FCC TEST REPORT (15.407)

REPORT NO.:	RF120820C06-4
MODEL NO.:	F-02E
FCC ID:	VQK-F02E
RECEIVED:	Aug. 20, 2012
TESTED:	Nov. 14 ~ Nov. 21, 2012
ISSUED:	Nov. 30, 2012

APPLICANT:	FUJITSU LIMITED
ADDRESS:	1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki 211-8588, Japan

ISSUED BY:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
LAB ADDRESS:	No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan, R.O.C.
TEST LOCATION:	No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120820C06-4	Original release	Nov. 30, 2012

1. CERTIFICATION

PRODUCT: Mobile Phone
MODEL: F-02E
BRAND: Xi
APPLICANT: FUJITSU LIMITED
TESTED: Nov. 14 ~ Nov. 21, 2012
TEST SAMPLE: Production Unit
STANDARDS: **FCC Part 15, Subpart E (Section 15.407)**
ANSI C63.10-2009

The above equipment (model: F-02E) 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	: Ivy Lin / Specialist	**, DATE :**	Nov. 30, 2012
APPROVED BY	: Ken Liu / Manager	**, DATE :**	Nov. 30, 2012

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407)			
STANDARD SECTION	**TEST TYPE**	**RESULT**	**REMARK**
15.407(b)(6)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is 13.25dB at 0.98594MHz.
15.407(b/1/2/3)(b)(6)	Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -6.0dB at 142.52MHz.
15.407(a/1/2)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a/1/2)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	No antenna connector is used.

2.1 MEASUREMENT UNCERTAINTY

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

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

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Mobile Phone
MODEL NO.	F-02E
POWER SUPPLY	3.8Vdc (Battery) 5.0Vdc (Adapter or host equipment)
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 72.2Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz & 5500 ~ 5700MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (20MHz) 5260 ~ 5320MHz: 4 for 802.11a, 802.11n (20MHz) 5500 ~ 5700MHz: 8 for 802.11a, 802.11n (20MHz)
OUTPUT POWER	10.740mW for 5180 ~ 5240MHz 11.298mW for 5260 ~ 5320MHz 11.402mW for 5500 ~ 5700MHz
ANTENNA TYPE	λ/4 Monopole antenna with -7.7dBi gain
ANTENNA CONNECTOR	N/A
DATA CABLE	Refer to Note
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	Battery

NOTE:

1. The EUT contains the following accessory.

ITEM	BRAND	MODEL	SPECIFICATION
Battery	Fujitsu Limited	F28	Rating: 3.8Vdc, 2420mA

2. The following accessories are support units only.

ITEM	BRAND	MODEL	DESCRIPTION
Adapter	NTT docomo	AC Adaptor 04	I/P: 100-240Vac, 200mA O/P: 5.0Vdc, 1800mA 1.0m DC cable with 2 cores.
USB cable	NA	NA	1.1m cable

3. SW version is R04.8.
4. HW version is V3.1.0.
5. IMEI Code: 353579050028147.
6. The above EUT information is 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

FOR 5180 ~ 5240MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

FOR 5260 ~ 5320MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

FOR 5500 ~ 5700MHz

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
100	5500 MHz	116	5580 MHz
104	5520 MHz	132	5660 MHz
108	5540 MHz	136	5680 MHz
112	5560 MHz	140	5700 MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	-	√	-	√	Power from battery
B	√	√	√	-	Power from adapter
C	-	√	-	-	Power from host equipment

Where **RE≥1G:** Radiated Emission above 1GHz **RE<1G:** Radiated Emission below 1GHz
PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

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

RADIATED EMISSION TEST (ABOVE 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
B	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
B	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
B	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
B	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
B	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
B	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5

RADIATED EMISSION TEST (BELOW 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A, B, C	802.11a	5180-5320	36 to 64	64	OFDM	BPSK	6.0
A, B, C	802.11a	5500-5700	100 to 140	140	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
B	802.11a	5180-5320	36 to 64	64	OFDM	BPSK	6.0
B	802.11a	5500-5700	100 to 140	140	OFDM	BPSK	6.0

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 MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
A	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
A	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
A	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
A	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
A	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5

TEST CONDITION:

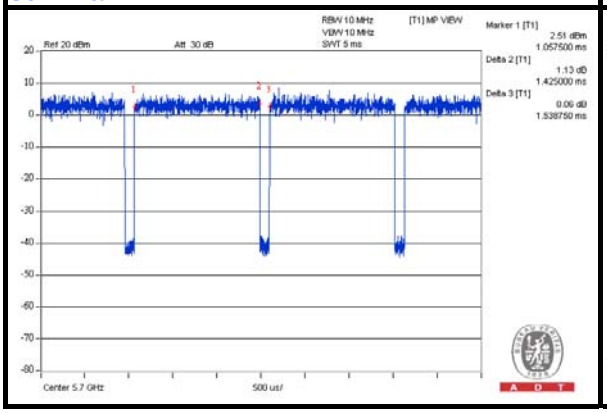
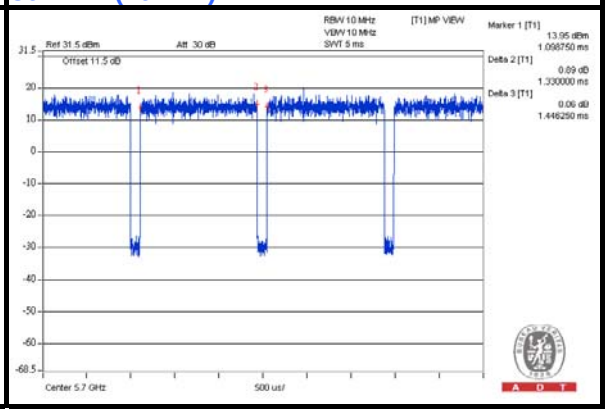
APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	24deg. C, 64%RH	120Vac, 60Hz	Sun Lin
RE<1G	24deg. C, 64%RH	3.8Vdc, 120Vac, 60Hz	Sun Lin
PLC	24deg. C, 65%RH	120Vac, 60Hz	Antony Lee
APCM	24deg. C, 64%RH	3.8Vdc	Match Tsui

3.3 DUTY CYCLE OF TEST SIGNAL

If duty cycle is < 98%, duty factor shall be considered.

802.11a: Duty cycle = 1.42500/1.538750 = 0.93, Duty factor = 10 * log(1/0.93) = 0.32

802.11n (20MHz): Duty cycle = 1.330000/1.446250 = 0.92, Duty factor = 10 * log(1/0.92) = 0.36

802.11a	802.11n (20MHz)
	

3.4 DESCRIPTION OF SUPPORT UNITS

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

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	NOTEBOOK	DELL	E5420	33MLMQ1	NA
2	EARPHONE	PHILIPS	SBC HL125	NA	NA

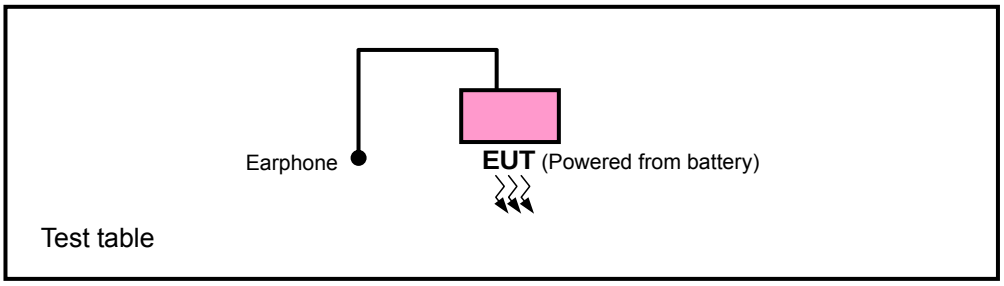
NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	1.1m USB cable
2	1.2 m wrapped shielded wire, terminated with 3.5mm phone plug via drain wire, w/o core.

