

FCC Test Report (15.247)

Report No.: RF141027E05

FCC ID: Q87-EA4500V3

Test Model: EA4500 V3

Received Date: Oct. 27, 2014

Test Date: Nov. 01, 2014 to Jan. 15, 2015

Issued Date: Jan. 29, 2015

Applicant: Linksys LLC

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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A D T

Release Control Record

Issue No.	Description	Date Issued
RF141027E05	Original release.	Jan. 29, 2015

1 Certificate of Conformity

Product: 802.11 a/b/g/nAP

Brand: Linksys

Test Model: EA4500 V3

Sample Status: ENGINEERING SAMPLE

Applicant: Linksys LLC

Test Date: Nov. 01, 2014 to Jan. 15, 2015

Standards: 47 CFR FCC Part 15, Subpart C (Section 15.247)
ANSI C63.10:2009

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, 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

:



Elsie Hsu, Specialist

,

Date: Jan. 29, 2015

Approved by

:



May Chen, Manager

,

Date: Jan. 29, 2015

2 Summary of Test Results

47 CFR FCC Part 15, Subpart C (SECTION 15.247)			
FCC Clause	Test Item	Result	Remarks
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -8.59dB at 0.46250MHz.
15.205 15.209 15.247(d)	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -3.0dB at 625.00MHz
15.205 15.209 15.247(d)	Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -1.0dB at 2390.000MHz, 2483.500MHz
15.247(d)	Antenna Port Emission	PASS	Meet the requirement of limit.
15.247(a)(2)	6dB bandwidth	PASS	Meet the requirement of limit.
15.247(b)	Conducted power	PASS	Meet the requirement of limit.
15.247(e)	Power Spectral Density	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is i-pex(MHF) not a standard connector.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

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

Measurement	Frequency	Expanded Uncertainty (k=2) ($\pm$)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.86 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1000MHz	5.37 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	3.65 dB
	6GHz ~ 18GHz	3.88 dB
	18GHz ~ 40GHz	4.11 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	802.11 a/b/g/nAP
Brand	Linksys
Test Model	EA4500 V3
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	DC 12V from power adapter
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b: up to 11Mbps 802.11a / g: up to 54Mbps 802.11n: up to 450Mbps
Operating Frequency	For 15.247 2.412 ~ 2.462GHz For 15.407 5.18 ~ 5.24GHz, 5.745 ~ 5.825GHz
Number of Channel	For 15.247 11 for 802.11b, 802.11g, 802.11n (HT20) 7 for 802.11n (HT40) For 15.407 9 for 802.11a, 802.11n (HT20) 4 for 802.11n (HT40)
Output Power	For 15.247 802.11b: 748.275mW 802.11g: 700.586mW 802.11n (HT20): 641.433mW 802.11n (HT40): 205.172mW For 15.407 802.11a: 595.601mW 802.11n (HT20): 458.001mW 802.11n (HT40): 632.872mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. The EUT has two transformers and following two different model names could be chosen:

Main source (Vendor:BOTHHAND)	
Vendor P/N	Location
LG2P109N LF	T1,T2
LG1P109N LF	T3
Second source: (Vendor:MINGTEK)	
Vendor P/N	Location
HN36201CG	T1,T2
HN18101CG	T3

From the above transformers, the EUT was pre-tested with above transformers, the worse case was found in Second source. Therefore only the test data of the transformer was recorded in this report.

2. The EUT must be supplied with a power adapter, and the following different models could be chosen:

Adapter 1	
brand:	LEI
Model:	IU24-2120200-WP
Input:	100-240V~, 50/60Hz, 0.6A
Output:	12V, 2A
Power Line:	DC output cable (Unshielded, 1.5m)
Adapter 2	
brand:	LEI
Model:	MU24-Y120200-A1
Input:	100-240V~, 50/60Hz, 0.7A
Output:	12V, 2A
Power Line:	DC output cable (Unshielded, 1.5m)
Adapter 3	
brand:	PHIHONG
Model:	PSA24R-120
Input:	100-240V~, 50-60Hz, 0.6A
Output:	12V, 2A
Power Line:	DC output cable (Unshielded, 1.5m)
Adapter 4	
brand:	PHIHONG
Model:	PSAC24A-120
Input:	100-240V~, 50-60Hz, 0.6A
Output:	12V, 2A
Power Line:	DC output cable (Unshielded, 1.5m)

For radiated test, the EUT was pre-tested with above adapters, the worse case was found in adapter 3. Therefore only the test data of the adapter was recorded in this report.

3. The antennas provided to the EUT, please refer to the following table:

2.4GHz antenna							
No.	Transmitter Circuit	Brand	Model	Gain (dBi) (Include cable loss)	Frequency range (GHz to GHz)	Antenna Type	Connector Type
1	0	WNC	57EAAH15.0CH	2.98	2.4~2.4835	PIFA	NA
3	1	WNC	57EAAH15.0CJ	3.26	2.4~2.4835	PIFA	NA
6	2	WNC	57EAAH15.0CK	3.57	2.4~2.4835	PIFA	NA
5GHz antenna							
No.	Transmitter Circuit	Brand	Model	Gain (dBi) (Include cable loss)	Frequency range (GHz to GHz)	Antenna Type	Connector Type
2	0	WNC	57EAAH15.0CL	3.18	5.15~5.25	PIFA	i-pex(MHF)
				2.46	5.725~5.850	PIFA	i-pex(MHF)
4	1	WNC	57EAAH15.0CM	2.67	5.15~5.25	PIFA	i-pex(MHF)
				3.88	5.725~5.850	PIFA	i-pex(MHF)
5	2	WNC	57EAAH15.0CN	3.19	5.15~5.25	PIFA	i-pex(MHF)
				3.90	5.725~5.850	PIFA	i-pex(MHF)

4. The EUT incorporates a MIMO function.

MODULATION MODE	DATA RATE (MCS)	TX & RX CONFIGURATION	
802.11b	1 ~ 11Mbps	3TX	3RX
802.11g	6 ~ 54Mbps	3TX	3RX
802.11a	6 ~ 54Mbps	3TX	3RX
802.11n (HT20), 802.11n (HT40)	MCS 0~7	3TX	3RX
	MCS 8~15	3TX	3RX
	MCS 16~23	3TX	3RX

5. The emission of the simultaneous operation (2.4GHz & 5GHz) has been evaluated and no non-compliance was found.

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

11 channels are provided for 802.11b, 802.11g and 802.11n (HT20):

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

7 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
3	2422MHz	7	2442MHz
4	2427MHz	8	2447MHz
5	2432MHz	9	2452MHz
6	2437MHz		

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE ≥ 1G	RE < 1G	PLC	APCM	
1	√	√	√	√	Adapter 3 + Sample 1
2	-	-	√	-	Adapter 1 + Sample 1
3	-	-	√	-	Adapter 2 + Sample 1
4	-	-	√	-	Adapter 4 + Sample 1
5	√	√	-	-	Adapter 3 + Sample 2

Where **RE≥1G**: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

Note: According to the applicant's requirement two test samples were tested for radiated emission only.

Radiated Emission Test (Above 1GHz):

☒ 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	DBPSK	1
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5

Radiated Emission Test (Below 1GHz):

☒ 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	OFDM	BPSK	1

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)
802.11b	1 to 11	1	OFDM	BPSK	1

Antenna Port Conducted Measurement:

- ☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- ☒ 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	DBPSK	1
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6
802.11n (HT20)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
802.11n (HT40)	3 to 9	3, 6, 9	OFDM	BPSK	13.5

Test Condition:

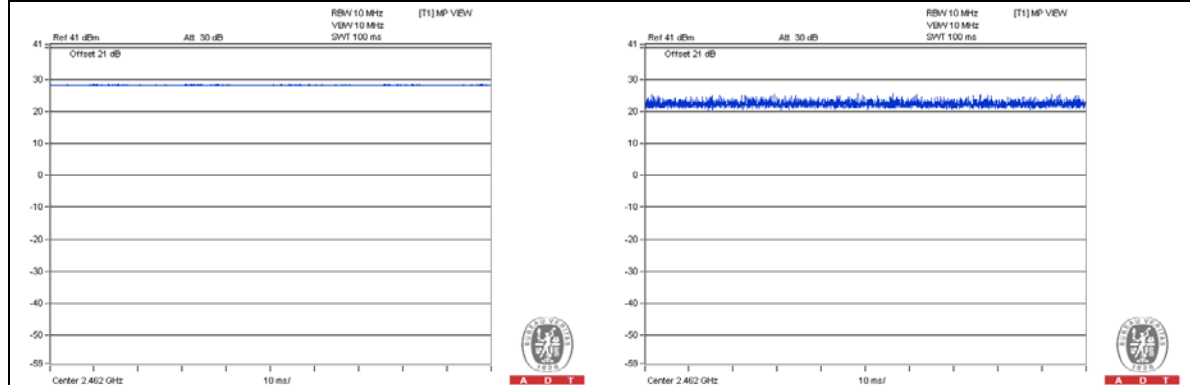
APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	24deg. C, 68%RH	120Vac, 60Hz	Robert Cheng
	25deg. C, 65%RH		Tim Ho
RE<1G	22deg. C, 66%RH	120Vac, 60Hz	Tim Ho
PLC	21deg. C, 65%RH	120Vac, 60Hz	Barry Lee
APCM	25deg. C, 60%RH	120Vac, 60Hz	Andy Ho

3.3 Duty Cycle of Test Signal

Duty cycle of test signal is 100 %, duty factor is not required.

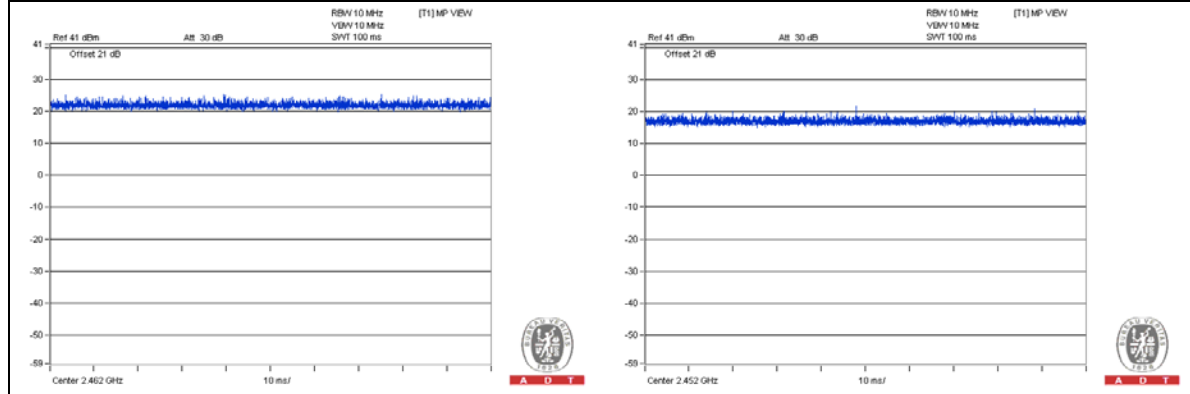
802.11b

802.11g



802.11n (HT20)

802.11n (HT40)



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.

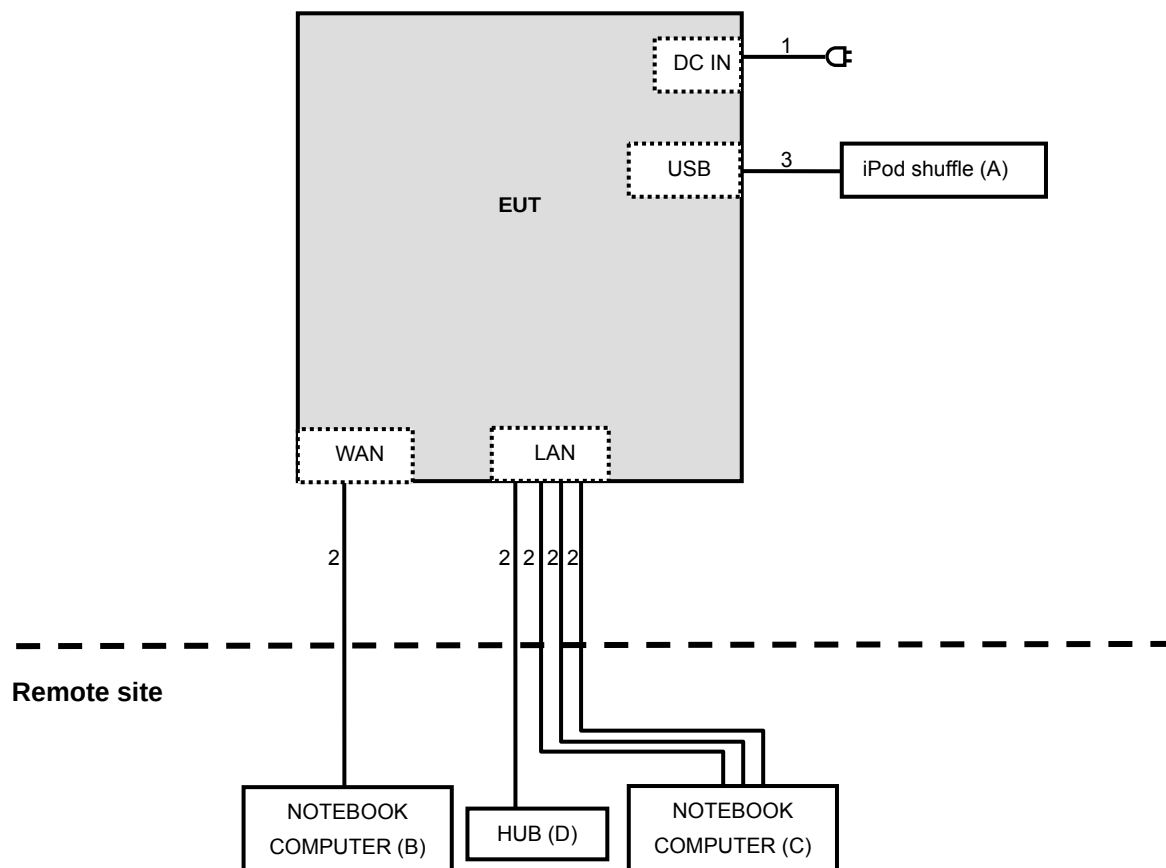
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	iPod shuffle	Apple	MD778TA/A	CC4JMCMXF4T1	NA	Provided by Lab
B.	NOTEBOOK COMPUTER	DELL	E5430	HYV4VY1	FCC DoC	Provided by Lab
C.	NOTEBOOK COMPUTER	DELL	PP04X	CN-0HN341-48643-84 5-4295	FCC DoC	Provided by Lab
D.	HUB	ZyXEL	ES-116P	S060H02000215	FCC DoC	Provided by Lab

Note:

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	DC	1	1.5	No	0	Supplied by client
2.	RJ-45	1	10	No	0	Provided by Lab
3.	USB	1	1	No	0	Provided by Lab

3.4.1 Configuration of System under Test



3.5 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)

558074 D01 DTS Meas Guidance v03r02

662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10-2009

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

Note: The EUT has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC).
The test report has been issued separately.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 30dB below the highest level of the desired power:

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. 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.

