

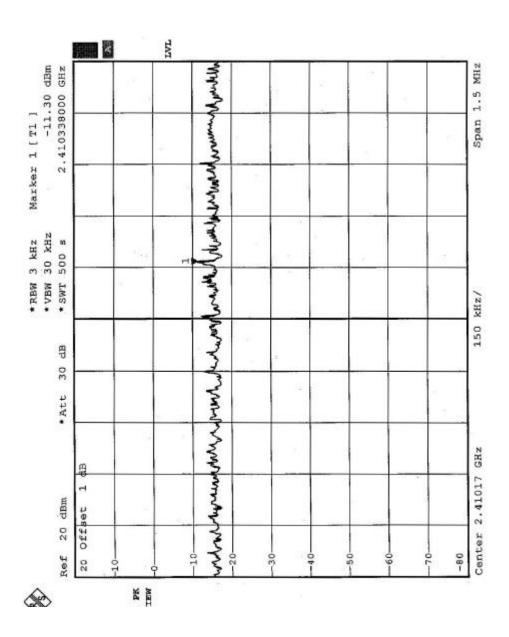


# 4.5.9 TEST RESULTS(B)-DSSS

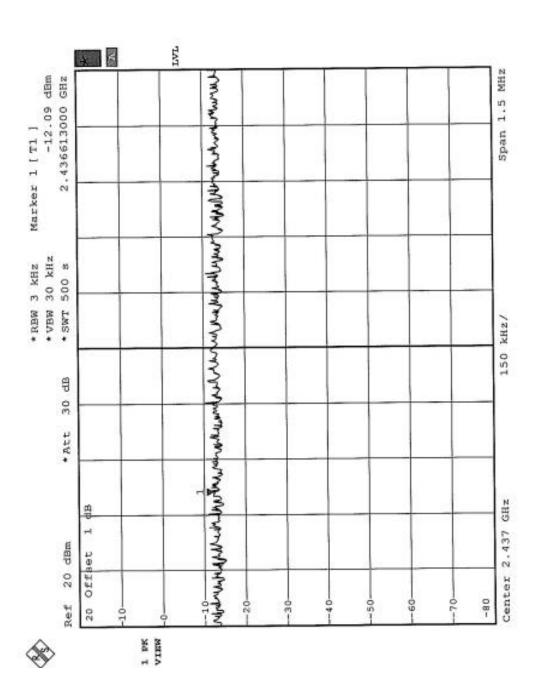
EUT	Wireless LAN Access Point	MODEL	A300-2
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg. C, 58RH, 969 hPa
TESTED BY	Eric Lee		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz )	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-11.30	8	PASS
6	2437	-12.09	8	PASS
11	2462	-12.55	8	PASS

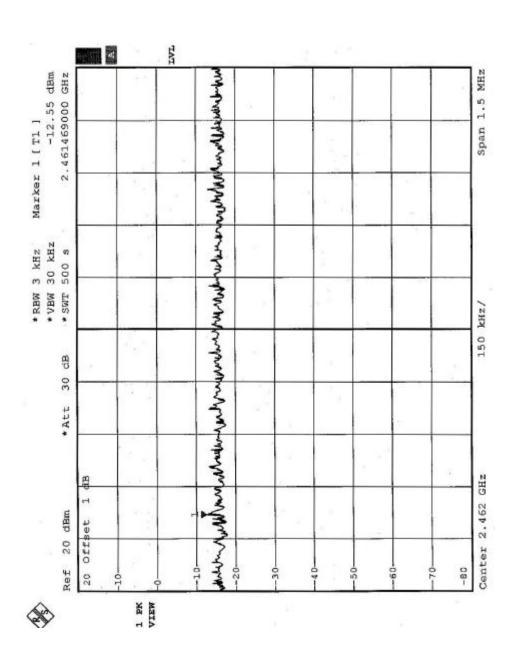












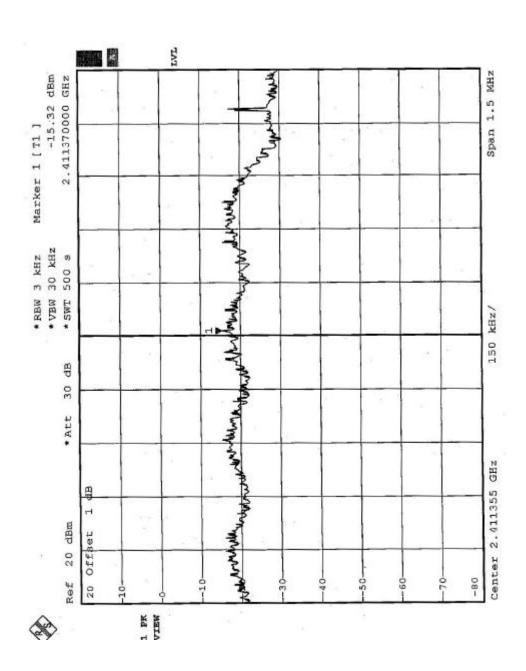


# 4.5.10 TEST RESULTS(B)-OFDM

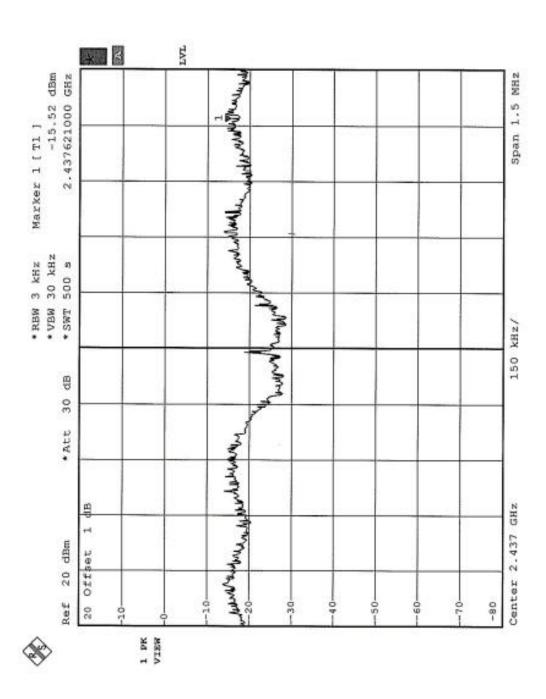
EUT	Wireless LAN Access Point	MODEL	A300-2
INPUT POWER (SYSTEM)	120Vac, 60Hz	ENVIRONMENTAL CONDITIONS	21deg. C, 58RH, 969 hPa
TESTED BY	Eric Lee		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz )	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-15.32	8	PASS
6	2437	-15.52	8	PASS
11	2462	-15.48	8	PASS

