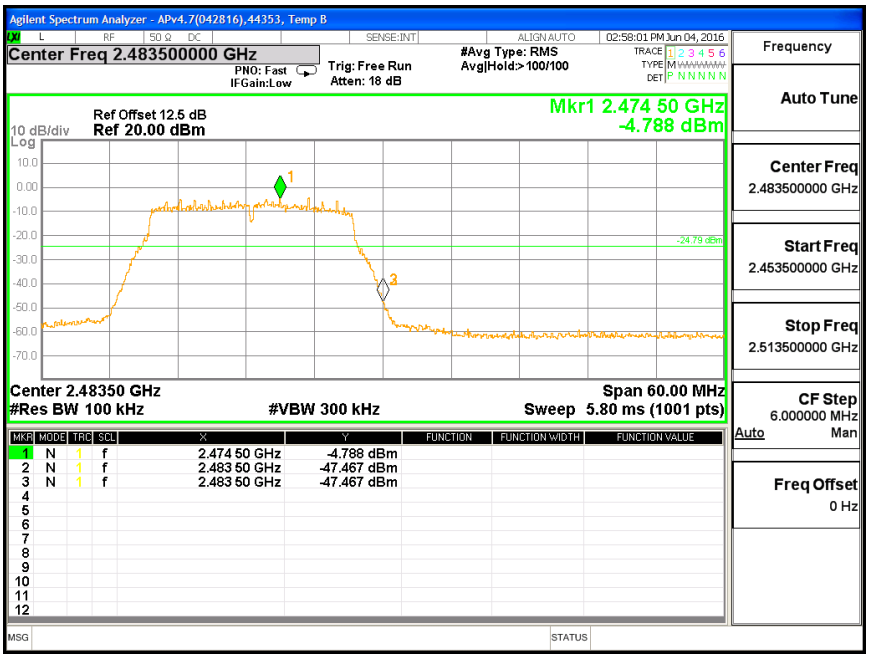
AUTHORIZED BAND EDGE HIGH CH 11



AUTHORIZED BAND EDGE HIGH CH 12

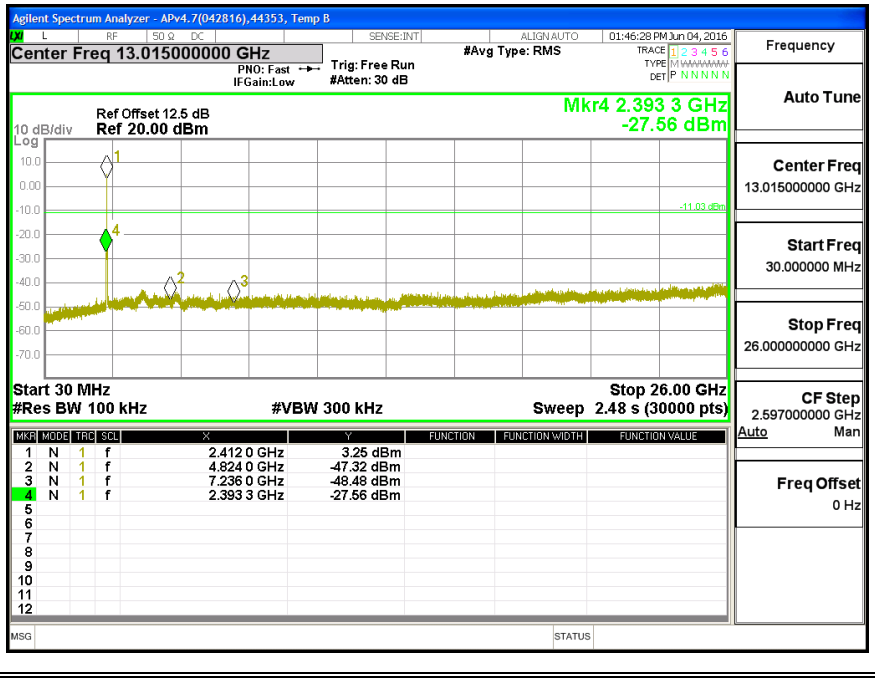


AUTHORIZED BAND EDGE HIGH CH 13

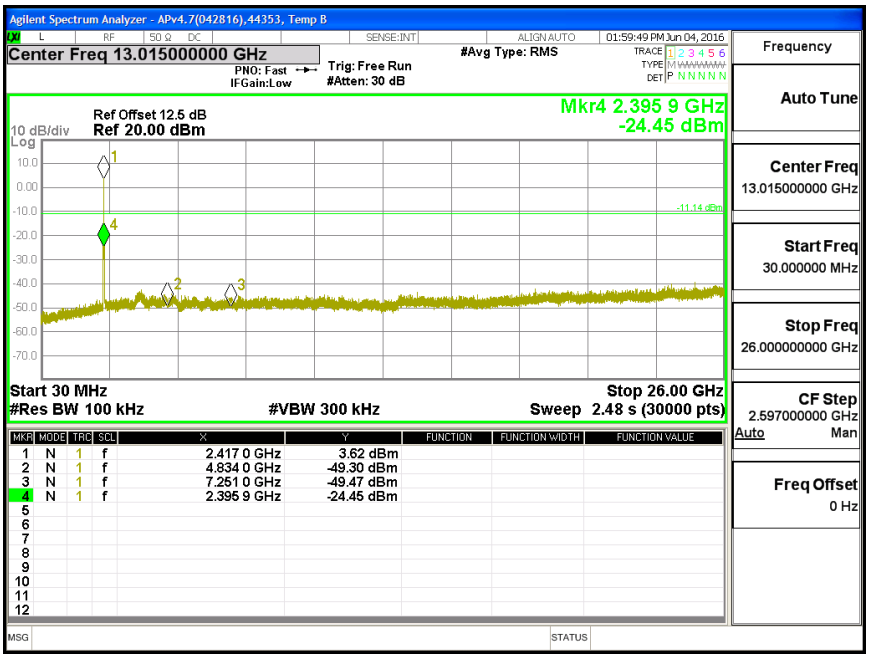


OUT-OF-BAND EMISSIONS, Chain 1

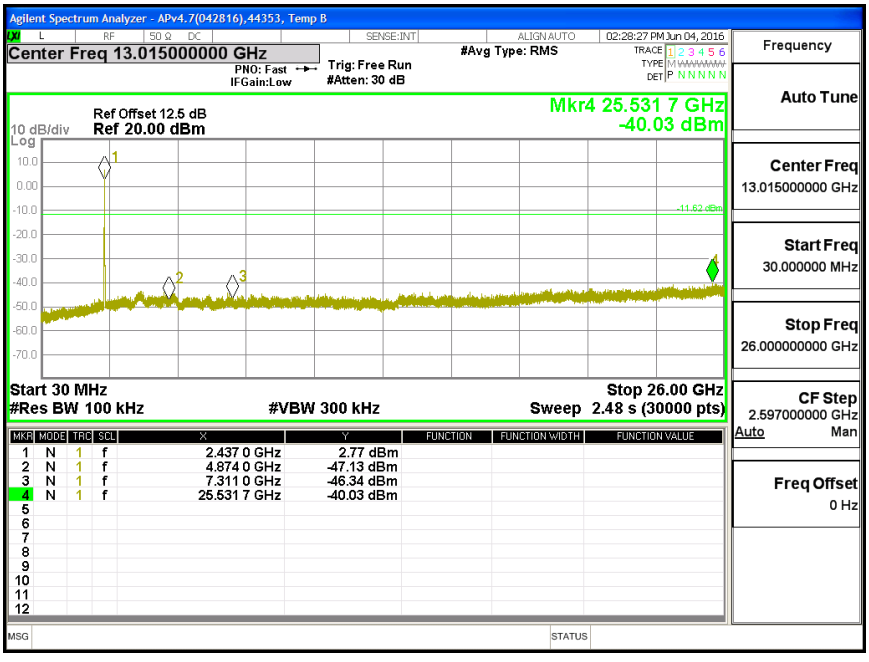
OUT OF BAND LOW CH 1



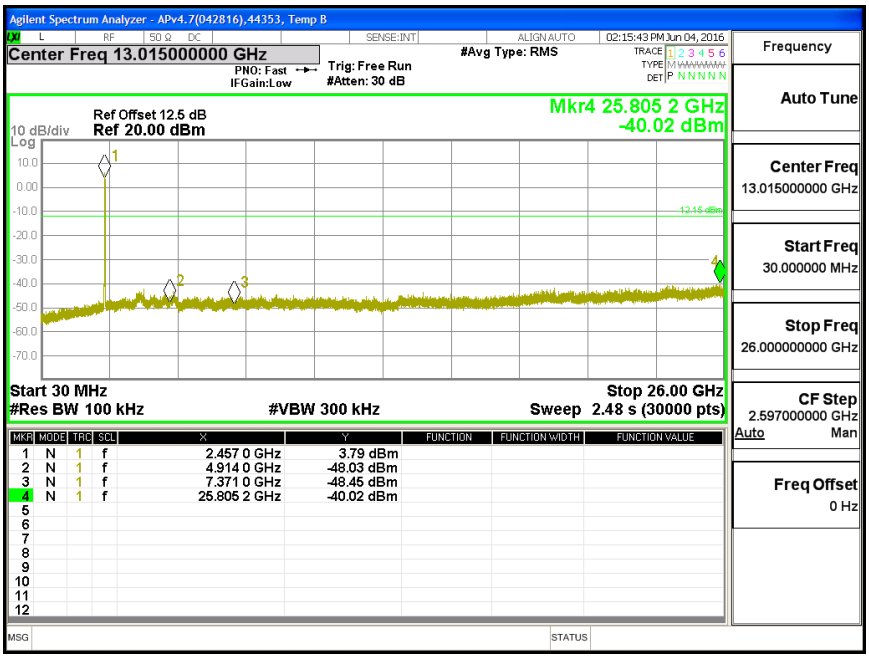
