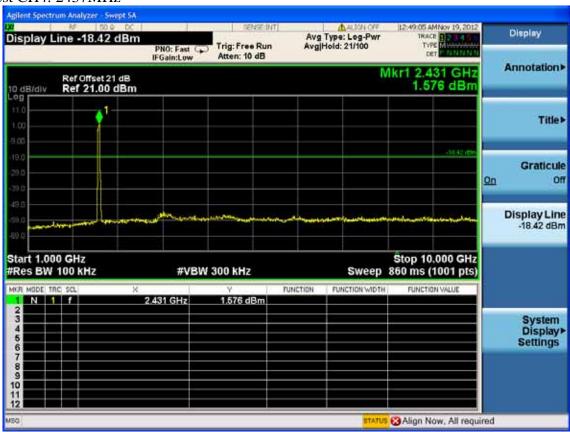
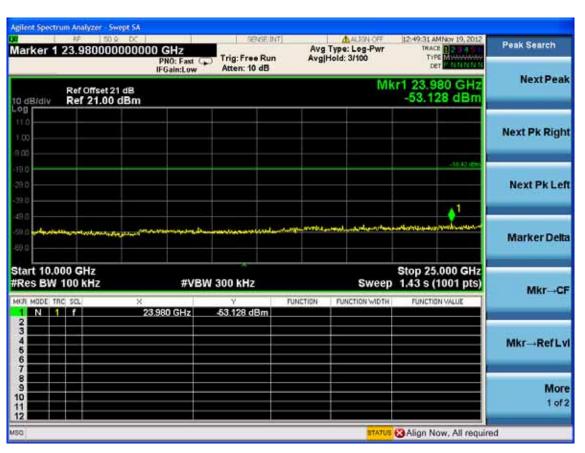
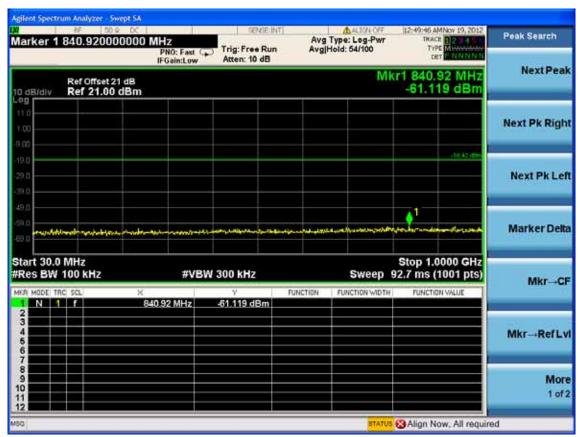


