

FCC SUPPLEMENTARY TEST REPORT

REPORT NO.: RF980305H02B

MODEL NO.: 21-121559

RECEIVED: June 18, 2009

TESTED: June 24 to July 10 to 24, 2009

ISSUED: July 24, 2009

APPLICANT: Motorola Inc.

ADDRESS: One Motorola Plaza Holtsville, NY 11742

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

LAB LOCATION: No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung
Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307,
Taiwan

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1 CERTIFICATION

PRODUCT : 21-121559-01
BRAND NAME : motorola
MODEL NO. : 21-121559
APPLICANT : Motorola Inc.
TESTED DATE: June 24 to July 10 to 24, 2009
TEST SAMPLE : ENGINEERING SAMPLE
STANDARDS : 47 CFR Part 15, Subpart C (Section 15.247),
ANSI C63.4-2003

The above equipment (Model: 21-121559) 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 : Sunny Wen , **DATE:** July 24, 2009
(Sunny Wen, Specialist)

TECHNICAL ACCEPTANCE : Hank Chung , **DATE:** July 24, 2009
Responsible for RF (Hank Chung, Deputy Manager)

APPROVED BY : May Chen , **DATE:** July 24, 2009
(May Chen, Deputy Manager)



2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: 47 CFR Part 15, Subpart C			
Standard Section	Test Type and Limit	Result	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -27.44dB at 0.201MHz
15.247(b)(2)	Maximum Peak Output Power Spec.: max. 30dBm	PASS	Meet the requirement of limit
15.247(d)	Transmitter Radiated Emissions Spec.: Table 15.209	PASS	Meet the requirement of limit Minimum passing margin is -6.88dB at 7418.00MHz

NOTE:

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

2.0 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
Conducted emissions	2.44 dB
Radiated emissions (30MHz-1GHz)	3.94 dB
Radiated emissions (1GHz ~18GHz)	2.49 dB
Radiated emissions (18GHz ~40GHz)	2.70 dB

3 GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

PRODUCT	21-121559-01
MODEL NO.	21-121559
FCC ID	UZ721121559
POWER SUPPLY	DC 5V from DC power supply
MODULATION TYPE	PR-ASK(DRM) , DSB-ASK(MRM), PR-ASK(XRM)
MODULATION TECHNOLOGY	FHSS
FREQUENCY RANGE	902.75MHz ~ 927.25MHz
NUMBER OF CHANNEL	50
OUTPUT POWER	PR-ASK(DRM): 597.035mW DSB-ASK(MRM): 864.968mW PR-ASK(XRM): 839.460mW
ANTENNA TYPE	Please see note 1
DATA CABLE	NA
I/O PORTS	NA
ASSOCIATED DEVICES	NA

NOTE:

- This report is prepared for FCC class II permissive change. The difference compared with the Report No.: RF980305H02 design is as the following:
 - u Modify the shielding case.
 - u Change the size of the IC: R1000 and relevant PCB layout.
 - u The inductor (L21) is changed from the 0.5nH to the 0.6nH.
 - u Change the PCB layout with IC: C120.
 - u Change the power amplifier.

- There is one antenna provided to this EUT:

Antenna Type	Connector Type	Gain (dBi)	Cable loss (dB)	Net Gain (dBi)
Dipole Antenna	SMA Female	2	0.3	1.7

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

3.2 DESCRIPTION OF TEST MODES

Fifty channels are provided to this EUT.

Channel	Freq. (MHz)	Channel	Freq. (MHz)	Channel	Freq. (MHz)
0	902.75	21	913.25	42	923.75
1	903.25	22	913.75	43	924.25
2	903.75	23	914.25	44	924.75
3	904.25	24	914.75	45	925.25
4	904.75	25	915.25	46	925.75
5	905.25	26	915.75	47	926.25
6	905.75	27	916.25	48	926.75
7	906.25	28	916.75	49	927.25
8	906.75	29	917.25		
9	907.25	30	917.75		
10	907.75	31	918.25		
11	908.25	32	918.75		
12	908.75	33	919.25		
13	909.25	34	919.75		
14	909.75	35	920.25		
15	910.25	36	920.75		
16	910.75	37	921.25		
17	911.25	38	921.75		
18	911.75	39	922.25		
19	912.25	40	922.75		
20	912.75	41	923.25		

3.3 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL:

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

Where PLC: Power Line Conducted Emission

RE<1G RE: Radiated Emission below 1GHz

RE≥1G: Radiated Emission above 1GHz

APCM: Antenna Port Conducted Measurement

Power Line Conducted Emission:

- ☒ Pre-Scan to determine the worst-case mode from all possible combinations between available modulations and packet types.
- ☒ Following channel(s) was (were) selected for the final test as listed below.

Available Channel	Tested Channel	Modulation Technology	Modulation Type
0 to 49	49	FHSS	DSB-ASK(MRM)

Radiated Emission Test (Below 1 GHz):

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

Available Channel	Tested Channel	Modulation Technology	Modulation Type
0 to 49	0	FHSS	PR-ASK(DRM)
0 to 49	0	FHSS	DSB-ASK(MRM)
0 to 49	0	FHSS	PR-ASK(XRM)

Radiated Emission Test (Above 1 GHz):

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

Available Channel	Tested Channel	Modulation Technology	Modulation Type
0 to 49	0, 24, 49	FHSS	PR-ASK(DRM)
0 to 49	0, 24, 49	FHSS	DSB-ASK(MRM)
0 to 49	0, 24, 49	FHSS	PR-ASK(XRM)

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.

Available Channel	Tested Channel	Modulation Technology	Modulation Type
0 to 49	0, 24, 49	FHSS	PR-ASK(DRM)
0 to 49	0, 24, 49	FHSS	DSB-ASK(MRM)
0 to 49	0, 24, 49	FHSS	PR-ASK(XRM)

3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

The EUT is a 21-121559-01. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

47 CFR Part 15, Subpart C. (15.247)
ANSI C63.4 : 2003

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

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



3.5 DESCRIPTION OF SUPPORT UNITS

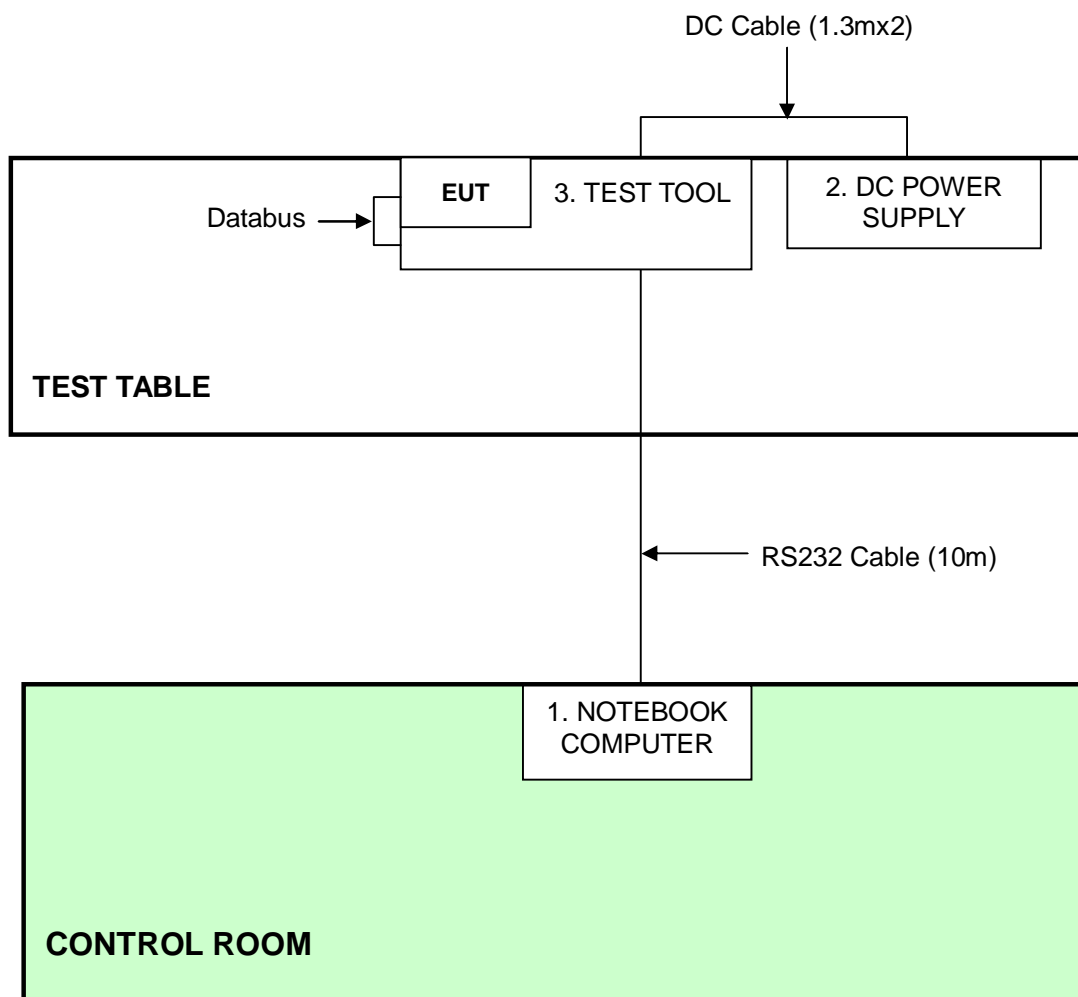
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK COMPUTER	DELL	D531	CN-0XM006-48 643-86L-4472	QDS-BRCM1019
2	DC POWER SUPPLY	GOOD WILL INSTRUMENT CO., LTD.	GPC-3030D	EG812707	NA
3	TEST TOOL	MTI	NA	NA	NA

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

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

3.6 CONFIGURATION OF SYSTEM UNDER TEST



4 TEST PROCEDURES AND RESULTS

4.1 CONDUCTED EMISSION MEASUREMENT

4.1.1 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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver	ESCS 30	100375	Mar. 23, 2009	Mar. 22, 2010
Line-Impedance Stabilization Network (for Peripheral)	ENV-216	100071	Nov. 26, 2008	Nov. 25, 2009
Line-Impedance Stabilization Network (for EUT)	ESH3-Z5	848773/004	Nov. 05, 2008	Nov. 04, 2009
RF Cable (JYEBAO)	5DFB	COBCAB-001	Aug. 15, 2008	Aug. 14, 2009
50 ohms Terminator	50	3	Nov. 05, 2008	Nov. 04, 2009
Software	BV ADT_Cond_V7.3.7	NA	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. B.
3. The VCCI Con B Registration No. is C-2193.

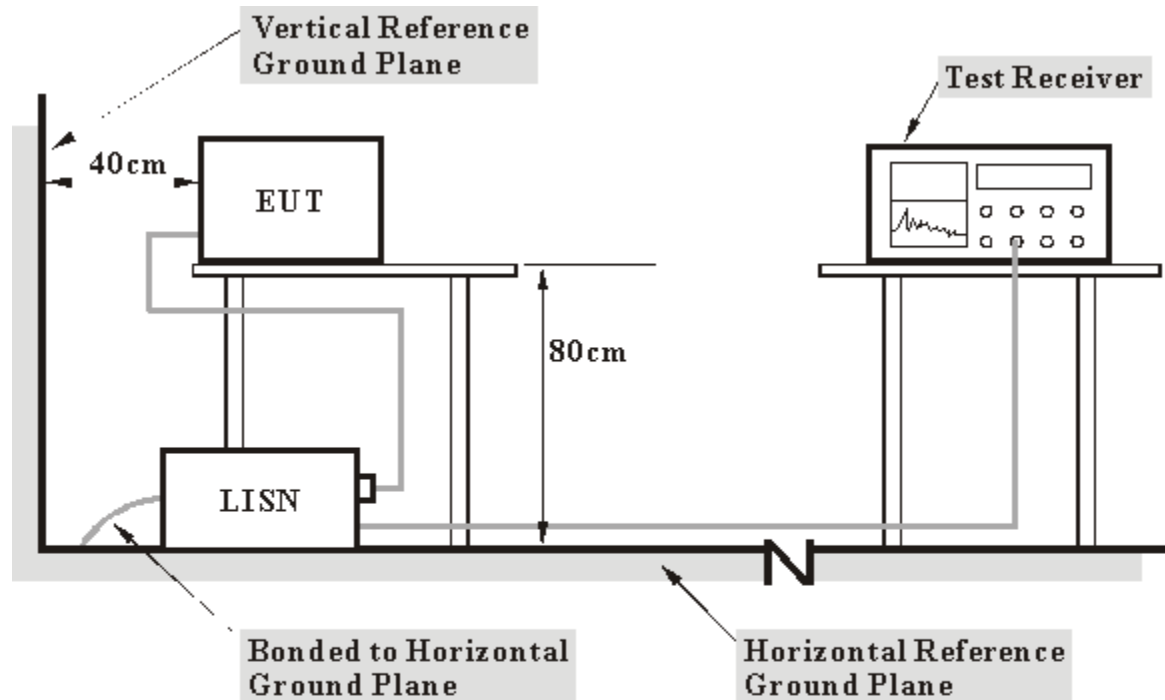
4.1.3 TEST PROCEDURES

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

4.1.4 DEVIATION FROM TEST STANDARD

No deviation

4.1.5 TEST SETUP



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

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

4.1.6 EUT OPERATING CONDITIONS

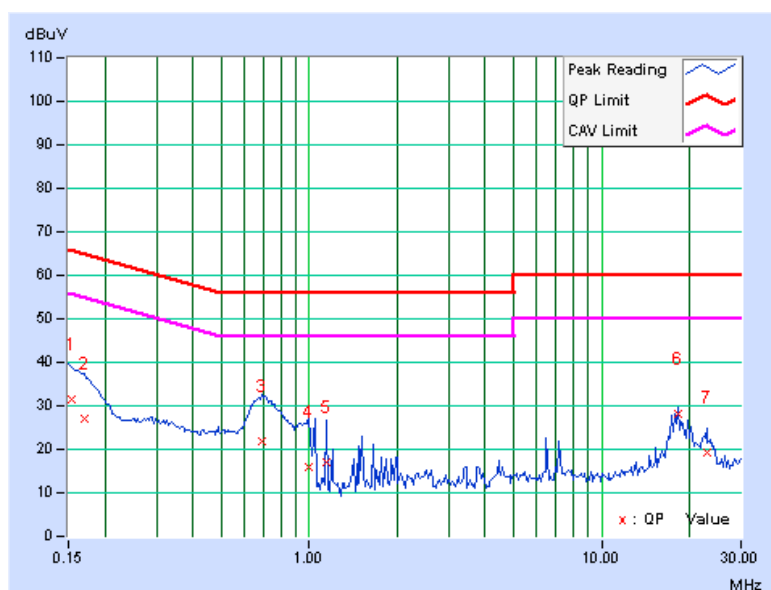
- a. Placed the EUT on the testing table.
- b. Connect the EUT with the support unit 1 (Notebook computer) which placed outside of testing area.
- c. The support unit 1 (Notebook computer) run test program “RFIDDemo W32” to enable EUT under transmission condition continuously at specific channel frequency.