NOTE:

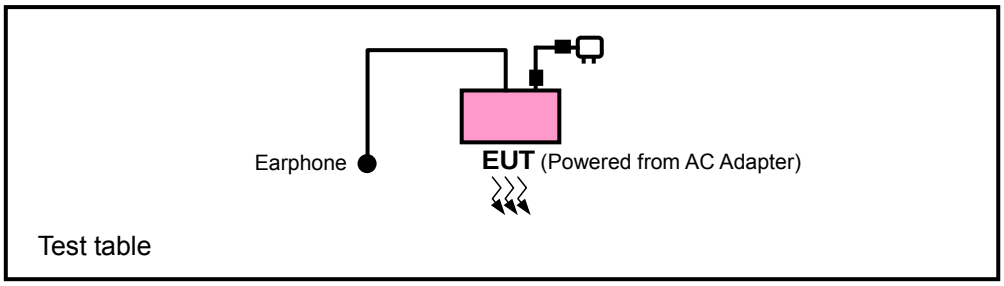
1. All power cords of the above support units are non shielded (1.8m).
2. 1.1 USB cable was provided by the client.

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST

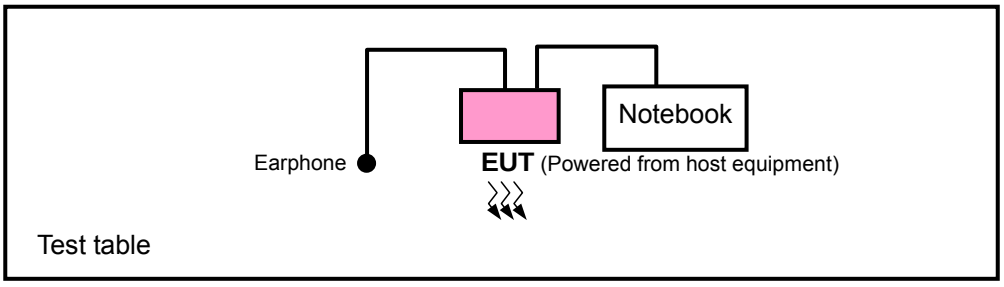
Test Mode A



Test Mode B



Test Mode C



3.5 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 E (15.407)
789033 D01 General UNII Test Procedures v01 r02
662911 D01 Multiple Transmitter Output v01 r02
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.

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table:

FREQUENCIES (MHz)	FIELD STRENGTH (microvolts/meter)	MEASUREMENT DISTANCE (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20dB under any condition of modulation.

4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

APPLICABLE TO	LIMIT	
√	FIELD STRENGTH AT 3m (dBμV/m)	
	PK	AV
	74	54
	EIRP LIMIT (dBm)	EQUIVALENT FIELD STRENGTH AT 3m (dBμV/m)
	PK	PK
	-27	68.3

NOTE: The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts).

4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100744	Apr. 19, 2012	Apr. 18, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Jan. 30, 2012	Jan. 29, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-156	Apr. 03, 2012	Apr. 02, 2013
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-563	Sep. 12, 2012	Sep. 11, 2013
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 11, 2012	Jul. 10, 2013
Preamplifier Agilent	8449B	3008A01911	Oct. 25, 2012	Oct. 24, 2013
Preamplifier Agilent	8447D	2944A10638	Oct. 25, 2012	Oct. 24, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295013/4 283403/4	Aug. 28, 2012	Aug. 27, 2013
RF signal cable Worken	8D-FB	Cable-HYCH9-01	Aug. 11, 2012	Aug. 10, 2013
Software	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower &Turn Table Controller EMCO	2090	NA	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 25, 2012	Oct. 24, 2013

NOTE:
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 9.
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 460141.
5. The IC Site Registration No. is IC 7450F-4.

4.1.4 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. 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 10dB 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 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

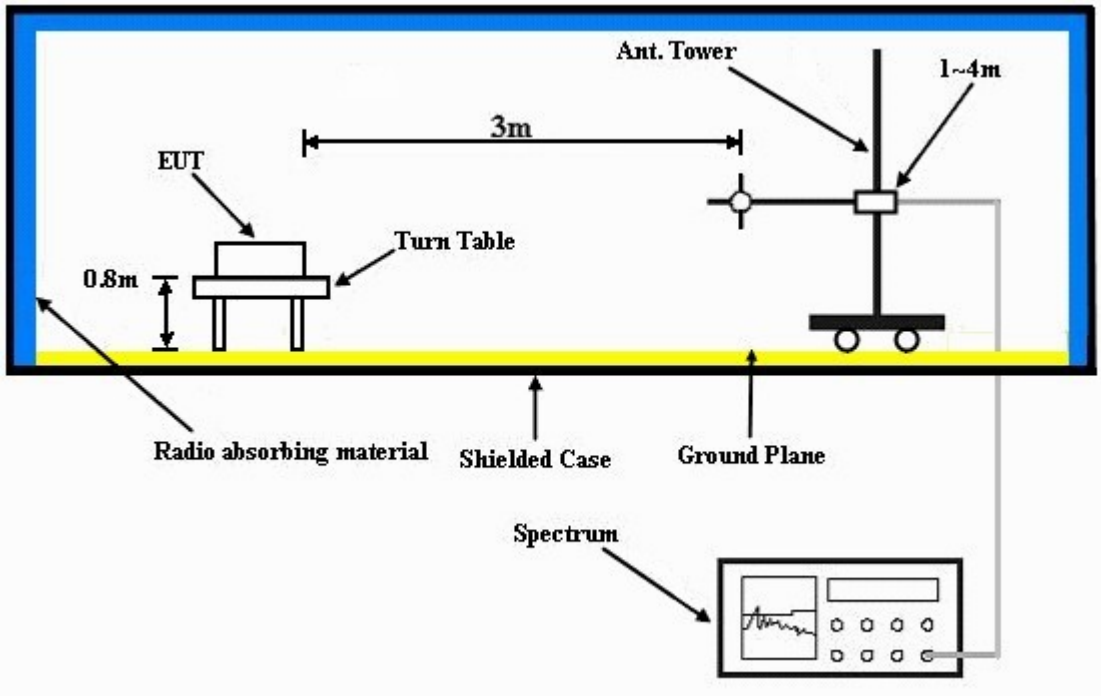
NOTE:

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 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 1kHz for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.5 DEVIATION FROM TEST STANDARD

No deviation.

4.1.6 TEST SETUP



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

4.1.7 EUT OPERATING CONDITION

a. Placed the EUT on a testing table.

b. Use the software to control the EUT under transmission condition continuously at specific channel frequency.

4.1.8 TEST RESULTS

ABOVE 1GHz DATA:

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	5150.00	42.1 PK	74.0	-31.9	1.18 H	201	4.30	37.80
2	5150.00	31.2 AV	54.0	-22.8	1.18 H	201	-6.60	37.80
3	*5180.00	90.6 PK			1.00 H	195	52.80	37.80
4	*5180.00	79.4 AV			1.00 H	195	41.60	37.80
5	#10360.00	55.9 PK	74.0	-18.1	1.09 H	42	7.10	48.80
6	#10360.00	44.3 AV	54.0	-9.7	1.09 H	42	-4.50	48.80
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	5150.00	42.9 PK	74.0	-31.1	1.05 V	35	5.10	37.80
2	5150.00	32.9 AV	54.0	-21.1	1.05 V	35	-4.90	37.80
3	*5180.00	93.7 PK			1.06 V	28	55.90	37.80
4	*5180.00	83.9 AV			1.06 V	28	46.10	37.80
5	#10360.00	58.9 PK	74.0	-15.1	1.24 V	39	10.10	48.80
6	#10360.00	44.8 AV	54.0	-9.2	1.24 V	39	-4.00	48.80

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.
6. " # ": The radiated frequency is out of the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5200.00	91.7 PK			1.00 H	262	53.80	37.90
2	*5200.00	81.1 AV			1.00 H	262	43.20	37.90
3	#10400.00	57.0 PK	74.0	-17.0	1.40 H	32	8.20	48.80
4	#10400.00	43.5 AV	54.0	-10.5	1.40 H	32	-5.30	48.80
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	*5200.00	95.6 PK			1.06 V	36	57.70	37.90
2	*5200.00	86.1 AV			1.06 V	36	48.20	37.90
3	#10400.00	56.4 PK	74.0	-17.6	1.28 V	45	7.60	48.80
4	#10400.00	45.6 AV	54.0	-8.4	1.28 V	45	-3.20	48.80

