



FCC TEST REPORT (15.407)

REPORT NO.: RF130223C15-1

MODEL NO.: DWA-171

FCC ID: KA2WA171A1

RECEIVED: Feb. 23, 2013

TESTED: Feb. 23 ~ Mar. 20, 2013

ISSUED: Apr. 08, 2013

APPLICANT: D-Link Corporation

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A D T

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF130223C15-1	Original release	Apr. 08, 2013



1. CERTIFICATION

PRODUCT: Wireless AC Dual Band USB Adapter

MODEL: DWA-171

BRAND: D-Link

APPLICANT: D-Link Corporation

TESTED: Feb. 23 ~ Mar. 20, 2013

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: **FCC Part 15, Subpart E (Section 15.407)**

ANSI C63.10-2009

The above equipment (model: DWA-171) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

PREPARED BY : Sun Li , **DATE :** Apr. 08, 2013
Suntee Liu / Specialist

APPROVED BY : Ken Liu , **DATE :** Apr. 08, 2013
Ken Liu / Senior Manager

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.407(b)(6)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -14.15dB at 0.18516MHz.
15.407(b)(1/2/3) (b)(6)	Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.0dB at 10520.00, 5150.00MHz.
15.407(a)(1/2)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a)(1/2)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	No antenna connector is used.

2.1 MEASUREMENT UNCERTAINTY

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

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

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

3. GENERAL INFORMATION

3.1 GENERAL DESCRIPTION OF EUT

EUT	Wireless AC Dual Band USB Adapter
MODEL NO.	DWA-171
POWER SUPPLY	5Vdc (host equipment)
MODULATION TYPE	64QAM, 16QAM, QPSK, BPSK 256QAM for OFDM in 11ac mode only
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n: up to 150Mbps 802.11ac: up to 433Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5260 ~ 5320MHz & 5500 ~ 5700MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 802.11a, 802.11n (20MHz): 4 802.11n (40MHz): 2 802.11ac (80MHz): 1 5260 ~ 5320MHz: 802.11a, 802.11n (20MHz): 4 802.11n (40MHz): 2 802.11ac (80MHz): 1 5500 ~ 5700MHz: 802.11a, 802.11n (20MHz): 8 802.11n (40MHz): 3 802.11ac (80MHz): 1
OUTPUT POWER	5180 ~ 5240MHz: 44.875mW 5260 ~ 5320MHz: 61.944mW 5500 ~ 5700MHz: 130.317mW
ANTENNA TYPE	PIFA antenna with 0dBi gain
ANTENNA CONNECTOR	UFL
DATA CABLE	NA
I/O PORTS	USB
ACCESSORY DEVICES	NA

NOTE:

1. The EUT provides 1 completed transmitter and 1 receiver.

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

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

3.2 DESCRIPTION OF TEST MODES

FOR 5180 ~ 5240MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

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

CHANNEL	FREQUENCY
42	5210MHz

FOR 5260 ~ 5320MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
54	5270 MHz	62	5310 MHz

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

CHANNEL	FREQUENCY
58	5290MHz

FOR 5500 ~ 5700MHz

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
102	5510 MHz	134	5670 MHz
110	5550 MHz		

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

CHANNEL	FREQUENCY
106	5530MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE \geq 1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

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

RADIATED EMISSION TEST (ABOVE 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11ac (80MHz)	5210	42	42	OFDM	BPSK	29.3
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
-	802.11ac (80MHz)	5290	58	58	OFDM	BPSK	29.3
-	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
-	802.11ac (80MHz)	5530	106	106	OFDM	BPSK	29.3

RADIATED EMISSION TEST (BELOW 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5180-5320	36 to 64	48	OFDM	BPSK	6.0
-	802.11a	5500-5700	100 to 140	140	OFDM	BPSK	6.0

POWER LINE CONDUCTED EMISSION TEST:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5180-5320	36 to 64	48	OFDM	BPSK	6.0
-	802.11a	5500-5700	100 to 140	140	OFDM	BPSK	6.0

ANTENNA PORT CONDUCTED MEASUREMENT:

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
-	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
-	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	13.5
-	802.11ac (80MHz)	5210	42	42	OFDM	BPSK	29.3
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
-	802.11n (20MHz)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
-	802.11n (40MHz)		54 to 62	54, 62	OFDM	BPSK	13.5
-	802.11ac (80MHz)	5290	58	58	OFDM	BPSK	29.3
-	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
-	802.11n (20MHz)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
-	802.11n (40MHz)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
-	802.11ac (80MHz)	5530	106	106	OFDM	BPSK	29.3

TEST CONDITION:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	21deg. C, 68%RH 24deg. C, 69%RH	120Vac, 60Hz	Sun Lin Brad Tung Alan Wu
RE<1G	21deg. C, 68%RH 25deg. C, 68%RH	120Vac, 60Hz	Sun Lin Martin Lee
PLC	25deg. C, 67%RH 20deg. C, 70%RH	120Vac, 60Hz	Sun Lin Martin Lee
APCM	25deg. C, 60%RH	120Vac, 60Hz	Martin Lee

3.3 DUTY CYCLE OF TEST SIGNAL

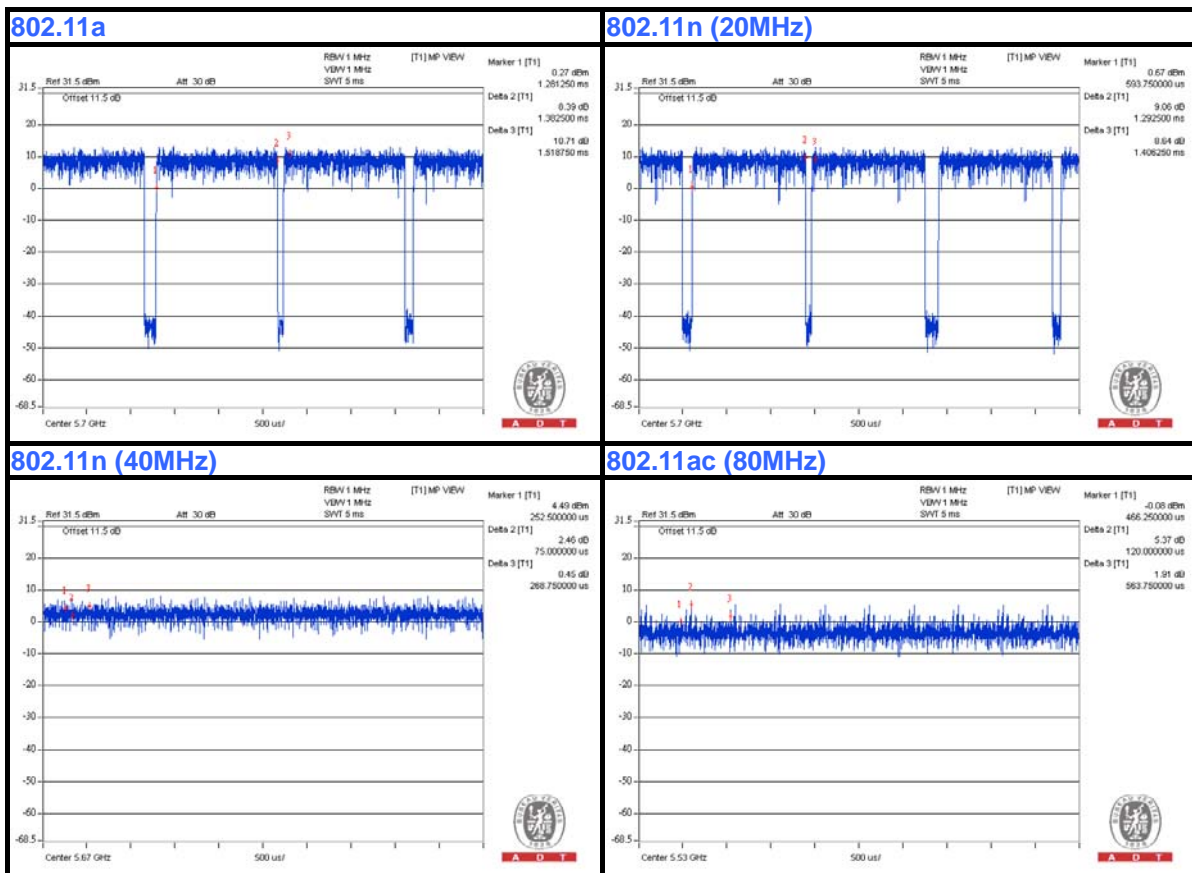
If duty cycle is < 98%, duty factor shall be considered.