## Test CH4: 2437MHz

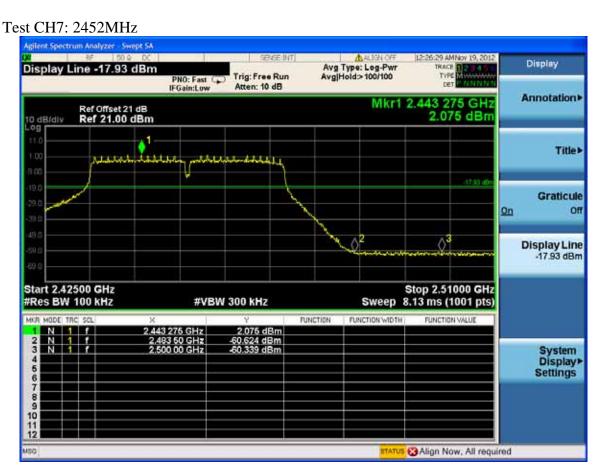


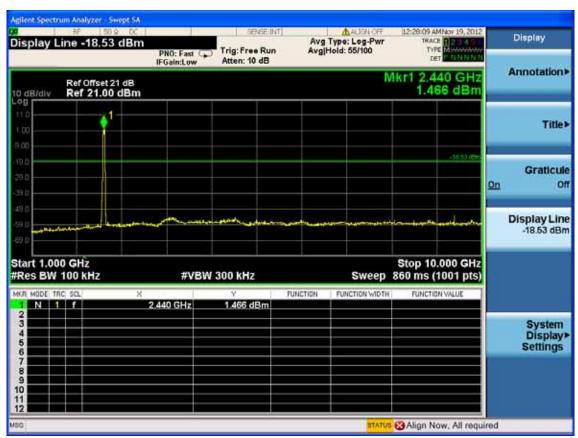






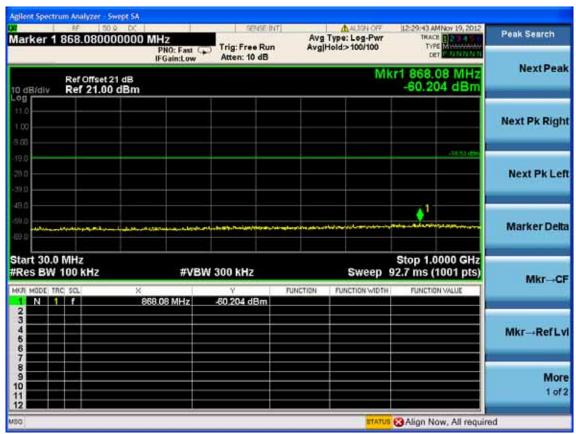










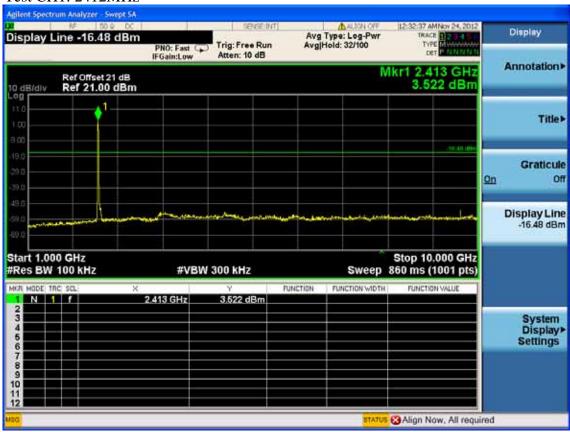


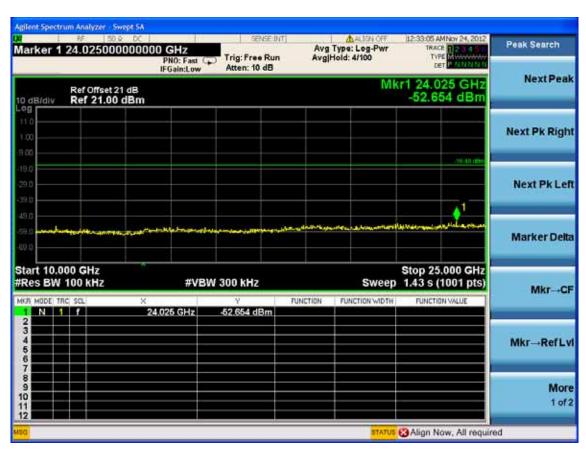


#### ANT 1

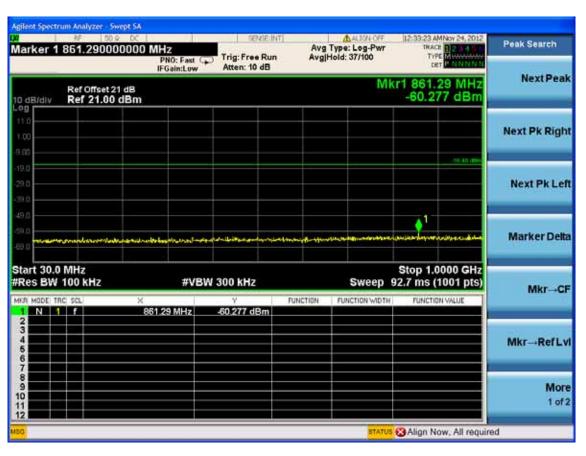
Test Mode: IEEE 802.11b TX

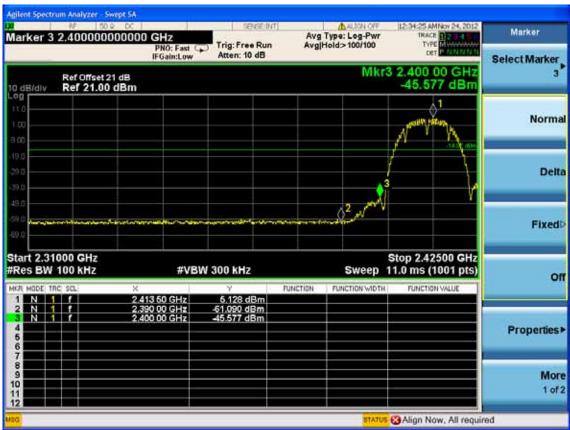
Test CH1: 2412MHz



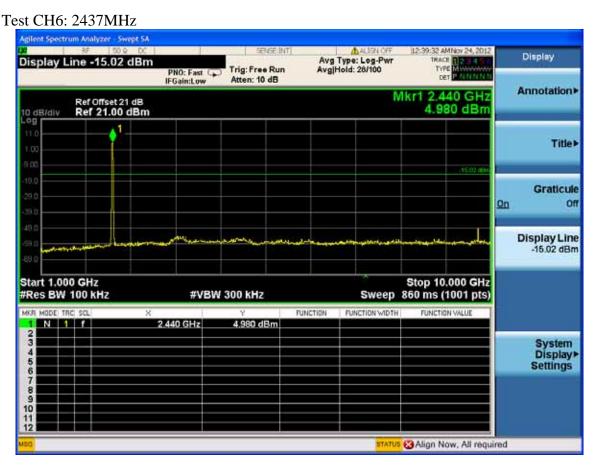


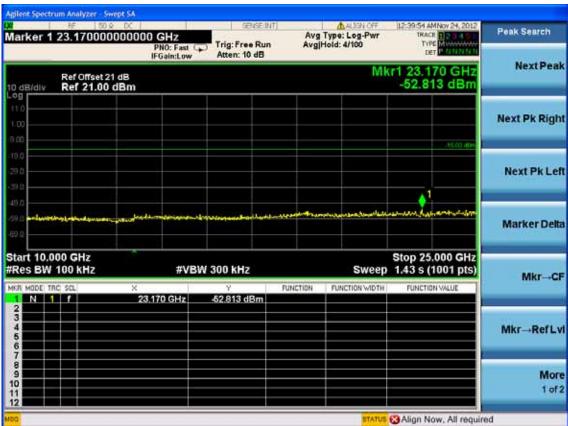




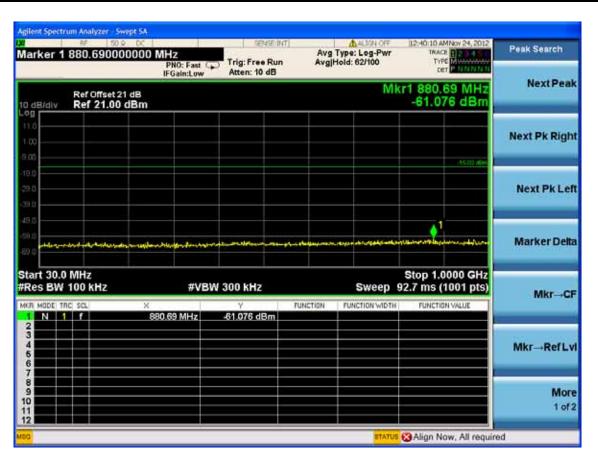




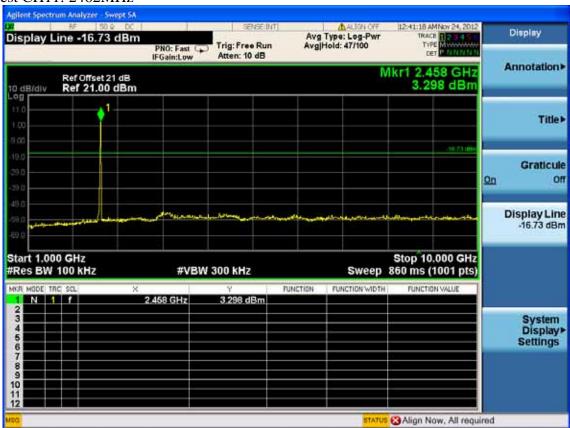




