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PARTIAL FCC TEST REPORT

(15.247_WLAN)

REPORT NO.: RF140707C54

MODEL NO.: UTX-3115XXXXXXXXXXXXXXXXXX,
UTX3115XXXXXXXXXXXXXXXXXX
("X" can be 0-9 or A-Z or blank or any
alphanumeric character)

FCC ID: M82-UTX-3115

RECEIVED: Jun. 18, 2014

TESTED: Jun. 18 ~ Jul. 25, 2014

ISSUED: Jul. 29, 2014

APPLICANT: ADVANTECH CO., LTD

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District, Taipei, Taiwan 114

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

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

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140707C54	Original release	Jul. 29, 2014



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1. CERTIFICATION

PRODUCT: COMPUTER

MODEL NO.: UTX-3115XXXXXXXXXXXXXXXXXX,
UTX3115XXXXXXXXXXXXXXXXXX ("X" can be 0-9 or A-Z or
blank or any alphanumeric character)

BRAND: Advantech

APPLICANT: ADVANTECH CO., LTD

TESTED: Jun. 18 ~ Jul. 25, 2014

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 15, Subpart C (Section 15.247)
ANSI C63.10-2009

The above equipment (model: UTX-3115) 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 : Celine Chou , **DATE :** Jul. 29, 2014
Celine Chou / Specialist

APPROVED BY : Ken Liu , **DATE :** Jul. 29, 2014
Ken Liu / Senior Manager

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART C (SECTION 15.247)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.207	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -15.89dB at 26.99997MHz.
15.205 & 209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -0.3dB at 2483.50MHz.
15.247(d)	Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -0.3dB at 2483.50MHz.
15.247(d)	Antenna Port Emission	NA	Refer to NOTE below.
15.247(a)(2)	6dB bandwidth	NA	Refer to NOTE below.
15.247(b)	Conducted power	NA	Refer to NOTE below.
15.247(e)	Power Spectral Density	NA	Refer to NOTE below.
15.203	Antenna Requirement	PASS	Antenna connector is SMA (M) not a standard connector.

NOTE: Test items for conducted and radiated emission test were performed for this report. Other testing data please refer to module (Brand: Intel, Model: 7260HMW, FCC ID: PD97260H) Report.

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	COMPUTER
MODEL NO.	UTX-3115XXXXXXXXXXXXXXXXXX, UTX3115XXXXXXXXXXXXXXXXXX ("X" can be 0-9 or A-Z or blank or any alphanumeric character)
POWER SUPPLY	12Vdc from Adapter
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 256QAM, 64QAM, 16QAM, QPSK, BPSK for OFDM
MODULATION TECHNOLOGY	DSSS, OFDM
TRANSFER RATE	802.11b: 11.0/ 5.5/ 2.0/ 1.0Mbps 802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 450.0Mbps 802.11ac: up to 866.7Mbps
OPERATING FREQUENCY	2.4GHz: 2412 ~ 2462MHz 5.0GHz: 5745 ~ 5825MHz
NUMBER OF CHANNEL	2.4GHz: 11 for 802.11b, 802.11g, 802.11n (20MHz) 7 for 802.11n (40MHz) 5.0GHz: 5 for 802.11a, 802.11n (20MHz) 2 for 802.11n (40MHz) 1 for 802.11ac (80MHz)
ANTENNA TYPE	2.4GHz: Dipole antenna with 2.98dBi gain 5.0GHz: Dipole antenna with 1.4dBi gain
ANTENNA CONNECTOR	SMA (M)
I/O PORTS	Refer to users' manual
DATA CABLE	N/A
ACCESSORY DEVICES	Refer to note

NOTE:

1. All models are listed as below.

Brand	Model	Difference
ADVANTECH	UTX-3115XXXXXXXXXXXXXXXXXX	"X" can be 0-9 or A-Z or blank or any alphanumeric character
	UTX3115XXXXXXXXXXXXXXXXXX	

* Model UTX-3115 was chosen for final test.

2. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers.

MODULATION MODE	TX FUNCTION
802.11b	1TX
802.11g	1TX
802.11a	1TX
802.11n (20MHz)	1TX / 2TX
802.11n (40MHz)	1TX / 2TX
802.11ac (20MHz)	1TX / 2TX
802.11ac (40MHz)	1TX / 2TX
802.11ac (80MHz)	1TX / 2TX

* The modulation and bandwidth are similar for 802.11n mode for 20MHz / 40MHz and 802.11ac mode for 20MHz / 40MHz, therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)

3. The EUT uses the following components.

Part	Specification	Vendor	Model
Main board	-	Advantech	AIMB-115
Memory	DDR3L 4GB	Apacer	PC3-1066 CL9
SSD	32GB	Plextor	PX-32G5Le-72
CPU	1.4GHz	Intel	ATOM E3826
3G Module	-	Telit	HE910
Wi-Fi Module	-	Intel	7260HMW
Adapter	I/P: 100-240Vac, 50-60Hz, 1.5A O/P: 12Vdc, 3A DC: 1.5m cable with one core attached on adapter AC: 1.8m shielded cable without core	FSP	FSP036-RAB

4. 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 2.4GHz:

11 channels are provided for 802.11b, 802.11g and 802.11n (20MHz):

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
3	2422MHz	7	2442MHz
4	2427MHz	8	2447MHz
5	2432MHz	9	2452MHz
6	2437MHz		

FOR 5.0GHz (5745 ~ 5825MHz):

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (80MHz):

CHANNEL	FREQUENCY
155	5775MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

FOR 2.4GHz:

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

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

NOTE:

The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
-	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
-	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2
-	802.11n (40MHz)	3 to 9	3, 6, 9	OFDM	BPSK	15.0

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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1	DSSS	DBPSK	1.0

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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1	DSSS	DBPSK	1.0

**A D T****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 MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11b	1 to 11	1, 11	DSSS	DBPSK	1.0
-	802.11g	1 to 11	1, 11	OFDM	BPSK	6.0
-	802.11n (20MHz)	1 to 11	1, 11	OFDM	BPSK	7.2
-	802.11n (40MHz)	3 to 9	3, 9	OFDM	BPSK	15.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	25deg. C, 60%RH	120Vac, 60Hz	Ted Chang
RE<1G	25deg. C, 60%RH	120Vac, 60Hz	Ted Chang
PLC	25deg. C, 70%RH	120Vac, 60Hz	Jones Chang

FOR 5.0GHz (5745 ~ 5825MHz):

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

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

NOTE:

The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0
-	802.11n (20MHz)	149 to 165	149, 157, 165	OFDM	BPSK	7.2
-	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0
-	802.11ac (80MHz)	155	155	OFDM	BPSK	65.0

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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	149 to 165	149	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	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	149 to 165	149	OFDM	BPSK	6.0



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BANDEDGE MEASUREMENT:

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

EUT CONFIGURE MODE	MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	149 to 165	149, 165	OFDM	BPSK	6.0
-	802.11n (20MHz)	149 to 165	149, 165	OFDM	BPSK	7.2
-	802.11n (40MHz)	151 to 159	151, 159	OFDM	BPSK	15.0
-	802.11ac (80MHz)	155	155	OFDM	BPSK	65.0

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	25deg. C, 60%RH	120Vac, 60Hz	Ted Chang
RE<1G	25deg. C, 60%RH	120Vac, 60Hz	Ted Chang
PLC	25deg. C, 70%RH	120Vac, 60Hz	Jones Chang

3.3 DESCRIPTION OF SUPPORT UNITS

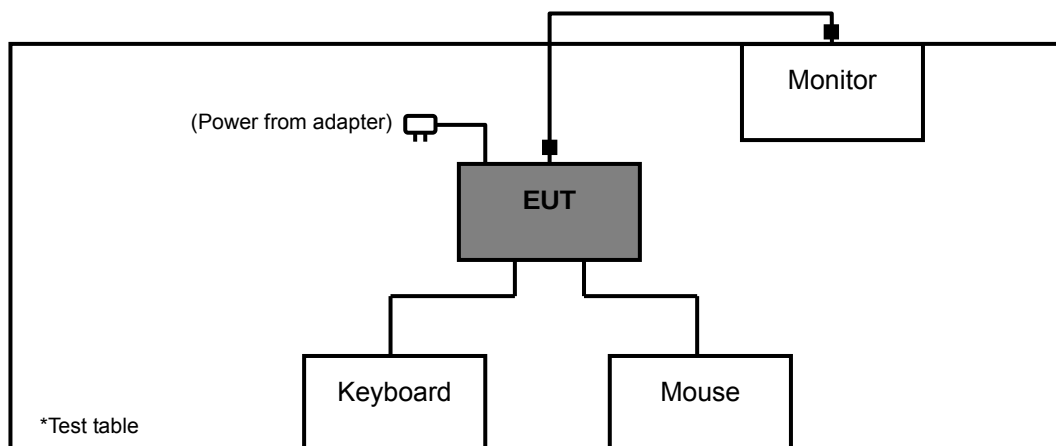
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	LCD Monitor	Samsung	173v	N/A	FCC DoC Approved
2	USB Mouse	DELL	MS-111T	CN-0KW2YH-71616-28H-0L30	N/A
3	USB Keyboard	WINTEK	WM700	20110700000	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	1.8m D-sub Cable with two cores
2	1.8m USB Cable
3	1.8m USB Cable

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

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST





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3.4 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart C (15.247)

558074 D01 DTS Meas Guidance v03r02

662911 D01 Multiple Transmitter Output v02r01

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 (FOR 2.4GHz BAND)

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

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

NOTE:

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

4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 29, 2013	Nov. 28, 2014
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Feb. 11, 2014	Feb. 10, 2015
BILOG Antenna SCHWARZBECK	VULB9168	9168-156	Feb. 25, 2014	Feb. 24, 2015
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-209	Sep. 12, 2013	Sep. 11, 2014
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Feb. 17, 2014	Feb. 16, 2015
Preamplifier Agilent	8449B	3008A01911	Aug. 22, 2013	Aug. 21, 2014
Preamplifier Agilent	8447D	2944A10638	Oct. 18, 2013	Oct. 17, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	248780/4 309222/4 274092/4	Aug. 26, 2013	Aug. 25, 2014
RF signal cable Worken	5D-FB	Cable-HYCH9-01	Aug. 11, 2013	Aug. 10, 2014
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	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. 18, 2013	Oct. 17, 2014

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. 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 215374.
 5. The IC Site Registration No. is IC 7450F-9.

