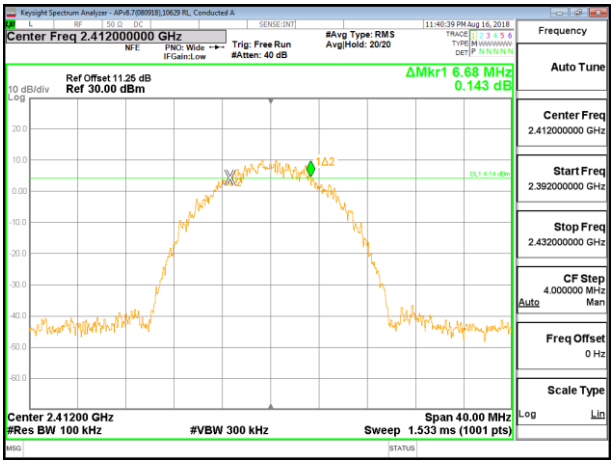
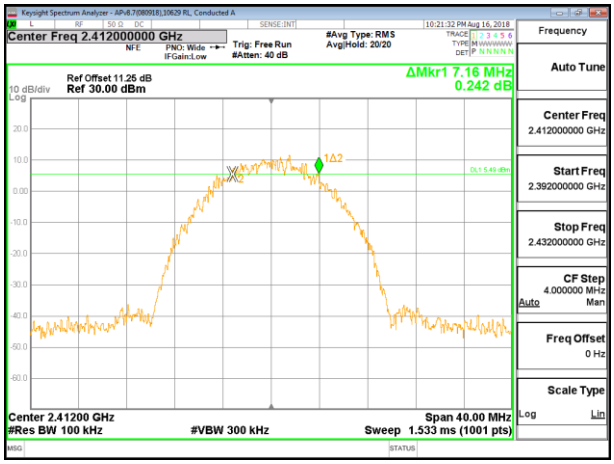
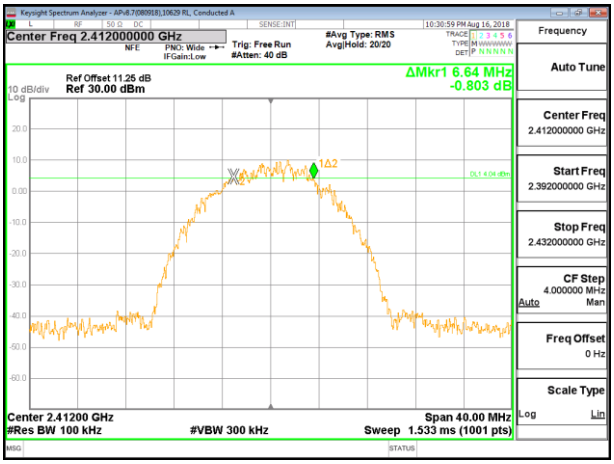
LOW CHANNEL 1