OUT OF BAND LOW CH 2



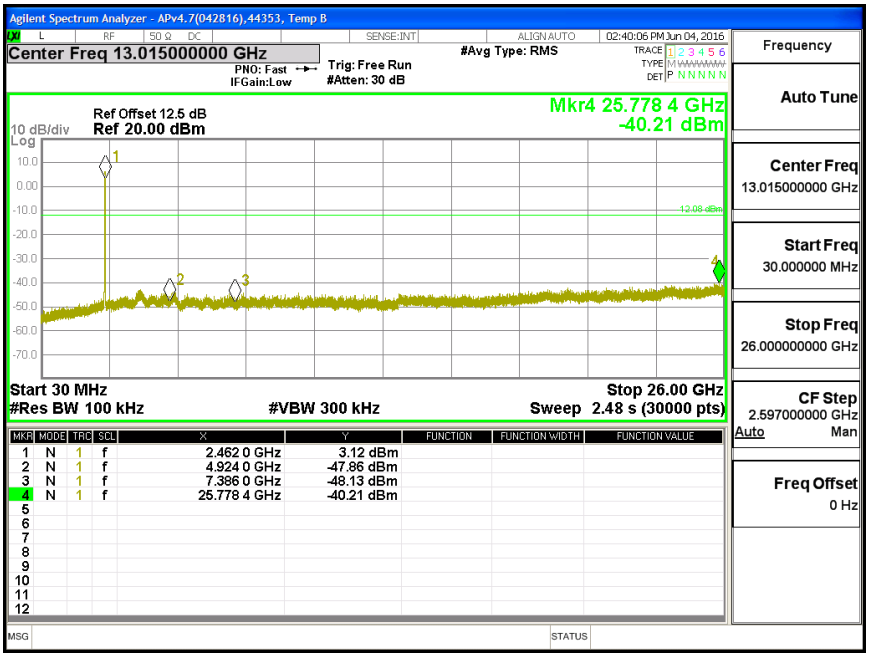
OUT OF BAND MID CH



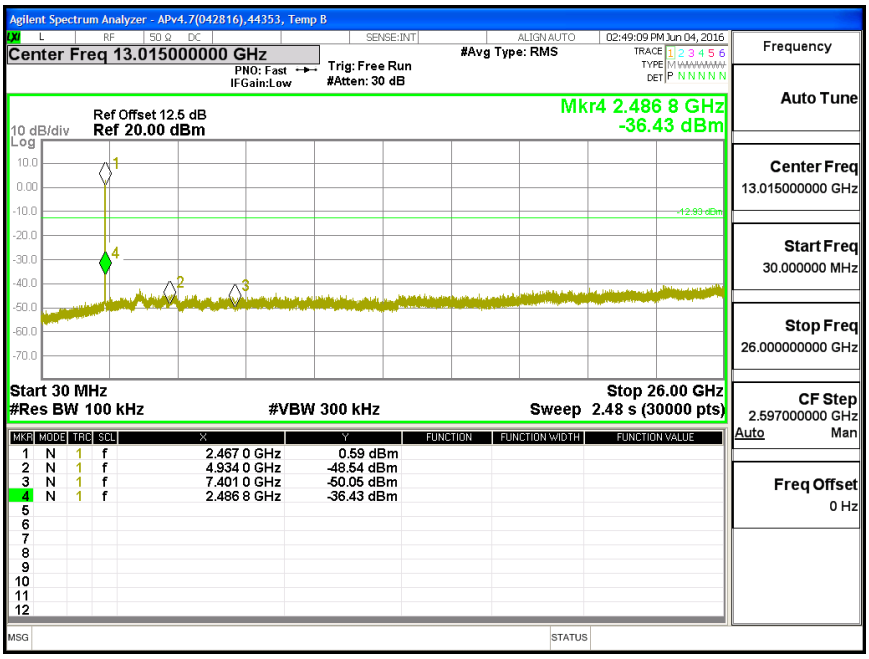
OUT OF BAND HIGH CH 10



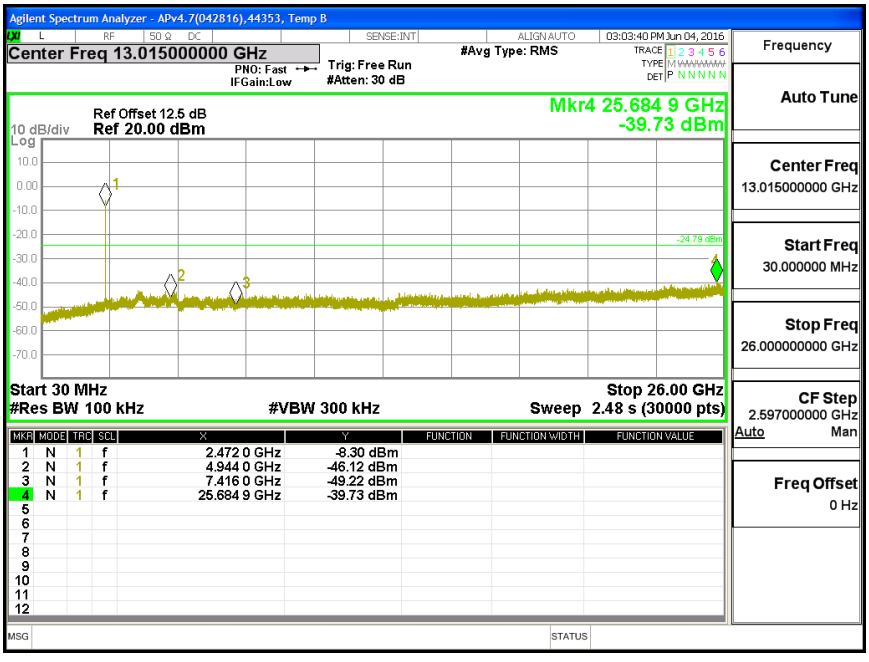
OUT OF BAND HIGH CH 11



OUT OF BAND HIGH CH 12



OUT OF BAND HIGH CH 13



9. RADIATED TEST RESULTS

9.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN, Section 8.9 and 8.10.

