5. TEST TYPES AND RESULTS (802.11a 5725~5850MHz Band)

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.
1. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
2. 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.

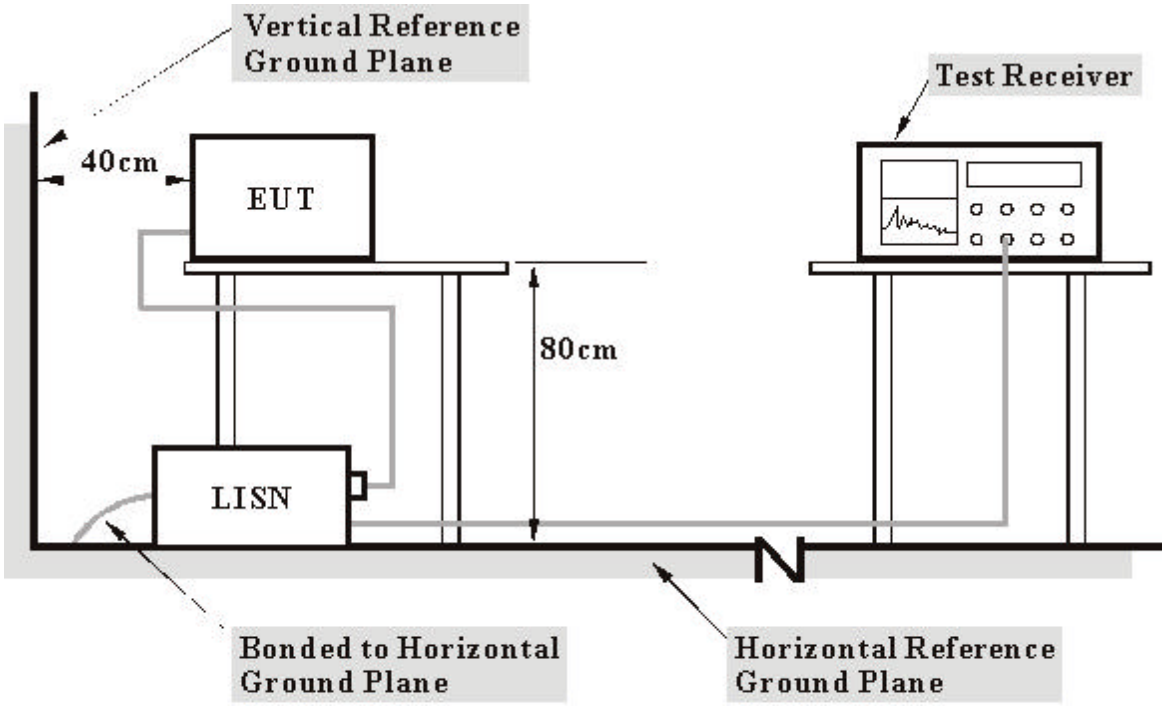
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

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

5.1.6 EUT OPERATING CONDITIONS

Same as 4.1.6

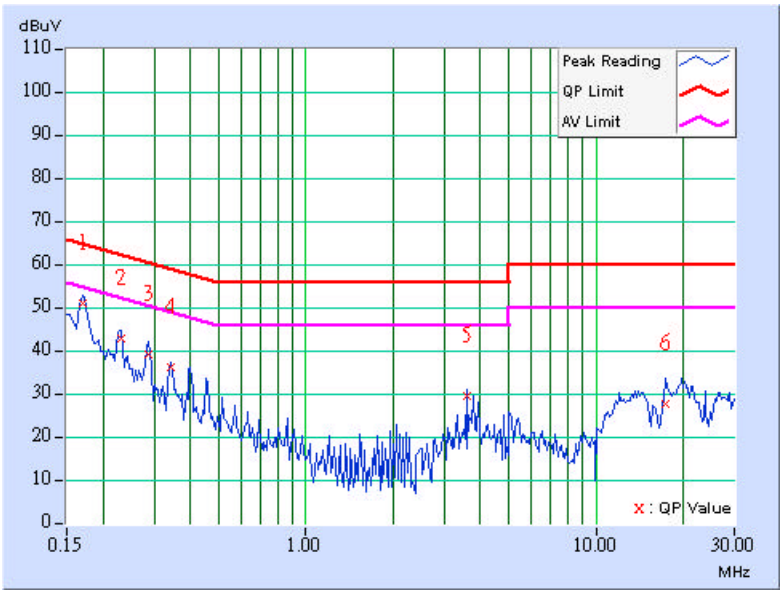
5.1.7 TEST RESULTS

Conducted Worst-Case Data (Antenna 12)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 3	**6dB BANDWIDTH**	9 kHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**PHASE**	Line (L)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa	**TESTED BY**	Gary Chang

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	0.170	0.10	50.66	-	50.76	-	64.98	54.98	-14.22	-
2	0.232	0.10	42.27	-	42.37	-	62.38	52.38	-20.00	-
3	0.287	0.11	38.77	-	38.88	-	60.62	50.62	-21.74	-
4	0.341	0.11	35.56	-	35.67	-	59.17	49.17	-23.50	-
5	3.602	0.20	28.91	-	29.11	-	56.00	46.00	-26.89	-
6	17.371	0.60	27.00	-	27.60	-	60.00	50.00	-32.40	-

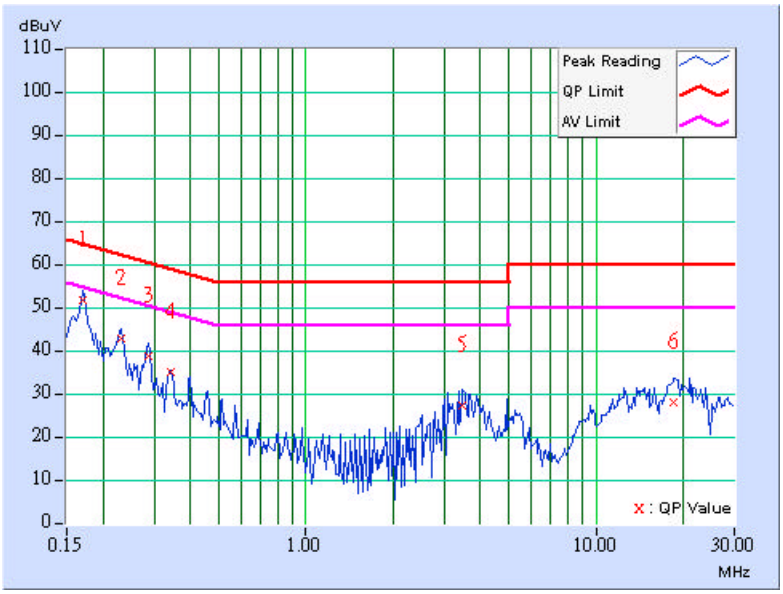
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 3	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Neutral (N)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa	TESTED BY	Gary Chang

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	**0.170**	**0.10**	**51.46**	**-**	**51.56**	**-**	**64.98**	**54.98**	**-13.43**	**-**
2	0.232	0.10	42.59	-	42.69	-	62.38	52.38	-19.68	-
3	0.287	0.11	38.59	-	38.70	-	60.62	50.62	-21.92	-
4	0.341	0.11	34.80	-	34.91	-	59.17	49.17	-24.26	-
5	3.480	0.19	26.89	-	27.08	-	56.00	46.00	-28.92	-
6	18.625	0.43	27.79	-	28.22	-	60.00	50.00	-31.78	-

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	Mar. 04, 2005
RF signal cable HUBER+SUHNER	SUCOFLEX 104	218194/4	Mar. 04, 2005
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 camber. 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.

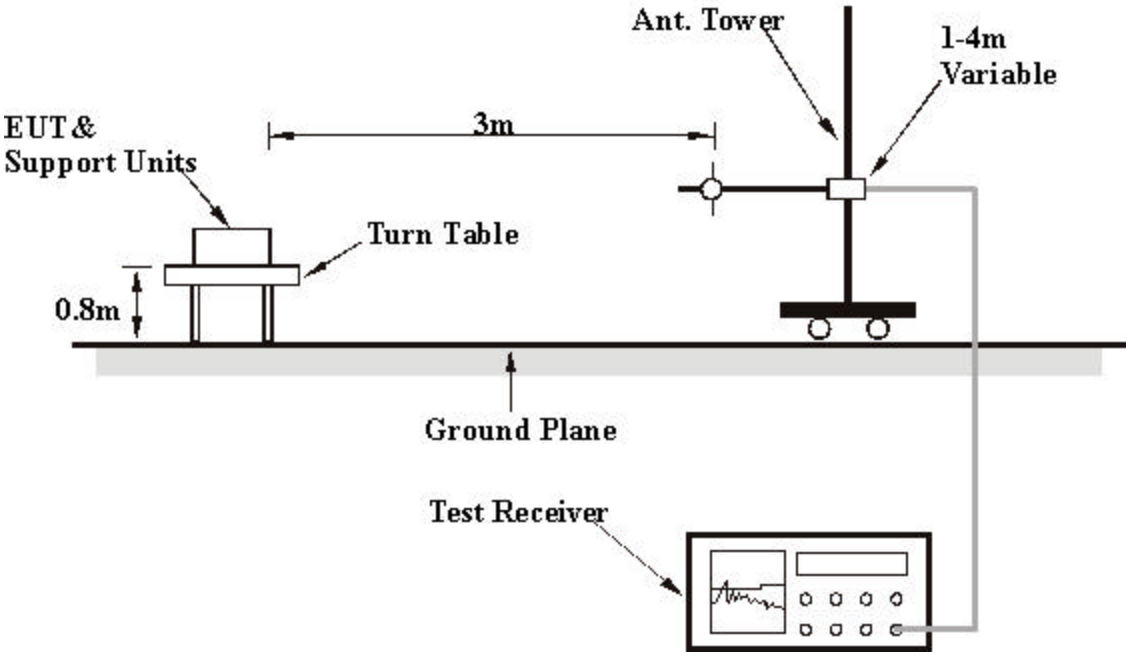
NOTE:

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 10 Hz 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

Same as 4.1.6

5.2.7 TEST RESULTS

Below 1GHz Worst-Case Data (Antenna 3)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 3	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 59%RH, 991hPa	**TESTED BY**	Gary Chang
TEST MODE	A		

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	98.04	38.24 QP	43.50	-5.26	2.00 H	172	27.49	10.75
2	399.34	39.57 QP	46.00	-6.43	3.00 H	319	22.86	16.71
3	566.51	36.01 QP	46.00	-9.99	1.50 H	295	16.10	19.91
4	630.66	36.32 QP	46.00	-9.68	1.50 H	160	15.10	21.22
5	665.65	38.13 QP	46.00	-7.87	1.00 H	139	16.49	21.64
6	799.78	37.20 QP	46.00	-8.80	1.00 H	313	13.74	23.46

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	59.16	30.48 QP	40.00	-9.52	1.00 V	316	16.79	13.69
2	98.04	34.70 QP	43.50	-8.80	1.00 V	220	23.95	10.75
3	399.34	39.39 QP	46.00	-6.61	1.50 V	208	22.68	16.71
4	630.66	38.68 QP	46.00	-7.32	1.00 V	133	17.46	21.22
5	667.60	37.83 QP	46.00	-8.17	1.00 V	13	16.17	21.66
6	799.78	40.18 QP	46.00	-5.82	1.50 V	58	16.72	23.46
7	906.69	37.30 QP	46.00	-8.70	3.00 V	220	12.42	24.88

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

Below 1GHz Worst-Case Data (Antenna 6)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 3	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 59%RH, 991hPa	**TESTED BY**	Gary Chang
TEST MODE	B		

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	74.71	29.34 QP	40.00	-10.66	1.50 H	178	18.09	11.25
2	156.35	34.11 QP	43.50	-9.39	2.00 H	223	19.26	14.85
3	397.39	40.77 QP	46.00	-5.23	1.00 H	352	24.10	16.67
4	630.66	37.28 QP	46.00	-8.72	1.50 H	166	16.06	21.22
5	665.65	39.45 QP	46.00	-6.55	2.00 H	226	17.81	21.64
6	799.78	41.05 QP	46.00	-4.95	1.00 H	331	17.60	23.46

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	61.10	30.56 QP	40.00	-9.44	1.50 V	343	17.08	13.49
2	98.04	33.96 QP	43.50	-9.54	1.00 V	10	23.21	10.75
3	133.03	31.77 QP	43.50	-11.73	1.00 V	199	17.88	13.89
4	364.35	34.53 QP	46.00	-11.47	1.50 V	148	18.66	15.87
5	399.34	38.74 QP	46.00	-7.26	1.50 V	52	22.02	16.71
6	566.51	35.40 QP	46.00	-10.60	1.00 V	1	15.48	19.91
7	630.66	34.74 QP	46.00	-11.26	1.50 V	166	13.52	21.22
8	663.71	39.41 QP	46.00	-6.59	1.00 V	166	17.80	21.62
9	795.89	37.29 QP	46.00	-8.71	2.50 V	58	13.85	23.44

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

Below 1GHz Worst-Case Data (Antenna 9)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 3	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 59%RH, 991hPa	**TESTED BY**	Gary Chang
TEST MODE	C		

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	98.04	35.36 QP	43.50	-8.14	2.00 H	202	24.61	10.75
2	131.08	33.70 QP	43.50	-9.80	1.50 H	268	19.96	13.74
3	164.13	32.94 QP	43.50	-10.56	1.50 H	22	18.42	14.52
4	399.34	38.91 QP	46.00	-7.09	1.00 H	340	22.20	16.71
5	632.61	35.20 QP	46.00	-10.80	1.00 H	226	13.95	21.25
6	665.65	39.20 QP	46.00	-6.80	3.00 H	100	17.56	21.64
7	797.84	38.98 QP	46.00	-7.02	1.00 H	319	15.53	23.45

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	66.93	29.85 QP	40.00	-10.15	1.00 V	322	17.03	12.83
2	99.98	34.90 QP	43.50	-8.60	1.50 V	139	23.99	10.91
3	133.03	33.17 QP	43.50	-10.33	1.00 V	205	19.28	13.89
4	164.13	31.71 QP	43.50	-11.79	1.00 V	187	17.19	14.52
5	399.34	38.36 QP	46.00	-7.64	1.50 V	49	21.64	16.71
6	628.72	34.49 QP	46.00	-11.51	1.00 V	10	13.29	21.20
7	665.65	37.02 QP	46.00	-8.98	1.00 V	358	15.38	21.64
8	799.78	38.42 QP	46.00	-7.58	1.50 V	31	14.96	23.46

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

Below 1GHz Worst-Case Data (Antenna 11)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 3	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 59%RH, 991hPa	**TESTED BY**	Gary Chang
TEST MODE	D		

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	98.04	35.36 QP	43.50	-8.14	2.00 H	190	24.62	10.75
2	164.13	35.00 QP	43.50	-8.50	1.00 H	46	20.48	14.52
3	397.39	38.37 QP	46.00	-7.63	2.00 H	136	21.70	16.67
4	630.66	34.00 QP	46.00	-12.00	1.50 H	163	12.78	21.22
5	663.71	35.32 QP	46.00	-10.68	1.00 H	109	13.70	21.62
6	799.78	38.21 QP	46.00	-7.79	1.00 H	304	14.75	23.46

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	61.10	28.21 QP	40.00	-11.79	1.00 V	325	14.72	13.49
2	98.04	33.23 QP	43.50	-10.27	1.00 V	196	22.48	10.75
3	164.13	32.17 QP	43.50	-11.33	1.00 V	178	17.66	14.52
4	399.34	39.17 QP	46.00	-6.83	1.50 V	31	22.46	16.71
5	667.60	39.38 QP	46.00	-6.62	1.00 V	25	17.72	21.66
6	799.78	35.24 QP	46.00	-10.76	1.50 V	262	11.78	23.46

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

Below 1GHz Worst-Case Data (Antenna 12)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 3	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 59%RH, 991hPa	**TESTED BY**	Gary Chang
TEST MODE	D		

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	133.03	33.16 QP	43.50	-10.34	3.00 H	262	19.27	13.89
2	164.13	35.36 QP	43.50	-8.14	2.00 H	67	20.84	14.52
3	199.12	33.20 QP	43.50	-10.30	1.50 H	79	21.85	11.34
4	397.39	37.21 QP	46.00	-8.79	1.00 H	16	20.54	16.67
5	665.65	35.93 QP	46.00	-10.07	1.00 H	280	14.29	21.64
6	795.89	38.99 QP	46.00	-7.01	1.00 H	310	15.54	23.44

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	66.93	29.55 QP	40.00	-10.45	1.00 V	307	16.72	12.83
2	131.08	31.81 QP	43.50	-11.69	2.00 V	37	18.08	13.74
3	164.13	32.06 QP	43.50	-11.44	1.00 V	151	17.54	14.52
4	399.34	39.67 QP	46.00	-6.33	2.50 V	310	22.95	16.71
5	667.60	33.70 QP	46.00	-12.30	2.00 V	16	12.04	21.66
6	795.89	36.65 QP	46.00	-9.35	1.50 V	10	13.21	23.44

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

802.11a OFDM modulation (Antenna 3)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 58%RH, 991hPa	**TESTED BY**	Match Tsui
TEST MODE	A		

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	#3830.00	47.43 PK	74.00	-26.57	1.18 H	16	12.57	34.86
1	#3830.00	41.04 AV	54.00	-12.96	1.18 H	16	6.18	34.86
2	*5745.00	108.60 PK			1.16 H	178	69.32	39.28
2	*5745.00	99.60 AV			1.16 H	178	60.32	39.28
3	#11490.00	57.04 PK	74.00	-16.96	1.04 H	72	7.97	49.07
3	#11490.00	44.59 AV	54.00	-9.41	1.04 H	72	-4.48	49.07

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	#3830.00	45.62 PK	74.00	-28.38	1.10 V	169	10.76	34.86
1	#3830.00	37.27 AV	54.00	-16.73	1.10 V	169	2.41	34.86
2	*5745.00	100.60 PK			1.00 V	132	61.32	39.28
2	*5745.00	91.20 AV			1.00 V	132	51.92	39.28
3	#11490.00	57.44 PK	74.00	-16.56	1.01 V	14	8.37	49.07
3	#11490.00	44.18 AV	54.00	-9.82	1.01 V	14	-4.89	49.07

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 58%RH, 991hPa	TESTED BY	Match Tsui
TEST MODE	A		

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	#3856.00	49.89 PK	74.00	-24.11	1.03 H	167	14.94	34.95
1	#3856.00	45.03 AV	54.00	-8.97	1.03 H	167	10.08	34.95
2	*5785.00	109.60 PK			1.04 H	191	70.22	39.38
2	*5785.00	102.08 AV			1.04 H	191	62.70	39.38
3	#11570.00	57.08 PK	74.00	-16.92	1.04 H	123	8.04	49.04
3	#11570.00	44.25 AV	54.00	-9.75	1.04 H	123	-4.79	49.04

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	#3856.00	44.91 PK	74.00	-29.09	1.09 V	228	9.96	34.95
1	#3856.00	36.69 AV	54.00	-17.31	1.09 V	228	1.74	34.95
2	*5785.00	102.30 PK			1.05 V	64	62.92	39.38
2	*5785.00	92.70 AV			1.05 V	64	53.32	39.38
3	#11570.00	58.01 PK	74.00	-15.99	1.05 V	120	8.97	49.04
3	#11570.00	44.31 AV	54.00	-9.69	1.05 V	120	-4.73	49.04