4.1.2 Test Instruments

For below 1GHz test & above 1GHz test (802.11b/g) (MODE 1)
above 1GHz test (MODE 2)

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY51210105	July 21, 2014	July 20, 2015
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-03	Nov. 12, 2014	Nov. 11, 2015
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-360	Feb. 26, 2014	Feb. 25, 2015
RF Cable	NA	CHGCAB_001	Oct. 04, 2014	Oct. 03, 2015
Horn_Antenna AISI	AIH.8018	0000320091110	Aug. 27, 2014	Aug. 26, 2015
Pre-Amplifier Agilent	8449B	3008A02578	June 24, 2014	June 23, 2015
RF Cable	NA	131205 131214 SNMY23684/4	Jan. 17, 2014	Jan. 16, 2015
Spectrum Analyzer R&S	FSV40	100964	July 05, 2014	July 04, 2015
Pre-Amplifier EMCI	EMC184045	980143	Jan. 17, 2014	Jan. 16, 2015
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Aug. 26, 2014	Aug. 25, 2015
RF Cable	NA	RF104-121 RF104-204	Dec. 11, 2014	Dec. 10, 2015
Antenna Tower & Turn Table CT	NA	NA	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 horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
3. The test was performed in 966 Chamber No. G.
4. The FCC Site Registration No. is 966073.
5. The VCCI Site Registration No. is G-137.
6. The CANADA Site Registration No. is IC 7450H-2.
7. Tested Date: Jan. 08 to 15, 2015

For above 1GHz test (802.11n) (MODE 1)

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY51210105	July 21, 2014	July 20, 2015
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-03	Nov. 13, 2013	Nov. 12, 2014
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-360	Feb. 26, 2014	Feb. 25, 2015
RF Cable	NA	CHGCAB_001	Oct. 04, 2014	Oct. 03, 2015
Horn_Antenna AISI	AIH.8018	0000320091110	Aug. 27, 2014	Aug. 26, 2015
Pre-Amplifier Agilent	8449B	3008A02578	June 24, 2014	June 23, 2015
RF Cable	NA	131205 131214 SNMY23684/4	Jan. 17, 2014	Jan. 16, 2015
Spectrum Analyzer R&S	FSV40	100964	July 05, 2014	July 04, 2015
Pre-Amplifier EMCI	EMC184045	980143	Jan. 17, 2014	Jan. 16, 2015
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Aug. 26, 2014	Aug. 25, 2015
RF Cable	NA	RF104-121 RF104-204	Dec. 12, 2013	Dec. 11, 2014
Antenna Tower & Turn Table CT	NA	NA	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 horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 3 The test was performed in 966 Chamber No. G.
4. The FCC Site Registration No. is 966073.
- 5 The VCCI Site Registration No. is G-137.
- 6 The CANADA Site Registration No. is IC 7450H-2.
- 7 Tested Date: Nov. 01, 2014

4.1.3 Test Procedures

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. 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 height of antenna 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

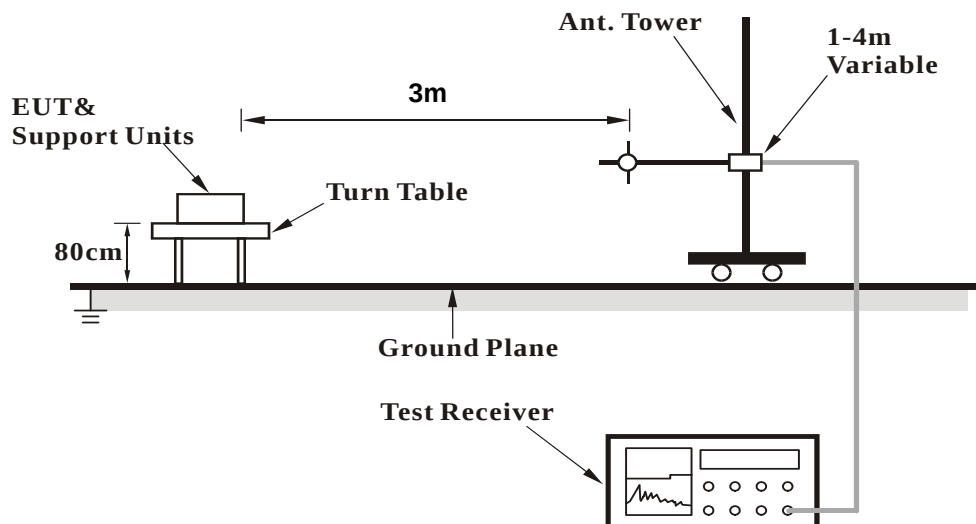
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ($10 \log(1/\text{duty cycle})$).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle $\geq 98\%$) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

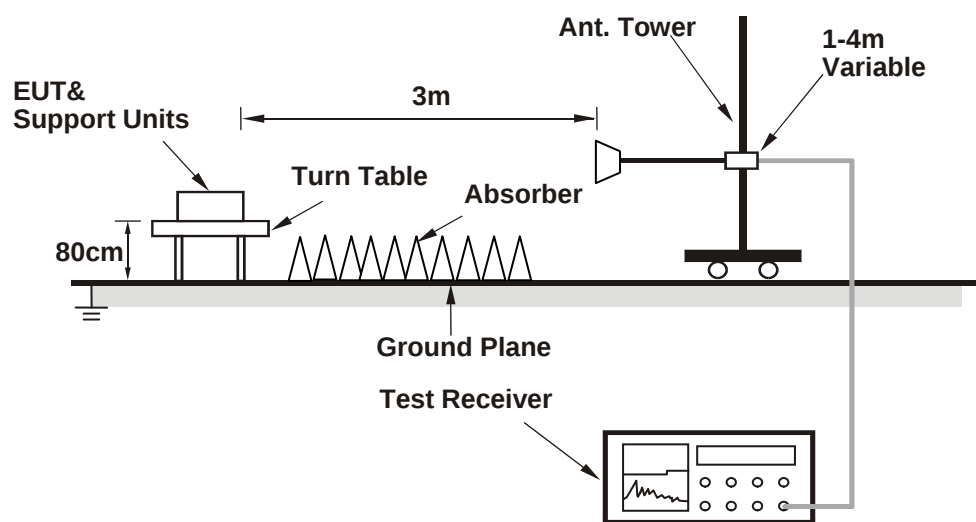
No deviation.

4.1.5 Test Set Up

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.6 EUT Operating Conditions

1. Placed the EUT on testing table.
2. Prepared computer system (support units B & C) to act as communication partner.
3. The communication partner ran test program "Art2 ver 4 6 78" to enable EUT under transmission/receiving condition continuously.

4.1.7 Test Results (MODE 1)

Below 1GHz Data

802.11b

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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	55.17	30.5 QP	40.0	-9.5	1.50 H	46	43.78	-13.30
2	125.01	32.4 QP	43.5	-11.1	1.50 H	275	46.96	-14.60
3	285.06	34.6 QP	46.0	-11.4	1.00 H	97	46.99	-12.38
4	375.03	42.8 QP	46.0	-3.2	1.00 H	360	52.54	-9.78
5	750.03	41.0 QP	46.0	-5.0	1.00 H	243	42.21	-1.21
6	875.02	42.9 QP	46.0	-3.1	1.00 H	360	42.56	0.31
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	55.54	34.6 QP	40.0	-5.4	1.00 V	169	47.96	-13.36
2	300.00	31.6 QP	46.0	-14.4	1.50 V	360	43.46	-11.90
3	375.03	40.0 QP	46.0	-6.0	1.00 V	341	49.80	-9.78
4	625.00	43.0 QP	46.0	-3.0	1.50 V	84	46.64	-3.68
5	750.03	39.0 QP	46.0	-7.0	1.50 V	76	40.24	-1.21
6	875.02	41.9 QP	46.0	-4.1	1.50 V	342	41.63	0.31

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

Above 1GHz Data

802.11b

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	2372.00	62.3 PK	74.0	-11.7	1.20 H	160	64.85	-2.55
2	2372.00	49.0 AV	54.0	-5.0	1.20 H	160	51.55	-2.55
3	*2412.00	118.9 PK			1.35 H	111	121.27	-2.37
4	*2412.00	116.9 AV			1.35 H	111	119.27	-2.37
5	2483.50	64.2 PK	74.0	-9.8	1.10 H	173	66.23	-2.03
6	2483.50	43.4 AV	54.0	-10.6	1.10 H	173	45.43	-2.03
7	4824.00	47.8 PK	74.0	-26.2	1.00 H	280	42.09	5.71
8	4824.00	35.0 AV	54.0	-19.0	1.00 H	280	29.29	5.71
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2372.00	62.3 PK	74.0	-11.7	1.26 V	212	64.85	-2.55
2	2372.00	49.8 AV	54.0	-4.2	1.26 V	212	52.35	-2.55
3	*2412.00	119.1 PK			1.26 V	236	121.47	-2.37
4	*2412.00	116.9 AV			1.26 V	236	119.27	-2.37
5	2483.50	62.9 PK	74.0	-11.1	1.20 V	310	64.93	-2.03
6	2483.50	43.2 AV	54.0	-10.8	1.20 V	310	45.23	-2.03
7	4824.00	53.2 PK	74.0	-20.8	1.29 V	137	47.49	5.71
8	4824.00	50.6 AV	54.0	-3.4	1.29 V	137	44.89	5.71

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	2317.00	59.8 PK	74.0	-14.2	1.40 H	122	62.60	-2.80
2	2317.00	45.3 AV	54.0	-8.7	1.40 H	122	48.10	-2.80
3	*2437.00	118.1 PK			1.46 H	111	120.35	-2.25
4	*2437.00	116.4 AV			1.46 H	111	118.65	-2.25
5	4874.00	49.6 PK	74.0	-24.4	1.12 H	157	43.70	5.90
6	4874.00	40.9 AV	54.0	-13.1	1.12 H	157	35.00	5.90
7	7311.00	52.4 PK	74.0	-21.6	1.04 H	67	39.23	13.17
8	7311.00	41.3 AV	54.0	-12.7	1.04 H	67	28.13	13.17
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2317.00	62.1 PK	74.0	-11.9	1.26 V	211	64.90	-2.80
2	2317.00	48.5 AV	54.0	-5.5	1.26 V	211	51.30	-2.80
3	*2437.00	119.1 PK			1.22 V	231	121.35	-2.25
4	*2437.00	117.1 AV			1.22 V	231	119.35	-2.25
5	4874.00	53.1 PK	74.0	-20.9	1.26 V	132	47.20	5.90
6	4874.00	50.3 AV	54.0	-3.7	1.26 V	132	44.40	5.90
7	7311.00	52.6 PK	74.0	-21.4	1.13 V	136	39.43	13.17
8	7311.00	42.6 AV	54.0	-11.4	1.13 V	136	29.43	13.17

REMARKS:

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

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	2340.00	54.1 PK	74.0	-19.9	1.44 H	139	56.80	-2.70
2	2340.00	44.7 AV	54.0	-9.3	1.44 H	139	47.40	-2.70
3	*2462.00	118.3 PK			1.41 H	124	120.44	-2.14
4	*2462.00	116.4 AV			1.41 H	124	118.54	-2.14
5	2483.50	59.3 PK	74.0	-14.7	1.46 H	130	61.33	-2.03
6	2483.50	44.9 AV	54.0	-9.1	1.46 H	130	46.93	-2.03
7	4924.00	49.6 PK	74.0	-24.4	1.10 H	159	43.49	6.11
8	4924.00	40.9 AV	54.0	-13.1	1.10 H	159	34.79	6.11
9	7386.00	51.9 PK	74.0	-22.1	1.00 H	82	38.72	13.18
10	7386.00	41.0 AV	54.0	-13.0	1.00 H	82	27.82	13.18
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	2340.00	57.0 PK	74.0	-17.0	1.00 V	88	59.70	-2.70
2	2340.00	47.5 AV	54.0	-6.5	1.00 V	88	50.20	-2.70
3	*2462.00	119.3 PK			1.21 V	220	121.44	-2.14
4	*2462.00	117.2 AV			1.21 V	220	119.34	-2.14
5	2483.50	62.1 PK	74.0	-11.9	1.21 V	220	64.13	-2.03
6	2483.50	47.6 AV	54.0	-6.4	1.21 V	220	49.63	-2.03
7	4924.00	53.3 PK	74.0	-20.7	1.26 V	132	47.19	6.11
8	4924.00	50.4 AV	54.0	-3.6	1.26 V	132	44.29	6.11
9	7386.00	53.3 PK	74.0	-20.7	1.00 V	145	40.12	13.18
10	7386.00	43.4 AV	54.0	-10.6	1.00 V	145	30.22	13.18

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) – Pre-Amplifier 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

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	72.8 PK	74.0	-1.2	1.38 H	118	75.27	-2.47
2	2390.00	50.3 AV	54.0	-3.7	1.38 H	118	52.77	-2.47
3	*2412.00	115.8 PK			1.38 H	118	118.17	-2.37
4	*2412.00	105.2 AV			1.38 H	118	107.57	-2.37
5	4824.00	47.5 PK	74.0	-26.5	1.01 H	224	41.79	5.71
6	4824.00	34.6 AV	54.0	-19.4	1.01 H	224	28.89	5.71
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	72.9 PK	74.0	-1.1	1.28 V	322	75.37	-2.47
2	2390.00	50.0 AV	54.0	-4.0	1.28 V	322	52.47	-2.47
3	*2412.00	114.0 PK			1.28 V	322	116.37	-2.37
4	*2412.00	104.1 AV			1.28 V	322	106.47	-2.37
5	4824.00	49.6 PK	74.0	-24.4	1.01 V	139	43.89	5.71
6	4824.00	42.3 AV	54.0	-11.7	1.01 V	139	36.59	5.71

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	57.2 PK	74.0	-16.8	1.09 H	136	59.67	-2.47
2	2390.00	41.3 AV	54.0	-12.7	1.09 H	136	43.77	-2.47
3	*2437.00	117.3 PK			1.09 H	136	119.55	-2.25
4	*2437.00	106.8 AV			1.09 H	136	109.05	-2.25
5	2483.50	69.5 PK	74.0	-4.5	1.08 H	140	71.53	-2.03
6	2483.50	42.6 AV	54.0	-11.4	1.08 H	140	44.63	-2.03
7	4874.00	51.6 PK	74.0	-22.4	1.07 H	90	45.70	5.90
8	4874.00	40.3 AV	54.0	-13.7	1.07 H	90	34.40	5.90
9	7311.00	58.0 PK	74.0	-16.0	1.09 H	135	44.83	13.17
10	7311.00	44.9 AV	54.0	-9.1	1.09 H	135	31.73	13.17
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	63.2 PK	74.0	-10.8	1.23 V	327	65.67	-2.47
2	2390.00	43.6 AV	54.0	-10.4	1.23 V	327	46.07	-2.47
3	*2437.00	120.0 PK			1.23 V	327	122.25	-2.25
4	*2437.00	108.6 AV			1.23 V	327	110.85	-2.25
5	2483.50	72.4 PK	74.0	-1.6	1.23 V	327	74.43	-2.03
6	2483.50	48.2 AV	54.0	-5.8	1.23 V	327	50.23	-2.03
7	4874.00	52.4 PK	74.0	-21.6	1.28 V	122	46.50	5.90
8	4874.00	49.3 AV	54.0	-4.7	1.28 V	122	43.40	5.90
9	7311.00	52.5 PK	74.0	-21.5	1.18 V	140	39.33	13.17
10	7311.00	42.5 AV	54.0	-11.5	1.18 V	140	29.33	13.17

REMARKS:

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

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	114.6 PK			1.10 H	334	116.74	-2.14
2	*2462.00	104.1 AV			1.10 H	334	106.24	-2.14
3	2483.50	71.5 PK	74.0	-2.5	1.10 H	334	73.53	-2.03
4	2483.50	47.8 AV	54.0	-6.2	1.10 H	334	49.83	-2.03
5	4924.00	46.5 PK	74.0	-27.5	1.03 H	209	40.39	6.11
6	4924.00	33.8 AV	54.0	-20.2	1.03 H	209	27.69	6.11
7	7386.00	52.0 PK	74.0	-22.0	1.05 H	85	38.82	13.18
8	7386.00	40.9 AV	54.0	-13.1	1.05 H	85	27.72	13.18
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	114.3 PK			1.26 V	319	116.44	-2.14
2	*2462.00	103.7 AV			1.26 V	319	105.84	-2.14
3	2483.50	72.7 PK	74.0	-1.3	1.26 V	319	74.73	-2.03
4	2483.50	47.0 AV	54.0	-7.0	1.26 V	319	49.03	-2.03
5	4924.00	49.6 PK	74.0	-24.4	1.02 V	145	43.49	6.11
6	4924.00	44.3 AV	54.0	-9.7	1.02 V	145	38.19	6.11
7	7386.00	53.8 PK	74.0	-20.2	1.04 V	156	40.62	13.18
8	7386.00	43.4 AV	54.0	-10.6	1.04 V	156	30.22	13.18

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (HT20)

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	67.2 PK	74.0	-6.8	1.11 H	138	69.67	-2.47
2	2390.00	48.7 AV	54.0	-5.3	1.11 H	138	51.17	-2.47
3	*2412.00	112.7 PK			1.11 H	138	115.07	-2.37
4	*2412.00	102.3 AV			1.11 H	138	104.67	-2.37
5	4824.00	47.4 PK	74.0	-26.6	1.02 H	231	41.69	5.71
6	4824.00	34.4 AV	54.0	-19.6	1.02 H	231	28.69	5.71
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	72.1 PK	74.0	-1.9	1.27 V	321	74.57	-2.47
2	2390.00	51.0 AV	54.0	-3.0	1.27 V	321	53.47	-2.47
3	*2412.00	113.5 PK			1.27 V	321	115.87	-2.37
4	*2412.00	103.4 AV			1.27 V	321	105.77	-2.37
5	4824.00	49.4 PK	74.0	-24.6	1.03 V	140	43.69	5.71
6	4824.00	42.3 AV	54.0	-11.7	1.03 V	140	36.59	5.71

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	61.1 PK	74.0	-12.9	1.13 H	332	63.57	-2.47
2	2390.00	41.6 AV	54.0	-12.4	1.13 H	332	44.07	-2.47
3	*2437.00	117.2 PK			1.13 H	332	119.45	-2.25
4	*2437.00	106.7 AV			1.13 H	332	108.95	-2.25
5	2483.50	68.3 PK	74.0	-5.7	1.13 H	332	70.33	-2.03
6	2483.50	43.8 AV	54.0	-10.2	1.13 H	332	45.83	-2.03
7	4874.00	52.1 PK	74.0	-21.9	1.08 H	95	46.20	5.90
8	4874.00	40.7 AV	54.0	-13.3	1.08 H	95	34.80	5.90
9	7311.00	58.3 PK	74.0	-15.7	1.10 H	138	45.13	13.17
10	7311.00	45.2 AV	54.0	-8.8	1.10 H	138	32.03	13.17

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2384.00	68.2 PK	74.0	-5.8	1.28 V	323	70.69	-2.49
2	2384.00	44.3 AV	54.0	-9.7	1.28 V	323	46.79	-2.49
3	*2437.00	118.2 PK			1.28 V	326	120.45	-2.25
4	*2437.00	108.6 AV			1.28 V	326	110.85	-2.25
5	2483.50	72.5 PK	74.0	-1.5	1.28 V	323	74.53	-2.03
6	2483.50	45.4 AV	54.0	-8.6	1.28 V	323	47.43	-2.03
7	4874.00	52.9 PK	74.0	-21.1	1.29 V	134	47.00	5.90
8	4874.00	48.7 AV	54.0	-5.3	1.29 V	134	42.80	5.90
9	7311.00	53.2 PK	74.0	-20.8	1.20 V	145	40.03	13.17
10	7311.00	43.1 AV	54.0	-10.9	1.20 V	145	29.93	13.17

REMARKS:

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

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	115.2 PK			1.34 H	120	117.34	-2.14
2	*2462.00	104.7 AV			1.34 H	120	106.84	-2.14
3	2483.50	72.6 PK	74.0	-1.4	1.34 H	120	74.63	-2.03
4	2483.50	49.3 AV	54.0	-4.7	1.34 H	120	51.33	-2.03
5	4924.00	47.1 PK	74.0	-26.9	1.06 H	256	40.99	6.11
6	4924.00	34.8 AV	54.0	-19.2	1.06 H	256	28.69	6.11
7	7386.00	51.3 PK	74.0	-22.7	1.00 H	56	38.12	13.18
8	7386.00	40.4 AV	54.0	-13.6	1.00 H	56	27.22	13.18
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	113.2 PK			1.00 V	187	115.34	-2.14
2	*2462.00	102.7 AV			1.00 V	187	104.84	-2.14
3	2483.50	63.5 PK	74.0	-10.5	1.00 V	187	65.53	-2.03
4	2483.50	43.9 AV	54.0	-10.1	1.00 V	187	45.93	-2.03
5	4924.00	50.2 PK	74.0	-23.8	1.31 V	120	44.09	6.11
6	4924.00	45.6 AV	54.0	-8.4	1.31 V	120	39.49	6.11
7	7386.00	53.0 PK	74.0	-21.0	1.04 V	123	39.82	13.18
8	7386.00	43.2 AV	54.0	-10.8	1.04 V	123	30.02	13.18

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (HT40)

CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	71.5 PK	74.0	-2.5	1.38 H	125	73.97	-2.47
2	2390.00	53.0 AV	54.0	-1.0	1.38 H	125	55.47	-2.47
3	*2422.00	109.4 PK			1.38 H	125	111.72	-2.32
4	*2422.00	99.6 AV			1.38 H	125	101.92	-2.32
5	4844.00	47.3 PK	74.0	-26.7	1.03 H	216	41.52	5.78
6	4844.00	34.6 AV	54.0	-19.4	1.03 H	216	28.82	5.78
7	7266.00	50.5 PK	74.0	-23.5	1.03 H	84	37.30	13.20
8	7266.00	40.3 AV	54.0	-13.7	1.03 H	84	27.10	13.20
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	68.3 PK	74.0	-5.7	1.20 V	199	70.77	-2.47
2	2390.00	49.3 AV	54.0	-4.7	1.20 V	199	51.77	-2.47
3	*2422.00	108.2 PK			1.20 V	199	110.52	-2.32
4	*2422.00	98.0 AV			1.20 V	199	100.32	-2.32
5	4844.00	49.9 PK	74.0	-24.1	1.35 V	116	44.12	5.78
6	4844.00	44.7 AV	54.0	-9.3	1.35 V	116	38.92	5.78
7	7266.00	52.5 PK	74.0	-21.5	1.01 V	115	39.30	13.20
8	7266.00	42.7 AV	54.0	-11.3	1.01 V	115	29.50	13.20

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	72.5 PK	74.0	-1.5	1.35 H	123	74.97	-2.47
2	2390.00	47.3 AV	54.0	-6.7	1.35 H	123	49.77	-2.47
3	*2437.00	112.3 PK			1.35 H	123	114.55	-2.25
4	*2437.00	102.2 AV			1.35 H	123	104.45	-2.25
5	2483.50	69.5 PK	74.0	-4.5	1.35 H	123	71.53	-2.03
6	2483.50	46.3 AV	54.0	-7.7	1.35 H	123	48.33	-2.03
7	4874.00	47.6 PK	74.0	-26.4	1.00 H	233	41.70	5.90
8	4874.00	34.8 AV	54.0	-19.2	1.00 H	233	28.90	5.90
9	7311.00	50.2 PK	74.0	-23.8	1.02 H	62	37.03	13.17
10	7311.00	40.0 AV	54.0	-14.0	1.02 H	62	26.83	13.17
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	68.4 PK	74.0	-5.6	1.00 V	186	70.87	-2.47
2	2390.00	45.9 AV	54.0	-8.1	1.00 V	186	48.37	-2.47
3	*2437.00	111.1 PK			1.00 V	186	113.35	-2.25
4	*2437.00	100.8 AV			1.00 V	186	103.05	-2.25
5	2483.50	67.4 PK	74.0	-6.6	1.00 V	185	69.43	-2.03
6	2483.50	44.4 AV	54.0	-9.6	1.00 V	185	46.43	-2.03
7	4874.00	50.5 PK	74.0	-23.5	1.34 V	141	44.60	5.90
8	4874.00	45.2 AV	54.0	-8.8	1.34 V	141	39.30	5.90
9	7311.00	53.4 PK	74.0	-20.6	1.06 V	121	40.23	13.17
10	7311.00	43.4 AV	54.0	-10.6	1.06 V	121	30.23	13.17

REMARKS:

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

CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	*2452.00	111.3 PK			1.33 H	121	113.48	-2.18
2	*2452.00	99.6 AV			1.33 H	121	101.78	-2.18
3	2483.50	72.3 PK	74.0	-1.7	1.33 H	121	74.33	-2.03
4	2483.50	53.0 AV	54.0	-1.0	1.33 H	121	55.03	-2.03
5	4904.00	47.1 PK	74.0	-26.9	1.05 H	241	41.08	6.02
6	4904.00	34.6 AV	54.0	-19.4	1.05 H	241	28.58	6.02
7	7356.00	51.7 PK	74.0	-22.3	1.03 H	71	38.52	13.18
8	7356.00	40.7 AV	54.0	-13.3	1.03 H	71	27.52	13.18
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	*2452.00	108.4 PK			1.00 V	185	110.58	-2.18
2	*2452.00	97.7 AV			1.00 V	185	99.88	-2.18
3	2483.50	68.1 PK	74.0	-5.9	1.00 V	185	70.13	-2.03
4	2483.50	46.0 AV	54.0	-8.0	1.00 V	185	48.03	-2.03
5	4904.00	49.8 PK	74.0	-24.2	1.31 V	117	43.78	6.02
6	4904.00	44.7 AV	54.0	-9.3	1.31 V	117	38.68	6.02
7	7356.00	52.8 PK	74.0	-21.2	1.02 V	116	39.62	13.18
8	7356.00	42.5 AV	54.0	-11.5	1.02 V	116	29.32	13.18

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

4.1.8 Test Results (MODE 5)

Below 1GHz Data

802.11b

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		

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	55.27	30.7 QP	40.0	-9.4	1.24 H	100	43.97	-13.32
2	125.40	32.7 QP	43.5	-10.9	1.24 H	304	47.23	-14.58
3	285.01	34.5 QP	46.0	-11.5	1.24 H	145	46.92	-12.38
4	375.12	42.9 QP	46.0	-3.1	1.24 H	342	52.70	-9.78
5	750.12	41.5 QP	46.0	-4.6	1.24 H	304	42.66	-1.21
6	875.02	42.8 QP	46.0	-3.2	1.34 H	240	42.47	0.31
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	55.42	34.9 QP	40.0	-5.2	1.24 V	204	48.19	-13.34
2	300.12	31.7 QP	46.0	-14.4	1.24 V	245	43.55	-11.90
3	375.12	40.2 QP	46.0	-5.8	1.34 V	301	49.99	-9.78
4	624.85	42.8 QP	46.0	-3.2	1.34 V	100	46.52	-3.68
5	750.09	39.1 QP	46.0	-6.9	1.24 V	104	40.33	-1.21
6	875.12	41.9 QP	46.0	-4.2	1.24 V	245	41.54	0.31

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

Above 1GHz Data

802.11b

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	2372.00	61.9 PK	74.0	-12.1	1.19 H	156	67.53	-5.63
2	2372.00	48.7 AV	54.0	-5.3	1.19 H	156	54.33	-5.63
3	*2412.00	118.7 PK			1.39 H	107	124.23	-5.53
4	*2412.00	116.8 AV			1.39 H	107	122.33	-5.53
5	2483.50	64.5 PK	74.0	-9.5	1.16 H	171	69.70	-5.20
6	2483.50	43.4 AV	54.0	-10.6	1.16 H	171	48.60	-5.20
7	4824.00	48.1 PK	74.0	-25.9	1.00 H	295	44.24	3.86
8	4824.00	35.2 AV	54.0	-18.8	1.00 H	295	31.34	3.86
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	2372.00	62.1 PK	74.0	-11.9	1.32 V	227	67.73	-5.63
2	2372.00	49.7 AV	54.0	-4.3	1.32 V	227	55.33	-5.63
3	*2412.00	119.8 PK			1.24 V	231	125.33	-5.53
4	*2412.00	117.3 AV			1.24 V	231	122.83	-5.53
5	2483.50	63.1 PK	74.0	-10.9	1.17 V	294	68.30	-5.20
6	2483.50	43.4 AV	54.0	-10.6	1.17 V	294	48.60	-5.20
7	4824.00	53.6 PK	74.0	-20.4	1.34 V	129	49.74	3.86
8	4824.00	50.8 AV	54.0	-3.2	1.34 V	129	46.94	3.86

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	2317.00	60.0 PK	74.0	-14.0	1.38 H	116	65.72	-5.72
2	2317.00	45.2 AV	54.0	-8.8	1.38 H	116	50.92	-5.72
3	*2437.00	118.4 PK			1.47 H	118	123.82	-5.42
4	*2437.00	116.9 AV			1.47 H	118	122.32	-5.42
5	4874.00	49.1 PK	74.0	-24.9	1.14 H	172	45.29	3.81
6	4874.00	40.5 AV	54.0	-13.5	1.14 H	172	36.69	3.81
7	7311.00	52.6 PK	74.0	-21.4	1.03 H	83	44.37	8.23
8	7311.00	41.5 AV	54.0	-12.5	1.03 H	83	33.27	8.23
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	2317.00	62.7 PK	74.0	-11.3	1.25 V	223	68.42	-5.72
2	2317.00	48.8 AV	54.0	-5.2	1.25 V	223	54.52	-5.72
3	*2437.00	119.3 PK			1.20 V	233	124.72	-5.42
4	*2437.00	117.0 AV			1.20 V	233	122.42	-5.42
5	4874.00	52.7 PK	74.0	-21.3	1.30 V	133	48.89	3.81
6	4874.00	50.0 AV	54.0	-4.0	1.30 V	133	46.19	3.81
7	7311.00	52.6 PK	74.0	-21.4	1.17 V	139	44.37	8.23
8	7311.00	42.6 AV	54.0	-11.4	1.17 V	139	34.37	8.23

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	2340.00	54.3 PK	74.0	-19.7	1.48 H	151	59.98	-5.68
2	2340.00	45.2 AV	54.0	-8.8	1.48 H	151	50.88	-5.68
3	*2462.00	118.4 PK			1.41 H	128	123.71	-5.31
4	*2462.00	116.5 AV			1.41 H	128	121.81	-5.31
5	2483.50	59.5 PK	74.0	-14.5	1.44 H	121	64.70	-5.20
6	2483.50	45.0 AV	54.0	-9.0	1.44 H	121	50.20	-5.20
7	4924.00	50.2 PK	74.0	-23.8	1.11 H	152	46.40	3.80
8	4924.00	41.4 AV	54.0	-12.6	1.11 H	152	37.60	3.80
9	7386.00	52.0 PK	74.0	-22.0	1.04 H	88	43.45	8.55
10	7386.00	41.1 AV	54.0	-12.9	1.04 H	88	32.55	8.55

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	118.6 PK			1.19 V	215	123.91	-5.31
2	*2462.00	116.7 AV			1.19 V	215	122.01	-5.31
3	2483.50	62.4 PK	74.0	-11.6	1.22 V	283	67.60	-5.20
4	2483.50	47.9 AV	54.0	-6.1	1.22 V	283	53.10	-5.20
5	4924.00	53.9 PK	74.0	-20.1	1.26 V	124	50.10	3.80
6	4924.00	50.8 AV	54.0	-3.2	1.26 V	124	47.00	3.80
7	7386.00	53.5 PK	74.0	-20.5	1.00 V	143	44.95	8.55
8	7386.00	43.6 AV	54.0	-10.4	1.00 V	143	35.05	8.55

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) – Pre-Amplifier 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

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	72.8 PK	74.0	-1.2	1.34 H	118	78.40	-5.60
2	2390.00	50.4 AV	54.0	-3.6	1.34 H	118	56.00	-5.60
3	*2412.00	115.4 PK			1.38 H	114	120.93	-5.53
4	*2412.00	104.9 AV			1.38 H	114	110.43	-5.53
5	4824.00	47.5 PK	74.0	-26.5	1.06 H	221	43.64	3.86
6	4824.00	34.5 AV	54.0	-19.5	1.06 H	221	30.64	3.86
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	72.9 PK	74.0	-1.1	1.36 V	335	78.50	-5.60
2	2390.00	50.5 AV	54.0	-3.5	1.36 V	335	56.10	-5.60
3	*2412.00	113.3 PK			1.25 V	347	118.83	-5.53
4	*2412.00	103.5 AV			1.25 V	347	109.03	-5.53
5	4824.00	49.5 PK	74.0	-24.5	1.00 V	150	45.64	3.86
6	4824.00	42.4 AV	54.0	-11.6	1.00 V	150	38.54	3.86

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	57.2 PK	74.0	-16.8	1.09 H	136	62.80	-5.60
2	2390.00	41.3 AV	54.0	-12.7	1.09 H	136	46.90	-5.60
3	*2437.00	117.3 PK			1.09 H	136	122.72	-5.42
4	*2437.00	106.8 AV			1.09 H	136	112.22	-5.42
5	2483.50	71.9 PK	74.0	-2.1	1.08 H	140	77.10	-5.20
6	2483.50	48.9 AV	54.0	-5.1	1.08 H	140	54.10	-5.20
7	4874.00	51.6 PK	74.0	-22.4	1.07 H	90	47.79	3.81
8	4874.00	40.3 AV	54.0	-13.7	1.07 H	90	36.49	3.81
9	7311.00	58.0 PK	74.0	-16.0	1.09 H	135	49.77	8.23
10	7311.00	44.9 AV	54.0	-9.1	1.09 H	135	36.67	8.23

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	63.2 PK	74.0	-10.8	1.23 V	327	68.80	-5.60
2	2390.00	43.6 AV	54.0	-10.4	1.23 V	327	49.20	-5.60
3	*2437.00	120.0 PK			1.23 V	327	125.42	-5.42
4	*2437.00	108.6 AV			1.23 V	327	114.02	-5.42
5	2483.50	72.4 PK	74.0	-1.6	1.23 V	327	77.60	-5.20
6	2483.50	48.2 AV	54.0	-5.8	1.23 V	327	53.40	-5.20
7	4874.00	52.4 PK	74.0	-21.6	1.28 V	122	48.59	3.81
8	4874.00	49.3 AV	54.0	-4.7	1.28 V	122	45.49	3.81
9	7311.00	52.5 PK	74.0	-21.5	1.18 V	140	44.27	8.23
10	7311.00	42.5 AV	54.0	-11.5	1.18 V	140	34.27	8.23

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	114.6 PK			1.10 H	334	119.91	-5.31
2	*2462.00	104.1 AV			1.10 H	334	109.41	-5.31
3	2483.50	72.1 PK	74.0	-1.9	1.10 H	334	77.30	-5.20
4	2483.50	47.8 AV	54.0	-6.2	1.10 H	334	53.00	-5.20
5	4924.00	46.5 PK	74.0	-27.5	1.03 H	209	42.70	3.80
6	4924.00	33.8 AV	54.0	-20.2	1.03 H	209	30.00	3.80
7	7386.00	52.0 PK	74.0	-22.0	1.05 H	85	43.45	8.55
8	7386.00	40.9 AV	54.0	-13.1	1.05 H	85	32.35	8.55
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	114.3 PK			1.26 V	319	119.61	-5.31
2	*2462.00	103.7 AV			1.26 V	319	109.01	-5.31
3	2483.50	72.7 PK	74.0	-1.3	1.26 V	319	77.90	-5.20
4	2483.50	47.0 AV	54.0	-7.0	1.26 V	319	52.20	-5.20
5	4924.00	49.6 PK	74.0	-24.4	1.02 V	145	45.80	3.80
6	4924.00	44.3 AV	54.0	-9.7	1.02 V	145	40.50	3.80
7	7386.00	53.8 PK	74.0	-20.2	1.04 V	156	45.25	8.55
8	7386.00	43.4 AV	54.0	-10.6	1.04 V	156	34.85	8.55

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (HT20)

CHANNEL	TX Channel 1	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	72.7 PK	74.0	-1.3	1.15 H	136	78.30	-5.60
2	2390.00	49.9 AV	54.0	-4.1	1.15 H	136	55.50	-5.60
3	*2412.00	112.2 PK			1.08 H	132	117.73	-5.53
4	*2412.00	102.0 AV			1.08 H	132	107.53	-5.53
5	4824.00	47.8 PK	74.0	-26.2	1.00 H	216	43.94	3.86
6	4824.00	34.8 AV	54.0	-19.2	1.00 H	216	30.94	3.86
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	72.2 PK	74.0	-1.8	1.30 V	334	77.80	-5.60
2	2390.00	51.5 AV	54.0	-2.5	1.30 V	334	57.10	-5.60
3	*2412.00	113.8 PK			1.25 V	336	119.33	-5.53
4	*2412.00	103.7 AV			1.25 V	336	109.23	-5.53
5	4824.00	49.4 PK	74.0	-24.6	1.03 V	153	45.54	3.86
6	4824.00	42.5 AV	54.0	-11.5	1.03 V	153	38.64	3.86

