FCC TEST REPORT (15.247)

REPORT NO.:	RF940203L01
MODEL NO.:	WLL4070
RECEIVED:	Feb. 03, 2005
TESTED:	Feb. 15 ~ Mar. 02, 2005
ISSUED:	Mar. 07, 2005

APPLICANT:	ASKEY COMPUTER CORP.
ADDRESS:	10F, NO.119, CHIENKANG RD., CHUNG-HO, TAIPEI TAIWAN R.O.C.

ISSUED BY:	Advance Data Technology Corporation
LAB ADDRESS:	No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang 244, Taipei Hsien, Taiwan, R.O.C.
TEST LOCATION:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

0528
ILAC MRA

No. 2177-01

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1. CERTIFICATION

PRODUCT:	Wireless Mini PCI Card
BRAND NAME:	Askey
MODEL NO.:	WLL4070
TEST SAMPLE:	ENGINEERING SAMPLE
TESTED:	Feb. 15 ~ Mar. 02, 2005
APPLICANT:	ASKEY COMPUTER CORP.
STANDARDS:	FCC Part 15, Subpart C (Section 15.247), ANSI C63.4-2003

The above equipment has been tested by **Advance Data Technology Corporation,** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Candice Chen , **DATE:** Mar. 07, 2005
(Candice Chen)

TECHNICAL ACCEPTANCE : Gary Chang , **DATE:** Mar. 07, 2005
Responsible for RF (Gary Chang)

APPROVED BY : , **DATE:** Mar. 07, 2005
(Cody Chang, Deputy Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 15, Subpart C (Section 15.247)			
Standard Section	**Test Type and Limit**	**Result**	**Remark**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is –13.43dB at 0.170MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is –1.44dB at 2390.00MHz
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

2.1 MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4:

Measurement	Frequency	Uncertainty
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.63 dB
	200MHz ~1000MHz	3.65 dB
	1GHz ~ 18GHz	2.20 dB
	18GHz ~ 40GHz	1.88 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Wireless Mini PCI Card
MODEL NO.	WLL4070
POWER SUPPLY	3.3Vdc from host equipment
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b:11/5.5/2/1Mbps 802.11g: 54/48/36/24/18/12/9/6Mbps (Turbo mode: up to 108Mbps *see Note 3) 802.11a: 54/48/36/24/18/12/9/6Mbps (Turbo mode: up to 108Mbps *see Note 3)
FREQUENCY RANGE	802.11b & 802.11g: 2412 ~ 2462MHz 802.11a: 5.15 ~ 5.35GHz and 5.725 ~ 5.850GHz
NUMBER OF CHANNEL	802.11b & 802.11g: 11 for Normal mode / 1 for Turbo mode 802.11a: 13 for Normal mode / 5 for Turbo mode
CHANNEL SPACING	802.11b & 802.11g: 5MHz 802.11a: 20MHz for Normal mode / 40MHz for Turbo mode
OUTPUT POWER	802.11b: 50.699mW 802.11g: 51.286mW 802.11a: 35.892mW
DATA CABLE	NA
ANTENNA TYPE	Please refer to Note 1 below
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT have seventeen combinations of antenna type. Please refer to following table.

No.	Brand	Antenna type	P/N	11g Gain (dBi)	11a Gain (dBi)
1	NISSEI Electric Co., Ltd	Inverted F	CP115407-01	0.19dBi	3.03dBi
2	NISSEI Electric Co., Ltd	Inverted F	CP115404-01	-1.19dBi	0.42dBi
3	**NISSEI Electric Co., Ltd**	**Inverted F**	**CP115410-01**	**0.39dBi**	**3.50dBi**
4	NISSEI Electric Co., Ltd	Inverted F	CP115401-01	-0.97dBi	2.93dBi
5	NISSEI Electric Co., Ltd	Inverted F	CP115399-01	1.05dBi	0.70dBi
6	**NISSEI Electric Co., Ltd**	**Inverted F**	**CP115412-01**	**1.06dBi**	**-1.18dBi**
7	Yokowo Co., Ltd	Monopole	YCE-5008	0.14dBi	0.89dBi

8	Yokowo Co., Ltd	Monopole	YCE-5008(008L00196)	2.57dBi	2.47dBi
9	**NEC TOKIN Corp.**	**Monopole**	**DA-120D-2454M-FJ01**	**-0.80dBi**	**-1.70dBi**
10	Yokowo Co., Ltd	Monopole	YCE-5008(008L00197)	2.48dBi	0.20dBi
11	**Yokowo Co., Ltd**	**Monopole**	**YCE-5008**	**2.85dBi**	**1.45dBi**
12	**Yokowo Co., Ltd**	**Monopole**	**YCE-5008(008L00197)**	**0.69dBi**	**4.91dBi**
13	Yokowo Co., Ltd	Monopole	YCE-5008(008L00197)	1.03dBi	2.39dBi
14	Yokowo Co., Ltd	Monopole	YCE-5008	1.49dBi	2.09dBi
15	Yokowo Co., Ltd	Monopole	YCE-5008(008L00197)	2.31dBi	2.95dBi
16	NISSEI Electric Co., Ltd	Inverted F	CP115391-01	-0.14dBi	1.78dBi
17	Yokowo Co., Ltd	Monopole	YCE-5008	0.44dBi	3.38dBi

*Item 3, 6, 9, 11 and 12 were the worst case and chosen for final test. We have tested for each type of antenna and chosen the highest gain of each type for final test and recorded.

2. The EUT operates in both the 5GHz and 2.4GHz Bands and compatibility with 802.11a and 802.11b, 802.11g technology.
3. This EUT is capable of providing data rates of up to 108Mbps in Turbo Mode depending upon reception quality.
4. The above EUT information was declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

Operated in 2400 ~ 2483.5MHz band:

For 802.11b/g: Eleven channels are provided to this EUT for normal mode.

Channel	Frequency	Channel	Frequency
1	2412 MHz	7	2442 MHz
2	2417 MHz	8	2447 MHz
3	2422 MHz	9	2452 MHz
4	2427 MHz	10	2457 MHz
5	2432 MHz	11	2462 MHz
6	2437 MHz		

For 802.11g: One channel is provided to this EUT for turbo mode.

Channel	Frequency
6	2437 MHz

Operated in 5725 ~ 5850MHz band:

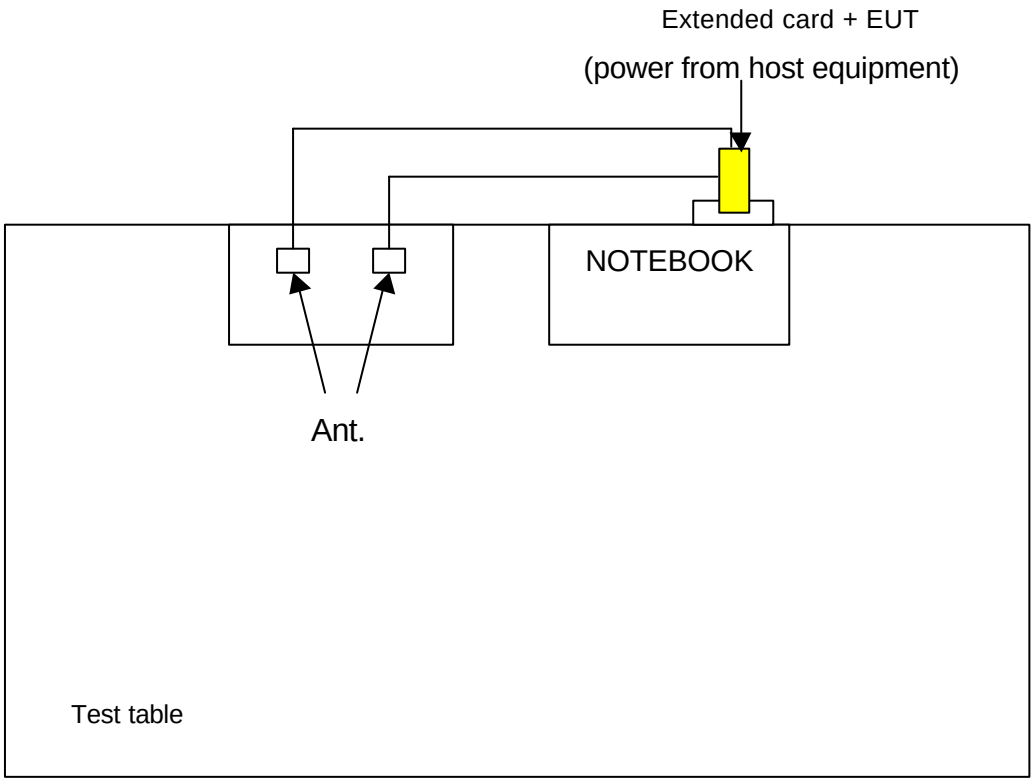
For 802.11a: Five channels are provided to this EUT for normal mode.

Channel	Frequency
1	5745 MHz
2	5765 MHz
3	5785 MHz
4	5805 MHz
5	5825 MHz

For 802.11a: Two channels are provided to this EUT for turbo mode.

Channel	Frequency
1	5760 MHz
2	5800 MHz

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
A	Note 1	x	x	Note 2	antenna 3 (see note 1 of section 3.1)
B	Note 1	x	x	Note 2	antenna 6 (see note 1 of section 3.1)
C	Note 1	x	x	Note 2	antenna 9 (see note 1 of section 3.1)
D	Note 1	x	x	Note 2	antenna 11 (see note 1 of section 3.1)
E	Note 1	x	x	Note 2	antenna 12 (see note 1 of section 3.1)

Where PLC: Power Line Conducted Emission RE<1G: Radiated Emission below 1GHz
RE≥1G: Radiated Emission above 1GHz APCM: Antenna Port Conducted Measurement

Note 1: No effect on Conducted RF measurement.

Note 2: Conducted RF measurement is independent of antenna.

Power Line Conducted Emission Test:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
D	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
E	802.11a	1 to 5	3	OFDM	BPSK	6

Radiated Emission Test (Below 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A, B, C, D, E	802.11g	1 to 11	1	OFDM	BPSK	6
A, B, C, D, E	802.11a	1 to 5	3	OFDM	BPSK	6

Radiated Emission Test (Above 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT configure mode	Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A, B, C, D, E	802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
A, B, C, D, E	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
A, B, C, D, E	802.11g Turbo	6	6	OFDM	BPSK	12
A, B, C, D, E	802.11a	1 to 5	1, 3, 5	OFDM	BPSK	6
A, B, C, D, E	802.11a Turbo	1 to 2	1, 2	OFDM	BPSK	12

Bandedge Measurement:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 11	DSSS	CCK	11
802.11g	1 to 11	1, 11	OFDM	BPSK	6
802.11g Turbo	6	6	OFDM	BPSK	12
802.11a	1 to 5	1, 5	OFDM	BPSK	6
802.11a Turbo	1 to 2	1, 2	OFDM	BPSK	12

Antenna Port Conducted Measurement:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11g Turbo	6	6	OFDM	BPSK	12
802.11a	1 to 5	1, 3, 5	OFDM	BPSK	6
802.11a Turbo	1 to 2	1, 2	OFDM	BPSK	12

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C. (15.247)
ANSI C63.4-2003

All test items have been performed and recorded as per the above standards.

NOTE: The EUT is also considered as a kind of computer peripheral, because the connection to computer is necessary for typical use. It has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

3.4 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	DELL	PP01L	15453736048	FCC DoC Approved

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

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

4. TEST TYPES AND RESULTS (802.11b & g 2412~2462MHz Band)

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 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.

4.1.2 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.

4.1.3 TEST PROCEDURES

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

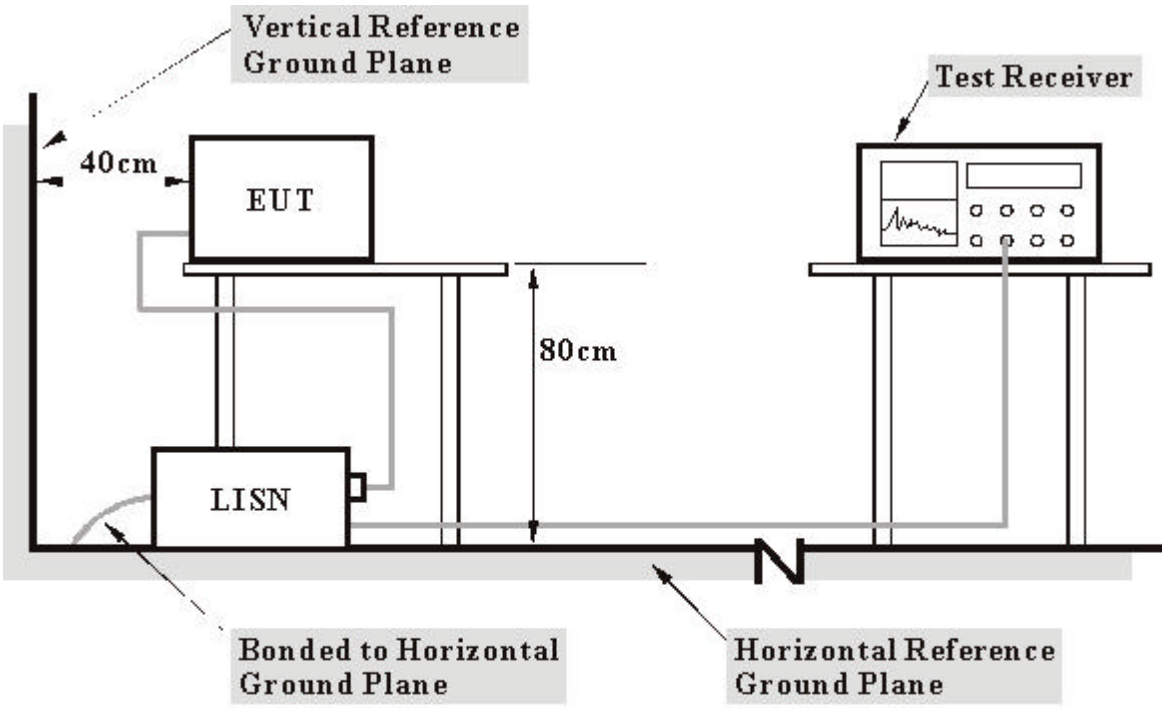
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 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.

4.1.6 EUT OPERATING CONDITIONS

a. Connected the EUT into notebook system via mini PCI extended card placed on a testing table.
b. The EUT ran a test program (provided by manufacturer) to enable all functions under transmission/receiving condition continuously at specific channel frequency.
c. The notebook system sent "H" messages to its screen.

