5. TEST TYPES AND RESULTS (For Dual CHAIN (TX))

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
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Nov. 06, 2005
RF signal cable Woken	5D-FB	Cable-HyC02-01	Jan. 09, 2006
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Jan. 20, 2006
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Jan. 20, 2006
Software ADT	ADT_Cond_V3	NA	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 3.
3. The VCCI Site Registration No. is C-2047.

5.1.3 TEST PROCEDURES

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

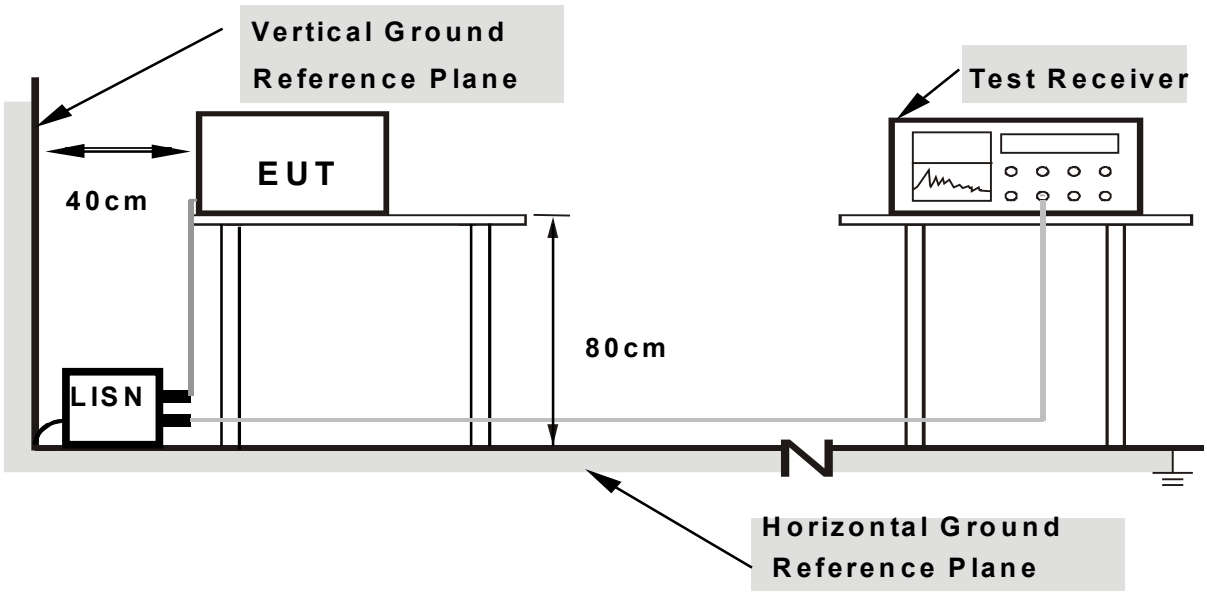
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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

5.1.4 DEVIATION FROM TEST STANDARD

No deviation

5.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

5.1.6 EUT OPERATING CONDITIONS

a. Connected the EUT into the notebook system and placed on a testing table.

b. The notebook system ran a test program (provided by manufacturer) to enable EUT under transmission/receiving condition continuously at specific channel frequency.

c. The notebook system show “H” messages on its screen.

d. The notebook system show “H” messages to modem.

e. The notebook system sent "H" messages to printer and the printer prints them on paper.

f. Repeated item c ~e.

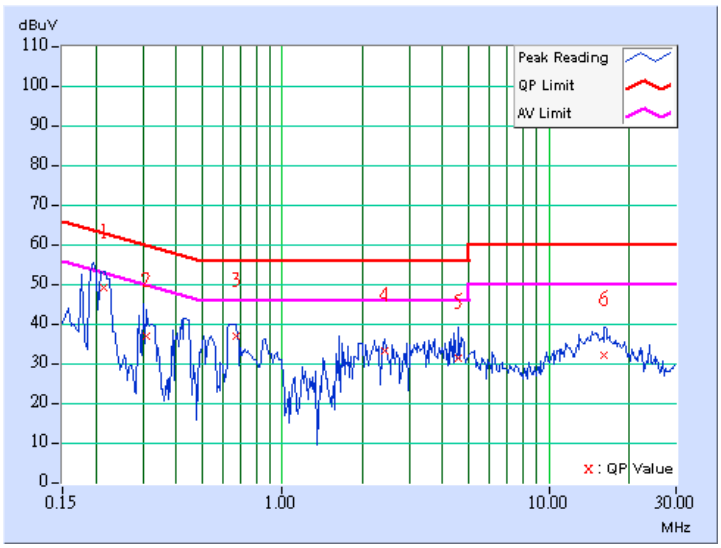
5.1.7 TEST RESULTS

CONDUCTED WORST CASE DATA_NORMAL MODE

EUT	802.11g Wireless MIMO miniPCI Module	**MEASUREMENT DETAIL**	
MODEL	WMD-360A	**PHASE**	Line 1
CHANNEL	Channel 1	**6dB BANDWIDTH**	9 kHz
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	20deg. C, 60%RH, 991hPa
TRANSFER RATE	6Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.215	0.10	48.82	-	48.92	-	63.02	53.02	-14.10	-
2	0.310	0.10	36.49	-	36.59	-	59.97	49.97	-23.38	-
3	0.670	0.14	36.64	-	36.78	-	56.00	46.00	-19.22	-
4	2.426	0.20	32.75	-	32.95	-	56.00	46.00	-23.05	-
5	4.594	0.21	30.81	-	31.02	-	56.00	46.00	-24.98	-
6	16.164	0.49	31.81	-	32.30	-	60.00	50.00	-27.70	-

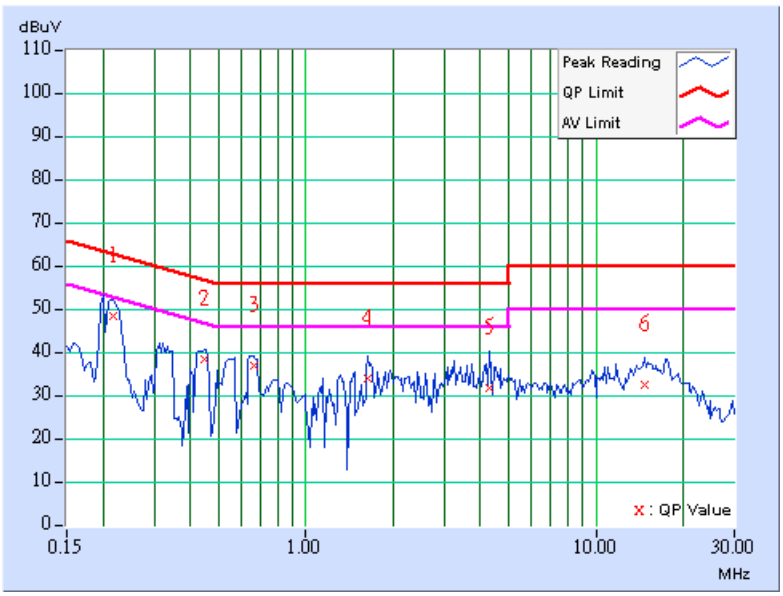
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	PHASE	Line 2
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.216	0.10	47.90	-	48.00	-	62.96	52.96	-14.96	-
2	0.447	0.11	37.97	-	38.08	-	56.93	46.93	-18.86	-
3	0.662	0.14	36.57	-	36.71	-	56.00	46.00	-19.29	-
4	1.637	0.20	33.51	-	33.71	-	56.00	46.00	-22.29	-
5	4.293	0.21	31.27	-	31.48	-	56.00	46.00	-24.52	-
6	14.742	0.49	32.22	-	32.71	-	60.00	50.00	-27.29	-

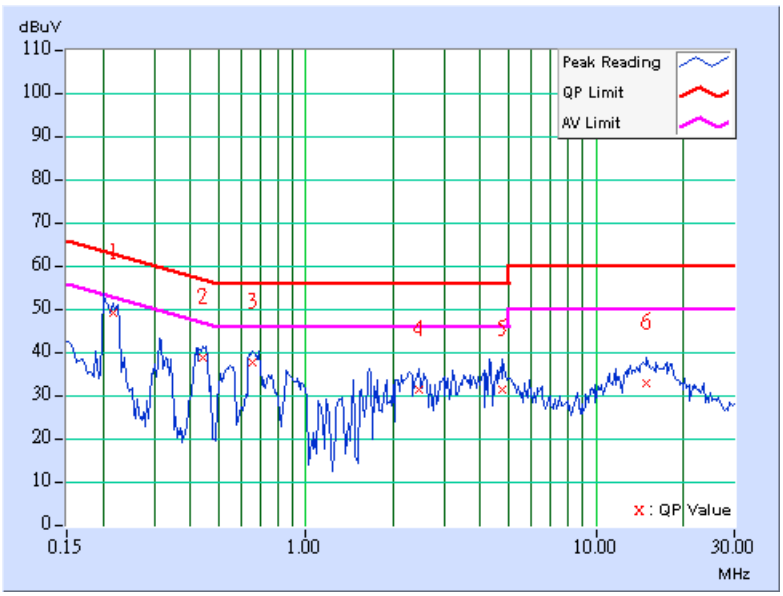
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	PHASE	Line 1
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.216**	**0.10**	**48.80**	**-**	**48.90**	**-**	**62.96**	**52.96**	**-14.06**	**-**
2	0.439	0.11	38.50	-	38.61	-	57.08	47.08	-18.47	-
3	0.658	0.14	37.42	-	37.56	-	56.00	46.00	-18.44	-
4	2.441	0.20	31.00	-	31.20	-	56.00	46.00	-24.80	-
5	4.781	0.21	31.14	-	31.35	-	56.00	46.00	-24.65	-
6	14.891	0.40	32.63	-	33.03	-	60.00	50.00	-26.97	-

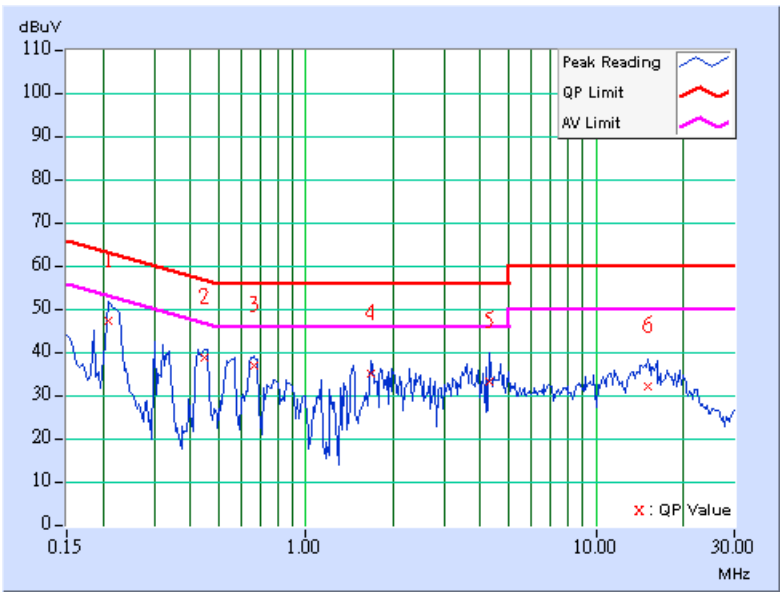
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	PHASE	Line 2
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.209	0.10	46.87	-	46.97	-	63.26	53.26	-16.29	-
2	0.447	0.11	38.20	-	38.31	-	56.93	46.93	-18.63	-
3	0.662	0.14	36.36	-	36.50	-	56.00	46.00	-19.50	-
4	1.680	0.20	34.68	-	34.88	-	56.00	46.00	-21.12	-
5	4.313	0.21	32.77	-	32.98	-	56.00	46.00	-23.02	-
6	15.094	0.51	31.62	-	32.13	-	60.00	50.00	-27.87	-

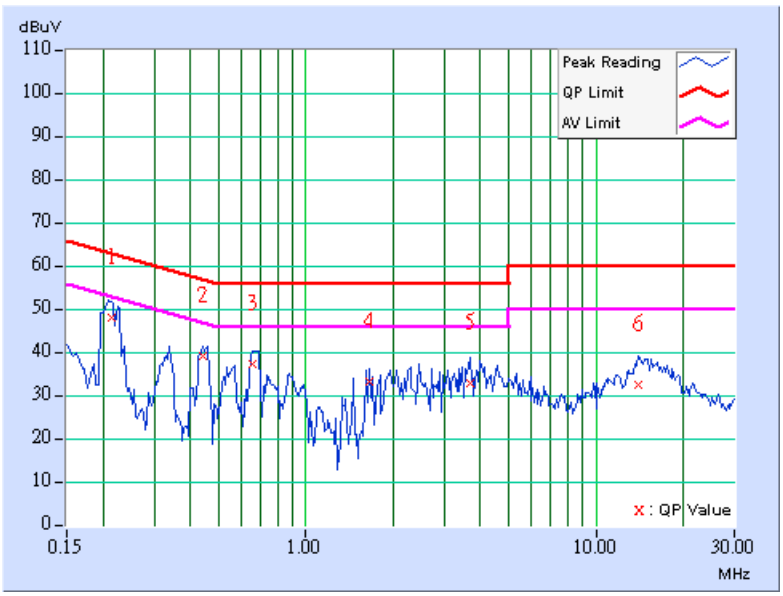
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	PHASE	Line 1
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.215	0.10	47.74	-	47.84	-	63.01	53.01	-15.17	-
2	0.443	0.11	38.82	-	38.93	-	57.01	47.01	-18.08	-
3	0.658	0.14	37.03	-	37.17	-	56.00	46.00	-18.83	-
4	1.656	0.20	32.91	-	33.11	-	56.00	46.00	-22.89	-
5	3.695	0.20	32.69	-	32.89	-	56.00	46.00	-23.11	-
6	14.078	0.38	32.20	-	32.58	-	60.00	50.00	-27.42	-

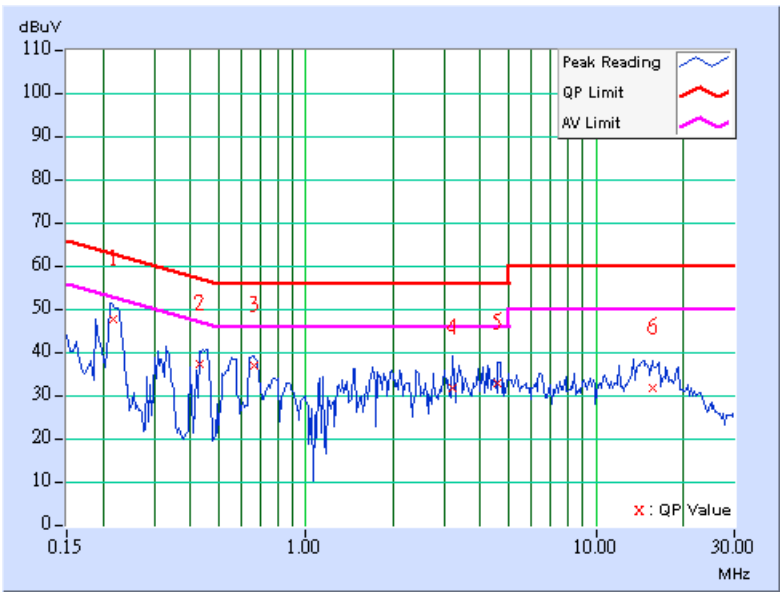
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	PHASE	Line 2
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.216	0.10	47.15	-	47.25	-	62.96	52.96	-15.71	-
2	0.431	0.11	36.83	-	36.94	-	57.23	47.23	-20.29	-
3	0.666	0.14	36.42	-	36.56	-	56.00	46.00	-19.44	-
4	3.207	0.20	31.47	-	31.67	-	56.00	46.00	-24.33	-
5	4.586	0.22	32.31	-	32.53	-	56.00	46.00	-23.47	-
6	15.672	0.54	31.18	-	31.72	-	60.00	50.00	-28.28	-

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

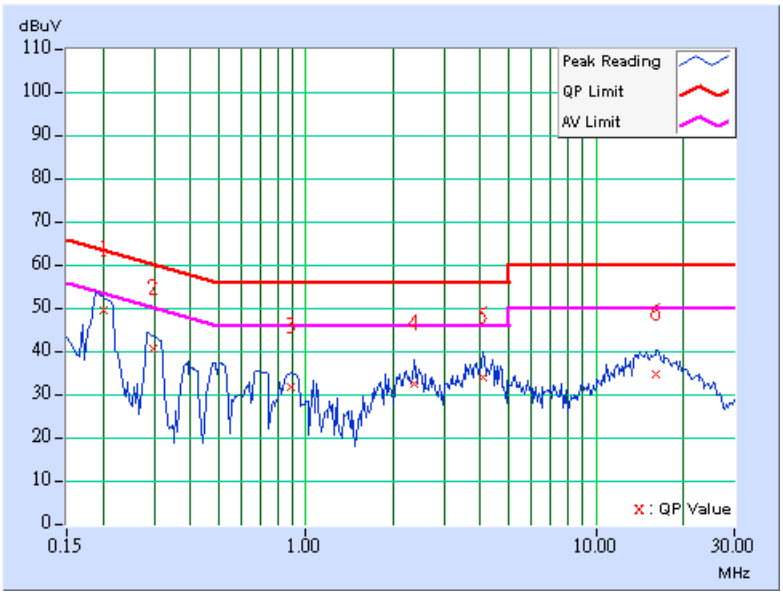


CONDUCTED WORST CASE DATA_TURBO MODE

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	PHASE	Line 1
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.201	0.10	49.27	-	49.37	-	63.58	53.58	-14.21	-
2	0.298	0.10	40.35	-	40.45	-	60.29	50.29	-19.84	-
3	0.892	0.18	31.47	-	31.65	-	56.00	46.00	-24.35	-
4	2.367	0.20	31.96	-	32.16	-	56.00	46.00	-23.84	-
5	4.059	0.20	33.68	-	33.88	-	56.00	46.00	-22.12	-
6	16.188	0.50	34.38	-	34.88	-	60.00	50.00	-25.12	-

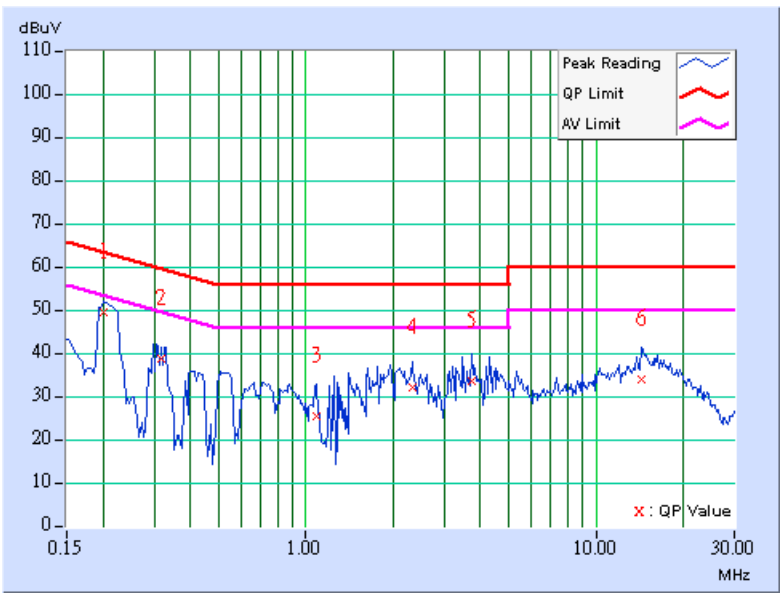
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	PHASE	Line 2
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.201	0.10	49.23	-	49.33	-	63.58	53.58	-14.25	-
2	0.318	0.10	38.33	-	38.43	-	59.77	49.77	-21.34	-
3	1.094	0.20	24.97	-	25.17	-	56.00	46.00	-30.83	-
4	2.320	0.20	31.80	-	32.00	-	56.00	46.00	-24.00	-
5	3.715	0.20	33.11	-	33.31	-	56.00	46.00	-22.69	-
6	14.375	0.49	33.43	-	33.92	-	60.00	50.00	-26.08	-

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



5.2 RADIATED EMISSION MEASUREMENT

5.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

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

5.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESIB7	100188	Dec. 19, 2005
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Nov. 21, 2005
BILOG Antenna SCHWARZBECK	VULB9168	9168-157	Jan. 22, 2006
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-407	Jan. 16, 2006
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA 9170241	Feb. 23, 2006
Preamplifier Agilent	8449B	3008A01961	Nov. 09, 2005
Preamplifier Agilent	8447D	2944A10629	Nov. 09, 2005
RF signal cable HUBER+SUHNER	SUCOFLEX 104	218182/4	Feb. 17, 2006
RF signal cable HUBER+SUHNER	SUCOFLEX 104	218194/4	Feb. 17, 2006
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower ADT.	AT100	AT93021702	NA
Turn Table ADT.	TT100.	TT93021702	NA
Controller ADT.	SC100.	SC93021702	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

2. The test was performed in HwaYa Chamber 1.

3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.