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.
6. " # ": The radiated frequency is out of the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5240.00	92.4 PK			1.02 H	254	54.50	37.90
2	*5240.00	81.8 AV			1.02 H	254	43.90	37.90
3	#10480.00	56.4 PK	74.0	-17.6	1.35 H	48	7.40	49.00
4	#10480.00	43.8 AV	54.0	-10.2	1.35 H	48	-5.20	49.00
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	*5240.00	96.2 PK			1.05 V	34	58.30	37.90
2	*5240.00	86.2 AV			1.05 V	34	48.30	37.90
3	#10480.00	56.9 PK	74.0	-17.1	1.29 V	47	7.90	49.00
4	#10480.00	46.0 AV	54.0	-8.0	1.29 V	47	-3.00	49.00

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.
6. " # ": The radiated frequency is out of the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5260.00	93.1 PK			1.05 H	205	55.20	37.90
2	*5260.00	82.5 AV			1.05 H	205	44.60	37.90
3	#10520.00	55.2 PK	74.0	-18.8	1.12 H	47	6.10	49.10
4	#10520.00	44.1 AV	54.0	-9.9	1.12 H	47	-5.00	49.10
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	*5260.00	96.4 PK			1.05 V	34	58.50	37.90
2	*5260.00	86.0 AV			1.05 V	34	48.10	37.90
3	#10520.00	56.7 PK	74.0	-17.3	1.28 V	52	7.60	49.10
4	#10520.00	45.6 AV	54.0	-8.4	1.28 V	52	-3.50	49.10

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5300.00	93.4 PK			1.24 H	198	55.40	38.00
2	*5300.00	82.8 AV			1.24 H	198	44.80	38.00
3	10600.00	54.8 PK	74.0	-19.2	1.18 H	52	5.80	49.00
4	10600.00	43.8 AV	54.0	-10.2	1.18 H	52	-5.20	49.00
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	*5300.00	96.9 PK			1.03 V	34	58.90	38.00
2	*5300.00	86.5 AV			1.03 V	34	48.50	38.00
3	10600.00	56.4 PK	74.0	-17.6	1.21 V	28	7.40	49.00
4	10600.00	45.1 AV	54.0	-8.9	1.21 V	28	-3.90	49.00

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5320.00	93.6 PK			1.18 H	205	55.60	38.00
2	*5320.00	82.6 AV			1.18 H	205	44.60	38.00
3	5350.00	46.4 PK	74.0	-27.6	1.18 H	205	8.30	38.10
4	5350.00	33.8 AV	54.0	-20.2	1.18 H	205	-4.30	38.10
5	10640.00	54.6 PK	74.0	-19.4	1.25 H	48	5.40	49.20
6	10640.00	43.2 AV	54.0	-10.8	1.25 H	48	-6.00	49.20
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	*5320.00	96.1 PK			1.12 V	43	58.10	38.00
2	*5320.00	86.2 AV			1.12 V	43	48.20	38.00
3	5350.00	47.6 PK	74.0	-26.4	1.03 V	32	9.50	38.10
4	5350.00	34.2 AV	54.0	-19.8	1.03 V	32	-3.90	38.10
5	10640.00	56.2 PK	74.0	-17.8	1.25 V	57	7.00	49.20
6	10640.00	45.2 AV	54.0	-8.8	1.25 V	57	-4.00	49.20

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	45.8 PK	74.0	-28.2	1.04 H	198	7.50	38.30
2	5460.00	33.4 AV	54.0	-20.6	1.04 H	198	-4.90	38.30
3	#5470.00	46.2 PK	74.0	-27.8	1.04 H	198	7.90	38.30
4	#5470.00	34.5 AV	54.0	-19.5	1.04 H	198	-3.80	38.30
5	*5500.00	92.8 PK			1.04 H	198	54.50	38.30
6	*5500.00	82.0 AV			1.04 H	198	43.70	38.30
7	11000.00	54.8 PK	74.0	-19.2	1.08 H	42	5.10	49.70
8	11000.00	43.9 AV	54.0	-10.1	1.08 H	42	-5.80	49.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	47.5 PK	74.0	-26.5	1.00 V	54	9.20	38.30
2	5460.00	34.4 AV	54.0	-19.6	1.00 V	54	-3.90	38.30
3	#5470.00	47.9 PK	74.0	-26.1	1.00 V	54	9.60	38.30
4	#5470.00	34.1 AV	54.0	-19.9	1.00 V	54	-4.20	38.30
5	*5500.00	96.1 PK			1.08 V	47	57.80	38.30
6	*5500.00	85.1 AV			1.08 V	47	46.80	38.30
7	11000.00	57.3 PK	74.0	-16.7	1.24 V	58	7.60	49.70
8	11000.00	46.8 AV	54.0	-7.2	1.24 V	58	-2.90	49.70

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.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5580.00	93.2 PK			1.07 H	208	54.80	38.40
2	*5580.00	82.7 AV			1.07 H	208	44.30	38.40
3	11160.00	55.8 PK	74.0	-18.2	1.18 H	54	6.30	49.50
4	11160.00	44.5 AV	54.0	-9.5	1.18 H	54	-5.00	49.50
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	*5580.00	96.5 PK			1.04 V	25	58.10	38.40
2	*5580.00	85.4 AV			1.04 V	25	47.00	38.40
3	11160.00	56.8 PK	74.0	-17.2	1.25 V	69	7.30	49.50
4	11160.00	46.7 AV	54.0	-7.3	1.25 V	69	-2.80	49.50

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5700.00	91.1 PK			1.12 H	207	52.40	38.70
2	*5700.00	81.2 AV			1.12 H	207	42.50	38.70
3	#5725.00	44.5 PK	74.0	-29.5	1.12 H	207	5.80	38.70
4	#5725.00	32.2 AV	54.0	-21.8	1.12 H	207	-6.50	38.70
5	11400.00	55.2 PK	74.0	-18.8	1.21 H	77	5.80	49.40
6	11400.00	44.1 AV	54.0	-9.9	1.21 H	77	-5.30	49.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	92.2 PK			1.04 V	12	53.50	38.70
2	*5700.00	81.8 AV			1.04 V	12	43.10	38.70
3	#5725.00	45.7 PK	74.0	-28.3	1.04 V	12	7.00	38.70
4	#5725.00	34.0 AV	54.0	-20.0	1.04 V	12	-4.70	38.70
5	11400.00	56.3 PK	74.0	-17.7	1.24 V	58	6.90	49.40
6	11400.00	45.9 AV	54.0	-8.1	1.24 V	58	-3.50	49.40

REMARKS:

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

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	5150.00	42.5 PK	74.0	-31.5	1.15 H	212	4.70	37.80
2	5150.00	31.8 AV	54.0	-22.2	1.15 H	212	-6.00	37.80
3	*5180.00	90.4 PK			1.14 H	218	52.60	37.80
4	*5180.00	80.2 AV			1.14 H	218	42.40	37.80
5	#10360.00	55.2 PK	74.0	-18.8	1.12 H	45	6.40	48.80
6	#10360.00	44.7 AV	54.0	-9.3	1.12 H	45	-4.10	48.80
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	5150.00	45.4 PK	74.0	-28.6	1.02 V	26	7.60	37.80
2	5150.00	33.1 AV	54.0	-20.9	1.02 V	26	-4.70	37.80
3	*5180.00	93.5 PK			1.08 V	20	55.70	37.80
4	*5180.00	83.4 AV			1.08 V	20	45.60	37.80
5	#10360.00	58.4 PK	74.0	-15.6	1.28 V	52	9.60	48.80
6	#10360.00	44.2 AV	54.0	-9.8	1.28 V	52	-4.60	48.80

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.
6. " # ": The radiated frequency is out of the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5200.00	91.4 PK			1.02 H	254	53.50	37.90
2	*5200.00	81.2 AV			1.02 H	254	43.30	37.90
3	#10400.00	56.5 PK	74.0	-17.5	1.47 H	52	7.70	48.80
4	#10400.00	43.2 AV	54.0	-10.8	1.47 H	52	-5.60	48.80
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	*5200.00	95.1 PK			1.04 V	22	57.20	37.90
2	*5200.00	85.7 AV			1.04 V	22	47.80	37.90
3	#10400.00	56.2 PK	74.0	-17.8	1.32 V	57	7.40	48.80
4	#10400.00	45.2 AV	54.0	-8.8	1.32 V	57	-3.60	48.80

