

FCC TEST REPORT (15.247)

REPORT NO.: RF120920C28A
MODEL NO.: WAP551
FCC ID: PD5-WAP551
RECEIVED: Sep. 20, 2012
TESTED: Mar. 26 ~ Mar. 27, 2013
ISSUED: Mar. 28, 2013

APPLICANT: Delta Networks, Inc.

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

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF120920C28A	Original release	Mar. 28, 2013



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1. CERTIFICATION

PRODUCT: Wireless AP with PoE

MODEL NO.: WAP551

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 **RF120920C28**. This report shall be used combined together with its original report.

PREPARED BY : Jemma Yang , **DATE** : Mar. 28, 2013
Jemma Yang / 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
15.247(d) 15.209	Radiated Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.2dB at 2483.50MHz and 2390MHz.
15.247(d)	Band Edge Measurement	NA	Refer to Note
15.247(a)(2)	6dB bandwidth	NA	Refer to Note
15.247(b)	Conducted power	NA	Refer to Note
15.247(e)	Power Spectral Density	NA	Refer to Note
15.203	Antenna Requirement	PASS	Antenna connector is IPEX not a standard connector.

NOTE: The radiated emission test was performed for the addendum. Refer to original report for the other test data.

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.	WAP551
POWER SUPPLY	55Vdc (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 450.0Mbps
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	440.52mW for 2412 ~ 2462MHz 402.32mW for 5745 ~ 5825MHz
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 report is issued as a supplementary report to the original BV ADT report no.: RF120920C28. This report shall be combined together with its original report.
2. This report is prepared for FCC class II permissive change. Difference compared with the original report is changing Antenna type. Therefore, radiated emission test had been reappraised.
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 EUT with follow antennas gain is listed as table below.

Antenna Item	Antenna Type	Connector	Gain(dBi)		X-plane	Z-plane
			2.4GHz	5GHz		
1	PIFA	IPEX	5.2dBi	5.5dBi	√	√
2	PIFA		3.2dBi	4.6dBi	√	
3	PIFA		4.4dBi	4.6dBi		√
4	PIFA		3.9dBi	5.6dBi	√	
5	PIFA		4.5dBi	5.8dBi		√

**For EUT position on X-plane, chosen antenna item 1, 2, 4 for final test.

**For EUT position on Z-plane, chosen antenna item 1, 3, 5 for final test.

5. The EUT consumes power from the following POE.

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

* POE was supplied for optional accessory.

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 (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

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	√	√	Lying flat
B	√	√	Standing

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

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	6	OFDM	BPSK	7.2

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE $\geq$ 1G	21deg. C, 72%RH	120Vac, 60Hz	Antony Lee
RE<1G	23deg. C, 66%RH	120Vac, 60Hz	Cedric Wu

FOR 5.0GHz (5745 ~ 5825MHz):

EUT CONFIGURE MODE	APPLICABLE TO		DESCRIPTION
	RE $\geq$ 1G	RE<1G	
A	√	√	Lying flat
B	√	√	Standing

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

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	21deg. C, 72%RH	120Vac, 60Hz	Antony Lee
RE<1G	23deg. C, 66%RH	120Vac, 60Hz	Cedric Wu

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.

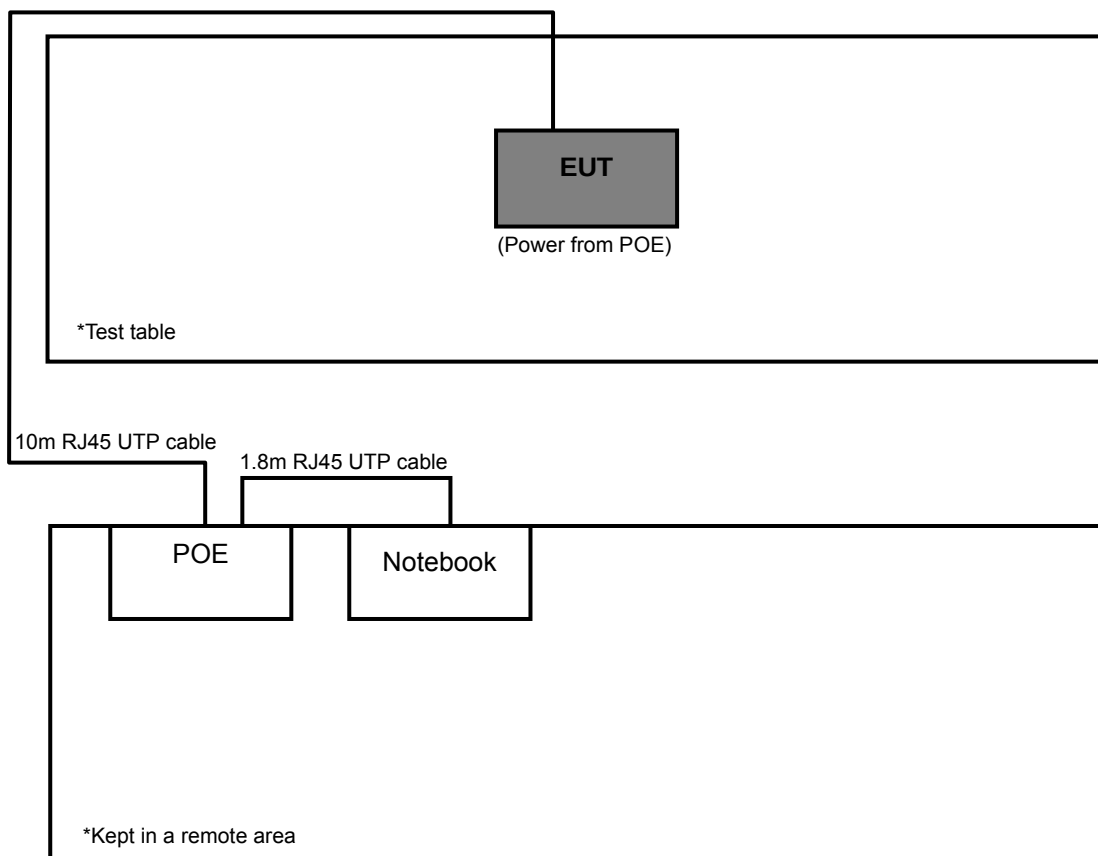
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Notebook	DELL	D531	CN-0XM006-48643-81U-2610	QDS-BRCM1020

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	10m non-shielded RJ45 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.

3.3.1 CONFIGURATION OF SYSTEM UNDER TEST



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
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Aug. 21, 2012	Aug. 20, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSU 43	100115	Oct. 25, 2012	Oct. 24, 2013
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Apr. 06, 2012	Apr. 05, 2013
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-404	Dec. 22, 2012	Dec. 21, 2013
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 11, 2012	Jul. 10, 2013
Loop Antenna	HFH2-Z2	100070	Jan. 31, 2012	Jan. 30, 2014
Preamplifier Agilent	8449B	3008A01961	Oct. 25, 2012	Oct. 24, 2013
Preamplifier Agilent	8447D	2944A10738	Oct. 23, 2012	Oct. 22, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309220/4	Aug. 28, 2012	Aug. 27, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250724/4	Aug. 28, 2012	Aug. 27, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295012/4	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	010303	NA	NA
Antenna Tower Controller inn-co GmbH	CO2000	019303	NA	NA
Turn Table ADT	TT100.	TT93021704	NA	NA
Turn Table Controller ADT	SC100.	SC93021704	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 25, 2012	Oct. 24, 2013
High Speed Peak Power Meter	ML2495A	0842014	Apr. 28, 2012	Apr. 27, 2013
Power Sensor	MA2411B	0738404	Apr. 28, 2012	Apr. 27, 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 calibration interval of the loop antenna is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in HwaYa Chamber 4.
4. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
5. The FCC Site Registration No. is 460141.
6. The IC Site Registration No. is IC7450F-4.

