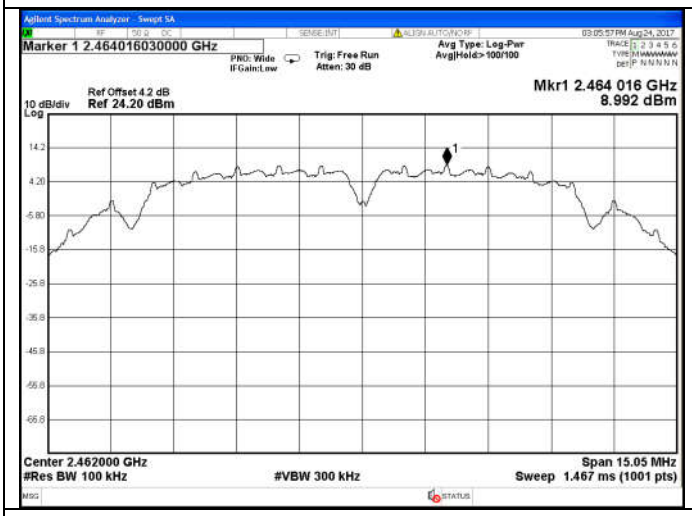
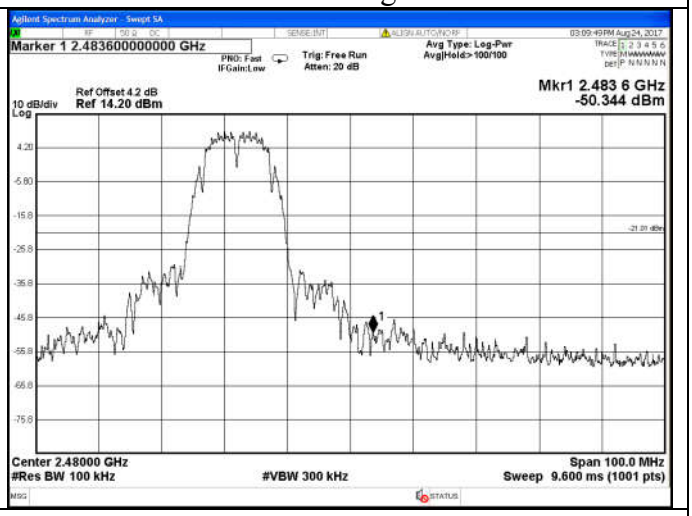
ANT0:
Test Mode: IEEE 802.11b
Test CH11: 2462MHz

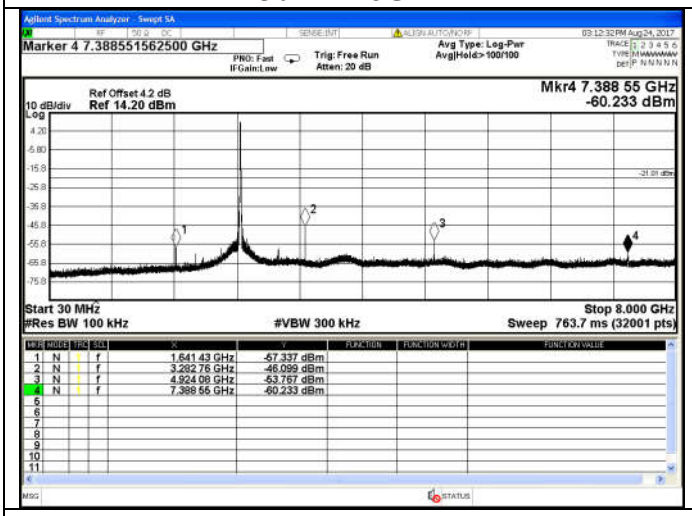
Reference Level



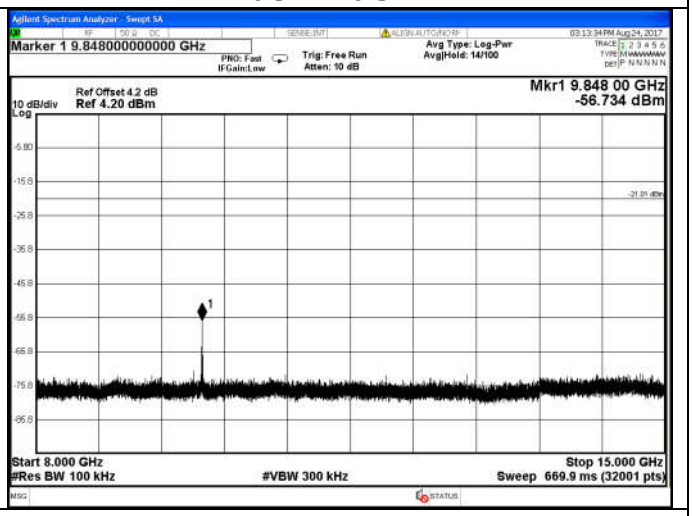
Band Edge



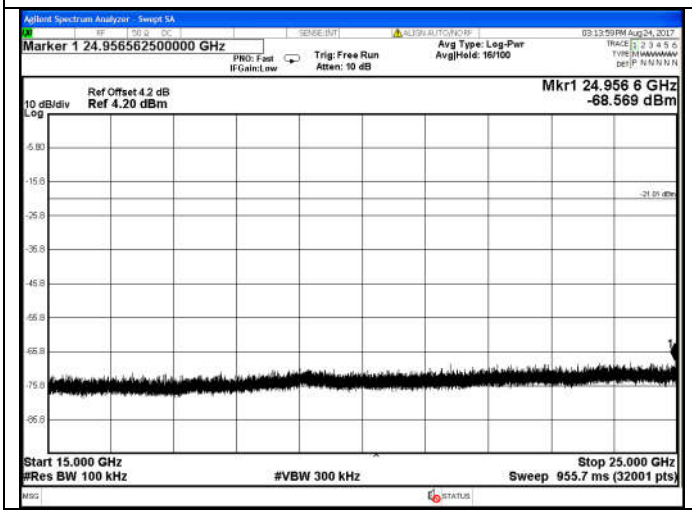
30MHz-8GHz



8GHz-15GHz

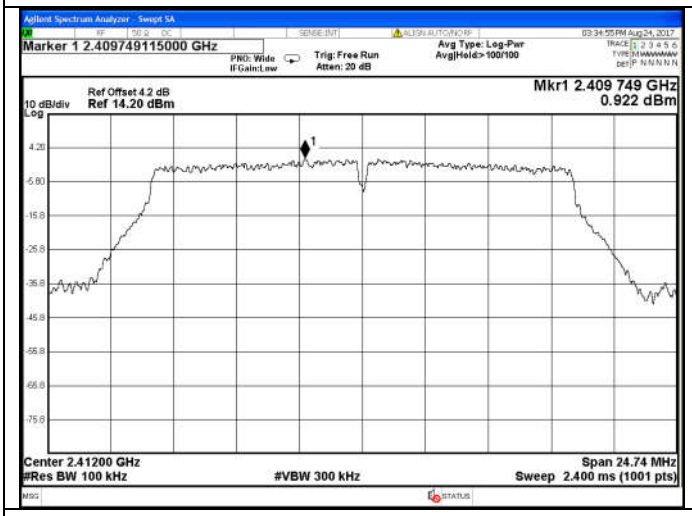


15GHz-25GHz

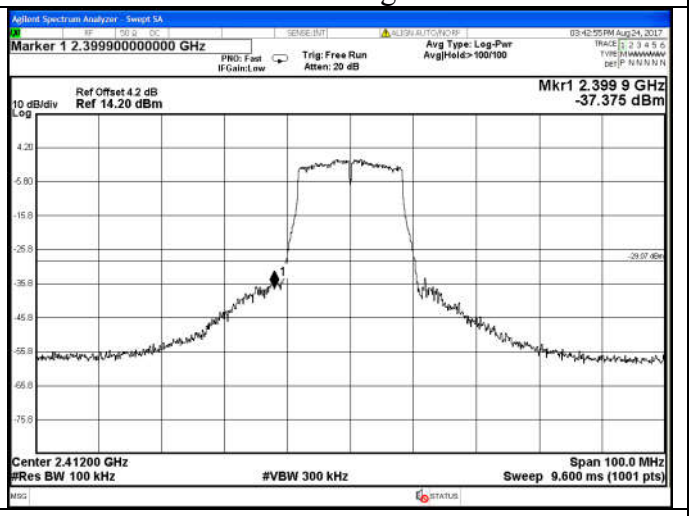


ANT0:
Test Mode: IEEE 802.11g
Test CH1: 2412MHz

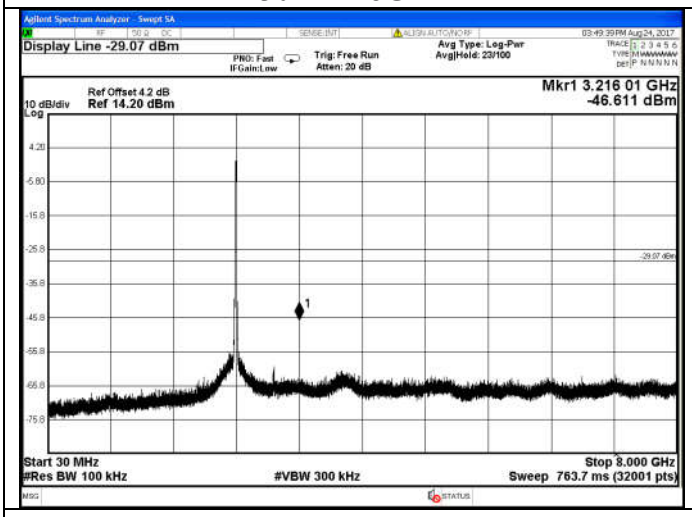
Reference Level



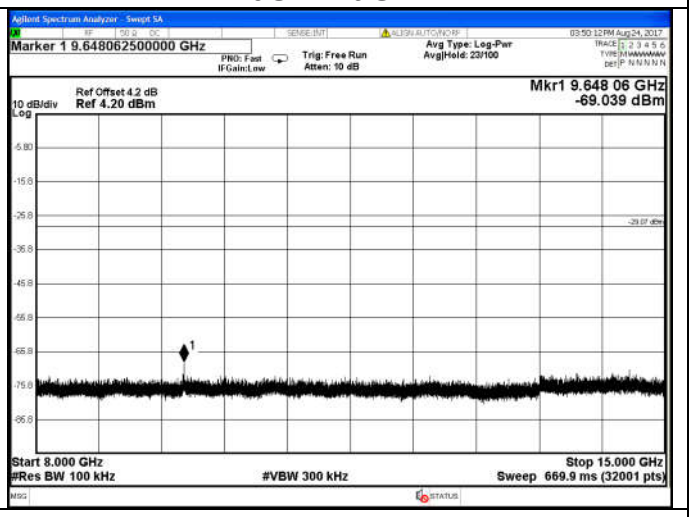
Band Edge



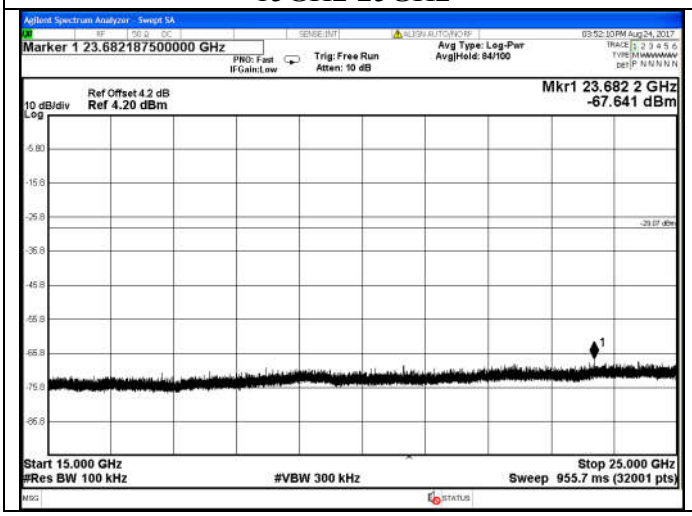
30MHz-8GHz



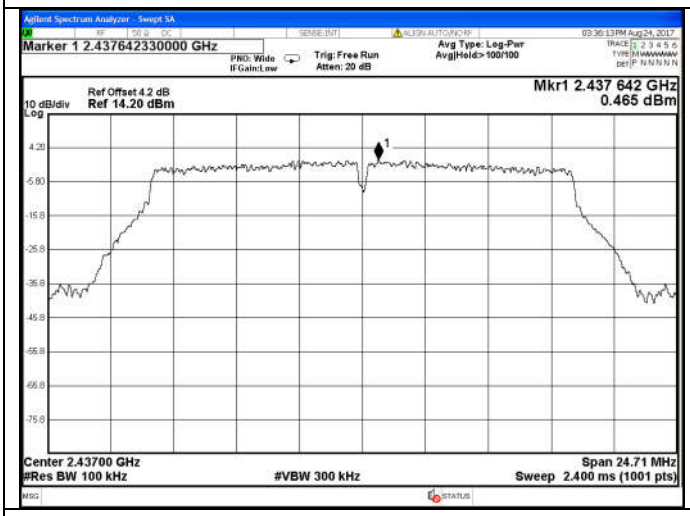
8GHz-15GHz

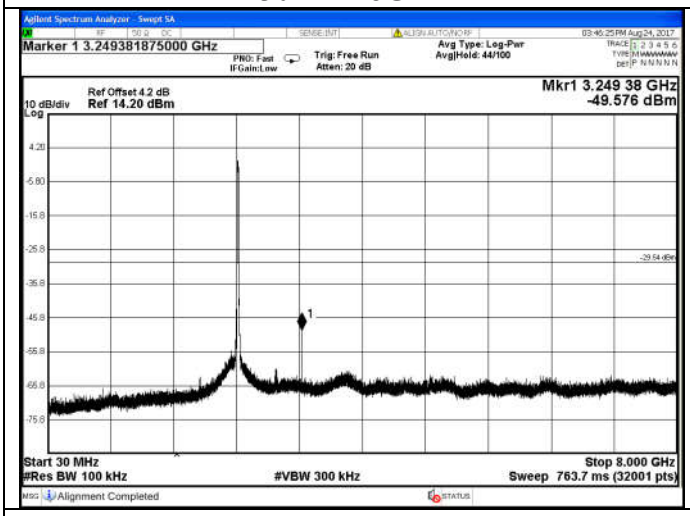
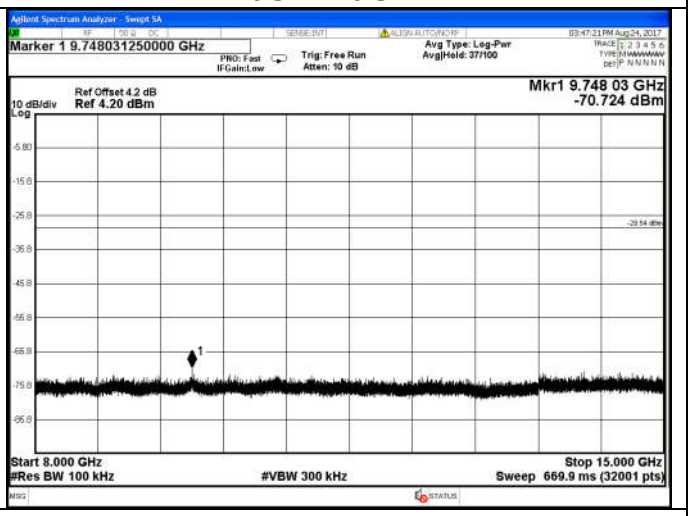