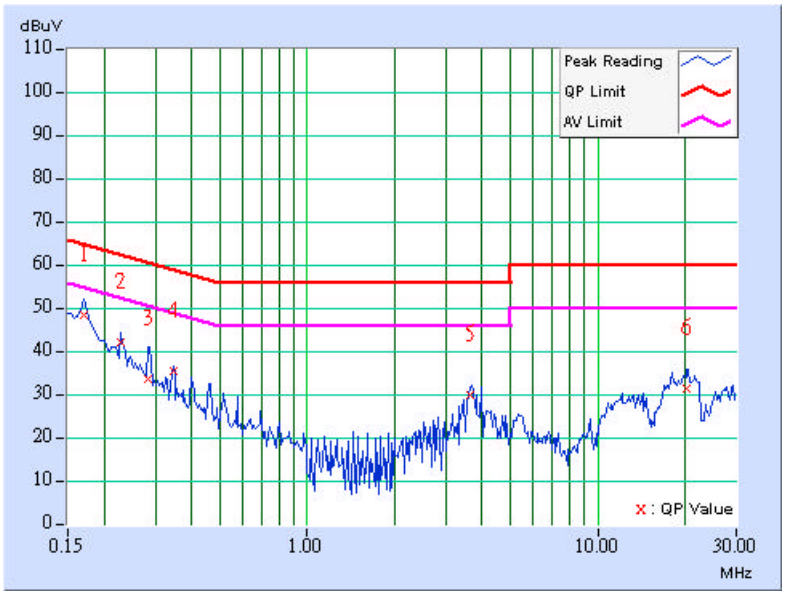
4.1.7 TEST RESULTS

Conducted Worst-Case Data (Antenna 11)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**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	47.75	-	47.85	-	64.98	54.98	-17.13	-
2	0.228	0.10	41.40	-	41.50	-	62.52	52.52	-21.02	-
3	0.283	0.11	32.98	-	33.09	-	60.73	50.73	-27.65	-
4	0.345	0.11	34.83	-	34.94	-	59.07	49.07	-24.13	-
5	3.617	0.20	29.09	-	29.29	-	56.00	46.00	-26.71	-
6	20.293	0.73	30.78	-	31.51	-	60.00	50.00	-28.49	-

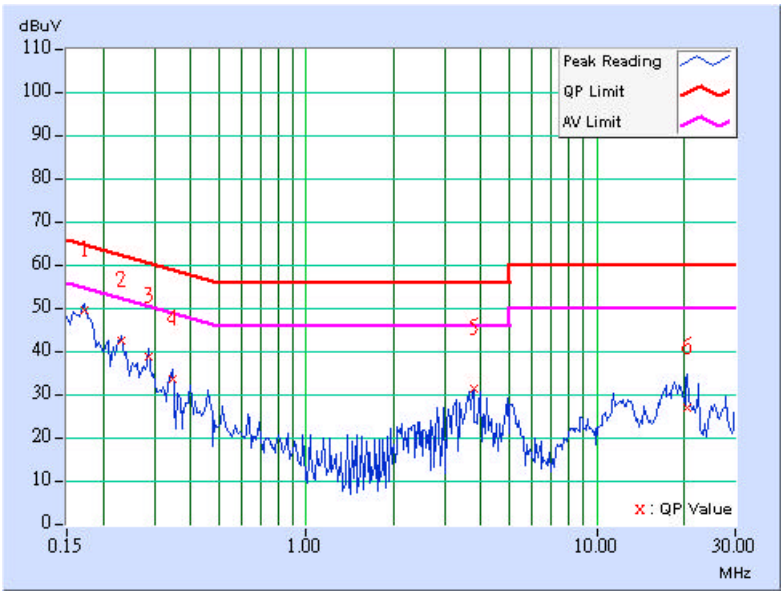
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission 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 1	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	0.173	0.10	49.13	-	49.23	-	64.79	54.79	-15.57	-
2	0.232	0.10	42.33	-	42.43	-	62.38	52.38	-19.94	-
3	0.287	0.11	38.43	-	38.54	-	60.62	50.62	-22.08	-
4	0.345	0.11	33.26	-	33.37	-	59.07	49.07	-25.70	-
5	3.793	0.20	31.08	-	31.28	-	56.00	46.00	-24.72	-
6	20.465	0.45	26.57	-	27.02	-	60.00	50.00	-32.98	-

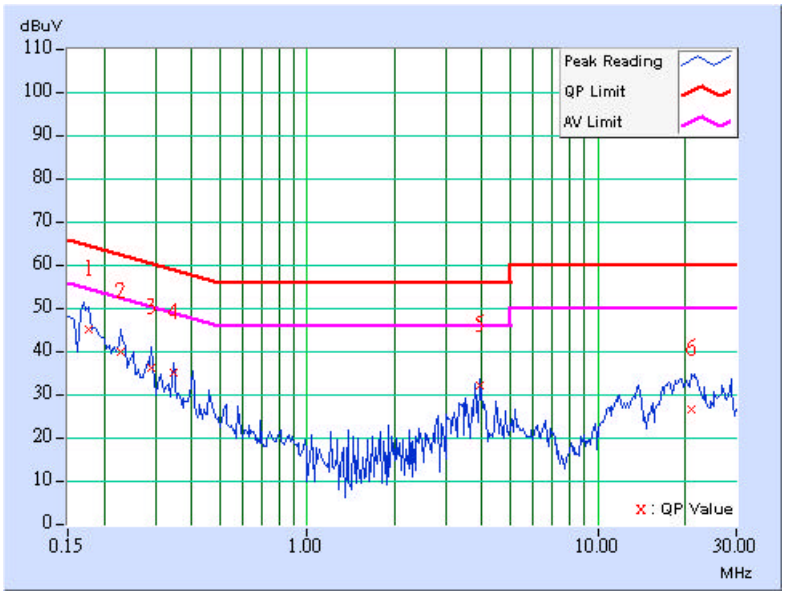
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission 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 6	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	0.177	0.10	44.33	-	44.43	-	64.61	54.61	-20.18	-
2	0.228	0.10	39.35	-	39.45	-	62.52	52.52	-23.07	-
3	0.291	0.11	35.49	-	35.60	-	60.51	50.51	-24.91	-
4	0.345	0.11	34.49	-	34.60	-	59.07	49.07	-24.47	-
5	3.922	0.21	31.59	-	31.80	-	56.00	46.00	-24.20	-
6	21.113	0.75	25.74	-	26.49	-	60.00	50.00	-33.51	-

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 6	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	0.173	0.10	47.93	-	48.03	-	64.79	54.79	-16.77	-
2	0.232	0.10	39.52	-	39.62	-	62.38	52.38	-22.75	-
3	0.287	0.11	35.56	-	35.67	-	60.62	50.62	-24.95	-
4	0.345	0.11	32.61	-	32.72	-	59.07	49.07	-26.35	-
5	3.801	0.20	30.91	-	31.11	-	56.00	46.00	-24.89	-
6	17.980	0.41	27.13	-	27.54	-	60.00	50.00	-32.46	-

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
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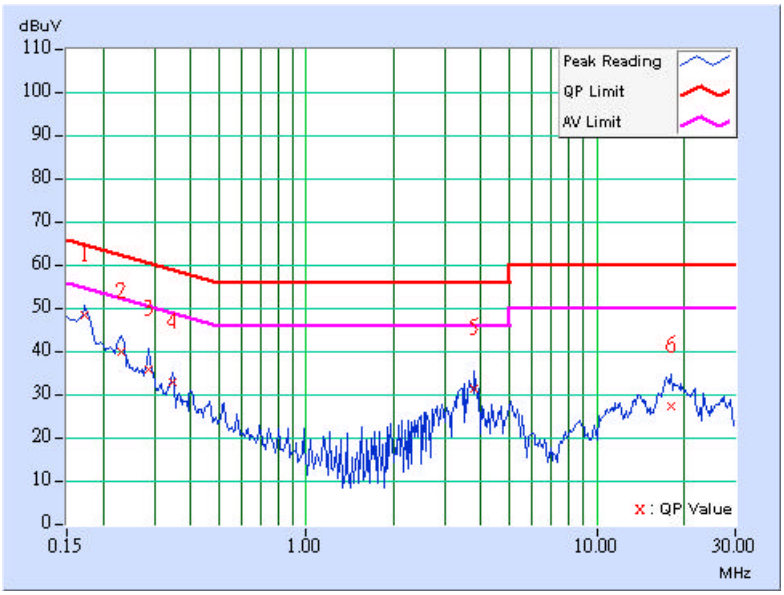
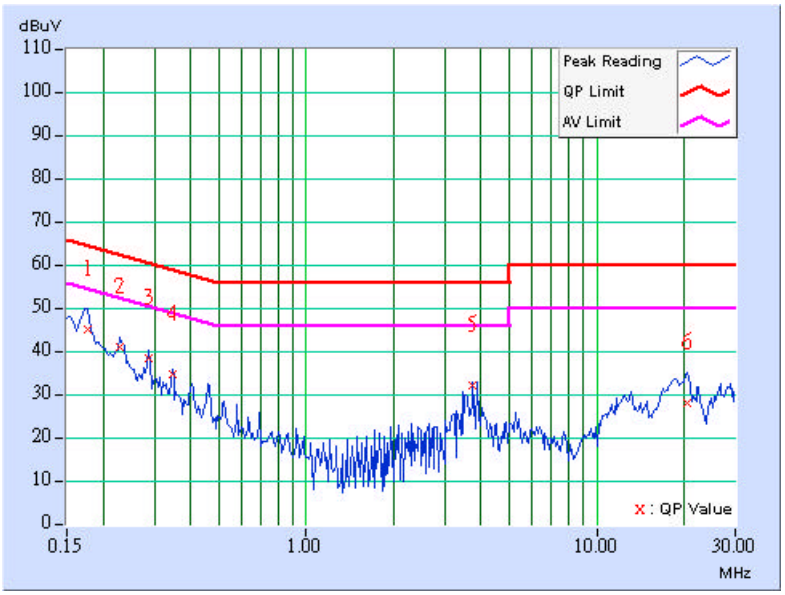


EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	PHASE	Line (L)
ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa	TESTED BY	Gary Chang

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	0.177	0.10	44.51	-	44.61	-	64.61	54.61	-20.00	-
2	0.228	0.10	40.40	-	40.50	-	62.52	52.52	-22.02	-
3	0.287	0.11	37.88	-	37.99	-	60.62	50.62	-22.63	-
4	0.345	0.11	34.22	-	34.33	-	59.07	49.07	-24.74	-
5	3.750	0.21	31.67	-	31.88	-	56.00	46.00	-24.12	-
6	20.598	0.74	27.29	-	28.03	-	60.00	50.00	-31.97	-

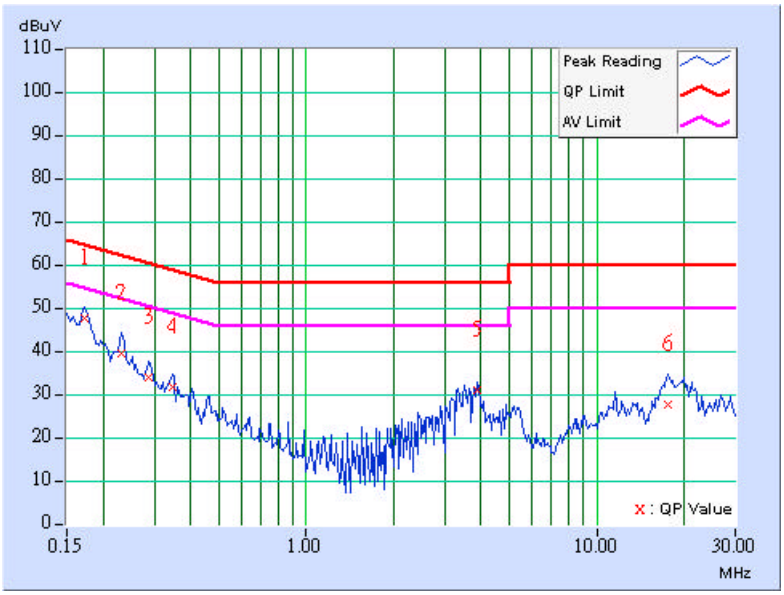
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 11	**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	0.173	0.10	47.30	-	47.40	-	64.79	54.79	-17.40	-
2	0.232	0.10	39.11	-	39.21	-	62.38	52.38	-23.16	-
3	0.287	0.11	33.75	-	33.86	-	60.62	50.62	-26.76	-
4	0.345	0.11	31.30	-	31.41	-	59.07	49.07	-27.66	-
5	3.871	0.20	30.84	-	31.04	-	56.00	46.00	-24.96	-
6	17.523	0.41	27.39	-	27.80	-	60.00	50.00	-32.20	-

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.



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 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.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESI7	838496/016	Jan. 07, 2006
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Nov. 29, 2005
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Jan. 22, 2006
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-404	Jan. 05, 2006
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA 9170242	Jan. 23, 2006
Preamplifier Agilent	8447D	2944A10631	Nov. 17, 2005
Preamplifier Agilent	8449B	3008A01960	Nov. 14, 2005
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	219272/4	Mar. 04, 2005
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	219275/4	Mar. 04, 2005
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA
Turn Table ADT.	TT100.	TT93021704	NA
Turn Table Controller ADT.	SC100.	SC93021704	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 3.

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 IC4924-4.

4.2.3 TEST PROCEDURES

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

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

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

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

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

f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using the quasi-peak method or average method as specified and then reported in Data sheet peak mode and QP mode.

