



#### 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.

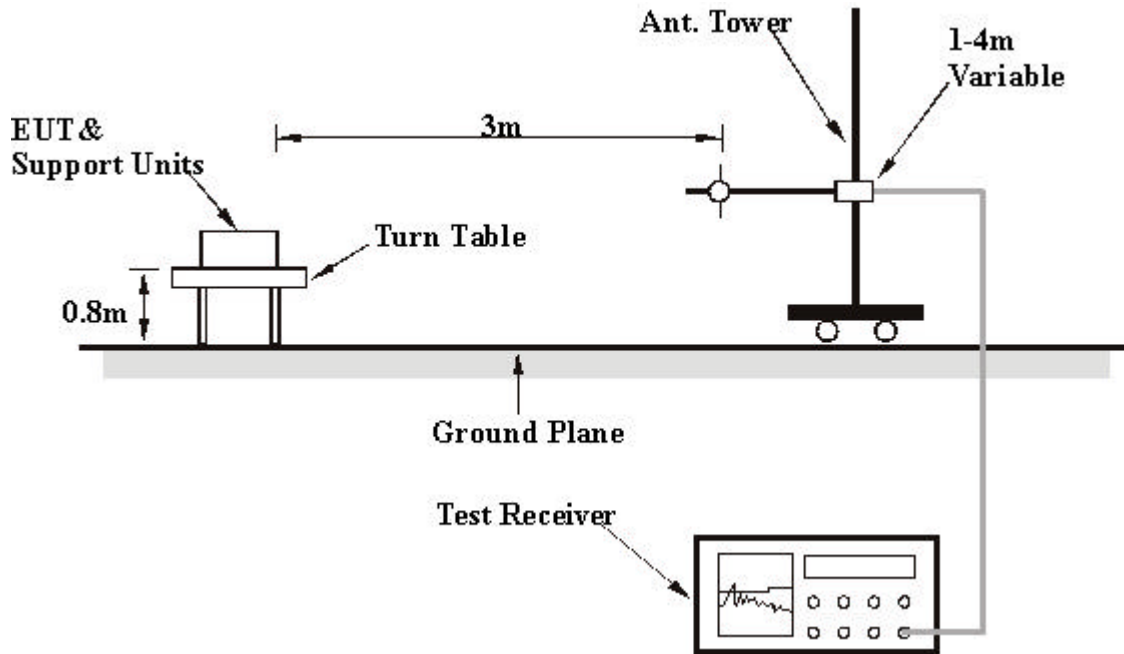
**NOTE:**

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.



5.2.8 TEST RESULTS

<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>FREQUENCY RANGE</b>	With Adapter, Below 1000MHz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic Lee		

<b>ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	125.00	27.5 QP	43.50	-16.00	1.01 H	222	15.30	12.20
2	250.00	37.8 QP	46.00	-8.20	1.22 H	321	24.60	13.20
3	352.00	31.2 QP	46.00	-14.80	1.04 H	14	15.60	15.60
4	374.99	28.1 QP	46.00	-17.90	1.04 H	14	11.90	16.20
5	400.03	32.8 QP	46.00	-13.20	1.17 H	0	15.80	17.00
6	500.00	30.1 QP	46.00	-15.90	1.38 H	23	10.80	19.30
7	800.06	33.1 QP	46.00	-12.90	1.41 H	97	9.60	23.50
8	850.07	31.2 QP	46.00	-14.80	1.43 H	37	6.10	25.10
9	1000.00	42.8 QP	54.00	-11.20	1.11 H	288	16.10	26.70