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 for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

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 pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

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

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

For 2.4 GHz band, the spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

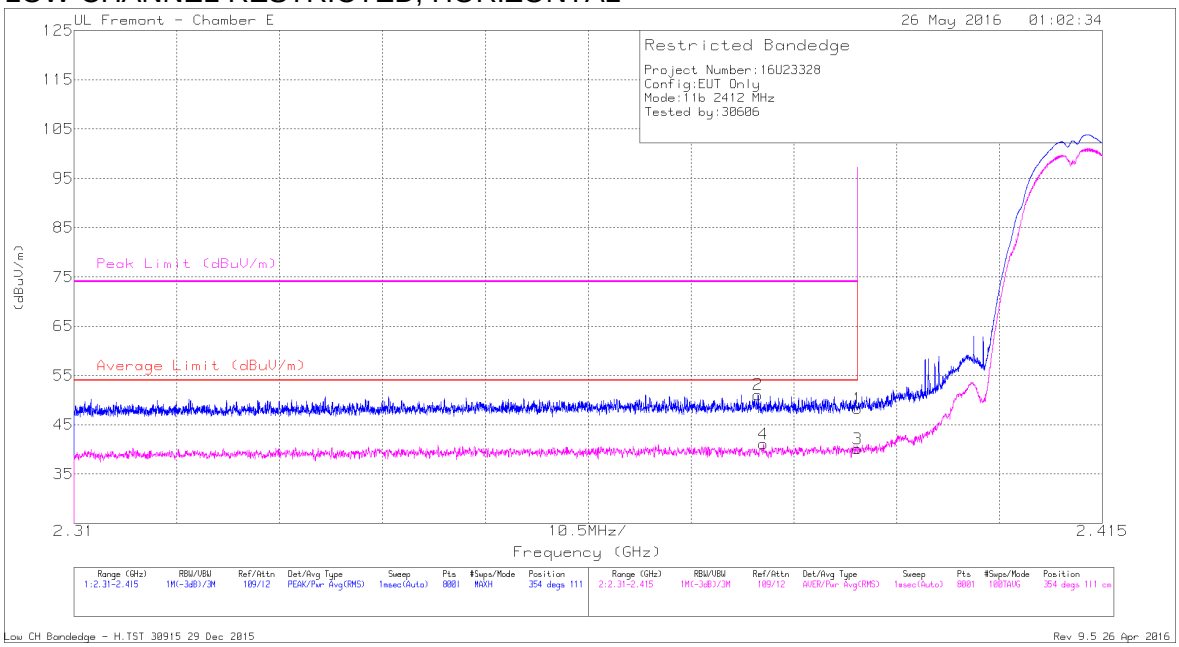
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

9.2. TRANSMITTER ABOVE 1 GHz

9.2.1. 802.11b 1Tx MODE IN THE 2.4 GHz BAND CHAIN 0

RESTRICTED BANDEDGE (LOW CHANNEL, 1)

LOW CHANNEL RESTRICTED, HORIZONTAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	36.05	Pk	32.1	-19.9	48.25	-	-	74	-25.75	354	111	H
2	* 2.38	39	Pk	32	-19.9	51.1	-	-	74	-22.9	354	111	H
3	* 2.39	27.94	RMS	32.1	-19.9	40.14	54	-13.86	-	-	354	111	H
4	* 2.38	28.97	RMS	32	-19.9	41.07	54	-12.93	-	-	354	111	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

LOW CHANNEL RESTRICTED, VERTICAL

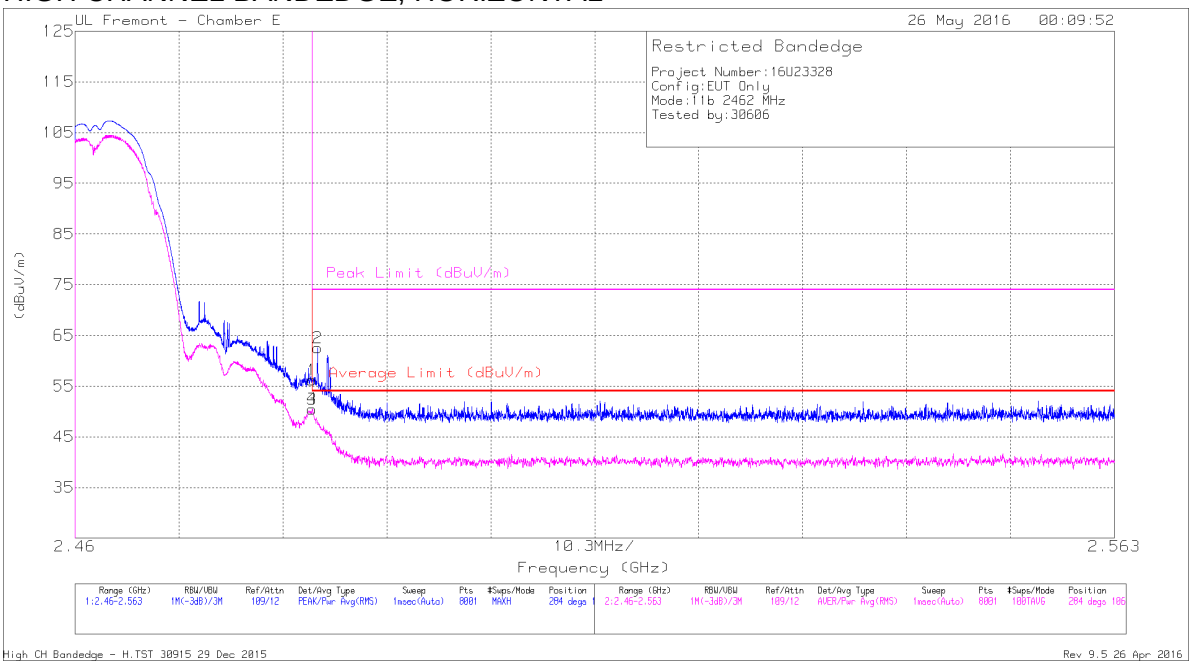
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.367	29.12	RMS	31.9	-20	41.02	54	-12.98	-	-	342	227	V
2	* 2.378	39.43	Pk	32	-20	51.43	-	-	74	-22.57	342	227	V
1	* 2.39	37.11	Pk	32.1	-19.9	49.31	-	-	74	-24.69	342	227	V
3	* 2.39	26.91	RMS	32.1	-19.9	39.11	54	-14.89	-	-	342	227	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL, 11)

HIGH CHANNEL BANDEDGE, HORIZONTAL

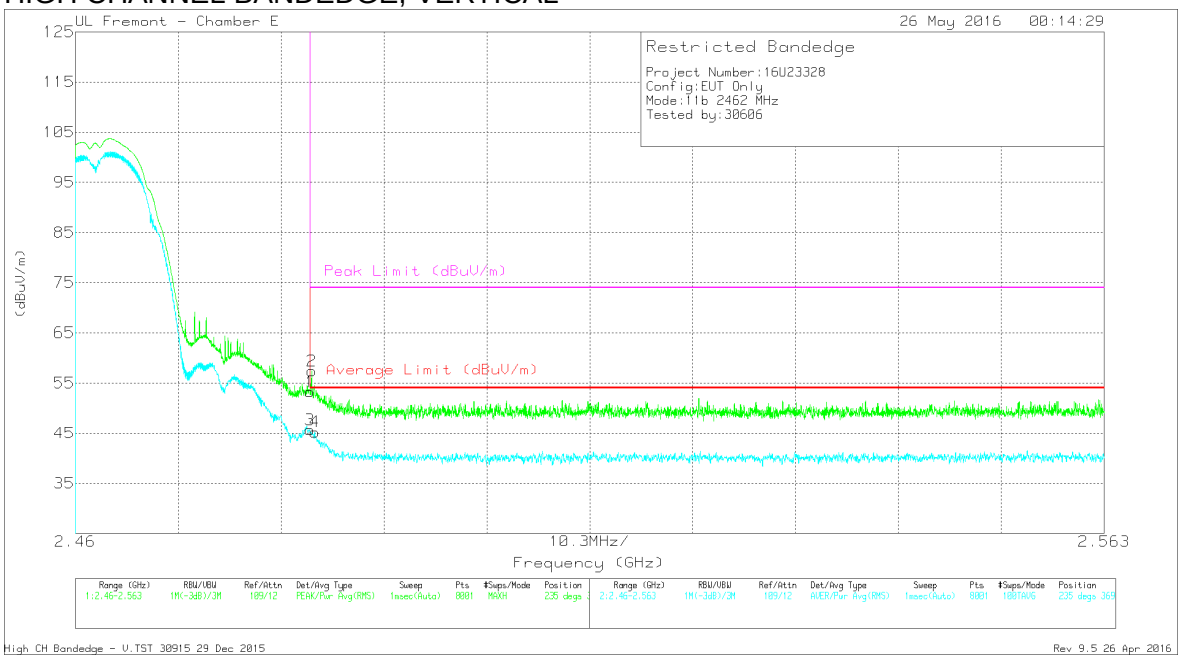


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	43.88	Pk	32.3	-20	56.18	-	-	74	-17.82	284	106	H
2	* 2.484	50.24	Pk	32.3	-20	62.54	-	-	74	-11.46	284	106	H
3	* 2.484	38.16	RMS	32.3	-20	50.46	54	-3.54	-	-	284	106	H
4	* 2.484	38.19	RMS	32.3	-20	50.49	54	-3.51	-	-	284	106	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



