

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

8.3.1. 6 dB BANDWIDTH

LIMITS

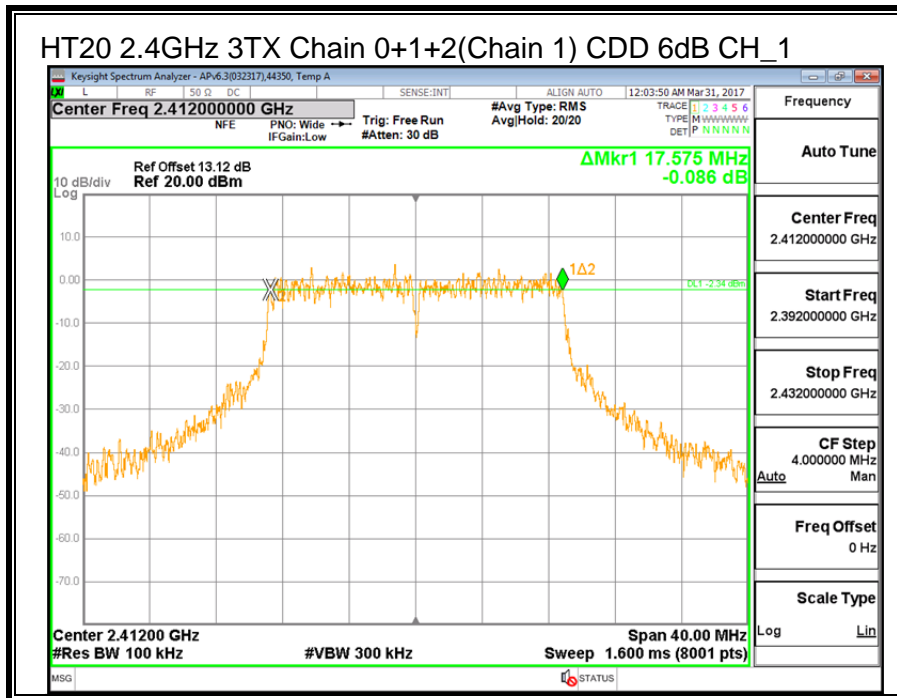
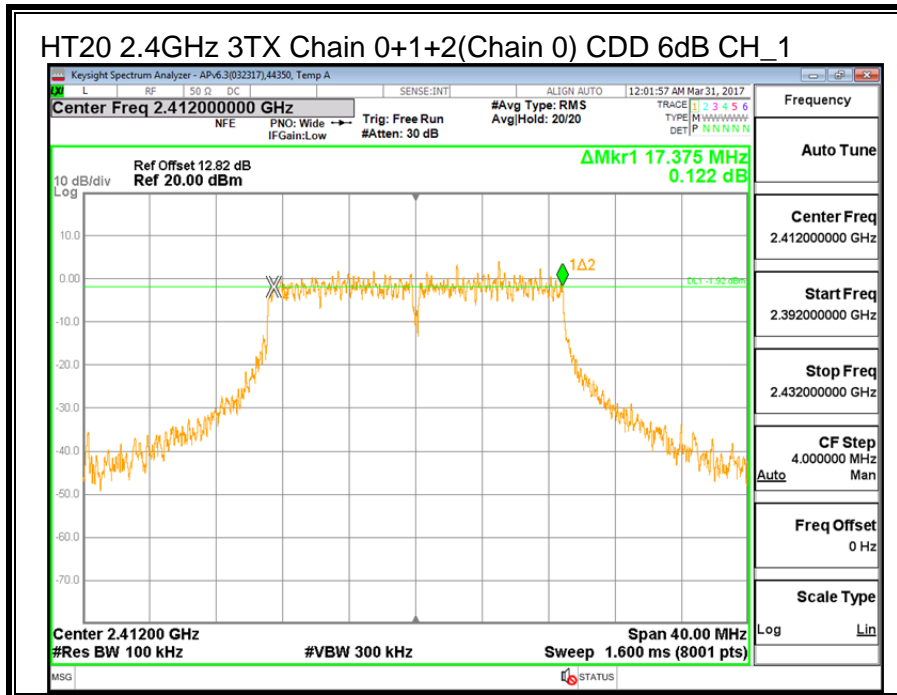
FCC §15.247 (a) (2)

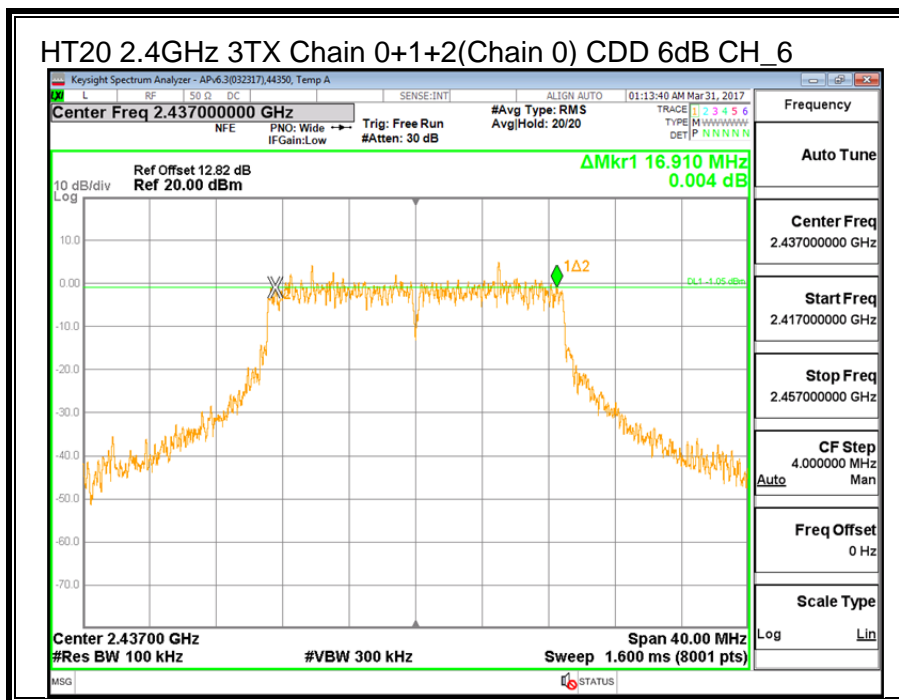
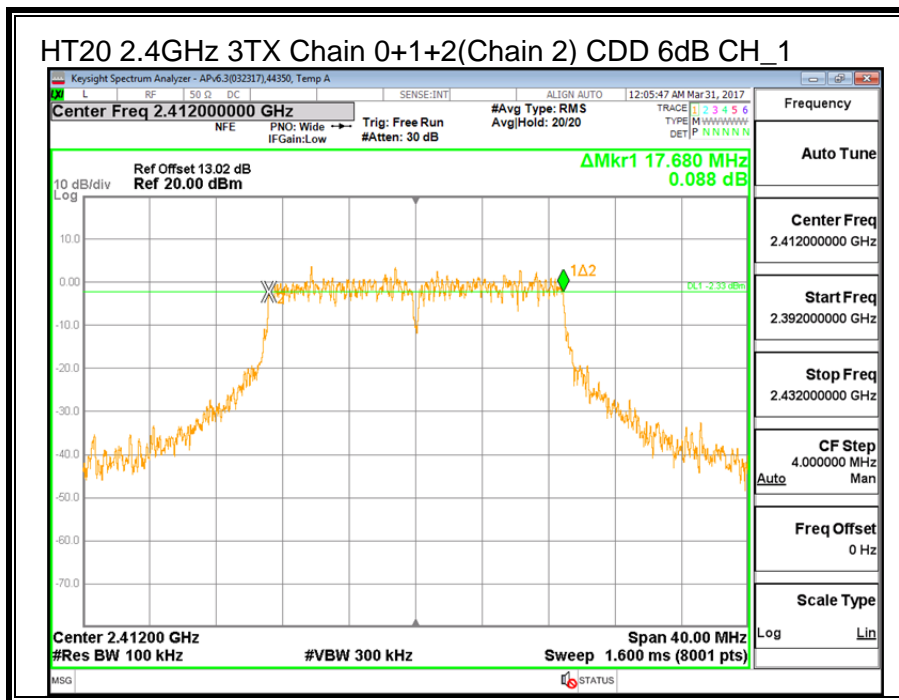
IC RSS-247 (5.2) (a)