<b>ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M</b>								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	250.01	36.2 QP	46.00	-9.80	1.23 V	288	23.00	13.20
2	300.02	24.2 QP	46.00	-21.80	1.41 V	32	10.10	14.10
3	350.03	25.2 QP	46.00	-20.80	1.66 V	252	9.70	15.60
4	352.00	32.7 QP	46.00	-13.30	1.26 V	51	17.10	15.60
5	375.01	27.4 QP	46.00	-18.60	1.46 V	51	11.20	16.20
6	400.03	33.9 QP	46.00	-12.10	1.11 V	345	16.90	17.00
7	500.03	31.1 QP	46.00	-14.90	1.17 V	17	11.80	19.30
8	600.04	30.8 QP	46.00	-15.20	1.00 V	29	9.90	20.90
9	800.06	32.0 QP	46.00	-14.00	1.22 V	0	8.50	23.50
10	850.06	31.3 QP	46.00	-14.70	1.00 V	93	6.20	25.10

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  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



<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>FREQUENCY RANGE</b>	With POE Below 1000MHz	<b>DETECTOR FUNCTION</b>	Quasi-Peak
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	250.02	27.8 QP	46.00	-18.20	1.63 H	0	14.80	13.00
2	416.00	24.6 QP	46.00	-21.40	1.00 H	25	6.90	17.70
3	440.00	27.6 QP	46.00	-18.40	2.53 H	261	9.60	18.00
4	500.01	27.4 QP	46.00	-18.60	1.46 H	100	8.10	19.30
5	704.00	29.7 QP	46.00	-16.30	1.20 H	104	7.10	22.60
6	750.02	27.5 QP	46.00	-18.50	1.27 H	102	3.70	23.80
7	768.00	32.3 QP	46.00	-13.70	1.13 H	170	8.40	23.90
8	792.00	28.2 QP	46.00	-17.80	1.17 H	104	4.40	23.80
9	800.01	33.5 QP	46.00	-12.50	1.00 H	103	9.80	23.70
10	924.00	26.7 QP	46.00	-19.30	1.74 H	319	0.90	25.80

#### 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	45.50	28.2 QP	40.00	-11.80	1.53 V	296	17.30	11.00
2	50.55	29.0 QP	40.00	-11.00	1.47 V	326	20.80	8.30
3	111.56	30.9 QP	43.50	-12.60	1.00 V	188	19.70	11.10
4	125.02	29.7 QP	43.50	-13.80	1.00 V	49	17.70	12.00
5	250.01	31.4 QP	46.00	-14.60	1.00 V	262	18.40	13.00
6	352.00	24.6 QP	46.00	-21.40	1.00 V	330	9.10	15.50
7	440.00	27.6 QP	46.00	-18.40	1.00 V	30	9.70	18.00
8	500.01	31.3 QP	46.00	-14.70	2.32 V	47	12.00	19.30
9	528.00	25.9 QP	46.00	-20.10	1.00 V	88	6.30	19.60
10	800.01	30.1 QP	46.00	-15.90	2.22 V	154	6.40	23.70

- REMARKS:**
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB)
  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



## 5.2.9 TEST RESULTS

<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Normal Mode	<b>CHANNEL</b>	1
<b>FREQUENCY RANGE</b>	Above 1000 MHz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	49.7 PK	74.00	-24.30	1.54 H	111	12.70	37.00
2	#5150.00	63.0 PK	74.00	-11.00	1.70 H	300	25.90	37.00
2	#5150.00	50.0 AV	54.00	-4.00	1.70 H	300	13.00	37.00
3	*5180.00	104.0 PK			1.62 H	281	66.90	37.00
3	*5180.00	93.3 AV			1.62 H	281	56.20	37.00
4	10360.00	48.0 PK	68.3	-19.70	1.30 H	214	3.30	44.70

**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	#5120.00	53.3 PK	74.00	-20.70	1.63 V	248	16.20	37.00
1	#5120.00	47.6 AV	54.00	-6.40	1.63 V	248	10.60	37.00
2	#5150.00	68.0 PK	74.00	-6.00	1.49 V	298	31.00	37.00
2	#5150.00	53.0 AV	54.00	-1.00	1.49 V	298	16.00	37.00
3	*5180.00	104.3 PK			1.47 V	244	67.30	37.00
3	*5180.00	94.3 AV			1.47 V	244	57.30	37.00
4	10360.00	49.8 PK	68.3	-18.50	1.25 V	259	5.10	44.70

**NOTE:**

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.