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.

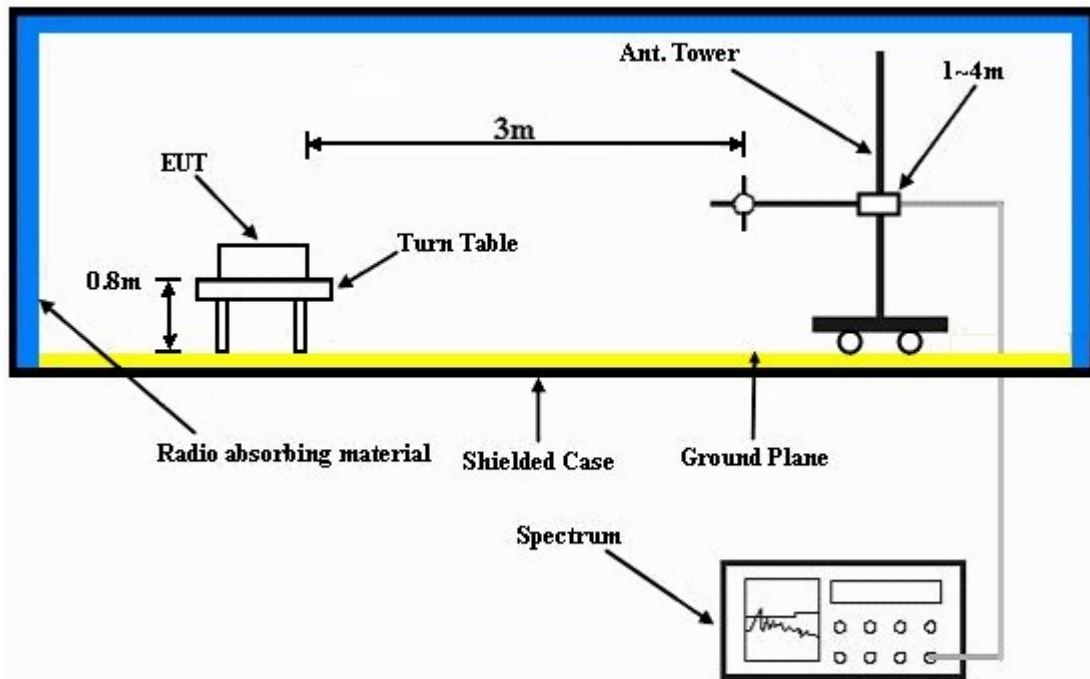
NOTE:

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 RJ45 cable and run a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
- The communication partner sent data to EUT by command "PING".



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4.1.7 TEST RESULTS (A)

ABOVE 1GHz DATA :

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	23deg. C, 75%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	62.5 PK	74.0	-11.5	1.12 H	45	30.50	32.00
2	2390.00	50.8 AV	54.0	-3.2	1.12 H	45	18.80	32.00
3	*2412.00	108.9 PK			1.05 H	206	76.90	32.00
4	*2412.00	103.8 AV			1.05 H	206	71.80	32.00
5	4824.00	50.5 PK	74.0	-23.5	1.55 H	186	12.10	38.40
6	4824.00	43.9 AV	54.0	-10.1	1.55 H	186	5.50	38.40
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	2390.00	61.0 PK	74.0	-13.0	1.56 V	53	29.00	32.00
2	2390.00	52.0 AV	54.0	-2.0	1.56 V	53	20.00	32.00
3	*2412.00	110.0 PK			1.56 V	53	78.00	32.00
4	*2412.00	105.7 AV			1.56 V	53	73.70	32.00
5	4824.00	52.6 PK	74.0	-21.4	1.33 V	56	14.20	38.40
6	4824.00	45.5 AV	54.0	-8.5	1.33 V	56	7.10	38.40

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.



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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	23deg. C, 75%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	109.0 PK			1.00 H	123	76.90	32.10
2	*2437.00	105.2 AV			1.00 H	123	73.10	32.10
3	#3249.00	44.2 PK	89.0	-44.8	1.58 H	8	10.10	34.10
4	#3249.00	31.3 AV	85.2	-53.9	1.58 H	8	-2.80	34.10
5	4874.00	51.0 PK	74.0	-23.0	1.36 H	62	12.60	38.40
6	4874.00	44.7 AV	54.0	-9.3	1.36 H	62	6.30	38.40
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	*2437.00	109.0 PK			1.00 V	18	76.90	32.10
2	*2437.00	103.6 AV			1.00 V	18	71.50	32.10
3	#3249.00	44.6 PK	89.0	-44.4	1.00 V	66	10.50	34.10
4	#3249.00	31.5 AV	83.6	-52.1	1.00 V	66	-2.60	34.10
5	4874.00	52.2 PK	74.0	-21.8	1.01 V	166	13.80	38.40
6	4874.00	45.6 AV	54.0	-8.4	1.01 V	166	7.20	38.40

REMARKS:

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



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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	23deg. C, 75%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	109.8 PK			1.00 H	222	77.60	32.20
2	*2462.00	106.0 AV			1.00 H	222	73.80	32.20
3	2483.50	62.5 PK	74.0	-11.5	1.00 H	222	30.20	32.30
4	2483.50	52.6 AV	54.0	-1.4	1.00 H	222	20.30	32.30
5	4924.00	50.9 PK	74.0	-23.1	1.00 H	187	12.50	38.40
6	4924.00	44.8 AV	54.0	-9.2	1.00 H	187	6.40	38.40
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	*2462.00	107.8 PK			1.02 V	22	75.60	32.20
2	*2462.00	102.2 AV			1.02 V	22	70.00	32.20
3	2483.50	62.5 PK	74.0	-11.5	1.02 V	22	30.20	32.30
4	2483.50	52.4 AV	54.0	-1.6	1.02 V	22	20.10	32.30
5	4924.00	53.0 PK	74.0	-21.0	1.00 V	147	14.60	38.40
6	4924.00	45.8 AV	54.0	-8.2	1.00 V	147	7.40	38.40

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.



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	23deg. C, 75%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	64.6 PK	74.0	-9.4	1.05 H	209	32.60	32.00
2	2390.00	52.1 AV	54.0	-1.9	1.05 H	209	20.10	32.00
3	*2412.00	112.8 PK			1.05 H	207	80.80	32.00
4	*2412.00	101.0 AV			1.05 H	207	69.00	32.00
5	4824.00	47.7 PK	74.0	-26.3	1.00 H	66	9.30	38.40
6	4824.00	34.5 AV	54.0	-19.5	1.00 H	66	-3.90	38.40
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	2390.00	65.8 PK	74.0	-8.2	1.00 V	145	33.80	32.00
2	2390.00	52.2 AV	54.0	-1.8	1.00 V	145	20.20	32.00
3	*2412.00	108.7 PK			1.00 V	145	76.70	32.00
4	*2412.00	99.1 AV			1.00 V	145	67.10	32.00
5	4824.00	47.8 PK	74.0	-26.2	1.00 V	26	9.40	38.40
6	4824.00	34.1 AV	54.0	-19.9	1.00 V	26	-4.30	38.40

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.



