FCC TEST REPORT (15.247)

REPORT NO.: RF940906H06
MODEL NO.: AP-80MB, AP-80SB, AP-80M, AP-80S
RECEIVED: Sep. 06, 2005
TESTED: Sep. 23 to Oct. 06, 2005
ISSUED: Oct. 20, 2005

APPLICANT: ARUBA WIRELESS NETWORKS INC.

ADDRESS: 1322 Crossman Ave. Sunnyvale , CA94089-1113, U.S.A.

ISSUED BY: Advance Data Technology Corporation

TEST LOCATION: No. 81-1, Lu Liao Keng, 9 Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien, Taiwan, R.O.C.

0536 No. 2177-01
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1. CERTIFICATION

PRODUCT:	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave
BRAND NAME:	ARUBA WIRELESS NETWORKS
MODEL NO.:	AP-80MB, AP-80SB, AP-80M, AP-80S
TEST SAMPLE:	R&D SAMPLE
TESTED:	Sep. 23 to Oct. 06, 2005
APPLICANT:	ARUBA WIRELESS NETWORKS INC.
STANDARDS:	FCC Part 15, Subpart C (Section 15.247), ANSI C63.4-2003

The above equipment (Model: AP-80MB and AP-80SB) have been tested by **Advance Data Technology Corporation**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Carol Liao , **DATE:** Oct. 20, 2005
(Carol Liao)

TECHNICAL ACCEPTANCE : Hank Chung , **DATE:** Oct. 20, 2005
Responsible for RF
(Hank Chung)

APPROVED BY : , **DATE:** Oct. 20, 2005
(May Chen, Deputy Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

For 802.11b & g, 2412~2462MHz Band

APPLIED STANDARD: FCC Part 15, Subpart C (Section 15.247)			
Standard Section	**Test Type and Limit**	**Result**	**Remark**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is –10.53dB at 0.344MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is –0.3dB at 2390.0MHz
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

For 802.11a, 5725~5850MHz Band

APPLIED STANDARD: FCC Part 15, Subpart C (Section 15.247)			
Standard Section	**Test Type and Limit**	**Result**	**Remark**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is –10.10dB at 0.345MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is –0.7dB at 5360MHz
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

NOTE:

1. The EUT was operating in 2.412 ~ 2.462GHz, 5.250 ~ 5.350GHz and 5.725 ~ 5.850GHz frequencies band. This report was recorded the RF parameters including 2.412 ~ 2.462GHz and 5.725 ~ 5.850GHz. For the 5.250 ~ 5.350GHz RF parameters was recorded in another test report.

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave
MODEL NO.	AP-80MB, AP-80SB, AP-80M, AP-80S
POWER SUPPLY	DC 48 V from POE
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b:11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps 802.11a: 54/48/36/24/18/12/9/6Mbps (Turbo mode: up to 108Mbps *see Note 2)
FREQUENCY RANGE	802.11b & 802.11g: 2412 ~ 2462MHz 802.11a: 5.25 ~ 5.35GHz and 5.725 ~ 5.850GHz
NUMBER OF CHANNEL	802.11b & 802.11g: 11 (1 for 802.11g Turbo mode) 802.11a: 9 (3 for 802.11a Turbo mode)
CHANNEL SPACING	802.11b & 802.11g: 5MHz 802.11a: 20MHz for Normal mode / 40MHz for Turbo mode
OUTPUT POWER	Please see note 7 (on next page)
DATA CABLE	NA
ANTENNA TYPE	Please see note 5 (on next page)
I/O PORTS	RJ 45 Port x 1
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT operates in both the 5GHz and 2.4GHz Bands and compatibility with 802.11a and 802.11b, 802.11g technology.

2. This EUT is capable of providing data rates of up to 108 Mbps in 802.11a/g Turbo mode depending upon reception quality.

3. The EUT was operated with the following power adapter:

BRAND:	MICROELECTRONICS TECH. INC.
MODEL:	TR60A-POE-L(0640-0086)
INPUT:	INPUT: 100-240Vac 1.5A 47-63Hz
OUTPUT:	OUTPUT: 48V, 1.2A

4. The EUT has four model names which are identical to each other in all aspects except for the followings:

Brand Name	Model Name	Product Name	Difference
Aruba	AP-80SB	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave	Int5G.+Ext2.4G (Accton software)
Aruba	AP-80MB	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master	Ext2.4G+Ext5G (Accton software)
Aruba	AP-80S	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Slave	Int5G.+Ext2.4G (Aruba software)
Aruba	AP-80M	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master	Ext2.4G+Ext5G (Aruba software)

From the above models, model: **AP-80SB** and **AP-80MB** were selected as representative model for the test and its data were recorded in this report. (Turbo mode is used on the AP-80SB and AP-80MB only)

5. There are eleven antennas provided to this EUT, please refer to the following table:

For 2.4GHz					
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	
For 5GHz					
No.	Model No.	Gain (dBi)	Cable Loss (dB)	Antenna Type	Antenna Connector
1	AP-ANT-86	9.0dBi	1.36dB	Omnidirectional (Dipole)	N-type
2	AP-ANT-87	7.0dBi		Wide-Angle (H-Plane)60°Patch	
3	AP-ANT-88	10.0dBi		120° Sector, typical with 36" cable	
4	AP-ANT-89	14.0dBi		Wide-Angle, High Gain, Directional Panel,	
5	ANT05535	17.0dBi	NA	Directional, Patch Panel (Internal Antenna)	Probe Pin

Note:

1. All of the above antennas are outdoor Antenna except the antenna model No.: ANT05535.
2. Antenna Model No. AP-ANT-85, AP-ANT-89 and ANT05535 can be used in point-to-point applications.
3. From above antennas, the different type of antennas were chosen for final test and its data were recorded in this report.
4. For 2.4GHz antennas, antenna 2, 6 and 7 are the same type of antenna (wide Angle(H-Plane)Sectoredand), we choose the highest gain antenna for final test. Antenna 2, the highest antenna gain one, was selected as representative antenna for the test.

6. Frequency Range of each Antennas are as followings:

For 2.4GHz	
Antenna No.	Frequency Range
No. 1 ~ 7	2400MHz ~ 2483.5MHz
For 5GHz	
Antenna No.	Frequency Range
No. 1 ~ 4	5.25GHz~5.35GHz and 5.725GHz ~ 5.850GHz
No. 5	5.725GHz ~ 5.850GHz (ISM Band)

7. Maximum peak output power (Unit : dBm) :

No.	Model No. (Antenna)	Operating Frequency (MHz)		
		2412~2462	5250~5350	5725~5850
1	AP-ANT-80	24.06	NA	NA
2	AP-ANT-82	18.46	NA	NA
3	AP-ANT-84	24.06	NA	NA
4	AP-ANT-85	18.46	NA	NA
5	AP-ANT-87	24.06	22.53	24.98
6	AP-ANT-86	NA	20.44	24.98
7	AP-ANT-88	NA	19.39	24.98
8	AP-ANT-89	NA	16.56	24.98
9	ANT05535	NA	NA	13.50

8. The above EUT information was declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

Operated in 2400 ~ 2483.5MHz band:

For 802.11b/g: Eleven channels are provided to this EUT.

Channel	Frequency	Channel	Frequency
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

For 802.11g turbo mode: One channel is provided to this EUT

Channel	Frequency
6	2437 MHz

Operated in 5725 ~ 5850MHz band:

For 802.11a normal mode (5725 ~ 5850MHz band): Five channels are provided to this EUT.

Channel	Frequency
1	5745 MHz
2	5765 MHz
3	5785 MHz
4	5805 MHz
5	5825 MHz

For 802.11a turbo mode (5725 ~ 5850MHz band): Two channels are provided to this EUT.

Channel	Frequency
1	5760 MHz
2	5800 MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
-	x	x	x	x	NA

Where PLC: Power Line Conducted Emission RE<1G RE: Radiated Emission below 1GHz
RE≥1G: Radiated Emission above 1GHz APCM: Antenna Port Conducted Measurement

Power Line Conducted Emission Test:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11g	1 to 11	11	OFDM	BPSK	6
802.11a	1 to 5	5	OFDM	BPSK	6

Radiated Emission Test (Below 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11g	1 to 11	11	OFDM	BPSK	6
802.11a	1 to 5	5	OFDM	BPSK	6

Radiated Emission Test (Above 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11g turbo	6	6	OFDM	BPSK	12
802.11a	1 to 5	1, 3, 5	OFDM	BPSK	6
802.11a turbo	1, 2	1, 2	OFDM	BPSK	12

Bandedge Measurement:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 11	DSSS	CCK	11
802.11g	1 to 11	1, 11	OFDM	BPSK	6
802.11g turbo	6	6	OFDM	BPSK	12
802.11a	1 to 5	1, 5	OFDM	BPSK	6
802.11a turbo	1, 2	1, 2	OFDM	BPSK	12

Antenna Port Conducted Measurement:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11g turbo	6	6	OFDM	BPSK	12
802.11a	1 to 5	1, 3, 5	OFDM	BPSK	6
802.11a turbo	1, 2	1, 2	OFDM	BPSK	12

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is an Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart C. (15.247)
ANSI C63.4-2003

All test items have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

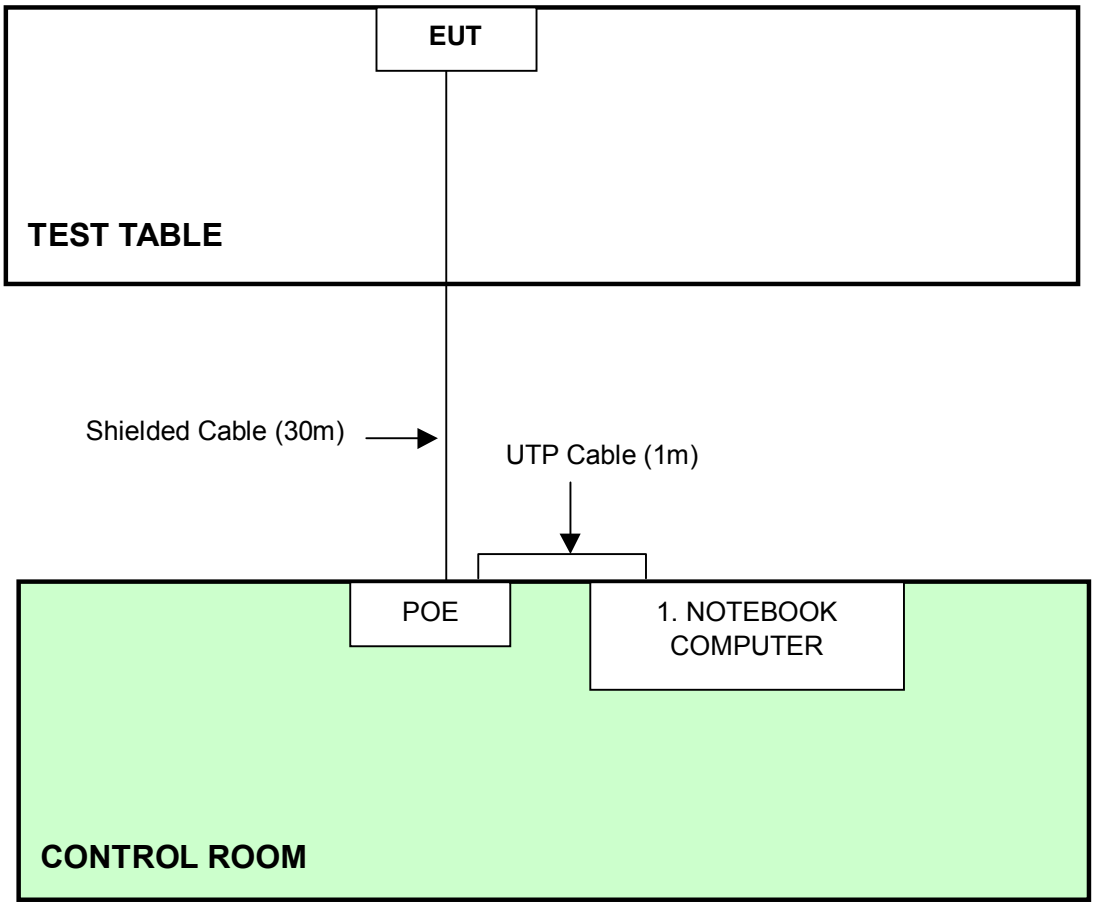
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	Dell	PP01L	TW-09c748-12800-165-3171	DoC

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA

NOTE: All power cords of the above support units are non shielded (1.8m).

3.5 CONFIGURATION OF SYSTEM UNDER TEST



NOTE: 1. Support unit 1 was kept in the control room during the test.
2. Please refer to the photos of test configuration in Item 6 also.

4.TEST TYPES AND RESULTS (802.11b & g, 2400 ~ 2483.5MHZ BAND)

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15-0.5 0.5-5 5-30	66 to 56 56 60	56 to 46 46 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.

4.1.2 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

4.1.3 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.

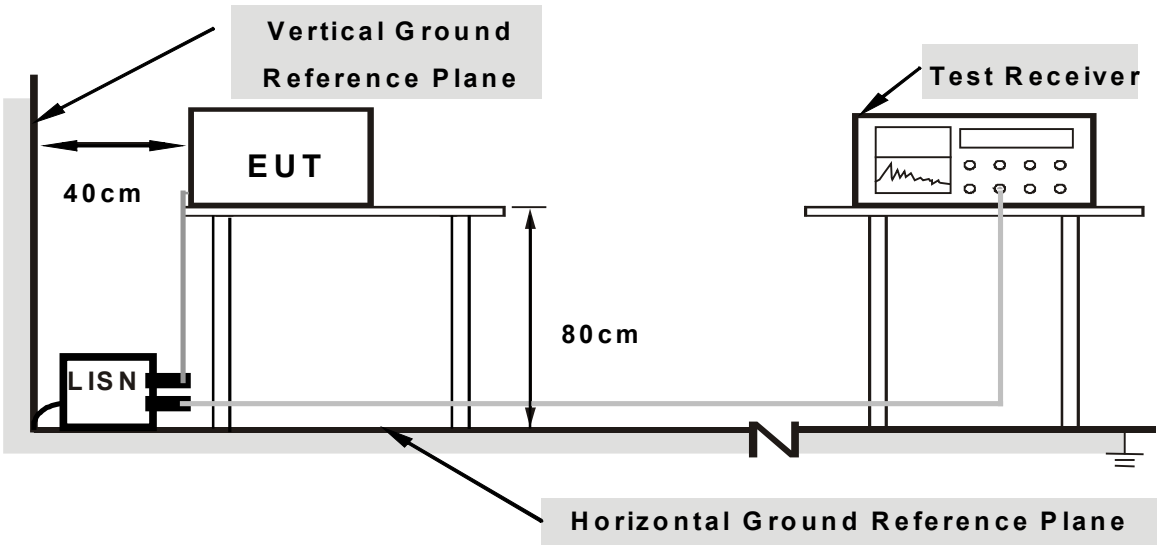
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 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.

4.1.6 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.

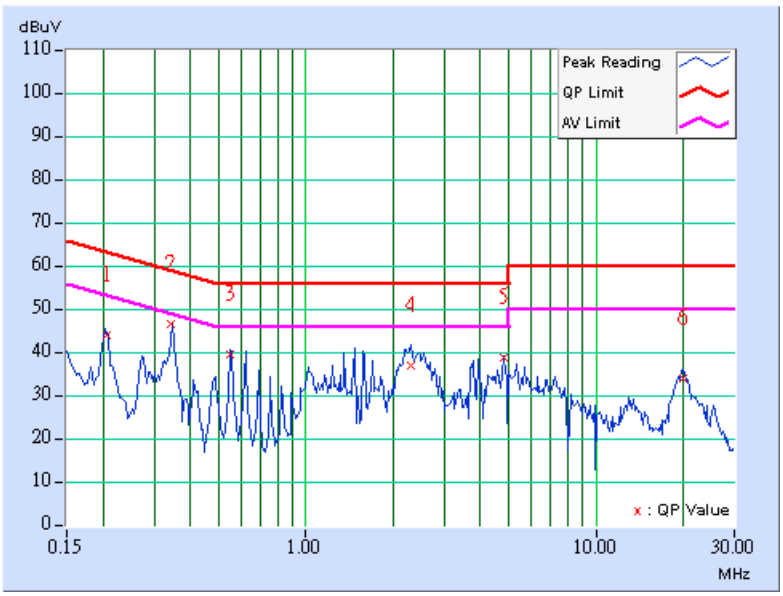
4.1.7 TEST RESULTS

Conducted Worst-Case Data

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

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.206	0.15	42.73	-	42.88	-	63.37	53.37	-20.49	-
2	0.344	0.16	45.39	-	45.55	-	59.11	49.11	-13.55	-
3	0.548	0.18	38.40	-	38.58	-	56.00	46.00	-17.42	-
4	2.310	0.28	35.54	-	35.82	-	56.00	46.00	-20.18	-
5	4.809	0.49	37.62	-	38.11	-	56.00	46.00	-17.89	-
6	19.921	1.32	32.92	-	34.24	-	60.00	50.00	-25.76	-

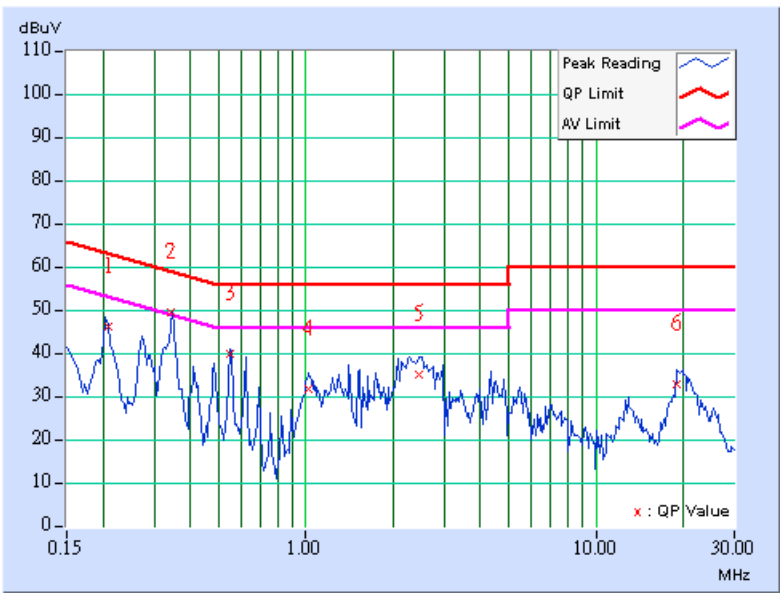
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



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

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.209	0.15	45.03	-	45.18	-	63.26	53.26	-18.08	-
2	**0.344**	**0.16**	**48.41**	**-**	**48.57**	**-**	**59.11**	**49.11**	**-10.53**	**-**
3	0.550	0.18	38.93	-	39.11	-	56.00	46.00	-16.89	-
4	1.025	0.20	30.75	-	30.95	-	56.00	46.00	-25.05	-
5	2.466	0.30	34.27	-	34.57	-	56.00	46.00	-21.43	-
6	19.030	1.08	31.99	-	33.07	-	60.00	50.00	-26.93	-

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.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 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:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
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.