<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Normal Mode	<b>CHANNEL</b>	4
<b>FREQUENCY RANGE</b>	Above 1000 MHz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	51.3 PK	74.00	-22.70	1.56 H	280	14.20	37.00
1	#5120.00	44.8 AV	54.00	-9.20	1.56 H	280	7.80	37.00
2	#5150.00	45.9 PK	74.00	-28.10	1.55 H	309	8.90	37.00
3	*5240.00	102.2 PK			1.48 H	264	65.10	37.00
3	*5240.00	94.0 AV			1.48 H	264	57.00	37.00
4	10480.00	51.8 PK	68.3	-16.50	1.70 H	281	6.90	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	#5120.00	51.9 PK	74.00	-22.10	1.33 V	236	14.80	37.00
1	#5120.00	46.0 AV	54.00	-8.00	1.33 V	236	9.00	37.00
2	#5150.00	46.7 PK	74.00	-27.30	1.32 V	234	9.70	37.00
3	*5240.00	105.0 PK			1.55 V	305	68.00	37.00
3	*5240.00	95.7 AV			1.55 V	305	58.70	37.00
4	10480.00	51.0 PK	68.3	-17.30	1.68 V	199	6.00	45.00

#### NOTE:

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.



<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Normal Mode	<b>CHANNEL</b>	5
<b>FREQUENCY RANGE</b>	Above 1000 MHz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	#5150.00	53.1 PK	74.00	-20.90	1.47 H	154	16.10	37.00
1	#5150.00	41.7 AV	54.00	-12.30	1.47 H	154	4.70	37.00
2	*5260.00	108.0 PK			1.49 H	302	71.00	37.00
2	*5260.00	98.6 AV			1.49 H	302	61.60	37.00
3	#5376.00	44.0 PK	74.00	-30.00	1.58 H	42	7.00	37.00
4	10520.00	49.2 PK	68.3	-19.10	1.38 H	254	4.00	45.20

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

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#5150.00	57.1 PK	74.00	-16.90	1.12 V	325	20.00	37.00
1	#5150.00	44.9 AV	54.00	-9.10	1.12 V	325	7.80	37.00
2	*5260.00	110.4 PK			1.57 V	330	73.40	37.00
2	*5260.00	101.1 AV			1.57 V	330	64.10	37.00
3	#5376.00	48.9 PK	74.00	-25.10	1.49 V	300	11.80	37.00
4	10520.00	50.0 PK	68.3	-18.30	1.36 V	320	4.90	45.20

#### NOTE:

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



<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Normal Mode	<b>CHANNEL</b>	8
<b>FREQUENCY RANGE</b>	Above 1000 MHz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	#5150.00	50.1 PK	74.00	-23.90	1.06 H	278	13.10	37.00
2	*5320.00	104.1 PK			1.43 H	316	67.10	37.00
2	*5320.00	94.0 AV			1.43 H	316	57.00	37.00
3	#5350.00	61.8 PK	74.00	-12.20	1.25 H	265	24.80	37.00
3	#5350.00	49.0 AV	54.00	-5.00	1.25 H	265	12.00	37.00
4	#10640.00	50.1 PK	74.00	-23.90	1.36 H	301	3.80	46.30

#### 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	#5150.00	54.1 PK	74.00	-19.90	1.68 V	330	17.10	37.00
1	#5150.00	41.7 AV	54.00	-12.30	1.68 V	330	4.60	37.00
2	*5320.00	106.4 PK			1.62 V	300	69.40	37.00
2	*5320.00	97.0 AV			1.62 V	300	60.00	37.00
3	#5350.00	65.1 PK	74.00	-8.90	1.24 V	276	28.10	37.00
3	#5350.00	50.7 AV	54.00	-3.30	1.24 V	276	13.70	37.00
4	#10640.00	51.3 PK	74.00	-22.70	1.35 V	320	5.00	46.30
4	#10640.00	40.7 AV	54.00	-13.30	1.35 V	320	-5.50	46.30

#### NOTE:

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.





