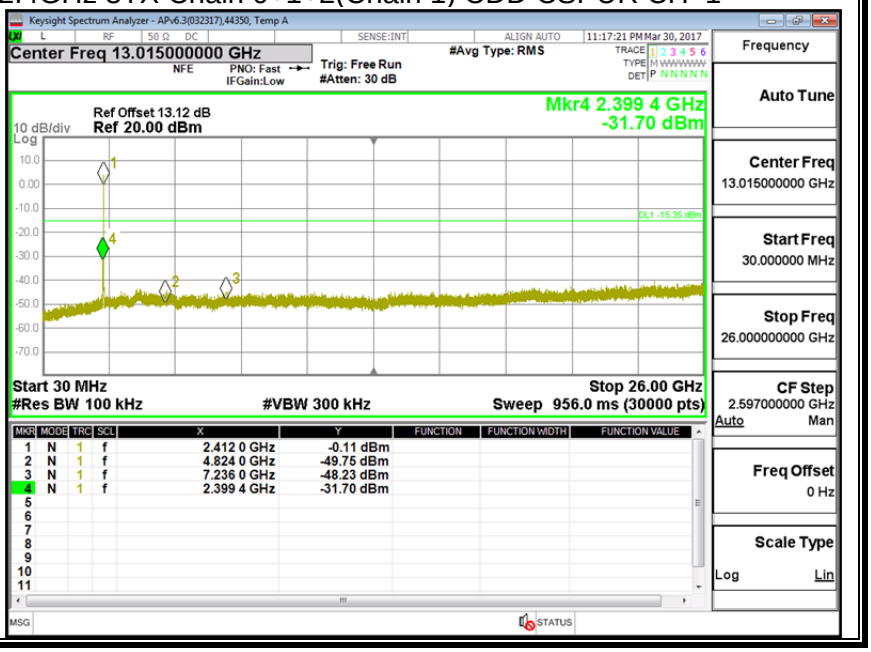
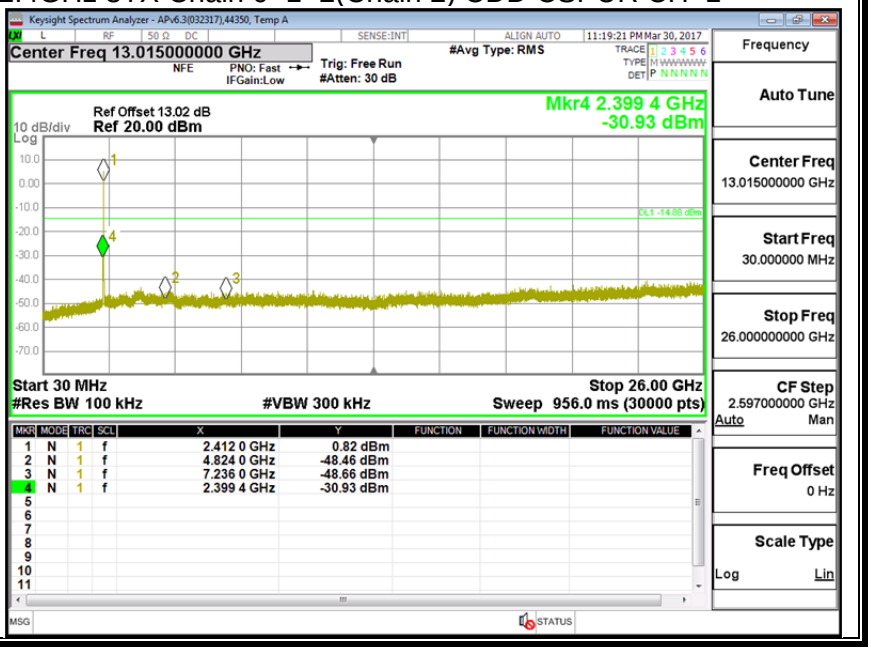
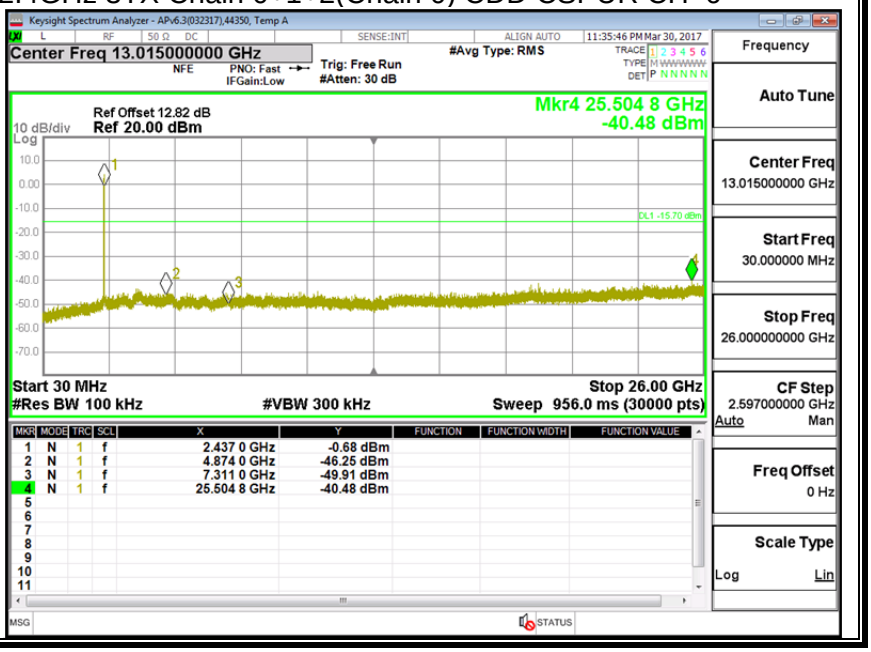
2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CSPUR CH 1



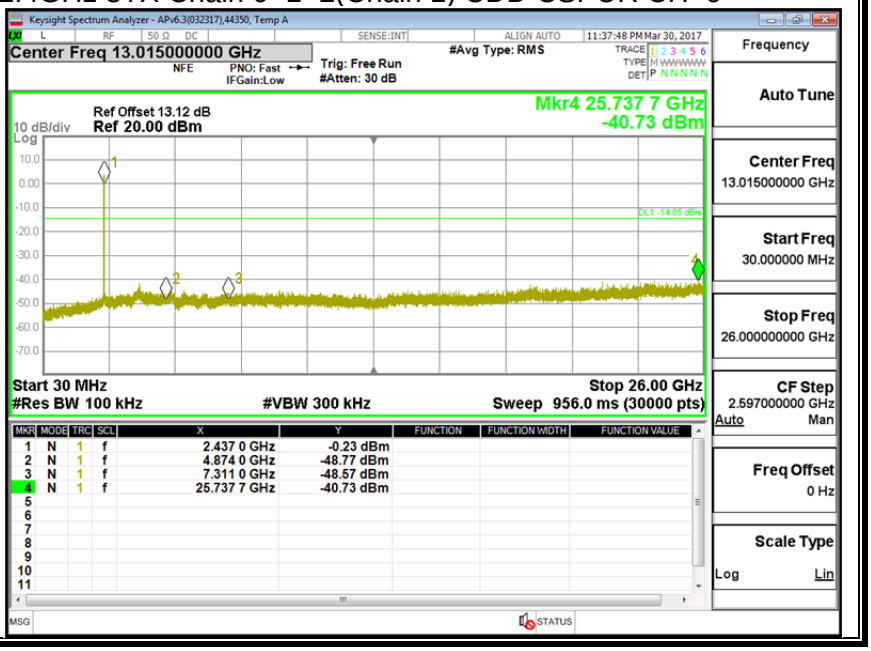
2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CSPUR CH 1



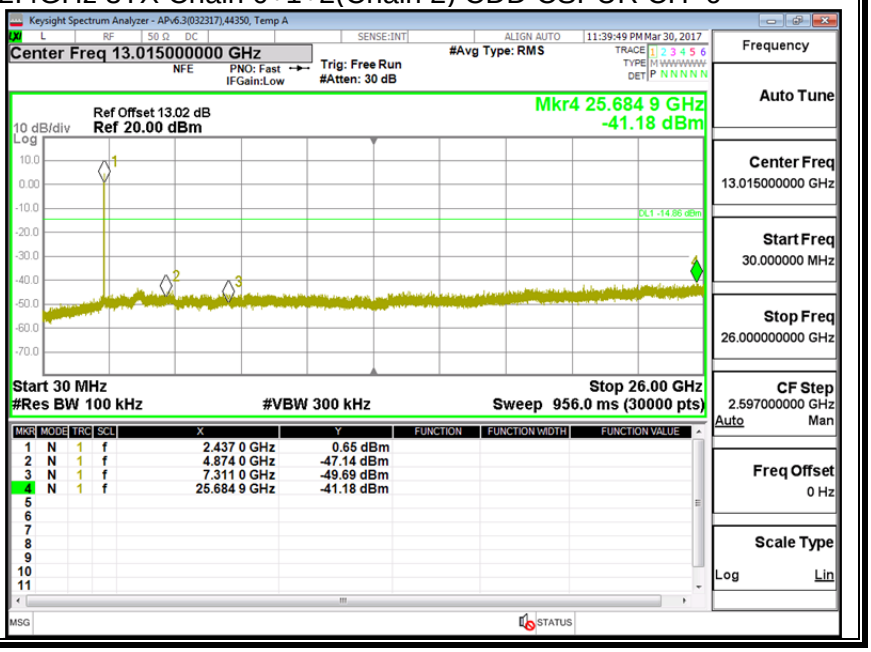
2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CSPUR CH 6



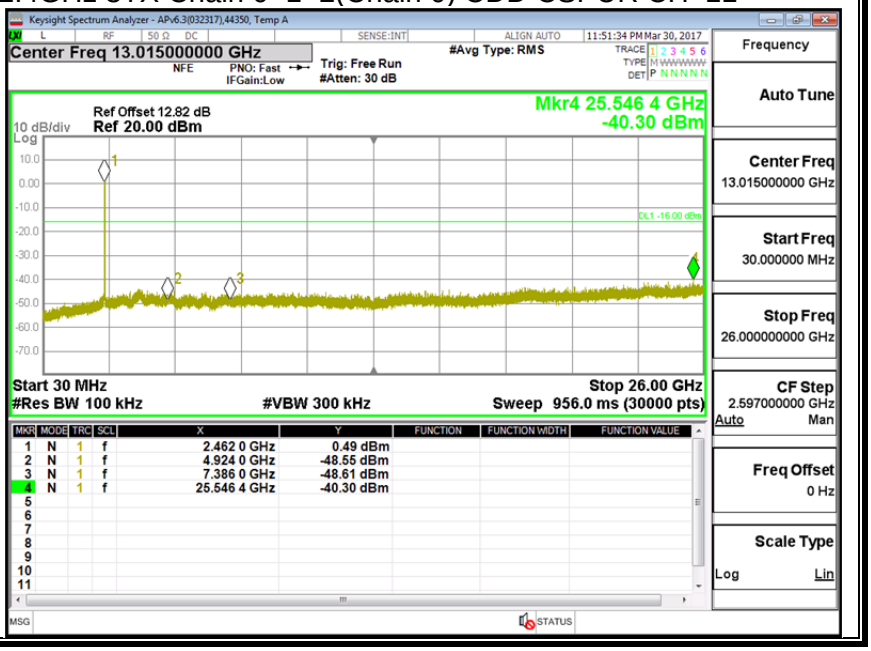
2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CSPUR CH 6



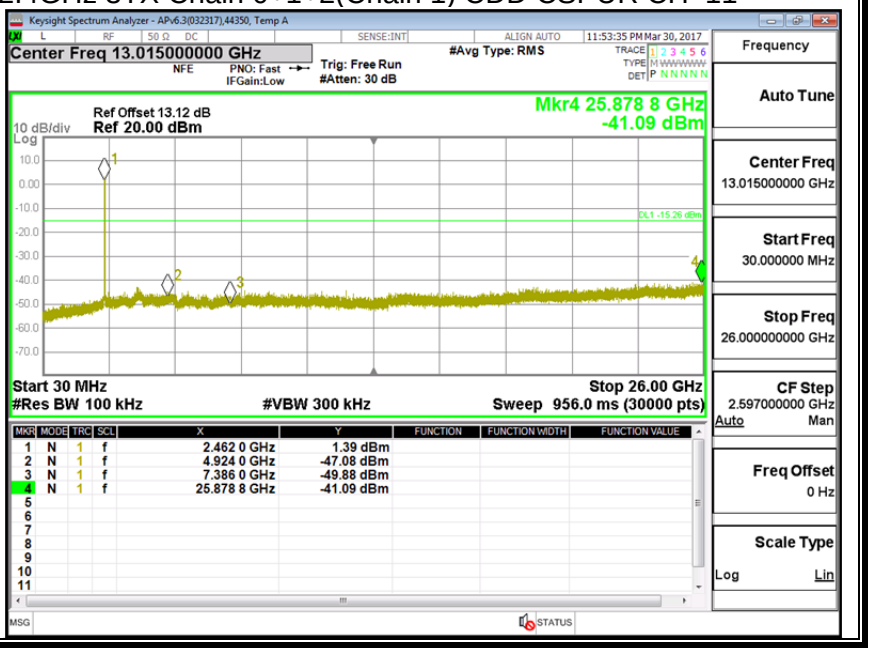
2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CSPUR CH 6



