FCC TEST REPORT (15.247)

REPORT NO.: RF960507H01
MODEL NO.: IP250
RECEIVED: May 07, 2007
TESTED: June 05 to 13, 2007
ISSUED: June 14, 2007

APPLICANT: Accton Technology Corporation

ADDRESS: No.1, Creation Rd. III, Science-based Industrial Park, Hsinchu, Taiwan, R.O.C.

ISSUED BY: Advance Data Technology Corporation

TEST LOCATION: No. 81-1, Lu Liao Keng, 9 Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien, Taiwan, R.O.C.

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0536

No. 2177-01

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1. CERTIFICATION

PRODUCT:	IronPoint 250 Access Point
BRAND NAME:	Foundry Networks
MODEL NO.:	IP250
TEST SAMPLE:	R&D SAMPLE
TESTED:	June 05 to 13, 2007
APPLICANT:	Accton Technology Corporation
STANDARDS:	FCC Part 15, Subpart C (Section 15.247), ANSI C63.4-2003

The above equipment (Model: IP250) 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 : _____ , **DATE:** June 14, 2007
(Midoli Peng, Specialist)

TECHNICAL ACCEPTANCE : _____ , **DATE:** June 14, 2007
Responsible for RF
(Hank Chung, Deputy Manager)

APPROVED BY : _____ , **DATE:** June 14, 2007
(May Chen, Deputy Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

For 802.11b & g, 2412~2462MHz Band

APPLIED STANDARD: FCC Part 15, Subpart C (Section 15.247)			
Standard Section	**Test Type and Limit**	**Result**	**Remark**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is –0.72dB at 1.185MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is –0.4dB at 2483.5MHz
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

For 802.11a, 5725~5850MHz Band

APPLIED STANDARD: FCC Part 15, Subpart C (Section 15.247)			
Standard Section	**Test Type and Limit**	**Result**	**Remark**
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is –0.86dB at 1.185MHz
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz	PASS	Meet the requirement of limit.
15.247(b)	Maximum Peak Output Power Limit: max. 30dBm	PASS	Meet the requirement of limit.
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is –2.5dB at 11490.0MHz
15.247(e)	Power Spectral Density Limit: max. 8dBm	PASS	Meet the requirement of limit.
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.

NOTE:

1. The EUT was operating in 2.412 ~ 2.462GHz, 5.150 ~ 5.250GHz and 5.725 ~ 5.850GHz frequencies band. This report was recorded the RF parameters including 2.412 ~ 2.462GHz and 5.725 ~ 5.850GHz. For the 5.150 ~ 5.250GHz RF parameters was recorded in another test report.

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:

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

Measurement	Value
Conducted emissions	2.41 dB
Radiated emissions (30MHz-1GHz)	3.89 dB
Radiated emissions (1GHz -18GHz)	2.21 dB
Radiated emissions (18GHz -40GHz)	1.88 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	IronPoint 250 Access Point
MODEL NO.	IP250
FCC ID	HEDIP250
POWER SUPPLY	DC 48V from Adapter or POE (Power over Ethernet)
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 802.11a: 54/48/36/24/18/12/9/6Mbps (Turbo mode: up to 108Mbps *see Note 2)
FREQUENCY RANGE	For 15.407 802.11a: 5.18 ~ 5.24GHz
	For 15.247 802.11b & 802.11g: 2412 ~ 2462MHz 802.11a: 5.745 ~ 5.825GHz
NUMBER OF CHANNEL	For 15.407 802.11a (5.15 ~ 5.25GHz):4(1 for 802.11a Turbo mode)
	For 15.247 802.11b & 802.11g: 11 802.11a (5.725 ~ 5.850GHz):5(2 for 802.11a Turbo mode)
CHANNEL SPACING	802.11b & 802.11g: 5MHz 802.11a: 20MHz for Normal mode
OUTPUT POWER	Please see note 5 (on next page)
DATA CABLE	Console cable(unshielded, 1.6m)
POWER CORE	AC input cable (unshielded, 1.9m)
ANTENNA TYPE	Please see note 4 (on next page)
I/O PORTS	Console Port x1, LAN Port x1
ASSOCIATED DEVICES	NA

NOTE:

1. The EUT operates in both the 5GHz and 2.4GHz Bands and compatibility with 802.11a and 802.11b, 802.11g technology.

2. This EUT is capable of providing data rates of up to 108 Mbps in 802.11a Turbo mode depending upon reception quality.

3. The EUT was operated with the following power adapter or POE:

Power adapter	
BRAND:	PHIHONG
MODEL:	PSA 18U-480C
INPUT:	AC 100~240V, 0.5A, 50~60Hz
OUTPUT:	DC 48V, 0.38A , 1.5m/ nonshield/ with one core

POE (Only for test, not for sale)	
BRAND:	3Com
MODEL:	PW130
INPUT:	AC100-250V, 0.5A, 50/60Hz
OUTPUT:	DC 48V, 0.42A

4. There are four antennas provided to this EUT, please refer to the following table:

For 2.4GHz						
No.	Model No.	Gain (dBi)	Cable lose (dB)	Net Gain (dBi)	Antenna Type	Connector
1	MHA2400PT	4	0	4	Bi-Directional	BNC,male
2	MP24013XFPT	13	0	13	Directional Panel	N, female
3	*MMO24580608	6	1	5	Omni Directional	N, female
4	*FDS_2FED01+I3G * FDS_2FED02+I3G	2	0	2	Dipole	UFL
For 5GHz						
No.	Model No.	Gain (dBi)	Cable lose (dB)	Net Gain (dBi)	Antenna Type	Connector
A	*MMO24580608	8	2	6	Omni Directional	N, female
B	*FDS_2FED01+I3G * FDS_2FED02+I3G	4.5	0	4.5	Dipole	UFL

Note:

1. "*" is a Dual Band antenna can be used in both 2.4GHz and 5GHz.
2. The model : FDS_2FED01+I3G and FDS_2FED02+I3G is one set antenna

5. Peak output power (Unit : mW) :

No.	Model No.	Operating Frequency (MHz)	
		2412MHz ~ 2462MHz	
1	MHA2400PT	251.189	
2	MP24013XFPT	149.624	
3	MMO24580608	251.189	
4	FDS_2FED01+I3G FDS_2FED02+I3G	281.838	
No.	Model No.	Operating Frequency (MHz)	
		5150~5250	5725~5850
A	MMO24580608	24.378	245.471
B	FDS_2FED01+I3G FDS_2FED02+I3G	30.974	331.131

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

3.2 DESCRIPTION OF TEST MODES

Operated in 2400 ~ 2483.5MHz band:

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

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		

Operated in 5725 ~ 5850MHz band:

For 802.11a (5725 ~ 5850MHz band): Five channels are provided to this EUT.

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

Two channels are provided to this EUT for turbo mode.

Channel	Frequency
1	5760 MHz
2	5800 MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

EUT configure mode	Applicable to				Description
	PLC	RE<1G	RE≥1G	APCM	
-	√	√	√	√	NA

Where PLC: Power Line Conducted Emission RE<1G RE: 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.

Mode	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11g	1 to 11	1	OFDM	BPSK	6
802.11a	1 to 5	1	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.

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

☒ For spurious emissions (below 1GHz), the EUT was pre-tested in chamber as the following test modes:

Test Mode	Description
Mode 1	With Adapter
Mode 2	With POE

Mode 1, the worse case one, was chosen for final test.

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.

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

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

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

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is an IronPoint 250 Access Point. 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.

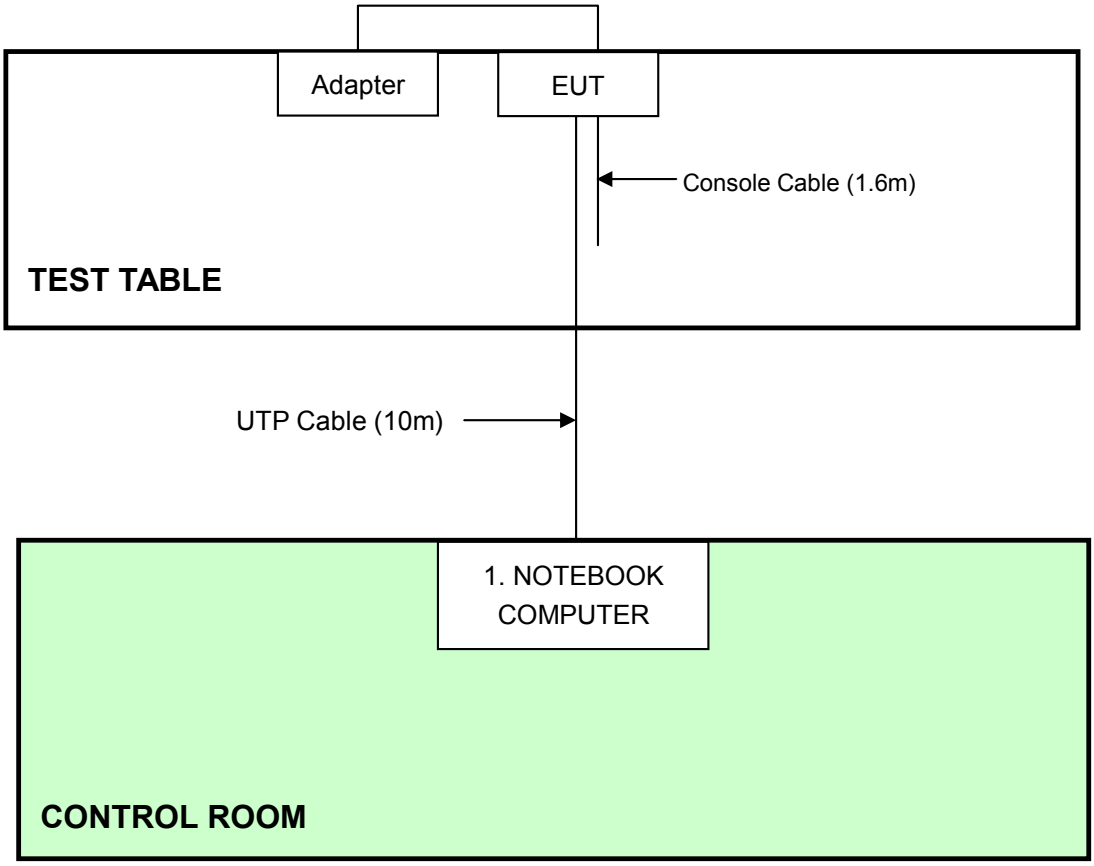
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	PP18L	6976685584	FCC DoC

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

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

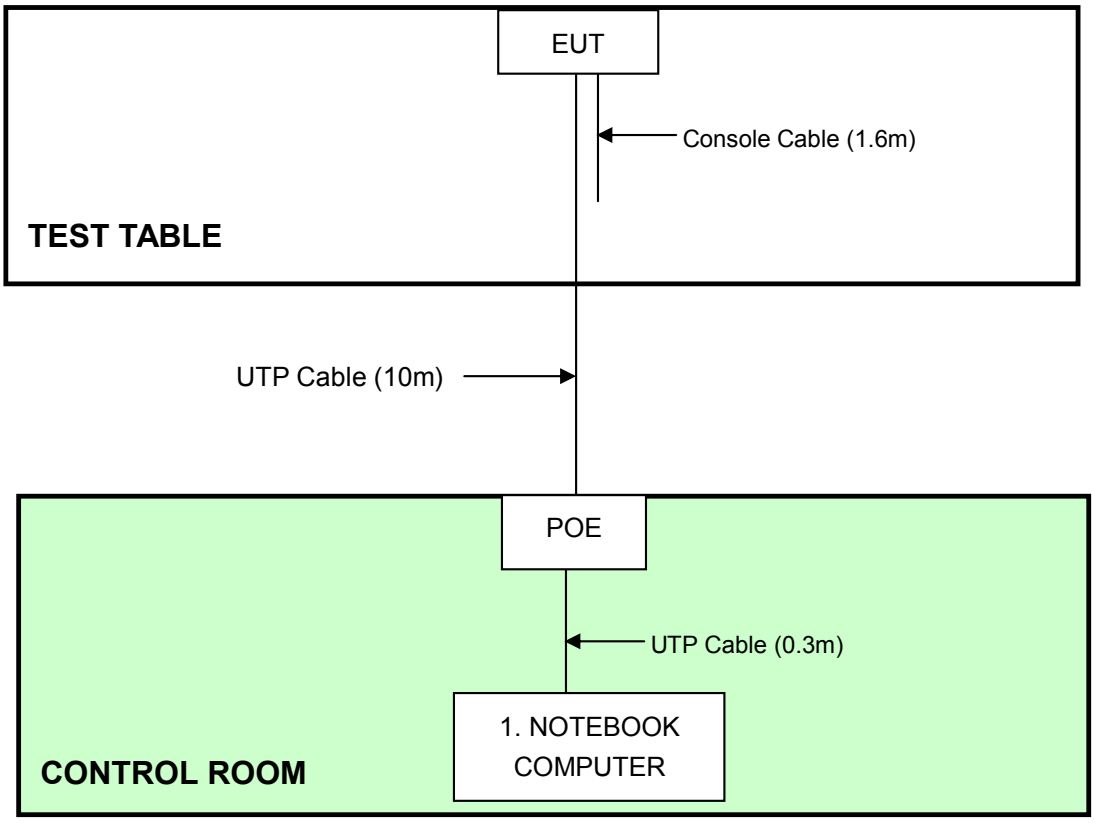
3.5 CONFIGURATION OF SYSTEM UNDER TEST

With adapter mode:



NOTE: 1. Support unit 1 was kept in the control room during the test.

With POE mode:



NOTE: 1. Support unit 1 was kept in the control room during the test.

4.TEST TYPES AND RESULTS (802.11b & g, 2400 ~ 2483.5MHz Band)

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56	56 to 46
0.5-5	56	46
5-30	60	50

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

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED UNTIL
Test Receiver	ESCS 30	847124/029	Mar. 28, 2008
Line-Impedance Stabilization Network(for EUT)	ENV-216	100071	Nov. 26, 2007
Line-Impedance Stabilization Network(for Peripheral)	ESH3-Z5	848773/004	Oct. 26, 2007
RF Cable (JETBAO)	RG233/U	Cable_CB_01	Dec. 09, 2007
Terminator	50	2	Oct. 30, 2007
Software	ADT_Cond_V7.3.2	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 ADT Shielded Room No. B.
3. The VCCI Con B Registration No. is C-2193.

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.

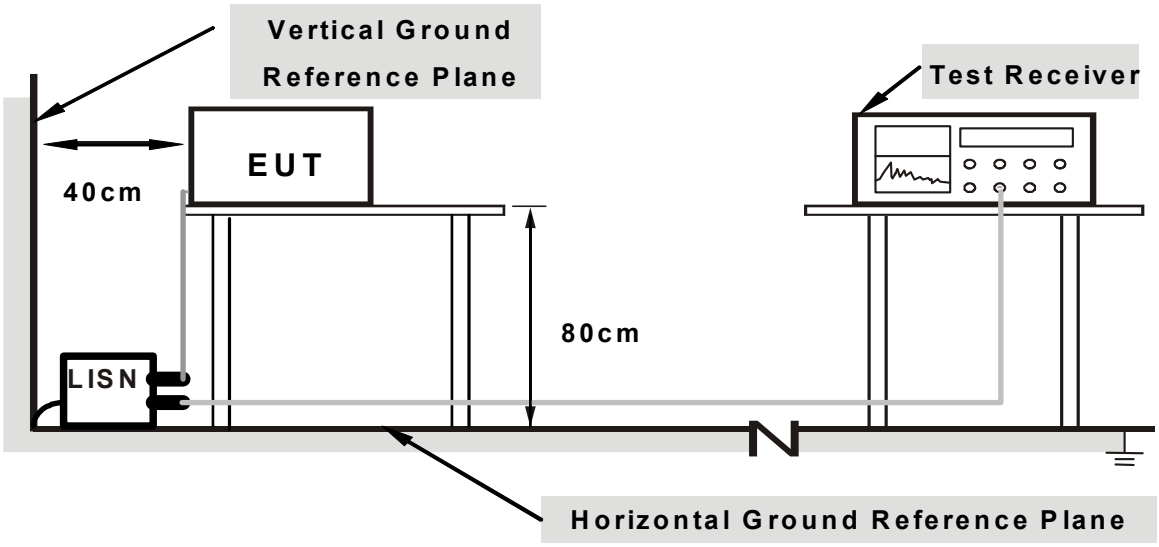
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were 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

a. Placed the EUT on the testing table.

b. Prepared other computer systems to act as a communication partner and placed them outside of testing area.

c. The communication partner run test program “ART 48 Build 5” to enable EUT under transmission/receiving condition continuously at specific channel frequency via UTP cable and wireless.

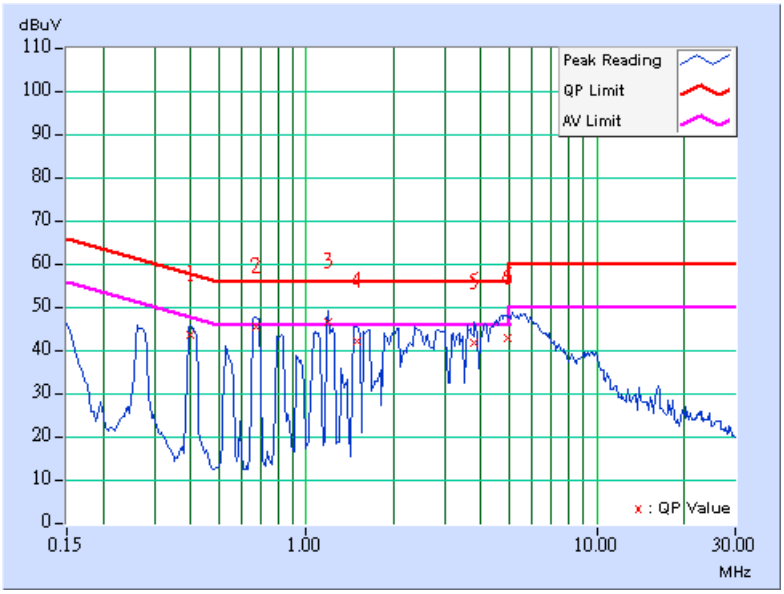
4.1.7 TEST RESULTS – With adapter mode

Conducted Worst-Case Data

MODULATION TYPE	BPSK	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	6Mbps
ENVIRONMENTAL CONDITIONS	20deg. C, 68%RH, 961hPa	**PHASE**	Line (L)
TESTED BY	Rex Huang		

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	0.400	0.40	42.99	-	43.39	-	57.85	47.85	-14.46	-
2	0.673	0.40	44.99	-	45.39	-	56.00	46.00	-10.61	-
3	**1.185**	**0.42**	**45.88**	**44.86**	**46.30**	**45.28**	**56.00**	**46.00**	**-9.70**	**-0.72**
4	1.502	0.45	41.42	-	41.87	-	56.00	46.00	-14.13	-
5	3.801	0.59	41.25	-	41.84	-	56.00	46.00	-14.16	-
6	4.941	0.63	42.48	-	43.11	-	56.00	46.00	-12.89	-

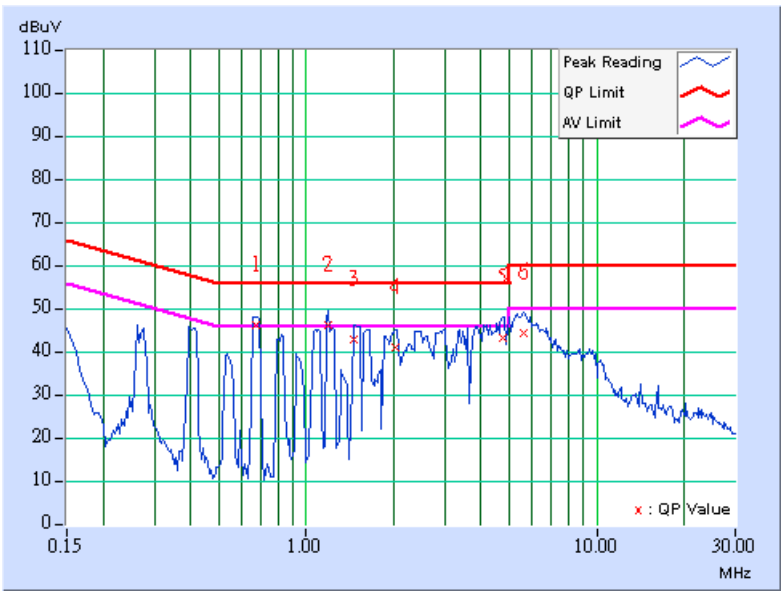
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



MODULATION TYPE	BPSK	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	6Mbps
ENVIRONMENTAL CONDITIONS	20deg. C, 68%RH, 961hPa	**PHASE**	Neutral (N)
TESTED BY	Rex Huang		

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	0.673	0.25	45.78	36.22	46.03	36.47	56.00	46.00	-9.97	-9.53
2	1.185	0.32	45.80	44.55	46.12	44.87	56.00	46.00	-9.88	-1.13
3	1.451	0.35	42.36	-	42.71	-	56.00	46.00	-13.29	-
4	2.037	0.40	40.60	-	41.00	-	56.00	46.00	-15.00	-
5	4.734	0.55	42.85	-	43.40	-	56.00	46.00	-12.60	-
6	5.629	0.61	43.98	-	44.59	-	60.00	50.00	-15.41	-

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.