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:

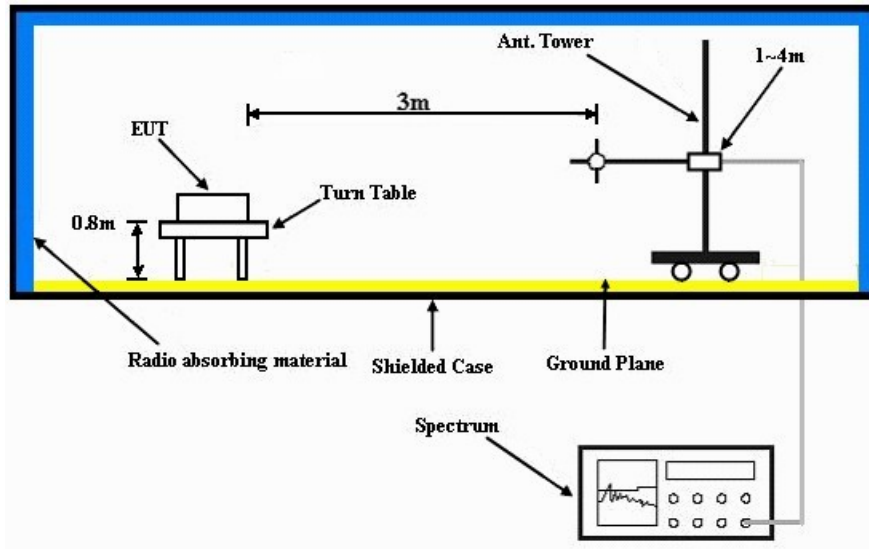
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (Duty cycle < 98%) or 10Hz (Duty cycle > 98%) 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

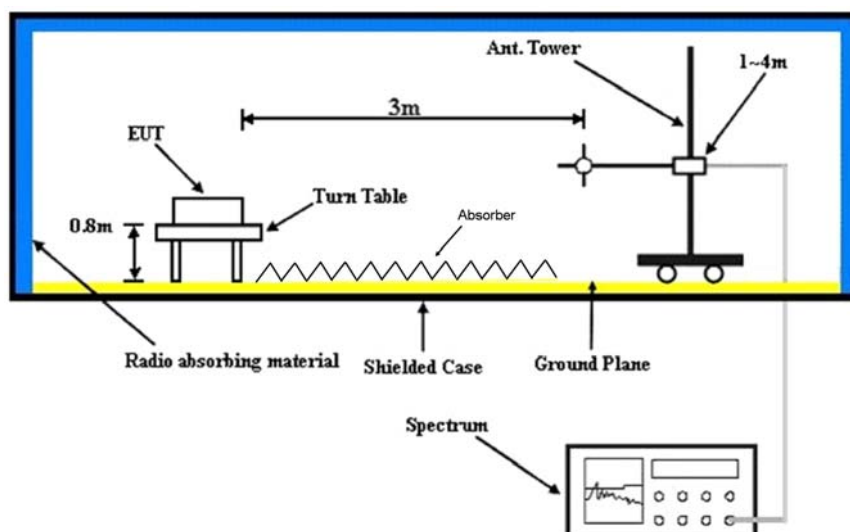
No deviation.

4.1.5 TEST SETUP

Frequency range 30MHz~1GHz



Frequency range above 1GHz



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

4.1.6 EUT OPERATING CONDITIONS

- Placed the EUT on the testing table.
- The EUT ran a test program (provided by manufacturer) to enable itself under transmission condition continuously at specific channel frequency.



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4.1.7 TEST RESULTS

ABOVE 1GHz DATA :

Chain 0

802.11b

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

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	58.8 PK	74.0	-15.2	1.35 H	340	26.50	32.30
2	2390.00	47.3 AV	54.0	-6.7	1.35 H	340	15.00	32.30
3	*2412.00	95.1 PK			1.32 H	340	62.60	32.50
4	*2412.00	91.4 AV			1.32 H	340	58.90	32.50
5	4824.00	45.9 PK	74.0	-28.1	1.00 H	105	43.90	2.00
6	4824.00	32.8 AV	54.0	-21.2	1.00 H	105	30.80	2.00
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	2390.00	60.1 PK	74.0	-13.9	1.16 V	54	27.80	32.30
2	2390.00	46.8 AV	54.0	-7.2	1.16 V	54	14.50	32.30
3	*2412.00	99.2 PK			1.16 V	20	66.70	32.50
4	*2412.00	94.7 AV			1.16 V	20	62.20	32.50
5	4824.00	49.0 PK	74.0	-25.0	1.00 V	240	47.00	2.00
6	4824.00	39.5 AV	54.0	-14.5	1.00 V	240	37.50	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*2437.00	96.7 PK			1.05 H	339	64.20	32.50
2	*2437.00	93.0 AV			1.05 H	339	60.50	32.50
3	4874.00	45.0 PK	74.0	-29.0	1.00 H	119	43.00	2.00
4	4874.00	32.0 AV	54.0	-22.0	1.00 H	119	30.00	2.00
5	7311.00	54.1 PK	74.0	-19.9	1.00 H	26	46.10	8.00
6	7311.00	40.9 AV	54.0	-13.1	1.00 H	26	32.90	8.00
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	*2437.00	99.9 PK			1.17 V	3	67.40	32.50
2	*2437.00	96.1 AV			1.17 V	3	63.60	32.50
3	4874.00	48.0 PK	74.0	-26.0	1.00 V	240	46.00	2.00
4	4874.00	37.2 AV	54.0	-16.8	1.00 V	240	35.20	2.00
5	7311.00	54.7 PK	74.0	-19.3	1.00 V	0	46.70	8.00
6	7311.00	41.2 AV	54.0	-12.8	1.00 V	0	33.20	8.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



A D T

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, 60%RH	TESTED BY	Ted Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	97.1 PK			1.30 H	154	64.50	32.60
2	*2462.00	93.6 AV			1.30 H	154	61.00	32.60
3	2483.50	58.5 PK	74.0	-15.5	1.00 H	26	25.70	32.80
4	2483.50	47.9 AV	54.0	-6.1	1.00 H	26	15.10	32.80
5	4924.00	45.7 PK	74.0	-28.3	1.00 H	32	43.60	2.10
6	4924.00	38.1 AV	54.0	-15.9	1.00 H	32	36.00	2.10
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	*2462.00	101.8 PK			1.12 V	18	69.20	32.60
2	*2462.00	97.8 AV			1.12 V	18	65.20	32.60
3	2483.50	60.6 PK	74.0	-13.4	1.11 V	11	27.80	32.80
4	2483.50	48.6 AV	54.0	-5.4	1.11 V	11	15.80	32.80
5	4924.00	48.6 PK	74.0	-25.4	1.02 V	4	46.50	2.10
6	4924.00	40.8 AV	54.0	-13.2	1.02 V	4	38.70	2.10

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



A D T

802.11g

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

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	58.5 PK	74.0	-15.5	1.00 H	29	26.20	32.30
2	2390.00	46.8 AV	54.0	-7.2	1.00 H	29	14.50	32.30
3	*2412.00	99.3 PK			1.00 H	10	66.80	32.50
4	*2412.00	88.3 AV			1.00 H	10	55.80	32.50
5	4824.00	43.9 PK	74.0	-30.1	1.00 H	95	41.90	2.00
6	4824.00	30.7 AV	54.0	-23.3	1.00 H	95	28.70	2.00
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	2390.00	60.1 PK	74.0	-13.9	1.00 V	0	27.80	32.30
2	2390.00	48.0 AV	54.0	-6.0	1.00 V	0	15.70	32.30
3	*2412.00	101.2 PK			1.18 V	18	68.70	32.50
4	*2412.00	90.4 AV			1.18 V	18	57.90	32.50
5	4824.00	45.6 PK	74.0	-28.4	1.12 V	20	43.60	2.00
6	4824.00	32.5 AV	54.0	-21.5	1.12 V	20	30.50	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*2437.00	99.4 PK			1.05 H	40	66.90	32.50
2	*2437.00	88.9 AV			1.05 H	40	56.40	32.50
3	4874.00	45.2 PK	74.0	-28.8	1.00 H	121	43.20	2.00
4	4874.00	32.5 AV	54.0	-21.5	1.00 H	121	30.50	2.00
5	7311.00	53.9 PK	74.0	-20.1	1.00 H	105	45.90	8.00
6	7311.00	39.2 AV	54.0	-14.8	1.00 H	105	31.20	8.00
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	*2437.00	103.8 PK			1.15 V	14	71.30	32.50
2	*2437.00	93.7 AV			1.15 V	14	61.20	32.50
3	4874.00	45.5 PK	74.0	-28.5	1.00 V	262	43.50	2.00
4	4874.00	32.7 AV	54.0	-21.3	1.00 V	262	30.70	2.00
5	7311.00	54.1 PK	74.0	-19.9	1.00 V	183	46.10	8.00
6	7311.00	40.8 AV	54.0	-13.2	1.00 V	183	32.80	8.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



A D T

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, 60%RH	TESTED BY	Ted Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	97.6 PK			1.28 H	152	65.00	32.60
2	*2462.00	84.1 AV			1.28 H	152	51.50	32.60
3	2483.50	59.9 PK	74.0	-14.1	1.23 H	149	27.10	32.80
4	2483.50	47.7 AV	54.0	-6.3	1.23 H	149	14.90	32.80
5	4924.00	44.9 PK	74.0	-29.1	1.00 H	132	42.80	2.10
6	4924.00	32.2 AV	54.0	-21.8	1.00 H	132	30.10	2.10
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	*2462.00	101.0 PK			1.12 V	20	68.40	32.60
2	*2462.00	90.5 AV			1.12 V	20	57.90	32.60
3	2483.50	60.6 PK	74.0	-13.4	1.14 V	22	27.80	32.80
4	2483.50	48.0 AV	54.0	-6.0	1.14 V	22	15.20	32.80
5	4924.00	45.7 PK	74.0	-28.3	1.00 V	146	43.60	2.10
6	4924.00	32.5 AV	54.0	-21.5	1.00 V	146	30.40	2.10

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



A D T

802.11n (20MHz)

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

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	59.7 PK	74.0	-14.3	1.00 H	143	27.40	32.30
2	2390.00	47.3 AV	54.0	-6.7	1.00 H	143	15.00	32.30
3	*2412.00	95.8 PK			1.05 H	154	63.30	32.50
4	*2412.00	85.6 AV			1.05 H	154	53.10	32.50
5	4824.00	45.9 PK	74.0	-28.1	1.00 H	58	43.90	2.00
6	4824.00	32.8 AV	54.0	-21.2	1.00 H	58	30.80	2.00
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	2390.00	60.0 PK	74.0	-14.0	1.10 V	13	27.70	32.30
2	2390.00	47.5 AV	54.0	-6.5	1.10 V	13	15.20	32.30
3	*2412.00	100.1 PK			1.20 V	15	67.60	32.50
4	*2412.00	89.5 AV			1.20 V	15	57.00	32.50
5	4824.00	46.6 PK	74.0	-27.4	1.00 V	99	44.60	2.00
6	4824.00	33.3 AV	54.0	-20.7	1.00 V	99	31.30	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*2437.00	98.6 PK			1.06 H	41	66.10	32.50
2	*2437.00	88.1 AV			1.06 H	41	55.60	32.50
3	4874.00	44.1 PK	74.0	-29.9	1.00 H	53	42.10	2.00
4	4874.00	32.2 AV	54.0	-21.8	1.00 H	53	30.20	2.00
5	7311.00	53.3 PK	74.0	-20.7	1.00 H	259	45.30	8.00
6	7311.00	40.1 AV	54.0	-13.9	1.00 H	259	32.10	8.00
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	*2437.00	102.7 PK			1.15 V	11	70.20	32.50
2	*2437.00	92.4 AV			1.15 V	11	59.90	32.50
3	4874.00	45.6 PK	74.0	-28.4	1.00 V	99	43.60	2.00
4	4874.00	32.4 AV	54.0	-21.6	1.00 V	99	30.40	2.00
5	7311.00	54.2 PK	74.0	-19.8	1.00 V	318	46.20	8.00
6	7311.00	41.0 AV	54.0	-13.0	1.00 V	318	33.00	8.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