4.1.7 TEST RESULTS

INPUT POWER (SYSTEM)	120Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	17 deg. C, 60%RH, 965 hPa	PHASE	Line (L)
TESTED BY	Frank Liu		

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	0.154	0.19	31.32	-	31.51	-	65.79	55.79	-34.27	-
2	0.170	0.20	26.71	-	26.91	-	64.98	54.98	-38.07	-
3	0.685	0.38	21.56	-	21.94	-	56.00	46.00	-34.06	-
4	0.994	0.29	15.81	-	16.10	-	56.00	46.00	-39.90	-
5	1.141	0.31	16.57	-	16.88	-	56.00	46.00	-39.12	-
6	18.242	1.36	26.71	-	28.07	-	60.00	50.00	-31.93	-
7	22.879	1.62	17.77	-	19.39	-	60.00	50.00	-40.61	-

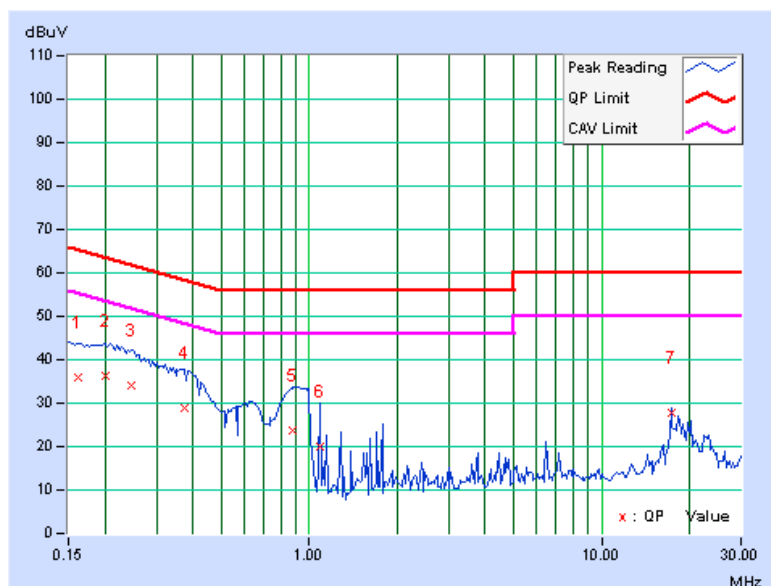
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
 3. The emission levels of other frequencies were very low against the limit.
 4. Margin value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



INPUT POWER (SYSTEM)	120Vac, 60 Hz	6dB BANDWIDTH	9 kHz
ENVIRONMENTAL CONDITIONS	17 deg. C, 60%RH, 965 hPa	PHASE	Neutral (N)
TESTED BY	Frank Liu		

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	0.162	0.13	35.72	-	35.85	-	65.38	55.38	-29.53	-
2	0.201	0.15	35.99	-	36.14	-	63.58	53.58	-27.44	-
3	0.248	0.21	33.98	-	34.19	-	61.84	51.84	-27.65	-
4	0.373	0.37	28.65	-	29.02	-	58.44	48.44	-29.43	-
5	0.873	0.24	23.45	-	23.69	-	56.00	46.00	-32.31	-
6	1.082	0.21	19.70	-	19.91	-	56.00	46.00	-36.09	-
7	17.410	1.05	26.69	-	27.74	-	60.00	50.00	-32.26	-

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



4.2 MAXIMUM PEAK OUTPUT POWER

4.2.1 LIMITS OF MAXIMUM PEAK OUTPUT POWER MEASUREMENT

The Maximum Peak Output Power Measurement is 30dBm.

4.2.2 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S SPECTRUM ANALYZER	FSP40	100037	Aug. 09, 2008	Aug. 08, 2009

NOTE: The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

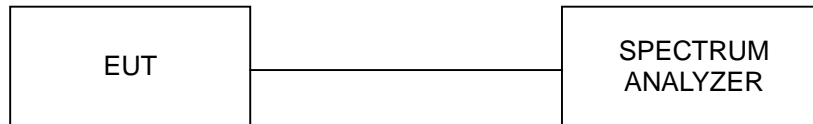
4.2.3 TEST PROCEDURES

- Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
- Turn on the EUT and connect it to measurement instrument. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
- The center frequency of the spectrum analyzer is set to the fundamental frequency and using 3MHz RBW and 3 MHz VBW.
- Measure the captured power within the band and recording the plot.
- Repeat above procedures until all frequencies required were complete.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation

4.2.5 TEST SETUP



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

4.2.6 EUT OPERATING CONDITION

The software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel frequencies individually.



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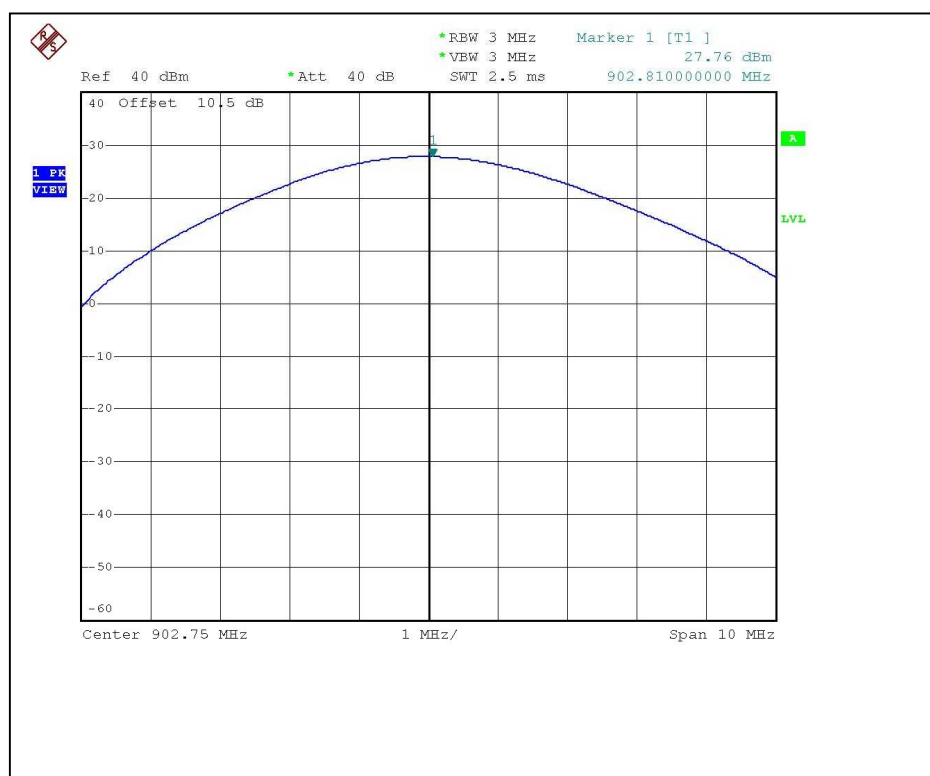
4.2.7 TEST RESULTS

For PR-ASK(DRM) – High Power:

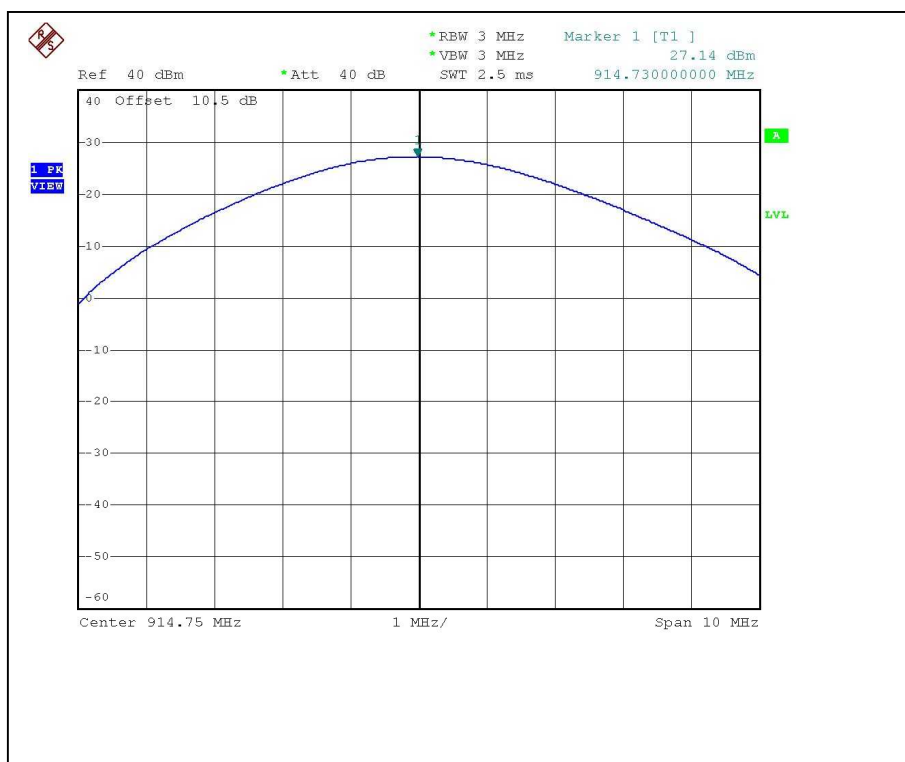
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 965 hPa	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
0	902.75	597.035	27.76	30	PASS
24	914.75	517.607	27.14	30	PASS
49	927.25	492.040	26.92	30	PASS

Channel 0



Channel 24



Channel 49





A D T

For PR-ASK(DRM) – Low Power:

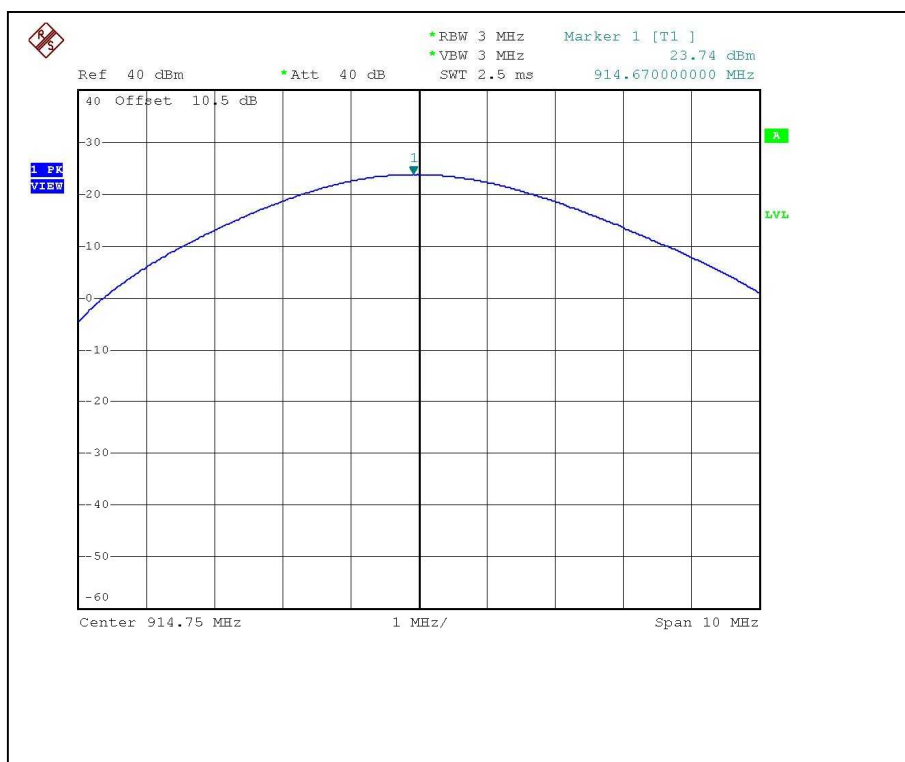
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 965 hPa	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
0	902.75	320.627	25.06	30	PASS
24	914.75	236.592	23.74	30	PASS
49	927.25	223.872	23.50	30	PASS