802.11a: Duty cycle = $1.382/1.519 = 0.910$, Duty factor = $10 \cdot \log(1/0.91) = 0.41$

802.11n (20MHz): Duty cycle = $1.292/1.406 = 0.919$, Duty factor = $10 \cdot \log(1/0.919) = 0.37$

802.11n (40MHz): Duty cycle of test signal is > 98 %, duty factor is not required.

802.11ac (80MHz): Duty cycle of test signal is > 98 %, duty factor is not required.



3.4 DESCRIPTION OF SUPPORT UNITS

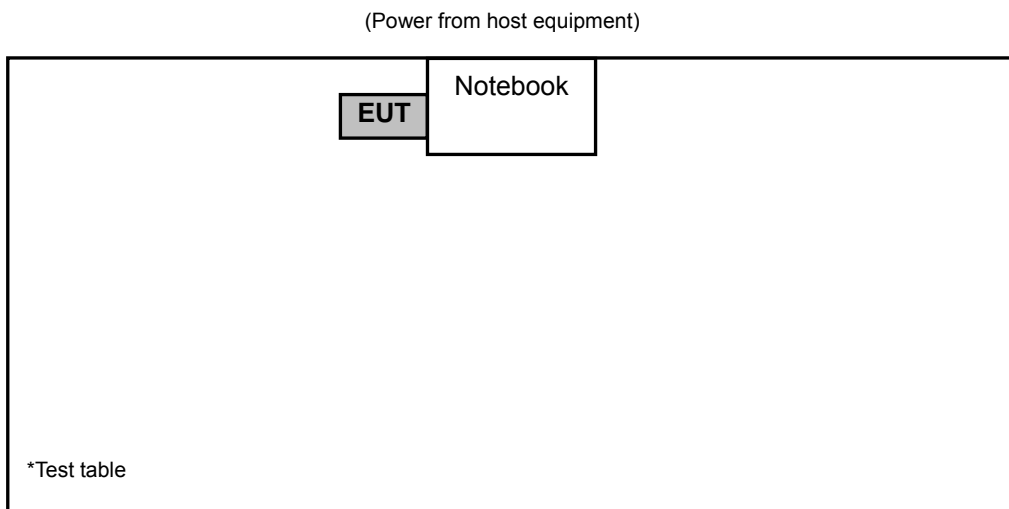
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Notebook	DELL	D531	CN-0XM006-48643-8 1U-2973	QDS-BRCM1020

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	NA

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

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST



3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart E (15.407)

789033 D01 General UNII Test Procedures v01 r02

ANSI C63.10-2009

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

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

4. TEST TYPES AND RESULTS

4.1 RADIATED EMISSION AND BANDEDGE MEASUREMENT

4.1.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT

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

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

NOTE:

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

4.1.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

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

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

4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCI	100744	Apr. 19, 2012	Apr. 18, 2013
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Jan. 28, 2013	Jan. 27, 2014
BILOG Antenna SCHWARZBECK	VULB9168	9168-156	Apr. 03, 2012	Apr. 02, 2013
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-563	Sep. 12, 2012	Sep. 11, 2013
HORN Antenna SCHWARZBECK	BBHA 9170	148	Jul. 11, 2012	Jul. 10, 2013
Loop Antenna	HFH2-Z2	100070	Jan. 31, 2012	Jan. 30, 2014
Preamplifier Agilent	8449B	3008A01911	Oct. 25, 2012	Oct. 24, 2013
Preamplifier Agilent	8447D	2944A10638	Oct. 25, 2012	Oct. 24, 2013
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	295013/4 283403/4	Aug. 28, 2012	Aug. 27, 2013
RF signal cable Worken	8D-FB	Cable-HYCH9-01	Aug. 11, 2012	Aug. 10, 2013
Software	ADT_Radiated_ V7.6.15.9.2	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower & Turn Table Controller EMCO	2090	NA	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 25, 2012	Oct. 24, 2013
High Speed Peak Power Meter	ML2495A	0842014	Apr. 28, 2012	Apr. 27, 2013
Power Sensor	MA2411B	0738404	Apr. 28, 2012	Apr. 27, 2013
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 13, 2012	Jun. 12, 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 9.
 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 215374.
 6. The IC Site Registration No. is IC 7450F-9.

4.1.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic 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 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

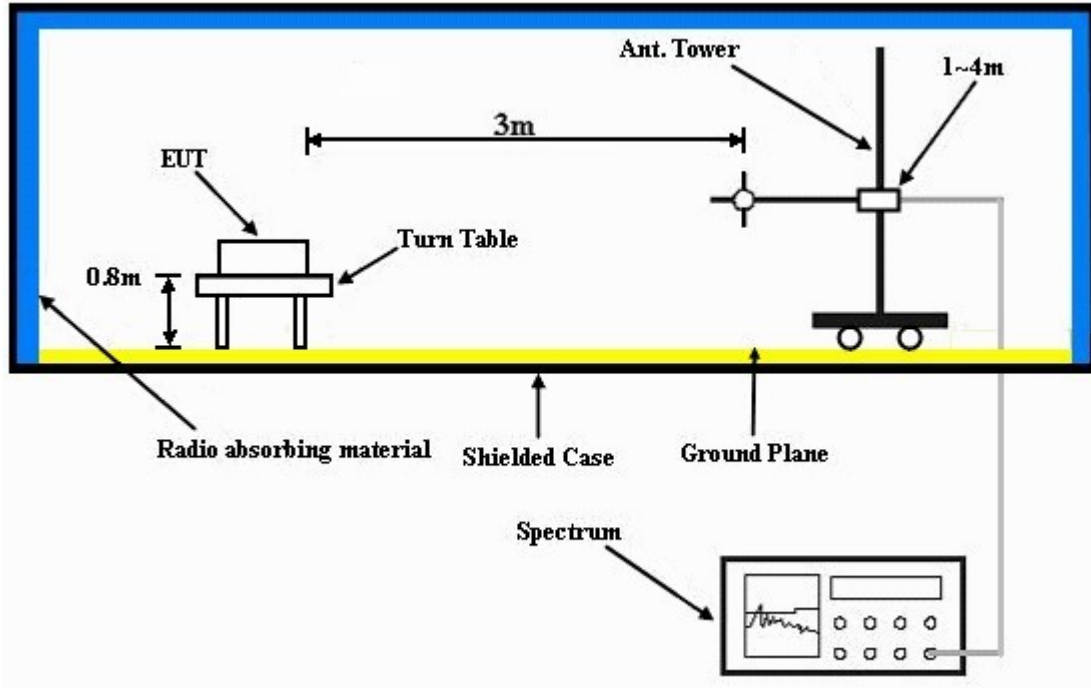
NOTE:

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

4.1.5 DEVIATION FROM TEST STANDARD

No deviation.

4.1.6 TEST SETUP



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

4.1.7 EUT OPERATING CONDITION

- Plugged the EUT into a notebook and placed on a testing table.
- The notebook ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.

