FCC TEST REPORT

REPORT NO.: RF951215L04
MODEL NO.: FON2200
RECEIVED: Dec. 15, 2006
TESTED: Dec. 18, 2006 ~ Jan. 05, 2007
ISSUED: Jan. 05, 2007

APPLICANT: Fon Technology S.L.
ADDRESS: Avenida de Bruselas, num 7, Planta 3, Alcobendas, Madrid 28108, Spain

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.

ACCREDITED
No. 2177-01

0528

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1 CERTIFICATION

PRODUCT :	La Fonera
MODEL NO.:	FON2200
BRAND:	Fon
APPLICANT :	Fon Technology S.L.
TESTED:	Dec. 18, 2006 ~ Jan. 05, 2007
TEST SAMPLE:	ENGINEERING SAMPLE
STANDARDS:	FCC Part 15, Subpart C (Section 15.247), ANSI C63.4-2003

The above equipment have 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 : Peggy Chen , **DATE:** Jan. 05, 2007
Peggy Chen

TECHNICAL ACCEPTANCE : Long Chen , **DATE:** Jan. 05, 2007
Responsible for RF
Long Chen

APPROVED BY : Gary Chang , **DATE:** Jan. 05, 2007
Gary Chang / Supervisor

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 –6.29dB at 0.659MHz.
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 –1.23dB at 276.87MHz.
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	3.71 dB
	200MHz ~1000MHz	3.73 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	La Fonera
MODEL NO.	FON2200
FCC ID	UVA-FON2200
POWER SUPPLY	7.5Vdc from AC adapter
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
FREQUENCY RANGE	2400MHz ~ 2483.5MHz
NUMBER OF CHANNEL	11
MAXIMUM OUTPUT POWER	90.365mW
ANTENNA TYPE	Refer to note 2
I/O PORTS	RJ45
DATA CABLE	NA

NOTE:

1. The EUT was powered by the following adapters:

Adapter 1:

Brand:	DVE
Model:	DSA-9R-05 AUS
Input:	100-120Vac, 50/60Hz, 0.3A
Output:	7.5Vdc, 1.0A
Power Cord:	1.8m non-shielded cable without core

Adapter 2:

Brand:	EFFICIENCY LEVEL III
Model:	RHM-0751000-1-1
Input:	100-120Vac, 50/60Hz, 0.2A
Output:	7.5Vdc, 1.0A
Power Cord:	1.8m non-shielded cable without core

2. There are 3 antennas for the EUT.

Antenna Location	Antenna Type	Antenna Model	Antenna Model	Gain (dBi)	TX/RX	Antenna connector
External	Dipole antenna	WHA YU	C529-510252-A	1.8	TX/RX	R-SMA
External	Dipole antenna	SANSEI	TT98090 (ANTB98-090)	1.8	TX/RX	R-SMA
Internal	PIFA antenna	NA	NA	1.05	TX/RX	NA

** C529-510252-A and PIFA antenna are the worst case and for final test.

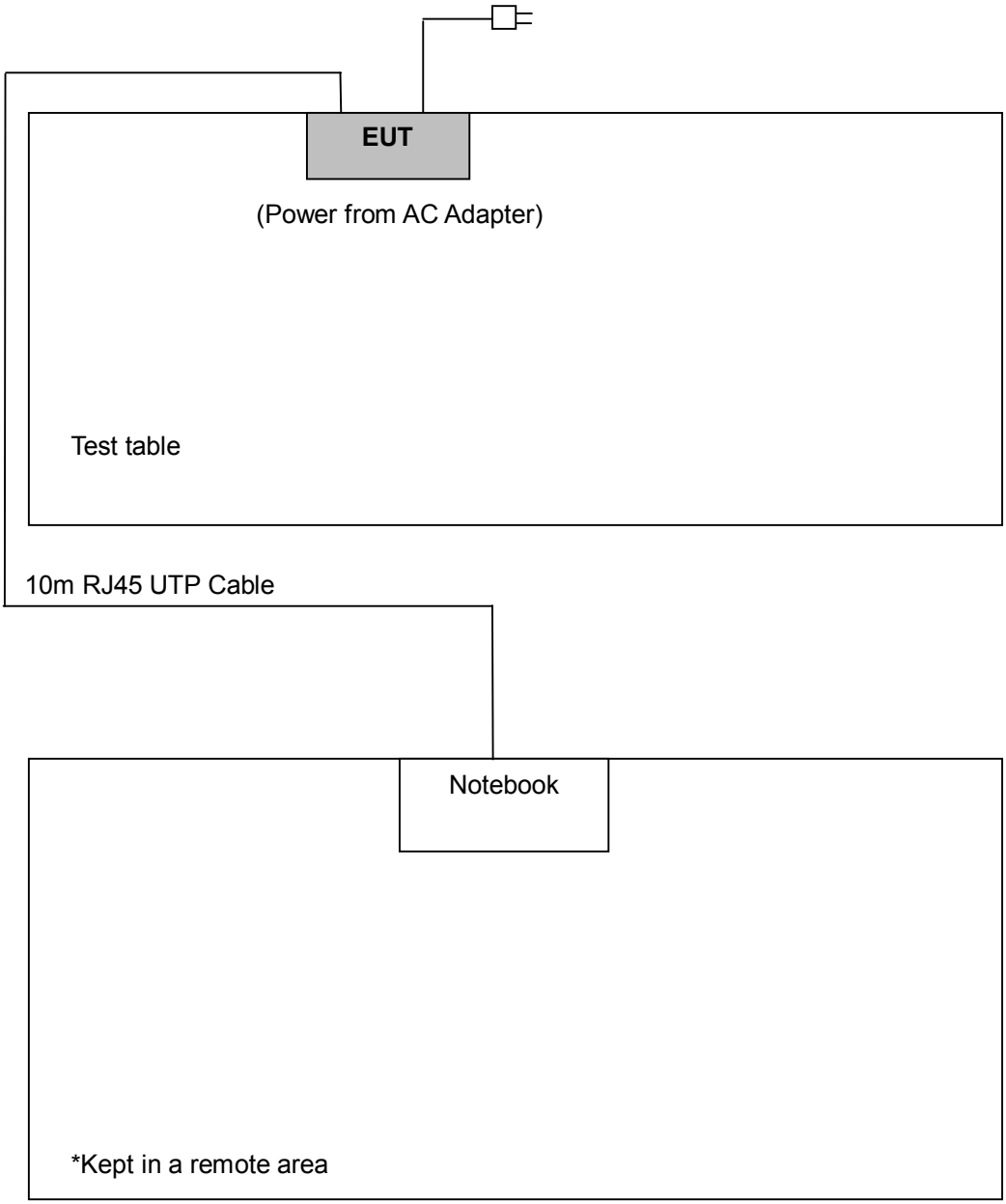
3. The EUT, operates in the 2.4GHz frequency range, lets you connect IEEE 802.11g or IEEE 802.11b devices to the network. With its high-speed data transmissions of up to 54Mbps.
4. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

3.2 DESCRIPTION OF TEST MODES

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		

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST



3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
A	√	√	-	-	Power from AC adapter (Model No.: DSA-9R-05 AUS)
B	√	√	√	√	Power from AC adapter (Model No.: RHM-0751000-1-1)

Where **PLC:** Power Line Conducted Emission **RE<1G:** Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 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)
A	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
B	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)
A	802.11g	1 to 11	11	OFDM	BPSK	6
B	802.11g	1 to 11	11	OFDM	BPSK	6

Radiated Emission Test (Above 1 GHz):

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

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

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

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a RF product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

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

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

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

3.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP05L	12130898320	E2K24CLNS

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

NOTE:
1. All power cords of the above support units are non shielded (1.8m).
2. Item 1 act as a communication partner to transfer data.

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 0.5-5 5-30	66 to 56 56 60	56 to 46 46 50

NOTE:
1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.
3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Sep. 25, 2007
RF signal cable Woken	5D-FB	Cable-HYCO3-01	Jan. 06, 2007
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Jan. 09, 2007
LISN ROHDE & SCHWARZ	ESH3-Z5	100311	Jan. 22, 2007
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 2.
3. The VCCI Site Registration No. is C-2047.

4.1.3 TEST PROCEDURES

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

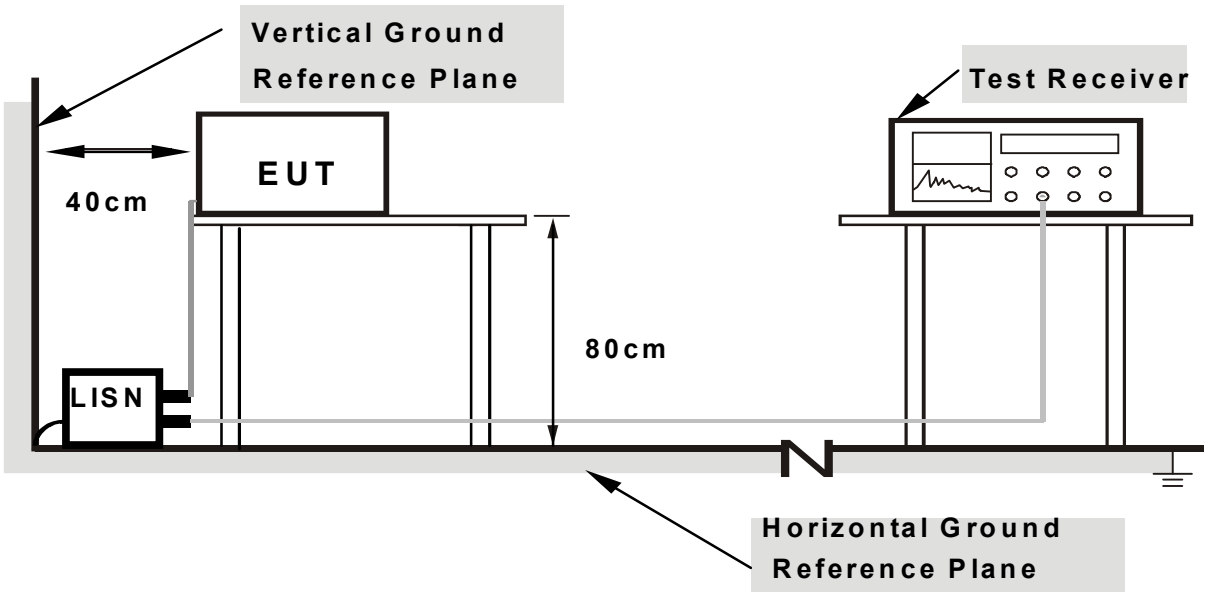
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

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

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) 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 attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

a. Placed the EUT on the testing table.
b. Prepared notebook system to act as a communication partner and placed it outside of testing area.
c. The communication partner run a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency via an RJ45 cable.
d. The communication partner sent data to EUT by command "PING".

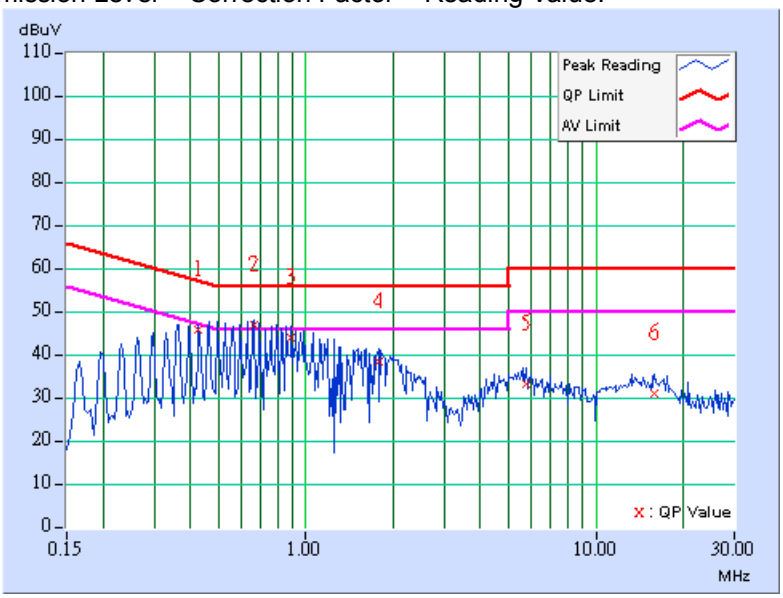
4.1.7 TEST RESULTS

CONDUCTED WORST-CASE DATA

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	**PHASE**	Line 1
MODULATION TYPE	BPSK	**6dB BANDWIDTH**	9 kHz
TRANSFER RATE	6Mbps	**INPUT POWER**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	**TEST MODE**	A
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.427	0.10	45.49	-	45.59	-	57.30	47.30	-11.71	-
2	**0.659**	**0.10**	**46.56**	**39.61**	**46.66**	**39.71**	**56.00**	**46.00**	**-9.34**	**-6.29**
3	0.892	0.10	43.53	-	43.63	-	56.00	46.00	-12.37	-
4	1.781	0.18	37.91	-	38.09	-	56.00	46.00	-17.91	-
5	5.763	0.37	32.75	-	33.12	-	60.00	50.00	-26.88	-
6	15.926	0.62	30.32	-	30.94	-	60.00	50.00	-29.06	-

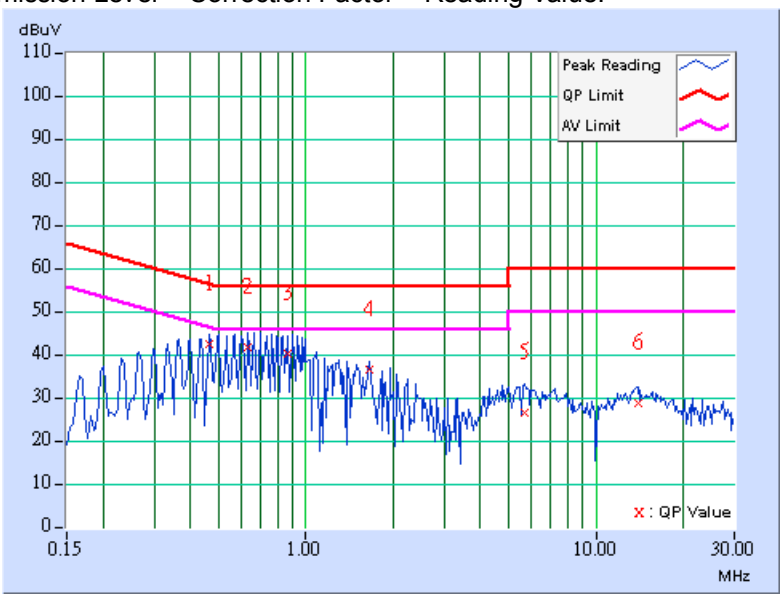
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Line 2
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TEST MODE	A
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.466	0.11	41.86	-	41.97	-	56.58	46.58	-14.61	-
2	0.633	0.14	41.11	-	41.25	-	56.00	46.00	-14.75	-
3	0.864	0.18	39.93	-	40.11	-	56.00	46.00	-15.89	-
4	1.660	0.20	36.08	-	36.28	-	56.00	46.00	-19.72	-
5	5.691	0.40	25.91	-	26.31	-	60.00	50.00	-33.69	-
6	13.910	0.59	28.19	-	28.78	-	60.00	50.00	-31.22	-

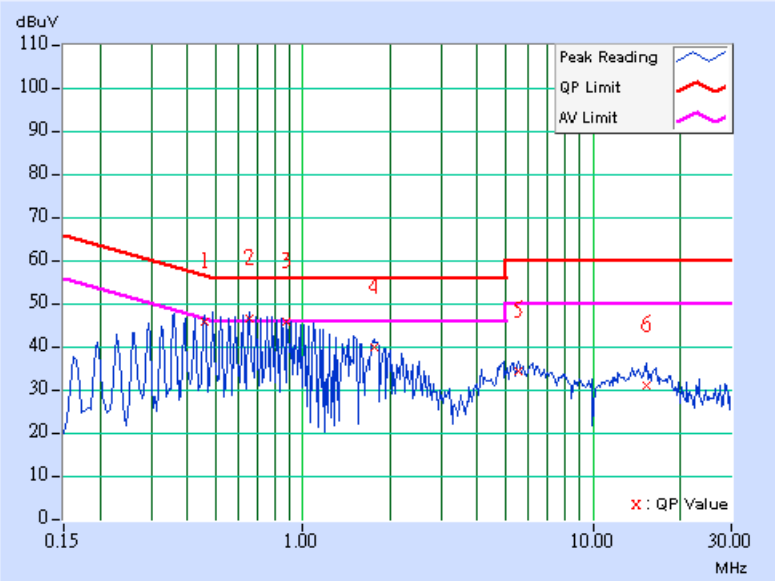
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TEST MODE	A
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.459	0.10	45.40	-	45.50	-	56.72	46.72	-11.22	-
2	0.654	0.10	46.21	39.52	46.31	39.62	56.00	46.00	-9.69	-6.38
3	0.880	0.10	45.41	-	45.51	-	56.00	46.00	-10.49	-
4	1.762	0.18	39.27	-	39.45	-	56.00	46.00	-16.55	-
5	5.543	0.37	33.64	-	34.01	-	60.00	50.00	-25.99	-
6	15.254	0.63	30.44	-	31.07	-	60.00	50.00	-28.93	-

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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 2
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TEST MODE	A
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.494	0.12	42.32	-	42.44	-	56.11	46.11	-13.67	-
2	0.724	0.15	40.40	-	40.55	-	56.00	46.00	-15.45	-
3	0.920	0.19	40.01	-	40.20	-	56.00	46.00	-15.80	-
4	1.215	0.20	37.51	-	37.71	-	56.00	46.00	-18.29	-
5	4.910	0.38	29.18	-	29.56	-	56.00	46.00	-26.44	-
6	12.809	0.56	28.33	-	28.89	-	60.00	50.00	-31.11	-