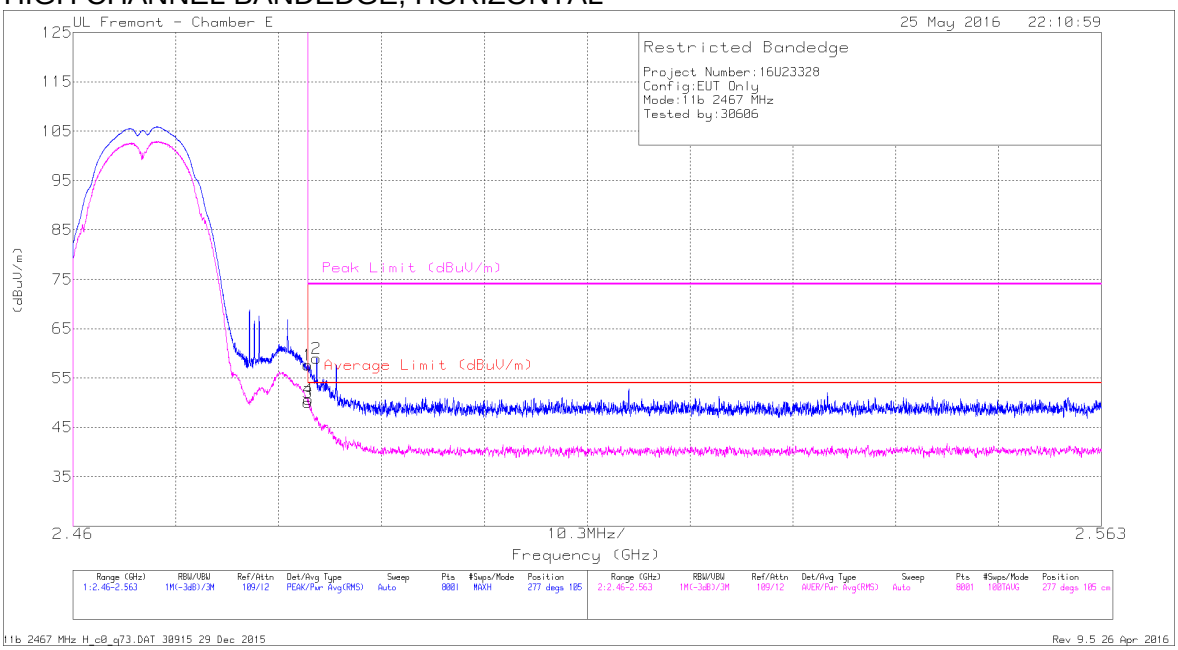
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.95	Pk	32.3	-20	53.25	-	-	74	-20.75	235	369	V
2	* 2.484	45.12	Pk	32.3	-20	57.42	-	-	74	-16.58	235	369	V
3	* 2.484	33.38	RMS	32.3	-20	45.68	54	-8.32	-	-	235	369	V
4	* 2.484	32.95	RMS	32.3	-20	45.25	54	-8.75	-	-	235	369	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL, 12)

HIGH CHANNEL BANDEDGE, HORIZONTAL

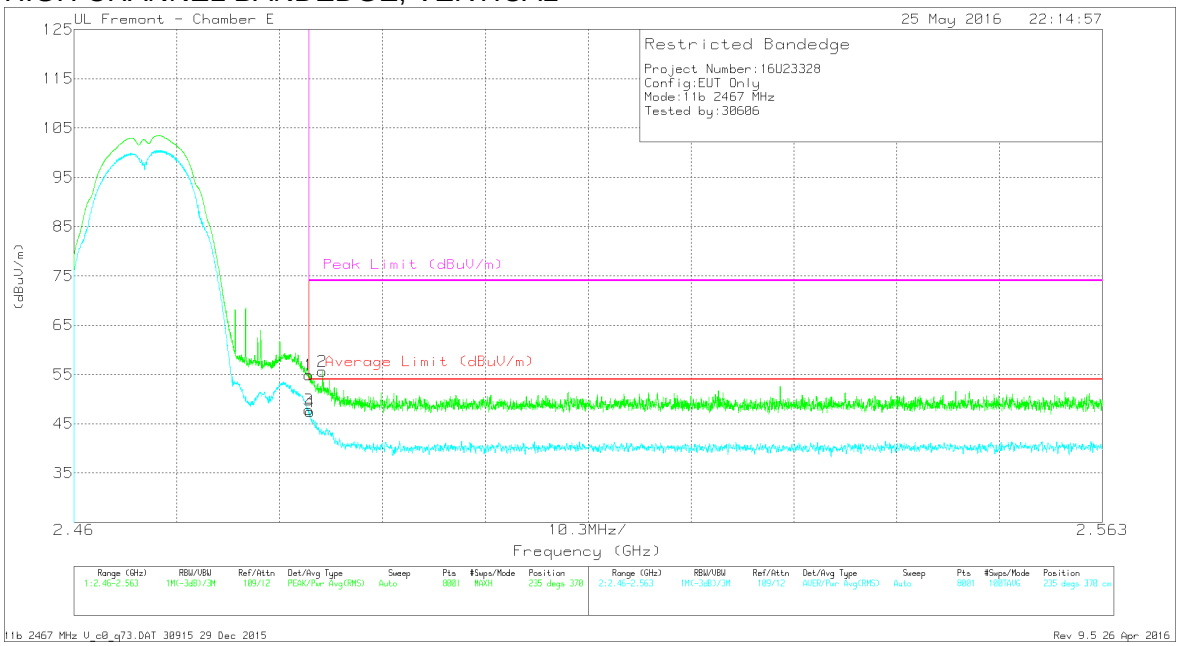


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	45.29	Pk	32.3	-20	57.59	-	-	74	-16.41	277	105	H
2	* 2.484	46.73	Pk	32.3	-20	59.03	-	-	74	-14.97	277	105	H
3	* 2.484	37.69	RMS	32.3	-20	49.99	54	-4.01	-	-	277	105	H
4	* 2.484	38.38	RMS	32.3	-20	50.68	54	-3.32	-	-	277	105	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



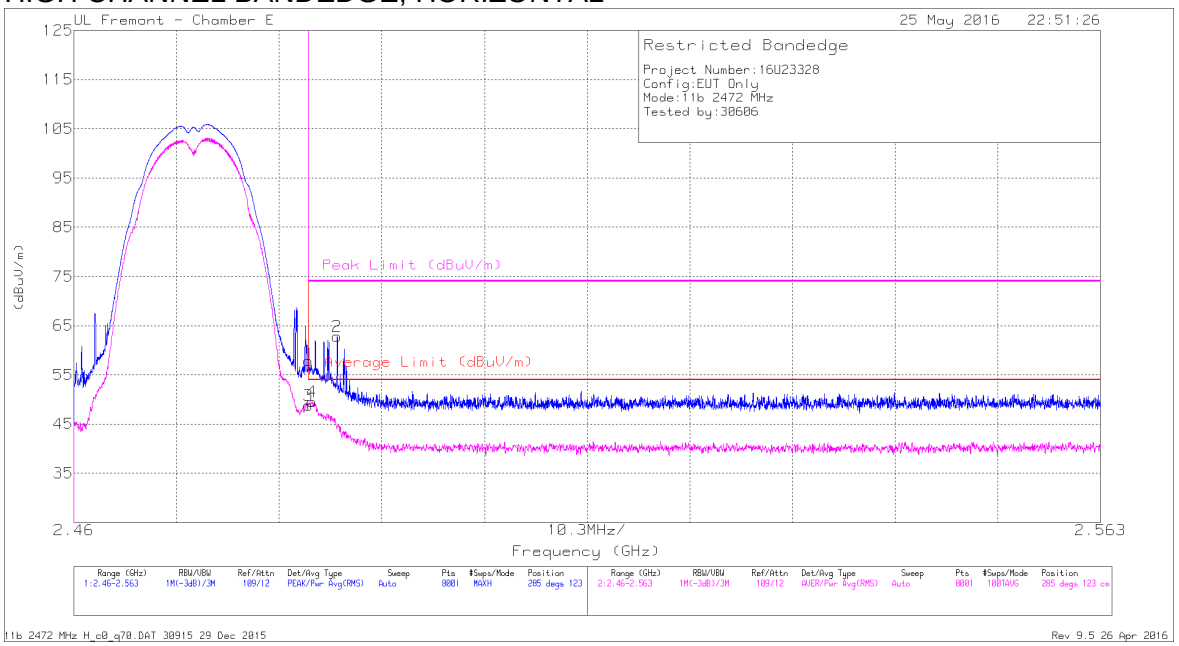
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	42.58	Pk	32.3	-20	54.88	-	-	74	-19.12	235	370	V
2	* 2.485	43.44	Pk	32.3	-20.1	55.64	-	-	74	-18.36	235	370	V
3	* 2.484	35.55	RMS	32.3	-20	47.85	54	-6.15	-	-	235	370	V
4	* 2.484	35.13	RMS	32.3	-20	47.43	54	-6.57	-	-	235	370	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