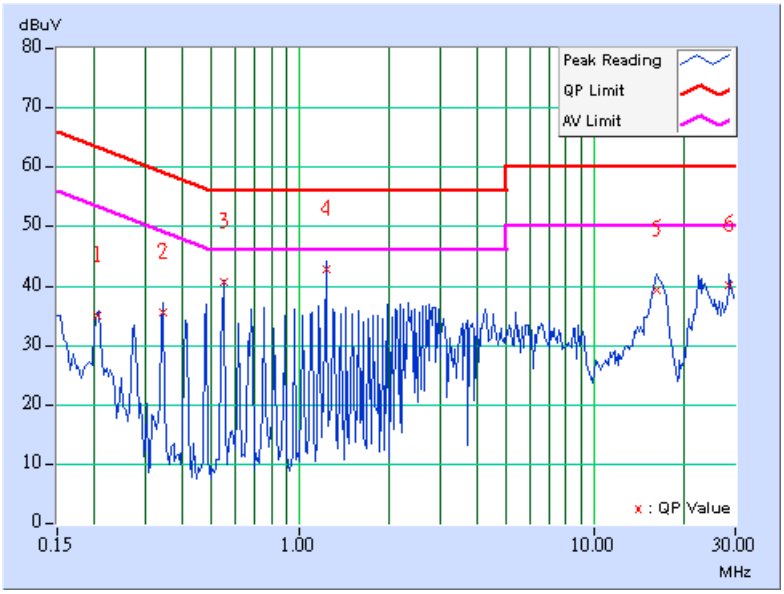
4.1.8 TEST RESULTS – With POE mode

Conducted Worst-Case Data

MODULATION TYPE	BPSK	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 62%RH, 961hPa	**PHASE**	Line (L)
TESTED BY	Rex Huang		

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	0.206	0.40	33.92	-	34.32	-	63.38	53.38	-29.06	-
2	0.341	0.40	34.68	-	35.08	-	59.17	49.17	-24.09	-
3	0.548	0.40	39.76	-	40.16	-	56.00	46.00	-15.84	-
4	1.228	0.42	41.85	-	42.27	-	56.00	46.00	-13.73	-
5	16.211	1.08	38.31	-	39.39	-	60.00	50.00	-20.61	-
6	28.686	1.00	39.15	-	40.15	-	60.00	50.00	-19.85	-

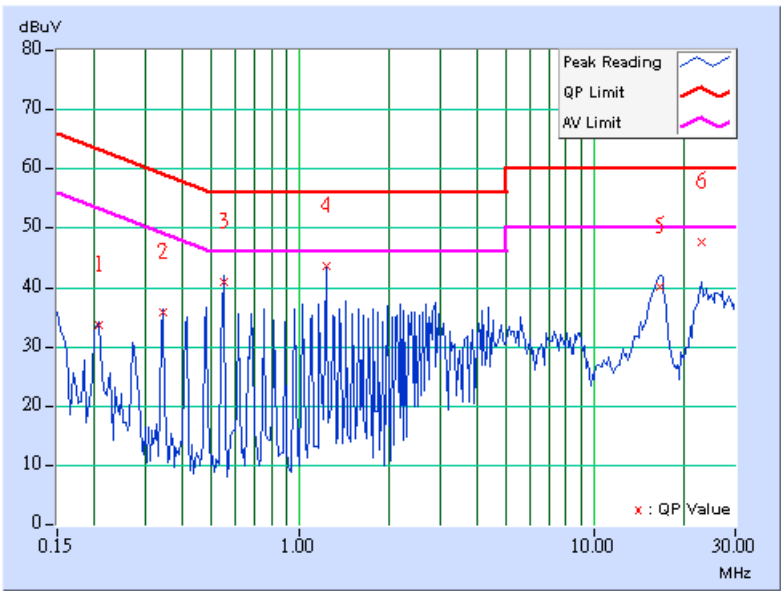
REMARKS: 1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
3. The emission levels of other frequencies were very low against the limit.
4. Margin value = Emission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



MODULATION TYPE	BPSK	**6dB BANDWIDTH**	9 kHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**TRANSFER RATE**	6Mbps
ENVIRONMENTAL CONDITIONS	26deg. C, 62%RH, 961hPa	**PHASE**	Neutral (N)
TESTED BY	Rex Huang		

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	0.209	0.20	32.32	-	32.52	-	63.26	53.26	-30.74	-
2	0.341	0.20	34.42	-	34.62	-	59.17	49.17	-24.55	-
3	0.548	0.22	39.45	-	39.67	-	56.00	46.00	-16.33	-
4	1.228	0.32	42.31	-	42.63	-	56.00	46.00	-13.37	-
5	16.691	1.23	38.78	-	40.01	-	60.00	50.00	-19.99	-
6	23.129	1.36	46.39	-	47.75	-	60.00	50.00	-12.25	-

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
ADVANTEST Spectrum Analyzer	R3271A	85060311	July 03, 2007
HP Pre_Amplifier	8449B	3008A01922	Sep. 18, 2007
ROHDE & SCHWARZ Test Receiver	ESCS30	100375	Sep. 20, 2007
CHASE Broadband Antenna	VULB 9168	138	July 17, 2007
Schwarzbeck Horn_Antenna	BBHA9120	D124	Jan. 01, 2008
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 05, 2008
SCHWARZBECK Biconical Antenna	VHBA9123	459	Jun. 08, 2009
SCHWARZBECK Periodic Antenna	UPA6108	1148	Jun. 08, 2009
RF Switches (ARNITSU)	CS-201	1565157	NA
RF CABLE (Chaintek)	SF102	22054-2	Nov. 14. 2007
RF Cable(RICHTEC)	9913-30M N-N Cable	STCCAB-30M-1 GHz	Jul. 15, 2007
Software	ADT_Radiated_V 7.6.15.7	NA	NA
CHANCE MOST Antenna Tower	AT-100	0203	NA
CHANCE MOST Turn Table	TT-100	0203	NA

Note: 1. The calibration interval of the above test instruments is 12 months (36 months for Biconical and Periodic Antenna)and the calibrations are traceable to NML/ROC and NIST/USA.
2. The horn antenna, HP preamplifier (model: 8449B) and Spectrum Analyzer (model: R3271A) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in ADT Open Site No. C.
4. The FCC Site Registration No. is 656396.
5. The VCCI Site Registration No. is R-1626.
6. The CANADA Site Registration No. is IC 4824A-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. The table was rotated 360 degrees to determine the position of the highest radiation.

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

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

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

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

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

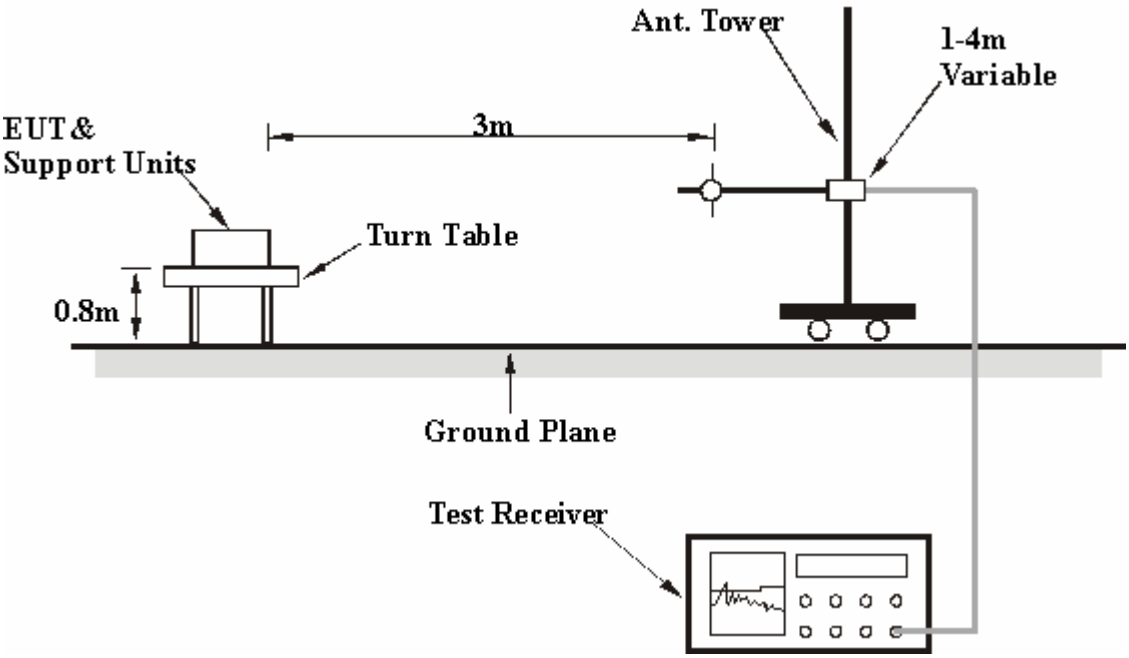
NOTE:

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

4.2.7 TEST RESULTS (ANTENNA 1)

Below 1GHz Worst-Case Data

TEST MODE	With adapter	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH, 961hPa	**TESTED BY**	Phoenix Huang

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	110.78	33.22 QP	43.50	-10.28	1.14 H	305	22.46	10.76
2	200.08	26.74 QP	43.50	-16.76	1.00 H	273	15.14	11.60
3	300.00	31.01 QP	46.00	-14.99	1.00 H	148	14.18	16.83
4	499.99	36.37 QP	46.00	-9.63	1.67 H	355	14.61	21.76
5	600.00	30.46 QP	46.00	-15.54	1.29 H	329	5.98	24.48
6	799.99	39.26 QP	46.00	-6.74	1.00 H	228	11.70	27.56
7	899.99	36.00 QP	46.00	-10.00	1.00 H	249	7.15	28.85

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	39.68	34.05 QP	40.00	-5.95	1.00 V	293	19.86	14.19
2	108.83	35.85 QP	43.50	-7.65	1.00 V	45	25.31	10.54
3	200.00	25.72 QP	43.50	-17.78	1.00 V	297	14.12	11.60
4	359.90	34.93 QP	46.00	-11.07	1.00 V	178	17.23	17.70
5	499.99	36.51 QP	46.00	-9.49	1.19 V	210	14.75	21.76
6	599.99	29.53 QP	46.00	-16.47	1.28 V	229	5.05	24.48
7	800.00	37.09 QP	46.00	-8.91	1.24 V	259	9.53	27.56
8	899.99	35.91 QP	46.00	-10.09	1.45 V	325	7.06	28.85

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

802.11b DSSS modulation

CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	56.78 PK	74.00	-17.22	1.31 H	347	26.38	30.40
2	2390.00	44.64 AV	54.00	-9.36	1.31 H	347	14.24	30.40
3	*2412.00	103.34 PK			1.32 H	349	72.85	30.49
4	*2412.00	98.45 AV			1.32 H	349	67.96	30.49
5	2688.00	44.20 PK	74.00	-29.80	1.03 H	316	12.89	31.31
6	2688.00	31.20 AV	54.00	-22.80	1.03 H	316	-0.11	31.31
7	4824.00	52.56 PK	74.00	-21.44	1.59 H	234	16.87	35.69
8	4824.00	48.41 AV	54.00	-5.59	1.59 H	234	12.72	35.69
9	7236.00	53.56 PK	74.00	-20.44	1.25 H	178	11.32	42.24
10	7236.00	39.67 AV	54.00	-14.33	1.25 H	178	-2.57	42.24

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	56.46 PK	74.00	-17.54	1.10 V	169	26.06	30.40
2	2390.00	45.41 AV	54.00	-8.59	1.10 V	169	15.01	30.40
3	*2412.00	110.06 PK			1.08 V	179	79.57	30.49
4	*2412.00	104.98 AV			1.08 V	179	74.49	30.49
5	2688.00	44.70 PK	74.00	-29.30	1.07 V	243	13.39	31.31
6	2688.00	36.60 AV	54.00	-17.40	1.07 V	243	5.29	31.31
7	4824.00	56.55 PK	74.00	-17.45	1.08 V	257	20.86	35.69
8	4824.00	53.22 AV	54.00	-0.78	1.08 V	257	17.53	35.69
9	7236.00	54.23 PK	74.00	-19.77	1.15 V	7	11.99	42.24
10	7236.00	39.96 AV	54.00	-14.04	1.15 V	7	-2.28	42.24

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	105.02 PK			1.23 H	344	74.41	30.61
2	*2437.00	100.88 AV			1.23 H	344	70.27	30.61
3	2688.00	44.40 PK	74.00	-29.60	1.04 H	321	13.09	31.31
4	2688.00	31.40 AV	54.00	-22.60	1.04 H	321	0.09	31.31
5	4874.00	52.79 PK	74.00	-21.21	1.58 H	232	16.99	35.80
6	4874.00	48.47 AV	54.00	-5.53	1.58 H	232	12.67	35.80
7	7311.00	53.47 PK	74.00	-20.53	1.27 H	169	10.95	42.52
8	7311.00	39.49 AV	54.00	-14.51	1.27 H	169	-3.03	42.52

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	112.02 PK			1.08 V	190	81.41	30.61
2	*2437.00	107.62 AV			1.08 V	190	77.01	30.61
3	2688.00	44.80 PK	74.00	-29.20	1.07 V	245	13.49	31.31
4	2688.00	36.80 AV	54.00	-17.20	1.07 V	245	5.49	31.31
5	4874.00	56.71 PK	74.00	-17.29	1.08 V	257	20.91	35.80
6	4874.00	53.39 AV	54.00	-0.61	1.08 V	257	17.59	35.80
7	7311.00	54.11 PK	74.00	-19.89	1.16 V	2	11.59	42.52
8	7311.00	39.84 AV	54.00	-14.16	1.16 V	2	-2.68	42.52

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

CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

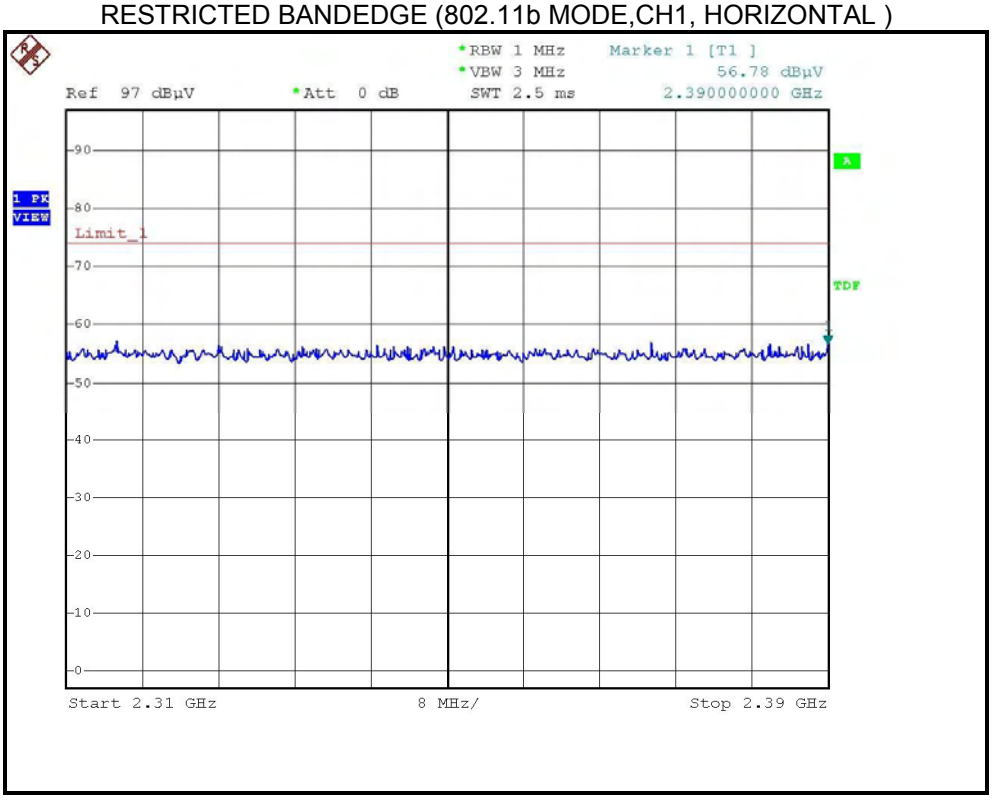
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	105.05 PK			1.27 H	342	74.33	30.72
2	*2462.00	100.17 AV			1.27 H	342	69.45	30.72
3	2488.00	57.28 PK	74.00	-16.72	1.26 H	338	26.44	30.84
4	2488.00	47.30 AV	54.00	-6.70	1.26 H	338	16.46	30.84
5	2688.00	44.10 PK	74.00	-29.90	1.06 H	327	12.79	31.31
6	2688.00	31.00 AV	54.00	-23.00	1.06 H	327	-0.31	31.31
7	4924.00	52.36 PK	74.00	-21.64	1.58 H	233	16.46	35.90
8	4924.00	48.16 AV	54.00	-5.84	1.58 H	233	12.26	35.90
9	7386.00	53.54 PK	74.00	-20.46	1.25 H	176	10.74	42.80
10	7386.00	39.59 AV	54.00	-14.41	1.25 H	176	-3.21	42.80

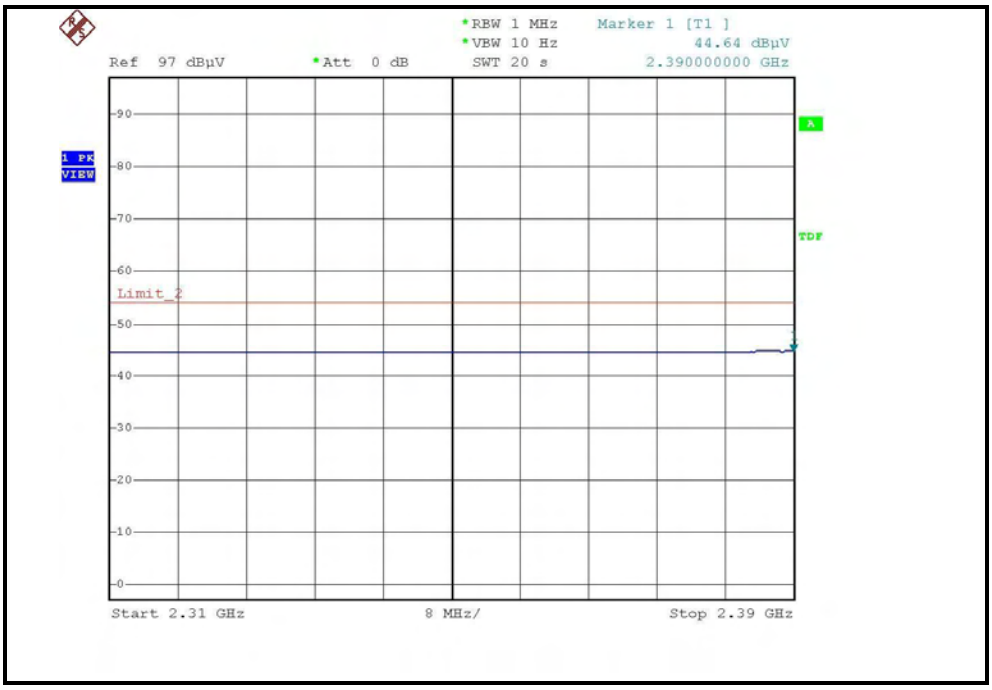
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	112.52 PK			1.04 V	186	81.80	30.72
2	*2462.00	107.46 AV			1.04 V	186	76.74	30.72
3	2487.00	59.53 PK	74.00	-14.47	1.00 V	188	28.70	30.83
4	2487.00	51.72 AV	54.00	-2.28	1.00 V	188	20.89	30.83
5	2688.00	44.60 PK	74.00	-29.40	1.08 V	246	13.29	31.31
6	2688.00	36.70 AV	54.00	-17.30	1.08 V	246	5.39	31.31
7	4924.00	56.19 PK	74.00	-17.81	1.06 V	254	20.29	35.90
8	4924.00	53.10 AV	54.00	-0.90	1.06 V	254	17.20	35.90
9	7386.00	54.06 PK	74.00	-19.94	1.15 V	0	11.26	42.80
10	7386.00	39.78 AV	54.00	-14.22	1.15 V	0	-3.02	42.80

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

RESTRICTED BANDEDGE (802.11b MODE,CH1, HORIZONTAL)





