



LIMITED FCC TEST REPORT (WLAN 15.247)

REPORT NO.: RF120720E09D

MODEL NO.: VC70N0

FCC ID: UZ7VC70N0

RECEIVED: Aug. 01, 2013

TESTED: Aug. 01 to Sep. 02, 2013

ISSUED: Sep. 11, 2013

APPLICANT: Motorola Solutions, Inc.

ADDRESS: One Motorola Plaza Holtsville NY 11742-1300 USA

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

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REPORT ISSUE HISTORY RECORD OF EUT (VC70N0)

ATTACHMENT NO.	ISSUE DATE	DESCRIPTION
120720E09	Nov. 08, 2012	Original
120720E09 R1	Nov. 09, 2012	Modified the description on section 3.1, section 3.4 & section 3.5
120720E09 R2	Nov. 14, 2012	Modified the description on section 3.5
120720E09D	Sep. 11, 2013	Add one new Stubby antenna of the EUT.

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120720E09D	Original release	Sep. 11, 2013



1. CERTIFICATION

PRODUCT: Vehicle Computer
BRAND NAME: MOTOROLA
MODEL NO.: VC70N0
TEST SAMPLE: MASS-PRODUCTION
APPLICANT: Motorola Solutions, Inc.
TESTED: Aug. 01 to Sep. 02, 2013
STANDARDS: FCC Part 15, Subpart C (Section 15.247)
ANSI C63.10-2009

The above equipment (Model: VC70N0) 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:** Sep. 11, 2013
(Lori Chung, Specialist)

APPROVED BY : , **DATE:** Sep. 11, 2013
(May Chen, Manager)



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2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

For 2.4GHz, 2412~2472MHz Band

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.247(d) 15.209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -2.0dB at 2390.00MHz & 2483.50MHz.
15.247(b)	Conducted Output power	PASS	Meet the requirement of limit.

For 5GHz, 5725~5850MHz Band

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.247(d) 15.209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -5.4dB at 39.10MHz.
15.247(b)	Conducted Output power	PASS	Meet the requirement of limit.

NOTE:

1. The EUT was operating in 2400 ~ 2483.5MHz, 5.15~5.35GHz, 5.47~5.6GHz & 5.65~5.725GHz and 5.725~5.850GHz frequencies band. This report was recorded the RF parameters including 2400 ~ 2483.5MHz and 5.725~5.850GHz. For the 5.15~5.35GHz, 5.47~5.6GHz & 5.65~5.725GHz RF parameters was recorded in another test report.
2. This report is prepared for FCC class II permissive change. Only radiated emission / conducted output power were presented in this test report.



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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)	5.63 dB
Radiated emissions (1GHz-6GHz)	3.73 dB
Radiated emissions (6GHz-18GHz)	3.90 dB
Radiated emissions (18GHz-40GHz)	4.11 dB



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3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	Vehicle Computer
MODEL NO.	VC70N0
POWER SUPPLY	DC 12V from power supply
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 / a: up to 54Mbps 802.11n (HT20, 800ns GI): up to 65Mbps 802.11n (HT20, 400ns GI): up to 72.2Mbps
OPERATING FREQUENCY	For 15.407 5GHz: 5.18 ~ 5.24GHz, 5.26 ~ 5.32GHz, 5.47~5.6GHz, 5.65~5.725GHz
	For 15.247 2.4GHz: 2.412 ~ 2.472GHz 5GHz: 5.745 ~ 5.825GHz
NUMBER OF CHANNEL	For 15.407 16 for 802.11a, 802.11n (HT20)
	For 15.247 (2.4GHz) 13 for 802.11b, 802.11g, 802.11n (HT20)
	For 15.247 (5GHz) 5 for 802.11a, 802.11n (HT20)
MAXIMUM OUTPUT POWER	For 15.407 802.11a: 101.391mW 802.11n (HT20): 73.451mW
	For 15.247(2.4GHz) 802.11b: 182.390mW 802.11g: 214.783mW 802.11n (HT20): 209.894mW
For 15.247(5GHz) 802.11a: 169.824mW 802.11n (HT20): 167.109mW	
ANTENNA TYPE	Please see NOTE
DATA CABLE	NA
I/O PORTS	Refer User's manual
ASSOCIATED DEVICES	NA



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NOTE:

1. This report is prepared for FCC Class II change. The difference compared with the Report No.: RF120720E09 R2 design is as the following:

u Add one new Stubby antenna of the EUT as following table:

Original								
No.	Brand	Model	ANT Type	Connector Type (External only)	Freq. Range (MHz to MHz)	Gain (dBi) (Including cable loss)	Cable Loss (dB)	Cable Length
1	Aristotle	RFA-02-G78-1	PIFA	N/A	2400-2500	1.7 (for BT)	0.783	27cm
2	Aristotle	RFA-02-G78-1	PIFA	N/A	2400-2500	1.1 (for Main WLAN)	0.58	20cm
3	Aristotle	RFA-02-G78-1	PIFA	N/A	4900-5850	4.7 (for Main WLAN)	0.96 ~ 1.06	20cm
4	Aristotle	RFA-02-G78-1	PIFA	N/A	2400-2500	-0.5 (for Aux WLAN)	0.783	27cm
5	Aristotle	RFA-02-G78-1	PIFA	N/A	4900-5850	4.3 (for Aux WLAN)	1.296 ~ 1.431	27cm
6	PCTEL	GPSDBHF	Shark-shape	RRSMA	2400-2500	1.18 (for External WLAN)	2.28	12ft
7	PCTEL	GPSDBHF	Shark-shape	RRSMA	4900-5850	0.24 (for External WLAN)	3.36 ~ 3.84	12ft
Newly								
No.	Brand	Model	ANT Type	Connector Type (External only)	Freq. Range (MHz to MHz)	Gain (dBi)	Cable Loss (dB)	Cable Length
8	CENTURION	WTS2450-RP SMA	Dipole (for External WLAN)	Reverse Polarity SMA-Male	2400-2500	2.1	NA	NA
					5150-5350	2.6		
					5470-5725	3.4		
					5725-5850	3.4		

2. According to above conditions, only radiated emission / conducted output power need to be performed. And all data was verified to meet the requirements.



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3. The associated devices(optional) of EUT information are as below:

Accessory	Model	Part No.	Description	Connector
Wired Scanner 1	LS 3408	LS 3408-ER20105R	LS 3408 serial/USB laser scanner	USB
Wired Scanner 2	DS3508	DS3508-ER20005R	DS3508 USB scanner	USB
Wired Scanner 3	DS457	DS457-SR20009	DS457 USB scanner	USB
Wireless Scanner 1	RS507	RS507-IM20000CTWR	RS507 BT Hands Free Imager (FCC ID: UZ7RS507)	NA (BT wireless connection)
Wireless Scanner 2	LS3578	LS3578-ER20005WR	LS3578 BT scanner (FCC ID: H9PLMX5452)	NA (BT wireless connection)
Wireless Scanner 3	DS3578	DS3578-ER2F005WR	DS3578 BT scanner (FCC ID: H9PDS3578)	NA (BT wireless connection)
External Speaker	HSN4040A	HSN4040A	Motorola HSN4040A 13 Watt water-resistant loudspeaker	special speaker connector
PTT mic	HMN1089B	HMN1089B	Motorola HMN1089B Water-resistant Palm Microphone or equivalent	special MIC connector
Keyboard 1	KYBD-QW-V C70-01R	59-160663-01	VC70_QWERTY keyboard	USB
Keyboard 2	KYBD-NU-V C70-01R	59-160661-01	VC70_21 keys_Functional/Numeric keyboard	USB
Keyboard 3	VC5090KYB D-00R	VC5090KYBD-02R	VC50_QWERTY keyboard	USB
Printer 1	RW420	R4D-0UBA000N-00	RW420 / Zebra, Printer.	RS232
Printer 2	MF2TE	200380-100	Microflash Series MF 2T, O'Neil, Easy Print	NA (BT wireless connection)
Power Supply 1	AA27410L	PWRS-9-60VDC-01R	Input Voltage: 9-60Vdc; Output Voltage: 12Vdc	DC input connector
Power Supply 2	50-14000-24 1R	PWRS-14000-241R	Input Voltage: 110-240Vac; Output Voltage: 12Vdc	DC input connector

Wired Scanner 1, Wireless Scanner 1 and Printer 1 were chosen for final test.

4. The EUT has two variants, which are identical to each other in all aspects except for the following table:

Sample	Brand	Model	Difference
1	MOTOROLA	VC70N0	Heater
2	MOTOROLA	VC70N0	Non-heater

From the above samples, test **sample 1** was selected as representative model for the test and its data was recorded in this report.

5. The Version of EUT information are as below:

OS Version	7.00.2806
OEM Name	Motorola VC70N0
OEM Version	0.34.0005
Wireless(Fusion) Version	X_2.01.0.0.049R
Wireless(Fusion) Firmwave	_2.01.0.0.130
XW2DMT Version	X_2.01.0.0.3
Motorola version	X_2.01.0.0.118

6. The EUT could be supplied from a battery, the information are listed as below:

Brand:	Palladium
Part No.:	82-161178-01
Rating:	3.7V, 1880mAh

7. The EUT incorporates a SISO function without beam forming.

MODULATION MODE	TX/RX FUNCTION
802.11b	1TX/1RX
802.11g	1TX/1RX
802.11a	1TX/1RX
802.11n (HT20)	1TX/1RX

8. 2.4GHz and 5GHz technology cannot transmit at same time.

