



FCC TEST REPORT (15.247)

REPORT NO.: RF120626C35-4

MODEL NO.: PM63100

FCC ID: NM8PM63100

RECEIVED: Jun. 26, 2012

TESTED: Jul. 10 ~ Jul. 19, 2012

ISSUED: Jul. 20, 2012

APPLICANT: HTC Corporation

ADDRESS: 23, Xinghua Rd., Taoyuan 330, Taiwan, R.O.C.

ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist.,
New Taipei City, Taiwan (R.O.C)

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei
Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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TABLE OF CONTENTS

RELEASE CONTROL RECORD	5
1. CERTIFICATION	6
2. SUMMARY OF TEST RESULTS	7
2.1 MEASUREMENT UNCERTAINTY	7
3. GENERAL INFORMATION	8
3.1 GENERAL DESCRIPTION OF EUT	8
3.2 DESCRIPTION OF TEST MODES	9
3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL	10
3.3 DESCRIPTION OF SUPPORT UNITS	14
3.3.1 CONFIGURATION OF SYSTEM UNDER TEST	14
3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS	14
4. TEST TYPES AND RESULTS (FOR 2.4GHz BAND)	15
4.1 RADIATED EMISSION AND BANDEdge MEASUREMENT	15
4.1.1 LIMITS OF RADIATED EMISSION AND BANDEdge MEASUREMENT	15
4.1.2 TEST INSTRUMENTS	16
4.1.3 TEST PROCEDURES	17
4.1.4 DEVIATION FROM TEST STANDARD	17
4.1.5 TEST SETUP	18
4.1.6 EUT OPERATING CONDITIONS	18
4.1.7 TEST RESULTS	19
4.2 CONDUCTED EMISSION MEASUREMENT	45
4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT	45
4.2.2 TEST INSTRUMENTS	45
4.2.3 TEST PROCEDURES	46
4.2.4 DEVIATION FROM TEST STANDARD	46
4.2.5 TEST SETUP	47
4.2.6 EUT OPERATING CONDITIONS	47
4.2.7 TEST RESULTS	48
4.3 6dB BANDWIDTH MEASUREMENT	50
4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT	50
4.3.2 TEST SETUP	50
4.3.3 TEST INSTRUMENTS	50
4.3.4 TEST PROCEDURE	50
4.3.5 DEVIATION FROM TEST STANDARD	50
4.3.6 EUT OPERATING CONDITIONS	50
4.3.7 TEST RESULTS	51
4.4 CONDUCTED OUTPUT POWER	52
4.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT	52
4.4.2 TEST SETUP	52
4.4.3 TEST INSTRUMENTS	52
4.4.4 TEST PROCEDURES	52
4.4.5 DEVIATION FROM TEST STANDARD	52
4.4.6 EUT OPERATING CONDITIONS	52
4.4.7 TEST RESULTS	53
4.5 POWER SPECTRAL DENSITY MEASUREMENT	54
4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	54
4.5.2 TEST SETUP	54
4.5.3 TEST INSTRUMENTS	54



A D T

4.5.4 TEST PROCEDURE.....	54
4.5.5 DEVIATION FROM TEST STANDARD	54
4.5.6 EUT OPERATING CONDITION	54
4.5.7 TEST RESULTS	55
4.6 CONDUCTED OUT OF BAND EMISSION MEASUREMENT	56
4.6.1 LIMITS OF CONDUCTED OUT OF BAND EMISSION MEASUREMENT	56
4.6.2 TEST SETUP	56
4.6.3 TEST INSTRUMENTS.....	56
4.6.4 TEST PROCEDURE.....	56
4.6.5 DEVIATION FROM TEST STANDARD	57
4.6.6 EUT OPERATING CONDITION	57
4.6.7 TEST RESULTS	57
5. TEST TYPES AND RESULTS (FOR 5.0GHz BAND)	62
5.1 RADIATED EMISSION AND BANDEdge MEASUREMENT	62
5.1.1 LIMITS OF RADIATED EMISSION AND BANDEdge MEASUREMENT	62
5.1.2 TEST INSTRUMENTS.....	63
5.1.3 TEST PROCEDURES	63
5.1.4 DEVIATION FROM TEST STANDARD	63
5.1.5 TEST SETUP	63
5.1.6 EUT OPERATING CONDITIONS	63
5.1.7 TEST RESULTS	64
5.2 CONDUCTED EMISSION MEASUREMENT	73
5.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT	73
5.2.2 TEST INSTRUMENTS.....	73
5.2.3 TEST PROCEDURES	73
5.2.4 DEVIATION FROM TEST STANDARD	73
5.2.5 TEST SETUP	73
5.2.6 EUT OPERATING CONDITIONS	73
5.2.7 TEST RESULTS	74
5.3 6dB BANDWIDTH MEASUREMENT.....	76
5.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT	76
5.3.2 TEST SETUP.....	76
5.3.3 TEST INSTRUMENTS.....	76
5.3.4 TEST PROCEDURE.....	76
5.3.5 DEVIATION FROM TEST STANDARD	76
5.3.6 EUT OPERATING CONDITIONS	76
5.3.7 TEST RESULTS	77
5.4 MAXIMUM OUTPUT POWER	78
5.4.1 LIMITS OF MAXIMUM OUTPUT POWER MEASUREMENT	78
5.4.2 TEST SETUP	78
5.4.3 INSTRUMENTS.....	78
5.4.4 TEST PROCEDURES	78
5.4.5 DEVIATION FROM TEST STANDARD	78
5.4.6 EUT OPERATING CONDITIONS	78
5.4.7 TEST RESULTS	79
5.5 POWER SPECTRAL DENSITY MEASUREMENT	80
5.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT	80
5.5.2 TEST SETUP	80
5.5.3 TEST INSTRUMENTS.....	80
5.5.4 TEST PROCEDURE.....	80
5.5.5 DEVIATION FROM TEST STANDARD	80



A D T

5.5.6 EUT OPERATING CONDITION	80
5.5.7 TEST RESULTS	81
5.6 CONDUCTED OUT OF BAND EMISSION MEASUREMENT	82
5.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT	82
5.6.2 TEST SETUP	82
5.6.3 TEST INSTRUMENTS.....	82
5.6.4 TEST PROCEDURE.....	82
5.6.5 DEVIATION FROM TEST STANDARD	82
5.6.6 EUT OPERATING CONDITION	82
5.6.7 TEST RESULTS	82
6. PHOTOGRAPHS OF THE TEST CONFIGURATION.....	86
7. INFORMATION ON THE TESTING LABORATORIES	87
8. APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB.....	88



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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120626C35-4	Original release	Jul. 20, 2012



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1. CERTIFICATION

PRODUCT: Smart Phone

MODEL NO.: PM63100

BRAND: HTC

APPLICANT: HTC Corporation

TESTED: Jul. 10 ~ Jul. 19, 2012

TEST SAMPLE: Production Unit

STANDARDS: FCC Part 15, Subpart C (Section 15.247)

ANSI C63.10-2009

The above equipment (model: PM63100) 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 : , DATE : Jul. 20, 2012
Andrea Hsia / Specialist

APPROVED BY : , DATE : Jul. 20, 2012
Gary Chang / Technical Manager



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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)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -4.16dB at 13.56250MHz.
15.247(d) 15.209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -4.48dB at 41.88MHz.
15.247(d)	Band Edge Measurement	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	No antenna connector is used.

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:

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	9kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	2.93 dB
	200MHz ~1000MHz	2.95 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Smart Phone
MODEL NO.	PM63100
POWER SUPPLY	5.0Vdc (adapter or host equipment) 3.8Vdc (Li-ion battery)
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11.0/ 5.5/ 2.0/ 1.0Mbps 802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 135.0Mbps
OPERATING FREQUENCY	2.4GHz: 2412 ~ 2462MHz 5.0GHz: 5745 ~ 5825MHz
NUMBER OF CHANNEL	2.4GHz: 11 for 802.11b, 802.11g, 802.11n (20MHz) 7 for 802.11n (40MHz) 5.0GHz: 4 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz)
OUTPUT POWER	216.770mW for 2412 ~ 2462MHz 224.905mW for 5745 ~ 5825MHz
ANTENNA TYPE	2.4GHz: PIFA antenna with -1dBi gain 5.0GHz: PIFA antenna with -3dBi gain
ANTENNA CONNECTOR	NA
DATA CABLE	Refer to Note as below
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	Refer to Note as below

NOTE:

- The EUT's accessories list refers to Ext Pho_ NM8PM63100.pdf.
* item 2, 3, 5, 6, 7 were the worst for the final test.
- The EUT provides one completed transmitter and one receiver.

MODULATION MODE	TX FUNCTION
802.11b	1TX
802.11g	1TX
802.11a	1TX
802.11n (20MHz)	1TX
802.11n (40MHz)	1TX

- The above EUT information is 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

FOR 2.4GHz:

11 channels are provided for 802.11b, 802.11g and 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		

7 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		

FOR 5.0GHz (5745 ~ 5825MHz):

4 channels are provided for 802.11a, 802.11n (20MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745MHz	157	5785MHz
153	5765MHz	161	5805MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz



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3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

FOR 2.4GHz:

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE \geq 1G	RE $<$ 1G	PLC	APCM	
-	✓	✓	✓	✓	-

Where RE \geq 1G: Radiated Emission above 1GHz

RE $<$ 1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on Y-plane.

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	1.0
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
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

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)
802.11g	1 to 11	11	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11g	1 to 11	11	OFDM	BPSK	6.0



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BANDEdge MEASUREMENT:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11b	1 to 11	1, 11	DSSS	DBPSK	1.0
802.11g	1 to 11	1, 11	OFDM	BPSK	6.0
802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	6.5
802.11n (40MHz)	3 to 9	3, 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.
- 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	1.0
802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
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	TESTED BY
RE≥1G	25deg. C, 65%RH	120Vac, 60Hz	Kay Wu
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Kay Wu
PLC	25deg. C, 65%RH	120Vac, 60Hz	David Huang
APCM	25deg. C, 65%RH	120Vac, 60Hz	Phoenix Chen



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FOR 5.0GHz (5745 ~ 5825MHz):

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

Where RE≥1G: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

NOTE: The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on Y-plane.**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)
802.11a	149 to 161	149, 157, 161	OFDM	BPSK	6.0
802.11n (20MHz)	149 to 161	149, 157, 161	OFDM	BPSK	6.5
802.11n (40MHz)	151 to 159	151, 159	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)
802.11a	149 to 161	161	OFDM	BPSK	6.0

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)
802.11a	149 to 161	161	OFDM	BPSK	6.0



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BANDEDGE MEASUREMENT:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	149 to 161	149, 161	OFDM	BPSK	6.0
802.11n (20MHz)	149 to 161	149, 161	OFDM	BPSK	6.5
802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	13.5

ANTENNA PORT CONDUCTED MEASUREMENT:

- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).
- Following channel(s) was (were) selected for the final test as listed below.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a	149 to 161	149, 157, 161	OFDM	BPSK	6.0
802.11n (20MHz)	149 to 161	149, 157, 161	OFDM	BPSK	6.5
802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	13.5

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	25deg. C, 65%RH	120Vac, 60Hz	Kay Wu
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Kay Wu
PLC	25deg. C, 65%RH	120Vac, 60Hz	David Huang
APCM	25deg. C, 65%RH	120Vac, 60Hz	Phoenix Chen

3.3 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.

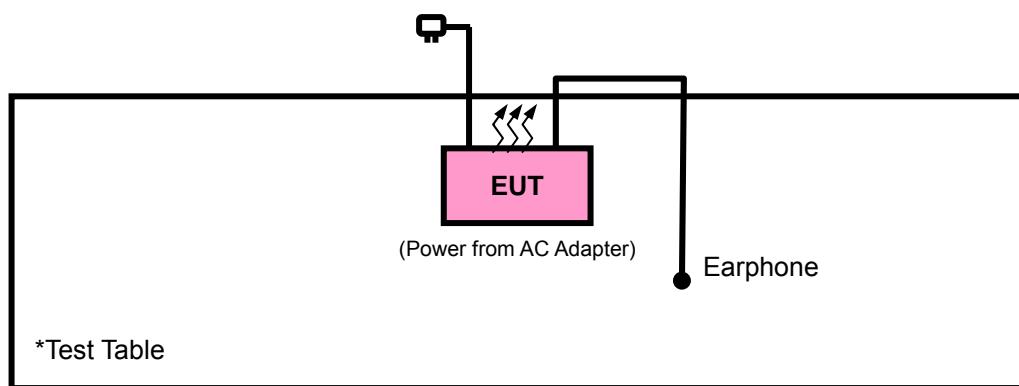
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Earphone	Merry	HS S250	NA	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	1.1m non-shielded cable

NOTE:

1. All power cords of the above support units are non shielded (1.8m).
2. Item 1 was provided by client.

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST



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)

ANSI C63.10-2009

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

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



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4. TEST TYPES AND RESULTS (FOR 2.4GHz BAND)

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 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.



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4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUe DATE OF CALIBRATION
Test Receiver Agilent	N9038A	MY51210203	Dec. 22, 2011	Dec. 21, 2012
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 21, 2011	Dec. 20, 2012
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Dec. 20, 2011	Dec. 19, 2012
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Dec. 20, 2011	Dec. 19, 2012
ORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Dec. 20, 2011	Dec. 19, 2012
Loop Antenna	HFH2-Z2	100070	Jan. 31, 2012	Jan. 30, 2014
Preamplifier EMCI	EMC 012645	980115	Dec. 30, 2011	Dec. 29, 2012
Preamplifier EMCI	EMC 330H	980112	Dec. 30, 2011	Dec. 29, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4	Oct. 21, 2011	Oct. 20, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Jan. 02, 2012	Jan. 01, 2013
RF signal cable Worken	RG-213	NA	Jan. 02, 2012	Jan. 01, 2013
Software	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 29, 2011	Oct. 28, 2012
Antenna Tower & Turn Table Controller MF	MF-7802	NA	NA	NA
JFW 20dB attenuation	50HF-020-SMA	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 calibration interval of the loop antenna is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
 3. The test was performed in HwaYa Chamber 9.
 4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 5. The FCC Site Registration No. is 460141.
 6. The IC Site Registration No. is IC 7450F-4.



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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 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Height of receiving 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 Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

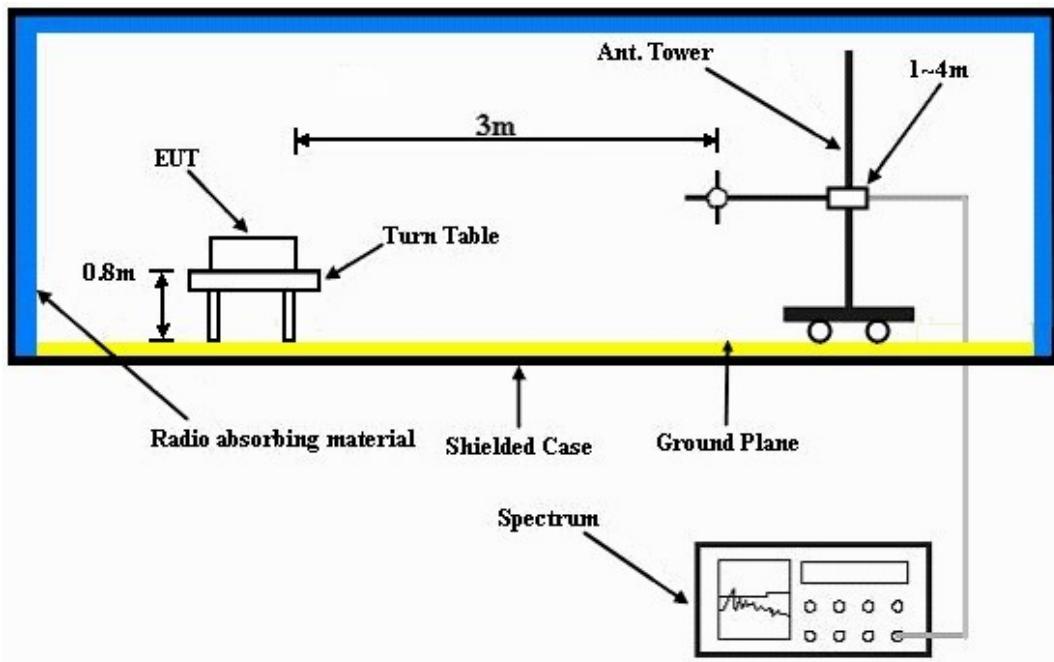
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.
4. 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 attached file (Test Setup Photo).

4.1.6 EUT OPERATING CONDITIONS

- Placed the EUT on a testing table.
- Use the software to control the EUT under transmission condition continuously at specific channel frequency.