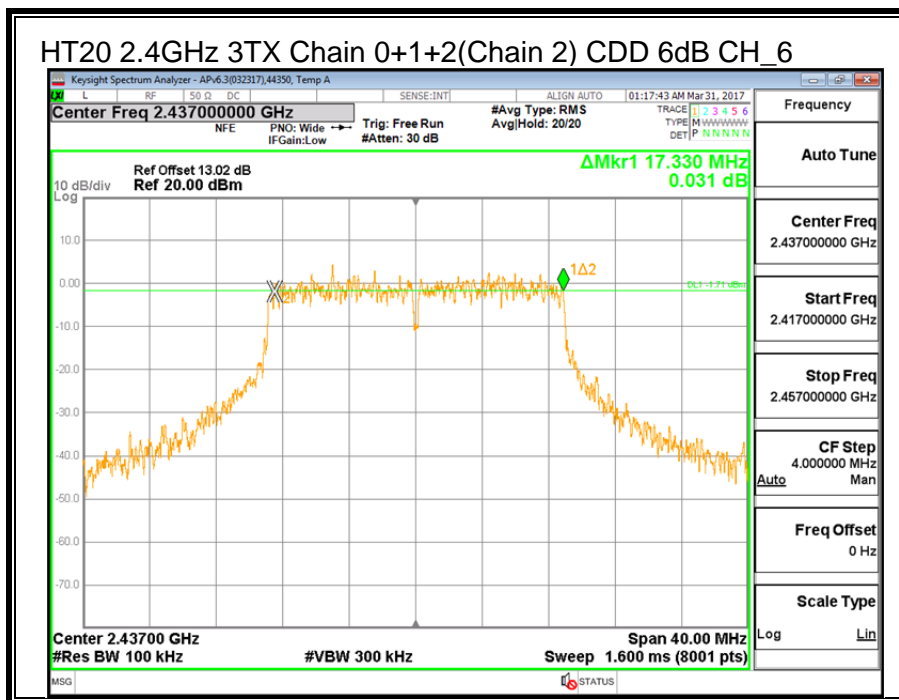
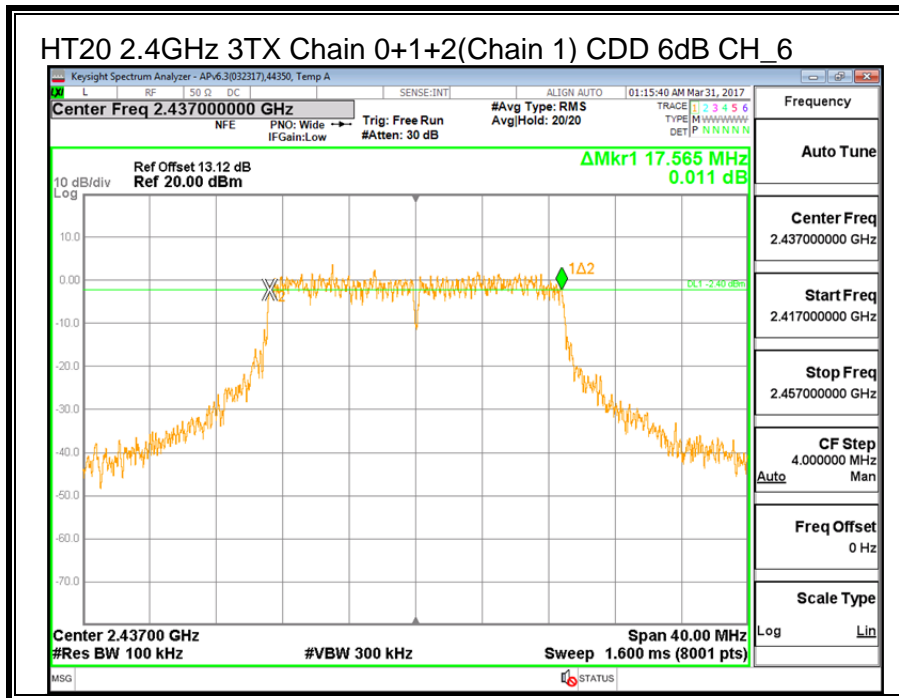
The minimum 6 dB bandwidth shall be at least 500 kHz.

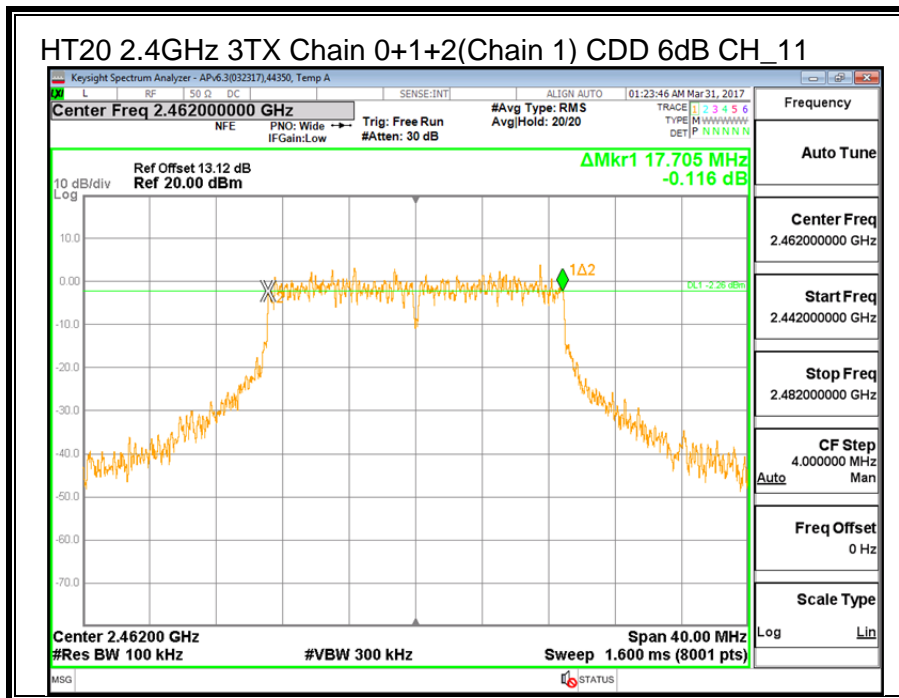
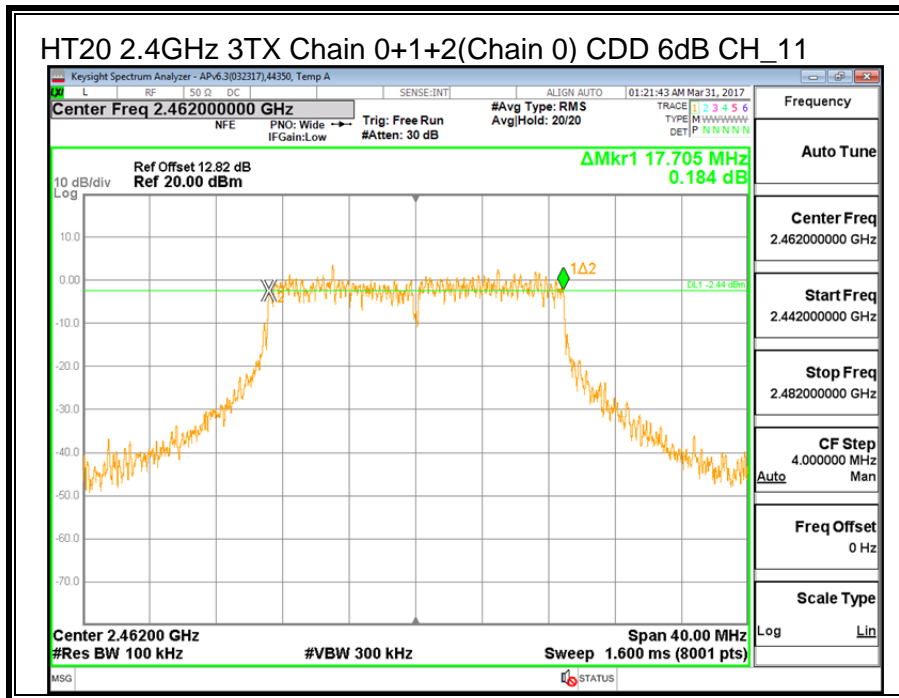
RESULTS

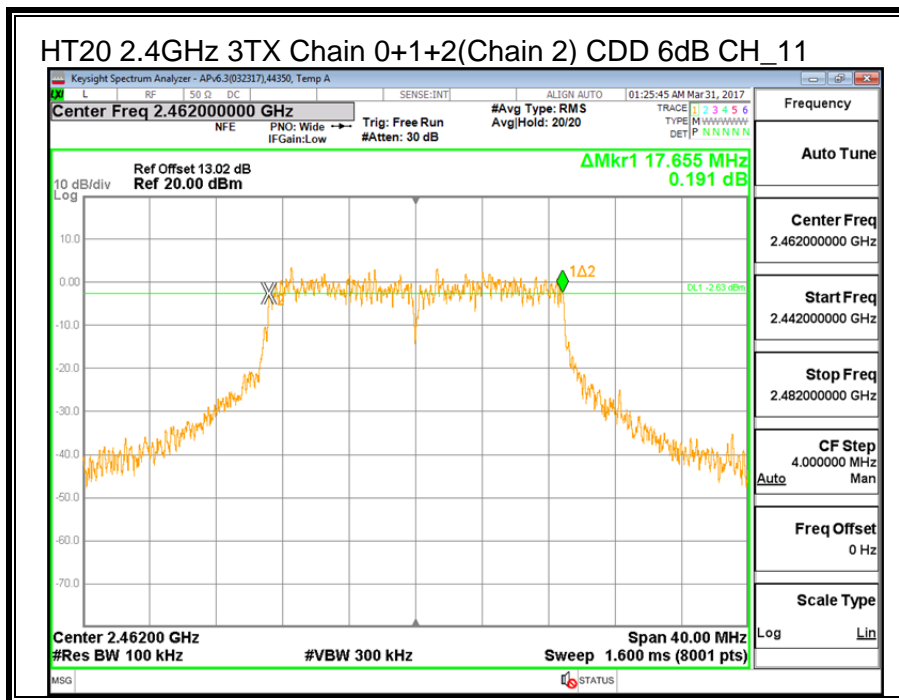
Channel	Frequency	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	6 dB BW Chain 2 (MHz)	Minimum Limit (MHz)
Low_1	2412	17.375	17.575	17.680	0.5
Middle_6	2437	16.910	17.565	17.330	0.5
High_11	2462	17.705	17.705	17.655	0.5











