

FCC TEST REPORT

REPORT NO.: RF940414L04

MODEL NO.: WLH3015

(refer to page 6 for other Models)

RECEIVED: Apr. 14, 2005

TESTED: Apr. 14 ~ May 06, 2005

ISSUED: May 09, 2005

APPLICANT: ASKEY COMPUTER CORP.

ADDRESS: 10F, No.119, Chien Kang Rd., Chung-Ho,
Taipei, Taiwan, R.O.C.

ISSUED BY: Advance Data Technology Corporation

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

TEST LOCATION: No. 19, Hwa Ya 2nd Rd., Kueishan, Taoyuan,
Taiwan, R.O.C.

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1 CERTIFICATION

PRODUCT : Wireless LAN PCI Card
MODEL NO.: WLH3015
(refer to page 6 for other Models)
BRAND: Askey
(refer to page 6 for other brand)
APPLICANT : ASKEY COMPUTER CORP.
TESTED: Apr. 14 ~ May 06, 2005
TEST SAMPLE: ENGINEERING SAMPLE
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 : Windy Chou. , **DATE:** May 09, 2005
(Windy Chou)

TECHNICAL
ACCEPTANCE : Gary Chang , **DATE:** May 09, 2005
Responsible for RF (Gary Chang)

APPROVED BY : Cody Chang , **DATE:** May 09, 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			
Standard Section	Test Type and Limit	Result	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -5.43dB at 0.650MHz.
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)	Transmitter Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is -0.45dB at 9648.00MHz.
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20 dB 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	3.55 dB
	200MHz ~1000MHz	3.58 dB
	1GHz ~ 18GHz	1.10 dB
	18GHz ~ 40GHz	0.91 dB

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Wireless LAN PCI Card
MODEL NO.	WLH3015 (refer to following table for more details)
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 125Mbps *see Note 3)
FREQUENCY RANGE	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11
MAXIMUM OUTPUT POWER	32.137mW
ANTENNA TYPE	Dipole antenna with 2dBi gain
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT complies with IEEE 802.11g standards and backwards compatible with IEEE 802.11b products.
2. The EUT operates in the 2.4GHz frequency spectrum with throughput of up to 54Mbps.
3. This EUT is capable of providing data rates of up to 125Mbps in Turbo Mode depending upon reception quality.
4. The models as below are identical to each other except for their model designation, brand name and the chip version due to marketing requirement. This EUT used two kind of version chip. The chip model: BCM4318KF13G included the 11g turbo function and the chip model: 13CM4318KF13G didn't include the 11g turbo function. The difference is the software version which controlled the turbo function to be on or off.

Model Name	Brand	Description
WLH3015	Askey	With turbo mode
WLH3016	Askey	Without Turbo mode
F5D7000	Belkin	Same as WLH3015
F5D7001	Belkin	Same as WLH3016

5. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

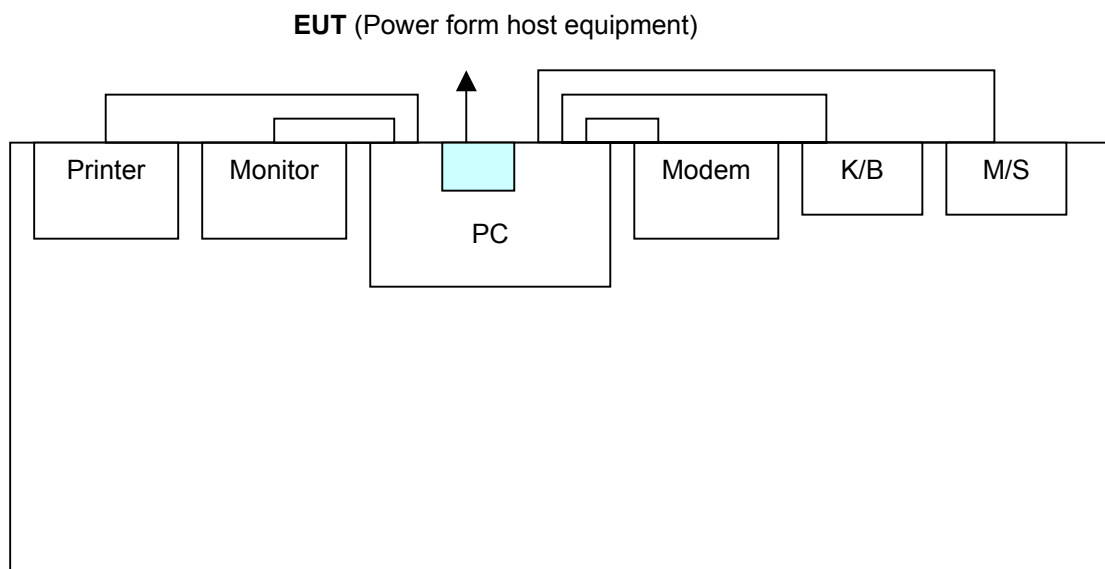
For 802.11b/g: Eleven channels are provided to this EUT for normal mode.

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

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	
1	x	x	x	Note 1	For Model: WLH3015(with Turbo mode)
2	x	x	x	Note 1	For Model: WLH3016(without Turbo Mode)

Where PLC: Power Line Conducted Emission
RE≥1G: Radiated Emission above 1GHz

RE<1G RE: Radiated Emission below 1GHz
APCM: Antenna Port Conducted Measurement

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)
1	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
2	802.11g	1 to 11	1, 6, 11	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)
1	802.11g	1 to 11	11	OFDM	BPSK	6
2	802.11g	1 to 11	11	OFDM	BPSK	6
1	802.11g Turbo	6	6	OFDM	BPSK	12

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)
1	802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
1	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
1	802.11g Turbo	6	6	OFDM	BPSK	12
2	802.11b	1 to 11	1, 6, 11	DSSS	CCK	11
2	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6

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.

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

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.

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

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is an Wireless LAN 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	PERSONAL COMPUTER	SoftStar	Hetis 865G	380125734	FCC DoC Approved
2	LCD MONITOR	ACER	AL1511 bm	ET.L1408.04334 800145PK01	FCC DoC Approved
3	USB KEYBOARD	BTC	5200U	G09302046421	E5XKB5122U
4	MOUSE	DELL	M056U0	349007014	FCC DoC Approved
5	PRINTER	EPSON	LQ-300+	DCGY047265	FCC DoC Approved
6	MODEM	ACEEX	1414V/3	0401008248	IFAXDM1414

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	NA
3	1.5m shielded cable.
4	1.8m shielded cable.
5	1.2m shielded cable.
6	1.2m shielded cable.

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

4 TEST TYPES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY 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	100291	Nov. 16, 2005
RF signal cable Woken	5D-FB	Cable-HYC01-01	Jan. 09, 2006
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Feb. 15, 2006
LISN ROHDE & SCHWARZ	ESH2-Z5	100104	Feb. 15, 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 1.
 3. The VCCI Site Registration No. is C-2040.



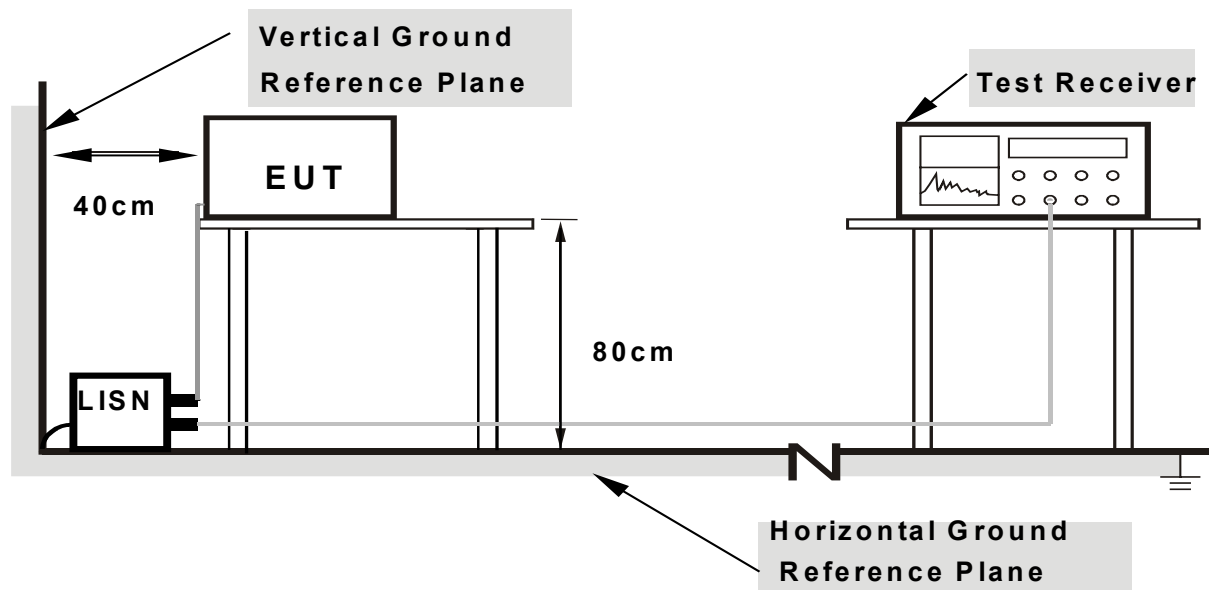
4.1.3 TEST PROCEDURES

- 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) are 80 cm from EUT and at least 80 from other units and other metal planes

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

4.1.6 EUT OPERATING CONDITIONS

- Plug the EUT to a Computer system placed on a testing table.
- The Computer ran a test program (provided by manufacturer) to enable EUT under transmission/receiving condition continuously at specific channel frequency.
- The computer system show "H" messages on its screen.
- The computer system show "H" messages to modem.
- The computer system sent "H" messages to printer, and the printer prints them on paper.
- Repeated c ~d.

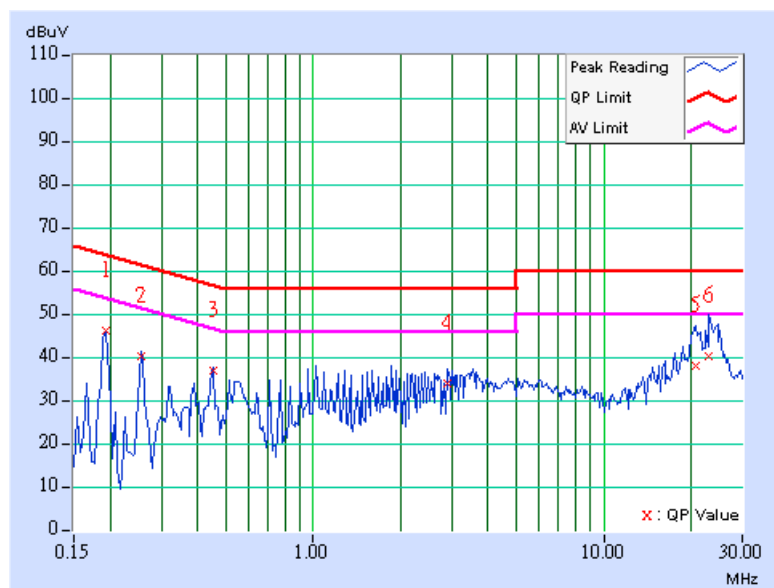
4.1.7 TEST RESULTS

Conducted Worst-Case Data

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	PHASE	Line 1
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	44.90	44.30	45.01	44.41	63.91	53.91	-18.90	-9.50
2	0.255	0.11	39.31	-	39.42	-	61.58	51.58	-22.16	-
3	0.451	0.12	35.96	-	36.08	-	56.86	46.86	-20.78	-
4	2.890	0.32	32.93	-	33.25	-	56.00	46.00	-22.75	-
5	20.848	1.08	36.79	-	37.87	-	60.00	50.00	-22.13	-
6	23.023	1.22	38.99	27.78	40.21	29.00	60.00	50.00	-19.79	-21.00

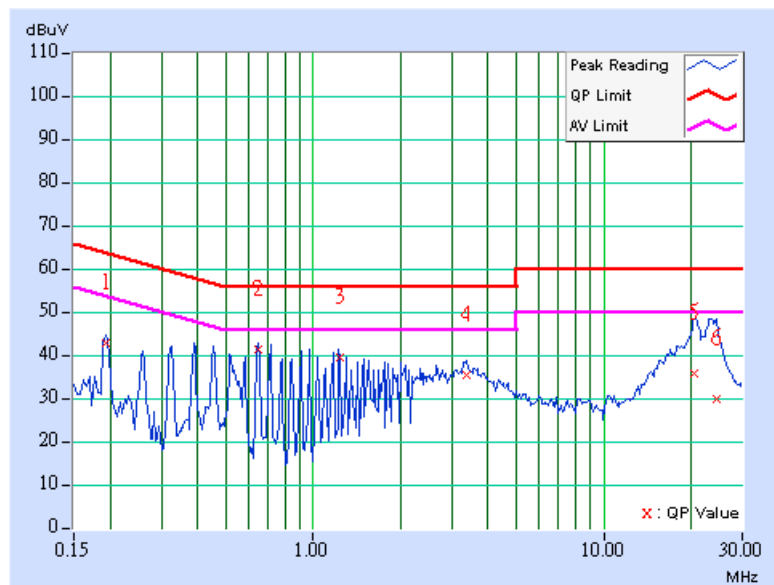
- REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value =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



EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	PHASE	Line 2
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	42.30	-	42.41	-	63.91	53.91	-21.50	-
2	0.650	0.16	40.49	40.23	40.65	40.39	56.00	46.00	-15.35	-5.61
3	1.235	0.24	38.80	38.38	39.04	38.62	56.00	46.00	-16.96	-7.38
4	3.379	0.35	34.64	-	34.99	-	56.00	46.00	-21.01	-
5	20.523	0.74	35.13	-	35.87	-	60.00	50.00	-24.13	-
6	24.484	0.84	29.07	-	29.91	-	60.00	50.00	-30.09	-

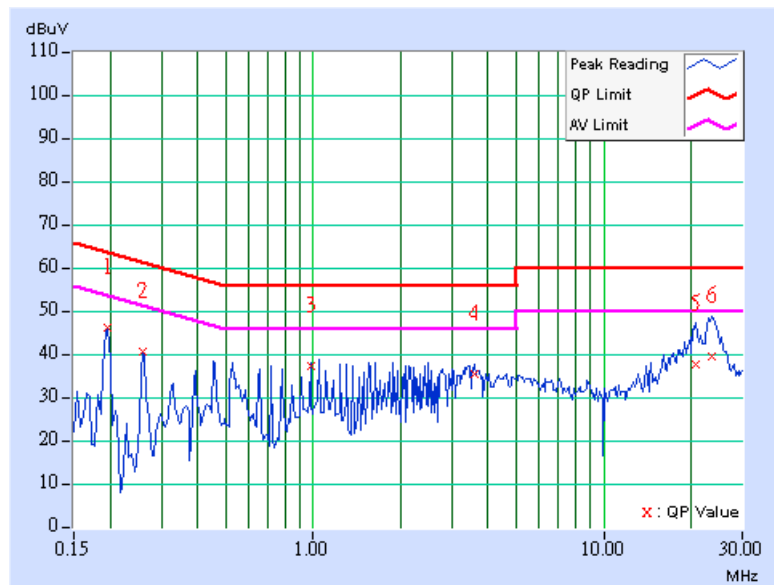
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	PHASE	Line 1
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.197	0.11	44.98	44.35	45.09	44.46	63.74	53.74	-18.65	-9.28
2	0.259	0.11	39.65	-	39.76	-	61.45	51.45	-21.69	-
3	0.978	0.24	36.03	34.93	36.27	35.17	56.00	46.00	-19.73	-10.83
4	3.586	0.36	34.20	-	34.56	-	56.00	46.00	-21.44	-
5	20.793	1.08	36.66	-	37.74	-	60.00	50.00	-22.26	-
6	23.664	1.26	38.21	-	39.47	-	60.00	50.00	-20.53	-

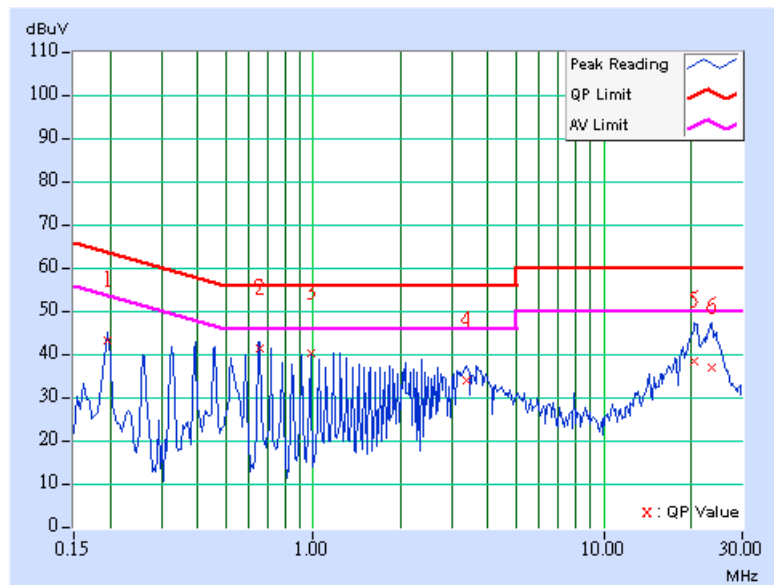
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	PHASE	Line 2
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.197	0.11	42.56	-	42.67	-	63.74	53.74	-21.07	-
2	0.654	0.17	40.62	40.32	40.79	40.49	56.00	46.00	-15.21	-5.51
3	0.978	0.24	39.47	37.40	39.71	39.64	56.00	46.00	-16.29	-6.36
4	3.391	0.35	33.24	-	33.59	-	56.00	46.00	-22.41	-
5	20.555	0.74	37.68	-	38.42	-	60.00	50.00	-21.58	-
6	23.555	0.82	36.29	-	37.11	-	60.00	50.00	-22.89	-

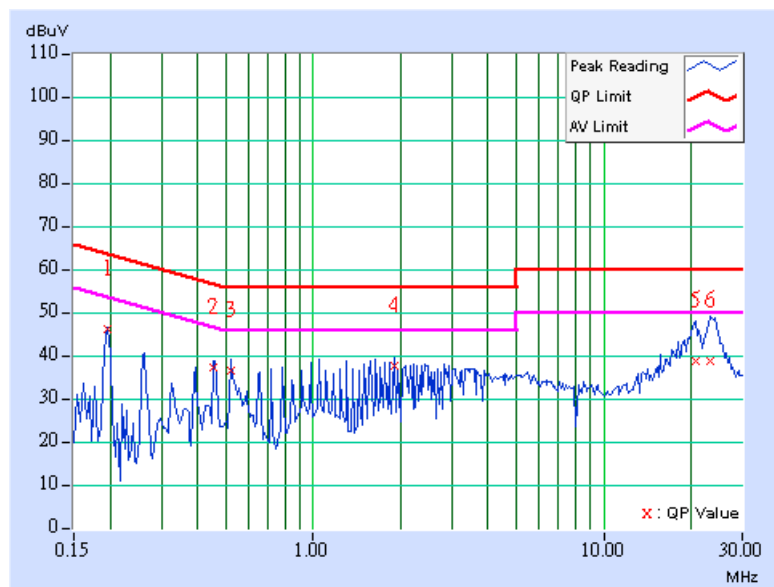
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1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
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 3. The emission levels of other frequencies were very low against the limit.
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 6. Emission Level = Correction Factor + Reading Value.



EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	PHASE	Line 1
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.197	0.11	45.13	44.90	45.24	45.01	63.74	53.74	-18.50	-8.73
2	0.455	0.12	36.27	-	36.39	-	56.79	46.79	-20.40	-
3	0.521	0.14	35.41	-	35.55	-	56.00	46.00	-20.45	-
4	1.895	0.26	36.54	35.52	36.80	35.78	56.00	46.00	-19.20	-10.22
5	20.844	1.08	37.76	-	38.84	-	60.00	50.00	-21.16	-
6	23.391	1.25	37.56	-	38.81	-	60.00	50.00	-21.19	-

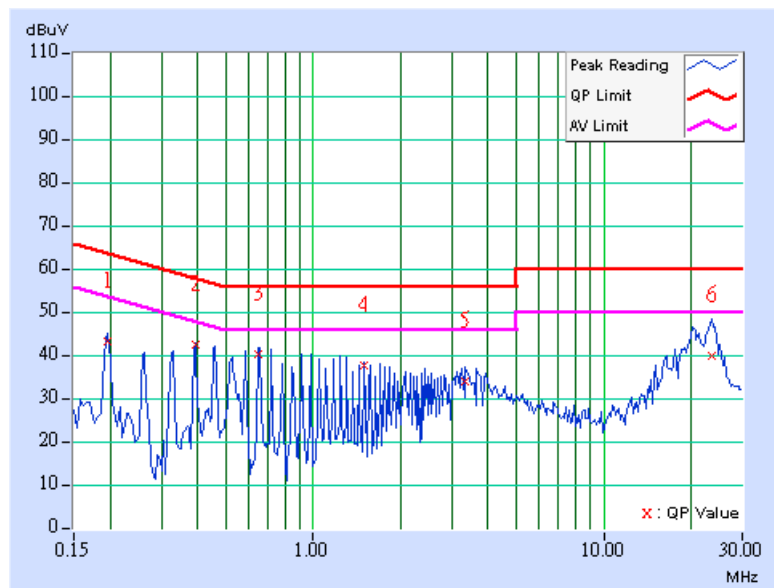
- REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value =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



EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	PHASE	Line 2
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.197	0.11	42.52	-	42.63	-	63.74	53.74	-21.11	-
2	0.392	0.11	41.69	41.61	41.80	41.72	58.02	48.02	-16.22	-6.30
3	0.650	0.16	39.43	38.70	39.59	38.86	56.00	46.00	-16.41	-7.14
4	1.504	0.25	37.11	36.07	37.36	36.32	56.00	46.00	-18.64	-9.68
5	3.328	0.35	33.20	-	33.55	-	56.00	46.00	-22.45	-
6	23.578	0.82	39.01	-	39.83	-	60.00	50.00	-20.17	-

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

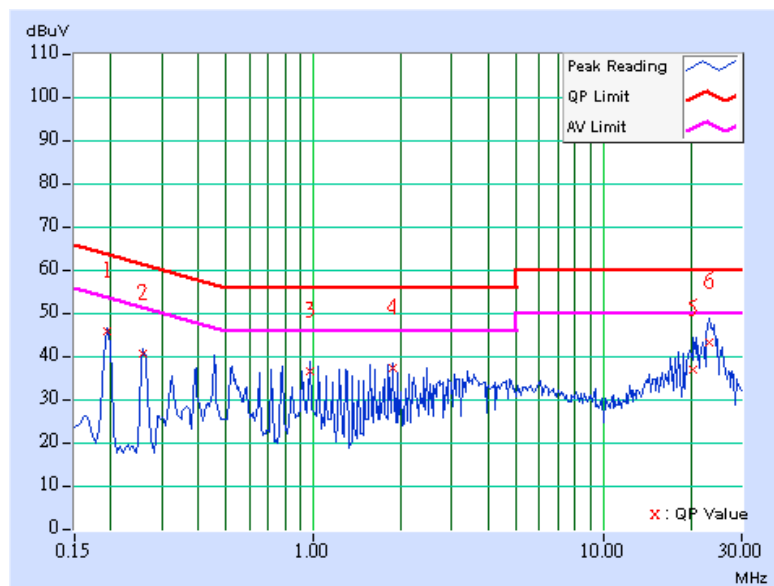


Conducted Worst-Case Data

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	PHASE	Line 1
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	44.72	44.20	44.83	44.31	63.91	53.91	-19.08	-9.60
2	0.259	0.11	39.47	-	39.58	-	61.45	51.45	-21.87	-
3	0.974	0.23	35.59	-	35.82	-	56.00	46.00	-20.18	-
4	1.883	0.26	36.10	34.66	36.36	34.92	56.00	46.00	-19.64	-11.08
5	20.461	1.06	35.73	-	36.79	-	60.00	50.00	-23.21	-
6	23.238	1.24	42.03	30.00	43.27	31.24	60.00	50.00	-16.73	-18.76

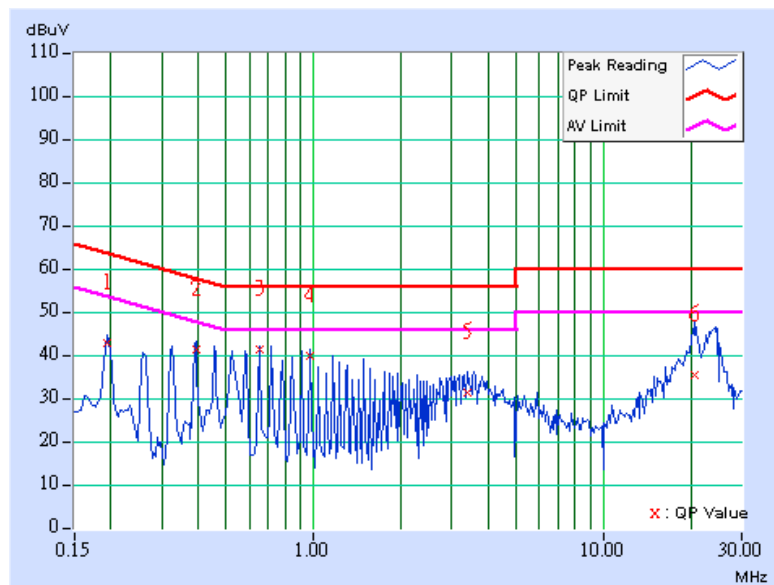
- REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	PHASE	Line 2
CHANNEL	Channel 1	6dB BANDWIDTH	9 kHz
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	42.14	-	42.25	-	63.91	53.91	-21.66	-
2	0.392	0.11	40.75	40.57	40.86	40.68	58.02	48.02	-17.16	-7.34
3	0.650	0.16	40.66	40.41	40.82	40.57	56.00	46.00	-15.18	-5.43
4	0.974	0.23	39.22	39.10	39.45	39.33	56.00	46.00	-16.55	-6.67
5	3.383	0.35	30.63	-	30.98	-	56.00	46.00	-25.02	-
6	20.746	0.75	34.82	-	35.57	-	60.00	50.00	-24.43	-

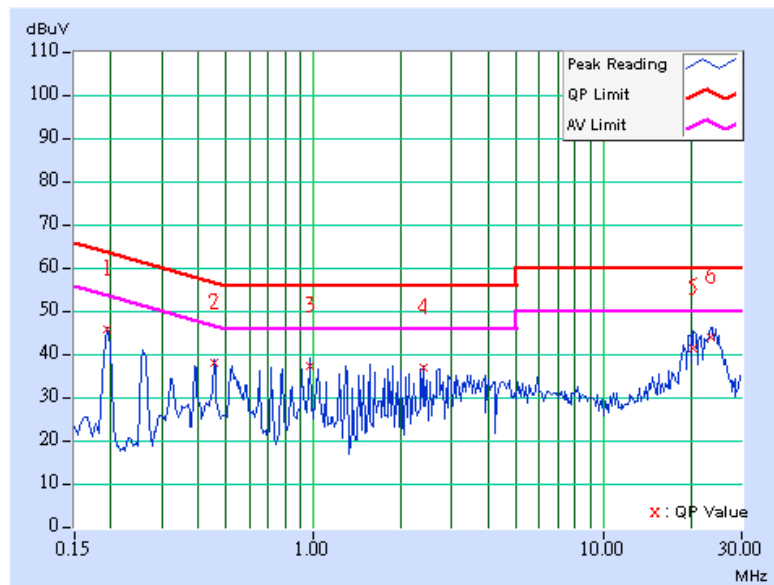
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	PHASE	Line 1
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	44.68	44.20	44.79	44.31	63.91	53.91	-19.12	-9.60
2	0.455	0.12	36.91	35.85	37.03	35.97	56.79	46.79	-19.76	-10.82
3	0.974	0.23	36.07	35.31	36.30	35.54	56.00	46.00	-19.70	-10.46
4	2.402	0.29	35.78	34.04	36.07	34.33	56.00	46.00	-19.93	-11.67
5	20.449	1.06	40.25	27.68	41.31	28.74	60.00	50.00	-18.69	-21.26
6	23.500	1.25	42.82	31.22	44.07	32.47	60.00	50.00	-15.93	-17.53

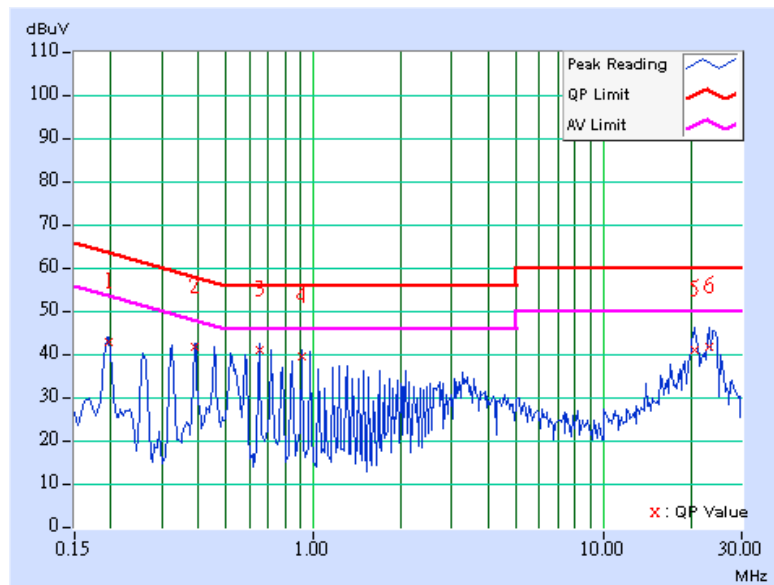
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	PHASE	Line 2
CHANNEL	Channel 6	6dB BANDWIDTH	9 kHz
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.197	0.11	42.14	-	42.25	-	63.74	53.74	-21.49	-
2	0.388	0.11	40.99	40.20	41.10	40.31	58.10	48.10	-17.00	-7.79
3	0.650	0.16	40.39	40.15	40.55	40.31	56.00	46.00	-15.45	-5.69
4	0.908	0.22	38.81	37.74	39.03	37.96	56.00	46.00	-16.97	-8.04
5	20.703	0.75	40.31	26.96	41.06	27.71	60.00	50.00	-18.94	-22.29
6	23.234	0.81	41.04	28.49	41.85	29.30	60.00	50.00	-18.15	-20.70

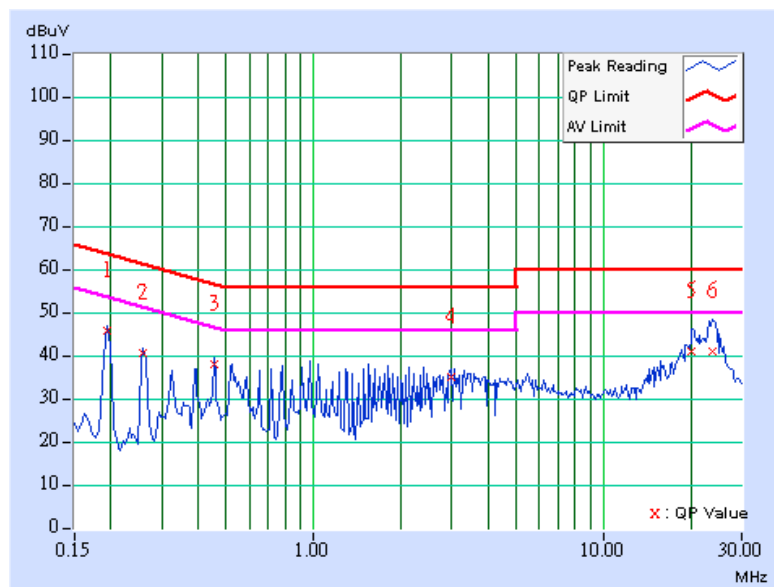
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	PHASE	Line 1
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	44.68	44.20	44.79	44.31	63.91	53.91	-19.12	-9.60
2	0.259	0.11	39.51	-	39.62	-	61.45	51.45	-21.83	-
3	0.455	0.12	36.95	35.85	37.07	35.97	56.79	46.79	-19.72	-10.82
4	2.984	0.32	34.06	-	34.38	-	56.00	46.00	-21.62	-
5	20.191	1.04	39.88	28.00	40.92	29.04	60.00	50.00	-19.08	-20.96
6	23.754	1.27	39.91	27.57	41.18	28.84	60.00	50.00	-18.82	-21.16

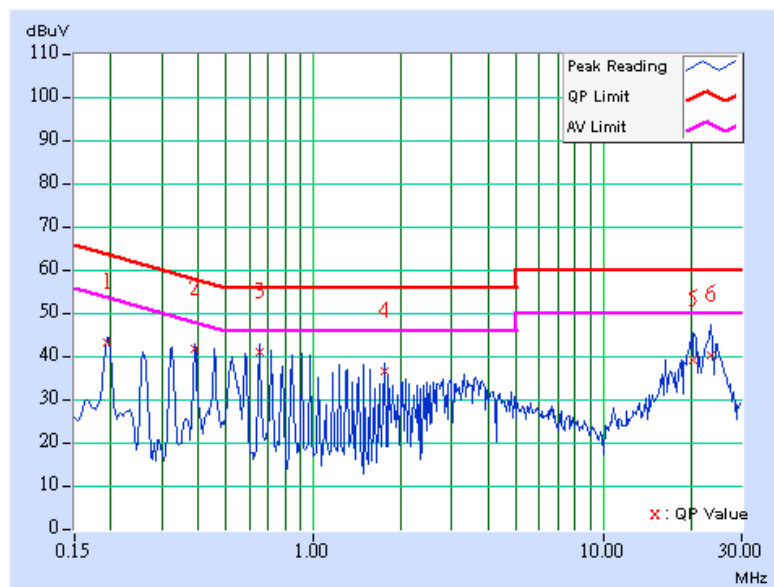
- REMARKS:** 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value =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



EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	PHASE	Line 2
CHANNEL	Channel 11	6dB BANDWIDTH	9 kHz
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	23deg. C, 65%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Gary Chang

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.193	0.11	42.36	-	42.47	-	63.91	53.91	-21.44	-
2	0.388	0.11	40.91	40.50	41.02	40.61	58.10	48.10	-17.08	-7.49
3	0.650	0.16	40.29	40.23	40.45	40.39	56.00	46.00	-15.55	-5.61
4	1.754	0.26	35.86	34.09	36.12	34.35	56.00	46.00	-19.88	-11.65
5	20.453	0.74	38.36	-	39.10	-	60.00	50.00	-20.90	-
6	23.441	0.81	39.53	26.72	40.34	27.53	60.00	50.00	-19.66	-22.47

- 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	$2400/F(\text{kHz})$	300
0.490-1.705	$24000/F(\text{kHz})$	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	100033	Jun. 08, 2005
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Jun. 03, 2005
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Jun. 01, 2005
HORN Antenna SCHWARZBECK	9120D	9120D-408	Jan. 17, 2006
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Jan. 23, 2006
Preamplifier Agilent	8447D	2944A10633	Nov. 09, 2005
Preamplifier Agilent	8449B	3008A01964	Nov. 06, 2005
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	218183/4	Jan. 26, 2006
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	218195/4	Jan. 26, 2006
Software ADT.	ADT_Radiated_V5.14	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA
Turn Table ADT.	TT100.	TT93021703	NA
Turn Table Controller ADT.	SC100.	SC93021703	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 2.
3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
4. The VCCI Site Registration No. is R-237.
5. The IC Site Registration No. is IC4924-3.

