

#### 11g 2TX CDD MIMO MODE IN THE 2.4GHz BAND 9.3.

#### 9.3.1. 6 dB BANDWIDTH

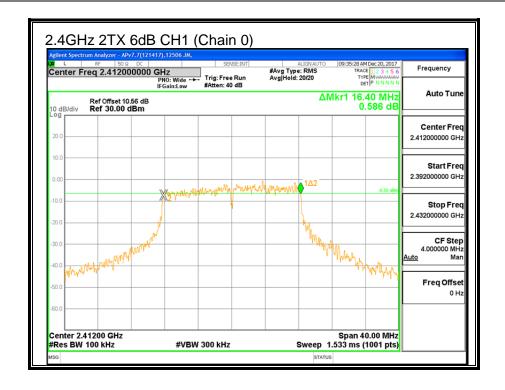
## **LIMITS**

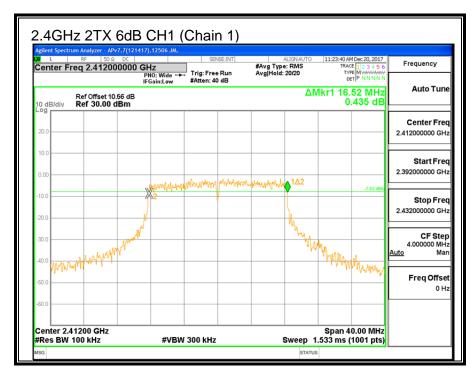
FCC §15.247 (a) (2)

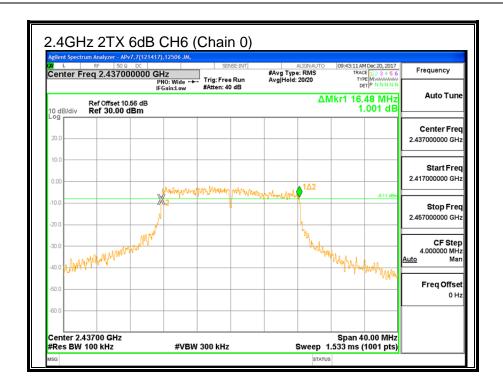
The minimum 6 dB bandwidth shall be at least 500 kHz.

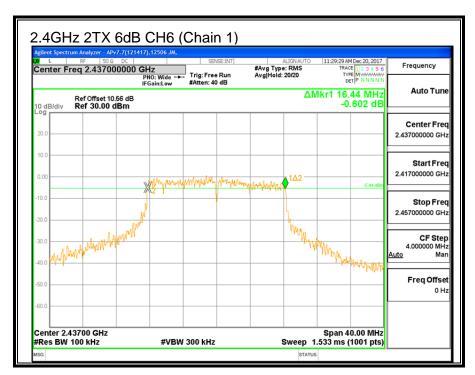
#### **RESULTS**

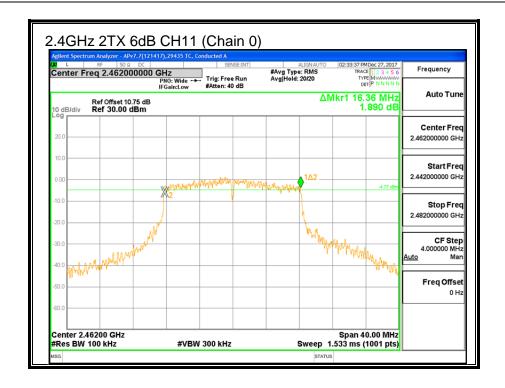
Channel	Frequency	6 dB BW Chain 0 (MHz)	6 dB BW Chain 1 (MHz)	Minimum Limit (MHz)
CH1	2412	16.40	16.52	0.5
CH6	2437	16.48	16.44	0.5
CH11	2462	16.36	16.36	0.5
CH12	2467	16.32	16.44	0.5
CH13	2472	16.48	16.36	0.5