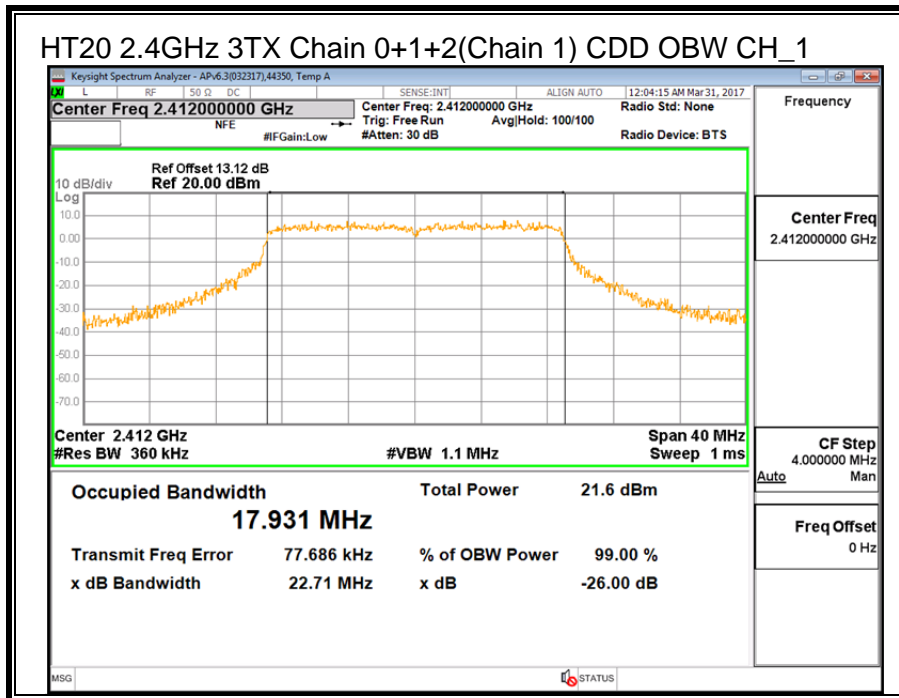
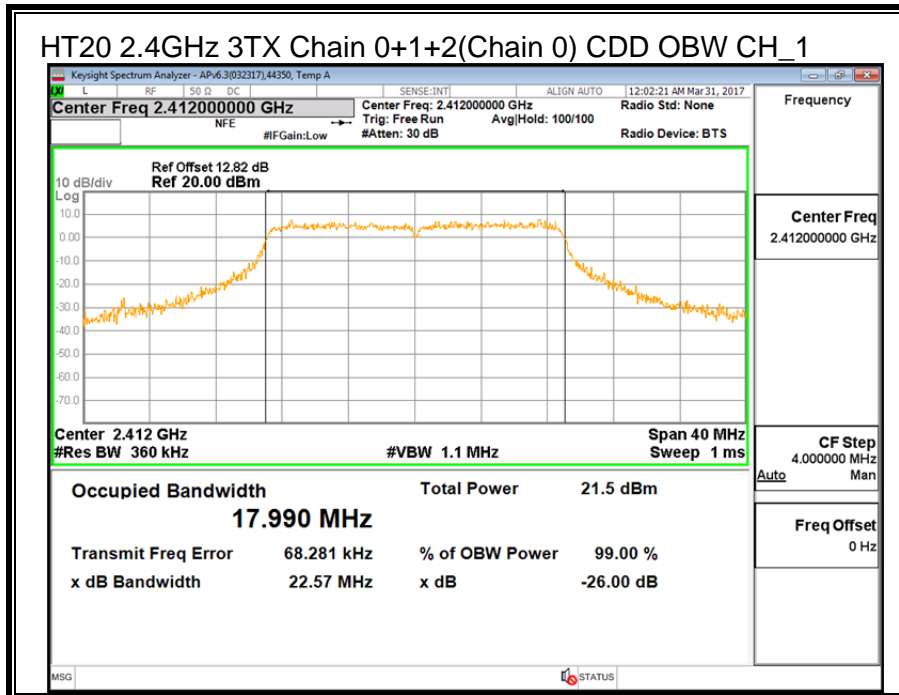
8.3.2. 99% BANDWIDTH

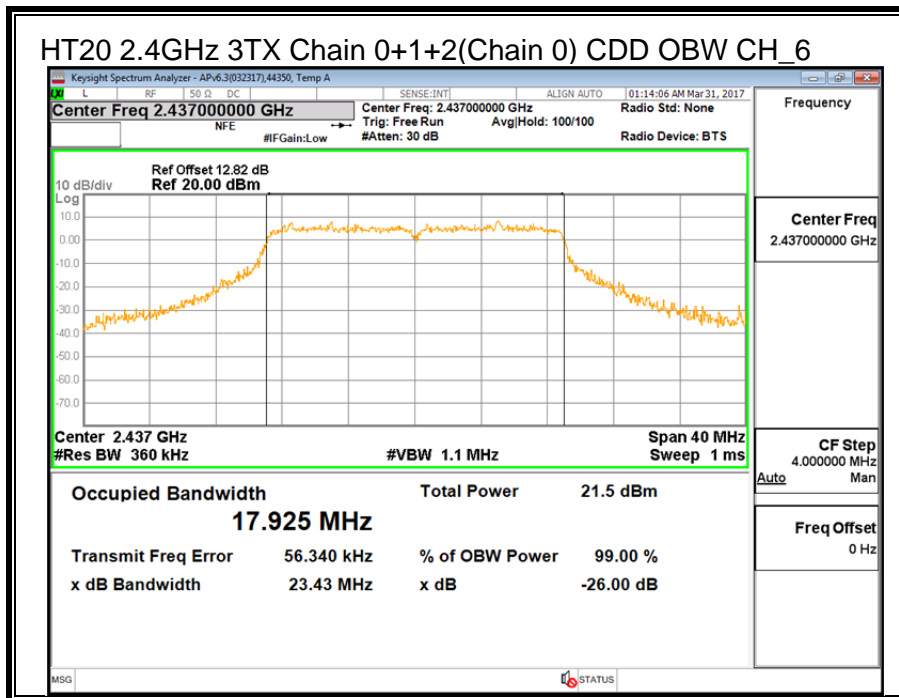
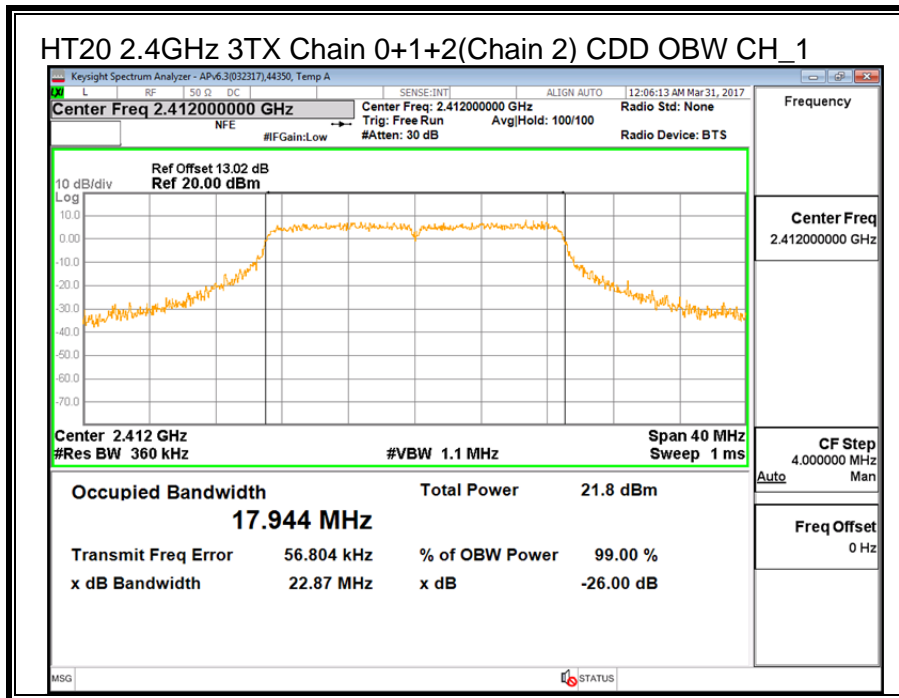
LIMITS

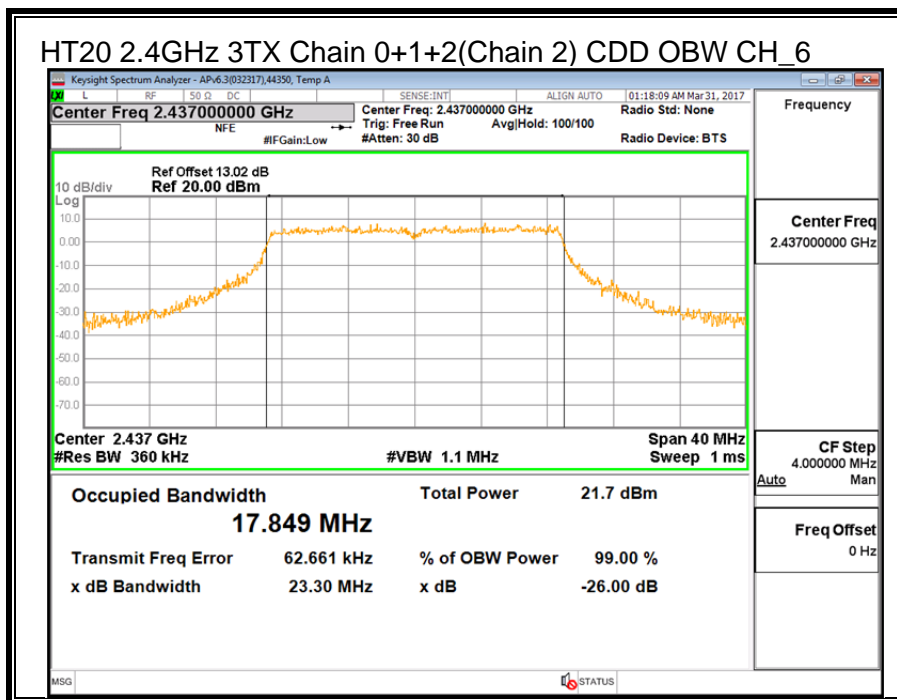
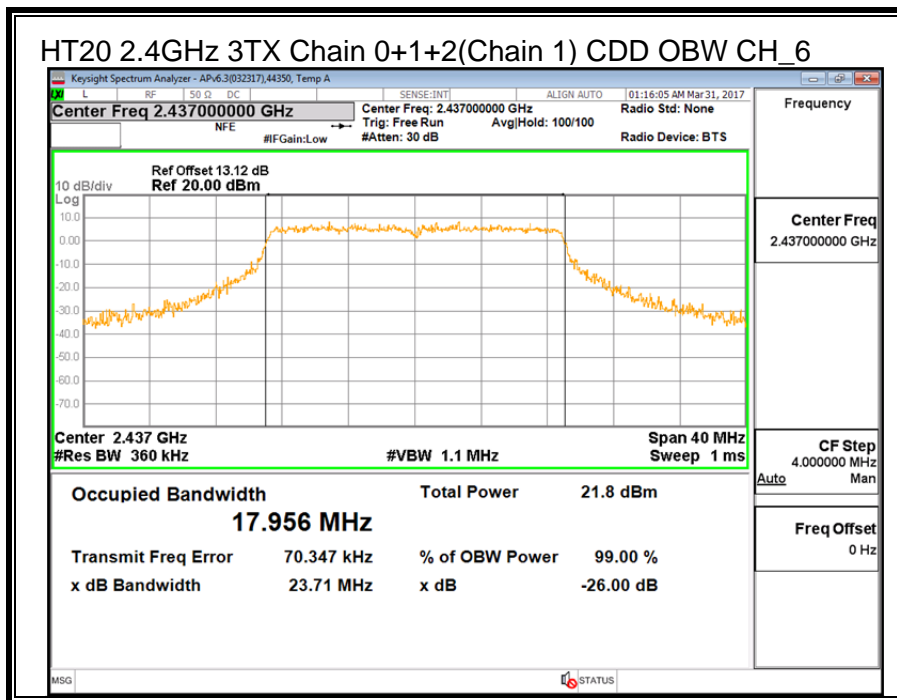
None; for reporting purposes only.

