FCC TEST REPORT

REPORT NO.:	RF991203E02N
MODEL NO.:	AR5B125
FCC ID:	PPD-AR5B125
IC:	4104A-AR5B125
RECEIVED:	July 10, 2012
TESTED:	July 12 to 13, 2012
ISSUED:	July 23, 2012

APPLICANT:	Qualcomm Atheros, Inc.
ADDRESS:	1700 Technology Drive, San Jose, CA 95110

ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
LAB ADDRESS:	No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.
TEST LOCATION (1):	No. 81-1, Lu Liao Keng, 9th Ling,Wu Lung Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.
TEST LOCATION (2):	No.49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan, R.O.C.

This report should not be used by the client to claim product certification, approval, or endorsement by TAF or any government agencies.

Table of Contents

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF991203E02N	Original release	July 23, 2012

1. CERTIFICATION

PRODUCT:	1X1 802.11b/g/n PCIe Module
BRAND NAME:	Atheros
MODEL NO.:	AR5B125
TEST SAMPLE:	ENGINEERING SAMPLE
APPLICANT:	Qualcomm Atheros, Inc.
TESTED:	July 12 to 13, 2012
STANDARDS:	FCC Part 15, Subpart C (Section 15.247) ANSI C63.10-2009 Canada RSS-210 Issue 8 (2010-12) Canada RSS-Gen Issue 3 (2010-12)

The above equipment (Model: AR5B125) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and was in compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : _____ , **DATE:** *July 23, 2012*
(Lori Chung, Specialist)

APPROVED BY : _____ , **DATE:** *July 23, 2012*
(May Chen, Deputy Manager)

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247); RSS-210; RSS-Gen				
STANDARD SECTION		TEST TYPE	RESULT	REMARK
FCC PART 15	CANADA STANDARD			
15.247(d) 15.209	RSS-210 A8.5	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -2.8dB at 600.24MHz
15.247(b)	RSS-210 A8.2 (4)	Maximum Peak Output Power	PASS	Meet the requirement of limit.

NOTE:

1. This report is prepared for FCC class II permissive change and IC reassessment change. Only radiated emission and maximum peak output power were presented in this test report.

2.1 MEASUREMENT UNCERTAINTY

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

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

Measurement	Value
Radiated emissions (30MHz-1GHz)	5.69 dB
Radiated emissions (1GHz -6GHz)	3.84 dB
Radiated emissions (6GHz -18GHz)	4.09 dB
Radiated emissions (18GHz -40GHz)	4.24 dB

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	1X1 802.11b/g/n PCIe Module
MODEL NO.	AR5B125
FCC ID	PPD-AR5B125
IC	4104A-AR5B125
POWER SUPPLY	DC 3.3V from host equipment
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: Up to 11Mbps 802.11g: Up to 54Mbps 802.11n: Up to 150Mbps
OPRTAING FREQUENCY	2412MHz ~ 2462MHz
NUMBER OF CHANNEL	11 for 802.11b, 802.11g, 802.11n (20MHz) 7 for 802.11n (40MHz)
MAXIMUM OUTPUT POWER	802.11b: 104.713mW 802.11g: 245.471mW 802.11n (20MHz): 186.209mW 802.11n (40MHz): 186.209mW
ANTENNA TYPE	See item 3.2
ANTENNA CONNECTOR	See item 3.2
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

1. This report is prepared for FCC class II permissive change and IC reassessment change. The difference compared with the Report No.: RF991203E02D design is as the following information:
   - **u** BOM change -

     Chain(0): add external LNA(Rx only) and SPDT

     Chain(1): only add external LNA (Rx only)
   - **u** HW version is AW-NE237
2. Only radiated spurious emissions were re-evaluated to confirm that the new switch and LNA did not introduce intermodulation issues and the switch did not affect the radiated spurious signal levels. The proposed changes do not affect output power and as the new component locations are not close to the antenna, and power remains the same, RF exposure was also not re-evaluated
3. The EUT is 1 * 1 spatial SISO without beam forming function.
4. The EUT complies with 802.11n standards and backwards compatible with 802.11b, 802.11g products.
5. The test mode was reference to the worst case in the original test report. Therefore only the test data of the mode was recorded in this report individually
6. The above EUT information was declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 DESCRIPTION OF ANTENNA