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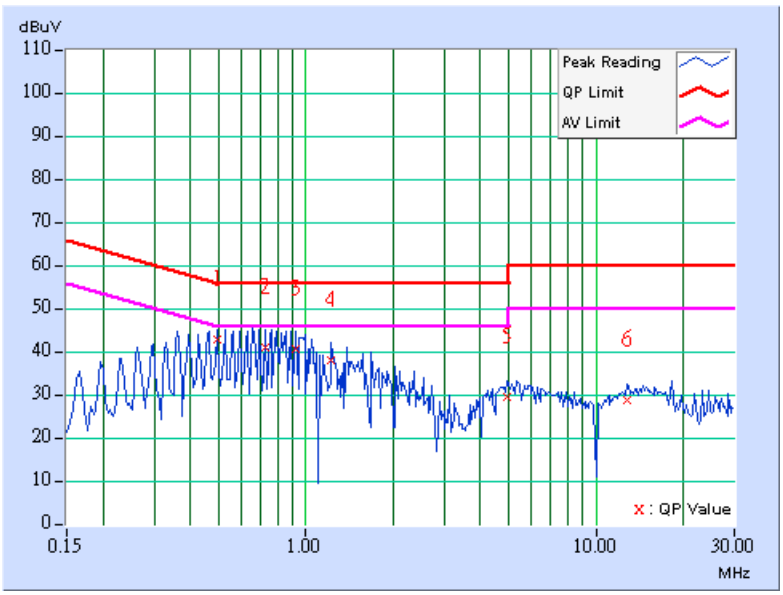
4. Margin value = Emission level - Limit value
5. Correction factor = Insertion loss + Cable loss
6. Emission Level = Correction Factor + Reading Value.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TEST MODE	A
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.455	0.10	45.18	-	45.28	-	56.79	46.79	-11.51	-
2	0.681	0.10	45.10	-	45.20	-	56.00	46.00	-10.80	-
3	0.873	0.10	45.41	-	45.51	-	56.00	46.00	-10.49	-
4	1.391	0.14	41.20	-	41.34	-	56.00	46.00	-14.66	-
5	5.131	0.37	33.91	-	34.28	-	60.00	50.00	-25.72	-
6	17.695	0.59	32.73	-	33.32	-	60.00	50.00	-26.68	-

REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
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4. Margin value = Emission level - Limit value
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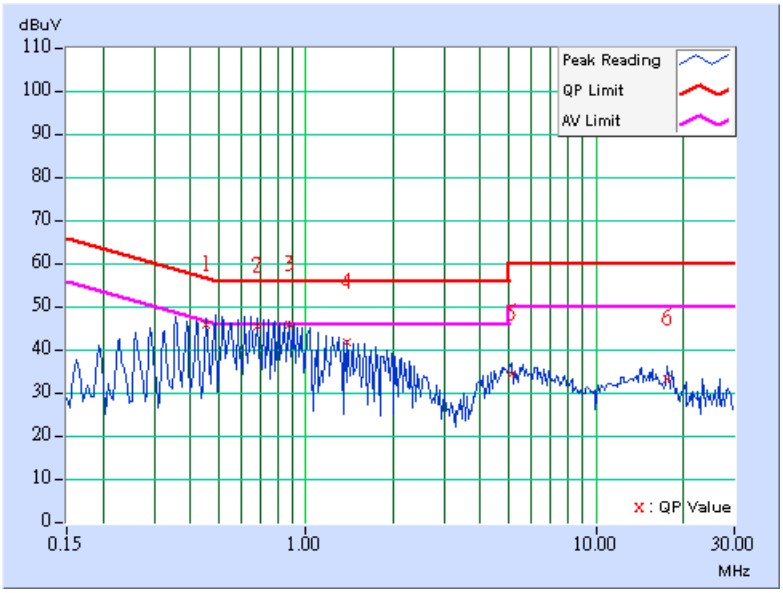
6. Emission Level = Correction Factor + Reading Value.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	PHASE	Line 2
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TEST MODE	A
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.487	0.11	42.55	-	42.66	-	56.21	46.21	-13.55	-
2	0.685	0.15	40.28	-	40.43	-	56.00	46.00	-15.57	-
3	0.912	0.19	39.79	-	39.98	-	56.00	46.00	-16.02	-
4	1.336	0.20	35.63	-	35.83	-	56.00	46.00	-20.17	-
5	5.246	0.39	25.86	-	26.25	-	60.00	50.00	-33.75	-
6	14.398	0.61	27.45	-	28.06	-	60.00	50.00	-31.94	-

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.
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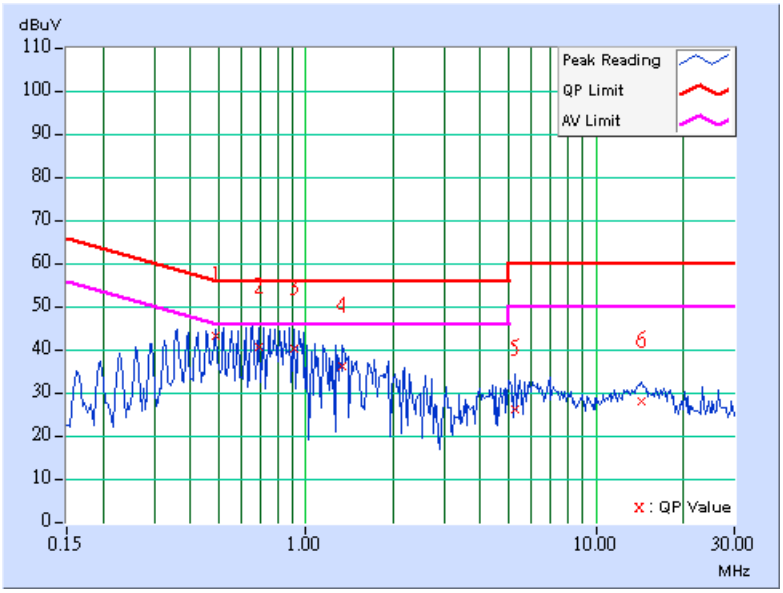
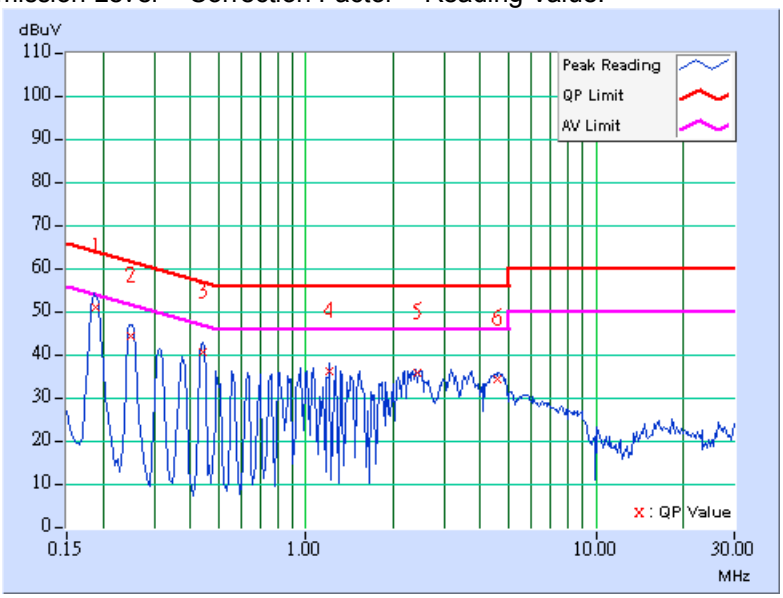


EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TEST MODE	B
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.188	0.10	50.58	-	50.68	-	64.14	54.14	-13.46	-
2	0.250	0.10	43.93	-	44.03	-	61.75	51.75	-17.72	-
3	0.439	0.10	40.40	-	40.50	-	57.08	47.08	-16.58	-
4	1.207	0.12	35.83	-	35.95	-	56.00	46.00	-20.05	-
5	2.410	0.23	35.64	-	35.87	-	56.00	46.00	-20.13	-
6	4.581	0.37	33.91	-	34.28	-	56.00	46.00	-21.72	-

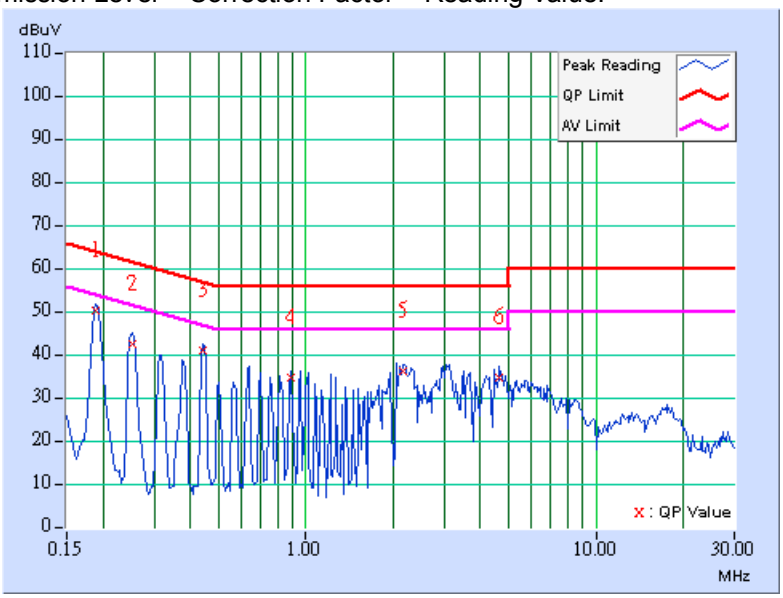
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	PHASE	Line 2
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TEST MODE	B
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.10	49.95	-	50.05	-	64.08	54.08	-14.03	-
2	0.252	0.10	42.13	-	42.23	-	61.71	51.71	-19.48	-
3	0.443	0.11	40.65	-	40.76	-	57.01	47.01	-16.25	-
4	0.892	0.18	34.45	-	34.63	-	56.00	46.00	-21.37	-
5	2.156	0.21	35.80	-	36.01	-	56.00	46.00	-19.99	-
6	4.641	0.38	34.34	-	34.72	-	56.00	46.00	-21.28	-

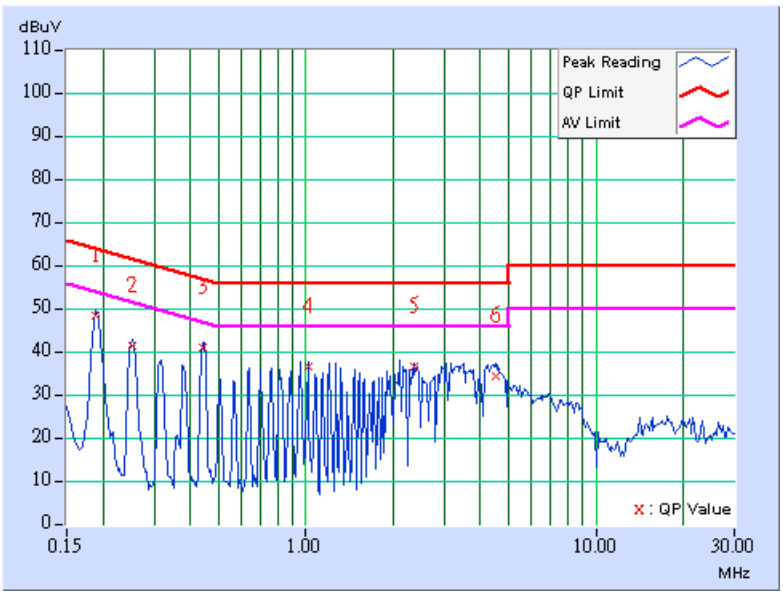
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TEST MODE	B
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.10	47.98	-	48.08	-	64.08	54.08	-16.00	-
2	0.252	0.10	41.19	-	41.29	-	61.71	51.71	-20.42	-
3	0.443	0.10	40.76	-	40.86	-	57.01	47.01	-16.15	-
4	1.020	0.10	36.31	-	36.41	-	56.00	46.00	-19.59	-
5	2.355	0.23	36.25	-	36.48	-	56.00	46.00	-19.52	-
6	4.500	0.37	33.96	-	34.33	-	56.00	46.00	-21.67	-

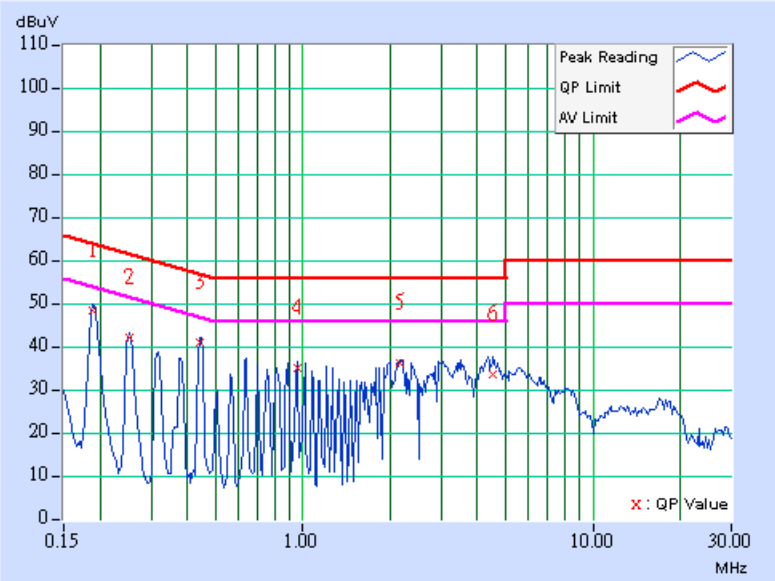
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	PHASE	Line 2
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TEST MODE	B
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.10	48.28	-	48.38	-	64.08	54.08	-15.70	-
2	0.252	0.10	41.72	-	41.82	-	61.71	51.71	-19.89	-
3	0.443	0.11	40.65	-	40.76	-	57.01	47.01	-16.25	-
4	0.955	0.19	34.97	-	35.16	-	56.00	46.00	-20.84	-
5	2.159	0.21	35.98	-	36.19	-	56.00	46.00	-19.81	-
6	4.526	0.38	33.36	-	33.74	-	56.00	46.00	-22.26	-

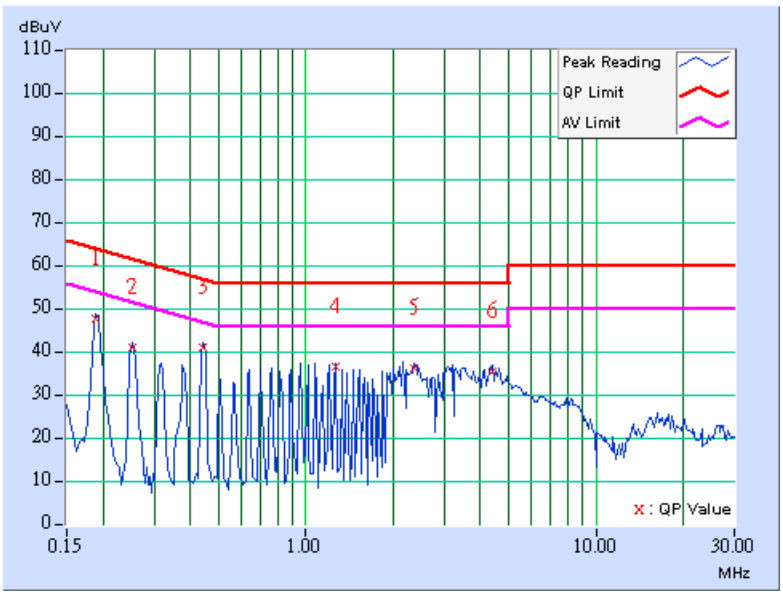
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	PHASE	Line 1
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TEST MODE	B
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.10	47.42	-	47.52	-	64.08	54.08	-16.56	-
2	0.252	0.10	40.60	-	40.70	-	61.71	51.71	-21.01	-
3	0.443	0.10	40.74	-	40.84	-	57.01	47.01	-16.17	-
4	1.273	0.13	36.42	-	36.55	-	56.00	46.00	-19.45	-
5	2.355	0.23	36.06	-	36.29	-	56.00	46.00	-19.71	-
6	4.395	0.37	35.35	-	35.72	-	56.00	46.00	-20.28	-

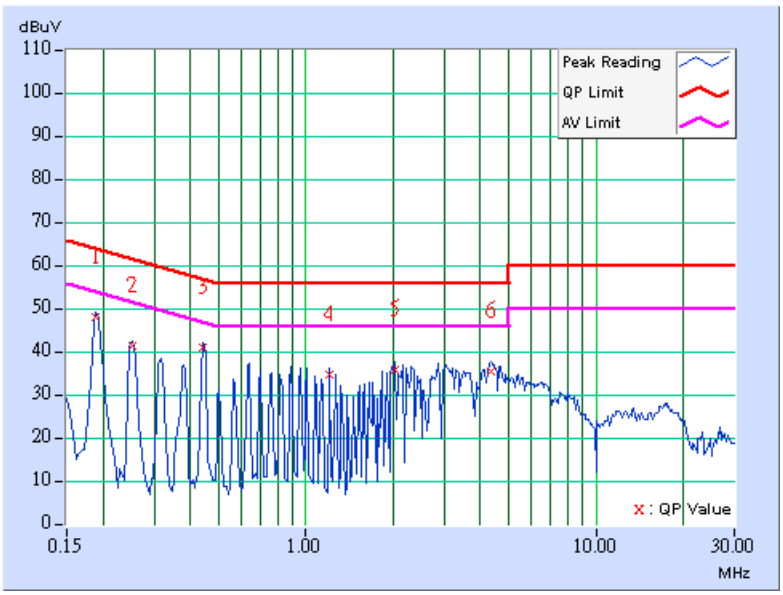
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	PHASE	Line 2
MODULATION TYPE	BPSK	6dB BANDWIDTH	9 kHz
TRANSFER RATE	6Mbps	INPUT POWER	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 991hPa	TEST MODE	B
TESTED BY	Match Tsui		

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.189	0.10	47.60	-	47.70	-	64.08	54.08	-16.38	-
2	0.252	0.10	41.09	-	41.19	-	61.71	51.71	-20.52	-
3	0.443	0.11	40.65	-	40.76	-	57.01	47.01	-16.25	-
4	1.211	0.20	34.47	-	34.67	-	56.00	46.00	-21.33	-
5	2.039	0.20	35.49	-	35.69	-	56.00	46.00	-20.31	-
6	4.328	0.37	35.17	-	35.54	-	56.00	46.00	-20.46	-

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



4.2 RADIATED EMISSION MEASUREMENT

4.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

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

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	2400/F(kHz)	300
0.490-1.705	24000/F(kHz)	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

NOTE:

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESMI	839013/007 839379/002	Jan. 24, 2007
Spectrum Analyzer ROHDE & SCHWARZ	FSEK30	100049	Aug. 21, 2007
BILOG Antenna SCHWARZBECK	VULB9168	9168-153	Jan. 15, 2007
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-407	Jan. 22, 2007
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170242	Jan. 19, 2007
Preamplifier Agilent	8449B	3008A01911	Sep. 13, 2007
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	218188/218189	Nov. 14, 2007
RF signal cable Worken	8D-FB	CABLE-HYCH9-01	Mar. 08, 2007
Software ADT.	ADT_Radiated_ V7.6.01	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA
Antenna Tower Controller EMCO	2090	NA	NA
Turn Table EMCO	2087-2.03	NA	NA
Turn Table Controller EMCO	2090	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 Chamber 9.

