

FCC TEST REPORT (15.247)

REPORT NO.: RF120926C25A

MODEL NO.: WAP561

FCC ID: PD5-WAP561

RECEIVED: Mar. 25, 2013

TESTED: Mar. 26 ~ Mar. 27, 2013

ISSUED: Mar. 28, 2013

APPLICANT: Delta Networks, Inc.

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Taoyuan Hsien 333, Taiwan

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

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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
RF120926C25A	Original release	Mar. 28, 2013



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1. CERTIFICATION

PRODUCT: Wireless AP with PoE

MODEL NO.: WAP561

BRAND: CISCO

APPLICANT: Delta Networks, Inc.

TESTED: Mar. 26 ~ Mar. 27, 2013

TEST SAMPLE: ENGINEERING SAMPLE

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

ANSI C63.10-2009

This report is issued as a supplementary report of **RF120926C25**. This report shall be used combined together with its original report.

PREPARED BY : Maggie Wu , **DATE :** Mar. 28, 2013
Maggie Wu / Specialist

APPROVED BY : Ken Liu , **DATE :** Mar. 28, 2013
Ken Liu / Senior Manager

NOTE: Test item for radiated emission test was performed for this addendum. Other testing data refer to original report.

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	NA	Refer to NOTE below
15.247(d) 15.209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin are -1.1dB at 2390.00 / 2483.50MHz.
15.247(d)	Band Edge Measurement	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 IPEX not a standard connector.

NOTE: Test item for radiated emission test was performed for this addendum. Other testing data refer to original 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
Radiated emissions	30MHz ~ 200MHz	3.19 dB
	200MHz ~1000MHz	3.21 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	Wireless AP with PoE
MODEL NO.	WAP561
POWER SUPPLY	48Vdc (from POE)
MODULATION TYPE	CCK, DQPSK, DBPSK for DSSS 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 300.0Mbps
OPERATING FREQUENCY	2.4GHz: 2400 ~ 2483.5MHz 5.0GHz: 5725 ~ 5850MHz
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)
OUTPUT POWER	642.17mW for 2400 ~ 2483.5MHz 447.98mW for 5725 ~ 5850MHz
ANTENNA TYPE	Refer to note for more details
ANTENNA CONNECTOR	Refer to note for more details
DATA CABLE	N/A
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	N/A

NOTE:

1. This is a supplementary report of RF120926C25. This report shall be combined together with its original report.
2. This report is prepared for FCC class II permissive change. The difference compared with the original report is changing the antenna type. Therefore, test item for radiated emission test had been re-tested in this report.
3. The EUT incorporates a MIMO function. Physically, the EUT provides three completed transmitters and three receivers.

MODULATION MODE	TX FUNCTION
802.11b	1TX
802.11g	3TX
802.11a	3TX
802.11n (20MHz)	3TX
802.11n (40MHz)	3TX

4. The built-in sensor of the EUT selects which antenna to be used when the EUT is placed on X-plane or Z-plane. The available configurations are list as below:

Antenna item	Antenna type	Connector	Gain (dBi)		X-plane		Z-plane	
			2.4GHz	5GHz	WLAN 0	WLAN 1	WLAN 0	WLAN 1
1	PIFA	IPEX	5.0	5.6	√		√	
2	PIFA		4.5	5.8		√		√
3	PIFA		3.3	4.5	√			
4	PIFA		4.3	4.8			√	
5	PIFA		3.7	5.2	√			
6	PIFA		5.0	5.8			√	
7	PIFA		4.2	4.5		√		
8	PIFA		4.9	5.4				√
9	PIFA		4.4	5.0		√		
10	PIFA		5.5	5.5				√

*For EUT position on X-plane, chosen highest antenna gain **WLAN 1** for final test.

*For EUT position on Z-plane, chosen highest antenna gain **WLAN 1** for final test.

5. The EUT consumes power from the following POE (for support unit only).

POE	
BRAND:	PowerDsine
MODEL:	PD-9001G
INPUT:	100-250Vac, 50/60Hz, 0.8A
OUTPUT:	55Vdc, 0.6A

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

3.2 DESCRIPTION OF TEST MODES

FOR 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 (5725 ~ 5850MHz):

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

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

FOR 2.4GHz:

EUT CONFIGURE MODE	APPLICABLE TO		DESCRIPTION
	RE $\geq$ 1G	RE<1G	
A	√	√	positioned on X-plane
B	√	√	positioned on Z-plane

Where RE $\geq$ 1G: Radiated Emission above 1GHz RE<1G: Radiated Emission below 1GHz

NOTE: "-" means no effect.

RADIATED EMISSION TEST (ABOVE 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, 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)
A, B	802.11b	1 to 11	1, 6, 11	DSSS	DBPSK	1.0
A, B	802.11g	1 to 11	1, 6, 11	OFDM	BPSK	6.0
A, B	802.11n (20MHz)	1 to 11	1, 6, 11	OFDM	BPSK	7.2
A, B	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)
A, B	802.11n (20MHz)	1 to 11	11	OFDM	BPSK	7.2

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	25deg. C, 65%RH	120Vac, 60Hz	Antony Lee
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Chris Lin

FOR 5.0GHz (5725 ~ 5850MHz):

EUT CONFIGURE MODE	APPLICABLE TO		DESCRIPTION
	RE $\geq$ 1G	RE<1G	
A	√	√	positioned on X-plane
B	√	√	positioned on Z-plane

Where **RE $\geq$ 1G**: Radiated Emission above 1GHz **RE<1G**: Radiated Emission below 1GHz

NOTE: “-” means no effect.

RADIATED EMISSION TEST (ABOVE 1GHz):

- ☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, 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)
A, B	802.11a	149 to 165	149, 157, 165	OFDM	BPSK	6.0
A, B	802.11n (20MHz)	149 to 165	149, 157, 165	OFDM	BPSK	7.2
A, B	802.11n (40MHz)	151 to 159	151, 159	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)
A, B	802.11n (20MHz)	149 to 165	165	OFDM	BPSK	7.2

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	25deg. C, 65%RH	120Vac, 60Hz	Chris Lin
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Chris Lin

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.

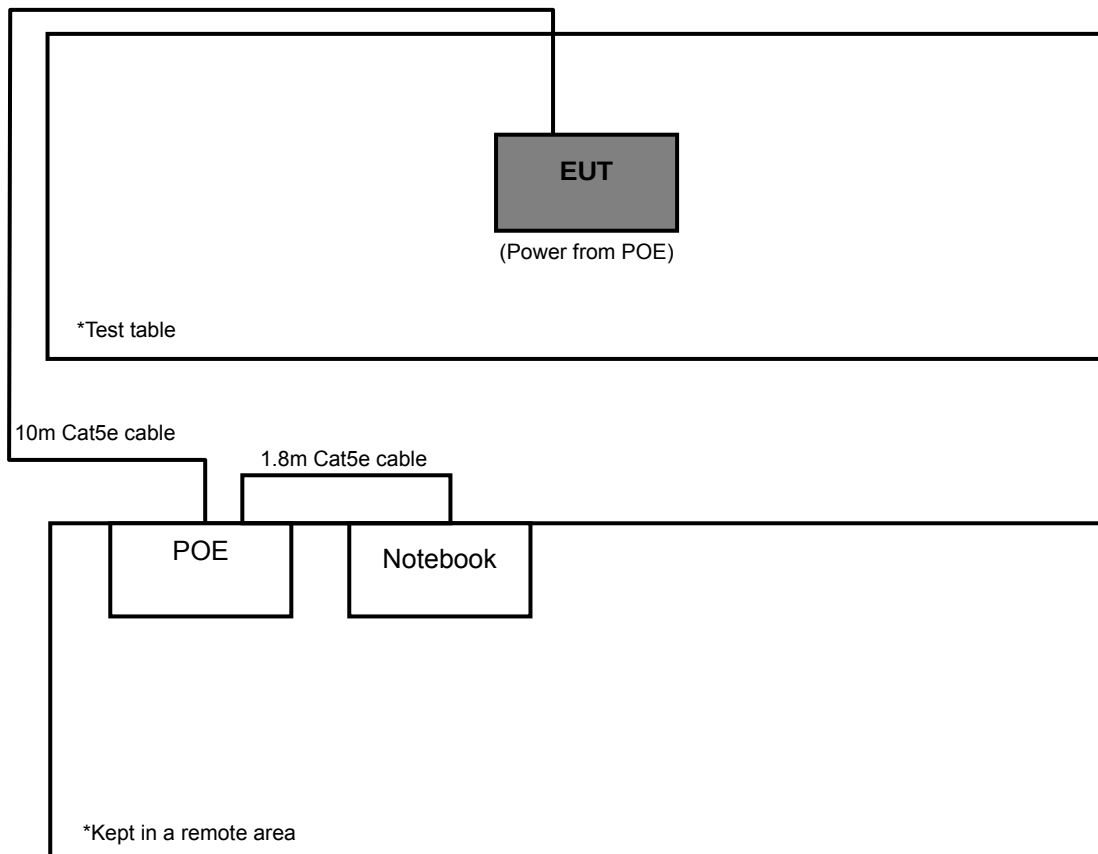
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Notebook	DELL	E5410	1HC2XM1	FCC DoC Approved
2	POE	PowerDsine	PD-9001G	N/A	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	10m non-shielded Cat5e cable.
2	1.8m non-shielded Cat5e cable