4.2.2 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

4.2.3 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. 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 10 dB 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 10 dB margin would be re-tested one by one using the quasi-peak method or average method as specified and then reported in Data sheet peak mode and QP mode.

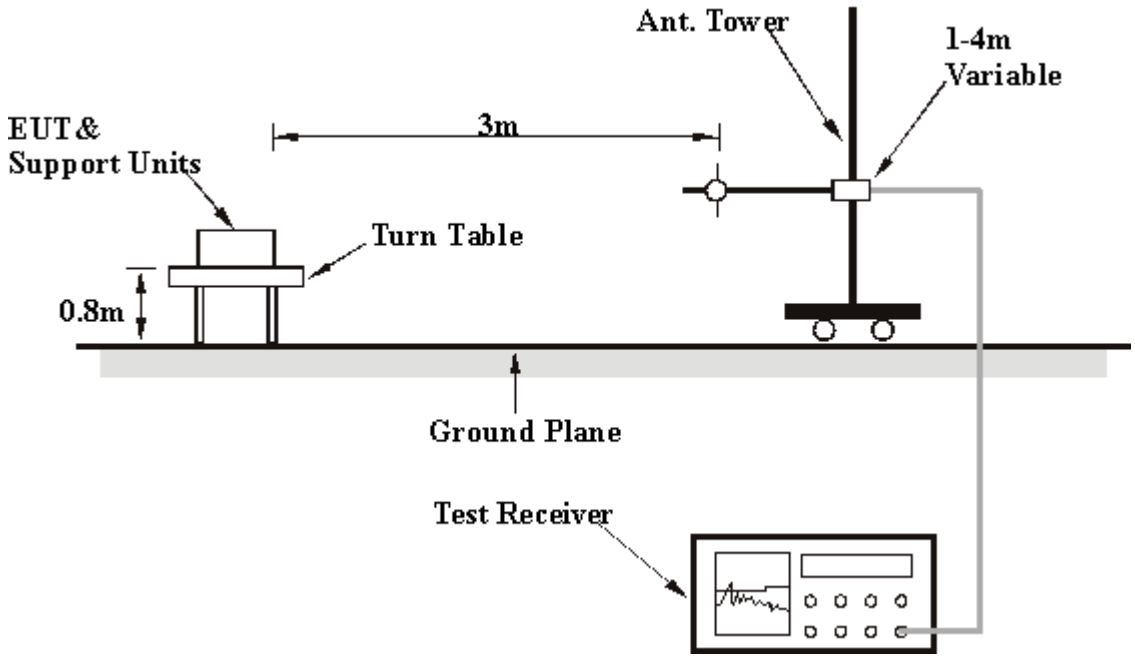
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection (PK) 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.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

4.2.7 TEST RESULTS (ANTENNA 1)

Below 1GHz Worst-Case Data

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 961hPa	**TESTED BY**	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	199.99	25.20 QP	43.50	-18.30	1.02 H	35	13.60	11.60
2	250.01	34.20 QP	46.00	-11.80	1.14 H	5	20.40	13.80
3	320.00	30.00 QP	46.00	-16.00	1.01 H	356	13.00	17.00
4	375.03	26.80 QP	46.00	-19.20	1.05 H	35	8.60	18.20
5	399.99	22.00 QP	46.00	-24.00	1.00 H	117	3.00	19.00
6	500.04	26.10 QP	46.00	-19.90	1.00 H	137	4.30	21.80
7	550.00	31.90 QP	46.00	-14.10	1.00 H	186	8.60	23.20
8	600.00	27.10 QP	46.00	-18.90	1.10 H	85	2.60	24.50

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	30.00 QP	43.50	-13.50	1.13 V	189	18.50	11.50
2	200.01	28.60 QP	43.50	-14.90	1.60 V	341	17.50	11.20
3	240.00	29.60 QP	46.00	-16.40	1.19 V	39	16.70	12.90
4	250.00	28.50 QP	46.00	-17.50	1.63 V	9	15.20	13.30
5	320.01	30.90 QP	46.00	-15.10	1.83 V	69	14.40	16.50
6	400.01	31.00 QP	46.00	-15.00	1.43 V	356	12.60	18.40
7	550.00	35.90 QP	46.00	-10.10	1.50 V	21	13.60	22.30
8	600.00	32.00 QP	46.00	-14.00	1.00 V	1	8.50	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

802.11b DSSS modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 1	**MODEL**	AP-80MB
MODULATION TYPE	CCK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2387.00	44.20 PK	74.00	-29.80	1.31 H	68	14.50	29.70
1	2387.00	35.30 AV	54.00	-18.70	1.31 H	68	5.60	29.70
2	2390.00	45.00 PK	74.00	-29.00	1.30 H	20	15.30	29.70
2	2390.00	35.10 AV	54.00	-18.90	1.30 H	20	5.40	29.70
3	*2412.00	96.90 PK			1.29 H	17	67.10	29.80
3	*2412.00	81.20 AV			1.29 H	17	51.40	29.80
4	2688.00	41.00 PK	74.00	-33.00	1.23 H	65	10.30	30.70
4	2688.00	33.00 AV	54.00	-21.00	1.23 H	65	2.30	30.70
5	4824.00	40.80 PK	74.00	-33.20	1.01 H	247	5.70	35.10
5	4824.00	29.30 AV	54.00	-24.70	1.01 H	247	-5.80	35.10
6	7236.00	46.50 PK	74.00	-27.50	1.36 H	98	6.00	40.50
6	7236.00	34.80 AV	54.00	-19.20	1.36 H	98	-5.70	40.50

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	2387.00	61.70 PK	74.00	-12.30	1.08 V	350	32.00	29.70
1	2387.00	52.30 AV	54.00	-1.70	1.08 V	350	22.60	29.70
2	2390.00	62.50 PK	74.00	-11.50	1.00 V	6	32.80	29.70
2	2390.00	53.10 AV	54.00	-0.90	1.00 V	6	23.40	29.70
3	*2412.00	114.40 PK			1.03 V	5	84.60	29.80
3	*2412.00	107.20 AV			1.03 V	5	77.40	29.80
4	2688.00	50.40 PK	74.00	-23.60	1.14 V	0	19.70	30.70
4	2688.00	49.30 AV	54.00	-4.70	1.14 V	0	18.60	30.70
5	4824.00	41.00 PK	74.00	-33.00	1.54 V	20	5.90	35.10
5	4824.00	31.00 AV	54.00	-23.00	1.54 V	20	-4.10	35.10
6	7236.00	46.20 PK	74.00	-27.80	1.11 V	21	5.70	40.50
6	7236.00	34.10 AV	54.00	-19.90	1.11 V	21	-6.40	40.50

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	MODEL	AP-80MB
MODULATION TYPE	CCK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2437.00	101.40 PK			1.32 H	52	71.50	29.90
1	*2437.00	94.20 AV			1.32 H	52	64.30	29.90
2	2688.00	43.70 PK	74.00	-30.30	1.29 H	38	13.00	30.70
2	2688.00	35.50 AV	54.00	-18.50	1.29 H	38	4.80	30.70
3	4874.00	41.00 PK	74.00	-33.00	1.06 H	35	5.70	35.30
3	4874.00	31.40 AV	54.00	-22.60	1.06 H	35	-3.90	35.30
4	7311.00	46.10 PK	74.00	-27.90	1.10 H	203	5.40	40.70
4	7311.00	34.30 AV	54.00	-19.70	1.10 H	203	-6.40	40.70

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	*2437.00	121.20 PK			1.26 V	8	91.30	29.90
1	*2437.00	113.20 AV			1.26 V	8	83.30	29.90
2	2688.00	51.90 PK	74.00	-22.10	1.14 V	0	21.20	30.70
2	2688.00	50.00 AV	54.00	-4.00	1.14 V	0	19.30	30.70
3	4874.00	41.20 PK	74.00	-32.80	1.11 V	96	5.90	35.30
3	4874.00	31.40 AV	54.00	-22.60	1.11 V	96	-4.00	35.30
4	7311.00	47.60 PK	74.00	-26.40	1.21 V	0	7.00	40.70
4	7311.00	32.60 AV	54.00	-21.40	1.21 V	0	-8.00	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 11	MODEL	AP-80MB
MODULATION TYPE	CCK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2462.00	98.80 PK			1.16 H	1	68.80	30.00
1	*2462.00	91.60 AV			1.16 H	1	61.60	30.00
2	2483.50	45.30 PK	74.00	-28.70	1.20 H	320	15.20	30.10
2	2483.50	34.00 AV	54.00	-20.00	1.20 H	320	3.90	30.10
3	2487.00	46.30 PK	74.00	-27.70	1.11 H	333	16.20	30.10
3	2487.00	34.30 AV	54.00	-19.70	1.11 H	333	4.20	30.10
4	2688.00	44.30 PK	74.00	-29.70	1.23 H	18	13.60	30.70
4	2688.00	35.90 AV	54.00	-18.10	1.23 H	18	5.20	30.70
5	4924.00	41.30 PK	74.00	-32.70	1.02 H	2	5.70	35.50
5	4924.00	30.40 AV	54.00	-23.60	1.02 H	2	-5.10	35.50
6	7386.00	46.20 PK	74.00	-27.80	1.10 H	356	5.30	40.80
6	7386.00	36.20 AV	54.00	-17.80	1.10 H	356	-4.60	40.80

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	*2462.00	118.30 PK			1.15 V	42	88.30	30.00
1	*2462.00	110.50 AV			1.15 V	42	80.50	30.00
2	2483.50	64.60 PK	74.00	-9.40	1.20 V	50	34.50	30.10
2	2483.50	52.90 AV	54.00	-1.10	1.20 V	50	22.80	30.10
3	2487.00	65.60 PK	74.00	-8.40	1.29 V	34	35.50	30.10
3	2487.00	53.60 AV	54.00	-0.40	1.29 V	34	23.50	30.10
4	2688.00	50.60 PK	74.00	-23.40	1.19 V	340	19.90	30.70
4	2688.00	49.40 AV	54.00	-4.60	1.19 V	340	18.70	30.70
5	4924.00	42.80 PK	74.00	-31.20	1.54 V	1	7.30	35.50
5	4924.00	31.80 AV	54.00	-22.20	1.54 V	1	-3.70	35.50
6	7386.00	47.20 PK	74.00	-26.80	1.10 V	358	6.40	40.80
6	7386.00	37.40 AV	54.00	-16.60	1.10 V	358	-3.40	40.80

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 1	**MODEL**	AP-80MB
MODULATION TYPE	BPSK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	45.60 PK	74.00	-28.40	1.10 H	20	15.90	29.70
1	2390.00	34.30 AV	54.00	-19.70	1.10 H	20	4.60	29.70
2	*2412.00	90.70 PK			1.26 H	16	60.90	29.80
2	*2412.00	81.60 AV			1.26 H	16	51.80	29.80
3	2688.00	43.10 PK	74.00	-30.90	1.11 H	220	12.40	30.70
3	2688.00	35.70 AV	54.00	-18.30	1.11 H	220	5.00	30.70
4	4824.00	40.80 PK	74.00	-33.20	1.00 H	2	5.70	35.10
4	4824.00	30.90 AV	54.00	-23.10	1.00 H	2	-4.20	35.10
5	7236.00	45.90 PK	74.00	-28.10	4.00 H	109	5.40	40.50
5	7236.00	34.80 AV	54.00	-19.20	4.00 H	109	-5.70	40.50

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	2390.00	64.60 PK	74.00	-9.40	1.02 V	3	34.90	29.70
1	2390.00	53.60 AV	54.00	-0.40	1.02 V	3	23.90	29.70
2	*2412.00	109.70 PK			1.50 V	4	79.90	29.80
2	*2412.00	100.90 AV			1.50 V	4	71.10	29.80
3	2688.00	51.00 PK	74.00	-23.00	1.42 V	54	20.30	30.70
3	2688.00	49.40 AV	54.00	-4.60	1.42 V	54	18.70	30.70
4	4824.00	41.40 PK	74.00	-32.60	1.54 V	24	6.30	35.10
4	4824.00	32.00 AV	54.00	-22.00	1.54 V	24	-3.10	35.10
5	7236.00	48.00 PK	74.00	-26.00	1.58 V	97	7.50	40.50
5	7236.00	37.80 AV	54.00	-16.20	1.58 V	97	-2.70	40.50

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	MODEL	AP-80MB
MODULATION TYPE	BPSK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2437.00	98.00 PK			1.31 H	353	68.10	29.90
1	*2437.00	90.10 AV			1.31 H	353	60.20	29.90
2	2688.00	45.10 PK	74.00	-28.90	1.53 H	69	14.40	30.70
2	2688.00	36.30 AV	54.00	-17.70	1.53 H	69	5.60	30.70
3	4874.00	41.50 PK	74.00	-32.50	1.47 H	24	6.20	35.30
3	4874.00	33.80 AV	54.00	-20.20	1.47 H	24	-1.50	35.30
4	7311.00	47.20 PK	74.00	-26.80	1.23 H	65	6.50	40.70
4	7311.00	34.30 AV	54.00	-19.70	1.23 H	65	-6.40	40.70

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	*2437.00	117.70 PK			1.51 V	341	87.80	29.90
1	*2437.00	108.90 AV			1.51 V	341	79.00	29.90
2	2688.00	50.10 PK	74.00	-23.90	1.02 V	309	19.40	30.70
2	2688.00	48.40 AV	54.00	-5.60	1.02 V	309	17.70	30.70
3	4874.00	42.20 PK	74.00	-31.80	1.32 V	65	6.90	35.30
3	4874.00	32.20 AV	54.00	-21.80	1.32 V	65	-3.10	35.30
4	7311.00	47.00 PK	74.00	-27.00	1.02 V	36	6.30	40.70
4	7311.00	36.60 AV	54.00	-17.40	1.02 V	36	-4.10	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 11	MODEL	AP-80MB
MODULATION TYPE	BPSK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2462.00	93.90 PK			1.49 H	34	63.90	30.00
1	*2462.00	84.90 AV			1.49 H	34	54.90	30.00
2	2483.50	44.50 PK	74.00	-29.50	1.50 H	6	14.40	30.10
2	2483.50	32.30 AV	54.00	-21.70	1.50 H	6	2.20	30.10
3	2688.00	44.10 PK	74.00	-29.90	1.59 H	353	13.40	30.70
3	2688.00	35.40 AV	54.00	-18.60	1.59 H	353	4.70	30.70
4	4924.00	41.80 PK	74.00	-32.20	1.24 H	57	6.30	35.50
4	4924.00	29.40 AV	54.00	-24.60	1.24 H	57	-6.10	35.50
5	7386.00	46.50 PK	74.00	-27.50	1.36 H	98	5.70	40.80
5	7386.00	36.40 AV	54.00	-17.60	1.36 H	98	-4.40	40.80

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	*2462.00	114.30 PK			1.14 V	352	84.30	30.00
1	*2462.00	105.60 AV			1.14 V	352	75.60	30.00
2	2483.50	64.90 PK	74.00	-9.10	1.15 V	359	34.80	30.10
2	2483.50	53.00 AV	54.00	-1.00	1.15 V	359	22.90	30.10
3	2688.00	50.90 PK	74.00	-23.10	1.40 V	20	20.20	30.70
3	2688.00	49.40 AV	54.00	-4.60	1.40 V	20	18.70	30.70
4	4924.00	41.30 PK	74.00	-32.70	1.80 V	287	5.70	35.50
4	4924.00	31.40 AV	54.00	-22.60	1.80 V	287	-4.10	35.50
5	7386.00	46.30 PK	74.00	-27.70	1.54 V	2	5.50	40.80
5	7386.00	36.90 AV	54.00	-17.10	1.54 V	2	-3.90	40.80

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g Turbo OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	**MODEL**	AP-80MB
MODULATION TYPE	BPSK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	12Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	42.70 PK	74.00	-31.30	1.38 H	290	13.00	29.70
1	2390.00	34.30 AV	54.00	-19.70	1.38 H	290	4.60	29.70
2	*2437.00	90.50 PK			1.50 H	221	60.60	29.90
2	*2437.00	82.30 AV			1.50 H	221	52.40	29.90
3	2483.50	39.90 PK	74.00	-34.10	1.43 H	200	9.80	30.10
3	2483.50	31.10 AV	54.00	-22.90	1.43 H	200	1.00	30.10
4	2688.00	43.40 PK	74.00	-30.60	1.02 H	306	12.70	30.70
4	2688.00	34.40 AV	54.00	-19.60	1.02 H	306	3.70	30.70
5	4874.00	40.10 PK	74.00	-33.90	1.11 H	68	4.80	35.30
5	4874.00	30.20 AV	54.00	-23.80	1.11 H	68	-5.10	35.30
6	7311.00	46.90 PK	74.00	-27.10	1.54 H	208	6.20	40.70
6	7311.00	35.50 AV	54.00	-18.50	1.54 H	208	-5.10	40.70

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	2390.00	63.50 PK	74.00	-10.50	1.60 V	358	33.80	29.70
1	**2390.00**	**53.70 AV**	**54.00**	**-0.30**	**1.60 V**	**358**	**24.00**	**29.70**
2	*2437.00	111.30 PK			1.04 V	4	81.40	29.90
2	*2437.00	101.70 AV			1.04 V	4	71.80	29.90
3	2483.50	60.70 PK	74.00	-13.30	1.55 V	3	30.60	30.10
3	2483.50	50.50 AV	54.00	-3.50	1.55 V	3	20.40	30.10
4	2688.00	48.90 PK	74.00	-25.10	1.40 V	23	18.20	30.70
4	2688.00	47.40 AV	54.00	-6.60	1.40 V	23	16.70	30.70
5	4874.00	41.60 PK	74.00	-32.40	1.02 V	2	6.30	35.30
5	4874.00	31.20 AV	54.00	-22.80	1.02 V	2	-4.10	35.30
6	7311.00	48.20 PK	74.00	-25.80	1.53 V	62	7.50	40.70
6	7311.00	36.00 AV	54.00	-18.00	1.53 V	62	-4.70	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