There is one set of antenna provided to this EUT, please refer to the following table:

No.	Brand	Model	Gain(dBi) (included cable loss)	Antenna Type	Connector	Cable Loss(dB)	Cable Length(mm)
1	WNC	81-EBJ15.005	3.62	PIFA	IPEX	1.15	300

3.3 DESCRIPTION OF TEST MODES

Operated in 2400 ~ 2483.5MHz band:

Eleven channels are provided for 802.11b, 802.11g, 802.11n (20MHz):

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		

Seven channels are provided for 802.11n (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
3	2422MHz	7	2442MHz
4	2427MHz	8	2447MHz
5	2432MHz	9	2452MHz
6	2437MHz		

3.3.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO			DESCRIPTION
	RE < 1G	RE ³ 1G	APCM	
-	√	√	√	-

Where **RE < 1G:** Radiated Emission below 1GHz **RE ³ 1G:** Radiated Emission above 1GHz

APCM: Antenna Port Conducted Measurement

RADIATED EMISSION TEST (BELOW 1 GHz):

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

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11g	1 to 11	6	OFDM	BPSK	6

RADIATED EMISSION TEST (ABOVE 1 GHz):

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

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

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 (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
802.11n (40MHz)	3 to 9	3, 6, 9	OFDM	BPSK	13.5

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

☒ 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 (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	6.5
802.11n (40MHz)	3 to 9	3, 6, 9	OFDM	BPSK	13.5

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Nelson Teng
RE³1G	25deg. C, 65%RH	120Vac, 60Hz	Evan Huang
APCM	25deg. C, 60%RH	120Vac, 60Hz	Rex Huang

3.4 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 v01
ANSI C63.10-2009
Canada RSS-210 Issue 8 (2010-12)
Canada RSS-Gen Issue 3 (2010-12)

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

3.5 DESCRIPTION OF SUPPORT UNITS

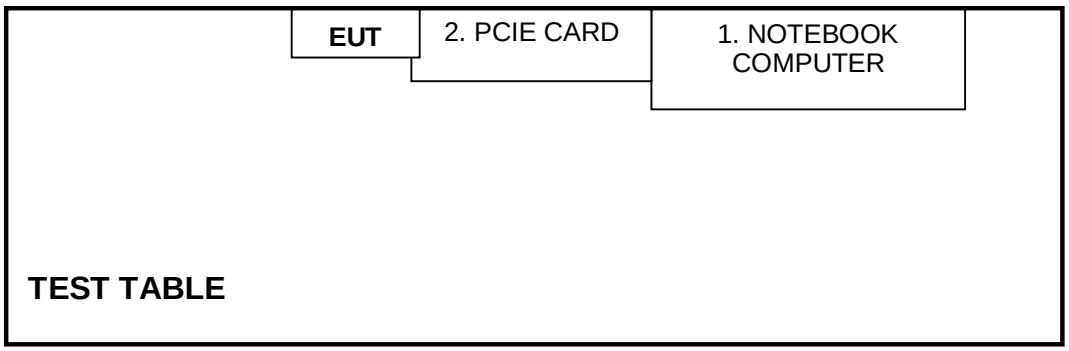
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	Lenovo	0769	L3-BE248 08/01	FCC DoC
2	PCIE CARD	Atheros	NA	NA	NA

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

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

3.6 CONFIGURATION OF SYSTEM UNDER TEST



4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION 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 20dB 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

