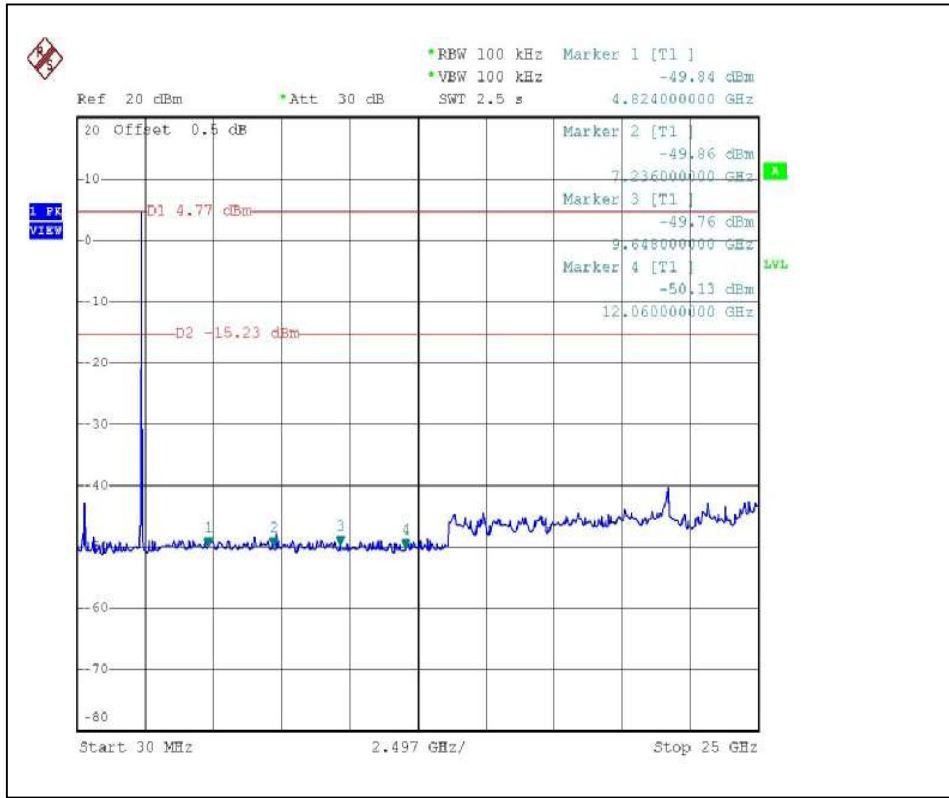
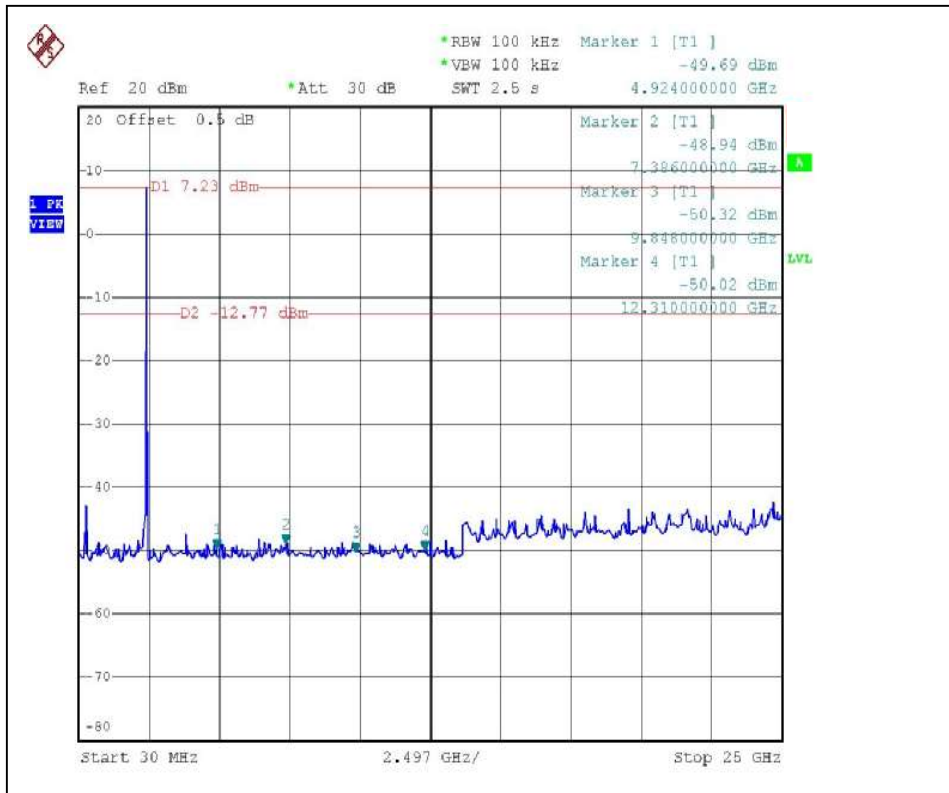




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## 802.11g OFDM modulation

The spectrum plots are attached on the following page. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

Note - The delta method is only used up to 2 MHz away from the restricted bandage, The radiated emissions which located in other restricted frequency band, the result, please refer to 4.2.

### NOTE (Peak):

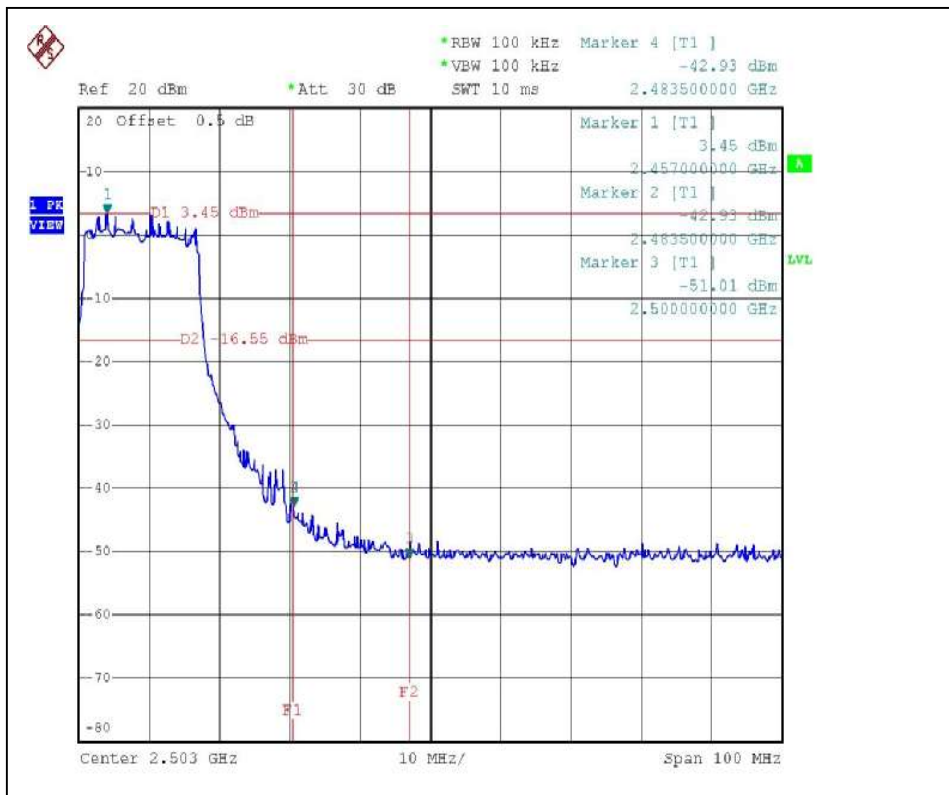
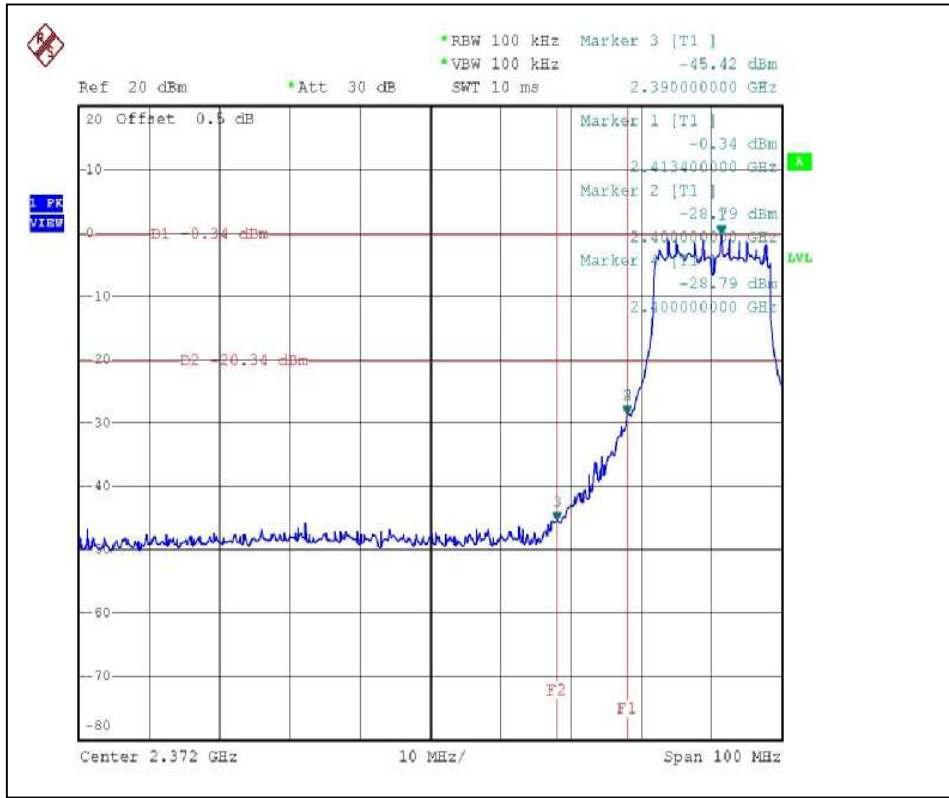
The band edge emission plot of OFDM technique on the following first page show 45.08dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 109.6dBuV/m, so the maximum field strength in restrict band is  $109.6 - 45.08 = 64.52$ dBuV/m which is under 74 dBuV/m limit.

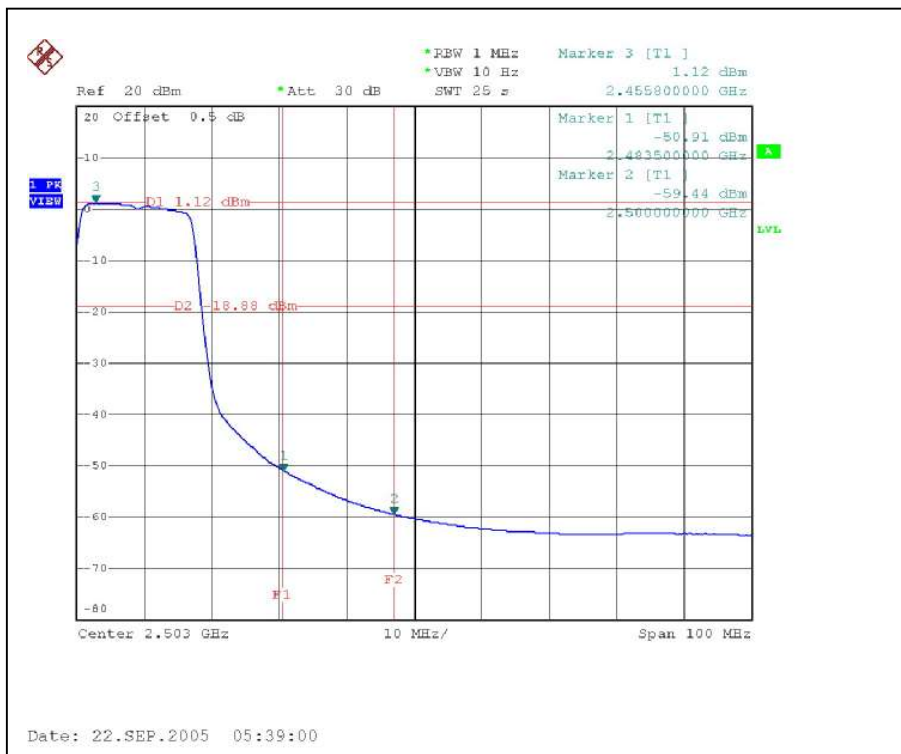
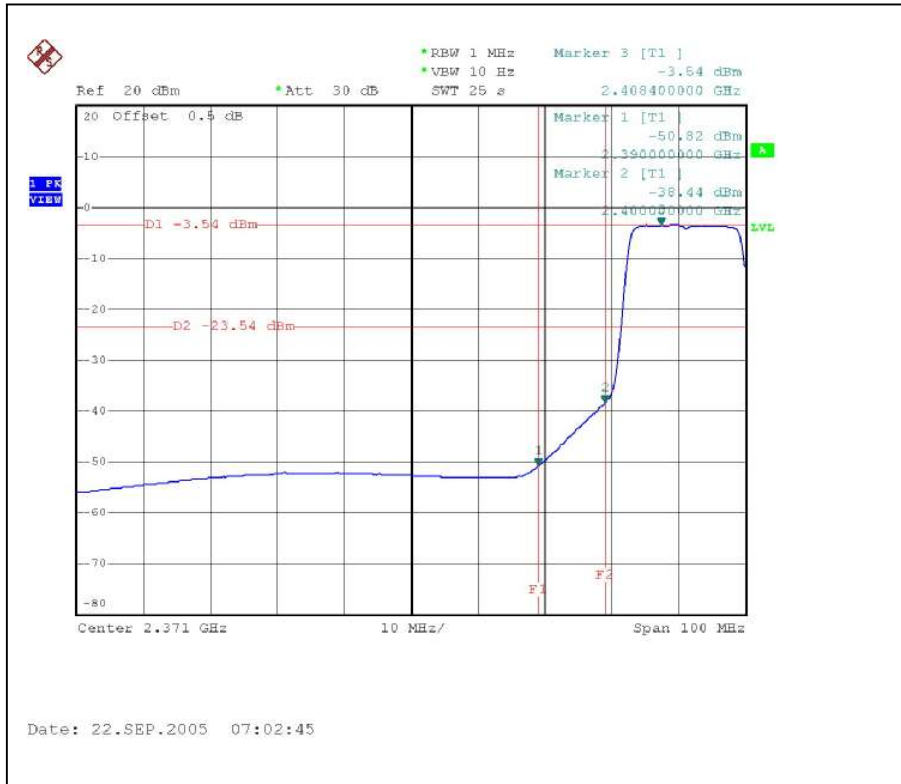
The band edge emission plot of OFDM technique on the following first page shows 46.38dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 114.4dBuV/m, so the maximum field strength in restrict band is  $114.4 - 46.38 = 68.02$ dBuV/m which is under 74 dBuV/m limit.

### NOTE (Average):

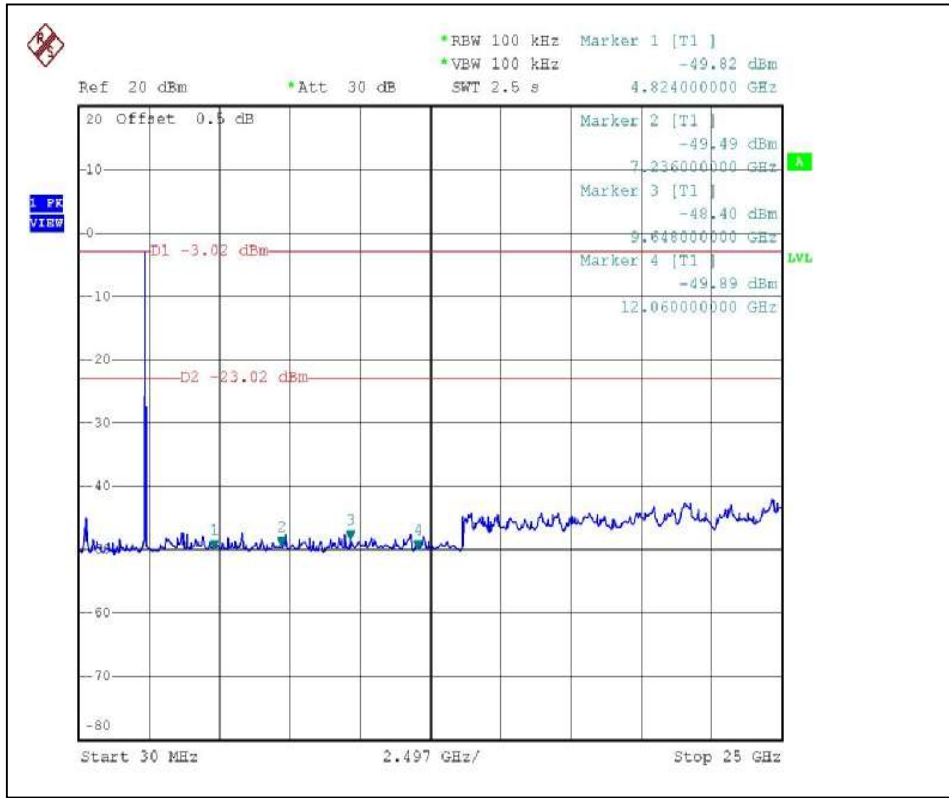
The band edge emission plot of OFDM technique on the following second page shows 47.28dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 100.5dBuV/m, so the maximum field strength in restrict band is  $100.5 - 47.28 = 53.22$ dBuV/m which is under 54 dBuV/m limit.

The band edge emission plot of OFDM technique on the following second page shows 52.03dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 105.0dBuV/m, so the maximum field strength in restrict band is  $105.0 - 52.03 = 52.97$ dBuV/m which is under 54 dBuV/m limit.

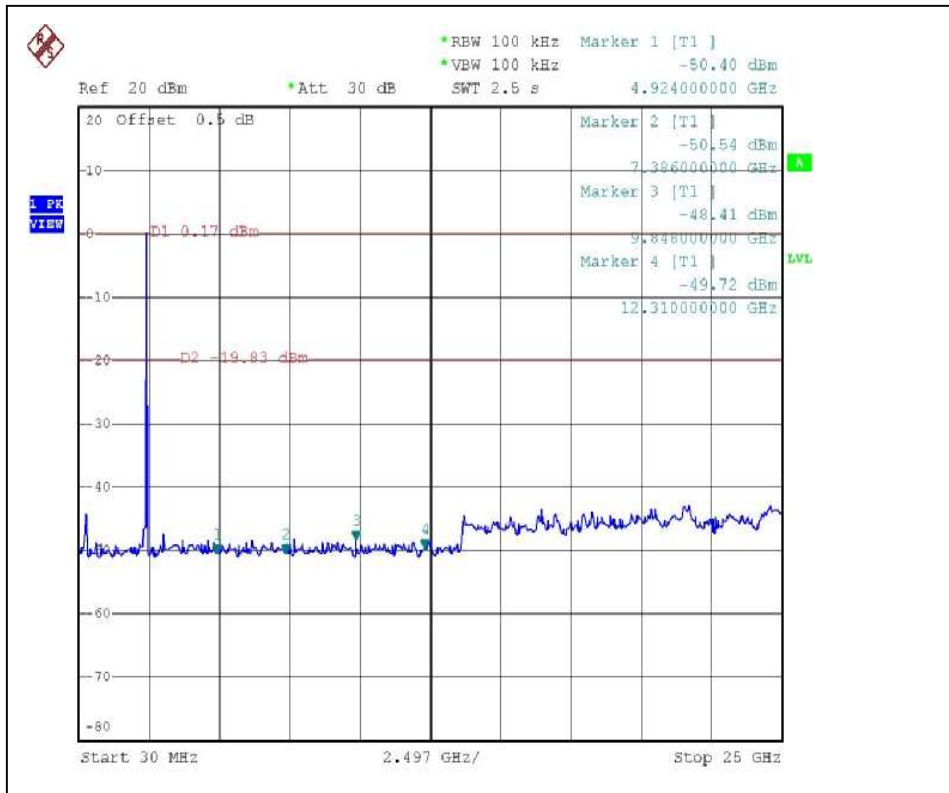




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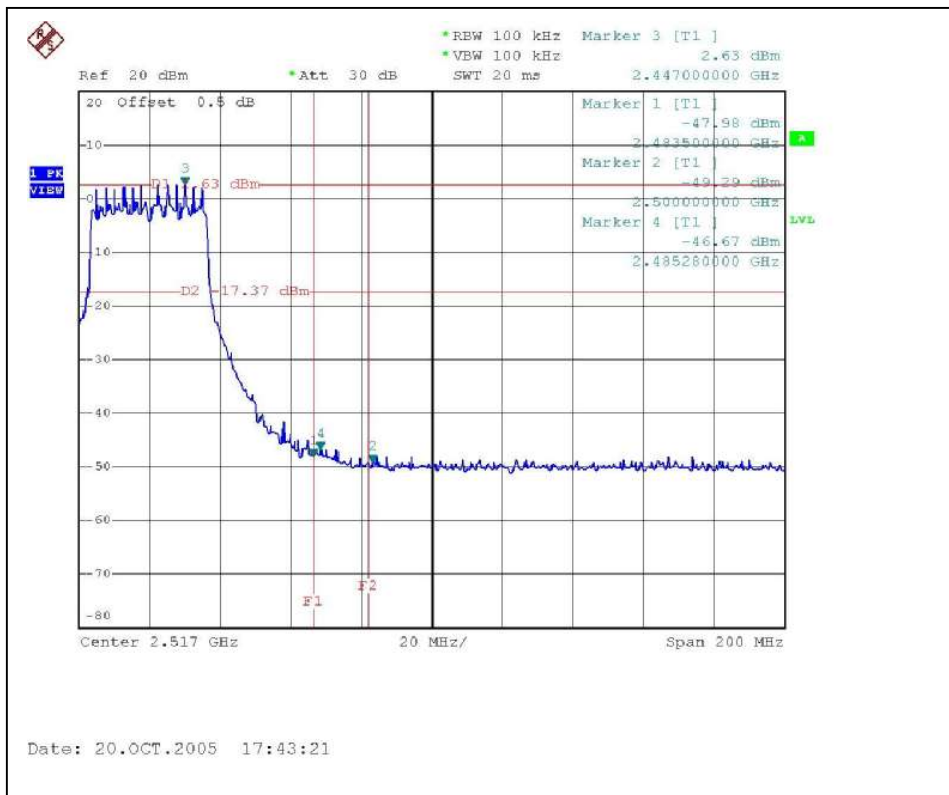
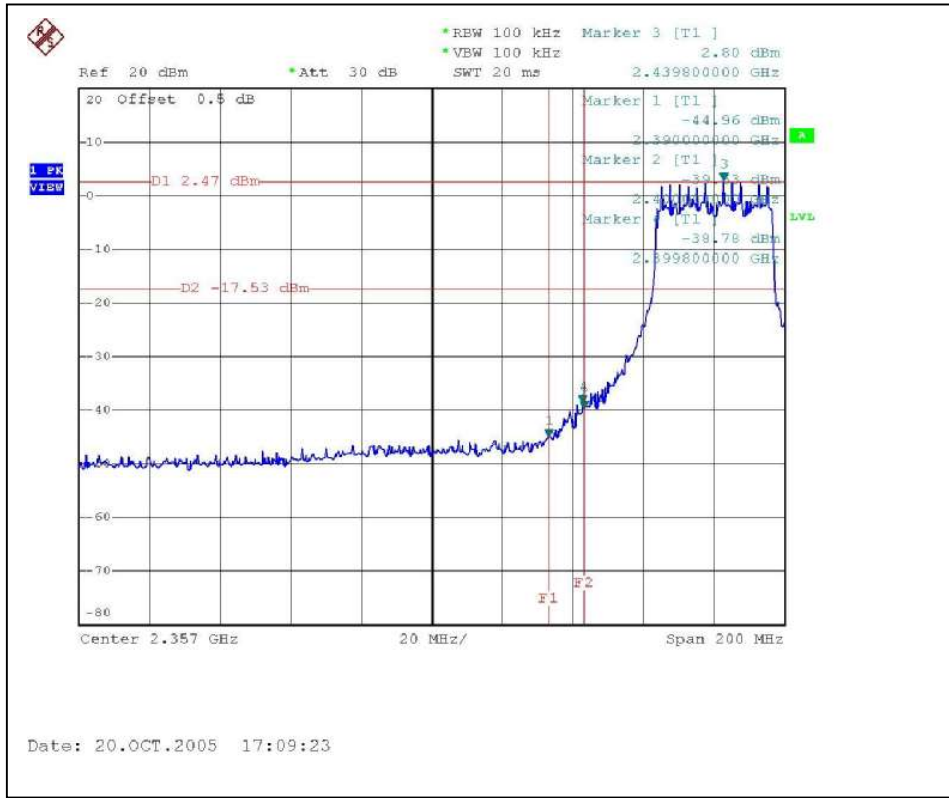