4.2.8 TEST RESULTS (ANTENNA 2)

Below 1GHz Worst-Case Data

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 961hPa	**TESTED BY**	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	200.00	24.20 QP	43.50	-19.30	1.70 H	300	12.60	11.60
2	250.02	33.20 QP	46.00	-12.80	1.49 H	103	19.40	13.80
3	320.00	30.20 QP	46.00	-15.80	1.01 H	1	13.20	17.00
4	375.03	26.40 QP	46.00	-19.60	1.00 H	117	8.20	18.20
5	399.99	22.00 QP	46.00	-24.00	1.00 H	117	3.00	19.00
6	500.04	26.10 QP	46.00	-19.90	1.00 H	137	4.30	21.80
7	549.99	31.90 QP	46.00	-14.10	1.00 H	186	8.60	23.20
8	600.00	26.10 QP	46.00	-19.90	1.86 H	108	1.60	24.50

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	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	36.80 QP	46.00	-9.20	1.25 V	347	14.50	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

802.11b DSSS modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 1	**MODEL**	AP-80MB
MODULATION TYPE	CCK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	51.10 PK	74.00	-22.90	1.17 H	311	21.40	29.70
1	2390.00	38.80 AV	54.00	-15.20	1.17 H	311	9.10	29.70
2	*2412.00	97.20 PK			1.18 H	325	67.40	29.80
2	*2412.00	90.40 AV			1.18 H	325	60.60	29.80
3	2688.00	42.40 PK	74.00	-31.60	1.11 H	8	11.70	30.70
3	2688.00	34.10 AV	54.00	-19.90	1.11 H	8	3.40	30.70
4	4824.00	43.00 PK	74.00	-31.00	1.36 H	360	7.90	35.10
4	4824.00	31.80 AV	54.00	-22.20	1.36 H	360	-3.30	35.10
5	7236.00	46.40 PK	74.00	-27.60	1.54 H	24	5.90	40.50
5	7236.00	36.20 AV	54.00	-17.80	1.54 H	24	-4.30	40.50

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	2390.00	65.40 PK	74.00	-8.60	1.20 V	359	35.70	29.70
1	2390.00	53.30 AV	54.00	-0.70	1.20 V	359	23.60	29.70
2	*2412.00	111.50 PK			1.18 V	358	81.70	29.80
2	*2412.00	104.50 AV			1.18 V	358	74.70	29.80
3	2688.00	50.00 PK	74.00	-24.00	1.14 V	348	19.30	30.70
3	2688.00	49.10 AV	54.00	-4.90	1.14 V	348	18.40	30.70
4	4824.00	42.40 PK	74.00	-31.60	1.52 V	24	7.30	35.10
4	4824.00	33.00 AV	54.00	-21.00	1.52 V	24	-2.10	35.10
5	7236.00	49.10 PK	74.00	-24.90	1.65 V	34	8.60	40.50
5	7236.00	38.10 AV	54.00	-15.90	1.65 V	34	-2.40	40.50

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	MODEL	AP-80MB
MODULATION TYPE	CCK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2437.00	105.20 PK			1.15 H	29	75.30	29.90
1	*2437.00	98.00 AV			1.15 H	29	68.10	29.90
2	2688.00	42.40 PK	74.00	-31.60	1.63 H	65	11.70	30.70
2	2688.00	33.80 AV	54.00	-20.20	1.63 H	65	3.10	30.70
3	4874.00	41.10 PK	74.00	-32.90	1.43 H	82	5.80	35.30
3	4874.00	31.20 AV	54.00	-22.80	1.43 H	82	-4.10	35.30
4	7311.00	46.20 PK	74.00	-27.80	1.47 H	14	5.50	40.70
4	7311.00	36.60 AV	54.00	-17.40	1.47 H	14	-4.10	40.70

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	*2437.00	119.80 PK			1.22 V	341	89.90	29.90
1	*2437.00	112.20 AV			1.22 V	341	82.30	29.90
2	2688.00	50.80 PK	74.00	-23.20	1.21 V	351	20.10	30.70
2	2688.00	49.90 AV	54.00	-4.10	1.21 V	351	19.20	30.70
3	4874.00	44.70 PK	74.00	-29.30	1.20 V	25	9.40	35.30
3	4874.00	33.60 AV	54.00	-20.40	1.20 V	25	-1.70	35.30
4	7311.00	48.40 PK	74.00	-25.60	1.11 V	3	7.70	40.70
4	7311.00	38.10 AV	54.00	-15.90	1.11 V	3	-2.60	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 11	MODEL	AP-80MB
MODULATION TYPE	CCK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2462.00	104.90 PK			1.00 H	304	74.90	30.00
1	*2462.00	97.80 AV			1.00 H	304	67.80	30.00
2	2483.50	51.10 PK	74.00	-22.90	1.01 H	120	21.00	30.10
2	2483.50	39.60 AV	54.00	-14.40	1.01 H	120	9.50	30.10
3	2487.00	52.20 PK	74.00	-21.80	1.08 H	133	22.10	30.10
3	2487.00	40.00 AV	54.00	-14.00	1.08 H	133	9.90	30.10
4	2688.00	41.50 PK	74.00	-32.50	1.54 H	329	10.80	30.70
4	2688.00	33.40 AV	54.00	-20.60	1.54 H	329	2.70	30.70
5	4924.00	41.30 PK	74.00	-32.70	1.02 H	245	5.70	35.50
5	4924.00	31.40 AV	54.00	-22.60	1.02 H	245	-4.10	35.50
6	7386.00	47.60 PK	74.00	-26.40	1.40 H	343	6.80	40.80
6	7386.00	36.50 AV	54.00	-17.50	1.40 H	343	-4.30	40.80

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	*2462.00	118.30 PK			1.25 V	358	88.30	30.00
1	*2462.00	110.80 AV			1.25 V	358	80.80	30.00
2	2483.50	64.90 PK	74.00	-9.10	1.25 V	359	34.80	30.10
2	2483.50	52.60 AV	54.00	-1.40	1.25 V	359	22.50	30.10
3	2487.00	66.00 PK	74.00	-8.00	1.15 V	352	35.90	30.10
3	2487.00	53.00 AV	54.00	-1.00	1.15 V	352	22.90	30.10
4	2688.00	50.90 PK	74.00	-23.10	1.15 V	330	20.20	30.70
4	2688.00	50.00 AV	54.00	-4.00	1.15 V	330	19.30	30.70
5	4924.00	45.00 PK	74.00	-29.00	1.32 V	15	9.40	35.50
5	4924.00	34.00 AV	54.00	-20.00	1.32 V	15	-1.60	35.50
6	7386.00	48.80 PK	74.00	-25.20	1.26 V	46	8.00	40.80
6	7386.00	38.70 AV	54.00	-15.30	1.26 V	46	-2.10	40.80

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 1	**MODEL**	AP-80MB
MODULATION TYPE	BPSK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	54.30 PK	74.00	-19.70	1.11 H	11	24.60	29.70
1	2390.00	39.20 AV	54.00	-14.80	1.11 H	11	9.50	29.70
2	*2412.00	95.10 PK			1.14 H	41	65.30	29.80
2	*2412.00	87.00 AV			1.14 H	41	57.20	29.80
3	2688.00	40.40 PK	74.00	-33.60	1.36 H	65	9.70	30.70
3	2688.00	32.70 AV	54.00	-21.30	1.36 H	65	2.00	30.70
4	4824.00	41.30 PK	74.00	-32.70	1.02 H	39	6.20	35.10
4	4824.00	31.60 AV	54.00	-22.40	1.02 H	39	-3.50	35.10
5	7236.00	46.90 PK	74.00	-27.10	1.09 H	326	6.40	40.50
5	7236.00	36.30 AV	54.00	-17.70	1.09 H	326	-4.20	40.50

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	2390.00	69.70 PK	74.00	-4.30	1.11 V	353	40.00	29.70
1	2390.00	52.60 AV	54.00	-1.40	1.11 V	353	22.90	29.70
2	*2412.00	110.50 PK			1.10 V	359	80.70	29.80
2	*2412.00	100.40 AV			1.10 V	359	70.60	29.80
3	2688.00	50.80 PK	74.00	-23.20	1.04 V	336	20.10	30.70
3	2688.00	49.60 AV	54.00	-4.40	1.04 V	336	18.90	30.70
4	4824.00	42.40 PK	74.00	-31.60	1.54 V	247	7.30	35.10
4	4824.00	33.00 AV	54.00	-21.00	1.54 V	247	-2.10	35.10
5	7236.00	46.80 PK	74.00	-27.20	1.02 V	24	6.30	40.50
5	7236.00	36.40 AV	54.00	-17.60	1.02 V	24	-4.10	40.50

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	MODEL	AP-80MB
MODULATION TYPE	BPSK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2437.00	103.70 PK			1.18 H	40	73.80	29.90
1	*2437.00	94.50 AV			1.18 H	40	64.60	29.90
2	2688.00	43.70 PK	74.00	-30.30	1.53 H	62	13.00	30.70
2	2688.00	34.10 AV	54.00	-19.90	1.53 H	62	3.40	30.70
3	4874.00	42.10 PK	74.00	-31.90	1.36 H	98	6.80	35.30
3	4874.00	31.50 AV	54.00	-22.50	1.36 H	98	-3.80	35.30
4	7311.00	46.00 PK	74.00	-28.00	1.26 H	98	5.30	40.70
4	7311.00	35.90 AV	54.00	-18.10	1.26 H	98	-4.80	40.70

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	*2437.00	116.90 PK			1.27 V	342	87.00	29.90
1	*2437.00	107.70 AV			1.27 V	342	77.80	29.90
2	2688.00	51.20 PK	74.00	-22.80	1.43 V	62	20.50	30.70
2	2688.00	50.10 AV	54.00	-3.90	1.43 V	62	19.40	30.70
3	4874.00	44.80 PK	74.00	-29.20	1.57 V	97	9.50	35.30
3	4874.00	33.50 AV	54.00	-20.50	1.57 V	97	-1.80	35.30
4	7311.00	50.30 PK	74.00	-23.70	1.03 V	13	9.60	40.70
4	7311.00	39.20 AV	54.00	-14.80	1.03 V	13	-1.40	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 11	MODEL	AP-80MB
MODULATION TYPE	BPSK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2462.00	101.40 PK			1.19 H	45	71.30	30.00
1	*2462.00	92.80 AV			1.19 H	45	62.80	30.00
2	2483.50	51.80 PK	74.00	-22.20	1.18 H	38	21.70	30.10
2	2483.50	39.60 AV	54.00	-14.40	1.18 H	38	9.50	30.10
3	2688.00	42.30 PK	74.00	-31.70	1.02 H	45	11.60	30.70
3	2688.00	34.00 AV	54.00	-20.00	1.02 H	45	3.30	30.70
4	4924.00	45.70 PK	74.00	-28.30	1.45 H	325	10.10	35.50
4	4924.00	31.50 AV	54.00	-22.50	1.45 H	325	-4.10	35.50
5	7386.00	46.80 PK	74.00	-27.20	1.02 H	74	6.00	40.80
5	7386.00	35.20 AV	54.00	-18.80	1.02 H	74	-5.60	40.80

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	*2462.00	115.00 PK			1.19 V	2	85.00	30.00
1	*2462.00	106.70 AV			1.19 V	2	76.70	30.00
2	2483.50	65.40 PK	74.00	-8.60	1.21 V	11	35.30	30.10
2	2483.50	53.50 AV	54.00	-0.50	1.21 V	11	23.40	30.10
3	2688.00	50.40 PK	74.00	-23.60	1.00 V	23	19.70	30.70
3	2688.00	49.30 AV	54.00	-4.70	1.00 V	23	18.60	30.70
4	4924.00	42.70 PK	74.00	-31.30	1.55 V	258	7.20	35.50
4	4924.00	31.40 AV	54.00	-22.60	1.55 V	258	-4.10	35.50
5	7386.00	49.30 PK	74.00	-24.70	1.00 V	23	8.50	40.80
5	7386.00	38.80 AV	54.00	-15.20	1.00 V	23	-2.00	40.80

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g Turbo OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	**MODEL**	AP-80MB
MODULATION TYPE	BPSK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	12Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	47.80 PK	74.00	-26.20	1.60 H	300	18.10	29.70
1	2390.00	37.80 AV	54.00	-16.20	1.60 H	300	8.10	29.70
2	*2437.00	94.20 PK			1.18 H	336	64.30	29.90
2	*2437.00	86.20 AV			1.18 H	336	56.30	29.90
3	2483.50	46.80 PK	74.00	-27.20	1.44 H	350	16.70	30.10
3	2483.50	34.10 AV	54.00	-19.90	1.44 H	350	4.00	30.10
4	2688.00	41.30 PK	74.00	-32.70	1.47 H	78	10.60	30.70
4	2688.00	33.00 AV	54.00	-21.00	1.47 H	78	2.30	30.70
5	4874.00	40.20 PK	74.00	-33.80	1.50 H	27	4.90	35.30
5	4874.00	31.40 AV	54.00	-22.60	1.50 H	27	-3.90	35.30
6	7311.00	47.60 PK	74.00	-26.40	1.02 H	36	6.90	40.70
6	7311.00	35.50 AV	54.00	-18.50	1.02 H	36	-5.10	40.70

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	2390.00	61.60 PK	74.00	-12.40	1.09 V	1	31.90	29.70
1	2390.00	52.50 AV	54.00	-1.50	1.09 V	1	22.80	29.70
2	*2437.00	109.70 PK			1.08 V	0	79.80	29.90
2	*2437.00	100.90 AV			1.08 V	0	71.00	29.90
3	2483.50	60.60 PK	74.00	-13.40	1.01 V	354	30.50	30.10
3	2483.50	48.80 AV	54.00	-5.20	1.01 V	354	18.70	30.10
4	2688.00	50.20 PK	74.00	-23.80	1.23 V	3	19.50	30.70
4	2688.00	49.20 AV	54.00	-4.80	1.23 V	3	18.50	30.70
5	4874.00	42.90 PK	74.00	-31.10	1.15 V	36	7.60	35.30
5	4874.00	33.20 AV	54.00	-20.80	1.15 V	36	-2.10	35.30
6	7311.00	47.00 PK	74.00	-27.00	1.63 V	234	6.30	40.70
6	7311.00	38.30 AV	54.00	-15.70	1.63 V	234	-2.40	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

4.2.9 TEST RESULTS (ANTENNA 3)

Below 1GHz Worst-Case Data

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 961hPa	**TESTED BY**	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	200.00	24.30 QP	43.50	-19.20	1.05 H	36	13.80	10.50
2	250.01	34.20 QP	46.00	-11.80	1.14 H	5	20.60	13.60
3	320.01	30.00 QP	46.00	-16.00	1.11 H	5	13.80	16.20
4	375.00	24.90 QP	46.00	-21.10	1.00 H	333	7.40	17.50
5	400.00	22.00 QP	46.00	-24.00	1.00 H	117	3.60	18.40
6	500.01	25.30 QP	46.00	-20.70	1.05 H	254	5.10	20.20
7	550.00	30.60 QP	46.00	-15.40	1.20 H	25	8.50	22.10
8	600.09	26.90 QP	46.00	-19.10	1.07 H	44	5.00	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	120.01	30.00 QP	43.50	-13.50	1.13 V	189	18.50	11.50
2	200.01	28.60 QP	43.50	-14.90	1.60 V	341	17.50	11.20
3	240.00	30.60 QP	46.00	-15.40	1.35 V	39	17.70	12.90
4	250.00	29.60 QP	46.00	-16.40	1.43 V	249	16.30	13.30
5	320.01	31.20 QP	46.00	-14.80	1.43 V	56	14.70	16.50
6	399.98	30.90 QP	46.00	-15.10	1.54 V	36	12.50	18.40
7	550.03	34.90 QP	46.00	-11.10	1.75 V	30	12.60	22.30
8	600.00	31.50 QP	46.00	-14.50	1.11 V	73	8.00	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

802.11b DSSS modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 1	**MODEL**	AP-80MB
MODULATION TYPE	CCK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2387.00	45.90 PK	74.00	-28.10	1.00 H	316	16.20	29.70
1	2387.00	36.90 AV	54.00	-17.10	1.00 H	316	7.20	29.70
2	2390.00	46.70 PK	74.00	-27.30	1.00 H	316	17.00	29.70
2	2390.00	36.70 AV	54.00	-17.30	1.00 H	316	7.00	29.70
3	*2412.00	98.60 PK			1.00 H	316	68.80	29.80
3	*2412.00	90.80 AV			1.00 H	316	61.00	29.80
4	2688.00	39.10 PK	74.00	-34.90	1.30 H	312	8.40	30.70
4	2688.00	33.10 AV	54.00	-20.90	1.30 H	312	2.40	30.70
5	4824.00	42.30 PK	74.00	-31.70	1.15 H	138	7.20	35.10
5	4824.00	30.00 AV	54.00	-24.00	1.15 H	138	-5.10	35.10
6	7236.00	48.00 PK	74.00	-26.00	1.21 H	21	7.50	40.50
6	7236.00	36.20 AV	54.00	-17.80	1.21 H	21	-4.30	40.50

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	2387.00	62.40 PK	74.00	-11.60	1.22 V	2	32.70	29.70
1	2387.00	53.50 AV	54.00	-0.50	1.22 V	2	23.80	29.70
2	2390.00	63.20 PK	74.00	-10.80	1.22 V	2	33.50	29.70
2	2390.00	53.30 AV	54.00	-0.70	1.22 V	2	23.60	29.70
3	*2412.00	115.10 PK			1.22 V	2	85.30	29.80
3	*2412.00	107.40 AV			1.22 V	2	77.60	29.80
4	2688.00	49.20 PK	74.00	-24.80	1.13 V	343	18.50	30.70
4	2688.00	48.10 AV	54.00	-5.90	1.13 V	343	17.40	30.70
5	4824.00	42.20 PK	74.00	-31.80	1.12 V	135	7.10	35.10
5	4824.00	30.00 AV	54.00	-24.00	1.12 V	135	-5.10	35.10
6	7236.00	48.40 PK	74.00	-25.60	1.05 V	109	7.90	40.50
6	7236.00	36.20 AV	54.00	-17.80	1.05 V	109	-4.30	40.50

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	MODEL	AP-80MB
MODULATION TYPE	CCK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2437.00	104.30 PK			1.48 H	285	74.40	29.90
1	*2437.00	97.10 AV			1.48 H	285	67.20	29.90
2	2688.00	39.20 PK	74.00	-34.80	1.20 H	359	8.50	30.70
2	2688.00	34.90 AV	54.00	-19.10	1.20 H	359	4.20	30.70
3	4874.00	42.20 PK	74.00	-31.80	1.13 H	123	6.90	35.30
3	4874.00	30.20 AV	54.00	-23.80	1.13 H	123	-5.10	35.30
4	7311.00	48.40 PK	74.00	-25.60	1.23 H	10	7.70	40.70
4	7311.00	36.40 AV	54.00	-17.60	1.23 H	10	-4.30	40.70