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer Agilent	E4446A	MY48250253	Aug. 29, 2011	Aug. 28, 2012
Pre-Selector Agilent	N9039A	MY46520310	Aug. 29, 2011	Aug. 28, 2012
Signal Generator Agilent	N5181A	MY49060347	July 25, 2011	July 24, 2012
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-04	Nov. 15, 2011	Nov. 14, 2012
Pre-Amplifier Agilent	8449B	3008A02465	Feb. 27, 2012	Feb. 26, 2013
SPACEK LABS	SLKKa-48-6	9K16	Nov. 15, 2011	Nov. 14, 2012
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Apr. 06, 2012	Apr. 05, 2013
Horn_Antenna AISI	AIH.8018	0000220091110	Nov. 23, 2011	Nov. 22, 2012
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 07, 2011	Oct. 06, 2012
RF Cable	NA	RF104-205 RF104-207 RF104-202	Dec. 27, 2011	Dec. 26, 2012
RF Cable	NA	CHHCAB_001	Oct. 08, 2011	Oct. 07, 2012
Software	ADT_Radiated _V8.7.05	NA	NA	NA
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 test was performed in 966 Chamber No. H.
3 The FCC Site Registration No. is 797305.
4. The CANADA Site Registration No. is IC 7450H-3.
5 Tested Date: July 12, 2012

4.1.3 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. 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.

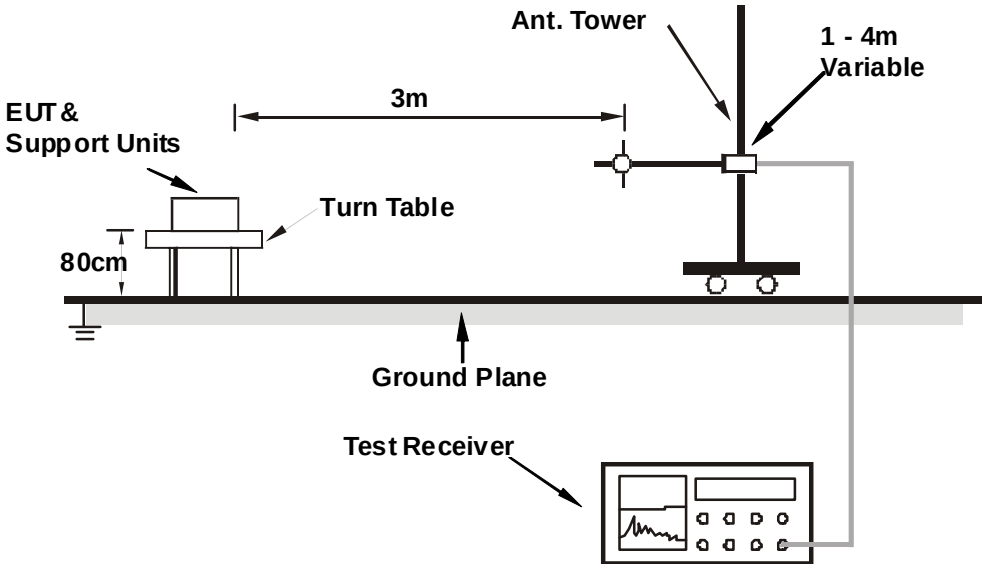
NOTE:

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 1 MHz and the video bandwidth is 10 Hz for Average detection (AV) at frequency above 1GHz.
4. 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 SETUP



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

4.1.6 EUT OPERATING CONDITIONS

1. Connect the EUT with the support unit 1 (Notebook Computer) which is placed on a testing table.
2. The support unit 1 (Notebook Computer) run test program “Art2_ver_2_56” to enable EUT under transmission/receiving condition continuously at specific channel frequency.

4.1.7 TEST RESULTS

BELOW 1GHz WORST-CASE DATA

802.11g

CHANNEL	TX Channel 6	**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	99.52	36.1 QP	43.5	-7.4	1.75 H	267	26.44	9.67
2	299.81	43.1 QP	46.0	-2.9	1.00 H	250	27.85	15.29
3	399.99	39.0 QP	46.0	-7.0	1.00 H	150	21.27	17.70
4	499.91	40.3 QP	46.0	-5.7	1.75 H	250	20.22	20.04
5	**600.24**	**43.2 QP**	**46.0**	**-2.8**	**1.25 H**	**250**	**20.95**	**22.22**
6	799.88	41.9 QP	46.0	-4.1	1.00 H	25	16.24	25.62
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	118.24	32.5 QP	43.5	-11.0	1.50 V	275	20.43	12.11
2	299.94	40.2 QP	46.0	-5.9	2.00 V	360	24.85	15.30
3	400.03	41.5 QP	46.0	-4.5	1.25 V	250	23.82	17.70
4	499.91	41.2 QP	46.0	-4.8	1.00 V	300	21.20	20.04
5	600.42	41.3 QP	46.0	-4.7	1.00 V	250	19.10	22.23
6	799.99	42.0 QP	46.0	-4.0	2.00 V	256	16.35	25.62