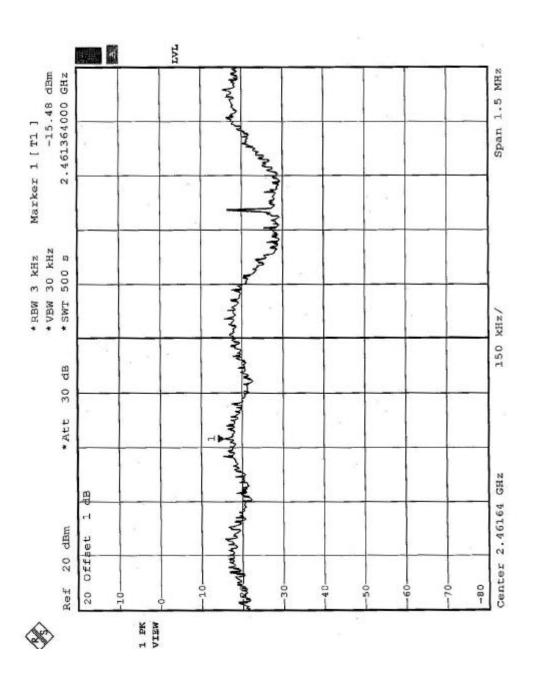














#### 4.6 BAND EDGES MEASUREMENT

### 4.6.1 LIMITS OF BAND EDGES MEASUREMENT

Below –20dB of the highest emission level of operating band (in 100KHz Resolution Bandwidth).

#### 4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSP	1093.4495.30	Dec. 19, 2003

#### 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.

#### 4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100 kHz with suitable frequency span including 100 kHz bandwidth from band edge. The band edges was measured and recorded.

#### 4.6.4 DEVIATION FROM TEST STANDARD

No deviation



#### 4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6

### 4.6.6 TEST RESULTS (A)-DSSS

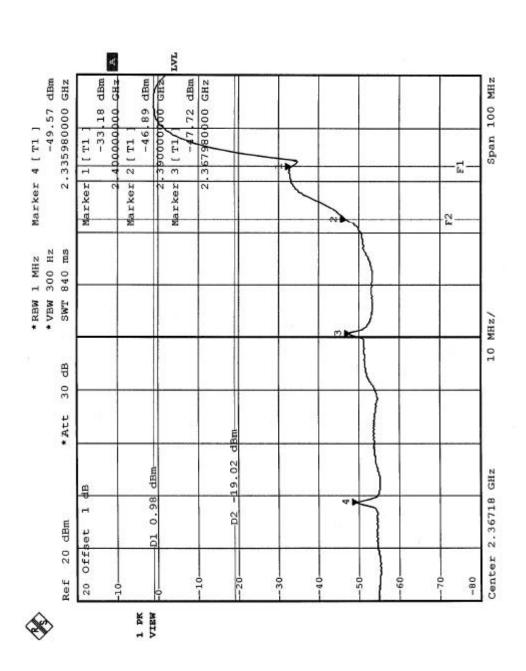
The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

**NOTE (1):** The band edge emission plot on the following first page shows 47.87dB delta between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 100.8dBuV/m, so the maximum field strength in restrict band is 100.8-47.87=52.93dBuV/m which is under 54 dBuV/m limit.

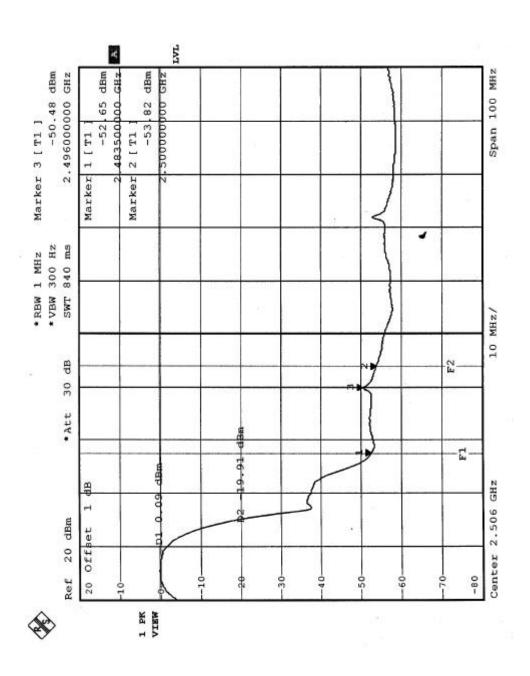
**NOTE (2):** The band edge emission plot on the following second page shows 50.57 dB delta between carrier maximum power and local maximum emission in restrict band (2.496GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 101.0dBuV/m, so the maximum field strength in restrict band is 101.0-50.57=50.43dBuV/m which is under 54 dBuV/m limit.