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 58%RH, 991hPa	TESTED BY	Match Tsui
TEST MODE	A		

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	#3883.00	50.35 PK	74.00	-23.65	1.33 H	360	15.31	35.04
1	#3883.00	46.34 AV	54.00	-7.66	1.33 H	360	11.30	35.04
2	*5825.00	109.31 PK			1.13 H	173	69.85	39.46
2	*5825.00	99.58 AV			1.13 H	173	60.12	39.46
3	#11650.00	57.78 PK	74.00	-16.22	1.11 H	1	8.79	48.99
3	#11650.00	44.35 AV	54.00	-9.65	1.11 H	1	-4.64	48.99

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	#3883.00	46.16 PK	74.00	-27.84	1.24 V	314	11.12	35.04
1	#3883.00	38.78 AV	54.00	-15.22	1.24 V	314	3.74	35.04
2	*5825.00	103.10 PK			1.03 V	64	63.64	39.46
2	*5825.00	93.44 AV			1.03 V	64	53.98	39.46
3	#11650.00	57.89 PK	74.00	-16.11	1.22 V	1	8.90	48.99
3	#11650.00	44.28 AV	54.00	-9.72	1.22 V	1	-4.71	48.99

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

802.11a OFDM modulation (Antenna 6)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	**TESTED BY**	Long Chen
TEST MODE	B		

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	#3830.00	46.59 PK	74.00	-27.41	1.14 H	28	10.91	35.68
2	*5745.00	103.92 PK			1.24 H	358	63.97	39.95
2	*5745.00	94.85 AV			1.24 H	358	54.90	39.95
3	#11490.00	59.42 PK	74.00	-14.58	1.00 H	29	10.36	49.07
3	#11490.00	46.11 AV	54.00	-7.89	1.00 H	29	-2.95	49.07

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	#3830.00	48.65 PK	74.00	-25.35	1.02 V	287	12.97	35.68
2	*5745.00	96.03 PK			1.32 V	171	56.08	39.95
2	*5745.00	86.41 AV			1.32 V	171	46.46	39.95
3	#11490.00	62.04 PK	74.00	-11.96	1.15 V	250	12.97	49.07
3	#11490.00	49.52 AV	54.00	-4.48	1.15 V	250	0.45	49.07

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	TESTED BY	Long Chen
TEST MODE	B		

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	#3856.00	48.54 PK	74.00	-25.46	1.54 H	207	12.77	35.77
2	*5785.00	104.89 PK			1.14 H	331	64.84	40.05
2	*5785.00	97.26 AV			1.14 H	331	57.21	40.05
3	#11570.00	58.98 PK	74.00	-15.02	1.16 H	227	9.97	49.01
3	#11570.00	47.25 AV	54.00	-6.75	1.16 H	227	-1.76	49.01

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	#3856.00	48.92 PK	74.00	-25.08	1.05 V	287	13.15	35.77
2	*5785.00	97.19 PK			1.15 V	357	57.14	40.05
2	*5785.00	87.69 AV			1.15 V	357	47.64	40.05
3	#11570.00	60.85 PK	74.00	-13.15	1.15 V	162	11.84	49.01
3	#11570.00	49.95 AV	54.00	-4.05	1.15 V	162	0.94	49.01

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	TESTED BY	Long Chen
TEST MODE	B		

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	#3883.00	45.90 PK	74.00	-28.10	1.42 H	272	10.03	35.87
2	*5825.00	105.10 PK			1.00 H	351	64.97	40.13
2	*5825.00	95.27 AV			1.00 H	351	55.13	40.13
3	#11650.00	58.40 PK	74.00	-15.60	1.02 H	295	9.43	48.97
3	#11650.00	47.87 AV	54.00	-6.13	1.02 H	295	-1.10	48.97

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	#3883.00	47.29 PK	74.00	-26.71	1.04 V	196	11.42	35.87
2	*5825.00	99.17 PK			1.15 V	175	59.04	40.13
2	*5825.00	89.12 AV			1.15 V	175	48.99	40.13
3	#11650.00	60.25 PK	74.00	-13.75	1.54 V	178	11.28	48.97
3	#11650.00	49.92 AV	54.00	-4.08	1.54 V	178	0.95	48.97

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

802.11a OFDM modulation (Antenna 9)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	**TESTED BY**	Long Chen
TEST MODE	C		

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	#3830.00	45.93 PK	74.00	-28.07	1.55 H	176	10.15	35.78
2	*5745.00	103.41 PK			1.05 H	334	63.60	39.81
2	*5745.00	94.32 AV			1.05 H	334	54.51	39.81
3	#11490.00	59.93 PK	74.00	-14.07	1.03 H	336	10.32	49.61
3	#11490.00	47.84 AV	54.00	-6.16	1.03 H	336	-1.77	49.61

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	#3830.00	47.65 PK	74.00	-26.35	1.54 V	188	11.87	35.78
2	*5745.00	95.57 PK			1.54 V	188	55.76	39.81
2	*5745.00	85.92 AV			1.54 V	188	46.11	39.81
3	#11490.00	61.36 PK	74.00	-12.64	1.54 V	188	11.75	49.61
3	#11490.00	49.80 AV	54.00	-4.20	1.54 V	188	0.19	49.61

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	TESTED BY	Long Chen
TEST MODE	C		

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	#3856.00	47.85 PK	74.00	-26.15	1.14 H	209	11.99	35.86
2	*5785.00	104.41 PK			1.06 H	18	64.54	39.87
2	*5785.00	96.76 AV			1.06 H	18	56.89	39.87
3	#11570.00	59.63 PK	74.00	-14.37	1.00 H	306	10.10	49.53
3	#11570.00	48.39 AV	54.00	-5.61	1.00 H	306	-1.14	49.53

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	#3856.00	50.41 PK	74.00	-23.59	1.18 V	120	14.55	35.86
1	#3856.00	44.83 AV	54.00	-9.17	1.18 V	120	8.97	35.86
2	*5785.00	96.56 PK			1.36 V	254	56.69	39.87
2	*5785.00	87.09 AV			1.36 V	254	47.22	39.87
3	#11570.00	61.20 PK	74.00	-12.80	1.12 V	304	11.67	49.53
3	#11570.00	50.10 AV	54.00	-3.90	1.12 V	304	0.57	49.53

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	TESTED BY	Long Chen
TEST MODE	C		

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	#3883.00	46.35 PK	74.00	-27.65	1.16 H	308	10.41	35.94
2	*5825.00	104.50 PK			1.00 H	18	64.56	39.94
2	*5825.00	94.87 AV			1.00 H	18	54.93	39.94
3	#11650.00	59.63 PK	74.00	-14.37	1.15 H	207	10.19	49.45
3	#11650.00	48.98 AV	54.00	-5.02	1.15 H	207	-0.47	49.45

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	#3883.00	51.60 PK	74.00	-22.40	1.57 V	248	15.66	35.94
1	#3883.00	46.07 AV	54.00	-7.93	1.57 V	248	10.13	35.94
2	*5825.00	98.70 PK			1.15 V	187	58.76	39.94
2	*5825.00	88.69 AV			1.15 V	187	48.75	39.94
3	#11650.00	60.21 PK	74.00	-13.79	1.63 V	54	10.77	49.45
3	#11650.00	50.04 AV	54.00	-3.96	1.63 V	54	0.59	49.45

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

802.11a OFDM modulation (Antenna 11)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 61%RH, 991hPa	**TESTED BY**	Brad Wu
TEST MODE	D		

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	#3830.00	47.06 PK	74.00	-26.94	1.06 H	37	11.88	35.18
1	#3830.00	40.71 AV	54.00	-13.29	1.06 H	37	5.53	35.18
2	*5745.00	106.47 PK			1.17 H	178	66.99	39.48
2	*5745.00	97.59 AV			1.17 H	178	58.11	39.48
3	#11490.00	56.68 PK	74.00	-17.32	1.07 H	92	5.97	50.71
3	#11490.00	44.23 AV	54.00	-9.77	1.07 H	92	-6.48	50.71

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	#3830.00	45.38 PK	74.00	-28.62	1.09 V	119	10.20	35.18
1	#3830.00	36.91 AV	54.00	-17.09	1.09 V	119	1.73	35.18
2	*5745.00	98.63 PK			1.23 V	276	59.15	39.48
2	*5745.00	89.08 AV			1.23 V	276	49.60	39.48
3	#11490.00	57.10 PK	74.00	-16.90	1.02 V	217	6.39	50.71
3	#11490.00	43.71 AV	54.00	-10.29	1.02 V	217	-7.00	50.71

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 61%RH, 991hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	#3856.00	49.68 PK	74.00	-24.32	1.07 H	215	14.43	35.25
1	#3856.00	44.57 AV	54.00	-9.43	1.07 H	215	9.32	35.25
2	*5785.00	107.39 PK			1.00 H	189	67.84	39.55
2	*5785.00	99.83 AV			1.00 H	189	60.28	39.55
3	#11570.00	56.67 PK	74.00	-17.33	1.09 H	261	6.02	50.65
3	#11570.00	43.81 AV	54.00	-10.19	1.09 H	261	-6.84	50.65

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	#3856.00	44.67 PK	74.00	-29.33	1.05 V	233	9.42	35.25
1	#3856.00	36.38 AV	54.00	-17.62	1.05 V	233	1.13	35.25
2	*5785.00	100.80 PK			1.62 V	261	61.25	39.55
2	*5785.00	91.38 AV			1.62 V	261	51.83	39.55
3	#11570.00	57.69 PK	74.00	-16.31	1.07 V	269	7.04	50.65
3	#11570.00	44.03 AV	54.00	-9.97	1.07 V	269	-6.62	50.65

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 61%RH, 991hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	3883.00	49.68 PK	74.00	-24.32	1.21 H	161	14.35	35.33
1	3883.00	45.63 AV	54.00	-8.37	1.21 H	161	10.30	35.33
2	*5825.00	107.50 PK			1.06 H	181	67.92	39.58
2	*5825.00	97.71 AV			1.06 H	181	58.13	39.58
3	11650.00	57.22 PK	74.00	-16.78	1.09 H	133	6.63	50.59
3	11650.00	43.81 AV	54.00	-10.19	1.09 H	133	-6.78	50.59

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	#3883.00	45.69 PK	74.00	-28.31	1.09 V	294	10.36	35.33
1	#3883.00	38.29 AV	54.00	-15.71	1.09 V	294	2.96	35.33
2	*5825.00	101.50 PK			1.09 V	234	61.92	39.58
2	*5825.00	92.10 AV			1.09 V	234	52.52	39.58
3	#11650.00	57.36 PK	74.00	-16.64	1.03 V	217	6.77	50.59
3	#11650.00	43.80 AV	54.00	-10.20	1.03 V	217	-6.79	50.59

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

802.11a OFDM modulation (Antenna 12)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	**TESTED BY**	Long Chen
TEST MODE	E		

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	#3830.00	46.34 PK	74.00	-27.66	1.16 H	30	10.56	35.78
2	*5745.00	110.10 PK			1.26 H	322	70.29	39.81
2	*5745.00	100.87 AV			1.26 H	322	61.06	39.81
3	#11490.00	59.96 PK	74.00	-14.04	1.18 H	208	10.35	49.61
3	#11490.00	47.63 AV	54.00	-6.37	1.18 H	208	-1.98	49.61

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	#3830.00	47.61 PK	74.00	-26.39	1.16 V	200	11.83	35.78
2	*5745.00	101.95 PK			1.16 V	192	62.14	39.81
2	*5745.00	92.38 AV			1.16 V	192	52.57	39.81
3	#11490.00	62.30 PK	74.00	-11.70	1.00 V	226	12.69	49.61
3	#11490.00	49.98 AV	54.00	-4.02	1.00 V	226	0.37	49.61

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 3	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	**TESTED BY**	Long Chen
TEST MODE	E		

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	#3856.00	47.30 PK	74.00	-26.70	1.02 H	271	11.44	35.86
2	*5785.00	111.04 PK			1.03 H	10	71.17	39.87
2	*5785.00	103.54 AV			1.03 H	10	63.67	39.87
3	#11570.00	58.49 PK	74.00	-15.51	1.16 H	240	8.96	49.53
3	#11570.00	48.63 AV	54.00	-5.37	1.16 H	240	-0.90	49.53

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	#3856.00	48.83 PK	74.00	-25.17	1.54 V	209	12.97	35.86
2	*5785.00	103.65 PK			1.17 V	184	63.78	39.87
2	*5785.00	94.25 AV			1.17 V	184	54.38	39.87
3	#11570.00	62.36 PK	74.00	-11.64	1.14 V	231	12.83	49.53
3	#11570.00	49.10 AV	54.00	-4.90	1.14 V	231	-0.43	49.53

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 5	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	TESTED BY	Long Chen
TEST MODE	E		

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	#3883.00	48.41 PK	74.00	-25.59	1.03 H	331	12.47	35.94
2	*5825.00	110.84 PK			1.00 H	2	70.90	39.94
2	*5825.00	101.14 AV			1.00 H	2	61.20	39.94
3	#11650.00	59.19 PK	74.00	-14.81	1.14 H	179	9.74	49.45
3	#11650.00	48.64 AV	54.00	-5.36	1.14 H	179	-0.80	49.45

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	#3883.00	49.12 PK	74.00	-24.88	1.47 V	304	13.18	35.94
2	*5825.00	104.60 PK			1.62 V	175	64.66	39.94
2	*5825.00	95.08 AV			1.62 V	175	55.14	39.94
3	#11650.00	61.02 PK	74.00	-12.98	1.41 V	148	11.58	49.45
3	#11650.00	50.33 AV	54.00	-3.67	1.41 V	148	0.88	49.45

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

802.11a Turbo OFDM modulation (Antenna 3)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 58%RH, 991hPa	**TESTED BY**	Match Tsui
TEST MODE	A		

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	#3840.00	48.56 PK	74.00	-25.44	1.02 H	170	13.67	34.90
1	#3840.00	43.69 AV	54.00	-10.31	1.02 H	170	8.80	34.90
2	*5760.00	105.16 PK			1.05 H	177	65.84	39.32
2	*5760.00	95.93 AV			1.05 H	177	56.61	39.32
3	#11520.00	56.86 PK	74.00	-17.14	1.09 H	172	7.80	49.06
3	#11520.00	44.33 AV	54.00	-9.67	1.09 H	172	-4.73	49.06

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	#3840.00	45.56 PK	74.00	-28.44	1.06 V	299	10.67	34.90
1	#3840.00	36.77 AV	54.00	-17.23	1.06 V	299	1.88	34.90
2	*5760.00	96.80 PK			1.00 V	180	57.48	39.32
2	*5760.00	87.30 AV			1.00 V	180	47.98	39.32
3	#11520.00	56.91 PK	74.00	-17.09	1.00 V	154	7.85	49.06
3	#11520.00	44.27 AV	54.00	-9.73	1.00 V	154	-4.79	49.06

NOTE:
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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	18deg. C, 58%RH, 991hPa	TESTED BY	Match Tsui
TEST MODE	A		

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	#3866.00	50.14 PK	74.00	-23.86	1.02 H	171	15.15	34.98
1	#3866.00	45.54 AV	54.00	-8.46	1.02 H	171	10.55	34.98
2	*5800.00	105.38 PK			1.16 H	158	65.97	39.41
2	*5800.00	95.99 AV			1.16 H	158	56.58	39.41
3	#11600.00	56.69 PK	74.00	-17.31	1.10 H	38	7.66	49.03
3	#11600.00	44.59 AV	54.00	-9.41	1.10 H	38	-4.44	49.03

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	#3866.00	45.77 PK	74.00	-28.23	1.07 V	229	10.78	34.98
1	#3866.00	36.83 AV	54.00	-17.17	1.07 V	229	1.84	34.98
2	*5800.00	97.58 PK			1.04 V	72	58.17	39.41
2	*5800.00	88.26 AV			1.04 V	72	48.85	39.41
3	#11600.00	57.03 PK	74.00	-16.97	1.11 V	150	8.00	49.03
3	#11600.00	44.10 AV	54.00	-9.90	1.11 V	150	-4.93	49.03

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

802.11a Turbo OFDM modulation (Antenna 6)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	**TESTED BY**	Long Chen
TEST MODE	B		

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	#3840.00	47.14 PK	74.00	-26.86	1.48 H	210	11.43	35.71
2	*5760.00	100.89 PK			1.15 H	329	60.90	39.99
2	*5760.00	92.11 AV			1.15 H	329	52.12	39.99
3	#11520.00	59.64 PK	74.00	-14.36	1.62 H	147	10.59	49.05
3	#11520.00	46.29 AV	54.00	-7.71	1.62 H	147	-2.76	49.05

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	#3840.00	48.61 PK	74.00	-25.39	1.15 V	20	12.90	35.71
2	*5760.00	92.63 PK			1.10 V	219	52.64	39.99
2	*5760.00	83.45 AV			1.10 V	219	43.46	39.99
3	#11520.00	61.30 PK	74.00	-12.70	1.45 V	227	12.25	49.05
3	#11520.00	49.92 AV	54.00	-4.08	1.45 V	227	0.87	49.05

NOTE:
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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	TESTED BY	Long Chen
TEST MODE	B		

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	#3866.00	49.51 PK	74.00	-24.49	1.28 H	143	13.70	35.81
2	*5800.00	100.88 PK			1.00 H	2	60.80	40.08
2	*5800.00	91.17 AV			1.00 H	2	51.09	40.08
3	#11600.00	58.15 PK	74.00	-15.85	1.00 H	2	9.16	48.99
3	#11600.00	45.95 AV	54.00	-8.05	1.00 H	2	-3.04	48.99

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	#3866.00	48.69 PK	74.00	-25.31	1.14 V	187	12.88	35.81
2	*5800.00	93.10 PK			1.05 V	131	53.02	40.08
2	*5800.00	84.31 AV			19.10	131	44.23	40.08
3	#11600.00	60.52 PK	74.00	-13.48	1.52 V	210	11.53	48.99
3	#11600.00	49.97 AV	54.00	-4.03	1.52 V	210	0.98	48.99

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

802.11a Turbo OFDM modulation (Antenna 9)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	**TESTED BY**	Long Chen
TEST MODE	C		

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	#3840.00	47.14 PK	74.00	-26.86	1.16 H	339	11.33	35.81
2	*5760.00	100.67 PK			1.16 H	342	60.84	39.83
2	*5760.00	91.49 AV			1.16 H	342	51.66	39.83
3	#11520.00	60.17 PK	74.00	-13.83	1.33 H	258	10.58	49.59
3	#11520.00	48.60 AV	54.00	-5.40	1.33 H	258	-0.99	49.59

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	#3840.00	49.63 PK	74.00	-24.37	1.06 V	138	13.82	35.81
2	*5760.00	92.39 PK			1.18 V	179	52.56	39.83
2	*5760.00	82.01 AV			1.18 V	179	42.18	39.83
3	#11520.00	61.84 PK	74.00	-12.16	1.54 V	176	12.25	49.59
3	#11520.00	50.33 AV	54.00	-3.67	1.54 V	176	0.74	49.59

NOTE:
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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	TESTED BY	Long Chen
TEST MODE	C		