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.
6. " # ": The radiated frequency is out of the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5240.00	92.2 PK			1.04 H	258	54.30	37.90
2	*5240.00	81.4 AV			1.04 H	258	43.50	37.90
3	#10480.00	56.8 PK	74.0	-17.2	1.28 H	54	7.80	49.00
4	#10480.00	43.5 AV	54.0	-10.5	1.28 H	54	-5.50	49.00
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	*5240.00	96.4 PK			1.08 V	32	58.50	37.90
2	*5240.00	86.0 AV			1.08 V	32	48.10	37.90
3	#10480.00	56.2 PK	74.0	-17.8	1.23 V	52	7.20	49.00
4	#10480.00	45.8 AV	54.0	-8.2	1.23 V	52	-3.20	49.00

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.
6. " # ": The radiated frequency is out of the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5260.00	93.2 PK			1.04 H	196	55.30	37.90
2	*5260.00	82.1 AV			1.04 H	196	44.20	37.90
3	#10520.00	54.8 PK	74.0	-19.2	1.12 H	56	5.70	49.10
4	#10520.00	44.5 AV	54.0	-9.5	1.12 H	56	-4.60	49.10
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	*5260.00	96.5 PK			1.05 V	17	58.60	37.90
2	*5260.00	86.2 AV			1.05 V	17	48.30	37.90
3	#10520.00	55.8 PK	74.0	-18.2	1.24 V	58	6.70	49.10
4	#10520.00	45.4 AV	54.0	-8.6	1.24 V	58	-3.70	49.10

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. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5300.00	93.4 PK			1.18 H	204	55.40	38.00
2	*5300.00	82.6 AV			1.18 H	204	44.60	38.00
3	10600.00	54.2 PK	74.0	-19.8	1.21 H	54	5.20	49.00
4	10600.00	43.6 AV	54.0	-10.4	1.21 H	54	-5.40	49.00
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	*5300.00	96.6 PK			1.04 V	28	58.60	38.00
2	*5300.00	86.2 AV			1.04 V	28	48.20	38.00
3	10600.00	56.5 PK	74.0	-17.5	1.18 V	42	7.50	49.00
4	10600.00	45.6 AV	54.0	-8.4	1.18 V	42	-3.40	49.00

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5320.00	92.5 PK			1.08 H	205	54.50	38.00
2	*5320.00	81.7 AV			1.08 H	205	43.70	38.00
3	5350.00	46.1 PK	74.0	-27.9	1.08 H	205	8.00	38.10
4	5350.00	33.2 AV	54.0	-20.8	1.08 H	205	-4.90	38.10
5	10640.00	54.2 PK	74.0	-19.8	1.05 H	69	5.00	49.20
6	10640.00	44.0 AV	54.0	-10.0	1.05 H	69	-5.20	49.20
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	*5320.00	95.1 PK			1.04 V	42	57.10	38.00
2	*5320.00	84.2 AV			1.04 V	42	46.20	38.00
3	5350.00	47.2 PK	74.0	-26.8	1.00 V	35	9.10	38.10
4	5350.00	34.1 AV	54.0	-19.9	1.00 V	35	-4.00	38.10
5	10640.00	55.1 PK	74.0	-18.9	1.22 V	51	5.90	49.20
6	10640.00	44.8 AV	54.0	-9.2	1.22 V	51	-4.40	49.20

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	45.2 PK	74.0	-28.8	1.02 H	221	6.90	38.30
2	5460.00	32.8 AV	54.0	-21.2	1.02 H	221	-5.50	38.30
3	#5470.00	45.8 PK	74.0	-28.2	1.02 H	221	7.50	38.30
4	#5470.00	34.2 AV	54.0	-19.8	1.02 H	221	-4.10	38.30
5	*5500.00	92.2 PK			1.02 H	221	53.90	38.30
6	*5500.00	81.5 AV			1.02 H	221	43.20	38.30
7	11000.00	54.2 PK	74.0	-19.8	1.12 H	52	4.50	49.70
8	11000.00	43.5 AV	54.0	-10.5	1.12 H	52	-6.20	49.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	45.9 PK	74.0	-28.1	1.04 V	25	7.60	38.30
2	5460.00	33.5 AV	54.0	-20.5	1.04 V	25	-4.80	38.30
3	#5470.00	46.5 PK	74.0	-27.5	1.04 V	25	8.20	38.30
4	#5470.00	34.6 AV	54.0	-19.4	1.04 V	25	-3.70	38.30
5	*5500.00	95.4 PK			1.04 V	25	57.10	38.30
6	*5500.00	84.5 AV			1.04 V	25	46.20	38.30
7	11000.00	56.8 PK	74.0	-17.2	1.29 V	62	7.10	49.70
8	11000.00	46.5 AV	54.0	-7.5	1.29 V	62	-3.20	49.70

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.
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5580.00	92.4 PK			1.04 H	203	54.00	38.40
2	*5580.00	81.8 AV			1.04 H	203	43.40	38.40
3	11160.00	55.2 PK	74.0	-18.8	1.21 H	65	5.70	49.50
4	11160.00	44.8 AV	54.0	-9.2	1.21 H	65	-4.70	49.50
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	*5580.00	95.1 PK			1.08 V	15	56.70	38.40
2	*5580.00	84.2 AV			1.08 V	15	45.80	38.40
3	11160.00	56.2 PK	74.0	-17.8	1.27 V	52	6.70	49.50
4	11160.00	46.1 AV	54.0	-7.9	1.27 V	52	-3.40	49.50

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 64%	TESTED BY	Sun Lin

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	*5700.00	90.8 PK			1.16 H	214	52.10	38.70
2	*5700.00	80.7 AV			1.16 H	214	42.00	38.70
3	#5725.00	44.2 PK	74.0	-29.8	1.16 H	214	5.50	38.70
4	#5725.00	31.8 AV	54.0	-22.2	1.16 H	214	-6.90	38.70
5	11400.00	55.8 PK	74.0	-18.2	1.28 H	57	6.40	49.40
6	11400.00	43.8 AV	54.0	-10.2	1.28 H	57	-5.60	49.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	91.4 PK			1.05 V	22	52.70	38.70
2	*5700.00	81.2 AV			1.05 V	22	42.50	38.70
3	#5725.00	45.2 PK	74.0	-28.8	1.05 V	22	6.50	38.70
4	#5725.00	33.4 AV	54.0	-20.6	1.05 V	22	-5.30	38.70
5	11400.00	55.4 PK	74.0	-18.6	1.15 V	69	6.00	49.40
6	11400.00	45.0 AV	54.0	-9.0	1.15 V	69	-4.40	49.40

REMARKS:

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

BELOW 1GHz WORST-CASE DATA：802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH	TESTED BY	Antony Lee
TEST MODE	A		

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	53.28	18.2 QP	40.0	-21.8	1.25 H	16	4.90	13.30
2	161.92	18.0 QP	43.5	-25.5	1.00 H	140	4.20	13.80
3	189.08	22.4 QP	43.5	-21.1	1.25 H	66	10.40	12.00
4	243.40	21.6 QP	46.0	-24.4	1.50 H	117	8.90	12.70
5	544.10	27.1 QP	46.0	-18.9	1.00 H	199	5.90	21.20
6	784.66	27.8 QP	46.0	-18.2	1.50 H	52	2.90	24.90
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	107.60	25.7 QP	43.5	-17.8	1.25 V	177	15.50	10.20
2	134.76	24.2 QP	43.5	-19.3	1.50 V	206	11.20	13.00
3	189.08	25.4 QP	43.5	-18.1	1.25 V	6	13.40	12.00
4	243.40	23.2 QP	46.0	-22.8	1.00 V	293	10.50	12.70
5	515.00	24.7 QP	46.0	-21.3	1.25 V	3	4.20	20.50
6	852.56	28.7 QP	46.0	-17.3	1.25 V	259	2.80	25.90

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH	TESTED BY	Antony Lee
TEST MODE	B		

