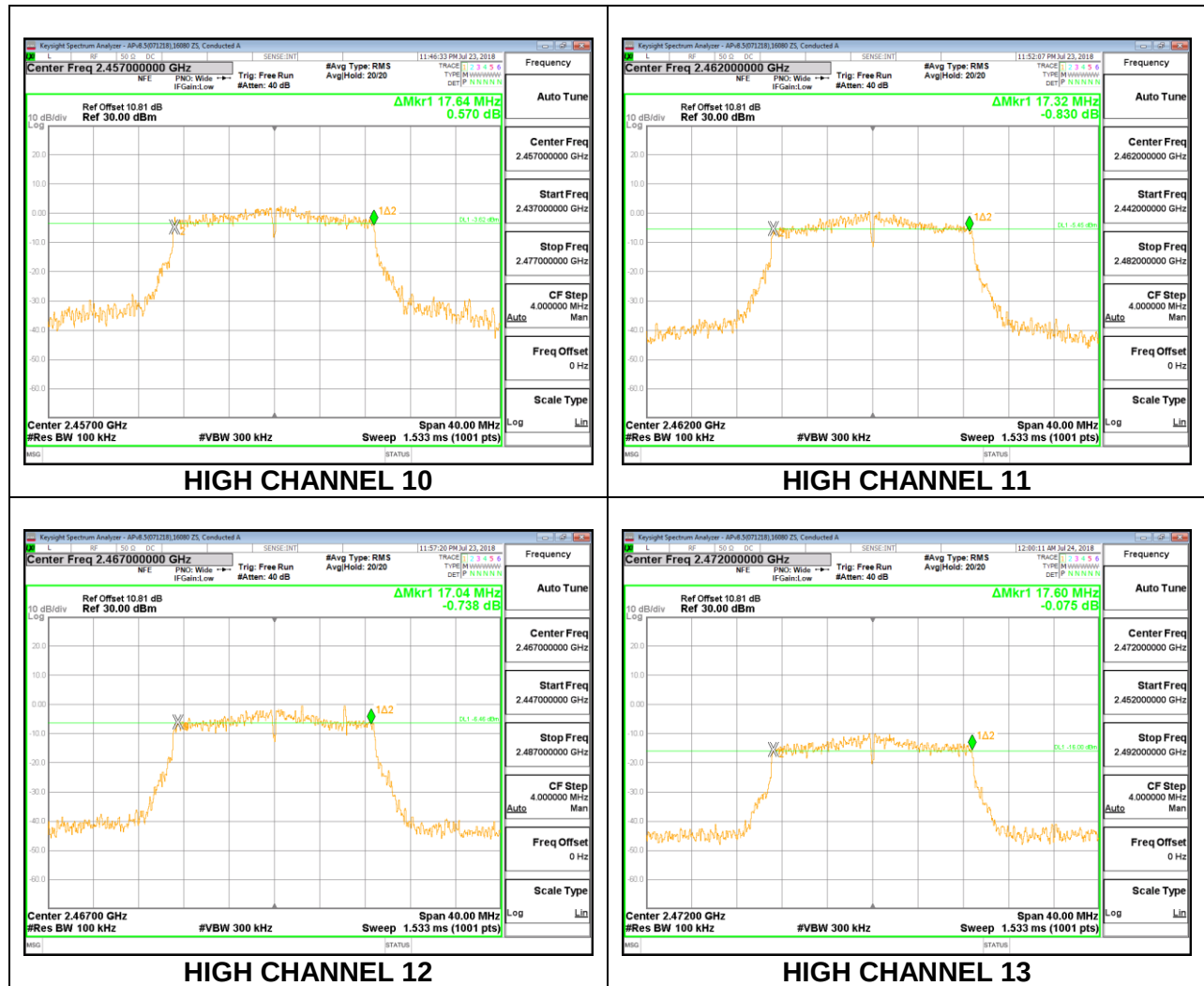
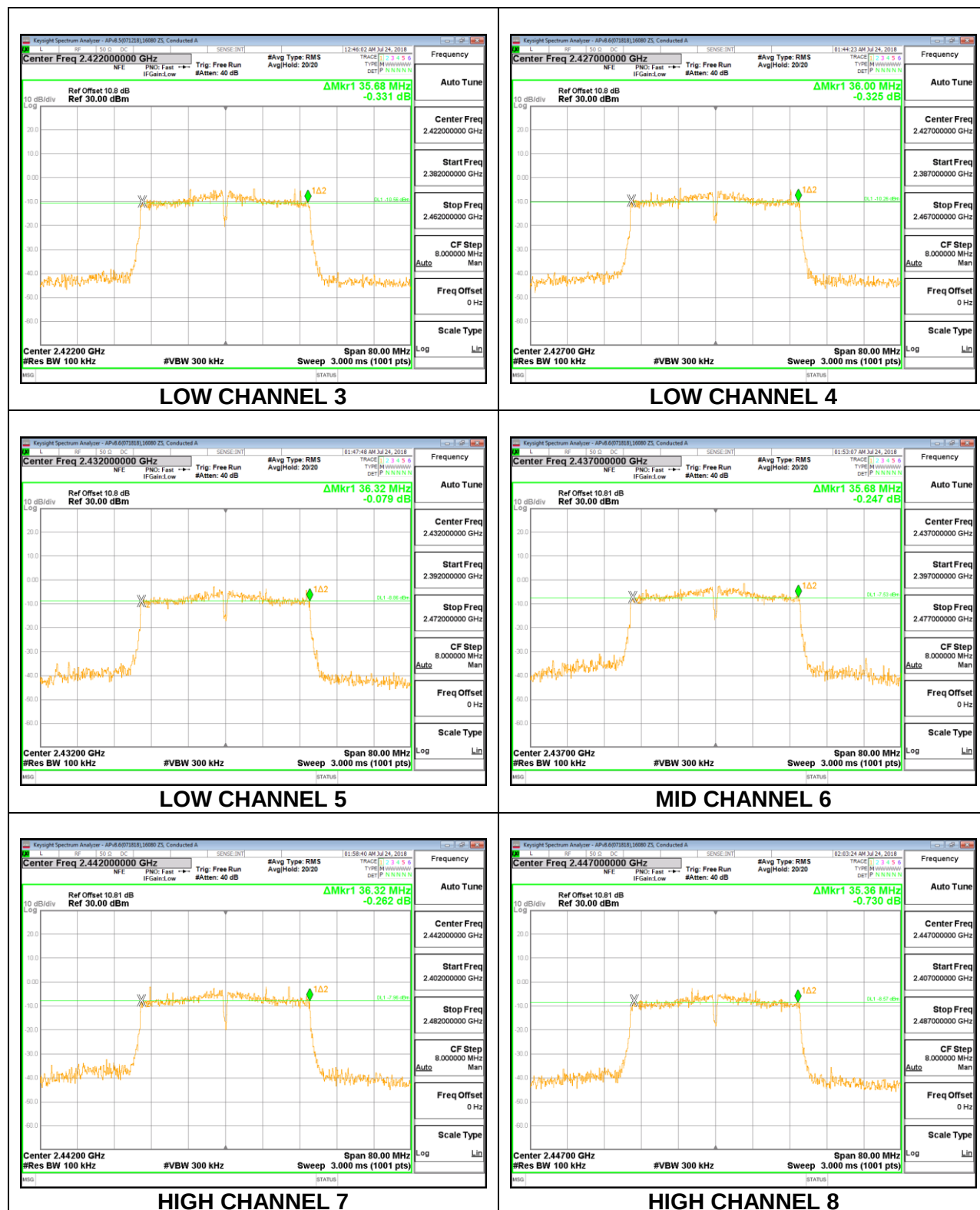