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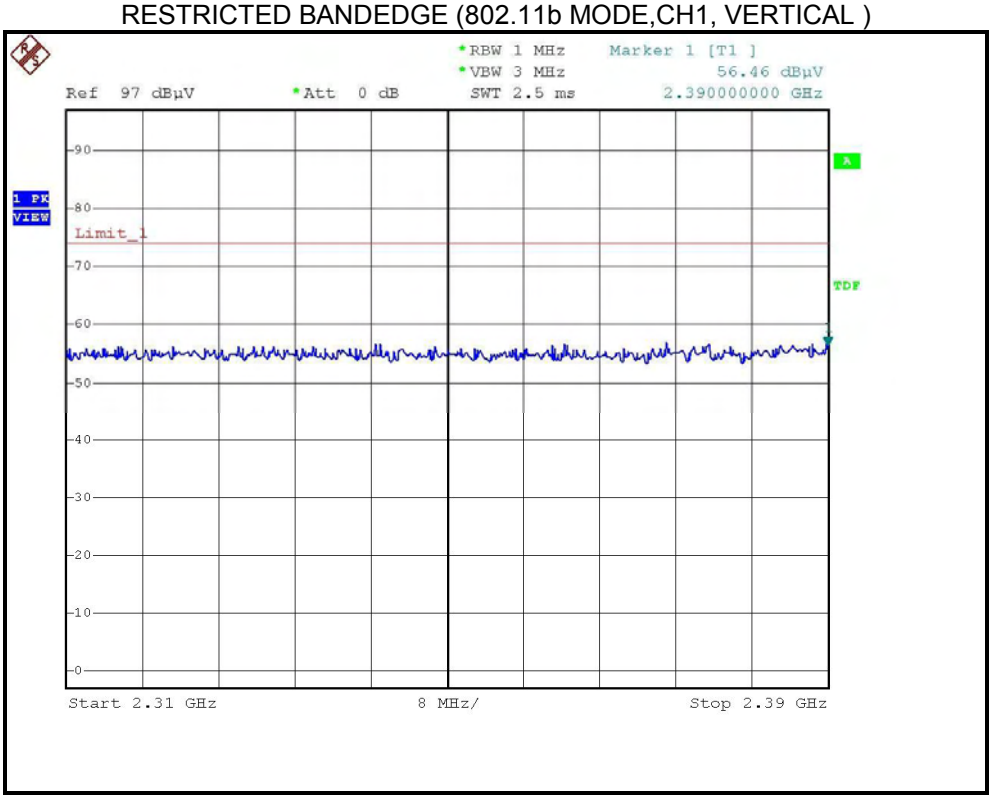
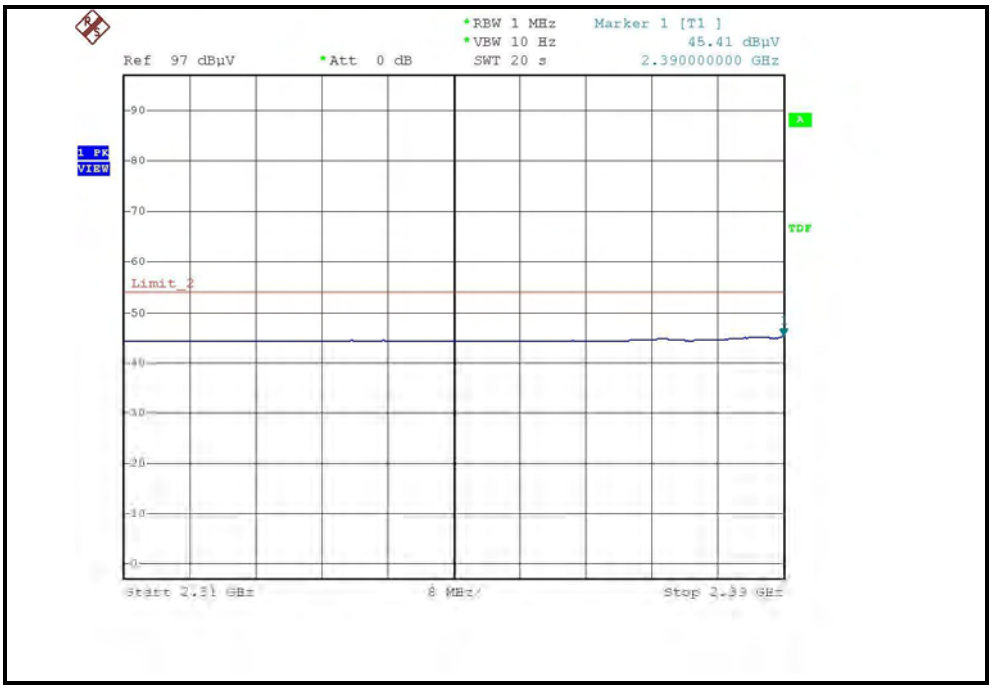
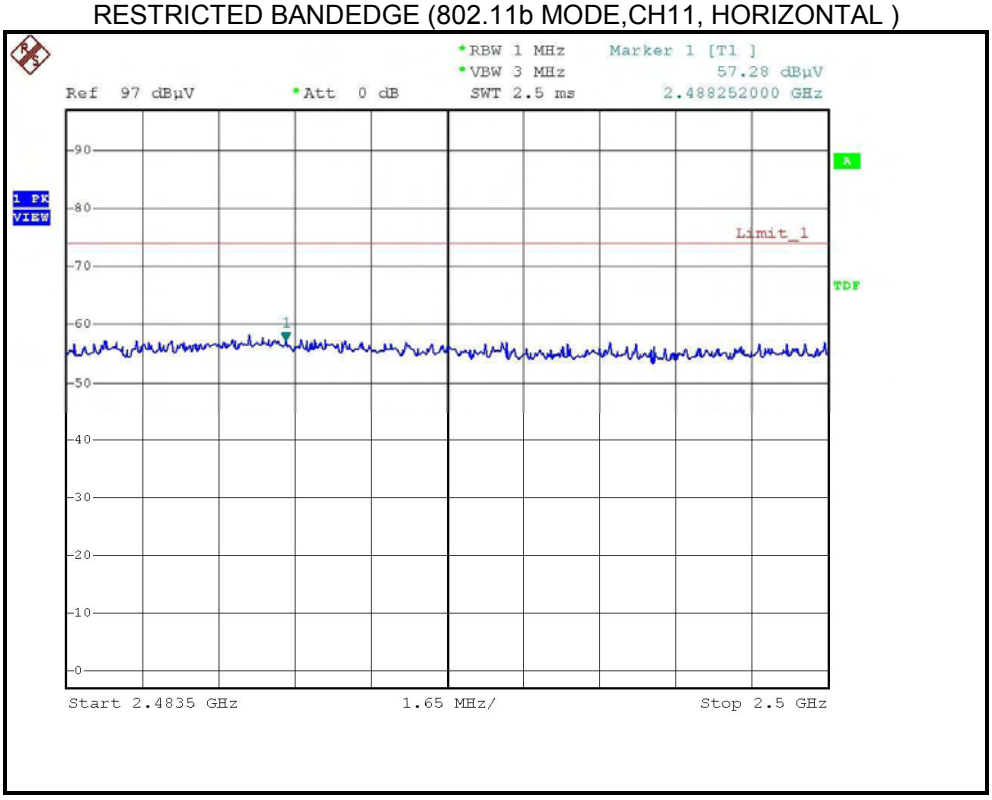
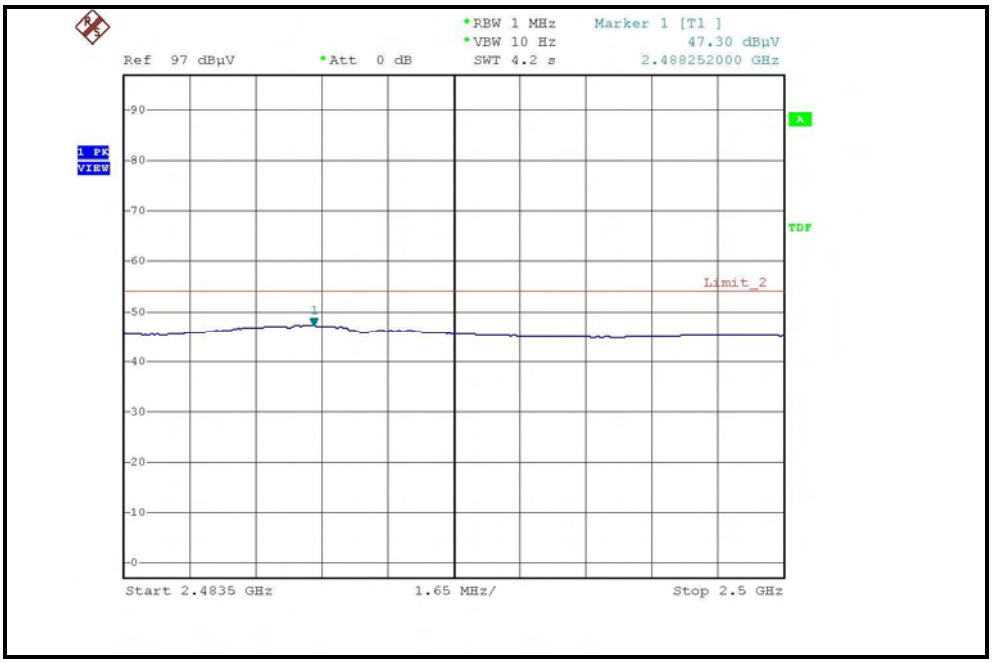




RESTRICTED BANDEDGE (802.11b MODE,CH11, HORIZONTAL)





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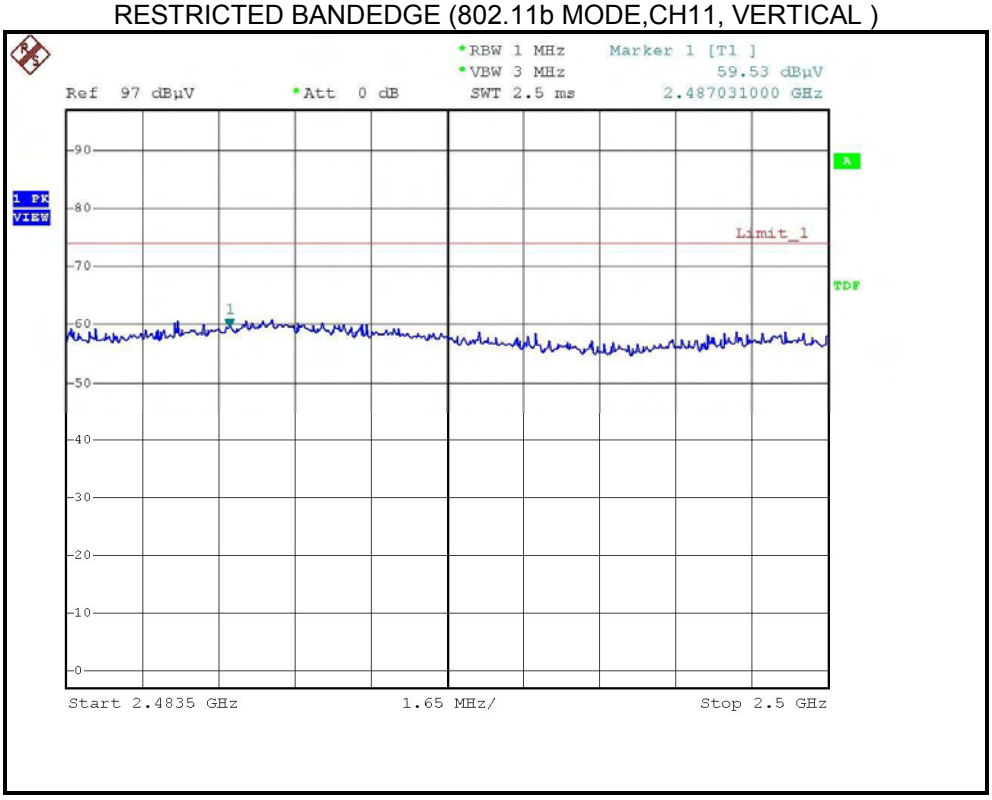
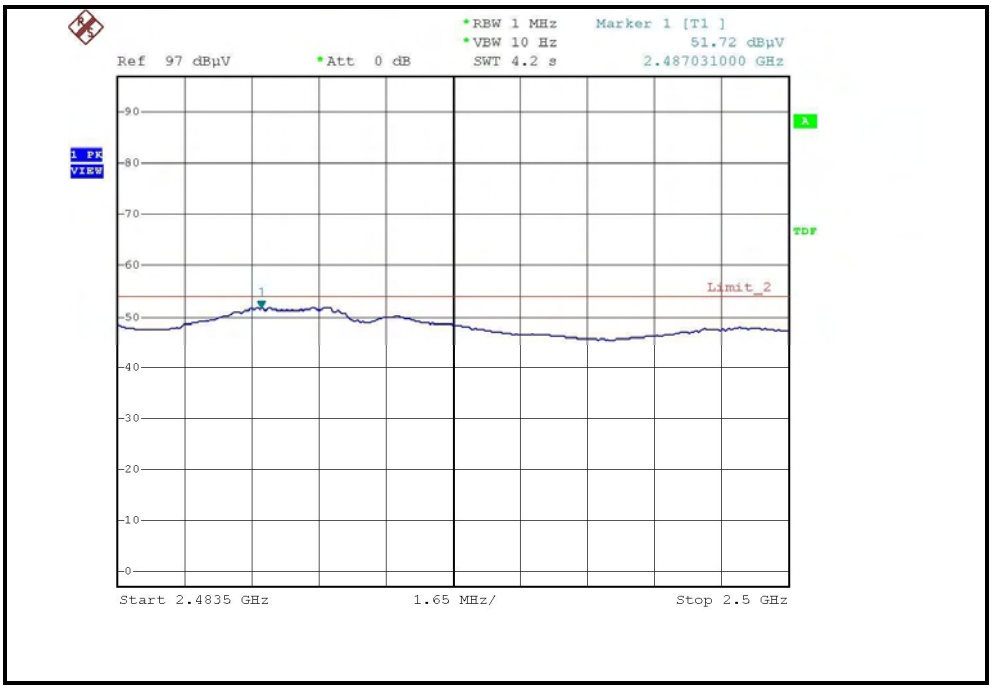




802.11g OFDM modulation

CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	67.82 PK	74.00	-6.18	1.33 H	346	37.42	30.40
2	2390.00	48.44 AV	54.00	-5.56	1.33 H	346	18.04	30.40
3	*2412.00	108.11 PK			1.33 H	349	77.62	30.49
4	*2412.00	97.80 AV			1.33 H	349	67.31	30.49
5	2688.00	44.00 PK	74.00	-30.00	1.04 H	314	12.69	31.31
6	2688.00	30.90 AV	54.00	-23.10	1.04 H	314	-0.41	31.31
7	4824.00	50.83 PK	74.00	-23.17	1.24 H	51	15.14	35.69
8	4824.00	36.09 AV	54.00	-17.91	1.24 H	51	0.40	35.69
9	7236.00	53.48 PK	74.00	-20.52	1.58 H	237	11.24	42.24
10	7236.00	39.69 AV	54.00	-14.31	1.58 H	237	-2.55	42.24

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	73.02 PK	74.00	-0.98	1.08 V	175	42.62	30.40
2	2390.00	52.22 AV	54.00	-1.78	1.08 V	175	21.82	30.40
3	*2412.00	114.36 PK			1.05 V	178	83.87	30.49
4	*2412.00	103.03 AV			1.05 V	178	72.54	30.49
5	2688.00	45.30 PK	74.00	-28.70	1.07 V	246	13.99	31.31
6	2688.00	37.10 AV	54.00	-16.90	1.07 V	246	5.79	31.31
7	4824.00	57.02 PK	74.00	-16.98	1.61 V	255	21.33	35.69
8	4824.00	41.25 AV	54.00	-12.75	1.61 V	255	5.56	35.69
9	7236.00	56.91 PK	74.00	-17.09	1.36 V	253	14.67	42.24
10	7236.00	39.18 AV	54.00	-14.82	1.36 V	253	-3.06	42.24

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	56.10 PK	74.00	-17.90	1.35 H	330	25.70	30.40
2	2390.00	44.72 AV	54.00	-9.28	1.35 H	330	14.32	30.40
3	*2437.00	112.59 PK			1.29 H	340	81.98	30.61
4	*2437.00	101.69 AV			1.29 H	340	71.08	30.61
5	2483.50	61.47 PK	74.00	-12.53	1.23 H	338	30.65	30.82
6	2483.50	45.75 AV	54.00	-8.25	1.23 H	338	14.93	30.82
7	2688.00	44.20 PK	74.00	-29.80	1.05 H	317	12.89	31.31
8	2688.00	31.30 AV	54.00	-22.70	1.05 H	317	-0.01	31.31
9	4874.00	69.08 PK	74.00	-4.92	1.31 H	16	33.28	35.80
10	4874.00	46.38 AV	54.00	-7.62	1.31 H	16	10.58	35.80
11	7311.00	60.44 PK	74.00	-13.56	1.58 H	237	17.92	42.52
12	7311.00	45.13 AV	54.00	-8.87	1.58 H	237	2.61	42.52

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	59.59 PK	74.00	-14.41	1.32 V	189	29.20	30.40
2	2390.00	47.37 AV	54.00	-6.63	1.32 V	189	16.97	30.40
3	*2437.00	120.72 PK			1.29 V	190	90.11	30.61
4	*2437.00	109.26 AV			1.29 V	190	78.65	30.61
5	2483.50	70.75 PK	74.00	-3.25	1.00 V	189	39.93	30.82
6	2483.50	49.72 AV	54.00	-4.28	1.00 V	189	18.90	30.82
7	2688.00	46.30 PK	74.00	-27.70	1.08 V	244	14.99	31.31
8	2688.00	38.40 AV	54.00	-15.60	1.08 V	244	7.09	31.31
9	4874.00	63.78 PK	74.00	-10.22	1.59 V	254	27.98	35.80
10	4874.00	48.80 AV	54.00	-5.20	1.59 V	254	13.00	35.80
11	7311.00	72.61 PK	74.00	-1.39	1.36 V	253	30.09	42.52
12	7311.00	49.72 AV	54.00	-4.28	1.36 V	253	7.20	42.52

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

CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

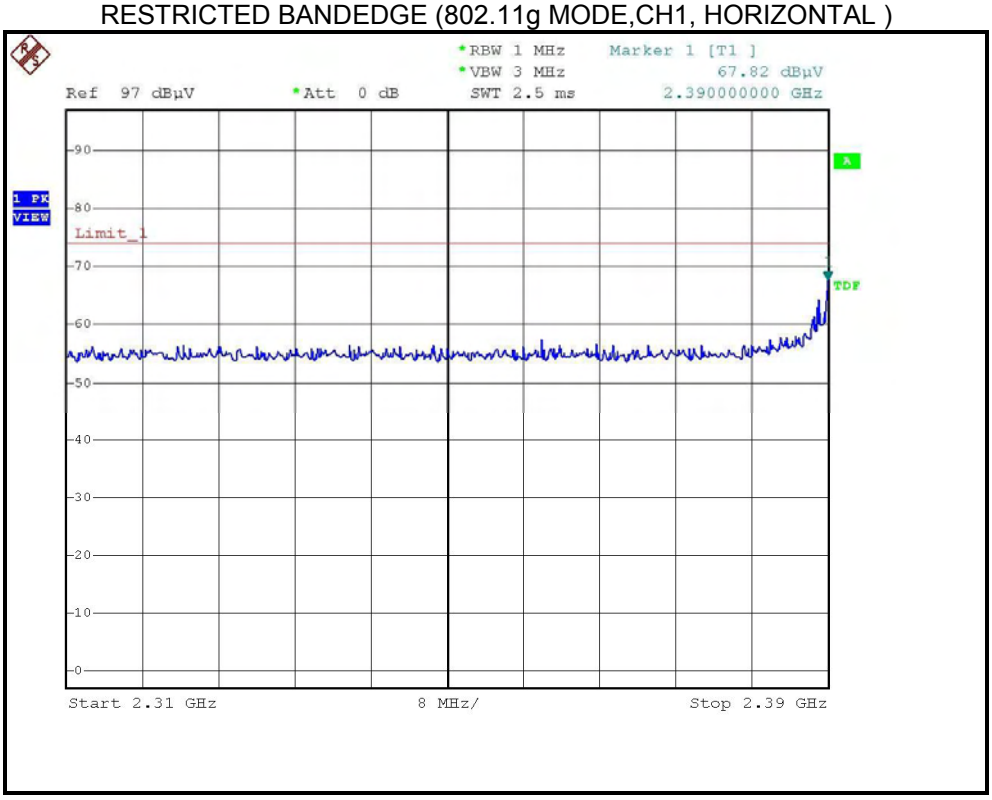
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	105.26 PK			1.26 H	340	74.54	30.72
2	*2462.00	94.47 AV			1.26 H	340	63.75	30.72
3	2483.50	65.65 PK	74.00	-8.35	1.23 H	338	34.83	30.82
4	2483.50	49.16 AV	54.00	-4.84	1.23 H	338	18.34	30.82
5	2688.00	44.10 PK	74.00	-29.90	1.07 H	314	12.79	31.31
6	2688.00	31.10 AV	54.00	-22.90	1.07 H	314	-0.21	31.31
7	4924.00	48.64 PK	74.00	-25.36	1.58 H	229	12.74	35.90
8	4924.00	34.42 AV	54.00	-19.58	1.58 H	229	-1.48	35.90
9	7386.00	53.41 PK	74.00	-20.59	1.59 H	238	10.61	42.80
10	7386.00	39.53 AV	54.00	-14.47	1.59 H	238	-3.27	42.80

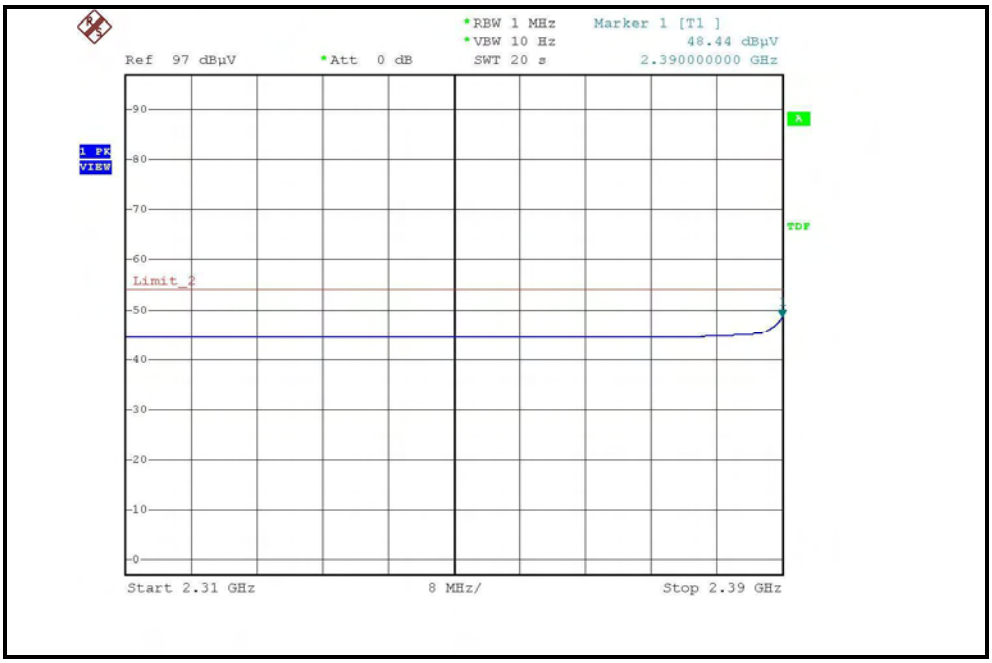
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	112.41 PK			1.04 V	187	81.69	30.72
2	*2462.00	101.65 AV			1.04 V	187	70.93	30.72
3	2483.50	72.21 PK	74.00	-1.79	1.00 V	187	41.39	30.82
4	2483.50	53.35 AV	54.00	-0.65	1.00 V	187	22.53	30.82
5	2688.00	45.10 PK	74.00	-28.90	1.09 V	243	13.79	31.31
6	2688.00	36.70 AV	54.00	-17.30	1.09 V	243	5.39	31.31
7	4924.00	52.12 PK	74.00	-21.88	1.59 V	263	16.22	35.90
8	4924.00	37.21 AV	54.00	-16.79	1.59 V	263	1.31	35.90
9	7386.00	57.13 PK	74.00	-16.87	1.33 V	259	14.33	42.80
10	7386.00	39.27 AV	54.00	-14.73	1.33 V	259	-3.53	42.80

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)





