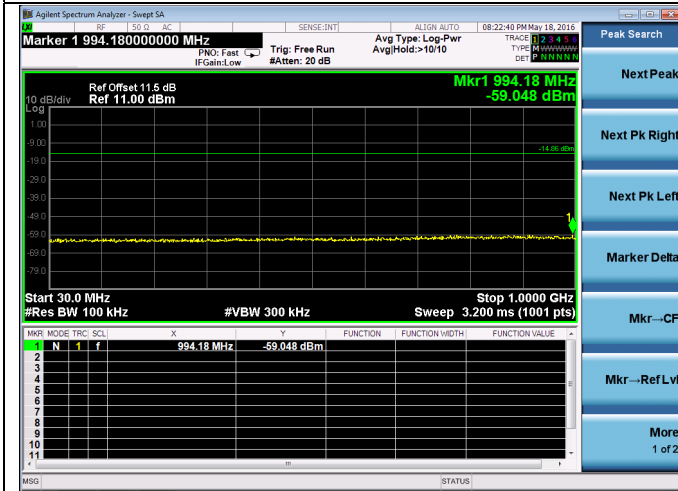
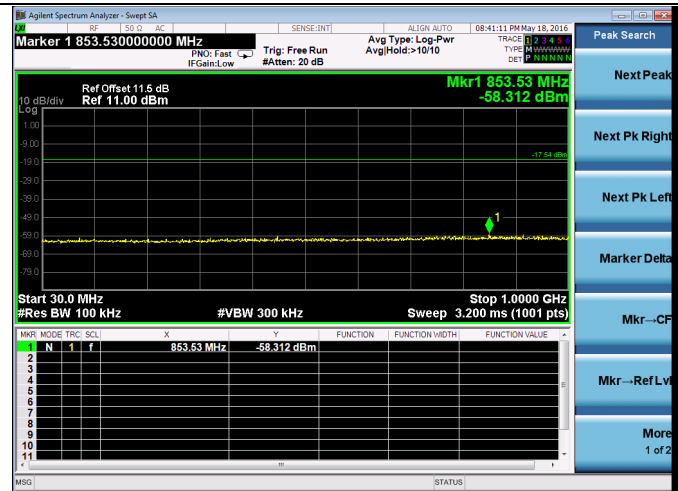
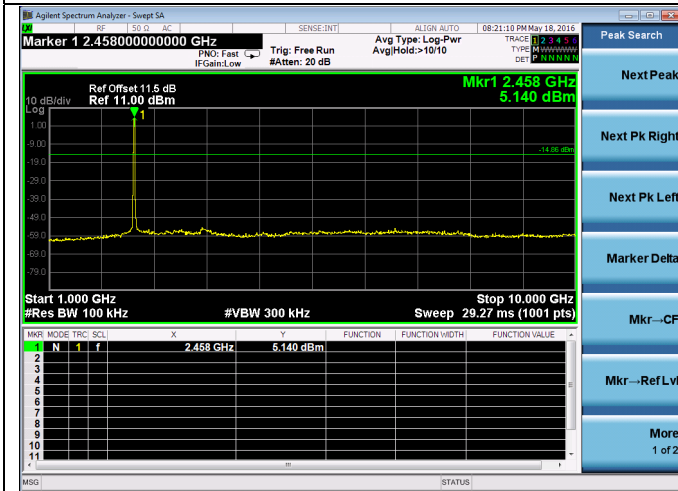


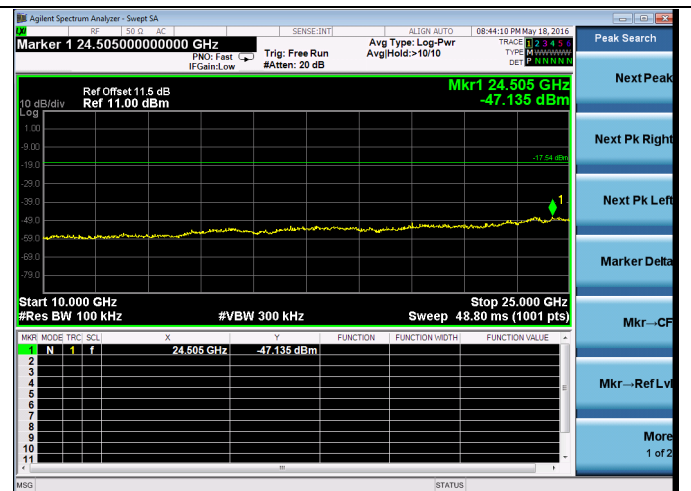
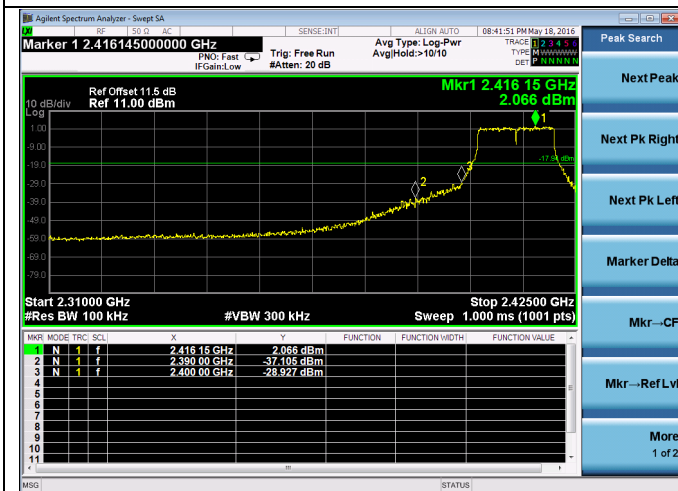
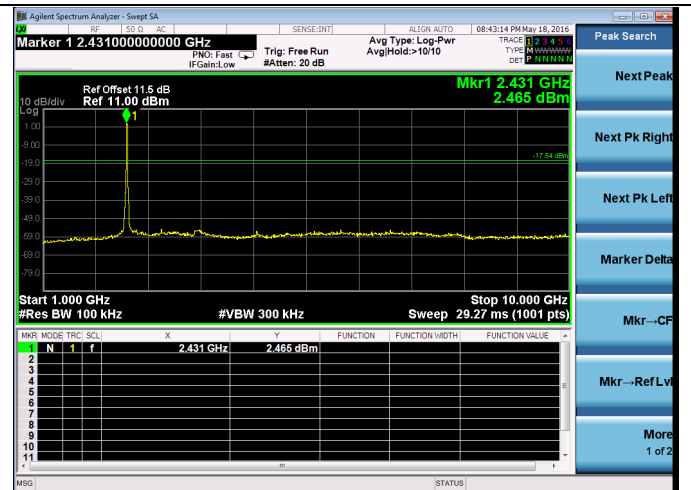
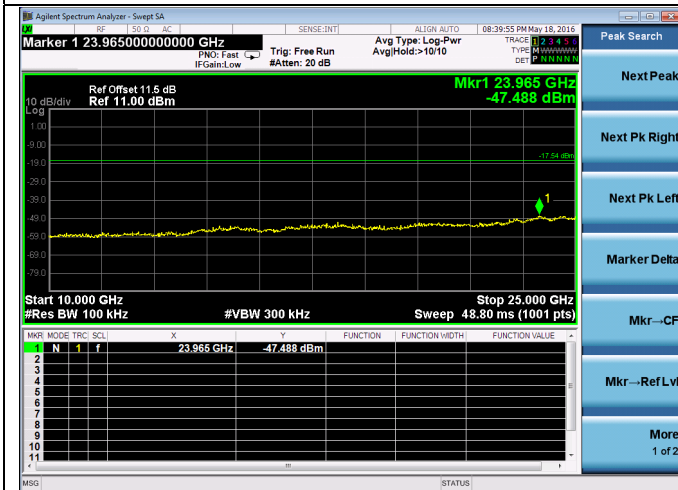
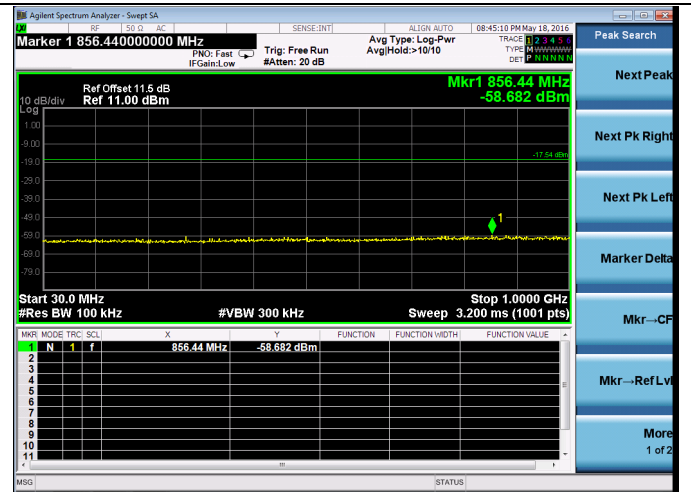
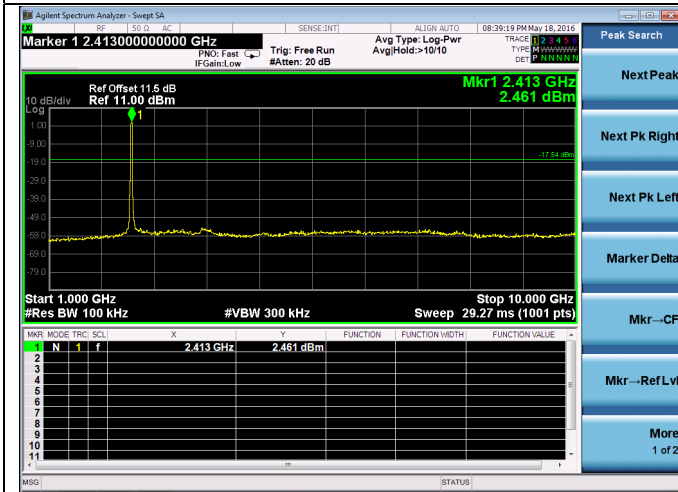
Test CH11: 2462MHz



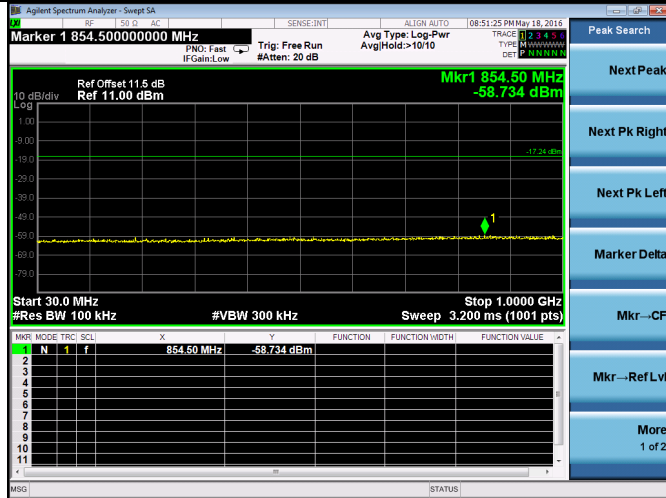
Test Mode: IEEE 802.11g
 Test CH1: 2412MHz



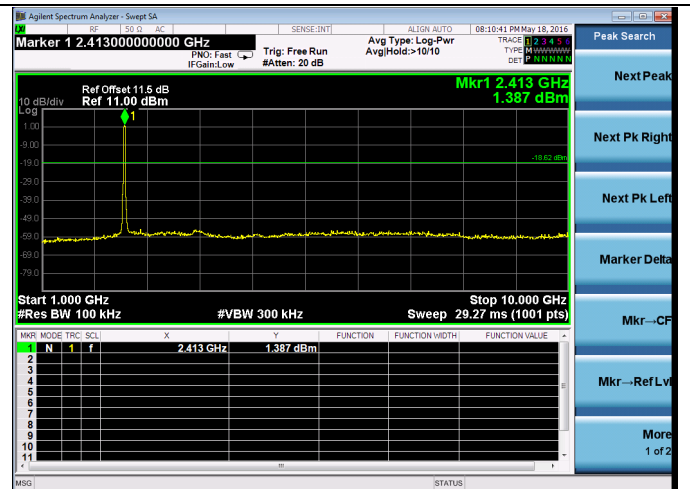
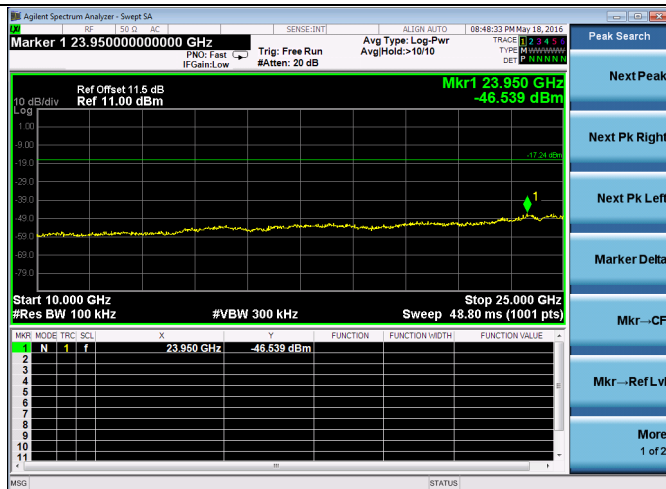
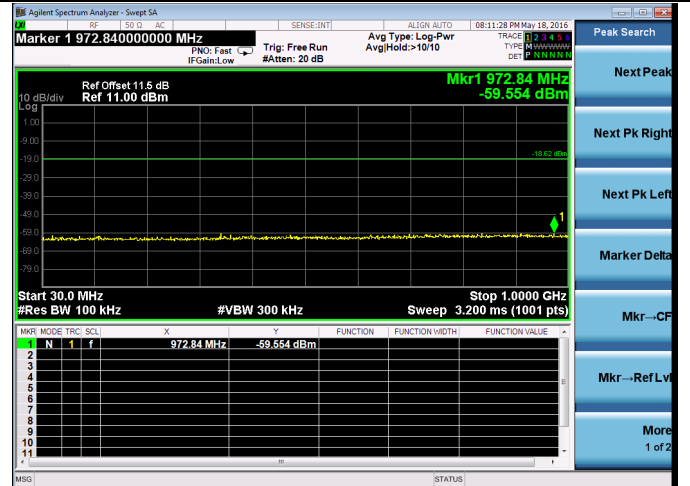
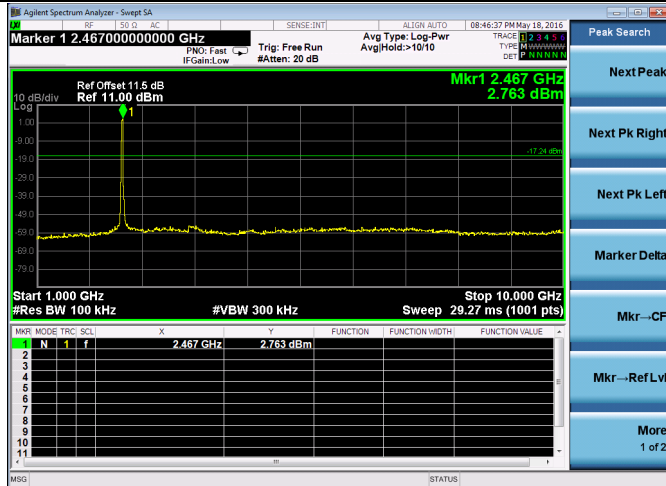
Test CH6: 2437MHz