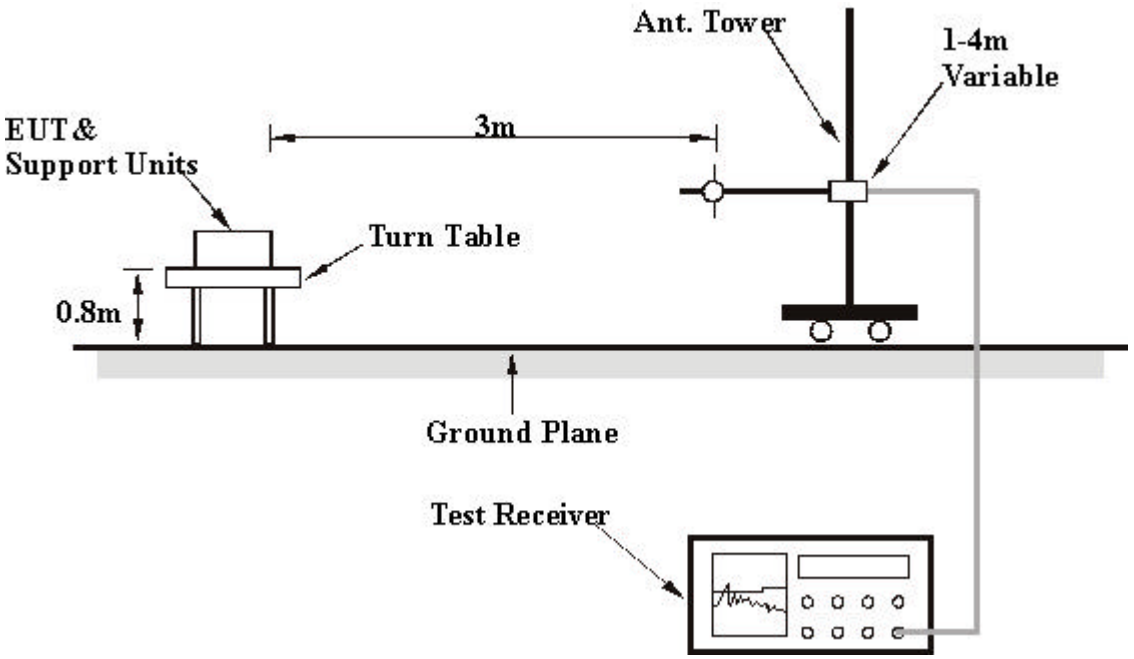
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 1 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

4.2.7 TEST RESULTS

Below 1GHz Worst-Case Data (Antenna 3)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**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 1	**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 1	**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 1	**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 1	**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

802.11b DSSS modulation (Antenna 3)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 62%RH, 991hPa	**TESTED BY**	Long Chen
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	2390.00	56.14 PK	74.00	-17.86	1.81 H	19	24.24	31.90
1	2390.00	47.55 AV	54.00	-6.45	1.81 H	19	15.65	31.90
2	*2412.00	109.51 PK			1.84 H	19	77.54	31.97
2	*2412.00	101.41 AV			1.84 H	19	69.44	31.97
3	3216.00	48.80 PK	74.00	-25.20	1.02 H	298	14.61	34.19
4	4824.00	53.61 PK	74.00	-20.39	1.54 H	38	15.15	38.46
4	4824.00	40.59 AV	54.00	-13.41	1.54 H	38	2.13	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	2390.00	54.62 PK	74.00	-19.38	1.75 V	229	22.72	31.90
1	2390.00	44.87 AV	54.00	-9.13	1.75 V	229	12.97	31.90
2	*2412.00	102.45 PK			1.75 V	229	70.48	31.97
2	*2412.00	94.18 AV			1.75 V	229	62.21	31.97
3	3216.00	45.26 PK	74.00	-28.74	1.01 V	177	11.07	34.19
4	4824.00	48.89 PK	74.00	-25.11	1.16 V	36	10.43	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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 62%RH, 991hPa	TESTED BY	Long Chen
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	*2437.00	109.84 PK			1.76 H	20	77.77	32.07
1	*2437.00	102.15 AV			1.76 H	20	70.08	32.07
2	3248.00	48.52 PK	74.00	-25.48	1.09 H	358	14.29	34.23
3	4874.00	53.98 PK	74.00	-20.02	1.15 H	322	15.37	38.61
3	4874.00	41.23 AV	54.00	-12.77	1.15 H	322	2.62	38.61

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	*2437.00	102.18 PK			1.76 V	234	70.11	32.07
1	*2437.00	94.40 AV			1.76 V	234	62.33	32.07
2	3248.00	45.29 PK	74.00	-28.71	1.64 V	158	11.06	34.23
3	4874.00	47.83 PK	74.00	-26.17	1.54 V	177	9.22	38.61

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 62%RH, 991hPa	TESTED BY	Long Chen
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	*2462.00	109.83 PK			1.81 H	13	77.67	32.16
1	*2462.00	102.17 AV			1.81 H	13	70.01	32.16
2	2486.00	57.87 PK	74.00	-16.13	1.81 H	13	25.62	32.25
2	2486.00	48.46 AV	54.00	-5.54	1.81 H	13	16.21	32.25
3	3282.00	47.89 PK	74.00	-26.11	1.16 H	360	13.61	34.28
4	4924.00	52.69 PK	74.00	-21.31	1.02 H	347	13.93	38.75
4	4924.00	39.70 AV	54.00	-14.30	1.02 H	347	0.94	38.75

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	*2462.00	102.17 PK			1.76 V	251	70.01	32.16
1	*2462.00	93.77 AV			1.76 V	251	61.61	32.16
2	2486.00	55.42 PK	74.00	-18.58	1.76 V	251	23.17	32.25
2	2486.00	45.43 AV	54.00	-8.57	1.76 V	251	13.18	32.25
3	3282.00	46.10 PK	74.00	-27.90	1.14 V	227	11.82	34.28
4	4924.00	48.74 PK	74.00	-25.26	1.15 V	265	9.99	38.75

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11b DSSS modulation (Antenna 6)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
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	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	2390.00	55.26 PK	74.00	-18.74	1.15 H	116	23.39	31.87
1	2390.00	45.69 AV	54.00	-8.31	1.15 H	116	13.82	31.87
2	*2412.00	110.73 PK			1.15 H	116	78.77	31.96
2	*2412.00	103.29 AV			1.15 H	116	71.33	31.96
3	3216.00	45.84 PK	74.00	-28.16	1.57 H	3	11.87	33.96
4	4824.00	46.75 PK	74.00	-27.25	1.15 H	161	8.92	37.83

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	2390.00	54.33 PK	74.00	-19.67	1.00 V	115	22.46	31.87
1	2390.00	44.42 AV	54.00	-9.58	1.00 V	115	12.55	31.87
2	*2412.00	103.90 PK			1.00 V	115	71.94	31.96
2	*2412.00	96.26 AV			1.00 V	115	64.30	31.96
3	3216.00	46.01 PK	74.00	-27.99	1.02 V	13	12.04	33.96
4	4824.00	47.43 PK	74.00	-26.57	1.06 V	321	9.60	37.83

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
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	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	*2437.00	111.88 PK			1.00 H	137	79.82	32.06
1	*2437.00	104.39 AV			1.00 H	137	72.33	32.06
2	3248.00	46.09 PK	74.00	-27.91	1.07 H	238	12.10	33.99
3	4874.00	47.25 PK	74.00	-26.75	1.03 H	131	9.27	37.98

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	*2437.00	102.62 PK			1.00 V	296	70.56	32.06
1	*2437.00	95.35 AV			1.00 V	296	63.29	32.06
2	3248.00	46.45 PK	74.00	-27.55	1.05 V	241	12.46	33.99
3	4874.00	47.83 PK	74.00	-26.17	1.06 V	50	9.85	37.98

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
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	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	*2462.00	111.59 PK			1.00 H	127	79.43	32.16
1	*2462.00	104.07 AV			1.00 H	127	71.91	32.16
2	2487.50	58.88 PK	74.00	-15.12	1.00 H	127	26.62	32.26
2	2487.50	50.65 AV	54.00	-3.35	1.00 H	127	18.39	32.26
3	3282.00	47.70 PK	74.00	-26.30	1.16 H	89	13.69	34.02
4	4924.00	54.35 PK	74.00	-19.65	1.13 H	164	16.21	38.14
4	4924.00	44.12 AV	54.00	-9.88	1.13 H	164	5.98	38.14

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	*2462.00	103.23 PK			1.29 V	81	71.07	32.16
1	*2462.00	95.88 AV			1.29 V	81	63.72	32.16
2	2487.50	53.73 PK	74.00	-20.27	1.29 V	81	21.47	32.26
2	2487.50	45.96 AV	54.00	-8.04	1.29 V	81	13.70	32.26
3	3282.00	47.98 PK	74.00	-26.02	1.08 V	99	13.96	34.02
4	4924.00	54.95 PK	74.00	-19.05	1.07 V	32	16.81	38.14
4	4924.00	44.98 AV	54.00	-9.02	1.07 V	32	6.84	38.14

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11b DSSS modulation (Antenna 9)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
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	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	2390.00	58.57 PK	74.00	-15.43	1.04 H	192	26.70	31.87
1	2390.00	50.02 AV	54.00	-3.98	1.04 H	192	18.15	31.87
2	*2412.00	107.32 PK			1.04 H	192	75.36	31.96
2	*2412.00	100.10 AV			1.04 H	192	68.14	31.96
3	3216.00	47.04 PK	74.00	-26.96	1.06 H	343	13.07	33.96
4	4824.00	52.81 PK	74.00	-21.19	1.16 H	187	14.98	37.83
4	4824.00	44.79 AV	54.00	-9.21	1.16 H	187	6.96	37.83
5	9648.00	57.05 PK	74.00	-16.95	1.01 H	231	9.28	47.77
5	9648.00	47.26 AV	54.00	-6.74	1.01 H	231	-0.51	47.77

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	2390.00	55.57 PK	74.00	-18.43	1.00 V	73	23.70	31.87
1	2390.00	44.99 AV	54.00	-9.01	1.00 V	73	13.12	31.87
2	*2412.00	100.95 PK			1.00 V	73	68.99	31.96
2	*2412.00	93.59 AV			1.00 V	73	61.63	31.96
3	3216.00	46.63 PK	74.00	-27.37	1.07 V	132	12.67	33.96
4	4824.00	52.27 PK	74.00	-21.73	1.03 V	181	14.44	37.83
4	4824.00	43.62 AV	54.00	-10.38	1.03 V	181	5.79	37.83
5	9648.00	57.25 PK	74.00	-16.75	1.00 V	168	9.48	47.77
5	9648.00	47.63 AV	54.00	-6.37	1.00 V	168	-0.14	47.77

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
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	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	*2437.00	108.78 PK			1.00 H	191	76.72	32.06
1	*2437.00	101.35 AV			1.00 H	191	69.29	32.06
2	3248.00	48.15 PK	74.00	-25.85	1.03 H	226	14.16	33.99
3	4874.00	54.36 PK	74.00	-19.64	1.01 H	221	16.38	37.98
3	4874.00	45.17 AV	54.00	-8.83	1.01 H	221	7.19	37.98
4	9748.00	59.55 PK	74.00	-14.45	1.02 H	96	11.52	48.03
4	9748.00	47.89 AV	54.00	-6.11	1.02 H	96	-0.14	48.03

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	*2437.00	101.08 PK			1.63 V	66	69.02	32.06
1	*2437.00	93.98 AV			1.63 V	66	61.92	32.06
2	3248.00	46.26 PK	74.00	-27.74	1.04 V	135	12.27	33.99
3	4874.00	51.35 PK	74.00	-22.65	1.07 V	269	13.37	37.98
3	4874.00	41.68 AV	54.00	-12.32	1.07 V	269	3.70	37.98
4	9748.00	57.79 PK	74.00	-16.21	1.16 V	131	9.76	48.03
4	9748.00	46.15 AV	54.00	-7.85	1.16 V	131	-1.88	48.03

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
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	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	*2462.00	109.42 PK			1.01 H	155	77.26	32.16
1	*2462.00	101.96 AV			1.01 H	155	69.80	32.16
2	2487.50	57.40 PK	74.00	-16.60	1.01 H	155	25.14	32.26
2	2487.50	48.35 AV	54.00	-5.65	1.01 H	155	16.09	32.26
3	3282.00	48.17 PK	74.00	-25.83	1.16 H	124	14.15	34.02
4	4924.00	55.03 PK	74.00	-18.97	1.13 H	333	16.89	38.14
4	4924.00	45.79 AV	54.00	-8.21	1.13 H	333	7.65	38.14
5	9848.00	60.35 PK	74.00	-13.65	1.07 H	323	12.03	48.32
5	9848.00	48.67 AV	54.00	-5.33	1.07 H	323	0.35	48.32

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	*2462.00	101.44 PK			1.67 V	65	69.28	32.16
1	*2462.00	94.15 AV			1.67 V	65	61.99	32.16
2	2486.30	55.39 PK	74.00	-18.61	1.67 V	65	23.13	32.26
2	2486.30	45.83 AV	54.00	-8.17	1.67 V	65	13.57	32.26
3	3282.00	46.73 PK	74.00	-27.27	1.09 V	233	12.71	34.02
4	4924.00	51.83 PK	74.00	-22.17	1.10 V	164	13.69	38.14
4	4924.00	42.66 AV	54.00	-11.34	1.10 V	164	4.52	38.14
5	9848.00	57.98 PK	74.00	-16.02	1.09 V	23	9.66	48.32
5	9848.00	46.88 AV	54.00	-7.12	1.09 V	23	-1.44	48.32

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11b DSSS modulation (Antenna 11)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 63%RH, 991hPa	**TESTED BY**	Long Chen
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	2386.00	59.02 PK	74.00	-14.98	1.00 H	350	26.67	32.35
1	2386.00	51.22 AV	54.00	-2.78	1.00 H	350	18.87	32.35
2	*2412.00	112.63 PK			1.00 H	350	80.16	32.47
2	*2412.00	104.83 AV			1.00 H	350	72.36	32.47
3	3216.00	46.88 PK	74.00	-27.12	1.39 H	30	12.44	34.44
4	4824.00	54.99 PK	74.00	-19.01	1.04 H	196	16.82	38.17
4	4824.00	45.10 AV	54.00	-8.90	1.04 H	196	6.93	38.17
5	9648.00	58.17 PK	74.00	-15.83	1.47 H	310	9.45	48.72
5	9648.00	49.48 AV	54.00	-4.52	1.47 H	310	0.76	48.72

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	2386.00	51.54 PK	74.00	-22.46	1.84 V	217	19.19	32.35
1	2386.00	43.76 AV	54.00	-10.24	1.84 V	217	11.41	32.35
2	*2412.00	105.15 PK			1.84 V	217	72.68	32.47
2	*2412.00	97.37 AV			1.84 V	217	64.90	32.47
3	3216.00	45.41 PK	74.00	-28.59	1.13 V	25	10.97	34.44
4	4824.00	51.58 PK	74.00	-22.42	1.12 V	335	13.41	38.17
4	4824.00	42.33 AV	54.00	-11.67	1.12 V	335	4.16	38.17
5	9648.00	54.36 PK	74.00	-19.64	1.05 V	254	5.64	48.72
5	9648.00	46.22 AV	54.00	-7.78	1.05 V	254	-2.50	48.72

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 63%RH, 991hPa	**TESTED BY**	Long Chen
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	*2437.00	113.06 PK			1.00 H	344	80.48	32.58
1	*2437.00	105.27 AV			1.00 H	344	72.69	32.58
2	3248.00	48.63 PK	74.00	-25.37	1.04 H	227	14.13	34.50
3	4874.00	54.96 PK	74.00	-19.04	1.52 H	345	16.68	38.28
3	4874.00	45.87 AV	54.00	-8.13	1.52 H	345	7.59	38.28
4	9748.00	60.04 PK	74.00	-13.96	1.00 H	330	11.07	48.97
4	9748.00	48.37 AV	54.00	-5.63	1.00 H	330	-0.60	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	*2437.00	105.35 PK			1.79 V	214	72.77	32.58
1	*2437.00	98.00 AV			1.79 V	214	65.42	32.58
2	3248.00	46.65 PK	74.00	-27.35	1.00 V	269	12.15	34.50
3	4874.00	51.86 PK	74.00	-22.14	1.05 V	330	13.58	38.28
3	4874.00	42.10 AV	54.00	-11.90	1.05 V	330	3.82	38.28
4	9748.00	58.23 PK	74.00	-15.77	1.00 V	247	9.26	48.97
4	9748.00	46.84 AV	54.00	-7.16	1.00 V	247	-2.13	48.97

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 63%RH, 991hPa	TESTED BY	Long Chen
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	*2462.00	112.52 PK			1.16 H	349	79.82	32.70
1	*2462.00	105.13 AV			1.16 H	349	72.43	32.70
2	2488.00	56.28 PK	74.00	-17.72	1.16 H	349	23.46	32.82
2	2488.00	48.89 AV	54.00	-5.11	1.16 H	349	16.07	32.82
3	3282.00	48.98 PK	74.00	-25.02	1.05 H	243	14.41	34.57
4	4924.00	55.63 PK	74.00	-18.37	1.15 H	338	17.24	38.39
4	4924.00	46.14 AV	54.00	-7.86	1.15 H	338	7.75	38.39
5	9848.00	60.82 PK	74.00	-13.18	1.14 H	313	11.60	49.22
5	9848.00	49.25 AV	54.00	-4.75	1.14 H	313	0.03	49.22