<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Normal Mode	<b>CHANNEL</b>	9
<b>FREQUENCY RANGE</b>	Above 1000 MHz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	5715.00	61.8 PK	68.30	-6.5	1.30 H	268	24.30	37.50
2	5725.00	75.1 PK	78.30	-3.2	1.30 H	268	37.60	37.50
3	*5745.00	109.4 PK			1.68 H	338	71.80	37.60
3	*5745.00	100.4 AV			1.68 H	338	62.90	37.60
4	#11490.00	55.4 PK	74.00	-18.60	1.62 H	354	4.10	51.30
4	#11490.00	46.2 AV	54.00	-7.80	1.62 H	354	-5.10	51.30

#### 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	5715.00	66.4 PK	68.30	-1.9	1.42 V	270	28.90	37.50
2	5725.00	77.5 PK	78.30	-0.8	1.42 V	270	40.00	37.50
3	*5745.00	112.7 PK			1.38 V	257	75.10	37.60
3	*5745.00	103.5 AV			1.38 V	257	66.00	37.60
4	#11490.00	56.3 PK	74.00	-17.70	1.39 V	269	5.00	51.30
4	#11490.00	46.5 AV	54.00	-7.50	1.39 V	269	-4.80	51.30

#### NOTE:

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.



<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Normal Mode	<b>CHANNEL</b>	12
<b>FREQUENCY RANGE</b>	Above 1000 MHz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	*5805.00	109.5 PK			1.70 H	240	71.80	37.70
1	*5805.00	99.9 AV			1.70 H	240	62.20	37.70
2	5825.00	74.5 PK	78.30	-2.9	1.60 H	321	36.80	37.70
3	5835.00	63.4 PK	68.30	-4.9	1.60 H	321	25.60	37.70
4	#11610.00	55.0 PK	74.00	-19.00	1.50 H	295	4.00	51.00
4	#11610.00	45.0 AV	54.00	-9.00	1.50 H	295	-6.00	51.00

#### 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	*5805.00	110.9 PK			1.40 V	270	73.20	37.70
1	*5805.00	102.1 AV			1.40 V	270	64.50	37.70
2	5825.00	77.3 PK	78.30	-1.0	1.55 V	300	40.00	37.70
3	<b>5835.00</b>	<b>67.6 PK</b>	<b>68.30</b>	<b>-0.7</b>	<b>1.55 V</b>	<b>300</b>	<b>29.90</b>	<b>37.70</b>
4	#11610.00	56.0 PK	74.00	-18.00	1.41 V	250	5.00	51.00
4	#11610.00	45.6 AV	54.00	-8.40	1.41 V	250	-5.40	51.00

#### NOTE:

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.



<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Turbo Mode	<b>CHANNEL</b>	1
<b>FREQUENCY RANGE</b>	Above 1000 MHz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	47.4 PK	74.00	-26.60	1.38 H	274	10.30	37.00
2	#5150.00	57.9 PK	74.00	-16.10	1.39 H	269	20.90	37.00
2	#5150.00	48.2 AV	54.00	-5.80	1.39 H	269	11.10	37.00
3	*5210.00	103.3 PK			1.38 H	268	66.20	37.00
3	*5210.00	94.3 AV			1.38 H	268	57.20	37.00
4	10420.00	49.0 PK	68.3	-19.70	1.70 H	222	4.10	44.80

#### 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	#5088.00	48.8 PK	74.00	-25.20	1.38 V	304	11.80	37.00
2	#5150.00	59.4 PK	74.00	-14.60	1.39 V	256	22.30	37.00
2	#5150.00	50.6 AV	54.00	-3.40	1.39 V	256	13.60	37.00
3	*5210.00	105.8 PK			1.38 V	204	68.70	37.00
3	*5210.00	96.8 AV			1.38 V	204	59.80	37.00
4	10420.00	50.9 PK	68.3	-17.40	1.54 V	302	6.10	44.80