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	#3866.00	47.89 PK	74.00	-26.11	1.63 H	158	12.00	35.89
2	*5800.00	100.14 PK			1.06 H	349	60.24	39.90
2	*5800.00	90.39 AV			1.06 H	349	50.49	39.90
3	#11600.00	59.71 PK	74.00	-14.29	1.15 H	174	10.22	49.49
3	#11600.00	48.02 AV	54.00	-5.98	1.15 H	174	-1.47	49.49

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	#3866.00	48.28 PK	74.00	-25.72	1.03 V	354	12.39	35.89
2	*5800.00	92.66 PK			1.25 V	149	52.76	39.90
2	*5800.00	83.85 AV			1.25 V	149	43.95	39.90
3	#11600.00	61.04 PK	74.00	-12.96	1.40 V	314	11.55	49.49
3	#11600.00	50.33 AV	54.00	-3.67	1.40 V	314	0.84	49.49

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

802.11a Turbo OFDM modulation (Antenna 11)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 61%RH, 991hPa	**TESTED BY**	Brad Wu
TEST MODE	D		

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	#3840.00	48.22 PK	74.00	-25.78	1.04 H	338	13.01	35.21
2	*5760.00	104.20 PK			1.11 H	19	64.69	39.51
2	*5760.00	94.60 AV			1.11 H	19	55.09	39.51
3	#11520.00	59.46 PK	74.00	-14.54	1.04 H	28	8.77	50.69
3	#11520.00	46.03 AV	54.00	-7.97	1.04 H	28	-4.66	50.69

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	#3840.00	49.11 PK	74.00	-24.89	1.04 V	134	13.90	35.21
2	*5760.00	95.40 PK			1.12 V	3	55.89	39.51
2	*5760.00	86.50 AV			1.12 V	3	46.99	39.51
3	#11520.00	61.08 PK	74.00	-12.92	1.06 V	91	10.39	50.69
3	#11520.00	49.77 AV	54.00	-4.23	1.06 V	91	-0.92	50.69

NOTE:
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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 2	FREQUENCY RANGE	1 ~ 40 GHz
MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	22deg. C, 61%RH, 991hPa	TESTED BY	Brad Wu
TEST MODE	D		

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	#3866.00	49.53 PK	74.00	-24.47	1.07 H	168	14.25	35.28
2	*5800.00	103.20 PK			1.10 H	21	63.63	39.57
2	*5800.00	93.80 AV			1.10 H	21	54.23	39.57
3	#11600.00	61.45 PK	74.00	-12.55	1.07 H	261	10.83	50.62
3	#11600.00	50.53 AV	54.00	-3.47	1.07 H	261	-0.09	50.62

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	#3866.00	49.73 PK	74.00	-24.27	1.09 V	28	14.45	35.28
2	*5800.00	96.50 PK			1.11 V	3	56.93	39.57
2	*5800.00	87.20 AV			1.11 V	3	47.63	39.57
3	#11600.00	61.34 PK	74.00	-12.66	1.13 V	261	10.72	50.62
3	#11600.00	50.41 AV	54.00	-3.59	1.13 V	261	-0.21	50.62

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

802.11a Turbo OFDM modulation (Antenna 12)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	**TESTED BY**	Long Chen
TEST MODE	E		

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	#3840.00	47.54 PK	74.00	-26.46	1.41 H	107	11.73	35.81
2	*5760.00	106.24 PK			1.47 H	358	66.41	39.83
2	*5760.00	96.84 AV			1.47 H	358	57.01	39.83
3	#11520.00	59.63 PK	74.00	-14.37	1.05 H	228	10.04	49.59
3	#11520.00	47.98 AV	54.00	-6.02	1.05 H	228	-1.61	49.59

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	#3840.00	49.47 PK	74.00	-24.53	1.28 V	259	13.66	35.81
2	*5760.00	97.85 PK			1.00 V	196	58.02	39.83
2	*5760.00	88.41 AV			1.00 V	196	48.58	39.83
3	#11520.00	61.02 PK	74.00	-12.98	1.06 V	307	11.43	49.59
3	#11520.00	49.95 AV	54.00	-4.05	1.06 V	307	0.36	49.59

NOTE:
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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 2	**FREQUENCY RANGE**	1 ~ 40 GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 61%RH, 991hPa	**TESTED BY**	Long Chen
TEST MODE	E		

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	#3866.00	47.62 PK	74.00	-26.38	1.63 H	108	11.73	35.89
2	*5800.00	106.48 PK			1.14 H	129	66.58	39.90
2	*5800.00	96.87 AV			1.14 H	129	56.97	39.90
3	#11600.00	58.30 PK	74.00	-15.70	1.03 H	227	8.81	49.49
3	#11600.00	48.10 AV	54.00	-5.90	1.03 H	227	-1.39	49.49

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	#3866.00	52.14 PK	74.00	-21.86	1.06 V	22	16.25	35.89
1	#3866.00	46.62 AV	54.00	-7.38	1.06 V	22	10.73	35.89
2	*5800.00	98.47 PK			1.16 V	207	58.57	39.90
2	*5800.00	89.10 AV			1.16 V	207	49.20	39.90
3	#11600.00	60.20 PK	74.00	-13.80	1.14 V	143	10.71	49.49
3	#11600.00	49.68 AV	54.00	-4.32	1.14 V	143	0.19	49.49

NOTE: 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
6. "#" The radiated frequency falling in the restricted band.
7. The limit value is defined as per 15.247

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
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

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

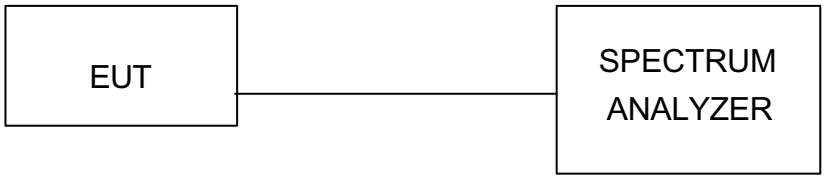
5.3.3 TEST PROCEDURE

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

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 lowest, middle and highest channel frequencies individually.

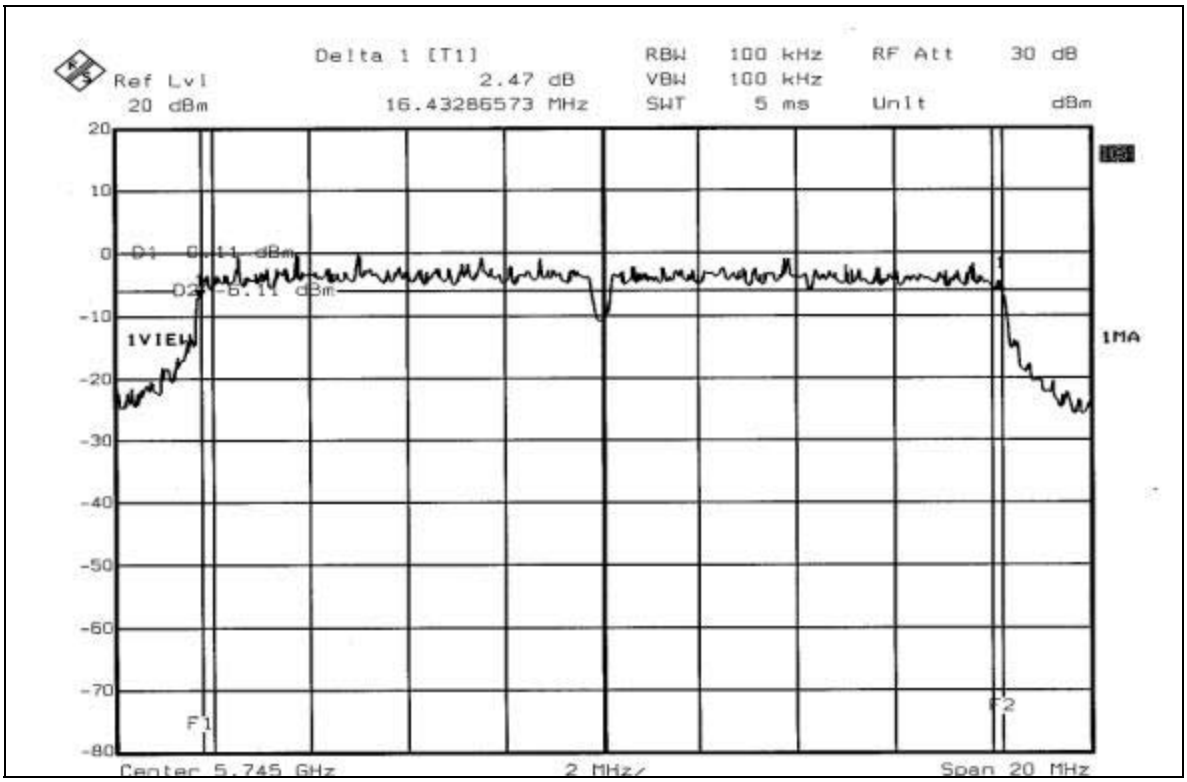
5.3.7 TEST RESULTS

802.11a OFDM modulation

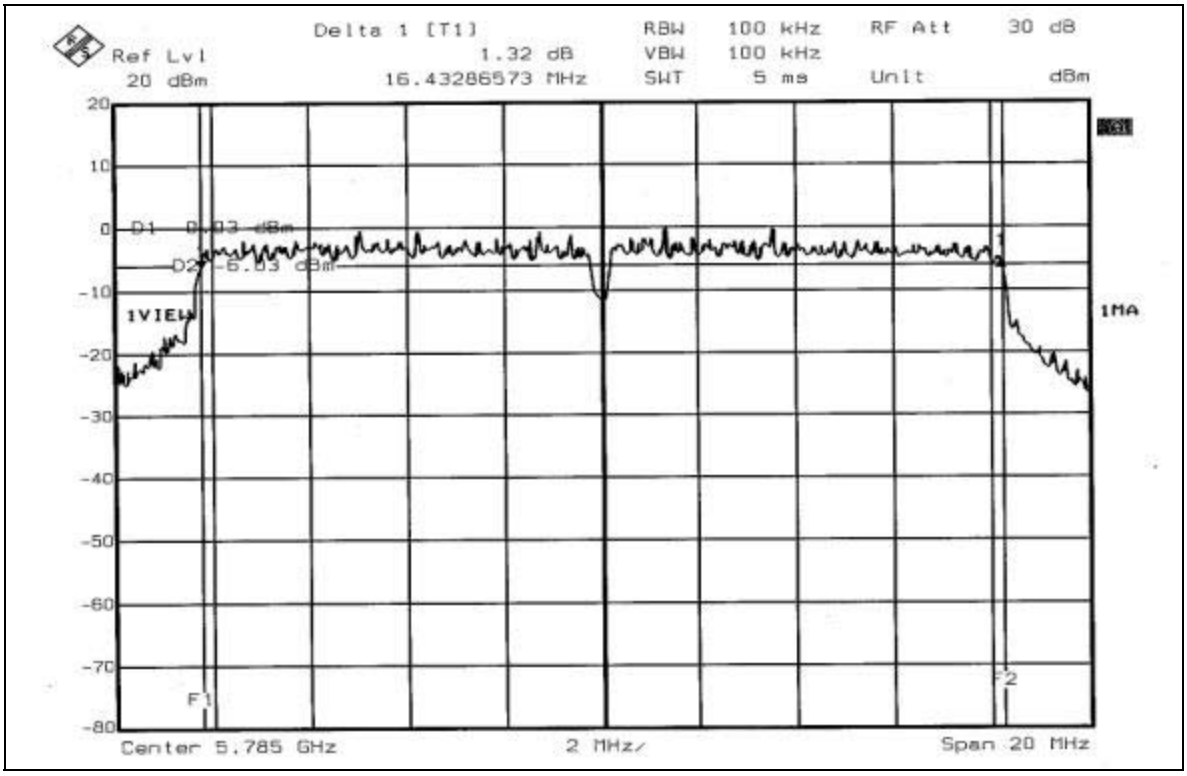
EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	25deg. C, 52%RH, 991 hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	5745	16.43	0.5	PASS
3	5785	16.43	0.5	PASS
5	5825	16.43	0.5	PASS

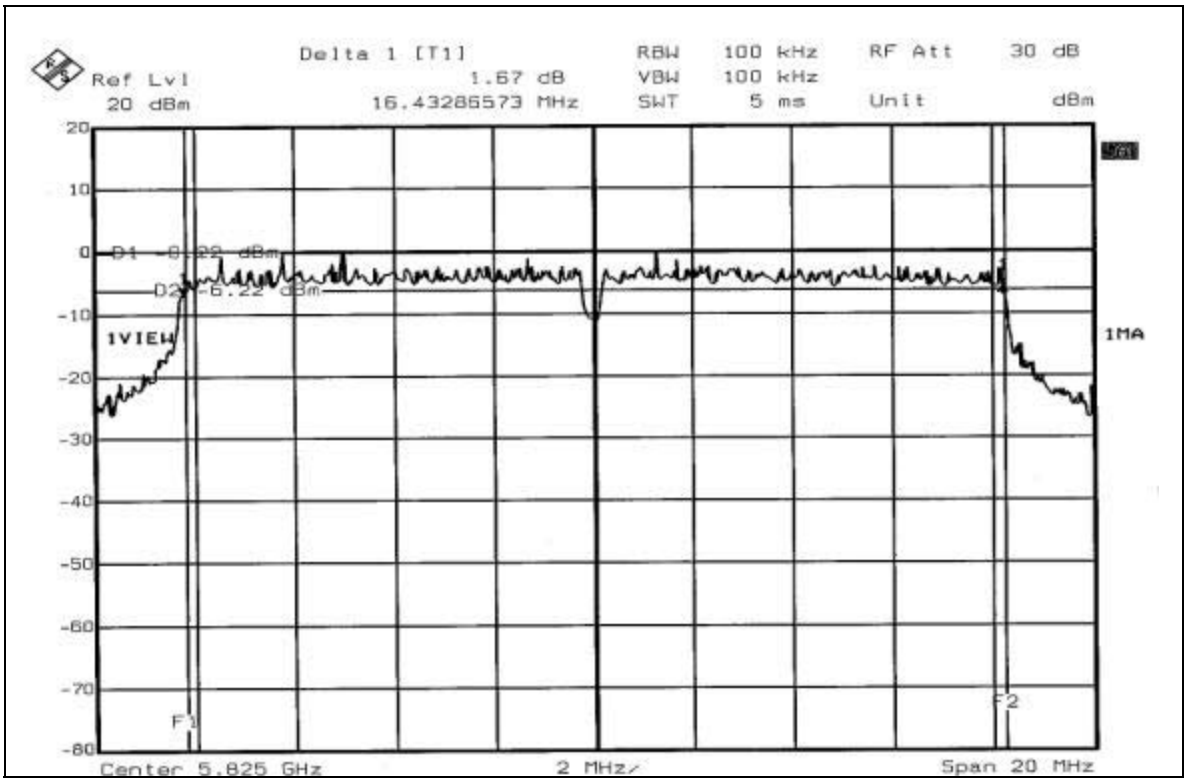
CH 1


Delta 1 [T1]
2.47 dB
16.43286573 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
D1 -0.11 dBm
D2 -6.11 dBm
1VIEW
1MA
F1
F2
Center 5.745 GHz
2 MHz/
Span 20 MHz

CH 3


Delta 1 [T1]
1.32 dB
16.43286573 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
D1 -0.03 dBm
D2 -6.03 dBm
1VIEW
1MA
F1
F2
Center 5.785 GHz
2 MHz/
Span 20 MHz

CH 5

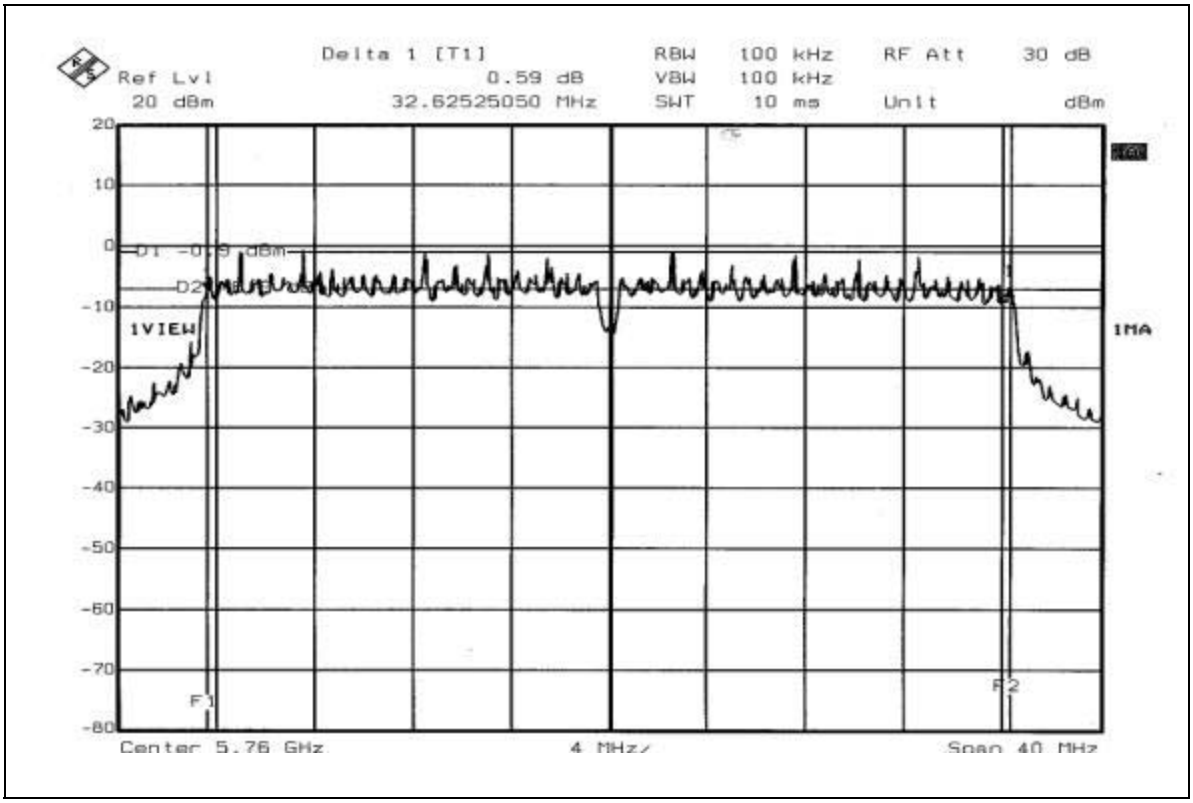

Delta 1 [T1]
1.67 dB
16.43286573 MHz
RBW 100 kHz
VBW 100 kHz
SWT 5 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
D1 -8.22 dBm
D2 -6.22 dBm
1VIEW
1MA
F1
F2
Center 5.825 GHz
2 MHz/
Span 20 MHz