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	53.28	17.4 QP	40.0	-22.6	1.00 H	285	4.10	13.30
2	189.08	22.2 QP	43.5	-21.3	1.50 H	53	10.20	12.00
3	243.40	20.9 QP	46.0	-25.1	1.50 H	267	8.20	12.70
4	515.00	25.7 QP	46.0	-20.3	1.25 H	345	5.20	20.50
5	544.10	26.6 QP	46.0	-19.4	1.00 H	220	5.40	21.20
6	829.28	27.6 QP	46.0	-18.4	1.00 H	144	2.00	25.60
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	53.28	21.6 QP	40.0	-18.4	1.25 V	173	8.30	13.30
2	107.60	25.4 QP	43.5	-18.1	1.00 V	182	15.20	10.20
3	134.76	22.8 QP	43.5	-20.7	1.00 V	16	9.80	13.00
4	189.08	25.2 QP	43.5	-18.3	1.00 V	16	13.20	12.00
5	243.40	23.6 QP	46.0	-22.4	1.00 V	323	10.90	12.70
6	854.50	29.2 QP	46.0	-16.8	1.00 V	180	3.30	25.90

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH	TESTED BY	Antony Lee
TEST MODE	C		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	99.84	35.3 QP	43.5	-8.2	1.50 H	116	26.00	9.30
2	142.52	37.4 QP	43.5	-6.1	1.25 H	115	23.90	13.50
3	206.54	34.3 QP	43.5	-9.2	1.25 H	122	22.90	11.40
4	239.52	35.6 QP	46.0	-10.4	1.00 H	88	23.00	12.60
5	299.66	29.2 QP	46.0	-16.8	1.00 H	119	14.30	14.90
6	664.38	35.8 QP	46.0	-10.2	1.50 H	233	13.10	22.70
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	31.94	33.9 QP	40.0	-6.1	1.00 V	106	21.80	12.10
2	97.90	35.1 QP	43.5	-8.4	1.00 V	106	26.00	9.10
3	142.52	36.0 QP	43.5	-7.5	1.00 V	59	22.50	13.50
4	165.80	33.4 QP	43.5	-10.1	1.00 V	116	19.80	13.60
5	431.58	26.7 QP	46.0	-19.3	1.50 V	5	8.40	18.30
6	664.38	31.9 QP	46.0	-14.1	1.50 V	168	9.20	22.70

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.

BELOW 1GHz WORST-CASE DATA：802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH	TESTED BY	Antony Lee
TEST MODE	A		

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	53.28	19.0 QP	40.0	-21.0	1.25 H	30	5.70	13.30
2	189.08	21.8 QP	43.5	-21.7	1.25 H	16	9.80	12.00
3	243.40	21.4 QP	46.0	-24.6	1.25 H	16	8.70	12.70
4	326.82	19.7 QP	46.0	-26.3	1.25 H	154	4.10	15.60
5	515.00	25.0 QP	46.0	-21.0	1.25 H	16	4.50	20.50
6	823.46	29.3 QP	46.0	-16.7	1.25 H	43	3.70	25.60
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	53.28	21.0 QP	40.0	-19.0	1.00 V	274	7.70	13.30
2	107.60	25.3 QP	43.5	-18.2	1.00 V	195	15.10	10.20
3	134.76	22.7 QP	43.5	-20.8	1.25 V	27	9.70	13.00
4	189.08	24.9 QP	43.5	-18.6	1.25 V	232	12.90	12.00
5	243.40	23.3 QP	46.0	-22.7	1.25 V	3	10.60	12.70
6	838.98	29.4 QP	46.0	-16.6	1.50 V	161	3.70	25.70

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH	TESTED BY	Antony Lee
TEST MODE	B		

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	53.28	17.3 QP	40.0	-22.7	1.00 H	356	4.00	13.30
2	146.40	16.8 QP	43.5	-26.7	1.00 H	352	3.10	13.70
3	189.08	18.8 QP	43.5	-24.7	1.25 H	22	6.80	12.00
4	243.40	19.5 QP	46.0	-26.5	1.00 H	108	6.80	12.70
5	544.10	25.5 QP	46.0	-20.5	1.50 H	338	4.30	21.20
6	846.74	29.2 QP	46.0	-16.8	1.00 H	71	3.40	25.80
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	53.28	22.2 QP	40.0	-17.8	1.25 V	289	8.90	13.30
2	107.60	24.4 QP	43.5	-19.1	1.25 V	26	14.20	10.20
3	134.76	23.6 QP	43.5	-19.9	1.25 V	8	10.60	13.00
4	189.08	25.2 QP	43.5	-18.3	1.25 V	181	13.20	12.00
5	243.40	23.1 QP	46.0	-22.9	1.25 V	258	10.40	12.70
6	852.56	28.9 QP	46.0	-17.1	1.25 V	10	3.00	25.90

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.

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	24deg. C, 64%RH	TESTED BY	Antony Lee
TEST MODE	C		

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	97.90	35.9 QP	43.5	-7.6	1.50 H	122	26.80	9.10
2	**142.52**	**37.5 QP**	**43.5**	**-6.0**	**1.25 H**	**99**	**24.00**	**13.50**
3	239.52	36.4 QP	46.0	-9.6	1.00 H	89	23.80	12.60
4	299.66	29.5 QP	46.0	-16.5	1.00 H	111	14.60	14.90
5	431.58	28.5 QP	46.0	-17.5	1.50 H	57	10.20	18.30
6	666.32	34.6 QP	46.0	-11.4	1.50 H	226	11.90	22.70
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	31.94	33.5 QP	40.0	-6.5	1.00 V	15	21.40	12.10
2	99.84	35.7 QP	43.5	-7.8	1.00 V	88	26.40	9.30
3	142.52	36.2 QP	43.5	-7.3	1.00 V	52	22.70	13.50
4	165.80	33.4 QP	43.5	-10.1	1.00 V	117	19.80	13.60
5	431.58	29.3 QP	46.0	-16.7	1.00 V	211	11.00	18.30
6	664.38	32.6 QP	46.0	-13.4	1.25 V	167	9.90	22.70

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.

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	100288	Nov. 09, 2012	Nov. 08, 2013
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 29, 2011	Dec. 28, 2012
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 30, 2011	Dec. 29, 2012
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 06, 2012	Jul. 05, 2013
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

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

2. The test was performed in HwaYa Shielded Room 2.

3. The VCCI Site Registration No. is C-2047.

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.

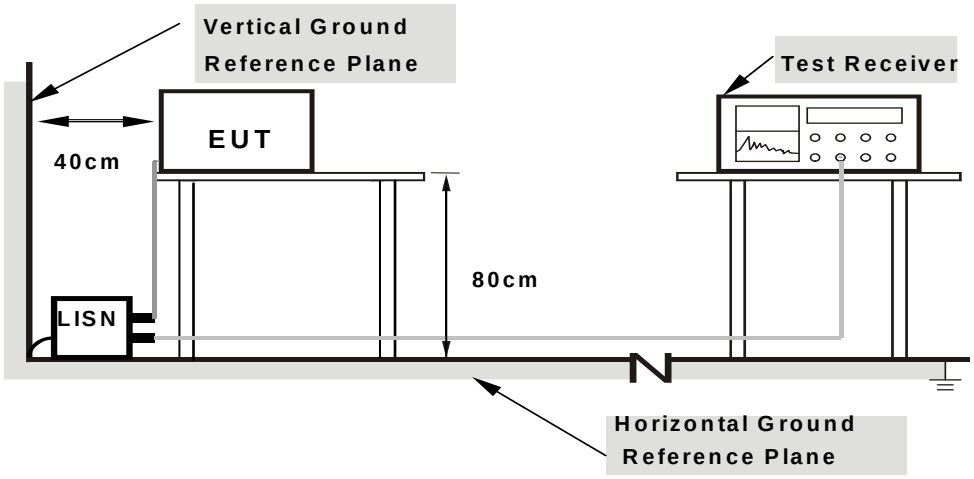
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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：