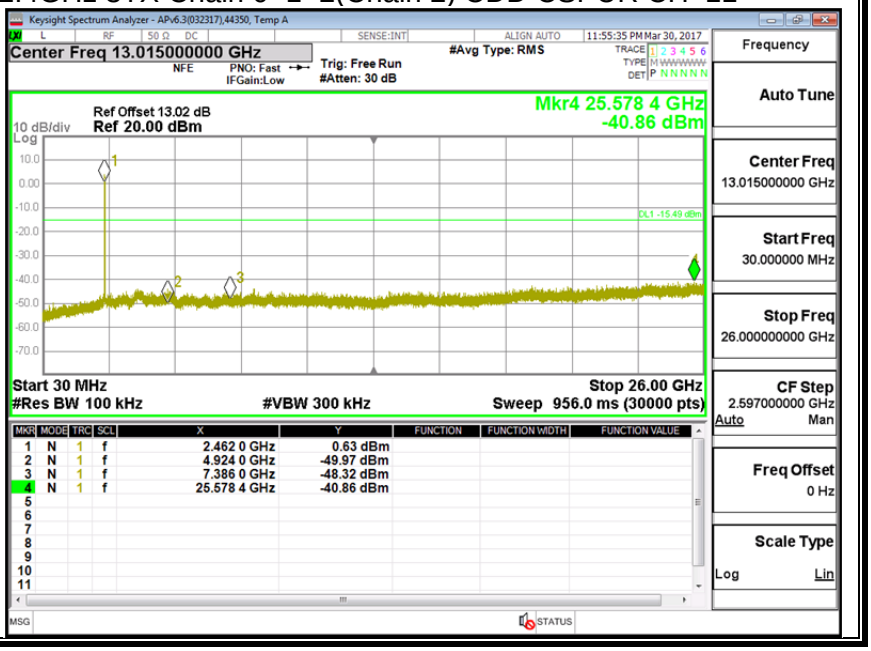
2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CSPUR CH 11



2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CSPUR CH 11



2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CSPUR CH 11



8.3. 11n HT20 3TX CDD MIMO MODE IN THE 2.4GHz BAND

8.3.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

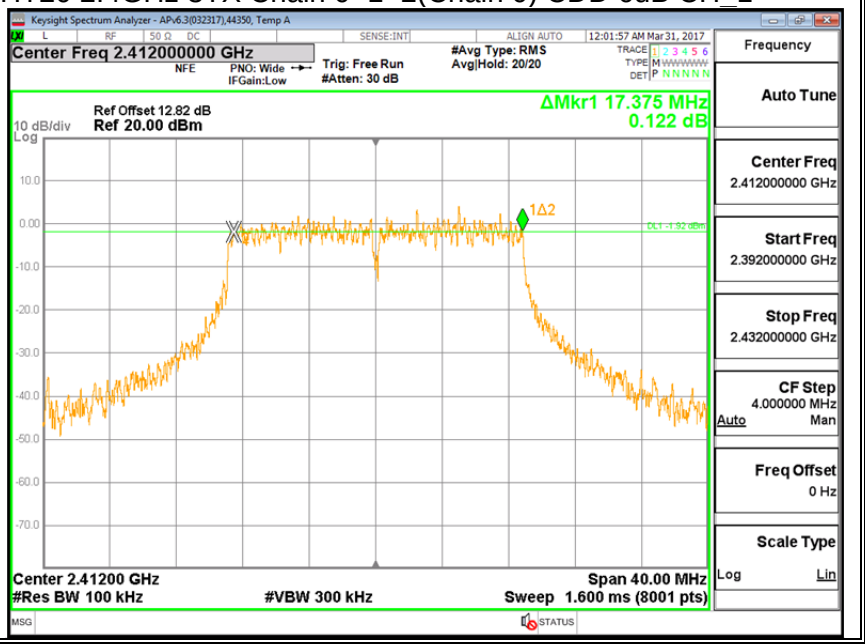
IC RSS-247 (5.2) (a)

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

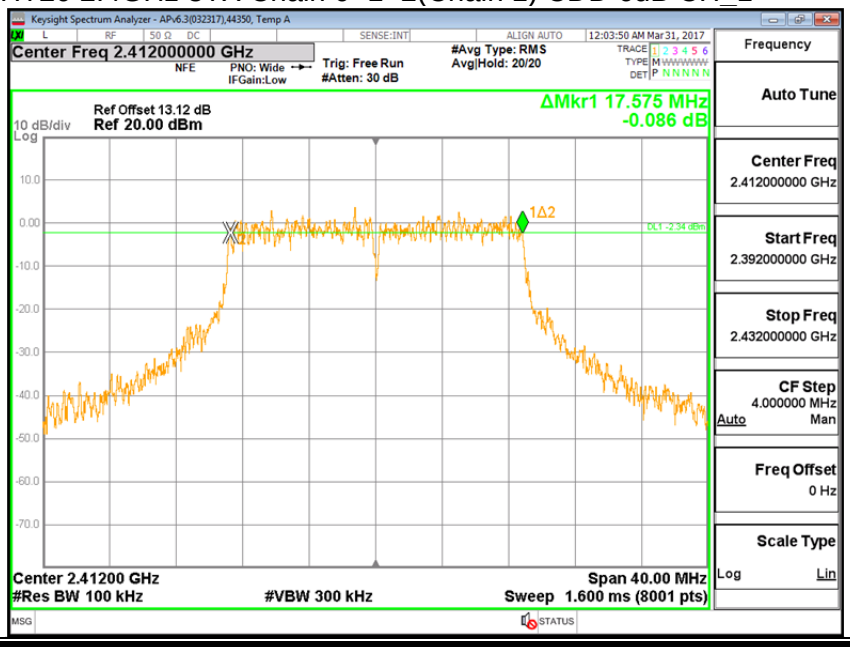
RESULTS

Channel	Frequency	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	6 dB BW Chain 2 (MHz)	Minimum Limit (MHz)
Low_1	2412	17.375	17.575	17.680	0.5
Middle_6	2437	16.910	17.565	17.330	0.5
High_11	2462	17.705	17.705	17.655	0.5

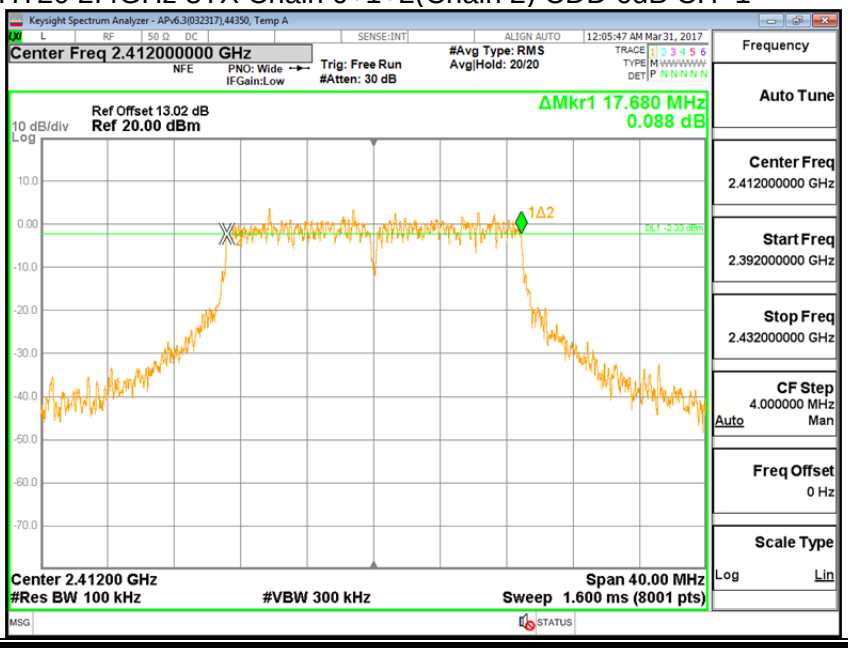
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD 6dB CH_1



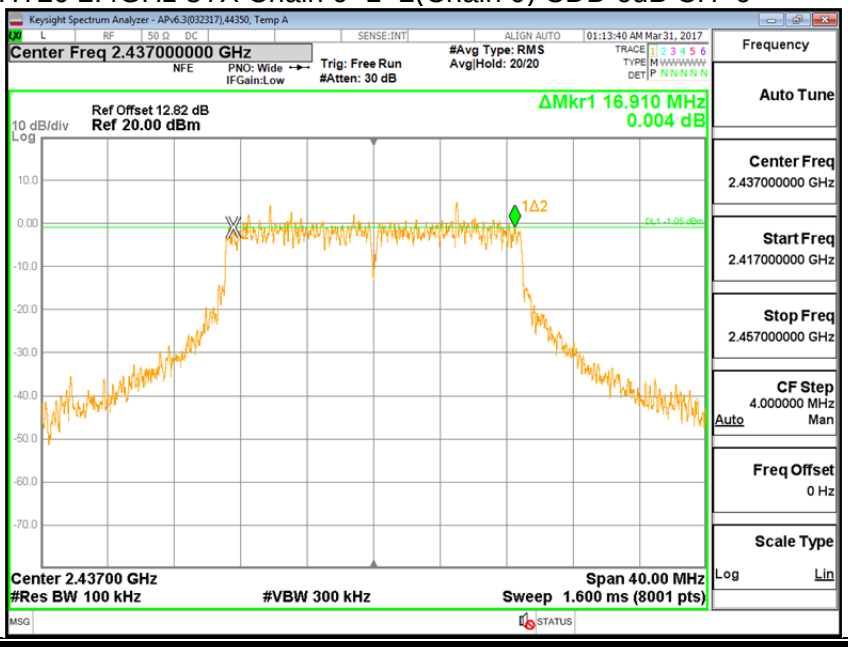
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD 6dB CH_1



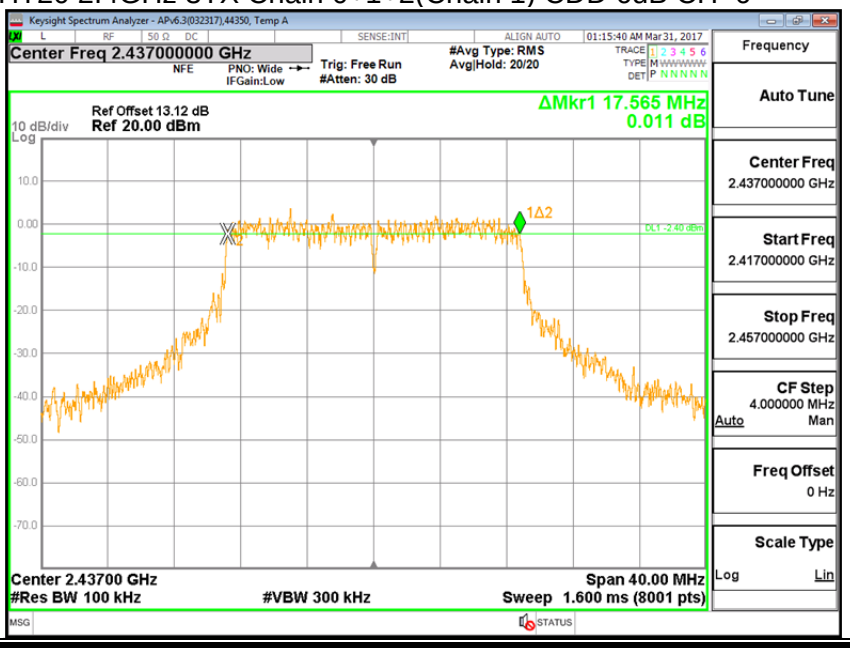
HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD 6dB CH 1



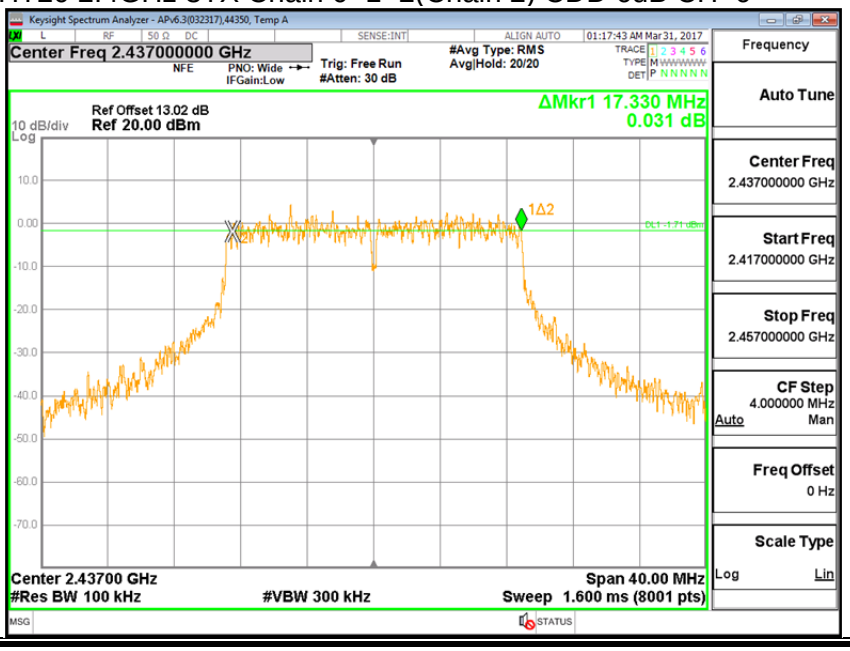
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD 6dB CH 6