A D T

4.1.7 TEST RESULTS

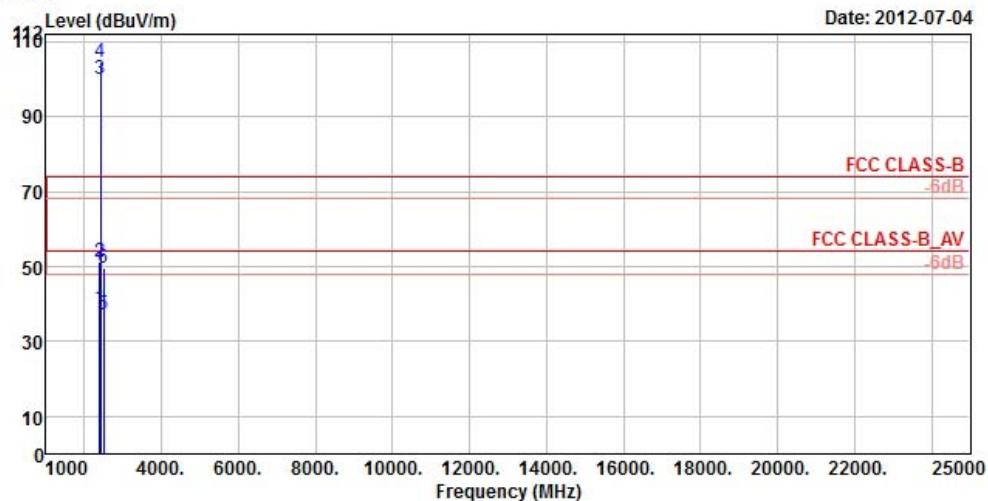
ABOVE 1GHz WORST-CASE DATA : 802.11b



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11B TX CH01
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 1M
Power : 18

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		Level	Line	Limit Factor	Loss	Factor			
MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg
1	2388.00	38.79	44.18	54.00	-15.21	27.26	4.85	37.50	100 137 Average
2	2388.00	51.31	56.70	74.00	-22.69	27.26	4.85	37.50	100 137 Peak
3 pp	2412.00	100.12	105.46			27.31	4.87	37.52	100 137 Average
4 pk	2412.00	104.40	109.74			27.31	4.87	37.52	100 137 Peak
5	2486.00	37.31	42.21	54.00	-16.69	27.50	4.92	37.32	100 137 Average
6	2486.00	49.65	54.55	74.00	-24.35	27.50	4.92	37.32	100 137 Peak



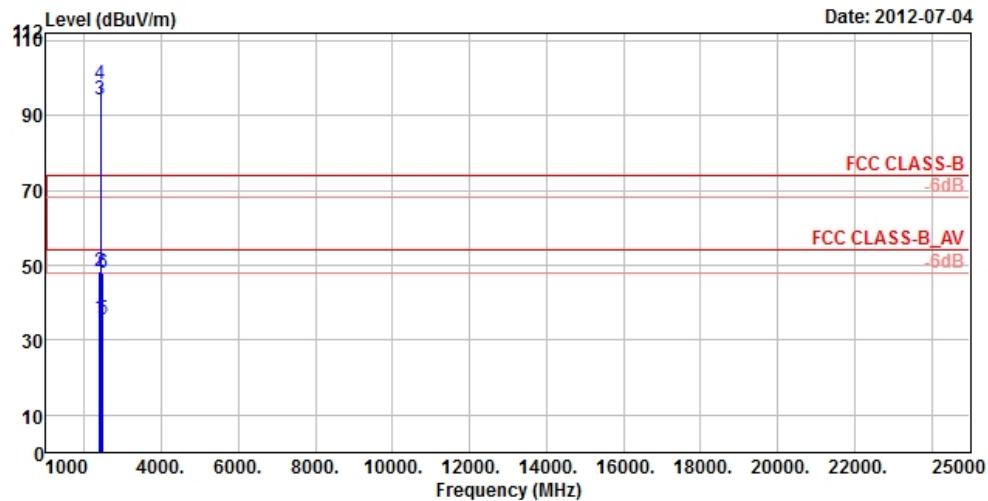
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11B TX CH01
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 1M
Power : 18

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	
1	2390.00	36.12	41.51	54.00	-17.88	27.26	4.87	37.52	100 37 Average
2	2390.00	48.35	53.74	74.00	-25.65	27.26	4.87	37.52	100 37 Peak
3 pp	2412.00	94.15	99.49			27.31	4.87	37.52	100 37 Average
4 pk	2412.00	98.45	103.79			27.31	4.87	37.52	100 37 Peak
5	2484.00	35.68	40.58	54.00	-18.32	27.50	4.92	37.32	100 37 Average
6	2484.00	47.94	52.84	74.00	-26.06	27.50	4.92	37.32	100 37 Peak



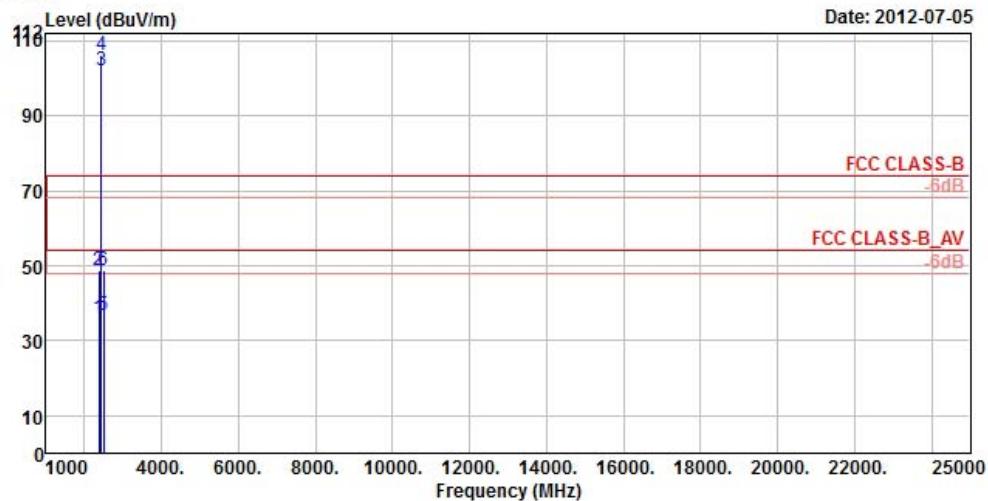
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11B TX CH06
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 1M
Power : 18

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	
1	2382.00	35.91	41.35	54.00	-18.09	27.21	4.85	37.50	100 135 Average
2	2382.00	48.58	54.02	74.00	-25.42	27.21	4.85	37.50	100 135 Peak
3 pp	2437.00	101.89	107.06			27.40	4.89	37.46	100 135 Average
4 pk	2437.00	106.40	111.57			27.40	4.89	37.46	100 135 Peak
5	2494.00	36.63	41.39	54.00	-17.37	27.55	4.94	37.25	100 135 Average
6	2494.00	48.91	53.67	74.00	-25.09	27.55	4.94	37.25	100 135 Peak



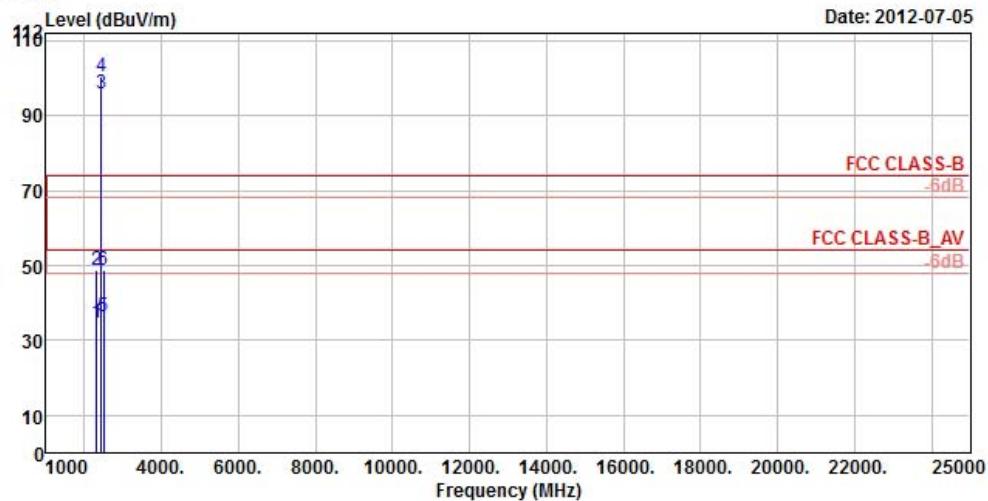
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11B TX CH06
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 1M
Power : 18

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dB _{UV}	dB _{UV/m}	Line	Limit Factor	Loss Factor	cm	
1	2316.00	34.83	40.50	54.00	-19.17	27.01	4.79	37.47	100 36 Average
2	2316.00	48.95	54.62	74.00	-25.05	27.01	4.79	37.47	100 36 Peak
3 pp	2437.00	96.06	101.23			27.40	4.89	37.46	100 36 Average
4 pk	2437.00	100.39	105.61			27.35	4.89	37.46	100 36 Peak
5	2500.00	36.34	41.10	54.00	-17.66	27.55	4.94	37.25	100 36 Average
6	2500.00	48.83	53.59	74.00	-25.17	27.55	4.94	37.25	100 36 Peak



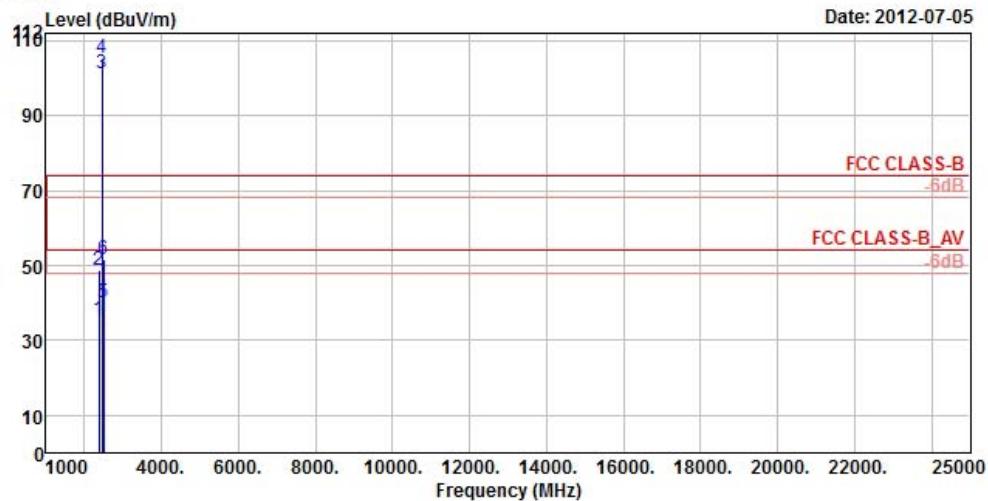
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11B TX CH11
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 1M
Power : 18

	Freq	Read Level	Limit Level	OverAntenna Line	Cable Limit Factor	Preamp Factor	A/Pos	T/Pos	Remark
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	cm	deg
1	2372.00	35.67	41.11	54.00	-18.33	27.21	4.85	37.50	104 349 Average
2	2372.00	48.78	54.22	74.00	-25.22	27.21	4.85	37.50	104 349 Peak
3 pp	2462.00	101.12	106.15			27.45	4.91	37.39	104 349 Average
4 pk	2462.00	105.54	110.57			27.45	4.91	37.39	104 349 Peak
5	2488.00	39.90	44.75	54.00	-14.10	27.55	4.92	37.32	104 349 Average
6	2488.00	51.68	56.53	74.00	-22.32	27.55	4.92	37.32	104 349 Peak



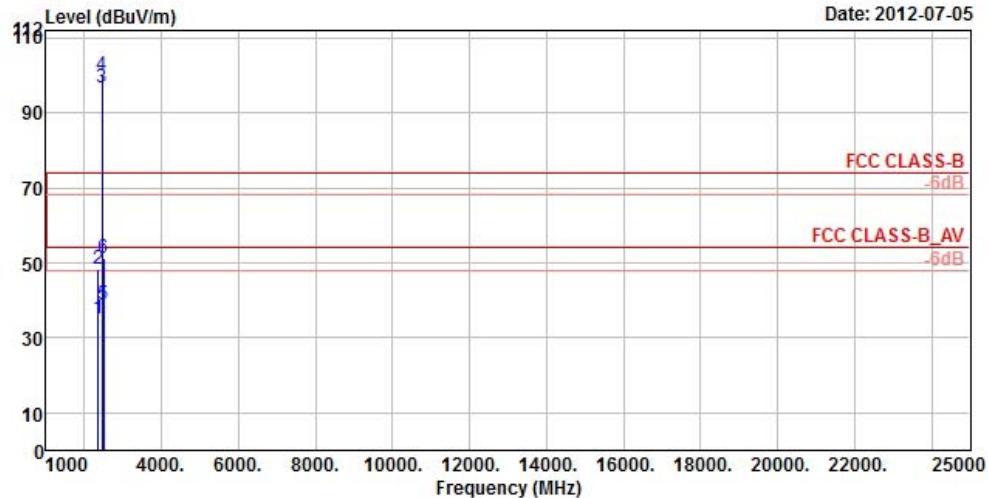
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11B TX CH11
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 1M
Power : 18

Freq	Level	Read	Limit	Over	Antenna	Cable	Preamplifier	A/Pos	T/Pos	Remark	
		MHz	dBuV/m	dBuV	dBuV/m	Line	Limit Factor	Loss Factor	cm	deg	
1	2360.00	35.03	40.54	54.00	-18.97	27.16	4.82	37.49	129	290	Average
2	2360.00	48.21	53.72	74.00	-25.79	27.16	4.82	37.49	129	290	Peak
3 pp	2462.00	96.71	101.74			27.45	4.91	37.39	129	290	Average
4 pk	2462.00	100.02	105.05			27.45	4.91	37.39	129	290	Peak
5	2486.00	38.86	43.76	54.00	-15.14	27.50	4.92	37.32	129	290	Average
6	2486.00	51.32	56.22	74.00	-22.68	27.50	4.92	37.32	129	290	Peak



A D T

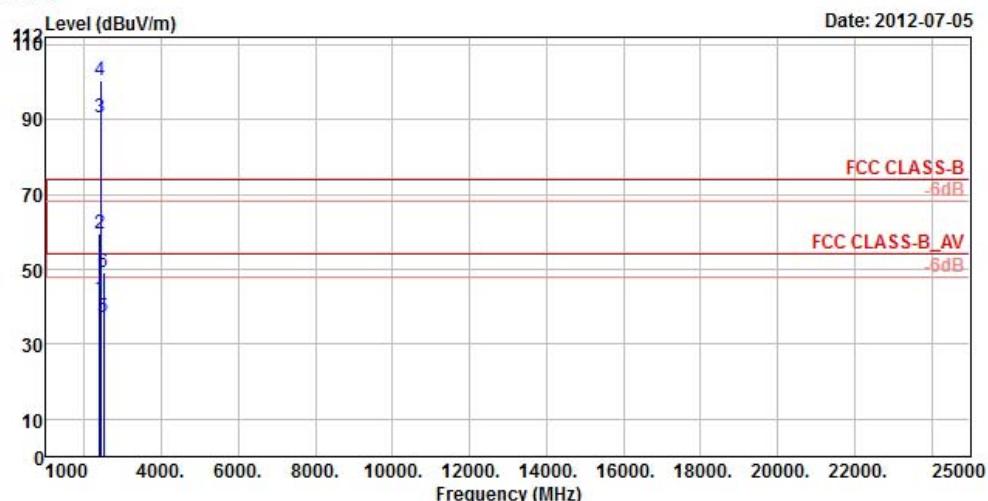
802.11g



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11G TX CH01
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 6M
Power : 13

Freq	Level	Read	Limit	Over	Antenna	Cable	Preamplifier	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	Line	Limit Factor	Loss Factor	dB	cm	
1	2390.00	42.25	47.64	54.00	-11.75	27.26	4.87	37.52	102	144 Average
2	2390.00	59.47	64.86	74.00	-14.53	27.26	4.87	37.52	102	144 Peak
3 pp	2412.00	90.64	95.98			27.31	4.87	37.52	102	144 Average
4 pk	2412.00	100.60	105.94			27.31	4.87	37.52	102	144 Peak
5	2498.00	37.06	41.82	54.00	-16.94	27.55	4.94	37.25	102	144 Average
6	2498.00	49.39	54.15	74.00	-24.61	27.55	4.94	37.25	102	144 Peak



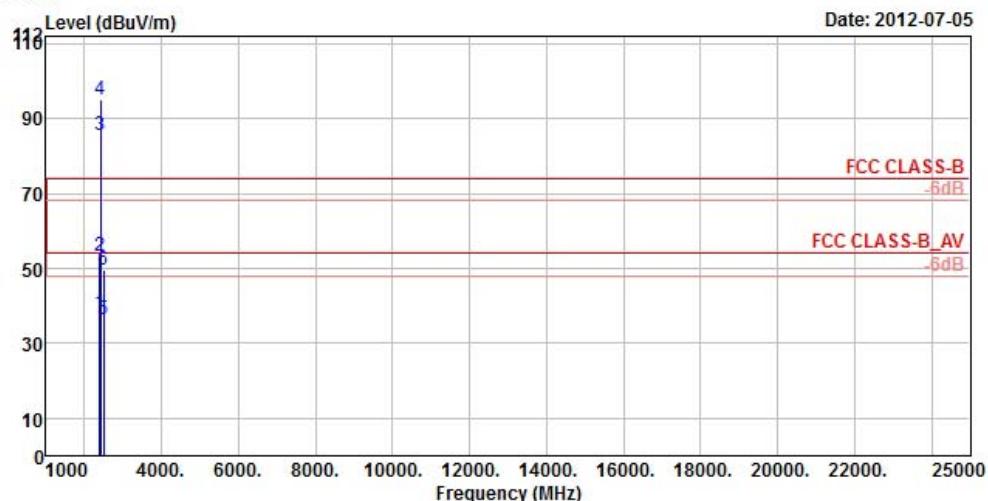
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11G TX CH01
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 6M
Power : 13

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		Level	Line	Limit Factor	Loss	Factor	cm	deg	
MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg
1	2390.00	38.20	43.59	54.00	-15.80	27.26	4.87	37.52	100 21 Average
2	2390.00	53.27	58.66	74.00	-20.73	27.26	4.87	37.52	100 21 Peak
3 pp	2412.00	85.56	90.90		27.31	4.87	37.52	100	21 Average
4 pk	2412.00	95.01	100.35		27.31	4.87	37.52	100	21 Peak
5	2488.00	36.52	41.37	54.00	-17.48	27.55	4.92	37.32	100 21 Average
6	2488.00	49.75	54.60	74.00	-24.25	27.55	4.92	37.32	100 21 Peak