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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	23deg. C, 75%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	112.5 PK			1.07 H	25	80.40	32.10
2	*2437.00	102.7 AV			1.07 H	25	70.60	32.10
3	#3249.00	46.0 PK	92.5	-46.5	1.07 H	25	11.90	34.10
4	#3249.00	32.1 AV	82.7	-50.6	1.07 H	25	-2.00	34.10
5	4874.00	52.1 PK	74.0	-21.9	1.00 H	163	13.70	38.40
6	4874.00	46.0 AV	54.0	-8.0	1.00 H	163	7.60	38.40
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	*2437.00	112.0 PK			1.27 V	159	79.90	32.10
2	*2437.00	101.0 AV			1.27 V	159	68.90	32.10
3	#3249.00	44.8 PK	92.0	-47.2	1.00 V	69	10.70	34.10
4	#3249.00	32.5 AV	81.0	-48.5	1.00 V	69	-1.60	34.10
5	4874.00	51.4 PK	74.0	-22.6	1.74 V	125	13.00	38.40
6	4874.00	46.3 AV	54.0	-7.7	1.74 V	125	7.90	38.40

REMARKS:

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



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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	23deg. C, 75%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	112.7 PK			1.05 H	66	80.50	32.20
2	*2462.00	101.7 AV			1.05 H	66	69.50	32.20
3	2483.50	68.0 PK	74.0	-6.0	1.05 H	66	35.70	32.30
4	2483.50	52.6 AV	54.0	-1.4	1.06 H	66	20.30	32.30
5	4924.00	52.7 PK	74.0	-21.3	1.00 H	152	14.30	38.40
6	4924.00	46.0 AV	54.0	-8.0	1.00 H	152	7.60	38.40
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	*2462.00	108.8 PK			1.65 V	5	76.60	32.20
2	*2462.00	98.6 AV			1.65 V	5	66.40	32.20
3	2483.50	63.0 PK	74.0	-11.0	1.65 V	5	30.70	32.30
4	2483.50	49.8 AV	54.0	-4.2	1.65 V	5	17.50	32.30
5	4924.00	52.8 PK	74.0	-21.2	1.00 V	174	14.40	38.40
6	4924.00	46.4 AV	54.0	-7.6	1.00 V	174	8.00	38.40

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.



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	23deg. C, 75%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	70.0 PK	74.0	-4.0	1.07 H	74	38.00	32.00
2	2390.00	52.4 AV	54.0	-1.6	1.07 H	74	20.40	32.00
3	*2412.00	111.5 PK			1.07 H	74	79.50	32.00
4	*2412.00	101.2 AV			1.07 H	74	69.20	32.00
5	4824.00	48.0 PK	74.0	-26.0	1.14 H	52	9.60	38.40
6	4824.00	34.1 AV	54.0	-19.9	1.14 H	52	-4.30	38.40
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	2390.00	68.7 PK	74.0	-5.3	1.00 V	281	36.70	32.00
2	2390.00	48.1 AV	54.0	-5.9	1.00 V	281	16.10	32.00
3	*2412.00	108.8 PK			1.00 V	281	76.80	32.00
4	*2412.00	98.8 AV			1.00 V	281	66.80	32.00
5	4824.00	47.5 PK	74.0	-26.5	1.00 V	222	9.10	38.40
6	4824.00	34.6 AV	54.0	-19.4	1.00 V	222	-3.80	38.40

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.



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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	23deg. C, 75%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	112.0 PK			1.88 H	157	79.90	32.10
2	*2437.00	102.2 AV			1.88 H	157	70.10	32.10
3	#3249.00	45.1 PK	92.0	-46.9	1.02 H	58	11.00	34.10
4	#3249.00	31.2 AV	82.2	-51.0	1.02 H	58	-2.90	34.10
5	4874.00	48.5 PK	74.0	-25.5	1.00 H	145	10.10	38.40
6	4874.00	35.2 AV	54.0	-18.8	1.00 H	145	-3.20	38.40
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	*2437.00	108.7 PK			1.06 V	32	76.60	32.10
2	*2437.00	99.2 AV			1.06 V	32	67.10	32.10
3	#3249.00	47.0 PK	88.7	-41.7	1.06 V	32	12.90	34.10
4	#3249.00	32.2 AV	79.2	-47.0	1.06 V	32	-1.90	34.10
5	4874.00	47.2 PK	74.0	-26.8	1.00 V	125	8.80	38.40
6	4874.00	33.8 AV	54.0	-20.2	1.00 V	125	-4.60	38.40

REMARKS:

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



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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	23deg. C, 75%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	113.2 PK			1.00 H	183	81.00	32.20
2	*2462.00	102.8 AV			1.00 H	183	70.60	32.20
3	2483.50	70.8 PK	74.0	-3.2	1.02 H	183	38.50	32.30
4	2483.50	52.6 AV	54.0	-1.4	1.02 H	183	20.30	32.30
5	4924.00	52.5 PK	74.0	-21.5	1.00 H	124	14.10	38.40
6	4924.00	46.1 AV	54.0	-7.9	1.00 H	124	7.70	38.40
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	*2462.00	108.7 PK			1.47 V	280	76.50	32.20
2	*2462.00	98.6 AV			1.47 V	280	66.40	32.20
3	2483.50	66.5 PK	74.0	-7.5	1.47 V	280	34.20	32.30
4	2483.50	49.5 AV	54.0	-4.5	1.47 V	280	17.20	32.30
5	4924.00	53.2 PK	74.0	-20.8	1.00 V	185	14.80	38.40
6	4924.00	46.2 AV	54.0	-7.8	1.00 V	185	7.80	38.40

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.



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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	23deg. C, 75%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	66.0 PK	74.0	-8.0	1.05 H	207	34.00	32.00
2	2390.00	52.2 AV	54.0	-1.8	1.05 H	207	20.20	32.00
3	*2422.00	108.4 PK			1.05 H	207	76.30	32.10
4	*2422.00	97.5 AV			1.05 H	207	65.40	32.10
5	4844.00	46.3 PK	74.0	-27.7	1.88 H	254	7.90	38.40
6	4844.00	34.5 AV	54.0	-19.5	1.88 H	254	-3.90	38.40
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	2390.00	65.0 PK	74.0	-9.0	1.02 V	278	33.00	32.00
2	2390.00	50.8 AV	54.0	-3.2	1.02 V	278	18.80	32.00
3	*2422.00	103.6 PK			1.02 V	278	71.50	32.10
4	*2422.00	94.6 AV			1.02 V	278	62.50	32.10
5	4844.00	46.6 PK	74.0	-27.4	1.00 V	64	8.20	38.40
6	4844.00	34.6 AV	54.0	-19.4	1.00 V	64	-3.80	38.40

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.



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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	23deg. C, 75%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	109.6 PK			1.07 H	7	77.50	32.10
2	*2437.00	99.0 AV			1.07 H	7	66.90	32.10
3	#3249.00	44.4 PK	89.6	-45.2	1.00 H	96	10.30	34.10
4	#3249.00	31.3 AV	79.0	-47.7	1.00 H	96	-2.80	34.10
5	4874.00	46.3 PK	74.0	-27.7	1.00 H	177	7.90	38.40
6	4874.00	35.4 AV	54.0	-18.6	1.00 H	177	-3.00	38.40
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	*2437.00	105.5 PK			1.00 V	283	73.40	32.10
2	*2437.00	96.0 AV			1.00 V	283	63.90	32.10
3	#3249.00	44.5 PK	85.5	-41.0	1.47 V	66	10.40	34.10
4	#3249.00	31.3 AV	76.0	-44.7	1.47 V	66	-2.80	34.10
5	4874.00	48.1 PK	74.0	-25.9	1.00 V	325	9.70	38.40
6	4874.00	35.2 AV	54.0	-18.8	1.00 V	325	-3.20	38.40

REMARKS:

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



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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	23deg. C, 75%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	106.6 PK			1.20 H	45	74.40	32.20
2	*2452.00	94.6 AV			1.20 H	45	62.40	32.20
3	2483.50	65.6 PK	74.0	-8.4	1.02 H	189	33.30	32.30
4	2483.50	52.8 AV	54.0	-1.2	1.02 H	189	20.50	32.30
5	4904.00	53.1 PK	74.0	-20.9	1.00 H	144	14.60	38.50
6	4904.00	46.6 AV	54.0	-7.4	1.00 H	144	8.10	38.50
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	*2452.00	106.3 PK			1.00 V	166	74.10	32.20
2	*2452.00	93.0 AV			1.00 V	166	60.80	32.20
3	2483.50	62.2 PK	74.0	-11.8	1.00 V	166	29.90	32.30
4	2483.50	50.5 AV	54.0	-3.5	1.00 V	166	18.20	32.30
5	4904.00	53.2 PK	74.0	-20.8	1.25 V	45	14.70	38.50
6	4904.00	47.7 AV	54.0	-6.3	1.25 V	45	9.20	38.50

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.