4.1.8 TEST RESULTS

802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Brad Tung

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.8 PK	74.0	-15.2	1.46 H	85	19.30	39.50
2	5150.00	44.7 AV	54.0	-9.3	1.46 H	85	5.20	39.50
3	*5180.00	98.2 PK			1.46 H	84	58.70	39.50
4	*5180.00	88.4 AV			1.46 H	84	48.90	39.50
5	#10360.00	55.9 PK	74.0	-18.1	1.30 H	250	9.20	46.70
6	#10360.00	44.9 AV	54.0	-9.1	1.30 H	250	-1.80	46.70
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	5150.00	57.1 PK	74.0	-16.9	1.32 V	271	17.60	39.50
2	5150.00	43.7 AV	54.0	-10.3	1.32 V	271	4.20	39.50
3	*5180.00	94.6 PK			1.30 V	272	55.10	39.50
4	*5180.00	84.7 AV			1.30 V	272	45.20	39.50
5	#10360.00	53.8 PK	74.0	-20.2	1.24 V	170	7.10	46.70
6	#10360.00	42.9 AV	54.0	-11.1	1.24 V	170	-3.80	46.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Brad Tung

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	98.7 PK			1.47 H	83	59.20	39.50
2	*5200.00	88.4 AV			1.47 H	83	48.90	39.50
3	#10400.00	56.0 PK	74.0	-18.0	1.33 H	241	9.30	46.70
4	#10400.00	45.0 AV	54.0	-9.0	1.33 H	241	-1.70	46.70
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	*5200.00	95.0 PK			1.31 V	264	55.50	39.50
2	*5200.00	85.2 AV			1.31 V	264	45.70	39.50
3	#10400.00	53.6 PK	74.0	-20.4	1.28 V	188	6.90	46.70
4	#10400.00	43.3 AV	54.0	-10.7	1.28 V	188	-3.40	46.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Brad Tung

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	98.5 PK			1.44 H	87	58.90	39.60
2	*5240.00	88.3 AV			1.44 H	87	48.70	39.60
3	5350.00	44.9 PK	74.0	-29.1	1.44 H	87	5.10	39.80
4	5350.00	35.4 AV	54.0	-18.6	1.44 H	87	-4.40	39.80
5	#10480.00	61.1 PK	74.0	-12.9	1.40 H	177	14.30	46.80
6	#10480.00	48.8 AV	54.0	-5.2	1.40 H	177	2.00	46.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	95.2 PK			1.31 V	266	55.60	39.60
2	*5240.00	85.1 AV			1.31 V	266	45.50	39.60
3	5350.00	45.2 PK	74.0	-28.8	1.31 V	266	5.40	39.80
4	5350.00	34.7 AV	54.0	-19.3	1.31 V	266	-5.10	39.80
5	#10480.00	59.3 PK	74.0	-14.7	1.25 V	180	12.50	46.80
6	#10480.00	46.9 AV	54.0	-7.1	1.25 V	180	0.10	46.80

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Martin 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	5150.00	50.9 PK	74.0	-23.1	1.02 H	138	11.40	39.50
2	5150.00	36.8 AV	54.0	-17.2	1.02 H	138	-2.70	39.50
3	*5260.00	101.9 PK			1.02 H	138	62.30	39.60
4	*5260.00	92.3 AV			1.02 H	138	52.70	39.60
5	5350.00	60.8 PK	74.0	-13.2	1.02 H	138	21.00	39.80
6	5350.00	46.8 AV	54.0	-7.2	1.02 H	138	7.00	39.80
7	#10520.00	67.4 PK	74.0	-6.6	1.49 H	128	20.60	46.80
8	#10520.00	53.0 AV	54.0	-1.0	1.49 H	128	6.20	46.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	47.6 PK	74.0	-26.4	1.40 V	199	8.10	39.50
2	5150.00	35.7 AV	54.0	-18.3	1.40 V	199	-3.80	39.50
3	*5260.00	98.7 PK			1.40 V	199	59.10	39.60
4	*5260.00	87.7 AV			1.40 V	199	48.10	39.60
5	5350.00	58.3 PK	74.0	-15.7	1.40 V	199	18.50	39.80
6	5350.00	44.6 AV	54.0	-9.4	1.40 V	199	4.80	39.80
7	#10520.00	60.3 PK	74.0	-13.7	1.37 V	337	13.50	46.80
8	#10520.00	46.4 AV	54.0	-7.6	1.37 V	337	-0.40	46.80

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Martin 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	*5300.00	101.3 PK			1.39 H	136	61.60	39.70
2	*5300.00	90.9 AV			1.39 H	136	51.20	39.70
3	10600.00	67.9 PK	74.0	-6.1	1.34 H	106	21.10	46.80
4	10600.00	52.6 AV	54.0	-1.4	1.34 H	106	5.80	46.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	99.5 PK			1.37 V	193	59.80	39.70
2	*5300.00	88.7 AV			1.37 V	193	49.00	39.70
3	10600.00	60.1 PK	74.0	-13.9	1.38 V	336	13.30	46.80
4	10600.00	45.8 AV	54.0	-8.2	1.38 V	336	-1.00	46.80

REMARKS:

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



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Martin 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	*5320.00	102.2 PK			1.39 H	135	62.50	39.70
2	*5320.00	91.3 AV			1.39 H	135	51.60	39.70
3	5350.00	63.7 PK	74.0	-10.3	1.39 H	135	23.90	39.80
4	5350.00	45.8 AV	54.0	-8.2	1.39 H	135	6.00	39.80
5	10640.00	67.6 PK	74.0	-6.4	1.35 H	130	20.70	46.90
6	10640.00	52.8 AV	54.0	-1.2	1.35 H	130	5.90	46.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	99.6 PK			1.00 V	242	59.90	39.70
2	*5320.00	89.0 AV			1.00 V	242	49.30	39.70
3	5350.00	62.3 PK	74.0	-11.7	1.00 V	242	22.50	39.80
4	5350.00	38.9 AV	54.0	-15.1	1.00 V	242	-0.90	39.80
5	10640.00	61.3 PK	74.0	-12.7	1.53 V	165	14.40	46.90
6	10640.00	47.6 AV	54.0	-6.4	1.53 V	165	0.70	46.90

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Martin 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	5460.00	57.8 PK	74.0	-16.2	1.71 H	141	17.80	40.00
2	5460.00	43.8 AV	54.0	-10.2	1.71 H	141	3.80	40.00
3	#5470.00	58.9 PK	74.0	-15.1	1.74 H	141	18.90	40.00
4	#5470.00	44.5 AV	54.0	-9.5	1.74 H	141	4.50	40.00
5	*5500.00	102.7 PK			1.74 H	141	62.70	40.00
6	*5500.00	92.3 AV			1.74 H	141	52.30	40.00
7	11000.00	67.3 PK	74.0	-6.7	1.25 H	150	19.60	47.70
8	11000.00	52.5 AV	54.0	-1.5	1.25 H	150	4.80	47.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.2 PK	74.0	-16.8	1.33 V	193	17.20	40.00
2	5460.00	41.9 AV	54.0	-12.1	1.33 V	193	1.90	40.00
3	#5470.00	57.9 PK	74.0	-16.1	1.33 V	193	17.90	40.00
4	#5470.00	42.9 AV	54.0	-11.1	1.33 V	193	2.90	40.00
5	*5500.00	102.5 PK			1.33 V	193	62.50	40.00
6	*5500.00	92.3 AV			1.33 V	193	52.30	40.00
7	11000.00	61.2 PK	74.0	-12.8	1.20 V	55	13.50	47.70
8	11000.00	46.5 AV	54.0	-7.5	1.20 V	55	-1.20	47.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Martin 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	*5580.00	102.9 PK			1.07 H	142	62.80	40.10
2	*5580.00	92.3 AV			1.07 H	142	52.20	40.10
3	11160.00	67.5 PK	74.0	-6.5	1.55 H	44	19.70	47.80
4	11160.00	52.7 AV	54.0	-1.3	1.55 H	44	4.90	47.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	102.4 PK			1.31 V	232	62.30	40.10
2	*5580.00	91.6 AV			1.31 V	232	51.50	40.10
3	11160.00	61.2 PK	74.0	-12.8	1.74 V	4	13.40	47.80
4	11160.00	46.3 AV	54.0	-7.7	1.74 V	4	-1.50	47.80