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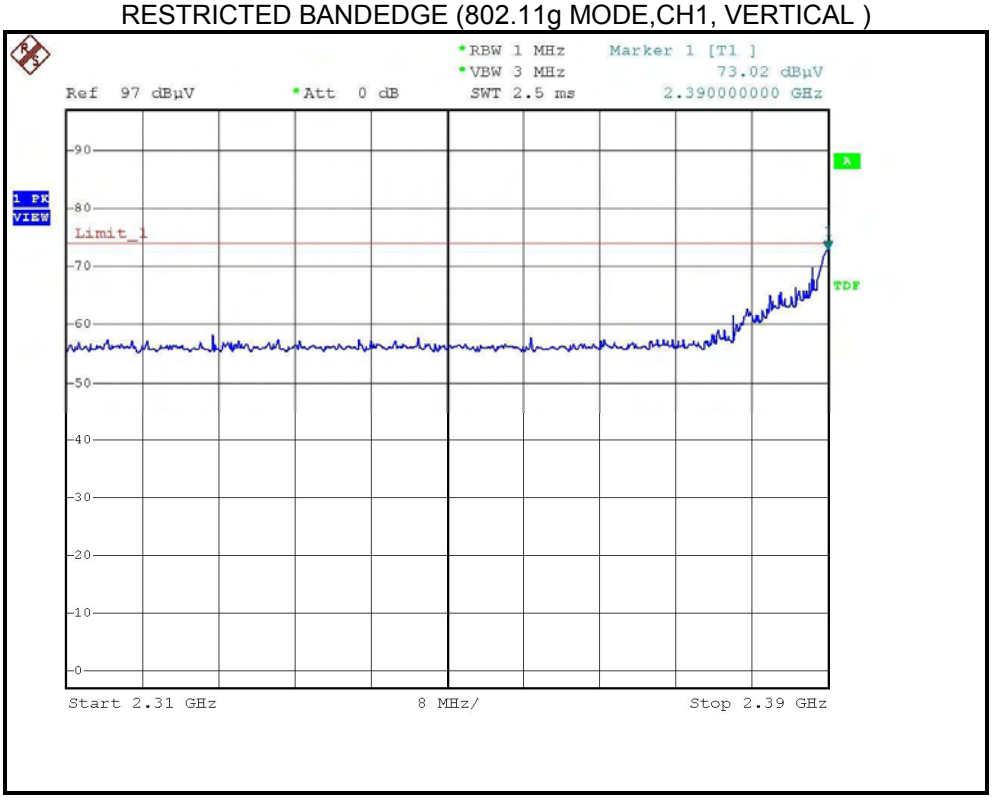

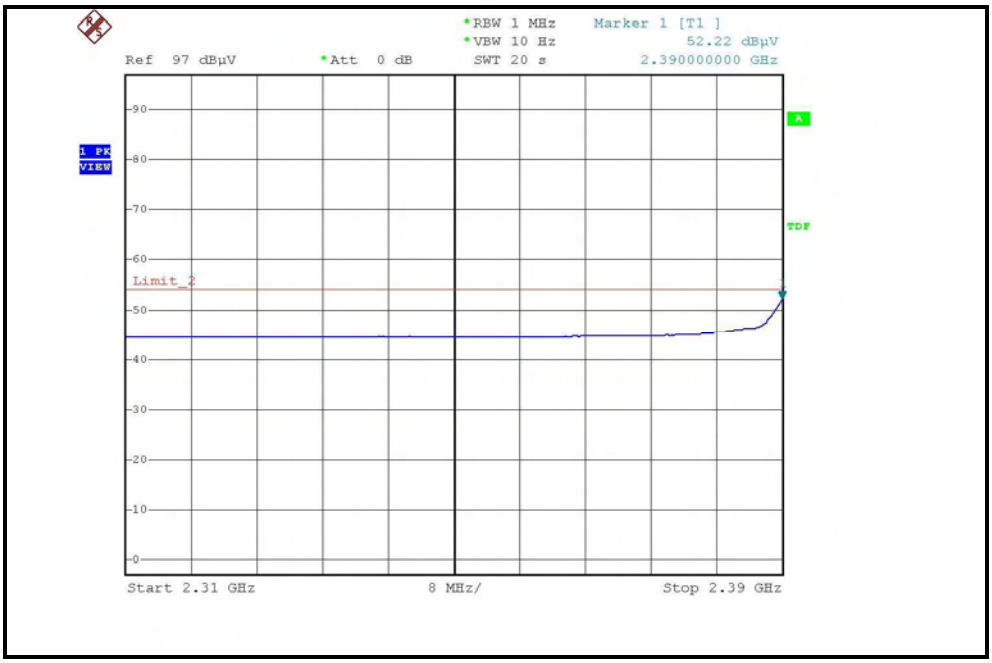

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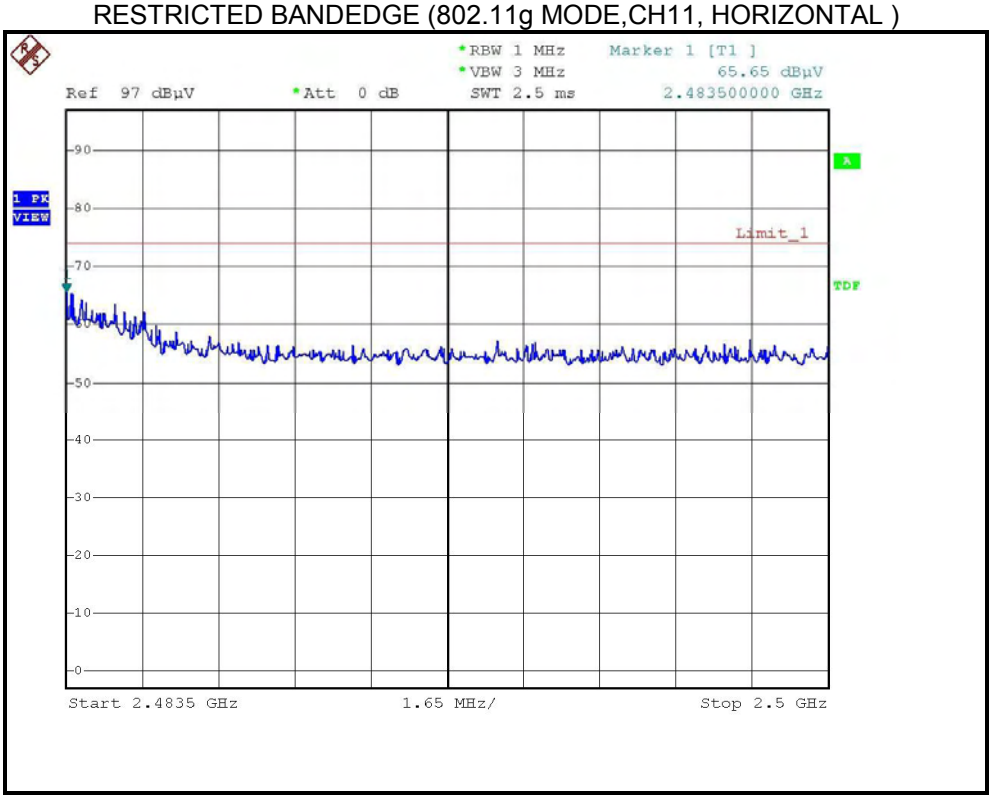

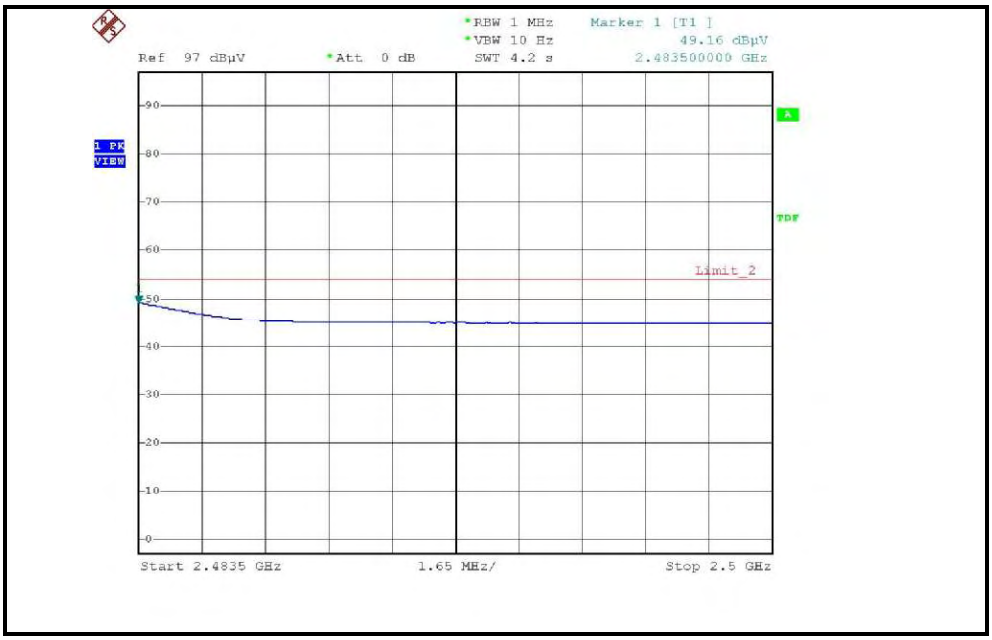

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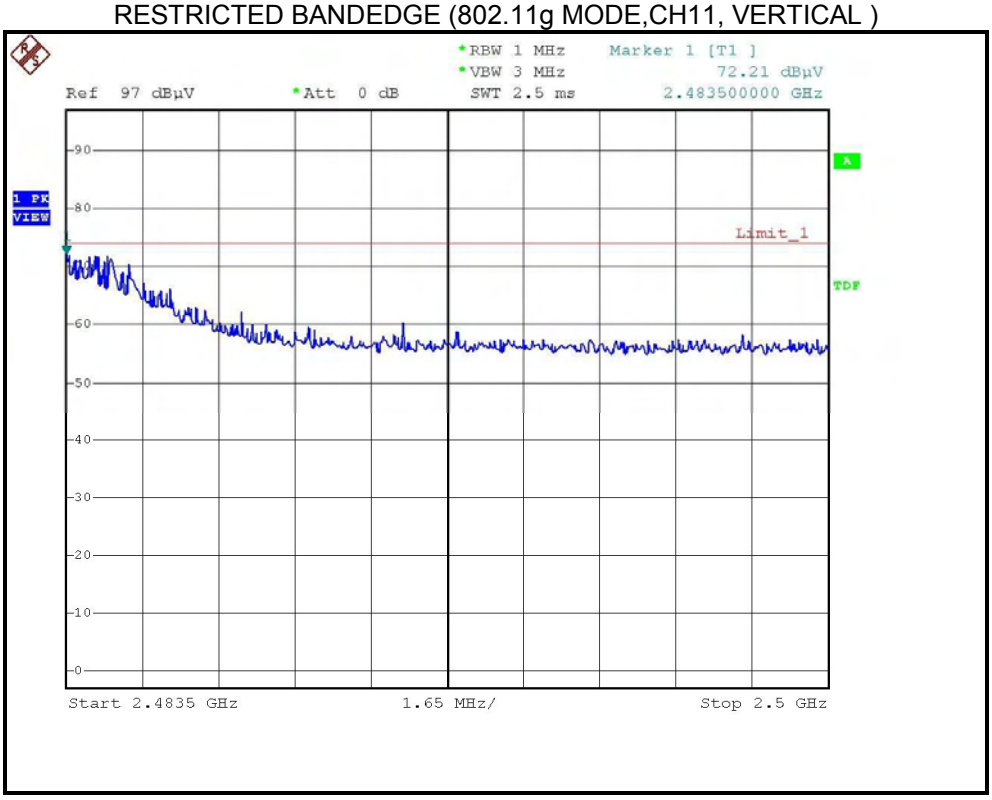
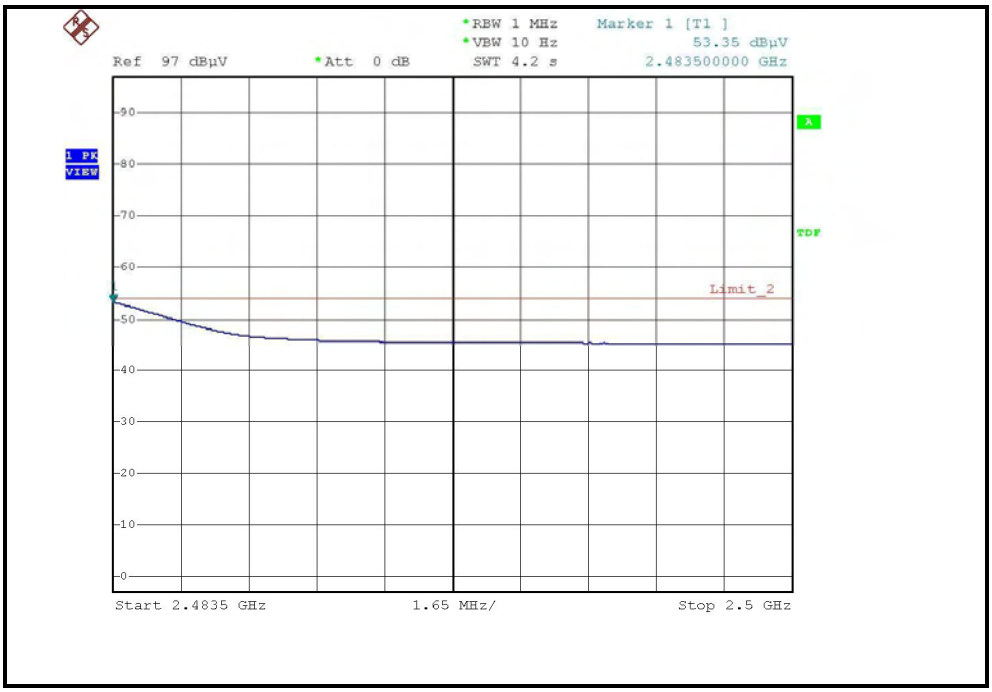




4.2.8 TEST RESULTS (ANTENNA 2)

Below 1GHz Worst-Case Data

TEST MODE	With adapter	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH, 961hPa	**TESTED BY**	Phoenix Huang

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	170.15	33.63 QP	43.50	-9.87	1.00 H	231	20.08	13.55
2	200.08	28.43 QP	43.50	-15.07	1.00 H	331	16.83	11.60
3	300.30	32.81 QP	46.00	-13.19	1.35 H	223	15.98	16.83
4	499.99	38.49 QP	46.00	-7.51	1.59 H	7	16.73	21.76
5	599.99	32.52 QP	46.00	-13.48	1.31 H	201	8.04	24.48
6	700.30	32.82 QP	46.00	-13.18	1.15 H	123	7.01	25.81
7	799.99	35.02 QP	46.00	-10.98	1.00 H	287	7.46	27.56
8	899.99	36.78 QP	46.00	-9.22	1.00 H	235	7.93	28.85

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	60.09	31.92 QP	40.00	-8.08	1.00 V	96	18.23	13.69
2	200.08	27.47 QP	43.50	-16.03	1.00 V	254	15.87	11.60
3	359.90	34.69 QP	46.00	-11.31	1.00 V	298	16.99	17.70
4	499.99	37.64 QP	46.00	-8.36	1.60 V	185	15.88	21.76
5	700.30	34.18 QP	46.00	-11.82	1.34 V	198	8.37	25.81
6	799.99	34.51 QP	46.00	-11.49	1.23 V	342	6.95	27.56
7	899.99	40.47 QP	46.00	-5.53	1.07 V	314	11.62	28.85

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

802.11b DSSS modulation

CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	58.30 PK	74.00	-15.70	1.07 H	151	27.90	30.40
2	2390.00	46.30 AV	54.00	-7.70	1.07 H	151	15.90	30.40
3	*2412.00	104.90 PK			1.07 H	151	74.41	30.49
4	*2412.00	99.90 AV			1.07 H	151	69.41	30.49
5	2688.00	44.00 PK	74.00	-30.00	1.00 H	1	12.69	31.31
6	2688.00	30.30 AV	54.00	-23.70	1.00 H	1	-1.01	31.31
7	4824.00	51.80 PK	74.00	-22.20	1.08 H	228	16.11	35.69
8	4824.00	46.10 AV	54.00	-7.90	1.08 H	228	10.41	35.69
9	7236.00	53.60 PK	74.00	-20.40	1.05 H	257	11.36	42.24
10	7236.00	39.40 AV	54.00	-14.60	1.05 H	257	-2.84	42.24

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	61.00 PK	74.00	-13.00	1.33 V	182	30.60	30.40
2	2390.00	49.30 AV	54.00	-4.70	1.33 V	182	18.90	30.40
3	*2412.00	118.70 PK			1.33 V	181	88.21	30.49
4	*2412.00	113.80 AV			1.33 V	181	83.31	30.49
5	2688.00	45.40 PK	74.00	-28.60	1.28 V	189	14.09	31.31
6	2688.00	37.20 AV	54.00	-16.80	1.28 V	189	5.89	31.31
7	4824.00	55.70 PK	74.00	-18.30	1.16 V	136	20.01	35.69
8	4824.00	53.10 AV	54.00	-0.90	1.16 V	136	17.41	35.69
9	7236.00	53.70 PK	74.00	-20.30	1.24 V	183	11.46	42.24
10	7236.00	39.60 AV	54.00	-14.40	1.24 V	183	-2.64	42.24

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	105.50 PK			1.06 H	152	74.89	30.61
2	*2437.00	100.70 AV			1.06 H	152	70.09	30.61
3	2688.00	44.10 PK	74.00	-29.90	1.00 H	2	12.79	31.31
4	2688.00	30.40 AV	54.00	-23.60	1.00 H	2	-0.91	31.31
5	4874.00	51.20 PK	74.00	-22.80	1.06 H	227	15.40	35.80
6	4874.00	44.90 AV	54.00	-9.10	1.06 H	227	9.10	35.80
7	7311.00	53.80 PK	74.00	-20.20	1.09 H	243	11.28	42.52
8	7311.00	39.50 AV	54.00	-14.50	1.09 H	243	-3.02	42.52

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	1688.00	45.60 PK	74.00	-28.40	1.29 V	188	17.45	28.15
2	1688.00	37.40 AV	54.00	-16.60	1.29 V	188	9.25	28.15
3	*2437.00	119.50 PK			1.33 V	182	88.89	30.61
4	*2437.00	114.80 AV			1.33 V	182	84.19	30.61
5	4874.00	55.10 PK	74.00	-18.90	1.15 V	138	19.30	35.80
6	4874.00	52.20 AV	54.00	-1.80	1.15 V	138	16.40	35.80
7	7311.00	54.10 PK	74.00	-19.90	1.21 V	174	11.58	42.52
8	7311.00	39.90 AV	54.00	-14.10	1.21 V	174	-2.62	42.52

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

CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

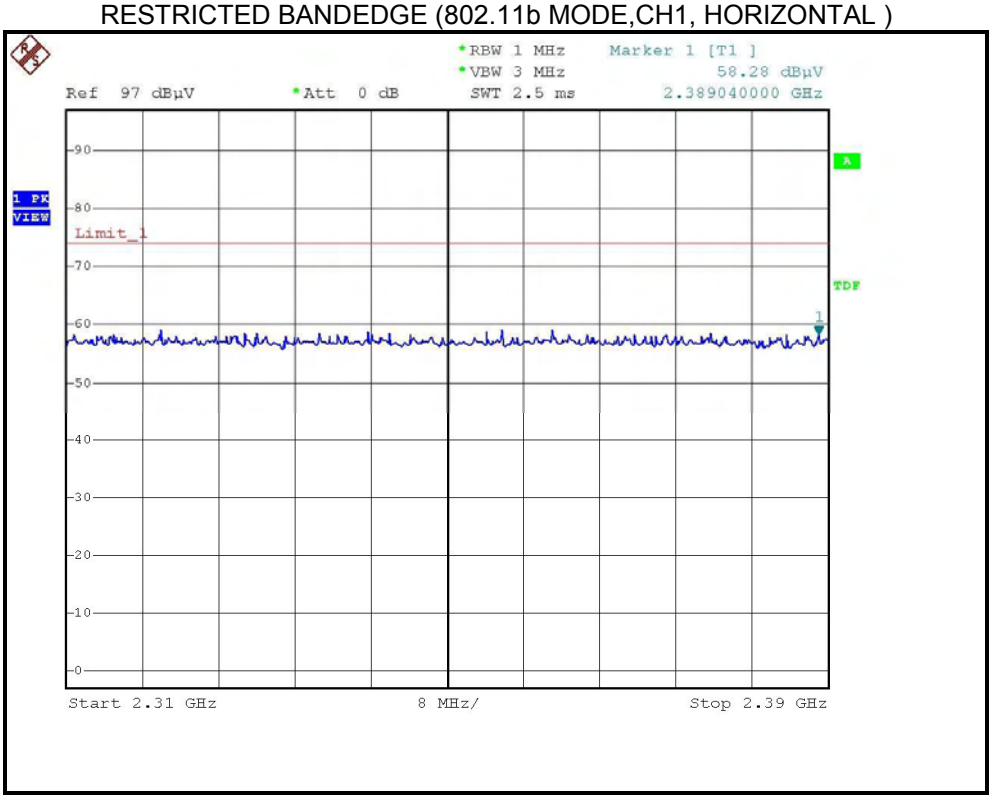
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	102.10 PK			1.07 H	153	71.38	30.72
2	*2462.00	97.30 AV			1.07 H	153	66.58	30.72
3	2488.00	58.80 PK	74.00	-15.20	1.07 H	153	27.96	30.84
4	2488.00	46.50 AV	54.00	-7.50	1.07 H	153	15.66	30.84
5	2688.00	44.20 PK	74.00	-29.80	1.00 H	1	12.89	31.31
6	2688.00	30.50 AV	54.00	-23.50	1.00 H	1	-0.81	31.31
7	4924.00	49.80 PK	74.00	-24.20	1.07 H	229	13.90	35.90
8	4924.00	42.10 AV	54.00	-11.90	1.07 H	229	6.20	35.90
9	7386.00	53.70 PK	74.00	-20.30	1.04 H	248	10.90	42.80
10	7386.00	39.60 AV	54.00	-14.40	1.04 H	248	-3.20	42.80