#### NOTE:

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



<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Turbo Mode	<b>CHANNEL</b>	2
<b>FREQUENCY RANGE</b>	Above 1000 MHz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	48.2 PK	74.00	-25.80	1.65 H	222	11.10	37.00
2	#5150.00	46.1 PK	74.00	-27.90	1.72 H	265	9.10	37.00
3	*5250.00	105.7 PK			1.48 H	111	68.70	37.00
3	*5250.00	96.3 AV			1.48 H	111	59.30	37.00
4	10500.00	48.6 PK	68.3	-19.70	1.23 H	302	3.60	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	50.3 PK	74.00	-23.70	1.40 V	274	13.20	37.00
2	#5150.00	48.1 PK	74.00	-25.90	1.53 V	310	11.10	37.00
3	*5250.00	107.5 PK			1.39 V	264	70.50	37.00
3	*5250.00	98.5 AV			1.39 V	264	61.50	37.00
4	10500.00	49.3 PK	68.3	-19.00	1.33 V	259	4.30	45.00

#### NOTE:

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



<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Turbo Mode	<b>CHANNEL</b>	3
<b>FREQUENCY RANGE</b>	Above 1000 MHz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	#5118.00	42.7PK	74	-31.3	1.32H	129	5.7	37.0
1	#5118.00	37.6AV	54	-16.4	1.32H	129	0.5	37.0
2	*5290.00	98.0PK			1.30H	70	61.0	37.0
2	*5290.00	88.7AV			1.30H	70	51.7	37.0
3	#5376.00	46.4PK	74	-27.6	1.60H	120	9.3	37.0
3	#5376.00	38.6AV	54	-15.4	1.60H	120	1.5	37.0
4	10580.00	50.4PK	68.3	-17.9	1.54H	102	4.7	45.7

#### 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	#5118.00	53.2PK	74	-20.8	1.33	99	16.2	37.0
1	#5118.00	45.6AV	74	-8.4	1.33	99	8.6	37.0
2	*5290.00	105.1PK			1.44	106	68.1	37.0
2	*5290.00	97.0AV			1.30	106	60.9	37.0
3	#5376.00	62.2PK	74	-11.8	1.30	106	25.2	37.0
3	#5376.00	50.0AV	74	-4.0	1.05	106	13.0	37.0
4	10580.00	51.4PK	68.3	-16.9	1.05	106	5.7	45.7

#### NOTE:

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



<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Turbo Mode	<b>CHANNEL</b>	4
<b>FREQUENCY RANGE</b>	Above 1000 MHz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	5715.00	63.4 PK	68.30	-4.9	1.68 H	301	25.90	37.50
2	5725.00	70.3 PK	78.30	-8.0	1.68 H	301	32.80	37.50
3	*5760.00	102.7 PK			1.48 H	284	65.10	37.60
3	*5760.00	95.5 AV			1.48 H	284	57.90	37.60
4	#11520.00	60.2 PK	74.00	-13.80	1.69 H	311	8.90	51.30
4	#11520.00	45.4 AV	54.00	-8.60	1.69 H	311	-5.90	51.30

### 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	5715.00	67.3 PK	68.30	-1.0	1.10 V	291	30.40	37.50
2	5725.00	74.1 PK	78.30	-4.2	1.10 V	291	36.60	37.50
3	*5760.00	106.5 PK			1.38 V	295	69.00	37.60
3	*5760.00	98.2 AV			1.38 V	295	60.60	37.60
4	#11520.00	56.0 PK	74.00	-18.00	1.48 V	320	4.70	51.30
4	#11520.00	47.0 AV	54.00	-7.00	1.48 V	320	-4.30	51.30

#### NOTE:

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.