Report No.: RF920910H03A ADT No.: 920910H03











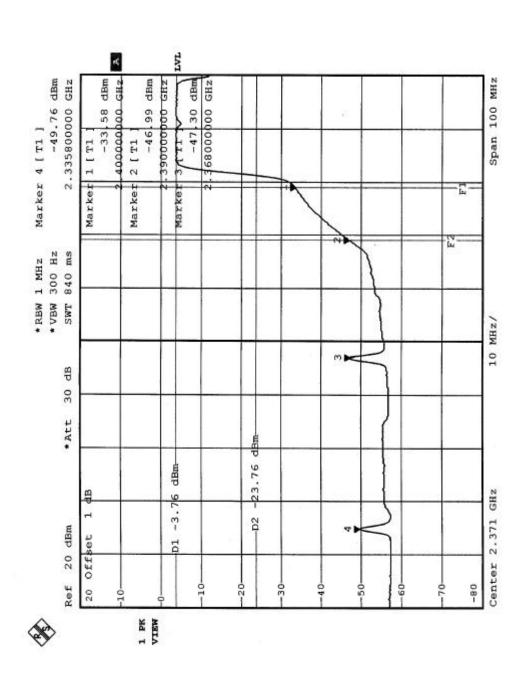
### 4.6.7 TEST RESULTS (A)-OFDM

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

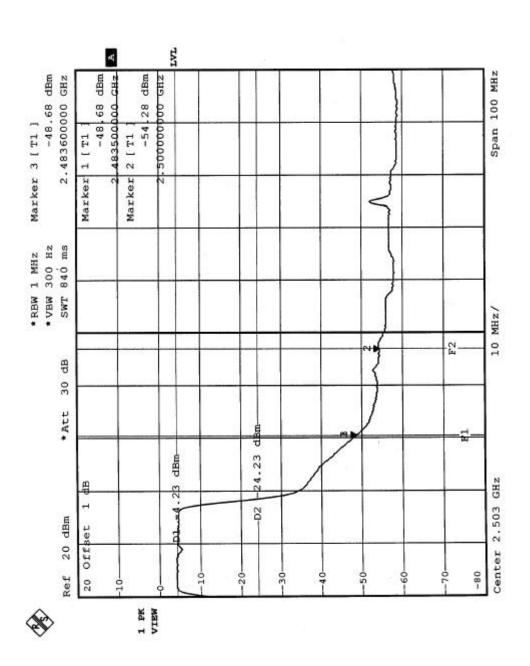
**NOTE (1):** The band edge emission plot on the following first page shows 43.23dB delta between carrier maximum power and local maximum emission in restrict band (2.390GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 93.8dBuV/m, so the maximum field strength in restrict band is 93.8-43.23=50.57dBuV/m which is under 54 dBuV/m limit.

**NOTE (2):** The band edge emission plot on the following second page shows 44.45 dB delta between carrier maximum power and local maximum emission in restrict band (2.4836GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 94.1dBuV/m, so the maximum field strength in restrict band is 94.1-44.45=49.65 dBuV/m which is under 54 dBuV/m limit.











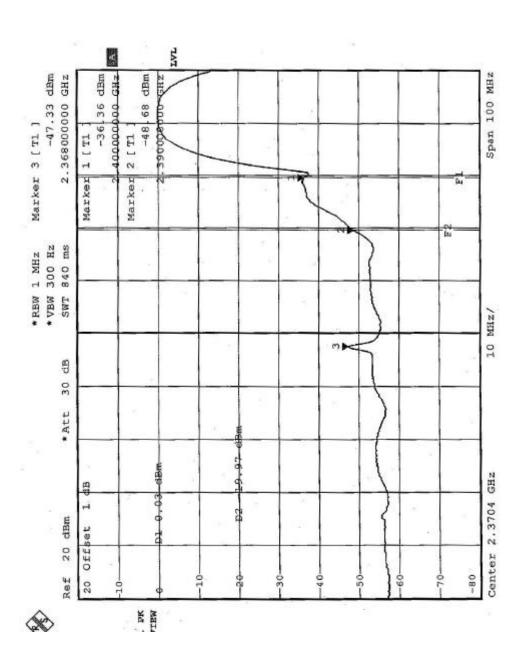
### 4.6.8 TEST RESULTS (B)-DSSS

The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

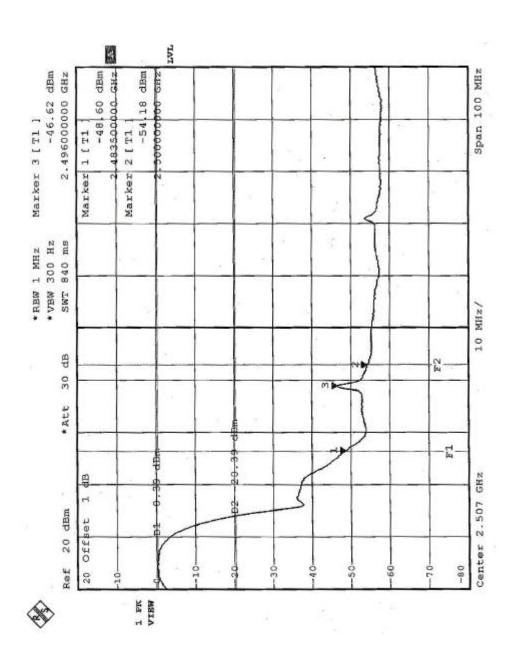
**NOTE (1):** The band edge emission plot on the following first page shows 47.36dB delta between carrier maximum power and local maximum emission in restrict band (2.368GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 99.2dBuV/m, so the maximum field strength in restrict band is 99.2-47.36=51.84dBuV/m which is under 54 dBuV/m limit.

**NOTE (2):** The band edge emission plot on the following second page shows 46.23 dB delta between carrier maximum power and local maximum emission in restrict band (2.496GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 98.5dBuV/m, so the maximum field strength in restrict band is 98.5-46.23=52.27dBuV/m which is under 54 dBuV/m limit.