AUTHORIZED BANDEDGE (HIGH CHANNEL, 13)

HIGH CHANNEL BANDEDGE, HORIZONTAL

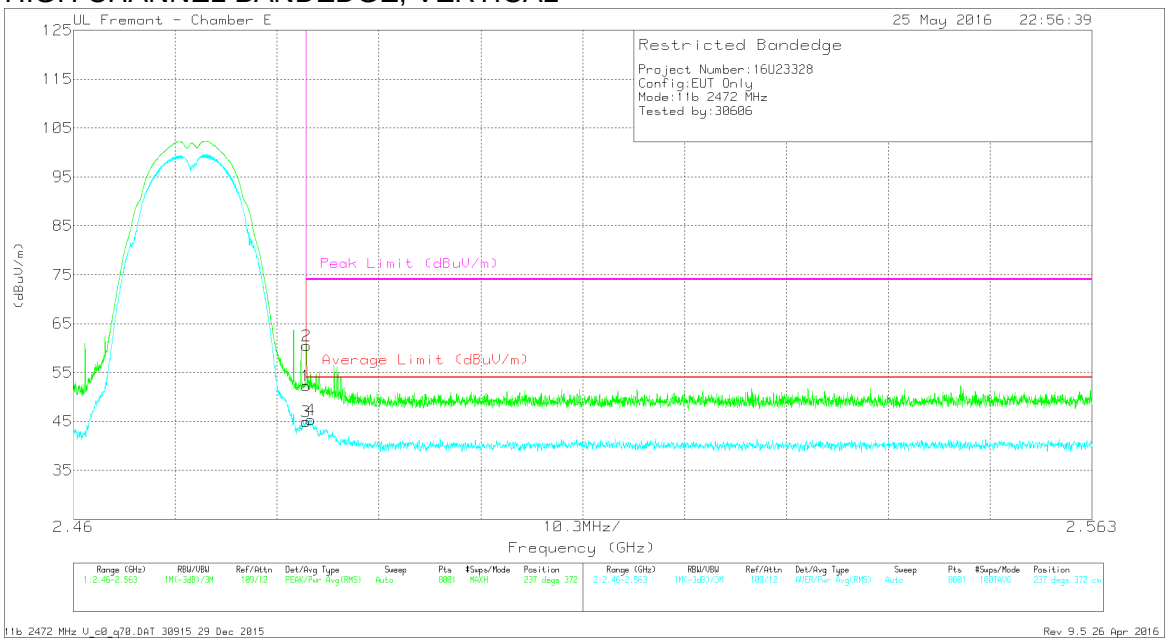


DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	45.52	Pk	32.3	-20	57.82	-	-	74	-16.18	285	123	H
2	* 2.486	50.66	Pk	32.3	-20.1	62.86	-	-	74	-11.14	285	123	H
3	* 2.484	36.55	RMS	32.3	-20	48.85	54	-5.15	-	-	285	123	H
4	* 2.484	37.23	RMS	32.3	-20	49.53	54	-4.47	-	-	285	123	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HIGH CHANNEL BANDEDGE, VERTICAL



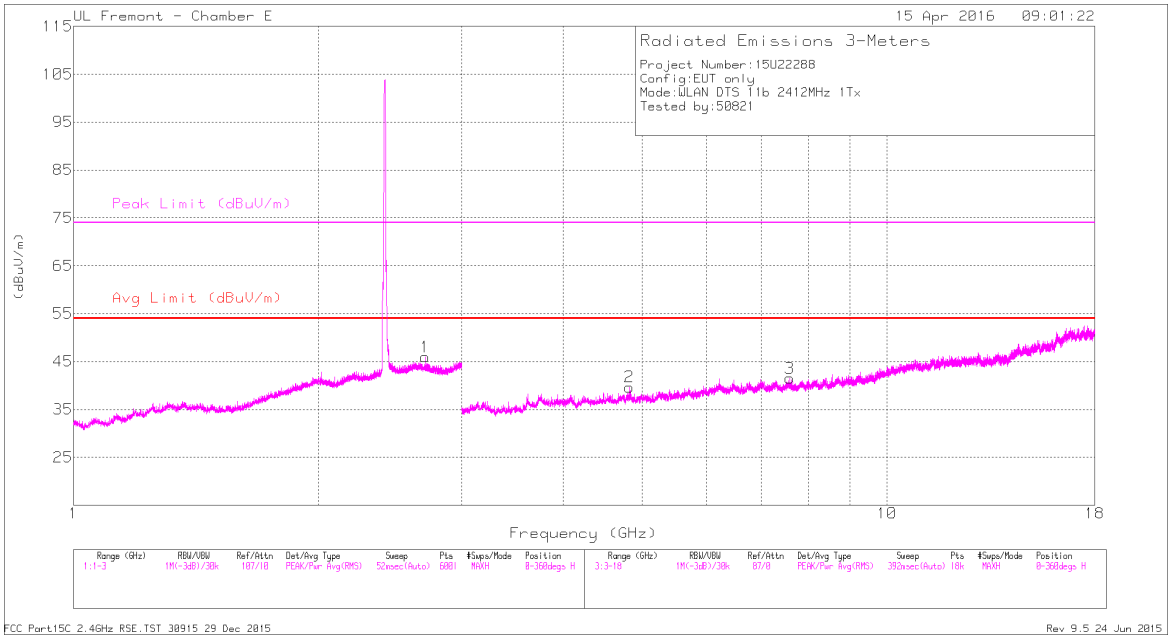
DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.02	Pk	32.3	-20	52.32	-	-	74	-21.68	237	372	V
2	* 2.484	48.16	Pk	32.3	-20	60.46	-	-	74	-13.54	237	372	V
3	* 2.484	32.66	RMS	32.3	-20	44.96	54	-9.04	-	-	237	372	V
4	* 2.484	33.08	RMS	32.3	-20	45.38	54	-8.62	-	-	237	372	V

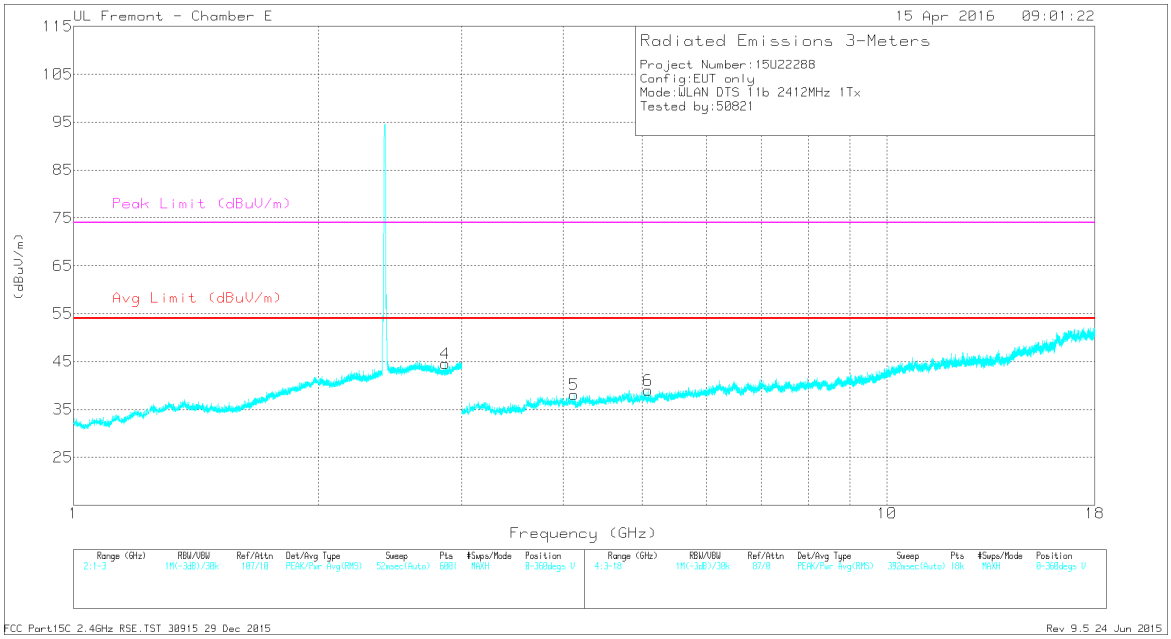
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band
Pk - Peak detector
RMS - RMS detection