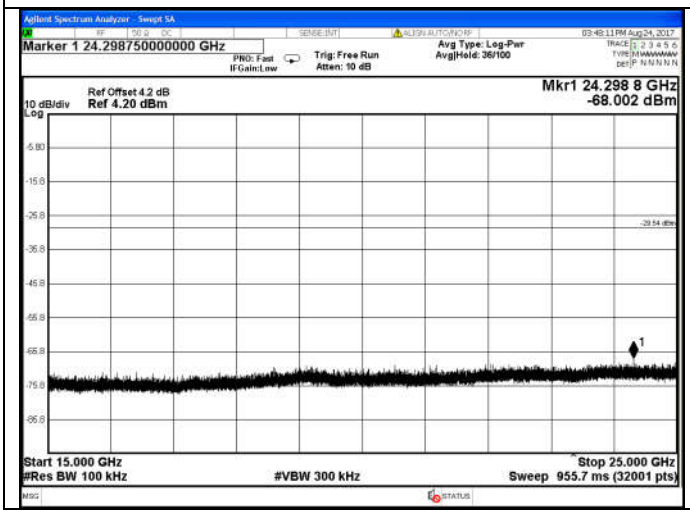
15GHz-25GHz



ANT0:
Test Mode: IEEE 802.11g
Test CH6: 2437MHz

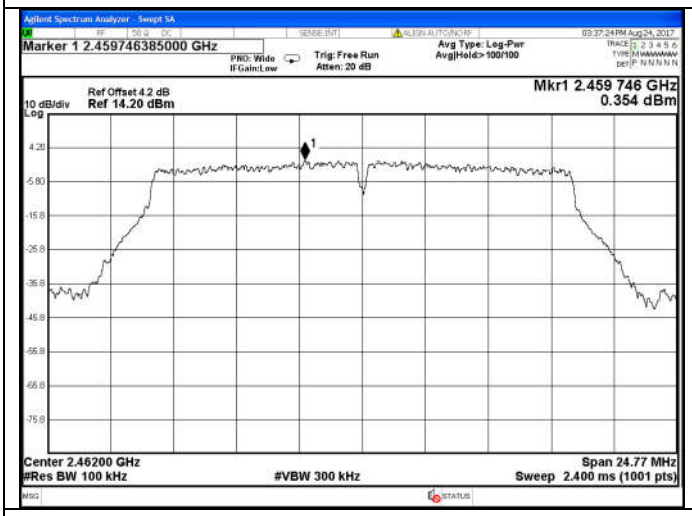
Reference Level	Band Edge
	

30MHz-8GHz	8GHz-15GHz
	

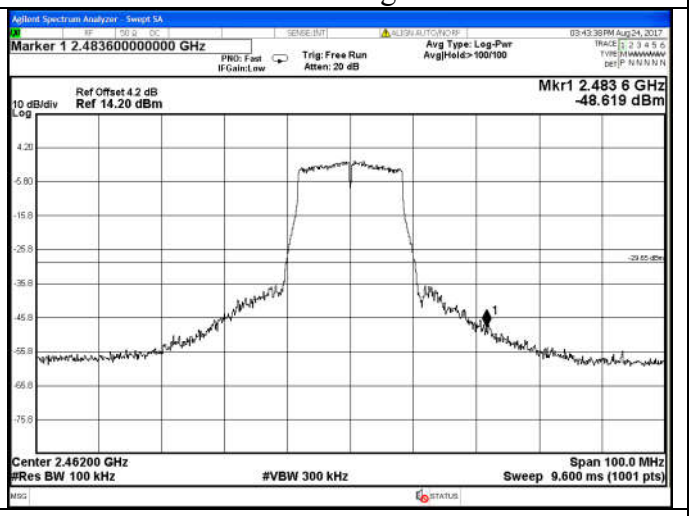
15GHz-25GHz	
	

ANT0:
Test Mode: IEEE 802.11g
Test CH11: 2462MHz

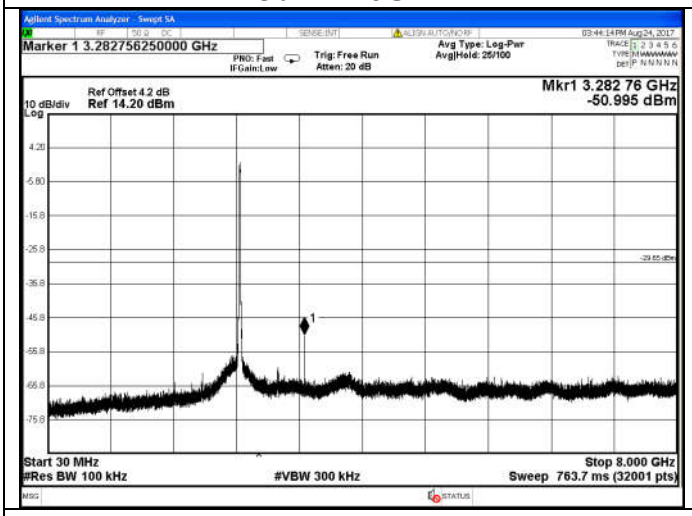
Reference Level



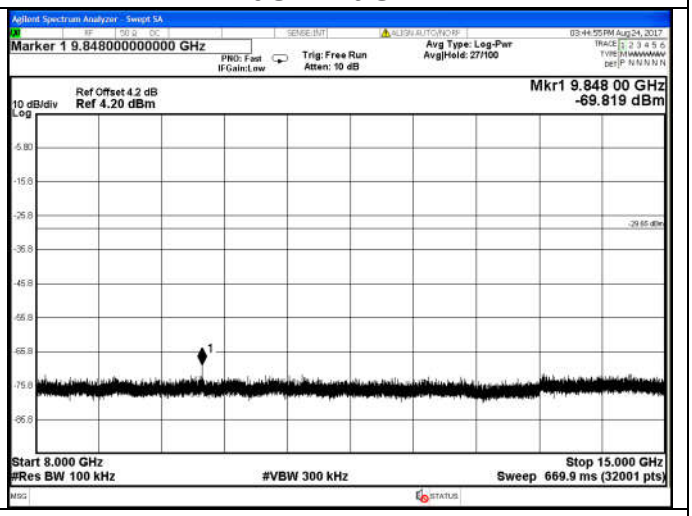
Band Edge



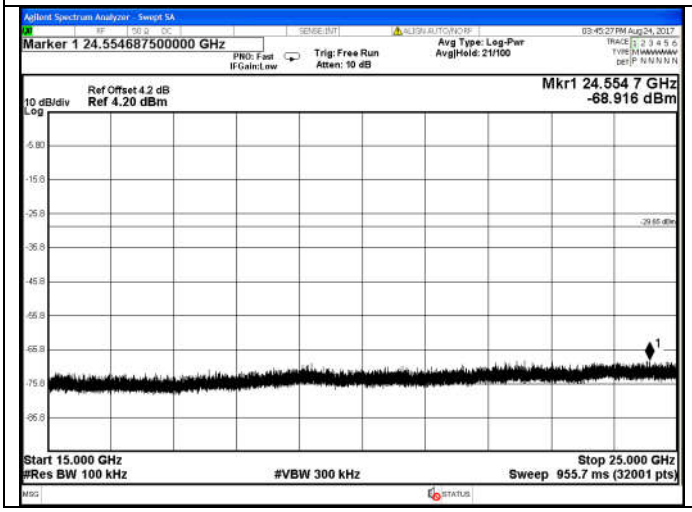
30MHz-8GHz



8GHz-15GHz

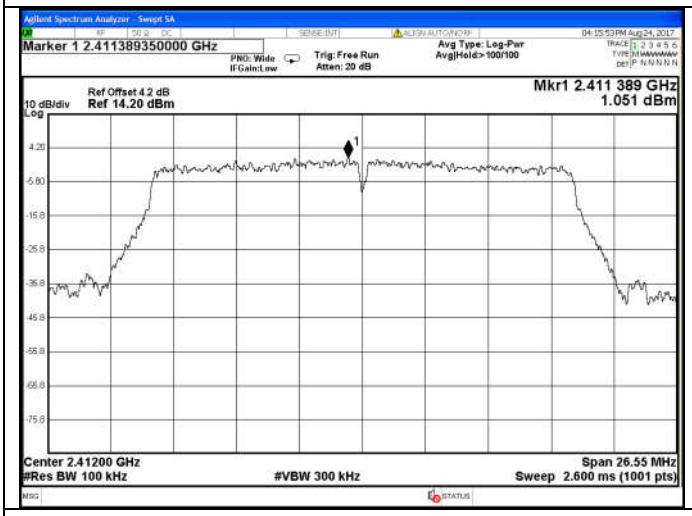


15GHz-25GHz

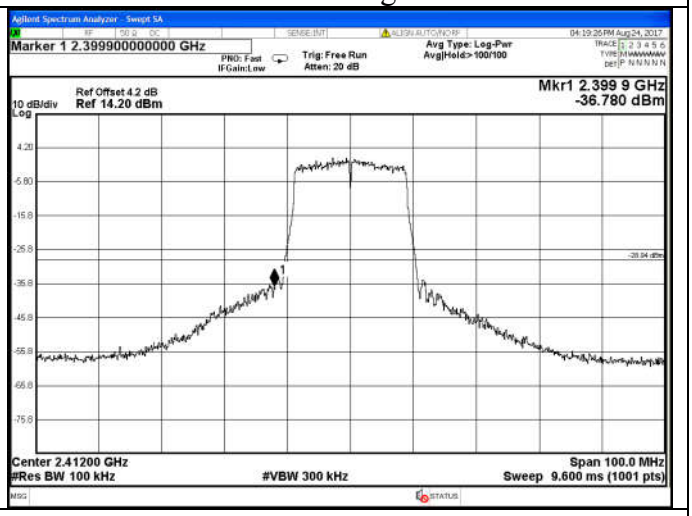


ANT1:
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz

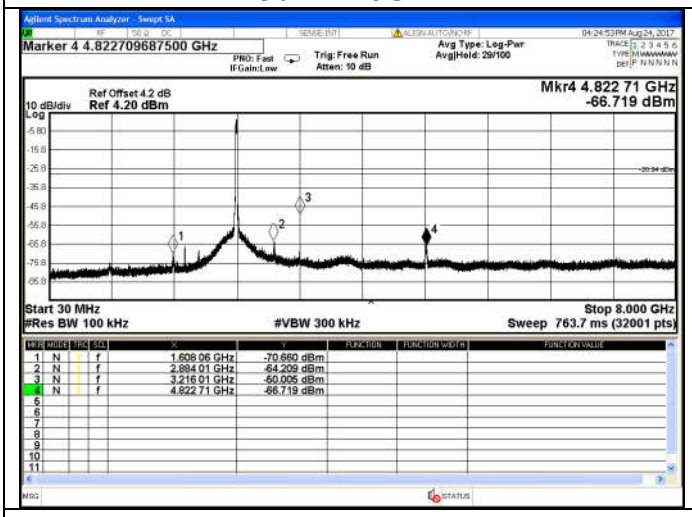
Reference Level



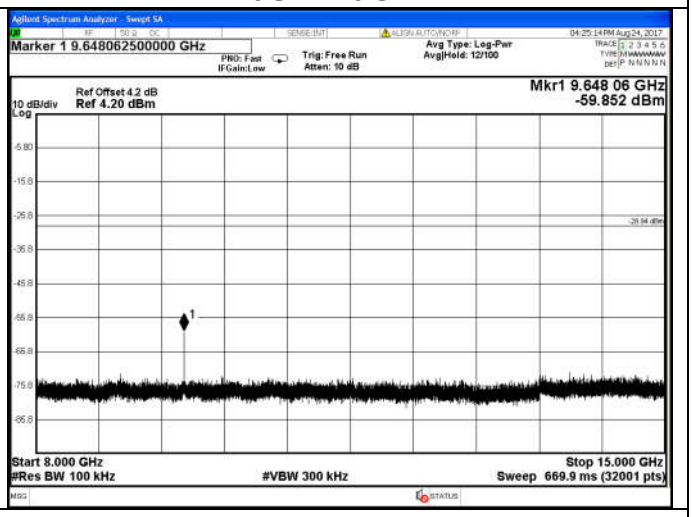
Band Edge



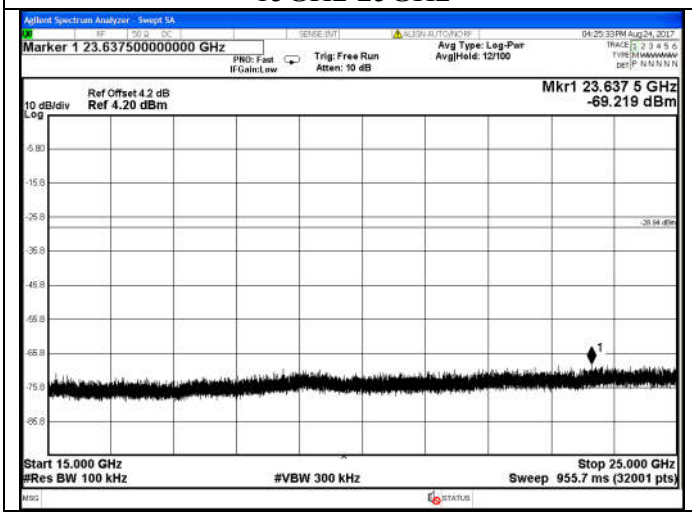
30MHz-8GHz



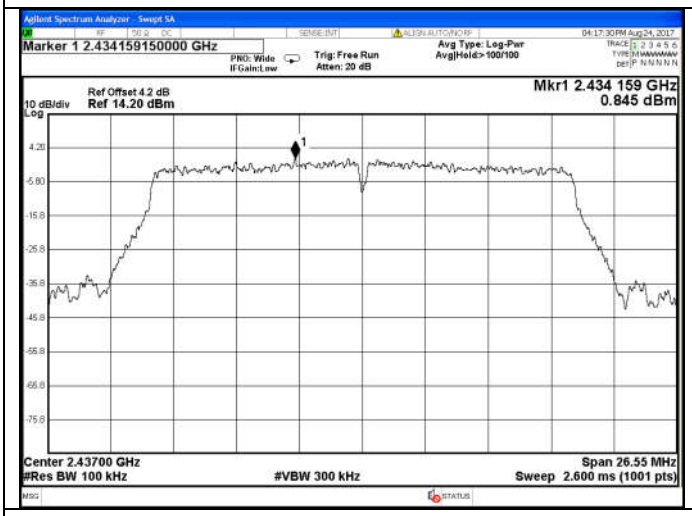
8GHz-15GHz

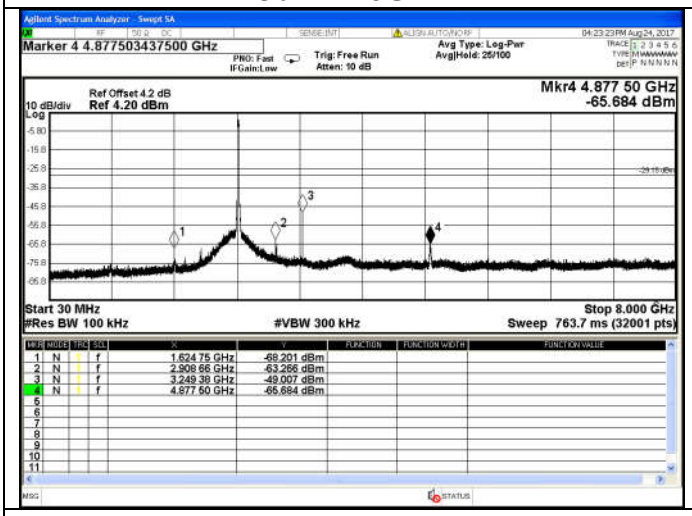
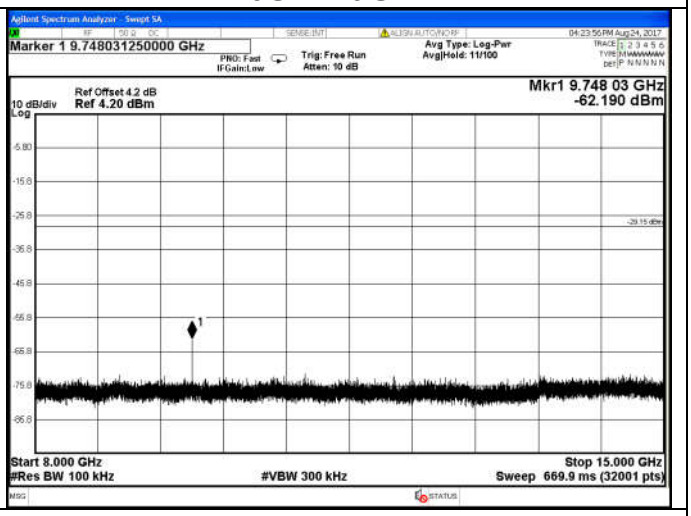