REMARKS:

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

ABOVE 1GHz DATA

802.11b

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	2390.00	56.7 PK	74.0	-17.3	1.36 H	269	24.32	32.38
2	2390.00	44.8 AV	54.0	-9.2	1.36 H	269	12.42	32.38
3	*2412.00	102.6 PK			1.36 H	269	70.16	32.44
4	*2412.00	100.4 AV			1.36 H	269	67.96	32.44
5	4824.00	51.8 PK	74.0	-22.2	1.65 H	305	9.86	41.94
6	4824.00	44.3 AV	54.0	-9.7	1.65 H	305	2.36	41.94
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	2390.00	56.3 PK	74.0	-17.7	1.03 V	340	23.92	32.38
2	2390.00	44.6 AV	54.0	-9.4	1.03 V	340	12.22	32.38
3	*2412.00	102.5 PK			1.03 V	340	70.06	32.44
4	*2412.00	99.8 AV			1.03 V	340	67.36	32.44
5	4824.00	53.1 PK	74.0	-20.9	1.25 V	269	11.16	41.94
6	4824.00	47.1 AV	54.0	-6.9	1.25 V	269	5.16	41.94

REMARKS:

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

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	2353.40	57.1 PK	74.0	-16.9	1.31 H	268	24.84	32.26
2	2353.40	44.7 AV	54.0	-9.3	1.31 H	268	12.44	32.26
3	*2437.00	104.2 PK			1.31 H	268	71.69	32.51
4	*2437.00	102.0 AV			1.31 H	268	69.49	32.51
5	2483.50	56.9 PK	74.0	-17.1	1.31 H	267	24.27	32.63
6	2483.50	44.3 AV	54.0	-9.7	1.31 H	267	11.67	32.63
7	4874.00	52.9 PK	74.0	-21.1	1.62 H	302	10.91	41.99
8	4874.00	45.5 AV	54.0	-8.5	1.62 H	302	3.51	41.99
9	7311.00	53.7 PK	74.0	-20.3	1.30 H	117	7.17	46.53
10	7311.00	41.1 AV	54.0	-12.9	1.30 H	117	-5.43	46.53
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	102.7 PK			1.07 V	342	70.19	32.51
2	*2437.00	100.2 AV			1.07 V	342	67.69	32.51
3	4874.00	53.5 PK	74.0	-20.5	1.21 V	276	11.51	41.99
4	4874.00	48.3 AV	54.0	-5.7	1.21 V	276	6.31	41.99
5	7311.00	53.2 PK	74.0	-20.8	1.43 V	321	6.67	46.53
6	7311.00	41.6 AV	54.0	-12.4	1.43 V	321	-4.93	46.53

REMARKS:

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

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	104.9 PK			1.29 H	270	72.33	32.57
2	*2462.00	102.7 AV			1.29 H	270	70.13	32.57
3	2483.50	58.2 PK	74.0	-15.8	1.31 H	268	25.57	32.63
4	2483.50	44.9 AV	54.0	-9.1	1.31 H	268	12.27	32.63
5	4924.00	54.4 PK	74.0	-19.6	1.64 H	304	12.39	42.01
6	4924.00	50.4 AV	54.0	-3.6	1.64 H	304	8.39	42.01
7	7386.00	53.8 PK	74.0	-20.2	1.25 H	120	7.07	46.73
8	7386.00	41.3 AV	54.0	-12.7	1.25 H	120	-5.43	46.73
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	102.2 PK			1.01 V	342	69.63	32.57
2	*2462.00	99.9 AV			1.01 V	342	67.33	32.57
3	2483.50	58.1 PK	74.0	-15.9	1.01 V	342	25.47	32.63
4	2483.50	44.7 AV	54.0	-9.3	1.01 V	342	12.07	32.63
5	4924.00	54.7 PK	74.0	-19.3	1.17 V	273	12.69	42.01
6	4924.00	50.7 AV	54.0	-3.3	1.17 V	273	8.69	42.01
7	7386.00	53.1 PK	74.0	-20.9	1.48 V	315	6.37	46.73
8	7386.00	41.3 AV	54.0	-12.7	1.48 V	315	-5.43	46.73

