FCC TEST REPORT

REPORT NO.: RF900807R02A
MODEL NO.: St-AP2124
RECEIVED: Jan. 8, 2002
TESTED: Jan. 8. 2002

APPLICANT: SUMTEL COMMUNICATIONS, INC.

ADDRESS: 2F, No.10, Industry E. Rd., IV, Science-Based Industrial Park, Hsinchu, Taiwan, R.O.C.

ISSUED BY: Advance Data Technology Corporation

LAB LOCATION: 47 14th Lin, Chiapau Tsun, Linko, Taipei, Taiwan, R.O.C.

0528
ILAC MRA

Lab Code: 200102-0

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1 CERTIFICATION

PRODUCT :	Wireless Access Point
BRAND NAME :	Sumtel
MODEL NO. :	St-AP2124
APPLICANT :	SUMTEL COMMUNICATIONS, INC.
STANDARDS :	47 CFR Part 15, Subpart C (Section 15.247), ANSI C63.4-1992, Canada RSS 210, New Zealand RFS 29

We, **Advance Data Technology Corporation**, hereby certify that one sample of the designation has been tested in our facility on Jan. 8, 2002. The test record, data evaluation and Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions herein specified.

TESTED BY: Gary Chang , DATE: Jan. 14, 2002
Gary Chang

CHECKED BY: Demi Chen , DATE: Jan. 14, 2002
Demi Chen

APPROVED BY: Alan Lane , DATE: Jan. 14, 2002
Dr. Alan Lane
Manager

2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: 47 CFR Part 15, Subpart C			
Standard Section	**Test Type and Limit**	**Result**	**REMARK**
15.207	AC Power Conducted Emission Limit: 48dBuV	PASS	Meet the requirement of limit Minimum passing margin is –6.31dBuV at 0.462MHz
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(c)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is –2.3dBuV at 4126.0 MHz
15.247(d)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit
15.247(c)	Band Edge Measurement Limit: 20 dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless Access Point
MODEL NO.	St-AP2124
POWER SUPPLY	7.5VDC from AC adapter
MODULATION TYPE	BPSK, QPSK, CCK
RADIO TECHNOLOGY	DSSS
TRANSFER RATE	1/2/5.5/11Mbps
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
OUTPUT POWER	10.56dBm
ANTENNA TYPE	Dipole antenna and Flat Plate antenna
POWER CABLE	1.2m (Nonshielded)
I/O PORTS	RJ45 port
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT is operated with the following power adapter.

Model No. :	SCP48-751500
Input Power :	120VAC, 60Hz
Output Power :	7.5VDC,1500mA

2. There are two antenna types provided in this EUT. One is Dipole Antenna. The other is Flat Plant Antenna which is used for outdoor only.

3. There are three combination on the use of the antennas. For mode 1, two dipole are used, but one of them use reversed SMA antenna connector. For mode 2, the same as mode 1, but of them use reversed SMA antenna connector. For mode 3, one antenna is fixed dipole, the other is Flat Plate Antenna.

4. For a more detailed features description, please refer to the manufacturer's specifications or the User's Manual.

3.2 DESCRIPTION OF TEST MODES

Eleven channels are provided in 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		

NOTE:

1. Below 1 GHz, the channel 1, 6, and 11 were pre-tested in chamber. The channel 11, worst case one, was chosen for final test.
2. Above 1 GHz, the channel 1, 6, and 11 were tested individually.
3. The test result (A) is for model 1 and model 2, mentioned on section 3.1. Test result (B) is for mode 3.

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a Wireless Access Point. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC CFR 47 Part 15, Subpart C. (15.247)

ANSI C63.4 : 1992, Canada RSS 210, New Zealand RFS 29

All tests 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	Dell	PP01L	TW-09C748-12800-19O-B220	FCC DoC APPROVED
2	LAN CARD	D-Link	DU-E100	UR15001597	FCC DoC APPROVED

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

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

4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY (MHz)	Class B (dBuV)	
	Quasi-peak	Average
0.45 – 30	48	-

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. All emanations from a class 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	ESCS30	834115/016	Feb. 21, 2002
ROHDE & SCHWARZ Artificial Mains Network (For EUT)	ESH2-Z5	892107/003	July 10, 2002
* ROHDE & SCHWARZ 4-wire ISN	ENY41	838119/028	Dec. 2, 2002
* ROHDE & SCHWARZ 2-wire ISN	ENY22	837497/018	Dec. 2, 2002
EMCO L.I.S.N. (For peripherals)	3825/2	9504-2359	July 10, 2002
Software	Cond-V2J	NA	NA
RF cable (JYEBAO)	RG-58A/U	Cable-C03.01	July 11, 2002
Terminator (For EMCO LISN)	NA	E1-01-300	Feb. 20, 2002
Terminator (For EMCO LISN)	NA	E1-01-301	Feb. 20, 2002
Shielded Room	Site 3	ADT-C03	NA
VCCI Site Registration No.	Site 3	C-274	NA

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.
3. "*" = These equipments are used for the final measurement.

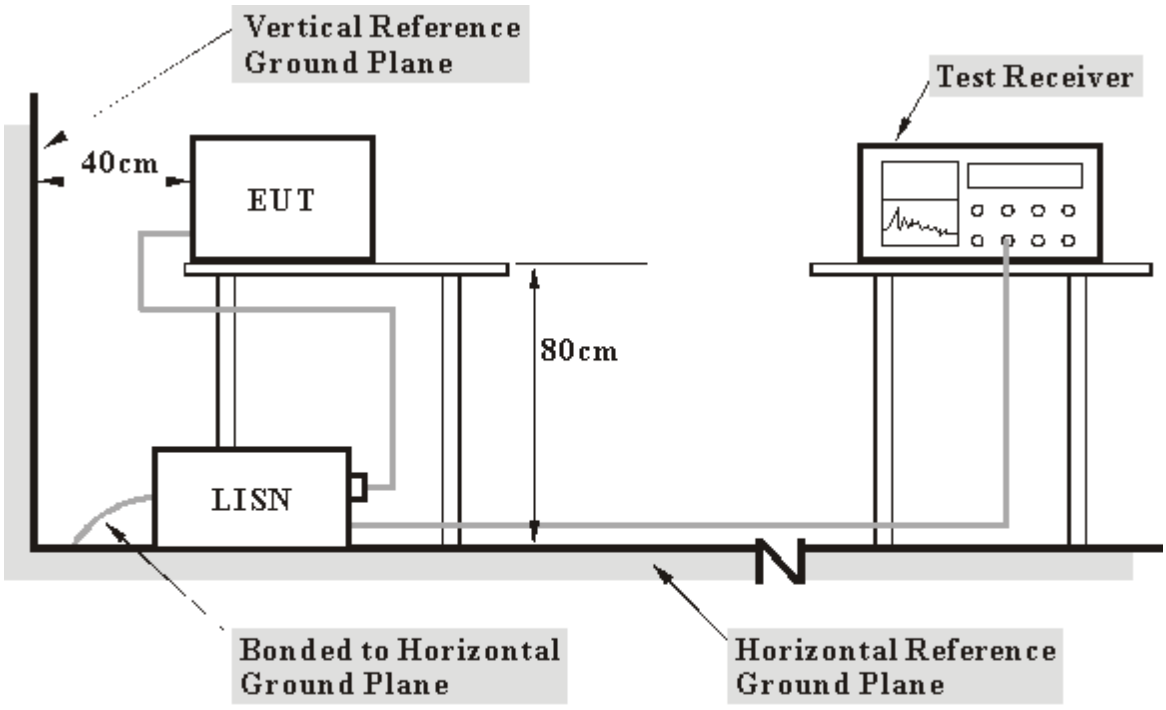
4.1.3 TEST PROCEDURES

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 450 kHz to 30 MHz was searched. Emission levels over 10dB under the prescribed limits could not be reported

4.1.4 TEST SETUP



Note: 1. Support units were connected to second LISN.
2. Both of LISNs (AMN) 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.