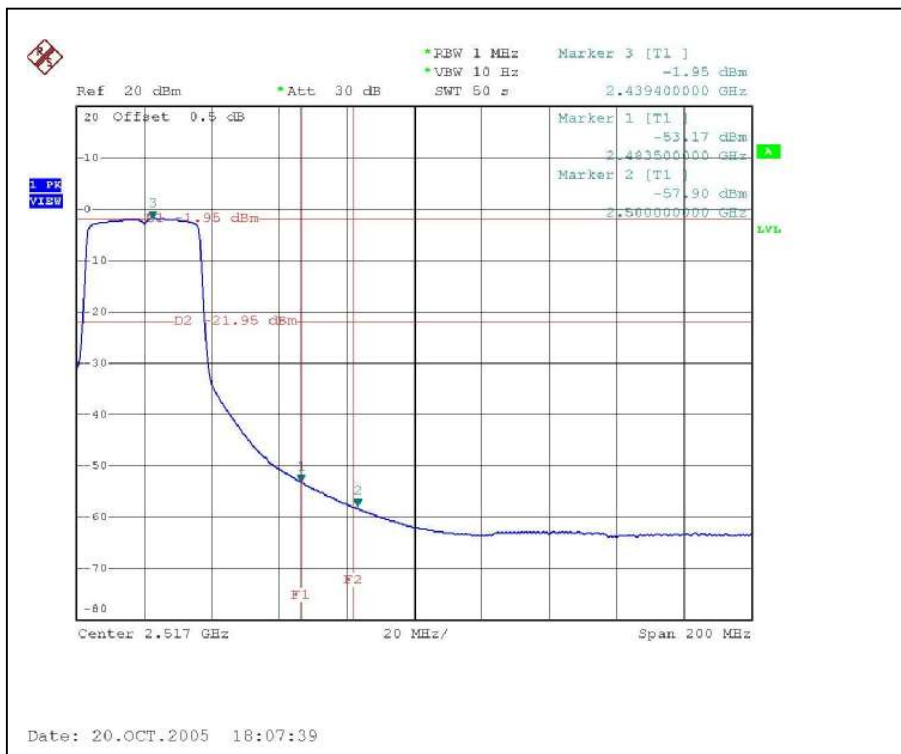
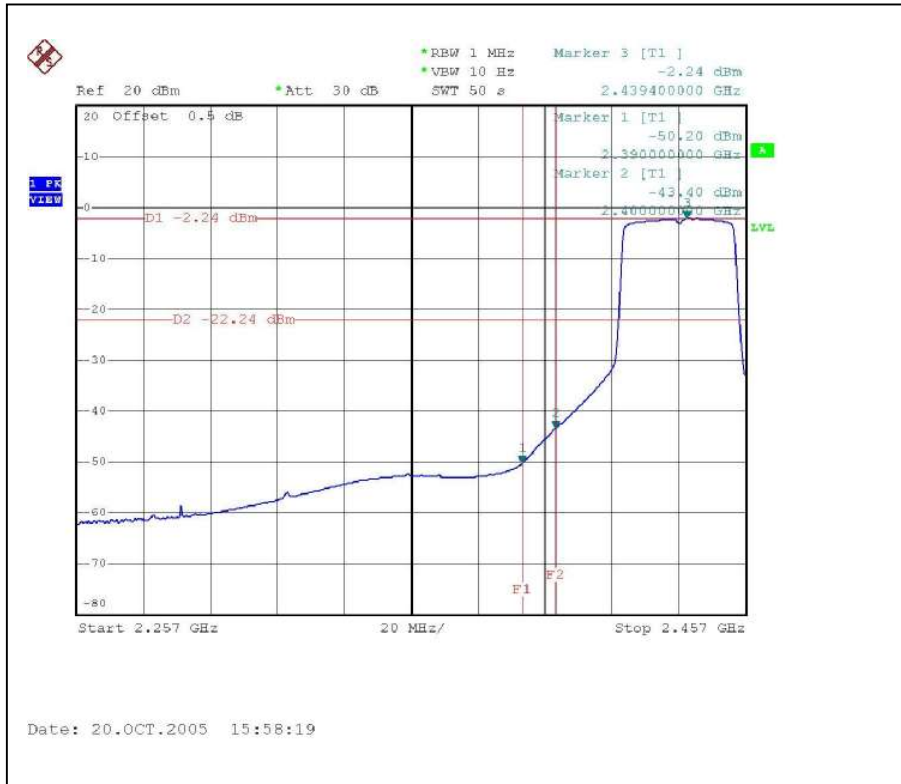


### **802.11g Turbo OFDM modulation**

The spectrum plots are attached on the following page. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

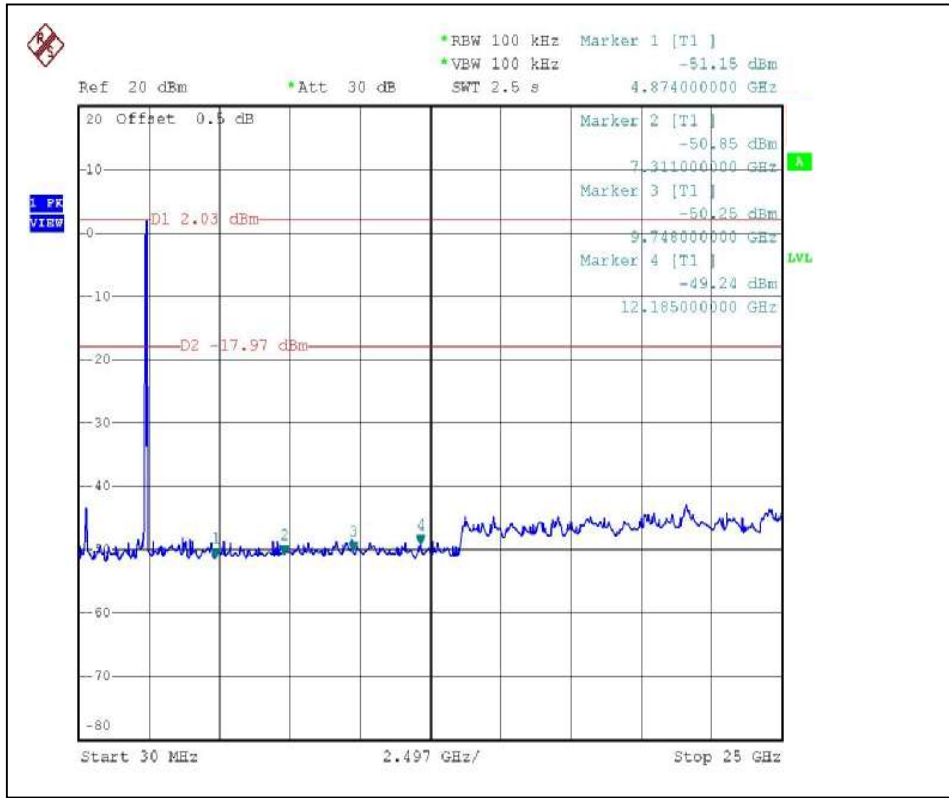








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#### 4.6.8 TEST RESULTS (ANTENNA 4)

##### **802.11b DSSS modulation**

The spectrum plots are attached on the following page. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

Note - The delta method is only used up to 2 MHz away from the restricted bandage, The radiated emissions which located in other restricted frequency band, the result, please refer to 4.2.

##### **NOTE (Peak):**

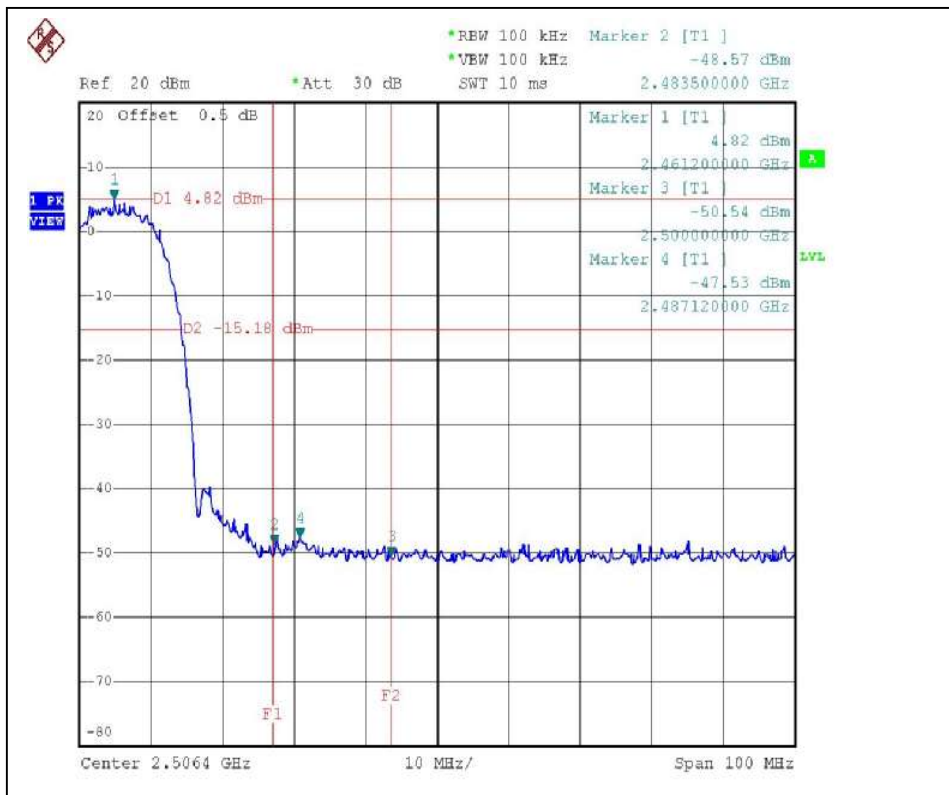
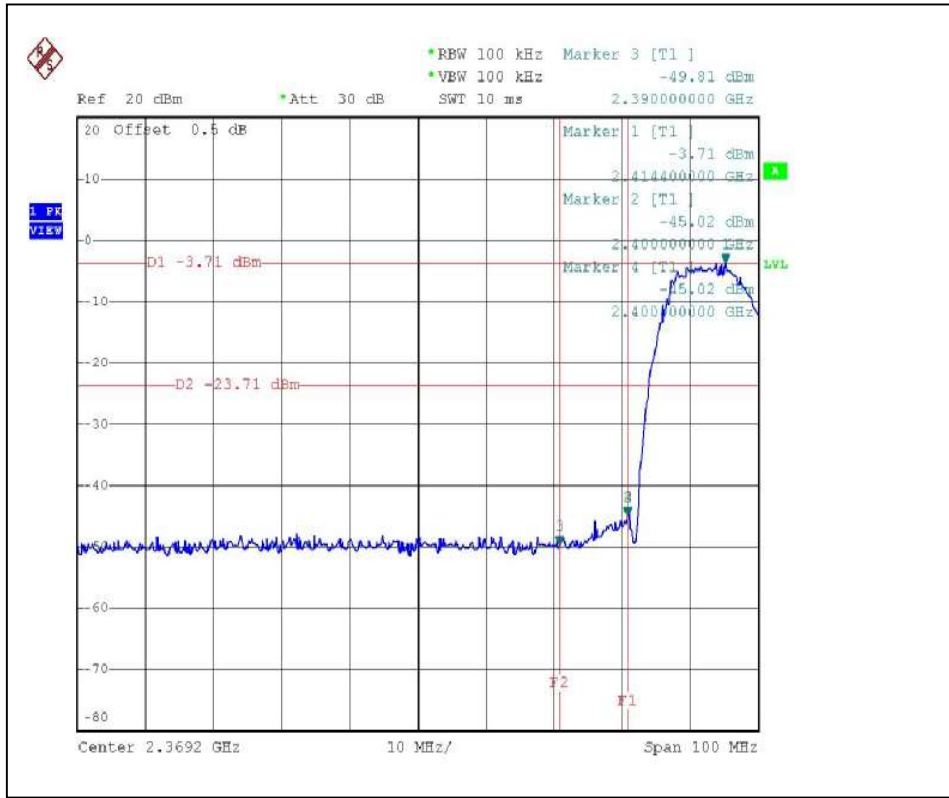
The band edge emission plot of DSSS technique on the following first page show 46.1dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 110.7dBuV/m, so the maximum field strength in restrict band is  $110.7-46.1=64.6$ dBuV/m which is under 74 dBuV/m limit.

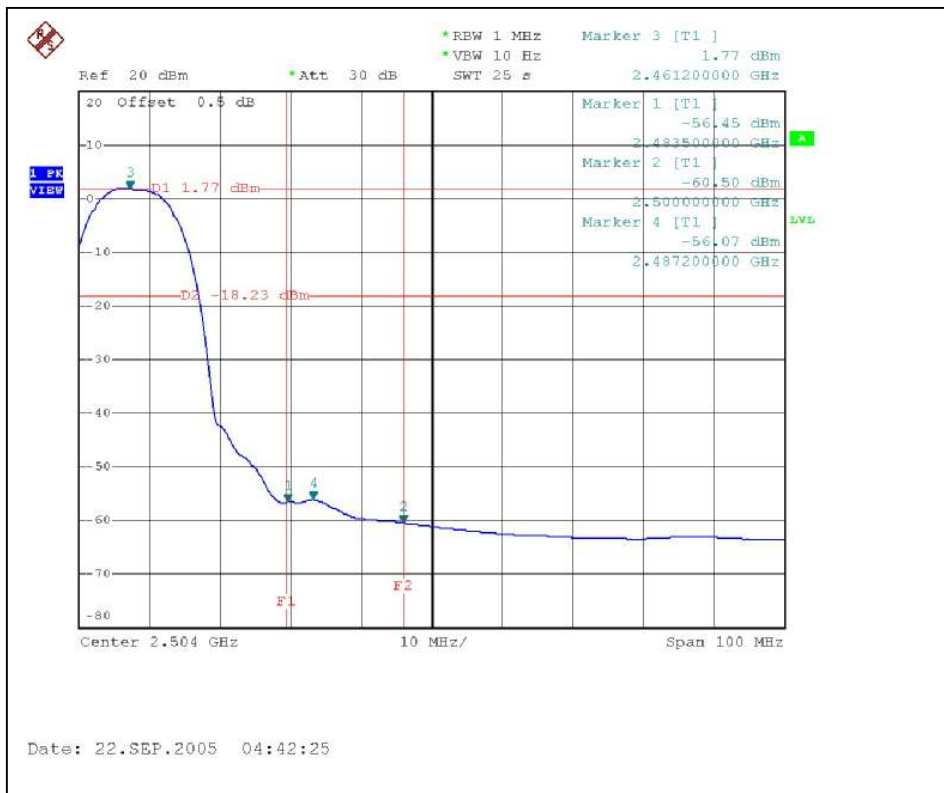
The band edge emission plot of DSSS technique on the following first page shows 53.39dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 118.4dBuV/m, so the maximum field strength in restrict band is  $118.4-53.39=65.01$ dBuV/m which is under 74 dBuV/m limit.

##### **NOTE (Average):**

The band edge emission plot of DSSS technique on the following second page shows 51.15dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 103.8dBuV/m, so the maximum field strength in restrict band is  $103.8-51.15=52.65$ dBuV/m which is under 54 dBuV/m limit.

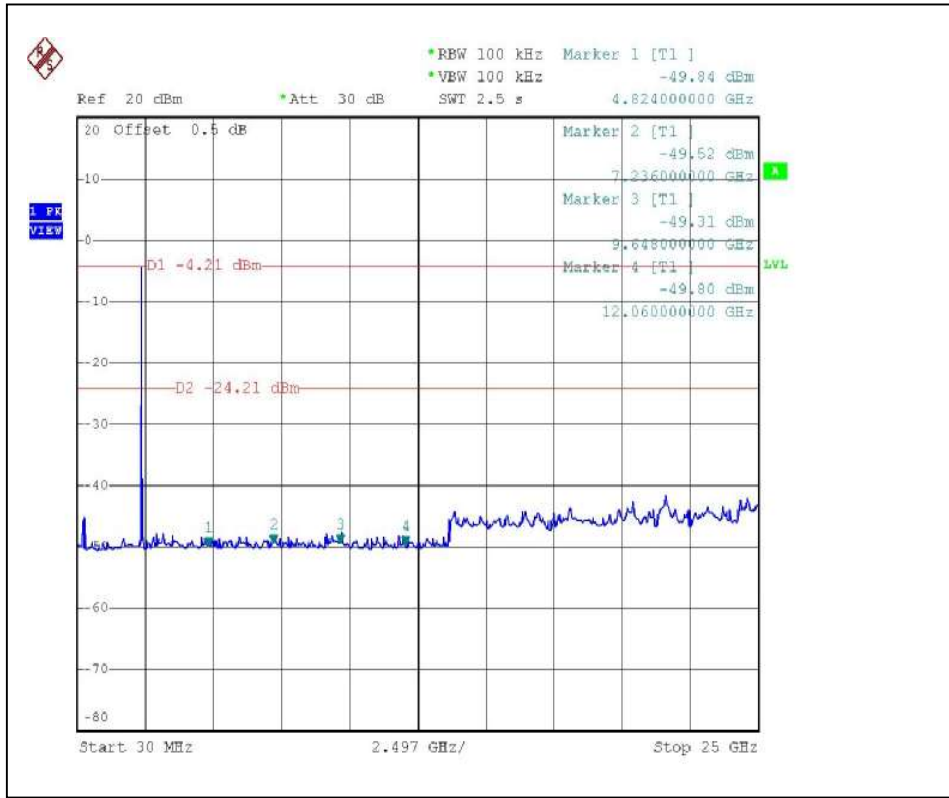
The band edge emission plot of DSSS technique on the following second page shows 58.22dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 110.9dBuV/m, so the maximum field strength in restrict band is  $110.9-58.22=52.68$ dBuV/m which is under 54 dBuV/m limit.



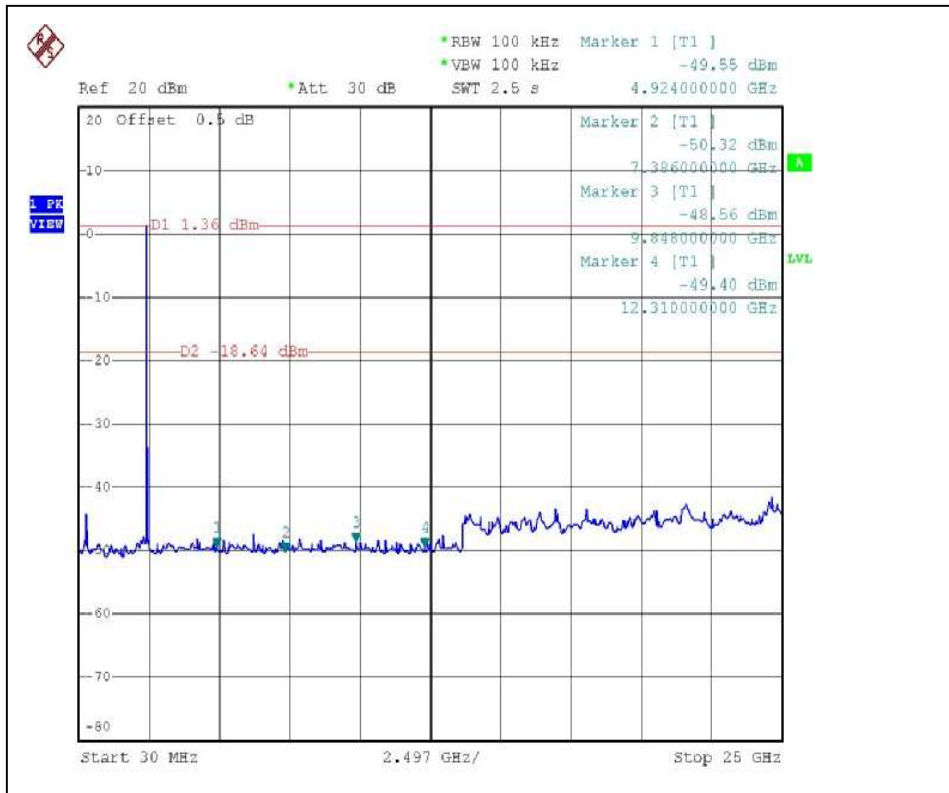




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## 802.11g OFDM modulation

The spectrum plots are attached on the following page. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

Note - The delta method is only used up to 2 MHz away from the restricted bandage, The radiated emissions which located in other restricted frequency band, the result, please refer to 4.2.

### NOTE (Peak):

The band edge emission plot of OFDM technique on the following first page show 40.82dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 109.5dBuV/m, so the maximum field strength in restrict band is  $109.5 - 40.82 = 68.68$ dBuV/m which is under 74 dBuV/m limit.

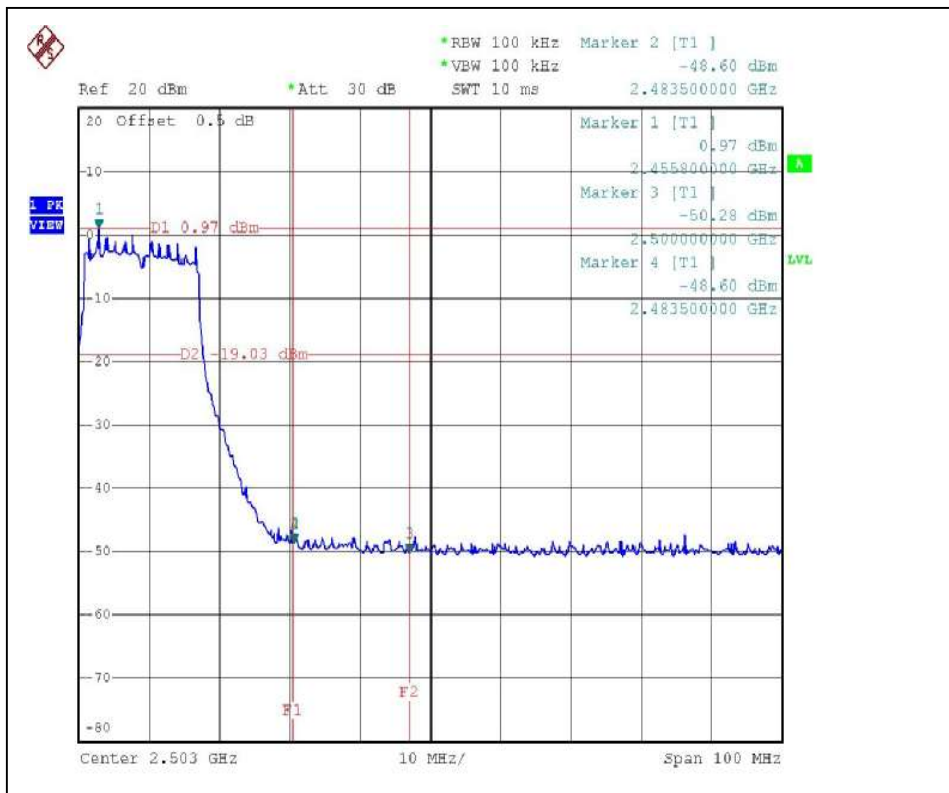
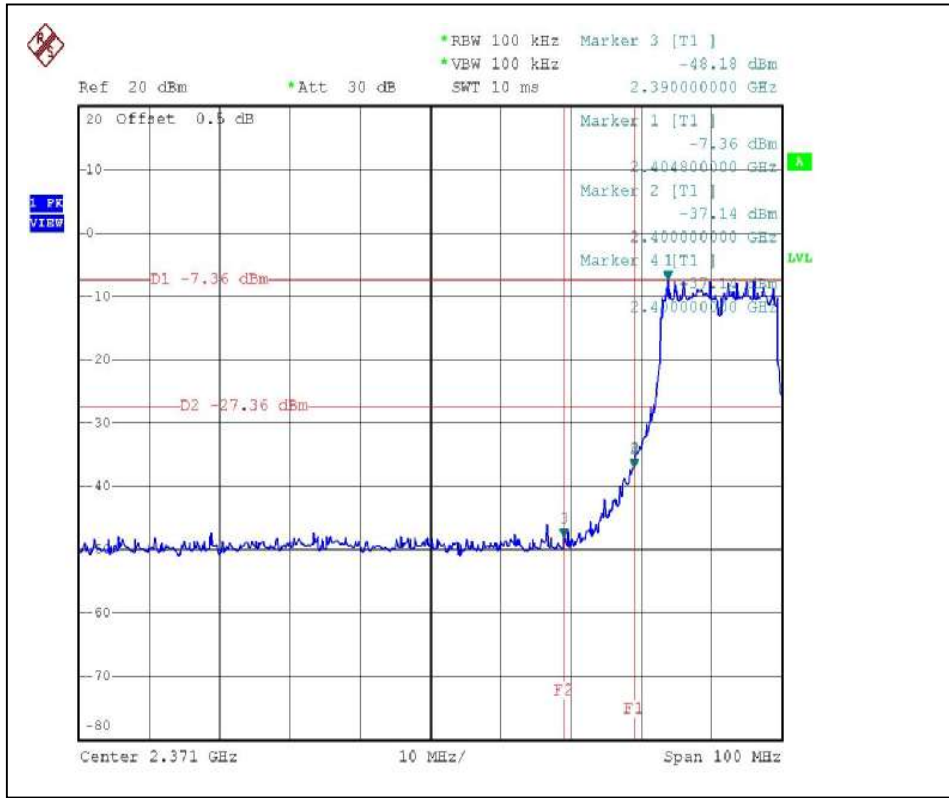
The band edge emission plot of OFDM technique on the following first page shows 49.57dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 113.8dBuV/m, so the maximum field strength in restrict band is  $113.8 - 49.57 = 64.23$ dBuV/m which is under 74 dBuV/m limit.