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 chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 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 peak, quasi-peak or average method as specified and then reported in a data sheet.

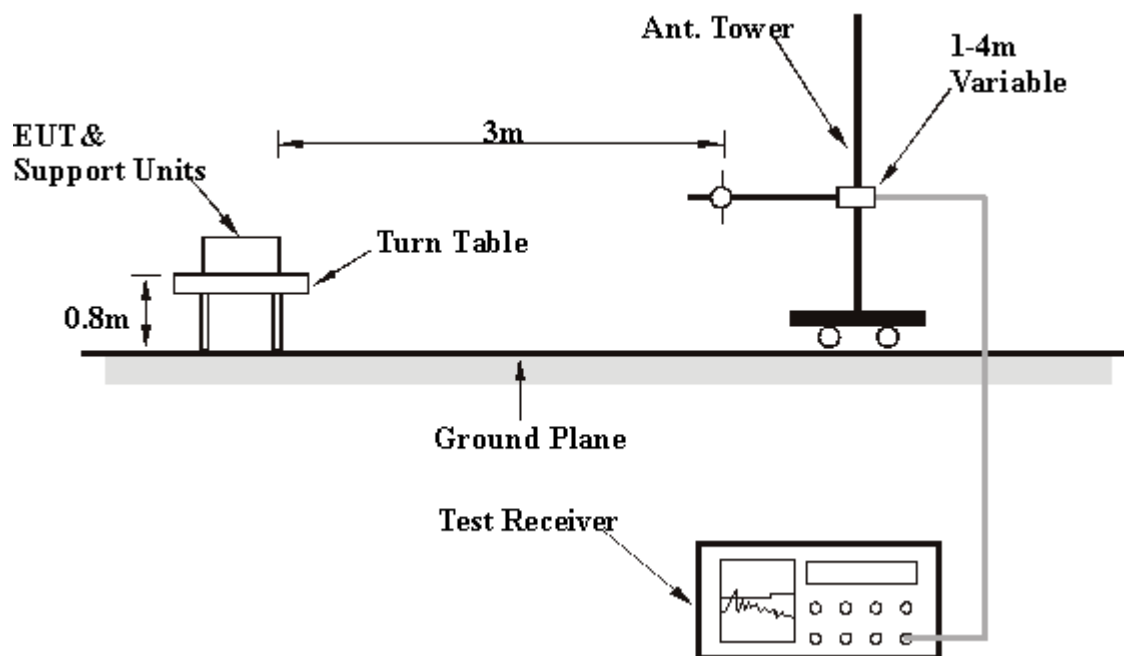
NOTE:

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 68%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Morgan Chen

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	168.02	31.67 QP	43.50	-11.83	1.00 H	82	17.19	14.48
2	399.34	31.66 QP	46.00	-14.34	1.00 H	115	14.44	17.22
3	488.76	32.70 QP	46.00	-13.30	1.00 H	121	13.57	19.13
4	537.35	30.91 QP	46.00	-15.09	1.25 H	28	10.87	20.04
5	671.48	32.49 QP	46.00	-13.51	1.00 H	352	9.92	22.57
6	908.64	36.88 QP	46.00	-9.12	1.00 H	244	10.88	26.00

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	399.34	35.86 QP	46.00	-10.14	1.00 V	16	18.64	17.22
2	432.38	33.78 QP	46.00	-12.22	1.25 V	310	15.63	18.15
3	488.76	37.40 QP	46.00	-8.60	1.00 V	295	18.27	19.13
4	537.35	35.42 QP	46.00	-10.58	1.00 V	328	15.38	20.04
5	671.48	33.41 QP	46.00	-12.59	1.50 V	82	10.85	22.57
6	957.23	32.82 QP	46.00	-13.18	1.00 V	10	6.30	26.52

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Quasi-Peak
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	23deg. C, 68%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Morgan Chen

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	168.02	33.66 QP	43.50	-9.84	1.50 H	100	19.18	14.48
2	236.05	31.08 QP	46.00	-14.92	1.25 H	355	17.81	13.27
3	496.53	38.01 QP	46.00	-7.99	1.25 H	295	18.78	19.23
4	539.30	31.75 QP	46.00	-14.25	1.25 H	343	11.67	20.08
5	671.48	33.03 QP	46.00	-12.97	1.00 H	103	10.47	22.57
6	805.61	32.56 QP	46.00	-13.44	1.00 H	58	7.93	24.62

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	399.34	37.53 QP	46.00	-8.47	1.00 V	10	20.30	17.22
2	432.38	33.10 QP	46.00	-12.90	1.00 V	298	14.95	18.15
3	488.76	36.97 QP	46.00	-9.03	1.00 V	151	17.84	19.13
4	533.47	34.63 QP	46.00	-11.37	1.00 V	352	14.68	19.96
5	805.61	33.56 QP	46.00	-12.44	1.00 V	358	8.93	24.62
6	945.57	33.35 QP	46.00	-12.65	1.00 V	340	6.92	26.43

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.
Margin value = Emission level – Limit value.

802.11g Turbo OFDM modulation

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	Below 1000MHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	168.02	31.49 QP	43.50	-12.01	2.00 H	82	17.00	14.48
2	399.34	34.16 QP	46.00	-11.84	3.00 H	118	16.94	17.22
3	432.38	30.99 QP	46.00	-15.01	3.00 H	88	12.84	18.15
4	496.53	34.10 QP	46.00	-11.90	3.00 H	226	14.86	19.23
5	539.30	30.13 QP	46.00	-15.87	2.00 H	40	10.05	20.08
6	675.37	33.90 QP	46.00	-12.10	2.00 H	115	11.28	22.62

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	391.56	33.62 QP	46.00	-12.38	1.00 V	325	16.56	17.06
2	424.61	39.57 QP	46.00	-6.43	1.50 V	52	21.64	17.93
3	496.53	38.98 QP	46.00	-7.02	1.50 V	166	19.75	19.23
4	537.35	33.31 QP	46.00	-12.69	1.00 V	304	13.27	20.04
5	675.37	33.22 QP	46.00	-12.78	1.50 V	79	10.60	22.62
6	805.61	33.33 QP	46.00	-12.67	1.00 V	337	8.70	24.62

- 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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	1608.00	47.40 PK	74.00	-26.60	1.51 H	35	18.04	29.36
1	1608.00	42.03 AV	54.00	-11.97	1.51 H	35	12.67	29.36
2	2390.00	48.34 PK	74.00	-25.66	1.21 H	290	16.47	31.87
2	2390.00	41.12 AV	54.00	-12.88	1.21 H	290	9.25	31.87
3	*2412.00	107.56 PK			1.21 H	290	75.60	31.96
3	*2412.00	100.34 AV			1.21 H	290	68.38	31.96
4	3216.00	49.88 PK	74.00	-24.12	1.04 H	36	15.91	33.96
4	3216.00	44.12 AV	54.00	-9.88	1.04 H	36	10.15	33.96
5	4824.00	47.19 PK	74.00	-26.81	1.06 H	311	9.36	37.83
5	4824.00	38.28 AV	54.00	-15.72	1.06 H	311	0.45	37.83
6	7236.00	54.77 PK	87.56	-32.79	1.08 H	285	10.48	44.29
6	7236.00	44.58 AV	80.34	-35.76	1.08 H	285	0.29	44.29
7	9648.00	57.51 PK	87.56	-30.05	1.00 H	30	9.74	47.77
7	9648.00	46.89 AV	80.34	-33.45	1.00 H	30	-0.88	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. “ * ” : Fundamental frequency.

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	1608.00	50.43 PK	74.00	-23.57	1.72 V	89	21.07	29.36
1	1608.00	46.36 AV	54.00	-7.64	1.72 V	89	17.00	29.36
2	2390.00	49.96 PK	74.00	-24.04	1.29 V	86	18.09	31.87
2	2390.00	43.29 AV	54.00	-10.71	1.29 V	86	11.42	31.87
3	*2412.00	109.18 PK			1.29 V	86	77.22	31.96
3	*2412.00	102.51 AV			1.29 V	86	70.55	31.96
4	3216.00	49.72 PK	74.00	-24.28	1.35 V	183	15.75	33.96
4	3216.00	43.74 AV	54.00	-10.26	1.35 V	183	9.77	33.96
5	4824.00	51.13 PK	74.00	-22.87	1.21 V	286	13.30	37.83
5	4824.00	42.32 AV	54.00	-11.68	1.21 V	286	4.49	37.83
6	7236.00	55.50 PK	89.18	-33.68	1.00 V	6	11.21	44.29
6	7236.00	44.42 AV	82.51	-38.09	1.00 V	6	0.13	44.29
7	9648.00	60.96 PK	89.18	-28.22	1.23 V	354	13.19	47.77
7	9648.00	53.55 AV	82.51	-28.96	1.23 V	354	5.78	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. “ * “ : Fundamental frequency.



EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	1624.00	46.23 PK	74.00	-27.77	1.08 H	156	16.83	29.40
1	1624.00	42.25 AV	54.00	-11.75	1.08 H	156	12.85	29.40
2	*2437.00	106.18 PK			1.17 H	69	74.12	32.06
2	*2437.00	99.59 AV			1.17 H	69	67.53	32.06
3	3248.00	48.11 PK	74.00	-25.89	1.14 H	102	14.12	33.99
3	3248.00	42.16 AV	54.00	-11.84	1.14 H	102	8.17	33.99
4	4874.00	48.62 PK	74.00	-25.38	1.09 H	233	10.64	37.98
4	4874.00	39.57 AV	54.00	-14.43	1.09 H	233	1.59	37.98
5	7311.00	54.16 PK	74.00	-19.84	1.36 H	357	9.65	44.51
5	7311.00	43.25 AV	54.00	-10.75	1.36 H	357	-1.26	44.51
6	9748.00	56.16 PK	86.18	-30.02	1.07 H	169	8.13	48.03
6	9748.00	48.87 AV	79.59	-30.72	1.07 H	169	0.84	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. “ * ” : Fundamental frequency.

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	1624.00	48.15 PK	74.00	-25.85	1.09 V	164	18.75	29.40
1	1624.00	44.31 AV	54.00	-9.69	1.09 V	164	14.91	29.40
2	*2437.00	109.64 PK			1.26 V	83	77.58	32.06
2	*2437.00	102.90 AV			1.26 V	83	70.84	32.06
3	3248.00	49.15 PK	74.00	-24.85	1.12 V	199	15.16	33.99
3	3248.00	43.22 AV	54.00	-10.78	1.12 V	199	9.23	33.99
4	4874.00	51.63 PK	74.00	-22.37	1.23 V	221	13.65	37.98
4	4874.00	42.59 AV	54.00	-11.41	1.23 V	221	4.61	37.98
5	7311.00	55.78 PK	74.00	-18.22	1.28 V	143	11.27	44.51
5	7311.00	44.62 AV	54.00	-9.38	1.28 V	143	0.11	44.51
6	9748.00	57.65 PK	89.64	-31.99	1.04 V	215	9.62	48.03
6	9748.00	50.11 AV	82.90	-32.79	1.04 V	215	2.08	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. “ * “ : Fundamental frequency.

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	1641.00	49.28 PK	74.00	-24.72	1.24 H	189	19.83	29.45
1	1641.00	45.36 AV	54.00	-8.64	1.24 H	189	15.91	29.45
2	*2462.00	106.71 PK			1.20 H	290	74.55	32.16
2	*2462.00	99.40 AV			1.20 H	290	67.24	32.16
3	2483.50	46.73 PK	74.00	-27.27	1.20 H	290	14.49	32.24
3	2483.50	39.42 AV	54.00	-14.58	1.20 H	290	7.18	32.24
4	3282.00	49.61 PK	74.00	-24.39	1.34 H	165	15.59	34.02
4	3282.00	44.76 AV	54.00	-9.24	1.34 H	165	10.74	34.02
5	4924.00	50.25 PK	74.00	-23.75	1.15 H	246	12.11	38.14
5	4924.00	44.53 AV	54.00	-9.47	1.15 H	246	6.39	38.14
6	7386.00	54.78 PK	74.00	-19.22	1.29 H	164	10.10	44.68
6	7386.00	43.65 AV	54.00	-10.35	1.29 H	164	-1.03	44.68
7	9848.00	54.88 PK	86.71	-31.83	1.43 H	256	6.56	48.32
7	9848.00	47.59 AV	79.40	-31.81	1.43 H	256	-0.73	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. “ * “ : Fundamental frequency.

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	1641.00	51.16 PK	74.00	-22.84	1.52 V	347	21.71	29.45
1	1641.00	47.28 AV	54.00	-6.72	1.52 V	347	17.83	29.45
2	*2462.00	109.49 PK			1.49 V	85	77.33	32.16
2	*2462.00	102.08 AV			1.49 V	85	69.92	32.16
3	2483.50	48.51 PK	74.00	-25.49	1.49 V	85	16.27	32.24
3	2483.50	41.10 AV	54.00	-12.90	1.49 V	85	8.86	32.24
4	3282.00	51.37 PK	74.00	-22.63	1.44 V	169	17.35	34.02
4	3282.00	46.50 AV	54.00	-7.50	1.44 V	169	12.48	34.02
5	4924.00	51.10 PK	74.00	-22.90	1.17 V	158	12.96	38.14
5	4924.00	45.34 AV	54.00	-8.66	1.17 V	158	7.20	38.14
6	7386.00	55.83 PK	74.00	-18.17	1.09 V	211	11.15	44.68
6	7386.00	44.71 AV	54.00	-9.29	1.09 V	211	0.03	44.68
7	9848.00	57.23 PK	89.49	-32.26	1.25 V	322	8.91	48.32
7	9848.00	50.16 AV	82.08	-31.92	1.25 V	322	1.84	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. “ * “ : Fundamental frequency.

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	22deg. C, 66%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Brad Wu

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	1608.00	52.85 PK	74.00	-21.15	1.51 H	301	24.04	28.81
1	1608.00	42.96 AV	54.00	-11.04	1.51 H	301	14.15	28.81
2	2390.00	40.02 PK	74.00	-33.98	1.23 H	56	8.63	31.39
3	*2412.00	105.66 PK			1.23 H	56	74.18	31.48
3	*2412.00	98.79 AV			1.23 H	56	67.31	31.48
4	3216.00	46.05 PK	74.00	-27.95	1.30 H	44	12.86	33.19
4	3216.00	38.62 AV	54.00	-15.38	1.30 H	44	5.43	33.19
5	4824.00	47.05 PK	74.00	-26.95	1.32 H	259	10.18	36.86
6	7236.00	51.92 PK	85.66	-33.74	1.12 H	254	9.30	42.62
6	7236.00	39.57 AV	78.79	-39.22	1.12 H	254	- 3.05	42.62
7	9648.00	53.90 PK	85.66	-31.76	1.12 H	10	7.58	46.32
7	9648.00	42.99 AV	78.79	-35.80	1.12 H	10	- 3.33	46.32

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	22deg. C, 66%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Brad Wu

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	1608.00	53.18 PK	74.00	-20.82	1.39 V	51	24.37	28.81
1	1608.00	44.24 AV	54.00	-9.76	1.39 V	51	15.43	28.81
2	2390.00	48.38 PK	74.00	-25.62	1.00 V	18	16.99	31.39
2	2390.00	40.83 AV	54.00	-13.17	1.00 V	18	9.44	31.39
3	*2412.00	108.99 PK			1.00 V	18	77.51	31.48
3	*2412.00	101.56 AV			1.00 V	18	70.08	31.48
4	3216.00	50.03 PK	74.00	-23.97	1.17 V	321	16.84	33.19
4	3216.00	43.93 AV	54.00	-10.07	1.17 V	321	10.74	33.19
5	4824.00	49.05 PK	74.00	-24.95	1.16 V	16	12.18	36.86
5	4824.00	39.29 AV	54.00	-14.71	1.16 V	16	2.42	36.86
6	7236.00	52.11 PK	88.99	-36.88	1.24 V	346	9.49	42.62
6	7236.00	40.48 AV	81.56	-41.08	1.24 V	346	-2.14	42.62
7	9648.00	56.58 PK	88.99	-32.41	1.08 V	346	10.26	46.32
7	9648.00	47.55 AV	81.56	-34.01	1.08 V	346	1.23	46.32

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	22deg. C, 66%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Brad Wu

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	1624.00	47.81 PK	74.00	-26.19	1.14 H	209	18.95	28.86
2	*2437.00	105.51 PK			1.12 H	45	73.92	31.59
2	*2437.00	98.40 AV			1.12 H	45	66.81	31.59
3	3248.00	45.74 PK	74.00	-28.26	1.02 H	285	12.51	33.23
4	4874.00	48.92 PK	74.00	-25.08	1.14 H	206	11.91	37.01
5	7311.00	52.01 PK	74.00	-21.99	1.13 H	354	9.17	42.84
5	7311.00	40.26 AV	54.00	-13.74	1.13 H	354	-2.58	42.84
6	9748.00	54.73 PK	85.51	-30.78	1.02 H	241	8.23	46.50
6	9748.00	42.08 AV	78.40	-36.32	1.02 H	241	-4.42	46.50

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	22deg. C, 66%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Brad Wu

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	1624.00	55.12 PK	74.00	-18.88	1.21 V	20	26.26	28.86
1	1624.00	46.32 AV	54.00	-7.68	1.21 V	20	17.46	28.86
2	*2437.00	109.50 PK			1.00 V	11	77.91	31.59
2	*2437.00	102.19 AV			1.00 V	11	70.60	31.59
3	3248.00	51.12 PK	74.00	-22.88	1.11 V	35	17.89	33.23
3	3248.00	46.12 AV	54.00	-7.88	1.11 V	35	12.89	33.23
4	4874.00	50.85 PK	74.00	-23.15	1.00 V	328	13.83	37.01
4	4874.00	42.89 AV	54.00	-11.11	1.00 V	328	5.87	37.01
5	7311.00	53.36 PK	74.00	-20.64	1.21 V	25	10.52	42.84
5	7311.00	41.21 AV	54.00	-12.79	1.21 V	25	-1.63	42.84
6	9748.00	56.81 PK	89.50	-32.69	1.05 V	50	10.31	46.50
6	9748.00	47.33 AV	82.19	-34.86	1.05 V	50	0.83	46.50

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	22deg. C, 66%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Brad Wu

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	1641.00	49.21 PK	74.00	-24.79	1.02 H	254	20.31	28.90
2	*2462.00	105.75 PK			1.14 H	299	74.06	31.69
2	*2462.00	98.49 AV			1.14 H	299	66.80	31.69
3	2483.50	43.04 PK	74.00	-30.96	1.14 H	299	11.26	31.78
4	3282.00	45.36 PK	74.00	-28.64	1.02 H	224	12.09	33.27
5	4924.00	47.69 PK	74.00	-26.31	1.05 H	303	10.53	37.16
6	7386.00	51.17 PK	74.00	-22.83	1.12 H	205	8.18	42.99
6	7386.00	40.41 AV	54.00	-13.59	1.12 H	205	-2.58	42.99
7	9848.00	55.85 PK	85.75	-29.90	1.02 H	254	9.21	46.64
7	9848.00	44.90 AV	78.49	-33.59	1.02 H	254	-1.74	46.64

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	CCK	ENVIRONMENTAL CONDITIONS	22deg. C, 66%RH, 991hPa
TRANSFER RATE	11Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Brad Wu

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	1641.00	54.59 PK	74.00	-19.41	1.20 V	30	25.69	28.90
1	1641.00	45.74 AV	54.00	-8.26	1.20 V	30	16.84	28.90
2	*2462.00	109.70 PK			1.00 V	11	78.01	31.69
2	*2462.00	102.45 AV			1.00 V	11	70.76	31.69
3	2483.50	49.49 PK	74.00	-24.51	1.00 V	11	17.71	31.78
3	2483.50	42.24 AV	54.00	-11.76	1.00 V	11	10.46	31.78
4	3282.00	50.48 PK	74.00	-23.52	1.21 V	341	17.21	33.27
4	3282.00	45.99 AV	54.00	-8.01	1.21 V	341	12.72	33.27
5	4924.00	52.44 PK	74.00	-21.56	1.20 V	21	15.28	37.16
5	4924.00	45.58 AV	54.00	-8.42	1.20 V	21	8.42	37.16
6	7386.00	52.22 PK	74.00	-21.78	1.11 V	108	9.23	42.99
6	7386.00	40.45 AV	54.00	-13.55	1.11 V	108	-2.54	42.99
7	9848.00	57.66 PK	89.70	-32.04	1.14 V	250	11.02	46.64
7	9848.00	48.26 AV	82.45	-34.19	1.14 V	250	1.62	46.64

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

802.11g OFDM modulation

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	1608.00	45.98 PK	74.00	-28.02	1.50 H	104	16.62	29.36
1	1608.00	41.77 AV	54.00	-12.23	1.50 H	104	12.41	29.36
2	2390.00	53.69 PK	74.00	-20.31	1.85 H	280	21.82	31.87
2	2390.00	43.86 AV	54.00	-10.14	1.85 H	280	11.99	31.87
3	*2412.00	103.17 PK			1.85 H	280	71.21	31.96
3	*2412.00	93.34 AV			1.85 H	280	61.38	31.96
4	3216.00	48.53 PK	74.00	-25.47	1.27 H	284	14.56	33.96
4	3216.00	42.80 AV	54.00	-11.20	1.27 H	284	8.83	33.96

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	1608.00	50.25 PK	74.00	-23.75	1.71 V	92	20.89	29.36
1	1608.00	46.91 AV	54.00	-7.09	1.71 V	92	17.55	29.36
2	2390.00	55.68 PK	74.00	-18.32	1.25 V	0	23.81	31.87
2	2390.00	45.90 AV	54.00	-8.10	1.25 V	0	14.03	31.87
3	*2412.00	106.16 PK			1.25 V	0	74.20	31.96
3	*2412.00	96.38 AV			1.25 V	0	64.42	31.96
4	3216.00	49.49 PK	74.00	-24.51	1.36 V	179	15.52	33.96
4	3216.00	43.96 AV	54.00	-10.04	1.36 V	179	9.99	33.96

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	1624.00	48.15 PK	74.00	-25.85	1.65 H	188	18.75	29.40
1	1624.00	44.09 AV	54.00	-9.91	1.65 H	188	14.69	29.40
2	*2437.00	103.10 PK			1.76 H	283	71.04	32.06
2	*2437.00	93.39 AV			1.76 H	283	61.33	32.06
3	3248.00	50.20 PK	74.00	-23.80	1.47 H	98	16.21	33.99
3	3248.00	45.31 AV	54.00	-8.69	1.47 H	98	11.32	33.99

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1624.00	50.23 PK	74.00	-23.77	1.24 V	118	20.83	29.40
1	1624.00	46.20 AV	54.00	-7.80	1.24 V	118	16.80	29.40
2	*2437.00	106.12 PK			1.26 V	83	74.06	32.06
2	*2437.00	96.26 AV			1.26 V	83	64.20	32.06
3	3248.00	51.17 PK	74.00	-22.83	1.33 V	202	17.18	33.99
3	3248.00	46.58 AV	54.00	-7.42	1.33 V	202	12.59	33.99

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	1641.00	49.62 PK	74.00	-24.38	1.25 H	38	20.17	29.45
1	1641.00	45.51 AV	54.00	-8.49	1.25 H	38	16.06	29.45
2	*2462.00	102.75 PK			1.75 H	286	70.59	32.16
2	*2462.00	92.95 AV			1.75 H	286	60.79	32.16
3	2483.50	56.25 PK	74.00	-17.75	1.75 H	286	24.01	32.24
3	2483.50	46.45 AV	54.00	-7.55	1.75 H	286	14.21	32.24
4	3282.00	50.23 PK	74.00	-23.77	1.05 H	213	16.21	34.02
4	3282.00	45.89 AV	54.00	-8.11	1.05 H	213	11.87	34.02

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1641.00	52.71 PK	74.00	-21.29	1.66 V	90	23.26	29.45
1	1641.00	48.72 AV	54.00	-5.28	1.66 V	90	19.27	29.45
2	*2462.00	106.46 PK			1.26 V	82	74.30	32.16
2	*2462.00	96.59 AV			1.26 V	82	64.43	32.16
3	2483.50	56.96 PK	74.00	-17.04	1.26 V	82	24.72	32.24
3	2483.50	47.09 AV	54.00	-6.91	1.26 V	82	14.85	32.24
4	3282.00	51.50 PK	74.00	-22.50	1.09 V	344	17.49	34.02
4	3282.00	47.10 AV	54.00	-6.90	1.09 V	344	13.09	34.02

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 1	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 66%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Brad Wu

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	1608.00	46.84 PK	74.00	-27.16	1.02 H	287	18.03	28.81
2	2390.00	49.39 PK	74.00	-24.61	1.22 H	40	18.00	31.39
2	2390.00	39.43 AV	54.00	-14.57	1.22 H	40	8.04	31.39
3	*2412.00	102.33 PK			1.22 H	40	70.85	31.48
3	*2412.00	92.37 AV			1.22 H	40	60.89	31.48
4	3216.00	48.50 PK	74.00	-25.50	1.48 H	309	15.31	33.19
5	4824.00	48.38 PK	74.00	-25.62	1.42 H	339	11.52	36.86
6	7236.00	51.13 PK	82.33	-31.20	1.14 H	205	8.51	42.62
6	7236.00	38.74 AV	72.37	-33.63	1.14 H	205	-3.88	42.62

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1608.00	48.39 PK	74.00	-25.61	1.02 V	354	19.58	28.81
2	2390.00	53.40 PK	74.00	-20.60	1.00 V	10	22.01	31.39
2	2390.00	43.99 AV	54.00	-10.01	1.00 V	10	12.60	31.39
3	*2412.00	106.84 PK			1.00 V	10	75.36	31.48
3	*2412.00	97.43 AV			1.00 V	10	65.95	31.48
4	3216.00	50.21 PK	74.00	-23.79	1.15 V	287	17.02	33.19
4	3216.00	46.25 AV	54.00	-7.75	1.15 V	287	13.06	33.19
5	4824.00	51.02 PK	74.00	-22.98	1.03 V	328	14.16	36.86
5	4824.00	39.58 AV	54.00	-14.42	1.03 V	328	2.72	36.86
6	7236.00	50.89 PK	86.84	-35.95	1.02 V	227	8.27	42.62
6	7236.00	39.64 AV	77.43	-37.79	1.02 V	227	-2.98	42.62

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 66%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Brad Wu

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	1624.00	55.87 PK	74.00	-18.13	1.05 H	24	27.01	28.86
1	1624.00	47.12 AV	54.00	-6.88	1.05 H	24	18.26	28.86
2	*2437.00	103.27 PK			1.02 H	10	71.68	31.59
2	*2437.00	93.82 AV			1.02 H	10	62.23	31.59
3	3248.00	52.01 PK	74.00	-21.99	1.05 H	10	18.78	33.23
3	3248.00	45.23 AV	54.00	-8.77	1.05 H	10	12.00	33.23
4	4874.00	51.89 PK	74.00	-22.11	1.15 H	35	14.88	37.01
4	4874.00	40.12 AV	54.00	-13.88	1.15 H	35	3.11	37.01
5	7311.00	51.10 PK	74.00	-22.90	1.02 H	25	8.26	42.84
5	7311.00	40.12 AV	54.00	-13.88	1.02 H	25	-2.72	42.84
6	9748.00	53.86 PK	83.27	-29.41	1.06 H	14	7.36	46.50
6	9748.00	42.31 AV	73.82	-31.51	1.06 H	14	-4.19	46.50

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	1624.00	56.17 PK	74.00	-17.83	1.10 V	36	27.31	28.86
1	1624.00	47.27 AV	54.00	-6.73	1.10 V	36	18.41	28.86
2	*2437.00	106.67 PK			1.18 V	35	75.08	31.59
2	*2437.00	95.35 AV			1.18 V	35	63.76	31.59
3	3248.00	52.98 PK	74.00	-21.02	1.08 V	40	19.75	33.23
3	3248.00	45.69 AV	54.00	-8.31	1.08 V	40	12.46	33.23
4	4874.00	52.29 PK	74.00	-21.71	1.15 V	35	15.28	37.01
4	4874.00	41.62 AV	54.00	-12.38	1.15 V	35	4.61	37.01
5	7311.00	51.95 PK	74.00	-22.05	1.12 V	18	9.11	42.84
5	7311.00	40.89 AV	54.00	-13.11	1.12 V	18	-1.95	42.84
6	9748.00	54.15 PK	86.67	-32.52	1.20 V	50	7.65	46.50
6	9748.00	43.11 AV	75.35	-32.24	1.20 V	50	-3.39	46.50

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

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3016	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 11	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	22deg. C, 66%RH, 991hPa
TRANSFER RATE	6Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	2	TESTED BY	Brad Wu

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	1641.00	46.52 PK	74.00	-27.48	1.10 H	228	17.62	28.90
2	*2462.00	101.03 PK			1.18 H	40	69.34	31.69
2	*2462.00	91.39 AV			1.18 H	40	59.70	31.69
3	2483.50	51.36 PK	74.00	-22.64	1.44 H	284	19.58	31.78
3	2483.50	41.72 AV	54.00	-12.28	1.44 H	284	9.94	31.78
4	3282.00	47.36 PK	74.00	-26.64	1.12 H	250	14.09	33.27
5	4924.00	48.39 PK	74.00	-25.61	1.02 H	225	11.23	37.16
6	7386.00	53.02 PK	74.00	-20.98	1.12 H	138	10.03	42.99
6	7386.00	37.61 AV	54.00	-16.39	1.12 H	138	-5.38	42.99

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1641.00	48.30 PK	74.00	-25.70	1.12 V	208	19.40	28.90
2	*2462.00	106.73 PK			1.01 V	11	75.04	31.69
2	*2462.00	96.94 AV			1.01 V	11	65.25	31.69
3	2483.50	56.06 PK	74.00	-17.94	1.01 V	11	24.28	31.78
3	2483.50	46.27 AV	54.00	-7.73	1.01 V	11	14.49	31.78
4	3282.00	49.58 PK	74.00	-24.42	1.18 V	54	16.31	33.27
5	4924.00	50.42 PK	74.00	-23.58	1.17 V	12	13.26	37.16
5	4924.00	38.16 AV	54.00	-15.84	1.17 V	12	1.00	37.16
6	7386.00	54.10 PK	74.00	-19.90	1.02 V	258	11.11	42.99
6	7386.00	40.99 AV	54.00	-13.01	1.02 V	258	-2.00	42.99

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

802.11g Turbo OFDM modulation

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	1624.00	48.24 PK	74.00	-25.76	1.07 H	193	18.84	29.40
1	1624.00	44.17 AV	54.00	-9.83	1.07 H	193	14.77	29.40
2	2390.00	50.18 PK	74.00	-23.82	1.43 H	138	18.31	31.87
2	2390.00	41.60 AV	54.00	-12.40	1.43 H	138	9.73	31.87
3	*2437.00	104.87 PK			1.43 H	138	72.81	32.06
3	*2437.00	95.29 AV			1.43 H	138	63.23	32.06
4	2483.50	49.26 PK	74.00	-24.74	1.43 H	138	17.02	32.24
4	2483.50	43.68 AV	54.00	-10.32	1.43 H	138	11.44	32.24
5	3248.00	49.16 PK	74.00	-24.84	1.25 H	164	15.17	33.99
5	3248.00	45.26 AV	54.00	-8.74	1.25 H	164	11.27	33.99
6	4874.00	52.15 PK	74.00	-21.85	1.08 H	192	14.17	37.98
6	4874.00	43.84 AV	54.00	-10.16	1.08 H	192	5.86	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.