<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Turbo Mode	<b>CHANNEL</b>	5
<b>FREQUENCY RANGE</b>	Above 1000 MHz	<b>DETECTOR FUNCTION</b>	Peak(PK) Average (AV)
<b>ENVIRONMENTAL CONDITIONS</b>	25 deg. C, 60%RH, 976 hPa	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60Hz
<b>TESTED BY</b>	Eic 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	*5800.00	100.8 PK			1.69 H	294	63.10	37.70
1	*5800.00	92.6 AV			1.69 H	294	55.00	37.70
2	5825.00	71.9 PK	78.30	-6.4	1.33 H	299	34.20	37.70
3	5835.00	64.1 PK	68.30	-4.2	1.33 H	299	26.40	37.70
4	#11600.00	55.0 PK	74.00	-19.00	1.75 H	313	4.00	51.00
4	#11600.00	45.0 AV	54.00	-9.00	1.75 H	313	-6.00	51.00

### 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	*5800.00	102.9 PK			1.38 V	283	65.20	37.70
1	*5800.00	95.1 AV			1.38 V	283	57.40	37.70
2	5825.00	76.4 PK	78.30	-1.9	1.10 V	292	38.70	37.70
3	5835.00	67.4 PK	68.30	-0.9	1.10 V	292	30.30	37.70
4	#11600.00	55.1 PK	74.00	-18.90	1.61 V	254	4.10	51.00
4	#11600.00	45.3 AV	54.00	-8.70	1.61 V	254	-5.70	51.00

#### NOTE:

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.



### 5.3 PEAK TRANSMIT POWER MEASUREMENT

#### 5.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

Frequency Band	Limit
5.15 – 5.25 GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.25 – 5.35 GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.725 – 5.825 GHz	The lesser of 1W (30dBm) or 17dBm + 10logB

**Note:** Where B is the 26dB emission bandwidth in MHz.

#### 5.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	July 24, 2003

**NOTE:**

The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.





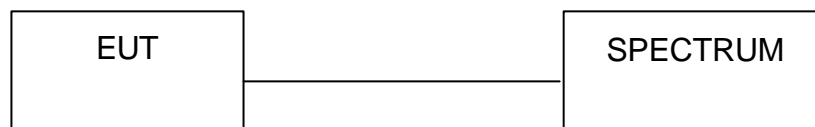
### 5.3.3 TEST PROCEDURE

2. The transmitter output was connected to the spectrum analyzer.
3. Set span to encompass the entire emission bandwidth of the signal.
4. Set RBW to 1MHz, VBW to 30kHz.
5. Using the spectrum analyzer's channel power measurement function to measure the output power.