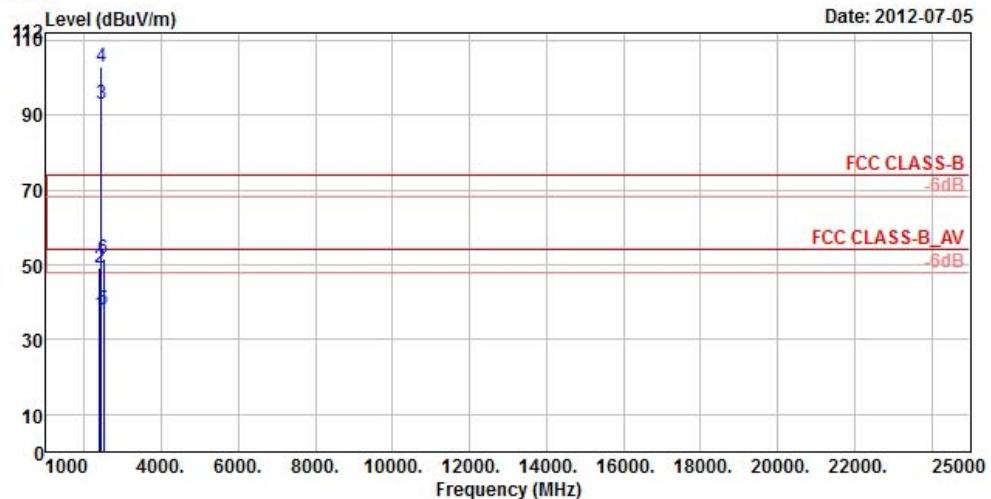
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11G TX CH06
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 6M
Power : 13

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		Freq	Level	Line	Limit Factor	Loss Factor	cm	deg	
MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg
1	2388.00	36.65	42.04	54.00	-17.35	27.26	4.85	37.50	102 166 Average
2	2388.00	49.35	54.74	74.00	-24.65	27.26	4.85	37.50	102 166 Peak
3 pp	2437.00	92.82	97.99		27.40	4.89	37.46	102	166 Average
4 pk	2437.00	102.72	107.89		27.40	4.89	37.46	102	166 Peak
5	2488.00	38.19	43.04	54.00	-15.81	27.55	4.92	37.32	102 166 Average
6	2488.00	51.67	56.52	74.00	-22.33	27.55	4.92	37.32	102 166 Peak

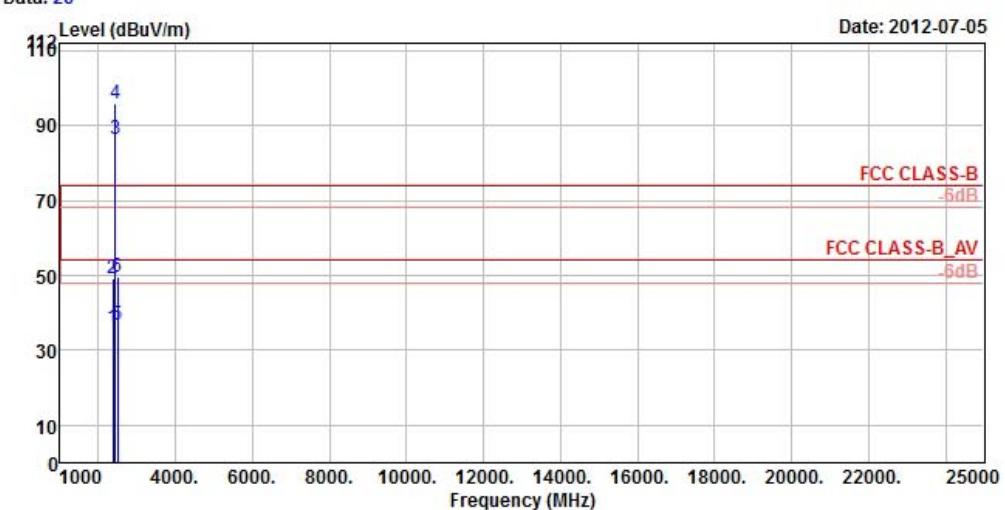


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A D T

Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11G TX CH06
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 6M
Power : 13

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	
1	2376.00	36.08	41.52	54.00	-17.92	27.21	4.85	37.50	100 21 Average
2	2376.00	49.02	54.46	74.00	-24.98	27.21	4.85	37.50	100 21 Peak
3 pp	2437.00	86.42	91.59			27.40	4.89	37.46	100 21 Average
4 pk	2437.00	95.84	101.01			27.40	4.89	37.46	100 21 Peak
5	2486.00	36.93	41.83	54.00	-17.07	27.50	4.92	37.32	100 21 Average
6	2486.00	49.46	54.36	74.00	-24.54	27.50	4.92	37.32	100 21 Peak



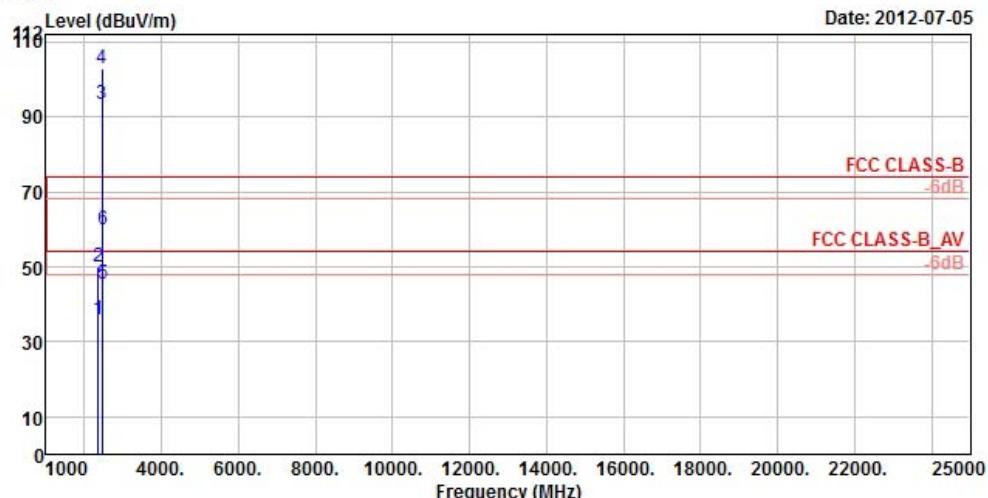
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11G TX CH11
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 6M
Power : 13

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		Level	Line	Limit Factor	Cable	Preamp	A/Pos	T/Pos	
MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	cm	deg	
1	2344.00	35.80	41.36	54.00	-18.20	27.11	4.82	37.49	100 15 Average
2	2344.00	49.91	55.47	74.00	-24.09	27.11	4.82	37.49	100 15 Peak
3 pp	2462.00	93.41	98.44			27.45	4.91	37.39	100 15 Average
4 pk	2462.00	102.82	107.85			27.45	4.91	37.39	100 15 Peak
5	2484.00	45.61	50.51	54.00	-8.39	27.50	4.92	37.32	100 15 Average
6	2484.00	59.87	64.77	74.00	-14.13	27.50	4.92	37.32	100 15 Peak



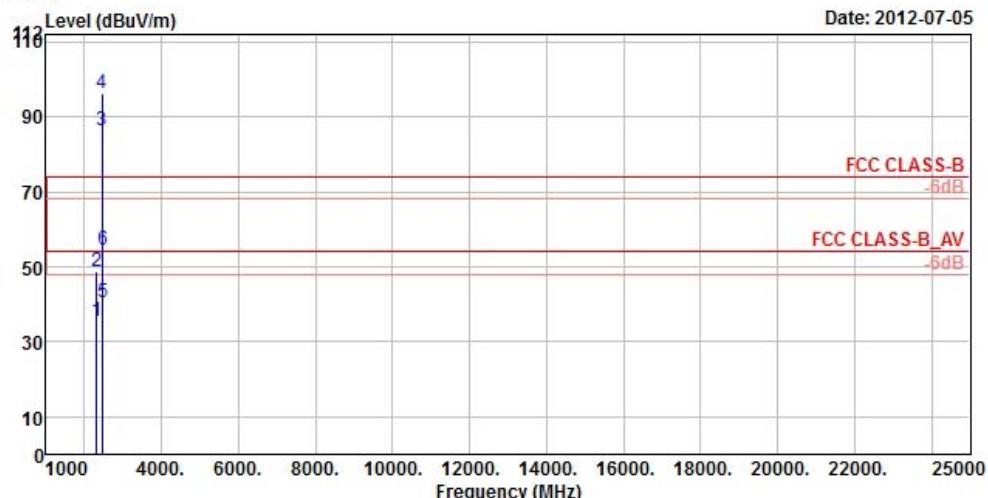
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11G TX CH11
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : 6M
Power : 13

Freq	Level	Read	Limit	OverAntenna	Cable	Preamplifier	A/Pos	T/Pos	Remark	
		Level	Line	Limit Factor	Cable	Preamplifier	A/Pos	T/Pos		
MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg	
1	2314.00	35.51	41.18	54.00	-18.49	27.01	4.79	37.47	100	13 Average
2	2314.00	48.79	54.46	74.00	-25.21	27.01	4.79	37.47	100	13 Peak
3 pp	2462.00	86.58	91.61			27.45	4.91	37.39	100	13 Average
4 pk	2462.00	96.29	101.32			27.45	4.91	37.39	100	13 Peak
5	2484.00	40.58	45.48	54.00	-13.42	27.50	4.92	37.32	100	13 Average
6	2484.00	54.58	59.48	74.00	-19.42	27.50	4.92	37.32	100	13 Peak



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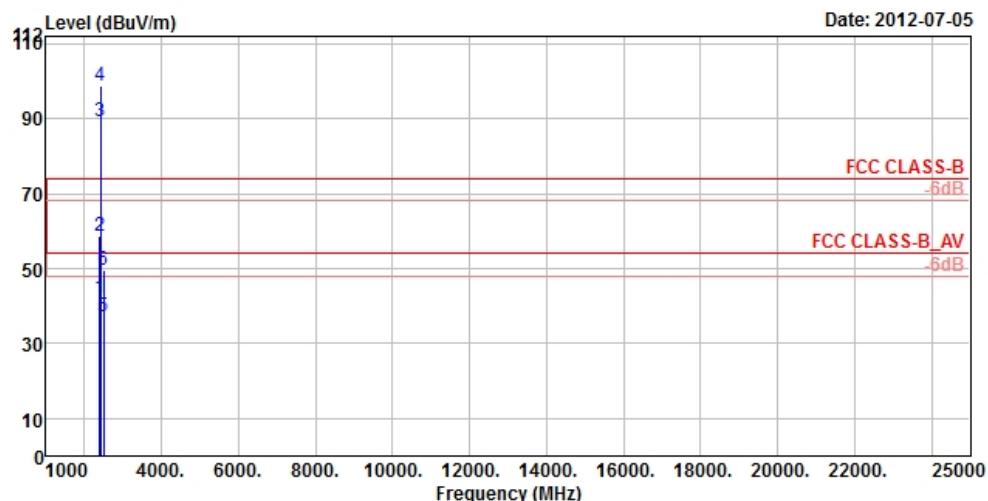
802.11n (20MHz)



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11N HT20 TX CH01
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	Over	Antenna	Cable	Preamp	A/Pos	T/Pos	Remark
		Level	Line	Limit	Factor	Loss	Factor	cm	deg	
MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg	
1	2390.00	42.15	47.54	54.00	-11.85	27.26	4.87	37.52	100	140 Average
2	2390.00	58.69	64.08	74.00	-15.31	27.26	4.87	37.52	100	140 Peak
3 pp	2412.00	89.44	94.78			27.31	4.87	37.52	100	140 Average
4 pk	2412.00	98.77	104.11			27.31	4.87	37.52	100	140 Peak
5	2490.00	37.25	42.10	54.00	-16.75	27.55	4.92	37.32	100	140 Average
6	2490.00	49.78	54.63	74.00	-24.22	27.55	4.92	37.32	100	140 Peak



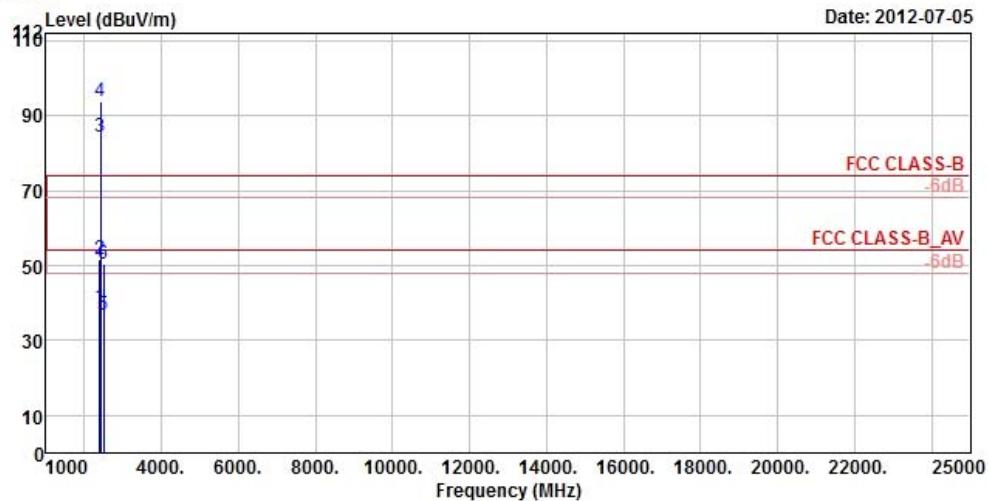
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Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11N HT20 TX CH01
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	
1	2390.00	38.71	44.10	54.00	-15.29	27.26	4.87	37.52	100 19 Average
2	2390.00	51.59	56.98	74.00	-22.41	27.26	4.87	37.52	100 19 Peak
3 pp	2412.00	84.25	89.59			27.31	4.87	37.52	100 19 Average
4 pk	2412.00	93.87	99.21			27.31	4.87	37.52	100 19 Peak
5	2486.00	36.80	41.70	54.00	-17.20	27.50	4.92	37.32	100 19 Average
6	2486.00	50.57	55.47	74.00	-23.43	27.50	4.92	37.32	100 19 Peak



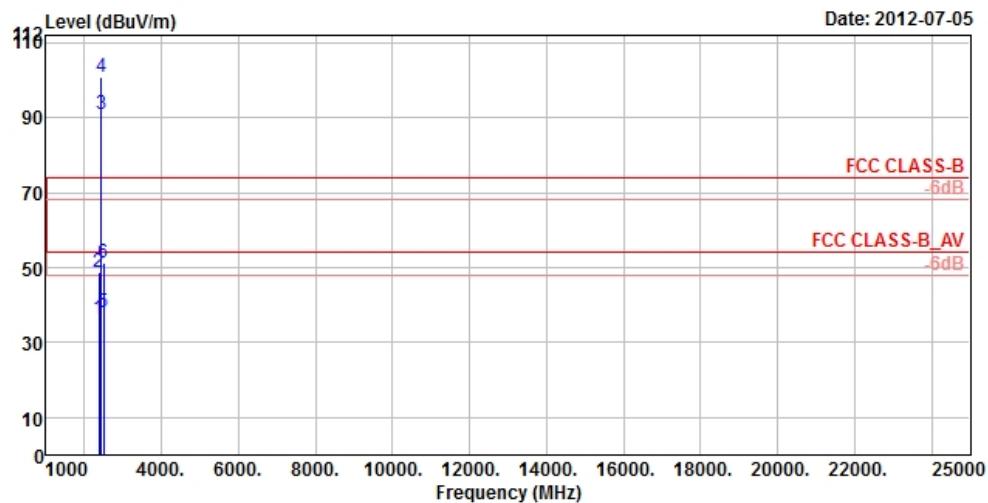
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11N HT20 TX CH06
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	
1	2366.00	36.56	42.05	54.00	-17.44	27.16	4.85	37.50	100 172 Average
2	2366.00	48.79	54.28	74.00	-25.21	27.16	4.85	37.50	100 172 Peak
3 pp	2437.00	91.02	96.19			27.40	4.89	37.46	100 172 Average
4 pk	2437.00	100.74	105.91			27.40	4.89	37.46	100 172 Peak
5	2498.00	37.99	42.75	54.00	-16.01	27.55	4.94	37.25	100 172 Average
6	2498.00	51.36	56.12	74.00	-22.64	27.55	4.94	37.25	100 172 Peak



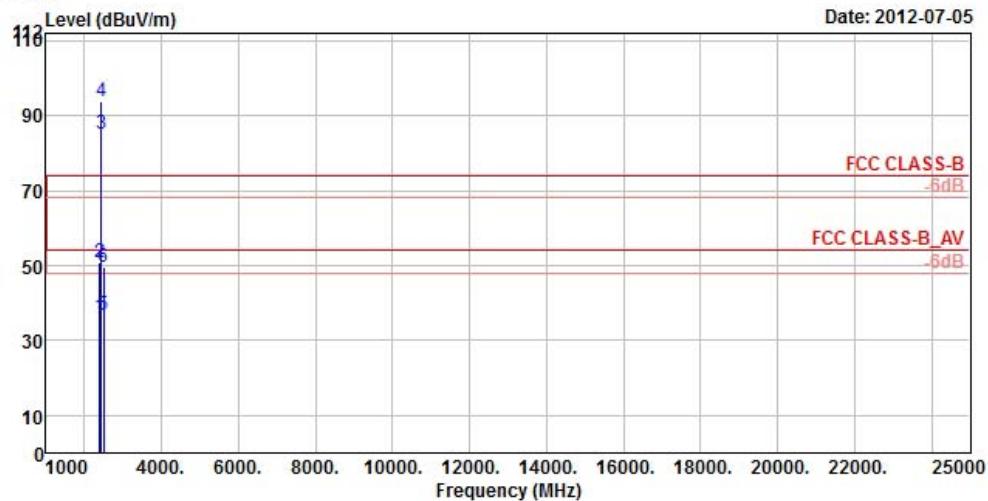
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11N HT20 TX CH06
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	
1	2390.00	36.44	41.83	54.00	-17.56	27.26	4.87	37.52	100 21 Average
2	2390.00	50.70	56.09	74.00	-23.30	27.26	4.87	37.52	100 21 Peak
3 pp	2437.00	85.03	90.20			27.40	4.89	37.46	100 21 Average
4 pk	2437.00	93.90	99.07			27.40	4.89	37.46	100 21 Peak
5	2490.00	36.88	41.73	54.00	-17.12	27.55	4.92	37.32	100 21 Average
6	2490.00	49.44	54.29	74.00	-24.56	27.55	4.92	37.32	100 21 Peak