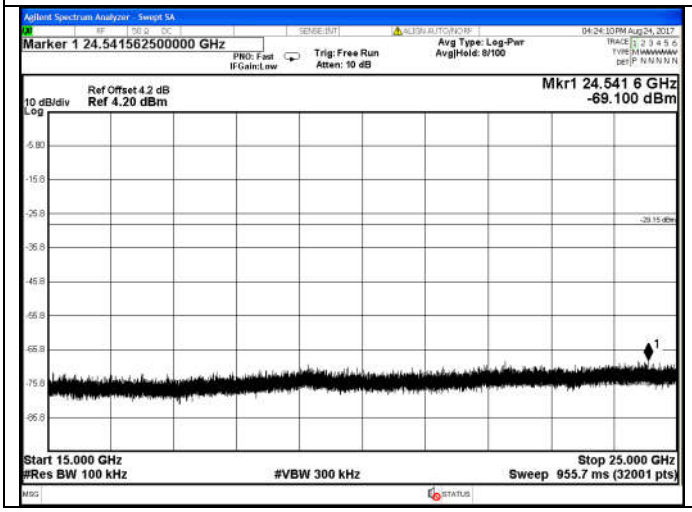
15GHz-25GHz



ANT1:
Test Mode: IEEE 802.11n HT20
Test CH6: 2437MHz

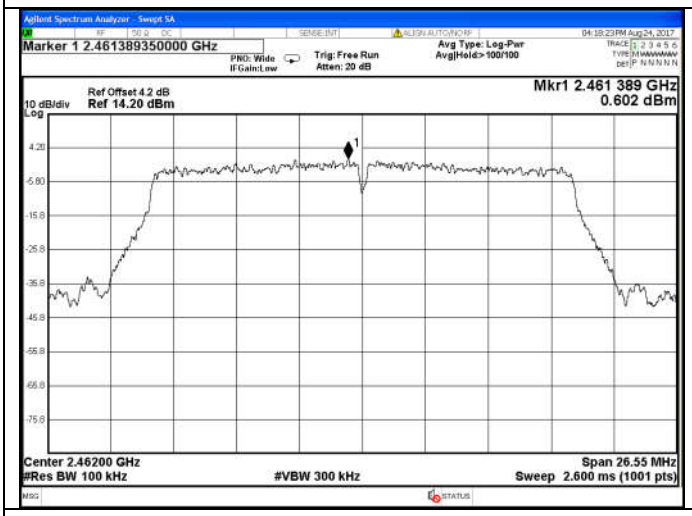
Reference Level	Band Edge
	

30MHz-8GHz	8GHz-15GHz
	

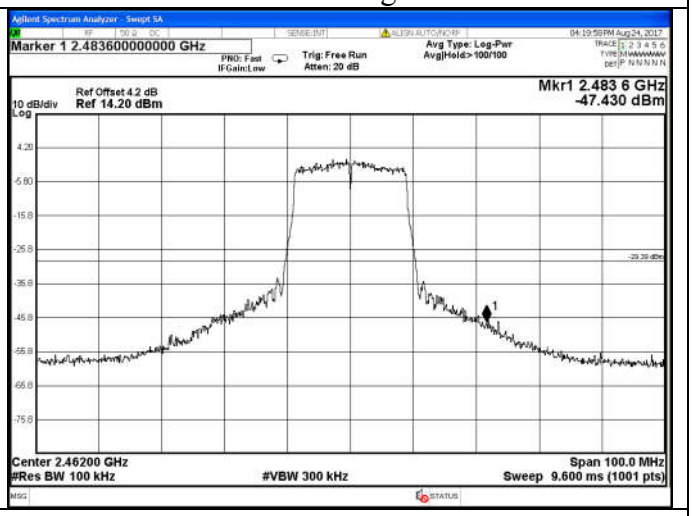
15GHz-25GHz	
	

ANT1:
Test Mode: IEEE 802.11n HT20
Test CH11: 2462MHz

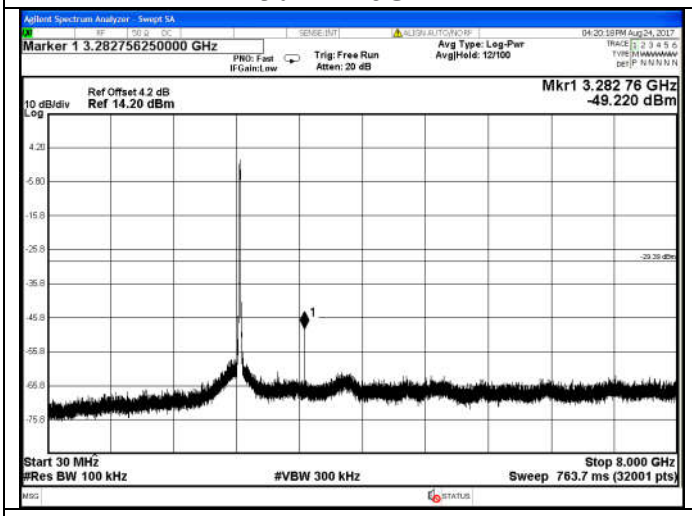
Reference Level



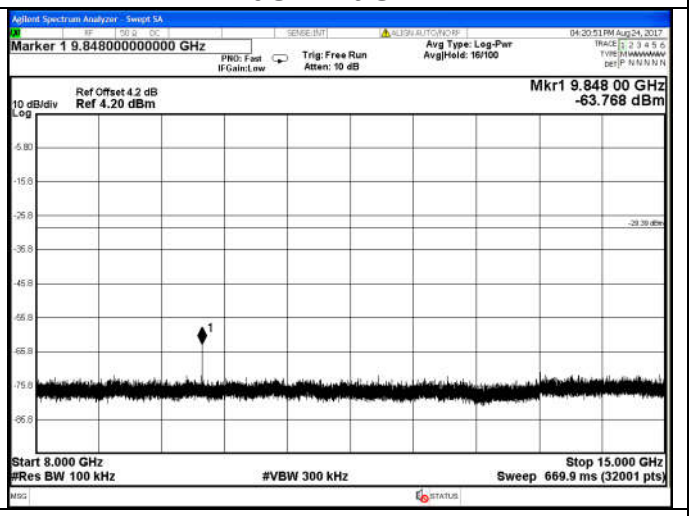
Band Edge



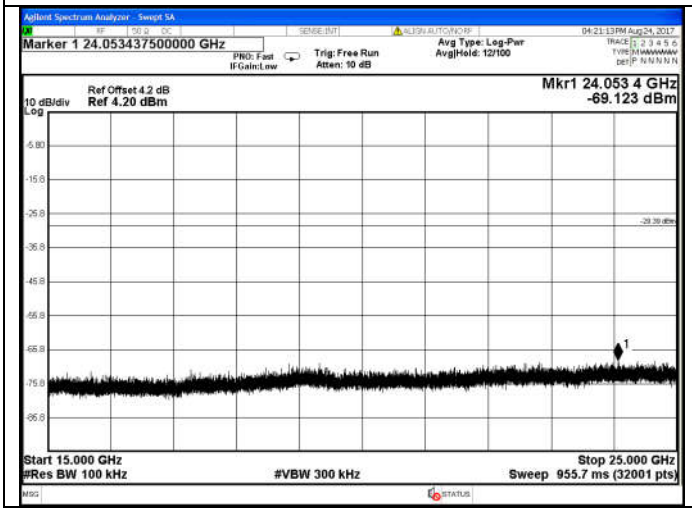
30MHz-8GHz



8GHz-15GHz

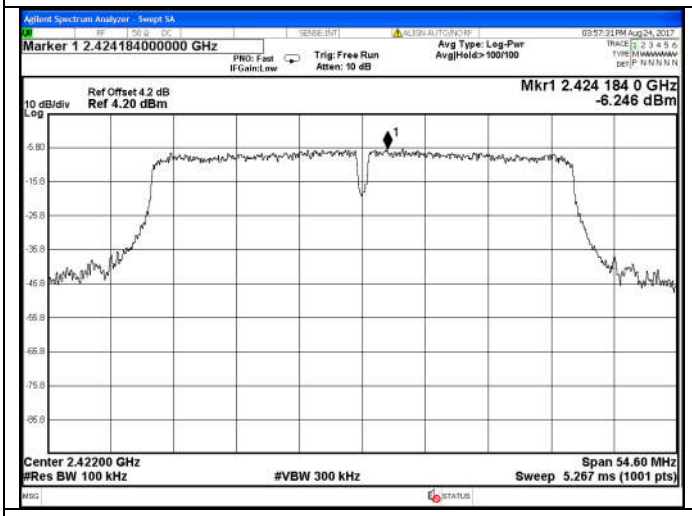


15GHz-25GHz

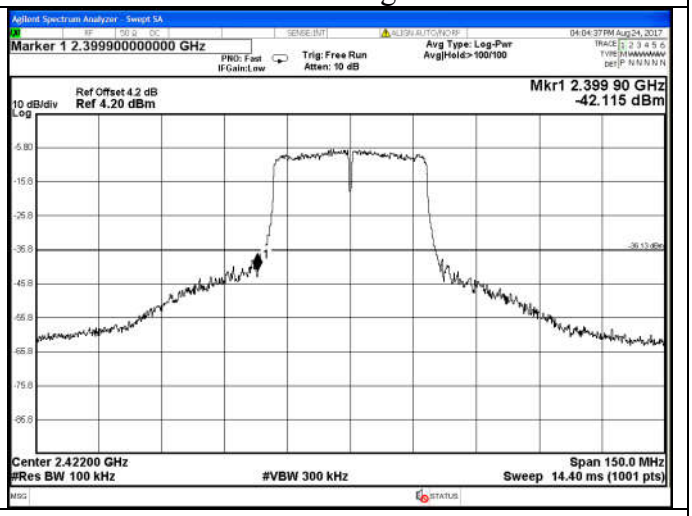


ANT0:
Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz

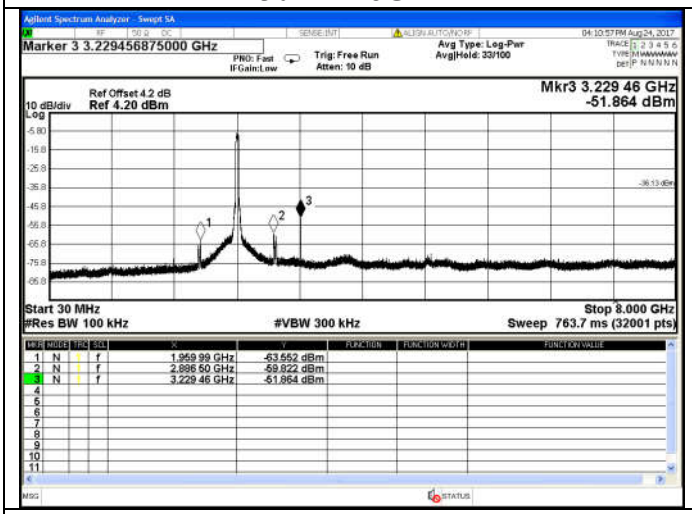
Reference Level



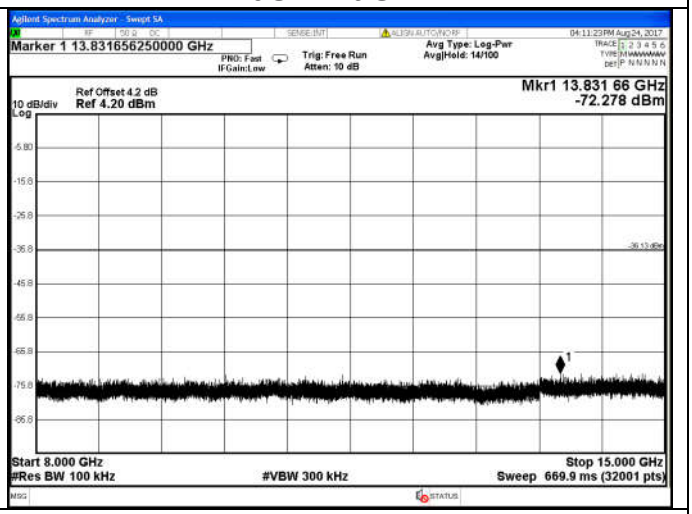
Band Edge



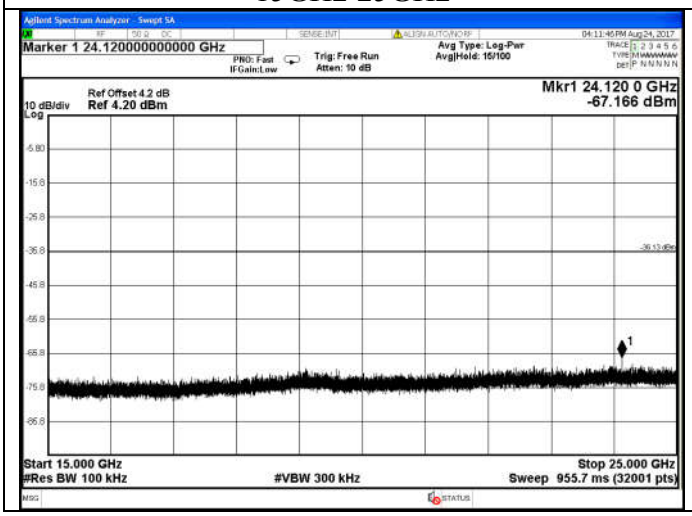
30MHz-8GHz



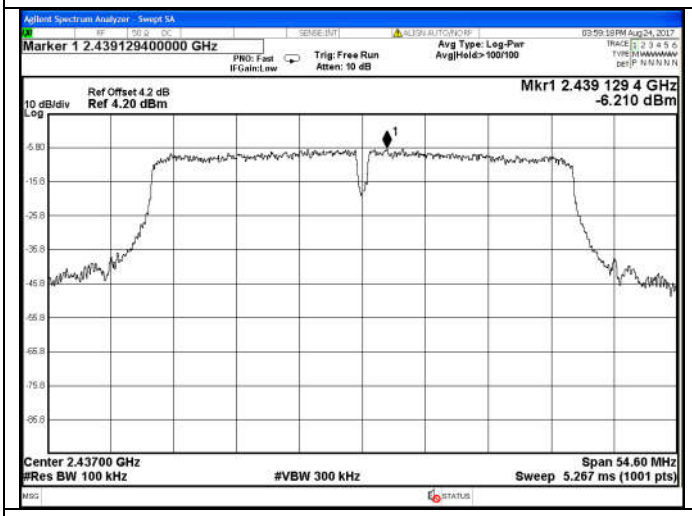
8GHz-15GHz

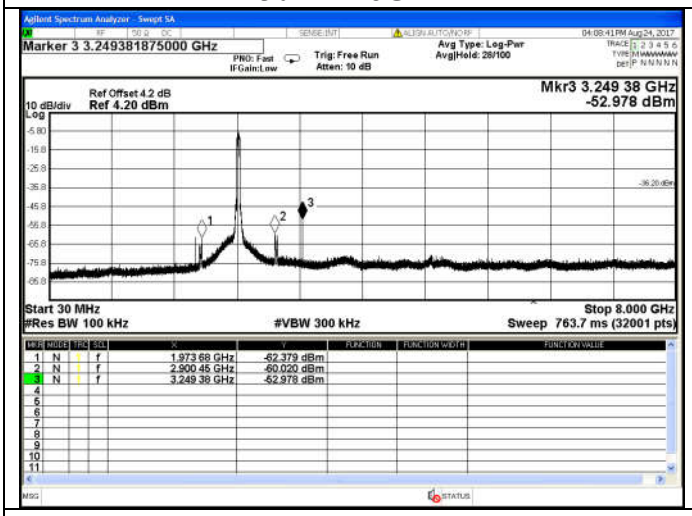
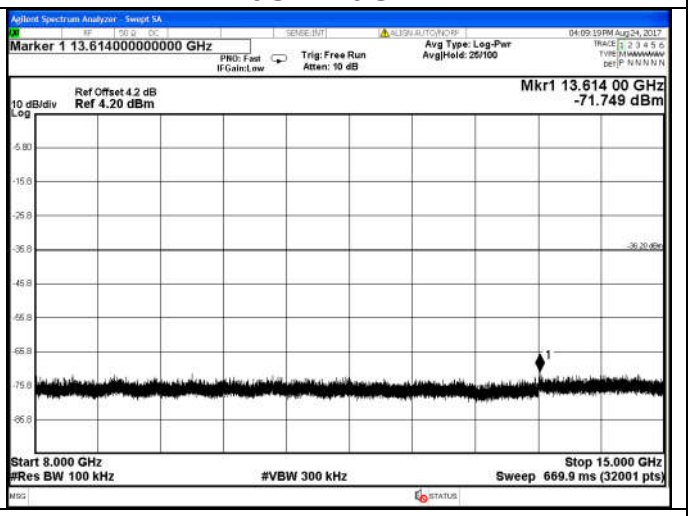


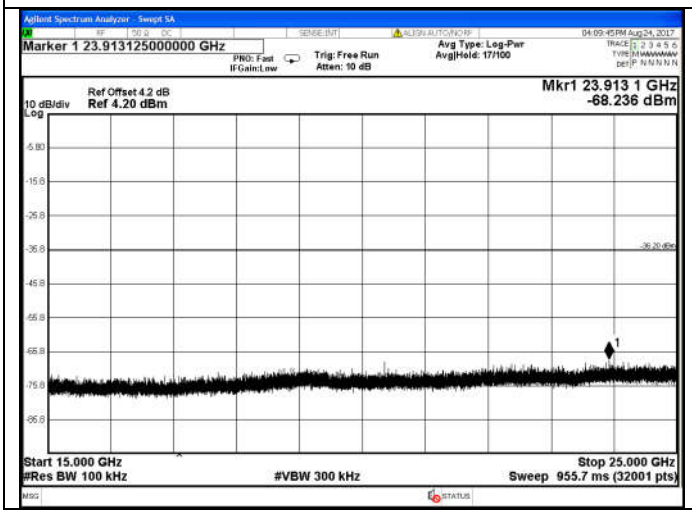
15GHz-25GHz



ANT0:
Test Mode: IEEE 802.11n HT40
Test CH6: 2437MHz

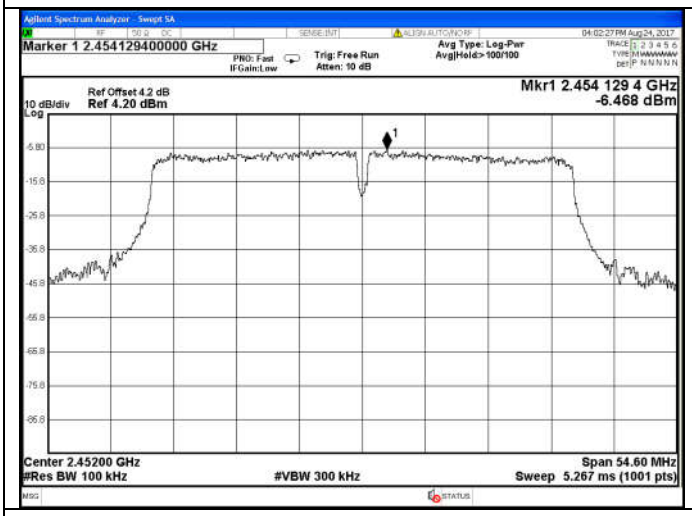
Reference Level	Band Edge
	

30MHz-8GHz	8GHz-15GHz
	

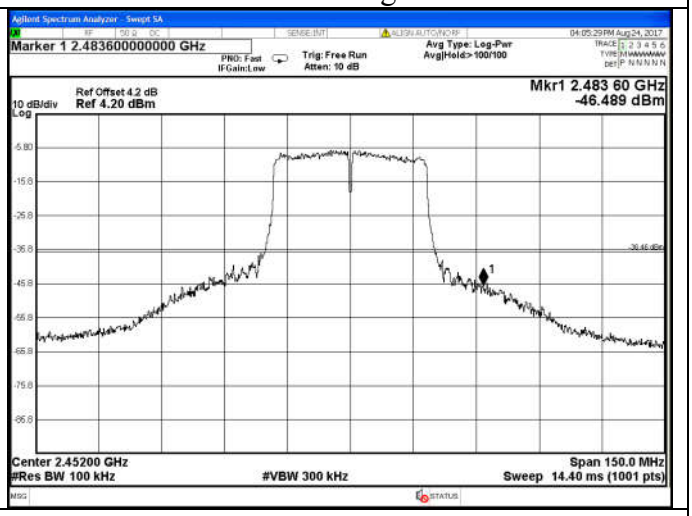
15GHz-25GHz	
	

ANT0:
Test Mode: IEEE 802.11n HT40
Test CH9: 2452MHz

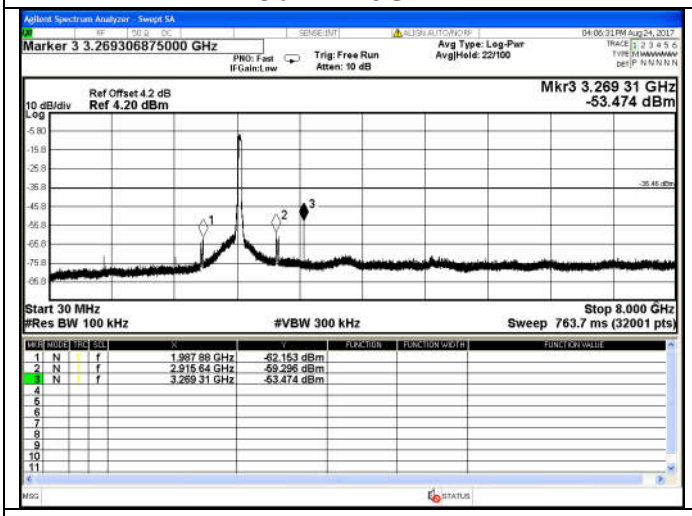
Reference Level



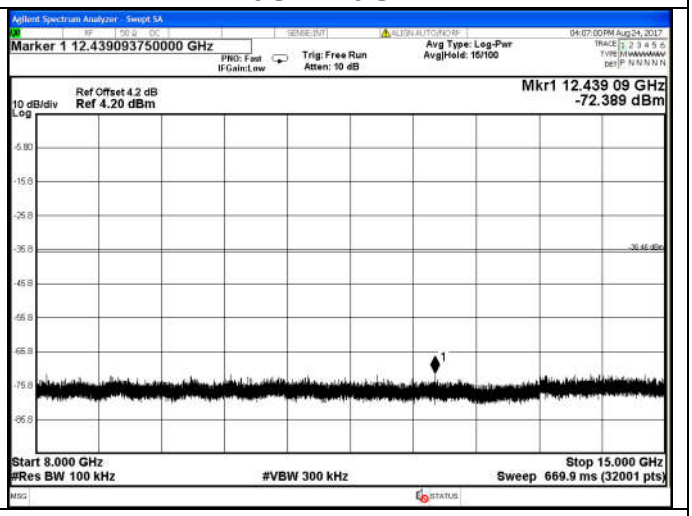
Band Edge



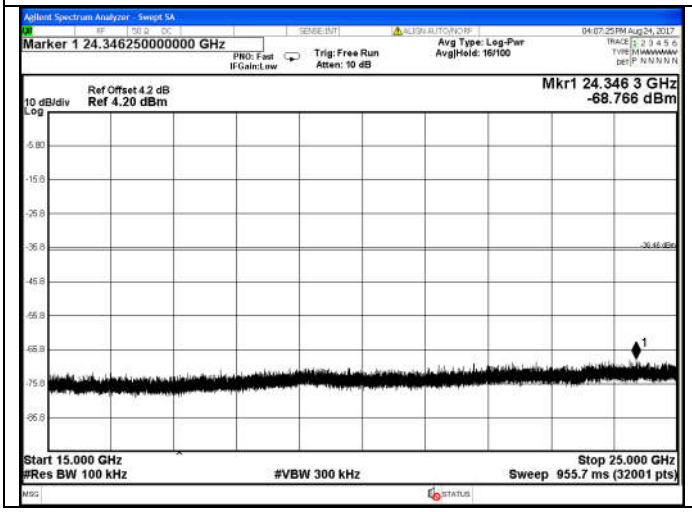
30MHz-8GHz



8GHz-15GHz



15GHz-25GHz



7. BAND EDGE COMPLIANCE TEST

7.1. Limit

All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209 & RSS-247, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental emissions, or comply with 15.209 & RSS-247 limits.

7.2. Test Procedure

1. The EUT is placed on a turntable, which is 1.5m above the ground plane and worked at highest radiated power.

2. The turntable was rotated for 360 degrees to determine the position of maximum emission level.

3. EUT is set 3m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emission.

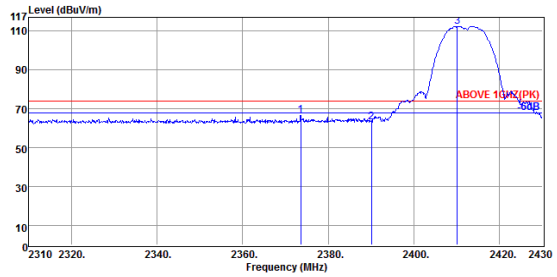
4. Set the spectrum analyzer in the following setting in order to capture the lower and upper band-edges of the emission:

(a) PEAK: RBW=1MHz; VBW=3MHz; Sweep=AUTO
(b) AVERAGE: RBW=1MHz; VBW=10Hz; Sweep=AUTO

7.3. Test Results

Pass (The testing data was attached in the next pages.)