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Martin 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	*5700.00	102.2 PK			1.29 H	75	62.00	40.20
2	*5700.00	92.5 AV			1.29 H	75	52.30	40.20
3	#5725.00	59.6 PK	74.0	-14.4	1.29 H	75	19.30	40.30
4	#5725.00	45.9 AV	54.0	-8.1	1.29 H	75	5.60	40.30
5	11400.00	64.0 PK	74.0	-10.0	1.30 H	71	15.80	48.20
6	11400.00	51.7 AV	54.0	-2.3	1.30 H	71	3.50	48.20
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	*5700.00	101.5 PK			1.29 V	232	61.30	40.20
2	*5700.00	92.0 AV			1.29 V	232	51.80	40.20
3	#5725.00	59.6 PK	74.0	-14.4	1.29 V	232	19.30	40.30
4	#5725.00	44.9 AV	54.0	-9.1	1.29 V	232	4.60	40.30
5	11400.00	58.2 PK	74.0	-15.8	1.32 V	44	10.00	48.20
6	11400.00	46.8 AV	54.0	-7.2	1.32 V	44	-1.40	48.20

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

802.11n (20MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 36	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Brad Tung

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.4 PK	74.0	-14.6	1.46 H	85	19.90	39.50
2	5150.00	44.4 AV	54.0	-9.6	1.46 H	85	4.90	39.50
3	*5180.00	97.1 PK			1.46 H	85	57.60	39.50
4	*5180.00	86.6 AV			1.46 H	85	47.10	39.50
5	#10360.00	59.5 PK	74.0	-14.5	1.48 H	177	12.80	46.70
6	#10360.00	46.5 AV	54.0	-7.5	1.48 H	177	-0.20	46.70
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	5150.00	57.1 PK	74.0	-16.9	1.50 V	200	17.60	39.50
2	5150.00	44.1 AV	54.0	-9.9	1.50 V	200	4.60	39.50
3	*5180.00	96.4 PK			1.49 V	200	56.90	39.50
4	*5180.00	86.3 AV			1.49 V	200	46.80	39.50
5	#10360.00	53.3 PK	74.0	-20.7	1.30 V	188	6.60	46.70
6	#10360.00	42.9 AV	54.0	-11.1	1.30 V	188	-3.80	46.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 40	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Brad Tung

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	98.2 PK			1.46 H	86	58.70	39.50
2	*5200.00	87.8 AV			1.46 H	86	48.30	39.50
3	#10400.00	61.2 PK	74.0	-12.8	1.41 H	180	14.50	46.70
4	#10400.00	47.4 AV	54.0	-6.6	1.41 H	180	0.70	46.70
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	*5200.00	98.2 PK			1.24 V	204	58.70	39.50
2	*5200.00	87.9 AV			1.24 V	204	48.40	39.50
3	#10400.00	52.0 PK	74.0	-22.0	1.28 V	196	5.30	46.70
4	#10400.00	42.6 AV	54.0	-11.4	1.28 V	196	-4.10	46.70

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Brad Tung

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	97.4 PK			1.43 H	83	57.80	39.60
2	*5240.00	87.1 AV			1.43 H	83	47.50	39.60
3	5350.00	44.2 PK	74.0	-29.8	1.43 H	83	4.40	39.80
4	5350.00	33.9 AV	54.0	-20.1	1.43 H	83	-5.90	39.80
5	#10480.00	62.1 PK	74.0	-11.9	1.45 H	175	15.30	46.80
6	#10480.00	48.6 AV	54.0	-5.4	1.45 H	175	1.80	46.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	95.9 PK			1.22 V	197	56.30	39.60
2	*5240.00	90.1 AV			1.22 V	197	50.50	39.60
3	5350.00	43.6 PK	74.0	-30.4	1.22 V	197	3.80	39.80
4	5350.00	32.8 AV	54.0	-21.2	1.22 V	197	-7.00	39.80
5	#10480.00	53.0 PK	74.0	-21.0	1.30 V	220	6.20	46.80
6	#10480.00	42.8 AV	54.0	-11.2	1.30 V	220	-4.00	46.80

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 52	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Alan 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	*5260.00	100.7 PK			1.01 H	140	61.10	39.60
2	*5260.00	90.0 AV			1.01 H	140	50.40	39.60
3	5350.00	60.9 PK	74.0	-13.1	1.06 H	135	21.10	39.80
4	5350.00	46.4 AV	54.0	-7.6	1.06 H	135	6.60	39.80
5	#10520.00	67.7 PK	74.0	-6.3	1.36 H	112	20.90	46.80
6	#10520.00	52.6 AV	54.0	-1.4	1.36 H	112	5.80	46.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	97.9 PK			1.00 V	171	58.30	39.60
2	*5260.00	87.5 AV			1.00 V	171	47.90	39.60
3	5350.00	58.1 PK	74.0	-15.9	1.00 V	174	18.30	39.80
4	5350.00	44.8 AV	54.0	-9.2	1.00 V	174	5.00	39.80
5	#10520.00	61.3 PK	74.0	-12.7	1.00 V	330	14.50	46.80
6	#10520.00	47.1 AV	54.0	-6.9	1.00 V	330	0.30	46.80

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 60	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Alan 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	*5300.00	100.9 PK			1.13 H	135	61.20	39.70
2	*5300.00	90.4 AV			1.13 H	135	50.70	39.70
3	10600.00	67.0 PK	74.0	-7.0	1.35 H	129	20.20	46.80
4	10600.00	52.5 AV	54.0	-1.5	1.35 H	129	5.70	46.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	99.0 PK			1.00 V	241	59.30	39.70
2	*5300.00	88.5 AV			1.00 V	241	48.80	39.70
3	10600.00	61.5 PK	74.0	-12.5	1.00 V	333	14.70	46.80
4	10600.00	47.5 AV	54.0	-6.5	1.00 V	333	0.70	46.80

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 64	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Alan 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	*5320.00	101.2 PK			1.41 H	106	61.50	39.70
2	*5320.00	90.8 AV			1.41 H	106	51.10	39.70
3	5350.00	61.8 PK	74.0	-12.2	1.42 H	109	22.00	39.80
4	5350.00	46.7 AV	54.0	-7.3	1.42 H	109	6.90	39.80
5	10640.00	66.9 PK	74.0	-7.1	1.37 H	111	20.00	46.90
6	10640.00	52.6 AV	54.0	-1.4	1.37 H	111	5.70	46.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	99.7 PK			1.00 V	247	60.00	39.70
2	*5320.00	89.2 AV			1.00 V	247	49.50	39.70
3	5350.00	60.9 PK	74.0	-13.1	1.00 V	247	21.10	39.80
4	5350.00	45.3 AV	54.0	-8.7	1.00 V	247	5.50	39.80
5	10640.00	60.5 PK	74.0	-13.5	1.00 V	337	13.60	46.90
6	10640.00	46.8 AV	54.0	-7.2	1.00 V	337	-0.10	46.90