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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Cedric Wu

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	101.69	22.0 QP	43.5	-21.5	1.36 H	101	12.40	9.60
2	148.26	22.5 QP	43.5	-21.0	1.00 H	251	8.60	13.90
3	198.71	25.7 QP	43.5	-17.8	1.77 H	19	14.80	10.90
4	400.52	30.3 QP	46.0	-15.7	1.20 H	313	13.20	17.10
5	672.17	35.3 QP	46.0	-10.7	1.24 H	335	13.30	22.00
6	800.24	36.0 QP	46.0	-10.0	2.25 H	121	11.40	24.60
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	57.07	30.1 QP	40.0	-9.9	1.24 V	340	16.50	13.60
2	154.09	25.2 QP	43.5	-18.3	1.02 V	10	11.20	14.00
3	249.17	22.9 QP	46.0	-23.1	1.63 V	49	10.10	12.80
4	284.09	23.2 QP	46.0	-22.8	1.88 V	275	9.00	14.20
5	499.48	25.7 QP	46.0	-20.3	2.45 V	220	6.20	19.50
6	800.24	32.8 QP	46.0	-13.2	1.20 V	60	8.20	24.60

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.

4.1.8 TEST RESULTS (B)

ABOVE 1GHz DATA :

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	21deg. C, 72%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	57.8 PK	74.0	-16.2	1.25 H	231	25.80	32.00
2	2390.00	47.2 AV	54.0	-6.8	1.25 H	231	15.20	32.00
3	*2412.00	103.8 PK			1.00 H	232	71.80	32.00
4	*2412.00	99.6 AV			1.00 H	232	67.60	32.00
5	4824.00	54.5 PK	74.0	-19.5	1.01 H	145	16.10	38.40
6	4824.00	42.1 AV	54.0	-11.9	1.01 H	145	3.70	38.40
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	2390.00	61.8 PK	74.0	-12.2	1.02 V	85	29.80	32.00
2	2390.00	52.5 AV	54.0	-1.5	1.02 V	85	20.50	32.00
3	*2412.00	112.4 PK			1.58 V	44	80.40	32.00
4	*2412.00	107.9 AV			1.58 V	44	75.90	32.00
5	4824.00	51.5 PK	74.0	-22.5	1.12 V	360	13.10	38.40
6	4824.00	45.2 AV	54.0	-8.8	1.12 V	360	6.80	38.40

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.



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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	21deg. C, 72%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	102.5 PK			1.00 H	325	70.40	32.10
2	*2437.00	98.2 AV			1.00 H	325	66.10	32.10
3	#3249.00	45.6 PK	82.5	-36.9	1.00 H	231	11.50	34.10
4	#3249.00	32.1 AV	78.2	-46.1	1.00 H	231	-2.00	34.10
5	4874.00	50.0 PK	74.0	-24.0	1.00 H	154	11.60	38.40
6	4874.00	41.1 AV	54.0	-12.9	1.00 H	154	2.70	38.40
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	*2437.00	112.8 PK			1.47 V	69	80.70	32.10
2	*2437.00	109.6 AV			1.47 V	69	77.50	32.10
3	#3249.00	46.3 PK	92.8	-46.5	1.27 V	17	12.20	34.10
4	#3249.00	37.2 AV	89.6	-52.4	1.27 V	17	3.10	34.10
5	4874.00	51.6 PK	74.0	-22.4	1.15 V	52	13.20	38.40
6	4874.00	44.7 AV	54.0	-9.3	1.15 V	52	6.30	38.40

REMARKS:

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



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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	21deg. C, 72%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	100.4 PK			1.00 H	321	68.20	32.20
2	*2462.00	96.2 AV			1.00 H	321	64.00	32.20
3	2483.50	57.5 PK	74.0	-16.5	1.02 H	321	25.20	32.30
4	2483.50	46.6 AV	54.0	-7.4	1.02 H	321	14.30	32.30
5	4924.00	50.0 PK	74.0	-24.0	1.02 H	120	11.60	38.40
6	4924.00	39.8 AV	54.0	-14.2	1.02 H	120	1.40	38.40
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	*2462.00	113.2 PK			1.00 V	60	81.00	32.20
2	*2462.00	108.6 AV			1.00 V	60	76.40	32.20
3	2483.50	61.8 PK	74.0	-12.2	1.65 V	44	29.50	32.30
4	2483.50	52.6 AV	54.0	-1.4	1.65 V	44	20.30	32.30
5	4924.00	51.5 PK	74.0	-22.5	1.02 V	225	13.10	38.40
6	4924.00	44.5 AV	54.0	-9.5	1.02 V	225	6.10	38.40

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.



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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	21deg. C, 72%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	64.8 PK	74.0	-9.2	1.85 H	36	32.80	32.00
2	2390.00	52.6 AV	54.0	-1.4	1.85 H	36	20.60	32.00
3	*2412.00	112.4 PK			1.08 H	331	80.40	32.00
4	*2412.00	101.8 AV			1.08 H	331	69.80	32.00
5	4824.00	47.6 PK	74.0	-26.4	1.07 H	170	9.20	38.40
6	4824.00	34.2 AV	54.0	-19.8	1.07 H	170	-4.20	38.40
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	2390.00	66.2 PK	74.0	-7.8	1.44 V	125	34.20	32.00
2	2390.00	52.0 AV	54.0	-2.0	1.44 V	125	20.00	32.00
3	*2412.00	111.5 PK			1.00 V	89	79.50	32.00
4	*2412.00	101.6 AV			1.00 V	89	69.60	32.00
5	4824.00	48.6 PK	74.0	-25.4	1.00 V	155	10.20	38.40
6	4824.00	35.2 AV	54.0	-18.8	1.00 V	155	-3.20	38.40

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.