Channel 0



Channel 24



Channel 49





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For DSB-ASK(MRM) – High Power:

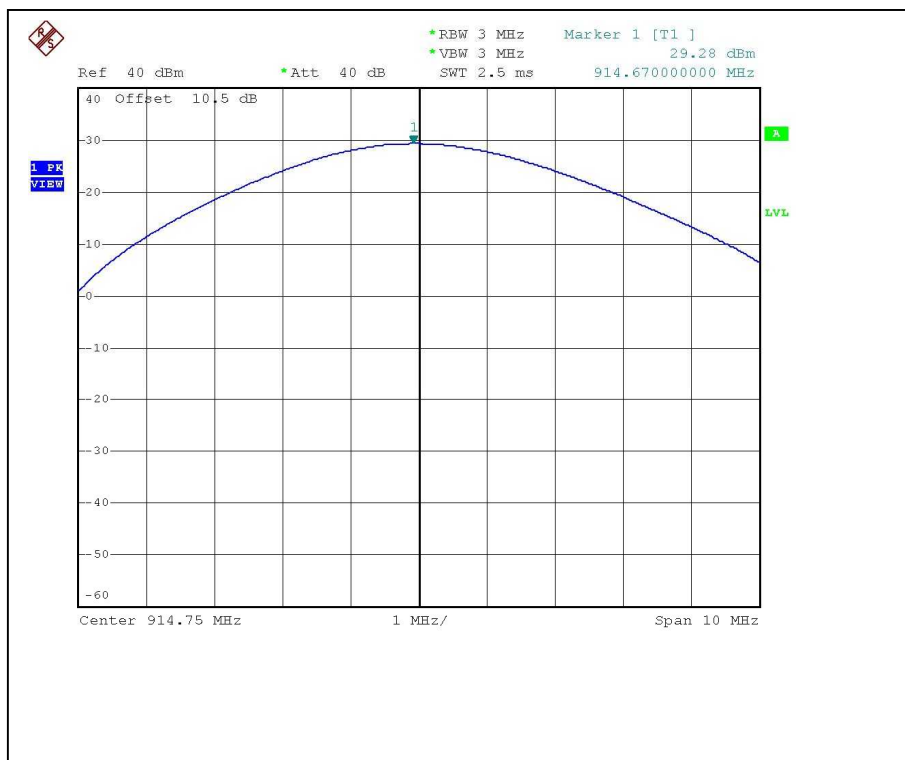
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 965 hPa	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
0	902.75	758.578	28.80	30	PASS
24	914.75	847.227	29.28	30	PASS
49	927.25	864.968	29.37	30	PASS

Channel 0



Channel 24



Channel 49





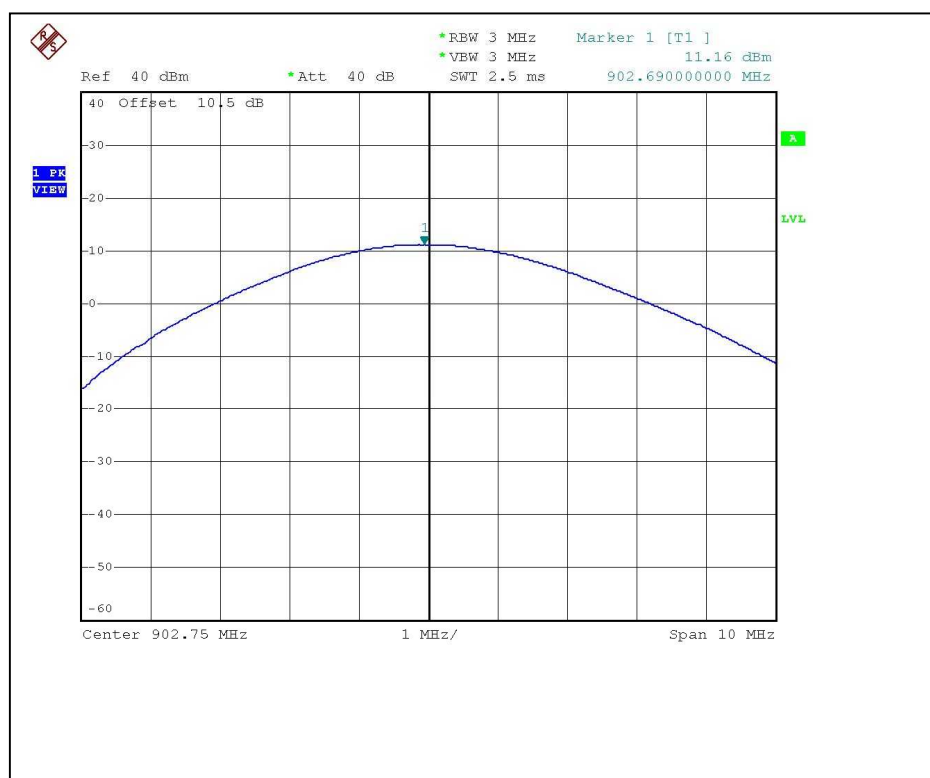
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For DSB-ASK(MRM) – Low Power:

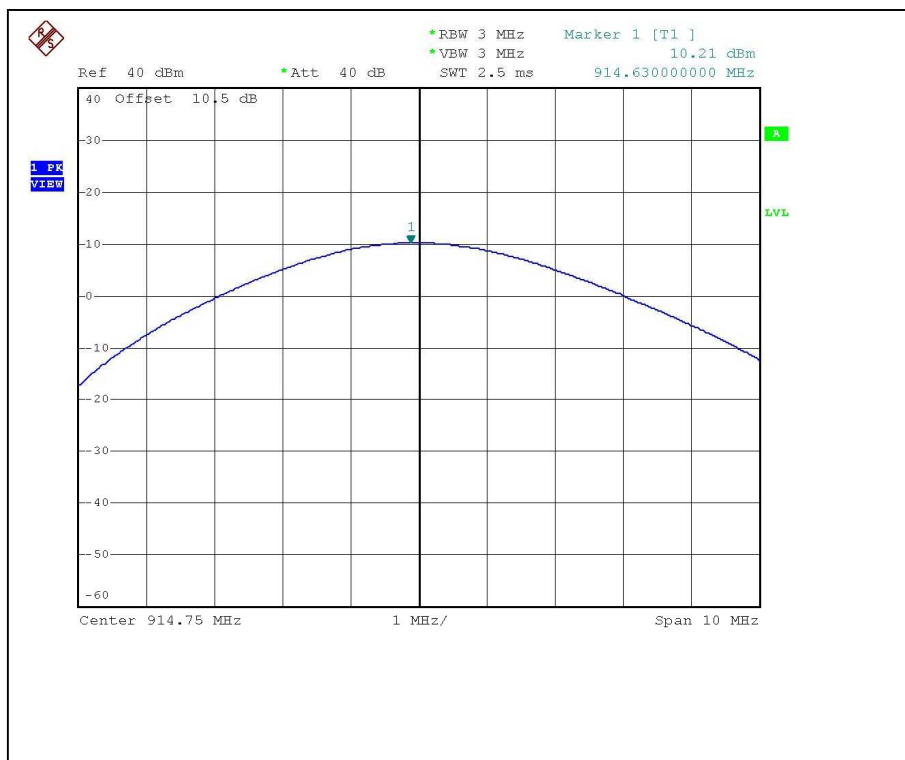
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 965 hPa	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
0	902.75	13.062	11.16	30	PASS
24	914.75	10.495	10.21	30	PASS
49	927.25	10.139	10.06	30	PASS

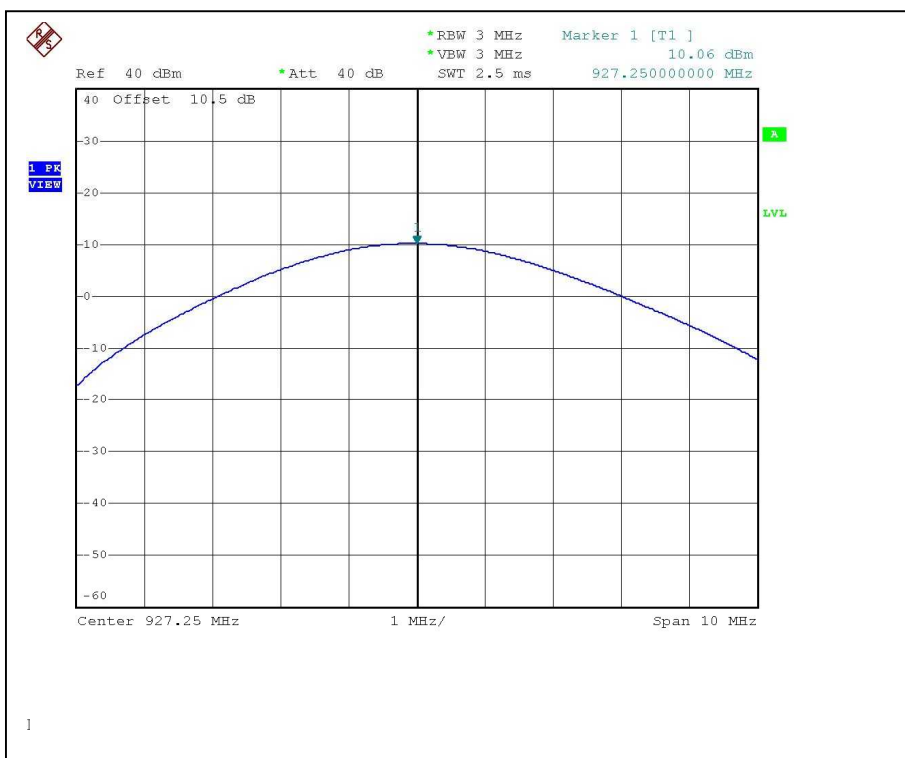
Channel 0



Channel 24



Channel 49





A D T

For PR-ASK(XRM) – High Power:

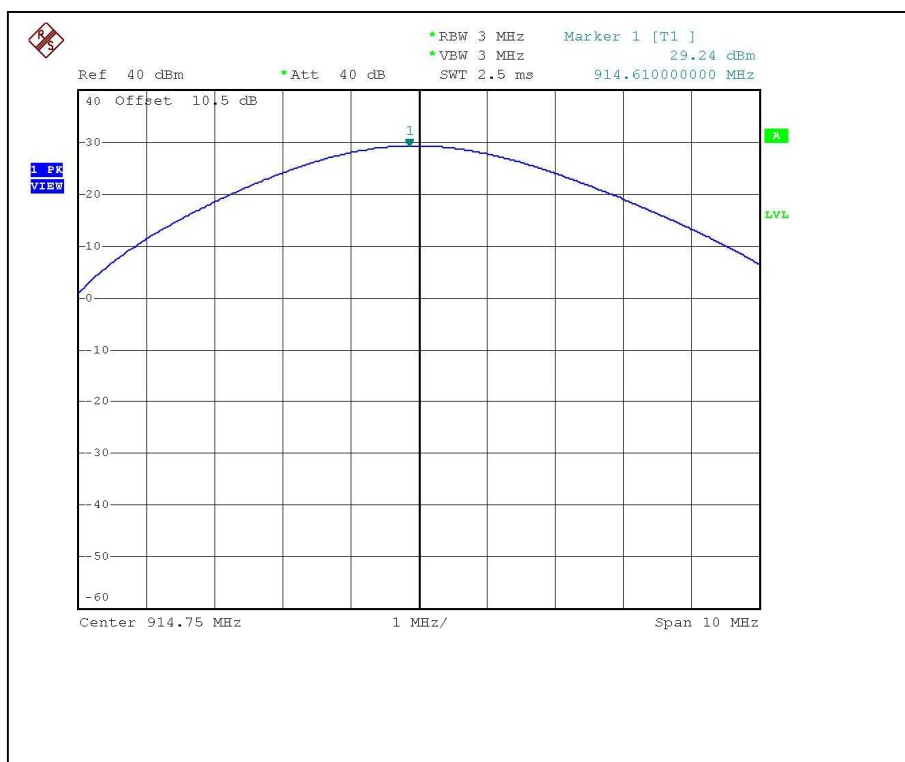
ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 965 hPa	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
0	902.75	839.460	29.24	30	PASS
24	914.75	839.460	29.24	30	PASS
49	927.25	831.764	29.20	30	PASS