REMARKS:

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

802.11g

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	62.2 PK	74.0	-11.8	1.36 H	266	29.82	32.38
2	2390.00	47.9 AV	54.0	-6.1	1.36 H	266	15.52	32.38
3	*2412.00	102.8 PK			1.36 H	266	70.36	32.44
4	*2412.00	92.3 AV			1.36 H	266	59.86	32.44
5	4824.00	49.4 PK	74.0	-24.6	1.26 H	273	7.46	41.94
6	4824.00	34.3 AV	54.0	-19.7	1.26 H	273	-7.64	41.94
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	61.7 PK	74.0	-12.3	1.01 V	344	29.32	32.38
2	2390.00	46.6 AV	54.0	-7.4	1.01 V	344	14.22	32.38
3	*2412.00	99.6 PK			1.01 V	344	67.16	32.44
4	*2412.00	89.4 AV			1.01 V	344	56.96	32.44
5	4824.00	48.3 PK	74.0	-25.7	1.24 V	269	6.36	41.94
6	4824.00	33.6 AV	54.0	-20.4	1.24 V	269	-8.34	41.94

REMARKS:

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

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	58.3 PK	74.0	-15.7	1.32 H	269	25.92	32.38
2	2390.00	45.3 AV	54.0	-8.7	1.32 H	269	12.92	32.38
3	*2437.00	108.1 PK			1.31 H	268	75.59	32.51
4	*2437.00	97.1 AV			1.31 H	268	64.59	32.51
5	2483.50	56.9 PK	74.0	-17.1	1.32 H	269	24.27	32.63
6	2483.50	44.6 AV	54.0	-9.4	1.32 H	269	11.97	32.63
7	4874.00	53.4 PK	74.0	-20.6	1.24 H	283	11.41	41.99
8	4874.00	39.6 AV	54.0	-14.4	1.24 H	283	-2.39	41.99
9	7311.00	52.4 PK	74.0	-21.6	1.43 H	324	5.87	46.53
10	7311.00	41.3 AV	54.0	-12.7	1.43 H	324	-5.23	46.53
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	103.2 PK			1.02 V	346	70.69	32.51
2	*2437.00	93.4 AV			1.02 V	346	60.89	32.51
3	4874.00	52.6 PK	74.0	-21.4	1.21 V	277	10.61	41.99
4	4874.00	39.3 AV	54.0	-14.7	1.21 V	277	-2.69	41.99
5	7311.00	52.9 PK	74.0	-21.1	1.48 V	315	6.37	46.53
6	7311.00	41.1 AV	54.0	-12.9	1.48 V	315	-5.43	46.53

REMARKS:

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

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	102.6 PK			1.31 H	269	70.03	32.57
2	*2462.00	91.9 AV			1.31 H	269	59.33	32.57
3	2483.50	62.9 PK	74.0	-11.1	1.31 H	269	30.27	32.63
4	2483.50	46.8 AV	54.0	-7.2	1.31 H	269	14.17	32.63
5	4924.00	48.4 PK	74.0	-25.6	1.21 H	269	6.39	42.01
6	4924.00	34.2 AV	54.0	-19.8	1.21 H	269	-7.81	42.01
7	7386.00	52.7 PK	74.0	-21.3	1.46 H	321	5.97	46.73
8	7386.00	40.6 AV	54.0	-13.4	1.46 H	321	-6.13	46.73
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	98.3 PK			1.04 V	341	65.73	32.57
2	*2462.00	88.4 AV			1.04 V	341	55.83	32.57
3	2483.50	62.4 PK	74.0	-11.6	1.04 V	341	29.77	32.63
4	2483.50	45.3 AV	54.0	-8.7	1.04 V	341	12.67	32.63
5	4924.00	47.3 PK	74.0	-26.7	1.24 V	276	5.29	42.01
6	4924.00	33.6 AV	54.0	-20.4	1.24 V	276	-8.41	42.01
7	7386.00	52.4 PK	74.0	-21.6	1.49 V	333	5.67	46.73
8	7386.00	40.6 AV	54.0	-13.4	1.49 V	333	-6.13	46.73