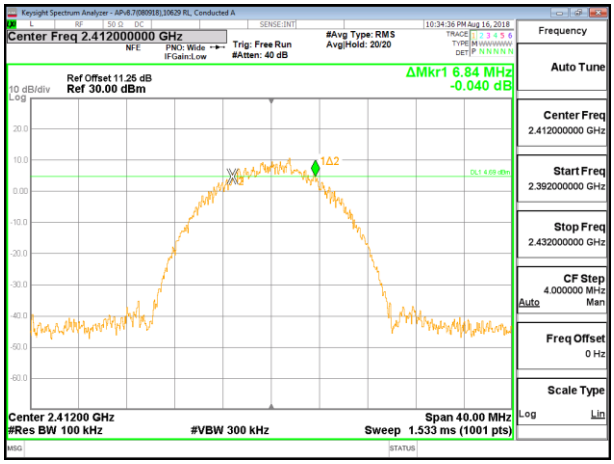
LOW CHANNEL 1 CHAIN 0



LOW CHANNEL 1 CHAIN 1

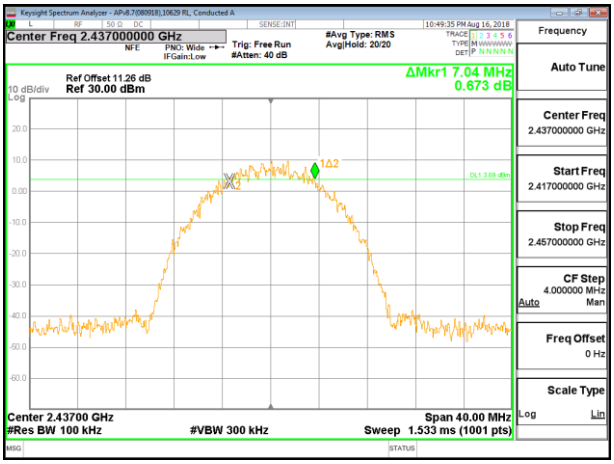


LOW CHANNEL 1 CHAIN 2

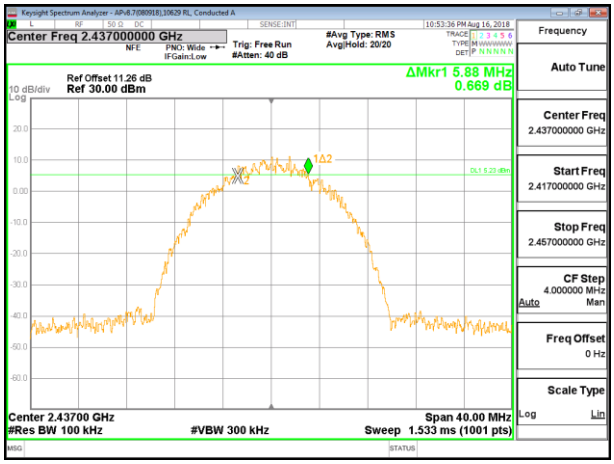


LOW CHANNEL 1 CHAIN 3

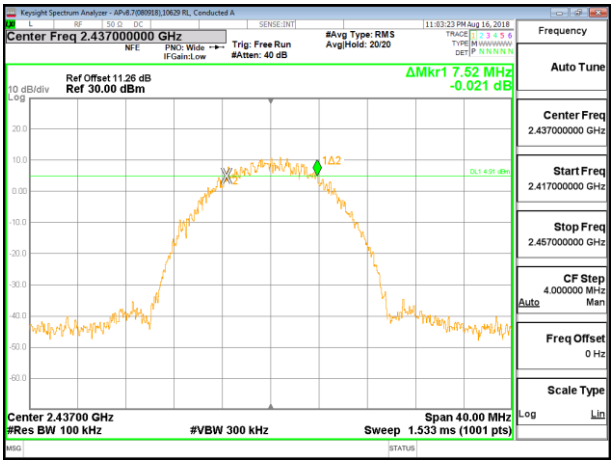
MID CHANNEL 6



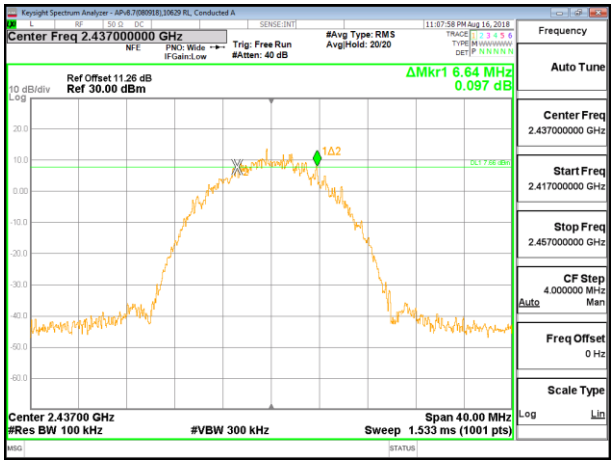
MID CHANNEL 6 CHAIN 0



MID CHANNEL 6 CHAIN 1

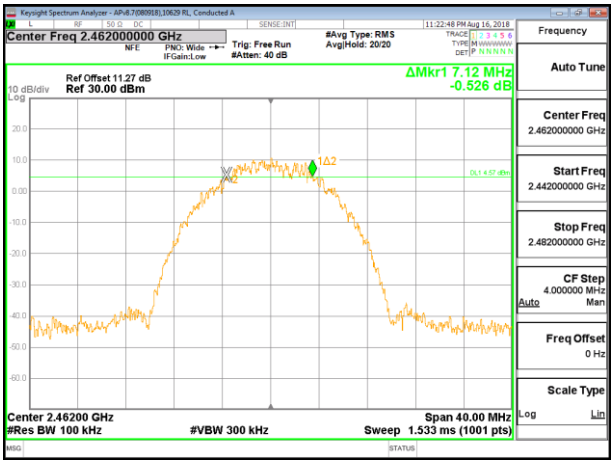


MID CHANNEL 6 CHAIN 2

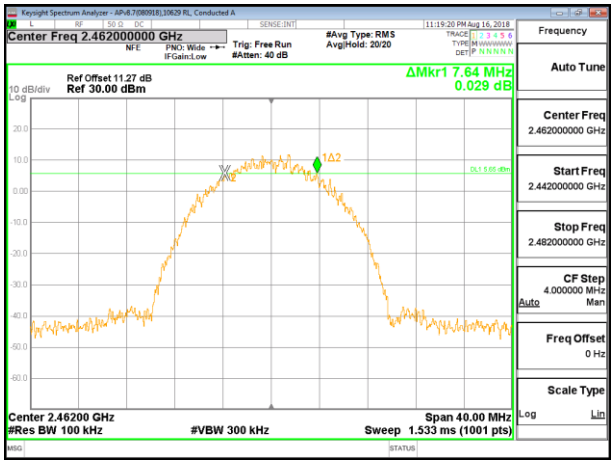


MID CHANNEL 6 CHAIN 3

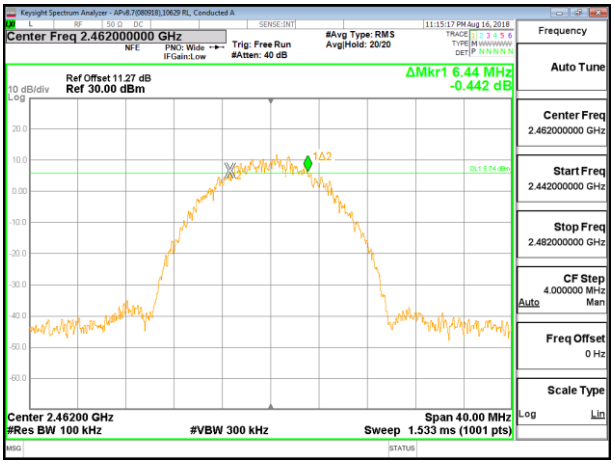
HIGH CHANNEL 11



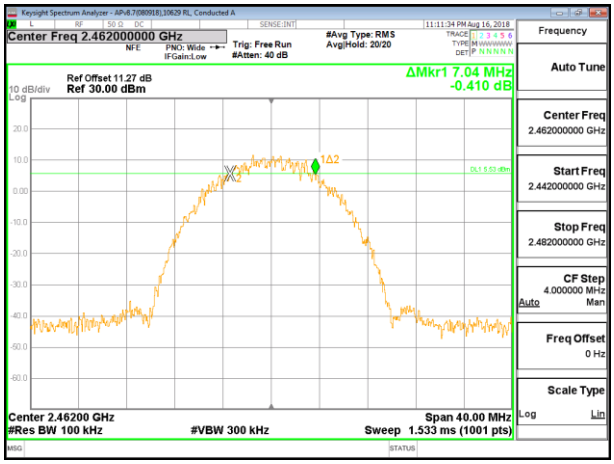
HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1



HIGH CHANNEL 11 CHAIN 2



HIGH CHANNEL 11 CHAIN 3

8.3.2. 802.11g MODE

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	6 dB BW Chain 2 (MHz)	6 dB BW Chain 3 (MHz)	Minimum Limit (MHz)
Low 1	2412	13.20	15.72	16.08	16.16	0.5
Low 2	2417	16.40	16.28	15.68	16.32	0.5
Mid 6	2437	15.32	15.40	15.04	15.40	0.5
High 10	2457	15.52	16.28	14.68	16.28	0.5
High 11	2462	16.36	16.28	16.04	15.44	0.5

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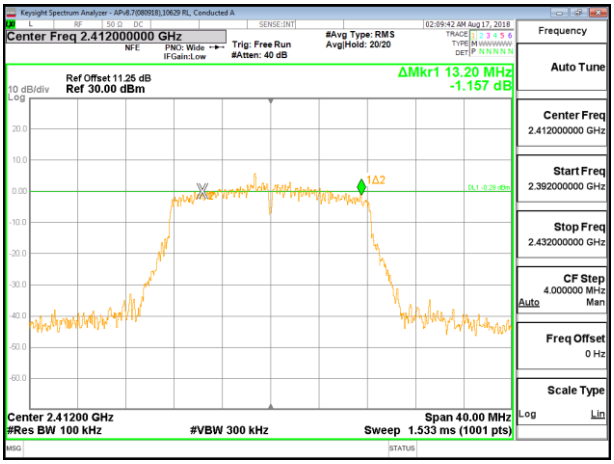
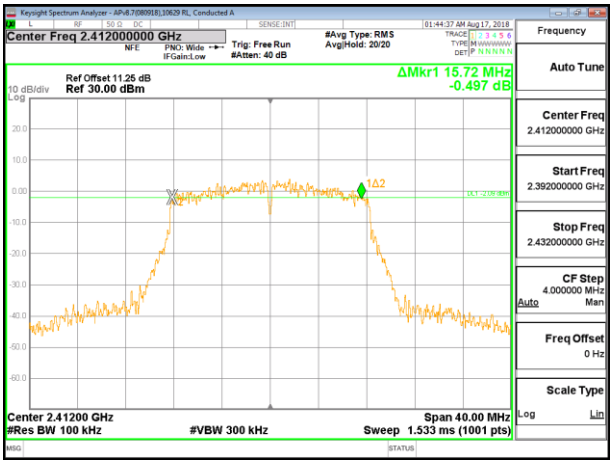
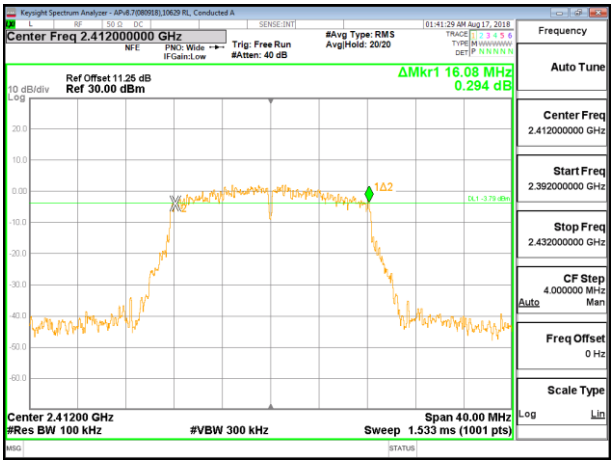
LOW CHANNEL 1



