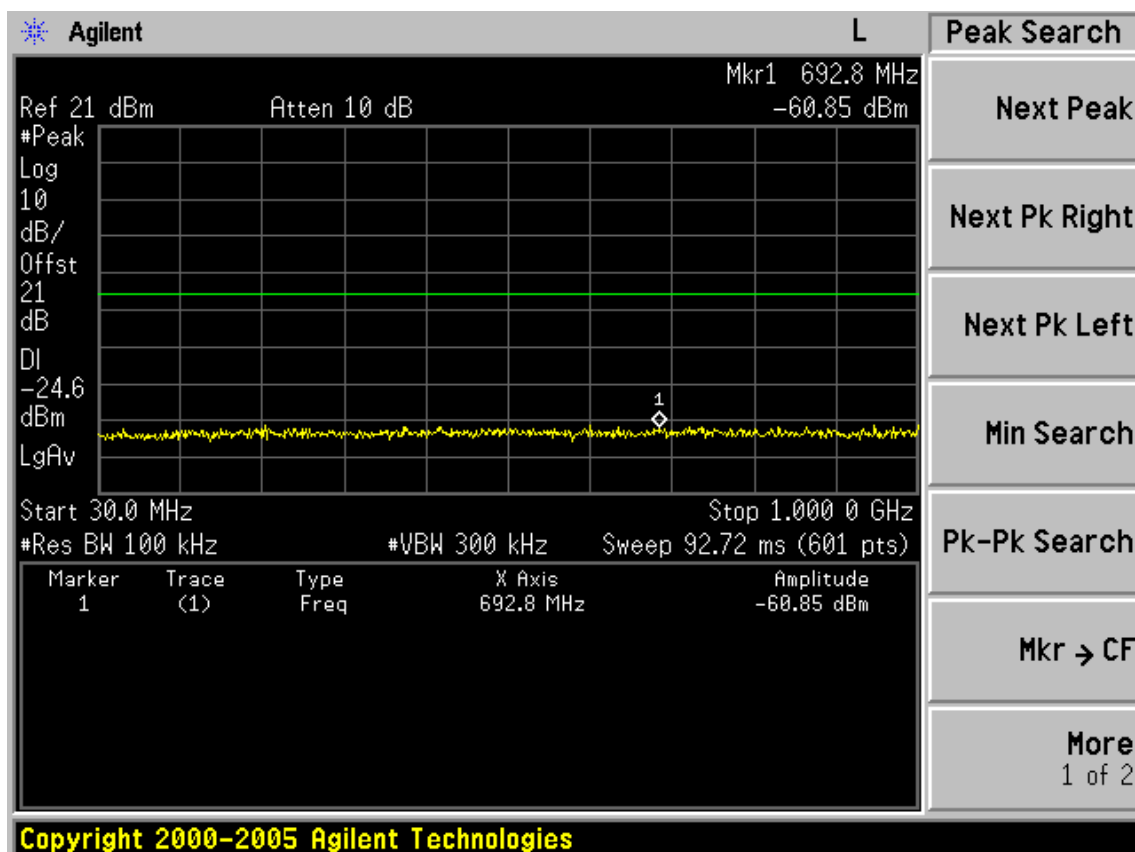
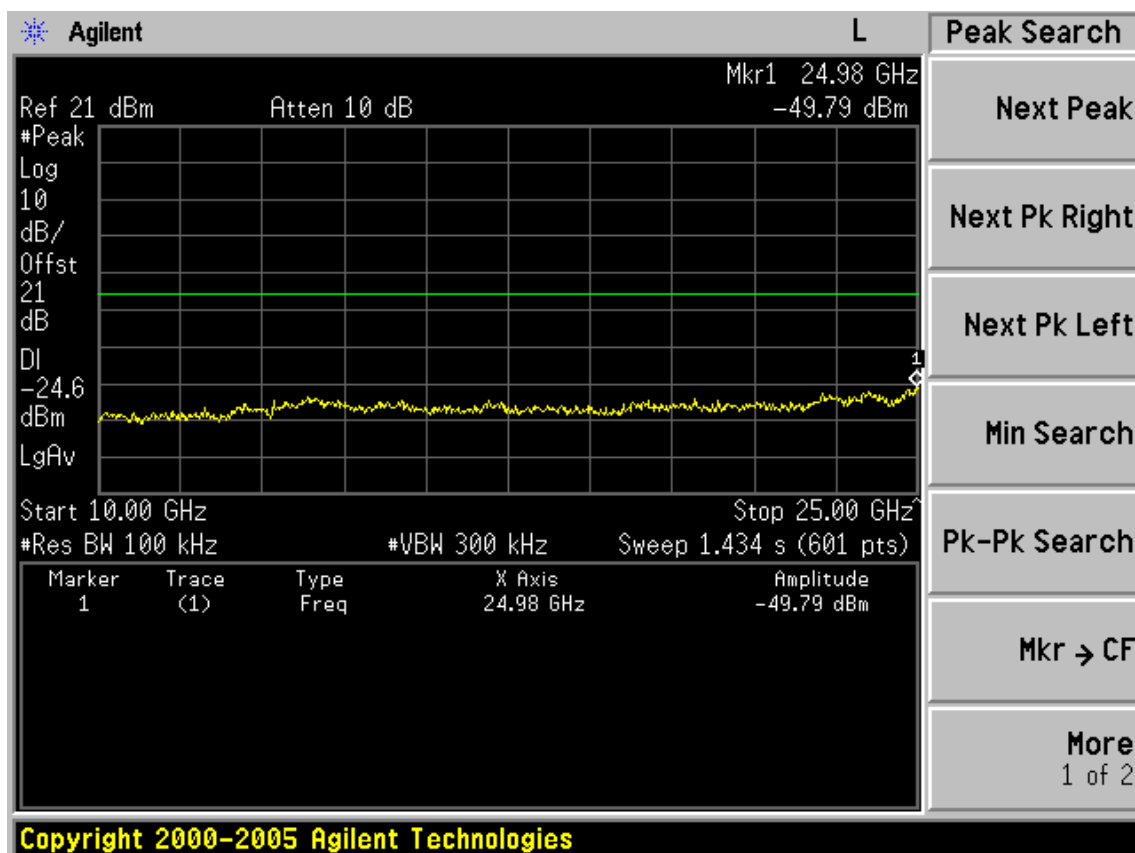
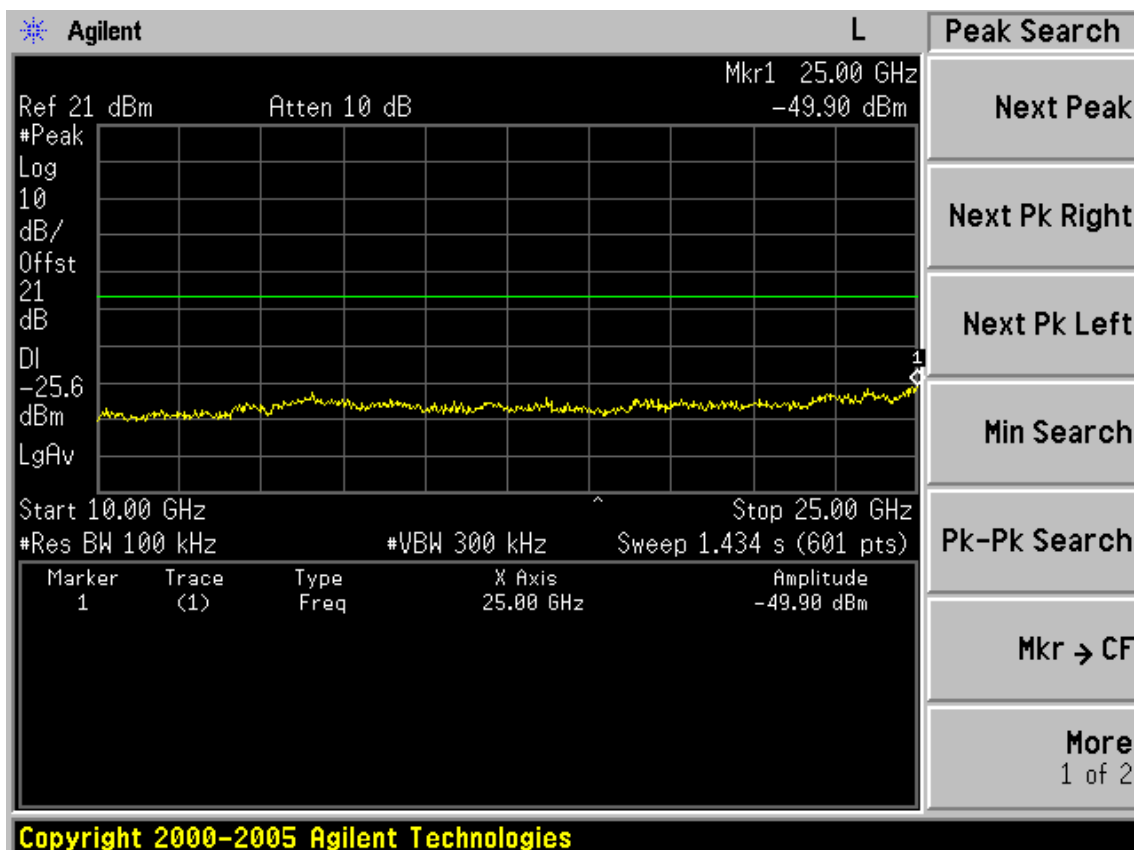
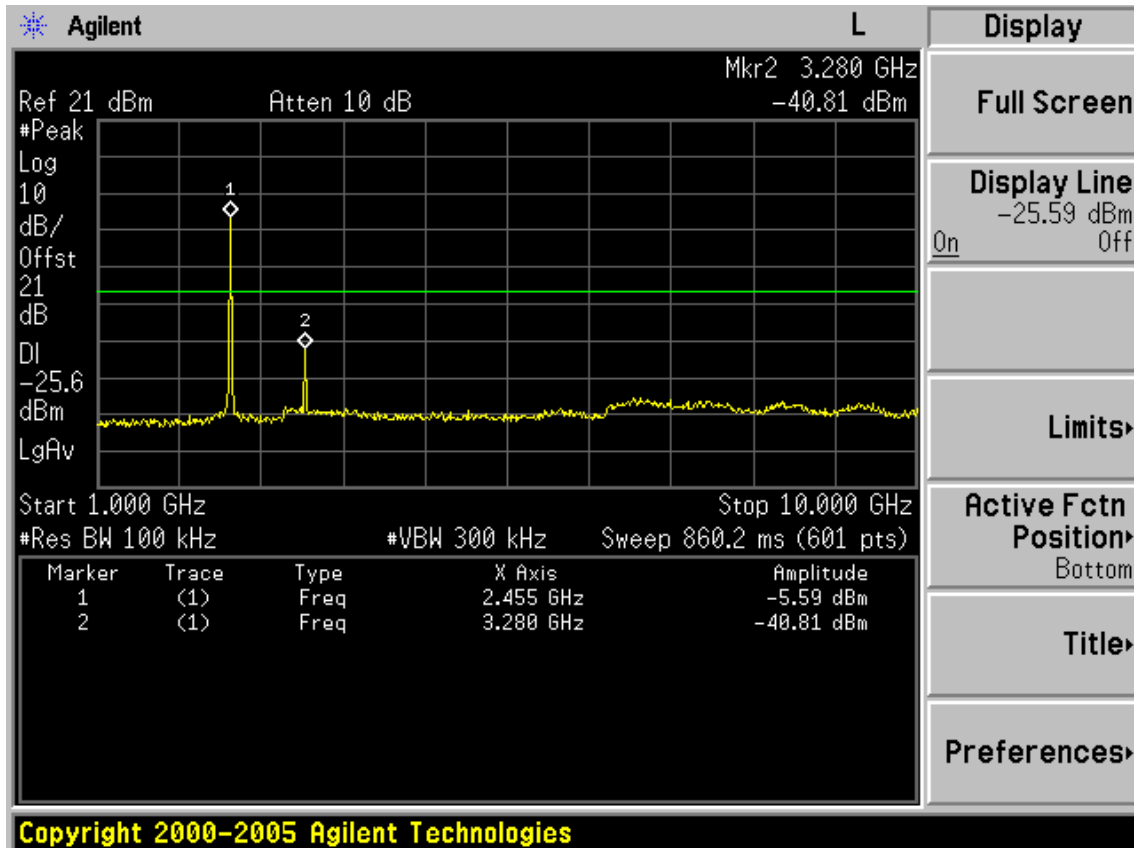
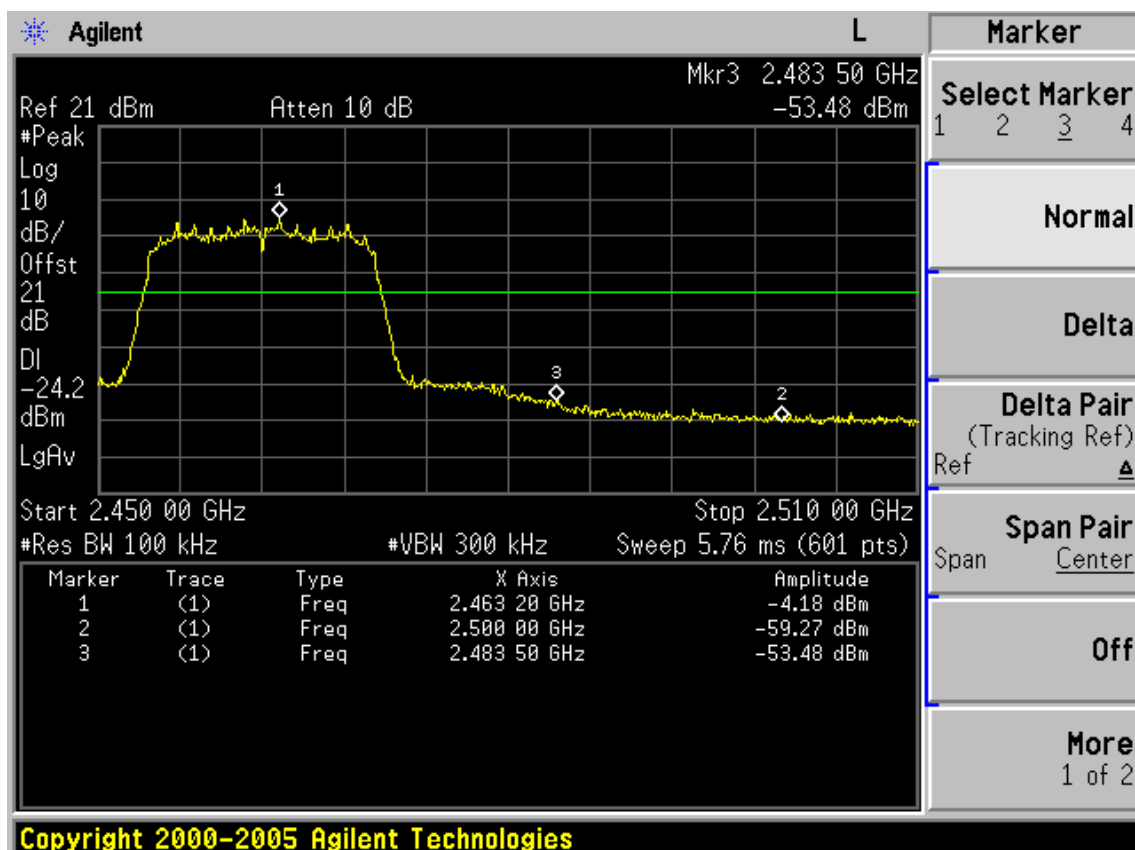
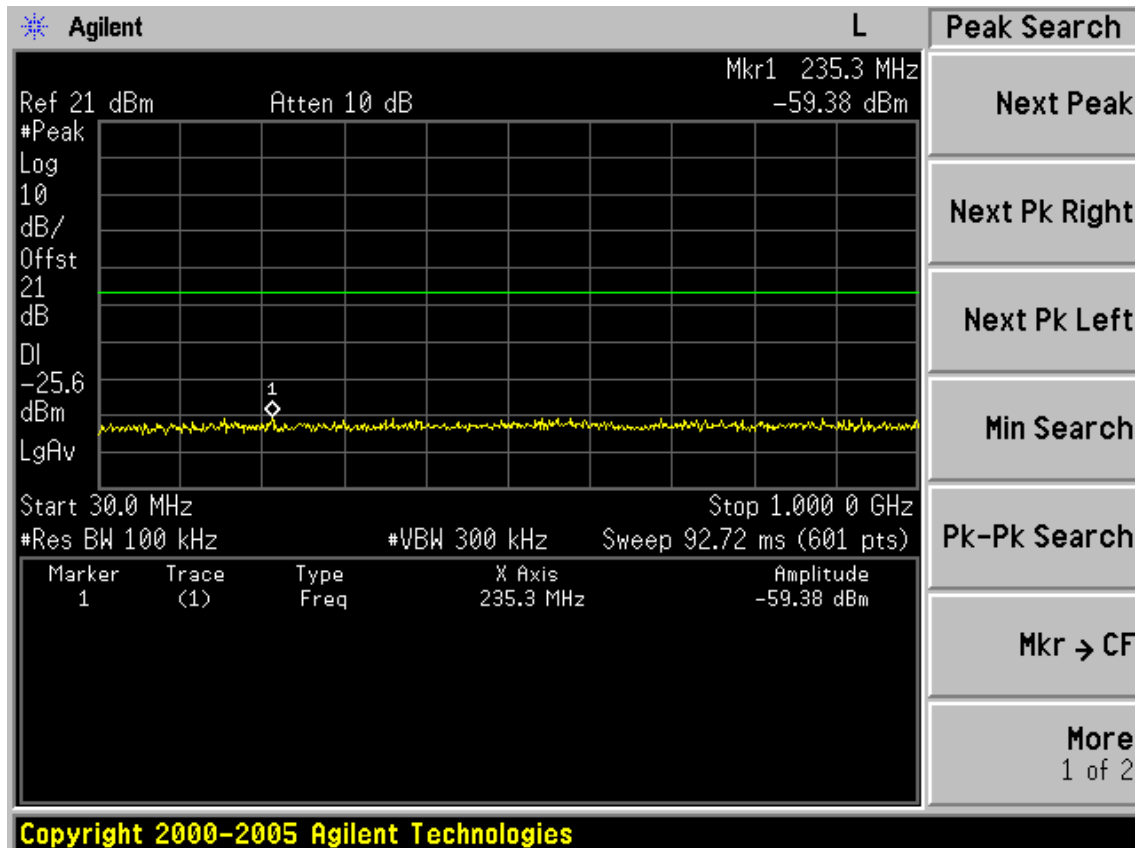




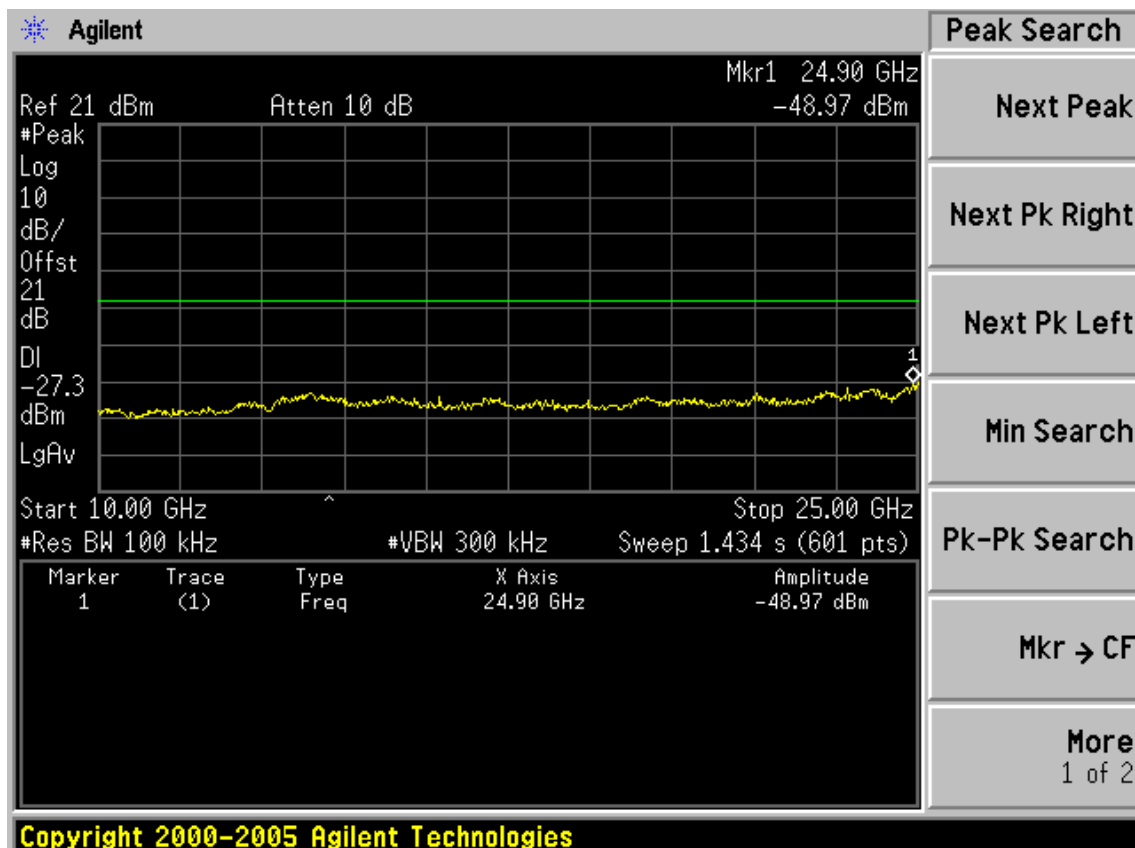
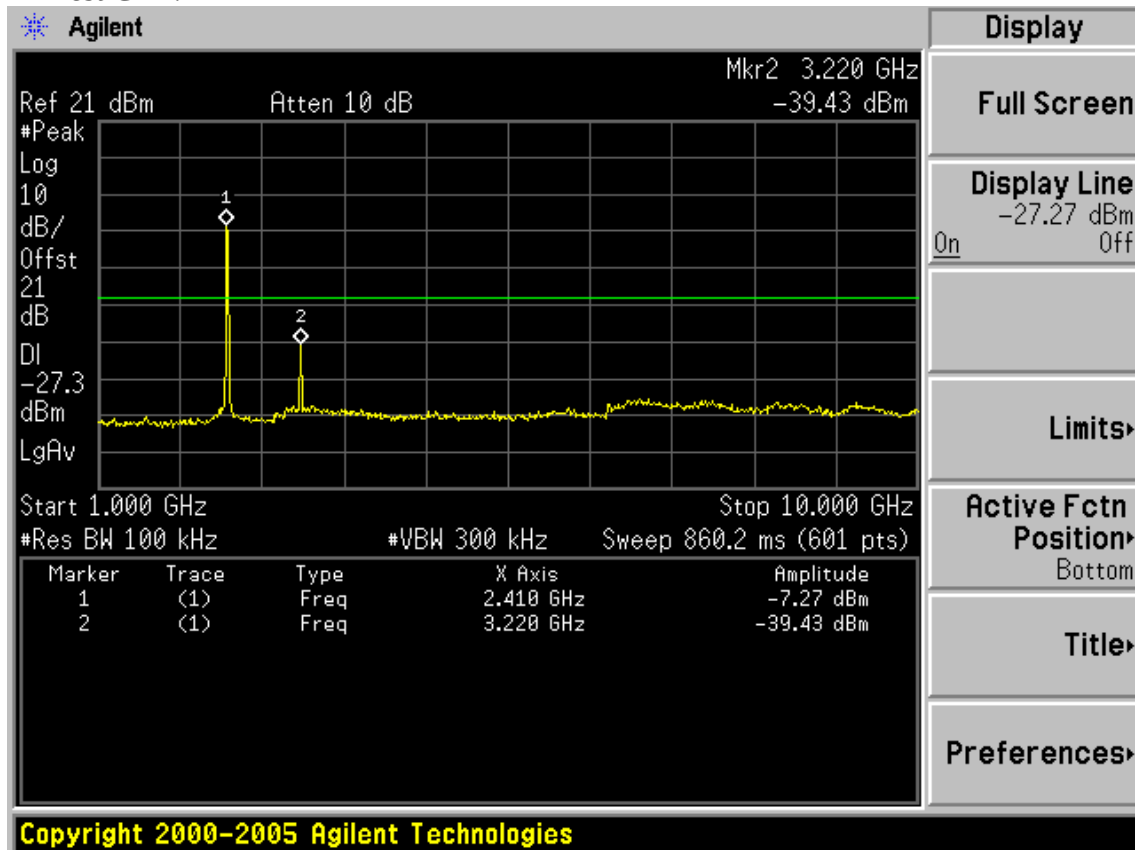
Test CH11: 2462MHz

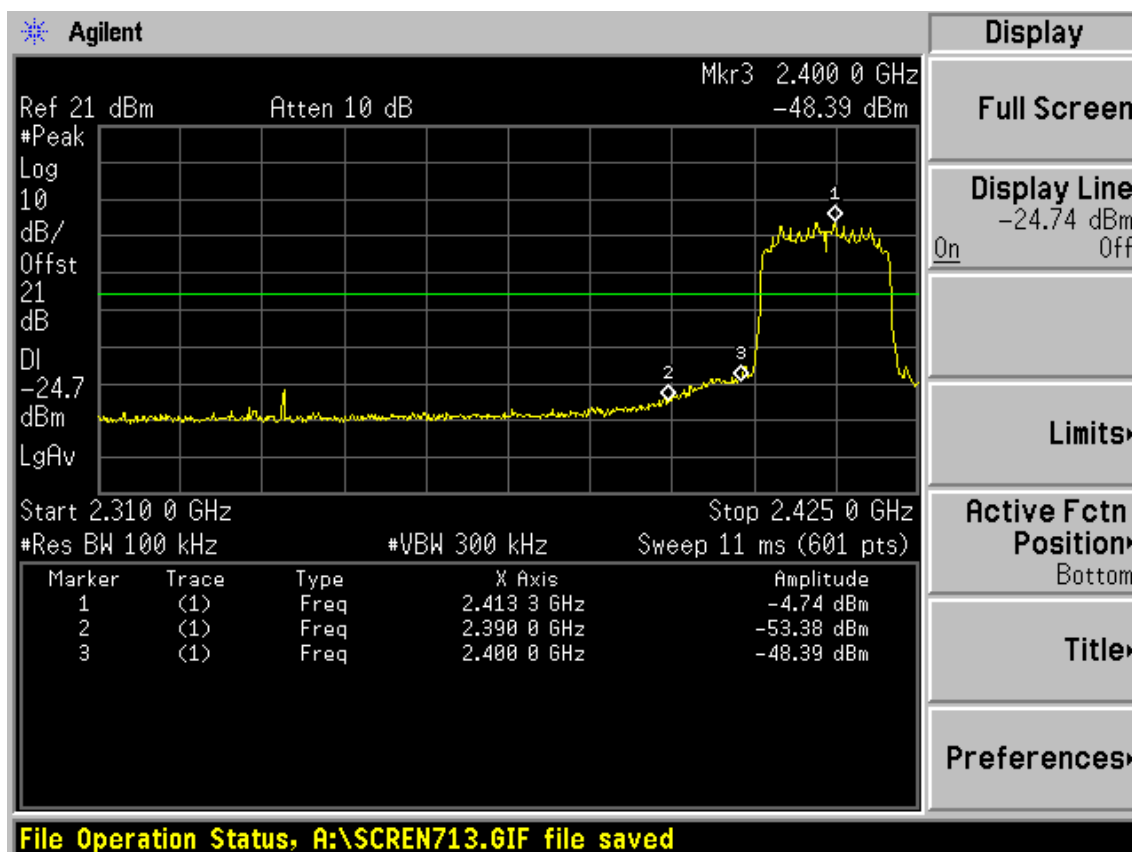
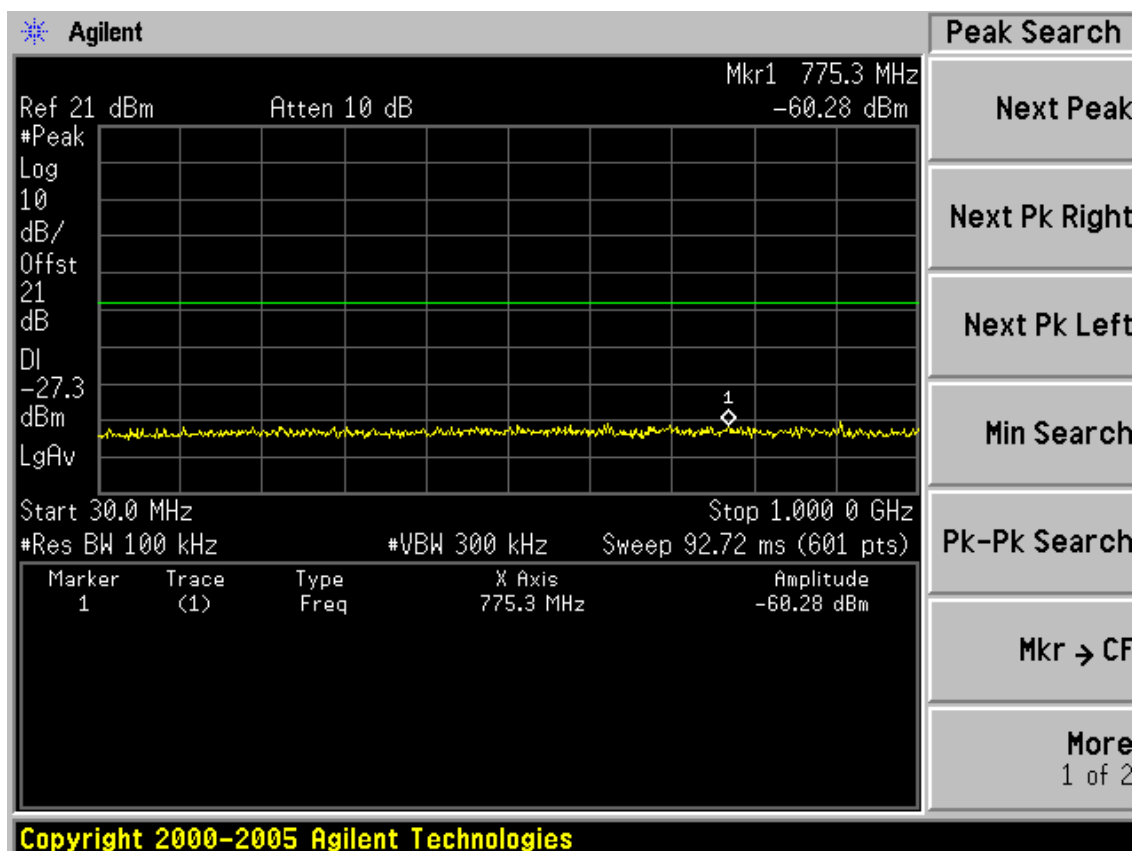




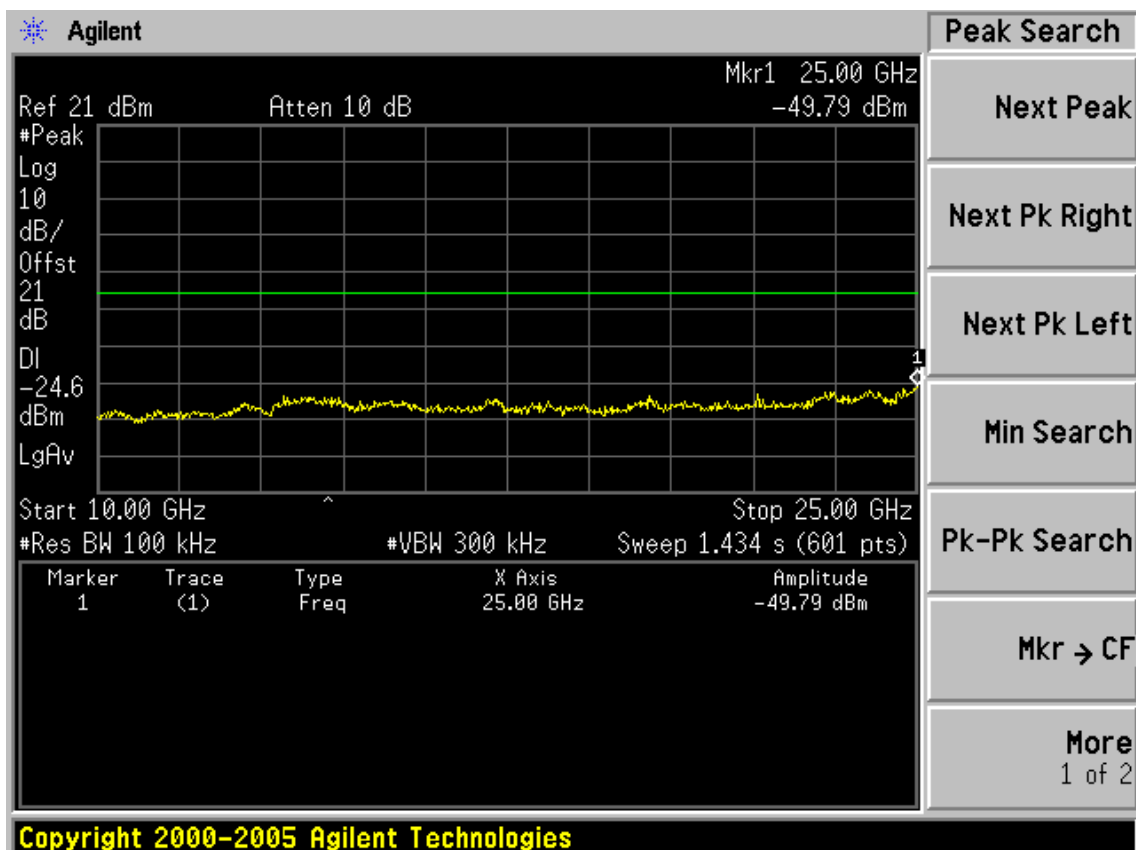
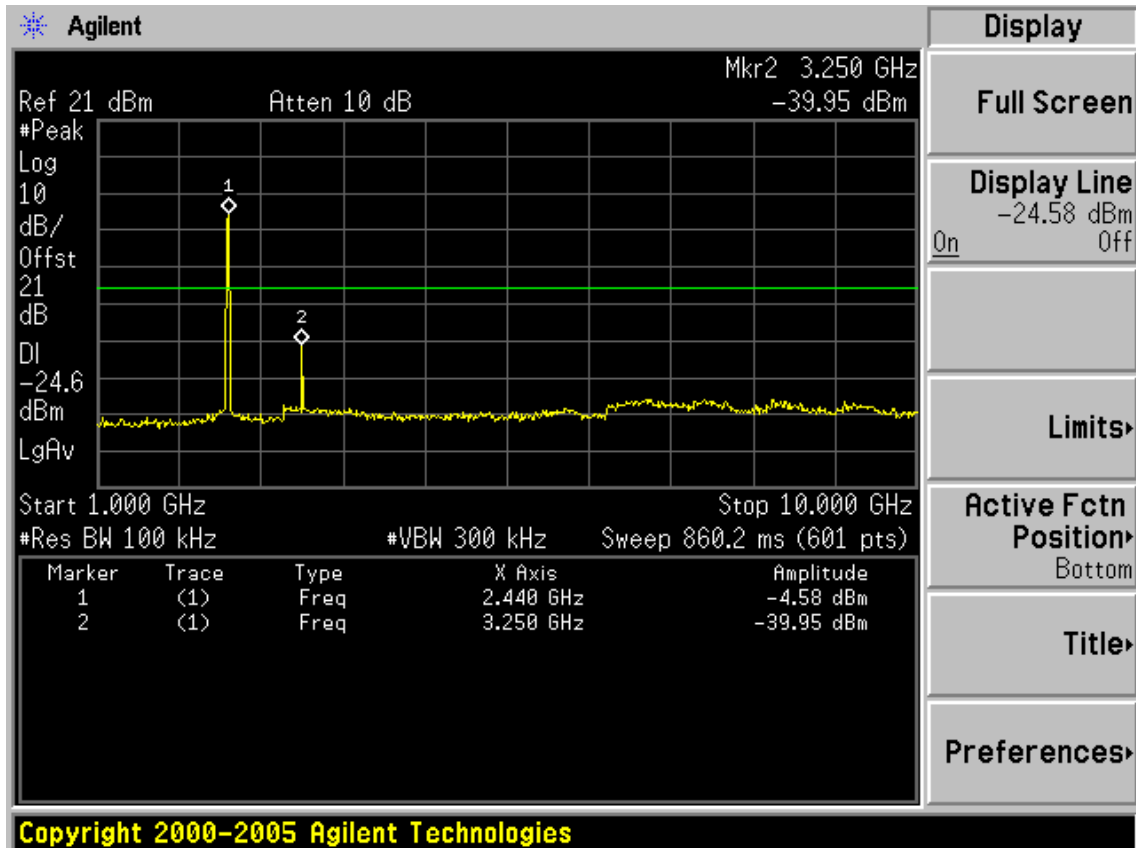
Test Mode: IEEE 802.11n HT20 TX