Channel 0



Channel 24



Channel 49





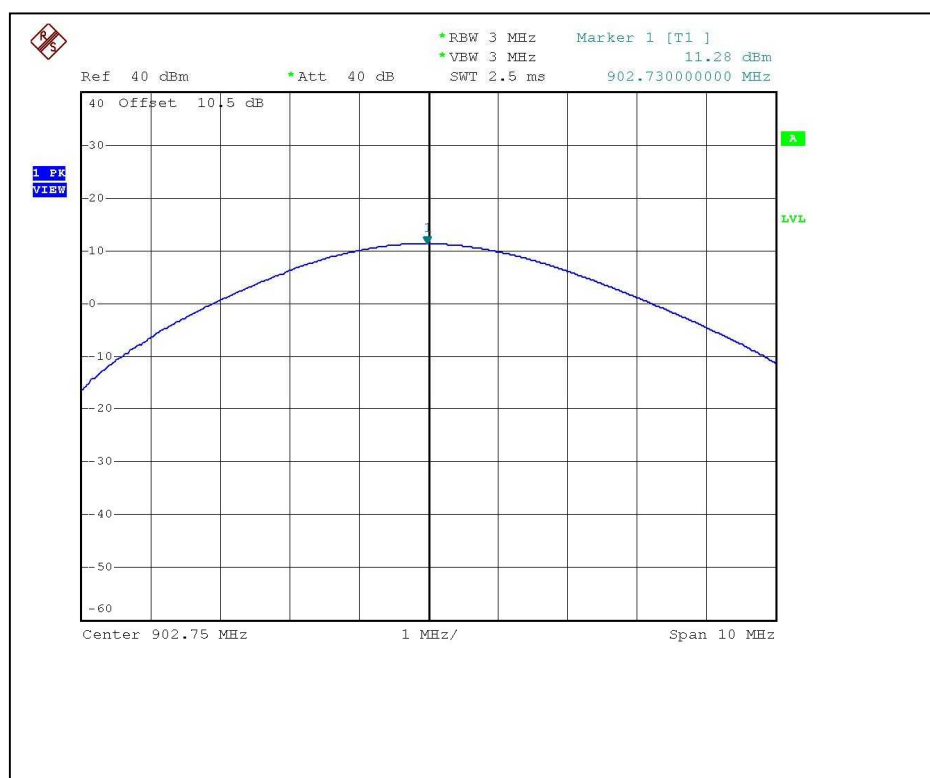
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For PR-ASK(XRM) – Low Power:

ENVIRONMENTAL CONDITIONS	20deg. C, 60%RH, 965 hPa	INPUT POWER (SYSTEM)	120Vac, 60 Hz
TESTED BY	Wen Yu		

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK POWER OUTPUT (mW)	PEAK POWER OUTPUT (dBm)	PEAK POWER LIMIT (dBm)	PASS/FAIL
0	902.75	13.428	11.28	30	PASS
24	914.75	10.789	10.33	30	PASS
49	927.25	11.858	10.74	30	PASS

Channel 0



Channel 24



Channel 49



4.3 RADIATED EMISSION MEASUREMENT

4.3.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Emissions radiated outside of the specified bands, shall be according to the general radiated limits in 15.247(d) and 15.209 as following:

Frequencies (MHz)	Field strength (microvolts/meter)	Measurement distance (meters)
0.009-0.490	$2400/F(\text{kHz})$	300
0.490-1.705	$24000/F(\text{kHz})$	30
1.705-30.0	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

As shown in 15.35(b), for frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

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4.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
ROHDE & SCHWARZ Spectrum Analyzer	FSP40	100036	Dec. 09, 2008	Dec. 08, 2009
HP Pre_Amplifier	8449B	3008A01923	Nov. 10, 2008	Nov. 09, 2009
ROHDE & SCHWARZ Test Receiver	ESCS30	847124/029	Sep.09, 2008	Sep. 08, 2009
SCHWARZBECK TRILOG Broadband Antenna	VULB 9168	138	April 29, 2009	April 28, 2010
Schwarzbeck Horn_Antenna	BBHA9120	D124	Dec. 09, 2008	Dec. 08, 2009
Schwarzbeck Horn_Antenna	BBHA 9170	BBHA9170153	Jan. 22, 2009	Jan. 21, 2010
R&S Loop Antenna	HFH2-Z2	100070	Jan. 14, 2008	Jan. 13, 2010
RF Switches	EMH-011	08009	Oct. 07, 2008	Oct. 06, 2009
RF CABLE (Chaintek)	Sucoflex 106	28077	Aug. 15, 2008	Aug. 14, 2009
RF Cable	8DFB	STCCAB-30M-1GHz	Oct. 07, 2008	Oct. 06, 2009
Software	ADT_Radiated_V7.6.15.9.2	NA	NA	NA
CT Antenna Tower & Turn Table	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, HP preamplifier (model: 8449B) and Spectrum Analyzer (model: FSP40) are used only for the measurement of emission frequency above 1GHz if tested.

3. The test was performed in Open Site No. C.

4. The FCC Site Registration No. is 656396.

5. The VCCI Site Registration No. is R-1626.

6. The CANADA Site Registration No. is IC 7450G-3.

4.3.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 10 meter open area test site. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was 10 dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10 dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

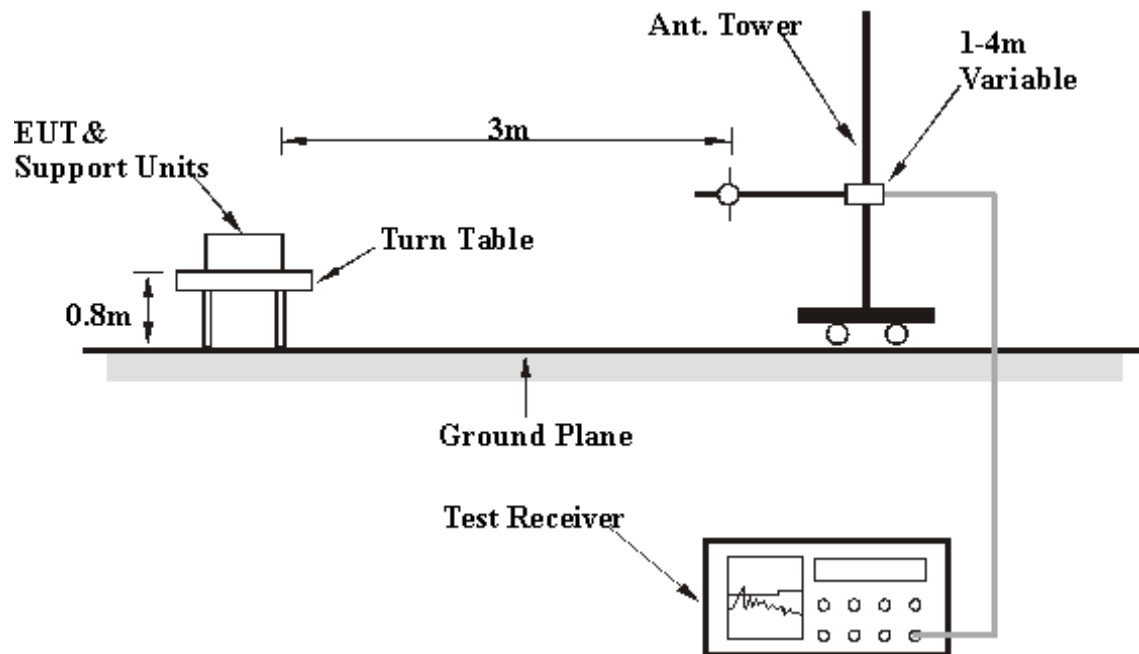
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Peak detection (PK) and Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Peak detection at frequency above 1GHz.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation

4.3.5 TEST SETUP



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



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4.3.6 TEST RESULTS

For PR-ASK(DRM) – High Power:

CHANNEL	0	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	30deg. C, 61%RH, 965 hPa	TESTED BY	Frank Liu

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	178.48	27.44 QP	43.50	-16.06	1.43 H	211	13.38	14.06
2	200.00	22.73 QP	43.50	-20.77	1.42 H	53	10.34	12.39
3	300.00	25.12 QP	46.00	-20.88	1.12 H	49	8.34	16.78
4	400.00	26.73 QP	46.00	-19.27	1.02 H	126	7.23	19.50
5	600.00	34.71 QP	46.00	-11.29	1.00 H	121	9.67	25.04
6	625.00	35.49 QP	46.00	-10.51	1.00 H	311	10.21	25.29

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	200.00	27.16 QP	43.50	-16.34	1.00 V	110	14.77	12.39
2	300.00	23.89 QP	46.00	-22.11	1.00 V	160	7.11	16.78
3	400.00	25.34 QP	46.00	-20.66	1.00 V	116	5.84	19.50
4	600.00	27.13 QP	46.00	-18.87	1.00 V	109	2.09	25.04
5	996.60	34.72 QP	54.00	-19.28	1.00 V	194	4.02	30.70

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



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CHANNEL	0, 24, 49	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	28deg. C, 64%RH, 965 hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

channel	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)
0	1	902.00	58.01 PK	100.91	-42.90	1.00 H	270	28.20	29.81
	2	902.00	44.61 AV	97.61	-53.00	1.00 H	270	14.80	29.81
	3	*902.75	120.91 PK			1.00 H	270	91.10	29.81
	4	*902.75	117.61 AV			1.00 H	270	87.80	29.81
24	1	*914.75	120.51 PK			1.00 H	264	90.60	29.91
	2	*914.75	117.01 AV			1.00 H	264	-87.10	29.91
49	1	*927.25	120.11 PK			1.00 H	71	90.10	30.01
	2	*927.25	116.61 AV			1.00 H	71	86.60	30.01
	3	928.00	57.72 PK	100.11	-42.39	1.00 H	71	27.70	30.02
	4	928.00	43.12 AV	96.61	-53.49	1.00 H	71	13.10	30.02

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

channel	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)
0	1	902.00	52.81 PK	96.71	-43.90	1.00 V	206	23.00	29.81
	2	902.00	39.11 AV	91.81	-52.70	1.00 V	206	9.30	29.81
	3	*902.75	116.71 PK			1.00 V	206	86.90	29.81
	4	*902.75	111.81 AV			1.00 V	206	82.00	29.81
24	1	*914.75	115.61 PK			1.00 V	204	85.70	29.91
	2	*914.75	110.21 AV			1.00 V	204	80.30	29.91
49	1	*927.25	115.31 PK			1.00 V	94	85.30	30.01
	2	*927.25	111.21 AV			1.00 V	94	81.20	30.01
	3	928.00	51.12PK	95.31	-44.19	1.00 V	94	21.10	30.02
	4	928.00	38.02 AV	91.21	-53.19	1.00 V	94	8.00	30.02

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



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CHANNEL	Channel 0	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2708.00	42.90 PK	74.00	-31.10	1.64 H	283	11.49	31.41
2	2708.00	36.30 AV	54.00	-17.70	1.64 H	283	4.89	31.41
3	3611.00	47.40 PK	74.00	-26.60	1.54 H	39	14.15	33.25
4	3611.00	37.30 AV	54.00	-16.70	1.54 H	39	4.05	33.25
5	4511.00	47.90 PK	74.00	-26.10	1.00 H	157	11.95	35.95
6	4511.00	33.10 AV	54.00	-20.90	1.00 H	157	-2.85	35.95
7	5416.50	47.20 PK	74.00	-26.80	1.03 H	174	9.94	37.26
8	5416.50	36.10 AV	54.00	-17.90	1.03 H	174	-1.16	37.26
9	8124.75	53.70 PK	74.00	-20.30	1.17 H	206	9.62	44.08
10	8124.75	43.80 AV	54.00	-10.20	1.17 H	206	-0.28	44.08
11	9027.50	53.90 PK	74.00	-20.10	1.29 H	134	9.37	44.53
12	9027.50	40.60 AV	54.00	-13.40	1.29 H	134	-3.93	44.53

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2708.00	44.10 PK	74.00	-29.90	1.00 V	211	12.69	31.41
2	2708.00	34.38 AV	54.00	-19.62	1.00 V	211	2.97	31.41
3	3611.00	46.40 PK	74.00	-27.60	1.54 V	83	13.15	33.25
4	3611.00	36.20 AV	54.00	-17.80	1.54 V	83	2.95	33.25
5	4511.00	45.30 PK	74.00	-28.70	1.31 V	126	9.35	35.95
6	4511.00	33.80 AV	54.00	-20.20	1.31 V	126	-2.15	35.95
7	5416.50	48.90 PK	74.00	-25.10	1.04 V	107	11.64	37.26
8	5416.50	37.00 AV	54.00	-17.00	1.04 V	107	-0.26	37.26
9	8124.75	54.30 PK	74.00	-19.70	1.13 V	120	10.22	44.08
10	8124.75	43.70 AV	54.00	-10.30	1.13 V	120	-0.38	44.08
11	9027.50	55.20 PK	74.00	-18.80	1.34 V	126	10.67	44.53
12	9027.50	40.80 AV	54.00	-13.20	1.34 V	126	-3.73	44.53

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



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CHANNEL	Channel 24	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2744.25	43.80 PK	74.00	-30.20	1.72 H	291	12.27	31.53
2	2744.25	37.20 AV	54.00	-16.80	1.72 H	291	5.67	31.53
3	3659.00	47.60 PK	74.00	-26.40	1.66 H	42	14.21	33.39
4	3659.00	38.10 AV	54.00	-15.90	1.66 H	42	4.71	33.39
5	4573.75	48.20 PK	74.00	-25.80	1.00 H	158	12.08	36.12
6	4573.75	33.40 AV	54.00	-20.60	1.00 H	158	-2.72	36.12
7	7318.00	55.10 PK	74.00	-18.90	1.02 H	183	11.97	43.13
8	7318.00	45.10 AV	54.00	-8.90	1.02 H	183	1.97	43.13
9	8232.75	53.80 PK	74.00	-20.20	1.14 H	203	9.71	44.09
10	8232.75	43.40 AV	54.00	-10.60	1.14 H	203	-0.69	44.09
11	9147.50	54.10 PK	74.00	-19.90	1.26 H	139	9.24	44.86
12	9147.50	41.40 AV	54.00	-12.60	1.26 H	139	-3.46	44.86