9. When the EUT operating in 802.11n, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 7.

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



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3.2 DESCRIPTION OF TEST MODES

Operated in 2400 ~ 2483.5MHz band:

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
1	2412MHz	8	2447MHz
2	2417MHz	9	2452MHz
3	2422MHz	10	2457MHz
4	2427MHz	11	2462MHz
5	2432MHz	12	2467MHz
6	2437MHz	13	2472MHz
7	2442MHz		

Operated in 5725 ~ 5850MHz band:

Five channels are provided for 802.11a, 802.11n (HT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
149	5745 MHz	161	5805 MHz
153	5765 MHz	165	5825 MHz
157	5785 MHz		



3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO			DESCRIPTION
	RE < 1G	RE ≥ 1G	APCM	
-	√	√	√	Antenna 8+Power Supply 2 + Keyboard 1

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

APCM: Antenna Port Conducted Measurement

NOTE: The test mode was reference to the worst case in the original test report.

RADIATED EMISSION TEST (BELOW 1 GHz):

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)
For 2.4 GHz 802.11n (HT20)	1 to 13	11	OFDM	BPSK	6.5
For 5 GHz 802.11n (HT20)	149 to 165	165	OFDM	BPSK	6.5

RADIATED EMISSION TEST (ABOVE 1 GHz):

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 13	1, 2, 3, 6, 9, 10 11, 12, 13	DSSS	DBPSK	1
802.11g	1 to 13	1, 2, 3, 6, 9, 10 11, 12, 13	OFDM	BPSK	6
For 2.4 GHz 802.11n (HT20)	1 to 13	1, 2, 3, 6, 9, 10 11, 12, 13	OFDM	BPSK	6.5
802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6
For 5 GHz 802.11n (HT20)	149 to 165	149, 157, 165	OFDM	BPSK	6.5



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ANTENNA PORT CONDUCTED MEASUREMENT:

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 13	1, 2, 3, 6, 9, 10 11, 12, 13	DSSS	DBPSK	1
802.11g	1 to 13	1, 2, 3, 6, 9, 10 11, 12, 13	OFDM	BPSK	6
For 2.4 GHz 802.11n (HT20)	1 to 13	1, 2, 3, 6, 9, 10 11, 12, 13	OFDM	BPSK	6.5
802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6
For 5 GHz 802.11n (HT20)	149 to 165	149, 157, 165	OFDM	BPSK	6.5

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER(system)	TESTED BY
RE<1G	23deg. C, 71%RH	120Vac, 60Hz	Chilin Lee
RE ³ 1G	23deg. C, 68%RH	120Vac, 60Hz	Tim Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	James Chan

3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C. (15.247)

558074 D01 DTS Meas Guidance v03r01

ANSI C63.10-2009

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

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



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3.4 DESCRIPTION OF SUPPORT UNITS

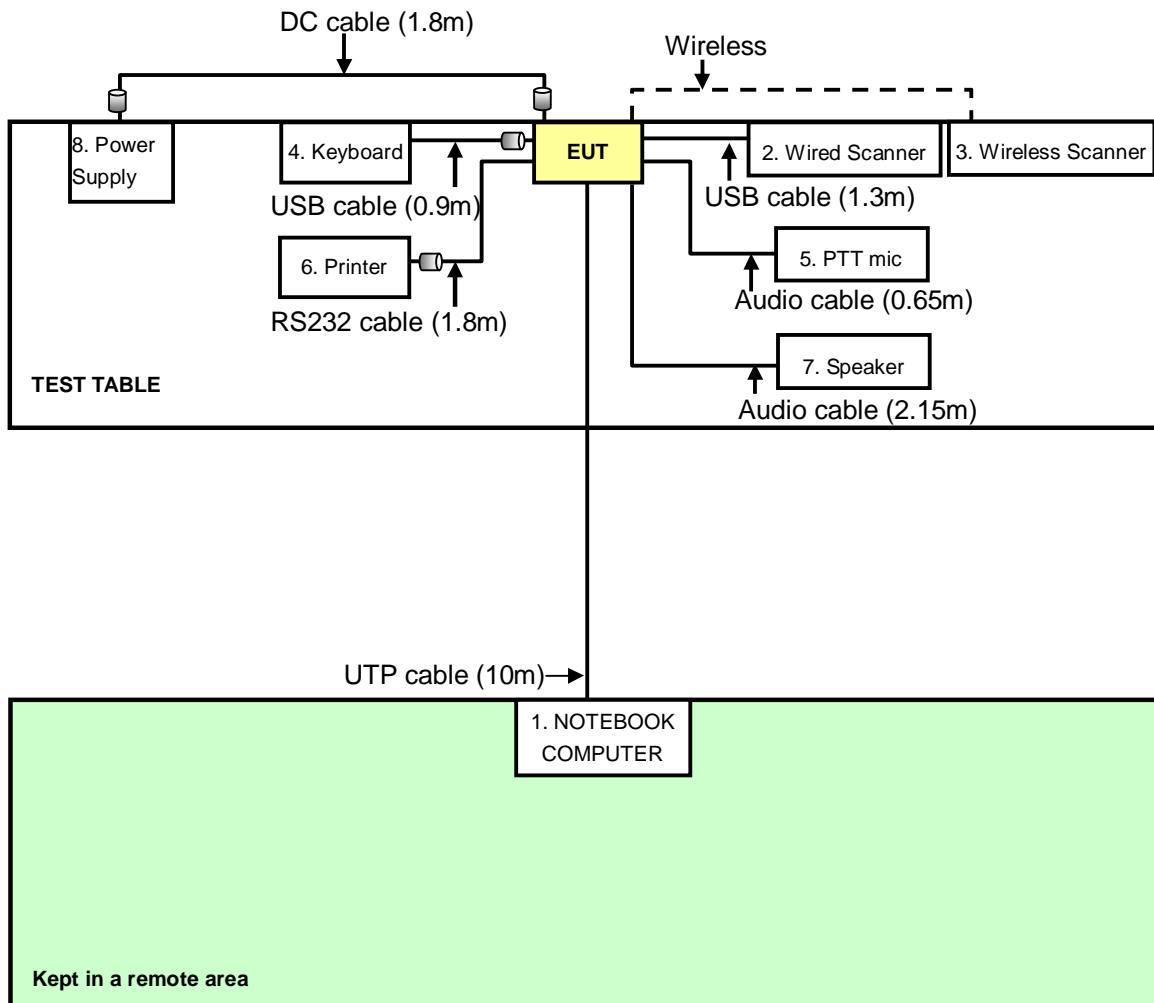
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Product	Brand	Model No.	Serial No.
1	NOTEBOOK COMPUTER	DELL	PP32LA	FSLB32S
2	Wired Scanner	NA	LS 3408	LS 3408-ER20105R
3	Wireless Scanner	NA	RS507	RS507-IM20000CTWR
4	Keyboard	NA	KYBD-QW-VC70-01R	59-160663-01
5	PTT MIC	Motorola	HMN1098B	HMN1098B
6	Printer	NA	RW420	R4D-0UBA000N-00
7	Speaker	Motorola	HSN4040A	HSN4040A
8	Power Supply	Motorola	50-14000-241R	PWRS-14000-241R

No.	Signal cable description
1	UTP cable (10m)
2	USB cable (1.3m)
3	NA
4	USB cable (0.9m, with 1 core)
5	Audio cable (0.65m)
6	RS232 cable (1.8m, with 1 core)
7	Audio cable (2.15m)
8	DC cable(1.8m, with two cores)

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

3.5 CONFIGURATION OF SYSTEM UNDER TEST





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



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4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer Agilent	E4446A	MY48250253	Sep. 03, 2012	Sep. 02, 2013
MXE EMI Receiver Agilent	N9038A	MY51210105	Jan. 29, 2013	Jan. 28, 2014
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-03	Nov. 14, 2012	Nov. 13, 2013
Pre-Amplifier Agilent	8449B	3008A02578	June 25, 2013	June 24, 2014
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 14, 2012	Nov. 13, 2013
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-360	Mar. 19, 2013	Mar. 18, 2014
Horn_Antenna AISI	AIH.8018	000032009111 0	Nov. 19, 2012	Nov. 18, 2013
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 12, 2012	Oct. 11, 2013
RF Cable	NA	RF104-201 RF104-203 RF104-204	Dec. 25, 2012	Dec. 24, 2013
RF Cable	NA	CHGCAB_001	Oct. 06, 2012	Oct. 05, 2013
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 horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 3 The test was performed in 966 Chamber No. G.
4. The FCC Site Registration No. is 966073.
- 5 The VCCI Site Registration No. is G-137.
- 6 The CANADA Site Registration No. is IC 7450H-2.
- 7 Tested Date: Aug. 01 to Sep. 02, 2013

4.1.3 TEST PROCEDURES

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

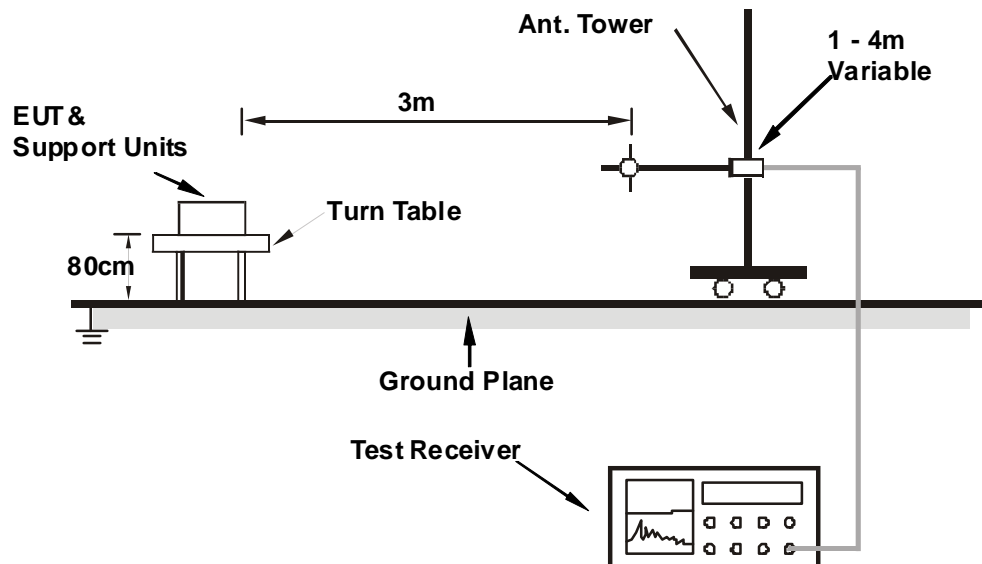
NOTE:

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. Turn on the power of EUT.
2. The communication partner run test program “XW2DMT.exe” to enable EUT under transmission/receiving condition continuously at specific channel frequency.