4.1.5 EUT OPERATING CONDITIONS

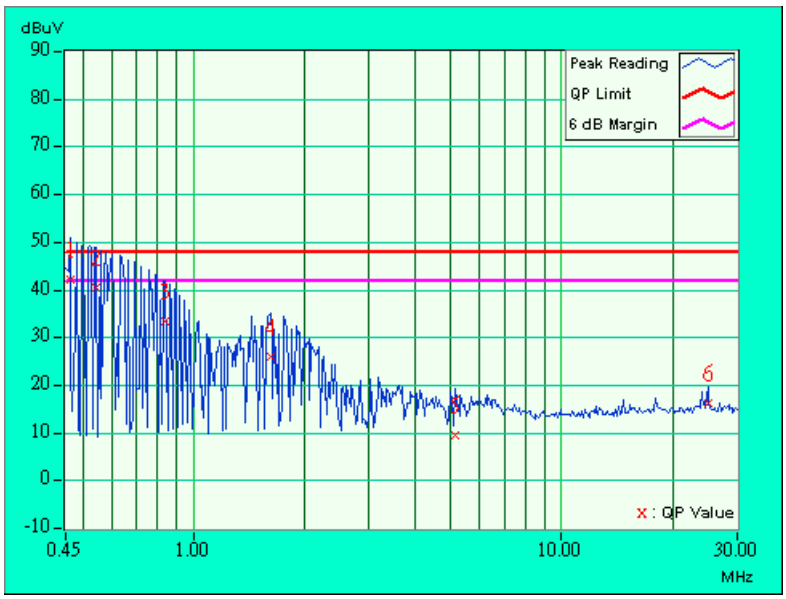
a. Placed the EUT on the testing table.
b. Prepared another computer system to act as a communication partner and placed it outside of testing area.
c. The communication partner run a test program to enable EUT under transmission/receiving condition continuously at specific channel frequency via an RJ 45 cable.
d. The communication partner sent data to EUT by command "PIN".

4.1.6 TEST RESULTS (A)

EUT	Wireless Access Point	**MODEL**	St-AP2124
MODE	Channel 1	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	**TESTED BY**: James Lee	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.462	0.11	41.58	-	41.69	-	48.00	-	-6.31	-
2	0.544	0.12	40.13	-	40.25	-	48.00	-	-7.75	-
3	0.841	0.17	32.83	-	33.00	-	48.00	-	-15.00	-
4	1.618	0.20	25.56	-	25.76	-	48.00	-	-22.24	-
5	5.153	0.32	8.93	-	9.25	-	48.00	-	-38.75	-
6	25.001	0.50	15.68	-	16.18	-	48.00	-	-31.82	-

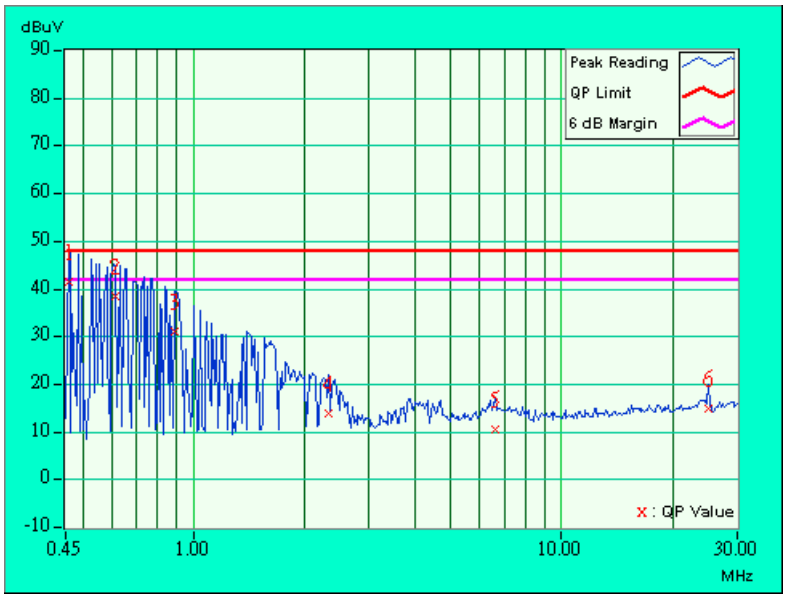
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 1	6dB BANDWIDTH	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	TESTED BY: James Lee	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.458	0.11	40.57	-	40.68	-	48.00	-	-7.32	-
2	0.611	0.14	37.38	-	37.52	-	48.00	-	-10.48	-
3	0.891	0.18	30.21	-	30.39	-	48.00	-	-17.61	-
4	2.320	0.22	12.90	-	13.12	-	48.00	-	-34.88	-
5	6.602	0.34	9.44	-	9.78	-	48.00	-	-38.22	-
6	25.002	1.00	13.82	-	14.82	-	48.00	-	-33.18	-

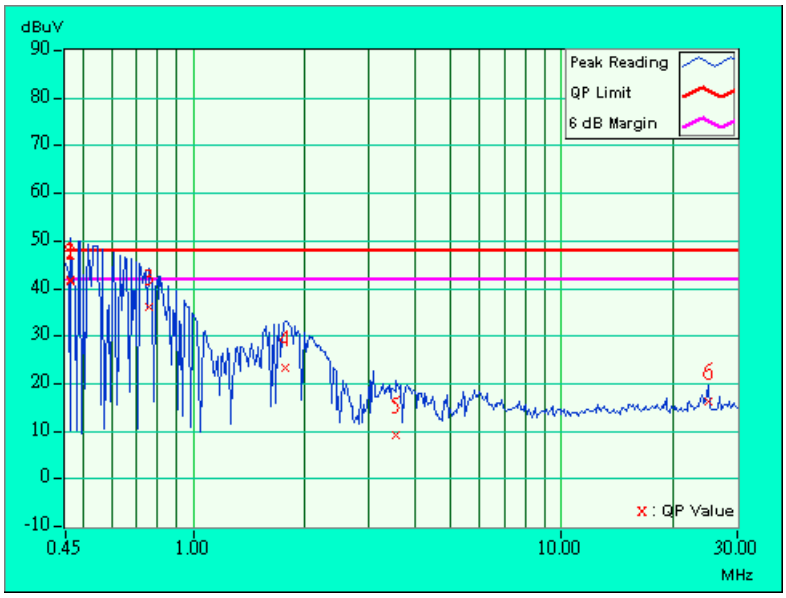
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 6	6dB BANDWIDTH	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	TESTED BY: James Lee	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.465	0.11	41.20	-	41.31	-	48.00	-	-6.69	-
2	0.465	0.11	40.97	-	41.08	-	48.00	-	-6.92	-
3	0.759	0.16	35.52	-	35.68	-	48.00	-	-12.32	-
4	1.782	0.20	22.69	-	22.89	-	48.00	-	-25.11	-
5	3.563	0.28	8.54	-	8.82	-	48.00	-	-39.18	-
6	25.001	0.50	15.78	-	16.28	-	48.00	-	-31.72	-

