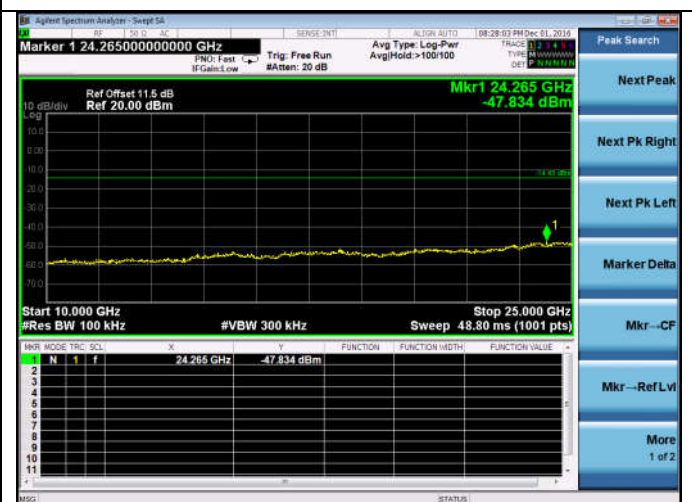
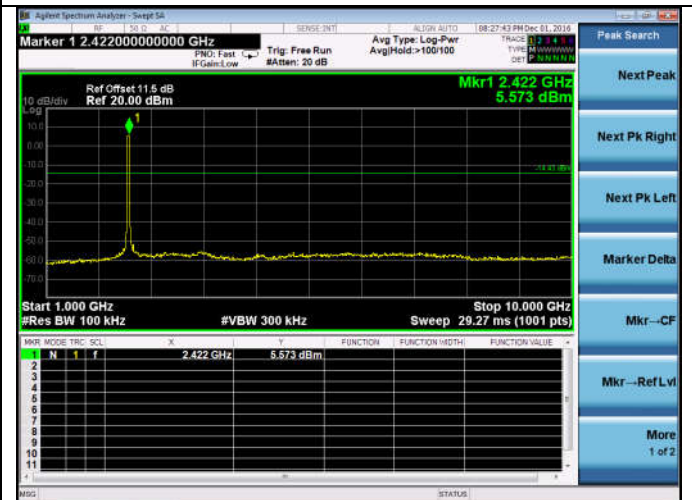
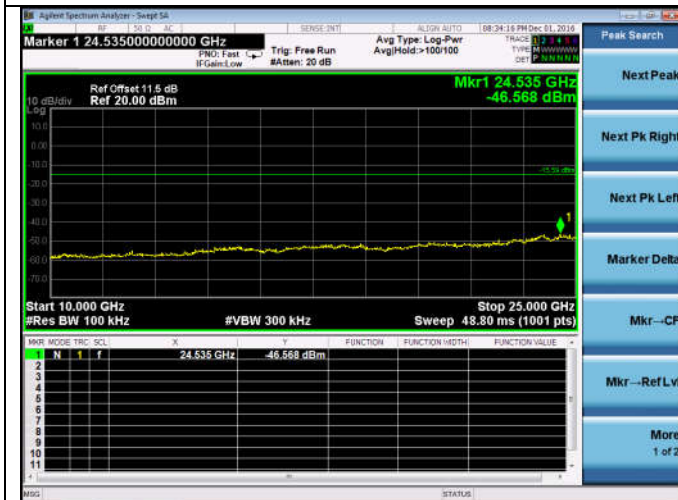
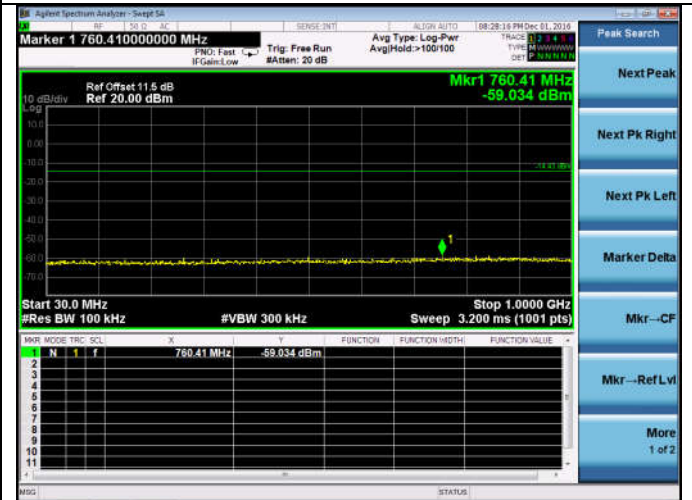
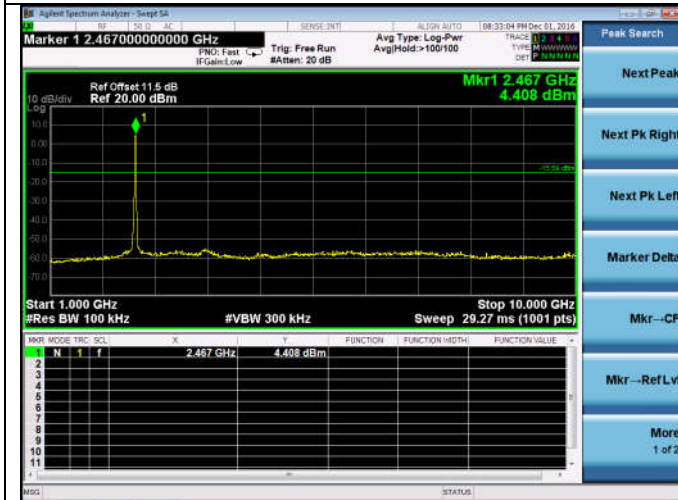
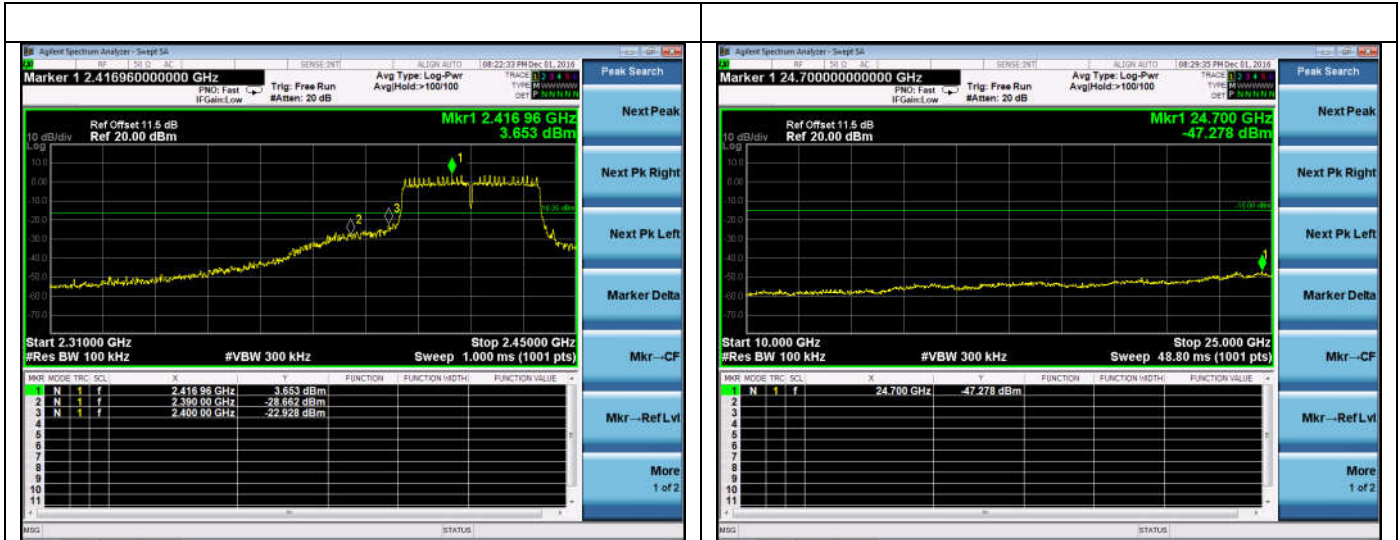
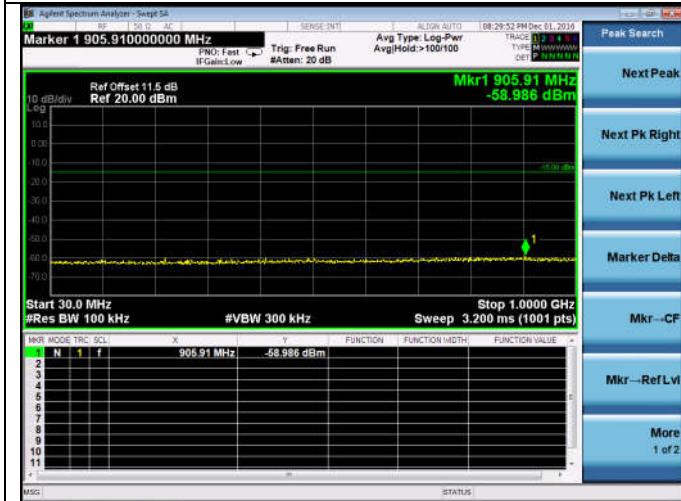


Test Mode: IEEE 802.11n HT40  
Test CH3: 2422MHz

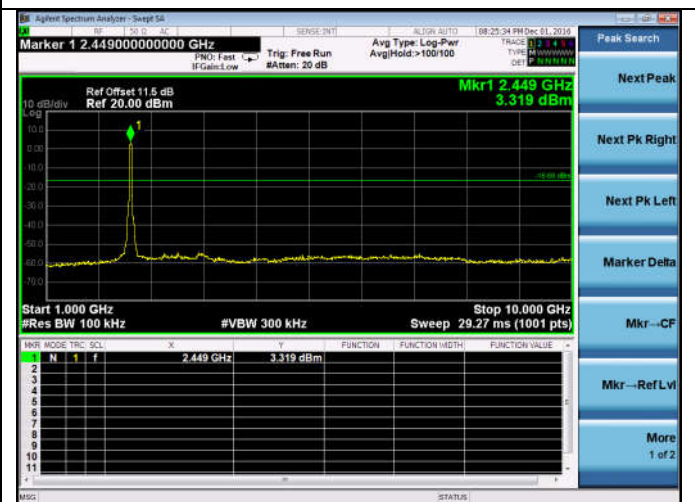
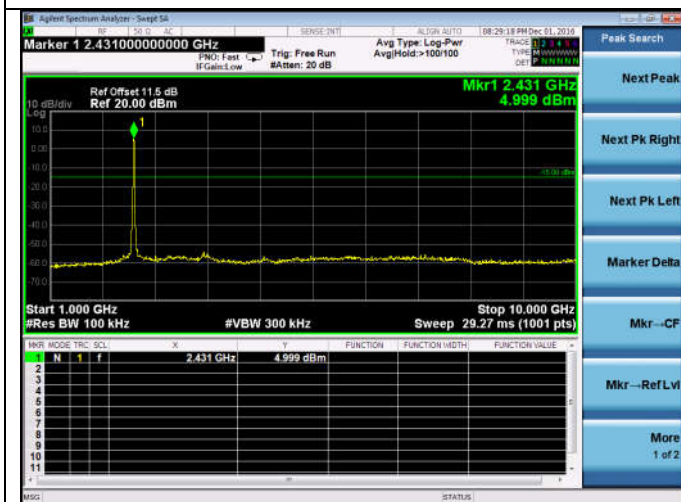
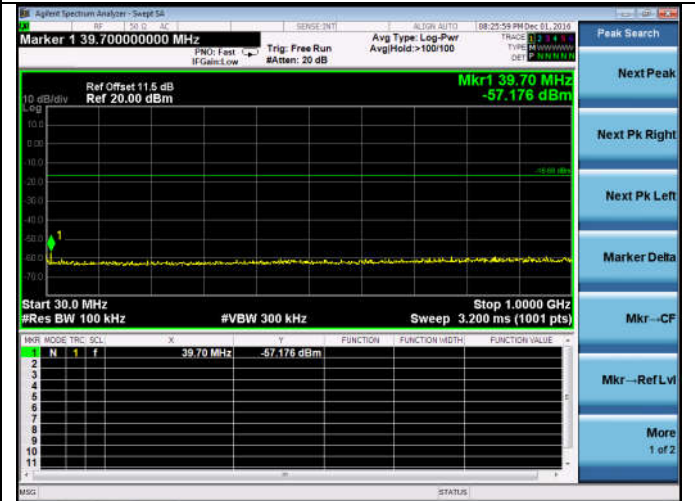


