

FCC TEST REPORT

REPORT NO.: RF110803C25

MODEL NO.: RPS1015-PD62-QQ

(refer to item 3.1 for more details)

FCC ID: Z3M-GRPS10

RECEIVED: Aug. 03, 2011

TESTED: Aug. 31 ~ Sep. 05, 2011

ISSUED: Sep. 13, 2011

APPLICANT: Greenwave Reality Pte Ltd

ADDRESS: 41 Science Park Road, #03-01, The Gemini,

Science Singapore 117610

ISSUED BY: Bureau Veritas Consumer Products Services (H.K.)

Ltd., Taoyuan Branch

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang,

Taipei Hsien 244, Taiwan, R.O.C.

TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei

Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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RELEASE CONTROL RECORD

ISSUE NO. REASON FOR CHANGE		DATE ISSUED
Original release	NA	Sep. 13, 2011



1. CERTIFICATION

PRODUCT: Meter Reader

MODEL: RPS1015-PD62-QQ (refer to item 3.1 for more details)

BRAND: greenWAVE REALITY

APPLICANT: Greenwave Reality Pte Ltd

TESTED: Aug. 31 ~ Sep. 05, 2011

TEST SAMPLE: ENGINEERING SAMPLE

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

ANSI C63.4-2003 ANSI C63.10-2009

The above equipment (Model: RPS1015-PD62-QQ) 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 : ADM DATE: Sep. 13, 2011

Pelly Chief / Specialist

APPROVED BY : DATE: Sep. 13, 2011

Gary Chang / Technical Manager



2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APF	APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)				
STANDARD SECTION TEST TYPE AND LIMIT		RESULT	REMARK		
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -21.00dB at 0.275MHz.		
15.247(a)(2)	Spectrum Bandwidth of a Direct Sequence Spread Spectrum System Limit: min. 500kHz		Meet the requirement of limit.		
15.247(b) Maximum Output Power Limit: max. 30dBm		PASS	Meet the requirement of limit.		
15.247(d)	Radiated Emissions Limit: Table 15.209	PASS	Meet the requirement of limit. Minimum passing margin is -4.7dB at 2483.50MHz.		
15.247(e) Power Spectral Density Limit: max. 8dBm		PASS	Meet the requirement of limit.		
15.247(d)	Band Edge Measurement Limit: 20dB less than the peak value of fundamental frequency	PASS	Meet the requirement of limit.		
15.203	Antenna Requirement	PASS	PIFA antenna: Antenna connector is IPEX not a standard connector. Dipole & monopole antenna: Antenna connector is R-SMA not a standard connector.		



2.1 MEASUREMENT UNCERTAINTY

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

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz~30MHz	2.44 dB
Radiated emissions	30MHz ~ 200MHz	3.34 dB
	200MHz ~1000MHz	3.35 dB
	1GHz ~ 18GHz	2.26 dB
	18GHz ~ 40GHz	1.94 dB

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



3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Meter Reader	
MODEL NO.	RPS1015-PD62-QQ (refer to NOTE for more details)	
FCC ID	Z3M-GRPS10	
POWER SUPPLY	5.0Vdc (Adapter) 6.0Vdc (AA Battery *4)	
MODULATION TYPE	O-QPSK	
MODULATION TECHNOLOGY	DSSS	
TRANSFER RATE	250kbps	
OPERATING FREQUENCY	2405 ~ 2480MHz	
NUMBER OF CHANNEL	16	
OUTPUT POWER	1.6mW	
ANTENNA TYPE	Refer to note as below	
ANTENNA CONNECTOR	Refer to note as below	
I/O PORTS	Refer to user's manual	
DATA CABLE	Refer to note as below	
ACCESSORY DEVICES	Adapter, Battery	

NOTE:

1. The following models are electrically identical, different model names are for marketing purpose. The EUT has two type of external enclosure, one is with USB port and the other is without USB port.

BRAND	MODEL	REMARK
	RPS1015-PD62-QQ	Main test model
greenWAVE REALITY	RPS10X5-YYZU	X: 0 or 1 YY: PD, ES, EP, MR, PA, PM Z: /, 2, 4, 6, 8, A, E, N U: /, 0, 1, 2, 3, 4, 5, 6
	RPS10X5-YYZU-VV	X: 0 or 1 YY: PD, ES, EP, MR, PA, PM Z: /, 2, 4, 6, 8, A, E, N U: /, 0, 1, 2, 3, 4, 5, 6 V: /, A~Z, 0~9

^{**1.} The function is identical for each models.

^{2.} The PCB is the same so we chose the device with USB port to perform tests.



2. The EUT uses the following antennas:

NO.	ANTENNA TYPE	ANTENNA GAIN	ANTENNA CONNECTOR
1	PIFA antenna	2.00dBi	IPEX
2	Dipole antenna	1.66dBi	R-SMA
3	Monopole antenna	1.34dBi	R-SMA

3. The EUT uses the following adapter.

BRAND:	Ktec		
MODEL:	KSAS0060500055VUD		
INPUT:	100-240Vac~, 50/60Hz, 0.18A		
OUTPUT: 5.0Vdc, 0.55A			
POWER LINE:	DC 1.5m non-shielded cable without core		

4. The EUT uses the following batteries.

Battery 1		
BRAND: Energizer		
MODEL: L91		
POWERRATING:	1.5Vdc	

Battery 2		
BRAND: Maxell		
MODEL:	LR6(GD)	
POWERRATING:	1.5Vdc	

^{**}The battery 1 is for final test.

5. The EUT uses the following cables.

PRODUCT	BRAND	MODEL	REMARK
Dual probe	Masterwave	PRS-PD62	1.0m non-shielded, w/o core × 2
Single probe	Masterwave	PRS-PA62	1.0m non-shielded, w/o core
S0 cable	Masterwave	PRS-ES62	1.0m non-shielded, w/o core
P1 cable	Masterwave	PRS-EP62	1.0m non-shielded, w/o core

^{*} Dual probe is for final report.

6. The above EUT information is declared by manufacturer and for more detailed feature description, please refer to the manufacturer's specifications or user's manual.



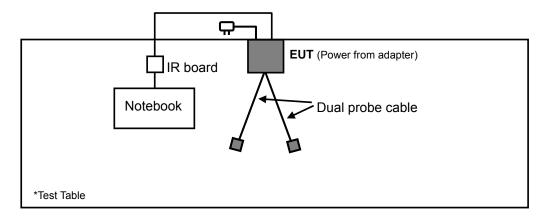
3.2 DESCRIPTION OF TEST MODES

16 channels are provided for the EUT:

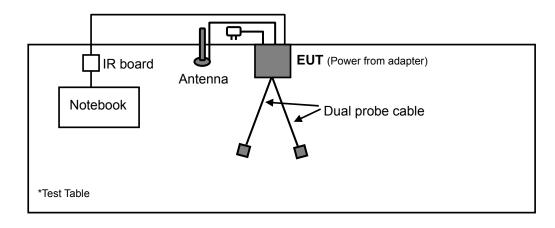
CHANNEL	FREQUENCY	CHANNEL	FREQUENCY (MHz)
11	2405MHz	19	2445MHz
12	2410MHz	20	2450MHz
13	2415MHz	21	2455MHz
14	2420MHz	22	2460MHz
15	2425MHz	23	2465MHz
16	2430MHz	24	2470MHz
17	2435MHz	25	2475MHz
18	2440MHz	26	2480MHz

3.2.1 CONFIGURATION OF SYSTEM UNDER TEST

Test Mode A (PIFA antenna)



Test Mode B (Dipole antenna) and Test Mode C (Monopole antenna)





3.2.2 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE	APPLICABLE TO			DESCRIPTION		
MODE	RE≥1G	RE<1G	PLC	APCM	DESCRIPTION	
А	\checkmark	\checkmark	\checkmark	\checkmark	EUT with PIFA antenna	
В	\checkmark	\checkmark	\checkmark	-	EUT with Dipole antenna	
С	\checkmark	\checkmark	\checkmark	-	EUT with Monopole antenna	

Where

RE≥1G: Radiated Emission above 1GHz

.