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4.1.7 TEST RESULTS

BELOW 1GHz WORST-CASE DATA

802.11n (HT20)

CHANNEL	TX Channel 11	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	Below 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	95.96	33.1 QP	43.5	-10.4	2.00 H	237	51.84	-18.72
2	200.28	34.2 QP	43.5	-9.3	1.00 H	228	50.88	-16.65
3	256.01	31.4 QP	46.0	-14.6	1.50 H	282	45.82	-14.43
4	448.02	39.1 QP	46.0	-6.9	2.00 H	193	47.88	-8.80
5	511.99	34.9 QP	46.0	-11.1	1.50 H	250	42.43	-7.54
6	959.99	35.1 QP	46.0	-10.9	1.50 H	19	34.50	0.56
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	38.92	34.9 QP	40.0	-5.2	1.00 V	191	49.03	-14.18
2	203.19	30.1 QP	43.5	-13.4	1.00 V	342	46.62	-16.55
3	511.99	34.6 QP	46.0	-11.4	1.00 V	360	42.13	-7.54
4	576.01	33.6 QP	46.0	-12.4	1.50 V	359	39.90	-6.28
5	639.98	32.9 QP	46.0	-13.1	1.50 V	19	37.53	-4.60
6	960.04	37.4 QP	54.0	-16.7	1.50 V	346	36.79	0.56

REMARKS:

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



A D T

ABOVE 1GHz DATA

802.11b

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	52.1 PK	74.0	-21.9	1.06 H	114	53.29	-1.19
2	2390.00	47.8 AV	54.0	-6.2	1.06 H	114	48.99	-1.19
3	*2412.00	102.1 PK			1.06 H	114	103.19	-1.09
4	*2412.00	99.0 AV			1.06 H	114	100.09	-1.09
5	4824.00	47.3 PK	74.0	-26.7	1.00 H	295	39.71	7.59
6	4824.00	36.2 AV	54.0	-17.8	1.00 H	295	28.61	7.59

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	57.1 PK	74.0	-16.9	1.07 V	266	58.29	-1.19
2	2390.00	50.8 AV	54.0	-3.2	1.07 V	266	51.99	-1.19
3	*2412.00	108.1 PK			1.07 V	266	109.19	-1.09
4	*2412.00	105.2 AV			1.07 V	266	106.29	-1.09
5	4824.00	50.1 PK	74.0	-23.9	1.00 V	151	42.51	7.59
6	4824.00	41.4 AV	54.0	-12.6	1.00 V	151	33.81	7.59

REMARKS:

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



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CHANNEL	TX Channel 2	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	52.6 PK	74.0	-21.4	1.01 H	119	53.79	-1.19
2	2390.00	47.3 AV	54.0	-6.7	1.01 H	119	48.49	-1.19
3	*2417.00	102.5 PK			1.01 H	119	103.57	-1.07
4	*2417.00	100.2 AV			1.01 H	119	101.27	-1.07
5	4834.00	48.1 PK	74.0	-25.9	1.05 H	312	40.47	7.63
6	4834.00	36.3 AV	54.0	-17.7	1.05 H	312	28.67	7.63
7	7251.00	55.2 PK	74.0	-18.8	1.00 H	136	39.66	15.54
8	7251.00	44.3 AV	54.0	-9.7	1.00 H	136	28.76	15.54

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	57.5 PK	74.0	-16.5	1.06 V	261	58.69	-1.19
2	2390.00	51.8 AV	54.0	-2.2	1.06 V	261	52.99	-1.19
3	*2417.00	109.1 PK			1.06 V	261	110.17	-1.07
4	*2417.00	106.8 AV			1.06 V	261	107.87	-1.07
5	4834.00	49.4 PK	74.0	-24.6	1.00 V	140	41.77	7.63
6	4834.00	41.0 AV	54.0	-13.0	1.00 V	140	33.37	7.63
7	7251.00	55.9 PK	74.0	-18.1	1.00 V	116	40.36	15.54
8	7251.00	45.2 AV	54.0	-8.8	1.00 V	116	29.66	15.54

REMARKS:

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



CHANNEL	TX Channel 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	51.6 PK	74.0	-22.4	1.04 H	116	52.79	-1.19
2	2390.00	47.1 AV	54.0	-6.9	1.04 H	116	48.29	-1.19
3	*2422.00	103.6 PK			1.04 H	116	104.65	-1.05
4	*2422.00	100.9 AV			1.04 H	116	101.95	-1.05
5	4844.00	47.8 PK	74.0	-26.2	1.00 H	315	40.14	7.66
6	4844.00	36.4 AV	54.0	-17.6	1.00 H	315	28.74	7.66
7	7266.00	55.2 PK	74.0	-18.8	1.02 H	128	39.69	15.51
8	7266.00	44.4 AV	54.0	-9.6	1.02 H	128	28.89	15.51

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	56.5 PK	74.0	-17.5	1.07 V	265	57.69	-1.19
2	2390.00	51.9 AV	54.0	-2.1	1.07 V	265	53.09	-1.19
3	*2422.00	109.8 PK			1.07 V	265	110.85	-1.05
4	*2422.00	107.1 AV			1.07 V	265	108.15	-1.05
5	4844.00	49.4 PK	74.0	-24.6	1.03 V	128	41.74	7.66
6	4844.00	40.7 AV	54.0	-13.3	1.03 V	128	33.04	7.66
7	7266.00	55.9 PK	74.0	-18.1	1.04 V	132	40.39	15.51
8	7266.00	45.4 AV	54.0	-8.6	1.04 V	132	29.89	15.51

REMARKS:

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



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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	52.0 PK	74.0	-22.0	1.08 H	117	53.19	-1.19
2	2390.00	41.5 AV	54.0	-12.5	1.08 H	117	42.69	-1.19
3	*2437.00	102.6 PK			1.08 H	117	103.59	-0.99
4	*2437.00	100.7 AV			1.08 H	117	101.69	-0.99
5	2483.50	51.9 PK	74.0	-22.1	1.08 H	117	52.70	-0.80
6	2483.50	42.4 AV	54.0	-11.6	1.08 H	117	43.20	-0.80
7	4874.00	48.4 PK	74.0	-25.6	1.07 H	305	40.63	7.77
8	4874.00	36.7 AV	54.0	-17.3	1.07 H	305	28.93	7.77
9	7311.00	54.8 PK	74.0	-19.2	1.03 H	121	39.31	15.49
10	7311.00	44.1 AV	54.0	-9.9	1.03 H	121	28.61	15.49

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	51.3 PK	74.0	-22.7	1.04 V	255	52.49	-1.19
2	2390.00	41.1 AV	54.0	-12.9	1.04 V	255	42.29	-1.19
3	*2437.00	109.2 PK			1.04 V	255	110.19	-0.99
4	*2437.00	107.1 AV			1.04 V	255	108.09	-0.99
5	2483.50	52.1 PK	74.0	-21.9	1.04 V	255	52.90	-0.80
6	2483.50	42.6 AV	54.0	-11.4	1.04 V	255	43.40	-0.80
7	4874.00	49.9 PK	74.0	-24.1	1.05 V	133	42.13	7.77
8	4874.00	41.3 AV	54.0	-12.7	1.05 V	133	33.53	7.77
9	7311.00	55.5 PK	74.0	-18.5	1.00 V	123	40.01	15.49
10	7311.00	45.0 AV	54.0	-9.0	1.00 V	123	29.51	15.49

REMARKS:

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



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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	101.9 PK			1.05 H	126	102.82	-0.92
2	*2452.00	100.0 AV			1.05 H	126	100.92	-0.92
3	2483.50	51.5 PK	74.0	-22.5	1.05 H	126	52.30	-0.80
4	2483.50	45.2 AV	54.0	-8.8	1.05 H	126	46.00	-0.80
5	4904.00	48.4 PK	74.0	-25.6	1.03 H	308	40.52	7.88
6	4904.00	36.5 AV	54.0	-17.5	1.03 H	308	28.62	7.88
7	7356.00	54.8 PK	74.0	-19.2	1.00 H	142	39.31	15.49
8	7356.00	44.2 AV	54.0	-9.8	1.00 H	142	28.71	15.49

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	108.2 PK			1.03 V	255	109.12	-0.92
2	*2452.00	106.3 AV			1.03 V	255	107.22	-0.92
3	2483.50	56.6 PK	74.0	-17.4	1.03 V	255	57.40	-0.80
4	2483.50	50.1 AV	54.0	-3.9	1.03 V	255	50.90	-0.80
5	4904.00	49.9 PK	74.0	-24.1	1.03 V	114	42.02	7.88
6	4904.00	41.2 AV	54.0	-12.8	1.03 V	114	33.32	7.88
7	7356.00	55.5 PK	74.0	-18.5	1.00 V	123	40.01	15.49
8	7356.00	45.3 AV	54.0	-8.7	1.00 V	123	29.81	15.49

REMARKS:

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



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CHANNEL	TX Channel 10	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	*2457.00	102.1 PK			1.05 H	130	103.01	-0.91
2	*2457.00	100.0 AV			1.05 H	130	100.91	-0.91
3	2483.50	57.3 PK	74.0	-16.7	1.05 H	130	58.10	-0.80
4	2483.50	47.3 AV	54.0	-6.7	1.05 H	130	48.10	-0.80
5	4914.00	48.5 PK	74.0	-25.5	1.06 H	299	40.60	7.90
6	4914.00	36.5 AV	54.0	-17.5	1.06 H	299	28.60	7.90
7	7371.00	54.8 PK	74.0	-19.2	1.00 H	148	39.29	15.51
8	7371.00	44.2 AV	54.0	-9.8	1.00 H	148	28.69	15.51

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	*2457.00	108.1 PK			1.04 V	255	109.01	-0.91
2	*2457.00	105.9 AV			1.04 V	255	106.81	-0.91
3	2483.50	61.8 PK	74.0	-12.2	1.04 V	255	62.60	-0.80
4	2483.50	51.8 AV	54.0	-2.2	1.04 V	255	52.60	-0.80
5	4914.00	48.9 PK	74.0	-25.1	1.02 V	131	41.00	7.90
6	4914.00	40.6 AV	54.0	-13.4	1.02 V	131	32.70	7.90
7	7371.00	56.0 PK	74.0	-18.0	1.00 V	115	40.49	15.51
8	7371.00	45.3 AV	54.0	-8.7	1.00 V	115	29.79	15.51

REMARKS:

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



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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	101.9 PK			1.06 H	143	102.79	-0.89
2	*2462.00	99.9 AV			1.06 H	143	100.79	-0.89
3	2483.50	52.4 PK	74.0	-21.6	1.06 H	143	53.20	-0.80
4	2483.50	46.7 AV	54.0	-7.3	1.06 H	143	47.50	-0.80
5	4924.00	48.6 PK	74.0	-25.4	1.08 H	299	40.66	7.94
6	4924.00	36.5 AV	54.0	-17.5	1.08 H	299	28.56	7.94
7	7386.00	54.6 PK	74.0	-19.4	1.00 H	127	39.09	15.51
8	7386.00	44.2 AV	54.0	-9.8	1.00 H	127	28.69	15.51

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	107.4 PK			1.03 V	254	108.29	-0.89
2	*2462.00	105.4 AV			1.03 V	254	106.29	-0.89
3	2483.50	57.5 PK	74.0	-16.5	1.03 V	254	58.30	-0.80
4	2483.50	51.9 AV	54.0	-2.1	1.03 V	254	52.70	-0.80
5	4924.00	49.8 PK	74.0	-24.2	1.02 V	135	41.86	7.94
6	4924.00	41.2 AV	54.0	-12.8	1.02 V	135	33.26	7.94
7	7386.00	56.0 PK	74.0	-18.0	1.00 V	121	40.49	15.51
8	7386.00	45.2 AV	54.0	-8.8	1.00 V	121	29.69	15.51

REMARKS:

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



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CHANNEL	TX Channel 12	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	*2467.00	97.3 PK			1.07 H	129	98.16	-0.86
2	*2467.00	95.8 AV			1.07 H	129	96.66	-0.86
3	2483.50	54.3 PK	74.0	-19.7	1.07 H	129	55.10	-0.80
4	2483.50	45.2 AV	54.0	-8.8	1.07 H	129	46.00	-0.80
5	4934.00	47.3 PK	74.0	-26.7	1.06 H	314	39.34	7.96
6	4934.00	35.8 AV	54.0	-18.2	1.06 H	314	27.84	7.96
7	7401.00	54.1 PK	74.0	-19.9	1.00 H	150	38.58	15.52
8	7401.00	43.7 AV	54.0	-10.3	1.00 H	150	28.18	15.52

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2467.00	103.7 PK			1.03 V	255	104.56	-0.86
2	*2467.00	101.8 AV			1.03 V	255	102.66	-0.86
3	2483.50	59.7 PK	74.0	-14.3	1.03 V	255	60.50	-0.80
4	2483.50	50.7 AV	54.0	-3.3	1.03 V	255	51.50	-0.80
5	4934.00	49.0 PK	74.0	-25.0	1.02 V	146	41.04	7.96
6	4934.00	40.9 AV	54.0	-13.1	1.02 V	146	32.94	7.96
7	7401.00	55.8 PK	74.0	-18.2	1.05 V	112	40.28	15.52
8	7401.00	45.3 AV	54.0	-8.7	1.05 V	112	29.78	15.52

REMARKS:

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



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CHANNEL	TX Channel 13	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	*2472.00	94.6 PK			1.06 H	116	95.45	-0.85
2	*2472.00	92.5 AV			1.06 H	116	93.35	-0.85
3	2483.50	51.3 PK	74.0	-22.7	1.06 H	116	52.10	-0.80
4	2483.50	46.1 AV	54.0	-7.9	1.06 H	116	46.90	-0.80
5	4944.00	48.2 PK	74.0	-25.8	1.00 H	323	40.22	7.98
6	4944.00	36.4 AV	54.0	-17.6	1.00 H	323	28.42	7.98
7	7416.00	53.3 PK	74.0	-20.7	1.00 H	152	37.82	15.48
8	7416.00	43.2 AV	54.0	-10.8	1.00 H	152	27.72	15.48

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	*2472.00	101.4 PK			1.06 V	258	102.25	-0.85
2	*2472.00	99.1 AV			1.06 V	258	99.95	-0.85
3	2483.50	56.3 PK	74.0	-17.7	1.06 V	258	57.10	-0.80
4	2483.50	51.5 AV	54.0	-2.5	1.06 V	258	52.30	-0.80
5	4944.00	49.9 PK	74.0	-24.1	1.00 V	131	41.92	7.98
6	4944.00	41.4 AV	54.0	-12.6	1.00 V	131	33.42	7.98
7	7416.00	56.0 PK	74.0	-18.0	1.00 V	103	40.52	15.48
8	7416.00	45.6 AV	54.0	-8.4	1.00 V	103	30.12	15.48

REMARKS:

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



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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	66.3 PK	74.0	-7.7	1.10 H	130	67.49	-1.19
2	2390.00	44.8 AV	54.0	-9.2	1.10 H	130	45.99	-1.19
3	*2412.00	100.3 PK			1.10 H	130	101.39	-1.09
4	*2412.00	88.3 AV			1.10 H	130	89.39	-1.09
5	4824.00	47.6 PK	74.0	-26.4	1.00 H	275	40.01	7.59
6	4824.00	35.8 AV	54.0	-18.2	1.00 H	275	28.21	7.59

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	70.4 PK	74.0	-3.6	1.07 V	260	71.59	-1.19
2	2390.00	49.5 AV	54.0	-4.5	1.07 V	260	50.69	-1.19
3	*2412.00	106.5 PK			1.07 V	260	107.59	-1.09
4	*2412.00	94.3 AV			1.07 V	260	95.39	-1.09
5	4824.00	49.6 PK	74.0	-24.4	1.03 V	127	42.01	7.59
6	4824.00	41.1 AV	54.0	-12.9	1.03 V	127	33.51	7.59

REMARKS:

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



CHANNEL	TX Channel 2	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	66.7 PK	74.0	-7.3	1.07 H	115	67.89	-1.19
2	2390.00	45.6 AV	54.0	-8.4	1.07 H	115	46.79	-1.19
3	*2417.00	102.6 PK			1.07 H	115	103.67	-1.07
4	*2417.00	90.6 AV			1.07 H	115	91.67	-1.07
5	4834.00	48.0 PK	74.0	-26.0	1.04 H	299	40.37	7.63
6	4834.00	36.4 AV	54.0	-17.6	1.04 H	299	28.77	7.63
7	7251.00	55.0 PK	74.0	-19.0	1.00 H	134	39.46	15.54
8	7251.00	44.5 AV	54.0	-9.5	1.00 H	134	28.96	15.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	71.6 PK	74.0	-2.4	1.03 V	66	72.79	-1.19
2	2390.00	50.3 AV	54.0	-3.7	1.03 V	66	51.49	-1.19
3	*2417.00	108.4 PK			1.03 V	66	109.47	-1.07
4	*2417.00	96.5 AV			1.03 V	66	97.57	-1.07
5	4834.00	49.4 PK	74.0	-24.6	1.00 V	143	41.77	7.63
6	4834.00	41.0 AV	54.0	-13.0	1.00 V	143	33.37	7.63
7	7251.00	56.2 PK	74.0	-17.8	1.00 V	130	40.66	15.54
8	7251.00	45.3 AV	54.0	-8.7	1.00 V	130	29.76	15.54

REMARKS:

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

CHANNEL	TX Channel 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	66.1 PK	74.0	-7.9	1.11 H	121	67.29	-1.19
2	2390.00	47.2 AV	54.0	-6.8	1.11 H	121	48.39	-1.19
3	*2422.00	104.0 PK			1.11 H	121	105.05	-1.05
4	*2422.00	92.3 AV			1.11 H	121	93.35	-1.05
5	4844.00	48.6 PK	74.0	-25.4	1.00 H	315	40.94	7.66
6	4844.00	36.6 AV	54.0	-17.4	1.00 H	315	28.94	7.66
7	7266.00	54.2 PK	74.0	-19.8	1.00 H	139	38.69	15.51
8	7266.00	43.6 AV	54.0	-10.4	1.00 H	139	28.09	15.51

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	70.9 PK	74.0	-3.1	1.06 V	58	72.09	-1.19
2	2390.00	51.9 AV	54.0	-2.1	1.06 V	58	53.09	-1.19
3	*2422.00	109.8 PK			1.06 V	58	110.85	-1.05
4	*2422.00	97.9 AV			1.06 V	58	98.95	-1.05
5	4844.00	49.4 PK	74.0	-24.6	1.01 V	141	41.74	7.66
6	4844.00	41.0 AV	54.0	-13.0	1.01 V	141	33.34	7.66
7	7266.00	56.6 PK	74.0	-17.4	1.00 V	112	41.09	15.51
8	7266.00	45.6 AV	54.0	-8.4	1.00 V	112	30.09	15.51