802.11a Turbo OFDM modulation

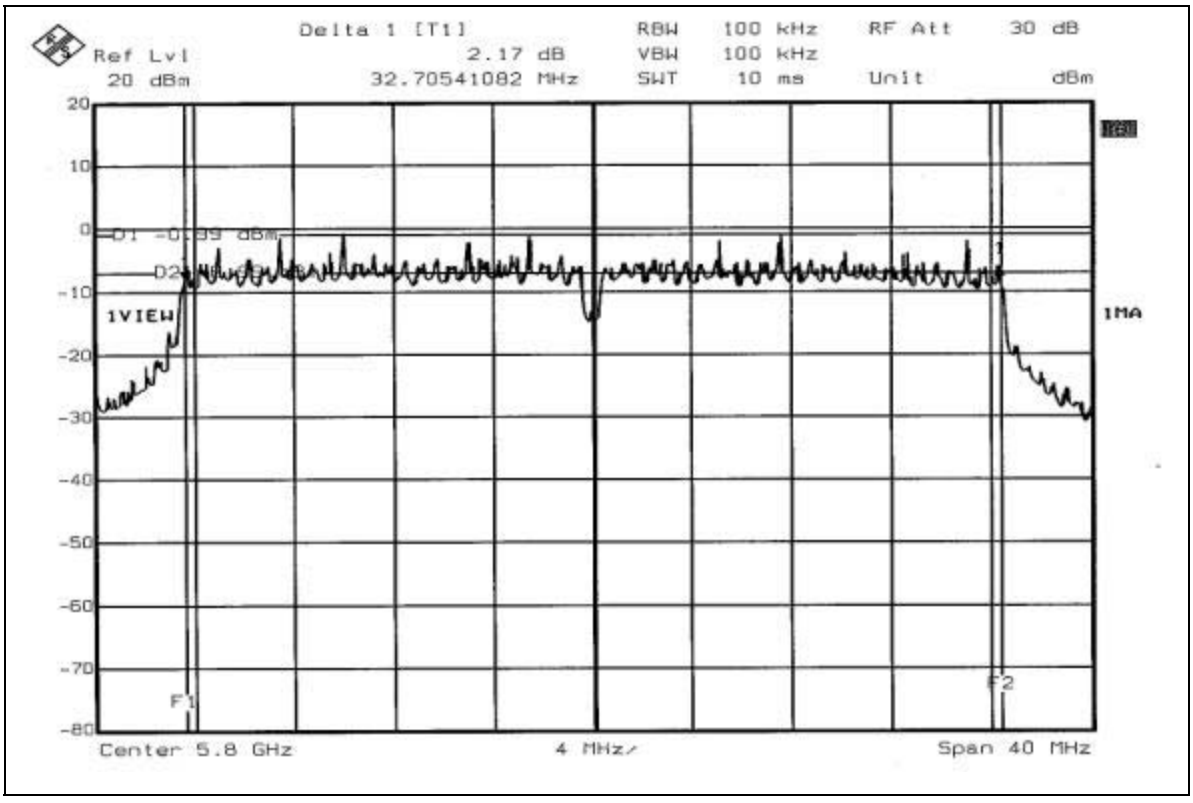
EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	25deg. C, 52%RH, 991 hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	5760	32.63	0.5	PASS
2	5800	32.71	0.5	PASS

CH1


Delta 1 [T1]
0.59 dB
32.62525050 MHz
RBW 100 kHz
VBW 100 kHz
SWT 10 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1VIEW
1MA
F1
F2
Center 5.76 GHz
4 MHz/
Span 40 MHz

CH2


Delta 1 [T1]
2.17 dB
32.70541082 MHz
RBW 100 kHz
VBW 100 kHz
SWT 10 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1VIEW
1MA
F1
F2
Center 5.8 GHz
4 MHz/
Span 40 MHz

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 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 1012	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 read 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 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

802.11a OFDM modulation

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	25deg. C, 52%RH, 991 hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	5745	35.645	15.52	30	PASS
3	5785	35.892	15.55	30	PASS
5	5825	35.727	15.53	30	PASS

802.11a Turbo OFDM modulation

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	25deg. C, 52%RH, 991 hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	5760	31.989	15.05	30	PASS
2	5800	32.137	15.07	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
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

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

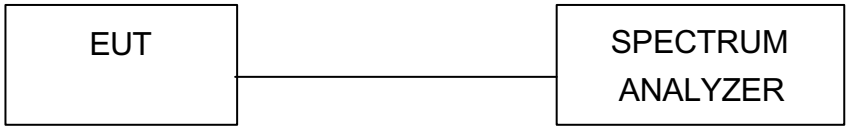
5.5.3 TEST PROCEDURE

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 3 kHz RBW and 30 kHz VBW, set sweep time = span/3 kHz. The power spectral density was measured and recorded.
The sweep time is allowed to be longer than span/3 kHz 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 CONDITION

Same as Item 5.3.6

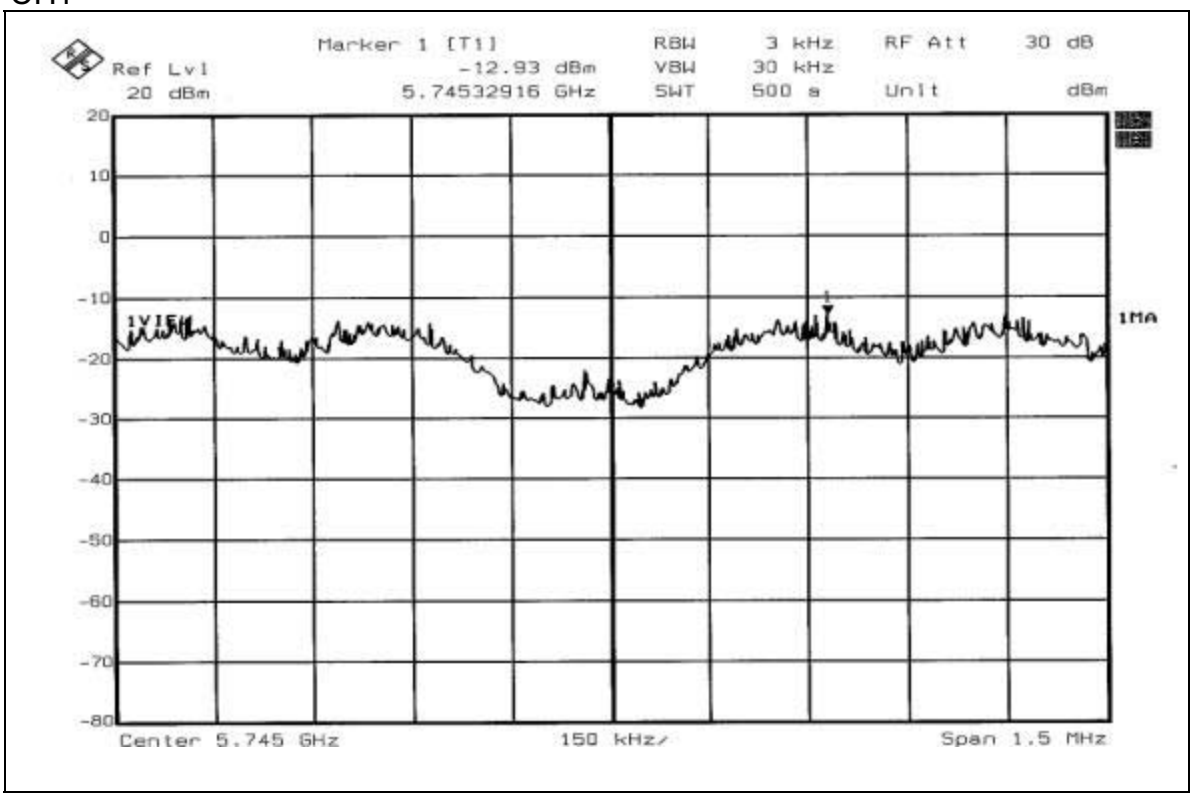
5.5.7 TEST RESULTS

802.11a OFDM modulation

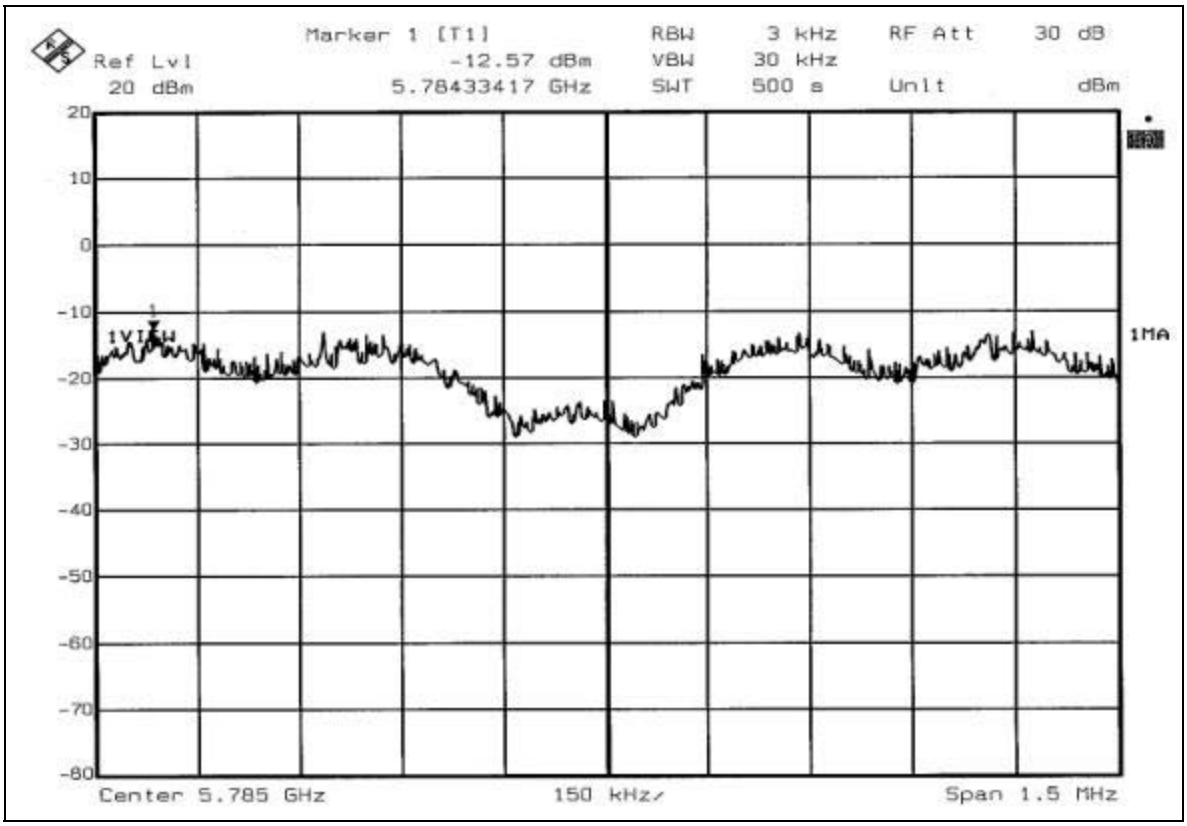
EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	25deg. C, 52%RH, 991 hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5745	-12.93	8	PASS
3	5785	-12.57	8	PASS
5	5825	-12.79	8	PASS

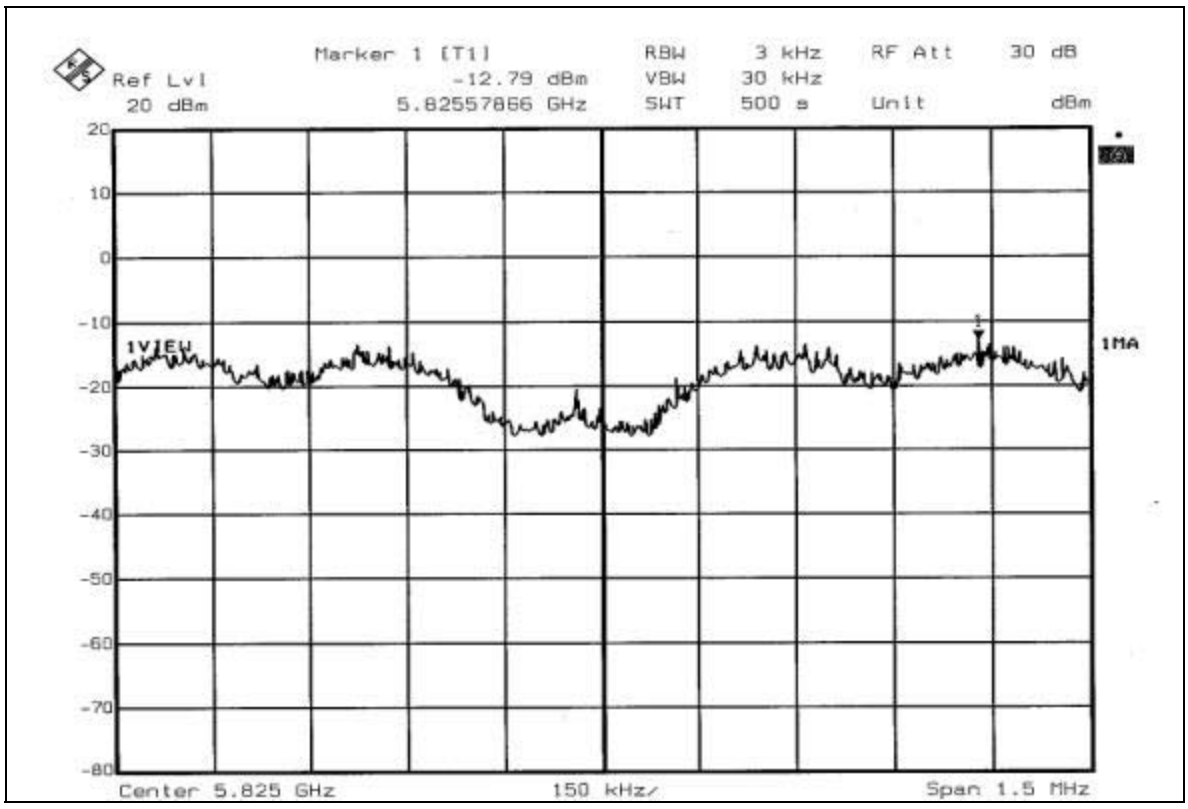
CH1


Marker 1 [T1]
-12.93 dBm
5.74532916 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1MA
Center 5.745 GHz
150 kHz/
Span 1.5 MHz

CH3


Marker 1 [T1]
-12.57 dBm
5.78433417 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1MA
Center 5.785 GHz
150 kHz/
Span 1.5 MHz

CH5

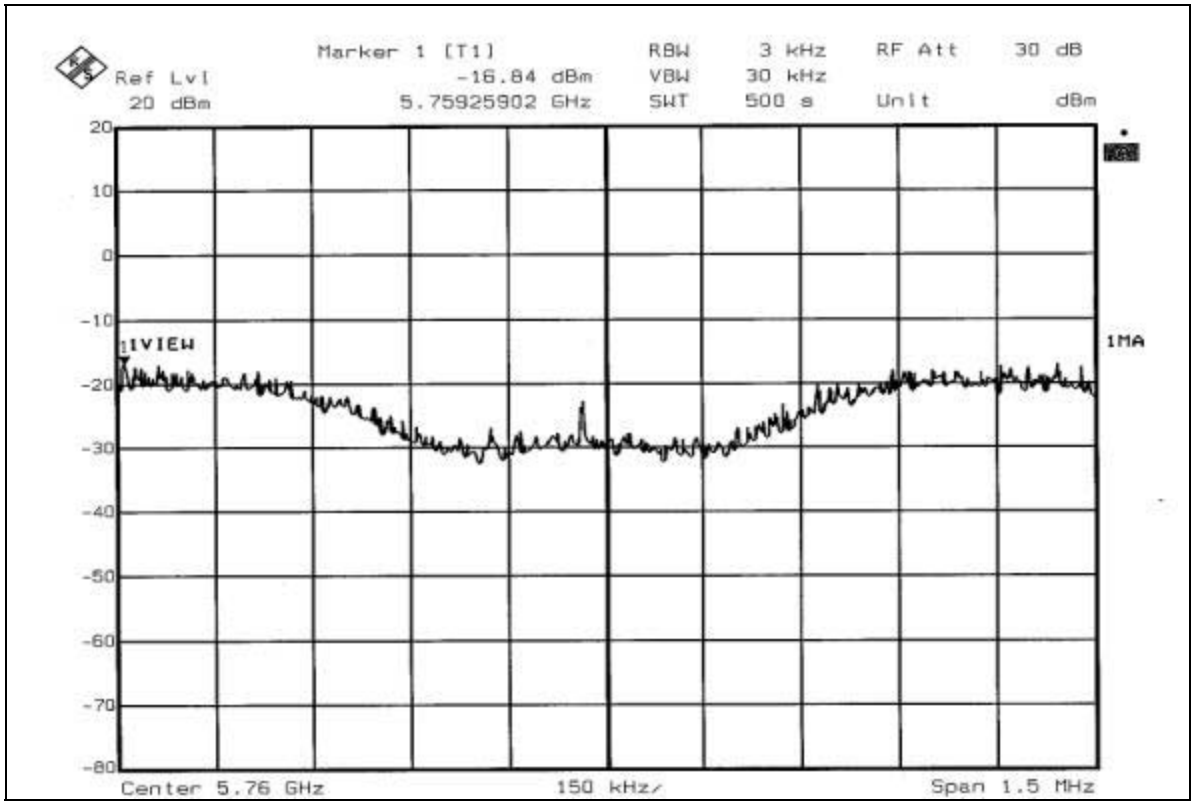

Marker 1 [T1]
-12.79 dBm
5.82557866 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1VIEW
1MA
Center 5.825 GHz
150 kHz/
Span 1.5 MHz

802.11a Turbo OFDM modulation

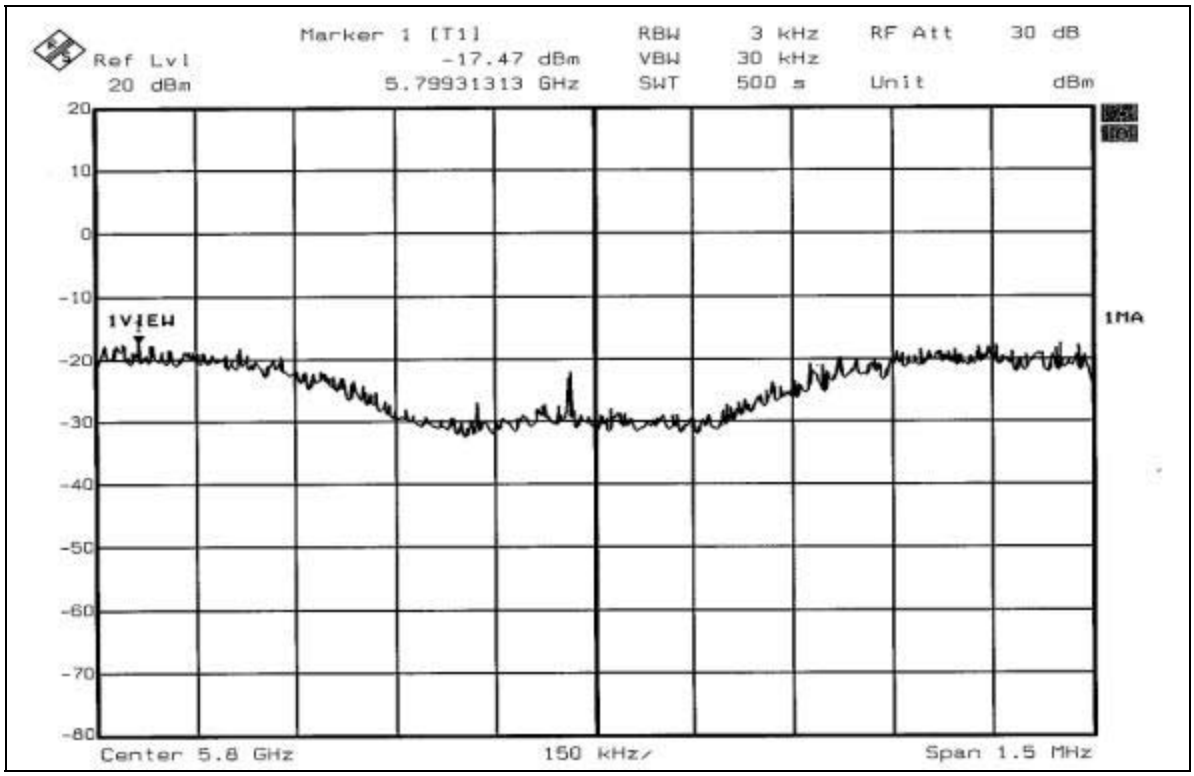
EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	25deg. C, 52%RH, 991 hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	5760	-16.84	8	PASS
2	5800	-17.47	8	PASS