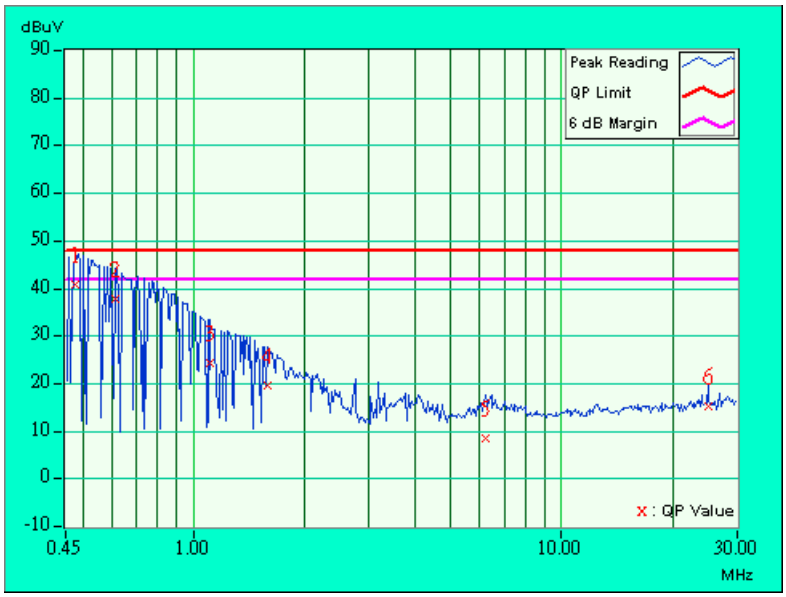
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Access Point	**MODEL**	St-AP2124
MODE	Channel 6	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	**TESTED BY**: James Lee	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.477	0.11	39.99	-	40.10	-	48.00	-	-7.90	-
2	0.613	0.14	36.80	-	36.94	-	48.00	-	-11.06	-
3	1.110	0.20	23.38	-	23.58	-	48.00	-	-24.42	-
4	1.591	0.20	18.76	-	18.96	-	48.00	-	-29.04	-
5	6.215	0.34	7.37	-	7.71	-	48.00	-	-40.29	-
6	25.001	1.00	14.20	-	15.20	-	48.00	-	-32.80	-

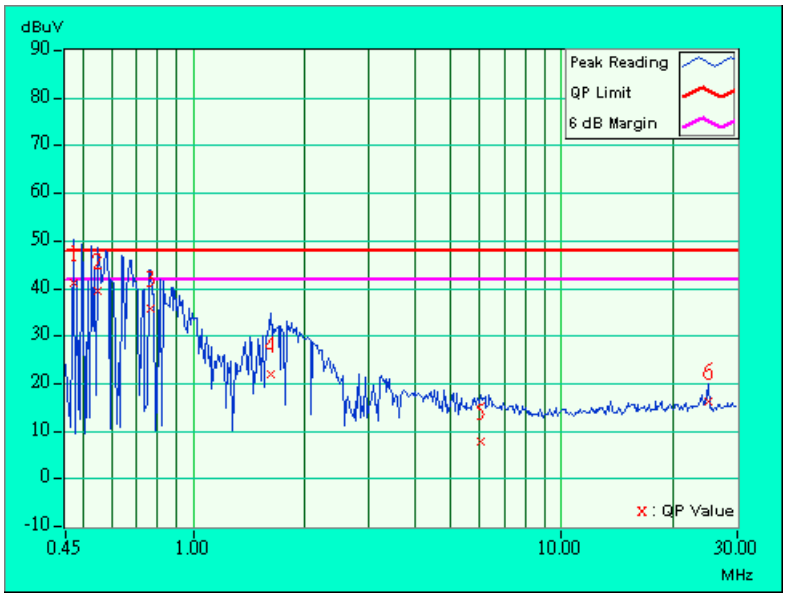
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 11	6dB BANDWIDTH	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	TESTED BY: James Lee	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.473	0.11	40.74	-	40.85	-	48.00	-	-7.15	-
2	0.552	0.13	39.11	-	39.24	-	48.00	-	-8.76	-
3	0.763	0.16	35.15	-	35.31	-	48.00	-	-12.69	-
4	1.618	0.20	21.48	-	21.68	-	48.00	-	-26.32	-
5	6.020	0.33	7.37	-	7.70	-	48.00	-	-40.30	-
6	25.001	0.50	15.78	-	16.28	-	48.00	-	-31.72	-

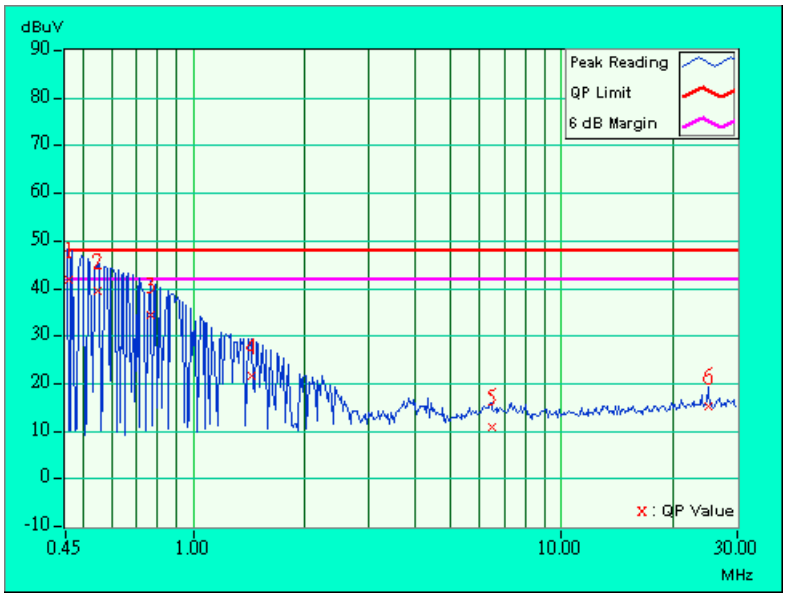
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Access Point	**MODEL**	St-AP2124
MODE	Channel 11	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	**TESTED BY**: James Lee	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.458	0.11	40.73	-	40.84	-	48.00	-	-7.16	-
2	0.548	0.12	38.51	-	38.63	-	48.00	-	-9.37	-
3	0.763	0.16	33.44	-	33.60	-	48.00	-	-14.40	-
4	1.442	0.20	20.56	-	20.76	-	48.00	-	-27.24	-
5	6.458	0.34	9.95	-	10.29	-	48.00	-	-37.71	-
6	25.001	1.00	14.28	-	15.28	-	48.00	-	-32.72	-

Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.