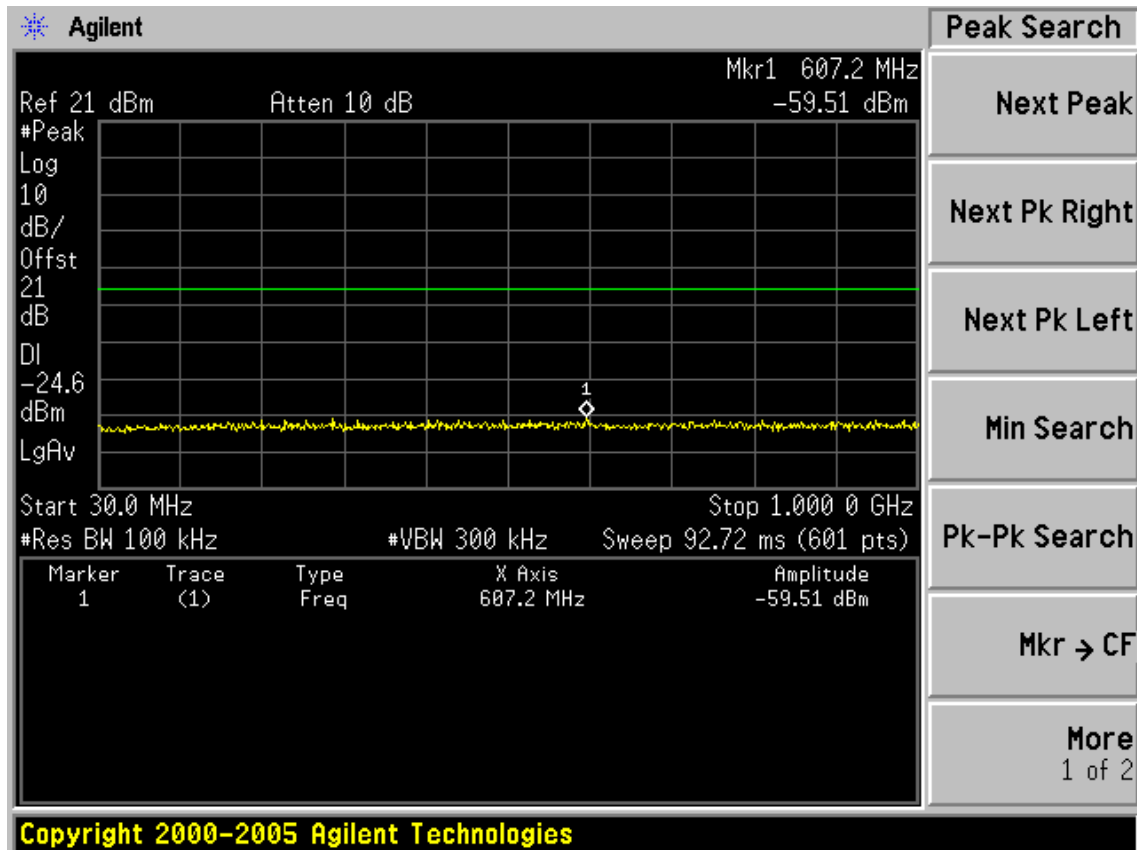
Test CH1: 2412MHz



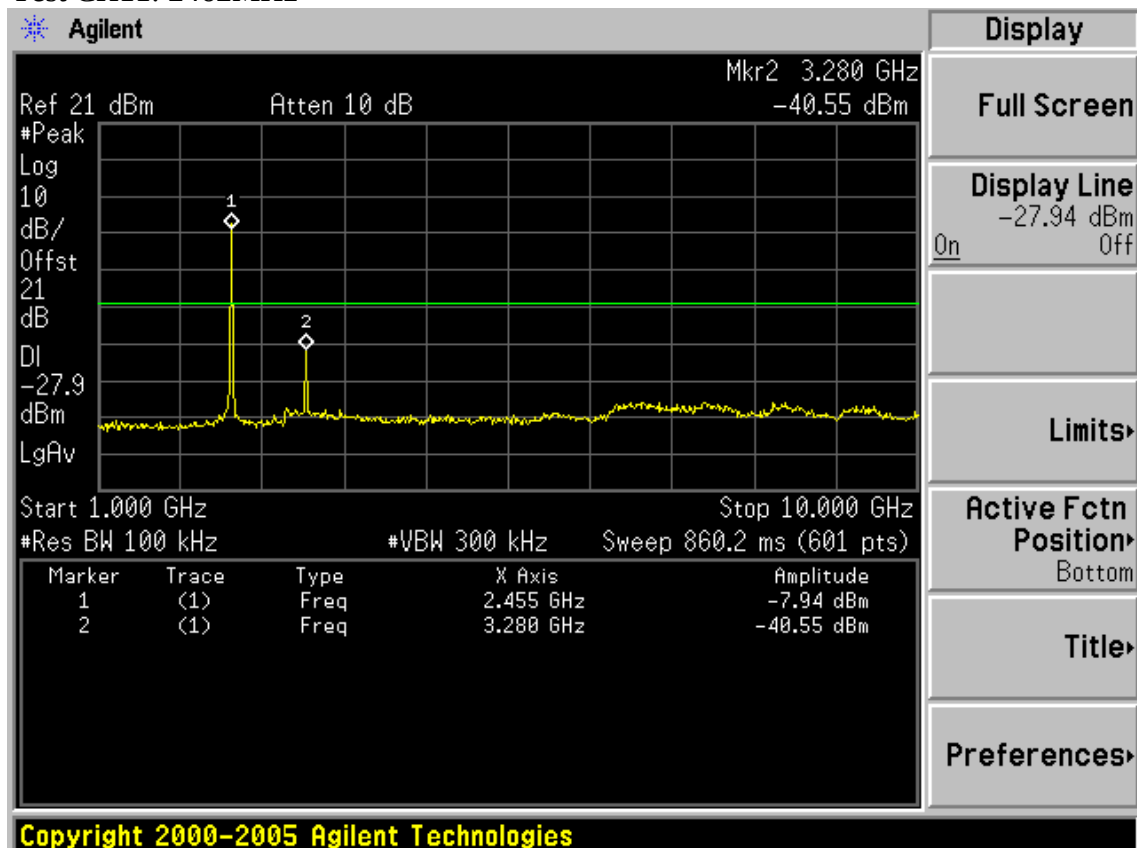


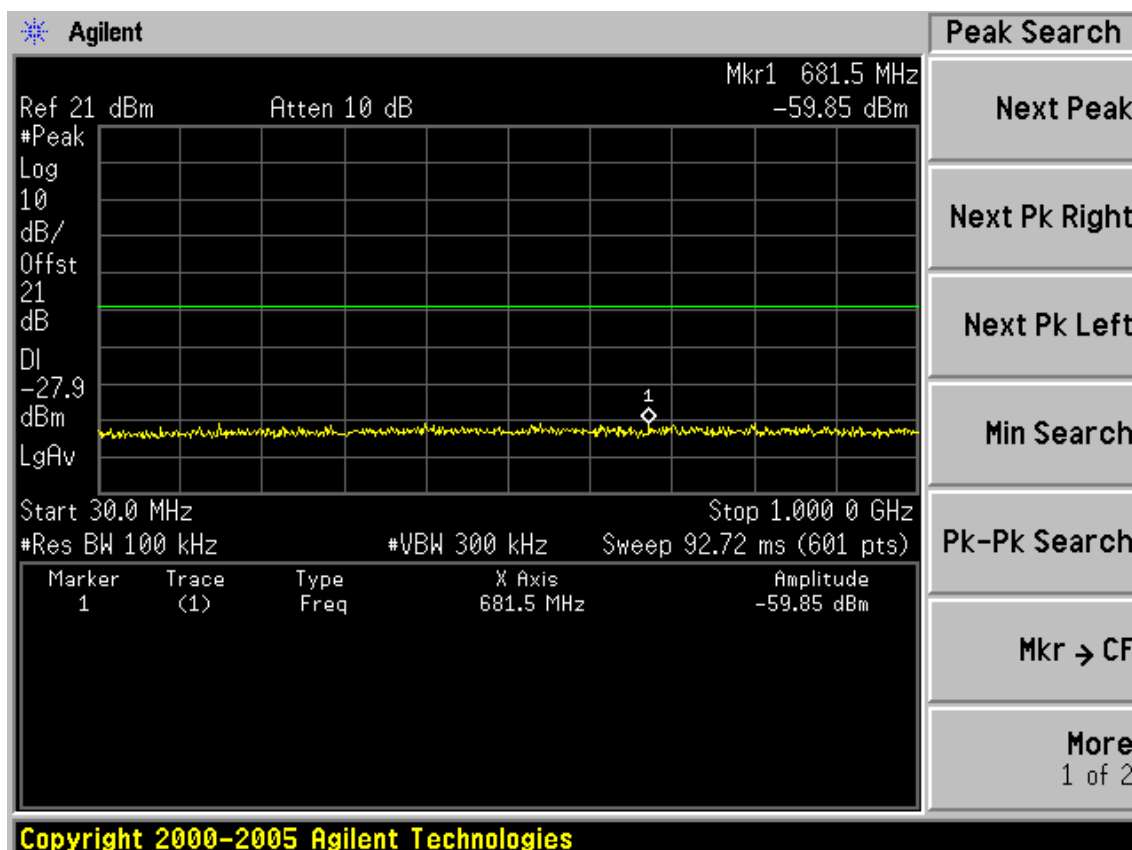
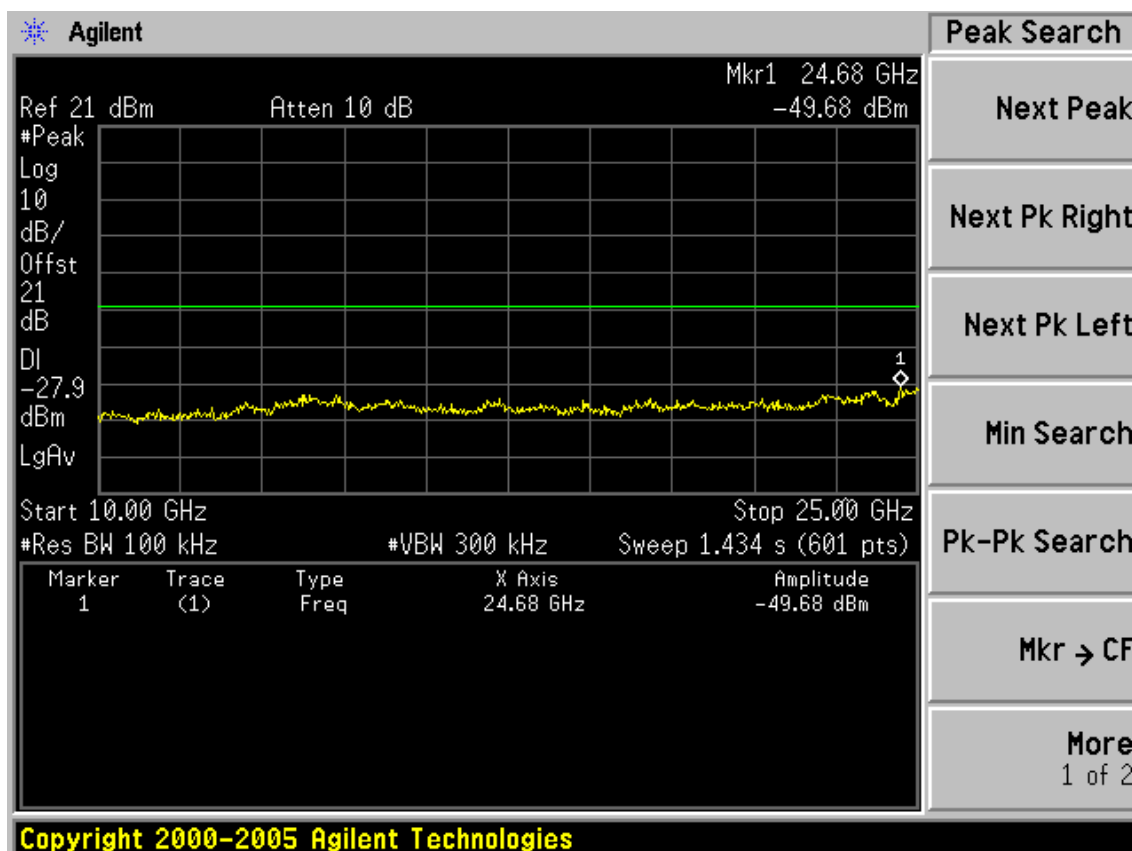
Test CH6: 2437MHz

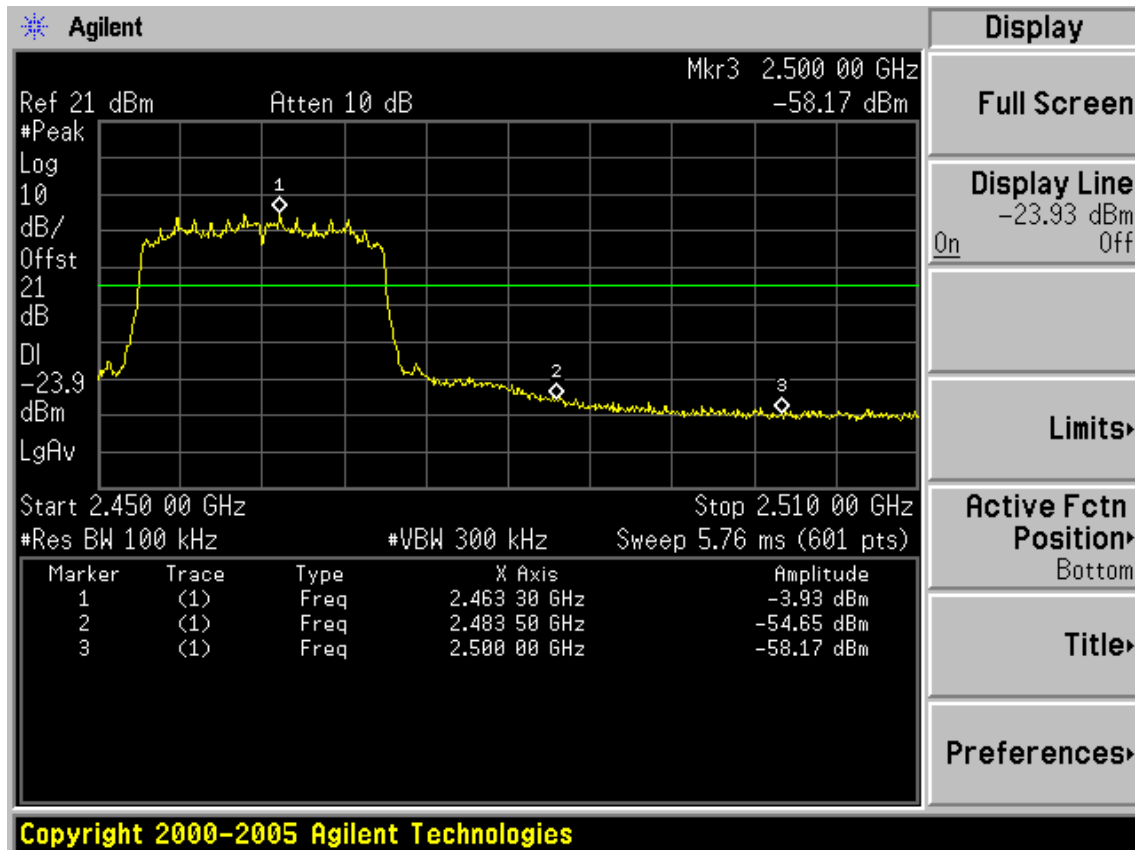




Test CH11: 2462MHz

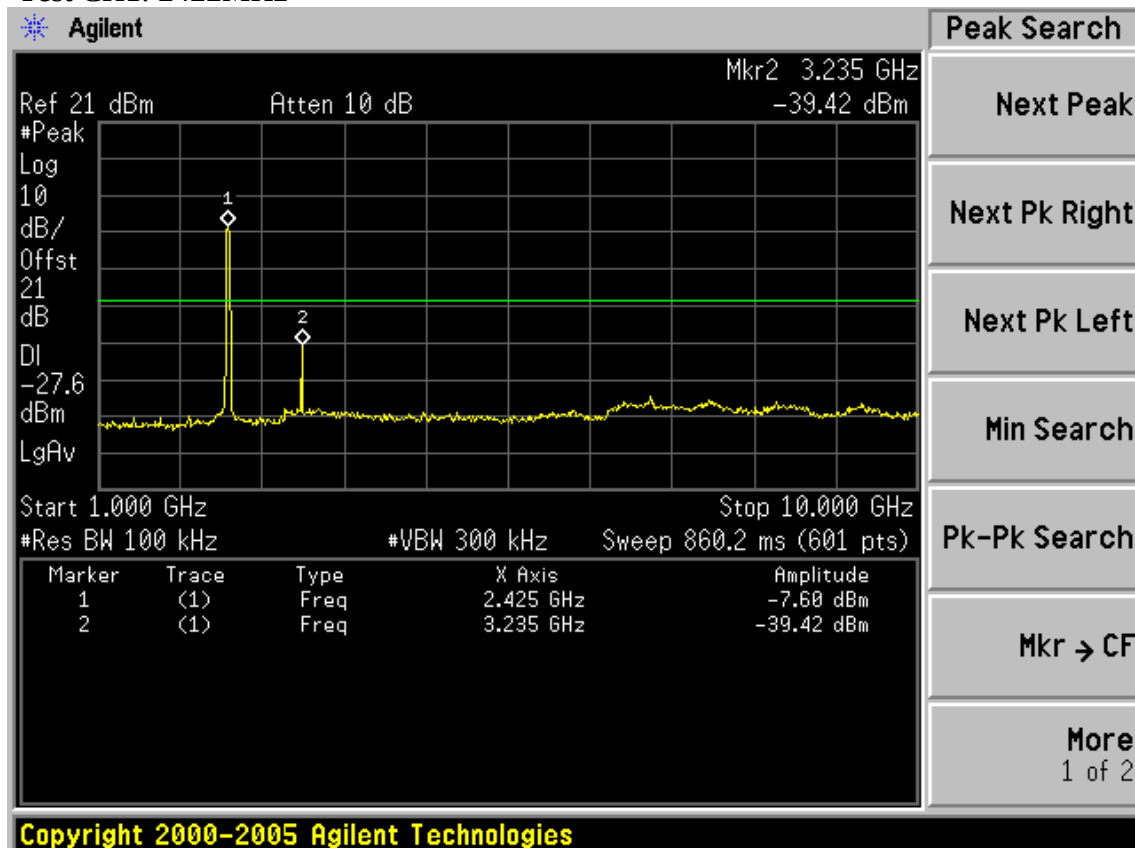


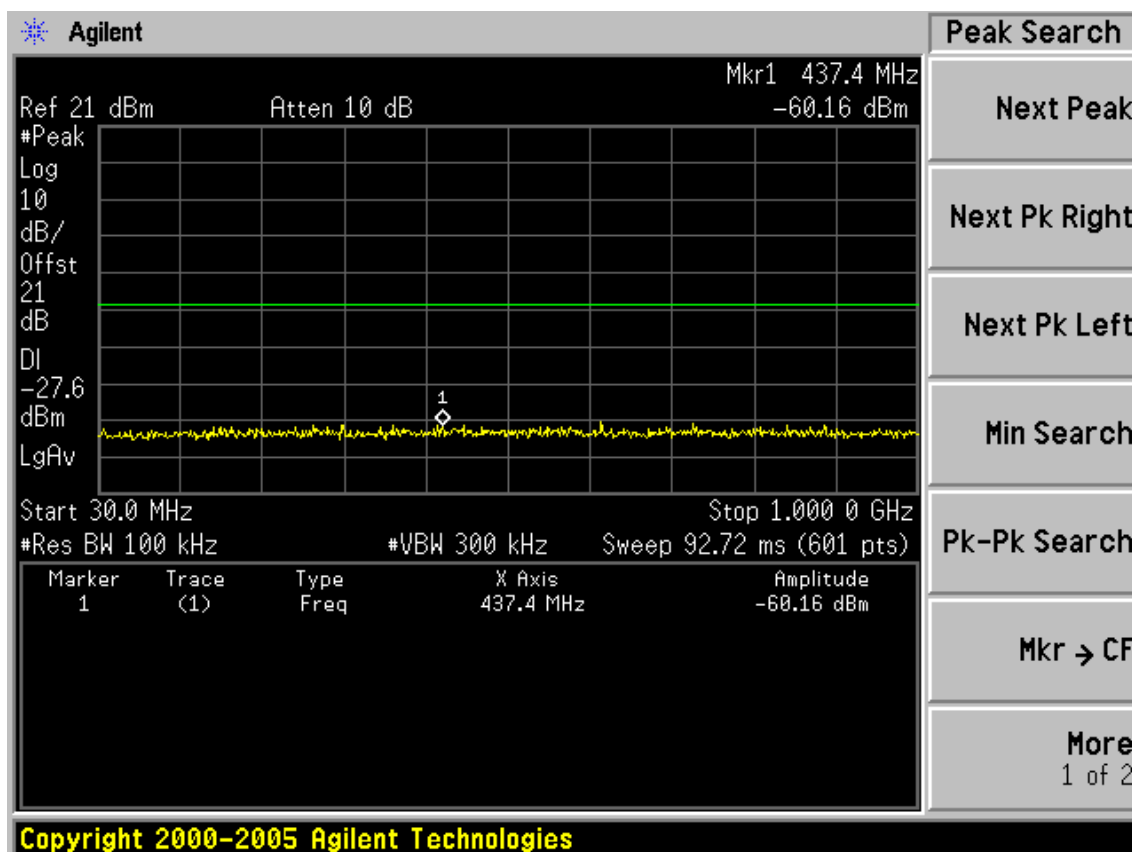
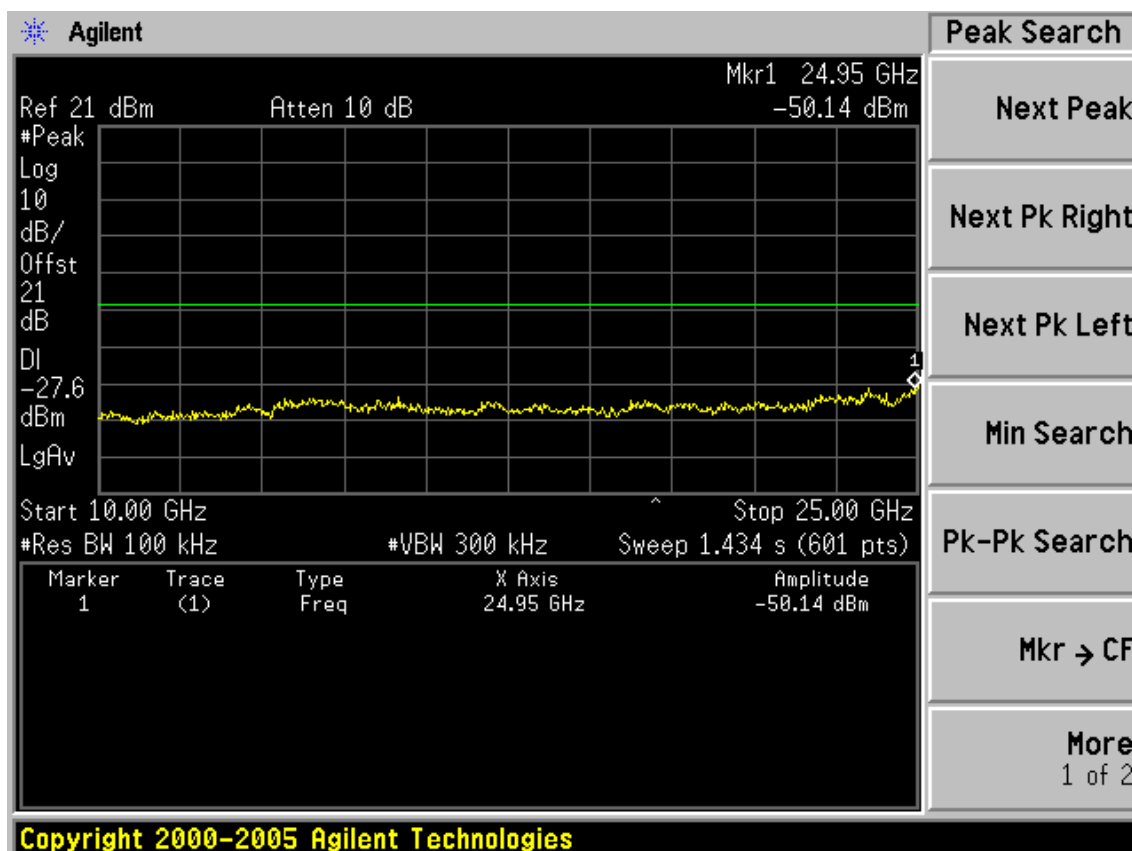


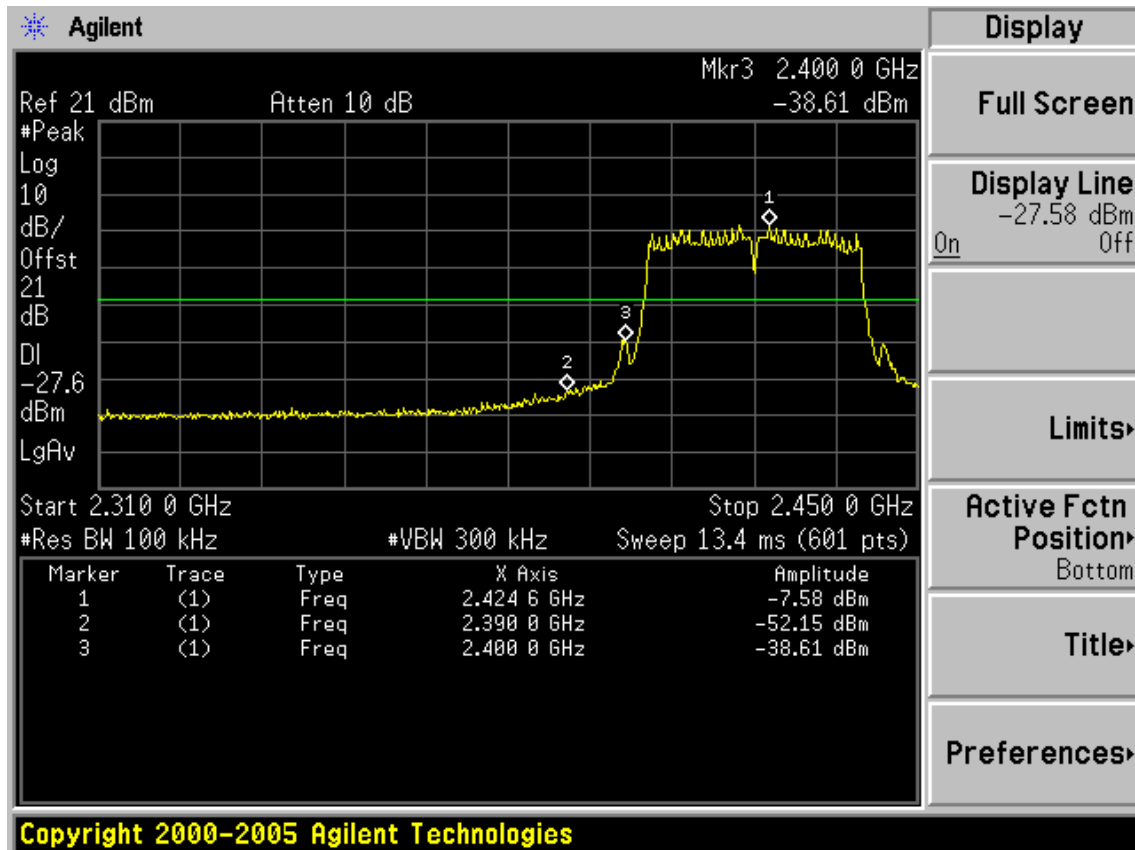


Test Mode: IEEE 802.11n HT40 TX

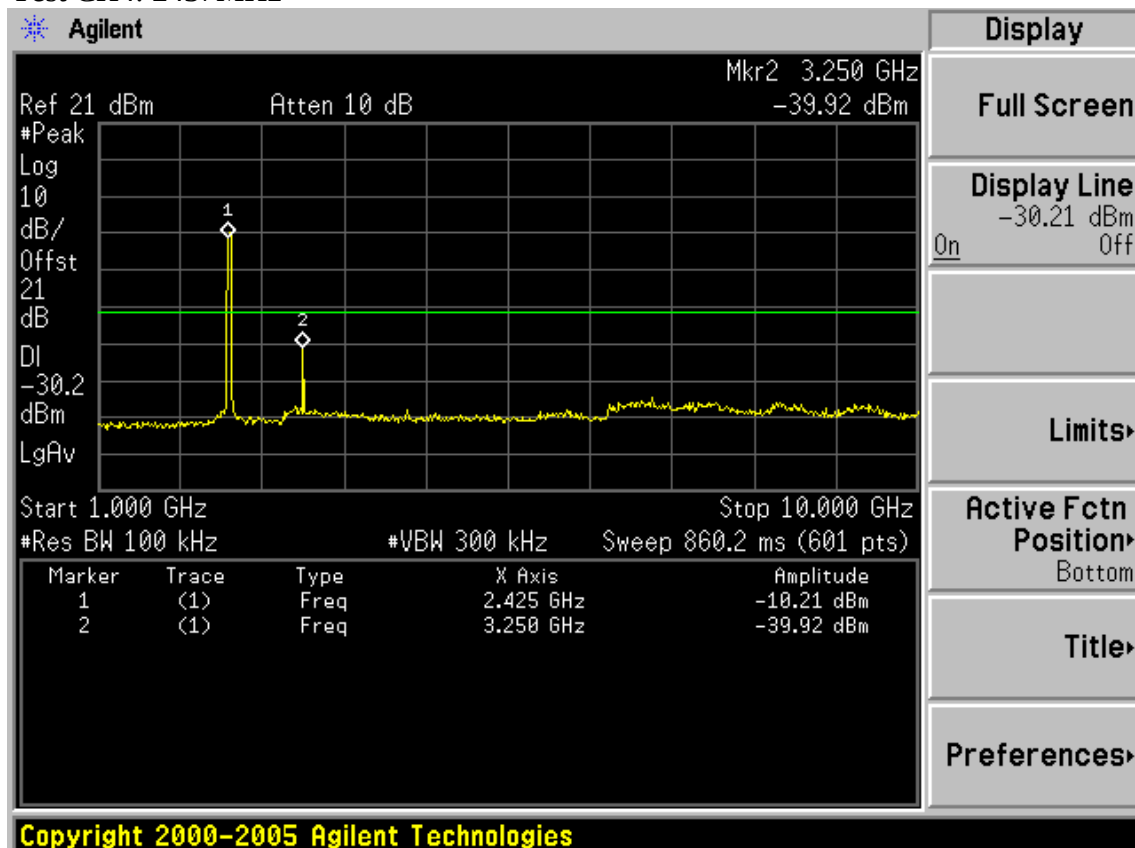
Test CH1: 2422MHz

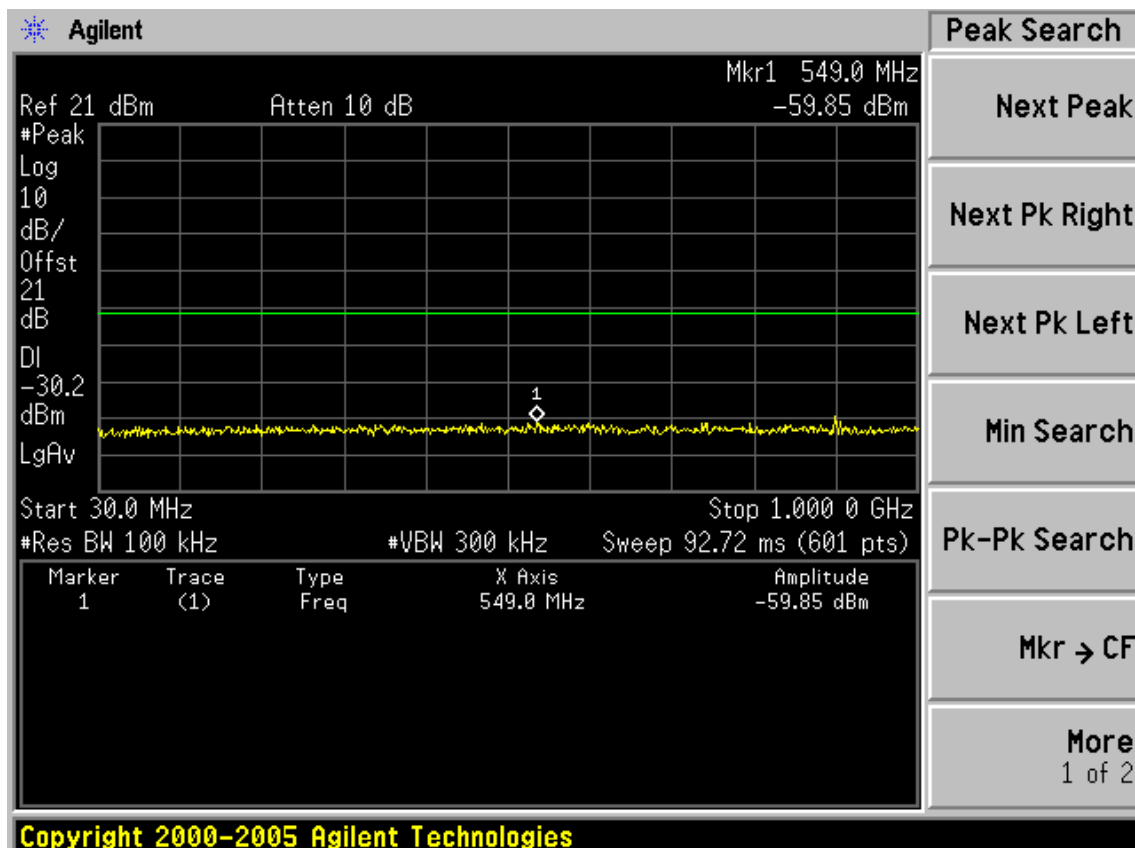
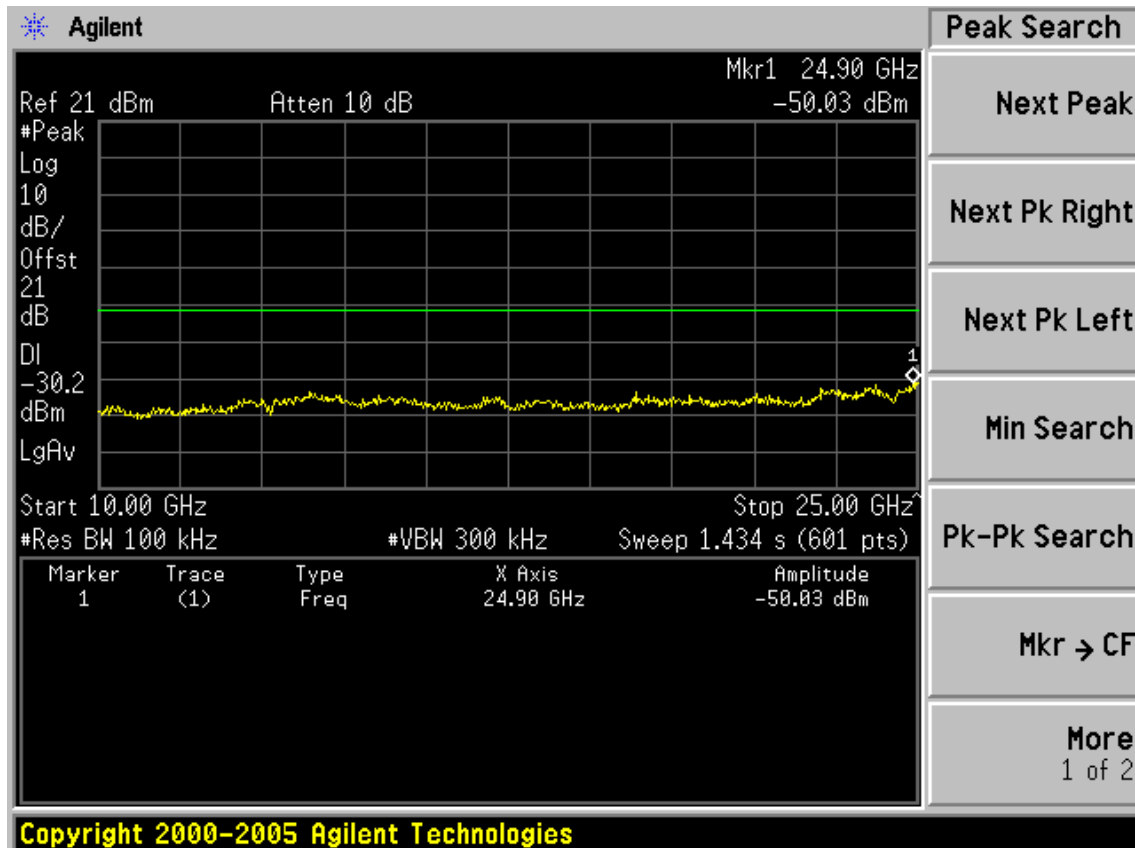