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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	21deg. C, 72%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	111.7 PK			1.77 H	325	79.60	32.10
2	*2437.00	101.3 AV			1.77 H	325	69.20	32.10
3	#3249.00	44.6 PK	91.7	-47.1	1.00 H	112	10.50	34.10
4	#3249.00	33.3 AV	81.3	-48.0	1.00 H	112	-0.80	34.10
5	4874.00	47.5 PK	74.0	-26.5	1.02 H	24	9.10	38.40
6	4874.00	35.0 AV	54.0	-19.0	1.02 H	24	-3.40	38.40
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	*2437.00	109.8 PK			1.47 V	154	77.70	32.10
2	*2437.00	100.5 AV			1.47 V	154	68.40	32.10
3	#3249.00	45.2 PK	89.8	-44.6	1.00 V	4	11.10	34.10
4	#3249.00	35.6 AV	80.5	-44.9	1.00 V	4	1.50	34.10
5	4874.00	48.7 PK	74.0	-25.3	1.00 V	265	10.30	38.40
6	4874.00	35.1 AV	54.0	-18.9	1.00 V	265	-3.30	38.40

REMARKS:

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



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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	21deg. C, 72%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	113.4 PK			1.04 H	8	81.20	32.20
2	*2462.00	102.1 AV			1.04 H	8	69.90	32.20
3	2483.50	70.5 PK	74.0	-3.5	1.04 H	8	38.20	32.30
4	2483.50	52.6 AV	54.0	-1.4	1.04 H	8	20.30	32.30
5	4924.00	48.8 PK	74.0	-25.2	1.45 H	256	10.40	38.40
6	4924.00	36.1 AV	54.0	-17.9	1.45 H	256	-2.30	38.40
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	*2462.00	111.0 PK			1.02 V	42	78.80	32.20
2	*2462.00	101.0 AV			1.02 V	42	68.80	32.20
3	2483.50	64.9 PK	74.0	-9.1	1.00 V	39	32.60	32.30
4	2483.50	50.8 AV	54.0	-3.2	1.00 V	39	18.50	32.30
5	4924.00	49.9 PK	74.0	-24.1	1.00 V	142	11.50	38.40
6	4924.00	36.0 AV	54.0	-18.0	1.00 V	142	-2.40	38.40

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.



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	21deg. C, 72%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	67.5 PK	74.0	-6.5	1.47 H	225	35.50	32.00
2	2390.00	52.2 AV	54.0	-1.8	1.47 H	225	20.20	32.00
3	*2412.00	112.0 PK			1.47 H	225	80.00	32.00
4	*2412.00	99.6 AV			1.47 H	225	67.60	32.00
5	4824.00	47.8 PK	74.0	-26.2	1.00 H	165	9.40	38.40
6	4824.00	35.0 AV	54.0	-19.0	1.00 H	165	-3.40	38.40
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	2390.00	61.9 PK	74.0	-12.1	1.00 V	124	29.90	32.00
2	2390.00	50.8 AV	54.0	-3.2	1.00 V	124	18.80	32.00
3	*2412.00	111.0 PK			1.00 V	124	79.00	32.00
4	*2412.00	101.0 AV			1.00 V	124	69.00	32.00
5	4824.00	47.9 PK	74.0	-26.1	1.00 V	236	9.50	38.40
6	4824.00	34.8 AV	54.0	-19.2	1.00 V	236	-3.60	38.40

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.



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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	21deg. C, 72%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	111.8 PK			1.04 H	44	79.70	32.10
2	*2437.00	101.2 AV			1.04 H	44	69.10	32.10
3	#3249.00	45.0 PK	91.8	-46.8	1.00 H	124	10.90	34.10
4	#3249.00	33.9 AV	81.2	-47.3	1.00 H	124	-0.20	34.10
5	4874.00	47.8 PK	74.0	-26.2	1.02 H	52	9.40	38.40
6	4874.00	36.0 AV	54.0	-18.0	1.02 H	52	-2.40	38.40
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	*2437.00	111.0 PK			1.01 V	68	78.90	32.10
2	*2437.00	99.8 AV			1.01 V	68	67.70	32.10
3	#3249.00	45.4 PK	91.0	-45.6	1.65 V	58	11.30	34.10
4	#3249.00	34.8 AV	79.8	-45.0	1.65 V	58	0.70	34.10
5	4874.00	49.0 PK	74.0	-25.0	1.14 V	360	10.60	38.40
6	4874.00	36.1 AV	54.0	-17.9	1.14 V	360	-2.30	38.40

REMARKS:

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



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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	21deg. C, 72%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	111.9 PK			1.04 H	333	79.70	32.20
2	*2462.00	101.0 AV			1.04 H	333	68.80	32.20
3	2483.50	72.1 PK	74.0	-1.9	1.04 H	333	39.80	32.30
4	2483.50	52.5 AV	54.0	-1.5	1.04 H	333	20.20	32.30
5	4924.00	50.1 PK	74.0	-23.9	1.00 H	124	11.70	38.40
6	4924.00	37.0 AV	54.0	-17.0	1.00 H	124	-1.40	38.40
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	*2462.00	109.8 PK			1.04 V	87	77.60	32.20
2	*2462.00	100.0 AV			1.04 V	87	67.80	32.20
3	2483.50	62.6 PK	74.0	-11.4	1.00 V	86	30.30	32.30
4	2483.50	52.5 AV	54.0	-1.5	1.00 V	86	20.20	32.30
5	4924.00	51.0 PK	74.0	-23.0	1.00 V	166	12.60	38.40
6	4924.00	36.9 AV	54.0	-17.1	1.00 V	166	-1.50	38.40

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.



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	21deg. C, 72%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	65.4 PK	74.0	-8.6	1.20 H	250	33.40	32.00
2	2390.00	52.6 AV	54.0	-1.4	1.20 H	250	20.60	32.00
3	*2422.00	107.4 PK			1.20 H	250	75.30	32.10
4	*2422.00	97.0 AV			1.20 H	250	64.90	32.10
5	4844.00	47.1 PK	74.0	-26.9	1.00 H	325	8.70	38.40
6	4844.00	35.0 AV	54.0	-19.0	1.00 H	325	-3.40	38.40
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	2390.00	69.1 PK	74.0	-4.9	1.44 V	254	37.10	32.00
2	2390.00	51.5 AV	54.0	-2.5	1.44 V	254	19.50	32.00
3	*2422.00	105.2 PK			1.44 V	254	73.10	32.10
4	*2422.00	95.6 AV			1.44 V	254	63.50	32.10
5	4844.00	47.0 PK	74.0	-27.0	1.00 V	26	8.60	38.40
6	4844.00	34.8 AV	54.0	-19.2	1.00 V	26	-3.60	38.40

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.



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	21deg. C, 72%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	109.0 PK			1.04 H	333	76.90	32.10
2	*2437.00	98.8 AV			1.04 H	333	66.70	32.10
3	#3249.00	45.2 PK	89.0	-43.8	1.14 H	352	11.10	34.10
4	#3249.00	33.3 AV	78.8	-45.5	1.14 H	352	-0.80	34.10
5	4874.00	48.5 PK	74.0	-25.5	1.00 H	21	10.10	38.40
6	4874.00	36.0 AV	54.0	-18.0	1.00 H	21	-2.40	38.40
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	*2437.00	108.5 PK			1.74 V	36	76.40	32.10
2	*2437.00	98.5 AV			1.74 V	36	66.40	32.10
3	#3249.00	45.1 PK	88.5	-43.4	1.05 V	56	11.00	34.10
4	#3249.00	34.2 AV	78.5	-44.3	1.05 V	56	0.10	34.10
5	4874.00	48.5 PK	74.0	-25.5	1.00 V	125	10.10	38.40
6	4874.00	35.2 AV	54.0	-18.8	1.00 V	125	-3.20	38.40

REMARKS:

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



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	21deg. C, 72%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	106.8 PK			1.10 H	332	74.60	32.20
2	*2452.00	96.2 AV			1.10 H	332	64.00	32.20
3	2483.50	64.2 PK	74.0	-9.8	1.10 H	332	31.90	32.30
4	2483.50	52.0 AV	54.0	-2.0	1.10 H	32	19.70	32.30
5	4904.00	47.2 PK	74.0	-26.8	1.00 H	36	8.70	38.50
6	4904.00	35.0 AV	54.0	-19.0	1.00 H	36	-3.50	38.50
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	*2452.00	106.2 PK			1.55 V	58	74.00	32.20
2	*2452.00	95.6 AV			1.55 V	58	63.40	32.20
3	2483.50	60.5 PK	74.0	-13.5	1.01 V	78	28.20	32.30
4	2483.50	51.3 AV	54.0	-2.7	1.01 V	78	19.00	32.30
5	4904.00	46.8 PK	74.0	-27.2	1.00 V	36	8.30	38.50
6	4904.00	34.3 AV	54.0	-19.7	1.00 V	36	-4.20	38.50

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.