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	*2462.00	105.38 PK			1.80 V	218	72.68	32.70
1	*2462.00	97.20 AV			1.80 V	218	64.50	32.70
2	2488.00	49.14 PK	74.00	-24.86	1.80 V	218	16.32	32.82
3	3282.00	47.32 PK	74.00	-26.68	1.02 V	21	12.75	34.57
4	4924.00	52.34 PK	74.00	-21.66	1.83 V	225	13.95	38.39
4	4924.00	43.14 AV	54.00	-10.86	1.83 V	225	4.75	38.39
5	9848.00	58.36 PK	74.00	-15.64	1.14 V	201	9.14	49.22
5	9848.00	47.22 AV	54.00	-6.78	1.14 V	201	-2.00	49.22

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11b DSSS modulation (Antenna 12)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
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	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	2386.00	56.44 PK	74.00	-17.56	1.02 H	339	24.58	31.86
1	2386.00	48.66 AV	54.00	-5.34	1.02 H	339	16.80	31.86
2	*2412.00	110.04 PK			1.02 H	339	78.08	31.96
2	*2412.00	102.26 AV			1.02 H	339	70.30	31.96
3	3216.00	45.63 PK	74.00	-28.37	1.23 H	78	11.67	33.96
4	4824.00	54.18 PK	74.00	-19.82	1.02 H	121	16.35	37.83
4	4824.00	44.69 AV	54.00	-9.31	1.02 H	121	6.86	37.83
5	9648.00	57.78 PK	74.00	-16.22	1.24 H	231	10.01	47.77
5	9648.00	49.20 AV	54.00	-4.80	1.24 H	231	1.43	47.77

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	2386.00	48.83 PK	74.00	-25.17	1.18 V	209	16.97	31.86
2	*2412.00	103.43 PK			1.18 V	209	71.47	31.96
2	*2412.00	95.68 AV			1.18 V	209	63.72	31.96
3	3216.00	44.89 PK	74.00	-29.11	1.03 V	356	10.93	33.96
4	4824.00	51.22 PK	74.00	-22.78	1.06 V	233	13.39	37.83
4	4824.00	41.87 AV	54.00	-12.13	1.06 V	233	4.04	37.83
5	9648.00	53.92 PK	74.00	-20.08	1.04 V	166	6.15	47.77
5	9648.00	45.86 AV	54.00	-8.14	1.04 V	166	-1.91	47.77

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
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	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	*2437.00	110.59 PK			1.06 H	343	78.53	32.06
1	*2437.00	102.88 AV			1.06 H	343	70.82	32.06
2	3248.00	47.84 PK	74.00	-26.16	1.13 H	91	13.85	33.99
3	4874.00	54.26 PK	74.00	-19.74	1.09 H	323	16.28	37.98
3	4874.00	45.11 AV	54.00	-8.89	1.09 H	323	7.13	37.98
4	9748.00	59.72 PK	74.00	-14.28	1.12 H	80	11.69	48.03
4	9748.00	47.79 AV	54.00	-6.21	1.12 H	80	-0.24	48.03

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	*2437.00	102.27 PK			1.13 V	220	70.21	32.06
1	*2437.00	95.13 AV			1.13 V	220	63.07	32.06
2	3248.00	45.88 PK	74.00	-28.12	1.06 V	231	11.89	33.99
3	4874.00	51.19 PK	74.00	-22.81	1.21 V	267	13.21	37.98
3	4874.00	41.38 AV	54.00	-12.62	1.21 V	267	3.40	37.98
4	9748.00	57.81 PK	74.00	-16.19	1.02 V	30	9.78	48.03
4	9748.00	46.28 AV	54.00	-7.72	1.02 V	30	-1.75	48.03

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
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	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	*2462.00	110.07 PK			1.07 H	350	77.91	32.16
1	*2462.00	102.66 AV			1.07 H	350	70.50	32.16
2	2488.00	53.87 PK	74.00	-20.13	1.07 H	350	21.61	32.26
2	2488.00	46.46 AV	54.00	-7.54	1.07 H	350	14.20	32.26
3	3282.00	48.09 PK	74.00	-25.91	1.16 H	248	14.07	34.02
4	4924.00	55.10 PK	74.00	-18.90	1.14 H	289	16.96	38.14
4	4924.00	45.69 AV	54.00	-8.31	1.14 H	289	7.55	38.14
5	9848.00	60.55 PK	74.00	-13.45	1.04 H	313	12.23	48.32
5	9848.00	48.89 AV	54.00	-5.11	1.04 H	313	0.57	48.32

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	*2462.00	102.55 PK			1.15 V	200	70.39	32.16
1	*2462.00	94.81 AV			1.15 V	200	62.65	32.16
2	2488.00	46.35 PK	74.00	-27.65	1.15 V	200	14.09	32.26
3	3282.00	46.59 PK	74.00	-27.41	1.10 V	96	12.57	34.02
4	4924.00	51.96 PK	74.00	-22.04	1.02 V	116	13.82	38.14
4	4924.00	42.81 AV	54.00	-11.19	1.02 V	116	4.67	38.14
5	9848.00	57.88 PK	74.00	-16.12	1.14 V	291	9.56	48.32
5	9848.00	46.76 AV	54.00	-7.24	1.14 V	291	-1.56	48.32

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g OFDM modulation (Antenna 3)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 62%RH, 991hPa	**TESTED BY**	Long Chen
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	2390.00	66.70 PK	74.00	-7.30	1.62 H	2	34.80	31.90
1	2390.00	51.21 AV	54.00	-2.79	1.62 H	2	19.31	31.90
2	*2412.00	106.32 PK			1.62 H	2	74.35	31.97
2	*2412.00	96.48 AV			1.62 H	2	64.51	31.97
3	3216.00	45.87 PK	74.00	-28.13	1.14 H	128	11.68	34.19
4	4824.00	48.36 PK	74.00	-25.64	1.05 H	339	9.90	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	2390.00	58.20 PK	74.00	-15.80	1.65 V	248	26.30	31.90
1	2390.00	43.95 AV	54.00	-10.05	1.65 V	248	12.05	31.90
2	*2412.00	99.45 PK			1.65 V	248	67.48	31.97
2	*2412.00	90.01 AV			1.65 V	248	58.04	31.97
3	3216.00	45.10 PK	74.00	-28.90	1.16 V	336	10.91	34.19
4	4824.00	47.05 PK	74.00	-26.95	1.16 V	165	8.59	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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 62%RH, 991hPa	**TESTED BY**	Long Chen
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	*2437.00	107.58 PK			1.65 H	24	75.51	32.07
1	*2437.00	98.21 AV			1.65 H	24	66.14	32.07
2	3248.00	47.86 PK	74.00	-26.14	1.15 H	22	13.63	34.23
3	4874.00	49.31 PK	74.00	-24.69	1.05 H	287	10.70	38.61

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	*2437.00	99.85 PK			1.58 V	254	67.78	32.07
1	*2437.00	90.92 AV			1.58 V	254	58.85	32.07
2	3248.00	45.87 PK	74.00	-28.13	1.13 V	336	11.64	34.23
3	4874.00	47.58 PK	74.00	-26.42	1.54 V	207	8.97	38.61

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 62%RH, 991hPa	**TESTED BY**	Long Chen
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	*2462.00	108.26 PK			1.84 H	3	76.10	32.16
1	*2462.00	98.36 AV			1.84 H	3	66.20	32.16
2	2483.50	64.01 PK	74.00	-9.99	1.84 H	3	31.77	32.24
2	2483.50	49.74 AV	54.00	-4.26	1.84 H	3	17.50	32.24
3	3282.00	46.55 PK	74.00	-27.45	1.15 H	257	12.27	34.28
4	4924.00	48.65 PK	74.00	-25.35	1.04 H	55	9.90	38.75

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	*2462.00	99.84 PK			1.68 V	261	67.68	32.16
1	*2462.00	90.72 AV			1.68 V	261	58.56	32.16
2	2483.50	58.81 PK	74.00	-15.19	1.68 V	261	26.57	32.24
2	2483.50	46.17 AV	54.00	-7.83	1.68 V	261	13.93	32.24
3	3282.00	45.59 PK	74.00	-28.41	1.05 V	227	11.31	34.28
4	4924.00	47.26 PK	74.00	-26.74	1.36 V	305	8.51	38.75

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g OFDM modulation (Antenna 6)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
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	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	2390.00	61.85 PK	74.00	-12.15	1.16 H	115	29.98	31.87
1	2390.00	46.15 AV	54.00	-7.85	1.16 H	115	14.28	31.87
2	*2412.00	107.89 PK			1.16 H	115	75.93	31.96
2	*2412.00	98.89 AV			1.16 H	115	66.93	31.96
3	3216.00	46.53 PK	74.00	-27.47	1.02 H	99	12.57	33.96
4	4824.00	47.31 PK	74.00	-26.69	1.06 H	89	9.48	37.83

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	2390.00	53.92 PK	74.00	-20.08	1.00 V	117	22.05	31.87
1	2390.00	44.36 AV	54.00	-9.64	1.00 V	117	12.49	31.87
2	*2412.00	100.86 PK			1.00 V	117	68.90	31.96
2	*2412.00	91.22 AV			1.00 V	117	59.26	31.96
3	3216.00	46.82 PK	74.00	-27.18	1.07 V	29	12.86	33.96
4	4824.00	47.89 PK	74.00	-26.11	1.11 V	96	10.06	37.83

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
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	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	*2437.00	108.01 PK			1.14 H	117	75.95	32.06
1	*2437.00	99.02 AV			1.14 H	117	66.96	32.06
2	3248.00	47.05 PK	74.00	-26.95	1.15 H	123	13.06	33.99
3	4874.00	48.15 PK	74.00	-25.85	1.09 H	133	10.17	37.98

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	*2437.00	100.51 PK			1.00 V	119	68.45	32.06
1	*2437.00	91.18 AV			1.00 V	119	59.12	32.06
2	3248.00	47.29 PK	74.00	-26.71	1.02 V	37	13.30	33.99
3	4874.00	48.29 PK	74.00	-25.71	1.10 V	104	10.31	37.98

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
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	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	*2462.00	108.80 PK			1.00 H	127	76.64	32.16
1	*2462.00	99.37 AV			1.00 H	127	67.21	32.16
2	2483.50	68.08 PK	74.00	-5.92	1.00 H	127	35.84	32.24
2	2483.50	51.55 AV	54.00	-2.45	1.00 H	127	19.31	32.24
3	3282.00	47.32 PK	74.00	-26.68	1.00 H	83	13.31	34.02
4	4924.00	48.12 PK	74.00	-25.88	1.00 H	9	9.98	38.14

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	*2462.00	100.88 PK			1.32 V	78	68.72	32.16
1	*2462.00	91.47 AV			1.32 V	78	59.31	32.16
2	2483.50	61.08 PK	74.00	-12.92	1.32 V	78	28.84	32.24
2	2483.50	46.53 AV	54.00	-7.47	1.32 V	78	14.29	32.24
3	3282.00	47.85 PK	74.00	-26.15	1.09 V	63	13.83	34.02
4	4924.00	47.98 PK	74.00	-26.02	1.03 V	94	9.84	38.14

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g OFDM modulation (Antenna 9)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
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	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	2390.00	69.43 PK	74.00	-4.57	1.49 H	322	37.56	31.87
1	2390.00	52.39 AV	54.00	-1.61	1.49 H	322	20.52	31.87
2	*2412.00	105.80 PK			1.49 H	322	73.84	31.96
2	*2412.00	95.17 AV			1.49 H	322	63.21	31.96
3	3216.00	48.15 PK	74.00	-25.85	1.09 H	324	14.19	33.96
4	4824.00	48.35 PK	74.00	-25.65	1.10 H	293	10.52	37.83

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	2390.00	61.72 PK	74.00	-12.28	1.00 V	68	29.85	31.87
1	2390.00	46.66 AV	54.00	-7.34	1.00 V	68	14.79	31.87
2	*2412.00	98.36 PK			1.00 V	68	66.40	31.96
2	*2412.00	88.21 AV			1.00 V	68	56.25	31.96
3	3216.00	46.85 PK	74.00	-27.15	1.07 V	89	12.89	33.96
4	4824.00	48.06 PK	74.00	-25.94	1.03 V	94	10.23	37.83

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
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	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	*2437.00	106.94 PK			1.04 H	178	74.88	32.06
1	*2437.00	97.51 AV			1.04 H	178	65.45	32.06
2	3248.00	46.18 PK	74.00	-27.82	1.09 H	326	12.19	33.99
3	4874.00	47.51 PK	74.00	-26.49	1.16 H	307	9.53	37.98

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	*2437.00	99.09 PK			1.00 V	68	67.03	32.06
1	*2437.00	89.83 AV			1.00 V	68	57.77	32.06
2	3248.00	45.23 PK	74.00	-28.77	1.07 V	89	11.24	33.99
3	4874.00	47.69 PK	74.00	-26.31	1.18 V	196	9.71	37.98

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
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	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	*2462.00	107.93 PK			1.03 H	179	75.77	32.16
1	*2462.00	97.61 AV			1.03 H	179	65.45	32.16
2	2483.50	68.10 PK	74.00	-5.90	1.03 H	179	35.86	32.24
2	2483.50	50.90 AV	54.00	-3.10	1.03 H	179	18.66	32.24
3	3282.00	47.23 PK	74.00	-26.77	1.07 H	200	13.21	34.02
4	4924.00	48.77 PK	74.00	-25.23	1.10 H	293	10.63	38.14

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	*2462.00	99.03 PK			1.00 V	66	66.87	32.16
1	*2462.00	89.78 AV			1.00 V	66	57.62	32.16
2	2483.50	60.77 PK	74.00	-13.23	1.00 V	66	28.53	32.24
2	2483.50	46.52 AV	54.00	-7.48	1.00 V	66	14.28	32.24
3	3248.00	46.11 PK	74.00	-27.89	1.00 V	331	12.12	33.99
4	4924.00	47.89 PK	74.00	-26.11	1.07 V	326	9.75	38.14

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g OFDM modulation (Antenna 11)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 63%RH, 991hPa	**TESTED BY**	Long Chen
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	2390.00	59.97 PK	74.00	-14.03	1.00 H	349	27.60	32.37
1	2390.00	50.06 AV	54.00	-3.94	1.00 H	349	17.69	32.37
2	*2412.00	109.84 PK			1.00 H	349	77.37	32.47
2	*2412.00	99.93 AV			1.00 H	349	67.46	32.47
3	3216.00	48.95 PK	74.00	-25.05	1.16 H	331	14.51	34.44
4	4824.00	49.19 PK	74.00	-24.81	1.25 H	229	11.02	38.17

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	2390.00	52.74 PK	74.00	-21.26	1.14 V	276	20.37	32.37
1	2390.00	43.10 AV	54.00	-10.90	1.14 V	276	10.73	32.37
2	*2412.00	102.61 PK			1.84 V	219	70.14	32.47
2	*2412.00	92.97 AV			1.84 V	219	60.50	32.47
3	3216.00	47.36 PK	74.00	-26.64	1.14 V	276	12.92	34.44
4	4824.00	48.54 PK	74.00	-25.46	1.36 V	228	10.37	38.17