REMARKS:

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

802.11n (20MHz)

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

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	62.1 PK	74.0	-11.9	1.36 H	266	29.72	32.38
2	2390.00	47.6 AV	54.0	-6.4	1.36 H	266	15.22	32.38
3	*2412.00	101.5 PK			1.36 H	266	69.06	32.44
4	*2412.00	91.1 AV			1.36 H	266	58.66	32.44
5	4824.00	47.3 PK	74.0	-26.7	1.21 H	273	5.36	41.94
6	4824.00	33.6 AV	54.0	-20.4	1.21 H	273	-8.34	41.94
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	61.3 PK	74.0	-12.7	1.04 V	341	28.92	32.38
2	2390.00	46.2 AV	54.0	-7.8	1.04 V	341	13.82	32.38
3	*2412.00	98.6 PK			1.04 V	341	66.16	32.44
4	*2412.00	88.4 AV			1.04 V	341	55.96	32.44
5	4824.00	46.5 PK	74.0	-27.5	1.21 V	264	4.56	41.94
6	4824.00	32.4 AV	54.0	-21.6	1.21 V	264	-9.54	41.94

REMARKS:

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

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	56.5 PK	74.0	-17.5	1.33 H	271	24.12	32.38
2	2390.00	44.7 AV	54.0	-9.3	1.33 H	271	12.32	32.38
3	*2437.00	104.1 PK			1.32 H	271	71.59	32.51
4	*2437.00	93.9 AV			1.32 H	271	61.39	32.51
5	2483.50	57.1 PK	74.0	-16.9	1.33 H	271	24.47	32.63
6	2483.50	44.8 AV	54.0	-9.2	1.33 H	271	12.17	32.63
7	4874.00	51.3 PK	74.0	-22.7	1.33 H	321	9.31	41.99
8	4874.00	40.6 AV	54.0	-13.4	1.33 H	321	-1.39	41.99
9	7311.00	51.6 PK	74.0	-22.4	1.44 H	243	5.07	46.53
10	7311.00	40.3 AV	54.0	-13.7	1.44 H	243	-6.23	46.53
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	100.3 PK			1.06 V	355	67.79	32.51
2	*2437.00	90.4 AV			1.06 V	355	57.89	32.51
3	4874.00	51.3 PK	74.0	-22.7	1.24 V	269	9.31	41.99
4	4874.00	38.4 AV	54.0	-15.6	1.24 V	269	-3.59	41.99
5	7311.00	51.4 PK	74.0	-22.6	1.43 V	277	4.87	46.53
6	7311.00	40.3 AV	54.0	-13.7	1.43 V	277	-6.23	46.53

REMARKS:

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

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	101.7 PK			1.30 H	267	69.13	32.57
2	*2462.00	90.6 AV			1.30 H	267	58.03	32.57
3	2483.50	62.3 PK	74.0	-11.7	1.30 H	267	29.67	32.63
4	2483.50	47.8 AV	54.0	-6.2	1.30 H	267	15.17	32.63
5	4924.00	46.1 PK	74.0	-27.9	1.24 H	269	4.09	42.01
6	4924.00	31.3 AV	54.0	-22.7	1.24 H	269	-10.71	42.01
7	7386.00	51.3 PK	74.0	-22.7	1.43 H	255	4.57	46.73
8	7386.00	40.2 AV	54.0	-13.8	1.43 H	255	-6.53	46.73
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	97.3 PK			1.06 V	333	64.73	32.57
2	*2462.00	87.4 AV			1.06 V	333	54.83	32.57
3	2483.50	60.3 PK	74.0	-13.7	1.06 V	333	27.67	32.63
4	2483.50	45.3 AV	54.0	-8.7	1.06 V	333	12.67	32.63
5	4924.00	46.1 PK	74.0	-27.9	1.24 V	255	4.09	42.01
6	4924.00	31.1 AV	54.0	-22.9	1.24 V	255	-10.91	42.01
7	7386.00	51.3 PK	74.0	-22.7	1.42 V	269	4.57	46.73
8	7386.00	40.2 AV	54.0	-13.8	1.42 V	269	-6.53	46.73