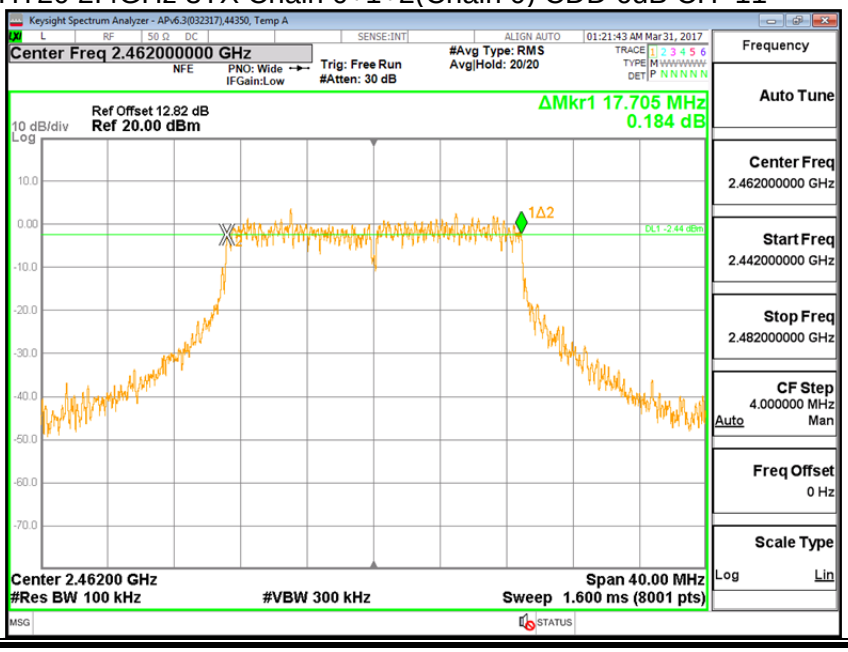
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD 6dB CH 6



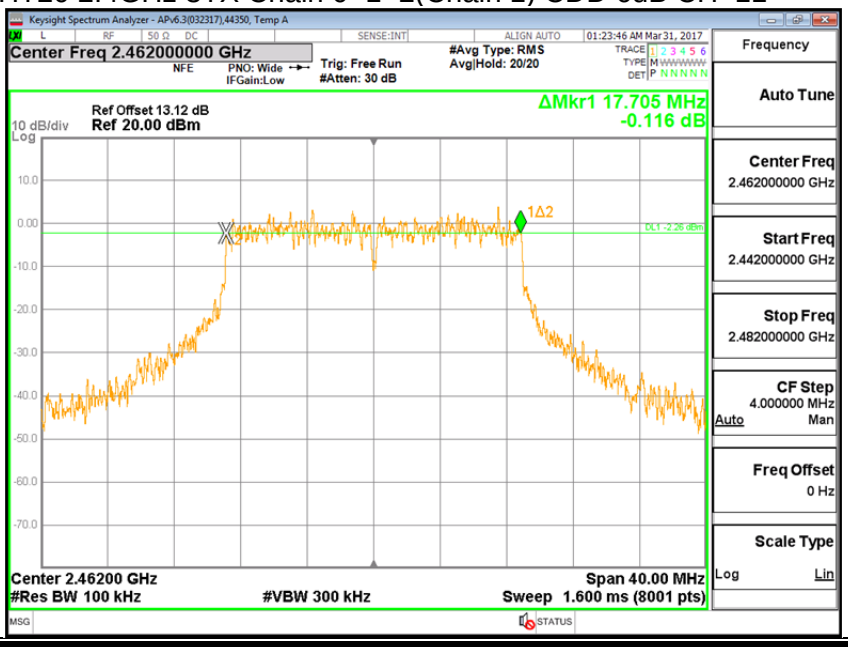
HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD 6dB CH 6



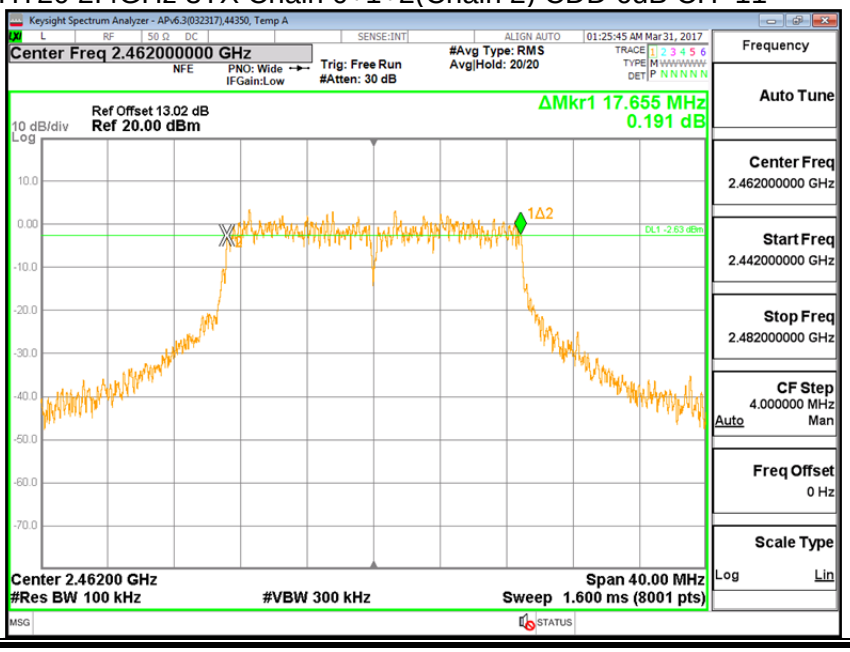
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD 6dB CH 11



HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD 6dB CH 11



HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD 6dB CH 11



8.3.2. 99% BANDWIDTH

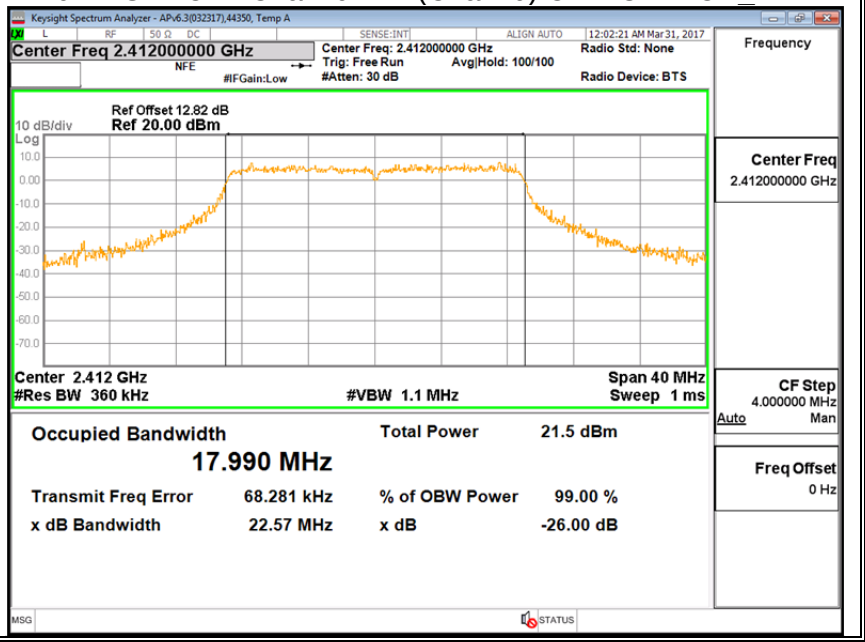
LIMITS

None; for reporting purposes only.

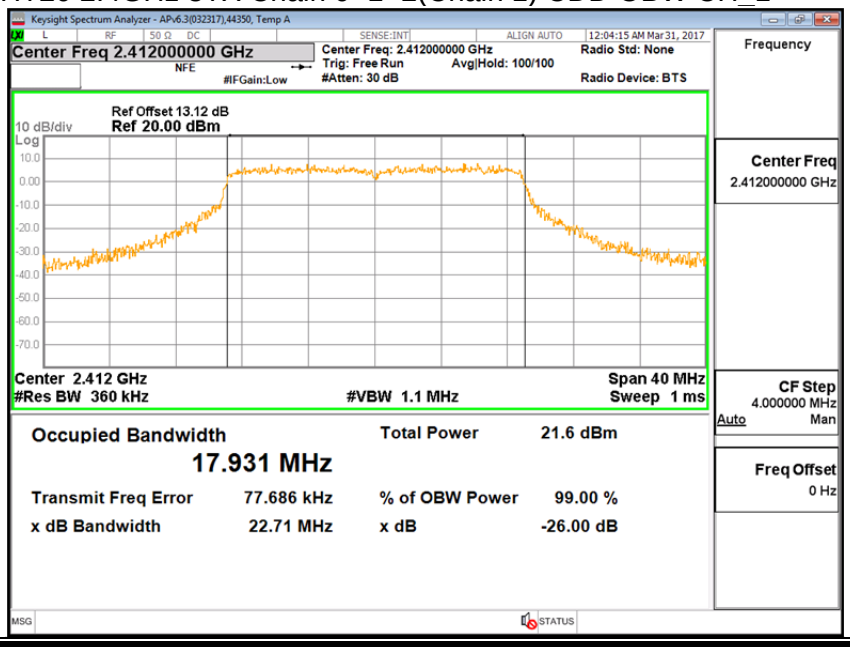
RESULTS

Channel	Frequency (MHz)	99% Bandwidth Chain 0 (MHz)	99% Bandwidth Chain 1 (MHz)	99% Bandwidth Chain 2 (MHz)
Low_1	2412	17.990	17.931	17.944
Middle_6	2437	17.925	17.956	17.849
High_11	2462	17.951	17.943	17.943

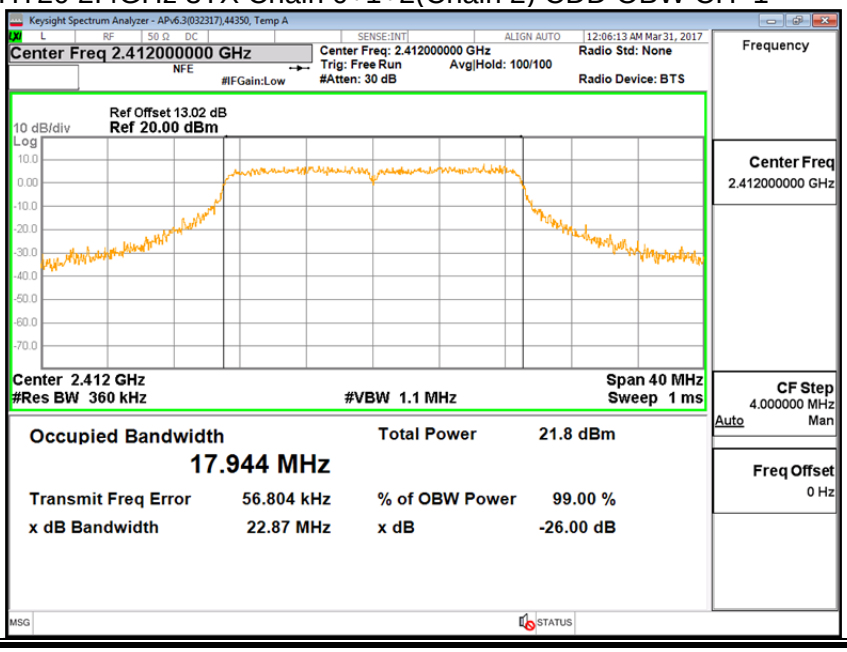
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD OBW CH_1