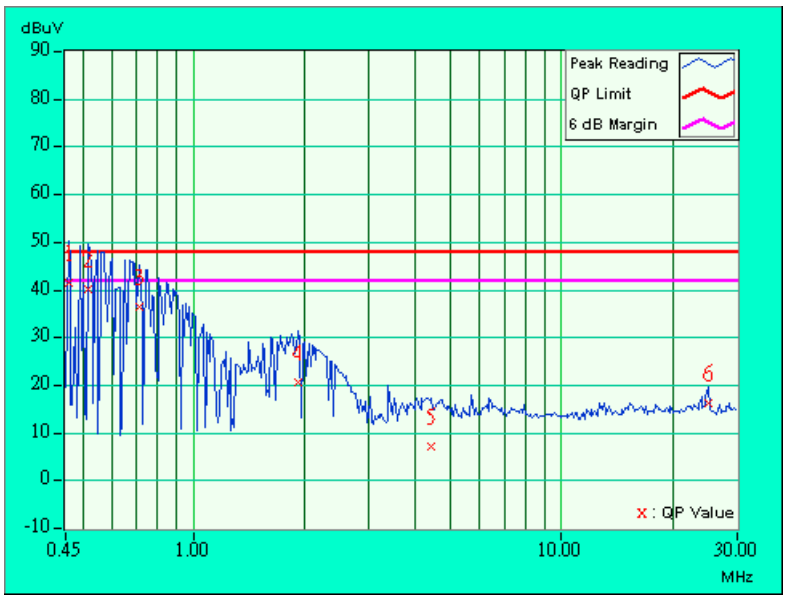


4.1.7 TEST RESULTS (B)

EUT	Wireless Access Point	**MODEL**	St-AP2124
MODE	Channel 1	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	**TESTED BY**: James Lee	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.458	0.11	41.01	-	41.12	-	48.00	-	-6.88	-
2	0.516	0.12	39.59	-	39.71	-	48.00	-	-8.29	-
3	0.712	0.15	36.04	-	36.19	-	48.00	-	-11.81	-
4	1.919	0.20	20.07	-	20.27	-	48.00	-	-27.73	-
5	4.415	0.31	6.73	-	7.04	-	48.00	-	-40.96	-
6	25.001	0.50	15.82	-	16.32	-	48.00	-	-31.68	-

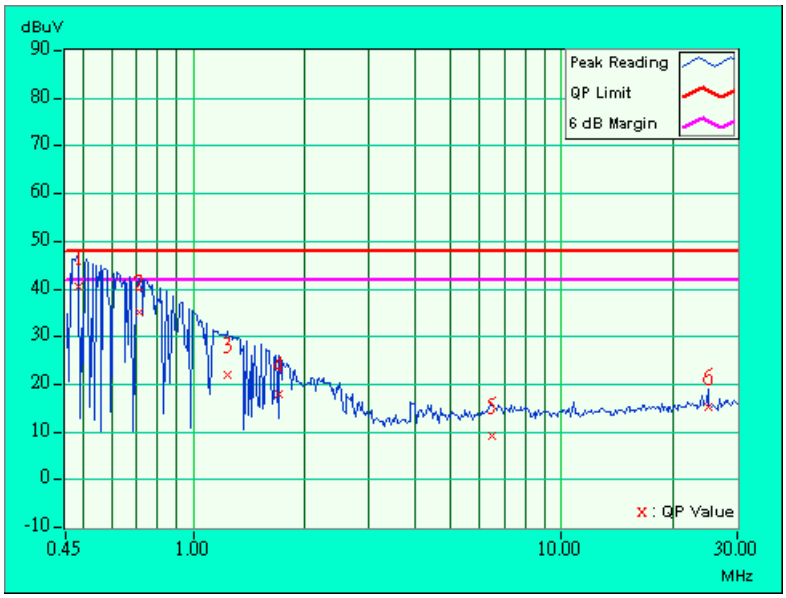
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 1	6dB BANDWIDTH	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	TESTED BY: James Lee	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.485	0.11	39.47	-	39.58	-	48.00	-	-8.42	-
2	0.712	0.15	34.25	-	34.40	-	48.00	-	-13.60	-
3	1.239	0.20	21.01	-	21.21	-	48.00	-	-26.79	-
4	1.712	0.20	16.90	-	17.10	-	48.00	-	-30.90	-
5	6.505	0.34	8.13	-	8.47	-	48.00	-	-39.53	-
6	25.001	1.00	14.26	-	15.26	-	48.00	-	-32.74	-

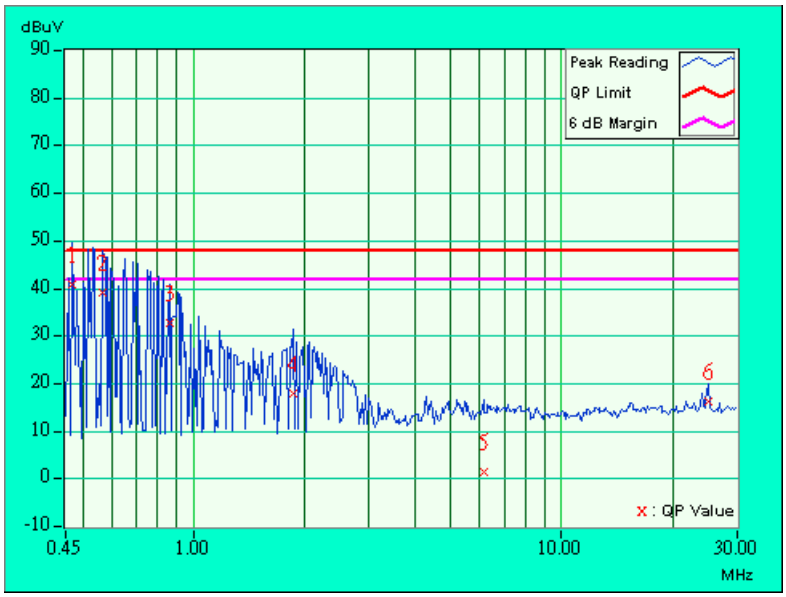
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 6	6dB BANDWIDTH	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	TESTED BY: James Lee	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.470	0.11	40.44	-	40.55	-	48.00	-	-7.45	-
2	0.567	0.13	38.53	-	38.66	-	48.00	-	-9.34	-
3	0.860	0.18	32.13	-	32.31	-	48.00	-	-15.69	-
4	1.872	0.20	17.61	-	17.81	-	48.00	-	-30.19	-
5	6.141	0.34	1.02	-	1.36	-	48.00	-	-46.64	-
6	25.001	0.50	15.74	-	16.24	-	48.00	-	-31.76	-