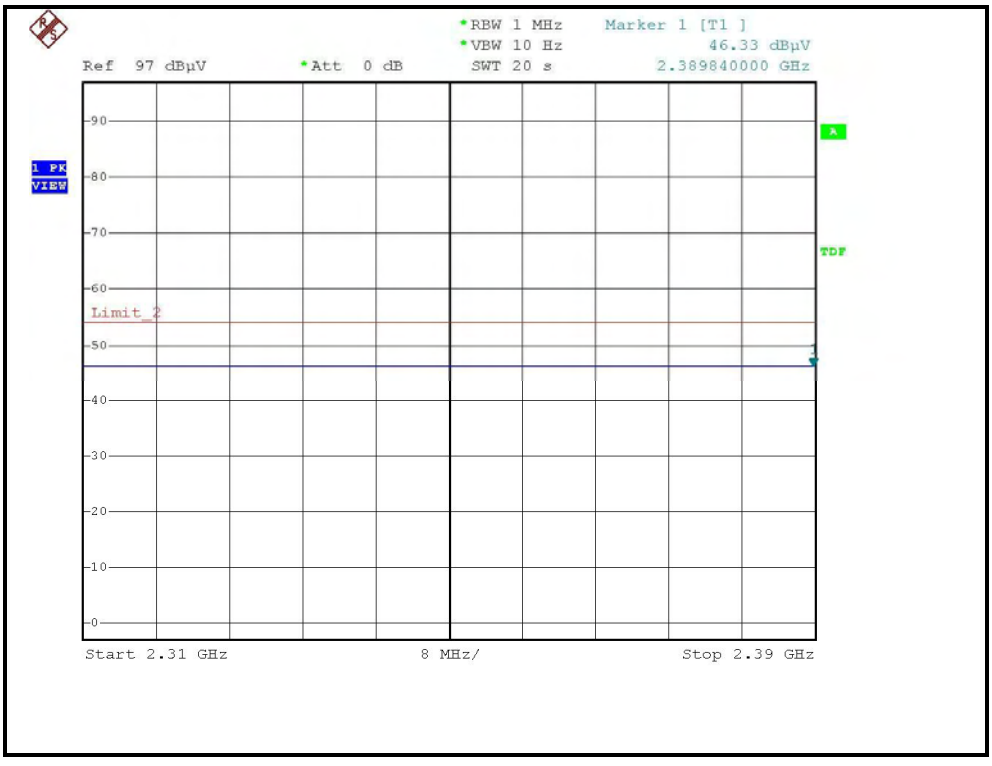
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	117.10 PK			1.47 V	181	86.38	30.72
2	*2462.00	112.60 AV			1.47 V	181	81.88	30.72
3	2488.00	64.45 PK	74.00	-9.55	1.47 V	182	33.61	30.84
4	2488.00	53.30 AV	54.00	-0.70	1.47 V	182	22.46	30.84
5	2688.00	45.50 PK	74.00	-28.50	1.28 V	187	14.19	31.31
6	2688.00	37.50 AV	54.00	-16.50	1.28 V	187	6.19	31.31
7	4924.00	53.00 PK	74.00	-21.00	1.14 V	139	17.10	35.90
8	4924.00	50.30 AV	54.00	-3.70	1.14 V	139	14.40	35.90
9	7386.00	53.80 PK	74.00	-20.20	1.23 V	177	11.00	42.80
10	7386.00	39.80 AV	54.00	-14.20	1.23 V	177	-3.00	42.80

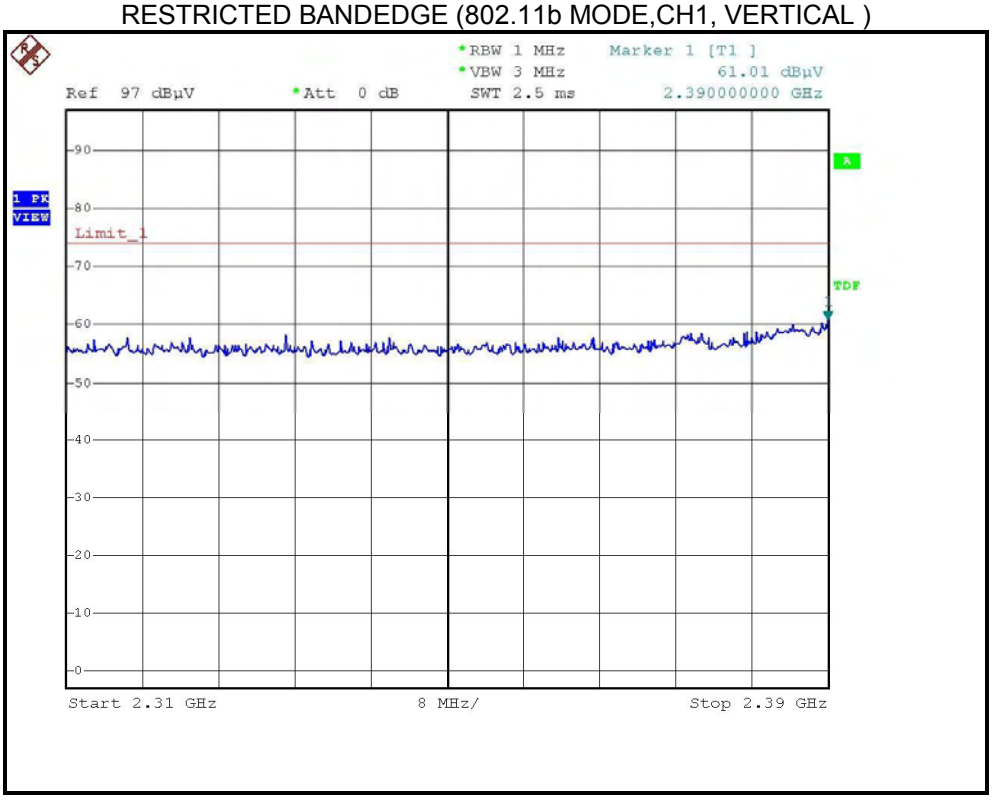
REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

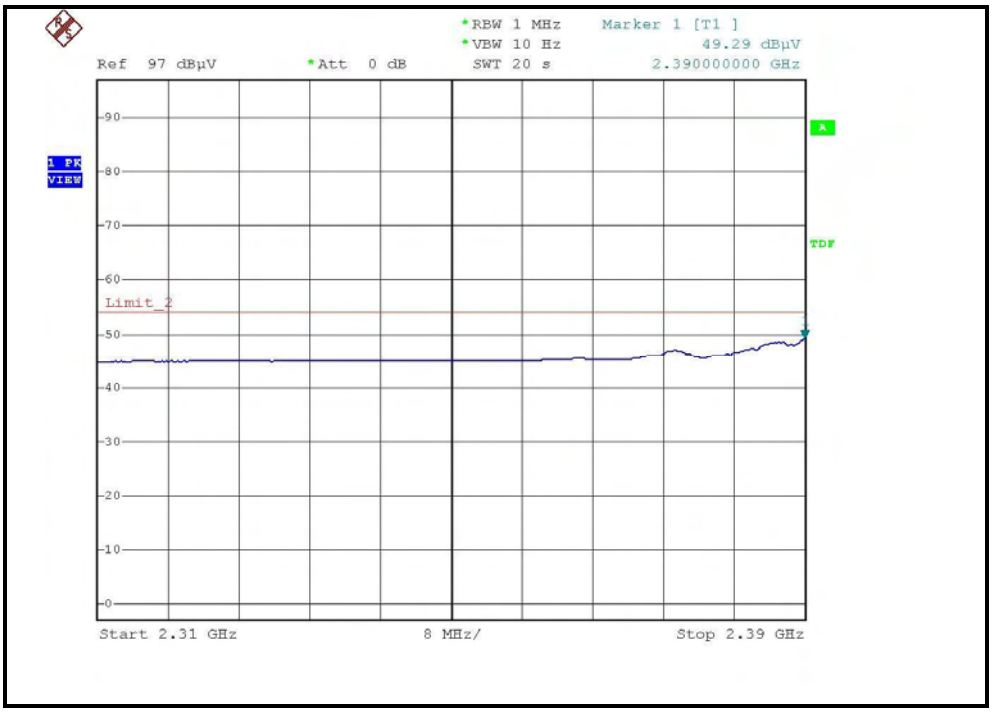
RESTRICTED BANDEDGE (802.11b MODE,CH1, HORIZONTAL)



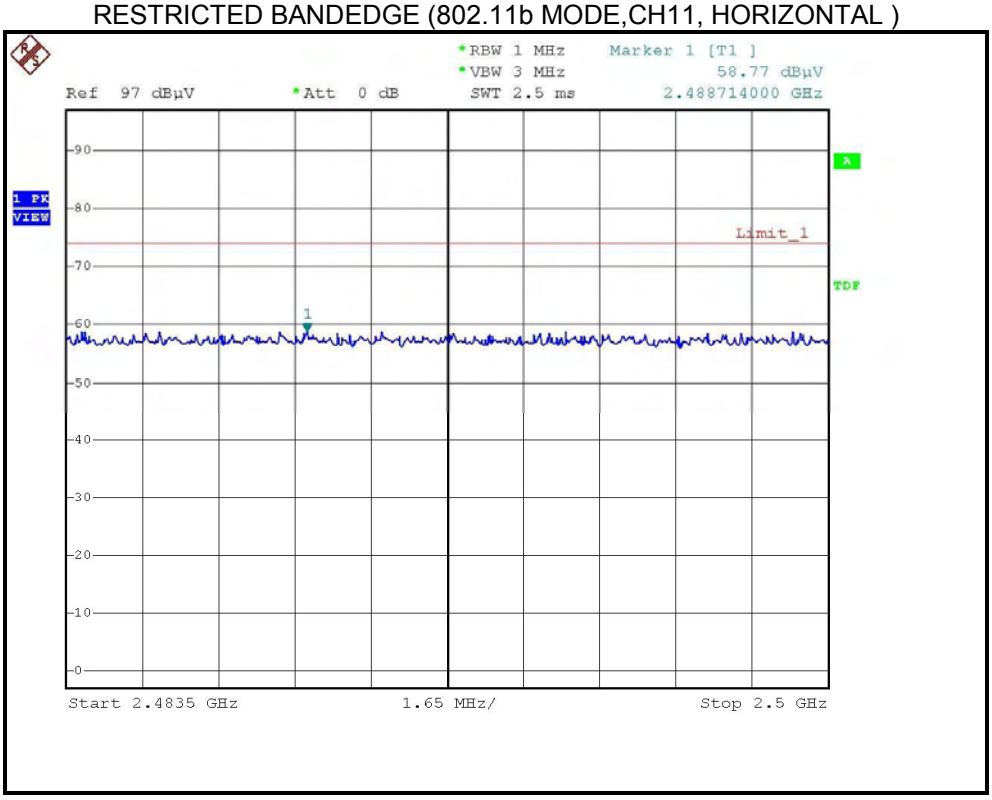


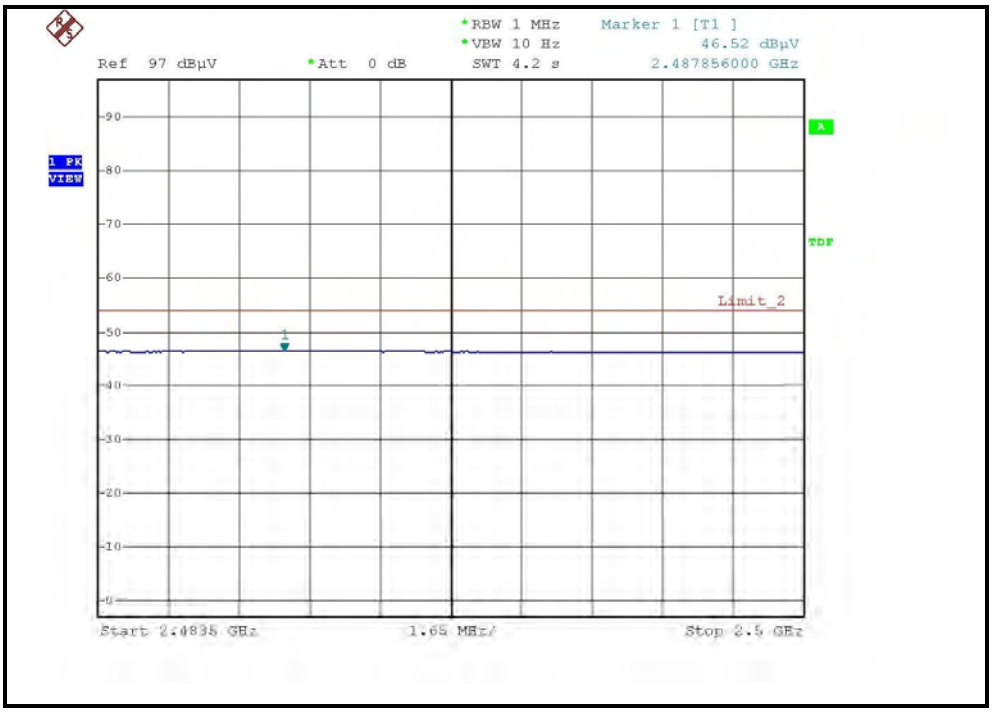
RESTRICTED BANDEDGE (802.11b MODE,CH1, VERTICAL)



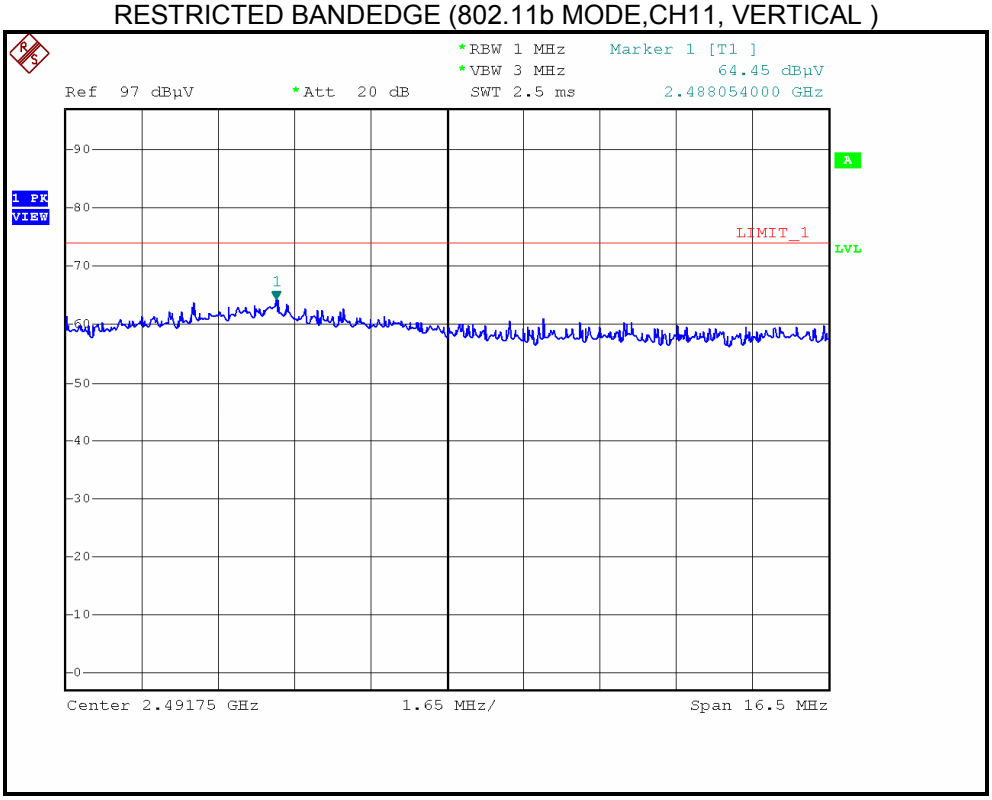


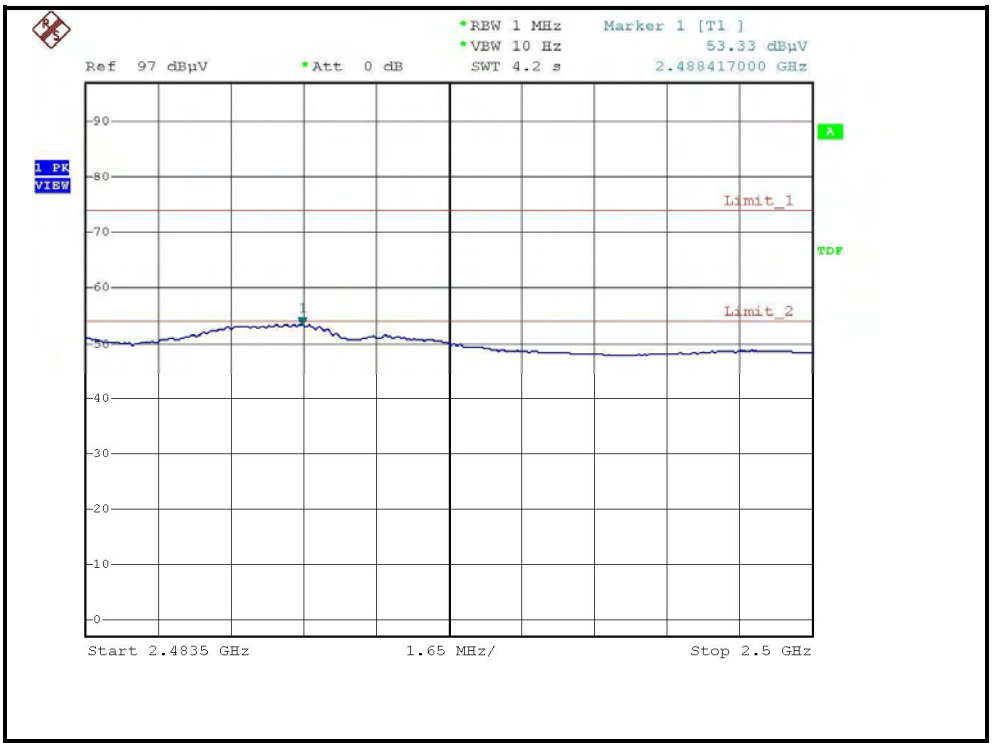
RESTRICTED BANDEDGE (802.11b MODE,CH11, HORIZONTAL)





RESTRICTED BANDEDGE (802.11b MODE,CH11, VERTICAL)





802.11g OFDM modulation

CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	59.00 PK	74.00	-15.00	1.06 H	150	28.60	30.40
2	2390.00	46.70 AV	54.00	-7.30	1.06 H	150	16.30	30.40
3	*2412.00	105.20 PK			1.06 H	150	74.71	30.49
4	*2412.00	94.40 AV			1.06 H	150	63.91	30.49
5	2688.00	43.80 PK	74.00	-30.20	1.00 H	3	12.49	31.31
6	2688.00	30.30 AV	54.00	-23.70	1.00 H	3	-1.01	31.31
7	4824.00	48.70 PK	74.00	-25.30	1.09 H	226	13.01	35.69
8	4824.00	34.40 AV	54.00	-19.60	1.09 H	226	-1.29	35.69
9	7236.00	53.50 PK	74.00	-20.50	1.07 H	257	11.26	42.24
10	7236.00	39.40 AV	54.00	-14.60	1.07 H	257	-2.84	42.24

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	72.60 PK	74.00	-1.40	1.36 V	180	42.20	30.40
2	2390.00	53.40 AV	54.00	-0.60	1.36 V	180	23.00	30.40
3	*2412.00	118.80 PK			1.33 V	182	88.31	30.49
4	*2412.00	108.30 AV			1.33 V	182	77.81	30.49
5	2688.00	45.40 PK	74.00	-28.60	1.27 V	189	14.09	31.31
6	2688.00	37.30 AV	54.00	-16.70	1.27 V	189	5.99	31.31
7	4824.00	56.70 PK	74.00	-17.30	1.16 V	137	21.01	35.69
8	4824.00	40.60 AV	54.00	-13.40	1.16 V	137	4.91	35.69
9	7236.00	53.60 PK	74.00	-20.40	1.31 V	186	11.36	42.24
10	7236.00	39.40 AV	54.00	-14.60	1.31 V	186	-2.84	42.24

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	58.40 PK	74.00	-15.60	1.06 H	150	28.00	30.40
2	2390.00	46.40 AV	54.00	-7.60	1.06 H	150	16.00	30.40
3	*2437.00	110.90 PK			1.06 H	150	80.29	30.61
4	*2437.00	100.80 AV			1.06 H	150	70.19	30.61
5	2483.50	58.30 PK	74.00	-15.70	1.06 H	150	27.48	30.82
6	2483.50	46.40 AV	54.00	-7.60	1.06 H	150	15.58	30.82
7	2688.00	44.30 PK	74.00	-29.70	1.00 H	1	12.99	31.31
8	2688.00	30.50 AV	54.00	-23.50	1.00 H	1	-0.81	31.31
9	4874.00	53.10 PK	74.00	-20.90	1.05 H	227	17.30	35.80
10	4874.00	39.00 AV	54.00	-15.00	1.05 H	227	3.20	35.80
11	7311.00	63.50 PK	74.00	-10.50	1.08 H	249	20.98	42.52
12	7311.00	40.30 AV	54.00	-13.70	1.08 H	249	-2.22	42.52

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	65.20 PK	74.00	-8.80	1.32 V	178	34.80	30.40
2	2390.00	50.70 AV	54.00	-3.30	1.32 V	178	20.30	30.40
3	*2437.00	125.00 PK			1.32 V	178	94.39	30.61
4	*2437.00	114.60 AV			1.32 V	178	83.99	30.61
5	2483.50	72.70 PK	74.00	-1.30	1.32 V	181	41.88	30.82
6	2483.50	49.60 AV	54.00	-4.40	1.32 V	181	18.78	30.82
7	2688.00	47.10 PK	74.00	-26.90	1.28 V	187	15.79	31.31
8	2688.00	38.60 AV	54.00	-15.40	1.28 V	187	7.29	31.31
9	4874.00	60.00 PK	74.00	-14.00	1.16 V	140	24.20	35.80
10	4874.00	46.30 AV	54.00	-7.70	1.16 V	140	10.50	35.80
11	7311.00	73.40 PK	74.00	-0.60	1.01 V	180	30.88	42.52
12	7311.00	44.70 AV	54.00	-9.30	1.01 V	180	2.18	42.52