A D T

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, 60%RH	TESTED BY	Ted Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	96.8 PK			1.30 H	151	64.20	32.60
2	*2462.00	85.9 AV			1.30 H	151	53.30	32.60
3	2483.50	60.3 PK	74.0	-13.7	1.15 H	149	27.50	32.80
4	2483.50	47.8 AV	54.0	-6.2	1.15 H	149	15.00	32.80
5	4924.00	45.0 PK	74.0	-29.0	1.00 H	101	42.90	2.10
6	4924.00	32.2 AV	54.0	-21.8	1.00 H	101	30.10	2.10
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	*2462.00	96.4 PK			1.00 V	20	63.80	32.60
2	*2462.00	86.8 AV			1.00 V	20	54.20	32.60
3	2483.50	60.1 PK	74.0	-13.9	1.00 V	35	27.30	32.80
4	2483.50	47.9 AV	54.0	-6.1	1.00 V	35	15.10	32.80
5	4924.00	46.5 PK	74.0	-27.5	1.02 V	67	44.40	2.10
6	4924.00	32.5 AV	54.0	-21.5	1.02 V	67	30.40	2.10

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



A D T

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	59.5 PK	74.0	-14.5	1.00 H	150	27.20	32.30
2	2390.00	47.3 AV	54.0	-6.7	1.00 H	150	15.00	32.30
3	*2422.00	93.9 PK			1.02 H	153	61.40	32.50
4	*2422.00	83.3 AV			1.02 H	153	50.80	32.50
5	4844.00	44.1 PK	74.0	-29.9	1.00 H	51	42.10	2.00
6	4844.00	32.5 AV	54.0	-21.5	1.00 H	51	30.50	2.00
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	2390.00	60.0 PK	74.0	-14.0	1.09 V	32	27.70	32.30
2	2390.00	47.4 AV	54.0	-6.6	1.09 V	32	15.10	32.30
3	*2422.00	95.7 PK			1.16 V	12	63.20	32.50
4	*2422.00	84.8 AV			1.16 V	12	52.30	32.50
5	4844.00	45.4 PK	74.0	-28.6	1.00 V	13	43.40	2.00
6	4844.00	33.0 AV	54.0	-21.0	1.00 V	13	31.00	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	59.2 PK	74.0	-14.8	1.00 H	49	26.90	32.30
2	2390.00	47.3 AV	54.0	-6.7	1.00 H	49	15.00	32.30
3	*2437.00	99.4 PK			1.04 H	339	66.90	32.50
4	*2437.00	89.0 AV			1.04 H	339	56.50	32.50
5	2483.50	60.3 PK	74.0	-13.7	1.00 H	106	27.50	32.80
6	2483.50	48.1 AV	54.0	-5.9	1.00 H	106	15.30	32.80
7	4874.00	44.9 PK	74.0	-29.1	1.00 H	96	42.90	2.00
8	4874.00	32.5 AV	54.0	-21.5	1.00 H	96	30.50	2.00
9	7311.00	52.9 PK	74.0	-21.1	1.00 H	66	44.90	8.00
10	7311.00	40.8 AV	54.0	-13.2	1.00 H	66	32.80	8.00
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	2390.00	61.6 PK	74.0	-12.4	1.00 V	10	29.30	32.30
2	2390.00	48.3 AV	54.0	-5.7	1.00 V	10	16.00	32.30
3	*2437.00	102.9 PK			1.16 V	10	70.40	32.50
4	*2437.00	92.6 AV			1.16 V	10	60.10	32.50
5	2483.50	60.9 PK	74.0	-13.1	1.00 V	20	28.10	32.80
6	2483.50	47.9 AV	54.0	-6.1	1.00 V	20	15.10	32.80
7	4874.00	45.4 PK	74.0	-28.6	1.00 V	59	43.40	2.00
8	4874.00	32.4 AV	54.0	-21.6	1.00 V	59	30.40	2.00
9	7311.00	54.3 PK	74.0	-19.7	1.28 V	35	46.30	8.00
10	7311.00	41.2 AV	54.0	-12.8	1.28 V	35	33.20	8.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 9	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	96.9 PK			1.30 H	153	64.30	32.60
2	*2452.00	86.2 AV			1.30 H	153	53.60	32.60
3	2483.50	60.3 PK	74.0	-13.7	1.00 H	52	27.50	32.80
4	2483.50	47.9 AV	54.0	-6.1	1.00 H	52	15.10	32.80
5	4904.00	45.3 PK	74.0	-28.7	1.00 H	29	43.20	2.10
6	4904.00	32.2 AV	54.0	-21.8	1.00 H	29	30.10	2.10
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	*2452.00	98.0 PK			1.16 V	3	65.40	32.60
2	*2452.00	87.4 AV			1.16 V	3	54.80	32.60
3	2483.50	60.6 PK	74.0	-13.4	1.00 V	32	27.80	32.80
4	2483.50	48.1 AV	54.0	-5.9	1.00 V	32	15.30	32.80
5	4904.00	46.1 PK	74.0	-27.9	1.00 V	10	44.00	2.10
6	4904.00	32.5 AV	54.0	-21.5	1.00 V	10	30.40	2.10

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.

Chain 1

802.11b

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

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	56.1 PK	74.0	-17.9	1.08 H	210	23.80	32.30
2	2390.00	45.8 AV	54.0	-8.2	1.08 H	210	13.50	32.30
3	*2412.00	94.9 PK			1.07 H	207	62.40	32.50
4	*2412.00	91.2 AV			1.07 H	207	58.70	32.50
5	4824.00	44.8 PK	74.0	-29.2	1.00 H	115	42.80	2.00
6	4824.00	35.3 AV	54.0	-18.7	1.00 H	115	33.30	2.00
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	2390.00	58.0 PK	74.0	-16.0	1.20 V	322	25.70	32.30
2	2390.00	48.9 AV	54.0	-5.1	1.20 V	322	16.60	32.30
3	*2412.00	98.8 PK			1.00 V	199	66.30	32.50
4	*2412.00	95.2 AV			1.00 V	199	62.70	32.50
5	4824.00	46.9 PK	74.0	-27.1	1.00 V	235	44.90	2.00
6	4824.00	41.1 AV	54.0	-12.9	1.00 V	235	39.10	2.00

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*2437.00	94.3 PK			1.31 H	231	61.80	32.50
2	*2437.00	90.6 AV			1.31 H	231	58.10	32.50
3	4874.00	45.7 PK	74.0	-28.3	1.04 H	15	43.70	2.00
4	4874.00	38.7 AV	54.0	-15.3	1.04 H	15	36.70	2.00
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	*2437.00	100.3 PK			1.00 V	9	67.80	32.50
2	*2437.00	97.1 AV			1.00 V	9	64.60	32.50
3	4874.00	49.5 PK	74.0	-24.5	1.50 V	74	47.50	2.00
4	4874.00	45.5 AV	54.0	-8.5	1.50 V	74	43.50	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



A D T

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, 60%RH	TESTED BY	Ted Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	96.4 PK			1.01 H	314	63.80	32.60
2	*2462.00	92.7 AV			1.01 H	314	60.10	32.60
3	2483.50	56.2 PK	74.0	-17.8	1.10 H	320	23.40	32.80
4	2483.50	46.0 AV	54.0	-8.0	1.10 H	320	13.20	32.80
5	4924.00	47.2 PK	74.0	-26.8	1.04 H	17	45.10	2.10
6	4924.00	38.3 AV	54.0	-15.7	1.04 H	17	36.20	2.10
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	*2462.00	101.4 PK			1.16 V	349	68.80	32.60
2	*2462.00	97.7 AV			1.16 V	349	65.10	32.60
3	2483.50	60.3 PK	74.0	-13.7	1.15 V	345	27.50	32.80
4	2483.50	49.5 AV	54.0	-4.5	1.15 V	345	16.70	32.80
5	4924.00	51.6 PK	74.0	-22.4	1.66 V	76	49.50	2.10
6	4924.00	48.2 AV	54.0	-5.8	1.66 V	76	46.10	2.10

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



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802.11g

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

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	55.7 PK	74.0	-18.3	1.10 H	210	23.40	32.30
2	2390.00	45.5 AV	54.0	-8.5	1.10 H	210	13.20	32.30
3	*2412.00	95.3 PK			1.06 H	204	62.80	32.50
4	*2412.00	85.9 AV			1.06 H	204	53.40	32.50
5	4824.00	43.6 PK	74.0	-30.4	1.17 H	45	41.60	2.00
6	4824.00	30.1 AV	54.0	-23.9	1.17 H	45	28.10	2.00
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	2390.00	58.6 PK	74.0	-15.4	1.13 V	316	26.30	32.30
2	2390.00	48.1 AV	54.0	-5.9	1.13 V	316	15.80	32.30
3	*2412.00	101.5 PK			1.00 V	80	69.00	32.50
4	*2412.00	91.4 AV			1.00 V	80	58.90	32.50
5	4824.00	44.9 PK	74.0	-29.1	1.15 V	62	42.90	2.00
6	4824.00	30.6 AV	54.0	-23.4	1.15 V	62	28.60	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*2437.00	102.2 PK			1.06 H	348	69.70	32.50
2	*2437.00	93.3 AV			1.06 H	348	60.80	32.50
3	4874.00	43.0 PK	74.0	-31.0	1.03 H	66	41.00	2.00
4	4874.00	30.0 AV	54.0	-24.0	1.03 H	66	28.00	2.00
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	*2437.00	104.6 PK			1.00 V	127	72.10	32.50
2	*2437.00	95.5 AV			1.00 V	127	63.00	32.50
3	4874.00	44.9 PK	74.0	-29.1	1.15 V	63	42.90	2.00
4	4874.00	31.0 AV	54.0	-23.0	1.15 V	63	29.00	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



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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, 60%RH	TESTED BY	Ted Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	99.6 PK			1.01 H	313	67.00	32.60
2	*2462.00	89.0 AV			1.01 H	313	56.40	32.60
3	2483.50	58.4 PK	74.0	-15.6	1.11 H	206	25.60	32.80
4	2483.50	46.3 AV	54.0	-7.7	1.11 H	206	13.50	32.80
5	4904.00	43.1 PK	74.0	-30.9	1.16 H	87	41.00	2.10
6	4904.00	29.7 AV	54.0	-24.3	1.16 H	87	27.60	2.10
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	*2462.00	101.5 PK			1.00 V	125	68.90	32.60
2	*2462.00	92.4 AV			1.00 V	125	59.80	32.60
3	2483.50	60.1 PK	74.0	-13.9	1.44 V	348	27.30	32.80
4	2483.50	48.1 AV	54.0	-5.9	1.44 V	348	15.30	32.80
5	4924.00	44.7 PK	74.0	-29.3	1.13 V	69	42.60	2.10
6	4924.00	30.7 AV	54.0	-23.3	1.13 V	69	28.60	2.10

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



A D T

802.11n (20MHz)