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2744.25	44.30 PK	74.00	-29.70	1.00 V	209	12.77	31.53
2	2744.25	34.62 AV	54.00	-19.38	1.00 V	209	3.09	31.53
3	3659.00	47.30 PK	74.00	-26.70	1.57 V	94	13.91	33.39
4	3659.00	36.80 AV	54.00	-17.20	1.57 V	94	3.41	33.39
5	4573.75	46.10 PK	74.00	-27.90	1.24 V	113	9.98	36.12
6	4573.75	34.20 AV	54.00	-19.80	1.24 V	113	-1.92	36.12
7	7318.00	51.77 PK	74.00	-22.23	1.09 V	102	8.64	43.13
8	7318.00	38.59 AV	54.00	-15.41	1.09 V	102	-4.54	43.13
9	8232.75	54.70 PK	74.00	-19.30	1.12 V	117	10.61	44.09
10	8232.75	44.20 AV	54.00	-9.80	1.12 V	117	0.11	44.09
11	9147.50	54.90 PK	74.00	-19.10	1.40 V	127	10.04	44.86
12	9147.50	40.60 AV	54.00	-13.40	1.40 V	127	-4.26	44.86

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



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CHANNEL	Channel 49	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2781.75	44.10 PK	74.00	-29.90	1.76 H	298	12.44	31.66
2	2781.75	37.90 AV	54.00	-16.10	1.76 H	298	6.24	31.66
3	3709.00	47.80 PK	74.00	-26.20	1.66 H	31	14.26	33.54
4	3709.00	38.40 AV	54.00	-15.60	1.66 H	31	4.86	33.54
5	4636.25	47.10 PK	74.00	-26.90	1.00 H	169	10.81	36.29
6	4636.25	32.90 AV	54.00	-21.10	1.00 H	169	-3.39	36.29
7	7418.00	55.40 PK	74.00	-18.60	1.00 H	198	12.27	43.13
8	7418.00	45.40 AV	54.00	-8.60	1.00 H	198	2.27	43.13
9	8345.25	54.30 PK	74.00	-19.70	1.10 H	201	10.20	44.10
10	8345.25	43.60 AV	54.00	-10.40	1.10 H	201	-0.50	44.10

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	2781.75	44.10 PK	74.00	-29.90	1.00 V	205	12.44	31.66
2	2781.75	34.57 AV	54.00	-19.43	1.00 V	205	2.91	31.66
3	3709.00	47.90 PK	74.00	-26.10	1.64 V	95	14.36	33.54
4	3709.00	37.20 AV	54.00	-16.80	1.64 V	95	3.66	33.54
5	4636.25	46.40 PK	74.00	-27.60	1.22 V	118	10.11	36.29
6	4636.25	34.40 AV	54.00	-19.60	1.22 V	118	-1.89	36.29
7	7418.00	56.26 PK	74.00	-17.74	1.10 V	141	13.13	43.13
8	7418.00	46.18 AV	54.00	-7.82	1.10 V	141	3.05	43.13
9	8345.25	55.00 PK	74.00	-19.00	1.14 V	106	10.90	44.10
10	8345.25	44.70 AV	54.00	-9.30	1.14 V	106	0.60	44.10

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



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For PR-ASK(DRM) – Low Power:

CHANNEL	0	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	30deg. C, 61%RH, 965 hPa	TESTED BY	Frank Liu

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	178.48	25.34 QP	43.50	-18.16	1.23 H	219	11.28	14.06
2	200.00	21.34 QP	43.50	-22.16	1.37 H	49	8.95	12.39
3	300.00	25.98 QP	46.00	-20.02	1.23 H	46	9.20	16.78
4	400.00	26.14 QP	46.00	-19.86	1.03 H	124	6.64	19.50
5	600.00	34.66 QP	46.00	-11.34	1.00 H	143	9.62	25.04
6	625.00	35.11 QP	46.00	-10.89	1.00 H	311	9.82	25.29

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	200.00	26.49 QP	43.50	-17.01	1.00 V	197	14.10	12.39
2	300.00	22.46 QP	46.00	-23.54	1.00 V	134	5.68	16.78
3	400.00	24.16 QP	46.00	-21.84	1.00 V	317	4.66	19.50
4	600.00	27.66 QP	46.00	-18.34	1.00 V	126	2.62	25.04
5	996.60	34.69 QP	54.00	-19.31	1.00 V	126	3.99	30.70

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



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CHANNEL	0, 24, 49	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	28deg. C, 64%RH, 965 hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

channel	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)
0	1	902.00	54.41PK	98.21	-43.80	1.00 H	57	24.60	29.81
	2	902.00	40.11 AV	93.61	-53.50	1.00 H	57	10.30	29.81
	3	*902.75	118.21 PK			1.00 H	54	88.40	29.81
	4	*902.75	113.61 AV			1.00 H	54	83.80	29.81
24	1	*914.75	118.01 PK			1.00 H	51	88.10	29.91
	2	*914.75	113.31 AV			1.00 H	51	83.40	29.91
49	1	*927.25	118.61 PK			1.00 H	231	88.60	30.01
	2	*927.25	113.91 AV			1.00 H	231	83.90	30.01
	3	928.00	53.12 PK	98.61	-45.49	1.00 H	231	23.10	30.02
	4	928.00	39.22 AV	93.91	-54.69	1.00 H	231	9.20	30.02

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

channel	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)
0	1	902.00	49.91 PK	94.41	-44.50	1.00 V	209	20.10	29.81
	2	902.00	36.21 AV	89.41	-53.20	1.00 V	209	6.40	29.81
	3	*902.75	114.41 PK			1.00 V	209	84.60	29.81
	4	*902.75	109.41 AV			1.00 V	209	79.60	29.81
24	1	*914.75	115.61 PK			1.00 V	204	85.70	29.91
	2	*914.75	110.21 AV			1.00 V	204	80.30	29.91
49	1	*927.25	116.31 PK			1.00 V	214	86.30	30.01
	2	*927.25	110.71 AV			1.00 V	214	80.70	30.01
	3	928.00	49.72 PK	96.31	-46.59	1.00 V	214	19.70	30.02
	4	928.00	35.82 AV	90.71	-54.89	1.00 V	214	5.80	30.02

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



A D T

CHANNEL	Channel 0	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2708.00	43.16 PK	74.00	-30.84	1.79 H	286	11.75	31.41
2	2708.00	37.24 AV	54.00	-16.76	1.79 H	286	5.83	31.41
3	3611.00	46.52 PK	74.00	-27.48	1.54 H	63	13.27	33.25
4	3611.00	36.43 AV	54.00	-17.57	1.54 H	63	3.18	33.25
5	4511.00	46.83 PK	74.00	-27.17	1.00 H	144	10.88	35.95
6	4511.00	33.54 AV	54.00	-20.46	1.00 H	144	-2.41	35.95
7	5416.50	47.10 PK	74.00	-26.90	1.00 H	184	9.84	37.26
8	5416.50	33.90 AV	54.00	-20.10	1.00 H	184	-3.36	37.26
9	8124.75	53.16 PK	74.00	-20.84	1.07 H	216	9.08	44.08
10	8124.75	42.29 AV	54.00	-11.71	1.07 H	216	-1.79	44.08
11	9027.50	54.16 PK	74.00	-19.84	1.26 H	107	9.63	44.53
12	9027.50	38.17 AV	54.00	-15.83	1.26 H	107	-6.36	44.53

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2708.00	44.13 PK	74.00	-29.87	1.03 V	206	12.72	31.41
2	2708.00	34.23 AV	54.00	-19.77	1.03 V	206	2.82	31.41
3	3611.00	47.24 PK	74.00	-26.76	1.48 V	74	13.99	33.25
4	3611.00	36.53 AV	54.00	-17.47	1.48 V	74	3.28	33.25
5	4511.00	45.00 PK	74.00	-29.00	1.26 V	136	9.05	35.95
6	4511.00	33.60 AV	54.00	-20.40	1.26 V	136	-2.35	35.95
7	5416.50	47.60 PK	74.00	-26.40	1.27 V	127	10.34	37.26
8	5416.50	35.40 AV	54.00	-18.60	1.27 V	127	-1.86	37.26
9	8124.75	55.84 PK	74.00	-18.16	1.04 V	128	11.76	44.08
10	8124.75	44.29 AV	54.00	-9.71	1.04 V	128	0.21	44.08
11	9027.50	54.13 PK	74.00	-19.87	1.53 V	116	9.60	44.53
12	9027.50	38.74 AV	54.00	-15.26	1.53 V	116	-5.79	44.53

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



A D T

CHANNEL	Channel 24	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2744.25	43.24 PK	74.00	-30.76	1.87 H	284	11.71	31.53
2	2744.25	37.12 AV	54.00	-16.88	1.87 H	284	5.59	31.53
3	3659.00	47.11 PK	74.00	-26.89	1.59 H	57	13.72	33.39
4	3659.00	37.93 AV	54.00	-16.07	1.59 H	57	4.54	33.39
5	4573.75	47.92 PK	74.00	-26.08	1.00 H	148	11.80	36.12
6	4573.75	33.62 AV	54.00	-20.38	1.00 H	148	-2.50	36.12
7	7318.00	45.12 PK	74.00	-28.88	1.00 H	173	1.99	43.13
8	7318.00	39.80 AV	54.00	-14.20	1.00 H	173	-3.33	43.13
9	8232.75	53.24 PK	74.00	-20.76	1.28 H	213	9.15	44.09
10	8232.75	42.43 AV	54.00	-11.57	1.28 H	213	-1.66	44.09
11	9147.50	54.11 PK	74.00	-19.89	1.24 H	117	9.25	44.86
12	9147.50	38.42 AV	54.00	-15.58	1.24 H	117	-6.44	44.86

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2744.25	43.82 PK	74.00	-30.18	1.07 V	206	12.29	31.53
2	2744.25	34.17 AV	54.00	-19.83	1.07 V	206	2.64	31.53
3	3659.00	47.69 PK	74.00	-26.31	1.57 V	84	14.30	33.39
4	3659.00	36.83 AV	54.00	-17.17	1.57 V	84	3.44	33.39
5	4573.75	45.16 PK	74.00	-28.84	1.24 V	137	9.04	36.12
6	4573.75	33.72 AV	54.00	-20.28	1.24 V	137	-2.40	36.12
7	7318.00	53.40 PK	74.00	-20.60	1.24 V	113	10.27	43.13
8	7318.00	39.20 AV	54.00	-14.80	1.24 V	113	-3.93	43.13
9	8232.75	55.79 PK	74.00	-18.21	1.08 V	109	11.70	44.09
10	8232.75	44.73 AV	54.00	-9.27	1.08 V	109	0.64	44.09
11	9147.50	54.20 PK	74.00	-19.80	1.43 V	107	9.34	44.86
12	9147.50	39.20 AV	54.00	-14.80	1.43 V	107	-5.66	44.86

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



A D T

CHANNEL	Channel 49	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2781.75	43.81 PK	74.00	-30.19	1.84 H	283	12.15	31.66
2	2781.75	37.29 AV	54.00	-16.71	1.84 H	283	5.63	31.66
3	3709.00	47.24 PK	74.00	-26.76	1.64 H	214	13.70	33.54
4	3709.00	38.13 AV	54.00	-15.87	1.64 H	214	4.59	33.54
5	4636.25	48.20 PK	74.00	-25.80	1.00 H	154	11.91	36.29
6	4636.25	33.40 AV	54.00	-20.60	1.00 H	154	-2.89	36.29
7	7418.00	46.40 PK	74.00	-27.60	1.00 H	172	3.27	43.13
8	7418.00	33.20 AV	54.00	-20.80	1.00 H	172	-9.93	43.13
9	8345.25	53.72 PK	74.00	-20.28	1.08 H	209	9.62	44.10
10	8345.25	42.84 AV	54.00	-11.16	1.08 H	209	-1.26	44.10

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	2781.75	44.02 PK	74.00	-29.98	1.00 V	204	12.36	31.66
2	2781.75	34.23 AV	54.00	-19.77	1.00 V	204	2.57	31.66
3	3709.00	47.83 PK	74.00	-26.17	1.54 V	93	14.29	33.54
4	3709.00	37.12 AV	54.00	-16.88	1.54 V	93	3.58	33.54
5	4636.25	45.24 PK	74.00	-28.76	1.21 V	114	8.95	36.29
6	4636.25	33.98 AV	54.00	-20.02	1.21 V	114	-2.31	36.29
7	7418.00	53.50 PK	74.00	-20.50	1.05 V	103	10.37	43.13
8	7418.00	39.60 AV	54.00	-14.40	1.05 V	103	-3.53	43.13
9	8345.25	54.63 PK	74.00	-19.37	1.12 V	104	10.53	44.10
10	8345.25	44.55 AV	54.00	-9.45	1.12 V	104	0.45	44.10