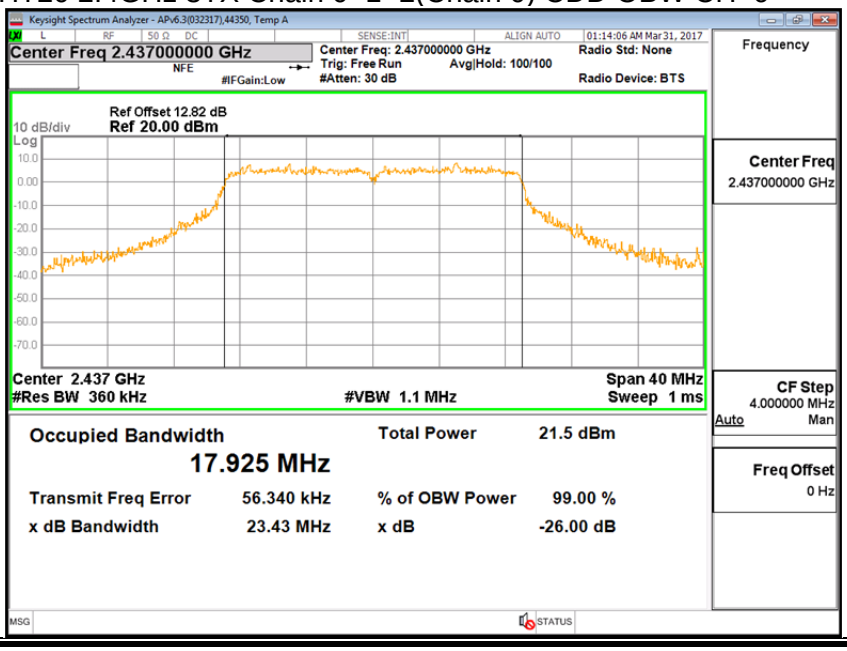
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD OBW CH_1



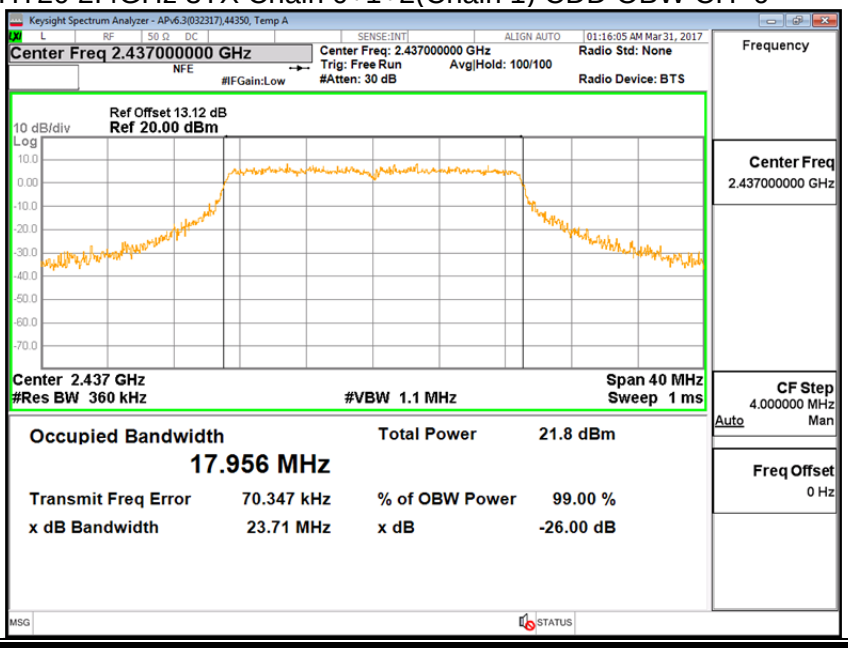
HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD OBW CH 1



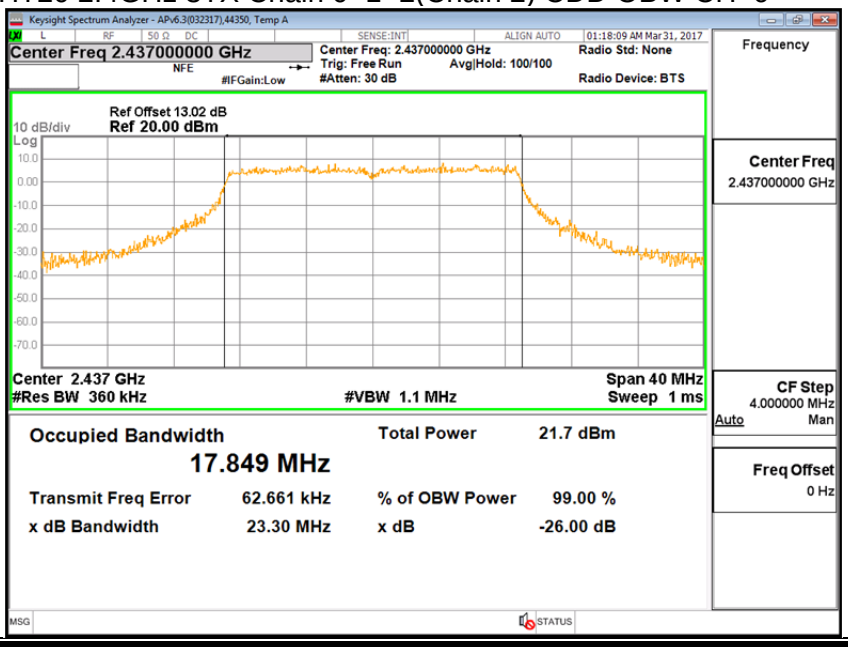
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD OBW CH 6



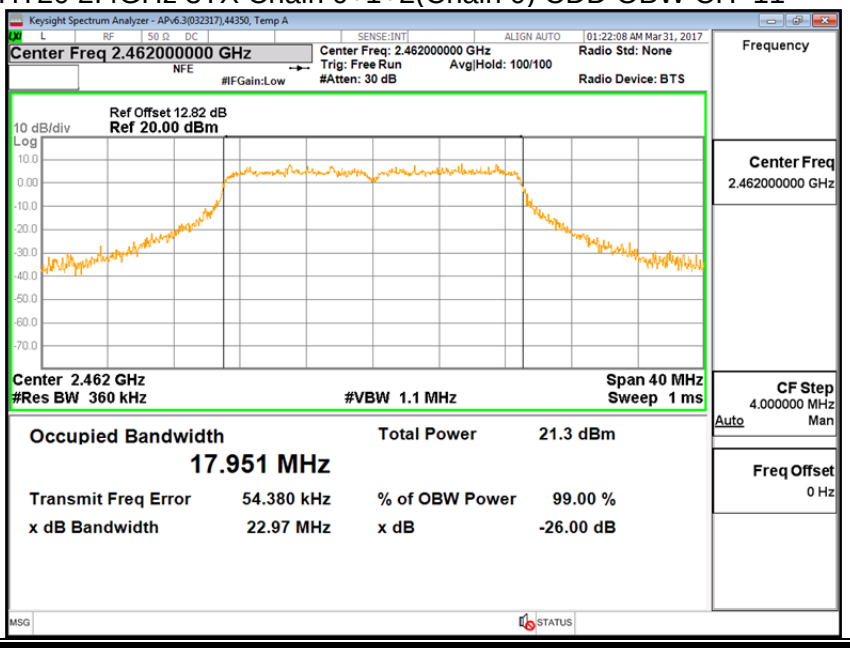
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD OBW CH 6



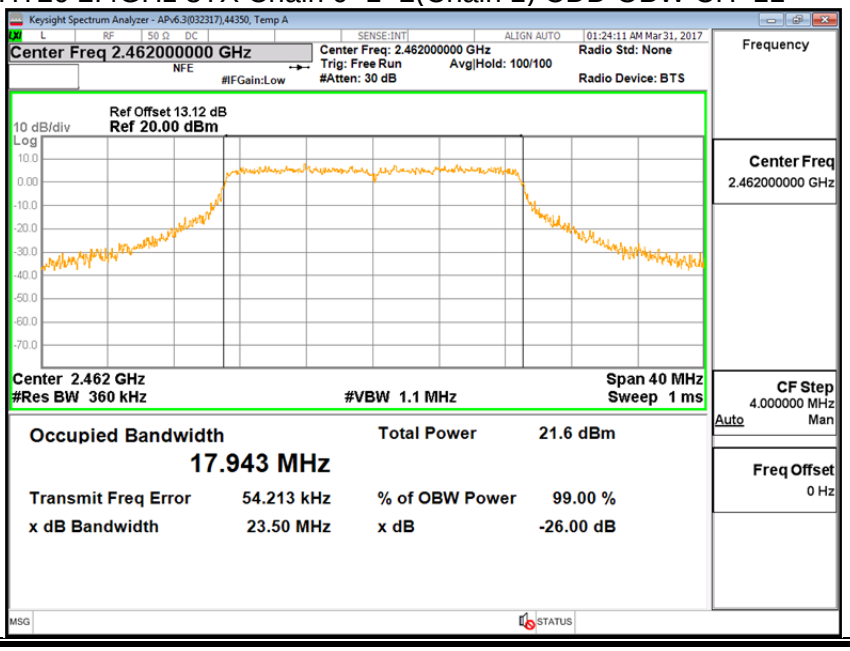
HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD OBW CH 6



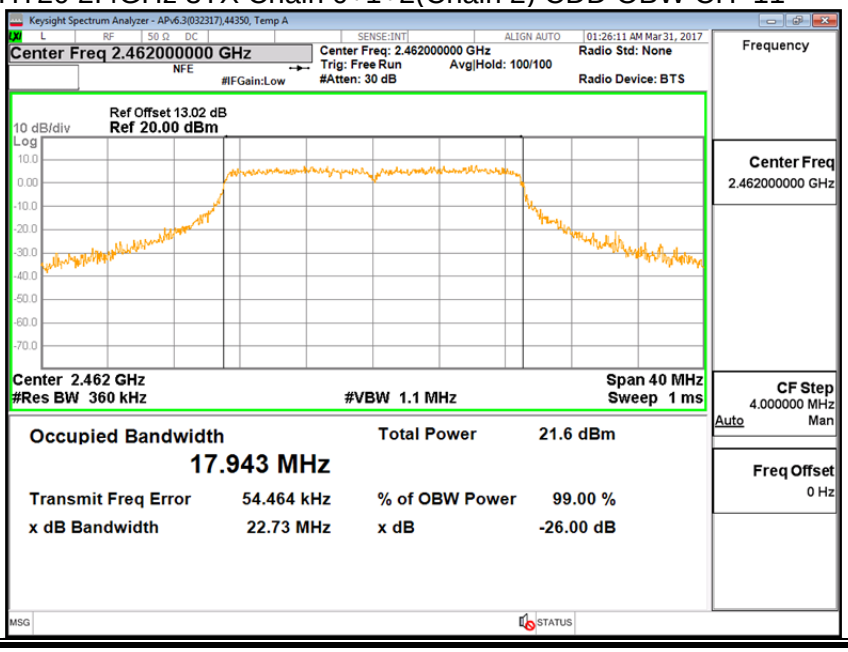
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD OBW CH 11



HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD OBW CH 11



HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD OBW CH 11



8.3.3. OUTPUT POWER

ID:	GE43578	Date:	6/1/17

LIMITS

FCC §15.247

IC 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.

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)	Chain 2 Antenna Gain (dBi)	Uncorrelated Chains Directional Gain (dBi)
2.69	2.02	1.33	2.05

RESULTS

Limits

Channel	Frequency (MHz)	Directional Gain (dBi)	FCC Power Limit (dBm)	IC Power Limit (dBm)	IC EIRP Limit (dBm)	Max Power (dBm)
Low	2412	2.05	30.00	30	36	30.00
Low	2417	2.05	30.00	30	36	30.00
Low	2422	2.05	30.00	30	36	30.00
Mid	2437	2.05	30.00	30	36	30.00
High	2452	2.05	30.00	30	36	30.00
High	2457	2.05	30.00	30	36	30.00
High	2462	2.05	30.00	30	36	30.00

Results

Channel	Frequency (MHz)	Chain 0 Meas Power (dBm)	Chain 1 Meas Power (dBm)	Chain 2 Meas Power (dBm)	Total Corr'd Power (dBm)	Power Limit (dBm)	Margin (dB)
Low	2412	15.78	15.36	15.62	20.36	30.00	-9.64
Low	2417	16.81	17.15	17.31	21.87	30.00	-8.13
Low	2422	18.45	18.68	18.75	23.40	30.00	-6.60
Mid	2437	18.12	18.26	18.50	23.07	30.00	-6.93
High	2452	18.14	18.02	18.45	22.98	30.00	-7.02
High	2457	16.57	15.86	16.36	21.04	30.00	-8.96
High	2462	15.34	15.50	15.52	20.23	30.00	-9.77

8.3.4. POWER SPECTRAL DENSITY

LIMITS

FCC §15.247

IC RSS-247 (5.2) (b)

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.