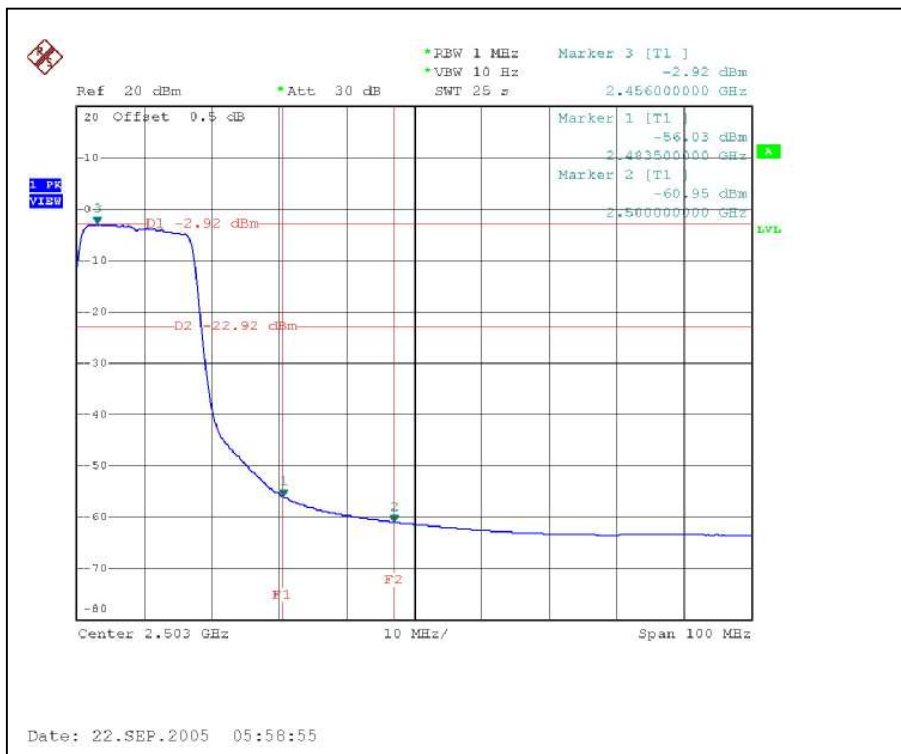
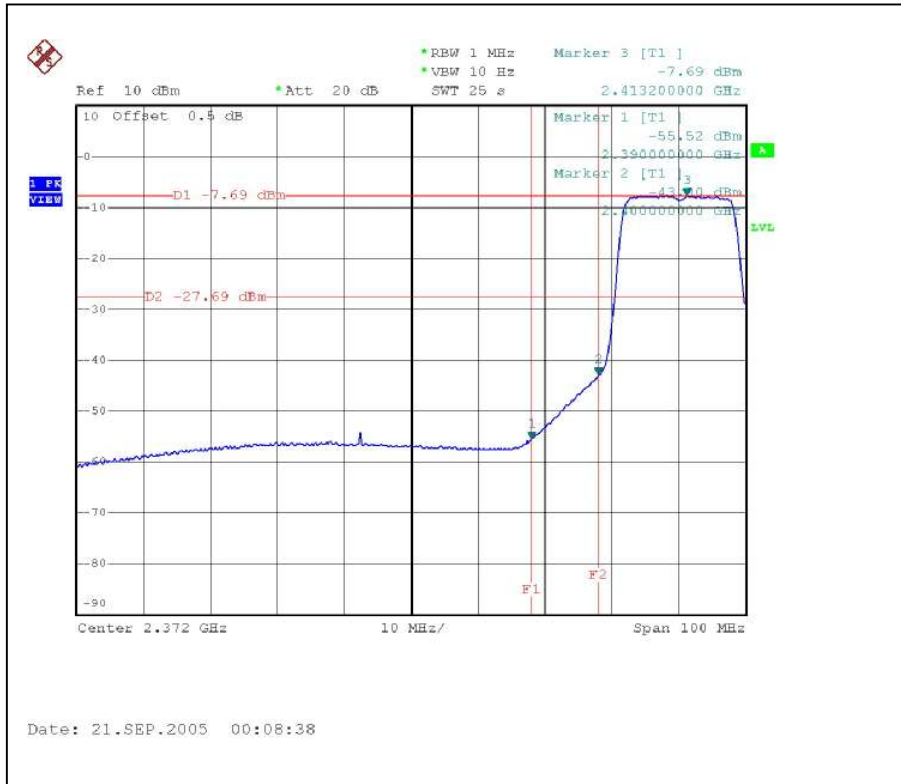
### NOTE (Average):

The band edge emission plot of OFDM technique on the following second page shows 47.83dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 101.3dBuV/m, so the maximum field strength in restrict band is  $101.3 - 47.83 = 53.47$ dBuV/m which is under 54 dBuV/m limit.

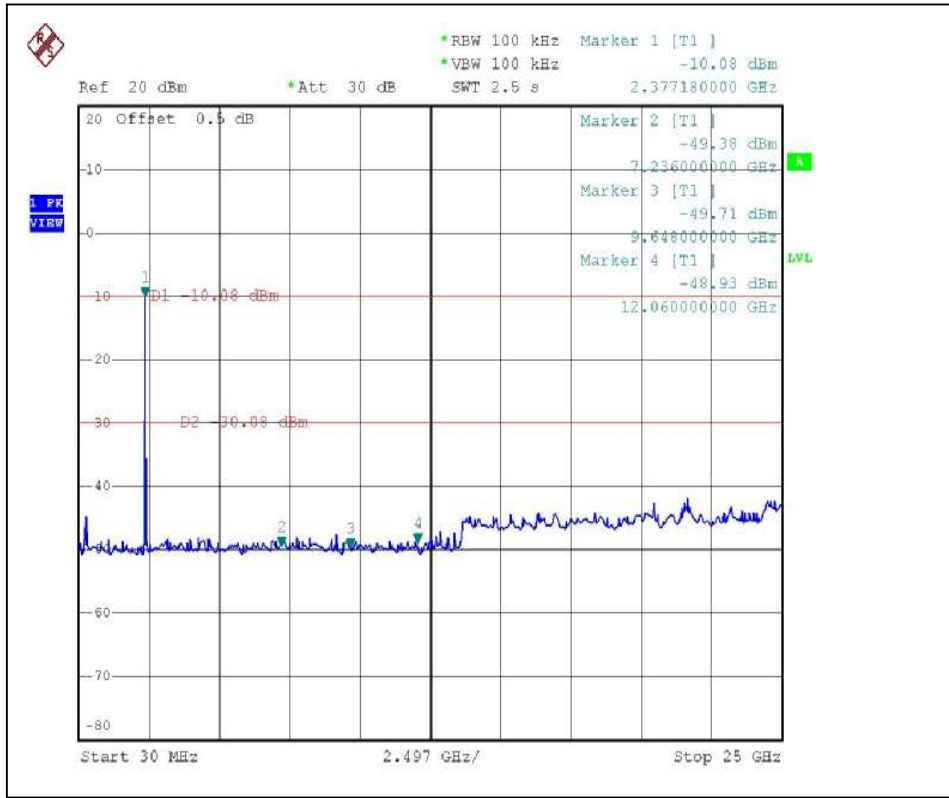
The band edge emission plot of OFDM technique on the following second page shows 53.11dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 106.3dBuV/m, so the maximum field strength in restrict band is  $106.3 - 53.11 = 53.19$ dBuV/m which is under 54 dBuV/m limit.



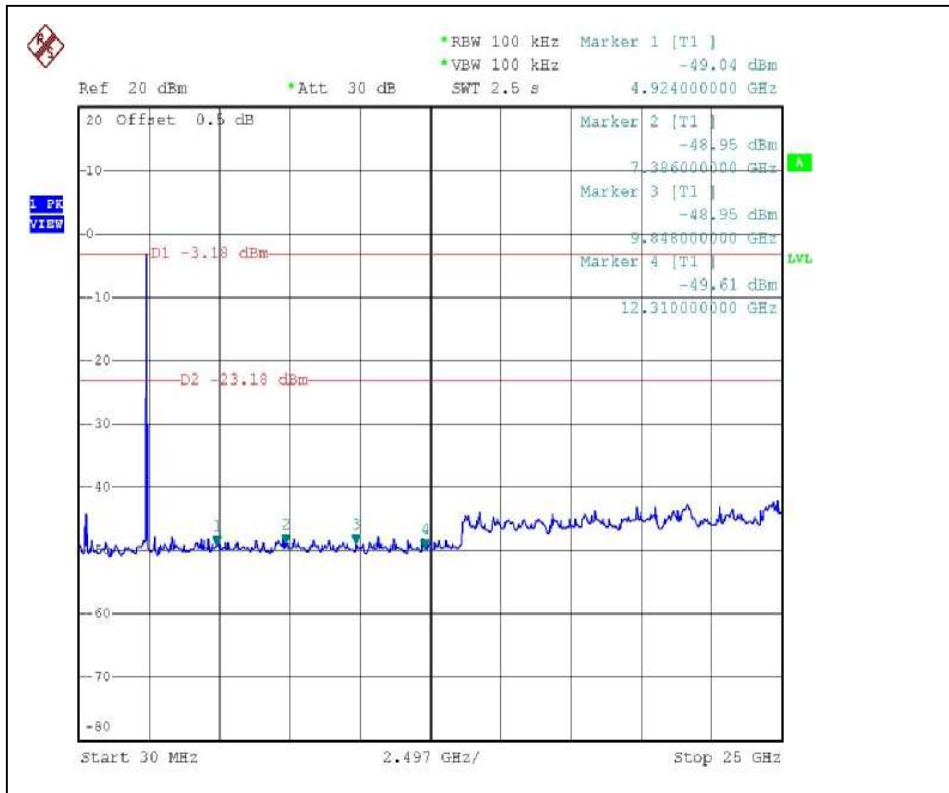




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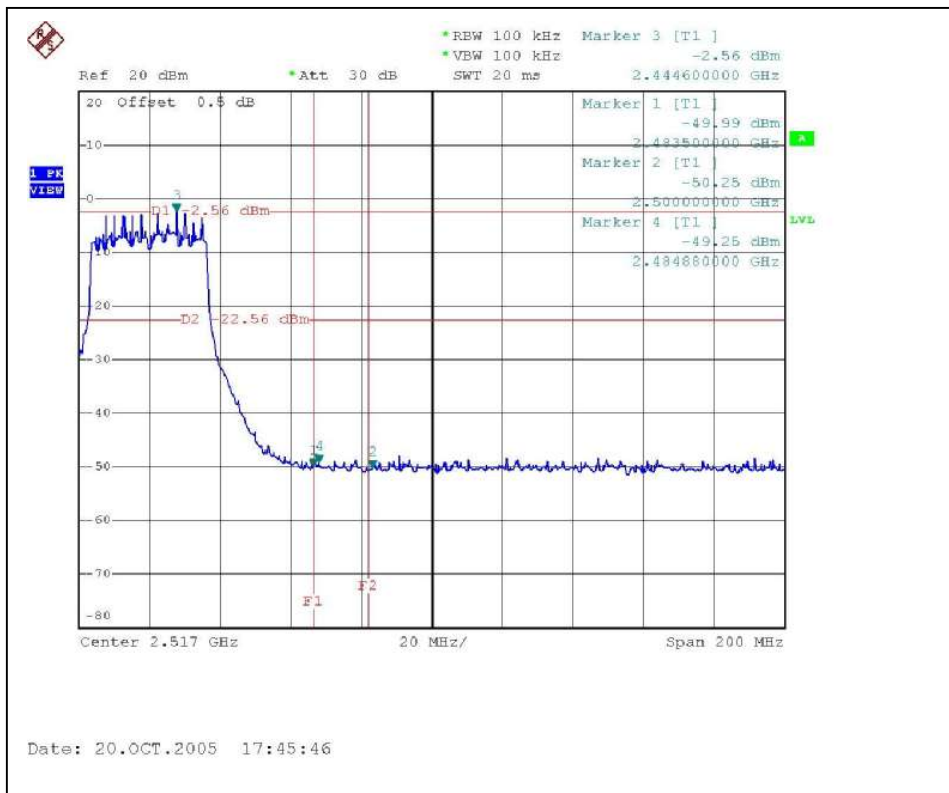
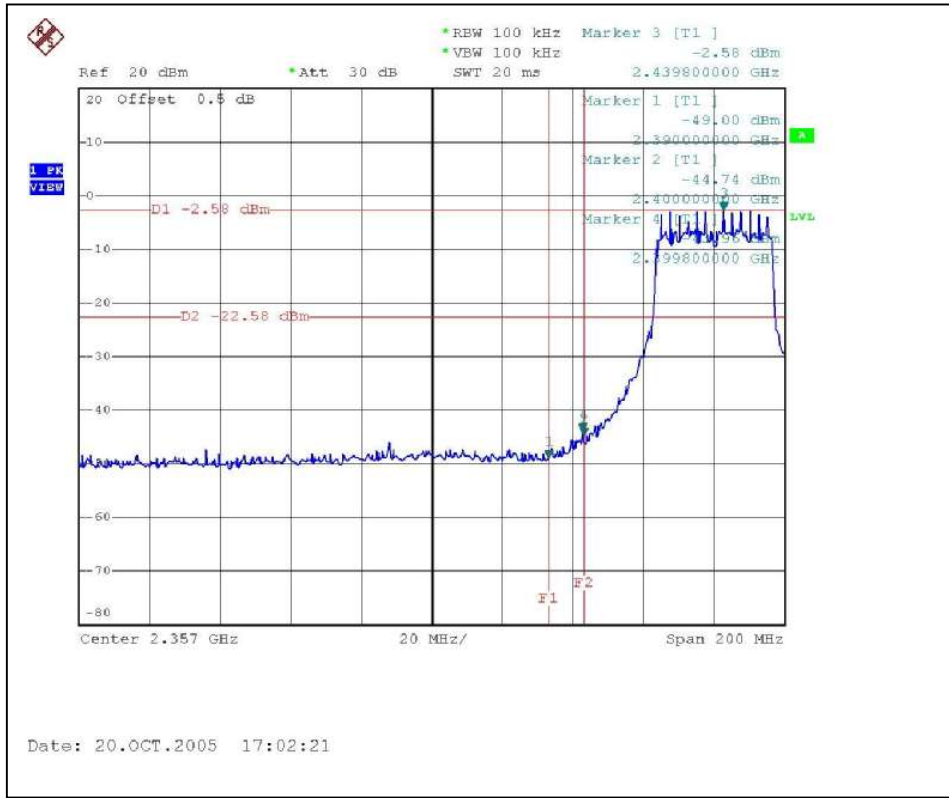
CH 11

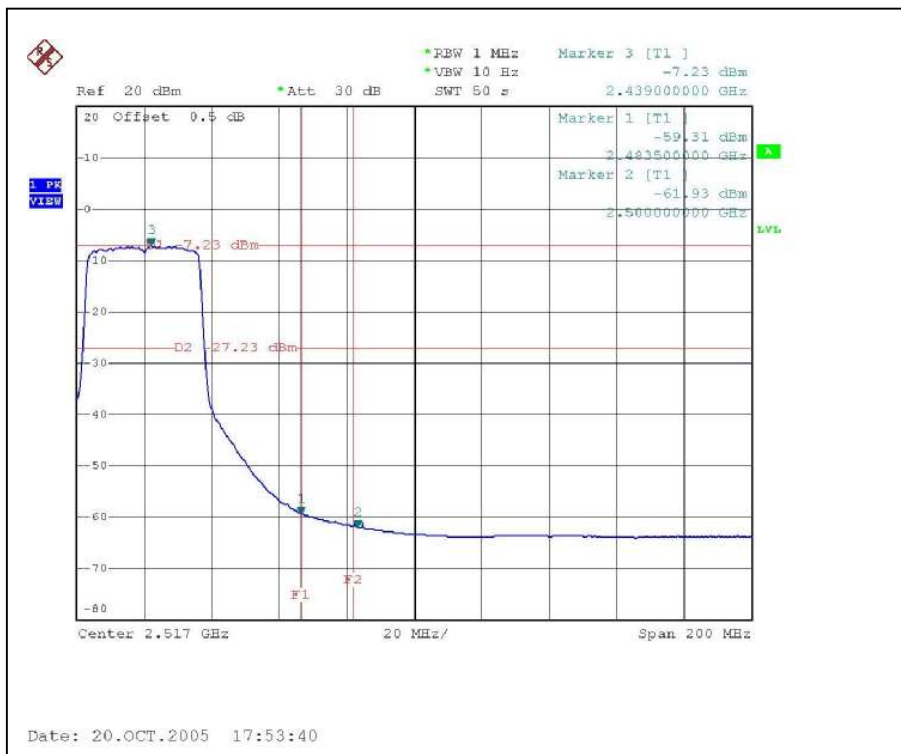
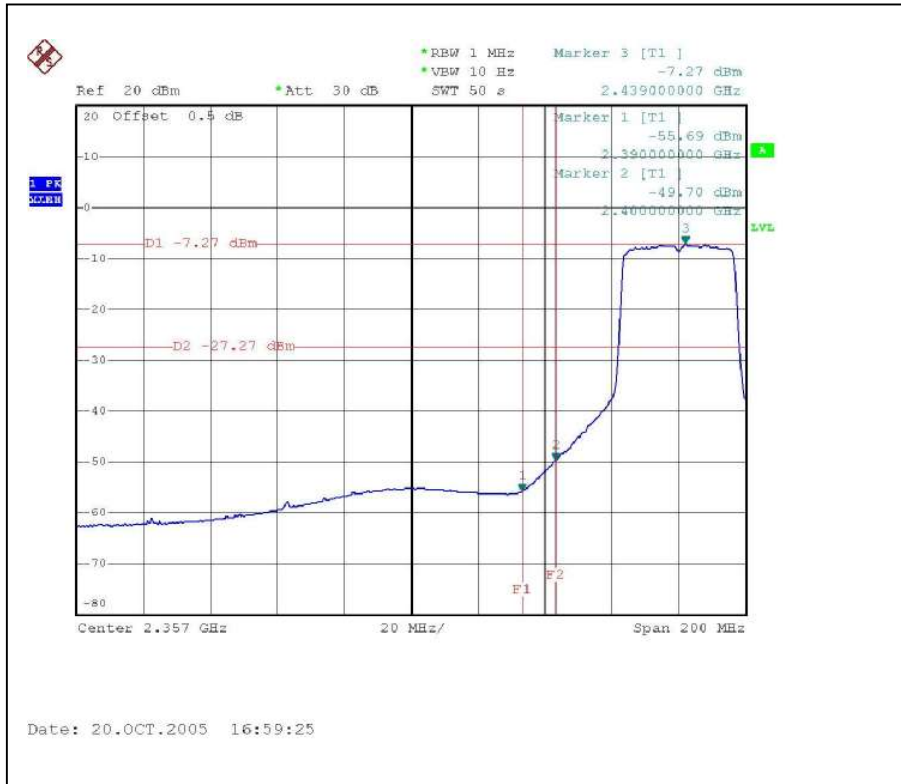




### **802.11g Turbo OFDM modulation**

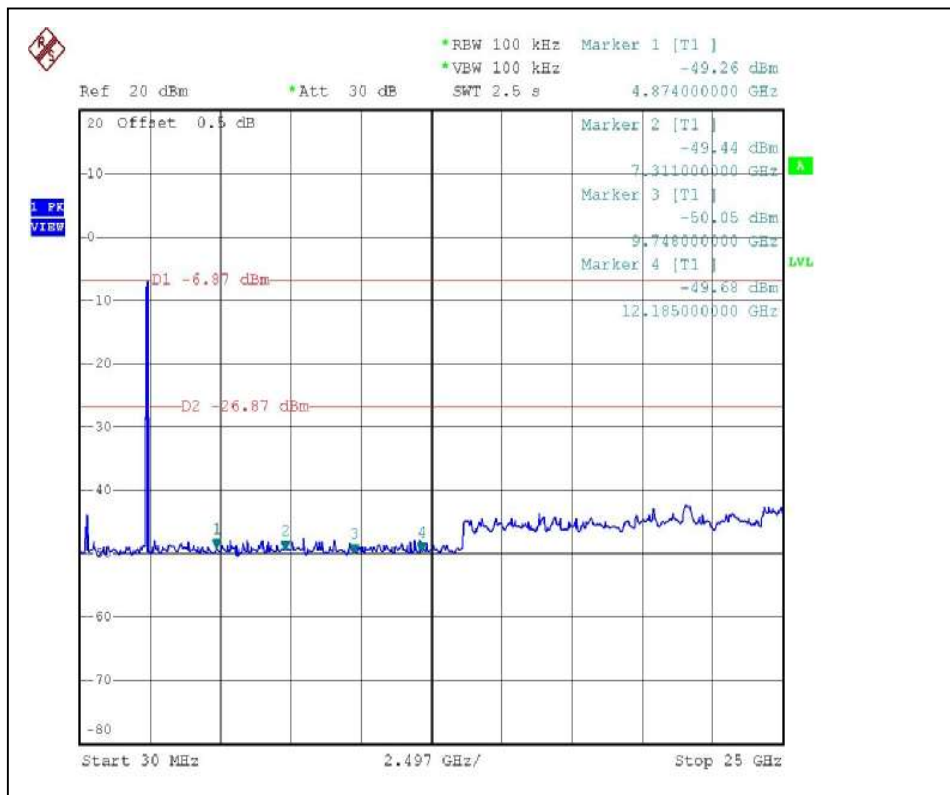
The spectrum plots are attached on the following page. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).







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#### 4.6.9 TEST RESULTS (ANTENNA 5)

##### **802.11b DSSS modulation**

The spectrum plots are attached on the following page. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

Note - The delta method is only used up to 2 MHz away from the restricted bandage, The radiated emissions which located in other restricted frequency band, the result, please refer to 4.2.

##### **NOTE (Peak):**

The band edge emission plot of DSSS technique on the following first page show 52.82dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 115.1dBuV/m, so the maximum field strength in restrict band is  $115.1 - 52.82 = 62.28$  dBuV/m which is under 74 dBuV/m limit.

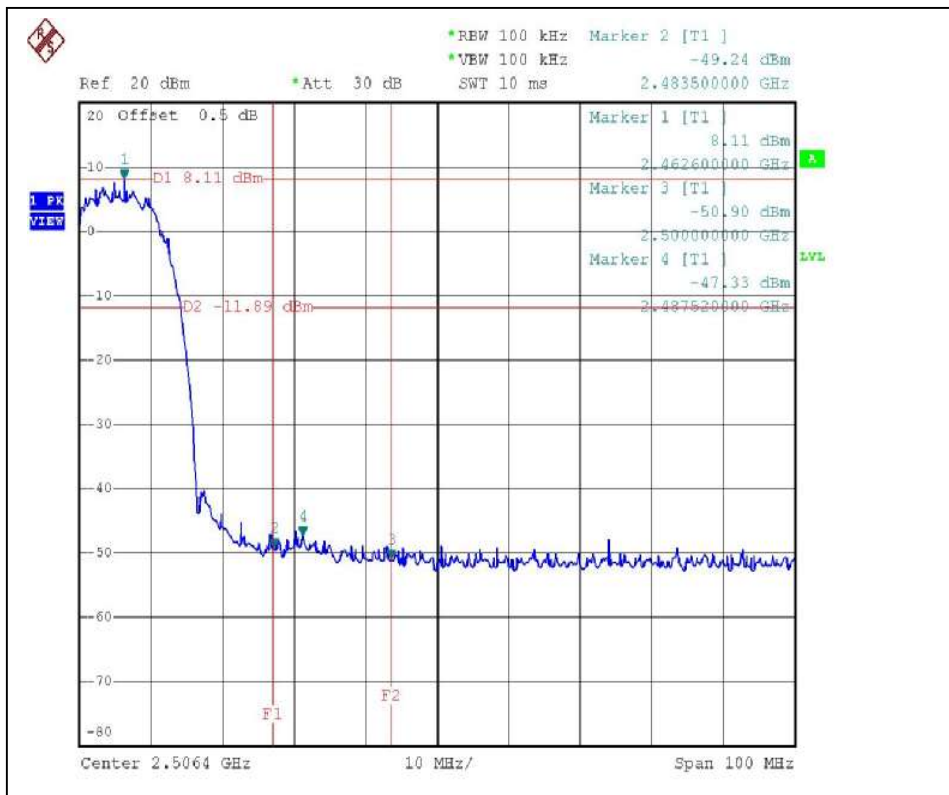
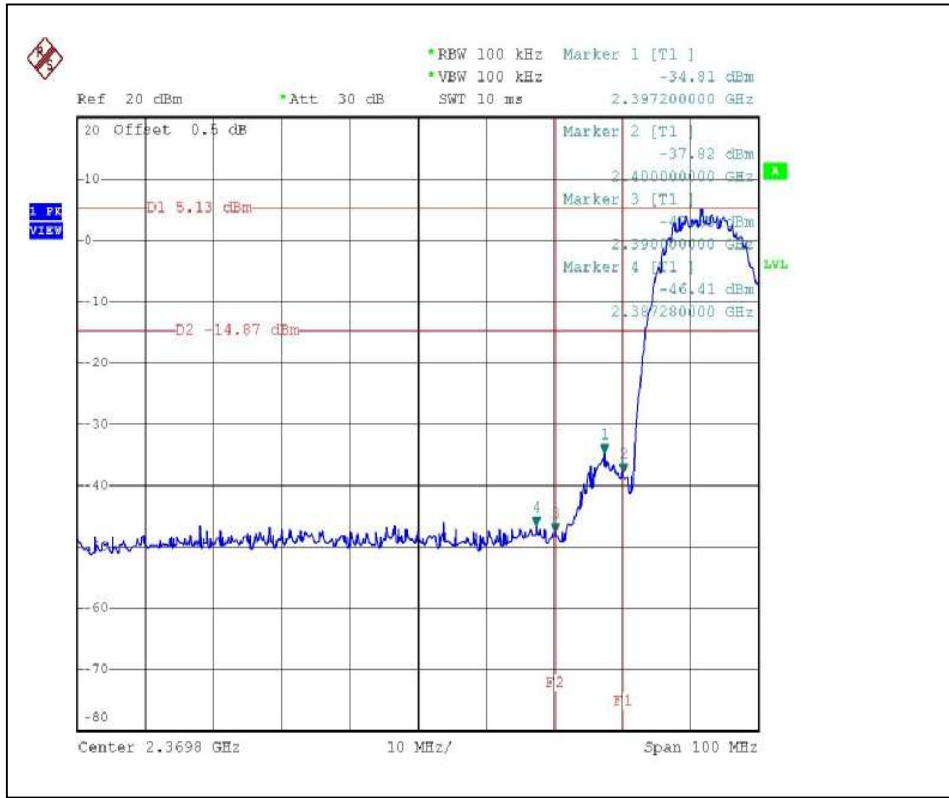
The band edge emission plot of DSSS technique on the following first page shows 57.35dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 117.5dBuV/m, so the maximum field strength in restrict band is  $117.5 - 57.35 = 60.15$  dBuV/m which is under 74 dBuV/m limit.