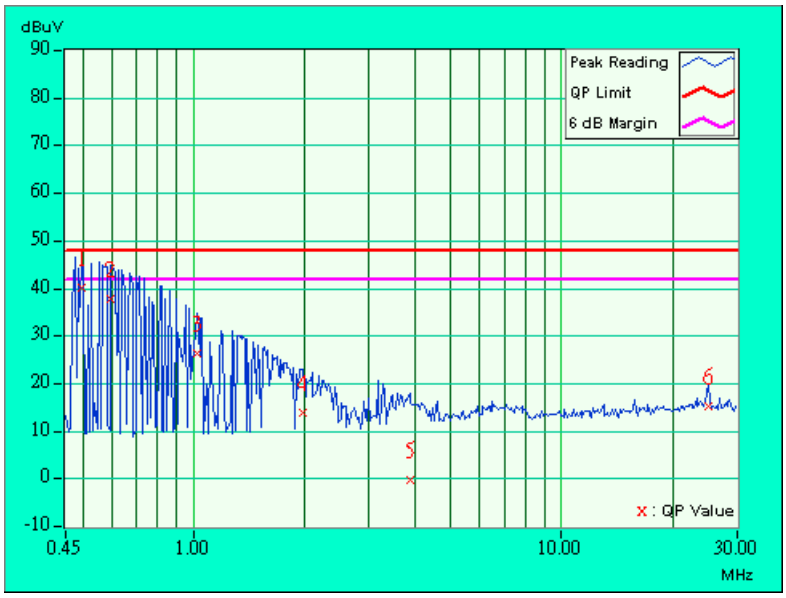
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 6	6dB BANDWIDTH	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	TESTED BY: James Lee	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.497	0.12	39.18	-	39.30	-	48.00	-	-8.70	-
2	0.598	0.13	36.76	-	36.89	-	48.00	-	-11.11	-
3	1.024	0.20	25.38	-	25.58	-	48.00	-	-22.42	-
4	1.977	0.20	13.03	-	13.23	-	48.00	-	-34.77	-
5	3.864	0.29	-1.20	-	-0.91	-	48.00	-	-48.91	-
6	25.001	1.00	14.28	-	15.28	-	48.00	-	-32.72	-

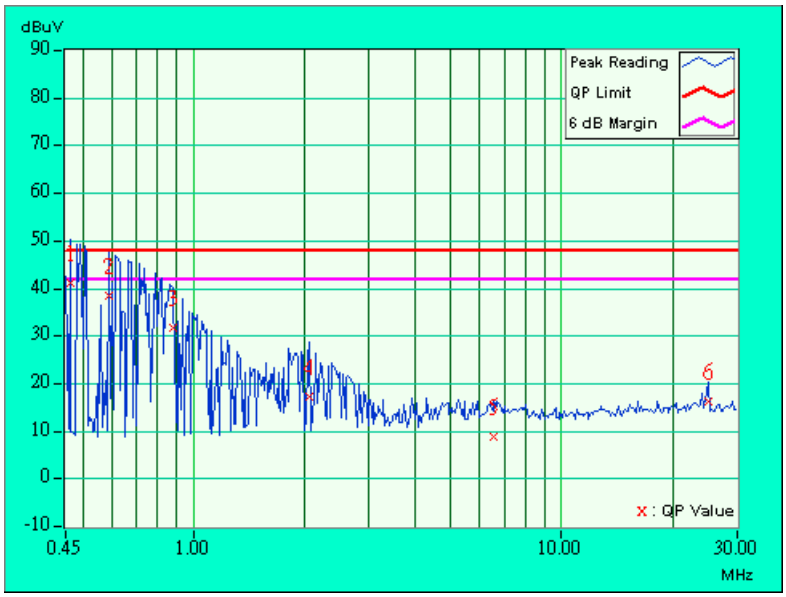
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Access Point	**MODEL**	St-AP2124
MODE	Channel 11	**6dB BANDWIDTH**	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	**TESTED BY**: James Lee	

No	Freq. (MHz)	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.462	0.11	40.63	-	40.74	-	48.00	-	-7.26	-
2	0.591	0.13	38.05	-	38.18	-	48.00	-	-9.82	-
3	0.880	0.18	31.40	-	31.58	-	48.00	-	-16.42	-
4	2.075	0.20	16.90	-	17.10	-	48.00	-	-30.90	-
5	6.555	0.34	8.24	-	8.58	-	48.00	-	-39.42	-
6	25.001	0.50	15.80	-	16.30	-	48.00	-	-31.70	-

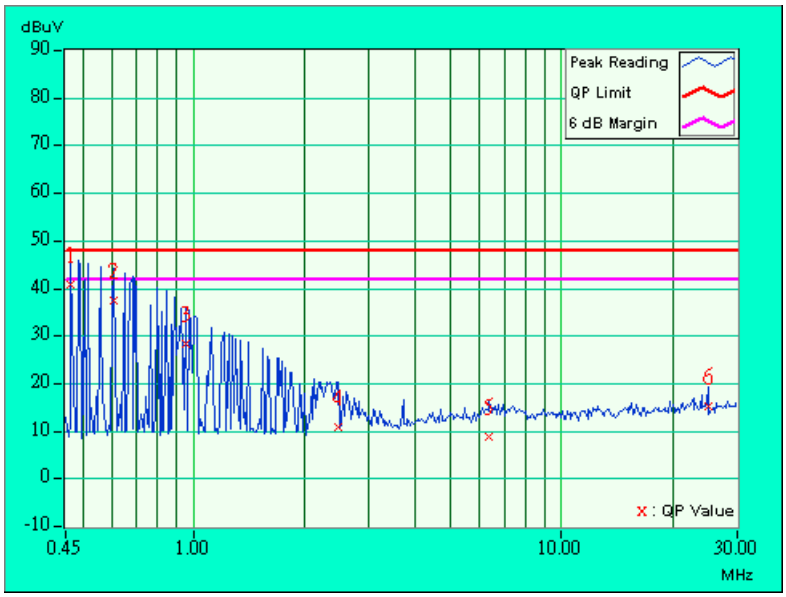
Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 11	6dB BANDWIDTH	10 kHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	20 deg. C, 50%RH, 1005 hPa	TESTED BY: James Lee	

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	QP.	AV.	QP.	AV.	QP.	AV.	QP.	AV.
1	0.466	0.11	39.86	-	39.97	-	48.00	-	-8.03	-
2	0.606	0.13	36.53	-	36.66	-	48.00	-	-11.34	-
3	0.950	0.19	27.33	-	27.52	-	48.00	-	-20.48	-
4	2.473	0.22	9.92	-	10.14	-	48.00	-	-37.86	-
5	6.360	0.34	7.97	-	8.31	-	48.00	-	-39.69	-
6	25.001	1.00	14.18	-	15.18	-	48.00	-	-32.82	-

Remarks:
1. "*": Undetectable
2. QP. and AV. are abbreviations of quasi-peak and average individually.
3. "-": NA
4. The emission levels of other frequencies were very low against the limit.
5. Margin value = Emission level - Limit value
6. Emission Level = Correction Factor + Reading Value.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Field strength limits are at the distance of 3 meters, emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.209 as following:

Frequencies (MHz)	Field Strength of Fundamental	
	uV/m	dBuV/m
30-88	100	40.0
88-216	150	43.5
216-960	200	46.0
Above 960	500	54.0

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
* HP Spectrum Analyzer	8590L	3544A01176	May 7, 2002
* HP Preamplifier	8447D	2944A08485	May 7, 2002
* HP Preamplifier	8449B	3008A01201	Dec. 06, 2002
* HP Preamplifier	8449B	3008A01292	Aug. 21, 2002
* ROHDE & SCHWARZ TEST RECEIVER	ESMI	839013/007 839379/002	Jan. 25, 2002
SCHWARZBECK Tunable Dipole Antenna	VHA 9103 UHA 9105	E101051 E101055	Nov. 23, 2002
* CHASE BILOG Antenna	CBL6112A	2221	Aug. 2, 2002
* SCHWARZBECK Horn Antenna	BBHA9120-D1	D130	July 6, 2002
* EMCO Horn Antenna	3115	9312-4192	April 15, 2002
* EMCO Turn Table	1060	1115	NA
* SHOSHIN Tower	AP-4701	A6Y005	NA
* Software	AS61D4	NA	NA
* ANRITSU RF Switches	MP59B	M35046	Aug. 2, 2002
* TIMES RF cable	LMR-600	CABLE-ST5-01	Aug. 2, 2002
* Antenna (Horn)	BBHA9120-D	D130	July 10, 2002
Open Field Test Site	Site 5	ADT-R05	July 28, 2002
VCCI Site Registration No.	Site 5	R-1039	NA
Site Registration No.	FCC: 90422 Canada IC: IC 3789 VCCI : R-1039		

NOTE: 1.The measurement uncertainty is less than +/- 3.0dB, 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.

3.“*” = These equipments are used for the final measurement.

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 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.

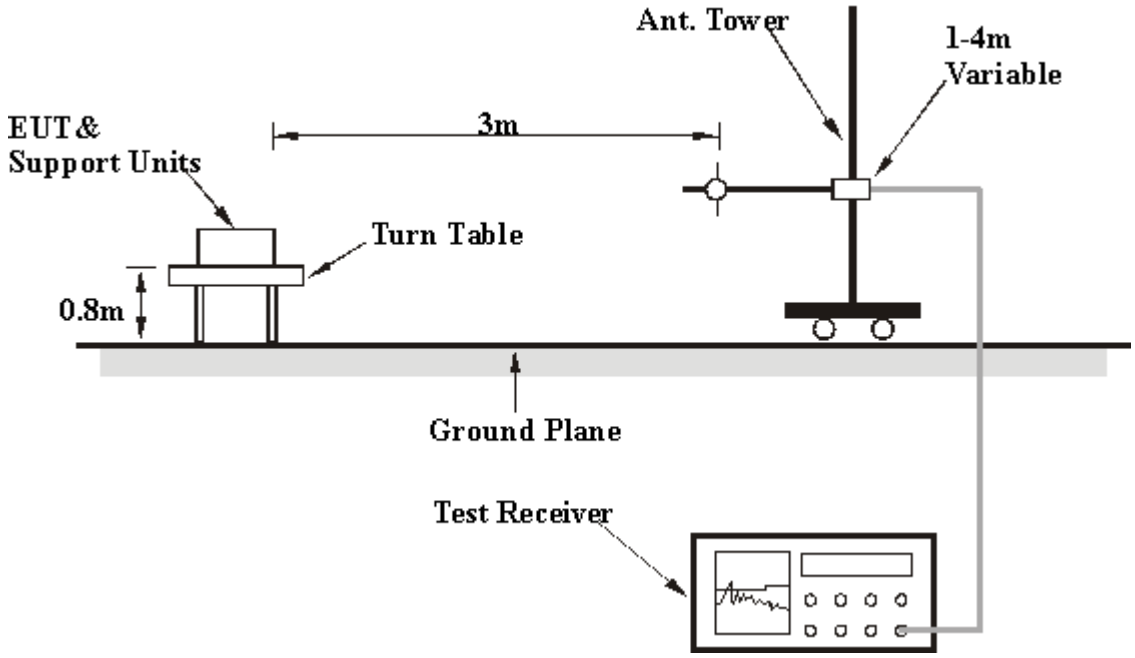
e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 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 300 Hz for Average detection (AV) at frequency above 1GHz.

4.2.4 TEST SETUP



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

4.2.5 EUT OPERATING CONDITIONS

Same as 4.1.5.

4.2.6 TEST RESULTS (A)

EUT	Wireless Access Point	**MODEL**	St-AP2124
MODE	Channel 11	**FREQUENCY RANGE**	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH, 1005 hPa	**TESTED BY**: Gary Chang	

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	120.00	31.7 QP	43.50	-11.80	1.99H	254	19.00	11.65	1.08	0.00	-12.73
2	160.00	27.9 QP	43.50	-15.60	1.54H	9	17.00	9.62	1.26	0.00	-10.89.
3	240.00	31.0 QP	46.00	-15.00	1.60H	283	18.00	11.41	1.62	0.00	-13.03
4	331.00	30.8 QP	46.00	-15.20	1.15H	295	15.00	13.82	1.98	0.00	-15.80
5	352.00	30.4 QP	46.00	-15.60	1.35H	188	14.00	14.31	2.05	0.00	-16.36
6	360.00	32.7 QP	46.00	-13.30	1.50H	105	16.00	14.58	2.08	0.00	-16.66
7	396.00	34.2 QP	46.00	-11.80	1.76H	320	16.00	15.96	2.22	0.00	-18.18
8	400.00	31.3 QP	46.00	-14.70	1.29H	353	13.00	16.11	2.24	0.00	-18.35
9	440.00	33.7 QP	46.00	-12.30	1.37H	354	15.00	16.32	2.38	0.00	-18.69
10	500.00	31.8 QP	46.00	-14.20	1.92H	112	12.00	17.26	2.50	0.00	-19.76
11	700.00	33.5 QP	46.00	-12.50	1.66H	198	11.00	19.31	3.15	0.00	-22.46
12	748.50	34.4 QP	46.00	-11.60	1.39H	142	11.00	20.14	3.26	0.00	-23.40

NOTE: 1 Emission level = Raw Value - Correction Factor

2 Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)

3 The other emission levels were very low against the limit.

4 Margin value = Emission level - Limit value

EUT	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 11	FREQUENCY RANGE	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	20deg. C, 70%RH, 1005 hPa	TESTED BY: Gary Chang	