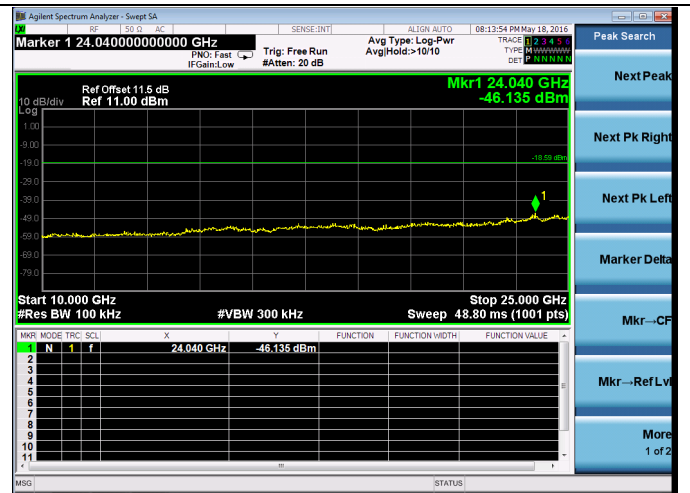
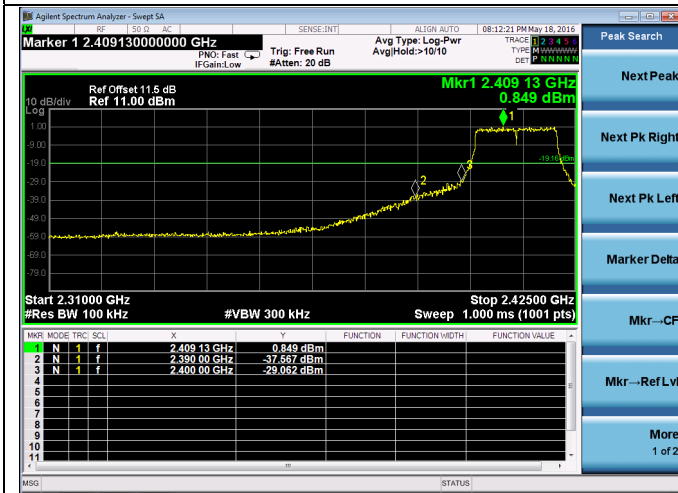
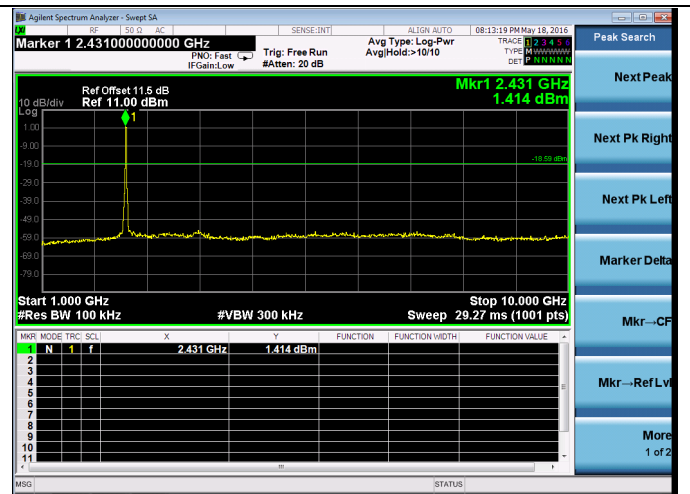
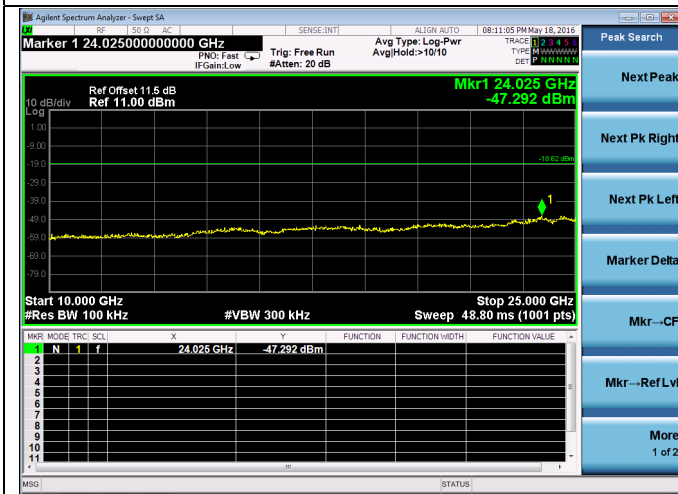


Test CH11: 2462MHz

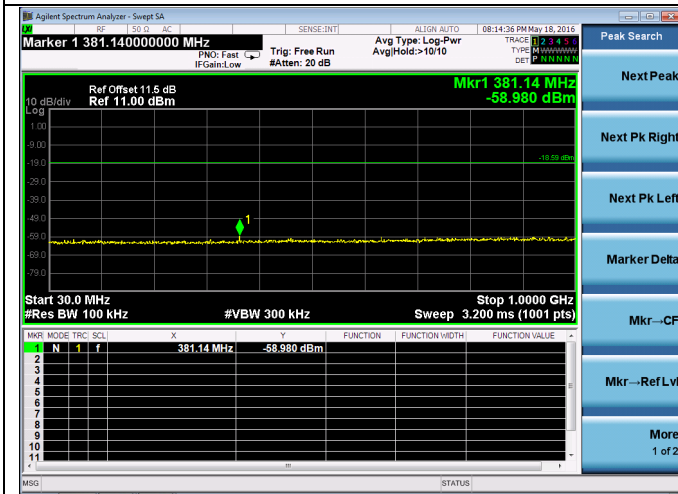


Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz

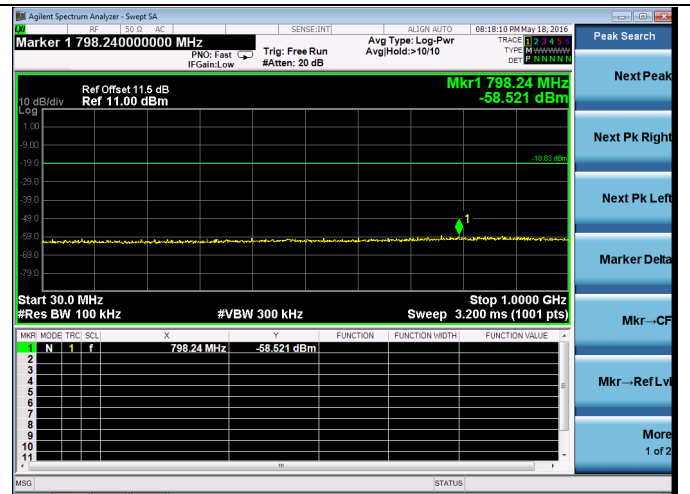




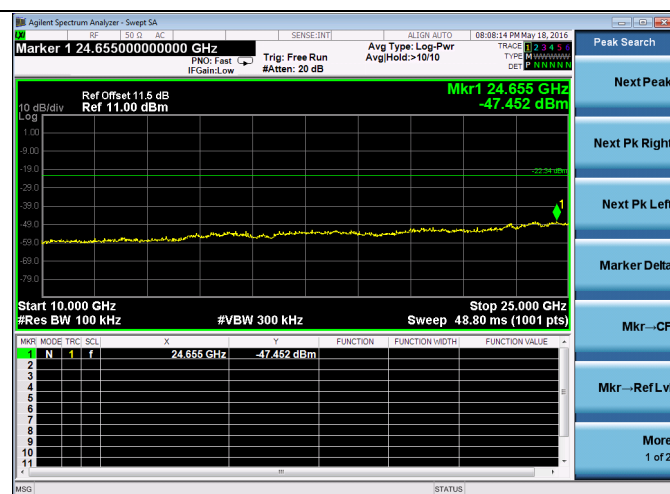
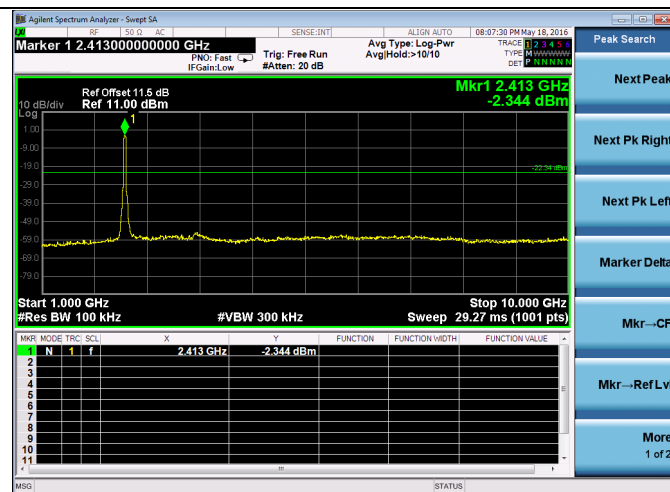
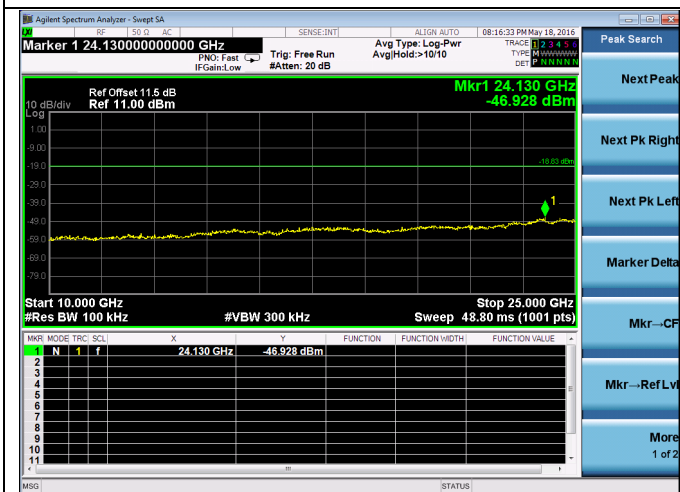
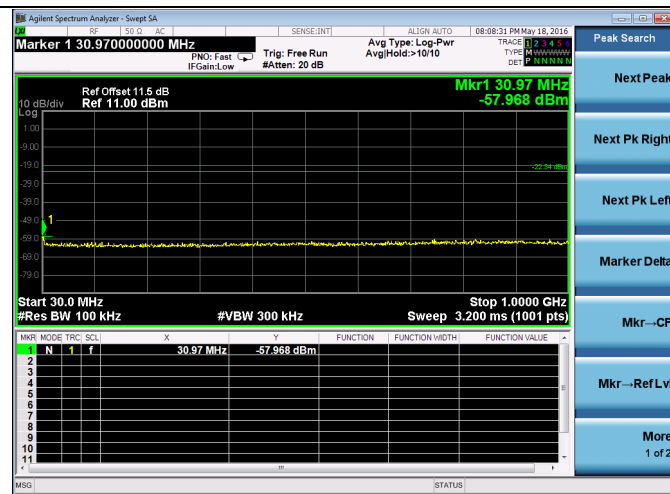
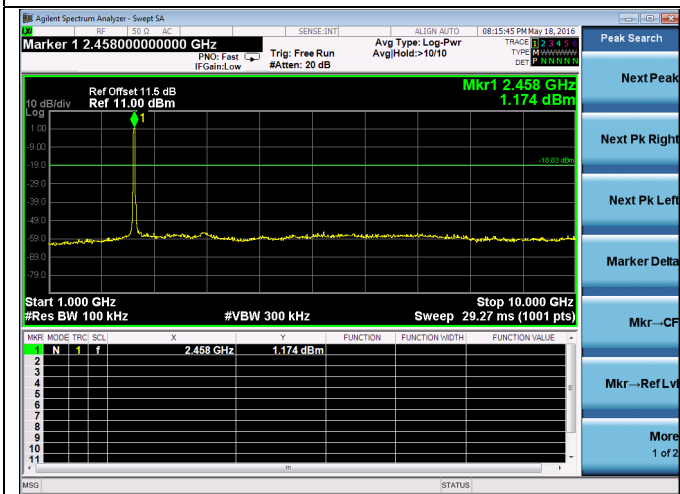
Test CH6: 2437MHz

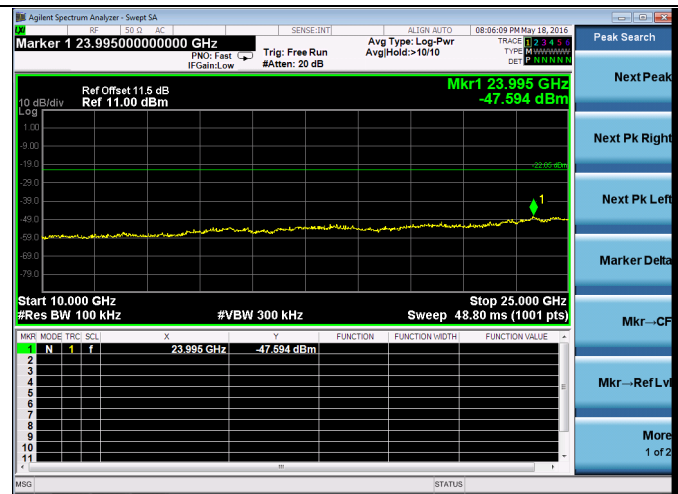
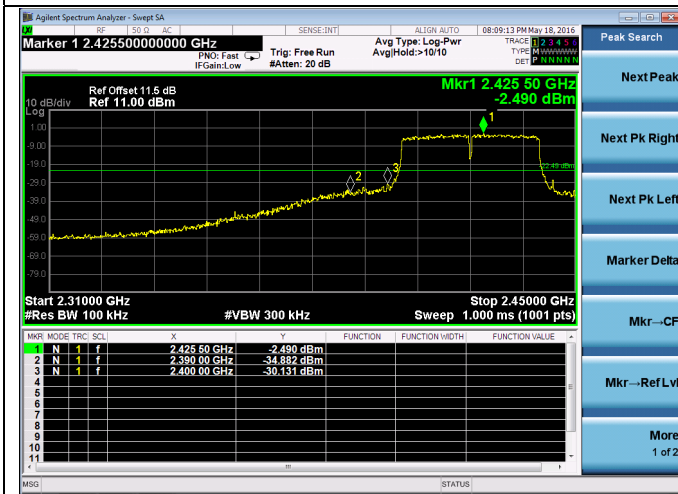


Test CH11: 2462MHz

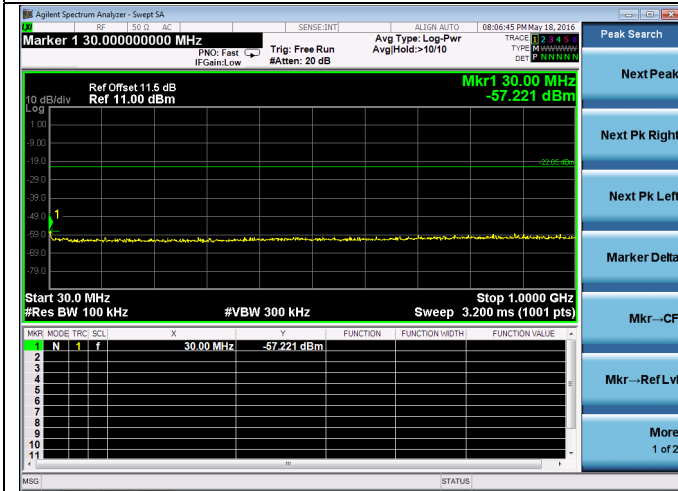


Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz

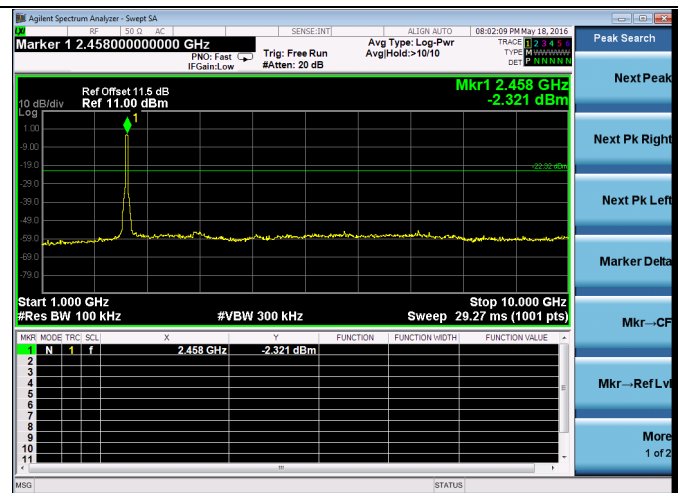
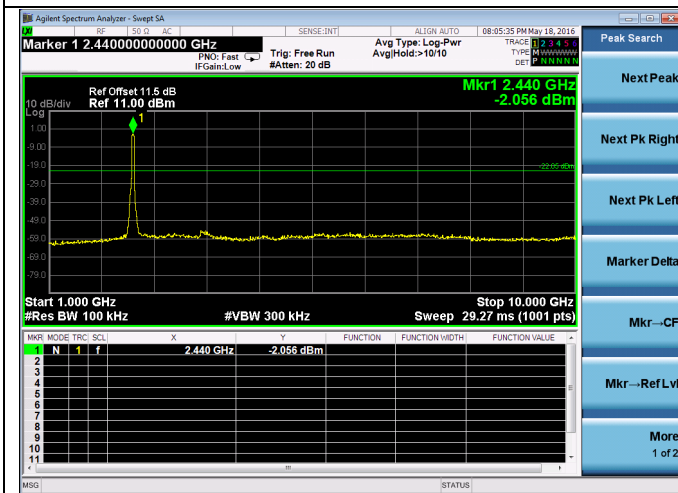
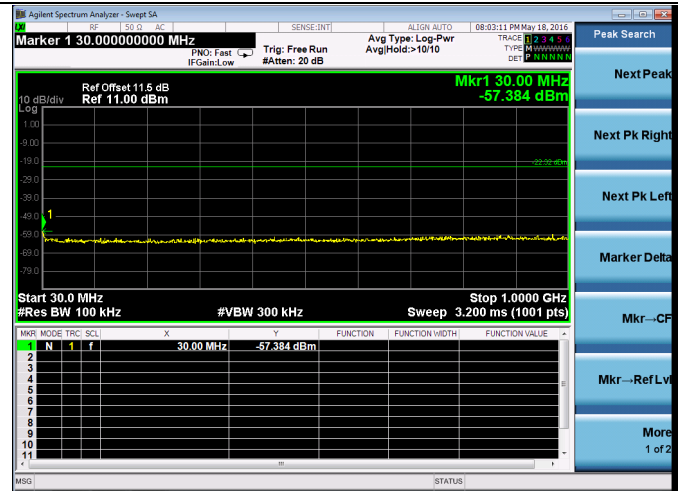