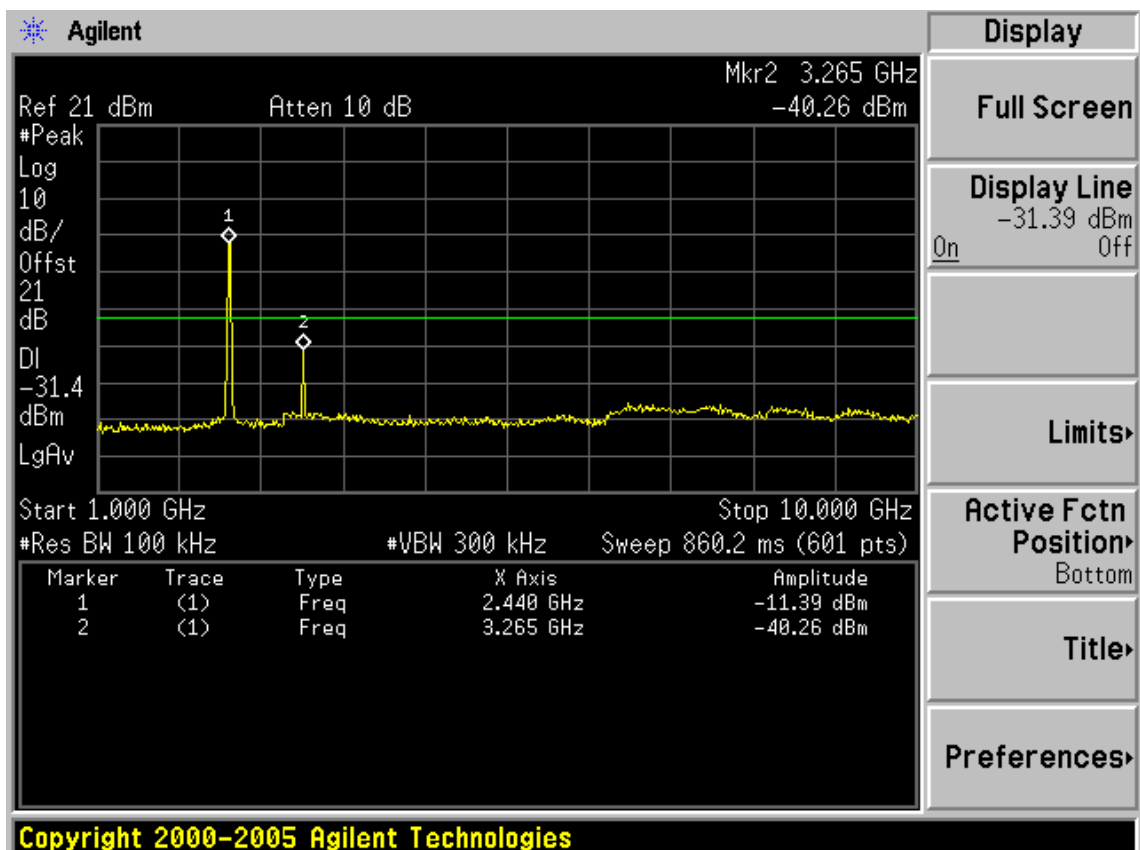
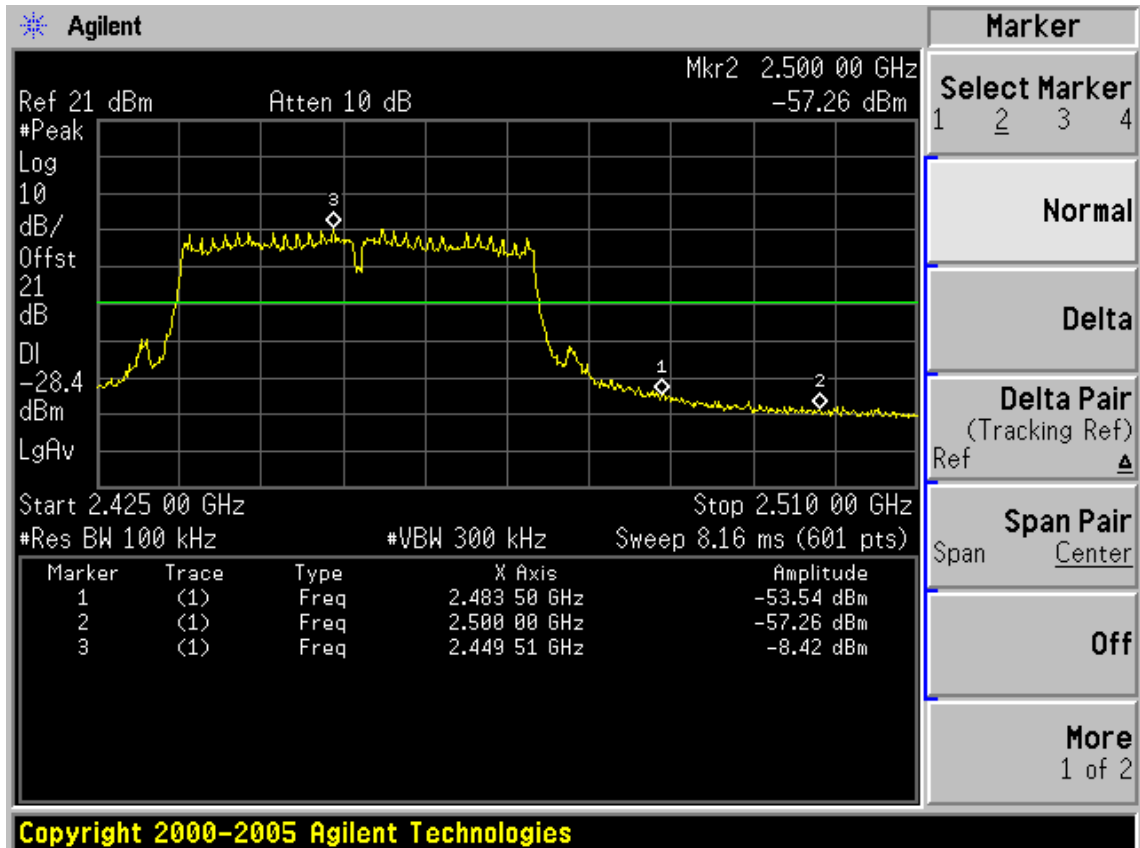


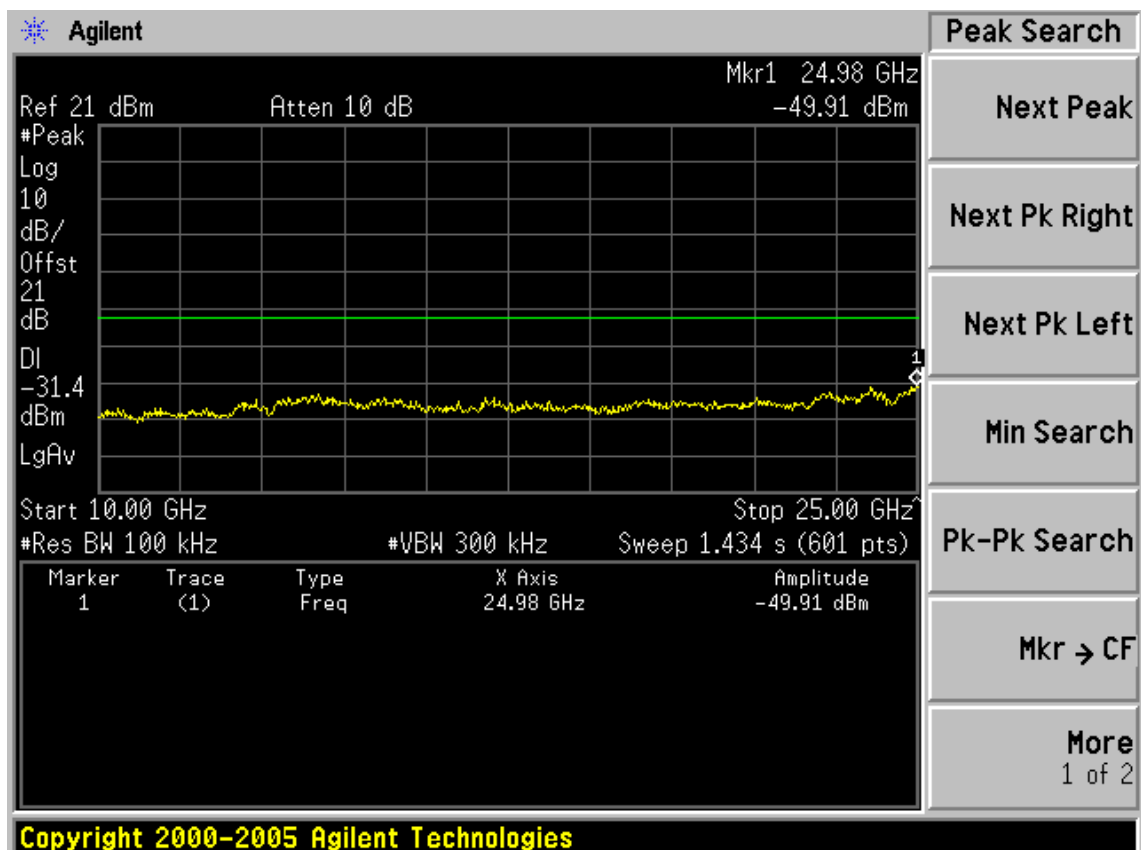
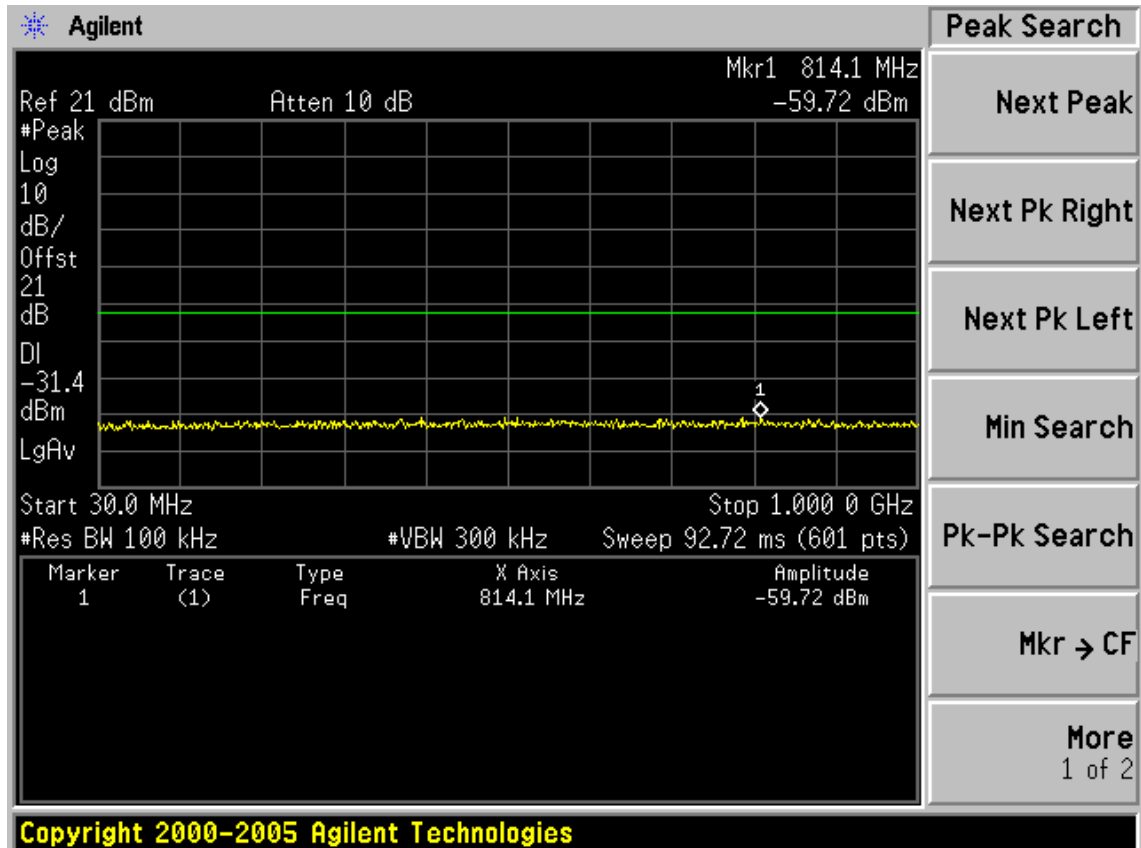
Test CH4: 2437MHz





Test CH7: 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	May.08, 12	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.31, 11	1Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 12	1 Year

6.2. Limit

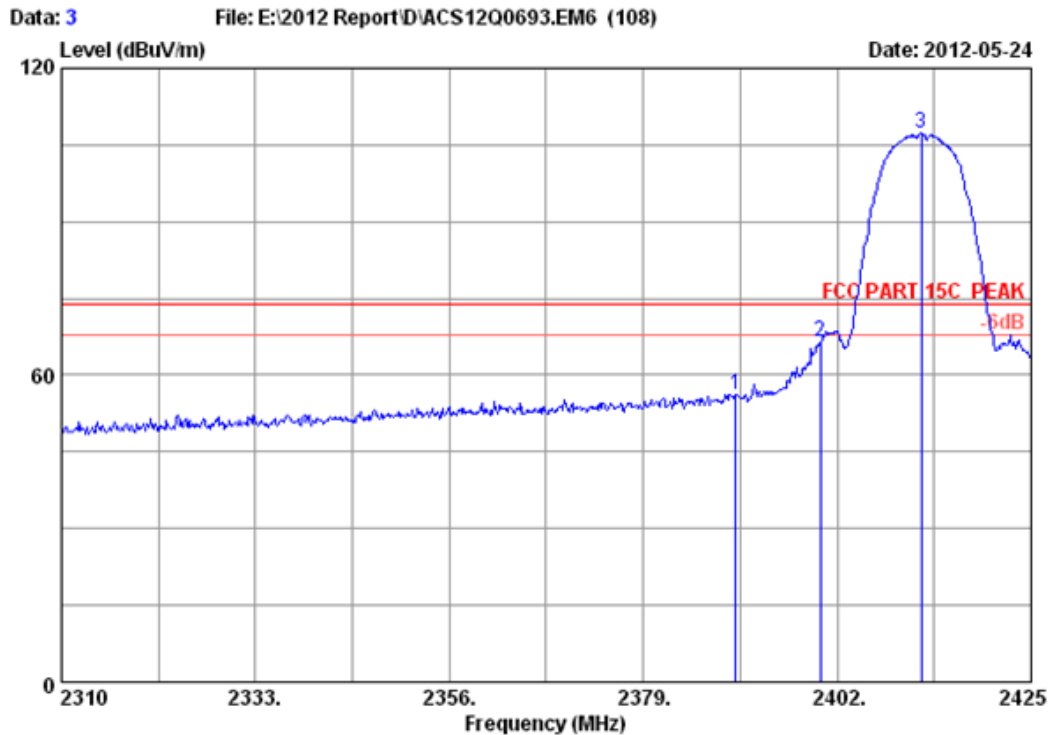
All the lower and upper band-edges emissions appearing within 2310MHz to 2390MHz and 2483.5MHz to 2500MHz restricted frequency bands shall not exceed the limits shown in 15.209, all the other emissions outside operation frequency band 2400MHz to 2483.5MHz shall be at least 20dB below the fundamental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

6.3. Test Produce

1. The EUT is placed on a turntable, which is 0.8m 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 upperband-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.)

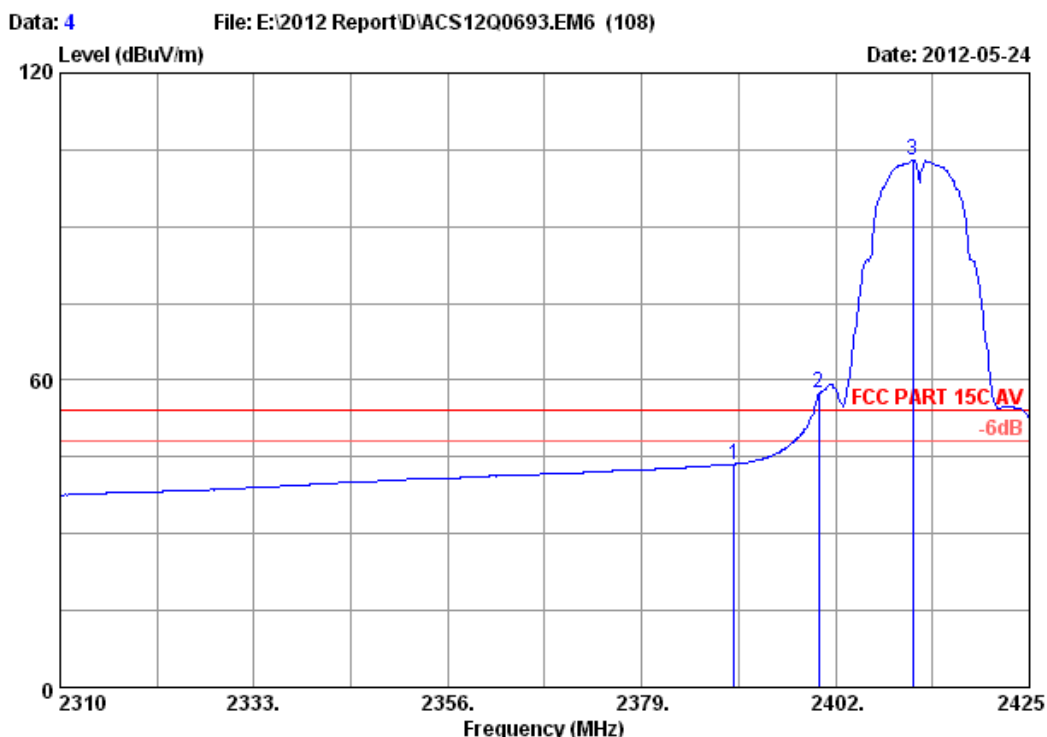


Site no. : 3m Chamber Data no. : 3
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.96	6.01	34.44	56.62	56.15	74.00	17.85	Peak
2	2400.000	27.96	6.01	34.44	67.00	66.53	74.00	7.47	Peak
3	2412.005	27.98	6.03	34.44	107.76	107.33	74.00	-33.33	Peak

Remarks:

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

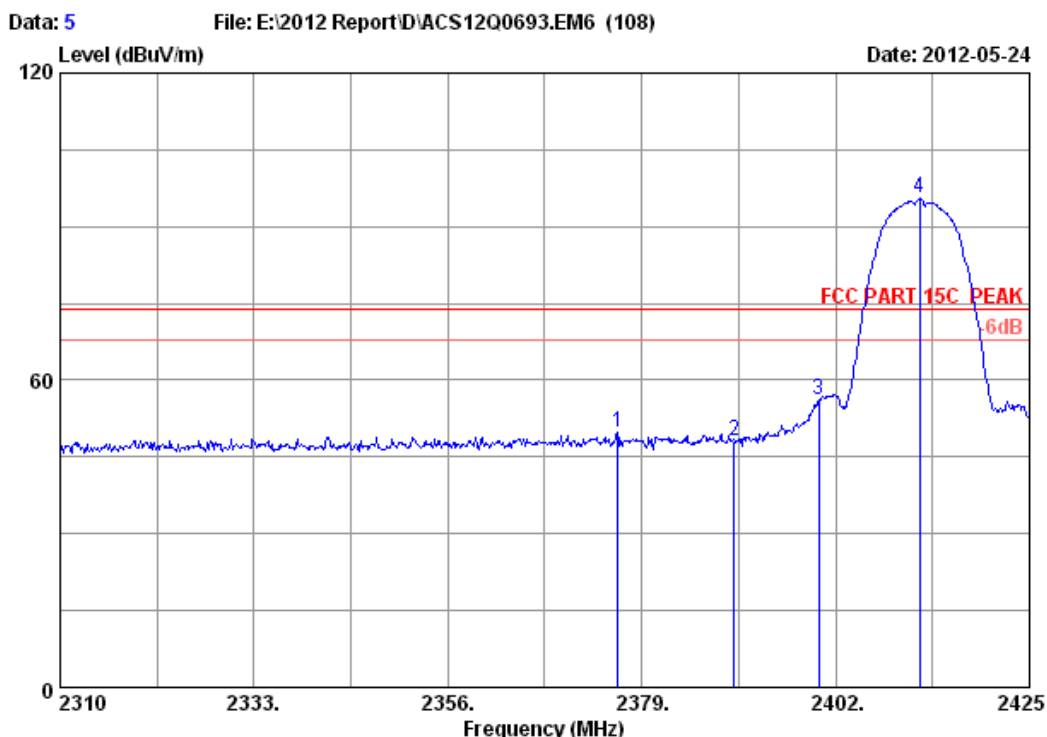


Site no. : 3m Chamber Data no. : 4
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.96	6.01	34.44	44.09	43.62	54.00	10.38	Average
2	2400.000	27.96	6.01	34.44	57.88	57.41	54.00	-3.41	Average
3	2411.200	27.98	6.03	34.44	103.53	103.10	54.00	-49.10	Average

Remarks:

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

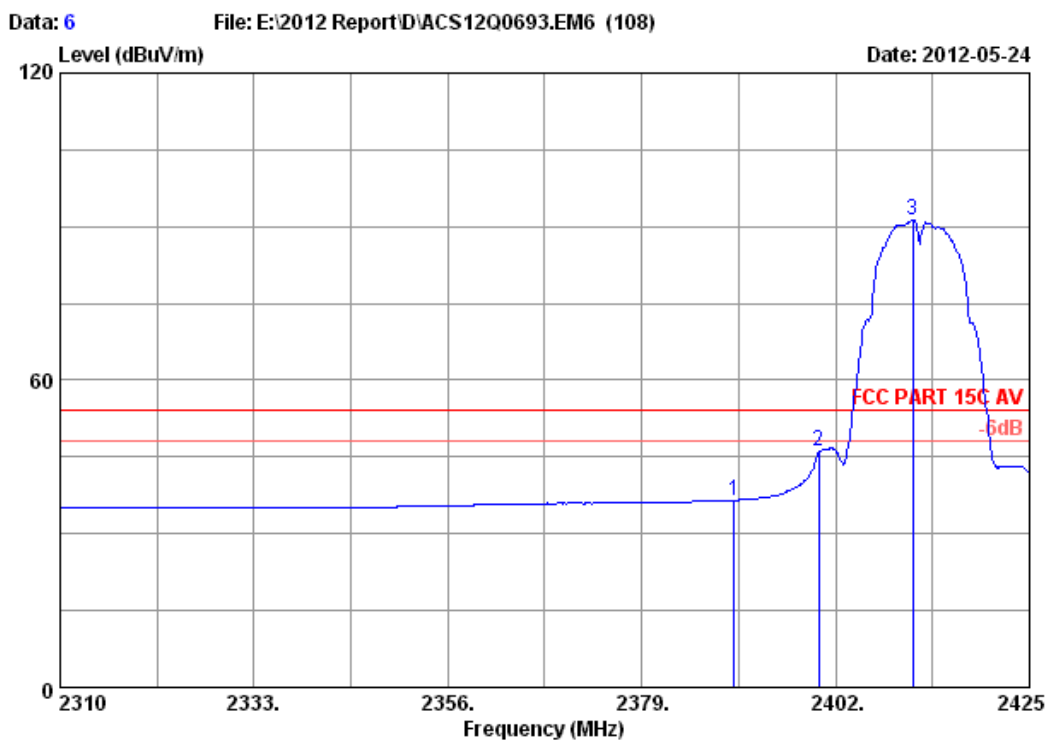


Site no. : 3m Chamber Data no. : 5
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2376.125	27.93	5.98	34.44	50.27	49.74	74.00	24.26	Peak
2	2390.000	27.96	6.01	34.44	48.49	48.02	74.00	25.98	Peak
3	2400.000	27.96	6.01	34.44	56.57	56.10	74.00	17.90	Peak
4	2412.005	27.98	6.03	34.44	95.88	95.45	74.00	-21.45	Peak

Remarks:

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

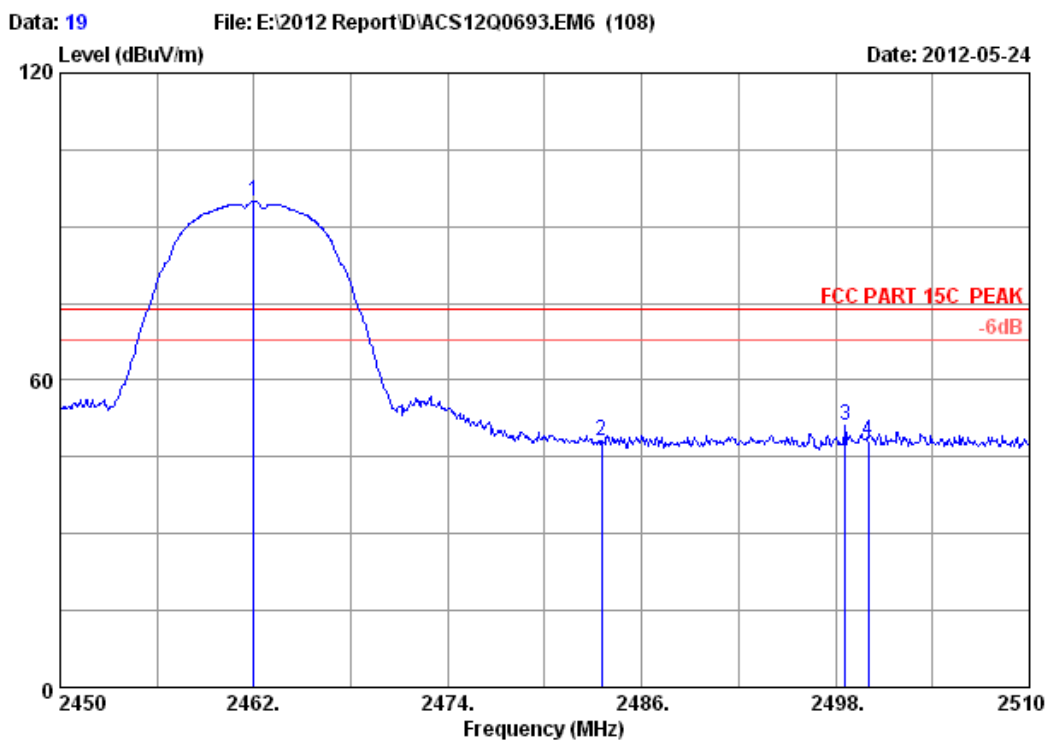


Site no. : 3m Chamber Data no. : 6
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.96	6.01	34.44	37.03	36.56	54.00	17.44	Average
2	2400.000	27.96	6.01	34.44	46.45	45.98	54.00	8.02	Average
3	2411.200	27.98	6.03	34.44	91.84	91.41	54.00	-37.41	Average

Remarks:

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

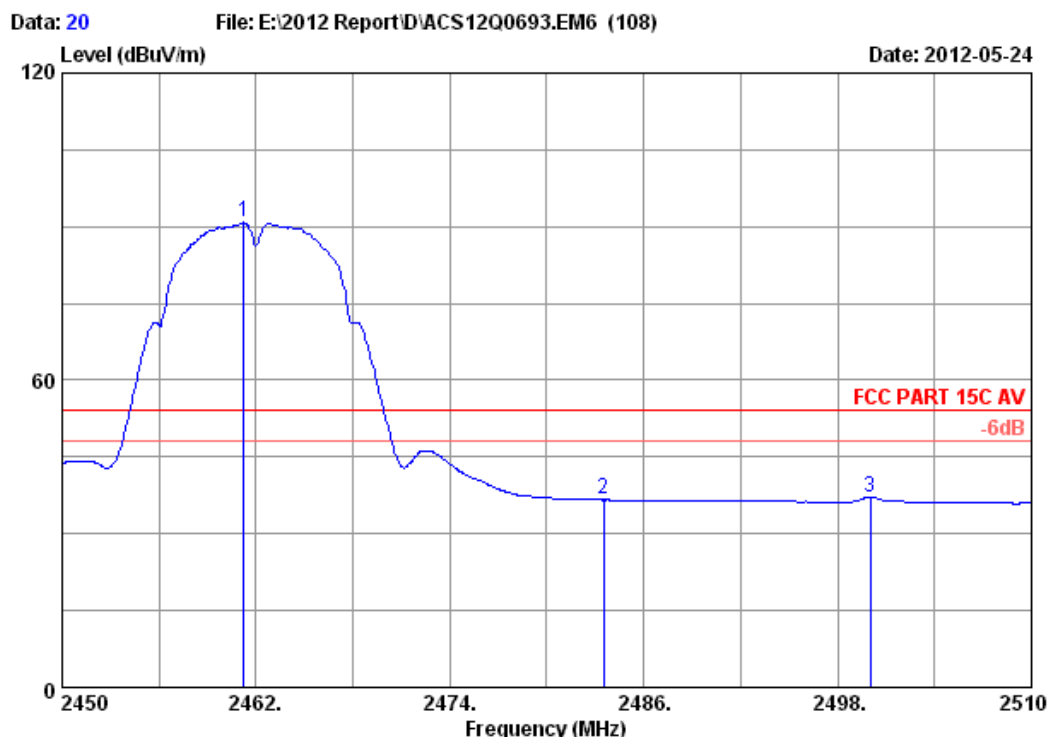


Site no. : 3m Chamber Data no. : 19
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.05	6.12	34.44	95.24	94.97	74.00	-20.97	Peak
2	2483.500	28.08	6.15	34.45	48.27	48.05	74.00	25.95	Peak
3	2498.600	28.10	6.18	34.45	51.17	51.00	74.00	23.00	Peak
4	2500.000	28.10	6.18	34.45	48.46	48.29	74.00	25.71	Peak

Remarks:

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

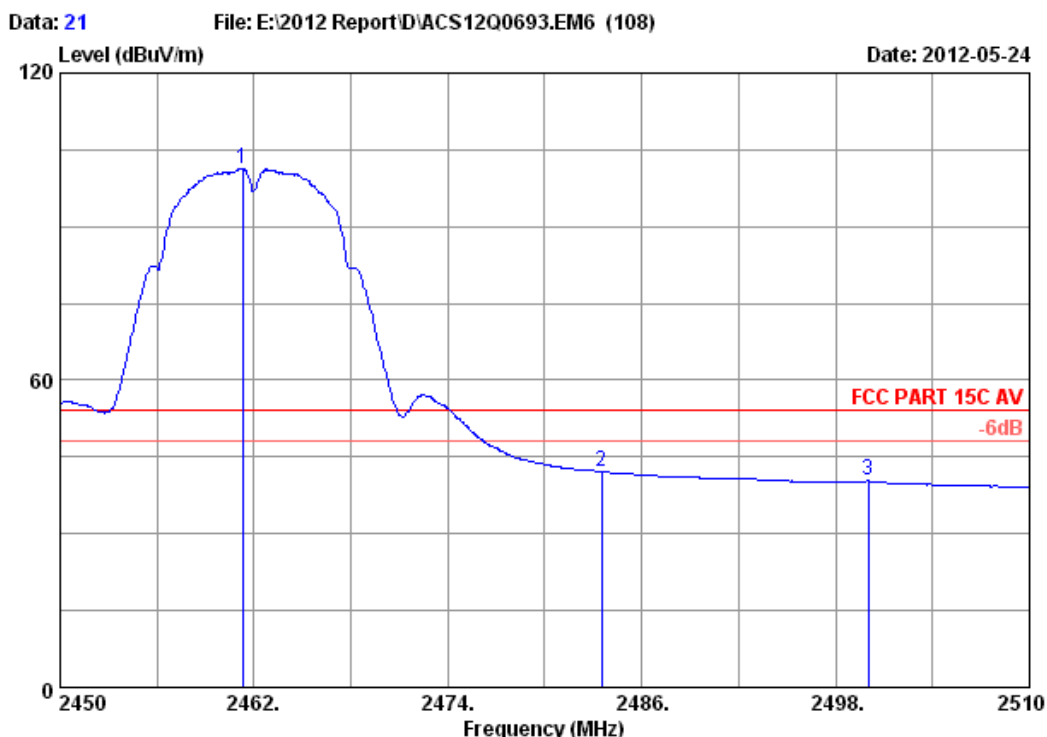


Site no. : 3m Chamber Data no. : 20
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.220	28.05	6.12	34.44	91.05	90.78	54.00	-36.78	Average
2	2483.500	28.08	6.15	34.45	36.84	36.62	54.00	17.38	Average
3	2500.000	28.10	6.18	34.45	37.30	37.13	54.00	16.87	Average

Remarks:

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

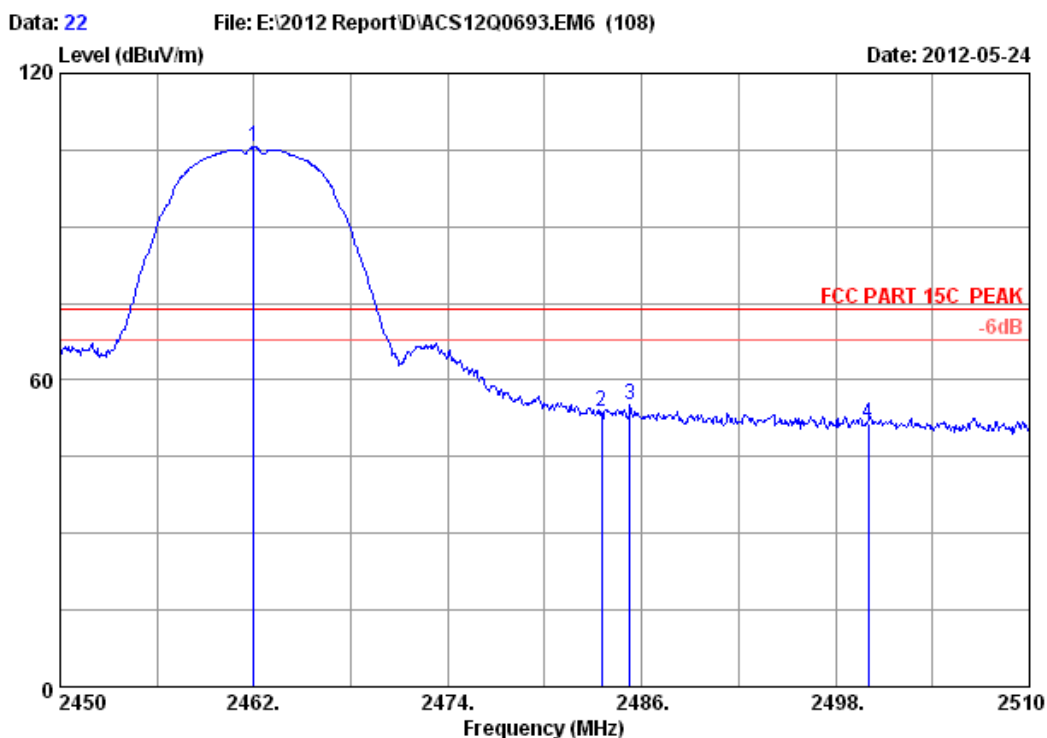


Site no. : 3m Chamber Data no. : 21
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2461.280	28.05	6.12	34.44	101.62	101.35	54.00	-47.35	Average
2	2483.500	28.08	6.15	34.45	42.33	42.11	54.00	11.89	Average
3	2500.000	28.10	6.18	34.45	40.46	40.29	54.00	13.71	Average

Remarks:

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

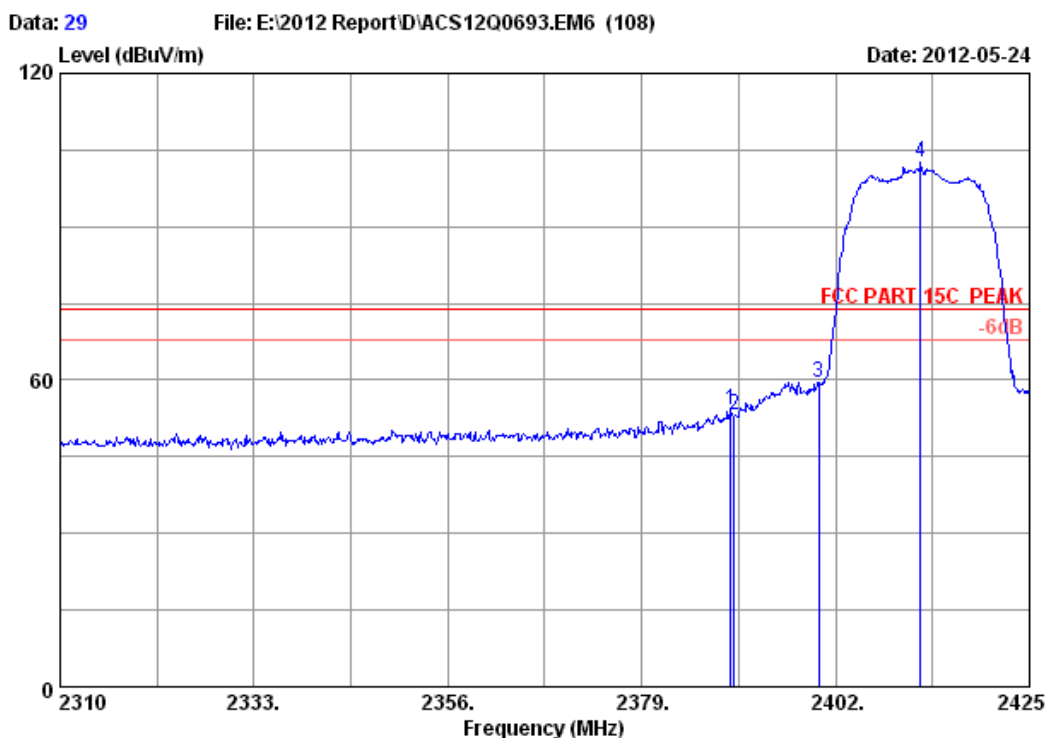


Site no. : 3m Chamber Data no. : 22
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11b CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.000	28.05	6.12	34.44	105.81	105.54	74.00	-31.54	Peak
2	2483.500	28.08	6.15	34.45	54.15	53.93	74.00	20.07	Peak
3	2485.280	28.08	6.15	34.45	55.48	55.26	74.00	18.74	Peak
4	2500.000	28.10	6.18	34.45	51.51	51.34	74.00	22.66	Peak

Remarks:

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

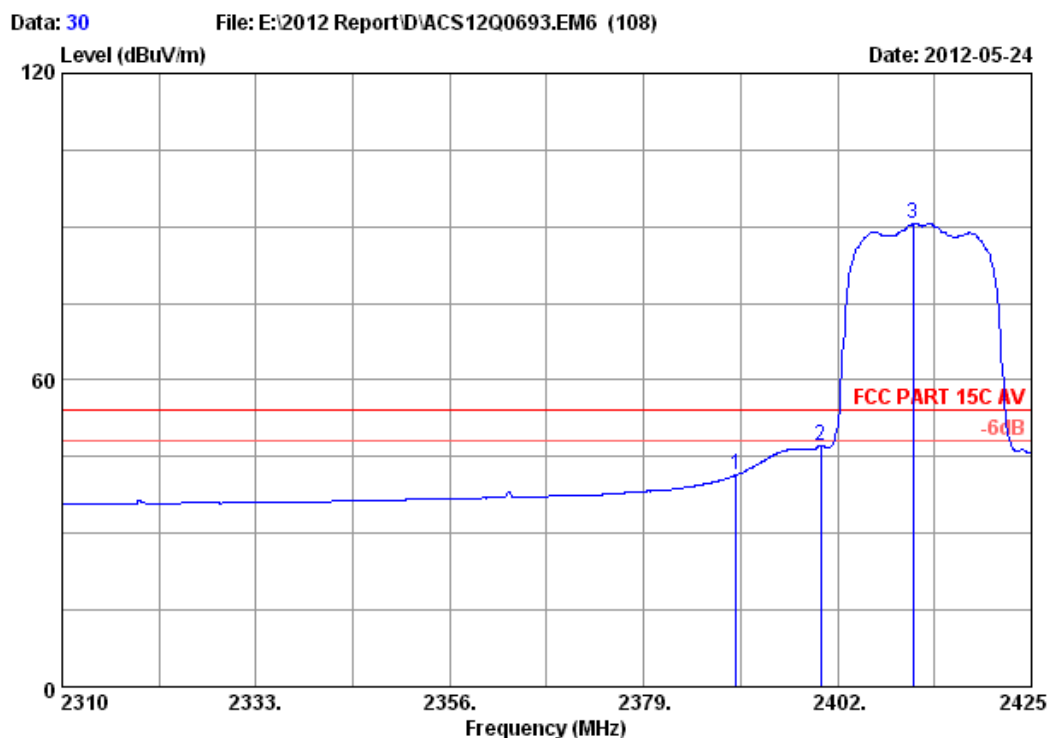


Site no. : 3m Chamber Data no. : 29
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.580	27.96	6.01	34.44	54.57	54.10	74.00	19.90	Peak
2	2390.000	27.96	6.01	34.44	53.53	53.06	74.00	20.94	Peak
3	2400.000	27.96	6.01	34.44	60.01	59.54	74.00	14.46	Peak
4	2412.120	27.98	6.03	34.44	103.14	102.71	74.00	-28.71	Peak

Remarks:

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

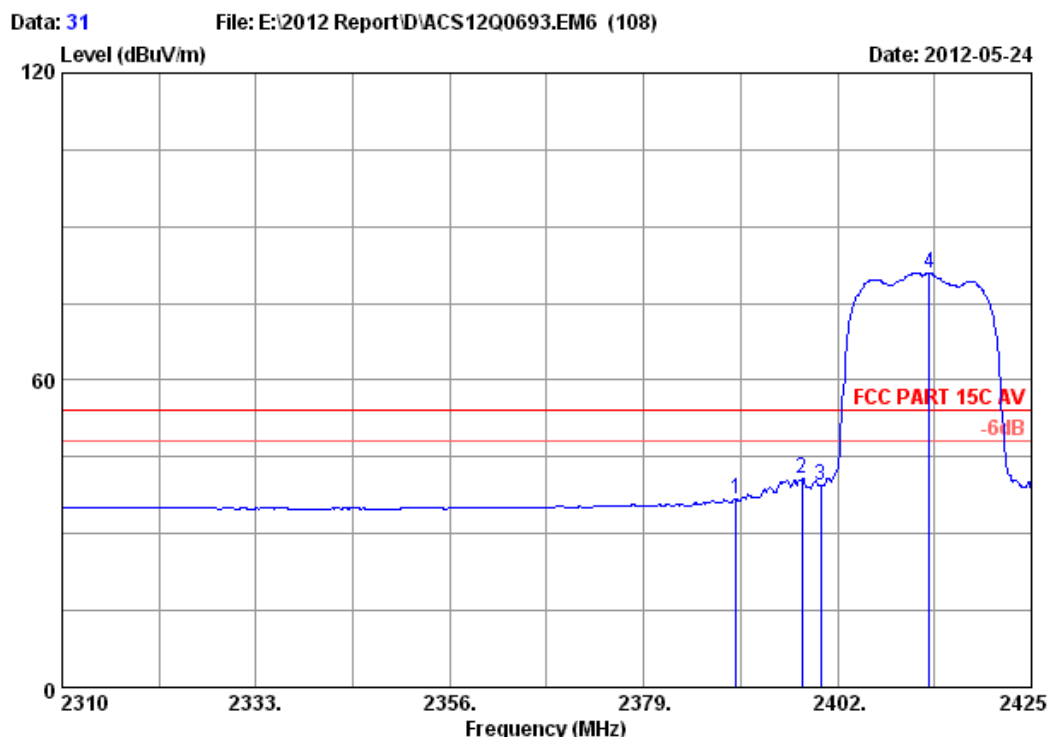


Site no. : 3m Chamber Data no. : 30
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.96	6.01	34.44	41.89	41.42	54.00	12.58	Average
2	2400.000	27.96	6.01	34.44	47.57	47.10	54.00	6.90	Average
3	2410.970	27.98	6.03	34.44	91.12	90.69	54.00	-36.69	Average

Remarks:

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

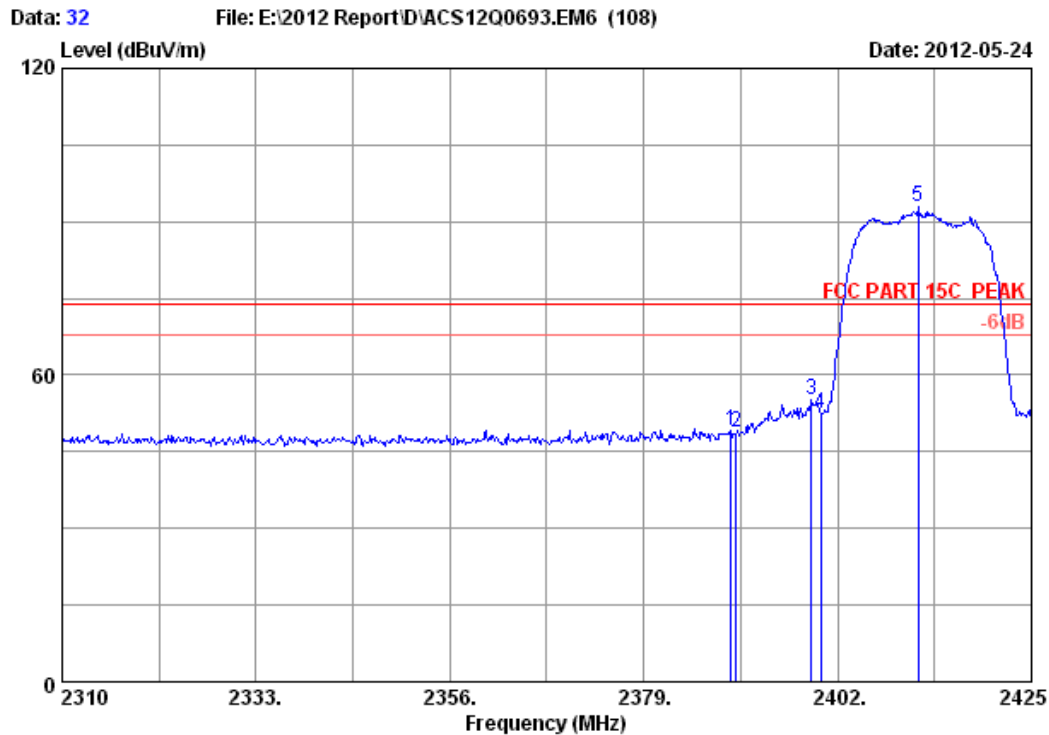


Site no. : 3m Chamber Data no. : 31
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.96	6.01	34.44	37.20	36.73	54.00	17.27	Average
2	2397.745	27.96	6.01	34.44	41.17	40.70	54.00	13.30	Average
3	2400.000	27.96	6.01	34.44	39.93	39.46	54.00	14.54	Average
4	2412.925	27.98	6.03	34.44	81.49	81.06	54.00	-27.06	Average

Remarks:

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

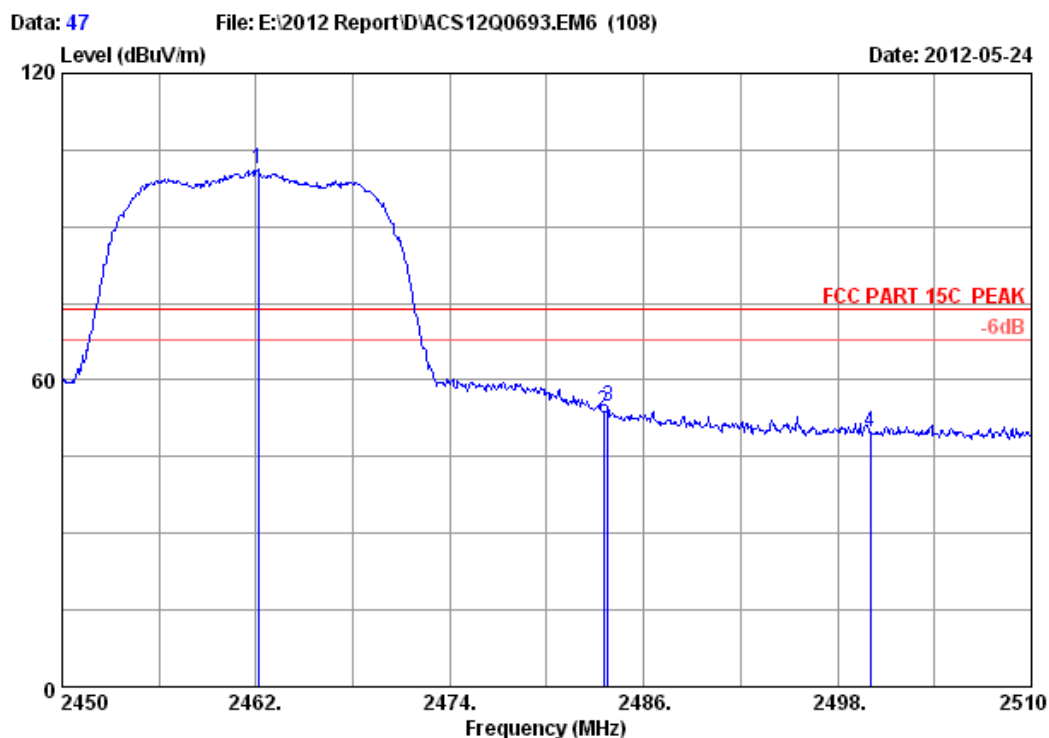


Site no. : 3m Chamber Data no. : 32
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.350	27.96	6.01	34.44	49.76	49.29	74.00	24.71	Peak
2	2390.000	27.96	6.01	34.44	49.11	48.64	74.00	25.36	Peak
3	2398.895	27.96	6.01	34.44	55.56	55.09	74.00	18.91	Peak
4	2400.000	27.96	6.01	34.44	52.81	52.34	74.00	21.66	Peak
5	2411.545	27.98	6.03	34.44	93.50	93.07	74.00	-19.07	Peak

Remarks:

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

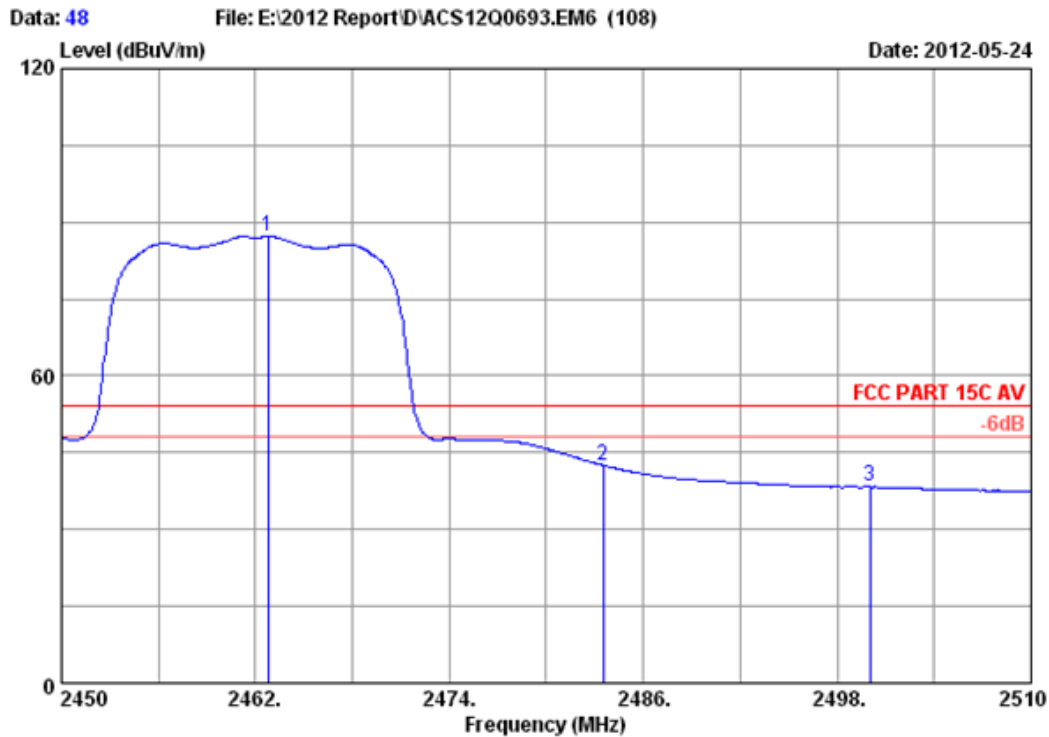


Site no. : 3m Chamber Data no. : 47
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.120	28.05	6.12	34.44	101.45	101.18	74.00	-27.18	Peak
2	2483.500	28.08	6.15	34.45	54.15	53.93	74.00	20.07	Peak
3	2483.780	28.08	6.15	34.45	55.20	54.98	74.00	19.02	Peak
4	2500.000	28.10	6.18	34.45	49.82	49.65	74.00	24.35	Peak

Remarks:

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

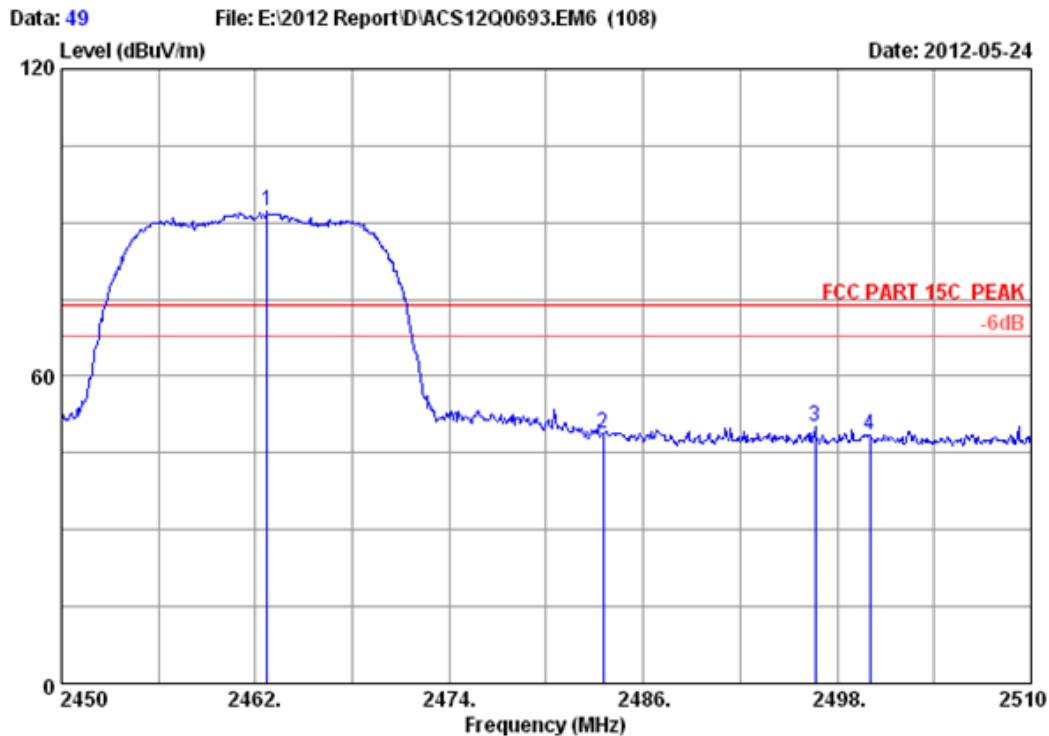


Site no. : 3m Chamber Data no. : 48
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2462.780	28.05	6.12	34.45	87.53	87.25	54.00	-33.25	Average
2	2483.500	28.08	6.15	34.45	42.77	42.55	54.00	11.45	Average
3	2500.000	28.10	6.18	34.45	38.47	38.30	54.00	15.70	Average

Remarks:

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

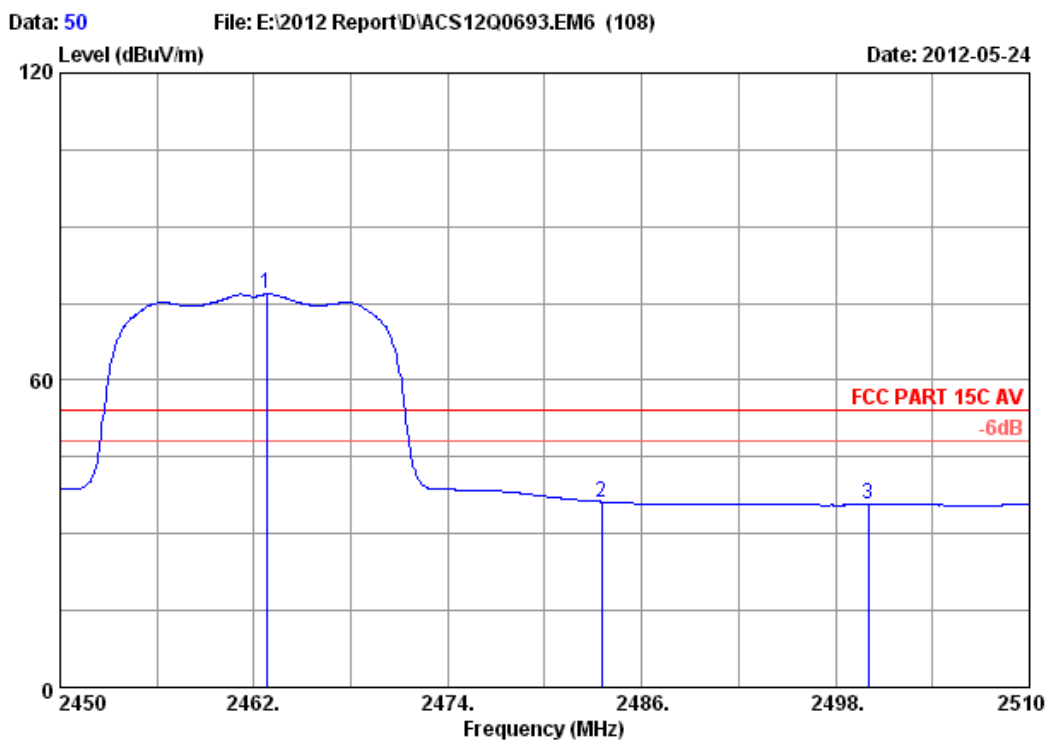


Site no. : 3m Chamber Data no. : 49
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.720	28.05	6.12	34.45	92.68	92.40	74.00	-18.40	Peak
2	2483.500	28.08	6.15	34.45	48.90	48.68	74.00	25.32	Peak
3	2496.620	28.10	6.18	34.45	50.15	49.98	74.00	24.02	Peak
4	2500.000	28.10	6.18	34.45	48.72	48.55	74.00	25.45	Peak

Remarks:

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

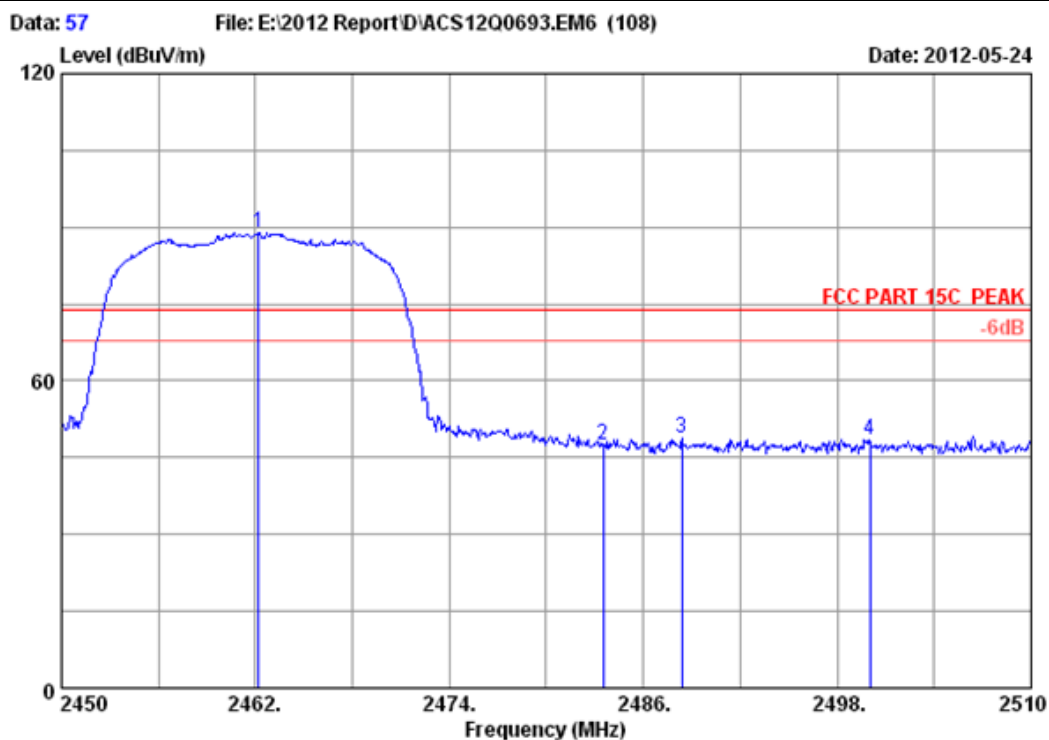


Site no. : 3m Chamber Data no. : 50
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11g CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.780	28.05	6.12	34.45	77.09	76.81	54.00	-22.81	Average
2	2483.500	28.08	6.15	34.45	36.48	36.26	54.00	17.74	Average
3	2500.000	28.10	6.18	34.45	36.07	35.90	54.00	18.10	Average

Remarks:

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

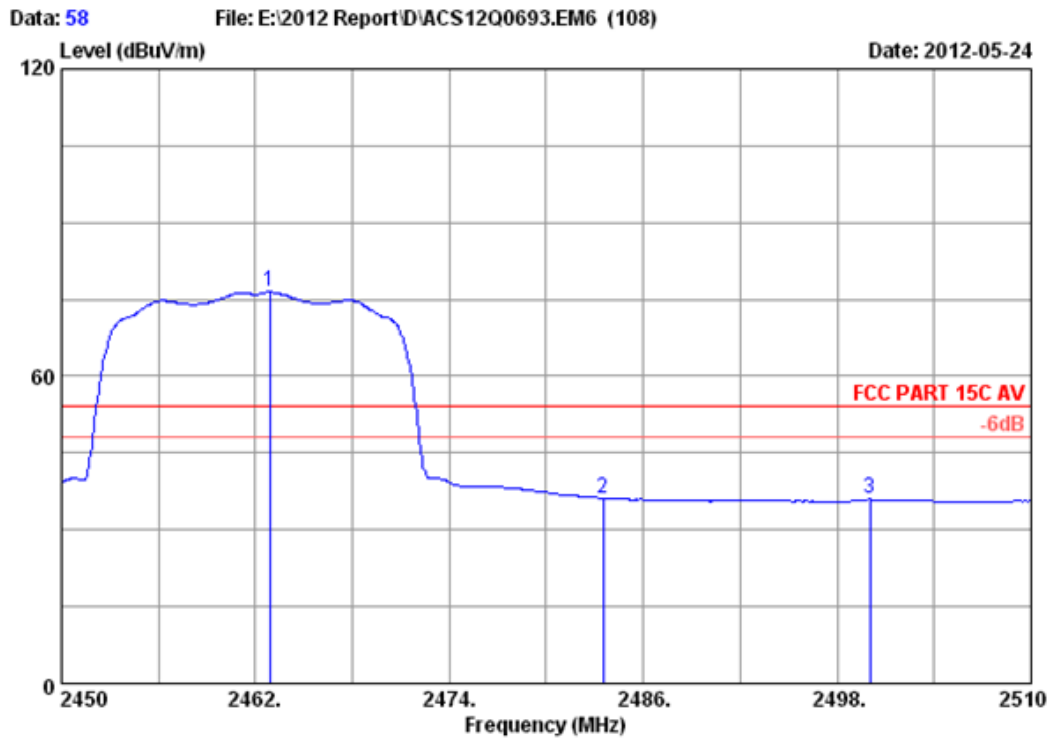


Site no. : 3m Chamber Data no. : 57
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.180	28.05	6.12	34.44	89.30	89.03	74.00	-15.03	Peak
2	2483.500	28.08	6.15	34.45	47.60	47.38	74.00	26.62	Peak
3	2488.400	28.10	6.15	34.45	49.11	48.91	74.00	25.09	Peak
4	2500.000	28.10	6.18	34.45	48.51	48.34	74.00	25.66	Peak

Remarks:

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

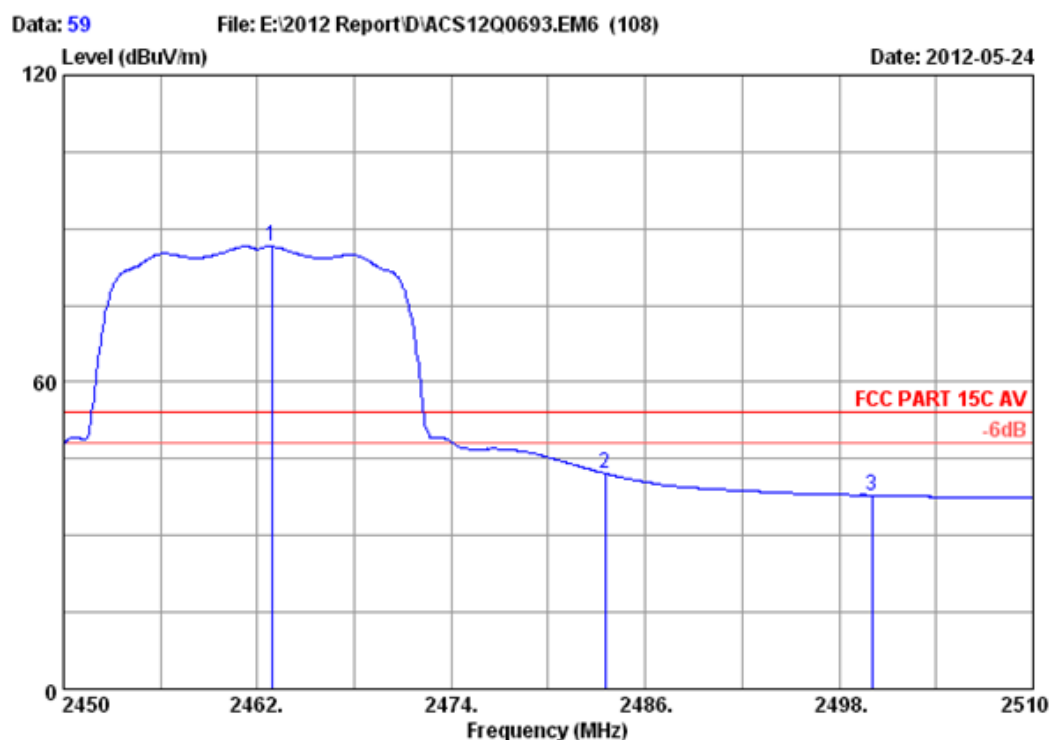


Site no. : 3m Chamber Data no. : 58
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.900	28.05	6.12	34.45	76.71	76.43	54.00	-22.43	Average
2	2483.500	28.08	6.15	34.45	36.41	36.19	54.00	17.81	Average
3	2500.000	28.10	6.18	34.45	36.11	35.94	54.00	18.06	Average

Remarks:

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

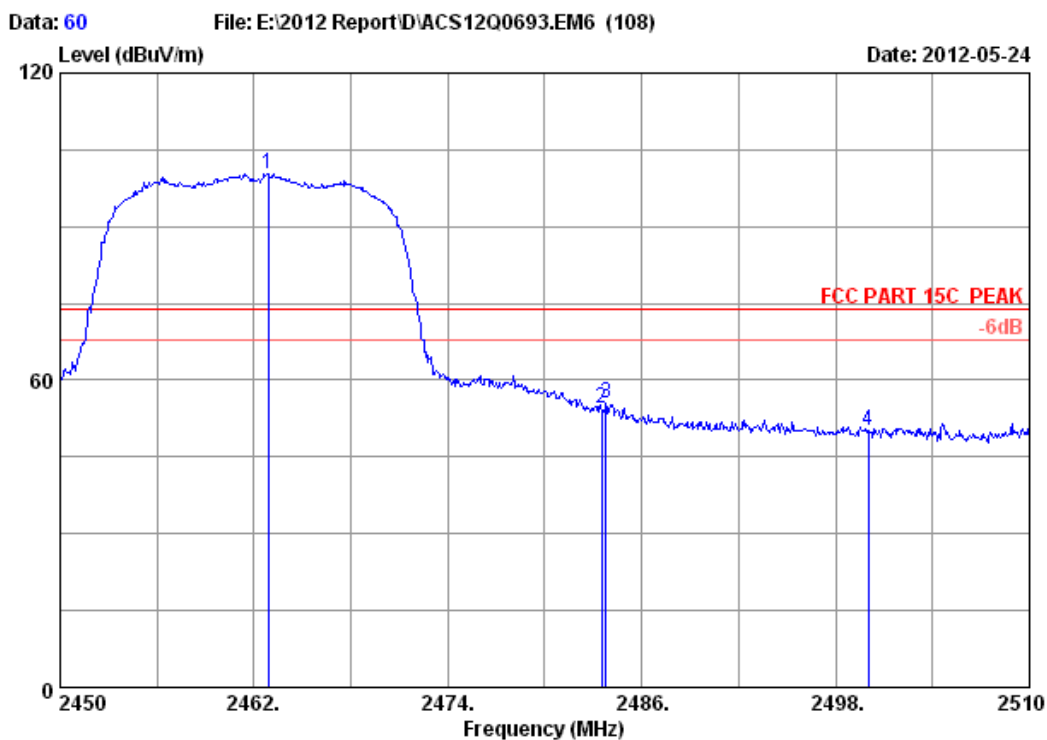


Site no. : 3m Chamber Data no. : 59
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.900	28.05	6.12	34.45	86.78	86.50	54.00	-32.50	Average
2	2483.500	28.08	6.15	34.45	42.38	42.16	54.00	11.84	Average
3	2500.000	28.10	6.18	34.45	38.07	37.90	54.00	16.10	Average

Remarks:

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

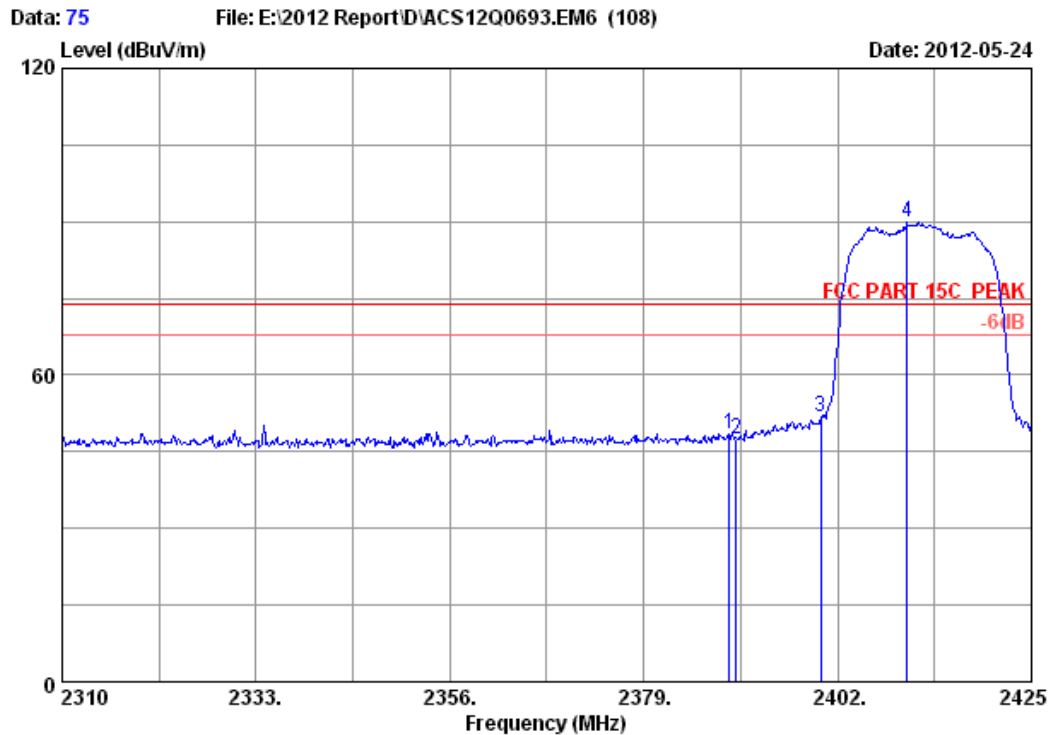


Site no. : 3m Chamber Data no. : 60
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT20 CH11 2462MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2462.900	28.05	6.12	34.45	100.60	100.32	74.00	-26.32	Peak
2	2483.500	28.08	6.15	34.45	54.76	54.54	74.00	19.46	Peak
3	2483.780	28.08	6.15	34.45	55.77	55.55	74.00	18.45	Peak
4	2500.000	28.10	6.18	34.45	50.46	50.29	74.00	23.71	Peak

Remarks:

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

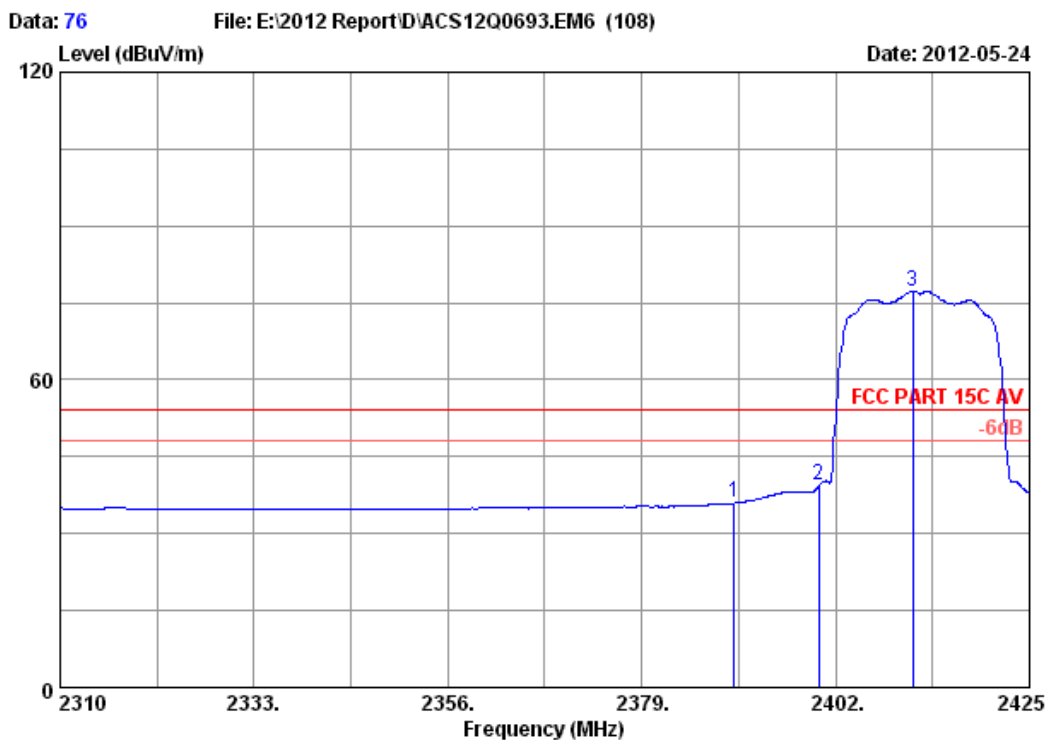


Site no. : 3m Chamber Data no. : 75
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.120	27.96	6.01	34.44	49.06	48.59	74.00	25.41	Peak
2	2390.000	27.96	6.01	34.44	48.07	47.60	74.00	26.40	Peak
3	2400.000	27.96	6.01	34.44	52.24	51.77	74.00	22.23	Peak
4	2410.280	27.98	6.03	34.44	90.42	89.99	74.00	-15.99	Peak

Remarks:

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

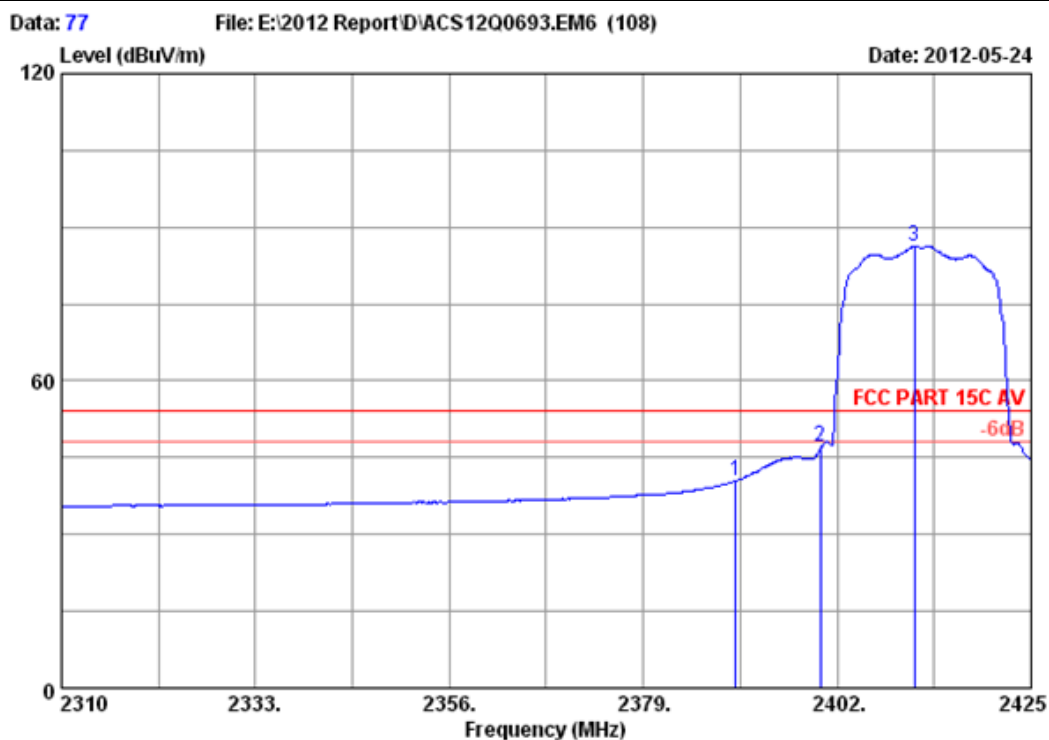


Site no. : 3m Chamber Data no. : 76
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.96	6.01	34.44	36.41	35.94	54.00	18.06	Average
2	2400.000	27.96	6.01	34.44	39.94	39.47	54.00	14.53	Average
3	2411.200	27.98	6.03	34.44	77.72	77.29	54.00	-23.29	Average

Remarks:

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

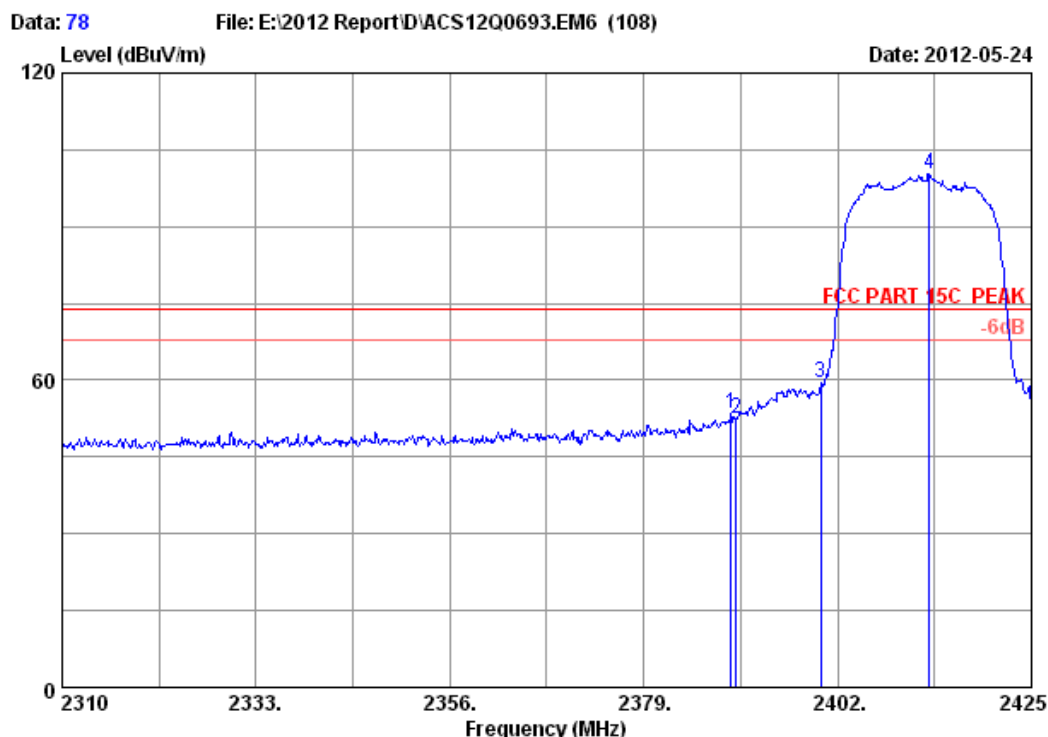


Site no. : 3m Chamber Data no. : 77
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.96	6.01	34.44	40.99	40.52	54.00	13.48	Average
2	2400.000	27.96	6.01	34.44	47.44	46.97	54.00	7.03	Average
3	2411.200	27.98	6.03	34.44	86.69	86.26	54.00	-32.26	Average

Remarks:

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

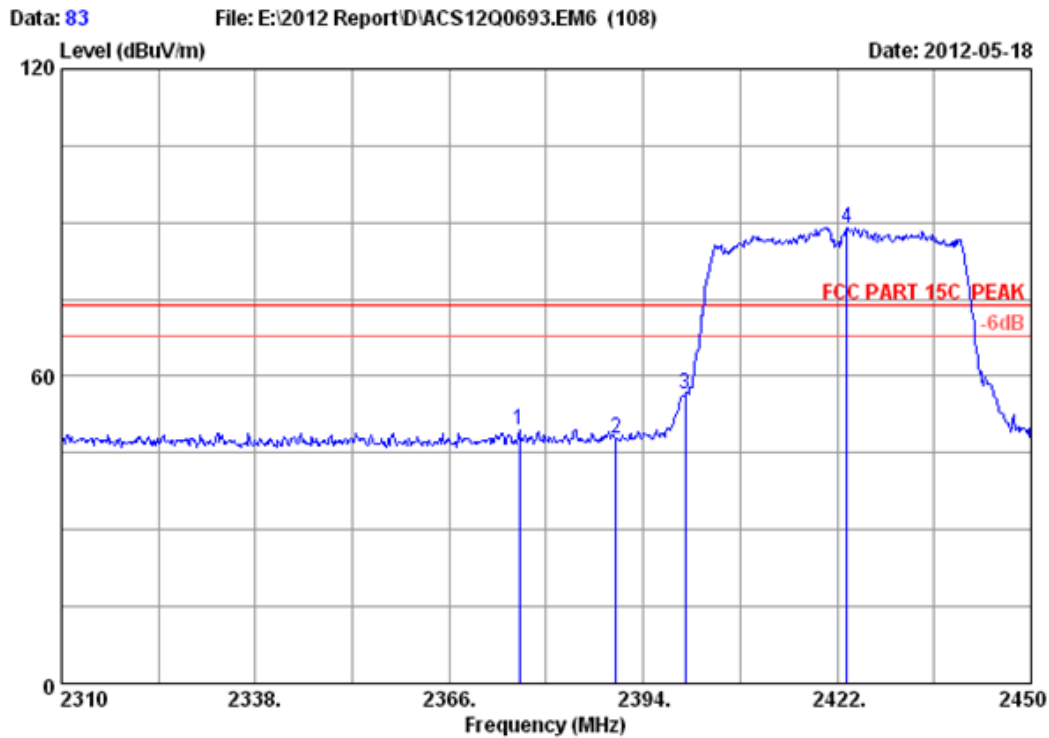


Site no. : 3m Chamber Data no. : 78
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT20 CH1 2412MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.350	27.96	6.01	34.44	54.00	53.53	74.00	20.47	Peak
2	2390.000	27.96	6.01	34.44	53.06	52.59	74.00	21.41	Peak
3	2400.000	27.96	6.01	34.44	59.89	59.42	74.00	14.58	Peak
4	2412.925	27.98	6.03	34.44	100.75	100.32	74.00	-26.32	Peak

Remarks:

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

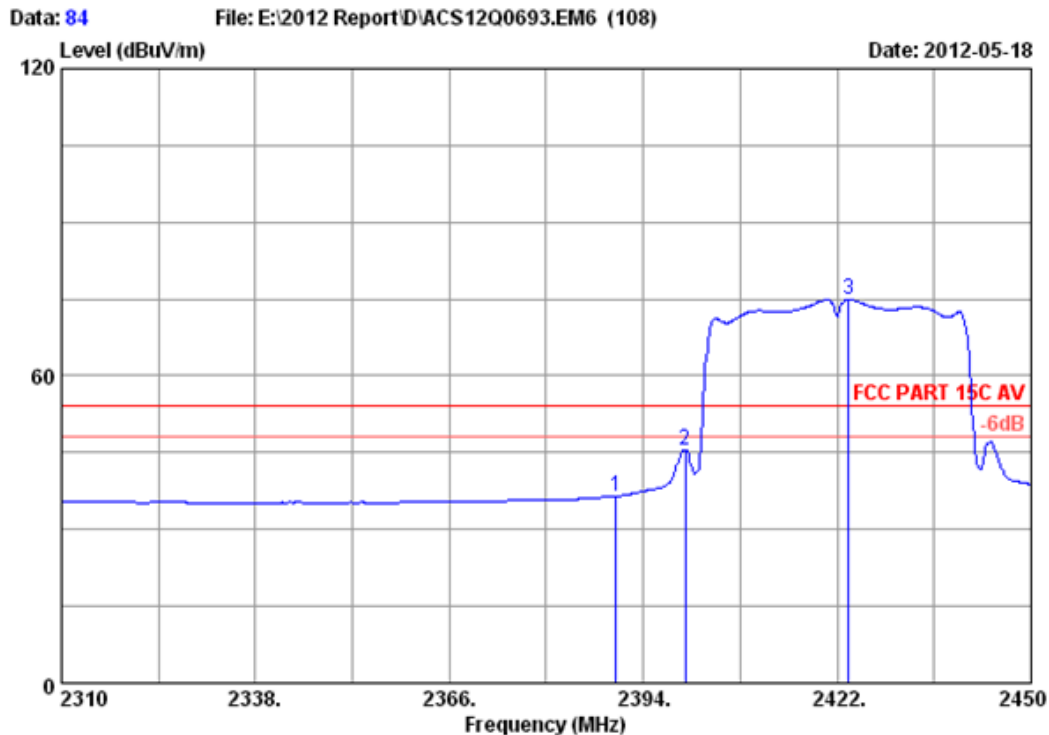


Site no. : 3m Chamber Data no. : 83
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2376.080	27.93	5.98	34.44	49.99	49.46	74.00	24.54	Peak
2	2390.000	27.96	6.01	34.44	48.21	47.74	74.00	26.26	Peak
3	2400.000	27.96	6.01	34.44	56.99	56.52	74.00	17.48	Peak
4	2423.400	28.00	6.06	34.44	89.43	89.05	74.00	-15.05	Peak

Remarks:

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

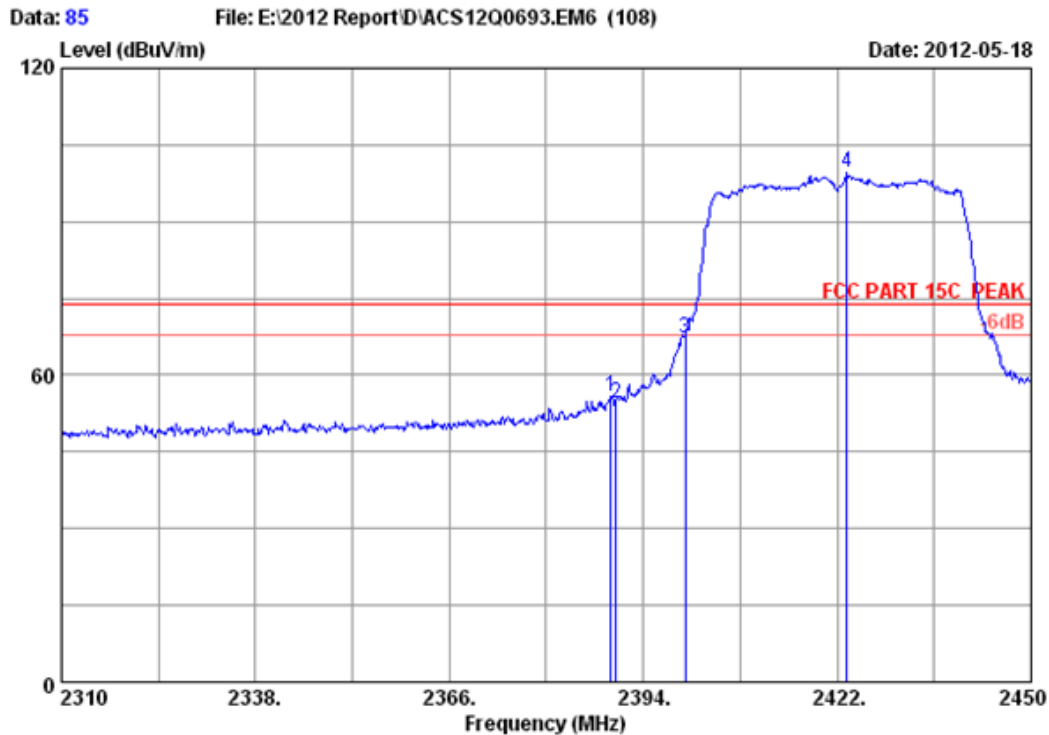


Site no. : 3m Chamber Data no. : 84
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBUV)	Emission Level (dBUV/m)	Limits (dBUV/m)	Margin (dB)	Remark
1	2390.000	27.96	6.01	34.44	36.94	36.47	54.00	17.53	Average
2	2400.000	27.96	6.01	34.44	46.09	45.62	54.00	8.38	Average
3	2423.680	28.00	6.06	34.44	75.22	74.84	54.00	-20.84	Average

Remarks:

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

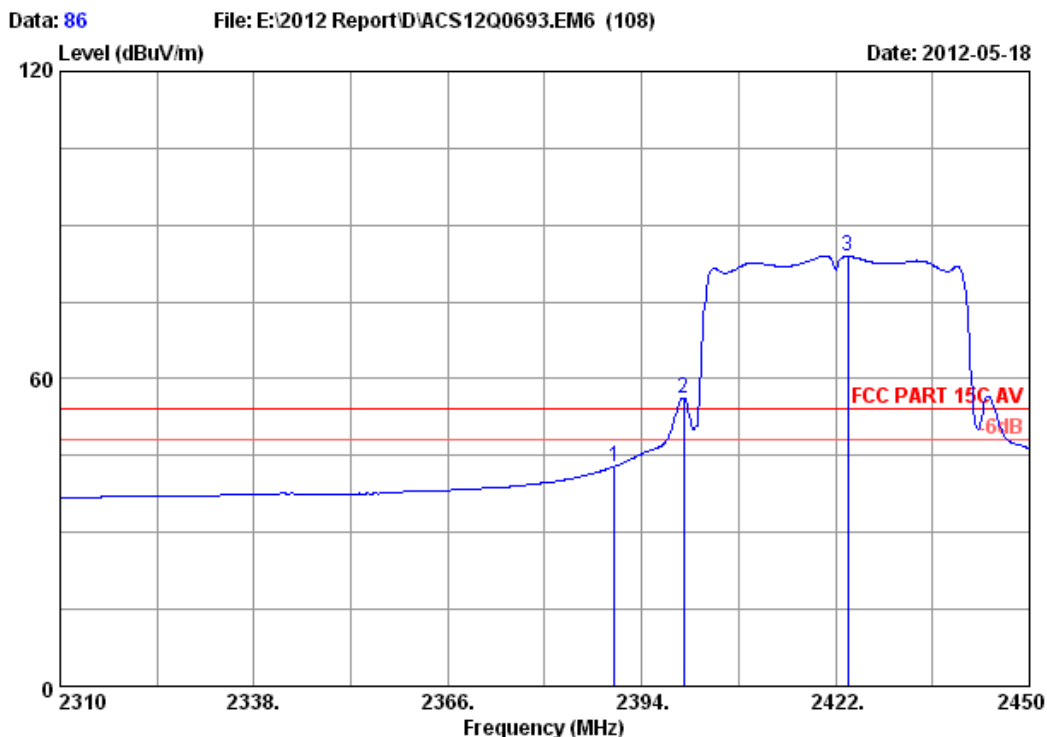


Site no. : 3m Chamber Data no. : 85
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2389.380	27.96	6.01	34.44	56.33	55.86	74.00	18.14	Peak
2	2390.000	27.96	6.01	34.44	54.79	54.32	74.00	19.68	Peak
3	2400.000	27.96	6.01	34.44	67.72	67.25	74.00	6.75	Peak
4	2423.400	28.00	6.06	34.44	99.84	99.46	74.00	-25.46	Peak

Remarks:

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

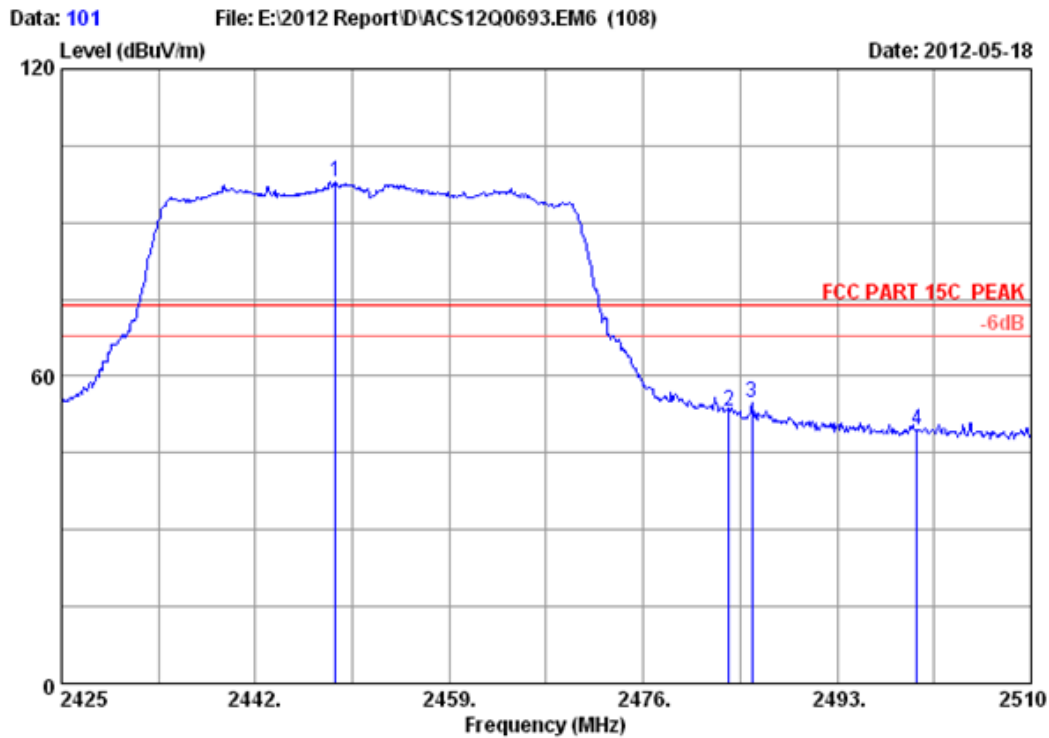


Site no. : 3m Chamber Data no. : 86
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT40 CH1 2422MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2390.000	27.96	6.01	34.44	43.28	42.81	54.00	11.19	Average
2	2400.000	27.96	6.01	34.44	56.70	56.23	54.00	-2.23	Average
3	2423.820	28.00	6.06	34.44	84.39	84.01	54.00	-30.01	Average

Remarks:

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

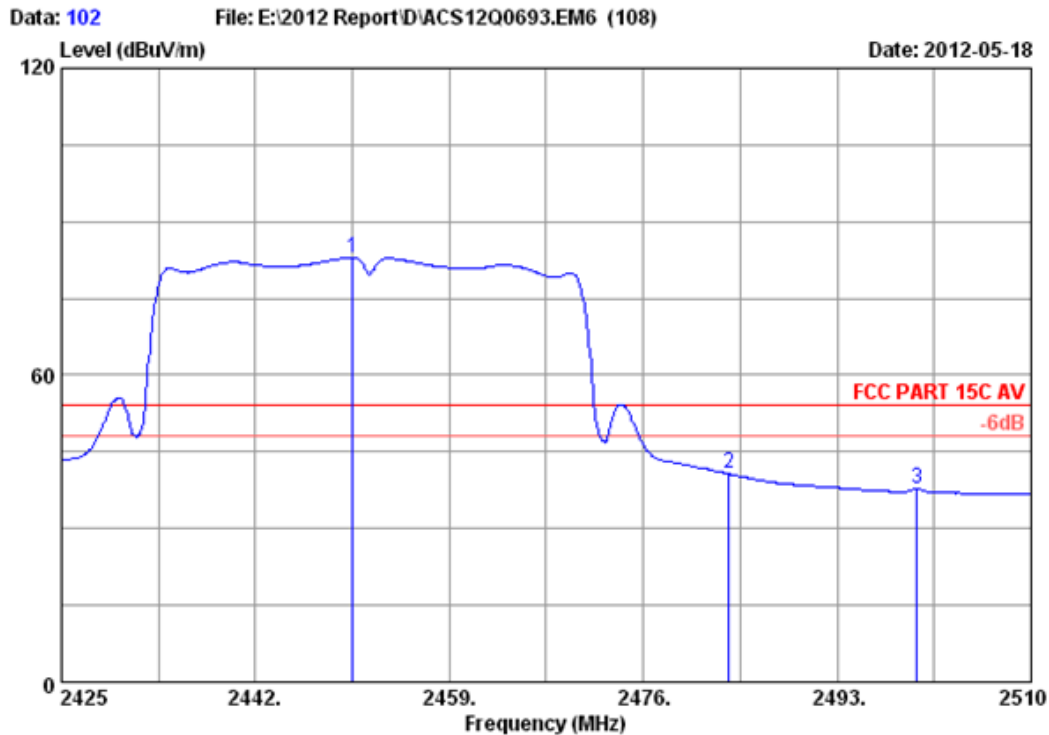


Site no. : 3m Chamber Data no. : 101
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.055	28.03	6.09	34.44	98.35	98.03	74.00	-24.03	Peak
2	2483.500	28.08	6.15	34.45	53.37	53.15	74.00	20.85	Peak
3	2485.520	28.08	6.15	34.45	55.20	54.98	74.00	19.02	Peak
4	2500.000	28.10	6.18	34.45	49.69	49.52	74.00	24.48	Peak

Remarks:

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

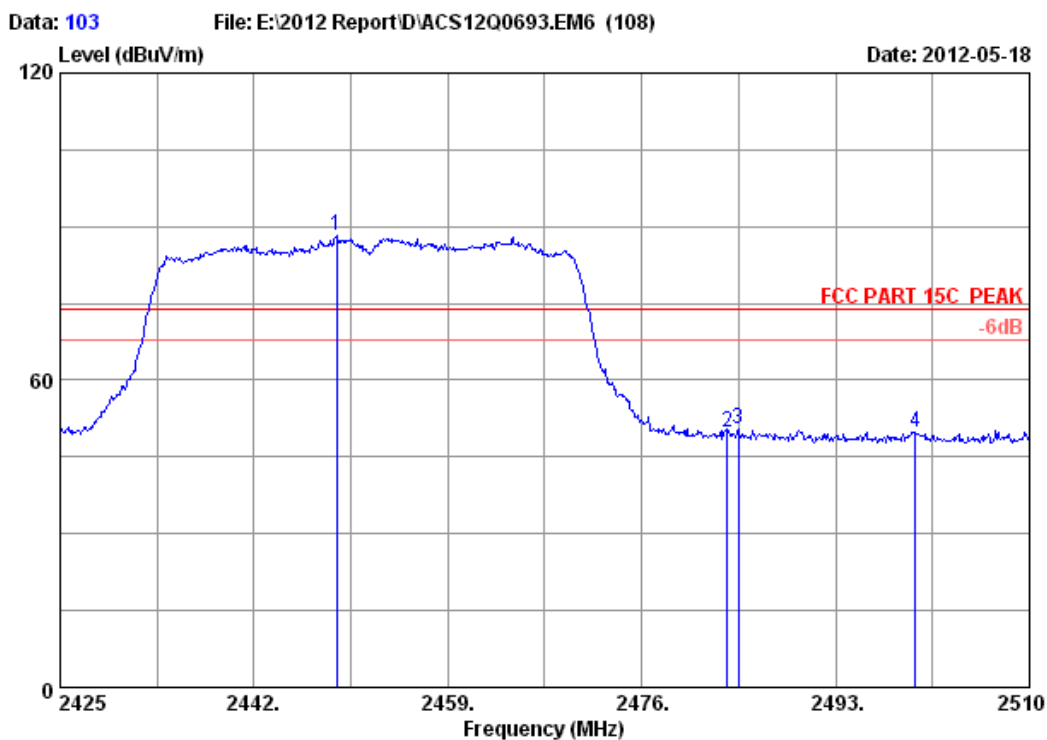


Site no. : 3m Chamber Data no. : 102
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2450.500	28.03	6.09	34.44	83.27	82.95	54.00	-28.95	Average
2	2483.500	28.08	6.15	34.45	40.92	40.70	54.00	13.30	Average
3	2500.000	28.10	6.18	34.45	37.89	37.72	54.00	16.28	Average