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	*2437.00	121.40 PK			1.29 V	4	91.50	29.90
1	*2437.00	113.60 AV			1.29 V	4	83.70	29.90
2	2688.00	50.40 PK	74.00	-23.60	1.16 V	350	19.70	30.70
2	2688.00	49.20 AV	54.00	-4.80	1.16 V	350	18.50	30.70
3	4874.00	42.10 PK	74.00	-31.90	1.13 V	112	6.80	35.30
3	4874.00	30.20 AV	54.00	-23.80	1.13 V	112	-5.10	35.30
4	7311.00	48.50 PK	74.00	-25.50	1.08 V	100	7.80	40.70
4	7311.00	36.20 AV	54.00	-17.80	1.08 V	100	-4.50	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 11	MODEL	AP-80MB
MODULATION TYPE	CCK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2462.00	102.00 PK			1.00 H	315	72.00	30.00
1	*2462.00	95.20 AV			1.00 H	315	65.20	30.00
2	2483.50	47.00 PK	74.00	-27.00	1.00 H	315	16.90	30.10
2	2483.50	37.00 AV	54.00	-17.00	1.00 H	315	6.90	30.10
3	2487.00	48.00 PK	74.00	-26.00	1.00 H	315	17.90	30.10
3	2487.00	38.60 AV	54.00	-15.40	1.00 H	315	8.50	30.10
4	2688.00	39.30 PK	74.00	-34.70	1.18 H	60	8.60	30.70
4	2688.00	32.20 AV	54.00	-21.80	1.18 H	60	1.50	30.70
5	4924.00	42.40 PK	74.00	-31.60	1.15 H	129	6.80	35.50
5	4924.00	30.50 AV	54.00	-23.50	1.15 H	129	-5.10	35.50
6	7386.00	48.50 PK	74.00	-25.50	1.24 H	25	7.70	40.80
6	7386.00	36.40 AV	54.00	-17.60	1.24 H	25	-4.40	40.80

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	*2462.00	117.10 PK			1.23 V	28	87.10	30.00
1	*2462.00	109.80 AV			1.23 V	28	79.80	30.00
2	2483.50	62.40 PK	74.00	-11.60	1.23 V	28	32.30	30.10
2	2483.50	51.60 AV	54.00	-2.40	1.23 V	28	21.50	30.10
3	2487.00	63.40 PK	74.00	-10.60	1.23 V	28	33.30	30.10
3	2487.00	53.10 AV	54.00	-0.90	1.23 V	28	23.00	30.10
4	2688.00	50.20 PK	74.00	-23.80	1.17 V	358	19.50	30.70
4	2688.00	49.30 AV	54.00	-4.70	1.17 V	358	18.60	30.70
5	4924.00	42.50 PK	74.00	-31.50	1.11 V	108	6.90	35.50
5	4924.00	30.60 AV	54.00	-23.40	1.11 V	108	-5.00	35.50
6	7386.00	48.60 PK	74.00	-25.40	1.09 V	96	7.80	40.80
6	7386.00	36.70 AV	54.00	-17.30	1.09 V	96	-4.10	40.80

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 1	**MODEL**	AP-80MB
MODULATION TYPE	BPSK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	48.00 PK	74.00	-26.00	1.00 H	316	18.30	29.70
1	2390.00	36.80 AV	54.00	-17.20	1.00 H	316	7.10	29.70
2	*2412.00	93.10 PK			1.00 H	316	63.30	29.80
2	*2412.00	84.10 AV			1.00 H	316	54.30	29.80
3	2688.00	38.30 PK	74.00	-35.70	1.08 H	6	7.60	30.70
3	2688.00	33.10 AV	54.00	-20.90	1.08 H	6	2.40	30.70
4	4824.00	42.20 PK	74.00	-31.80	1.11 H	133	7.10	35.10
4	4824.00	30.00 AV	54.00	-24.00	1.11 H	133	-5.10	35.10
5	7236.00	48.10 PK	74.00	-25.90	1.26 H	16	7.60	40.50
5	7236.00	36.10 AV	54.00	-17.90	1.26 H	16	-4.40	40.50

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	2390.00	64.50 PK	74.00	-9.50	1.21 V	0	34.80	29.70
1	2390.00	53.20 AV	54.00	-0.80	1.21 V	0	23.50	29.70
2	*2412.00	109.60 PK			1.21 V	0	79.80	29.80
2	*2412.00	100.50 AV			1.21 V	0	70.70	29.80
3	2688.00	50.50 PK	74.00	-23.50	1.18 V	340	19.80	30.70
3	2688.00	46.20 AV	54.00	-7.80	1.18 V	340	15.50	30.70
4	4824.00	41.90 PK	74.00	-32.10	1.15 V	127	6.80	35.10
4	4824.00	29.80 AV	54.00	-24.20	1.15 V	127	-5.30	35.10
5	7236.00	48.30 PK	74.00	-25.70	1.09 V	128	7.80	40.50
5	7236.00	36.00 AV	54.00	-18.00	1.09 V	128	-4.50	40.50

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	MODEL	AP-80MB
MODULATION TYPE	BPSK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2437.00	101.20 PK			1.49 H	285	71.30	29.90
1	*2437.00	91.90 AV			1.49 H	285	62.00	29.90
2	2688.00	38.90 PK	74.00	-35.10	1.21 H	6	8.20	30.70
2	2688.00	32.50 AV	54.00	-21.50	1.21 H	6	1.80	30.70
3	4874.00	42.30 PK	74.00	-31.70	1.19 H	136	7.00	35.30
3	4874.00	30.10 AV	54.00	-23.90	1.19 H	136	-5.20	35.30
4	7311.00	48.50 PK	74.00	-25.50	1.28 H	28	7.80	40.70
4	7311.00	36.20 AV	54.00	-17.80	1.28 H	28	-4.50	40.70

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	*2437.00	118.20 PK			1.28 V	7	88.30	29.90
1	*2437.00	108.80 AV			1.28 V	7	78.90	29.90
2	2688.00	50.20 PK	74.00	-23.80	1.19 V	3	19.50	30.70
2	2688.00	49.40 AV	54.00	-4.60	1.19 V	3	18.70	30.70
3	4874.00	42.20 PK	74.00	-31.80	1.11 V	122	6.90	35.30
3	4874.00	30.10 AV	54.00	-23.90	1.11 V	122	-5.20	35.30
4	7311.00	48.20 PK	74.00	-25.80	1.02 V	125	7.50	40.70
4	7311.00	36.40 AV	54.00	-17.60	1.02 V	125	-4.30	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 11	MODEL	AP-80MB
MODULATION TYPE	BPSK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2462.00	98.40 PK			1.00 H	314	68.40	30.00
1	*2462.00	89.80 AV			1.00 H	314	59.80	30.00
2	2483.50	52.00 PK	74.00	-22.00	1.00 H	314	21.90	30.10
2	2483.50	37.80 AV	54.00	-16.20	1.00 H	314	7.70	30.10
3	2688.00	39.20 PK	74.00	-34.80	1.10 H	8	8.50	30.70
3	2688.00	32.30 AV	54.00	-21.70	1.10 H	8	1.60	30.70
4	4924.00	42.70 PK	74.00	-31.30	1.25 H	131	7.10	35.50
4	4924.00	30.50 AV	54.00	-23.50	1.25 H	131	-5.10	35.50
5	7386.00	48.80 PK	74.00	-25.20	1.20 H	28	8.00	40.80
5	7386.00	36.70 AV	54.00	-17.30	1.20 H	28	-4.10	40.80

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	*2462.00	114.40 PK			1.00 V	4	84.40	30.00
1	*2462.00	105.00 AV			1.00 V	4	75.00	30.00
2	2483.50	68.00 PK	74.00	-6.00	1.00 V	4	37.90	30.10
2	2483.50	53.00 AV	54.00	-1.00	1.00 V	4	22.90	30.10
3	2688.00	50.20 PK	74.00	-23.80	1.11 V	4	19.50	30.70
3	2688.00	49.10 AV	54.00	-4.90	1.11 V	4	18.40	30.70
4	4924.00	42.70 PK	74.00	-31.30	1.12 V	120	7.10	35.50
4	4924.00	30.50 AV	54.00	-23.50	1.12 V	120	-5.10	35.50
5	7386.00	48.90 PK	74.00	-25.10	1.05 V	121	8.10	40.80
5	7386.00	36.40 AV	54.00	-17.60	1.05 V	121	-4.40	40.80

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g Turbo OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	**MODEL**	AP-80MB
MODULATION TYPE	BPSK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	12Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	45.60 PK	74.00	-28.40	1.00 H	317	15.90	29.70
1	2390.00	36.70 AV	54.00	-17.30	1.00 H	317	7.00	29.70
2	*2437.00	93.40 PK			1.00 H	317	63.50	29.90
2	*2437.00	84.70 AV			1.00 H	317	54.80	29.90
3	2483.50	40.80 PK	74.00	-33.20	1.00 H	317	10.70	30.10
3	2483.50	33.50 AV	54.00	-20.50	1.00 H	317	3.40	30.10
4	2688.00	39.10 PK	74.00	-34.90	1.09 H	330	8.40	30.70
4	2688.00	32.10 AV	54.00	-21.90	1.09 H	330	1.40	30.70
5	4874.00	42.50 PK	74.00	-31.50	1.07 H	135	7.20	35.30
5	4874.00	30.10 AV	54.00	-23.90	1.07 H	135	-5.20	35.30
6	7311.00	48.70 PK	74.00	-25.30	1.31 H	19	8.00	40.70
6	7311.00	36.10 AV	54.00	-17.90	1.31 H	19	-4.60	40.70

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	2390.00	62.40 PK	74.00	-11.60	1.00 V	2	32.70	29.70
1	2390.00	53.30 AV	54.00	-0.70	1.00 V	2	23.60	29.70
2	*2437.00	110.20 PK			1.00 V	2	80.30	29.90
2	*2437.00	101.30 AV			1.00 V	2	71.40	29.90
3	2483.50	57.70 PK	74.00	-16.30	1.00 V	2	27.60	30.10
3	2483.50	50.10 AV	54.00	-3.90	1.00 V	2	20.00	30.10
4	2688.00	49.10 PK	74.00	-24.90	1.01 V	4	18.40	30.70
4	2688.00	47.20 AV	54.00	-6.80	1.01 V	4	16.50	30.70
5	4874.00	42.20 PK	74.00	-31.80	1.11 V	119	6.90	35.30
5	4874.00	30.30 AV	54.00	-23.70	1.11 V	119	-5.00	35.30
6	7311.00	48.20 PK	74.00	-25.80	1.07 V	121	7.50	40.70
6	7311.00	36.50 AV	54.00	-17.50	1.07 V	121	-4.20	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

4.2.10 TEST RESULTS (ANTENNA 4)

Below 1GHz Worst-Case Data

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 961hPa	**TESTED BY**	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	199.99	26.30 QP	43.50	-17.20	1.00 H	53	15.80	10.50
2	250.01	34.90 QP	46.00	-11.10	1.45 H	53	21.30	13.60
3	320.01	31.00 QP	46.00	-15.00	1.54 H	108	14.80	16.20
4	375.03	26.40 QP	46.00	-19.60	1.75 H	346	8.80	17.60
5	400.00	21.70 QP	46.00	-24.30	1.87 H	56	3.30	18.40
6	500.01	26.10 QP	46.00	-19.90	1.44 H	316	5.90	20.20
7	549.98	29.40 QP	46.00	-16.60	1.39 H	9	7.30	22.10
8	600.01	26.90 QP	46.00	-19.10	1.57 H	43	5.00	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	62	19.70	11.50
2	200.01	30.40 QP	43.50	-13.10	1.24 V	153	19.30	11.20
3	240.01	32.50 QP	46.00	-13.50	1.80 V	258	19.60	12.90
4	250.00	30.70 QP	46.00	-15.30	1.60 V	326	17.40	13.30
5	320.01	33.00 QP	46.00	-13.00	1.07 V	100	16.50	16.50
6	399.98	31.60 QP	46.00	-14.40	1.20 V	96	13.30	18.40
7	550.03	33.40 QP	46.00	-12.60	1.75 V	0	11.10	22.30
8	600.01	33.30 QP	46.00	-12.70	1.79 V	243	9.80	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

802.11b DSSS modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 1	**MODEL**	AP-80MB
MODULATION TYPE	CCK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	45.30 PK	74.00	-28.70	1.19 H	138	15.60	29.70
1	2390.00	33.50 AV	54.00	-20.50	1.19 H	138	3.80	29.70
2	*2412.00	91.40 PK			1.34 H	323	61.60	29.80
2	*2412.00	84.60 AV			1.34 H	323	54.80	29.80
3	2688.00	39.20 PK	74.00	-34.80	1.31 H	315	8.50	30.70
3	2688.00	33.40 AV	54.00	-20.60	1.31 H	315	2.70	30.70
4	4824.00	42.80 PK	74.00	-31.20	1.42 H	341	7.70	35.10
4	4824.00	31.10 AV	54.00	-22.90	1.42 H	341	-4.00	35.10
5	7236.00	47.50 PK	74.00	-26.50	1.18 H	286	7.00	40.50
5	7236.00	36.00 AV	54.00	-18.00	1.18 H	286	-4.50	40.50

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	2390.00	64.60 PK	74.00	-9.40	1.00 V	0	34.90	29.70
1	2390.00	52.70 AV	54.00	-1.30	1.00 V	0	23.00	29.70
2	*2412.00	110.70 PK			1.00 V	0	80.90	29.80
2	*2412.00	103.80 AV			1.00 V	0	74.00	29.80
3	2688.00	50.30 PK	74.00	-23.70	1.11 V	320	19.60	30.70
3	2688.00	49.20 AV	54.00	-4.80	1.11 V	320	18.50	30.70
4	4824.00	43.00 PK	74.00	-31.00	1.21 V	26	7.90	35.10
4	4824.00	31.40 AV	54.00	-22.60	1.21 V	26	-3.70	35.10
5	7236.00	47.70 PK	74.00	-26.30	1.07 V	284	7.20	40.50
5	7236.00	36.20 AV	54.00	-17.80	1.07 V	284	-4.30	40.50

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	MODEL	AP-80MB
MODULATION TYPE	CCK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2437.00	100.00 PK			1.36 H	13	70.10	29.90
1	*2437.00	92.70 AV			1.36 H	13	62.80	29.90
2	2688.00	39.30 PK	74.00	-34.70	1.32 H	311	8.60	30.70
2	2688.00	34.20 AV	54.00	-19.80	1.32 H	311	3.50	30.70
3	4874.00	43.20 PK	74.00	-30.80	1.37 H	332	7.90	35.30
3	4874.00	31.50 AV	54.00	-22.50	1.37 H	332	-3.80	35.30
4	7311.00	47.50 PK	74.00	-26.50	1.17 H	293	6.80	40.70
4	7311.00	35.70 AV	54.00	-18.30	1.17 H	293	-5.00	40.70

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	*2437.00	119.30 PK			1.17 V	0	89.40	29.90
1	*2437.00	111.70 AV			1.17 V	0	81.80	29.90
2	2688.00	50.40 PK	74.00	-23.60	1.12 V	328	19.70	30.70
2	2688.00	49.30 AV	54.00	-4.70	1.12 V	328	18.60	30.70
3	4874.00	43.30 PK	74.00	-30.70	1.25 V	37	8.00	35.30
3	4874.00	31.40 AV	54.00	-22.60	1.25 V	37	-3.90	35.30
4	7311.00	47.70 PK	74.00	-26.30	1.09 V	316	7.00	40.70
4	7311.00	36.10 AV	54.00	-17.90	1.09 V	316	-4.60	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 11	MODEL	AP-80MB
MODULATION TYPE	CCK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2462.00	99.50 PK			1.32 H	22	69.50	30.00
1	*2462.00	92.50 AV			1.32 H	22	62.50	30.00
2	2483.50	46.10 PK	74.00	-27.90	1.32 H	22	16.00	30.10
2	2483.50	34.30 AV	54.00	-19.70	1.32 H	22	4.20	30.10
3	2487.00	47.20 PK	74.00	-26.80	1.32 H	22	17.10	30.10
3	2487.00	34.70 AV	54.00	-19.30	1.32 H	22	4.60	30.10
4	2688.00	39.40 PK	74.00	-34.60	1.32 H	308	8.70	30.70
4	2688.00	34.30 AV	54.00	-19.70	1.32 H	308	3.60	30.70
5	4924.00	42.90 PK	74.00	-31.10	1.49 H	336	7.30	35.50
5	4924.00	31.30 AV	54.00	-22.70	1.49 H	336	-4.30	35.50
6	7386.00	48.40 PK	74.00	-25.60	1.21 H	274	7.60	40.80
6	7386.00	36.60 AV	54.00	-17.40	1.21 H	274	-4.20	40.80

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	*2462.00	118.40 PK			1.16 V	358	88.40	30.00
1	*2462.00	110.90 AV			1.16 V	358	80.90	30.00
2	2483.50	65.00 PK	74.00	-9.00	1.16 V	358	34.90	30.10
2	2483.50	52.70 AV	54.00	-1.30	1.16 V	358	22.60	30.10
3	2487.00	66.10 PK	74.00	-7.90	1.16 V	358	36.00	30.10
3	2487.00	53.10 AV	54.00	-0.90	1.16 V	358	23.00	30.10
4	2688.00	50.30 PK	74.00	-23.70	1.13 V	326	19.60	30.70
4	2688.00	49.30 AV	54.00	-4.70	1.13 V	326	18.60	30.70
5	4924.00	43.30 PK	74.00	-30.70	1.14 V	67	7.70	35.50
5	4924.00	31.50 AV	54.00	-22.50	1.14 V	67	-4.10	35.50
6	7386.00	48.50 PK	74.00	-25.50	1.06 V	293	7.70	40.80
6	7386.00	36.70 AV	54.00	-17.30	1.06 V	293	-4.10	40.80

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 1	**MODEL**	AP-80MB
MODULATION TYPE	BPSK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	49.30 PK	74.00	-24.70	1.36 H	323	19.60	29.70
1	2390.00	33.60 AV	54.00	-20.40	1.36 H	323	3.90	29.70
2	*2412.00	90.10 PK			1.36 H	323	60.30	29.80
2	*2412.00	81.40 AV			1.36 H	323	51.60	29.80
3	2688.00	39.60 PK	74.00	-34.40	1.15 H	335	8.90	30.70
3	2688.00	34.20 AV	54.00	-19.80	1.15 H	335	3.50	30.70
4	4824.00	42.10 PK	74.00	-31.90	1.15 H	120	7.00	35.10
4	4824.00	29.90 AV	54.00	-24.10	1.15 H	120	-5.20	35.10
5	7236.00	48.50 PK	74.00	-25.50	1.09 H	31	8.00	40.50
5	7236.00	36.40 AV	54.00	-17.60	1.09 H	31	-4.10	40.50