4. The IC Site Registration No. is IC4924-2.

5.2.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

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

f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak method or average method as specified and then reported in data sheet.

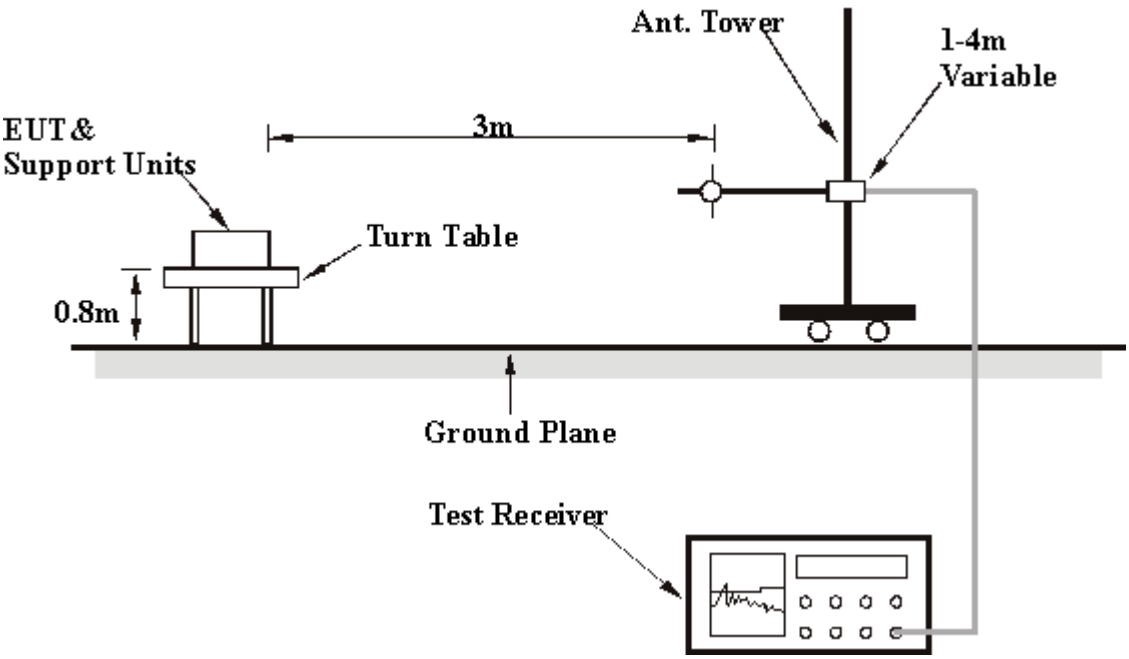
NOTE:

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 1kHz for Average detection (AV) at frequency above 1GHz.

5.2.4 DEVIATION FROM TEST STANDARD

No deviation

5.2.5 TEST SETUP



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

5.2.6 EUT OPERATING CONDITIONS

For finding the maximum radiated emission under this dual chain operation mode. The beam-forming coefficients has been adjusted to swing 30 degrees each step and pre-scans reveal that the maximum radiated emission is independent of the beam-forming coefficients, and hence the all dual chain operation is measured under the condition that both chains are output at same phase.

5.2.7 TEST RESULTS

RADIATED BELOW 1GHz WORST CASE DATA (DIPOLE AND PRINTED ANTENNA)

EUT	802.11g Wireless MIMO miniPCI Module	**MEASUREMENT DETAIL**	
MODEL	WMD-360A	**FREQUENCY RANGE**	Below 1000MHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Quasi-Peak
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 68%RH, 991hPa
TRANSFER RATE	1Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST MODE	**1**	**TESTED BY**	Match Tsui

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	99.89	40.71 QP	43.50	-2.79	2.00 H	177	29.97	10.74
2	133.18	38.69 QP	43.50	-4.81	1.75 H	308	24.96	13.73
3	166.82	41.19 QP	43.50	-2.31	2.00 H	133	27.20	13.99
4	200.18	41.23 QP	43.50	-2.27	1.00 H	350	30.09	11.14
5	232.16	34.41 QP	46.00	-11.59	1.00 H	358	21.99	12.41
6	331.30	31.56 QP	46.00	-14.44	1.00 H	49	16.52	15.04
7	444.18	35.28 QP	46.00	-10.72	1.25 H	46	17.52	17.76
8	607.58	42.66 QP	46.00	-3.34	1.50 H	127	21.66	21.00
9	731.74	26.85 QP	46.00	-19.15	1.00 H	22	3.86	22.99

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	27deg. C, 68%RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Match Tsui

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	64.28	28.40 QP	40.00	-11.60	1.25 V	200	15.43	12.97
2	100.18	34.20 QP	43.50	-9.30	2.00 V	177	23.44	10.76
3	168.02	34.73 QP	43.50	-8.77	1.50 V	313	20.86	13.88
4	200.30	37.80 QP	43.50	-5.70	1.75 V	28	26.66	11.14
5	267.15	29.05 QP	46.00	-16.95	2.00 V	301	15.52	13.53
6	440.16	38.00 QP	46.00	-8.00	1.00 V	7	20.34	17.66
7	465.43	33.05 QP	46.00	-12.95	1.00 V	43	14.93	18.12
8	605.39	43.62 QP	46.00	-2.38	1.28 V	300	22.65	20.97
9	636.49	35.91 QP	46.00	-10.09	1.00 V	250	14.51	21.40
10	733.69	25.50 QP	46.00	-20.50	1.00 V	22	2.47	23.03

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

802.11g OFDM MODULATION_NORMAL MODE (DIPOLE AND PRINTED ANTENNA)

EUT	802.11g Wireless MIMO miniPCI Module	**MEASUREMENT DETAIL**	
MODEL	WMD-360A	**FREQUENCY RANGE**	1 ~ 25GHz
CHANNEL	Channel 1	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 67%RH, 991hPa
TRANSFER RATE	6Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST MODE	**1**	**TESTED BY**	Match Tsui

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	1740.00	46.48 PK	74.00	-27.52	1.19 H	341	17.43	29.05
1	1740.00	42.64 AV	54.00	-11.36	1.19 H	341	13.59	29.05
2	1832.00	64.55 PK	74.00	-9.45	1.57 H	1	35.22	29.34
2	1832.00	37.48 AV	54.00	-16.52	1.57 H	1	8.15	29.34
3	2016.00	48.17 PK	84.17	-36.00	1.00 H	37	17.83	30.34
3	2016.00	44.76 AV	74.71	-29.95	1.00 H	37	14.42	30.34
4	2390.00	63.54 PK	74.00	-10.46	1.30 H	49	31.50	32.04
4	2390.00	46.81 AV	54.00	-7.19	1.30 H	49	14.77	32.04
5	*2412.00	104.17 PK			1.30 H	49	72.04	32.13
5	*2412.00	94.71 AV			1.30 H	49	62.58	32.13
6	4824.00	46.77 PK	74.00	-27.23	1.24 H	144	8.57	38.20
6	4824.00	34.00 AV	54.00	-20.00	1.24 H	144	-4.20	38.20

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Match Tsui

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	1053.00	43.60 PK	74.00	-30.40	1.33 V	251	16.14	27.46
1	1053.00	41.64 AV	54.00	-12.36	1.33 V	251	14.18	27.46
2	1740.00	50.12 PK	74.00	-23.88	1.45 V	177	21.07	29.05
2	1740.00	46.24 AV	54.00	-7.76	1.45 V	177	17.19	29.05
3	1827.00	65.39 PK	74.00	-8.61	1.02 V	286	36.08	29.31
3	1827.00	41.53 AV	54.00	-12.47	1.02 V	286	12.22	29.31
4	2016.00	52.50 PK	92.98	-40.48	1.00 V	76	22.16	30.34
4	2016.00	51.05 AV	83.20	-32.15	1.00 V	76	20.71	30.34
5	2390.00	68.92 PK	74.00	-5.08	1.14 V	288	36.88	32.04
5	2390.00	49.22 AV	54.00	-4.78	1.14 V	288	17.18	32.04
6	*2412.00	112.98 PK			1.14 V	288	80.85	32.13
6	*2412.00	103.20 AV			1.14 V	288	71.07	32.13
7	2688.00	46.09 PK	74.00	-27.91	1.18 V	55	13.15	32.94
7	2688.00	40.15 AV	54.00	-13.85	1.18 V	55	7.21	32.94
8	4824.00	46.99 PK	74.00	-27.01	1.03 V	1	8.79	38.20
8	4824.00	34.86 AV	54.00	-19.14	1.03 V	1	-3.34	38.20

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Match Tsui

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	1764.00	46.11 PK	74.00	-27.89	1.18 H	339	17.01	29.10
1	1764.00	41.91 AV	54.00	-12.09	1.18 H	339	12.81	29.10
2	1854.00	65.73 PK	86.27	-20.54	1.10 H	16	36.27	29.46
2	1854.00	42.54 AV	76.11	-33.57	1.10 H	16	13.08	29.46
3	2016.00	54.06 PK	86.27	-32.21	1.35 H	187	23.72	30.34
3	2016.00	52.20 AV	76.11	-23.91	1.35 H	187	21.86	30.34
4	*2437.00	106.27 PK			1.07 H	347	74.02	32.25
4	*2437.00	96.11 AV			1.07 H	347	63.86	32.25
5	4874.00	46.25 PK	74.00	-27.75	1.20 H	178	7.93	38.32
5	4874.00	34.15 AV	54.00	-19.85	1.20 H	178	-4.17	38.32

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	1765.00	50.81 PK	74.00	-23.19	1.07 V	312	21.71	29.10
1	1765.00	46.86 AV	54.00	-7.14	1.07 V	312	17.76	29.10
2	1854.00	73.14 PK	94.39	-21.25	1.33 V	275	43.68	29.46
2	1854.00	43.23 AV	84.56	-41.33	1.33 V	275	13.77	29.46
3	2016.00	54.52 PK	94.39	-39.87	1.31 V	73	24.18	30.34
3	2016.00	53.52 AV	84.56	-31.04	1.31 V	73	23.18	30.34
4	*2437.00	114.39 PK			1.07 V	57	82.14	32.25
4	*2437.00	104.56 AV			1.07 V	57	72.31	32.25
5	4874.00	47.14 PK	74.00	-26.86	1.10 V	177	8.82	38.32
5	4874.00	34.79 AV	54.00	-19.21	1.10 V	177	-3.53	38.32

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	27deg. C, 67%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Match Tsui

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	1877.00	70.96 PK	82.93	-11.97	1.35 H	275	41.37	29.58
1	1877.00	41.61 AV	72.96	-31.35	1.35 H	275	12.02	29.58
2	2016.00	52.54 PK	82.93	-30.39	1.21 H	285	22.20	30.34
2	2016.00	50.67 AV	72.96	-22.29	1.21 H	285	20.33	30.34
3	*2462.00	102.93 PK			1.32 H	332	70.57	32.36
3	*2462.00	92.96 AV			1.32 H	332	60.60	32.36
4	2483.50	53.75 PK	74.00	-20.25	1.32 H	332	21.29	32.46
4	2483.50	45.92 AV	54.00	-8.08	1.32 H	332	13.46	32.46
5	4924.00	46.71 PK	74.00	-27.29	1.17 H	236	8.25	38.46
5	4924.00	34.39 AV	54.00	-19.61	1.17 H	236	-4.07	38.46

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	1790.00	50.22 PK	74.00	-23.78	1.03 V	311	21.08	29.14
1	1790.00	46.97 AV	54.00	-7.03	1.03 V	311	17.83	29.14
2	1875.00	77.33 PK	93.17	-15.84	1.38 V	294	47.76	29.57
2	1875.00	46.74 AV	83.85	-37.11	1.38 V	294	17.17	29.57
3	2016.00	57.77 PK	93.17	-35.40	1.33 V	258	27.43	30.34
3	2016.00	56.11 AV	83.85	-27.74	1.33 V	258	25.77	30.34
4	*2462.00	113.17 PK			1.09 V	339	80.81	32.36
4	*2462.00	103.85 AV			1.09 V	339	71.49	32.36
5	2483.50	66.53 PK	74.00	-7.47	1.09 V	339	34.07	32.46
5	2483.50	51.80 AV	54.00	-2.20	1.09 V	339	19.34	32.46
6	4924.00	46.91 PK	74.00	-27.09	1.10 V	1	8.45	38.46
6	4924.00	34.65 AV	54.00	-19.35	1.10 V	1	-3.81	38.46

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

802.11g OFDM MODULATION_TURBO MODE (DIPOLE AND PRINTED ANTENNA)

EUT	802.11g Wireless MIMO miniPCI Module	**MEASUREMENT DETAIL**	
MODEL	WMD-360A	**FREQUENCY RANGE**	Below 1000MHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Quasi-Peak
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 68%RH, 991hPa
TRANSFER RATE	12Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST MODE	**1**	**TESTED BY**	Match Tsui

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	100.11	39.88 QP	43.50	-3.62	2.00 H	163	29.12	10.76
2	133.20	38.71 QP	43.50	-4.79	2.00 H	268	24.98	13.73
3	166.23	41.21 QP	43.50	-2.29	2.00 H	178	27.16	14.05
4	199.98	41.11 QP	43.50	-2.39	1.25 H	55	29.98	11.13
5	232.16	34.41 QP	46.00	-11.59	1.00 H	358	21.99	12.41
6	331.30	31.56 QP	46.00	-14.44	1.00 H	49	16.52	15.04
7	444.18	35.28 QP	46.00	-10.72	1.25 H	46	17.52	17.76
8	465.43	29.90 QP	46.00	-16.10	2.00 H	52	11.78	18.12
9	607.58	42.66 QP	46.00	-3.34	1.50 H	127	21.66	21.00
10	731.74	26.85 QP	46.00	-19.15	1.00 H	22	3.86	22.99

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	27deg. C, 68%RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Match Tsui

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	64.11	30.88 QP	40.00	-9.12	1.50 V	179	17.89	12.99
2	100.18	34.20 QP	43.50	-9.30	2.00 V	177	23.44	10.76
3	168.02	34.73 QP	43.50	-8.77	1.50 V	313	20.86	13.88
4	199.95	38.56 QP	43.50	-4.94	1.50 V	136	27.43	11.13
5	267.15	29.05 QP	46.00	-16.95	2.00 V	301	15.52	13.53
6	440.16	38.00 QP	46.00	-8.00	1.00 V	7	20.34	17.66
7	466.28	34.28 QP	46.00	-11.72	1.25 V	311	16.15	18.13
8	604.27	43.52 QP	46.00	-2.48	1.00 V	188	22.57	20.95
9	638.55	37.11 QP	46.00	-8.89	1.00 V	277	15.68	21.43
10	733.69	25.50 QP	46.00	-20.50	1.00 V	22	2.47	23.03

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Match Tsui

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	1832.00	65.03 PK	74.00	-8.97	1.50 H	176	35.70	29.34
1	1832.00	40.82 AV	54.00	-13.18	1.50 H	176	11.49	29.34
2	2016.00	51.79 PK	83.88	-32.09	1.27 H	314	21.45	30.34
2	2016.00	50.36 AV	74.08	-23.72	1.27 H	314	20.02	30.34
3	2390.00	58.15 PK	74.00	-15.85	1.06 H	125	26.11	32.04
3	2390.00	47.15 AV	54.00	-6.85	1.06 H	125	15.11	32.04
4	*2437.00	103.88 PK			1.06 H	125	71.63	32.25
4	*2437.00	94.08 AV			1.06 H	125	61.83	32.25
5	2483.50	56.46 PK	74.00	-17.54	1.06 H	125	24.00	32.46
5	2483.50	46.50 AV	54.00	-7.50	1.06 H	125	14.04	32.46
6	7311.00	51.33 PK	74.00	-22.67	1.50 H	1	6.48	44.85
6	7311.00	41.19 AV	54.00	-12.81	1.50 H	1	-3.66	44.85

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Match Tsui

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	1858.00	65.29 PK	74.00	-8.71	1.00 V	129	35.81	29.48
1	1858.00	41.13 AV	54.00	-12.87	1.00 V	129	11.65	29.48
2	2016.00	56.31 PK	92.03	-35.72	1.03 V	151	25.97	30.34
2	2016.00	55.30 AV	80.98	-25.68	1.03 V	151	24.96	30.34
3	2390.00	65.31 PK	74.00	-8.69	1.13 V	127	33.27	32.04
3	2390.00	52.16 AV	54.00	-1.84	1.13 V	127	20.12	32.04
4	*2437.00	112.03 PK			1.13 V	127	79.78	32.25
4	*2437.00	100.98 AV			1.13 V	127	68.73	32.25
5	2483.50	62.82 PK	74.00	-11.18	1.13 V	127	30.36	32.46
5	2483.50	50.93 AV	54.00	-3.07	1.13 V	127	18.47	32.46
6	2688.00	46.65 PK	74.00	-27.35	1.00 V	305	13.71	32.94
6	2688.00	43.03 AV	54.00	-10.97	1.00 V	305	10.09	32.94
7	7311.00	55.52 PK	74.00	-18.48	1.10 V	353	10.67	44.85
7	7311.00	42.50 AV	54.00	-11.50	1.10 V	353	-2.35	44.85

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

RADIATED BELOW 1GHz WORST CASE DATA (DIPOLE ANTENNA)