REMARKS:

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



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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	64.4 PK	74.0	-9.6	1.16 H	127	65.59	-1.19
2	2390.00	41.0 AV	54.0	-13.0	1.16 H	127	42.19	-1.19
3	*2437.00	105.0 PK			1.16 H	127	105.99	-0.99
4	*2437.00	92.9 AV			1.16 H	127	93.89	-0.99
5	2483.50	60.2 PK	74.0	-13.8	1.16 H	127	61.00	-0.80
6	2483.50	40.3 AV	54.0	-13.7	1.16 H	127	41.10	-0.80
7	4874.00	48.1 PK	74.0	-25.9	1.00 H	307	40.33	7.77
8	4874.00	36.7 AV	54.0	-17.3	1.00 H	307	28.93	7.77
9	7311.00	54.1 PK	74.0	-19.9	1.00 H	149	38.61	15.49
10	7311.00	43.6 AV	54.0	-10.4	1.00 H	149	28.11	15.49

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	69.7 PK	74.0	-4.3	1.03 V	56	70.89	-1.19
2	2390.00	46.4 AV	54.0	-7.6	1.03 V	56	47.59	-1.19
3	*2437.00	111.6 PK			1.03 V	56	112.59	-0.99
4	*2437.00	99.3 AV			1.03 V	56	100.29	-0.99
5	2483.50	64.0 PK	74.0	-10.0	1.03 V	56	64.80	-0.80
6	2483.50	44.3 AV	54.0	-9.7	1.03 V	56	45.10	-0.80
7	4874.00	49.6 PK	74.0	-24.4	1.04 V	147	41.83	7.77
8	4874.00	41.2 AV	54.0	-12.8	1.04 V	147	33.43	7.77
9	7311.00	56.1 PK	74.0	-17.9	1.04 V	110	40.61	15.49
10	7311.00	45.3 AV	54.0	-8.7	1.04 V	110	29.81	15.49

REMARKS:

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



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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	105.1 PK			1.17 H	128	106.02	-0.92
2	*2452.00	92.8 AV			1.17 H	128	93.72	-0.92
3	2483.50	66.5 PK	74.0	-7.5	1.17 H	128	67.30	-0.80
4	2483.50	45.7 AV	54.0	-8.3	1.17 H	128	46.50	-0.80
5	4904.00	47.6 PK	74.0	-26.4	1.00 H	295	39.72	7.88
6	4904.00	35.5 AV	54.0	-18.5	1.00 H	295	27.62	7.88
7	7356.00	54.9 PK	74.0	-19.1	1.00 H	156	39.41	15.49
8	7356.00	44.0 AV	54.0	-10.0	1.00 H	156	28.51	15.49

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	110.8 PK			1.05 V	57	111.72	-0.92
2	*2452.00	98.6 AV			1.05 V	57	99.52	-0.92
3	2483.50	71.9 PK	74.0	-2.1	1.05 V	57	72.70	-0.80
4	2483.50	50.9 AV	54.0	-3.1	1.05 V	57	51.70	-0.80
5	4904.00	49.1 PK	74.0	-24.9	1.00 V	135	41.22	7.88
6	4904.00	40.9 AV	54.0	-13.1	1.00 V	135	33.02	7.88
7	7356.00	55.8 PK	74.0	-18.2	1.00 V	107	40.31	15.49
8	7356.00	45.2 AV	54.0	-8.8	1.00 V	107	29.71	15.49

REMARKS:

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



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CHANNEL	TX Channel 10	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	*2457.00	102.1 PK			1.17 H	117	103.01	-0.91
2	*2457.00	90.1 AV			1.17 H	117	91.01	-0.91
3	2483.50	65.4 PK	74.0	-8.6	1.17 H	117	66.20	-0.80
4	2483.50	46.9 AV	54.0	-7.1	1.17 H	117	47.70	-0.80
5	4914.00	47.4 PK	74.0	-26.6	1.01 H	318	39.50	7.90
6	4914.00	36.0 AV	54.0	-18.0	1.01 H	318	28.10	7.90
7	7371.00	53.7 PK	74.0	-20.3	1.00 H	126	38.19	15.51
8	7371.00	43.7 AV	54.0	-10.3	1.00 H	126	28.19	15.51

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	*2457.00	108.7 PK			1.06 V	38	109.61	-0.91
2	*2457.00	96.6 AV			1.06 V	38	97.51	-0.91
3	2483.50	70.6 PK	74.0	-3.4	1.06 V	38	71.40	-0.80
4	2483.50	52.0 AV	54.0	-2.0	1.06 V	38	52.80	-0.80
5	4914.00	49.2 PK	74.0	-24.8	1.00 V	149	41.30	7.90
6	4914.00	40.6 AV	54.0	-13.4	1.00 V	149	32.70	7.90
7	7371.00	55.1 PK	74.0	-18.9	1.04 V	106	39.59	15.51
8	7371.00	44.7 AV	54.0	-9.3	1.04 V	106	29.19	15.51

REMARKS:

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



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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	100.3 PK			1.20 H	131	101.19	-0.89
2	*2462.00	88.4 AV			1.20 H	131	89.29	-0.89
3	2483.50	66.4 PK	74.0	-7.6	1.20 H	131	67.20	-0.80
4	2483.50	46.5 AV	54.0	-7.5	1.20 H	131	47.30	-0.80
5	4924.00	48.3 PK	74.0	-25.7	1.01 H	318	40.36	7.94
6	4924.00	36.6 AV	54.0	-17.4	1.01 H	318	28.66	7.94
7	7386.00	55.0 PK	74.0	-19.0	1.00 H	127	39.49	15.51
8	7386.00	44.6 AV	54.0	-9.4	1.00 H	127	29.09	15.51

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	106.4 PK			1.26 V	2	107.29	-0.89
2	*2462.00	94.5 AV			1.26 V	2	95.39	-0.89
3	2483.50	71.5 PK	74.0	-2.5	1.26 V	2	72.30	-0.80
4	2483.50	51.8 AV	54.0	-2.2	1.26 V	2	52.60	-0.80
5	4924.00	48.8 PK	74.0	-25.2	1.00 V	145	40.86	7.94
6	4924.00	40.5 AV	54.0	-13.5	1.00 V	145	32.56	7.94
7	7386.00	55.7 PK	74.0	-18.3	1.00 V	117	40.19	15.51
8	7386.00	45.0 AV	54.0	-9.0	1.00 V	117	29.49	15.51

REMARKS:

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



CHANNEL	TX Channel 12	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	*2467.00	97.5 PK			1.22 H	137	98.36	-0.86
2	*2467.00	85.9 AV			1.22 H	137	86.76	-0.86
3	2483.50	67.7 PK	74.0	-6.3	1.22 H	137	68.50	-0.80
4	2483.50	45.8 AV	54.0	-8.2	1.22 H	137	46.60	-0.80
5	4934.00	48.0 PK	74.0	-26.0	1.01 H	313	40.04	7.96
6	4934.00	36.0 AV	54.0	-18.0	1.01 H	313	28.04	7.96
7	7401.00	54.6 PK	74.0	-19.4	1.00 H	143	39.08	15.52
8	7401.00	44.1 AV	54.0	-9.9	1.00 H	143	28.58	15.52

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2467.00	104.1 PK			1.28 V	1	104.96	-0.86
2	*2467.00	92.1 AV			1.28 V	1	92.96	-0.86
3	2483.50	71.5 PK	74.0	-2.5	1.28 V	1	72.30	-0.80
4	2483.50	51.2 AV	54.0	-2.8	1.28 V	1	52.00	-0.80
5	4934.00	49.8 PK	74.0	-24.2	1.00 V	127	41.84	7.96
6	4934.00	41.1 AV	54.0	-12.9	1.00 V	127	33.14	7.96
7	7401.00	56.0 PK	74.0	-18.0	1.00 V	106	40.48	15.52
8	7401.00	45.4 AV	54.0	-8.6	1.00 V	106	29.88	15.52

REMARKS:

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



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CHANNEL	TX Channel 13	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	*2472.00	88.4 PK			1.28 H	126	89.25	-0.85
2	*2472.00	77.7 AV			1.28 H	126	78.55	-0.85
3	2483.50	66.6 PK	74.0	-7.4	1.28 H	126	67.40	-0.80
4	2483.50	40.5 AV	54.0	-13.5	1.28 H	126	41.30	-0.80
5	4944.00	48.8 PK	74.0	-25.2	1.00 H	307	40.82	7.98
6	4944.00	36.8 AV	54.0	-17.2	1.00 H	307	28.82	7.98
7	7416.00	54.9 PK	74.0	-19.1	1.00 H	146	39.42	15.48
8	7416.00	44.6 AV	54.0	-9.4	1.00 H	146	29.12	15.48

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	*2472.00	93.8 PK			1.24 V	3	94.65	-0.85
2	*2472.00	83.3 AV			1.24 V	3	84.15	-0.85
3	2483.50	71.9 PK	74.0	-2.1	1.24 V	3	72.70	-0.80
4	2483.50	45.9 AV	54.0	-8.1	1.24 V	3	46.70	-0.80
5	4944.00	49.2 PK	74.0	-24.8	1.00 V	147	41.22	7.98
6	4944.00	40.6 AV	54.0	-13.4	1.00 V	147	32.62	7.98
7	7416.00	55.8 PK	74.0	-18.2	1.03 V	129	40.32	15.48
8	7416.00	45.1 AV	54.0	-8.9	1.03 V	129	29.62	15.48

REMARKS:

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



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802.11n (HT20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	66.5 PK	74.0	-7.5	1.22 H	139	67.69	-1.19
2	2390.00	43.1 AV	54.0	-10.9	1.22 H	139	44.29	-1.19
3	*2412.00	100.2 PK			1.22 H	139	101.29	-1.09
4	*2412.00	87.3 AV			1.22 H	139	88.39	-1.09
5	4824.00	48.3 PK	74.0	-25.7	1.05 H	308	40.71	7.59
6	4824.00	36.5 AV	54.0	-17.5	1.05 H	308	28.91	7.59

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	70.8 PK	74.0	-3.2	1.06 V	36	71.99	-1.19
2	2390.00	47.5 AV	54.0	-6.5	1.06 V	36	48.69	-1.19
3	*2412.00	106.7 PK			1.06 V	36	107.79	-1.09
4	*2412.00	93.2 AV			1.06 V	36	94.29	-1.09
5	4824.00	49.2 PK	74.0	-24.8	1.00 V	127	41.61	7.59
6	4824.00	41.1 AV	54.0	-12.9	1.00 V	127	33.51	7.59

REMARKS:

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



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CHANNEL	TX Channel 2	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 25GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	67.6 PK	74.0	-6.4	1.28 H	144	68.79	-1.19
2	2390.00	46.1 AV	54.0	-7.9	1.28 H	144	47.29	-1.19
3	*2417.00	102.5 PK			1.28 H	144	103.57	-1.07
4	*2417.00	90.3 AV			1.28 H	144	91.37	-1.07
5	4834.00	48.3 PK	74.0	-25.7	1.00 H	316	40.67	7.63
6	4834.00	36.6 AV	54.0	-17.4	1.00 H	316	28.97	7.63
7	7251.00	54.7 PK	74.0	-19.3	1.00 H	126	39.16	15.54
8	7251.00	44.3 AV	54.0	-9.7	1.00 H	126	28.76	15.54

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	72.0 PK	74.0	-2.0	1.05 V	39	73.19	-1.19
2	2390.00	50.7 AV	54.0	-3.3	1.05 V	39	51.89	-1.19
3	*2417.00	108.5 PK			1.05 V	39	109.57	-1.07
4	*2417.00	96.5 AV			1.05 V	39	97.57	-1.07
5	4834.00	49.3 PK	74.0	-24.7	1.00 V	130	41.67	7.63
6	4834.00	41.1 AV	54.0	-12.9	1.00 V	130	33.47	7.63
7	7251.00	55.7 PK	74.0	-18.3	1.03 V	122	40.16	15.54
8	7251.00	45.0 AV	54.0	-9.0	1.03 V	122	29.46	15.54

REMARKS:

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



CHANNEL	TX Channel 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	65.1 PK	74.0	-8.9	1.23 H	148	66.29	-1.19
2	2390.00	46.4 AV	54.0	-7.6	1.23 H	148	47.59	-1.19
3	*2422.00	104.5 PK			1.23 H	148	105.55	-1.05
4	*2422.00	92.3 AV			1.23 H	148	93.35	-1.05
5	4844.00	48.8 PK	74.0	-25.2	1.04 H	322	41.14	7.66
6	4844.00	36.9 AV	54.0	-17.1	1.04 H	322	29.24	7.66
7	7266.00	54.3 PK	74.0	-19.7	1.00 H	133	38.79	15.51
8	7266.00	43.9 AV	54.0	-10.1	1.00 H	133	28.39	15.51

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	70.8 PK	74.0	-3.2	1.09 V	55	71.99	-1.19
2	2390.00	51.9 AV	54.0	-2.1	1.09 V	55	53.09	-1.19
3	*2422.00	110.5 PK			1.09 V	55	111.55	-1.05
4	*2422.00	98.4 AV			1.09 V	55	99.45	-1.05
5	4844.00	48.9 PK	74.0	-25.1	1.00 V	131	41.24	7.66
6	4844.00	40.7 AV	54.0	-13.3	1.00 V	131	33.04	7.66
7	7266.00	54.2 PK	74.0	-19.8	1.00 V	131	38.69	15.51
8	7266.00	43.9 AV	54.0	-10.1	1.00 V	131	28.39	15.51

REMARKS:

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



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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	64.7 PK	74.0	-9.3	1.26 H	136	65.89	-1.19
2	2390.00	41.1 AV	54.0	-12.9	1.26 H	136	42.29	-1.19
3	*2437.00	105.5 PK			1.26 H	136	106.49	-0.99
4	*2437.00	93.1 AV			1.26 H	136	94.09	-0.99
5	2483.50	60.2 PK	74.0	-13.8	1.26 H	136	61.00	-0.80
6	2483.50	40.5 AV	54.0	-13.5	1.26 H	136	41.30	-0.80
7	4874.00	48.4 PK	74.0	-25.6	1.08 H	308	40.63	7.77
8	4874.00	36.4 AV	54.0	-17.6	1.08 H	308	28.63	7.77
9	7311.00	55.1 PK	74.0	-18.9	1.00 H	140	39.61	15.49
10	7311.00	44.5 AV	54.0	-9.5	1.00 H	140	29.01	15.49

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	70.1 PK	74.0	-3.9	1.05 V	55	71.29	-1.19
2	2390.00	46.5 AV	54.0	-7.5	1.05 V	55	47.69	-1.19
3	*2437.00	111.5 PK			1.05 V	55	112.49	-0.99
4	*2437.00	99.2 AV			1.05 V	55	100.19	-0.99
5	2483.50	63.5 PK	74.0	-10.5	1.05 V	55	64.30	-0.80
6	2483.50	44.0 AV	54.0	-10.0	1.05 V	55	44.80	-0.80
7	4874.00	49.3 PK	74.0	-24.7	1.00 V	127	41.53	7.77
8	4874.00	41.4 AV	54.0	-12.6	1.00 V	127	33.63	7.77
9	7311.00	55.3 PK	74.0	-18.7	1.00 V	100	39.81	15.49
10	7311.00	44.8 AV	54.0	-9.2	1.00 V	100	29.31	15.49

REMARKS:

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



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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	104.4 PK			1.21 H	137	105.32	-0.92
2	*2452.00	92.5 AV			1.21 H	137	93.42	-0.92
3	2483.50	67.3 PK	74.0	-6.7	1.21 H	137	68.10	-0.80
4	2483.50	46.1 AV	54.0	-7.9	1.21 H	137	46.90	-0.80
5	4904.00	48.4 PK	74.0	-25.6	1.00 H	309	40.52	7.88
6	4904.00	36.5 AV	54.0	-17.5	1.00 H	309	28.62	7.88
7	7356.00	54.9 PK	74.0	-19.1	1.00 H	148	39.41	15.49
8	7356.00	44.5 AV	54.0	-9.5	1.00 H	148	29.01	15.49

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	110.7 PK			1.07 V	52	111.62	-0.92
2	*2452.00	98.7 AV			1.07 V	52	99.62	-0.92
3	2483.50	71.9 PK	74.0	-2.1	1.07 V	52	72.70	-0.80
4	2483.50	50.8 AV	54.0	-3.2	1.07 V	52	51.60	-0.80
5	4904.00	48.9 PK	74.0	-25.1	1.00 V	141	41.02	7.88
6	4904.00	40.3 AV	54.0	-13.7	1.00 V	141	32.42	7.88
7	7356.00	55.5 PK	74.0	-18.5	1.00 V	111	40.01	15.49
8	7356.00	45.2 AV	54.0	-8.8	1.00 V	111	29.71	15.49

REMARKS:

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



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CHANNEL	TX Channel 10	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	*2457.00	103.2 PK			1.16 H	124	104.11	-0.91
2	*2457.00	91.1 AV			1.16 H	124	92.01	-0.91
3	2483.50	67.4 PK	74.0	-6.6	1.16 H	124	68.20	-0.80
4	2483.50	46.1 AV	54.0	-7.9	1.16 H	124	46.90	-0.80
5	4914.00	48.0 PK	74.0	-26.0	1.07 H	322	40.10	7.90
6	4914.00	36.2 AV	54.0	-17.8	1.07 H	322	28.30	7.90
7	7371.00	55.4 PK	74.0	-18.6	1.00 H	153	39.89	15.51
8	7371.00	44.5 AV	54.0	-9.5	1.00 H	153	28.99	15.51

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	*2457.00	108.8 PK			1.07 V	47	109.71	-0.91
2	*2457.00	96.8 AV			1.07 V	47	97.71	-0.91
3	2483.50	71.8 PK	74.0	-2.2	1.07 V	47	72.60	-0.80
4	2483.50	50.7 AV	54.0	-3.3	1.07 V	47	51.50	-0.80
5	4914.00	48.9 PK	74.0	-25.1	1.00 V	142	41.00	7.90
6	4914.00	40.6 AV	54.0	-13.4	1.00 V	142	32.70	7.90
7	7371.00	55.8 PK	74.0	-18.2	1.00 V	116	40.29	15.51
8	7371.00	45.0 AV	54.0	-9.0	1.00 V	116	29.49	15.51

REMARKS:

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



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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	100.4 PK			1.14 H	113	101.29	-0.89
2	*2462.00	88.5 AV			1.14 H	113	89.39	-0.89
3	2483.50	66.5 PK	74.0	-7.5	1.14 H	113	67.30	-0.80
4	2483.50	44.3 AV	54.0	-9.7	1.14 H	113	45.10	-0.80
5	4924.00	48.0 PK	74.0	-26.0	1.07 H	302	40.06	7.94
6	4924.00	36.2 AV	54.0	-17.8	1.07 H	302	28.26	7.94
7	7386.00	54.3 PK	74.0	-19.7	1.00 H	149	38.79	15.51
8	7386.00	44.0 AV	54.0	-10.0	1.00 H	149	28.49	15.51