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	2390.00	68.90 PK	74.00	-5.10	1.00 V	359	39.20	29.70
1	2390.00	53.50 AV	54.00	-0.50	1.00 V	359	23.80	29.70
2	*2412.00	109.50 PK			1.00 V	359	79.70	29.80
2	*2412.00	101.30 AV			1.00 V	359	71.50	29.80
3	2688.00	50.80 PK	74.00	-23.20	1.10 V	336	20.10	30.70
3	2688.00	49.20 AV	54.00	-4.80	1.10 V	336	18.50	30.70
4	4824.00	41.90 PK	74.00	-32.10	1.12 V	136	6.80	35.10
4	4824.00	29.90 AV	54.00	-24.10	1.12 V	136	-5.20	35.10
5	7236.00	48.40 PK	74.00	-25.60	1.06 V	110	7.90	40.50
5	7236.00	36.30 AV	54.00	-17.70	1.06 V	110	-4.20	40.50

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	MODEL	AP-80MB
MODULATION TYPE	BPSK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2437.00	96.90 PK			1.36 H	15	67.00	29.90
1	*2437.00	88.30 AV			1.36 H	15	58.40	29.90
2	2688.00	39.70 PK	74.00	-34.30	1.13 H	336	9.00	30.70
2	2688.00	34.30 AV	54.00	-19.70	1.13 H	336	3.60	30.70
3	4874.00	42.20 PK	74.00	-31.80	1.17 H	122	6.90	35.30
3	4874.00	30.20 AV	54.00	-23.80	1.17 H	122	-5.10	35.30
4	7311.00	48.60 PK	74.00	-25.40	1.10 H	32	7.90	40.70
4	7311.00	36.50 AV	54.00	-17.50	1.10 H	32	-4.20	40.70

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	*2437.00	116.70 PK			1.18 V	358	86.80	29.90
1	*2437.00	107.30 AV			1.18 V	358	77.40	29.90
2	2688.00	50.40 PK	74.00	-23.60	1.12 V	315	19.70	30.70
2	2688.00	49.30 AV	54.00	-4.70	1.12 V	315	18.60	30.70
3	4874.00	42.10 PK	74.00	-31.90	1.13 V	135	6.80	35.30
3	4874.00	30.20 AV	54.00	-23.80	1.13 V	135	-5.10	35.30
4	7311.00	48.50 PK	74.00	-25.50	1.00 V	116	7.80	40.70
4	7311.00	36.20 AV	54.00	-17.80	1.00 V	116	-4.50	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 11	MODEL	AP-80MB
MODULATION TYPE	BPSK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2462.00	95.80 PK			1.32 H	11	65.80	30.00
1	*2462.00	87.90 AV			1.32 H	11	57.90	30.00
2	2483.50	46.20 PK	74.00	-27.80	1.32 H	11	16.10	30.10
2	2483.50	34.80 AV	54.00	-19.20	1.32 H	11	4.70	30.10
3	2688.00	39.30 PK	74.00	-34.70	1.16 H	338	8.60	30.70
3	2688.00	34.40 AV	54.00	-19.60	1.16 H	338	3.70	30.70
4	4924.00	42.60 PK	74.00	-31.40	1.14 H	122	7.00	35.50
4	4924.00	30.40 AV	54.00	-23.60	1.14 H	122	-5.20	35.50
5	7386.00	48.90 PK	74.00	-25.10	1.15 H	31	8.10	40.80
5	7386.00	36.60 AV	54.00	-17.40	1.15 H	31	-4.20	40.80

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	*2462.00	113.80 PK			1.16 V	358	83.80	30.00
1	*2462.00	106.30 AV			1.16 V	358	76.30	30.00
2	2483.50	64.20 PK	74.00	-9.80	1.16 V	358	34.10	30.10
2	2483.50	53.20 AV	54.00	-0.80	1.16 V	358	23.10	30.10
3	2688.00	50.60 PK	74.00	-23.40	1.15 V	339	19.90	30.70
3	2688.00	49.30 AV	54.00	-4.70	1.15 V	339	18.60	30.70
4	4924.00	42.50 PK	74.00	-31.50	1.15 V	130	6.90	35.50
4	4924.00	30.50 AV	54.00	-23.50	1.15 V	130	-5.10	35.50
5	7386.00	48.80 PK	74.00	-25.20	1.06 V	109	8.00	40.80
5	7386.00	36.80 AV	54.00	-17.20	1.06 V	109	-4.00	40.80

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g Turbo OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	**MODEL**	AP-80MB
MODULATION TYPE	BPSK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	12Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	43.20 PK	74.00	-30.80	1.35 H	35	13.50	29.70
1	2390.00	32.30 AV	54.00	-21.70	1.35 H	35	2.60	29.70
2	*2437.00	89.60 PK			1.35 H	35	59.70	29.90
2	*2437.00	80.70 AV			1.35 H	35	50.80	29.90
3	2483.50	42.20 PK	74.00	-31.80	1.35 H	35	12.10	30.10
3	2483.50	28.60 AV	54.00	-25.40	1.35 H	35	-1.50	30.10
4	2688.00	39.40 PK	74.00	-34.60	1.17 H	343	8.70	30.70
4	2688.00	34.30 AV	54.00	-19.70	1.17 H	343	3.60	30.70
5	4874.00	42.20 PK	74.00	-31.80	1.18 H	125	6.90	35.30
5	4874.00	30.20 AV	54.00	-23.80	1.18 H	125	-5.10	35.30
6	7311.00	48.60 PK	74.00	-25.40	1.12 H	29	7.90	40.70
6	7311.00	36.50 AV	54.00	-17.50	1.12 H	29	-4.20	40.70

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	2390.00	62.50 PK	74.00	-11.50	1.00 V	359	32.80	29.70
1	2390.00	52.90 AV	54.00	-1.10	1.00 V	359	23.20	29.70
2	*2437.00	108.90 PK			1.00 V	359	79.00	29.90
2	*2437.00	100.90 AV			1.00 V	359	71.00	29.90
3	2483.50	61.50 PK	74.00	-12.50	1.00 V	359	31.40	30.10
3	2483.50	48.80 AV	54.00	-5.20	1.00 V	359	18.70	30.10
4	2688.00	50.50 PK	74.00	-23.50	1.16 V	326	19.80	30.70
4	2688.00	49.40 AV	54.00	-4.60	1.16 V	326	18.70	30.70
5	4874.00	42.10 PK	74.00	-31.90	1.18 V	129	6.80	35.30
5	4874.00	30.10 AV	54.00	-23.90	1.18 V	129	-5.20	35.30
6	7311.00	48.50 PK	74.00	-25.50	1.06 V	110	7.80	40.70
6	7311.00	36.40 AV	54.00	-17.60	1.06 V	110	-4.30	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

4.2.11 TEST RESULTS (ANTENNA 5)

Below 1GHz Worst-Case Data

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH, 961hPa	**TESTED BY**	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	25.60 QP	43.50	-17.90	1.05 H	36	15.10	10.50
2	250.01	34.90 QP	46.00	-11.10	1.09 H	55	21.30	13.60
3	320.01	31.00 QP	46.00	-15.00	1.08 H	222	14.80	16.20
4	375.03	25.90 QP	46.00	-20.10	2.01 H	4	8.30	17.60
5	400.00	21.70 QP	46.00	-24.30	1.87 H	56	3.30	18.40
6	500.01	25.90 QP	46.00	-20.10	1.09 H	12	5.70	20.20
7	549.98	29.40 QP	46.00	-16.60	1.39 H	9	7.30	22.10
8	600.01	25.40 QP	46.00	-20.60	1.23 H	54	3.50	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	30.40 QP	43.50	-13.10	1.13 V	189	18.90	11.50
2	200.00	30.00 QP	43.50	-13.50	1.60 V	341	18.80	11.20
3	240.00	31.20 QP	46.00	-14.80	1.43 V	351	18.40	12.90
4	250.00	30.70 QP	46.00	-15.30	1.60 V	66	17.40	13.30
5	320.01	32.60 QP	46.00	-13.40	1.07 V	100	16.10	16.50
6	399.98	30.90 QP	46.00	-15.10	1.20 V	96	12.50	18.40
7	550.03	33.40 QP	46.00	-12.60	1.75 V	30	11.10	22.30
8	600.00	32.40 QP	46.00	-13.60	1.79 V	243	8.90	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

802.11b DSSS modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 1	**MODEL**	AP-80MB
MODULATION TYPE	CCK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	45.30 PK	74.00	-28.70	1.14 H	340	15.60	29.70
1	2390.00	37.00 AV	54.00	-17.00	1.14 H	340	7.30	29.70
2	*2412.00	98.10 PK			1.14 H	340	68.30	29.80
2	*2412.00	91.00 AV			1.14 H	340	61.20	29.80
3	2688.00	45.30 PK	74.00	-28.70	1.30 H	38	14.60	30.70
3	2688.00	37.30 AV	54.00	-16.70	1.30 H	38	6.60	30.70
4	4824.00	42.20 PK	74.00	-31.80	1.12 H	136	7.10	35.10
4	4824.00	30.00 AV	54.00	-24.00	1.12 H	136	-5.10	35.10
5	7236.00	48.60 PK	74.00	-25.40	1.23 H	25	8.10	40.50
5	7236.00	36.30 AV	54.00	-17.70	1.23 H	25	-4.20	40.50

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	2390.00	62.30 PK	74.00	-11.70	1.16 V	1	32.60	29.70
1	2390.00	53.40 AV	54.00	-0.60	1.16 V	1	23.70	29.70
2	*2412.00	115.10 PK			1.16 V	1	85.30	29.80
2	*2412.00	107.50 AV			1.16 V	1	77.70	29.80
3	2688.00	48.80 PK	74.00	-25.20	1.40 V	110	18.10	30.70
3	2688.00	47.90 AV	54.00	-6.10	1.40 V	110	17.20	30.70
4	4824.00	42.00 PK	74.00	-32.00	1.16 V	123	6.90	35.10
4	4824.00	30.00 AV	54.00	-24.00	1.16 V	123	-5.10	35.10
5	7236.00	48.40 PK	74.00	-25.60	1.05 V	124	7.90	40.50
5	7236.00	36.20 AV	54.00	-17.80	1.05 V	124	-4.30	40.50

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	MODEL	AP-80MB
MODULATION TYPE	CCK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2437.00	105.20 PK			1.11 H	22	75.30	29.90
1	*2437.00	98.60 AV			1.11 H	22	68.70	29.90
2	2688.00	44.20 PK	74.00	-29.80	1.19 H	350	13.50	30.70
2	2688.00	35.10 AV	54.00	-18.90	1.19 H	350	4.40	30.70
3	4874.00	42.30 PK	74.00	-31.70	1.15 H	133	7.00	35.30
3	4874.00	30.30 AV	54.00	-23.70	1.15 H	133	-5.00	35.30
4	7311.00	48.70 PK	74.00	-25.30	1.25 H	31	8.00	40.70
4	7311.00	36.40 AV	54.00	-17.60	1.25 H	31	-4.30	40.70

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	*2437.00	114.10 PK			1.37 V	6	84.20	29.90
1	*2437.00	122.00 AV			1.37 V	6	92.10	29.90
2	2688.00	50.00 PK	74.00	-24.00	1.10 V	310	19.30	30.70
2	2688.00	49.10 AV	54.00	-4.90	1.10 V	310	18.40	30.70
3	4874.00	42.30 PK	74.00	-31.70	1.12 V	126	7.00	35.30
3	4874.00	30.20 AV	54.00	-23.80	1.12 V	126	-5.10	35.30
4	7311.00	48.50 PK	74.00	-25.50	1.04 V	125	7.80	40.70
4	7311.00	36.50 AV	54.00	-17.50	1.04 V	125	-4.20	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 11	MODEL	AP-80MB
MODULATION TYPE	CCK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	11Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2462.00	101.30 PK			1.14 H	343	71.30	30.00
1	*2462.00	93.80 AV			1.14 H	343	63.80	30.00
2	2483.50	44.00 PK	74.00	-30.00	1.14 H	343	13.90	30.10
2	2483.50	36.10 AV	54.00	-17.90	1.14 H	343	6.00	30.10
3	2487.00	45.90 PK	74.00	-28.10	1.14 H	343	15.80	30.10
3	2487.00	37.00 AV	54.00	-17.00	1.14 H	343	6.90	30.10
4	2688.00	41.00 PK	74.00	-33.00	1.34 H	311	10.30	30.70
4	2688.00	36.40 AV	54.00	-17.60	1.34 H	311	5.70	30.70
5	4924.00	42.60 PK	74.00	-31.40	1.17 H	138	7.00	35.50
5	4924.00	30.60 AV	54.00	-23.40	1.17 H	138	-5.00	35.50
6	7386.00	48.80 PK	74.00	-25.20	1.28 H	36	8.00	40.80
6	7386.00	36.70 AV	54.00	-17.30	1.28 H	36	-4.10	40.80

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	*2462.00	117.50 PK			1.34 V	0	87.50	30.00
1	*2462.00	110.40 AV			1.34 V	0	80.40	30.00
2	2483.50	60.20 PK	74.00	-13.80	1.34 V	0	30.10	30.10
2	2483.50	52.80 AV	54.00	-1.20	1.34 V	0	22.70	30.10
3	2487.00	62.10 PK	74.00	-11.90	1.34 V	0	32.00	30.10
3	2487.00	53.60 AV	54.00	-0.40	1.34 V	0	23.50	30.10
4	2688.00	49.90 PK	74.00	-24.10	1.31 V	10	19.20	30.70
4	2688.00	49.00 AV	54.00	-5.00	1.31 V	10	18.30	30.70
5	4924.00	42.70 PK	74.00	-31.30	1.13 V	127	7.10	35.50
5	4924.00	30.60 AV	54.00	-23.40	1.13 V	127	-5.00	35.50
6	7386.00	48.80 PK	74.00	-25.20	1.06 V	122	8.00	40.80
6	7386.00	36.80 AV	54.00	-17.20	1.06 V	122	-4.00	40.80

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 1	**MODEL**	AP-80MB
MODULATION TYPE	BPSK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	47.20 PK	74.00	-26.80	1.12 H	341	17.50	29.70
1	2390.00	36.70 AV	54.00	-17.30	1.12 H	341	7.00	29.70
2	*2412.00	92.90 PK			1.12 H	341	63.10	29.80
2	*2412.00	84.70 AV			1.12 H	341	54.90	29.80
3	2688.00	39.60 PK	74.00	-34.40	1.35 H	358	8.90	30.70
3	2688.00	34.60 AV	54.00	-19.40	1.35 H	358	3.90	30.70
4	4824.00	43.00 PK	74.00	-31.00	1.12 H	133	7.90	35.10
4	4824.00	29.90 AV	54.00	-24.10	1.12 H	133	-5.20	35.10
5	7236.00	49.30 PK	74.00	-24.70	1.22 H	28	8.80	40.50
5	7236.00	36.20 AV	54.00	-17.80	1.22 H	28	-4.30	40.50

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	2390.00	64.60 PK	74.00	-9.40	1.15 V	1	34.90	29.70
1	2390.00	53.20 AV	54.00	-0.80	1.15 V	1	23.50	29.70
2	*2412.00	110.30 PK			1.15 V	1	80.50	29.80
2	*2412.00	101.20 AV			1.15 V	1	71.40	29.80
3	2688.00	50.90 PK	74.00	-23.10	1.12 V	312	20.20	30.70
3	2688.00	49.30 AV	54.00	-4.70	1.12 V	312	18.60	30.70
4	4824.00	43.10 PK	74.00	-30.90	1.11 V	125	8.00	35.10
4	4824.00	30.10 AV	54.00	-23.90	1.11 V	125	-5.00	35.10
5	7236.00	49.40 PK	74.00	-24.60	1.06 V	121	8.90	40.50
5	7236.00	36.10 AV	54.00	-17.90	1.06 V	121	-4.40	40.50

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	MODEL	AP-80MB
MODULATION TYPE	BPSK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2437.00	103.50 PK			1.10 H	22	73.60	29.90
1	*2437.00	94.10 AV			1.10 H	22	64.20	29.90
2	2688.00	39.70 PK	74.00	-34.30	1.33 H	326	9.00	30.70
2	2688.00	34.50 AV	54.00	-19.50	1.33 H	326	3.80	30.70
3	4874.00	43.30 PK	74.00	-30.70	1.14 H	135	8.00	35.30
3	4874.00	30.10 AV	54.00	-23.90	1.14 H	135	-5.20	35.30
4	7311.00	49.60 PK	74.00	-24.40	1.25 H	31	8.90	40.70
4	7311.00	36.50 AV	54.00	-17.50	1.25 H	31	-4.20	40.70

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	*2437.00	119.30 PK			1.37 V	7	89.40	29.90
1	*2437.00	109.20 AV			1.37 V	7	79.30	29.90
2	2688.00	50.70 PK	74.00	-23.30	1.13 V	326	20.00	30.70
2	2688.00	49.50 AV	54.00	-4.50	1.13 V	326	18.80	30.70
3	4874.00	43.20 PK	74.00	-30.80	1.12 V	126	7.90	35.30
3	4874.00	30.10 AV	54.00	-23.90	1.12 V	126	-5.20	35.30
4	7311.00	49.50 PK	74.00	-24.50	1.09 V	120	8.80	40.70
4	7311.00	36.40 AV	54.00	-17.60	1.09 V	120	-4.30	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 11	MODEL	AP-80MB
MODULATION TYPE	BPSK	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	TRANSFER RATE	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	DETECTOR FUNCTION	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	*2462.00	96.10 PK			1.14 H	342	66.10	30.00
1	*2462.00	87.80 AV			1.14 H	342	57.80	30.00
2	2483.50	48.50 PK	74.00	-25.50	1.14 H	342	18.40	30.10
2	2483.50	35.20 AV	54.00	-18.80	1.14 H	342	5.10	30.10
3	2688.00	39.80 PK	74.00	-34.20	1.36 H	315	9.10	30.70
3	2688.00	34.40 AV	54.00	-19.60	1.36 H	315	3.70	30.70
4	4924.00	43.40 PK	74.00	-30.60	1.12 H	132	7.80	35.50
4	4924.00	30.50 AV	54.00	-23.50	1.12 H	132	-5.10	35.50
5	7386.00	49.70 PK	74.00	-24.30	1.13 H	27	8.90	40.80
5	7386.00	36.60 AV	54.00	-17.40	1.13 H	27	-4.20	40.80