EUT	Wireless LAN PCI Card	MEASUREMENT DETAIL	
MODEL	WLH3015	FREQUENCY RANGE	1 ~ 25GHz
CHANNEL	Channel 6	DETECTOR FUNCTION	Peak(PK) Average (AV)
MODULATION TYPE	BPSK	ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa
TRANSFER RATE	12Mbps	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TEST MODE	1	TESTED BY	Brad Wu

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	1624.00	50.74 PK	74.00	-23.26	1.02 V	124	21.34	29.40
1	1624.00	46.52 AV	54.00	-7.48	1.02 V	124	17.12	29.40
2	2390.00	51.22 PK	74.00	-22.78	1.00 V	297	19.35	31.87
2	2390.00	42.19 AV	54.00	-11.81	1.00 V	297	10.32	31.87
3	*2437.00	105.91 PK			1.00 V	297	73.85	32.06
3	*2437.00	96.88 AV			1.00 V	297	64.82	32.06
4	2483.50	50.30 PK	74.00	-23.70	1.00 V	297	18.06	32.24
4	2483.50	41.27 AV	54.00	-12.73	1.00 V	297	9.03	32.24
5	3248.00	52.57 PK	74.00	-21.43	1.04 V	213	18.58	33.99
5	3248.00	48.44 AV	54.00	-5.56	1.04 V	213	14.45	33.99
6	4874.00	53.75 PK	74.00	-20.25	1.04 V	213	15.77	37.98
6	4874.00	45.19 AV	54.00	-8.81	1.04 V	213	7.21	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	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.

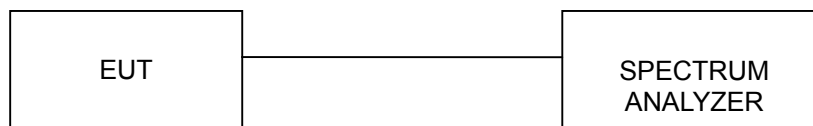
4.3.3 TEST PROCEDURE

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

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



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

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.

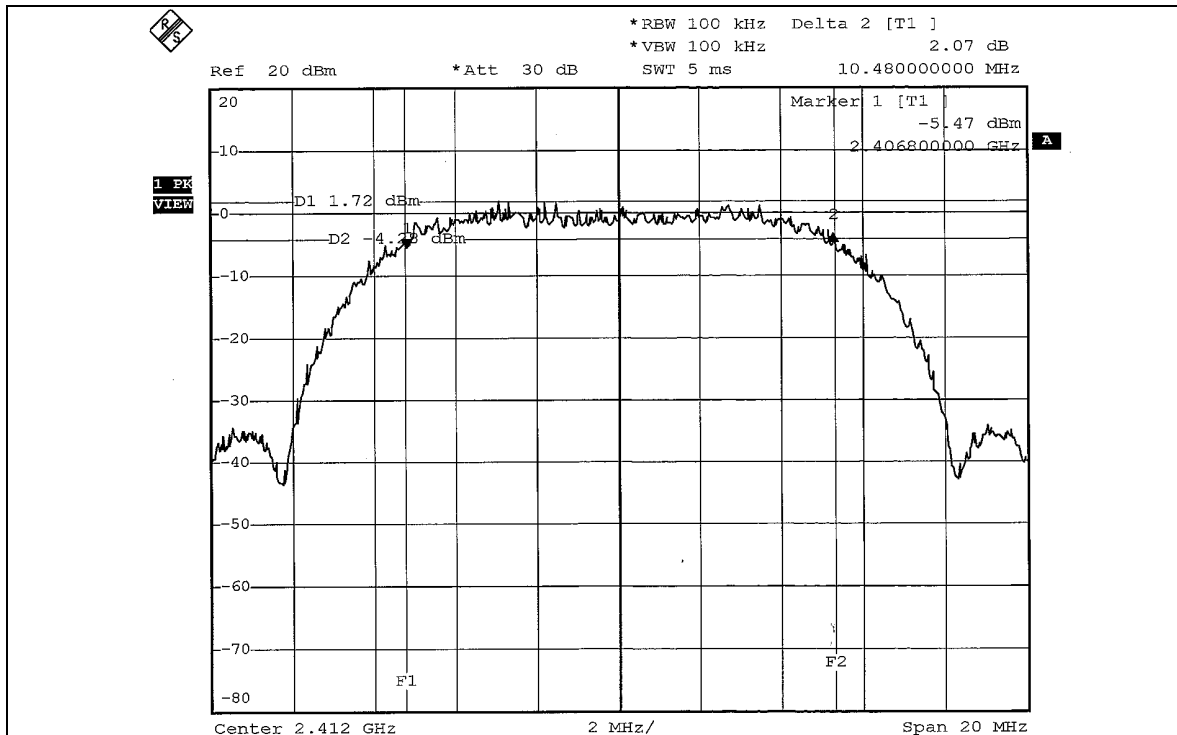
4.3.7 TEST RESULTS

802.11b DSSS modulation with test mode 1

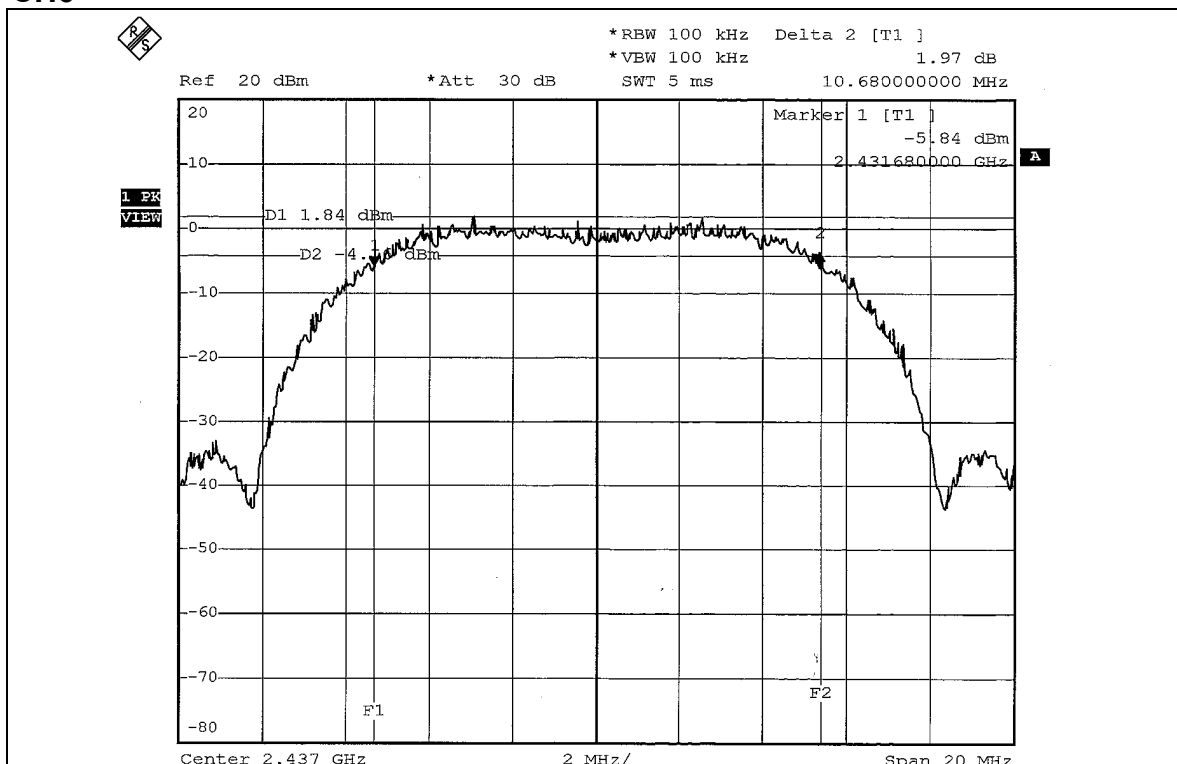
EUT	Wireless LAN PCI Card	MODEL	WLH3015
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	10.48	0.5	PASS
6	2437	10.68	0.5	PASS
11	2462	10.76	0.5	PASS

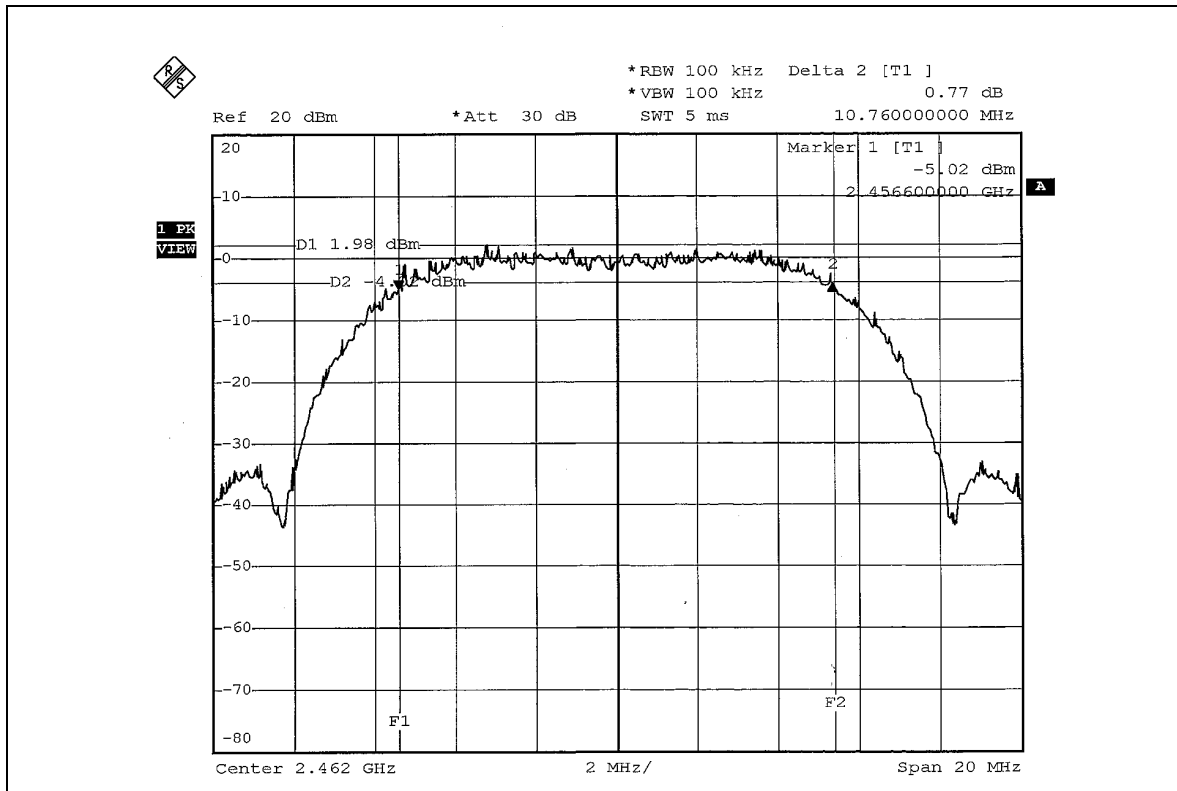
CH1



CH6



CH11

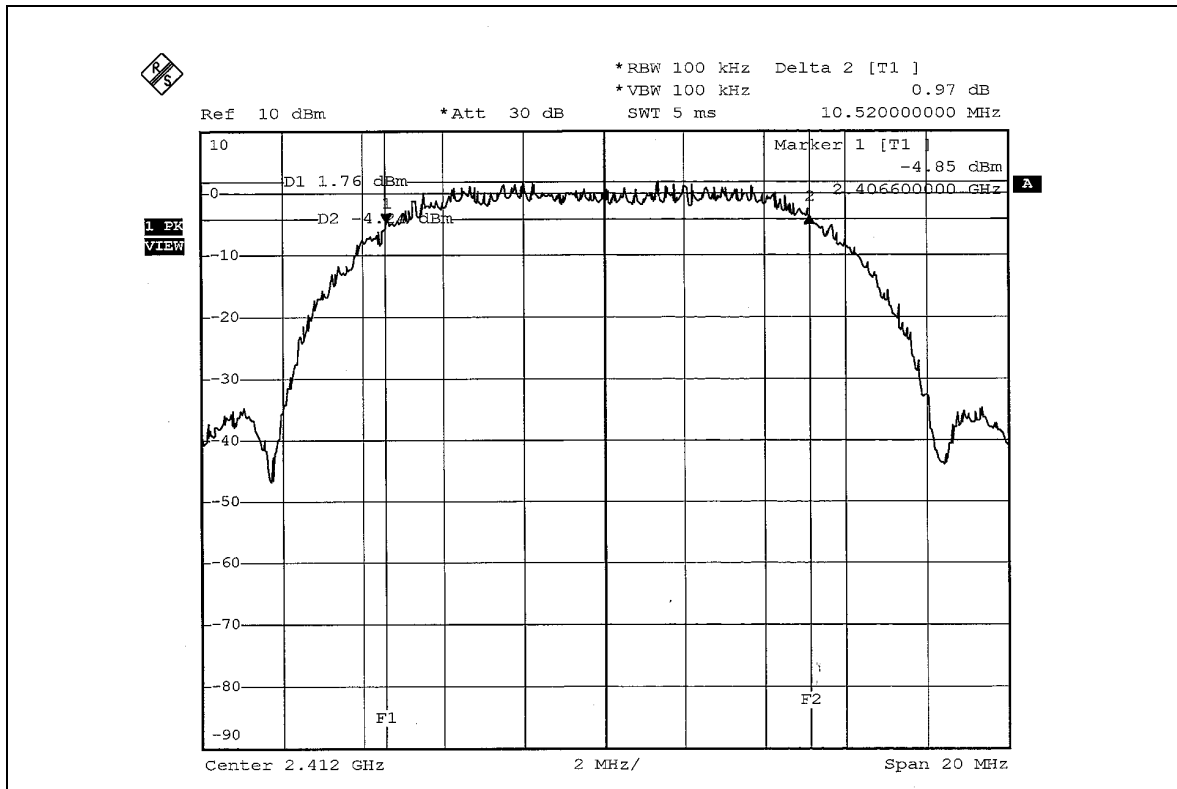


**802.11b DSSS modulation with test mode 2**

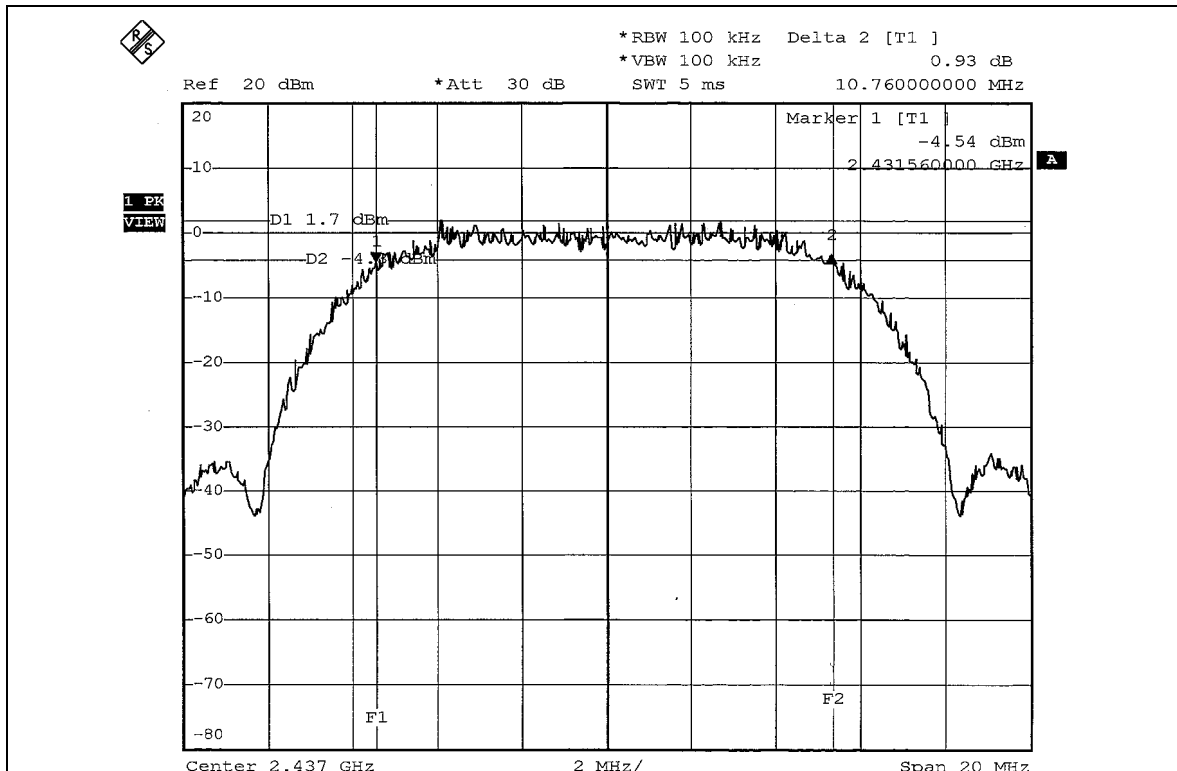
EUT	Wireless LAN PCI Card	MODEL	WLH3016
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	10.52	0.5	PASS
6	2437	10.76	0.5	PASS
11	2462	10.48	0.5	PASS

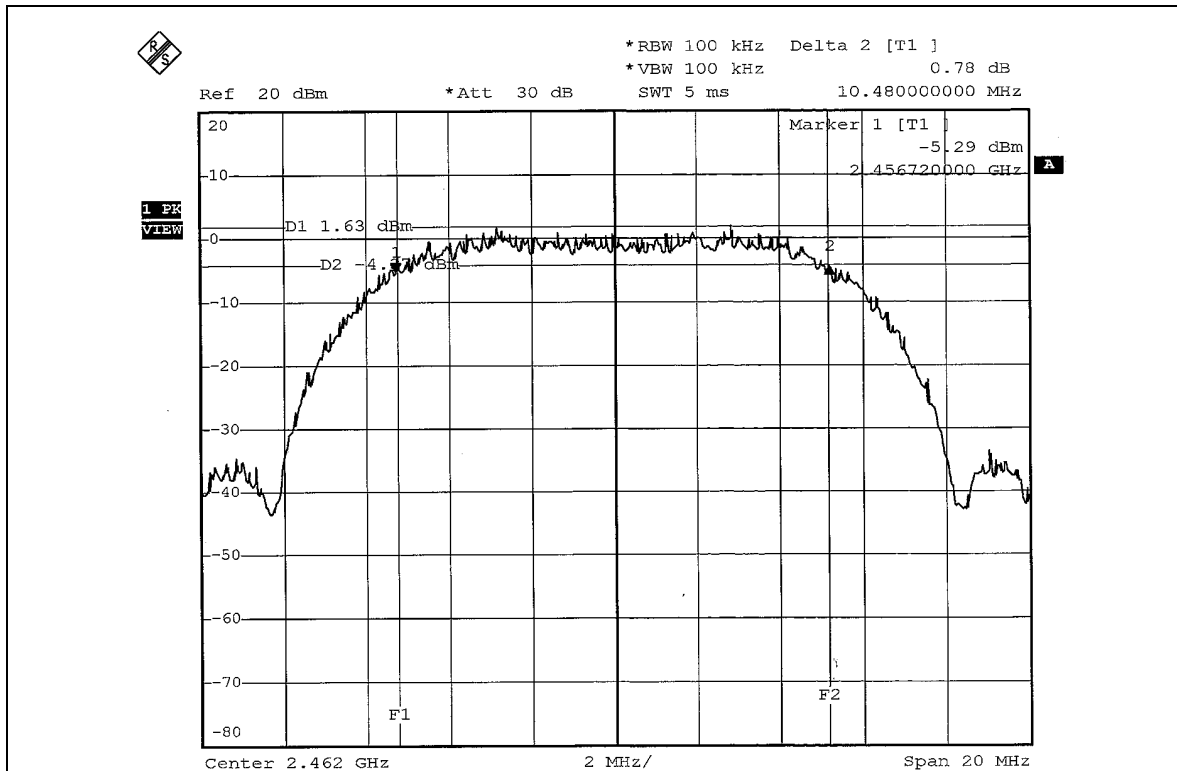
CH1



CH6



CH11

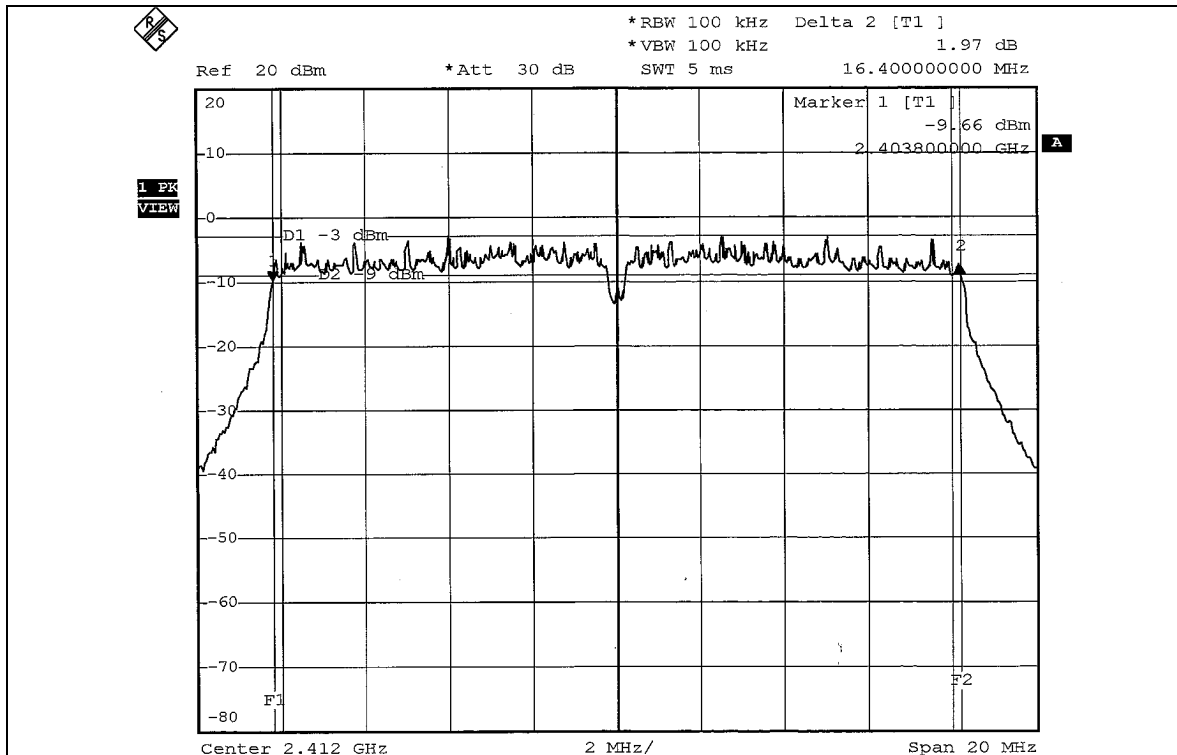


802.11g OFDM modulation with test mode 1

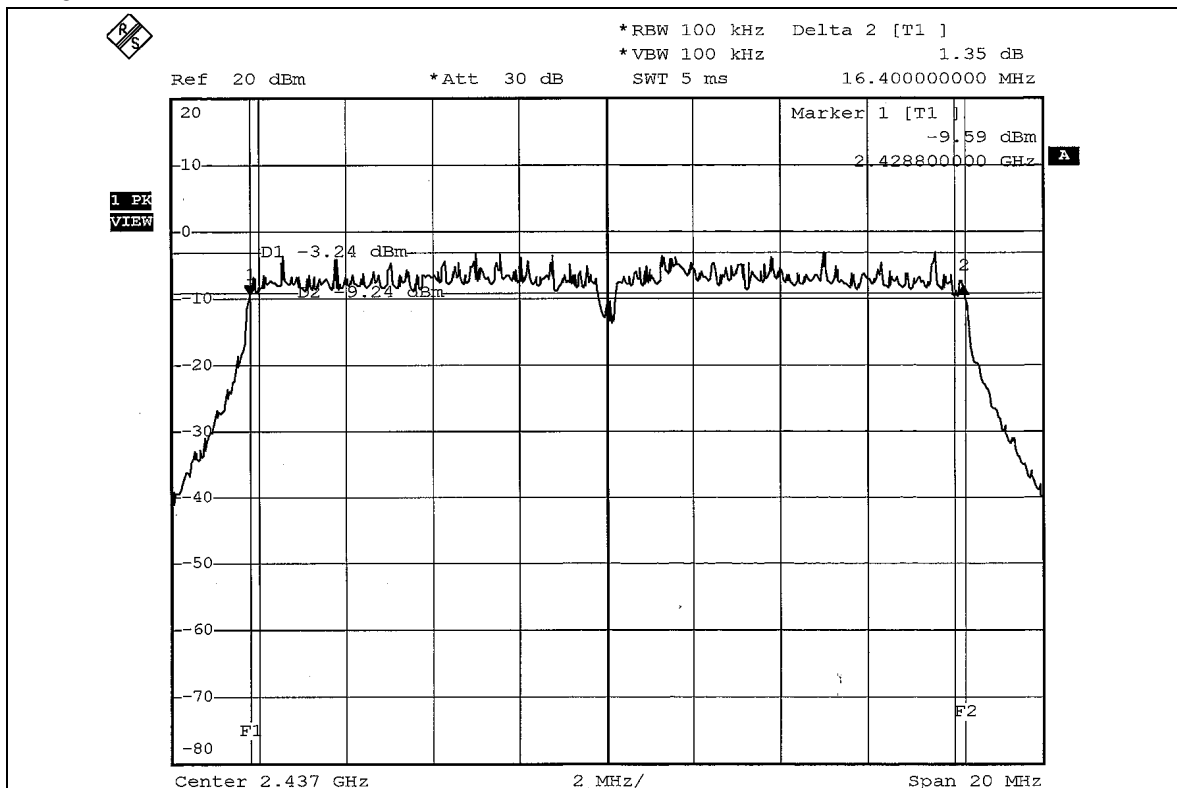
EUT	Wireless LAN PCI Card	MODEL	WLH3015
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TESTED BY	Gary Chang		