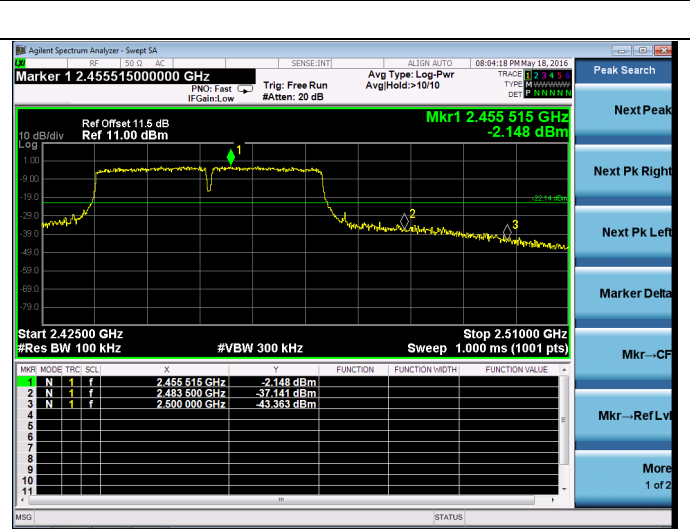
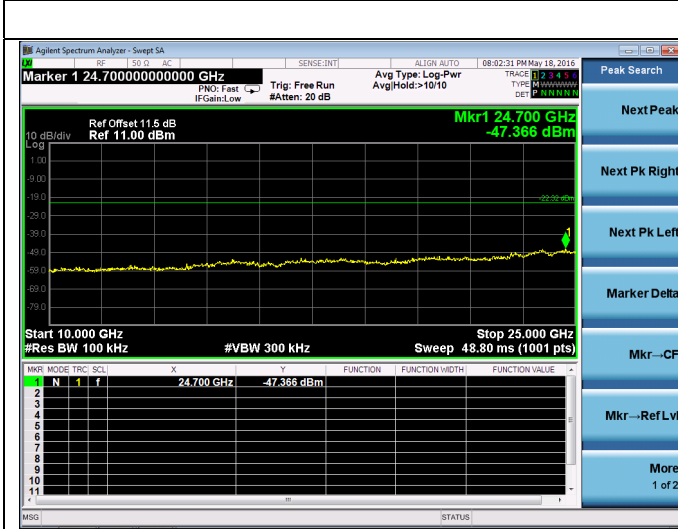


Test CH6: 2437MHz



Test CH9: 2452MHz





6. BAND EDGE COMPLIANCE TEST

6.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	Apr.24,16	1 Year
2.	Amp	HP	8449B	3008A02495	Apr.24,16	1 Year
3.	Horn Antenna	ETS	3115	9510-4580	Oct.15,15	1 Year
4.	Horn Antenna	ETC	MCTD 1209	DRH15F03007	Apr.11,16	1 Year
5.	HF Cable	Hubersuhner	Sucoflex104	274094/4	Apr.24,16	1 Year

6.2. Limit

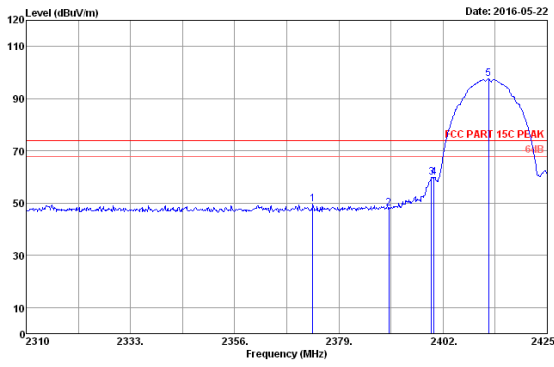
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental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

6.3. Test Produce

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

6.4. Test Results

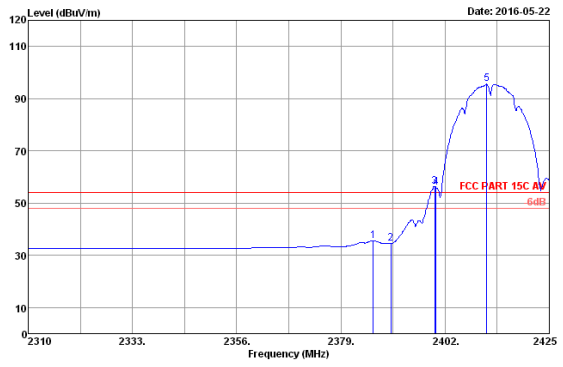
Pass (The testing data was attached in the next pages.)



Site no. : 3m Chamber Data no. : 7
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11b 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2373.25	28.22	8.31	49.39	36.39	49.53	74.00	24.47	Peak
2	2390.00	28.23	8.33	47.75	36.39	47.92	74.00	26.08	Peak
3	2399.47	28.24	8.34	59.57	36.39	59.75	74.00	14.24	Peak
4	2400.00	28.24	8.34	59.56	36.39	59.75	74.00	14.25	Peak
5	2412.01	28.25	8.35	97.50	36.39	97.71	74.00	-23.71	Peak

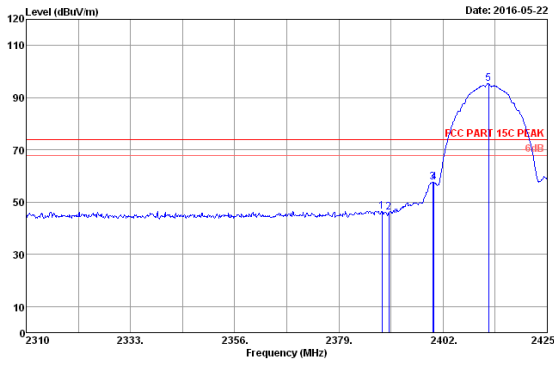
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 8
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11b 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2386.13	28.23	8.32	35.37	36.39	35.53	54.00	18.47	Average
2	2390.00	28.23	8.33	34.41	36.39	34.58	54.00	19.42	Average
3	2399.70	28.24	8.34	55.17	36.39	55.36	54.00	-2.36	Average
4	2400.00	28.24	8.34	55.68	36.39	55.87	54.00	-1.87	Average
5	2411.20	28.25	8.35	95.32	36.39	95.53	54.00	-41.53	Average

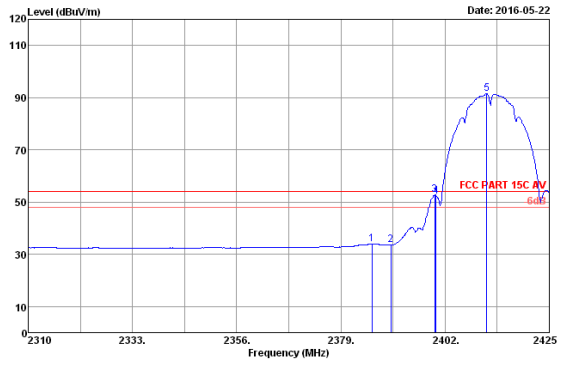
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 9
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11b 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2388.55	28.23	8.33	46.38	36.39	46.55	74.00	27.45	Peak
2	2390.00	28.23	8.33	45.77	36.39	45.94	74.00	28.06	Peak
3	2399.70	28.24	8.34	57.50	36.39	57.69	74.00	16.31	Peak
4	2400.00	28.24	8.34	57.38	36.39	57.57	74.00	16.43	Peak
5	2412.01	28.25	8.35	95.18	36.39	95.39	74.00	-21.39	Peak

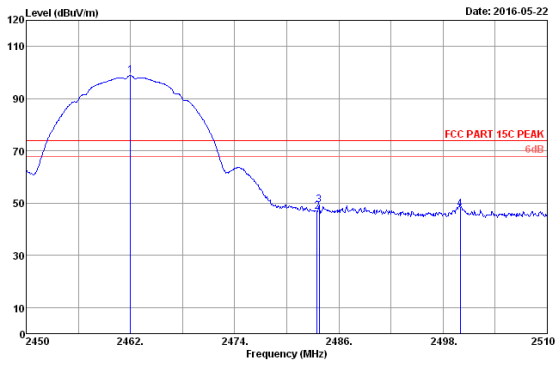
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 10
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11b 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2385.90	28.23	8.32	33.91	36.39	34.07	54.00	19.93	Average
2	2390.00	28.23	8.33	33.43	36.39	33.60	54.00	20.40	Average
3	2399.70	28.24	8.34	52.54	36.39	52.73	54.00	1.27	Average
4	2400.00	28.24	8.34	52.07	36.39	52.26	54.00	1.74	Average
5	2411.20	28.25	8.35	91.28	36.39	91.49	54.00	-37.49	Average

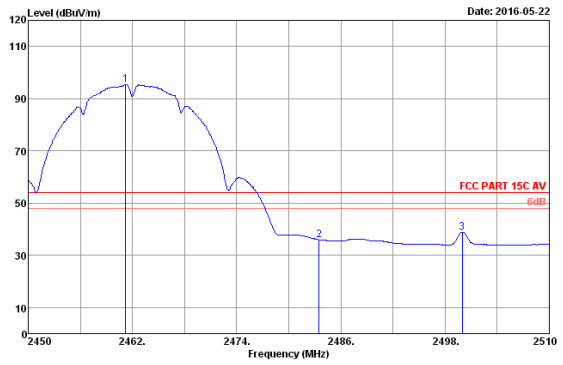
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 21
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11b 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.28	8.40	98.53	36.38	98.83	74.00	-24.83	Peak
2	2483.50	28.29	8.42	46.49	36.38	46.82	74.00	27.18	Peak
3	2483.72	28.29	8.42	48.94	36.38	49.27	74.00	24.13	Peak
4	2500.00	28.30	8.44	47.33	36.38	47.69	74.00	26.31	Peak

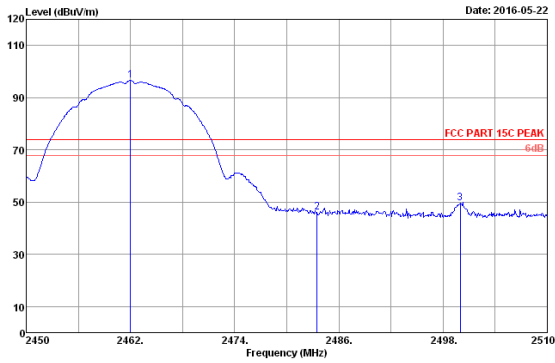
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 22
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11b 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.22	28.28	8.40	95.07	36.38	95.37	54.00	-41.37	Average
2	2483.50	28.29	8.42	35.58	36.38	35.91	54.00	18.09	Average
3	2500.00	28.30	8.44	38.46	36.38	38.82	54.00	15.18	Average

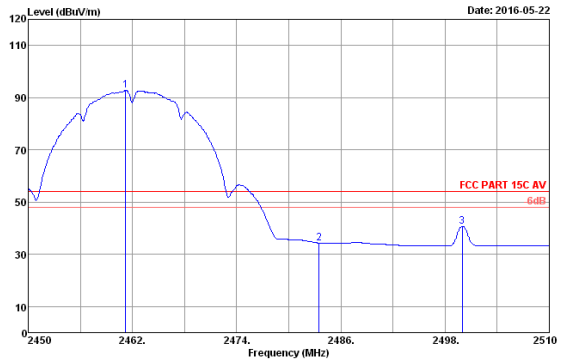
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 23
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11b 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.00	28.28	8.40	96.39	36.38	96.69	74.00	-22.69	Peak
2	2483.50	28.29	8.42	45.78	36.38	46.11	74.00	27.89	Peak
3	2500.00	28.30	8.44	49.15	36.38	49.51	74.00	24.49	Peak

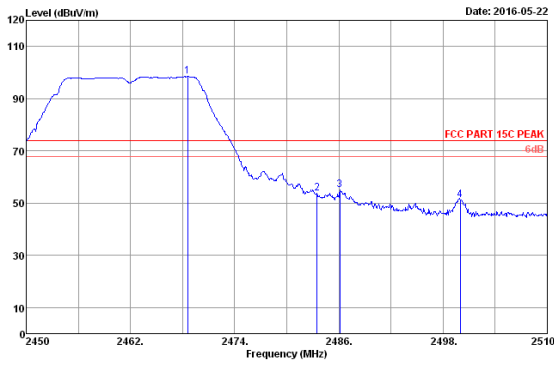
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 24
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11b 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.22	28.28	8.40	92.45	36.38	92.75	54.00	-38.75	Average
2	2483.50	28.29	8.42	33.99	36.38	34.32	54.00	19.68	Average
3	2500.00	28.30	8.44	40.34	36.38	40.70	54.00	13.30	Average

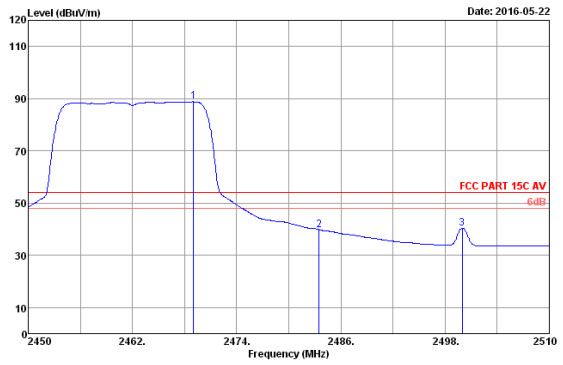
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 29
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2K Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11g 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2468.60	28.28	8.41	98.19	36.38	98.50	74.00	-24.50	Peak
2	2483.50	28.29	8.42	53.51	36.38	53.84	74.00	20.16	Peak
3	2486.12	28.29	8.43	54.59	36.38	54.93	74.00	19.07	Peak
4	2500.00	28.30	8.44	50.91	36.38	51.27	74.00	22.73	Peak

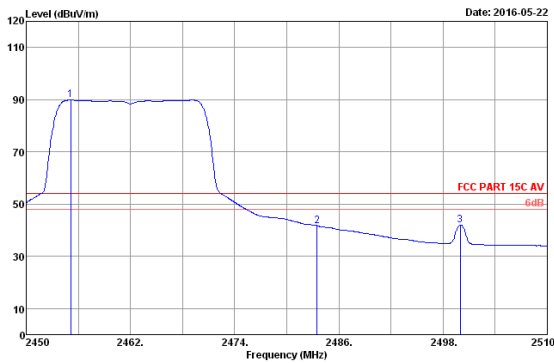
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 30
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2K Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11g 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2468.60	28.28	8.41	88.49	36.38	88.80	54.00	-34.80	Average
2	2483.50	28.29	8.42	39.51	36.38	39.84	54.00	14.16	Average
3	2500.00	28.30	8.44	39.95	36.38	40.31	54.00	13.69	Average

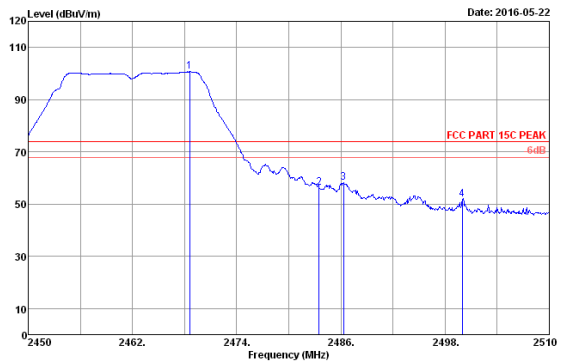
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 31
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2K Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11g 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2455.10	28.27	8.39	89.55	36.38	89.83	54.00	-35.83	Average
2	2483.50	28.29	8.42	41.34	36.38	41.67	54.00	12.33	Average
3	2500.00	28.30	8.44	41.61	36.38	41.97	54.00	12.03	Average

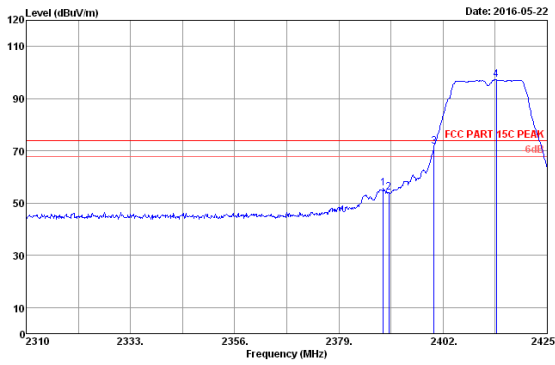
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 32
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2K Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11g 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2468.60	28.28	8.41	100.39	36.38	100.70	74.00	-26.70	Peak
2	2483.50	28.29	8.42	56.11	36.38	56.44	74.00	17.56	Peak
3	2486.12	28.29	8.43	57.76	36.38	58.10	74.00	15.90	Peak
4	2500.00	28.30	8.44	51.54	36.38	51.90	74.00	22.10	Peak