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	120.00	31.1 QP	43.50	-12.40	1.32V	136	18.40	11.65	1.08	0.00	-12.73
2	131.00	30.3 QP	43.50	-13.20	1.33V	176	18.00	11.16	1.13	0.00	-12.29
3	160.00	27.9 QP	43.50	-15.60	1.13V	140	17.00	9.62	1.26	0.00	-10.90
4	176.00	29.4 QP	43.50	-14.10	1.26V	186	19.00	9.08	1.33	0.00	-10.42
5	200.00	28.4 QP	43.50	-15.10	1.25V	180	18.00	8.98	1.42	0.00	-10.41
6	240.00	30.0 QP	46.00	-16.00	2.14V	356	17.00	11.41	1.62	0.00	-13.03
7	396.00	35.2 QP	46.00	-10.80	1.34V	38	17.00	15.96	2.22	0.00	-18.18
8	400.00	32.3 QP	46.00	-13.70	2.14V	162	14.00	16.11	2.24	0.00	-18.35
9	440.00	33.7 QP	46.00	-12.30	1.90V	244	15.00	16.32	2.38	0.00	-18.69
10	484.00	35.4 QP	46.00	-10.60	1.96V	185	16.00	16.96	2.47	0.00	-19.43
11	500.00	32.8 QP	46.00	-13.20	1.16V	41	13.00	17.26	2.50	0.00	-19.76
12	572.00	36.0 QP	46.00	-10.00	1.31V	55	15.00	18.25	2.75	0.00	-21.00
13	616.00	35.9 QP	46.00	-10.10	1.43V	194	14.20	18.82	2.89	0.00	-21.71
14	660.00	36.3 QP	46.00	-9.70	1.14V	191	14.00	19.25	3.05	0.00	-22.29
15	748.50	35.4 QP	46.00	-10.60	1.14V	28	12.00	20.14	3.26	0.00	-23.40

NOTE: 1 Emission level = Raw Value - Correction Factor
2 Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
3 The other emission levels were very low against the limit.
4 Margin value = Emission level - Limit value

EUT	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 1	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	TESTED BY: Gary Chang	

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2038.0	47.2 PK	74.00	-26.80	1.69H	17	52.00	25.20	4.86	34.90	4.84
2	*2413.0	101.2 PK	-	-	1.33H	305	69.00	27.11	5.10	0.00	-32.21
3	*2413.0	94.2 AV	-	-	1.33H	305	62.00	27.11	5.10	0.00	-32.21
4	4076.0	48.6 PK	74.00	-25.40	1.09H	275	46.20	30.13	6.78	34.52	-2.39
5	4824.0	51.2 PK	74.00	-22.80	1.28H	299	47.20	31.43	7.23	34.63	-4.02

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2038.0	47.4 PK	74.00	-26.60	1.37V	58	52.20	25.20	4.86	34.90	4.84
2	*2413.0	104.7 PK	-	-	1.04V	165	72.50	27.11	5.10	0.00	-32.21
3	*2413.0	99.2 AV	-	-	1.04V	165	67.00	27.11	5.10	0.00	-32.21
4	4076.0	50.9 PK	74.00	-23.10	1.68V	320	48.50	30.13	6.78	34.52	-2.39
5	4824.0	51.2 PK	74.00	-22.80	1.21V	39	47.20	31.43	7.23	34.63	-4.03

NOTE: 1. Emission level = Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
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	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 6	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 hPa	TESTED BY: Gary Chang	

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2063.0	46.5 PK	74.00	-27.50	1.22H	7	51.00	25.41	4.96	34.90	4.53
2	*2437.0	98.4 PK	-	-	1.22H	7	66.00	27.33	5.08	0.00	-32.40
3	*2437.0	92.4 AV	-	-	1.22H	7	60.00	27.33	5.08	0.00	-32.40
4	4126.0	50.5 PK	74.00	-23.50	1.47H	353	48.00	30.32	6.70	34.56	-2.46
5	4874.0	51.1 PK	74.00	-22.90	2.22H	103	47.00	31.47	7.21	34.63	-4.05

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2063.0	45.5 PK	74.00	-28.50	2.03V	6	50.00	25.41	4.96	34.90	4.53
2	*2437.0	103.4 PK	-	-	2.09V	317	71.00	27.33	5.08	0.00	-32.40
3	*2437.0	96.4 AV	-	-	2.09V	317	64.00	27.33	5.08	0.00	-32.40
4	4126.0	50.5 PK	74.00	-23.50	1.69V	59	48.00	30.32	6.70	34.56	-2.46
5	4874.0	51.1 PK	74.00	-22.90	1.08V	1	47.00	31.47	7.21	34.63	-4.06

NOTE: 1. Emission level = Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
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	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 11	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	20 deg. C, 70%RH, 1005 Hpa	TESTED BY: Gary Chang	

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2088.0	47.7 PK	74.00	-26.30	1.74H	355	52.00	25.62	5.02	34.90	4.26
2	*2463.0	95.4 PK	-	-	1.16H	7	63.00	27.33	5.08	0.00	-32.40.
3	*2463.0	89.4 AV	-	-	1.16H	7	57.00	27.33	5.08	0.00	-32.40.
4	2486.0	47.7 PK	74.00	-26.30	1.22H	35	50.00	27.54	5.06	34.90	2.32
5	4176.0	48.5 PK	74.00	-25.50	1.05H	284	46.00	30.41	6.68	34.58	-2.51
6	4924.0	51.1 PK	74.00	-22.90	1.30H	187	47.00	31.51	7.21	34.62	-4.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2088.0	47.7 PK	74.00	-26.30	1.40V	352	52.00	25.62	5.02	34.90	4.26
2	*2463.0	102.9 PK	-	-	1.46V	200	70.50	27.33	5.08	0.00	-32.41
3	*2463.0	96.4 AV	-	-	1.46V	200	64.00	27.33	5.08	0.00	-32.41
4	2491.0	48.7 PK	74.00	-25.30	1.32V	298	50.97	27.54	5.06	34.90	2.31
5	4176.0	52.9 PK	74.00	-21.10	1.27V	262	50.34	30.41	6.68	34.58	-2.51
6	4176.0	48.5 AV	54.00	-5.50	1.27V	262	46.00	30.41	6.68	34.58	-2.51
7	4924.0	50.1 PK	74.00	-23.90	1.17V	244	46.00	31.51	7.21	34.62	-4.10

NOTE: 1. Emission level= Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
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

4.2.7 TEST RESULTS (B)

EUT	Wireless Access Point	**MODEL**	St-AP2124
MODE	Channel 11	**FREQUENCY RANGE**	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 70%RH, 1005 hPa	**TESTED BY**: Gary Chang	

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	120.00	33.7 QP	43.50	-9.80	1.94H	196	21.00	11.65	1.08	0.00	-12.73
2	160.00	30.9 QP	43.50	-12.60	2.02H	227	20.00	9.62	1.26	0.00	-10.89
3	280.00	33.5 QP	46.00	-12.50	1.09H	2	19.00	12.71	1.77	0.00	-14.48
4	320.00	31.8 QP	46.00	-14.20	1.88H	324	16.20	13.62	1.95	0.00	-15.57
5	400.00	34.3 QP	46.00	-11.70	1.03H	101	16.00	16.11	2.24	0.00	-18.35
6	440.00	31.7 QP	46.00	-14.30	1.07H	281	13.00	16.32	2.38	0.00	-18.69
7	500.00	32.8 QP	46.00	-13.20	1.29H	164	13.00	17.26	2.50	0.00	-19.76
8	650.00	34.3 QP	46.00	-11.70	1.11H	27	12.00	19.23	3.02	0.00	-22.26
9	700.00	33.5 QP	46.00	-12.50	1.59H	113	11.00	19.31	3.15	0.00	-22.46
10	720.00	34.9 QP	46.00	-11.10	1.52H	251	12.00	19.68	3.20	0.00	-22.87
11	748.00	35.4 QP	46.00	-10.60	1.25H	56	12.00	20.14	3.26	0.00	-23.41