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

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	55.9 PK	74.0	-18.1	1.30 H	210	23.60	32.30
2	2390.00	44.9 AV	54.0	-9.1	1.30 H	210	12.60	32.30
3	*2412.00	95.2 PK			1.34 H	205	62.70	32.50
4	*2412.00	85.8 AV			1.34 H	205	53.30	32.50
5	4824.00	43.0 PK	74.0	-31.0	1.15 H	69	41.00	2.00
6	4824.00	29.5 AV	54.0	-24.5	1.15 H	69	27.50	2.00
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	2390.00	60.6 PK	74.0	-13.4	1.00 V	19	28.30	32.30
2	2390.00	49.5 AV	54.0	-4.5	1.00 V	19	17.20	32.30
3	*2412.00	100.1 PK			1.00 V	82	67.60	32.50
4	*2412.00	90.5 AV			1.00 V	82	58.00	32.50
5	4824.00	44.6 PK	74.0	-29.4	1.05 V	66	42.60	2.00
6	4824.00	31.0 AV	54.0	-23.0	1.05 V	66	29.00	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*2437.00	102.3 PK			1.08 H	347	69.80	32.50
2	*2437.00	92.4 AV			1.08 H	347	59.90	32.50
3	4874.00	43.3 PK	74.0	-30.7	1.15 H	39	41.30	2.00
4	4874.00	29.8 AV	54.0	-24.2	1.15 H	39	27.80	2.00
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	*2437.00	103.6 PK			1.00 V	12	71.10	32.50
2	*2437.00	94.8 AV			1.00 V	12	62.30	32.50
3	4874.00	44.7 PK	74.0	-29.3	1.07 V	44	42.70	2.00
4	4874.00	31.0 AV	54.0	-23.0	1.07 V	44	29.00	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



A D T

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, 60%RH	TESTED BY	Ted Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	100.6 PK			1.10 H	351	68.00	32.60
2	*2462.00	91.0 AV			1.10 H	351	58.40	32.60
3	2483.50	60.6 PK	74.0	-13.4	1.09 H	350	27.80	32.80
4	2483.50	48.2 AV	54.0	-5.8	1.09 H	350	15.40	32.80
5	4924.00	43.1 PK	74.0	-30.9	1.30 H	52	41.00	2.10
6	4924.00	29.6 AV	54.0	-24.4	1.30 H	52	27.50	2.10
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	*2462.00	101.1 PK			1.00 V	127	68.50	32.60
2	*2462.00	92.2 AV			1.00 V	127	59.60	32.60
3	2483.50	58.5 PK	74.0	-15.5	1.02 V	131	25.70	32.80
4	2483.50	48.7 AV	54.0	-5.3	1.02 V	131	15.90	32.80
5	4924.00	45.0 PK	74.0	-29.0	1.16 V	203	42.90	2.10
6	4924.00	30.7 AV	54.0	-23.3	1.16 V	203	28.60	2.10

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



A D T

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	55.0 PK	74.0	-19.0	1.14 H	171	22.70	32.30
2	2390.00	45.0 AV	54.0	-9.0	1.14 H	171	12.70	32.30
3	*2422.00	92.8 PK			1.05 H	204	60.30	32.50
4	*2422.00	83.7 AV			1.05 H	204	51.20	32.50
5	4844.00	43.6 PK	74.0	-30.4	1.23 H	69	41.60	2.00
6	4844.00	29.7 AV	54.0	-24.3	1.23 H	69	27.70	2.00
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	2390.00	58.3 PK	74.0	-15.7	1.20 V	321	26.00	32.30
2	2390.00	49.4 AV	54.0	-4.6	1.20 V	321	17.10	32.30
3	*2422.00	95.8 PK			1.00 V	82	63.30	32.50
4	*2422.00	87.2 AV			1.00 V	82	54.70	32.50
5	4844.00	44.6 PK	74.0	-29.4	1.16 V	58	42.60	2.00
6	4844.00	31.0 AV	54.0	-23.0	1.16 V	58	29.00	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*2437.00	97.9 PK			1.08 H	350	65.40	32.50
2	*2437.00	88.6 AV			1.08 H	350	56.10	32.50
3	4874.00	43.5 PK	74.0	-30.5	1.15 H	230	41.50	2.00
4	4874.00	29.4 AV	54.0	-24.6	1.15 H	230	27.40	2.00
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	*2437.00	100.0 PK			1.00 V	126	67.50	32.50
2	*2437.00	90.3 AV			1.00 V	126	57.80	32.50
3	4874.00	44.6 PK	74.0	-29.4	1.15 V	78	42.60	2.00
4	4874.00	30.7 AV	54.0	-23.3	1.15 V	78	28.70	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 9	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	98.3 PK			1.08 H	358	65.70	32.60
2	*2452.00	88.8 AV			1.08 H	358	56.20	32.60
3	2483.50	56.4 PK	74.0	-17.6	1.10 H	350	23.60	32.80
4	2483.50	46.1 AV	54.0	-7.9	1.10 H	350	13.30	32.80
5	4904.00	43.1 PK	74.0	-30.9	1.33 H	304	41.00	2.10
6	4904.00	29.7 AV	54.0	-24.3	1.33 H	304	27.60	2.10
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	*2452.00	99.0 PK			1.00 V	126	66.40	32.60
2	*2452.00	90.0 AV			1.00 V	126	57.40	32.60
3	2483.50	57.7 PK	74.0	-16.3	1.10 V	130	24.90	32.80
4	2483.50	47.4 AV	54.0	-6.6	1.10 V	130	14.60	32.80
5	4904.00	44.7 PK	74.0	-29.3	1.15 V	217	42.60	2.10
6	4904.00	31.0 AV	54.0	-23.0	1.15 V	217	28.90	2.10

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



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Chain 0 + 1

802.11n (20MHz)

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

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	59.0 PK	74.0	-15.0	1.00 H	35	26.70	32.30
2	2390.00	47.5 AV	54.0	-6.5	1.00 H	35	15.20	32.30
3	*2412.00	96.5 PK			1.18 H	15	64.00	32.50
4	*2412.00	92.4 AV			1.18 H	15	59.90	32.50
5	4824.00	45.3 PK	74.0	-28.7	1.00 H	116	43.30	2.00
6	4824.00	35.3 AV	54.0	-18.7	1.00 H	116	33.30	2.00
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	2390.00	59.9 PK	74.0	-14.1	1.10 V	20	27.60	32.30
2	2390.00	48.2 AV	54.0	-5.8	1.10 V	20	15.90	32.30
3	*2412.00	100.4 PK			1.16 V	9	67.90	32.50
4	*2412.00	96.2 AV			1.16 V	9	63.70	32.50
5	4824.00	48.0 PK	74.0	-26.0	1.00 V	237	46.00	2.00
6	4824.00	38.7 AV	54.0	-15.3	1.00 V	237	36.70	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*2437.00	98.8 PK			1.30 H	29	66.30	32.50
2	*2437.00	94.5 AV			1.30 H	29	62.00	32.50
3	4874.00	47.5 PK	74.0	-26.5	1.00 H	231	45.50	2.00
4	4874.00	37.9 AV	54.0	-16.1	1.00 H	231	35.90	2.00
5	7311.00	54.1 PK	74.0	-19.9	1.00 H	32	46.10	8.00
6	7311.00	40.6 AV	54.0	-13.4	1.00 H	32	32.60	8.00
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	*2437.00	100.7 PK			1.12 V	41	68.20	32.50
2	*2437.00	96.5 AV			1.12 V	41	64.00	32.50
3	4874.00	49.1 PK	74.0	-24.9	1.00 V	352	47.10	2.00
4	4874.00	42.1 AV	54.0	-11.9	1.00 V	352	40.10	2.00
5	7311.00	54.6 PK	74.0	-19.4	1.00 V	13	46.60	8.00
6	7311.00	41.8 AV	54.0	-12.2	1.00 V	13	33.80	8.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



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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, 60%RH	TESTED BY	Ted Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	102.2 PK			1.32 H	27	69.60	32.60
2	*2462.00	91.7 AV			1.32 H	27	59.10	32.60
3	2483.50	69.4 PK	74.0	-4.6	1.00 H	13	36.60	32.80
4	2483.50	52.2 AV	54.0	-1.8	1.00 H	13	19.40	32.80
5	4924.00	46.2 PK	74.0	-27.8	1.10 H	121	44.10	2.10
6	4924.00	34.5 AV	54.0	-19.5	1.10 H	121	32.40	2.10
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	*2462.00	104.8 PK			1.14 V	10	72.20	32.60
2	*2462.00	94.8 AV			1.14 V	10	62.20	32.60
3	2483.50	69.8 PK	74.0	-4.2	1.08 V	20	37.00	32.80
4	2483.50	52.5 AV	54.0	-1.5	1.08 V	20	19.70	32.80
5	4924.00	46.2 PK	74.0	-27.8	1.14 V	107	44.10	2.10
6	4924.00	35.6 AV	54.0	-18.4	1.14 V	107	33.50	2.10

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.



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802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	61.8 PK	74.0	-12.2	1.00 H	15	29.50	32.30
2	2390.00	49.1 AV	54.0	-4.9	1.00 H	15	16.80	32.30
3	*2422.00	97.8 PK			1.33 H	27	65.30	32.50
4	*2422.00	86.9 AV			1.33 H	27	54.40	32.50
5	4844.00	46.9 PK	74.0	-27.1	1.05 H	109	44.90	2.00
6	4844.00	33.6 AV	54.0	-20.4	1.05 H	109	31.60	2.00
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	2390.00	65.0 PK	74.0	-9.0	1.00 V	5	32.70	32.30
2	2390.00	52.4 AV	54.0	-1.6	1.00 V	5	20.10	32.30
3	*2422.00	100.2 PK			1.14 V	7	67.70	32.50
4	*2422.00	89.1 AV			1.14 V	7	56.60	32.50
5	4844.00	48.2 PK	74.0	-25.8	1.10 V	120	46.20	2.00
6	4844.00	34.9 AV	54.0	-19.1	1.10 V	120	32.90	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	61.4 PK	74.0	-12.6	1.00 H	18	29.10	32.30
2	2390.00	49.2 AV	54.0	-4.8	1.00 H	18	16.90	32.30
3	*2437.00	98.9 PK			1.03 H	342	66.40	32.50
4	*2437.00	88.1 AV			1.03 H	342	55.60	32.50
5	2483.50	69.0 PK	74.0	-5.0	1.00 H	326	36.20	32.80
6	2483.50	50.6 AV	54.0	-3.4	1.00 H	326	17.80	32.80
7	4874.00	47.8 PK	74.0	-26.2	1.00 H	195	45.80	2.00
8	4874.00	34.0 AV	54.0	-20.0	1.00 H	195	32.00	2.00
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	2390.00	62.6 PK	74.0	-11.4	1.00 V	4	30.30	32.30
2	2390.00	51.1 AV	54.0	-2.9	1.00 V	4	18.80	32.30
3	*2437.00	103.4 PK			1.15 V	7	70.90	32.50
4	*2437.00	92.6 AV			1.15 V	7	60.10	32.50
5	2483.50	70.0 PK	74.0	-4.0	1.11 V	10	37.20	32.80
6	2483.50	52.6 AV	54.0	-1.4	1.11 V	10	19.80	32.80
7	4874.00	49.0 PK	74.0	-25.0	1.00 V	233	47.00	2.00
8	4874.00	34.9 AV	54.0	-19.1	1.00 V	233	32.90	2.00

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 9	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	99.1 PK			1.30 H	28	66.50	32.60
2	*2452.00	87.8 AV			1.30 H	28	55.20	32.60
3	2483.50	65.3 PK	74.0	-8.7	1.00 H	233	32.50	32.80
4	2483.50	50.5 AV	54.0	-3.5	1.00 H	233	17.70	32.80
5	4904.00	46.4 PK	74.0	-27.6	1.00 H	115	44.30	2.10
6	4904.00	32.1 AV	54.0	-21.9	1.00 H	115	30.00	2.10
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	*2452.00	102.4 PK			1.11 V	7	69.80	32.60
2	*2452.00	91.3 AV			1.11 V	7	58.70	32.60
3	2483.50	70.2 PK	74.0	-3.8	1.11 V	8	37.40	32.80
4	2483.50	53.7 AV	54.0	-0.3	1.11 V	8	20.90	32.80
5	4904.00	46.0 PK	74.0	-28.0	1.00 V	158	43.90	2.10
6	4904.00	33.2 AV	54.0	-20.8	1.00 V	158	31.10	2.10

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.