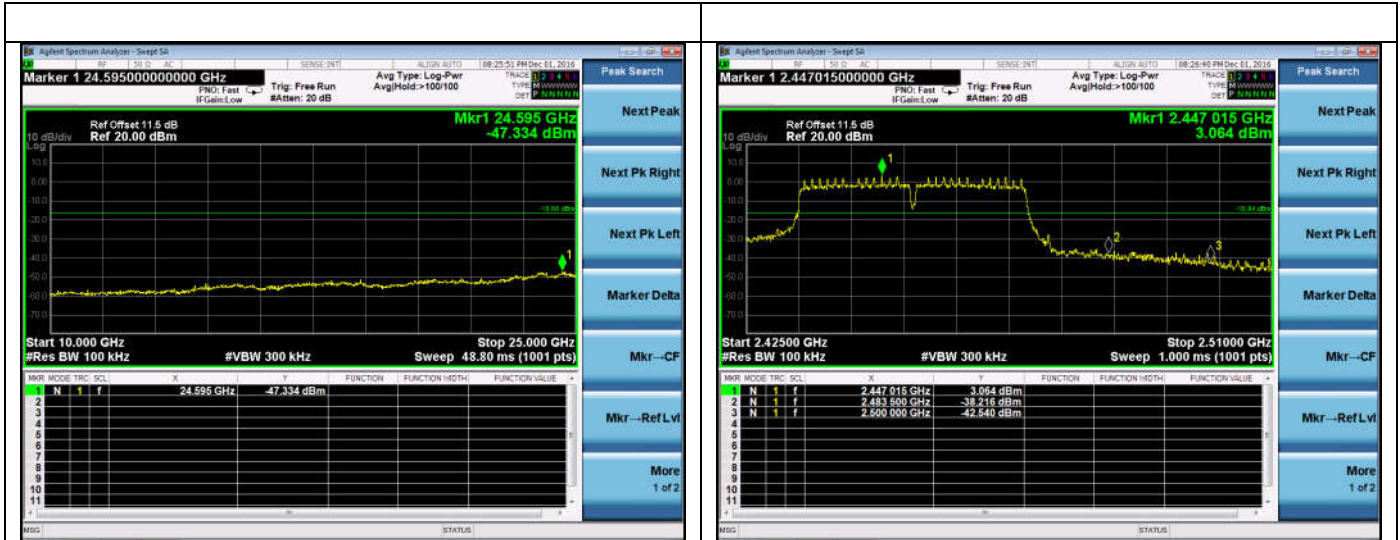


### Test CH6: 2437MHz



### 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	ETC	MCTD 1209	DRH15F03007	Apr.11,16	1 Year
4.	HF Cable	Hubersuhner	Sucoflex104	274094/4	Apr.24,16	1 Year

### 6.2. Limit

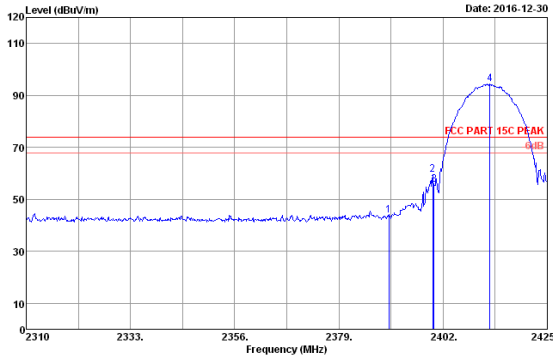
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental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

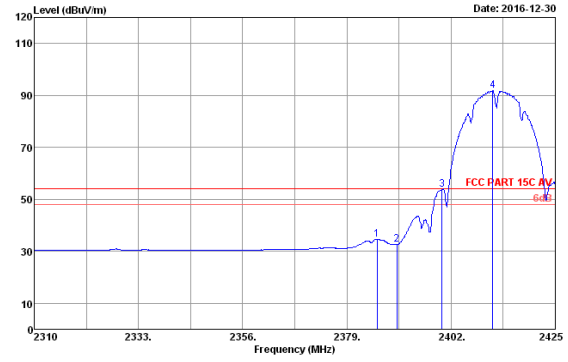
Pass (The testing data was attached in the next pages.)



Site no. : 3m Chamber Data no. : 1  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11b 2412MHz Tx Mode  
 M/N:CR2

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	28.12	8.33	43.91	36.39	43.97	74.00	30.03	Peak
2	2399.00	28.14	8.34	59.50	36.39	59.59	74.00	14.41	Peak
3	2400.00	28.14	8.34	55.43	36.39	55.52	74.00	18.48	Peak
4	2412.35	28.16	8.35	94.16	36.39	94.28	74.00	-20.28	Peak

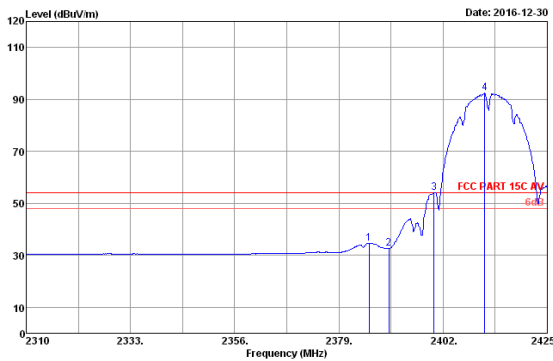
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 2  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11b 2412MHz Tx Mode  
 M/N:CR2

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	2385.67	28.12	8.32	34.56	36.39	34.61	54.00	19.39	Average
2	2390.00	28.12	8.33	32.63	36.39	32.69	54.00	21.31	Average
3	2400.00	28.14	8.34	53.78	36.39	53.87	54.00	0.13	Average
4	2411.20	28.16	8.35	91.80	36.39	91.92	54.00	-37.92	Average

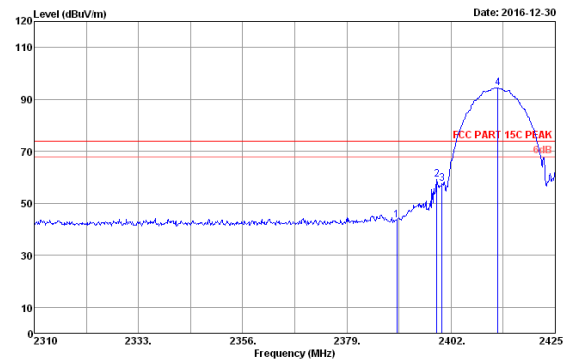
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 3  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11b 2412MHz Tx Mode  
 M/N:CR2

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	2385.67	28.12	8.32	34.64	36.39	34.69	54.00	19.31	Average
2	2390.00	28.12	8.33	32.65	36.39	32.71	54.00	21.29	Average
3	2400.00	28.14	8.34	54.07	36.39	54.16	54.00	-0.16	Average
4	2411.20	28.16	8.35	92.30	36.39	92.42	54.00	-38.42	Average

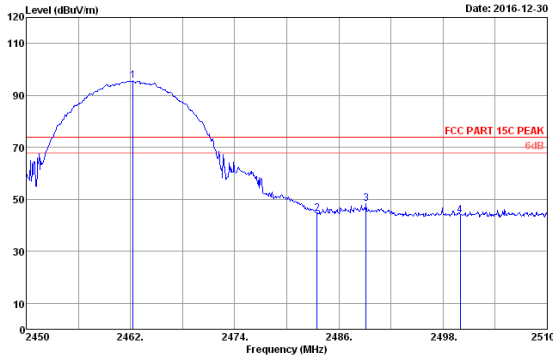
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 4  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11b 2412MHz Tx Mode  
 M/N:CR2

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	28.12	8.33	43.49	36.39	43.55	74.00	30.45	Peak
2	2398.90	28.14	8.34	59.18	36.39	59.27	74.00	14.73	Peak
3	2400.00	28.14	8.34	57.38	36.39	57.47	74.00	16.53	Peak
4	2412.35	28.16	8.35	94.37	36.39	94.49	74.00	-20.49	Peak

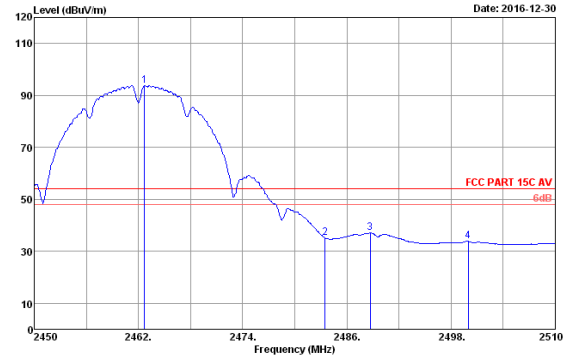
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 5  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11b 2462MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2462.30	28.24	8.40	95.29	36.38	95.55	74.00	-21.55	Peak
2	2483.50	28.27	8.42	44.17	36.38	44.48	74.00	29.52	Peak
3	2489.12	28.28	8.43	48.11	36.38	48.44	74.00	25.56	Peak
4	2500.00	28.30	8.44	43.54	36.38	43.90	74.00	30.10	Peak

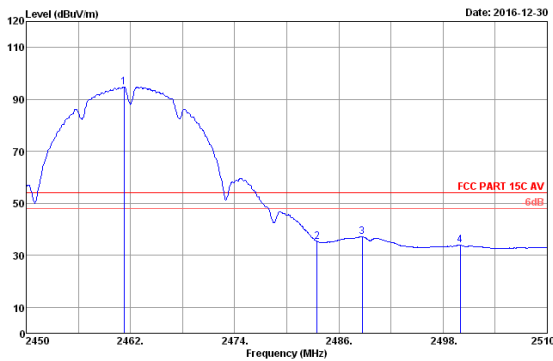
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 6  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11b 2462MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2462.72	28.24	8.40	93.52	36.38	93.78	54.00	-39.78	Average
2	2483.50	28.27	8.42	34.90	36.38	35.11	54.00	18.89	Average
3	2488.70	28.28	8.43	36.67	36.38	37.00	54.00	17.00	Average
4	2500.00	28.30	8.44	33.43	36.38	33.79	54.00	20.21	Average

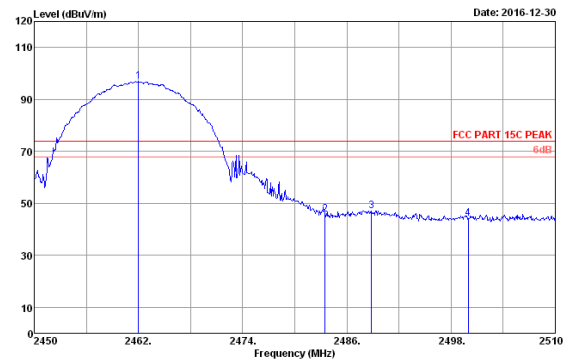
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 7  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11b 2462MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2461.28	28.24	8.40	94.59	36.38	94.85	54.00	-40.85	Average
2	2483.50	28.27	8.42	34.99	36.38	35.30	54.00	18.70	Average
3	2488.70	28.28	8.43	36.78	36.38	37.11	54.00	16.89	Average
4	2500.00	28.30	8.44	33.48	36.38	33.84	54.00	20.16	Average

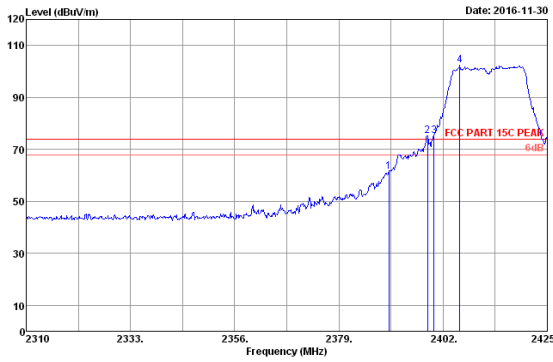
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 8  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11b 2462MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2462.00	28.24	8.40	96.68	36.38	96.94	74.00	-22.94	Peak
2	2483.50	28.27	8.42	45.57	36.38	45.88	74.00	28.12	Peak
3	2488.82	28.28	8.43	46.86	36.38	47.19	74.00	26.81	Peak
4	2500.00	28.30	8.44	43.85	36.38	44.21	74.00	29.79	Peak

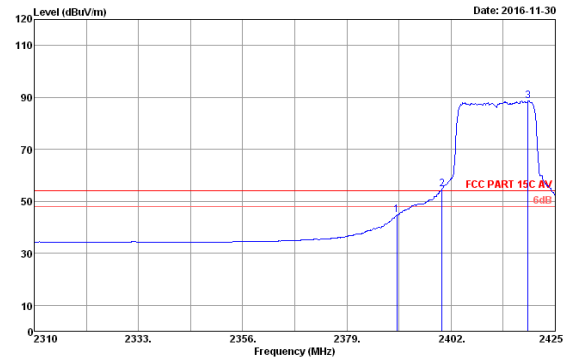
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 33  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11g 2412MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.12	8.33	61.23	36.39	61.29	74.00	12.71	Peak
2	2398.55	28.14	8.34	75.25	36.39	75.34	74.00	-1.34	Peak
3	2400.00	28.14	8.34	75.00	36.39	75.09	74.00	-1.09	Peak
4	2405.68	28.16	8.34	102.37	36.39	102.47	74.00	-28.47	Peak

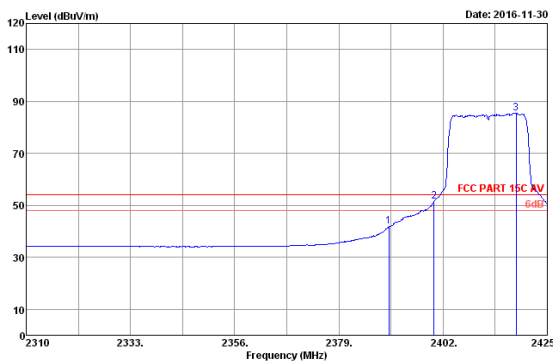
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 34  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11g 2412MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.12	8.33	44.61	36.39	44.67	54.00	9.33	Average
2	2400.00	28.14	8.34	54.67	36.39	54.76	54.00	-0.76	Average
3	2419.02	28.17	8.36	88.57	36.38	88.72	54.00	-34.72	Average

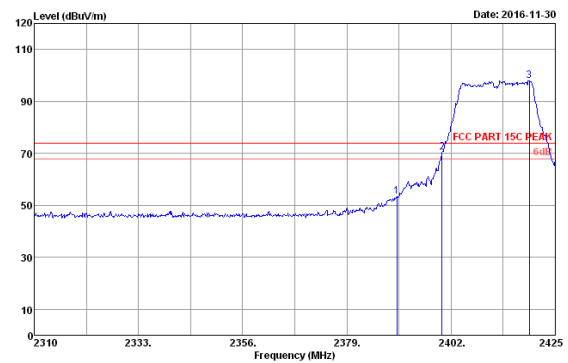
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 35  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11g 2412MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.12	8.33	41.73	36.39	41.79	54.00	12.21	Average
2	2400.00	28.14	8.34	51.42	36.39	51.51	54.00	2.49	Average
3	2418.10	28.17	8.36	85.44	36.38	85.59	54.00	-31.59	Average