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	60.9 PK	74.0	-13.1	1.09 H	343	66.50	-5.60
2	2390.00	41.3 AV	54.0	-12.7	1.09 H	343	46.90	-5.60
3	*2437.00	117.4 PK			1.18 H	345	122.82	-5.42
4	*2437.00	107.1 AV			1.18 H	345	112.52	-5.42
5	2483.50	72.6 PK	74.0	-1.4	1.06 H	331	77.80	-5.20
6	2483.50	48.4 AV	54.0	-5.6	1.06 H	331	53.60	-5.20
7	4874.00	51.5 PK	74.0	-22.5	1.08 H	80	47.69	3.81
8	4874.00	40.2 AV	54.0	-13.8	1.08 H	80	36.39	3.81
9	7311.00	58.4 PK	74.0	-15.6	1.00 H	122	50.17	8.23
10	7311.00	45.6 AV	54.0	-8.4	1.00 H	122	37.37	8.23

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	2384.00	67.1 PK	74.0	-6.9	1.28 V	331	72.71	-5.61
2	2384.00	43.6 AV	54.0	-10.4	1.28 V	331	49.21	-5.61
3	*2437.00	117.2 PK			1.34 V	330	122.62	-5.42
4	*2437.00	108.2 AV			1.34 V	330	113.62	-5.42
5	2483.50	72.1 PK	74.0	-1.9	1.23 V	332	77.30	-5.20
6	2483.50	48.7 AV	54.0	-5.3	1.23 V	332	53.90	-5.20
7	4874.00	53.0 PK	74.0	-21.0	1.19 V	112	49.19	3.81
8	4874.00	48.8 AV	54.0	-5.2	1.19 V	112	44.99	3.81
9	7311.00	52.2 PK	74.0	-21.8	1.14 V	159	43.97	8.23
10	7311.00	42.3 AV	54.0	-11.7	1.14 V	159	34.07	8.23

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	115.3 PK			1.37 H	105	120.61	-5.31
2	*2462.00	104.7 AV			1.37 H	105	110.01	-5.31
3	2483.50	72.9 PK	74.0	-1.1	1.01 H	184	78.10	-5.20
4	2483.50	50.1 AV	54.0	-3.9	1.01 H	184	55.30	-5.20
5	4924.00	52.6 PK	74.0	-21.4	1.01 H	84	48.80	3.80
6	4924.00	41.1 AV	54.0	-12.9	1.01 H	84	37.30	3.80
7	7386.00	57.1 PK	74.0	-16.9	1.10 H	152	48.55	8.55
8	7386.00	44.1 AV	54.0	-9.9	1.10 H	152	35.55	8.55
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	112.8 PK			1.00 V	166	118.11	-5.31
2	*2462.00	102.4 AV			1.00 V	166	107.71	-5.31
3	2483.50	72.1 PK	74.0	-1.9	1.31 V	115	77.30	-5.20
4	2483.50	49.7 AV	54.0	-4.3	1.31 V	115	54.90	-5.20
5	4924.00	52.8 PK	74.0	-21.2	1.22 V	97	49.00	3.80
6	4924.00	48.7 AV	54.0	-5.3	1.22 V	97	44.90	3.80
7	7386.00	52.0 PK	74.0	-22.0	1.12 V	173	43.45	8.55
8	7386.00	42.1 AV	54.0	-11.9	1.12 V	173	33.55	8.55

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

802.11n (HT40)

CHANNEL	TX Channel 3	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	72.2 PK	74.0	-1.8	1.41 H	113	77.80	-5.60
2	2390.00	53.0 AV	54.0	-1.0	1.41 H	113	58.60	-5.60
3	*2422.00	109.5 PK			1.35 H	140	114.99	-5.49
4	*2422.00	99.5 AV			1.35 H	140	104.99	-5.49
5	4844.00	47.4 PK	74.0	-26.6	1.01 H	206	43.56	3.84
6	4844.00	34.8 AV	54.0	-19.2	1.01 H	206	30.96	3.84
7	7266.00	49.3 PK	74.0	-24.7	1.00 H	58	41.24	8.06
8	7266.00	39.3 AV	54.0	-14.7	1.00 H	58	31.24	8.06

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	71.8 PK	74.0	-2.2	1.21 V	170	77.40	-5.60
2	2390.00	52.1 AV	54.0	-1.9	1.21 V	170	57.70	-5.60
3	*2422.00	107.7 PK			1.07 V	191	113.19	-5.49
4	*2422.00	97.5 AV			1.07 V	191	102.99	-5.49
5	4844.00	49.1 PK	74.0	-24.9	1.35 V	119	45.26	3.84
6	4844.00	44.4 AV	54.0	-9.6	1.35 V	119	40.56	3.84
7	7266.00	51.5 PK	74.0	-22.5	1.00 V	111	43.44	8.06
8	7266.00	42.2 AV	54.0	-11.8	1.00 V	111	34.14	8.06

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 6	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	72.5 PK	74.0	-1.5	1.32 H	107	78.10	-5.60
2	2390.00	47.2 AV	54.0	-6.8	1.32 H	107	52.80	-5.60
3	*2437.00	111.4 PK			1.27 H	135	116.82	-5.42
4	*2437.00	101.5 AV			1.27 H	135	106.92	-5.42
5	2483.50	69.1 PK	74.0	-4.9	1.33 H	109	74.30	-5.20
6	2483.50	45.9 AV	54.0	-8.1	1.33 H	109	51.10	-5.20
7	4874.00	47.2 PK	74.0	-26.8	1.00 H	219	43.39	3.81
8	4874.00	34.1 AV	54.0	-19.9	1.00 H	219	30.29	3.81
9	7311.00	49.9 PK	74.0	-24.1	1.00 H	43	41.67	8.23
10	7311.00	39.8 AV	54.0	-14.2	1.00 H	43	31.57	8.23

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	71.9 PK	74.0	-2.1	1.00 V	197	77.50	-5.60
2	2390.00	46.9 AV	54.0	-7.1	1.00 V	197	52.50	-5.60
3	*2437.00	111.1 PK			1.00 V	162	116.52	-5.42
4	*2437.00	100.9 AV			1.00 V	162	106.32	-5.42
5	2483.50	67.5 PK	74.0	-6.5	1.00 V	179	72.70	-5.20
6	2483.50	44.4 AV	54.0	-9.6	1.00 V	179	49.60	-5.20
7	4874.00	50.9 PK	74.0	-23.1	1.33 V	150	47.09	3.81
8	4874.00	45.5 AV	54.0	-8.5	1.33 V	150	41.69	3.81
9	7311.00	54.1 PK	74.0	-19.9	1.07 V	129	45.87	8.23
10	7311.00	43.8 AV	54.0	-10.2	1.07 V	129	35.57	8.23

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) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.

CHANNEL	TX Channel 9	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

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	*2452.00	110.6 PK			1.24 H	132	115.96	-5.36
2	*2452.00	99.2 AV			1.24 H	132	104.56	-5.36
3	2483.50	72.1 PK	74.0	-1.9	1.27 H	93	77.30	-5.20
4	2483.50	52.5 AV	54.0	-1.5	1.27 H	93	57.70	-5.20
5	4904.00	46.7 PK	74.0	-27.3	1.05 H	242	42.91	3.79
6	4904.00	34.5 AV	54.0	-19.5	1.05 H	242	30.71	3.79
7	7356.00	51.4 PK	74.0	-22.6	1.08 H	56	42.97	8.43
8	7356.00	40.4 AV	54.0	-13.6	1.08 H	56	31.97	8.43
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	*2452.00	107.8 PK			1.00 V	170	113.16	-5.36
2	*2452.00	97.4 AV			1.00 V	170	102.76	-5.36
3	2483.50	71.7 PK	74.0	-2.3	1.03 V	167	76.90	-5.20
4	2483.50	51.4 AV	54.0	-2.6	1.03 V	167	56.60	-5.20
5	4904.00	49.6 PK	74.0	-24.4	1.27 V	95	45.81	3.79
6	4904.00	44.7 AV	54.0	-9.3	1.27 V	95	40.91	3.79
7	7356.00	52.7 PK	74.0	-21.3	1.05 V	129	44.27	8.43
8	7356.00	42.5 AV	54.0	-11.5	1.05 V	129	34.07	8.43

REMARKS:

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

4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	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 0.50MHz.

4.2.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS 30	100375	Apr. 29, 2014	Apr. 28, 2015
Line-Impedance Stabilization Network (for EUT) SCHWARZBECK	NSLK-8127	8127-522	Sep. 15, 2014	Sep. 14, 2015
Line-Impedance Stabilization Network (for Peripheral) ROHDE & SCHWARZ	ENV216	100071	Nov. 10, 2014	Nov. 09, 2015
RF Cable (JYEBAO)	5DFB	COCCAB-001	Mar. 10, 2014	Mar. 09, 2015
50 ohms Terminator	N/A	EMC-03	Sep. 22, 2014	Sep. 21, 2015
50 ohms Terminator	N/A	EMC-02	Sep. 30, 2014	Sep. 29, 2015
Software ADT	BV ADT_Cond_V7.3.7. 3	NA	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 Shielded Room No. C.
3. The VCCI Con C Registration No. is C-3611.
4. Tested Date: Jan. 12, 2015

4.2.3 Test Procedures

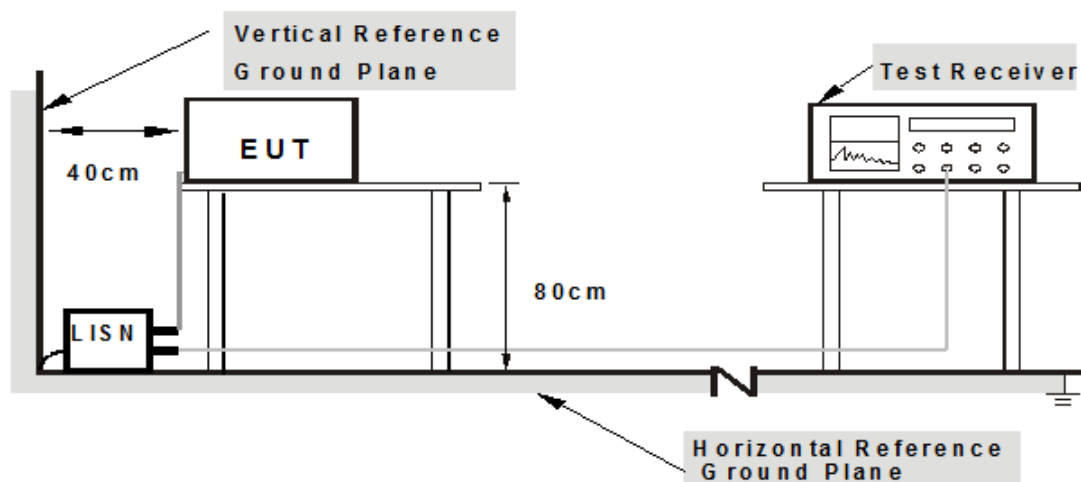
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

Note: 1. The resolution bandwidth of test receiver is 9kHz for Quasi-peak detection (QP) & Average detection (AV).

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1. Support units were connected to second LISN.

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 (MODE 1)

PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	0.07	48.82	36.26	48.89	36.33	63.74	53.74	-14.85	-17.41
2	0.27109	0.08	42.66	27.26	42.74	27.34	61.08	51.08	-18.35	-23.75
3	0.30625	0.08	41.40	29.72	41.48	29.80	60.07	50.07	-18.59	-20.27
4	0.39609	0.09	34.06	21.22	34.15	21.31	57.93	47.93	-23.79	-26.63
5	0.50156	0.10	27.88	14.38	27.98	14.48	56.00	46.00	-28.02	-31.52
6	3.94141	0.25	27.14	20.62	27.39	20.87	56.00	46.00	-28.61	-25.13

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

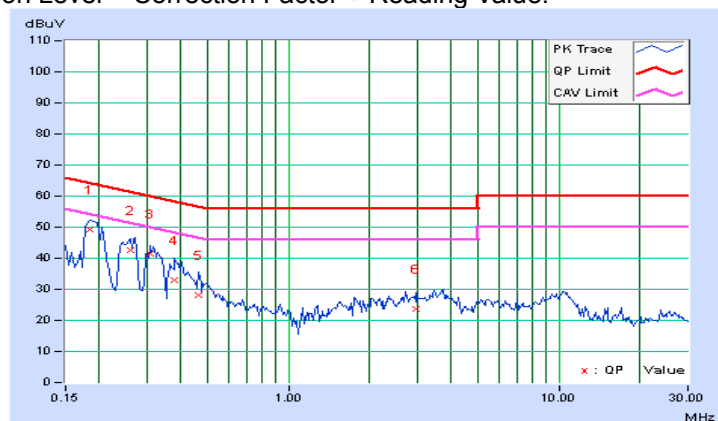


PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18516	0.06	49.26	36.82	49.32	36.88	64.25	54.25	-14.93	-17.37
2	0.25938	0.07	42.68	31.88	42.75	31.95	61.45	51.45	-18.70	-19.50
3	0.31016	0.08	41.34	30.32	41.42	30.40	59.97	49.97	-18.55	-19.57
4	0.38047	0.09	32.76	20.72	32.85	20.81	58.27	48.27	-25.42	-27.46
5	0.46641	0.09	28.04	13.98	28.13	14.07	56.58	46.58	-28.44	-32.50
6	2.94531	0.22	23.50	16.60	23.72	16.82	56.00	46.00	-32.28	-29.18

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



4.2.8 Test Results (MODE 2)

PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)
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No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.17344	0.07	52.32	38.44	52.39	38.51	64.79	54.79	-12.41	-16.29
2	0.33359	0.08	39.84	26.90	39.92	26.98	59.36	49.36	-19.44	-22.38
3	0.40391	0.09	43.66	35.50	43.75	35.59	57.77	47.77	-14.02	-12.18
4	0.48984	0.10	46.20	35.26	46.30	35.36	56.17	46.17	-9.87	-10.81
5	2.55469	0.20	30.80	24.86	31.00	25.06	56.00	46.00	-25.00	-20.94
6	9.41797	0.43	32.40	26.46	32.83	26.89	60.00	50.00	-27.17	-23.11

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

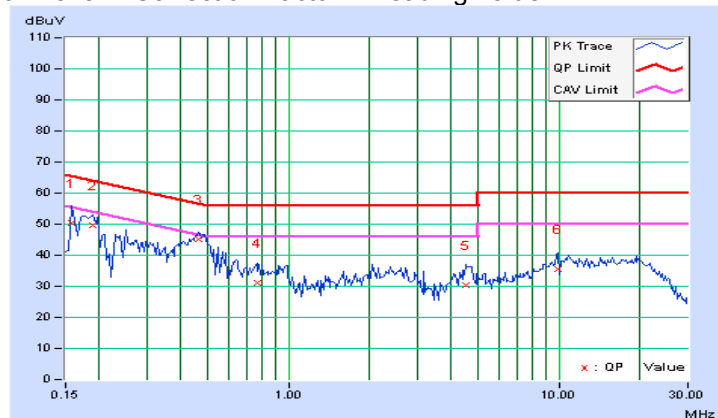


PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	0.06	50.46	28.00	50.52	28.06	65.58	55.58	-15.05	-27.51
2	0.18906	0.06	49.58	41.38	49.64	41.44	64.08	54.08	-14.44	-12.64
3	0.46250	0.09	45.18	37.96	45.27	38.05	56.65	46.65	-11.37	-8.59
4	0.76328	0.11	31.02	18.94	31.13	19.05	56.00	46.00	-24.87	-26.95
5	4.53516	0.28	30.20	21.72	30.48	22.00	56.00	46.00	-25.52	-24.00
6	9.98047	0.46	34.98	28.78	35.44	29.24	60.00	50.00	-24.56	-20.76

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



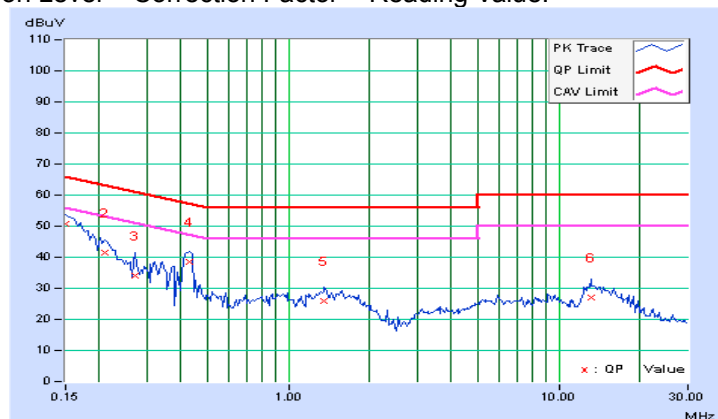
4.2.9 Test Results (MODE 3)

PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.07	50.62	38.08	50.69	38.15	66.00	56.00	-15.31	-17.85
2	0.20859	0.07	41.58	31.36	41.65	31.43	63.26	53.26	-21.61	-21.83
3	0.27109	0.08	34.06	23.48	34.14	23.56	61.08	51.08	-26.95	-27.53
4	0.43125	0.09	38.34	26.66	38.43	26.75	57.23	47.23	-18.80	-20.48
5	1.35938	0.15	25.86	20.18	26.01	20.33	56.00	46.00	-29.99	-25.67
6	13.09766	0.53	26.40	21.36	26.93	21.89	60.00	50.00	-33.07	-28.11