### 4.6.9 TEST RESULTS (B)-OFDM

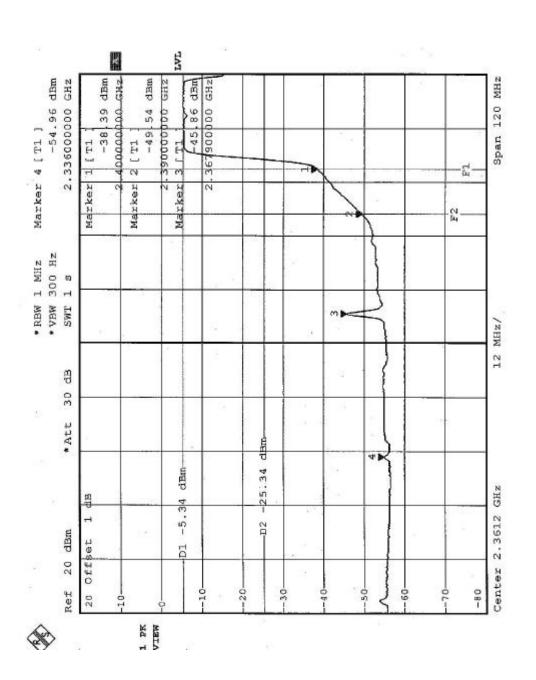
The spectrum plots are attached on the following 2 pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(C).

**NOTE (1):** The band edge emission plot on the following first page shows 40.52dB delta between carrier maximum power and local maximum emission in restrict band (2.3679GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2 is 92.5dBuV/m, so the maximum field strength in restrict band is 92.5-40.52=51.98dBuV/m which is under 54 dBuV/m limit.

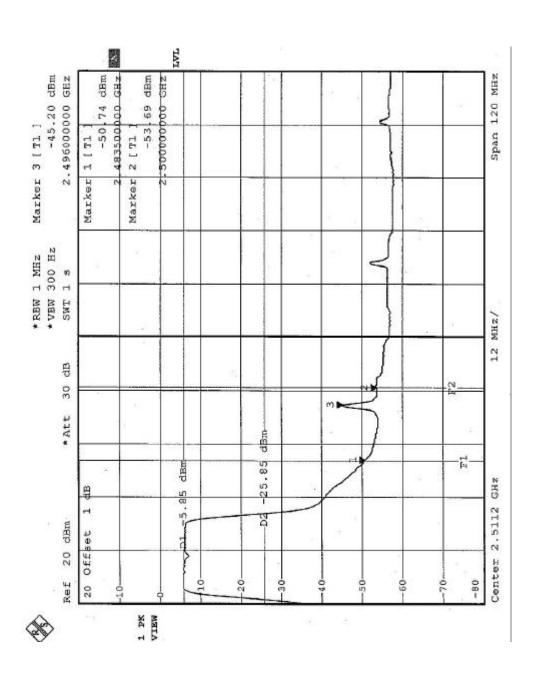
**NOTE (2):** The band edge emission plot on the following second page shows 39.35 dB delta between carrier maximum power and local maximum emission in restrict band (2.4960GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2 is 92.6dBuV/m, so the maximum field strength in restrict band is 92.6-39.35=53.25 dBuV/m which is under 54 dBuV/m limit.

### FCC ID: RJF-ALT300-2-NA











#### 4.7 ANTENNA REQUIREMENT

#### 4.7.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

#### 4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antenna used in this product is Dual-Band Omni-Directional Antenna with HRS U.FL-LP-066 connector and Dual Mode Antenna with RP TNC connector. The maximum Gain of the antenna is 6dBi.



# **5. TEST TYPES AND RESULTS (FOR PART 802.11a)**

### 5.1 CONDUCTED EMISSION MEASUREMENT

#### 5.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBµV)		
	Quasi-peak	Average	
0.15-0.5	66 to 56	56 to 46	
0.5-5	56	46	
5-30	60	50	

#### NOTE:

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

#### 5.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
ROHDE & SCHWARZ	ESCS 30	847124/029	Nov. 17, 2003
Test Receiver			
ROHDE & SCHWARZ LISN	ESHS-Z5	848773/004	Nov. 13, 2003
(for EUT)			
KYORITSU LISN (for peripheral)	KNW-407	8/1395/12	Jul. 23, 2004
RF Cable (JETBAO)	RG233/U	Cable_CA_01	Jul. 03, 2004
Terminator(for KYORITSU)	50	3	Apr. 11, 2004
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.

- 3. The test was performed in ADT Shielded Room No. A.
- 3. The VCCI Con A Registration No. is C-817.



#### 5.1.3 TEST PROCEDURES

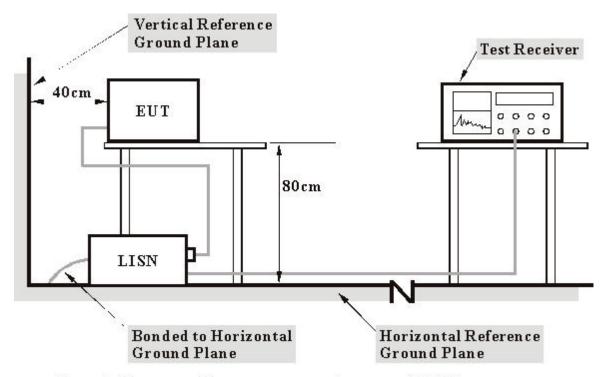
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

#### 5.1.4 DEVIATION FROM TEST STANDARD

No deviation



### 5.1.5 TEST SETUP



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

2. Both of LISNs (AMIN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

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

### 5.1.6 EUT OPERATING CONDITIONS

Same as 4.1.6.