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

CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

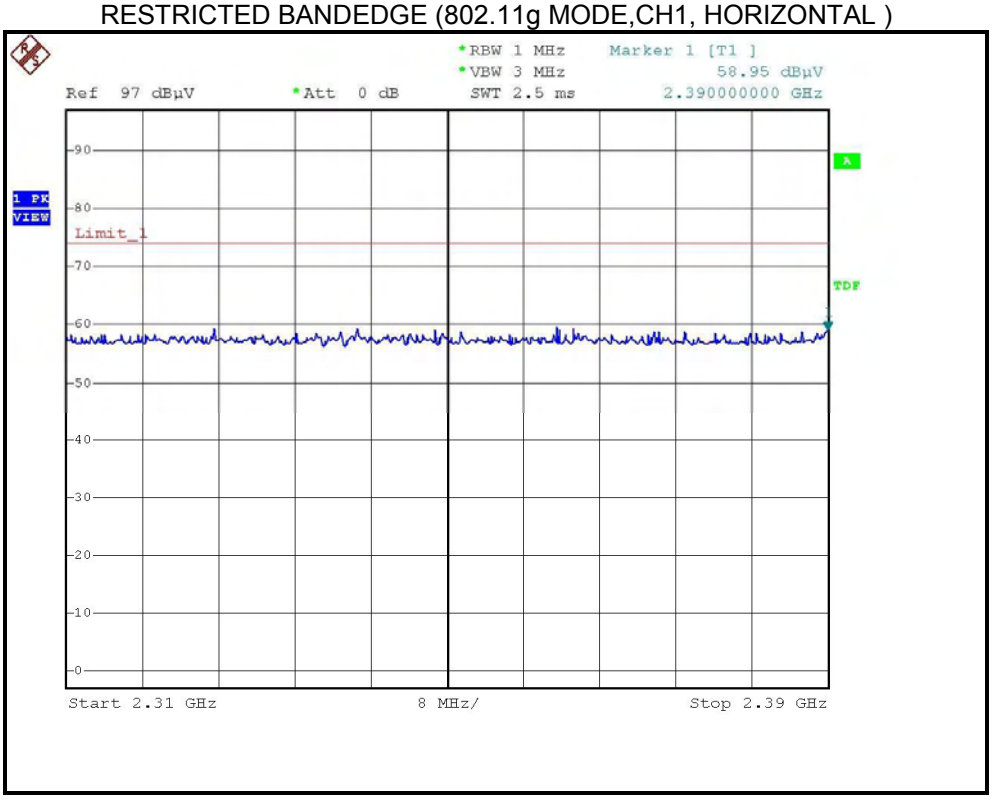
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	99.80 PK			1.08 H	152	69.08	30.72
2	*2462.00	88.60 AV			1.08 H	152	57.88	30.72
3	2483.50	59.10 PK	74.00	-14.90	1.08 H	152	28.28	30.82
4	2483.50	46.70 AV	54.00	-7.30	1.08 H	152	15.88	30.82
5	2688.00	43.90 PK	74.00	-30.10	1.00 H	2	12.59	31.31
6	2688.00	30.30 AV	54.00	-23.70	1.00 H	2	-1.01	31.31
7	4924.00	47.50 PK	74.00	-26.50	1.04 H	228	11.60	35.90
8	4924.00	33.40 AV	54.00	-20.60	1.04 H	228	-2.50	35.90
9	7386.00	53.50 PK	74.00	-20.50	1.06 H	245	10.70	42.80
10	7386.00	39.40 AV	54.00	-14.60	1.06 H	245	-3.40	42.80

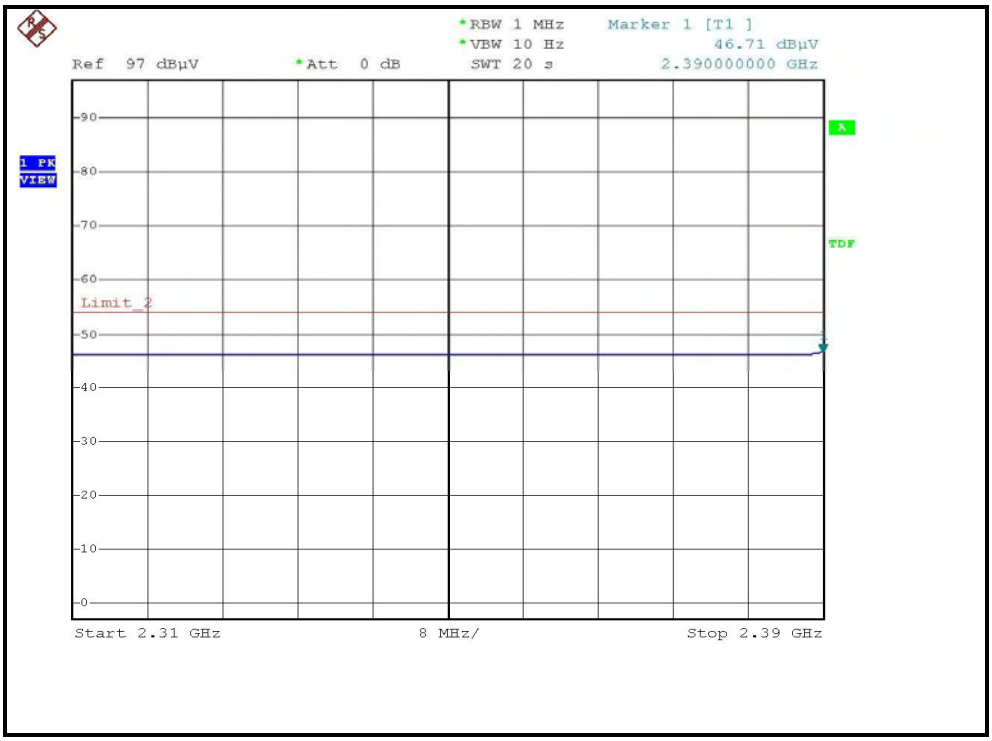
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	115.40 PK			1.49 V	180	84.68	30.72
2	*2462.00	104.70 AV			1.49 V	180	73.98	30.72
3	2483.50	73.40 PK	74.00	-0.60	1.49 V	179	42.58	30.82
4	**2483.50**	**53.60 AV**	**54.00**	**-0.40**	**1.49 V**	**179**	**22.78**	**30.82**
5	2688.00	45.30 PK	74.00	-28.70	1.27 V	188	13.99	31.31
6	2688.00	37.20 AV	54.00	-16.80	1.27 V	188	5.89	31.31
7	4924.00	48.30 PK	74.00	-25.70	1.15 V	138	12.40	35.90
8	4924.00	34.10 AV	54.00	-19.90	1.15 V	138	-1.80	35.90
9	7386.00	53.40 PK	74.00	-20.60	1.27 V	182	10.60	42.80
10	7386.00	39.80 AV	54.00	-14.20	1.27 V	182	-3.00	42.80

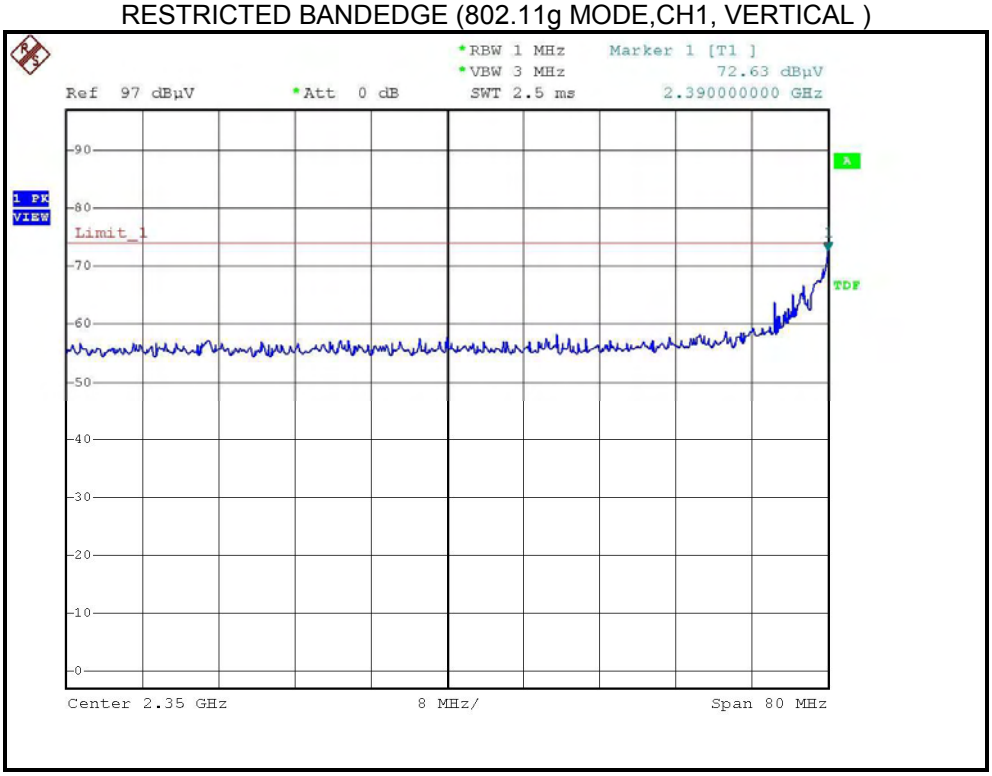
REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

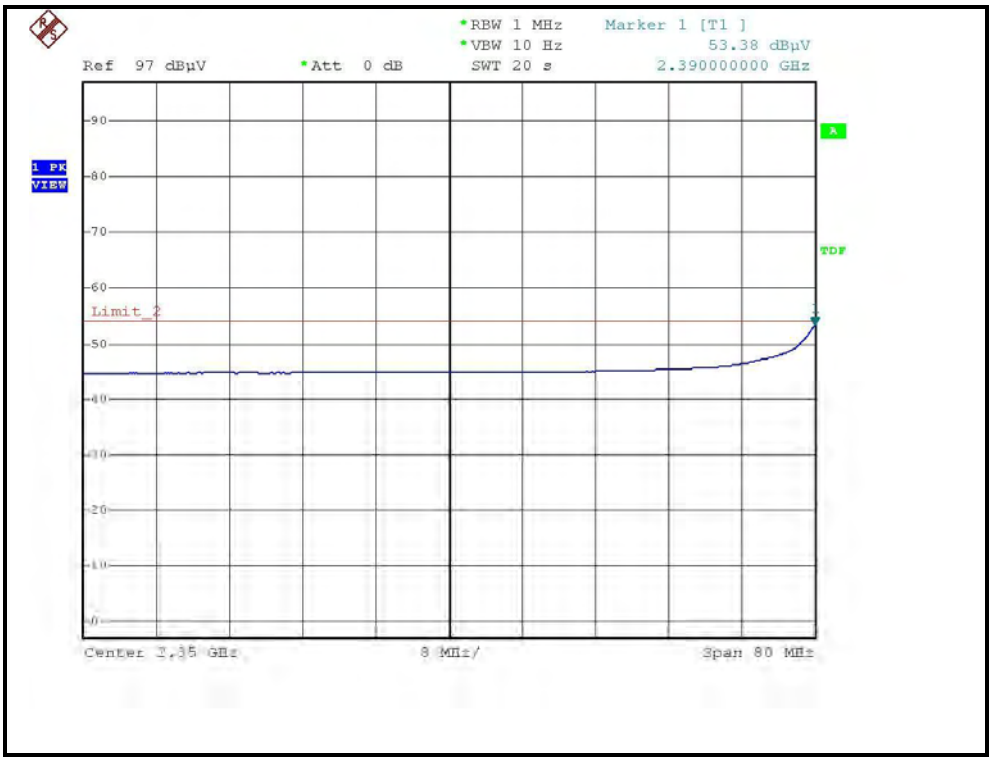
RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)



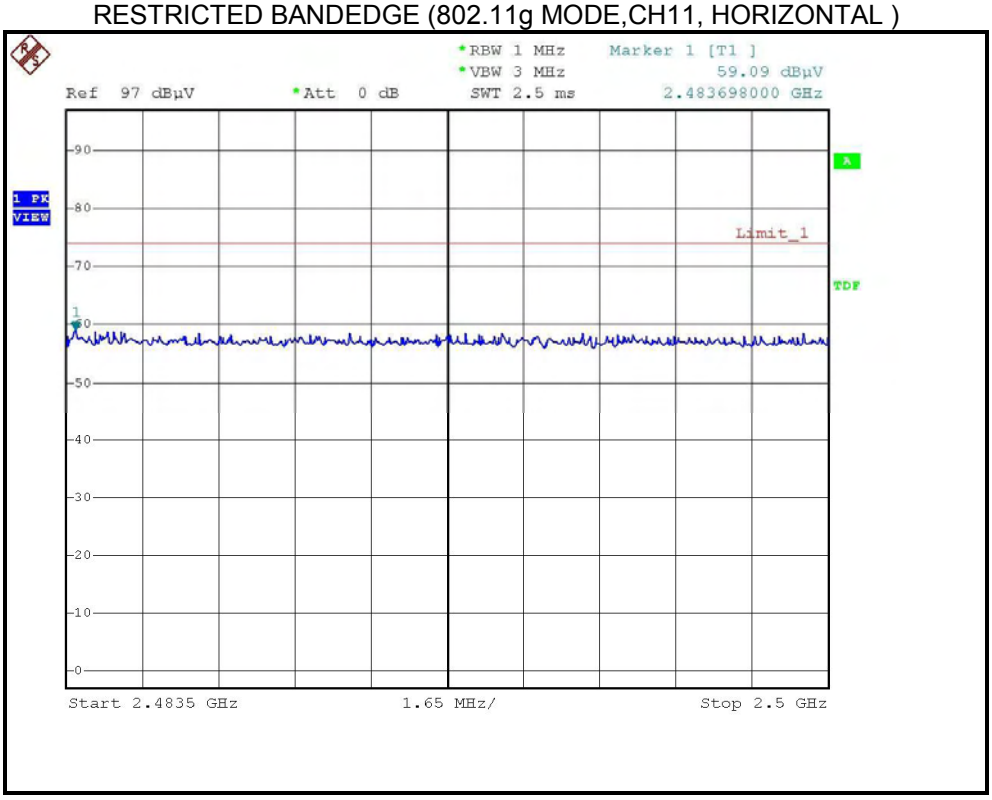


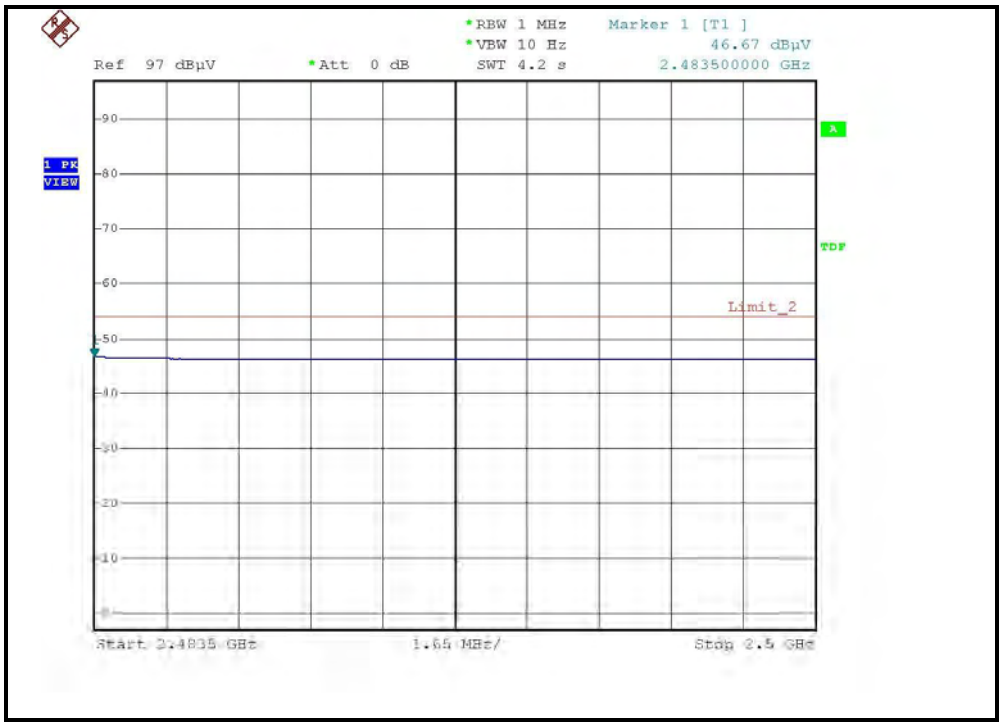
RESTRICTED BANDEDGE (802.11g MODE,CH1, VERTICAL)



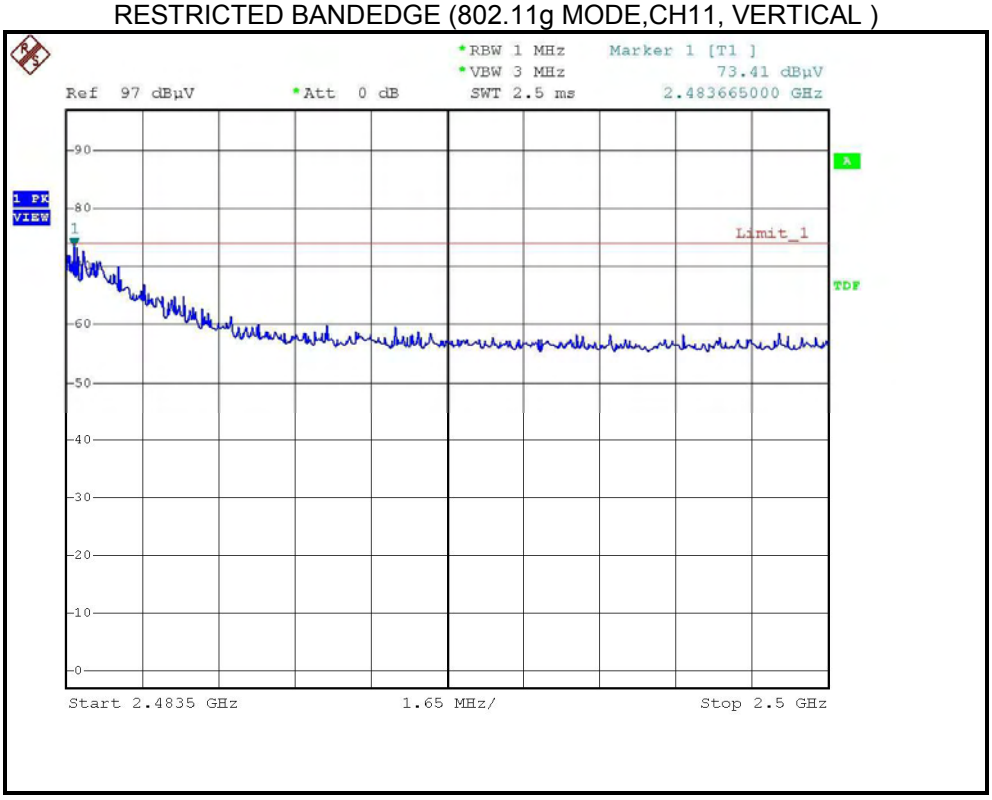


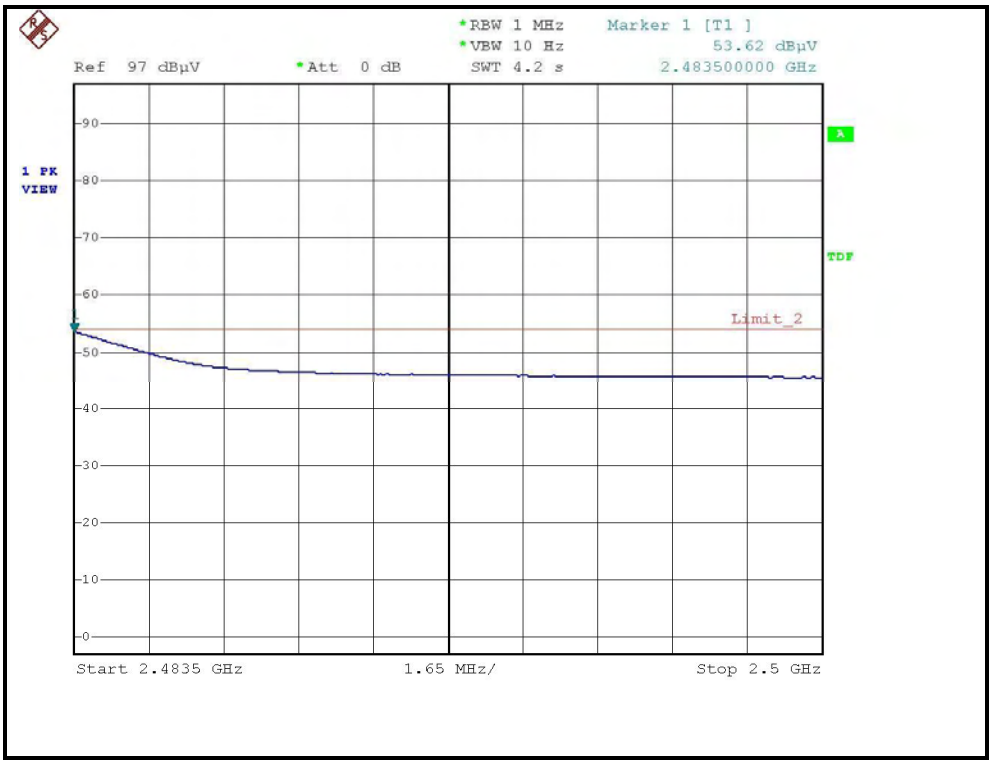
RESTRICTED BANDEDGE (802.11g MODE,CH11, HORIZONTAL)





RESTRICTED BANDEDGE (802.11g MODE,CH11, VERTICAL)





4.2.9 TEST RESULTS (ANTENNA 3)

Below 1GHz Worst-Case Data

TEST MODE	With adapter	**FREQUENCY RANGE**	Below 1000MHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Quasi-Peak
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH, 961hPa	**TESTED BY**	Phoenix Huang

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	170.83	32.34 QP	43.50	-11.16	1.00 H	193	18.83	13.51
2	200.08	28.00 QP	43.50	-15.50	1.00 H	267	16.40	11.60
3	300.30	33.04 QP	46.00	-12.96	1.35 H	156	16.21	16.83
4	500.00	39.70 QP	46.00	-6.30	1.72 H	319	17.94	21.76
5	700.00	33.76 QP	46.00	-12.24	1.20 H	308	7.96	25.80
6	799.99	34.11 QP	46.00	-11.89	1.00 H	339	6.55	27.56
7	899.99	35.66 QP	46.00	-10.34	1.00 H	245	6.81	28.85

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	68.20	33.70 QP	40.00	-6.30	1.00 V	328	20.93	12.77
2	108.83	35.46 QP	43.50	-8.04	1.00 V	273	24.92	10.54
3	200.21	27.86 QP	43.50	-15.64	1.00 V	4	16.25	11.61
4	360.00	27.45 QP	46.00	-18.55	1.21 V	129	9.74	17.71
5	500.00	37.53 QP	46.00	-8.47	1.64 V	26	15.77	21.76
6	600.00	32.01 QP	46.00	-13.99	1.21 V	194	7.53	24.48
7	800.00	36.08 QP	46.00	-9.92	1.31 V	83	8.52	27.56
8	899.99	38.13 QP	46.00	-7.87	1.00 V	242	9.28	28.85

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

802.11b DSSS modulation

CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	55.71 PK	74.00	-18.29	1.13 H	236	25.31	30.40
2	2390.00	44.60 AV	54.00	-9.40	1.13 H	236	14.20	30.40
3	*2412.00	98.60 PK			1.03 H	233	68.11	30.49
4	*2412.00	92.80 AV			1.03 H	233	62.31	30.49
5	2688.00	44.50 PK	74.00	-29.50	1.09 H	275	13.19	31.31
6	2688.00	31.80 AV	54.00	-22.20	1.09 H	275	0.49	31.31
7	4824.00	47.60 PK	74.00	-26.40	1.22 H	242	11.91	35.69
8	4824.00	39.00 AV	54.00	-15.00	1.22 H	242	3.31	35.69
9	7236.00	52.50 PK	74.00	-21.50	1.06 H	54	10.26	42.24
10	7236.00	39.20 AV	54.00	-14.80	1.06 H	54	-3.04	42.24