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

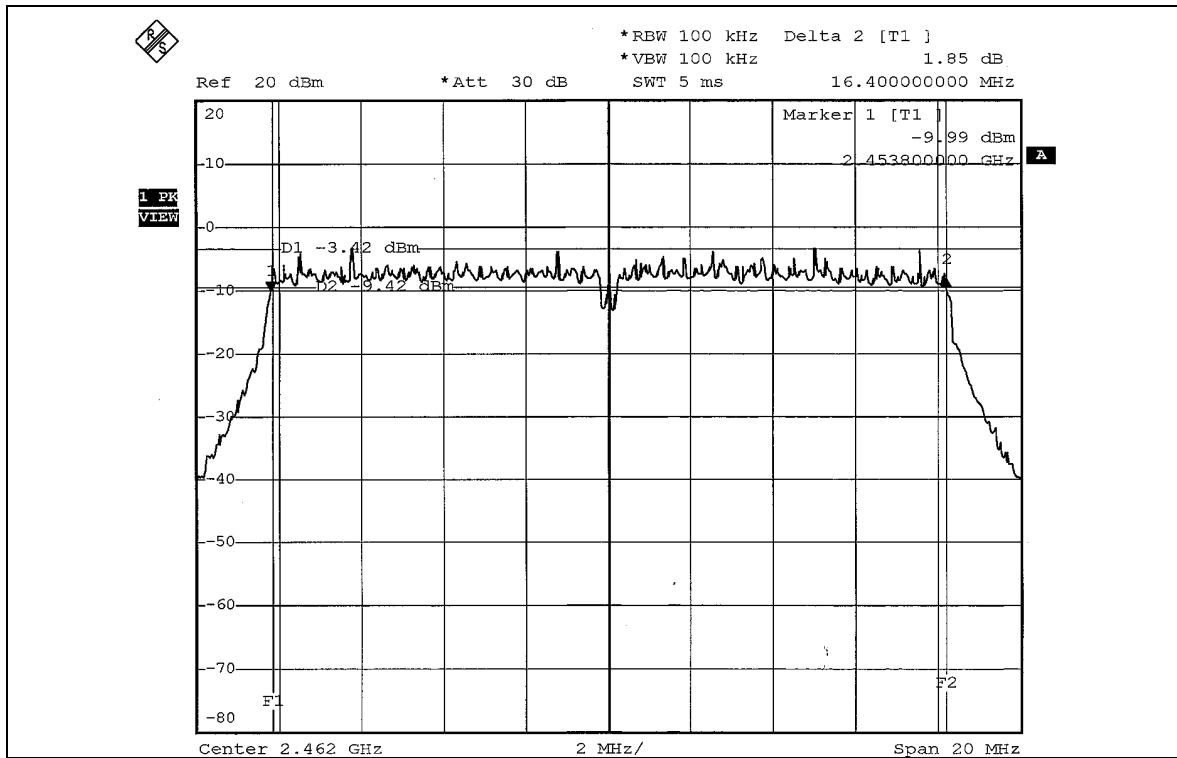
CH1



CH6



CH11

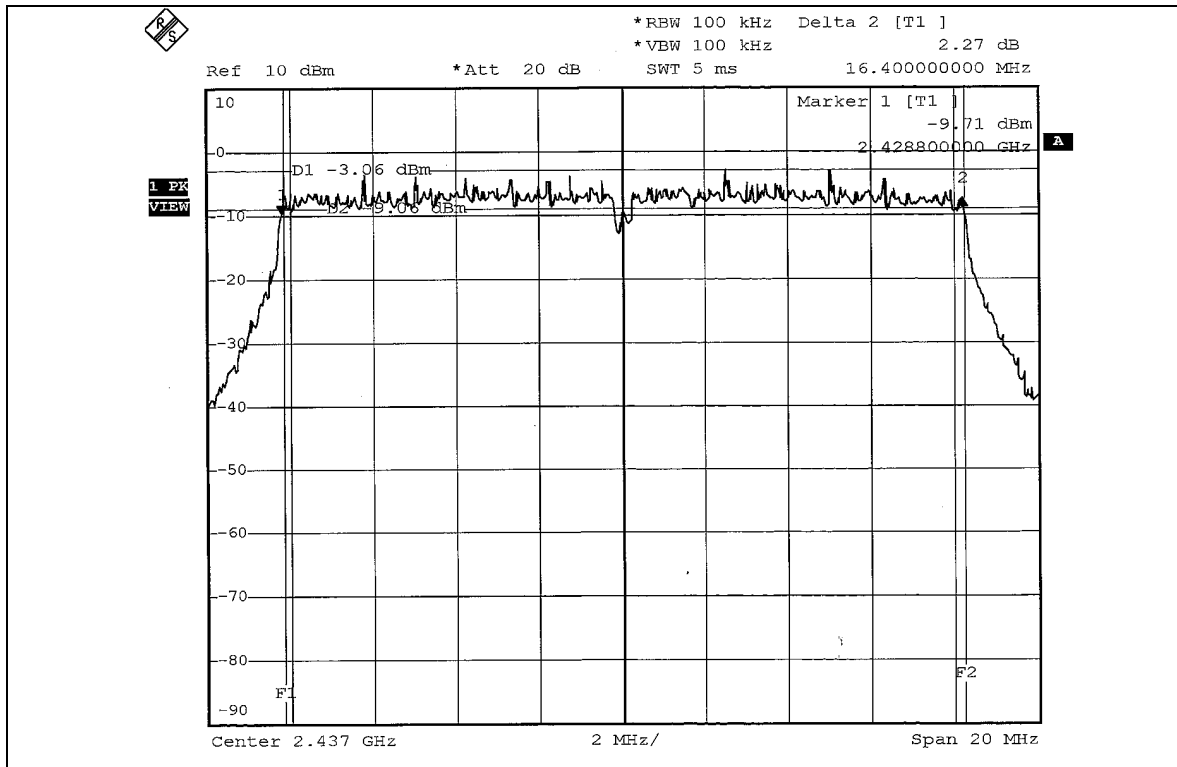


802.11g Turbo OFDM modulation with test mode 1

EUT	Wireless LAN PCI Card	MODEL	WLH3015
MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
6	2437	16.40	0.5	PASS

CH6

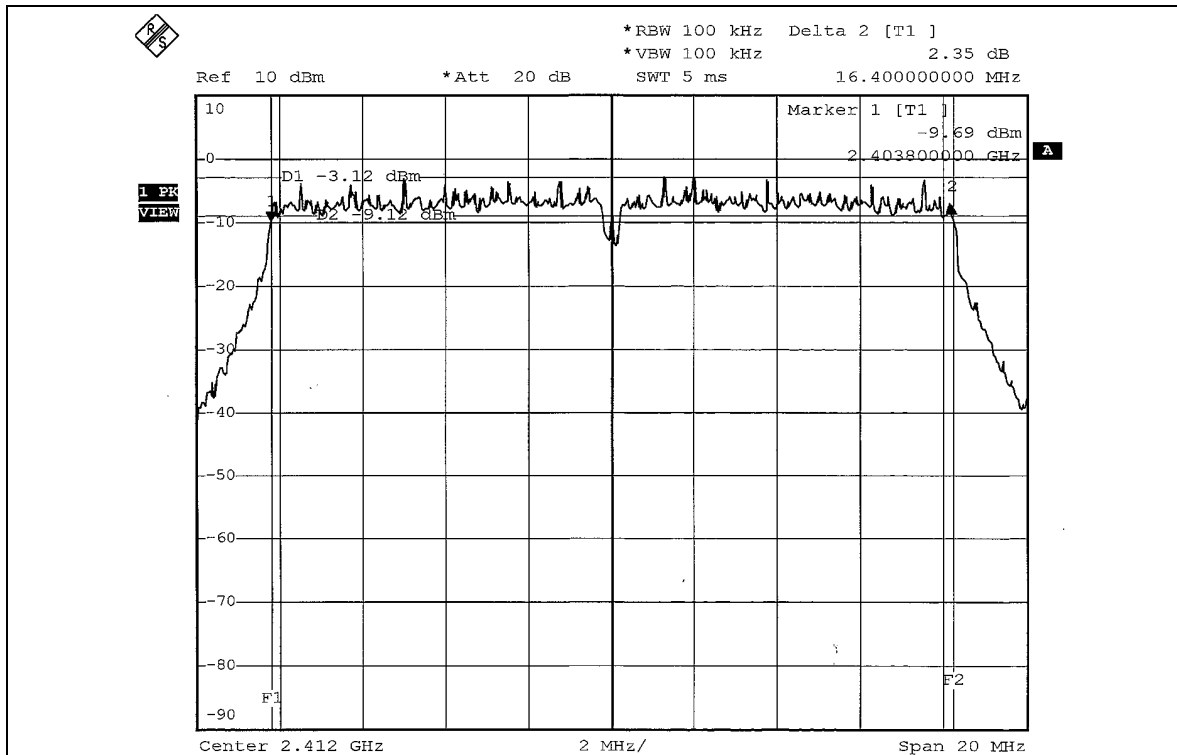


**802.11g OFDM modulation with test mode 2**

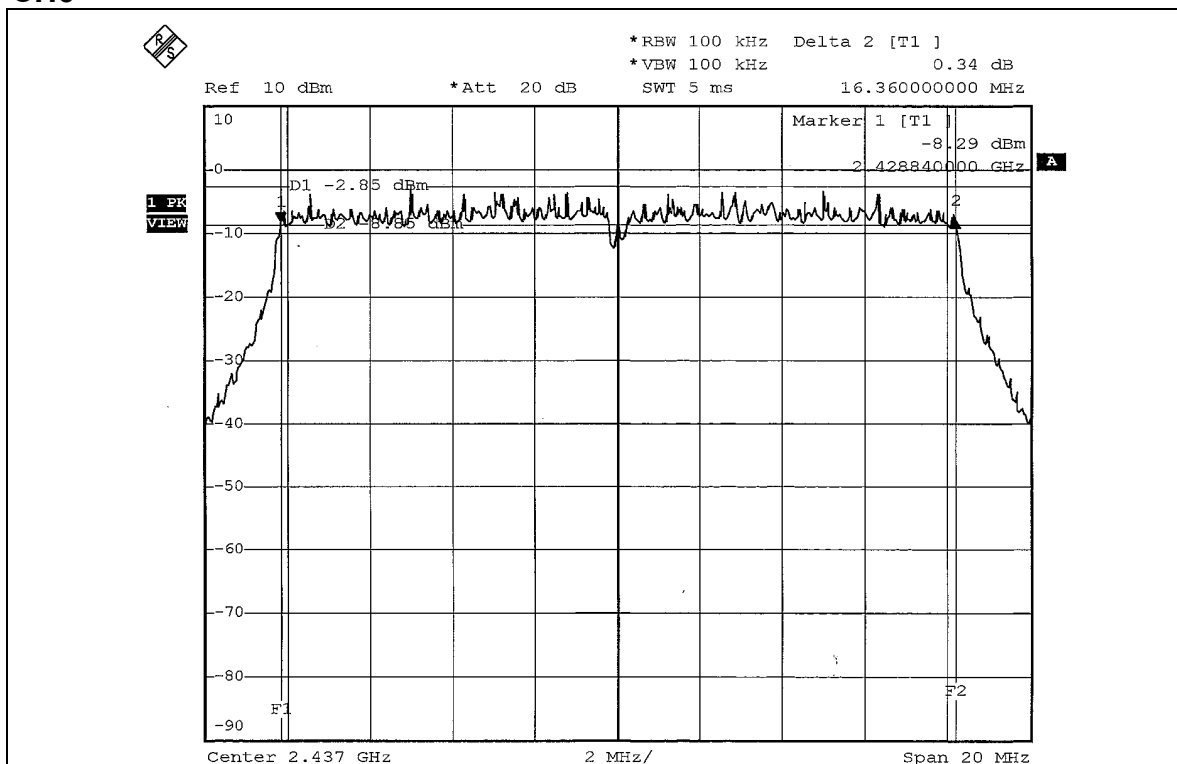
EUT	Wireless LAN PCI Card	MODEL	WLH3016
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	6 dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	16.40	0.5	PASS
6	2437	16.36	0.5	PASS
11	2462	16.36	0.5	PASS

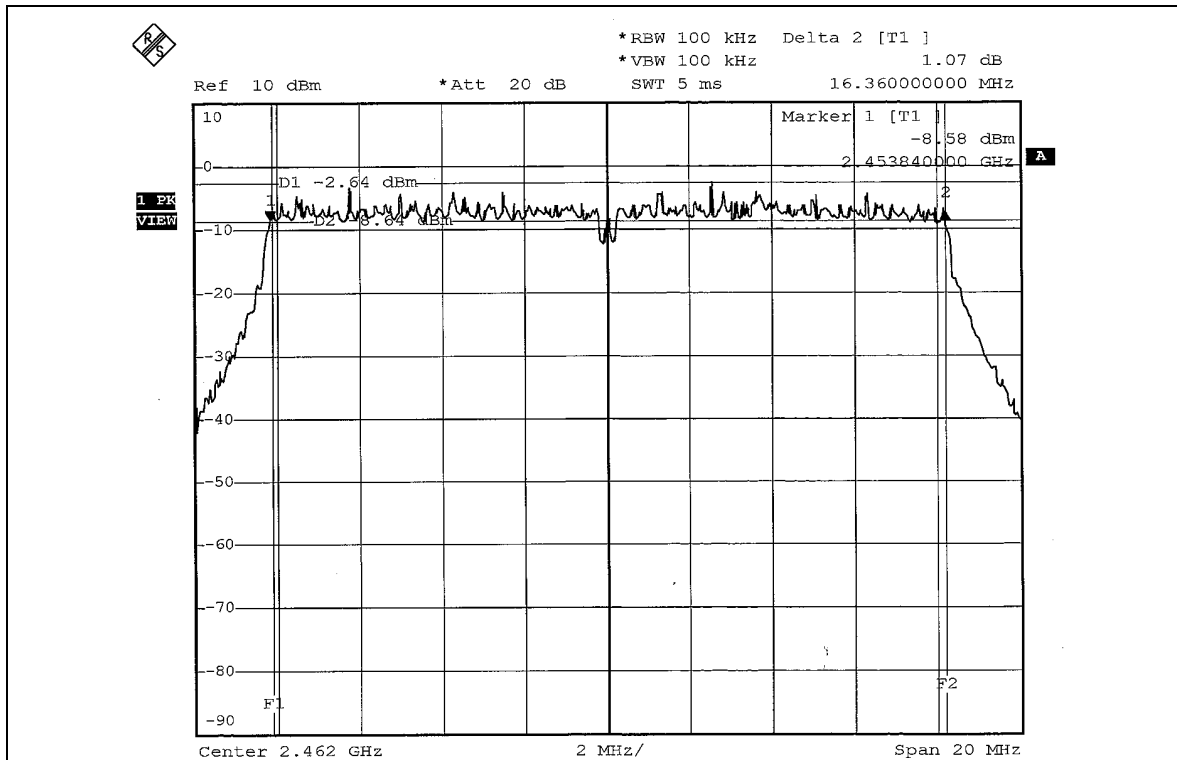
CH1



CH6



CH11



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 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
R&S SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005
AGILENT SIGNAL GENERATOR	E8257C	MY43320668	Dec. 06, 2005
TEKTRONIX OSCILLOSCOPE	TDS 220	C019167	Feb. 01, 2006
NARDA DETECTOR	4503A	FSCM99899	NA

NOTE:

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

4.4.3 TEST PROCEDURES

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

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 with test mode 1

EUT	Wireless LAN PCI Card	MODEL	WLH3015
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%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	31.989	15.05	30	PASS
6	2437	32.137	15.07	30	PASS
11	2462	31.915	15.04	30	PASS

802.11b DSSS modulation with test mode 2

EUT	Wireless LAN PCI Card	MODEL	WLH3016
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%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	31.769	15.02	30	PASS
6	2437	31.989	15.05	30	PASS
11	2462	31.842	15.03	30	PASS

**802.11g OFDM modulation with test mode 1**

EUT	Wireless LAN PCI Card	MODEL	WLH3015
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%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	31.769	15.02	30	PASS
6	2437	31.915	15.04	30	PASS
11	2462	31.769	15.02	30	PASS

802.11g Turbo OFDM modulation with test mode 1

EUT	Wireless LAN PCI Card	MODEL	WLH3015
MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%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	32.063	15.06	30	PASS

**802.11g OFDM modulation with test mode 2**

EUT	Wireless LAN PCI Card	MODEL	WLH3016
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%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	31.769	15.02	30	PASS
6	2437	31.915	15.04	30	PASS
11	2462	31.696	15.01	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
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.

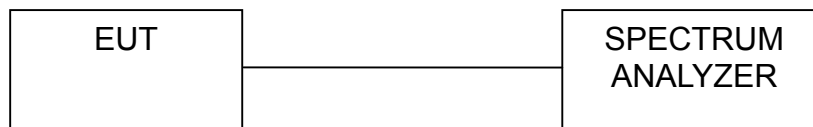
4.5.3 TEST PROCEDURE

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 CONDITIONS

Same as 4.3.6

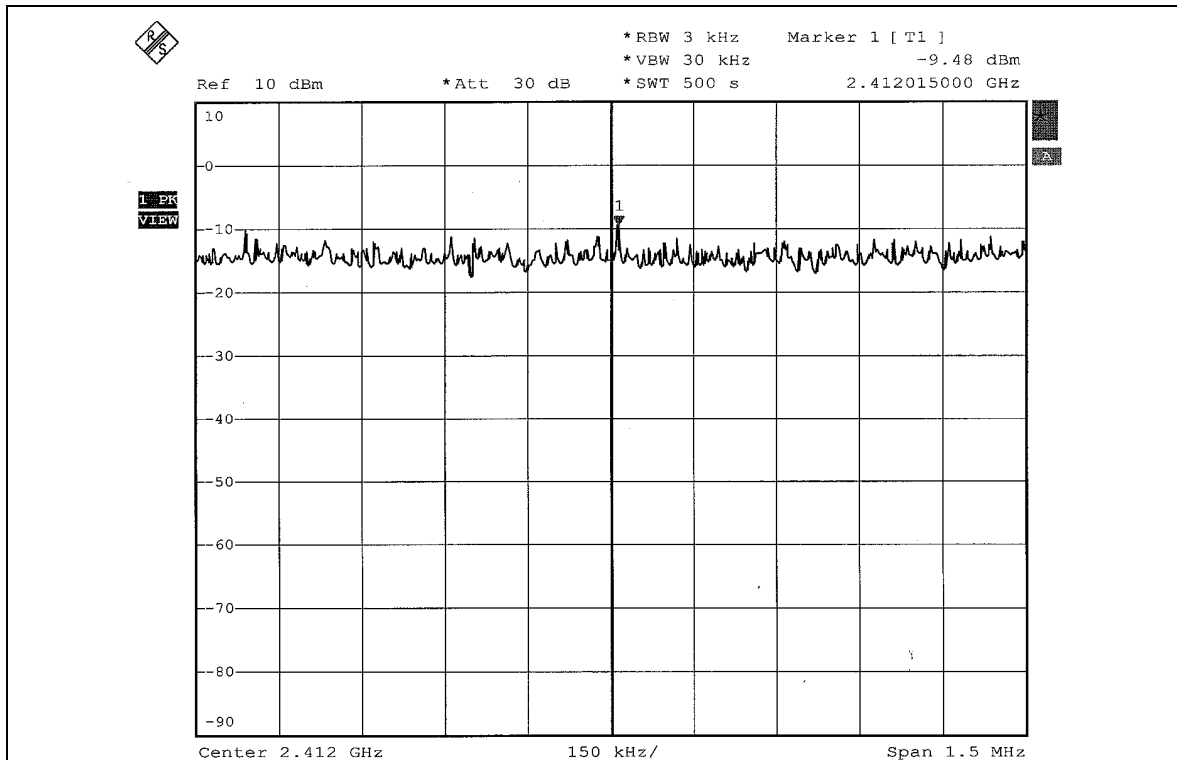
4.5.7 TEST RESULTS

802.11b DSSS modulation with test mode 1

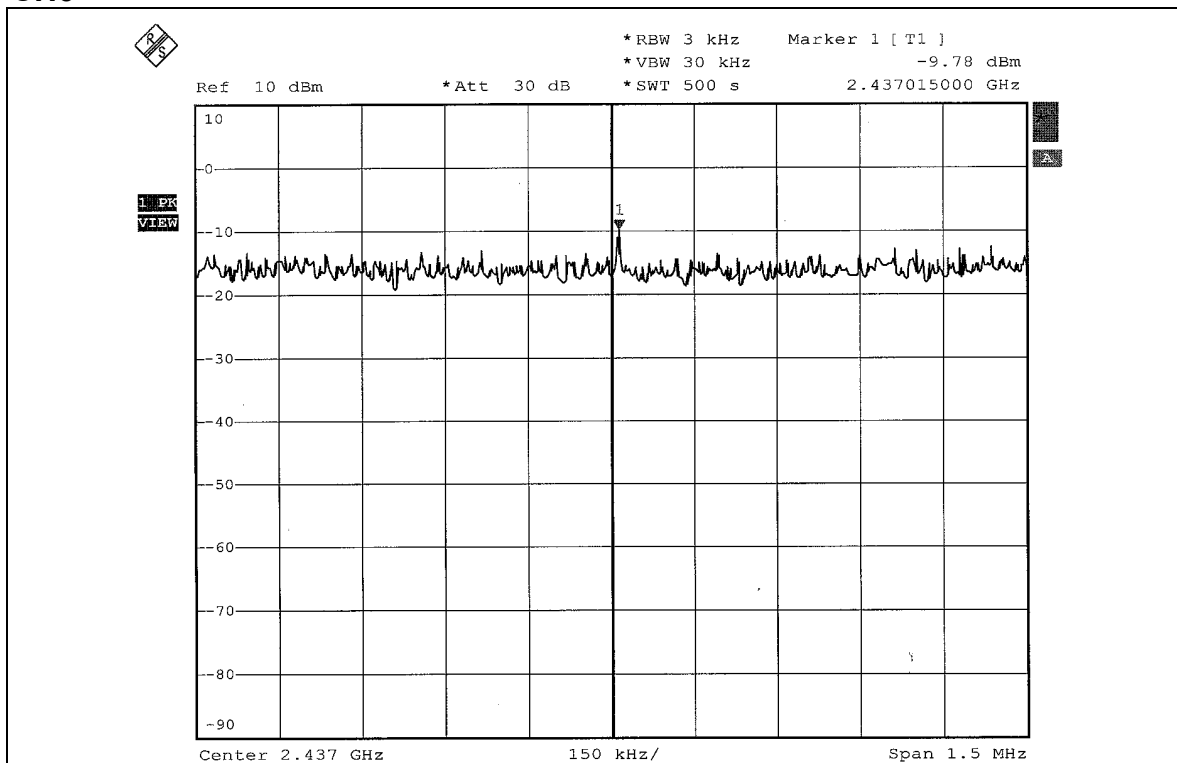
EUT	Wireless LAN PCI Card	MODEL	WLH3015
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-9.48	8	PASS
6	2437	-9.78	8	PASS
11	2462	-9.68	8	PASS

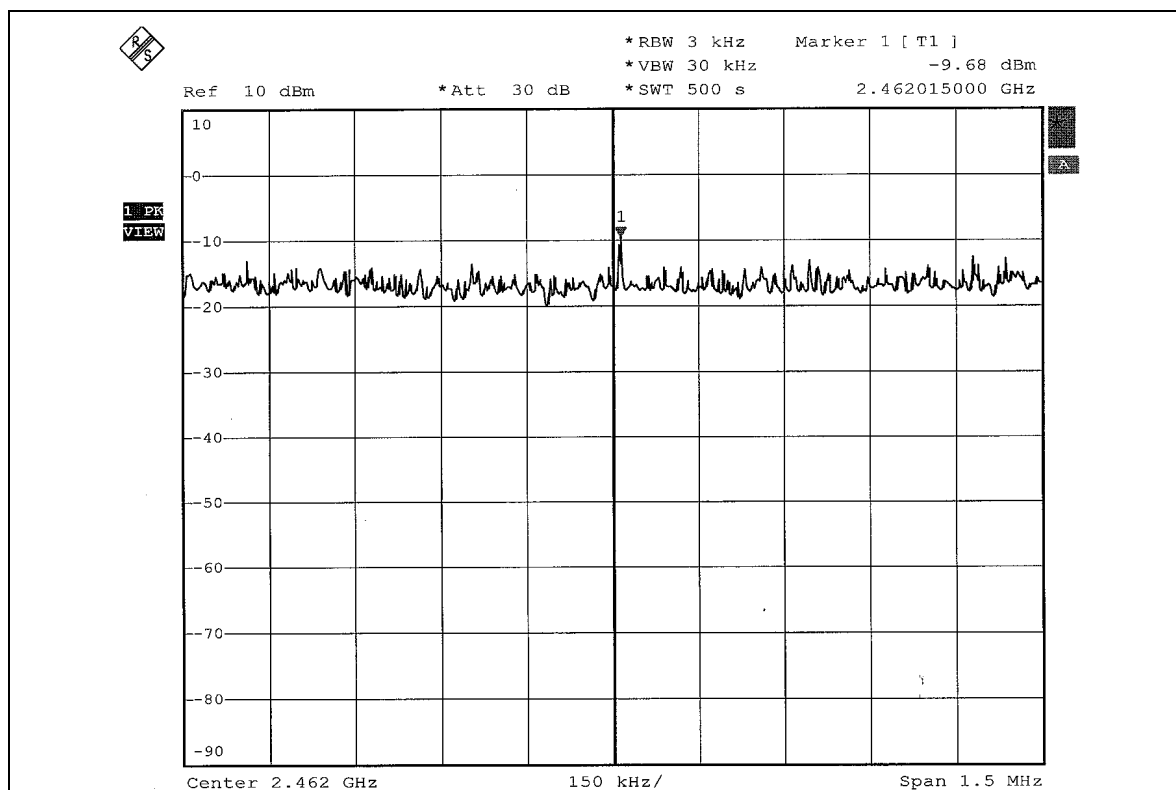
CH1



CH6



CH11

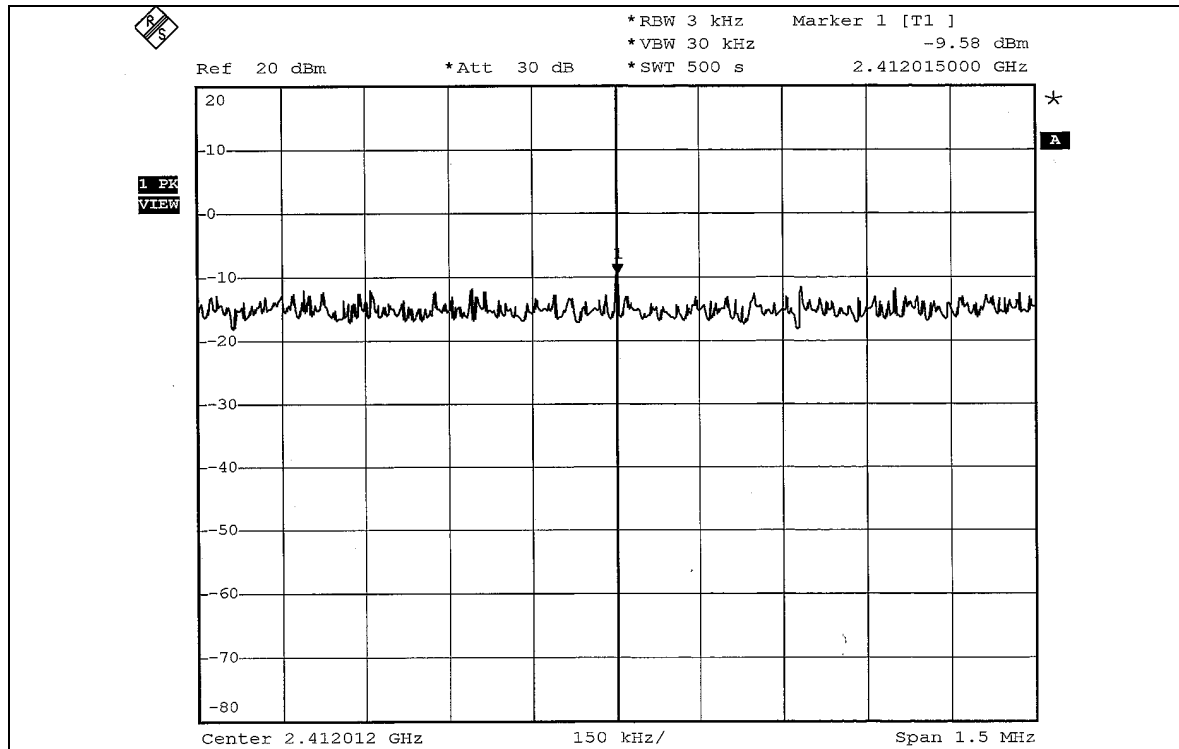


802.11b DSSS modulation with test mode 2

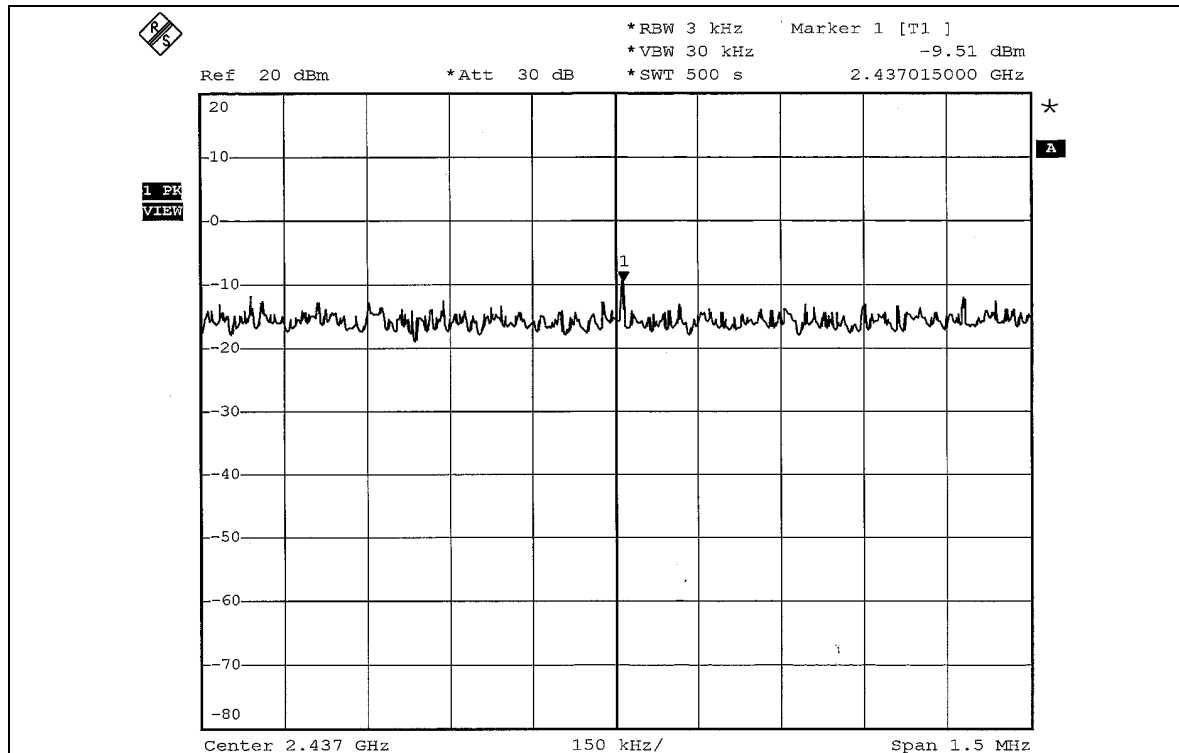
EUT	Wireless LAN PCI Card	MODEL	WLH3016
MODULATION TYPE	CCK	TRANSFER RATE	11Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-9.58	8	PASS
6	2437	-9.51	8	PASS
11	2462	-9.07	8	PASS