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	*2462.00	114.20 PK			1.13 V	2	84.20	30.00
1	*2462.00	105.90 AV			1.13 V	2	75.90	30.00
2	2483.50	66.60 PK	74.00	-7.40	1.13 V	2	36.50	30.10
2	2483.50	53.40 AV	54.00	-0.60	1.13 V	2	23.30	30.10
3	2688.00	50.80 PK	74.00	-23.20	1.15 V	315	20.10	30.70
3	2688.00	49.60 AV	54.00	-4.40	1.15 V	315	18.90	30.70
4	4924.00	43.40 PK	74.00	-30.60	1.14 V	122	7.80	35.50
4	4924.00	30.50 AV	54.00	-23.50	1.14 V	122	-5.10	35.50
5	7386.00	49.60 PK	74.00	-24.40	1.10 V	121	8.80	40.80
5	7386.00	36.70 AV	54.00	-17.30	1.10 V	121	-4.10	40.80

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g Turbo OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
CHANNEL	Channel 6	**MODEL**	AP-80MB
MODULATION TYPE	BPSK	**FREQUENCY RANGE**	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	12Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 56%RH, 961hPa	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TESTED BY	Eric Lee		

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	2390.00	43.80 PK	74.00	-30.20	1.13 H	312	14.10	29.70
1	2390.00	35.20 AV	54.00	-18.80	1.13 H	312	5.50	29.70
2	*2437.00	92.00 PK			1.13 H	312	62.10	29.90
2	*2437.00	83.60 AV			1.13 H	312	53.70	29.90
3	2483.50	41.60 PK	74.00	-32.40	1.13 H	312	11.50	30.10
3	2483.50	32.20 AV	54.00	-21.80	1.13 H	312	2.10	30.10
4	2688.00	39.90 PK	74.00	-34.10	1.32 H	326	9.20	30.70
4	2688.00	34.30 AV	54.00	-19.70	1.32 H	326	3.60	30.70
5	4874.00	43.20 PK	74.00	-30.80	1.11 H	131	7.90	35.30
5	4874.00	30.20 AV	54.00	-23.80	1.11 H	131	-5.10	35.30
6	7311.00	49.60 PK	74.00	-24.40	1.24 H	25	8.90	40.70
6	7311.00	36.50 AV	54.00	-17.50	1.24 H	25	-4.20	40.70

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	2390.00	62.60 PK	74.00	-11.40	1.14 V	1	32.90	29.70
1	**2390.00**	**53.70 AV**	**54.00**	**-0.30**	**1.14 V**	**1**	**24.00**	**29.70**
2	*2437.00	110.80 PK			1.14 V	1	80.90	29.90
2	*2437.00	101.90 AV			1.14 V	1	72.00	29.90
3	2483.50	60.40 PK	74.00	-13.60	1.14 V	1	30.30	30.10
3	2483.50	50.40 AV	54.00	-3.60	1.14 V	1	20.30	30.10
4	2688.00	50.90 PK	74.00	-23.10	1.13 V	336	20.20	30.70
4	2688.00	49.50 AV	54.00	-4.50	1.13 V	336	18.80	30.70
5	4874.00	43.10 PK	74.00	-30.90	1.15 V	125	7.80	35.30
5	4874.00	30.20 AV	54.00	-23.80	1.15 V	125	-5.10	35.30
6	7311.00	49.50 PK	74.00	-24.50	1.11 V	123	8.80	40.70
6	7311.00	36.40 AV	54.00	-17.60	1.11 V	123	-4.30	40.70

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 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.

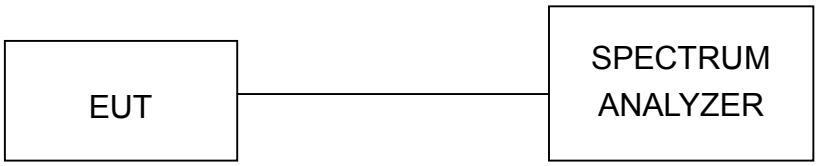
4.3.3 TEST PROCEDURE

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.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

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

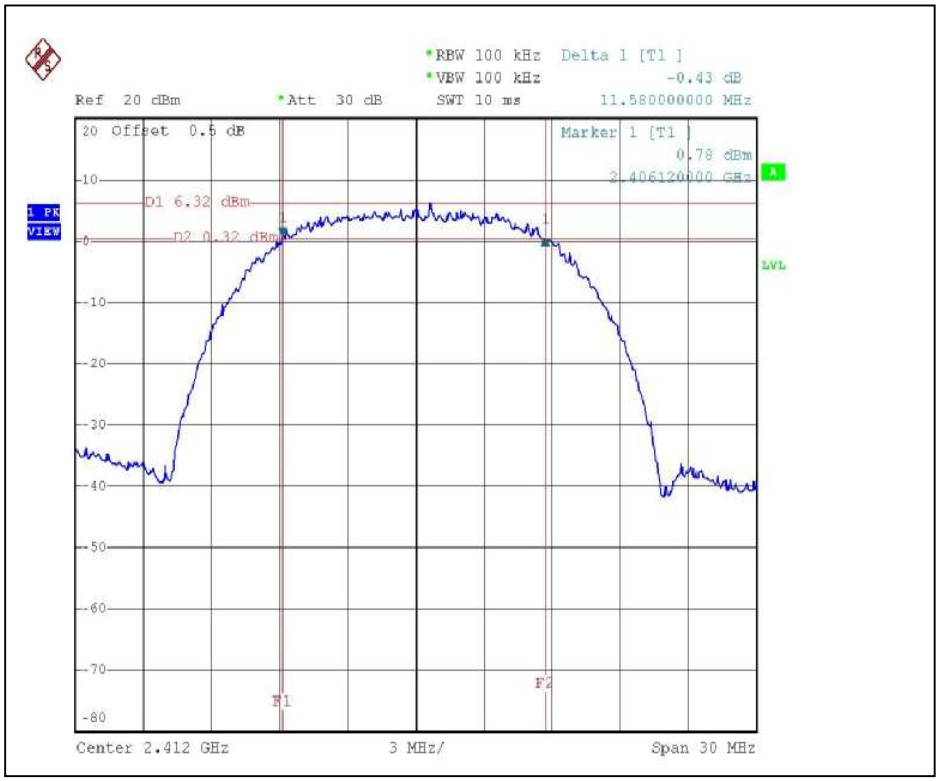
4.3.7 TEST RESULTS (ANTENNA 1)

802.11b DSSS modulation

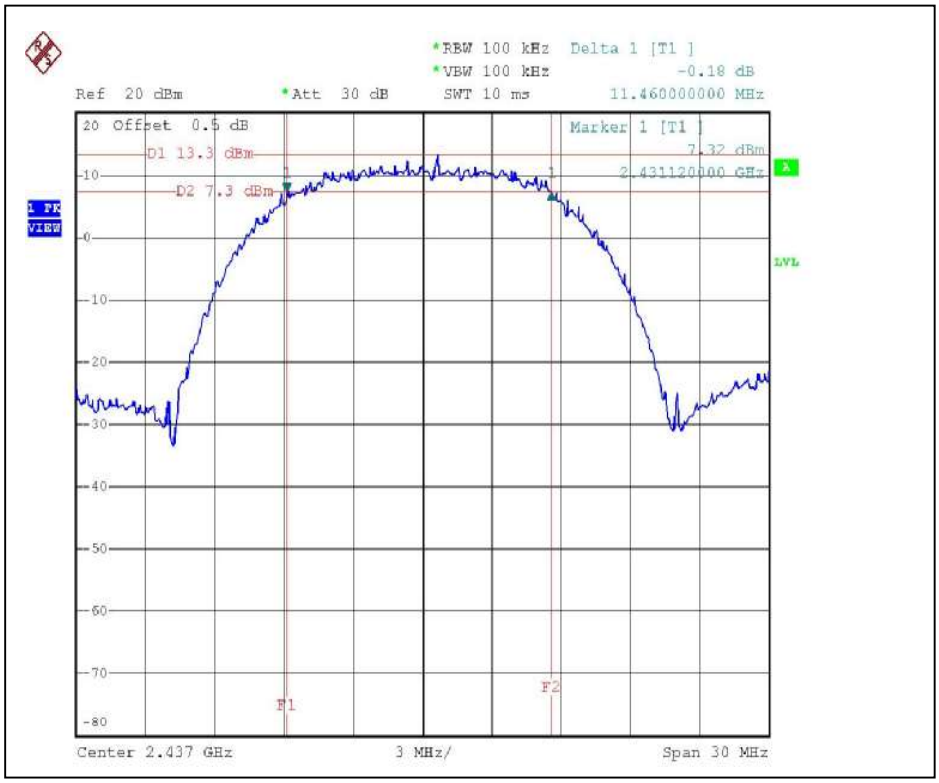
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	11Mbps
MODULATION TYPE	CCK	**ENVIRONMENTAL CONDITIONS**	26deg. C, 64%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.58	0.5	PASS
6	2437	11.46	0.5	PASS
11	2462	11.58	0.5	PASS

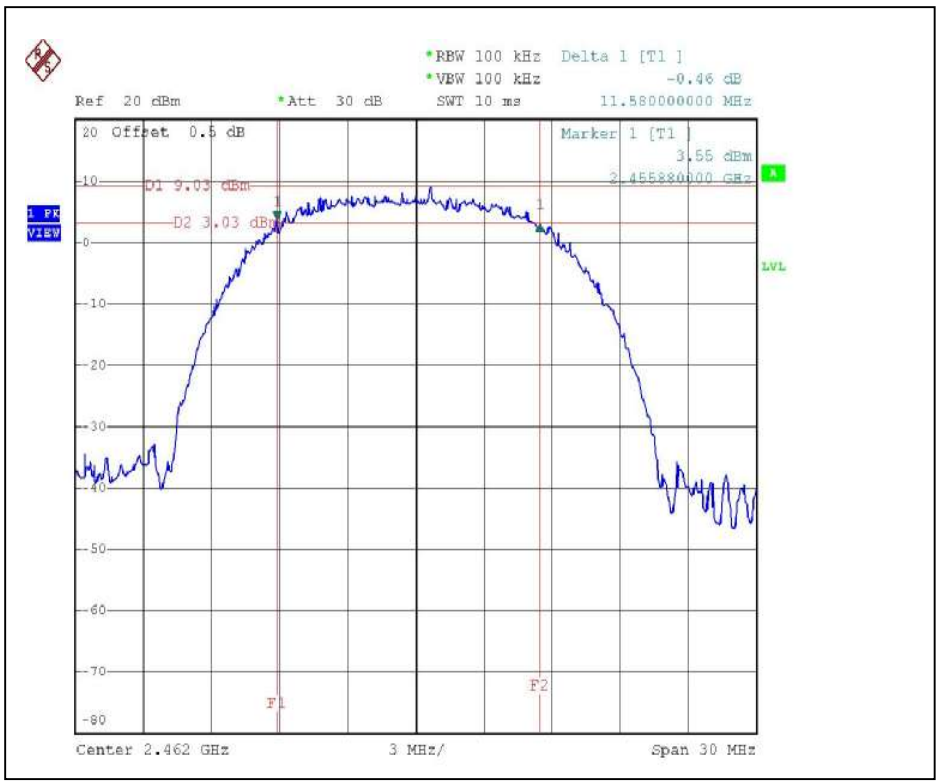
CH1


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-0.43 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
11.580000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
0.78 dBm
2.406120000 GHz
D1 6.32 dBm
D2 0.32 dBm
1 PK VIEW
LVL
F1
F2
Center 2.412 GHz
3 MHz/
Span 30 MHz

CH6


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-0.18 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
11.460000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
7.32 dBm
2.431120000 GHz
D1 13.3 dBm
D2 7.3 dBm
1 PK VIEW
LVL
F1
F2
Center 2.437 GHz
3 MHz/
Span 30 MHz

CH11

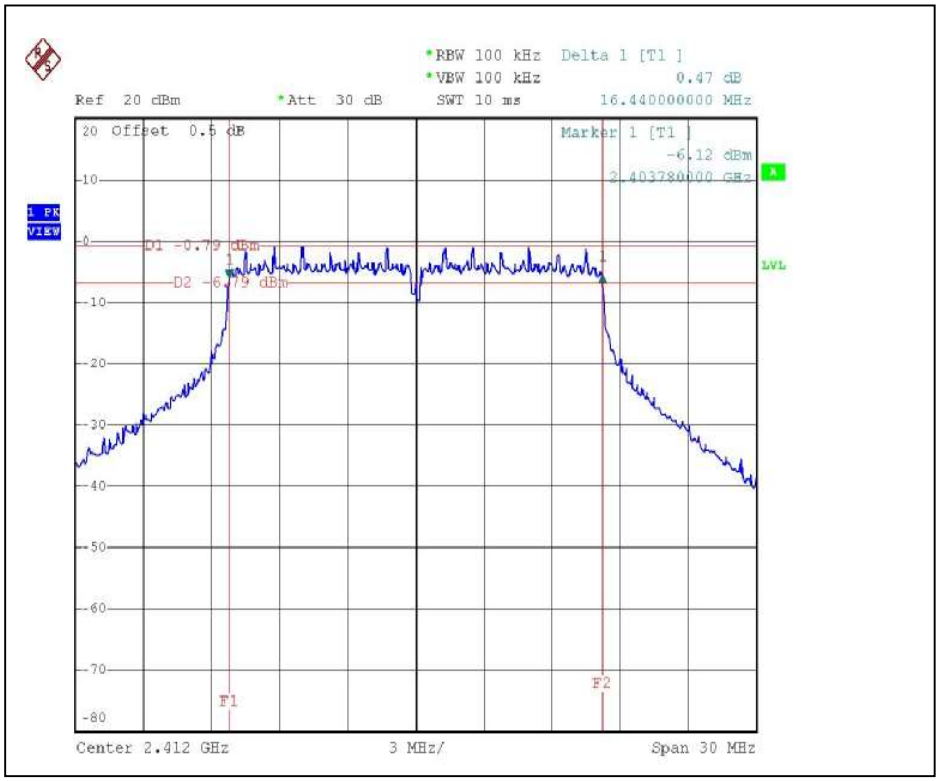

*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-0.46 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
11.580000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
3.55 dBm
2.455880000 GHz
D1 9.03 dBm
D2 3.03 dBm
1 PK VIEW
LVL
F1
F2
Center 2.462 GHz
3 MHz/
Span 30 MHz

802.11g OFDM modulation

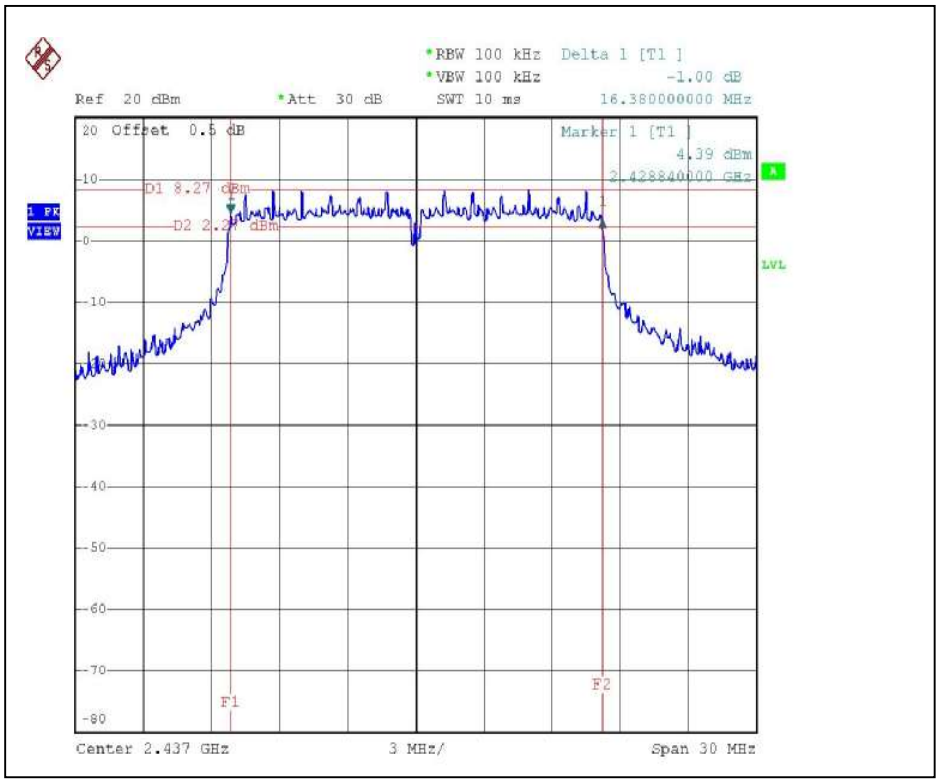
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	6Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	26deg. C, 64%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.44	0.5	PASS
6	2437	16.38	0.5	PASS
11	2462	16.38	0.5	PASS

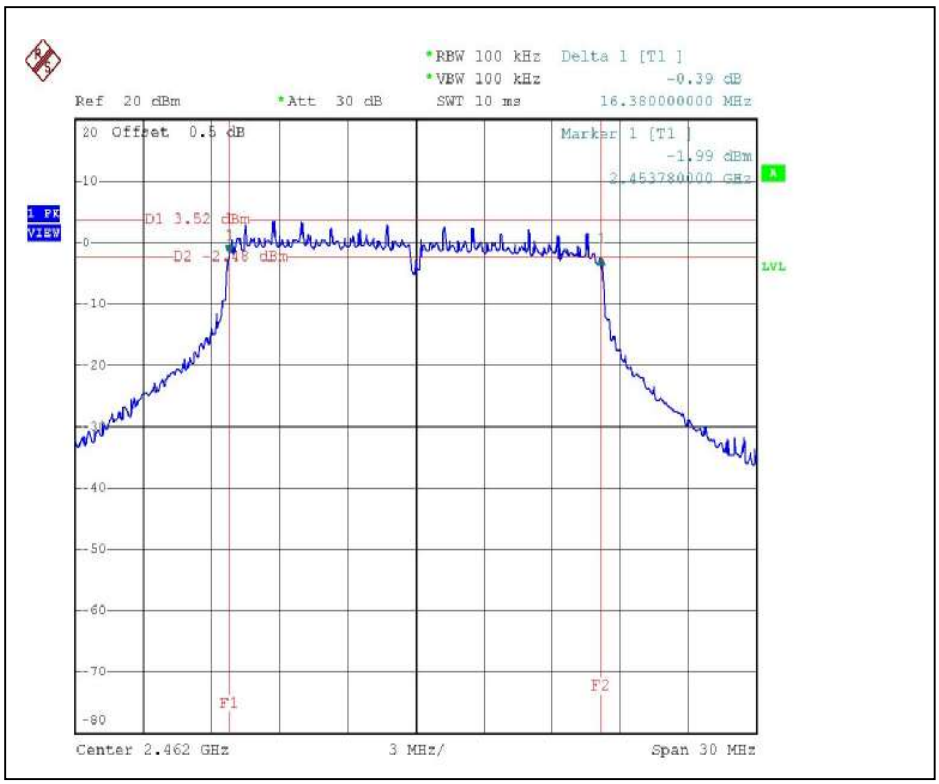
CH1


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
0.47 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
16.440000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
-6.12 dBm
2.403780000 GHz
1 PK VIEW
D1 -0.79 dBm
D2 -6.79 dBm
LVL
F1
F2
Center 2.412 GHz
3 MHz/
Span 30 MHz