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BELOW 1GHz WORST-CASE DATA : 802.11b

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 1	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	112.39	31.3 QP	43.5	-12.2	1.50 H	249	48.30	-17.00
2	207.21	35.8 QP	43.5	-7.7	1.01 H	99	52.20	-16.40
3	400.03	44.2 QP	46.0	-1.8	1.00 H	223	54.40	-10.20
4	678.22	40.1 QP	46.0	-5.9	1.25 H	197	45.20	-5.10
5	801.03	41.7 QP	46.0	-4.3	1.50 H	47	44.40	-2.70
6	925.38	39.4 QP	46.0	-6.6	1.25 H	104	39.70	-0.30
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	37.77	30.8 QP	40.0	-9.2	1.00 V	91	46.10	-15.30
2	113.94	31.4 QP	43.5	-12.1	1.00 V	82	48.20	-16.80
3	207.21	32.4 QP	43.5	-11.1	1.00 V	235	48.80	-16.40
4	395.30	39.4 QP	46.0	-6.6	1.99 V	211	49.50	-10.10
5	670.45	37.0 QP	46.0	-9.0	1.99 V	165	42.20	-5.20
6	829.01	37.7 QP	46.0	-8.3	1.49 V	7	39.90	-2.20

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)
– Pre-Amplifier 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	100289	Nov. 29, 2013	Nov. 28, 2014
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 27, 2013	Dec. 26, 2014
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 13, 2014	Feb. 12, 2015
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 21, 2013	Jul. 20, 2014
			Jul. 21, 2014	Jul. 20, 2015
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 1.
3. The VCCI Site Registration No. is C-2040.

4.2.3 TEST PROCEDURES

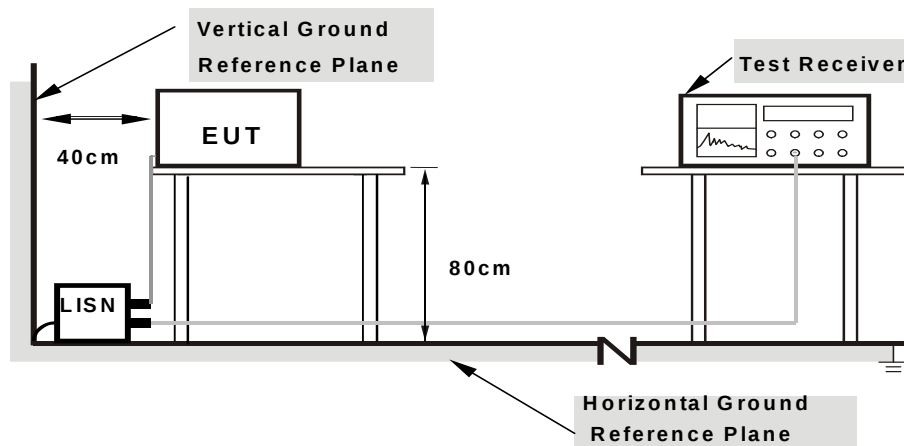
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



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

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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

4.2.7 TEST RESULTS

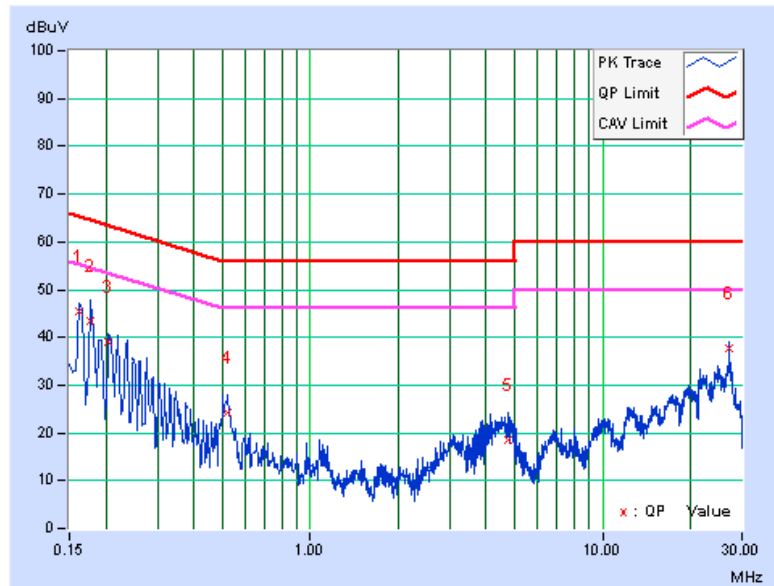
CONDUCTED WORST-CASE DATA : 802.11b

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16181	0.08	45.43	30.80	45.51	30.88	65.37	55.37	-19.86	-24.49
2	0.17737	0.07	43.53	29.40	43.60	29.47	64.61	54.61	-21.00	-25.13
3	0.20474	0.07	38.90	25.23	38.97	25.30	63.42	53.42	-24.45	-28.12
4	0.52145	0.09	24.20	19.23	24.29	19.32	56.00	46.00	-31.71	-26.68
5	4.73252	0.26	18.10	9.01	18.36	9.27	56.00	46.00	-37.64	-36.73
6	26.99997	1.25	36.32	32.74	37.57	33.99	60.00	50.00	-22.43	-16.01

REMARKS:

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

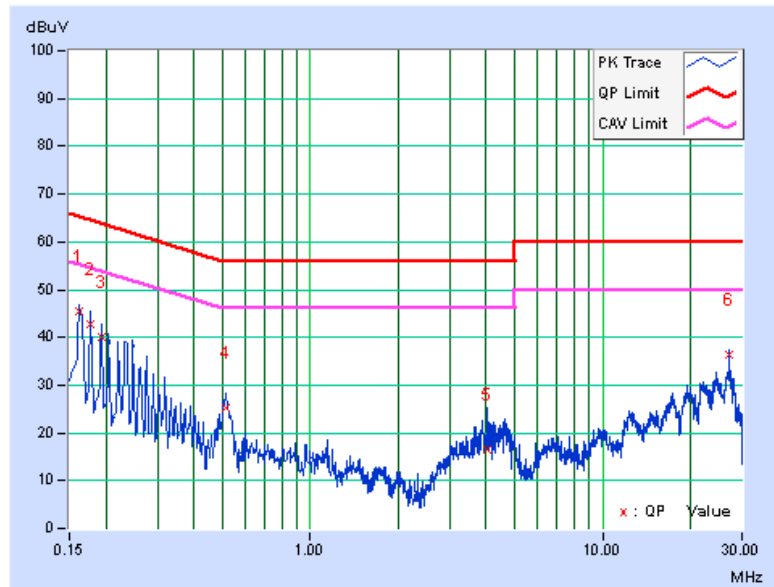


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16181	0.05	45.39	30.82	45.44	30.87	65.37	55.37	-19.93	-24.50
2	0.17737	0.05	42.81	28.97	42.86	29.02	64.61	54.61	-21.75	-25.59
3	0.19301	0.05	40.05	26.29	40.10	26.34	63.91	53.91	-23.81	-27.57
4	0.51448	0.07	25.10	20.28	25.17	20.35	56.00	46.00	-30.83	-25.65
5	4.00526	0.21	16.39	6.43	16.60	6.64	56.00	46.00	-39.40	-39.36
6	27.00388	1.06	35.21	31.49	36.27	32.55	60.00	50.00	-23.73	-17.45

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



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

5.1 RADIATED EMISSION MEASUREMENT

5.1.1 LIMITS OF RADIATED EMISSION MEASUREMENT

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20dB below the highest level of the desired power:

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

NOTE:

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



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5.1.2 TEST INSTRUMENTS

Same as item 4.1.2.

5.1.3 TEST PROCEDURES

Same as item 4.1.3.

5.1.4 DEVIATION FROM TEST STANDARD

No deviation.

5.1.5 TEST SETUP

Same as item 4.1.5.

5.1.6 EUT OPERATING CONDITIONS

Same as item 4.1.6.

5.1.7 TEST RESULTS

ABOVE 1GHz DATA :

Chain 0

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	#5714.90	59.8 PK	77.4	-17.6	1.16 H	164	56.50	3.30
2	#5714.90	47.1 AV	67.1	-20.0	1.16 H	164	43.80	3.30
3	#5725.00	73.8 PK	77.4	-3.6	1.56 H	316	70.50	3.30
4	#5725.00	56.7 AV	67.1	-10.4	1.56 H	316	53.40	3.30
5	*5745.00	97.4 PK			1.14 H	317	57.10	40.30
6	*5745.00	87.1 AV			1.14 H	317	46.80	40.30
7	11490.00	62.2 PK	74.0	-11.8	1.00 H	269	46.30	15.90
8	11490.00	48.3 AV	54.0	-5.7	1.00 H	269	32.40	15.90
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	#5714.90	66.8 PK	85.2	-18.4	1.03 V	255	63.50	3.30
2	#5714.90	52.3 AV	74.5	-22.2	1.03 V	255	49.00	3.30
3	#5725.00	81.4 PK	85.2	-3.8	1.01 V	252	78.10	3.30
4	#5725.00	63.6 AV	74.5	-10.9	1.01 V	252	60.30	3.30
5	*5745.00	105.2 PK			1.00 V	253	64.90	40.30
6	*5745.00	94.5 AV			1.00 V	253	54.20	40.30
7	11490.00	61.5 PK	74.0	-12.5	1.00 V	25	45.60	15.90
8	11490.00	48.4 AV	54.0	-5.6	1.00 V	25	32.50	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5785.00	95.8 PK			1.48 H	168	55.50	40.30
2	*5785.00	85.3 AV			1.48 H	168	45.00	40.30
3	11570.00	61.0 PK	74.0	-13.0	1.00 H	165	45.10	15.90
4	11570.00	48.7 AV	54.0	-5.3	1.00 H	165	32.80	15.90
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	*5785.00	104.8 PK			1.00 V	251	64.50	40.30
2	*5785.00	94.4 AV			1.00 V	251	54.10	40.30
3	11570.00	61.1 PK	74.0	-12.9	1.00 V	63	45.20	15.90
4	11570.00	47.7 AV	54.0	-6.3	1.00 V	63	31.80	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.
6. The limit value is defined as per 15.247.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5825.00	93.6 PK			1.00 H	318	53.10	40.50
2	*5825.00	83.3 AV			1.00 H	318	42.80	40.50
3	#5850.00	61.9 PK	73.6	-11.7	1.33 H	165	58.50	3.40
4	#5850.00	49.3 AV	63.3	-14.0	1.33 H	165	45.90	3.40
5	11650.00	60.6 PK	74.0	-13.4	1.00 H	126	44.70	15.90
6	11650.00	47.5 AV	54.0	-6.5	1.00 H	126	31.60	15.90
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	*5825.00	103.2 PK			1.00 V	250	62.70	40.50
2	*5825.00	92.8 AV			1.00 V	250	52.30	40.50
3	#5850.00	67.7 PK	83.2	-15.5	1.00 V	248	64.30	3.40
4	#5850.00	54.6 AV	72.8	-18.2	1.00 V	248	51.20	3.40
5	11650.00	60.1 PK	74.0	-13.9	1.00 V	53	44.20	15.90
6	11650.00	46.8 AV	54.0	-7.2	1.00 V	53	30.90	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.