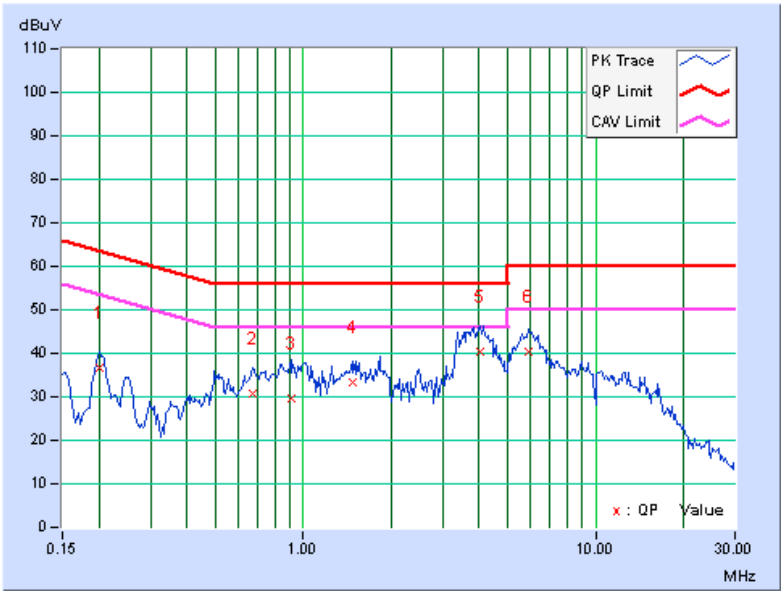
802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
CHANNEL	CH 64	TEST MODE	B

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.15	36.54	30.02	36.69	30.17	63.58	53.58	-26.89	-23.41
2	0.66953	0.18	30.47	22.19	30.65	22.37	56.00	46.00	-25.35	-23.63
3	0.90781	0.19	29.45	21.53	29.64	21.72	56.00	46.00	-26.36	-24.28
4	1.47656	0.22	33.02	24.91	33.24	25.13	56.00	46.00	-22.76	-20.87
5	4.03125	0.34	40.12	29.87	40.46	30.21	56.00	46.00	-15.54	-15.79
6	5.91406	0.37	39.93	35.05	40.30	35.42	60.00	50.00	-19.70	-14.58

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

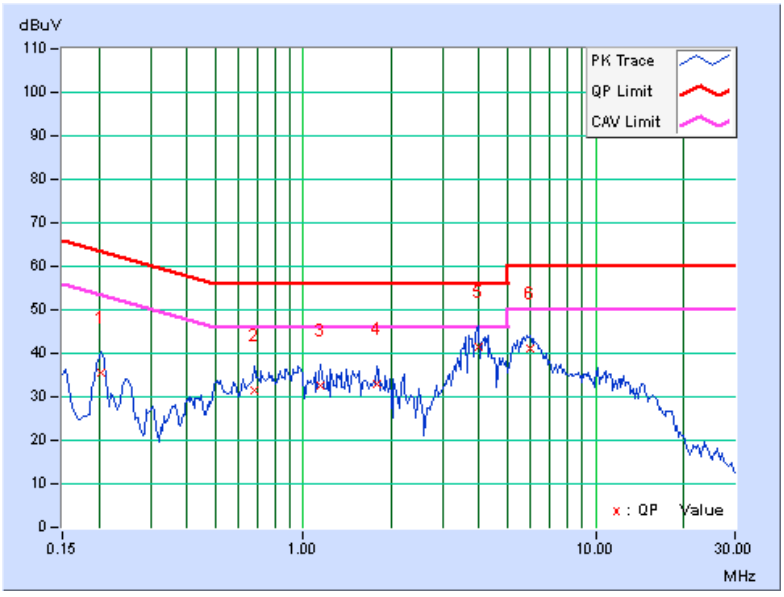


PHASE	Line 2	6dB BANDWIDTH	9kHz
CHANNEL	CH 64	TEST MODE	B

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20469	0.14	35.50	27.98	35.64	28.12	63.42	53.42	-27.78	-25.30
2	0.67734	0.17	31.43	23.03	31.60	23.20	56.00	46.00	-24.40	-22.80
3	1.14063	0.20	32.38	24.23	32.58	24.43	56.00	46.00	-23.42	-21.57
4	1.79297	0.25	32.89	24.51	33.14	24.76	56.00	46.00	-22.86	-21.24
5	3.96484	0.35	41.25	30.12	41.60	30.47	56.00	46.00	-14.40	-15.53
6	5.96484	0.39	40.60	35.66	40.99	36.05	60.00	50.00	-19.01	-13.95

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



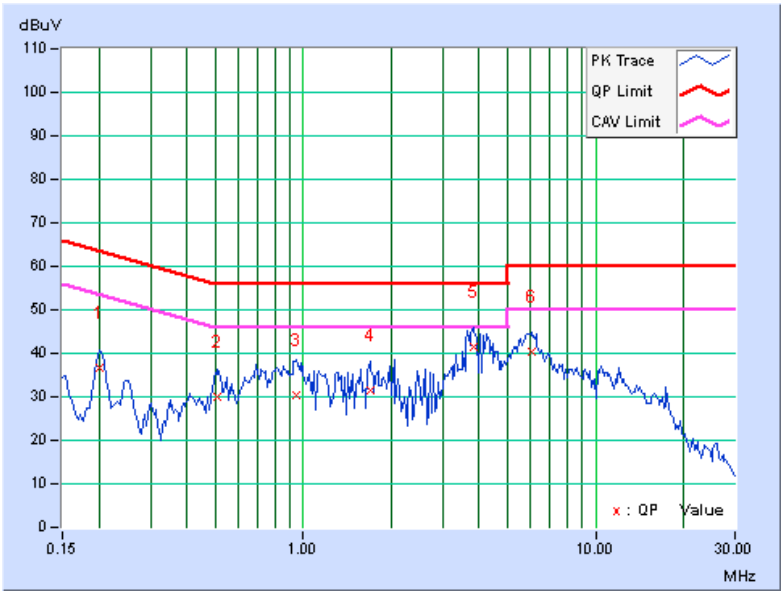
802.11n(20MHz)

PHASE	Line 1	6dB BANDWIDTH	9kHz
CHANNEL	CH 140	TEST MODE	B

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	0.15	36.52	30.52	36.67	30.67	63.58	53.58	-26.91	-22.91
2	0.50547	0.17	29.84	21.94	30.01	22.11	56.00	46.00	-25.99	-23.89
3	0.94688	0.19	30.16	22.32	30.35	22.51	56.00	46.00	-25.65	-23.49
4	1.69141	0.24	31.42	24.30	31.66	24.54	56.00	46.00	-24.34	-21.46
5	3.84375	0.33	41.05	30.34	41.38	30.67	56.00	46.00	-14.62	-15.33
6	6.06250	0.37	39.84	35.12	40.21	35.49	60.00	50.00	-19.79	-14.51

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

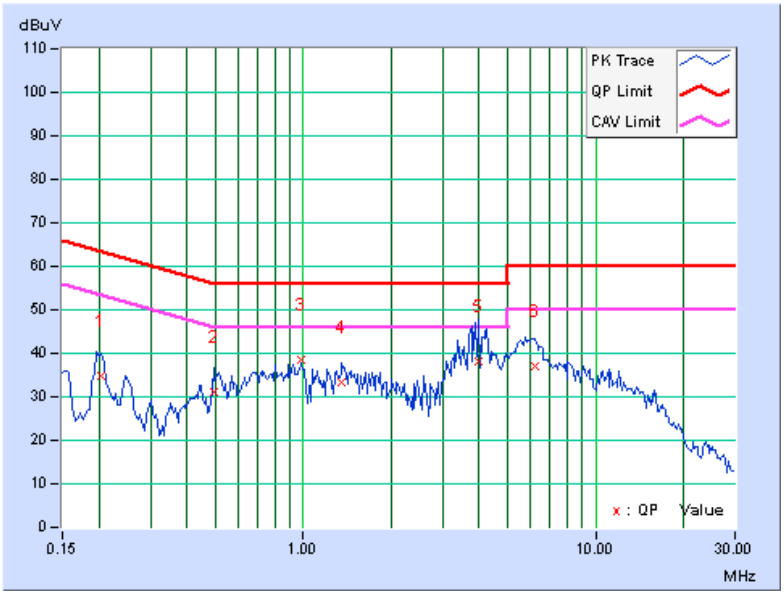


PHASE	Line 2	6dB BANDWIDTH	9kHz
CHANNEL	CH 140	TEST MODE	B

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20323	0.14	34.61	27.26	34.75	27.40	63.48	53.48	-28.73	-26.08
2	0.49375	0.16	31.07	24.73	31.23	24.89	56.10	46.10	-24.87	-21.21
3	**0.98594**	**0.19**	**38.44**	**32.56**	**38.63**	**32.75**	**56.00**	**46.00**	**-17.37**	**-13.25**
4	1.35547	0.21	33.01	25.81	33.22	26.02	56.00	46.00	-22.78	-19.98
5	3.96484	0.35	37.77	27.77	38.12	28.12	56.00	46.00	-17.88	-17.88
6	6.21484	0.40	36.58	31.51	36.98	31.91	60.00	50.00	-23.02	-18.09

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



4.3 PEAK TRANSMIT POWER MEASUREMENT

4.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	The lesser of 50mW (17dBm) or 4dBm + 10logB
5.250 ~ 5.350GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB
5.470 ~ 5.725GHz	The lesser of 250mW (24dBm) or 11dBm + 10logB

NOTE: Where B is the 26dB emission bandwidth in MHz.