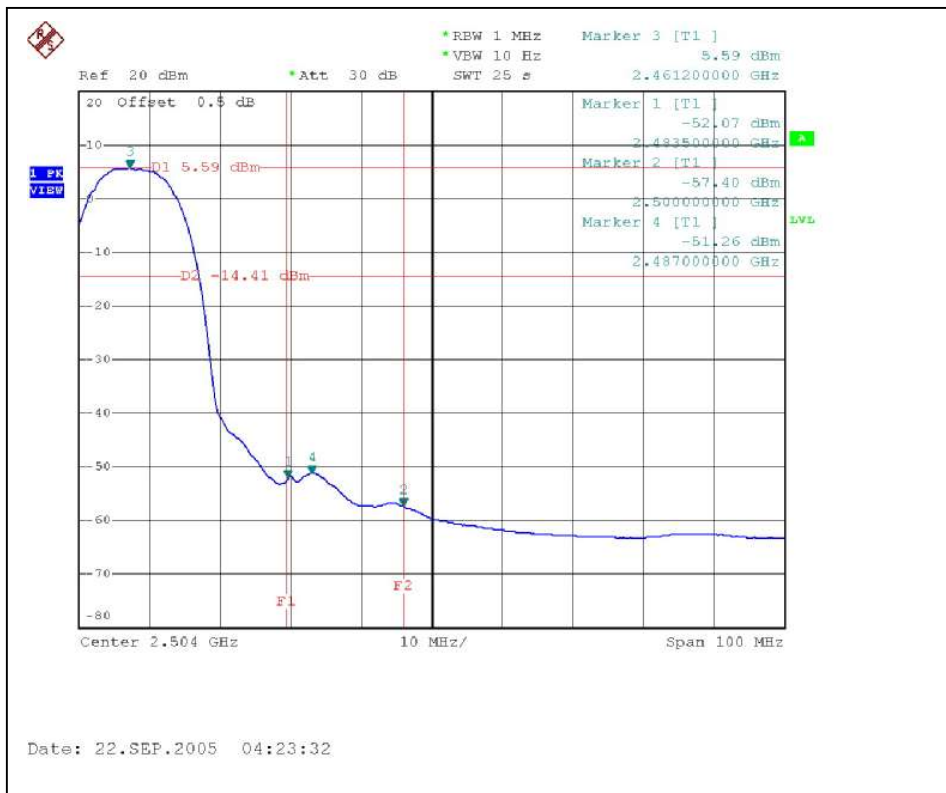
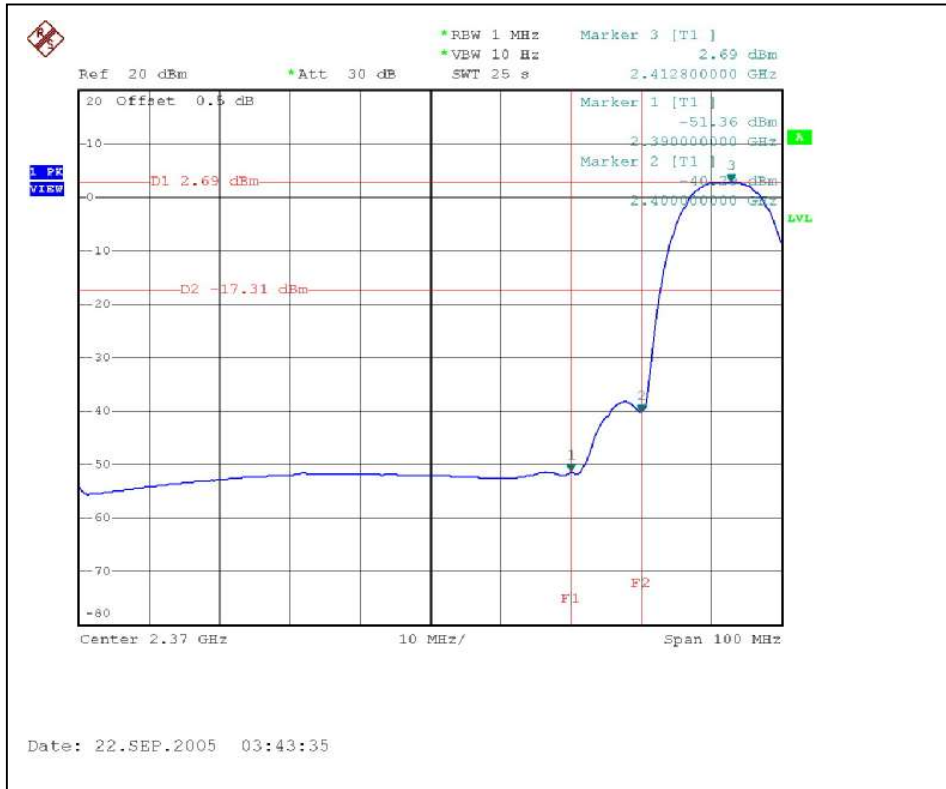
##### **NOTE (Average):**

The band edge emission plot of DSSS technique on the following second page shows 54.05dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 107.5dBuV/m, so the maximum field strength in restrict band is  $107.5 - 54.05 = 53.45$  dBuV/m which is under 54 dBuV/m limit.

The band edge emission plot of DSSS technique on the following second page shows 57.66dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 110.4dBuV/m, so the maximum field strength in restrict band is  $110.4 - 57.66 = 52.74$  dBuV/m which is under 54 dBuV/m limit.

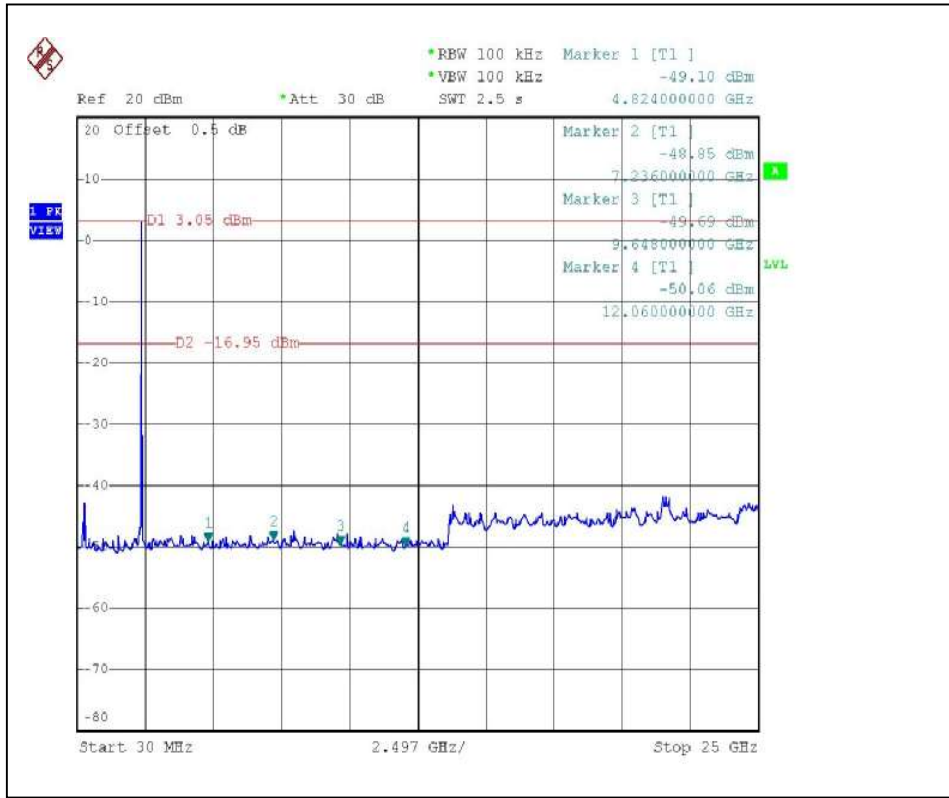




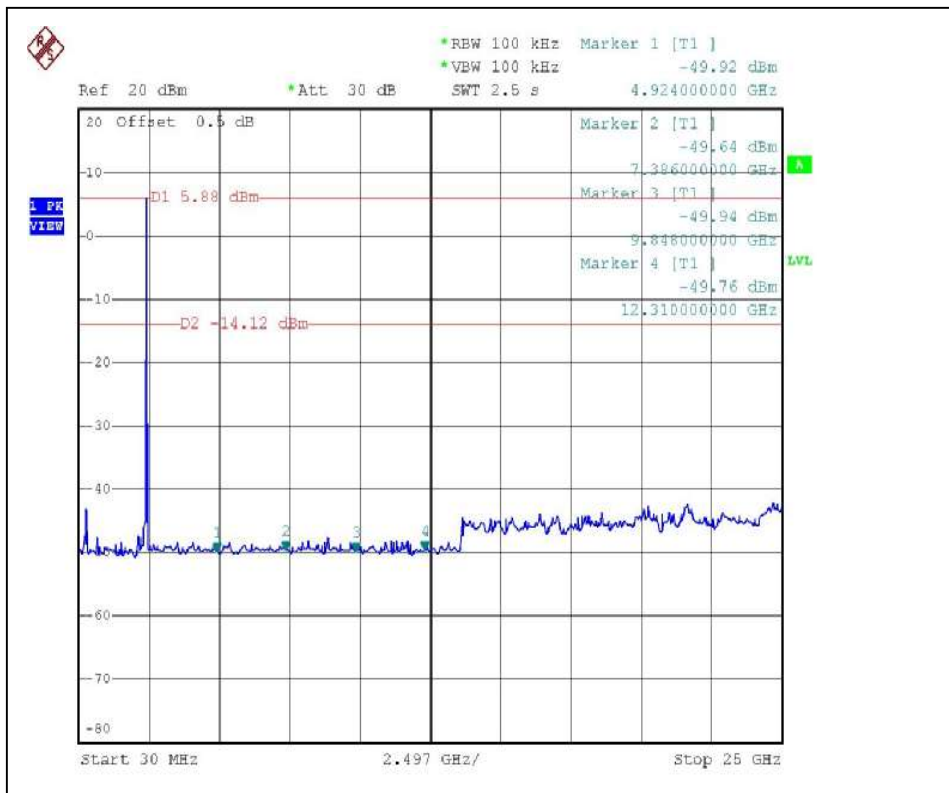




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## 802.11g OFDM modulation

The spectrum plots are attached on the following page. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

Note - The delta method is only used up to 2 MHz away from the restricted bandage, The radiated emissions which located in other restricted frequency band, the result, please refer to 4.2.

### NOTE (Peak):

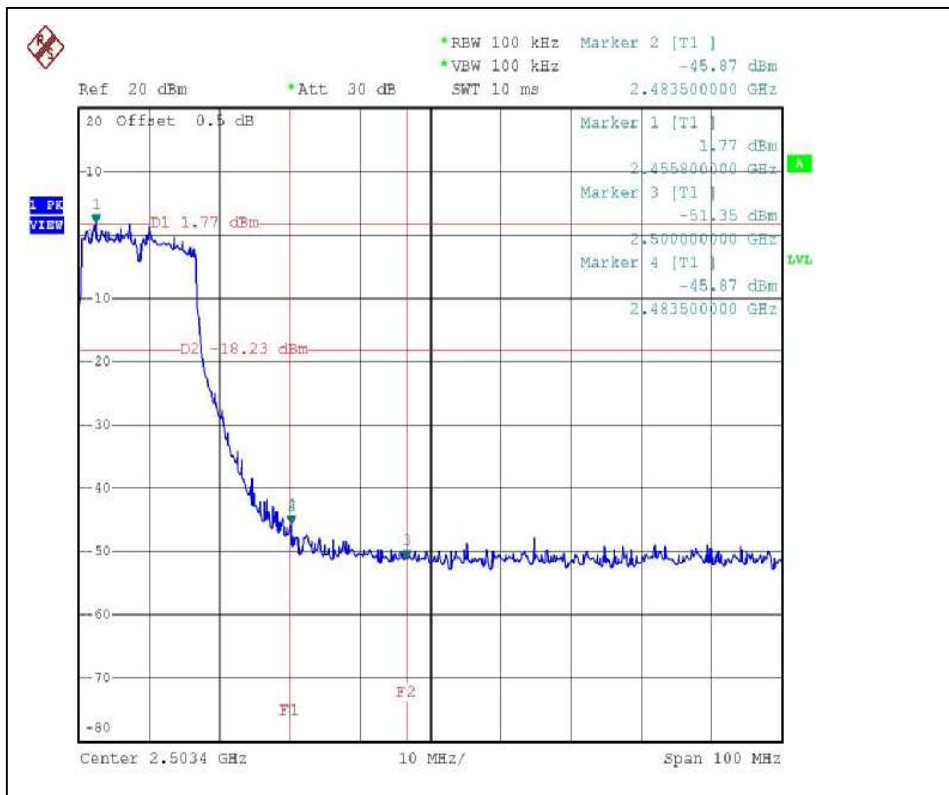
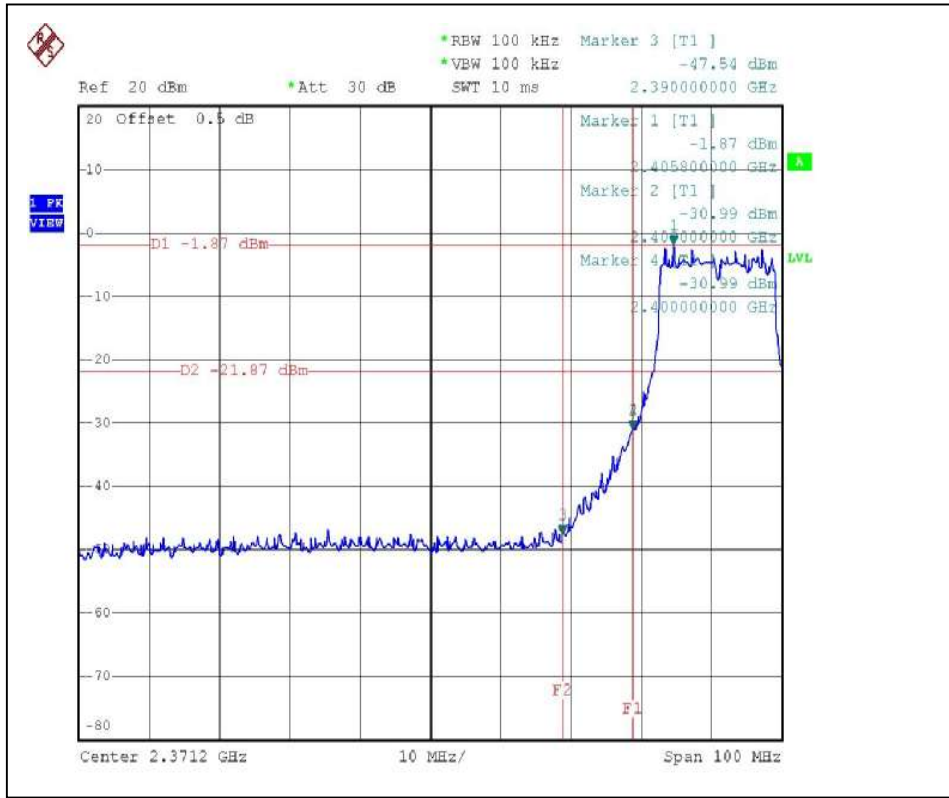
The band edge emission plot of OFDM technique on the following first page show 45.67dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 110.3dBuV/m, so the maximum field strength in restrict band is  $110.3-45.67=64.63$ dBuV/m which is under 74 dBuV/m limit.

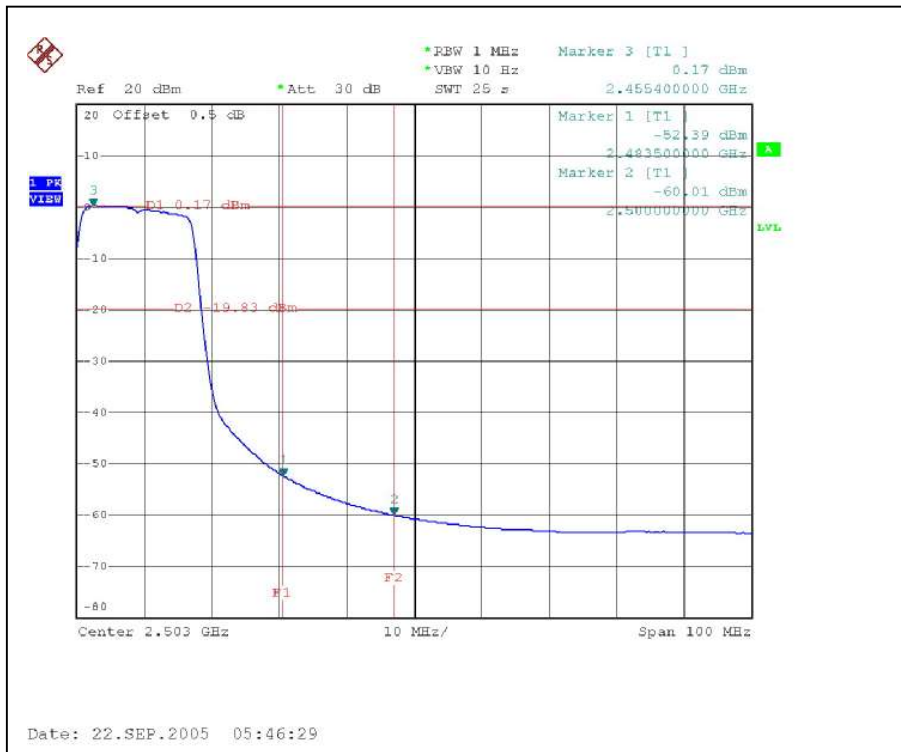
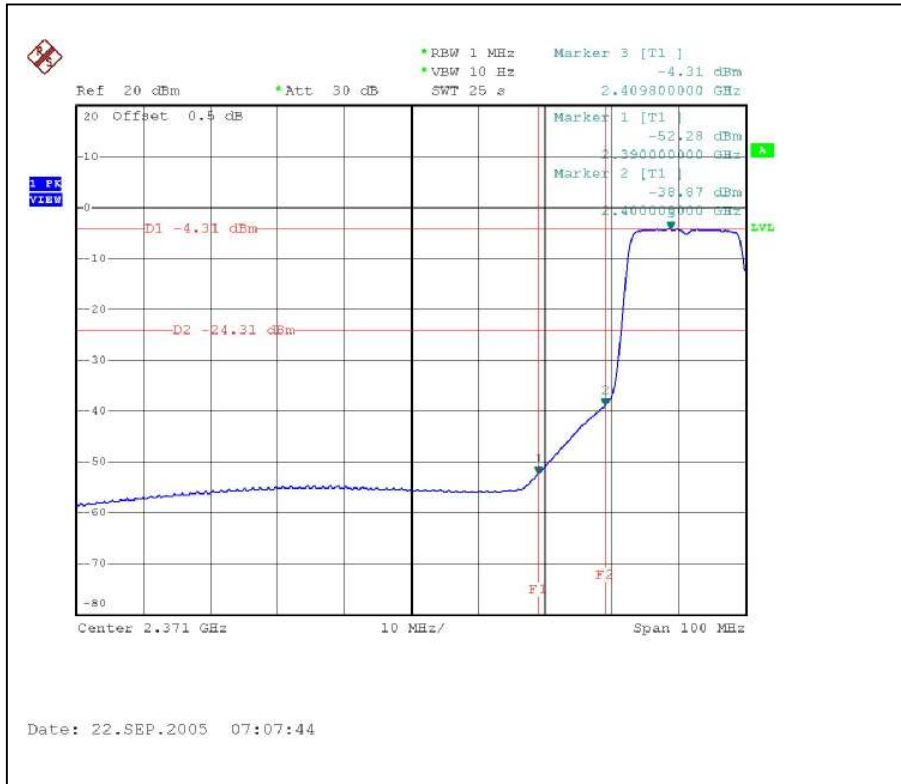
The band edge emission plot of OFDM technique on the following first page shows 47.64dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 114.2dBuV/m, so the maximum field strength in restrict band is  $114.2-47.64=66.56$ dBuV/m which is under 74 dBuV/m limit.

### NOTE (Average):

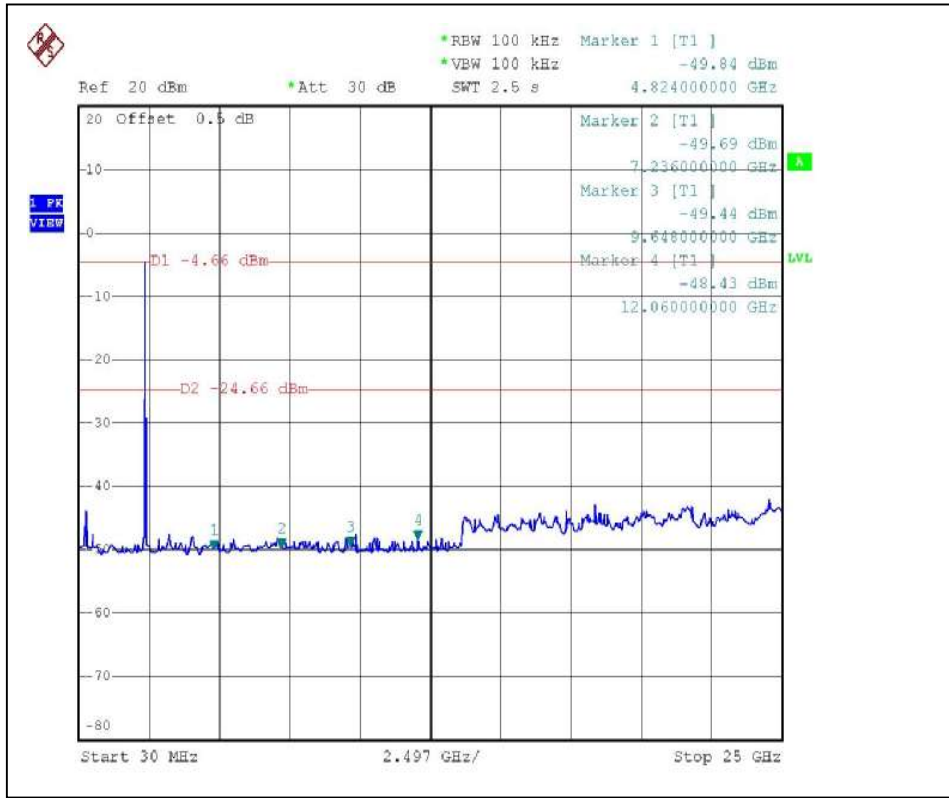
The band edge emission plot of OFDM technique on the following second page shows 47.97dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 101.2dBuV/m, so the maximum field strength in restrict band is  $101.2-47.97=53.23$ dBuV/m which is under 54 dBuV/m limit.

The band edge emission plot of OFDM technique on the following second page shows 52.56dB delta between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 105.9dBuV/m, so the maximum field strength in restrict band is  $105.9-52.56=53.34$ dBuV/m which is under 54 dBuV/m limit.