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802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	#5714.90	62.5 PK	76.0	-13.5	1.30 H	299	59.20	3.30
2	#5714.90	47.8 AV	65.3	-17.5	1.30 H	299	44.50	3.30
3	#5725.00	71.6 PK	76.0	-4.4	1.34 H	317	68.30	3.30
4	#5725.00	54.4 AV	65.3	-10.9	1.34 H	317	51.10	3.30
5	*5745.00	96.0 PK			1.12 H	315	55.70	40.30
6	*5745.00	85.3 AV			1.12 H	315	45.00	40.30
7	11490.00	62.4 PK	74.0	-11.6	1.00 H	165	46.50	15.90
8	11490.00	48.7 AV	54.0	-5.3	1.00 H	165	32.80	15.90
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	#5714.90	69.9 PK	83.2	-13.3	1.01 V	245	66.60	3.30
2	#5714.90	53.1 AV	72.9	-19.8	1.01 V	245	49.80	3.30
3	#5725.00	79.0 PK	83.2	-4.2	1.02 V	252	75.70	3.30
4	#5725.00	61.9 AV	72.9	-11.0	1.02 V	252	58.60	3.30
5	*5745.00	103.2 PK			1.00 V	251	62.90	40.30
6	*5745.00	92.9 AV			1.00 V	251	52.60	40.30
7	11490.00	62.1 PK	74.0	-11.9	1.00 V	29	46.20	15.90
8	11490.00	48.7 AV	54.0	-5.3	1.00 V	29	32.80	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.
6. The limit value is defined as per 15.247.
7. “#”:The radiated frequency is out the restricted band.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5785.00	95.5 PK			1.43 H	166	55.20	40.30
2	*5785.00	84.8 AV			1.43 H	166	44.50	40.30
3	11570.00	61.2 PK	74.0	-12.8	1.00 H	113	45.30	15.90
4	11570.00	47.5 AV	54.0	-6.5	1.00 H	113	31.60	15.90
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	*5785.00	103.2 PK			1.00 V	250	62.90	40.30
2	*5785.00	93.0 AV			1.00 V	250	52.70	40.30
3	11570.00	61.7 PK	74.0	-12.3	1.00 V	26	45.80	15.90
4	11570.00	48.4 AV	54.0	-5.6	1.00 V	26	32.50	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.
6. The limit value is defined as per 15.247.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5825.00	94.2 PK			1.10 H	313	53.70	40.50
2	*5825.00	83.2 AV			1.10 H	313	42.70	40.50
3	#5850.00	58.7 PK	74.2	-15.5	1.50 H	167	55.30	3.40
4	#5850.00	46.2 AV	63.2	-17.0	1.50 H	167	42.80	3.40
5	11650.00	60.9 PK	74.0	-13.1	1.00 H	26	45.00	15.90
6	11650.00	47.3 AV	54.0	-6.7	1.00 H	26	31.40	15.90
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	*5825.00	103.0 PK			1.00 V	247	62.50	40.50
2	*5825.00	92.4 AV			1.00 V	247	51.90	40.50
3	#5850.00	67.5 PK	83.0	-15.5	1.00 V	248	64.10	3.40
4	#5850.00	52.3 AV	72.4	-20.1	1.00 V	248	48.90	3.40
5	11650.00	61.6 PK	74.0	-12.4	1.00 V	110	45.70	15.90
6	11650.00	47.7 AV	54.0	-6.3	1.00 V	110	31.80	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	#5714.90	67.6 PK	74.2	-6.6	1.49 H	319	64.30	3.30
2	#5714.90	52.5 AV	63.9	-11.4	1.49 H	319	49.20	3.30
3	#5725.00	71.8 PK	74.2	-2.4	1.46 H	318	68.50	3.30
4	#5725.00	57.3 AV	63.9	-6.6	1.46 H	318	54.00	3.30
5	*5755.00	94.2 PK			1.11 H	315	53.90	40.30
6	*5755.00	83.9 AV			1.11 H	315	43.60	40.30
7	11510.00	61.7 PK	74.0	-12.3	1.00 H	102	45.80	15.90
8	11510.00	48.5 AV	54.0	-5.5	1.00 H	102	32.60	15.90
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	#5714.90	74.5 PK	81.3	-6.8	1.00 V	75	71.20	3.30
2	#5714.90	58.8 AV	71.0	-12.2	1.00 V	75	55.50	3.30
3	#5725.00	75.7 PK	81.3	-5.6	1.00 V	79	72.40	3.30
4	#5725.00	60.8 AV	71.0	-10.2	1.00 V	79	57.50	3.30
5	*5755.00	101.3 PK			1.00 V	252	61.00	40.30
6	*5755.00	91.0 AV			1.00 V	252	50.70	40.30
7	11510.00	62.2 PK	74.0	-11.8	1.00 V	121	46.30	15.90
8	11510.00	48.6 AV	54.0	-5.4	1.00 V	121	32.70	15.90

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 159	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5795.00	92.9 PK			1.00 H	317	52.50	40.40
2	*5795.00	83.1 AV			1.00 H	317	42.70	40.40
3	#5850.00	57.0 PK	72.9	-15.9	1.66 H	163	53.60	3.40
4	#5850.00	43.4 AV	63.1	-19.7	1.66 H	163	40.00	3.40
5	11590.00	60.9 PK	74.0	-13.1	1.00 H	232	45.10	15.80
6	11590.00	47.6 AV	54.0	-6.4	1.00 H	232	31.80	15.80
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	*5795.00	101.1 PK			1.01 V	247	60.70	40.40
2	*5795.00	91.0 AV			1.01 V	247	50.60	40.40
3	#5850.00	60.7 PK	81.1	-20.4	1.00 V	247	57.30	3.40
4	#5850.00	47.5 AV	71.0	-23.5	1.00 V	247	44.10	3.40
5	11550.00	61.6 PK	74.0	-12.4	1.00 V	63	45.70	15.90
6	11550.00	48.4 AV	54.0	-5.6	1.00 V	63	32.50	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.



A D T

802.11ac (80MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 155	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	#5714.90	62.6 PK	68.8	-6.2	1.00 H	316	59.30	3.30
2	#5714.90	48.1 AV	58.5	-10.4	1.00 H	316	44.80	3.30
3	#5725.00	64.3 PK	68.8	-4.5	1.76 H	318	61.00	3.30
4	#5725.00	49.9 AV	58.5	-8.6	1.76 H	318	46.60	3.30
5	*5775.00	88.8 PK			1.00 H	314	48.50	40.30
6	*5775.00	78.5 AV			1.00 H	314	38.20	40.30
7	#5850.00	56.2 PK	68.8	-12.6	1.00 H	275	52.80	3.40
8	#5850.00	43.6 AV	58.5	-14.9	1.00 H	275	40.20	3.40
9	11550.00	61.3 PK	74.0	-12.7	1.00 H	13	45.40	15.90
10	11550.00	48.3 AV	54.0	-5.7	1.00 H	13	32.40	15.90
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	#5714.90	70.7 PK	77.0	-6.3	1.13 V	247	67.40	3.30
2	#5714.90	55.9 AV	66.3	-10.4	1.13 V	247	52.60	3.30
3	#5725.00	71.4 PK	77.0	-5.6	1.02 V	245	68.10	3.30
4	#5725.00	56.8 AV	66.3	-9.5	1.02 V	245	53.50	3.30
5	*5775.00	97.0 PK			1.00 V	248	56.70	40.30
6	*5775.00	86.3 AV			1.00 V	248	46.00	40.30
7	#5850.00	62.0 PK	77.0	-15.0	1.00 V	248	58.60	3.40
8	#5850.00	46.8 AV	66.3	-19.5	1.00 V	248	43.40	3.40
9	11550.00	61.6 PK	74.0	-12.4	1.00 V	296	45.70	15.90
10	11550.00	48.4 AV	54.0	-5.6	1.00 V	296	32.50	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.

Chain 1

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	#5714.90	58.7 PK	74.8	-16.1	1.00 H	104	55.40	3.30
2	#5714.90	45.8 AV	64.3	-18.5	1.00 H	104	42.50	3.30
3	#5725.00	67.5 PK	74.8	-7.3	1.00 H	75	64.20	3.30
4	#5725.00	49.7 AV	64.3	-14.6	1.00 H	75	46.40	3.30
5	*5745.00	94.8 PK			1.35 H	78	54.50	40.30
6	*5745.00	84.3 AV			1.35 H	78	44.00	40.30
7	11490.00	61.6 PK	74.0	-12.4	1.00 H	216	45.70	15.90
8	11490.00	48.3 AV	54.0	-5.7	1.00 H	216	32.40	15.90
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	#5714.90	61.8 PK	82.0	-20.2	1.00 V	172	58.50	3.30
2	#5714.90	47.2 AV	71.3	-24.1	1.00 V	172	43.90	3.30
3	#5725.00	75.1 PK	82.0	-6.9	1.00 V	280	71.80	3.30
4	#5725.00	55.4 AV	71.3	-15.9	1.00 V	280	52.10	3.30
5	*5745.00	102.0 PK			1.00 V	244	61.70	40.30
6	*5745.00	91.3 AV			1.00 V	244	51.00	40.30
7	11490.00	62.2 PK	74.0	-11.8	1.00 V	255	46.30	15.90
8	11490.00	48.5 AV	54.0	-5.5	1.00 V	255	32.60	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.
6. The limit value is defined as per 15.247.
7. “#”:The radiated frequency is out the restricted band.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5785.00	92.5 PK			1.00 H	63	52.20	40.30
2	*5785.00	81.7 AV			1.00 H	63	41.40	40.30
3	11570.00	60.5 PK	74.0	-13.5	1.00 H	216	44.60	15.90
4	11570.00	47.6 AV	54.0	-6.4	1.00 H	216	31.70	15.90
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	*5785.00	100.9 PK			1.00 V	284	60.60	40.30
2	*5785.00	90.7 AV			1.00 V	284	50.40	40.30
3	11570.00	61.1 PK	74.0	-12.9	1.00 V	263	45.20	15.90
4	11570.00	48.4 AV	54.0	-5.6	1.00 V	263	32.50	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.
6. The limit value is defined as per 15.247.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5825.00	89.5 PK			1.00 H	214	49.00	40.50
2	*5825.00	79.3 AV			1.00 H	214	38.80	40.50
3	#5850.00	56.4 PK	69.5	-13.1	1.00 H	293	53.00	3.40
4	#5850.00	43.8 AV	59.3	-15.5	1.00 H	293	40.40	3.40
5	11650.00	60.0 PK	74.0	-14.0	1.00 H	207	44.10	15.90
6	11650.00	47.0 AV	54.0	-7.0	1.00 H	207	31.10	15.90
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	*5825.00	100.3 PK			1.00 V	282	59.80	40.50
2	*5825.00	89.8 AV			1.00 V	282	49.30	40.50
3	#5850.00	59.1 PK	80.3	-21.2	1.00 V	128	55.70	3.40
4	#5850.00	45.3 AV	69.8	-24.5	1.00 V	128	41.90	3.40
5	11650.00	60.5 PK	74.0	-13.5	1.18 V	0	44.60	15.90
6	11650.00	47.4 AV	54.0	-6.6	1.18 V	0	31.50	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.