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 63%RH, 991hPa	TESTED BY	Long Chen
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	*2437.00	110.29 PK			1.00 H	345	77.71	32.58
1	*2437.00	100.10 AV			1.00 H	345	67.52	32.58
2	3248.00	47.36 PK	74.00	-26.64	1.63 H	338	12.86	34.50
3	4874.00	48.73 PK	74.00	-25.27	1.13 H	35	10.45	38.28

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	*2437.00	102.52 PK			1.79 V	215	69.94	32.58
1	*2437.00	93.50 AV			1.79 V	215	60.92	32.58
2	3248.00	46.50 PK	74.00	-27.50	1.13 V	254	12.00	34.50
3	4874.00	47.64 PK	74.00	-26.36	1.04 V	274	9.36	38.28

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 63%RH, 991hPa	TESTED BY	Long Chen
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	*2462.00	109.97 PK			1.18 H	345	77.27	32.70
1	*2462.00	99.49 AV			1.18 H	345	66.79	32.70
2	2483.50	60.78 PK	74.00	-13.22	1.18 H	345	27.98	32.80
2	2483.50	50.30 AV	54.00	-3.70	1.18 H	345	17.50	32.80
3	3282.00	47.85 PK	74.00	-26.15	1.13 H	20	13.28	34.57
4	4924.00	49.25 PK	74.00	-24.75	1.14 H	256	10.86	38.39
4	4924.00	38.71 AV	54.00	-15.29	1.14 H	256	0.32	38.39

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	*2462.00	103.20 PK			1.79 V	220	70.50	32.70
1	*2462.00	93.62 AV			1.79 V	220	60.92	32.70
2	2483.50	54.01 PK	74.00	-19.99	1.79 V	220	21.21	32.80
2	2483.50	44.43 AV	54.00	-9.57	1.79 V	220	11.63	32.80
3	3248.00	46.89 PK	74.00	-27.11	1.15 V	116	12.39	34.50
4	4924.00	48.35 PK	74.00	-25.65	1.45 V	251	9.96	38.39

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g OFDM modulation (Antenna 12)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
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	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	2390.00	57.35 PK	74.00	-16.65	1.01 H	351	25.48	31.87
1	2390.00	47.40 AV	54.00	-6.60	1.01 H	351	15.53	31.87
2	*2412.00	107.18 PK			1.01 H	351	75.22	31.96
2	*2412.00	97.23 AV			1.01 H	351	65.27	31.96
3	3216.00	48.26 PK	74.00	-25.74	1.17 H	330	14.30	33.96
4	4824.00	48.85 PK	74.00	-25.15	1.24 H	260	11.02	37.83

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	2390.00	50.24 PK	74.00	-23.76	1.80 V	223	18.37	31.87
1	2390.00	40.55 AV	54.00	-13.45	1.80 V	223	8.68	31.87
2	*2412.00	100.07 PK			1.80 V	223	68.11	31.96
2	*2412.00	90.38 AV			1.80 V	223	58.42	31.96
3	3216.00	46.84 PK	74.00	-27.16	1.10 V	216	12.88	33.96
4	4824.00	48.31 PK	74.00	-25.69	1.30 V	213	10.48	37.83

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
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	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	*2437.00	108.59 PK			1.00 H	340	76.53	32.06
1	*2437.00	98.40 AV			1.00 H	340	66.34	32.06
2	3248.00	46.74 PK	74.00	-27.26	1.53 H	323	12.75	33.99
3	4874.00	48.20 PK	74.00	-25.80	1.10 H	64	10.22	37.98

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	*2437.00	100.09 PK			1.60 V	226	68.03	32.06
1	*2437.00	91.00 AV			1.60 V	226	58.94	32.06
2	3248.00	45.93 PK	74.00	-28.07	1.10 V	263	11.94	33.99
3	4874.00	47.15 PK	74.00	-26.85	1.02 V	243	9.17	37.98

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.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

EUT	Wireless Mini PCI Card	MODEL	WLL4070
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz
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	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	*2462.00	108.47 PK			1.13 H	326	76.31	32.16
1	*2462.00	98.50 AV			1.13 H	326	66.34	32.16
2	2483.50	58.28 PK	74.00	-15.72	1.13 H	326	26.04	32.24
2	2483.50	47.81 AV	54.00	-6.19	1.13 H	326	15.57	32.24
3	3282.00	46.87 PK	74.00	-27.13	1.10 H	39	12.85	34.02
4	4924.00	48.87 PK	74.00	-25.13	1.13 H	261	10.73	38.14

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	*2462.00	100.60 PK			1.68 V	230	68.44	32.16
1	*2462.00	91.02 AV			1.68 V	230	58.86	32.16
2	2483.50	51.41 PK	74.00	-22.59	1.68 V	230	19.17	32.24
2	2483.50	41.83 AV	54.00	-12.17	1.68 V	230	9.59	32.24
3	3248.00	45.87 PK	74.00	-28.13	1.19 V	120	11.88	33.99
4	4924.00	47.98 PK	74.00	-26.02	1.39 V	247	9.84	38.14

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. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

802.11g Turbo OFDM modulation (Antenna 3)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
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
TESE 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	2390.00	60.58 PK	74.00	-13.42	1.32 H	102	28.71	31.87
1	2390.00	46.79 AV	54.00	-7.21	1.32 H	102	14.92	31.87
2	*2437.00	103.51 PK			1.32 H	102	71.45	32.06
2	*2437.00	94.77 AV			1.32 H	102	62.71	32.06
3	2483.50	59.61 PK	74.00	-14.39	1.32 H	102	27.37	32.24
3	2483.50	46.27 AV	54.00	-7.73	1.32 H	102	14.03	32.24
4	3248.00	46.88 PK	74.00	-27.12	1.09 H	319	12.89	33.99
5	4874.00	48.66 PK	74.00	-25.34	1.11 H	313	10.68	37.98

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	2390.00	58.79 PK	74.00	-15.21	1.00 V	74	26.92	31.87
1	2390.00	45.61 AV	54.00	-8.39	1.00 V	74	13.74	31.87
2	*2437.00	97.04 PK			1.00 V	74	64.98	32.06
2	*2437.00	87.83 AV			1.00 V	74	55.77	32.06
3	2483.50	59.20 PK	74.00	-14.80	1.00 V	74	26.96	32.24
3	2483.50	46.00 AV	54.00	-8.00	1.00 V	74	13.76	32.24
4	3248.00	46.19 PK	74.00	-27.81	1.07 V	88	12.20	33.99
5	4874.00	47.13 PK	74.00	-26.87	1.06 V	38	9.15	37.98

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.
5. " * " : Fundamental frequency

802.11g Turbo OFDM modulation (Antenna 6)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
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
TESE 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	2390.00	58.64 PK	74.00	-15.36	1.15 H	117	26.77	31.87
1	2390.00	46.08 AV	54.00	-7.92	1.15 H	117	14.21	31.87
2	*2437.00	104.68 PK			1.15 H	117	72.62	32.06
2	*2437.00	95.86 AV			1.15 H	117	63.80	32.06
3	2483.50	61.24 PK	74.00	-12.76	1.15 H	117	29.00	32.24
3	2483.50	47.19 AV	54.00	-6.81	1.15 H	117	14.95	32.24
4	3248.00	47.01 PK	74.00	-26.99	1.16 H	134	13.02	33.99
5	4874.00	49.31 PK	74.00	-24.69	1.05 H	122	11.33	37.98

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	2390.00	53.77 PK	74.00	-20.23	1.00 V	117	21.90	31.87
1	2390.00	44.32 AV	54.00	-9.68	1.00 V	117	12.45	31.87
2	*2437.00	97.67 PK			1.00 V	117	65.61	32.06
2	*2437.00	88.76 AV			1.00 V	117	56.70	32.06
3	2483.50	55.91 PK	74.00	-18.09	1.00 V	117	23.67	32.24
3	2483.50	44.50 AV	54.00	-9.50	1.00 V	117	12.26	32.24
4	3248.00	47.59 PK	74.00	-26.41	1.07 V	119	13.60	33.99
5	4874.00	49.87 PK	74.00	-24.13	1.02 V	120	11.89	37.98

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.
5. " * " : Fundamental frequency

802.11g Turbo OFDM modulation (Antenna 9)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
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
TESE 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	2390.00	67.99 PK	74.00	-6.01	1.03 H	180	36.12	31.87
1	**2390.00**	**52.56 AV**	**54.00**	**-1.44**	**1.03 H**	**180**	**20.69**	**31.87**
2	*2437.00	103.94 PK			1.03 H	180	71.88	32.06
2	*2437.00	93.58 AV			1.03 H	180	61.52	32.06
3	2483.50	65.40 PK	74.00	-8.60	1.03 H	180	33.16	32.24
3	2483.50	50.80 AV	54.00	-3.20	1.03 H	180	18.56	32.24
4	3248.00	47.08 PK	74.00	-26.92	1.05 H	338	13.09	33.99
5	4874.00	49.01 PK	74.00	-24.99	1.10 H	233	11.03	37.98

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	2390.00	59.46 PK	74.00	-14.54	1.00 V	67	27.59	31.87
1	2390.00	46.71 AV	54.00	-7.29	1.00 V	67	14.84	31.87
2	*2437.00	96.23 PK			1.00 V	67	64.17	32.06
2	*2437.00	85.86 AV			1.00 V	67	53.80	32.06
3	2483.50	60.31 PK	74.00	-13.69	1.00 V	67	28.07	32.24
3	2483.50	46.20 AV	54.00	-7.80	1.00 V	67	13.96	32.24
4	3248.00	46.19 PK	74.00	-27.81	1.03 V	298	12.20	33.99
5	4874.00	47.31 PK	74.00	-26.69	1.06 V	327	9.33	37.98

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.
5. " * " : Fundamental frequency

802.11g Turbo OFDM modulation (Antenna 11)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 63%RH, 991hPa	**TESTED BY**	Long Chen
TESE 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	2390.00	59.65 PK	74.00	-14.35	1.00 H	349	27.28	32.37
1	2390.00	50.64 AV	54.00	-3.36	1.00 H	349	18.27	32.37
2	*2437.00	107.46 PK			1.00 H	349	74.88	32.58
2	*2437.00	98.45 AV			1.00 H	349	65.87	32.58
3	2483.50	58.73 PK	74.00	-15.27	1.00 H	349	25.93	32.80
3	2483.50	49.72 AV	54.00	-4.28	1.00 H	349	16.92	32.80
4	3248.00	47.95 PK	74.00	-26.05	1.15 H	348	13.45	34.50
5	4874.00	49.51 PK	74.00	-24.49	1.00 H	20	11.22	38.28
5	4874.00	36.78 AV	54.00	-17.22	1.00 H	20	-1.51	38.28

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	2390.00	52.09 PK	74.00	-21.91	1.78 V	215	19.72	32.37
1	2390.00	43.20 AV	54.00	-10.80	1.78 V	215	10.83	32.37
2	*2437.00	99.90 PK			1.78 V	215	67.32	32.58
2	*2437.00	91.01 AV			1.78 V	215	58.43	32.58
3	2483.50	51.17 PK	74.00	-22.83	1.78 V	215	18.37	32.80
3	2483.50	42.28 AV	54.00	-11.72	1.78 V	215	9.48	32.80
4	3248.00	46.51 PK	74.00	-27.49	1.15 V	348	12.01	34.50
5	4874.00	47.57 PK	74.00	-26.43	1.05 V	22	9.29	38.28

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 Turbo OFDM modulation (Antenna12)

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
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
TESE 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	2390.00	57.03 PK	74.00	-16.97	1.02 H	353	25.16	31.87
1	2390.00	48.02 AV	54.00	-5.98	1.02 H	353	16.15	31.87
2	*2437.00	104.06 PK			1.02 H	353	72.00	32.06
2	*2437.00	95.05 AV			1.02 H	353	62.99	32.06
3	2483.50	56.04 PK	74.00	-17.96	1.02 H	353	23.80	32.24
3	2483.50	47.03 AV	54.00	-6.97	1.02 H	353	14.79	32.24
4	3248.00	47.01 PK	74.00	-26.99	1.16 H	339	13.02	33.99
5	4874.00	48.97 PK	74.00	-25.03	1.03 H	36	10.99	37.98

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	2390.00	49.40 PK	74.00	-24.60	1.61 V	209	17.53	31.87
1	2390.00	40.48 AV	54.00	-13.52	1.61 V	209	8.61	31.87
2	*2437.00	97.23 PK			1.61 V	209	65.17	32.06
2	*2437.00	88.33 AV			1.61 V	209	56.27	32.06
3	2483.50	48.41 PK	74.00	-25.59	1.61 V	209	16.17	32.24
3	2483.50	39.51 AV	54.00	-14.49	1.61 V	209	7.27	32.24
4	3248.00	46.18 PK	74.00	-27.82	1.10 V	341	12.19	33.99
5	4874.00	47.26 PK	74.00	-26.74	1.03 V	64	9.28	37.98

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.
5. " * " : Fundamental frequency

4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK 30	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.