NOTE:

1. All power cords of the above support units are non shielded (1.8m).
2. Item 1 acted as communication partner to transfer data.
3. Item 2 was provided by the manufacturer.

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 v02

662911 D01 Multiple Transmitter Output v01 r02

ANSI C63.10-2009

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

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

4. TEST TYPES AND RESULTS (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
HORN Antenna SCHWARZBECK	9120D	209	Sep. 03, 2012	Sep. 02, 2013
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 11, 2012	Jul. 10, 2013
Preamplifier Agilent	8447D	2944A10633	Oct. 25, 2012	Oct. 24, 2013
Preamplifier Agilent	8449B	3008A01964	Oct. 25, 2012	Oct. 24, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250723/4	Aug. 28, 2012	Aug. 27, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 106	12738/6+309224/ 4	Aug. 28, 2012	Aug. 27, 2013
Software ADT.	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	017303	NA	NA
Turn Table ADT.	TT100	TT93021703	NA	NA
Turn Table Controller ADT.	SC100	SC93021703	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 25, 2012	Oct. 24, 2013

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Chamber 3.
 3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The FCC Site Registration No. is 988962.
 5. The IC Site Registration No. is IC 7450F-3.

4.1.3 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.
- f. If the emission level of the EUT in peak mode was lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

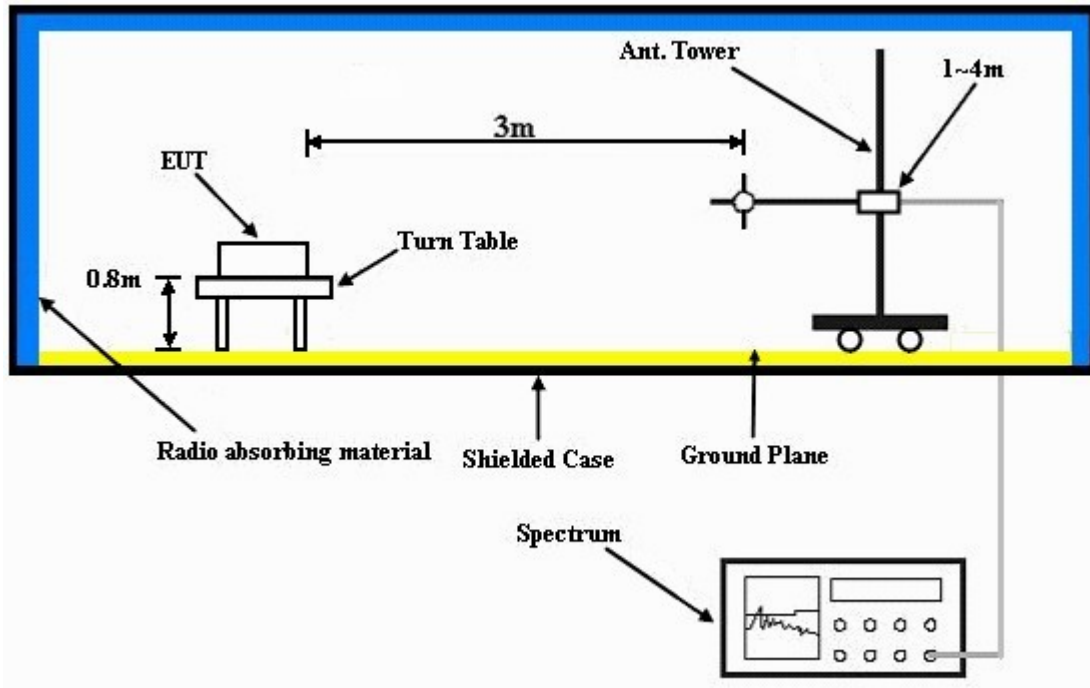
NOTE:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 100kHz and video bandwidth is 300kHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 1kHz for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 DEVIATION FROM TEST STANDARD

No deviation.

4.1.5 TEST SETUP



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

4.1.6 EUT OPERATING CONDITIONS

- Placed the EUT on the testing table.
- Prepared notebook to act as communication partner and placed it outside of testing area.
- The communication partner connected with EUT via a Cat5e cable and run a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.



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4.1.7 TEST RESULTS (A)

802.11b

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

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	1.11 H	155	25.10	30.80
2	2390.00	45.6 AV	54.0	-8.4	1.11 H	155	14.80	30.80
3	*2412.00	104.2 PK			1.11 H	166	73.30	30.90
4	*2412.00	100.0 AV			1.11 H	166	69.10	30.90
5	4824.00	51.9 PK	74.0	-22.1	1.26 H	10	14.90	37.00
6	4824.00	46.9 AV	54.0	-7.1	1.26 H	10	9.90	37.00
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	1.36 V	122	27.20	30.80
2	2390.00	47.7 AV	54.0	-6.3	1.36 V	122	16.90	30.80
3	*2412.00	107.3 PK			1.32 V	140	76.40	30.90
4	*2412.00	102.8 AV			1.32 V	140	71.90	30.90
5	4824.00	52.0 PK	74.0	-22.0	1.35 V	56	15.00	37.00
6	4824.00	47.2 AV	54.0	-6.8	1.35 V	56	10.20	37.00

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	105.1 PK			1.10 H	158	74.10	31.00
2	*2437.00	100.9 AV			1.10 H	158	69.90	31.00
3	4874.00	51.4 PK	74.0	-22.6	1.20 H	347	14.30	37.10
4	4874.00	45.4 AV	54.0	-8.6	1.20 H	347	8.30	37.10
5	7311.00	45.2 PK	74.0	-28.8	1.00 H	180	1.60	43.60
6	7311.00	40.9 AV	54.0	-13.1	1.00 H	180	-2.70	43.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	107.9 PK			1.27 V	147	76.90	31.00
2	*2437.00	103.8 AV			1.27 V	147	72.80	31.00
3	4874.00	50.9 PK	74.0	-23.1	1.34 V	360	13.80	37.10
4	4874.00	45.9 AV	54.0	-8.1	1.34 V	360	8.80	37.10
5	7311.00	46.4 PK	74.0	-27.6	1.00 V	360	2.80	43.60
6	7311.00	41.2 AV	54.0	-12.8	1.00 V	360	-2.40	43.60

REMARKS:

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



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

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	106.0 PK			1.35 H	153	74.90	31.10
2	*2462.00	101.7 AV			1.35 H	153	70.60	31.10
3	2483.50	58.1 PK	74.0	-15.9	1.35 H	153	26.90	31.20
4	2483.50	47.2 AV	54.0	-6.8	1.35 H	153	16.00	31.20
5	4924.00	49.7 PK	74.0	-24.3	1.11 H	342	12.50	37.20
6	4924.00	42.4 AV	54.0	-11.6	1.11 H	342	5.20	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	108.4 PK			1.29 V	157	77.30	31.10
2	*2462.00	104.8 AV			1.29 V	157	73.70	31.10
3	2483.50	58.2 PK	74.0	-15.8	1.29 V	157	27.00	31.20
4	2483.50	47.4 AV	54.0	-6.6	1.29 V	157	16.20	31.20
5	4924.00	49.5 PK	74.0	-24.5	1.16 V	351	12.30	37.20
6	4924.00	40.7 AV	54.0	-13.3	1.16 V	351	3.50	37.20

REMARKS:

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



A D T

802.11g

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

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	71.6 PK	74.0	-2.4	1.12 H	140	40.80	30.80
2	2390.00	52.0 AV	54.0	-2.0	1.12 H	140	21.20	30.80
3	*2412.00	110.2 PK			1.08 H	165	79.30	30.90
4	*2412.00	100.9 AV			1.08 H	165	70.00	30.90
5	4824.00	48.3 PK	74.0	-25.7	1.00 H	35	11.30	37.00
6	4824.00	33.9 AV	54.0	-20.1	1.00 H	35	-3.10	37.00
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	68.3 PK	74.0	-5.7	1.11 V	311	37.50	30.80
2	2390.00	49.9 AV	54.0	-4.1	1.11 V	311	19.10	30.80
3	*2412.00	109.5 PK			1.09 V	286	78.60	30.90
4	*2412.00	99.8 AV			1.09 V	286	68.90	30.90
5	4824.00	48.0 PK	74.0	-26.0	1.16 V	40	11.00	37.00
6	4824.00	33.9 AV	54.0	-20.1	1.16 V	40	-3.10	37.00

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	111.1 PK			1.10 H	174	80.10	31.00
2	*2437.00	101.8 AV			1.10 H	174	70.80	31.00
3	4874.00	48.9 PK	74.0	-25.1	1.00 H	15	11.80	37.10
4	4874.00	34.4 AV	54.0	-19.6	1.00 H	15	-2.70	37.10
5	7311.00	46.2 PK	74.0	-27.8	1.00 H	187	2.60	43.60
6	7311.00	41.0 AV	54.0	-13.0	1.00 H	187	-2.60	43.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	109.3 PK			1.11 V	37	78.30	31.00
2	*2437.00	99.8 AV			1.11 V	37	68.80	31.00
3	4874.00	48.3 PK	74.0	-25.7	1.40 V	71	11.20	37.10
4	4874.00	33.8 AV	54.0	-20.2	1.40 V	71	-3.30	37.10
5	7311.00	46.7 PK	74.0	-27.3	1.00 V	0	3.10	43.60
6	7311.00	40.8 AV	54.0	-13.2	1.00 V	0	-2.80	43.60

REMARKS:

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



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

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	111.8 PK			1.05 H	153	80.70	31.10
2	*2462.00	102.3 AV			1.05 H	153	71.20	31.10
3	2483.50	70.9 PK	74.0	-3.1	1.09 H	180	39.70	31.20
4	2483.50	52.5 AV	54.0	-1.5	1.09 H	180	21.30	31.20
5	4924.00	48.7 PK	74.0	-25.3	1.05 H	55	11.50	37.20
6	4924.00	34.2 AV	54.0	-19.8	1.05 H	55	-3.00	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	109.5 PK			1.12 V	34	78.40	31.10
2	*2462.00	98.7 AV			1.12 V	34	67.60	31.10
3	2483.50	69.2 PK	74.0	-4.8	1.22 V	294	38.00	31.20
4	2483.50	50.2 AV	54.0	-3.8	1.22 V	294	19.00	31.20
5	4924.00	48.1 PK	74.0	-25.9	1.44 V	52	10.90	37.20
6	4924.00	33.7 AV	54.0	-20.3	1.44 V	52	-3.50	37.20

REMARKS:

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



A D T

802.11n (20MHz)

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

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	72.7 PK	74.0	-1.3	1.09 H	165	41.90	30.80
2	2390.00	52.7 AV	54.0	-1.3	1.09 H	165	21.90	30.80
3	*2412.00	111.2 PK			1.09 H	171	80.30	30.90
4	*2412.00	101.8 AV			1.09 H	171	70.90	30.90
5	4824.00	47.8 PK	74.0	-26.2	1.22 H	325	10.80	37.00
6	4824.00	34.3 AV	54.0	-19.7	1.22 H	325	-2.70	37.00
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	68.5 PK	74.0	-5.5	1.01 V	279	37.70	30.80
2	2390.00	51.6 AV	54.0	-2.4	1.01 V	279	20.80	30.80
3	*2412.00	109.2 PK			1.00 V	276	78.30	30.90
4	*2412.00	99.2 AV			1.00 V	276	68.30	30.90
5	4824.00	47.1 PK	74.0	-26.9	1.00 V	144	10.10	37.00
6	4824.00	34.3 AV	54.0	-19.7	1.00 V	144	-2.70	37.00

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	111.0 PK			1.10 H	159	80.00	31.00
2	*2437.00	101.5 AV			1.10 H	159	70.50	31.00
3	4874.00	47.5 PK	74.0	-26.5	1.10 H	310	10.40	37.10
4	4874.00	34.6 AV	54.0	-19.4	1.10 H	310	-2.50	37.10
5	7311.00	48.0 PK	74.0	-26.0	1.10 H	355	4.40	43.60
6	7311.00	41.7 AV	54.0	-12.3	1.10 H	355	-1.90	43.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	109.8 PK			1.10 V	280	78.80	31.00
2	*2437.00	99.8 AV			1.10 V	280	68.80	31.00
3	4874.00	47.8 PK	74.0	-26.2	1.11 V	250	10.70	37.10
4	4874.00	34.5 AV	54.0	-19.5	1.11 V	250	-2.60	37.10
5	7311.00	46.1 PK	74.0	-27.9	1.10 V	360	2.50	43.60
6	7311.00	41.0 AV	54.0	-13.0	1.10 V	360	-2.60	43.60

REMARKS:

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



A D T

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

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	110.5 PK			1.05 H	144	79.40	31.10
2	*2462.00	100.8 AV			1.05 H	144	69.70	31.10
3	2483.50	70.1 PK	74.0	-3.9	1.05 H	142	38.90	31.20
4	2483.50	52.9 AV	54.0	-1.1	1.05 H	142	21.70	31.20
5	4924.00	47.2 PK	74.0	-26.8	1.10 H	263	10.00	37.20
6	4924.00	34.5 AV	54.0	-19.5	1.10 H	263	-2.70	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	109.7 PK			1.10 V	340	78.60	31.10
2	*2462.00	100.0 AV			1.10 V	340	68.90	31.10
3	2483.50	71.8 PK	74.0	-2.2	1.10 V	340	40.60	31.20
4	2483.50	52.0 AV	54.0	-2.0	1.10 V	340	20.80	31.20
5	4924.00	47.6 PK	74.0	-26.4	1.35 V	254	10.40	37.20
6	4924.00	34.2 AV	54.0	-19.8	1.35 V	254	-3.00	37.20

REMARKS:

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



A D T

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	64.0 PK	74.0	-10.0	1.08 H	185	33.20	30.80
2	2390.00	52.0 AV	54.0	-2.0	1.08 H	185	21.20	30.80
3	*2422.00	104.9 PK			1.12 H	145	74.00	30.90
4	*2422.00	94.8 AV			1.12 H	145	63.90	30.90
5	4844.00	46.9 PK	74.0	-27.1	1.28 H	253	9.90	37.00
6	4844.00	34.0 AV	54.0	-20.0	1.28 H	253	-3.00	37.00
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	62.5 PK	74.0	-11.5	1.28 V	40	31.70	30.80
2	2390.00	50.8 AV	54.0	-3.2	1.28 V	40	20.00	30.80
3	*2422.00	101.0 PK			1.35 V	300	70.10	30.90
4	*2422.00	92.5 AV			1.35 V	300	61.60	30.90
5	4844.00	47.0 PK	74.0	-27.0	1.13 V	70	10.00	37.00
6	4844.00	34.0 AV	54.0	-20.0	1.13 V	70	-3.00	37.00

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	1.10 H	152	28.70	30.80
2	2390.00	48.1 AV	54.0	-5.9	1.10 H	152	17.30	30.80
3	*2437.00	106.9 PK			1.10 H	152	75.90	31.00
4	*2437.00	96.8 AV			1.10 H	152	65.80	31.00
5	2483.50	62.1 PK	74.0	-11.9	1.10 H	152	30.90	31.20
6	2483.50	47.7 AV	54.0	-6.3	1.10 H	152	16.50	31.20
7	4874.00	47.2 PK	74.0	-26.8	1.28 H	250	10.10	37.10
8	4874.00	34.5 AV	54.0	-19.5	1.28 H	250	-2.60	37.10
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	2390.00	58.6 PK	74.0	-15.4	1.21 V	311	27.80	30.80
2	2390.00	46.2 AV	54.0	-7.8	1.21 V	311	15.40	30.80
3	*2437.00	105.8 PK			1.21 V	311	74.80	31.00
4	*2437.00	96.1 AV			1.21 V	311	65.10	31.00
5	2483.50	64.5 PK	74.0	-9.5	1.21 V	311	33.30	31.20
6	2483.50	44.9 AV	54.0	-9.1	1.21 V	311	13.70	31.20
7	4874.00	47.1 PK	74.0	-26.9	1.10 V	47	10.00	37.10
8	4874.00	34.3 AV	54.0	-19.7	1.10 V	47	-2.80	37.10

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 9	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	107.0 PK			1.05 H	148	75.90	31.10
2	*2452.00	97.2 AV			1.05 H	148	66.10	31.10
3	2483.50	67.5 PK	74.0	-6.5	1.05 H	160	36.30	31.20
4	2483.50	52.3 AV	54.0	-1.7	1.05 H	160	21.10	31.20
5	4904.00	47.8 PK	74.0	-26.2	1.02 H	333	10.60	37.20
6	4904.00	34.8 AV	54.0	-19.2	1.02 H	333	-2.40	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	106.0 PK			1.25 V	308	74.90	31.10
2	*2452.00	96.5 AV			1.25 V	308	65.40	31.10
3	2483.50	67.7 PK	74.0	-6.3	1.30 V	80	36.50	31.20
4	2483.50	50.5 AV	54.0	-3.5	1.30 V	80	19.30	31.20
5	4904.00	47.6 PK	74.0	-26.4	1.04 V	44	10.40	37.20
6	4904.00	34.4 AV	54.0	-19.6	1.04 V	44	-2.80	37.20

REMARKS:

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



A D T

BELOW 1GHz WORST-CASE DATA : 802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	208.77	32.5 QP	43.5	-11.0	1.25 H	131	21.20	11.30
2	274.88	27.6 QP	46.0	-18.4	1.25 H	263	13.60	14.00
3	500.42	32.0 QP	46.0	-14.0	2.00 H	211	12.00	20.00
4	624.85	35.8 QP	46.0	-10.2	1.25 H	316	13.50	22.30
5	751.23	35.0 QP	46.0	-11.0	2.00 H	312	10.60	24.40
6	805.67	34.8 QP	46.0	-11.2	1.00 H	318	9.10	25.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	64.90	32.7 QP	40.0	-7.3	1.24 V	358	19.80	12.90
2	148.50	31.5 QP	43.5	-12.0	1.00 V	275	17.40	14.10
3	210.72	32.6 QP	43.5	-10.9	1.00 V	209	21.20	11.40
4	500.42	31.4 QP	46.0	-14.6	1.00 V	167	11.40	20.00
5	624.85	29.8 QP	46.0	-16.2	1.50 V	29	7.50	22.30
6	751.23	29.9 QP	46.0	-16.1	1.24 V	153	5.50	24.40

REMARKS:

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



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4.1.8 TEST RESULTS (B)

802.11b

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

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	56.2 PK	74.0	-17.8	1.20 H	86	25.40	30.80
2	2390.00	46.2 AV	54.0	-7.8	1.20 H	86	15.40	30.80
3	*2412.00	106.3 PK			1.22 H	100	75.40	30.90
4	*2412.00	101.0 AV			1.22 H	100	70.10	30.90
5	4824.00	47.7 PK	74.0	-26.3	1.30 H	68	10.70	37.00
6	4824.00	40.8 AV	54.0	-13.2	1.30 H	68	3.80	37.00
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	57.2 PK	74.0	-16.8	1.07 V	294	26.40	30.80
2	2390.00	47.1 AV	54.0	-6.9	1.07 V	294	16.30	30.80
3	*2412.00	109.3 PK			1.39 V	182	78.40	30.90
4	*2412.00	104.7 AV			1.39 V	182	73.80	30.90
5	4824.00	52.0 PK	74.0	-22.0	1.55 V	300	15.00	37.00
6	4824.00	44.9 AV	54.0	-9.1	1.55 V	300	7.90	37.00

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	105.5 PK			1.10 H	310	74.50	31.00
2	*2437.00	101.1 AV			1.10 H	310	70.10	31.00
3	4874.00	49.5 PK	74.0	-24.5	1.20 H	210	12.40	37.10
4	4874.00	41.5 AV	54.0	-12.5	1.20 H	210	4.40	37.10
5	7311.00	48.1 PK	74.0	-25.9	1.00 H	355	4.50	43.60
6	7311.00	40.8 AV	54.0	-13.2	1.00 H	355	-2.80	43.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	109.2 PK			1.18 V	170	78.20	31.00
2	*2437.00	104.9 AV			1.18 V	170	73.90	31.00
3	4874.00	52.8 PK	74.0	-21.2	1.20 V	93	15.70	37.10
4	4874.00	45.8 AV	54.0	-8.2	1.20 V	93	8.70	37.10
5	7311.00	48.6 PK	74.0	-25.4	1.10 V	10	5.00	43.60
6	7311.00	41.3 AV	54.0	-12.7	1.10 V	10	-2.30	43.60

REMARKS:

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



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

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	104.9 PK			1.27 H	216	73.80	31.10
2	*2462.00	100.6 AV			1.27 H	216	69.50	31.10
3	2483.50	57.4 PK	74.0	-16.6	1.24 H	217	26.20	31.20
4	2483.50	46.1 AV	54.0	-7.9	1.24 H	217	14.90	31.20
5	4924.00	50.7 PK	74.0	-23.3	1.23 H	219	13.50	37.20
6	4924.00	41.6 AV	54.0	-12.4	1.23 H	219	4.40	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	108.8 PK			1.28 V	276	77.70	31.10
2	*2462.00	104.6 AV			1.28 V	276	73.50	31.10
3	2483.50	58.2 PK	74.0	-15.8	1.02 V	55	27.00	31.20
4	2483.50	47.5 AV	54.0	-6.5	1.02 V	55	16.30	31.20
5	4924.00	52.1 PK	74.0	-21.9	1.22 V	88	14.90	37.20
6	4924.00	46.4 AV	54.0	-7.6	1.22 V	88	9.20	37.20

REMARKS:

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



A D T

802.11g

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

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	71.4 PK	74.0	-2.6	1.29 H	15	40.60	30.80
2	2390.00	51.6 AV	54.0	-2.4	1.29 H	15	20.80	30.80
3	*2412.00	110.0 PK			1.29 H	18	79.10	30.90
4	*2412.00	100.0 AV			1.29 H	18	69.10	30.90
5	4824.00	48.8 PK	74.0	-25.2	1.28 H	84	11.80	37.00
6	4824.00	34.6 AV	54.0	-19.4	1.28 H	84	-2.40	37.00
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	71.6 PK	74.0	-2.4	1.27 V	54	40.80	30.80
2	2390.00	52.5 AV	54.0	-1.5	1.27 V	126	21.70	30.80
3	*2412.00	113.1 PK			1.23 V	31	82.20	30.90
4	*2412.00	103.0 AV			1.23 V	31	72.10	30.90
5	4824.00	47.4 PK	74.0	-26.6	1.24 V	4	10.40	37.00
6	4824.00	34.1 AV	54.0	-19.9	1.24 V	4	-2.90	37.00

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	109.8 PK			1.21 H	210	78.80	31.00
2	*2437.00	100.1 AV			1.21 H	210	69.10	31.00
3	4874.00	48.1 PK	74.0	-25.9	1.21 H	97	11.00	37.10
4	4874.00	34.3 AV	54.0	-19.7	1.21 H	97	-2.80	37.10
5	7311.00	48.1 PK	74.0	-25.9	1.11 H	180	4.50	43.60
6	7311.00	41.0 AV	54.0	-13.0	1.11 H	180	-2.60	43.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	112.8 PK			1.21 V	189	81.80	31.00
2	*2437.00	102.9 AV			1.21 V	189	71.90	31.00
3	4874.00	47.9 PK	74.0	-26.1	1.20 V	10	10.80	37.10
4	4874.00	34.5 AV	54.0	-19.5	1.20 V	10	-2.60	37.10
5	7311.00	47.9 PK	74.0	-26.1	1.09 V	360	4.30	43.60
6	7311.00	41.6 AV	54.0	-12.4	1.09 V	360	-2.00	43.60

REMARKS:

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



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

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	110.4 PK			1.10 H	188	79.30	31.10
2	*2462.00	99.8 AV			1.10 H	188	68.70	31.10
3	2483.50	70.3 PK	74.0	-3.7	1.09 H	180	39.10	31.20
4	2483.50	51.7 AV	54.0	-2.3	1.09 H	180	20.50	31.20
5	4924.00	47.9 PK	74.0	-26.1	1.35 H	22	10.70	37.20
6	4924.00	33.4 AV	54.0	-20.6	1.35 H	22	-3.80	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	112.0 PK			1.31 V	167	80.90	31.10
2	*2462.00	102.0 AV			1.31 V	167	70.90	31.10
3	2483.50	70.9 PK	74.0	-3.1	1.30 V	188	39.70	31.20
4	2483.50	52.0 AV	54.0	-2.0	1.30 V	188	20.80	31.20
5	4924.00	47.4 PK	74.0	-26.6	1.50 V	75	10.20	37.20
6	4924.00	33.7 AV	54.0	-20.3	1.50 V	75	-3.50	37.20

REMARKS:

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



A D T

802.11n (20MHz)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	2390.00	67.8 PK	74.0	-6.2	1.05 H	350	37.00	30.80
2	2390.00	50.0 AV	54.0	-4.0	1.05 H	350	19.20	30.80
3	*2412.00	109.8 PK			1.10 H	161	78.90	30.90
4	*2412.00	99.5 AV			1.10 H	161	68.60	30.90
5	4824.00	46.8 PK	74.0	-27.2	1.39 H	9	9.80	37.00
6	4824.00	33.7 AV	54.0	-20.3	1.39 H	9	-3.30	37.00
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	72.3 PK	74.0	-1.7	1.03 V	150	41.50	30.80
2	2390.00	52.9 AV	54.0	-1.1	1.03 V	150	22.10	30.80
3	*2412.00	112.0 PK			1.03 V	126	81.10	30.90
4	*2412.00	101.5 AV			1.03 V	126	70.60	30.90
5	4824.00	47.1 PK	74.0	-26.9	1.12 V	325	10.10	37.00
6	4824.00	34.4 AV	54.0	-19.6	1.12 V	325	-2.60	37.00

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	109.7 PK			1.07 H	190	78.70	31.00
2	*2437.00	99.7 AV			1.07 H	190	68.70	31.00
3	4874.00	46.7 PK	74.0	-27.3	1.31 H	37	9.60	37.10
4	4874.00	34.5 AV	54.0	-19.5	1.31 H	37	-2.60	37.10
5	7311.00	49.4 PK	74.0	-24.6	1.10 H	0	5.80	43.60
6	7311.00	41.9 AV	54.0	-12.1	1.10 H	0	-1.70	43.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2437.00	111.9 PK			1.20 V	120	80.90	31.00
2	*2437.00	101.7 AV			1.20 V	120	70.70	31.00
3	4874.00	47.3 PK	74.0	-26.7	1.30 V	300	10.20	37.10
4	4874.00	34.6 AV	54.0	-19.4	1.30 V	300	-2.50	37.10
5	7311.00	48.3 PK	74.0	-25.7	1.09 V	360	4.70	43.60
6	7311.00	41.1 AV	54.0	-12.9	1.09 V	360	-2.50	43.60

REMARKS:

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



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

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	109.4 PK			1.10 H	175	78.30	31.10
2	*2462.00	99.2 AV			1.10 H	175	68.10	31.10
3	2483.50	70.6 PK	74.0	-3.4	1.10 H	175	39.40	31.20
4	2483.50	51.3 AV	54.0	-2.7	1.10 H	175	20.10	31.20
5	4924.00	46.0 PK	74.0	-28.0	1.35 H	80	8.80	37.20
6	4924.00	34.6 AV	54.0	-19.4	1.35 H	80	-2.60	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2462.00	111.6 PK			1.30 V	125	80.50	31.10
2	*2462.00	101.3 AV			1.30 V	125	70.20	31.10
3	2483.50	71.1 PK	74.0	-2.9	1.30 V	125	39.90	31.20
4	2483.50	52.0 AV	54.0	-2.0	1.30 V	125	20.80	31.20
5	4924.00	47.0 PK	74.0	-27.0	1.22 V	70	9.80	37.20
6	4924.00	34.3 AV	54.0	-19.7	1.22 V	70	-2.90	37.20

REMARKS:

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



A D T

802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 3	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	63.0 PK	74.0	-11.0	1.03 H	18	32.20	30.80
2	2390.00	49.6 AV	54.0	-4.4	1.03 H	18	18.80	30.80
3	*2422.00	101.0 PK			1.03 H	18	70.10	30.90
4	*2422.00	91.1 AV			1.03 H	18	60.20	30.90
5	4844.00	47.0 PK	74.0	-27.0	1.00 H	23	10.00	37.00
6	4844.00	34.3 AV	54.0	-19.7	1.00 H	23	-2.70	37.00
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	66.2 PK	74.0	-7.8	1.02 V	128	35.40	30.80
2	2390.00	52.6 AV	54.0	-1.4	1.02 V	128	21.80	30.80
3	*2422.00	105.6 PK			1.02 V	30	74.70	30.90
4	*2422.00	96.2 AV			1.02 V	30	65.30	30.90
5	4844.00	47.3 PK	74.0	-26.7	1.00 V	123	10.30	37.00
6	4844.00	34.3 AV	54.0	-19.7	1.00 V	123	-2.70	37.00