A D T

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	#5714.90	58.3 PK	74.2	-15.9	1.00 H	221	55.00	3.30
2	#5714.90	44.6 AV	63.5	-18.9	1.00 H	221	41.30	3.30
3	#5725.00	70.0 PK	74.2	-4.2	1.00 H	63	66.70	3.30
4	#5725.00	52.6 AV	63.5	-10.9	1.00 H	63	49.30	3.30
5	*5745.00	94.2 PK			1.00 H	200	53.90	40.30
6	*5745.00	83.5 AV			1.00 H	200	43.20	40.30
7	11490.00	62.4 PK	74.0	-11.6	1.00 H	29	46.50	15.90
8	11490.00	48.6 AV	54.0	-5.4	1.00 H	29	32.70	15.90
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	#5714.90	61.4 PK	82.0	-20.6	1.00 V	279	58.10	3.30
2	#5714.90	47.4 AV	71.0	-23.6	1.00 V	279	44.10	3.30
3	#5725.00	75.7 PK	82.0	-6.3	1.00 V	282	72.40	3.30
4	#5725.00	56.9 AV	71.0	-14.1	1.00 V	282	53.60	3.30
5	*5745.00	102.0 PK			1.07 V	167	61.70	40.30
6	*5745.00	91.0 AV			1.07 V	167	50.70	40.30
7	11490.00	61.8 PK	74.0	-12.2	1.00 V	15	45.90	15.90
8	11490.00	48.4 AV	54.0	-5.6	1.00 V	15	32.50	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.
6. The limit value is defined as per 15.247.
7. “#”:The radiated frequency is out the restricted band.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5785.00	94.6 PK			1.01 H	204	54.30	40.30
2	*5785.00	84.0 AV			1.01 H	204	43.70	40.30
3	11570.00	62.2 PK	74.0	-11.8	1.00 H	20	46.30	15.90
4	11570.00	47.6 AV	54.0	-6.4	1.00 H	20	31.70	15.90
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	*5785.00	102.5 PK			1.01 V	126	62.20	40.30
2	*5785.00	91.6 AV			1.01 V	126	51.30	40.30
3	11570.00	61.4 PK	74.0	-12.6	1.00 V	156	45.50	15.90
4	11570.00	47.6 AV	54.0	-6.4	1.00 V	156	31.70	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.
6. The limit value is defined as per 15.247.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5825.00	92.8 PK			1.00 H	204	52.30	40.50
2	*5825.00	82.0 AV			1.00 H	204	41.50	40.50
3	#5850.00	59.2 PK	72.8	-13.6	1.00 H	63	55.80	3.40
4	#5850.00	43.8 AV	62.0	-18.2	1.00 H	63	40.40	3.40
5	11650.00	61.0 PK	74.0	-13.0	1.00 H	103	45.10	15.90
6	11650.00	48.2 AV	54.0	-5.8	1.00 H	103	32.30	15.90
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	*5825.00	100.9 PK			1.00 V	126	60.40	40.50
2	*5825.00	89.8 AV			1.00 V	126	49.30	40.50
3	#5850.00	66.9 PK	80.9	-14.0	1.00 V	127	63.50	3.40
4	#5850.00	49.6 AV	69.8	-20.2	1.00 V	127	46.20	3.40
5	11650.00	60.6 PK	74.0	-13.4	1.00 V	26	44.70	15.90
6	11650.00	47.4 AV	54.0	-6.6	1.00 V	26	31.50	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.



A D T

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	#5714.90	65.4 PK	75.1	-9.7	1.00 H	218	62.10	3.30
2	#5714.90	50.8 AV	64.0	-13.2	1.00 H	218	47.50	3.30
3	#5725.00	68.9 PK	75.1	-6.2	1.01 H	201	65.60	3.30
4	#5725.00	55.9 AV	64.0	-8.1	1.01 H	201	52.60	3.30
5	*5755.00	95.1 PK			1.09 H	76	54.80	40.30
6	*5755.00	84.0 AV			1.09 H	76	43.70	40.30
7	11510.00	62.8 PK	74.0	-11.2	1.00 H	36	46.90	15.90
8	11510.00	49.0 AV	54.0	-5.0	1.00 H	36	33.10	15.90
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	#5714.90	70.8 PK	79.3	-8.5	1.00 V	248	67.50	3.30
2	#5714.90	57.4 AV	68.8	-11.4	1.00 V	248	54.10	3.30
3	#5725.00	75.1 PK	79.3	-4.2	1.00 V	248	71.80	3.30
4	#5725.00	62.7 AV	68.8	-6.1	1.00 V	248	59.40	3.30
5	*5755.00	99.3 PK			1.00 V	285	59.00	40.30
6	*5755.00	88.8 AV			1.00 V	285	48.50	40.30
7	11510.00	62.4 PK	74.0	-11.6	1.00 V	103	46.50	15.90
8	11510.00	48.6 AV	54.0	-5.4	1.00 V	103	32.70	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.
6. The limit value is defined as per 15.247.
7. “#”:The radiated frequency is out the restricted band.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 159	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5795.00	91.9 PK			1.00 H	205	51.50	40.40
2	*5795.00	81.8 AV			1.00 H	205	41.40	40.40
3	#5850.00	56.4 PK	71.9	-15.5	1.12 H	20	53.00	3.40
4	#5850.00	43.2 AV	61.8	-18.6	1.12 H	20	39.80	3.40
5	11590.00	62.1 PK	74.0	-11.9	1.00 H	26	46.30	15.80
6	11590.00	49.2 AV	54.0	-4.8	1.00 H	26	33.40	15.80
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	*5795.00	98.7 PK			1.00 V	126	58.30	40.40
2	*5795.00	88.1 AV			1.00 V	126	47.70	40.40
3	#5850.00	56.6 PK	78.7	-22.1	1.25 V	97	53.20	3.40
4	#5850.00	44.2 AV	68.1	-23.9	1.25 V	97	40.80	3.40
5	11590.00	61.3 PK	74.0	-12.7	1.00 V	102	45.50	15.80
6	11590.00	48.1 AV	54.0	-5.9	1.00 V	102	32.30	15.80

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.



A D T

802.11ac (80MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 155	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	#5714.90	60.3 PK	67.2	-6.9	1.02 H	57	57.00	3.30
2	#5714.90	47.4 AV	56.4	-9.0	1.02 H	57	44.10	3.30
3	#5725.00	61.9 PK	67.2	-5.3	1.02 H	57	58.60	3.30
4	#5725.00	48.0 AV	56.4	-8.4	1.02 H	57	44.70	3.30
5	*5775.00	87.2 PK			1.01 H	204	46.90	40.30
6	*5775.00	76.4 AV			1.01 H	204	36.10	40.30
7	#5850.00	56.6 PK	67.2	-10.6	1.00 H	343	53.20	3.40
8	#5850.00	43.5 AV	56.4	-12.9	1.00 H	343	40.10	3.40
9	11550.00	62.2 PK	74.0	-11.8	1.00 H	203	46.30	15.90
10	11550.00	48.8 AV	54.0	-5.2	1.00 H	203	32.90	15.90
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	#5714.90	66.2 PK	74.4	-8.2	1.00 V	168	62.90	3.30
2	#5714.90	52.3 AV	64.2	-11.9	1.00 V	168	49.00	3.30
3	#5725.00	67.4 PK	74.4	-7.0	1.00 V	167	64.10	3.30
4	#5725.00	53.3 AV	64.2	-10.9	1.00 V	167	50.00	3.30
5	*5775.00	94.4 PK			1.02 V	127	54.10	40.30
6	*5775.00	84.2 AV			1.02 V	127	43.90	40.30
7	#5850.00	60.6 PK	74.4	-13.8	1.00 V	125	57.20	3.40
8	#5850.00	45.4 AV	64.2	-18.8	1.00 V	125	42.00	3.40
9	11550.00	61.9 PK	74.0	-12.1	1.00 V	168	46.00	15.90
10	11550.00	48.4 AV	54.0	-5.6	1.00 V	168	32.50	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.
6. The limit value is defined as per 15.247.
7. “#”:The radiated frequency is out the restricted band.

Chain 0 + 1

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	#5714.90	59.2 PK	75.5	-16.3	1.00 H	12	55.90	3.30
2	#5714.90	44.9 AV	64.8	-19.9	1.00 H	12	41.60	3.30
3	#5725.00	61.8 PK	75.5	-13.7	1.00 H	318	58.50	3.30
4	#5725.00	45.6 AV	64.8	-19.2	1.00 H	318	42.30	3.30
5	*5745.00	95.5 PK			1.24 H	221	55.20	40.30
6	*5745.00	84.8 AV			1.24 H	221	44.50	40.30
7	11490.00	61.7 PK	74.0	-12.3	1.10 H	193	45.80	15.90
8	11490.00	49.1 AV	54.0	-4.9	1.10 H	193	33.20	15.90
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	#5714.90	60.7 PK	84.2	-23.5	1.11 V	250	57.40	3.30
2	#5714.90	46.1 AV	73.8	-27.7	1.11 V	250	42.80	3.30
3	#5725.00	70.7 PK	84.2	-13.5	1.21 V	246	67.40	3.30
4	#5725.00	53.4 AV	73.8	-20.4	1.21 V	246	50.10	3.30
5	*5745.00	104.2 PK			1.00 V	246	63.90	40.30
6	*5745.00	93.8 AV			1.00 V	246	53.50	40.30
7	11490.00	62.3 PK	74.0	-11.7	1.00 V	342	46.40	15.90
8	11490.00	48.5 AV	54.0	-5.5	1.00 V	342	32.60	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.
6. The limit value is defined as per 15.247.
7. “#”:The radiated frequency is out the restricted band.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 157	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5785.00	94.3 PK			1.00 H	185	54.00	40.30
2	*5785.00	83.9 AV			1.00 H	185	43.60	40.30
3	11570.00	61.6 PK	74.0	-12.4	1.00 H	210	45.70	15.90
4	11570.00	47.4 AV	54.0	-6.6	1.00 H	210	31.50	15.90
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	*5785.00	104.2 PK			1.00 V	282	63.90	40.30
2	*5785.00	93.5 AV			1.00 V	282	53.20	40.30
3	11570.00	61.3 PK	74.0	-12.7	1.00 V	27	45.40	15.90
4	11570.00	48.5 AV	54.0	-5.5	1.00 V	27	32.60	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * ”: Fundamental frequency.
6. The limit value is defined as per 15.247.



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5825.00	92.5 PK			1.00 H	200	52.00	40.50
2	*5825.00	82.3 AV			1.00 H	200	41.80	40.50
3	#5850.00	56.4 PK	72.5	-16.1	1.00 H	40	53.00	3.40
4	#5850.00	44.2 AV	62.3	-18.1	1.00 H	40	40.80	3.40
5	11650.00	60.9 PK	74.0	-13.1	1.00 H	203	45.00	15.90
6	11650.00	47.8 AV	54.0	-6.2	1.00 H	203	31.90	15.90
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	*5825.00	101.7 PK			1.08 V	244	61.20	40.50
2	*5825.00	91.3 AV			1.08 V	244	50.80	40.50
3	#5850.00	58.2 PK	81.7	-23.5	1.00 V	134	54.80	3.40
4	#5850.00	43.7 AV	71.3	-27.6	1.00 V	134	40.30	3.40
5	11650.00	60.0 PK	74.0	-14.0	1.00 V	252	44.10	15.90
6	11650.00	47.8 AV	54.0	-6.2	1.00 V	252	31.90	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.