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

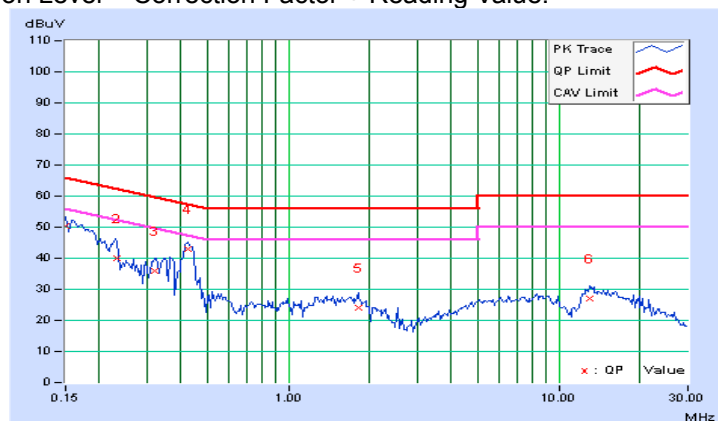


PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.07	50.26	37.60	50.33	37.67	66.00	56.00	-15.67	-18.33
2	0.23203	0.06	39.82	30.02	39.88	30.08	62.38	52.38	-22.49	-22.29
3	0.32188	0.08	35.90	28.78	35.98	28.86	59.66	49.66	-23.68	-20.80
4	0.42344	0.09	42.80	35.22	42.89	35.31	57.38	47.38	-14.49	-12.07
5	1.80859	0.17	24.08	17.34	24.25	17.51	56.00	46.00	-31.75	-28.49
6	13.07031	0.55	26.54	21.32	27.09	21.87	60.00	50.00	-32.91	-28.13

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



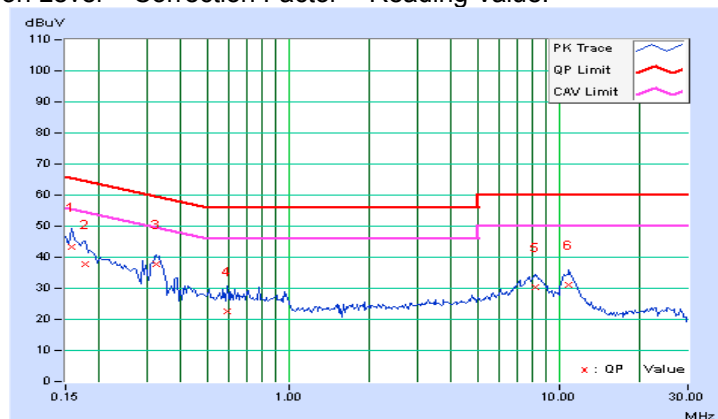
4.2.10 Test Results (MODE 4)

PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	0.07	43.26	30.26	43.33	30.33	65.58	55.58	-22.25	-25.25
2	0.17734	0.07	37.62	26.44	37.69	26.51	64.61	54.61	-26.92	-28.10
3	0.32578	0.08	37.76	29.40	37.84	29.48	59.56	49.56	-21.72	-20.08
4	0.59141	0.10	22.48	13.12	22.58	13.22	56.00	46.00	-33.42	-32.78
5	8.14063	0.39	29.82	23.80	30.21	24.19	60.00	50.00	-29.79	-25.81
6	10.86719	0.47	30.76	26.28	31.23	26.75	60.00	50.00	-28.77	-23.25

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

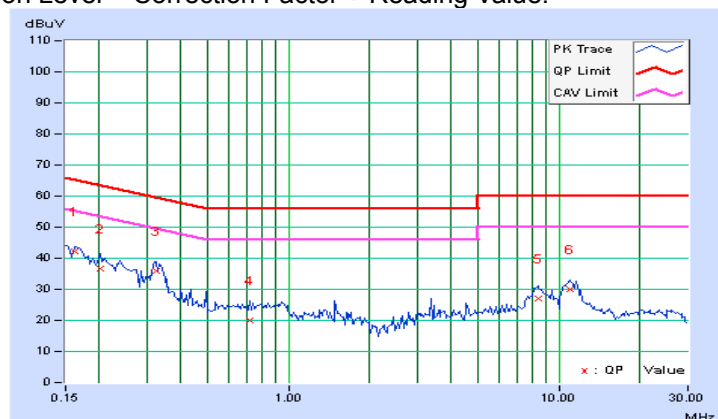


PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16172	0.06	42.00	31.34	42.06	31.40	65.38	55.38	-23.31	-23.97
2	0.20078	0.06	36.46	25.06	36.52	25.12	63.58	53.58	-27.06	-28.46
3	0.32578	0.08	35.80	26.38	35.88	26.46	59.56	49.56	-23.68	-23.10
4	0.71641	0.11	19.92	13.46	20.03	13.57	56.00	46.00	-35.97	-32.43
5	8.35156	0.41	26.46	19.94	26.87	20.35	60.00	50.00	-33.13	-29.65
6	10.93750	0.49	29.50	24.58	29.99	25.07	60.00	50.00	-30.01	-24.93

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

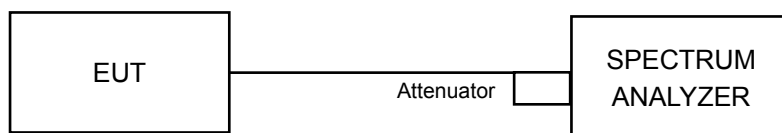


4.3 6dB Bandwidth Measurement

4.3.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 Test Setup



4.3.3 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
SPECTRUM ANALYZER R&S	FSP 40	100060	May 08, 2014	May 07, 2015

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. Tested date: Jan. 12, 2015

4.3.4 Test Procedure

- Set resolution bandwidth (RBW) = 100kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.3.5 Deviation from Test Standard

No deviation.

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 Result

802.11b

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	7.12	7.59	7.11	0.5	PASS
6	2437	7.12	7.12	7.12	0.5	PASS
11	2462	7.12	7.57	7.12	0.5	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	16.59	16.63	16.53	0.5	PASS
6	2437	16.60	16.61	16.52	0.5	PASS
11	2462	16.60	16.61	16.53	0.5	PASS

802.11n (HT20)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
1	2412	17.86	17.86	17.85	0.5	PASS
6	2437	17.85	17.83	17.79	0.5	PASS
11	2462	17.88	17.85	17.82	0.5	PASS

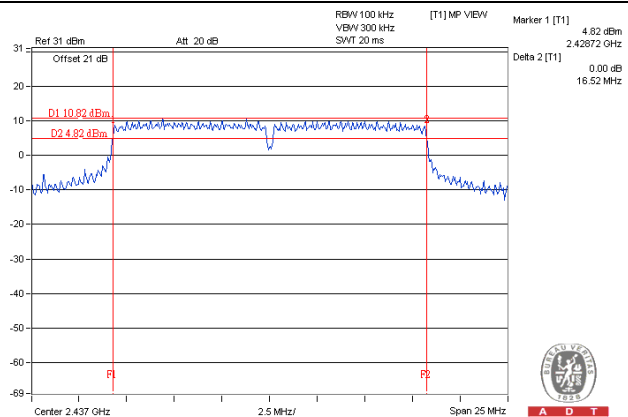
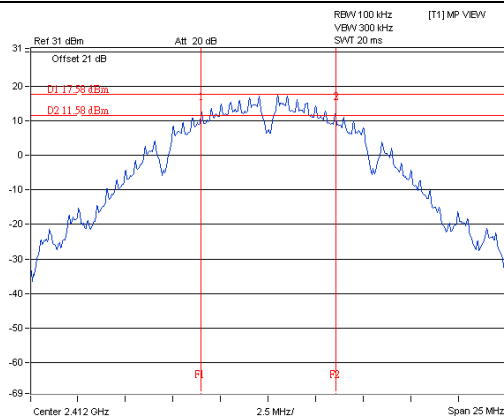
802.11n (HT40)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)			MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2		
3	2422	36.60	36.61	36.58	0.5	PASS
6	2437	36.60	36.60	36.59	0.5	PASS
9	2452	36.65	36.62	36.60	0.5	PASS

SPECTRUM PLOT OF WORST VALUE

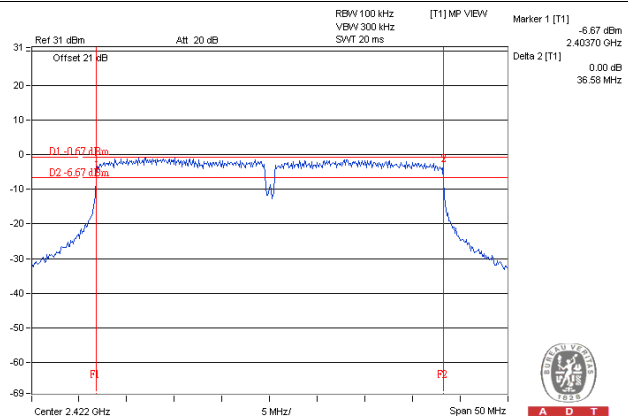
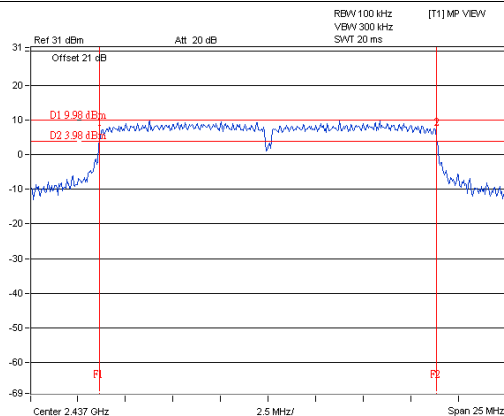
802.11b – Chain (2): CH 1

802.11g – Chain (2): CH 6



802.11n (HT20) – Chain (2): CH 6

802.11n (HT40) – Chain (2): CH 3



4.4 Conducted Output Power Measurement

4.4.1 Limits OF Conducted Output Power Measurement

For systems using digital modulation in the 2400–2483.5 MHz bands: 1 Watt (30dBm)

Per KDB 662911 D01 Multiple Transmitter Output Method of conducted output power measurement on IEEE 802.11 devices,

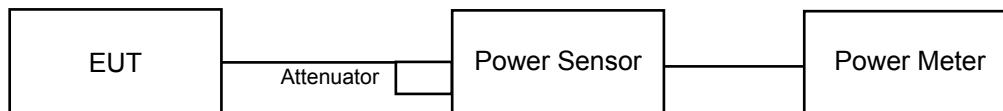
Array Gain = 0 dB (i.e., no array gain) for $NANT \leq 4$;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any NANT;

Array Gain = $5 \log(NANT/NSS)$ dB or 3 dB, whichever is less for 20-MHz channel widths with $NANT \geq 5$.

For power measurements on all other devices: Array Gain = $10 \log(NANT/NSS)$ dB.

4.4.2 Test Setup



4.4.3 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power meter Anritsu	ML2495A	1014008	Apr. 30, 2014	Apr. 29, 2015
Power sensor Anritsu	MA2411B	0917122	Apr. 30, 2014	Apr. 29, 2015

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. Tested date: Jan. 12, 2015

4.4.4 Test Procedures

An average power sensor was used on the output port of the EUT. A power meter was used to read the response of the average power sensor. Record the power level.

4.4.5 Deviation from Test Standard

No deviation.

4.4.6 EUT Operating Conditions

Same as Item 4.3.6.

4.4.7 Test Results

802.11b

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
1	2412	24.62	24.11	23.03	748.275	28.74	30	PASS
6	2437	24.41	24.03	23.02	729.435	28.63	30	PASS
11	2462	24.36	23.92	22.99	718.569	28.56	30	PASS

802.11g

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
1	2412	18.70	18.46	18.64	217.391	23.37	30	PASS
6	2437	23.65	23.71	23.69	700.586	28.45	30	PASS
11	2462	18.63	18.61	18.66	219.008	23.40	30	PASS

802.11n (HT20)

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
1	2412	18.53	18.46	17.74	200.86	23.03	30	PASS
6	2437	23.23	23.32	23.35	641.433	28.07	30	PASS
11	2462	18.07	18.05	17.95	190.32	22.79	30	PASS

802.11n (HT40)

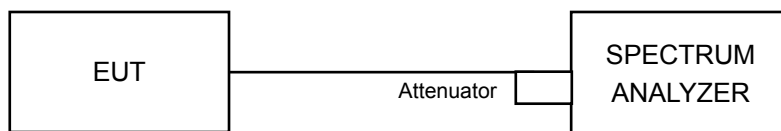
CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)			TOTAL POWER (mW)	TOTAL POWER (dBm)	LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1	CHAIN 2				
3	2422	16.30	16.16	16.04	124.142	20.94	30	PASS
6	2437	18.53	18.39	18.12	205.172	23.12	30	PASS
9	2452	16.58	1.00	15.22	80.024	19.03	30	PASS

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 Setup



4.5.3 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
SPECTRUM ANALYZER R&S	FSP 40	100060	May 08, 2014	May 07, 2015

- NOTE:**
1. The test was performed in Oven room B.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. Tested Date: Jan. 12, 2015

4.5.4 Test Procedure

1. Set the RBW = 10 kHz, VBW =30 kHz, Detector = power averaging (RMS).
2. Ensure that the number of measurement points in the sweep $\geq 2 \times \text{span/RBW}$
3. Sweep time = auto couple,
4. Employ trace averaging (RMS) mode over a minimum of 100 traces.
5. Use the peak marker function to determine the maximum amplitude level.

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

Same as Item 4.3.6

4.5.7 Test Results

802.11b

TX CHAIN	CHANNEL	FREQUENCY (MHz)	PSD (dBm)	10 log (N=3) dB	TOTAL PSD (dBm)	LIMIT (dBm)	PASS /FAIL
0	1	2412	-1.80	4.77	2.97	5.96	PASS
	6	2437	-3.31	4.77	1.46	5.96	PASS
	11	2462	-1.61	4.77	3.16	5.96	PASS
1	1	2412	-2.05	4.77	2.72	5.96	PASS
	6	2437	-3.19	4.77	1.58	5.96	PASS
	11	2462	-3.42	4.77	1.35	5.96	PASS
2	1	2412	-2.49	4.77	2.28	5.96	PASS
	6	2437	-3.35	4.77	1.42	5.96	PASS
	11	2462	-3.61	4.77	1.16	5.96	PASS

NOTE: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 8.04\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8-(8.04-6) = 5.96\text{dBm}$.

802.11g

TX CHAIN	CHANNEL	FREQUENCY (MHz)	PSD (dBm)	10 log (N=3) dB	TOTAL PSD (dBm)	LIMIT (dBm)	PASS /FAIL
0	1	2412	-9.89	4.77	-5.12	5.96	PASS
	6	2437	-4.70	4.77	0.07	5.96	PASS
	11	2462	-10.29	4.77	-5.52	5.96	PASS
1	1	2412	-12.26	4.77	-7.49	5.96	PASS
	6	2437	-6.49	4.77	-1.72	5.96	PASS
	11	2462	-12.36	4.77	-7.59	5.96	PASS
2	1	2412	-12.12	4.77	-7.35	5.96	PASS
	6	2437	-6.75	4.77	-1.98	5.96	PASS
	11	2462	-12.35	4.77	-7.58	5.96	PASS

NOTE: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 8.04\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8-(8.04-6) = 5.96\text{dBm}$.

802.11n (HT20)

TX CHAIN	CHANNEL	FREQUENCY (MHz)	PSD (dBm)	10 log (N=3) dB	TOTAL PSD (dBm)	LIMIT (dBm)	PASS /FAIL
0	1	2412	-11.29	4.77	-6.52	5.96	PASS
	6	2437	-6.23	4.77	-1.46	5.96	PASS
	11	2462	-11.74	4.77	-6.97	5.96	PASS
1	1	2412	-10.40	4.77	-5.63	5.96	PASS
	6	2437	-8.05	4.77	-3.28	5.96	PASS
	11	2462	-12.23	4.77	-7.46	5.96	PASS
2	1	2412	-12.74	4.77	-7.97	5.96	PASS
	6	2437	-7.36	4.77	-2.59	5.96	PASS
	11	2462	-11.31	4.77	-6.54	5.96	PASS

NOTE: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 8.04\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8-(8.04-6) = 5.96\text{dBm}$.

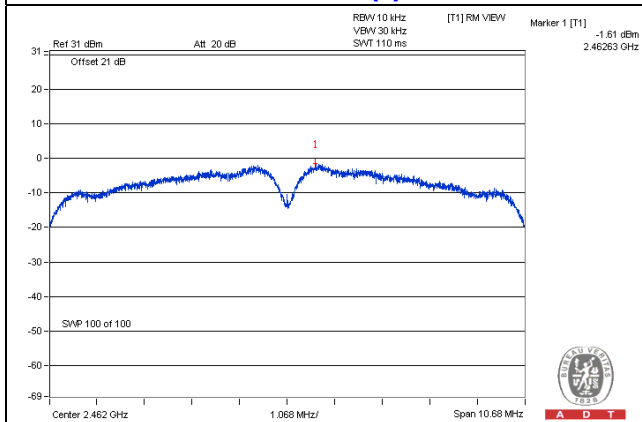
802.11n (HT40)

TX CHAIN	CHANNEL	FREQUENCY (MHz)	PSD (dBm)	10 log (N=3) dB	TOTAL PSD (dBm)	LIMIT (dBm)	PASS /FAIL
0	3	2422	-15.23	4.77	-10.46	5.96	PASS
	6	2437	-12.94	4.77	-8.17	5.96	PASS
	9	2452	-15.70	4.77	-10.93	5.96	PASS
1	3	2422	-16.48	4.77	-11.71	5.96	PASS
	6	2437	-14.06	4.77	-9.29	5.96	PASS
	9	2452	-17.05	4.77	-12.28	5.96	PASS
2	3	2422	-16.91	4.77	-12.14	5.96	PASS
	6	2437	-13.55	4.77	-8.78	5.96	PASS
	9	2452	-16.18	4.77	-11.41	5.96	PASS

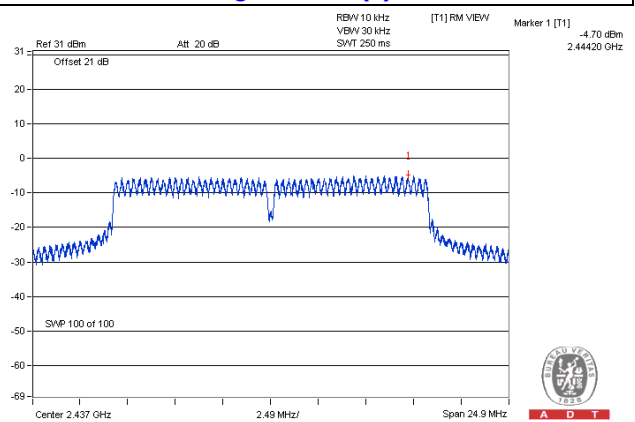
NOTE: Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + 10^{G3/20})^2 / 3] = 8.04\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $8-(8.04-6) = 5.96\text{dBm}$.