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	58.49 PK	74.00	-15.51	1.09 V	237	28.09	30.40
2	2390.00	46.89 AV	54.00	-7.11	1.09 V	237	16.49	30.40
3	*2412.00	113.20 PK			1.26 V	243	82.71	30.49
4	*2412.00	108.50 AV			1.26 V	243	78.01	30.49
5	2688.00	46.50 PK	74.00	-27.50	1.26 V	224	15.19	31.31
6	2688.00	32.80 AV	54.00	-21.20	1.26 V	224	1.49	31.31
7	4824.00	55.50 PK	74.00	-18.50	1.30 V	250	19.81	35.69
8	4824.00	52.70 AV	54.00	-1.30	1.30 V	250	17.01	35.69
9	7236.00	53.00 PK	74.00	-21.00	1.16 V	88	10.76	42.24
10	7236.00	39.20 AV	54.00	-14.80	1.16 V	88	-3.04	42.24

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	99.10 PK			1.48 H	241	68.49	30.61
2	*2437.00	93.20 AV			1.48 H	241	62.59	30.61
3	2688.00	44.80 PK	74.00	-29.20	1.12 H	258	13.49	31.31
4	2688.00	32.20 AV	54.00	-21.80	1.12 H	258	0.89	31.31
5	4874.00	48.20 PK	74.00	-25.80	1.25 H	238	12.40	35.80
6	4874.00	39.87 AV	54.00	-14.13	1.25 H	238	4.07	35.80
7	7311.00	53.20 PK	74.00	-20.80	1.12 H	60	10.68	42.52
8	7311.00	40.20 AV	54.00	-13.80	1.12 H	60	-2.32	42.52

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	114.10 PK			1.13 V	235	83.49	30.61
2	*2437.00	109.60 AV			1.13 V	235	78.99	30.61
3	2688.00	46.80 PK	74.00	-27.20	1.20 V	218	15.49	31.31
4	2688.00	33.20 AV	54.00	-20.80	1.20 V	218	1.89	31.31
5	4874.00	55.60 PK	74.00	-18.40	1.30 V	275	19.80	35.80
6	4874.00	52.90 AV	54.00	-1.10	1.30 V	275	17.10	35.80
7	7311.00	53.20 PK	74.00	-20.80	1.10 V	72	10.68	42.52
8	7311.00	39.50 AV	54.00	-14.50	1.10 V	72	-3.02	42.52

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

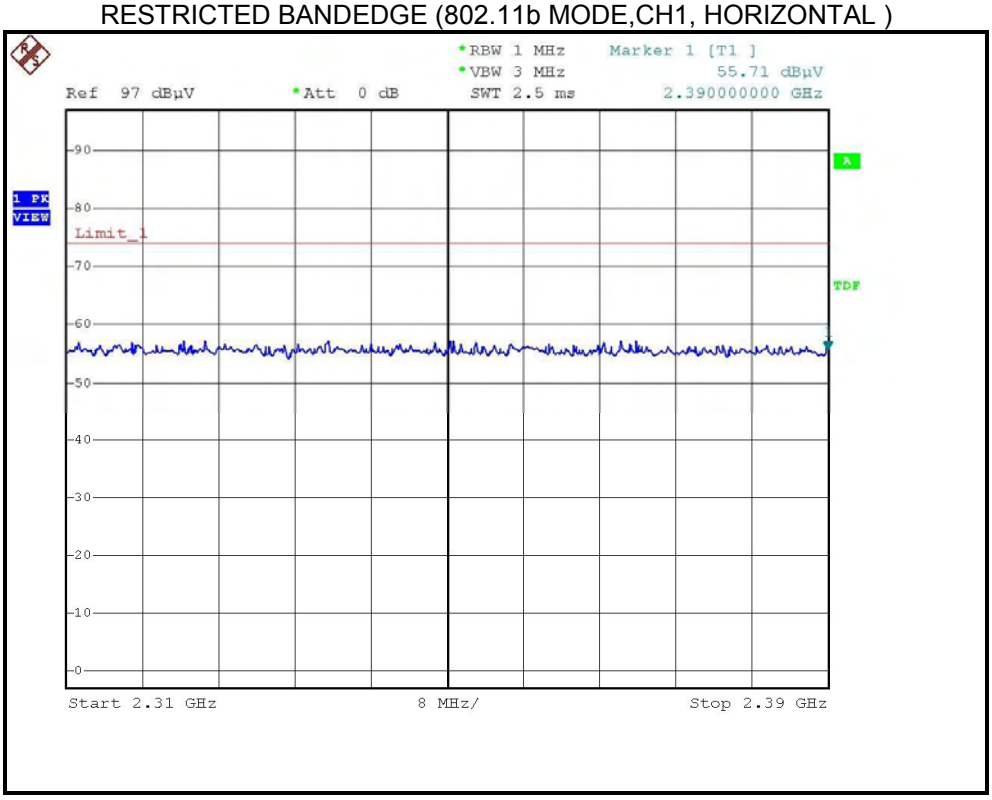
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	CCK	**TRANSFER RATE**	1Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

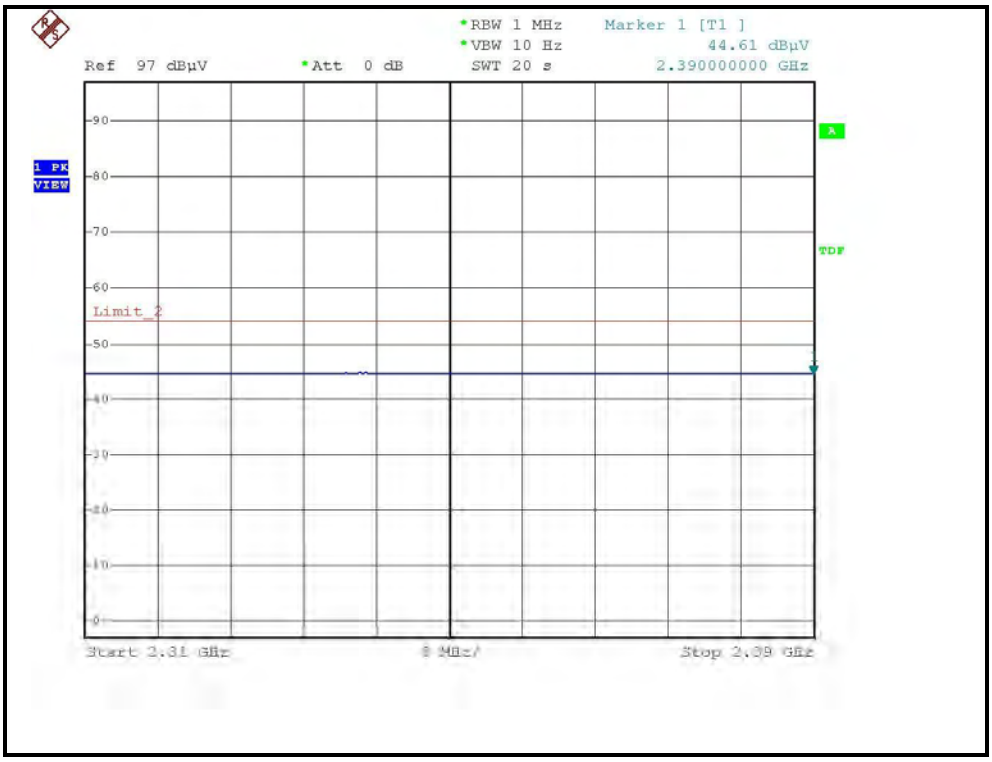
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	100.40 PK			1.48 H	256	69.68	30.72
2	*2462.00	95.20 AV			1.48 H	256	64.48	30.72
3	2487.42	55.77 PK	74.00	-18.23	1.50 H	257	24.94	30.83
4	2487.42	45.08 AV	54.00	-8.92	1.50 H	257	14.25	30.83
5	2688.00	44.60 PK	74.00	-29.40	1.10 H	262	13.29	31.31
6	2688.00	32.00 AV	54.00	-22.00	1.10 H	262	0.69	31.31
7	4924.00	48.60 PK	74.00	-25.40	1.26 H	228	12.70	35.90
8	4924.00	40.40 AV	54.00	-13.60	1.26 H	228	4.50	35.90
9	7386.00	53.00 PK	74.00	-21.00	1.08 H	46	10.20	42.80
10	7386.00	39.80 AV	54.00	-14.20	1.08 H	46	-3.00	42.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	114.70 PK			1.20 V	265	83.98	30.72
2	*2462.00	110.00 AV			1.20 V	265	79.28	30.72
3	2487.16	61.99 PK	74.00	-12.01	1.22 V	263	31.16	30.83
4	2487.16	52.81 AV	54.00	-1.19	1.22 V	263	21.98	30.83
5	2688.00	47.00 PK	74.00	-27.00	1.22 V	220	15.69	31.31
6	2688.00	33.20 AV	54.00	-20.80	1.22 V	220	1.89	31.31
7	4924.00	55.00 PK	74.00	-19.00	1.21 V	234	19.10	35.90
8	4924.00	52.00 AV	54.00	-2.00	1.21 V	234	16.10	35.90
9	7386.00	53.80 PK	74.00	-20.20	1.14 V	95	11.00	42.80
10	7386.00	40.00 AV	54.00	-14.00	1.14 V	95	-2.80	42.80

REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

RESTRICTED BANDEDGE (802.11b MODE,CH1, HORIZONTAL)





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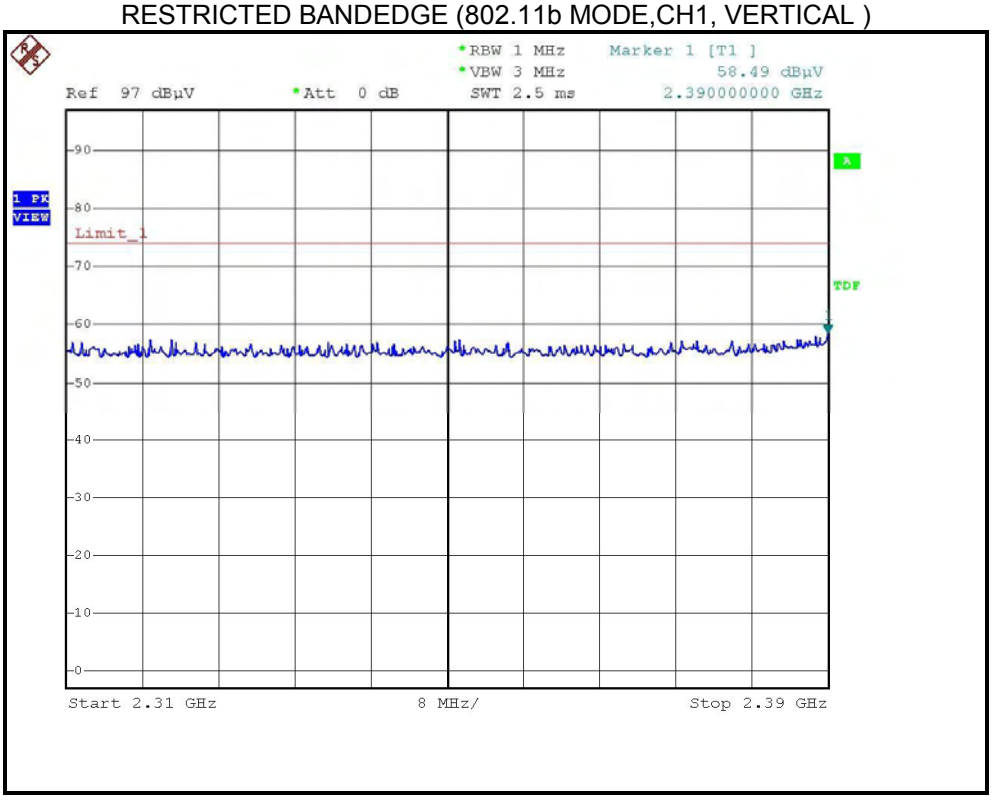

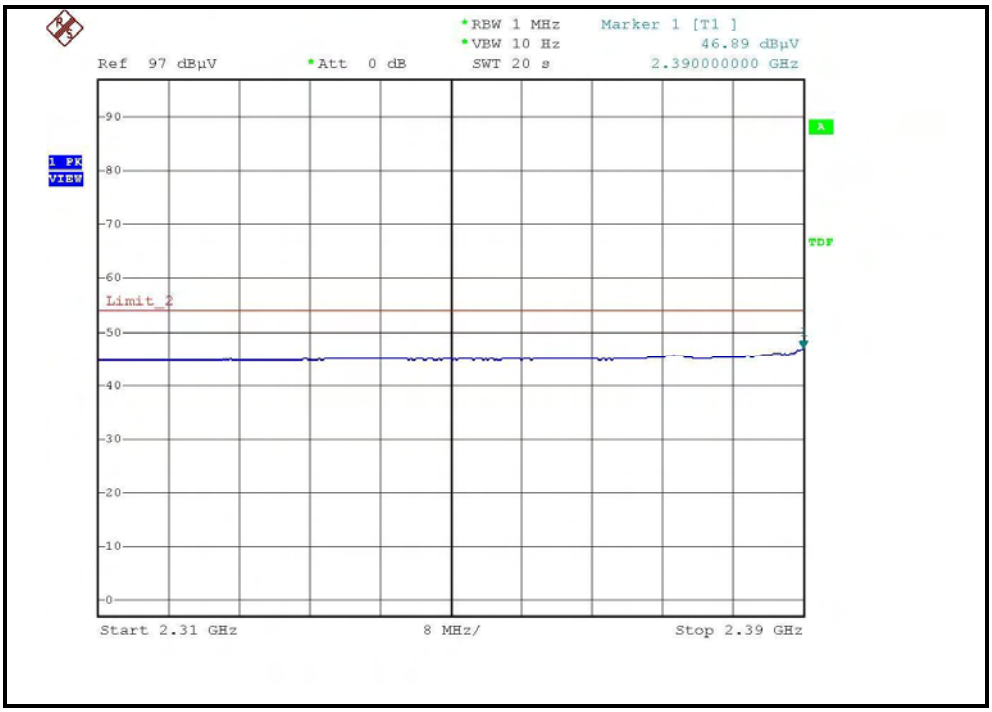

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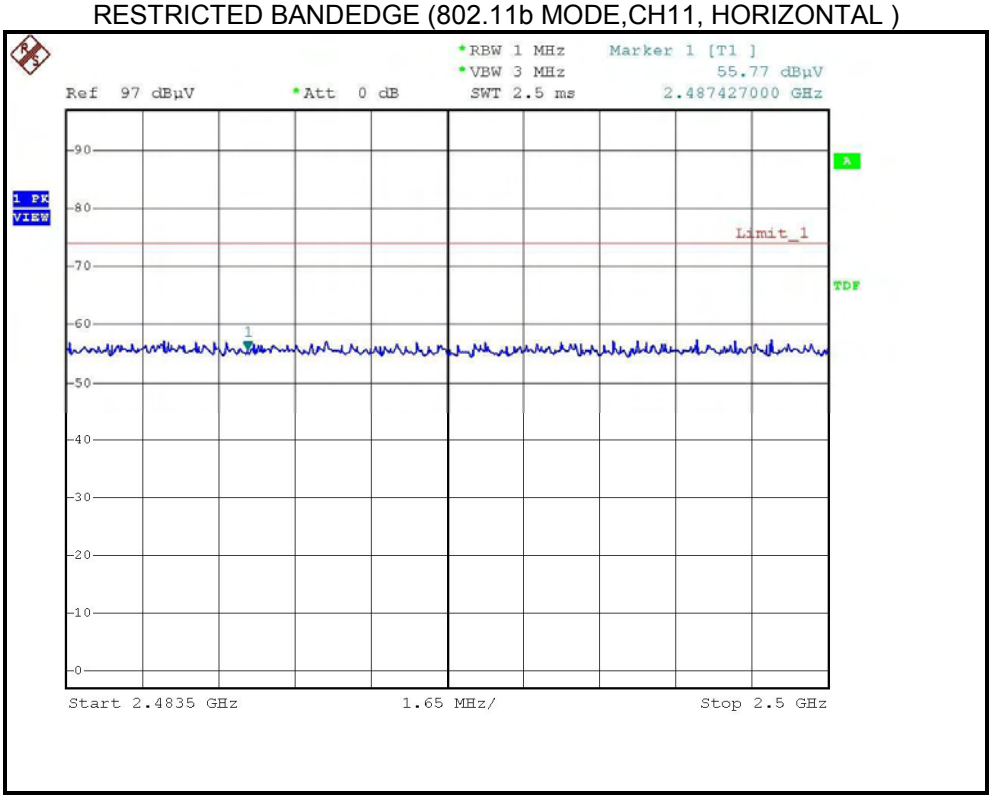
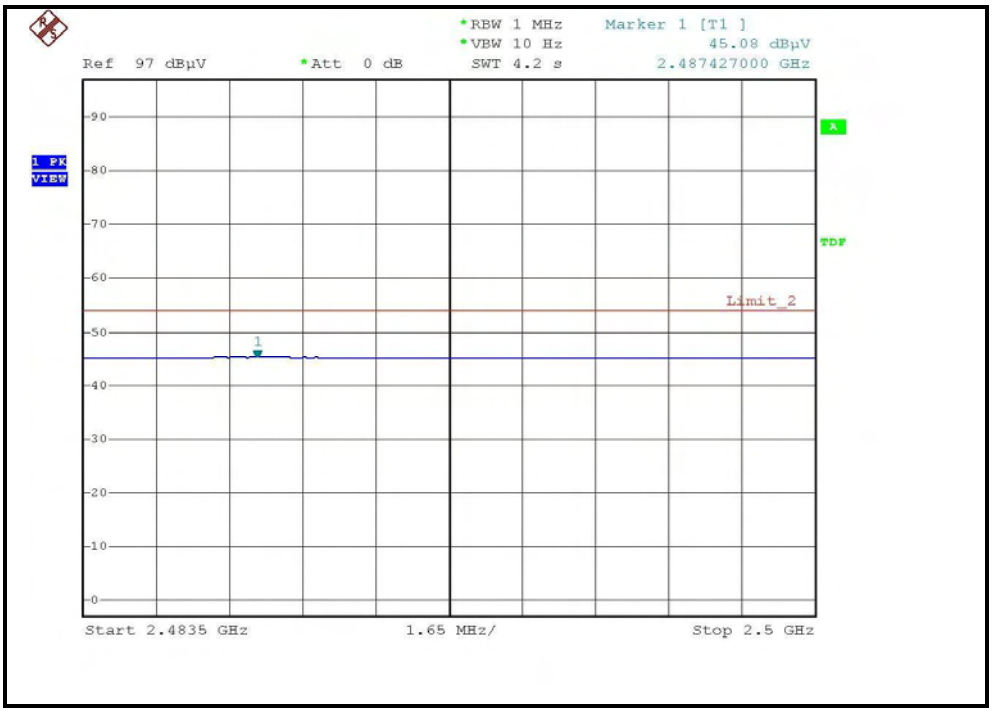
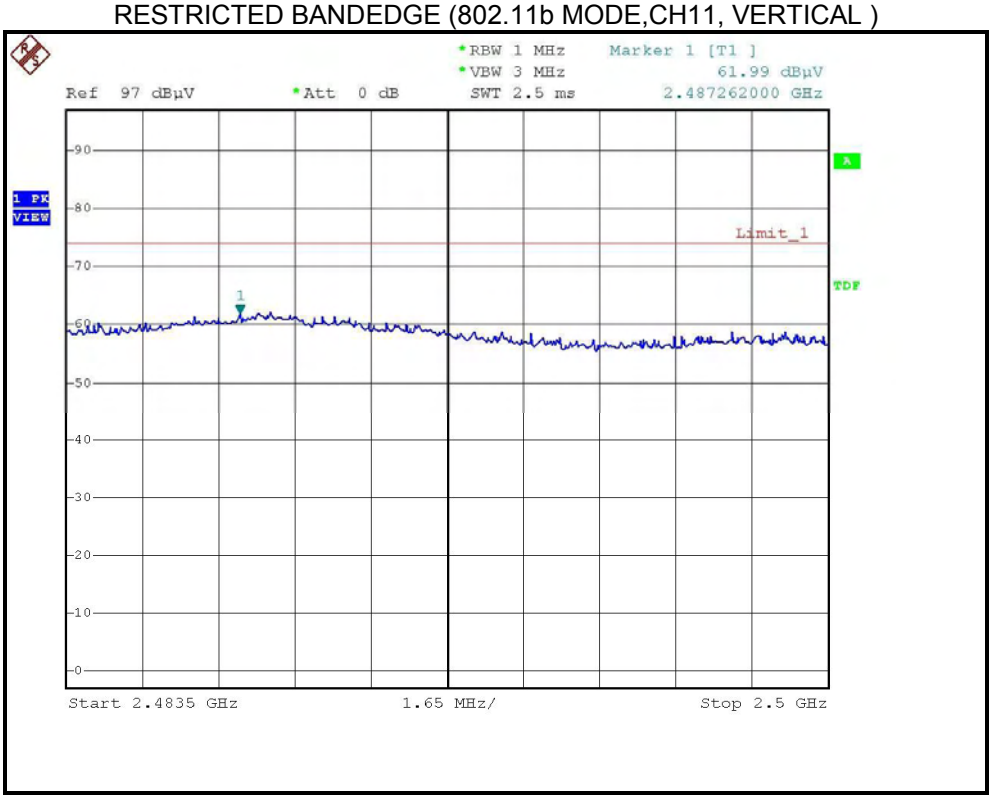
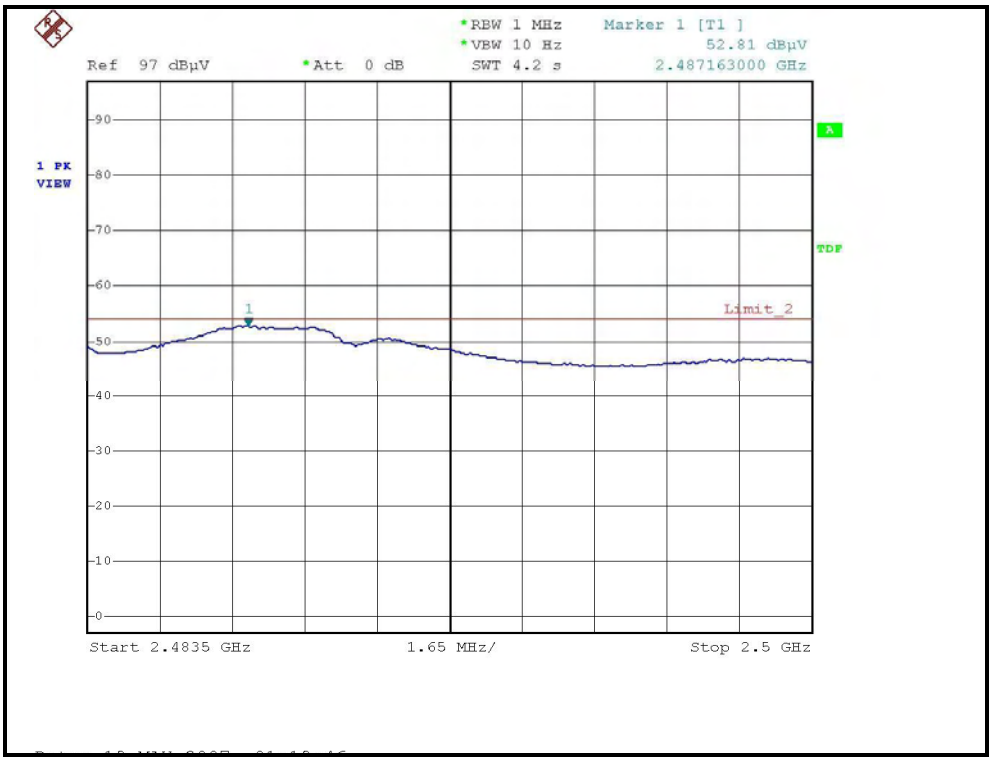