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 100	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Alan 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	5460.00	57.9 PK	74.0	-16.1	1.31 H	113	17.90	40.00
2	5460.00	44.0 AV	54.0	-10.0	1.31 H	113	4.00	40.00
3	#5470.00	58.1 PK	74.0	-15.9	1.31 H	113	18.10	40.00
4	#5470.00	44.6 AV	54.0	-9.4	1.31 H	113	4.60	40.00
5	*5500.00	102.8 PK			1.35 H	118	62.80	40.00
6	*5500.00	92.4 AV			1.35 H	118	52.40	40.00
7	11000.00	67.4 PK	74.0	-6.6	1.37 H	31	19.70	47.70
8	11000.00	52.4 AV	54.0	-1.6	1.37 H	31	4.70	47.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.3 PK	74.0	-16.7	1.30 V	201	17.30	40.00
2	5460.00	42.8 AV	54.0	-11.2	1.30 V	201	2.80	40.00
3	#5470.00	57.6 PK	74.0	-16.4	1.30 V	201	17.60	40.00
4	#5470.00	43.5 AV	54.0	-10.5	1.30 V	201	3.50	40.00
5	*5500.00	102.6 PK			1.34 V	200	62.60	40.00
6	*5500.00	92.2 AV			1.34 V	200	52.20	40.00
7	11000.00	61.1 PK	74.0	-12.9	1.00 V	331	13.40	47.70
8	11000.00	46.6 AV	54.0	-7.4	1.00 V	331	-1.10	47.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 116	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Alan 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	*5580.00	102.7 PK			1.31 H	117	62.60	40.10
2	*5580.00	92.2 AV			1.31 H	117	52.10	40.10
3	11160.00	67.6 PK	74.0	-6.4	1.30 H	89	19.80	47.80
4	11160.00	52.9 AV	54.0	-1.1	1.30 H	89	5.10	47.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	102.3 PK			1.32 V	201	62.20	40.10
2	*5580.00	91.4 AV			1.32 V	201	51.30	40.10
3	11160.00	61.3 PK	74.0	-12.7	1.00 V	338	13.50	47.80
4	11160.00	46.1 AV	54.0	-7.9	1.00 V	338	-1.70	47.80

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Alan 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	*5700.00	101.9 PK			1.07 H	143	61.70	40.20
2	*5700.00	92.2 AV			1.07 H	143	52.00	40.20
3	#5725.00	59.3 PK	74.0	-14.7	1.07 H	144	19.00	40.30
4	#5725.00	45.2 AV	54.0	-8.8	1.07 H	144	4.90	40.30
5	11400.00	64.2 PK	74.0	-9.8	1.29 H	77	16.00	48.20
6	11400.00	51.7 AV	54.0	-2.3	1.29 H	77	3.50	48.20
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	*5700.00	101.4 PK			1.03 V	235	61.20	40.20
2	*5700.00	92.1 AV			1.03 V	235	51.90	40.20
3	#5725.00	58.2 PK	74.0	-15.8	1.08 V	230	17.90	40.30
4	#5725.00	44.7 AV	54.0	-9.3	1.08 V	230	4.40	40.30
5	11400.00	58.6 PK	74.0	-15.4	1.00 V	338	10.40	48.20
6	11400.00	45.8 AV	54.0	-8.2	1.00 V	338	-2.40	48.20

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



802.11n (40MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 38	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Sun Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.7 PK	74.0	-9.3	1.80 H	110	25.20	39.50
2	5150.00	51.4 AV	54.0	-2.6	1.80 H	110	11.90	39.50
3	*5190.00	92.7 PK			1.75 H	109	53.20	39.50
4	*5190.00	83.8 AV			1.75 H	109	44.30	39.50
5	#10380.00	58.8 PK	74.0	-15.2	1.37 H	178	12.10	46.70
6	#10380.00	45.3 AV	54.0	-8.7	1.37 H	178	-1.40	46.70
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	5150.00	65.8 PK	74.0	-8.2	1.40 V	203	26.30	39.50
2	5150.00	52.0 AV	54.0	-2.0	1.40 V	203	12.50	39.50
3	*5190.00	92.2 PK			1.37 V	205	52.70	39.50
4	*5190.00	83.2 AV			1.37 V	205	43.70	39.50
5	#10380.00	54.4 PK	74.0	-19.6	1.18 V	46	7.70	46.70
6	#10380.00	43.5 AV	54.0	-10.5	1.18 V	46	-3.20	46.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 46	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Sun Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	92.4 PK			1.75 H	108	52.80	39.60
2	*5230.00	83.5 AV			1.75 H	108	43.90	39.60
3	5350.00	46.9 PK	74.0	-27.1	1.75 H	108	7.10	39.80
4	5350.00	35.8 AV	54.0	-18.2	1.75 H	108	-4.00	39.80
5	#10460.00	58.6 PK	74.0	-15.4	1.53 H	167	11.90	46.70
6	#10460.00	47.1 AV	54.0	-6.9	1.53 H	167	0.40	46.70
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	*5230.00	91.8 PK			1.33 V	205	52.20	39.60
2	*5230.00	82.5 AV			1.33 V	205	42.90	39.60
3	5350.00	45.4 PK	74.0	-28.6	1.33 V	205	5.60	39.80
4	5350.00	35.3 AV	54.0	-18.7	1.33 V	205	-4.50	39.80
5	#10460.00	54.2 PK	74.0	-19.8	1.09 V	50	7.50	46.70
6	#10460.00	42.4 AV	54.0	-11.6	1.09 V	50	-4.30	46.70

REMARKS:

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



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EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 54	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Alan 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	*5270.00	100.6 PK			1.01 H	139	60.90	39.70
2	*5270.00	90.5 AV			1.01 H	139	50.80	39.70
3	5350.00	61.9 PK	74.0	-12.1	1.04 H	136	22.10	39.80
4	5350.00	47.0 AV	54.0	-7.0	1.04 H	136	7.20	39.80
5	#10540.00	66.5 PK	74.0	-7.5	1.35 H	106	19.70	46.80
6	#10540.00	52.8 AV	54.0	-1.2	1.35 H	106	6.00	46.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	97.9 PK			1.02 V	240	58.20	39.70
2	*5270.00	87.6 AV			1.02 V	240	47.90	39.70
3	5350.00	60.0 PK	74.0	-14.0	1.01 V	240	20.20	39.80
4	5350.00	46.0 AV	54.0	-8.0	1.01 V	240	6.20	39.80
5	#10540.00	60.1 PK	74.0	-13.9	1.00 V	331	13.30	46.80
6	#10540.00	46.0 AV	54.0	-8.0	1.00 V	331	-0.80	46.80

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 62	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Alan 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	*5310.00	99.1 PK			1.13 H	132	59.40	39.70
2	*5310.00	89.6 AV			1.13 H	132	49.90	39.70
3	5350.00	71.6 PK	74.0	-2.4	1.17 H	130	31.80	39.80
4	5350.00	52.3 AV	54.0	-1.7	1.17 H	130	12.50	39.80
5	10620.00	65.9 PK	74.0	-8.1	1.36 H	114	19.00	46.90
6	10620.00	51.4 AV	54.0	-2.6	1.36 H	114	4.50	46.90
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	96.6 PK			1.00 V	241	56.90	39.70
2	*5310.00	86.4 AV			1.00 V	241	46.70	39.70
3	5350.00	68.7 PK	74.0	-5.3	1.00 V	249	28.90	39.80
4	5350.00	49.2 AV	54.0	-4.8	1.00 V	249	9.40	39.80
5	10620.00	59.4 PK	74.0	-14.6	1.00 V	339	12.50	46.90
6	10620.00	45.5 AV	54.0	-8.5	1.00 V	339	-1.40	46.90