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

Note: "_" means no effect.

RADIATED EMISSION TEST (ABOVE 1GHz):

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

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

EUT CONFIGURE MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	AXIS
A, B, C	11 to 26	11, 19, 26	DSSS	O-QPSK	Z

RADIATED EMISSION TEST (BELOW 1GHz):

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

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

EUT CONFIGURE	AVAILABLE	TESTED	MODULATION	MODULATION	AXIS
MODE	CHANNEL	CHANNEL	TECHNOLOGY	TYPE	
A, B, C	11 to 26	11	DSSS	O-QPSK	Z

POWER LINE CONDUCTED EMISSION TEST:

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

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

EUT CONFIGURE	AVAILABLE	TESTED	MODULATION	MODULATION
MODE	CHANNEL	CHANNEL	TECHNOLOGY	TYPE
A, B, C	11 to 26	11	DSSS	O-QPSK



BANDEDGE MEASUREMENT:

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

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

EUT CONFIGURE	AVAILABLE	TESTED	MODULATION	MODULATION
MODE	CHANNEL	CHANNEL	TECHNOLOGY	TYPE
A	11 to 26	11, 26	DSSS	

ANTENNA PORT CONDUCTED MEASUREMENT:

- This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.
- Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

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

EUT CONFIGURE	AVAILABLE	TESTED	MODULATION	MODULATION
MODE	CHANNEL	CHANNEL	TECHNOLOGY	TYPE
А	11 to 26	11, 19, 26	DSSS	O-QPSK

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	25deg. C, 65%RH	120Vac, 60Hz	Antony Lee
RE<1G	25deg. C, 68%RH	120Vac, 60Hz	Long Chen
PLC	25deg. C, 66%RH	120Vac, 60Hz	Cody Chang
APCM	26deg. C, 66%RH	120Vac, 60Hz	Long Chen



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)

ANSI C63.4-2003

ANSI C63.10-2009

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

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

3.4 DESCRIPTION OF SUPPORT UNITS

NO.	PRODUCT	BRAND	MODEL NO. SERIAL NO.		FCC ID
1	IR BOARD	NA	NA	NA	NA
2	NOTEBOOK	DELL	D820	21498926752	NA

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA
2	1.5m RS232 cable

NOTE:

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



4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a). 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. 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.



4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESIB7	100212	Aug. 02, 2011	Aug. 01, 2012
Spectrum Analyzer ROHDE & SCHWARZ	FSP 40	100041	Jul. 21, 2011	Jul. 20, 2012
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Apr. 13, 2011	Apr. 12, 2012
HORN Antenna SCHWARZBECK	9120D	209	Aug. 25, 2011	Aug. 24, 2012
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170243	Dec. 27, 2010	Dec. 26, 2011
Preamplifier Agilent	8447D	2944A10633	Nov. 02, 2010	Nov. 01, 2011
Preamplifier Agilent	8449B	3008A01964	Nov. 02, 2010	Nov. 01, 2011
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295014/4	Aug. 19, 2011	Aug. 18, 2012
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	12738/6	Aug. 19, 2011	Aug. 18, 2012
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table ADT.	TT100.	TT93021703	NA	NA
Turn Table Controller ADT.	SC100.	SC93021703	NA	NA

NOTE: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

- 2. The test was performed in HwaYa Chamber 3.
- 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 4. The FCC Site Registration No. is 988962.
- 5. The IC Site Registration No. is IC 7450F-3.



4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. 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 lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE

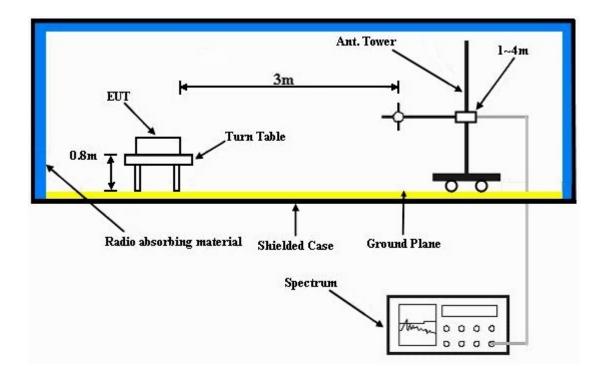
- 1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
- 2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
- 3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz for Average detection (AV) at frequency above 1GHz.
- 4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation



4.1.5 TEST SETUP



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

4.1.6 EUT OPERATING CONDITIONS

- a. Connected the EUT with a notebook via controller board and placed on a testing table.
- b. The notebook ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
- c. The necessary accessories enable the system in full functions.



4.1.7 TEST RESULTS

ABOVE 1GHz DATA

EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee	
TEST MODE	Α			

	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	54.8 PK	74.0	-19.2	1.28 H	205	22.10	32.70		
2	2390.00	44.5 AV	54.0	-9.5	1.28 H	205	11.80	32.70		
3	2398.00	55.2 PK	74.0	-18.8	1.30 H	205	22.50	32.70		
4	2398.00	44.9 AV	54.0	-9.1	1.30 H	205	12.20	32.70		
5	2400.00	43.1 PK	74.0	-30.9	1.30 H	206	10.40	32.70		
6	2400.00	39.0 AV	54.0	-15.0	1.30 H	206	6.30	32.70		
7	*2405.00	98.1 PK			1.30 H	206	65.40	32.70		
8	*2405.00	94.0 AV			1.30 H	206	61.30	32.70		
9	4810.00	52.5 PK	74.0	-21.5	1.00 H	15	13.60	38.90		
10	4810.00	43.2 AV	54.0	-10.8	1.00 H	15	4.30	38.90		

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee	
TEST MODE	Α			

	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	53.8 PK	74.0	-20.2	1.00 V	145	21.10	32.70		
2	2390.00	44.9 AV	54.0	-9.1	1.00 V	145	12.20	32.70		
3	2398.00	55.1 PK	74.0	-18.9	1.00 V	142	22.40	32.70		
4	2398.00	44.6 AV	54.0	-9.4	1.00 V	142	11.90	32.70		
5	2400.00	39.2 PK	74.0	-34.8	1.00 V	144	6.50	32.70		
6	2400.00	35.0 AV	54.0	-19.0	1.00 V	144	2.30	32.70		
7	*2405.00	94.6 PK			1.00 V	144	61.90	32.70		
8	*2405.00	90.1 AV			1.00 V	144	57.40	32.70		
9	4810.00	51.8 PK	74.0	-22.2	1.00 V	85	12.90	38.90		
10	4810.00	43.1 AV	54.0	-10.9	1.00 V	85	4.20	38.90		