Data: 1 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\b\OOB.EM6 (1

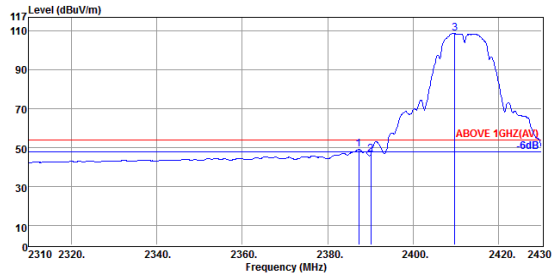


Site no. : Fully Chamber Site Data no. : 1
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2373.80	32.13	6.55	27.69	66.37	74.00	7.63	Peak
2	2390.04	32.16	6.57	24.49	63.22	74.00	10.78	Peak
3	2410.08	32.18	6.59	73.45	112.22	74.00	-38.22	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 2 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\b\OOB.EM6 (1

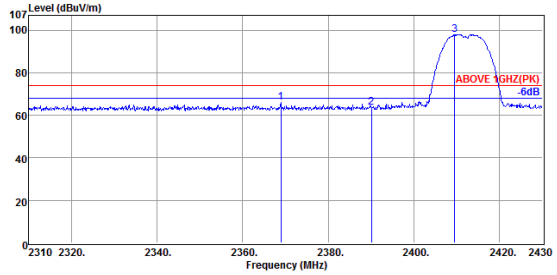


Site no. : Fully Chamber Site Data no. : 2
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2387.28	32.16	6.57	10.50	49.23	54.00	4.77	Average
2	2390.04	32.16	6.57	8.02	46.75	54.00	7.25	Average
3	2409.72	32.18	6.59	70.04	108.81	54.00	-54.81	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 3 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\b\OOB.EM6 (1

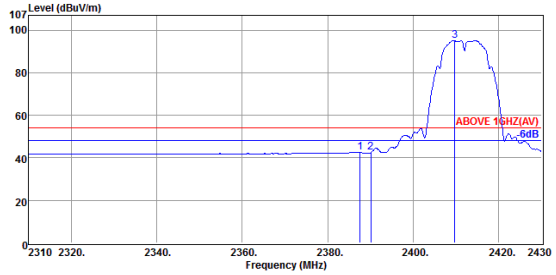


Site no. : Fully Chamber Site Data no. : 3
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2388.92	32.13	6.55	27.52	66.20	74.00	7.80	Peak
2	2390.04	32.16	6.57	24.89	63.62	74.00	10.38	Peak
3	2409.48	32.18	6.59	59.12	97.89	74.00	-23.89	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 4 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\b\OOB.EM6 (1

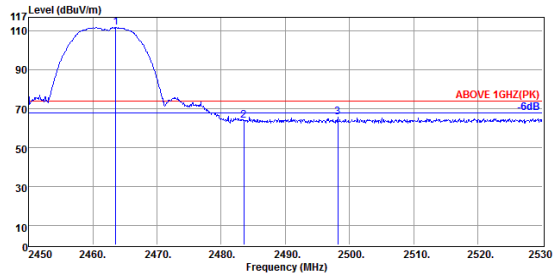


Site no. : Fully Chamber Site Data no. : 4
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2387.52	32.16	6.57	3.73	42.46	54.00	11.54	Average
2	2390.04	32.16	6.57	3.73	42.46	54.00	11.54	Average
3	2409.72	32.18	6.59	56.41	95.18	54.00	-41.18	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 5 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\b\OOB.EM6 (1

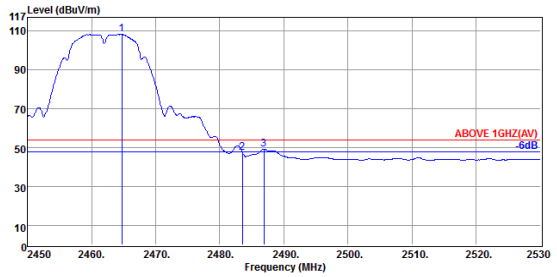


Site no. : Fully Chamber Site Data no. : 5
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2483.60	32.25	6.85	72.71	111.81	74.00	-37.81	Peak
2	2483.52	32.28	6.67	24.89	63.84	74.00	10.16	Peak
3	2498.16	32.30	6.69	26.86	65.85	74.00	8.35	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 6 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\b\OOB.EM6 (1

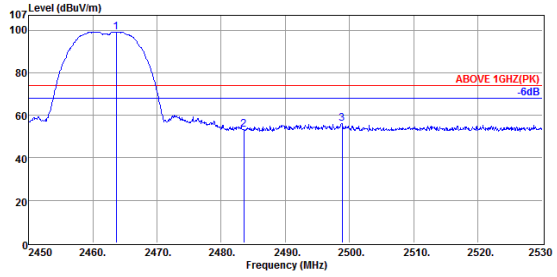


Site no. : Fully Chamber Site Data no. : 6
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2484.72	32.25	6.85	69.37	108.27	54.00	-54.27	Average
2	2483.52	32.28	6.67	8.46	47.41	54.00	6.59	Average
3	2486.88	32.28	6.67	10.19	49.14	54.00	4.86	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 7 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\b\OOB.EM6 (1

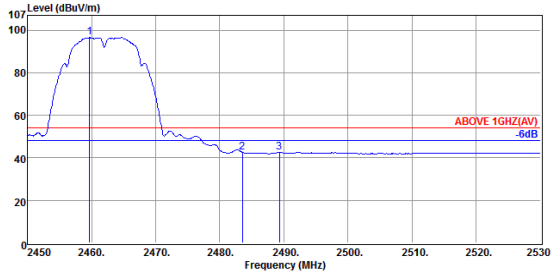


Site no. : Fully Chamber Site Data no. : 7
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2483.68	32.25	6.85	60.28	99.18	74.00	-25.18	Peak
2	2483.52	32.28	6.67	14.51	53.46	74.00	20.54	Peak
3	2498.80	32.30	6.69	17.04	56.03	74.00	17.97	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 8 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\b\OOB.EM6 (1

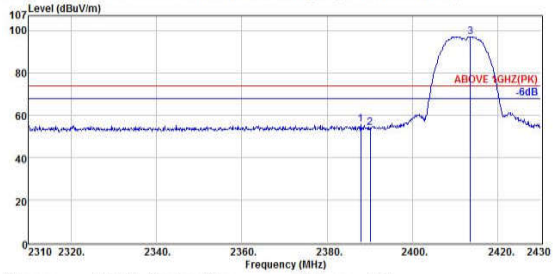


Site no. : Fully Chamber Site Data no. : 8
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2458.68	32.25	6.85	57.60	96.50	54.00	-42.50	Average
2	2483.52	32.28	6.67	3.62	42.57	54.00	11.43	Average
3	2489.28	32.30	6.69	3.50	42.49	54.00	11.51	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 1 File: \\Rf-chamber\sam\2017\C1M1707048_FCC_IC\171102\b\OOB.EM6 (4)

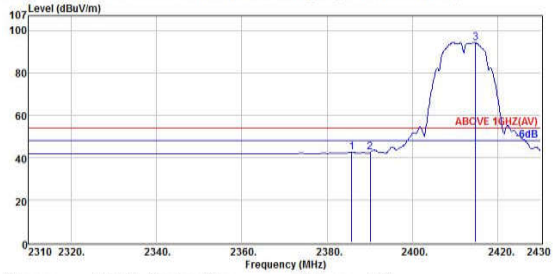


Site no. : Fully Chamber Site Data no. : 1
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V/60Hz
Test Mode : Tx 2412MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2387.88	32.16	6.57	17.15	55.88	74.00	18.12	Peak
2	2390.04	32.16	6.57	15.29	54.02	74.00	19.98	Peak
3	2413.56	32.18	6.59	58.21	96.98	74.00	-22.98	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 2 File: \\Rf-chamber\sam\2017\C1M1707048_FCC_IC\171102\b\OOB.EM6 (4)

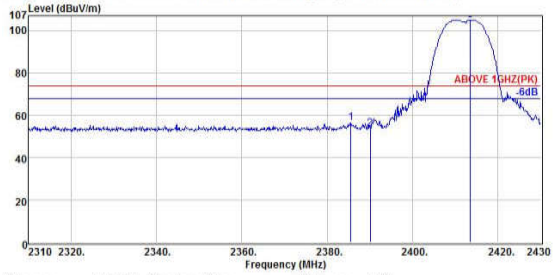


Site no. : Fully Chamber Site Data no. : 2
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V/60Hz
Test Mode : Tx 2412MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2385.72	32.16	6.57	4.01	42.74	54.00	11.26	Average
2	2390.04	32.16	6.57	3.73	42.46	54.00	11.54	Average
3	2414.76	32.18	6.59	55.57	94.34	54.00	-40.34	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 3 File: \\Rf-chamber\sam\2017\C1M1707048_FCC_IC\171102\b\OOB.EM6 (4)

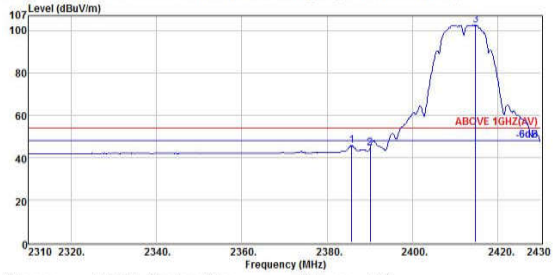


Site no. : Fully Chamber Site Data no. : 3
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V/60Hz
Test Mode : Tx 2412MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2385.80	32.16	6.57	17.74	56.47	74.00	17.53	Peak
2	2390.04	32.16	6.57	14.80	53.53	74.00	20.47	Peak
3	2413.56	32.18	6.59	86.42	105.19	74.00	-31.19	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 4 File: \\Rf-chamber\sam\2017\C1M1707048_FCC_IC\171102\b\OOB.EM6 (4)

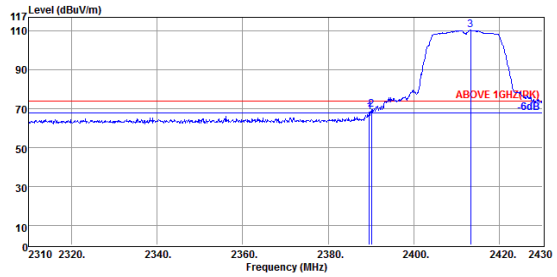


Site no. : Fully Chamber Site Data no. : 4
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V/60Hz
Test Mode : Tx 2412MHz(802.11b)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2385.72	32.16	6.57	6.89	45.62	54.00	8.38	Average
2	2390.04	32.16	6.57	5.83	44.56	54.00	9.44	Average
3	2414.76	32.18	6.59	83.79	102.56	54.00	-48.56	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 1 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\g\OOB.EM6 (E

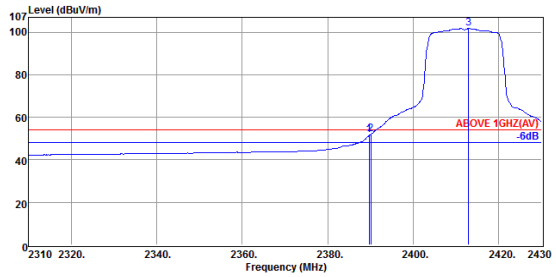


Site no. : Fully Chamber Site Data no. : 1
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2389.56	32.16	6.57	28.74	68.47	74.00	5.53	Peak
2	2390.04	32.16	6.57	30.82	69.55	74.00	4.45	Peak
3	2413.20	32.18	6.59	71.51	110.28	74.00	-36.28	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 2 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\g\OOB.EM6 (E

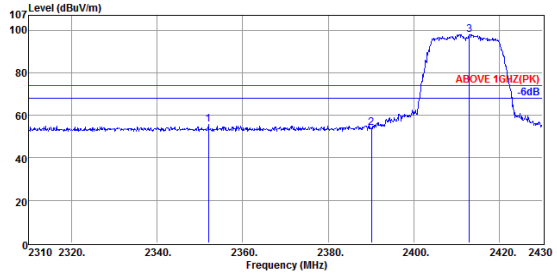


Site no. : Fully Chamber Site Data no. : 2
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2389.88	32.16	6.57	12.78	51.51	54.00	2.49	Average
2	2390.04	32.16	6.57	13.31	52.04	54.00	1.96	Average
3	2412.96	32.18	6.59	62.95	101.72	54.00	-47.72	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 3 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\g\OOB.EM6 (E

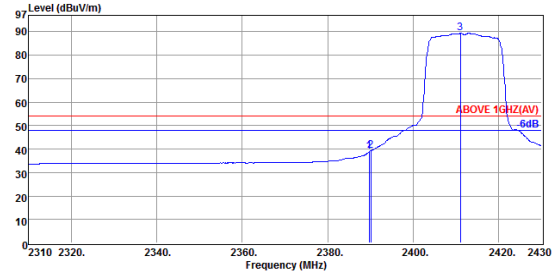


Site no. : Fully Chamber Site Data no. : 3
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2352.00	32.11	6.53	17.05	55.69	74.00	18.31	Peak
2	2390.04	32.16	6.57	15.30	54.03	74.00	19.97	Peak
3	2412.96	32.18	6.59	59.05	97.82	74.00	-23.82	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 4 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\g\OOB.EM6 (E

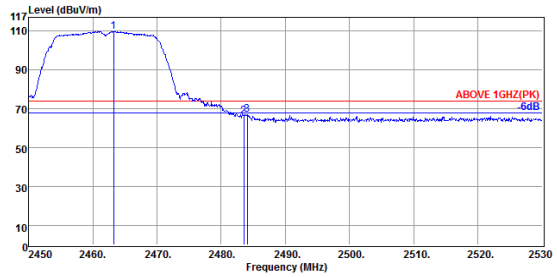


Site no. : Fully Chamber Site Data no. : 4
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2388.68	32.16	6.57	0.17	38.90	54.00	15.10	Average
2	2390.04	32.16	6.57	0.57	39.30	54.00	14.70	Average
3	2411.04	32.18	6.59	50.55	89.32	54.00	-35.32	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 5 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\g\OOB.EM6 (E

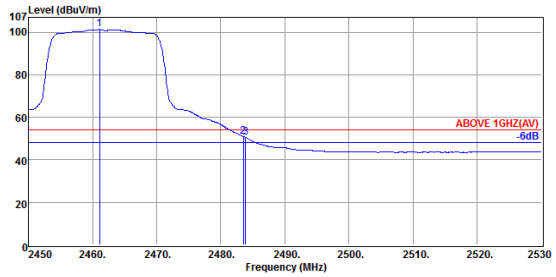


Site no. : Fully Chamber Site Data no. : 5
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% M9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2483.28	32.25	6.85	70.73	109.83	74.00	-35.83	Peak
2	2483.52	32.28	6.67	26.95	65.90	74.00	8.10	Peak
3	2484.08	32.28	6.87	28.17	67.12	74.00	6.88	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 6 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\g\OOB.EM6 (E

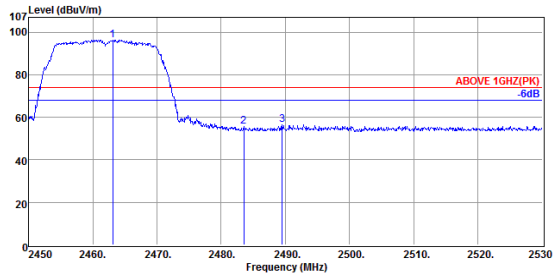


Site no. : Fully Chamber Site Data no. : 6
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% M9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2461.12	32.25	6.85	62.37	101.27	54.00	-47.27	Average
2	2483.52	32.28	6.67	11.97	50.92	54.00	3.08	Average
3	2483.84	32.28	6.87	11.58	50.53	54.00	3.47	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 7 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\g\OOB.EM6 (E

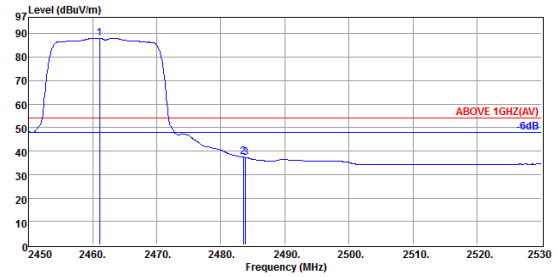


Site no. : Fully Chamber Site Data no. : 7
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% M9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2483.12	32.25	6.85	57.54	96.44	74.00	-22.44	Peak
2	2483.52	32.28	6.67	16.88	55.83	74.00	18.17	Peak
3	2489.52	32.30	6.69	17.39	56.38	74.00	17.62	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 8 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\g\OOB.EM6 (E

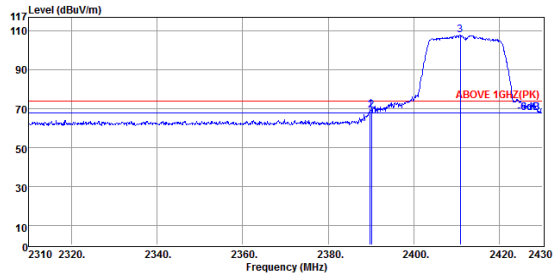


Site no. : Fully Chamber Site Data no. : 8
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% M9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11g)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2461.12	32.25	6.85	49.15	88.05	54.00	-34.05	Average
2	2483.52	32.28	6.67	-1.54	37.41	54.00	16.59	Average
3	2483.84	32.28	6.87	-1.69	37.26	54.00	16.74	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 1 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n20\OOB.EM6

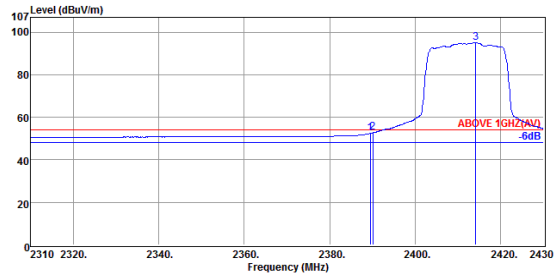


Site no. : Fully Chamber Site Data no. : 1
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11n20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2389.80	32.16	6.57	30.70	69.43	74.00	4.57	Peak
2	2390.04	32.16	6.57	30.62	69.35	74.00	4.65	Peak
3	2410.80	32.18	6.59	69.09	107.86	74.00	-33.86	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 2 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n20\OOB.EM6

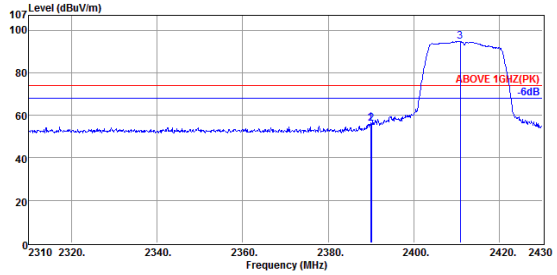


Site no. : Fully Chamber Site Data no. : 2
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11n20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2389.44	32.16	6.57	13.68	52.41	54.00	1.59	Average
2	2390.04	32.16	6.57	14.00	52.73	54.00	1.27	Average
3	2414.16	32.18	6.59	56.15	94.92	54.00	-40.92	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 3 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n20\OOB.EM6

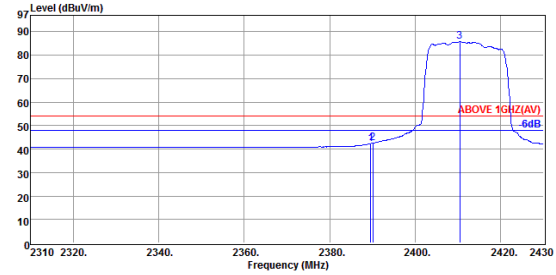


Site no. : Fully Chamber Site Data no. : 3
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11n20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2389.92	32.16	6.57	17.70	56.43	74.00	17.57	Peak
2	2390.04	32.16	6.57	17.55	56.28	74.00	17.72	Peak
3	2410.80	32.18	6.59	55.97	94.74	74.00	-20.74	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 4 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n20\OOB.EM6