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

4. The IC Site Registration No. is IC4924A-9.

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 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.

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

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

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

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

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

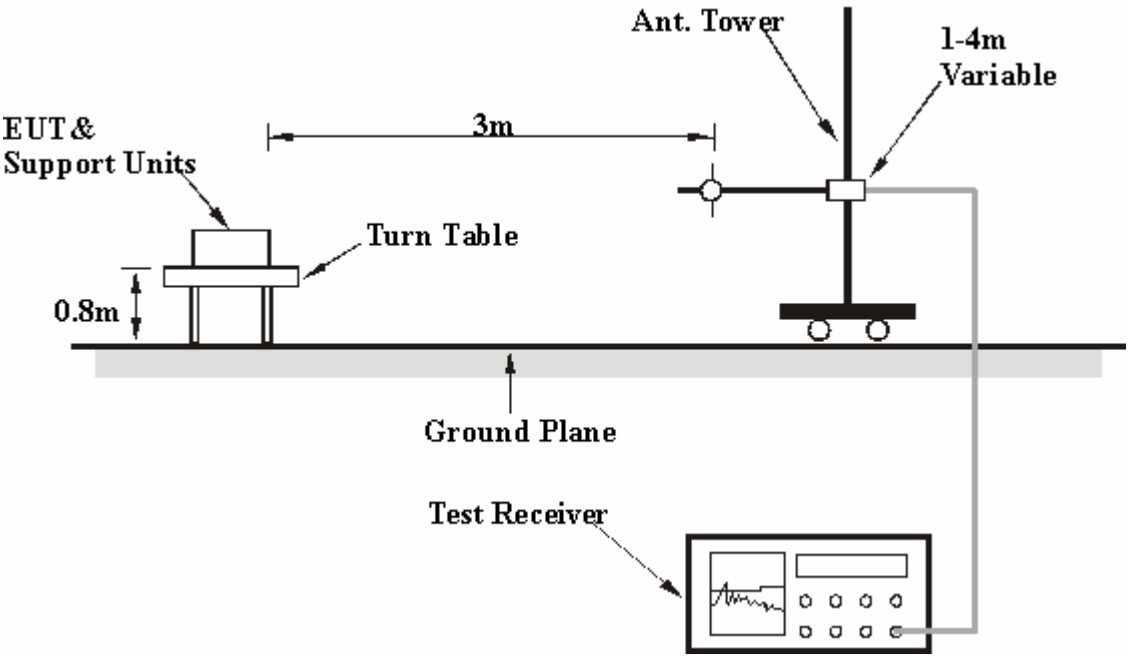
NOTE:

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 of test receiver/spectrum analyzer is 1 MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz 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 attached file (Test Setup Photo).

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

4.2.7 TEST RESULTS

RADIATED WORST-CASE DATA: BELOW 1GHz

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**DETECTOR FUNCTION**	Quasi-Peak
TRANSFER RATE	6Mbps	**INPUT POWER**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991hPa	**TEST MODE**	A
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	94.15	32.17 QP	43.50	-11.33	2.00 H	156	23.64	8.53
2	98.04	32.89 QP	43.50	-10.61	2.00 H	339	24.48	8.41
3	133.03	33.25 QP	43.50	-10.25	1.00 H	17	21.49	11.76
4	249.66	39.95 QP	46.00	-6.05	1.00 H	156	28.39	11.56
5	376.01	34.40 QP	46.00	-11.60	2.00 H	143	18.49	15.90
6	399.34	42.60 QP	46.00	-3.40	1.00 H	327	25.96	16.64
7	426.55	41.78 QP	46.00	-4.22	2.00 H	187	24.68	17.11
8	500.42	35.22 QP	46.00	-10.78	1.50 H	181	16.60	18.62
9	751.18	35.12 QP	46.00	-10.88	1.50 H	206	11.21	23.91

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	107.76	36.16 QP	43.50	-7.34	1.00 V	124	27.16	9.00
2	133.03	32.69 QP	43.50	-10.81	1.00 V	339	20.93	11.76
3	168.02	33.43 QP	43.50	-10.07	1.50 V	289	21.37	12.06
4	249.66	36.15 QP	46.00	-9.85	1.00 V	130	24.58	11.56
5	401.28	39.99 QP	46.00	-6.01	1.00 V	80	23.31	16.68
6	426.55	42.00 QP	46.00	-4.00	1.50 V	225	24.89	17.11
7	500.42	40.00 QP	46.00	-6.00	1.00 V	80	21.38	18.62
8	731.74	34.86 QP	46.00	-11.14	1.00 V	80	11.50	23.36
9	809.50	34.24 QP	46.00	-11.76	1.00 V	137	10.14	24.10
10	933.91	36.06 QP	46.00	-9.94	1.00 V	137	9.48	26.58

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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	BPSK	**DETECTOR FUNCTION**	Quasi-Peak
TRANSFER RATE	6Mbps	**INPUT POWER**	120Vac, 60 Hz
ENVIRONMENTAL CONDITIONS	24deg. C, 65%RH, 991hPa	**TEST MODE**	B
TESTED BY	Match Tsui		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	94.15	32.90 QP	43.50	-10.60	1.50 H	181	24.37	8.53
2	98.04	32.10 QP	43.50	-11.40	1.50 H	358	23.69	8.41
3	133.03	34.08 QP	43.50	-9.42	2.50 H	200	22.32	11.76
4	249.66	38.15 QP	46.00	-7.85	1.00 H	143	26.58	11.56
5	**276.87**	**44.77 QP**	**46.00**	**-1.23**	**2.50 H**	**130**	**31.24**	**13.53**
6	376.01	37.41 QP	46.00	-8.59	2.50 H	130	21.51	15.90
7	401.28	41.00 QP	46.00	-5.00	2.50 H	137	24.32	16.68
8	426.55	44.19 QP	46.00	-1.81	2.00 H	162	27.08	17.11
9	475.15	35.00 QP	46.00	-11.00	2.50 H	130	16.94	18.06
10	500.42	35.55 QP	46.00	-10.45	2.50 H	137	16.93	18.62
11	731.74	36.22 QP	46.00	-9.78	2.50 H	137	12.86	23.36

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	94.15	32.60 QP	43.50	-10.90	1.00 V	181	24.07	8.53
2	109.70	34.90 QP	43.50	-8.60	1.00 V	187	25.74	9.17
3	131.08	41.14 QP	43.50	-2.36	2.00 V	225	29.64	11.50
4	169.96	33.54 QP	43.50	-9.96	1.50 V	219	21.61	11.93
5	249.66	35.17 QP	46.00	-10.83	1.00 V	99	23.61	11.56
6	376.01	34.07 QP	46.00	-11.93	1.00 V	143	18.16	15.90
7	399.34	38.69 QP	46.00	-7.31	1.00 V	130	22.05	16.64
8	426.55	42.94 QP	46.00	-3.06	1.50 V	206	25.83	17.11
9	500.42	35.13 QP	46.00	-10.87	1.50 V	219	16.51	18.62
10	729.80	35.31 QP	46.00	-10.69	1.00 V	130	12.01	23.30
11	809.50	35.06 QP	46.00	-10.94	1.00 V	156	10.96	24.10
12	931.96	35.61 QP	46.00	-10.39	1.00 V	99	9.13	26.48

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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	DBPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	1Mbps	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Morgan Chen	**ANTENNA TYPE**	Dipole

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	54.18 PK	74.00	-19.82	1.03 H	341	23.70	30.48
1	1608.00	43.52 AV	54.00	-10.48	1.03 H	341	13.04	30.48
2	2360.00	52.32 PK	74.00	-21.68	1.06 H	23	20.02	32.30
2	2360.00	43.61 AV	54.00	-10.39	1.06 H	23	11.31	32.30
3	2390.00	52.05 PK	74.00	-21.95	1.09 H	34	19.61	32.44
3	2390.00	43.21 AV	54.00	-10.79	1.09 H	34	10.77	32.44
4	*2412.00	101.42 PK			1.09 H	142	68.89	32.53
4	*2412.00	97.74 AV			1.09 H	142	65.21	32.53
5	3216.00	48.45 PK	81.42	-32.97	1.09 H	37	13.67	34.78
5	3216.00	42.32 AV	77.74	-35.42	1.09 H	37	7.54	34.78
6	4824.00	55.66 PK	74.00	-18.34	1.02 H	332	16.38	39.28
6	4824.00	51.13 AV	54.00	-2.87	1.02 H	332	11.85	39.28
7	7236.00	55.59 PK	81.42	-25.50	1.03 H	346	9.69	45.90
7	7236.00	42.89 AV	77.74	-34.85	1.03 H	346	-3.01	45.90

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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	DBPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	1Mbps	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Morgan Chen	**ANTENNA TYPE**	Dipole

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	56.33 PK	74.00	-17.67	1.08 V	12	25.85	30.48
1	1608.00	45.70 AV	54.00	-8.30	1.08 V	12	15.22	30.48
2	2320.00	58.90 PK	74.00	-15.10	1.13 V	18	26.78	32.12
2	2320.00	48.67 AV	54.00	-5.33	1.13 V	18	16.55	32.12
3	2360.00	59.46 PK	74.00	-14.54	1.11 V	15	27.16	32.30
3	2360.00	49.19 AV	54.00	-4.81	1.11 V	15	16.89	32.30
4	2390.00	57.12 PK	74.00	-16.88	1.13 V	18	24.68	32.44
4	2390.00	48.33 AV	54.00	-5.67	1.13 V	18	15.89	32.44
5	*2412.00	109.63 PK			1.41 V	96	77.10	32.53
5	*2412.00	105.83 AV			1.41 V	96	73.30	32.53
6	3216.00	51.30 PK	74.00	-22.70	1.04 V	41	16.52	34.78
6	3216.00	45.95 AV	54.00	-8.05	1.04 V	41	11.17	34.78
7	4824.00	56.08 PK	74.00	-17.92	1.24 V	19	16.80	39.28
7	4824.00	52.33 AV	54.00	-1.67	1.24 V	19	13.05	39.28
8	7236.00	56.64 PK	89.63	-32.99	1.15 V	19	10.74	45.90
8	7236.00	43.95 AV	85.83	-41.88	1.15 V	19	-1.95	45.90

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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	DBPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	1Mbps	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Morgan Chen	**ANTENNA TYPE**	Dipole

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	54.37 PK	74.00	-19.63	1.05 H	339	23.89	30.48
1	1624.00	43.73 AV	54.00	-10.27	1.05 H	339	13.25	30.48
2	2360.00	52.61 PK	74.00	-21.39	1.04 H	16	20.31	32.30
2	2360.00	43.79 AV	54.00	-10.21	1.04 H	16	11.49	32.30
3	*2437.00	102.12 PK			1.07 H	135	69.47	32.65
3	*2437.00	98.43 AV			1.07 H	135	65.78	32.65
4	3248.00	48.69 PK	82.12	-33.43	1.05 H	26	13.79	34.90
4	3248.00	42.58 AV	78.43	-35.85	1.05 H	26	7.68	34.90
5	4874.00	56.04 PK	74.00	-17.96	1.13 H	316	16.69	39.35
5	4874.00	51.32 AV	54.00	-2.68	1.13 H	316	11.97	39.35
6	7311.00	55.82 PK	74.00	-18.18	1.05 H	337	9.78	46.04
6	7311.00	43.23 AV	54.00	-10.77	1.05 H	337	-2.81	46.04

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1624.00	56.45 PK	74.00	-17.55	1.07 V	22	25.97	30.48
1	1624.00	46.04 AV	54.00	-7.96	1.07 V	22	15.56	30.48
2	2360.00	59.86 PK	74.00	-14.14	1.08 V	13	27.56	32.30
2	2360.00	49.25 AV	54.00	-4.75	1.08 V	13	16.95	32.30
3	*2437.00	110.50 PK			1.37 V	67	77.85	32.65
3	*2437.00	106.63 AV			1.37 V	67	73.98	32.65
4	3248.00	51.04 PK	90.50	-39.46	1.20 V	33	16.14	34.90
4	3248.00	45.63 AV	86.63	-41.00	1.20 V	33	10.73	34.90
5	4874.00	55.80 PK	74.00	-18.20	1.33 V	20	16.45	39.35
5	4874.00	52.01 AV	54.00	-1.99	1.33 V	20	12.66	39.35
6	7311.00	55.74 PK	74.00	-18.26	1.23 V	22	9.70	46.04
6	7311.00	43.85 AV	54.00	-10.15	1.23 V	22	-2.19	46.04

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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	DBPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	1Mbps	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Morgan Chen	**ANTENNA TYPE**	Dipole

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	54.65 PK	81.08	-26.43	1.08 H	341	24.16	30.49
1	1641.00	43.91 AV	77.31	-33.40	1.08 H	341	13.42	30.49
2	2360.00	51.26 PK	74.00	-22.74	1.03 H	126	18.96	32.30
2	2360.00	42.24 AV	54.00	-11.76	1.03 H	126	9.94	32.30
3	2392.00	54.32 PK	81.08	-26.76	1.01 H	110	21.88	32.44
3	2392.00	45.76 AV	77.31	-31.55	1.01 H	110	13.32	32.44
4	*2462.00	101.08 PK			1.05 H	126	68.32	32.76
4	*2462.00	97.31 AV			1.05 H	126	64.55	32.76
5	2483.50	51.69 PK	74.00	-22.31	1.06 H	117	18.83	32.86
5	2483.50	42.79 AV	54.00	-11.21	1.06 H	117	9.93	32.86
6	3282.00	48.79 PK	81.08	-32.29	1.05 H	310	13.77	35.02
6	3282.00	42.67 AV	77.31	-34.64	1.05 H	310	7.65	35.02
7	4924.00	56.37 PK	74.00	-17.63	1.10 H	305	16.95	39.42
7	4924.00	51.61 AV	54.00	-2.39	1.10 H	305	12.19	39.42
8	7386.00	56.11 PK	74.00	-17.89	1.08 H	346	9.98	46.13
8	7386.00	43.49 AV	54.00	-10.51	1.08 H	346	-2.64	46.13

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	DBPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	1Mbps	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Morgan Chen	**ANTENNA TYPE**	Dipole

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	56.78 PK	88.39	-31.61	1.05 V	16	26.29	30.49
1	1641.00	46.31 AV	84.51	-38.20	1.05 V	16	15.82	30.49
2	2360.00	60.96 PK	74.00	-13.04	1.03 V	8	28.66	32.30
2	2360.00	49.48 AV	54.00	-4.52	1.03 V	8	17.18	32.30
3	2392.00	58.79 PK	88.39	-29.60	1.07 V	3	26.35	32.44
3	2392.00	51.33 AV	84.51	-33.18	1.07 V	3	18.89	32.44
4	*2462.00	108.39 PK			1.29 V	56	75.63	32.76
4	*2462.00	104.51 AV			1.29 V	56	71.75	32.76
5	2483.50	60.69 PK	74.00	-13.31	1.04 V	26	27.83	32.86
5	2483.50	50.21 AV	54.00	-3.79	1.04 V	26	17.35	32.86
6	3282.00	51.56 PK	88.39	-36.83	1.18 V	23	16.54	35.02
6	3282.00	46.89 AV	84.51	-37.62	1.18 V	23	11.87	35.02
7	4924.00	56.97 PK	74.00	-17.03	1.17 V	171	17.55	39.42
7	4924.00	52.61 AV	54.00	-1.39	1.17 V	171	13.19	39.42
8	7386.00	56.12 PK	74.00	-17.88	1.19 V	16	9.99	46.13
8	7386.00	44.12 AV	54.00	-9.88	1.19 V	16	-2.01	46.13

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	DBPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	1Mbps	**ENVIRONMENTAL CONDITIONS**	23deg. C, 64%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Match Tsui	**ANTENNA TYPE**	PIFA

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	58.64 PK	74.00	-15.36	1.00 H	199	30.62	28.02
1	1608.00	47.22 AV	54.00	-6.78	1.00 H	199	19.20	28.02
2	2390.00	55.69 PK	74.00	-18.31	1.07 H	136	24.48	31.21
2	2390.00	47.02 AV	54.00	-6.98	1.07 H	136	15.81	31.21
3	*2412.00	106.63 PK			1.07 H	136	75.43	31.20
3	*2412.00	92.44 AV			1.07 H	136	61.24	31.20
4	4824.00	53.27 PK	74.00	-20.73	1.00 H	236	16.85	36.42
4	4824.00	49.35 AV	54.00	-4.65	1.00 H	236	12.93	36.42
5	7236.00	52.33 PK	86.63	-34.30	1.02 H	360	9.41	42.92
5	7236.00	40.36 AV	72.44	-32.08	1.02 H	360	-2.56	42.92

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	52.39 PK	74.00	-21.61	1.12 V	230	24.37	28.02
1	1608.00	41.96 AV	54.00	-12.04	1.12 V	230	13.94	28.02
2	2390.00	50.99 PK	74.00	-23.01	1.09 V	146	19.78	31.21
2	2390.00	43.23 AV	54.00	-10.77	1.09 V	146	12.02	31.21
3	*2412.00	100.32 PK			1.09 V	146	69.12	31.20
3	*2412.00	96.74 AV			1.09 V	146	65.54	31.20
4	4824.00	51.26 PK	74.00	-22.74	1.17 V	189	14.84	36.42
4	4824.00	47.89 AV	54.00	-6.11	1.17 V	189	11.47	36.42

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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	DBPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	1Mbps	**ENVIRONMENTAL CONDITIONS**	23deg. C, 64%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Match Tsui	**ANTENNA TYPE**	PIFA

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	58.96 PK	86.33	-27.37	1.01 H	230	31.00	27.96
1	1641.00	47.63 AV	82.26	-34.63	1.01 H	230	19.67	27.96
2	*2462.00	106.33 PK			1.02 H	145	75.11	31.22
2	*2462.00	102.26 AV			1.02 H	145	71.04	31.22
3	2483.50	56.22 PK	74.00	-17.78	1.02 H	145	24.99	31.23
3	2483.50	47.01 AV	54.00	-6.99	1.02 H	145	15.78	31.23
4	4924.00	54.23 PK	74.00	-19.77	1.06 H	196	17.60	36.63
4	4924.00	50.01 AV	54.00	-3.99	1.06 H	196	13.38	36.63

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	53.20 PK	82.58	-29.38	1.08 V	256	25.24	27.96
1	1641.00	42.09 AV	78.69	-36.60	1.08 V	256	14.13	27.96
2	*2462.00	102.58 PK			1.04 V	154	71.36	31.22
2	*2462.00	98.69 AV			1.04 V	154	67.47	31.22
3	2483.50	49.54 PK	74.00	-24.46	1.04 V	154	18.31	31.23
3	2483.50	42.69 AV	54.00	-11.31	1.04 V	154	11.46	31.23
4	4924.00	50.48 PK	74.00	-23.52	1.10 V	350	13.85	36.63
4	4924.00	47.26 AV	54.00	-6.74	1.10 V	350	10.63	36.63