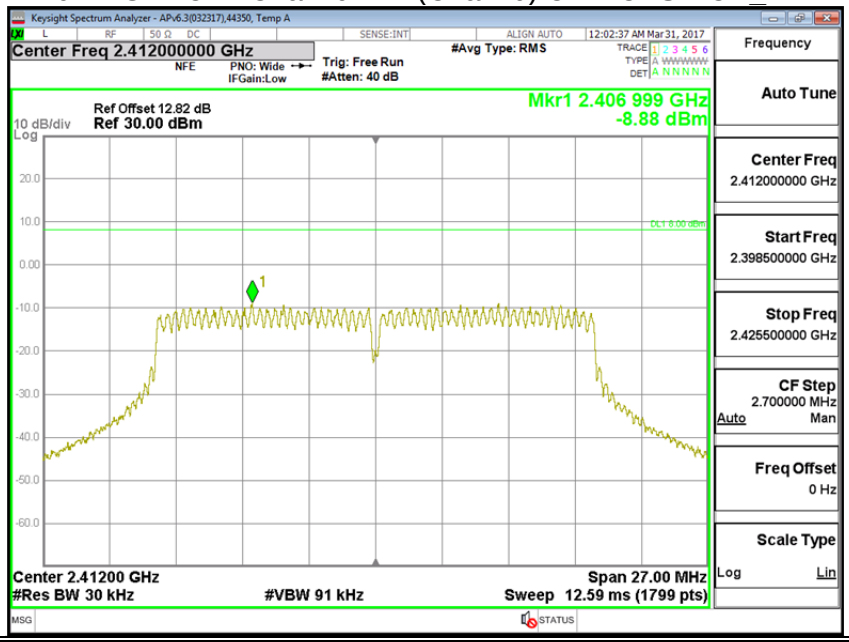
RESULTS

Duty Cycle CF (dB)	0.22	Included in Calculations of Corr'd PSD

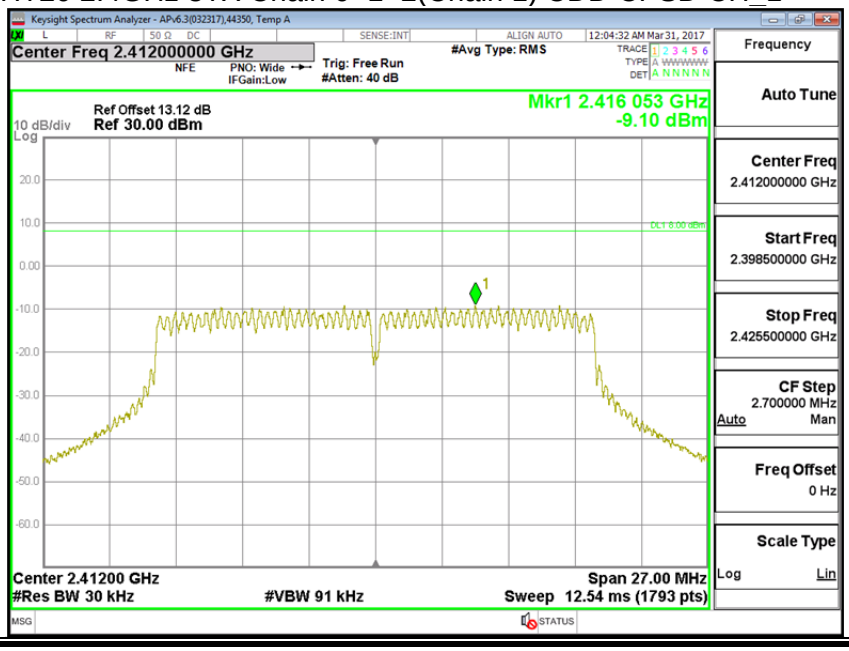
PSD Results

Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Chain 2 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-8.88	-9.10	-8.93	-3.98	8.0	-12.0
Low	2417	-7.34	-7.60	-7.14	-2.36	8.0	-10.4
Low	2422	-6.10	-6.45	-6.07	-1.21	8.0	-9.2
Mid	2437	-5.99	-6.40	-6.50	-1.30	8.0	-9.3
High	2452	-6.27	-6.18	-6.45	-1.31	8.0	-9.3
High	2457	-7.80	-7.98	-8.36	-3.05	8.0	-11.0
High	2462	-9.09	-9.09	-8.92	-4.04	8.0	-12.0

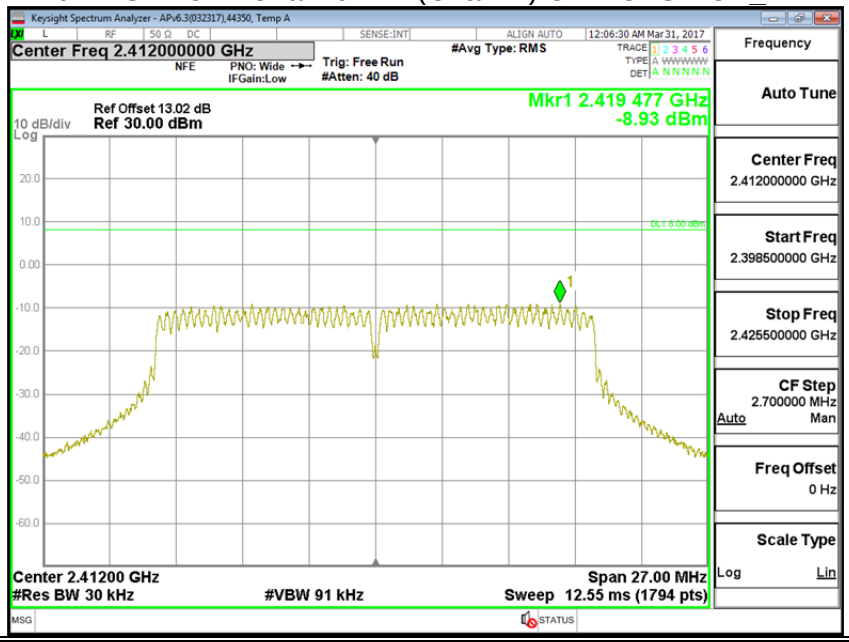
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CPSD CH_1



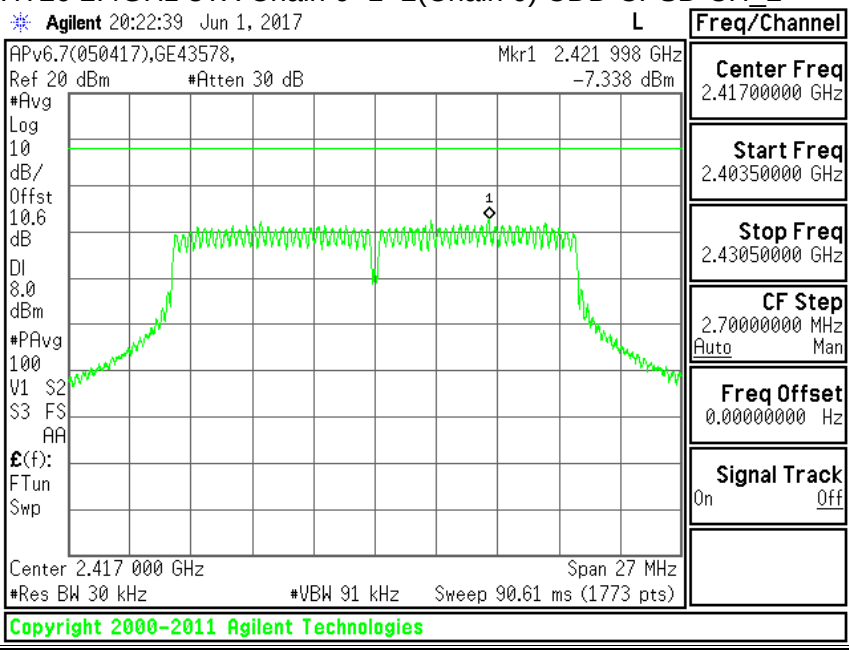
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CPSD CH_1



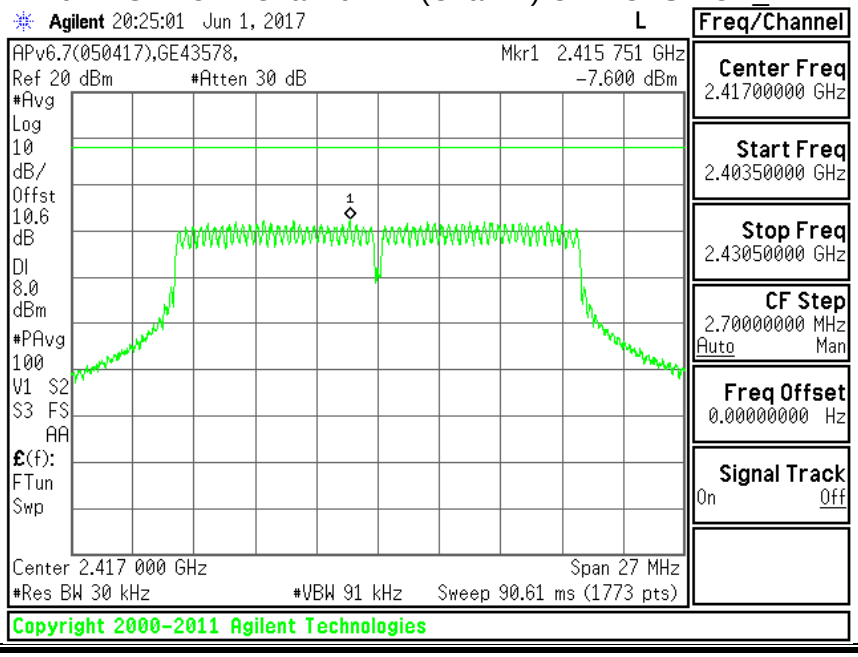
HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CPSD CH_1



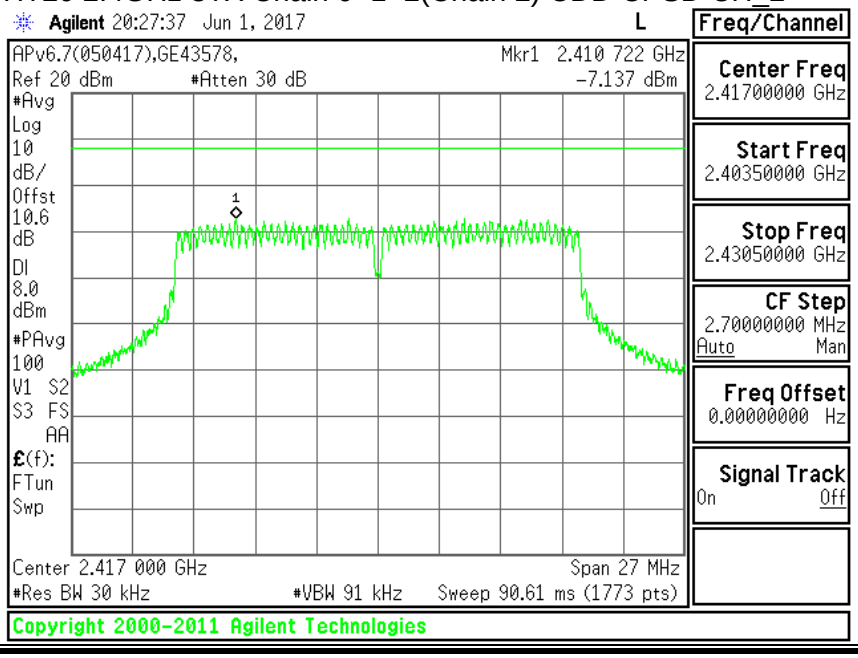
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CPSD CH_2



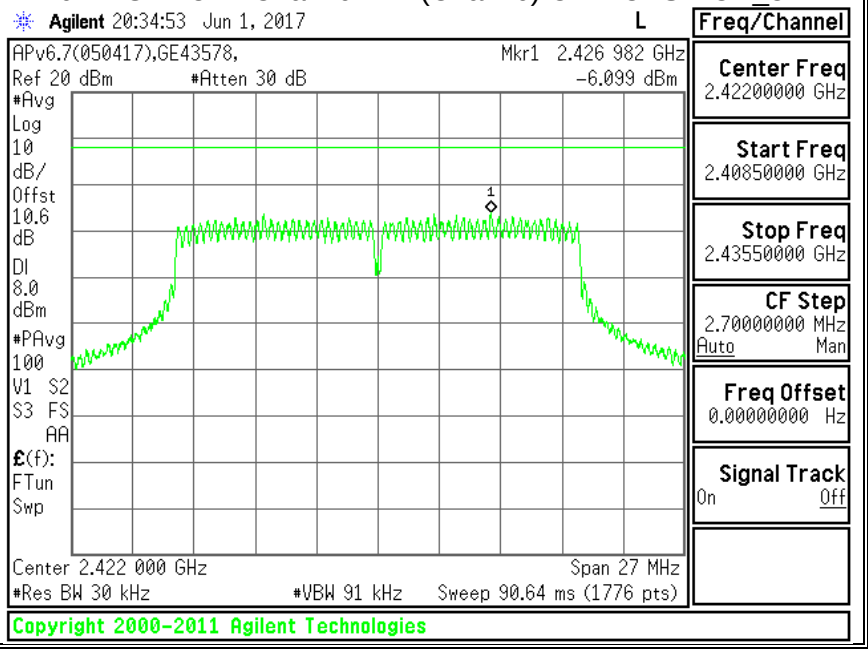
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CPSD CH_2