SPECTRUM PLOT OF WORST VALUE

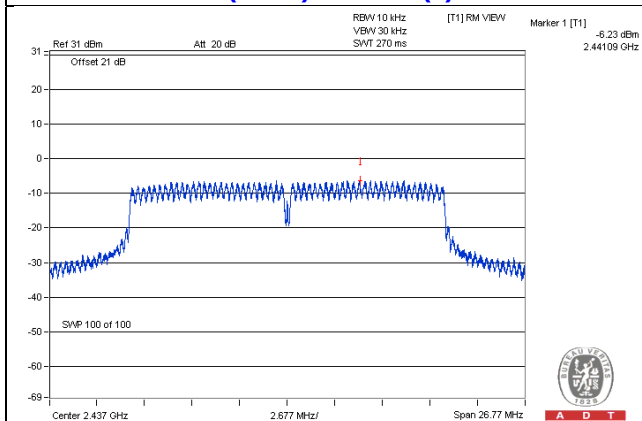
802.11b – Chain (0): CH 11



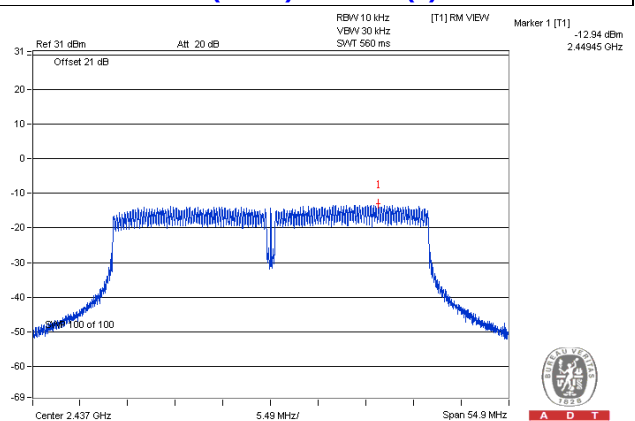
802.11g – Chain (0): CH 6



802.11n (HT20) – Chain (0): CH 6



802.11n (HT40) – Chain (0): CH 6

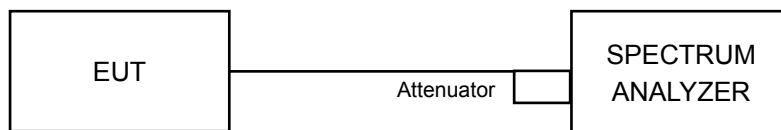


4.6 Conducted Out of Band Emission Measurement

4.6.1 Limits of Conducted Out of Band Emission Measurement

Below 30dB of the highest emission level of operating band (in 100kHz Resolution Bandwidth).

4.6.2 Test Setup



4.6.3 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
SPECTRUM ANALYZER R&S	FSP 40	100060	May 08, 2014	May 07, 2015

- NOTE:**
1. The test was performed in Oven room B.
 2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. Tested Date: Jan. 12, 2015

4.6.4 Test Procedure

MEASUREMENT PROCEDURE REF

1. Set the RBW = 100 kHz.
2. Set the VBW $\geq$ 300 kHz.
3. Detector = peak.
4. Sweep time = auto couple.
5. Trace mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.

MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW $\geq$ 300 kHz.
3. Detector = peak.
4. Sweep = auto couple.
5. Trace Mode = max hold.
6. Allow trace to fully stabilize.
7. Use the peak marker function to determine the maximum amplitude level.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

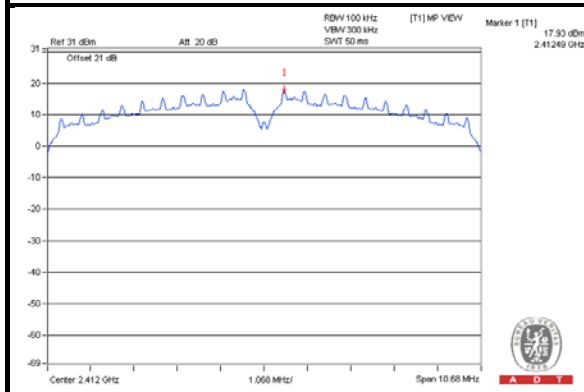
Same as Item 4.3.6

4.6.7 Test Results

The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 30dB offset below D1. It shows compliance with the requirement.