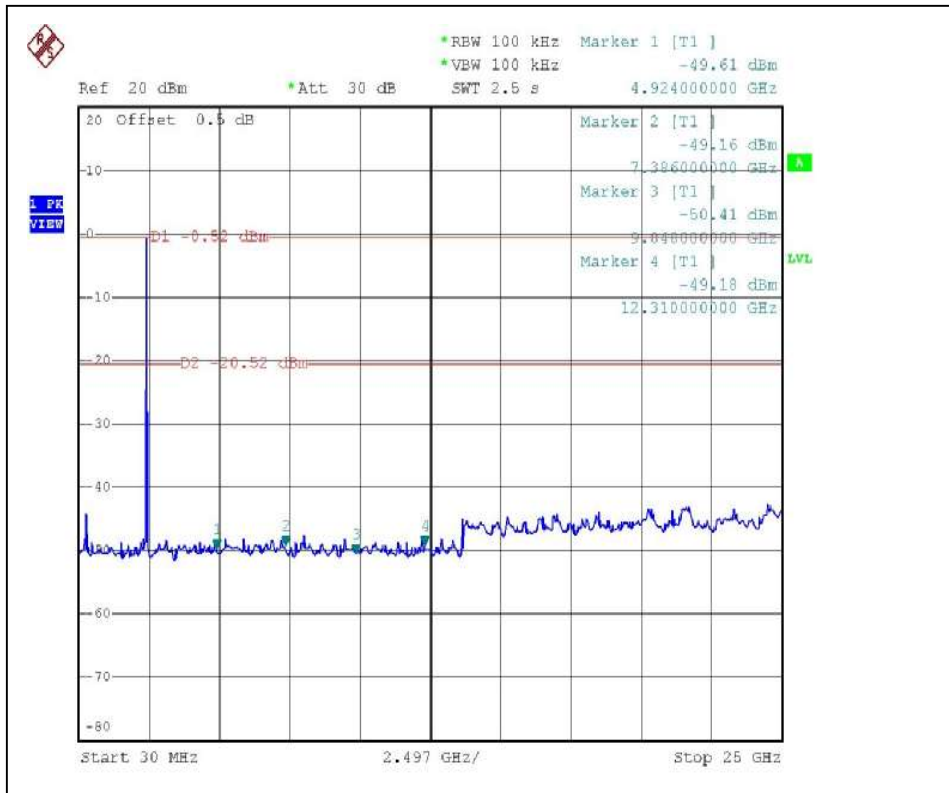




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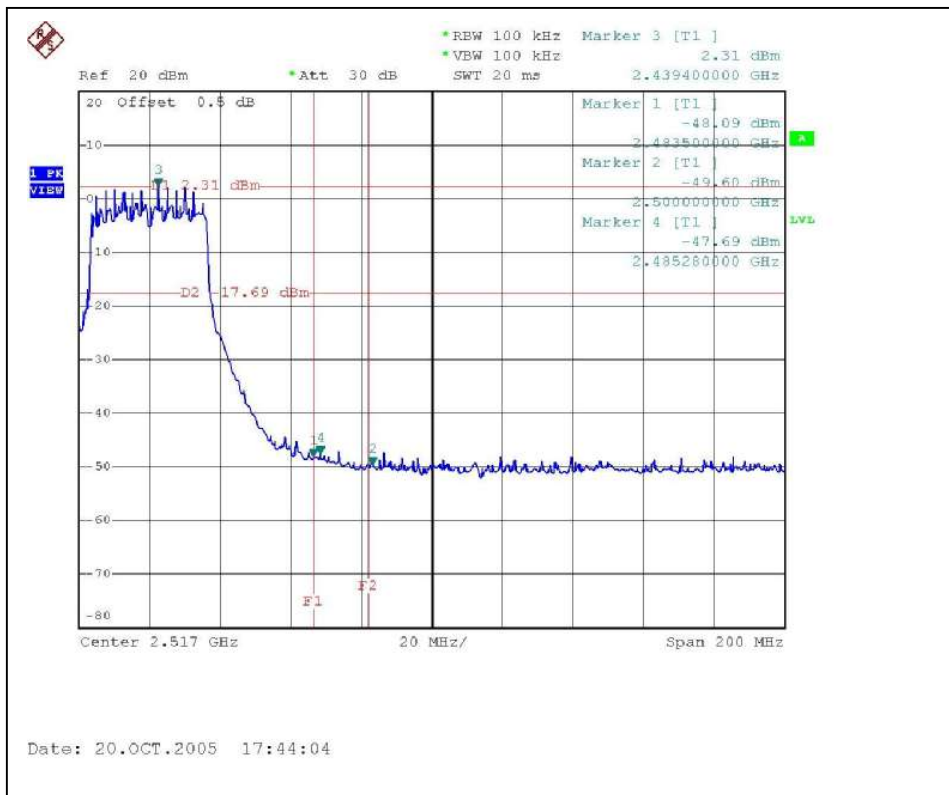
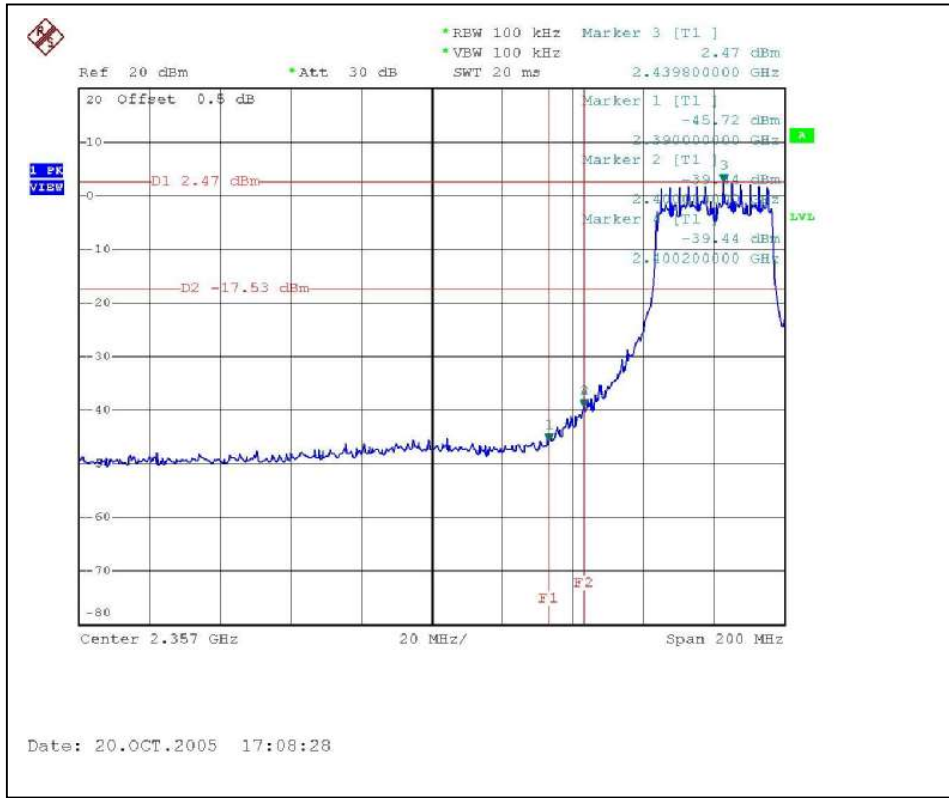


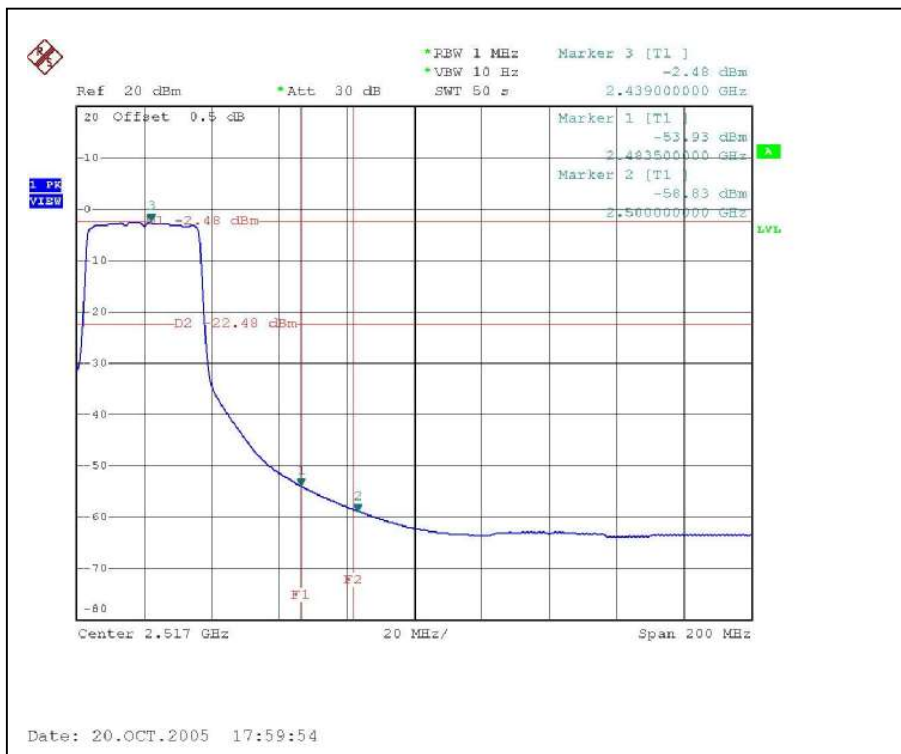
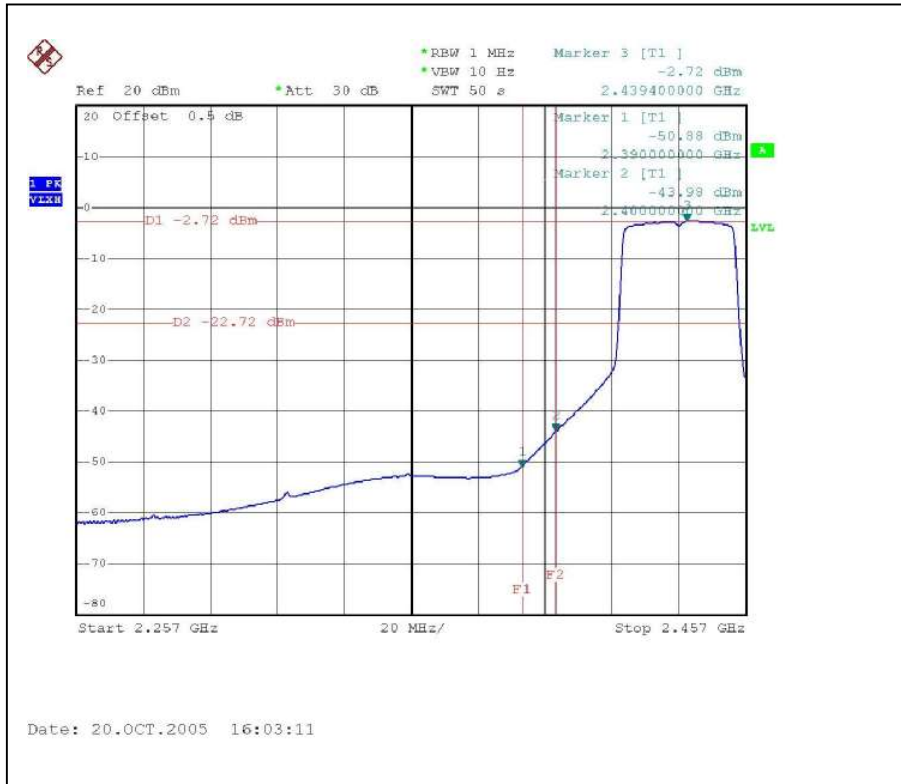


### **802.11g Turbo OFDM modulation**

The spectrum plots are attached on the following page. D1 line indicates the highest level, D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(C).

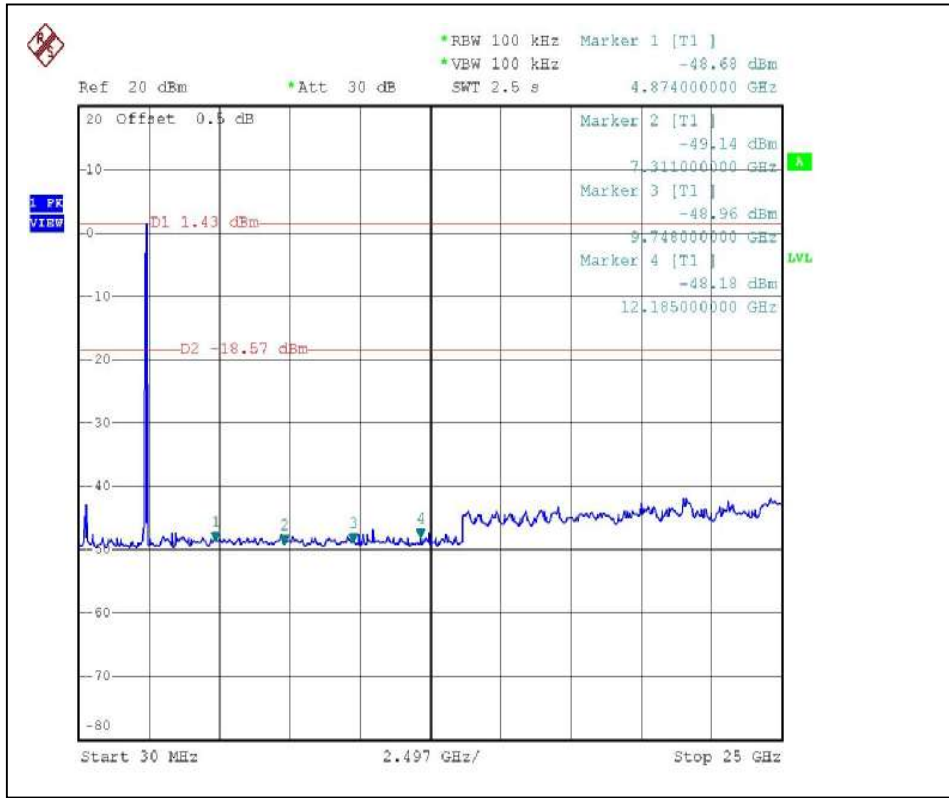








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## 4.7 ANTENNA REQUIREMENT

### 4.7.1 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.

### 4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antennas used in this product are as following:

No.	Model No.	Gain (dBi)	Cable Loss (dB)	Antenna Type	Antenna Connector
1	AP-ANT-80	8.0 dBi	0.79dB	Dipole	N-type
2	AP-ANT-82	12.0 dBi		Wide-Angle (H-Plane)90°Sectored	
3	AP-ANT-84	5.0 dBi		Wide-Angle 135° Directional	
4	AP-ANT-85	15.0 dBi		High Gain, Directional Panel	
5	AP-ANT-87	7.0 dBi		Wide-Angle (H-Plane)60°Patch	
6	AP-ANT-81	8.0 dBi		Wide-Angle (H-Plane)60°Sectored	
7	AP-ANT-83	7.0 dBi		Wide-Angle 90° Directional Sectored	

## 5. TEST TYPES AND RESULTS (802.11a, 5725~5850MHz Band)

### 5.1 CONDUCTED EMISSION MEASUREMENT

#### 5.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB $\mu$ V)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
  2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
  3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### 5.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ Test Receiver	ESCS 30	847124/029	Dec. 07, 2005
ROHDE & SCHWARZ LISN (for EUT)	ESHS-Z5	848773/004	Nov. 08, 2005
KYORITSU LISN (for peripheral)	KNW-407	8/1395/12	Jul. 19, 2006
RF Cable (JETBAO)	RG233/U	Cable_CA_01	Jul. 19, 2006
Terminator(for KYORITSU)	50	3	Oct. 12, 2005
Software	Cond-V2e	NA	NA

**NOTE:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in ADT Shielded Room No. A.
3. The VCCI Con A Registration No. is C-817.
4. The measurement uncertainty is 2.53 dB, which is calculated as per the document CISPR 16-4



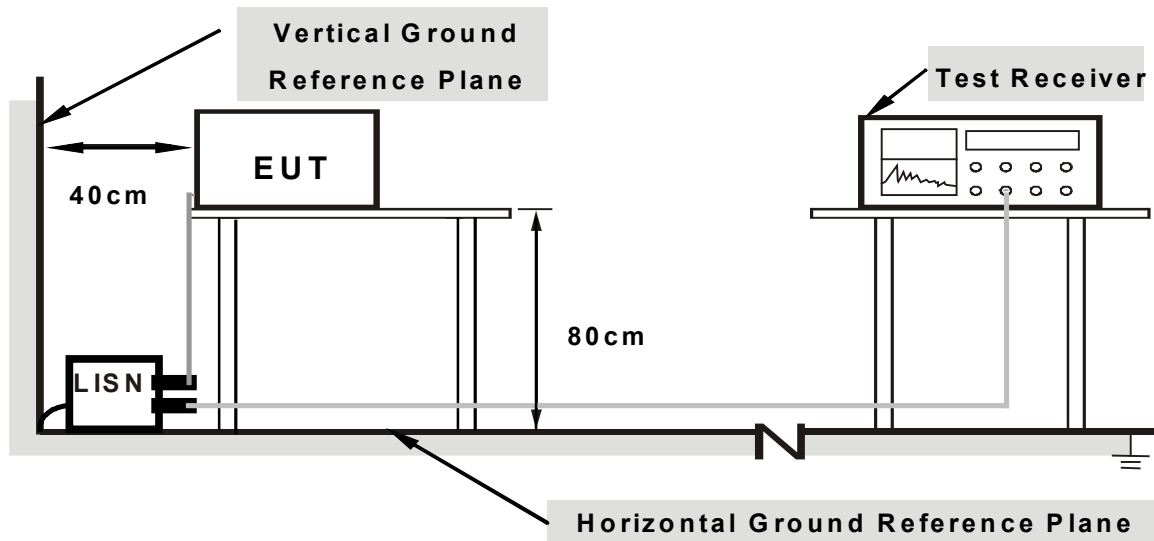
### 5.1.3 TEST PROCEDURES

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit – 20dB) were not recorded.

### 5.1.4 DEVIATION FROM TEST STANDARD

No deviation

### 5.1.5 TEST SETUP



**Note: 1. Support units were connected to second LISN.**

**2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes**

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

### 5.1.6 EUT OPERATING CONDITIONS

- a. Placed the EUT on the testing table.
- b. Prepared other computer system to act as a communication partner and placed it outside of testing area.
- c. The communication partner run test program “ART V48 build5” to enable EUT under transmission/receiving condition continuously at specific channel frequency via UTP cable and wireless.



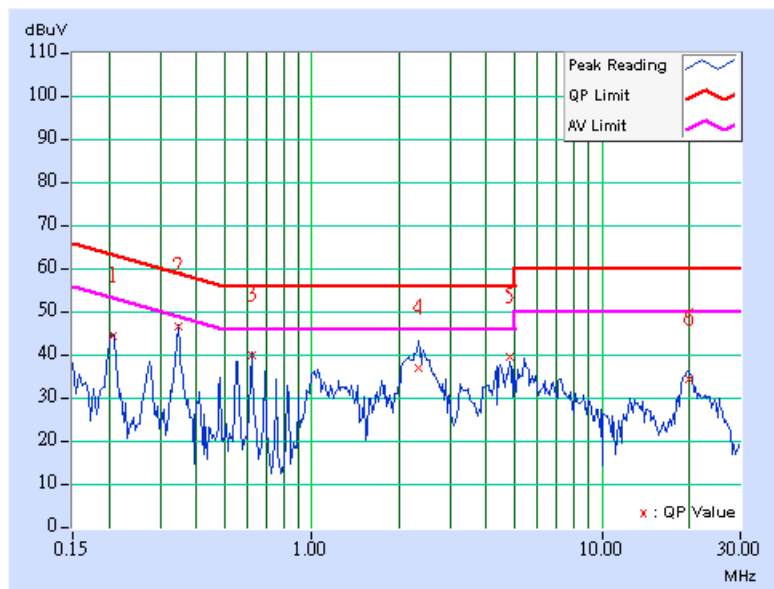
5.1.7 TEST RESULTS

**Conducted Worst-Case Data**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODEL</b>	AP-80MB	<b>6dB BANDWIDTH</b>	9 kHz
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>PHASE</b>	Line (L)
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 65%RH, 961hPa	<b>TESTED BY</b>	Phoenix Huang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.207	0.15	43.21	-	43.36	-	63.31
2	0.345	0.16	45.45	-	45.61	-	59.07	49.07	-13.46	-
3	0.620	0.18	38.70	-	38.88	-	56.00	46.00	-17.12	-
4	2.334	0.28	35.61	-	35.89	-	56.00	46.00	-20.11	-
5	4.818	0.49	38.14	-	38.63	-	56.00	46.00	-17.37	-
6	19.954	1.33	33.12	-	34.45	-	60.00	50.00	-25.55	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Emission level - Limit value
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.



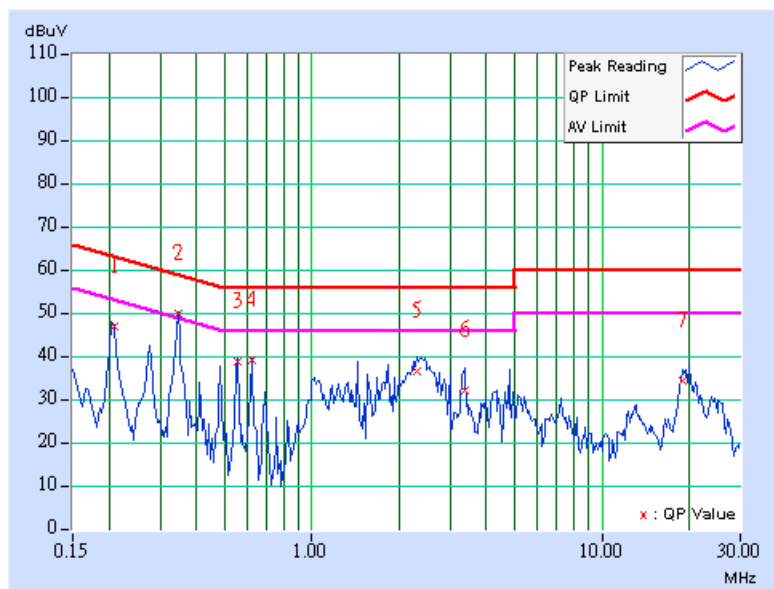




<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODEL</b>	AP-80MB	<b>6dB BANDWIDTH</b>	9 kHz
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>PHASE</b>	Neutral (N)
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 65%RH, 961hPa	<b>TESTED BY</b>	Phoenix Huang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.209	0.15	45.89	-	46.04	-	63.26
2	<b>0.345</b>	<b>0.16</b>	<b>48.81</b>	-	<b>48.97</b>	-	<b>59.07</b>	<b>49.07</b>	<b>-10.10</b>	-
3	0.552	0.18	37.72	-	37.90	-	56.00	46.00	-18.10	-
4	0.619	0.18	38.10	-	38.28	-	56.00	46.00	-17.72	-
5	2.310	0.28	35.48	-	35.76	-	56.00	46.00	-20.24	-
6	3.359	0.39	31.15	-	31.54	-	56.00	46.00	-24.46	-
7	18.934	1.08	33.52	-	34.60	-	60.00	50.00	-25.40	-

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Emission level - Limit value
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.





**5.2 RADIATED EMISSION MEASUREMENT**

**5.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT**

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

<b>Frequencies (MHz)</b>	<b>Field strength (microvolts/meter)</b>	<b>Measurement distance (meters)</b>
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

**NOTE:**

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.



## 5.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ADVANTEST Spectrum Analyzer	R3271A	85060311	July 07, 2006
HP Pre_Amplifier	8449B	3008A01922	Oct. 13, 2005
ROHDE & SCHWARZ Test Receiver	ESCS30	100287	Dec. 08, 2005
CHASE Broadband Antenna	VULB9168	138	Dec. 21, 2005
Schwarzbeck Horn_Antenna	BBHA9120	D124	Dec. 11, 2005
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 30, 2006
SCHWARZBECK Biconical Antenna	VHBA9123	459	Jun. 26, 2006
SCHWARZBECK Periodic Antenna	UPA6108	1148	Jun. 26, 2006
RF Switches (ARNITSU)	CS-201	1565157	NA
RF CABLE (Chaintek) 1GHz-20GHz	SF102	22054-2	Nov. 15. 2005
RF Cable(RICHTEC)	9913-30M	STCCAB-30M- 1GHz-021	Jul. 16, 2006
Software	ADT_Radiated_V 5.14	NA	NA
CHANCE MOST Antenna Tower	AT-100	0203	NA
CHANCE MOST Turn Table	TT-100	0203	NA

- Note: 1. The calibration interval of the above test instruments is 12 months (36 months for Tunable Periodic Antenna) and the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in ADT Open Site No. C.
4. The FCC Site Registration No. is 656396.
5. The VCCI Site Registration No. is R-1626.
6. The CANADA Site Registration No. is IC 4824-3.
7. The following table is for the measurement uncertainty, which is calculated as per the document CISPR 16-4.