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 19	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee	
TEST MODE	Α			

	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	*2445.00	97.8 PK			1.00 H	25	64.90	32.90	
2	*2445.00	93.8 AV			1.00 H	25	60.90	32.90	
3	4890.00	45.9 PK	74.0	-28.1	1.41 H	201	6.70	39.20	
4	4890.00	36.3 AV	54.0	-17.7	1.41 H	201	-2.90	39.20	
5	7335.00	51.5 PK	74.0	-22.5	1.02 H	32	6.40	45.10	
6	7335.00	42.4 AV	54.0	-11.6	1.02 H	32	-2.70	45.10	
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	*2445.00	96.3 PK			1.64 V	95	63.40	32.90	
2	*2445.00	91.8 AV			1.64 V	95	58.90	32.90	
3	4890.00	52.3 PK	74.0	-21.7	1.00 V	178	13.10	39.20	
4	4890.00	43.6 AV	54.0	-10.4	1.00 V	178	4.40	39.20	
5	7335.00	52.5 PK	74.0	-21.5	1.00 V	320	7.40	45.10	
6	7335.00	42.3 AV	54.0	-11.7	1.00 V	320	-2.80	45.10	

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 26	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee	
TEST MODE	A			

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	*2480.00	96.7 PK			1.00 H	7	63.70	33.00
2	*2480.00	93.0 AV			1.00 H	7	60.00	33.00
3	2483.50	53.0 PK	74.0	-21.0	1.00 H	7	20.00	33.00
4	2483.50	49.3 AV	54.0	-4.7	1.00 H	7	16.30	33.00
5	2485.50	54.6 PK	74.0	-19.4	1.50 H	188	21.60	33.00
6	2485.50	45.2 AV	54.0	-8.8	1.50 H	188	12.20	33.00
7	4960.00	48.3 PK	74.0	-25.7	1.20 H	169	9.00	39.30
8	4960.00	41.2 AV	54.0	-12.8	1.20 H	169	1.90	39.30
		ANTENNA	POLARITY	Y & TEST DI	STANCE: V	ERTICAL A	T 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	*2480.00	96.1 PK			1.00 V	113	63.10	33.00
2	*2480.00	92.4 AV			1.00 V	113	59.40	33.00
3	2483.50	52.8 PK	74.0	-21.2	1.00 V	113	19.80	33.00
4	2483.50	49.1 AV	54.0	-4.9	1.00 V	113	16.10	33.00
5	2485.50	55.2 PK	74.0	-18.8	1.00 V	182	22.20	33.00
6	2485.50	45.1 AV	54.0	-8.9	1.00 V	182	12.10	33.00
7	4960.00	51.1 PK	74.0	-22.9	1.00 V	125	11.80	39.30
8	4960.00	42.5 AV	54.0	-11.5	1.00 V	125	3.20	39.30

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TESTED BY	Antony Lee	
TEST MODE	В			

	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	55.2 PK	74.0	-18.8	1.58 H	195	22.50	32.70		
2	2390.00	44.9 AV	54.0	-9.1	1.58 H	195	12.20	32.70		
3	2398.00	55.1 PK	74.0	-18.9	1.58 H	196	22.40	32.70		
4	2398.00	45.5 AV	54.0	-8.5	1.58 H	196	12.80	32.70		
5	2400.00	43.6 PK	74.0	-30.4	1.66 H	193	10.90	32.70		
6	2400.00	39.4 AV	54.0	-14.6	1.66 H	193	6.70	32.70		
7	*2405.00	96.1 PK			1.66 H	193	63.40	32.70		
8	*2405.00	91.7 AV			1.66 H	193	59.00	32.70		
9	4810.00	48.7 PK	74.0	-25.3	1.02 H	193	9.80	38.90		
10	4810.00	39.1 AV	54.0	-14.9	1.02 H	193	0.20	38.90		

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TESTED BY	Antony Lee	
TEST MODE	В			

	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	54.0 PK	74.0	-20.0	1.55 V	224	21.30	32.70		
2	2390.00	44.8 AV	54.0	-9.2	1.55 V	224	12.10	32.70		
3	2398.00	55.0 PK	74.0	-19.0	1.55 V	228	22.30	32.70		
4	2398.00	44.7 AV	54.0	-9.3	1.55 V	228	12.00	32.70		
5	2400.00	44.6 PK	74.0	-29.4	1.54 V	260	11.90	32.70		
6	2400.00	40.0 AV	54.0	-14.0	1.54 V	260	7.30	32.70		
7	*2405.00	96.9 PK			1.54 V	260	64.20	32.70		
8	*2405.00	92.3 AV			1.54 V	260	59.60	32.70		
9	4810.00	52.2 PK	74.0	-21.8	1.01 V	81	13.30	38.90		
10	4810.00	43.4 AV	54.0	-10.6	1.01 V	81	4.50	38.90		

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 19	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TESTED BY	Antony Lee	
TEST MODE	В			

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	*2445.00	95.7 PK			1.00 H	18	62.80	32.90
2	*2445.00	91.3 AV			1.00 H	18	58.40	32.90
3	4890.00	48.8 PK	74.0	-25.2	1.38 H	203	9.60	39.20
4	4890.00	39.3 AV	54.0	-14.7	1.38 H	203	0.10	39.20
5	7335.00	51.9 PK	74.0	-22.1	1.00 H	23	6.80	45.10
6	7335.00	39.5 AV	54.0	-14.5	1.00 H	23	-5.60	45.10
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	*2445.00	98.3 PK			1.00 V	174	65.40	32.90
2	*2445.00	94.8 AV			1.00 V	174	61.90	32.90
3	4890.00	50.1 PK	74.0	-23.9	1.00 V	183	10.90	39.20
4	4890.00	41.1 AV	54.0	-12.9	1.00 V	183	1.90	39.20
5	7335.00	51.3 PK	74.0	-22.7	1.00 V	325	6.20	45.10
6	7335.00	40.3 AV	54.0	-13.7	1.00 V	325	-4.80	45.10

- 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.