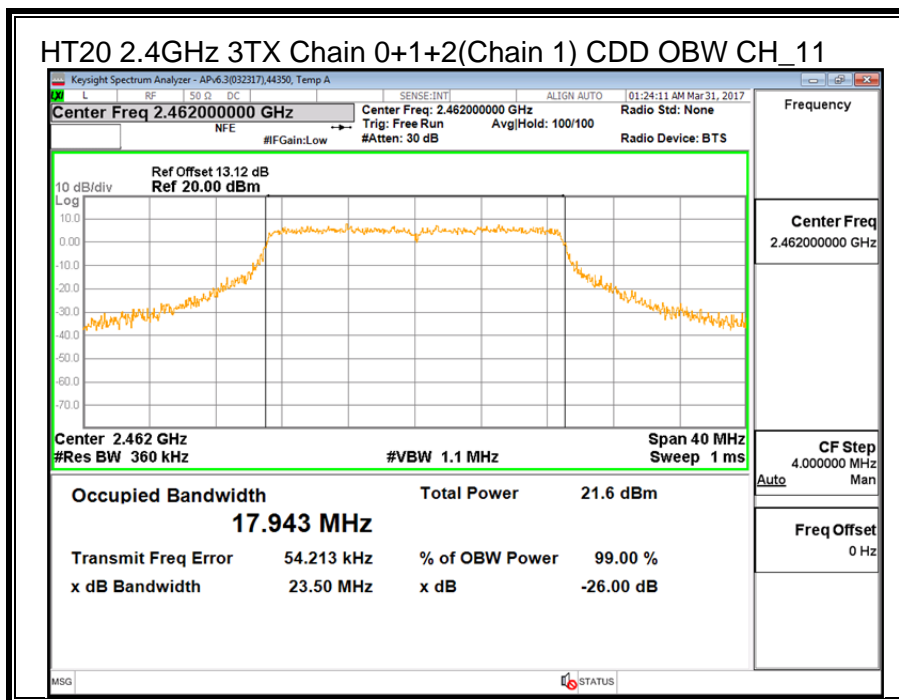
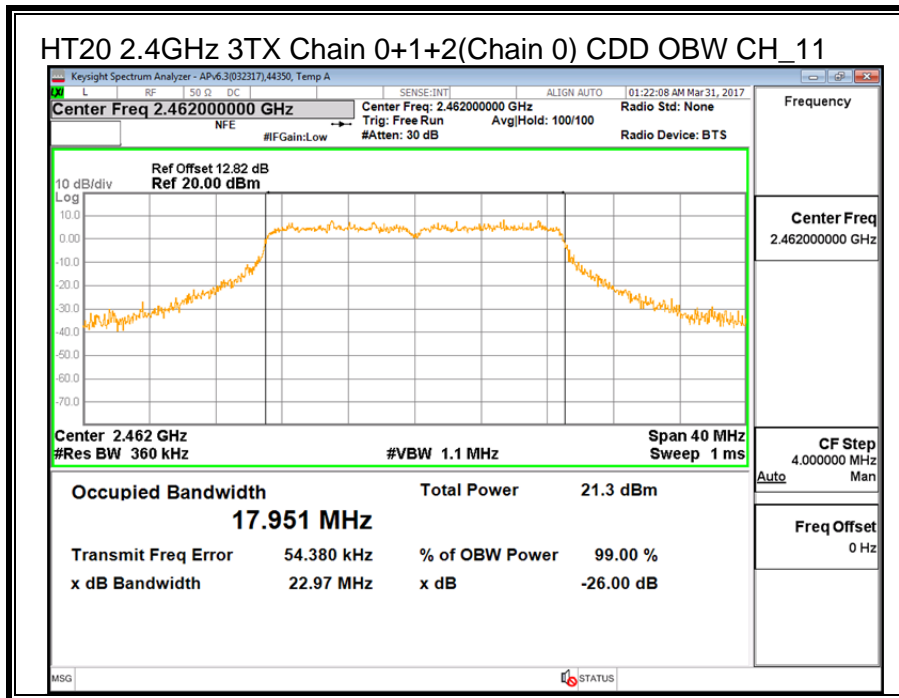
RESULTS

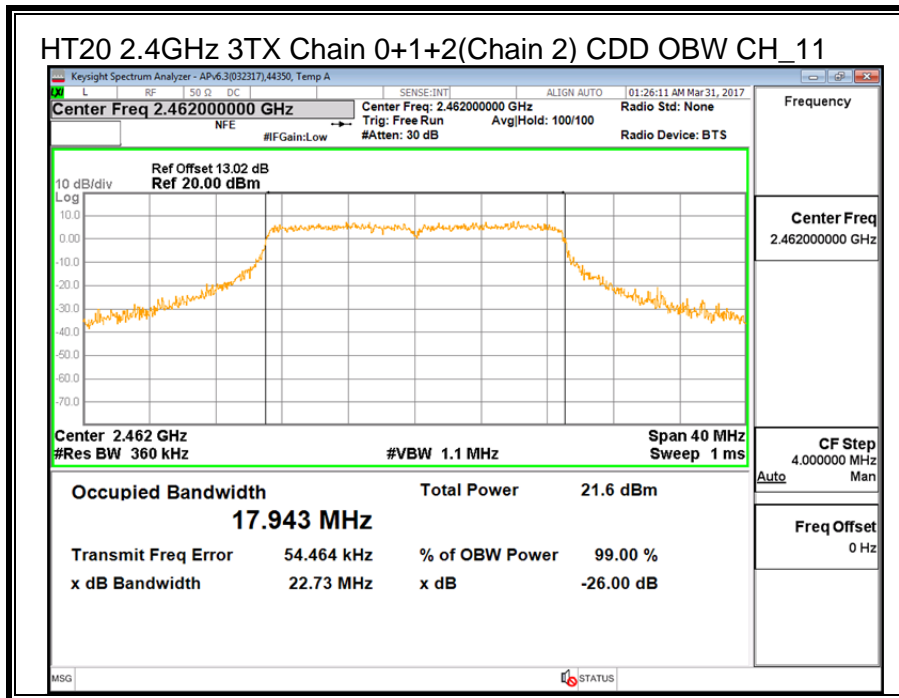
Channel	Frequency (MHz)	99% Bandwidth Chain 0 (MHz)	99% Bandwidth Chain 1 (MHz)	99% Bandwidth Chain 2 (MHz)
Low_1	2412	17.990	17.931	17.944
Middle_6	2437	17.925	17.956	17.849
High_11	2462	17.951	17.943	17.943











8.3.3. OUTPUT POWER

ID:	GE43578	Date:	6/1/17
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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

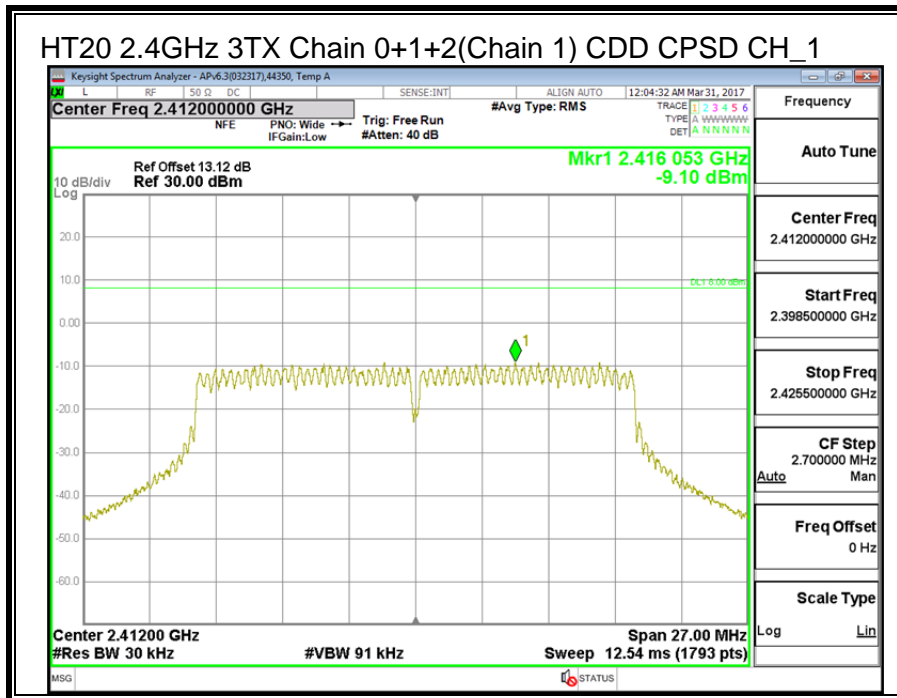
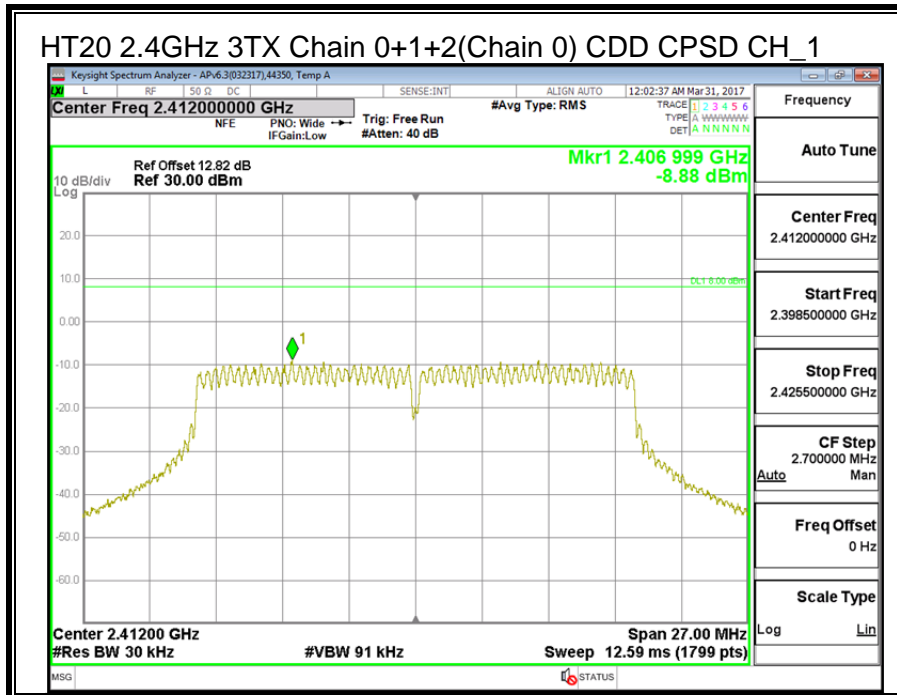
FCC §15.247