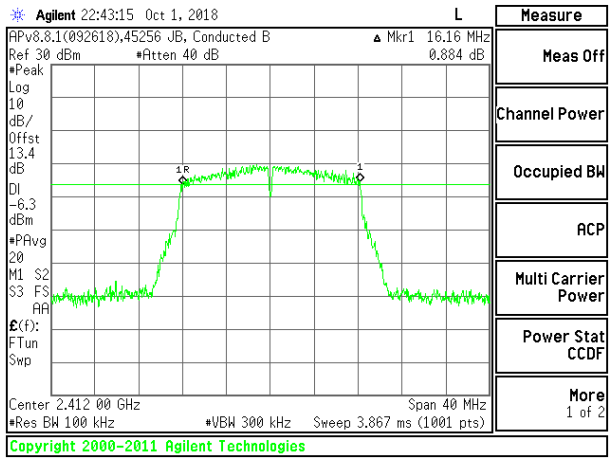
LOW CHANNEL 1 CHAIN 0



LOW CHANNEL 1 CHAIN 1

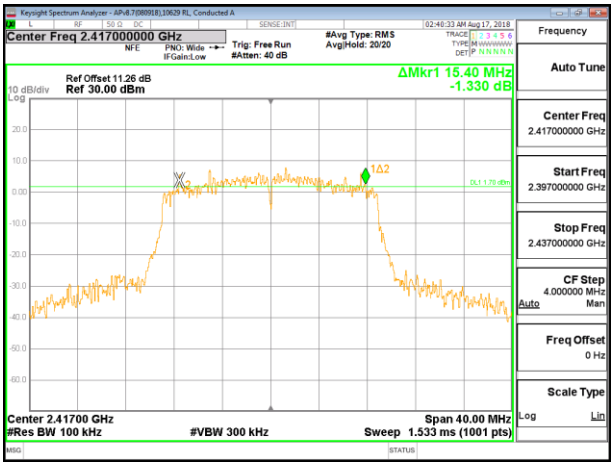


LOW CHANNEL 1 CHAIN 2

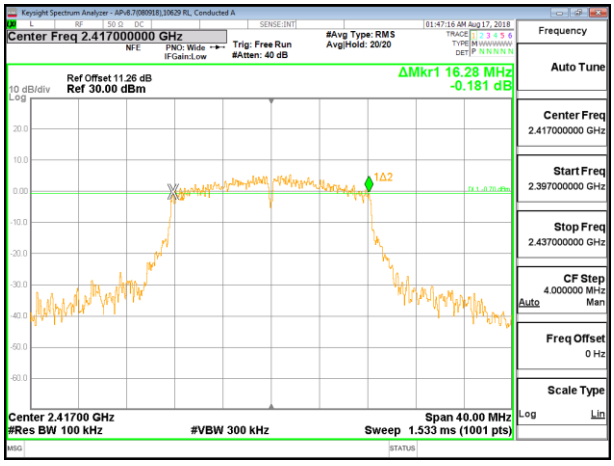


LOW CHANNEL 1 CHAIN 3

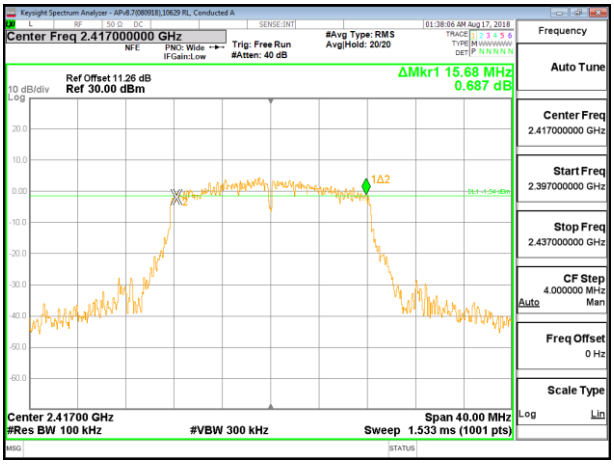
LOW CHANNEL 2



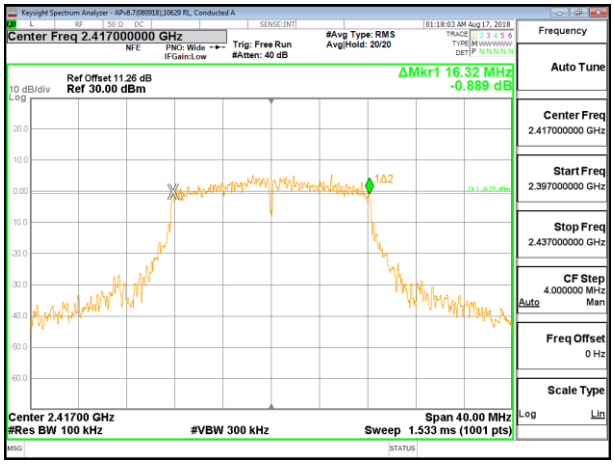
LOW CHANNEL 2 CHAIN 0



LOW CHANNEL 2 CHAIN 1

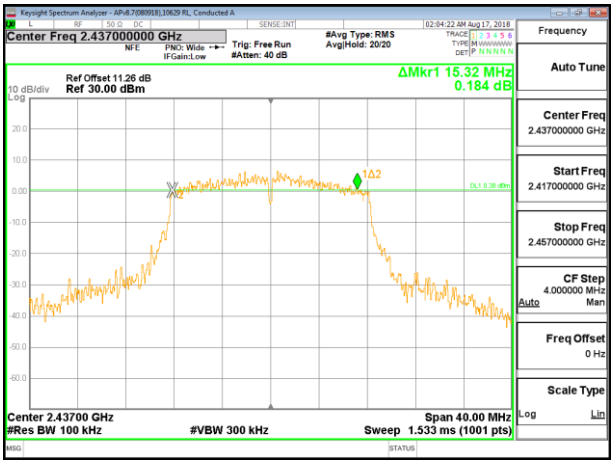


LOW CHANNEL 2 CHAIN 2

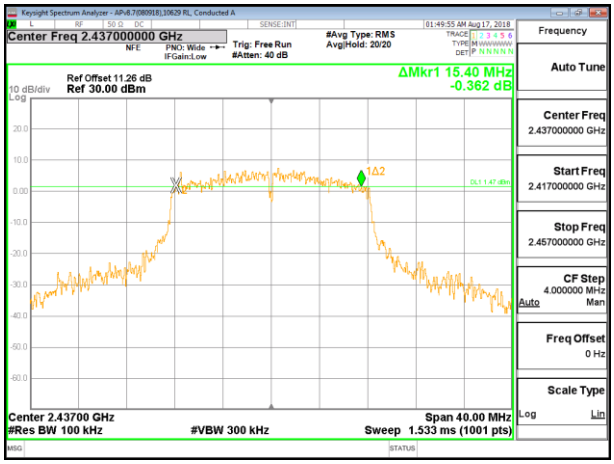


LOW CHANNEL 2 CHAIN 3

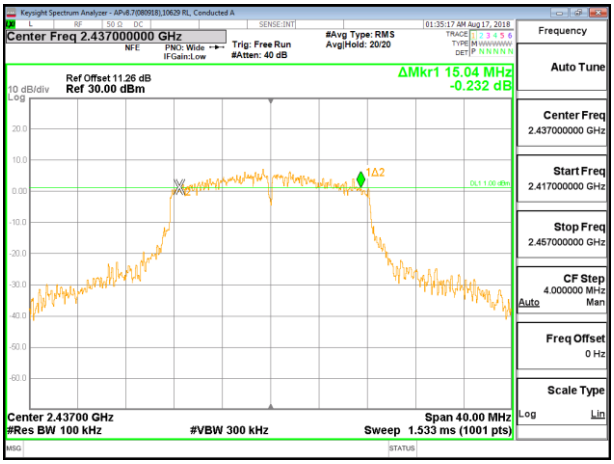
MID CHANNEL 6



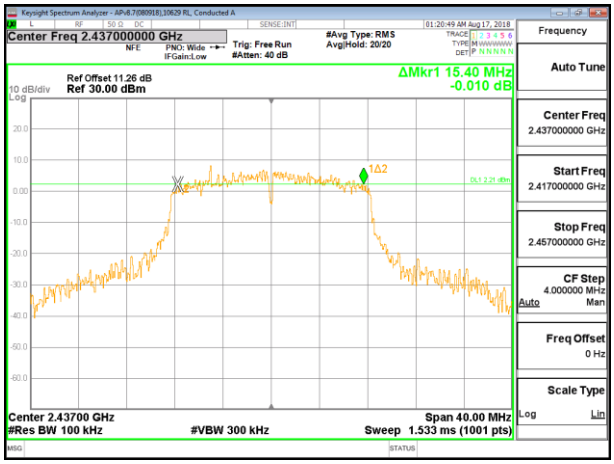
MID CHANNEL 6 CHAIN 0



MID CHANNEL 6 CHAIN 1

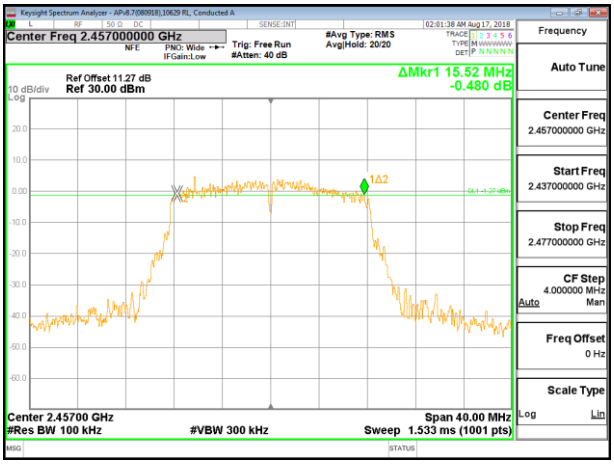


MID CHANNEL 6 CHAIN 2

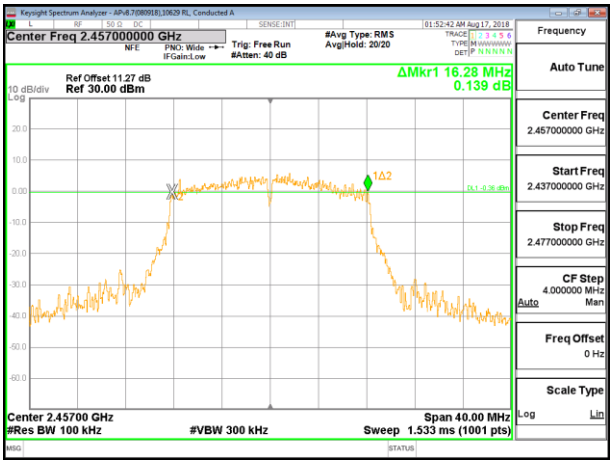


MID CHANNEL 6 CHAIN 3

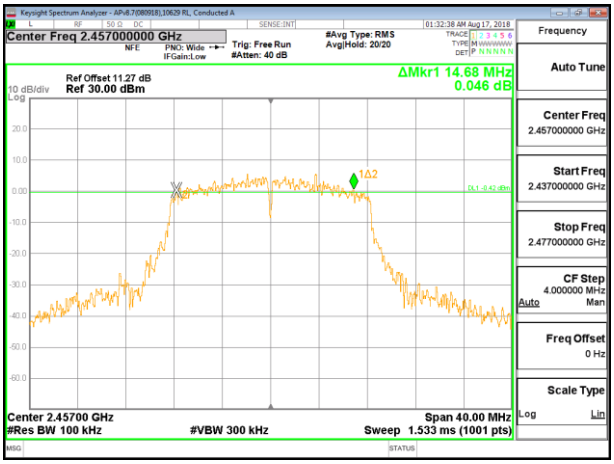
HIGH CHANNEL 10



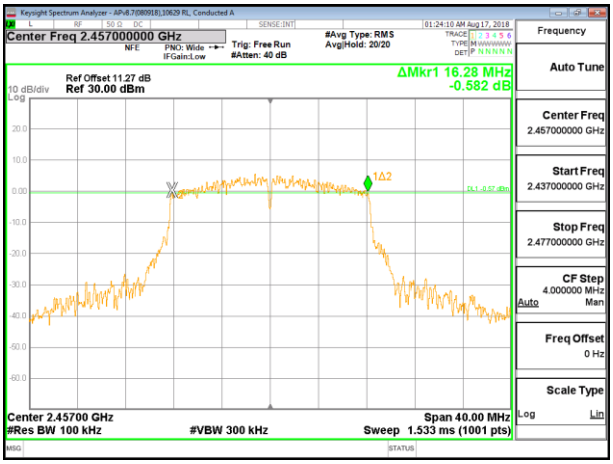
HIGH CHANNEL 10 CHAIN 0



HIGH CHANNEL 10 CHAIN 1