EUT TEST CONDITION		MEASUREMENT DETAI	L
CHANNEL	Channel 26	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TESTED BY	Antony Lee
TEST MODE	В		

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	*2480.00	94.2 PK			1.58 H	191	61.20	33.00
2	*2480.00	89.7 AV			1.58 H	191	56.70	33.00
3	2483.50	50.8 PK	74.0	-23.2	1.58 H	191	17.80	33.00
4	2483.50	46.3 AV	54.0	-7.7	1.58 H	191	13.30	33.00
5	2485.50	54.8 PK	74.0	-19.2	1.57 H	193	21.80	33.00
6	2485.50	45.0 AV	54.0	-9.0	1.57 H	193	12.00	33.00
7	4960.00	48.7 PK	74.0	-25.3	1.18 H	198	9.40	39.30
8	4960.00	41.0 AV	54.0	-13.0	1.18 H	198	1.70	39.30
		ANTENNA	POLARITY	Y & TEST DI	STANCE: V	ERTICAL A	T 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	*2480.00	97.2 PK			1.00 V	180	64.20	33.00
2	*2480.00	92.7 AV			1.00 V	180	59.70	33.00
3	2483.50	53.1 PK	74.0	-20.9	1.00 V	180	20.10	33.00
4	2483.50	48.6 AV	54.0	-5.4	1.00 V	180	15.60	33.00
5	2485.50	55.0 PK	74.0	-19.0	1.00 V	181	22.00	33.00
6	2485.50	45.4 AV	54.0	-8.6	1.00 V	181	12.40	33.00
7	4960.00	50.0 PK	74.0	-24.0	1.00 V	194	10.70	39.30
8	4960.00	40.0 AV	54.0	-14.0	1.00 V	194	0.70	39.30

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TESTED BY	Antony Lee	
TEST MODE	С			

	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	53.8 PK	74.0	-20.2	1.51 H	283	21.10	32.70		
2	2390.00	44.7 AV	54.0	-9.3	1.51 H	283	12.00	32.70		
3	2398.00	54.6 PK	74.0	-19.4	1.50 H	283	21.90	32.70		
4	2398.00	44.8 AV	54.0	-9.2	1.50 H	283	12.10	32.70		
5	2400.00	40.9 PK	74.0	-33.1	1.49 H	281	8.20	32.70		
6	2400.00	36.5 AV	54.0	-17.5	1.49 H	281	3.80	32.70		
7	*2405.00	93.6 PK			1.49 H	281	60.90	32.70		
8	*2405.00	89.2 AV			1.49 H	281	56.50	32.70		
9	4810.00	51.6 PK	74.0	-22.4	1.00 H	253	12.70	38.90		
10	4810.00	36.8 AV	54.0	-17.2	1.00 H	253	-2.10	38.90		

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 11	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TESTED BY	Antony Lee	
TEST MODE	С			

	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	54.9 PK	74.0	-19.1	1.00 V	59	22.20	32.70		
2	2390.00	44.6 AV	54.0	-9.4	1.00 V	59	11.90	32.70		
3	2398.00	54.2 PK	74.0	-19.8	1.00 V	56	21.50	32.70		
4	2398.00	45.0 AV	54.0	-9.0	1.00 V	56	12.30	32.70		
5	2400.00	43.0 PK	74.0	-31.0	1.00 V	55	10.30	32.70		
6	2400.00	38.5 AV	54.0	-15.5	1.00 V	55	5.80	32.70		
7	*2405.00	94.1 PK			1.00 V	55	61.40	32.70		
8	*2405.00	89.6 AV			1.00 V	55	56.90	32.70		
9	4810.00	47.9 PK	74.0	-26.1	1.00 V	129	9.00	38.90		
10	4810.00	36.8 AV	54.0	-17.2	1.00 V	129	-2.10	38.90		

- 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.



EUT TEST CONDITION		MEASUREMENT DETAI	L
CHANNEL	Channel 19	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TESTED BY	Antony Lee
TEST MODE	С		

	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	*2445.00	94.6 PK			1.36 H	43	61.70	32.90	
2	*2445.00	90.2 AV			1.36 H	43	57.30	32.90	
3	4890.00	49.2 PK	74.0	-24.8	1.00 H	204	10.00	39.20	
4	4890.00	39.4 AV	54.0	-14.6	1.00 H	204	0.20	39.20	
5	7335.00	53.1 PK	74.0	-20.9	1.00 H	160	8.00	45.10	
6	7335.00	41.2 AV	54.0	-12.8	1.00 H	160	-3.90	45.10	
		ANTENNA	POLARIT	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M		
	NO. FREQ. (MHz) EMISSION LEVEL LIMIT (dBuV/m) MARGIN (dB) ANTENNA HEIGHT (m) TABLE RAW VALUE (dBuV) FACTOR								
NO.	FREQ. (MHz)			MARGIN (dB)		.,		CORRECTION FACTOR (dB/m)	
NO.	FREQ. (MHz) *2445.00	LEVEL		MARGIN (dB)		ANGLE		FACTOR	
	` ,	LEVEL (dBuV/m)		MARGIN (dB)	HEIGHT (m)	ANGLE (Degree)	(dBuV)	FACTOR (dB/m)	
1	*2445.00	LEVEL (dBuV/m) 94.2 PK		MARGIN (dB) -23.7	HEIGHT (m) 1.00 V	ANGLE (Degree)	(dBuV) 61.30	FACTOR (dB/m) 32.90	
1 2	*2445.00 *2445.00	LEVEL (dBuV/m) 94.2 PK 89.8 AV	(dBuV/m)		1.00 V 1.00 V	ANGLE (Degree) 74 74	(dBuV) 61.30 56.90	FACTOR (dB/m) 32.90 32.90	
1 2 3	*2445.00 *2445.00 4890.00	LEVEL (dBuV/m) 94.2 PK 89.8 AV 50.3 PK	(dBuV/m) 74.0	-23.7	1.00 V 1.00 V 1.00 V	ANGLE (Degree) 74 74 219	(dBuV) 61.30 56.90 11.10	FACTOR (dB/m) 32.90 32.90 39.20	

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL		
CHANNEL	Channel 26	FREQUENCY RANGE	1 ~ 25GHz	
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)	
ENVIRONMENTAL CONDITIONS	26deg. C, 65%RH	TESTED BY	Antony Lee	
TEST MODE	С			

		ANTENNA	POLARITY	& TEST DIS	TANCE: HO	RIZONTAL	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	*2480.00	89.7 PK			1.05 H	175	56.70	33.00
2	*2480.00	85.2 AV			1.05 H	175	52.20	33.00
3	2483.50	46.8 PK	74.0	-27.2	1.05 H	175	13.80	33.00
4	2483.50	42.3 AV	54.0	-11.7	1.05 H	175	9.30	33.00
5	2485.50	54.5 PK	74.0	-19.5	1.05 H	182	21.50	33.00
6	2485.50	45.3 AV	54.0	-8.7	1.05 H	182	12.30	33.00
7	4960.00	49.7 PK	74.0	-24.3	1.46 H	211	10.40	39.30
8	4960.00	41.2 AV	54.0	-12.8	1.46 H	211	1.90	39.30
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 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	*2480.00	92.7 PK			1.00 V	133	59.70	33.00
2	*2480.00	88.1 AV			1.00 V	133	55.10	33.00
3	2483.50	49.9 PK	74.0	-24.1	1.00 V	133	16.90	33.00
4	2483.50	45.3 AV	54.0	-8.7	1.00 V	133	12.30	33.00
5	2485.50	55.9 PK	74.0	-18.1	1.00 V	135	22.90	33.00
6	2485.50	45.1 AV	54.0	-8.9	1.00 V	135	12.10	33.00
7	4960.00	49.0 PK	74.0	-25.0	1.00 V	213	9.70	39.30
8	4960.00	40.0 AV	54.0	-14.0	1.00 V	213	0.70	39.30

- 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.