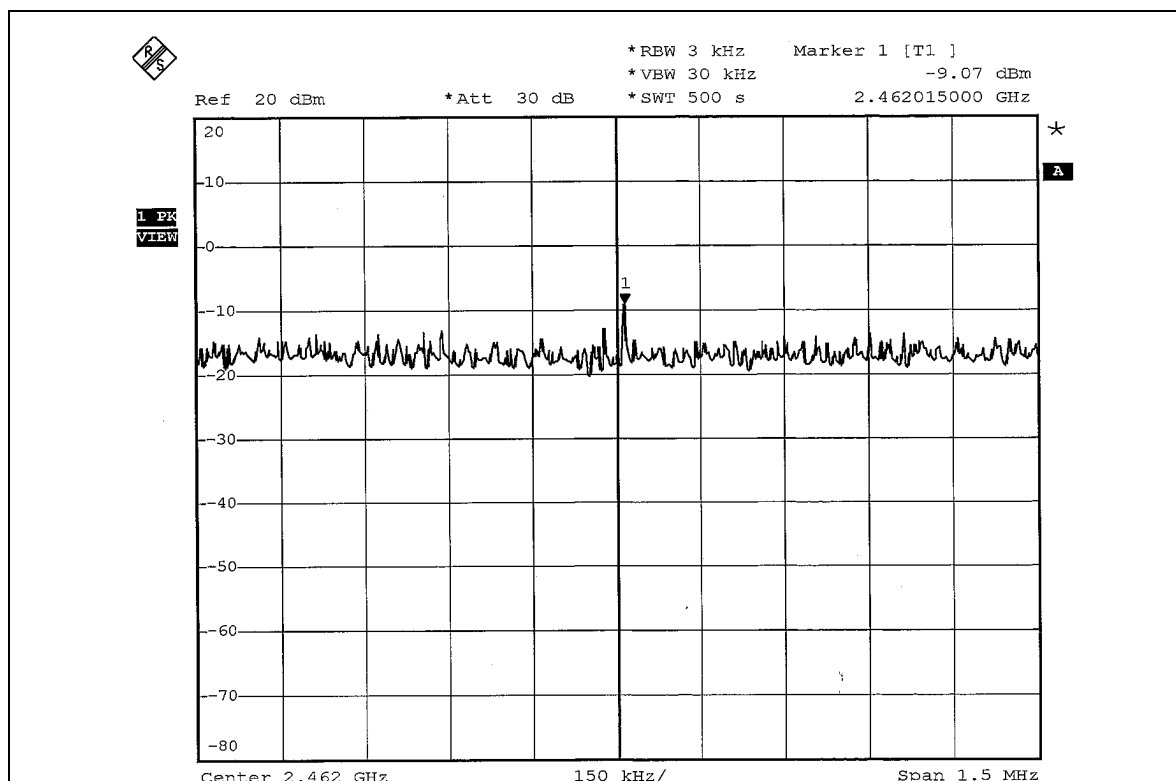
CH1



CH6



CH11

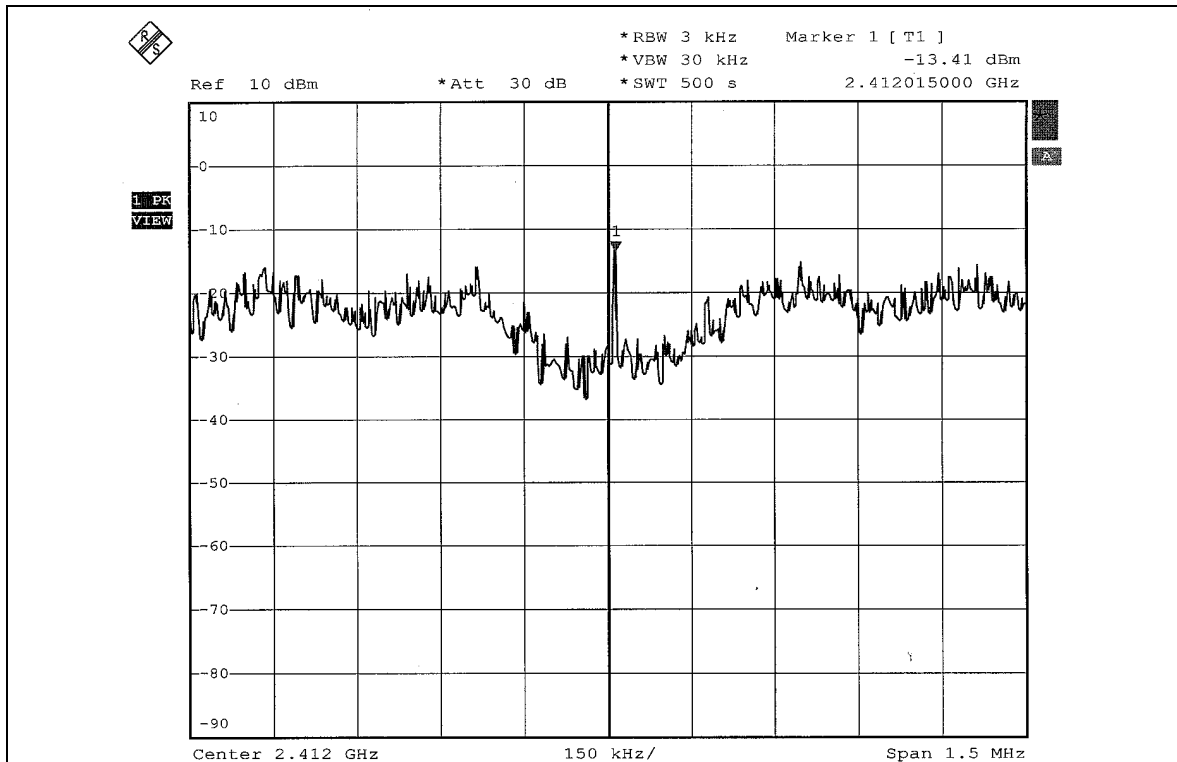


**802.11g OFDM modulation with test mode 1**

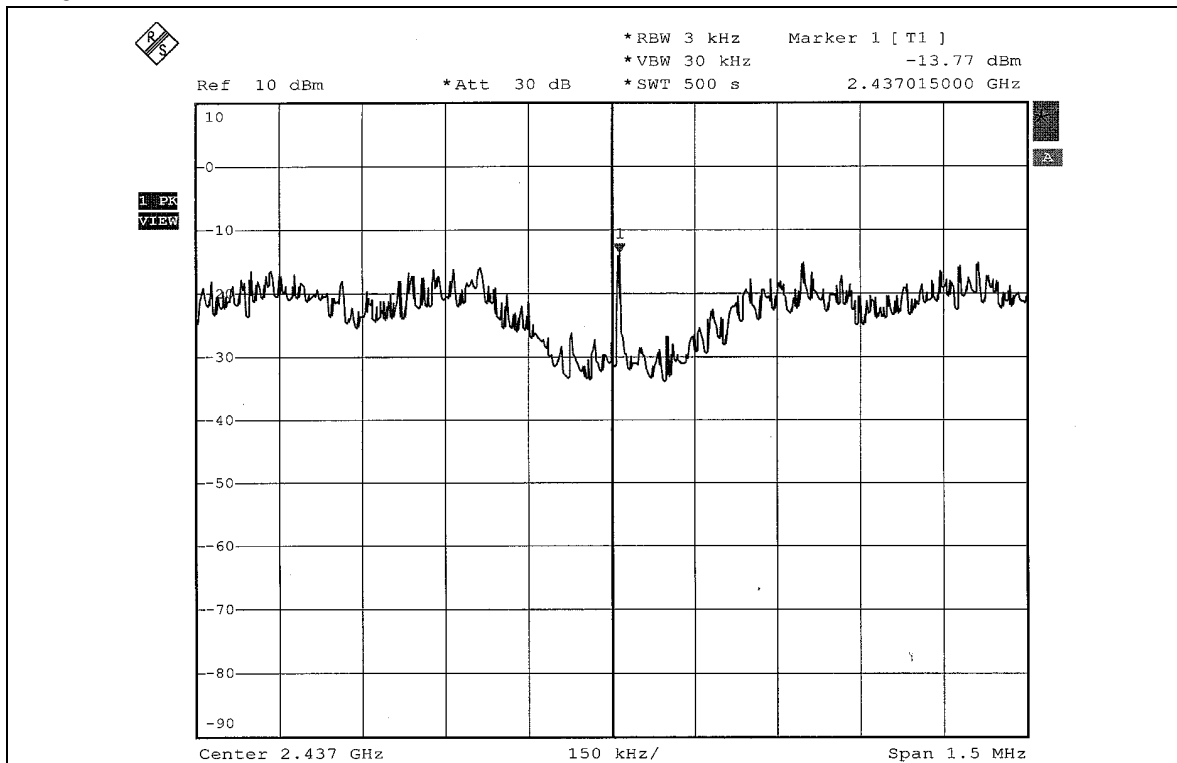
EUT	Wireless LAN PCI Card	MODEL	WLH3015
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-13.41	8	PASS
6	2437	-13.77	8	PASS
11	2462	-13.47	8	PASS

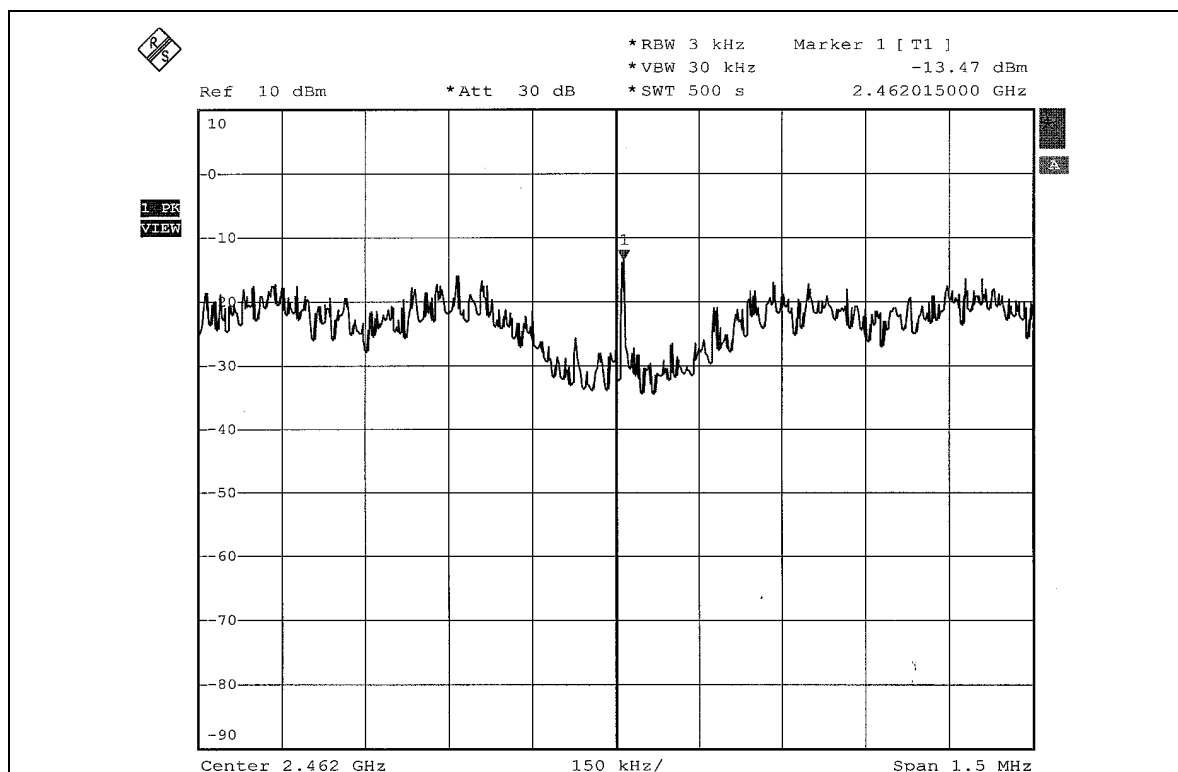
CH1



CH6



CH11

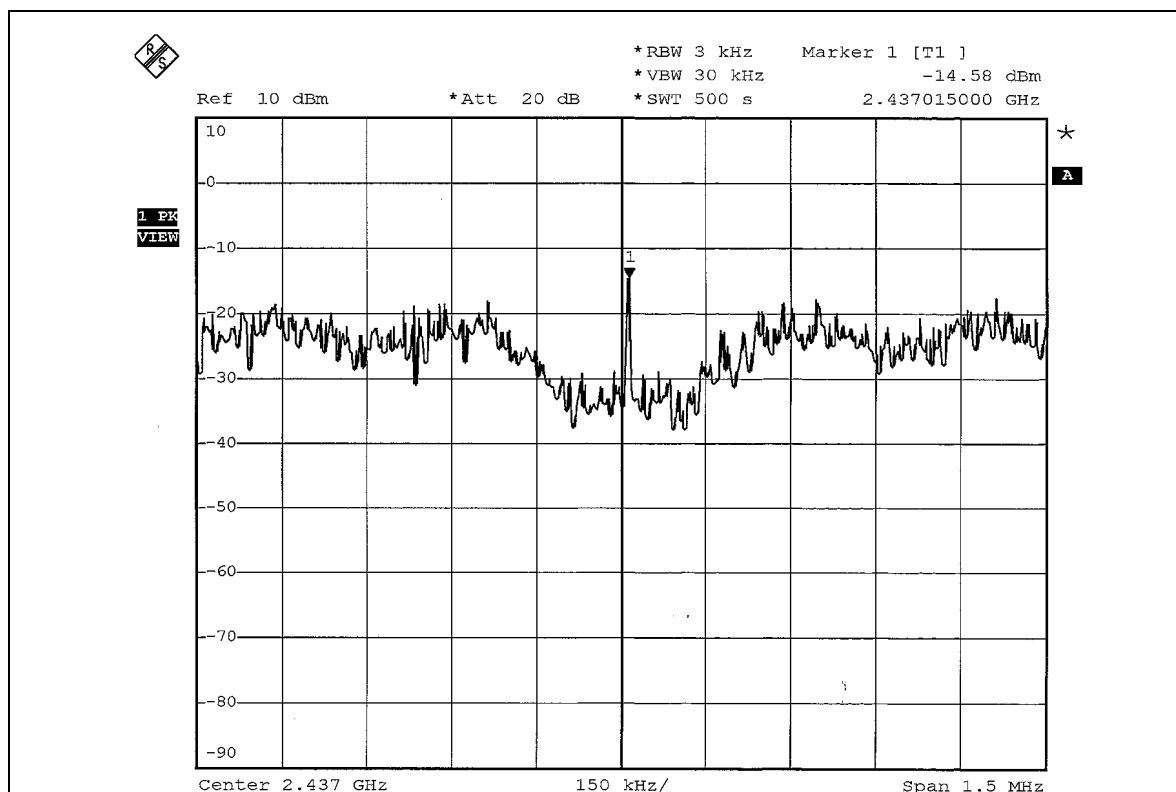


802.11g Turbo OFDM modulation with test mode 1

EUT	Wireless LAN PCI Card	MODEL	WLH3015
MODULATION TYPE	BPSK	TRANSFER RATE	12Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
6	2437	-14.58	8	PASS

CH6

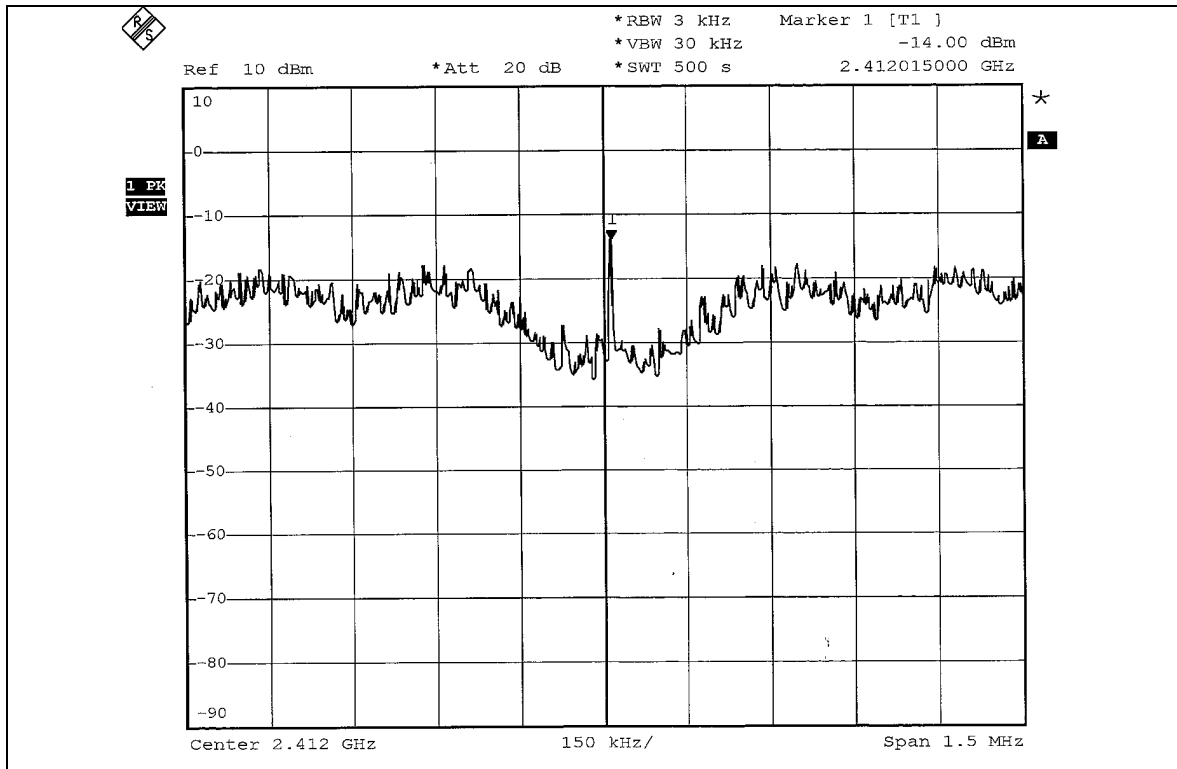


802.11g OFDM modulation with test mode 2

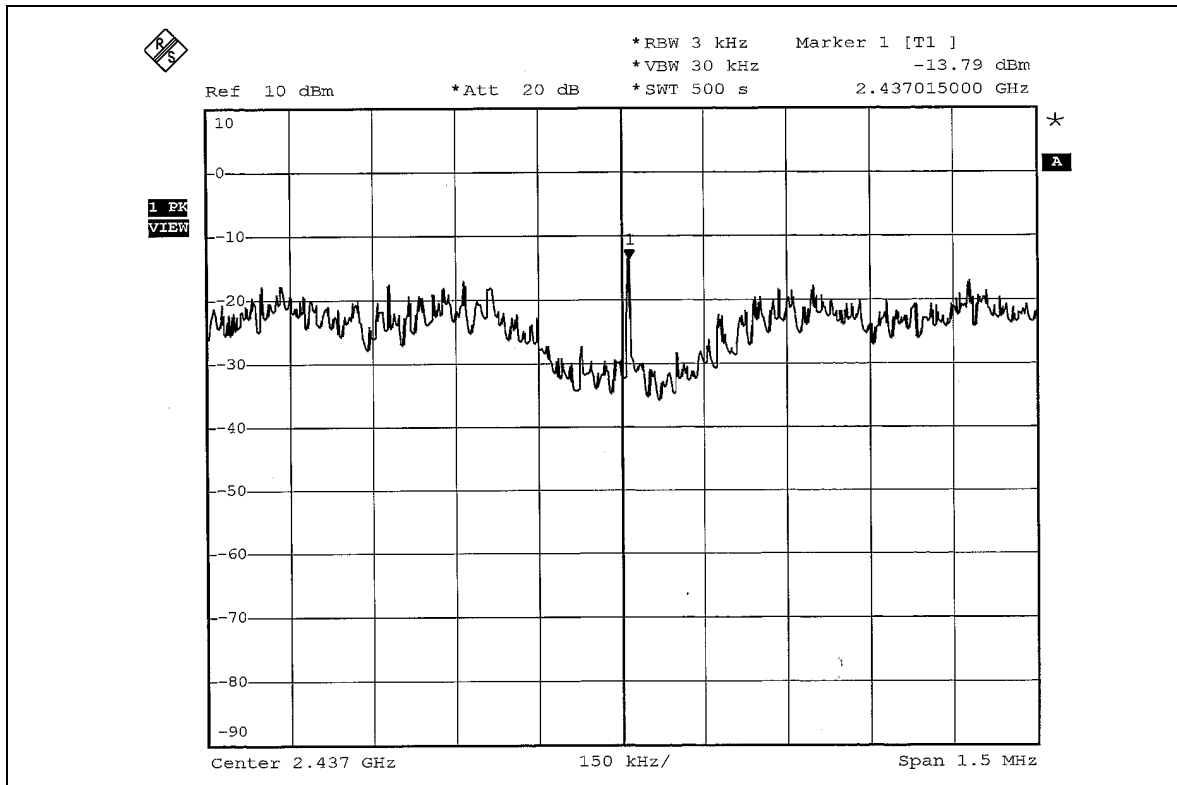
EUT	Wireless LAN PCI Card	MODEL	WLH3016
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	24deg.C, 53%RH, 991hPa
TESTED BY	Gary Chang		

CHANNEL NUMBER	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3KHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-14.00	8	PASS
6	2437	-13.79	8	PASS
11	2462	-13.45	8	PASS

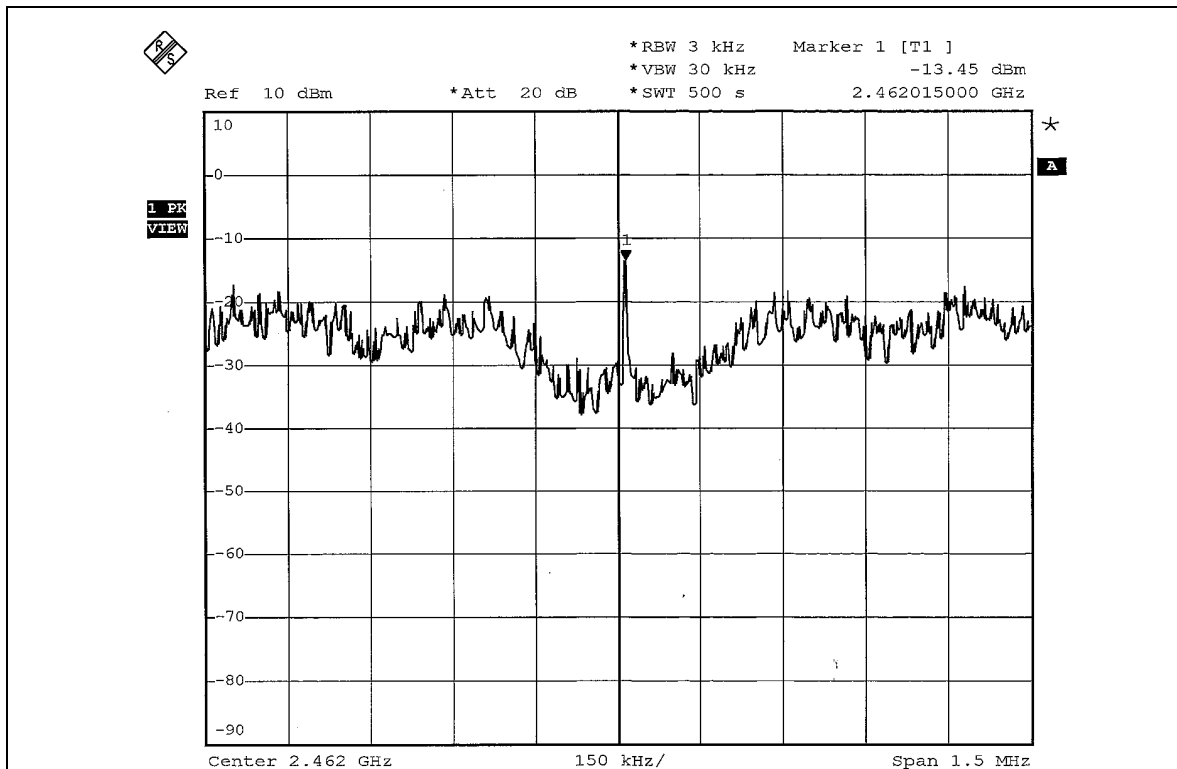
CH1



CH6



CH11



4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

Description & Manufacturer	Model No.	Serial No.	Calibrated Until
SPECTRUM ANALYZER	FSEK30	100049	Aug. 12, 2005

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

4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low loss cable. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges were measured and recorded. The spectrum plots (Peak RBW=VBW=100kHz ; Average RBW=1MHz, VBW=1kHz) are attached on the following pages.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation

4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6



4.6.6 TEST RESULTS

The spectrum plots are attached on the following 30 images. D2 line indicates the highest level, and D1 line indicates the 20dB offset below D2. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS modulation with test mode 1

NOTE 1: The band edge emission plot of DSSS technique on page 95 shows 49.84dBc between carrier maximum power and local maximum emission in restrict band (2.3812GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 is 1109.18dBuV/m (Peak), so the maximum field strength in restrict band is $1109.18 - 49.84 = 1059.34$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on page 95 shows 61.94dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 is 102.51dBuV/m (Average), so the maximum field strength in restrict band is $102.51 - 61.94 = 40.57$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot of DSSS technique on page 96 shows 49.33dBc between carrier maximum power and local maximum emission in restrict band (2.4880GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 109.49dBuV/m (Peak), so the maximum field strength in restrict band is $109.49 - 49.33 = 60.16$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on page 97 shows 61.44dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 102.08dBuV/m (Average), so the maximum field strength in restrict band is $102.08 - 61.44 = 40.64$ dBuV/m which is under 54dBuV/m limit.

**802.11b DSSS modulation with test mode 2**

NOTE 1: The band edge emission plot of DSSS technique on page 98 shows 58.64dBc between carrier maximum power and local maximum emission in restrict band (2.3858GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 is 108.99dBuV/m (Peak), so the maximum field strength in restrict band is $108.99 - 58.64 = 50.35$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on page 98 shows 62.92dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.8 is 101.56dBuV/m (Average), so the maximum field strength in restrict band is $101.56 - 62.92 = 38.64$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot of DSSS technique on page 99 shows 49.98dBc between carrier maximum power and local maximum emission in restrict band (2.4844GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 109.70dBuV/m (Peak), so the maximum field strength in restrict band is $109.70 - 49.98 = 59.72$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of DSSS technique on page 100 shows 60.55dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.8 is 102.45dBuV/m (Average), so the maximum field strength in restrict band is $102.45 - 60.55 = 41.90$ dBuV/m which is under 54dBuV/m limit.

802.11g OFDM modulation with test mode 1

NOTE 1: The band edge emission plot of OFDM technique on page 101 shows 45.74dBc between carrier maximum power and local maximum emission in restrict band (2.3880GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 106.16dBuV/m (Peak), so the maximum field strength in restrict band is $106.16 - 45.74 = 60.42$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on page 101 shows 56.33dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 96.38dBuV/m (Average), so the maximum field strength in restrict band is $96.38 - 56.33 = 40.05$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot of OFDM technique on page 102 shows 45.64dBc between carrier maximum power and local maximum emission in restrict band (2.5000GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 106.46dBuV/m (Peak), so the maximum field strength in restrict band is $106.46 - 45.64 = 60.82$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on page 103 shows 55.96dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 96.59dBuV/m (Average), so the maximum field strength in restrict band is $96.59 - 55.96 = 40.63$ dBuV/m which is under 54dBuV/m limit.

802.11g Turbo OFDM modulation with test mode 1

NOTE 1: The band edge emission plot of OFDM technique on page 104 shows 54.29dBc between carrier maximum power and local maximum emission in restrict band (2.3110GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.9 is 104.87dBuV/m (Peak), so the maximum field strength in restrict band is $104.87 - 54.29 = 50.58$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on page 104 shows 60.39dBc between carrier maximum power and local maximum emission in restrict band (2.3528GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.9 is 95.29dBuV/m (Average), so the maximum field strength in restrict band is $95.29 - 60.39 = 34.90$ dBuV/m which is under 54dBuV/m limit.

NOTE 2: The band edge emission plot of OFDM technique on page 105 shows 53.43dBc between carrier maximum power and local maximum emission in restrict band (2.4941GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.9 is 105.91dBuV/m (Peak), so the maximum field strength in restrict band is $105.91 - 53.43 = 52.48$ dBuV/m which is under 74dBuV/m limit.

The band edge emission plot of OFDM technique on page 106 shows 59.04dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 6 at the item 4.2.9 is 96.88dBuV/m (Average), so the maximum field strength in restrict band is $96.88 - 59.04 = 37.84$ dBuV/m which is under 54dBuV/m limit.