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



A D T

For DSB-ASK(MRM) – High Power:

CHANNEL	0	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	30deg. C, 61%RH, 965 hPa	TESTED BY	Frank Liu

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	178.48	28.24 QP	43.50	-15.26	1.57 H	226	14.18	14.06
2	200.00	21.45 QP	43.50	-22.05	1.57 H	82	9.06	12.39
3	300.00	25.05 QP	46.00	-20.95	1.33 H	8	8.27	16.78
4	400.00	27.94 QP	46.00	-18.06	1.18 H	148	8.44	19.50
5	600.00	35.59 QP	46.00	-10.41	1.00 H	140	10.55	25.04
6	625.00	35.81 QP	46.00	-10.19	1.00 H	318	10.53	25.29

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	200.00	28.26 QP	43.50	-15.24	1.00 V	209	15.87	12.39
2	300.00	24.73 QP	46.00	-21.27	1.00 V	95	7.95	16.78
3	400.00	24.25 QP	46.00	-21.75	1.00 V	307	4.75	19.50
4	600.00	29.39 QP	46.00	-16.61	1.00 V	106	4.35	25.04
5	996.60	33.21 QP	54.00	-20.79	1.00 V	165	2.51	30.70

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



A D T

CHANNEL	0, 24, 49	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	28deg. C, 64%RH, 965 hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

channel	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)
0	1	902.00	58.71 PK	104.14	-45.70	1.02 H	270	28.90	29.81
	2	902.00	45.61 AV	100.51	-54.90	1.02 H	270	15.80	29.81
	3	*902.75	124.41 PK			1.00 H	270	94.60	29.81
	4	*902.75	120.51 AV			1.00 H	270	90.70	29.81
24	1	*914.75	122.51 PK			1.00 H	279	92.60	29.91
	2	*914.75	118.51 AV			1.00 H	279	88.60	29.91
49	1	*927.25	125.41 PK			1.00 H	65	95.40	30.01
	2	*927.25	122.81 AV			1.00 H	65	92.80	30.01
	3	928.00	59.42 PK	105.41	-45.99	1.00 H	65	29.40	30.02
	4	928.00	46.32 AV	102.81	-56.49	1.00 H	65	16.30	30.02

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

channel	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)
0	1	902.00	54.61 PK	99.11	-44.50	1.00 V	225	24.80	29.81
	2	902.00	41.91 AV	96.91	-55.00	1.00 V	225	12.10	29.81
	3	*902.75	119.11 PK			1.00 V	225	89.30	29.81
	4	*902.75	116.91 AV			1.00 V	225	87.10	29.81
24	1	*914.75	119.81 PK			1.00 V	226	89.90	29.91
	2	*914.75	117.11 AV			1.00 V	226	87.20	29.91
49	1	*927.25	118.91 PK			1.00 V	93	88.90	30.01
	2	*927.25	116.41 AV			1.00 V	93	86.40	30.01
	3	928.00	54.62 PK	98.91	-44.29	1.00 V	93	24.60	30.02
	4	928.00	40.62 AV	96.41	-55.79	1.00 V	93	10.60	30.02

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



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CHANNEL	Channel 0	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2708.00	45.93 PK	74.00	-28.07	1.51 H	42	14.52	31.41
2	2708.00	35.92 AV	54.00	-18.08	1.51 H	42	4.51	31.41
3	3611.00	47.24 PK	74.00	-26.76	1.54 H	29	13.99	33.25
4	3611.00	38.14 AV	54.00	-15.86	1.54 H	29	4.89	33.25
5	4511.00	45.83 PK	74.00	-28.17	1.04 H	126	9.88	35.95
6	4511.00	33.10 AV	54.00	-20.90	1.04 H	126	-2.85	35.95
7	5416.50	49.30 PK	74.00	-24.70	1.02 H	167	12.04	37.26
8	5416.50	37.40 AV	54.00	-16.60	1.02 H	167	0.14	37.26
9	8124.75	55.27 PK	74.00	-18.73	1.14 H	208	11.19	44.08
10	8124.75	42.93 AV	54.00	-11.07	1.14 H	208	-1.15	44.08
11	9027.50	54.29 PK	74.00	-19.71	1.24 H	129	9.76	44.53
12	9027.50	40.60 AV	54.00	-13.40	1.24 H	129	-3.93	44.53

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2708.00	46.11 PK	74.00	-27.89	1.04 V	219	14.71	31.41
2	2708.00	35.10 AV	54.00	-18.90	1.04 V	219	3.69	31.41
3	3611.00	50.63 PK	74.00	-23.37	1.57 V	93	17.38	33.25
4	3611.00	38.42 AV	54.00	-15.58	1.57 V	93	5.17	33.25
5	4511.00	46.93 PK	74.00	-27.07	1.26 V	129	10.98	35.95
6	4511.00	34.00 AV	54.00	-20.00	1.26 V	129	-1.95	35.95
7	5416.50	57.40 PK	74.00	-16.60	1.09 V	113	20.14	37.26
8	5416.50	40.23 AV	54.00	-13.77	1.09 V	113	2.97	37.26
9	8124.75	56.80 PK	74.00	-17.20	1.27 V	144	12.72	44.08
10	8124.75	43.29 AV	54.00	-10.71	1.27 V	144	-0.79	44.08
11	9027.50	53.72 PK	74.00	-20.28	1.39 V	127	9.19	44.53
12	9027.50	40.13 AV	54.00	-13.87	1.39 V	127	-4.40	44.53

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



A D T

CHANNEL	Channel 24	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2744.25	46.10 PK	74.00	-27.90	1.54 H	39	14.57	31.53
2	2744.25	36.20 AV	54.00	-17.80	1.54 H	39	4.67	31.53
3	3659.00	47.30 PK	74.00	-26.70	1.59 H	23	13.91	33.39
4	3659.00	38.20 AV	54.00	-15.80	1.59 H	23	4.81	33.39
5	4573.75	46.10 PK	74.00	-27.90	1.01 H	127	9.98	36.12
6	4573.75	33.40 AV	54.00	-20.60	1.01 H	127	-2.72	36.12
7	7318.00	55.80 PK	74.00	-18.20	1.00 H	164	12.67	43.13
8	7318.00	43.90 AV	54.00	-10.10	1.00 H	164	0.77	43.13
9	8232.75	55.14 PK	74.00	-18.86	1.12 H	209	11.05	44.09
10	8232.75	43.10 AV	54.00	-10.90	1.12 H	209	-0.99	44.09
11	9147.50	54.70 PK	74.00	-19.30	1.21 H	113	9.84	44.86
12	9147.50	41.30 AV	54.00	-12.70	1.21 H	113	-3.56	44.86

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2744.25	46.23 PK	74.00	-27.77	1.02 V	213	14.70	31.53
2	2744.25	35.40 AV	54.00	-18.60	1.02 V	213	3.87	31.53
3	3659.00	50.20 PK	74.00	-23.80	1.54 V	83	16.81	33.39
4	3659.00	39.70 AV	54.00	-14.30	1.54 V	83	6.31	33.39
5	4573.75	47.12 PK	74.00	-26.88	1.27 V	124	11.00	36.12
6	4573.75	34.30 AV	54.00	-19.70	1.27 V	124	-1.82	36.12
7	7318.00	57.66 PK	74.00	-16.34	1.13 V	104	14.53	43.13
8	7318.00	46.25 AV	54.00	-7.75	1.13 V	104	3.12	43.13
9	8232.75	56.10 PK	74.00	-17.90	1.26 V	149	12.01	44.09
10	8232.75	44.10 AV	54.00	-9.90	1.26 V	149	0.01	44.09
11	9147.50	54.10 PK	74.00	-19.90	1.41 V	126	9.24	44.86
12	9147.50	40.20 AV	54.00	-13.80	1.41 V	126	-4.66	44.86

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



A D T

CHANNEL	Channel 49	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2781.75	46.30 PK	74.00	-27.70	1.57 H	29	14.64	31.66
2	2781.75	37.40 AV	54.00	-16.60	1.57 H	29	5.74	31.66
3	3709.00	48.60 PK	74.00	-25.40	1.67 H	13	15.06	33.54
4	3709.00	39.00 AV	54.00	-15.00	1.67 H	13	5.46	33.54
5	4636.25	46.00 PK	74.00	-28.00	1.00 H	124	9.71	36.29
6	4636.25	32.60 AV	54.00	-21.40	1.00 H	124	-3.69	36.29
7	7418.00	55.20 PK	74.00	-18.80	1.00 H	172	12.07	43.13
8	7418.00	43.50 AV	54.00	-10.50	1.00 H	172	0.37	43.13
9	8345.25	54.90 PK	74.00	-19.10	1.10 H	201	10.80	44.10
10	8345.25	42.50 AV	54.00	-11.50	1.10 H	201	-1.60	44.10

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	2781.75	46.50 PK	74.00	-27.50	1.03 V	204	14.84	31.66
2	2781.75	35.70 AV	54.00	-18.30	1.03 V	204	4.04	31.66
3	3709.00	50.10 PK	74.00	-23.90	1.59 V	97	16.56	33.54
4	3709.00	40.00 AV	54.00	-14.00	1.59 V	97	6.46	33.54
5	4636.25	47.70 PK	74.00	-26.30	1.24 V	137	11.41	36.29
6	4636.25	35.40 AV	54.00	-18.60	1.24 V	137	-0.89	36.29
7	7418.00	57.42 PK	74.00	-16.58	1.17 V	106	14.29	43.13
8	7418.00	47.12 AV	54.00	-6.88	1.17 V	106	3.99	43.13
9	8345.25	56.30 PK	74.00	-17.70	1.27 V	127	12.20	44.10
10	8345.25	44.70 AV	54.00	-9.30	1.27 V	127	0.60	44.10

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



A D T

For DSB-ASK(MRM) – Low Power:

CHANNEL	0	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	30deg. C, 61%RH, 965 hPa	TESTED BY	Frank Liu

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	178.48	25.22 QP	43.50	-18.28	1.03 H	209	11.16	14.06
2	200.00	25.37 QP	43.50	-18.13	1.29 H	91	12.98	12.39
3	300.00	25.53 QP	46.00	-20.47	1.26 H	173	8.75	16.78
4	400.00	27.13 QP	46.00	-18.87	1.06 H	127	7.63	19.50
5	600.00	34.16 QP	46.00	-11.84	1.00 H	169	9.12	25.04
6	625.00	36.71 QP	46.00	-9.29	1.00 H	310	11.43	25.29

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	200.00	27.34 QP	43.50	-16.16	1.00 V	224	14.95	12.39
2	300.00	23.46 QP	46.00	-22.54	1.00 V	98	6.68	16.78
3	400.00	25.31 QP	46.00	-20.69	1.00 V	311	5.81	19.50
4	600.00	28.64 QP	46.00	-17.36	1.00 V	100	3.60	25.04
5	996.60	34.31 QP	54.00	-19.69	1.00 V	103	3.61	30.70

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



A D T

CHANNEL	0, 24, 49	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	28deg. C, 64%RH, 965 hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

channel	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)
0	1	902.00	48.91 PK	85.41	-36.50	1.00 H	54	19.10	29.81
	2	902.00	37.11 AV	83.51	-46.40	1.00 H	54	7.30	29.81
	3	*902.75	105.41 PK			1.00 H	57	75.60	29.81
	4	*902.75	103.51 AV			1.00 H	57	73.70	29.81
24	1	*914.75	105.81 PK			1.00 H	96	75.90	29.91
	2	*914.75	103.01 AV			1.00 H	96	-73.10	29.91
49	1	*927.25	105.21 PK			1.00 H	62	75.20	30.01
	2	*927.25	102.81 AV			1.00 H	62	72.80	30.01
	3	928.00	48.72 PK	85.21	-36.49	1.00 H	62	18.70	30.02
	4	928.00	35.42 AV	82.81	-47.39	1.00 H	62	5.40	30.02

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

channel	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)
0	1	902.00	48.01PK	80.71	-32.70	1.00 V	214	18.20	29.81
	2	902.00	36.11 AV	80.11	-44.00	1.00 V	214	6.30	29.81
	3	*902.75	100.71 PK			1.00 V	13	70.90	29.81
	4	*902.75	100.11 AV			1.00 V	13	70.30	29.81
24	1	*914.75	100.11 PK			1.00 V	214	70.20	29.91
	2	*914.75	99.21 AV			1.00 V	214	69.30	29.91
49	1	*927.25	99.31 PK			1.00 V	99	69.30	30.01
	2	*927.25	98.41 AV			1.00 V	99	68.40	30.01
	3	928.00	47.32 PK	79.31	-31.99	1.00 V	99	17.30	30.02
	4	928.00	35.42 AV	78.47	-42.99	1.00 V	99	5.40	30.02