EUT	802.11g Wireless MIMO miniPCI Module	**MEASUREMENT DETAIL**	
MODEL	WMD-360A	**FREQUENCY RANGE**	Below 1000MHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Quasi-Peak
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 68%RH, 991hPa
TRANSFER RATE	1Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST MODE	**2**	**TESTED BY**	Match Tsui

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	99.87	38.44 QP	43.50	-5.06	1.25 H	163	27.70	10.74
2	133.28	38.96 QP	43.50	-4.54	1.25 H	246	25.22	13.74
3	166.28	40.12 QP	43.50	-3.38	2.00 H	350	26.07	14.05
4	199.40	40.67 QP	43.50	-2.83	1.50 H	154	29.50	11.18
5	234.22	40.45 QP	46.00	-5.55	1.00 H	122	27.91	12.54
6	265.21	34.27 QP	46.00	-11.73	1.00 H	124	20.83	13.45
7	441.20	34.58 QP	46.00	-11.42	1.75 H	136	16.89	17.69
8	553.22	37.55 QP	46.00	-8.45	1.75 H	177	17.86	19.69
9	597.44	38.69 QP	46.00	-7.31	1.25 H	244	17.86	20.83
10	735.63	33.53 QP	46.00	-12.47	1.00 H	37	10.45	23.08
11	828.94	32.34 QP	46.00	-13.66	1.00 H	334	8.40	23.94

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	27deg. C, 68%RH, 991hPa
TRANSFER RATE	1Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Match Tsui

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	60.47	28.99 QP	40.00	-11.01	1.25 V	147	15.59	13.40
2	99.88	30.88 QP	43.50	-12.62	2.00 V	127	20.14	10.74
3	166.07	34.14 QP	43.50	-9.36	1.50 V	310	20.08	14.07
4	199.88	37.55 QP	43.50	-5.95	1.50 V	277	26.41	11.14
5	265.21	29.34 QP	46.00	-16.66	2.00 V	10	15.90	13.45
6	465.43	32.77 QP	46.00	-13.23	1.00 V	58	14.65	18.12
7	578.18	34.25 QP	46.00	-11.75	1.50 V	67	13.92	20.33
8	599.56	37.18 QP	46.00	-8.82	1.00 V	283	16.30	20.88
9	638.44	33.34 QP	46.00	-12.66	2.00 V	55	11.91	21.43
10	832.83	28.38 QP	46.00	-17.62	2.00 V	40	4.41	23.98

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

802.11g OFDM MODULATION_NORMAL MODE (DIPOLE ANTENNA)

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Match Tsui

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	1832.00	48.42 PK	74.00	-25.58	1.05 H	25	19.09	29.34
1	1832.00	37.79 AV	54.00	-16.21	1.05 H	25	8.46	29.34
2	2016.00	48.28 PK	74.00	-25.72	1.29 H	31	17.94	30.34
2	2016.00	45.50 AV	54.00	-8.50	1.29 H	31	15.16	30.34
3	2390.00	65.06 PK	74.00	-8.94	1.50 H	162	33.02	32.04
3	2390.00	50.47 AV	54.00	-3.53	1.50 H	162	18.43	32.04
4	*2412.00	112.78 PK			1.50 H	162	80.65	32.13
4	*2412.00	102.32 AV			1.50 H	162	70.19	32.13

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	1826.00	51.39 PK	74.00	-22.61	1.12 V	328	22.09	29.30
1	1826.00	37.32 AV	54.00	-16.68	1.12 V	328	8.02	29.30
2	2016.00	52.27 PK	74.00	-21.73	1.29 V	282	21.93	30.34
2	2016.00	50.41 AV	54.00	-3.59	1.29 V	282	20.07	30.34
3	2390.00	57.13 PK	74.00	-16.87	1.05 V	281	25.09	32.04
3	2390.00	46.89 AV	54.00	-7.11	1.05 V	281	14.85	32.04
4	*2412.00	105.75 PK			1.05 V	281	73.62	32.13
4	*2412.00	95.92 AV			1.05 V	281	63.79	32.13

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Match Tsui

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	1844.00	67.75 PK	74.00	-6.25	1.06 H	355	38.35	29.40
1	1844.00	44.33 AV	54.00	-9.67	1.06 H	355	14.93	29.40
2	2016.00	53.87 PK	95.47	41.60	1.00 H	189	23.53	30.34
2	2016.00	51.82 AV	85.21	-33.39	1.00 H	189	21.48	30.34
3	*2437.00	115.47 PK			1.50 H	179	83.22	32.25
3	*2437.00	105.21 AV			1.50 H	179	72.96	32.25
4	7311.00	60.60 PK	74.00	-13.40	1.39 H	86	15.75	44.85
4	7311.00	46.16 AV	54.00	-7.84	1.39 H	86	1.31	44.85

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	1845.00	69.34 PK	74.00	-4.66	1.17 V	6	39.93	29.41
1	1845.00	41.33 AV	54.00	-12.67	1.17 V	6	11.93	29.41
2	2016.00	54.53 PK	85.40	-30.87	1.36 V	350	24.19	30.34
2	2016.00	53.15 AV	75.48	-22.33	1.36 V	350	22.81	30.34
3	*2437.00	105.40 PK			1.04 V	264	73.15	32.25
3	*2437.00	95.48 AV			1.04 V	264	63.23	32.25
4	7311.00	62.02 PK	74.00	-11.98	1.29 V	164	17.17	44.85
4	7311.00	47.99 AV	54.00	-6.01	1.29 V	164	3.14	44.85

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Match Tsui

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	1870.00	58.13 PK	74.00	-15.87	1.37 H	18	28.59	29.54
1	1870.00	39.23 AV	54.00	-14.77	1.37 H	18	9.69	29.54
2	2016.00	53.24 PK	92.08	-38.84	1.00 H	348	22.90	30.34
2	2016.00	51.22 AV	81.85	-30.63	1.00 H	348	20.88	30.34
3	*2462.00	112.08 PK			1.18 H	152	79.72	32.36
3	*2462.00	101.85 AV			1.18 H	152	69.49	32.36
4	2483.50	69.06 PK	74.00	-4.94	1.18 H	152	36.60	32.46
4	2483.50	50.58 AV	54.00	-3.42	1.18 H	152	18.12	32.46
5	7386.00	52.33 PK	74.00	-21.67	1.00 H	177	7.27	45.06
5	7386.00	39.78 AV	54.00	-14.22	1.00 H	177	-5.28	45.06

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)	Correction Factor (dB/m)
1	1871.00	58.96 PK	74.00	-15.04	1.13 V	66	29.41	29.55
1	1871.00	41.37 AV	54.00	-12.63	1.13 V	66	11.82	29.55
2	2016.00	54.67 PK	82.69	-28.02	1.37 V	4	24.33	30.34
2	2016.00	53.20 AV	73.31	-20.11	1.37 V	4	22.86	30.34
3	*2462.00	102.69 PK			1.47 V	63	70.33	32.36
3	*2462.00	93.31 AV			1.47 V	63	60.95	32.36
4	2483.50	54.58 PK	74.00	-19.42	1.47 V	63	22.12	32.46
4	2483.50	45.61 AV	54.00	-8.39	1.47 V	63	13.15	32.46
5	7386.00	55.95 PK	74.00	-18.05	1.20 V	336	10.89	45.06
5	7386.00	42.47 AV	54.00	-11.53	1.20 V	336	-2.59	45.06

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

802.11g OFDM MODULATION_TURBO MODE (DIPOLE ANTENNA)

EUT	802.11g Wireless MIMO miniPCI Module	**MEASUREMENT DETAIL**	
MODEL	WMD-360A	**FREQUENCY RANGE**	Below 1000MHz
CHANNEL	Channel 11	**DETECTOR FUNCTION**	Quasi-Peak
MODULATION TYPE	BPSK	**ENVIRONMENTAL CONDITIONS**	27deg. C, 68%RH, 991hPa
TRANSFER RATE	12Mbps	**INPUT POWER (SYSTEM)**	120Vac, 60 Hz
TEST MODE	**2**	**TESTED BY**	Match Tsui

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	100.17	38.44 QP	43.50	-5.06	1.75 H	26	27.68	10.76
2	133.50	38.90 QP	43.50	-4.60	2.00 H	180	25.15	13.75
3	166.44	38.89 QP	43.50	-4.61	2.00 H	344	24.86	14.03
4	200.11	40.89 QP	43.50	-2.61	1.50 H	288	29.76	11.13
5	233.70	40.58 QP	46.00	-5.42	1.25 H	300	28.07	12.51
6	265.21	34.27 QP	46.00	-11.73	1.00 H	124	20.83	13.45
7	333.28	32.88 QP	46.00	-13.12	1.00 H	146	17.80	15.08
8	467.37	29.40 QP	46.00	-16.60	2.00 H	67	11.25	18.15
9	554.80	38.20 QP	46.00	-7.80	1.50 H	288	18.47	19.73
10	597.55	38.44 QP	46.00	-7.56	1.50 H	288	17.61	20.83
11	735.63	33.53 QP	46.00	-12.47	1.00 H	37	10.45	23.08
12	828.94	32.34 QP	46.00	-13.66	1.00 H	334	8.40	23.94

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	27deg. C, 68%RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Match Tsui

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	64.22	30.88 QP	40.00	-9.12	1.25 V	350	17.90	12.98
2	100.24	33.58 QP	43.50	-9.92	1.75 V	46	22.81	10.77
3	166.64	37.80 QP	43.50	-5.70	2.00 V	177	23.79	14.01
4	199.12	36.48 QP	43.50	-7.02	1.50 V	286	25.28	11.20
5	268.71	30.58 QP	46.00	-15.42	1.75 V	236	16.98	13.60
6	400.20	30.80 QP	46.00	-15.20	2.00 V	277	14.16	16.64
7	440.16	38.00 QP	46.00	-8.00	1.00 V	7	20.34	17.66
8	466.28	35.08 QP	46.00	-10.92	1.25 V	111	16.95	18.13
9	604.80	43.28 QP	46.00	-2.72	1.00 V	268	22.32	20.96
10	640.28	37.20 QP	46.00	-8.80	1.25 V	328	15.75	21.45
11	793.95	26.13 QP	46.00	-19.87	1.00 V	355	2.46	23.67

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Match Tsui

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	1844.00	56.37 PK	74.00	-17.63	1.00 H	331	26.97	29.40
1	1844.00	39.63 AV	54.00	-14.37	1.00 H	331	10.23	29.40
2	2016.00	52.56 PK	92.59	-40.03	1.00 H	346	22.22	30.34
2	2016.00	50.67 AV	81.01	-30.34	1.00 H	346	20.33	30.34
3	2390.00	67.87 PK	74.00	-6.13	1.21 H	328	35.83	32.04
3	2390.00	52.19 AV	54.00	-1.81	1.21 H	328	20.15	32.04
4	*2437.00	112.59 PK			1.21 H	328	80.34	32.25
4	*2437.00	101.01 AV			1.21 H	328	68.76	32.25
5	2483.50	65.75 PK	74.00	-8.25	1.21 H	328	33.29	32.46
5	**2483.50**	**52.25 AV**	**54.00**	**-1.75**	**1.21 H**	**328**	**19.79**	**32.46**
6	7311.00	58.16 PK	74.00	-15.84	1.40 H	268	13.31	44.85
6	7311.00	45.33 AV	54.00	-8.67	1.40 H	268	0.48	44.85

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

EUT	802.11g Wireless MIMO miniPCI Module	MEASUREMENT DETAIL	
MODEL	WMD-360A	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak (PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Match Tsui

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	1854.00	54.76 PK	74.00	-19.24	1.15 V	127	25.30	29.46
1	1854.00	40.47 AV	54.00	-13.53	1.15 V	127	11.01	29.46
2	2016.00	56.88 PK	85.67	-28.79	1.03 V	209	26.54	30.34
2	2016.00	55.49 AV	76.14	-20.65	1.03 V	209	25.15	30.34
3	2390.00	60.40 PK	74.00	-13.60	1.05 V	289	28.36	32.04
3	2390.00	47.95 AV	54.00	-6.05	1.05 V	289	15.91	32.04
4	*2437.00	105.67 PK			1.05 V	289	73.42	32.25
4	*2437.00	96.14 AV			1.05 V	289	63.89	32.25
5	2483.50	58.22 PK	74.00	-15.78	1.05 V	289	25.76	32.46
5	2483.50	47.14 AV	54.00	-6.86	1.05 V	289	14.68	32.46
6	7311.00	61.49 PK	74.00	-12.51	1.32 V	191	16.64	44.85
6	7311.00	47.17 AV	54.00	-6.83	1.32 V	191	2.32	44.85

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

5.3 6dB BANDWIDTH MEASUREMENT

5.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

5.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

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

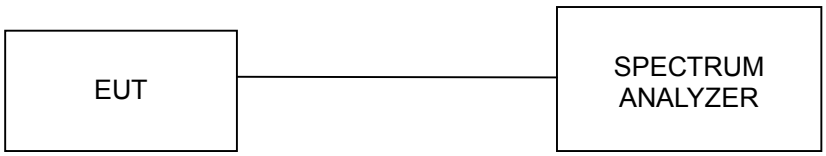
5.3.3 TEST PROCEDURE

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

5.3.4 DEVIATION FROM TEST STANDARD

No deviation

5.3.5 TEST SETUP



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

5.3.6 EUT OPERATING CONDITIONS

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

5. 3.7 TEST RESULTS

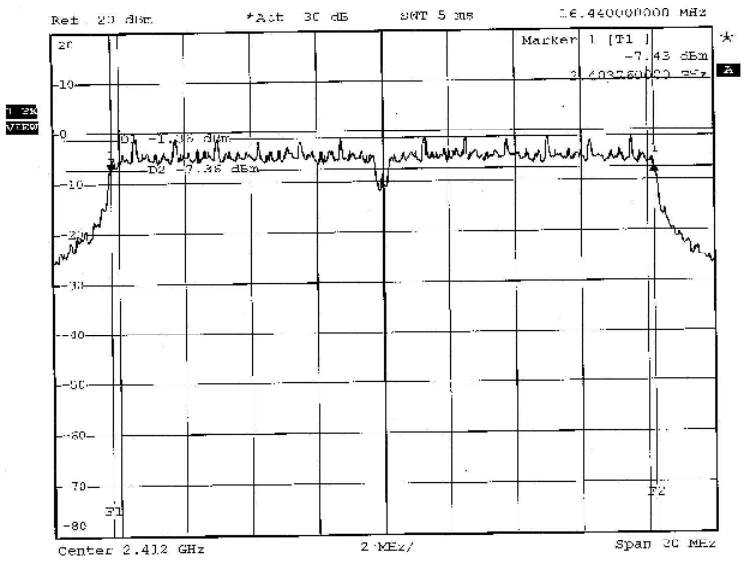
802.11g OFDM MODULATION_NORMAL MODE

EUT	802.11g Wireless MIMO miniPCI Module	MODEL	WMD-360A
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH, 991hPa
TESTED BY	Match Tsui		

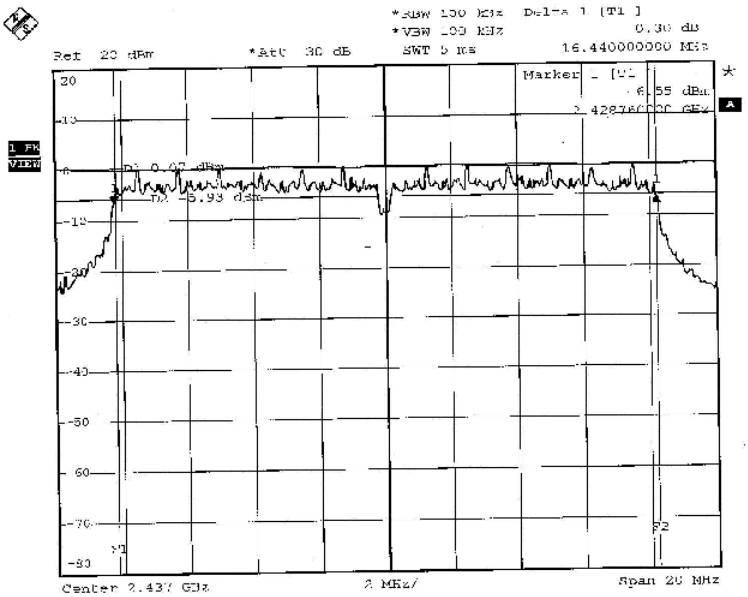
CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS/FAIL
		CHAIN 0	CHAIN 1		
1	2412	16.44	16.40	0.5	PASS
6	2437	16.44	16.44	0.5	PASS
11	2462	16.44	16.44	0.5	PASS

FOR CHAIN 0:

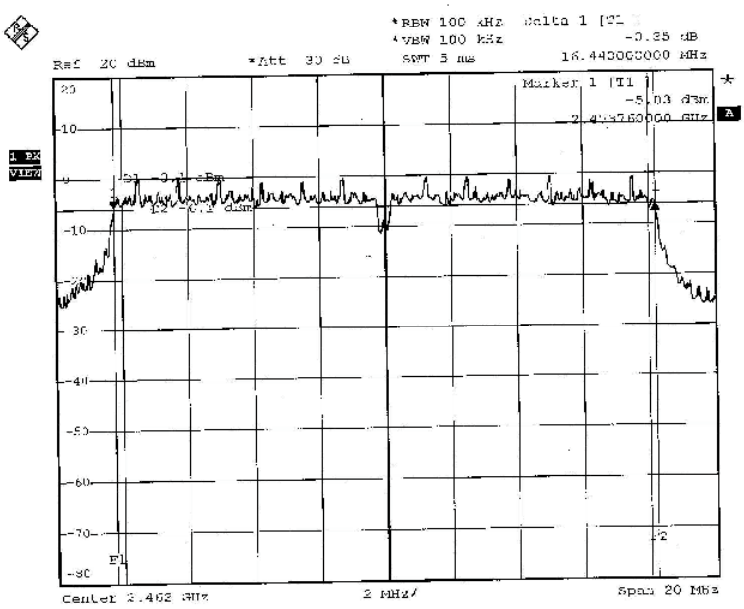
CH1



CH6

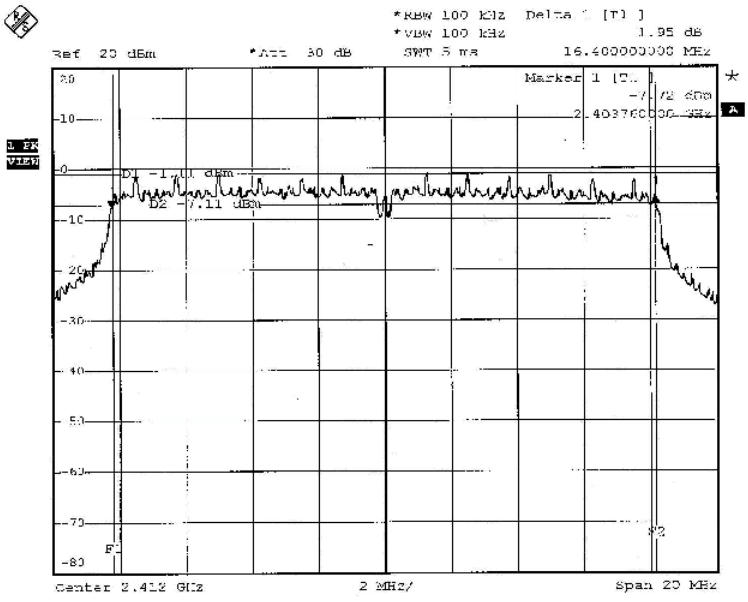


CH11

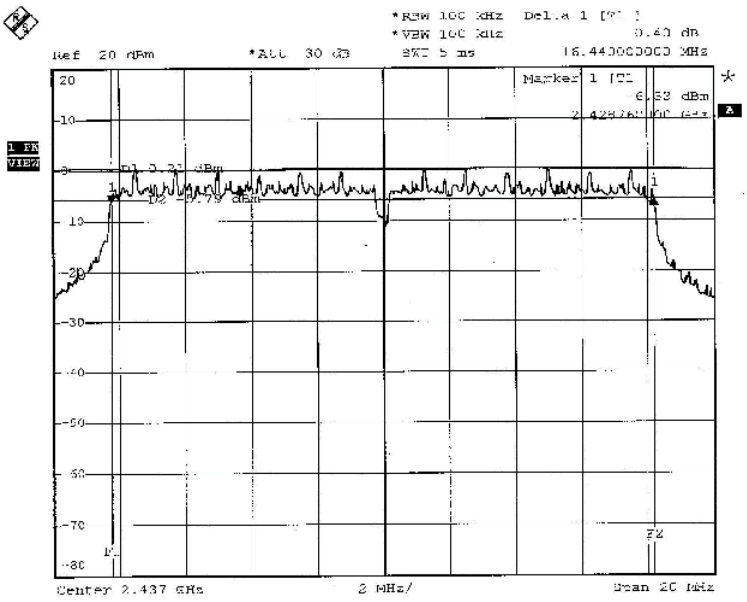


FOR CHAIN 1:

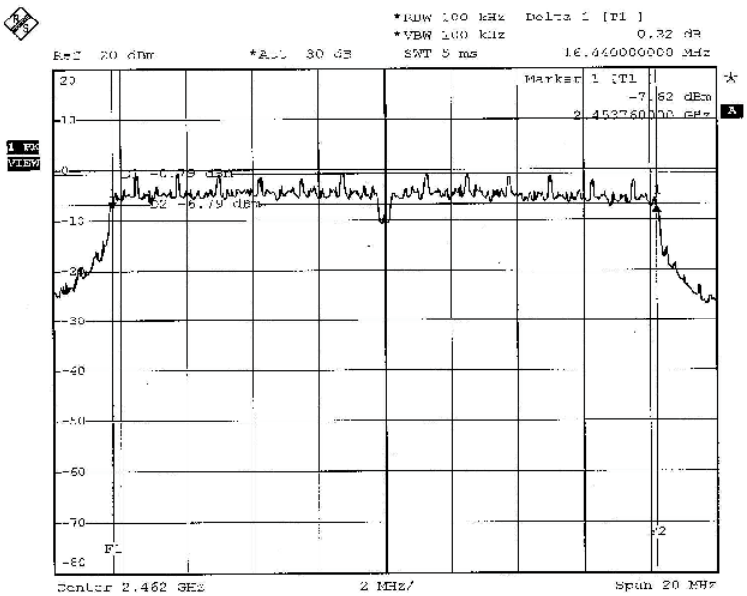
CH1



CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Ref 20 dBm
Center 2.437 GHz
2 MHz/
Span 20 MHz

CH11


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Ref 20 dBm
Center 2.462 GHz
2 MHz/
Span 20 MHz

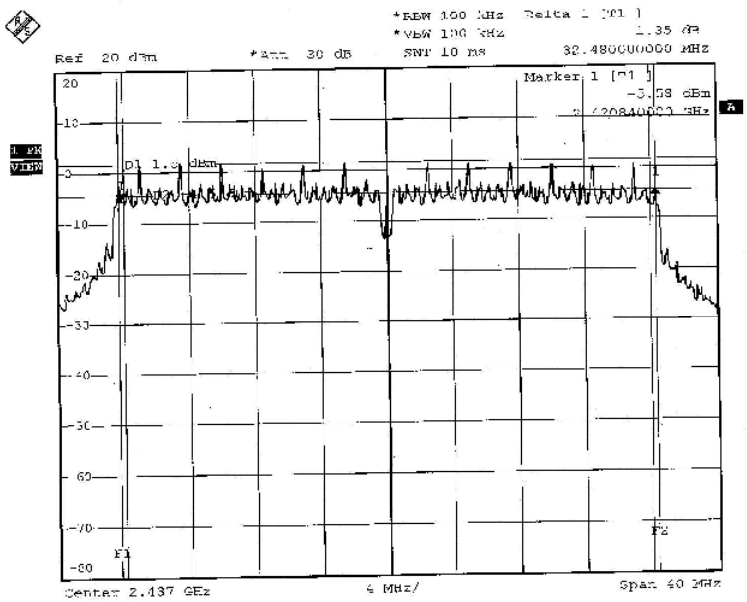
802.11g OFDM MODULATION_TURBO MODE

EUT	802.11g Wireless MIMO miniPCI Module	**MODEL**	WMD-360A
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	28deg. C, 67%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS/FAIL
		CHAIN 0	CHAIN 1		
6	2437	32.48	32.08	0.5	PASS

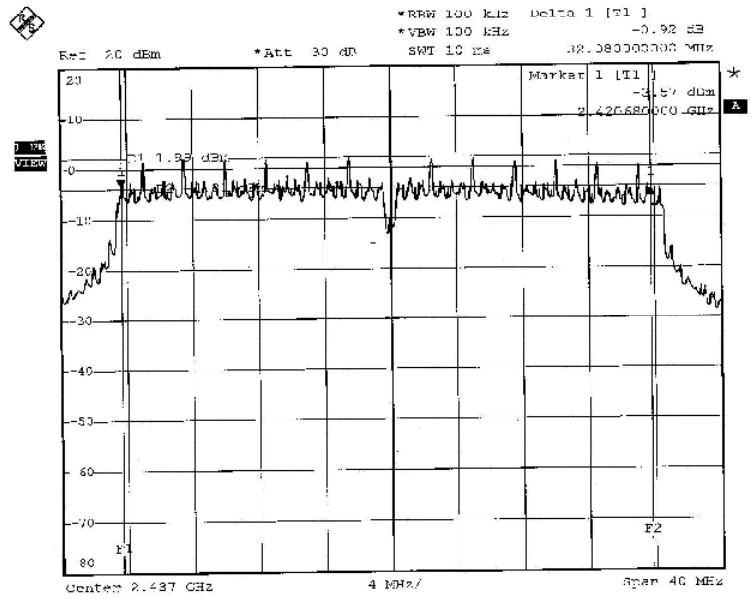
FOR CHAIN 0:

CH6



FOR CHAIN 1:

CH6



5.4 MAXIMUM PEAK OUTPUT POWER

5.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

5.4.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005
AGILENT SIGNAL GENERATOR	E8257C	MY43320668	Dec. 06, 2005
TEKTRONIX OSCILLOSCOPE	TDS 220	C019167	Feb. 01, 2006
NARDA DETECTOR	4503A	FSCM99899	NA

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

5.4.3 TEST PROCEDURES

1. A detector was used on the output port of the EUT. An oscilloscope was used to peak the response of the detector.
2. Replaced the EUT by the signal generator. The center frequency of the S.G was adjusted to the center frequency of the measured channel.
3. Adjusted the power to have the same peak reading on oscilloscope. Record the power level.

5.4.4 DEVIATION FROM TEST STANDARD

No deviation

5.4.5 TEST SETUP

5.4.6 EUT OPERATING CONDITIONS

Same as Item 5.3.6

5.4.7 TEST RESULTS

802.11g OFDM MODULATION_NORMAL MODE

EUT	802.11g Wireless MIMO miniPCI Module	MODEL	WMD-360A
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)		PEAK POWER OUTPUT (dBm)		TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
1	2412	31.989	31.769	15.05	15.02	63.758	18.05	30	PASS
6	2437	32.137	31.769	15.07	15.02	63.905	18.06	30	PASS
11	2462	32.211	31.842	15.08	15.03	64.053	18.07	30	PASS

802.11g OFDM MODULATION_TURBO MODE

EUT	802.11g Wireless MIMO miniPCI Module	MODEL	WMD-360A
MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	28deg. C, 67%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)		PEAK POWER OUTPUT (dBm)		TOTAL PEAK POWER (mW)	TOTAL PEAK POWER (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1	CHAIN 0	CHAIN 1				
6	2437	32.137	31.989	15.07	15.05	64.126	18.07	30	PASS

5.5 POWER SPECTRAL DENSITY MEASUREMENT

5.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

5.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

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

5.5.3 TEST PROCEDURE

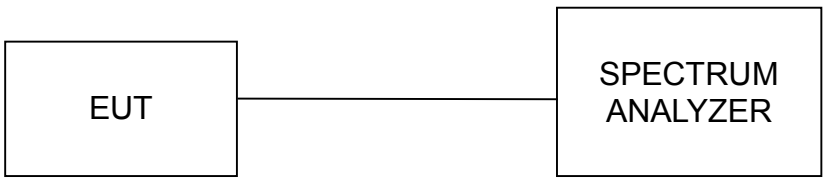
The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time=span/3kHz. The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.

5.5.4 DEVIATION FROM TEST STANDARD

No deviation

5.5.5 TEST SETUP



5.5.6 EUT OPERATING CONDITIONS

Same as 4.3.6

5.5.7 TEST RESULTS

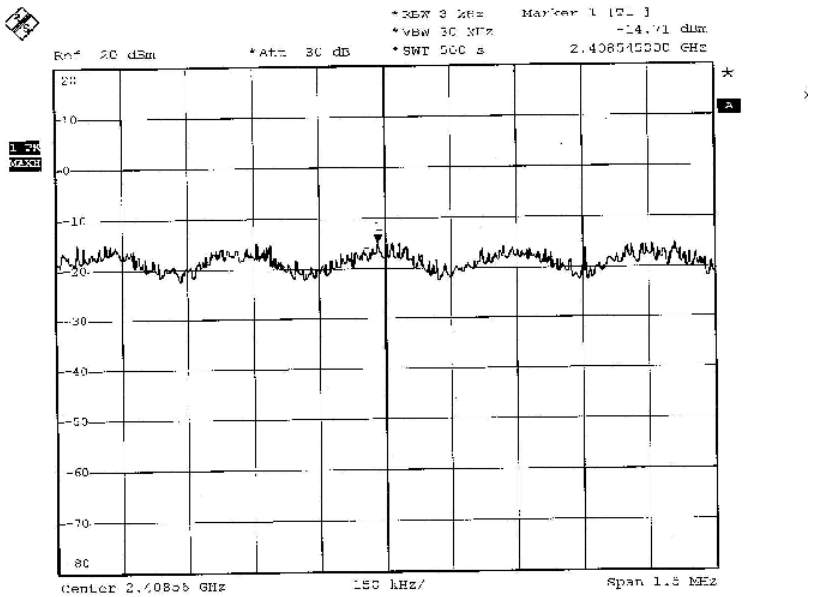
802.11g OFDM MODULATION_NORMAL MODE

EUT	802.11g Wireless MIMO miniPCI Module	**MODEL**	WMD-360A
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	28deg. C, 67%RH, 991hPa
TESTED BY	Match Tsui		

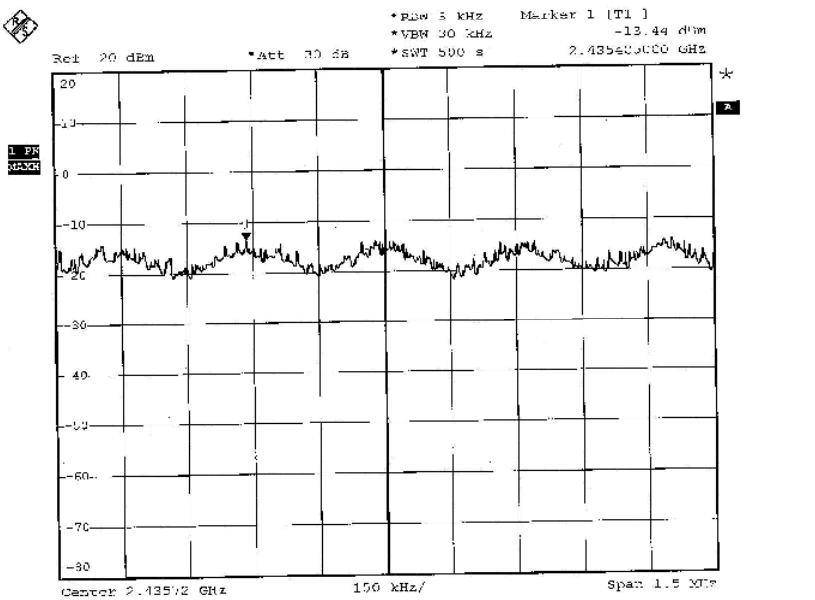
CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)		MAXIMUM LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1		
1	2412	-14.71	-15.33	8	PASS
6	2437	-13.44	-13.78	8	PASS
11	2462	-14.41	-14.46	8	PASS

FOR CHAIN 0:

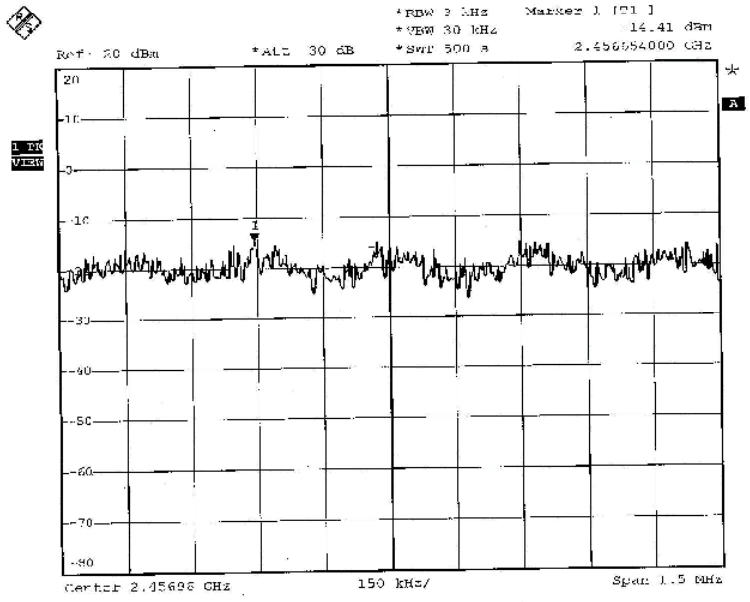
CH1



CH6

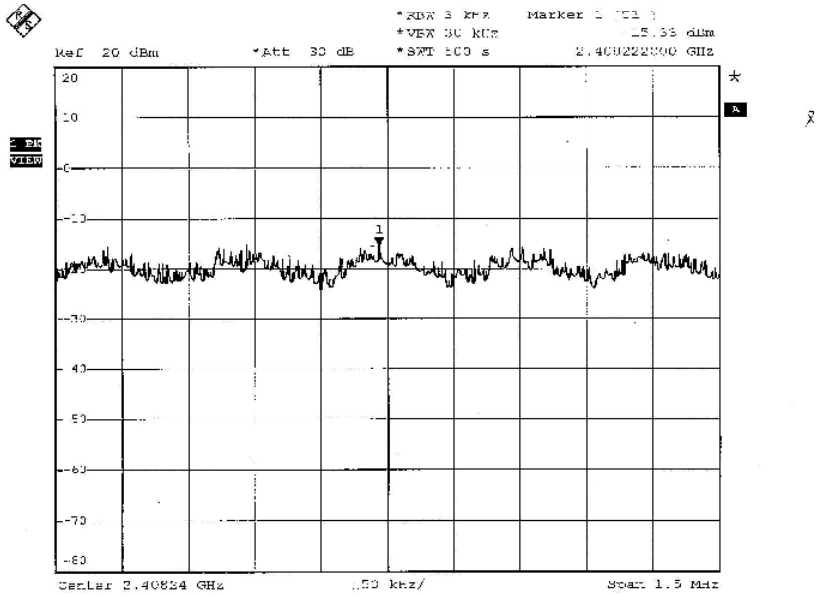


CH11

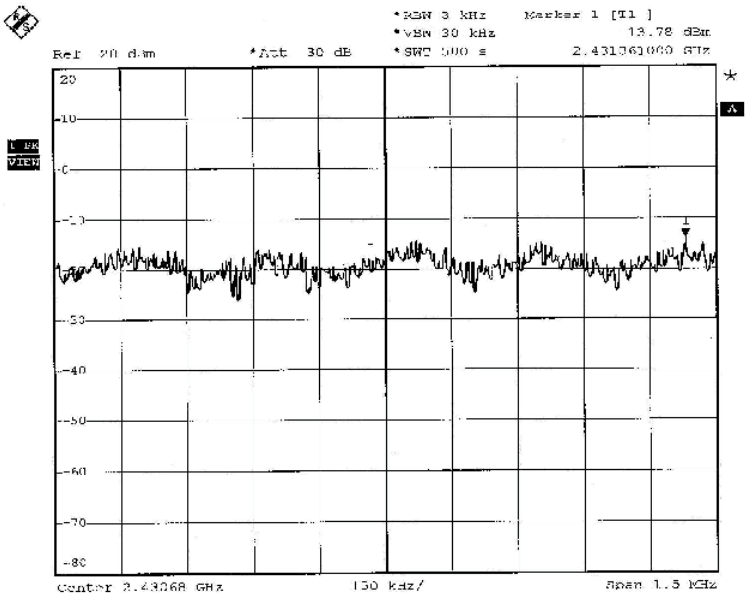


FOR CHAIN 1:

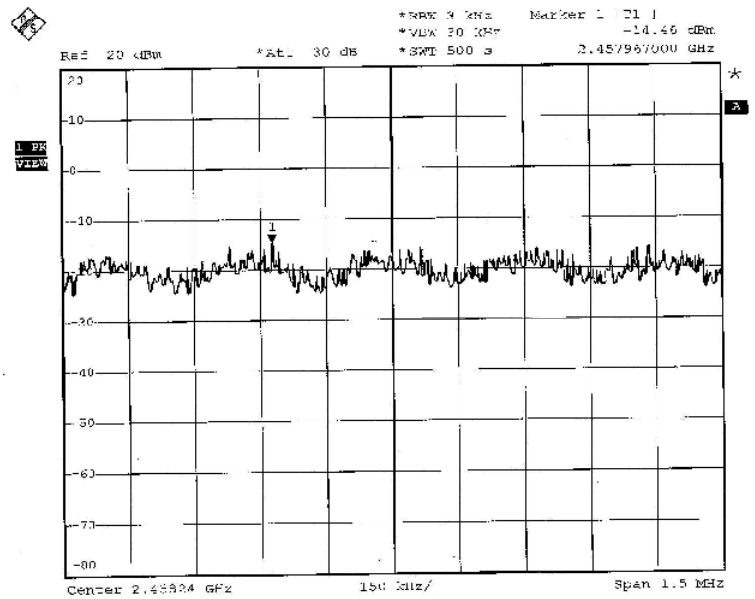
CH1



CH6


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
13.78 dBm
2.431361000 GHz
Ref 20 dBm
*Att 30 dB
1 PK VIEW
Center 2.43068 GHz
150 kHz/
Span 1.5 MHz