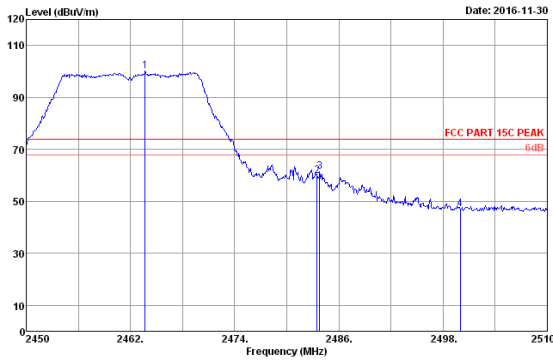
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 36  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11g 2412MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.12	8.33	53.26	36.39	53.32	74.00	20.68	Peak
2	2400.00	28.14	8.34	70.29	36.39	70.38	74.00	3.62	Peak
3	2419.25	28.17	8.36	97.81	36.38	97.96	74.00	-23.96	Peak

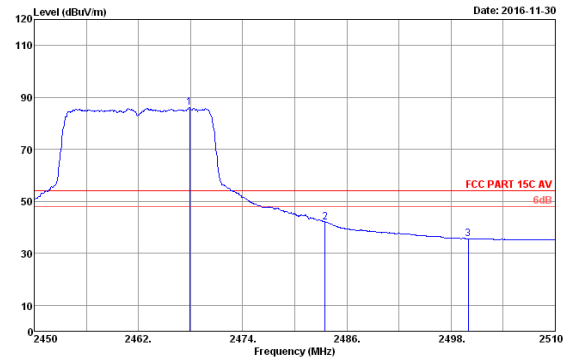
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 49  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11g 2462MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2463.68	28.24	8.40	99.77	36.38	100.03	74.00	-26.03	Peak
2	2483.50	28.27	8.42	58.61	36.38	59.92	74.00	14.08	Peak
3	2483.78	28.27	8.42	61.08	36.38	61.39	74.00	12.61	Peak
4	2500.00	28.30	8.44	46.54	36.38	46.90	74.00	27.10	Peak

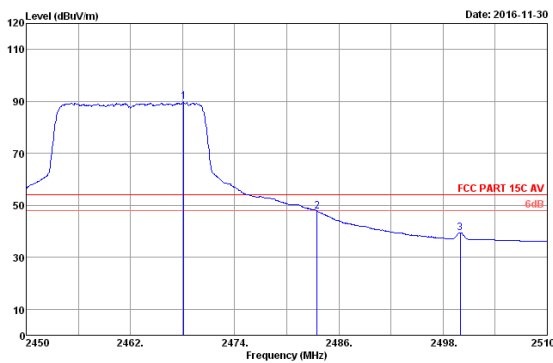
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
 -Ant Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 50  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11g 2462MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2467.88	28.25	8.41	85.78	36.38	86.06	54.00	-32.06	Average
2	2483.50	28.27	8.42	41.64	36.38	41.96	54.00	12.05	Average
3	2500.00	28.30	8.44	35.28	36.38	35.64	54.00	18.36	Average

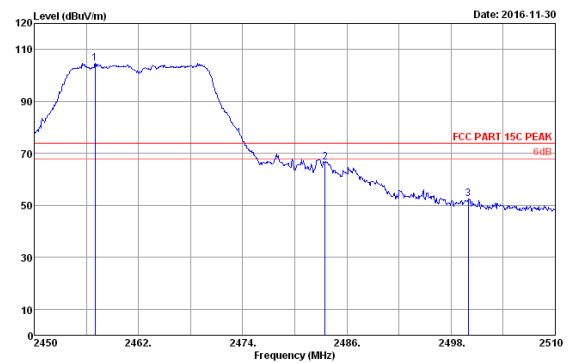
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
 -Ant Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 51  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11g 2462MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2468.12	28.25	8.41	89.48	36.38	89.76	54.00	-35.76	Average
2	2483.50	28.27	8.42	47.50	36.38	47.81	54.00	6.19	Average
3	2500.00	28.30	8.44	39.16	36.38	39.52	54.00	14.48	Average

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

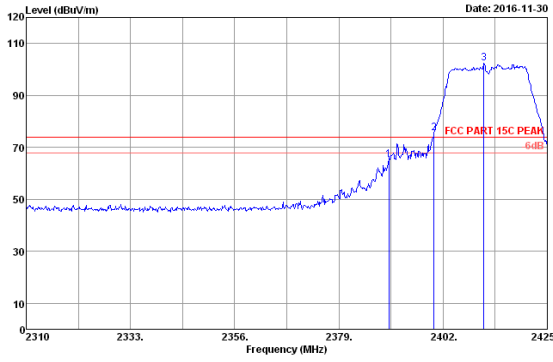


Site no. : 3m Chamber Data no. : 52  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11g 2462MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2457.02	28.23	8.40	104.36	36.38	104.61	74.00	-30.61	Peak
2	2483.50	28.27	8.42	66.10	36.38	66.41	74.00	7.59	Peak
3	2500.00	28.30	8.44	52.08	36.38	52.44	74.00	21.56	Peak

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

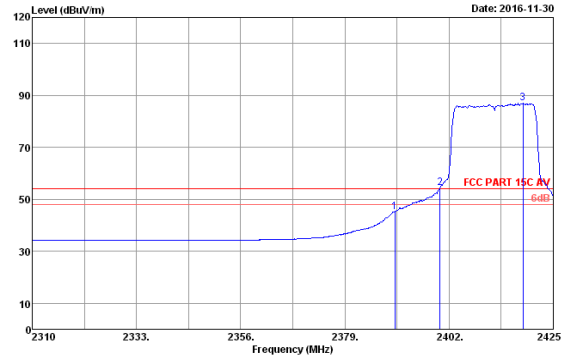




Site no. : 3m Chamber Data no. : 59  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 2412MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.12	8.33	65.24	36.39	65.30	74.00	8.70	Peak
2	2400.00	28.14	8.34	75.37	36.39	75.48	74.00	-1.46	Peak
3	2410.97	28.16	8.35	102.13	36.39	102.25	74.00	-28.25	Peak

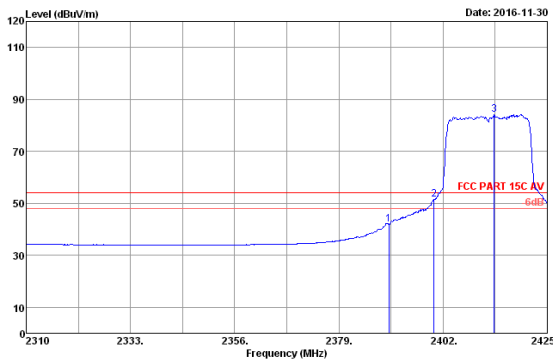
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 60  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 2412MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.12	8.33	45.14	36.39	45.20	54.00	8.80	Average
2	2400.00	28.14	8.34	54.27	36.39	54.36	54.00	-0.36	Average
3	2418.33	28.17	8.36	86.83	36.38	86.98	54.00	-32.98	Average

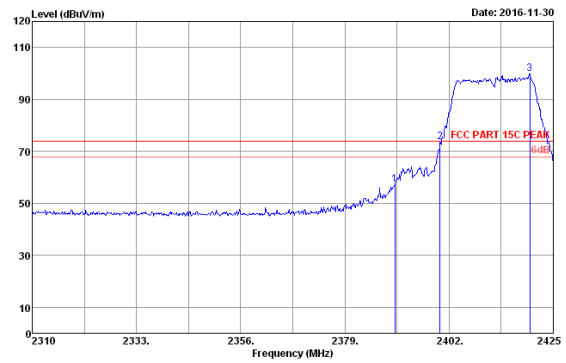
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 61  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 2412MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.12	8.33	42.02	36.39	42.08	54.00	11.92	Average
2	2400.00	28.14	8.34	51.41	36.39	51.50	54.00	2.50	Average
3	2413.27	28.16	8.35	84.09	36.39	84.21	54.00	-30.21	Average

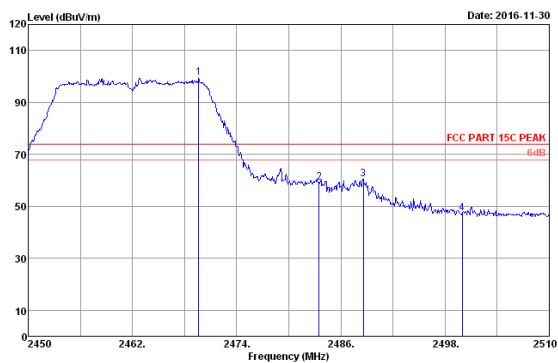
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 62  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9V From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 2412MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.00	28.12	8.33	57.15	36.39	57.21	74.00	16.79	Peak
2	2400.00	28.14	8.34	73.65	36.39	73.74	74.00	0.26	Peak
3	2419.83	28.17	8.36	99.60	36.38	99.75	74.00	-25.75	Peak

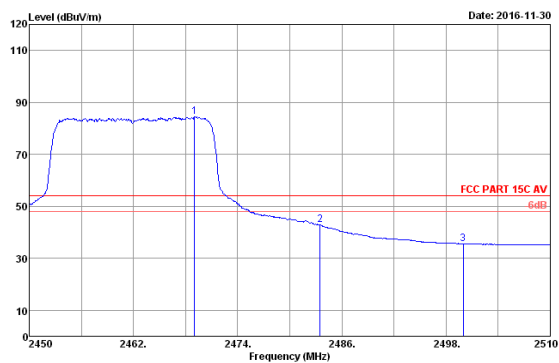
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 75  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 2462MHz Tx Mode  
 M/N:CR2

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	2469.02	28.25	8.41	99.09	36.38	99.37	74.00	-25.37	Peak
2	2483.50	28.27	8.42	58.96	36.38	59.27	74.00	14.73	Peak
3	2488.58	28.28	8.43	60.01	36.38	60.34	74.00	13.66	Peak
4	2500.00	28.30	8.44	47.12	36.38	47.48	74.00	26.52	Peak

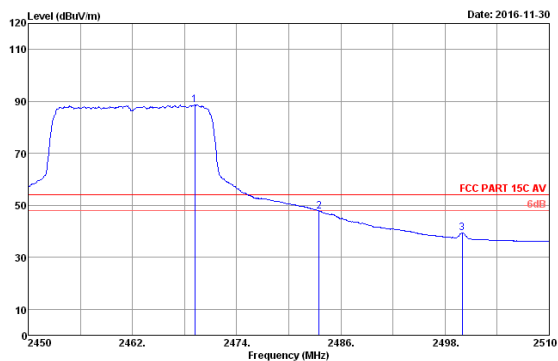
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
 -Ant Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 76  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 2462MHz Tx Mode  
 M/N:CR2

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	2469.02	28.25	8.41	84.19	36.38	84.47	54.00	-30.47	Average
2	2483.50	28.27	8.42	42.54	36.38	42.96	54.00	11.04	Average
3	2500.00	28.30	8.44	35.25	36.38	35.61	54.00	18.39	Average

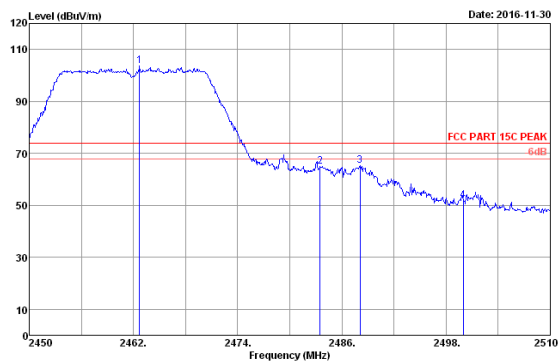
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
 -Ant Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 77  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 2462MHz Tx Mode  
 M/N:CR2

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	2469.02	28.25	8.41	88.39	36.38	88.67	54.00	-34.67	Average
2	2483.50	28.27	8.42	47.47	36.38	47.78	54.00	6.22	Average
3	2500.00	28.30	8.44	38.96	36.38	39.32	54.00	14.68	Average

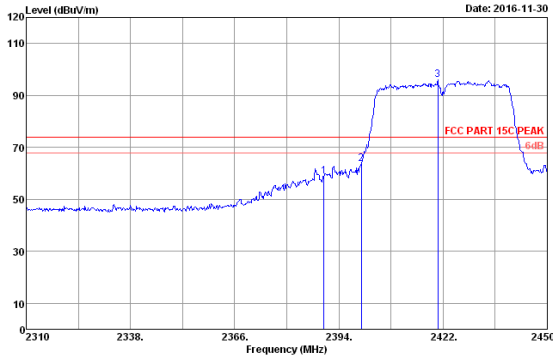
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
 -Ant Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 78  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT20 2462MHz Tx Mode  
 M/N:CR2

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	2469.02	28.25	8.41	103.41	36.38	103.67	74.00	-29.67	Peak
2	2483.50	28.27	8.42	64.50	36.38	64.81	74.00	9.19	Peak
3	2488.58	28.28	8.43	65.06	36.38	65.39	74.00	8.61	Peak
4	2500.00	28.30	8.44	51.56	36.38	51.92	74.00	22.08	Peak

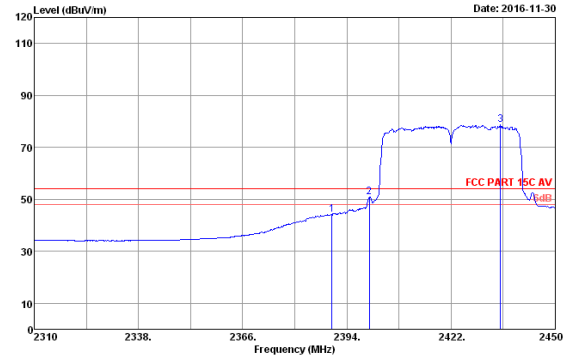
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading  
 -Ant Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 85  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 2422MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2390.00	28.12	8.33	58.92	36.39	58.98	74.00	15.02	Peak
2	2400.00	28.14	8.34	63.49	36.39	63.58	74.00	10.42	Peak
3	2420.60	28.17	8.36	95.70	36.38	95.85	74.00	-21.85	Peak