BELOW 1GHz WORST-CASE DATA:

EUT TEST CONDITION		MEASUREMENT DETAIL			
CHANNEL	Channel 11	FREQUENCY RANGE	Below 1000MHz		
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak		
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH	TESTED BY	Long Chen		
TEST MODE	Α				

	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	96.01	34.1 QP	43.5	-9.4	2.50 H	46	24.50	9.60		
2	156.28	31.2 QP	43.5	-12.3	2.50 H	265	16.50	14.70		
3	272.94	29.7 QP	46.0	-16.3	1.00 H	274	15.80	13.90		
4	587.91	34.5 QP	46.0	-11.5	1.50 H	298	12.30	22.20		
5	797.89	36.6 QP	46.0	-9.4	1.00 H	154	11.40	25.20		
6	945.66	34.8 QP	46.0	-11.2	2.00 H	235	7.30	27.50		
		ANTENNA	A POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	FREQ. (MHz)	EMISSION	LIMIT			TABLE	RAW VALUE	CORRECTION		
	1 (LQ: (III.12)	LEVEL (dBuV/m)	(dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	ANGLE (Degree)	(dBuV)	FACTOR (dB/m)		
1	96.01			MARGIN (dB) -9.0	7	7				
1 2	` ,	(dBuV/m)	(dBuV/m)	, ,	HEIGHT (m)	(Degree)	(dBuV)	(dB/m)		
	96.01	(dBuV/m) 34.5 QP	(dBuV/m) 43.5	-9.0	HEIGHT (m) 2.50 V	(Degree)	(dBuV) 24.90	(dB/m) 9.60		
2	96.01 156.28	(dBuV/m) 34.5 QP 32.3 QP	(dBuV/m) 43.5 43.5	-9.0 -11.2	2.50 V 4.00 V	(Degree) 19 292	(dBuV) 24.90 17.60	(dB/m) 9.60 14.70		
2	96.01 156.28 249.60	(dBuV/m) 34.5 QP 32.3 QP 30.3 QP	(dBuV/m) 43.5 43.5 46.0	-9.0 -11.2 -15.7	2.50 V 4.00 V 1.00 V	(Degree) 19 292 55	(dBuV) 24.90 17.60 17.30	(dB/m) 9.60 14.70 13.00		

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL				
CHANNEL	Channel 11	FREQUENCY RANGE	Below 1000MHz			
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak			
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH	TESTED BY	Long Chen			
TEST MODE	В	В				

	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	156.28	30.3 QP	43.5	-13.2	1.00 H	151	15.60	14.70		
2	263.21	30.1 QP	46.0	-15.9	1.00 H	73	16.50	13.60		
3	399.31	29.9 QP	46.0	-16.1	2.00 H	310	12.50	17.40		
4	585.97	34.5 QP	46.0	-11.5	1.00 H	295	12.30	22.20		
5	799.84	33.9 QP	46.0	-12.1	1.00 H	127	8.60	25.30		
6	945.66	33.9 QP	46.0	-12.1	2.00 H	181	6.40	27.50		
		ANTENNA	A POLARIT	Y & TEST DI	STANCE: V	ERTICAL A	T 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	158.22	30.5 QP	43.5	-13.0	1.00 V	10	15.70	14.80		
2	158.22 397.37	30.5 QP 28.1 QP	43.5 46.0	-13.0 -17.9	1.00 V 1.00 V	10 262	15.70 10.70	14.80 17.40		
2	397.37	28.1 QP	46.0	-17.9	1.00 V	262	10.70	17.40		
2	397.37 587.91	28.1 QP 34.1 QP	46.0 46.0	-17.9 -11.9	1.00 V 1.00 V	262 136	10.70 11.90	17.40 22.20		

- 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.



EUT TEST CONDITION		MEASUREMENT DETAIL			
CHANNEL	Channel 11	FREQUENCY RANGE	Below 1000MHz		
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak		
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH	TESTED BY	Long Chen		
TEST MODE	С				

	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	158.22	29.1 QP	43.5	-14.4	1.50 H	76	14.30	14.80		
2	263.21	28.4 QP	46.0	-17.6	1.00 H	256	14.80	13.60		
3	399.31	25.5 QP	46.0	-20.5	1.50 H	247	8.10	17.40		
4	587.91	36.0 QP	46.0	-10.0	1.00 H	292	13.80	22.20		
5	797.89	34.4 QP	46.0	-11.6	1.00 H	142	9.20	25.20		
6	947.60	34.4 QP	46.0	-11.6	1.50 H	229	6.90	27.50		
		ANTENNA	POLARITY	/ & TEST DI	STANCE: V	ERTICAL A	T 3 M			
NO.	FREQ. (MHz)		LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE	RAW VALUE (dBuV)	CORRECTION FACTOR		
		(dBuV/m)	(,		TILIOTTI (III)	(Degree)	(ubur)	(dB/m)		
1	158.22	(dBuV/m) 31.3 QP	43.5	-12.2	1.00 V	(Degree)	16.50	(dB/m) 14.80		
1	158.22 587.91	,	, ,	-12.2 -10.2	` ,	, , ,	, ,	, ,		
		31.3 QP	43.5		1.00 V	10	16.50	14.80		
2	587.91	31.3 QP 35.8 QP	43.5 46.0	-10.2	1.00 V 1.50 V	10	16.50 13.60	14.80 22.20		
3	587.91 799.84	31.3 QP 35.8 QP 35.9 QP	43.5 46.0 46.0	-10.2 -10.1	1.00 V 1.50 V 1.50 V	10 70 202	16.50 13.60 10.60	14.80 22.20 25.30		

2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).

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- 3. The other emission levels were very low against the limit.
- 4. Margin value = Emission level Limit value.



4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

NOTE: 1. The lower limit shall apply at the transition frequencies.

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 23, 2010	Nov. 22, 2011
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 30, 2010	Dec. 29, 2011
LISN ROHDE & SCHWARZ	ESH2-Z5	100100	Jan. 06, 2011	Jan. 05, 2012
LISN ROHDE & SCHWARZ	ESH3-Z5	100312	Jul. 07, 2011	Jul. 06, 2012
V-LISN SCHWARZBECK	NNBL 8226-2	8226-142	Jun. 30, 2011	Jun. 29, 2012
LISN ROHDE & SCHWARZ	ENV216	100072	Jun. 10, 2011	Jun. 09, 2012
Software ADT	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 HwaYa Shielded Room 2.
- 3. The VCCI Site Registration No. is C-2047.



4.2.3 TEST PROCEDURES

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

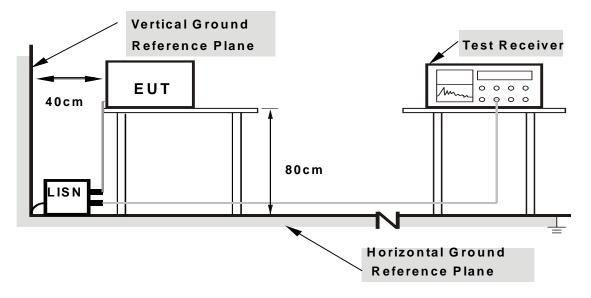
NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.