CH11


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-14.46 dBm
2.457967000 GHz
Ref 20 dBm
*Att 30 dB
1 PK VIEW
Center 2.44824 GHz
150 kHz/
Span 1.5 MHz

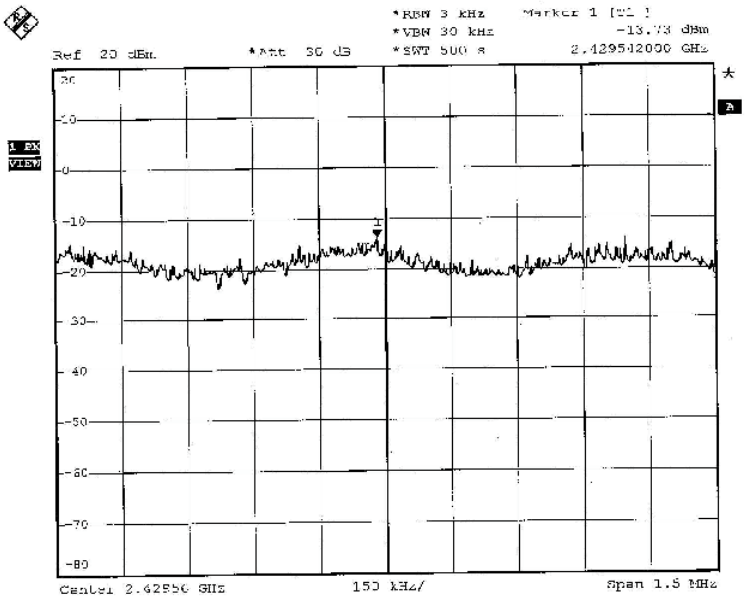
802.11g OFDM MODULATION_TURBO MODE

EUT	802.11g Wireless MIMO miniPCI Module	**MODEL**	WMD-360A
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	28deg. C, 67%RH, 991hPa
TESTED BY	Match Tsui		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)		MAXIMUM LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1		
6	2437	-13.73	-13.83	8	PASS

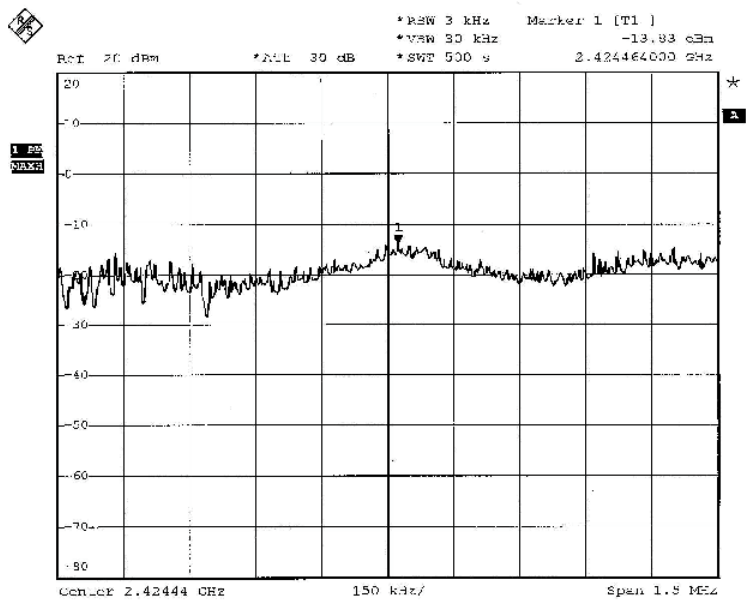
FOR CHAIN 0:

CH6



FOR CHAIN 1:

CH6



5.6 BAND EDGES MEASUREMENT

5.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

5.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

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

5.6.3 TEST PROCEDURE

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (Peak RBW = VBW = 100kHz; Average RBW = 1MHz, VBW = 1kHz)

NOTE: The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 1kHz for Average detection (AV) at frequency above 1GHz.

5.6.4 DEVIATION FROM TEST STANDARD

No deviation

5.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6

5.6.6 TEST RESULTS

The spectrum plots are attached on the following 12 images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

(DIPOLE AND PRINTED ANTENNA WITH TEST MODE 1)

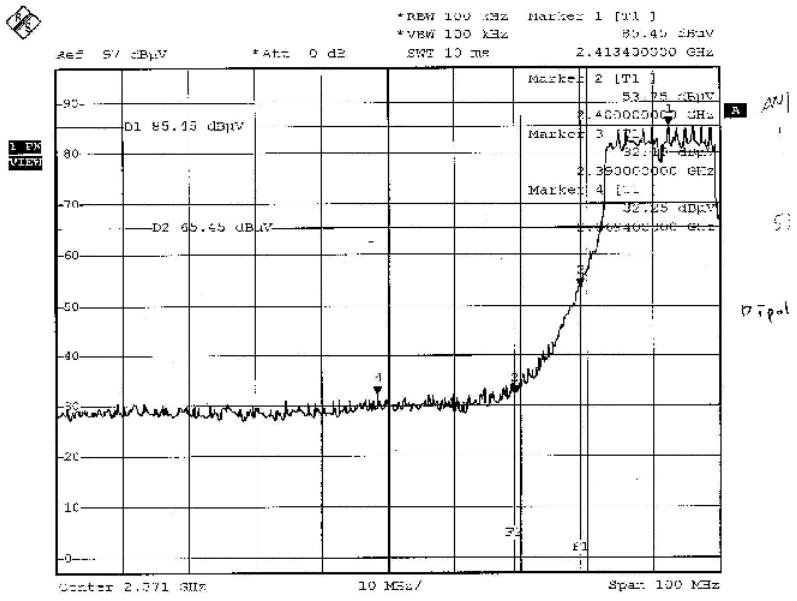
802.11g OFDM MODULATION_NORMAL MODE

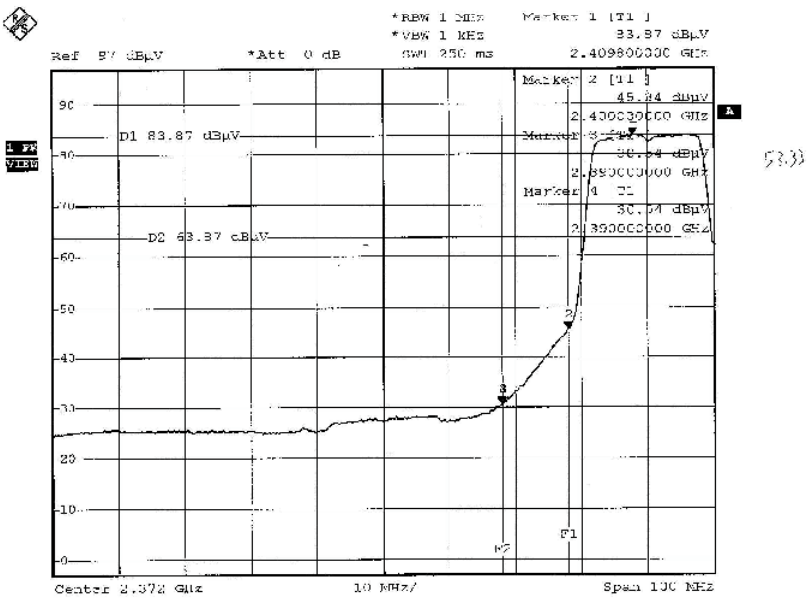
NOTE 1: The band edge emission plot on page 151 shows 53.20dBc between carrier maximum power and local maximum emission in restrict band (2.3694GHz). The emission of carrier strength list in the test result of channel 1 at the item 5.2.7 is 112.98dBuV/m (Peak), so the maximum field strength in restrict band is 112.98-53.20=59.78dBuV/m, which is under 74dBuV/m limit.

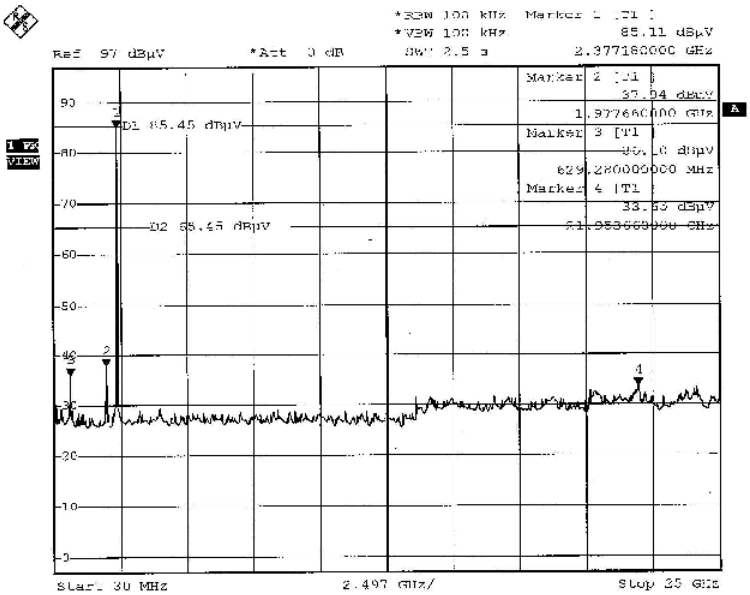
The band edge emission plot on page 151 shows 53.33dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 5.2.7 is 103.20dBuV/m (Average), so the maximum field strength in restrict band is 103.20-53.33=49.87dBuV/m, which is under 54dBuV/m limit.

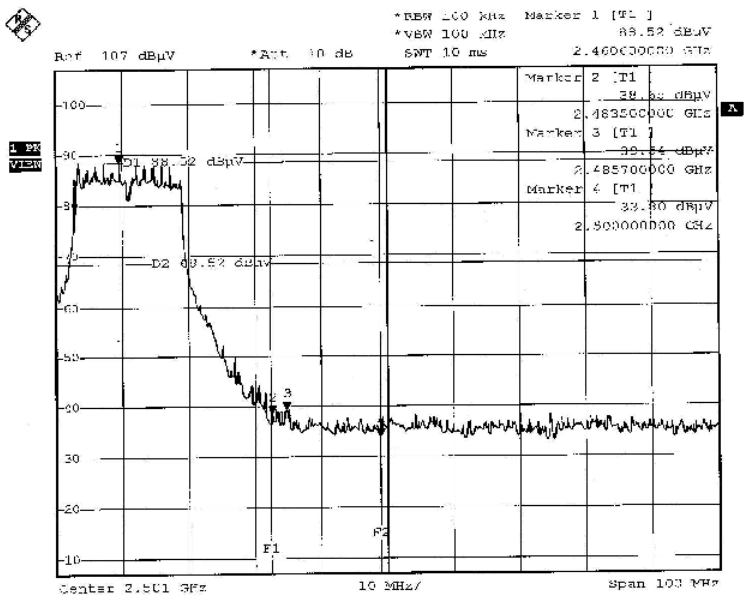
NOTE 2: The band edge emission plot on page 152 shows 48.98dBc between carrier maximum power and local maximum emission in restrict band (2.4857GHz). The emission of carrier strength list in the test result of channel 11 at the item 5.2.7 is 113.17dBuV/m (Peak), so the maximum field strength in restrict band is 113.17-48.98=64.19dBuV/m, which is under 74dBuV/m limit.

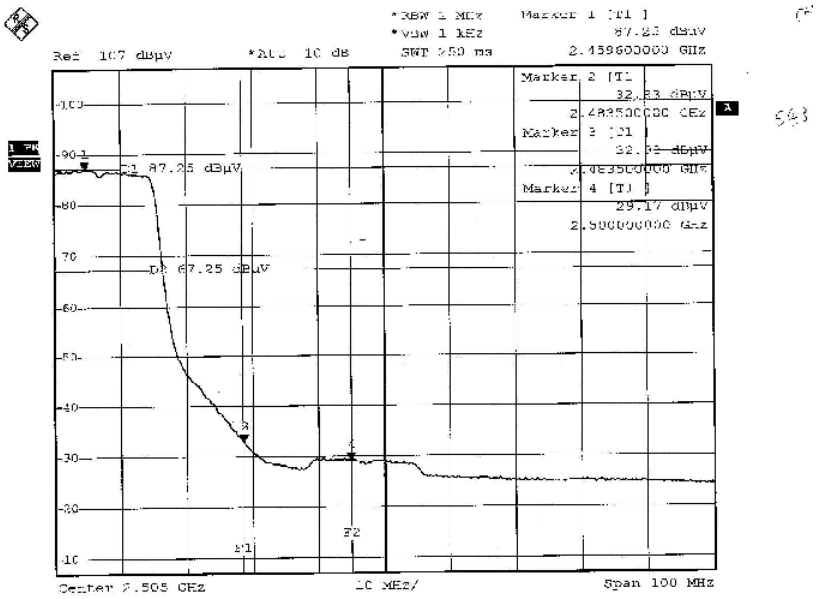
The band edge emission plot on page 153 shows 54.32dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 5.2.7 is 103.85dBuV/m (Average), so the maximum field strength in restrict band is 103.85-54.32=49.53dBuV/m, which is under 54dBuV/m limit.

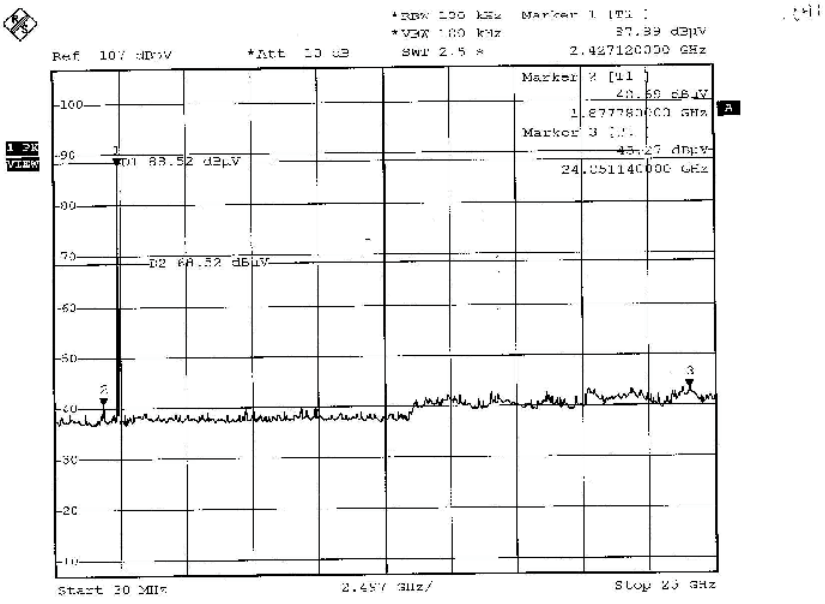

*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Marker 1 [T1]
2.413400000 GHz
Ref 97 dBµV
*Att 0 dB
Marker 2 [T1]
53.25 dBµV
Marker 3
Marker 4
32.25 dBµV
D1 85.15 dBµV
D2 65.45 dBµV
Center 2.371 GHz
10 MHz/
Span 100 MHz


*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
83.87 dBµV
2.409800000 GHz
Ref 97 dBµV
*Att 0 dB
Marker 2 [T1]
45.84 dBµV
Marker 4 [T1]
30.84 dBµV
D1 83.87 dBµV
D2 63.87 dBµV
Center 2.372 GHz
10 MHz/
Span 100 MHz


*RBW 100 kHz
*VBW 100 kHz
Ref 97 dBµV
*Att 0 dB
SWT 2.5 s
Marker 1 [T1]
85.11 dBµV
2.377180000 GHz
Marker 2 [T1]
97.54 dBµV
1.977660000 GHz
Marker 3 [T1]
Marker 4 [T1]
33.53 dBµV
1 PK VIEW
D1 85.45 dBµV
D2 85.45 dBµV
Start 30 MHz
2.497 GHz/
Stop 25 GHz


*RBW 100 kHz
*VBW 100 kHz
Ref 107 dBµV
*Att 10 dB
SWT 10 ms
Marker 1 [T1]
88.52 dBµV
Marker 2 [T1]
Marker 3 [T1]
Marker 4 [T1]
1 PK VIEW
D1 88.52 dBµV
D2 88.52 dBµV
F1
F2
Center 2.501 GHz
10 MHz/
Span 100 MHz


*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
87.83 dBµV
2.459600000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
32.83 dBµV
2.483500000 GHz
Marker 3 [T1]
32.68 dBµV
2.483500000 GHz
Marker 4 [T1]
29.17 dBµV
2.500000000 GHz
D1 87.25 dBµV
D2 67.25 dBµV
Center 2.505 GHz
10 MHz/
Span 100 MHz


*RBW 100 kHz
*VBW 100 kHz
SWT 2.5 s
Marker 1 [T1]
87.89 dBµV
2.427120000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
48.69 dBµV
1.877780000 GHz
Marker 3 [T1]
45.27 dBµV
24.051140000 GHz
D1 88.52 dBµV
D2 68.52 dBµV
Start 30 MHz
2.497 GHz/
Stop 25 GHz

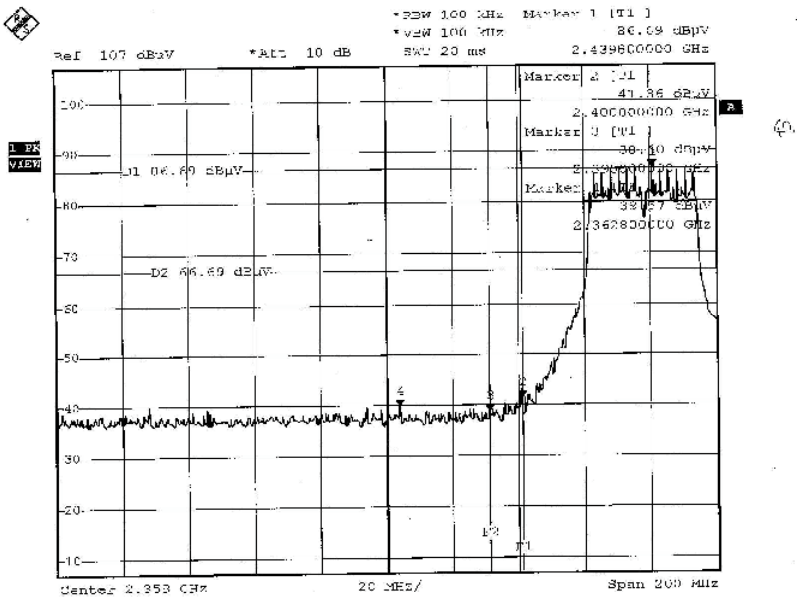
802.11g OFDM MODULATION_TURBO MODE

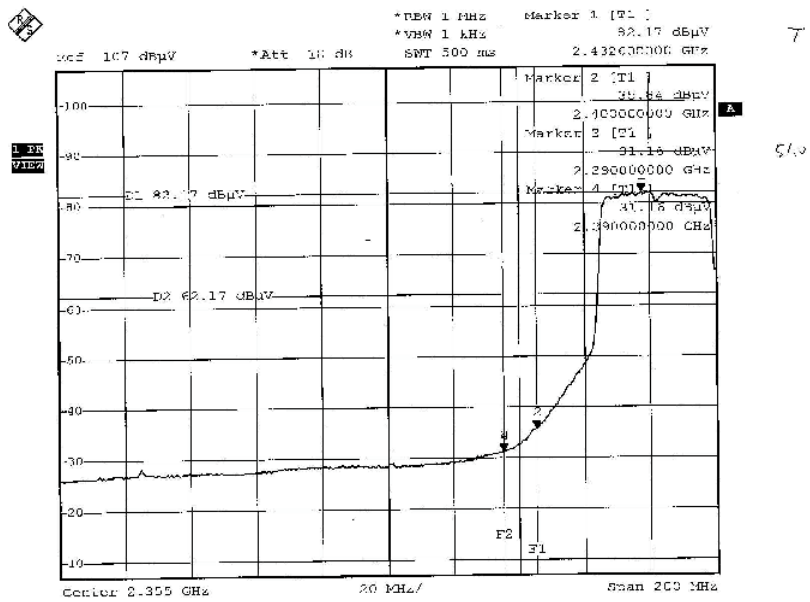
NOTE 1: The band edge emission plot on page 155 shows 47.12dBc between carrier maximum power and local maximum emission in restrict band (2.3872GHz). The emission of carrier strength list in the test result of channel 6 at the item 5.2.7 is 112.03dBuV/m (Peak), so the maximum field strength in restrict band is 112.03-47.12=64.91dBuV/m, which is under 74dBuV/m limit.