CH6


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-1.00 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
16.380000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
4.39 dBm
2.428840000 GHz
1 PK VIEW
D1 8.27 dBm
D2 2.27 dBm
LVL
F1
F2
Center 2.437 GHz
3 MHz/
Span 30 MHz

CH11

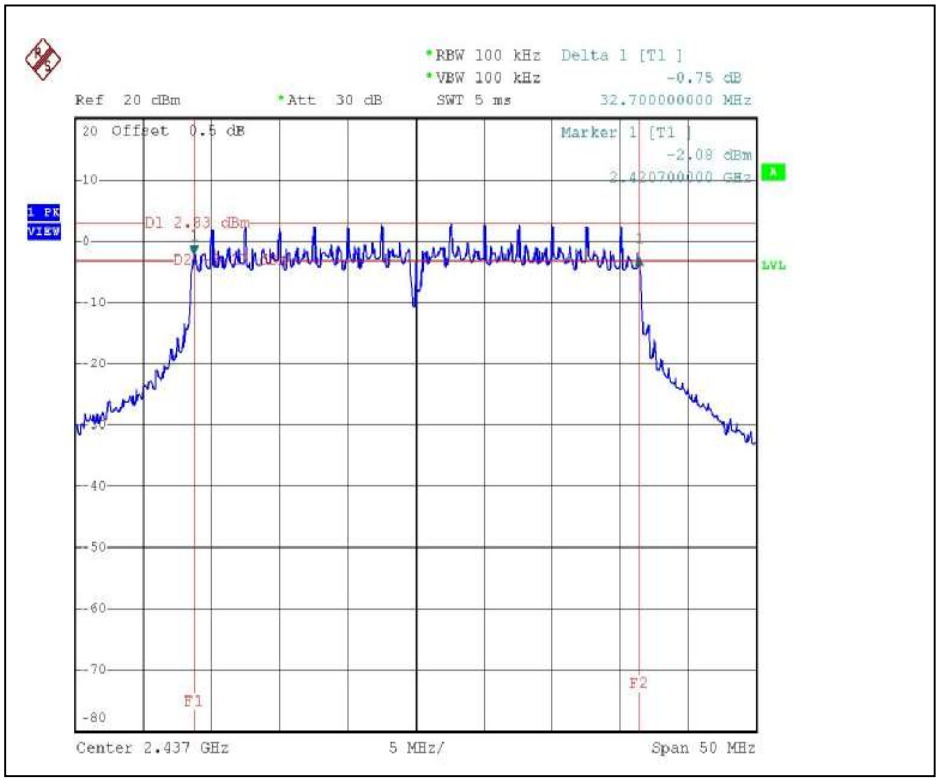

*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-0.39 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
16.380000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
-1.99 dBm
2.453780000 GHz
1 PK
VIEW
D1 3.52 dBm
D2 -2.48 dBm
LVL
10
0
-10
-20
-30
-40
-50
-60
-70
-80
F1
F2
Center 2.462 GHz
3 MHz/
Span 30 MHz

802.11g Turbo OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	12Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	26deg. C, 64%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
6	2437	32.7	0.5	PASS

CH6


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-0.75 dB
Ref 20 dBm
*Att 30 dB
SWT 5 ms
32.700000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
-2.08 dBm
2.420700000 GHz
1 PK VIEW
D1 2.83 dBm
D2
LVL
F1
F2
Center 2.437 GHz
5 MHz/
Span 50 MHz

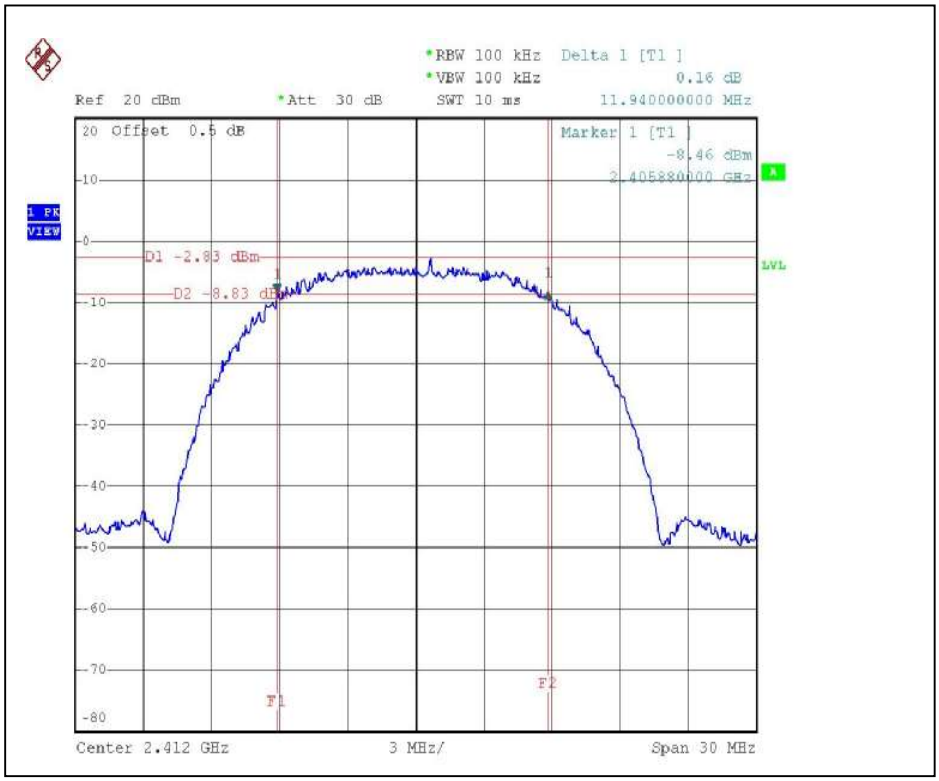
4.3.8 TEST RESULTS (ANTENNA 2)

802.11b DSSS modulation

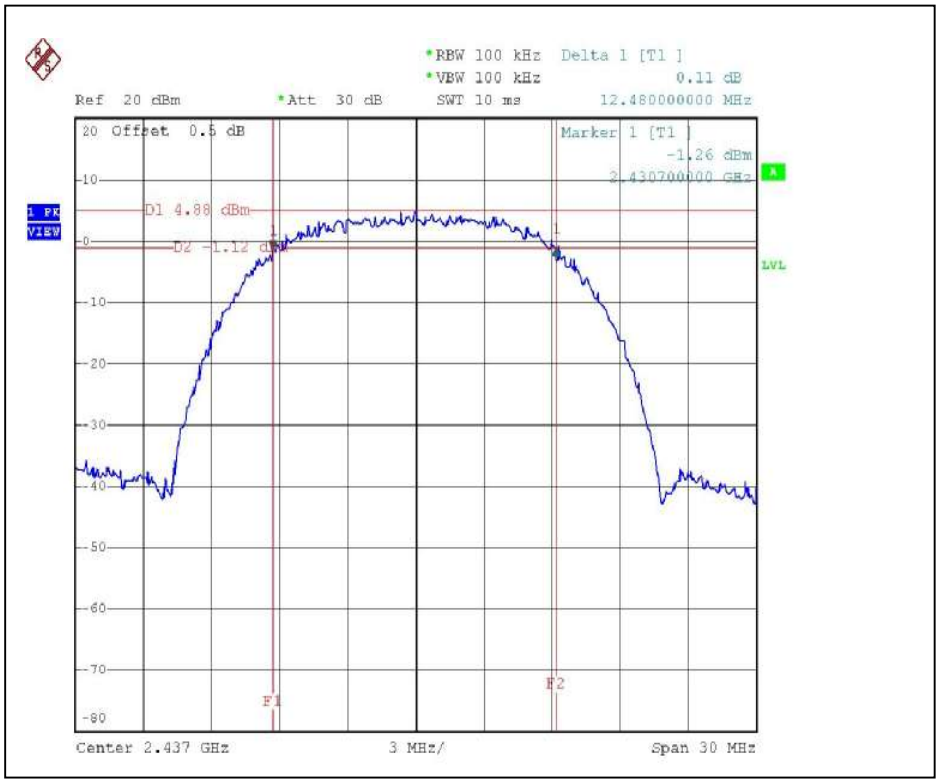
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	11Mbps
MODULATION TYPE	CCK	**ENVIRONMENTAL CONDITIONS**	26deg. C, 64%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.94	0.5	PASS
6	2437	12.48	0.5	PASS
11	2462	12.18	0.5	PASS

CH1


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
0.16 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
11.940000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
-8.46 dBm
2.405880000 GHz
1 PK VIEW
D1 -2.83 dBm
D2 -8.83 dB
LVL
F1
F2
Center 2.412 GHz
3 MHz/
Span 30 MHz

CH6


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
0.11 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
12.480000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
-1.26 dBm
2.430700000 GHz
1 PK VIEW
D1 4.88 dBm
D2 -1.12 dB
LVL
F1
F2
Center 2.437 GHz
3 MHz/
Span 30 MHz

CH11

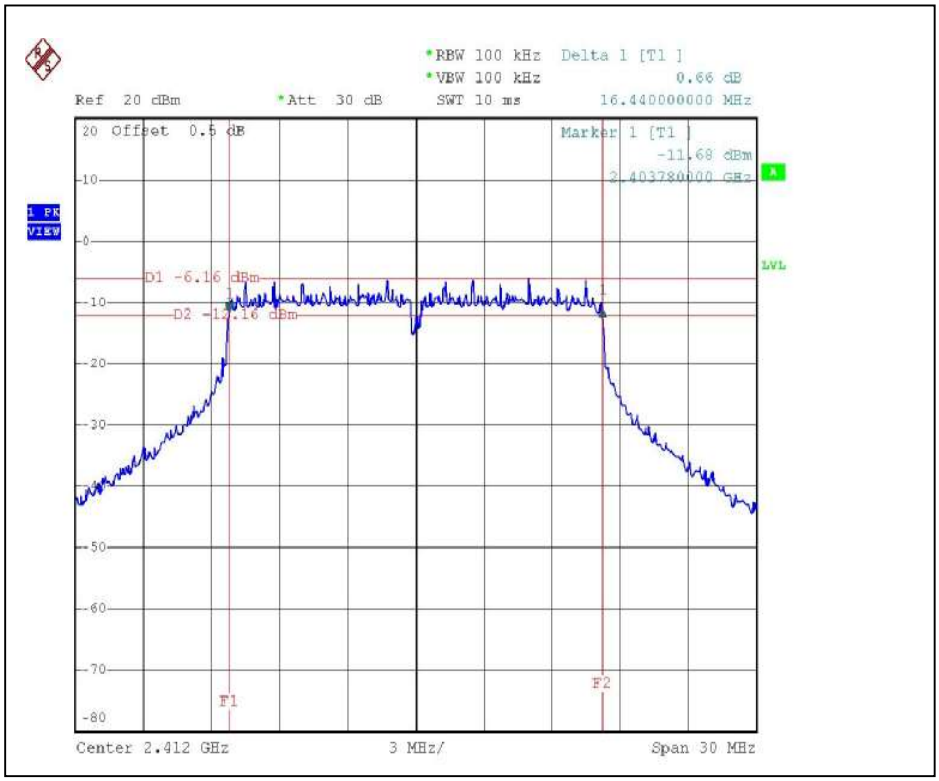

*RBW 100 kHz
*VBW 100 kHz
Delta 1 [T1]
-0.82 dB
12.180000000 MHz
Ref 20 dBm
*Att 30 dB
SWT 10 ms
20 Offset 0.5 dB
Marker 1 [T1]
-1.29 dBm
2.455820000 GHz
D1 3.55 dBm
D2 -2.45 dBm
1 PK VIEW
LVL
F1
F2
Center 2.462 GHz
3 MHz/
Span 30 MHz

802.11g OFDM modulation

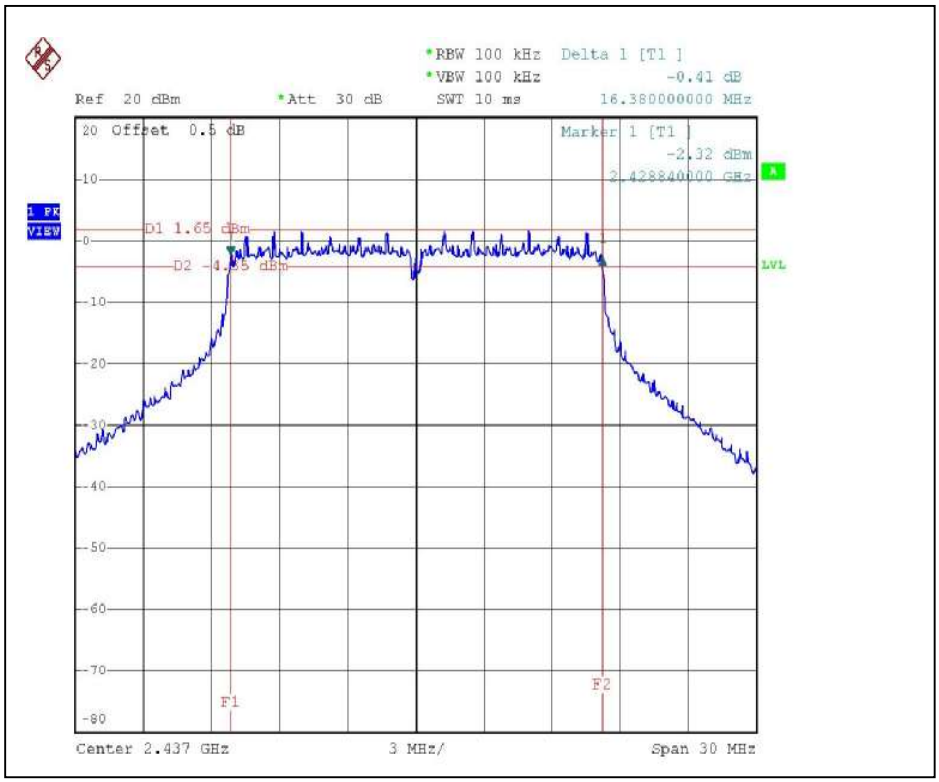
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	6Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	26deg. C, 64%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.44	0.5	PASS
6	2437	16.38	0.5	PASS
11	2462	16.38	0.5	PASS

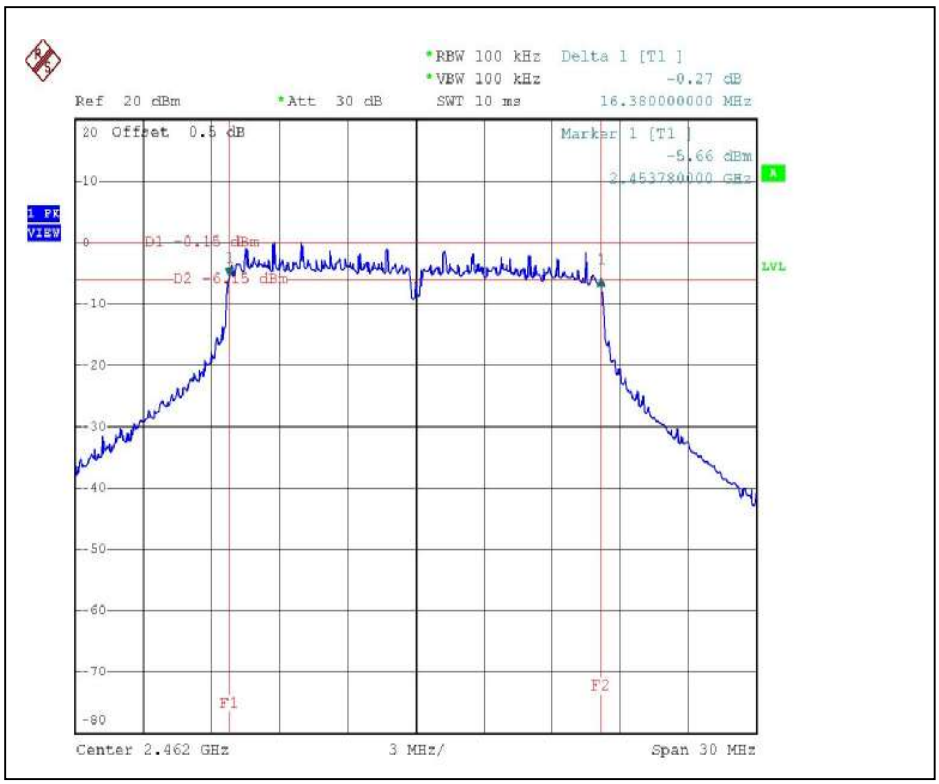
CH1


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
0.66 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
16.440000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
-11.68 dBm
2.403780000 GHz
1 PK VIEW
D1 -6.16 dBm
D2 -12.16 dBm
LVL
F1
F2
Center 2.412 GHz
3 MHz/
Span 30 MHz

CH6


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-0.41 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
16.380000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
-2.32 dBm
2.428840000 GHz
1 PK VIEW
D1 1.65 dBm
D2 -4.35 dBm
LVL
F1
F2
Center 2.437 GHz
3 MHz/
Span 30 MHz