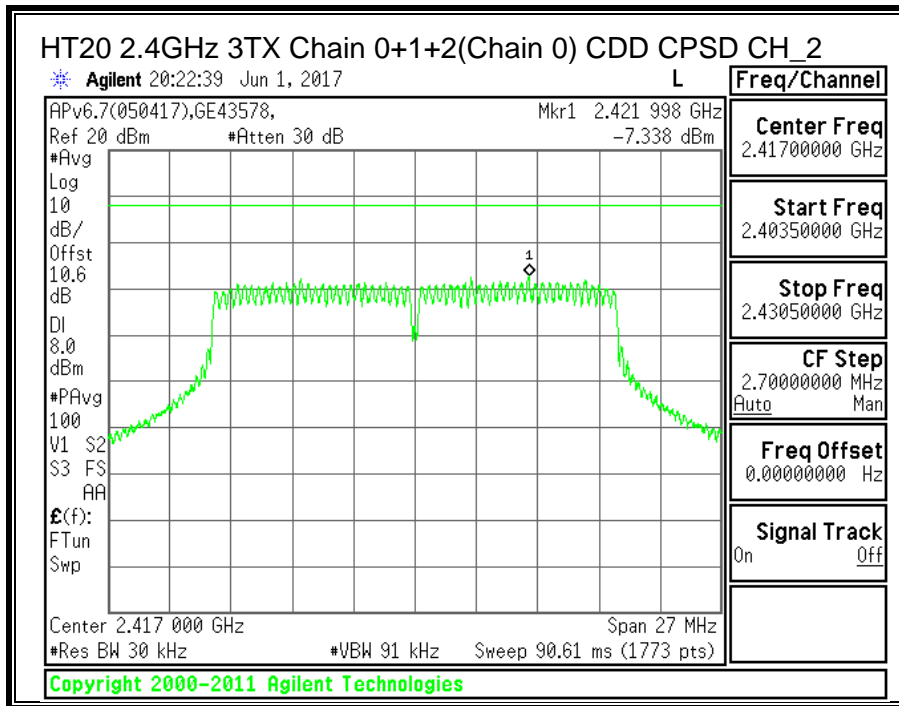
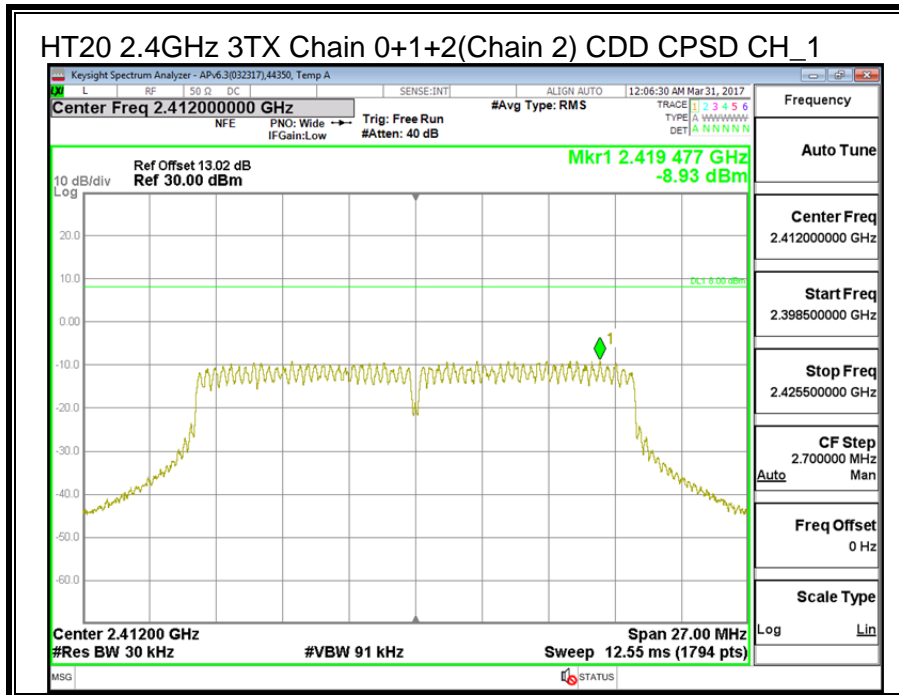
IC RSS-247 (5.2) (b)

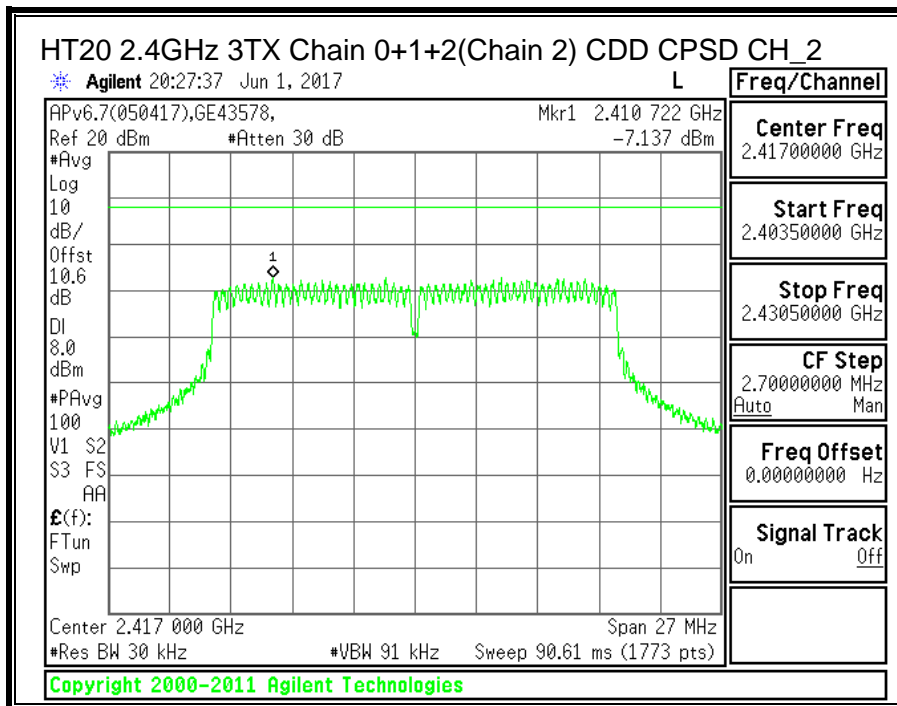
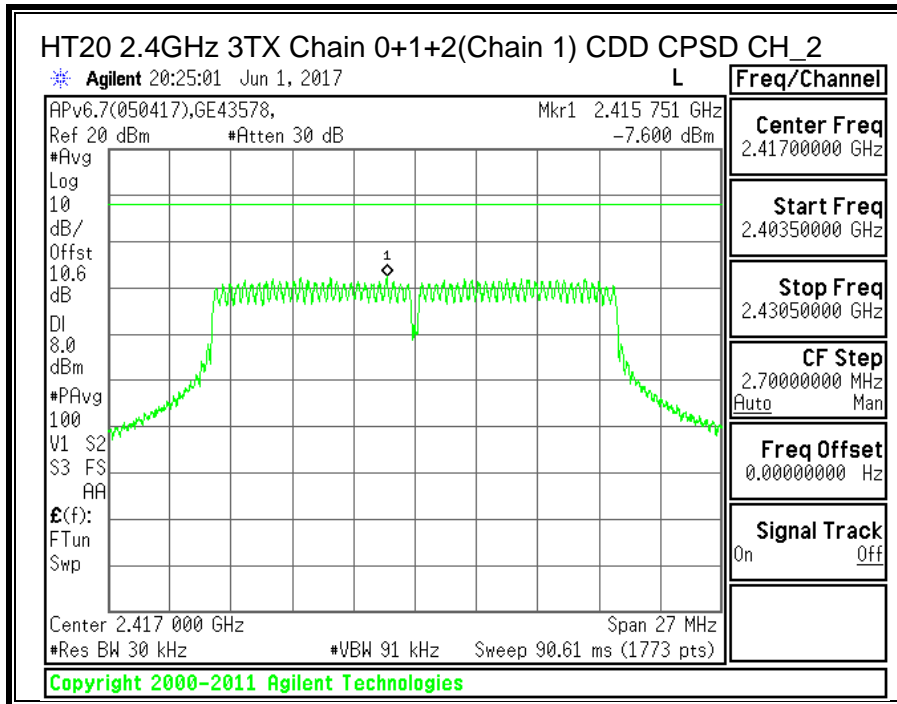
For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 KHz band during any time interval of continuous transmissions.