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



A D T

CHANNEL	Channel 0	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2708.00	45.27 PK	74.00	-28.73	1.64 H	167	13.86	31.41
2	2708.00	36.26 AV	54.00	-17.74	1.64 H	167	4.85	31.41
3	3611.00	47.23 PK	74.00	-26.77	1.64 H	43	13.98	33.25
4	3611.00	37.64 AV	54.00	-16.36	1.64 H	43	4.39	33.25
5	4511.00	46.13 PK	74.00	-27.87	1.00 H	162	10.18	35.95
6	4511.00	32.10 AV	54.00	-21.90	1.00 H	162	-3.85	35.95
7	5416.50	46.10 PK	74.00	-27.90	1.07 H	159	8.84	37.26
8	5416.50	33.40 AV	54.00	-20.60	1.07 H	159	-3.86	37.26
9	8124.75	55.73 PK	74.00	-18.27	1.20 H	207	11.65	44.08
10	8124.75	42.69 AV	54.00	-11.31	1.20 H	207	-1.39	44.08
11	9027.50	54.24 PK	74.00	-19.76	1.26 H	144	9.71	44.53
12	9027.50	40.26 AV	54.00	-13.74	1.26 H	144	-4.27	44.53

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2708.00	45.24 PK	74.00	-28.76	1.04 V	218	13.83	31.41
2	2708.00	34.12 AV	54.00	-19.88	1.04 V	218	2.71	31.41
3	3611.00	48.73 PK	74.00	-25.27	1.54 V	79	15.48	33.25
4	3611.00	38.42 AV	54.00	-15.58	1.54 V	79	5.17	33.25
5	4511.00	46.71 PK	74.00	-27.29	1.26 V	134	10.76	35.95
6	4511.00	35.42 AV	54.00	-18.58	1.26 V	134	-0.53	35.95
7	5416.50	47.10 PK	74.00	-26.90	1.20 V	104	9.84	37.26
8	5416.50	35.30 AV	54.00	-18.70	1.20 V	104	-1.96	37.26
9	8124.75	54.93 PK	74.00	-19.07	1.20 V	174	10.85	44.08
10	8124.75	43.11 AV	54.00	-10.89	1.20 V	174	-0.97	44.08
11	9027.50	53.72 PK	74.00	-20.28	1.39 V	138	9.19	44.53
12	9027.50	38.94 AV	54.00	-15.06	1.39 V	138	-5.59	44.53

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



A D T

CHANNEL	Channel 24	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2744.25	46.13 PK	74.00	-27.87	1.64 H	269	14.60	31.53
2	2744.25	36.80 AV	54.00	-17.20	1.64 H	269	5.27	31.53
3	3659.00	47.64 PK	74.00	-26.36	1.54 H	56	14.25	33.39
4	3659.00	38.12 AV	54.00	-15.88	1.54 H	56	4.73	33.39
5	4573.75	46.50 PK	74.00	-27.50	1.00 H	154	10.38	36.12
6	4573.75	32.40 AV	54.00	-21.60	1.00 H	154	-3.72	36.12
7	7318.00	55.29 PK	74.00	-18.71	1.02 H	158	12.16	43.13
8	7318.00	42.73 AV	54.00	-11.27	1.02 H	158	-0.40	43.13
9	8232.75	54.93 PK	74.00	-19.07	1.21 H	209	10.84	44.09
10	8232.75	42.34 AV	54.00	-11.66	1.21 H	209	-1.75	44.09
11	9147.50	54.62 PK	74.00	-19.38	1.24 H	147	9.76	44.86
12	9147.50	40.80 AV	54.00	-13.20	1.24 H	147	-4.06	44.86

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2744.25	45.93 PK	74.00	-28.07	1.06 V	219	14.40	31.53
2	2744.25	34.26 AV	54.00	-19.74	1.06 V	219	2.73	31.53
3	3659.00	49.12 PK	74.00	-24.88	1.54 V	73	15.73	33.39
4	3659.00	38.87 AV	54.00	-15.13	1.54 V	73	5.48	33.39
5	4573.75	46.83 PK	74.00	-27.17	1.29 V	137	10.71	36.12
6	4573.75	35.23 AV	54.00	-18.77	1.29 V	137	-0.89	36.12
7	7318.00	53.40 PK	74.00	-20.60	1.24 V	106	10.27	43.13
8	7318.00	39.70 AV	54.00	-14.30	1.24 V	106	-3.43	43.13
9	8232.75	55.29 PK	74.00	-18.71	1.19 V	134	11.20	44.09
10	8232.75	43.26 AV	54.00	-10.74	1.19 V	134	-0.83	44.09
11	9147.50	53.84 PK	74.00	-20.16	1.42 V	127	8.98	44.86
12	9147.50	39.73 AV	54.00	-14.27	1.42 V	127	-5.13	44.86

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



A D T

CHANNEL	Channel 49	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2781.75	46.23 PK	74.00	-27.77	1.58 H	32	14.57	31.66
2	2781.75	37.10 AV	54.00	-16.90	1.58 H	32	5.44	31.66
3	3709.00	48.59 PK	74.00	-25.41	1.64 H	23	15.05	33.54
4	3709.00	38.40 AV	54.00	-15.60	1.64 H	23	4.86	33.54
5	4636.25	46.70 PK	74.00	-27.30	1.00 H	129	10.41	36.29
6	4636.25	32.80 AV	54.00	-21.20	1.00 H	129	-3.49	36.29
7	7418.00	55.40 PK	74.00	-18.60	1.00 H	174	12.27	43.13
8	7418.00	43.10 AV	54.00	-10.90	1.00 H	174	-0.03	43.13
9	8345.25	55.10 PK	74.00	-18.90	1.08 H	204	11.00	44.10
10	8345.25	40.60 AV	54.00	-13.40	1.08 H	204	-3.50	44.10

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	2781.75	46.10 PK	74.00	-27.90	1.04 V	213	14.44	31.66
2	2781.75	34.80 AV	54.00	-19.20	1.04 V	213	3.14	31.66
3	3709.00	49.30 PK	74.00	-24.70	1.51 V	81	15.76	33.54
4	3709.00	39.20 AV	54.00	-14.80	1.51 V	81	5.66	33.54
5	4636.25	47.10 PK	74.00	-26.90	1.21 V	134	10.81	36.29
6	4636.25	35.10 AV	54.00	-18.90	1.21 V	134	-1.19	36.29
7	7418.00	53.70 PK	74.00	-20.30	1.13 V	107	10.57	43.13
8	7418.00	39.80 AV	54.00	-14.20	1.13 V	107	-3.33	43.13
9	8345.25	55.70 PK	74.00	-18.30	1.24 V	126	11.60	44.10
10	8345.25	42.10 AV	54.00	-11.90	1.24 V	126	-2.00	44.10

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



A D T

For PR-ASK(XRM) – High Power:

CHANNEL	0	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	30deg. C, 61%RH, 965 hPa	TESTED BY	Frank Liu

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	178.48	27.16 QP	43.50	-16.34	1.54 H	231	13.10	14.06
2	200.00	22.34 QP	43.50	-21.16	1.49 H	49	9.95	12.39
3	300.00	25.73 QP	46.00	-20.27	1.24 H	23	8.95	16.78
4	400.00	26.37 QP	46.00	-19.63	1.14 H	123	6.87	19.50
5	600.00	34.86 QP	46.00	-11.14	1.00 H	122	9.82	25.04
6	625.00	35.31 QP	46.00	-10.69	1.00 H	315	10.03	25.29

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	200.00	27.46 QP	43.50	-16.04	1.00 V	129	15.07	12.39
2	300.00	23.67 QP	46.00	-22.33	1.00 V	164	6.89	16.78
3	400.00	25.94 QP	46.00	-20.06	1.00 V	136	6.44	19.50
4	600.00	27.84 QP	46.00	-18.16	1.00 V	114	2.80	25.04
5	996.60	34.83 QP	54.00	-19.17	1.00 V	120	4.13	30.70

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



A D T

CHANNEL	0, 24, 49	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	28deg. C, 64%RH, 965 hPa	TESTED BY	Frank Liu

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

channel	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)
0	1	902.00	58.71 PK	104.11	-45.40	1.00 H	186	28.90	29.81
	2	902.00	45.21 AV	101.31	-56.10	1.00 H	186	15.40	29.81
	3	*902.75	124.11 PK			1.00 H	186	94.30	29.81
	4	*902.75	121.31 AV			1.00 H	186	91.50	29.81
24	1	*914.75	124.01 PK			1.00 H	184	94.10	29.91
	2	*914.75	120.11 AV			1.00 H	184	90.20	29.91
49	1	*927.25	123.71 PK			1.00 H	71	93.70	30.01
	2	*927.25	120.81 AV			1.00 H	71	90.80	30.01
	3	928.00	58.02 PK	103.71	-45.69	1.00 H	71	28.00	30.02
	4	928.00	44.12 AV	100.81	-56.69	1.00 H	71	14.10	30.02

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

channel	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)
0	1	902.00	54.71 PK	99.91	-45.20	1.00 V	225	24.90	29.81
	2	902.00	41.21 AV	97.01	-55.80	1.00 V	225	11.40	29.81
	3	*902.75	119.91 PK			1.00 V	225	90.10	29.81
	4	*902.75	117.01 AV			1.00 V	225	87.20	29.81
24	1	*914.75	119.21 PK			1.00 V	97	89.30	29.91
	2	*914.75	116.81 AV			1.00 V	97	86.90	29.91
49	1	*927.25	102.61 PK			1.00 V	94	72.60	30.01
	2	*927.25	96.81 AV			1.00 V	94	66.80	30.01
	3	928.00	44.12 PK	98.71	-44.39	1.00 V	94	14.10	30.02
	4	928.00	31.50 AV	96.91	-55.03	1.00 V	94	1.48	30.02

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



A D T

CHANNEL	Channel 0	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2708.00	41.10 PK	74.00	-32.90	1.69 H	120	9.69	31.41
2	2708.00	32.84 AV	54.00	-21.16	1.69 H	120	1.43	31.41
3	3611.00	47.89 PK	74.00	-26.11	1.98 H	253	14.64	33.25
4	3611.00	37.00 AV	54.00	-17.00	1.98 H	253	3.75	33.25
5	4511.00	45.30 PK	74.00	-28.70	1.09 H	127	9.35	35.95
6	4511.00	32.30 AV	54.00	-21.70	1.09 H	127	-3.65	35.95
7	5416.50	47.30 PK	74.00	-26.70	1.24 H	110	10.04	37.26
8	5416.50	33.90 AV	54.00	-20.10	1.24 H	110	-3.36	37.26
9	8124.75	54.60 PK	74.00	-19.40	1.14 H	208	10.52	44.08
10	8124.75	40.30 AV	54.00	-13.70	1.14 H	208	-3.78	44.08
11	9027.50	54.60 PK	74.00	-19.40	1.00 H	124	10.07	44.53
12	9027.50	41.70 AV	54.00	-12.30	1.00 H	124	-2.83	44.53

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2708.00	41.90 PK	74.00	-32.10	1.06 V	127	10.49	31.41
2	2708.00	36.70 AV	54.00	-17.30	1.06 V	127	5.29	31.41
3	3611.00	46.40 PK	74.00	-27.60	1.27 V	281	13.15	33.25
4	3611.00	35.45 AV	54.00	-18.55	1.27 V	281	2.20	33.25
5	4511.00	45.90 PK	74.00	-28.10	1.43 V	23	9.95	35.95
6	4511.00	33.80 AV	54.00	-20.20	1.43 V	23	-2.15	35.95
7	5416.50	46.90 PK	74.00	-27.10	1.00 V	84	9.64	37.26
8	5416.50	33.90 AV	54.00	-20.10	1.00 V	84	-3.36	37.26
9	8124.75	56.10 PK	74.00	-17.90	1.16 V	8	12.02	44.08
10	8124.75	42.60 AV	54.00	-11.40	1.16 V	8	-1.48	44.08
11	9027.50	54.10 PK	74.00	-19.90	1.00 V	27	9.57	44.53
12	9027.50	40.20 AV	54.00	-13.80	1.00 V	27	-4.33	44.53

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



A D T

CHANNEL	Channel 24	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2744.25	41.70 PK	74.00	-32.30	1.64 H	12	10.17	31.53
2	2744.25	33.40 AV	54.00	-20.60	1.64 H	12	1.87	31.53
3	3659.00	47.94 PK	74.00	-26.06	1.89 H	254	14.55	33.39
4	3659.00	37.60 AV	54.00	-16.40	1.89 H	254	4.21	33.39
5	4573.75	45.60 PK	74.00	-28.40	1.04 H	127	9.48	36.12
6	4573.75	32.90 AV	54.00	-21.10	1.04 H	127	-3.22	36.12
7	7318.00	47.80 PK	74.00	-26.20	1.09 H	100	4.67	43.13
8	7318.00	34.10 AV	54.00	-19.90	1.09 H	100	-9.03	43.13
9	8232.75	54.50 PK	74.00	-19.50	1.10 H	204	10.41	44.09
10	8232.75	40.40 AV	54.00	-13.60	1.10 H	204	-3.69	44.09
11	9147.50	54.30 PK	74.00	-19.70	1.00 H	127	9.44	44.86
12	9147.50	41.60 AV	54.00	-12.40	1.00 H	127	-3.26	44.86