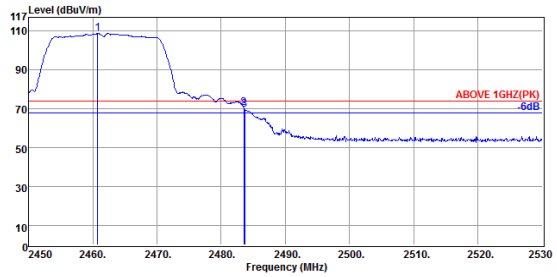


Site no. : Fully Chamber Site Data no. : 4
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2412MHz(802.11n20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2389.56	32.16	6.57	3.63	42.36	54.00	11.64	Average
2	2390.04	32.16	6.57	3.84	42.57	54.00	11.43	Average
3	2410.44	32.18	6.59	46.95	85.72	54.00	-31.72	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 5 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n20\OOB.EM6

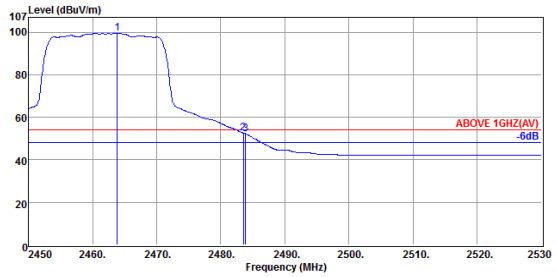


Site no. : Fully Chamber Site Data no. : 5
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11n20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2480.80	32.25	6.85	69.71	108.81	74.00	-34.81	Peak
2	2483.52	32.28	6.87	31.61	70.56	74.00	3.44	Peak
3	2483.68	32.28	6.87	30.54	69.49	74.00	4.51	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 6 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n20\OOB.EM6

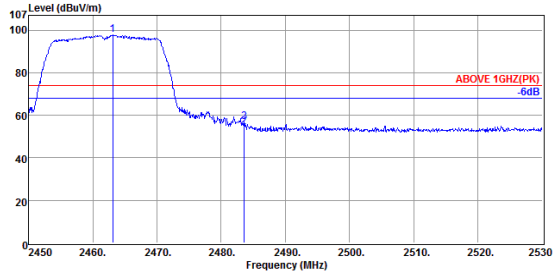


Site no. : Fully Chamber Site Data no. : 6
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11n20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2483.84	32.25	6.85	60.87	99.57	54.00	-45.57	Average
2	2483.52	32.28	6.87	13.65	52.60	54.00	1.40	Average
3	2483.84	32.28	6.87	13.28	52.23	54.00	1.77	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 7 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n20\OOB.EM6

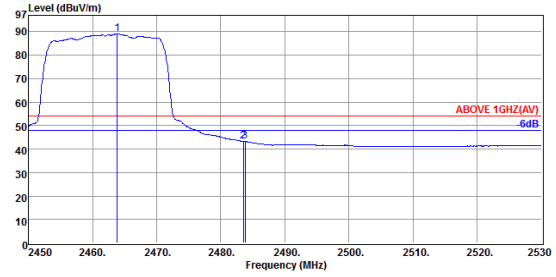


Site no. : Fully Chamber Site Data no. : 7
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11n20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2483.12	32.25	6.85	58.77	97.87	74.00	-23.87	Peak
2	2483.52	32.28	6.87	15.56	54.51	74.00	19.49	Peak
3	2483.80	32.28	6.87	17.95	56.90	74.00	17.10	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 8 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n20\OOB.EM6

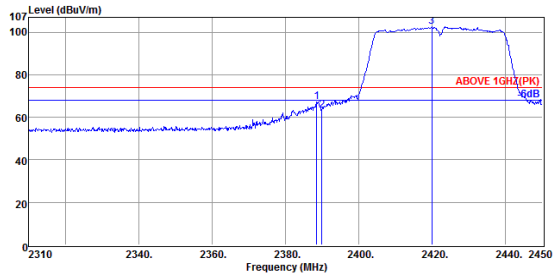


Site no. : Fully Chamber Site Data no. : 8
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2462MHz(802.11n20)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2483.84	32.25	6.85	50.11	89.01	54.00	-35.01	Average
2	2483.52	32.28	6.87	4.38	43.33	54.00	10.67	Average
3	2483.76	32.28	6.87	4.32	43.27	54.00	10.73	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 1 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n40\OOB.EM6

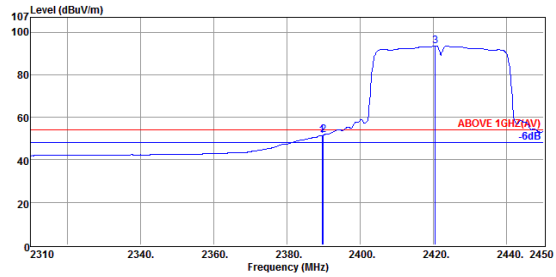


Site no. : Fully Chamber Site Data no. : 1
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2422MHz(802.11n40)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2388.54	32.16	6.57	28.60	67.33	74.00	6.67	Peak
2	2389.94	32.16	6.57	24.68	63.41	74.00	10.59	Peak
3	2419.90	32.20	6.61	63.83	102.64	74.00	-28.64	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 2 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n40\OOB.EM6

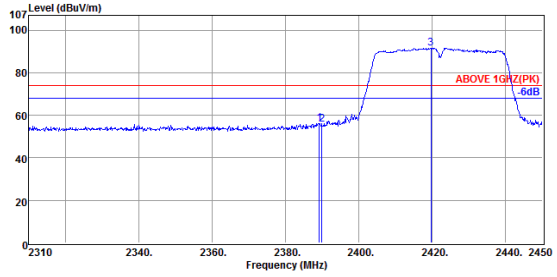


Site no. : Fully Chamber Site Data no. : 2
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2422MHz(802.11n40)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2388.52	32.16	6.57	12.86	51.39	54.00	2.61	Average
2	2389.94	32.16	6.57	12.89	51.62	54.00	2.38	Average
3	2420.46	32.20	6.61	54.73	93.54	54.00	-39.54	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 3 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n40\OOB.EM6

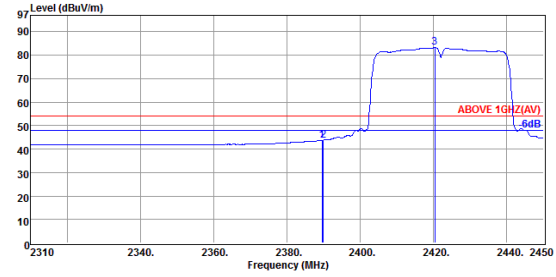


Site no. : Fully Chamber Site Data no. : 3
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2422MHz(802.11n40)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2389.24	32.16	6.57	17.44	56.17	74.00	17.83	Peak
2	2389.94	32.16	6.57	16.77	55.50	74.00	18.50	Peak
3	2419.82	32.20	6.61	52.85	91.66	74.00	-17.66	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 4 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n40\OOB.EM6

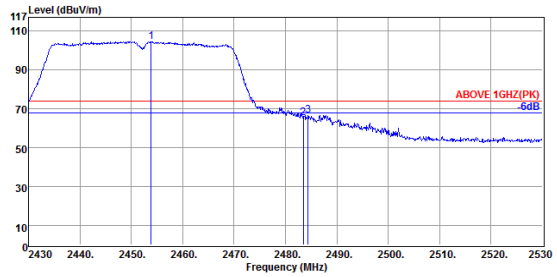


Site no. : Fully Chamber Site Data no. : 4
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2422MHz(802.11n40)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2388.52	32.16	6.57	5.05	43.78	54.00	10.22	Average
2	2389.94	32.16	6.57	5.05	43.78	54.00	10.22	Average
3	2420.32	32.20	6.61	44.39	83.20	54.00	-29.20	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 5 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n40\OOB.EM6

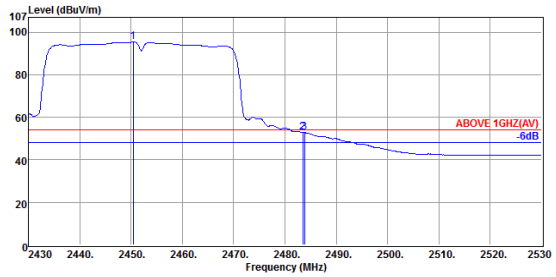


Site no. : Fully Chamber Site Data no. : 5
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2452MHz(802.11n40)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2453.90	32.25	6.85	65.69	104.59	74.00	-30.59	Peak
2	2483.50	32.28	6.87	26.21	65.16	74.00	8.84	Peak
3	2484.40	32.28	6.87	27.80	66.75	74.00	7.25	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 6 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n40\OOB.EM6

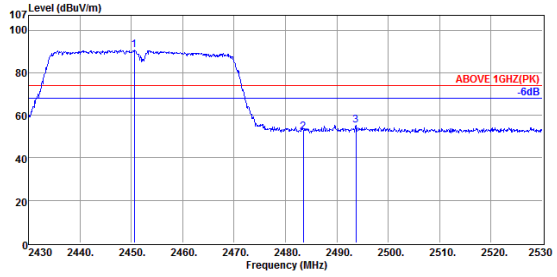


Site no. : Fully Chamber Site Data no. : 6
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : VERTICAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2452MHz(802.11n40)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2450.40	32.23	6.83	58.48	95.34	54.00	-41.34	Average
2	2483.50	32.28	6.87	13.96	52.91	54.00	1.09	Average
3	2483.80	32.28	6.87	13.86	52.81	54.00	1.19	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 7 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n40\OOB.EM6

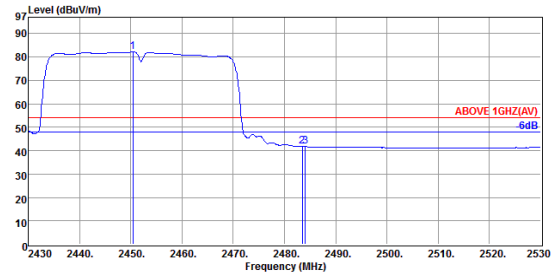


Site no. : Fully Chamber Site Data no. : 7
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(PK)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2452MHz(802.11n40)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2450.60	32.23	6.83	51.75	90.81	74.00	-16.81	Peak
2	2483.50	32.28	6.87	13.09	52.04	74.00	21.96	Peak
3	2493.70	32.30	6.89	16.12	55.11	74.00	18.89	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

Data: 8 File: C:\Users\Sam_Chang\Desktop\未完成\C1M1707048_2.4G_5G_B1_FCC_IC\e3\2.4G\n40\OOB.EM6



Site no. : Fully Chamber Site Data no. : 8
Dis. / Ant. : 3m 3117(00135902) Ant. pol. : HORIZONTAL
Limit : ABOVE 1GHZ(AV)
Env. / Ins. : 22*C / 58% N9010B Engineer : Sam
EUT : GEAC-200
Power Rating : AC 120V
Test Mode : Tx 2452MHz(802.11n40)

	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBμV)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)	Remark
1	2450.40	32.23	6.83	43.29	82.15	54.00	-28.15	Average
2	2483.50	32.28	6.87	2.74	41.89	54.00	12.31	Average
3	2484.10	32.28	6.87	2.73	41.88	54.00	12.32	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading
2. The emissions not reported are 20 dB lower than the specified limit.

8. 6dB & 99% Bandwidth Test

8.1.Limit

For direct sequence systems, the minimum 6dB bandwidth shall be at least 500kHz

8.2.Test Procedure

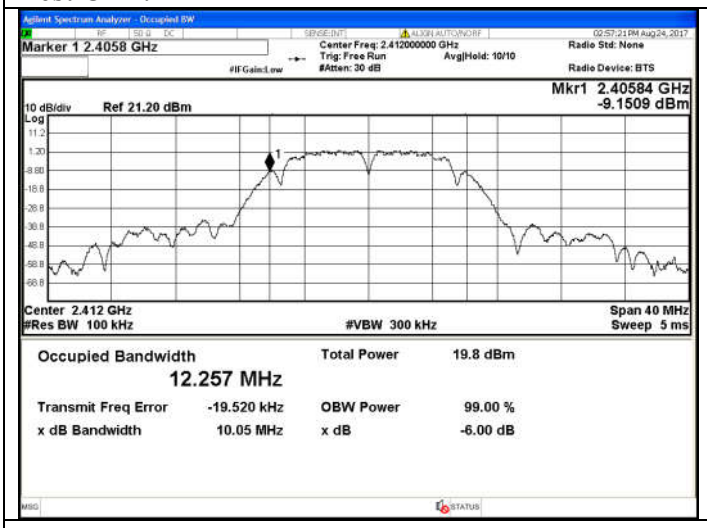
The transmitter output was connected to a spectrum analyzer, The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

8.3.Test Results

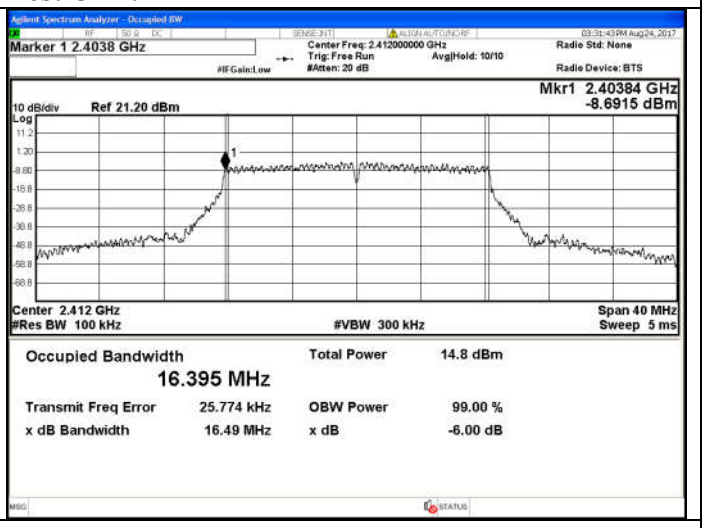
Test Mode	CH	6dB bandwidth (MHz)	Limit (kHz)
11b	CH1	10.05	≧500
	CH6	10.04	≧500
	CH11	10.03	≧500
11g	CH1	16.49	≧500
	CH6	16.47	≧500
	CH11	16.51	≧500
11n HT20	CH1	17.70	≧500
	CH6	17.70	≧500
	CH11	17.70	≧500
11n HT40	CH3	36.40	≧500
	CH6	36.40	≧500
	CH9	36.40	≧500
Conclusion：PASS			

Test Mode	CH	99% Bandwidth (MHz)	Limit
11b	CH1	12.257	N/A
	CH6	12.236	N/A
	CH11	12.256	N/A
11g	CH1	16.395	N/A
	CH6	16.385	N/A
	CH11	16.398	N/A
11n HT20	CH1	17.576	N/A
	CH6	17.579	N/A
	CH11	17.579	N/A
11n HT40	CH3	35.970	N/A
	CH6	35.990	N/A
	CH9	36.046	N/A
Conclusion：PASS			

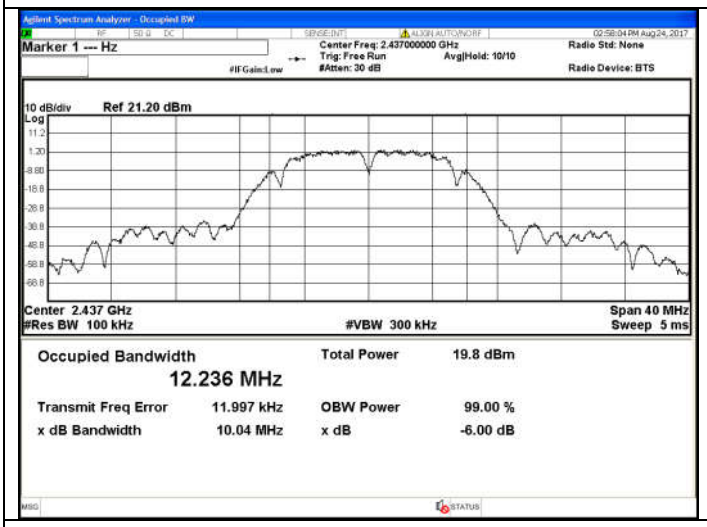
ANT0:
Test Mode: IEEE 802.11b
Test CH1: 2412MHz



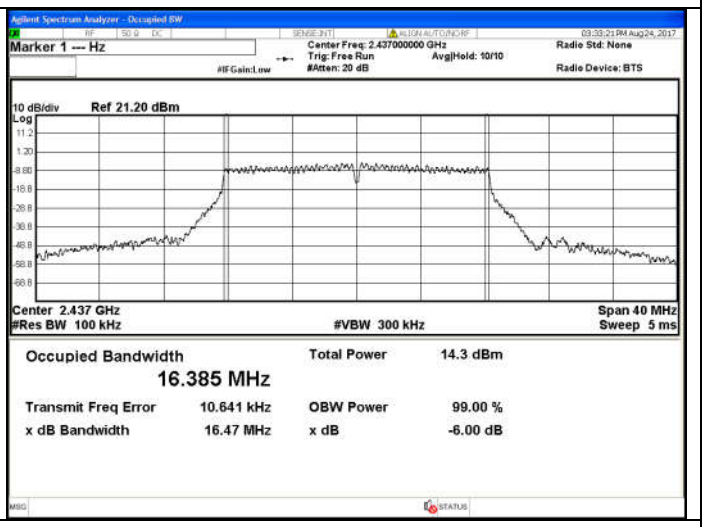
ANT0:
Test Mode: IEEE 802.11g
Test CH1: 2412MHz