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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	**ENVIRONMENTAL CONDITIONS**	25deg. C, 65%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Morgan Chen	**ANTENNA TYPE**	Dipole

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	53.81 PK	74.00	-20.19	1.08 H	355	23.33	30.48
1	1608.00	43.16 AV	54.00	-10.84	1.08 H	355	12.68	30.48
2	2390.00	61.75 PK	74.00	-12.25	1.07 H	149	29.31	32.44
2	2390.00	48.66 AV	54.00	-5.34	1.07 H	149	16.22	32.44
3	*2412.00	105.11 PK			1.06 H	147	72.58	32.53
3	*2412.00	93.82 AV			1.06 H	147	61.29	32.53
4	3216.00	50.12 PK	85.11	-34.99	1.03 H	315	15.34	34.78
4	3216.00	44.35 AV	73.82	-29.47	1.03 H	315	9.57	34.78
5	4824.00	56.38 PK	74.00	-17.62	1.23 H	34	17.10	39.28
5	4824.00	41.15 AV	54.00	-12.85	1.23 H	34	1.87	39.28

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 m								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	1608.00	55.46 PK	74.00	-18.54	1.05 V	26	24.98	30.48
1	1608.00	44.86 AV	54.00	-9.14	1.05 V	26	14.38	30.48
2	2390.00	72.55 PK	74.00	-1.45	1.11 V	16	40.11	32.44
2	2390.00	52.54 AV	54.00	-1.46	1.11 V	16	20.10	32.44
3	*2412.00	110.43 PK			1.11 V	18	77.90	32.53
3	*2412.00	99.28 AV			1.11 V	18	66.75	32.53
4	3216.00	50.89 PK	90.43	-39.54	1.03 V	28	16.11	34.78
4	3216.00	45.13 AV	79.28	-34.15	1.03 V	28	10.35	34.78
5	4824.00	57.49 PK	74.00	-16.51	1.37 V	13	18.21	39.28
5	4824.00	42.19 AV	54.00	-11.81	1.37 V	13	2.91	39.28

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Morgan Chen	**ANTENNA TYPE**	Dipole

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	53.98 PK	74.00	-20.02	1.06 H	349	23.50	30.48
1	1624.00	43.23 AV	54.00	-10.77	1.06 H	349	12.75	30.48
2	*2437.00	105.61 PK			1.04 H	158	72.96	32.65
2	*2437.00	94.30 AV			1.04 H	158	61.65	32.65
3	3248.00	50.33 PK	85.61	-35.28	1.05 H	306	15.43	34.90
3	3248.00	44.53 AV	74.30	-29.77	1.05 H	306	9.63	34.90
4	4874.00	56.63 PK	74.00	-17.37	1.30 H	26	17.28	39.35
4	4874.00	41.28 AV	54.00	-12.72	1.30 H	26	1.93	39.35

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	55.59 PK	74.00	-18.41	1.08 V	13	25.11	30.48
1	1624.00	45.00 AV	54.00	-9.00	1.08 V	13	14.52	30.48
2	*2437.00	111.11 PK			1.09 V	26	78.46	32.65
2	*2437.00	99.64 AV			1.09 V	26	66.99	32.65
3	3248.00	51.25 PK	91.11	-39.86	1.08 V	16	16.35	34.90
3	3248.00	45.39 AV	79.64	-34.25	1.08 V	16	10.49	34.90
4	4874.00	57.81 PK	74.00	-16.19	1.30 V	7	18.46	39.35
4	4874.00	42.58 AV	54.00	-11.42	1.30 V	7	3.23	39.35

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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	**ENVIRONMENTAL CONDITIONS**	25deg. C, 68%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Morgan Chen	**ANTENNA TYPE**	Dipole

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	53.98 PK	85.39	-31.41	1.05 H	346	23.49	30.49
1	1641.00	43.29 AV	74.11	-30.82	1.05 H	346	12.80	30.49
2	*2462.00	105.39 PK			1.05 H	134	72.63	32.76
2	*2462.00	94.11 AV			1.05 H	134	61.35	32.76
3	2483.50	61.55 PK	74.00	-12.45	1.05 H	133	28.69	32.86
3	2483.50	48.43 AV	54.00	-5.57	1.05 H	133	15.57	32.86
4	3282.00	50.65 PK	85.39	-34.74	1.08 H	309	15.63	35.02
4	3282.00	44.71 AV	74.11	-29.40	1.08 H	309	9.69	35.02
5	4924.00	56.59 PK	74.00	-17.41	1.15 H	26	17.17	39.42
5	4924.00	41.32 AV	54.00	-12.68	1.15 H	26	1.90	39.42

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	55.87 PK	91.58	-35.71	1.08 V	14	25.38	30.49
1	1641.00	45.16 AV	79.46	-34.30	1.08 V	14	14.67	30.49
2	*2462.00	111.58 PK			1.08 V	24	78.82	32.76
2	*2462.00	99.46 AV			1.08 V	24	66.70	32.76
3	2483.50	72.33 PK	74.00	-1.67	1.08 V	23	39.47	32.86
3	2483.50	52.27 AV	54.00	-1.73	1.08 V	23	19.41	32.86
4	3282.00	51.32 PK	91.58	-40.26	1.05 V	22	16.30	35.02
4	3282.00	45.45 AV	79.46	-34.01	1.05 V	22	10.43	35.02
5	4924.00	58.15 PK	74.00	-15.85	1.30 V	25	18.73	39.42
5	4924.00	43.34 AV	54.00	-10.66	1.30 V	25	3.92	39.42

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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	**ENVIRONMENTAL CONDITIONS**	23deg. C, 64%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Match Tsui	**ANTENNA TYPE**	PIFA

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	56.23 PK	74.00	-17.77	1.10 H	236	28.21	28.02
1	1608.00	45.26 AV	54.00	-8.74	1.10 H	236	17.24	28.02
2	2390.00	63.30 PK	74.00	-10.70	1.05 H	127	32.09	31.21
2	2390.00	50.24 AV	54.00	-3.76	1.05 H	127	19.03	31.21
3	*2412.00	107.38 PK			1.05 H	127	76.18	31.20
3	*2412.00	95.67 AV			1.05 H	127	64.47	31.20
4	4824.00	55.24 PK	74.00	-18.76	1.04 H	236	18.82	36.42
4	4824.00	39.86 AV	54.00	-14.14	1.04 H	236	3.44	36.42

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	52.36 PK	74.00	-21.64	1.07 V	136	24.34	28.02
1	1608.00	42.07 AV	54.00	-11.93	1.07 V	136	14.05	28.02
2	2390.00	58.36 PK	74.00	-15.64	1.06 V	214	27.15	31.21
2	2390.00	45.74 AV	54.00	-8.26	1.06 V	214	14.53	31.21
3	*2412.00	102.63 PK			1.06 V	214	71.43	31.20
3	*2412.00	90.47 AV			1.06 V	214	59.27	31.20
4	4824.00	51.90 PK	74.00	-22.10	1.07 V	247	15.48	36.42
4	4824.00	36.02 AV	54.00	-17.98	1.07 V	247	-0.40	36.42

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 TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
TRANSFER RATE	6Mbps	**ENVIRONMENTAL CONDITIONS**	23deg. C, 64%RH, 991hPa
INPUT POWER	120Vac, 60 Hz	**TEST MODE**	B
TESTED BY	Match Tsui	**ANTENNA TYPE**	PIFA

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	55.87 PK	87.28	-31.41	1.10 H	163	27.91	27.96
1	1641.00	45.39 AV	75.27	-29.88	1.10 H	163	17.43	27.96
2	*2462.00	107.28 PK			1.03 H	136	76.06	31.22
2	*2462.00	95.27 AV			1.03 H	136	64.05	31.22
3	2483.50	61.82 PK	74.00	-12.18	1.03 H	136	30.59	31.23
3	2483.50	48.98 AV	54.00	-5.02	1.03 H	136	17.75	31.23
4	4924.00	55.47 PK	74.00	-18.53	1.12 H	154	18.84	36.63
4	4924.00	40.03 AV	54.00	-13.97	1.12 H	154	3.40	36.63

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	51.57 PK	82.19	-30.62	1.09 V	163	23.61	27.96
1	1641.00	41.74 AV	68.98	-27.24	1.09 V	163	13.78	27.96
2	*2462.00	102.19 PK			1.03 V	187	70.97	31.22
2	*2462.00	89.98 AV			1.03 V	187	58.76	31.22
3	2483.50	57.14 PK	74.00	-16.86	1.03 V	187	25.91	31.23
3	2483.50	45.09 AV	54.00	-8.91	1.03 V	187	13.86	31.23
4	4924.00	52.63 PK	74.00	-21.37	1.01 V	300	16.00	36.63
4	4924.00	36.45 AV	54.00	-17.55	1.01 V	300	-0.18	36.63

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	FSP40	100040	Jun. 07, 2007

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

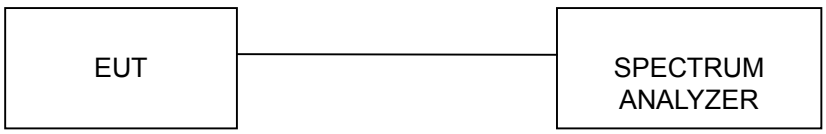
4.3.3 TEST PROCEDURE

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.

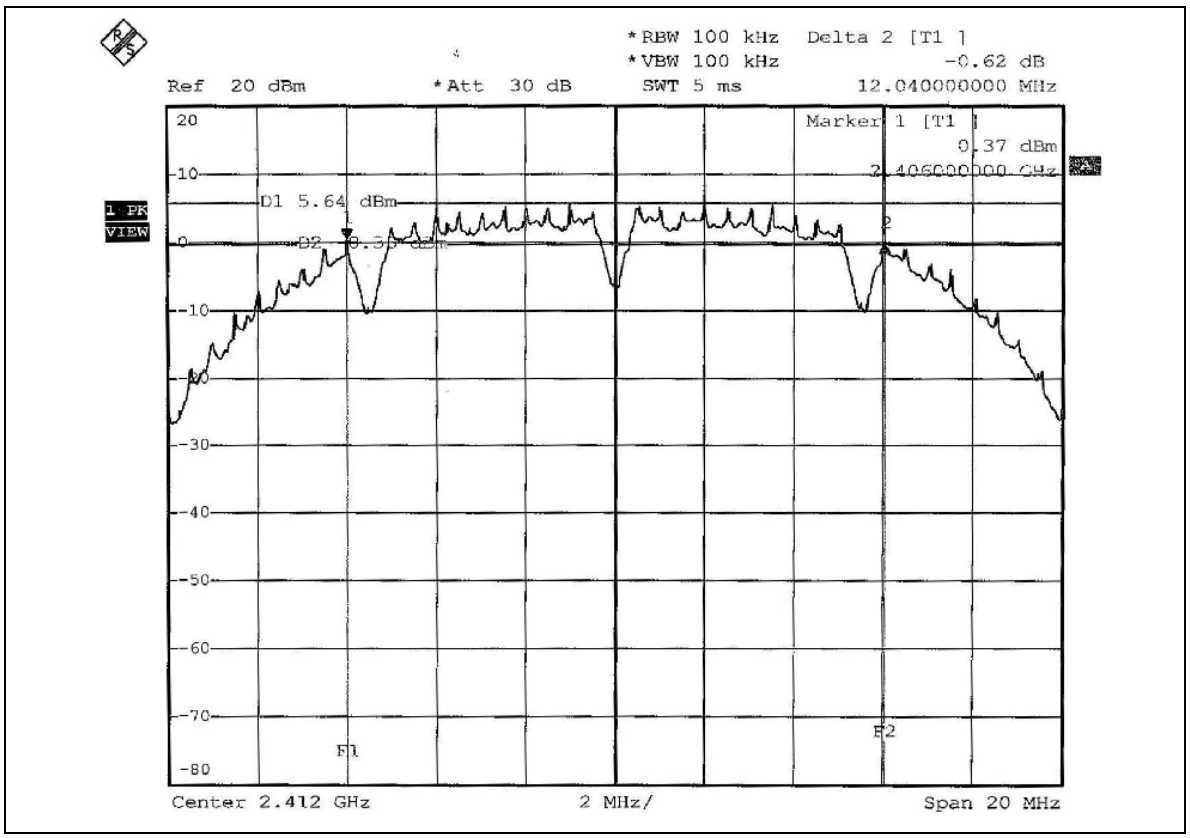
4.3.7 TEST RESULTS

802.11b DSSS MODULATION

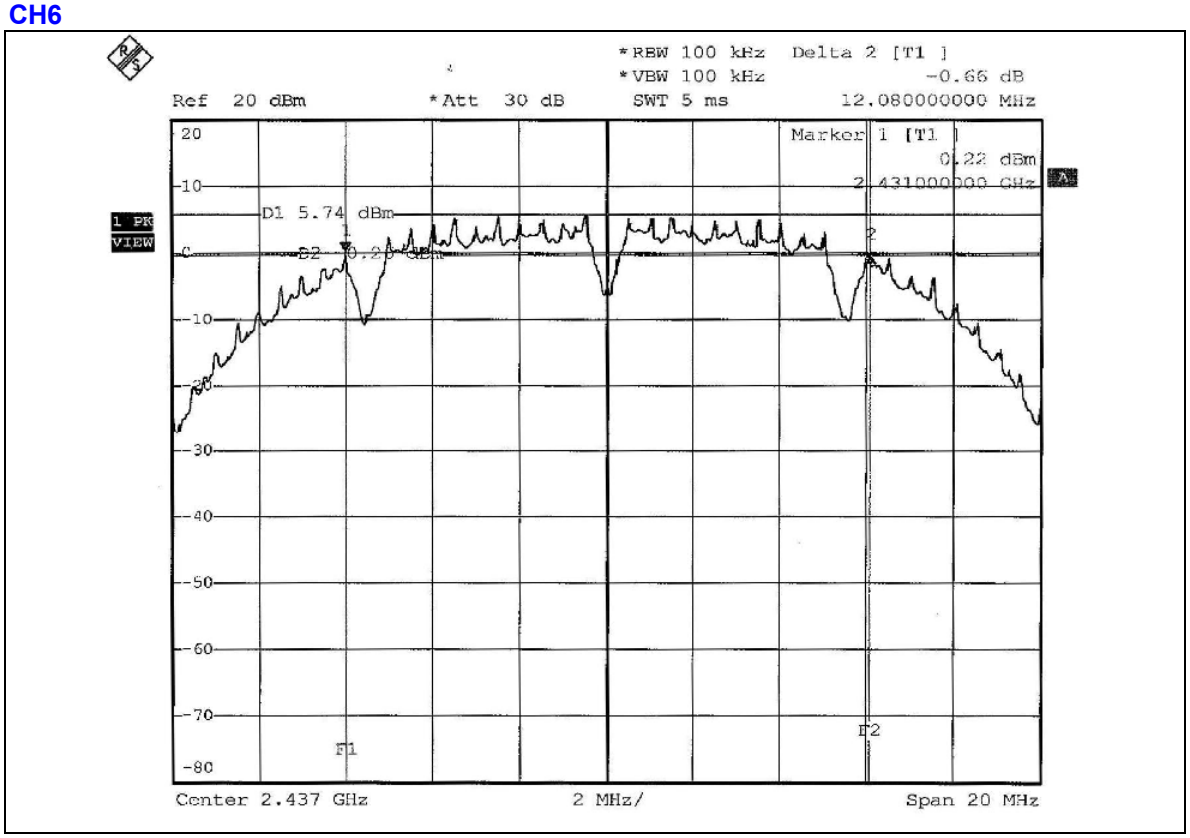
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 66%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS/FAIL
1	2412	12.04	0.5	PASS
6	2437	12.08	0.5	PASS
11	2462	12.04	0.5	PASS

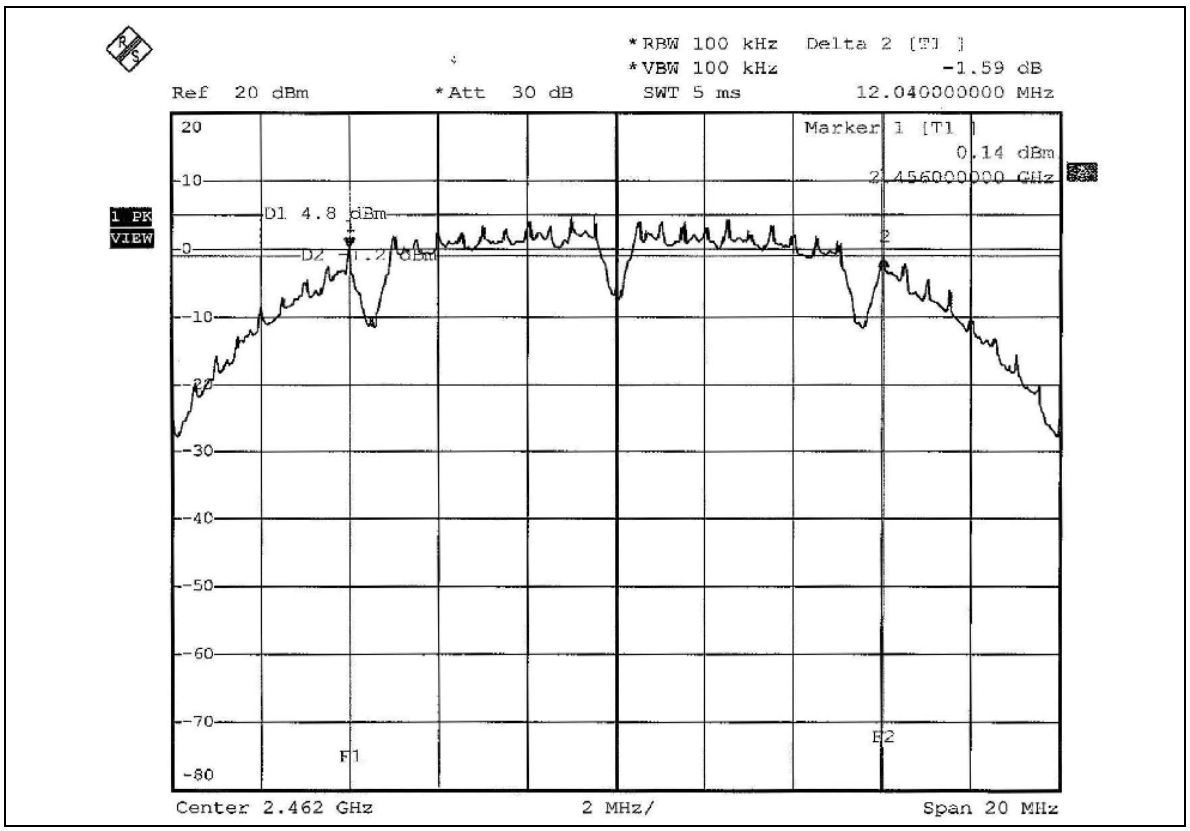
CH1


*RBW 100 kHz
*VBW 100 kHz
Delta 2 [T1]
-0.62 dB
Ref 20 dBm
*Att 30 dB
SWT 5 ms
12.040000000 MHz
Marker 1 [T1]
0.37 dBm
2.406000000 GHz
D1 5.64 dBm
D2 0.37 dBm
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz