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

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	58.1 PK	74.0	-15.9	1.05 H	29	27.30	30.80
2	2390.00	44.6 AV	54.0	-9.4	1.05 H	29	13.80	30.80
3	*2437.00	101.5 PK			1.05 H	29	70.50	31.00
4	*2437.00	91.8 AV			1.05 H	29	60.80	31.00
5	2483.50	53.4 PK	74.0	-20.6	1.05 H	29	22.20	31.20
6	2483.50	45.7 AV	54.0	-8.3	1.05 H	29	14.50	31.20
7	4874.00	47.3 PK	74.0	-26.7	1.00 H	23	10.20	37.10
8	4874.00	35.1 AV	54.0	-18.9	1.00 H	23	-2.00	37.10
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	2390.00	61.5 PK	74.0	-12.5	1.01 V	169	30.70	30.80
2	2390.00	48.0 AV	54.0	-6.0	1.01 V	169	17.20	30.80
3	*2437.00	105.5 PK			1.01 V	169	74.50	31.00
4	*2437.00	95.7 AV			1.01 V	169	64.70	31.00
5	2483.50	60.1 PK	74.0	-13.9	1.02 V	172	28.90	31.20
6	2483.50	48.6 AV	54.0	-5.4	1.02 V	172	17.40	31.20
7	4874.00	47.1 PK	74.0	-26.9	1.00 V	210	10.00	37.10
8	4874.00	34.5 AV	54.0	-19.5	1.00 V	210	-2.60	37.10

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 9	FREQUENCY RANGE	1 ~ 25GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Antony Lee

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	101.2 PK			1.00 H	330	70.10	31.10
2	*2452.00	91.5 AV			1.00 H	330	60.40	31.10
3	2483.50	58.0 PK	74.0	-16.0	1.00 H	325	26.80	31.20
4	2483.50	49.4 AV	54.0	-4.6	1.00 H	325	18.20	31.20
5	4904.00	47.9 PK	74.0	-26.1	1.00 H	150	10.70	37.20
6	4904.00	35.1 AV	54.0	-18.9	1.00 H	150	-2.10	37.20
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*2452.00	104.8 PK			1.05 V	165	73.70	31.10
2	*2452.00	94.6 AV			1.05 V	165	63.50	31.10
3	2483.50	64.0 PK	74.0	-10.0	1.00 V	177	32.80	31.20
4	2483.50	51.9 AV	54.0	-2.1	1.00 V	177	20.70	31.20
5	4904.00	46.4 PK	74.0	-27.6	1.00 V	60	9.20	37.20
6	4904.00	34.2 AV	54.0	-19.8	1.00 V	60	-3.00	37.20

REMARKS:

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



A D T

BELOW 1GHz WORST-CASE DATA : 802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 11	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	168.45	30.9 QP	43.5	-12.6	1.50 H	152	17.30	13.60
2	245.85	34.8 QP	46.0	-11.2	1.00 H	285	21.90	12.90
3	375.01	28.3 QP	46.0	-17.7	1.00 H	66	11.40	16.90
4	500.06	33.2 QP	46.0	-12.8	1.25 H	86	13.20	20.00
5	624.99	34.7 QP	46.0	-11.3	1.00 H	133	12.40	22.30
6	799.95	34.5 QP	46.0	-11.5	1.00 H	200	8.90	25.60
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	139.54	32.9 QP	43.5	-10.6	1.25 V	265	19.40	13.50
2	254.85	32.2 QP	46.0	-13.8	1.25 V	77	19.00	13.20
3	500.14	32.4 QP	46.0	-13.6	1.00 V	16	12.40	20.00
4	624.98	29.4 QP	46.0	-16.6	1.00 V	249	7.10	22.30
5	750.11	29.0 QP	46.0	-17.0	2.00 V	5	4.70	24.30
6	799.99	31.3 QP	46.0	-14.7	1.25 V	96	5.70	25.60

REMARKS:

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

5. 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.



A D T

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 4.1.6.

5.1.7 TEST RESULTS (A)

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	65.6 PK	86.0	-20.4	1.08 H	140	26.90	38.70
2	#5725.00	54.9 AV	75.3	-20.4	1.08 H	140	16.20	38.70
3	*5745.00	106.0 PK			1.10 H	155	67.30	38.70
4	*5745.00	95.3 AV			1.10 H	155	56.60	38.70
5	11490.00	57.2 PK	74.0	-16.8	1.00 H	133	7.70	49.50
6	11490.00	45.3 AV	54.0	-8.7	1.00 H	133	-4.20	49.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	66.9 PK	87.3	-20.4	1.07 V	40	28.20	38.70
2	#5725.00	57.5 AV	77.9	-20.4	1.07 V	40	18.80	38.70
3	*5745.00	107.3 PK			1.00 V	36	68.60	38.70
4	*5745.00	97.9 AV			1.00 V	36	59.20	38.70
5	11490.00	58.4 PK	74.0	-15.6	1.12 V	100	8.90	49.50
6	11490.00	45.2 AV	54.0	-8.8	1.12 V	100	-4.30	49.50

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.
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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	106.1 PK			1.06 H	190	67.30	38.80
2	*5785.00	96.2 AV			1.06 H	190	57.40	38.80
3	11570.00	57.7 PK	74.0	-16.3	1.05 H	127	8.30	49.40
4	11570.00	45.2 AV	54.0	-8.8	1.05 H	127	-4.20	49.40
5	#17355.00	64.8 PK	86.1	-21.3	1.10 H	133	11.80	53.00
6	#17355.00	51.1 AV	76.2	-25.1	1.10 H	133	-1.90	53.00
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	*5785.00	107.1 PK			1.00 V	159	68.30	38.80
2	*5785.00	97.7 AV			1.00 V	159	58.90	38.80
3	11570.00	58.1 PK	74.0	-15.9	1.04 V	112	8.70	49.40
4	11570.00	45.4 AV	54.0	-8.6	1.04 V	112	-4.00	49.40
5	#17355.00	63.9 PK	87.1	-23.2	1.10 V	148	10.90	53.00
6	#17355.00	50.9 AV	77.7	-26.8	1.10 V	148	-2.10	53.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The 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 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	107.5 PK			1.27 H	165	68.60	38.90
2	*5825.00	97.3 AV			1.27 H	165	58.40	38.90
3	#5850.00	57.5 PK	87.5	-30.0	1.17 H	155	18.60	38.90
4	#5850.00	47.3 AV	77.3	-30.0	1.17 H	155	8.40	38.90
5	11650.00	57.4 PK	74.0	-16.6	1.07 H	142	8.10	49.30
6	11650.00	45.2 AV	54.0	-8.8	1.07 H	142	-4.10	49.30
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	*5825.00	108.7 PK			1.01 V	193	69.80	38.90
2	*5825.00	99.1 AV			1.01 V	193	60.20	38.90
3	#5850.00	58.7 PK	88.7	-30.0	1.10 V	320	19.80	38.90
4	#5850.00	49.1 AV	79.1	-30.0	1.10 V	320	10.20	38.90
5	11650.00	58.1 PK	74.0	-15.9	1.14 V	132	8.80	49.30
6	11650.00	45.3 AV	54.0	-8.7	1.14 V	132	-4.00	49.30

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The 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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	65.5 PK	88.5	-23.0	1.10 H	184	26.80	38.70
2	#5725.00	55.7 AV	78.7	-23.0	1.10 H	184	17.00	38.70
3	*5745.00	108.5 PK			1.00 H	194	69.80	38.70
4	*5745.00	98.7 AV			1.00 H	194	60.00	38.70
5	11490.00	58.2 PK	74.0	-15.8	1.02 H	76	8.70	49.50
6	11490.00	45.7 AV	54.0	-8.3	1.02 H	76	-3.80	49.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	66.1 PK	89.1	-23.0	1.10 V	47	27.40	38.70
2	#5725.00	56.1 AV	79.1	-23.0	1.10 V	47	17.40	38.70
3	*5745.00	109.1 PK			1.00 V	41	70.40	38.70
4	*5745.00	99.1 AV			1.00 V	41	60.40	38.70
5	11490.00	58.1 PK	74.0	-15.9	1.14 V	152	8.60	49.50
6	11490.00	46.1 AV	54.0	-7.9	1.14 V	152	-3.40	49.50