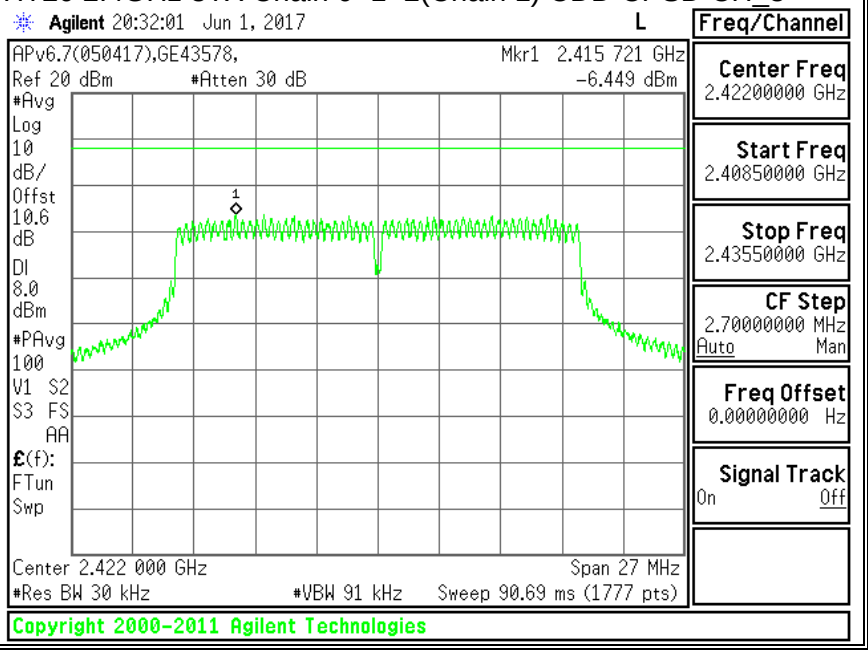
HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CPSD CH_2



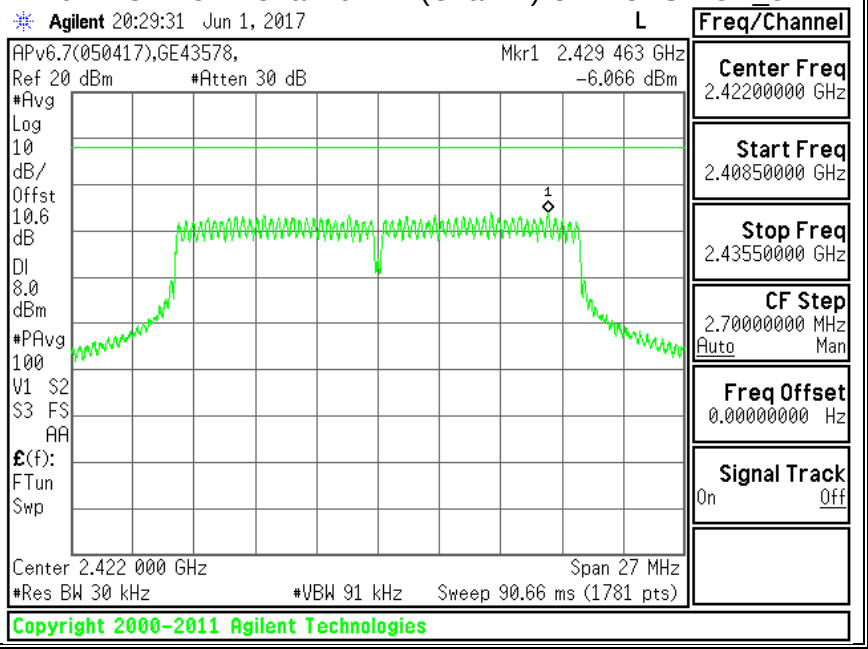
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CPSD CH_3



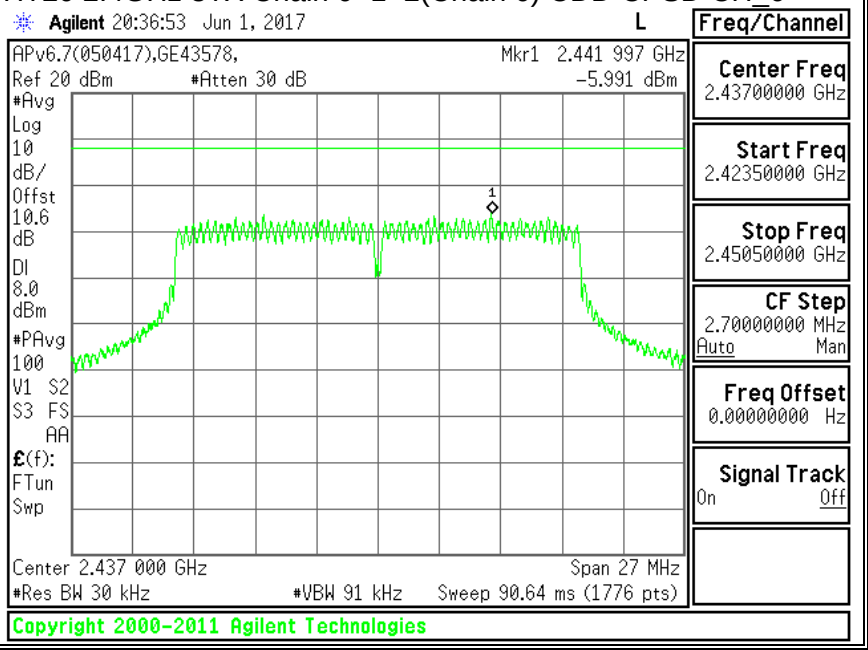
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CPSD CH_3



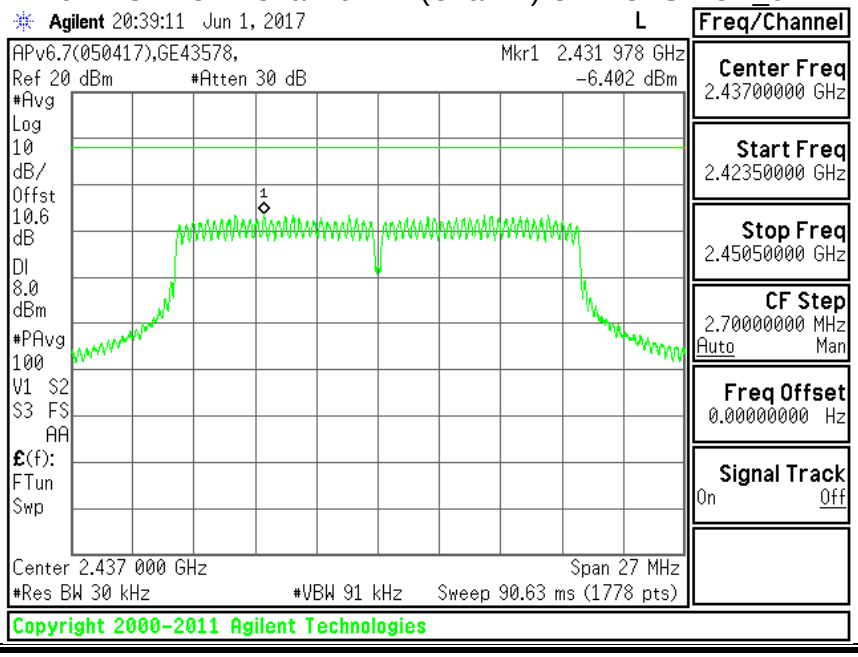
HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CPSD CH_3



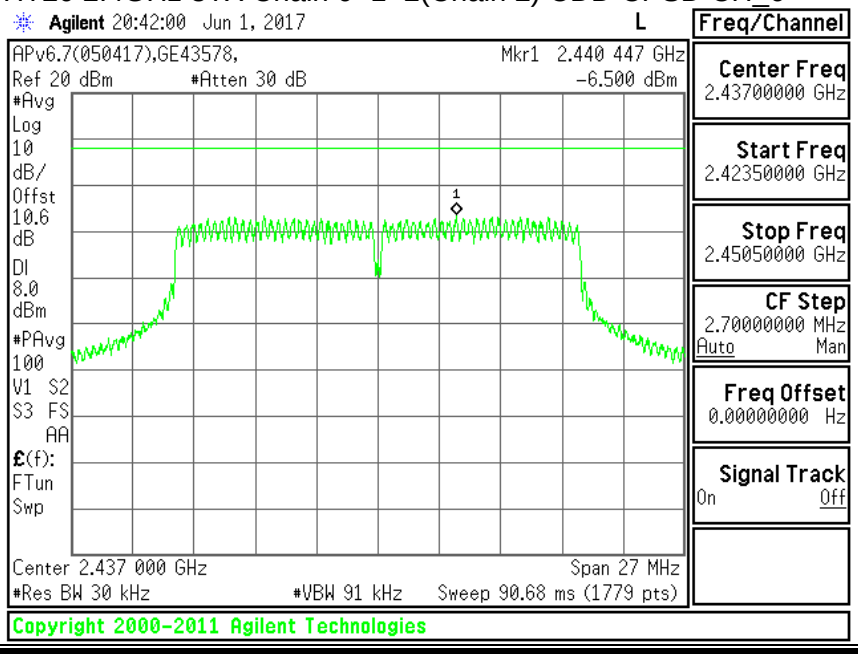
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CPSD CH_6



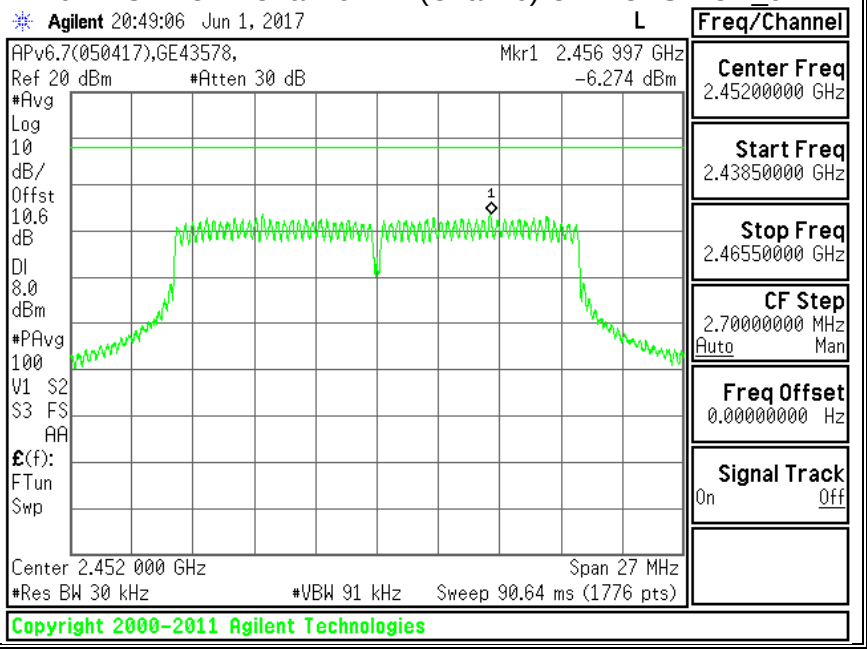
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CPSD CH_6



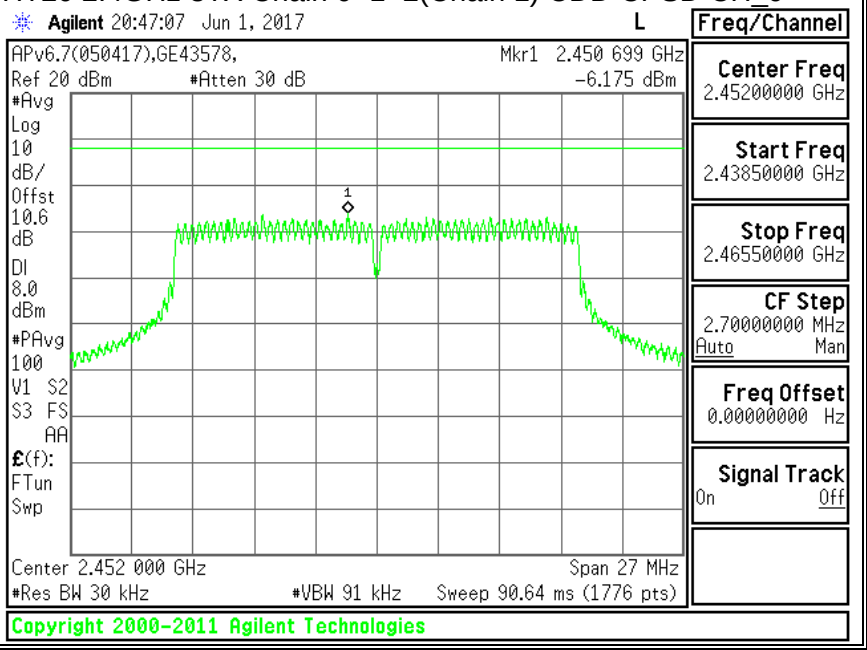
HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CPSD CH_6