CH1


Marker 1 [T1]
-16.84 dBm
5.75925902 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1VIEW
1MA
Center 5.76 GHz
150 kHz/
Span 1.5 MHz

CH2


Marker 1 [T1]
-17.47 dBm
5.79931313 GHz
RBW 3 kHz
VBW 30 kHz
SWT 500 s
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
1VIEW
1MA
Center 5.8 GHz
150 kHz/
Span 1.5 MHz

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
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

NOTES:
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

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

5.6.4 DEVIATION FROM TEST STANDARD

No deviation

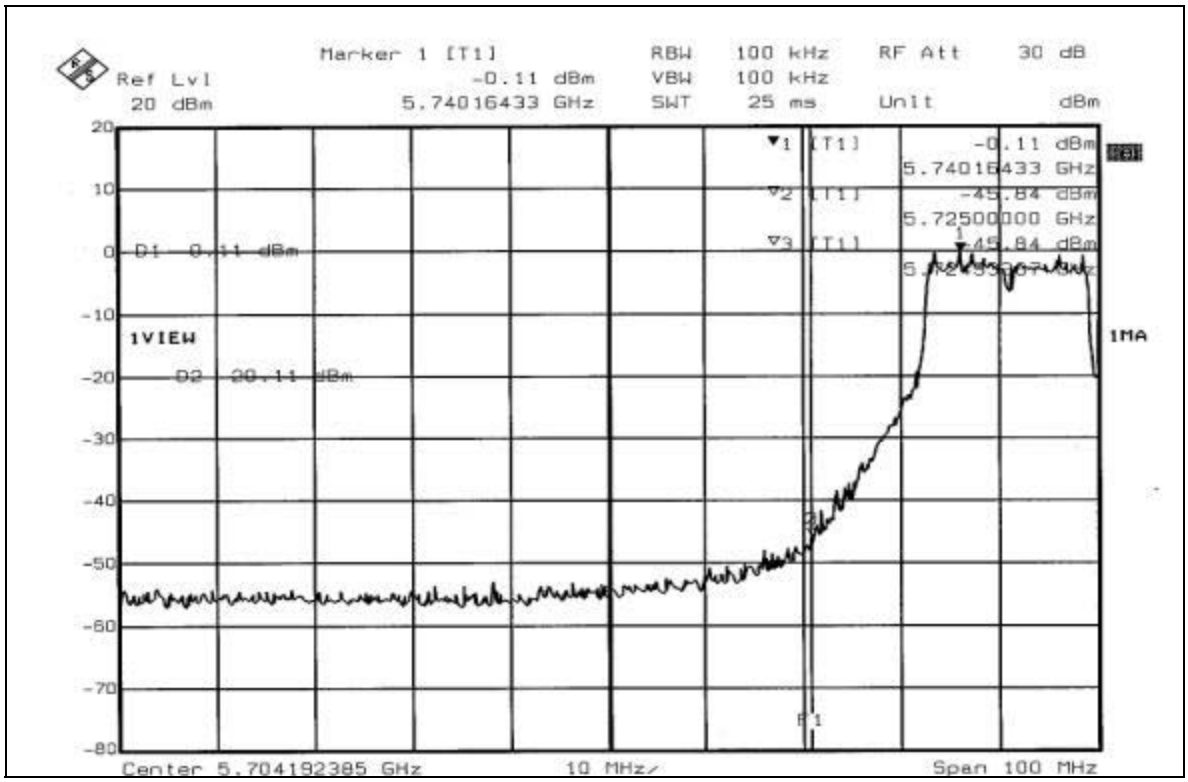
5.6.5 EUT OPERATING CONDITION

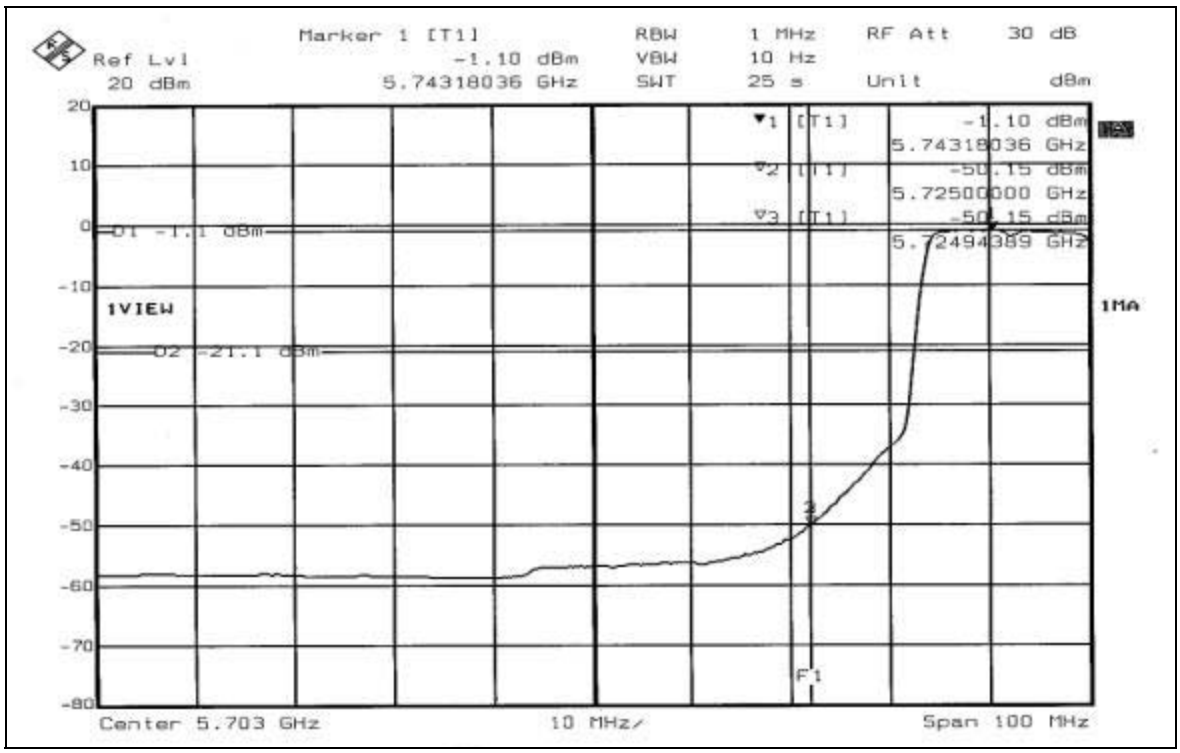
Same as Item 5.3.6

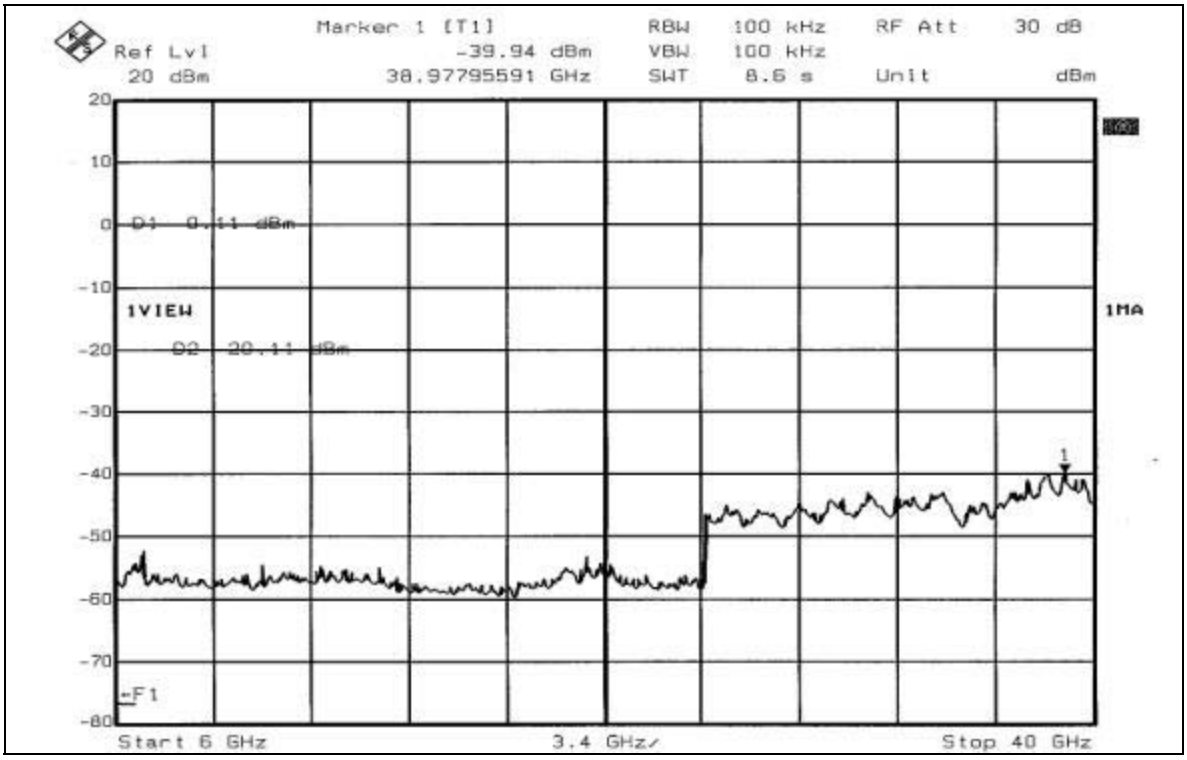
5.6.6 TEST RESULTS

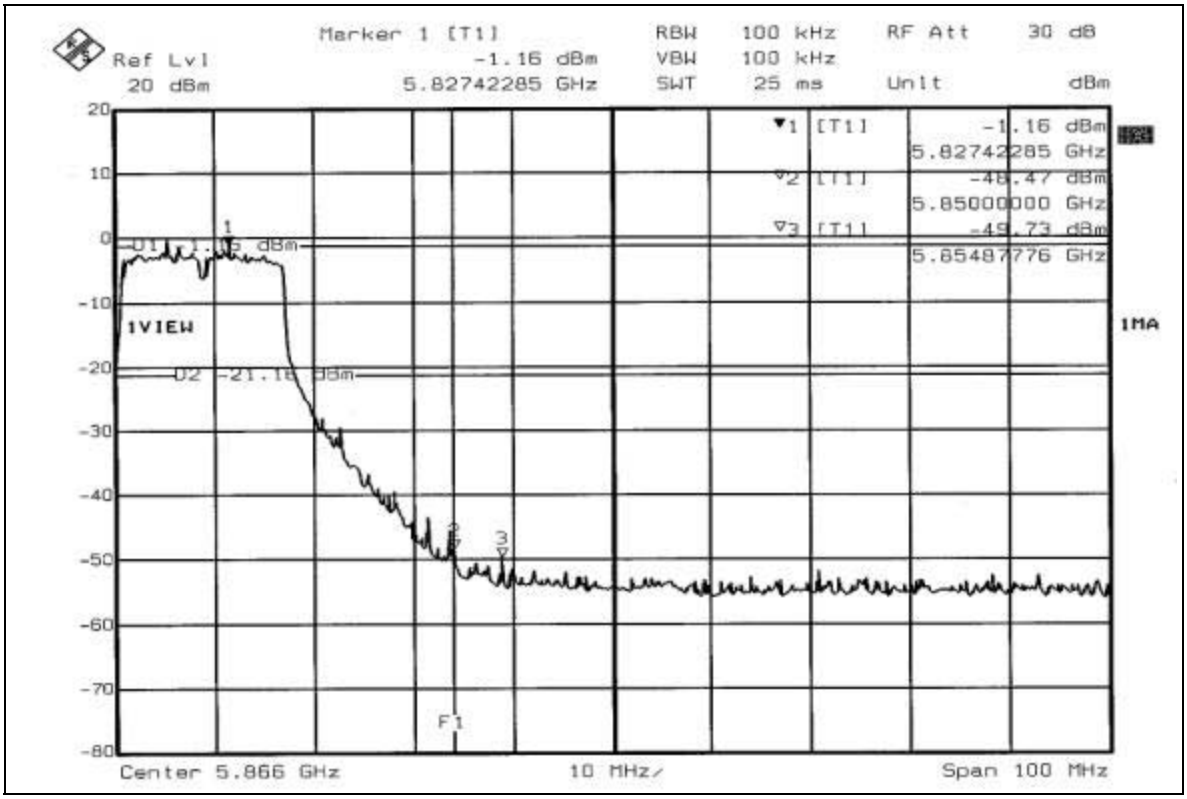
The spectrum plots are attached on the following pages. D2 line indicates the highest level, D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