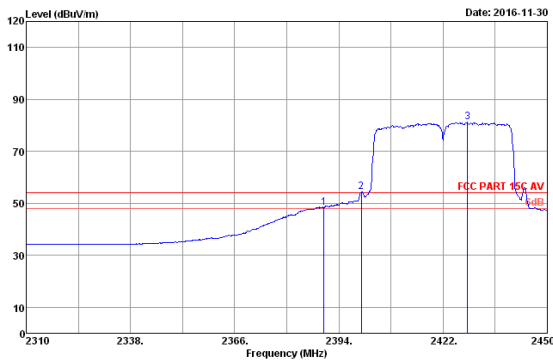
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 86  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 2422MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2390.00	28.12	8.33	43.97	36.39	44.03	54.00	9.97	Average
2	2400.00	28.14	8.34	50.84	36.39	50.93	54.00	3.07	Average
3	2435.30	28.20	8.37	78.40	36.38	78.59	54.00	-24.59	Average

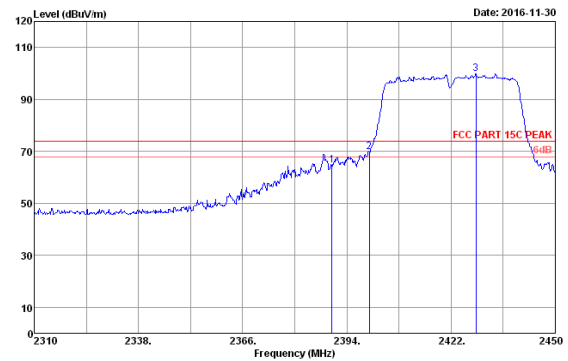
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 87  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 2422MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2390.00	28.12	8.33	48.41	36.39	48.47	54.00	5.53	Average
2	2400.00	28.14	8.34	54.36	36.39	54.45	54.00	-0.45	Average
3	2428.58	28.19	8.37	80.96	36.38	81.14	54.00	-27.14	Average

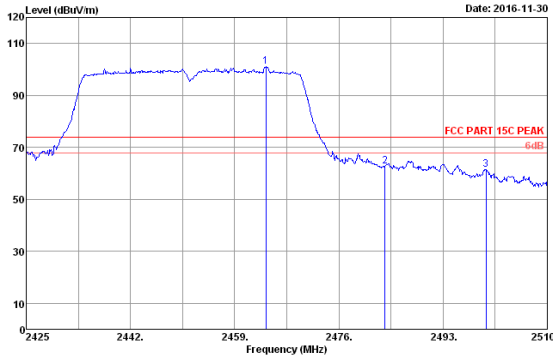
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 88  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 2422MHz Tx Mode  
 M/N:CR2

No.	Freq. (MHz)	Ant. Factor (dB/a)	Cable Loss (dB)	Reading factor (dBuV)	AMP factor (dB)	Emission Level (dBuV/a)	Limits (dBuV/a)	Margin (dB)	Remark
1	2390.00	28.12	8.33	64.57	36.39	64.63	74.00	9.37	Peak
2	2400.00	28.14	8.34	69.83	36.39	69.92	74.00	4.08	Peak
3	2428.72	28.19	8.37	99.80	36.38	99.98	74.00	-25.98	Peak

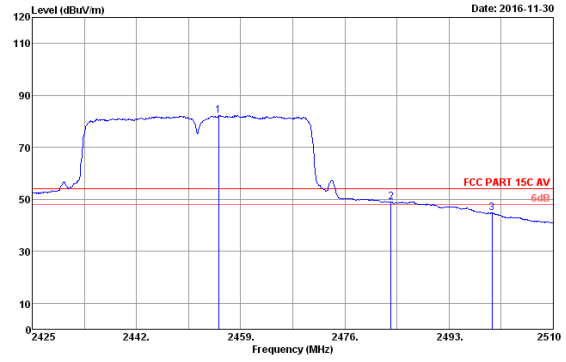
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 101  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 2452MHz Tx Mode  
 M/N:CR2

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	2455.43	28.24	8.40	100.92	36.38	101.18	74.00	-27.18	Peak
2	2453.50	28.27	8.42	62.30	36.38	62.61	74.00	11.39	Peak
3	2500.00	28.30	8.44	60.96	36.38	61.32	74.00	12.68	Peak

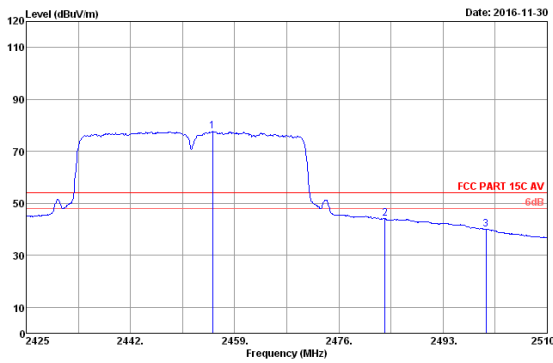
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 102  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : VERTICAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 2452MHz Tx Mode  
 M/N:CR2

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	2455.43	28.23	8.39	82.08	36.38	82.32	54.00	-28.32	Average
2	2453.50	28.27	8.42	48.67	36.38	48.98	54.00	5.02	Average
3	2500.00	28.30	8.44	44.39	36.38	44.75	54.00	9.25	Average

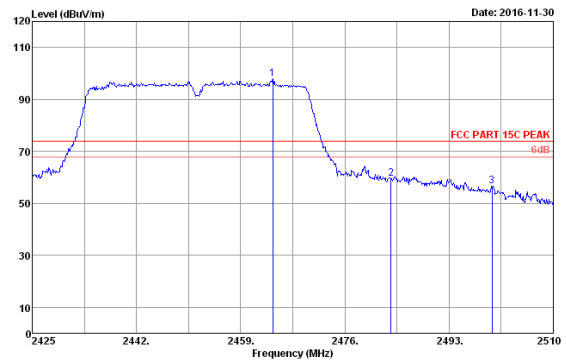
Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor  
 2. The emission levels that are 20dB below the official limit are not reported.



Site no. : 3m Chamber Data no. : 103  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C AV Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 2452MHz Tx Mode  
 M/N:CR2

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	2455.43	28.23	8.39	77.36	36.38	77.60	54.00	-23.60	Average
2	2453.50	28.27	8.42	43.76	36.38	44.07	54.00	9.93	Average
3	2500.00	28.30	8.44	39.61	36.38	39.97	54.00	14.03	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. : 104  
 Dis. / Ant. : 3m 2016 MCTD1209 3007 Ant. pol. : HORIZONTAL  
 Limit : FCC PART 15C PEAK Pre : 101.2kPa  
 Env. / Ins. : 23.1°C/54.9% Engineer : Lynn  
 EUT : CaptionCall Wireless Router 2  
 Power rating : DC 9W From Adapter Input AC 120V/60Hz  
 Test Mode : IEEE802.11nHT40 2452MHz Tx Mode  
 M/N:CR2

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	2455.43	28.24	8.40	97.63	36.38	97.89	74.00	-23.89	Peak
2	2453.50	28.27	8.42	59.32	36.38	59.63	74.00	14.37	Peak
3	2500.00	28.30	8.44	56.43	36.38	56.79	74.00	17.21	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.

## 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.15,16	1 Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.23,16	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.15,16	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: CaptionCall Wireless Router 2		
M/N: CR2		
Test date: 2017-01-02	Pressure: 102.3±1.0 kpa	Humidity: 51.5±3.0%
Tested by: Lynn	Test site: RF site	Temperature: 22.1±0.6 °C

Test Mode	CH	6dB bandwidth ( MHz )		Limit (KHz)
		ANT A	ANT B	
11b	CH1	10.06	10.04	≥ 500
	CH6	10.03	10.03	≥ 500
	CH11	10.02	10.03	≥ 500
11g	CH1	16.36	16.36	≥ 500
	CH6	16.36	16.36	≥ 500
	CH11	16.35	16.36	≥ 500
11n HT20	CH1	17.58	17.58	≥ 500
	CH6	17.60	17.58	≥ 500
	CH11	17.60	17.59	≥ 500
11n HT40	CH3	35.71	35.41	≥ 500
	CH6	35.72	35.40	≥ 500
	CH9	35.40	35.40	≥ 500
Conclusion : PASS				

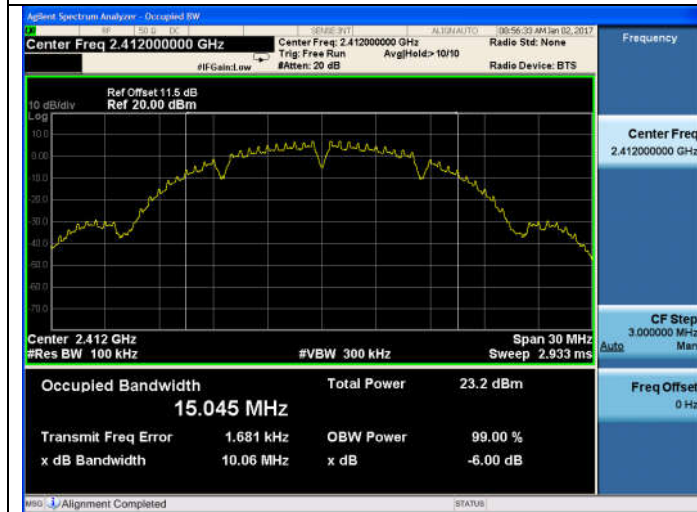
**ANTA:**

Test Mode: IEEE 802.11b

Test CH1: 2412MHz

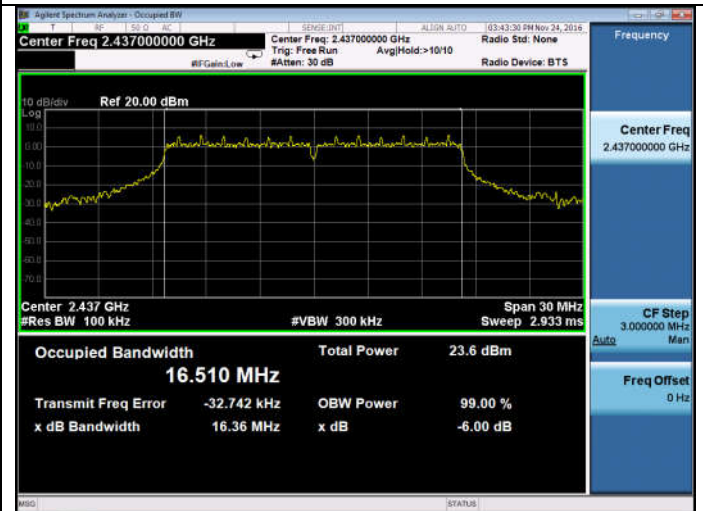
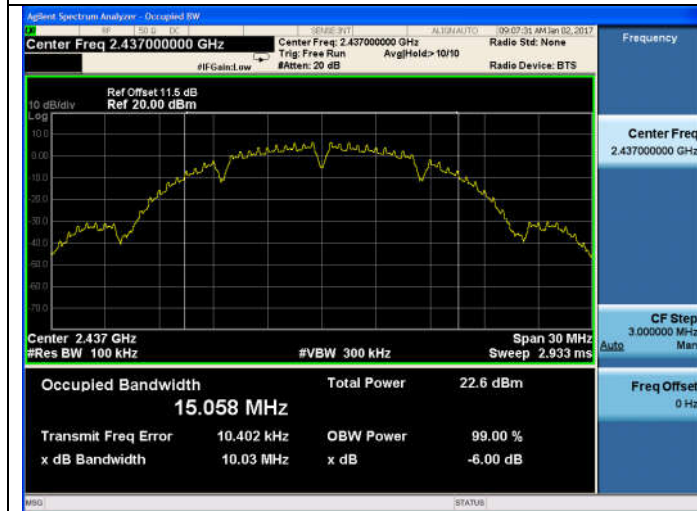
Test Mode: IEEE 802.11g