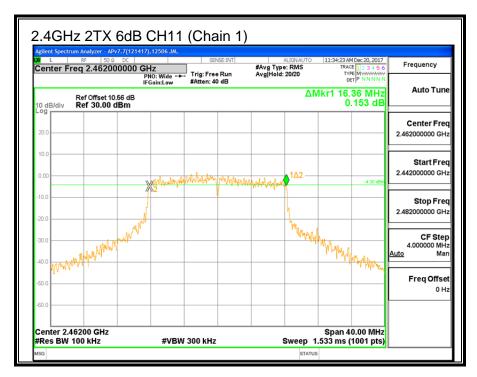


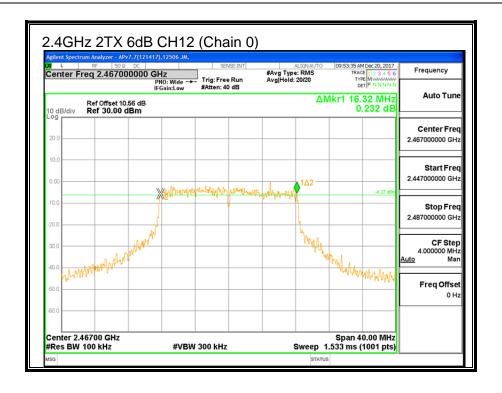


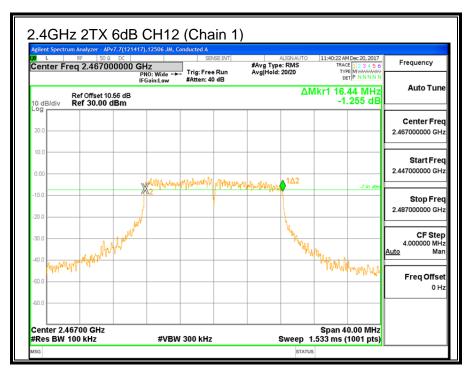


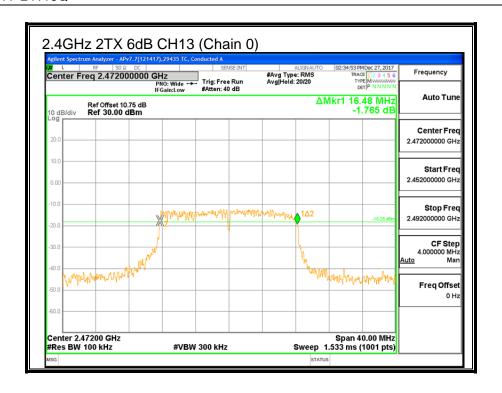


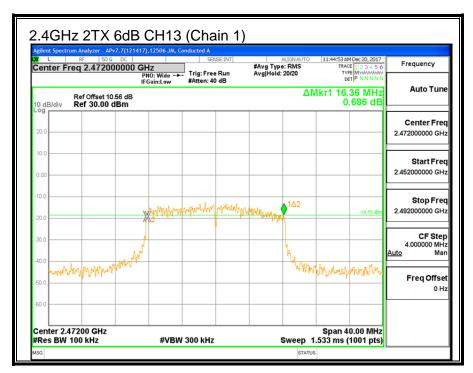












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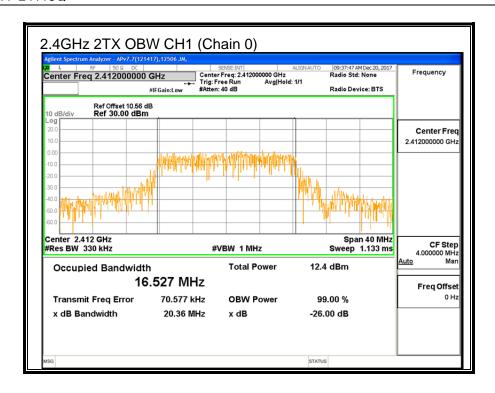
## 9.3.2. 99% BANDWIDTH

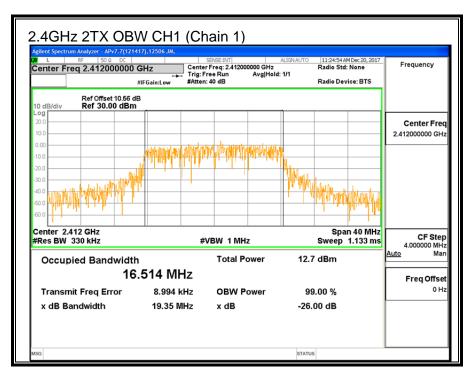
# **LIMITS**

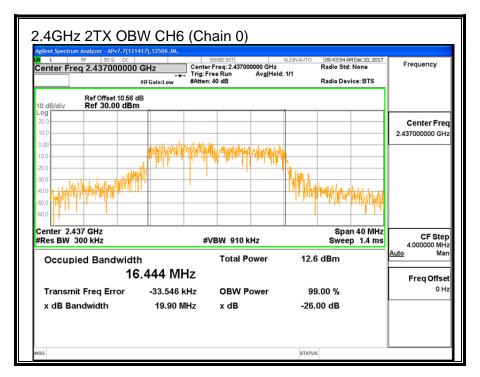
None; for reporting purposes only.