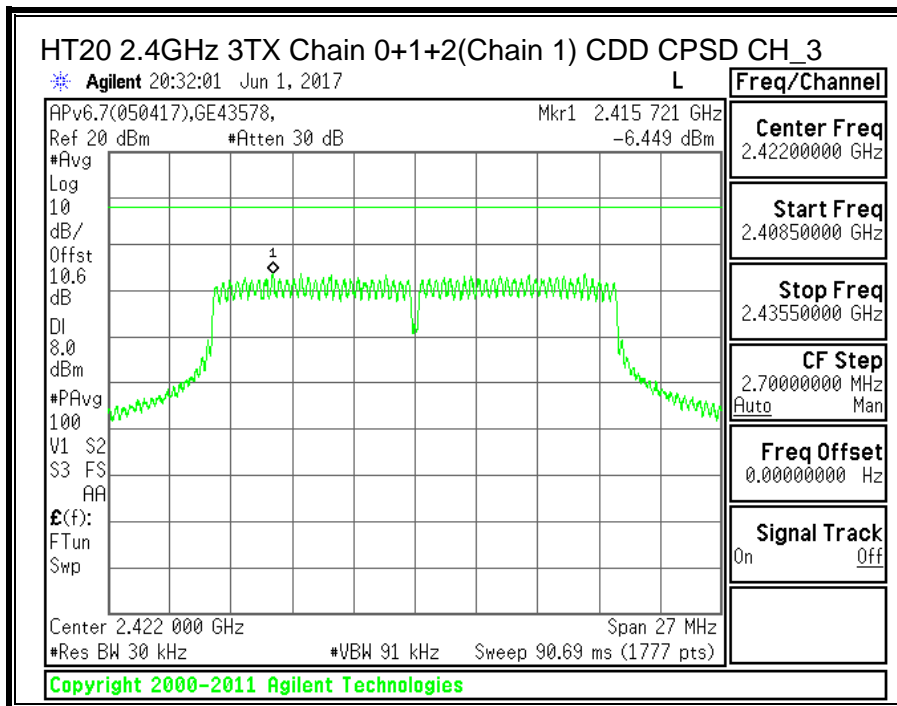
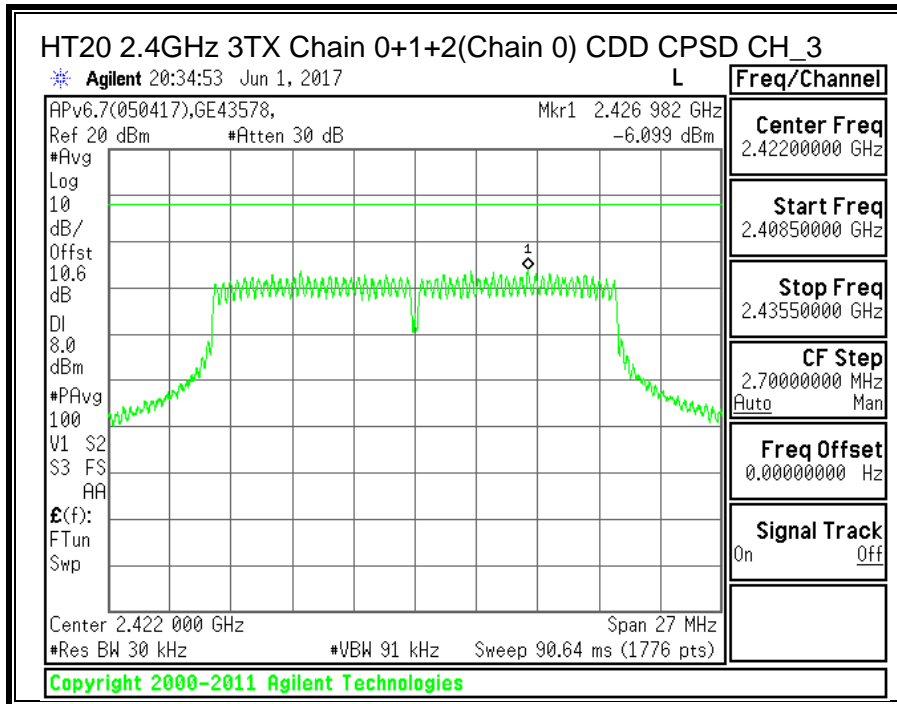
RESULTS

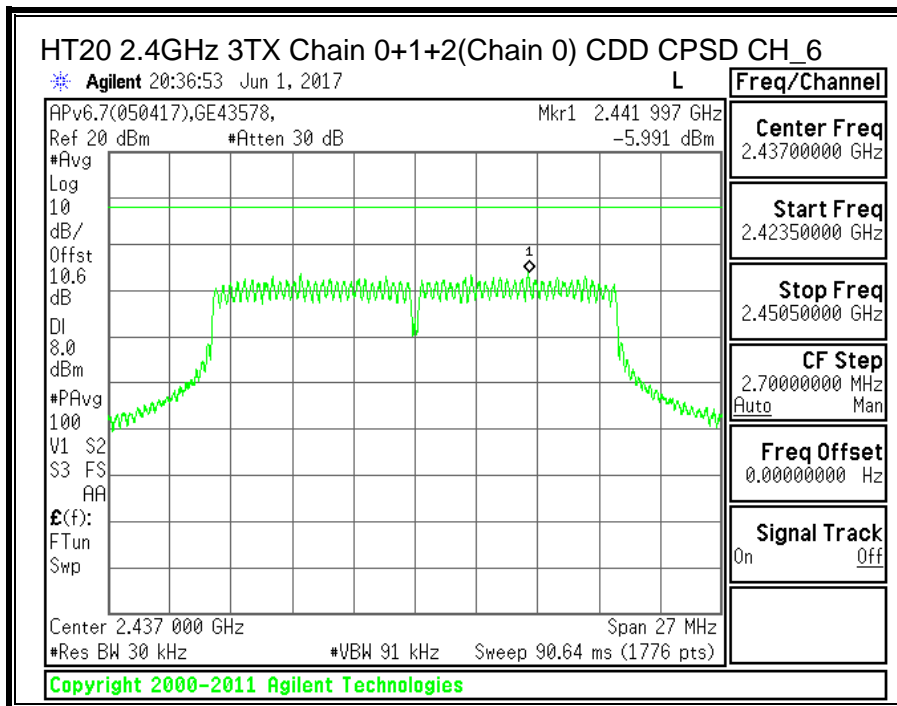
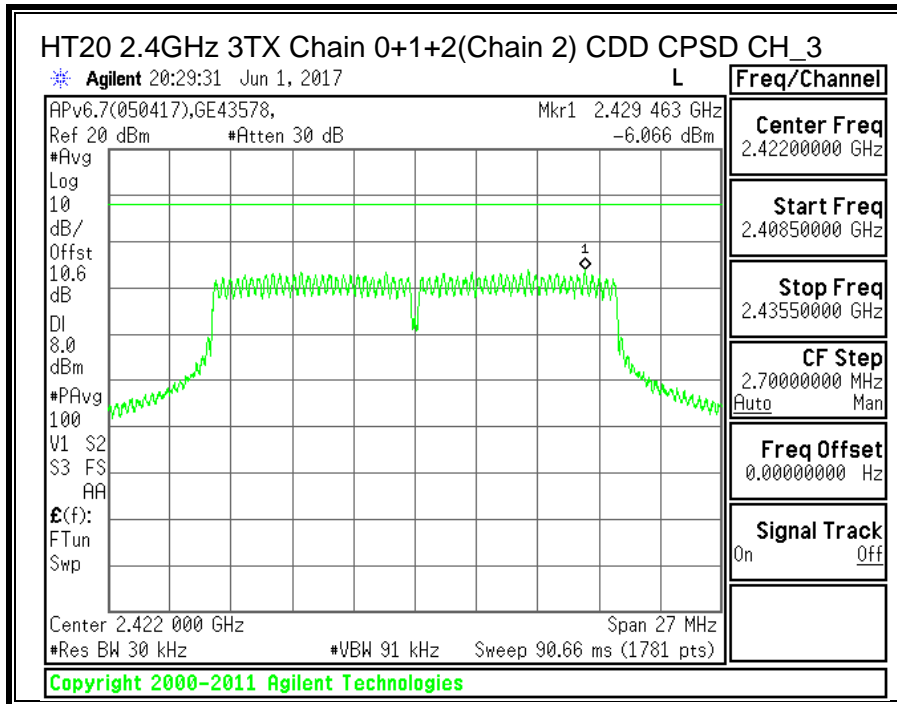
Duty Cycle CF (dB)		0.22	Included in Calculations of Corr'd PSD				
PSD Results							
Channel	Frequency (MHz)	Chain 0 Meas (dBm)	Chain 1 Meas (dBm)	Chain 2 Meas (dBm)	Total Corr'd PSD (dBm)	Limit (dBm)	Margin (dB)
Low	2412	-8.88	-9.10	-8.93	-3.98	8.0	-12.0
Low	2417	-7.34	-7.60	-7.14	-2.36	8.0	-10.4
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

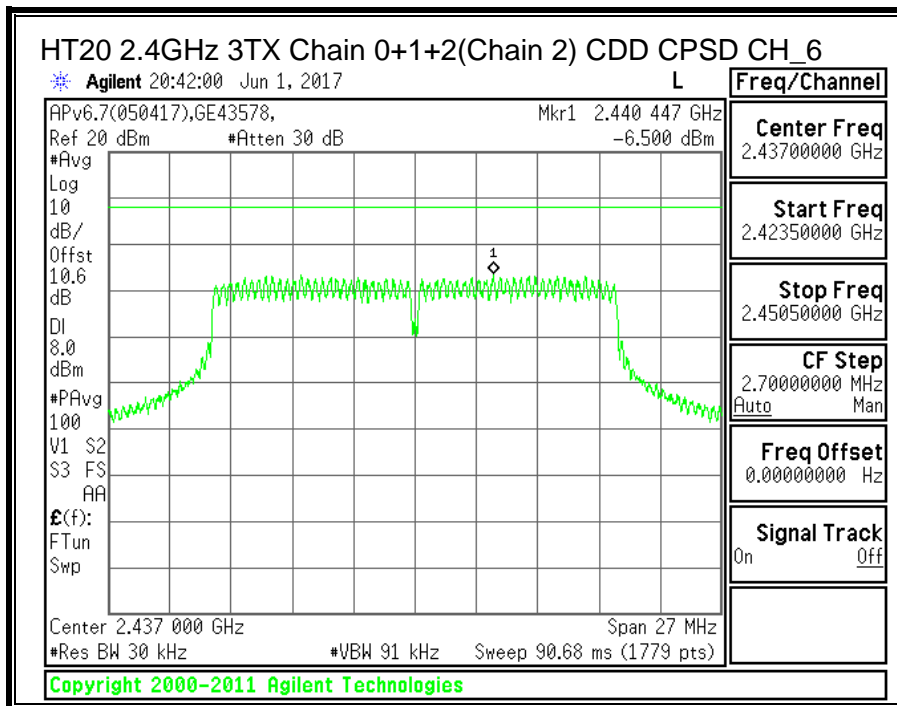
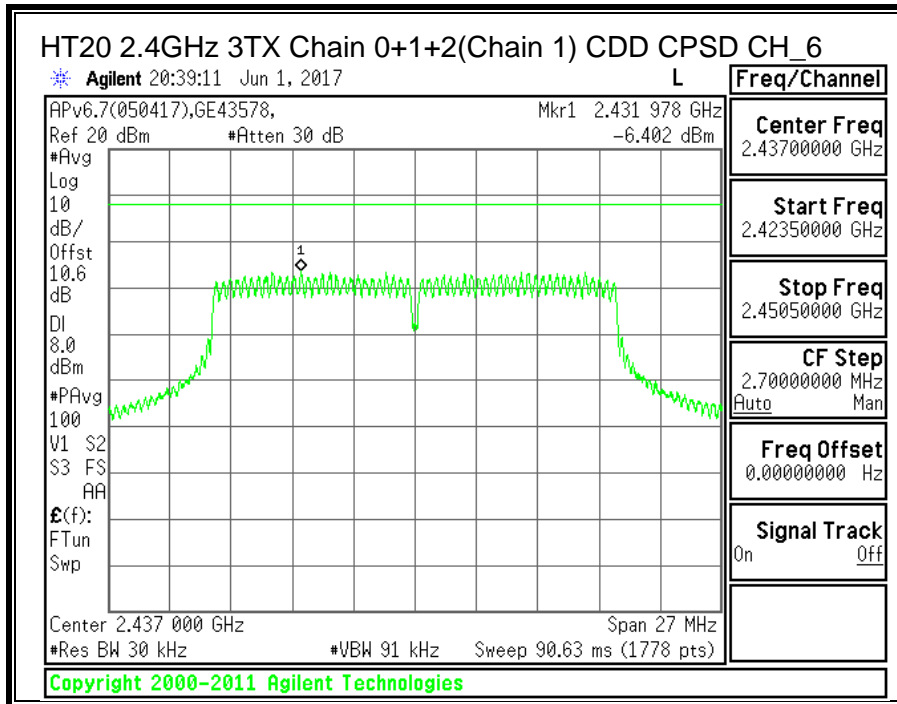