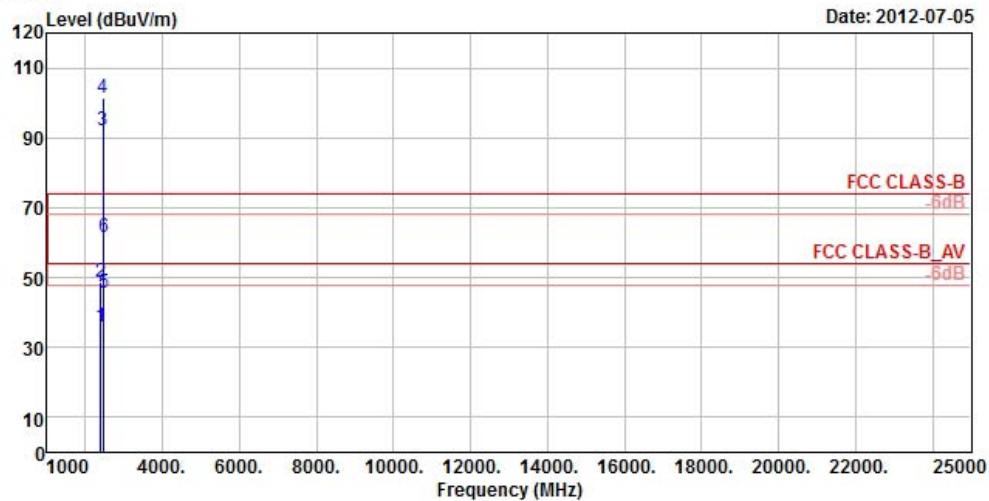
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11N HT20 TX CH11
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		Level	Line	Limit Factor	Loss	Factor	cm	deg	
MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	cm	deg	
1	2384.00	35.97	41.41	54.00	-18.03	27.21	4.85	37.50	100 15 Average
2	2384.00	48.82	54.26	74.00	-25.18	27.21	4.85	37.50	100 15 Peak
3 pp	2462.00	92.22	97.25			27.45	4.91	37.39	100 15 Average
4 pk	2462.00	101.18	106.21			27.45	4.91	37.39	100 15 Peak
5	2484.00	45.78	50.68	54.00	-8.22	27.50	4.92	37.32	100 15 Average
6	2484.00	61.48	66.38	74.00	-12.52	27.50	4.92	37.32	100 15 Peak



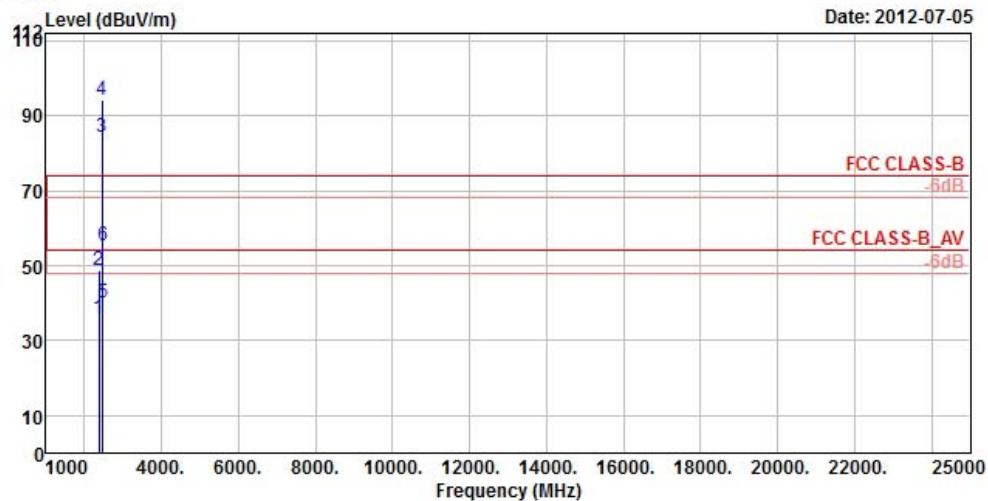
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11N HT20 TX CH11
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	
1	2368.00	35.77	41.26	54.00	-18.23	27.16	4.85	37.50	100 15 Average
2	2368.00	48.77	54.26	74.00	-25.23	27.16	4.85	37.50	100 15 Peak
3 pp	2462.00	84.49	89.52			27.45	4.91	37.39	100 15 Average
4 pk	2462.00	94.26	99.29			27.45	4.91	37.39	100 15 Peak
5	2484.00	40.18	45.08	54.00	-13.82	27.50	4.92	37.32	100 15 Average
6	2484.00	55.35	60.25	74.00	-18.65	27.50	4.92	37.32	100 15 Peak



A D T

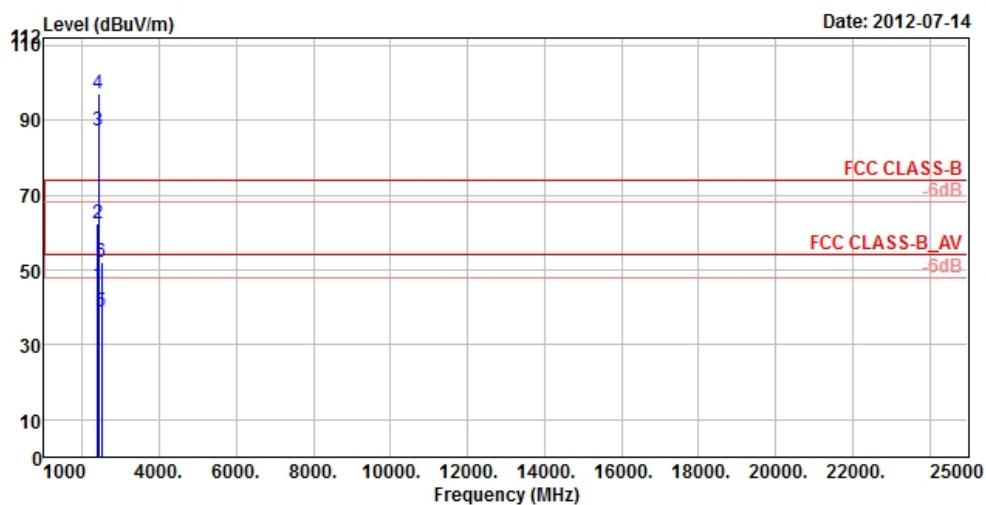
802.11n (40MHz)



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11N HT_40 TX CH03
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	Over	Antenna	Cable	Preamp	A/Pos	T/Pos	Remark
		Level	Line	Limit	Factor	Loss	Factor	cm	deg	
MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	dB	cm	deg	
1	2386.00	45.94	51.33	54.00	-8.06	27.26	4.85	37.50	154	171 Average
2	2386.00	62.47	67.86	74.00	-11.53	27.26	4.85	37.50	154	171 Peak
3 pp	2422.00	87.26	92.48			27.35	4.89	37.46	154	171 Average
4 pk	2422.00	97.07	102.29			27.35	4.89	37.46	154	171 Peak
5	2492.00	38.76	43.52	54.00	-15.24	27.55	4.94	37.25	154	171 Average
6	2492.00	51.91	56.67	74.00	-22.09	27.55	4.94	37.25	154	171 Peak



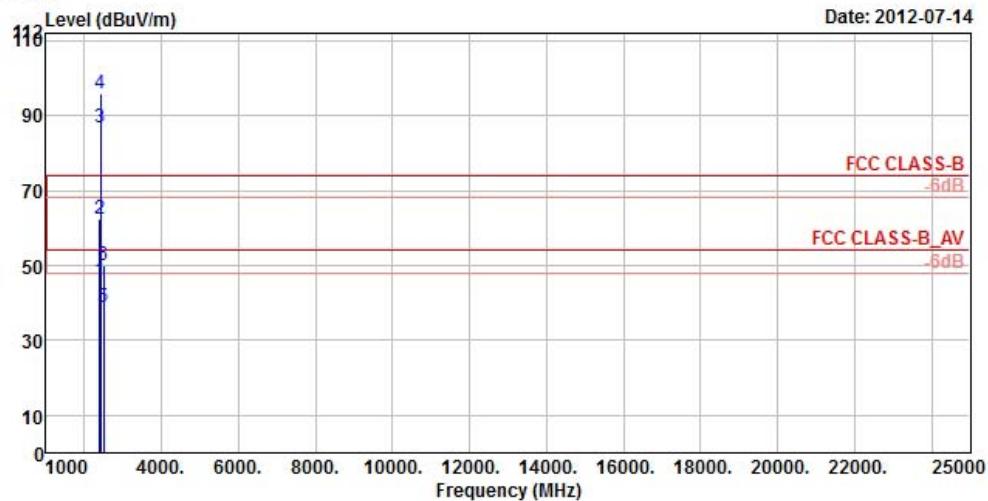
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11N HT_40 TX CH03
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dB _{UV}	dB _{UV/m}	Line	Limit Factor	Loss Factor	cm	
1	2388.00	45.92	51.31	54.00	-8.08	27.26	4.85	37.50	130 300 Average
2	2388.00	62.45	67.84	74.00	-11.55	27.26	4.85	37.50	130 300 Peak
3 pp	2422.00	86.76	91.98			27.35	4.89	37.46	130 300 Average
4 pk	2422.00	96.01	101.23			27.35	4.89	37.46	130 300 Peak
5	2492.00	38.90	43.66	54.00	-15.10	27.55	4.94	37.25	130 300 Average
6	2492.00	50.08	54.84	74.00	-23.92	27.55	4.94	37.25	130 300 Peak



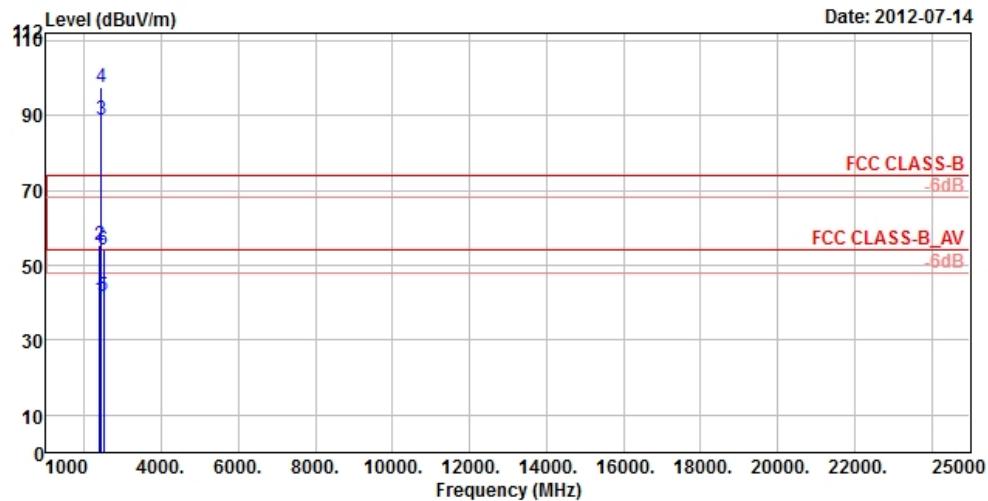
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 19



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11N HT_40 TX CH06
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	
1	2390.00	40.95	46.34	54.00	-13.05	27.26	4.87	37.52	101 175 Average
2	2390.00	55.43	60.82	74.00	-18.57	27.26	4.87	37.52	101 175 Peak
3 pp	2437.00	89.03	94.20			27.40	4.89	37.46	101 175 Average
4 pk	2437.00	97.58	102.75			27.40	4.89	37.46	101 175 Peak
5	2486.00	41.54	46.44	54.00	-12.46	27.50	4.92	37.32	101 175 Average
6	2486.00	54.29	59.19	74.00	-19.71	27.50	4.92	37.32	101 175 Peak



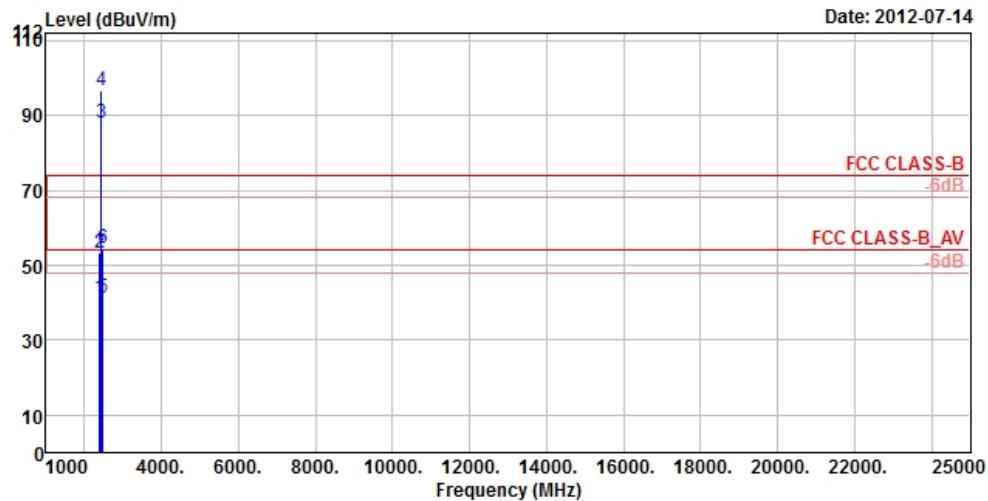
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 20



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11N HT_40 TX CH06
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	
1	2390.00	41.23	46.62	54.00	-12.77	27.26	4.87	37.52	105 301 Average
2	2390.00	53.36	58.75	74.00	-20.64	27.26	4.87	37.52	105 301 Peak
3 pp	2437.00	88.14	93.31			27.40	4.89	37.46	105 301 Average
4 pk	2437.00	96.80	101.97			27.40	4.89	37.46	105 301 Peak
5	2484.00	41.33	46.23	54.00	-12.67	27.50	4.92	37.32	105 301 Average
6	2484.00	54.55	59.45	74.00	-19.45	27.50	4.92	37.32	105 301 Peak



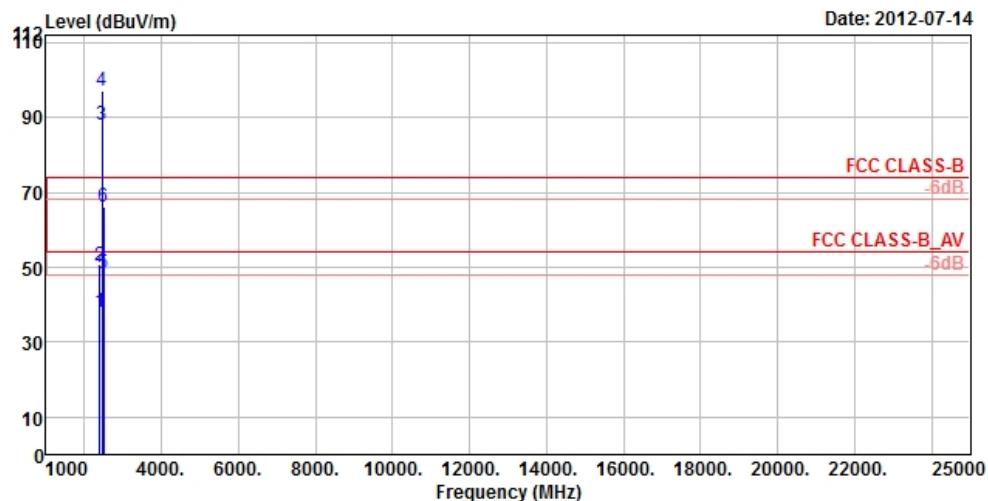
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 21



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF HORIZONTAL
Brand/Model: PM63100
Remark : 11N HT_40 TX CH09
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	
1	2388.00	38.17	43.56	54.00	-15.83	27.26	4.85	37.50	100 170 Average
2	2388.00	50.36	55.75	74.00	-23.64	27.26	4.85	37.50	100 170 Peak
3 pp	2452.00	88.11	93.19			27.40	4.91	37.39	100 170 Average
4 pk	2452.00	97.31	102.39			27.40	4.91	37.39	100 170 Peak
5 !	2488.22	48.49	53.34	54.00	-5.51	27.55	4.92	37.32	100 170 Average
6	2488.22	66.01	70.86	74.00	-7.99	27.55	4.92	37.32	100 170 Peak