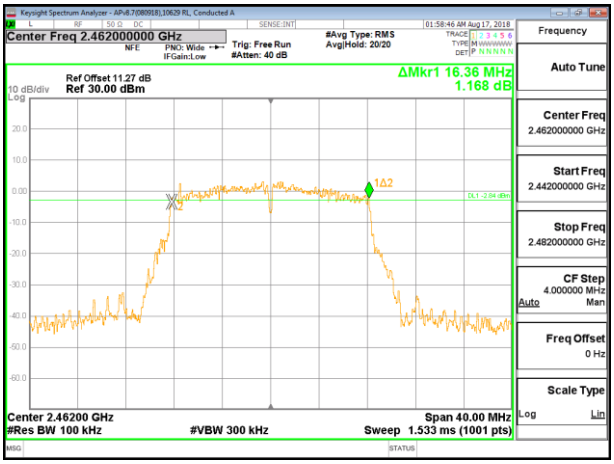


HIGH CHANNEL 10 CHAIN 2

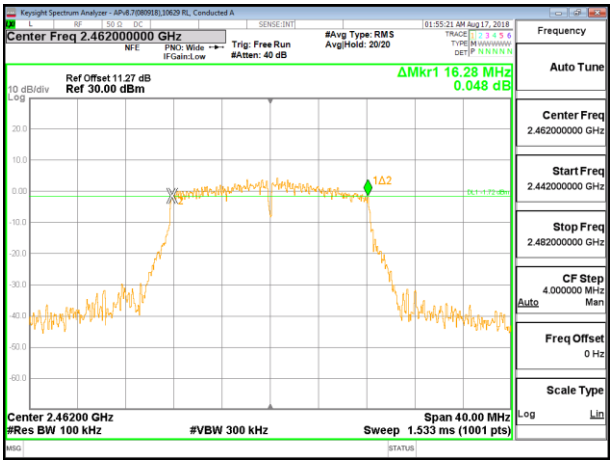


HIGH CHANNEL 10 CHAIN 3

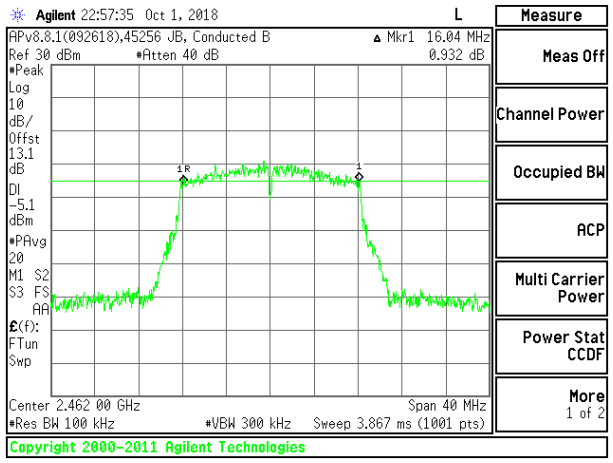
HIGH CHANNEL 11



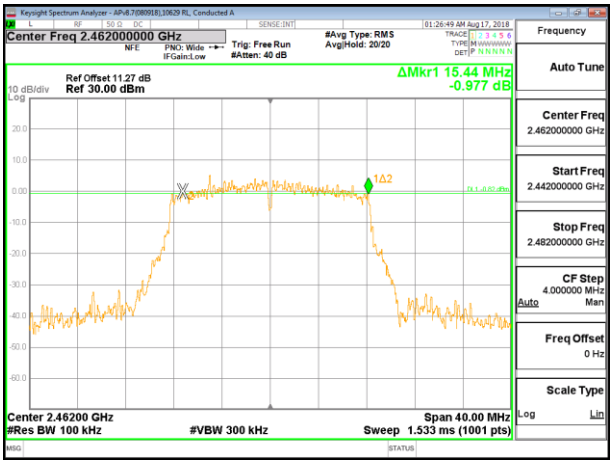
HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1



HIGH CHANNEL 11 CHAIN 2



HIGH CHANNEL 11 CHAIN 3

8.3.3. 802.11n HT20 MODE

Channel	Frequency (MHz)	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	6 dB BW Chain 2 (MHz)	6 dB BW Chain 3 (MHz)	Minimum Limit (MHz)
Low 1	2412	16.96	15.08	16.76	16.08	0.5
Low 2	2417	15.40	15.04	16.12	15.40	0.5
Mid 6	2437	17.24	14.80	17.64	15.48	0.5
High 10	2457	15.16	13.60	13.20	15.12	0.5
High 11	2462	13.80	15.12	17.64	15.08	0.5

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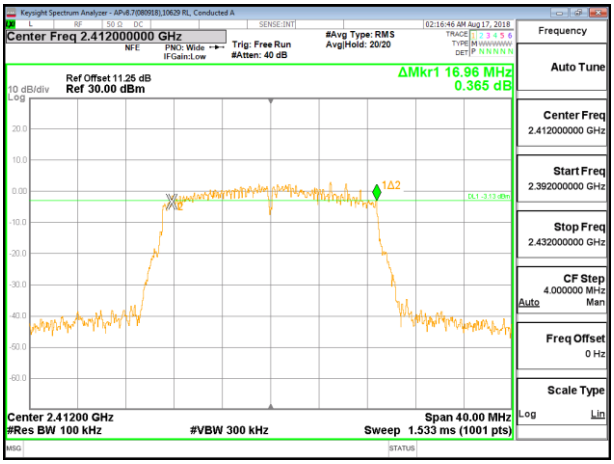
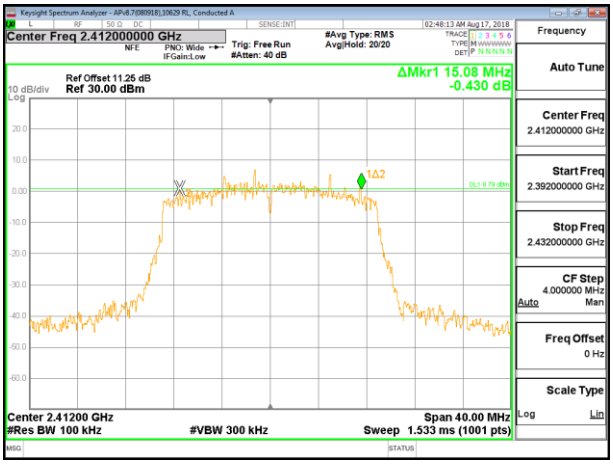
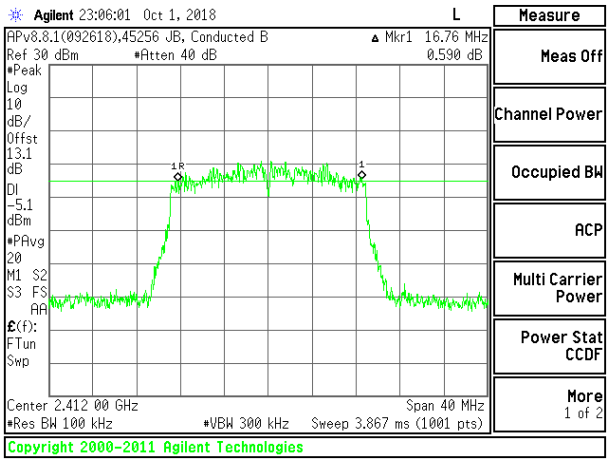
LOW CHANNEL 1