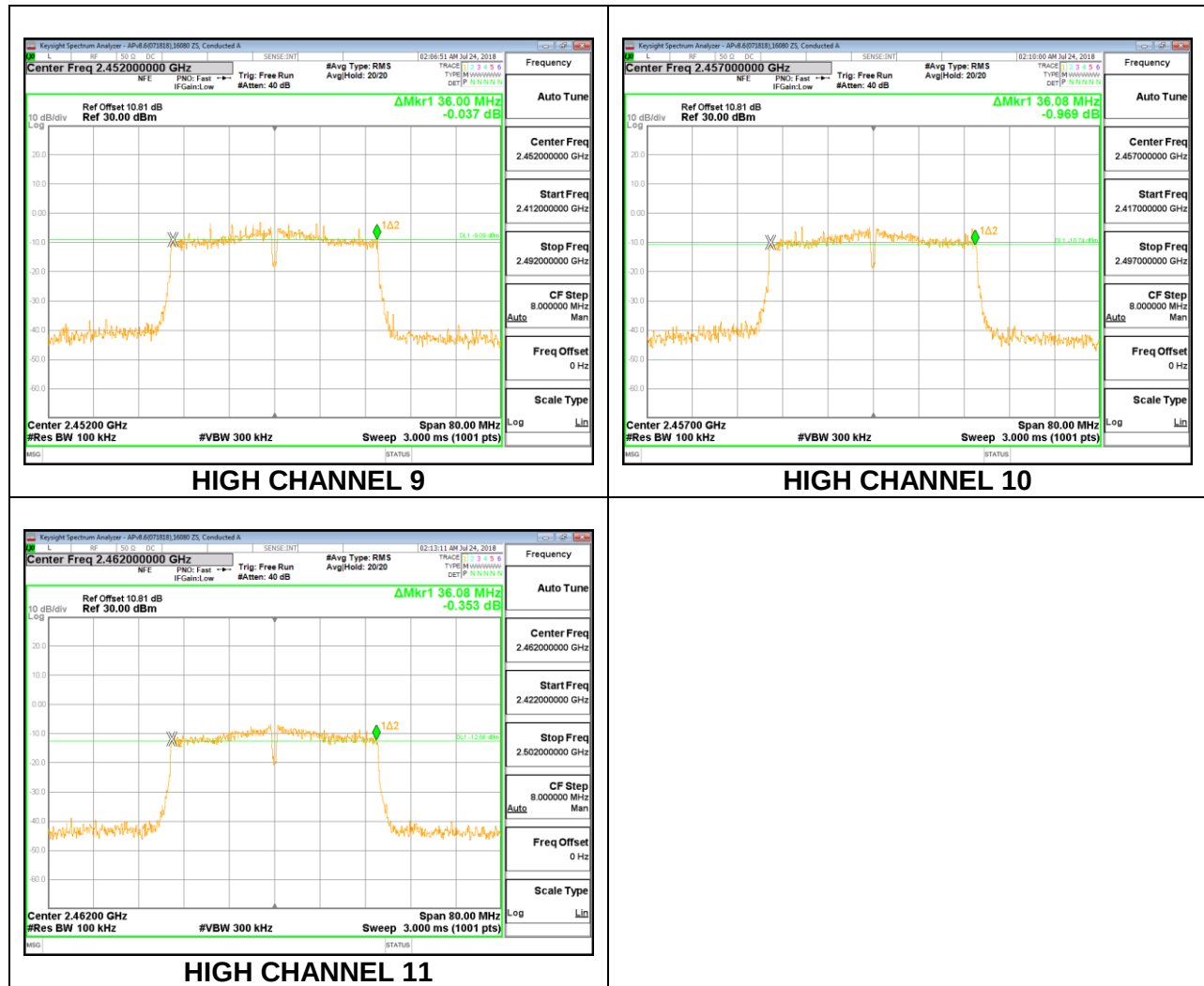