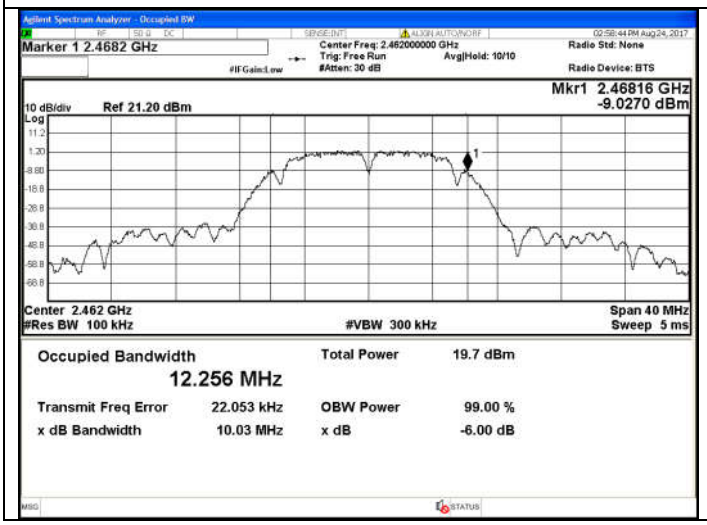
Test CH6: 2437MHz



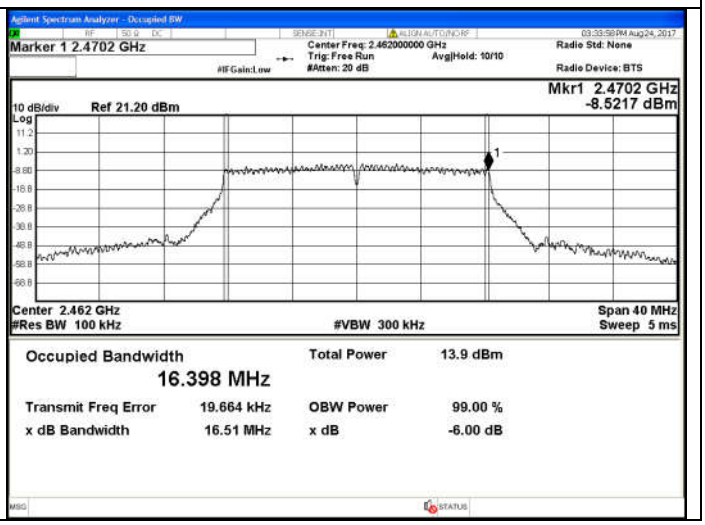
Test CH6: 2437MHz



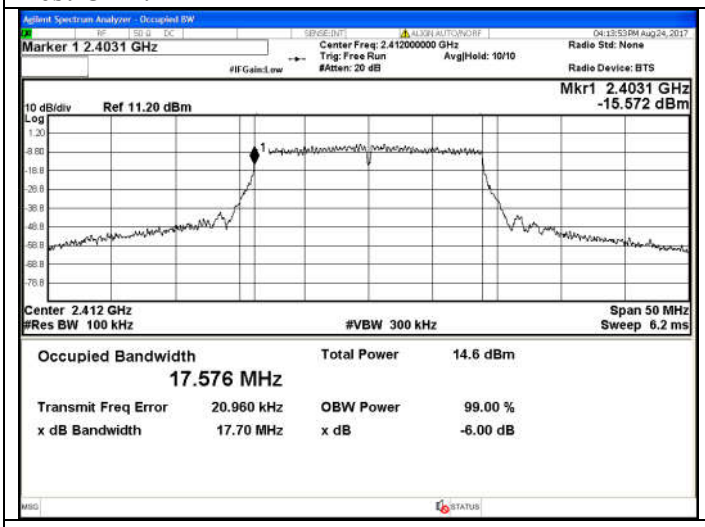
Test CH11: 2462MHz



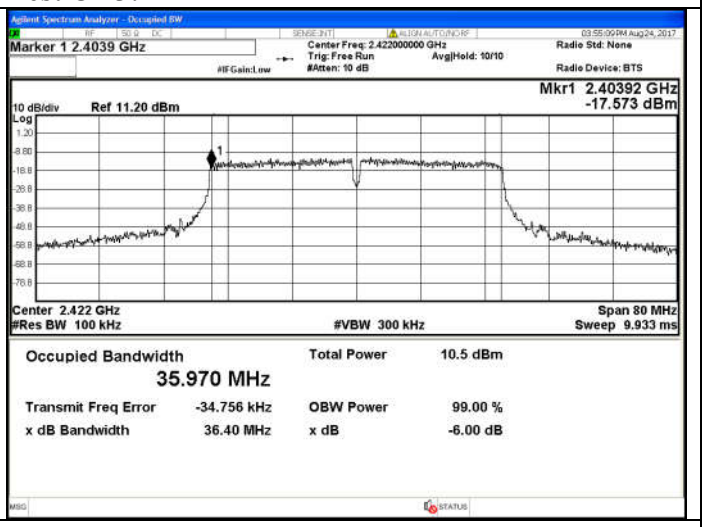
Test CH11: 2462MHz



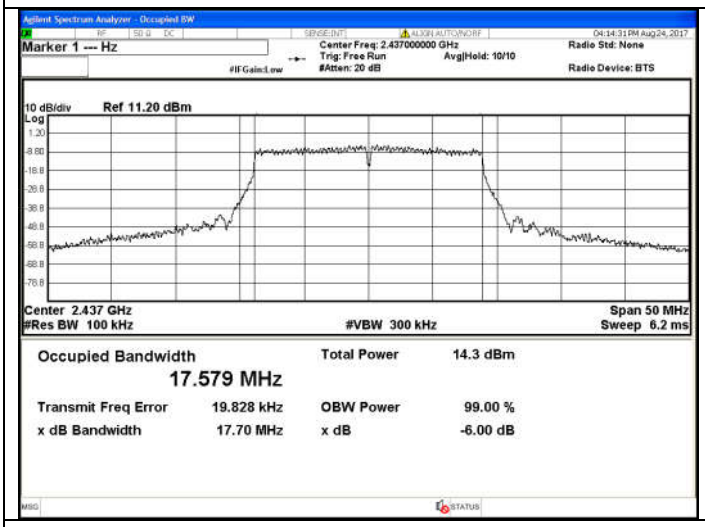
ANT1:
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



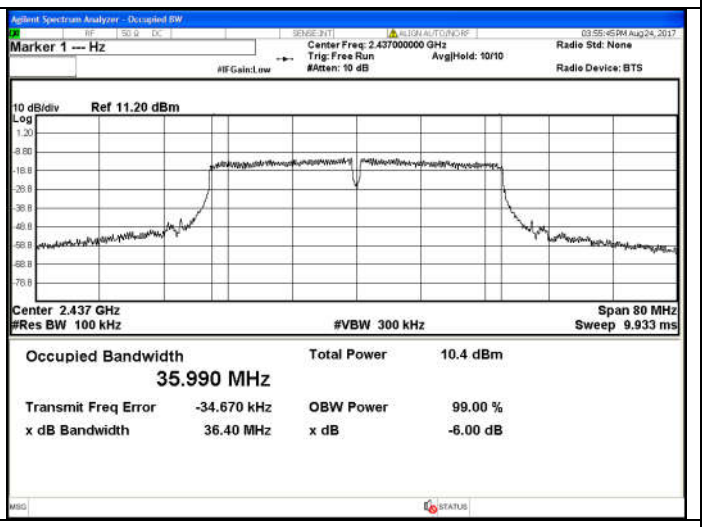
ANT0:
Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz



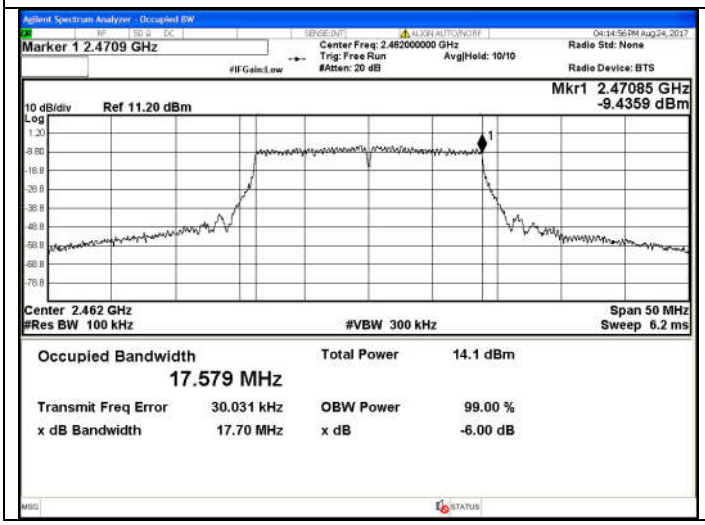
Test CH6: 2437MHz



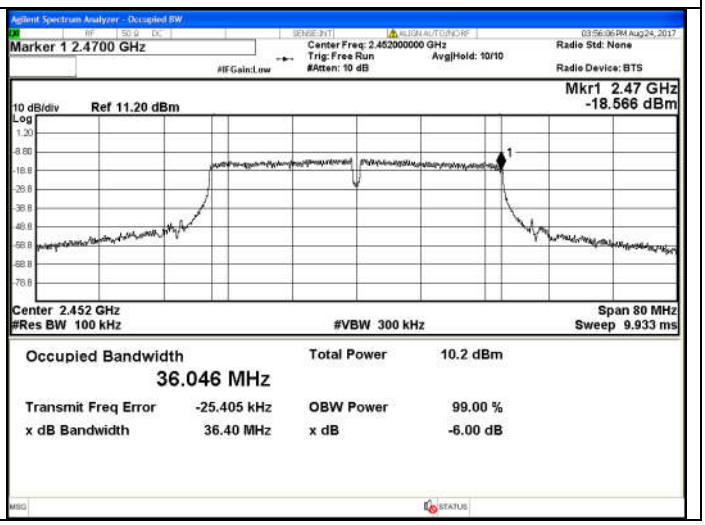
Test CH6: 2437MHz



Test CH11: 2462MHz



Test CH9: 2452MHz



9. OUTPUT POWER TEST

9.1.Limit

For systems using digital modulation in the 2400—2483.5MHz, The Peak output Power shall not exceed 1W(30dBm), As an alternative to a peak power measurement, compliance with the one Watt limit can be based on a measurement of the maximum conducted output power. Maximum Conducted Output Power is defined as the total transmit power delivered to all antennas and antenna elements averaged across all symbols in the signaling alphabet when the transmitter is operating at its maximum power control level.

9.2.Test Procedure

1, Connected the EUT's antenna port to measure device by 20dB attenuator.

2, Use the test method descried in KDB 558074 clause 9.2.2.

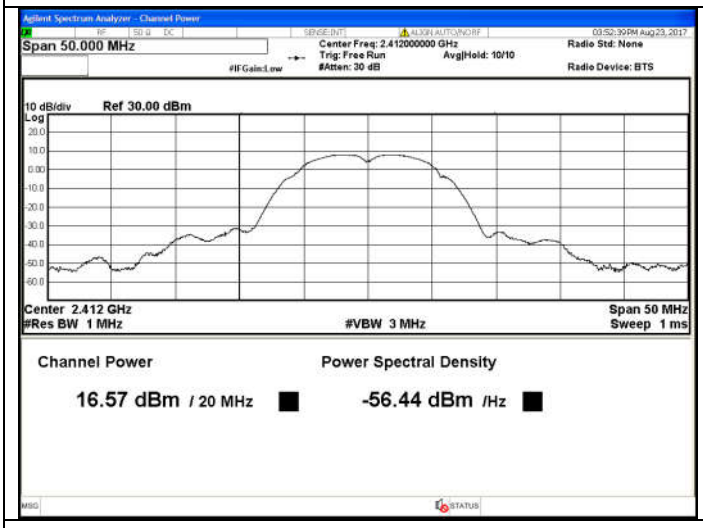
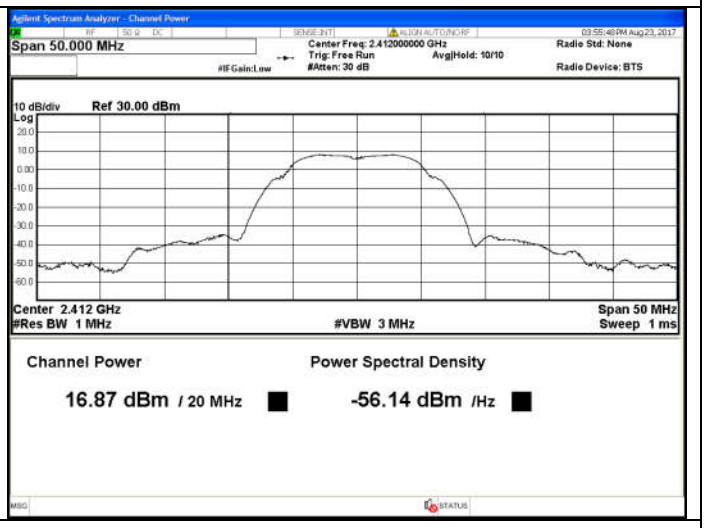
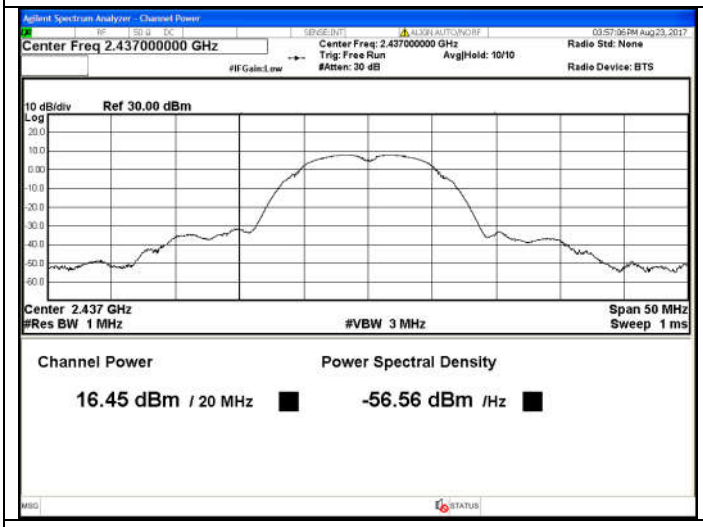
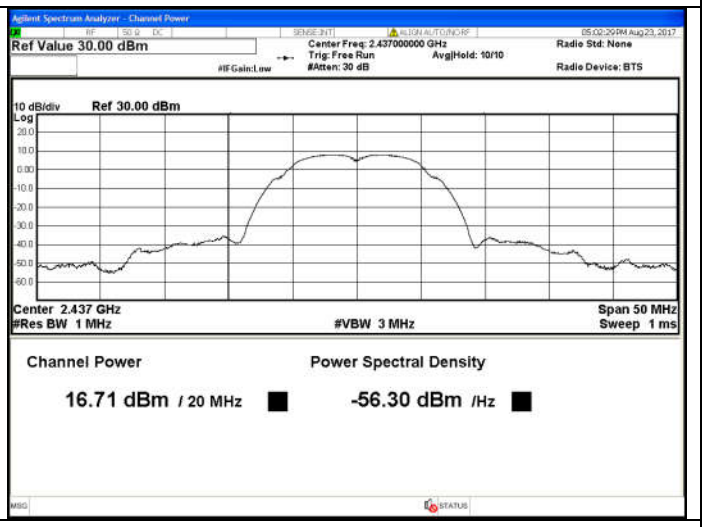
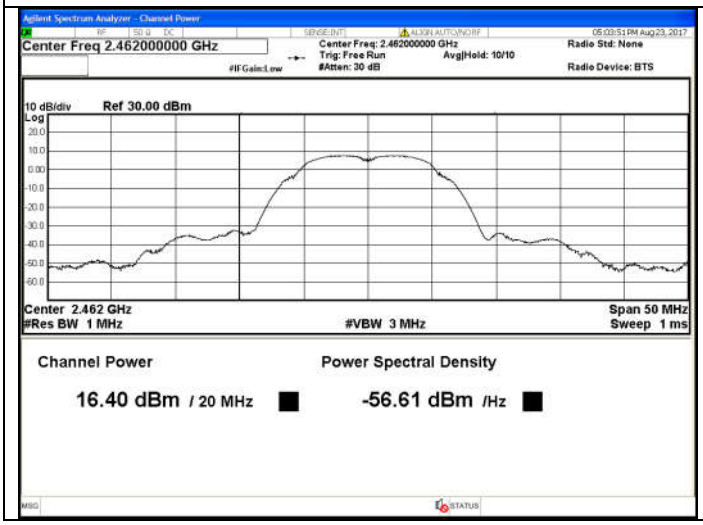
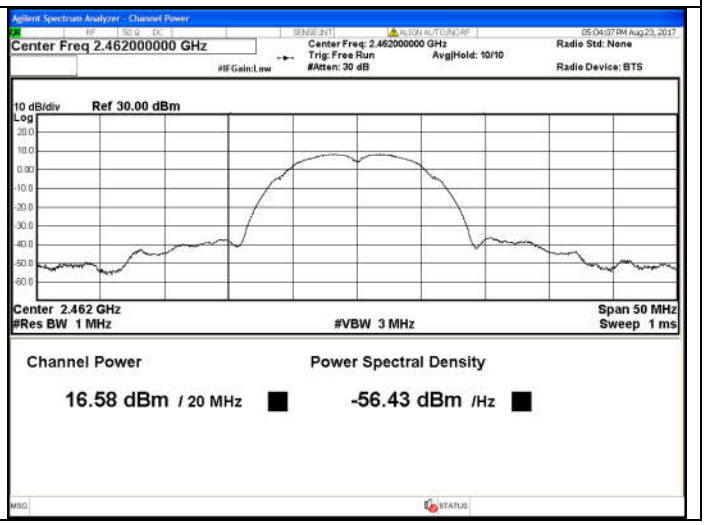
1) Set span to at least 1.5 OBW.
2) Set RBW = 1 % to 5 % of the OBW, not to exceed 1 MHz.
3) Set VBW ≥ 3 RBW.
4) Number of points in sweep ≥ 2 span / RBW.
5) Sweep time = auto.
6) Detector = RMS (i.e., power averaging), if available. Otherwise, use sample detector mode.
7) If transmit duty cycle < 98 %, use a sweep trigger with the level set to enable triggering only on full power pulses. The transmitter shall operate at maximum power control level for the entire 558074 D01 DTS Meas Guidance v04 Page 8 duration of every sweep. If the EUT transmits continuously or at duty cycle ≥ 98 %, and if each transmission is entirely at the maximum power control level, then the trigger shall be set to "free run".
8) Trace average at least 100 traces in power averaging mode.
9) Compute power by integrating the spectrum across the OBW of the signal using the instrument's band power measurement function, with band limits set equal to the OBW band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at intervals equal to the RBW extending across the entire OBW of the spectrum.