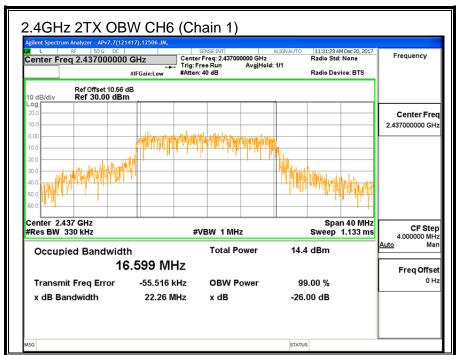
#### **RESULTS**

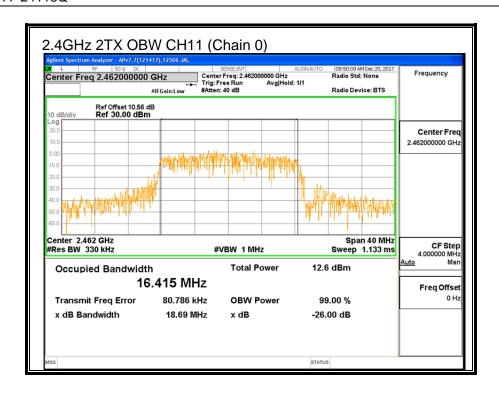
Channel	Frequency (MHz)	99% Bandwidth Chain 0 (MHz)	99% Bandwidth Chain 1 (MHz)
CH1	2412	16.527	16.514
CH6	2437	16.444	16.599
CH11	2462	16.415	16.444
CH12	2467	16.483	16.549
CH13	2472	16.440	16.382

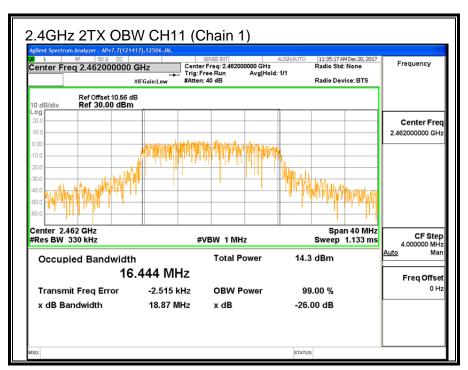


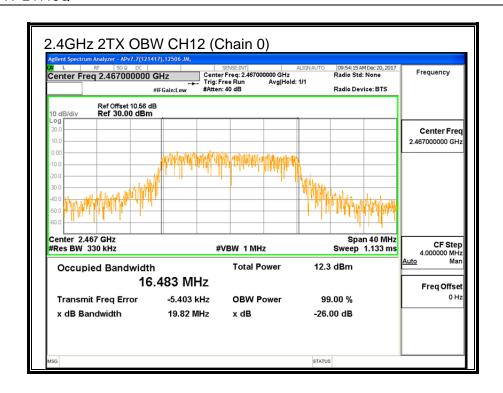


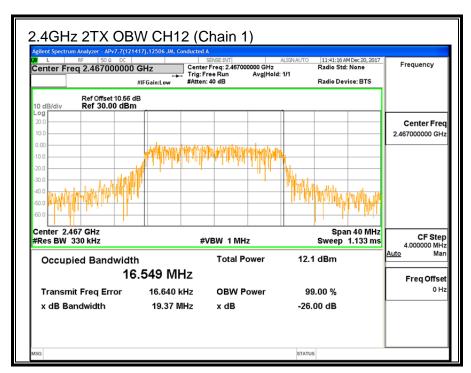


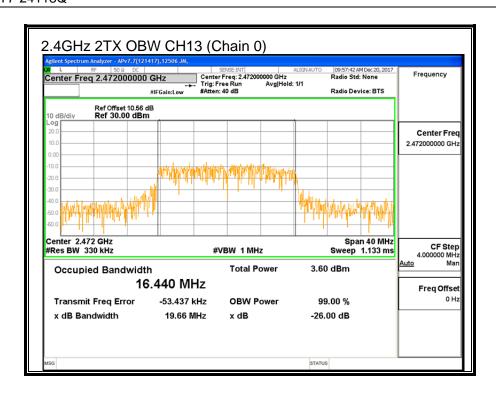


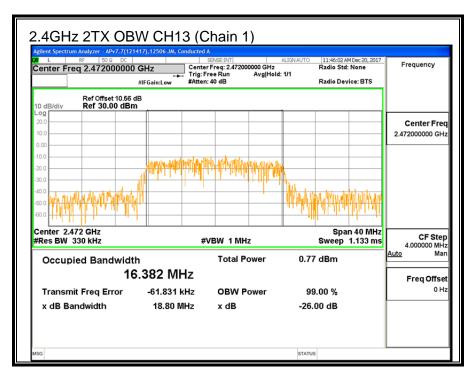












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#### 9.3.3. OUTPUT POWER

### **LIMITS**

FCC §15.247 (b) (3)

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.