8.3.4. 802.11n HT40 MODE

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)
Low 3	2422	35.6800	0.5
Low 4	2427	36.0000	0.5
Low 5	2432	36.3200	0.5
Mid 6	2437	35.6800	0.5
High 7	2442	36.3200	0.5
High 8	2447	35.3600	0.5
High 9	2452	36.0000	0.5
High 10	2457	36.0800	0.5
High 11	2462	36.0800	0.5





8.4. OUTPUT POWER

LIMITS

NCC LP0002 §3.10.1.2 (1)(C)

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 for a gated average reading of power.

DIRECTIONAL ANTENNA GAIN

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

RESULTS

Tested By:	16080 ZS
Date:	07/25/2018

8.4.1. 802.11b MODE**Limits**

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
Low 1	2412	4.00	30.00	30	36	30.00
Mid 6	2437	4.00	30.00	30	36	30.00
High 11	2462	4.00	30.00	30	36	30.00
High 12	2467	4.00	30.00	30	36	30.00
High 13	2472	4.00	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low 1	2412	18.84	18.84	30.00	-11.16
Mid 6	2437	19.06	19.06	30.00	-10.94
High 11	2462	17.97	17.97	30.00	-12.03
High 12	2467	16.09	16.09	30.00	-13.91
High 13	2472	12.02	12.02	30.00	-17.98

8.4.2. 802.11g MODE**Limits**

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
Low 1	2412	4.00	30.00	30	36	30.00
Low 2	2417	4.00	30.00	30	36	30.00
Low 3	2422	4.00	30.00	30	36	30.00
Low 4	2427	4.00	30.00	30	36	30.00
Low 5	2432	4.00	30.00	30	36	30.00
Mid 6	2437	4.00	30.00	30	36	30.00
High 8	2447	4.00	30.00	30	36	30.00
High 9	2452	4.00	30.00	30	36	30.00
High 10	2457	4.00	30.00	30	36	30.00
High 11	2462	4.00	30.00	30	36	30.00
High 12	2467	4.00	30.00	30	36	30.00
High 13	2472	4.00	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low 1	2412	13.56	13.56	30.00	-16.44
Low 2	2417	15.03	15.03	30.00	-14.97
Low 3	2422	16.40	16.40	30.00	-13.60
Low 4	2427	17.59	17.59	30.00	-12.41
Low 5	2432	18.82	18.82	30.00	-11.18
Mid 6	2437	19.40	19.40	30.00	-10.60
High 8	2447	18.26	18.26	30.00	-11.74
High 9	2452	17.15	17.15	30.00	-12.85
High 10	2457	16.38	16.38	30.00	-13.62
High 11	2462	14.96	14.96	30.00	-15.04
High 12	2467	12.87	12.87	30.00	-17.13
High 13	2472	6.18	6.18	30.00	-23.82

8.4.3. 802.11n HT20 MODE**1TX Antenna 1 MODE****Limits**

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
Low 1	2412	4.00	30.00	30	36	30.00
Low 2	2417	4.00	30.00	30	36	30.00
Low 3	2422	4.00	30.00	30	36	30.00
Low 4	2427	4.00	30.00	30	36	30.00
Mid 6	2437	4.00	30.00	30	36	30.00
High 9	2452	4.00	30.00	30	36	30.00
High 10	2457	4.00	30.00	30	36	30.00
High 11	2462	4.00	30.00	30	36	30.00
High 12	2467	4.00	30.00	30	36	30.00
High 13	2472	4.00	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low 1	2412	13.65	13.65	30.00	-16.35
Low 2	2417	16.45	16.45	30.00	-13.55
Low 3	2422	16.99	16.99	30.00	-13.01
Low 4	2427	18.12	18.12	30.00	-11.88
Mid 6	2437	19.25	19.25	30.00	-10.75
High 9	2452	17.37	17.37	30.00	-12.63
High 10	2457	16.52	16.52	30.00	-13.48
High 11	2462	13.90	13.90	30.00	-16.10
High 12	2467	12.35	12.35	30.00	-17.65
High 13	2472	4.16	4.16	30.00	-25.84

8.4.4. 802.11n HT40 MODE**1TX Antenna 1 MODE****Limits**

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	ISED Power Limit (dBm)	ISED EIRP Limit (dBm)	Max Power (dBm)
Low 3	2422	4.00	30.00	30	36	30.00
Low 4	2427	4.00	30.00	30	36	30.00
Low 5	2432	4.00	30.00	30	36	30.00
Mid 6	2437	4.00	30.00	30	36	30.00
High 7	2442	4.00	30.00	30	36	30.00
High 8	2447	4.00	30.00	30	36	30.00
High 9	2452	4.00	30.00	30	36	30.00
High 10	2457	4.00	30.00	30	36	30.00
High 11	2462	4.00	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low 3	2422	11.12	11.12	30.00	-18.88
Low 4	2427	11.71	11.71	30.00	-18.29
Low 5	2432	12.91	12.91	30.00	-17.09
Mid 6	2437	14.47	14.47	30.00	-15.53
High 7	2442	13.78	13.78	30.00	-16.22
High 8	2447	12.55	12.55	30.00	-17.45
High 9	2452	11.98	11.98	30.00	-18.02
High 10	2457	11.93	11.93	30.00	-18.07
High 11	2462	10.04	10.04	30.00	-19.96

8.5. POWER SPECTRAL DENSITY

LIMITS

NCC LP0002 §3.10.1.6 (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.