Remarks:

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

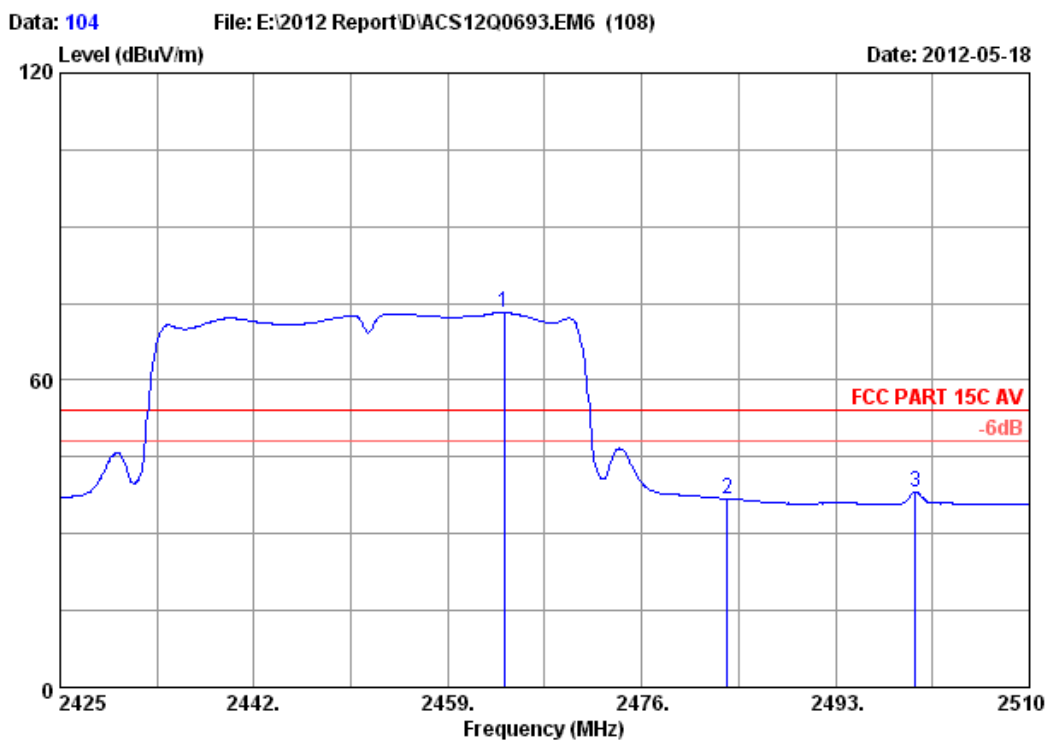


Site no. : 3m Chamber Data no. : 103
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C PEAK
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2449.225	28.03	6.09	34.44	88.45	88.13	74.00	-14.13	Peak
2	2483.500	28.08	6.15	34.45	49.92	49.70	74.00	24.30	Peak
3	2484.500	28.08	6.15	34.45	50.65	50.43	74.00	23.57	Peak
4	2500.000	28.10	6.18	34.45	49.92	49.75	74.00	24.25	Peak

Remarks:

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



Site no. : 3m Chamber Data no. : 104
 Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL
 Limit : FCC PART 15C AV
 Env. / Ins. : 23°C/54% Engineer : Leo-Li
 EUT : Wireless N 150 Router
 Power supply : DC 5V From Adapter Input AC 120V/60Hz
 Test mode : IEEE802.11nHT40 CH7 2452MHz Tx
 : DIR-524

	Freq. (MHz)	Ant. Factor (dB/m)	Cable loss (dB)	Amp. Factor (dB)	Reading (dBuV)	Emission Level (dBuV/m)	Limits (dBuV/m)	Margin (dB)	Remark
1	2463.930	28.05	6.12	34.45	73.45	73.17	54.00	-19.17	Average
2	2483.500	28.08	6.15	34.45	37.03	36.81	54.00	17.19	Average
3	2500.000	28.10	6.18	34.45	38.32	38.15	54.00	15.85	Average

Remarks:

1. Emission Level= Antenna Factor + Cable Loss -Amp Factor + Reading.
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	E4446A	US44300459	May.08, 12	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.31, 11	1Year
4.	HF Cable	Hubersuhner	Sucoflex104	-	May.08, 12	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 300 kHz 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

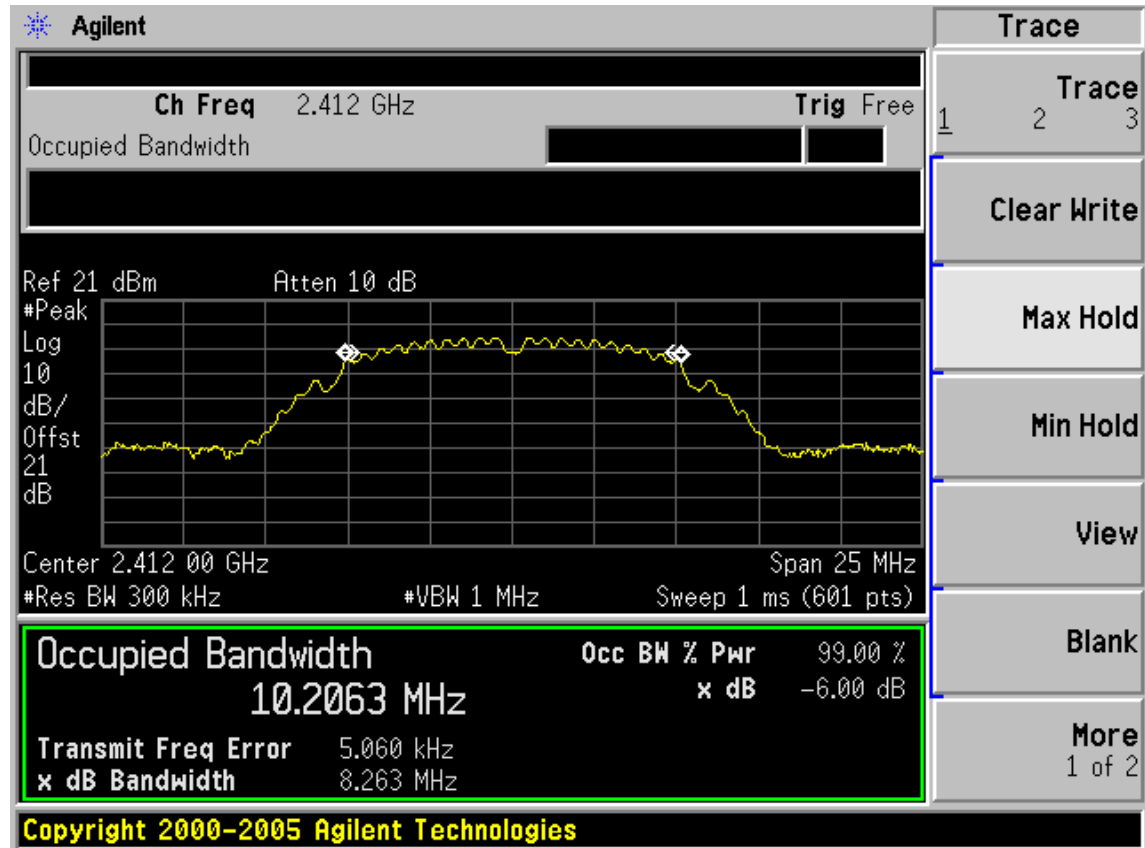
EUT: Wireless N 150 Router		
M/N:DIR-524		
Test date: 2012-05-23	Pressure: 101.4kpa	Humidity: 51.7%
Tested by: Leo-Li	Test site: RF Site	Temperature : 23.9 °C

Cable loss: 1 dB		Attenuator loss: 20 dB	
Test Mode	CH	6dB bandwidth (MHz)	Limit (KHz)
11b	CH1	8.263	>500
	CH6	8.262	>500
	CH11	8.258	>500
11g	CH1	15.688	>500
	CH6	14.738	>500
	CH11	15.257	>500
11n HT20	CH1	17.099	>500
	CH6	16.855	>500
	CH11	16.870	>500
11n HT40	CH1	36.511	>500
	CH4	36.461	>500
	CH7	36.897	>500
Conclusion : PASS			

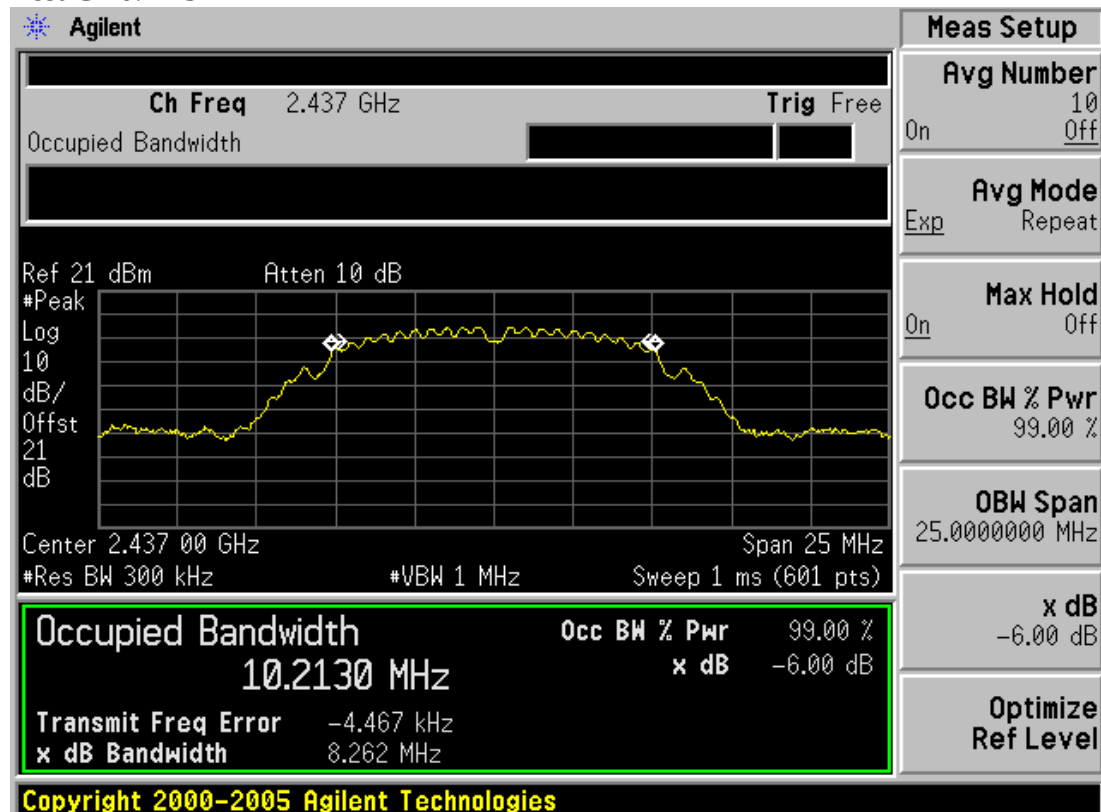
Chain 0:

Test Mode: IEEE 802.11b TX

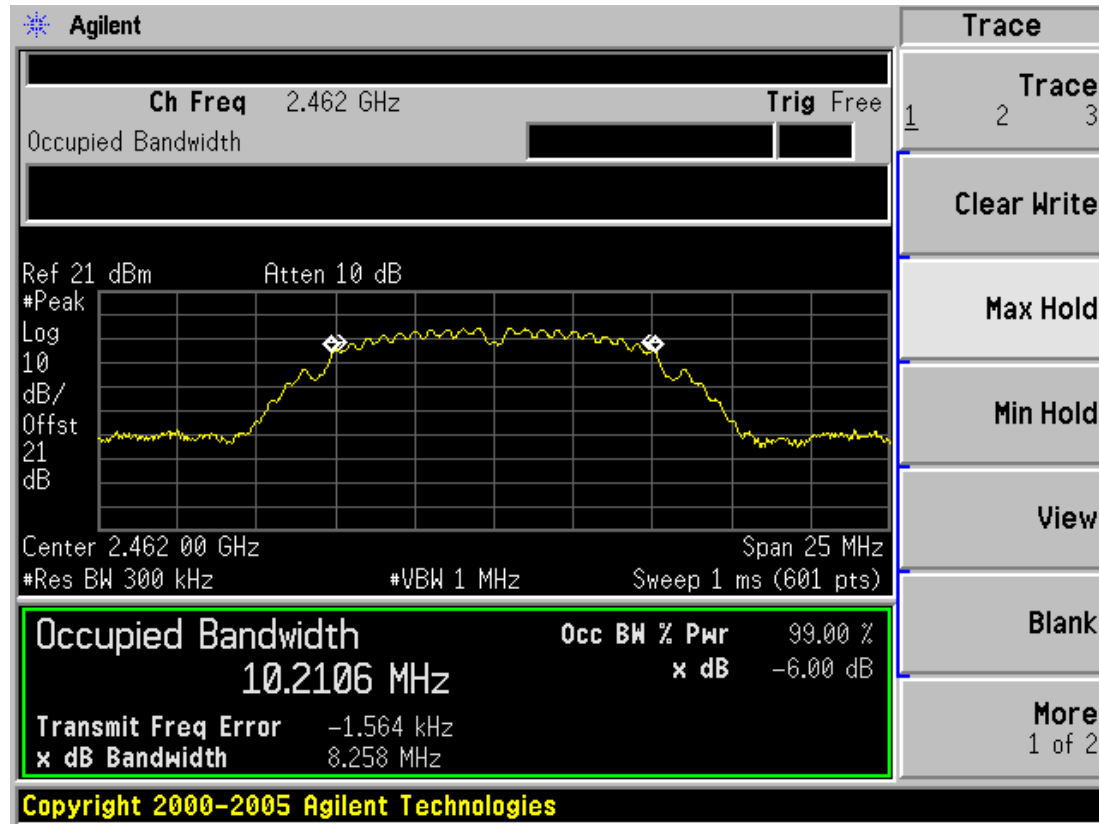
Test CH1: 2412MHz



Test CH6: 2437MHz

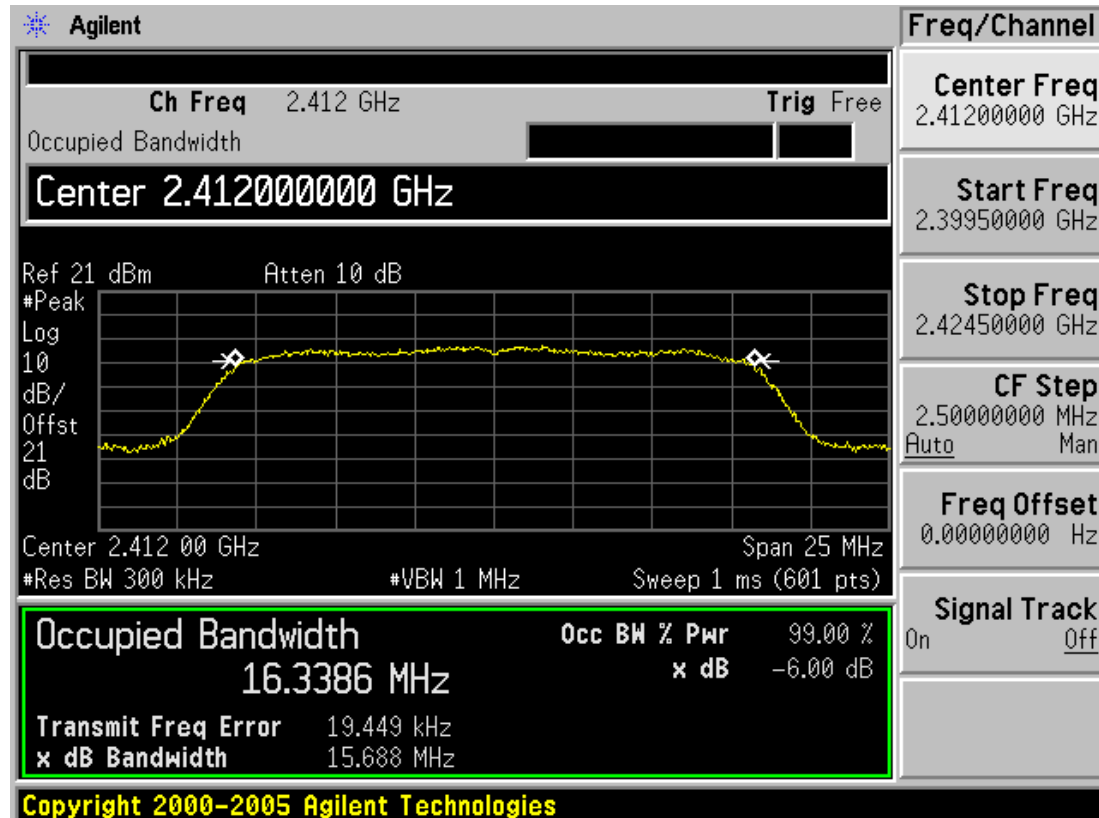


Test CH11: 2462MHz

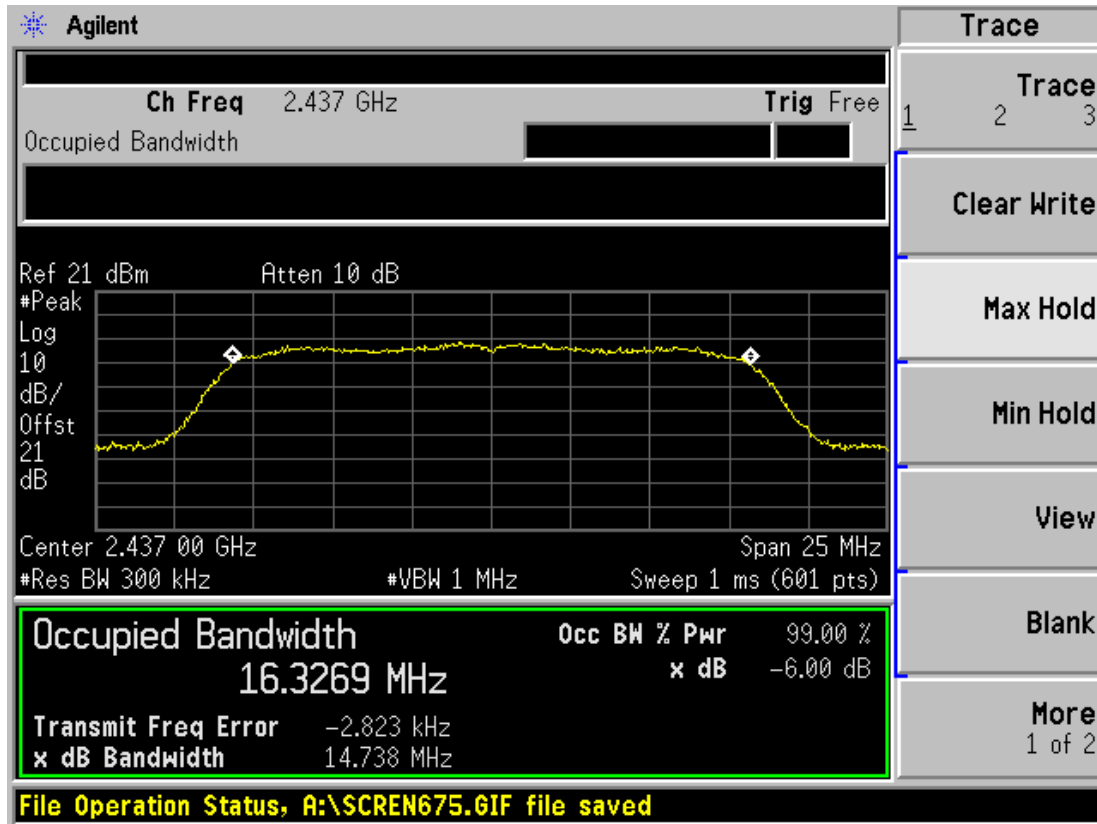


Test Mode: IEEE 802.11g TX

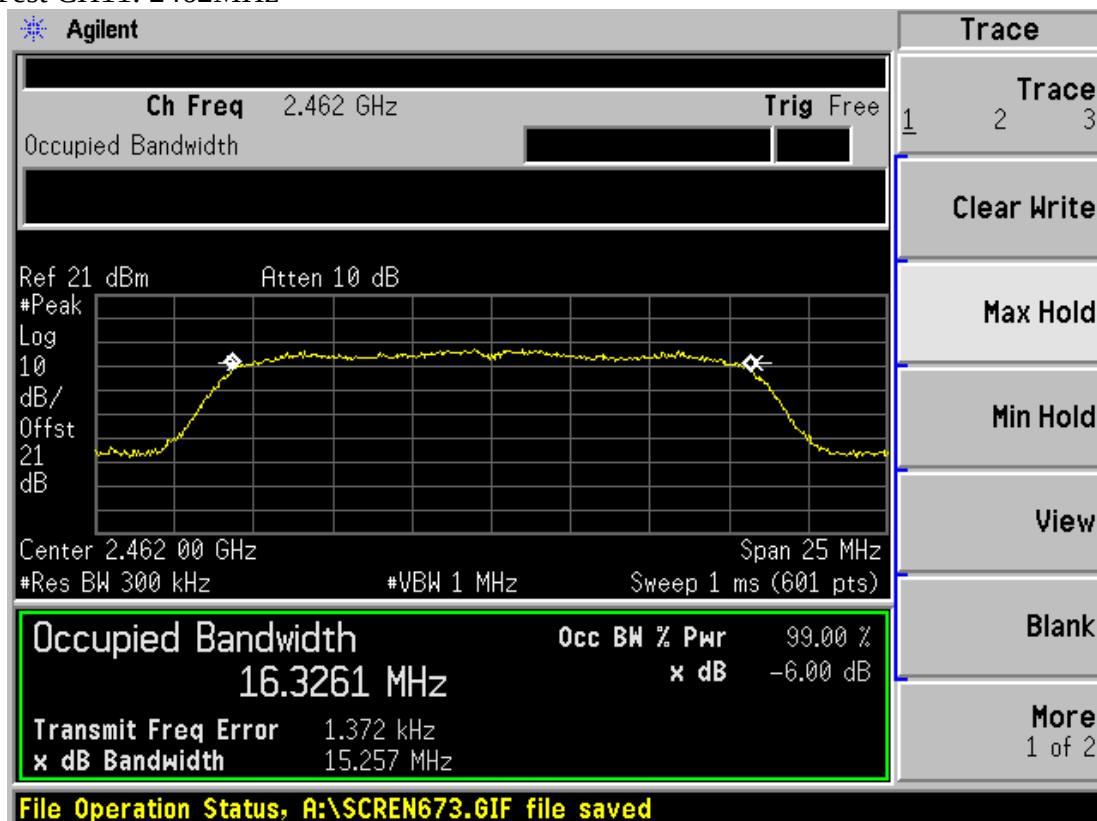
Test CH1: 2412MHz



Test CH6: 2437MHz

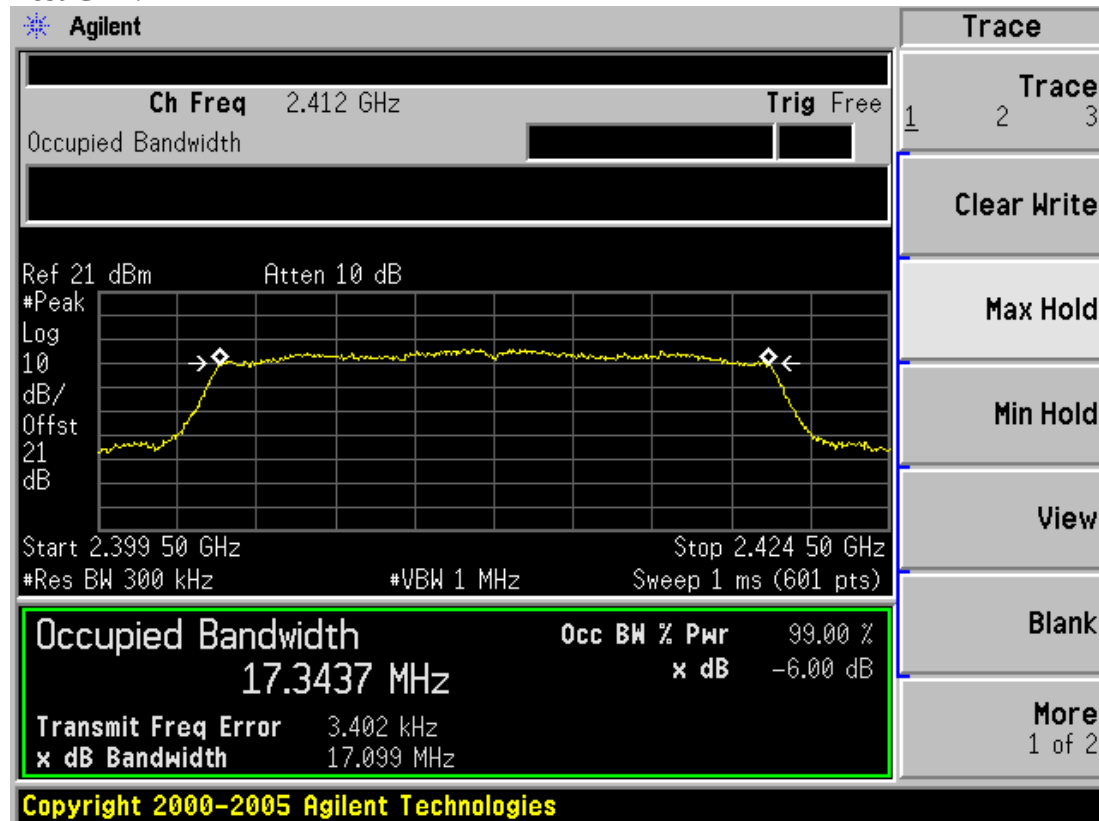


Test CH11: 2462MHz

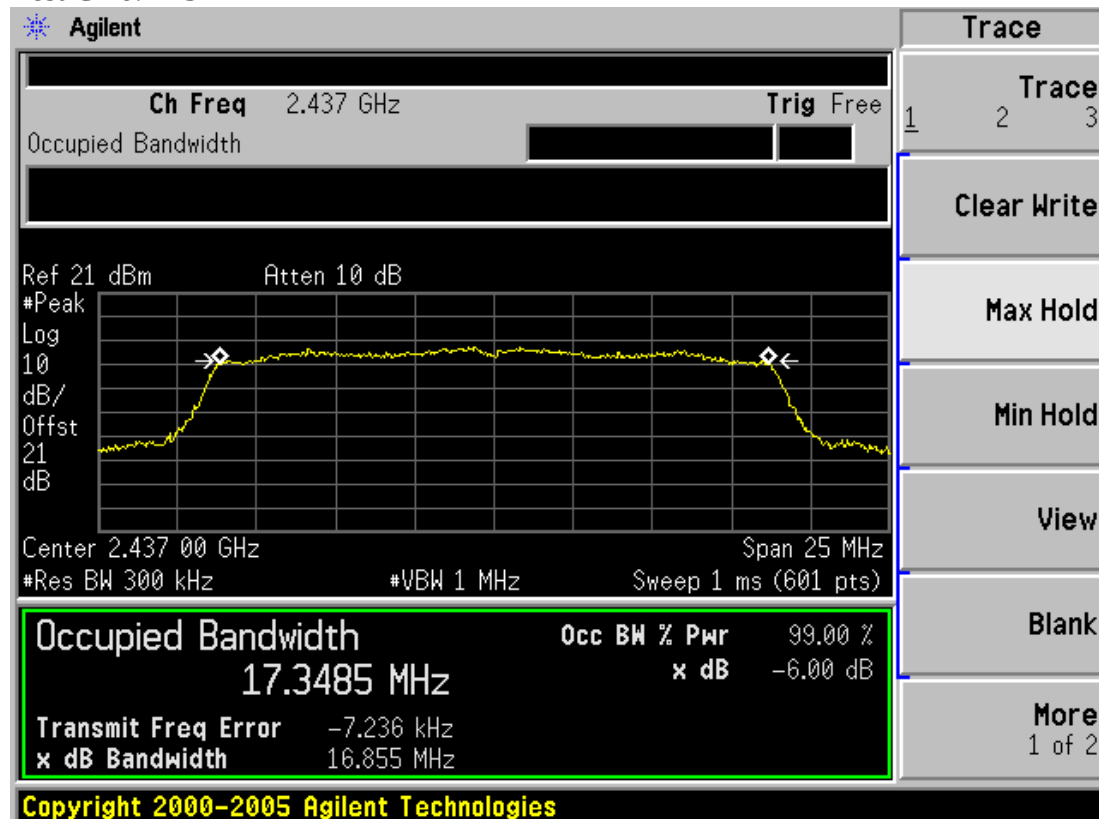


Test Mode: IEEE 802.11n HT20 TX

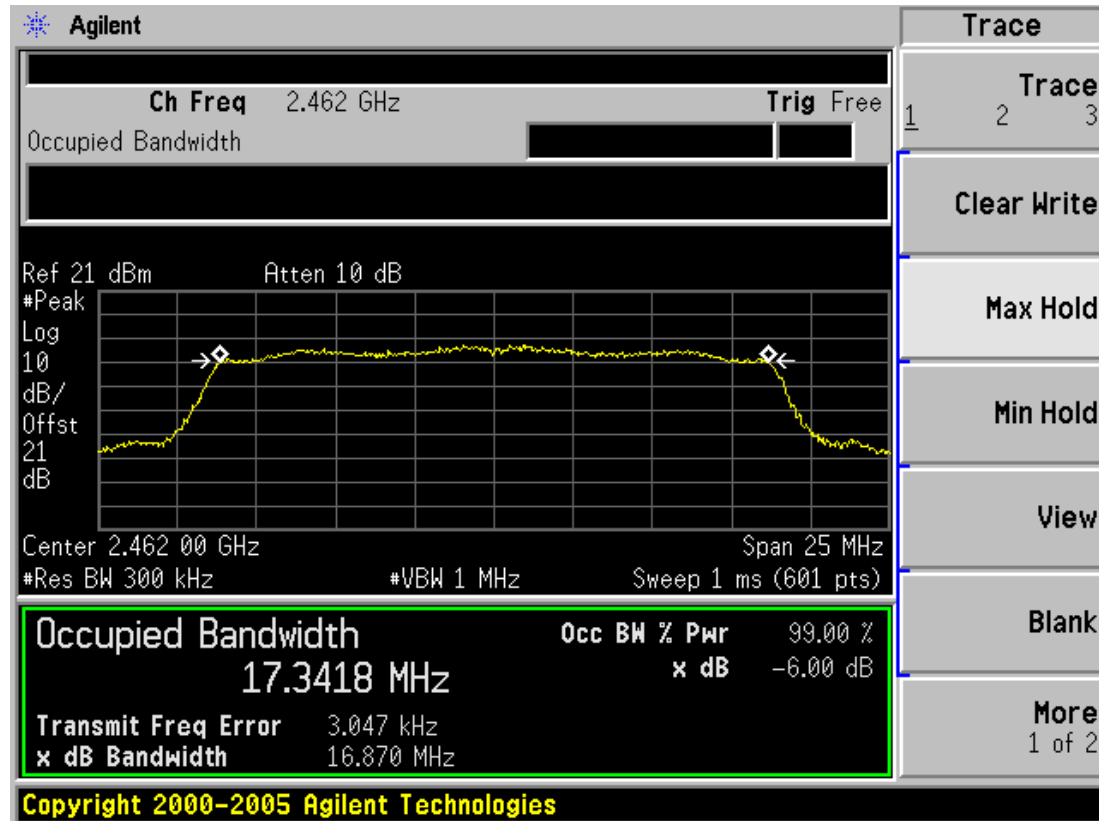
Test CH1: 2412MHz



Test CH6: 2437MHz

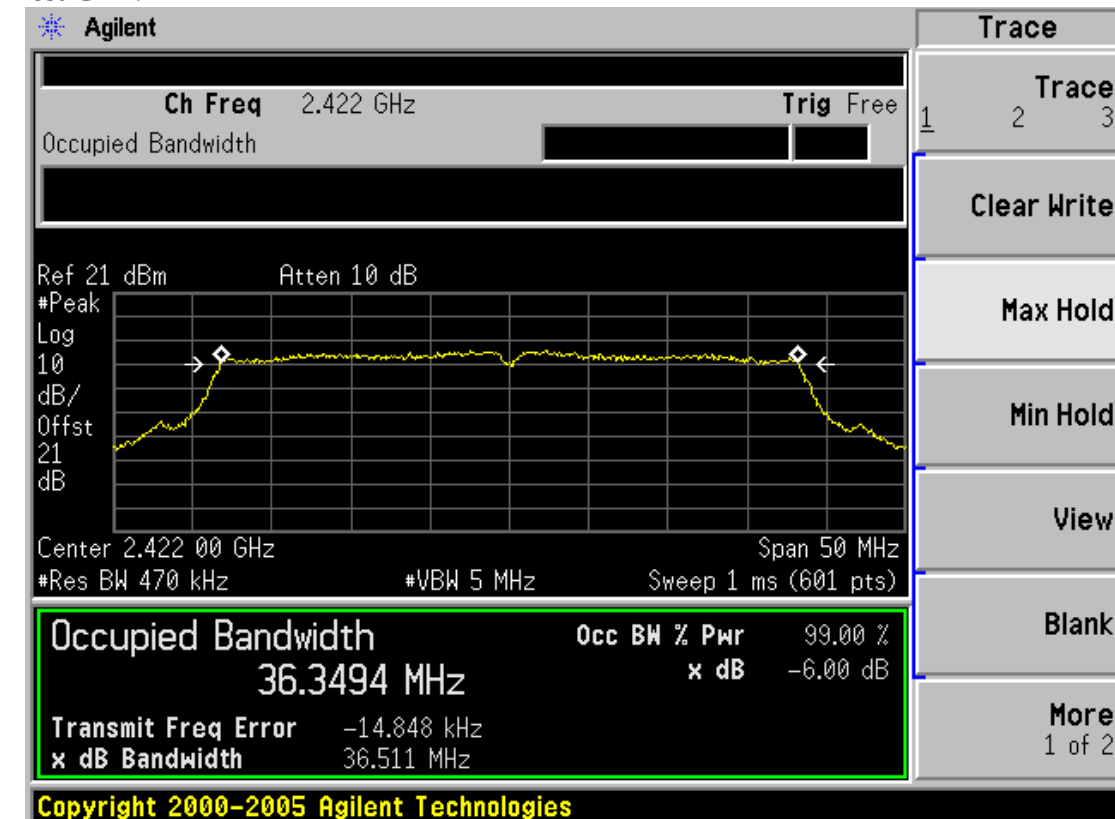


Test CH11: 2462MHz

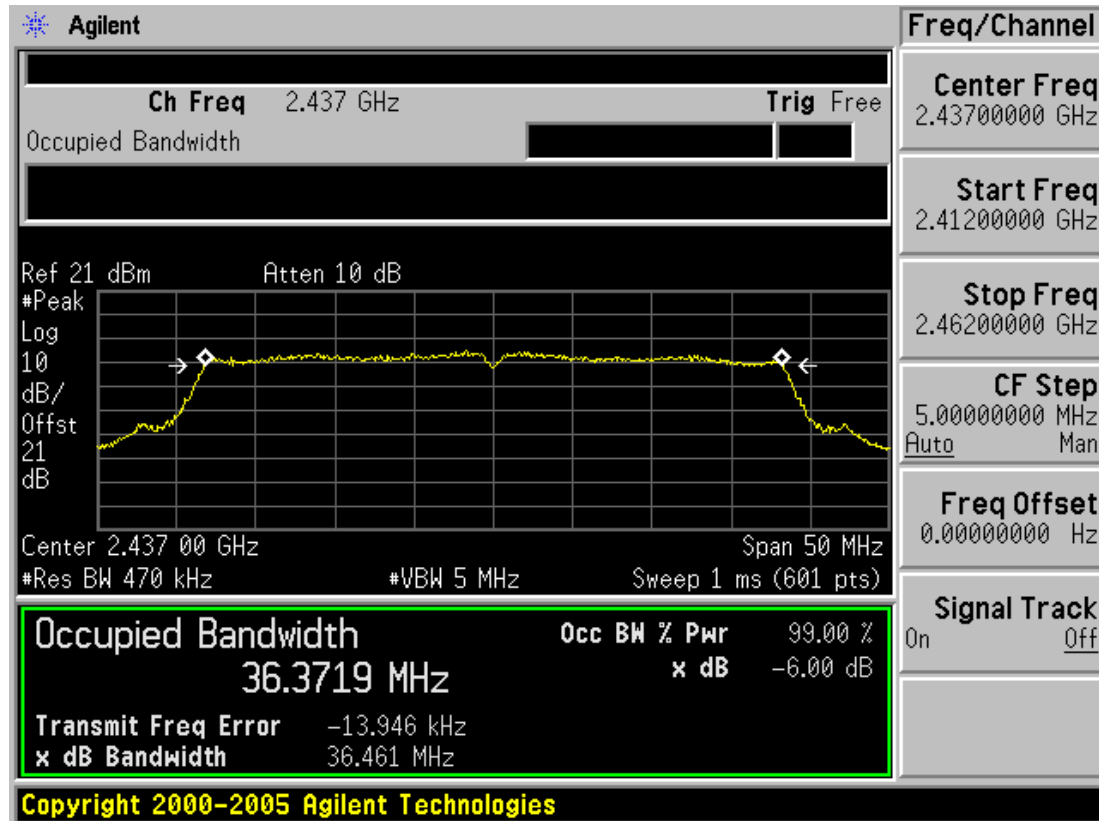


Test Mode: IEEE 802.11n HT40 TX

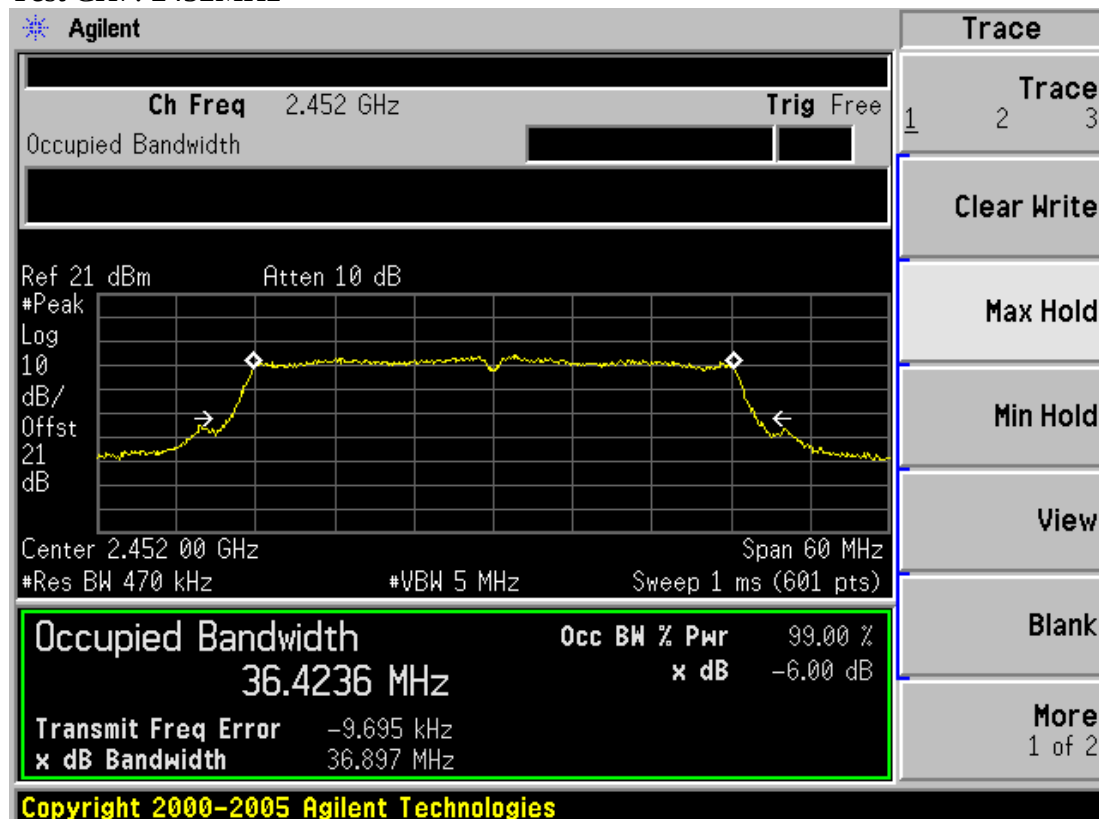
Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



8. OUTPUT POWER TEST

8.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	May.08, 12	1 Year
2	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
	Antenna	EMCO	3115	9510-4580	May.31, 11	1Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 12	1 Year
5.	Power Meter	Anritsu	ML2487A	6K00002472	May.08, 12	1Year
6.	Power Sensor	Anritsu	MA2491A	033005	May.08, 12	1Year

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

For systems using digital modulation in the 2400—2483.5MHz, The Peak out put Power shall not exceed 1W(30dBm)

8.3. Test Procedure

- 1, Connected the EUT's antenna port to measure device by 20dB attenuator.
- 2, For IEEE 802.11b/g and IEEE802.11n HT20 mode, use a PK power meter which's bandwidth is above 6dB bandwidth of signal to measure out each test modes' PK output power.
3. For IEEE802.11n HT40 mode, because the signal's bandwidth is about 40MHz and above 20MHz bandwidth of power sensor ML2491A. So the channel power measure function of Spectrum Analyzer was used to measure out the PK output power of each test modes'

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

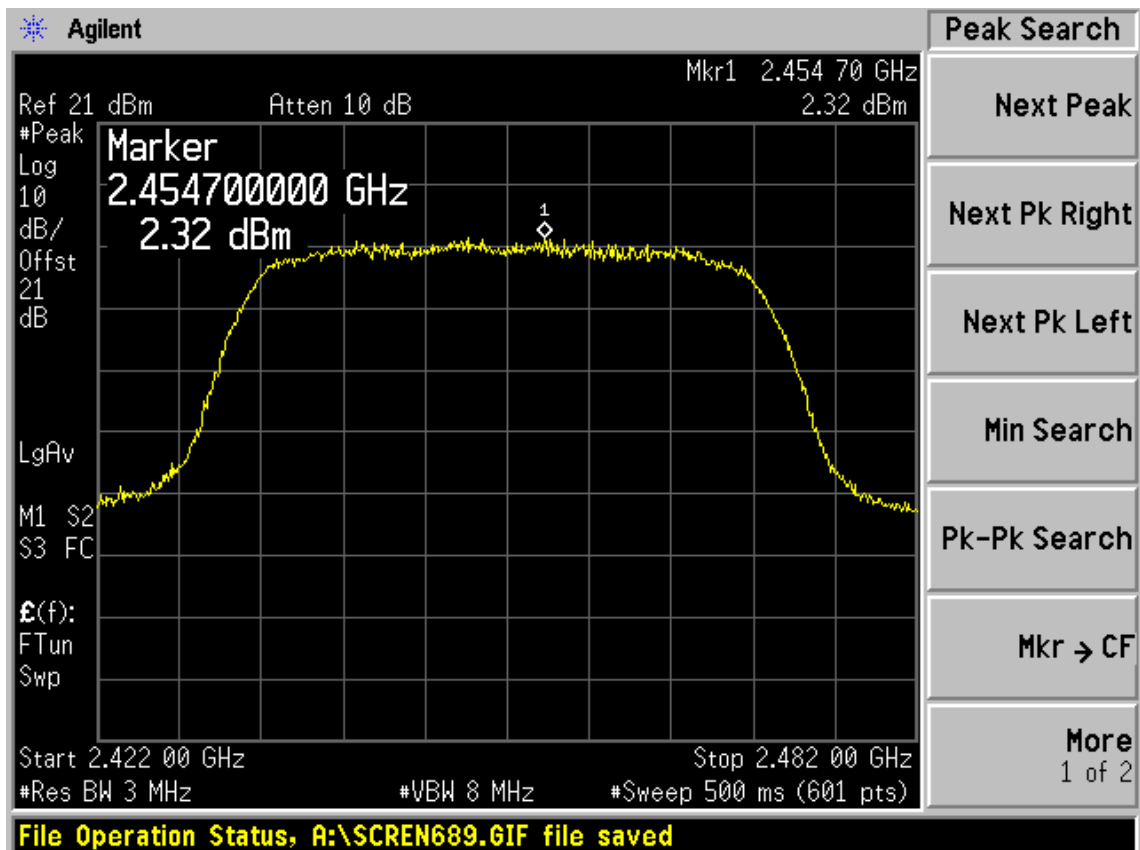
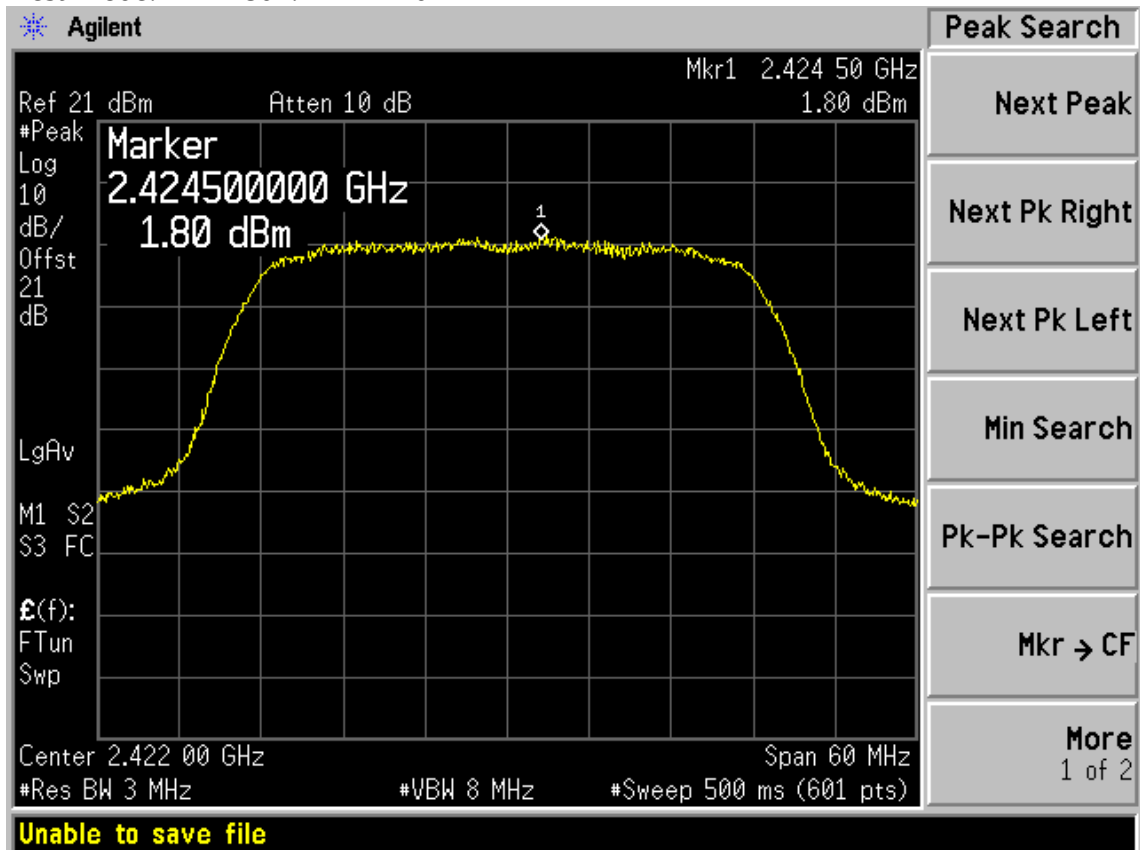
8.4.Test Results

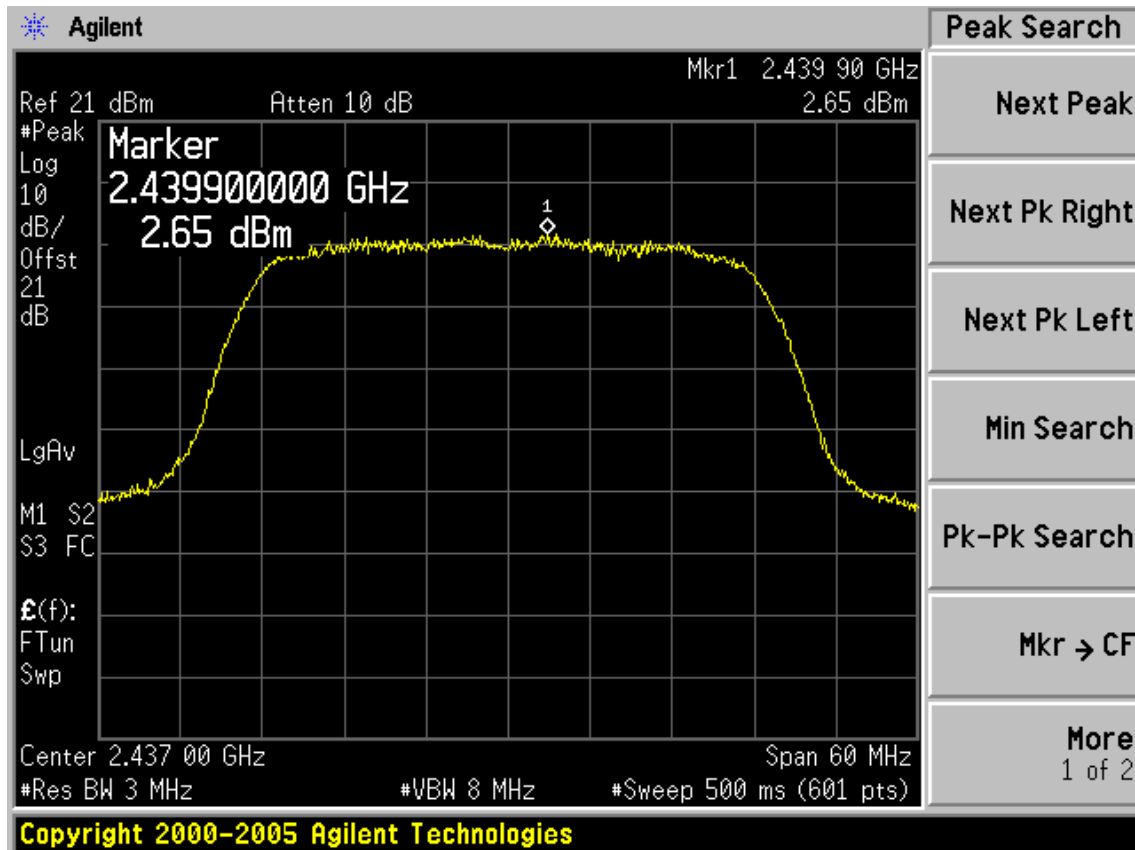
EUT: Wireless N 150 Router			
M/N: DIR-524			
Test date: 2012-05-25		Pressure: 101.2 kpa	Humidity: 51.6 %
Tested by: Leo-Li		Test site: RF site	Temperature: 24.3 °C
Cable loss: 1 dB		Attenuator loss: 20 dB	
Test Mode	CH (MHz)	Peak output Power (dBm)	Limit (dBm)
11b	CH1	17.25	30
	CH6	17.29	30
	CH11	17.08	30
11g	CH1	15.09	30
	CH6	15.55	30
	CH11	15.67	30
11n HT20	CH1	14.41	30
	CH6	14.58	30
	CH11	14.19	30

Test Mode	CH	Result		Limit
		Measured power(dBm)/3MHz	PK Output power (dBm)	(dBm)
11n HT40	CH1	1.80	13.04	30
	CH4	2.65	13.89	30
	CH7	2.32	13.56	30
26dB Bandwidth for 11n HT40: 39.951MHz				
BW correction factor = $10\log[(39.951\text{MHz})/(3\text{MHz})] = 11.24\text{dB}$				
Conclusion: PASS				

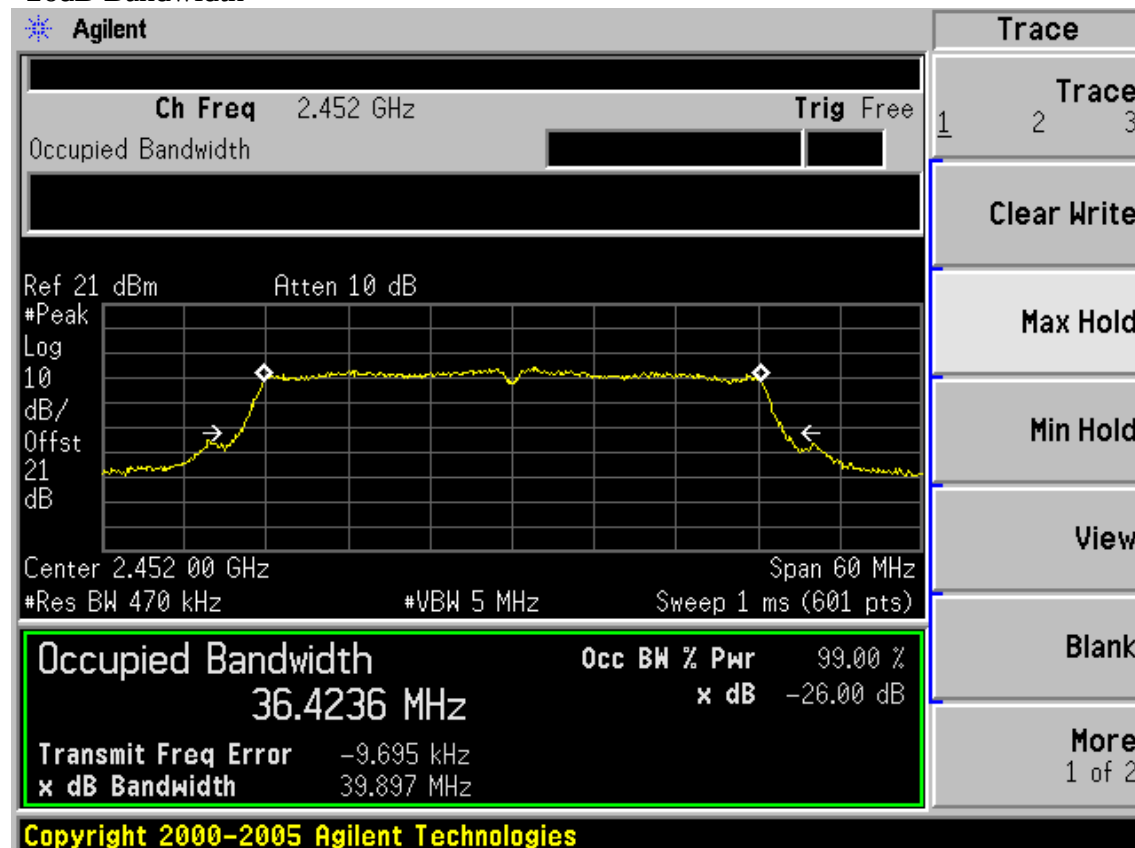
Chain 0:

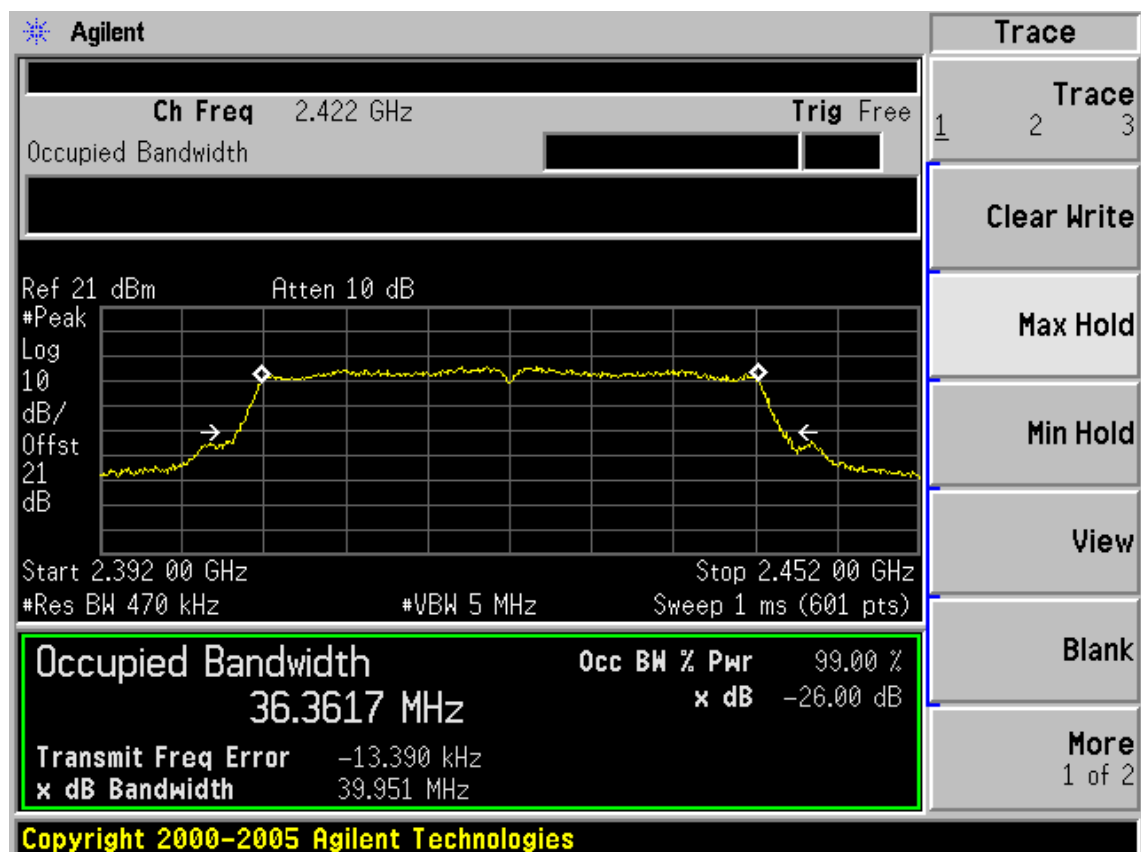
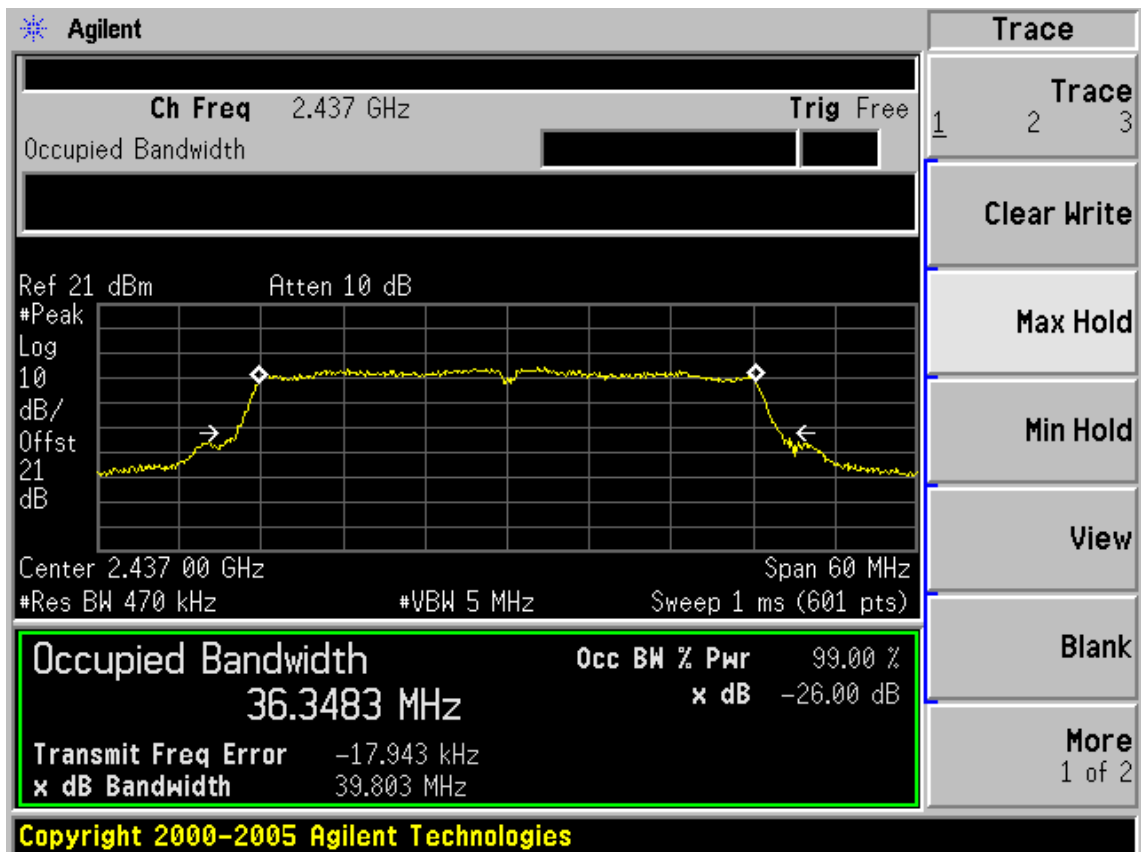
Test Mode: IEEE 802.11n HT40





26dB Bandwidth





9. POWER SPECTRAL DENSITY TEST

9.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4446A	US44300459	May.08, 12	1 Year
2.	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.31, 11	1Year
4.	HF Cable	Hubersuhne	Sucoflex104	-	May.08, 12	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 the test frequency as center frequency, Set RBW=3KHz,VBW=10KHz,Span large enough capture the entire frequency, Read out maximum peak level frequency
3. Set the frequency read from produce 2 as center frequency, then set the span=300KHz, Sweep time=Span/RBW, Then Max hold, read out each mode and each chain's Power density.

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

9.4.Test Results

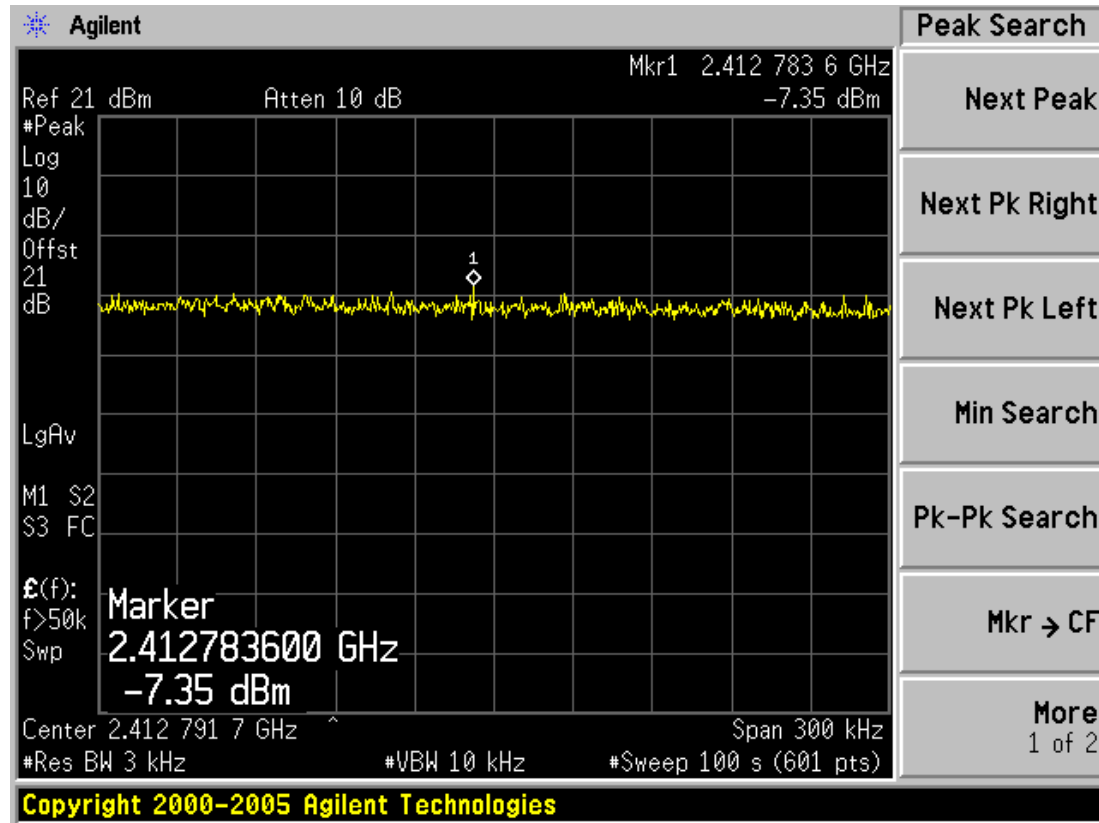
EUT: Wireless N 150 Router		
M/N:DIR-524		
Test date:2012-05-23	Pressure: 101.4 kpa	Humidity: 51.3%
Tested by: Leo-Li	Test site: RF Site	Temperature : 24.7℃

Cable loss: 1 dB		Attenuator loss: 20 dB	
Test Mode	CH	Power density (dBm/3KHz)	Limit (dBm/3KHz)
11b	CH1	-7.35	8
	CH6	-9.47	8
	CH11	-7.44	8
11g	CH1	-18.58	8
	CH6	-16.76	8
	CH11	-18.81	8
11n HT20	CH1	-21.82	8
	CH6	-17.78	8
	CH11	-18.06	8
11n HT40	CH1	-23.61	8
	CH4	-21.82	8
	CH7	-22.47	8
Conclusion : PASS			

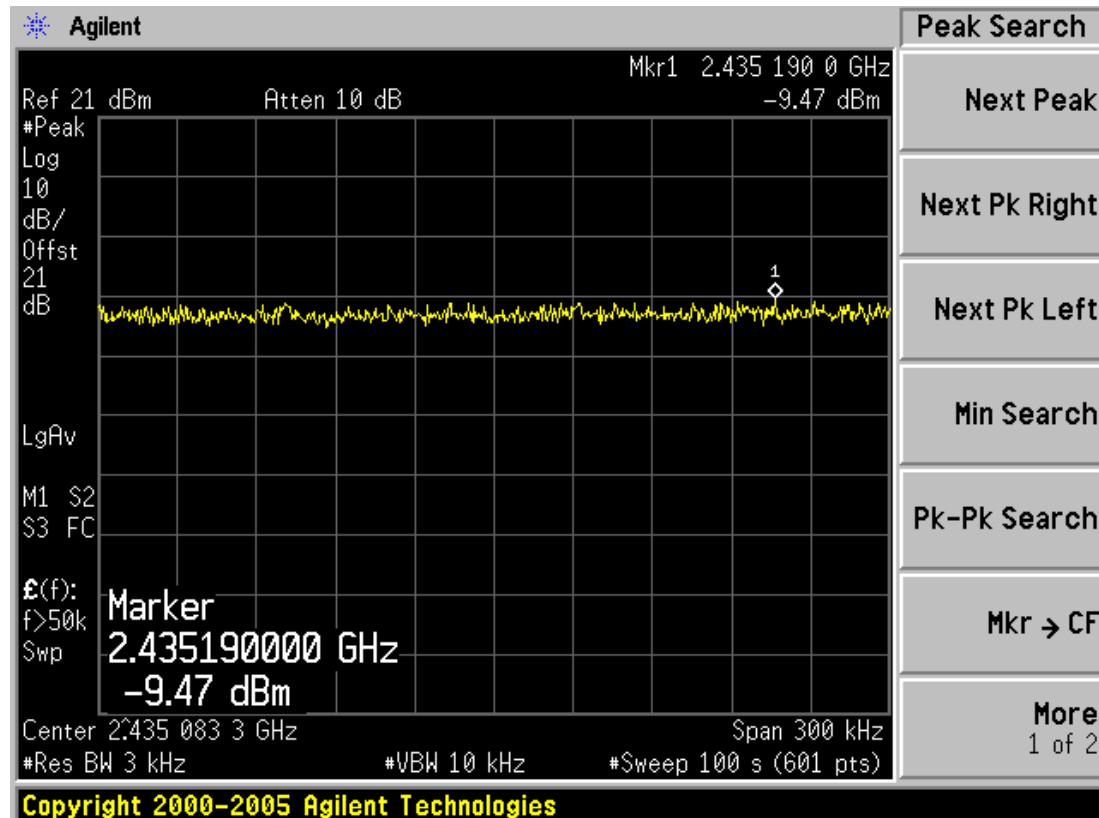
Chiaín 0:

Test Mode: IEEE 802.11b TX

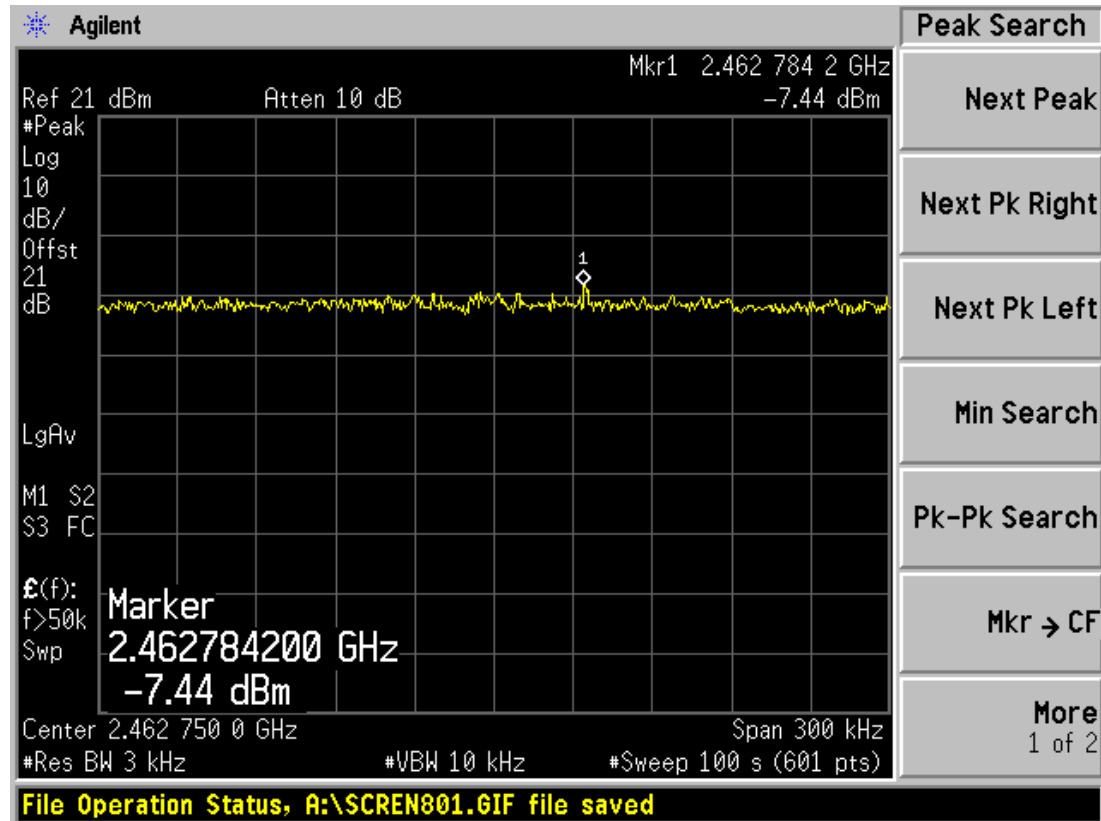
Test CH1: 2412MHz



Test CH6: 2437MHz

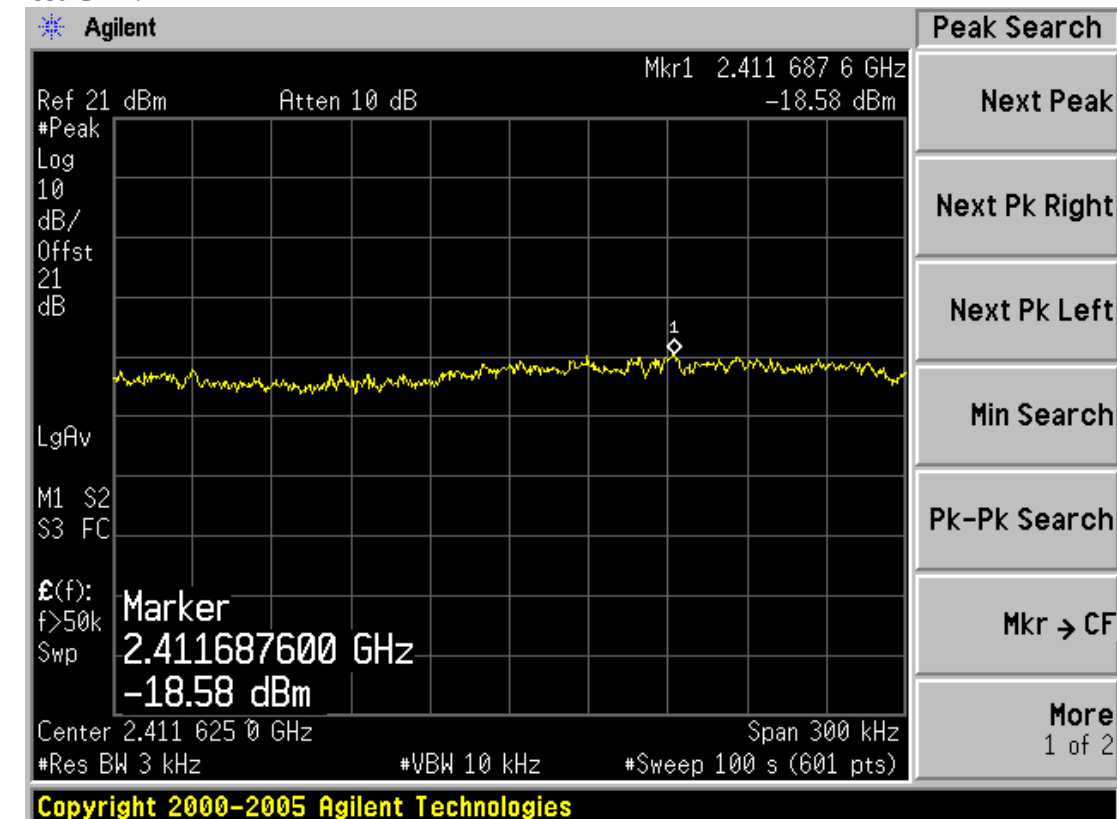


Test CH11: 2462MHz

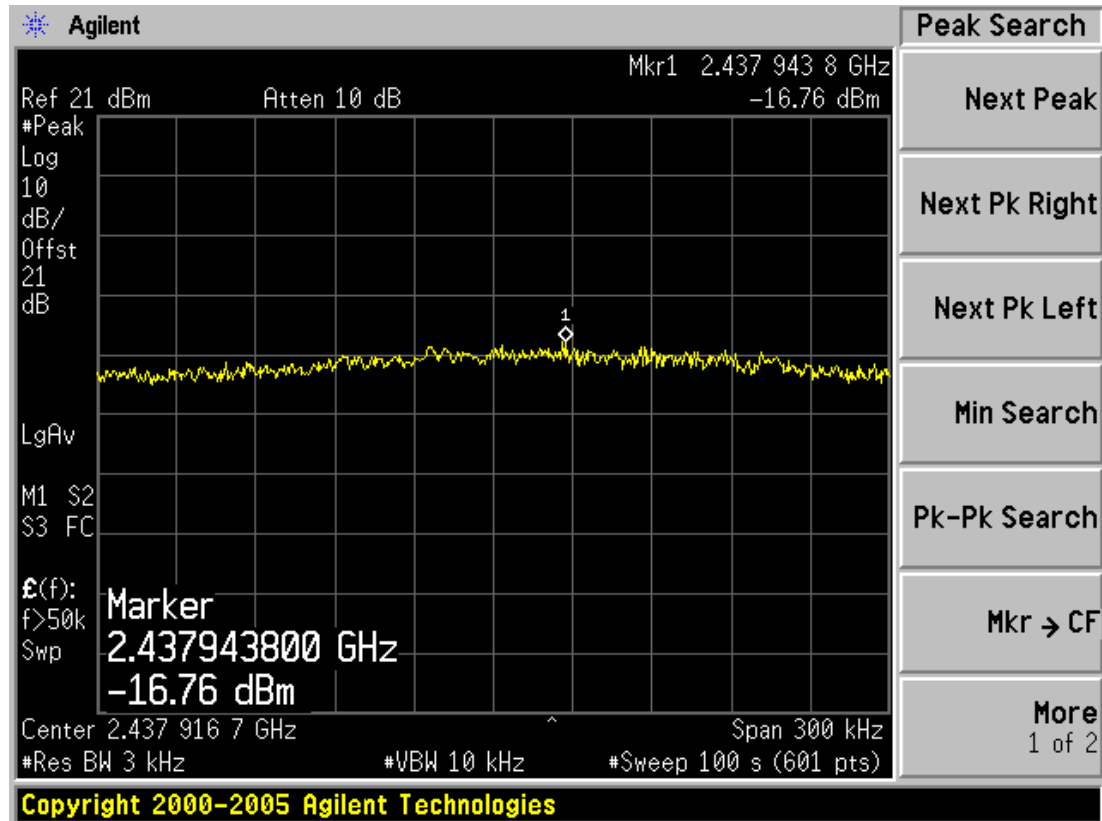


Test Mode: IEEE 802.11g TX

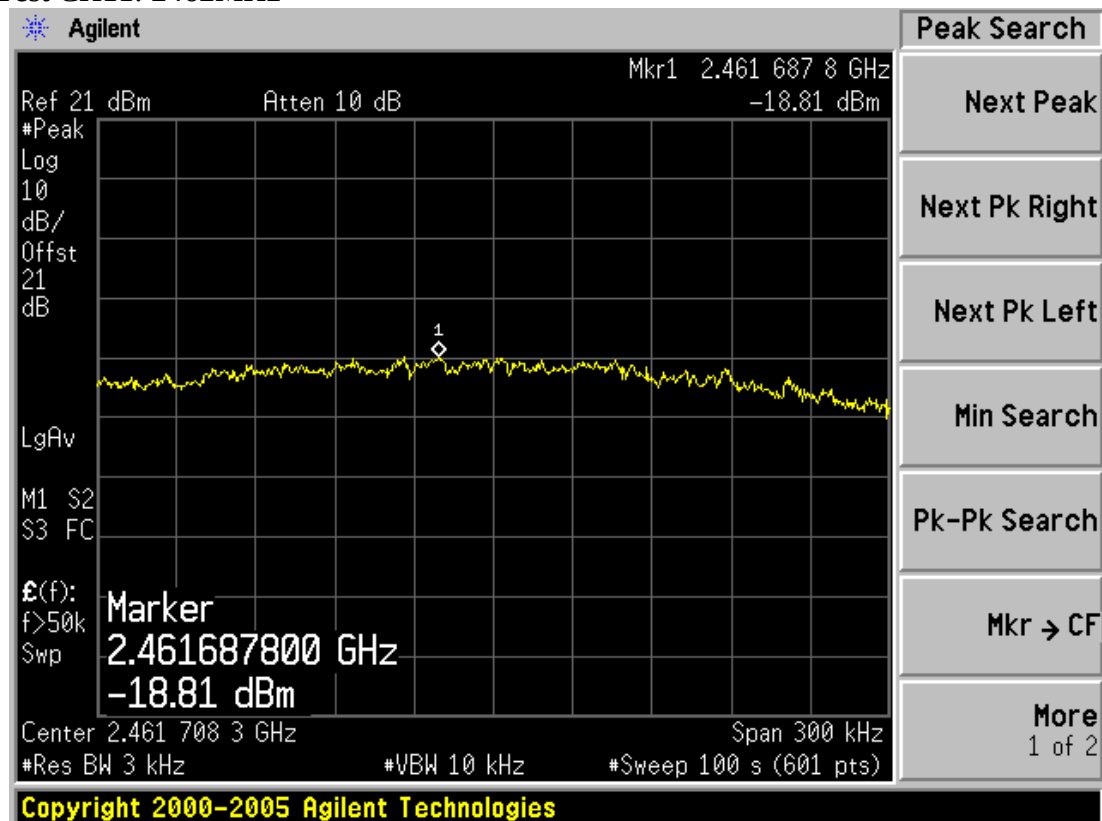
Test CH1: 2412MHz



Test CH6: 2437MHz

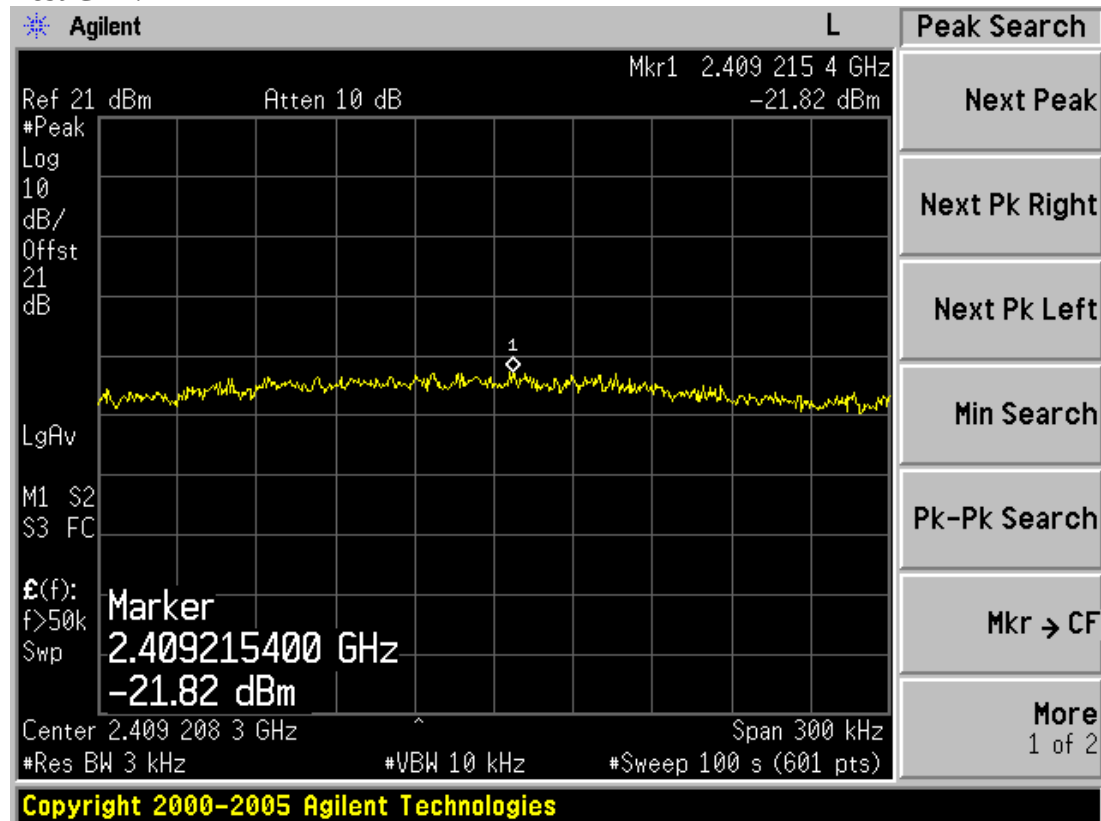


Test CH11: 2462MHz

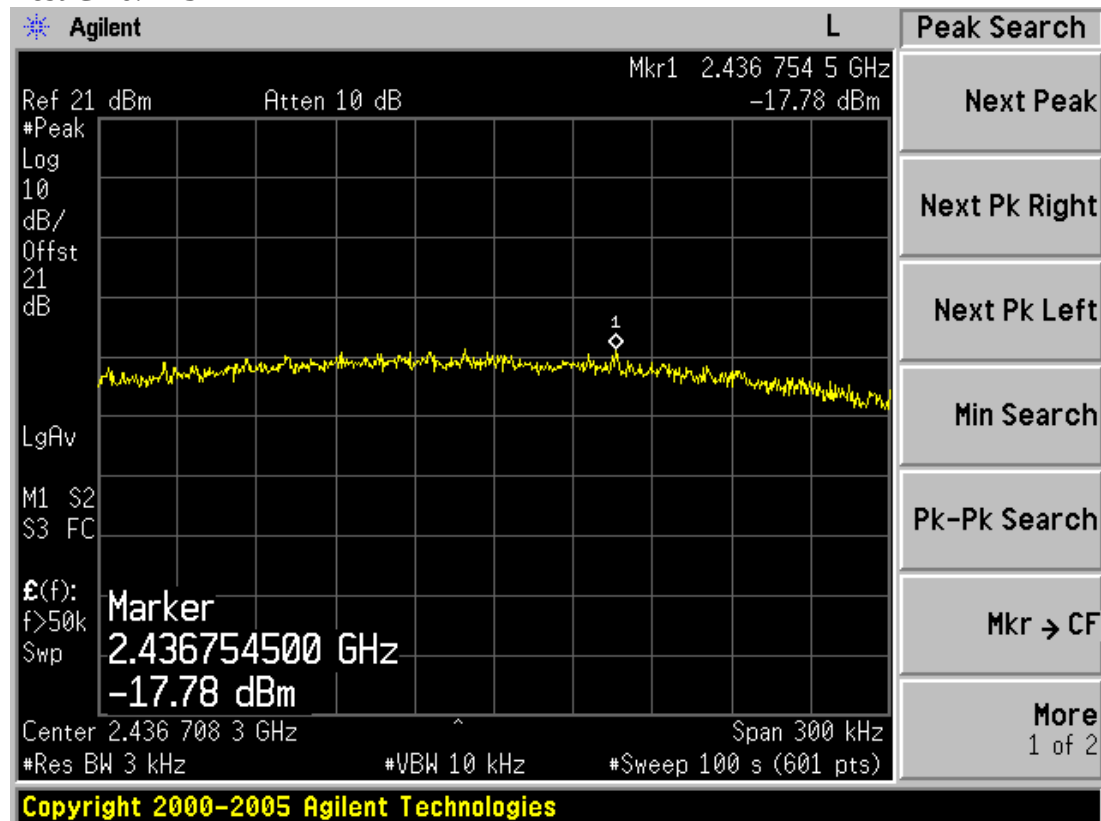


Test Mode: IEEE 802.11n HT20 TX

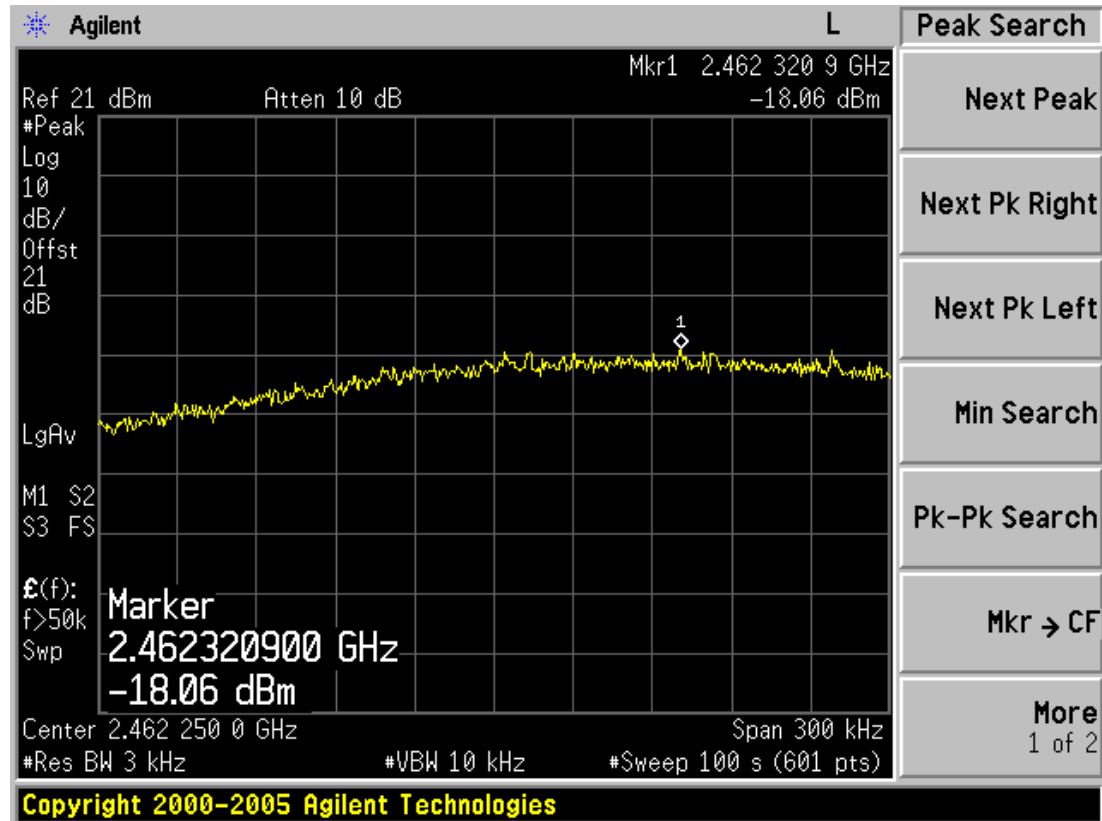
Test CH1: 2412MHz



Test CH6: 2437MHz

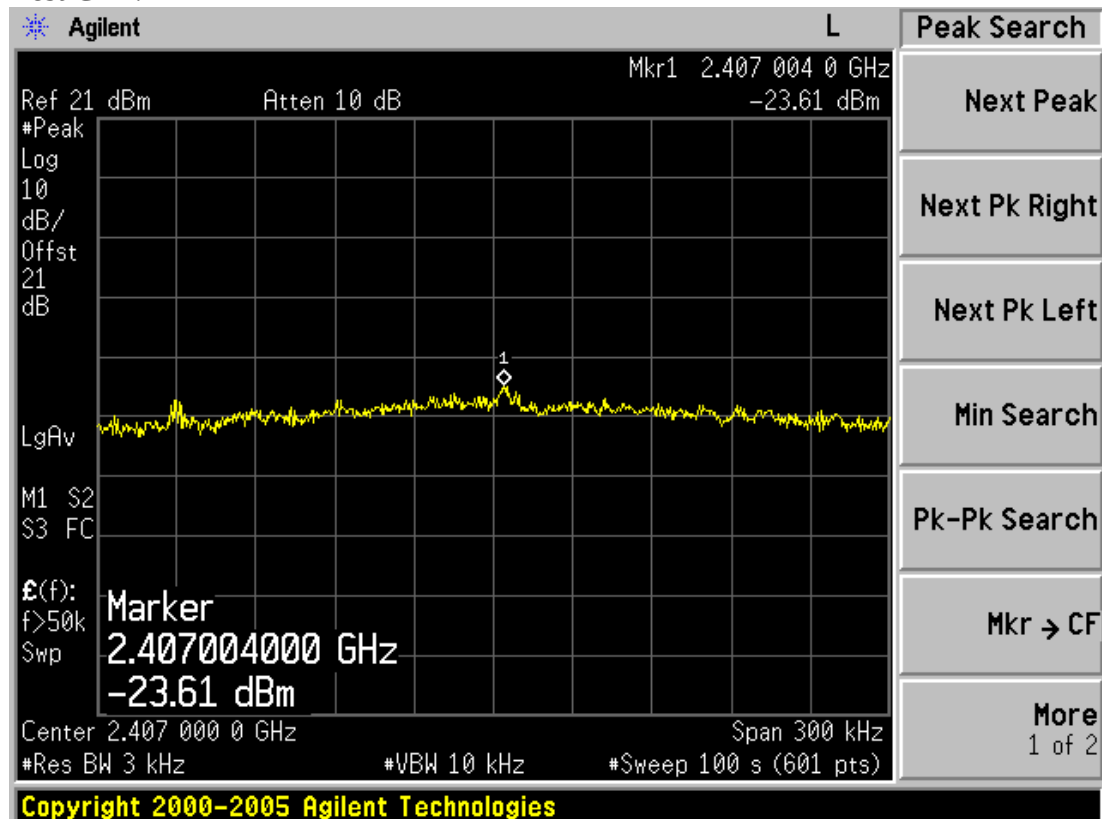


Test CH11: 2462MHz

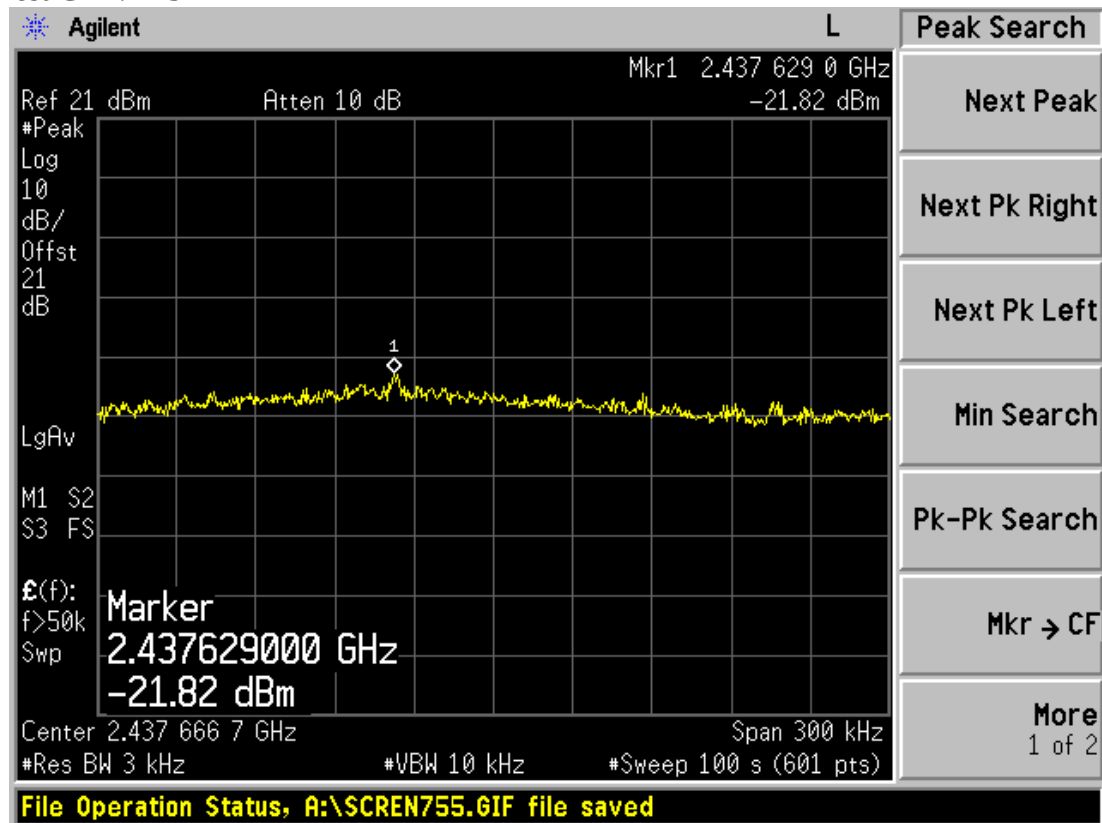


Test Mode: IEEE 802.11n HT40 TX

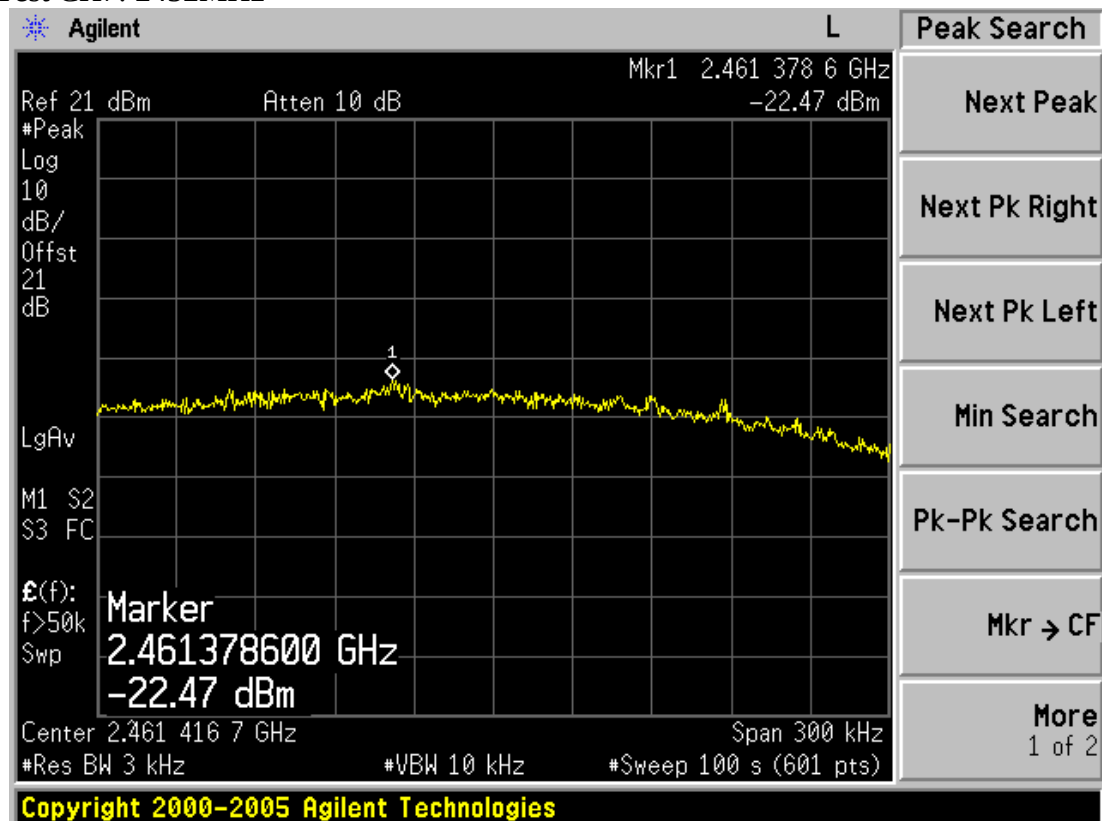
Test CH1: 2422MHz



Test CH4: 2437MHz



Test CH7: 2452MHz



10. ANTENNA REQUIREMENT

10.1 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.

10.2 ANTENNA CONNECTED CONSTRUCTION

The antennas used for this product is dipole antenna and 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 only 2dBi.

11.MPE ESTIMATION

11.1.Limit for General Population/ Uncontrolled Exposures

Frequency	Power density (mW/ cm ²)	Averaging time(minutes)
300MHz----1.5GHz	F/1500	30
1.5GHz---100GHz	1.0	30

Frequency(MHz)	Power density (mW/ cm ²)	Averaging time(minutes)
2412	1	30
2437	1	30
2462	1	30

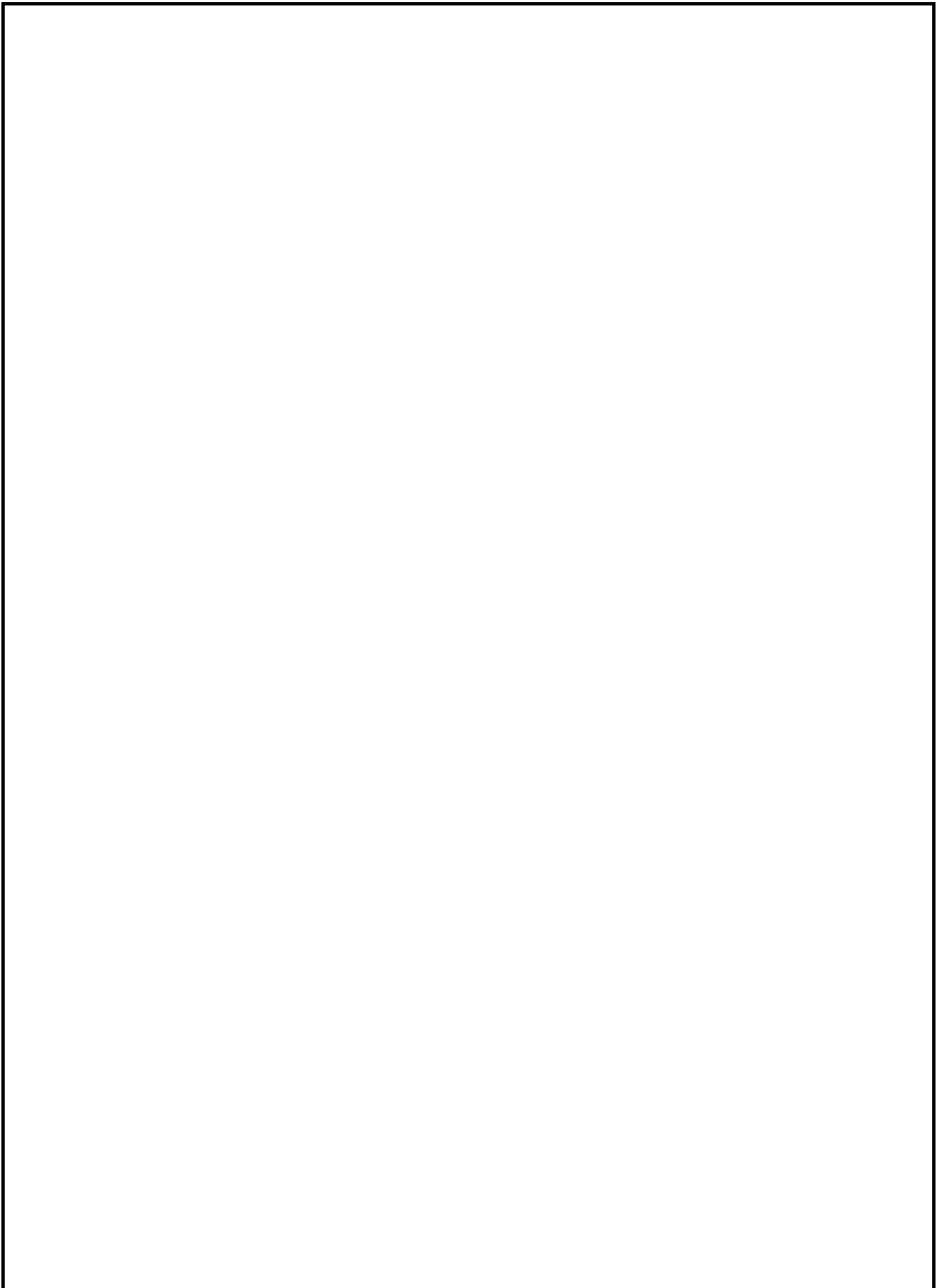
Note: F= Frequency in MHz

11.2. Estimation Result

EUT: Wireless N 150 Router		
M/N: DIR-524		
Test date: 2012-05-25	Pressure: 100.3 kpa	Humidity: 52.9%
Tested by: Leo-Li	Test site: RF Site	Temperature : 25.4℃

Cable loss: 1 dB		Attenuator loss: 20 dB				Antenna Gain: 2 dBi	
Test Mode	CH	Frequency (MHz)	Peak Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Antenna Gain (Linear)	MPE
11b	CH1	2412	17.25	53.09	2	1.58	0.0167
	CH6	2437	17.29	53.58	2	1.58	0.0169
	CH11	2462	17.08	51.05	2	1.58	0.0161
11g	CH1	2412	15.09	32.28	2	1.58	0.0102
	CH6	2437	15.55	35.89	2	1.58	0.0113
	CH11	2462	15.67	36.90	2	1.58	0.0116
11n HT20	CH1	2412	14.41	27.61	2	1.58	0.0087
	CH6	2437	14.58	28.71	2	1.58	0.0091
	CH11	2462	14.19	26.24	2	1.58	0.0083
11n HT40	CH1	2422	13.04	20.14	2	1.58	0.0064
	CH4	2437	13.89	24.49	2	1.58	0.0077
	CH7	2452	13.56	22.70	2	1.58	0.0072

Note: The estimation distance is 20cm



12.DEVIATION TO TEST SPECIFICATIONS

[NONE]