Test CH1: 2412MHz



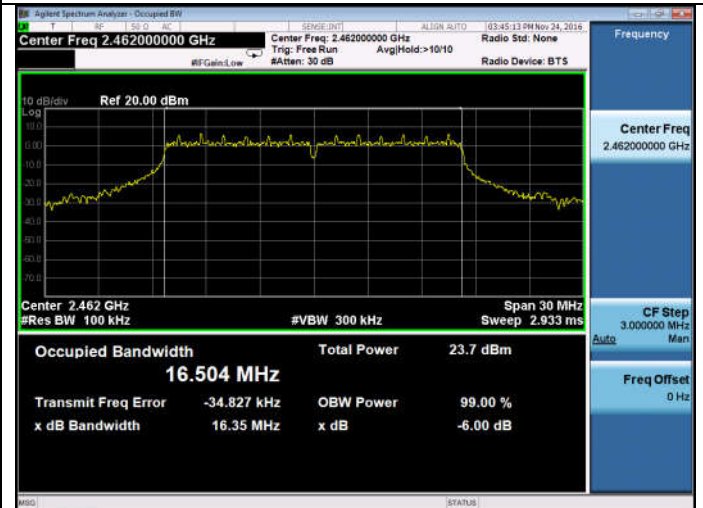
Test CH6: 2437MHz

Test CH6: 2437MHz



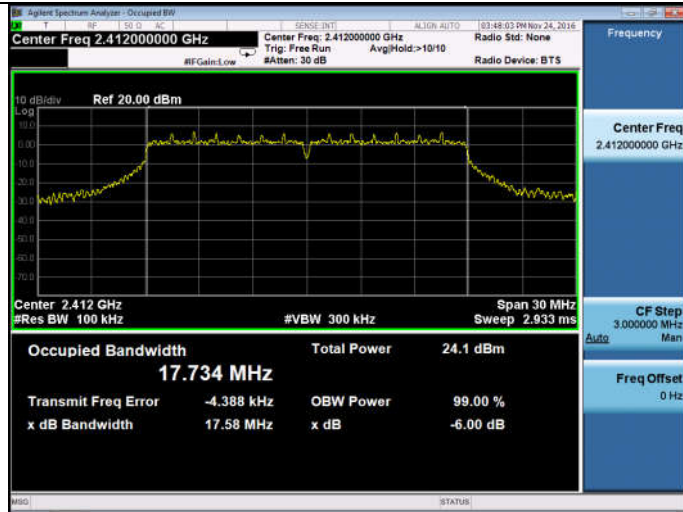
Test CH11: 2462MHz

Test CH11: 2462MHz

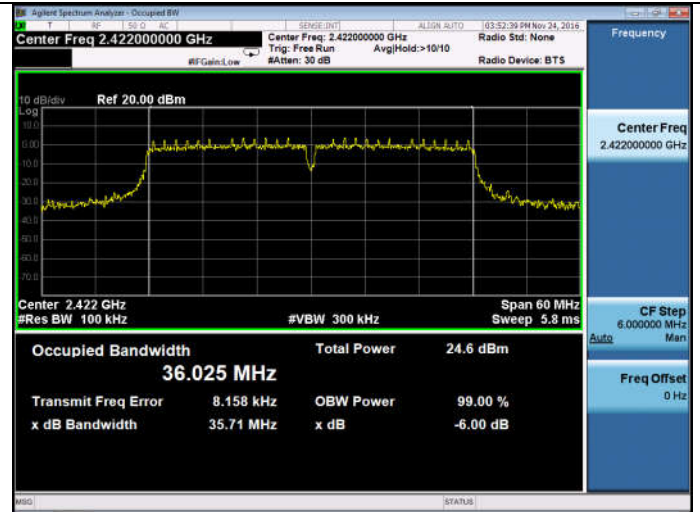




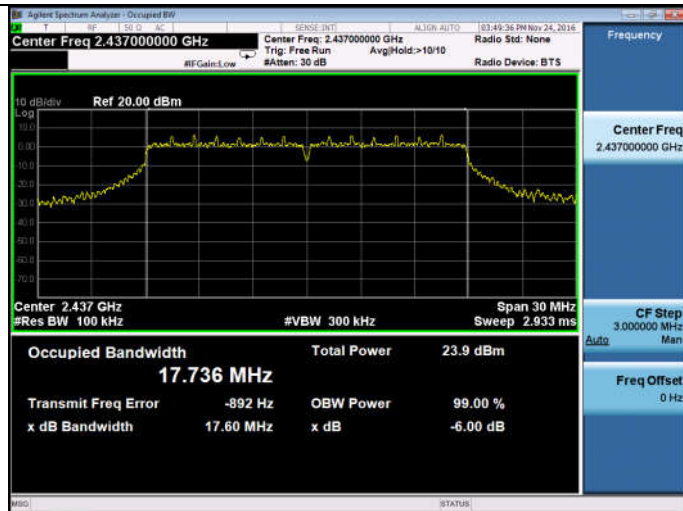
Test Mode: IEEE 802.11n HT20  
Test CH1: 2412MHz



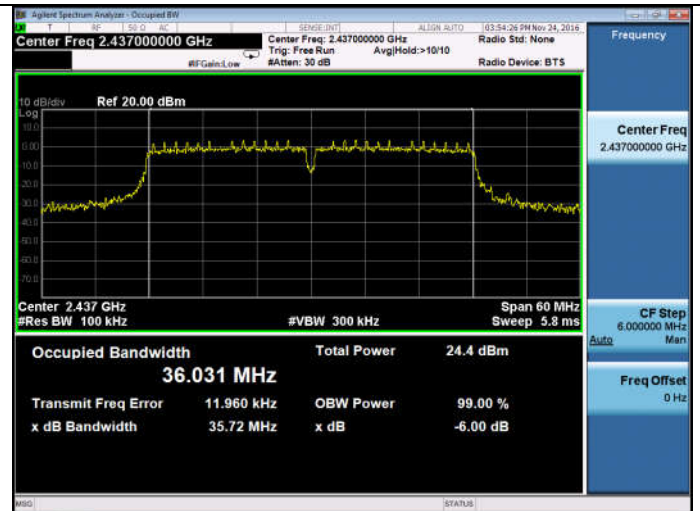
Test Mode: IEEE 802.11n HT40  
Test CH3: 2422MHz



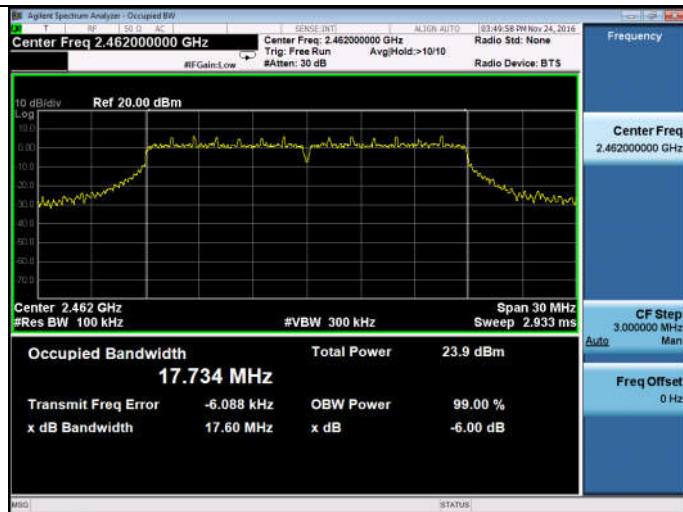
Test CH6: 2437MHz



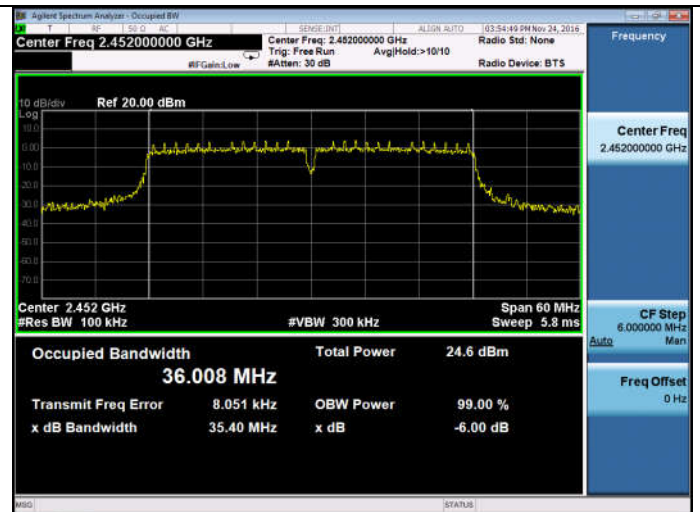
Test CH6: 2437MHz



Test CH11: 2462MHz



Test CH9: 2452MHz



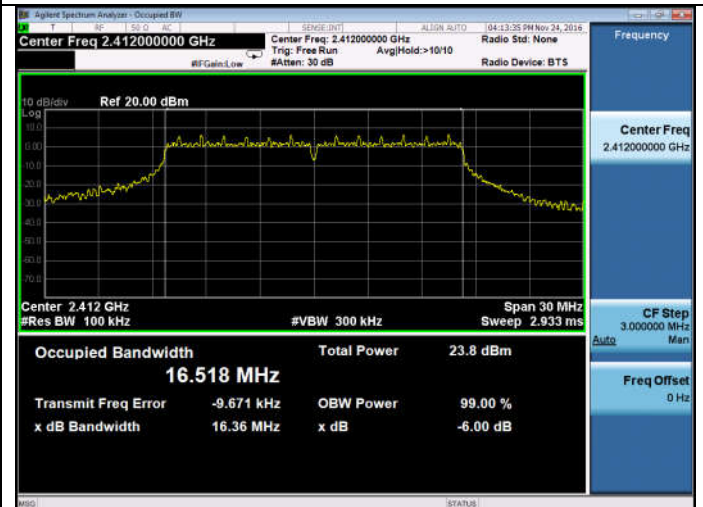
**ANTB:**

Test Mode: IEEE 802.11b

Test CH1: 2412MHz

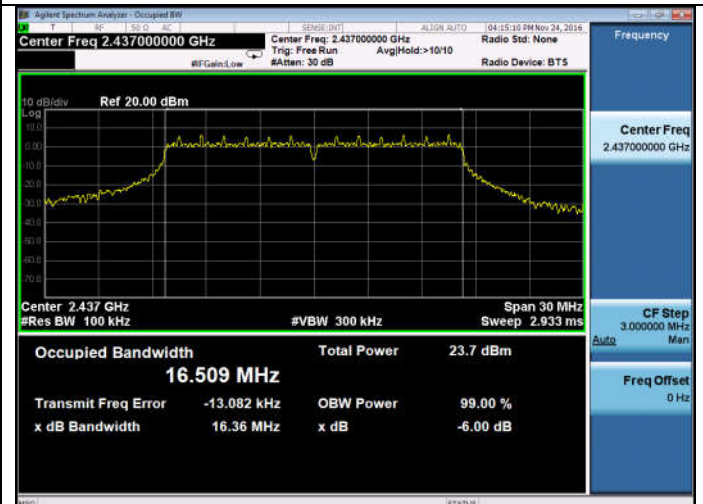
Test Mode: IEEE 802.11g

Test CH1: 2412MHz



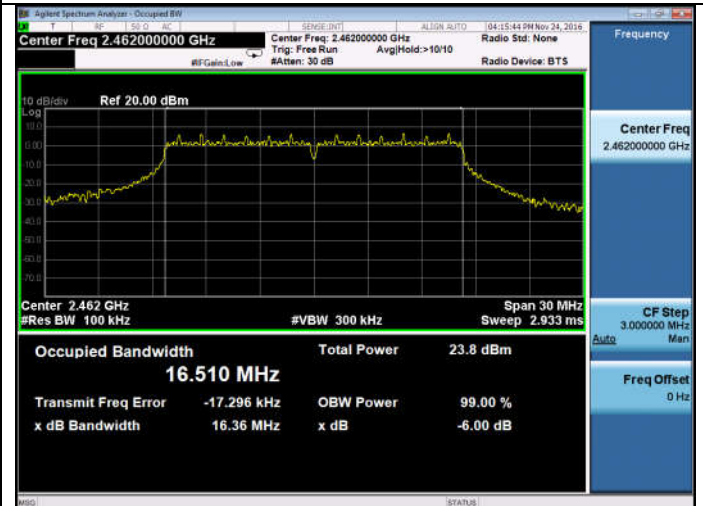
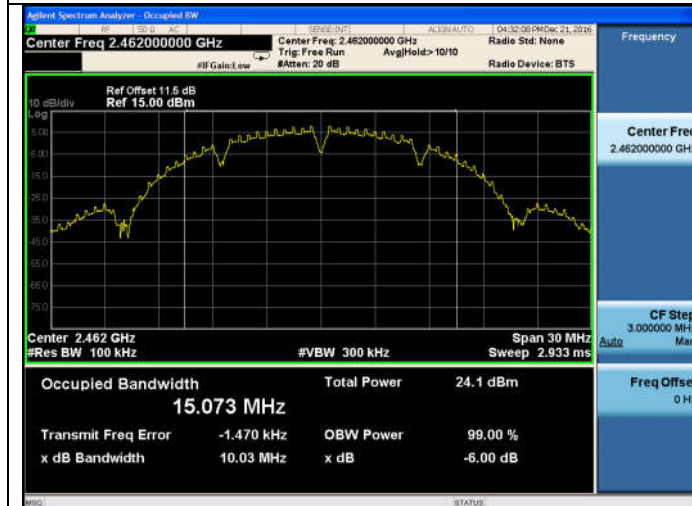
Test CH6: 2437MHz

Test CH6: 2437MHz



Test CH11: 2462MHz

Test CH11: 2462MHz

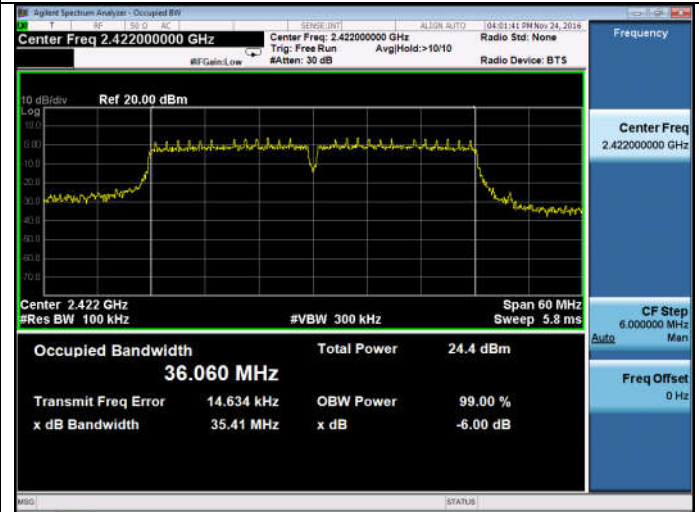




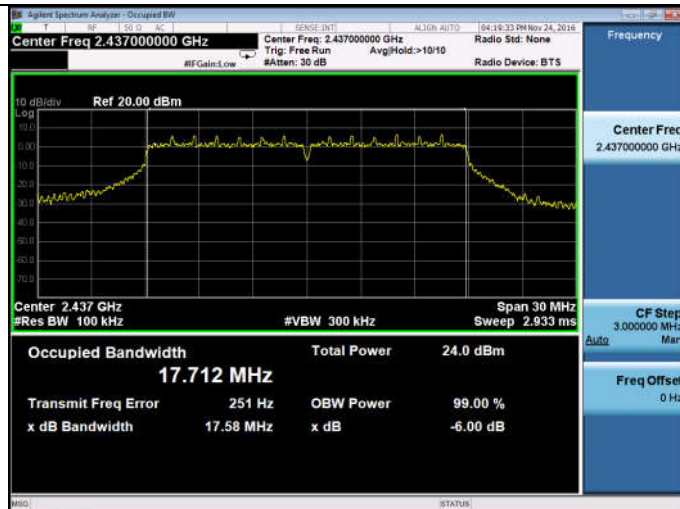
Test Mode: IEEE 802.11n HT20  
Test CH1: 2412MHz