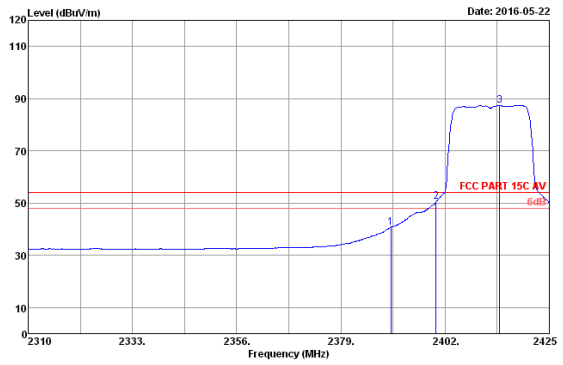
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 45
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11g 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2388.78	28.23	8.33	55.38	36.39	55.55	74.00	18.45	Peak
2	2390.00	28.23	8.33	53.78	36.39	53.95	74.00	20.05	Peak
3	2400.00	28.24	8.34	71.36	36.39	71.55	74.00	2.45	Peak
4	2413.73	28.25	8.35	96.99	36.39	97.20	74.00	-23.20	Peak

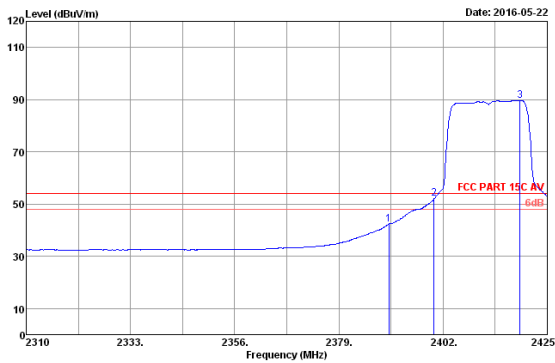
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 46
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11g 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.23	8.33	40.59	36.39	40.76	54.00	13.24	Average
2	2400.00	28.24	8.34	50.33	36.39	50.52	54.00	3.48	Average
3	2414.08	28.25	8.35	87.25	36.39	87.46	54.00	-33.46	Average

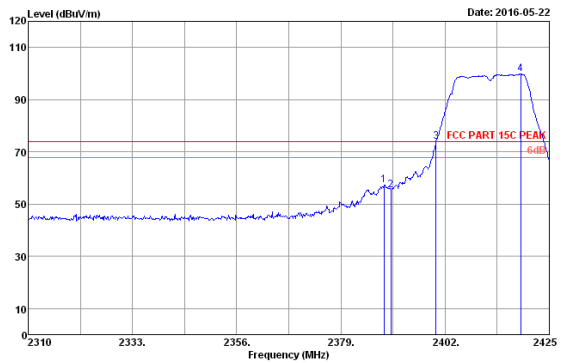
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 47
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11g 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.23	8.33	42.20	36.39	42.37	54.00	11.63	Average
2	2400.00	28.24	8.34	51.91	36.39	52.10	54.00	1.90	Average
3	2419.02	28.25	8.35	89.38	36.38	89.61	54.00	-35.61	Average

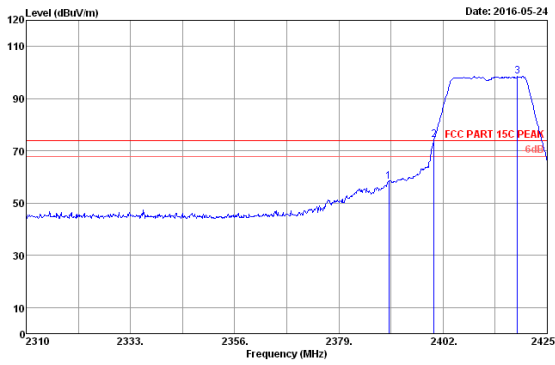
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 48
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11g 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2388.55	28.23	8.33	57.20	36.39	57.37	74.00	16.63	Peak
2	2390.00	28.23	8.33	55.27	36.39	55.44	74.00	18.56	Peak
3	2400.00	28.24	8.34	73.66	36.39	73.85	74.00	0.15	Peak
4	2418.68	28.25	8.36	99.56	36.38	99.79	74.00	-25.79	Peak

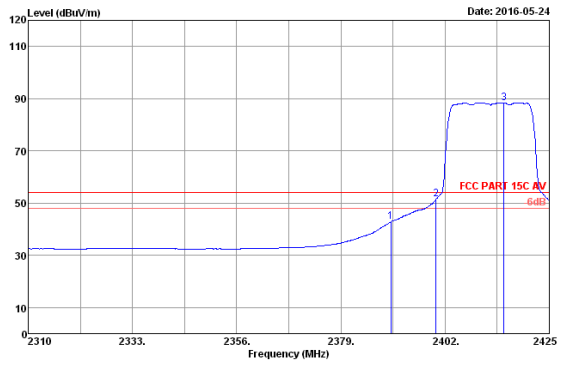
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 55
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT20 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.23	8.33	58.14	36.39	58.31	74.00	15.69	Peak
2	2400.00	28.24	8.34	74.04	36.39	74.23	74.00	-0.23	Peak
3	2416.46	28.25	8.36	98.34	36.38	98.57	74.00	-24.57	Peak

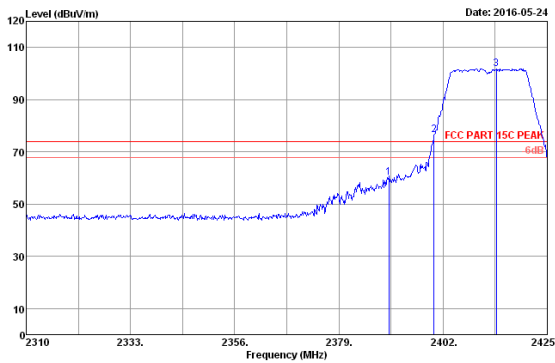
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 56
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT20 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.23	8.33	42.65	36.39	42.82	54.00	11.18	Average
2	2400.00	28.24	8.34	51.40	36.39	51.59	54.00	2.41	Average
3	2415.00	28.25	8.35	88.26	36.39	88.47	54.00	-34.47	Average

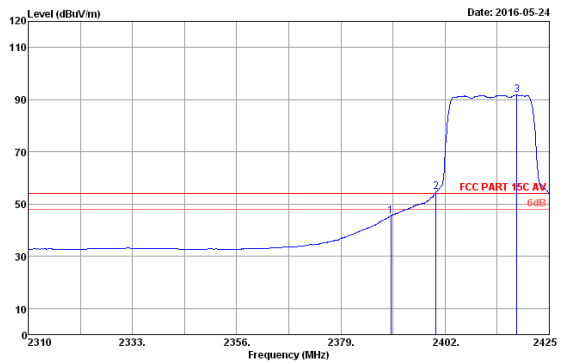
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 57
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT20 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.23	8.33	59.96	36.39	60.13	74.00	13.87	Peak
2	2400.00	28.24	8.34	76.27	36.39	76.46	74.00	-2.46	Peak
3	2417.73	28.25	8.35	101.67	36.39	101.88	74.00	-27.88	Peak

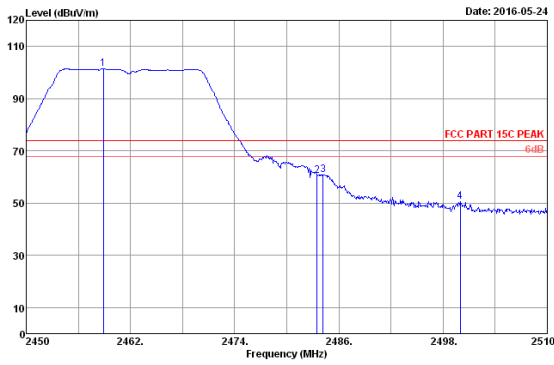
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 58
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT20 2412MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.23	8.33	45.40	36.39	45.57	54.00	8.43	Average
2	2400.00	28.24	8.34	54.38	36.39	54.57	54.00	-0.57	Average
3	2417.87	28.25	8.36	91.48	36.39	91.71	54.00	-37.71	Average

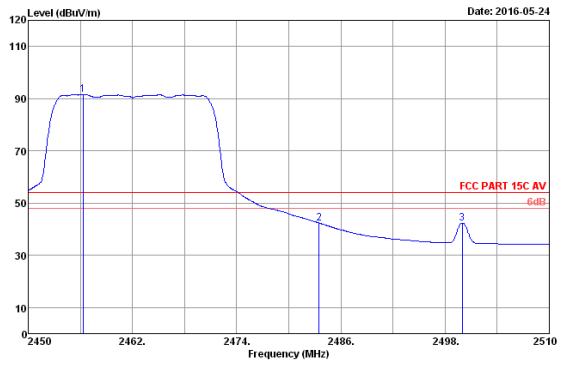
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 71
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT20 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2458.88	28.28	8.40	101.24	36.38	101.54	74.00	-27.54	Peak
2	2483.50	28.29	8.42	60.24	36.38	80.57	74.00	13.43	Peak
3	2484.20	28.29	8.42	60.59	36.38	80.92	74.00	13.08	Peak
4	2500.00	28.30	8.44	50.18	36.38	50.54	74.00	23.46	Peak

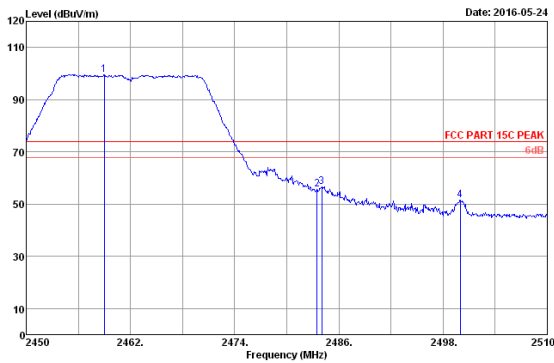
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 72
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT20 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2456.30	28.27	8.40	91.19	36.38	91.48	54.00	-37.48	Average
2	2483.50	28.29	8.42	42.00	36.38	42.33	54.00	11.67	Average
3	2500.00	28.30	8.44	42.02	36.38	42.38	54.00	11.62	Average

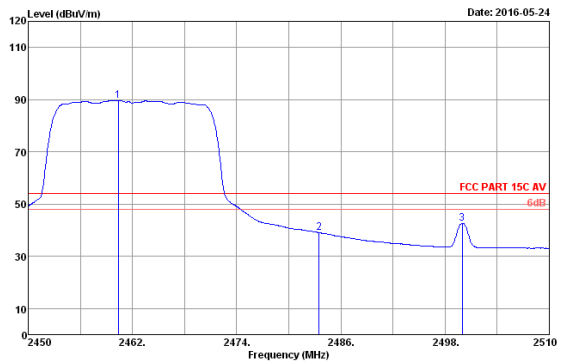
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 73
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT20 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2459.00	28.28	8.40	99.28	36.38	99.58	74.00	-25.58	Peak
2	2483.50	28.29	8.42	55.48	36.38	55.81	74.00	18.19	Peak
3	2484.02	28.29	8.42	56.40	36.38	56.73	74.00	17.27	Peak
4	2500.00	28.30	8.44	51.07	36.38	51.43	74.00	22.57	Peak

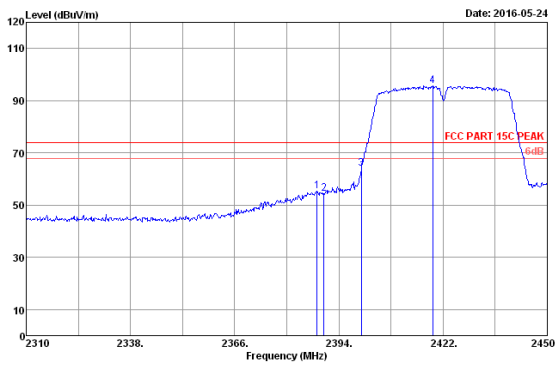
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 74
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT20 2462MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2460.38	28.28	8.40	89.34	36.38	89.64	54.00	-35.64	Average
2	2483.50	28.29	8.42	38.75	36.38	39.08	54.00	14.92	Average
3	2500.00	28.30	8.44	42.34	36.38	42.70	54.00	11.30	Average

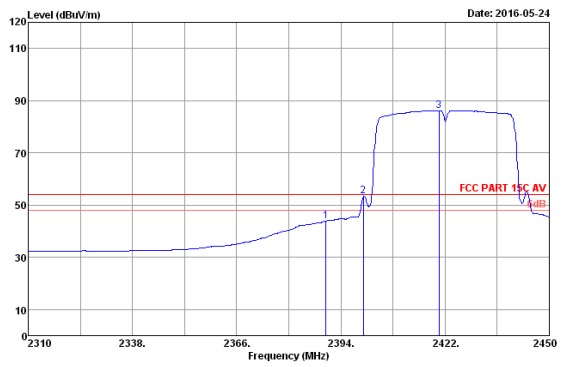
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 85
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT40 2422MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2388.12	28.23	8.33	55.14	36.39	55.31	74.00	18.69	Peak
2	2390.00	28.23	8.33	54.09	36.39	54.26	74.00	19.74	Peak
3	2400.00	28.24	8.34	63.67	36.39	83.86	74.00	10.14	Peak
4	2419.20	28.25	8.36	95.38	36.38	95.61	74.00	-21.61	Peak

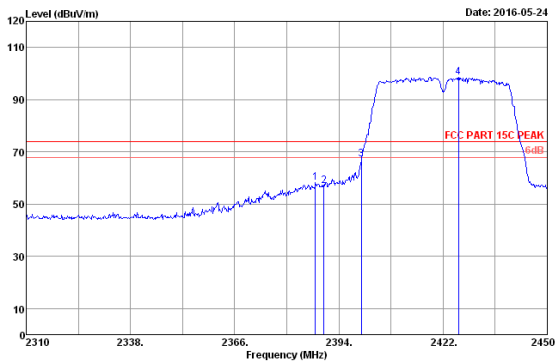
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 86
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT40 2422MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.23	8.33	43.75	36.39	43.92	54.00	10.08	Average
2	2400.00	28.24	8.34	53.17	36.39	53.36	54.00	0.64	Average
3	2420.32	28.25	8.36	85.94	36.38	86.17	54.00	-32.17	Average

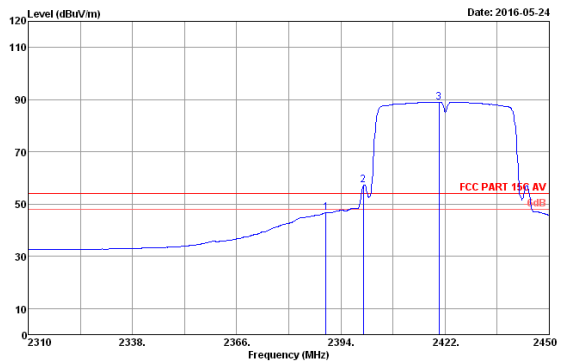
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 87
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT40 2422MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2387.70	28.23	8.33	57.94	36.39	58.11	74.00	15.89	Peak
2	2390.00	28.23	8.33	65.93	36.39	57.10	74.00	16.90	Peak
3	2400.00	28.24	8.34	67.02	36.38	87.21	74.00	6.19	Peak
4	2426.20	28.26	8.36	98.36	36.38	98.60	74.00	-24.60	Peak

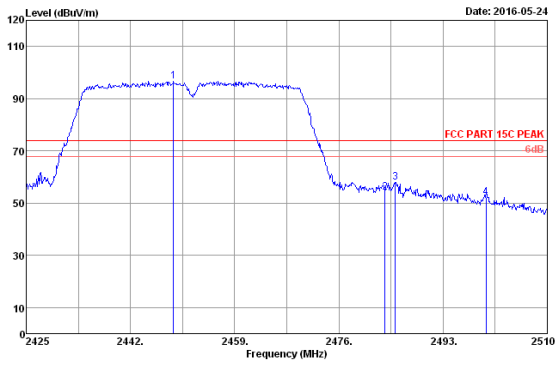
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 88
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6°C/51.2% Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB802.11nHT40 2422MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.23	8.33	46.47	36.39	46.64	54.00	7.36	Average
2	2400.00	28.24	8.34	57.14	36.39	57.33	54.00	-3.33	Average
3	2420.32	28.25	8.36	88.86	36.38	89.09	54.00	-35.09	Average

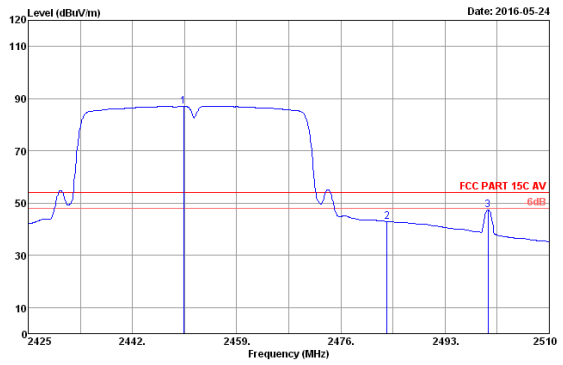
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 99
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB002.11nHT40 2452MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.06	28.27	8.39	96.28	36.38	96.56	74.00	-22.56	Peak
2	2483.50	28.29	8.42	53.61	36.38	53.94	74.00	20.06	Peak
3	2485.18	28.29	8.42	57.53	36.38	57.85	74.00	16.14	Peak
4	2500.00	28.30	8.44	51.92	36.38	52.28	74.00	21.72	Peak