REMARKS:

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

802.11n (40MHz)

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	64.7 PK	74.0	-9.3	1.32 H	267	32.32	32.38
2	2390.00	47.2 AV	54.0	-6.8	1.32 H	267	14.82	32.38
3	*2422.00	98.2 PK			1.31 H	267	65.73	32.47
4	*2422.00	87.5 AV			1.31 H	267	55.03	32.47
5	4844.00	46.2 PK	74.0	-27.8	1.21 H	255	4.24	41.96
6	4844.00	31.4 AV	54.0	-22.6	1.21 H	255	-10.56	41.96
7	7266.00	51.6 PK	74.0	-22.4	1.42 H	254	5.20	46.40
8	7266.00	40.3 AV	54.0	-13.7	1.42 H	254	-6.10	46.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	59.3 PK	74.0	-14.7	1.04 V	351	26.92	32.38
2	2390.00	45.2 AV	54.0	-8.8	1.04 V	351	12.82	32.38
3	*2422.00	95.2 PK			1.04 V	351	62.73	32.47
4	*2422.00	84.3 AV			1.04 V	351	51.83	32.47
5	4844.00	46.5 PK	74.0	-27.5	1.24 V	256	4.54	41.96
6	4844.00	31.2 AV	54.0	-22.8	1.24 V	256	-10.76	41.96
7	7266.00	51.6 PK	74.0	-22.4	1.33 V	264	5.20	46.40
8	7266.00	40.3 AV	54.0	-13.7	1.33 V	264	-6.10	46.40

REMARKS:

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

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	62.1 PK	74.0	-11.9	1.31 H	266	29.72	32.38
2	2390.00	47.2 AV	54.0	-6.8	1.31 H	266	14.82	32.38
3	*2437.00	101.2 PK			1.31 H	266	68.69	32.51
4	*2437.00	91.1 AV			1.31 H	266	58.59	32.51
5	2483.50	65.0 PK	74.0	-9.0	1.31 H	266	32.37	32.63
6	2483.50	47.1 AV	54.0	-6.9	1.31 H	266	14.47	32.63
7	4874.00	46.1 PK	74.0	-27.9	1.24 H	269	4.11	41.99
8	4874.00	31.3 AV	54.0	-22.7	1.24 H	269	-10.69	41.99
9	7311.00	51.3 PK	74.0	-22.7	1.43 H	251	4.77	46.53
10	7311.00	40.6 AV	54.0	-13.4	1.43 H	251	-5.93	46.53
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	98.3 PK			1.03 V	359	65.79	32.51
2	*2437.00	88.6 AV			1.03 V	359	56.09	32.51
3	4874.00	46.2 PK	74.0	-27.8	1.21 V	259	4.21	41.99
4	4874.00	31.1 AV	54.0	-22.9	1.21 V	259	-10.89	41.99
5	7311.00	51.4 PK	74.0	-22.6	1.32 V	255	4.87	46.53
6	7311.00	40.2 AV	54.0	-13.8	1.32 V	255	-6.33	46.53

REMARKS:

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

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	97.2 PK			1.34 H	267	64.65	32.55
2	*2452.00	86.6 AV			1.34 H	267	54.05	32.55
3	2483.50	65.3 PK	74.0	-8.7	1.34 H	267	32.67	32.63
4	2483.50	45.9 AV	54.0	-8.1	1.34 H	267	13.27	32.63
5	4904.00	46.3 PK	74.0	-27.7	1.26 H	266	4.28	42.02
6	4904.00	31.0 AV	54.0	-23.0	1.26 H	266	-11.02	42.02
7	7356.00	62.3 PK	74.0	-11.7	1.34 H	256	15.65	46.65
8	7356.00	47.3 AV	54.0	-6.7	1.34 H	256	0.65	46.65
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	93.6 PK			1.02 V	344	61.05	32.55
2	*2452.00	83.3 AV			1.02 V	344	50.75	32.55
3	2483.50	65.1 PK	74.0	-8.9	1.02 V	344	32.47	32.63
4	2483.50	45.3 AV	54.0	-8.7	1.02 V	344	12.67	32.63
5	4904.00	46.2 PK	74.0	-27.8	1.27 V	243	4.18	42.02
6	4904.00	31.6 AV	54.0	-22.4	1.27 V	243	-10.42	42.02
7	7356.00	51.1 PK	74.0	-22.9	1.32 V	259	4.45	46.65
8	7356.00	40.2 AV	54.0	-13.8	1.32 V	259	-6.45	46.65