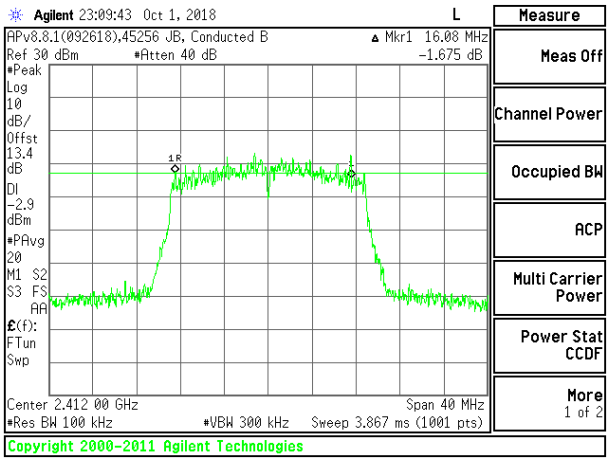
LOW CHANNEL 1 CHAIN 0



LOW CHANNEL 1 CHAIN 1

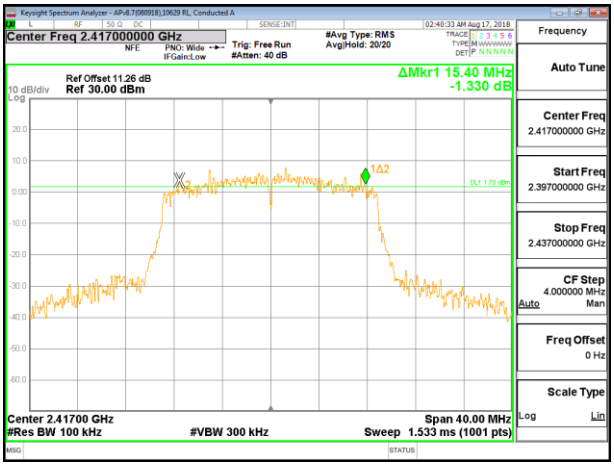


LOW CHANNEL 1 CHAIN 2

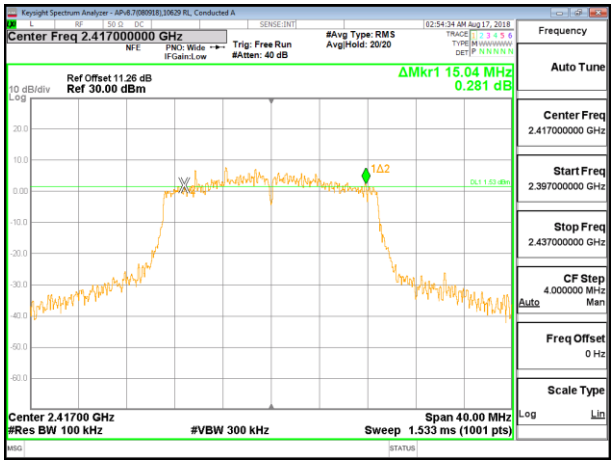


LOW CHANNEL 1 CHAIN 3

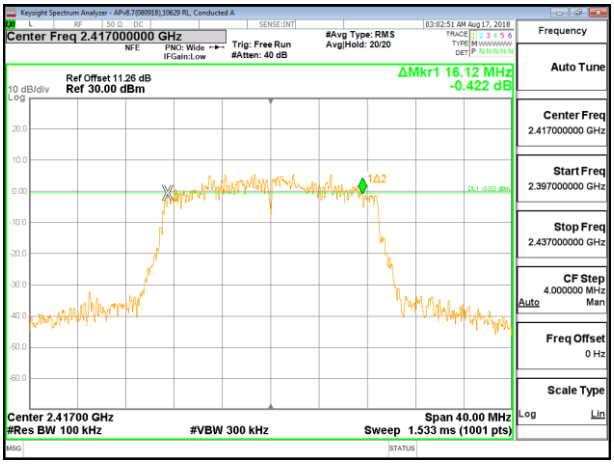
LOW CHANNEL 2



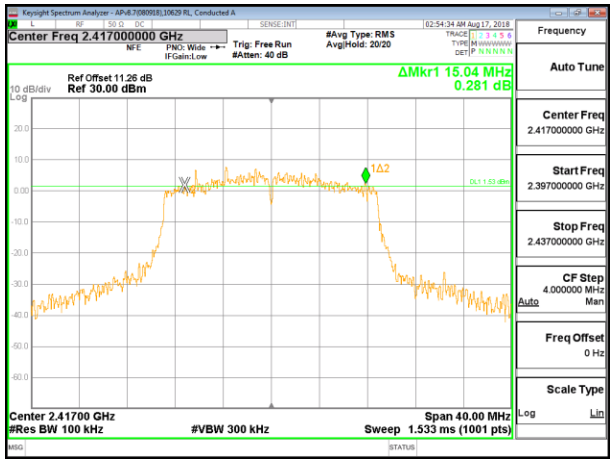
LOW CHANNEL 2 CHAIN 0



LOW CHANNEL 2 CHAIN 1

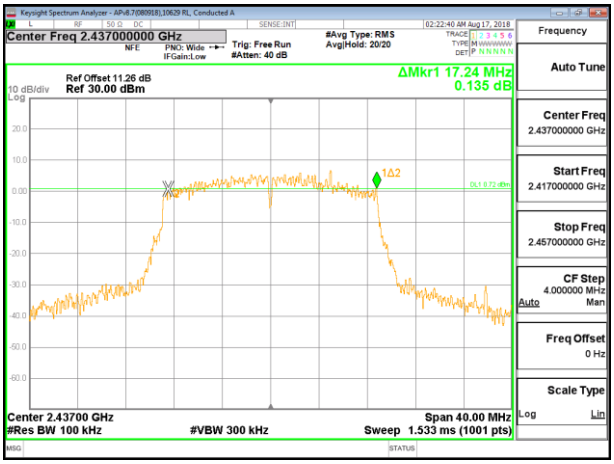


LOW CHANNEL 2 CHAIN 2

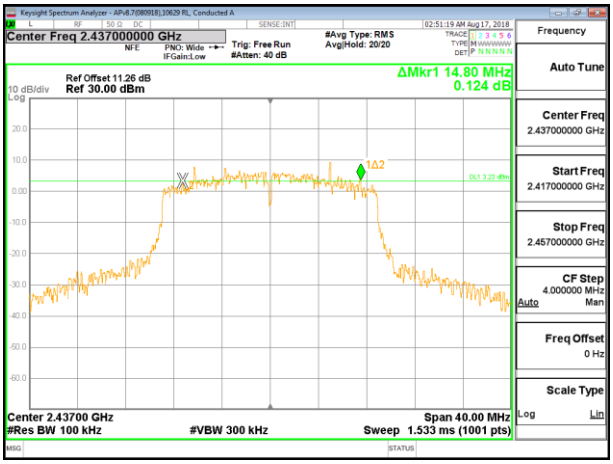


LOW CHANNEL 2 CHAIN 3

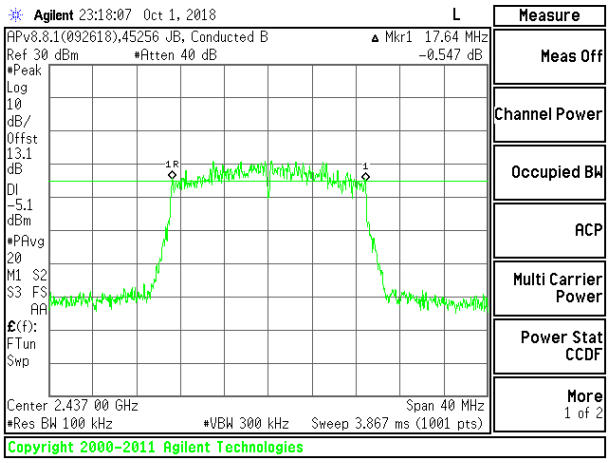
MID CHANNEL 6



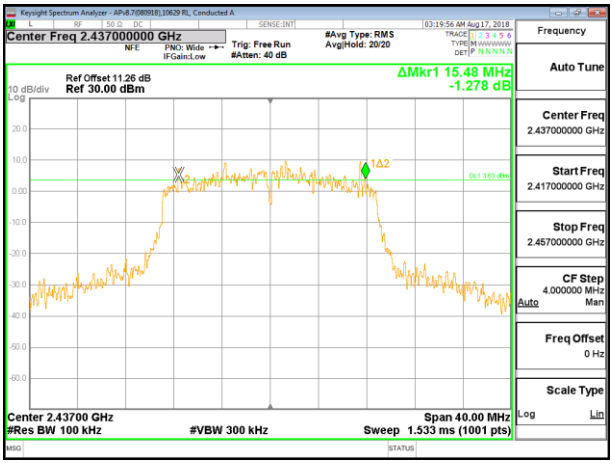
MID CHANNEL 6 CHAIN 0



MID CHANNEL 6 CHAIN 1

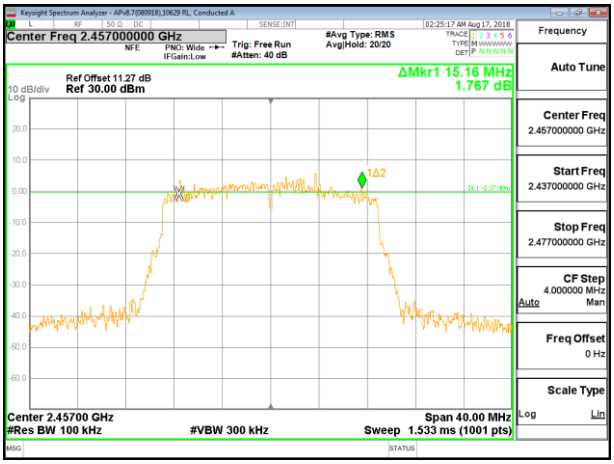


MID CHANNEL 6 CHAIN 2

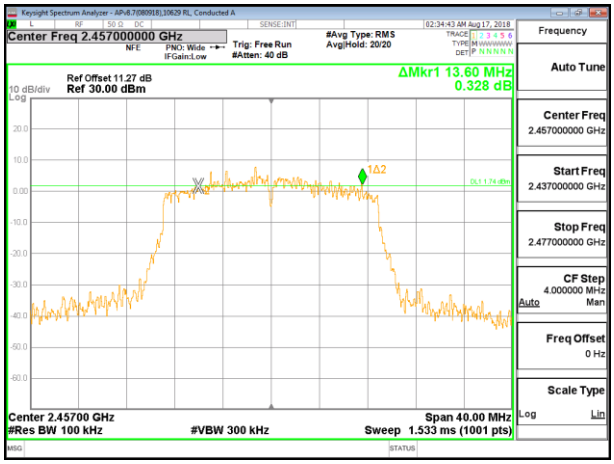


MID CHANNEL 6 CHAIN 3

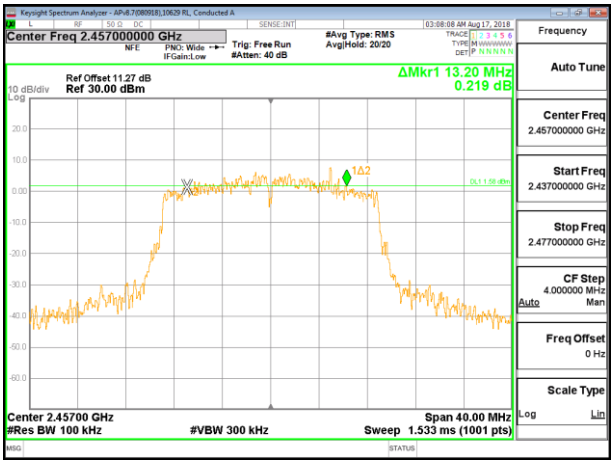
HIGH CHANNEL 10



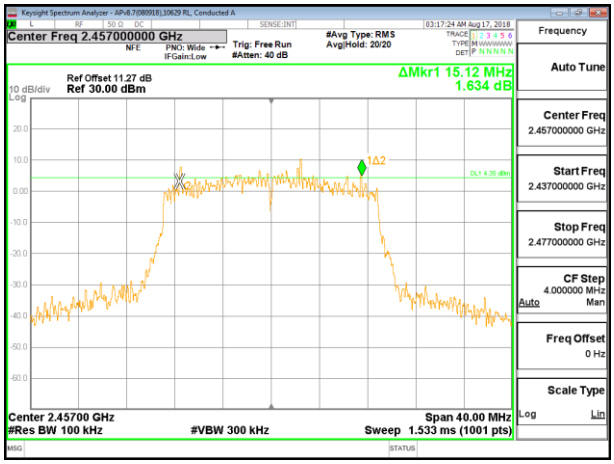
HIGH CHANNEL 10 CHAIN 0



HIGH CHANNEL 10 CHAIN 1

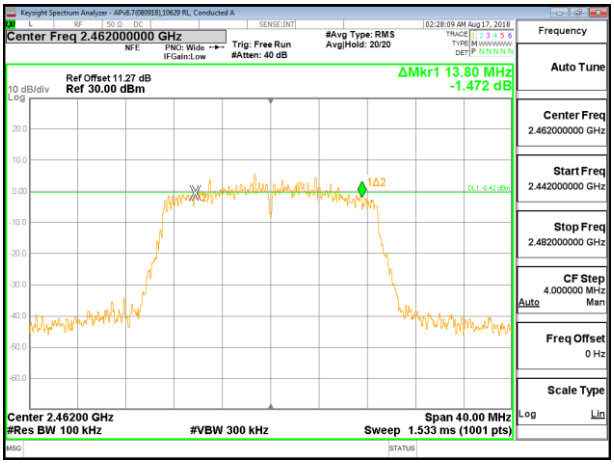


HIGH CHANNEL 10 CHAIN 2

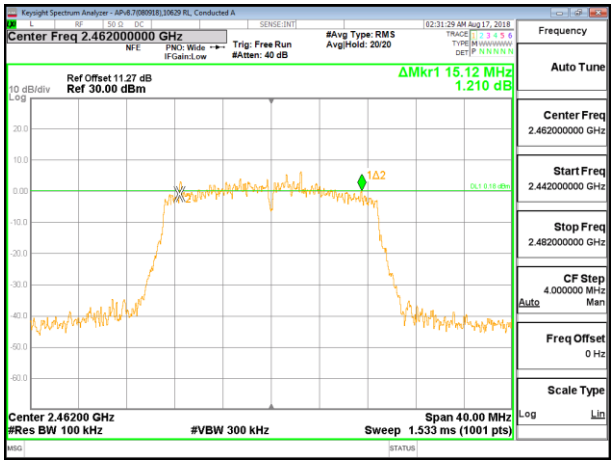


HIGH CHANNEL 10 CHAIN 3

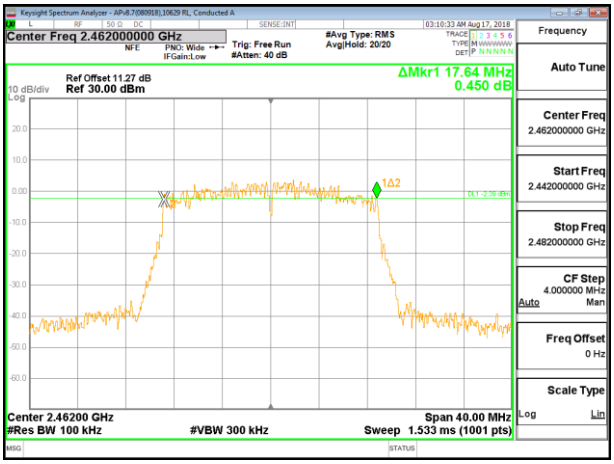
HIGH CHANNEL 11



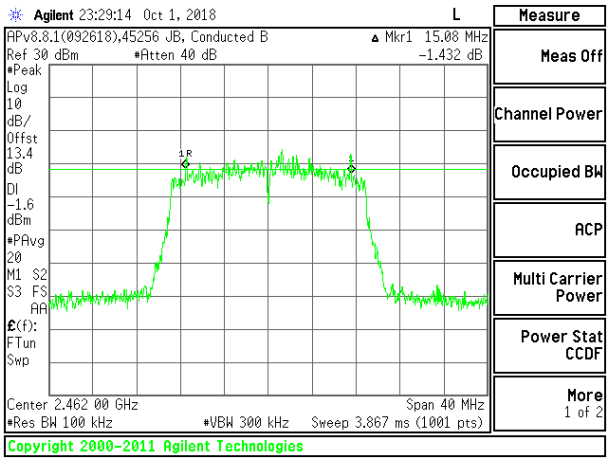
HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1



HIGH CHANNEL 11 CHAIN 2



HIGH CHANNEL 11 CHAIN 3

8.4. OUTPUT POWER

LIMITS

FCC §15.247 (b) (3)

RSS-247 5.4 (d)

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.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The transmitter output is connected to a power meter.The cable assembly insertion loss was entered as an offset in the power meter to allow for a gated Average reading of power.