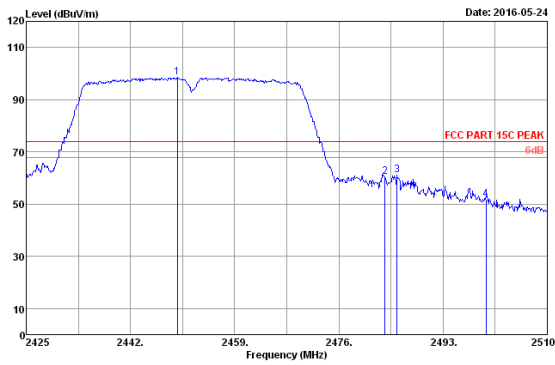
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 100
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB002.11nHT40 2452MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2450.33	28.27	8.39	86.81	36.38	87.09	54.00	-33.09	Average
2	2483.50	28.29	8.42	42.54	36.38	42.87	54.00	11.13	Average
3	2500.00	28.30	8.44	47.10	36.38	47.46	54.00	6.54	Average

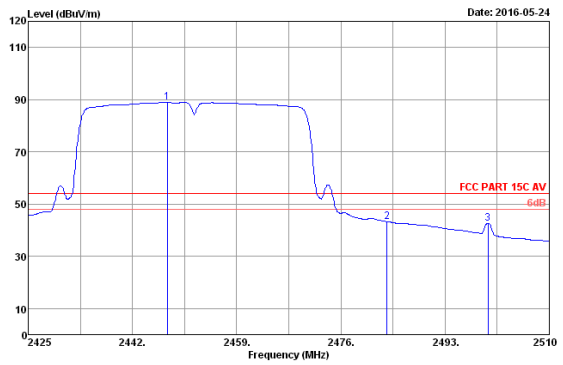
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 101
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB002.11nHT40 2452MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.65	28.27	8.39	98.26	36.38	98.54	74.00	-24.54	Peak
2	2483.50	28.29	8.42	60.03	36.38	60.36	74.00	13.64	Peak
3	2485.52	28.29	8.43	60.94	36.38	61.23	74.00	12.72	Peak
4	2500.00	28.30	8.44	51.43	36.38	51.79	74.00	22.21	Peak

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 102
 Dis. / Ant. : 3m 2016 3115(4580) Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV Pre : 101.2kPa
 Env. / Ins. : 22.6C/51.2k Engineer : Leo-Li
 EUT : Aton Engine Burner
 Power rating : DC 12V From Adapter Input AC120V/60Hz
 Test Mode : IEEB002.11nHT40 2452MHz Tx

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2447.70	28.27	8.39	88.65	36.38	88.93	54.00	-34.93	Average
2	2483.50	28.29	8.42	42.52	36.38	43.26	54.00	10.75	Average
3	2500.00	28.30	8.44	42.36	36.38	42.72	54.00	11.28	Average

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor
 2. The emission levels that are 20dB below the official limit are not reported.

7. 6dB Bandwidth Test

7.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.18,15	1 Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.23,16	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	No.1	Oct.17.15	1 Year

7.2. Limit

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

7.3. 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.

7.4. Test Results

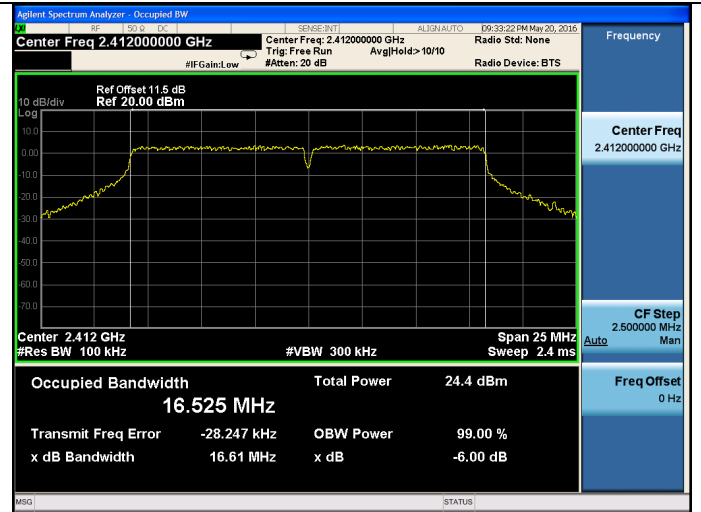
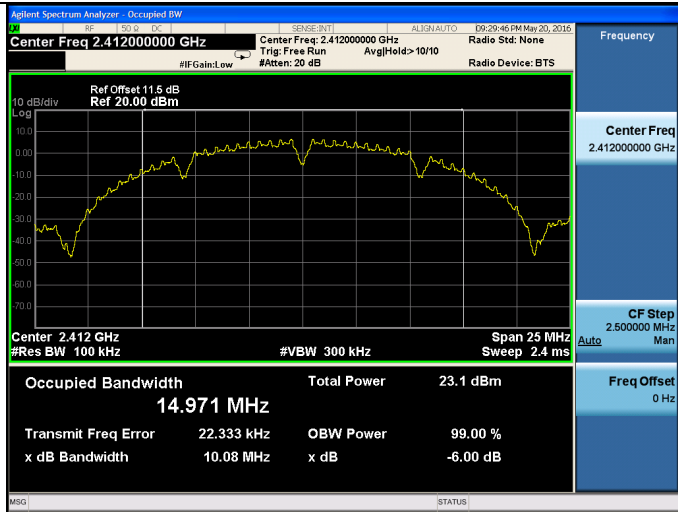
EUT: Atom Engine Burner		
M/N: FR-WR5014TF-C		
Test date: 2016-05-20	Pressure: 101.3±1.0 kpa	Humidity: 50.5±3.0%
Tested by: Leo_li	Test site: RF site	Temperature:22.6±0.6 °C

Test Mode	CH	6dB bandwidth (MHz)		Limit (KHz)
		ANT 1	ANT 2	
11b	CH1	10.08	10.08	≧ 500
	CH6	10.08	10.08	≧ 500
	CH11	10.08	10.08	≧ 500
11g	CH1	16.61	16.61	≧ 500
	CH6	16.61	16.61	≧ 500
	CH11	16.61	16.61	≧ 500
11n HT20	CH1	17.85	17.85	≧ 500
	CH6	17.84	17.84	≧ 500
	CH11	17.84	17.85	≧ 500
11n HT40	CH3	36.49	36.49	≧ 500
	CH6	36.48	36.50	≧ 500
	CH9	36.50	36.51	≧ 500
Conclusion : PASS				

ANT1:

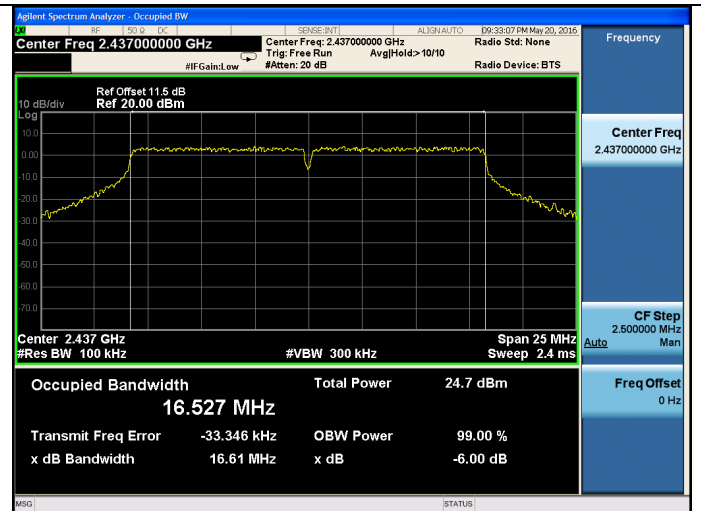
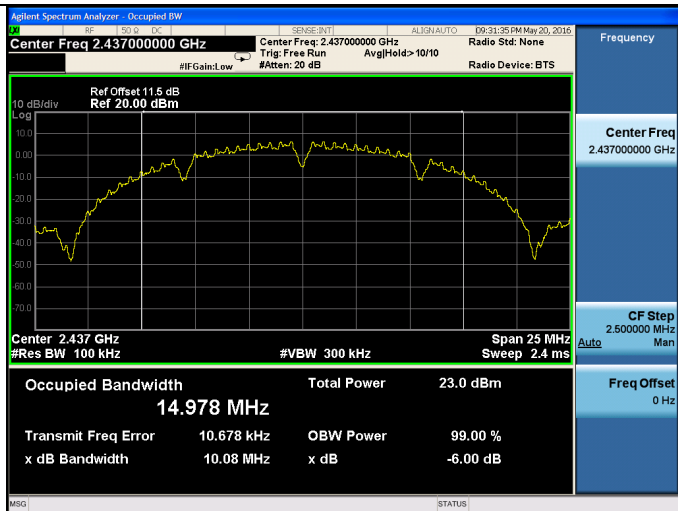
Test Mode: IEEE 802.11b
Test CH1: 2412MHz

Test Mode: IEEE 802.11g
Test CH1: 2412MHz



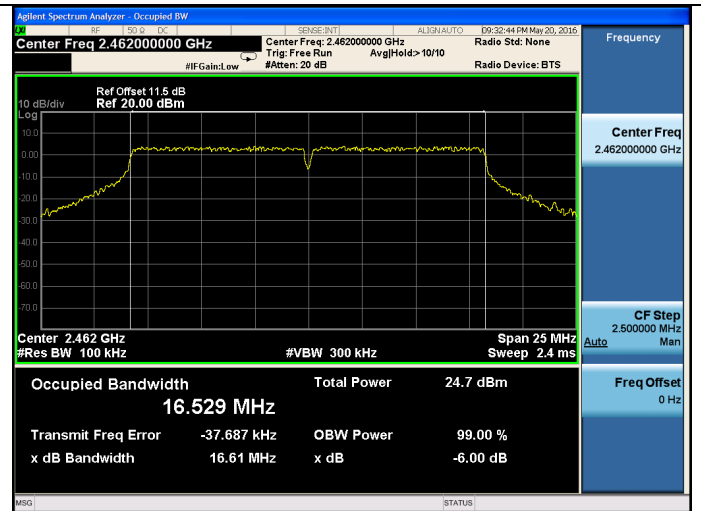
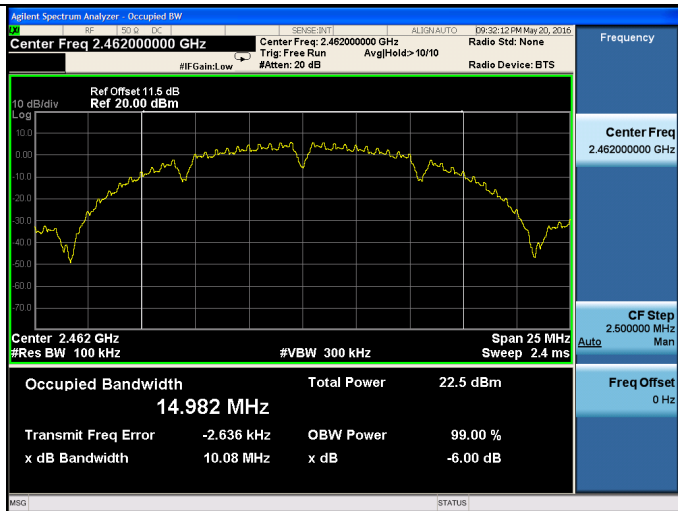
Test CH6: 2437MHz

Test CH6: 2437MHz

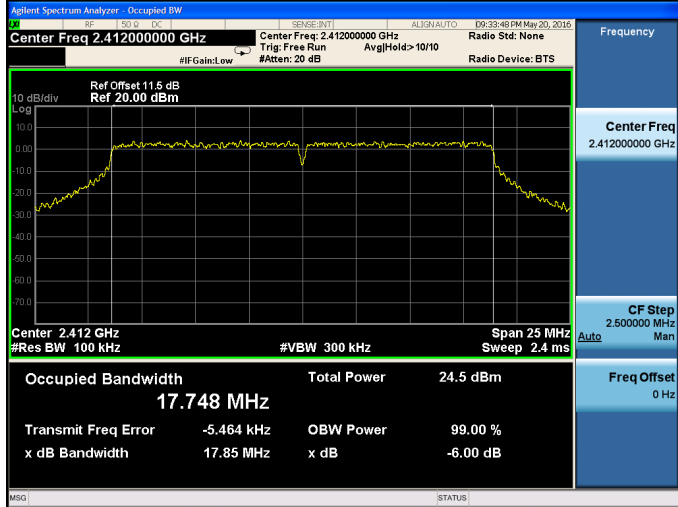


Test CH11: 2462MHz

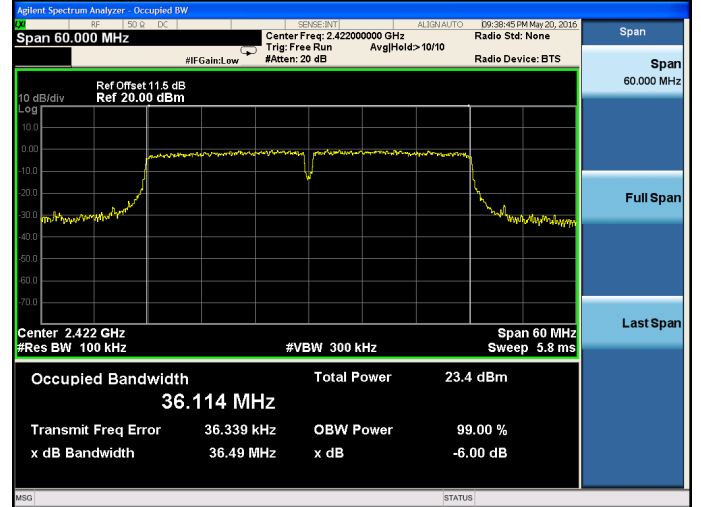
Test CH11: 2462MHz



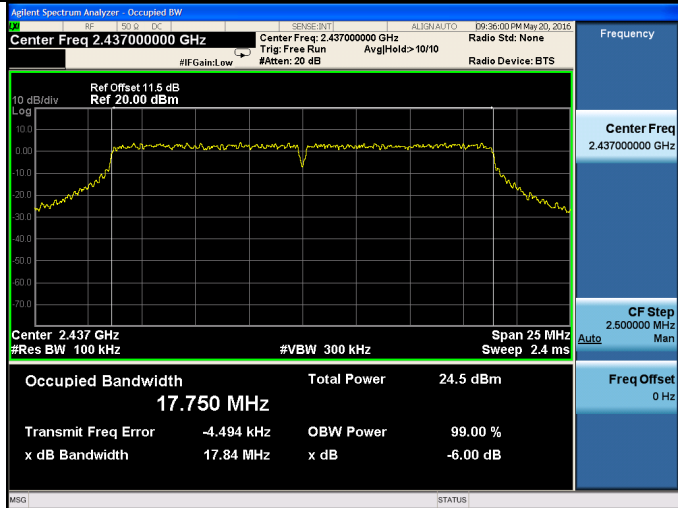
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



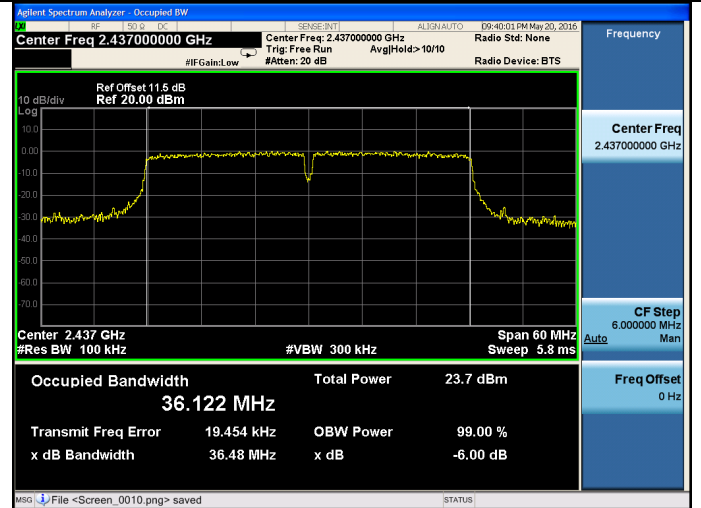
Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz



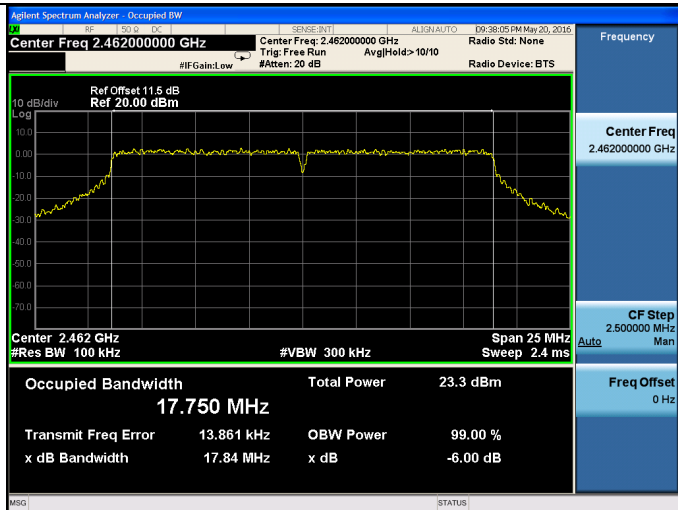
Test CH6: 2437MHz



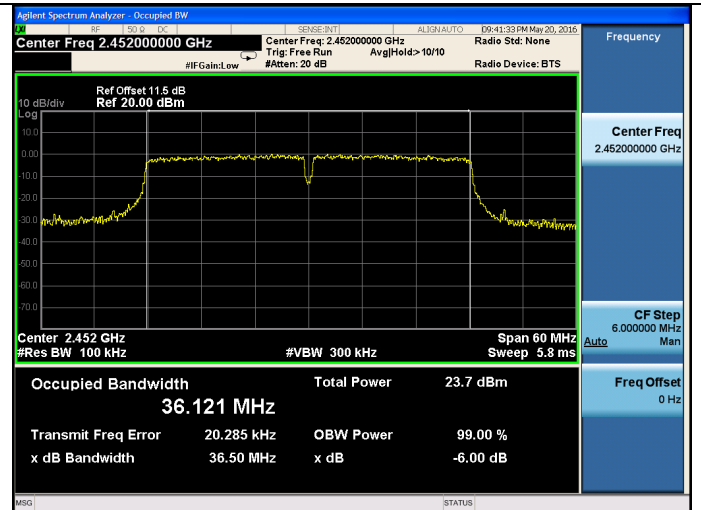
Test CH6: 2437MHz



Test CH11: 2462MHz

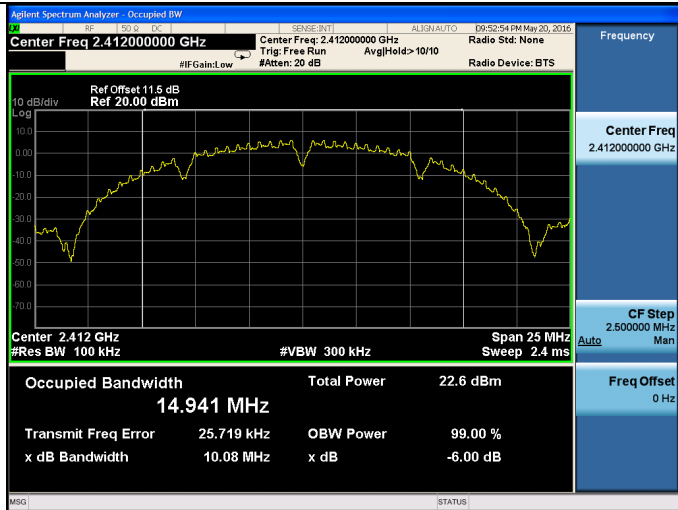


Test CH9: 2452MHz

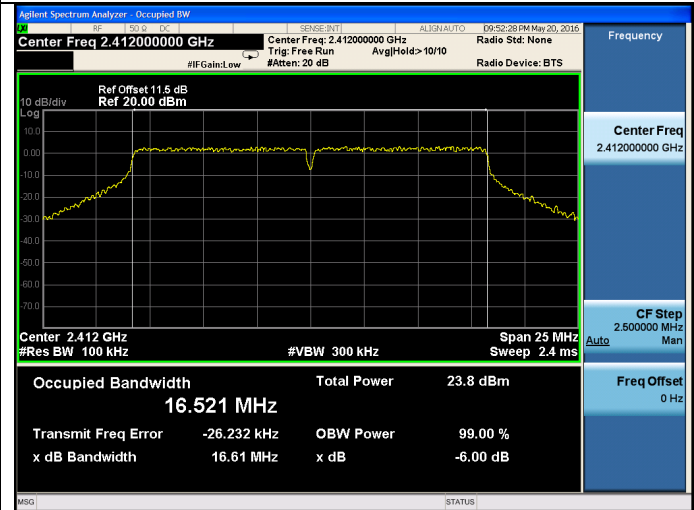


ANT2:

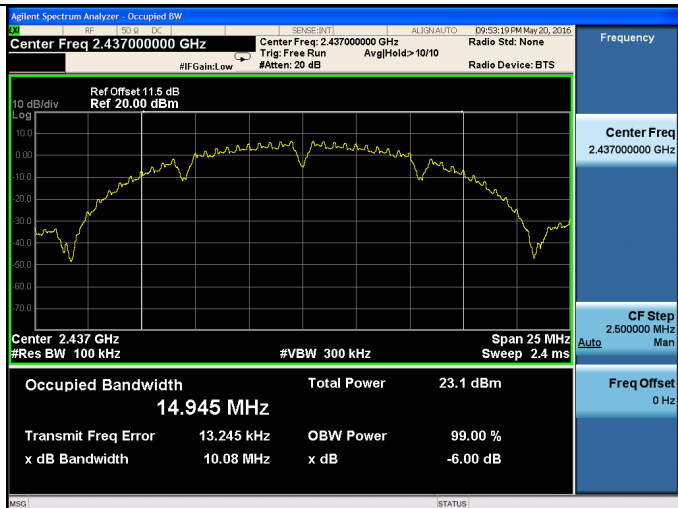
Test Mode: IEEE 802.11b
Test CH1: 2412MHz



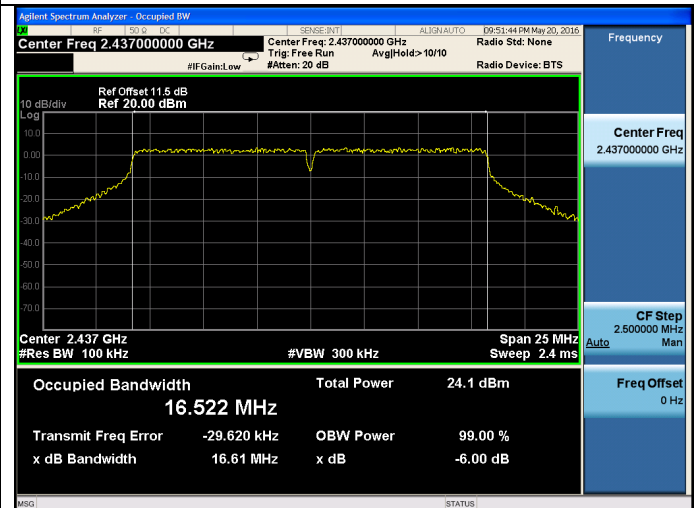
Test Mode: IEEE 802.11g
Test CH1: 2412MHz



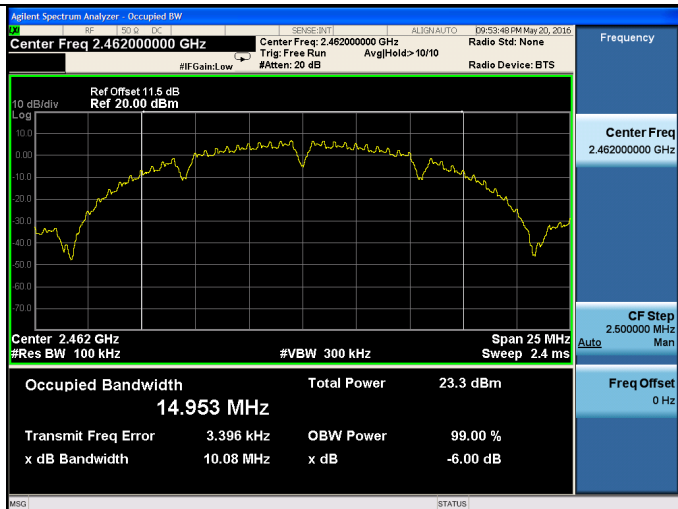
Test CH6: 2437MHz



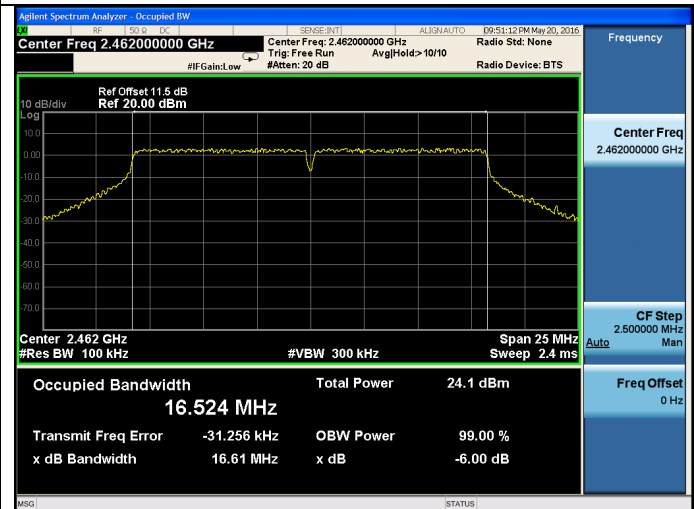
Test CH6: 2437MHz



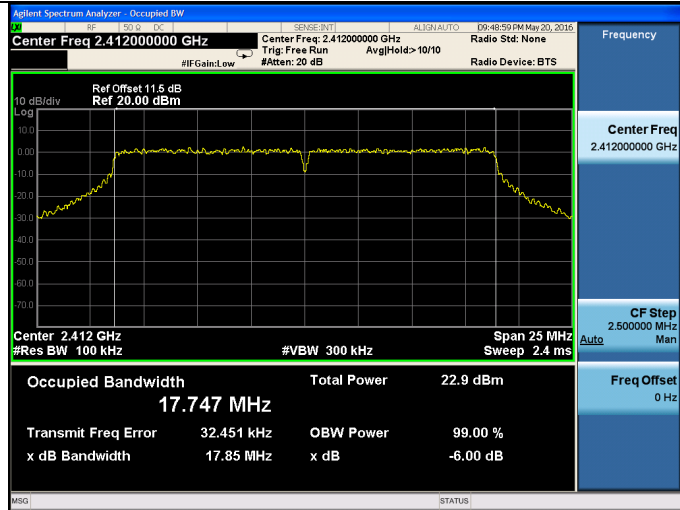
Test CH11: 2462MHz



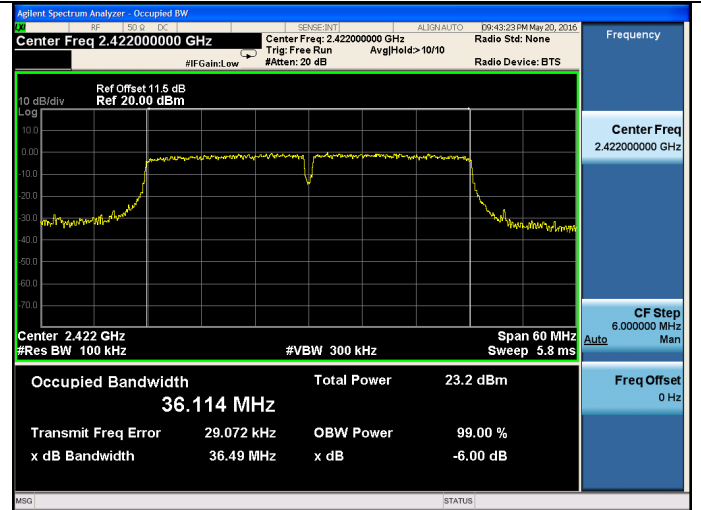
Test CH11: 2462MHz



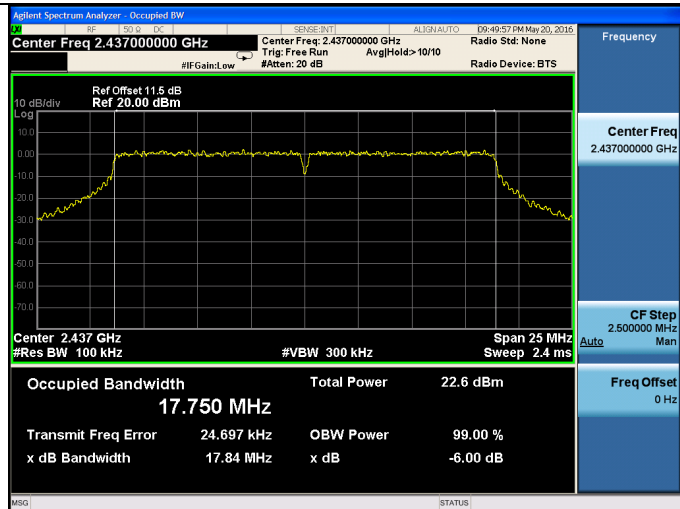
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



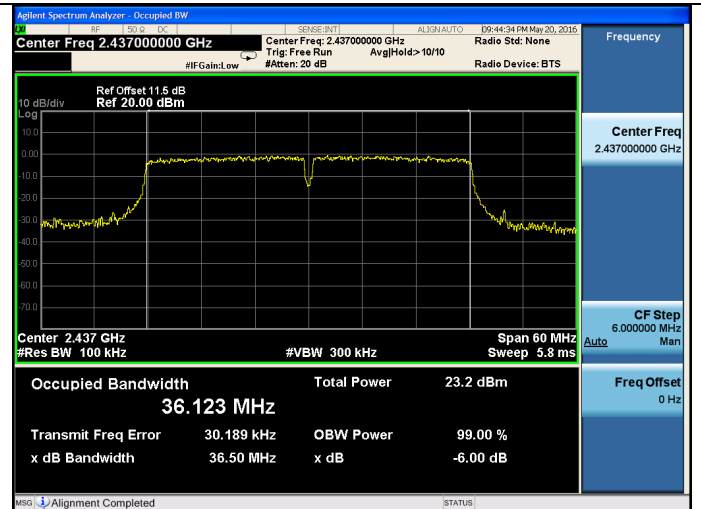
Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz



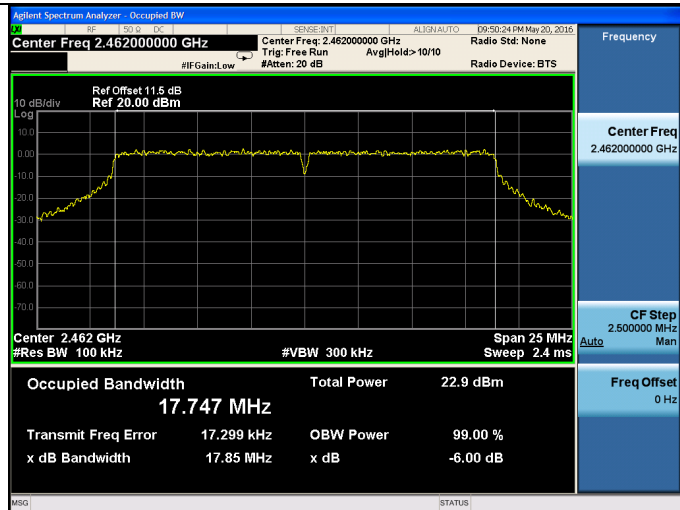
Test CH6: 2437MHz



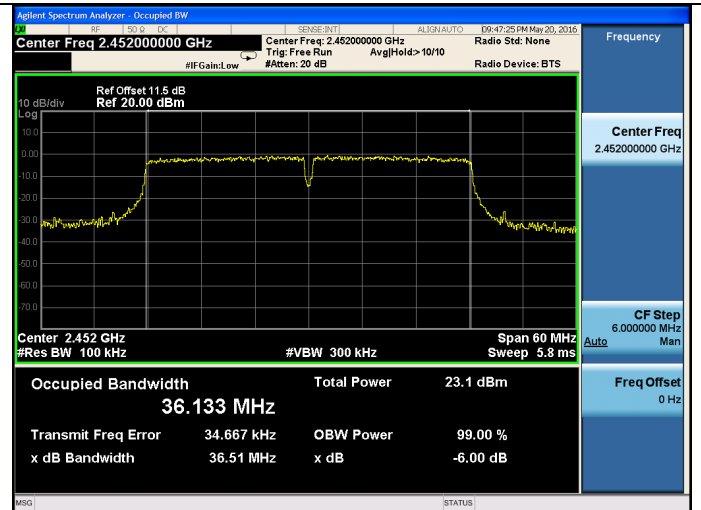
Test CH6: 2437MHz



Test CH11: 2462MHz



Test CH9: 2452MHz



8. OUTPUT POWER TEST

8.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.18,15	1 Year
2.	Power meter	Anritsu	ML2487A	6K00002472	Apr.23,16	1 Year
3.	Power sensor	Anritsu	MA2491A	0033005	Apr.23,16	1 Year
4.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.23,16	1 Year
5.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.17,15	1 Year

8.2. Limit (FCC Part 15C 15.247 b(3))

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.

8.3. Test Procedure

- 1, Connected the EUT's antenna port to measure device by 26dB attenuator.
- 2, For IEEE 802.11b/g and IEEE802.11n HT20 modes, use a power meter which bandwidth is 20MHz, above the bandwidth of signals, to measure out output power in each mode.
- 3, For IEEE802.11n HT40 mode, since the signal bandwidth is nearly 40MHz, which is above 20MHz bandwidth of power sensor of ML2491A. use the test method descried in KDB558074 clause 9.2.2.
 - 1) Set the RBW=1MHz and VBW =3MHz
 - 2) Set the span at least 1.5 times the OBW
 - 3) Detector = RMS
 - 4) Sweep time = auto couple
 - 5) allow trace to fully stabilize
 - 6) use the spectrum analyser's integrated band power measurement function with band limits set equal to the EBW band edges.