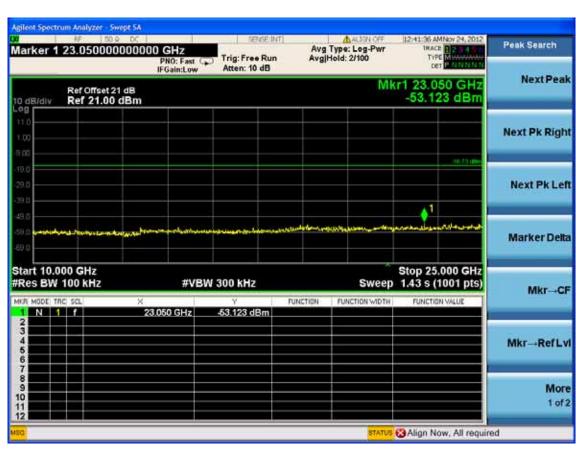


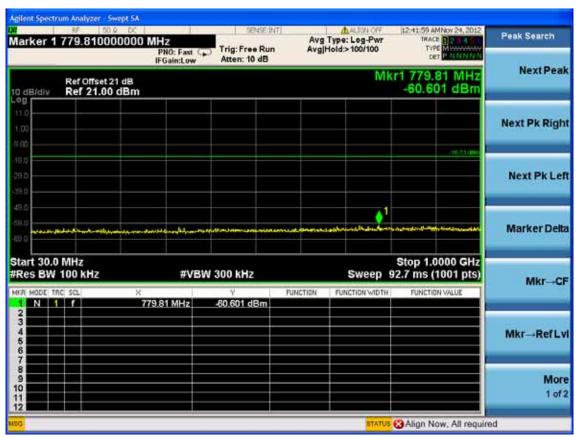


#### Test CH11: 2462MHz







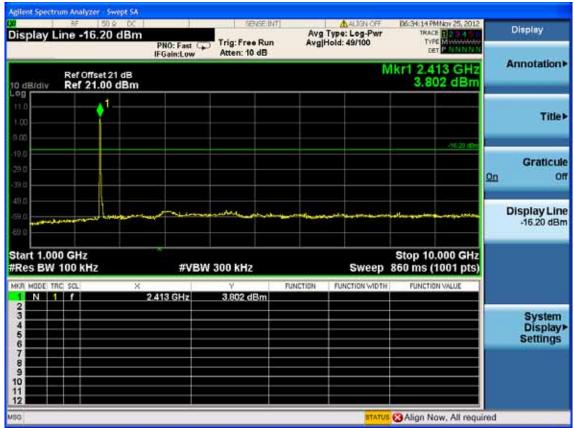






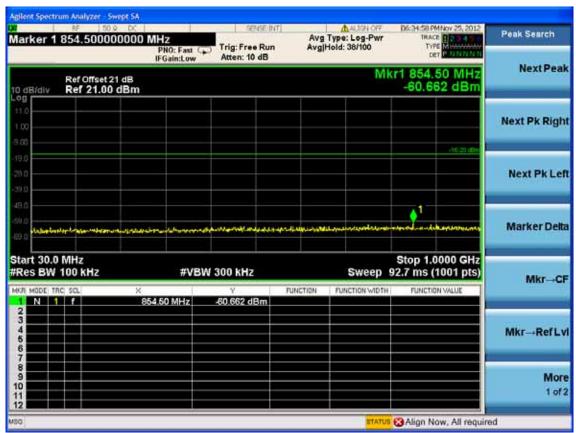
Test Mode: IEEE 802.11g TX

Test CH1: 2412MHz

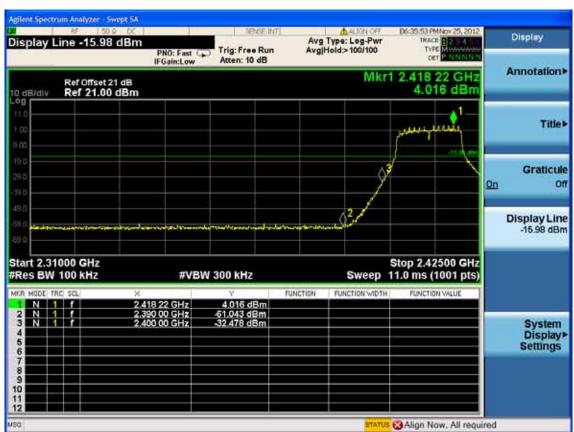




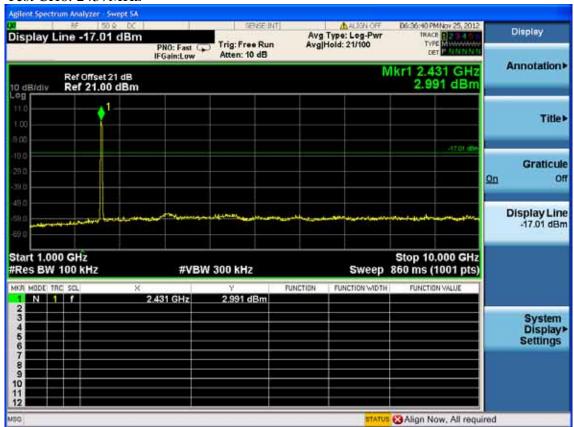






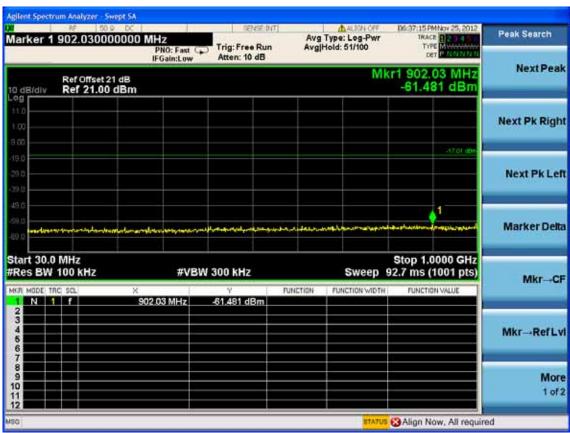


#### Test CH6: 2437MHz



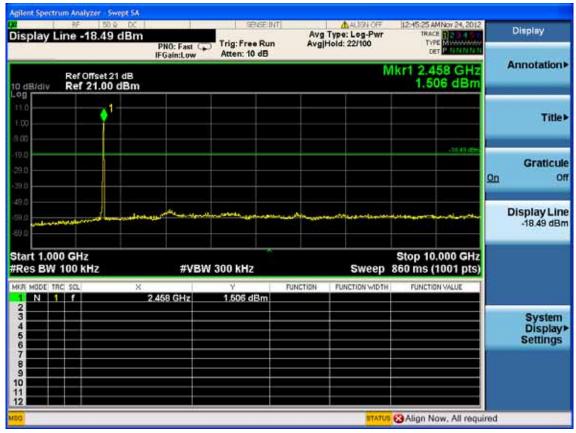






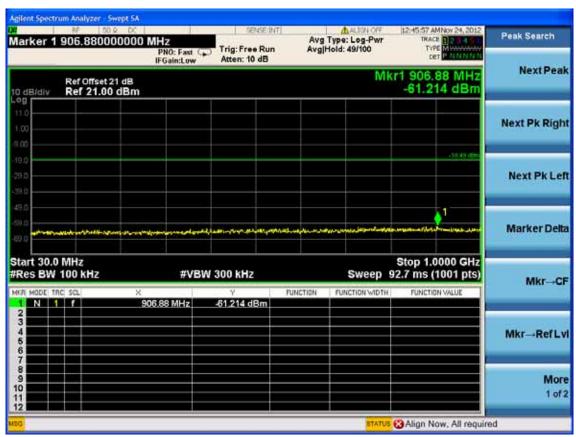








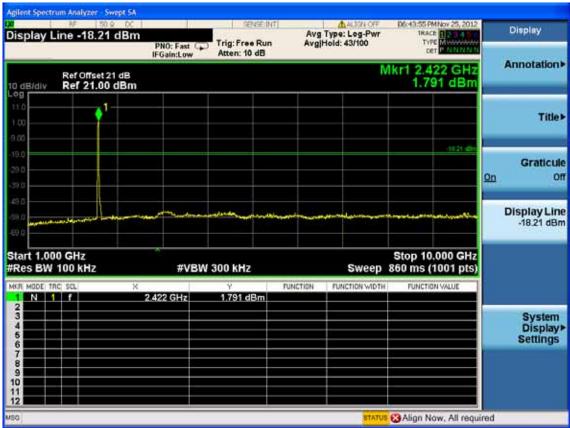