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 102	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Alan 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	5460.00	65.6 PK	74.0	-8.4	1.36 H	108	25.60	40.00
2	5460.00	47.5 AV	54.0	-6.5	1.36 H	108	7.50	40.00
3	#5470.00	70.6 PK	74.0	-3.4	1.36 H	108	30.60	40.00
4	#5470.00	52.8 AV	54.0	-1.2	1.36 H	108	12.80	40.00
5	*5510.00	100.0 PK			1.34 H	108	60.00	40.00
6	*5510.00	90.0 AV			1.34 H	108	50.00	40.00
7	11020.00	65.4 PK	74.0	-8.6	1.32 H	116	17.70	47.70
8	11020.00	51.6 AV	54.0	-2.4	1.32 H	116	3.90	47.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	65.1 PK	74.0	-8.9	1.39 V	202	25.10	40.00
2	5460.00	47.2 AV	54.0	-6.8	1.39 V	202	7.20	40.00
3	#5470.00	69.6 PK	74.0	-4.4	1.39 V	202	29.60	40.00
4	#5470.00	52.0 AV	54.0	-2.0	1.39 V	202	12.00	40.00
5	*5510.00	99.2 PK			1.33 V	200	59.20	40.00
6	*5510.00	89.3 AV			1.33 V	200	49.30	40.00
7	11020.00	59.9 PK	74.0	-14.1	1.00 V	337	12.20	47.70
8	11020.00	45.7 AV	54.0	-8.3	1.00 V	337	-2.00	47.70

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 110	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Alan 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	*5550.00	100.9 PK			1.34 H	120	60.80	40.10
2	*5550.00	91.0 AV			1.34 H	120	50.90	40.10
3	11100.00	67.5 PK	74.0	-6.5	1.30 H	87	19.70	47.80
4	11100.00	52.9 AV	54.0	-1.1	1.30 H	87	5.10	47.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	99.6 PK			1.00 V	205	59.50	40.10
2	*5550.00	89.3 AV			1.00 V	205	49.20	40.10
3	11100.00	61.2 PK	74.0	-12.8	1.00 V	332	13.40	47.80
4	11100.00	46.1 AV	54.0	-7.9	1.00 V	332	-1.70	47.80

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 134	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	24deg. C, 69%RH	TESTED BY	Alan 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	*5670.00	100.3 PK			1.33 H	121	60.10	40.20
2	*5670.00	90.5 AV			1.33 H	121	50.30	40.20
3	#5725.00	60.0 PK	74.0	-14.0	1.35 H	120	19.70	40.30
4	#5725.00	46.1 AV	54.0	-7.9	1.35 H	120	5.80	40.30
5	11340.00	65.2 PK	74.0	-8.8	1.28 H	82	17.00	48.20
6	11340.00	52.0 AV	54.0	-2.0	1.28 H	82	3.80	48.20
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	*5670.00	99.3 PK			1.02 V	250	59.10	40.20
2	*5670.00	89.0 AV			1.02 V	250	48.80	40.20
3	#5725.00	59.0 PK	74.0	-15.0	1.02 V	247	18.70	40.30
4	#5725.00	45.7 AV	54.0	-8.3	1.02 V	247	5.40	40.30
5	11340.00	59.7 PK	74.0	-14.3	1.00 V	335	11.50	48.20
6	11340.00	46.0 AV	54.0	-8.0	1.00 V	335	-2.20	48.20

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



802.11ac (80MHz)

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 42	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Martin 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	5150.00	66.1 PK	74.0	-7.9	1.49 H	82	26.60	39.50
2	5150.00	52.6 AV	54.0	-1.4	1.49 H	82	13.10	39.50
3	*5210.00	92.8 PK			1.46 H	82	53.20	39.60
4	*5210.00	82.1 AV			1.46 H	82	42.50	39.60
5	5350.00	55.6 PK	74.0	-18.4	1.49 H	82	15.80	39.80
6	5350.00	43.4 AV	54.0	-10.6	1.49 H	82	3.60	39.80
7	#10420.00	56.5 PK	74.0	-17.5	1.41 H	167	9.80	46.70
8	#10420.00	46.4 AV	54.0	-7.6	1.41 H	167	-0.30	46.70
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	5150.00	66.5 PK	74.0	-7.5	1.26 V	191	27.00	39.50
2	5150.00	53.0 AV	54.0	-1.0	1.26 V	191	13.50	39.50
3	*5210.00	92.2 PK			1.22 V	196	52.60	39.60
4	*5210.00	83.1 AV			1.22 V	196	43.50	39.60
5	5350.00	52.6 PK	74.0	-21.4	1.26 V	191	12.80	39.80
6	5350.00	43.4 AV	54.0	-10.6	1.26 V	191	3.60	39.80
7	#10420.00	53.4 PK	74.0	-20.6	1.14 V	125	6.70	46.70
8	#10420.00	40.9 AV	54.0	-13.1	1.14 V	125	-5.80	46.70

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 58	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Martin 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	*5290.00	97.7 PK			1.12 H	133	58.00	39.70
2	*5290.00	87.2 AV			1.12 H	133	47.50	39.70
3	5350.00	69.5 PK	74.0	-4.5	1.14 H	139	29.70	39.80
4	5350.00	52.4 AV	54.0	-1.6	1.14 H	139	12.60	39.80
5	#10580.00	65.1 PK	74.0	-8.9	1.49 H	127	18.30	46.80
6	#10580.00	50.6 AV	54.0	-3.4	1.49 H	127	3.80	46.80
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	94.4 PK			1.00 V	240	54.70	39.70
2	*5290.00	84.0 AV			1.00 V	240	44.30	39.70
3	5350.00	66.4 PK	74.0	-7.6	1.00 V	237	26.60	39.80
4	5350.00	49.6 AV	54.0	-4.4	1.00 V	237	9.80	39.80
5	#10580.00	59.6 PK	74.0	-14.4	1.00 V	332	12.80	46.80
6	#10580.00	44.6 AV	54.0	-9.4	1.00 V	332	-2.20	46.80

REMARKS:

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



A D T

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 106	FREQUENCY RANGE	1 ~ 40GHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Peak (PK) Average (AV)
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Martin 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	5460.00	69.3 PK	74.0	-4.7	1.07 H	135	29.30	40.00
2	5460.00	52.1 AV	54.0	-1.9	1.07 H	135	12.10	40.00
3	#5470.00	69.8 PK	74.0	-4.2	1.07 H	135	29.80	40.00
4	#5470.00	52.6 AV	54.0	-1.4	1.07 H	135	12.60	40.00
5	*5530.00	96.8 PK			1.08 H	137	56.80	40.00
6	*5530.00	86.8 AV			1.08 H	137	46.80	40.00
7	11060.00	63.9 PK	74.0	-10.1	1.31 H	90	16.20	47.70
8	11060.00	50.9 AV	54.0	-3.1	1.31 H	90	3.20	47.70
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	67.2 PK	74.0	-6.8	1.25 V	204	27.20	40.00
2	5460.00	50.3 AV	54.0	-3.7	1.25 V	204	10.30	40.00
3	#5470.00	67.7 PK	74.0	-6.3	1.25 V	204	27.70	40.00
4	#5470.00	50.8 AV	54.0	-3.2	1.25 V	204	10.80	40.00
5	*5530.00	95.3 PK			1.30 V	207	55.30	40.00
6	*5530.00	85.1 AV			1.30 V	207	45.10	40.00
7	11060.00	57.2 PK	74.0	-16.8	1.00 V	339	9.50	47.70
8	11060.00	44.9 AV	54.0	-9.1	1.00 V	339	-2.80	47.70

REMARKS:

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



BELOW 1GHz WORST-CASE DATA : 802.11a

EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 48	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	21deg. C, 68%RH	TESTED BY	Sun Lin

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	239.52	32.3 QP	46.0	-13.7	1.24 H	302	19.80	12.50
2	299.66	29.7 QP	46.0	-16.3	1.00 H	107	14.80	14.90
3	336.52	27.7 QP	46.0	-18.3	1.00 H	105	11.90	15.80
4	431.58	31.1 QP	46.0	-14.9	1.99 H	76	12.90	18.20
5	666.32	34.5 QP	46.0	-11.5	1.24 H	234	11.50	23.00
6	720.64	30.9 QP	46.0	-15.1	1.00 H	131	7.20	23.70
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	144.46	26.2 QP	43.5	-17.3	1.00 V	78	12.90	13.30
2	189.08	24.2 QP	43.5	-19.3	1.00 V	220	12.50	11.70
3	231.76	23.9 QP	46.0	-22.1	1.00 V	90	11.70	12.20
4	336.52	26.5 QP	46.0	-19.5	1.50 V	276	10.70	15.80
5	431.58	27.5 QP	46.0	-18.5	1.50 V	11	9.30	18.20
6	666.32	30.2 QP	46.0	-15.8	1.50 V	181	7.20	23.00

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.