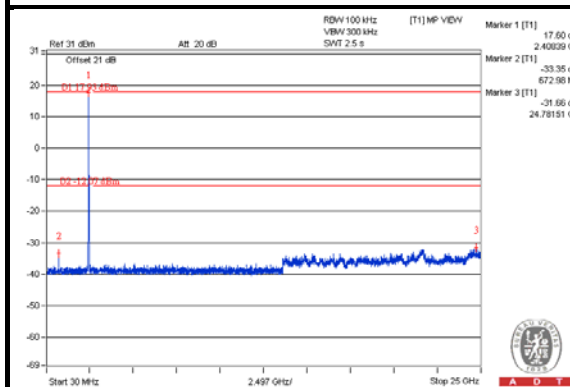
802.11b

Maximum REF

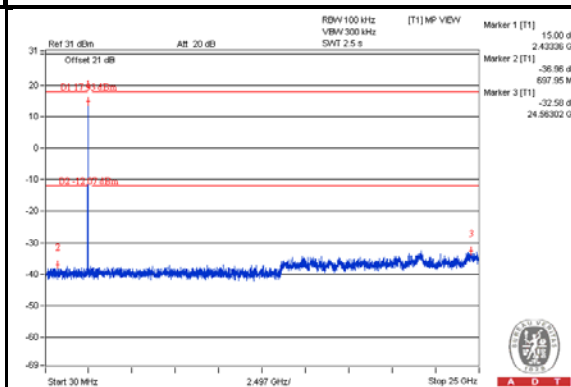


CHAIN 0

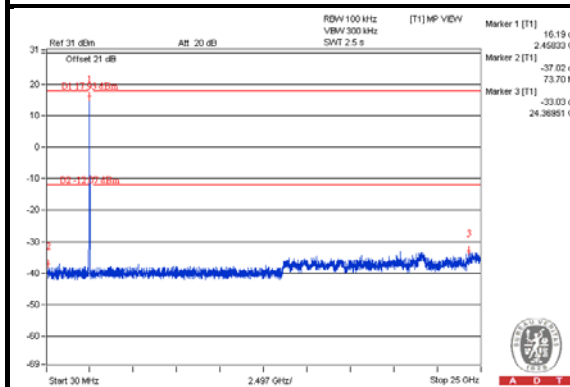
CH 1



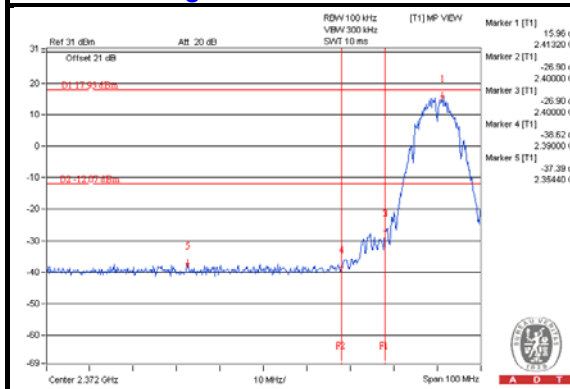
CH 6



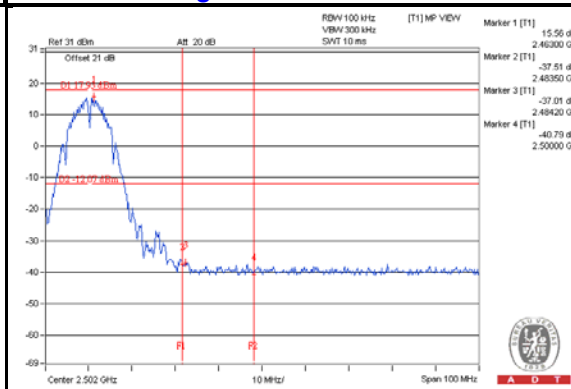
CH 11



CH 1 Band edge

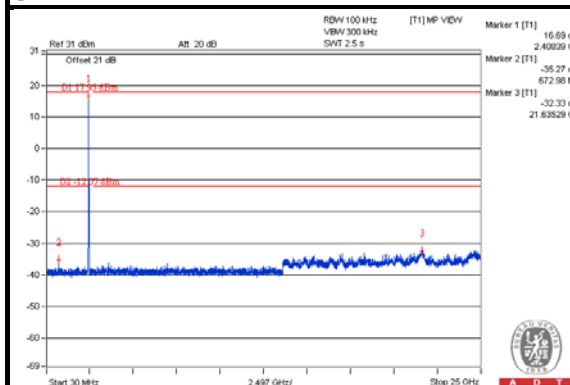


CH 11 Band edge

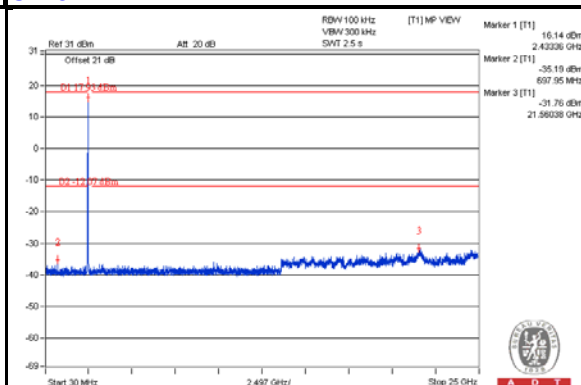


CHAIN 1

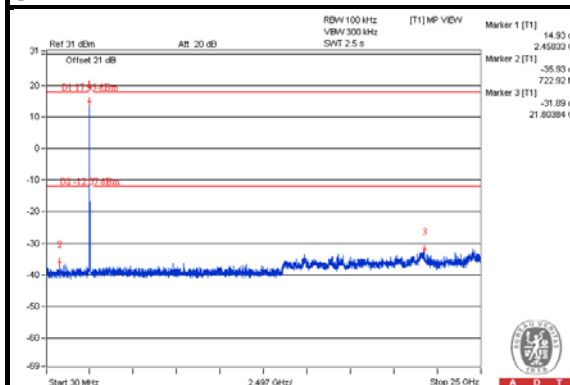
CH 1



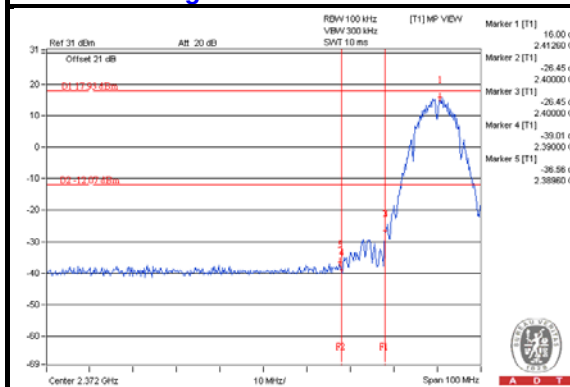
CH 6



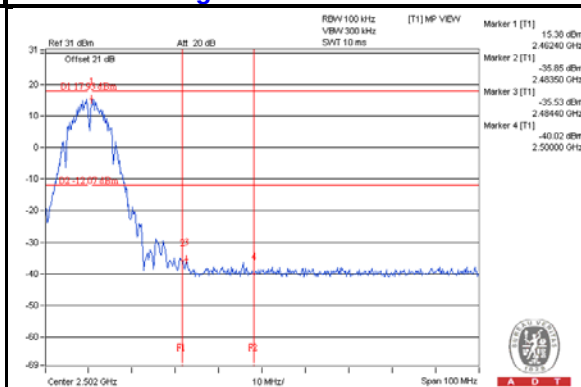
CH 11



CH 1 Band edge

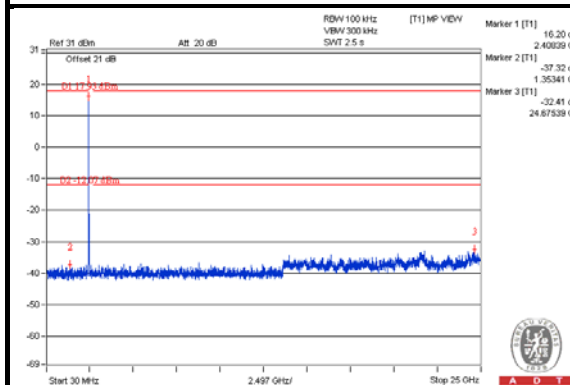


CH 11 Band edge

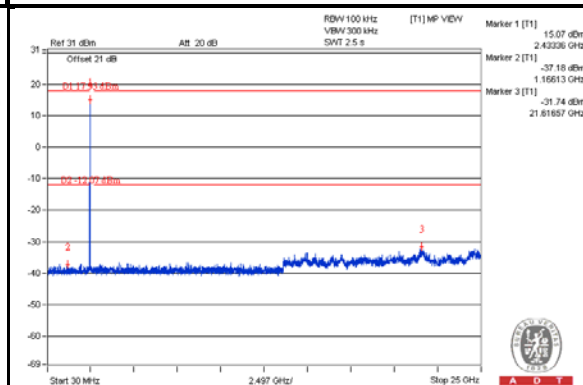


CHAIN 2

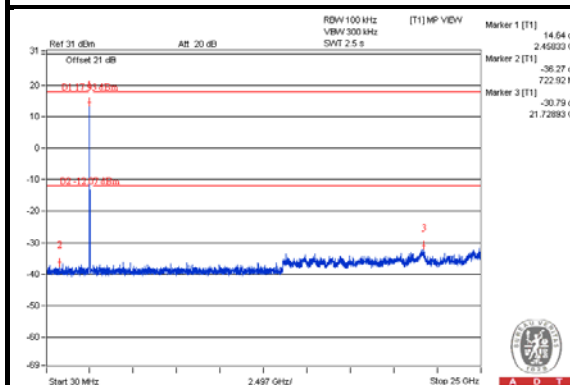
CH 1



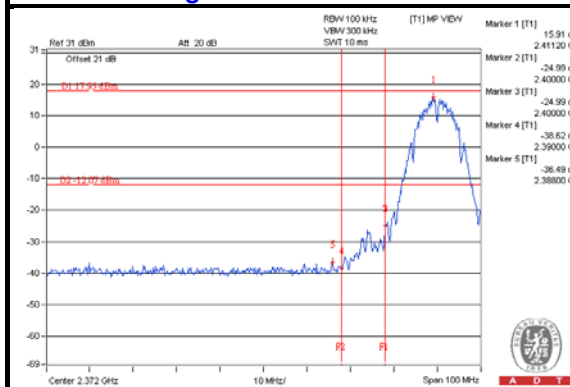
CH 6



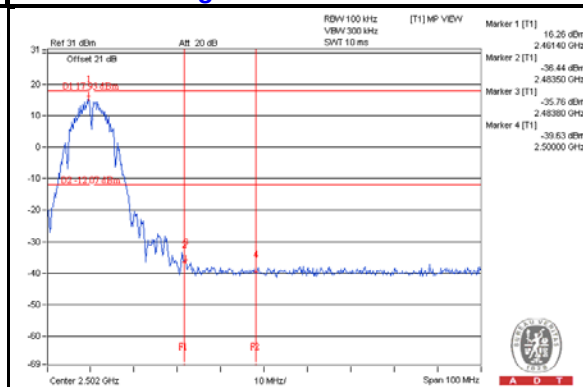
CH 11



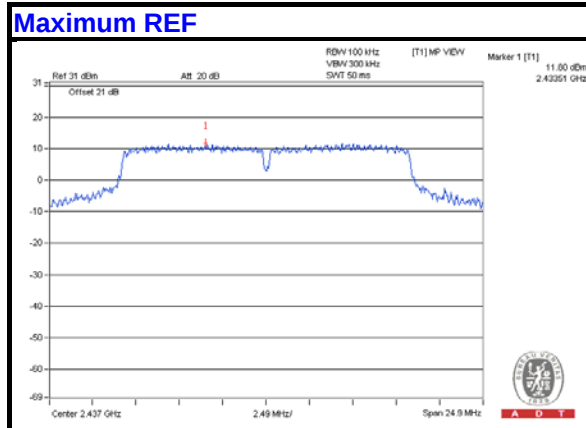
CH 1 Band edge



CH 11 Band edge

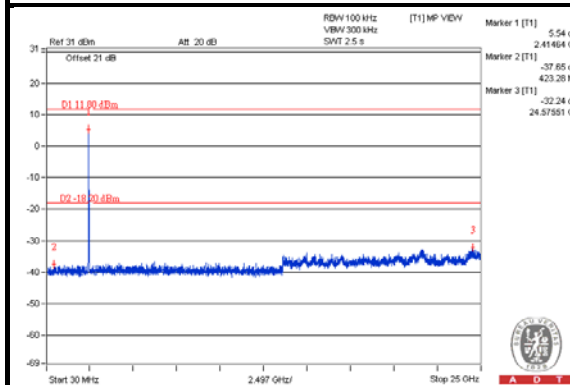


802.11g

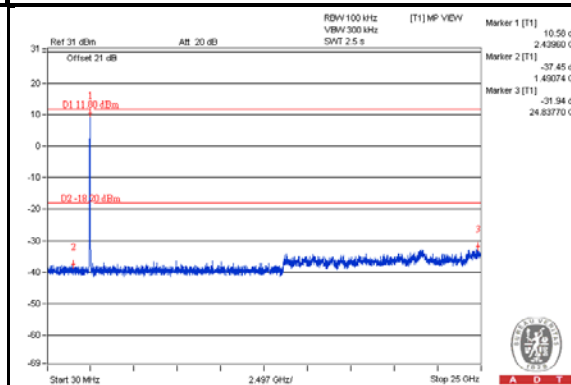


CHAIN 0

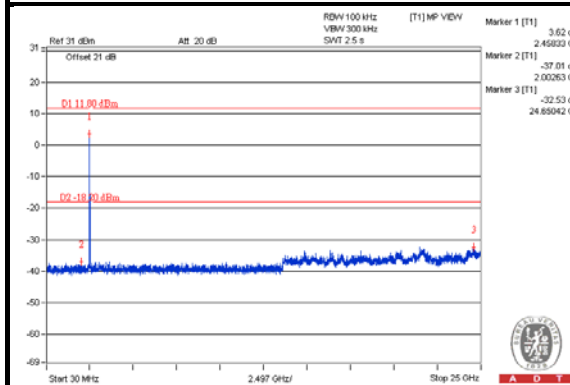
CH 1



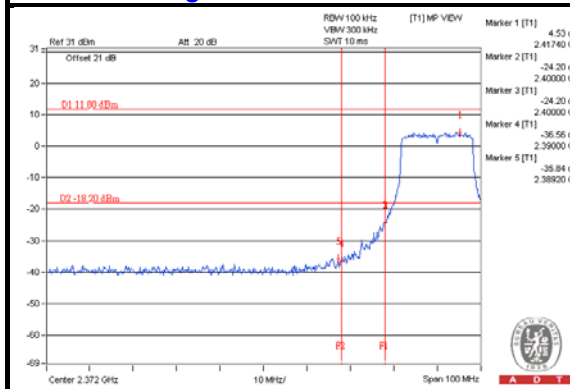
CH 6



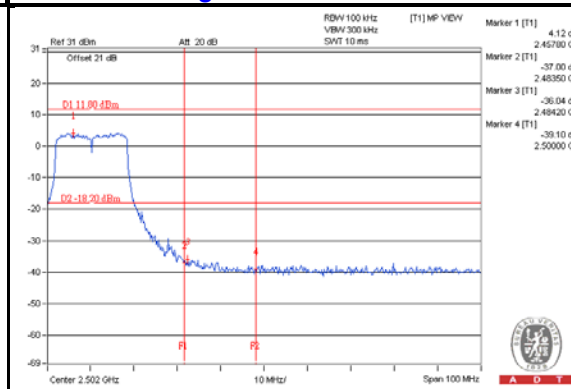
CH 11



CH 1 Band edge

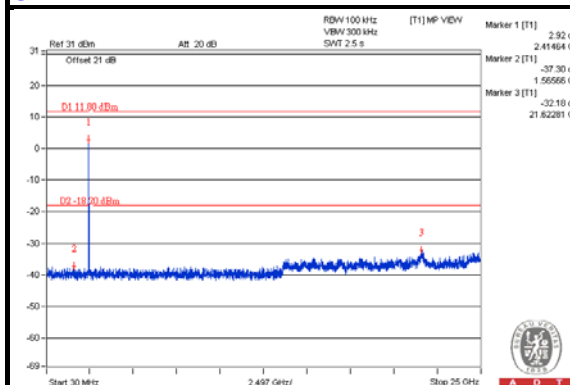


CH 11 Band edge

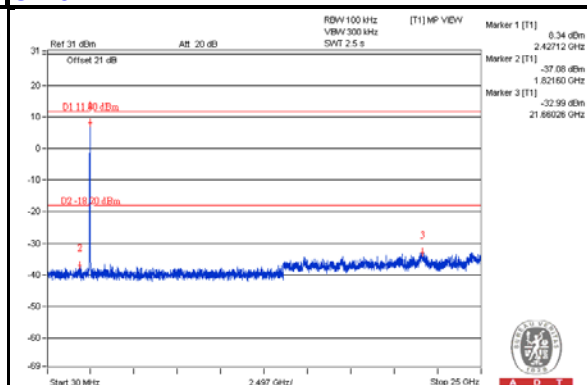


CHAIN 1

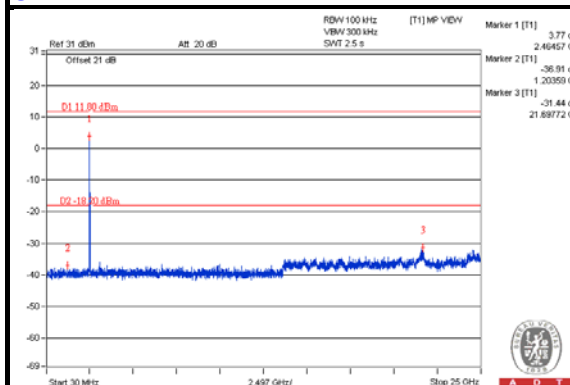
CH 1



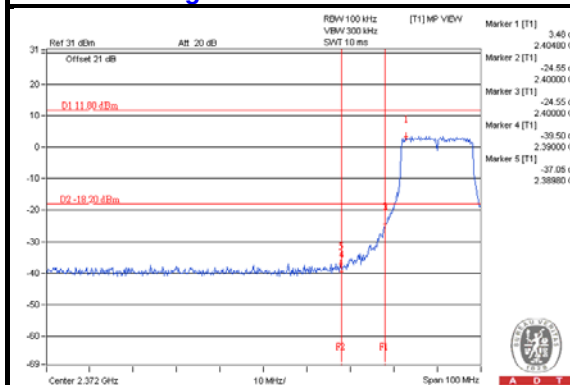
CH 6



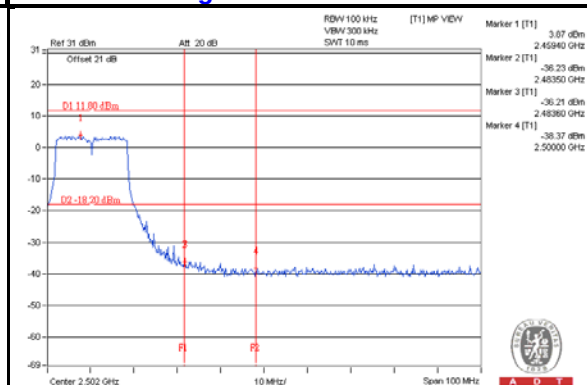
CH 11



CH 1 Band edge

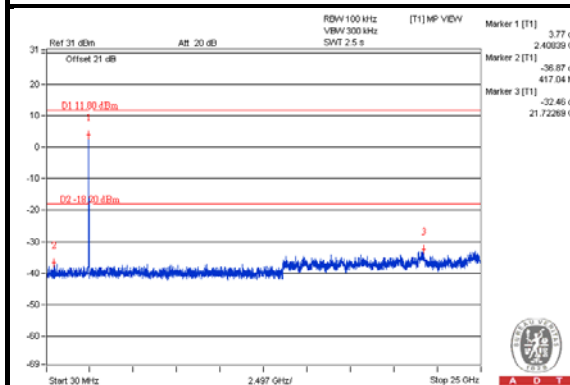


CH 11 Band edge

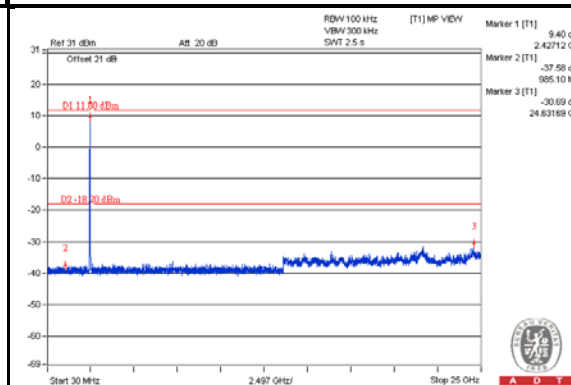


CHAIN 2

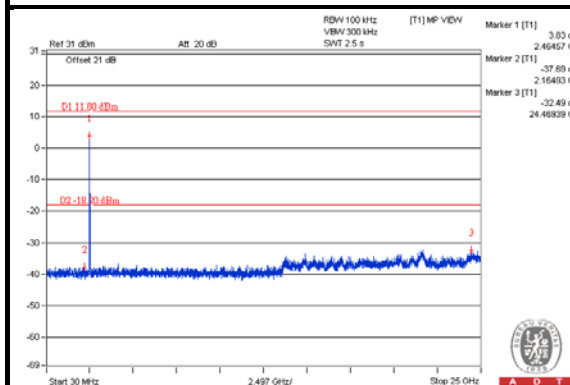
CH 1



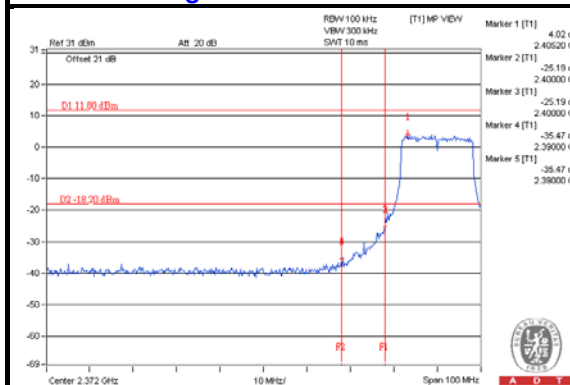
CH 6



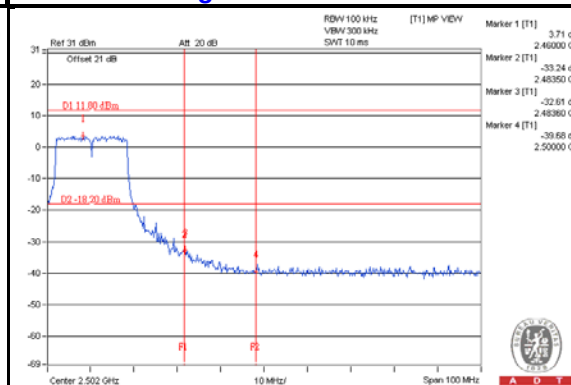
CH 11



CH 1 Band edge

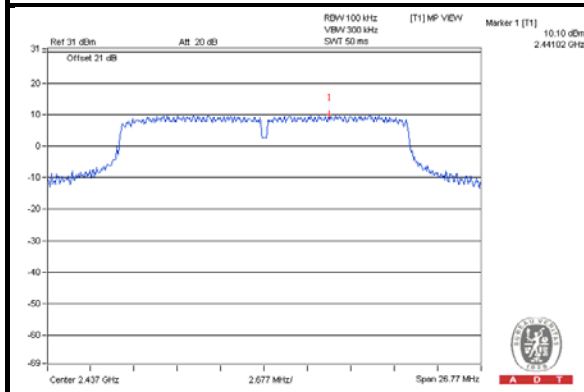


CH 11 Band edge



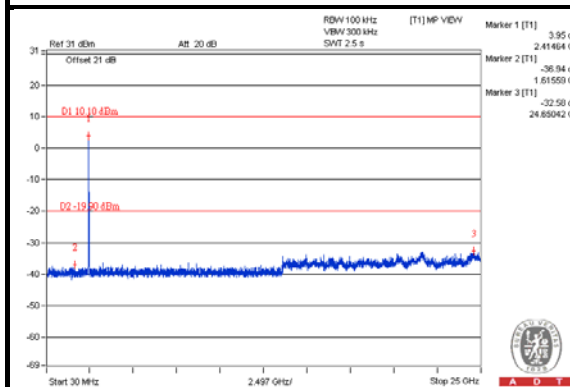
802.11n (HT20)

Maximum REF

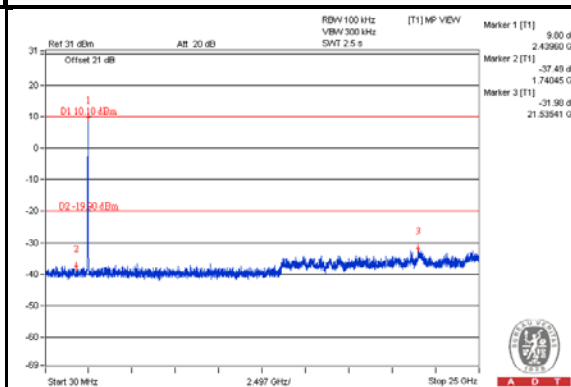


CHAIN 0

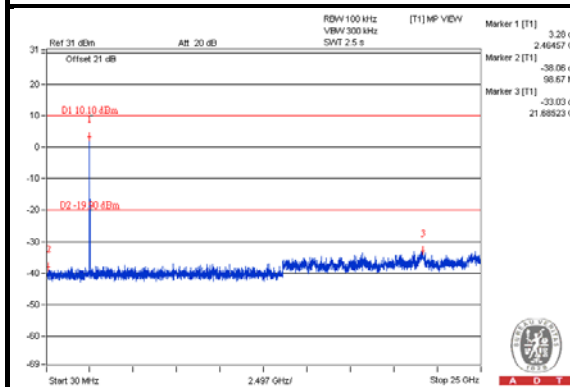
CH 1



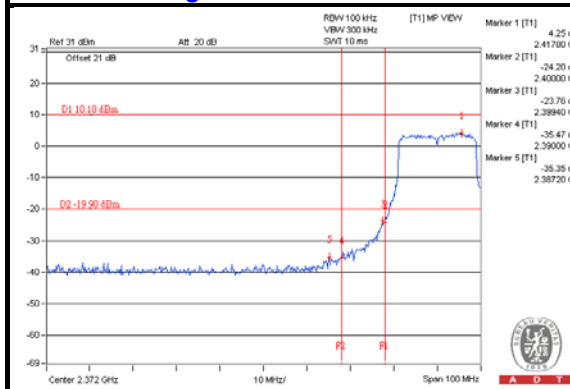
CH 6



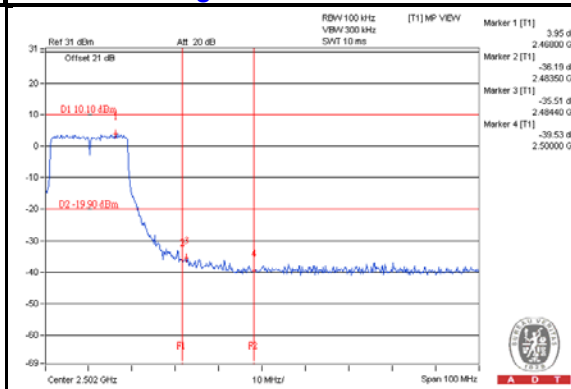
CH 11



CH 1 Band edge

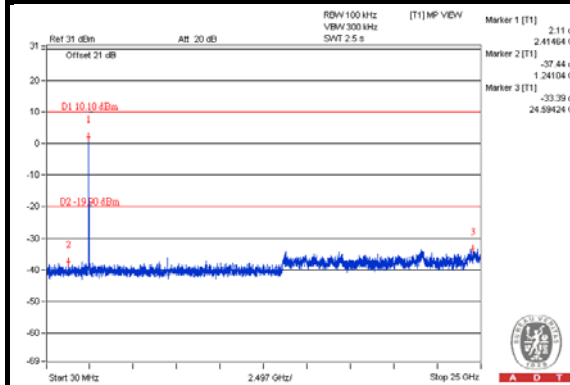


CH 11 Band edge

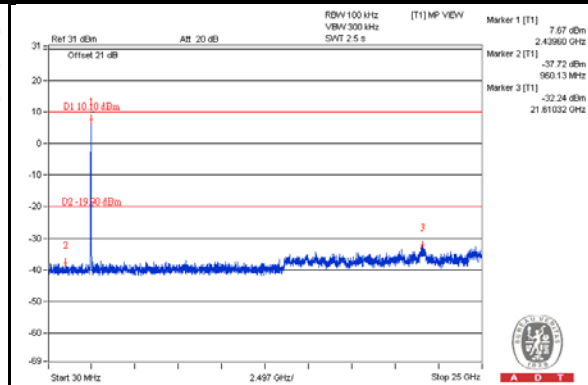


CHAIN 1

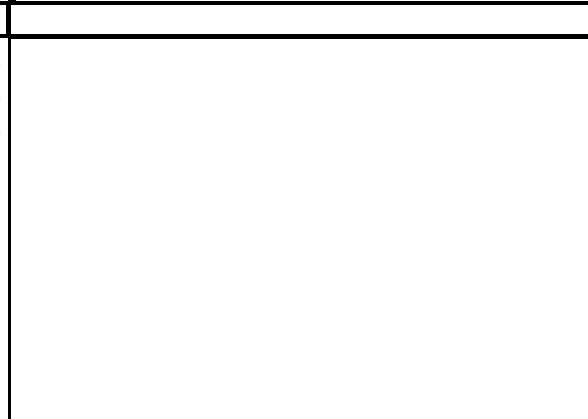
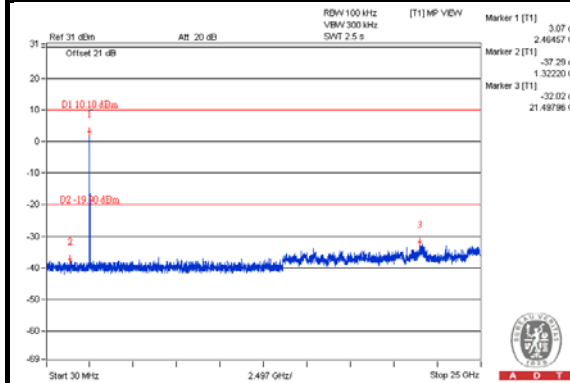
CH 1