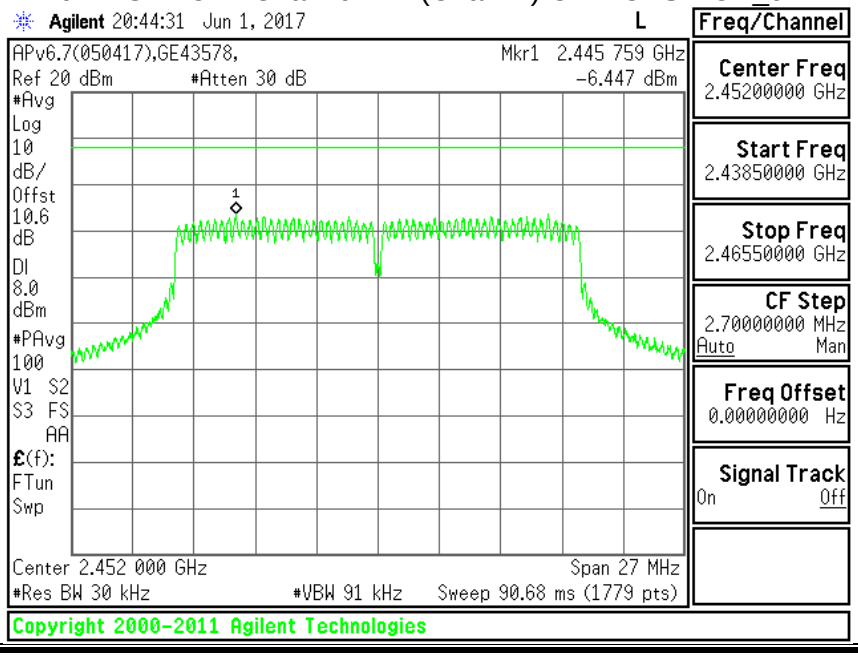
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CPSD CH_9



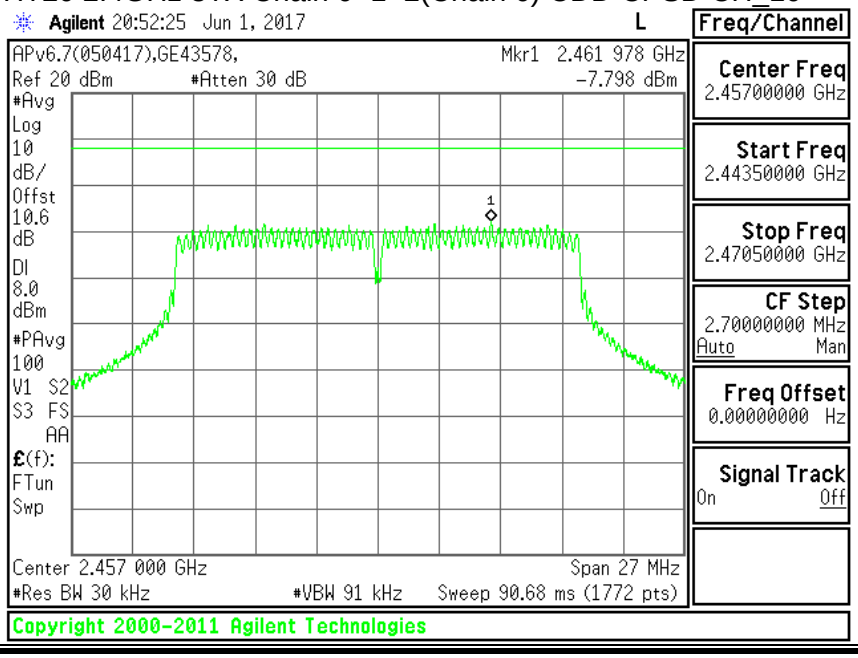
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CPSD CH_9



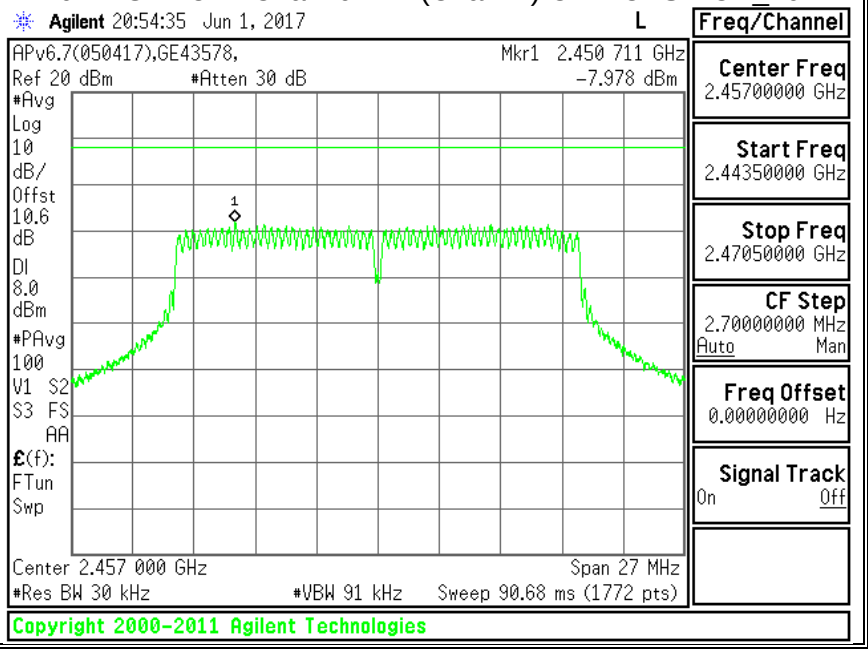
HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CPSD CH_9



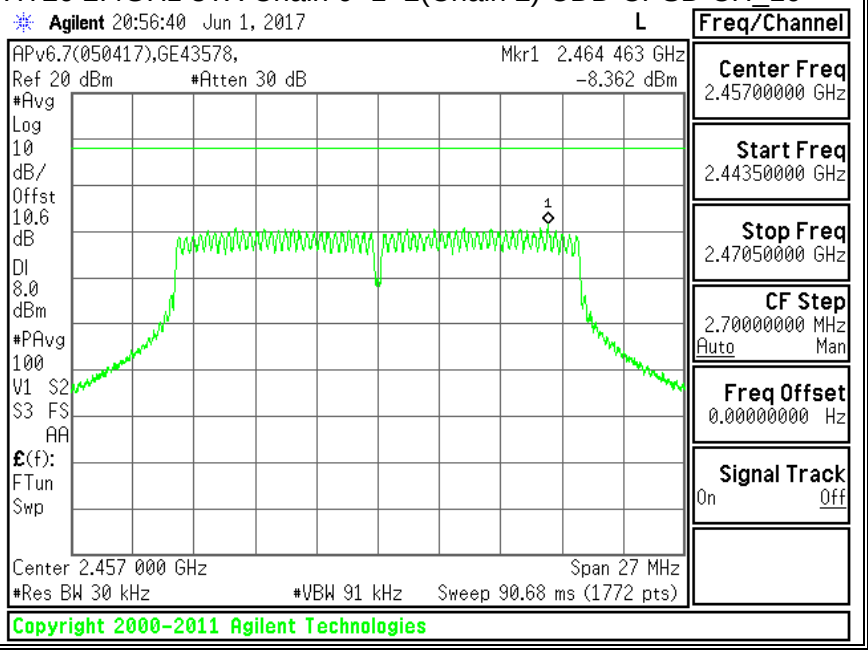
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CPSD CH_10



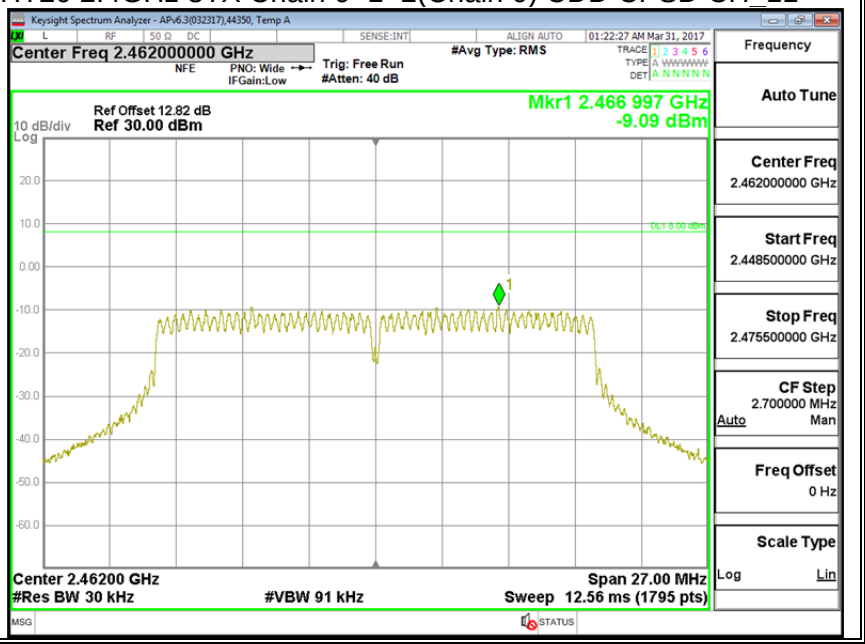
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CPSD CH_10



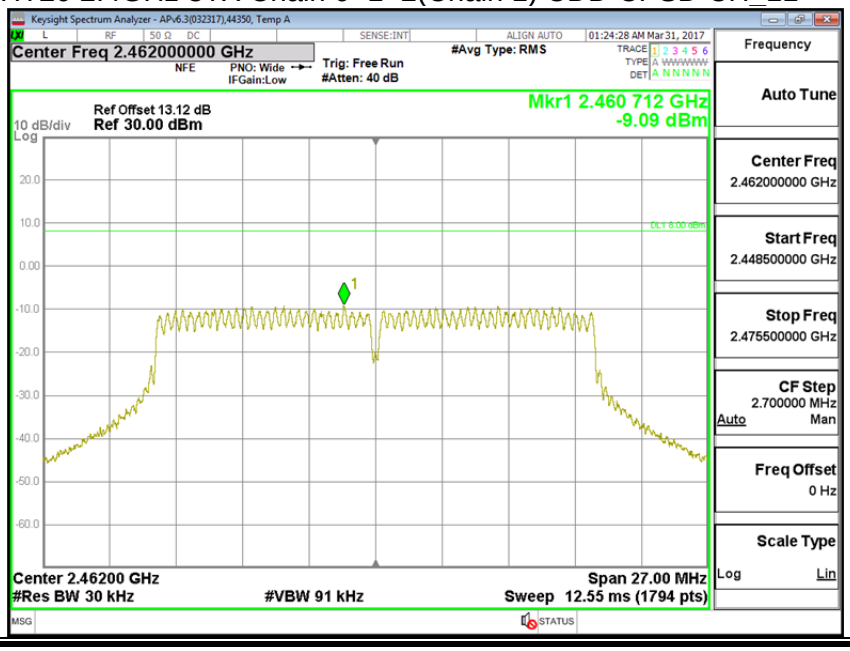
HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CPSD CH_10



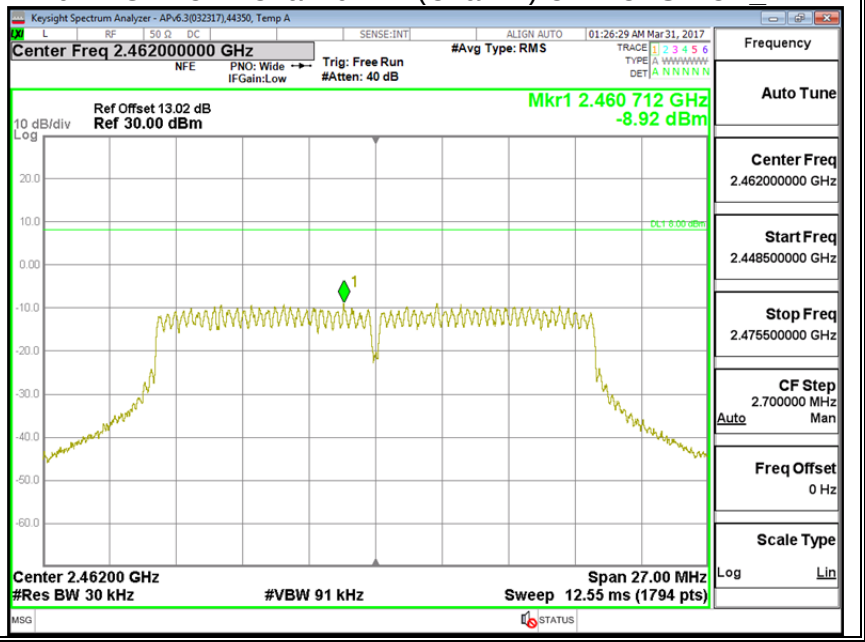
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CPSD CH_11



HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CPSD CH_11

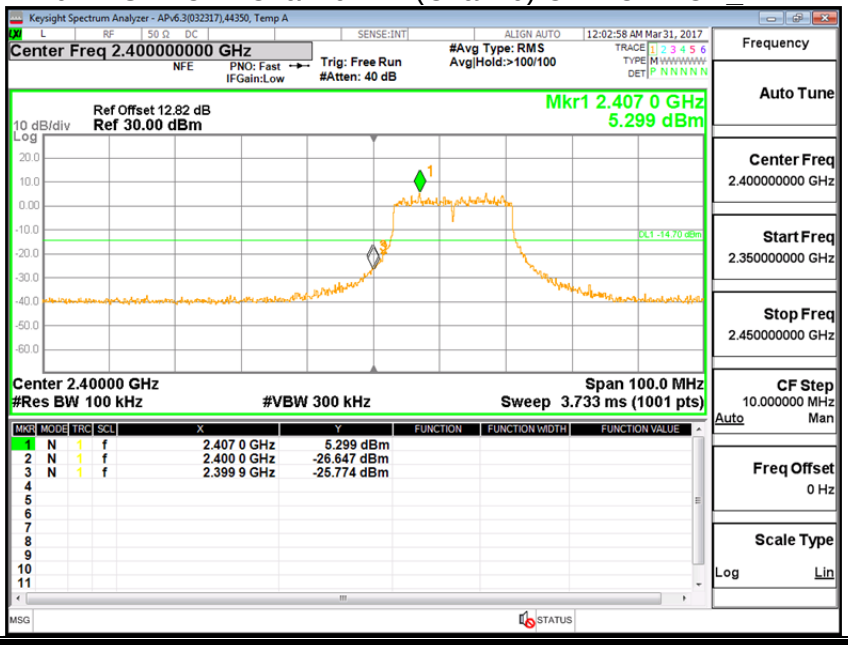


HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CPSD CH_11

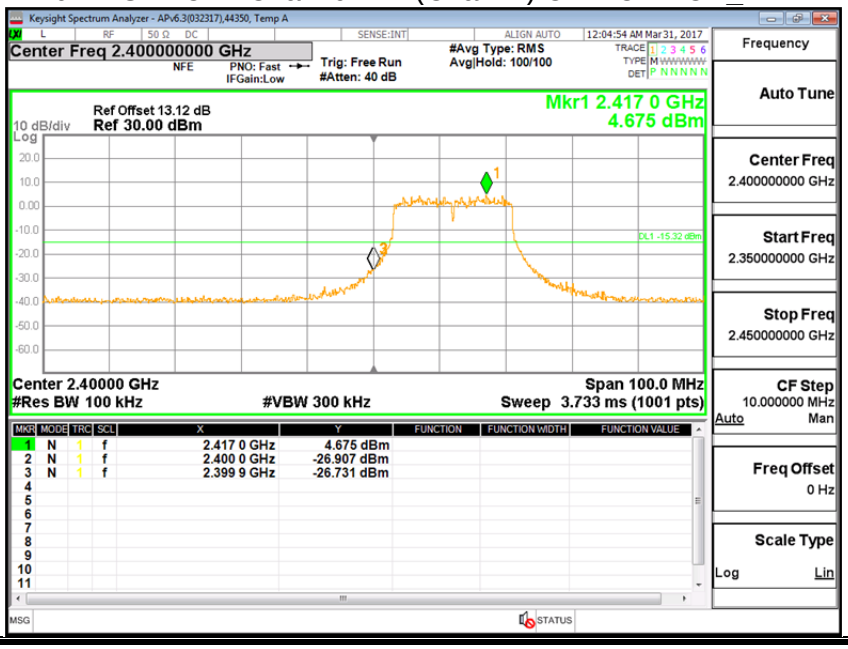


8.3.5. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

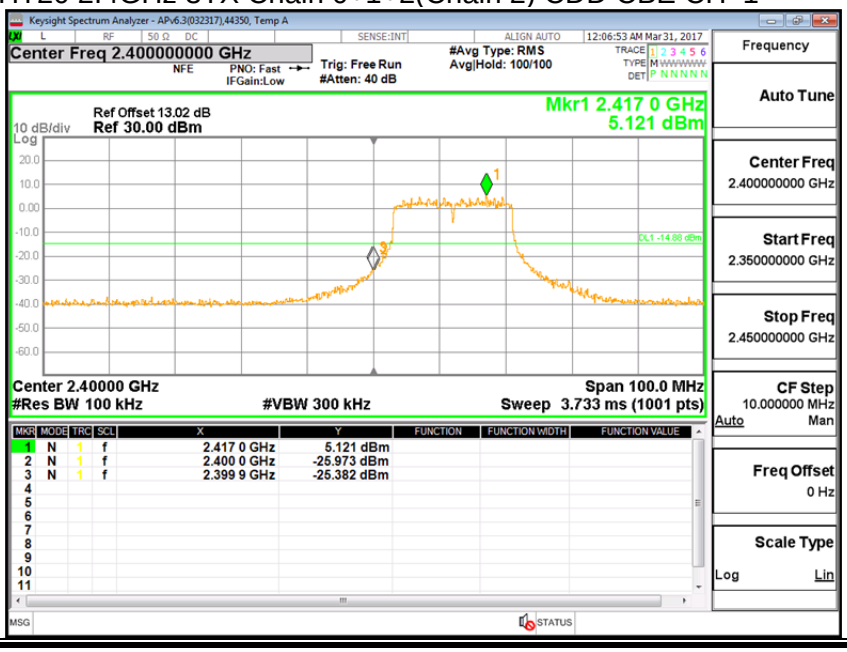
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CBE CH_1



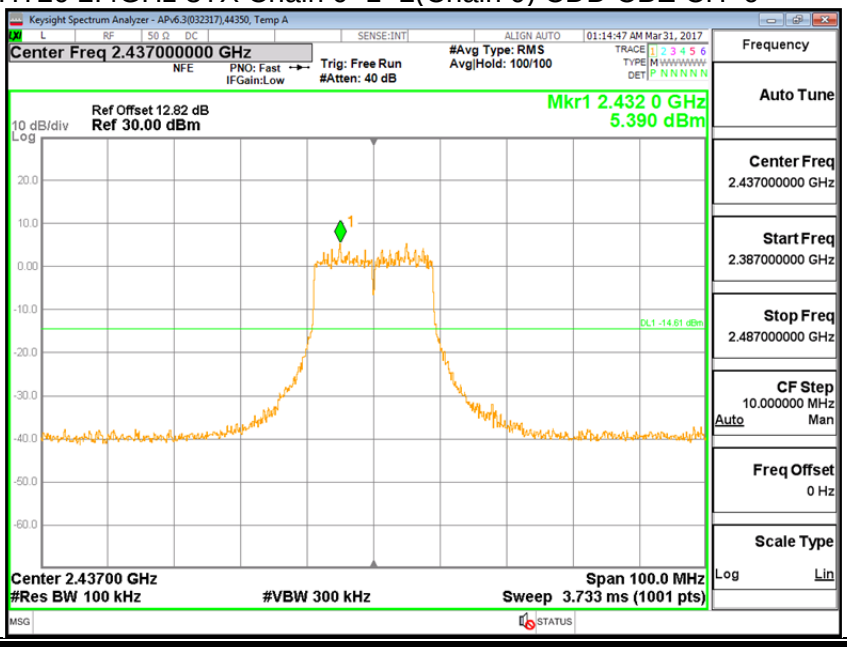
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CBE CH_1



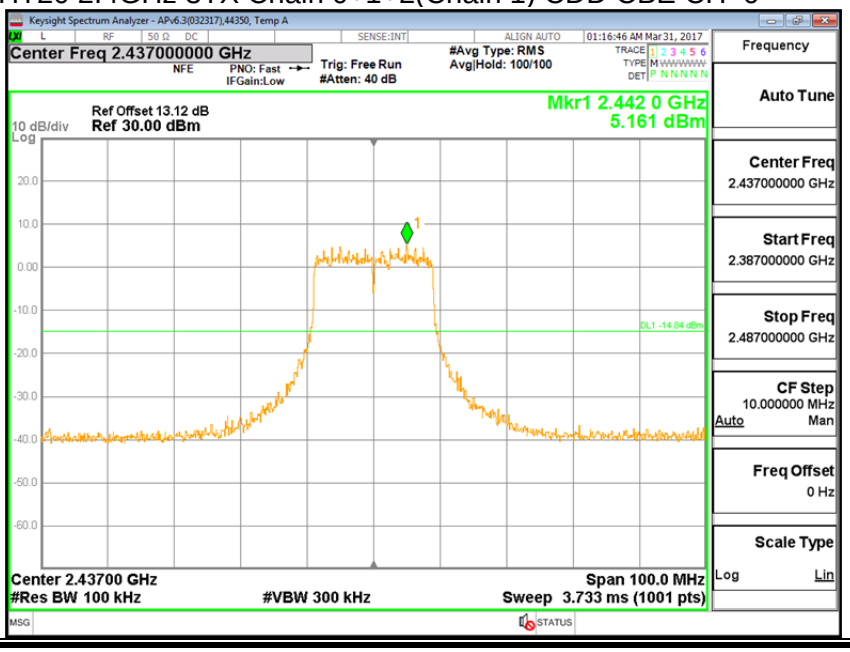
HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CBE CH 1



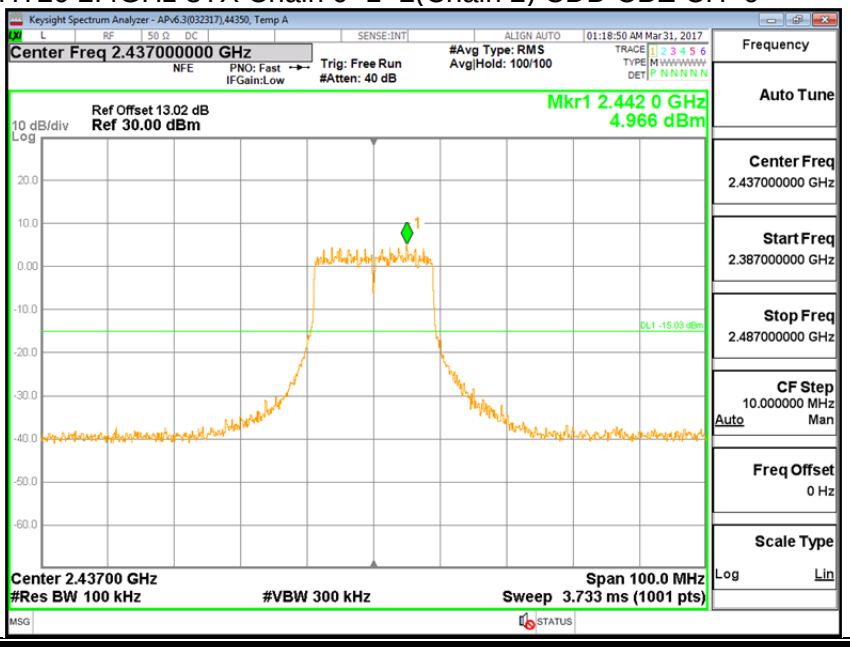
HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CBE CH 6



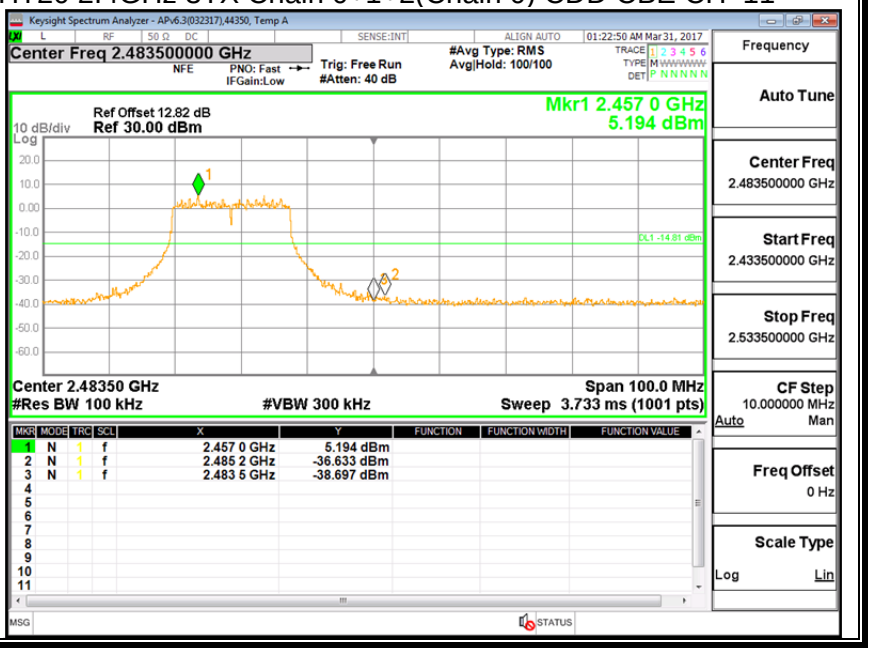
HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CBE CH 6



HT20 2.4GHz 3TX Chain 0+1+2(Chain 2) CDD CBE CH 6



HT20 2.4GHz 3TX Chain 0+1+2(Chain 0) CDD CBE CH 11



HT20 2.4GHz 3TX Chain 0+1+2(Chain 1) CDD CBE CH 11