EUT TEST CONDITION		MEASUREMENT DETAIL	
CHANNEL	Channel 140	FREQUENCY RANGE	Below 1000MHz
INPUT POWER (SYSTEM)	120Vac, 60Hz	DETECTOR FUNCTION	Quasi-Peak
ENVIRONMENTAL CONDITIONS	25deg. C, 68%RH	TESTED BY	Martin 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	144.46	30.7 QP	43.5	-12.8	1.50 H	166	17.40	13.30
2	239.52	34.0 QP	46.0	-12.0	1.00 H	249	21.50	12.50
3	480.08	35.9 QP	46.0	-10.1	1.77 H	16	16.40	19.50
4	720.64	36.9 QP	46.0	-9.1	1.56 H	302	13.20	23.70
5	916.58	42.5 QP	46.0	-3.5	2.00 H	295	15.90	26.60
6	960.11	46.6 QP	54.0	-7.4	1.23 H	311	19.50	27.10
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	99.84	34.5 QP	43.5	-9.0	1.25 V	242	25.60	8.90
2	144.46	31.6 QP	43.5	-11.9	1.00 V	116	18.30	13.30
3	336.52	26.4 QP	46.0	-19.6	1.49 V	69	10.60	15.80
4	480.08	27.9 QP	46.0	-18.1	1.78 V	4	8.40	19.50
5	916.58	42.7 QP	46.0	-3.3	2.25 V	146	16.10	26.60
6	960.20	45.5 QP	54.0	-8.5	1.36 V	258	18.40	27.10

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.

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

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

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Nov. 09, 2012	Nov. 08, 2013
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 28, 2012	Dec. 27, 2013
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 21, 2012	Dec. 20, 2013
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 06, 2012	Jul. 05, 2013
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

- NOTE:**
1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
 2. The test was performed in HwaYa Shielded Room 2.
 3. The VCCI Site Registration No. is C-2047.

4.2.3 TEST PROCEDURES

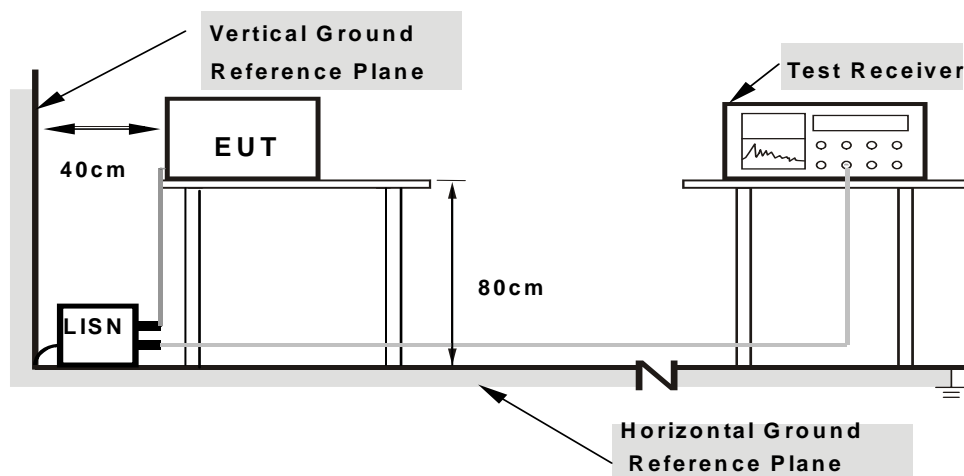
- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling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

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

4.2.4 DEVIATION FROM TEST STANDARD

No deviation.

4.2.5 TEST SETUP



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

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

4.2.6 EUT OPERATING CONDITIONS

Same as 4.1.6.

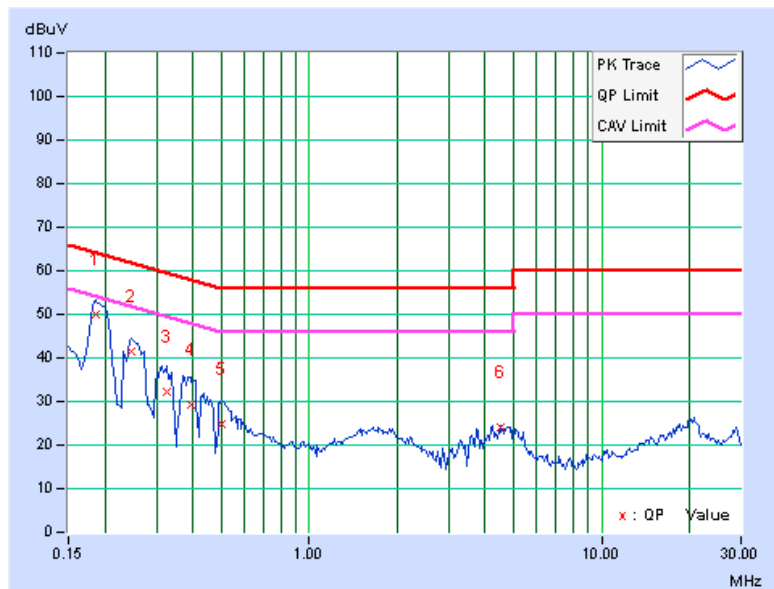
4.2.7 TEST RESULTS

CONDUCTED WORST-CASE DATA : 802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
CHANNEL	Channel 48		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18516	0.17	49.93	32.40	50.10	32.57	64.25	54.25	-14.15	-21.68
2	0.24766	0.18	41.12	23.56	41.30	23.74	61.84	51.84	-20.54	-28.10
3	0.32578	0.20	32.00	15.10	32.20	15.30	59.56	49.56	-27.36	-34.26
4	0.39219	0.21	29.18	12.99	29.39	13.20	58.02	48.02	-28.63	-34.82
5	0.50156	0.22	24.41	11.09	24.63	11.31	56.00	46.00	-31.37	-34.69
6	4.51172	0.38	23.72	11.00	24.10	11.38	56.00	46.00	-31.90	-34.62