NOTE: 1 Emission level = Raw Value - Correction Factor

2 Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)

3 The other emission levels were very low against the limit.

4 Margin value = Emission level - Limit value

EUT	Wireless Access Point	**MODEL**	St-AP2124
MODE	Channel 11	**FREQUENCY RANGE**	30-1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 70%RH, 1005 hPa	**TESTED BY**: Gary Chang	

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	120.00	32.7 QP	43.50	-10.80	1.39V	292	20.00	11.65	1.08	0.00	-12.73
2	132.00	29.3 QP	43.50	-14.20	1.27V	160	17.00	11.16	1.13	0.00	-12.29
3	160.00	29.9 QP	43.50	-13.60	1.18V	79	19.00	9.62	1.26	0.00	-10.89
4	240.00	31.0 QP	46.00	-15.00	1.54V	254	18.00	11.41	1.62	0.00	-13.03
5	250.00	32.7 QP	46.00	-13.30	1.11V	31	19.00	12.02	1.66	0.00	-13.69
6	396.00	33.2 QP	46.00	-12.80	1.22V	48	15.00	15.96	2.22	0.00	-18.18
7	440.00	34.7 QP	46.00	-11.30	1.89V	148	16.00	16.32	2.38	0.00	-18.69
8	500.00	34.8 QP	46.00	-11.20	1.63V	309	15.00	17.26	2.50	0.00	-19.76
9	660.00	35.3 QP	46.00	-10.70	2.14V	314	13.00	19.25	3.05	0.00	-22.29
10	704.00	32.9 QP	46.00	-13.10	1.41V	225	10.40	19.38	3.16	0.00	-22.54
11	748.00	34.4 QP	46.00	-11.60	1.25V	184	11.00	20.14	3.26	0.00	-23.40

NOTE: 1 Emission level = Raw Value - Correction Factor

2 Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)

3 The other emission levels were very low against the limit.

4 Margin value = Emission level - Limit value

EUT	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 1	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 70%RH, 1005 hPa	TESTED BY: Gary Chang	

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2038.0	46.9 PK	74.00	-27.10	2.31H	170	51.70	25.20	4.86	34.90	4.84
2	*2413.0	114.1 PK	-	-	1.07H	37	81.90	27.11	5.10	0.00	-32.22
3	*2413.0	107.2 AV	-	-	1.07H	37	75.00	27.11	5.10	0.00	-32.22
4	4076.0	49.6 PK	74.00	-24.40	1.93H	22	47.20	30.13	6.78	34.52	-2.39
5	4824.0	50.0 PK	74.00	-24.00	1.44H	356	46.00	31.43	7.23	34.63	-4.02

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2038.0	47.5 PK	74.00	-26.50	1.07V	27	52.30	25.20	4.86	34.90	4.84
2	*2413.0	93.0 PK	-	-	1.63V	357	60.80	27.11	5.10	0.00	-32.21
3	*2413.0	86.2 AV	-	-	1.63V	357	54.00	27.11	5.10	0.00	-32.21
4	4076.0	50.6 PK	74.00	-23.40	1.60V	236	48.20	30.13	6.78	34.52	-2.39
5	4824.0	50.2 PK	74.00	-23.80	1.41V	211	46.20	31.43	7.23	34.63	-4.02

NOTE: 1. Emission level = Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
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	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 6	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 70%RH, 1005 hPa	TESTED BY: Gary Chang	

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2063.0	48.5 PK	74.00	-25.50	1.76H	9	53.00	25.41	4.96	34.90	4.53
2	*2437.0	113.4 PK	-	-	1.32H	337	81.00	27.33	5.08	0.00	-32.40
3	*2437.0	105.4 AV	-	-	1.32H	337	73.00	27.33	5.08	0.00	-32.40
4	4126.0	49.8 PK	74.00	-24.20	2.02H	357	47.30	30.32	6.70	34.56	-2.46
5	4874.0	50.8 PK	74.00	-23.20	1.51H	41	46.70	31.47	7.21	34.63	-4.06

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2063.0	47.5 PK	74.00	-26.50	1.02V	8	52.00	25.41	4.96	34.90	4.53
2	*2437.0	93.8 PK	-	-	1.81V	8	61.40	27.33	5.08	0.00	-32.40
3	*2437.0	88.4 AV	-	-	1.81V	8	56.00	27.33	5.08	0.00	-32.40
4	4126.0	51.7 AV	54.00	-2.30	1.31V	324	49.20	30.32	6.70	34.56	-2.46
5	4874.0	50.9 PK	74.00	-23.10	1.22V	283	46.80	31.47	7.21	34.63	-4.05

NOTE: 1. Emission level = Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
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	Wireless Access Point	MODEL	St-AP2124
MODE	Channel 11	FREQUENCY RANGE	Above 1000 MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25 deg. C, 70%RH, 1005 Hpa	TESTED BY: Gary Chang	

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)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2088.0	46.7 PK	74.00	-27.30	1.66H	351	51.00	25.62	5.02	34.90	4.26
2	*2463.0	112.2 PK	-	-	1.86H	117	79.80	27.33	5.08	0.00	-32.41
3	*2463.0	104.4 AV	-	-	1.86H	117	72.00	27.33	5.08	0.00	-32.41
4	2491.0	54.7 PK	74.00	-19.30	1.86H	51	57.00	27.54	5.06	34.90	2.31.
5	2491.0	46.7 AV	74.00	-7.30	1.86H	51	48.97	27.54	5.06	34.90	2.32
6	4176.0	49.5 PK	74.00	-24.50	1.67H	14	47.00	30.41	6.68	34.58	-2.51
7	4924.0	50.1 PK	74.00	-23.90	1.50H	30	46.00	31.51	7.21	34.62	-4.10

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Antenna Factor (dB/m)	Cable Factor (dB)	Pre-Amp. Factor (dB)	Correction Factor (dB/m)
1	2088.0	47.7 PK	74.00	-26.30	1.34V	106	52.00	25.62	5.02	34.90	4.26
2	*2463.0	93.4 PK	-	-	1.26V	68	61.00	27.33	5.08	0.00	-32.40
3	*2463.0	88.4 AV	-	-	1.26V	68	56.00	27.33	5.08	0.00	-32.40
4	2485.4	48.7 PK	74.00	-25.30	1.81V	359	51.00	27.54	5.06	34.90	2.31
5	4176.0	50.5 PK	74.00	-23.50	1.16V	339	48.00	30.41	6.68	34.58	-2.51
6	4924.0	50.1 PK	74.00	-23.90	1.41V	111	46.00	31.51	7.21	34.62	-4.10

NOTE: 1. Emission level= Raw Value - Correction Factor
2. Correction Factor = External Preamp. Gain - Ant. Factor - Cable loss
(External Preamp. Gain = 0, when the test receiver is used for the test.)
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