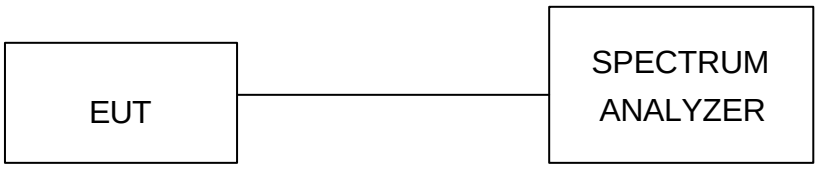
4.3.3 TEST PROCEDURE

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.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

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

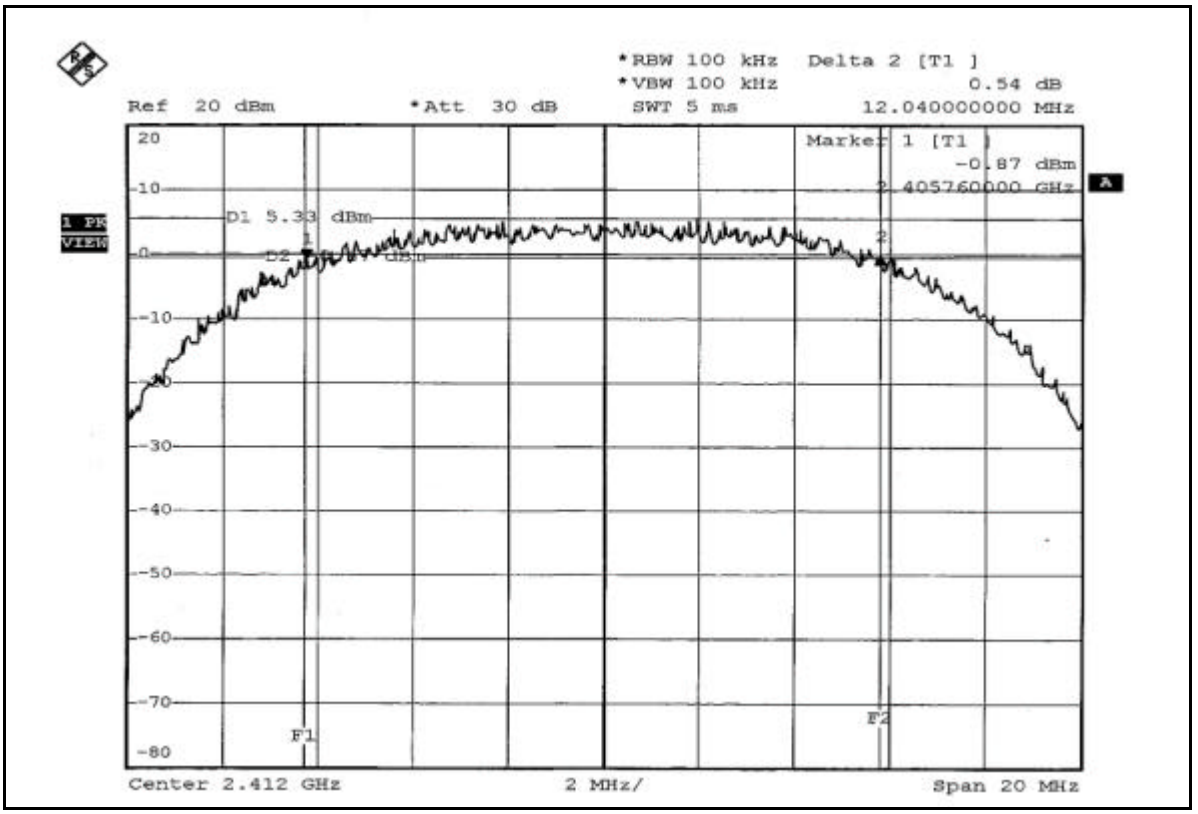
4.3.7 TEST RESULTS

802.11b DSSS modulation

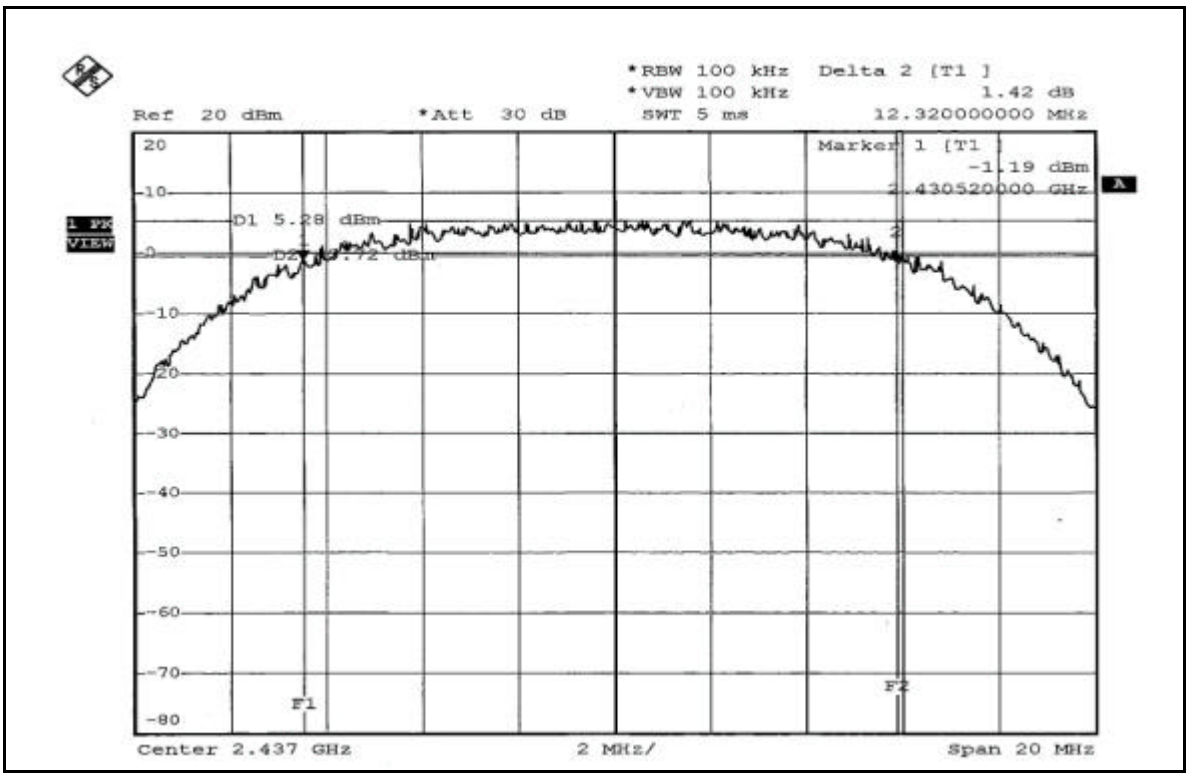
EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	25deg. C, 52%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	12.04	0.5	PASS
6	2437	12.32	0.5	PASS
11	2462	11.88	0.5	PASS

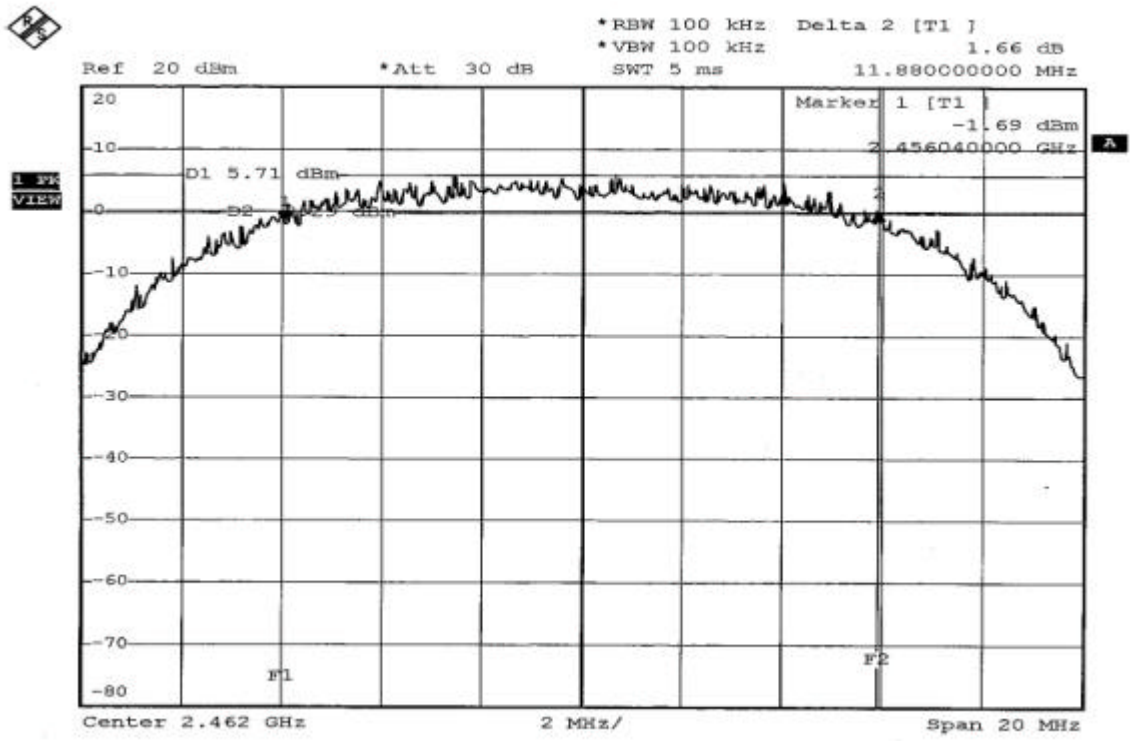
CH1


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 2 [T1]
0.54 dB
12.040000000 MHz
Ref 20 dBm
*Att 30 dB
Marker 1 [T1]
-0.87 dBm
2.405760000 GHz
D1 5.33 dBm
1 PK VIEW
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz

CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 2 [T1]
1.42 dB
12.320000000 MHz
Ref 20 dBm
*Att 30 dB
Marker 1 [T1]
-1.19 dBm
2.430520000 GHz
D1 5.28 dBm
1 PK VIEW
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz

CH11

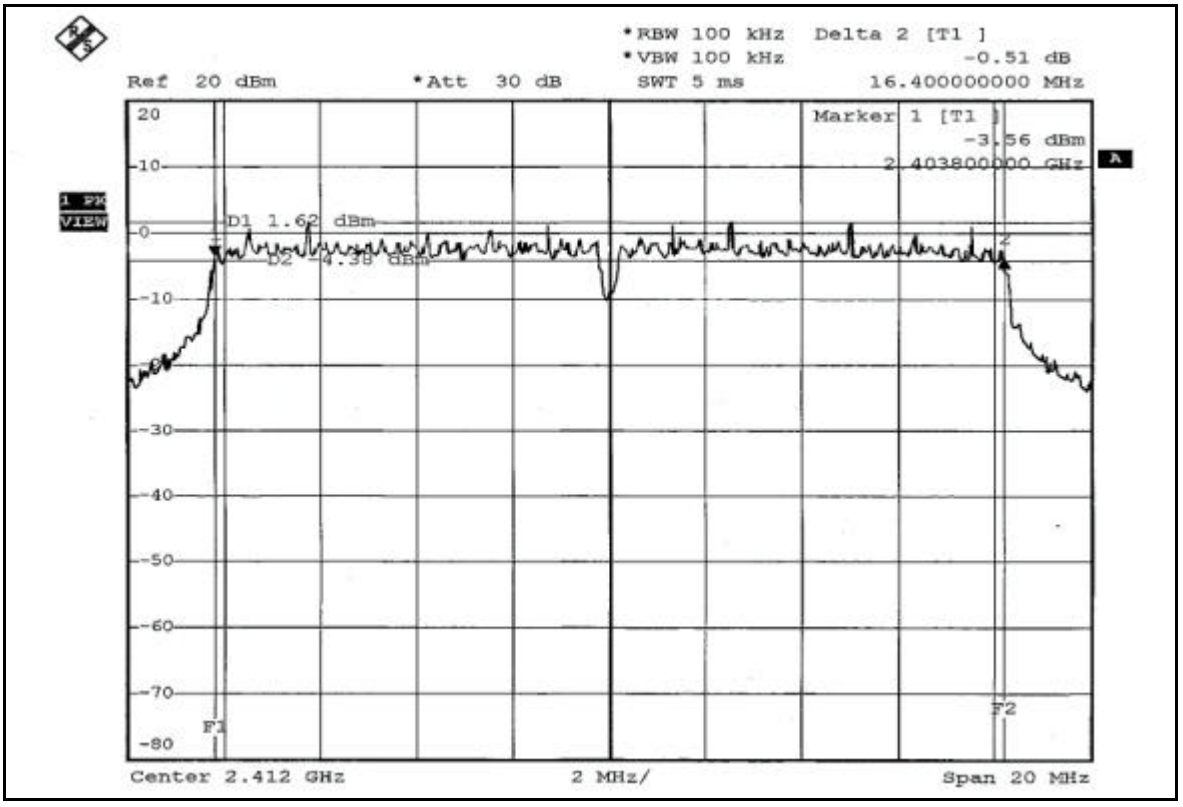

*RBW 100 kHz
*VBW 100 kHz
Delta 2 [T1]
1.66 dB
Ref 20 dBm
*Att 30 dB
SWT 5 ms
11.880000000 MHz
Marker 1 [T1]
-1.69 dBm
2.456040000 GHz
D1 5.71 dBm
1 PK VIEW
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz

802.11g OFDM modulation

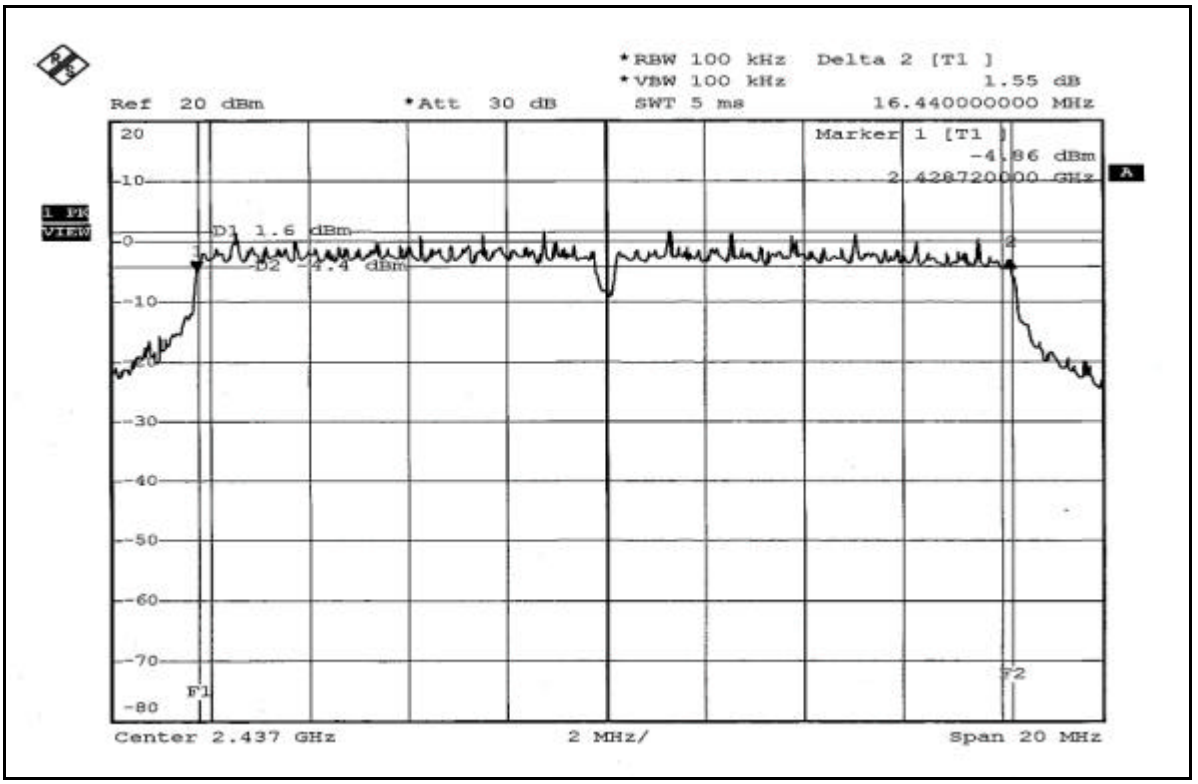
EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	25deg. C, 52%RH, 991hPa
TESTED BY	Gary Chang		