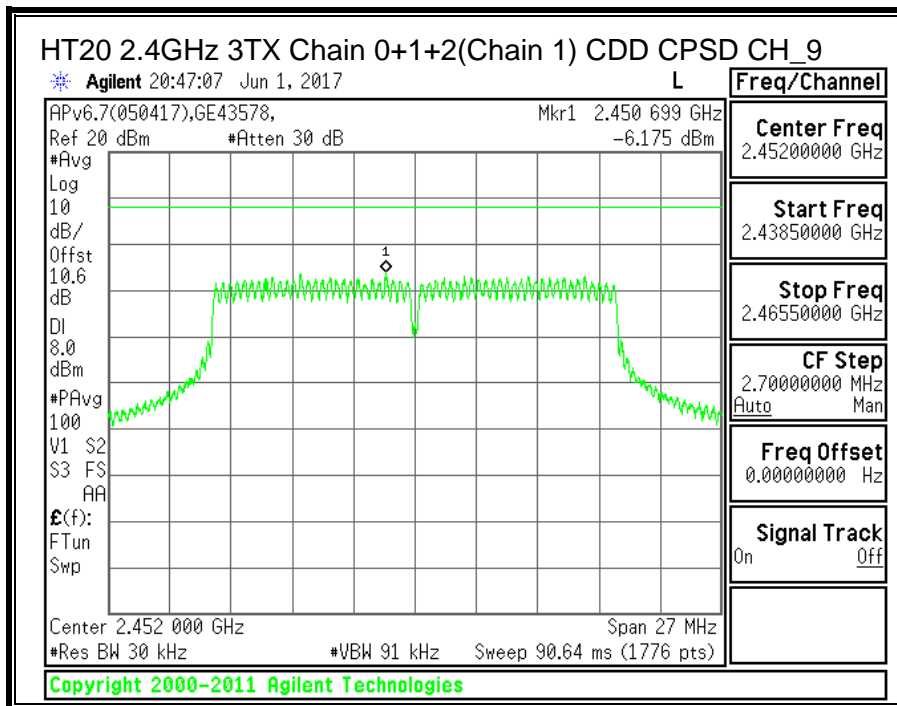
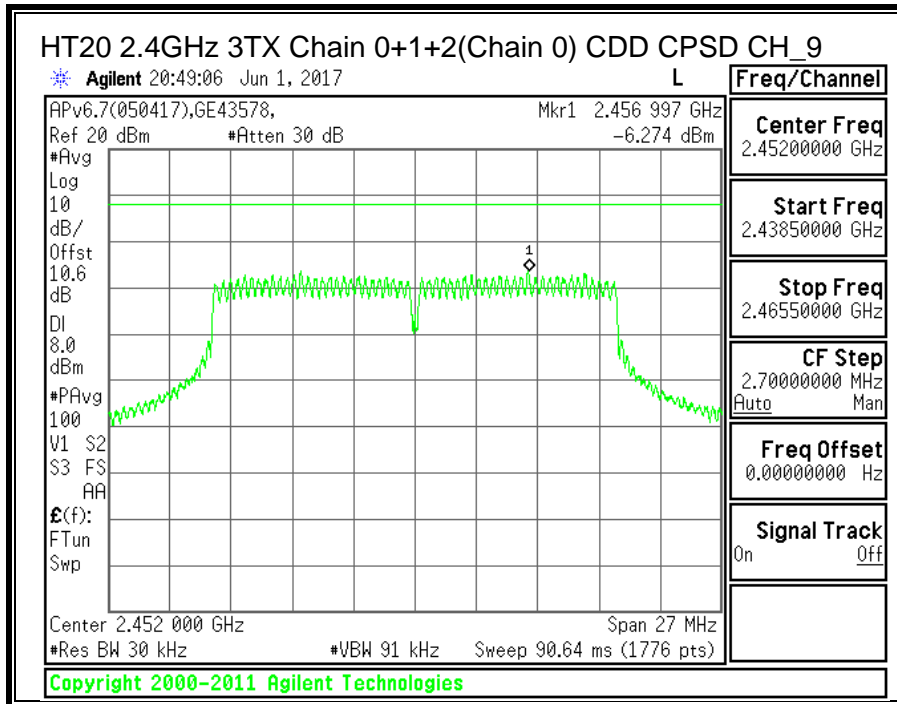


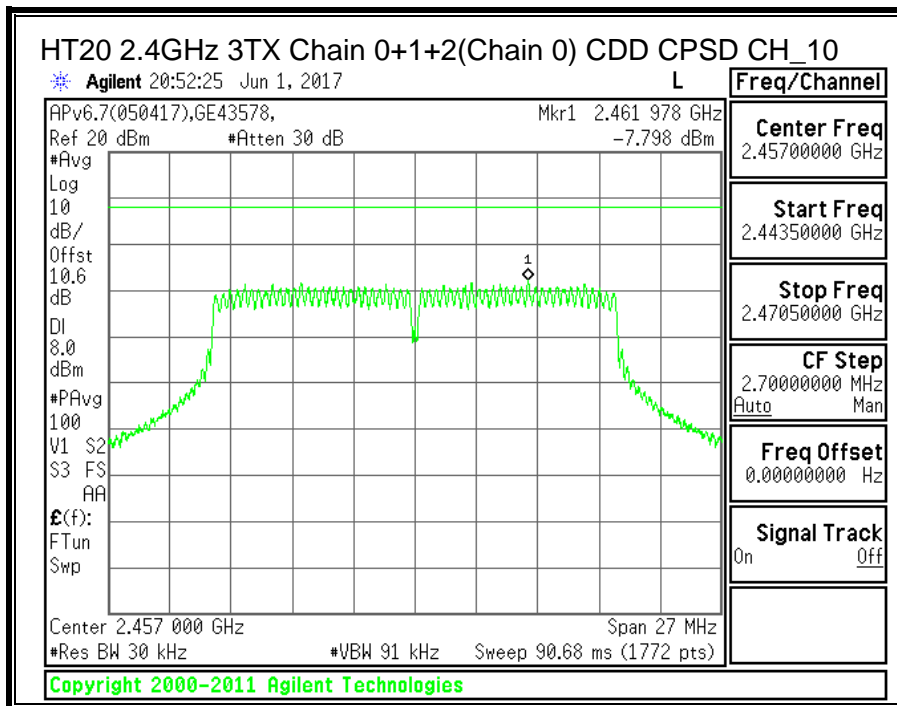
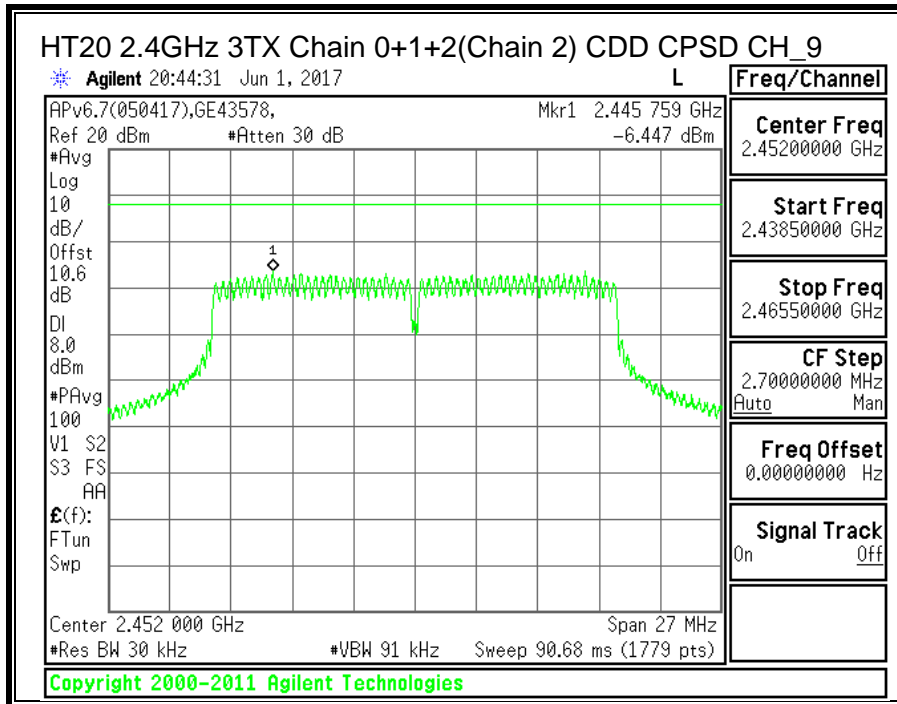