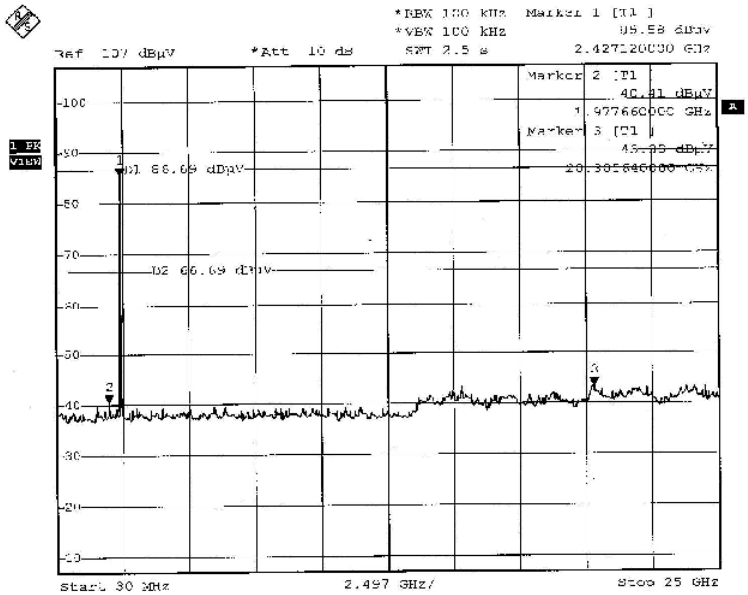
The band edge emission plot on page 155 shows 51.01dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 6 at the item 5.2.7 is 100.98dBuV/m (Average), so the maximum field strength in restrict band is 100.98-51.01=49.97dBuV/m, which is under 54dBuV/m limit.

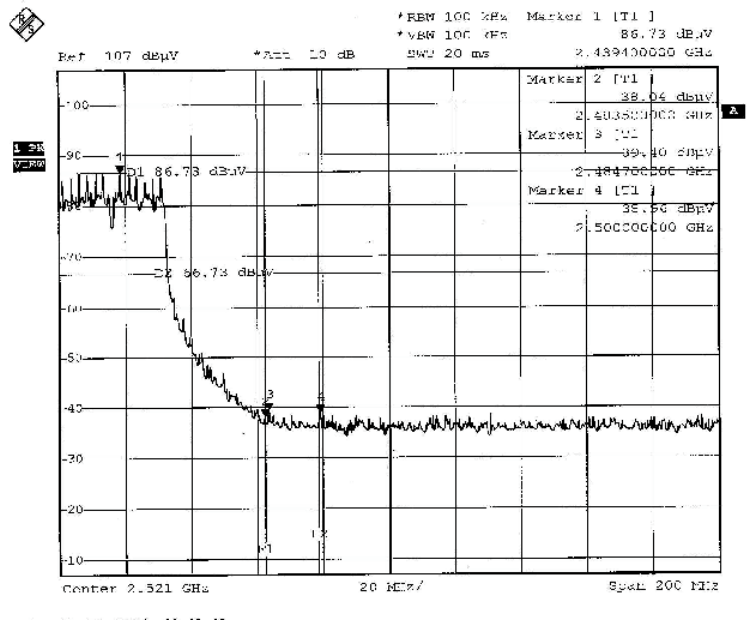
NOTE 2: The band edge emission plot on page 156 shows 47.33dBc between carrier maximum power and local maximum emission in restrict band (2.4847GHz). The emission of carrier strength list in the test result of channel 6 at the item 5.2.7 is 112.03dBuV/m (Peak), so the maximum field strength in restrict band is 112.03-47.33=64.70dBuV/m, which is under 74dBuV/m limit.

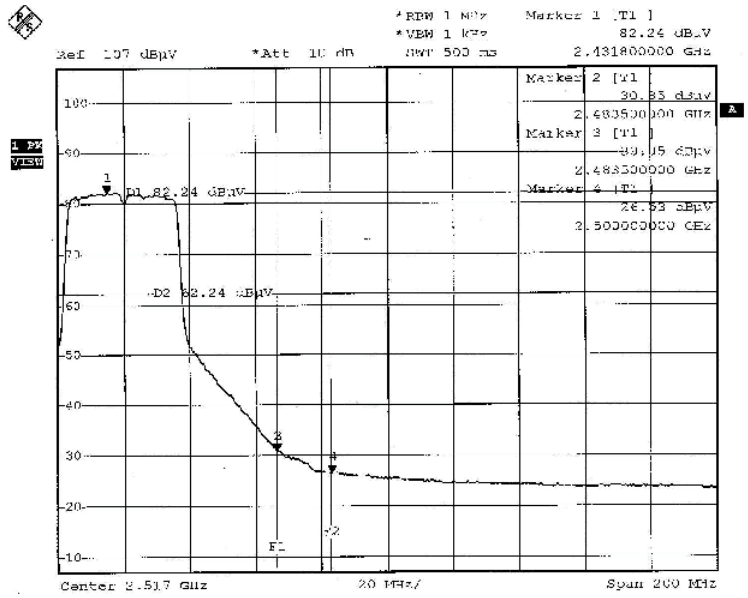
The band edge emission plot on page 157 shows 51.39dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 6 at the item 5.2.7 is 100.98dBuV/m (Average), so the maximum field strength in restrict band is 100.98-51.39=49.59dBuV/m, which is under 54dBuV/m limit.

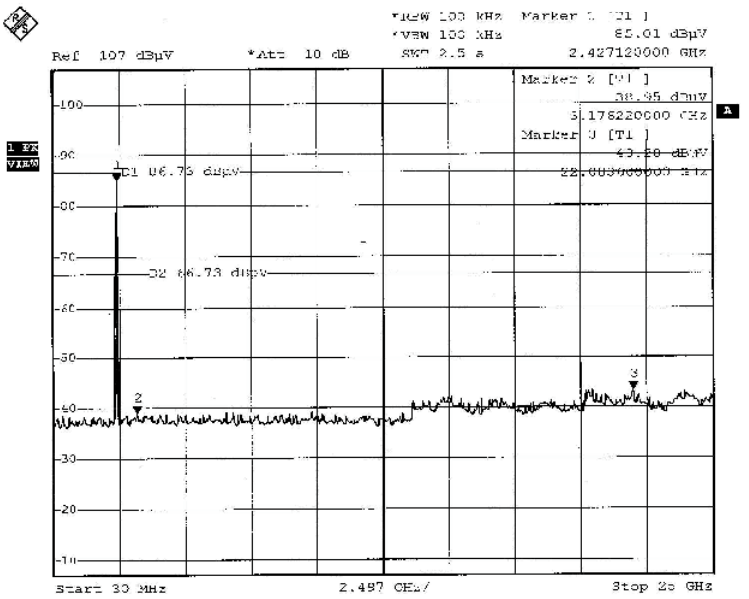

*RBW 100 kHz
*VBW 100 kHz
SWT 20 ms
Marker 1 [T1]
86.09 dBµV
2.439800000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
41.86 dBµV
2.400000000 GHz
Marker 3 [T1]
38.10 dBµV
2.362800000 GHz
D1 86.09 dBµV
D2 66.69 dBµV
Center 2.353 GHz
20 MHz/
Span 200 MHz


*RBW 1 MHz
*VBW 1 kHz
SWT 500 ms
Marker 1 [T1]
82.17 dBµV
2.432600000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
2.400000000 GHz
Marker 3 [T1]
2.290000000 GHz
D1 82.17 dBµV
D2 62.17 dBµV
Center 2.355 GHz
20 MHz/
Span 200 MHz


*RBW 100 kHz
*VBW 100 kHz
SWT 2.5 s
Marker 1 [T1]
95.58 dBµV
2.427120000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
40.81 dBµV
1.977660000 GHz
Marker 3 [T1]
43.35 dBµV
20.305660000 GHz
D1 86.69 dBµV
D2 66.69 dBµV
Start 30 MHz
2.497 GHz/
Stop 25 GHz


*RBW 100 kHz
*VBW 100 kHz
SWT 20 ms
Marker 1 [T1]
86.73 dBµV
2.439400000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
38.04 dBµV
2.480300000 GHz
Marker 3 [T1]
39.40 dBµV
2.484700000 GHz
Marker 4 [T1]
35.50 dBµV
2.500000000 GHz
D1 86.73 dBµV
D2 66.73 dBµV
Center 2.521 GHz
20 MHz/
Span 200 MHz


*RBW 1 MHz
*VBW 1 kHz
Ref 107 dBµV
*Att 10 dB
SWT 500 ms
Marker 1 [T1]
82.24 dBµV
2.431800000 GHz
Marker 2 [T1]
30.33 dBµV
2.483500000 GHz
Marker 3 [T1]
Marker 4 [T1]
26.53 dBµV
2.500000000 GHz
1 PK VIEW
D1 82.24 dBµV
D2 82.24 dBµV
Center 2.517 GHz
20 MHz/
Span 200 MHz


Ref 107 dBµV
*Att 10 dB
SWT 2.5 s
2.427120000 GHz
Marker 2 [T1]
38.85 dBµV
3.176220000 GHz
Marker 3 [T1]
43.20 dBµV
1 PK VIEW
D1 86.73 dBµV
D2 86.73 dBµV
Start 30 MHz
2.497 GHz/
Stop 25 GHz

(DIPOLE ANTENNA WITH TEST MODE 2)

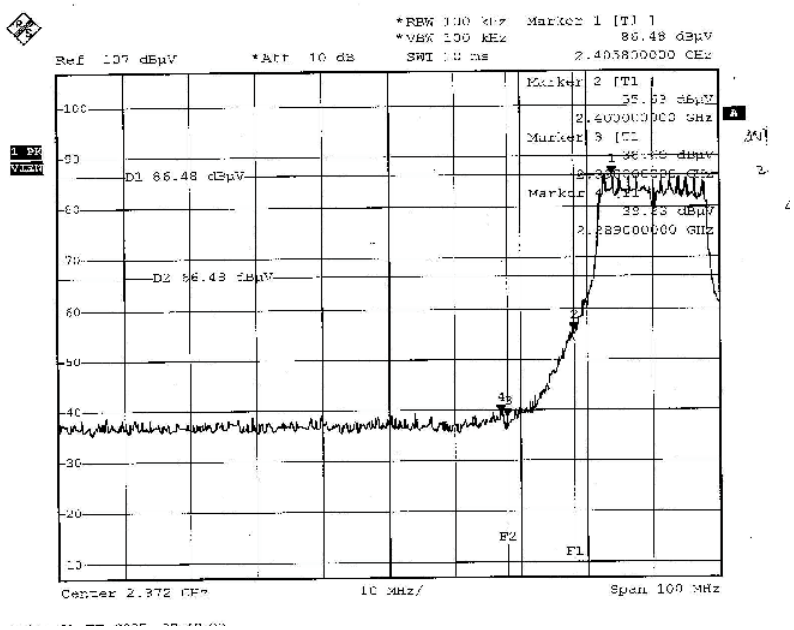
802.11g OFDM MODULATION_NORMAL MODE

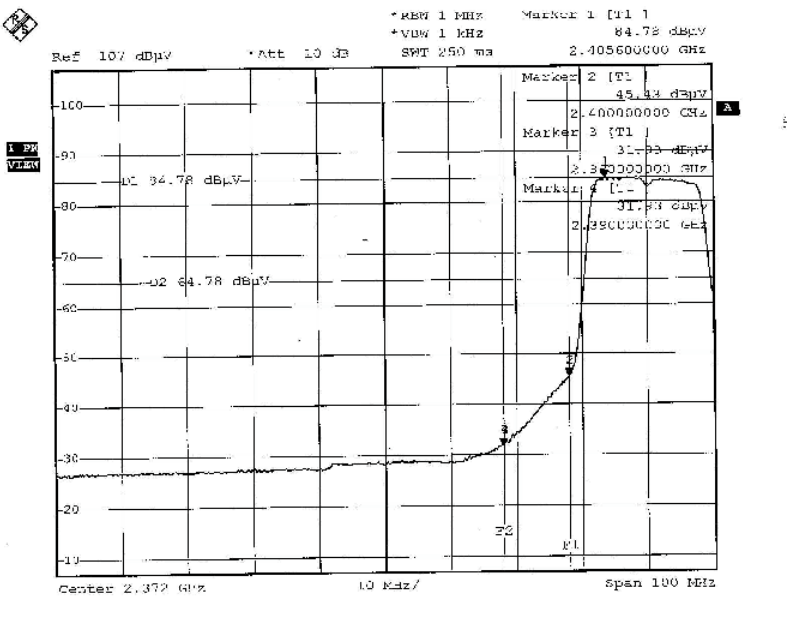
NOTE 1: The band edge emission plot on page 159 shows 47.15dBc between carrier maximum power and local maximum emission in restrict band (2.3890 GHz). The emission of carrier strength list in the test result of channel 1 at the item 5.2.7 is 112.78dBuV/m (Peak), so the maximum field strength in restrict band is 112.78-47.15=65.63dBuV/m, which is under 74dBuV/m limit.

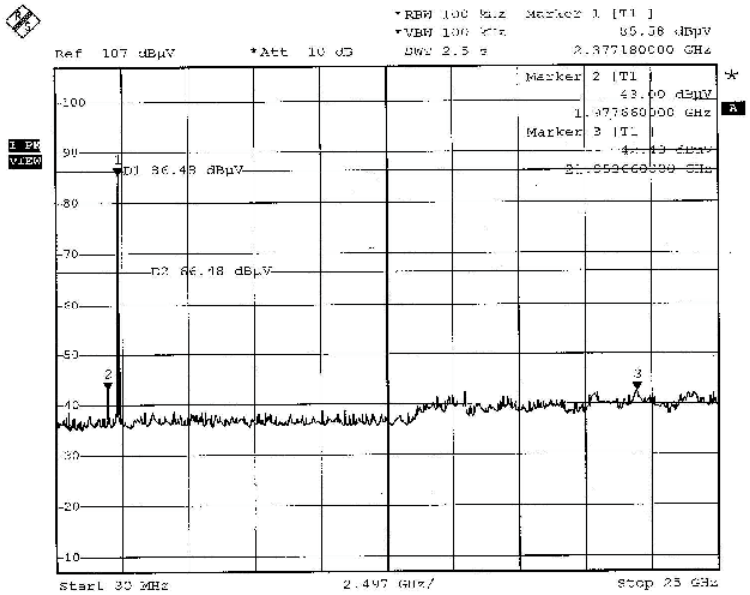
The band edge emission plot on page 159 shows 52.85dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 5.2.7 is 102.32dBuV/m (Average), so the maximum field strength in restrict band is 102.32-52.85=49.47dBuV/m, which is under 54dBuV/m limit.

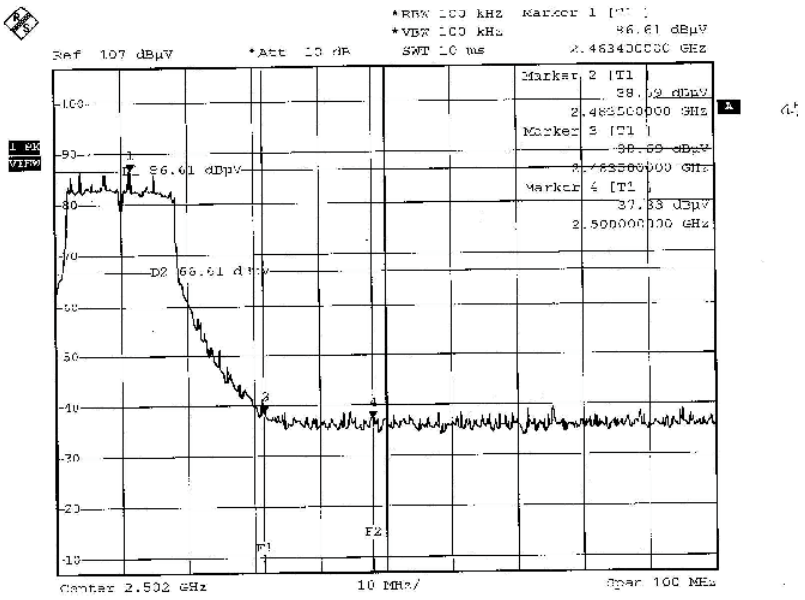
NOTE 2: The band edge emission plot on page 160 shows 47.92dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 5.2.7 is 112.08dBuV/m (Peak), so the maximum field strength in restrict band is 112.08-47.92=64.16dBuV/m, which is under 74dBuV/m limit.

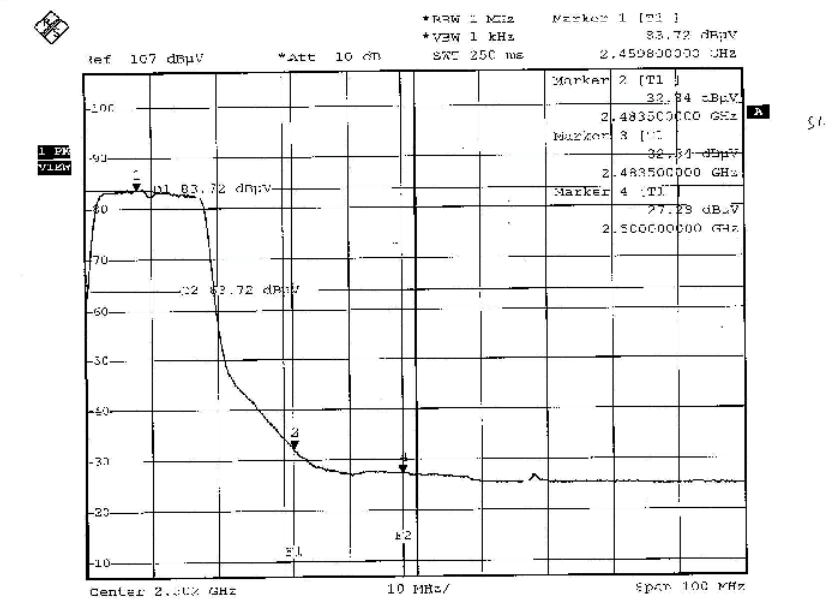
The band edge emission plot on page 161 shows 51.38dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 5.2.7 is 101.85dBuV/m (Average), so the maximum field strength in restrict band is 101.85-51.38=50.47dBuV/m, which is under 54dBuV/m limit.