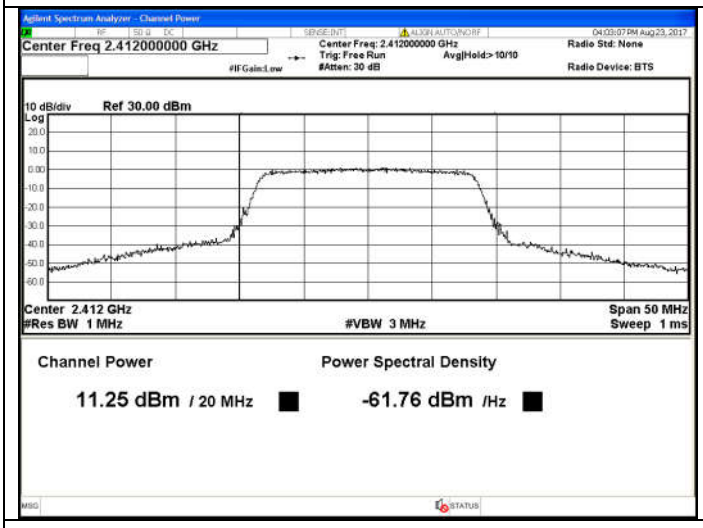
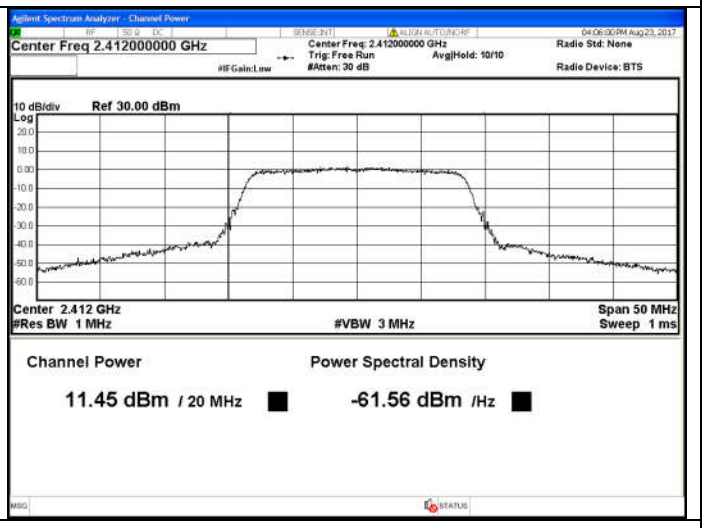
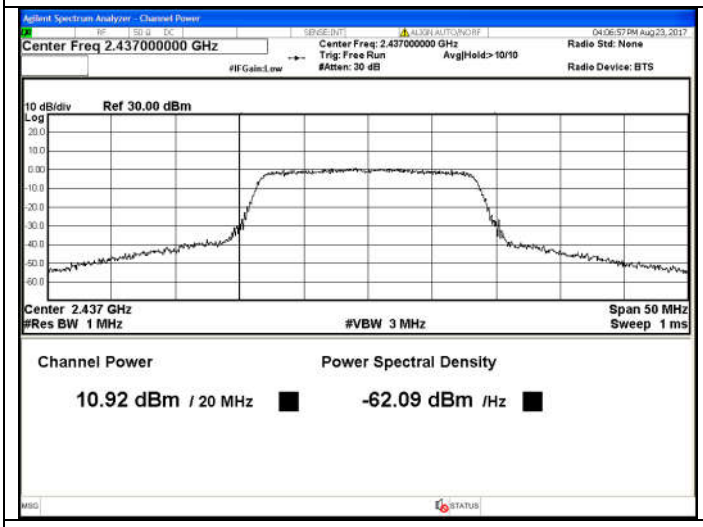
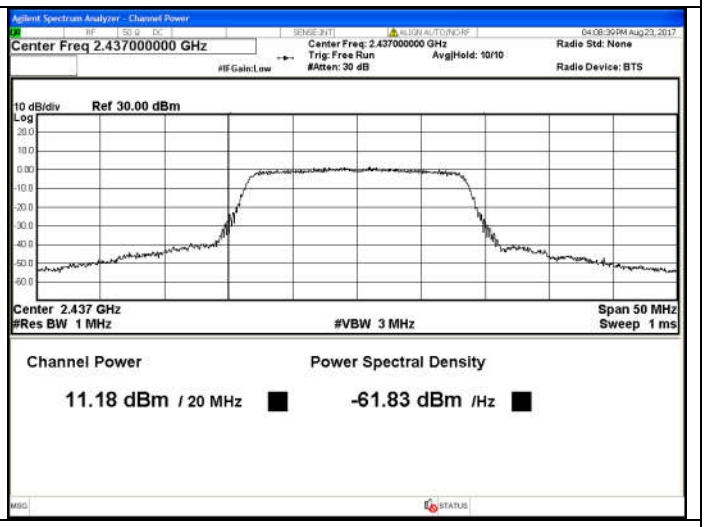
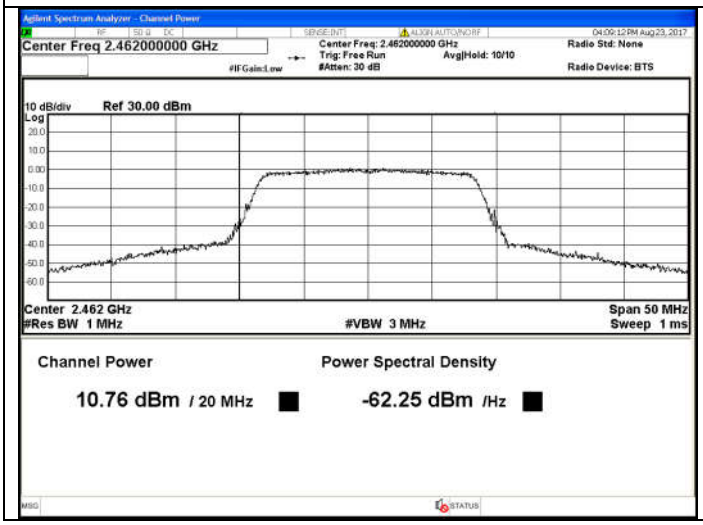
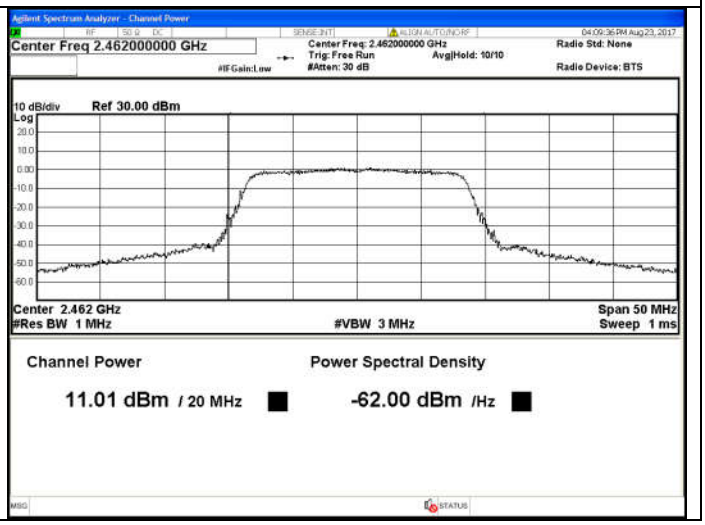
Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

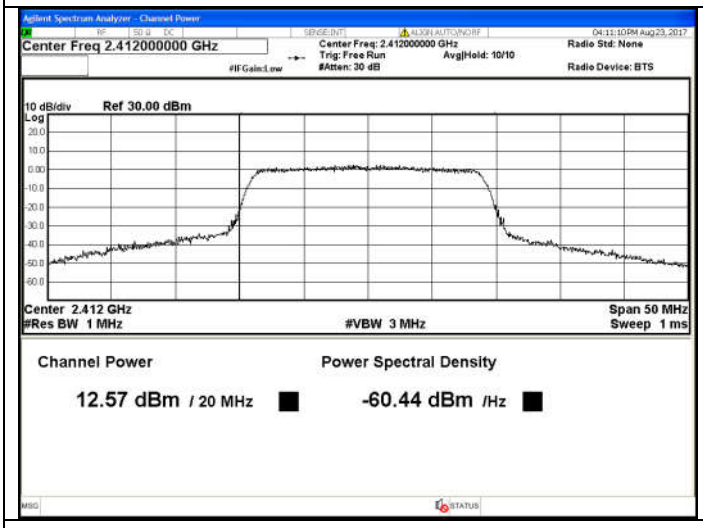
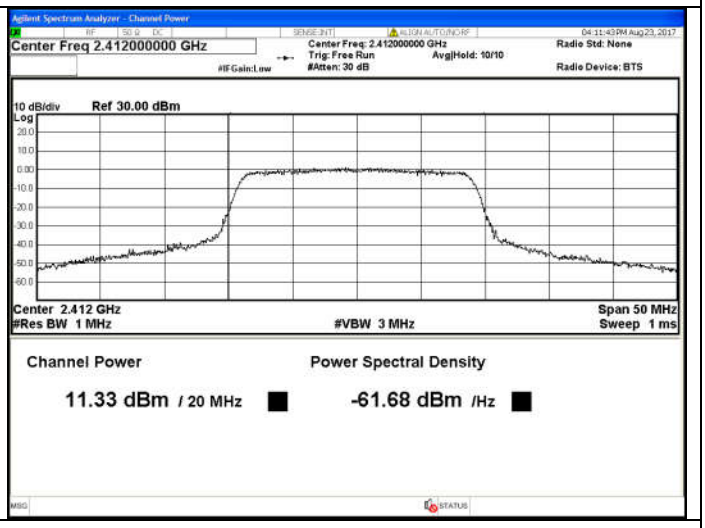
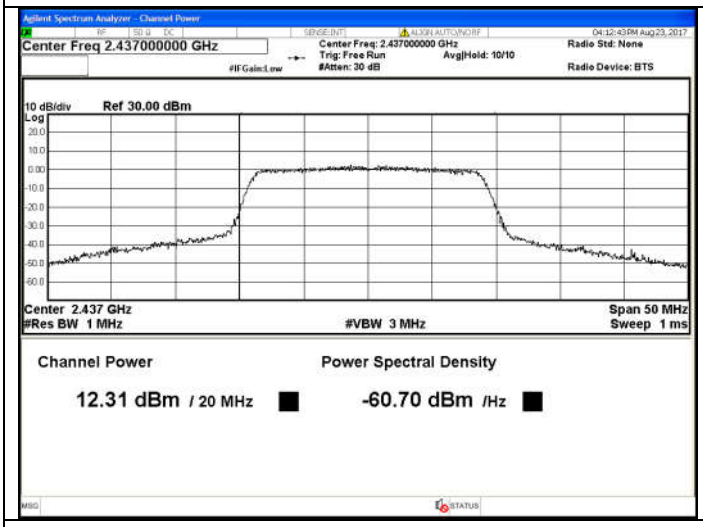
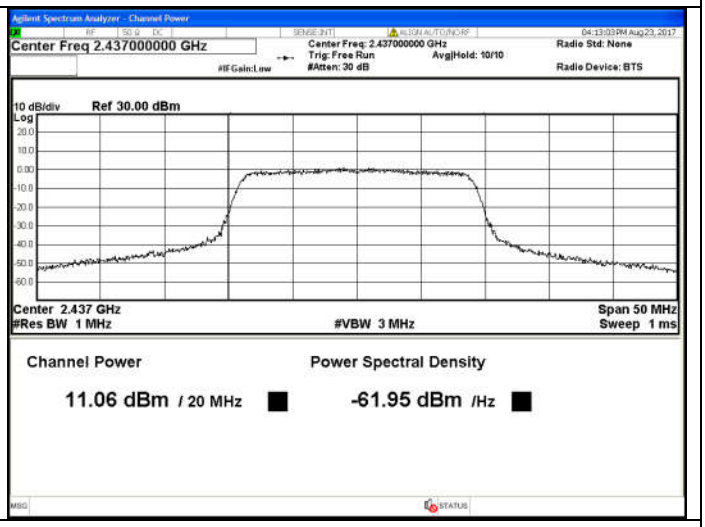
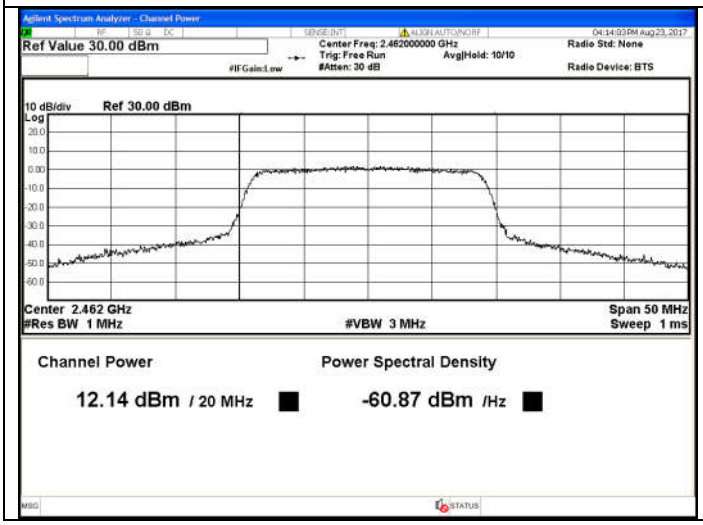
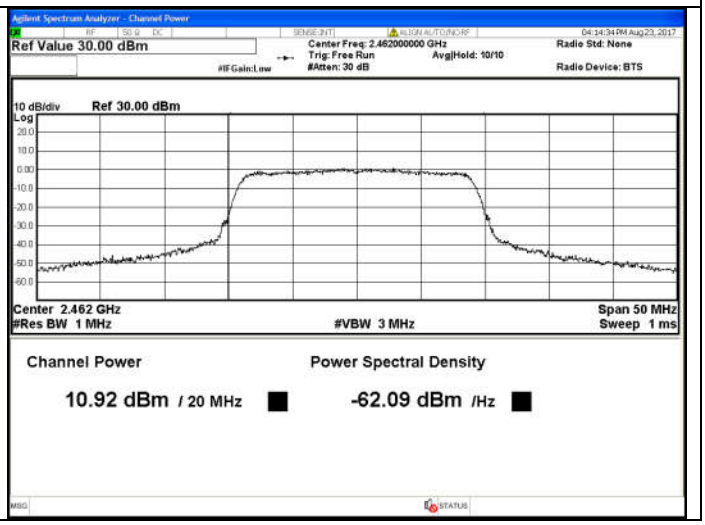
9.3.Test Results

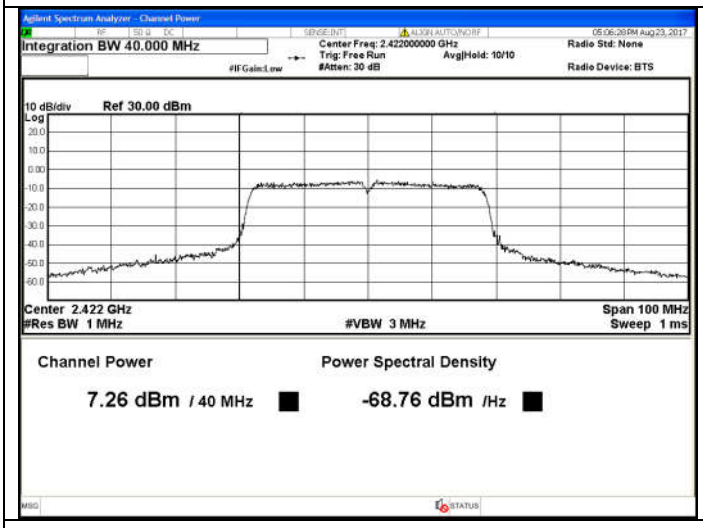
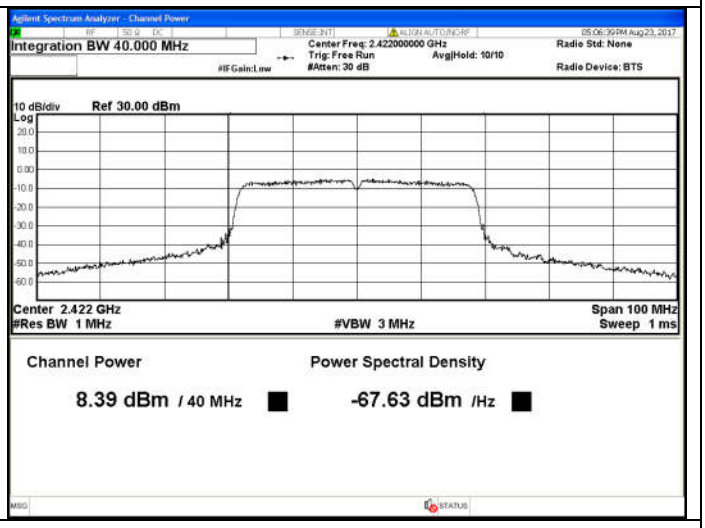
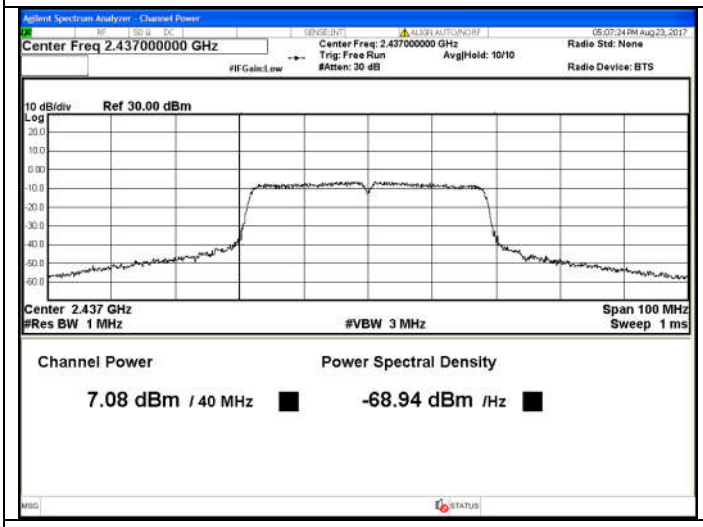
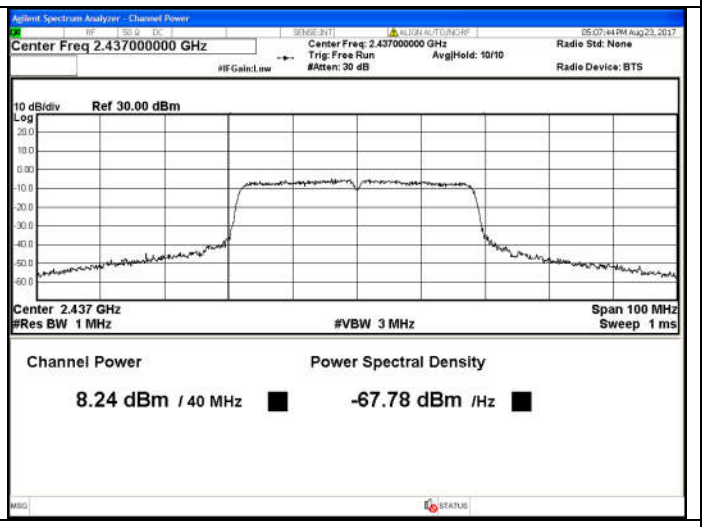
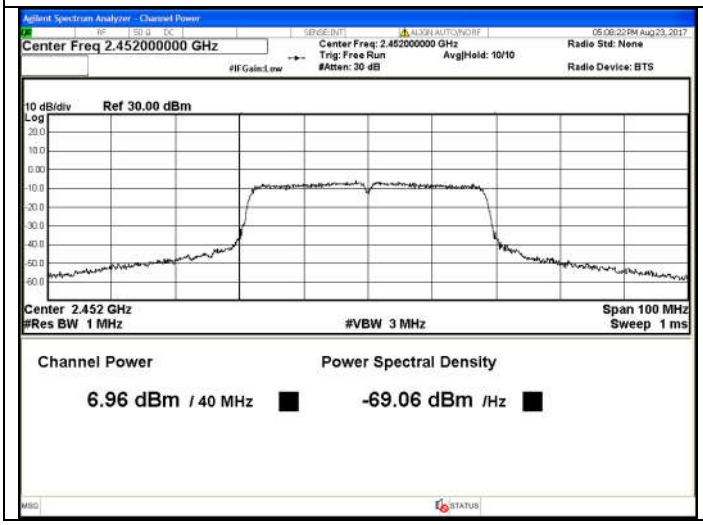
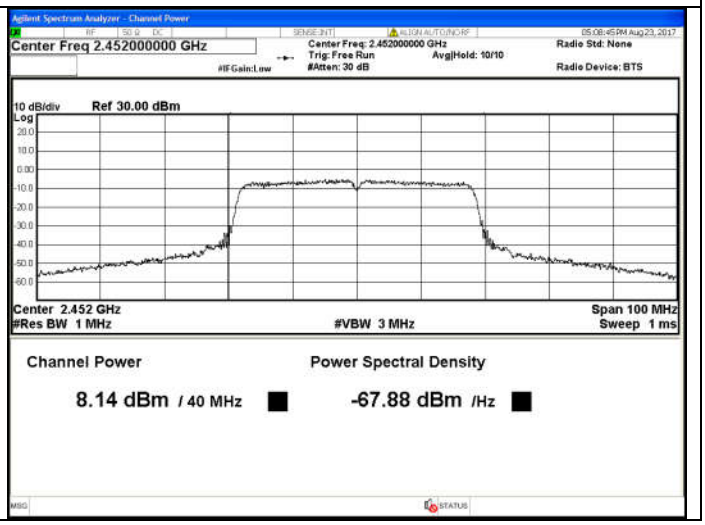
Test Mode	CH	Average Output Power (dBm)			Limit (dBm)
		ANT 0	ANT 1	Total	
11b	CH1	16.57	16.87	19.73	30
	CH6	16.45	16.71	19.59	30
	CH11	16.4	16.58	19.50	30
11g	CH1	11.25	11.45	14.36	30
	CH6	10.92	11.18	14.06	30
	CH11	10.76	11.01	13.90	30
11n HT20	CH1	12.57	11.33	15.00	30
	CH6	12.31	11.06	14.74	30
	CH11	12.14	10.92	14.58	30
11n HT40	CH3	7.26	8.39	10.87	30
	CH6	7.08	8.24	10.71	30
	CH9	6.96	8.14	10.60	30
Conclusion: PASS					

Note: 1. Directional Gain= G_{ANT} = 4.42dBi <6dBi.
2. The transmit signals are uncorrelated.