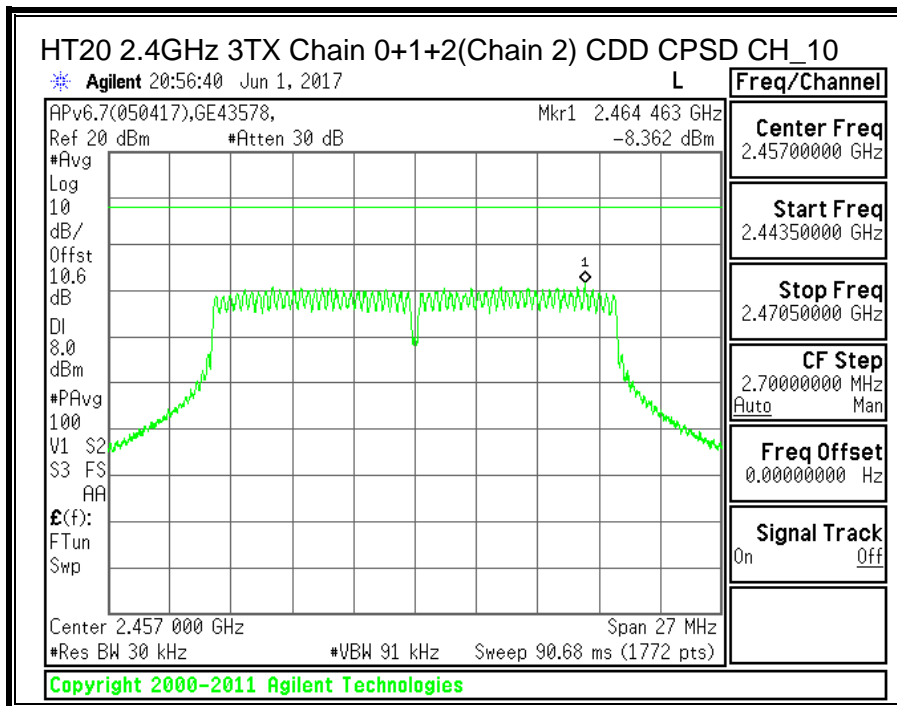
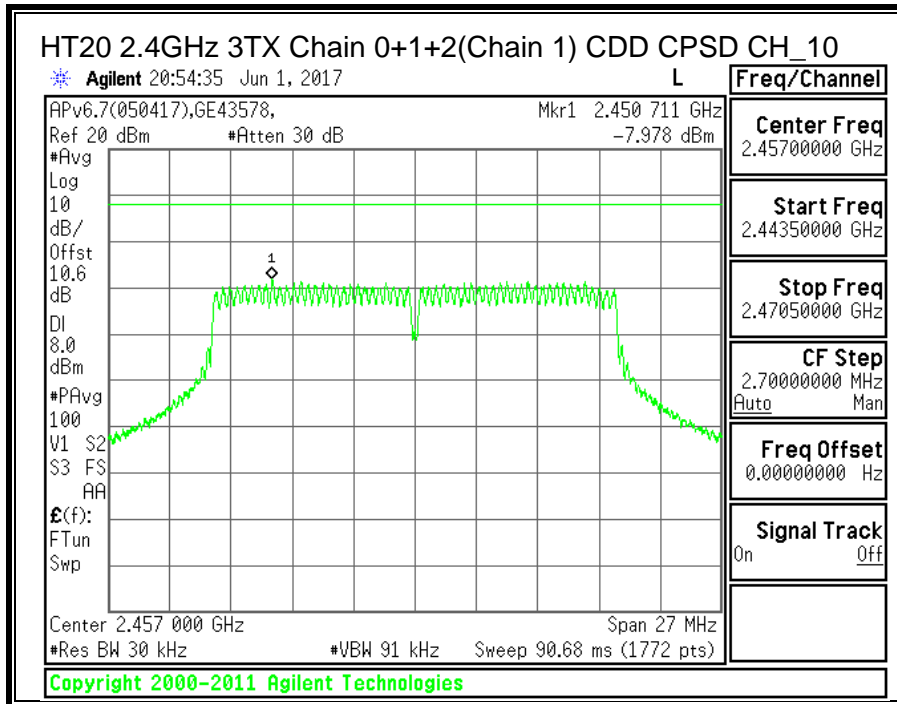


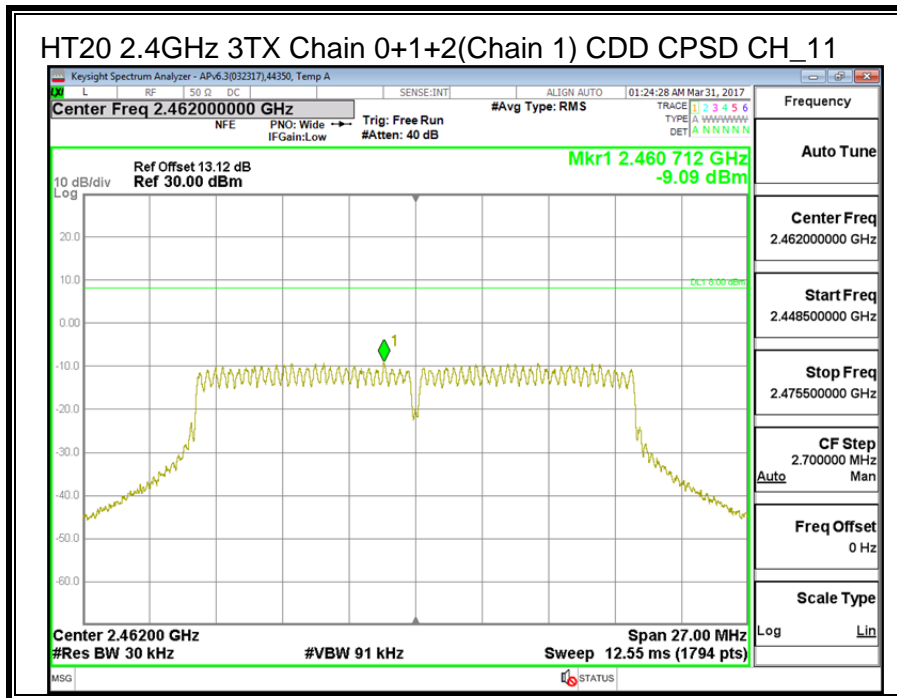
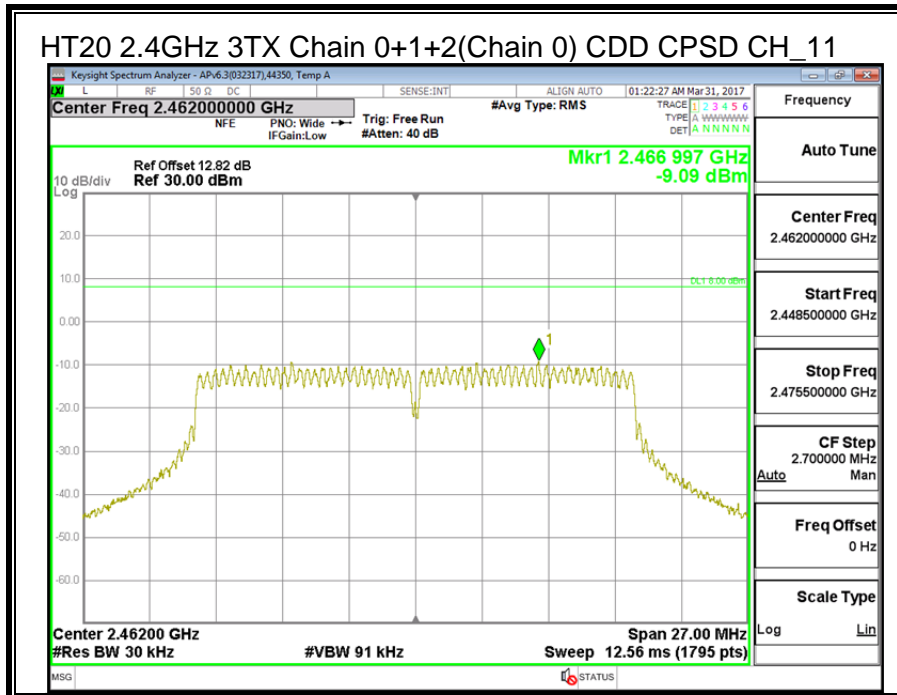


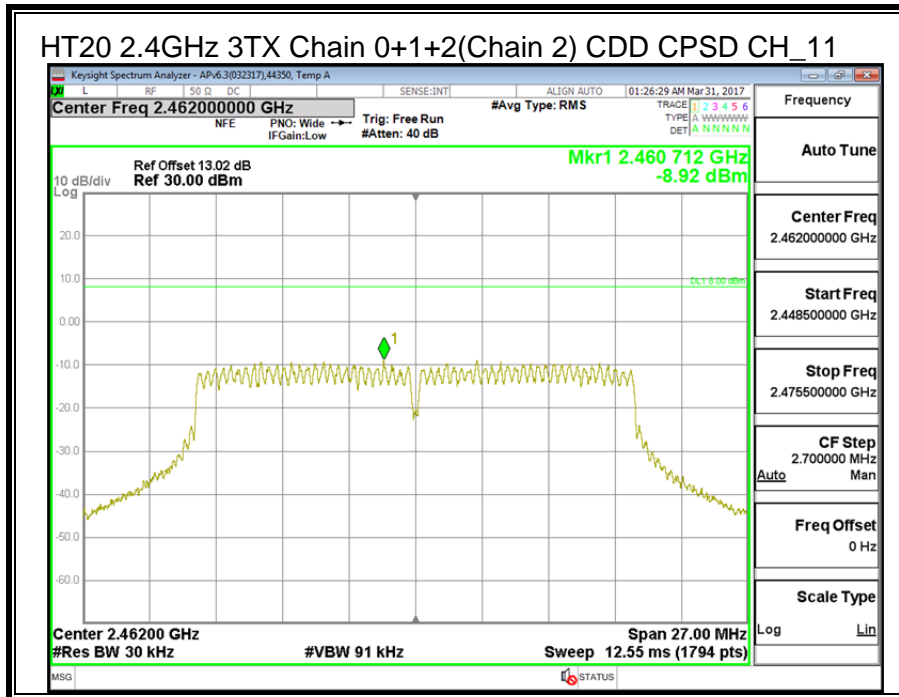












8.3.5. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