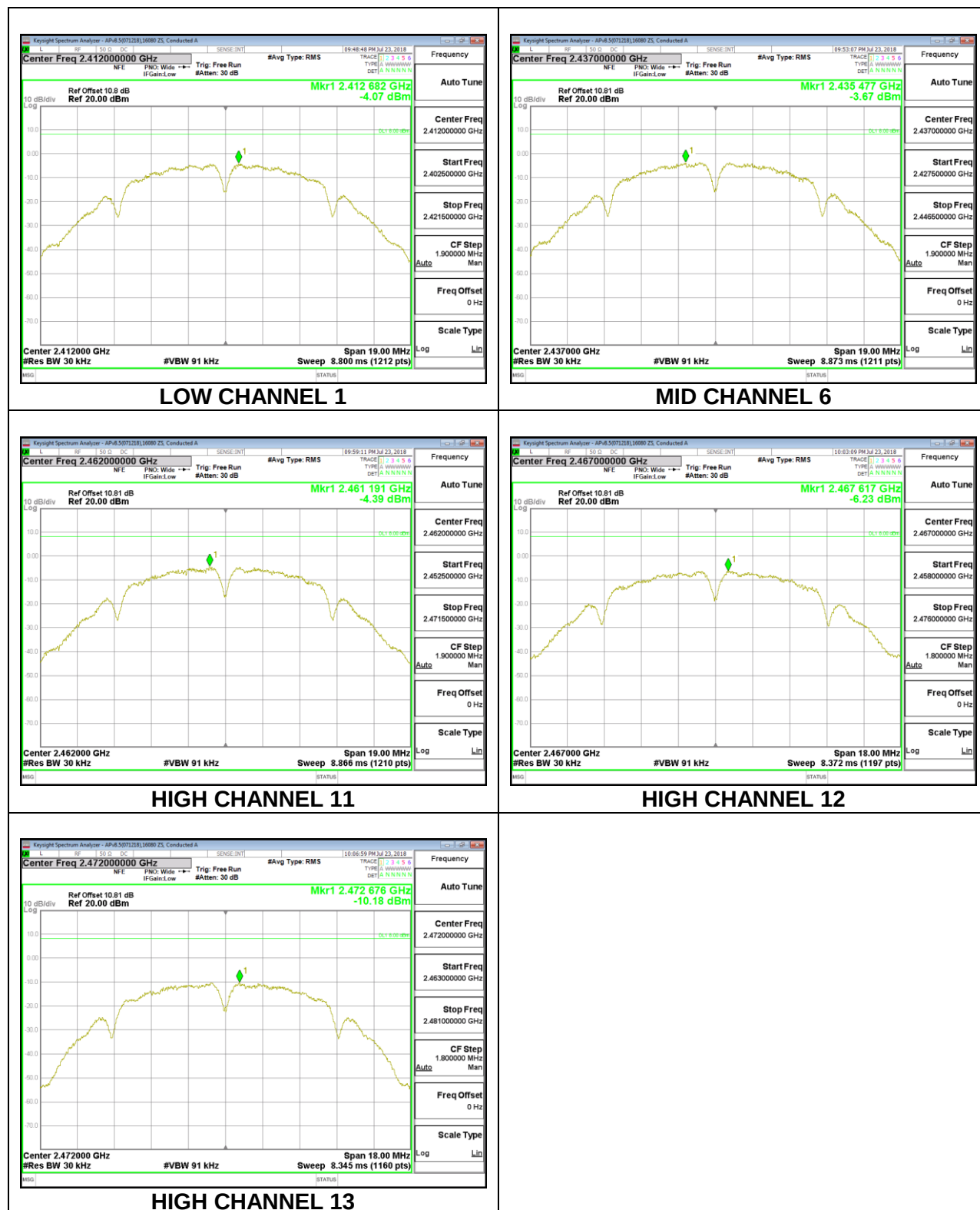
RESULTS

8.5.1. 802.11b MODE

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

Channel	Frequency (MHz)	Chain 0 Meas (dBm/ 3kHz)	Total Corr'd PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low 1	2412	-4.07	-4.07	8.0	-12.1
Mid 6	2437	-3.67	-3.67	8.0	-11.7
High 11	2462	-4.39	-4.39	8.0	-12.4
High 12	2467	-6.23	-6.23	8.0	-14.2
High 13	2472	-10.18	-10.18	8.0	-18.2