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DIRECTIONAL ANTENNA GAIN

For 4 TX:

Horizontal Polarity (Worst Case)

Band (GHz)	Chain 0 Antenna Gain (dBi)	Chain 1 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.4	3.47	3.65	3.56

Vertical Polarity

Band (GHz)	Chain 2 Antenna Gain (dBi)	Chain 3 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.4	2.22	2.11	2.17

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RESULTS

8.4.1. 802.11b MODE

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
Low 1	2412	3.56	30.00	36	30.00
Mid 6	2437	3.56	30.00	36	30.00
High 11	2462	3.56	30.00	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low 1	2412	19.88	20.64	19.68	19.95	26.07	30.00	-3.93
Mid 6	2437	19.42	20.59	19.81	20.21	26.05	30.00	-3.95
High 11	2462	20.13	20.87	20.18	20.53	26.46	30.00	-3.54

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8.4.2. 802.11g MODE

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
Low 1	2412	3.56	30.00	36	30.00
Low 2	2417	3.56	30.00	36	30.00
Mid 6	2437	3.56	30.00	36	30.00
High 10	2457	3.56	30.00	36	30.00
High 11	2462	3.56	30.00	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low 1	2412	16.52	17.3	15.88	16.42	22.58	30.00	-7.42
Low 2	2417	18.21	19.09	18.03	18.76	24.56	30.00	-5.44
Mid 6	2437	19.32	20.1	19.19	19.96	25.68	30.00	-4.32
High 10	2457	18.02	18.94	18.97	18.93	24.75	30.00	-5.25
High 11	2462	16.88	17.84	17.13	17.56	23.39	30.00	-6.61