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

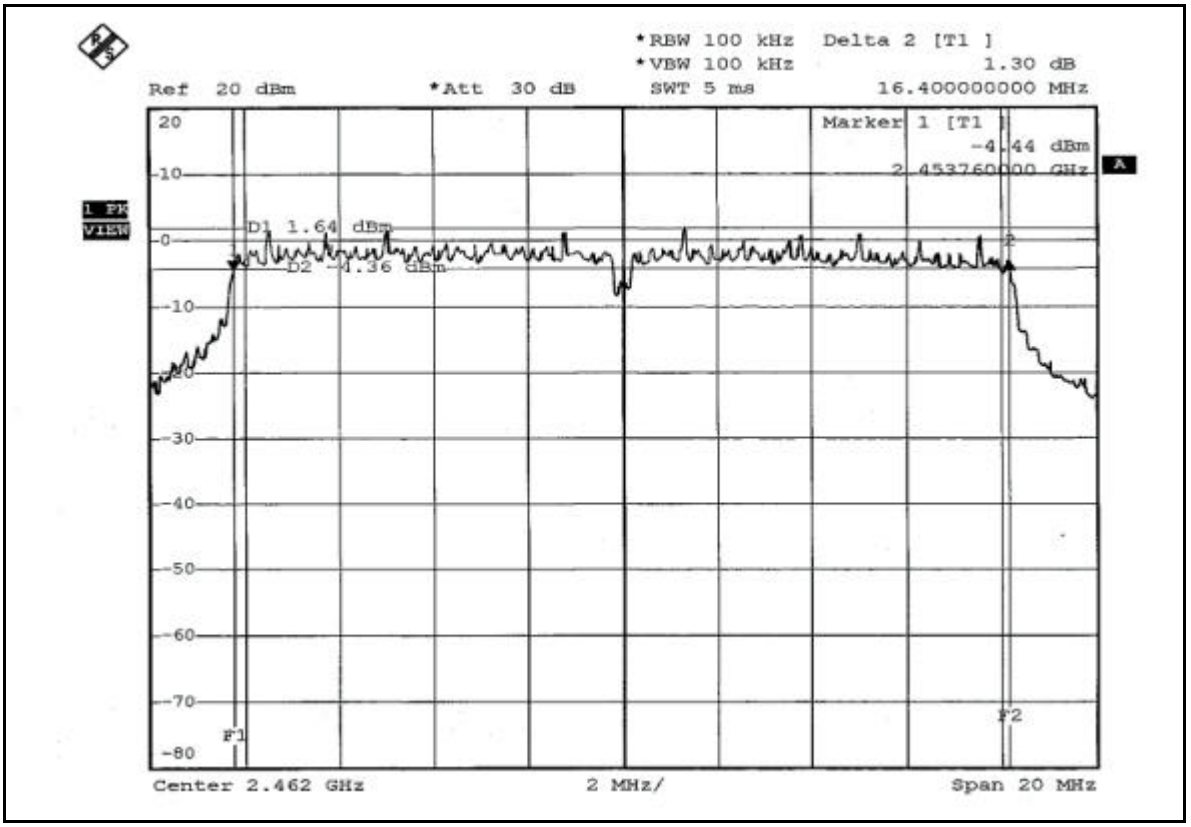
CH1


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 2 [T1]
-0.51 dB
16.400000000 MHz
Ref 20 dBm
*Att 30 dB
Marker 1 [T1]
-3.56 dBm
2.403800000 GHz
1 PK VIEW
D1 1.62 dBm
D2 -4.38 dBm
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz

CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 2 [T1]
1.55 dB
16.440000000 MHz
Ref 20 dBm
*Att 30 dB
Marker 1 [T1]
-4.86 dBm
2.428720000 GHz
1 PK VIEW
D1 1.6 dBm
D2 -4.4 dBm
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz

CH11

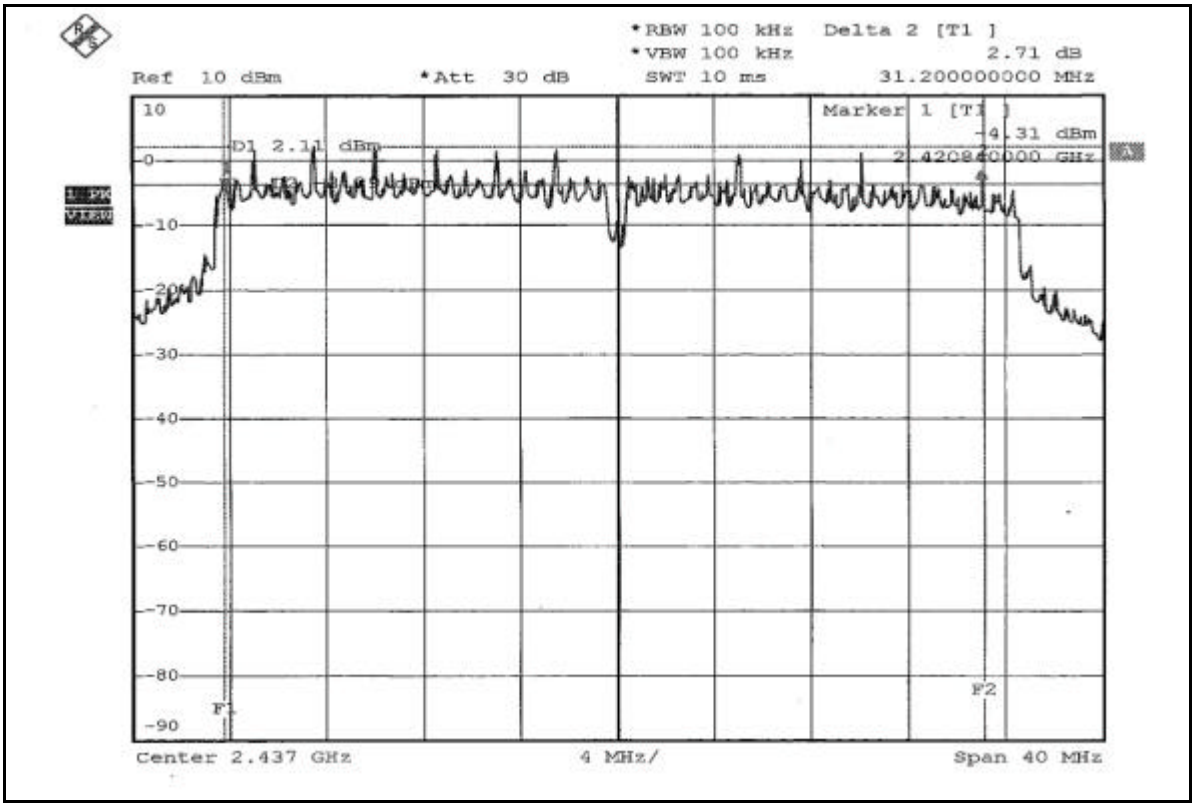

*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 2 [T1]
1.30 dB
16.400000000 MHz
Ref 20 dBm
*Att 30 dB
Marker 1 [T1]
-4.44 dBm
2.453760000 GHz
1 PK
VIEW
D1 1.64 dBm
D2 -1.36 dBm
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz

802.11g 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, 991hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
6	2437	31.20	0.5	PASS

CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Delta 2 [T1]
2.71 dB
31.200000000 MHz
Ref 10 dBm
*Att 30 dB
Marker 1 [T1]
-4.31 dBm
2.420800000 GHz
D1 2.11 dBm
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
F1
F2
Center 2.437 GHz
4 MHz/
Span 40 MHz

4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.4.2 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.

4.4.3 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.

4.4.4 DEVIATION FROM TEST STANDARD

No deviation

4.4.5 TEST SETUP

4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6

4.4.7 TEST RESULTS

802.11b DSSS modulation

EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	25deg. C, 52%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	50.350	17.02	30	PASS
6	2437	50.699	17.05	30	PASS
11	2462	50.582	17.04	30	PASS

802.11g OFDM modulation

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

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	45.709	16.60	30	PASS
6	2437	51.286	17.10	30	PASS
11	2462	44.875	16.52	30	PASS

802.11g Turbo OFDM modulation

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

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
6	2437	39.994	16.02	30	PASS

4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S 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.

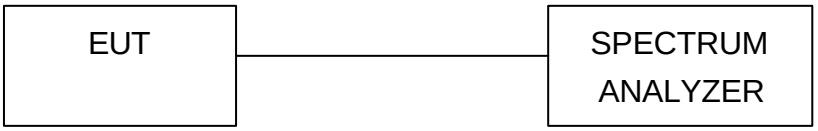
4.5.3 TEST PROCEDURE

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.

4.5.4 DEVIATION FROM TEST STANDARD

No deviation

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

Same as Item 4.3.6

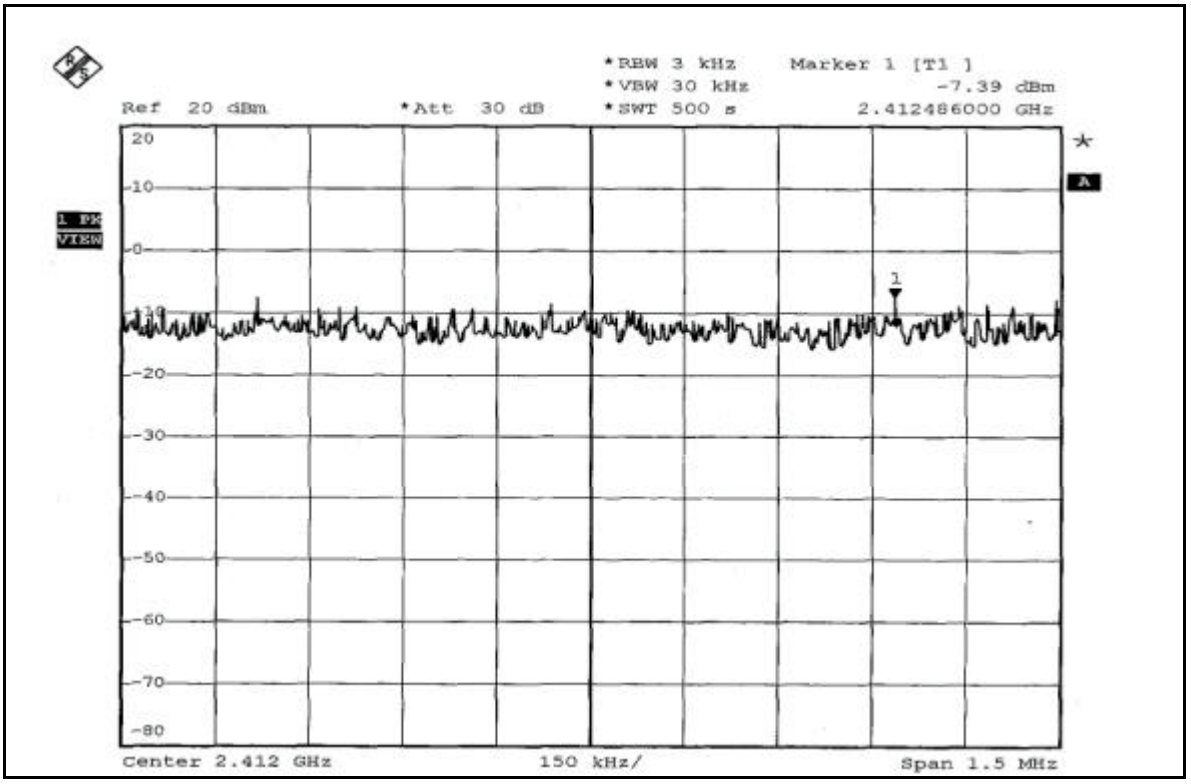
4.5.7 TEST RESULTS

802.11b DSSS modulation

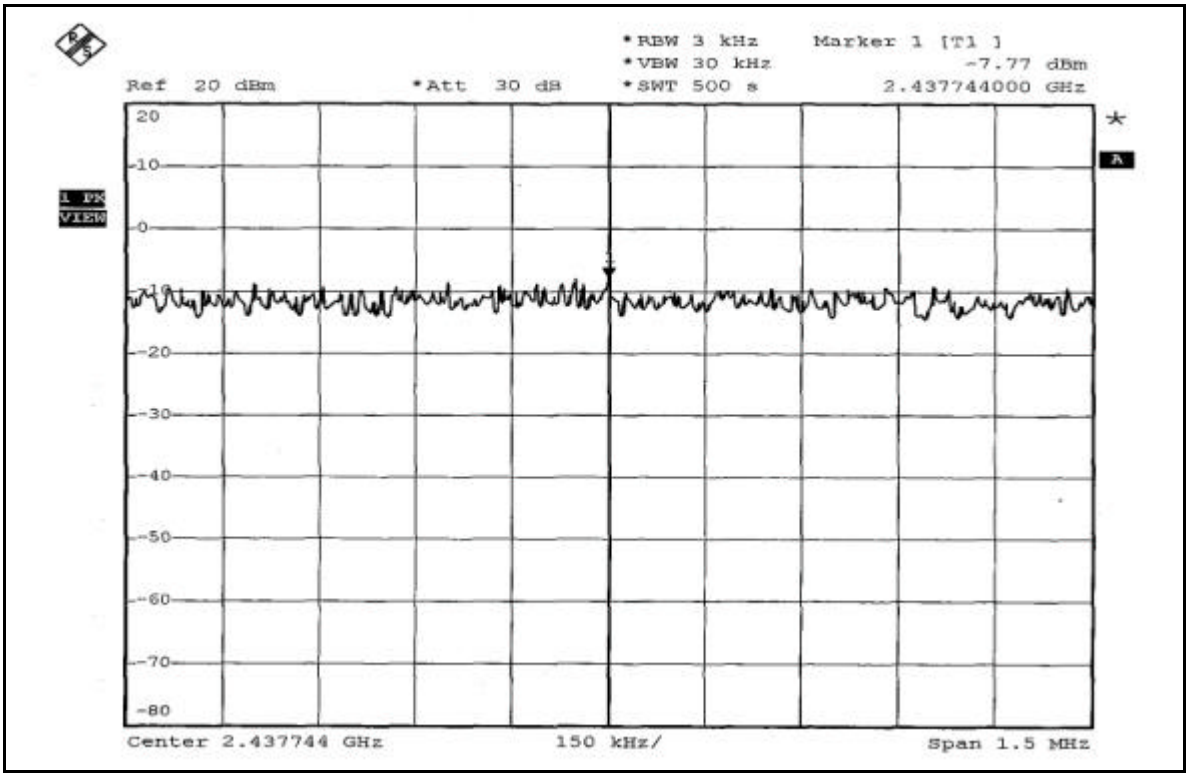
EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
MODULATION TYPE	CCK	**TRANSFER RATE**	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	25deg.C, 52%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-7.39	8	PASS
6	2437	-7.77	8	PASS
11	2462	-7.58	8	PASS