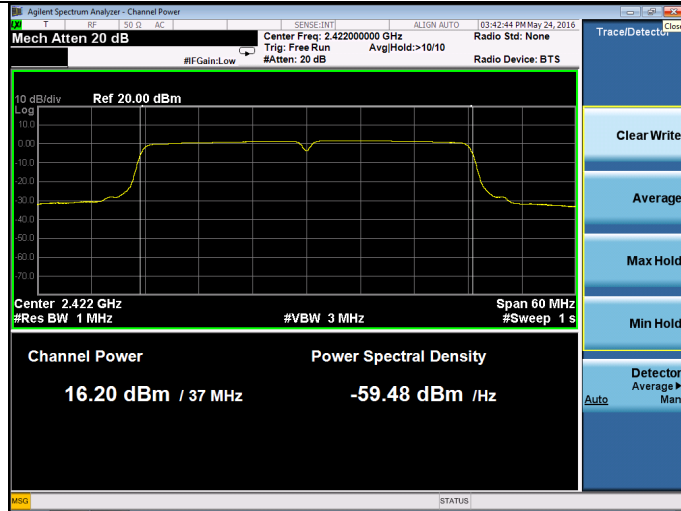
Note: The cable loss and attenuator loss were offset into measure device as an amplitude offset.

8.4. Test Results

EUT: Atom Engine Burner					
M/N: FR-WR5014TF-C					
Test date: 2016-05-24		Pressure: 101.6±1.0 kpa		Humidity: 50.5±3.0%	
Tested by: Leo_li		Test site: RF site		Temperature: 22.6±0.6 °C	
Test Mode	CH	Output Power (dBm)			Limit (dBm)
		ANT 1	ANT 2	Total	
11b	CH1	15.89	15.93	N/A	30
	CH6	16.33	16.68	N/A	30
	CH11	16.46	17.08	N/A	30
11g	CH1	17.12	16.66	N/A	30
	CH6	17.28	16.81	N/A	30
	CH11	17.32	16.92	N/A	30
11n HT20	CH1	15.77	15.25	18.53	30
	CH6	16.17	15.82	19.01	30
	CH11	16.42	16.26	19.35	30
11n HT40	CH3	16.20	15.10	18.70	30
	CH6	16.56	15.72	19.17	30
	CH9	16.69	15.42	19.11	30
Conclusion: PASS					

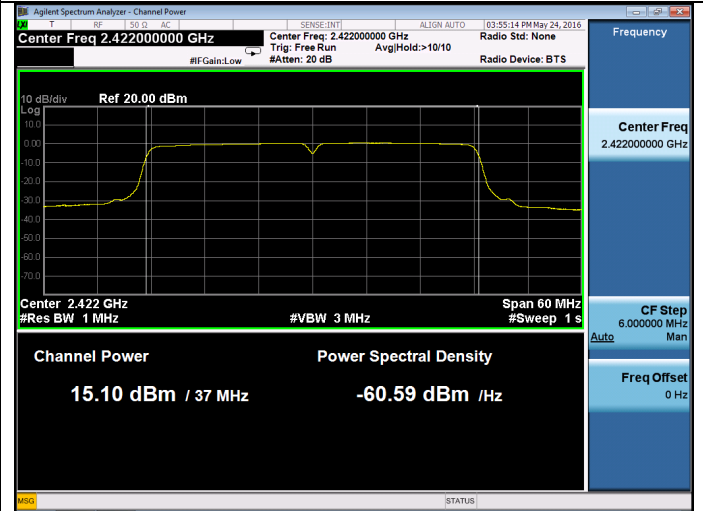
ANT1:

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

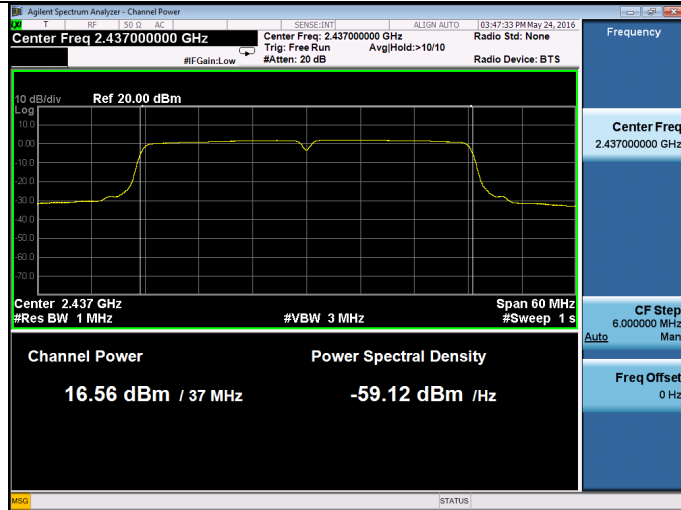


ANT2:

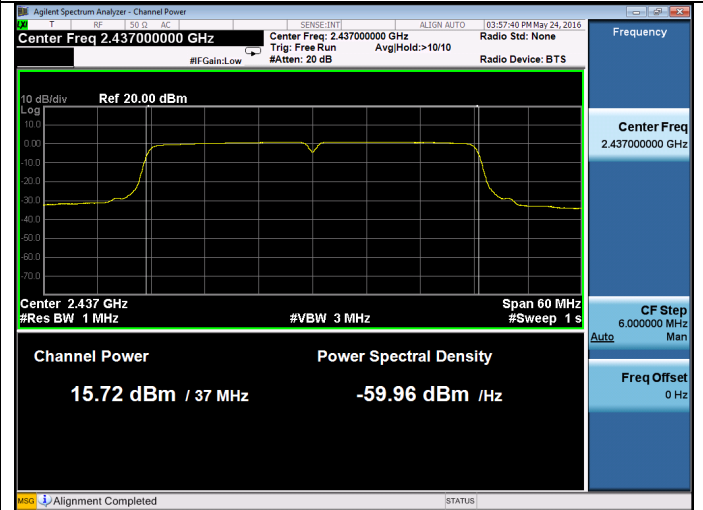
Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz



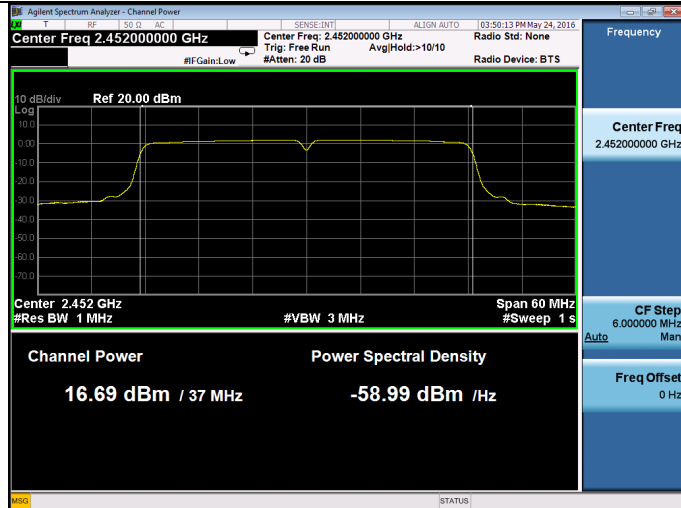
Test CH6: 2437MHz



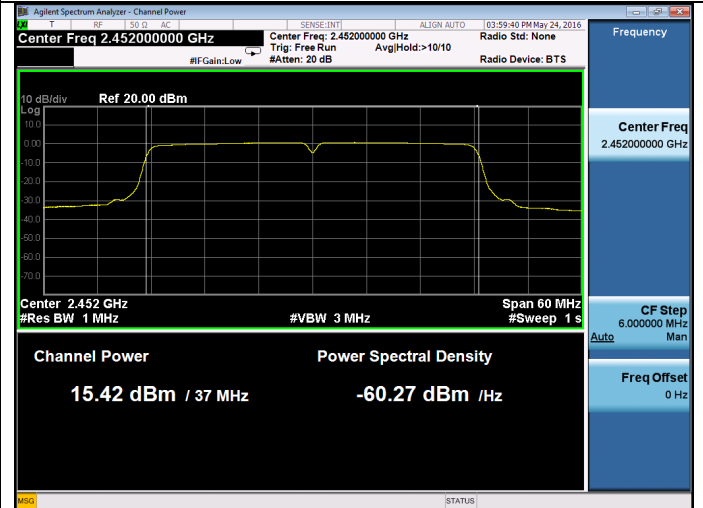
Test CH6: 2437MHz



Test CH9: 2452MHz



Test CH9: 2452MHz



9. POWER SPECTRAL DENSITY TEST

9.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	N9030A	MY51380221	Oct.18,15	1 Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.23,16	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.17,15	1 Year

9.2. 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.

9.3. 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=10KHz.
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

9.4. Test Results

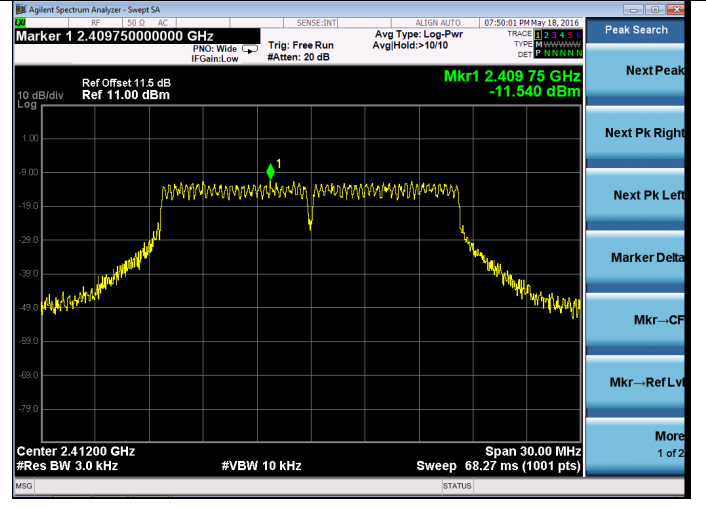
EUT: Atom Engine Burner					
M/N: FR-WR5014TF-C					
Test date: 2015-05-23		Pressure: 101.1±1.0 kpa		Humidity: 49.8±3.0%	
Tested by: Leo-Li		Test site: RF site		Temperature: 22.2±0.6 °C	
Test Mode	CH	Power Density (dBm/3KHz)			Limit (dBm/3KHz)
		ANT 1	ANT 2	Total	
11b	CH1	-13.851	-13.209	N/A	8
	CH6	-13.468	-12.722	N/A	8
	CH11	-13.597	-12.459	N/A	8
11g	CH1	-11.54	-11.893	N/A	8
	CH6	-11.629	-11.485	N/A	8
	CH11	-11.348	-11.390	N/A	8
11n HT20	CH1	-11.950	-12.004	-8.97	8
	CH6	-11.500	-11.956	-8.71	8
	CH11	-11.248	-11.327	-8.28	8
11n HT40	CH3	-12.749	-12.424	-9.57	8
	CH6	-12.145	-12.389	-9.25	8
	CH9	-12.156	-12.723	-9.42	8
Conclusion: PASS					

ANT1:

Test Mode: IEEE 802.11b
Test CH1: 2412MHz



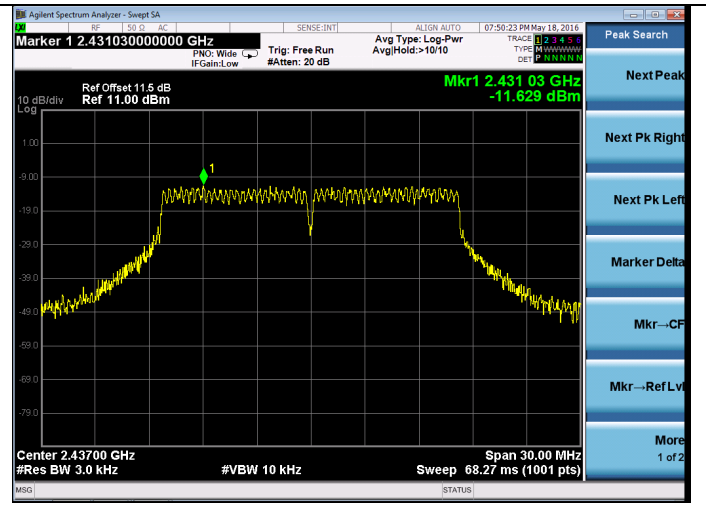
Test Mode: IEEE 802.11g
Test CH1: 2412MHz



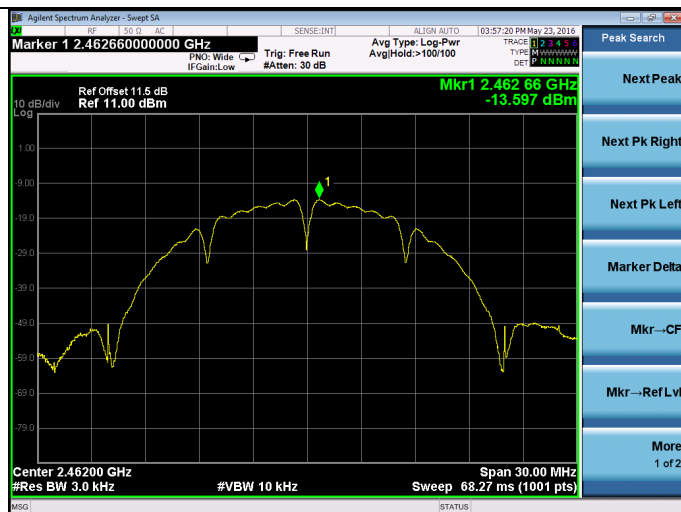
Test CH6: 2437MHz



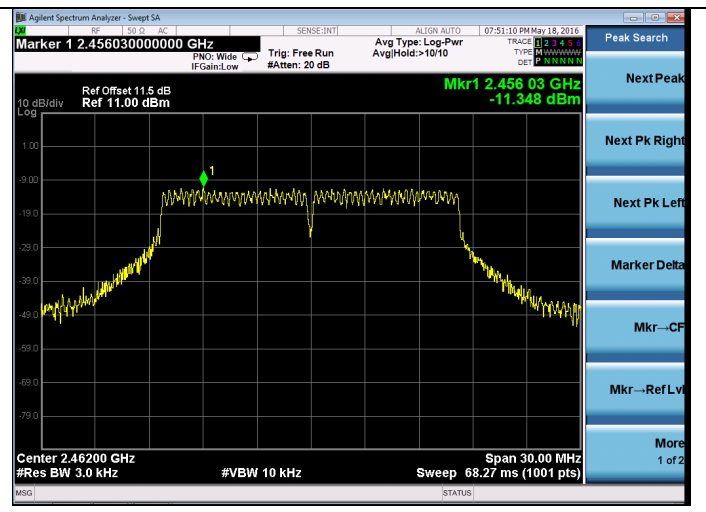
Test CH6: 2437MHz



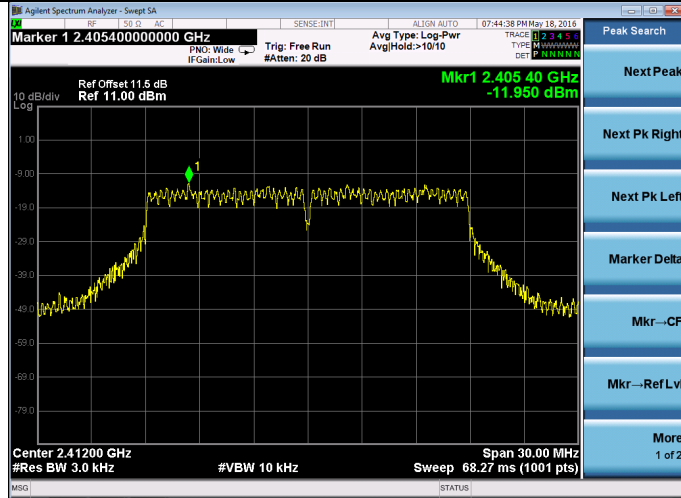
Test CH11: 2462MHz



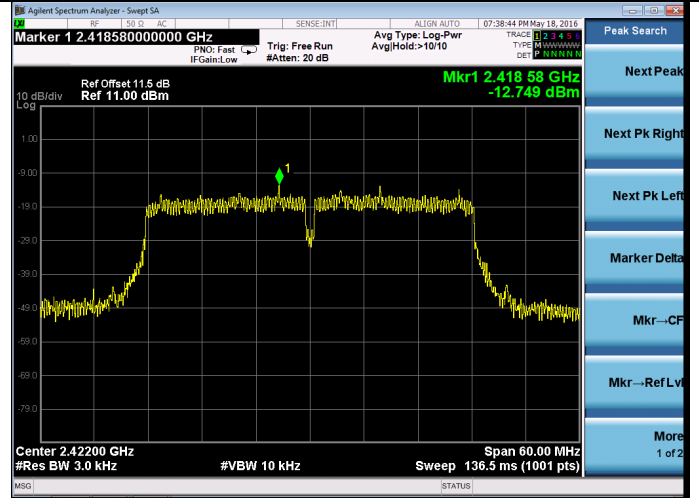
Test CH11: 2462MHz



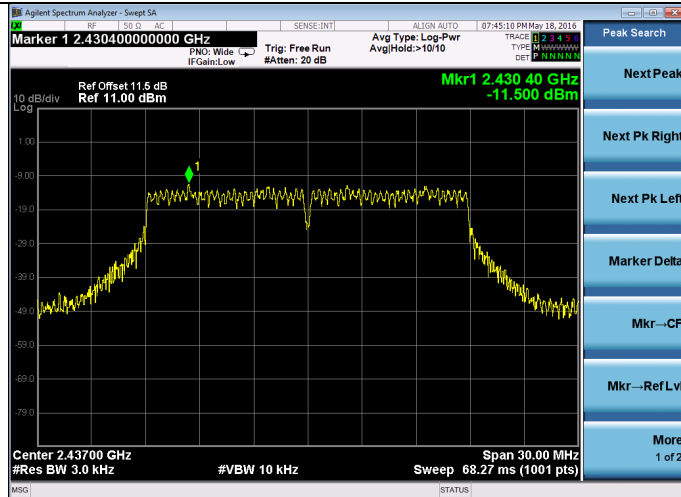
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