ANT0:	**ANT1:**
Test Mode: IEEE 802.11b Test CH1: 2412MHz	Test Mode: IEEE 802.11b Test CH1: 2412MHz
	
Test CH6: 2437MHz	Test CH6: 2437MHz
	
Test CH11: 2462MHz	Test CH11: 2462MHz
	

ANT0:	ANT1:
Test Mode: IEEE 802.11g Test CH1: 2412MHz	Test Mode: IEEE 802.11g Test CH1: 2412MHz
	
Test CH6: 2437MHz	Test CH6: 2437MHz
	
Test CH11: 2462MHz	Test CH11: 2462MHz
	

ANT0:	ANT1:
Test Mode: IEEE 802.11n HT20 Test CH1: 2412MHz	Test Mode: IEEE 802.11n HT20 Test CH1: 2412MHz
	
Test CH6: 2437MHz	Test CH6: 2437MHz
	
Test CH11: 2462MHz	Test CH11: 2462MHz
	

ANT0:	**ANT1:**
Test Mode: IEEE 802.11n HT40 Test CH3: 2422MHz	Test Mode: IEEE 802.11n HT40 Test CH3: 2422MHz
	
Test CH6: 2437MHz	Test CH6: 2437MHz
	
Test CH9: 2452MHz	Test CH9: 2452MHz
	

10. EQUIVALENT Isotropic Radiated Power Test

10.1. Limit

Limit
36dBm / (4W) (e.i.r.p)

These limits shall apply for any combination of power level and intended antenna assembly.

10.2. Test Method

(1) Connected the EUT's antenna port to the Spectrum Analyzer by suitable attenuator ,set the Spectrum Analyzer as below:

Span: Zero
RBW:100KHz
VBW:100KHz

Read out the duty cycle(X) of the transmitter and record as X

(2) The channel power measure function of spectrum Analyzer was used to measure out average output power of transmitter.

(3)Calculated e.i.r.p according to the formula: Read + Cable loss + Atten loss + Antenna Gain + 10log(1/x)

(4)Repeated test at the lowest, the middle, and the highest frequency of the stated frequency range.

10.3. Test Results

Test Mode	CH	Max Out power (dBm)	Antenna Gain (dBi)	10log(1/X)	Max Out power EIRP (dBm)	Limit (dBm)
11b	CH1	19.73	4.42	0	24.15	36
	CH6	19.59			24.01	36
	CH11	19.50			23.92	36
11g	CH1	14.36		0	18.78	36
	CH6	14.06			18.48	36
	CH11	13.90			18.32	36
11n HT20	CH1	15.00		0	19.42	36
	CH6	14.74			19.16	36
	CH11	14.58			19.00	36
11n HT40	CH3	10.87		0	15.29	36
	CH6	10.71			15.13	36
	CH9	10.60			15.02	36
Conclusion: PASS						

11.POWER SPECTRAL DENSITY TEST

11.1.Limit

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

11.2.Test Procedure

1. Connected the EUT's antenna port to spectrum analyzer device by 20dB attenuator.

2. Set span to 1.5 times the DTS Bandwidth.

3. Set the RBW=3KHz, VBW=30KHz.

4. Detector=peak, Sweep time=Auto, Trace mode=max Hold

5. All the trace to fully stabilize.

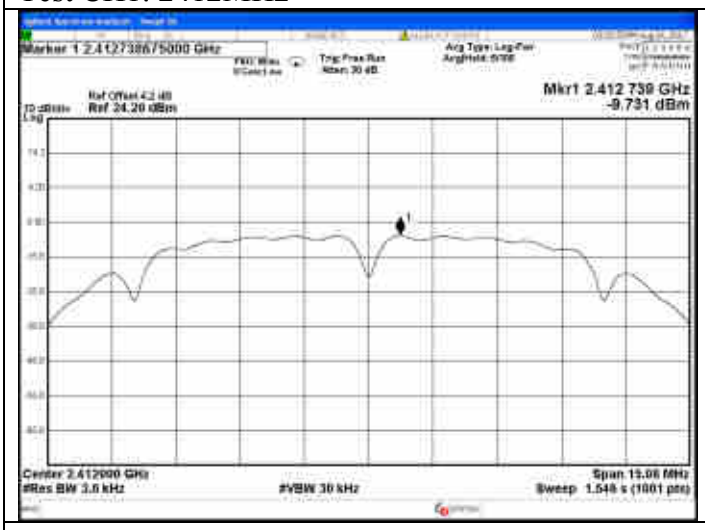
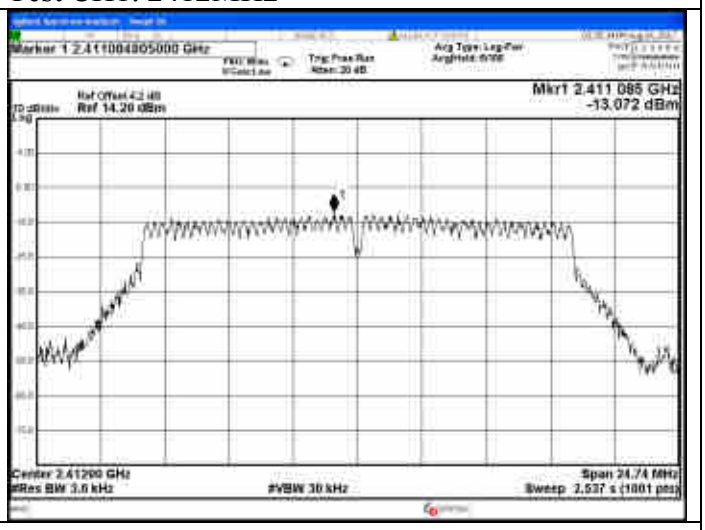
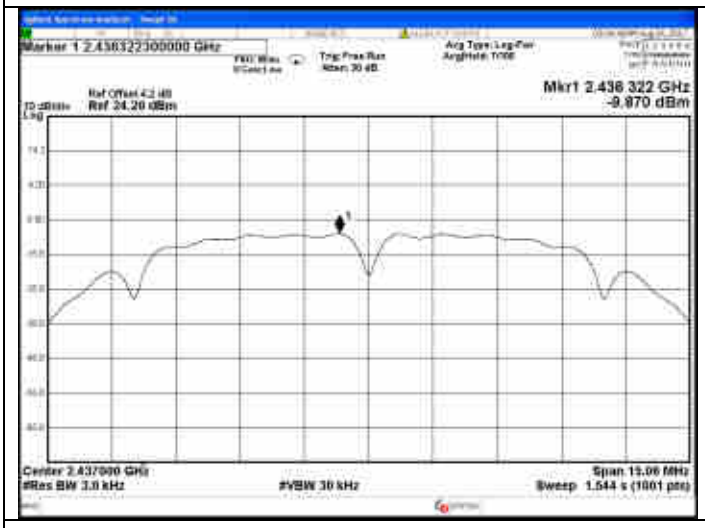
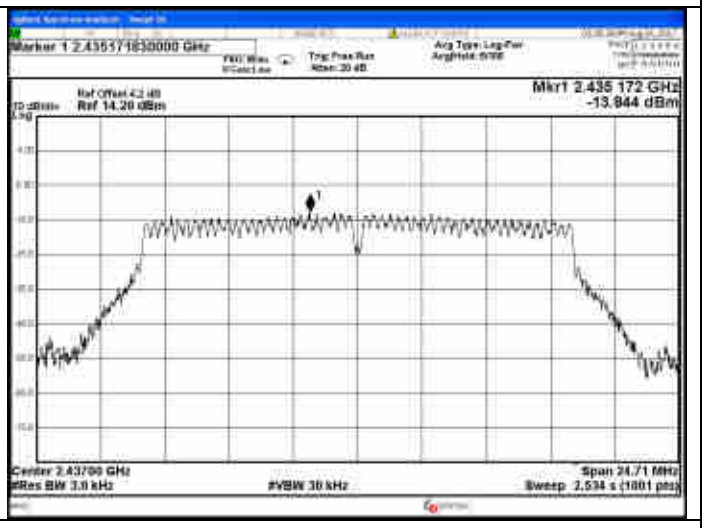
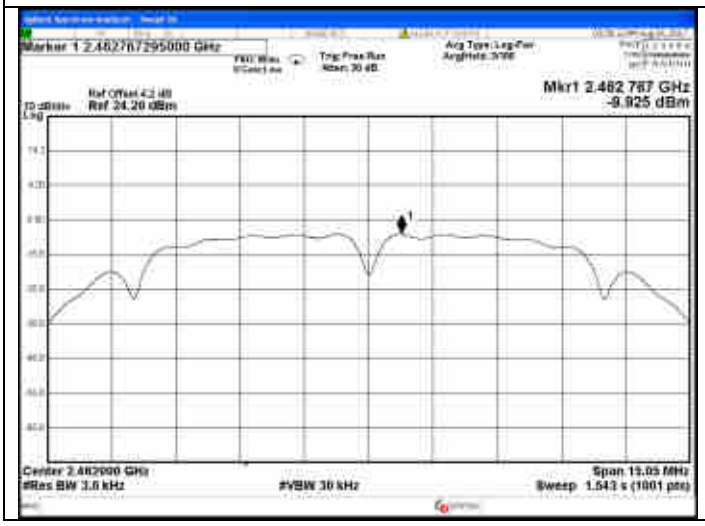
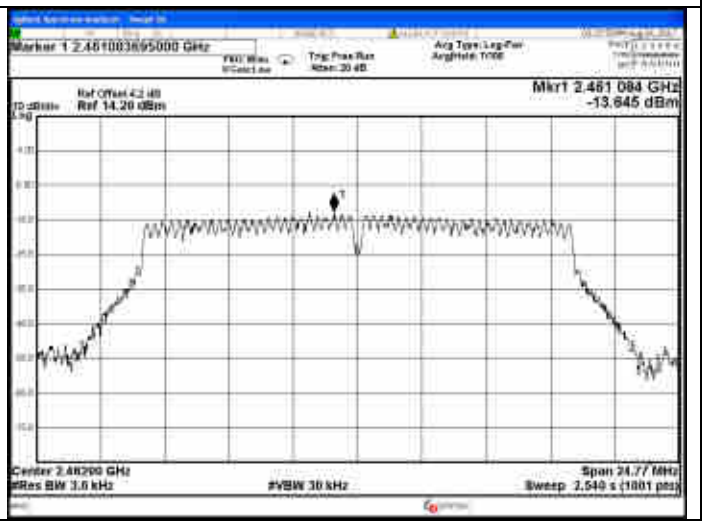
6. Use the peak marker function to determine the maximum amplitude level with in the RBW.

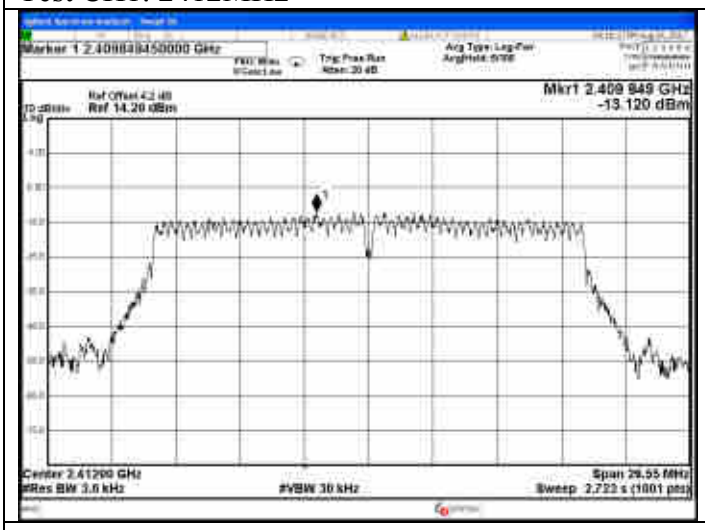
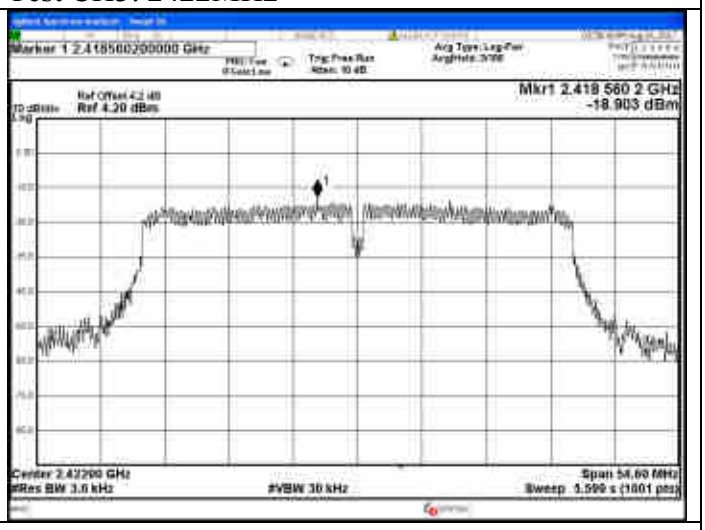
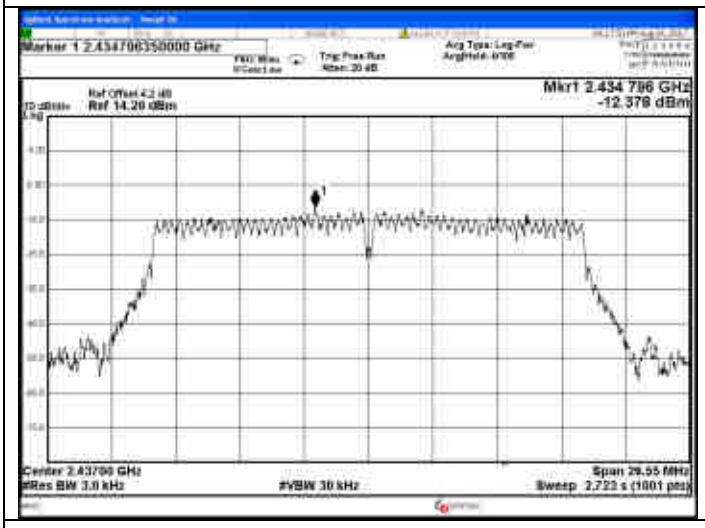
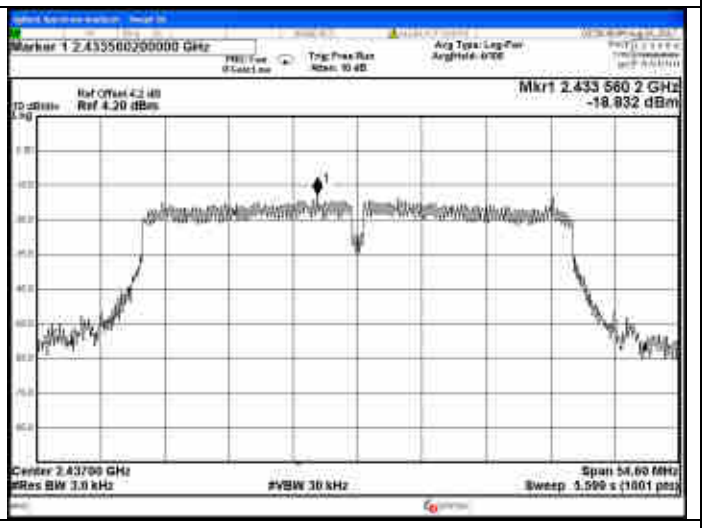
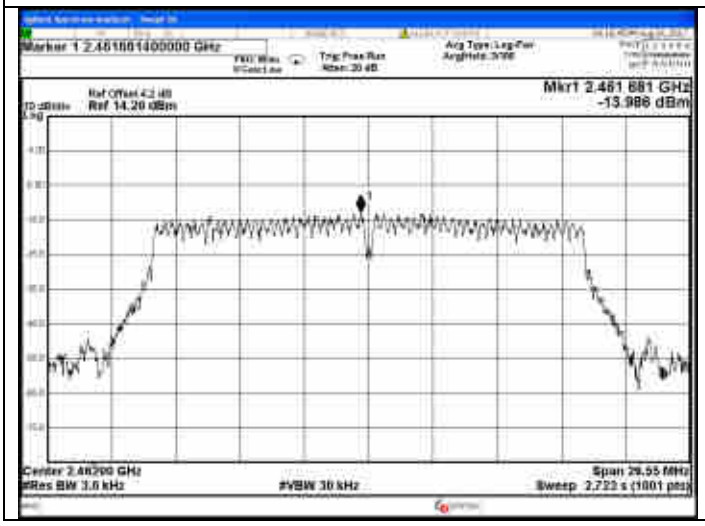
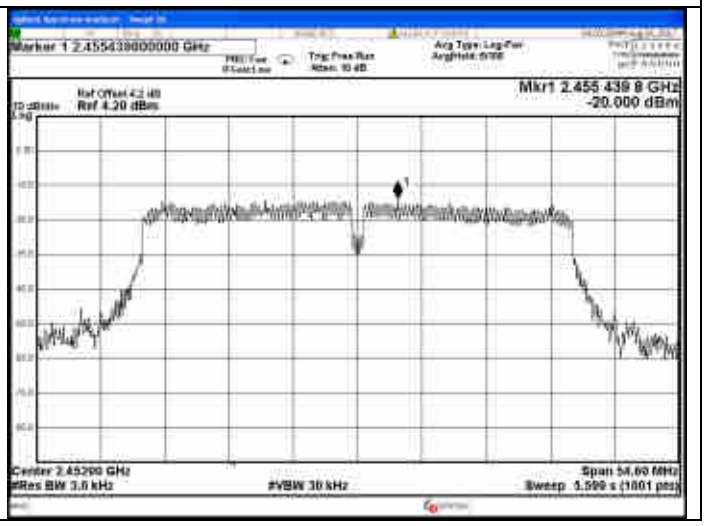
Note: The cable loss and attenuator loss were offset into measure device as an amplitude

11.3.Test Results

Test Mode	CH	Power Density (dBm/3KHz)	Limit (dBm/3KHz)
11b	CH1	-9.731	8
	CH6	-9.870	8
	CH11	-9.925	8
11g	CH1	-13.072	8
	CH6	-13.844	8
	CH11	-13.645	8
11n HT20	CH1	-13.120	8
	CH6	-12.378	8
	CH11	-13.986	8
11n HT40	CH3	-18.903	8
	CH6	-18.832	8
	CH9	-20.000	8
Conclusion：PASS			

Note: 1.The output power of worst case is MIMO(ant0+ant1), so we test it in MIMO configuration.
2. Directional Gain= G_{ANT} = 4.42dBi < 6dBi.
3. The transmit signals are uncorrelated.

Test Mode: IEEE 802.11b Test CH1: 2412MHz	Test Mode: IEEE 802.11g Test CH1: 2412MHz
	
Test CH6: 2437MHz	Test CH6: 2437MHz
	
Test CH11: 2462MHz	Test CH11: 2462MHz
	

Test Mode: IEEE 802.11n HT20 Test CH1: 2412MHz	Test Mode: IEEE 802.11n HT40 Test CH3: 2422MHz
	
Test CH6: 2437MHz	Test CH6: 2437MHz
	
Test CH11: 2462MHz	Test CH9: 2452MHz
	

12. ANTENNA REQUIREMENT

12.1. Standard Applicable

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

12.2. Antenna Connected Construction

The antennas used for this product are Dipole antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is 4.42dBi.

13. DEVIATION TO TEST SPECIFICATIONS

[NONE]