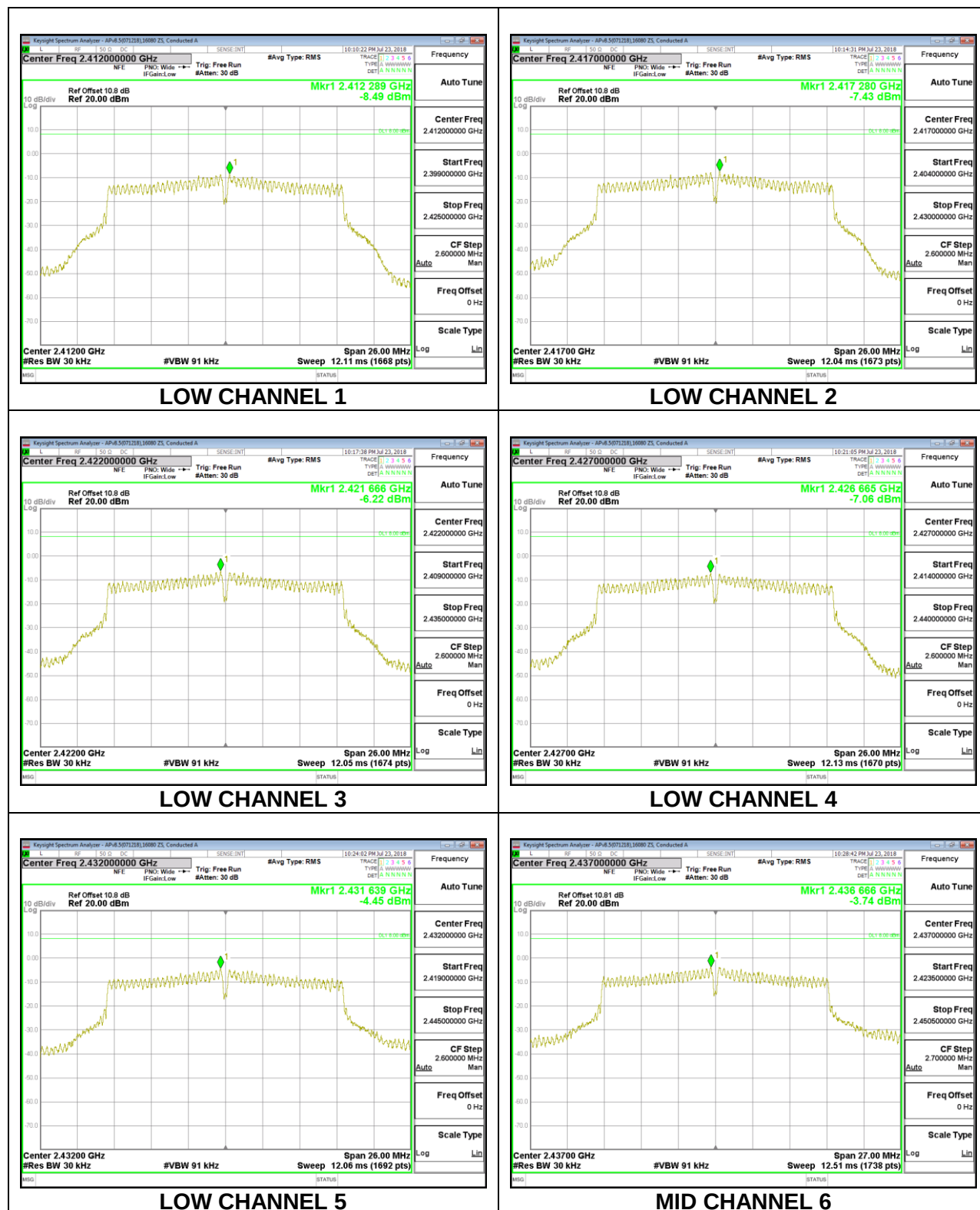


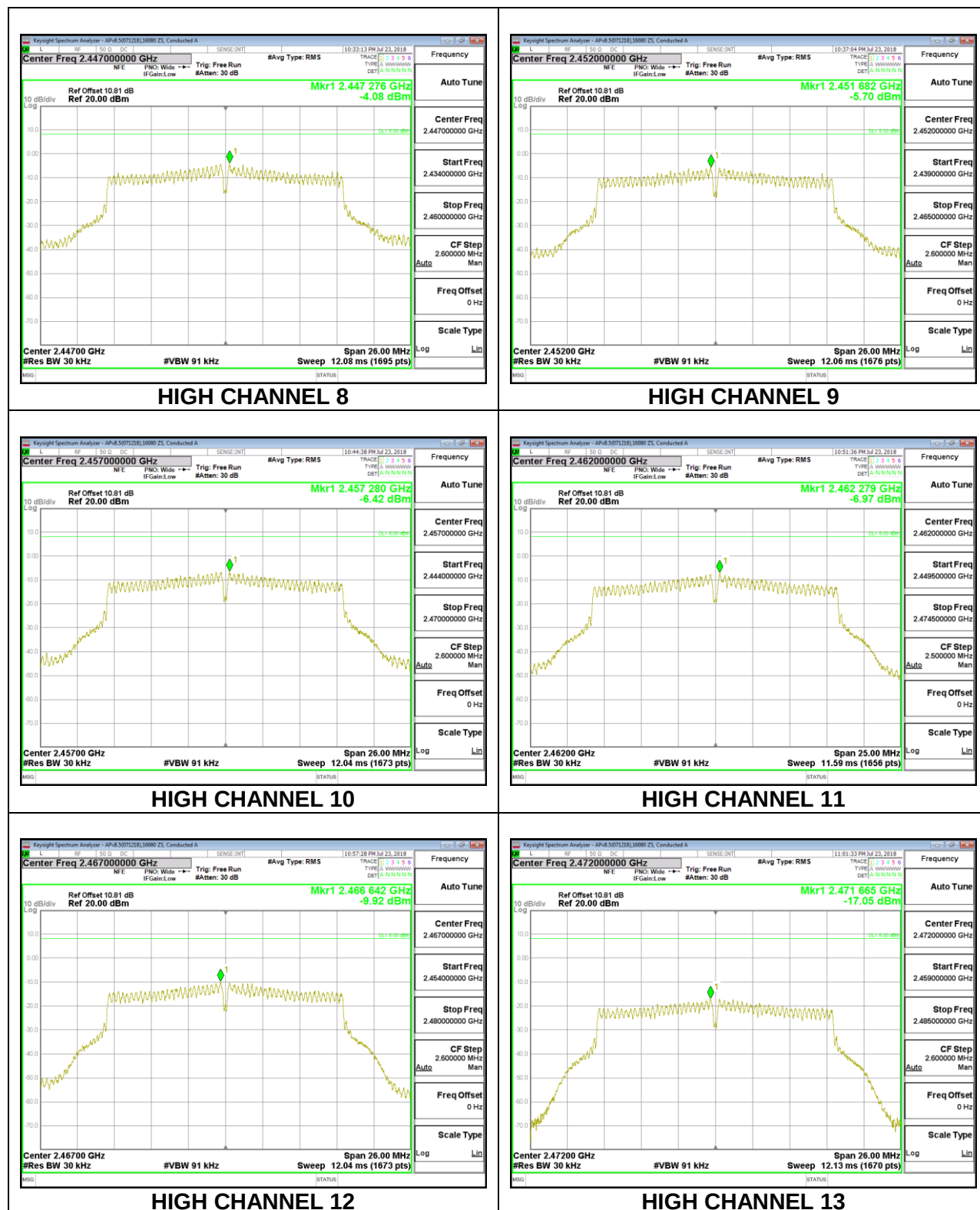
8.5.2. 802.11g MODE

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

Channel	Frequency (MHz)	Chain 0 Meas (dBm/ 3kHz)	Total Corr'd PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low 1	2412	-8.49	-8.49	8.0	-16.5
Low 2	2417	-7.43	-7.43	8.0	-15.4
Low 3	2422	-6.22	-6.22	8.0	-14.2
Low 4	2427	-7.06	-7.06	8.0	-15.1
Low 5	2432	-4.45	-4.45	8.0	-12.5
Mid 6	2437	-3.74	-3.74	8.0	-11.7
High 8	2447	-4.08	-4.08	8.0	-12.1
High 9	2452	-5.70	-5.70	8.0	-13.7
High 10	2457	-6.42	-6.42	8.0	-14.4
High 11	2462	-6.97	-6.97	8.0	-15.0
High 12	2467	-9.92	-9.92	8.0	-17.9
High 13	2472	-17.05	-17.05	8.0	-25.1