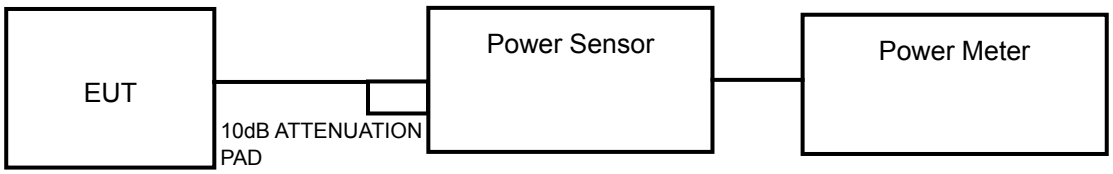
Per KDB 662911 D01 Multiple Transmitter Output v01r02 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any NANT;
Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less for 20-MHz channel widths with NANT ≥ 5.

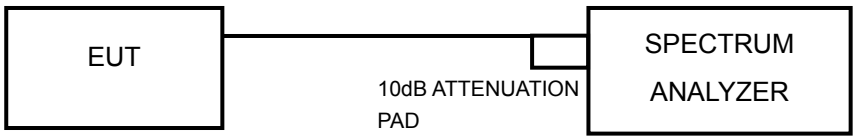
For power measurements on all other devices: Array Gain = 10 log(NANT/NSS) dB.

4.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT



FOR 26dB BANDWIDTH



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.3.4 TEST PROCEDURE

FOR AVERAGE POWER MEASUREMENT

Duty cycle of test signal is < 98 %. Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

FOR 26dB BANDWIDTH

1) Set RBW = approximately 1% of the emission bandwidth.
2) Set the VBW > RBW.
3) Detector = Peak.
4) Trace mode = max hold.
5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.3.5 DEVIATION FROM TEST STANDARD

No deviation.

4.3.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at specific channel frequencies individually.

4.3.7 TEST RESULTS

POWER OUTPUT: 802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	10.641	10.27	17	PASS
40	5200	10.740	10.31	17	PASS
48	5240	10.715	10.30	17	PASS
52	5260	11.169	10.48	24	PASS
60	5300	11.194	10.49	24	PASS
64	5320	11.298	10.53	24	PASS
100	5500	11.402	10.57	24	PASS
116	5580	11.092	10.45	24	PASS
140	5700	10.691	10.29	24	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	10.399	10.17	17	PASS
40	5200	10.399	10.17	17	PASS
48	5240	10.666	10.28	17	PASS
52	5260	10.839	10.35	24	PASS
60	5300	10.914	10.38	24	PASS
64	5320	10.965	10.40	24	PASS
100	5500	11.066	10.44	24	PASS
116	5580	10.641	10.27	24	PASS
140	5700	10.641	10.27	24	PASS

26dB BANDWIDTH: 802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
36	5180	23.39	PASS
40	5200	22.64	PASS
48	5240	22.63	PASS
52	5260	22.45	PASS
60	5300	22.63	PASS
64	5320	22.68	PASS
100	5500	22.90	PASS
116	5580	23.21	PASS
140	5700	22.93	PASS

802.11n (20MHz)

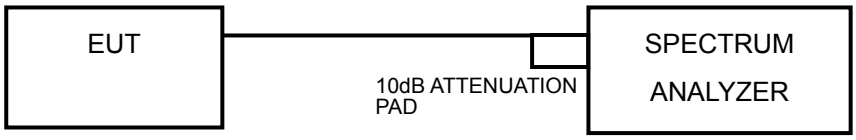
CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
36	5180	23.67	PASS
40	5200	24.01	PASS
48	5240	24.01	PASS
52	5260	24.41	PASS
60	5300	23.75	PASS
64	5320	23.74	PASS
100	5500	23.68	PASS
116	5580	24.29	PASS
140	5700	23.48	PASS

4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

FREQUENCY BAND	LIMIT
5.150 ~ 5.250GHz	4dBm
5.250 ~ 5.350GHz	11dBm
5.470 ~ 5.725GHz	11dBm

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.4.4 TEST PROCEDURES

1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 30 KHz, Set VBW ≥ 1 MHz, Detector = RMS
3) Set Channel power measure = 1MHz
4) Sweep time = auto, trigger set to “free run”.
5) Trace average at least 100 traces in power averaging mode.
6) Record the max value and add 10 log (1/duty cycle)

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as 4.3.6.

4.4.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	-2.73	0.32	-2.41	4	PASS
40	5200	-4.07	0.32	-3.75	4	PASS
48	5240	-3.80	0.32	-3.48	4	PASS
52	5260	-3.00	0.32	-2.68	11	PASS
60	5300	-2.13	0.32	-1.81	11	PASS
64	5320	-2.08	0.32	-1.76	11	PASS
100	5500	-1.85	0.32	-1.53	11	PASS
116	5580	-1.59	0.32	-1.27	11	PASS
140	5700	-1.77	0.32	-1.45	11	PASS

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	-3.81	0.36	-3.45	4	PASS
40	5200	-4.11	0.36	-3.75	4	PASS
48	5240	-3.43	0.36	-3.07	4	PASS
52	5260	-3.43	0.36	-3.07	11	PASS
60	5300	-2.79	0.36	-2.43	11	PASS
64	5320	-2.65	0.36	-2.29	11	PASS
100	5500	-1.97	0.36	-1.61	11	PASS
116	5580	-2.09	0.36	-1.73	11	PASS
140	5700	-2.19	0.36	-1.83	11	PASS

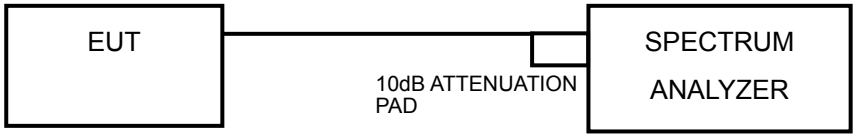
NOTE: Refer to section 3.3 for duty cycle spectrum plot.

4.5 PEAK POWER EXCURSION MEASUREMENT

4.5.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

Shall not exceed 13 dB.