CH11

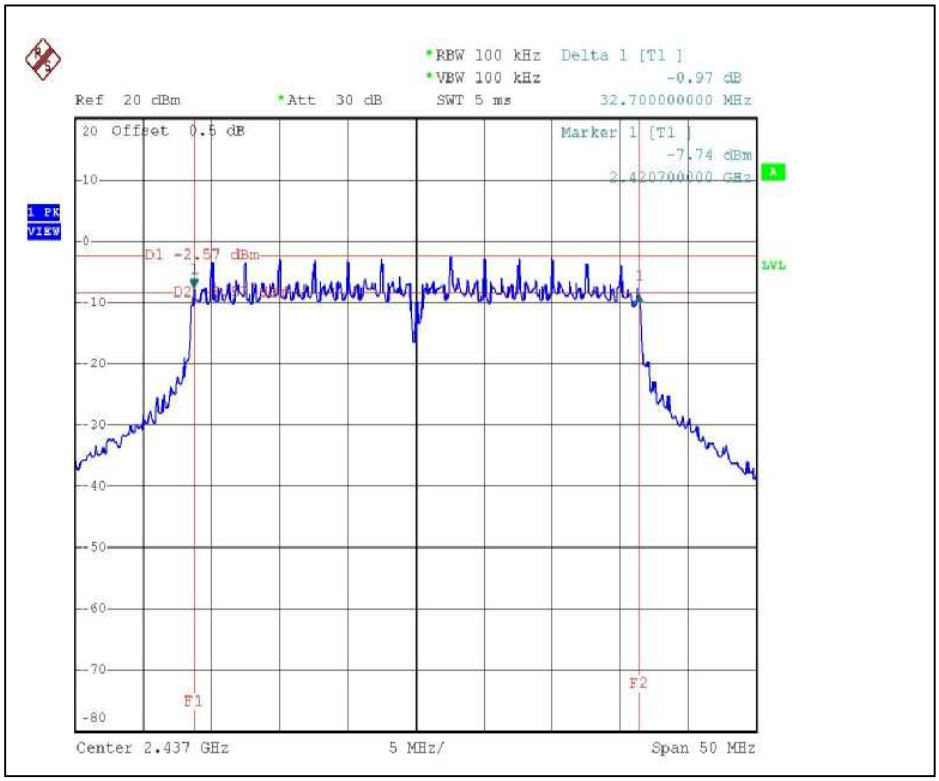

*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-0.27 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
16.380000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
-5.66 dBm
2.453780000 GHz
1 PK
VIEW
D1 -0.16 dBm
D2 -6.15 dBm
LVL
F1
F2
Center 2.462 GHz
3 MHz/
Span 30 MHz

802.11g Turbo OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	12Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	26deg. C, 64%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
6	2437	32.7	0.5	PASS

CH6


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-0.97 dB
Ref 20 dBm
*Att 30 dB
SWT 5 ms
32.700000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
-7.74 dBm
2.420700000 GHz
1 PK
VIEW
D1 -2.57 dBm
D2
LVL
F1
F2
Center 2.437 GHz
5 MHz/
Span 50 MHz

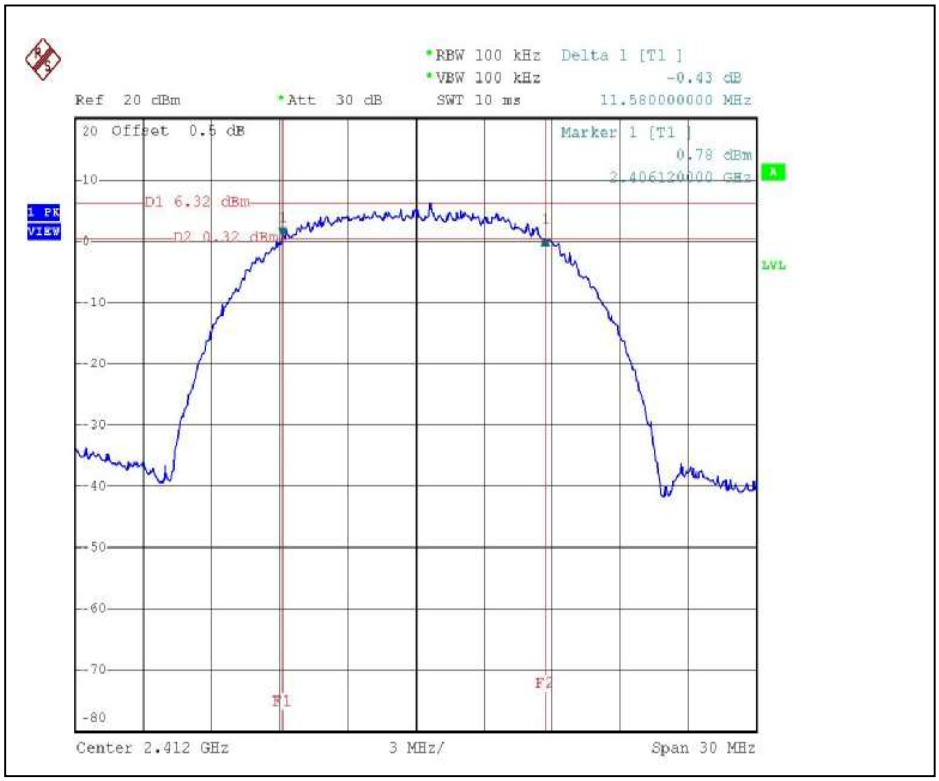
4.3.9 TEST RESULTS (ANTENNA 3)

802.11b DSSS modulation

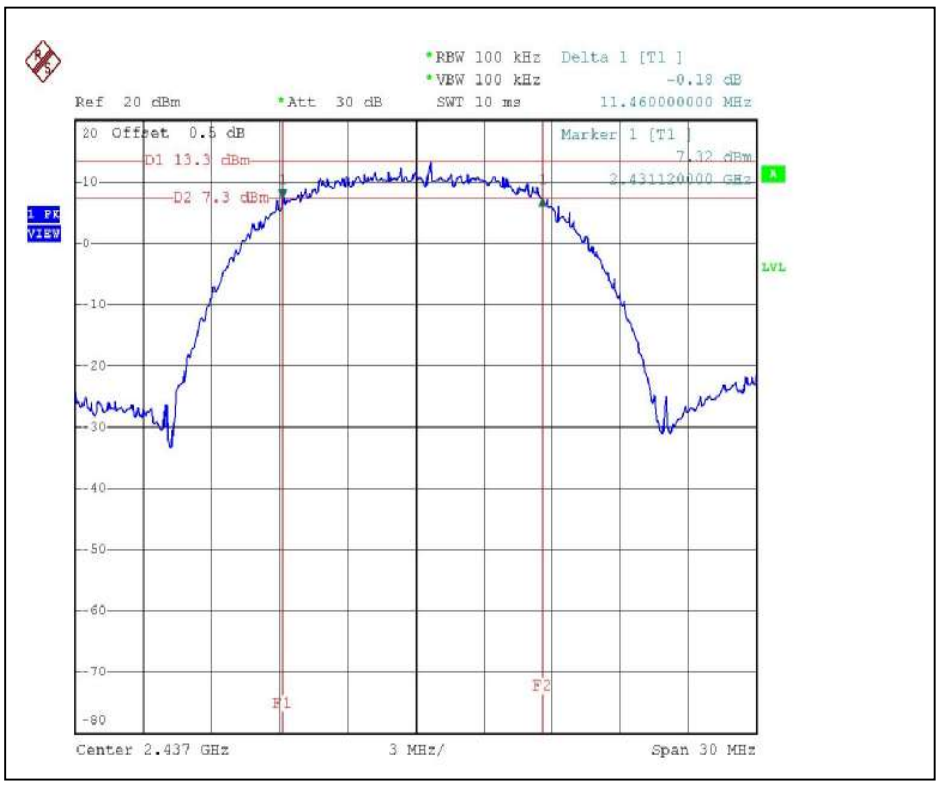
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	11Mbps
MODULATION TYPE	CCK	**ENVIRONMENTAL CONDITIONS**	26deg. C, 64%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	11.58	0.5	PASS
6	2437	11.46	0.5	PASS
11	2462	11.70	0.5	PASS

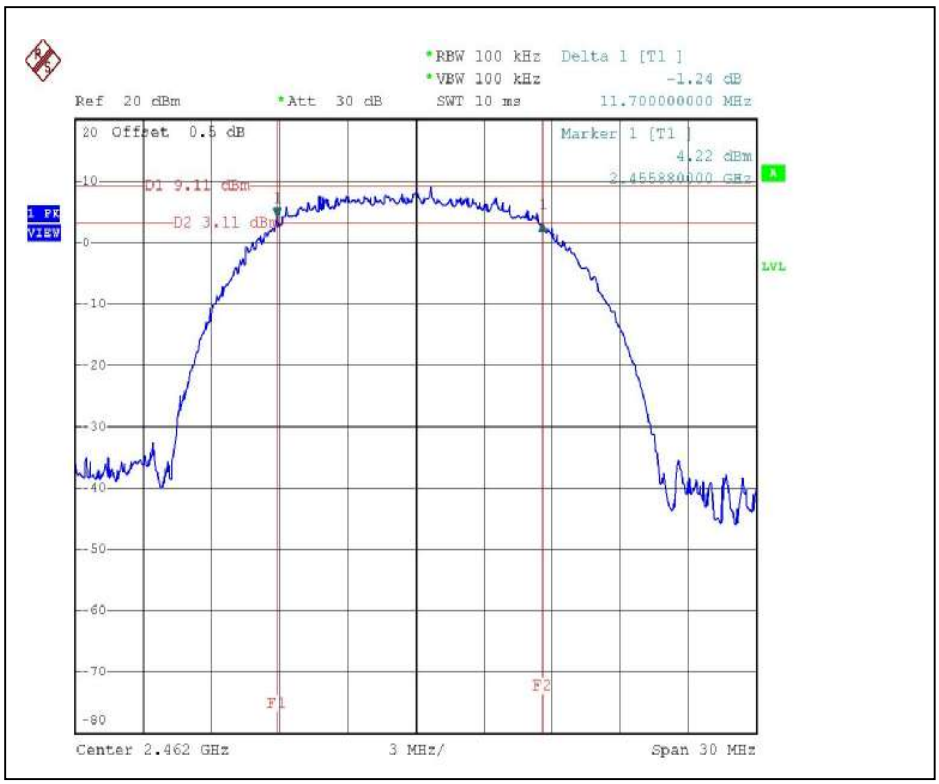
CH1


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-0.43 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
11.580000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
0.78 dBm
2.406120000 GHz
D1 6.32 dBm
D2 0.32 dBm
1 PK VIEW
LVL
F1
F2
Center 2.412 GHz
3 MHz/
Span 30 MHz

CH6


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-0.18 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
11.460000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
7.32 dBm
2.431120000 GHz
D1 13.3 dBm
D2 7.3 dBm
1 PK VIEW
LVL
F1
F2
Center 2.437 GHz
3 MHz/
Span 30 MHz

CH11

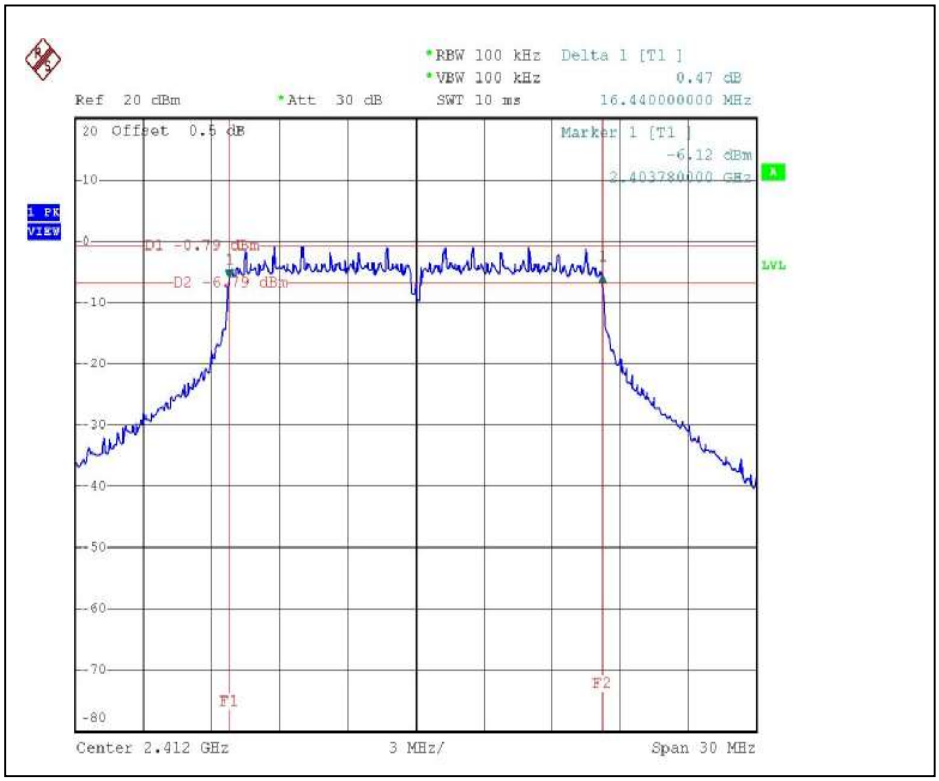

*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-1.24 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
11.700000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
4.22 dBm
2.455880000 GHz
D1 9.11 dBm
D2 3.11 dBm
1 PK VIEW
LVL
F1
F2
Center 2.462 GHz
3 MHz/
Span 30 MHz

802.11g OFDM modulation

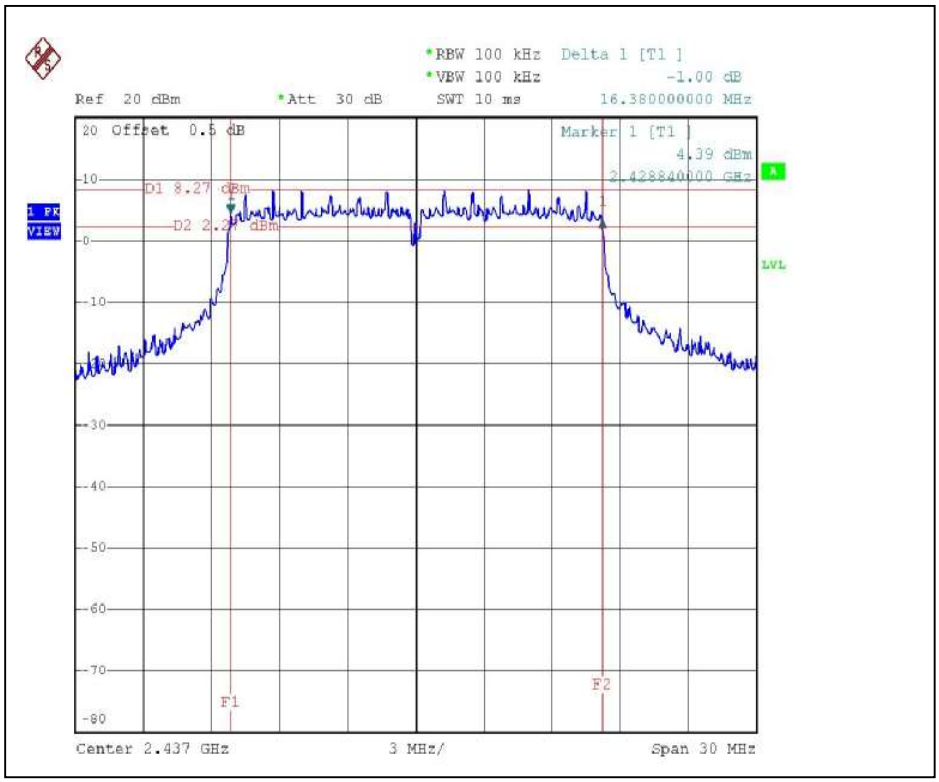
EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	6Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	26deg. C, 64%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.44	0.5	PASS
6	2437	16.38	0.5	PASS
11	2462	16.44	0.5	PASS

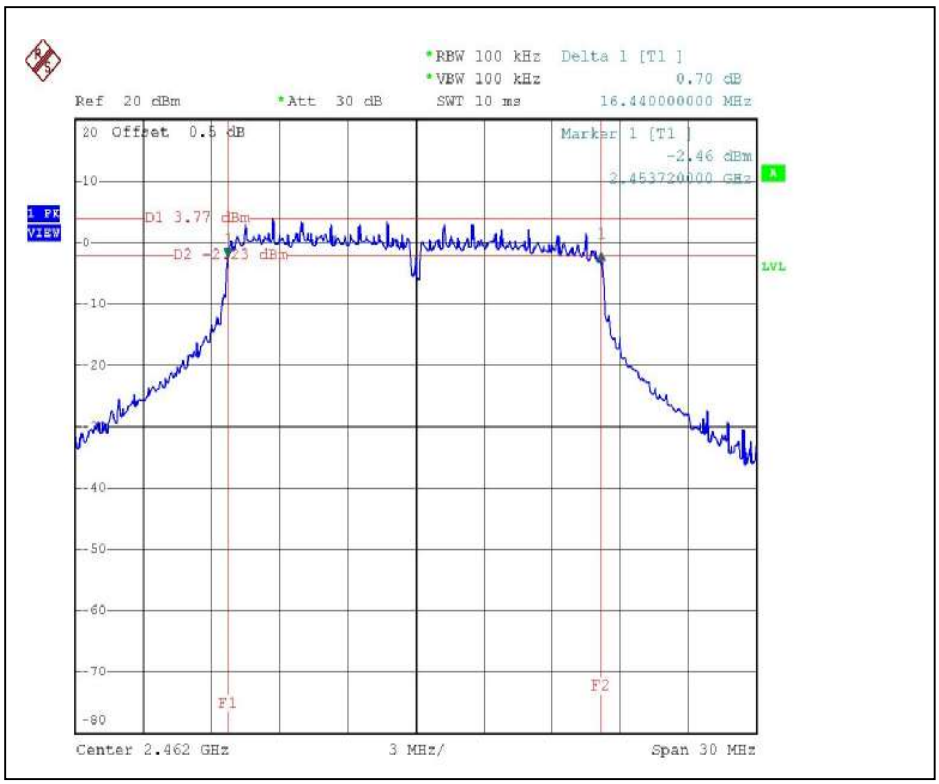
CH1


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
0.47 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
16.440000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
-6.12 dBm
2.403780000 GHz
1 PK VIEW
D1 -0.79 dBm
D2 -6.79 dBm
LVL
F1
F2
Center 2.412 GHz
3 MHz/
Span 30 MHz

CH6


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
-1.00 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
16.380000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
4.39 dBm
2.428840000 GHz
1 PK VIEW
D1 8.27 dBm
D2 2.27 dBm
LVL
F1
F2
Center 2.437 GHz
3 MHz/
Span 30 MHz

CH11


*RBW 100 kHz
Delta 1 [T1]
*VBW 100 kHz
0.70 dB
Ref 20 dBm
*Att 30 dB
SWT 10 ms
16.440000000 MHz
20 Offset 0.5 dB
Marker 1 [T1]
-2.46 dBm
2.453720000 GHz
1 PK VIEW
D1 3.77 dBm
D2 -2.23 dBm
LVL
F1
F2
Center 2.462 GHz
3 MHz/
Span 30 MHz

802.11g Turbo OFDM modulation

EUT	Aruba 80 a+b/g Outdoor Stand-alone Access Point / WDS Bridge Master		
MODEL	AP-80MB	**TRANSFER RATE**	12Mbps
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	26deg. C, 64%RH, 961hPa
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TESTED BY**	Eric Lee

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
6	2437	32.7	0.5	PASS