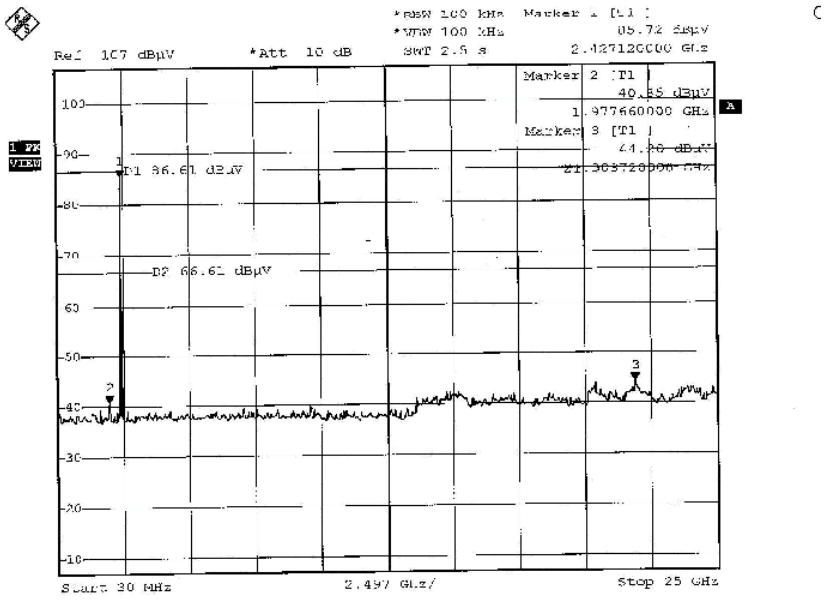

*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Marker 1 [T1]
86.48 dBµV
2.405800000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
Marker 3 [T1]
Marker 4 [T1]
D1 86.48 dBµV
D2 66.48 dBµV
F2
F1
Center 2.372 GHz
10 MHz/
Span 100 MHz


*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
84.78 dBµV
2.405600000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
45.43 dBµV
2.400000000 GHz
Marker 3 [T1]
D1 84.78 dBµV
D2 64.78 dBµV
F2
F1
Center 2.372 GHz
10 MHz/
Span 100 MHz


*RBW 100 kHz
*VBW 100 kHz
SWT 2.5 s
Marker 1 [T1]
85.38 dBµV
2.377180000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
43.00 dBµV
1.977880000 GHz
Marker 3 [T1]
D1 86.48 dBµV
D2 66.48 dBµV
Start 30 MHz
2.497 GHz/
Stop 25 GHz


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Marker 1 [T1]
96.61 dBµV
2.463400000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
Marker 3 [T1]
Marker 4 [T1]
37.83 dBµV
2.500000000 GHz
D1 96.61 dBµV
D2 66.61 dBµV
F1
F2
Center 2.502 GHz
10 MHz/
Span 100 MHz


*RBW 1 MHz
*VBW 1 kHz
SWT 250 ms
Marker 1 [T1]
83.72 dBµV
2.459800000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
32.84 dBµV
2.483500000 GHz
Marker 3 [T1]
32.84 dBµV
2.483500000 GHz
Marker 4 [T1]
27.28 dBµV
2.500000000 GHz
1 PK VIEW
D1 83.72 dBµV
D2 83.72 dBµV
Center 2.4?? GHz
10 MHz/
Span 100 MHz


*RBW 100 kHz
*VBW 100 kHz
SWT 2.5 s
Marker 1 [T1]
85.72 dBµV
2.427120000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
40.85 dBµV
1.977660000 GHz
Marker 3 [T1]
44.90 dBµV
1 PK VIEW
T1 86.61 dBµV
D? 66.61 dBµV
Start 30 MHz
2.497 GHz/
Stop 25 GHz

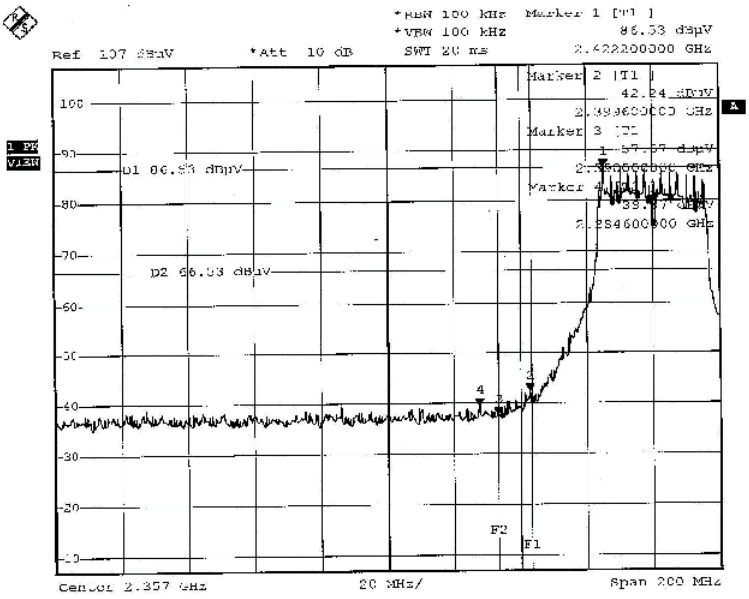
802.11g OFDM MODULATION_TURBO MODE

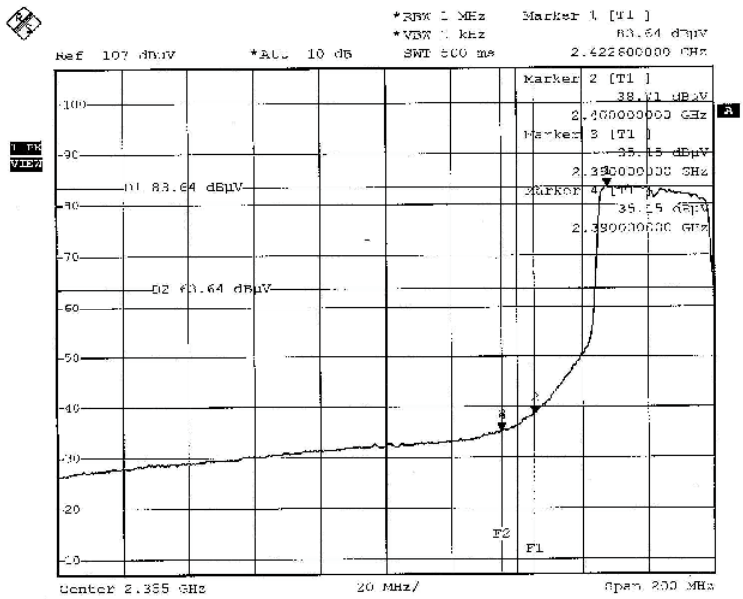
NOTE 1: The band edge emission plot on page 163 shows 47.16dBc between carrier maximum power and local maximum emission in restrict band (2.3846GHz). The emission of carrier strength list in the test result of channel 6 at the item 5.2.7 is 112.59dBuV/m (Peak), so the maximum field strength in restrict band is 112.59-47.16=65.43dBuV/m, which is under 74dBuV/m limit.

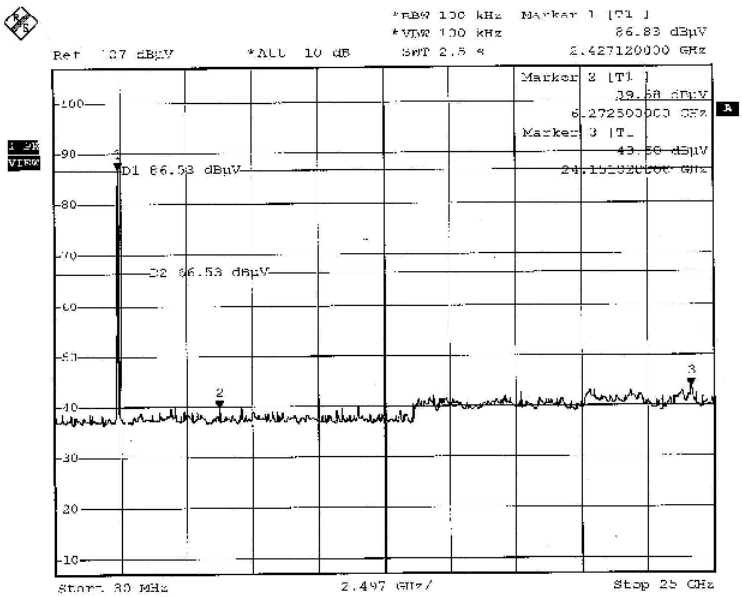
The band edge emission plot on page 163 shows 48.49dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 6 at the item 5.2.7 is 101.01dBuV/m (Average), so the maximum field strength in restrict band is 101.01-48.49=52.52dBuV/m, which is under 54dBuV/m limit.

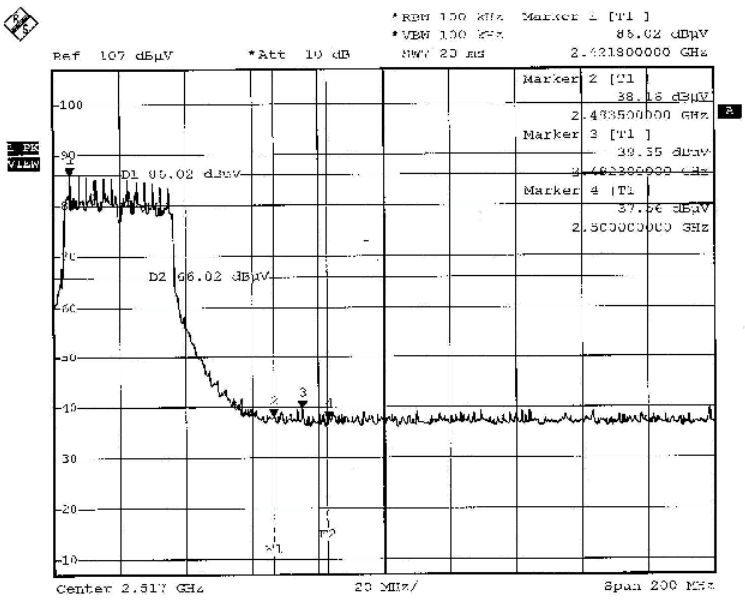
NOTE 2: The band edge emission plot on page 164 shows 46.47dBc between carrier maximum power and local maximum emission in restrict band (2.4923GHz). The emission of carrier strength list in the test result of channel 6 at the item 5.2.7 is 112.59dBuV/m (Peak), so the maximum field strength in restrict band is 112.59-46.47=66.12dBuV/m, which is under 74dBuV/m limit.

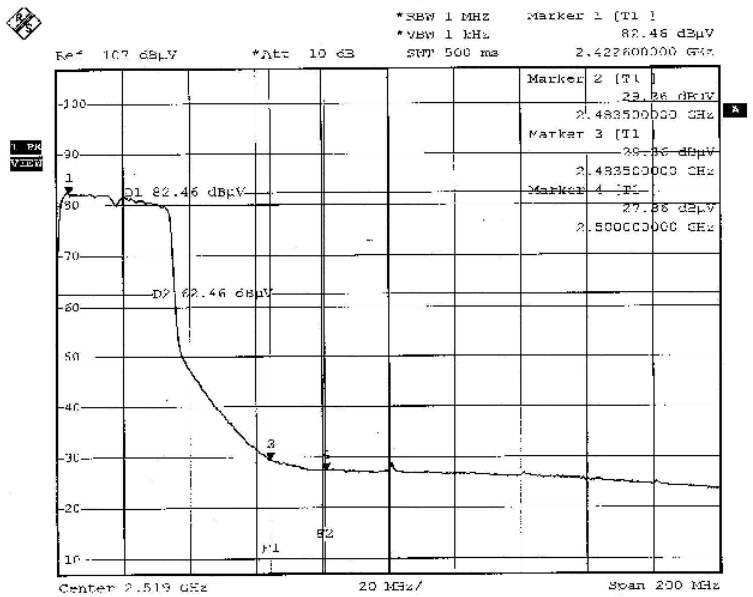
The band edge emission plot on page 165 shows 53.10dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 6 at the item 5.2.7 is 101.01dBuV/m (Average), so the maximum field strength in restrict band is 101.01-53.10=47.91dBuV/m, which is under 54dBuV/m limit.

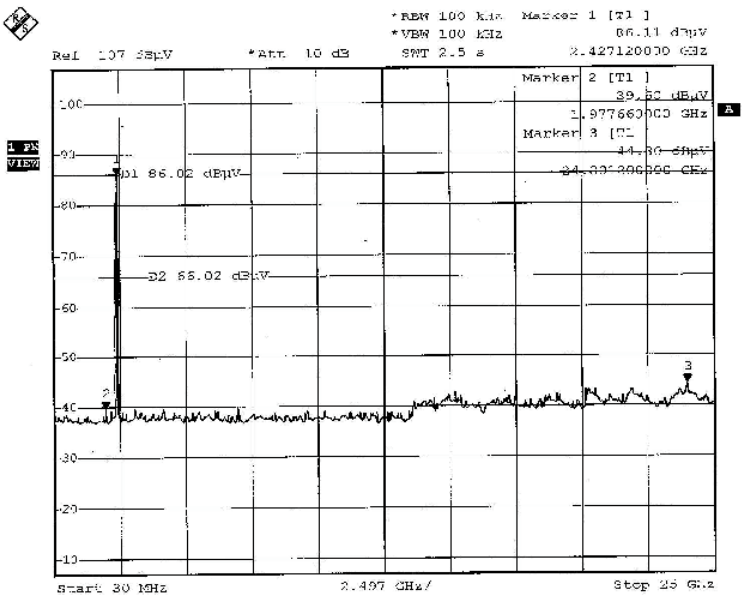

*RBW 100 kHz
*VBW 100 kHz
SWT 20 ms
Marker 1 [T1]
86.53 dBµV
2.422200000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
42.24 dBµV
Marker 3 [T1]
Marker 4
D1 86.53 dBµV
D2 66.53 dBµV
F2
F1
Center 2.357 GHz
20 MHz/
Span 200 MHz


*RBW 1 MHz
*VBW 1 kHz
SWT 600 ms
Marker 1 [T1]
83.64 dBµV
2.422600000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
38.71 dBµV
Marker 3 [T1]
D1 83.64 dBµV
D2 63.64 dBµV
F2
F1
Center 2.355 GHz
20 MHz/
Span 200 MHz


*RBW 100 kHz
*VBW 100 kHz
SWT 2.5 s
Marker 1 [T1]
86.83 dBµV
2.427120000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
Marker 3 [T1]
D1 86.53 dBµV
D2 86.53 dBµV
Start 30 MHz
2.497 GHz/
Stop 25 GHz


*RBW 100 kHz
*VBW 100 kHz
SWT 20 ms
Marker 1 [T1]
85.02 dBµV
2.421800000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
Marker 3 [T1]
Marker 4 [T1]
D1 86.02 dBµV
D2 86.02 dBµV
Center 2.517 GHz
20 MHz/
Span 200 MHz


*RBW 1 MHz
*VBW 1 kHz
SWT 500 ms
Marker 1 [T1]
82.46 dBµV
2.422600000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
23.86 dBµV
2.483500000 GHz
Marker 3 [T1]
23.86 dBµV
2.483500000 GHz
Marker 4 [T1]
27.86 dBµV
2.500000000 GHz
1 PK VIEW
D1 82.46 dBµV
D2 82.46 dBµV
Center 2.519 GHz
20 MHz/
Span 200 MHz


*RBW 100 kHz
*VBW 100 kHz
SWT 2.5 s
Marker 1 [T1]
86.11 dBµV
2.427120000 GHz
Ref 107 dBµV
*Att 10 dB
Marker 2 [T1]
39.62 dBµV
1.977660000 GHz
Marker 3 [T1]
44.80 dBµV
24.000000000 GHz
1 PK VIEW
D1 86.02 dBµV
D2 86.02 dBµV
Start 30 MHz
2.497 GHz/
Stop 26 GHz

5.7 ANTENNA REQUIREMENT

5.7.1 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.