# 5.1.7 TEST RESULTS

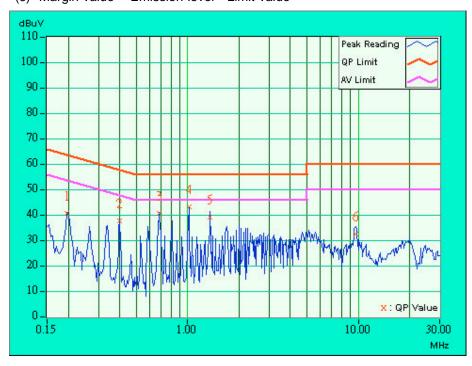
EUT	Wireless LAN Access Point						
MODEL	A300-2	4300-2 <b>6dB BANDWIDTH</b> 9 kHz					
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)				
ENVIRONMENTAL CONDITIONS	27deg. C, 69RH, 969 hPa	TESTED BY	Larry Peng				
TEST MODE	802.11a						

	From	Corr.	Reading	g Value	Emissio	n Level	Lir	mit	Mai	rgin
No	Freq.	Factor	[dB (	(uV)]	[dB (	(uV)]	[dB	(uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.197	0.20	39.93	ı	40.13	-	63.74	53.74	-23.61	-
2	0.400	0.20	36.84	ı	37.04	-	57.85	47.85	-20.81	-
3	0.677	0.25	40.03	-	40.28	-	56.00	46.00	-15.72	-
4	1.017	0.30	42.40	1	42.70	-	56.00	46.00	-13.30	-
5	1.353	0.30	38.48	ı	38.78	-	56.00	46.00	-17.22	-
6	9.695	0.78	31.63		32.41	-	60.00	50.00	-27.59	-

NOTES: (1) "\*": Undetectable
(2) Q.P. and AV. are abbreviations of quasi-peak and average.
(3) "-": The Quasi-peak reading value also meets an average limit, thus measurement with the average detector is unnecessary.

(4) The emission levels of other frequencies were very low against the limit.

(5) Correction Factor = Insertion loss + Cable loss(6) Margin value = Emission level - Limit value



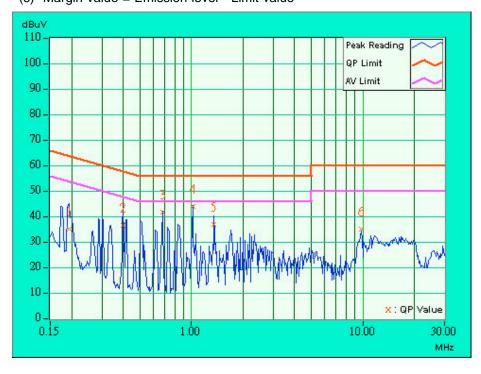


EUT	Wireless LAN Access Point						
MODEL	A300-2	4300-2 <b>6dB BANDWIDTH</b> 9 kHz					
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)				
ENVIRONMENTAL CONDITIONS	27deg. C, 69RH, 969 hPa	TESTED BY	Larry Peng				
TEST MODE	802.11a						

	From	Corr.	Reading	g Value	Emissio	n Level	Lir	nit	Mai	gin
No	Freq.	Factor	[dB (	(uV)]	[dB (	(uV)]	[dB	(uV)]	(d	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.20	34.48	ı	34.68	-	63.91	53.91	-29.23	-
2	0.400	0.20	35.95	-	36.15	-	57.85	47.85	-21.70	-
3	0.677	0.25	40.99	-	41.24	-	56.00	46.00	-14.76	-
4	1.017	0.30	43.22	1	43.52	-	56.00	46.00	-12.48	-
5	1.357	0.30	36.24	-	36.54	-	56.00	46.00	-19.46	-
6	9.837	0.69	34.36	-	35.05	-	60.00	50.00	-24.95	-

NOTES: (1) "\*": Undetectable

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



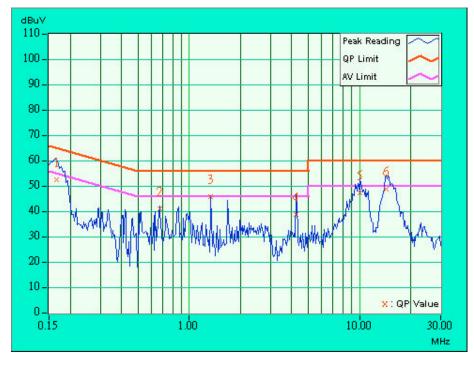


EUT	Wireless LAN Access Point						
MODEL	A300-2	A300-2 <b>6dB BANDWIDTH</b> 9 kHz					
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)				
ENVIRONMENTAL CONDITIONS	27deg. C, 69RH, 969 hPa TESTED BY Larry Peng						
TEST MODE	802.11a and draft 802.11g						

	Corr.		Reading	Reading Value Emission Level		Limit		Margin			
No	Freq.	Factor	[dB (	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	
1	0.166	0.20	51.63	ı	51.83	-	65.18	55.18	-13.35	1	
2	0.670	0.24	39.91	-	40.15	-	56.00	46.00	-15.85	-	
3	1.338	0.30	44.92	-	45.22	-	56.00	46.00	-10.78	-	
4	4.258	0.42	37.91	ı	38.33	-	56.00	46.00	-17.67	-	
5	10.016	0.80	46.29	ı	47.09	-	60.00	50.00	-12.91	-	
6	14.379	1.06	47.67	-	48.73	-	60.00	50.00	-11.27	-	

NOTES: (1) "\*": Undetectable

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



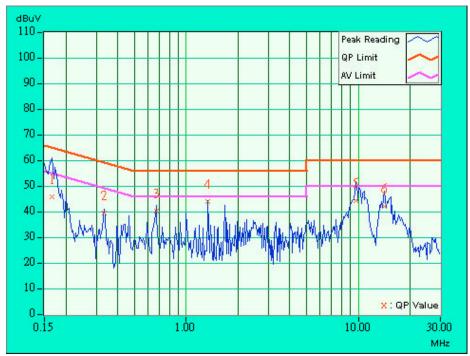


EUT	Wireless LAN Access	Wireless LAN Access Point					
MODEL	A300-2	300-2 <b>6dB BANDWIDTH</b> 9 kHz					
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)				
ENVIRONMENTAL CONDITIONS	27deg. C, 69RH, 969 hPa						
TEST MODE	802.11a and draft 802.11g						