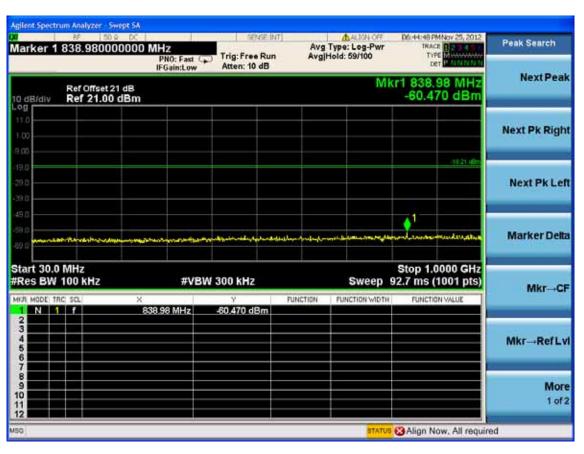


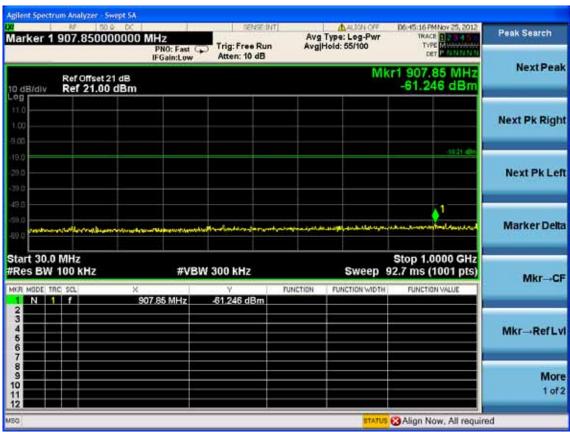
Test CH1: 2412MHz



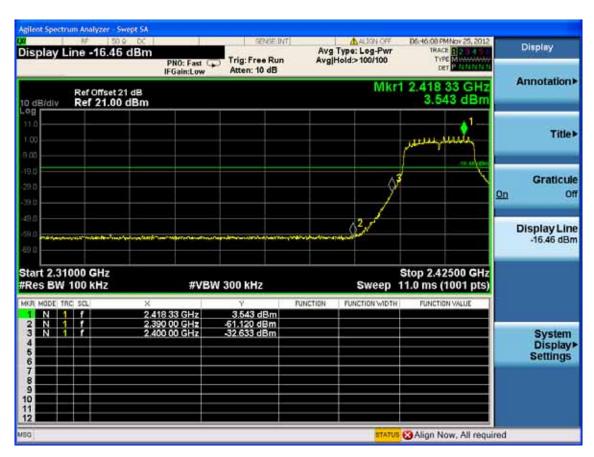




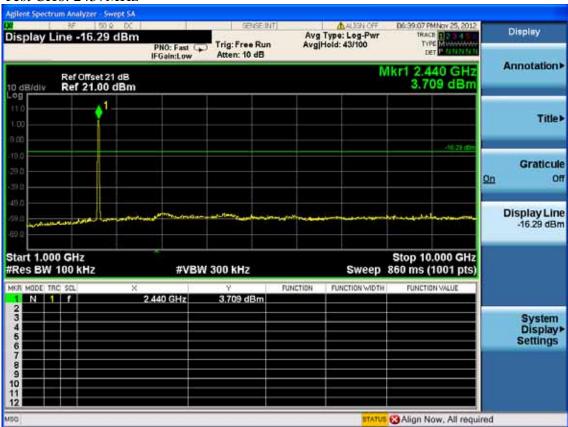




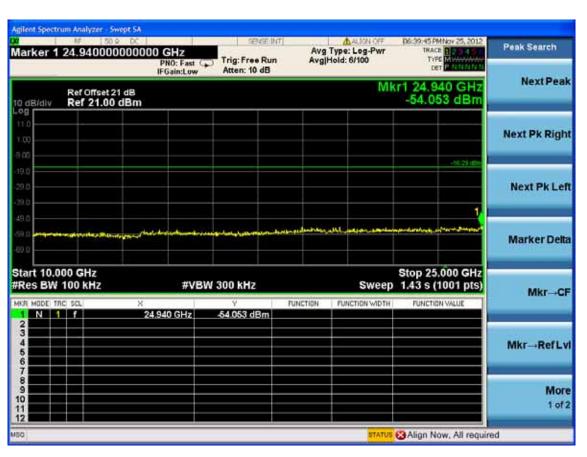


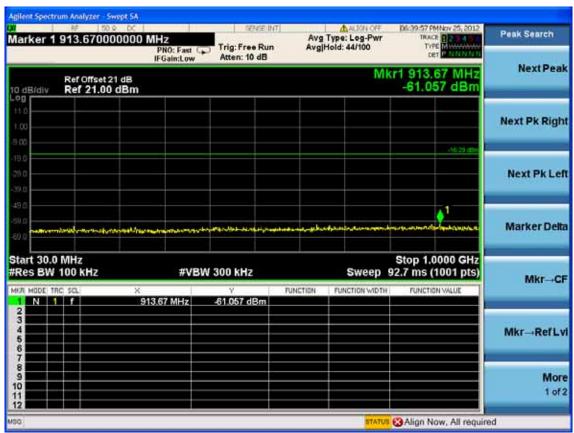


#### Test CH6: 2437MHz



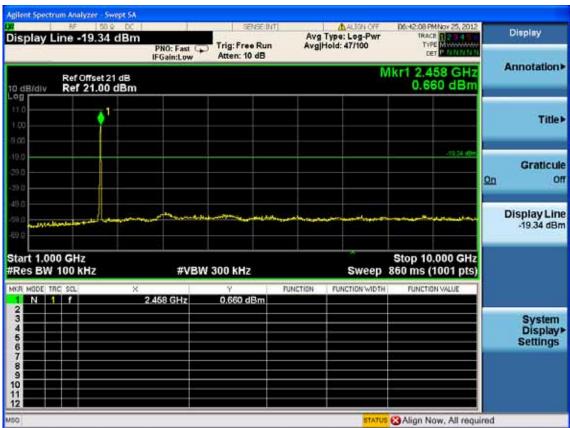




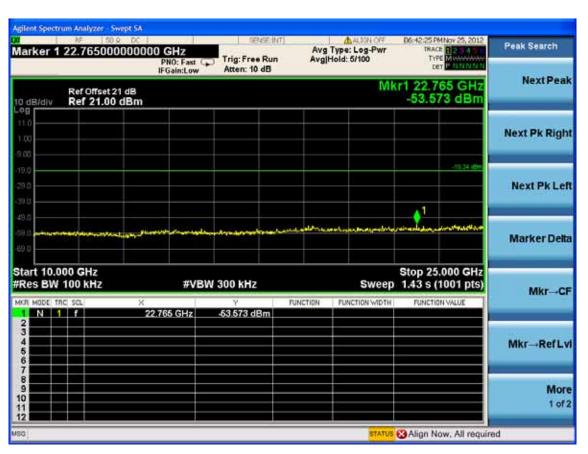


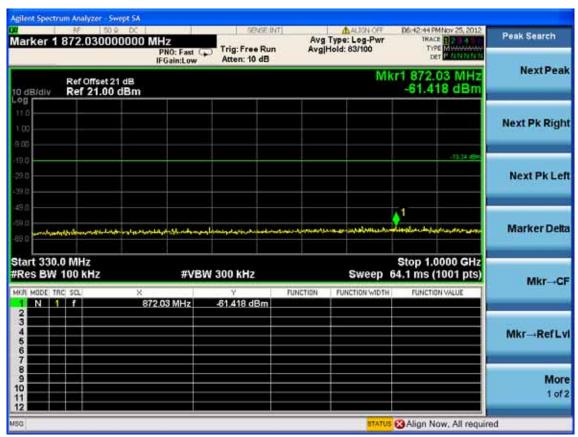








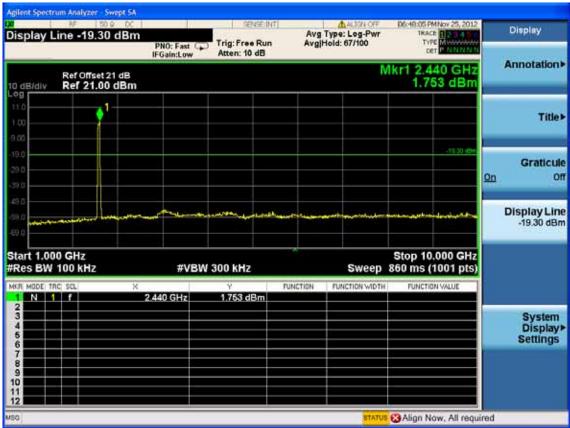






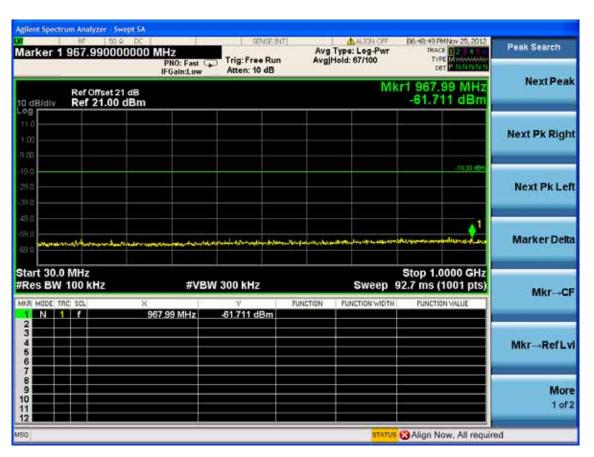
Test Mode: IEEE 802.11n HT40 TX