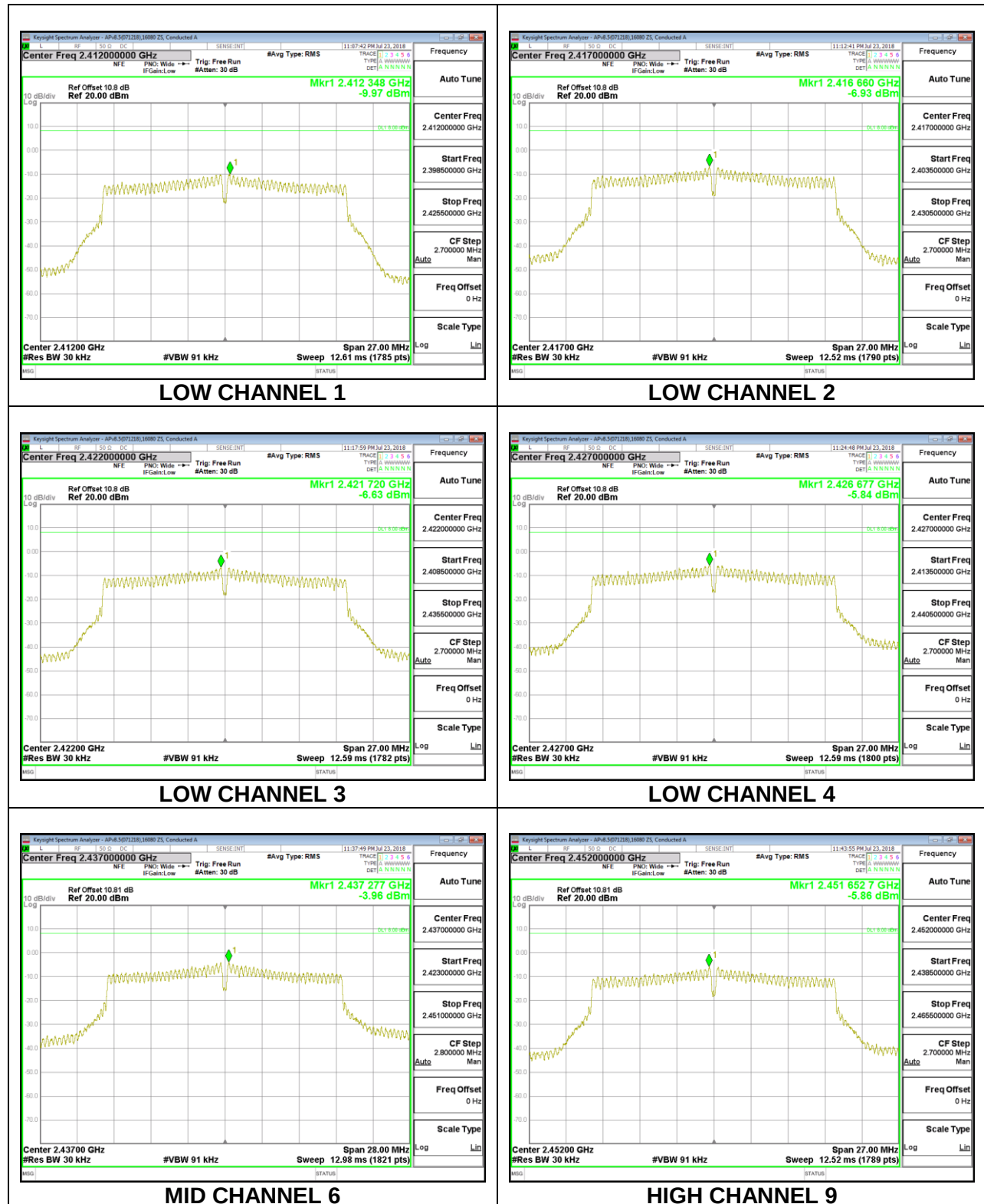


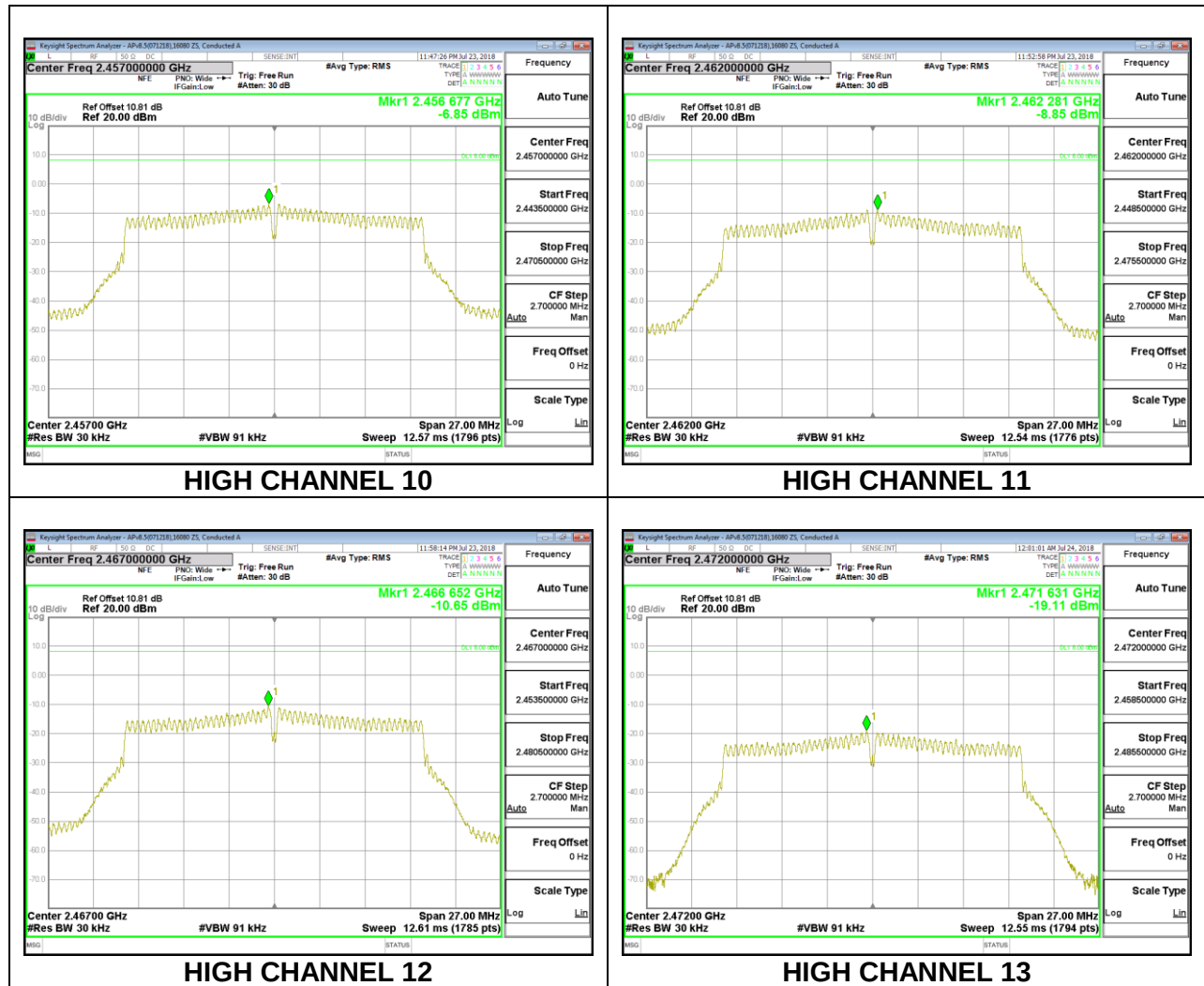
8.5.3. 802.11n HT20 MODE

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

Channel	Frequency (MHz)	Chain 0 Meas (dBm/ 3kHz)	Total Corr'd PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low 1	2412	-9.97	-9.97	8.0	-18.0
Low 2	2417	-6.93	-6.93	8.0	-14.9
Low 3	2422	-6.63	-6.63	8.0	-14.6
Low 4	2427	-5.84	-5.84	8.0	-13.8
Mid 6	2437	-3.96	-3.96	8.0	-12.0
High 9	2452	-5.86	-5.86	8.0	-13.9
High 10	2457	-6.85	-6.85	8.0	-14.9
High 11	2462	-8.85	-8.85	8.0	-16.9
High 12	2467	-10.65	-10.65	8.0	-18.7
High 13	2472	-19.11	-19.11	8.0	-27.1