A D T

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	#5714.90	57.9 PK	74.6	-16.7	1.67 H	219	54.60	3.30
2	#5714.90	45.9 AV	63.6	-17.7	1.67 H	219	42.60	3.30
3	#5725.00	60.7 PK	74.6	-13.9	1.00 H	58	57.40	3.30
4	#5725.00	47.4 AV	63.6	-16.2	1.00 H	58	44.10	3.30
5	*5755.00	94.6 PK			1.45 H	220	54.30	40.30
6	*5755.00	83.6 AV			1.45 H	220	43.30	40.30
7	11510.00	62.3 PK	74.0	-11.7	1.00 H	159	46.40	15.90
8	11510.00	48.4 AV	54.0	-5.6	1.00 H	159	32.50	15.90
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	#5714.90	68.0 PK	80.8	-12.8	1.00 V	285	64.70	3.30
2	#5714.90	51.4 AV	70.6	-19.2	1.00 V	285	48.10	3.30
3	#5725.00	69.5 PK	80.8	-11.3	1.15 V	275	66.20	3.30
4	#5725.00	55.8 AV	70.6	-14.8	1.15 V	275	52.50	3.30
5	*5755.00	100.8 PK			1.00 V	247	60.50	40.30
6	*5755.00	90.6 AV			1.00 V	247	50.30	40.30
7	11510.00	61.8 PK	74.0	-12.2	1.00 V	116	45.90	15.90
8	11510.00	48.4 AV	54.0	-5.6	1.00 V	116	32.50	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.
6. The limit value is defined as per 15.247.
7. “#”:The radiated frequency is out the restricted band.



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 159	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	*5795.00	94.0 PK			1.69 H	221	53.60	40.40
2	*5795.00	83.7 AV			1.69 H	221	43.30	40.40
3	#5850.00	56.5 PK	74.0	-17.5	1.00 H	10	53.10	3.40
4	#5850.00	43.4 AV	63.7	-20.3	1.00 H	10	40.00	3.40
5	11590.00	60.6 PK	74.0	-13.4	1.00 H	215	44.80	15.80
6	11590.00	47.8 AV	54.0	-6.2	1.00 H	215	32.00	15.80
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	*5795.00	102.2 PK			1.00 V	244	61.80	40.40
2	*5795.00	92.1 AV			1.00 V	244	51.70	40.40
3	#5850.00	56.6 PK	82.2	-25.6	1.00 V	283	53.20	3.40
4	#5850.00	44.4 AV	72.1	-27.7	1.00 V	283	41.00	3.40
5	11590.00	60.8 PK	74.0	-13.2	1.00 V	23	45.00	15.80
6	11590.00	48.6 AV	54.0	-5.4	1.00 V	23	32.80	15.80

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. The limit value is defined as per 15.247.
7. "#":The radiated frequency is out the restricted band.



A D T

802.11ac (80MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 155	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	#5714.90	63.2 PK	68.1	-4.9	1.00 H	316	59.90	3.30
2	#5714.90	47.9 AV	56.7	-8.8	1.00 H	316	44.60	3.30
3	#5725.00	64.0 PK	68.1	-4.1	1.45 H	318	60.70	3.30
4	#5725.00	49.0 AV	56.7	-7.7	1.45 H	318	45.70	3.30
5	*5775.00	88.1 PK			1.30 H	317	47.80	40.30
6	*5775.00	76.7 AV			1.30 H	317	36.40	40.30
7	#5850.00	56.4 PK	68.1	-11.7	1.00 H	152	53.00	3.40
8	#5850.00	43.2 AV	56.7	-13.5	1.00 H	152	39.80	3.40
9	11500.00	61.2 PK	74.0	-12.8	1.00 H	23	45.30	15.90
10	11500.00	47.8 AV	54.0	-6.2	1.00 H	23	31.90	15.90
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	#5714.90	70.0 PK	78.4	-8.4	1.28 V	284	66.70	3.30
2	#5714.90	54.8 AV	65.9	-11.1	1.28 V	284	51.50	3.30
3	#5725.00	71.7 PK	78.4	-6.7	1.00 V	254	68.40	3.30
4	#5725.00	55.9 AV	65.9	-10.0	1.00 V	254	52.60	3.30
5	*5775.00	98.4 PK			1.23 V	283	58.10	40.30
6	*5775.00	85.9 AV			1.23 V	283	45.60	40.30
7	#5850.00	60.3 PK	78.4	-18.1	1.00 V	129	56.90	3.40
8	#5850.00	45.6 AV	65.9	-20.3	1.00 V	129	42.20	3.40
9	11500.00	60.0 PK	74.0	-14.0	1.00 V	20	44.10	15.90
10	11500.00	45.9 AV	54.0	-8.1	1.00 V	20	30.00	15.90

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)
– Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. “ * “: Fundamental frequency.
6. The limit value is defined as per 15.247.
7. “#”:The radiated frequency is out the restricted band.



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BELOW 1GHz WORST-CASE DATA : 802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 60%RH	TESTED BY	Ted Chang

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	113.94	31.5 QP	43.5	-12.0	1.51 H	255	48.30	-16.80
2	207.21	36.2 QP	43.5	-7.3	1.00 H	80	52.60	-16.40
3	395.30	42.7 QP	46.0	-3.3	1.00 H	150	52.80	-10.10
4	672.00	40.8 QP	46.0	-5.2	1.00 H	331	46.00	-5.20
5	801.03	40.5 QP	46.0	-5.5	1.51 H	302	43.20	-2.70
6	902.07	38.9 QP	46.0	-7.1	1.51 H	15	40.00	-1.10
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	37.77	30.2 QP	40.0	-9.8	1.00 V	70	45.50	-15.30
2	113.94	31.1 QP	43.5	-12.4	1.00 V	79	47.90	-16.80
3	207.21	31.8 QP	43.5	-11.7	1.00 V	194	48.20	-16.40
4	395.30	36.8 QP	46.0	-9.2	1.00 V	196	46.90	-10.10
5	672.00	38.8 QP	46.0	-7.2	1.00 V	10	44.00	-5.20
6	801.03	37.3 QP	46.0	-8.7	1.00 V	118	40.00	-2.70

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)
– Pre-Amplifier Factor (dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

5.2 CONDUCTED EMISSION MEASUREMENT

5.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

5.2.2 TEST INSTRUMENTS

Same as item 4.2.2.

5.2.3 TEST PROCEDURES

Same as item 4.2.3.

5.2.4 DEVIATION FROM TEST STANDARD

No deviation.

5.2.5 TEST SETUP

Same as item 4.2.5.

5.2.6 EUT OPERATING CONDITIONS

Same as item 4.1.6.

5.2.7 TEST RESULTS

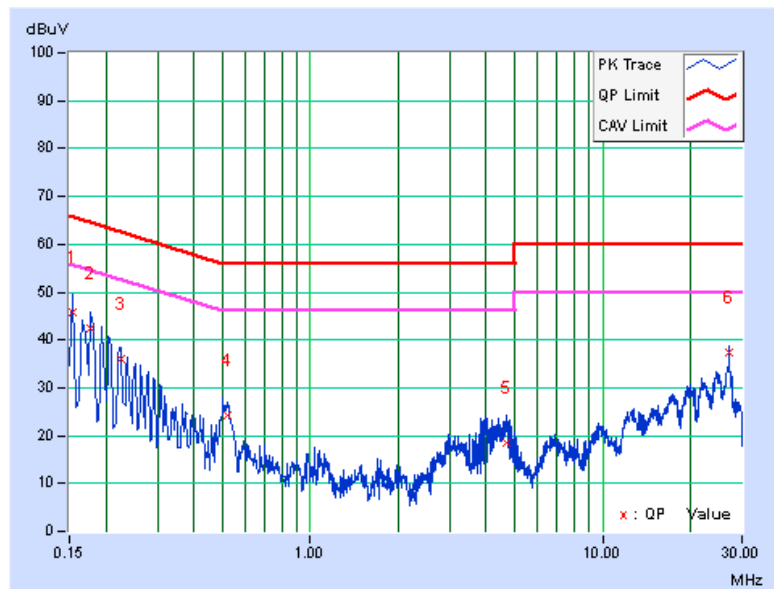
CONDUCTED WORST-CASE DATA : 802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.08	45.79	33.33	45.87	33.41	65.79	55.79	-19.92	-22.38
2	0.17744	0.07	42.49	28.63	42.56	28.70	64.60	54.60	-22.04	-25.90
3	0.22434	0.07	35.91	23.54	35.98	23.61	62.66	52.66	-26.68	-29.05
4	0.52145	0.09	24.14	19.36	24.23	19.45	56.00	46.00	-31.77	-26.55
5	4.70906	0.26	18.39	9.14	18.65	9.40	56.00	46.00	-37.35	-36.60
6	26.99997	1.25	36.07	32.86	37.32	34.11	60.00	50.00	-22.68	-15.89

REMARKS:

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

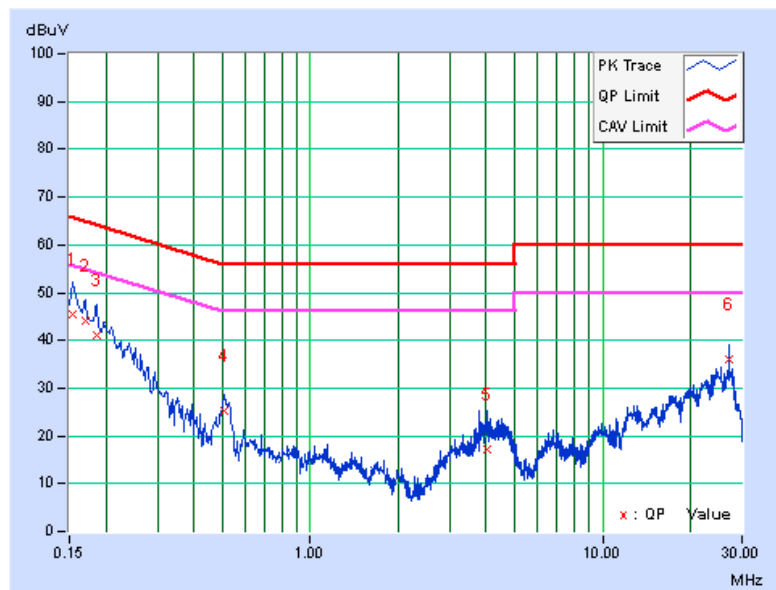


PHASE	Line 2	6dB BANDWIDTH	9kHz
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No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	0.05	45.31	32.84	45.36	32.89	65.79	55.79	-20.43	-22.90
2	0.16955	0.05	44.00	29.90	44.05	29.95	64.98	54.98	-20.93	-25.03
3	0.18508	0.05	41.14	27.31	41.19	27.36	64.25	54.25	-23.06	-26.89
4	0.50972	0.07	25.29	20.45	25.36	20.52	56.00	46.00	-30.64	-25.48
5	4.00917	0.21	16.97	6.64	17.18	6.85	56.00	46.00	-38.82	-39.15
6	27.00388	1.06	35.05	31.54	36.11	32.60	60.00	50.00	-23.89	-17.40

REMARKS:

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





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6. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



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7. INFORMATION ON THE TESTING LABORATORIES

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

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

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Web Site: www.bureauveritas-adt.com

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



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8. 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.

---END---