Measurement	Value
Radiated emissions (30MHz-1GHz)	2.98 dB
Radiated emissions (1GHz ~18GHz)	2.21 dB
Radiated emissions (18GHz ~20GHz)	1.88 dB



### 5.2.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

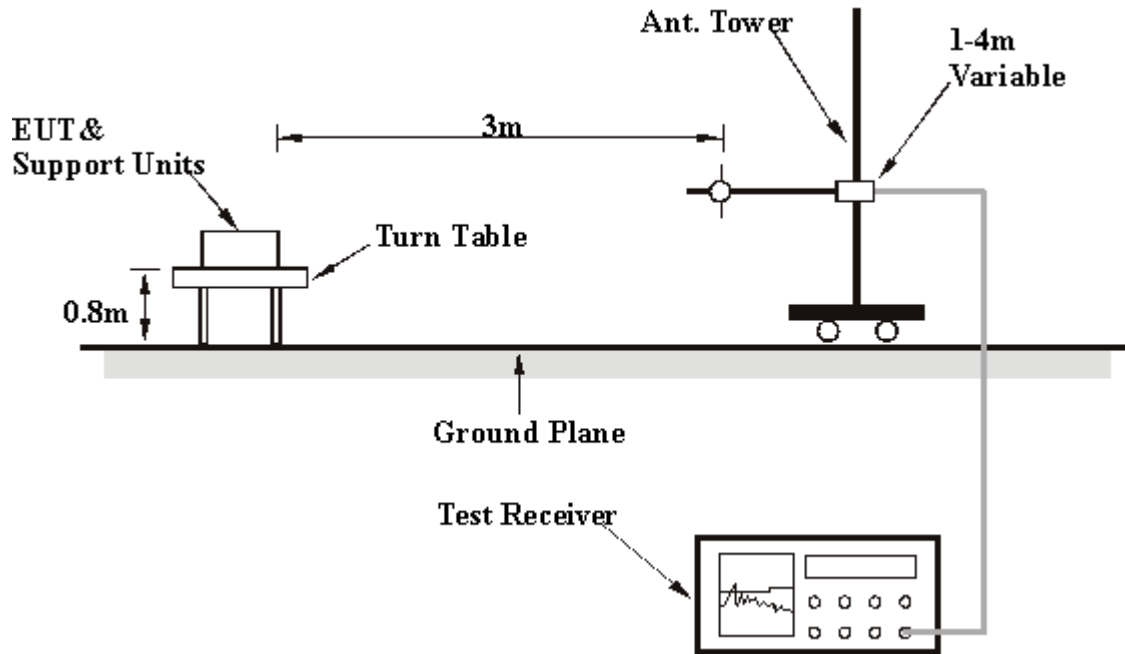
**NOTE:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

### 5.2.4 DEVIATION FROM TEST STANDARD

No deviation

### 5.2.5 TEST SETUP



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

### 5.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

## 5.2.7 TEST RESULTS (ANTENNA 1)

**Below 1GHz Worst-Case Data**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODEL</b>	AP-80MB	<b>FREQUENCY RANGE</b>	Below 1000MHz
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 961hPa	<b>TESTED BY</b>	Wen Yu

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	200.01	26.70 QP	43.50	-16.80	1.00 H	333	16.20	10.50
2	250.01	32.40 QP	46.00	-13.60	1.11 H	360	18.90	13.60
3	320.00	30.50 QP	46.00	-15.50	1.53 H	221	14.30	16.20
4	375.00	25.90 QP	46.00	-20.10	2.00 H	168	8.40	17.50
5	399.99	26.30 QP	46.00	-19.70	1.65 H	100	7.90	18.40
6	500.02	25.30 QP	46.00	-20.70	1.36 H	153	5.10	20.20
7	550.01	31.60 QP	46.00	-14.40	1.69 H	4	9.50	22.10
8	600.02	29.90 QP	46.00	-16.10	1.53 H	19	8.00	21.90

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	120.00	31.20 QP	43.50	-12.30	1.53 V	221	19.70	11.50
2	200.00	32.40 QP	43.50	-11.10	1.50 V	296	21.30	11.20
3	240.00	31.70 QP	46.00	-14.30	1.46 V	3	18.80	12.90
4	250.02	31.80 QP	46.00	-14.20	1.60 V	326	18.50	13.30
5	320.01	31.90 QP	46.00	-14.10	1.50 V	300	15.40	16.50
6	400.00	33.60 QP	46.00	-12.40	1.42 V	236	15.20	18.40
7	550.00	32.50 QP	46.00	-13.50	1.89 V	97	10.20	22.30
8	600.00	33.80 QP	46.00	-12.20	1.30 V	1	10.20	23.50

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value

**802.11a OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 1	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5351.00	54.20 PK	74.00	-19.80	1.11 H	311	18.40	35.80
1	#5351.00	45.60 AV	54.00	-8.40	1.11 H	311	9.80	35.80
2	*5745.00	97.20 PK			1.02 H	254	60.80	36.40
2	*5745.00	89.90 AV			1.02 H	254	53.50	36.40
3	#11490.00	55.80 PK	74.00	-18.20	1.06 H	280	4.70	51.10
3	#11490.00	44.80 AV	54.00	-9.20	1.06 H	280	-6.30	51.10

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5351.00	62.80 PK	74.00	-11.20	1.34 V	3	27.00	35.80
1	#5351.00	52.40 AV	54.00	-1.60	1.34 V	3	16.60	35.80
2	*5745.00	113.80 PK			1.15 V	331	77.40	36.40
2	*5745.00	104.90 AV			1.15 V	331	68.50	36.40
3	#11490.00	59.60 PK	74.00	-14.40	1.09 V	6	8.50	51.10
3	#11490.00	47.70 AV	54.00	-6.30	1.09 V	6	-3.40	51.10

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 3	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5350.00	52.60 PK	74.00	-21.40	1.09 H	300	16.80	35.80
1	#5350.00	45.20 AV	54.00	-8.80	1.09 H	300	9.40	35.80
2	*5785.00	98.20 PK			1.04 H	270	61.70	36.50
2	*5785.00	89.90 AV			1.04 H	270	53.40	36.50
3	#11570.00	55.60 PK	74.00	-18.40	1.08 H	29	4.70	50.90
3	#11570.00	45.40 AV	54.00	-8.60	1.08 H	29	-5.50	50.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5350.00	63.40 PK	74.00	-10.60	1.31 V	33	27.60	35.80
1	#5350.00	52.50 AV	54.00	-1.50	1.31 V	33	16.70	35.80
2	*5785.00	114.50 PK			1.14 V	329	78.00	36.50
2	*5785.00	105.90 AV			1.14 V	329	69.30	36.50
3	#11570.00	58.60 PK	74.00	-15.40	1.09 V	3	7.70	50.90
3	#11570.00	47.70 AV	54.00	-6.30	1.09 V	3	-3.20	50.90

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247





<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 5	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5350.00	52.60 PK	74.00	-21.40	1.11 H	301	16.80	35.80
1	#5350.00	45.20 AV	54.00	-8.80	1.11 H	301	9.40	35.80
2	*5825.00	98.60 PK			1.09 H	280	62.00	36.60
2	*5825.00	90.40 AV			1.09 H	280	53.80	36.60
3	#11650.00	55.50 PK	74.00	-18.50	1.20 H	351	4.90	50.60
3	#11650.00	45.00 AV	54.00	-9.00	1.20 H	351	-5.60	50.60

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5350.00	63.30 PK	74.00	-10.70	1.30 V	350	27.50	35.80
1	#5350.00	52.50 AV	54.00	-1.50	1.30 V	350	16.70	35.80
2	*5825.00	113.30 PK			1.13 V	343	76.70	36.60
2	*5825.00	104.00 AV			1.13 V	343	67.40	36.60
3	#11650.00	57.60 PK	74.00	-16.40	1.08 V	6	7.00	50.60
3	#11650.00	46.40 AV	54.00	-7.60	1.08 V	6	-4.20	50.60

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



**802.11a Turbo OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 1	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5351.00	52.30 PK	74.00	-21.70	1.20 H	308	16.50	35.80
1	#5351.00	45.20 AV	54.00	-8.80	1.20 H	308	9.40	35.80
2	*5760.00	94.50 PK			1.03 H	259	58.10	36.40
2	*5760.00	86.80 AV			1.03 H	259	50.30	36.40
3	#11520.00	54.70 PK	74.00	-19.30	1.11 H	291	3.60	51.10
3	#11520.00	44.90 AV	54.00	-9.10	1.11 H	291	-6.20	51.10

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5351.00	59.60 PK	74.00	-14.40	1.39 V	6	23.80	35.80
1	#5351.00	51.30 AV	54.00	-2.70	1.39 V	6	15.50	35.80
2	*5760.00	110.10 PK			1.16 V	329	73.70	36.40
2	*5760.00	102.30 AV			1.16 V	329	65.90	36.40
3	#11520.00	60.70 PK	74.00	-13.30	1.11 V	7	9.60	51.10
3	#11520.00	47.50 AV	54.00	-6.50	1.11 V	7	-3.60	51.10

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 2	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5350.00	51.20 PK	74.00	-22.80	1.11 H	280	15.40	35.80
1	#5350.00	44.40 AV	54.00	-9.60	1.11 H	280	8.60	35.80
2	*5800.00	94.80 PK			1.10 H	48	58.30	36.60
2	*5800.00	87.60 AV			1.10 H	48	51.10	36.60
3	#11600.00	55.10 PK	74.00	-18.90	1.21 H	30	4.30	50.80
3	#11600.00	45.10 AV	54.00	-8.90	1.21 H	30	-5.70	50.80

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5350.00	62.30 PK	74.00	-11.70	1.40 V	359	26.50	35.80
1	#5350.00	51.20 AV	54.00	-2.80	1.40 V	359	15.40	35.80
2	*5800.00	111.50 PK			1.10 V	359	75.00	36.60
2	*5800.00	102.10 AV			1.10 V	359	65.50	36.60
3	#11600.00	57.40 PK	74.00	-16.60	1.08 V	20	6.60	50.80
3	#11600.00	47.10 AV	54.00	-6.90	1.08 V	20	-3.70	50.80

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



5.2.8 TEST RESULTS (ANTENNA 2)

**Below 1GHz Worst-Case Data**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODEL</b>	AP-80MB	<b>FREQUENCY RANGE</b>	Below 1000MHz
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 961hPa	<b>TESTED BY</b>	Wen Yu

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	200.00	26.80 QP	43.50	-16.70	1.16 H	342	16.30	10.50
2	250.00	23.90 QP	46.00	-22.10	1.57 H	143	10.30	13.60
3	320.01	32.70 QP	46.00	-13.30	1.80 H	17	16.40	16.20
4	375.00	27.80 QP	46.00	-18.20	1.43 H	224	10.30	17.50
5	399.98	27.30 QP	46.00	-18.70	1.26 H	59	8.90	18.40
6	500.00	27.60 QP	46.00	-18.40	1.00 H	239	7.40	20.20
7	550.00	30.50 QP	46.00	-15.50	1.30 H	342	8.40	22.10
8	600.02	30.00 QP	46.00	-16.00	1.68 H	65	8.10	21.90

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	120.00	30.60 QP	43.50	-12.90	1.13 V	189	19.10	11.50
2	200.00	27.30 QP	43.50	-16.20	1.59 V	19	16.10	11.20
3	240.00	28.50 QP	46.00	-17.50	1.19 V	39	15.60	12.90
4	250.01	29.20 QP	46.00	-16.80	1.01 V	31	15.90	13.30
5	320.00	30.50 QP	46.00	-15.50	1.26 V	1	14.00	16.50
6	400.00	28.90 QP	46.00	-17.10	1.05 V	36	10.50	18.40
7	550.00	36.40 QP	46.00	-9.60	1.25 V	347	14.10	22.30
8	600.00	31.90 QP	46.00	-14.10	1.00 V	1	8.40	23.50

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value

**802.11a OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 1	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	41.20 PK	74.00	-32.80	1.11 H	6	5.40	35.80
1	#5360.00	31.60 AV	54.00	-22.40	1.11 H	6	-4.20	35.80
2	*5745.00	102.60 PK			1.02 H	330	66.20	36.40
2	*5745.00	94.30 AV			1.02 H	330	57.90	36.40
3	#11490.00	56.60 PK	74.00	-17.40	1.09 H	23	5.50	51.10
3	#11490.00	46.70 AV	54.00	-7.30	1.09 H	23	-4.40	51.10

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	62.50 PK	74.00	-11.50	1.00 V	5	26.70	35.80
1	#5360.00	52.30 AV	54.00	-1.70	1.00 V	5	16.50	35.80
2	*5745.00	117.40 PK			1.00 V	4	81.00	36.40
2	*5745.00	108.50 AV			1.00 V	4	72.10	36.40
3	#11490.00	58.50 PK	74.00	-15.50	1.02 V	7	7.40	51.10
3	#11490.00	49.10 AV	54.00	-4.90	1.02 V	7	-2.00	51.10

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 3	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	42.50 PK	74.00	-31.50	1.12 H	20	6.70	35.80
1	#5360.00	31.80 AV	54.00	-22.20	1.12 H	20	-4.00	35.80
2	*5785.00	103.40 PK			1.08 H	339	66.90	36.50
2	*5785.00	94.70 AV			1.08 H	339	58.20	36.50
3	#11570.00	56.80 PK	74.00	-17.20	1.10 H	48	5.90	50.90
3	#11570.00	46.30 AV	54.00	-7.70	1.10 H	48	-4.60	50.90

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	62.60 PK	74.00	-11.40	1.01 V	3	26.80	35.80
1	#5360.00	52.20 AV	54.00	-1.80	1.01 V	3	16.40	35.80
2	*5785.00	118.40 PK			1.01 V	3	81.90	36.50
2	*5785.00	109.40 AV			1.01 V	3	72.90	36.50
3	#11570.00	56.50 PK	74.00	-17.50	1.02 V	0	5.60	50.90
3	#11570.00	48.20 AV	54.00	-5.80	1.02 V	0	-2.70	50.90

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 5	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	42.40 PK	74.00	-31.60	1.17 H	43	6.60	35.80
1	#5360.00	31.40 AV	54.00	-22.60	1.17 H	43	-4.40	35.80
2	*5825.00	104.00 PK			1.04 H	310	67.40	36.60
2	*5825.00	95.50 AV			1.04 H	310	58.90	36.60
3	#11650.00	57.00 PK	74.00	-17.00	1.08 H	50	6.40	50.60
3	#11650.00	47.10 AV	54.00	-6.90	1.08 H	50	-3.50	50.60

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	62.30 PK	74.00	-11.70	1.02 V	4	26.50	35.80
1	#5360.00	52.50 AV	54.00	-1.50	1.02 V	4	16.70	35.80
2	*5825.00	119.00 PK			1.00 V	3	82.40	36.60
2	*5825.00	109.80 AV			1.00 V	3	73.20	36.60
3	#11650.00	58.30 PK	74.00	-15.70	1.04 V	5	7.70	50.60
3	#11650.00	47.90 AV	54.00	-6.10	1.04 V	5	-2.70	50.60

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

**802.11a Turbo OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 1	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	40.40 PK	74.00	-33.60	1.09 H	2	4.60	35.80
1	#5360.00	31.20 AV	54.00	-22.80	1.09 H	2	-4.60	35.80
2	*5760.00	100.60 PK			1.03 H	350	64.20	36.40
2	*5760.00	91.30 AV			1.03 H	350	54.90	36.40
3	#11520.00	58.80 PK	74.00	-15.20	1.16 H	18	7.70	51.10
3	#11520.00	45.70 AV	54.00	-8.30	1.16 H	18	-5.40	51.10

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	61.40 PK	74.00	-12.60	1.00 V	6	25.60	35.80
1	#5360.00	50.40 AV	54.00	-3.60	1.00 V	6	14.60	35.80
2	*5760.00	115.40 PK			1.01 V	3	79.00	36.40
2	*5760.00	106.30 AV			1.01 V	3	69.90	36.40
3	#11520.00	56.70 PK	74.00	-17.30	1.00 V	2	5.60	51.10
3	#11520.00	48.40 AV	54.00	-5.60	1.00 V	2	-2.70	51.10

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247





<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 2	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	42.00 PK	74.00	-32.00	1.08 H	30	6.20	35.80
1	#5360.00	31.20 AV	54.00	-22.80	1.08 H	30	-4.60	35.80
2	*5800.00	100.80 PK			1.09 H	28	64.20	36.60
2	*5800.00	93.50 AV			1.09 H	28	56.90	36.60
3	#11600.00	58.00 PK	74.00	-16.00	1.10 H	23	7.20	50.80
3	#11600.00	47.20 AV	54.00	-6.80	1.10 H	23	-3.60	50.80

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	61.50 PK	74.00	-12.50	1.00 V	2	25.70	35.80
1	#5360.00	50.30 AV	54.00	-3.70	1.00 V	2	14.50	35.80
2	*5800.00	115.80 PK			1.01 V	1	79.20	36.60
2	*5800.00	106.30 AV			1.01 V	1	69.70	36.60
3	#11600.00	58.80 PK	74.00	-15.20	1.00 V	359	8.00	50.80
3	#11600.00	49.10 AV	54.00	-4.90	1.00 V	359	-1.70	50.80

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



5.2.9 TEST RESULTS (ANTENNA 3)

**Below 1GHz Worst-Case Data**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODEL</b>	AP-80MB	<b>FREQUENCY RANGE</b>	Below 1000MHz
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 961hPa	<b>TESTED BY</b>	Wen Yu

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	200.00	27.60 QP	43.50	-15.90	1.63 H	346	17.10	10.50
2	250.01	32.40 QP	46.00	-13.60	1.11 H	360	18.90	13.60
3	320.00	30.00 QP	46.00	-16.00	1.34 H	93	13.80	16.20
4	375.00	24.90 QP	46.00	-21.10	1.01 H	311	7.40	17.50
5	400.00	25.30 QP	46.00	-20.70	1.64 H	90	6.90	18.40
6	500.01	27.60 QP	46.00	-18.40	1.35 H	64	7.40	20.20
7	550.01	29.60 QP	46.00	-16.40	1.20 H	250	7.50	22.10
8	600.02	29.90 QP	46.00	-16.10	1.53 H	19	8.00	21.90

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	120.00	30.80 QP	43.50	-12.70	1.34 V	353	19.40	11.50
2	200.00	31.40 QP	43.50	-12.10	1.36 V	9	20.20	11.20
3	240.01	32.50 QP	46.00	-13.50	1.74 V	300	19.60	12.90
4	250.02	29.90 QP	46.00	-16.10	1.60 V	326	16.60	13.30
5	320.00	31.90 QP	46.00	-14.10	1.39 V	55	15.40	16.50
6	399.98	31.50 QP	46.00	-14.50	1.24 V	36	13.10	18.40
7	550.00	32.40 QP	46.00	-13.60	1.22 V	25	10.10	22.30
8	600.00	32.60 QP	46.00	-13.40	1.24 V	143	9.10	23.50

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value

**802.11a OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 1	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	46.60 PK	74.00	-27.40	1.21 H	340	10.80	35.80
1	#5360.00	39.30 AV	54.00	-14.70	1.21 H	340	3.50	35.80
2	*5745.00	102.00 PK			1.16 H	55	65.60	36.40
2	*5745.00	93.50 AV			1.16 H	55	57.10	36.40
3	#11490.00	56.70 PK	74.00	-17.30	1.10 H	345	5.60	51.10
3	#11490.00	45.80 AV	54.00	-8.20	1.10 H	345	-5.30	51.10

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	62.10 PK	74.00	-11.90	1.09 V	2	26.30	35.80
1	#5360.00	51.20 AV	54.00	-2.80	1.09 V	2	15.40	35.80
2	*5745.00	115.80 PK			1.08 V	8	79.30	36.40
2	*5745.00	106.80 AV			1.08 V	8	70.40	36.40
3	#11490.00	58.70 PK	74.00	-15.30	1.10 V	6	7.60	51.10
3	#11490.00	47.40 AV	54.00	-6.60	1.10 V	6	-3.70	51.10

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 3	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	47.70 PK	74.00	-26.30	1.23 H	349	11.90	35.80
1	#5360.00	40.60 AV	54.00	-13.40	1.23 H	349	4.80	35.80
2	*5785.00	102.40 PK			1.19 H	40	65.90	36.50
2	*5785.00	93.70 AV			1.19 H	40	57.20	36.50
3	#11570.00	59.40 PK	74.00	-14.60	1.11 H	350	8.50	50.90
3	#11570.00	45.70 AV	54.00	-8.30	1.11 H	350	-5.20	50.90

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	62.30 PK	74.00	-11.70	1.10 V	3	26.50	35.80
1	#5360.00	51.40 AV	54.00	-2.60	1.10 V	3	15.60	35.80
2	*5785.00	116.40 PK			1.06 V	5	79.90	36.50
2	*5785.00	107.80 AV			1.06 V	5	71.30	36.50
3	#11570.00	56.60 PK	74.00	-17.40	1.08 V	2	5.70	50.90
3	#11570.00	46.30 AV	54.00	-7.70	1.08 V	2	-4.60	50.90

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 5	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

#### ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	47.70 PK	74.00	-26.30	1.19 H	358	11.90	35.80
1	#5360.00	41.50 AV	54.00	-12.50	1.19 H	358	5.70	35.80
2	*5825.00	102.70 PK			1.17 H	41	66.10	36.60
2	*5825.00	95.00 AV			1.17 H	41	58.40	36.60
3	#11650.00	55.90 PK	74.00	-18.10	1.19 H	341	5.30	50.60
3	#11650.00	45.50 AV	54.00	-8.50	1.19 H	341	-5.10	50.60

#### ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	62.70 PK	74.00	-11.30	1.11 V	2	26.90	35.80
1	#5360.00	51.50 AV	54.00	-2.50	1.11 V	2	15.70	35.80
2	*5825.00	116.60 PK			1.08 V	7	80.00	36.60
2	*5825.00	17.60 AV			1.08 V	7	-19.00	36.60
3	#11650.00	57.10 PK	74.00	-16.90	1.07 V	3	6.50	50.60
3	#11650.00	46.00 AV	54.00	-8.00	1.07 V	3	-4.60	50.60

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

**802.11a Turbo OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 1	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	44.40 PK	74.00	-29.60	1.15 H	333	8.60	35.80
1	#5360.00	37.40 AV	54.00	-16.60	1.15 H	333	1.60	35.80
2	*5760.00	99.90 PK			1.14 H	64	63.50	36.40
2	*5760.00	91.40 AV			1.14 H	64	55.00	36.40
3	#11520.00	56.50 PK	74.00	-17.50	1.13 H	350	5.40	51.10
3	#11520.00	45.40 AV	54.00	-8.60	1.13 H	350	-5.70	51.10

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	59.90 PK	74.00	-14.10	1.12 V	0	24.10	35.80
1	#5360.00	49.30 AV	54.00	-4.70	1.12 V	0	13.50	35.80
2	*5760.00	113.60 PK			1.11 V	9	77.20	36.40
2	*5760.00	105.40 AV			1.11 V	9	69.00	36.40
3	#11520.00	56.60 PK	74.00	-17.40	1.08 V	5	5.50	51.10
3	#11520.00	46.30 AV	54.00	-7.70	1.08 V	5	-4.80	51.10

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 2	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	46.60 PK	74.00	-27.40	1.30 H	348	10.80	35.80
1	#5360.00	40.30 AV	54.00	-13.70	1.30 H	348	4.50	35.80
2	*5800.00	100.50 PK			1.20 H	39	63.90	36.60
2	*5800.00	92.10 AV			1.20 H	39	55.60	36.60
3	#11600.00	56.20 PK	74.00	-17.80	1.10 H	359	5.40	50.80
3	#11600.00	45.50 AV	54.00	-8.50	1.10 H	359	-5.30	50.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	61.30 PK	74.00	-12.70	1.20 V	4	25.50	35.80
1	#5360.00	51.20 AV	54.00	-2.80	1.20 V	4	15.40	35.80
2	*5800.00	113.50 PK			1.09 V	6	77.00	36.60
2	*5800.00	105.70 AV			1.09 V	6	69.10	36.60
3	#11600.00	56.00 PK	74.00	-18.00	1.11 V	3	5.20	50.80
3	#11600.00	46.30 AV	54.00	-7.70	1.11 V	3	-4.50	50.80

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

## 5.2.10 TEST RESULTS (ANTENNA 4)

**Below 1GHz Worst-Case Data**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODEL</b>	AP-80MB	<b>FREQUENCY RANGE</b>	Below 1000MHz
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	25deg. C, 65%RH, 961hPa	<b>TESTED BY</b>	Wen Yu

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	200.05	27.70 QP	43.50	-15.80	1.73 H	64	17.20	10.50
2	249.98	32.40 QP	46.00	-13.60	1.36 H	9	18.90	13.50
3	320.01	31.70 QP	46.00	-14.30	1.11 H	46	15.50	16.20
4	375.01	26.50 QP	46.00	-19.50	1.86 H	197	9.00	17.50
5	399.99	27.10 QP	46.00	-18.90	1.12 H	326	8.70	18.40
6	500.00	26.90 QP	46.00	-19.10	1.53 H	43	6.70	20.20
7	550.01	31.60 QP	46.00	-14.40	1.69 H	46	9.50	22.10
8	600.02	30.00 QP	46.00	-16.00	1.53 H	19	8.10	21.90

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	120.01	30.80 QP	43.50	-12.70	1.34 V	353	19.40	11.50
2	200.00	31.60 QP	43.50	-11.90	1.14 V	326	20.50	11.20
3	240.00	32.70 QP	46.00	-13.30	1.36 V	3	19.80	12.90
4	250.02	31.80 QP	46.00	-14.20	1.60 V	326	18.50	13.30
5	320.02	31.90 QP	46.00	-14.10	1.39 V	55	15.40	16.50
6	400.00	33.20 QP	46.00	-12.80	1.42 V	236	14.90	18.40
7	550.00	32.50 QP	46.00	-13.50	1.89 V	144	10.20	22.30
8	600.00	32.60 QP	46.00	-13.40	1.24 V	143	9.10	23.50

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value





**802.11a OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 1	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	49.50 PK	74.00	-24.50	1.10 H	351	13.70	35.80
1	#5360.00	41.70 AV	54.00	-12.30	1.10 H	351	5.90	35.80
2	*5745.00	106.10 PK			1.03 H	359	69.70	36.40
2	*5745.00	97.40 AV			1.03 H	359	61.00	36.40
3	#11490.00	57.50 PK	74.00	-16.50	1.20 H	358	6.40	51.10
3	#11490.00	46.10 AV	54.00	-7.90	1.20 H	358	-5.00	51.10