#### **TEST PROCEDURE**

KDB 58074 D01 v04 Section 9.2.3.2

#### **DIRECTIONAL ANTENNA GAIN**

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

Chain 0	Chain 1	Uncorrelated Chains	
Antenna	Antenna	Directional	
Gain	Gain	Gain	
(dBi)	(dBi)	(dBi)	
-3.94	-9.83	-5.95	

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#### **RESULTS**

#### Limits

Channel	Frequency	Directional	FCC	IC	IC	Max
		Gain	Power	Power	EIRP	Power
			Limit	Limit	Limit	
	(MHz)	(dBi)	(dBm)	(dBm)	(dBm)	(dBm)
CH1	2412	-5.95	30.00	30	36	30.00
CH6	2437	-5.95	30.00	30	36	30.00
CH11	2462	-5.95	30.00	30	36	30.00
CH12	2467	-5.95	30.00	30	36	30.00
CH13	2472	-5.95	30.00	30	36	30.00

#### Results

Channel	Frequency	Chain 0	Chain 1	Total	Power	Margin
		Meas	Meas	Corr'd	Limit	
		Power	Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dBm)	(dB)
CH1	2412	12.35	13.02	15.71	30.00	-14.29
CH6	2437	12.39	14.53	16.60	30.00	-13.40
CH11	2462	12.27	14.70	16.66	30.00	-13.34
CH12	2467	12.33	12.60	15.48	30.00	-14.52
CH13	2472	3.55	1.01	5.47	30.00	-24.53

**Note:** the power readings above were measured with gated method, and the measurement was taken only during the ON time. No duty cycle correction was necessary.

#### 9.3.4. POWER SPECTRAL DENSITY

### **LIMITS**

FCC §15.247 (e)

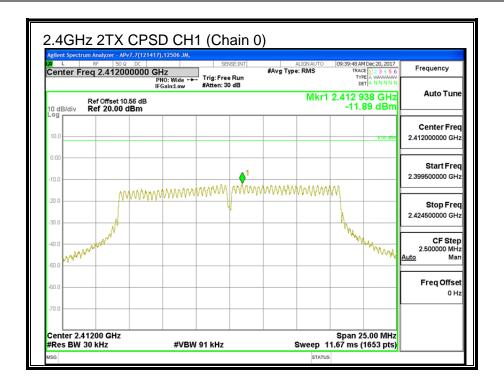
For digitally modulated systems, the power spectral density conducted form the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 KHz band during any time interval of continuous transmissions.

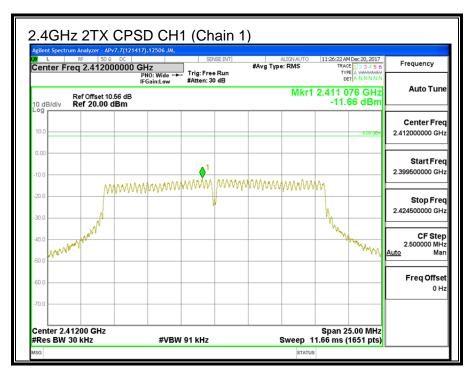
#### **RESULTS**

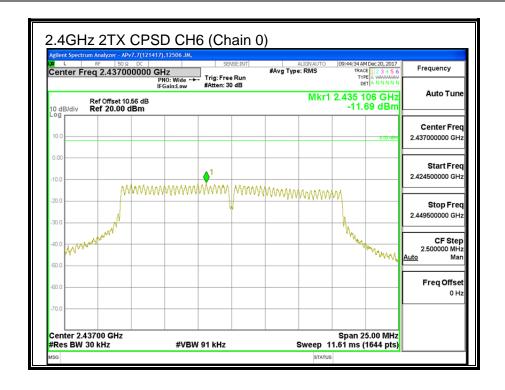
Duty Cycle CF (dB)	0.00	Included in Calculations of Corr'd PSD