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.5.4 TEST PROCEDURE

1) Set RBW = 1 MHz, VBW ≥ 3 MHz, Detector = peak.
2) Trace mode = max-hold. Allow the sweeps to continue until the trace stabilizes.
3) Use the peak search function to find the peak of the spectrum.
4) Measure the PPSD.
5) Compute the ratio of the maximum of the peak-max-hold spectrum to the PPSD.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITIONS

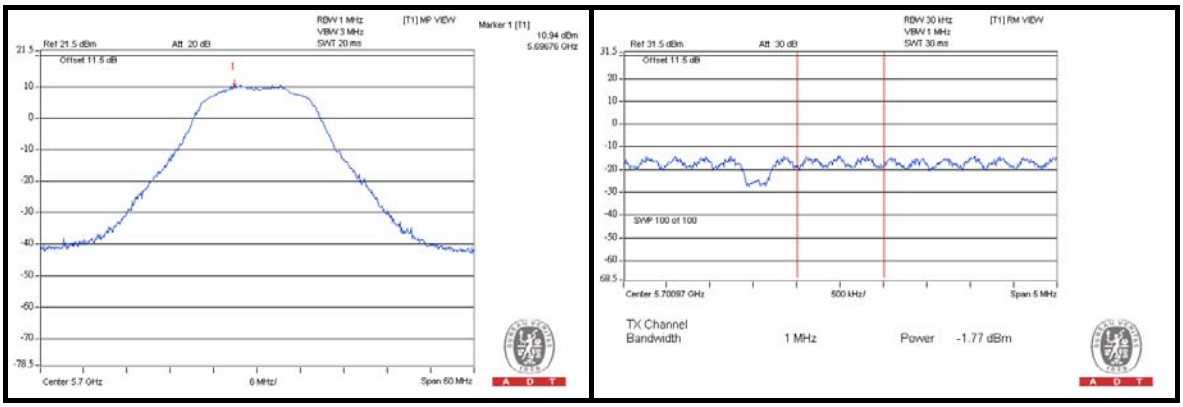
Same as 4.2.6

4.5.7 TEST RESULTS

802.11a

CHAN.	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD WITHOUT DUTY FACTOR (dBm)	PPSD WITH DUTY FACTOR (dBm)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS /FAIL
36	5180	9.56	-2.73	-2.41	11.97	13	PASS
40	5200	8.28	-4.07	-3.75	12.03	13	PASS
48	5240	8.84	-3.80	-3.48	12.32	13	PASS
52	5260	9.23	-3.00	-2.68	11.91	13	PASS
60	5300	9.71	-2.13	-1.81	11.52	13	PASS
64	5320	10.47	-2.08	-1.76	12.23	13	PASS
100	5500	10.54	-1.85	-1.53	12.07	13	PASS
116	5580	10.29	-1.59	-1.27	11.56	13	PASS
140	5700	10.94	-1.77	-1.45	12.39	13	PASS

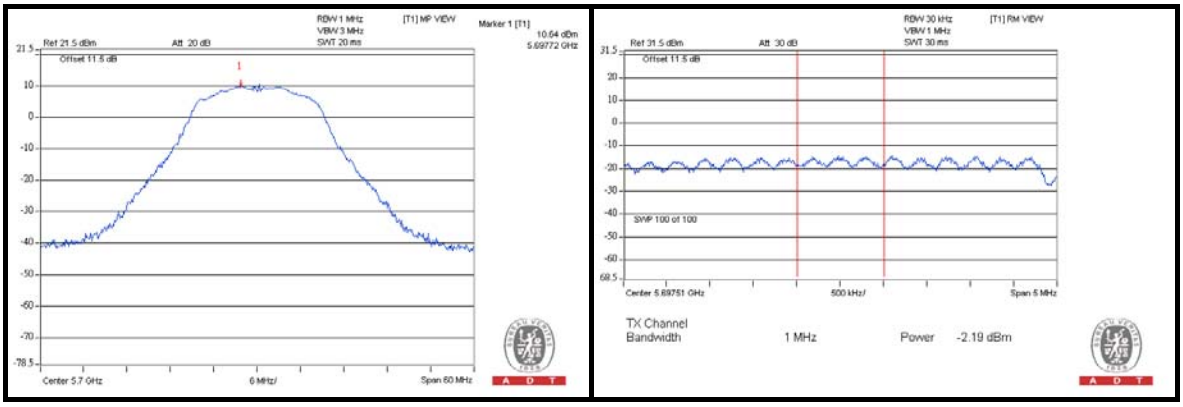
NOTE: Refer to section 3.3 for duty cycle spectrum plot.



802.11n (20MHz)

CHAN.	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD WITHOUT DUTY FACTOR (dBm)	PPSD WITH DUTY FACTOR (dBm)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS /FAIL
36	5180	8.45	-3.81	-3.45	11.90	13	PASS
40	5200	7.83	-4.11	-3.75	11.58	13	PASS
48	5240	9.13	-3.43	-3.07	12.20	13	PASS
52	5260	9.22	-3.43	-3.07	12.29	13	PASS
60	5300	9.70	-2.79	-2.43	12.13	13	PASS
64	5320	9.60	-2.65	-2.29	11.89	13	PASS
100	5500	10.13	-1.97	-1.61	11.74	13	PASS
116	5580	10.21	-2.09	-1.73	11.94	13	PASS
140	5700	10.64	-2.19	-1.83	12.47	13	PASS

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

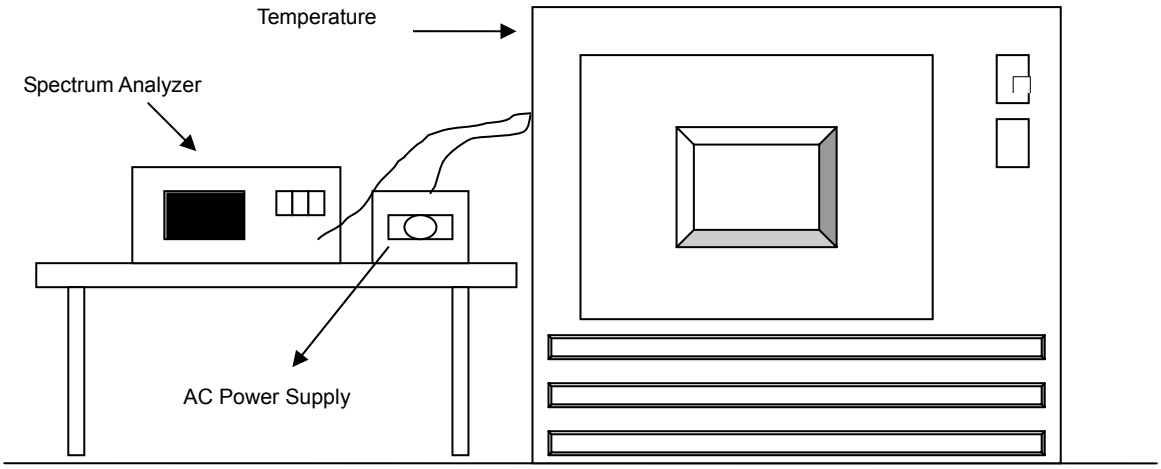


4.6 FREQUENCY STABILITY

4.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

The frequency of the carrier signal shall be maintained within band of operation

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.6.4 TEST PROCEDURE

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.

b. Turn the EUT on and couple its output to a spectrum analyzer.

c. Turn the EUT off and set the chamber to the highest temperature specified.

d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.

e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.

f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITION

Set the EUT transmit at un-modulation mode to test frequency stability.

4.6.7 TEST RESULTS

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5200MHz									
TEMP. (℃)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
60	3.8	5200.0162	3.1154	5199.9954	-0.8846	5200.0174	3.3462	5199.9947	-1.0192
50	3.8	5199.9923	-1.4808	5199.9942	-1.1154	5199.9936	-1.2308	5199.9959	-0.7885
40	3.8	5199.9984	-0.3077	5200.0034	0.6538	5199.9989	-0.2115	5200.005	0.9615
30	3.8	5199.9766	-4.5000	5199.9756	-4.6923	5199.9743	-4.9423	5199.9838	-3.1154
20	3.8	5199.9917	-1.5962	5199.9953	-0.9038	5199.9951	-0.9423	5200.0012	0.2308
10	3.8	5200.0059	1.1346	5200.0037	0.7115	5199.9989	-0.2115	5200.0033	0.6346
0	3.8	5200.0076	1.4615	5200.0096	1.8462	5200.0129	2.4808	5200.0069	1.3269
-10	3.8	5199.9875	-2.4038	5199.9819	-3.4808	5199.9859	-2.7115	5199.991	-1.7308
-20	3.8	5200.0270	5.1923	5200.0289	5.5577	5200.0231	4.4423	5200.0247	4.7500

FREQUEMCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5200MHz									
TEMP. (℃)	POWER SUPPLY (Vdc)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
20	4.37	5199.9932	-1.3077	5199.9952	-0.9231	5199.9966	-0.6538	5200.0011	0.2115
	3.8	5199.9917	-1.5962	5199.9953	-0.9038	5199.9951	-0.9423	5200.0012	0.2308
	3.23	5199.9934	-1.2692	5199.9945	-1.0577	5199.9966	-0.6538	5200.0010	0.1923

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.

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

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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 modifications were made to the EUT by the lab during the test.

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