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9.1.2. 802.11n HT20 MODE

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC/ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
Low 1	2412	3.56	30.00	36	30.00
Low 2	2417	3.56	30.00	36	30.00
Mid 6	2437	3.56	30.00	36	30.00
High 10	2457	3.56	30.00	36	30.00
High 11	2462	3.56	30.00	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Chain 3 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low 1	2412	16.21	16.91	15.89	16.19	22.34	30.00	-7.66
Low 2	2417	18.97	19.73	18.79	19.66	25.33	30.00	-4.67
Mid 6	2437	19.07	19.85	18.99	19.93	25.50	30.00	-4.50
High 10	2457	17.63	18.27	18.33	18.98	24.35	30.00	-5.65
High 11	2462	16.41	16.89	16.67	17.02	22.77	30.00	-7.23

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9.2. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247 (e)

RSS-247 (5.2) (b)

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

RESULTS

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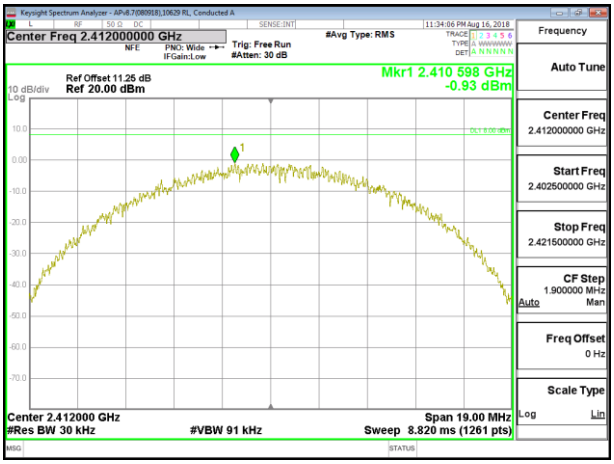
9.2.1. 802.11b MODE

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

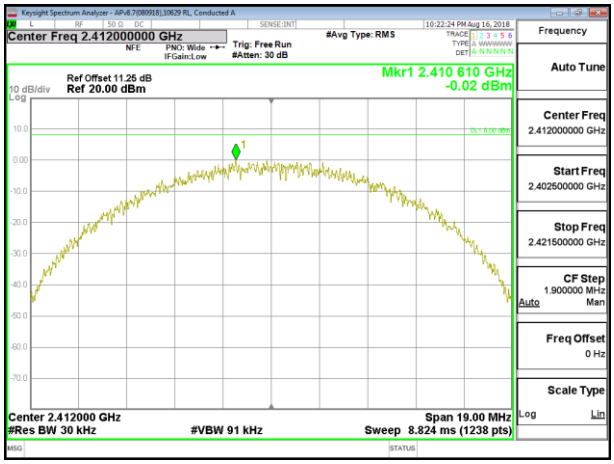
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm/ 3kHz)	Chain 1 Meas (dBm/ 3kHz)	Chain 2 Meas (dBm/ 3kHz)	Chain 3 Meas (dBm/ 3kHz)	Total Corr'd PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low 1	2412	-0.93	-0.02	-1.34	-1.00	5.23	8.0	-2.8
Mid 6	2437	-1.36	-0.31	0.19	-0.13	5.66	8.0	-2.3
High 11	2462	-0.46	0.54	0.13	0.18	6.13	8.0	-1.9

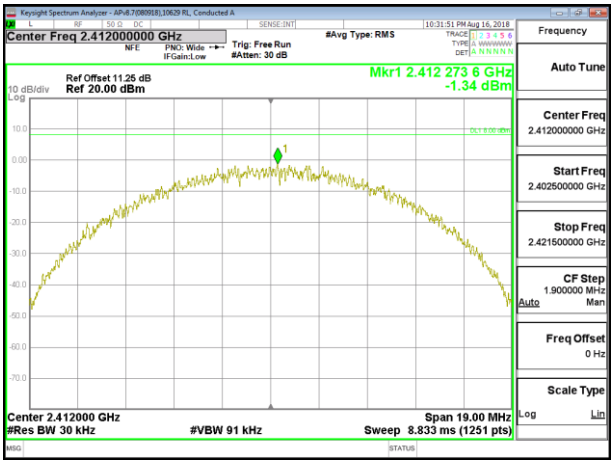
LOW CHANNEL 1



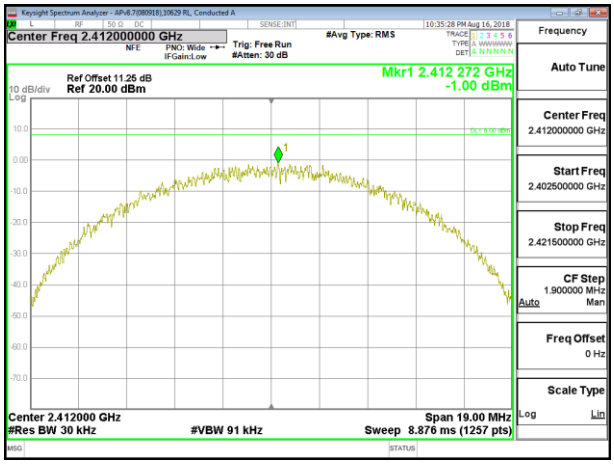
LOW CHANNEL 1 CHAIN 0



LOW CHANNEL 1 CHAIN 1

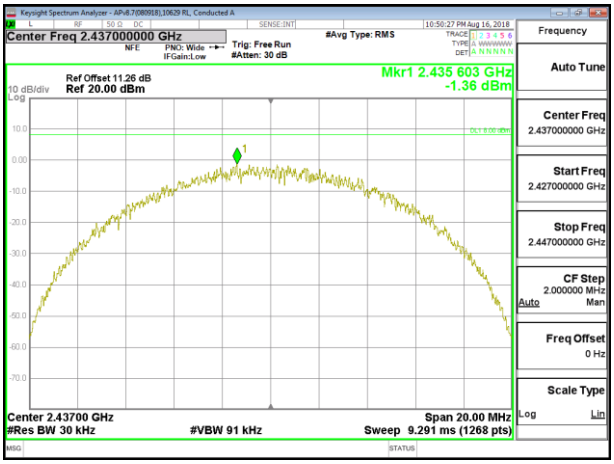


LOW CHANNEL 1 CHAIN 2



LOW CHANNEL 1 CHAIN 3

MID CHANNEL 6



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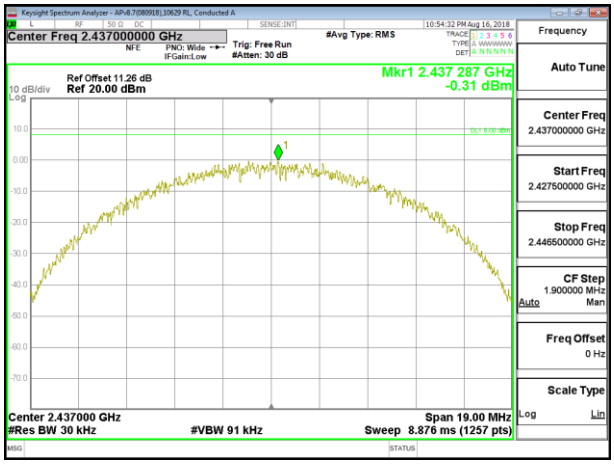

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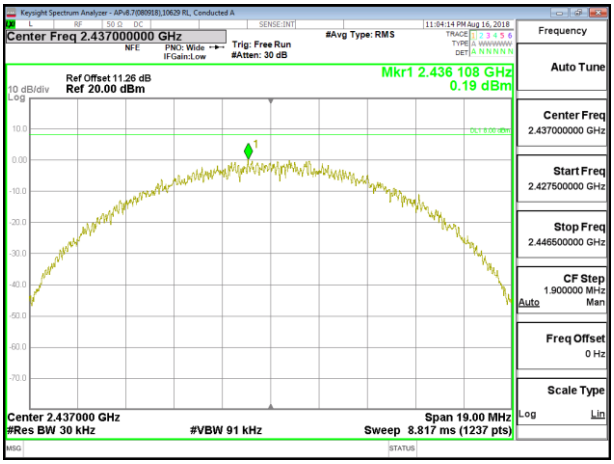