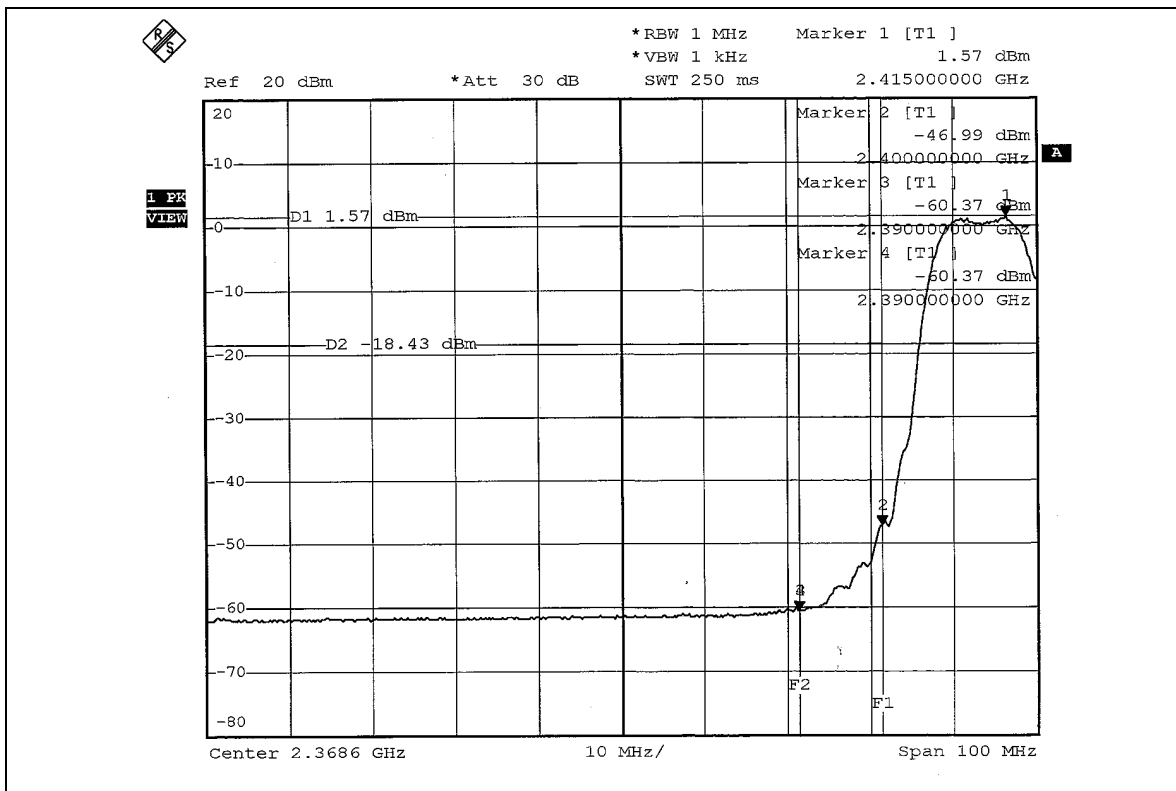
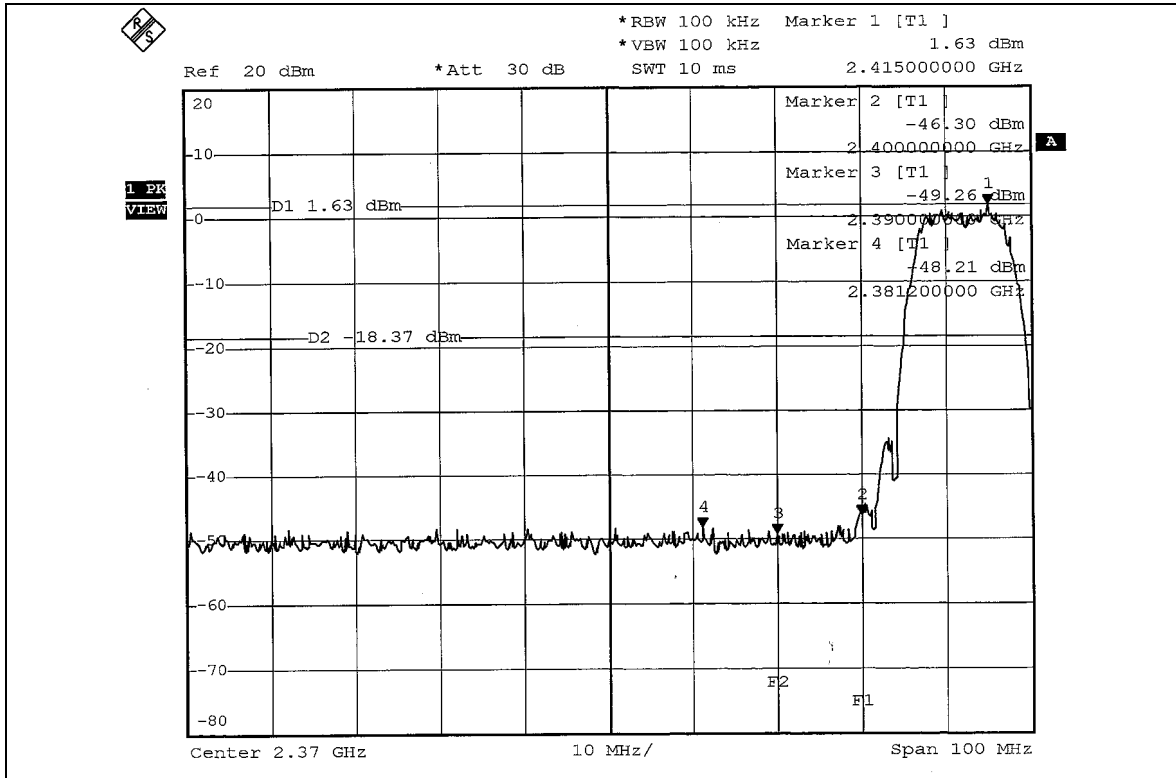
802.11g OFDM modulation with test mode 2

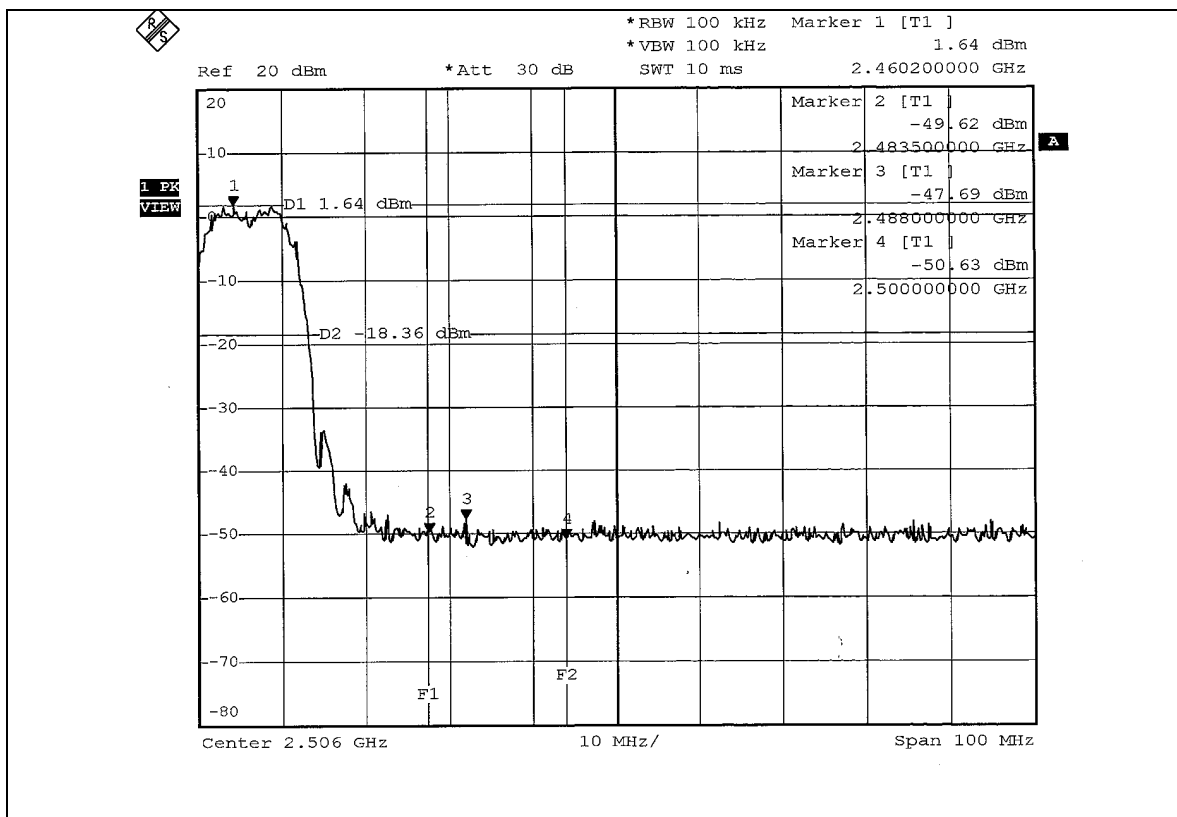
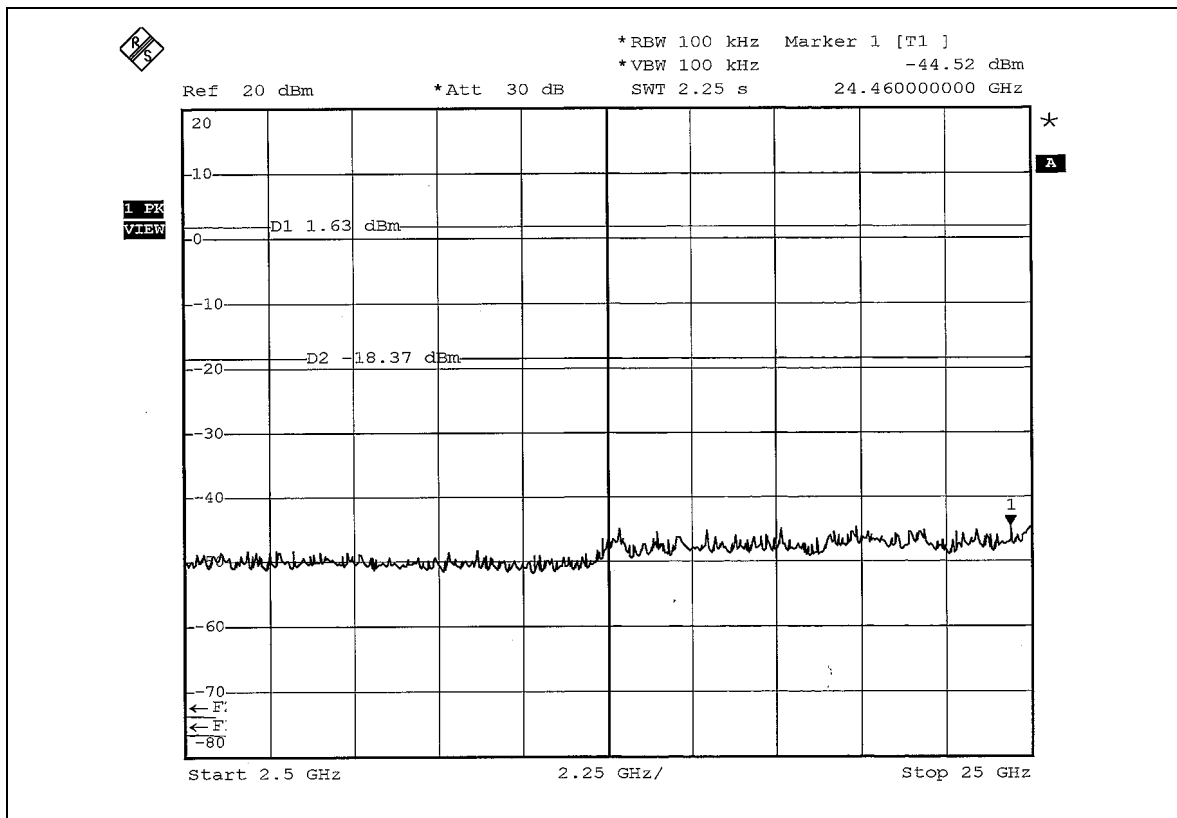
NOTE 1: The band edge emission plot of OFDM technique on page 107 shows 53.98dBc between carrier maximum power and local maximum emission in restrict band (2.3726GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 106.84dBuV/m (Peak), so the maximum field strength in restrict band is $106.84 - 53.98 = 52.86$ dBuV/m which is under 74dBuV/m limit.

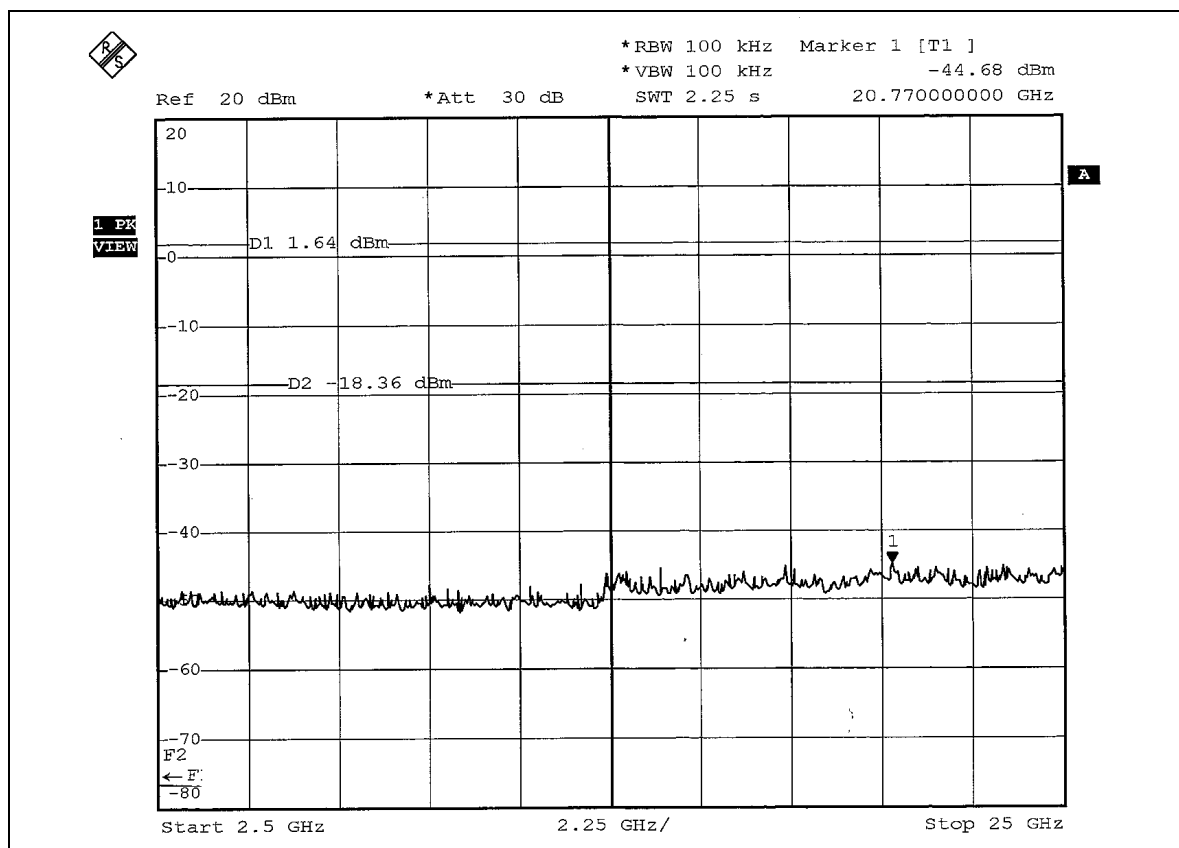
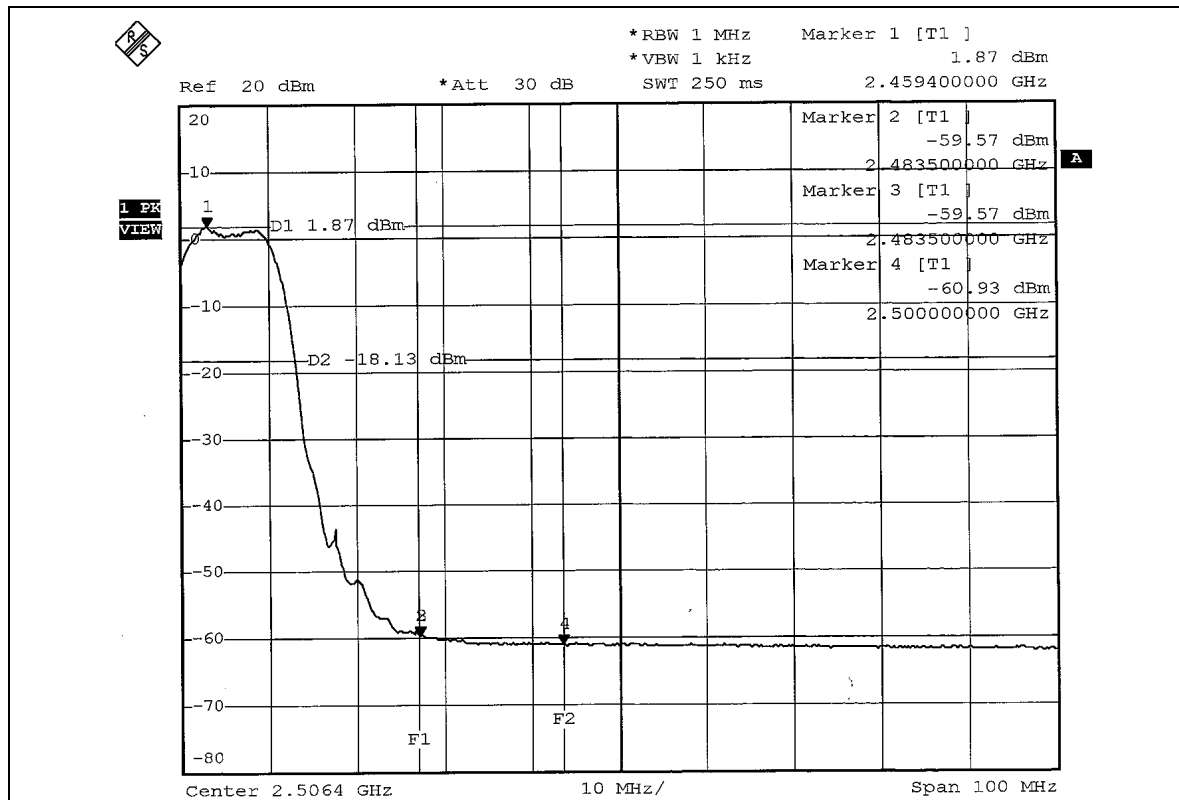
The band edge emission plot of OFDM technique on page 107 shows 58.56dBc between carrier maximum power and local maximum emission in restrict band (2.3900GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.9 is 97.43dBuV/m (Average), so the maximum field strength in restrict band is $97.43 - 58.56 = 38.87$ dBuV/m which is under 54dBuV/m limit.

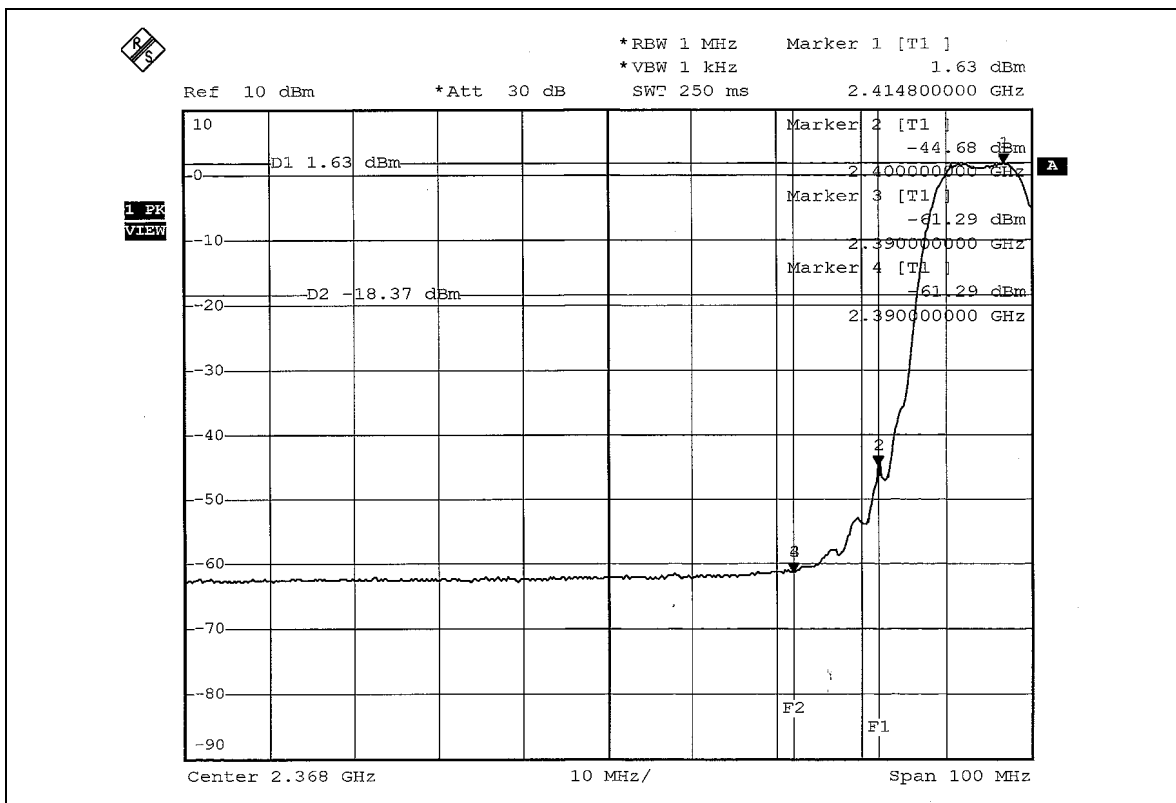
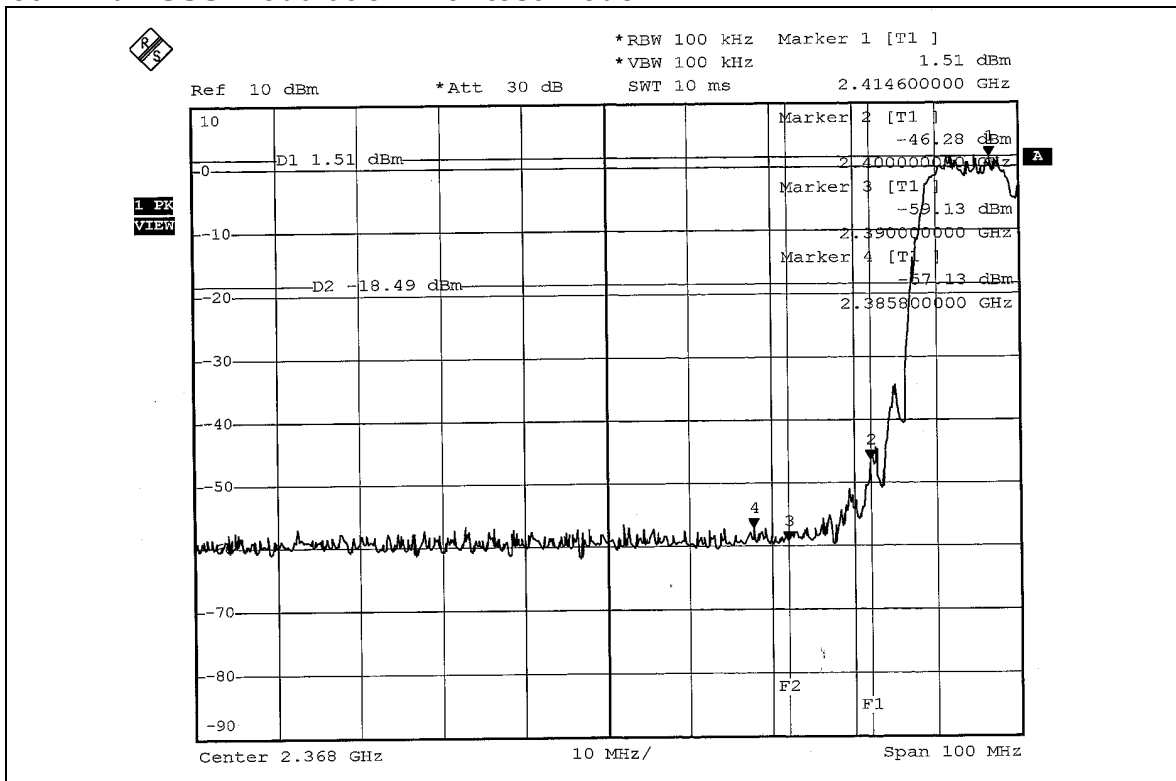
NOTE 2: The band edge emission plot of OFDM technique on page 108 shows 52.37dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 106.73dBuV/m (Peak), so the maximum field strength in restrict band is $106.73 - 52.37 = 54.36$ dBuV/m which is under 74dBuV/m limit.

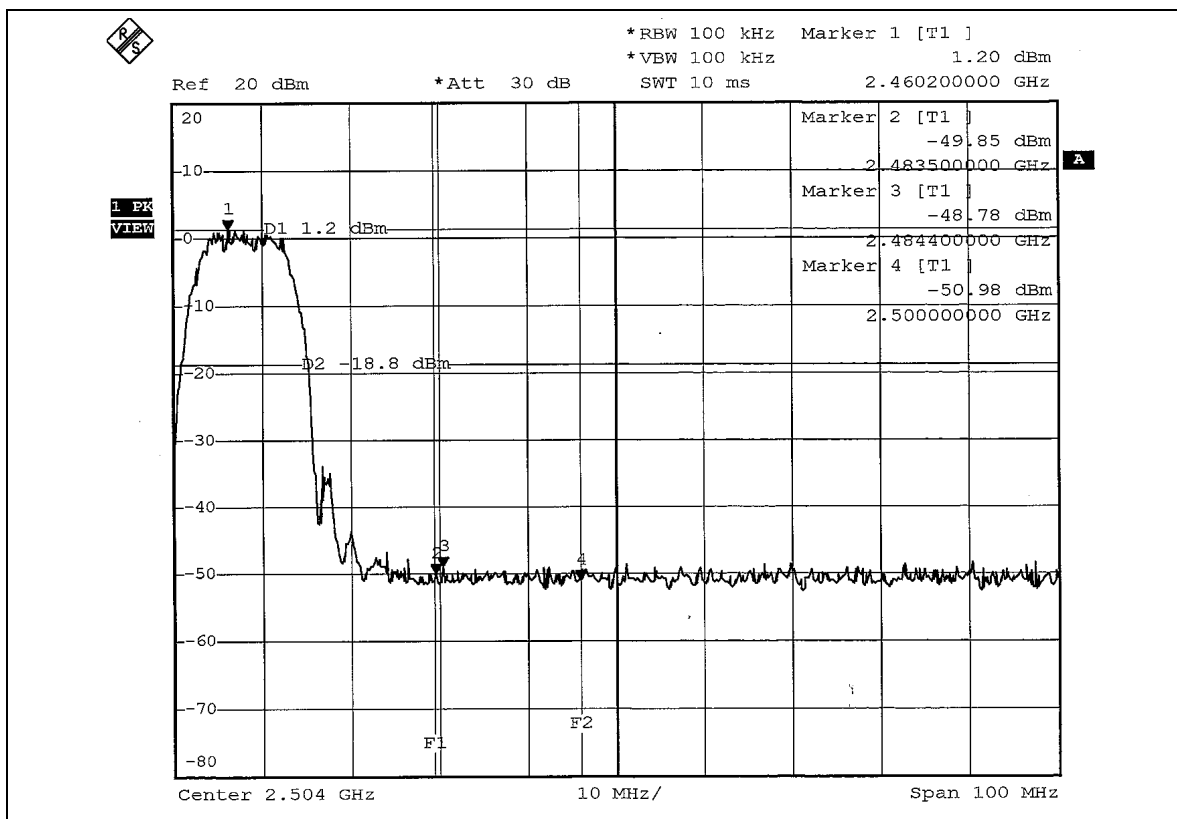
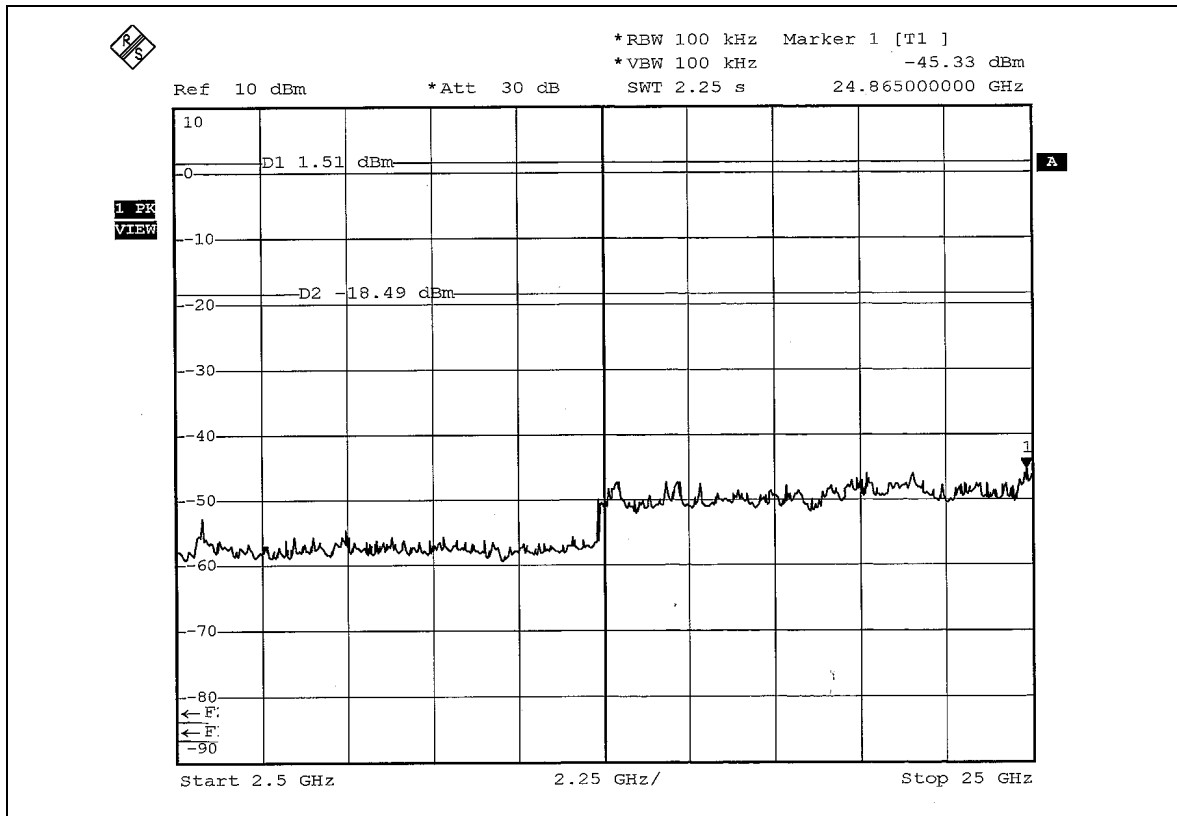
The band edge emission plot of OFDM technique on page 109 shows 56.55dBc between carrier maximum power and local maximum emission in restrict band (2.4835GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.9 is 96.94dBuV/m (Average), so the maximum field strength in restrict band is $96.94 - 56.55 = 40.39$ dBuV/m which is under 54dBuV/m limit.