HARMONICS AND SPURIOUS EMISSIONS LOW CHANNEL, 1

LOW CHANNEL HORIZONTAL



LOW CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.705	38.73	PK2	32.6	-19.6	51.73	-	-	74	-22.27	316	382	H
	* 2.708	26.22	MAv1	32.6	-19.6	39.22	54	-14.78	-	-	316	382	H
4	* 2.865	38.26	PK2	32.1	-19.6	50.76	-	-	74	-23.24	158	298	V
	* 2.863	25.92	MAv1	32.1	-19.7	38.32	54	-15.68	-	-	158	298	V
2	* 4.824	42.13	PK2	34	-30.1	46.03	-	-	74	-27.97	115	148	H
	* 4.824	33.02	MAv1	34	-30.1	36.92	54	-17.08	-	-	115	148	H
3	* 7.588	38.62	PK2	35.7	-26	48.32	-	-	74	-25.68	103	164	H
	* 7.589	26.16	MAv1	35.7	-26	35.86	54	-18.14	-	-	103	164	H
5	* 4.122	40.87	PK2	33.4	-30.8	43.47	-	-	74	-30.53	68	191	V
	* 4.123	29.44	MAv1	33.4	-30.8	32.04	54	-21.96	-	-	68	191	V
6	* 5.083	40.49	PK2	34	-29.7	44.79	-	-	74	-29.21	14	375	V
	* 5.081	28.97	MAv1	34	-29.7	33.27	54	-20.73	-	-	14	375	V

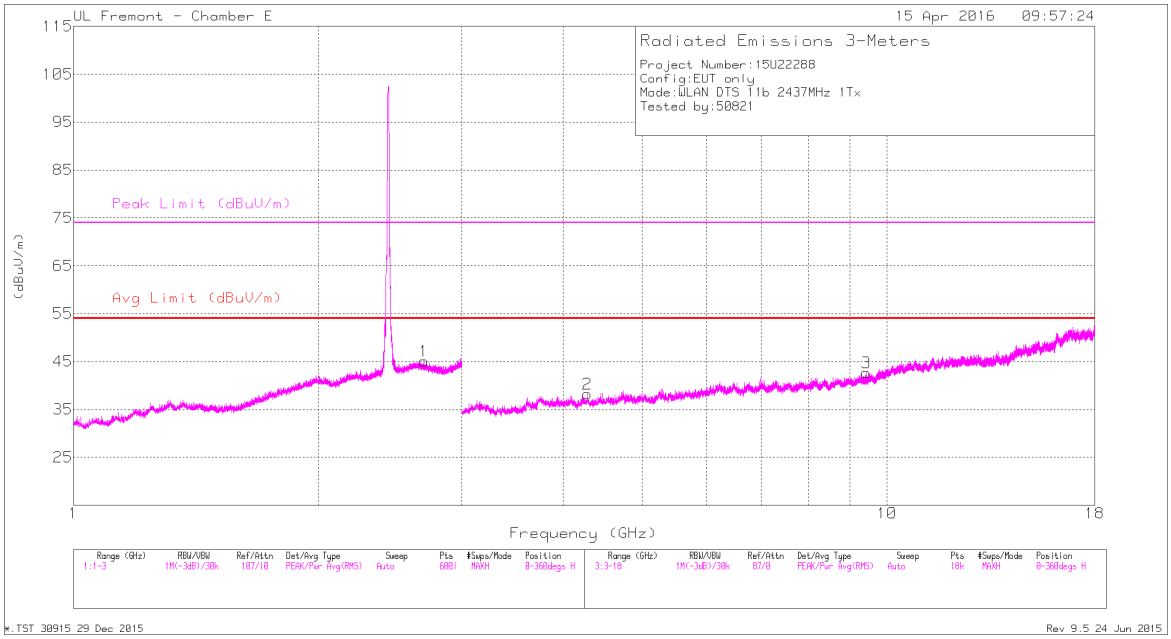
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

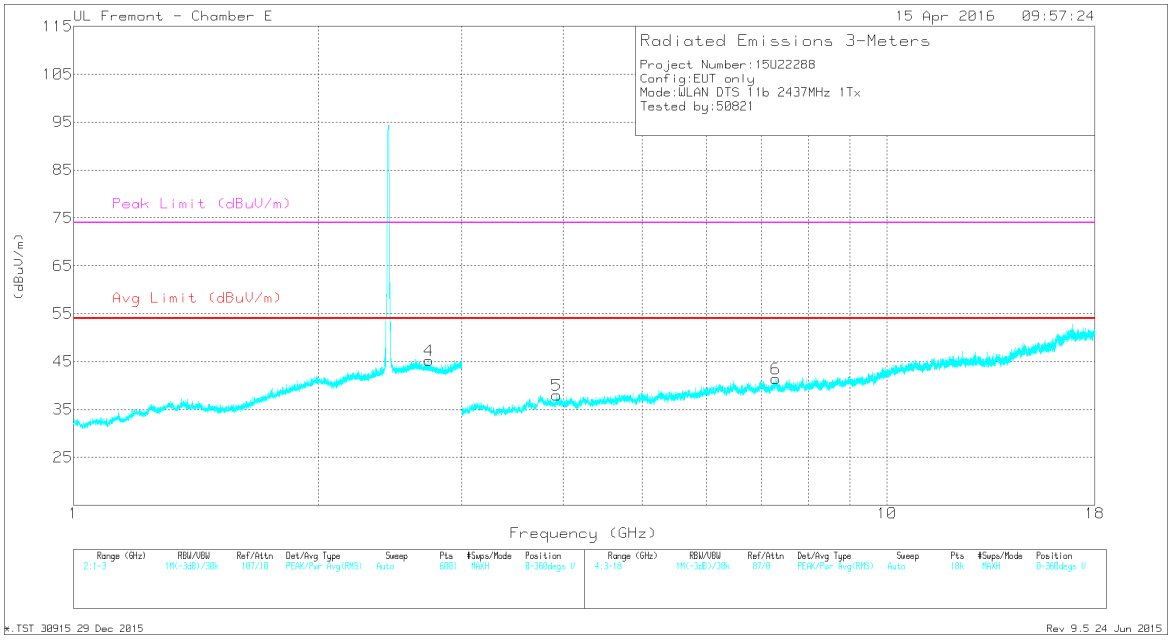
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS MID CHANNEL, 6

MID CHANNEL HORIZONTAL



MID CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.697	38.66	PK2	32.6	-19.7	51.56	-	-	74	-22.44	104	106	H
	* 2.698	26.24	MAv1	32.6	-19.7	39.14	54	-14.86	-	-	104	106	H
4	* 2.733	38.92	PK2	32.5	-19.8	51.62	-	-	74	-22.38	108	237	V
	* 2.732	26.26	MAv1	32.5	-19.8	38.96	54	-15.04	-	-	108	237	V
2	* 4.285	42.15	PK2	33.3	-29.5	45.95	-	-	74	-28.05	89	101	H
	* 4.284	29.6	MAv1	33.3	-29.5	33.4	54	-20.6	-	-	89	101	H
3	* 9.42	38.29	PK2	36.3	-25.4	49.19	-	-	74	-24.81	329	350	H
	* 9.419	26.15	MAv1	36.3	-25.5	36.95	54	-17.05	-	-	329	350	H
5	* 3.927	41.44	PK2	33.3	-29.8	44.94	-	-	74	-29.06	345	173	V
	* 3.925	29.32	MAv1	33.3	-29.8	32.82	54	-21.18	-	-	345	173	V
6	* 7.3	38.42	PK2	35.6	-26.1	47.92	-	-	74	-26.08	337	114	V
	* 7.302	26.95	MAv1	35.6	-26.1	36.45	54	-17.55	-	-	337	114	V