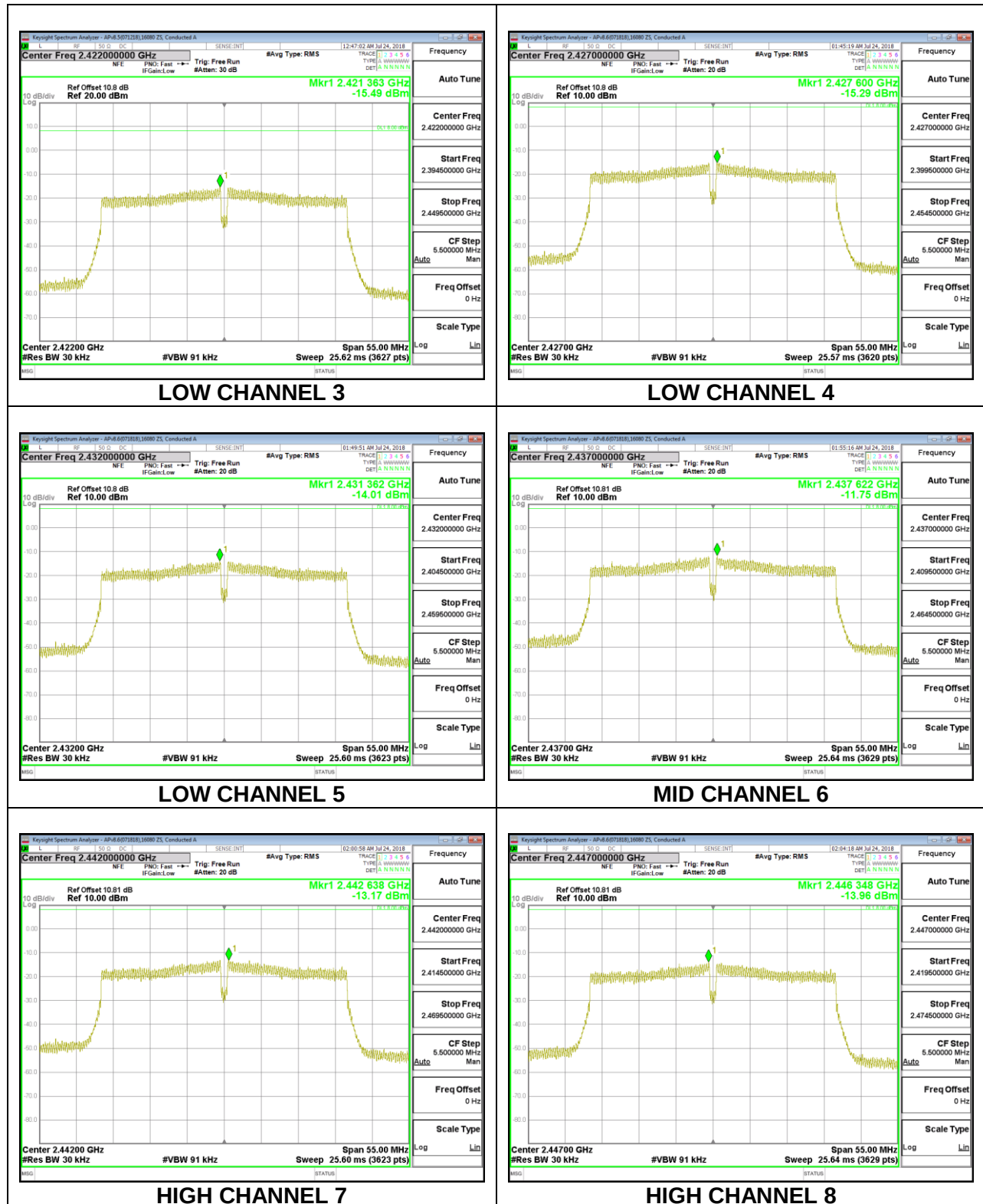


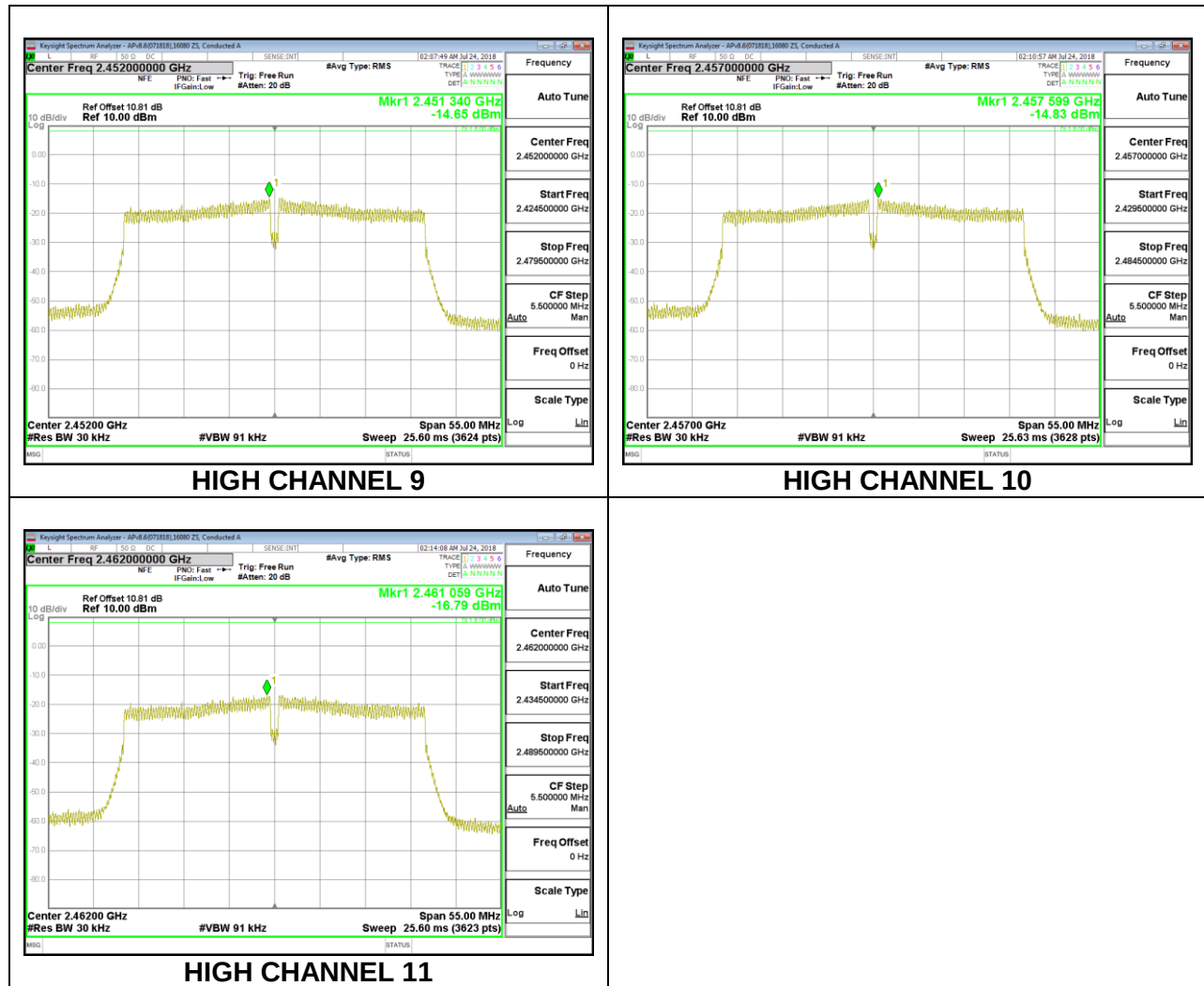
8.5.4. 802.11n HT40 MODE

Duty Cycle CF (dB)	0.10	Included in Calculations of Corr'd PSD
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PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm/ 3kHz)	Total Corr'd PSD (dBm/ 3kHz)	Limit (dBm/ 3kHz)	Margin (dB)
Low 3	2422	-15.49	-15.39	8.0	-23.4
Low 4	2427	-15.29	-15.19	8.0	-23.2
Low 5	2432	-14.01	-13.91	8.0	-21.9
Mid 6	2437	-11.75	-11.65	8.0	-19.7
High 7	2442	-13.17	-13.07	8.0	-21.1
High 8	2447	-13.96	-13.86	8.0	-21.9
High 9	2452	-14.65	-14.55	8.0	-22.6
High 10	2457	-14.83	-14.73	8.0	-22.7
High 11	2462	-16.79	-16.69	8.0	-24.7





8.6. CONDUCTED SPURIOUS EMISSIONS

LIMITS

NCC LP0002 §3.10.1.5 (1)

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.

Output power was measured based on the use of average measurement, therefore the required attenuation is 30 dB.

RESULTS

8.6.1. 802.11b MODE