A D T

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 6	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Cedric Wu

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	101.69	26.3 QP	43.5	-17.2	1.20 H	95	16.70	9.60
2	196.77	26.0 QP	43.5	-17.5	1.44 H	321	14.90	11.10
3	282.15	29.8 QP	46.0	-16.2	1.63 H	12	15.70	14.10
4	534.40	37.5 QP	46.0	-8.5	1.88 H	29	17.30	20.20
5	683.81	36.3 QP	46.0	-9.7	1.77 H	14	14.20	22.10
6	800.24	37.5 QP	46.0	-8.5	1.55 H	155	12.90	24.60
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	101.69	26.8 QP	43.5	-16.7	1.36 V	273	17.20	9.60
2	196.77	28.9 QP	43.5	-14.6	1.11 V	90	17.80	11.10
3	400.52	26.4 QP	46.0	-19.6	1.88 V	253	9.30	17.10
4	524.70	34.5 QP	46.0	-11.5	1.77 V	227	14.50	20.00
5	676.05	32.3 QP	46.0	-13.7	1.65 V	315	10.30	22.00
6	895.32	33.5 QP	46.0	-12.5	1.00 V	130	7.80	25.70

REMARKS:

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

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.



A D T

5.1.7 TEST RESULTS (A)

ABOVE 1GHz DATA :

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	23deg. C, 75%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	#5725.00	65.1 PK	92.4	-27.3	1.01 H	185	25.60	39.50
2	#5725.00	51.6 AV	82.0	-30.4	1.01 H	185	12.10	39.50
3	*5745.00	112.4 PK			1.03 H	187	72.80	39.60
4	*5745.00	102.0 AV			1.03 H	187	62.40	39.60
5	11490.00	62.0 PK	74.0	-12.0	1.04 H	24	10.30	51.70
6	11490.00	50.2 AV	54.0	-3.8	1.04 H	24	-1.50	51.70
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	#5725.00	66.2 PK	88.7	-22.5	1.22 V	22	26.70	39.50
2	#5725.00	48.2 AV	78.6	-30.4	1.22 V	22	8.70	39.50
3	*5745.00	108.7 PK			1.02 V	174	69.10	39.60
4	*5745.00	98.6 AV			1.02 V	174	59.00	39.60
5	11490.00	61.8 PK	74.0	-12.2	1.32 V	14	10.10	51.70
6	11490.00	49.5 AV	54.0	-4.5	1.32 V	14	-2.20	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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	23deg. C, 75%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	*5785.00	109.5 PK			1.11 H	22	69.80	39.70
2	*5785.00	98.7 AV			1.11 H	22	59.00	39.70
3	11570.00	60.0 PK	74.0	-14.0	1.18 H	8	8.40	51.60
4	11570.00	48.5 AV	54.0	-5.5	1.18 H	8	-3.10	51.60
5	#17355.00	66.0 PK	89.5	-23.5	1.00 H	22	10.60	55.40
6	#17355.00	52.0 AV	78.7	-26.7	1.00 H	22	-3.40	55.40
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	*5785.00	109.5 PK			1.00 V	175	69.80	39.70
2	*5785.00	99.0 AV			1.00 V	175	59.30	39.70
3	11570.00	59.9 PK	74.0	-14.1	1.55 V	54	8.30	51.60
4	11570.00	48.1 AV	54.0	-5.9	1.55 V	54	-3.50	51.60
5	#17355.00	65.6 PK	89.5	-23.9	1.02 V	360	10.20	55.40
6	#17355.00	52.6 AV	79.0	-26.4	1.02 V	360	-2.80	55.40

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 75%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	*5825.00	110.6 PK			1.54 H	180	70.90	39.70
2	*5825.00	99.3 AV			1.54 H	180	59.60	39.70
3	#5850.00	57.5 PK	90.6	-33.1	1.02 H	182	17.70	39.80
4	#5850.00	43.9 AV	79.3	-35.4	1.02 H	182	4.10	39.80
5	11650.00	59.6 PK	74.0	-14.4	1.14 H	47	8.00	51.60
6	11650.00	46.4 AV	54.0	-7.6	1.14 H	47	-5.20	51.60
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	*5825.00	109.8 PK			1.02 V	172	70.10	39.70
2	*5825.00	99.1 AV			1.02 V	172	59.40	39.70
3	#5850.00	58.7 PK	89.8	-31.1	1.00 V	172	18.90	39.80
4	#5850.00	42.6 AV	79.1	-36.5	1.00 V	172	2.80	39.80
5	11650.00	59.6 PK	74.0	-14.4	1.55 V	2	8.00	51.60
6	11650.00	46.3 AV	54.0	-7.7	1.55 V	2	-5.30	51.60

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.
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	23deg. C, 75%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	#5725.00	67.3 PK	91.5	-24.2	1.00 H	160	27.80	39.50
2	#5725.00	49.1 AV	81.0	-31.9	1.00 H	160	9.60	39.50
3	*5745.00	111.5 PK			1.00 H	160	71.90	39.60
4	*5745.00	101.0 AV			1.00 H	160	61.40	39.60
5	11490.00	63.0 PK	74.0	-11.0	1.33 H	325	11.30	51.70
6	11490.00	51.5 AV	54.0	-2.5	1.33 H	325	-0.20	51.70
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	#5725.00	68.0 PK	88.9	-20.9	1.12 V	189	28.50	39.50
2	#5725.00	52.7 AV	78.1	-25.4	1.12 V	189	13.20	39.50
3	*5745.00	108.9 PK			1.15 V	190	69.30	39.60
4	*5745.00	98.1 AV			1.15 V	190	58.50	39.60
5	11490.00	63.2 PK	74.0	-10.8	1.00 V	22	11.50	51.70
6	11490.00	50.0 AV	54.0	-4.0	1.32 V	25	-1.70	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * “: Fundamental frequency.
6. The 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	23deg. C, 75%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	*5785.00	109.2 PK			1.02 H	138	69.50	39.70
2	*5785.00	98.3 AV			1.02 H	138	58.60	39.70
3	11570.00	62.0 PK	74.0	-12.0	1.04 H	32	10.40	51.60
4	11570.00	50.0 AV	54.0	-4.0	1.04 H	32	-1.60	51.60
5	#17355.00	67.5 PK	89.2	-21.7	1.00 H	159	12.10	55.40
6	#17355.00	51.4 AV	78.3	-26.9	1.00 H	159	-4.00	55.40
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	*5785.00	108.0 PK			1.00 V	152	68.30	39.70
2	*5785.00	98.1 AV			1.00 V	152	58.40	39.70
3	11570.00	61.0 PK	74.0	-13.0	1.00 V	35	9.40	51.60
4	11570.00	49.2 AV	54.0	-4.8	1.00 V	35	-2.40	51.60
5	#17355.00	66.6 PK	88.0	-21.4	1.55 V	85	11.20	55.40
6	#17355.00	51.0 AV	78.1	-27.1	1.55 V	85	-4.40	55.40