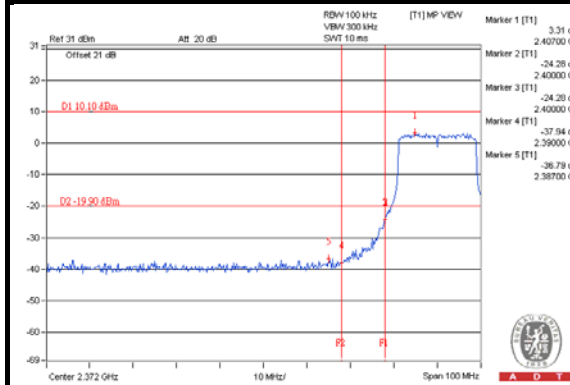
CH 6



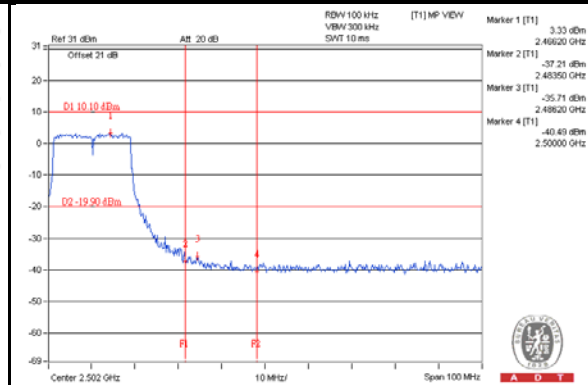
CH 11



CH 1 Band edge

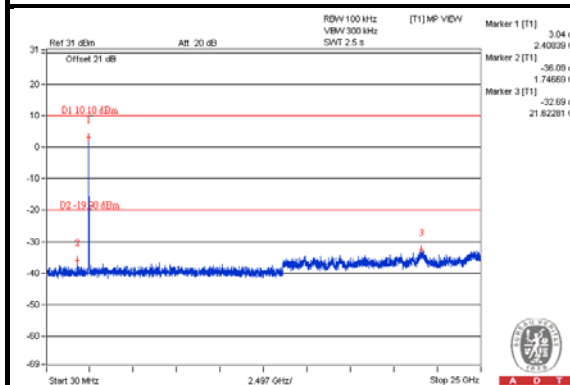


CH 11 Band edge

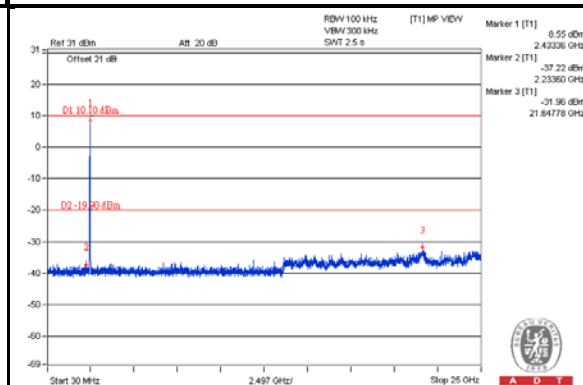


CHAIN 2

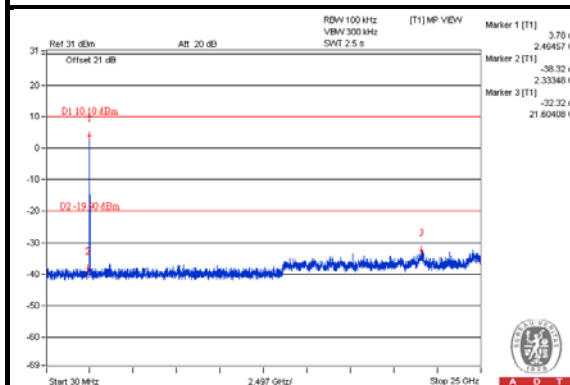
CH 1



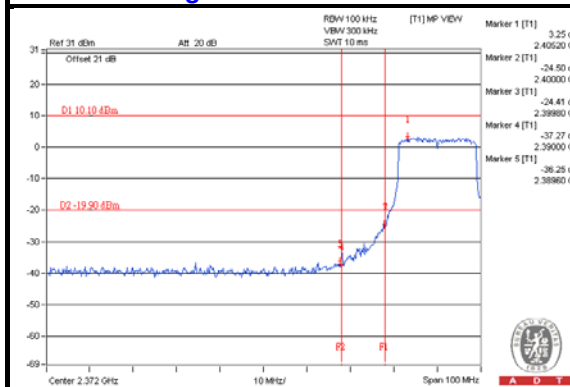
CH 6



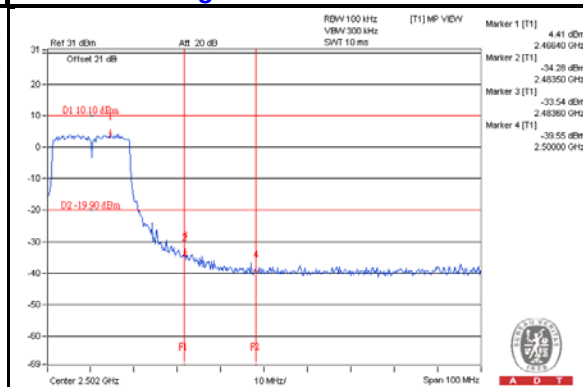
CH 11



CH 1 Band edge

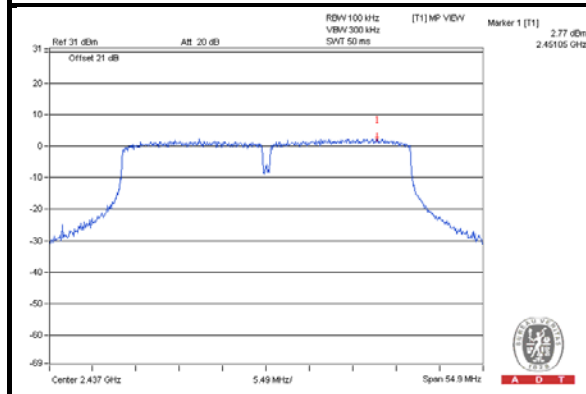


CH 11 Band edge



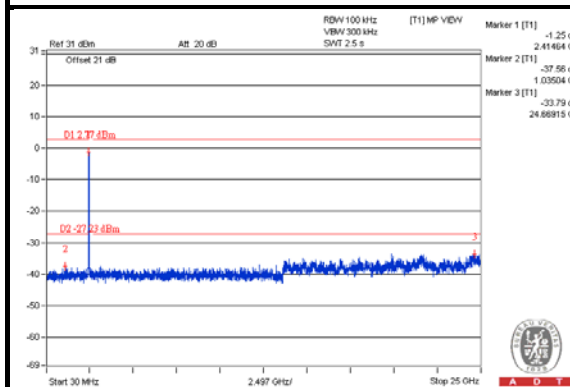
802.11n (HT40)

Maximum REF

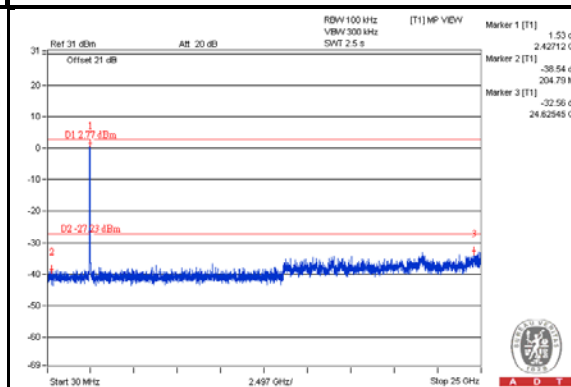


CHAIN 0

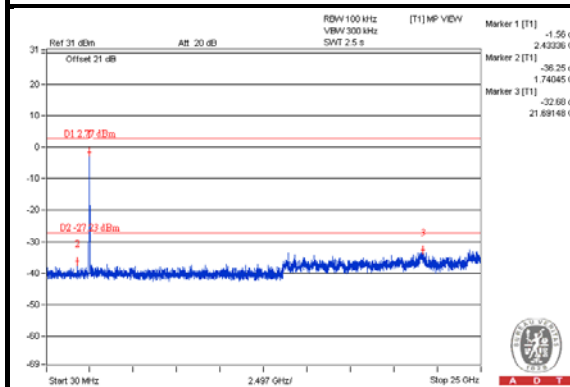
CH 3



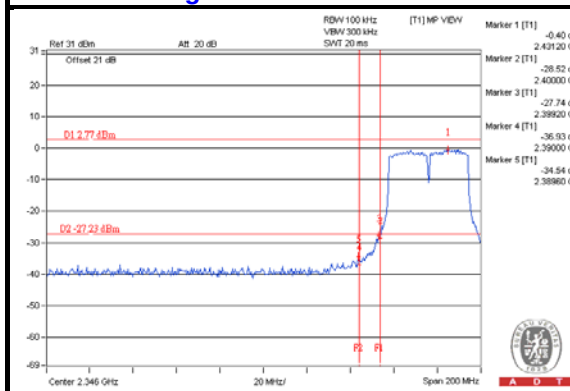
CH 6



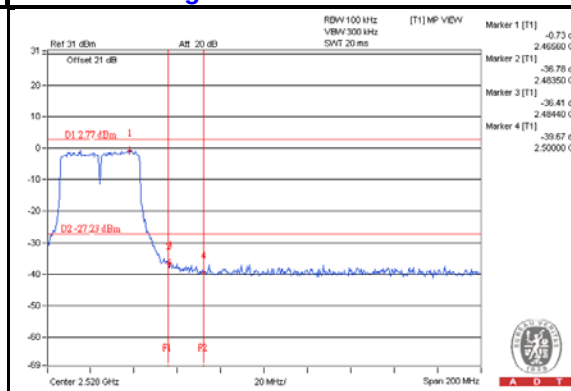
CH 9



CH 3 Band edge

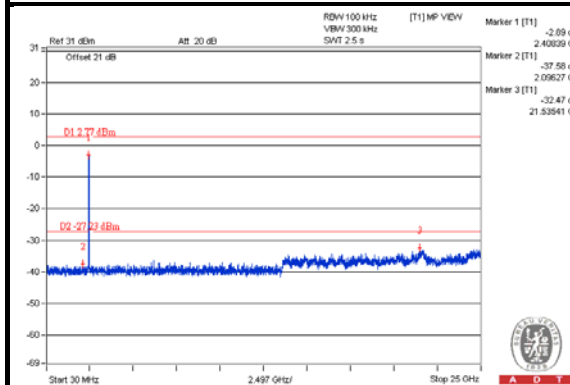


CH 9 Band edge

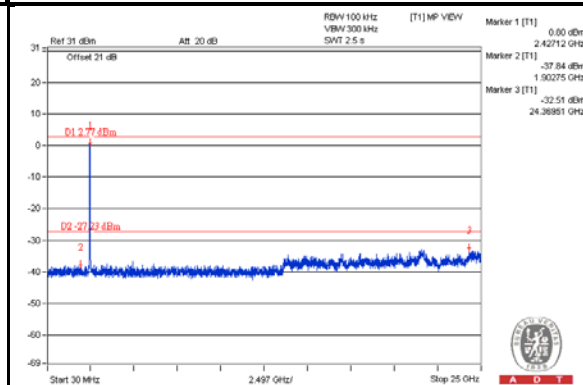


CHAIN 1

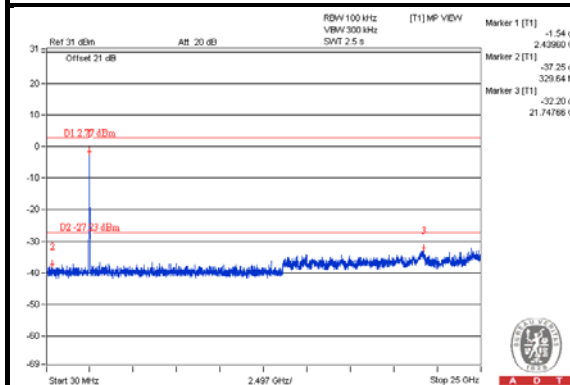
CH 3



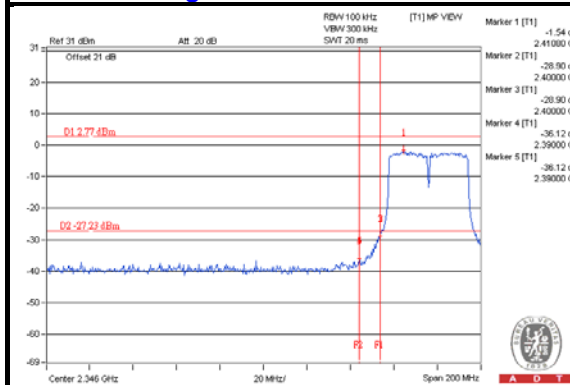
CH 6



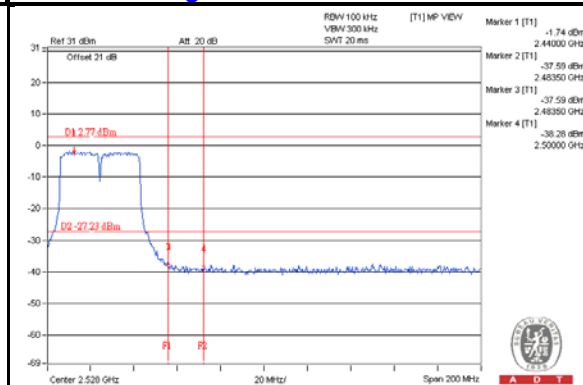
CH 9



CH 3 Band edge

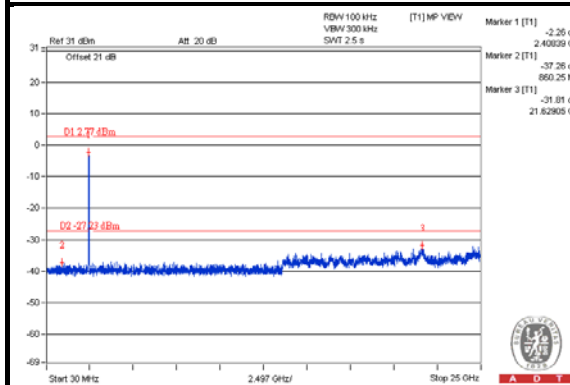


CH 9 Band edge

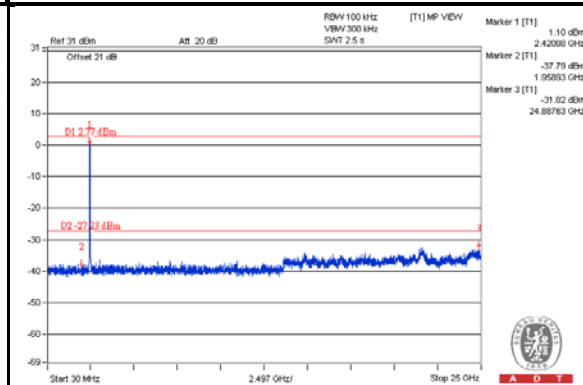


CHAIN 2

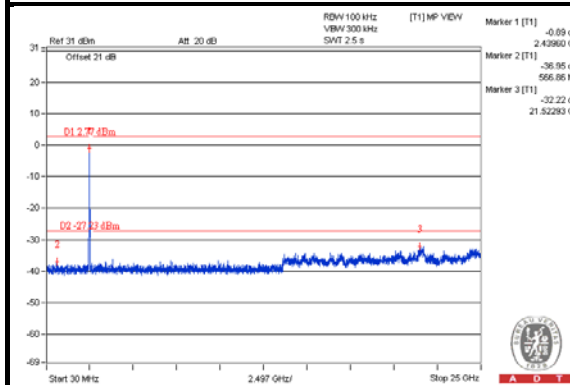
CH 3



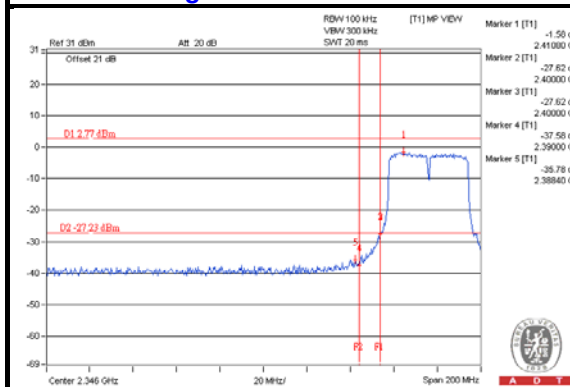
CH 6



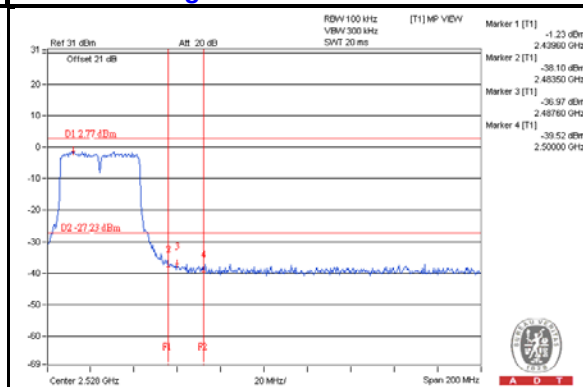
CH 9



CH 3 Band edge



CH 9 Band edge



5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Web Site: www.bureauveritas-adt.com

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

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