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



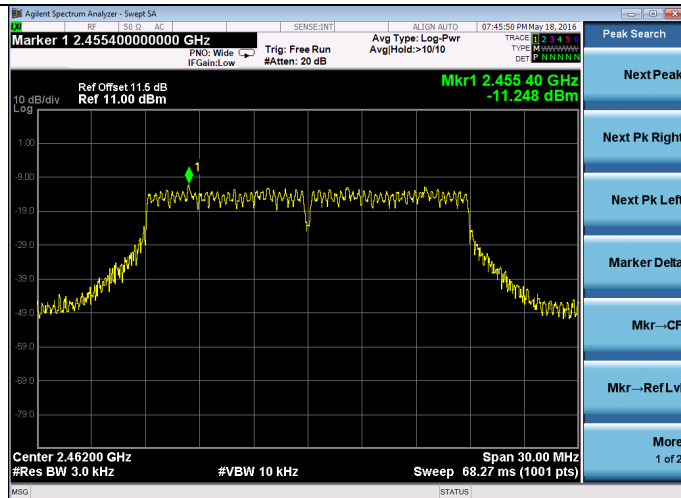
Test CH6: 2437MHz



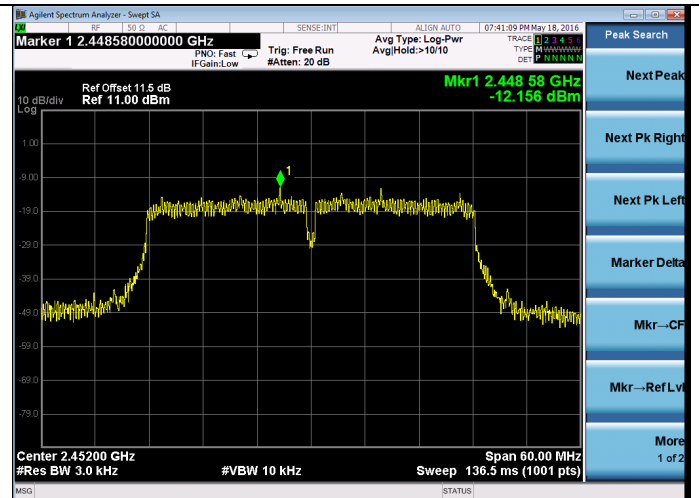
Test CH6: 2437MHz



Test CH11: 2462MHz

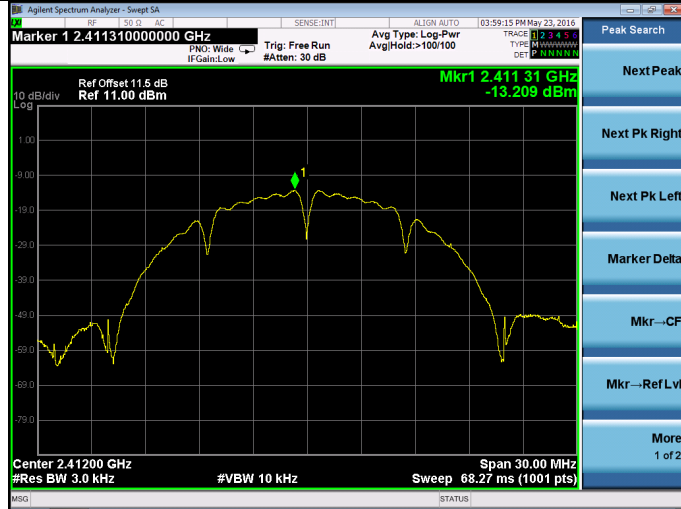


Test CH9: 2452MHz

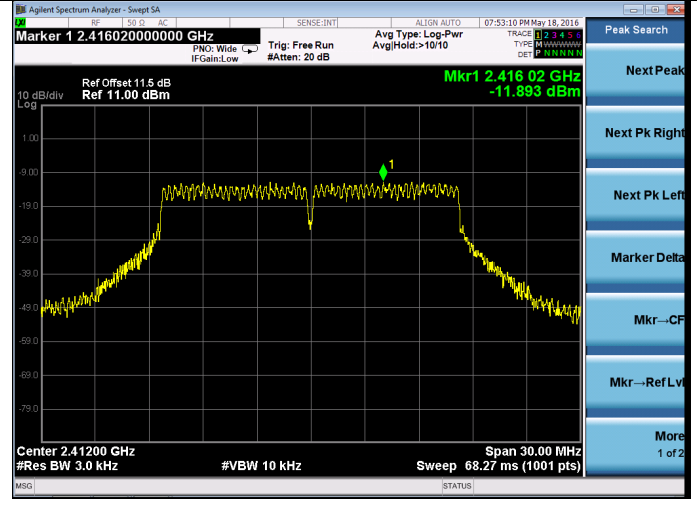


ANT2:

Test Mode: IEEE 802.11b
Test CH1: 2412MHz



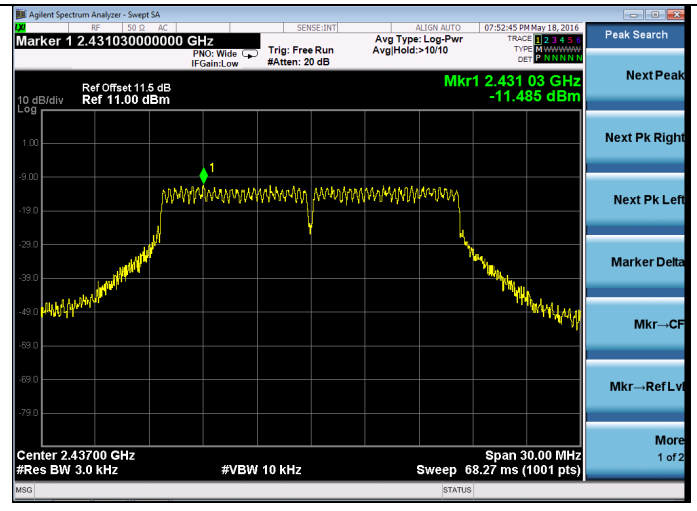
Test Mode: IEEE 802.11g
Test CH1: 2412MHz



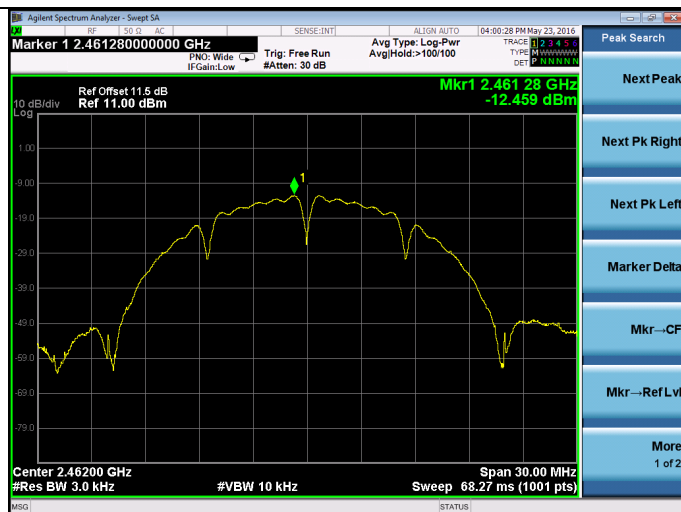
Test CH6: 2437MHz



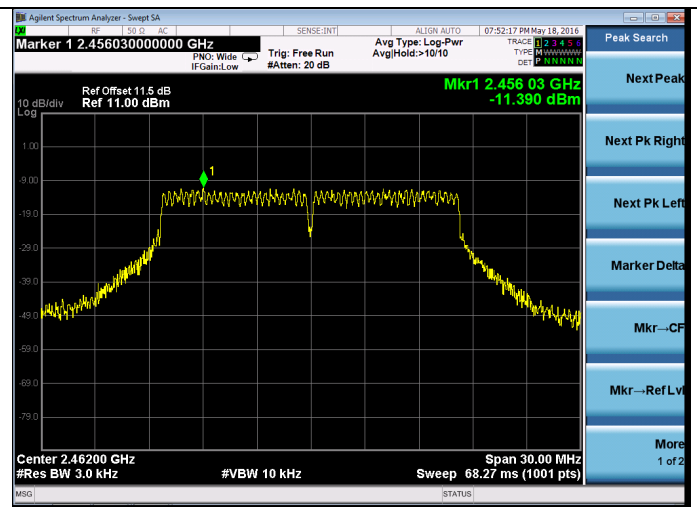
Test CH6: 2437MHz



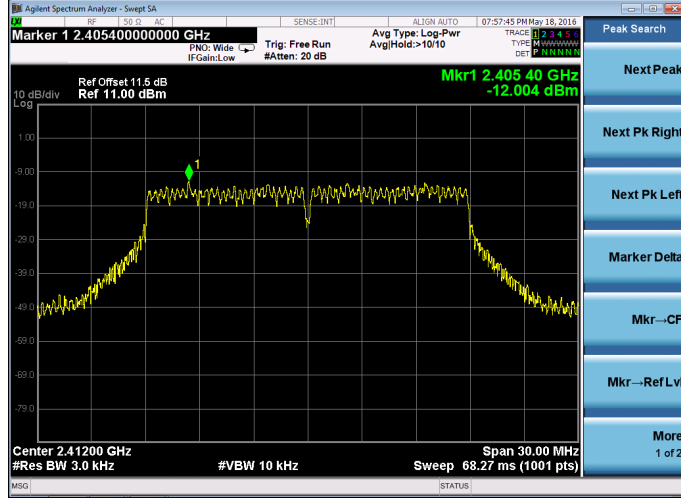
Test CH11: 2462MHz



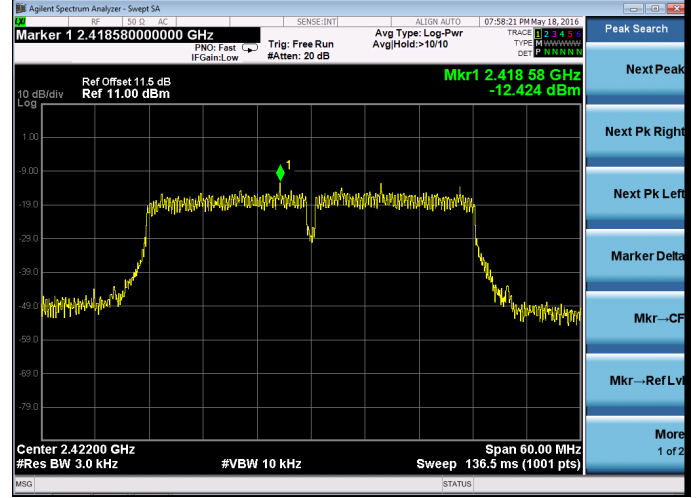
Test CH11: 2462MHz



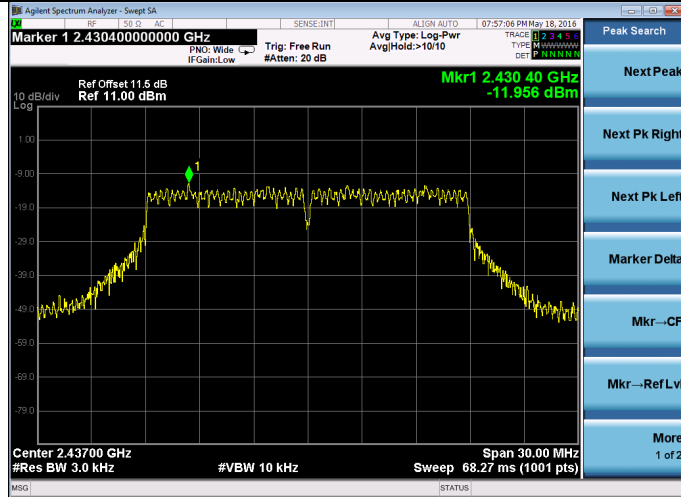
Test Mode: IEEE 802.11n HT20
Test CH1: 2412MHz



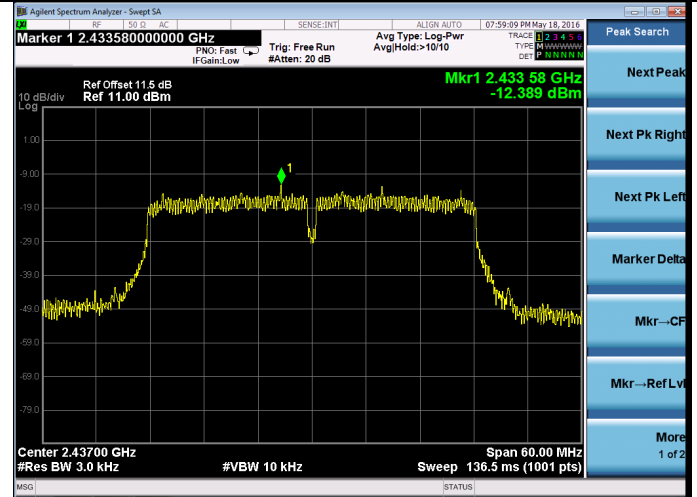
Test Mode: IEEE 802.11n HT40
Test CH3: 2422MHz



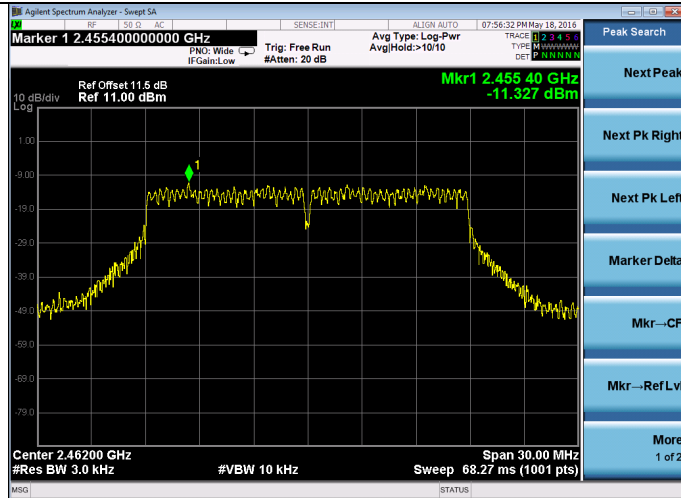
Test CH6: 2437MHz



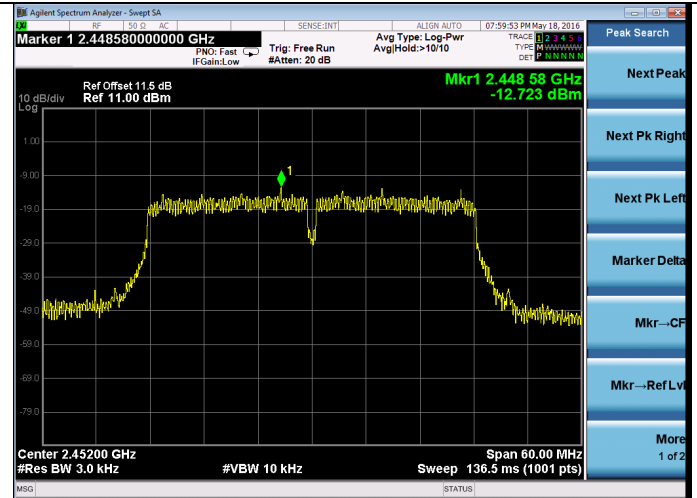
Test CH6: 2437MHz



Test CH11: 2462MHz



Test CH9: 2452MHz



11. ANTENNA REQUIREMENT

11.1. 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.

11.2. Antenna Connected Construction

The antennas used for this product are PCB Layout 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 2.0dBi.

12.DEVIATION TO TEST SPECIFICATIONS

[NONE]