CH6


*RBW 100 kHz
*VBW 100 kHz
Delta 2 [T1]
-0.66 dB
Ref 20 dBm
*Att 30 dB
SWT 5 ms
12.080000000 MHz
Marker 1 [T1]
0.22 dBm
2.431000000 GHz
D1 5.74 dBm
D2 0.22 dBm
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz

CH11

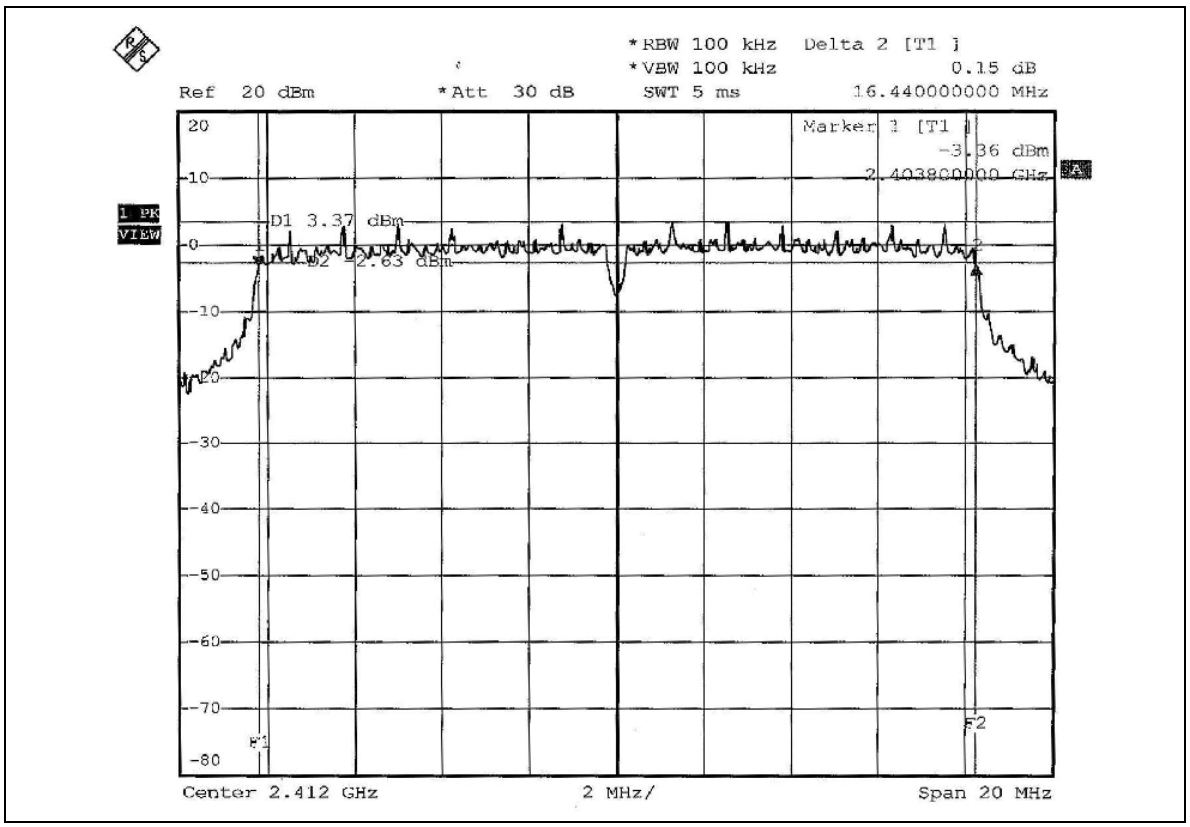

*RBW 100 kHz
*VBW 100 kHz
Delta 2 [T1]
-1.59 dB
Ref 20 dBm
*Att 30 dB
SWT 5 ms
12.040000000 MHz
Marker 1 [T1]
0.14 dBm
2.456000000 GHz
1 PK
VIEW
D1 4.8 dBm
D2 -1.2 dBm
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz

802.11g OFDM MODULATION

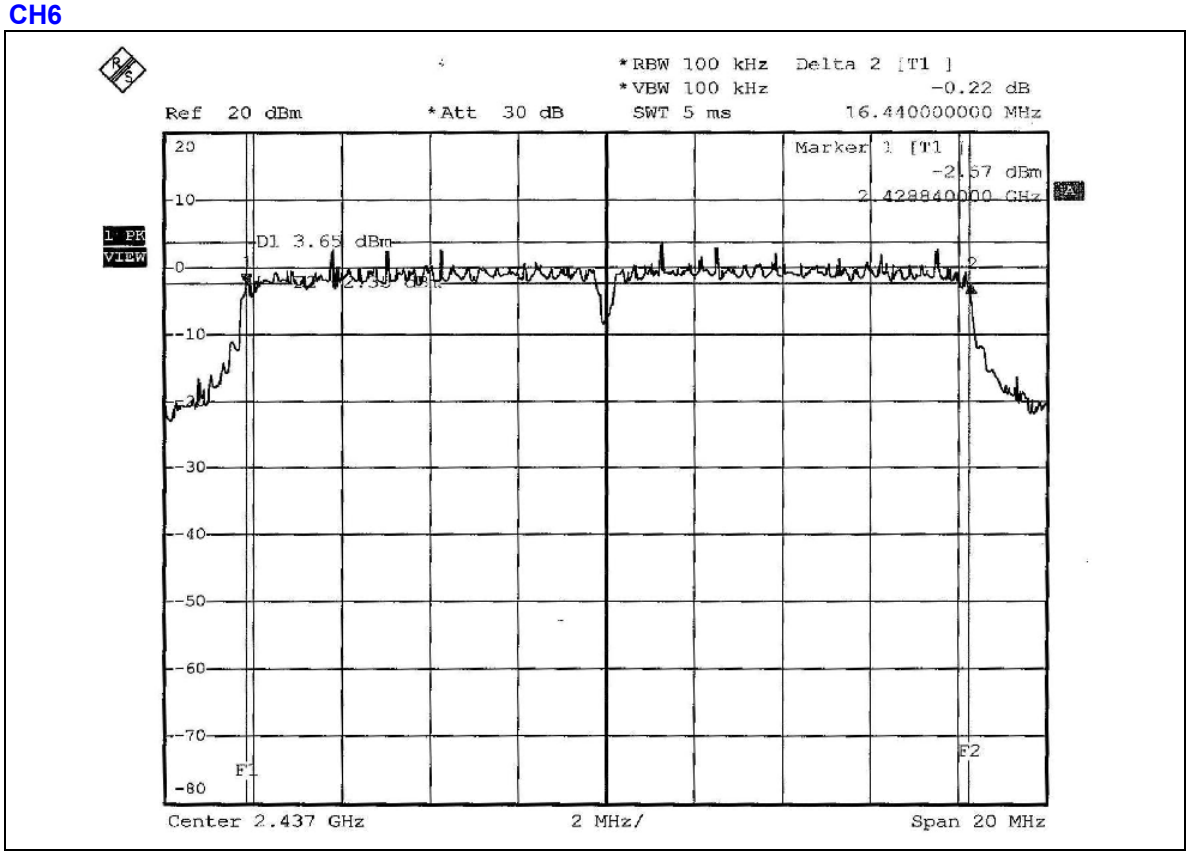
MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 66%RH, 991hPa
TESTED BY	Long Chen		

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

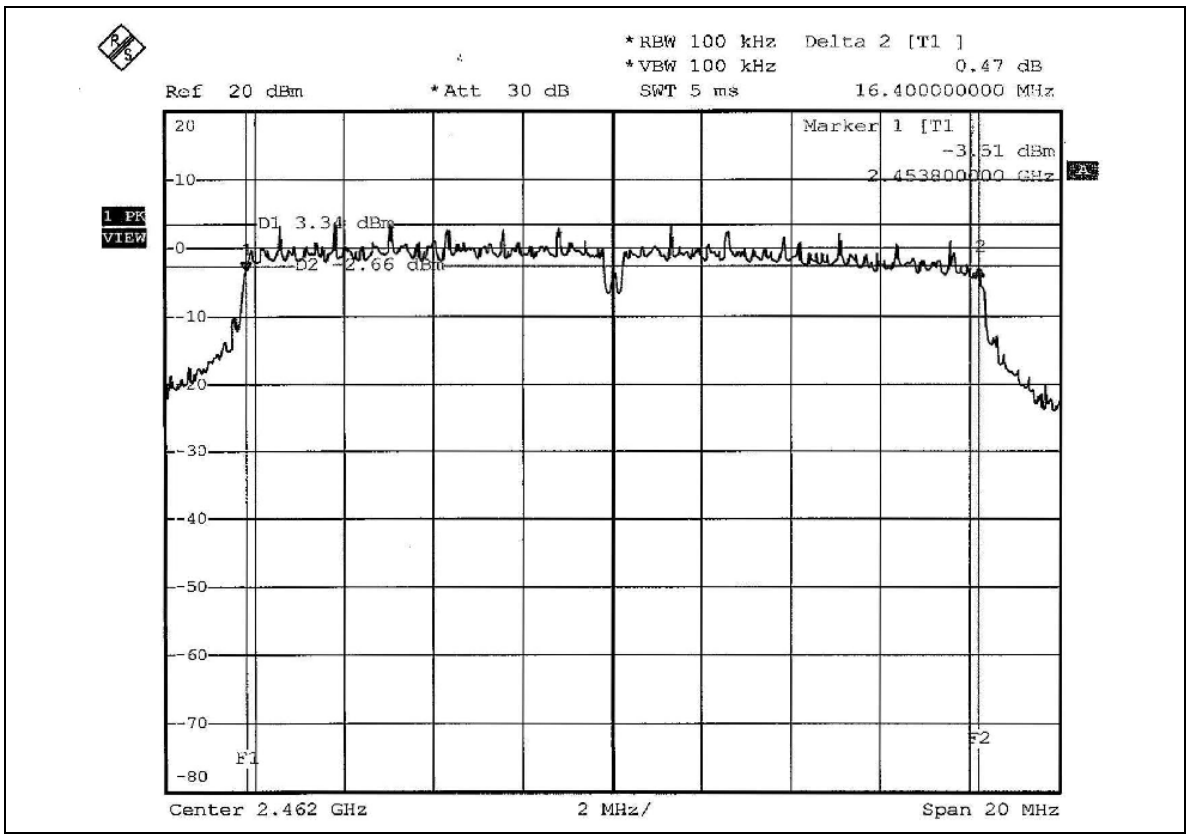
CH1


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 2 [T1]
0.15 dB
16.440000000 MHz
Ref 20 dBm
*Att 30 dB
Marker 1 [T1]
-3.36 dBm
2.403800000 GHz
1 PK VIEW
D1 3.37 dBm
D2 -2.63 dBm
F1
F2
Center 2.412 GHz
2 MHz/
Span 20 MHz

CH6


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 2 [T1]
-0.22 dB
16.440000000 MHz
Ref 20 dBm
*Att 30 dB
Marker 1 [T1]
-2.67 dBm
2.428840000 GHz
1 PK VIEW
D1 3.65 dBm
F1
F2
Center 2.437 GHz
2 MHz/
Span 20 MHz

CH11


*RBW 100 kHz
*VBW 100 kHz
SWT 5 ms
Delta 2 [T1]
0.47 dB
16.400000000 MHz
Ref 20 dBm
*Att 30 dB
Marker 1 [T1
-3.51 dBm
2.453800000 GHz
1 PK
VIEW
D1 3.34 dBm
D2 -2.66 dBm
F1
F2
Center 2.462 GHz
2 MHz/
Span 20 MHz

4.4 MAXIMUM PEAK OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm. .

4.4.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP40	100040	Jun. 07, 2007
ANRITSU SYNTHESIZED SIGNAL GENERATOR	68247B	984703	May 08, 2007
DIGITAL RT OSCILLOSCOPE	TDS1012	C037299	Nov. 28, 2007
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

MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 66%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	72.277	18.59	30	PASS
6	2437	70.795	18.50	30	PASS
11	2462	51.050	17.08	30	PASS

802.11g OFDM MODULATION

MODULATION TYPE	BPSK	TRANSFER RATE	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 66%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
1	2412	89.950	19.54	30	PASS
6	2437	90.365	19.56	30	PASS
11	2462	89.743	19.53	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	FSP40	100040	Jun. 07, 2007

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

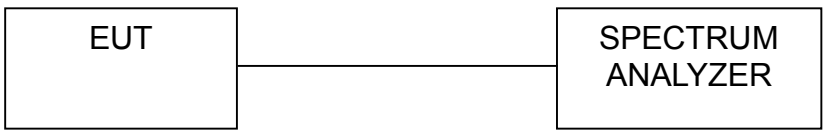
4.5.3 TEST PROCEDURE

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

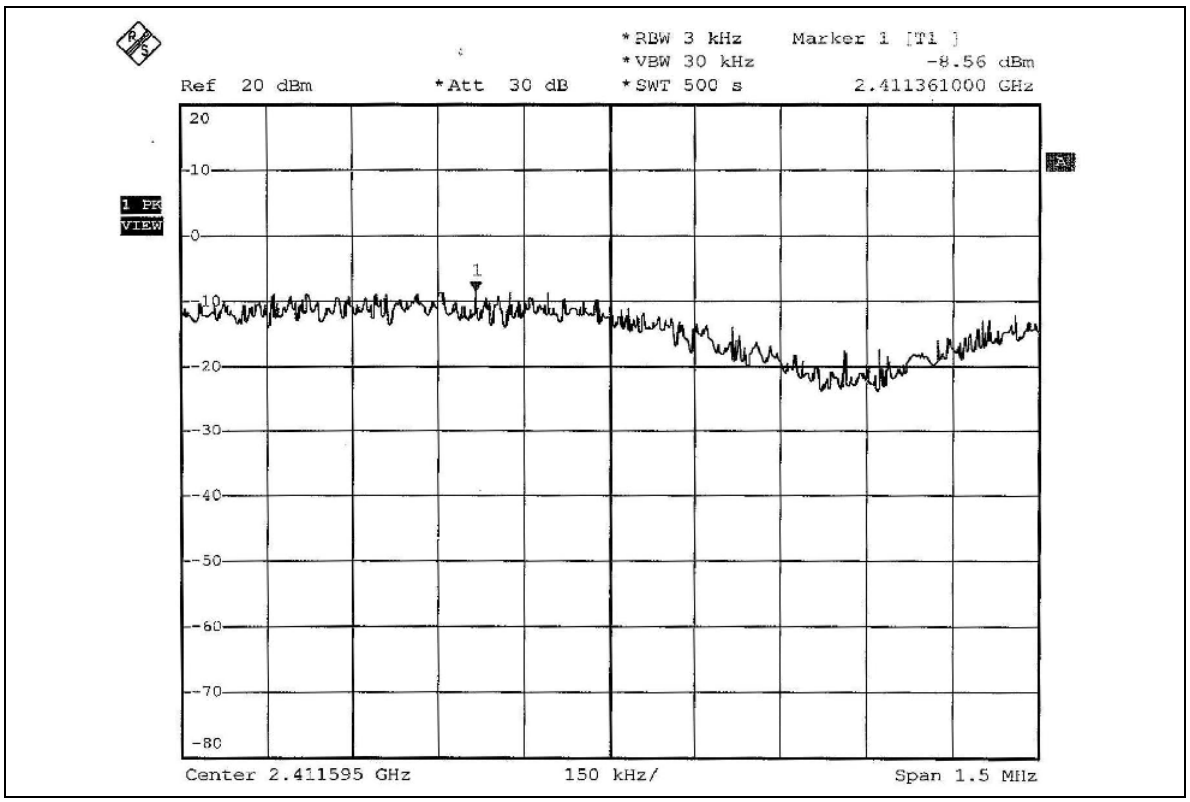
4.5.7 TEST RESULTS

802.11b DSSS MODULATION

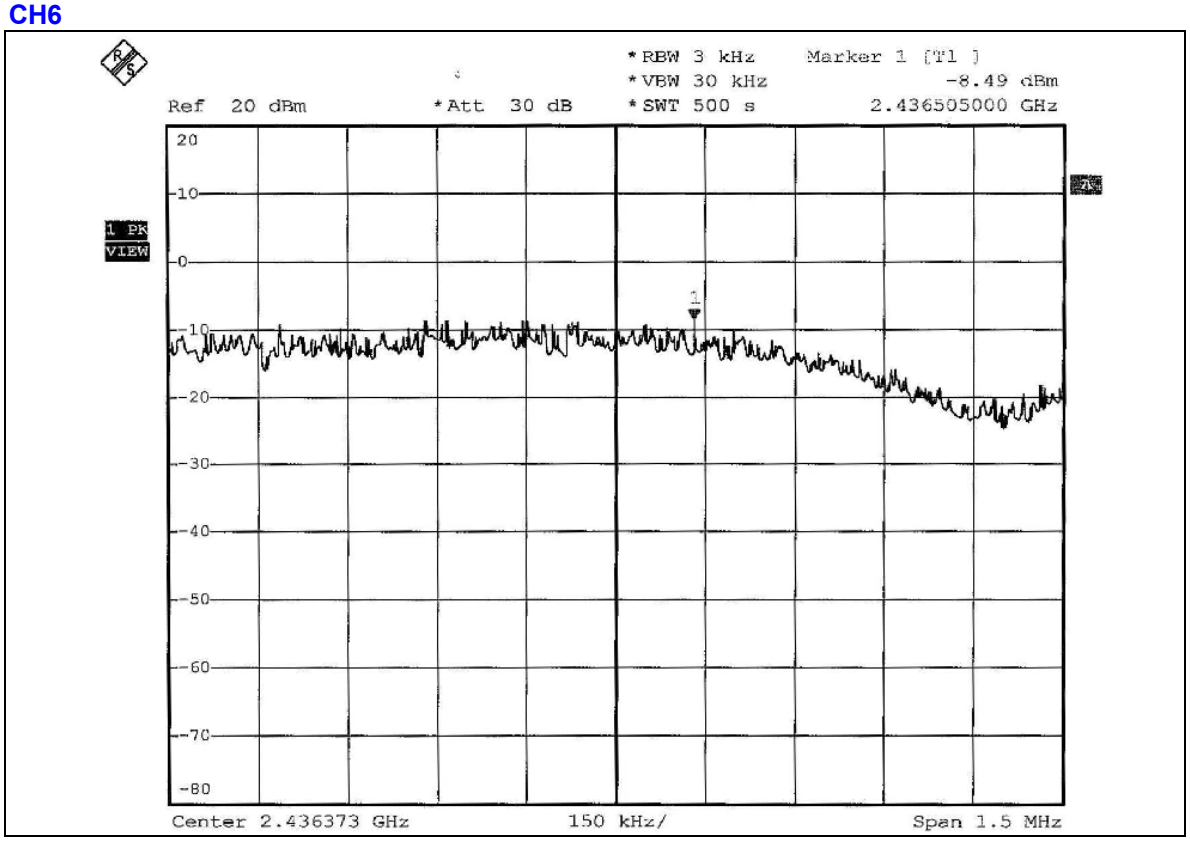
MODULATION TYPE	DBPSK	TRANSFER RATE	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	ENVIRONMENTAL CONDITIONS	26deg.C, 66%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-8.56	8	PASS
6	2437	-8.49	8	PASS
11	2462	-9.93	8	PASS