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	65.20 PK	74.00	-8.80	1.11 V	2	29.40	35.80
<b>1</b>	<b>#5360.00</b>	<b>53.30 AV</b>	<b>54.00</b>	<b>-0.70</b>	<b>1.11 V</b>	<b>2</b>	<b>17.50</b>	<b>35.80</b>
2	*5745.00	120.80 PK			1.10 V	359	84.40	36.40
2	*5745.00	111.70 AV			1.10 V	359	75.30	36.40
3	#11490.00	58.20 PK	74.00	-15.80	1.10 V	357	7.10	51.10
3	#11490.00	46.40 AV	54.00	-7.60	1.10 V	357	-4.70	51.10

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. “\*” : Fundamental frequency
  6. “#”The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 3	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	51.30 PK	74.00	-22.70	1.11 H	359	15.50	35.80
1	#5360.00	43.00 AV	54.00	-11.00	1.11 H	359	7.20	35.80
2	*5785.00	106.40 PK			1.02 H	358	69.90	36.50
2	*5785.00	97.30 AV			1.02 H	358	60.80	36.50
3	#11570.00	56.80 PK	74.00	-17.20	1.18 H	3	5.90	50.90
3	#11570.00	45.80 AV	54.00	-8.20	1.18 H	3	-5.10	50.90

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	64.80 PK	74.00	-9.20	1.12 V	1	29.00	35.80
1	#5360.00	53.00 AV	54.00	-1.00	1.12 V	1	17.20	35.80
2	*5785.00	120.70 PK			1.04 V	3	84.20	36.50
2	*5785.00	111.30 AV			1.04 V	3	74.80	36.50
3	#11570.00	58.30 PK	74.00	-15.70	1.08 V	358	7.40	50.90
3	#11570.00	46.50 AV	54.00	-7.50	1.08 V	358	-4.40	50.90

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 5	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5359.00	51.30 PK	74.00	-22.70	1.18 H	3	15.50	35.80
1	#5359.00	42.60 AV	54.00	-11.40	1.18 H	3	6.80	35.80
2	*5825.00	106.00 PK			1.02 H	354	69.40	36.60
2	*5825.00	97.20 AV			1.02 H	354	60.60	36.60
3	#11650.00	57.10 PK	74.00	-16.90	1.10 H	2	6.50	50.60
3	#11650.00	45.30 AV	54.00	-8.70	1.10 H	2	-5.30	50.60

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5359.00	65.00 PK	74.00	-9.00	1.12 V	0	29.20	35.80
1	#5359.00	53.20 AV	54.00	-0.80	1.12 V	0	17.40	35.80
2	*5825.00	119.50 PK			1.21 V	2	82.90	36.60
2	*5825.00	110.80 AV			1.21 V	2	74.20	36.60
3	#11650.00	58.00 PK	74.00	-16.00	1.18 V	3	7.40	50.60
3	#11650.00	46.50 AV	54.00	-7.50	1.18 V	3	-4.10	50.60

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

**802.11a Turbo OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 1	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	49.90 PK	74.00	-24.10	1.21 H	8	14.10	35.80
1	#5360.00	41.40 AV	54.00	-12.60	1.21 H	8	5.60	35.80
2	*5760.00	104.60 PK			1.05 H	354	68.20	36.40
2	*5760.00	94.80 AV			1.05 H	354	58.40	36.40
3	#11520.00	58.20 PK	74.00	-15.80	1.24 H	7	7.10	51.10
3	#11520.00	46.00 AV	54.00	-8.00	1.24 H	7	-5.10	51.10

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	63.40 PK	74.00	-10.60	1.08 V	3	27.60	35.80
1	#5360.00	52.40 AV	54.00	-1.60	1.08 V	3	16.60	35.80
2	*5760.00	118.40 PK			1.08 V	2	82.00	36.40
2	*5760.00	109.30 AV			1.08 V	2	72.90	36.40
3	#11520.00	58.60 PK	74.00	-15.40	1.11 V	0	7.50	51.10
3	#11520.00	46.50 AV	54.00	-7.50	1.11 V	0	-4.60	51.10

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>CHANNEL</b>	Channel 2	<b>MODEL</b>	AP-80MB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 57%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Rex Huang		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	50.20 PK	74.00	-23.80	1.18 H	6	14.40	35.80
1	#5360.00	41.60 AV	54.00	-12.40	1.18 H	6	5.80	35.80
2	*5800.00	104.50 PK			1.03 H	350	67.90	36.60
2	*5800.00	94.60 AV			1.03 H	350	58.00	36.60
3	#11600.00	57.50 PK	74.00	-16.50	1.20 H	4	6.70	50.80
3	#11600.00	45.50 AV	54.00	-8.50	1.20 H	4	-5.30	50.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	62.60 PK	74.00	-11.40	1.13 V	2	26.80	35.80
1	#5360.00	52.30 AV	54.00	-1.70	1.13 V	2	16.50	35.80
2	*5800.00	118.60 PK			1.11 V	4	82.00	36.60
2	*5800.00	108.50 AV			1.11 V	4	71.90	36.60
3	#11600.00	57.10 PK	74.00	-16.90	1.09 V	359	6.30	50.80
3	#11600.00	46.50 AV	54.00	-7.50	1.09 V	359	-4.30	50.80

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

## 5.2.11 TEST RESULTS (ANTENNA 5)

**Below 1GHz Worst-Case Data**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave		
<b>MODEL</b>	AP-80SB	<b>FREQUENCY RANGE</b>	Below 1000MHz
<b>MODULATION TYPE</b>	BPSK	<b>TRANSFER RATE</b>	6Mbps
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	28deg. C, 55%RH, 961hPa	<b>TESTED BY</b>	Wen Yu

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	125.00	30.90 QP	43.50	-12.60	1.72 H	330	18.70	12.10
2	250.00	25.40 QP	46.00	-20.60	1.20 H	341	12.20	13.20
3	280.00	21.80 QP	46.00	-24.20	1.08 H	298	7.30	14.50
4	320.00	27.40 QP	46.00	-18.60	1.59 H	15	11.60	15.80
5	360.00	26.80 QP	46.00	-19.20	1.03 H	358	9.80	16.90
6	400.00	30.80 QP	46.00	-15.20	1.00 H	6	12.70	18.10
7	480.00	29.20 QP	46.00	-16.80	2.34 H	198	8.90	20.30
8	500.00	35.50 QP	46.00	-10.50	1.64 H	212	14.60	20.90
9	600.00	39.80 QP	46.00	-6.20	1.41 H	4	16.80	23.00
10	720.00	33.40 QP	46.00	-12.60	1.47 H	15	8.50	24.80

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	125.00	35.30 QP	43.50	-8.20	1.00 V	224	23.10	12.10
2	160.00	26.30 QP	43.50	-17.20	1.00 V	14	11.90	14.40
3	250.00	28.80 QP	46.00	-17.20	1.00 V	23	15.60	13.20
4	320.00	24.60 QP	46.00	-21.40	1.00 V	251	8.80	15.80
5	375.00	32.50 QP	46.00	-13.50	1.00 V	276	15.10	17.40
6	400.00	27.40 QP	46.00	-18.60	1.00 V	352	9.30	18.10
7	480.00	28.10 QP	46.00	-17.90	1.00 V	35	7.80	20.30
8	500.00	33.60 QP	46.00	-12.40	1.50 V	279	12.70	20.90
9	600.00	33.90 QP	46.00	-12.10	1.89 V	354	10.90	23.00
10	720.00	31.90 QP	46.00	-14.10	2.33 V	74	7.10	24.80

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value

**802.11a OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave		
<b>CHANNEL</b>	Channel 1	<b>MODEL</b>	AP-80SB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 70%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Wen Yu		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	43.80 PK	74.00	-30.20	1.15 H	309	6.80	37.00
2	*5745.00	98.60 PK			1.00 H	309	61.10	37.60
2	*5745.00	90.10 AV			1.00 H	309	52.60	37.60
3	#11490.00	58.90 PK	74.00	-15.10	1.43 H	316	7.50	51.30
3	#11490.00	47.80 AV	54.00	-6.20	1.43 H	316	-3.50	51.30
4	17235.00	59.80 PK	68.30	-8.50	1.00 H	118	8.10	51.70

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	62.90 PK	74.00	-11.10	1.10 V	1	25.90	37.00
1	#5360.00	51.90 AV	54.00	-2.10	1.10 V	1	14.90	37.00
2	*5745.00	114.80 PK			1.10 V	1	77.30	37.60
2	*5745.00	107.50 AV			1.10 V	1	69.90	37.60
3	#11490.00	59.40 PK	74.00	-14.60	1.00 V	310	8.00	51.30
3	#11490.00	47.90 AV	54.00	-6.10	1.00 V	310	-3.50	51.30
4	17235.00	59.20 PK	68.30	-9.10	1.13 V	319	7.50	51.70

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#"The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave		
<b>CHANNEL</b>	Channel 3	<b>MODEL</b>	AP-80SB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 70%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Wen Yu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	44.70 PK	74.00	-29.30	1.17 H	310	7.70	37.00
2	*5785.00	100.90 PK			1.00 H	309	63.30	37.60
2	*5785.00	92.50 AV			1.00 H	309	54.90	37.60
3	#11570.00	61.10 PK	74.00	-12.90	1.43 H	307	10.00	51.10
3	#11570.00	50.30 AV	54.00	-3.70	1.43 H	307	-0.80	51.10
4	17355.00	60.10 PK	68.30	-8.20	1.00 H	120	7.20	52.90

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	64.10 PK	74.00	-9.90	1.10 V	360	27.10	37.00
1	#5360.00	53.00 AV	54.00	-1.00	1.10 V	360	16.00	37.00
2	*5785.00	118.20 PK			1.04 V	1	80.60	37.60
2	*5785.00	109.30 AV			1.04 V	1	71.70	37.60
3	#11570.00	57.80 PK	74.00	-16.20	1.00 V	307	6.70	51.10
3	#11570.00	47.80 AV	54.00	-6.20	1.00 V	307	-3.40	51.10
4	17355.00	59.00 PK	68.30	-9.30	1.11 V	23	6.00	52.90

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. “\*” : Fundamental frequency
  6. “#”The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247





<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave		
<b>CHANNEL</b>	Channel 5	<b>MODEL</b>	AP-80SB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 70%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Wen Yu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	44.00 PK	74.00	-30.00	1.18 H	306	6.90	37.00
2	*5825.00	99.60 PK			1.00 H	316	61.80	37.70
2	*5825.00	91.30 AV			1.00 H	316	53.50	37.70
3	#11650.00	58.60 PK	74.00	-15.40	1.42 H	311	7.80	50.80
3	#11650.00	47.50 AV	54.00	-6.50	1.42 H	311	-3.30	50.80
4	17475.00	61.60 PK	68.30	-6.70	1.00 H	333	7.40	54.20

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	64.20 PK	74.00	-9.80	1.10 V	1	27.20	37.00
1	#5360.00	52.70 AV	54.00	-1.30	1.10 V	1	15.70	37.00
2	*5825.00	117.60 PK			1.09 V	1	79.80	37.70
2	*5825.00	108.50 AV			1.09 V	1	70.80	37.70
3	#11650.00	58.60 PK	74.00	-15.40	1.00 V	319	7.80	50.80
3	#11650.00	47.60 AV	54.00	-6.40	1.00 V	319	-3.20	50.80
4	17475.00	61.50 PK	68.30	-6.80	1.10 V	26	7.40	54.20

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. “\*” : Fundamental frequency
  6. “#”The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



**802.11a Turbo OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave		
<b>CHANNEL</b>	Channel 1	<b>MODEL</b>	AP-80SB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 70%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Wen Yu		

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	46.50 PK	74.00	-27.50	1.56 H	14	9.50	37.00
2	*5760.00	96.30 PK			1.22 H	301	58.70	37.60
2	*5760.00	88.20 AV			1.22 H	301	50.60	37.60
3	#11520.00	60.20 PK	74.00	-13.80	1.15 H	284	8.90	51.30
3	#11520.00	49.00 AV	54.00	-5.00	1.15 H	284	-2.30	51.30
4	17280.00	58.20 PK	68.30	-10.10	1.40 H	360	6.10	52.20

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5360.00	63.20 PK	74.00	-10.80	1.65 V	355	26.20	37.00
1	#5360.00	52.80 AV	54.00	-1.20	1.65 V	355	15.80	37.00
2	*5760.00	112.20 PK			2.00 V	355	74.70	37.60
2	*5760.00	103.60 AV			2.00 V	355	66.00	37.60
3	#11520.00	53.90 PK	74.00	-20.10	1.93 V	319	2.60	51.30
3	#11520.00	44.40 AV	54.00	-9.60	1.93 V	319	-6.90	51.30
4	17272.00	59.70 PK	68.30	-8.60	1.63 V	336	7.60	52.10

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. "\*" : Fundamental frequency
  6. "#”The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247



<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave		
<b>CHANNEL</b>	Channel 2	<b>MODEL</b>	AP-80SB
<b>MODULATION TYPE</b>	BPSK	<b>FREQUENCY RANGE</b>	1 ~ 40 GHz
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 70%RH, 961hPa	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>TESTED BY</b>	Wen Yu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5356.00	49.40 PK	74.00	-24.60	1.83 H	41	12.30	37.00
2	*5800.00	95.10 PK			1.92 H	14	57.40	37.70
2	*5800.00	87.10 AV			1.92 H	14	49.40	37.70
3	#11600.00	58.90 PK	74.00	-15.10	1.24 H	50	7.90	51.00
3	#11600.00	47.60 AV	54.00	-6.40	1.24 H	50	-3.40	51.00
4	17400.00	60.90 PK	68.30	-7.40	1.14 H	57	7.60	53.40

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5351.00	62.40 PK	74.00	-11.60	1.62 V	3	25.40	37.00
1	#5351.00	51.90 AV	54.00	-2.10	1.62 V	3	14.90	37.00
2	*5800.00	113.70 PK			2.00 V	3	76.00	37.70
2	*5800.00	105.20 AV			2.00 V	3	67.50	37.70
3	#11600.00	58.00 PK	74.00	-16.00	1.46 V	62	7.00	51.00
3	#11600.00	47.20 AV	54.00	-6.80	1.46 V	62	-3.80	51.00
4	17400.00	61.20 PK	68.30	-7.10	1.07 V	29	7.80	53.40

- NOTE:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value
  5. “\*” : Fundamental frequency
  6. “#”The radiated frequency falling in the restricted band.
  7. The limit value is defined as per 15.247

### 5.3 6dB BANDWIDTH MEASUREMENT

#### 5.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

#### 5.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP40	100036	Nov. 23, 2005

**NOTE:**

- 1.The measurement uncertainty is less than +/- 2.6dB, which is calculated as per the NAMAS document NIS81.
- 2.The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

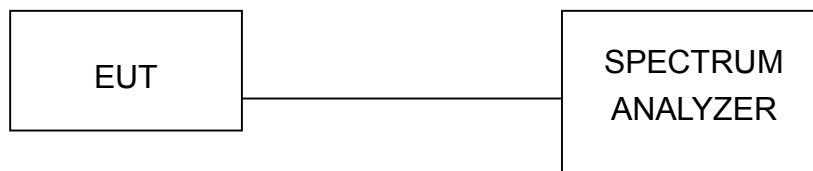
### 5.3.3 TEST PROCEDURE

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

### 5.3.4 DEVIATION FROM TEST STANDARD

No deviation

### 5.3.5 TEST SETUP



### 5.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



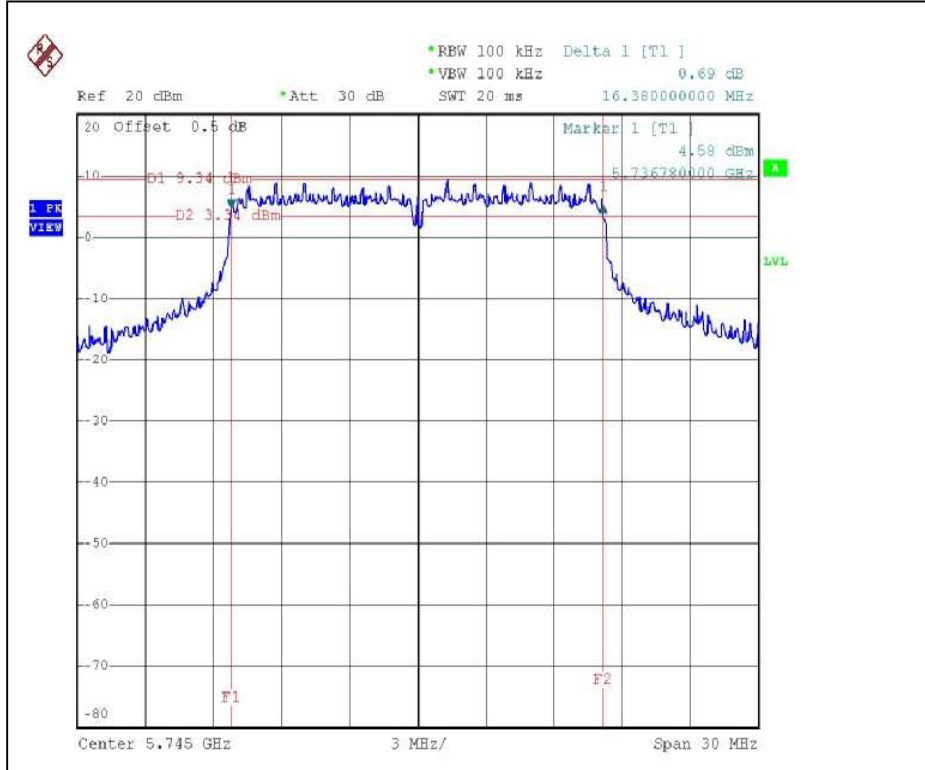
5.3.7 TEST RESULTS (ANTENNA 1)

**802.11a OFDM modulation**

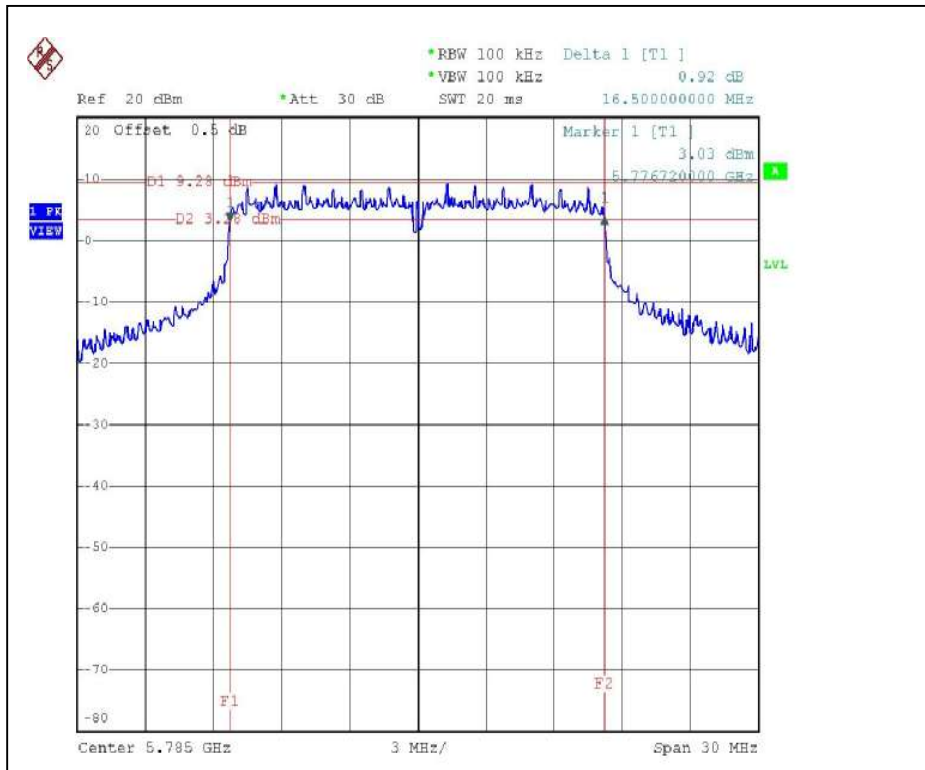
<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODULATION TYPE</b>	BPSK	<b>MODEL</b>	AP-80MB
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>TESTED BY</b>	Rex Huang	<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 53%RH, 961hPa

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	5745	16.38	0.5	PASS
3	5785	16.5	0.5	PASS
5	5825	16.5	0.5	PASS

CH1

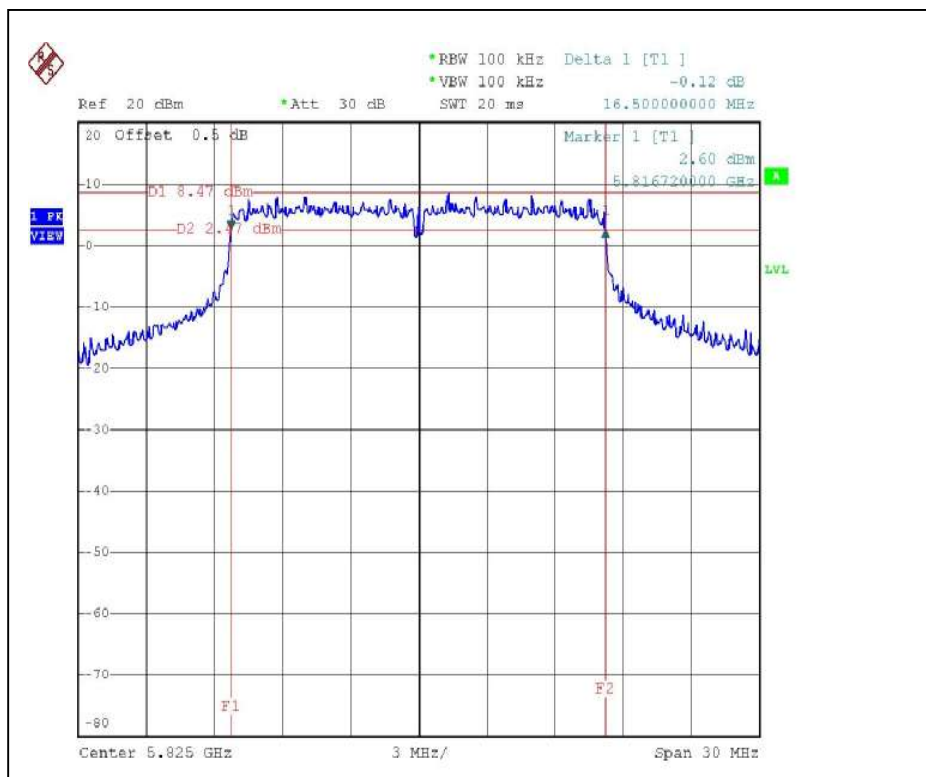


CH3





CH5







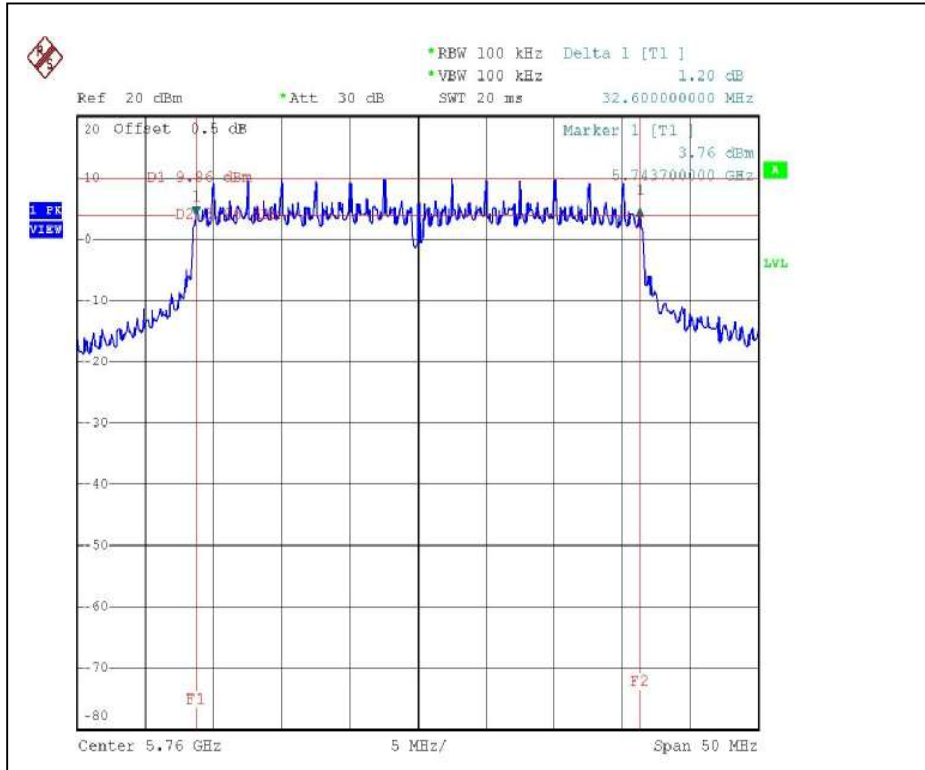
**802.11a Turbo OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODULATION TYPE</b>	BPSK	<b>MODEL</b>	AP-80MB
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>TESTED BY</b>	Rex Huang	<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 53%RH, 961hPa