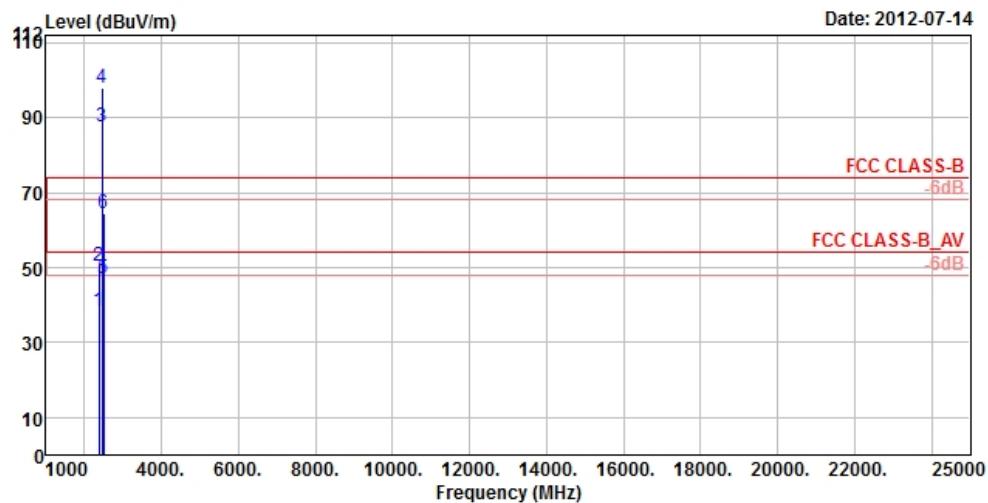
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 22



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_18G~40G_HF VERTICAL
Brand/Model: PM63100
Remark : 11N HT_40 TX CH09
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y
Rate : MCS0
Power : 12

Freq	Level	Read	Limit	OverAntenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m	dB	
1	2372.00	38.55	43.99	54.00	-15.45	27.21	4.85	37.50	106 298 Average
2	2372.00	50.48	55.92	74.00	-23.52	27.21	4.85	37.50	106 298 Peak
3 pp	2452.00	87.80	92.88			27.40	4.91	37.39	106 298 Average
4 pk	2452.00	97.88	102.96			27.40	4.91	37.39	106 298 Peak
5	2488.41	47.21	52.06	54.00	-6.79	27.55	4.92	37.32	106 298 Average
6	2488.41	64.46	69.31	74.00	-9.54	27.55	4.92	37.32	106 298 Peak



A D T

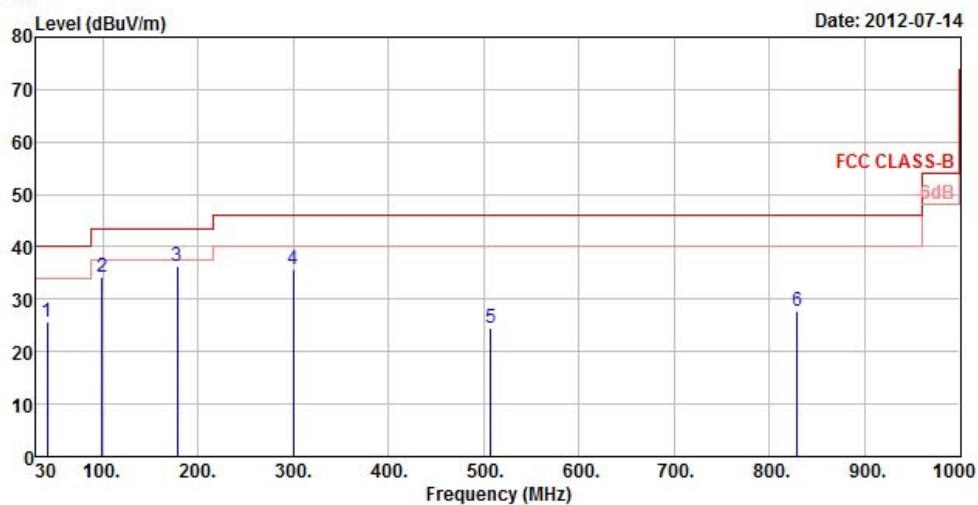
BELOW 1GHz WORST-CASE DATA : 802.11g



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 5



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_30M~1G_LF HORIZONTAL
Brand/Model: PM63100
Remark : WIFI TX LF
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y

Freq	Read	Limit	OverAntenna	Cable	Preampl	A/Pos	T/Pos	Remark	
	Level	Level	Line	Limit Factor	Loss Factor	dB	cm		
MHz	dB _B V/m	dB _B V	dB _B V/m	dB	dB/m	dB	dB	cm	deg
1	41.88	25.70	42.51	40.00	-14.30	13.56	0.68	31.05	132
2	99.66	34.29	56.12	43.50	-9.21	9.06	1.07	31.96	124
3 pp	178.50	36.32	55.73	43.50	-7.18	10.92	1.49	31.82	100
4	300.00	35.81	52.66	46.00	-10.19	12.94	2.05	31.84	332
5	507.20	24.45	35.77	46.00	-21.55	17.48	2.80	31.60	100
6	829.20	27.86	33.20	46.00	-18.14	22.60	3.77	31.71	212



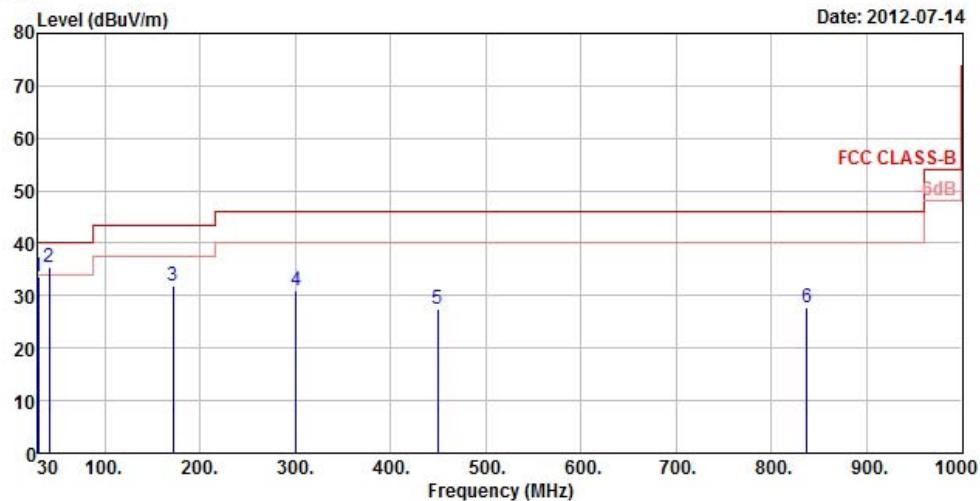
A D T



Bureau Veritas Consumer Products Services Ltd., Taoyuan Branch

A D T

Data: 6



Site : 966 Chamber 5
Condition : FCC CLASS-B 3m ANT_30M~1G_LF VERTICAL
Brand/Model: PM63100
Remark : WIFI TX LF
Tested by : Kay Wu
Temprature : 25°C
Humidity : 65%
Plane : Y

Freq	Level	Read	Limit	Over	Antenna	Cable	Preamp	A/Pos	T/Pos	Remark
		MHz	dBuV/m	dBuV	dBuV/m	Line	Limit Factor	Loss Factor	cm	deg
1	30.00	33.77	52.36	40.00	-6.23	11.98	0.57	31.14	100	7 QP
2 pp	41.88	35.52	52.33	40.00	-4.48	13.56	0.68	31.05	100	288 QP
3 pk	172.02	31.99	50.72	43.50	-11.51	11.57	1.45	31.75	100	342 Peak
4	300.70	31.13	47.97	46.00	-14.87	12.96	2.05	31.85	200	300 Peak
5	449.80	27.60	40.63	46.00	-18.40	16.33	2.62	31.98	100	200 Peak
6	836.90	27.61	32.90	46.00	-18.39	22.70	3.79	31.78	100	23 Peak

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 19, 2011	Nov. 18, 2012
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 29, 2011	Dec. 28, 2012
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 30, 2011	Dec. 29, 2012
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 06, 2012	Jul. 05, 2013
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 HwaYa Shielded Room 2.
 3. The VCCI Site Registration No. is C-2047.



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4.2.3 TEST PROCEDURES

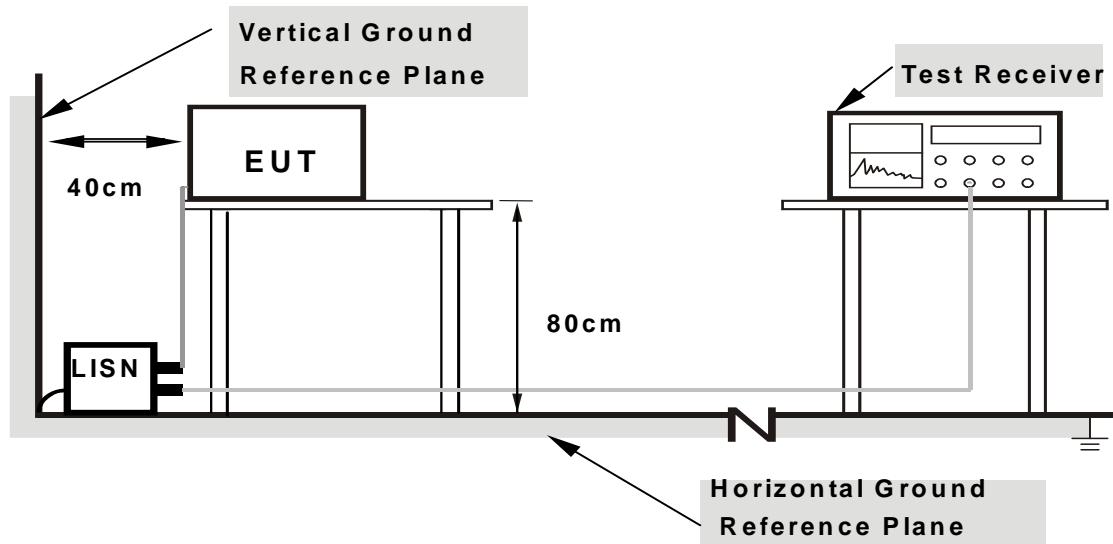
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



- Note:**
1. Support units were connected to second LISN.
 2. Both of LISNs (AMN) are 80 cm from EUT and at least 80 cm from other units and other metal planes

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

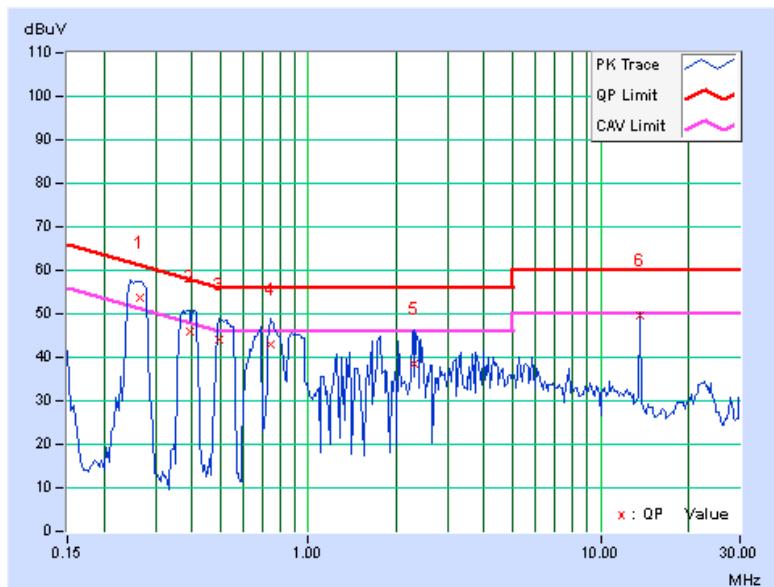
CONDUCTED WORST-CASE DATA : 802.11g

PHASE	Line 1		6dB BANDWIDTH		9kHz	
-------	--------	--	---------------	--	------	--

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.26719	0.18	53.38	35.90	53.56	36.08	61.20	51.20	-7.64	-15.12
2	0.39219	0.20	45.80	27.94	46.00	28.14	58.02	48.02	-12.02	-19.88
3	0.49375	0.20	43.77	25.53	43.97	25.73	56.10	46.10	-12.13	-20.37
4	0.73984	0.22	42.58	25.40	42.80	25.62	56.00	46.00	-13.20	-20.38
5	2.29297	0.31	38.32	18.21	38.63	18.52	56.00	46.00	-17.37	-27.48
6	13.56250	0.57	49.24	45.16	49.81	45.73	60.00	50.00	-10.19	-4.27

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.

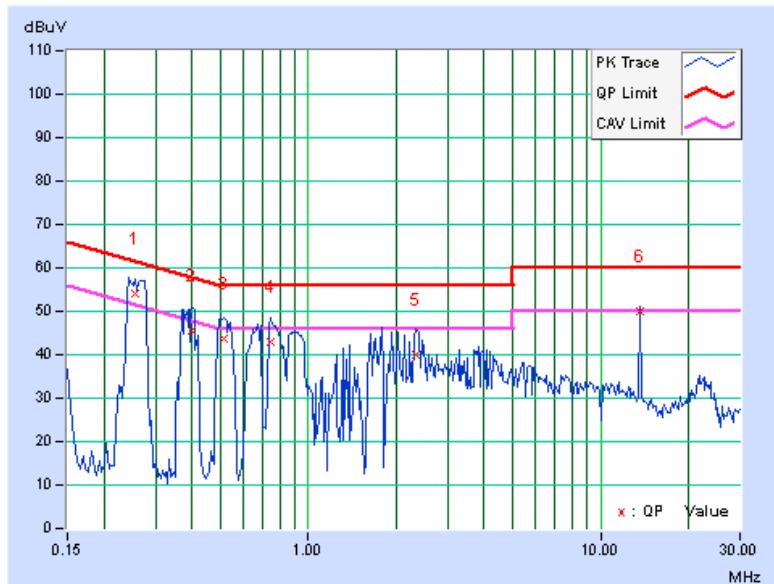


PHASE	Line 2	6dB BANDWIDTH	9kHz
--------------	--------	----------------------	------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
	0.25547	0.16	53.94	37.01	54.10	37.17	61.58	51.58	-7.48	-14.41
2	0.40000	0.18	45.45	27.47	45.63	27.65	57.85	47.85	-12.22	-20.20
3	0.51328	0.18	43.37	25.81	43.55	25.99	56.00	46.00	-12.45	-20.01
4	0.74375	0.19	42.68	25.83	42.87	26.02	56.00	46.00	-13.13	-19.98
5	2.32813	0.29	39.60	22.44	39.89	22.73	56.00	46.00	-16.11	-23.27
6	13.56250	0.66	49.20	45.18	49.86	45.84	60.00	50.00	-10.14	-4.16

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

Refer to section 4.1.2 to get information of above instrument.

4.3.4 TEST PROCEDURE

- a. Set resolution bandwidth (RBW) = approximately 1% of the emission bandwidth
- b. Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- c. Trace mode = max hold.
- d. Sweep = auto couple.
- e. 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.



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4.3.7 TEST RESULTS

802.11b

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	8.09	0.5	PASS
6	2437	8.08	0.5	PASS
11	2462	7.60	0.5	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	16.72	0.5	PASS
6	2437	16.67	0.5	PASS
11	2462	16.72	0.5	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
1	2412	17.77	0.5	PASS
6	2437	17.90	0.5	PASS
11	2462	17.88	0.5	PASS

802.11n (40MHz)

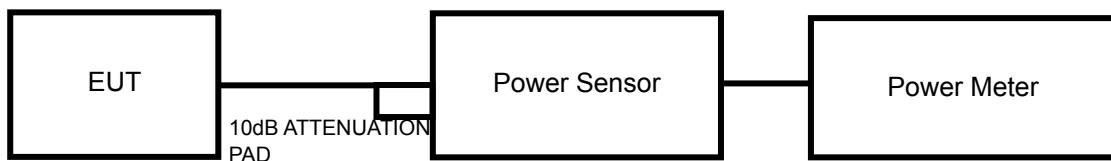
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
3	2422	37.66	0.5	PASS
6	2437	36.98	0.5	PASS
9	2452	37.29	0.5	PASS

4.4 CONDUCTED OUTPUT POWER

4.4.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

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

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.4.4 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.

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6.



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4.4.7 TEST RESULTS

802.11b

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	100.925	20.04	30	PASS
6	2437	107.647	20.32	30	PASS
11	2462	110.408	20.43	30	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	212.814	23.28	30	PASS
6	2437	194.984	22.90	30	PASS
11	2462	216.770	23.36	30	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	156.675	21.95	30	PASS
6	2437	168.267	22.26	30	PASS
11	2462	172.982	22.38	30	PASS

802.11n (40MHz)

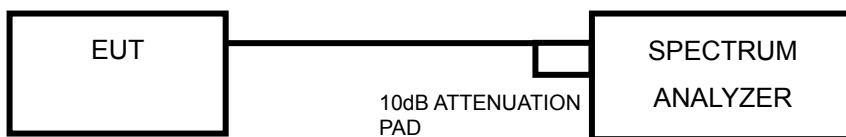
CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
3	2422	181.552	22.59	30	PASS
6	2437	187.932	22.74	30	PASS
9	2452	191.867	22.83	30	PASS

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

Refer to section 4.1.2 to get information of above instrument.

4.5.4 TEST PROCEDURE

- a. Set the RBW = 100 kHz, VBW =300 kHz, Detector = peak.
- b. Sweep time = auto couple, Trace mode = max hold, allow trace to fully stabilize.
- c. Use the peak marker function to determine the maximum power level in any 100 kHz band segment within the fundamental EBW.
- d. Scale the observed power level to an equivalent value in 3 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(3 \text{ kHz}/100\text{kHz})$

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

Same as Item 4.3.6



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4.5.7 TEST RESULTS

802.11b

Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
1	2412	9.22	-6.01	8	PASS
6	2437	9.18	-6.05	8	PASS
11	2462	9.33	-5.90	8	PASS

802.11g

Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
1	2412	0.67	-14.56	8	PASS
6	2437	1.19	-14.04	8	PASS
11	2462	1.13	-14.10	8	PASS

802.11n (20MHz)

Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
1	2412	-0.24	-15.47	8	PASS
6	2437	-0.11	-15.34	8	PASS
11	2462	-0.12	-15.35	8	PASS

802.11n (40MHz)

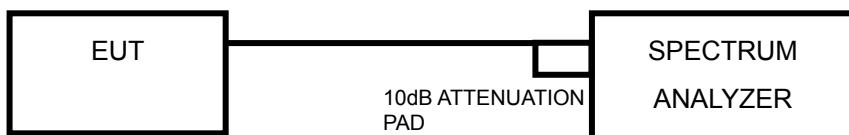
Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
3	2422	-2.42	-17.65	8	PASS
6	2437	-2.22	-17.45	8	PASS
9	2452	-2.43	-17.66	8	PASS

4.6 CONDUCTED OUT OF BAND EMISSION MEASUREMENT

4.6.1 LIMITS OF CONDUCTED OUT OF BAND EMISSION MEASUREMENT

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

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

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.