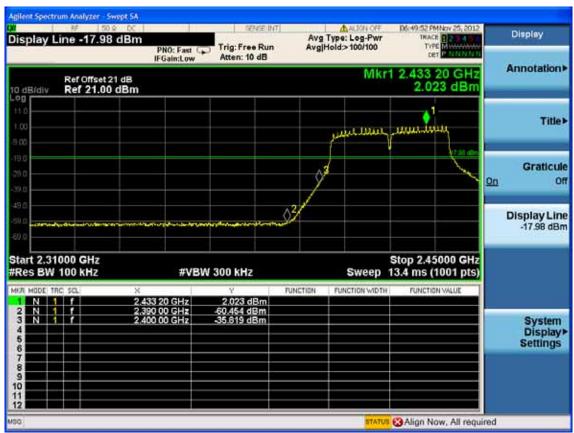
Test CH1: 2422MHz





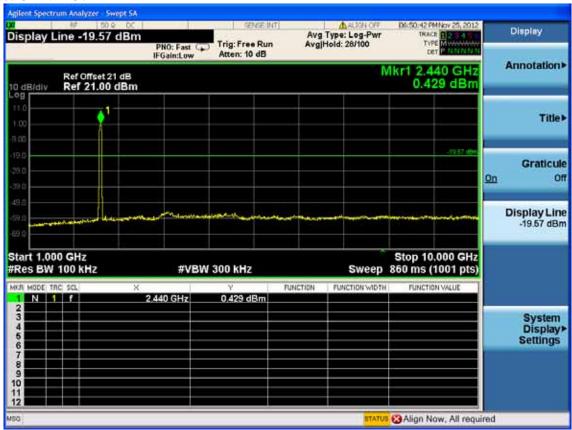






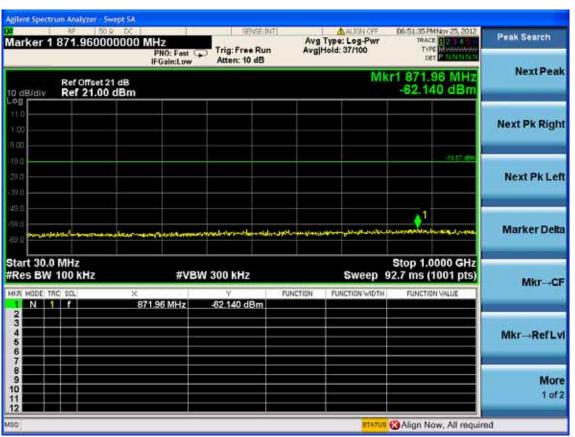


## Test CH4: 2437MHz

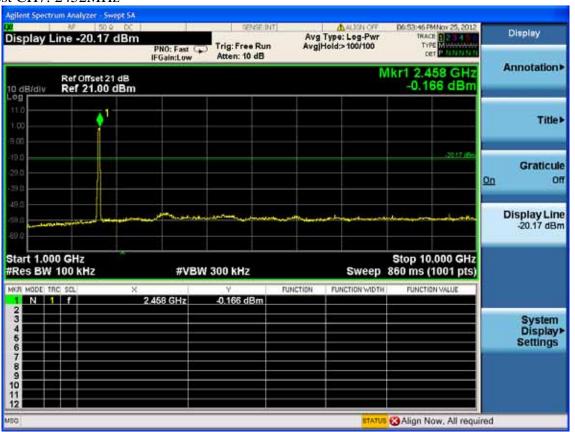




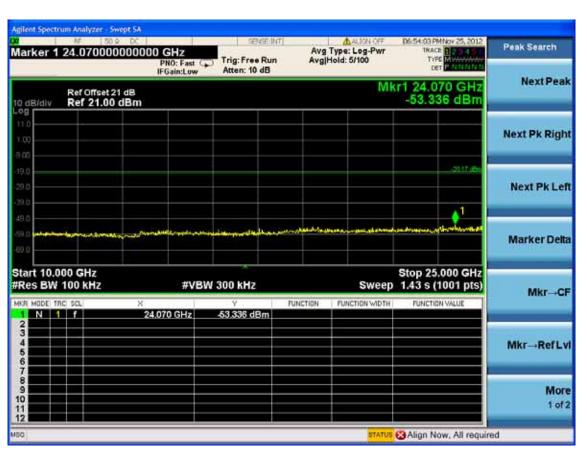


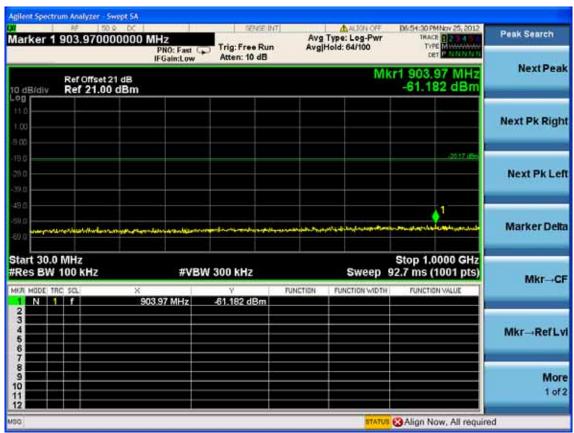


## Test CH7: 2452MHz









STATUS Align Now, All required



10 11 12

page 5-46 FCC ID:UCC-WA8011N Agilent Spectrum Analyzer - Swept SA Avg Type: Log-Pwr Avg|Hold>100/100 Display Display Line -19.56 dBm Trig: Free Run Atten: 10 dB Annotation> Mkr1 2.463 250 GHz 0.440 dBm Ref Offset 21 dB Ref 21.00 dBm Title⊁ DIE LILL Graticule On  $\Diamond^2$ Display Line -19.56 dBm Start 2.42500 GHz #Res BW 100 kHz Stop 2.51000 GHz #VBW 300 kHz Sweep 8.13 ms (1001 pts) FUNCTION FUNCTION WIDTH -60.494 dBm -61.254 dBm System Display> Settings

## 6. BAND EDGE COMPLIANCE TEST

# 6.1.Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	Spectrum	Agilent	E4407B	MY41440292	May.08, 12	1 Year
	Analyzer					
2.	Amp	HP	8449B	3008A08495	May.08, 12	1 Year
3.	Antenna	EMCO	3115	9510-4580	May.08, 12	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.