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	108.4 PK			1.06 H	186	69.60	38.80
2	*5785.00	97.7 AV			1.06 H	186	58.90	38.80
3	11570.00	57.8 PK	74.0	-16.2	1.24 H	55	8.40	49.40
4	11570.00	44.8 AV	54.0	-9.2	1.24 H	55	-4.60	49.40
5	#17355.00	63.9 PK	88.4	-24.5	1.15 H	19	10.90	53.00
6	#17355.00	50.5 AV	77.7	-27.2	1.15 H	19	-2.50	53.00
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	*5785.00	109.3 PK			1.00 V	42	70.50	38.80
2	*5785.00	100.3 AV			1.00 V	42	61.50	38.80
3	11570.00	57.9 PK	74.0	-16.1	1.14 V	152	8.50	49.40
4	11570.00	45.4 AV	54.0	-8.6	1.14 V	152	-4.00	49.40
5	#17355.00	63.4 PK	89.3	-25.9	1.04 V	112	10.40	53.00
6	#17355.00	51.0 AV	80.3	-29.3	1.04 V	112	-2.00	53.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The 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 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	107.7 PK			1.11 H	150	68.80	38.90
2	*5825.00	97.2 AV			1.11 H	150	58.30	38.90
3	#5850.00	61.7 PK	87.7	-26.0	1.10 H	145	22.80	38.90
4	#5850.00	51.2 AV	77.2	-26.0	1.10 H	145	12.30	38.90
5	11650.00	57.9 PK	74.0	-16.1	1.00 H	106	8.60	49.30
6	11650.00	45.1 AV	54.0	-8.9	1.00 H	106	-4.20	49.30
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	*5825.00	108.3 PK			1.00 V	53	69.40	38.90
2	*5825.00	98.5 AV			1.00 V	53	59.60	38.90
3	#5850.00	62.3 PK	88.3	-26.0	1.00 V	300	23.40	38.90
4	#5850.00	52.5 AV	78.5	-26.0	1.00 V	300	13.60	38.90
5	11650.00	57.9 PK	74.0	-16.1	1.08 V	68	8.60	49.30
6	11650.00	44.9 AV	54.0	-9.1	1.08 V	68	-4.40	49.30

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	62.5 PK	87.5	-25.0	1.15 H	180	23.80	38.70
2	#5725.00	52.9 AV	77.9	-25.0	1.15 H	180	14.20	38.70
3	*5755.00	107.5 PK			1.00 H	200	68.80	38.70
4	*5755.00	97.9 AV			1.00 H	200	59.20	38.70
5	11510.00	57.3 PK	74.0	-16.7	1.06 H	157	7.80	49.50
6	11510.00	45.2 AV	54.0	-8.8	1.06 H	157	-4.30	49.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	63.8 PK	88.8	-25.0	1.00 V	57	25.10	38.70
2	#5725.00	53.2 AV	78.2	-25.0	1.00 V	57	14.50	38.70
3	*5755.00	108.8 PK			1.00 V	57	70.10	38.70
4	*5755.00	98.2 AV			1.00 V	57	59.50	38.70
5	11510.00	58.2 PK	74.0	-15.8	1.21 V	88	8.70	49.50
6	11510.00	45.3 AV	54.0	-8.7	1.21 V	88	-4.20	49.50

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.
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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	108.7 PK			1.06 H	192	69.90	38.80
2	*5795.00	98.4 AV			1.06 H	192	59.60	38.80
3	#5850.00	61.7 PK	88.7	-27.0	1.10 H	125	22.80	38.90
4	#5850.00	51.4 AV	78.4	-27.0	1.10 H	125	12.50	38.90
5	11590.00	59.1 PK	74.0	-14.9	1.02 H	78	9.70	49.40
6	11590.00	45.6 AV	54.0	-8.4	1.02 H	78	-3.80	49.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	109.8 PK			1.13 V	164	71.00	38.80
2	*5795.00	99.2 AV			1.13 V	164	60.40	38.80
3	#5850.00	62.8 PK	89.8	-27.0	1.10 V	340	23.90	38.90
4	#5850.00	52.2 AV	79.2	-27.0	1.10 V	340	13.30	38.90
5	11590.00	57.7 PK	74.0	-16.3	1.12 V	99	8.30	49.40
6	11590.00	45.3 AV	54.0	-8.7	1.12 V	99	-4.10	49.40

REMARKS:

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



A D T

BELOW 1GHz WORST-CASE DATA : 802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	208.77	32.1 QP	43.5	-11.4	1.00 H	106	20.80	11.30
2	243.77	32.4 QP	46.0	-13.6	1.25 H	224	19.60	12.80
3	500.42	30.9 QP	46.0	-15.1	1.50 H	144	10.90	20.00
4	624.85	36.4 QP	46.0	-9.6	1.25 H	326	14.10	22.30
5	739.57	26.4 QP	46.0	-19.6	2.00 H	286	2.40	24.00
6	920.38	30.8 QP	46.0	-15.2	1.00 H	241	3.80	27.00
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	64.90	32.2 QP	40.0	-7.8	1.24 V	13	19.30	12.90
2	148.50	30.6 QP	43.5	-12.9	1.00 V	253	16.50	14.10
3	208.77	32.4 QP	43.5	-11.1	1.50 V	211	21.10	11.30
4	500.42	32.4 QP	46.0	-13.6	1.00 V	173	12.40	20.00
5	624.85	30.1 QP	46.0	-15.9	1.50 V	39	7.80	22.30
6	751.23	30.5 QP	46.0	-15.5	2.00 V	177	6.10	24.40

REMARKS:

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

5.1.8 TEST RESULTS (B)

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	59.7 PK	83.3	-23.6	1.00 H	310	21.00	38.70
2	#5725.00	50.3 AV	73.9	-23.6	1.00 H	310	11.60	38.70
3	*5745.00	103.3 PK			1.04 H	300	64.60	38.70
4	*5745.00	93.9 AV			1.04 H	300	55.20	38.70
5	11490.00	57.7 PK	74.0	-16.3	1.00 H	168	8.20	49.50
6	11490.00	45.6 AV	54.0	-8.4	1.00 H	168	-3.90	49.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	66.0 PK	89.6	-23.6	1.00 V	300	27.30	38.70
2	#5725.00	56.4 AV	80.0	-23.6	1.00 V	300	17.70	38.70
3	*5745.00	109.6 PK			1.00 V	300	70.90	38.70
4	*5745.00	100.0 AV			1.00 V	300	61.30	38.70
5	11490.00	57.4 PK	74.0	-16.6	1.00 V	111	7.90	49.50
6	11490.00	45.8 AV	54.0	-8.2	1.00 V	111	-3.70	49.50

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.
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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	104.9 PK			1.00 H	345	66.10	38.80
2	*5785.00	94.4 AV			1.00 H	345	55.60	38.80
3	11570.00	57.5 PK	74.0	-16.5	1.07 H	146	8.10	49.40
4	11570.00	45.0 AV	54.0	-9.0	1.07 H	146	-4.40	49.40
5	#17355.00	63.6 PK	84.9	-21.3	1.00 H	147	10.60	53.00
6	#17355.00	50.9 AV	74.4	-23.5	1.00 H	147	-2.10	53.00
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	*5785.00	109.7 PK			1.00 V	268	70.90	38.80
2	*5785.00	98.9 AV			1.00 V	268	60.10	38.80
3	11570.00	58.9 PK	74.0	-15.1	1.00 V	268	9.50	49.40
4	11570.00	46.2 AV	54.0	-7.8	1.00 V	268	-3.20	49.40
5	#17355.00	63.7 PK	89.7	-26.0	1.47 V	125	10.70	53.00
6	#17355.00	50.9 AV	78.9	-28.0	1.47 V	125	-2.10	53.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The 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 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	104.6 PK			1.17 H	4	65.70	38.90
2	*5825.00	94.3 AV			1.17 H	4	55.40	38.90
3	#5850.00	55.6 PK	84.6	-29.0	1.00 H	314	16.70	38.90
4	#5850.00	45.3 AV	74.3	-29.0	1.00 H	314	6.40	38.90
5	11650.00	57.4 PK	74.0	-16.6	1.14 H	168	8.10	49.30
6	11650.00	45.4 AV	54.0	-8.6	1.14 H	168	-3.90	49.30
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	*5825.00	108.0 PK			1.00 V	269	69.10	38.90
2	*5825.00	97.7 AV			1.00 V	269	58.80	38.90
3	#5850.00	59.0 PK	88.0	-29.0	1.00 V	314	20.10	38.90
4	#5850.00	48.7 AV	77.7	-29.0	1.00 V	314	9.80	38.90
5	11650.00	57.5 PK	74.0	-16.5	1.07 V	116	8.20	49.30
6	11650.00	45.4 AV	54.0	-8.6	1.07 V	116	-3.90	49.30