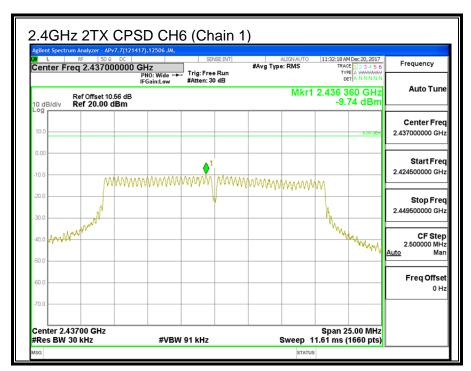
#### **PSD Results**

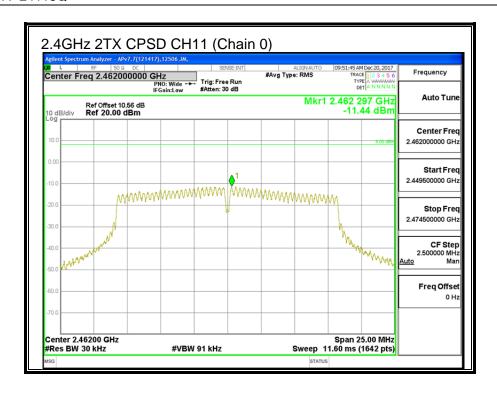
Channel	Frequency	Chain 0	Chain 1	Total	Limit	Margin
		Meas	Meas	Corr'd		
	(MHz)	(dBm)	(dBm)	PSD		
				(dBm)	(dBm)	(dB)
CH1	2412	-11.89	-11.66	-8.76	8.0	-16.8
CH6	2437	-11.69	-9.74	-7.60	8.0	-15.6
CH11	2462	-11.44	-9.19	-7.16	8.0	-15.2
CH12	2467	-12.11	-11.83	-8.96	8.0	-17.0
CH13	2472	-20.48	-23.37	-18.68	8.0	-26.7

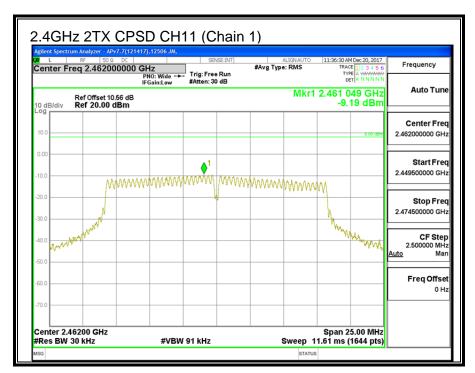


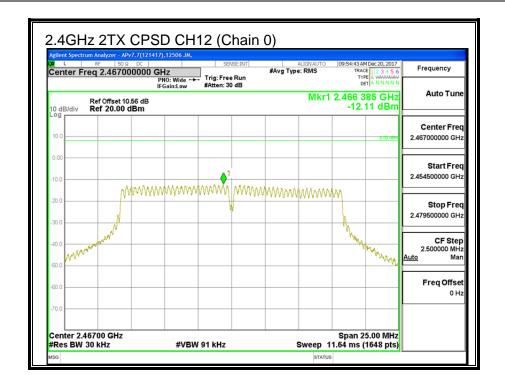


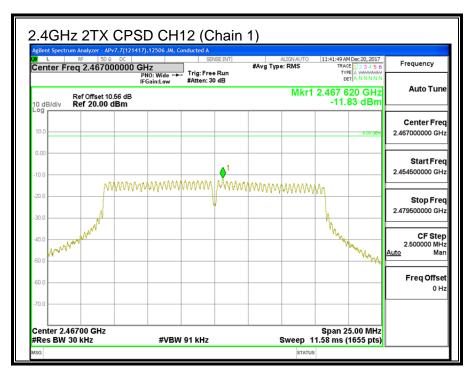


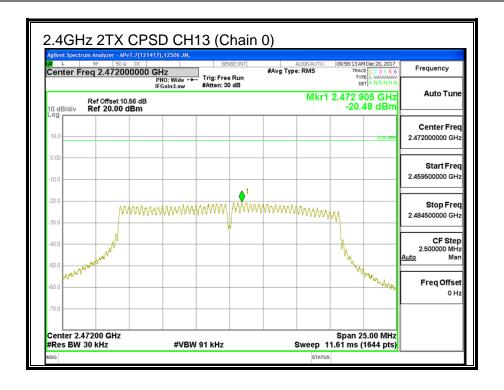


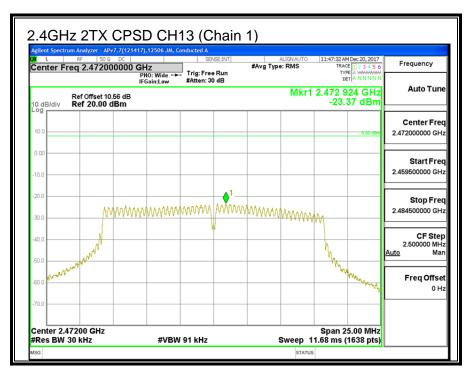












#### 9.3.5. CONDUCTED BANDEDGE AND SPURIOUS EMISSIONS