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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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 75%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	*5825.00	109.9 PK			1.00 H	193	70.20	39.70
2	*5825.00	98.8 AV			1.00 H	193	59.10	39.70
3	#5850.00	58.1 PK	89.9	-31.8	1.04 H	21	18.30	39.80
4	#5850.00	45.0 AV	78.8	-33.8	1.04 H	21	5.20	39.80
5	11650.00	59.9 PK	74.0	-14.1	1.11 H	21	8.30	51.60
6	11650.00	46.8 AV	54.0	-7.2	1.11 H	21	-4.80	51.60
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	*5825.00	109.4 PK			1.00 V	185	69.70	39.70
2	*5825.00	98.0 AV			1.00 V	185	58.30	39.70
3	#5850.00	58.9 PK	89.4	-30.5	1.00 V	185	19.10	39.80
4	#5850.00	43.0 AV	78.0	-35.0	1.00 V	185	3.20	39.80
5	11650.00	60.1 PK	74.0	-13.9	1.36 V	98	8.50	51.60
6	11650.00	46.8 AV	54.0	-7.2	1.36 V	98	-4.80	51.60

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.
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	23deg. C, 75%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	#5725.00	69.7 PK	88.5	-18.8	1.04 H	173	30.20	39.50
2	#5725.00	56.0 AV	77.6	-21.6	1.04 H	173	16.50	39.50
3	*5755.00	108.5 PK			1.05 H	174	68.90	39.60
4	*5755.00	97.6 AV			1.05 H	174	58.00	39.60
5	11510.00	60.6 PK	74.0	-13.4	1.99 H	250	8.90	51.70
6	11510.00	48.8 AV	54.0	-5.2	1.99 H	250	-2.90	51.70
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	#5725.00	70.8 PK	86.5	-15.7	1.11 V	200	31.30	39.50
2	#5725.00	56.5 AV	75.7	-19.2	1.11 V	200	17.00	39.50
3	*5755.00	106.5 PK			1.00 V	204	66.90	39.60
4	*5755.00	95.7 AV			1.00 V	204	56.10	39.60
5	11510.00	61.9 PK	74.0	-12.1	1.54 V	87	10.20	51.70
6	11510.00	49.2 AV	54.0	-4.8	1.54 V	87	-2.50	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.
6. The 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	23deg. C, 75%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	*5795.00	108.5 PK			1.17 H	78	68.80	39.70
2	*5795.00	98.8 AV			1.17 H	78	59.10	39.70
3	#5850.00	52.4 PK	88.5	-36.1	1.04 H	188	12.60	39.80
4	#5850.00	41.5 AV	78.8	-37.3	1.04 H	188	1.70	39.80
5	11590.00	61.8 PK	74.0	-12.2	1.02 H	33	10.30	51.50
6	11590.00	49.6 AV	54.0	-4.4	1.02 H	33	-1.90	51.50
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	*5795.00	105.4 PK			1.02 V	177	65.70	39.70
2	*5795.00	95.6 AV			1.02 V	177	55.90	39.70
3	#5850.00	52.0 PK	85.4	-33.4	1.44 V	54	12.20	39.80
4	#5850.00	40.7 AV	75.6	-34.9	1.44 V	54	0.90	39.80
5	11590.00	62.8 PK	74.0	-11.2	1.69 V	9	11.30	51.50
6	11590.00	50.2 AV	54.0	-3.8	1.69 V	9	-1.30	51.50

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

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Cedric Wu

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	30.20	28.6 QP	40.0	-11.4	1.66 H	70	16.20	12.40
2	198.71	27.4 QP	43.5	-16.1	1.74 H	7	16.50	10.90
3	249.17	26.7 QP	46.0	-19.3	1.12 H	322	13.90	12.80
4	400.52	32.3 QP	46.0	-13.7	1.85 H	292	15.20	17.10
5	495.60	29.0 QP	46.0	-17.0	1.03 H	2	9.60	19.40
6	579.03	27.8 QP	46.0	-18.2	1.77 H	349	6.70	21.10
7	800.24	36.5 QP	46.0	-9.5	1.00 H	119	11.90	24.60
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	30.20	31.6 QP	40.0	-8.4	1.77 V	19	19.20	12.40
2	43.48	30.0 QP	40.0	-10.0	1.65 V	40	16.10	13.90
3	154.09	25.5 QP	43.5	-18.0	1.78 V	10	11.50	14.00
4	249.17	22.7 QP	46.0	-23.3	1.05 V	45	9.90	12.80
5	499.48	25.0 QP	46.0	-21.0	2.14 V	218	5.50	19.50
6	1000.10	32.0 QP	54.0	-22.0	1.99 V	19	5.30	26.70

REMARKS:

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



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5.1.8 TEST RESULTS (B)

ABOVE 1GHz DATA :

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	23deg. C, 75%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	#5725.00	61.0 PK	84.7	-23.7	1.77 H	258	21.50	39.50
2	#5725.00	48.2 AV	74.2	-26.0	1.77 H	258	8.70	39.50
3	*5745.00	104.7 PK			1.02 H	343	65.10	39.60
4	*5745.00	94.2 AV			1.02 H	343	54.60	39.60
5	11490.00	61.0 PK	74.0	-13.0	1.99 H	325	9.30	51.70
6	11490.00	48.9 AV	54.0	-5.1	1.99 H	325	-2.80	51.70
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	#5725.00	72.0 PK	90.2	-18.2	1.00 V	14	32.50	39.50
2	#5725.00	54.8 AV	80.2	-25.4	1.00 V	14	15.30	39.50
3	*5745.00	110.2 PK			1.02 V	14	70.60	39.60
4	*5745.00	100.2 AV			1.02 V	14	60.60	39.60
5	11490.00	63.1 PK	74.0	-10.9	1.00 V	152	11.40	51.70
6	11490.00	48.9 AV	54.0	-5.1	1.00 V	152	-2.80	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. " * ": Fundamental frequency.
6. The 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	23deg. C, 75%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	*5785.00	106.0 PK			1.44 H	325	66.30	39.70
2	*5785.00	95.6 AV			1.44 H	325	55.90	39.70
3	11570.00	60.9 PK	74.0	-13.1	1.00 H	68	9.30	51.60
4	11570.00	47.3 AV	54.0	-6.7	1.00 H	68	-4.30	51.60
5	#17355.00	65.4 PK	86.0	-20.6	1.00 H	255	10.00	55.40
6	#17355.00	51.5 AV	75.6	-24.1	1.00 H	255	-3.90	55.40
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	*5785.00	109.6 PK			1.57 V	14	69.90	39.70
2	*5785.00	99.1 AV			1.57 V	14	59.40	39.70
3	11570.00	61.9 PK	74.0	-12.1	1.00 V	125	10.30	51.60
4	11570.00	47.5 AV	54.0	-6.5	1.00 V	125	-4.10	51.60
5	#17355.00	66.3 PK	89.6	-23.3	1.00 V	36	10.90	55.40
6	#17355.00	51.5 AV	79.1	-27.6	1.00 V	36	-3.90	55.40

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 75%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	*5825.00	105.0 PK			1.29 H	339	65.30	39.70
2	*5825.00	94.2 AV			1.29 H	339	54.50	39.70
3	#5850.00	56.2 PK	85.0	-28.8	1.29 H	341	16.40	39.80
4	#5850.00	39.2 AV	74.2	-35.0	1.29 H	341	-0.60	39.80
5	11650.00	65.0 PK	74.0	-9.0	1.47 H	74	13.40	51.60
6	11650.00	50.9 AV	54.0	-3.1	1.47 H	74	-0.70	51.60
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	*5825.00	110.8 PK			1.00 V	270	71.10	39.70
2	*5825.00	98.9 AV			1.00 V	270	59.20	39.70
3	#5850.00	61.5 PK	90.8	-29.3	1.00 V	270	21.70	39.80
4	#5850.00	43.5 AV	78.9	-35.4	1.00 V	270	3.70	39.80
5	11650.00	63.6 PK	74.0	-10.4	1.00 V	258	12.00	51.60
6	11650.00	50.0 AV	54.0	-4.0	1.00 V	258	-1.60	51.60