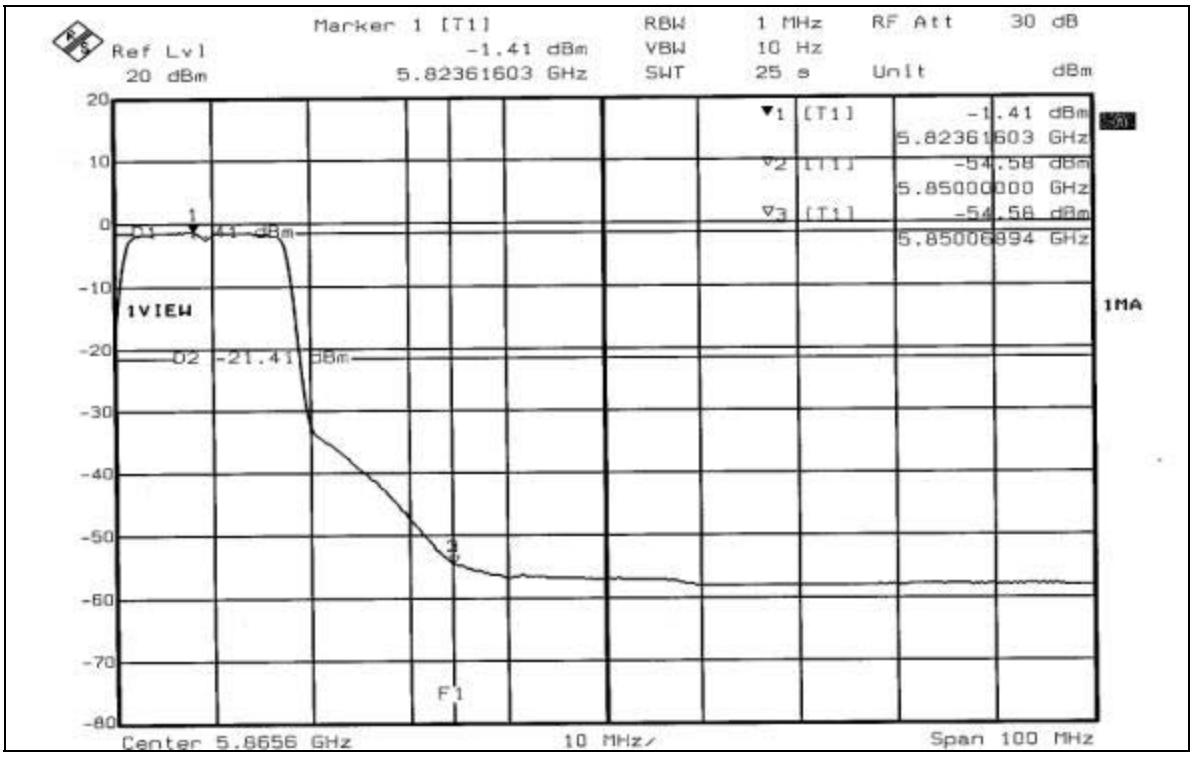
802.11a OFDM modulation

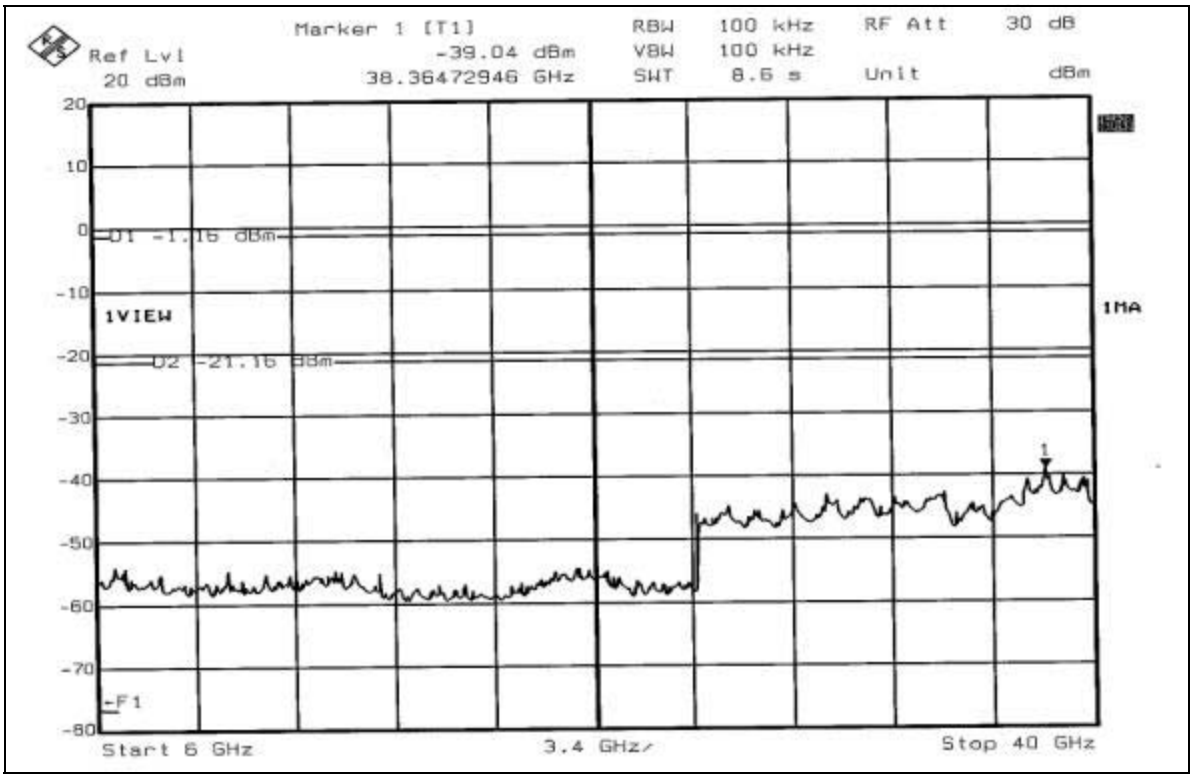




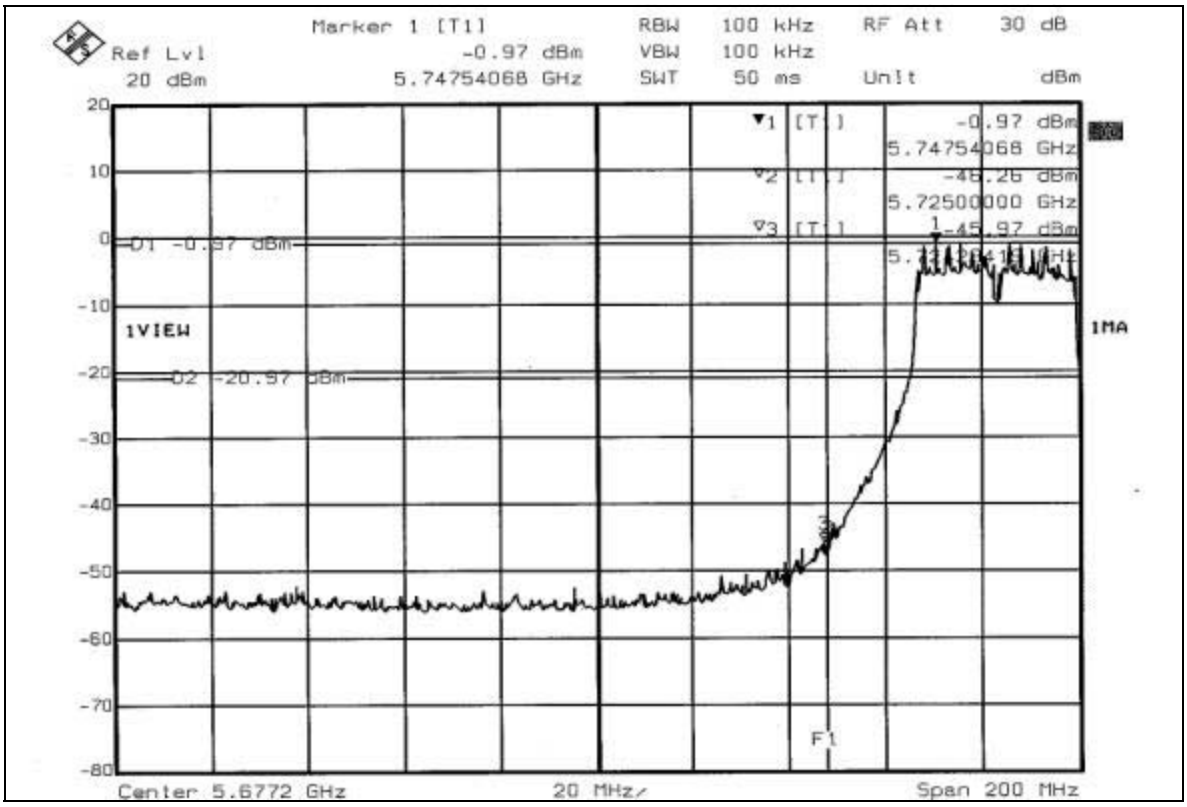

Marker 1 [T1]
-39.94 dBm
38.97795591 GHz
RBW 100 kHz
VBW 100 kHz
SWT 8.6 s
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
D1 0.11 dBm
1VIEW
D2 20.11 dBm
1MA
F1
Start 6 GHz
3.4 GHz/
Stop 40 GHz

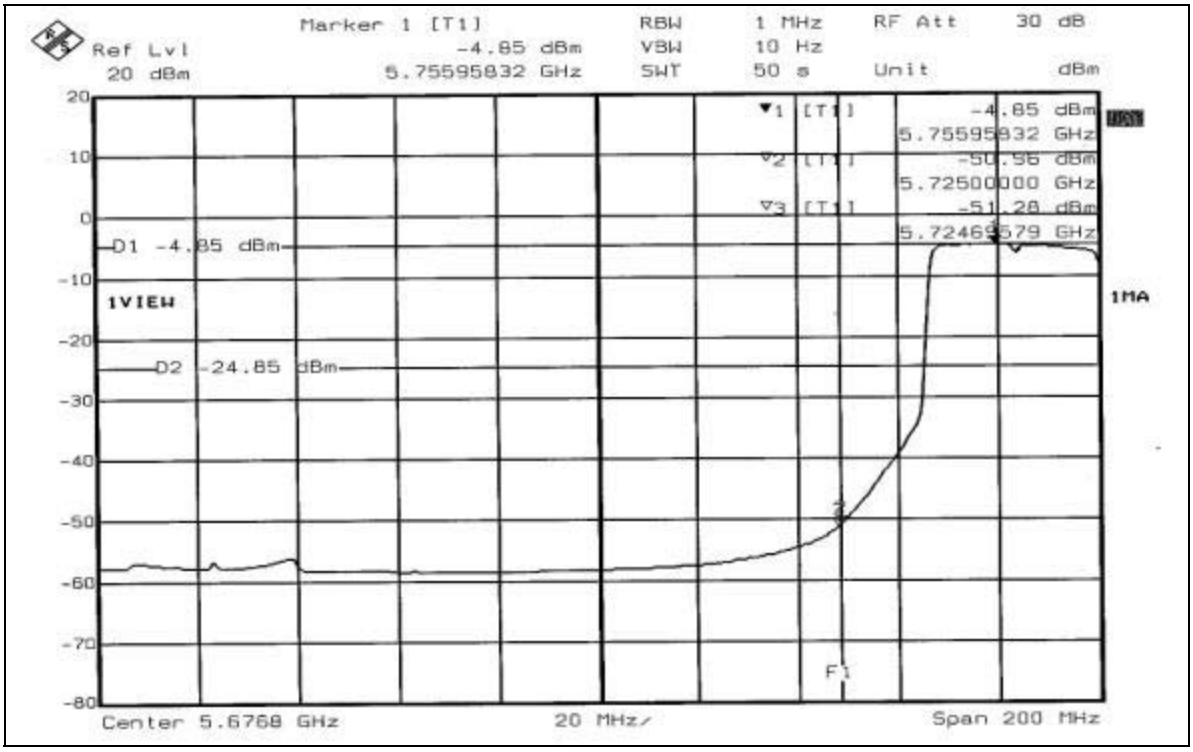

Marker 1 [T1]
-1.16 dBm
5.82742285 GHz
RBW 100 kHz
VBW 100 kHz
SWT 25 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
▼1 [T1] -1.16 dBm
5.82742285 GHz
▽2 [T1] -48.47 dBm
5.85000000 GHz
▽3 [T1] -49.73 dBm
5.85487776 GHz
D1 1.16 dBm
1VIEW
D2 -21.16 dBm
1MA
F1
Center 5.866 GHz
10 MHz/
Span 100 MHz

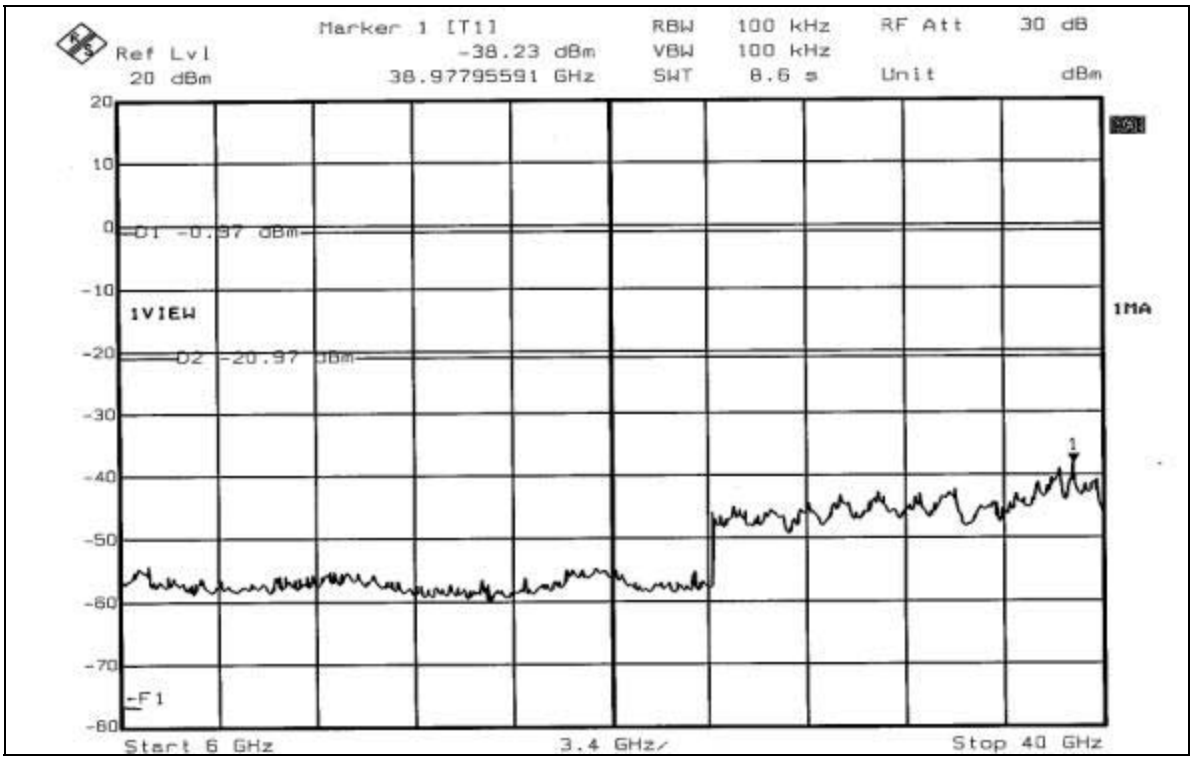

Marker 1 [T1]
-1.41 dBm
5.82361603 GHz
RBW 1 MHz
VBW 10 Hz
SWT 25 s
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
▼1 [T1] -1.41 dBm
5.82361603 GHz
▽2 [T1] -54.58 dBm
5.85000000 GHz
▽3 [T1] -54.58 dBm
5.85006894 GHz
D1 -1.41 dBm
D2 -21.41 dBm
1VIEW
1MA
F1
Center 5.8656 GHz
10 MHz/
Span 100 MHz

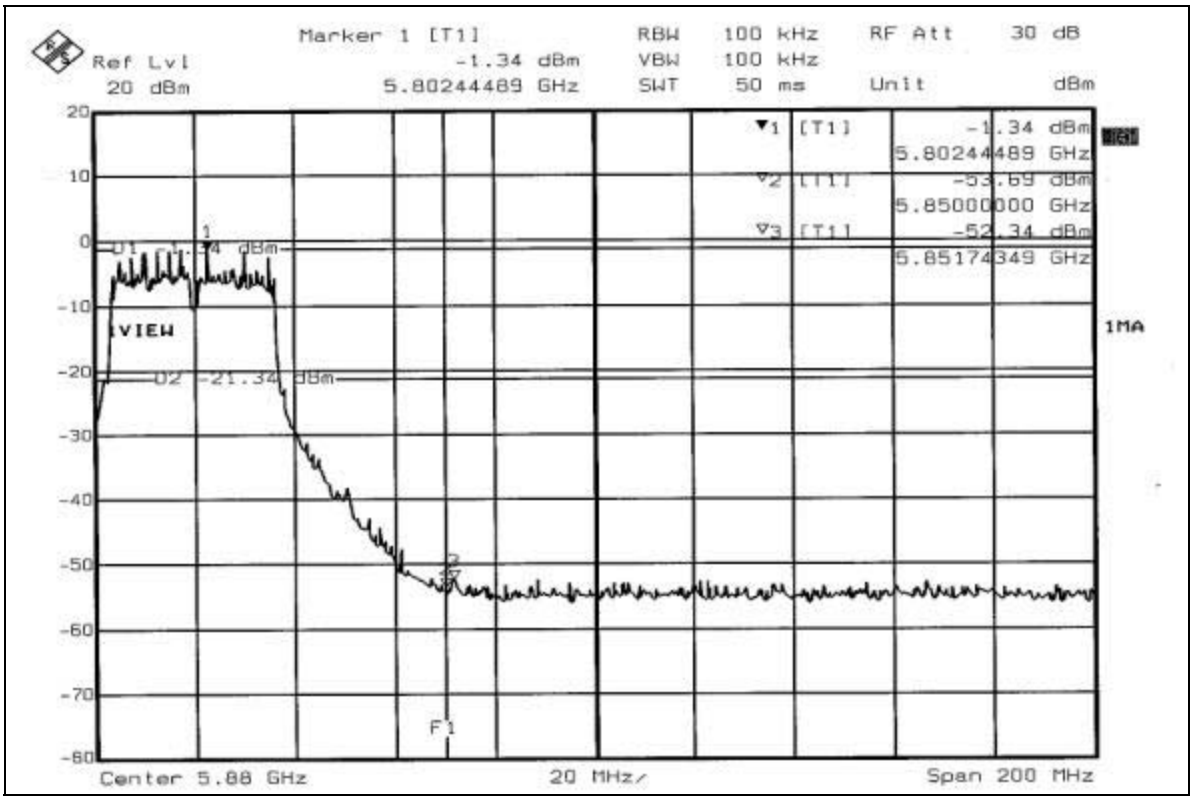

Marker 1 [T1]
-39.04 dBm
38.36472946 GHz
RBW 100 kHz
VBW 100 kHz
SWT 8.6 s
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
D1 -1.16 dBm
D2 -21.16 dBm
1VIEW
1MA
F1
Start 6 GHz
3.4 GHz/
Stop 40 GHz

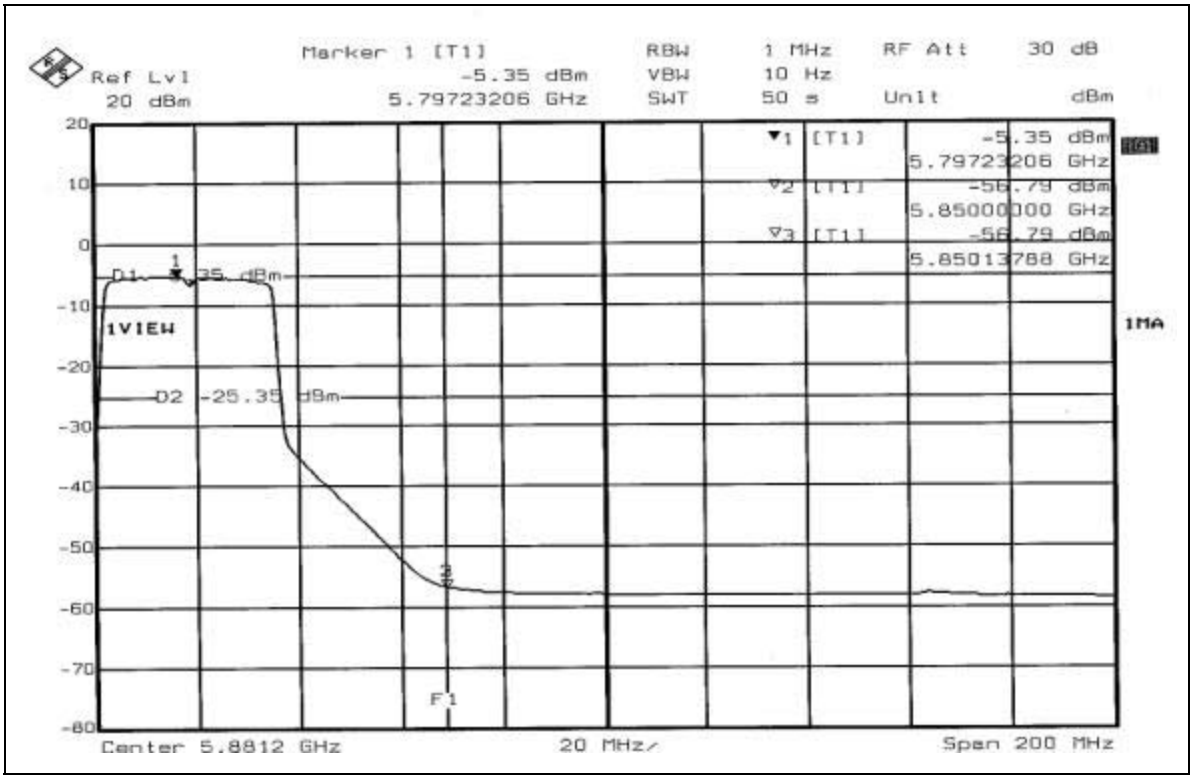
802.11a Turbo OFDM modulation

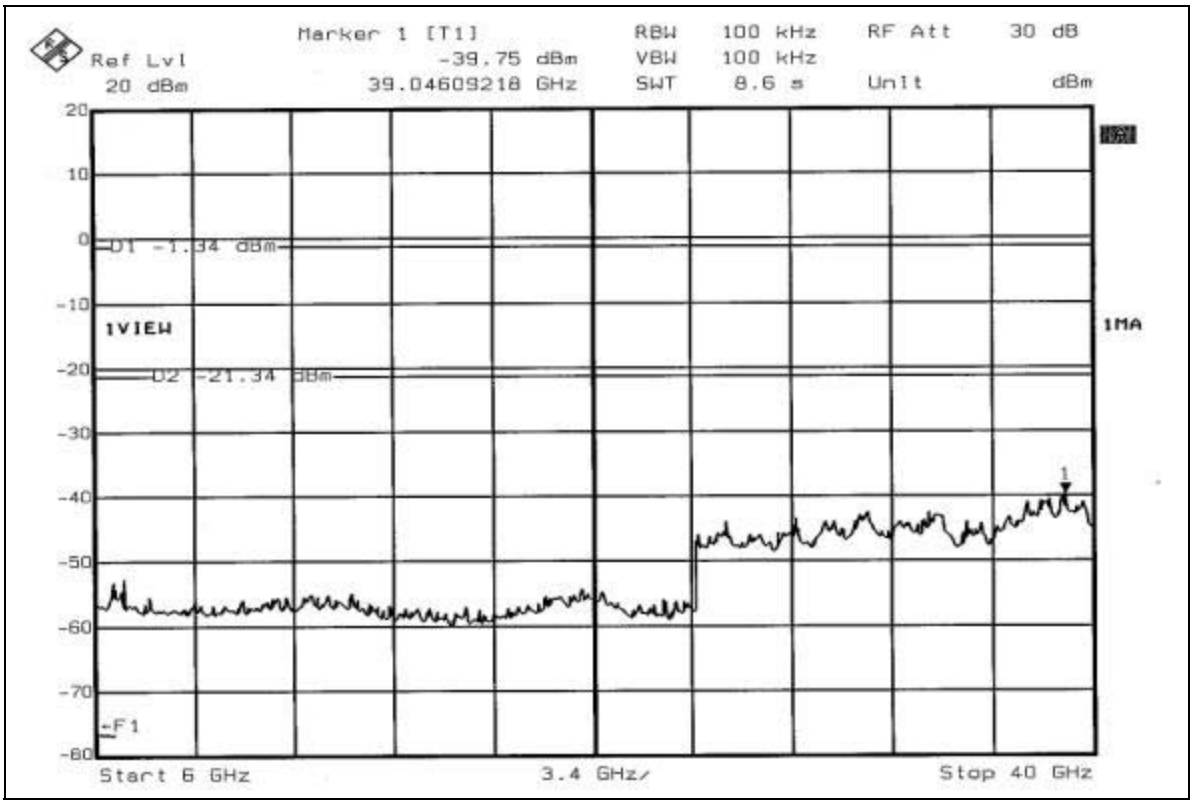





Marker 1 [T1]
-38.23 dBm
38.97795591 GHz
RBW 100 kHz
VBW 100 kHz
SWT 8.6 s
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
D1 -0.97 dBm
1VIEW
D2 -20.97 dBm
1MA
F1
Start 6 GHz
3.4 GHz/
Stop 40 GHz


Marker 1 [T1]
-1.34 dBm
5.80244489 GHz
RBW 100 kHz
VBW 100 kHz
SWT 50 ms
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
▼1 [T1] -1.34 dBm
5.80244489 GHz
▽2 [T1] -53.69 dBm
5.85000000 GHz
▽3 [T1] -52.34 dBm
5.85174349 GHz
D1 -1.34 dBm
1VIEW
D2 -21.34 dBm
1MA
F1
Center 5.88 GHz
20 MHz/
Span 200 MHz


Marker 1 [T1]
-5.35 dBm
5.79723206 GHz
RBW 1 MHz
VBW 10 Hz
SWT 50 s
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
▼1 [T1] -5.35 dBm
5.79723206 GHz
▽2 [T1] -56.79 dBm
5.85000000 GHz
▽3 [T1] -56.79 dBm
5.85013788 GHz
D1 -5.35 dBm
D2 -25.35 dBm
1VIEW
1MA
F1
Center 5.8812 GHz
20 MHz/
Span 200 MHz


Marker 1 [T1]
-39.75 dBm
39.04609218 GHz
RBW 100 kHz
VBW 100 kHz
SWT 8.6 s
RF Att 30 dB
Unit dBm
Ref Lvl
20 dBm
D1 -1.34 dBm
D2 -21.34 dBm
1VIEW
1MA
F1
Start 6 GHz
3.4 GHz/
Stop 40 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(a), 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.