4.2.5 TEST SETUP



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

2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.



4.2.7 TEST RESULTS

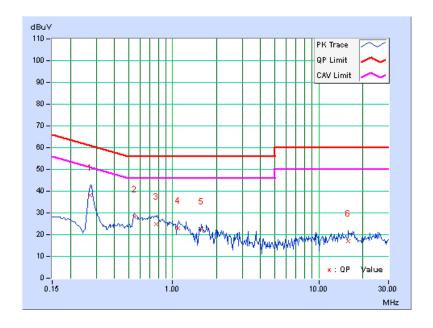
CONDUCTED WORST-CASE DATA:

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No Freq.		Corr.	Readin	g Value		sion vel	Lir	nit	Mar	gin
INO		Factor	[dB ((uV)]	[dB ((uV)]	[dB	(uV)]	(dl	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.271	0.16	37.81	-	37.97	-	61.08	51.08	-23.12	-
2	0.550	0.17	28.04	-	28.21	-	56.00	46.00	-27.79	-
3	0.776	0.18	24.78	-	24.96	-	56.00	46.00	-31.04	-
4	1.086	0.19	22.64	-	22.83	-	56.00	46.00	-33.17	-
5	1.574	0.21	22.26	-	22.47	-	56.00	46.00	-33.53	-
6	15.906	0.92	15.97	-	16.89	-	60.00	50.00	-43.11	-

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.

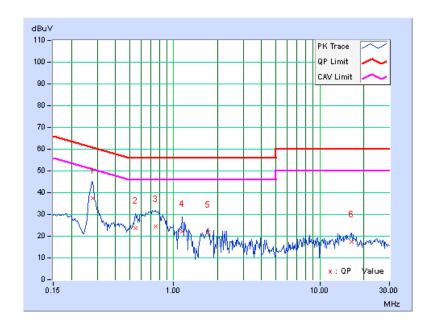




PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	No Freq.		Reading Value		Emission Level		Limit		Margin	
NO		Factor	[dB ((uV)]	[dB ((uV)]	[dB	(uV)]	(dl	3)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.279	0.18	37.33	-	37.51	-	60.85	50.85	-23.34	_
2	0.548	0.19	23.38	-	23.57	-	56.00	46.00	-32.43	_
3	0.752	0.20	24.22	-	24.42	-	56.00	46.00	-31.58	-
4	1.141	0.21	21.91	-	22.12	-	56.00	46.00	-33.88	-
5	1.715	0.22	21.45	-	21.67	-	56.00	46.00	-34.33	-
6	16.422	0.78	16.48	-	17.26	-	60.00	50.00	-42.74	-

- 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.

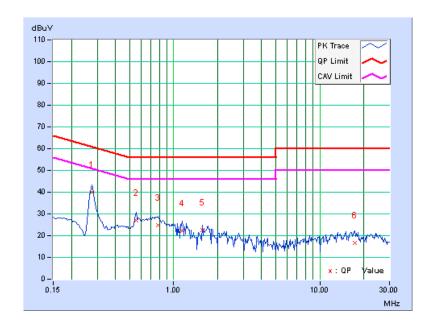




PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	В		

No	Freq.	Corr.	Readin	g Value	Emis Le	ssion vel	Limit		Margin	
NO		Factor	[dB	(uV)]	[dB ((uV)]	[dB	(uV)]	(dl	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.275	0.16	39.81	-	39.97	-	60.97	50.97	-21.00	-
2	0.552	0.18	26.77	-	26.95	-	56.00	46.00	-29.05	-
3	0.779	0.18	24.81	-	24.99	-	56.00	46.00	-31.01	-
4	1.152	0.19	22.13	-	22.32	-	56.00	46.00	-33.68	-
5	1.570	0.21	22.29	-	22.50	-	56.00	46.00	-33.50	_
6	17.309	0.99	15.61	-	16.60	-	60.00	50.00	-43.40	-

- 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.

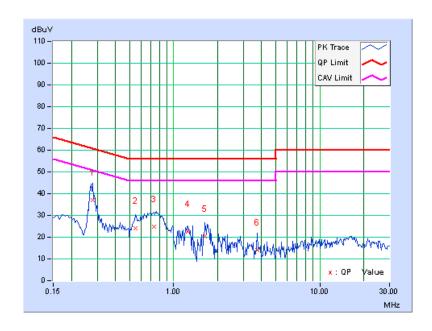




PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	В		

No	Freq.	Corr.	Readin	g Value		Emission Level		nit	Mar	gin
NO		Factor	[dB ((uV)]	[dB ((uV)]	[dB	(uV)]	(dl	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.279	0.18	37.00	-	37.18	-	60.85	50.85	-23.67	-
2	0.548	0.19	23.73	-	23.92	-	56.00	46.00	-32.08	-
3	0.736	0.20	24.50	-	24.70	-	56.00	46.00	-31.30	-
4	1.258	0.22	22.30	-	22.52	-	56.00	46.00	-33.48	-
5	1.633	0.22	20.29	-	20.51	-	56.00	46.00	-35.49	-
6	3.723	0.31	13.77	-	14.08	-	56.00	46.00	-41.92	-

- 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.

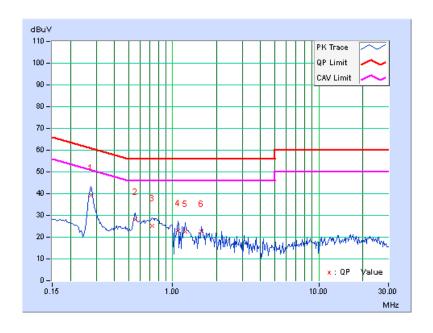




PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	С		

No	No Freq. Co		Reading Value		Emission Level		Limit		Margin	
INO		Factor	[dB ((uV)]	[dB ((uV)]	[dB	(uV)]	(dl	3)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.275	0.16	39.08	-	39.24	-	60.97	50.97	-21.73	-
2	0.552	0.18	28.14	-	28.32	-	56.00	46.00	-27.68	-
3	0.724	0.18	25.19	-	25.37	-	56.00	46.00	-30.63	-
4	1.090	0.19	22.72	-	22.91	-	56.00	46.00	-33.09	-
5	1.227	0.20	22.34	-	22.54	-	56.00	46.00	-33.46	-
6	1.578	0.21	22.35	-	22.56	-	56.00	46.00	-33.44	-

- 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.

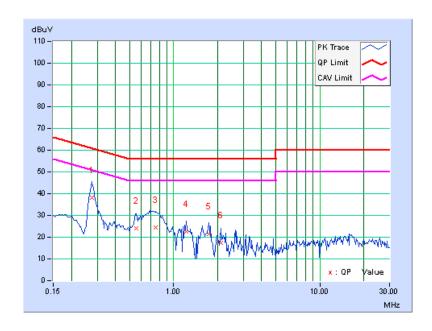




PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	С		

No	Freq.	Corr.	Readin	g Value	Emis Le	sion vel	Limit		Margin	
NO		Factor	[dB ((uV)]	[dB ((uV)]	[dB	(uV)]	(dl	B)
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.275	0.18	37.95	-	38.13	-	60.97	50.97	-22.84	-
2	0.552	0.20	23.73	-	23.93	-	56.00	46.00	-32.07	-
3	0.752	0.20	24.38	-	24.58	-	56.00	46.00	-31.42	-
4	1.227	0.21	22.42	-	22.63	-	56.00	46.00	-33.37	-
5	1.734	0.22	21.15	-	21.37	-	56.00	46.00	-34.63	-
6	2.121	0.24	17.34	-	17.58	-	56.00	46.00	-38.42	-

- 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.