REMARKS:

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

4.2 CONDUCTED OUTPUT POWER

4.2.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

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

4.2.2 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power Meter	ML2495A	0824006	May 10, 2012	May 09, 2013
Peak Power Sensor	MA2411B	0738172	May 10, 2012	May 09, 2013

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: July 13, 2012

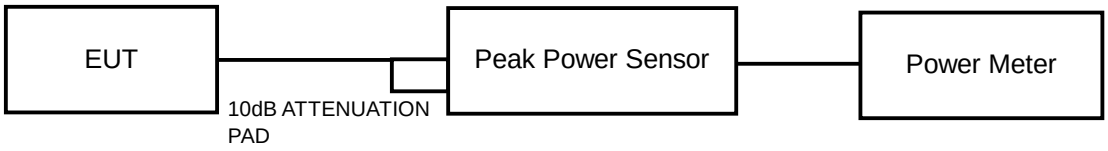
4.2.3 TEST PROCEDURES

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



4.2.6 EUT OPERATING CONDITIONS

Same as Item 4.1.6

4.2.7 TEST RESULTS

802.11b

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	74.131	18.7	30	PASS
6	2437	104.713	20.2	30	PASS
11	2462	100.000	20.0	30	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	138.038	21.4	30	PASS
6	2437	245.471	23.9	30	PASS
11	2462	125.893	21.0	30	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	117.490	20.7	30	PASS
6	2437	186.209	22.7	30	PASS
11	2462	109.648	20.4	30	PASS

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
3	2422	107.152	20.3	30	PASS
6	2437	186.209	22.7	30	PASS
9	2452	87.096	19.4	30	PASS

4.3 AVERAGE OUTPUT POWER

4.3.1 FOR REFERENCE.

4.3.2 TEST INSTRUMENTS

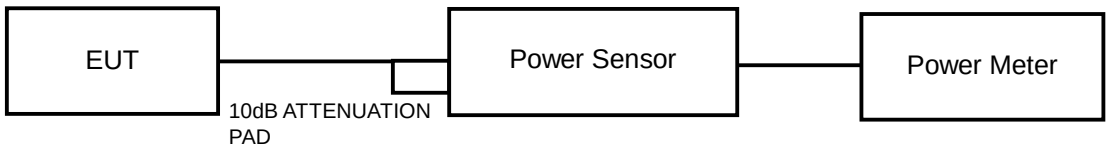
DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power Meter	ML2495A	0824006	May 10, 2012	May 09, 2013
Power Sensor	MA2411B	0738172	May 10, 2012	May 09, 2013

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: July 13, 2012

4.3.3 TEST PROCEDURES

1. The transmitter output was connected to the power meter through an attenuator, the bandwidth of the fundamental frequency was measured with the power meter.
2. Record the average power level.

4.3.4 TEST SETUP



4.3.5 EUT OPERATING CONDITIONS

Same as Item 4.1.6

4.3.6 TEST RESULTS

802.11b

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	16.5
6	2437	18.2
11	2462	18.1

802.11g

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
1	2412	14.6
6	2437	18.5
11	2462	13.8

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHZ)	AVERAGE POWER OUTPUT (DBM)
1	2412	13.4
6	2437	16.4
11	2462	12.9

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER OUTPUT (dBm)
3	2422	12.4
6	2437	14.1
9	2452	11.8

5. 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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Email: service.adt@tw.bureauveritas.com
Web Site: www.adt.com.tw

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

6.APPENDIX-A- MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

---END---