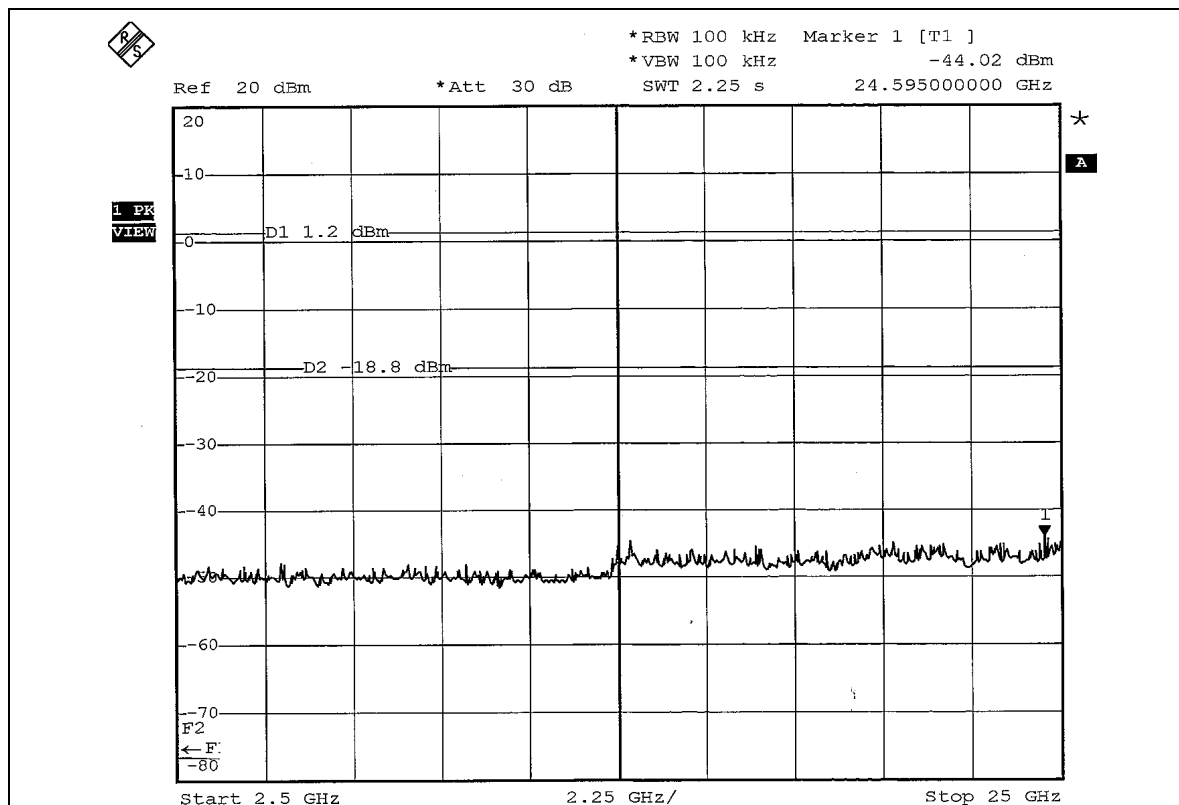
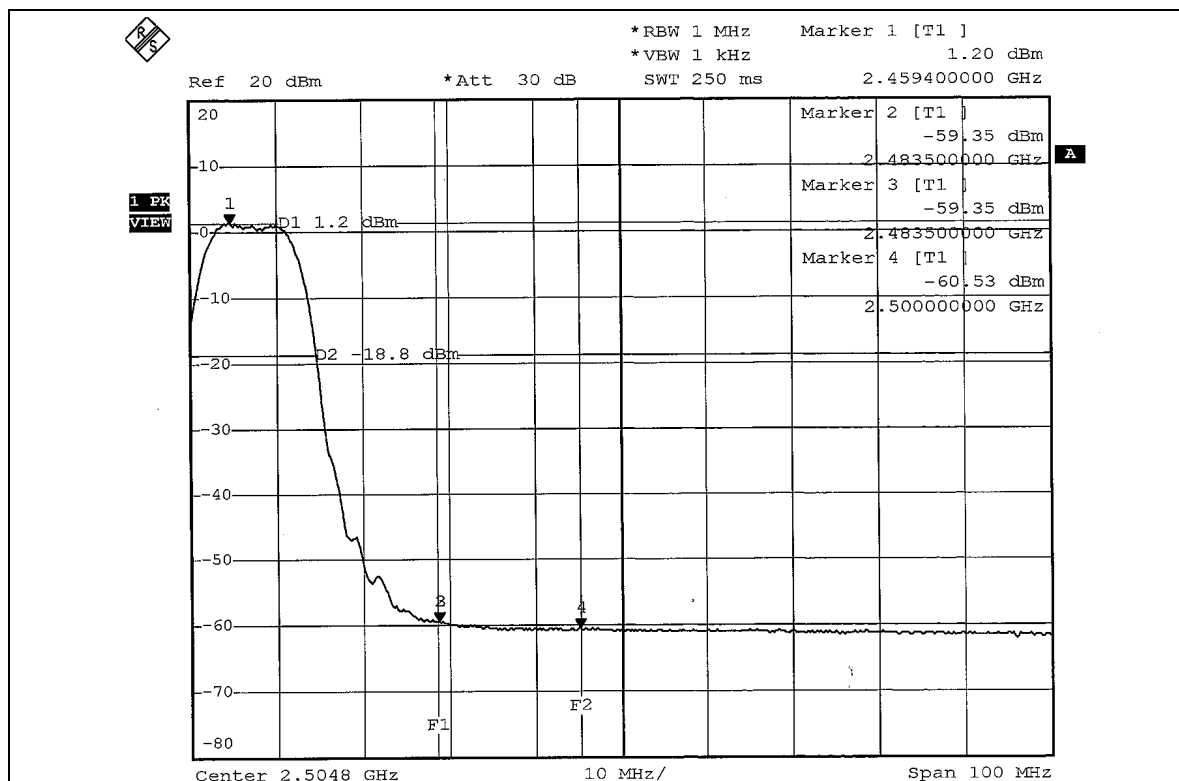
802.11b DSSS modulation with test mode 1



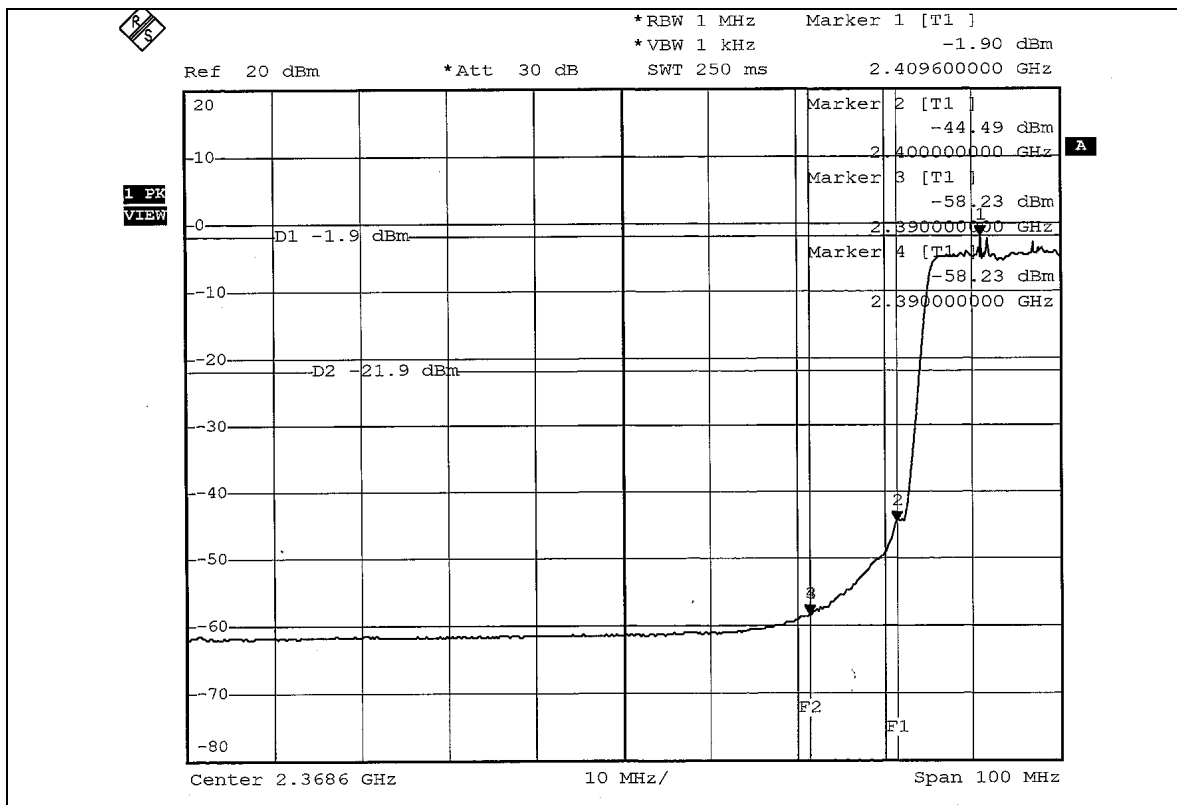
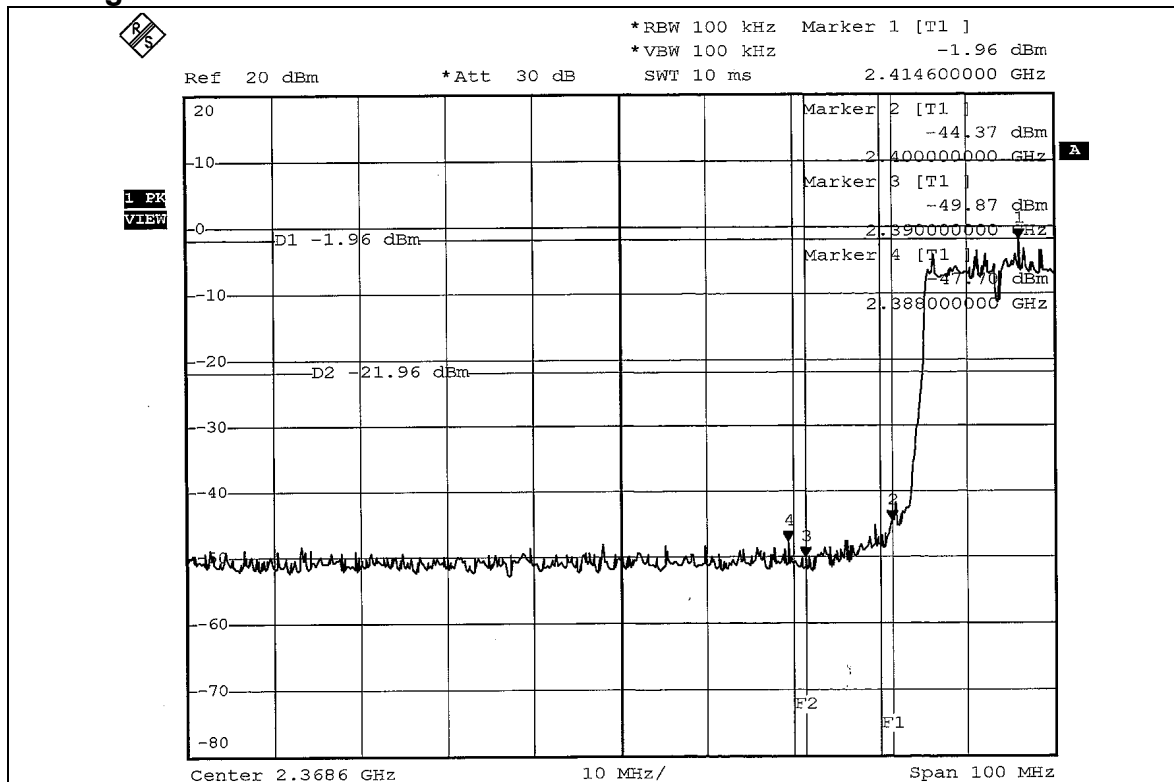


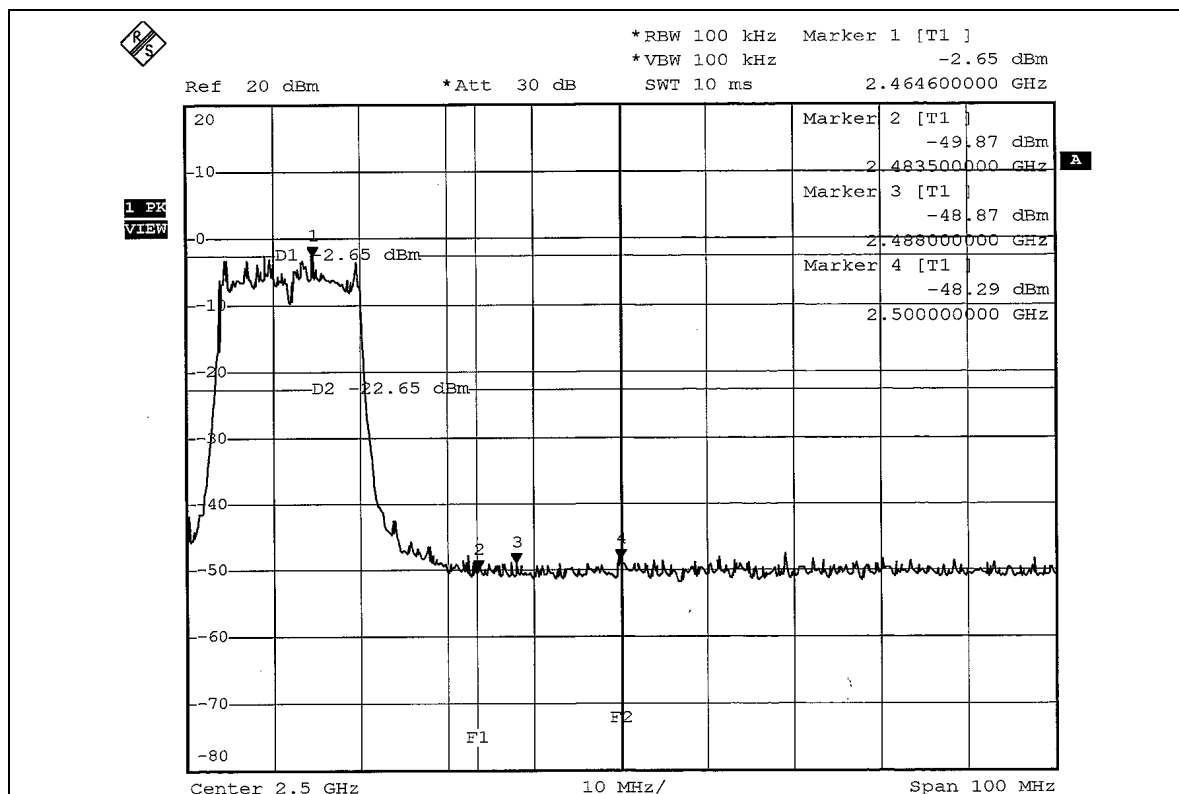
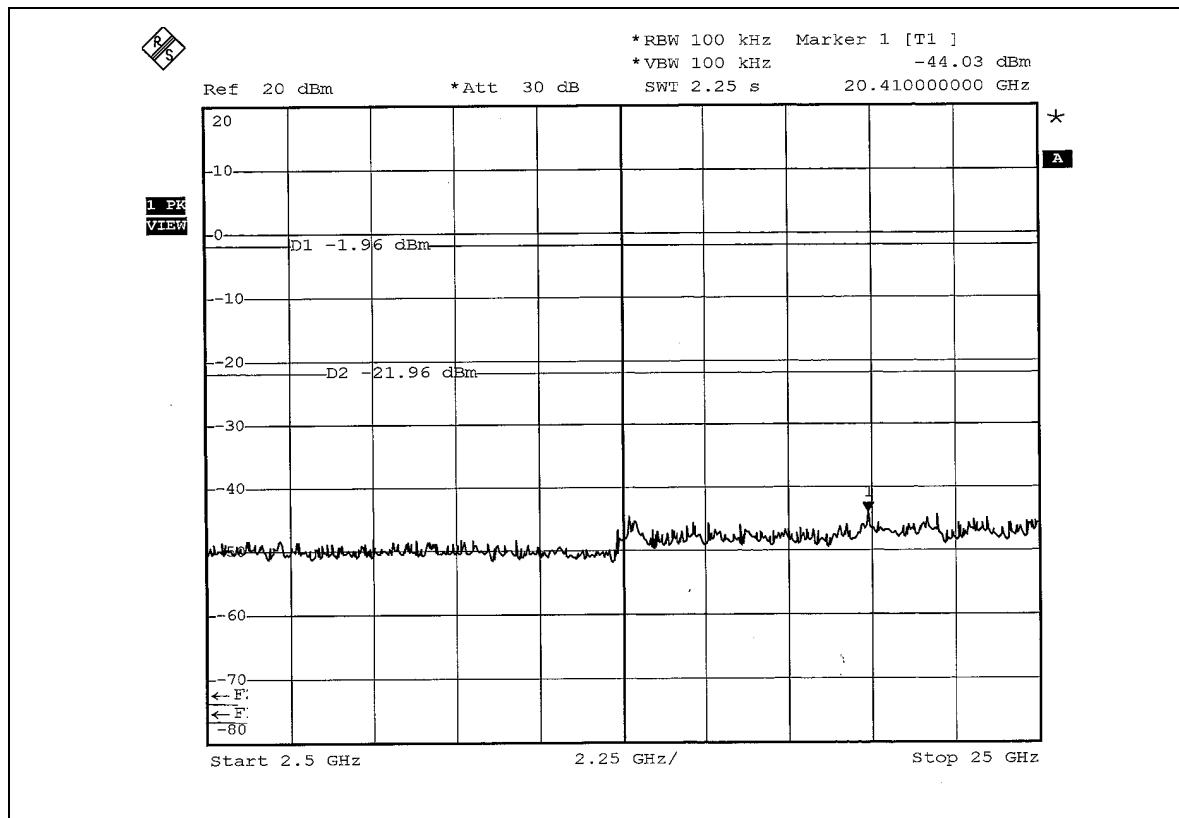
802.11b DSSS modulation with test mode 2

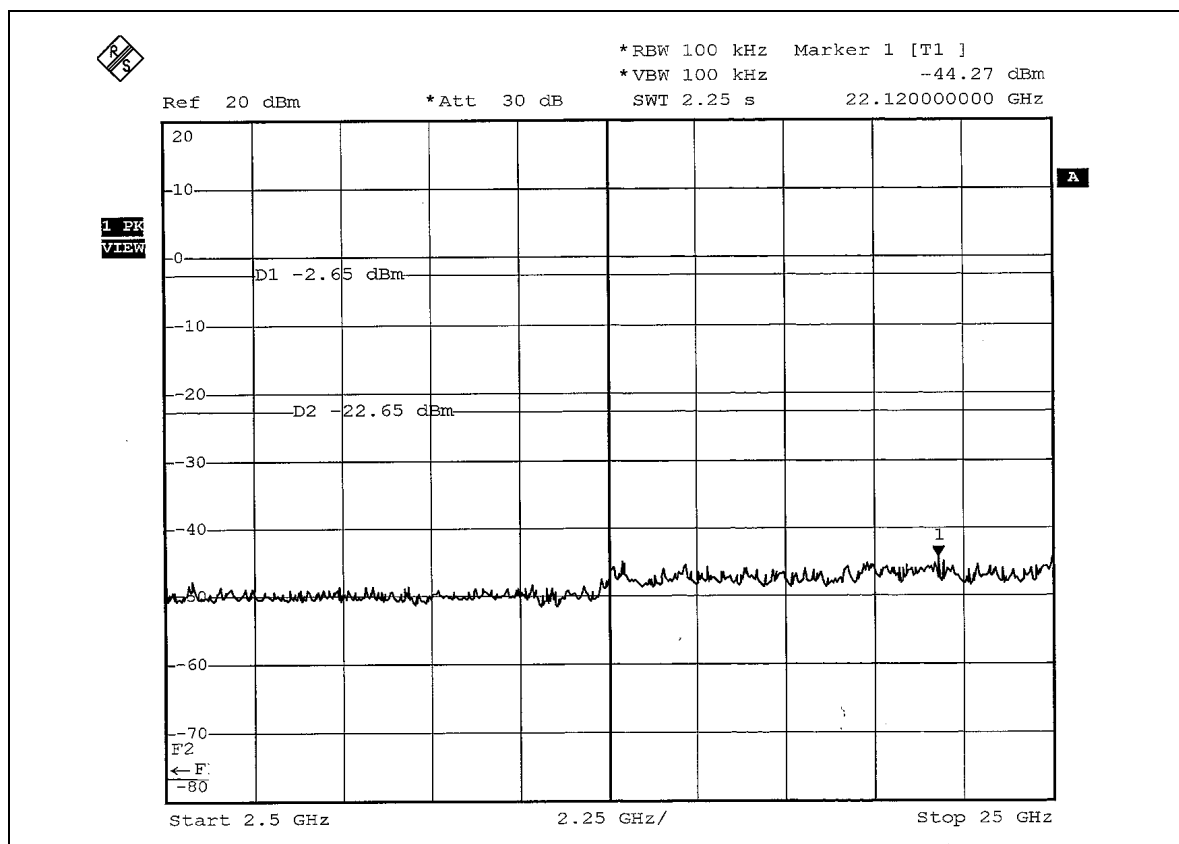
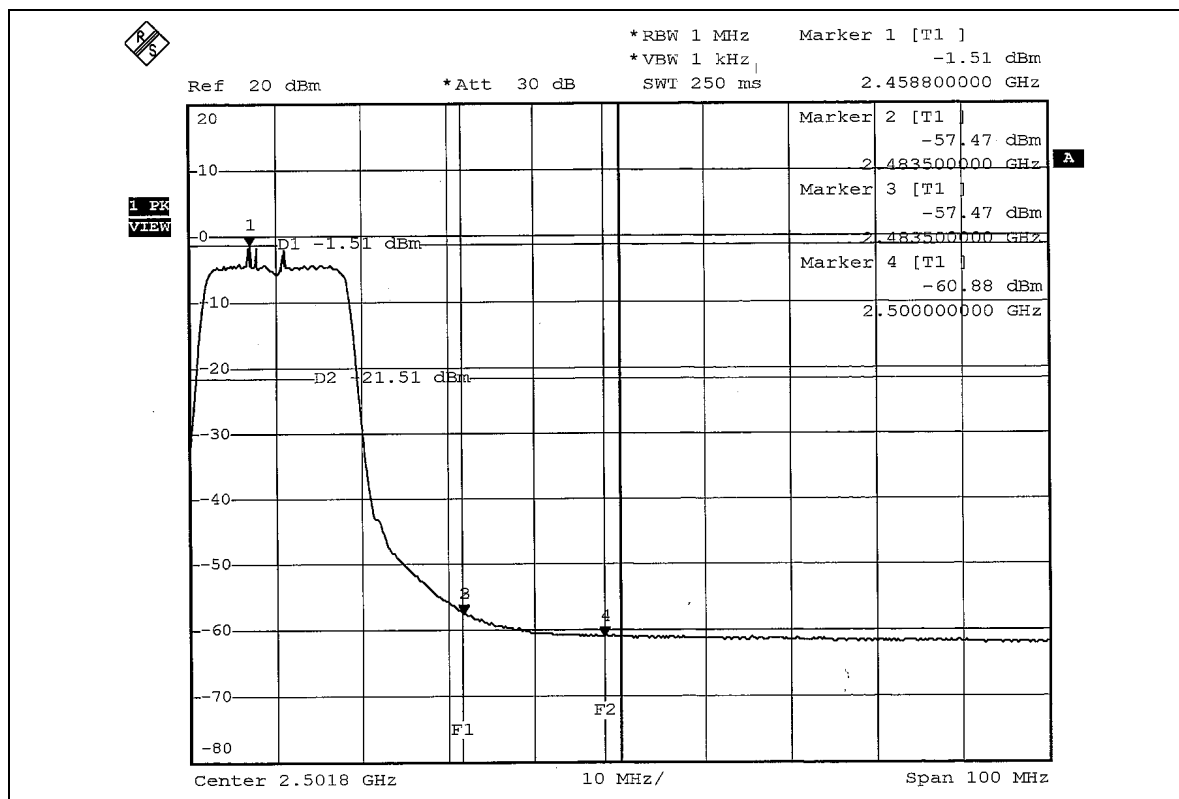


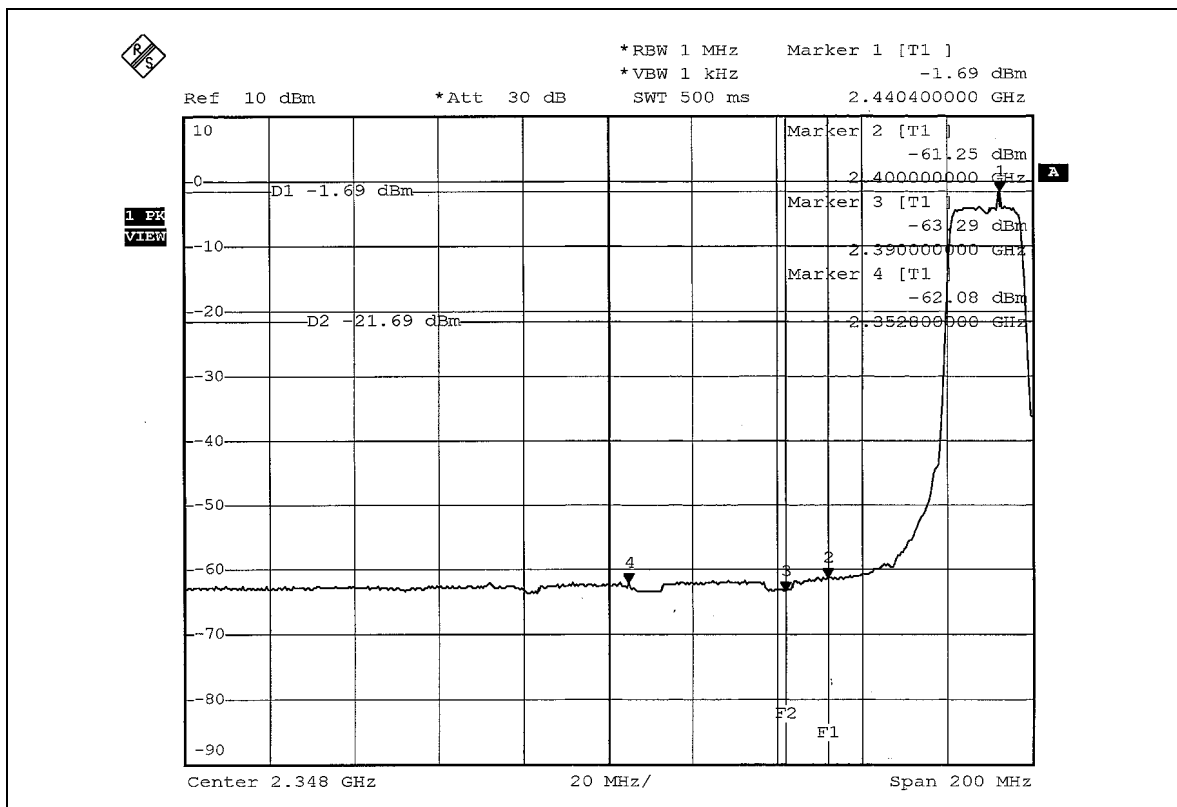
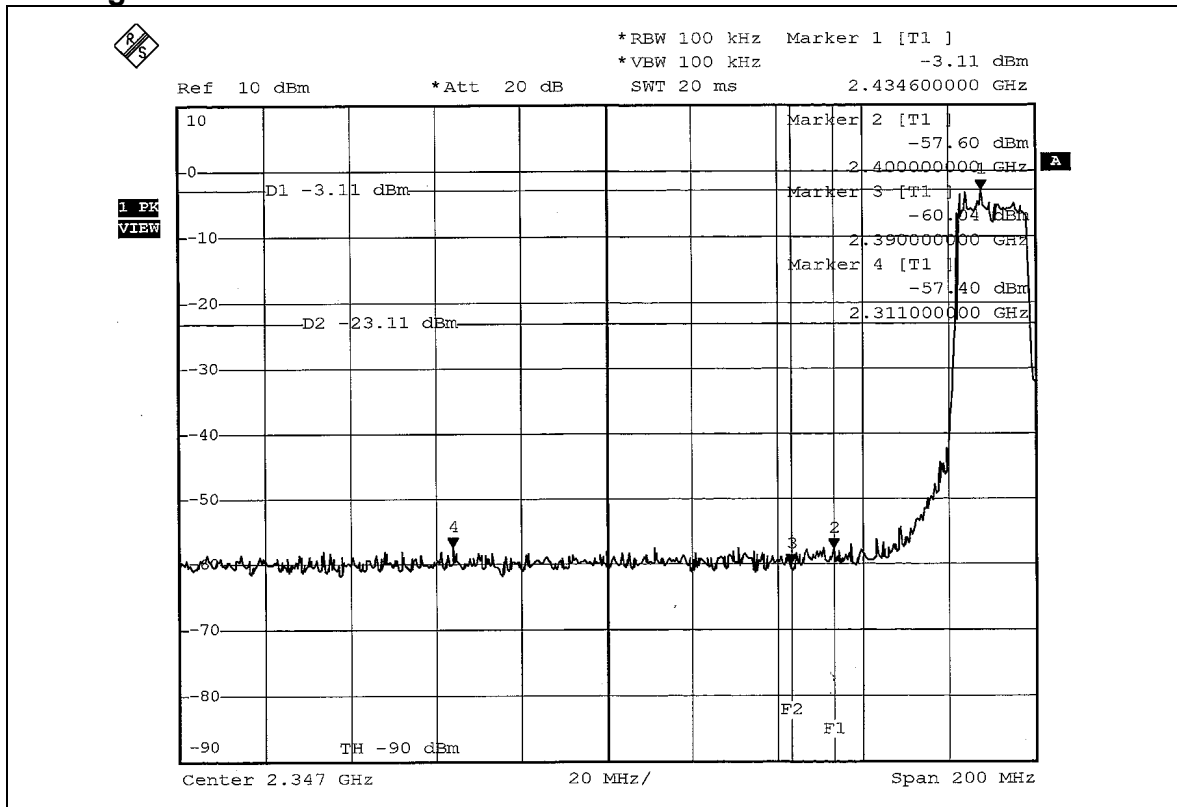