4.3 6dB BANDWIDTH MEASUREMENT

4.3.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5 MHz.

4.3.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
SPECTRUM ANALYZER R&S	FSP40	100040	Aug. 01, 2011	Jul. 31, 2012

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

4.3.3 TEST PROCEDURE

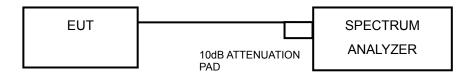
The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with 100kHz RBW and 300kHz VBW. The 6dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 6dB.

4.3.4 DEVIATION FROM TEST STANDARD

No deviation.



4.3.5 TEST SETUP



4.3.6 EUT OPERATING CONDITIONS

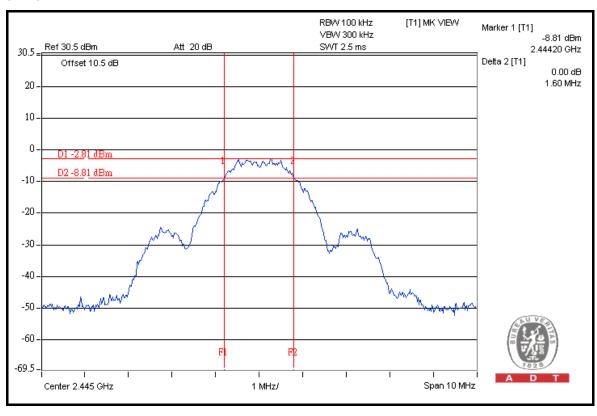
The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.



4.3.7 TEST RESULTS

CHANNEL	CHANNEL FREQUENCY (MHz)	6dB BANDWIDTH (MHz)	MINIMUM LIMIT (MHz)	PASS / FAIL
11	2405	1.59	0.5	PASS
19	2445	1.60	0.5	PASS
26	2480	1.58	0.5	PASS

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4.4 MAXIMUM OUTPUT POWER

4.4.1 LIMITS OF MAXIMUM OUTPUT POWER MEASUREMENT

The Maximum Output Power Measurement is 30dBm.

4.4.2 INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
High Speed Peak Power Meter	ML2495A	0824011	Aug. 04, 2011	Aug. 03, 2012
Power Sensor	MA2411B	0738171	Aug. 04, 2011	Aug. 03, 2012

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. Measurement Bandwidth of ML2495A is 65MHz greater than 6dB bandwidth of emission.

4.4.3 TEST PROCEDURES

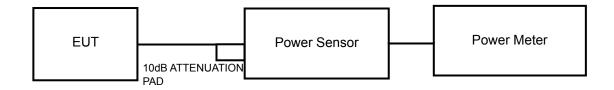
A power sensor was used on the output port of the EUT. A power meter was used to read the response of the power sensor. Record the power level.



4.4.4 DEVIATION FROM TEST STANDARD

No deviation.

4.4.5 TEST SETUP



4.4.6 EUT OPERATING CONDITIONS

Same as Item 4.3.6.

4.4.7 TEST RESULTS

CHANNEL	CHANNEL FREQUENCY (MHz)	POWER OUTPUT (mW)	POWER OUTPUT (dBm)	POWER LIMIT (dBm)	PASS/FAIL
11	2405	1.6	2.1	30	PASS
19	2445	1.4	1.4	30	PASS
26	2480	1.2	0.8	30	PASS



4.5 POWER SPECTRAL DENSITY MEASUREMENT

4.5.1 LIMITS OF POWER SPECTRAL DENSITY MEASUREMENT

The Maximum of Power Spectral Density Measurement is 8dBm.

4.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
SPECTRUM ANALYZER R&S	FSP40	100040	Aug. 01, 2011	Jul. 31, 2012

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

4.5.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer through an attenuator, the bandwidth of the fundamental frequency was measured with the spectrum analyzer using 3kHz RBW and 30kHz VBW, set sweep time = span/3kHz. The power spectral density was measured and recorded.

The sweep time is allowed to be longer than span/3kHz for a full response of the mixer in the spectrum analyzer.



4.5.4 DEVIATION FROM TEST STANDARD

No deviation.

4.5.5 TEST SETUP



4.5.6 EUT OPERATING CONDITION

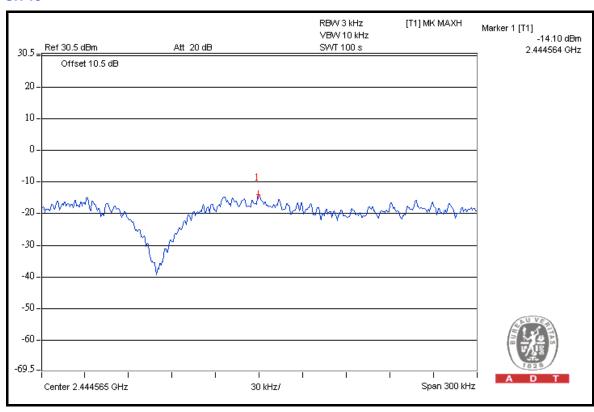
Same as Item 4.3.6



4.5.7 TEST RESULTS

CHANNEL	CHANNEL FREQUENCY (MHz)	RF POWER LEVEL IN 3 kHz BW (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
11	2405	-14.2	8	PASS
19	2445	-14.1	8	PASS
26	2480	-15.4	8	PASS

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4.6 BAND EDGES MEASUREMENT

4.6.1 LIMITS OF BAND EDGES MEASUREMENT

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

4.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
SPECTRUM ANALYZER R&S	FSP40	100040	Aug. 01, 2011	Jul. 31, 2012

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

4.6.3 TEST PROCEDURE

The transmitter output was connected to the spectrum analyzer via a low lose cable. Set both RBW and VBW of spectrum analyzer to 100kHz with suitable frequency span including 300kMHz bandwidth from band edge. The band edges was measured and recorded.

The spectrum plots (Peak RBW =100kHz, VBW = 300kHz; Average RBW = 1MHz, VBW = 10Hz) are attached on the following pages.

4.6.4 DEVIATION FROM TEST STANDARD

No deviation.

4.6.5 EUT OPERATING CONDITION

Same as Item 4.3.6.



4.6.6 TEST RESULTS

The spectrum plots are attached on the following pages. D1 line indicates the highest level, and D2 line indicates the 20dB offset below D1. It shows compliance with the requirement in part 15.247(d).

TEST MODE A

RESTRICT BAND (2310 ~ 2390 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2405.00 (PK)	98.1	45.73	52.37	74.00
2405.00 (AV)	94.0	45.73	48.27	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2480.00 (PK)	96.7	42.40	54.30	74.00
2480.00 (AV)	93.0	42.40	50.60	54.00

NOTE:

- 1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 2 pages.
- 2. Maximum field strength in restrict band = Fundamental emission Delta.