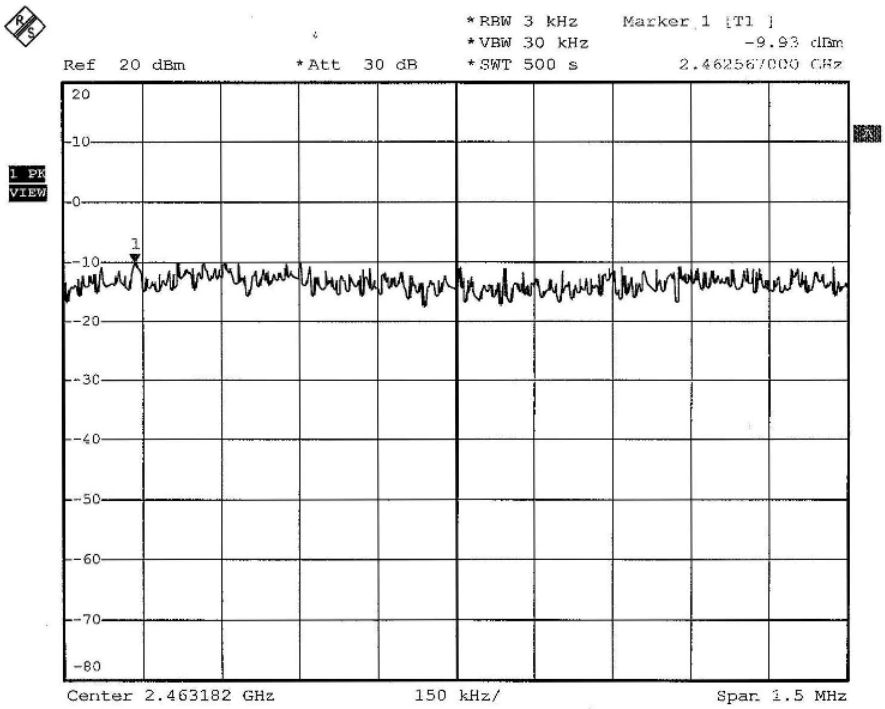
CH1


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-8.56 dBm
2.411361000 GHz
Ref 20 dBm
*Att 30 dB
1 PK
VIEW
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.411595 GHz
150 kHz/
Span 1.5 MHz

CH6


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-8.49 dBm
2.436505000 GHz
Ref 20 dBm
*Att 30 dB
1 PK
VIEW
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.436373 GHz
150 kHz/
Span 1.5 MHz

CH11

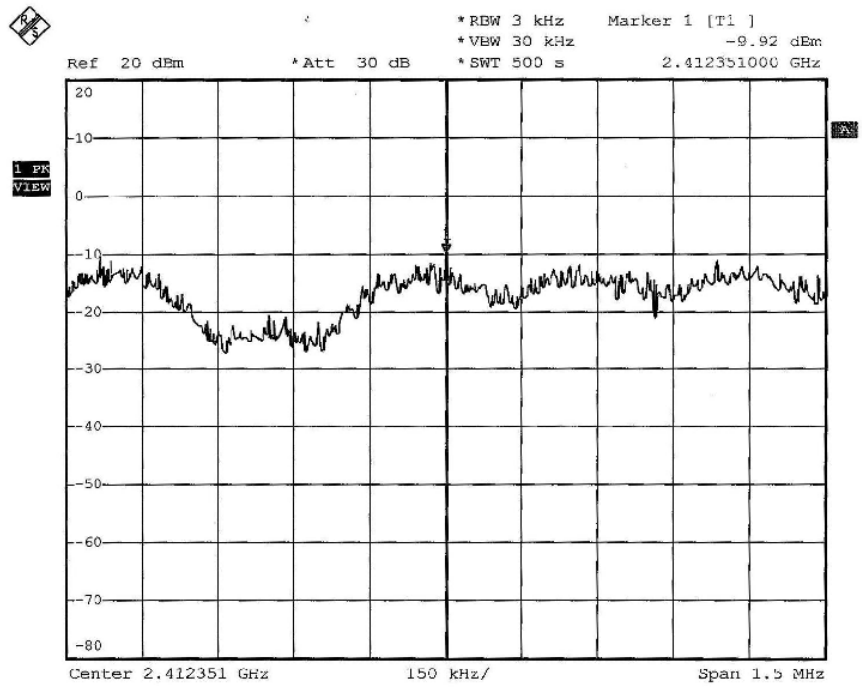

*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-9.93 dBm
2.462567000 GHz
Ref 20 dBm
*Att 30 dB
1 PK
VIEW
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.463182 GHz
150 kHz/
Span 1.5 MHz

802.11g OFDM MODULATION

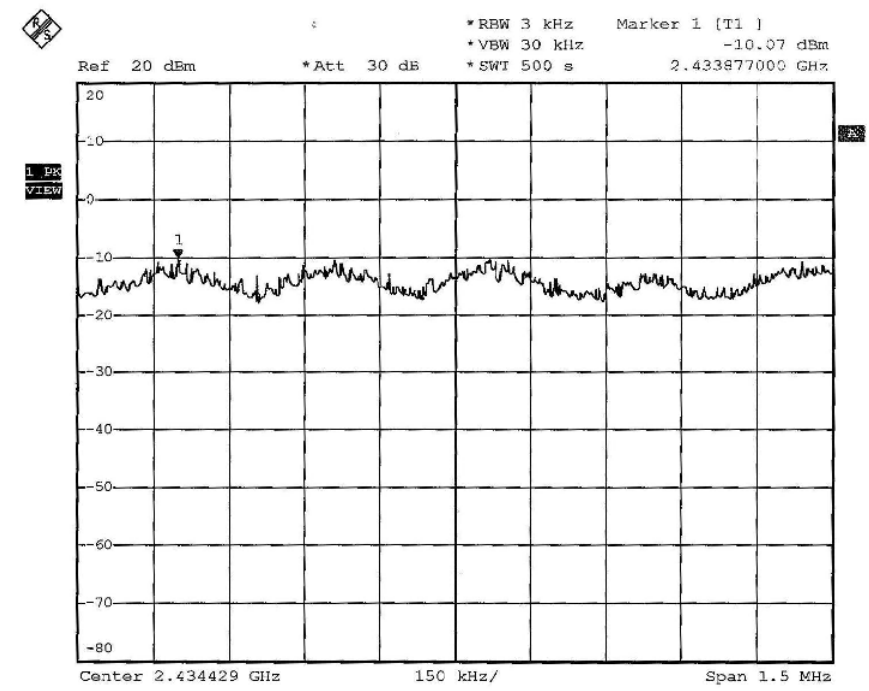
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**ENVIRONMENTAL CONDITIONS**	26deg.C, 66%RH, 991hPa
TESTED BY	Long Chen		

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
1	2412	-9.92	8	PASS
6	2437	-10.07	8	PASS
11	2462	-9.79	8	PASS

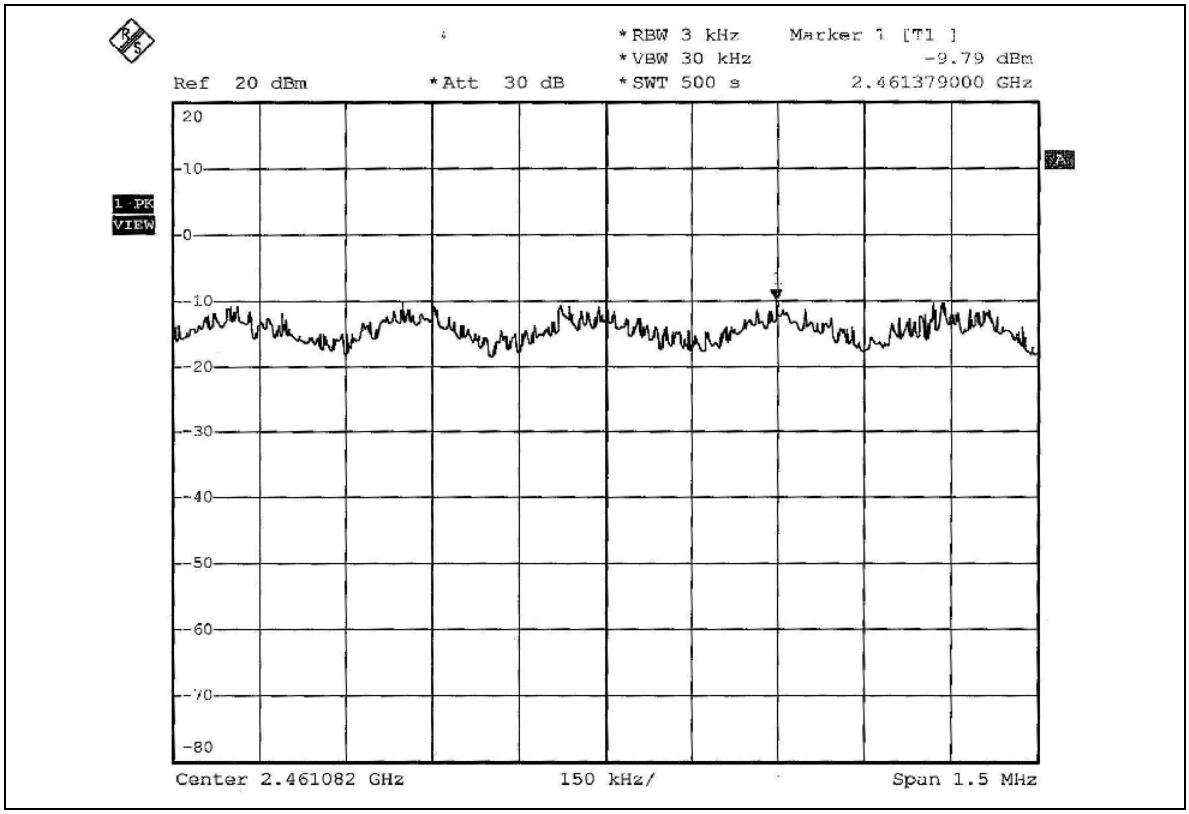
CH1


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-9.92 dBm
2.412351000 GHz
Ref 20 dBm
*Att 30 dB
1 PK
VIEW
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.412351 GHz
150 kHz/
Span 1.5 MHz

CH6


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-10.07 dBm
2.433877000 GHz
Ref 20 dBm
*Att 30 dB
1 PK
VIEW
1
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.434429 GHz
150 kHz/
Span 1.5 MHz

CH11


*RBW 3 kHz
*VBW 30 kHz
*SWT 500 s
Marker 1 [T1]
-9.79 dBm
2.461379000 GHz
Ref 20 dBm
*Att 30 dB
1 PK
VIEW
20
10
0
-10
-20
-30
-40
-50
-60
-70
-80
Center 2.461082 GHz
150 kHz/
Span 1.5 MHz

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	FSP40	100040	Jun. 07, 2007

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 lose cable. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 100MHz bandwidth from band edge. The band edges was measured and recorded. The spectrum plots (Peak RBW=VBW=100kHz; Average RBW=1MHz, VBW=10Hz) 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 12 images. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

802.11b DSSS MODULATION

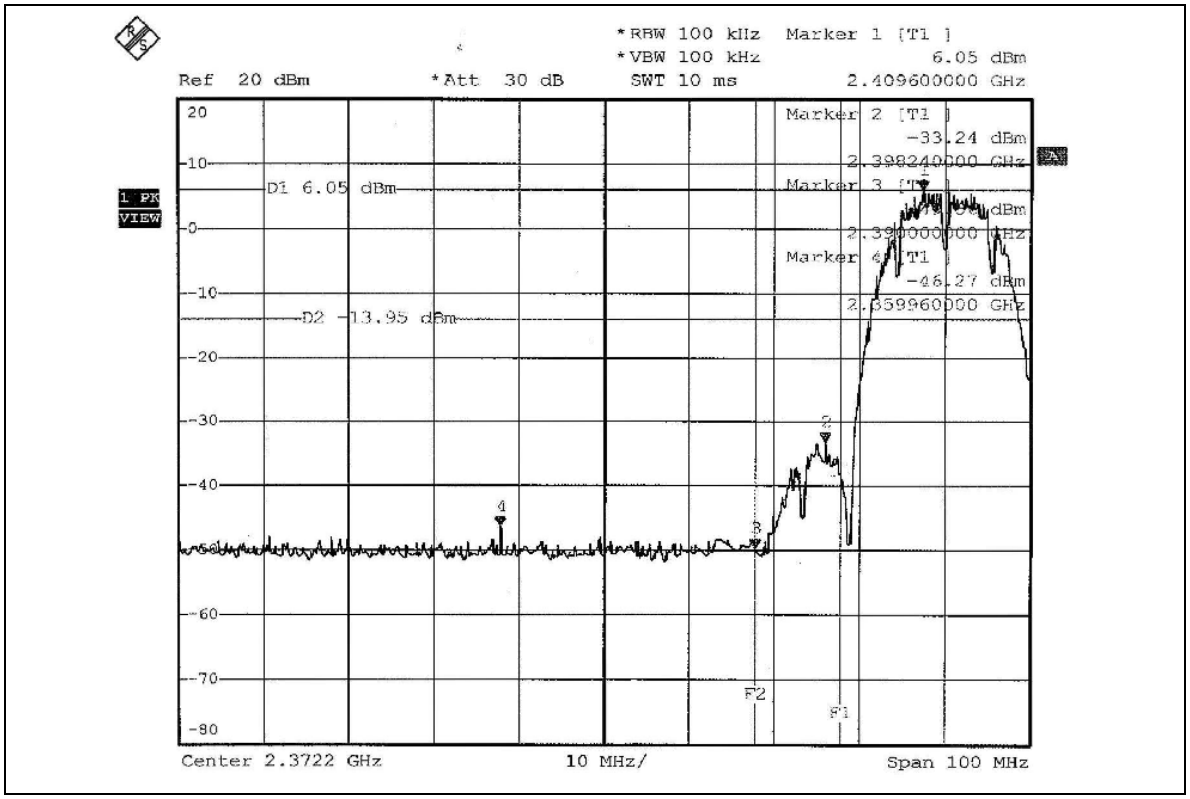
NOTE 1: The band edge emission plot of DSSS technique on the next page shows 52.32dBc between carrier maximum power and local maximum emission in restrict band (2.359960000GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 109.63dBuV/m (Peak), so the maximum field strength in restrict band is 109.63 –52.32 = 57.31dBuV/m which is under 74dBuV/m limit.

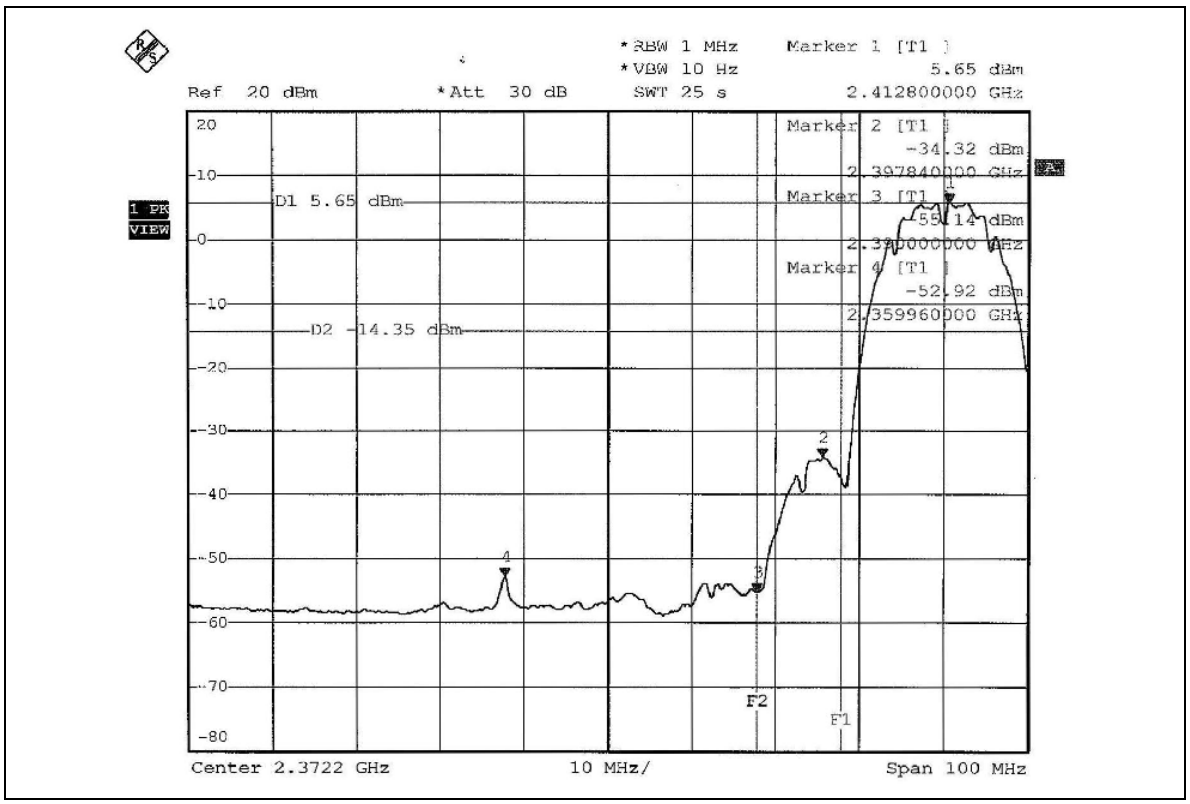
The band edge emission plot of DSSS technique on the next page shows 58.57dBc between carrier maximum power and local maximum emission in restrict band (2.359960000GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 105.83dBuV/m (Average), so the maximum field strength in restrict band is 105.83 – 58.57 = 47.26dBuV/m which is under 54dBuV/m limit.