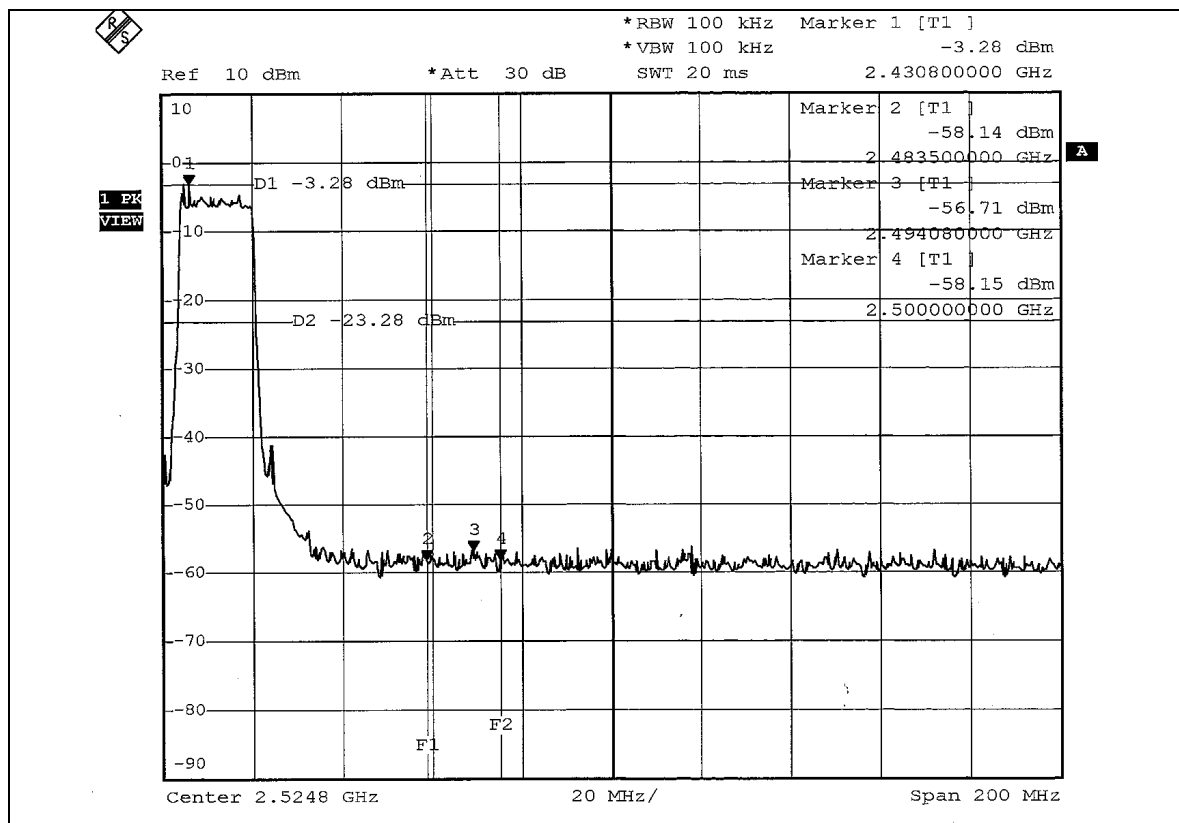
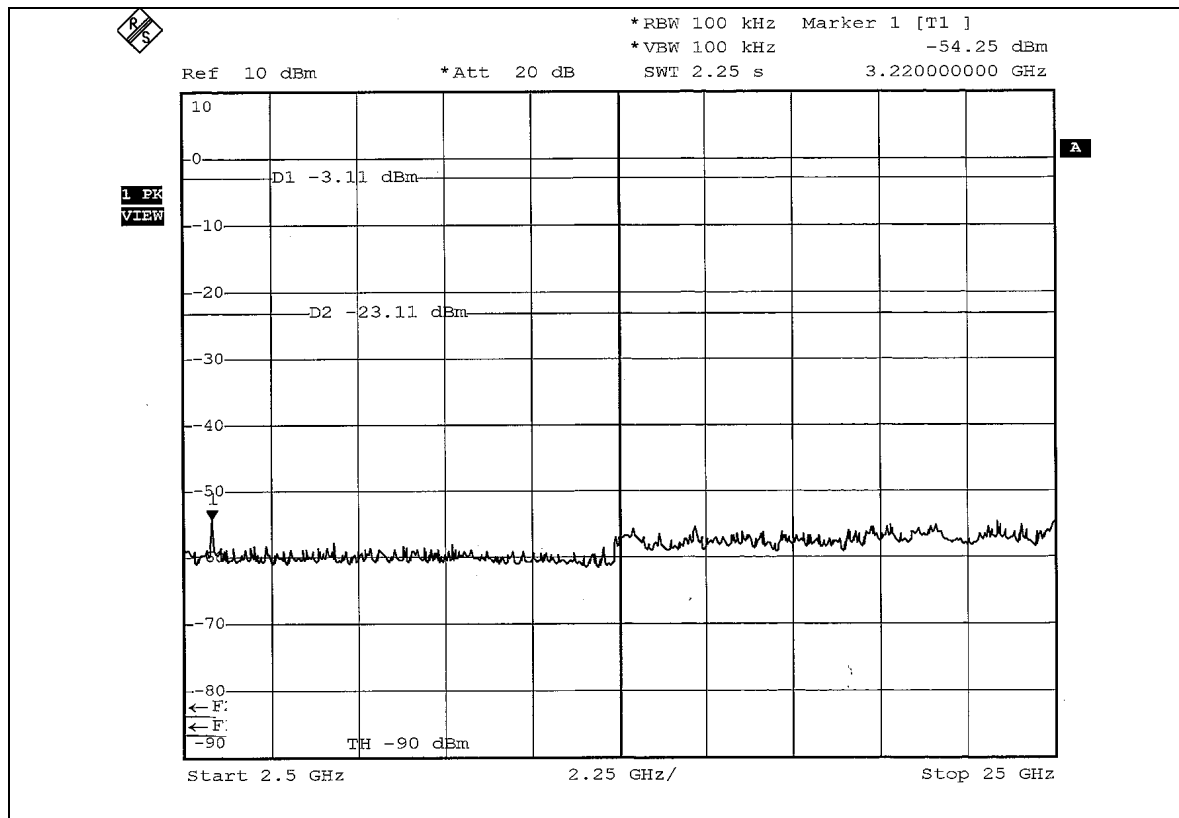
802.11g OFDM modulation with test mode 1

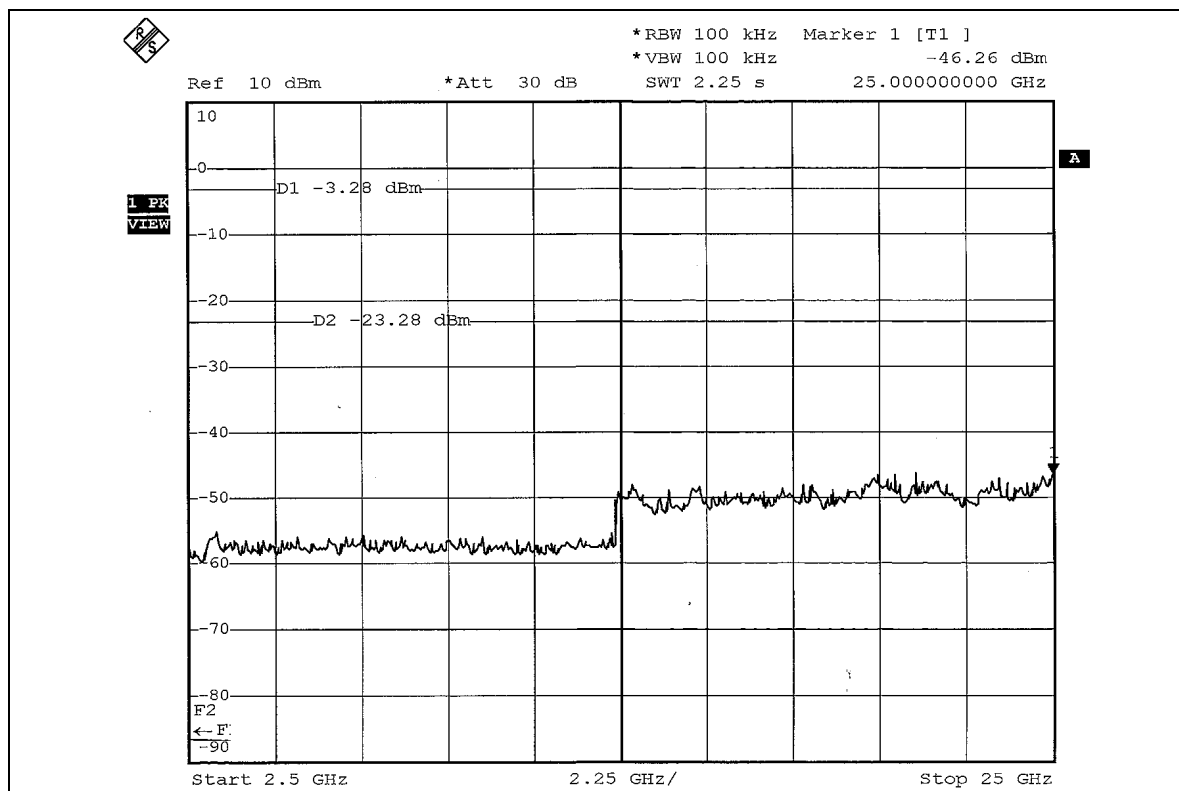
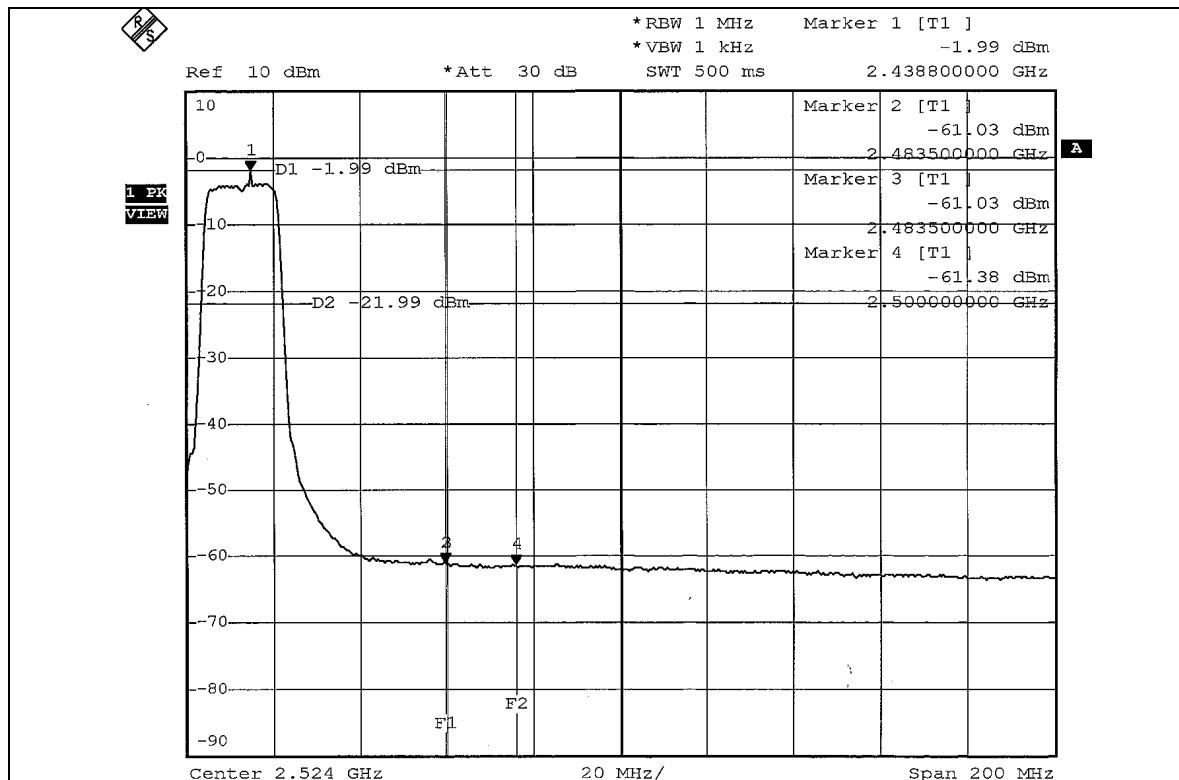


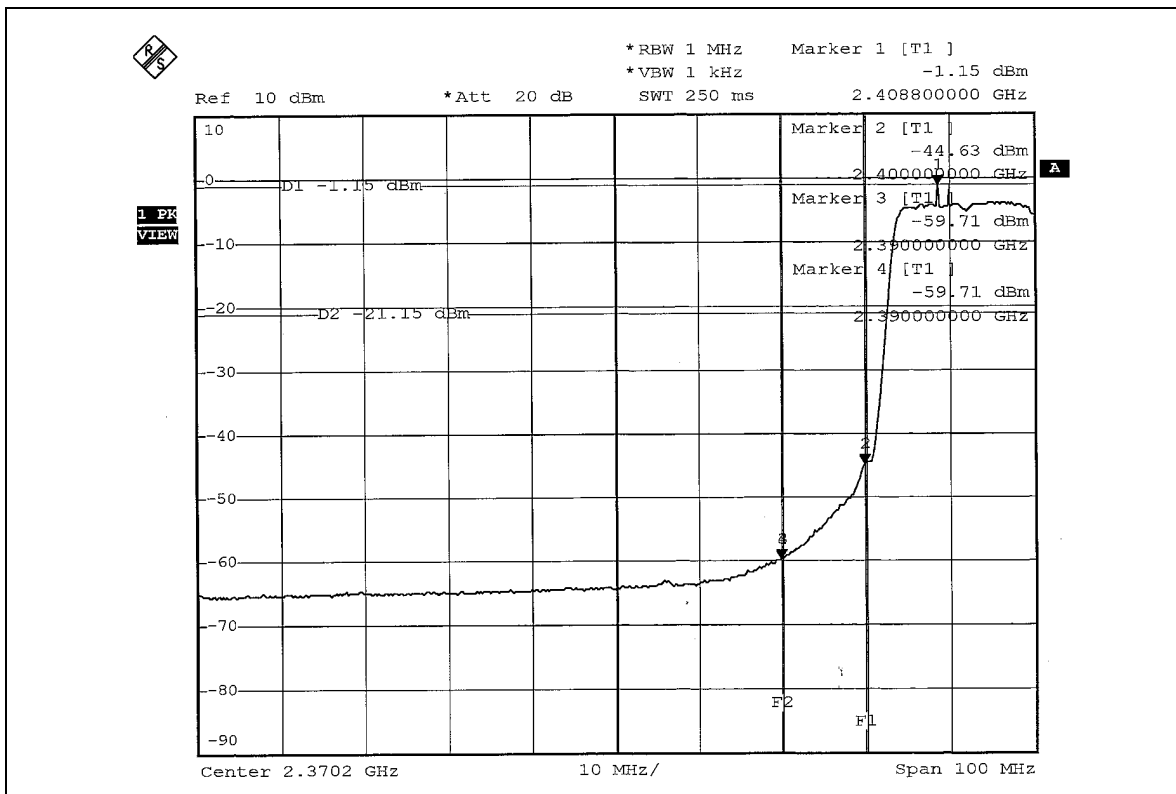
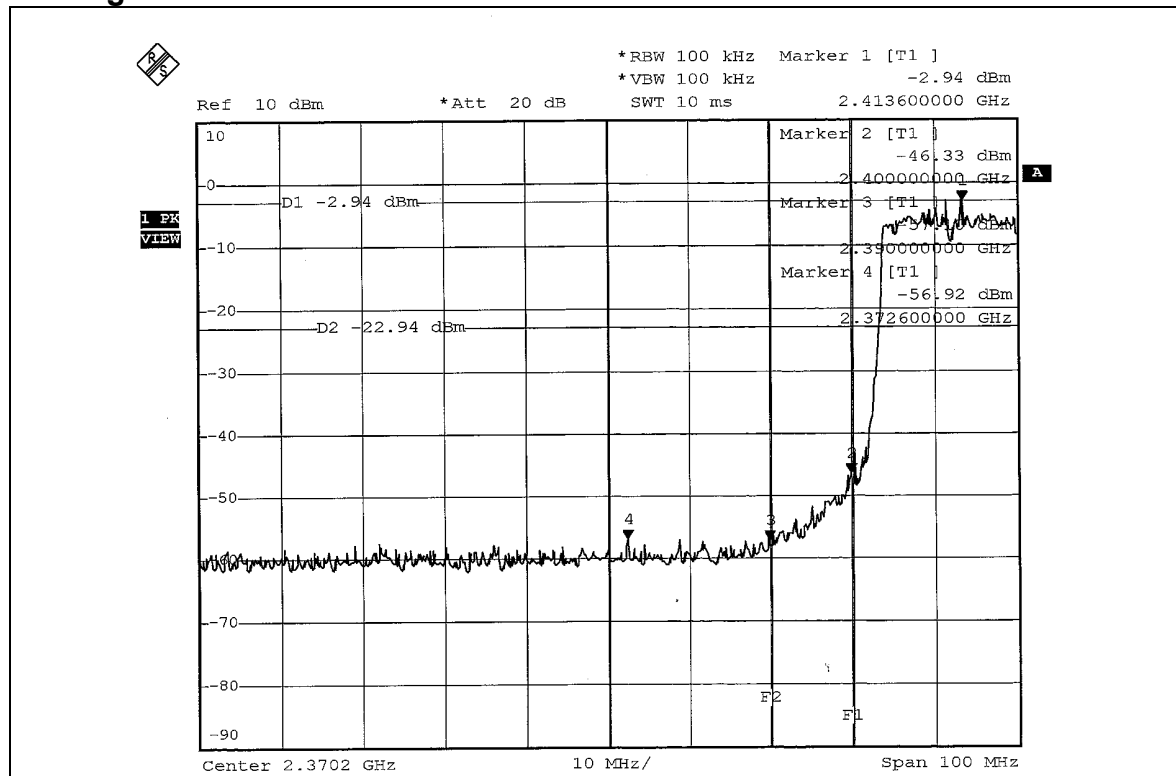


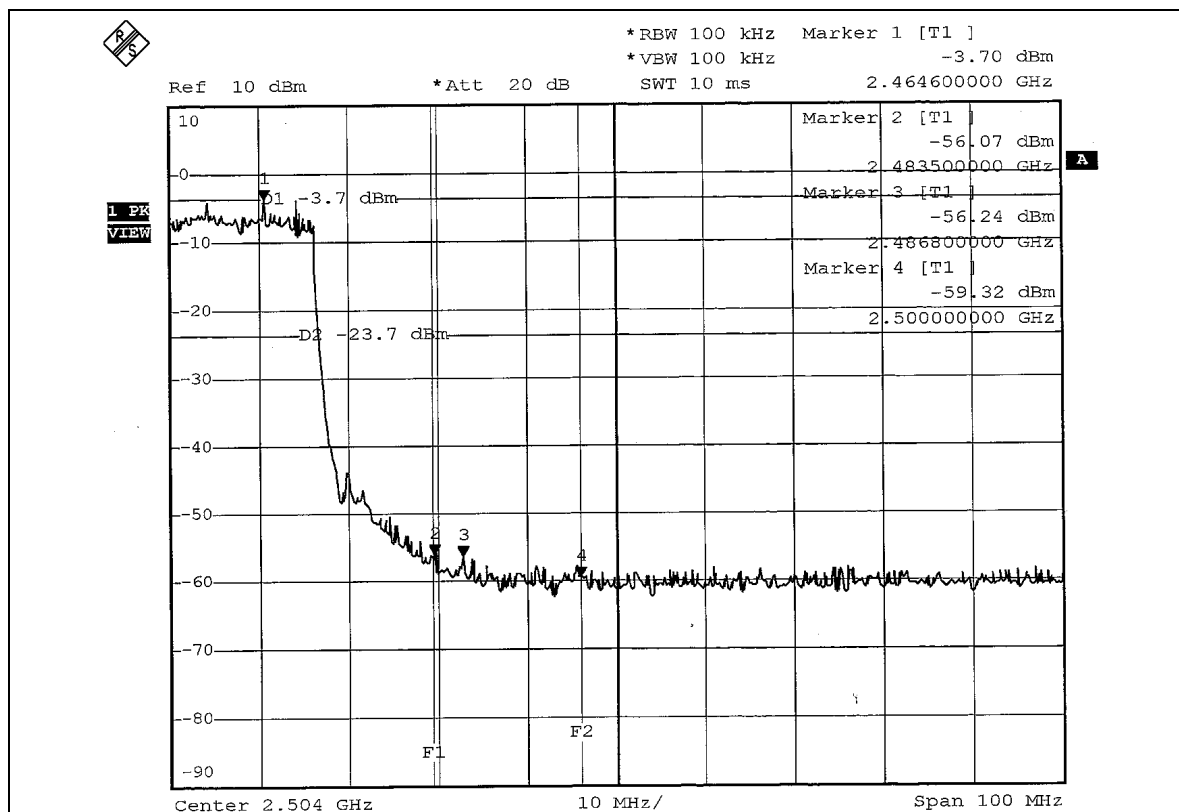
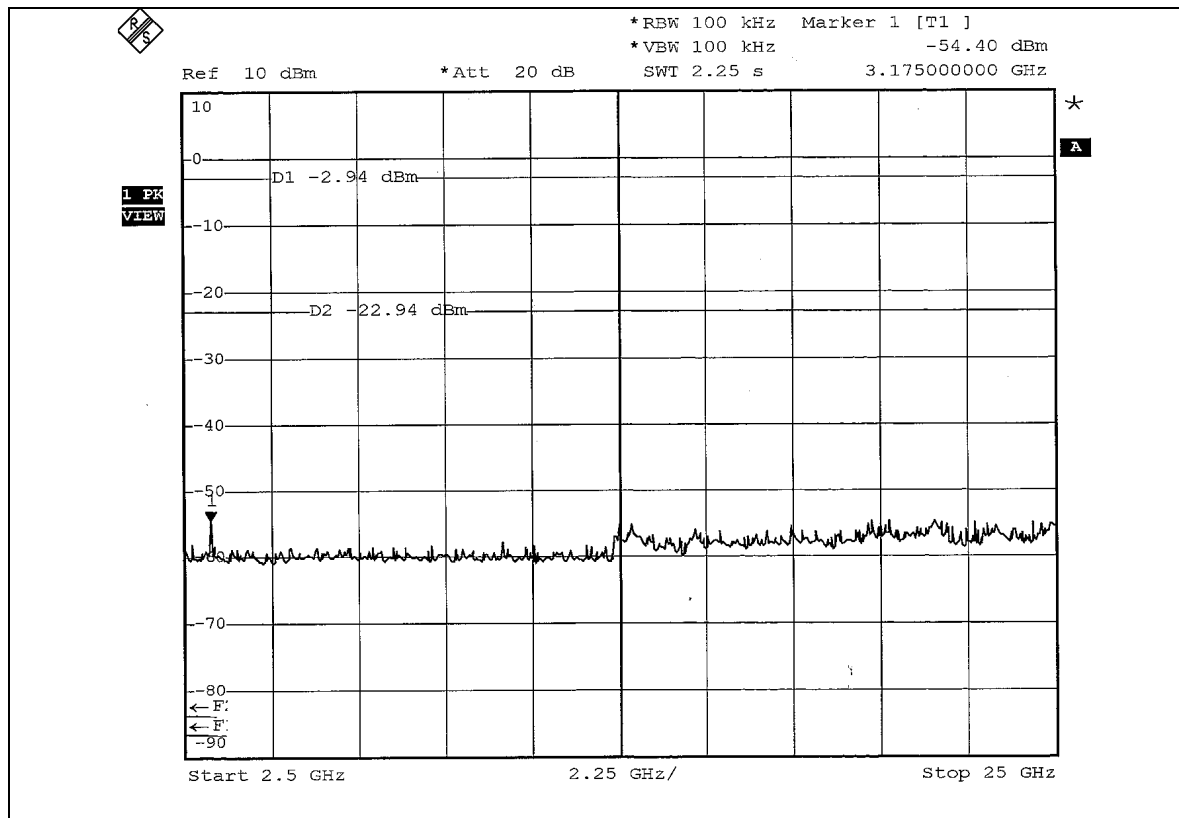


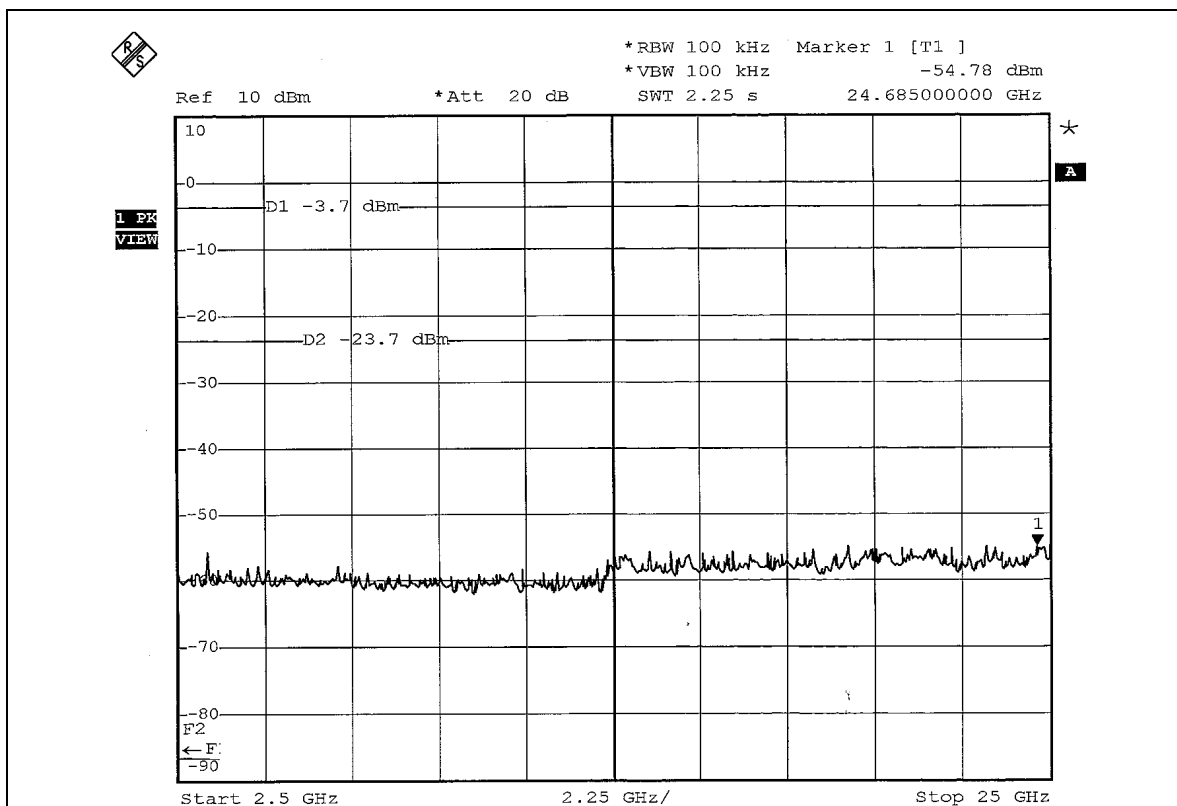
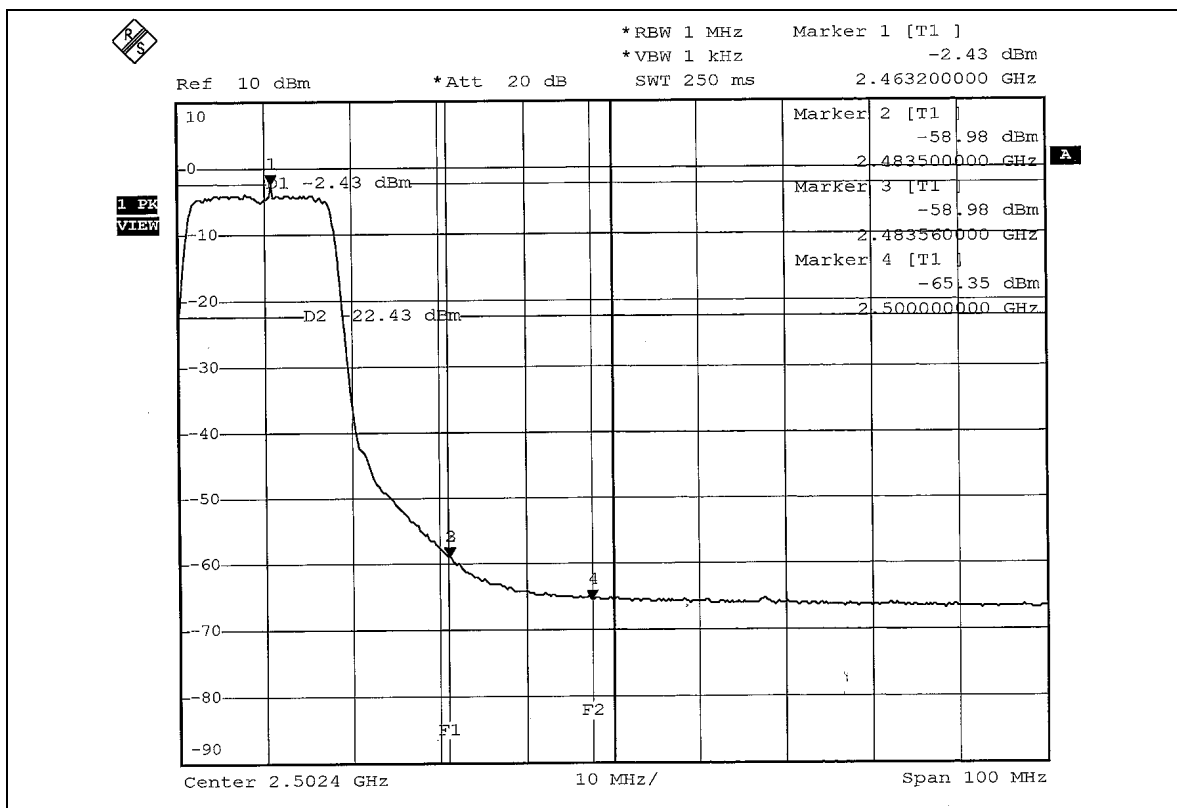
802.11g Turbo OFDM modulation with test mode 1





802.11g OFDM modulation with test mode 2







4.7 ANTENNA REQUIREMENT

4.7.1 STANDARD APPLICABLE

For intentional device, according to FCC 47 CFR Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

And according to FCC 47 CFR Section 15.247 (b), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

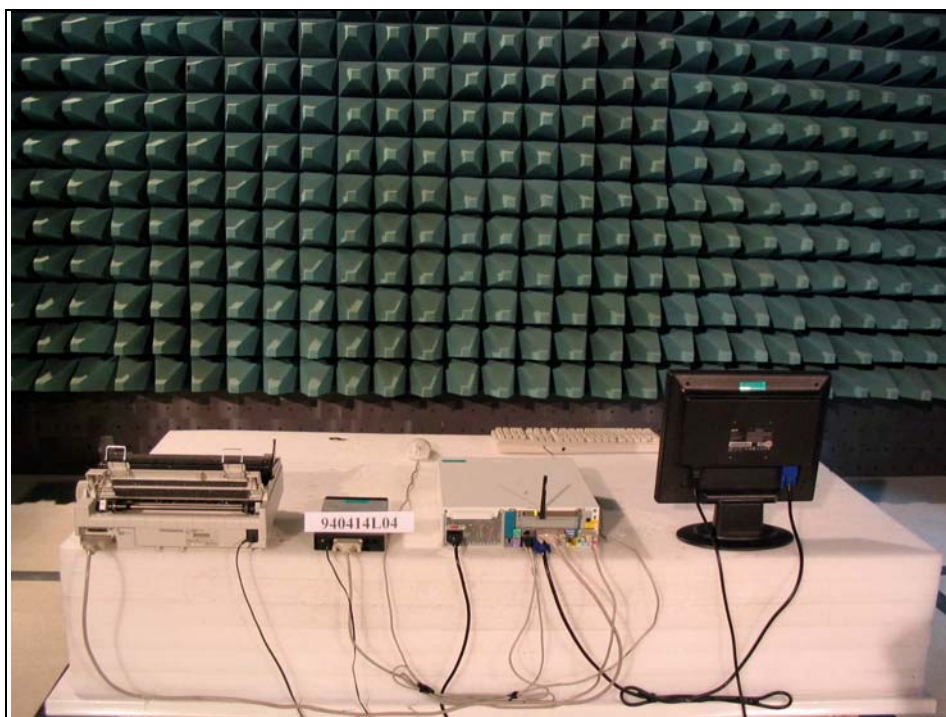
4.7.2 ANTENNA CONNECTED CONSTRUCTION

The antenna type used in this product is Dipole antenna without antenna connector. The maximum Gain of this antenna is only 2dBi.

5 PHOTOGRAPHS OF THE TEST CONFIGURATION CONDUCTED EMISSION TEST



RADIATED EMISSION TEST





6 INFORMATION ON THE TESTING LABORATORIES

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

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

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site:

www.adt.com.tw/index.5/phtml. If you have any comments, please feel free to contact us at the following:

Linko EMC/RF Lab:

Tel: 886-2-26052180

Fax: 886-2-26052943

Hsin Chu EMC/RF Lab:

Tel: 886-3-5935343

Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety/Telecom Lab:

Tel: 886-3-3183232

Fax: 886-3-3185050

Linko RF Lab.

Tel: 886-3-3270910

Fax: 886-3-3270892

Web Site: www.adt.com.tw

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