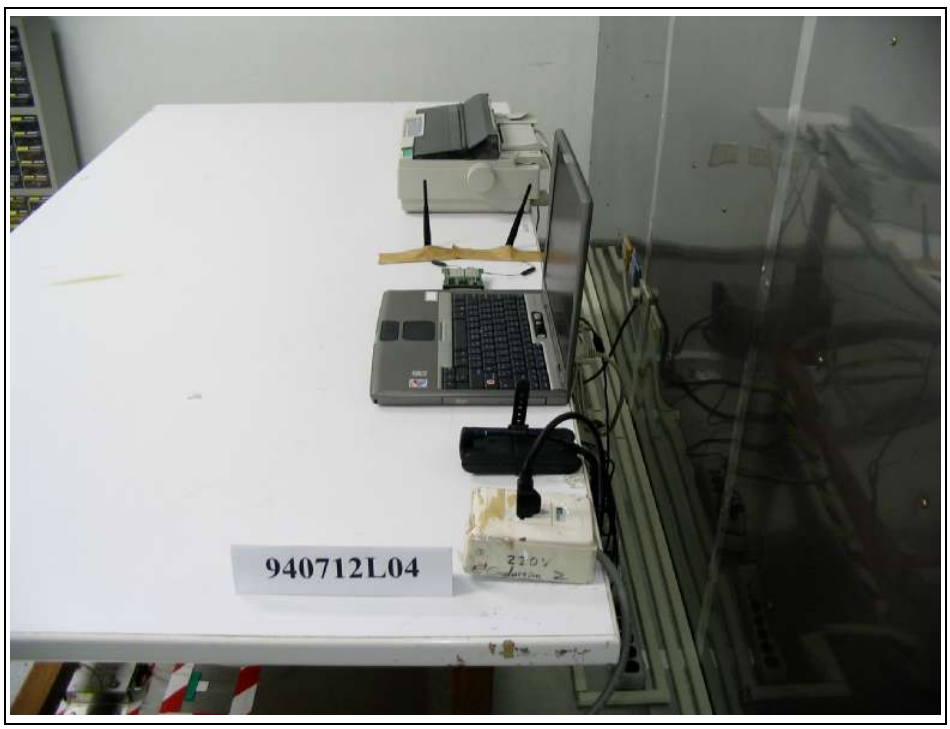
5.7.2 ANTENNA CONNECTED CONSTRUCTION

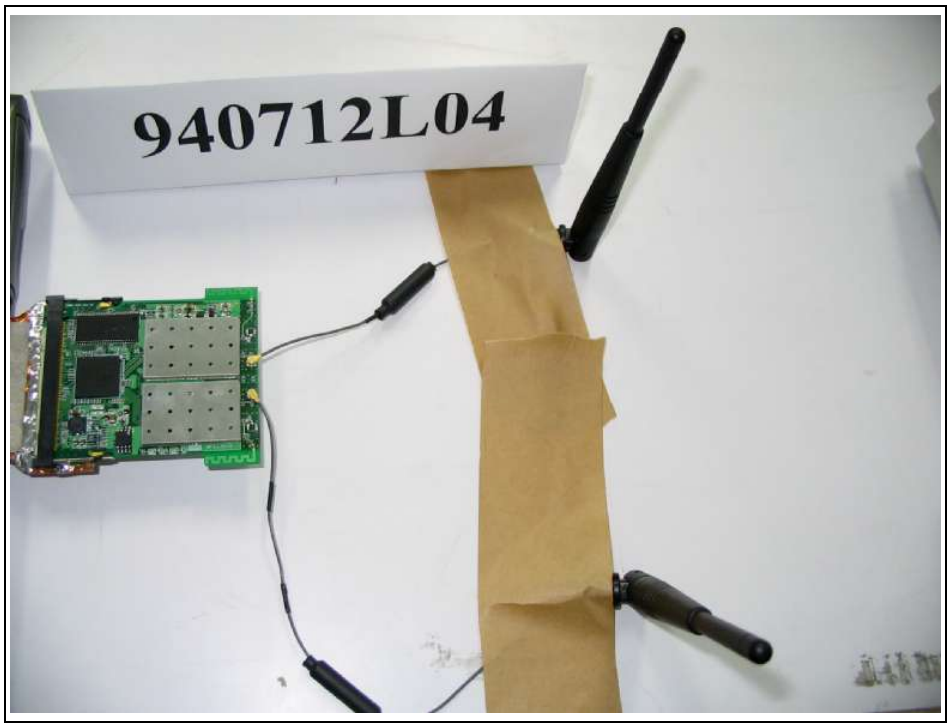
The antenna type used in this product is Printed and Dipole antenna with UFL connector. The maximum Gain of this antenna is only 4dBi.

6. PHOTOGRAPHS OF THE TEST CONFIGURATION

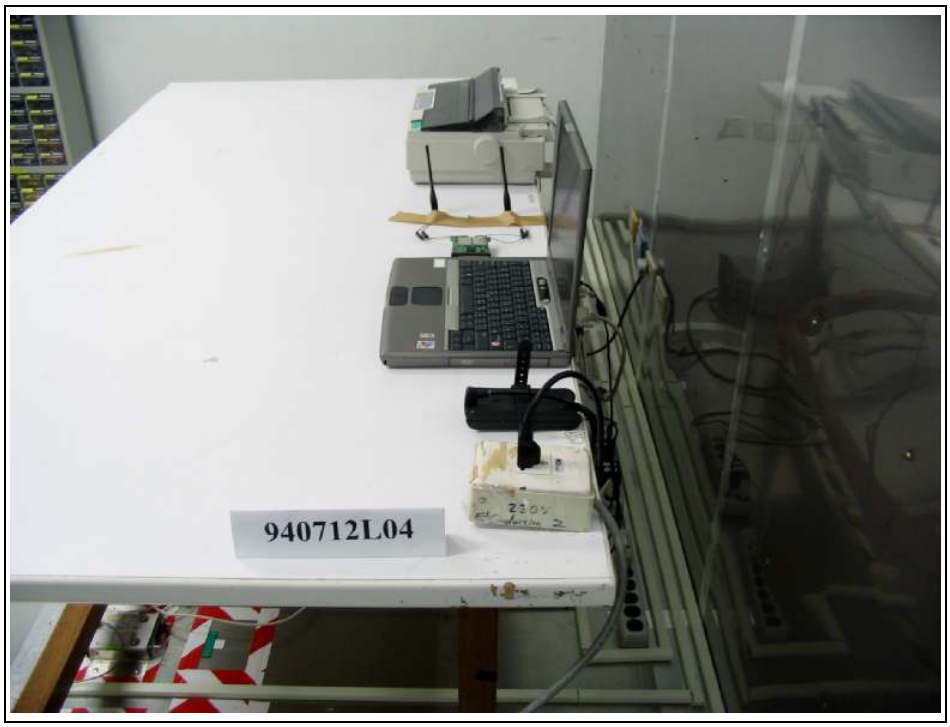
CONDUCTED EMISSION TEST

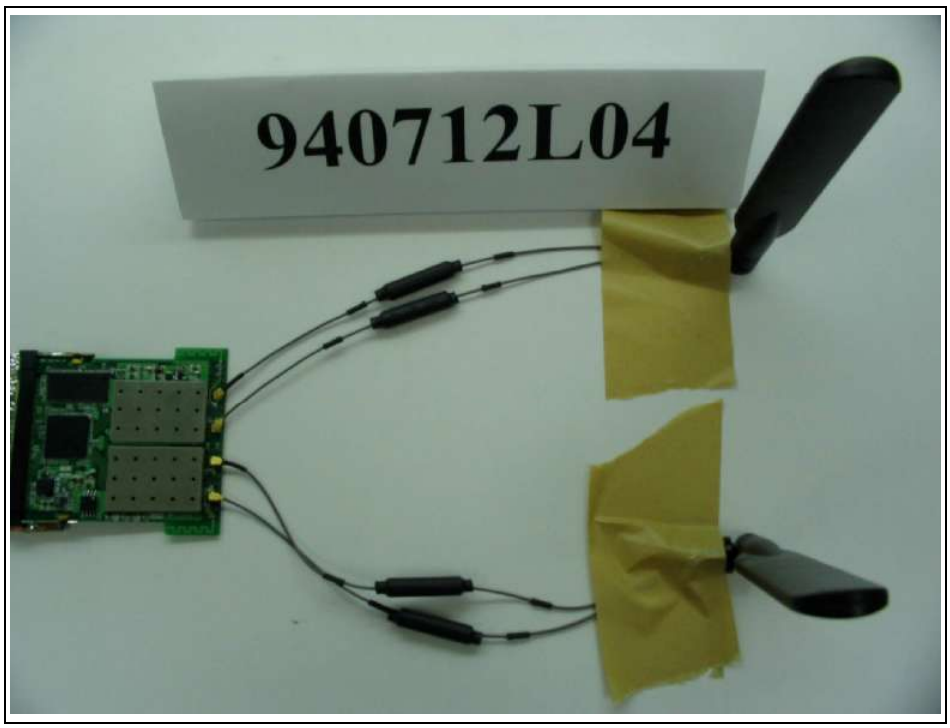
Test mode 1_Dipole and Printed antenna





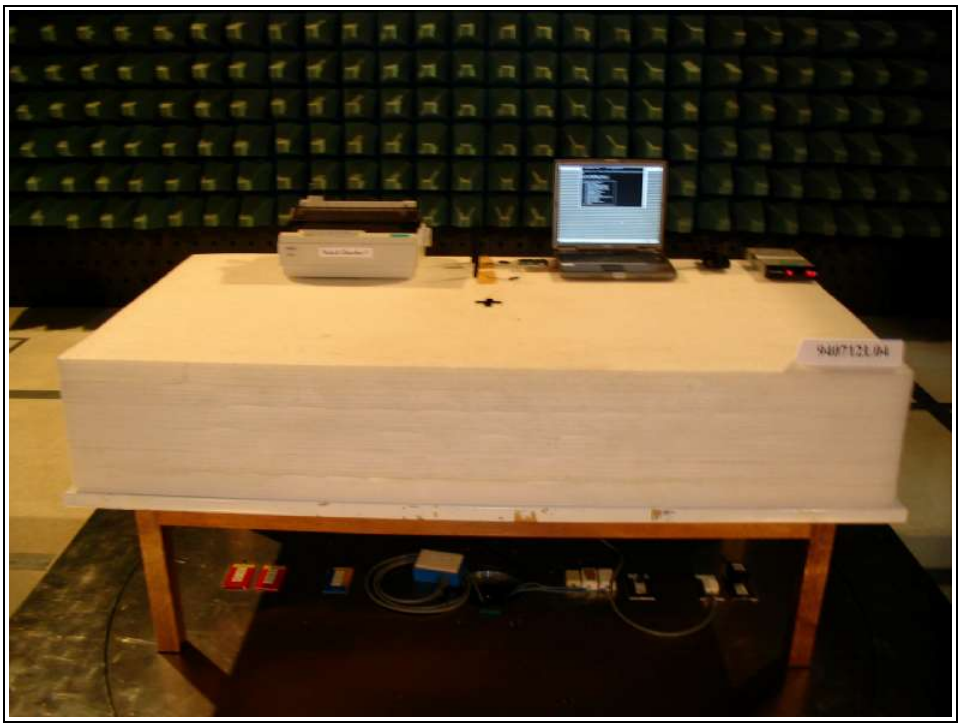
Test mode 2_Dipole antenna

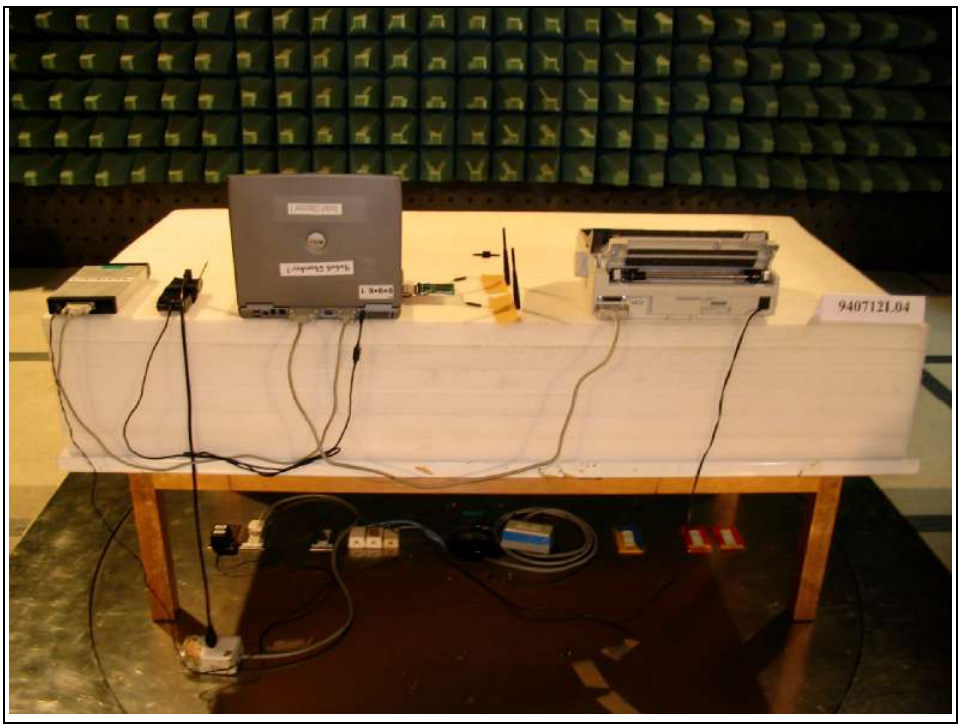

940712L04

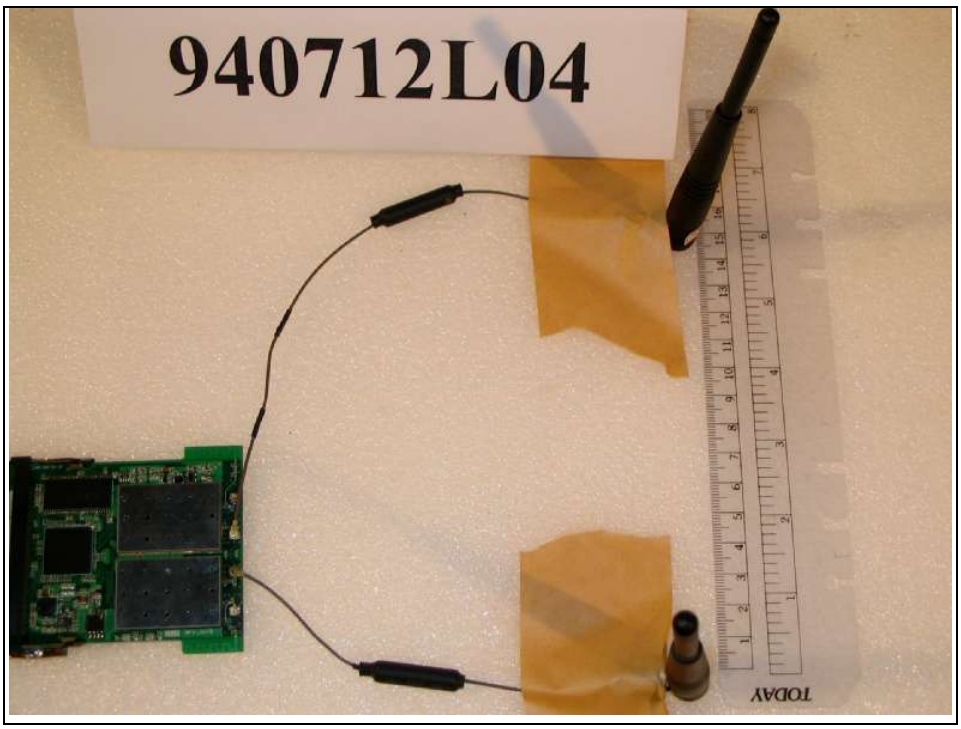

940712L04

RADIATED EMISSION TEST

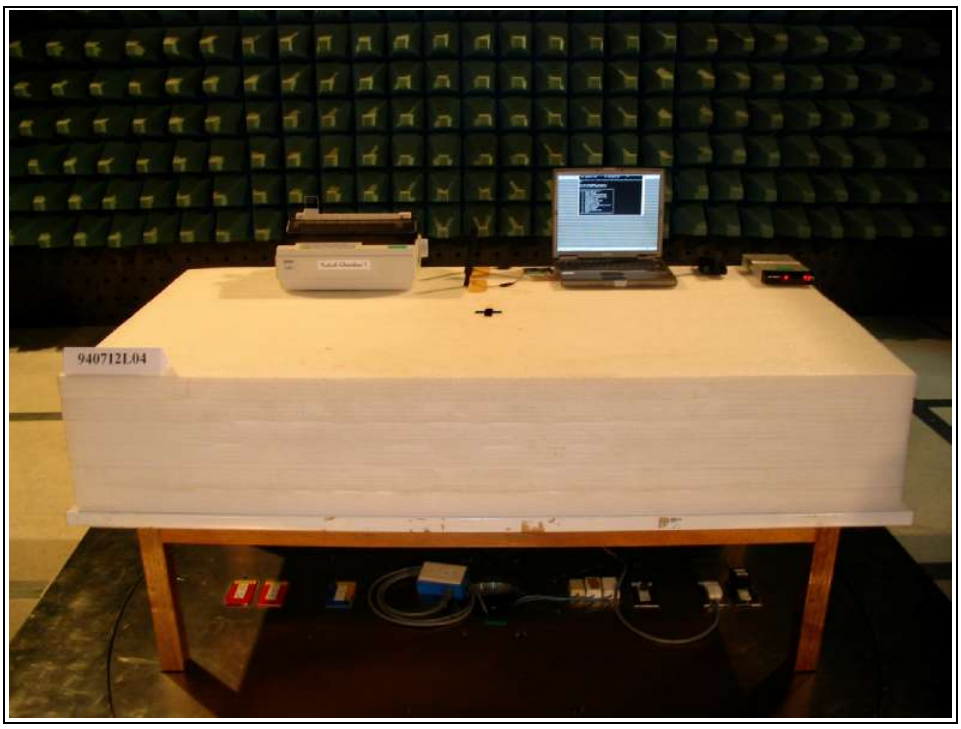
Test mode 1_ Dipole and Printed antenna



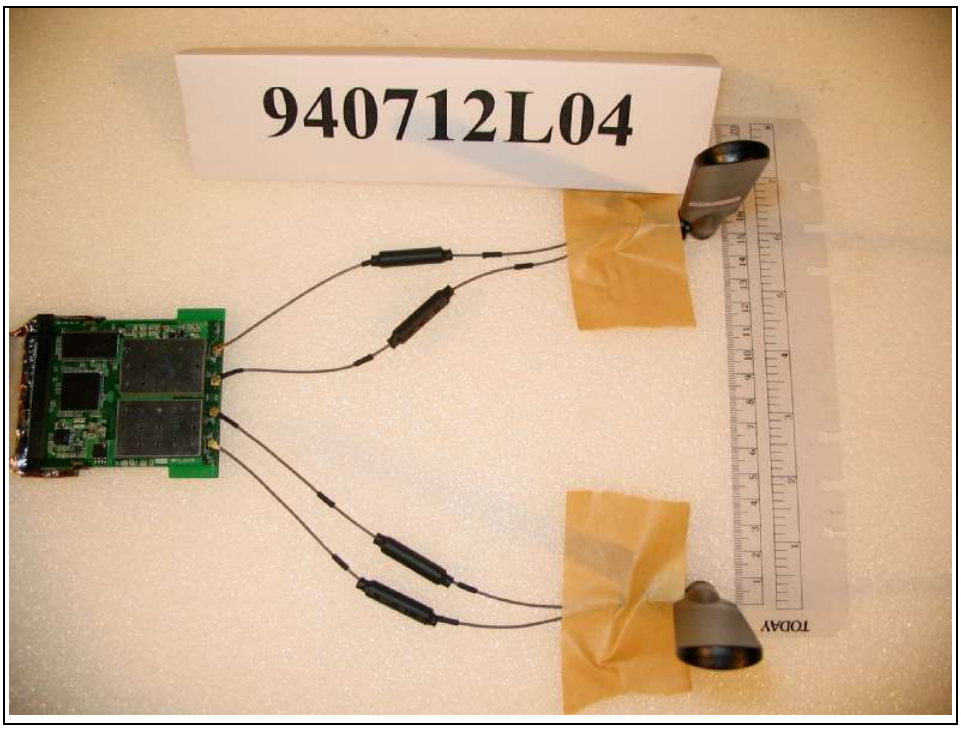




Test mode 2_Dipole antenna




9407121.04


940712L04
TODAY

7. INFORMATION ON THE TESTING LABORATORIES

We, ADT Corp., were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved by the following approval agencies according to ISO/IEC 17025.

USA	FCC, NVLAP, UL, A2LA
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	CNLA, BSMI, DGT
Netherlands	Telefication
Singapore	PSB , GOST-ASIA(MOU)
Russia	CERTIS(MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:
Tel: 886-2-26052180
Fax: 886-2-26052943

Hsin Chu EMC/RF Lab:
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab:
Tel: 886-3-3183232
Fax: 886-3-3185050

Linko RF Lab.
Tel: 886-3-3270910
Fax: 886-3-3270892

Web Site: www.adt.com.tw

The address and road map of all our labs can be found in our web site also.