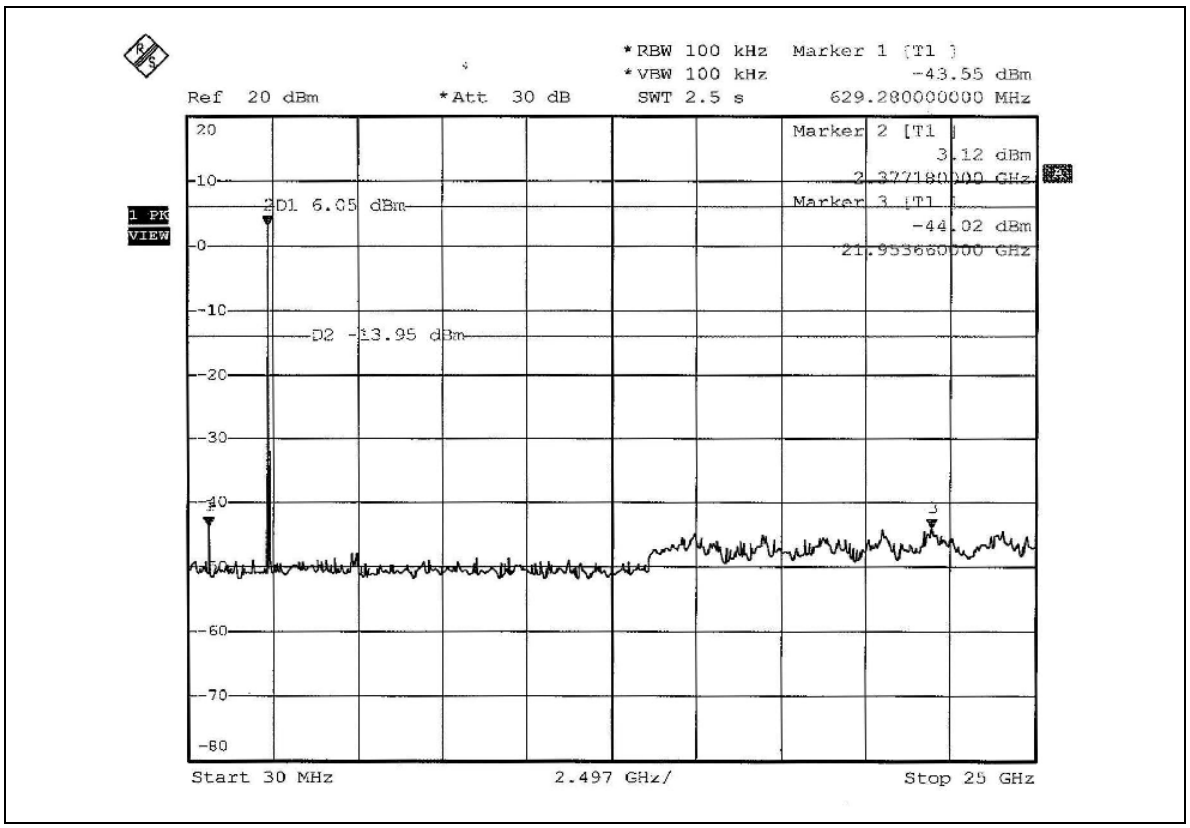
NOTE 2: The band edge emission plot of DSSS technique on the next second page shows 53.95dBc between carrier maximum power and local maximum emission in restrict band (2.491100000GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 108.39dBuV/m (Peak), so the maximum field strength in restrict band is 108.39 – 53.95=54.44dBuV/m which is under 74dBuV/m limit.

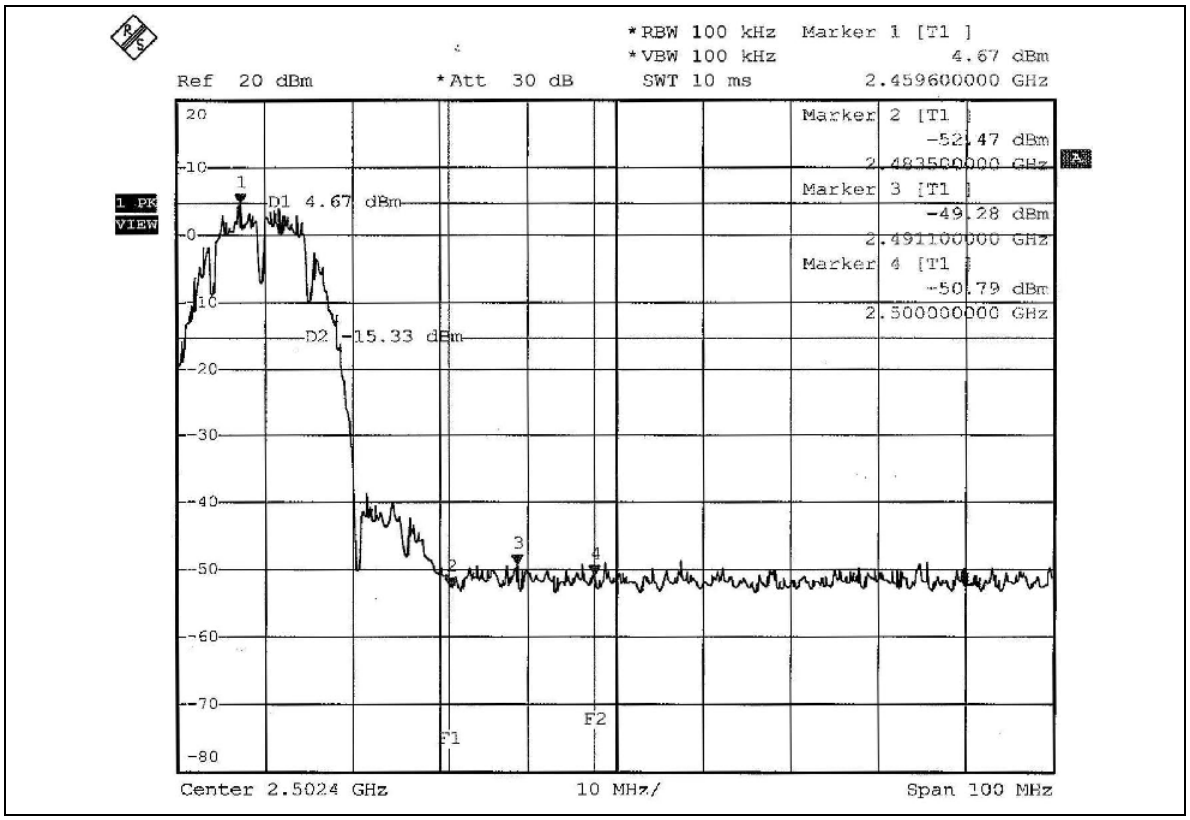
The band edge emission plot of DSSS technique on the next third page shows 60.12dBc between carrier maximum power and local maximum emission in restrict band (2.488700000GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 104.51dBuV/m (Average), so the maximum field strength in restrict band is 104.51 – 60.12 = 44.39dBuV/m which is under 54dBuV/m limit.

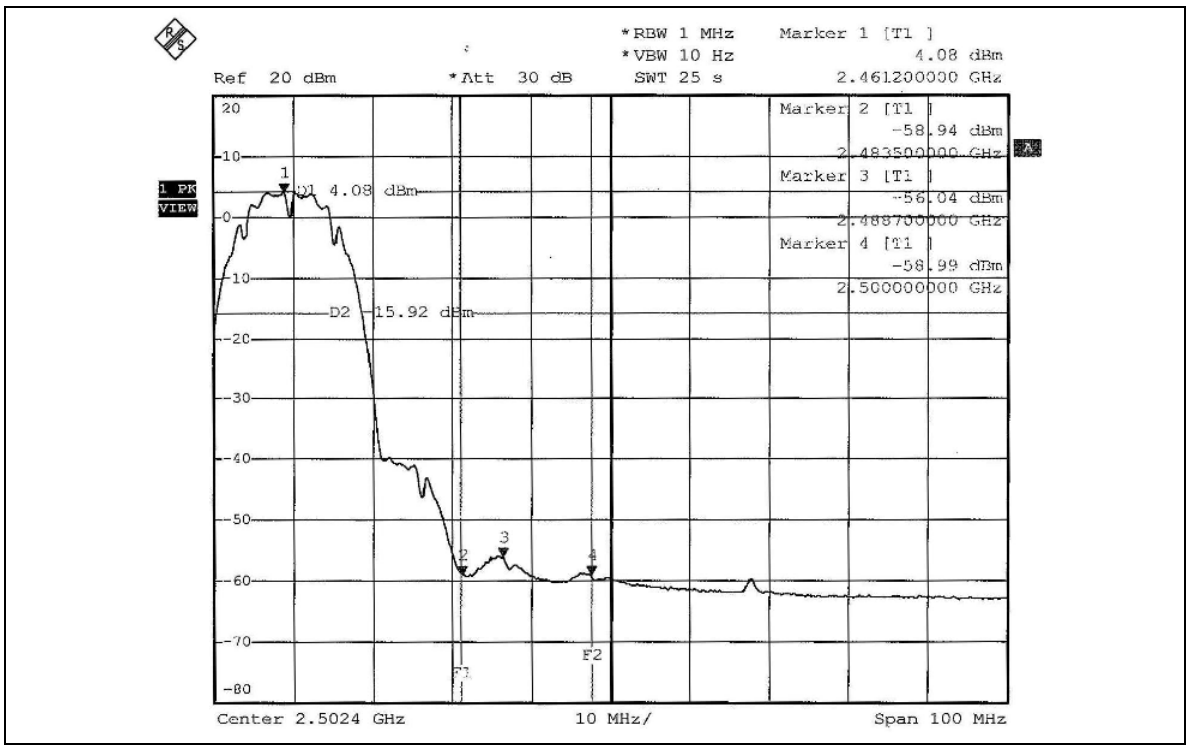
802.11b DSSS MODULATION

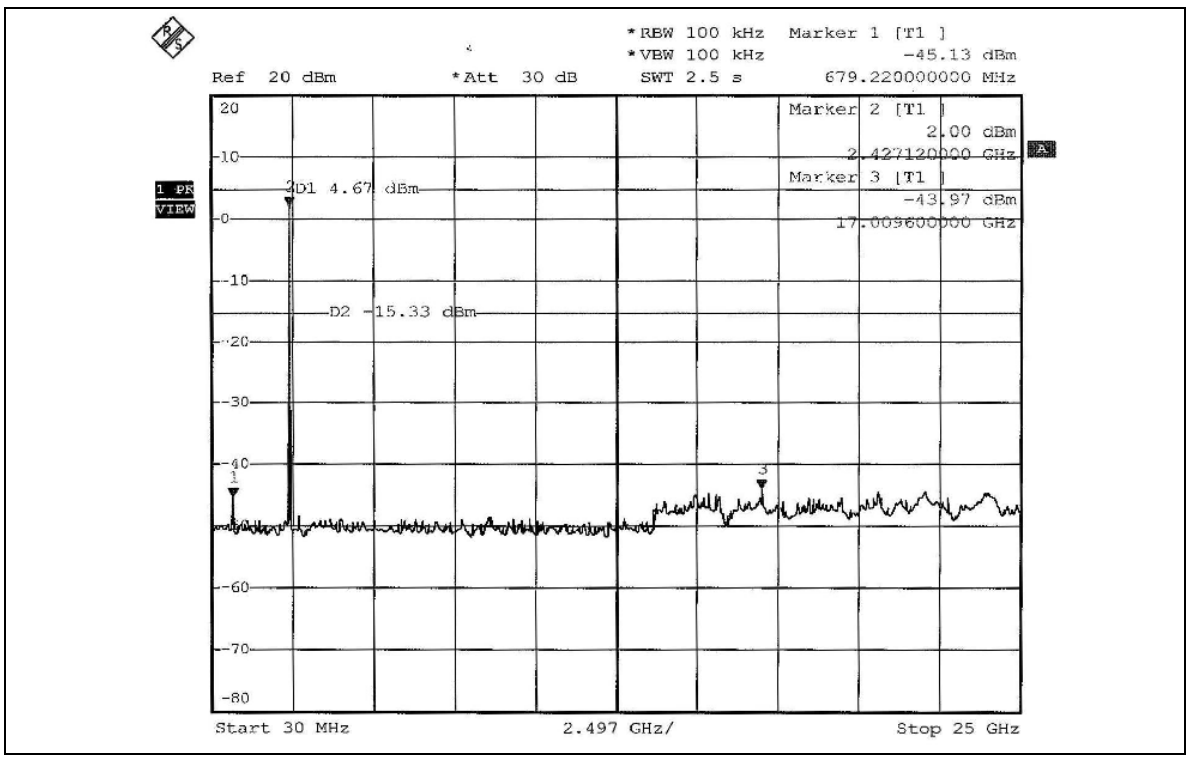





*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 2.5 s
Marker 1 [T1]
-43.55 dBm
629.280000000 MHz
Marker 2 [T1]
3.12 dBm
2.377180000 GHz
Marker 3 [T1]
-44.02 dBm
21.953660000 GHz
1 PK
VIEW
D1 6.05 dBm
D2 -13.95 dBm
Start 30 MHz
2.497 GHz/
Stop 25 GHz


*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 10 ms
Marker 1 [T1]
4.67 dBm
2.459600000 GHz
Marker 2 [T1]
-52.47 dBm
2.483500000 GHz
Marker 3 [T1]
-49.28 dBm
2.491100000 GHz
Marker 4 [T1]
-50.79 dBm
2.500000000 GHz
1 PK
VIEW
D1 4.67 dBm
D2 -15.33 dBm
F1
F2
Center 2.5024 GHz
10 MHz/
Span 100 MHz


*RBW 1 MHz
*VBW 10 Hz
Ref 20 dBm
*Att 30 dB
SWT 25 s
Marker 1 [T1]
4.08 dBm
2.461200000 GHz
Marker 2 [T1]
-58.94 dBm
2.483500000 GHz
Marker 3 [T1]
-56.04 dBm
2.488700000 GHz
Marker 4 [T1]
-58.99 dBm
2.500000000 GHz
1 PK VIEW
D1 4.08 dBm
D2 -15.92 dBm
Center 2.5024 GHz
10 MHz/
Span 100 MHz


*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 2.5 s
Marker 1 [T1]
-45.13 dBm
679.220000000 MHz
Marker 2 [T1]
2.00 dBm
2.427120000 GHz
Marker 3 [T1]
-43.97 dBm
17.009600000 GHz
1 PK VIEW
D1 4.67 dBm
D2 -15.33 dBm
Start 30 MHz
2.497 GHz/
Stop 25 GHz

802.11g OFDM MODULATION

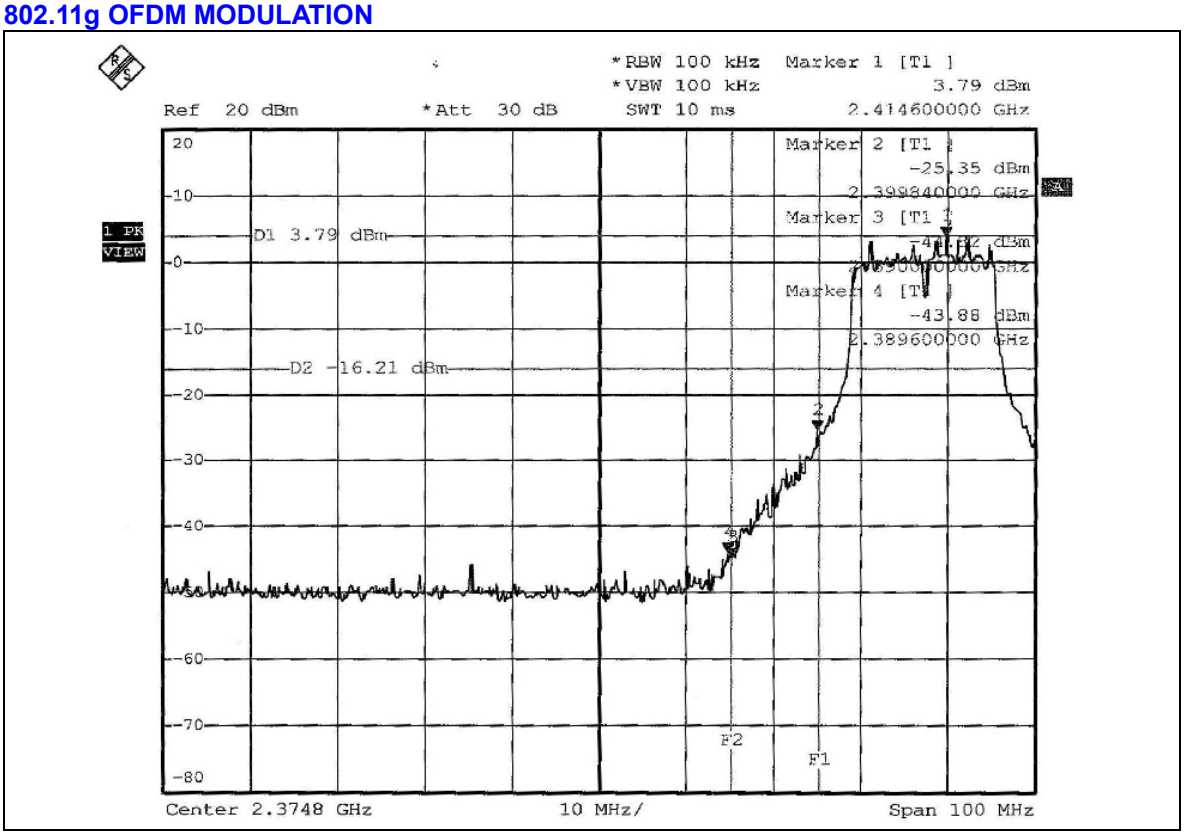
NOTE 1: The band edge emission plot of OFDM technique on the next page shows 47.67dBc between carrier maximum power and local maximum emission in restrict band (2.389600000GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 110.43dBuV/m (Peak), so the maximum field strength in restrict band is 110.43 – 47.67 = 62.76dBuV/m which is under 74dBuV/m limit.