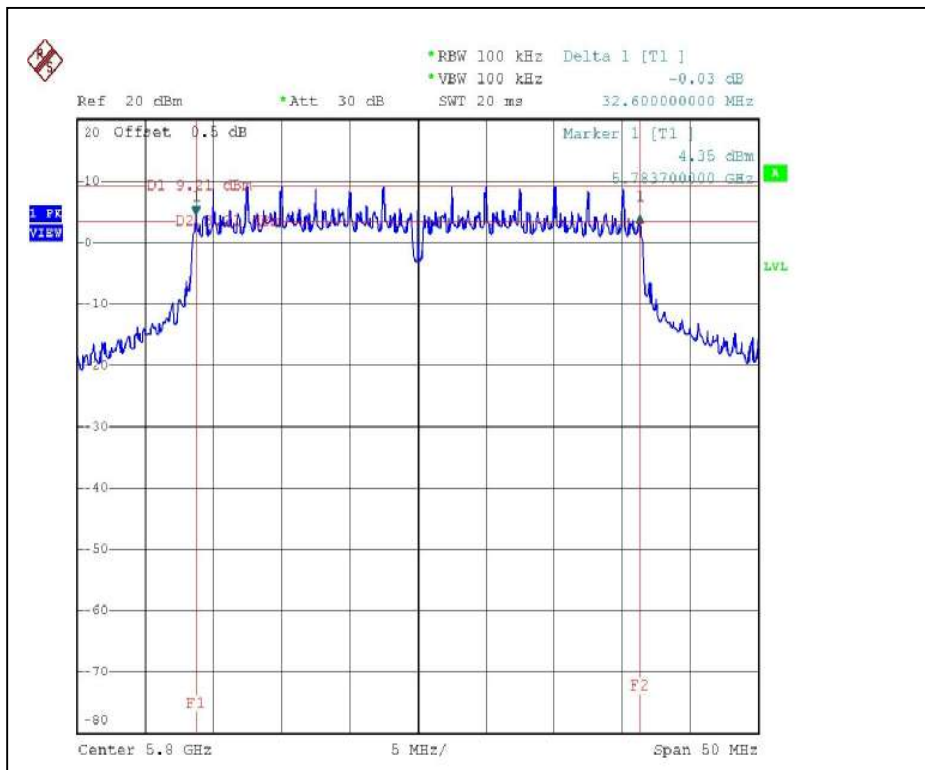
<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>6dB BANDWIDTH (MHz)</b>	<b>MINIMUM LIMIT (MHz)</b>	<b>PASS/FAIL</b>
1	5760	32.6	0.5	PASS
2	5800	32.6	0.5	PASS



CH1



CH2



## 5.3.8 TEST RESULTS (ANTENNA 2)

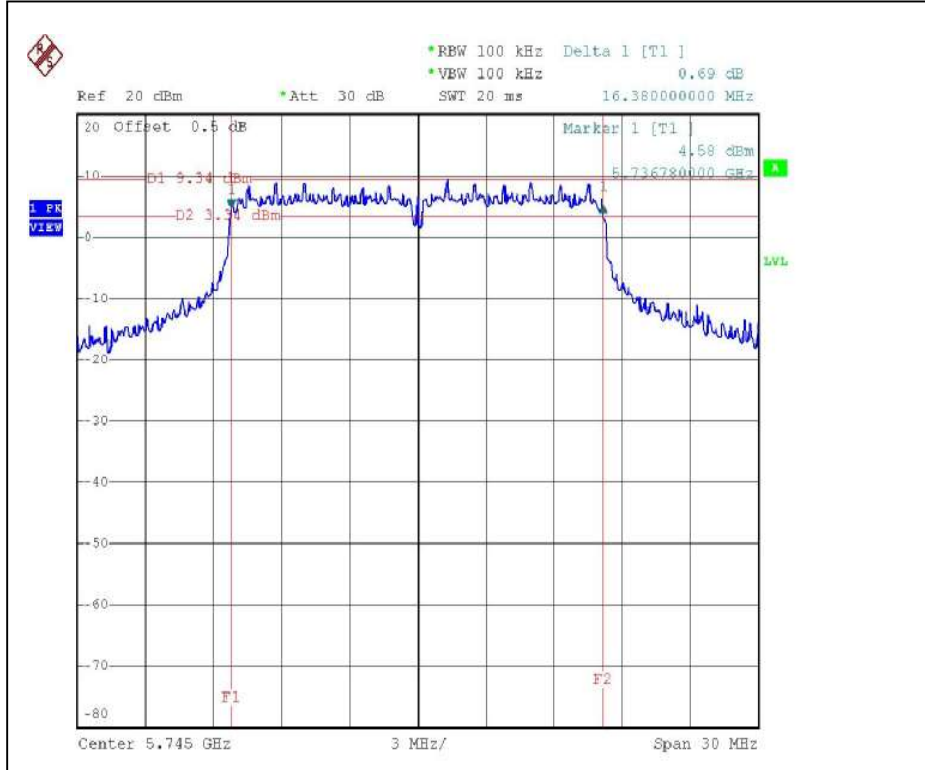
**802.11a OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODULATION TYPE</b>	BPSK	<b>MODEL</b>	AP-80MB
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>TESTED BY</b>	Rex Huang	<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 53%RH, 961hPa

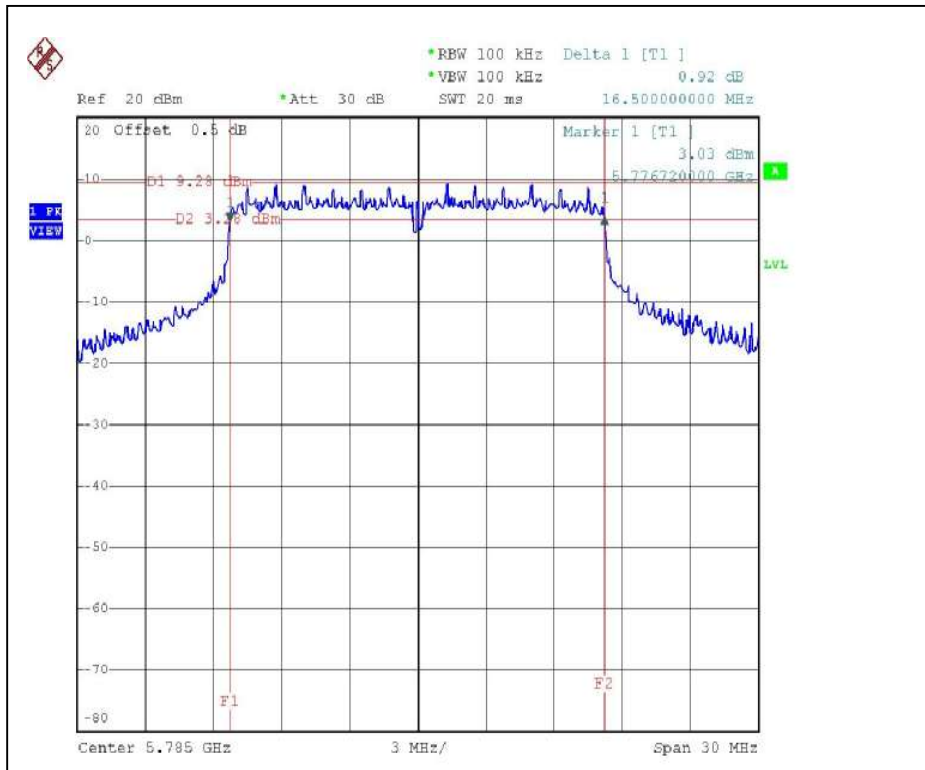
<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>6dB BANDWIDTH (MHz)</b>	<b>MINIMUM LIMIT (MHz)</b>	<b>PASS/FAIL</b>
1	5745	16.38	0.5	PASS
3	5785	16.5	0.5	PASS
5	5825	16.5	0.5	PASS



CH1

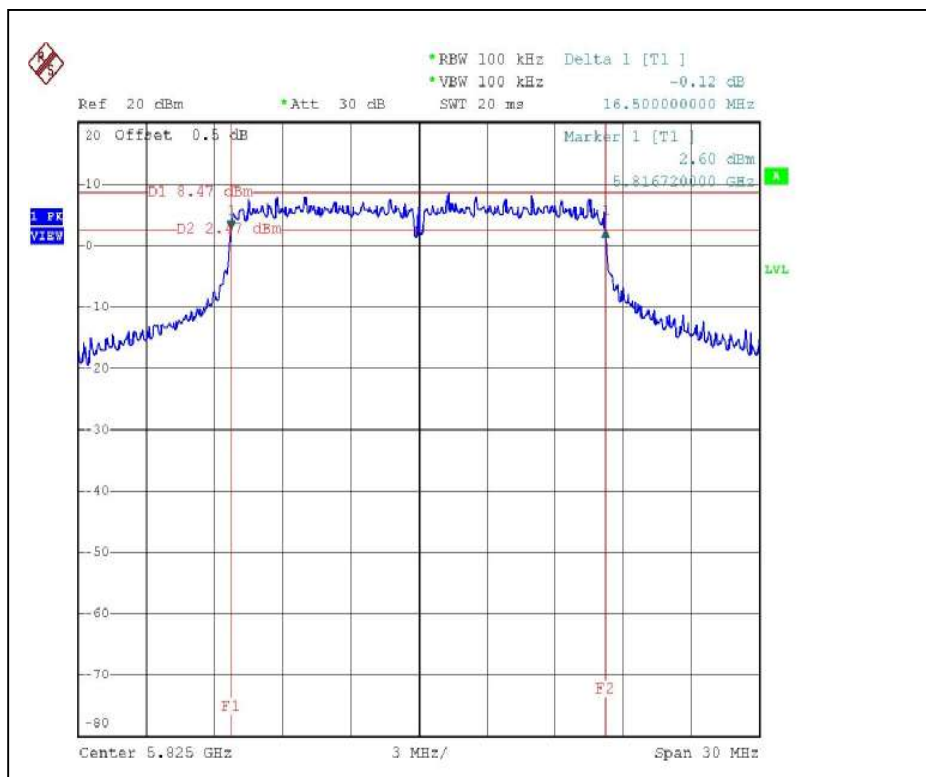


CH3





CH5





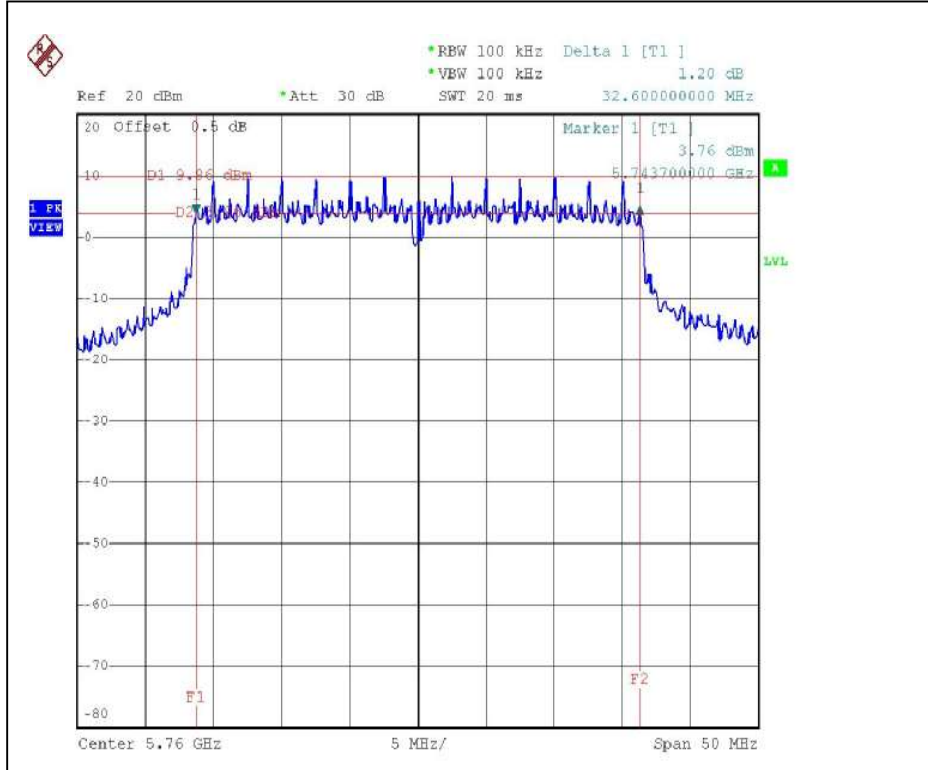
**802.11a Turbo OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODULATION TYPE</b>	BPSK	<b>MODEL</b>	AP-80MB
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>TESTED BY</b>	Rex Huang	<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 53%RH, 961hPa

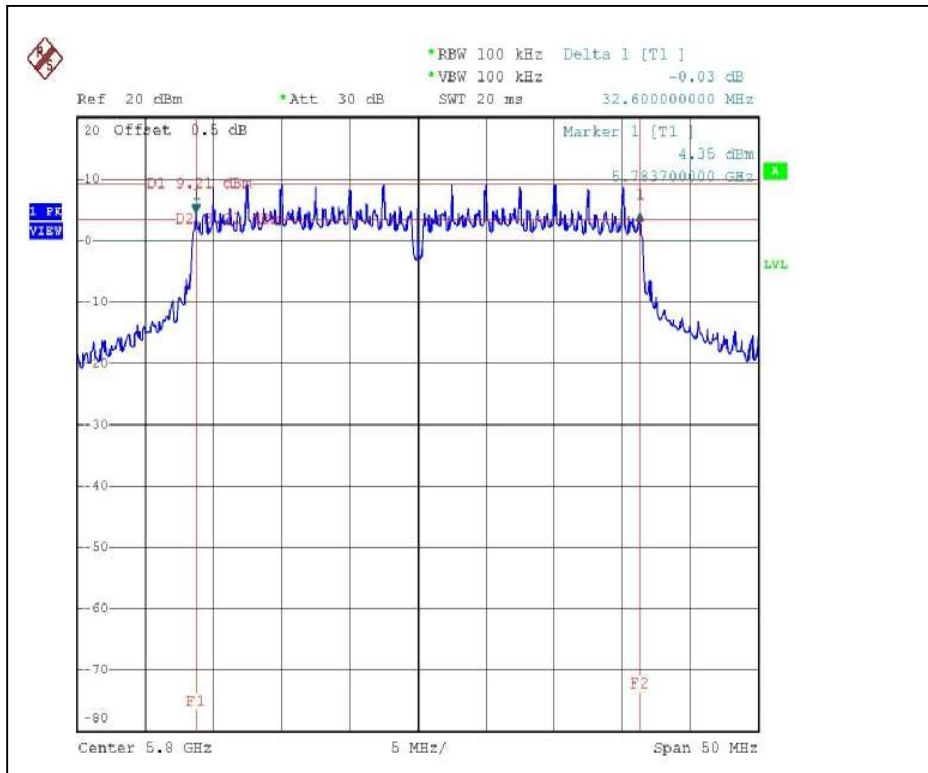
<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>6dB BANDWIDTH (MHz)</b>	<b>MINIMUM LIMIT (MHz)</b>	<b>PASS/FAIL</b>
1	5760	32.6	0.5	PASS
2	5800	32.6	0.5	PASS



CH1



CH2



## 5.3.9 TEST RESULTS (ANTENNA 3)

**802.11a OFDM modulation**

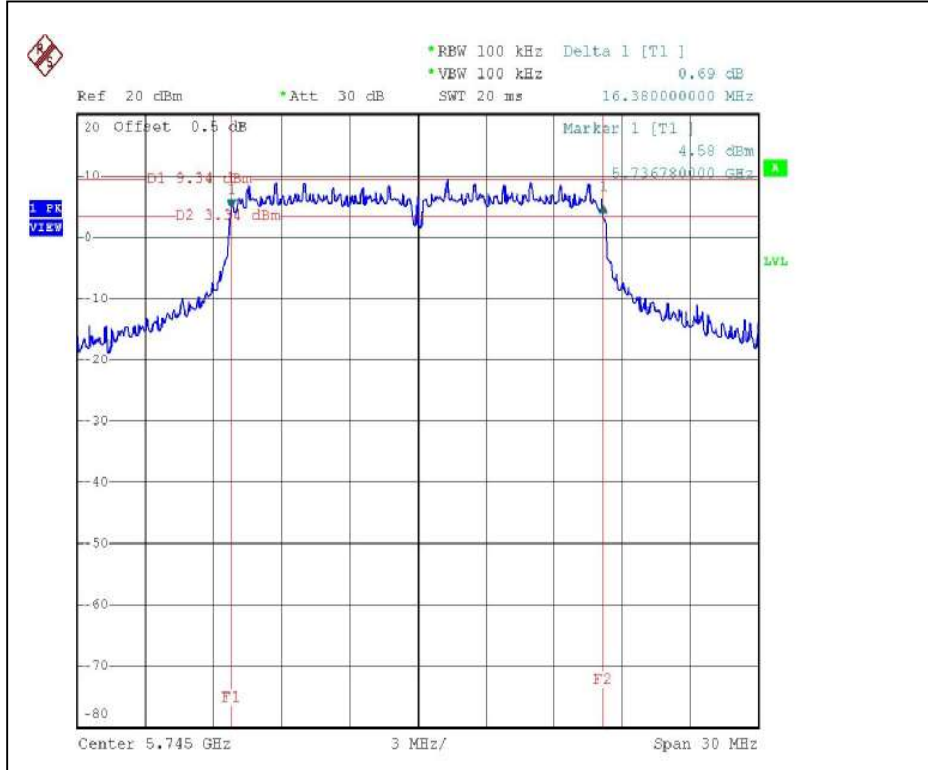
<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODULATION TYPE</b>	BPSK	<b>MODEL</b>	AP-80MB
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	6Mbps
<b>TESTED BY</b>	Rex Huang	<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 53%RH, 961hPa

<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>6dB BANDWIDTH (MHz)</b>	<b>MINIMUM LIMIT (MHz)</b>	<b>PASS/FAIL</b>
1	5745	16.38	0.5	PASS
3	5785	16.5	0.5	PASS
5	5825	16.5	0.5	PASS

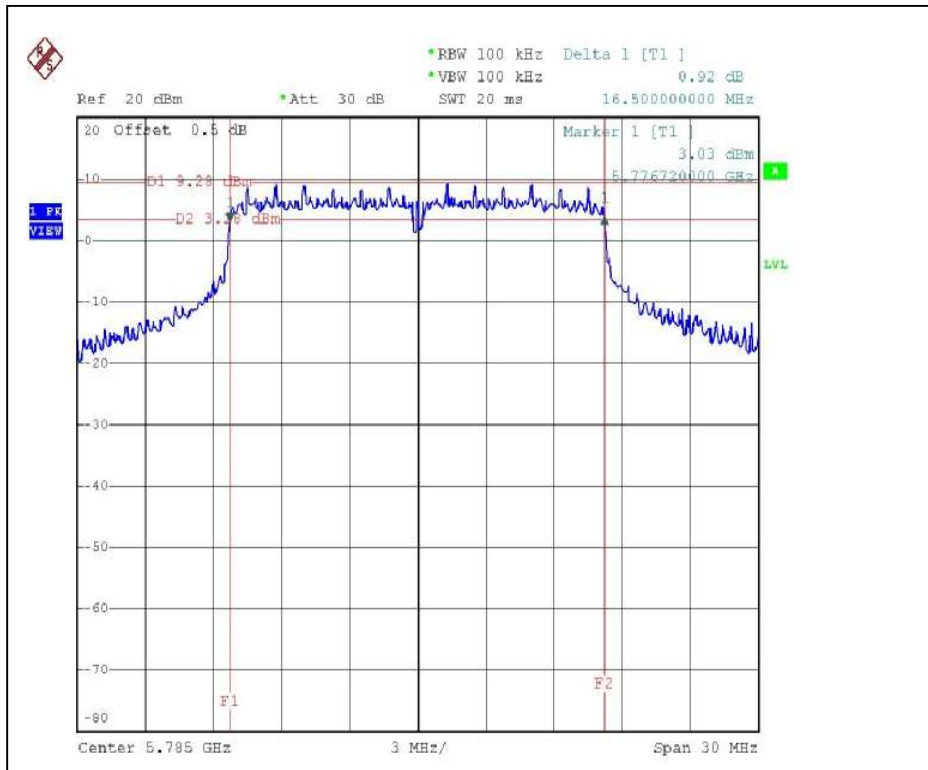




CH1

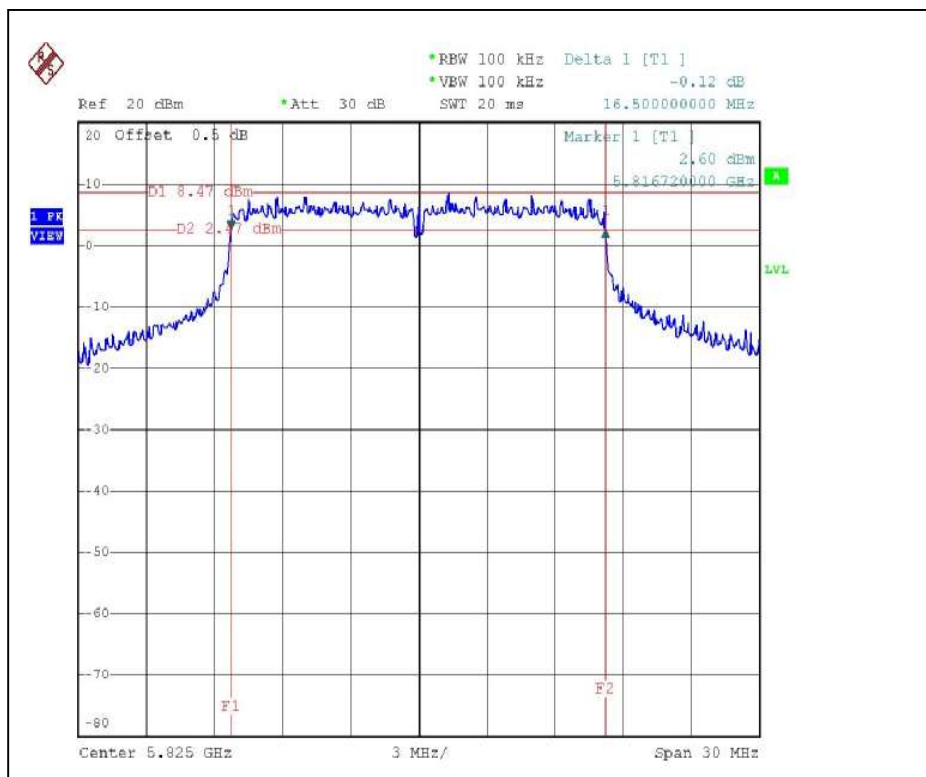


CH3





CH5



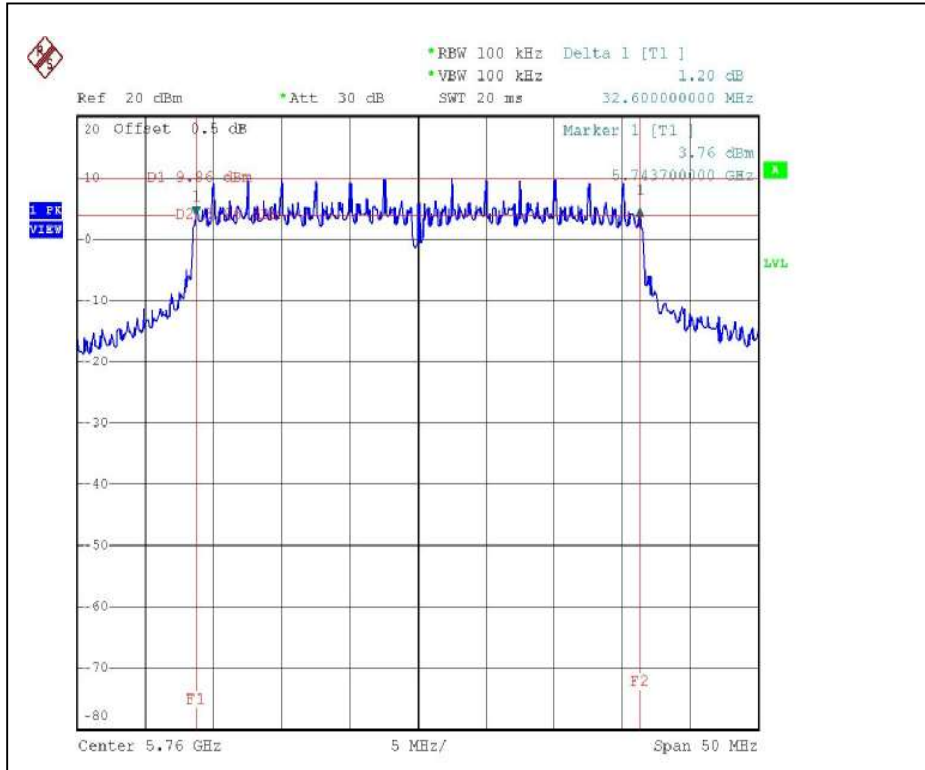
**802.11a Turbo OFDM modulation**

<b>EUT</b>	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
<b>MODULATION TYPE</b>	BPSK	<b>MODEL</b>	AP-80MB
<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz	<b>TRANSFER RATE</b>	12Mbps
<b>TESTED BY</b>	Rex Huang	<b>ENVIRONMENTAL CONDITIONS</b>	27deg. C, 53%RH, 961hPa

<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>6dB BANDWIDTH (MHz)</b>	<b>MINIMUM LIMIT (MHz)</b>	<b>PASS/FAIL</b>
1	5760	32.6	0.5	PASS
2	5800	32.6	0.5	PASS



CH1



CH2