RESTRICTED BANDEDGE (802.11b MODE,CH11, VERTICAL)





802.11g OFDM modulation

CHANNEL	Channel 1	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	57.60 PK	74.00	-16.40	1.45 H	256	27.20	30.40
2	2390.00	45.09 AV	54.00	-8.91	1.45 H	256	14.70	30.40
3	*2412.00	99.20 PK			1.45 H	256	68.71	30.49
4	*2412.00	88.40 AV			1.45 H	256	57.91	30.49
5	2688.00	44.80 PK	74.00	-29.20	1.02 H	295	13.49	31.31
6	2688.00	32.20 AV	54.00	-21.80	1.02 H	295	0.89	31.31
7	4824.00	47.50 PK	74.00	-26.50	1.27 H	262	11.81	35.69
8	4824.00	34.10 AV	54.00	-19.90	1.27 H	262	-1.59	35.69
9	7236.00	52.90 PK	74.00	-21.10	1.30 H	85	10.66	42.24
10	7236.00	39.20 AV	54.00	-14.80	1.30 H	85	-3.04	42.24

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2390.00	71.15 PK	74.00	-2.85	1.10 V	235	40.76	30.40
2	2390.00	53.15 AV	54.00	-0.85	1.10 V	235	22.75	30.40
3	*2412.00	115.90 PK			1.16 V	235	85.41	30.49
4	*2412.00	104.90 AV			1.16 V	235	74.41	30.49
5	2688.00	46.80 PK	74.00	-27.20	1.20 V	252	15.49	31.31
6	2688.00	33.60 AV	54.00	-20.40	1.20 V	252	2.29	31.31
7	4824.00	53.50 PK	74.00	-20.50	1.17 V	232	17.81	35.69
8	4824.00	39.00 AV	54.00	-15.00	1.17 V	232	3.31	35.69
9	7236.00	53.70 PK	74.00	-20.30	1.54 V	293	11.46	42.24
10	7236.00	39.40 AV	54.00	-14.60	1.54 V	293	-2.84	42.24

REMARKS: 1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

CHANNEL	Channel 6	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	103.90 PK			1.00 H	258	73.29	30.61
2	*2437.00	93.70 AV			1.00 H	258	63.09	30.61
3	2688.00	45.58 PK	74.00	-28.42	1.08 H	302	14.27	31.31
4	2688.00	33.00 AV	54.00	-21.00	1.08 H	302	1.69	31.31
5	4874.00	48.50 PK	74.00	-25.50	1.52 H	272	12.70	35.80
6	4874.00	35.80 AV	54.00	-18.20	1.52 H	272	0.00	35.80
7	7311.00	53.50 PK	74.00	-20.50	1.54 H	134	10.98	42.52
8	7311.00	40.60 AV	54.00	-13.40	1.54 H	134	-1.92	42.52

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2437.00	120.40 PK			1.20 V	242	89.79	30.61
2	*2437.00	109.70 AV			1.20 V	242	79.09	30.61
3	2688.00	47.80 PK	74.00	-26.20	1.24 V	263	16.49	31.31
4	2688.00	34.40 AV	54.00	-19.60	1.24 V	263	3.09	31.31
5	4874.00	58.00 PK	74.00	-16.00	1.50 V	272	22.20	35.80
6	4874.00	44.80 AV	54.00	-9.20	1.50 V	272	9.00	35.80
7	7311.00	64.10 PK	74.00	-9.90	1.15 V	308	21.58	42.52
8	7311.00	42.70 AV	54.00	-11.30	1.15 V	308	0.18	42.52

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

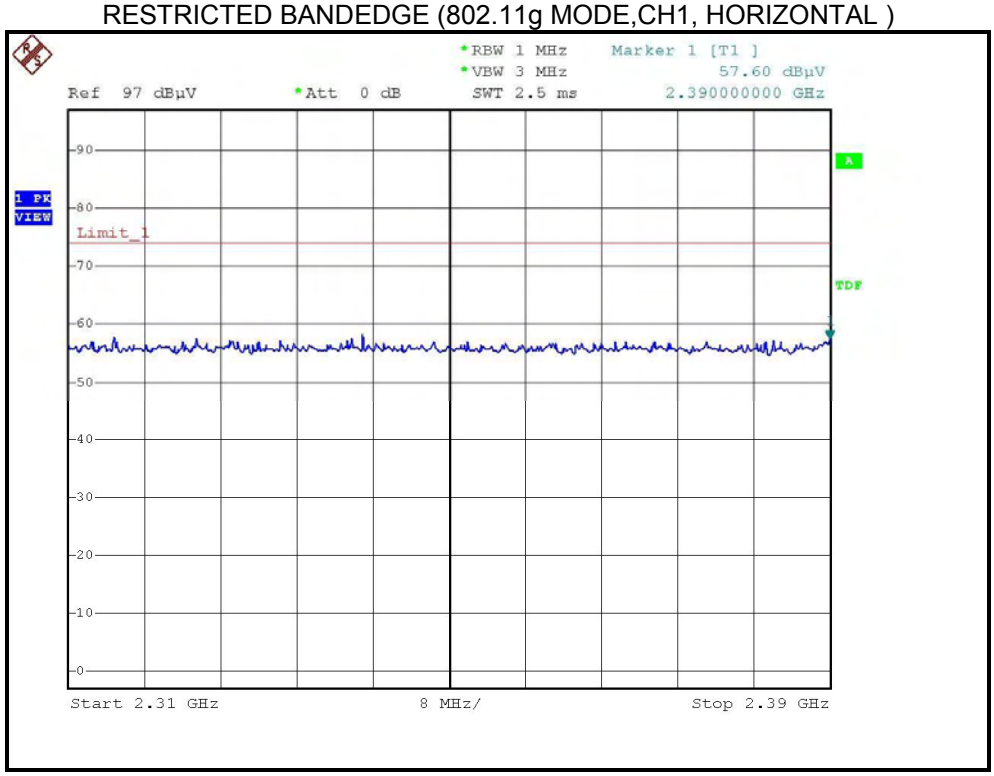
CHANNEL	Channel 11	**FREQUENCY RANGE**	1 ~ 25GHz
MODULATION TYPE	BPSK	**TRANSFER RATE**	6Mbps
INPUT POWER (SYSTEM)	120Vac, 60 Hz	**DETECTOR FUNCTION**	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	29deg. C, 65%RH, 961hPa	**TESTED BY**	Wen Yu

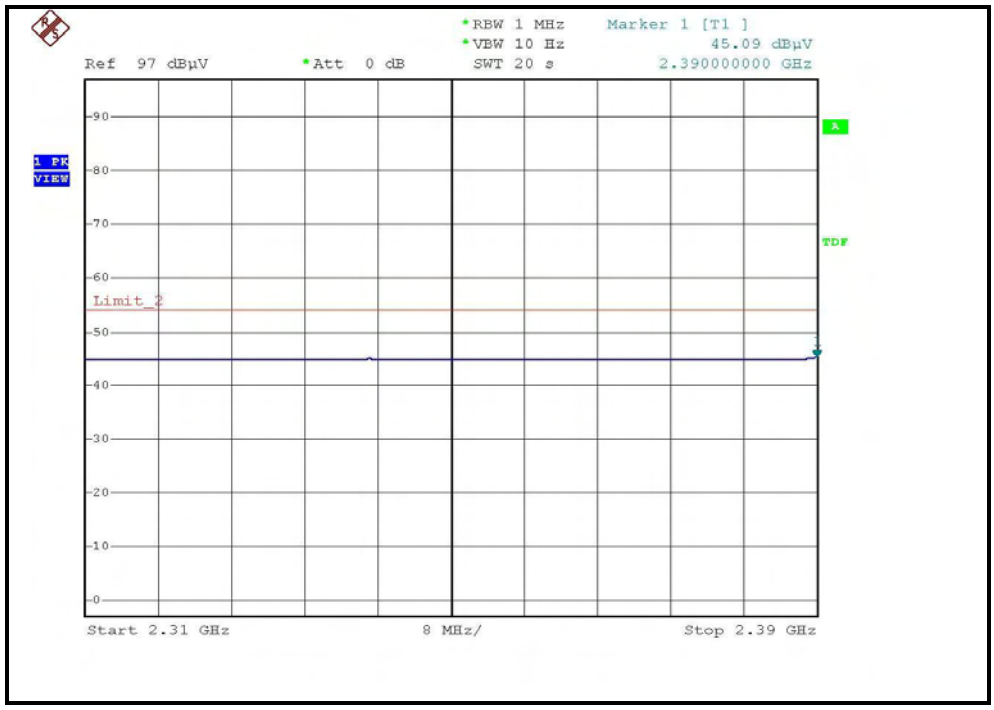
ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	99.80 PK			1.48 H	257	69.08	30.72
2	*2462.00	89.10 AV			1.48 H	257	58.38	30.72
3	2483.50	62.09 PK	74.00	-11.91	1.48 H	257	31.27	30.82
4	2483.50	46.41 AV	54.00	-7.59	1.48 H	257	15.59	30.82
5	2688.00	44.50 PK	74.00	-29.50	1.05 H	322	13.19	31.31
6	2688.00	32.20 AV	54.00	-21.80	1.05 H	322	0.89	31.31
7	4924.00	47.00 PK	74.00	-27.00	1.20 H	275	11.10	35.90
8	4924.00	33.80 AV	54.00	-20.20	1.20 H	275	-2.10	35.90
9	7386.00	51.80 PK	74.00	-22.20	1.25 H	62	9.00	42.80
10	7386.00	37.50 AV	54.00	-16.50	1.25 H	62	-5.30	42.80

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	*2462.00	113.90 PK			1.27 V	258	83.18	30.72
2	*2462.00	103.00 AV			1.27 V	258	72.28	30.72
3	2483.50	71.68 PK	74.00	-2.32	1.24 V	260	40.86	30.82
4	2483.50	53.35 AV	54.00	-0.65	1.24 V	260	22.53	30.82
5	2688.00	46.20 PK	74.00	-27.80	1.15 V	248	14.89	31.31
6	2688.00	33.20 AV	54.00	-20.80	1.15 V	248	1.89	31.31
7	4824.00	52.20 PK	74.00	-21.80	1.32 V	245	16.51	35.69
8	4824.00	38.20 AV	54.00	-15.80	1.32 V	245	2.51	35.69
9	7386.00	52.50 PK	74.00	-21.50	1.36 V	272	9.70	42.80
10	7386.00	38.60 AV	54.00	-15.40	1.36 V	272	-4.20	42.80

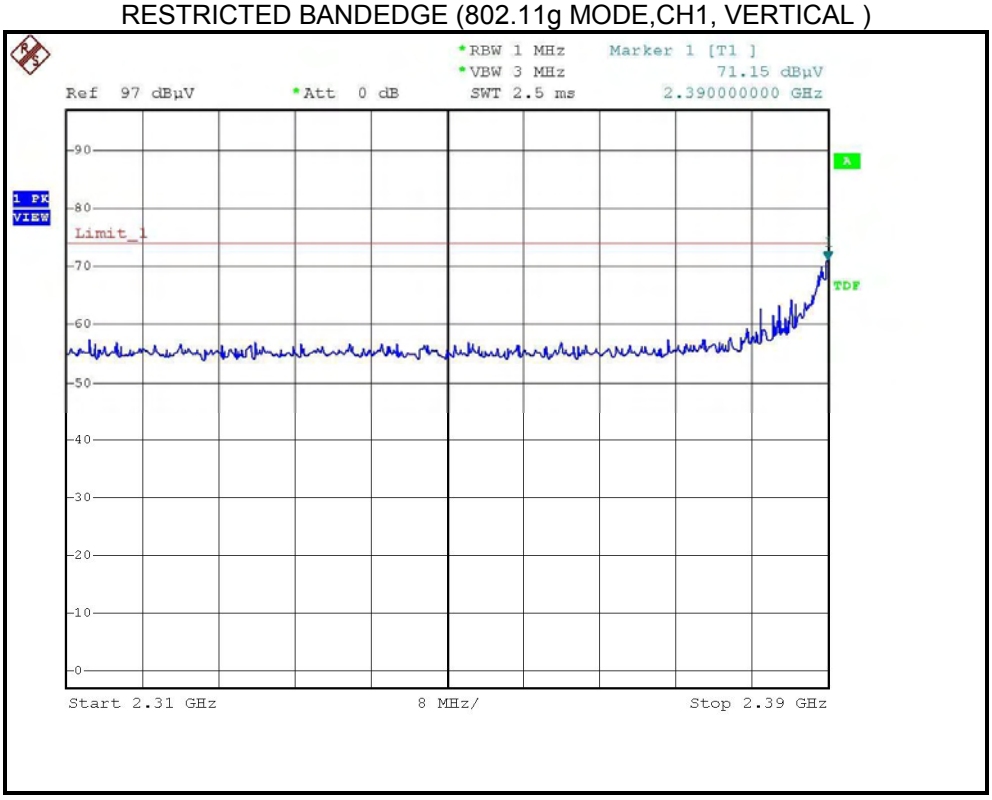
REMARKS:
1. Emission level(dBuV/m)=Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. The limit value is defined as per 15.247
6. " * " : Fundamental frequency

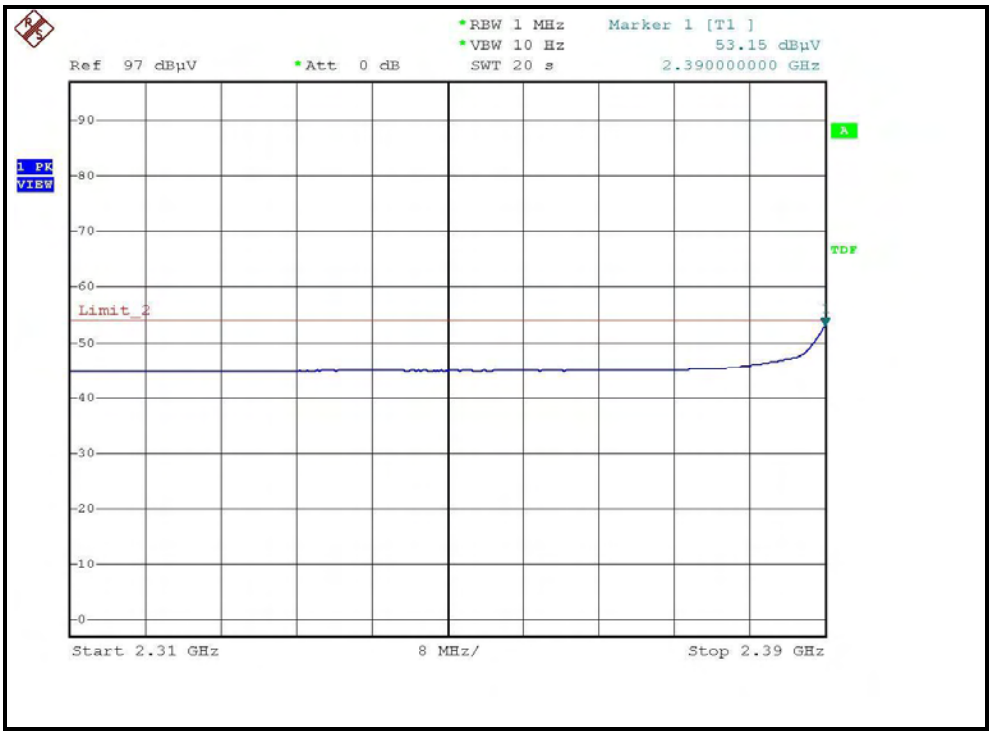
RESTRICTED BANDEDGE (802.11g MODE,CH1, HORIZONTAL)



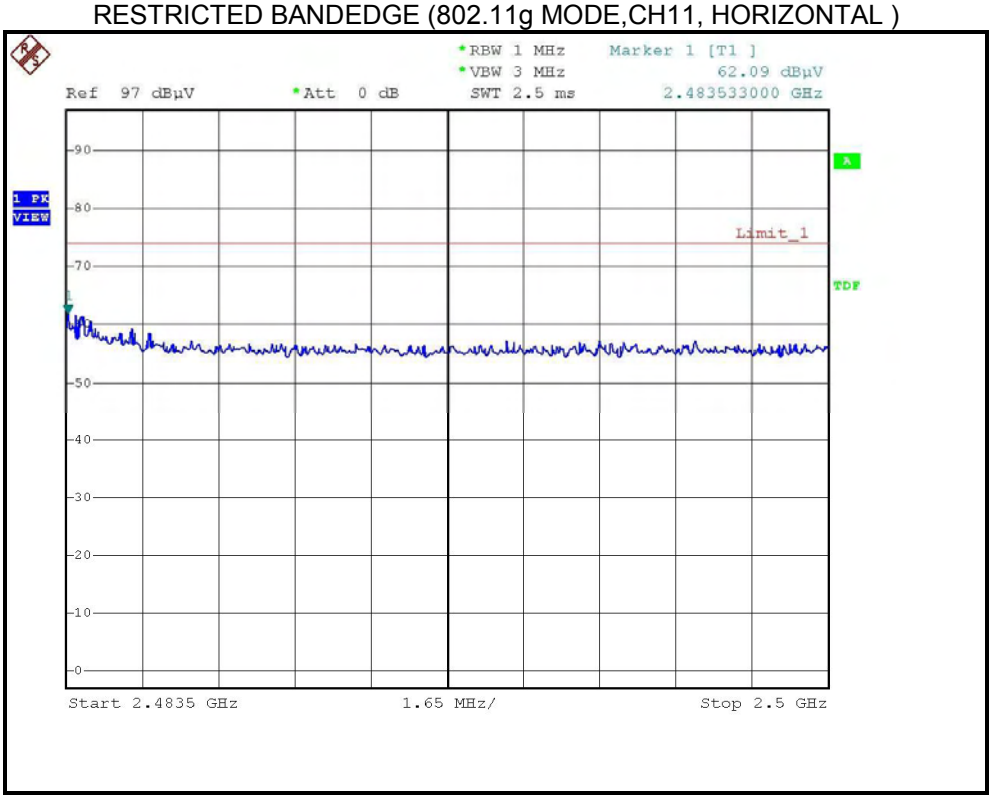


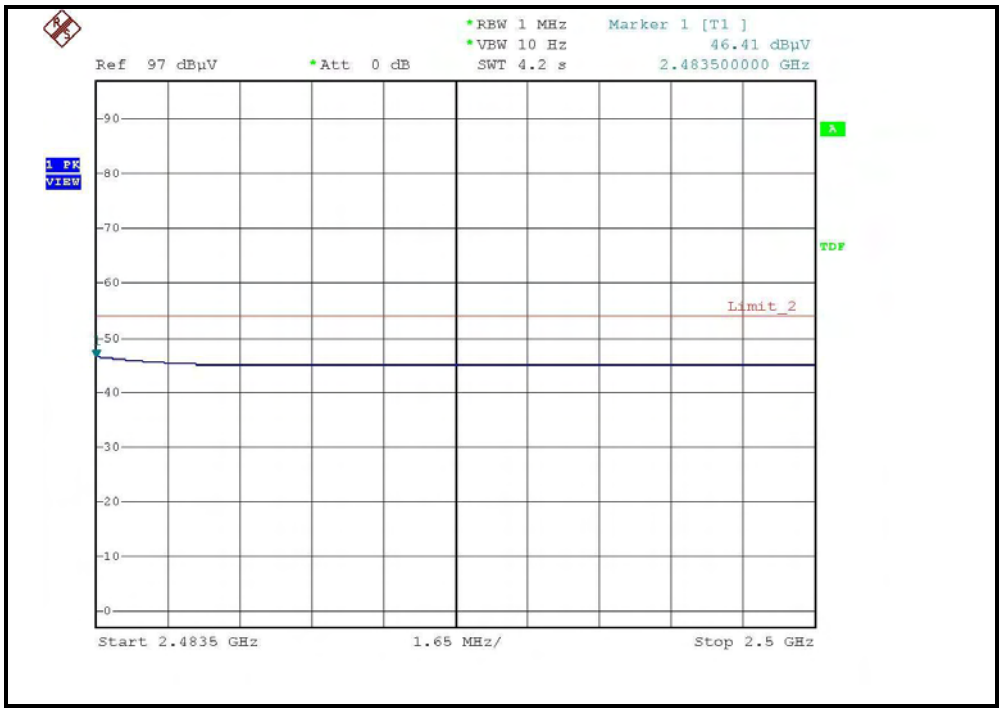
RESTRICTED BANDEDGE (802.11g MODE,CH1, VERTICAL)





RESTRICTED BANDEDGE (802.11g MODE,CH11, HORIZONTAL)





RESTRICTED BANDEDGE (802.11g MODE,CH11, VERTICAL)