	From	Corr.	Reading	Reading Value		Emission Level		Limit		Margin	
No	Freq.	Factor	[dB (	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	
1	0.166	0.20	45.02	1	45.22	-	65.18	55.18	-19.96	-	
2	0.334	0.20	38.66	ı	38.86	-	59.36	49.36	-20.50	-	
3	0.670	0.24	39.47	-	39.71	-	56.00	46.00	-16.29	-	
4	1.338	0.30	43.26	ı	43.56	-	56.00	46.00	-12.44	-	
5	9.625	0.68	43.67	-	44.35	-	60.00	50.00	-15.65	-	
6	14.262	0.87	41.42	-	42.29	-	60.00	50.00	-17.71	-	

NOTES: (1) "\*": Undetectable

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





#### 5.2 RADIATED EMISSION MEASUREMENT

#### 5.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

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

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



# 5.2.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

Frequencies (MHz)	EIRP Limit (dBm)	Equivalent Field Strength at 3m (dBµV/m) *note 3	
5150~5250	-27	68.3	
5250~5350	-27	68.3	
E70E E00E	-27 *note 1	68.3	
5725~5825	-17 *note 2	78.3	

- 1. For frequencies 10MHz or greater above or below the band edge.
- 2. All emissions within the frequency range from the band edge to 10MHz above or below the band edge.
- 3. The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength

$$E = \frac{1000000\sqrt{30P}}{3}$$
 µV/m, where P is the eirp (Watts)



### 5.2.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
HP Spectrum Analyzer	8594ER	3829U04676	Jul. 14, 2004
ADVANTEST Spectrum Analyzer	R3271A	85060311	May 21, 2004
CHASE RF Pre_Amplifier	CPA9232	1057	Apr. 24, 2004
HP Pre_Amplifier	8449B	3008A01281	June 27, 2004
ROHDE & SCHWARZ Test Receiver	ESVS 10	849231 /019	Nov. 03, 2003
CHASE Broadband Antenna	CBL6111c	2730	Jul 17, 2004
Schwarzbeck Horn_Antenna	3115	5619	Jul. 17, 2004
SCHWARZBECK Tunable	UHAP	897	Mar. 07, 2005
Dipole Antenna			
SCHWARZBECK Tunable	VHAP	880	Mar. 07, 2005
Dipole Antenna			
RF Switches (ARNITSU)	CS-201	1565157	Dec. 01, 2003
RF CABLE (Chaintek) 1GHz-20GHz	SF102	22054-2	Feb. 10. 2004
RF Cable(RICHTEC)	9913-30M	STCCAB-30M-	Nov. 5, 2003
		1GHz-021	
Software	AS60P8	NA	NA
CHANCE MOST	AT-100	0203	NA
Antenna Tower			
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 Dipole Antenna) and the calibrations are traceable to NML/ROC and NIST/USA.

- 2. \* = These equipment are used for the final measurement.
- 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 4. The test was performed in ADT Open Site No. C.
  5. The FCC Site Registration No. is 656396.
  6. The VCCI Site Registration No. is R-1626.
  7. The CANADA Site Registration No. is IC 3789-C.



#### 5.2.4 TEST PROCEDURES

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

#### NOTE:

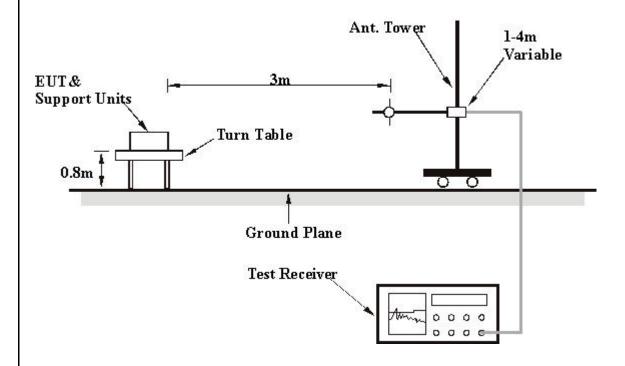
- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
- 2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 300 Hz for Average detection (AV) at frequency above 1GHz.

#### 5.2.5 DEVIATION FROM TEST STANDARD

No deviation



### 5.2.6 TEST SETUP



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

# 5.2.7 EUT OPERATING CONDITIONS

Same as 4.1.6.



#### TEST RESULTS 5.2.8

EUT	Wireless LAN Access Point					
MODEL	A300-2	DETECTOR FUNCTION Quasi-				
FREQUENCY RANGE	Below 1000MHz	INPUT POWER (SYSTEM)	120Vac, 60Hz			
ENVIRONMENTAL CONDITIONS	29 deg. C, 56%RH, 969 hPa	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	50.69	27.5 QP	40.00	-12.50	1.96 H	58	19.40	8.20		
2	68.29	24.0 QP	40.00	-16.00	1.08 H	57	18.30	5.70		
3	124.59	27.6 QP	43.50	-15.90	1.52 H	309	15.60	12.00		
4	220.00	29.4 QP	46.00	-16.60	1.48 H	54	20.00	9.40		
5	220.11	26.3 QP	46.00	-19.70	1.77 H	47	16.90	9.40		
6	250.03	28.0 QP	46.00	-18.00	1.88 H	5	15.00	13.00		
7	352.01	29.8 QP	46.00	-16.20	1.88 H	5	14.30	15.50		
8	374.98	31.9 QP	46.00	-14.10	1.14 H	147	15.70	16.20		
9	500.12	34.3 QP	46.00	-11.70	1.18 H	160	15.00	19.30		
10	527.68	37.2 QP	46.00	-8.80	1.58 H	98	17.60	19.60		