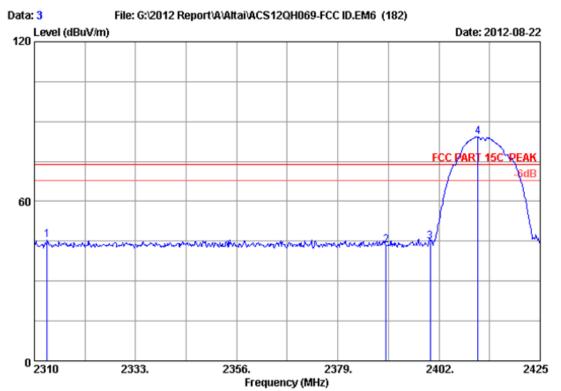
## 6.3. Test Produce

- 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 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. : 3# Chamber Data no. : 3

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH1 2412MHz Tx

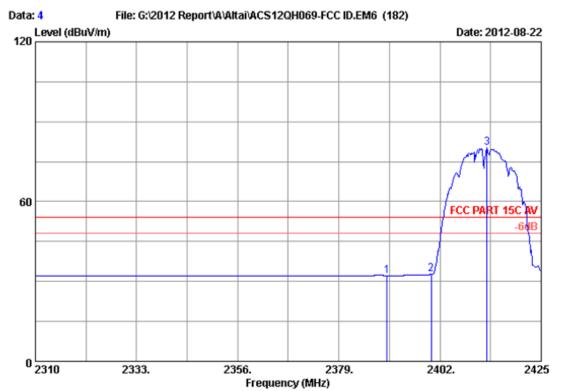
M/N : WA8011N

Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
2312.875	27.83	5.89	34.43	46.15	45.44	74.00	28.56	Peak
2390.000	27.96	6.01	34.44	43.88	43.41	74.00	30.59	Peak
2400.000	27.96	6.01	34.44	45.22	44.75	74.00	29.25	Peak
2410.855	27.98	6.03	34.44	84.76	84.33	74.00	-10.33	Peak
	(MHz) 2312.875 2390.000 2400.000	Freq. Factor (MHz) (dB/m) 2312.875 27.83 2390.000 27.96 2400.000 27.96	Freq. Factor Loss (MHz) (dB/m) (dB) 2312.875 27.83 5.89 2390.000 27.96 6.01 2400.000 27.96 6.01	Freq. Factor Loss factor (MHz) (dB/m) (dB) (dBuV)  2312.875 27.83 5.89 34.43 2390.000 27.96 6.01 34.44 2400.000 27.96 6.01 34.44	Freq. Factor Loss factor Reading (MHz) (dB/m) (dB) (dBuV) (dBuV/m)  2312.875 27.83 5.89 34.43 46.15 2390.000 27.96 6.01 34.44 43.88 2400.000 27.96 6.01 34.44 45.22	Freq. Factor Loss factor Reading Level (MHz) (dB/m) (dB) (dBuV) (dBuV/m) (dBuV/m)  2312.875 27.83 5.89 34.43 46.15 45.44 2390.000 27.96 6.01 34.44 43.88 43.41 2400.000 27.96 6.01 34.44 45.22 44.75	Freq. Factor Loss factor Reading Level Limits (MHz) (dB/m) (dB) (dBuV) (dBuV/m) (dBuV/m) (dBuV/m) (dB)  2312.875 27.83 5.89 34.43 46.15 45.44 74.00 2390.000 27.96 6.01 34.44 43.88 43.41 74.00 2400.000 27.96 6.01 34.44 45.22 44.75 74.00	Freq. Factor Loss factor Reading Level Limits Margin (MHz) (dB/m) (dB) (dBuV) (dBuV/m) (dBuV/m) (dB) (dB) (dB)  2312.875 27.83 5.89 34.43 46.15 45.44 74.00 28.56 2390.000 27.96 6.01 34.44 43.88 43.41 74.00 30.59 2400.000 27.96 6.01 34.44 45.22 44.75 74.00 29.25

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Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor





Site no. : 3# Chamber Data no. : 4

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH1 2412MHz Tx

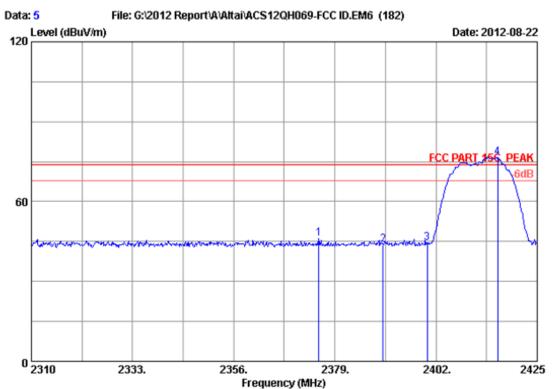
M/N : WA8011N

No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dBuV)	Reading (dBuV/m)	Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
2	2390.000 2400.000 2412.695	27.96 27.96 27.98	6.01 6.01 6.03	34.44 34.44 34.44	32.69 33.13 80.53	32.22 32.66 80.10	54.00 54.00 54.00		Average Average Average

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Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor





Site no. : 3# Chamber Data no. : 5

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH1 2412MHz Tx

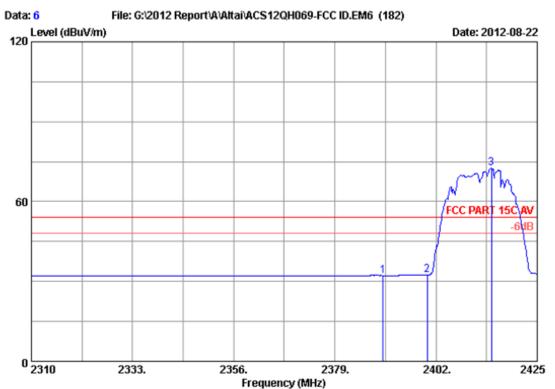
M/N : WA8011N

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
2		27.93 27.96 27.96 27.98	5.98 6.01 6.01 6.03	34.44 34.44 34.44 34.44	46.56 44.37 44.97 76.89	46.03 43.90 44.50 76.46	74.00 74.00 74.00 74.00	27.97 30.10 29.50 -2.46	Peak Peak Peak Peak Peak

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Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor





Site no. : 3# Chamber Data no. : 6

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C AV

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH1 2412MHz Tx

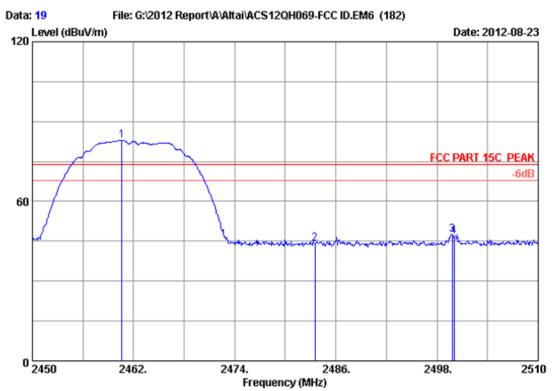
M/N : WA8011N

No.	Freq.	Factor (dB/m)	Loss (dB)	factor (dBuV)	Reading (dBuV/m)	Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
2	2390.000 2400.000 2414.650	27.96 27.96 27.98	6.01 6.01 6.03	34.44 34.44 34.44	32.69 32.96 73.06	32.22 32.49 72.63	54.00 54.00 54.00	21.51	Average Average Average

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Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor





Site no. : 3# Chamber Data no. : 19
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH11 2462MHz Tx

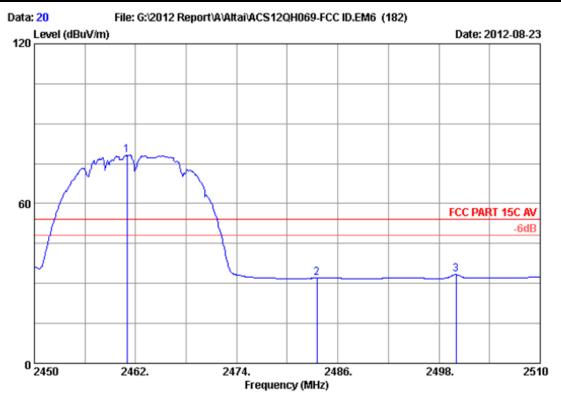
M/N : WA8011N

No.	Freq.	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
2	2460.620	28.05	6.12	34.44	83.18	82.91	74.00	-8.91	Peak
	2483.500	28.08	6.15	34.45	44.28	44.06	74.00	29.94	Peak
	2499.800	28.10	6.18	34.45	47.66	47.49	74.00	26.51	Peak
	2500.000	28.10	6.18	34.45	47.06	46.89	74.00	27.11	Peak

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Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor





Site no. : 3# Chamber Data no. : 20
Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : VERTICAL

Limit : FCC PART 15C AV

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH11 2462MHz Tx

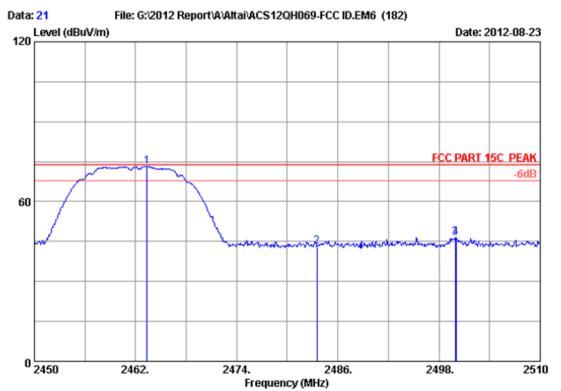
M/N : WA8011N

No.	Freq. (MHz)	Factor (dB/m)	Loss (dB)	factor (dBuV)	Reading (dBuV/m)	Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
2	2460.980 2483.500 2500.000	28.05 28.08 28.10	6.12 6.15 6.18	34.44 34.45 34.45	78.50 32.25 33.51	78.23 32.03 33.34	54.00 54.00 54.00	21.97	Average Average Average

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Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading - Amp Factor





Site no. : 3# Chamber Data no. : 21

Dis. / Ant. : 3m 2011 3115 4580 Ant. pol. : HORIZONTAL

Limit : FCC PART 15C PEAK

Env. / Ins. : 24\*C/56% Engineer : Leo-Li

EUT : A8-Ein Super WiFi Base Station

Power Rating : DC 56V From Adapter Input AC 120V/60Hz

Test Mode : IEEE802.11b CH11 2462MHz Tx

M/N : WASO11N

No.	Freq. (MHz)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP factor (dBuV)	Reading (dBuV/m)	Emission Level (dBuV/m)	Limits (dB)	Margin (dB)	Remark
1	2463.380	28.05	6.12	34.45	73.60	73.32	74.00	0.68	Peak
2	2483.500	28.08	6.15	34.45	43.34	43.12	74.00	30.88	Peak
3	2499.920	28.10	6.18	34.45	46.76	46.59	74.00	27.41	Peak
4	2500.000	28.10	6.18	34.45	46.64	46.47	74.00	27.53	Peak

\_\_\_\_\_

Remarks: 1. Emission Level= Antenna Factor + Cable Loss + Reading -Amp Factor