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The 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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	64.0 PK	84.0	-20.0	1.00 H	360	25.30	38.70
2	#5725.00	54.0 AV	74.0	-20.0	1.00 H	360	15.30	38.70
3	*5745.00	104.0 PK			1.06 H	360	65.30	38.70
4	*5745.00	94.0 AV			1.06 H	360	55.30	38.70
5	11490.00	57.4 PK	74.0	-16.6	1.47 H	152	7.90	49.50
6	11490.00	46.7 AV	54.0	-7.3	1.47 H	152	-2.80	49.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	68.1 PK	88.1	-20.0	1.00 V	360	29.40	38.70
2	#5725.00	58.1 AV	78.1	-20.0	1.00 V	360	19.40	38.70
3	*5745.00	108.1 PK			1.00 V	267	69.40	38.70
4	*5745.00	98.1 AV			1.00 V	267	59.40	38.70
5	11490.00	58.5 PK	74.0	-15.5	1.24 V	155	9.00	49.50
6	11490.00	48.1 AV	54.0	-5.9	1.24 V	155	-1.40	49.50

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
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 (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5785.00	104.3 PK			1.00 H	350	65.50	38.80
2	*5785.00	94.0 AV			1.00 H	350	55.20	38.80
3	11570.00	57.0 PK	74.0	-17.0	1.04 H	163	7.60	49.40
4	11570.00	44.5 AV	54.0	-9.5	1.04 H	163	-4.90	49.40
5	#17355.00	64.1 PK	84.3	-20.2	1.24 H	130	11.10	53.00
6	#17355.00	50.7 AV	74.0	-23.3	1.24 H	130	-2.30	53.00
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	*5785.00	108.8 PK			1.00 V	286	70.00	38.80
2	*5785.00	99.0 AV			1.00 V	286	60.20	38.80
3	11570.00	58.0 PK	74.0	-16.0	1.05 V	142	8.60	49.40
4	11570.00	44.7 AV	54.0	-9.3	1.05 V	142	-4.70	49.40
5	#17355.00	64.5 PK	88.8	-24.3	1.10 V	136	11.50	53.00
6	#17355.00	50.5 AV	79.0	-28.5	1.10 V	136	-2.50	53.00

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The 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 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	104.1 PK			1.24 H	309	65.20	38.90
2	*5825.00	94.9 AV			1.24 H	309	56.00	38.90
3	#5850.00	55.1 PK	84.1	-29.0	1.00 H	312	16.20	38.90
4	#5850.00	45.9 AV	74.9	-29.0	1.00 H	312	7.00	38.90
5	11650.00	57.9 PK	74.0	-16.1	1.04 H	97	8.60	49.30
6	11650.00	45.2 AV	54.0	-8.8	1.04 H	97	-4.10	49.30
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	*5825.00	109.2 PK			1.00 V	268	70.30	38.90
2	*5825.00	98.6 AV			1.00 V	268	59.70	38.90
3	#5850.00	60.2 PK	89.2	-29.0	1.00 V	312	21.30	38.90
4	#5850.00	49.6 AV	78.6	-29.0	1.00 V	312	10.70	38.90
5	11650.00	58.2 PK	74.0	-15.8	1.44 V	152	8.90	49.30
6	11650.00	44.9 AV	54.0	-9.1	1.44 V	152	-4.40	49.30

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The limit value is defined as per 15.247.
7. “#”: The radiated frequency is out the restricted band.



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802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 151	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	66.4 PK	83.4	-17.0	1.00 H	10	27.70	38.70
2	#5725.00	56.5 AV	73.5	-17.0	1.00 H	10	17.80	38.70
3	*5755.00	103.4 PK			1.07 H	11	64.70	38.70
4	*5755.00	93.5 AV			1.07 H	11	54.80	38.70
5	11510.00	57.2 PK	74.0	-16.8	1.23 H	200	7.70	49.50
6	11510.00	45.2 AV	54.0	-8.8	1.23 H	200	-4.30	49.50
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5725.00	70.4 PK	87.4	-17.0	1.00 V	10	31.70	38.70
2	#5725.00	60.4 AV	77.4	-17.0	1.00 V	10	21.70	38.70
3	*5755.00	107.4 PK			1.00 V	266	68.70	38.70
4	*5755.00	97.4 AV			1.00 V	266	58.70	38.70
5	11510.00	57.2 PK	74.0	-16.8	1.04 V	61	7.70	49.50
6	11510.00	45.0 AV	54.0	-9.0	1.04 V	61	-4.50	49.50

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
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 159	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	104.1 PK			1.20 H	345	65.30	38.80
2	*5795.00	94.9 AV			1.20 H	345	56.10	38.80
3	#5850.00	55.1 PK	84.1	-29.0	1.10 H	313	16.20	38.90
4	#5850.00	45.9 AV	74.9	-29.0	1.10 H	313	7.00	38.90
5	11590.00	57.2 PK	74.0	-16.8	1.07 H	144	7.80	49.40
6	11590.00	44.4 AV	54.0	-9.6	1.07 H	144	-5.00	49.40
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	108.5 PK			1.00 V	268	69.70	38.80
2	*5795.00	98.1 AV			1.00 V	268	59.30	38.80
3	#5850.00	59.5 PK	88.5	-29.0	1.10 V	313	20.60	38.90
4	#5850.00	49.1 AV	78.1	-29.0	1.10 V	313	10.20	38.90
5	11590.00	57.9 PK	74.0	-16.1	1.14 V	152	8.50	49.40
6	11590.00	45.3 AV	54.0	-8.7	1.14 V	152	-4.10	49.40

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The 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 : 802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 149	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60 Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 65%RH	TESTED BY	Chris Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	157.21	31.7 QP	43.5	-11.8	2.00 H	265	17.60	14.10
2	204.52	29.1 QP	43.5	-14.4	1.25 H	111	17.90	11.20
3	374.89	25.2 QP	46.0	-20.8	2.00 H	263	8.30	16.90
4	500.12	34.5 QP	46.0	-11.5	1.00 H	20	14.50	20.00
5	624.98	34.0 QP	46.0	-12.0	1.25 H	54	11.70	22.30
6	750.11	33.1 QP	46.0	-12.9	1.00 H	16	8.80	24.30
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	68.57	32.2 QP	40.0	-7.8	1.25 V	32	19.70	12.50
2	148.51	32.1 QP	43.5	-11.4	1.00 V	120	18.00	14.10
3	200.95	32.1 QP	43.5	-11.4	1.50 V	80	21.10	11.00
4	500.41	30.7 QP	46.0	-15.3	1.00 V	130	10.70	20.00
5	624.99	29.4 QP	46.0	-16.6	2.00 V	187	7.10	22.30
6	799.96	31.8 QP	46.0	-14.2	1.00 V	163	6.20	25.60

REMARKS:

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



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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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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.

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