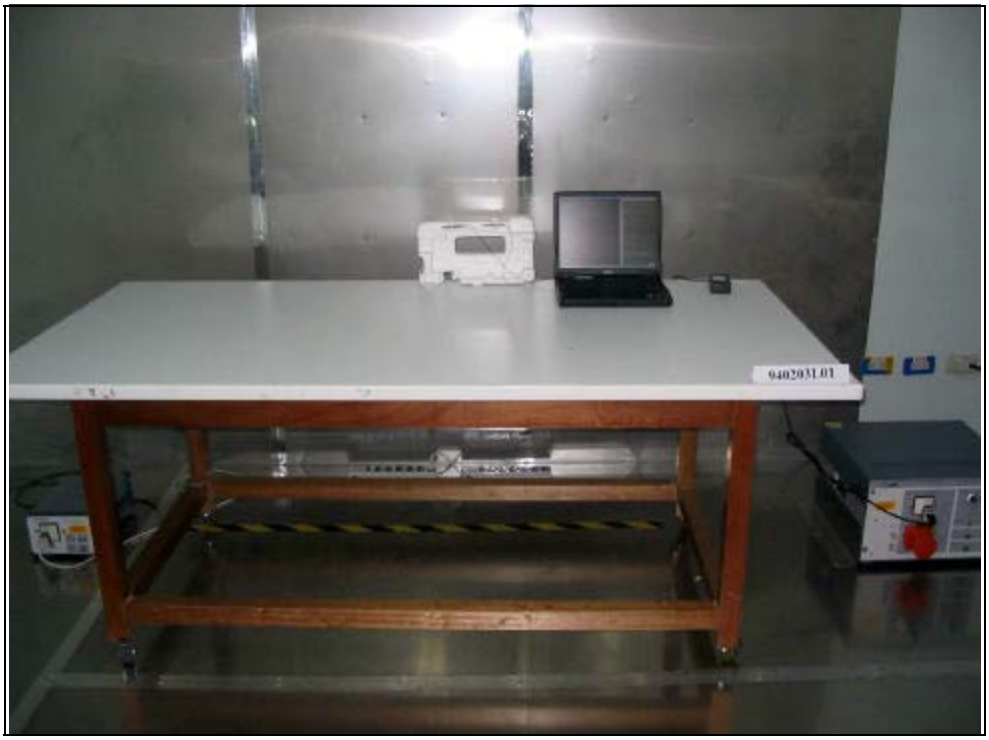
5.7.2 ANTENNA CONNECTED CONSTRUCTION

The antennas used in this product are Inverted F and Monopole antenna with UFL antenna connector. The maximum Gain of the antenna is 4.91dBi.

6. PHOTOGRAPHS OF THE TEST CONFIGURATION

CONDUCTED EMISSION TEST

Test Mode A

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Test Mode B


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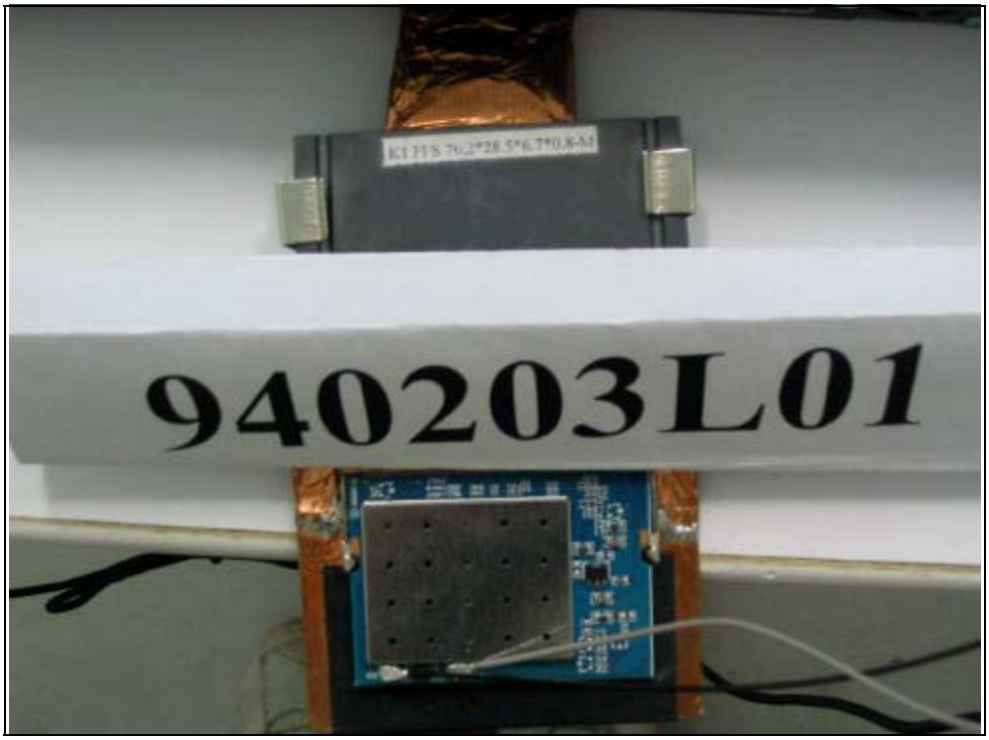
Test Mode C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Test Mode D


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Test Mode E


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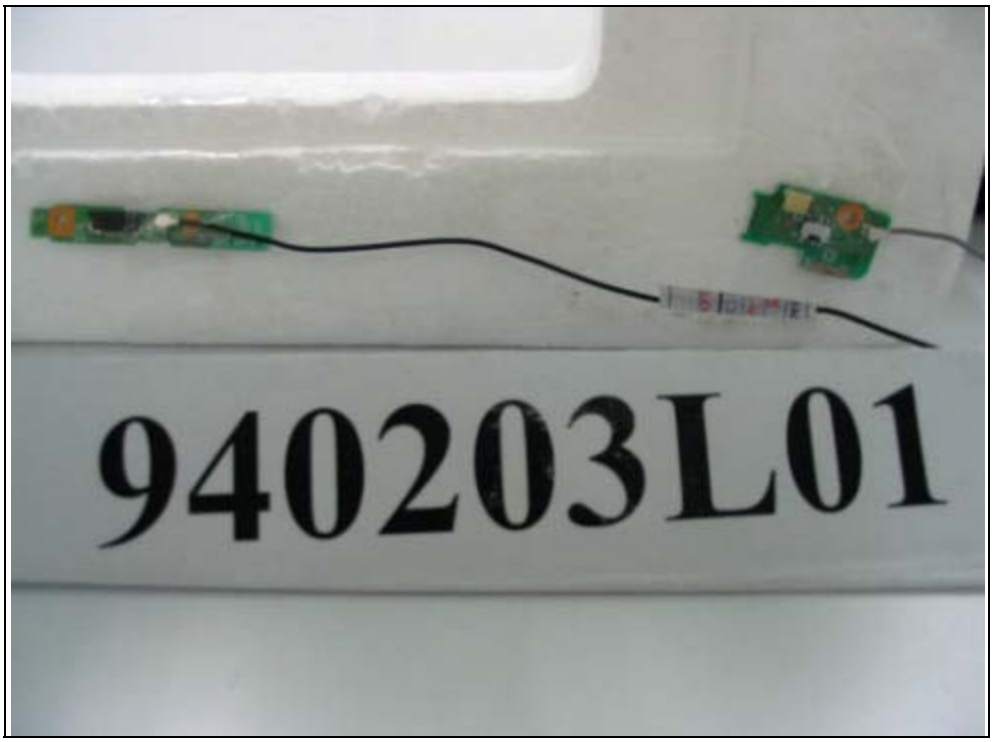
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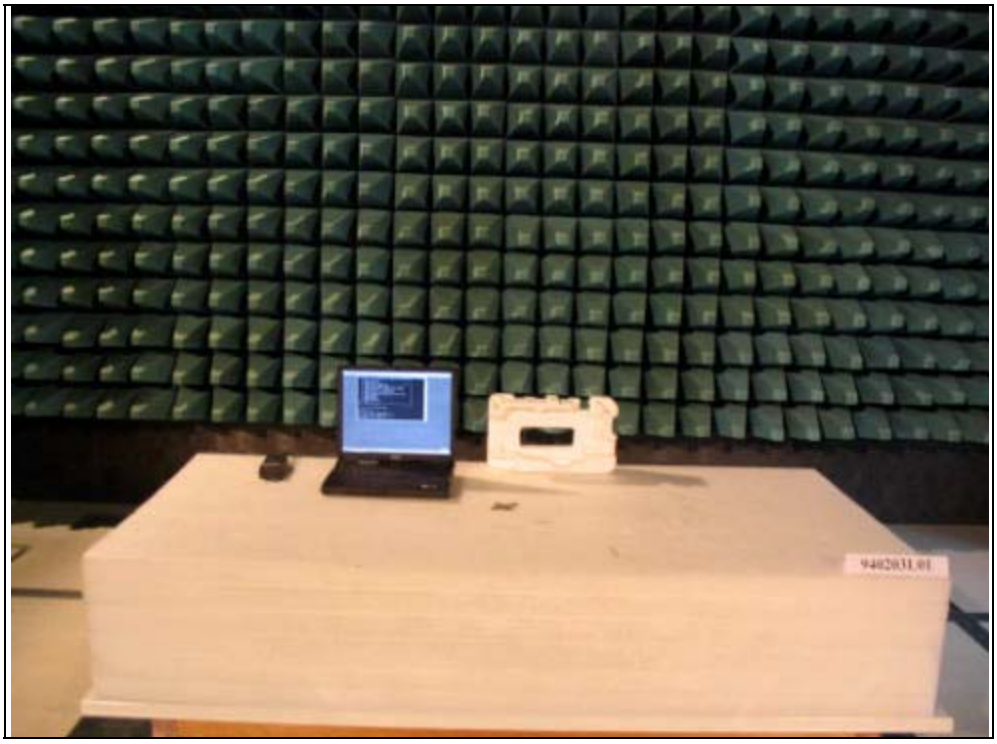
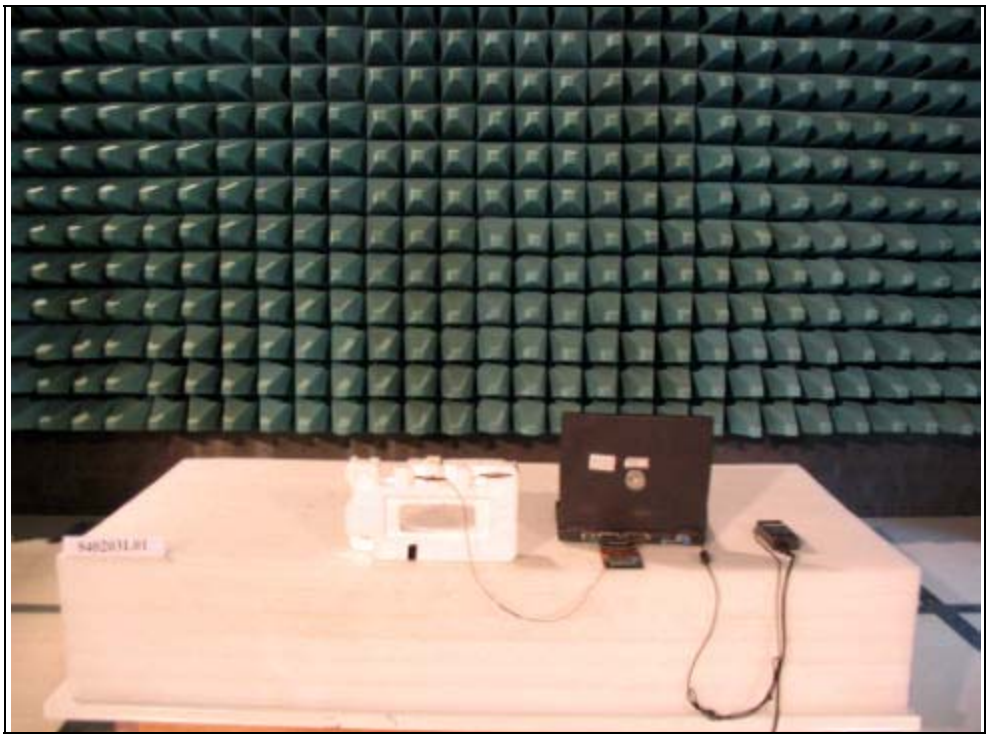
RADIATED EMISSION TEST

Test Mode A



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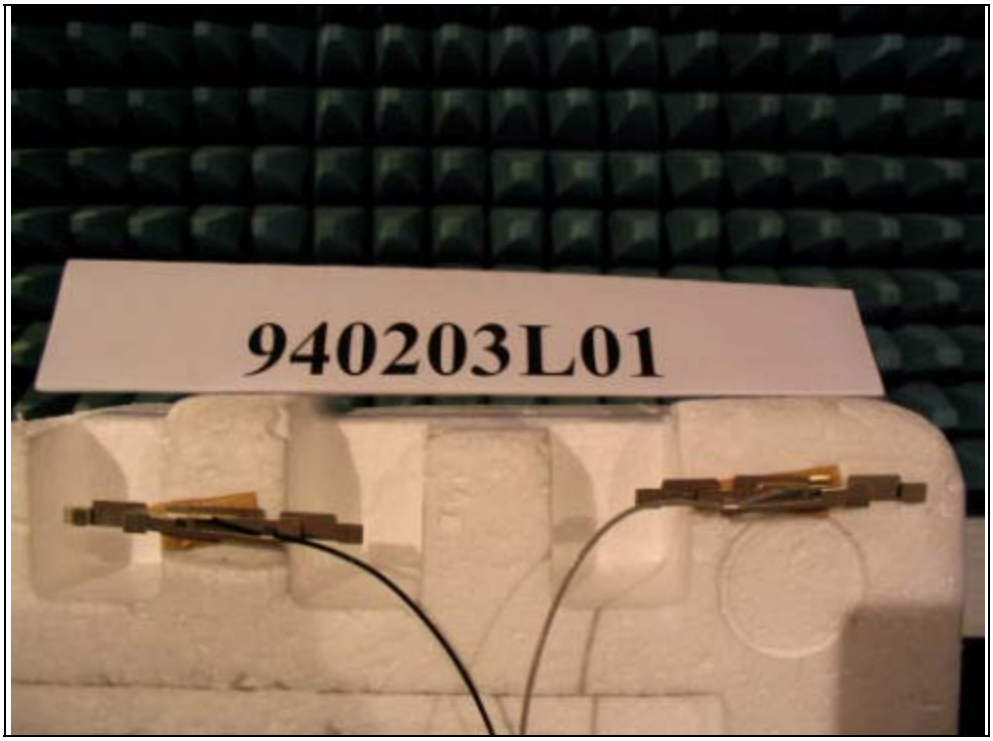
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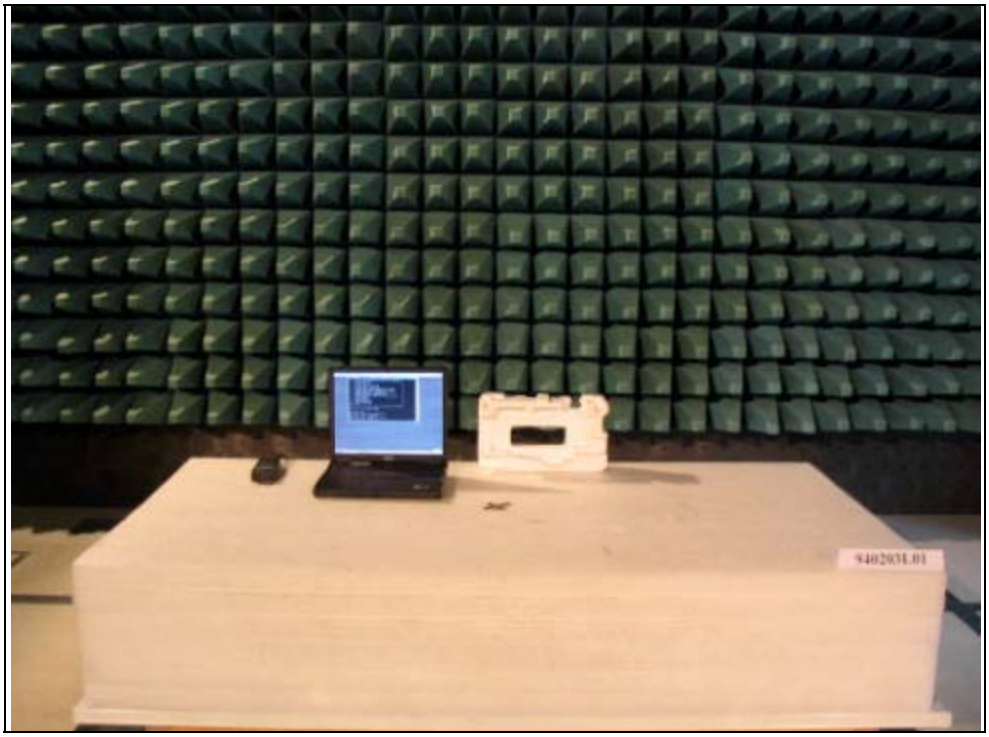
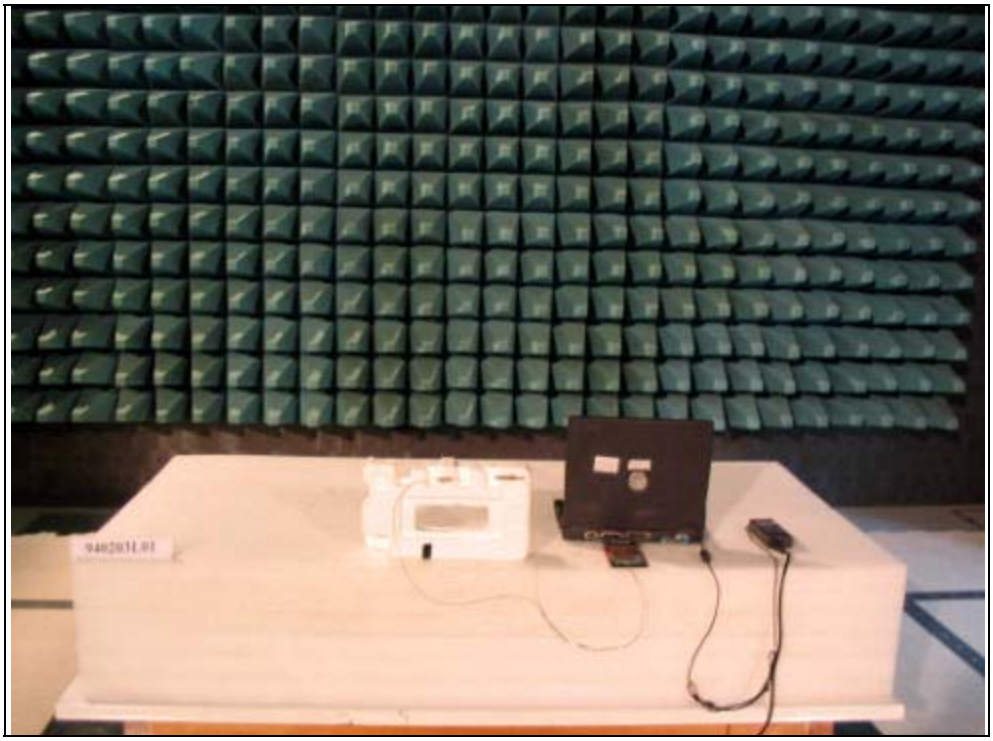
Test Mode B