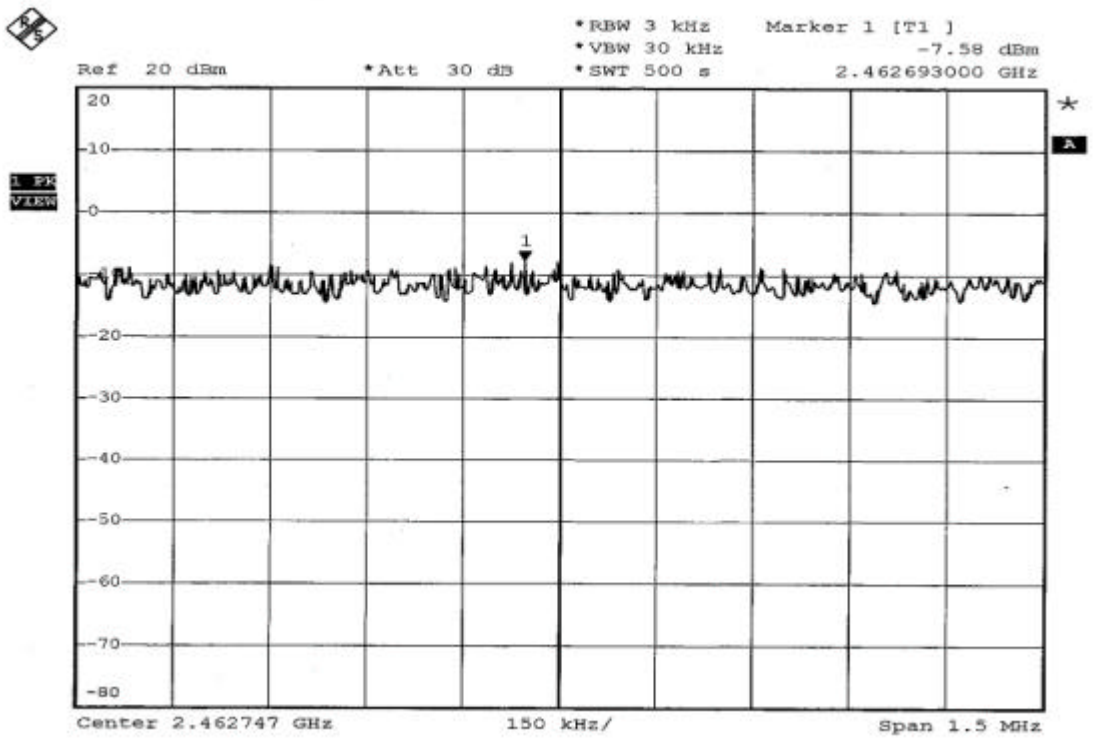
CH1


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-7.39 dBm
2.412486000 GHz
Ref 20 dBm
*Att 30 dB
1 PK VIEW
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.412 GHz
150 kHz/
Span 1.5 MHz

CH6


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-7.77 dBm
2.437744000 GHz
Ref 20 dBm
*Att 30 dB
1 PK VIEW
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.437744 GHz
150 kHz/
Span 1.5 MHz

CH11

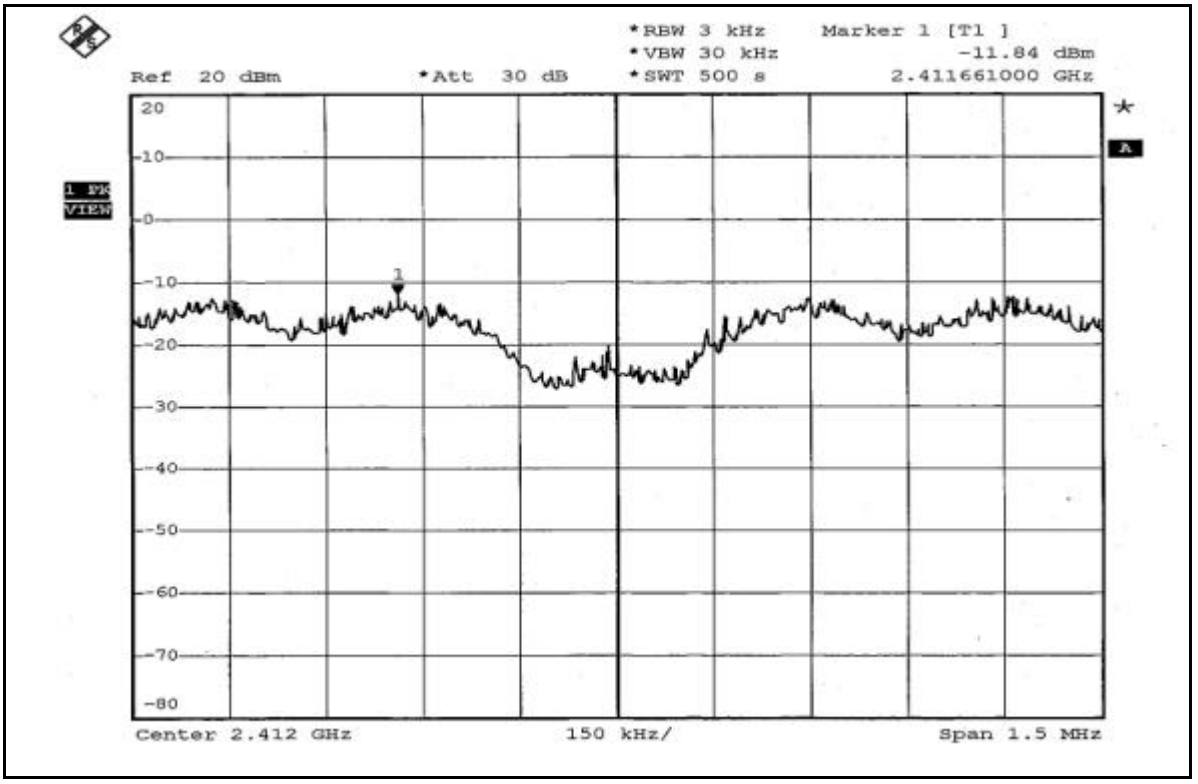

*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-7.58 dBm
2.462693000 GHz
Ref 20 dBm
*Att 30 dB
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
1
Center 2.462747 GHz
150 kHz/
Span 1.5 MHz

802.11g OFDM modulation

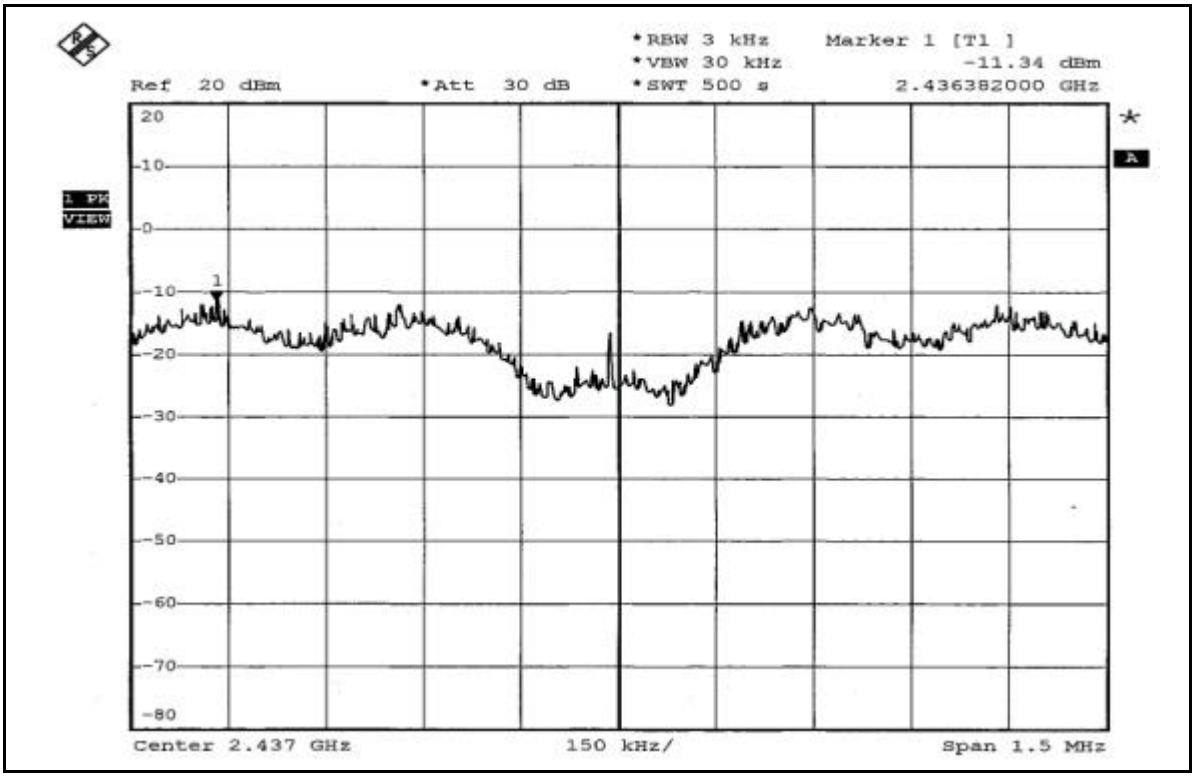
EUT	Wireless Mini PCI Card	**MODEL**	WLL4070
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60Hz	**ENVIRONMENTAL CONDITIONS**	25deg.C, 52%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-11.84	8	PASS
6	2437	-11.34	8	PASS
11	2462	-11.50	8	PASS

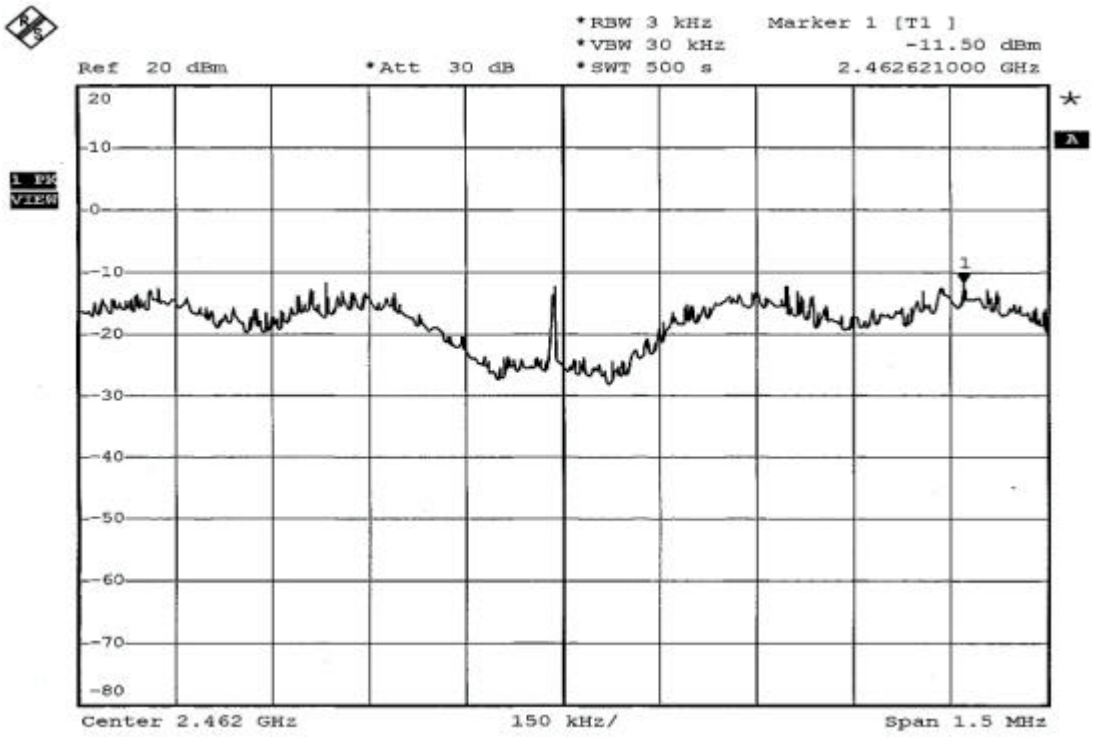
CH1


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-11.84 dBm
2.411661000 GHz
Ref 20 dBm
*Att 30 dB
1 PK VIEW
A
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.412 GHz
150 kHz/
Span 1.5 MHz

CH6


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-11.34 dBm
2.436382000 GHz
Ref 20 dBm
*Att 30 dB
1 PK VIEW
A
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.437 GHz
150 kHz/
Span 1.5 MHz

CH11

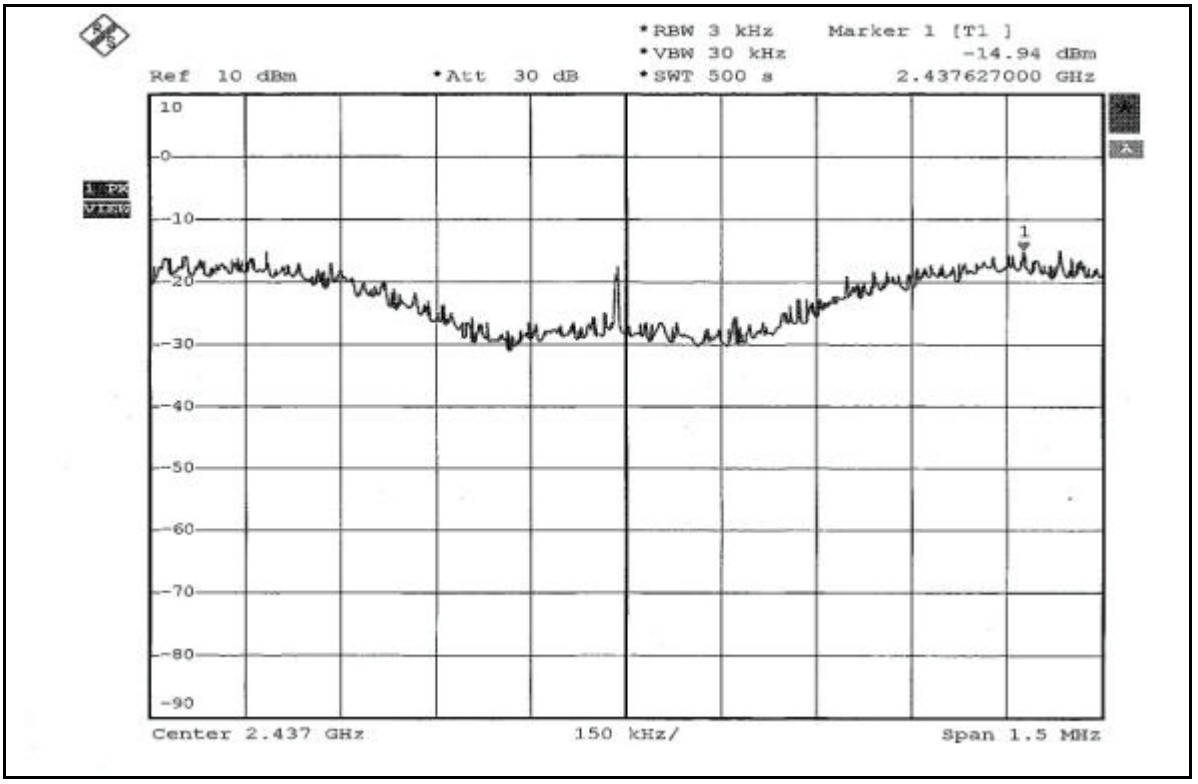

*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-11.50 dBm
2.462621000 GHz
Ref 20 dBm
*Att 30 dB
1 PK
VIEW
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
1
Center 2.462 GHz
150 kHz/
Span 1.5 MHz

802.11g Turbo OFDM modulation

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

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
6	2437	-14.94	8	PASS

CH6


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-14.94 dBm
2.437627000 GHz
Ref 10 dBm
*Att 30 dB
1 PK
VIEW
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
1
Center 2.437 GHz
150 kHz/
Span 1.5 MHz