### 5.3.4 DEVIATION FROM TEST STANDARD

No deviation

### 5.3.5 TEST SETUP



### 5.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.



## 5.3.7 TEST RESULTS

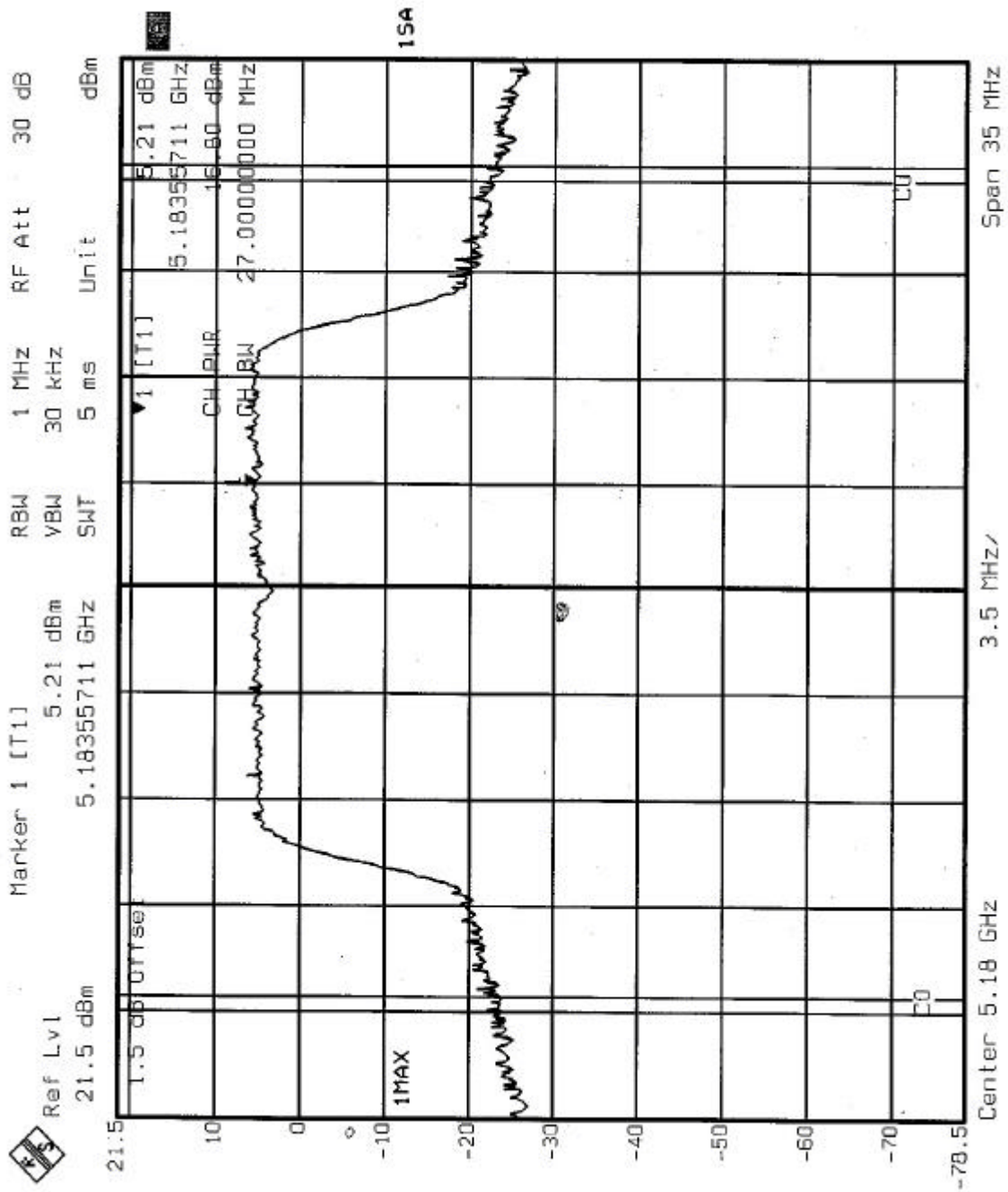
<b>EUT</b>	WLAN Access Point 2220	<b>MODEL</b>	WLAN Access Point 2220
<b>MODE</b>	Normal	<b>INPUT POWER (SYSTEM)</b>	120Vac, 60 Hz
<b>ENVIRONMENTAL CONDITIONS</b>	20eg. C, 60RH, 976 hPa	<b>TESTED BY</b>	Hank Chung

<b>CHANNEL</b>	<b>CHANNEL FREQUENCY (MHz)</b>	<b>PEAK POWER OUTPUT (dBm)</b>	<b>PEAK POWER LIMIT (dBm)</b>	<b>26dBc Occupied Bandwidth (MHz)</b>	<b>PASS/FAIL</b>
1	5180	16.8	17.00	24.6	PASS
4	5240	16.91	17.00	26.13	PASS
5	5260	19.77	24.00	18.13	PASS
8	5320	15.23	24.00	24.76	PASS
9	5745	19.06	30.00	23.72	PASS
12	5805	18.93	30.00	32.22	PASS

**NOTE:** The 26dBc Occupied Bandwidth plot, please refer to the following pages.



CHANNEL 1





CHANNEL 4