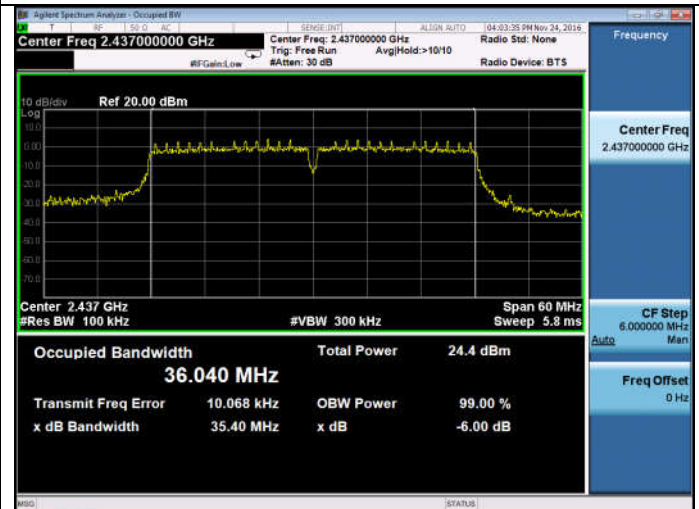
Test Mode: IEEE 802.11n HT40  
Test CH3: 2422MHz



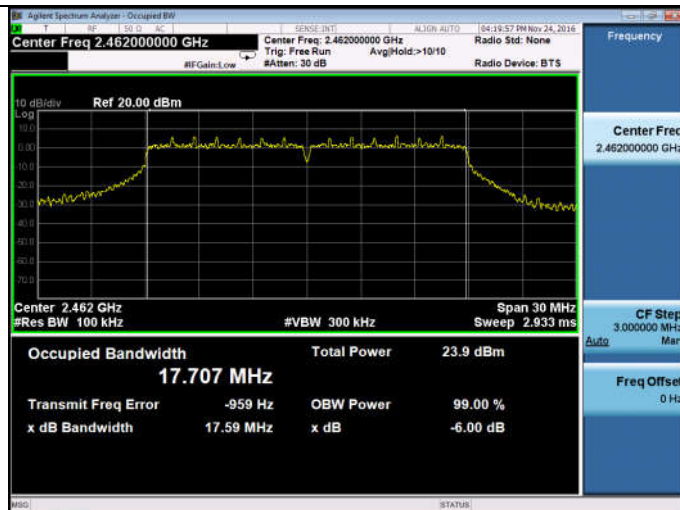
Test CH6: 2437MHz



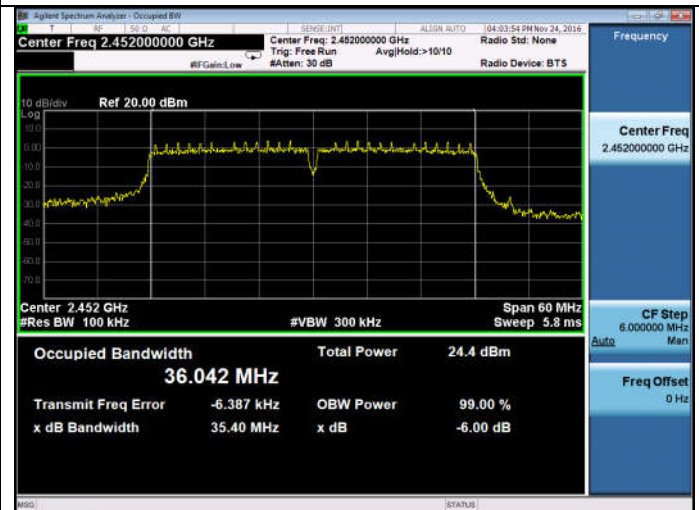
Test CH6: 2437MHz



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.15,16	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.15,16	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.

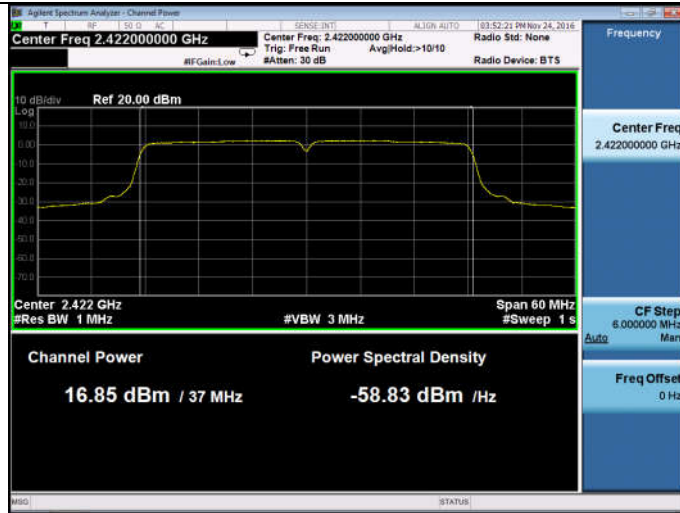
## 8.4. Test Results

EUT: CaptionCall Wireless Router 2					
M/N: CR2					
Test date: 2016-11-24		Pressure: 102.3±1.0 kpa		Humidity: 51.5±3.0%	
Tested by: Lynn		Test site: RF site		Temperature: 22.1±0.6 °C	
Test Mode	CH	output Power ( dBm )			Limit (dBm)
		ANT A	ANT B	Total	
11b	CH1	15.46	16.73	N/A	30
	CH6	15.14	16.88	N/A	30
	CH11	15.04	16.74	N/A	30
11g	CH1	16.77	16.52	N/A	30
	CH6	16.67	16.76	N/A	30
	CH11	16.65	16.60	N/A	30
11n HT20	CH1	16.54	16.34	19.45	29.361
	CH6	16.52	16.57	19.56	29.361
	CH11	16.44	16.41	19.44	29.361
11n HT40	CH3	16.85	16.66	19.77	29.361
	CH6	16.78	16.69	19.75	29.361
	CH9	16.69	16.60	19.66	29.361
Conclusion: PASS					

**ANTA:**

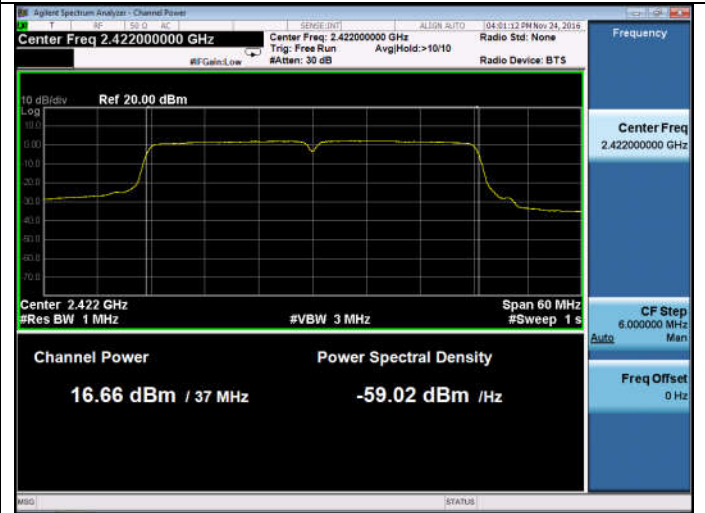
Test Mode: IEEE 802.11n HT40

Test CH3: 2422MHz

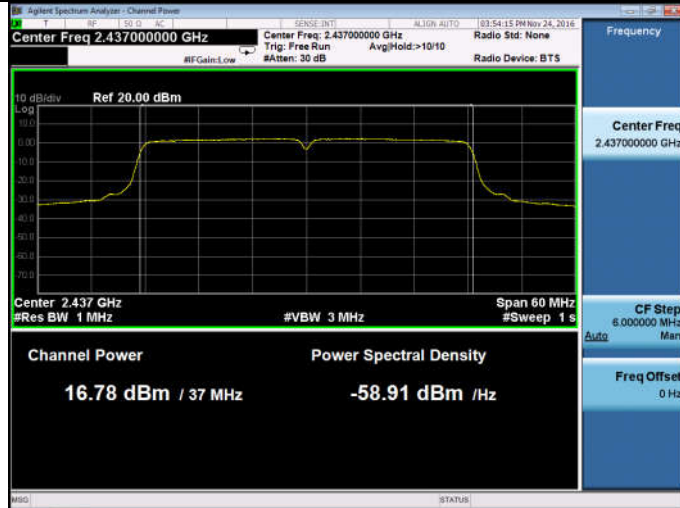

**ANTB:**

Test Mode: IEEE 802.11n HT40

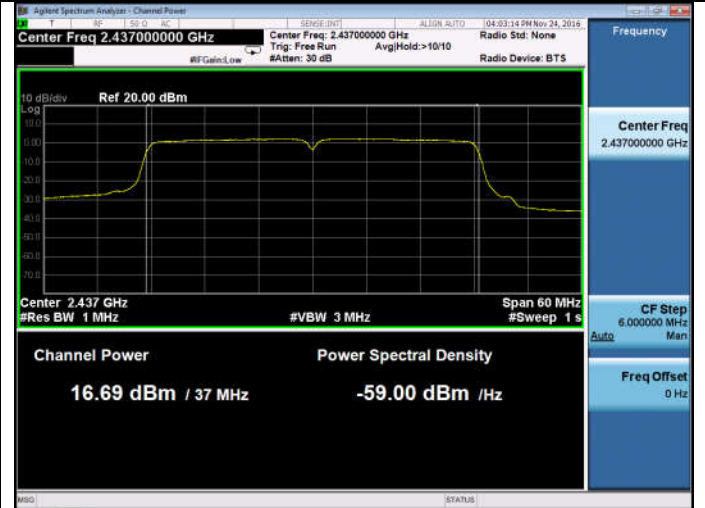
Test CH3: 2422MHz



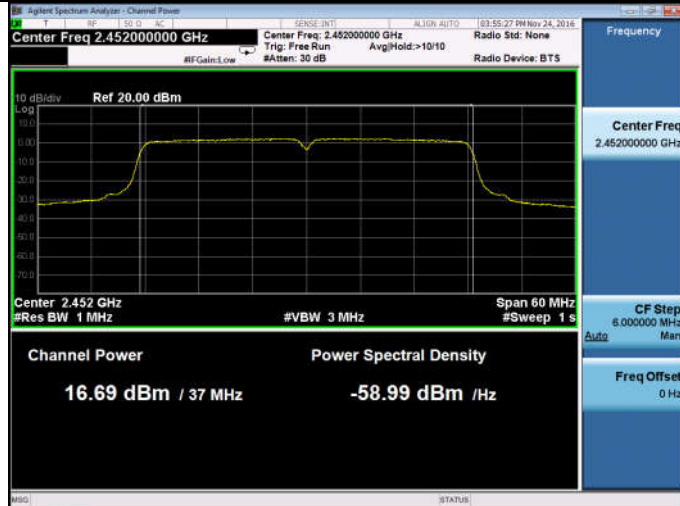
Test CH6: 2437MHz



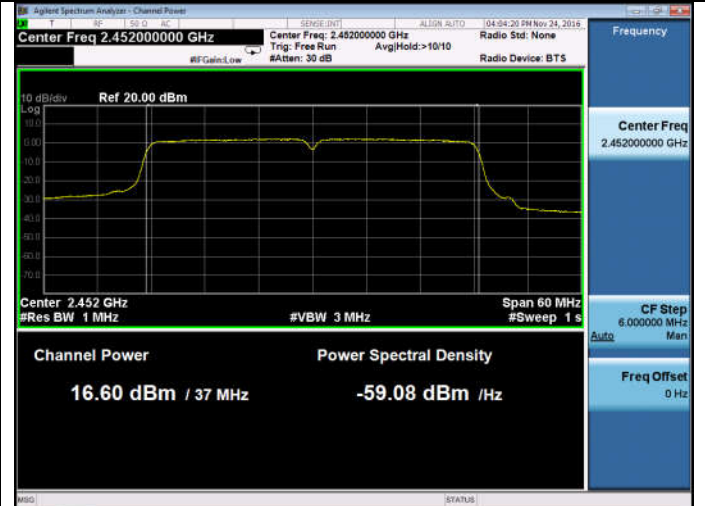
Test CH6: 2437MHz



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.15,16	1 Year
2.	Attenuator (20dB)	Agilent	8491B	MY39262165	Apr.23,16	1 Year
3.	RF Cable	Marvelous Microwave Inc	SFL402105FLEX	NO.1	Oct.15,16	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