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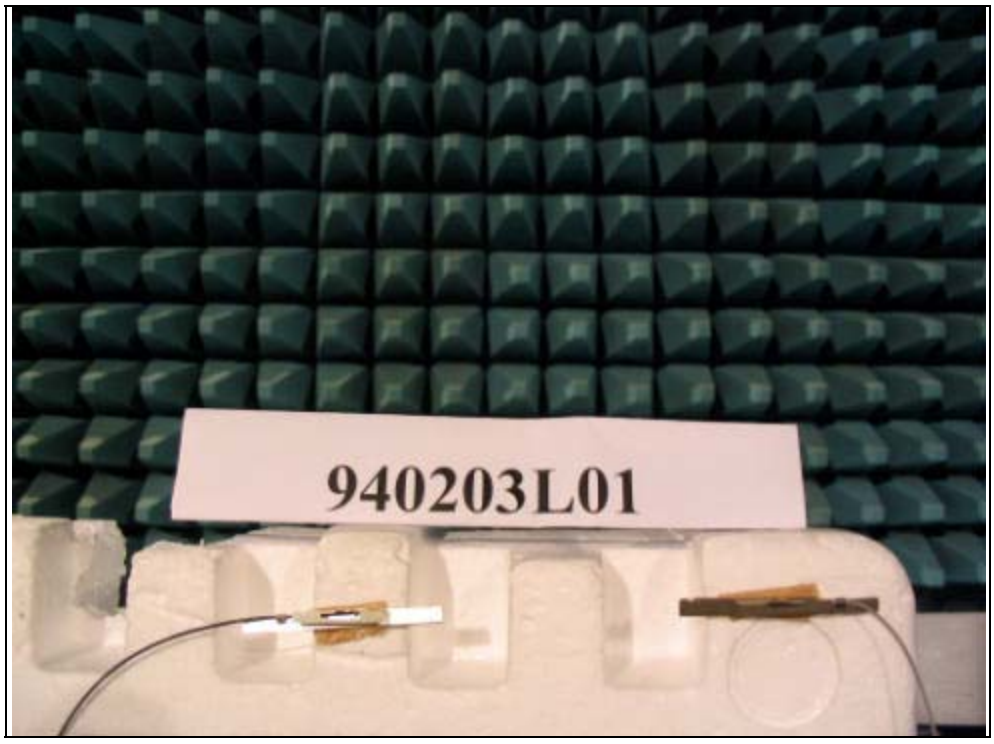
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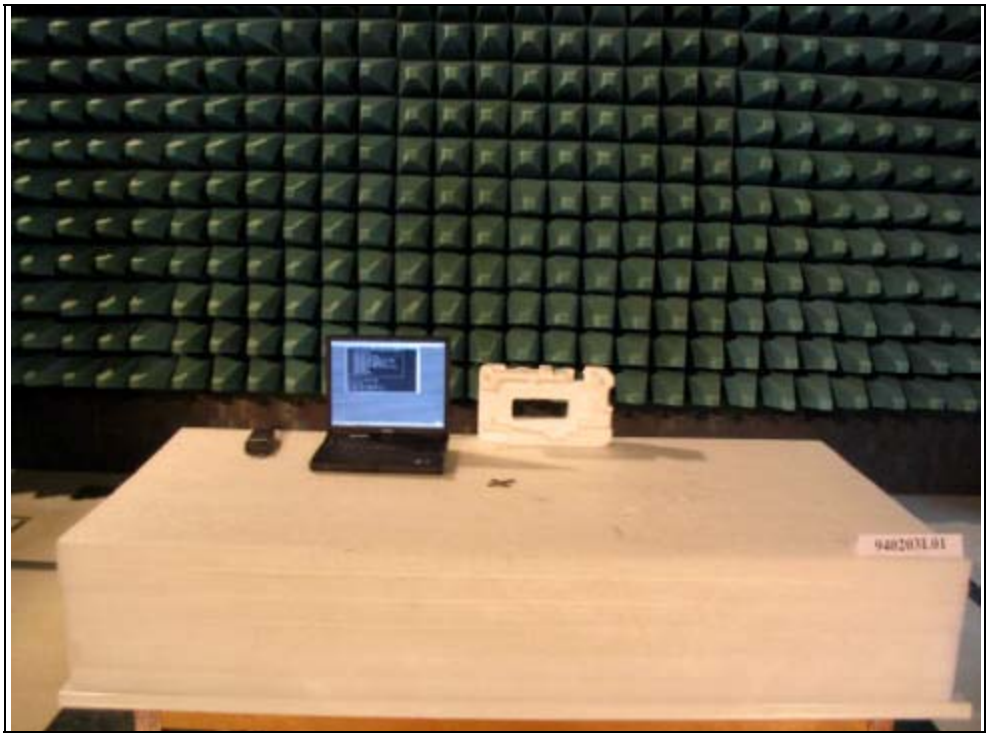
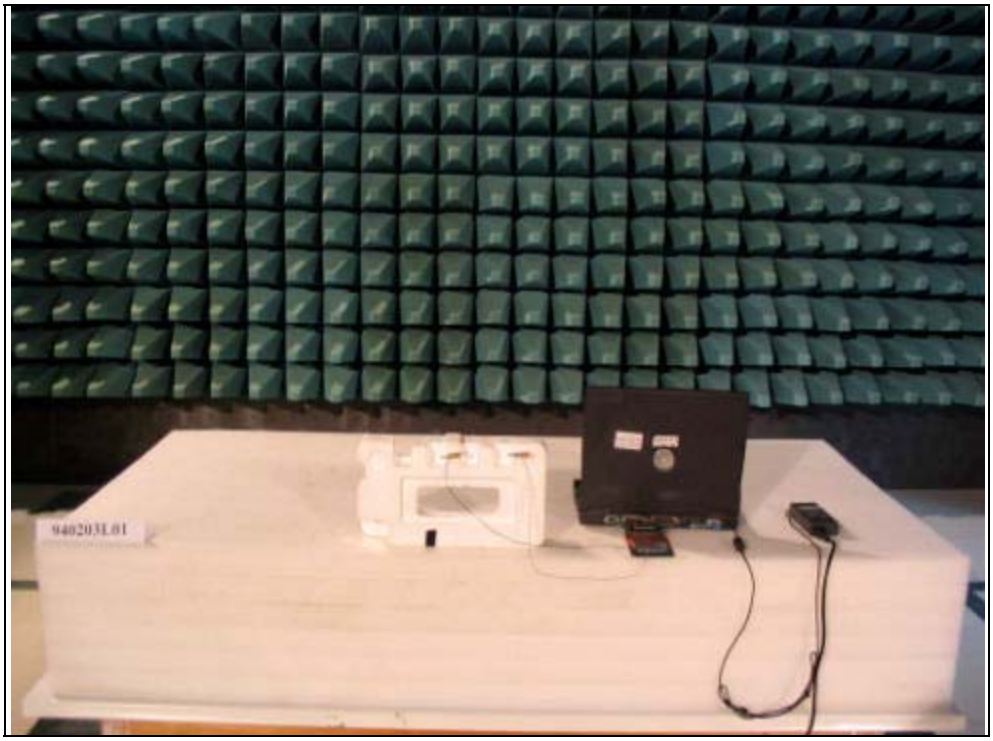
Test Mode C



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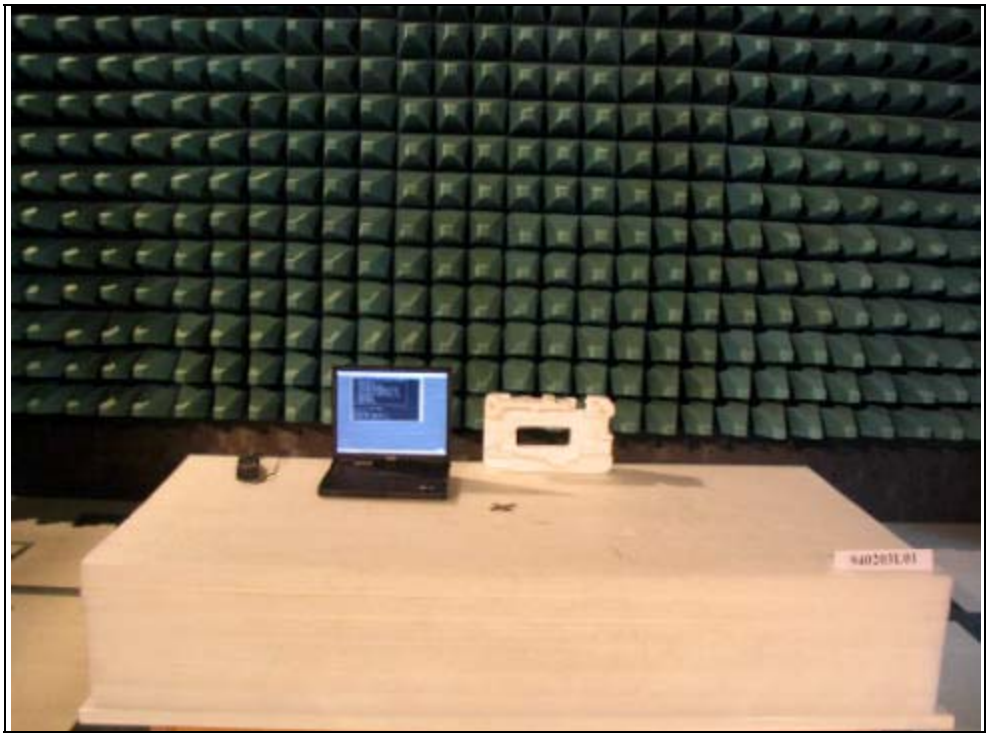
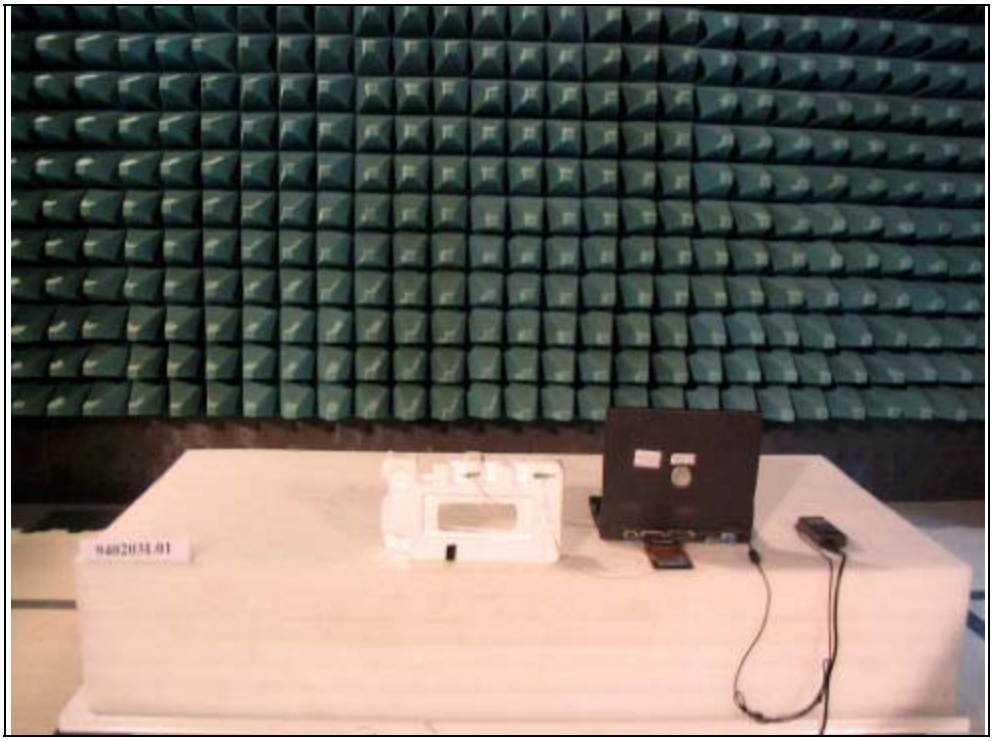
Test Mode D



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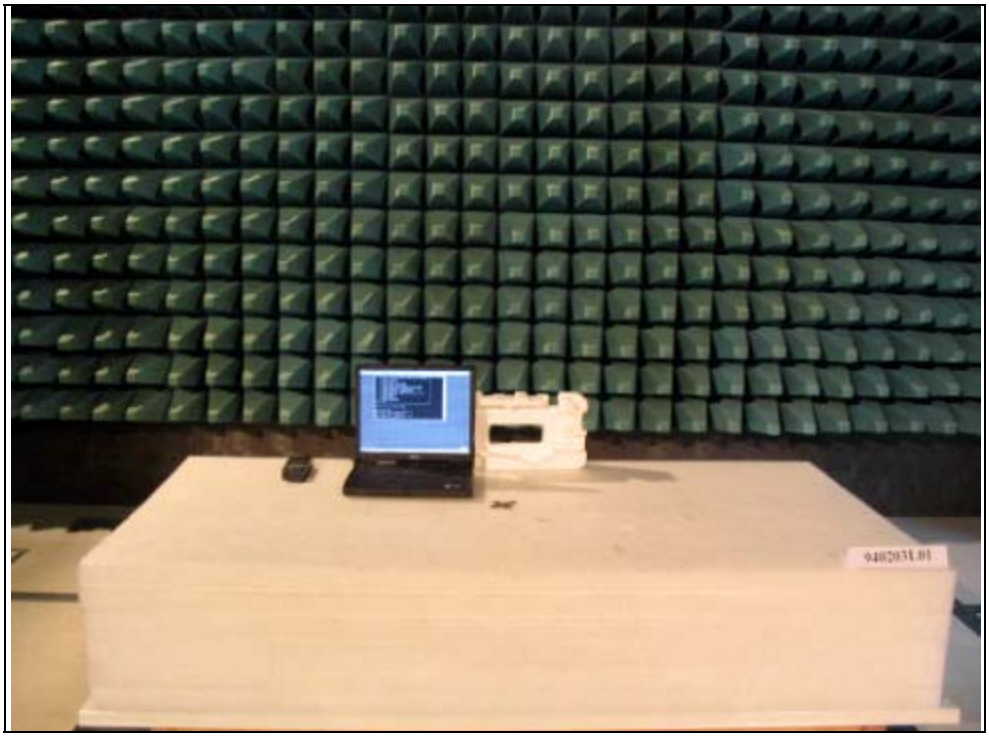
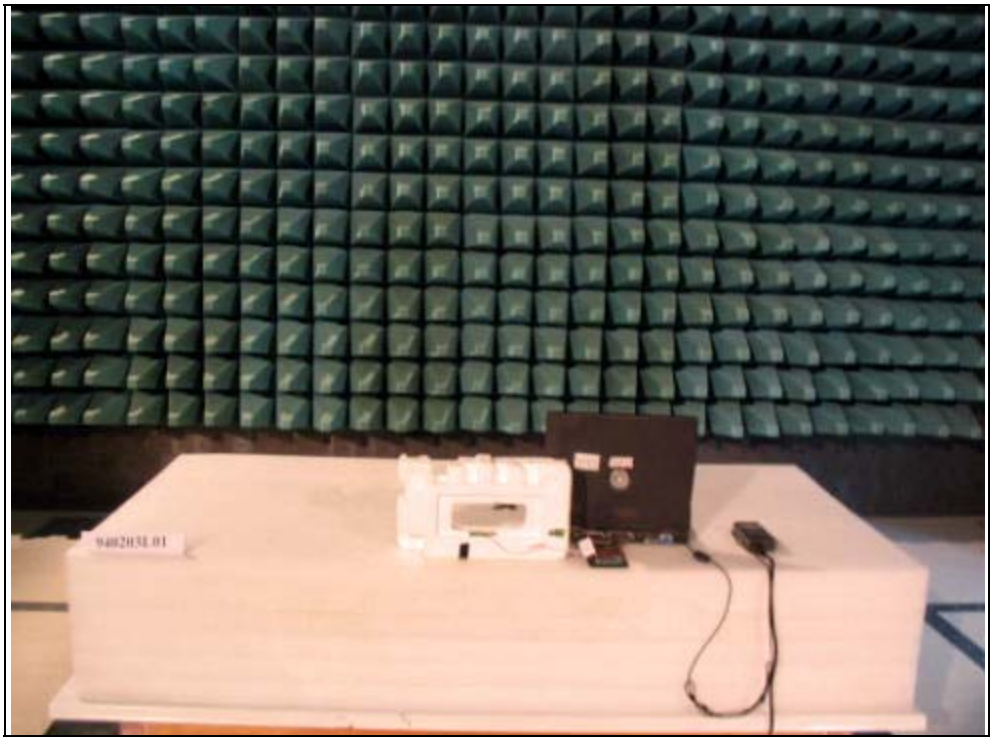
Test Mode E



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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