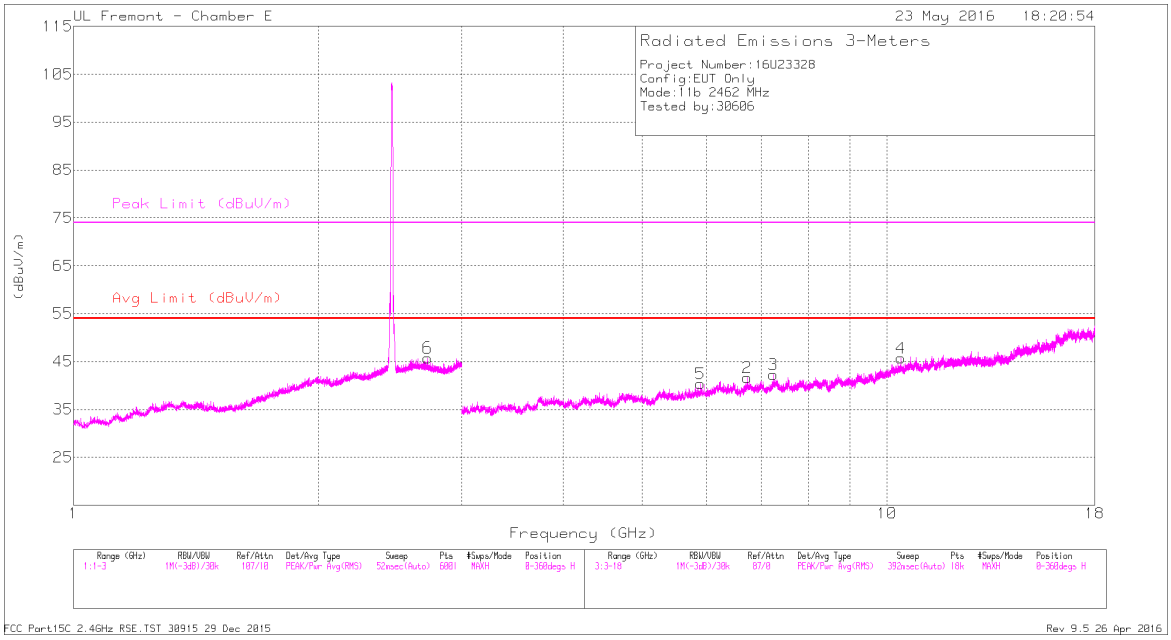
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

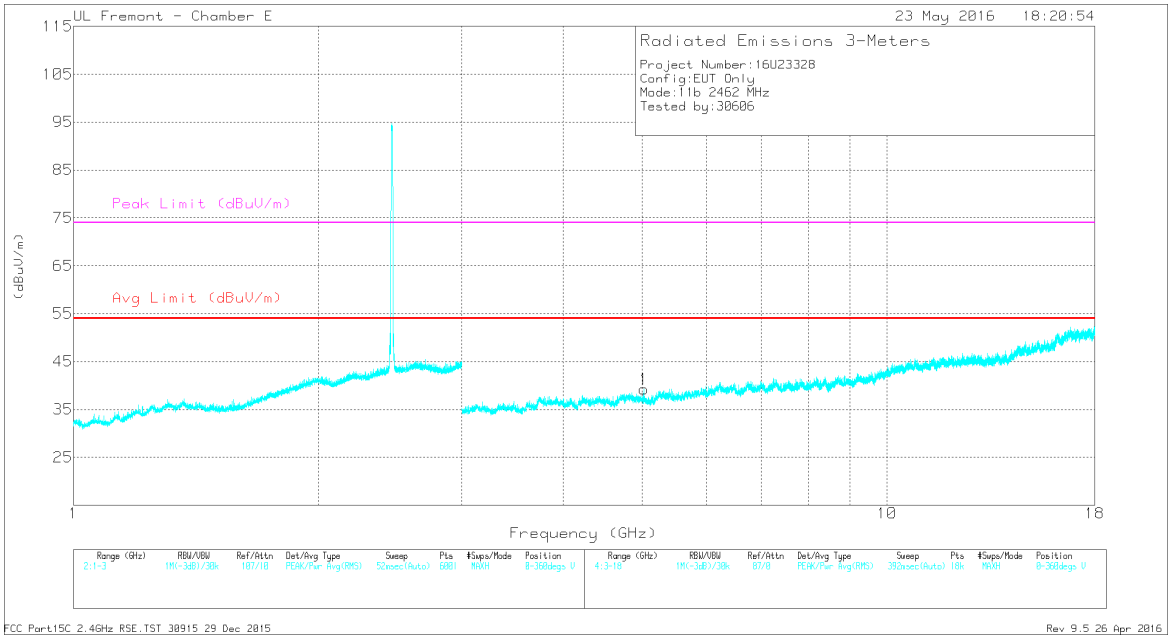
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, 11

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
6	* 2.723	38.2	PK2	32.5	-19.7	51	-	-	74	-23	10	200	H
	* 2.721	26.6	MAv1	32.6	-19.7	39.5	54	-14.5	-	-	10	200	H
1	* 5.026	40.68	PK2	34	-30	44.68	-	-	74	-29.32	277	283	V
	* 5.027	29.95	MAv1	34	-30	33.95	54	-20.05	-	-	277	283	V
5	5.9	39.9	PK2	34.9	-29	45.8	-	-	-	-	84	101	H
2	6.735	38.36	PK2	35.5	-26.7	47.16	-	-	-	-	67	200	H
3	7.248	38.4	PK2	35.6	-27.3	46.7	-	-	-	-	75	101	H
4	10.394	36.43	PK2	37.8	-23.7	50.53	-	-	-	-	94	101	H

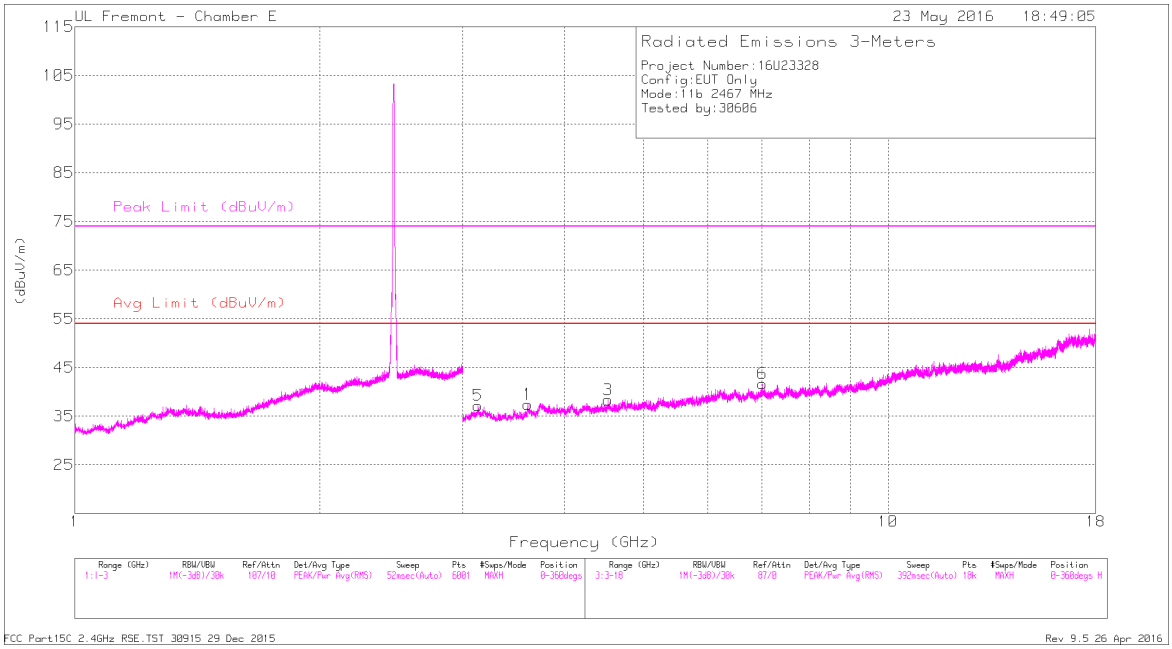
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

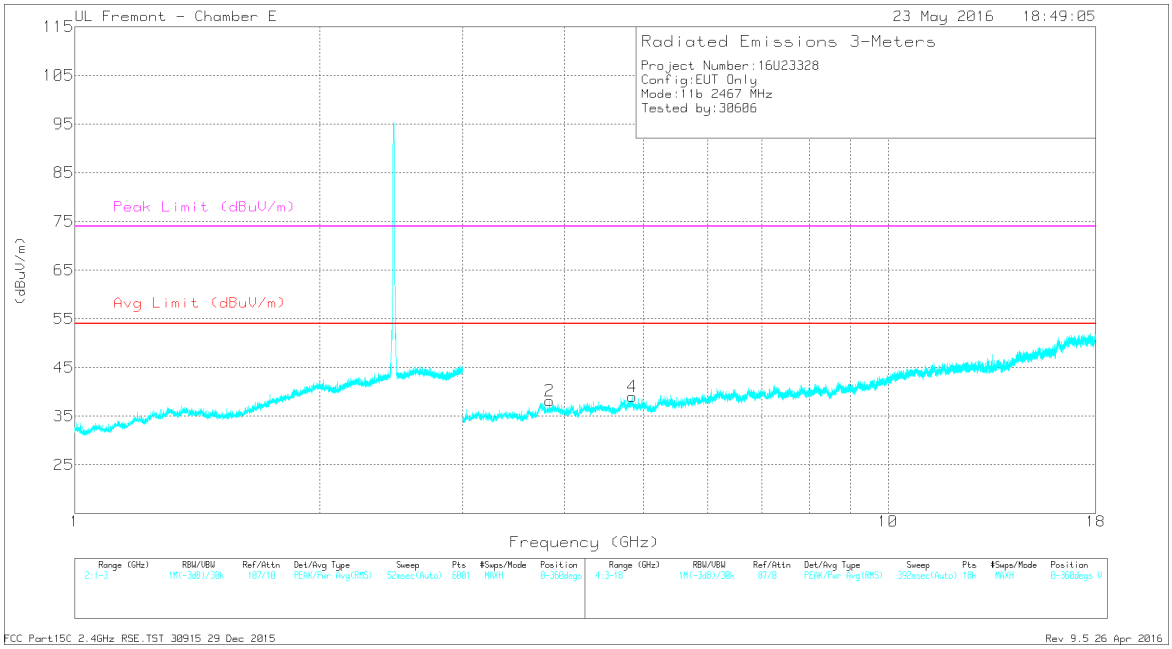
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, 12