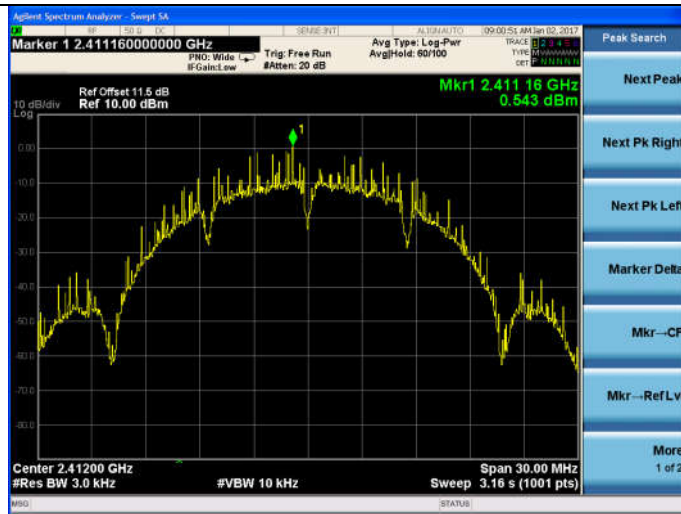
## 9.4. Test Results

EUT: CaptionCall Wireless Router 2					
M/N: CR2					
Test date: 2016-12-21		Pressure: 102.3±1.0 kpa		Humidity: 51.5±3.0%	
Tested by: Lynn		Test site: RF site		Temperature: 22.1±0.6 °C	
Test Mode	CH	Power Density ( dBm/3KHz )			Limit (dBm/3KHz)
		ANT A	ANT B	Total	
11b	CH1	0.543	1.086	N/A	8
	CH6	0.272	2.022	N/A	8
	CH11	0.166	1.812	N/A	8
11g	CH1	-9.539	-9.647	N/A	8
	CH6	-9.678	-9.632	N/A	8
	CH11	-9.570	-9.564	N/A	8
11n HT20	CH1	-9.144	-9.357	-6.24	8
	CH6	-9.679	-9.072	-6.35	8
	CH11	-9.728	-9.064	-6.37	8
11n HT40	CH3	-10.466	-11.474	-7.93	8
	CH6	-10.479	-11.309	-7.86	8
	CH9	-10.460	-11.402	-7.9	8
Conclusion: PASS					

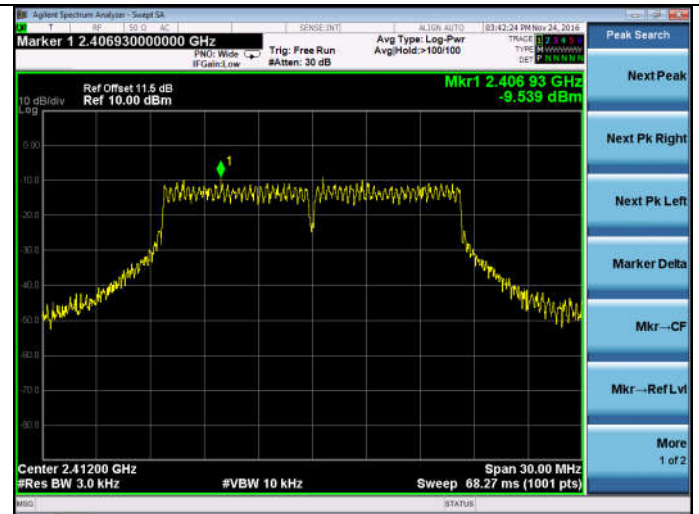


ANTA:

Test Mode: IEEE 802.11b  
Test CH1: 2412MHz



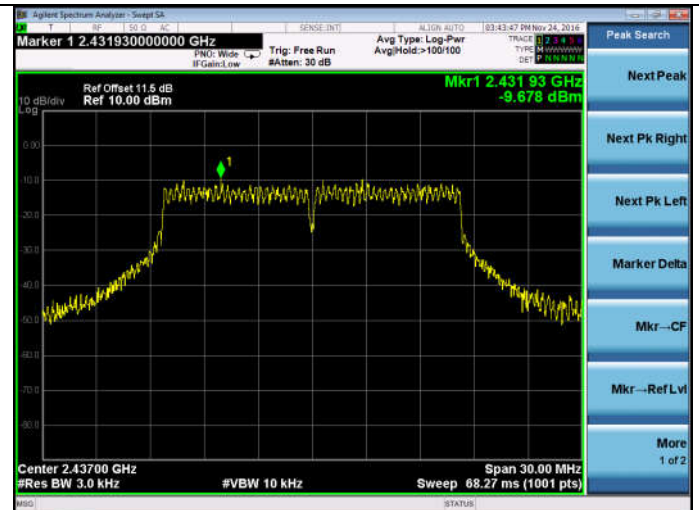
Test Mode: IEEE 802.11g  
Test CH1: 2412MHz



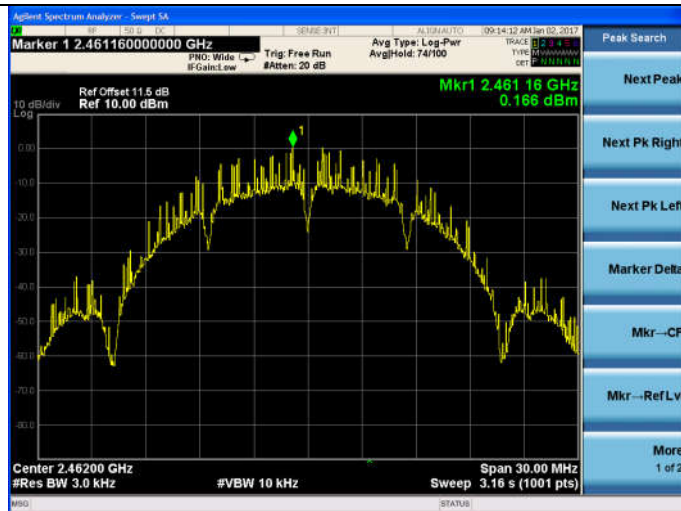
Test CH6: 2437MHz



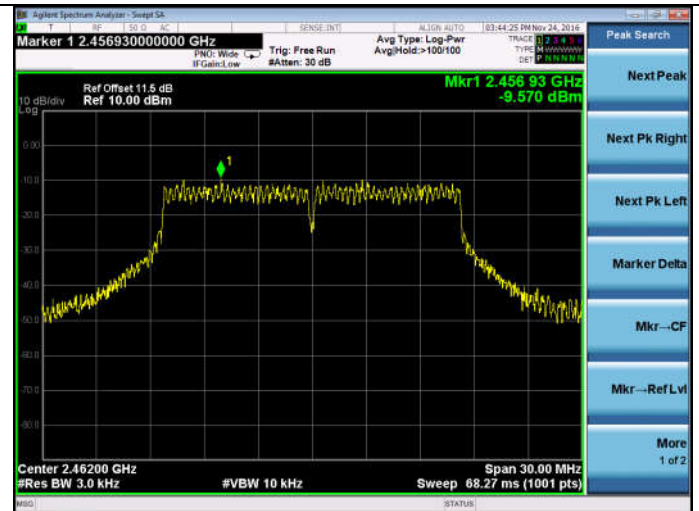
Test CH6: 2437MHz



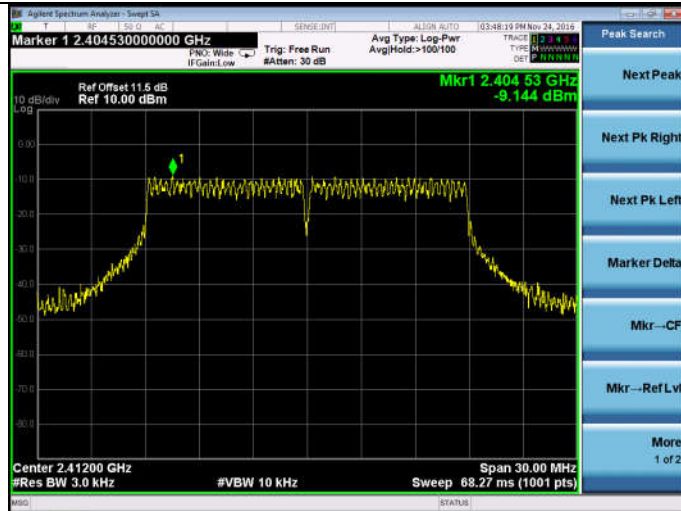
Test CH11: 2462MHz



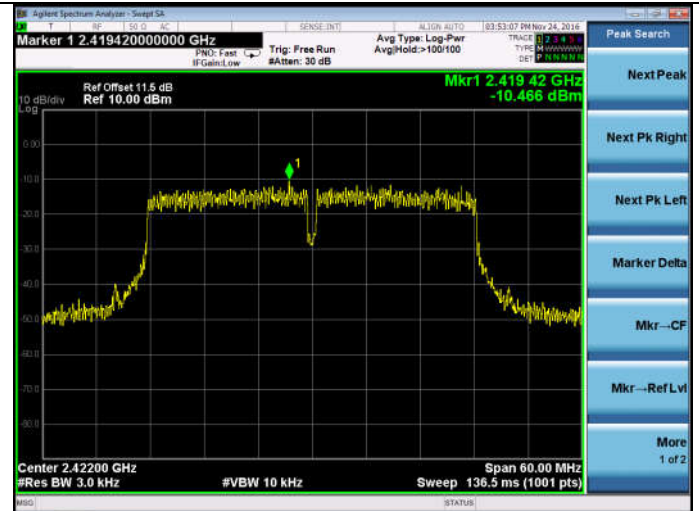
Test CH11: 2462MHz



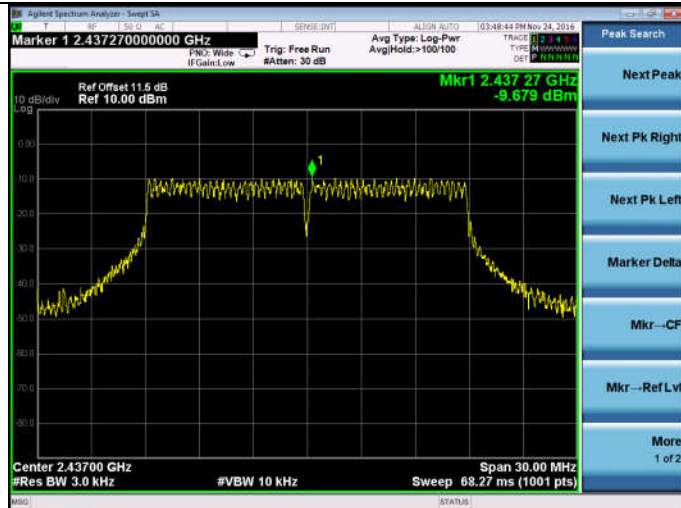
Test Mode: IEEE 802.11n HT20  
Test CH1: 2412MHz



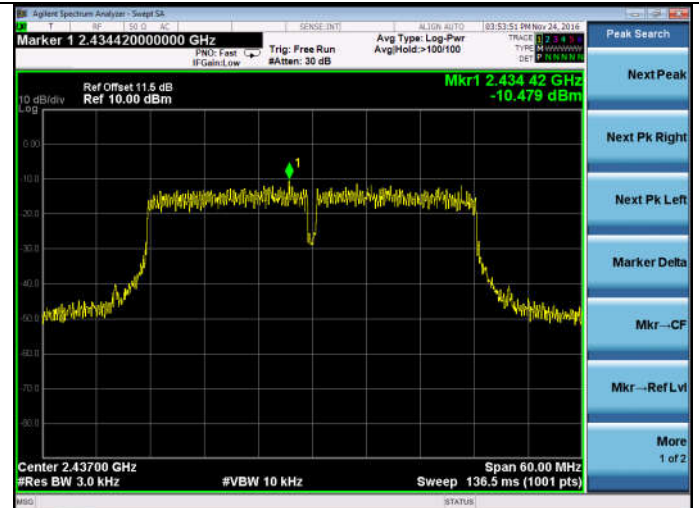
Test Mode: IEEE 802.11n HT40  
Test CH3: 2422MHz



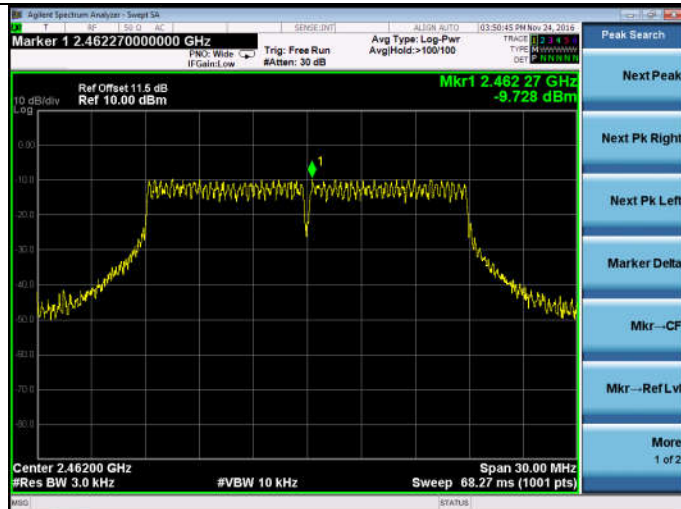
Test CH6: 2437MHz



Test CH6: 2437MHz



Test CH11: 2462MHz



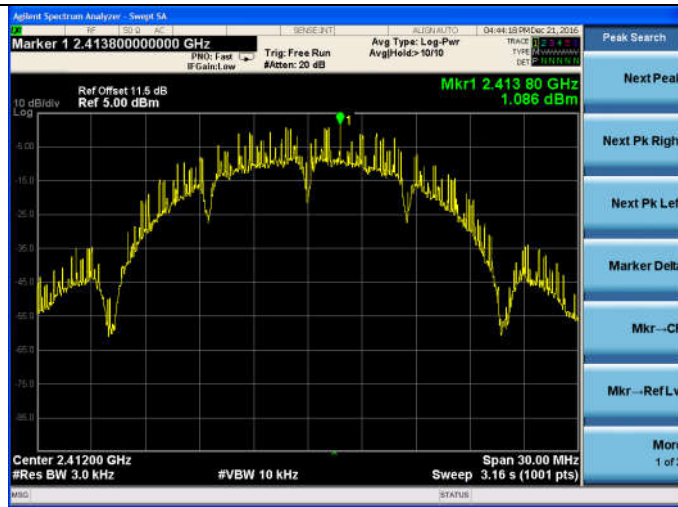
Test CH9: 2452MHz



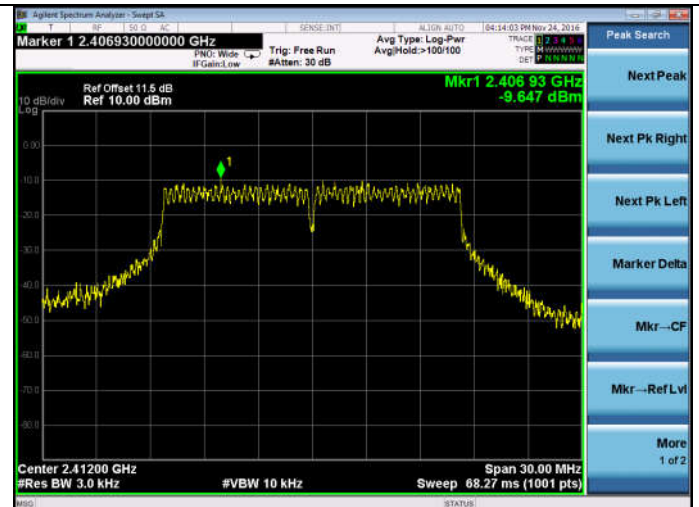


ANTB:

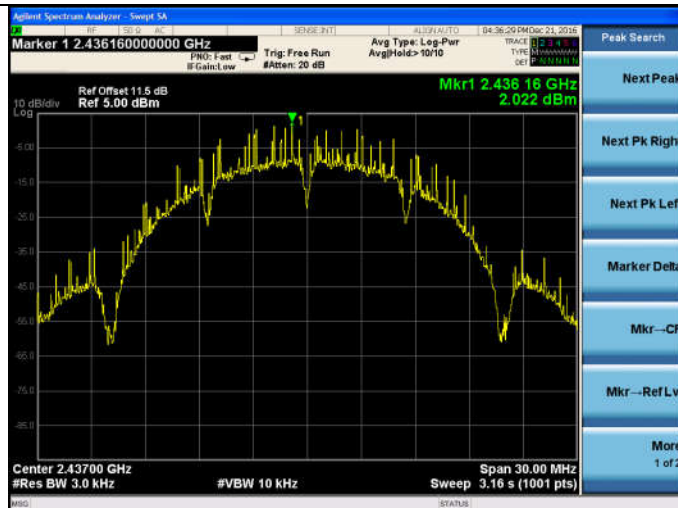
Test Mode: IEEE 802.11b  
Test CH1: 2412MHz



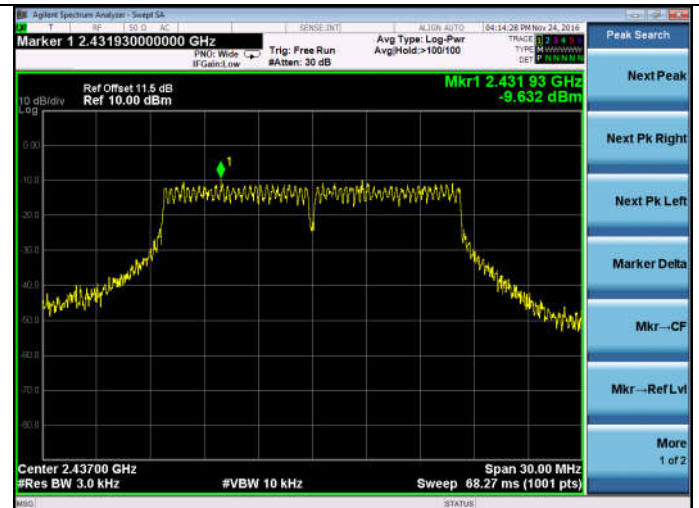
Test Mode: IEEE 802.11g  
Test CH1: 2412MHz



Test CH6: 2437MHz



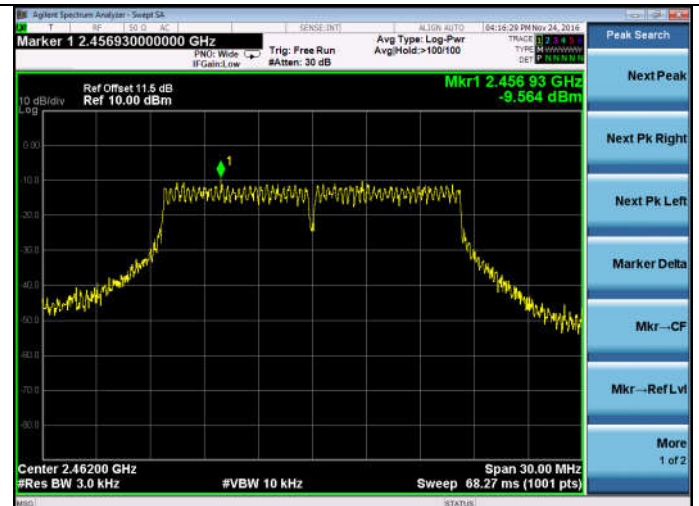
Test CH6: 2437MHz



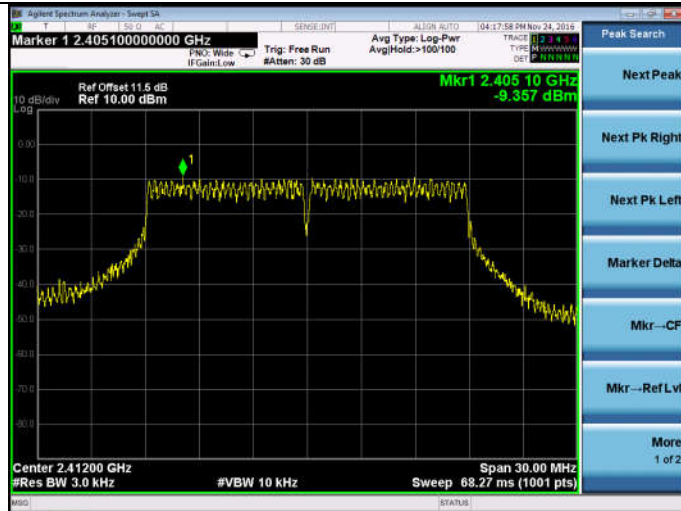
Test CH11: 2462MHz



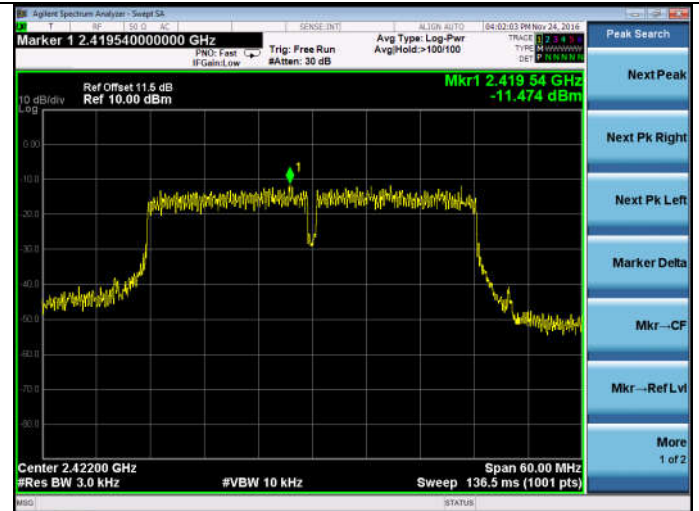
Test CH11: 2462MHz



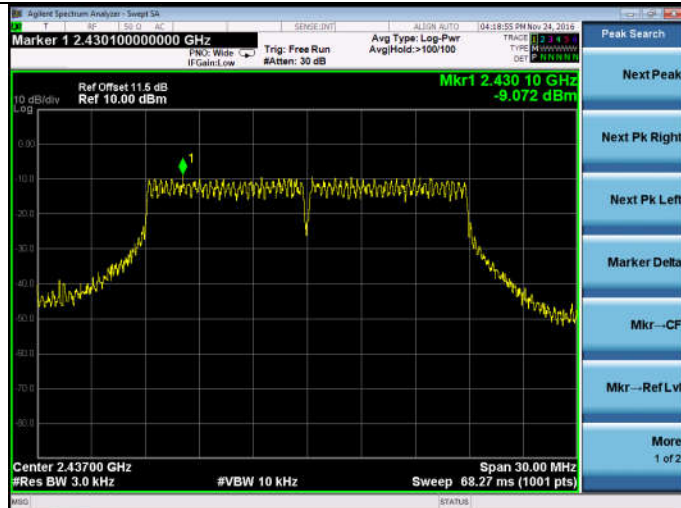
Test Mode: IEEE 802.11n HT20  
Test CH1: 2412MHz



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



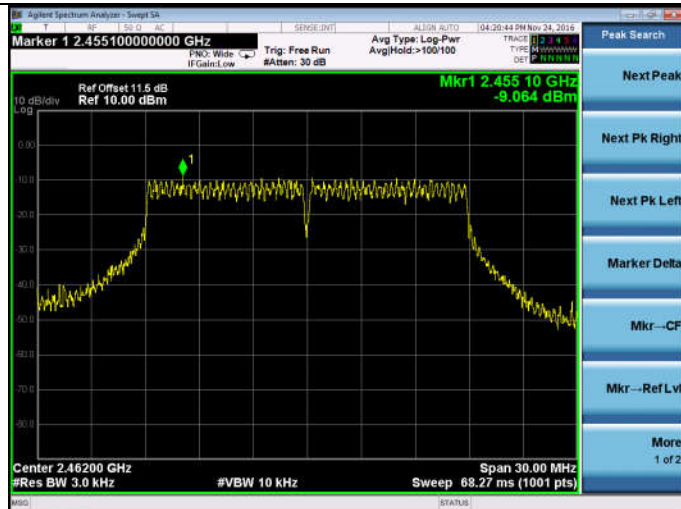
Test CH6: 2437MHz



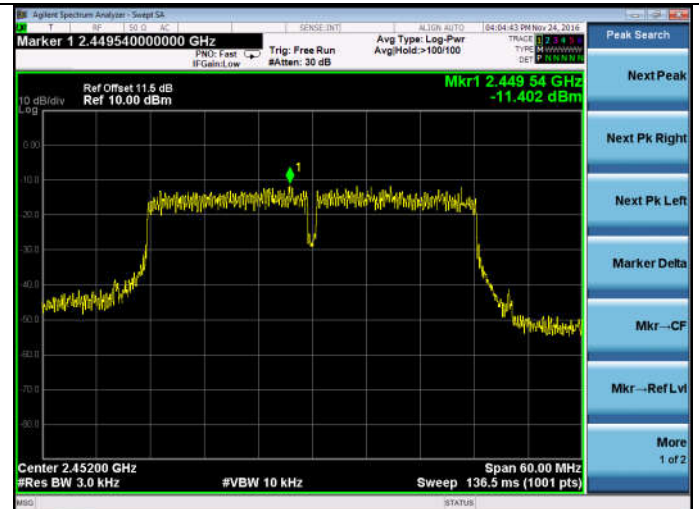
Test CH6: 2437MHz



Test CH11: 2462MHz



Test CH9: 2452MHz



## 10. MPE ESTIMATION

### 10.1.Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/cm2)	Averaging time(minutes)
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	1.0	30

Frequency	Power density (mW/cm2)	Averaging time(minutes)
2412	1	30
2437	1	30
2462	1	30

Note: F= Frequency in MHz

### 10.2.Estimation Result

EUT: CaptionCall Wireless Router 2		
M/N: CR2		
Test date: 2017-01-03	Pressure: 102.3±1.0 kpa	Humidity: 51.5±3.0%
Tested by: Lynn	Test site: RF site	Temperature:22.1±0.6 °C

Test Mode	Frequency (MHz)	Peak Output Power (dBm)		Peak Output Power (mW)		Antenna Gain (dBi)		Antenna Gain (Linear)		MPE		
		Ant a	Ant b	Ant a	Ant b	Ant a	Ant b	Ant a	Ant b	Ant a	Ant b	Total
11b	2412	15.46	16.73	35.16	47.10	2	5	1.58	3.16	0.0111	0.0296	N/A
	2437	15.14	16.88	32.66	48.75	2	5	1.58	3.16	0.0103	0.0307	N/A
	2462	15.04	16.74	31.92	47.21	2	5	1.58	3.16	0.0101	0.0297	N/A
11g	2412	16.77	16.52	47.53	44.87	2	5	1.58	3.16	0.0150	0.0282	N/A
	2437	16.67	16.76	46.45	47.42	2	5	1.58	3.16	0.0147	0.0299	N/A
	2462	16.65	16.60	46.24	45.71	2	5	1.58	3.16	0.0146	0.0288	N/A
11n HT20	2412	16.54	16.34	45.08	43.05	2	5	1.58	3.16	0.0142	0.0271	0.0413
	2437	16.52	16.57	44.87	45.39	2	5	1.58	3.16	0.0142	0.0286	0.0428
	2462	16.44	16.41	44.06	43.75	2	5	1.58	3.16	0.0139	0.0275	0.0414
11n HT40	2422	16.85	16.66	48.42	46.34	2	5	1.58	3.16	0.0153	0.0292	0.0445
	2437	16.78	16.69	47.64	46.67	2	5	1.58	3.16	0.0150	0.0294	0.0444
	2452	16.69	16.60	46.67	45.71	2	5	1.58	3.16	0.0147	0.0288	0.0435

$$MPE = \frac{PG}{4\pi R^2} \quad (R=20 \text{ cm})$$

## 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 Dipole antenna and PCBA 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 5dBi.

## 12.DEVIATION TO TEST SPECIFICATIONS

[ NONE]