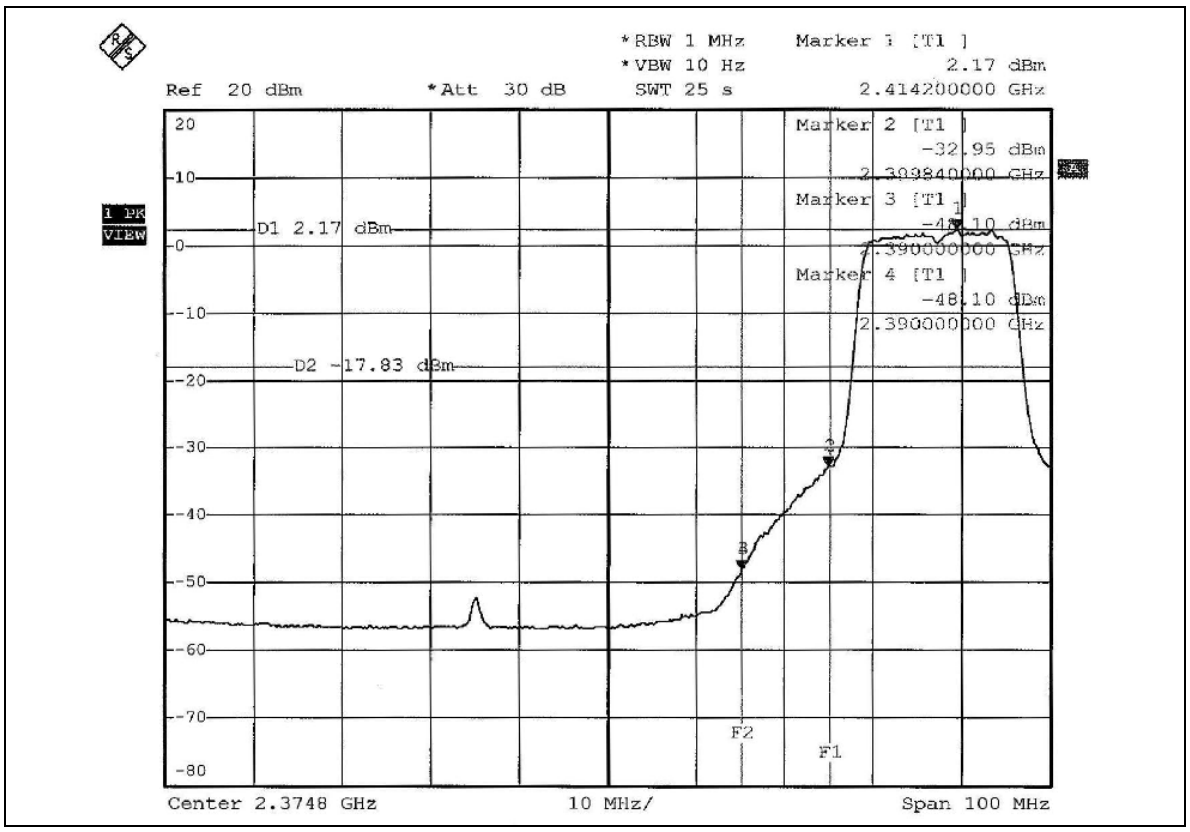
The band edge emission plot of OFDM technique on the next page shows 50.27dBc between carrier maximum power and local maximum emission in restrict band (2.390000000GHz). The emission of carrier strength list in the test result of channel 1 at the item 4.2.7 is 99.28dBuV/m (Average), so the maximum field strength in restrict band is 99.28– 50.27= 49.01dBuV/m which is under 54dBuV/m limit.

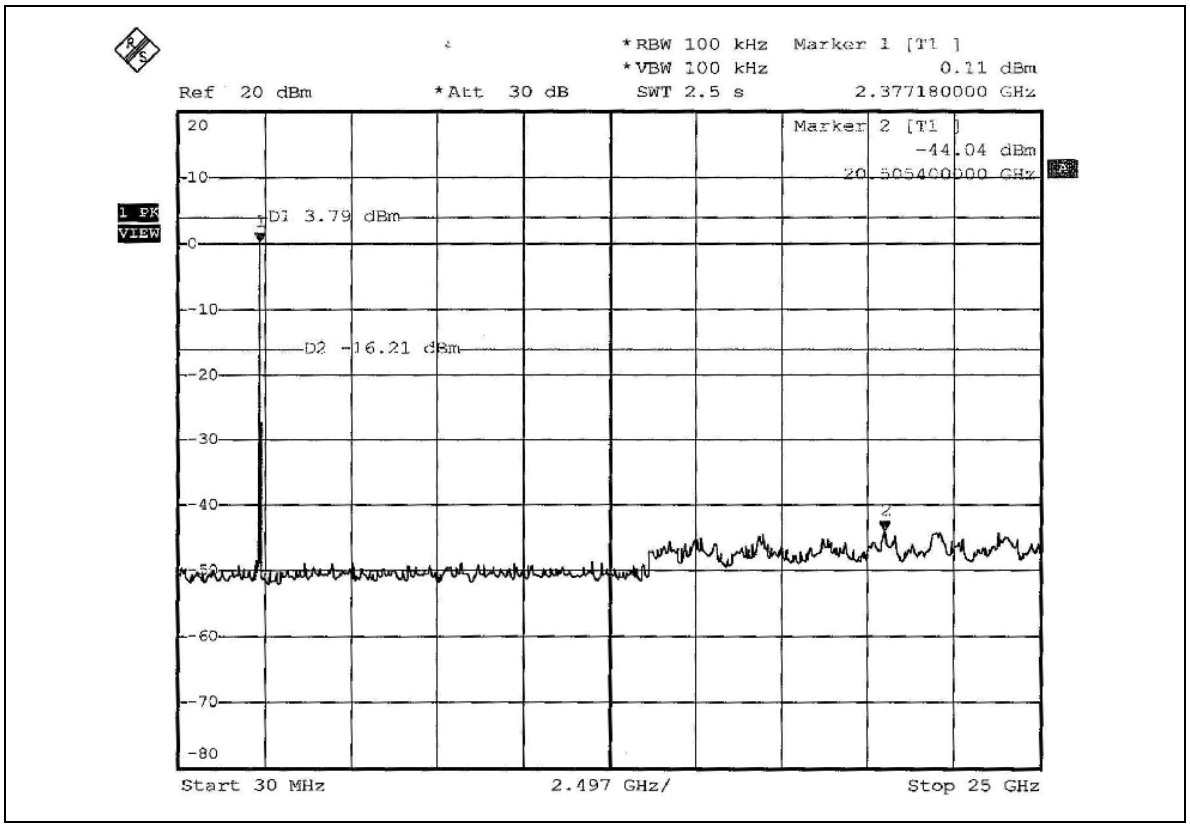
NOTE 2: The band edge emission plot of OFDM technique on the next second page shows 44.97dBc between carrier maximum power and local maximum emission in restrict band (2.483500000GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 111.58dBuV/m (Peak), so the maximum field strength in restrict band is 111.58 – 44.97 = 66.61dBuV/m which is under 74dBuV/m limit.

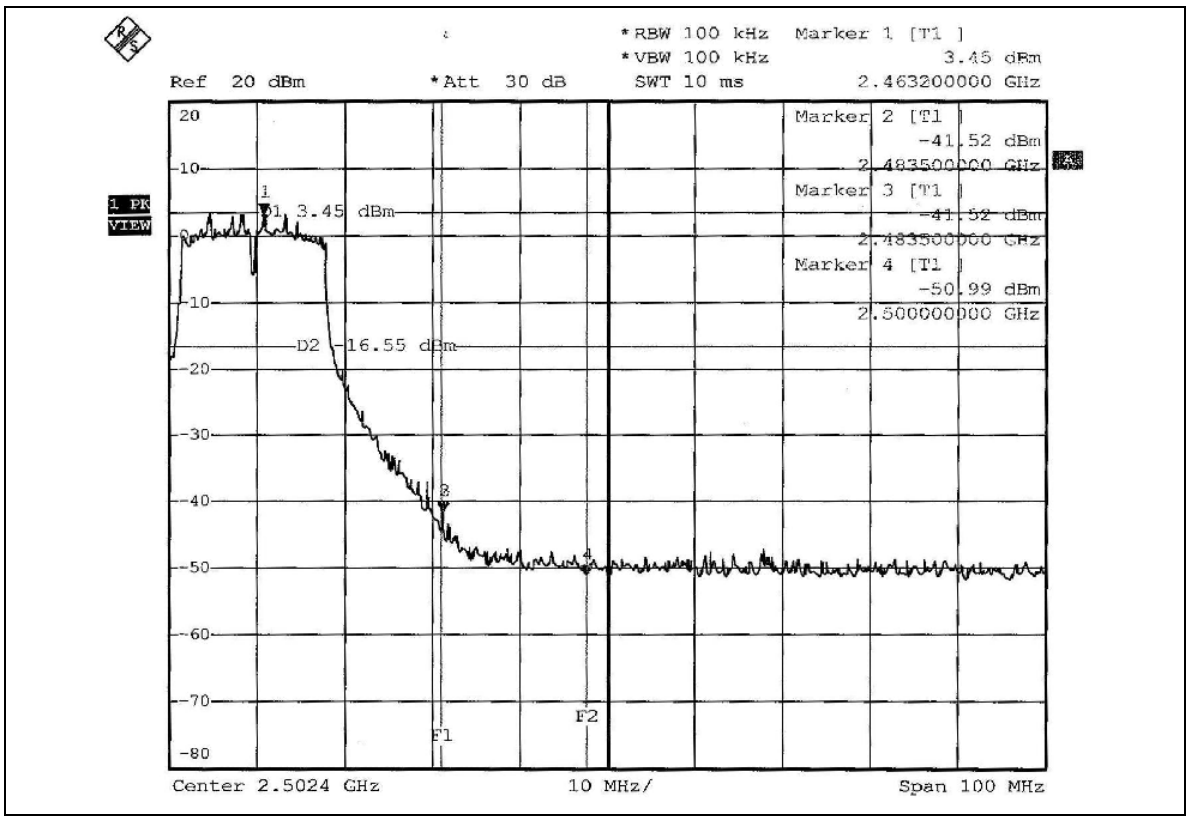
The band edge emission plot of OFDM technique on the next third page shows 48.50dBc between carrier maximum power and local maximum emission in restrict band (2.483500000GHz). The emission of carrier strength list in the test result of channel 11 at the item 4.2.7 is 99.46dBuV/m (Average), so the maximum field strength in restrict band is 99.46 – 48.50 = 50.96dBuV/m which is under 54dBuV/m limit.

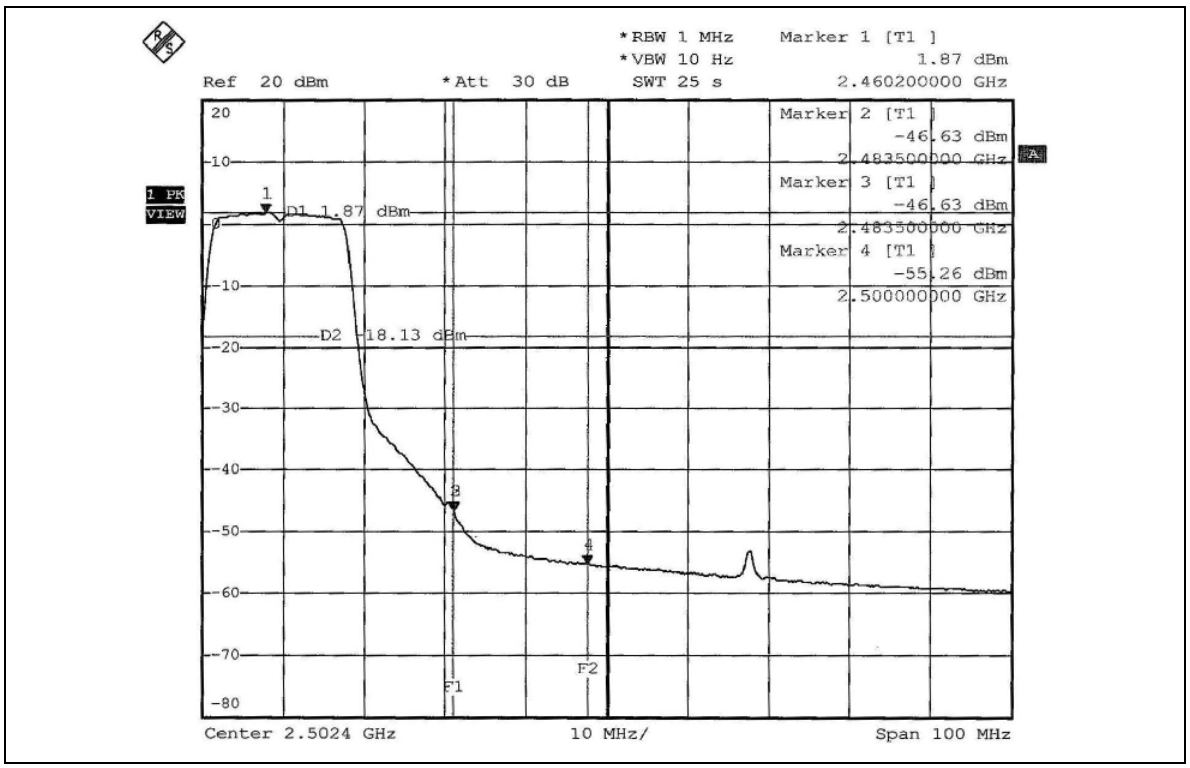
802.11g OFDM MODULATION

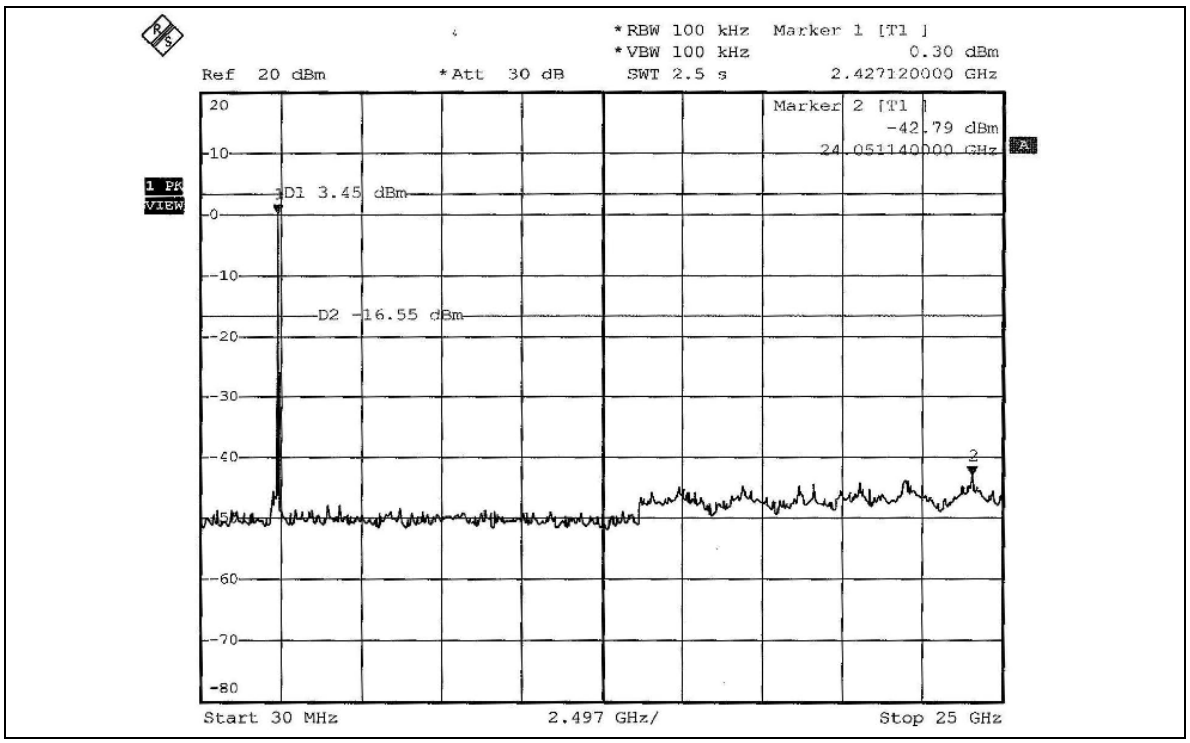





*RBW 100 kHz
*VBW 100 kHz
SWT 2.5 s
Marker 1 [T1]
0.11 dBm
2.377180000 GHz
Ref 20 dBm
*Att 30 dB
Marker 2 [T1]
-44.04 dBm
20.505400000 GHz
1 PK
VIEW
D1 3.79 dBm
D2 -16.21 dBm
Start 30 MHz
2.497 GHz/
Stop 25 GHz


*RBW 100 kHz
*VBW 100 kHz
SWT 10 ms
Marker 1 [T1]
3.45 dBm
2.463200000 GHz
Ref 20 dBm
*Att 30 dB
Marker 2 [T1]
-41.52 dBm
2.483500000 GHz
Marker 3 [T1]
-41.52 dBm
2.483500000 GHz
Marker 4 [T1]
-50.99 dBm
2.500000000 GHz
1 PK
VIEW
D1 3.45 dBm
D2 -16.55 dBm
F1
F2
Center 2.5024 GHz
10 MHz/
Span 100 MHz


*RBW 1 MHz
*VBW 10 Hz
Ref 20 dBm
*Att 30 dB
SWT 25 s
Marker 1 [T1]
1.87 dBm
2.460200000 GHz
Marker 2 [T1]
-46.63 dBm
2.483500000 GHz
Marker 3 [T1]
-46.63 dBm
2.483500000 GHz
Marker 4 [T1]
-55.26 dBm
2.500000000 GHz
1 PK VIEW
D1 1.87 dBm
D2 -18.13 dBm
F1
F2
Center 2.5024 GHz
10 MHz/
Span 100 MHz


*RBW 100 kHz
*VBW 100 kHz
Ref 20 dBm
*Att 30 dB
SWT 2.5 s
Marker 1 [T1]
0.30 dBm
2.427120000 GHz
Marker 2 [T1]
-42.79 dBm
24.051140000 GHz
1 PK VIEW
D1 3.45 dBm
D2 -16.55 dBm
Start 30 MHz
2.497 GHz/
Stop 25 GHz

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 used in this product is dipole antenna with R-SMA connector and PIFA antenna without connector. The maximum Gain of the antenna is 1.8 dBi.

5 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, UL, A2LA
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA , CSA
R.O.C.	CNLA, BSMI, NCC
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: 886-2-26051924

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

Web Site: www.adt.com.tw

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

APPENDIX-A

MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No any modifications are made to the EUT by the lab during the test.