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	106.5 PK			1.25 V	6	107.39	-0.89
2	*2462.00	94.8 AV			1.25 V	6	95.69	-0.89
3	2483.50	71.7 PK	74.0	-2.3	1.25 V	6	72.50	-0.80
4	2483.50	49.6 AV	54.0	-4.4	1.25 V	6	50.40	-0.80
5	4924.00	48.7 PK	74.0	-25.3	1.00 V	142	40.76	7.94
6	4924.00	40.4 AV	54.0	-13.6	1.00 V	142	32.46	7.94
7	7386.00	55.6 PK	74.0	-18.4	1.03 V	97	40.09	15.51
8	7386.00	45.1 AV	54.0	-8.9	1.03 V	97	29.59	15.51

REMARKS:

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



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CHANNEL	TX Channel 12	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	*2467.00	98.5 PK			1.19 H	112	99.36	-0.86
2	*2467.00	86.8 AV			1.19 H	112	87.66	-0.86
3	2483.50	66.7 PK	74.0	-7.3	1.19 H	112	67.50	-0.80
4	2483.50	45.0 AV	54.0	-9.0	1.19 H	112	45.80	-0.80
5	4934.00	49.0 PK	74.0	-25.0	1.00 H	319	41.04	7.96
6	4934.00	36.8 AV	54.0	-17.2	1.00 H	319	28.84	7.96
7	7401.00	54.8 PK	74.0	-19.2	1.00 H	129	39.28	15.52
8	7401.00	44.3 AV	54.0	-9.7	1.00 H	129	28.78	15.52

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2467.00	104.4 PK			1.25 V	14	105.26	-0.86
2	*2467.00	92.5 AV			1.25 V	14	93.36	-0.86
3	2483.50	72.0 PK	74.0	-2.0	1.25 V	14	72.80	-0.80
4	2483.50	50.4 AV	54.0	-3.6	1.25 V	14	51.20	-0.80
5	4934.00	48.8 PK	74.0	-25.2	1.04 V	142	40.84	7.96
6	4934.00	41.0 AV	54.0	-13.0	1.04 V	142	33.04	7.96
7	7401.00	55.5 PK	74.0	-18.5	1.05 V	91	39.98	15.52
8	7401.00	45.1 AV	54.0	-8.9	1.05 V	91	29.58	15.52

REMARKS:

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



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CHANNEL	TX Channel 13	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	*2472.00	87.8 PK			1.16 H	124	88.65	-0.85
2	*2472.00	76.1 AV			1.16 H	124	76.95	-0.85
3	2483.50	67.0 PK	74.0	-7.0	1.16 H	124	67.80	-0.80
4	2483.50	39.8 AV	54.0	-14.2	1.16 H	124	40.60	-0.80
5	4944.00	48.2 PK	74.0	-25.8	1.09 H	317	40.22	7.98
6	4944.00	36.1 AV	54.0	-17.9	1.09 H	317	28.12	7.98
7	7416.00	54.8 PK	74.0	-19.2	1.00 H	154	39.32	15.48
8	7416.00	44.3 AV	54.0	-9.7	1.00 H	154	28.82	15.48

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	*2472.00	93.8 PK			1.25 V	3	94.65	-0.85
2	*2472.00	81.9 AV			1.25 V	3	82.75	-0.85
3	2483.50	72.0 PK	74.0	-2.0	1.25 V	3	72.80	-0.80
4	2483.50	45.1 AV	54.0	-8.9	1.25 V	3	45.90	-0.80
5	4944.00	48.7 PK	74.0	-25.3	1.00 V	137	40.72	7.98
6	4944.00	40.6 AV	54.0	-13.4	1.00 V	137	32.62	7.98
7	7416.00	55.6 PK	74.0	-18.4	1.00 V	89	40.12	15.48
8	7416.00	45.2 AV	54.0	-8.8	1.00 V	89	29.72	15.48

REMARKS:

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

4.2 CONDUCTED OUTPUT POWER MEASUREMENT

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	1014008	Apr. 23, 2013	Apr. 22, 2014
Power Sensor	MA2411B	0917122	Apr. 23, 2013	Apr. 22, 2014

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 : Aug. 14 and Sep. 02, 2013

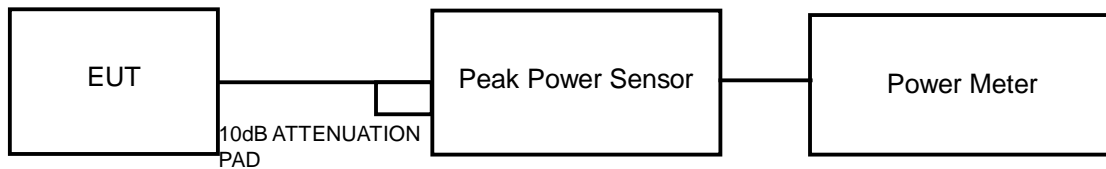
4.2.3 TEST PROCEDURES

The 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

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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4.2.7 TEST RESULTS

802.11b

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	125.893	21.00	30	PASS
2	2417	164.437	22.16	30	PASS
3	2422	163.682	22.14	30	PASS
6	2437	182.390	22.61	30	PASS
9	2452	164.816	22.17	30	PASS
10	2457	162.555	22.11	30	PASS
11	2462	162.181	22.10	30	PASS
12	2467	43.652	16.40	30	PASS
13	2472	27.542	14.40	30	PASS

802.11g

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	136.458	21.35	30	PASS
2	2417	173.780	22.40	30	PASS
3	2422	184.927	22.67	30	PASS
6	2437	196.789	22.94	30	PASS
9	2452	198.153	22.97	30	PASS
10	2457	214.783	23.32	30	PASS
11	2462	170.608	22.32	30	PASS
12	2467	106.414	20.27	30	PASS
13	2472	15.996	12.04	30	PASS



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802.11n (HT20)

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
1	2412	134.586	21.29	30	PASS
2	2417	167.109	22.23	30	PASS
3	2422	198.153	22.97	30	PASS
6	2437	209.894	23.22	30	PASS
9	2452	197.697	22.96	30	PASS
10	2457	196.336	22.93	30	PASS
11	2462	161.065	22.07	30	PASS
12	2467	97.724	19.90	30	PASS
13	2472	10.666	10.28	30	PASS

5. TEST TYPES AND RESULTS (802.11a, 5725~5850MHz Band)

5.1 RADIATED AND BANDEDGE EMISSION MEASUREMENT

5.1.1 LIMITS OF RADIATED AND BANDEDGE 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.



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5.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer Agilent	E4446A	MY48250253	Sep. 03, 2012	Sep. 02, 2013
MXE EMI Receiver Agilent	N9038A	MY51210105	Jan. 29, 2013	Jan. 28, 2014
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-03	Nov. 14, 2012	Nov. 13, 2013
Pre-Amplifier Agilent	8449B	3008A02578	June 25, 2013	June 24, 2014
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 14, 2012	Nov. 13, 2013
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-360	Mar. 19, 2013	Mar. 18, 2014
Horn_Antenna AISI	AIH.8018	000032009111 0	Nov. 19, 2012	Nov. 18, 2013
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 12, 2012	Oct. 11, 2013
RF Cable	NA	RF104-201 RF104-203 RF104-204	Dec. 25, 2012	Dec. 24, 2013
RF Cable	NA	CHGCAB_001	Oct. 06, 2012	Oct. 05, 2013
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 horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 3 The test was performed in 966 Chamber No. G.
4. The FCC Site Registration No. is 966073.
- 5 The VCCI Site Registration No. is G-137.
- 6 The CANADA Site Registration No. is IC 7450H-2.
- 7 Tested Date: Aug. 01 to Sep. 02, 2013



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5.1.3 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.

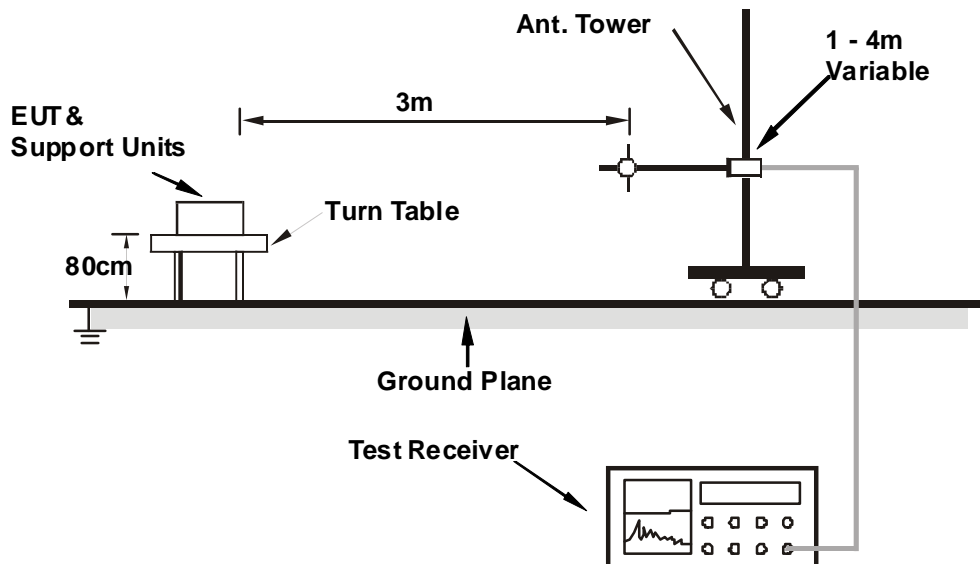
NOTE:

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.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation