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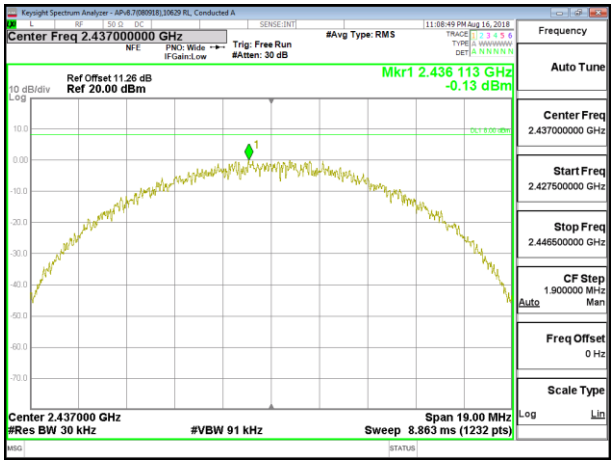
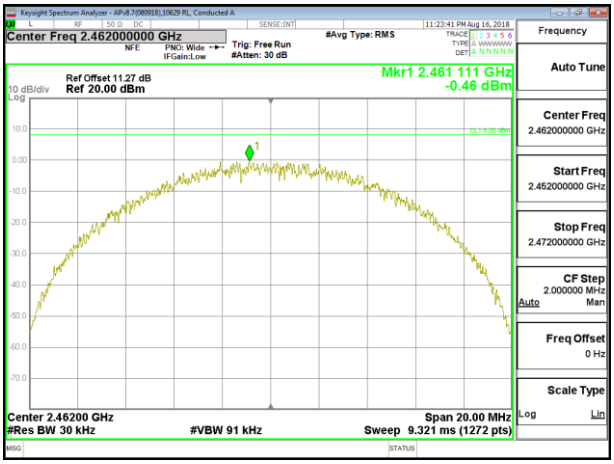
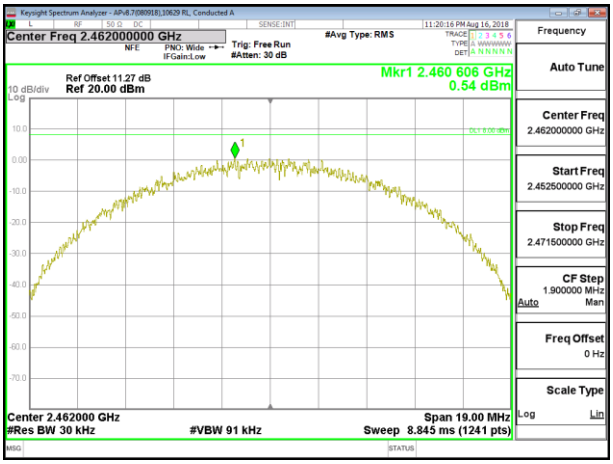


MID CHANNEL 6 CHAIN 3

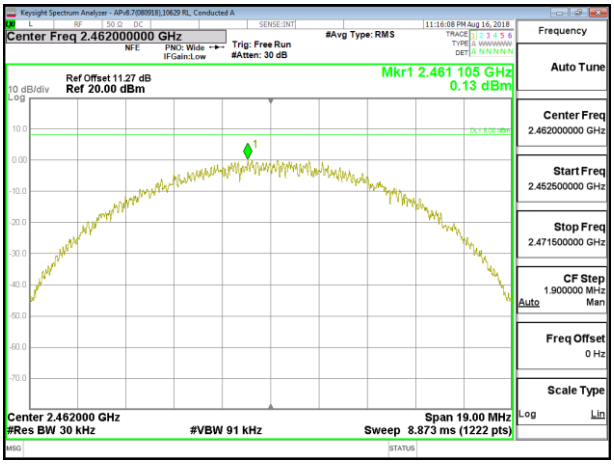
HIGH CHANNEL 11



HIGH CHANNEL 11 CHAIN 0



HIGH CHANNEL 11 CHAIN 1



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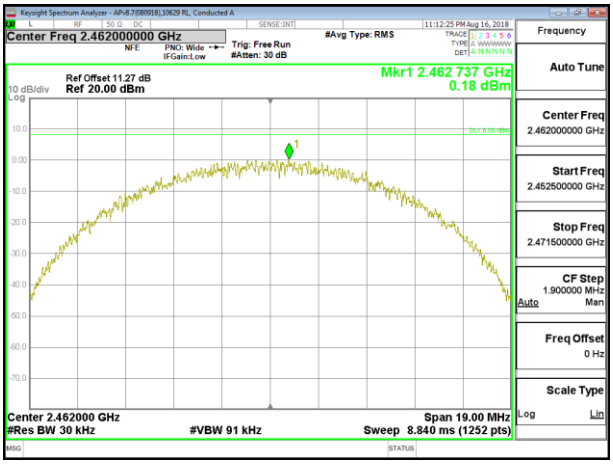

HIGH CHANNEL 11 CHAIN 3

9.2.2. 802.11g MODE

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

PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm/ 3kHz)	Chain 1 Meas (dBm/ 3kHz)	Chain 2 Meas (dBm/ 3kHz)	Chain 3 Meas (dBm/ 3kHz)	Total Corr'd PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low 1	2412	-7.07	-6.53	-7.44	-6.61	-0.88	8.0	-8.9
Low 2	2417	-5.02	-4.23	-5.44	-4.78	1.18	8.0	-6.8
Mid 6	2437	-3.64	-2.90	-3.84	-3.14	2.66	8.0	-5.3
High 10	2457	-5.92	-4.24	-4.94	-4.45	1.18	8.0	-6.8
High 11	2462	-6.46	-5.44	-5.92	-5.52	0.20	8.0	-7.8

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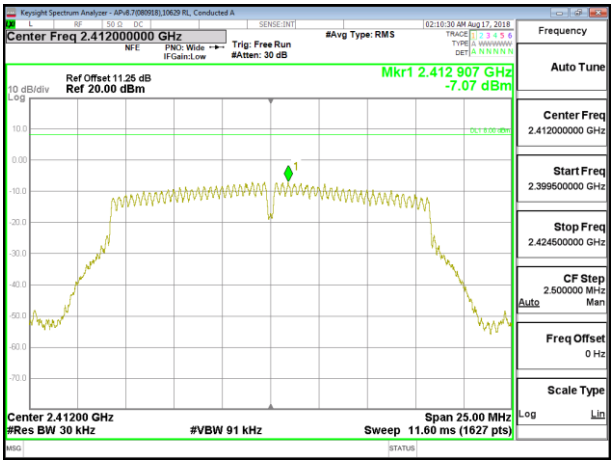
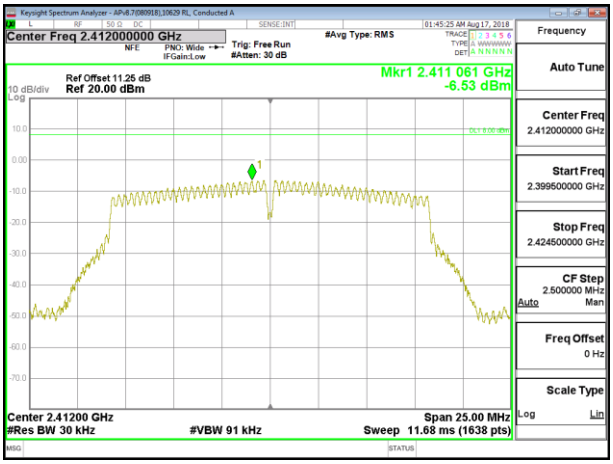
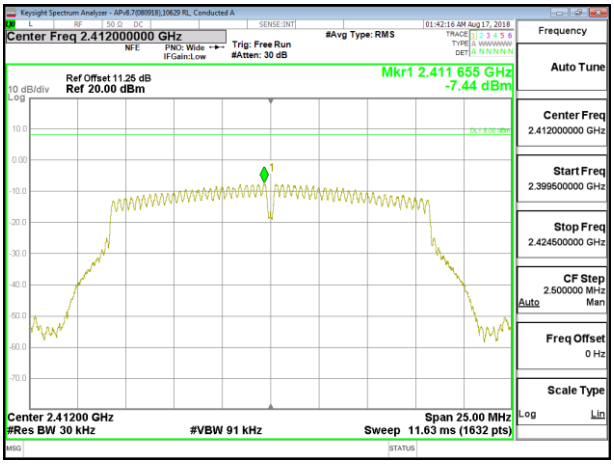
LOW CHANNEL 1



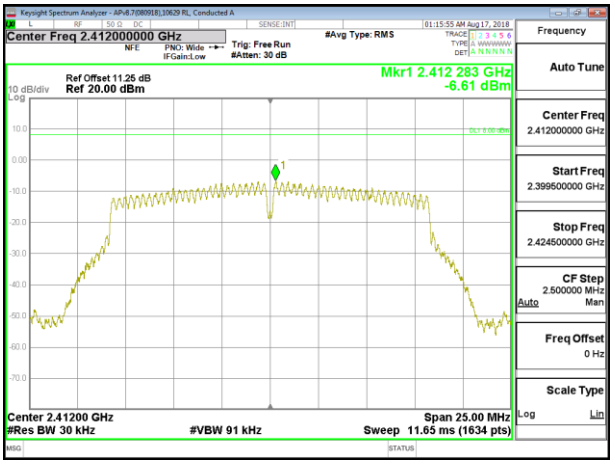
LOW CHANNEL 1 CHAIN 0



LOW CHANNEL 1 CHAIN 1



LOW CHANNEL 1 CHAIN 2



LOW CHANNEL 1 CHAIN 3