	ANTE	NNA POLAF	RITY & T	EST DIS	TANCE	: VERTIO	CAL AT 3	M
No.	Freq. (MHz)	Emission Level	Limit (dBuV/m)	Margin (dB)	Antenna Height	Table Angle	Raw Value	Correction Factor
1	51.02	(dBuV/m) 31.3 QP	40.00 -8.70	(m) 1.58 V	(Degree) 54	(dBuV) 23.20	(dB/m) 8.00	
2	55.89	30.1 QP	40.00	-9.90	1.08 V	68	23.70	6.40
3	69.03	36.7 QP	40.00	-3.30	1.68 V	199	30.90	5.80
4	72.00	31.5 QP	40.00	-8.50	1.02 V	96	25.20	6.30
5	124.97	27.3 QP	43.50	-16.20	1.09 V	269	15.30	12.00
6	250.00	26.2 QP	46.00	-19.80	1.47 V	54	13.20	13.00
7	264.02	29.4 QP	46.00	-16.60	1.09 V	69	15.30	14.10
8	374.36	32.1 QP	46.00	-13.90	1.78 V	7	15.90	16.20
9	396.21	32.0 QP	46.00	-14.00	1.00 V	356	15.00	17.00
10	500.02	34.3 QP	46.00	-11.70	1.38 V	68	15.00	19.30
11	527.89	40.6 QP	46.00	-5.40	1.08 V	354	21.00	19.60
12	625.32	33.3 QP	46.00	-12.70	1.58 V	55	11.60	21.70

#### **REMARKS**:

- Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
   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



# 5.2.9 TEST RESULTS (A)

### STANDARD SECTION 15.407

EUT	Wireless LAN Access Point	MODEL	A300-2
MODE	Normal Mode	CHANNEL	1
FREQUENCY RANGE	1000MHz~25000MHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28 deg. C, 56%RH, 969 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
TESTED BY	Eric Lee		

	ANTEN	NA POLA	RITY & T	EST DIST	TANCE: H	ORIZONI	TAL 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	#5088.00	54.2 PK	74.00	-19.80	1.46 H	329	17.10	37.00
1	#5088.00	46.2 AV	54.00	-7.80	1.46 H	329	9.20	37.00
2	#5120.00	55.0 PK	74.00	-19.00	1.08 H	326	18.00	37.00
2	#5120.00	46.6 AV	54.00	-7.40	1.08 H	326	9.60	37.00
3	#5150.00	54.6 PK	74.00	-19.40	1.40 H	208	17.60	37.00
3	#5150.00	44.6 AV	54.00	-9.40	1.40 H	208	7.60	37.00
4	*5180.00	95.3 PK			1.48 H	69	58.30	37.00
4	*5180.00	87.1 AV			1.48 H	69	50.10	37.00
5	#5440.00	52.1 PK	74.00	-21.90	1.37 H	151	15.10	37.00
5	#5440.00	44.9 AV	54.00	-9.10	1.37 H	151	7.90	37.00
6	10360.00	49.7 PK	68.30	-18.60	1.07 H	46	5.00	44.70

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
	Freq.	Emission	Limit	Margin	Antenna	Table	Raw	Correction			
No.	(MHz)	Level	(dBuV/m)	(dB)	Height	Angle	Value	Factor			
	(1411-12)	(dBuV/m)	(dbdv/III)	(ub)	(m)	(Degree)	(dBuV)	(dB/m)			
1	#5088.00	63.2 PK	74.00	-10.80	1.01 V	43	26.20	37.00			
1	#5088.00	51.0 AV	54.00	-3.00	1.01 V	43	14.00	37.00			
2	#5120.00	58.3 PK	74.00	-15.70	1.85 V	65	21.30	37.00			
2	#5120.00	51.6 AV	54.00	-2.40	1.85 V	65	14.60	37.00			
3	#5150.00	59.6 PK	74.00	-14.40	1.39 V	66	22.60	37.00			
3	#5150.00	50.3 AV	54.00	-3.70	1.39 V	66	13.30	37.00			
4	*5180.00	103.3 PK			1.25 V	54	66.20	37.00			
4	*5180.00	95.7 AV			1.25 V	54	58.60	37.00			
5	#5440.00	60.3 PK	74.00	-13.70	1.36 V	332	23.30	37.00			
5	#5440.00	52.2 AV	54.00	-1.80	1.36 V	332	15.20	37.00			
6	10360.00	53.9 PK	68.30	-14.40	1.35 V	222	9.20	44.70			

- 1. Emission level = Raw value Correction Factor
- 2. Correction Factor = Pre-Amp. Factor Ant. Factor Cable loss (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
- 3. Margin value = Emission level Limit value
- 4. The other emission levels were very low against the limit.
- 5. "\*": Fundamental frequency
- 6. "# ": The radiated frequency falling in the restricted band.



### STANDARD SECTION 15.407

EUT	Wireless LAN Access Point	MODEL	A300-2
MODE	Normal Mode	CHANNEL	4
FREQUENCY RANGE	1000MHz~40000MHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28 deg. C, 56%RH, 969 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
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	#5088.00	51.0 PK	74.00	-23.00	1.21 H	5	13.90	37.00		
1	#5088.00	43.0 AV	54.00	-11.00	1.21 H	5	6.00	37.00		
2	#5150.00	50.6 PK	74.00	-23.40	1.30 H	65	13.50	37.00		
3	*5240.00	96.4 PK			1.33 H	200	59.40	37.00		
3	*5240.00	87.9 AV			1.33 H	200	50.90	37.00		
4	#5440.00	53.3 PK	74.00	-20.70	1.05 H	22	16.20	37.00		
4	#5440.00	45.1 AV	54.00	-8.90	1.05 H	22	8.10	37.00		
5	10480.00	49.9 PK	68.30	-18.40	1.35 H	69	4.90	45.00		

	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	#5088.00	57.2 PK	74.00	-16.80	1.07 V	57	20.10	37.00		
1	#5088.00	47.7 AV	54.00	-6.30	1.07 V	57	10.60	37.00		
2	#5150.00	55.2 PK	74.00	-18.80	1.36 V	307	18.20	37.00		
2	#5150.00	47.3 AV	54.00	-6.70	1.36 V	307	10.20	37.00		
3	*5240.00	102.9 PK			1.35 V	68	65.90	37.00		
3	*5240.00	96.0 AV			1.35 V	68	59.00	37.00		
4	#5440.00	57.6 PK	74.00	-16.40	1.32 V	256	20.60	37.00		
4	#5440.00	49.4 AV	54.00	-4.60	1.32 V	256	12.40	37.00		
5	10480.00	54.6 PK	68.30	-13.70	1.20 V	249	9.70	45.00		

- 1. Emission level = Raw value Correction Factor
- 2. Correction Factor = Pre-Amp. Factor Ant. Factor Cable loss (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
- 3. Margin value = Emission level Limit value
- 4. The other emission levels were very low against the limit.
- 5. "\*": Fundamental frequency
- 6. "# ": The radiated frequency falling in the restricted band.