5.1.5 TEST SETUP



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

5.1.6 EUT OPERATING CONDITIONS

Same as the 4.1.6

5.1.7 TEST RESULTS

BELOW 1GHz WORST-CASE DATA

802.11a

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	Below 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	95.81	33.3 QP	43.5	-10.2	2.00 H	257	52.03	-18.73
2	200.63	33.9 QP	43.5	-9.6	1.00 H	248	50.54	-16.64
3	256.01	31.6 QP	46.0	-14.4	1.50 H	262	46.06	-14.43
4	448.02	38.9 QP	46.0	-7.1	2.00 H	213	47.68	-8.80
5	512.10	35.0 QP	46.0	-11.0	1.50 H	230	42.58	-7.54
6	958.92	35.4 QP	46.0	-10.6	1.50 H	19	34.82	0.56
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	39.10	34.6 QP	40.0	-5.4	1.00 V	201	48.75	-14.19
2	202.90	30.3 QP	43.5	-13.2	1.00 V	353	46.91	-16.57
3	510.88	34.8 QP	46.0	-11.2	1.00 V	340	42.31	-7.55
4	575.72	33.9 QP	46.0	-12.1	1.50 V	339	40.23	-6.29
5	638.98	33.2 QP	46.0	-12.8	1.50 V	19	37.80	-4.59
6	960.12	36.9 QP	54.0	-17.1	1.50 V	356	36.33	0.56

REMARKS:

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



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ABOVE 1GHz DATA

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	5460.00	53.2 PK	74.0	-20.8	1.02 H	317	43.55	9.65
2	5460.00	39.6 AV	54.0	-14.4	1.02 H	317	29.95	9.65
3	*5745.00	107.5 PK			1.02 H	317	97.08	10.42
4	*5745.00	95.1 AV			1.02 H	317	84.68	10.42
5	11490.00	49.1 PK	74.0	-24.9	1.30 H	108	31.84	17.26
6	11490.00	36.5 AV	54.0	-17.5	1.30 H	108	19.24	17.26

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	5460.00	54.7 PK	74.0	-19.3	1.03 V	306	45.05	9.65
2	5460.00	41.0 AV	54.0	-13.0	1.03 V	306	31.35	9.65
3	*5745.00	113.7 PK			1.03 V	306	103.28	10.42
4	*5745.00	101.4 AV			1.03 V	306	90.98	10.42
5	11490.00	48.6 PK	74.0	-25.4	1.21 V	310	31.34	17.26
6	11490.00	36.5 AV	54.0	-17.5	1.21 V	310	19.24	17.26

REMARKS:

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



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CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	5460.00	53.0 PK	74.0	-21.0	1.08 H	306	43.35	9.65
2	5460.00	39.3 AV	54.0	-14.7	1.08 H	306	29.65	9.65
3	*5785.00	106.9 PK			1.08 H	306	96.41	10.49
4	*5785.00	95.4 AV			1.08 H	306	84.91	10.49
5	11570.00	49.0 PK	74.0	-25.0	1.30 H	133	31.71	17.29
6	11570.00	36.3 AV	54.0	-17.7	1.30 H	133	19.01	17.29

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	5460.00	54.6 PK	74.0	-19.4	1.02 V	304	44.95	9.65
2	5460.00	40.9 AV	54.0	-13.1	1.02 V	304	31.25	9.65
3	*5785.00	112.8 PK			1.02 V	304	102.31	10.49
4	*5785.00	101.1 AV			1.02 V	304	90.61	10.49
5	11570.00	48.2 PK	74.0	-25.8	1.13 V	307	30.91	17.29
6	11570.00	36.1 AV	54.0	-17.9	1.13 V	307	18.81	17.29

REMARKS:

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



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CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	5460.00	53.1 PK	74.0	-20.9	1.07 H	298	43.45	9.65
2	5460.00	39.5 AV	54.0	-14.5	1.07 H	298	29.85	9.65
3	*5825.00	107.6 PK			1.07 H	298	96.95	10.65
4	*5825.00	95.6 AV			1.07 H	298	84.95	10.65
5	11650.00	49.5 PK	74.0	-24.5	1.35 H	122	31.84	17.66
6	11650.00	36.8 AV	54.0	-17.2	1.35 H	122	19.14	17.66

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	5460.00	54.4 PK	74.0	-19.6	1.01 V	302	44.75	9.65
2	5460.00	41.0 AV	54.0	-13.0	1.01 V	302	31.35	9.65
3	*5825.00	113.2 PK			1.01 V	302	102.55	10.65
4	*5825.00	101.4 AV			1.01 V	302	90.75	10.65
5	11650.00	49.2 PK	74.0	-24.8	1.22 V	311	31.54	17.66
6	11650.00	36.9 AV	54.0	-17.1	1.22 V	311	19.24	17.66

REMARKS:

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



802.11n (HT20)

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	5460.00	53.5 PK	74.0	-20.5	1.08 H	296	43.85	9.65
2	5460.00	40.0 AV	54.0	-14.0	1.08 H	296	30.35	9.65
3	*5745.00	105.4 PK			1.08 H	296	94.98	10.42
4	*5745.00	94.1 AV			1.08 H	296	83.68	10.42
5	11490.00	48.9 PK	74.0	-25.1	1.34 H	102	31.64	17.26
6	11490.00	36.4 AV	54.0	-17.6	1.34 H	102	19.14	17.26
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	5460.00	54.5 PK	74.0	-19.5	1.06 V	289	44.85	9.65
2	5460.00	40.9 AV	54.0	-13.1	1.06 V	289	31.25	9.65
3	*5745.00	112.6 PK			1.06 V	289	102.18	10.42
4	*5745.00	100.7 AV			1.06 V	289	90.28	10.42
5	11490.00	49.4 PK	74.0	-24.6	1.21 V	317	32.14	17.26
6	11490.00	37.0 AV	54.0	-17.0	1.21 V	317	19.74	17.26

REMARKS:

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



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CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	5460.00	53.3 PK	74.0	-20.7	1.12 H	289	43.65	9.65
2	5460.00	39.9 AV	54.0	-14.1	1.12 H	289	30.25	9.65
3	*5785.00	106.3 PK			1.12 H	289	95.81	10.49
4	*5785.00	95.0 AV			1.12 H	289	84.51	10.49
5	11570.00	49.9 PK	74.0	-24.1	1.41 H	101	32.61	17.29
6	11570.00	36.9 AV	54.0	-17.1	1.41 H	101	19.61	17.29

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	5460.00	55.2 PK	74.0	-18.8	1.00 V	311	45.55	9.65
2	5460.00	41.3 AV	54.0	-12.7	1.00 V	311	31.65	9.65
3	*5785.00	112.8 PK			1.00 V	311	102.31	10.49
4	*5785.00	101.4 AV			1.00 V	311	90.91	10.49
5	11570.00	49.3 PK	74.0	-24.7	1.20 V	284	32.01	17.29
6	11570.00	37.3 AV	54.0	-16.7	1.20 V	284	20.01	17.29

REMARKS:

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



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CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		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	5460.00	53.8 PK	74.0	-20.2	1.11 H	301	44.15	9.65
2	5460.00	39.9 AV	54.0	-14.1	1.11 H	301	30.25	9.65
3	*5825.00	106.1 PK			1.11 H	301	95.45	10.65
4	*5825.00	94.6 AV			1.11 H	301	83.95	10.65
5	11650.00	48.7 PK	74.0	-25.3	1.30 H	130	31.04	17.66
6	11650.00	36.2 AV	54.0	-17.8	1.30 H	130	18.54	17.66

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	5460.00	54.2 PK	74.0	-19.8	1.03 V	303	44.55	9.65
2	5460.00	40.8 AV	54.0	-13.2	1.03 V	303	31.15	9.65
3	*5825.00	112.7 PK			1.03 V	303	102.05	10.65
4	*5825.00	101.2 AV			1.03 V	303	90.55	10.65
5	11650.00	49.8 PK	74.0	-24.2	1.22 V	323	32.14	17.66
6	11650.00	37.2 AV	54.0	-16.8	1.22 V	323	19.54	17.66

REMARKS:

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

5.2 CONDUCTED OUTPUT POWER MEASUREMENT

5.2.1 LIMITS OF CONDUCTED OUTPUT POWER MEASUREMENT

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

5.2.2 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power Meter	ML2495A	1014008	Apr. 23, 2013	Apr. 22, 2014
Power Sensor	MA2411B	0917122	Apr. 23, 2013	Apr. 22, 2014

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 : Aug. 14 and Sep. 02, 2013

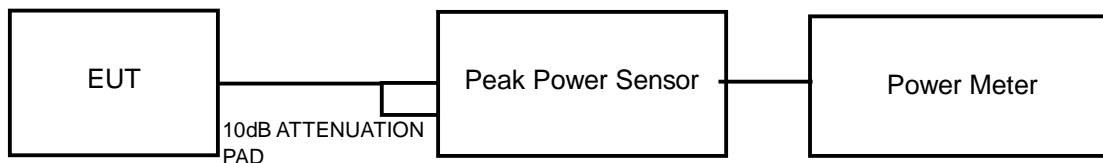
5.2.3 TEST PROCEDURES

The 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.

5.2.4 DEVIATION FROM TEST STANDARD

No deviation

5.2.5 TEST SETUP





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5.2.6 EUT OPERATING CONDITIONS

Same as Item 4.2.6



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5.2.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
149	5745	165.196	22.18	30	PASS
157	5785	167.109	22.23	30	PASS
165	5825	169.824	22.30	30	PASS

802.11n (HT20)

CHANNEL	FREQUENCY (MHz)	PEAK POWER (mW)	PEAK POWER (dBm)	LIMIT (dBm)	PASS/FAIL
149	5745	164.437	22.16	30	PASS
157	5785	164.059	22.15	30	PASS
165	5825	167.109	22.23	30	PASS



6. 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: 886-2-26052943

Hsin Chu EMC/RF Lab:

Tel: 886-3-5935343

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Web Site: www.bureauveritas-adt.com

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



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7.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.



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8.APPENDIX B – Change List

Please refer to the declaration as below:

- u Add one new Stubby antenna of the EUT.

--- END ---