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MEASUREMENT PROCEDURE OOB

1. Set RBW = 100 kHz.
2. Set VBW \geq 300 kHz.
3. Set span to encompass the spectrum to be examined.
4. Detector = peak.
5. Trace Mode = max hold.
6. Sweep = auto couple.

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

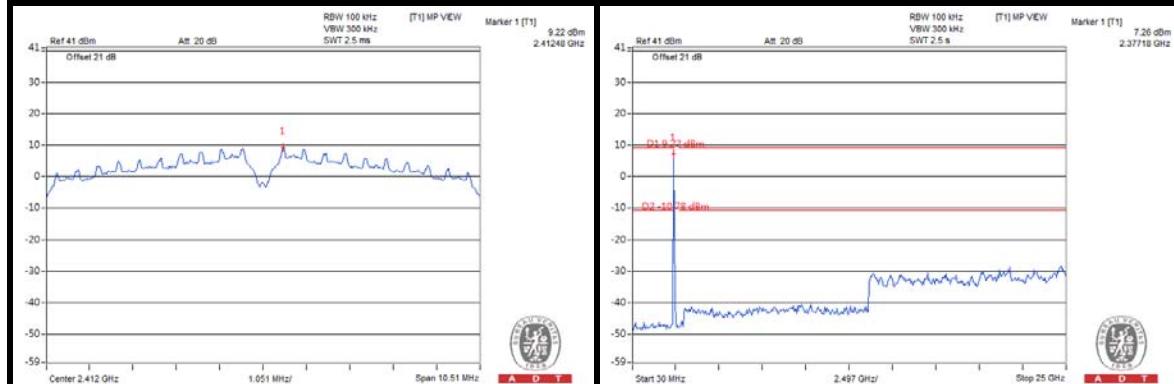
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.



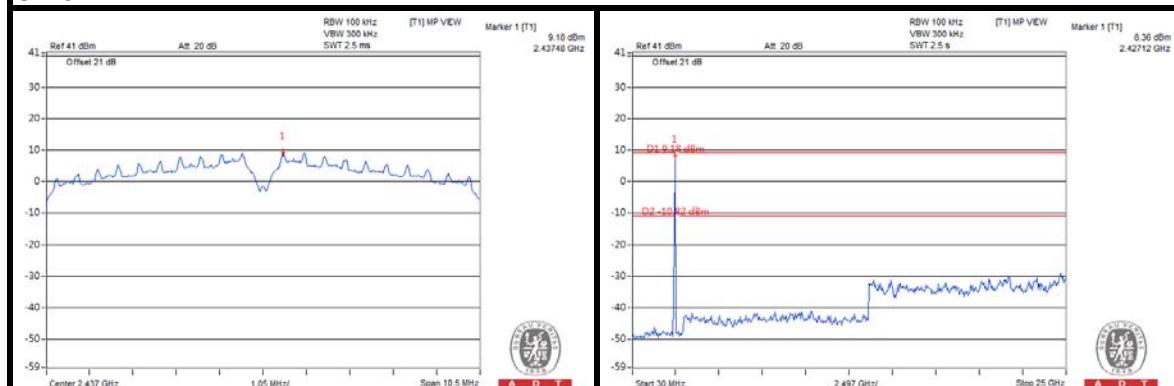
A D T

802.11b

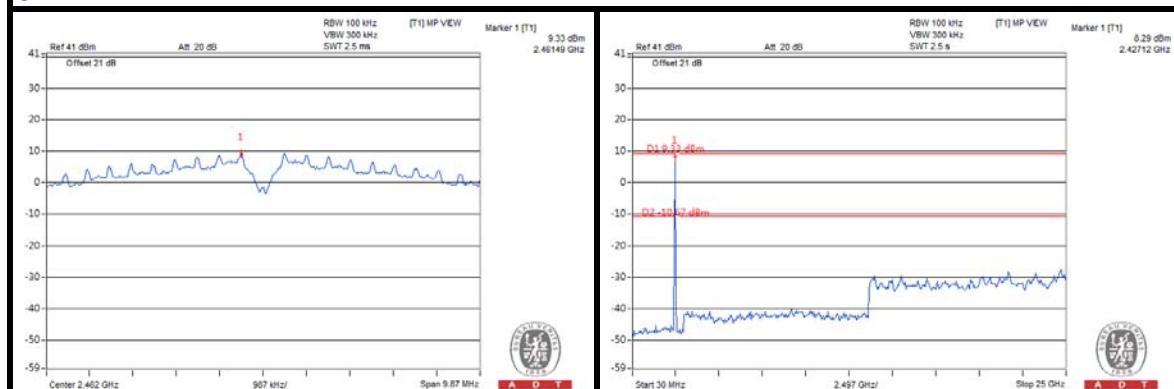
CH 1



CH 6



CH 11

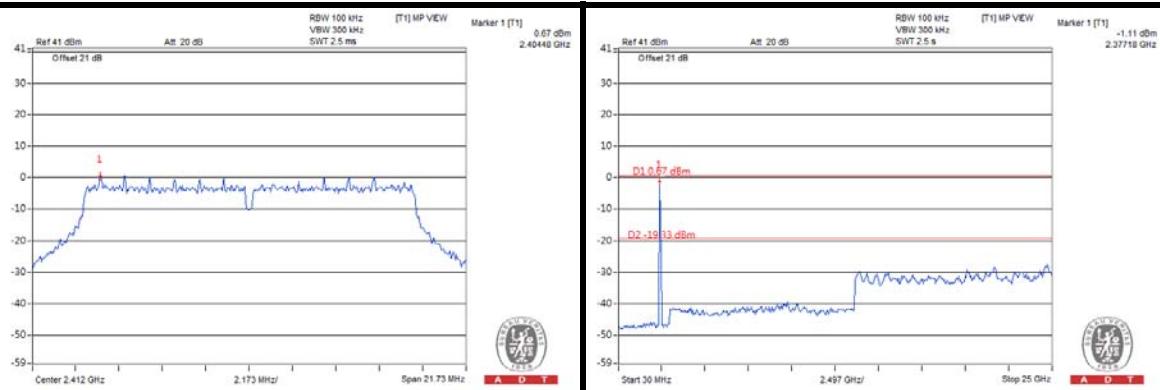




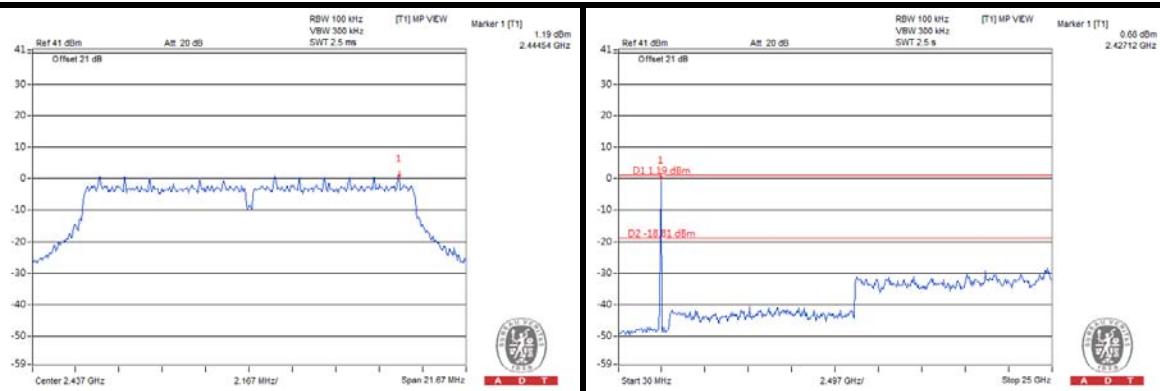
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802.11g

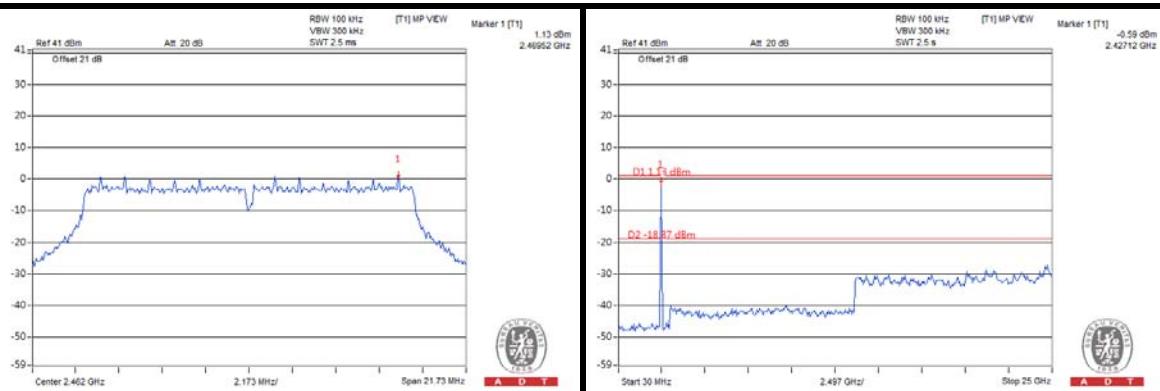
CH 1



CH 6



CH 11

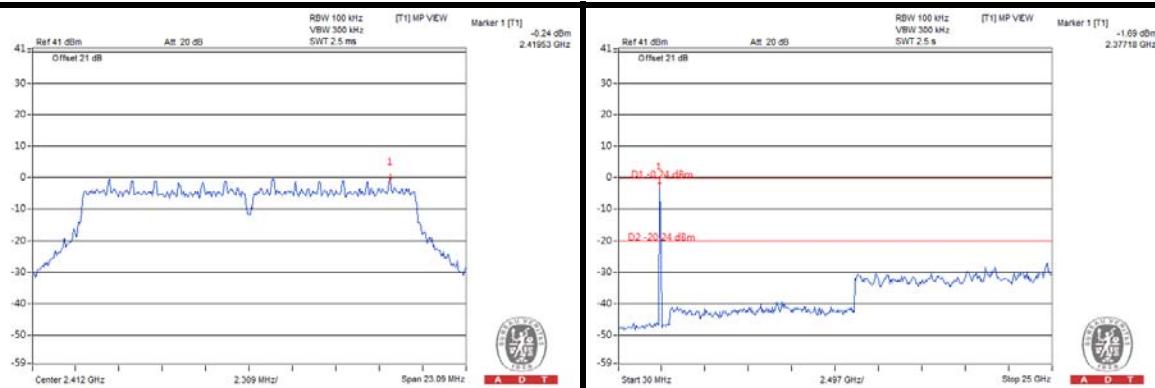




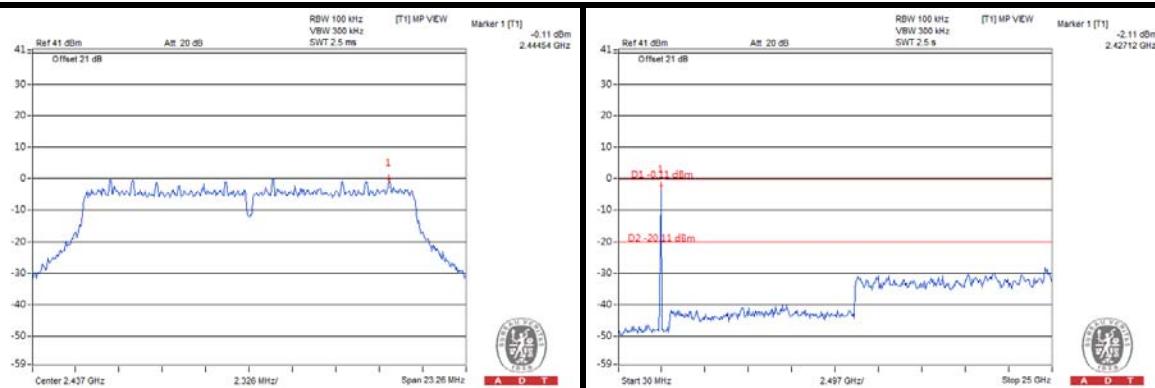
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802.11n (20MHz)

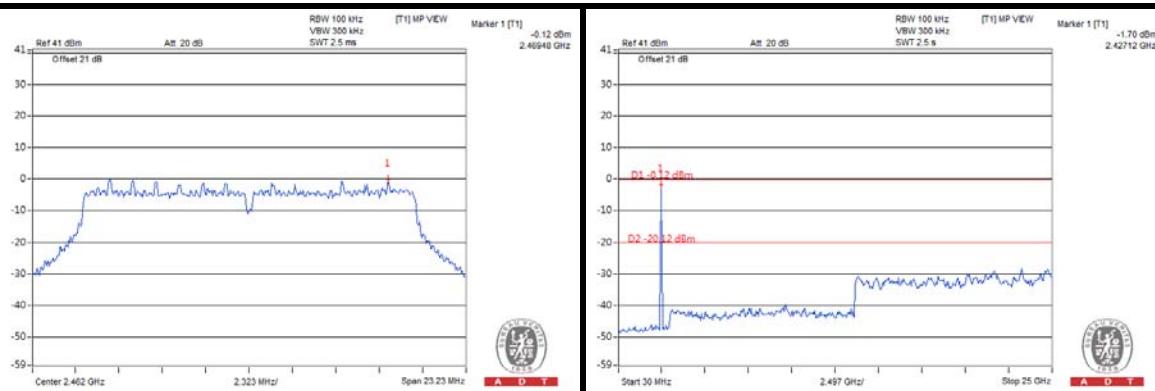
CH 1



CH 6



CH 11

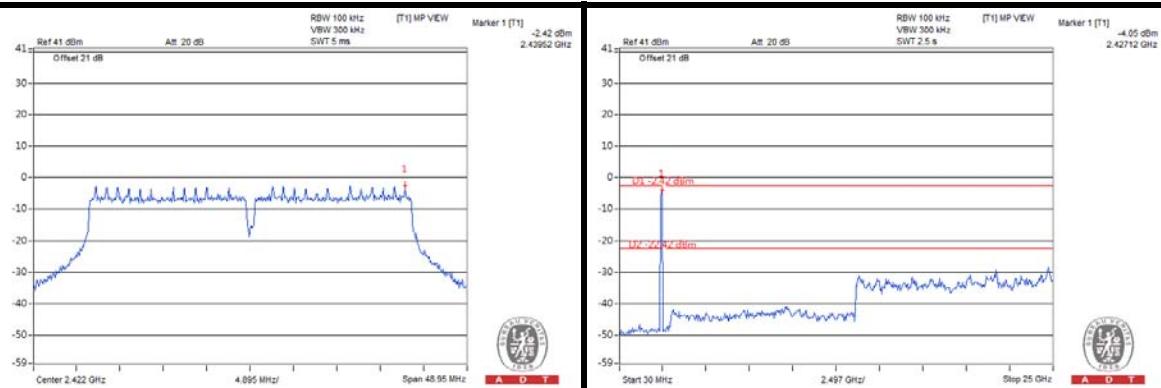




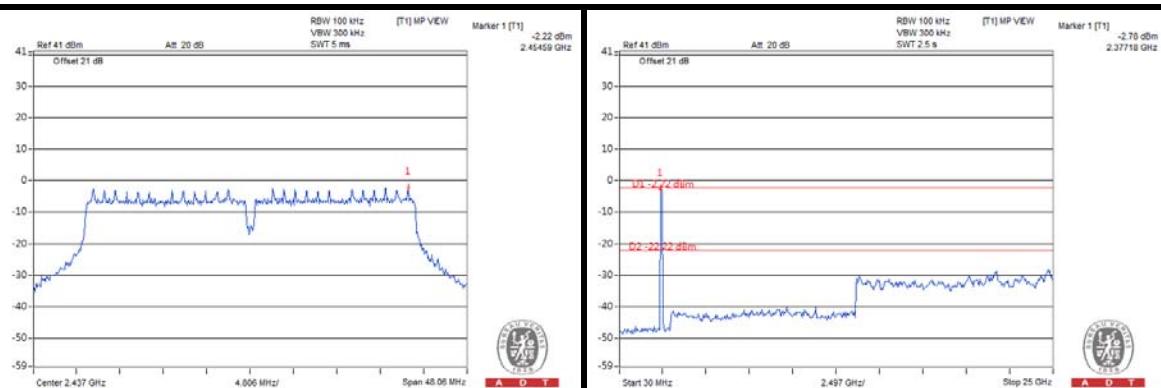
A D T

802.11n (40MHz)

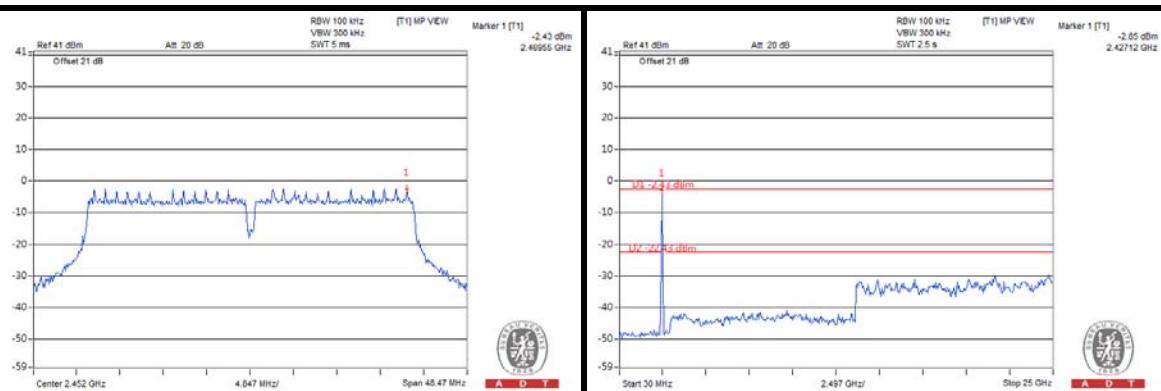
CH 1



CH 6



CH 11



5. TEST TYPES AND RESULTS (FOR 5.0GHz BAND)

5.1 RADIATED EMISSION AND BANEDGE MEASUREMENT

5.1.1 LIMITS OF RADIATED EMISSION AND BANEDGE 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 (dB_uV/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.