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/Flt r/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 3.604	41.58	PK2	33	-30.6	43.98	-	-	74	-30.02	109	100	H
	* 3.606	30.22	MAv1	33	-30.6	32.62	54	-21.38	-	-	109	100	H
3	* 4.527	40.59	PK2	33.7	-29.8	44.49	-	-	74	-29.51	87	100	H
	* 4.526	29.51	MAv1	33.7	-29.8	33.41	54	-20.59	-	-	87	100	H
2	* 3.836	42.55	PK2	33.2	-31.2	44.55	-	-	74	-29.45	185	101	V
	* 3.838	31.08	MAv1	33.2	-31.2	33.08	54	-20.92	-	-	185	101	V
4	* 4.849	40.58	PK2	34	-30.2	44.38	-	-	74	-29.62	280	101	V
	* 4.849	29.72	MAv1	34	-30.2	33.52	54	-20.48	-	-	280	101	V
5	3.131	40.5	PK2	33.1	-29.9	43.7	-	-	-	-	31	200	H
6	7.009	38.34	PK2	35.6	-26.4	47.54	-	-	-	-	58	101	H

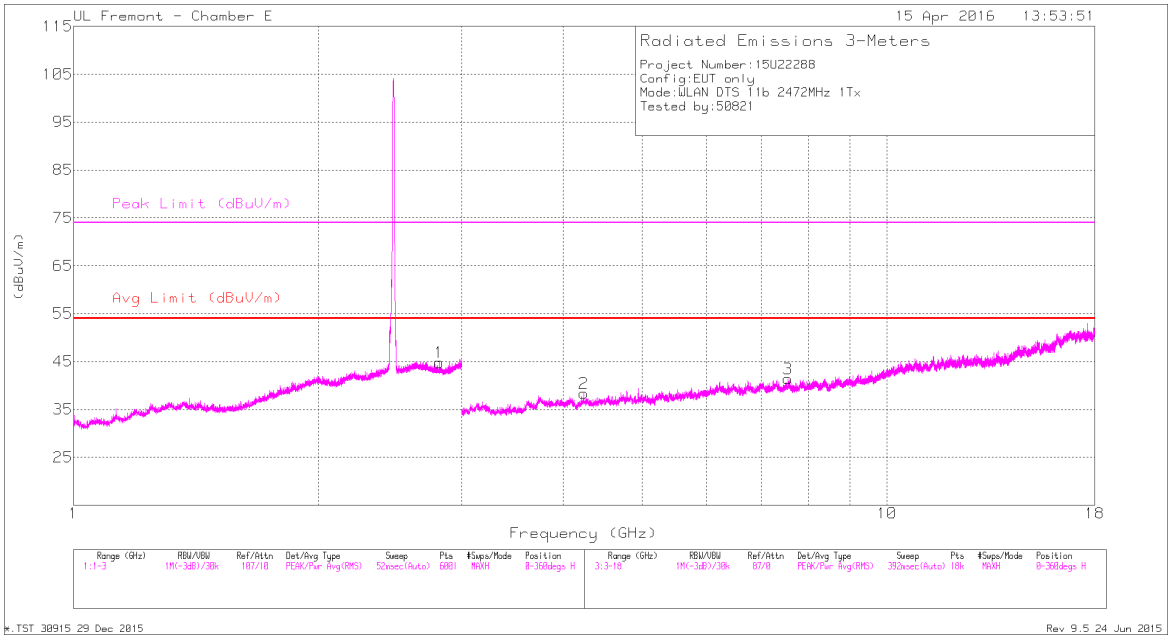
* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

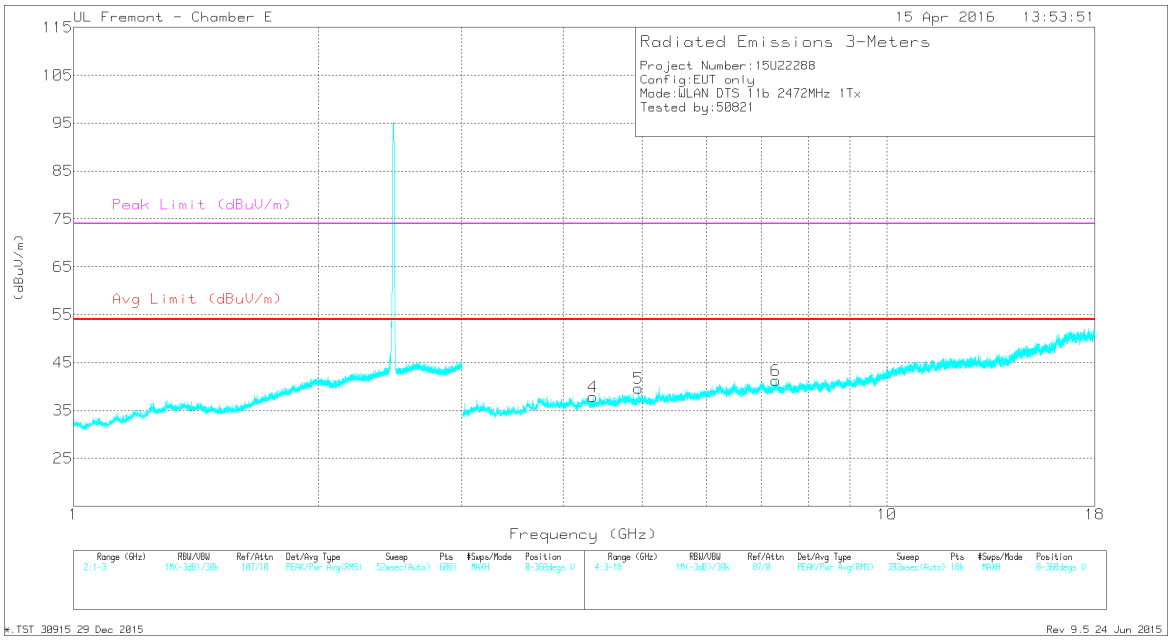
MAv1 - KDB558074 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS HIGH CHANNEL, 13

HIGH CHANNEL HORIZONTAL



HIGH CHANNEL VERTICAL



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T711 (dB/m)	Amp/Cbl/ Fltr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.816	37.91	PK2	32.3	-19.9	50.31	-	-	74	-23.69	319	344	H
	* 2.816	26.06	MAv1	32.3	-19.9	38.46	54	-15.54	-	-	319	344	H
2	* 4.237	41	PK2	33.3	-29	45.3	-	-	74	-28.7	95	306	H
	* 4.239	28.84	MAv1	33.3	-29	33.14	54	-20.86	-	-	95	306	H
3	* 7.55	38.48	PK2	35.6	-26.1	47.98	-	-	74	-26.02	71	150	H
	* 7.546	26.31	MAv1	35.6	-26.2	35.71	54	-18.29	-	-	71	150	H
4	* 4.345	42.37	PK2	33.5	-30.9	44.97	-	-	74	-29.03	60	120	V
	* 4.345	30.45	MAv1	33.5	-30.9	33.05	54	-20.95	-	-	60	120	V
5	* 4.944	43.56	PK2	34	-30.5	47.06	-	-	74	-26.94	7	274	V
	* 4.944	34.98	MAv1	34	-30.5	38.48	54	-15.52	-	-	7	274	V
6	* 7.299	38.54	PK2	35.6	-26.2	47.94	-	-	74	-26.06	17	394	V
	* 7.298	26.76	MAv1	35.6	-26.2	36.16	54	-17.84	-	-	17	394	V

* - indicates frequency in CFR15.205/IC7.2.2 Restricted Band

PK2 - KDB558074 Method: Maximum Peak

MAv1 - KDB558074 Option 1 Maximum RMS Average