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2744.25	41.30 PK	74.00	-32.70	1.04 V	124	9.77	31.53
2	2744.25	36.40 AV	54.00	-17.60	1.04 V	124	4.87	31.53
3	3659.00	46.70 PK	74.00	-27.30	1.21 V	279	13.31	33.39
4	3659.00	35.23 AV	54.00	-18.77	1.21 V	279	1.84	33.39
5	4573.75	47.30 PK	74.00	-26.70	1.41 V	29	11.18	36.12
6	4573.75	34.90 AV	54.00	-19.10	1.41 V	29	-1.22	36.12
7	7318.00	56.38 PK	74.00	-17.62	1.00 V	73	13.25	43.13
8	7318.00	45.97 AV	54.00	-8.03	1.00 V	73	2.84	43.13
9	8232.75	57.40 PK	74.00	-16.60	1.08 V	9	13.31	44.09
10	8232.75	43.40 AV	54.00	-10.60	1.08 V	9	-0.69	44.09
11	9147.50	54.60 PK	74.00	-19.40	1.00 V	37	9.74	44.86
12	9147.50	40.70 AV	54.00	-13.30	1.00 V	37	-4.16	44.86

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



A D T

CHANNEL	Channel 49	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2781.25	41.60 PK	74.00	-32.40	1.62 H	127	9.94	31.66
2	2781.25	34.70 AV	54.00	-19.30	1.62 H	127	3.04	31.66
3	3709.00	48.20 PK	74.00	-25.80	1.87 H	224	14.66	33.54
4	3709.00	38.40 AV	54.00	-15.60	1.87 H	224	4.86	33.54
5	4636.25	46.20 PK	74.00	-27.80	1.03 H	107	9.91	36.29
6	4636.25	33.10 AV	54.00	-20.90	1.03 H	107	-3.19	36.29
7	7418.00	47.40 PK	74.00	-26.60	1.12 H	120	4.27	43.13
8	7418.00	34.30 AV	54.00	-19.70	1.12 H	120	-8.83	43.13
9	8345.25	54.20 PK	74.00	-19.80	1.00 H	169	10.10	44.10
10	8345.25	40.10 AV	54.00	-13.90	1.00 H	169	-4.00	44.10

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	2781.75	41.60 PK	74.00	-32.40	1.04 V	127	9.94	31.66
2	2781.75	36.70 AV	54.00	-17.30	1.04 V	127	5.04	31.66
3	3709.00	46.30 PK	74.00	-27.70	1.20 V	283	12.76	33.54
4	3709.00	35.10 AV	54.00	-18.90	1.20 V	283	1.56	33.54
5	4636.25	47.40 PK	74.00	-26.60	1.43 V	32	11.11	36.29
6	4636.25	35.10 AV	54.00	-18.90	1.43 V	32	-1.19	36.29
7	7418.00	58.43 PK	74.00	-15.57	1.00 V	92	15.30	43.13
8	7418.00	47.38 AV	54.00	-6.62	1.00 V	92	4.25	43.13
9	8345.25	55.30 PK	74.00	-18.70	1.07 V	13	11.20	44.10
10	8345.25	41.20 AV	54.00	-12.80	1.07 V	13	-2.90	44.10

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



A D T

For PR-ASK(XRM) – Low Power:

CHANNEL	0	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	30deg. C, 61%RH, 965 hPa	TESTED BY	Frank Liu

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	178.48	24.37 QP	43.50	-19.13	1.13 H	203	10.31	14.06
2	200.00	21.46 QP	43.50	-22.04	1.21 H	83	9.07	12.39
3	300.00	24.98 QP	46.00	-21.02	1.21 H	153	8.20	16.78
4	400.00	26.79 QP	46.00	-19.21	1.04 H	129	7.29	19.50
5	600.00	33.89 QP	46.00	-12.11	1.00 H	141	8.85	25.04
6	625.00	35.49 QP	46.00	-10.51	1.00 H	314	10.21	25.29

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	200.00	26.71 QP	43.50	-16.79	1.00 V	123	14.32	12.39
2	300.00	22.59 QP	46.00	-23.41	1.00 V	109	5.81	16.78
3	400.00	24.83 QP	46.00	-21.17	1.00 V	309	5.33	19.50
4	600.00	27.11 QP	46.00	-18.89	1.00 V	129	2.07	25.04
5	996.60	34.71 QP	54.00	-19.29	1.00 V	103	4.01	30.70

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



A D T

CHANNEL	0, 24, 49	FREQUENCY RANGE	Below 1GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak Peak(PK)
ENVIRONMENTAL CONDITIONS	22deg. C, 67%RH, 965 hPa	TESTED BY	Eric Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

channel	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)
0	1	902.00	47.11 PK	88.11	-41.00	1.00 H	182	17.30	29.81
	2	902.00	33.91 AV	85.71	-51.80	1.00 H	182	4.10	29.81
	3	*902.75	108.11 PK			1.00 H	182	78.30	29.81
	4	*902.75	105.71 AV			1.00 H	182	75.90	29.81
24	1	*914.75	108.11 PK			1.00 H	173	78.20	29.91
	2	*914.75	105.01 AV			1.00 H	173	75.10	29.91
49	1	*927.25	107.91 PK			1.00 H	74	77.90	30.01
	2	*927.25	104.61 AV			1.00 H	74	74.60	30.01
	3	928.00	47.42 PK	87.91	-40.49	1.00 H	74	17.40	30.02
	4	928.00	34.32 AV	84.61	-50.29	1.00 H	74	4.30	30.02

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

channel	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)
0	1	902.00	44.51 PK	83.51	-39.00	1.00 V	224	14.70	29.81
	2	902.00	31.75 AV	78.01	-46.26	1.00 V	224	1.94	29.81
	3	*902.75	103.51 PK			1.00 V	224	73.70	29.81
	4	*902.75	98.01 AV			1.00 V	224	68.20	29.81
24	1	*914.75	103.01 PK			1.00 V	216	73.10	29.91
	2	*914.75	97.21 AV			1.00 V	216	67.30	29.91
49	1	*927.25	102.61 PK			1.00 V	94	72.60	30.01
	2	*927.25	96.81 AV			1.00 V	94	66.80	30.01
	3	928.00	44.12 PK	82.61	-38.49	1.00 V	94	14.10	30.02
	4	928.00	31.50 AV	76.81	-45.31	1.00 V	94	1.48	30.02

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



A D T

CHANNEL	Channel 0	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2708.00	40.30 PK	74.00	-33.70	1.69 H	120	8.89	31.41
2	2708.00	32.10 AV	54.00	-21.90	1.69 H	120	0.69	31.41
3	3611.00	48.72 PK	74.00	-25.28	1.87 H	211	15.47	33.25
4	3611.00	38.40 AV	54.00	-15.60	1.87 H	211	5.15	33.25
5	4511.00	46.34 PK	74.00	-27.66	1.06 H	124	10.39	35.95
6	4511.00	32.69 AV	54.00	-21.31	1.06 H	124	-3.26	35.95
7	5416.50	46.11 PK	74.00	-27.89	1.07 H	206	8.85	37.26
8	5416.50	34.72 AV	54.00	-19.28	1.07 H	206	-2.54	37.26
9	8124.75	54.63 PK	74.00	-19.37	1.00 H	184	10.55	44.08
10	8124.75	38.62 AV	54.00	-15.38	1.00 H	184	-5.46	44.08
11	9027.50	54.29 PK	74.00	-19.71	1.00 H	156	9.76	44.53
12	9027.50	40.10 AV	54.00	-13.90	1.00 H	156	-4.43	44.53

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2708.00	40.92 PK	74.00	-33.08	1.04 V	127	9.51	31.41
2	2708.00	34.73 AV	54.00	-19.27	1.04 V	127	3.32	31.41
3	3611.00	45.62 PK	74.00	-28.38	1.09 V	243	12.37	33.25
4	3611.00	34.29 AV	54.00	-19.71	1.09 V	243	1.04	33.25
5	4511.00	46.59 PK	74.00	-27.41	1.44 V	83	10.64	35.95
6	4511.00	34.76 AV	54.00	-19.24	1.44 V	83	-1.19	35.95
7	5416.50	47.34 PK	74.00	-26.66	1.04 V	23	10.08	37.26
8	5416.50	35.26 AV	54.00	-18.74	1.04 V	23	-2.00	37.26
9	8124.75	56.73 PK	74.00	-17.27	1.14 V	11	12.65	44.08
10	8124.75	41.24 AV	54.00	-12.76	1.14 V	11	-2.84	44.08
11	9027.50	54.84 PK	74.00	-19.16	1.00 V	72	10.31	44.53
12	9027.50	40.73 AV	54.00	-13.27	1.00 V	72	-3.80	44.53

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



A D T

CHANNEL	Channel 24	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2744.25	41.12 PK	74.00	-32.88	1.64 H	121	9.59	31.53
2	2744.25	33.70 AV	54.00	-20.30	1.64 H	121	2.17	31.53
3	3659.00	48.74 PK	74.00	-25.26	1.84 H	213	15.35	33.39
4	3659.00	38.24 AV	54.00	-15.76	1.84 H	213	4.85	33.39
5	4573.75	46.29 PK	74.00	-27.71	1.07 H	127	10.17	36.12
6	4573.75	32.73 AV	54.00	-21.27	1.07 H	127	-3.39	36.12
7	7318.00	46.12 PK	74.00	-27.88	1.04 H	204	2.99	43.13
8	7318.00	33.29 AV	54.00	-20.71	1.04 H	204	-9.84	43.13
9	8232.75	54.27 PK	74.00	-19.73	1.00 H	192	10.18	44.09
10	8232.75	38.42 AV	54.00	-15.58	1.00 H	192	-5.67	44.09
11	9147.50	54.60 PK	74.00	-19.40	1.00 H	141	9.74	44.86
12	9147.50	41.73 AV	54.00	-12.27	1.00 H	141	-3.13	44.86

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

No.	Freq. (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	2744.25	41.45 PK	74.00	-32.55	1.01 V	124	9.92	31.53
2	2744.25	35.62 AV	54.00	-18.38	1.01 V	124	4.09	31.53
3	3659.00	45.73 PK	74.00	-28.27	1.19 V	273	12.34	33.39
4	3659.00	34.12 AV	54.00	-19.88	1.19 V	273	0.73	33.39
5	4573.75	47.39 PK	74.00	-26.61	1.46 V	43	11.27	36.12
6	4573.75	35.24 AV	54.00	-18.76	1.46 V	43	-0.88	36.12
7	7318.00	47.44 PK	74.00	-26.56	1.00 V	84	4.31	43.13
8	7318.00	35.09 AV	54.00	-18.91	1.00 V	84	-8.04	43.13
9	8232.75	56.37 PK	74.00	-17.63	1.01 V	10	12.28	44.09
10	8232.75	41.12 AV	54.00	-12.88	1.01 V	10	-2.97	44.09
11	9147.50	54.90 PK	74.00	-19.10	1.00 V	47	10.04	44.86
12	9147.50	40.84 AV	54.00	-13.16	1.00 V	47	-4.02	44.86

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



A D T

CHANNEL	Channel 49	FREQUENCY RANGE	1 ~10GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak(PK) Average (AV)
ENVIRONMENTAL CONDITIONS	28deg. C, 55%RH, 965 hPa	TESTED BY	Frank Liu

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	2781.75	41.54 PK	74.00	-32.46	1.61 H	120	9.88	31.66
2	2781.75	34.10 AV	54.00	-19.90	1.61 H	120	2.44	31.66
3	3709.00	48.24 PK	74.00	-25.76	1.91 H	226	14.70	33.54
4	3709.00	38.17 AV	54.00	-15.83	1.91 H	226	4.63	33.54
5	4636.25	46.14 PK	74.00	-27.86	1.04 H	112	9.85	36.29
6	4636.25	32.63 AV	54.00	-21.37	1.04 H	112	-3.66	36.29
7	7418.00	46.29 PK	74.00	-27.71	1.03 H	209	3.16	43.13
8	7418.00	33.11 AV	54.00	-20.89	1.03 H	209	-10.02	43.13
9	8345.25	54.11 PK	74.00	-19.89	1.00 H	174	10.01	44.10
10	8345.25	39.24 AV	54.00	-14.76	1.00 H	174	-4.86	44.10

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	2781.75	41.12 PK	74.00	-32.88	1.01 V	121	9.46	31.66
2	2781.75	35.37 AV	54.00	-18.63	1.01 V	121	3.71	31.66
3	3709.00	45.60 PK	74.00	-28.40	1.14 V	279	12.06	33.54
4	3709.00	34.20 AV	54.00	-19.80	1.14 V	279	0.66	33.54
5	4636.25	47.64 PK	74.00	-26.36	1.47 V	39	11.35	36.29
6	4636.25	35.17 AV	54.00	-18.83	1.47 V	39	-1.12	36.29
7	7418.00	53.10 PK	74.00	-20.90	1.00 V	93	9.97	43.13
8	7418.00	39.40 AV	54.00	-14.60	1.00 V	93	-3.73	43.13
9	8345.25	55.37 PK	74.00	-18.63	1.08 V	24	11.27	44.10
10	8345.25	41.34 AV	54.00	-12.66	1.08 V	24	-2.76	44.10

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

5 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 by the following approval agencies according to ISO/IEC 17025:

USA	FCC, NVLAP
Germany	TUV Rheinland
Japan	VCCI
Norway	NEMKO
Canada	INDUSTRY CANADA, CSA
R.O.C.	TAF, BSMI, NCC
Netherlands	Telefication
Singapore	GOST-ASIA (MOU)
Russia	CERTIS (MOU)

Copies of accreditation certificates of our laboratories obtained from approval agencies can be downloaded from our web site: www.adt.com.tw/index.5/phtml.

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Web Site: www.adt.com.tw

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

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

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

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