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5.1.2 TEST INSTRUMENTS

Same as item 4.1.2.

5.1.3 TEST PROCEDURES

Same as item 4.1.3.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation.

5.1.5 TEST SETUP

Same as item 4.1.5.

5.1.6 EUT OPERATING CONDITIONS

Same as 4.1.6.



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5.1.7 TEST RESULTS

ABOVE 1GHz WORST-CASE DATA : 802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL					
CHANNEL		Channel 149			FREQUENCY RANGE		30MHz ~ 40GHz
INPUT POWER (SYSTEM)		120Vac, 60 Hz			DETECTOR FUNCTION		Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS		25deg. C, 65%RH			TESTED BY		Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	52.45	49.81	72.46	-20.01	32.36	7.71	37.43	110	236	Average
5725	64.61	61.97	81.93	-17.32	32.36	7.71	37.43	110	236	Peak
5745	92.46	89.81			32.38	7.74	37.47	110	236	Average
5745	101.93	99.28			32.38	7.74	37.47	110	236	Peak
5825	41.58	38.78	72.46	-30.88	32.51	7.82	37.53	110	236	Average
5825	50.64	47.84	81.93	-31.29	32.51	7.82	37.53	110	236	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	52.81	50.17	72.60	-19.79	32.36	7.71	37.43	110	292	Average
5725	66.35	63.71	81.63	-15.28	32.36	7.71	37.43	110	292	Peak
5745	92.60	89.95			32.38	7.74	37.47	110	292	Average
5745	101.63	98.98			32.38	7.74	37.47	110	292	Peak
5825	41.68	38.88	72.60	-30.92	32.51	7.82	37.53	110	292	Average
5825	50.79	47.99	81.63	-30.84	32.51	7.82	37.53	110	292	Peak

REMARKS:

- 5745MHz: Fundamental frequency.
- 5725MHz & 5825MHz: Out of restricted band



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EUT TEST CONDITION			MEASUREMENT DETAIL		
CHANNEL		Channel 157		FREQUENCY RANGE	30MHz ~ 40GHz
INPUT POWER (SYSTEM)		120Vac, 60 Hz		DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS		25deg. C, 65%RH		TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	41.07	38.43	71.06	-29.99	32.36	7.71	37.43	100	226	Average
5725	51.40	48.76	79.83	-28.43	32.36	7.71	37.43	100	226	Peak
5785	91.06	88.37			32.43	7.80	37.54	100	226	Average
5785	99.83	97.14			32.43	7.80	37.54	100	226	Peak
5825	42.24	39.44	71.06	-28.82	32.51	7.82	37.53	100	226	Average
5825	52.00	49.20	79.83	-27.83	32.51	7.82	37.53	100	226	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	41.50	38.86	71.07	-29.57	32.36	7.71	37.43	112	290	Average
5725	53.30	50.66	80.31	-27.01	32.36	7.71	37.43	112	290	Peak
5785	91.07	88.38			32.43	7.80	37.54	112	290	Average
5785	100.31	97.62			32.43	7.80	37.54	112	290	Peak
5825	42.24	39.44	71.07	-28.83	32.51	7.82	37.53	112	290	Average
5825	53.36	50.56	80.31	-26.95	32.51	7.82	37.53	112	290	Peak

REMARKS:

1. 5785MHz: Fundamental frequency.
2. 5725MHz & 5825MHz: Out of restricted band



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EUT TEST CONDITION			MEASUREMENT DETAIL		
CHANNEL		Channel 161		FREQUENCY RANGE	30MHz ~ 40GHz
INPUT POWER (SYSTEM)		120Vac, 60 Hz		DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS		25deg. C, 65%RH		TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	41.07	38.43	71.06	-29.99	32.36	7.71	37.43	100	226	Average
5725	51.53	48.89	79.85	-28.32	32.36	7.71	37.43	100	226	Peak
5805	91.06	88.32			32.48	7.80	37.54	100	226	Average
5805	99.85	97.11			32.48	7.80	37.54	100	226	Peak
5825	50.85	48.05	71.06	-20.21	32.51	7.82	37.53	100	226	Average
5825	66.53	63.73	79.85	-13.32	32.51	7.82	37.53	100	226	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5724	42.34	39.7	70.55	-28.21	32.36	7.71	37.43	112	286	Average
5724	50.86	48.22	79.85	-28.99	32.36	7.71	37.43	112	286	Peak
5805	90.55	87.81			32.48	7.80	37.54	112	286	Average
5805	99.85	97.11			32.48	7.80	37.54	112	286	Peak
5825	51.28	48.48	70.55	-19.27	32.51	7.82	37.53	112	286	Average
5825	66.86	64.06	79.85	-12.99	32.51	7.82	37.53	112	286	Peak

REMARKS:

1. 5805MHz: Fundamental frequency.
2. 5724MHz, 5725MHz & 5825MHz: Out of restricted band



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802.11n (20MHz)

EUT TEST CONDITION			MEASUREMENT DETAIL			
CHANNEL		Channel 149			FREQUENCY RANGE	30MHz ~ 40GHz
INPUT POWER (SYSTEM)		120Vac, 60 Hz			DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS		25deg. C, 65%RH			TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	50.17	47.53	70.48	-20.31	32.36	7.71	37.43	109	237	Average
5725	59.93	57.29	79.44	-19.51	32.36	7.71	37.43	109	237	Peak
5745	90.48	87.83			32.38	7.74	37.47	109	237	Average
5745	99.44	96.79			32.38	7.74	37.47	109	237	Peak
5825	41.23	38.43	70.48	-29.25	32.51	7.82	37.53	109	237	Average
5825	52.33	49.53	79.44	-27.11	32.51	7.82	37.53	109	237	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	50.3	47.66	70.38	-20.08	32.36	7.71	37.43	111	292	Average
5725	63.33	60.69	79.5	-16.17	32.36	7.71	37.43	111	292	Peak
5745	90.38	87.73			32.38	7.74	37.47	111	292	Average
5745	99.5	96.85			32.38	7.74	37.47	111	292	Peak
5825	41.33	38.53	70.38	-29.05	32.51	7.82	37.53	111	292	Average
5825	51.64	48.84	79.5	-27.86	32.51	7.82	37.53	111	292	Peak

REMARKS:

1. 5745MHz: Fundamental frequency.
2. 5725MHz & 5825MHz: Out of restricted band



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EUT TEST CONDITION			MEASUREMENT DETAIL		
CHANNEL		Channel 157		FREQUENCY RANGE	30MHz ~ 40GHz
INPUT POWER (SYSTEM)		120Vac, 60 Hz		DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS		25deg. C, 65%RH		TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	41.09	38.45	69.1	-28.01	32.36	7.71	37.43	120	258	Average
5725	52.73	50.09	78.33	-25.6	32.36	7.71	37.43	120	258	Peak
5785	89.1	86.41			32.43	7.8	37.54	120	258	Average
5785	98.33	95.64			32.43	7.8	37.54	120	258	Peak
5825	41.59	38.79	69.1	-27.51	32.51	7.82	37.53	120	258	Average
5825	51.38	48.58	78.33	-26.95	32.51	7.82	37.53	120	258	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	40.89	38.25	69.34	-28.45	32.36	7.71	37.43	110	292	Average
5725	51.17	48.53	78.73	-27.56	32.36	7.71	37.43	110	292	Peak
5785	89.34	86.65			32.43	7.8	37.54	110	292	Average
5785	98.73	96.04			32.43	7.8	37.54	110	292	Peak
5825	41.79	38.99	69.34	-27.55	32.51	7.82	37.53	110	292	Average
5825	51.8	49	78.73	-26.93	32.51	7.82	37.53	110	292	Peak

REMARKS:

1. 5785MHz: Fundamental frequency.
2. 5725MHz & 5825MHz: Out of restricted band



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EUT TEST CONDITION			MEASUREMENT DETAIL		
CHANNEL		Channel 161		FREQUENCY RANGE	30MHz ~ 40GHz
INPUT POWER (SYSTEM)		120Vac, 60 Hz		DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS		25deg. C, 65%RH		TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	40.86	38.22	68.85	-27.99	32.36	7.71	37.43	100	226	Average
5725	51.31	48.67	77.87	-26.56	32.36	7.71	37.43	100	226	Peak
5805	88.85	86.11			32.48	7.8	37.54	100	226	Average
5805	97.87	95.13			32.48	7.8	37.54	100	226	Peak
5825	47.75	44.95	68.85	-21.1	32.51	7.82	37.53	100	226	Average
5825	64.53	61.73	77.87	-13.34	32.51	7.82	37.53	100	226	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	40.8	38.16	69.07	-28.27	32.36	7.71	37.43	120	292	Average
5725	50.95	48.31	78.11	-27.16	32.36	7.71	37.43	120	292	Peak
5805	89.07	86.33			32.48	7.8	37.54	120	292	Average
5805	98.11	95.37			32.48	7.8	37.54	120	292	Peak
5825	47.76	44.96	69.07	-21.31	32.51	7.82	37.53	120	292	Average
5825	63.71	60.91	78.11	-14.4	32.51	7.82	37.53	120	292	Peak

REMARKS:

1. 5805MHz: Fundamental frequency.
2. 5725MHz & 5825MHz: Out of restricted band



A D T

802.11n (40MHz)

EUT TEST CONDITION			MEASUREMENT DETAIL						
CHANNEL		Channel 151			FREQUENCY RANGE		30MHz ~ 40GHz		
INPUT POWER (SYSTEM)		120Vac, 60 Hz			DETECTOR FUNCTION		Peak (PK) Average (AV)		
ENVIRONMENTAL CONDITIONS		25deg. C, 65%RH			TESTED BY		Kay Wu		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	53.1	50.46	67.86	-14.76	32.36	7.71	37.43	122	257	Average
5725	65.96	63.32	76.32	-10.36	32.36	7.71	37.43	122	257	Peak
5755	87.86	85.18			32.41	7.74	37.47	122	257	Average
5755	96.32	93.64			32.41	7.74	37.47	122	257	Peak
5825	41.82	39.02	67.86	-26.04	32.51	7.82	37.53	122	257	Average
5825	53.03	50.23	76.32	-23.29	32.51	7.82	37.53	122	257	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	51.96	49.32	67.02	-15.06	32.36	7.71	37.43	110	293	Average
5725	63.29	60.65	76.32	-13.03	32.36	7.71	37.43	110	293	Peak
5755	87.02	84.34			32.41	7.74	37.47	110	293	Average
5755	96.32	93.64			32.41	7.74	37.47	110	293	Peak
5825	42.07	39.27	67.02	-24.95	32.51	7.82	37.53	110	293	Average
5825	52.16	49.36	76.32	-24.16	32.51	7.82	37.53	110	293	Peak

REMARKS:

1. 5755MHz: Fundamental frequency.
2. 5725MHz & 5825MHz: Out of restricted band



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EUT TEST CONDITION			MEASUREMENT DETAIL		
CHANNEL		Channel 159		FREQUENCY RANGE	30MHz ~ 40GHz
INPUT POWER (SYSTEM)		120Vac, 60 Hz		DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS		25deg. C, 65%RH		TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	41.48	38.84	66.2	-24.72	32.36	7.71	37.43	100	224	Average
5725	50.15	47.51	76.19	-26.04	32.36	7.71	37.43	100	224	Peak
5795	86.2	83.48			32.46	7.8	37.54	100	224	Average
5795	96.19	93.47			32.46	7.8	37.54	100	224	Peak
5825	50.39	47.59	66.2	-15.81	32.51	7.82	37.53	100	224	Average
5825	64.37	61.57	76.19	-11.82	32.51	7.82	37.53	100	224	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
5725	41.48	38.84	67.42	-25.94	32.36	7.71	37.43	119	290	Average
5725	51.11	48.47	76.05	-24.94	32.36	7.71	37.43	119	290	Peak
5795	87.42	84.7			32.46	7.8	37.54	119	290	Average
5795	96.05	93.33			32.46	7.8	37.54	119	290	Peak
5825	51.83	49.03	67.42	-15.59	32.51	7.82	37.53	119	290	Average
5825	64.09	61.29	76.05	-11.96	32.51	7.82	37.53	119	290	Peak

REMARKS:

1. 5795MHz: Fundamental frequency.
2. 5725MHz & 5825MHz: Out of restricted band



A D T

BELOW 1GHz WORST-CASE DATA : 802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL			
CHANNEL		Channel 161		FREQUENCY RANGE	30MHz ~ 40GHz
INPUT POWER (SYSTEM)		120Vac, 60 Hz		DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS		25deg. C, 65%RH		TESTED BY	Kay Wu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
41.61	25.8	42.61	40	-14.2	13.56	0.68	31.05	100	285	Peak
99.66	33.83	55.66	43.5	-9.67	9.06	1.07	31.96	133	241	Peak
177.69	36.69	56	43.5	-6.81	11.01	1.49	31.81	100	231	Peak
308.4	35.93	52.63	46	-10.07	13.15	2.08	31.93	100	285	Peak
511.4	24.88	36.08	46	-21.12	17.57	2.82	31.59	133	212	Peak
782.3	27.55	33.34	46	-18.45	21.98	3.65	31.42	167	42	Peak
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M										
FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	READ LEVEL (dBuV)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA FACTOR (dB/m)	CABLE LOSS (dB)	PREAMP FACTOR (dB)	ANTENNA HEIGHT (cm)	TABLE ANGLE (Degree)	REMARK
30	32.64	51.23	40	-7.36	11.98	0.57	31.14	100	5	QP
41.88	35.33	52.14	40	-4.67	13.56	0.68	31.05	100	285	QP
145.83	31.4	49.16	43.5	-12.1	12.54	1.32	31.62	100	322	Peak
300.7	30.97	47.81	46	-15.03	12.96	2.05	31.85	174	35	Peak
456.8	27.22	40.11	46	-18.78	16.46	2.64	31.99	133	211	Peak
847.4	28.15	33.36	46	-17.85	22.84	3.81	31.86	100	231	Peak

5.2 CONDUCTED EMISSION MEASUREMENT

5.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

5.2.2 TEST INSTRUMENTS

Same as item 4.2.2.

5.2.3 TEST PROCEDURES

Same as item 4.2.3.

5.2.4 DEVIATION FROM TEST STANDARD

No deviation.

5.2.5 TEST SETUP

Same as item 4.2.5.

5.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6

5.2.7 TEST RESULTS

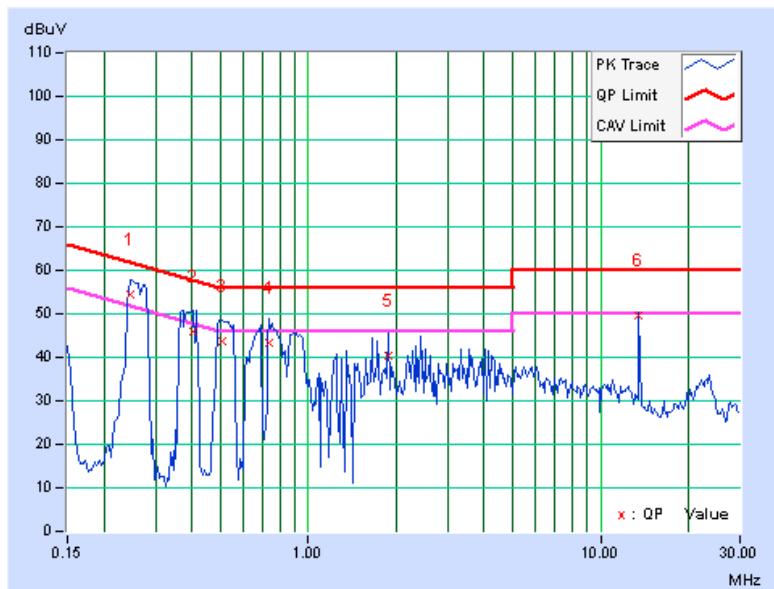
CONDUCTED WORST-CASE DATA : 802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
	0.24766	0.18	54.22	36.39	54.40	36.57	61.84	51.84	-7.44	-15.27
2	0.40391	0.20	45.59	27.42	45.79	27.62	57.77	47.77	-11.98	-20.15
3	0.50938	0.21	43.32	25.46	43.53	25.67	56.00	46.00	-12.47	-20.33
4	0.73594	0.22	43.05	24.67	43.27	24.89	56.00	46.00	-12.73	-21.11
5	1.89063	0.29	40.06	21.52	40.35	21.81	56.00	46.00	-15.65	-24.19
6	13.55859	0.57	49.10	44.80	49.67	45.37	60.00	50.00	-10.33	-4.63

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.