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.
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	23deg. C, 75%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	#5725.00	69.2 PK	85.7	-16.5	1.55 H	222	29.70	39.50
2	#5725.00	49.7 AV	75.3	-25.6	1.55 H	222	10.20	39.50
3	*5745.00	105.7 PK			1.55 H	222	66.10	39.60
4	*5745.00	95.3 AV			1.55 H	222	55.70	39.60
5	11490.00	61.5 PK	74.0	-12.5	1.00 H	124	9.80	51.70
6	11490.00	49.8 AV	54.0	-4.2	1.00 H	124	-1.90	51.70
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	#5725.00	76.0 PK	89.5	-13.5	1.01 V	3	36.50	39.50
2	#5725.00	54.8 AV	79.2	-24.4	1.01 V	3	15.30	39.50
3	*5745.00	109.5 PK			1.01 V	3	69.90	39.60
4	*5745.00	99.2 AV			1.01 V	3	59.60	39.60
5	11490.00	63.7 PK	74.0	-10.3	1.50 V	55	12.00	51.70
6	11490.00	50.2 AV	54.0	-3.8	1.50 V	55	-1.50	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.
6. The 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	23deg. C, 75%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	*5785.00	105.0 PK			1.55 H	345	65.30	39.70
2	*5785.00	93.9 AV			1.55 H	345	54.20	39.70
3	11570.00	61.1 PK	74.0	-12.9	1.00 H	352	9.50	51.60
4	11570.00	48.0 AV	54.0	-6.0	1.00 H	352	-3.60	51.60
5	#17355.00	65.2 PK	85.0	-19.8	1.00 H	311	9.80	55.40
6	#17355.00	50.7 AV	73.9	-23.2	1.00 H	311	-4.70	55.40
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	*5785.00	108.8 PK			1.05 V	32	69.10	39.70
2	*5785.00	98.4 AV			1.05 V	32	58.70	39.70
3	11570.00	61.8 PK	74.0	-12.2	1.00 V	124	10.20	51.60
4	11570.00	48.0 AV	54.0	-6.0	1.00 V	124	-3.60	51.60
5	#17355.00	66.9 PK	88.8	-21.9	1.95 V	5	11.50	55.40
6	#17355.00	51.1 AV	78.4	-27.3	1.95 V	5	-4.30	55.40

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 75%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	*5825.00	104.0 PK			1.55 H	341	64.30	39.70
2	*5825.00	92.8 AV			1.55 H	341	53.10	39.70
3	#5850.00	56.5 PK	84.0	-27.5	1.00 H	353	16.70	39.80
4	#5850.00	40.6 AV	72.8	-32.2	1.00 H	353	0.80	39.80
5	11650.00	66.2 PK	74.0	-7.8	1.42 H	21	14.60	51.60
6	11650.00	50.7 AV	54.0	-3.3	1.42 H	21	-0.90	51.60
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	*5825.00	109.1 PK			1.14 V	4	69.40	39.70
2	*5825.00	98.2 AV			1.14 V	4	58.50	39.70
3	#5850.00	62.8 PK	89.1	-26.3	1.02 V	3	23.00	39.80
4	#5850.00	44.3 AV	78.2	-33.9	1.02 V	3	4.50	39.80
5	11650.00	65.0 PK	74.0	-9.0	1.58 V	78	13.40	51.60
6	11650.00	50.7 AV	54.0	-3.3	1.58 V	78	-0.90	51.60

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.
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	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 75%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	#5725.00	64.5 PK	83.0	-18.5	1.48 H	342	25.00	39.50
2	#5725.00	49.8 AV	72.6	-22.8	1.48 H	342	10.30	39.50
3	*5755.00	103.0 PK			1.48 H	342	63.40	39.60
4	*5755.00	92.6 AV			1.48 H	342	53.00	39.60
5	11510.00	60.2 PK	74.0	-13.8	1.36 H	99	8.50	51.70
6	11510.00	48.6 AV	54.0	-5.4	1.36 H	99	-3.10	51.70
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	#5725.00	73.2 PK	88.2	-15.0	1.14 V	74	33.70	39.50
2	#5725.00	58.1 AV	78.2	-20.1	1.14 V	74	18.60	39.50
3	*5755.00	108.2 PK			1.00 V	15	68.60	39.60
4	*5755.00	98.2 AV			1.00 V	15	58.60	39.60
5	11510.00	62.2 PK	74.0	-11.8	1.00 V	256	10.50	51.70
6	11510.00	49.3 AV	54.0	-4.7	1.00 V	256	-2.40	51.70

REMARKS:

1. Emission level (dBuV/m) = Raw Value (dBuV) + Correction Factor (dB/m).
2. Correction Factor (dB/m) = Antenna Factor (dB/m) + Cable Factor (dB).
3. The other emission levels were very low against the limit.
4. Margin value = Emission level – Limit value.
5. “ * ”: Fundamental frequency.
6. The 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	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	23deg. C, 75%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	*5795.00	101.0 PK			1.63 H	36	61.30	39.70
2	*5795.00	90.6 AV			1.63 H	36	50.90	39.70
3	#5850.00	48.7 PK	81.0	-32.3	1.63 H	36	8.90	39.80
4	#5850.00	37.5 AV	70.6	-33.1	1.63 H	36	-2.30	39.80
5	11590.00	60.0 PK	74.0	-14.0	1.00 H	0	8.50	51.50
6	11590.00	47.1 AV	54.0	-6.9	1.00 H	0	-4.40	51.50
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	*5795.00	106.0 PK			1.55 V	23	66.30	39.70
2	*5795.00	96.2 AV			1.55 V	23	56.50	39.70
3	#5850.00	52.2 PK	86.0	-33.8	1.00 V	23	12.40	39.80
4	#5850.00	40.3 AV	76.2	-35.9	1.00 V	23	0.50	39.80
5	11590.00	60.5 PK	74.0	-13.5	1.00 V	37	9.00	51.50
6	11590.00	46.8 AV	54.0	-7.2	1.00 V	37	-4.70	51.50

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

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 165	FREQUENCY RANGE	Below 1000MHz
INPUT POWER	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	23deg. C, 66%RH	TESTED BY	Cedric Wu

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	148.26	22.5 QP	43.5	-21.0	1.25 H	279	8.60	13.90
2	245.28	27.5 QP	46.0	-18.5	1.44 H	212	14.80	12.70
3	421.86	32.0 QP	46.0	-14.0	2.00 H	345	14.40	17.60
4	511.12	34.6 QP	46.0	-11.4	1.78 H	160	14.90	19.70
5	701.28	33.8 QP	46.0	-12.2	1.33 H	173	11.60	22.20
6	926.36	33.8 QP	46.0	-12.2	1.89 H	195	7.80	26.00
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	41.54	32.4 QP	40.0	-7.6	1.38 V	306	18.60	13.80
2	101.69	26.1 QP	43.5	-17.4	1.00 V	234	16.50	9.60
3	400.52	33.5 QP	46.0	-12.5	1.74 V	101	16.40	17.10
4	507.24	28.5 QP	46.0	-17.5	1.07 V	246	8.90	19.60
5	676.05	37.0 QP	46.0	-9.0	2.14 V	70	15.00	22.00
6	901.14	37.3 QP	46.0	-8.7	1.69 V	145	11.50	25.80

REMARKS:

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



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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.

---END---