TEST MODE B

RESTRICT BAND (2310 ~ 2390 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2405.00 (PK)	96.9	45.73	51.17	74.00
2405.00 (AV)	92.3	45.73	46.57	54.00

RESTRICT BAND (2483.5 ~ 2500 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2480.00 (PK)	97.2	42.40	54.80	74.00
2480.00 (AV)	92.7	42.40	50.30	54.00

NOTE:

- 1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 2 pages.
- 2. Maximum field strength in restrict band = Fundamental emission Delta.



TEST MODE C

RESTRICT BAND (2310 ~ 2390 MHz)

FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2405.00 (PK)	94.1	45.73	48.37	74.00
2405.00 (AV)	89.6	45.73	43.87	54.00

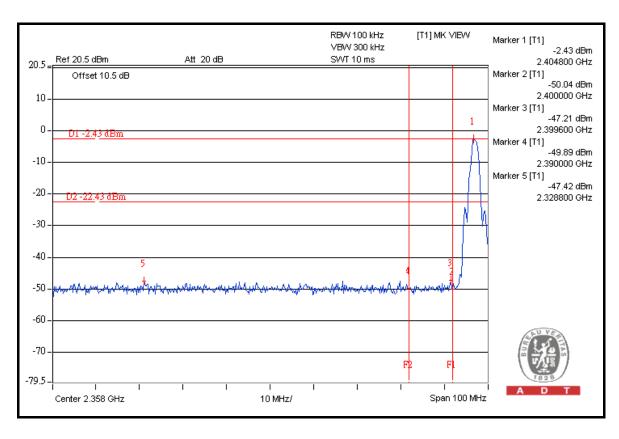
RESTRICT BAND (2483.5 ~ 2500 MHz)

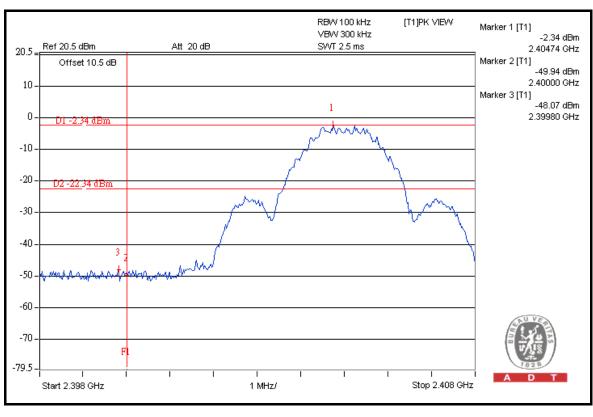
FREQUENCY (MHz)	FUNDAMENTAL EMISSION (dBuV/m)	DELTA (dB)	MAXIMUM FIELD STRENGTH IN RESTRICT BAND (dBuV/m)	LIMIT (dBuV/m)
2480.00 (PK)	92.7	42.40	50.30	74.00
2480.00 (AV)	88.1	42.40	45.70	54.00

NOTE:

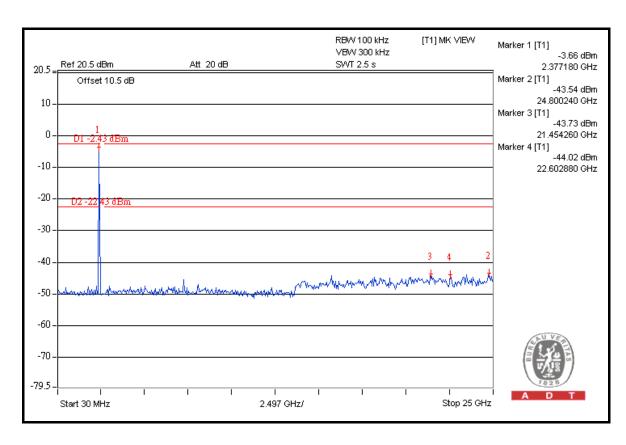
- 1. Delta = Amplitude between the peak of the fundamental and the peak of the band edge emission. Please check following 2 pages.
- 2. Maximum field strength in restrict band = Fundamental emission Delta.

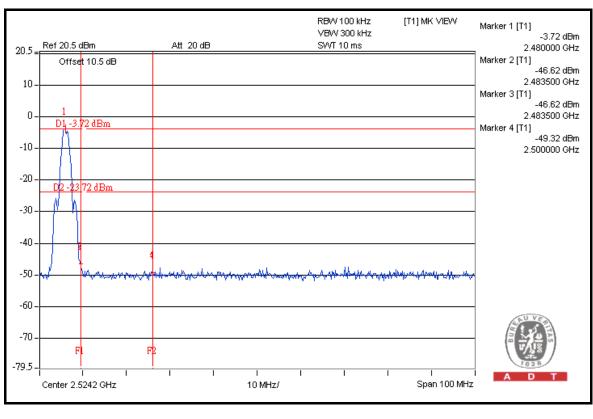




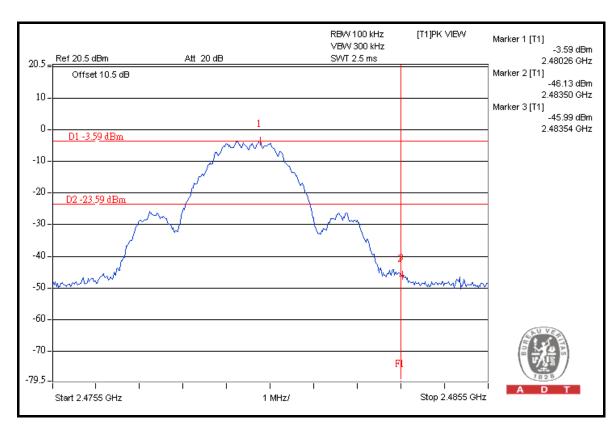


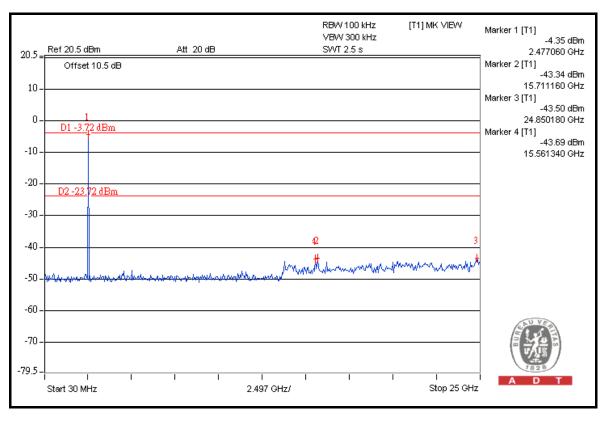














5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



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.

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

Linko EMC/RF Lab: Hsin Chu EMC/RF Lab:

Tel: 886-2-26052180 Tel: 886-3-5935343 Fax: 886-2-26051924 Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Telecom Lab:

Tel: 886-3-3183232 Fax: 886-3-3185050

Email: service.adt@tw.bureauveritas.com

Web Site: www.adt.com.tw

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



7. 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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