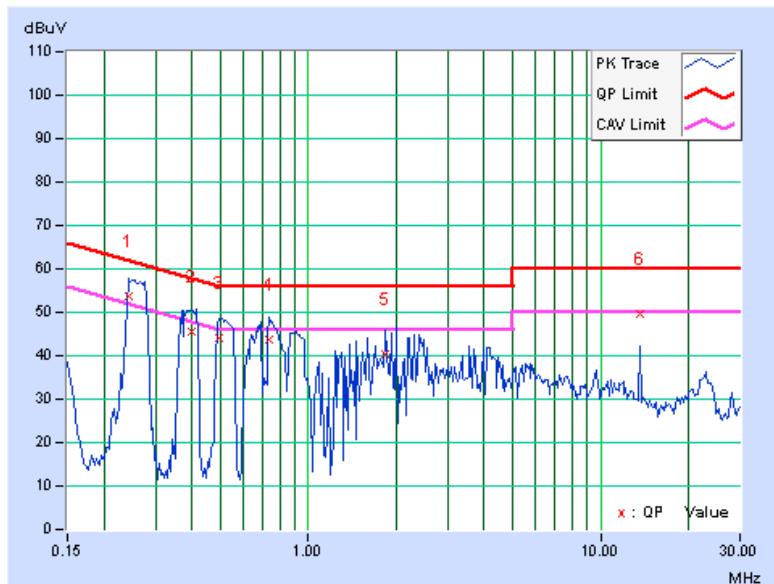


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]	[dB (uV)]	[dB (uV)]	[dB (uV)]	[dB (uV)]	[dB (uV)]	(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.24375	0.16	53.57	32.18	53.73	32.34	61.97	51.97	-8.24	-19.63
2	0.40000	0.18	45.39	27.33	45.57	27.51	57.85	47.85	-12.28	-20.34
3	0.49375	0.18	43.77	25.94	43.95	26.12	56.10	46.10	-12.15	-19.98
4	0.73594	0.19	43.45	25.07	43.64	25.26	56.00	46.00	-12.36	-20.74
5	1.83984	0.26	40.22	21.68	40.48	21.94	56.00	46.00	-15.52	-24.06
6	13.56250	0.66	49.02	44.94	49.68	45.60	60.00	50.00	-10.32	-4.40

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.





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5.3 6dB BANDWIDTH MEASUREMENT

5.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

5.3.2 TEST SETUP

Same as item 4.3.2.

5.3.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.3.4 TEST PROCEDURE

Same as item 4.3.4.

5.3.5 DEVIATION FROM TEST STANDARD

No deviation.

5.3.6 EUT OPERATING CONDITIONS

Same as item 4.3.6.



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5.3.7 TEST RESULTS

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	16.77	0.5	PASS
157	5785	16.77	0.5	PASS
161	5805	16.77	0.5	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
149	5745	17.92	0.5	PASS
157	5785	17.89	0.5	PASS
161	5805	18.04	0.5	PASS

802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
151	5755	37.22	0.5	PASS
159	5795	37.53	0.5	PASS



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5.4 MAXIMUM OUTPUT POWER

5.4.1 LIMITS OF MAXIMUM OUTPUT POWER MEASUREMENT

For systems using digital modulation in the 5725–5850 MHz bands: 1 Watt (30dBm)

5.4.2 TEST SETUP

Same as Item 4.4.2.

5.4.3 INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.4.4 TEST PROCEDURES

Same as Item 4.4.4.

5.4.5 DEVIATION FROM TEST STANDARD

No deviation.

5.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6.



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5.4.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
149	5745	222.844	23.48	30	PASS
157	5785	218.776	23.40	30	PASS
161	5805	224.905	23.52	30	PASS

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
149	5745	177.011	22.48	30	PASS
157	5785	176.604	22.47	30	PASS
161	5805	196.789	22.94	30	PASS

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
151	5755	199.986	23.01	30	PASS
159	5795	192.309	22.84	30	PASS



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5.5 POWER SPECTRAL DENSITY MEASUREMENT

5.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

5.5.2 TEST SETUP

Same as item 4.5.2.

5.5.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.5.4 TEST PROCEDURE.

Same as item 4.5.4.

5.5.5 DEVIATION FROM TEST STANDARD

No deviation.

5.5.6 EUT OPERATING CONDITION

Same as item 4.3.6.



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5.5.7 TEST RESULTS

802.11a

Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
149	5745	3.31	-11.92	8	PASS
157	5785	3.43	-11.80	8	PASS
161	5805	3.18	-12.05	8	PASS

802.11n (20MHz)

Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
149	5745	1.42	-13.81	8	PASS
157	5785	1.24	-13.99	8	PASS
161	5805	1.34	-13.89	8	PASS

802.11n (40MHz)

Channel	FREQ. (MHz)	PSD (dBm/100kHz)	PSD (dBm/3kHz)	Limit (dBm/3kHz)	PASS /FAIL
151	5755	-1.07	-16.30	8	PASS
159	5795	-1.03	-16.26	8	PASS



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5.6 CONDUCTED OUT OF BAND EMISSION MEASUREMENT

5.6.1 LIMITS OF OUT OF BAND EMISSION MEASUREMENT

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

5.6.2 TEST SETUP

Same as Item 4.6.2

5.6.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

5.6.4 TEST PROCEDURE

Same as Item 4.6.4

5.6.5 DEVIATION FROM TEST STANDARD

No deviation.

5.6.6 EUT OPERATING CONDITION

Same as Item 4.3.6

5.6.7 TEST RESULTS

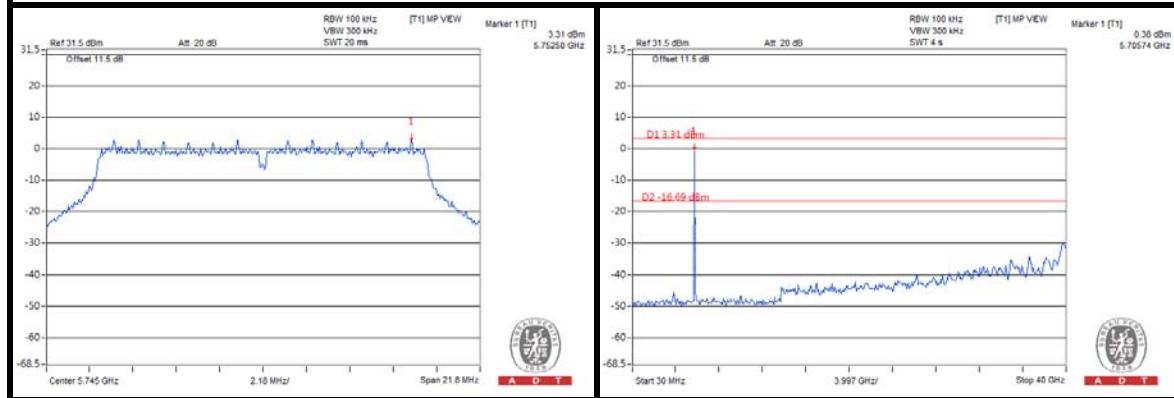
The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement.



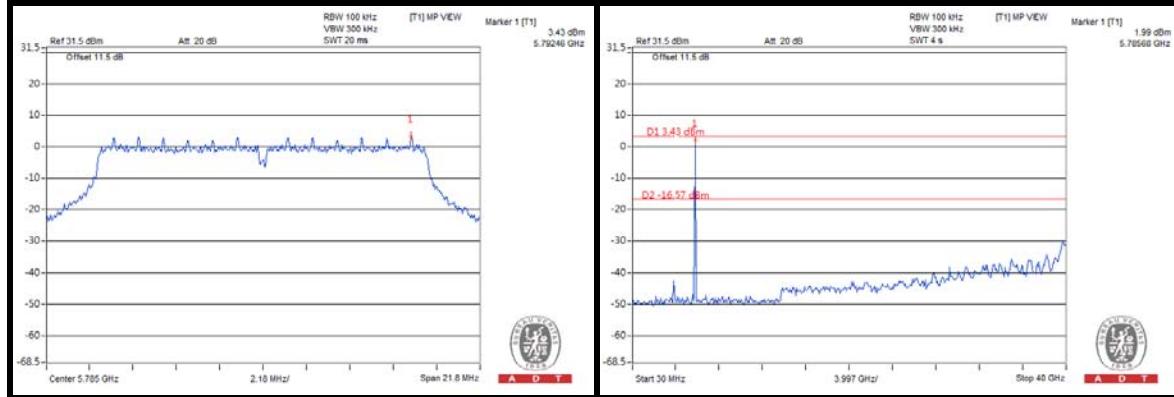
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802.11a

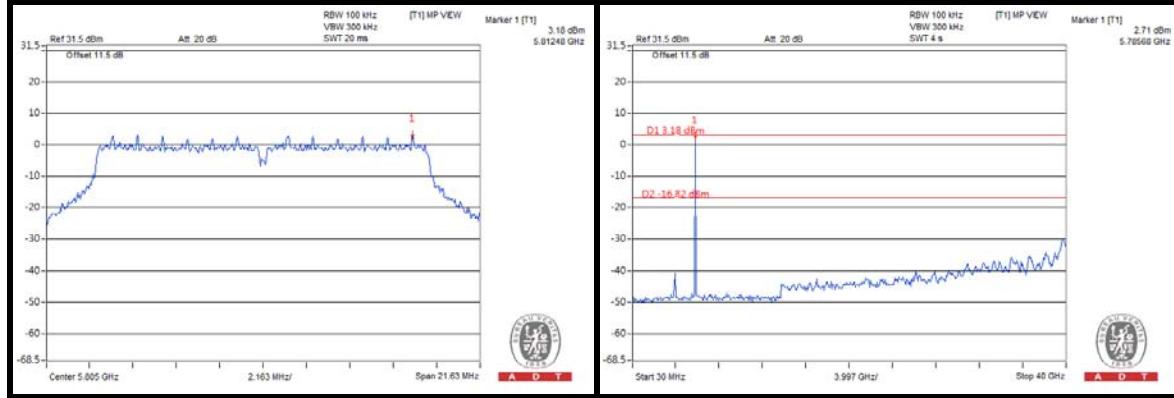
CH 149



CH 157

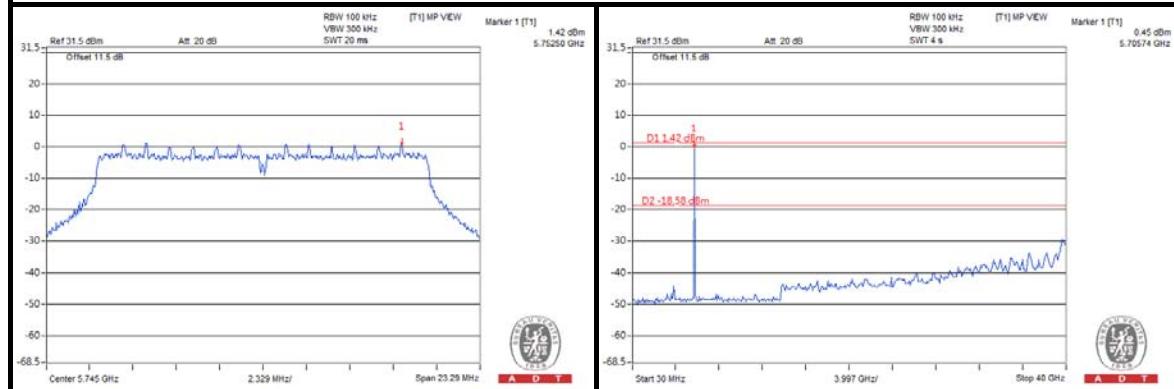
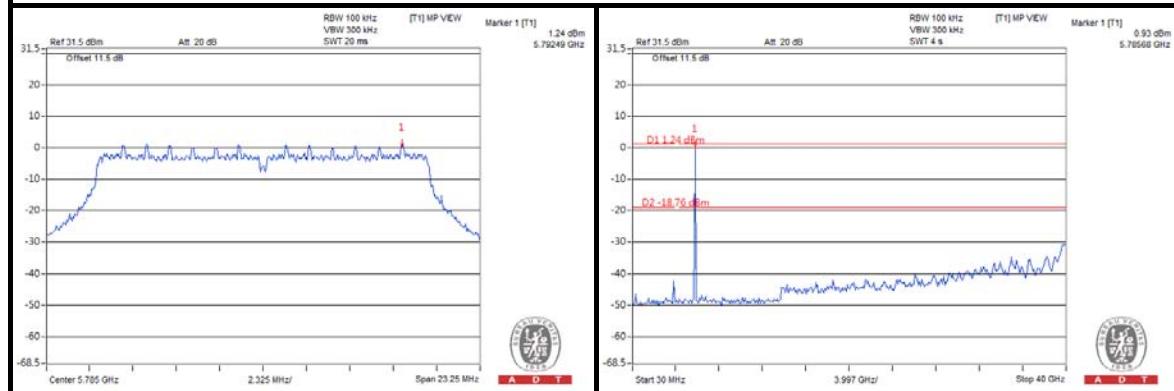
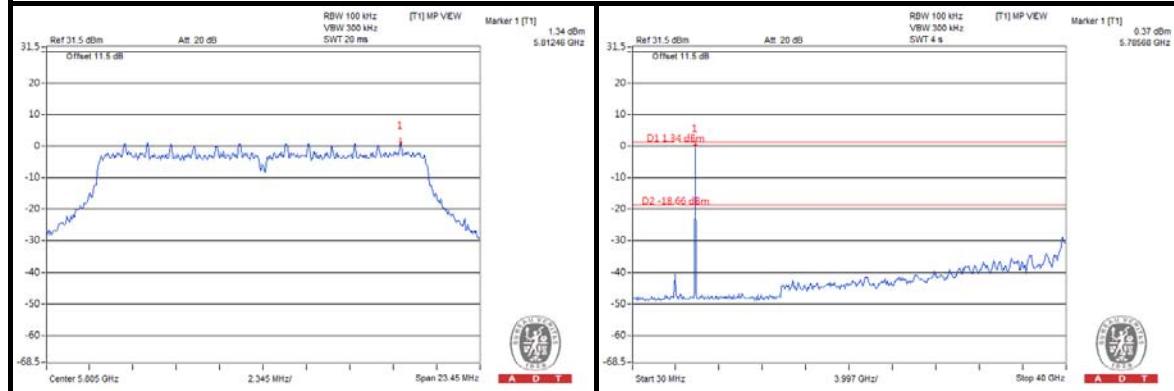


CH 161



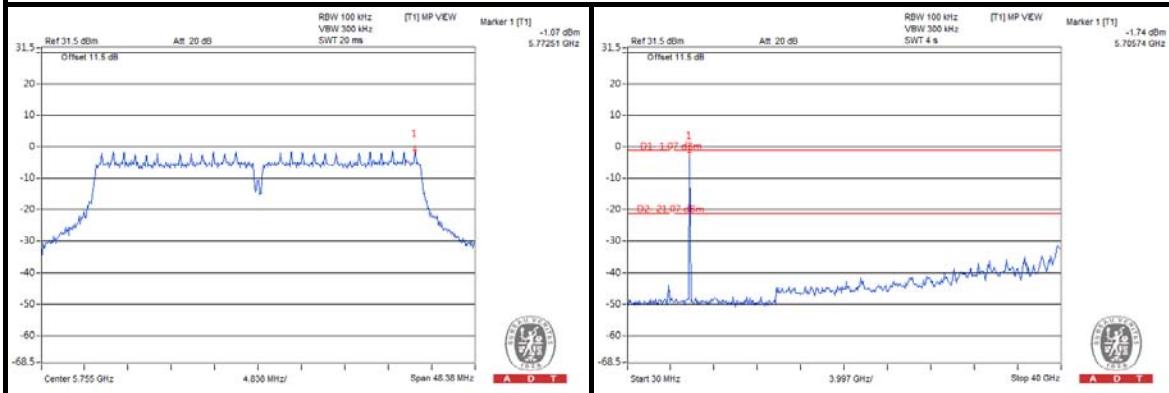
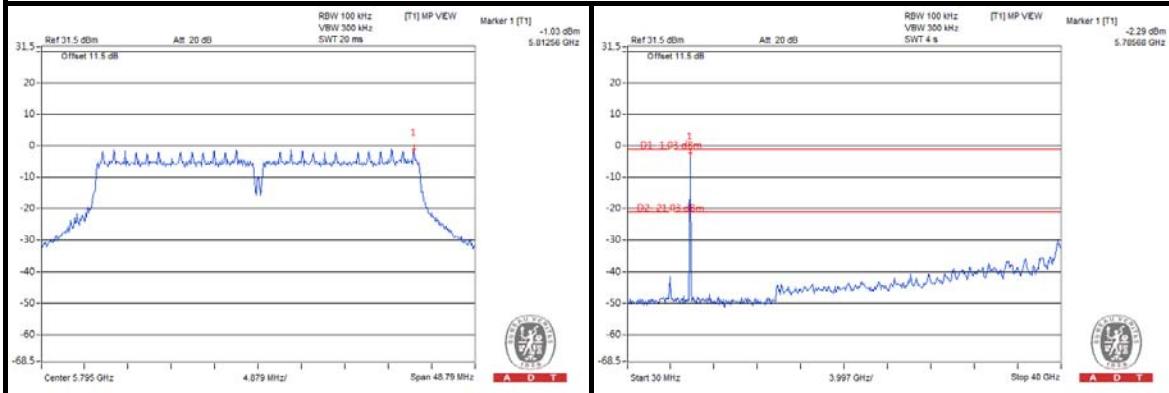


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802.11n(20MHz)**CH 149****CH 157****CH 161**



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802.11n(40MHz)**CH 151****CH 159**



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6. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



7. 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:

Linko EMC/RF Lab:

Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF Lab:

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Hwa Ya EMC/RF/Safety Telecom Lab:

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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.



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

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

---END---