### STANDARD SECTION 15.407

EUT	Wireless LAN Access Point	MODEL	A300-2
MODE	Normal Mode	CHANNEL	5
FREQUENCY RANGE	1000MHz~40000MHz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28 deg. C, 56%RH, 969 hPa	INPUT POWER (SYSTEM)	120Vac, 60Hz
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	#5056.00	44.60 PK	74.00	-29.40	1.52 H	32	7.60	37.00		
2	#5120.00	51.20 PK	74.00	-22.80	1.21 H	54	14.20	37.00		
2	#5120.00	44.70 AV	54.00	-9.30	1.21 H	54	7.60	37.00		
3	*5260.00	102.00 PK			1.36 H	241	65.00	37.00		
3	*5260.00	92.70 AV			1.36 H	241	55.60	37.00		
4	#5376.00	52.00 PK	74.00	-22.00	1.11 H	2	15.00	37.00		
4	#5376.00	45.70 AV	54.00	-8.30	1.11 H	2	8.70	37.00		
5	#5440.00	51.00 PK	74.00	-23.00	1.45 H	21	14.00	37.00		
5	#5440.00	45.70 AV	54.00	-8.30	1.45 H	21	8.60	37.00		
6	10520.00	49.00 PK	68.30	-19.30	1.02 H	241	3.80	45.20		

	ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT3 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	#5056.00	52.90 PK	74.00	-21.10	1.17 V	111	15.80	37.00		
1	#5056.00	48.90 AV	54.00	-5.10	1.17 V	111	11.80	37.00		
2	#5120.00	58.70 PK	74.00	-15.30	1.19 V	12	21.60	37.00		
2	#5120.00	52.20 AV	54.00	-1.80	1.19 V	12	15.20	37.00		
3	*5260.00	108.20 PK			1.09 V	359	71.20	37.00		
3	*5260.00	99.90 AV			1.09 V	359	62.90	37.00		
4	#5376.00	59.10 PK	74.00	-14.90	1.18 V	99	22.10	37.00		
4	#5376.00	53.00 AV	54.00	-1.00	1.18 V	99	16.00	37.00		
5	#5440.00	59.10 PK	74.00	-14.90	1.15 V	122	22.00	37.00		
5	#5440.00	52.80 AV	54.00	-1.20	1.15 V	122	15.80	37.00		
6	10520.00	53.80 PK	68.30	-14.50	1.19 V	160	8.60	45.20		

- 1. Emission level = Raw value Correction Factor
- 2. Correction Factor = Pre-Amp. Factor Ant. Factor Cable loss (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
- 3. Margin value = Emission level Limit value
- 4. The other emission levels were very low against the limit.
- 5. "\*": Fundamental frequency



### STANDARD SECTION 15.407

EUT	Wireless LAN Access Point	MODEL	A300-2
MODE	Normal Mode	CHANNEL	8
FREQUENCY RANGE	1000MHz~40000MHz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28 deg. C, 56%RH, 969 hPa INPUT POWER (SYSTEM)		120Vac, 60Hz
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	#5120.00	50.7 PK	74.00	-23.30	1.76 H	64	13.70	37.00			
2	*5320.00	95.1 PK			1.06 H	326	58.10	37.00			
2	*5320.00	88.0 AV			1.06 H	326	51.00	37.00			
3	#5350.00	51.5 PK	74.00	-22.50	1.07 H	168	14.50	37.00			
3	#5350.00	45.9 AV	54.00	-8.10	1.07 H	168	8.90	37.00			
4	#5408.00	53.7 PK	74.00	-20.30	1.53 H	354	16.70	37.00			
4	#5408.00	48.0 AV	54.00	-6.00	1.53 H	354	11.00	37.00			
5	#10640.00	53.9 PK	74.00	-20.10	1.36 H	199	7.60	46.30			
5	#10640.00	43.2 AV	54.00	-10.80	1.36 H	199	-3.10	37.00			

	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	#5120.00	55.3 PK	74.00	-18.70	1.33 V	201	18.30	37.00			
1	#5120.00	46.1 AV	54.00	-7.90	1.33 V	201	9.10	37.00			
2	*5320.00	102.3 PK			1.05 V	326	65.30	37.00			
2	*5320.00	94.0 AV			1.05 V	326	57.00	37.00			
3	#5350.00	60.8 PK	74.00	-13.20	1.09 V	357	23.80	37.00			
3	#5350.00	51.9 AV	54.00	-2.10	1.09 V	357	14.90	37.00			
4	#5408.00	62.4 PK	74.00	-11.60	1.58 V	52	25.40	37.00			
4	#5408.00	53.0 AV	54.00	-1.00	1.58 V	52	16.00	37.00			
5	#10640.00	58.1 PK	74.00	-15.90	1.22 V	5	11.90	46.30			
5	#10640.00	46.4 AV	54.00	-7.60	1.22 V	5	0.10	46.30			

- 1. Emission level = Raw value Correction Factor
- 2. Correction Factor = Pre-Amp. Factor Ant. Factor Cable loss (Pre-Amp. Factor = 0, when a Pre-Amplifier is not used for the test.)
- 3. Margin value = Emission level Limit value
- 4. The other emission levels were very low against the limit.
- 5. "\*": Fundamental frequency
- 6. "#": The radiated frequency falling in the restricted band.