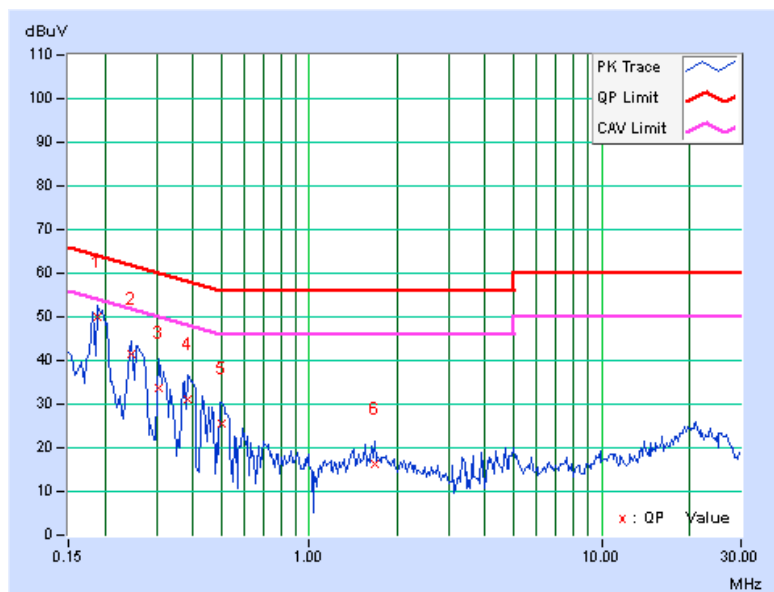
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. The emission levels of other frequencies were very low against the limit.
 3. Margin value = Emission level - Limit value
 4. Correction factor = Insertion loss + Cable loss
 5. Emission Level = Correction Factor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



PHASE	Line 2	6dB BANDWIDTH	9kHz
CHANNEL	Channel 48		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18906	0.18	49.70	34.04	49.88	34.22	64.08	54.08	-14.20	-19.86
2	0.24766	0.20	41.20	22.18	41.40	22.38	61.84	51.84	-20.44	-29.46
3	0.30625	0.22	33.54	12.90	33.76	13.12	60.07	50.07	-26.31	-36.95
4	0.38438	0.24	30.94	13.66	31.18	13.90	58.18	48.18	-27.00	-34.28
5	0.50156	0.25	25.28	8.04	25.53	8.29	56.00	46.00	-30.47	-37.71
6	1.68750	0.26	15.87	4.92	16.13	5.18	56.00	46.00	-39.87	-40.82

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



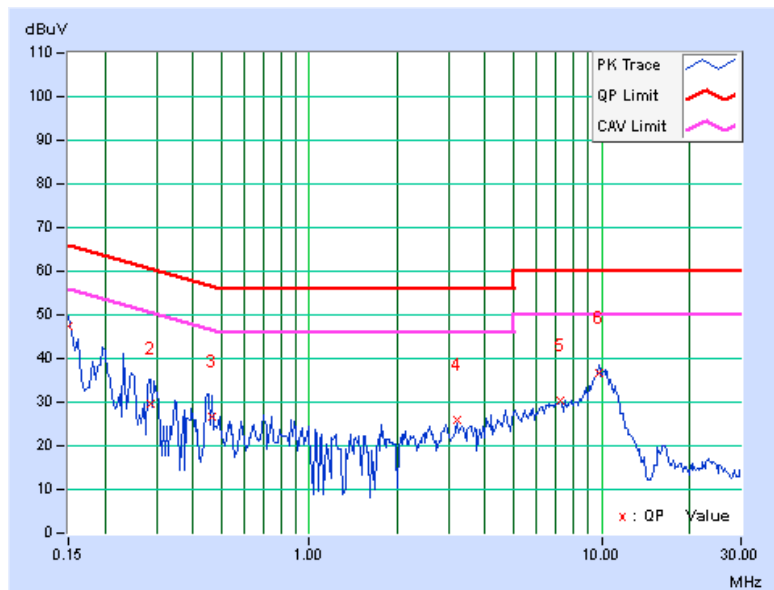


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PHASE	Line 1	6dB BANDWIDTH	9kHz
CHANNEL	Channel 140		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.13	47.35	37.55	47.48	37.68	66.00	56.00	-18.52	-18.32
2	0.28672	0.16	29.42	16.21	29.58	16.37	60.62	50.62	-31.04	-34.25
3	0.46250	0.18	26.41	16.73	26.59	16.91	56.65	46.65	-30.05	-29.73
4	3.21484	0.32	25.44	16.37	25.76	16.69	56.00	46.00	-30.24	-29.31
5	7.21484	0.51	29.95	23.68	30.46	24.19	60.00	50.00	-29.54	-25.81
6	9.78906	0.63	36.06	30.48	36.69	31.11	60.00	50.00	-23.31	-18.89

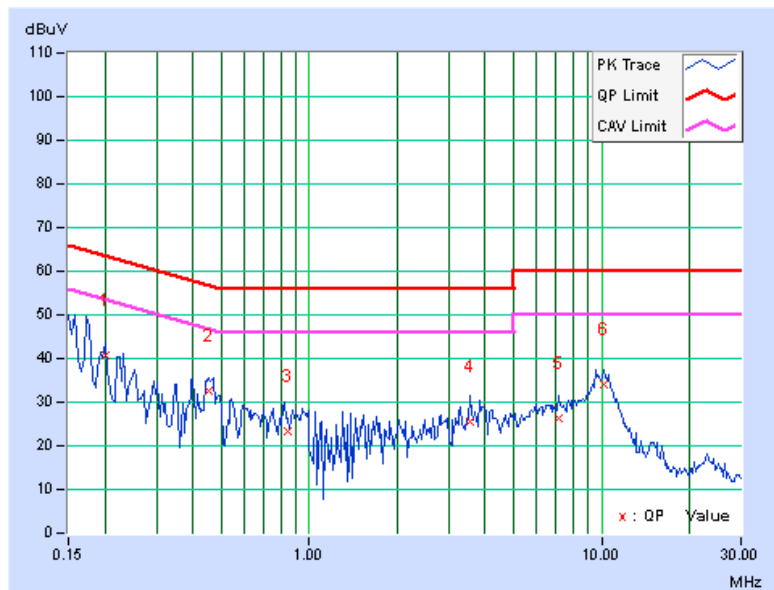
- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
 2. The emission levels of other frequencies were very low against the limit.
 3. Margin value = Emission level - Limit value
 4. Correction factor = Insertion loss + Cable loss
 5. Emission Level = Correction Factor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



PHASE	Line 2	6dB BANDWIDTH	9kHz
CHANNEL	Channel 140		

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20139	0.15	40.56	32.83	40.71	32.98	63.55	53.55	-22.84	-20.57
2	0.45078	0.19	32.27	29.16	32.46	29.35	56.86	46.86	-24.40	-17.51
3	0.84103	0.22	23.07	20.18	23.29	20.40	56.00	46.00	-32.71	-25.60
4	3.53906	0.33	25.21	18.57	25.54	18.90	56.00	46.00	-30.46	-27.10
5	7.09766	0.45	25.95	21.36	26.40	21.81	60.00	50.00	-33.60	-28.19
6	10.16797	0.56	33.36	28.83	33.92	29.39	60.00	50.00	-26.08	-20.61

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



4.3 PEAK TRANSMIT POWER MEASUREMENT

4.3.1 LIMITS OF PEAK TRANSMIT POWER MEASUREMENT

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

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

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

Array Gain = 0 dB (i.e., no array gain) for NANT ≤ 4;

Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any NANT;

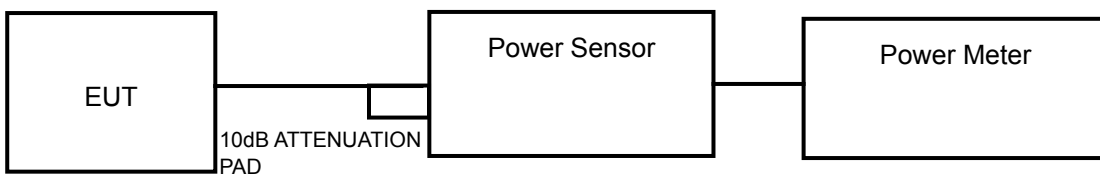
Array Gain = 5 log(NANT/NSS) dB or 3 dB, whichever is less for 20-MHz channel widths with NANT ≥ 5.

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

4.3.2 TEST SETUP

FOR POWER OUTPUT MEASUREMENT

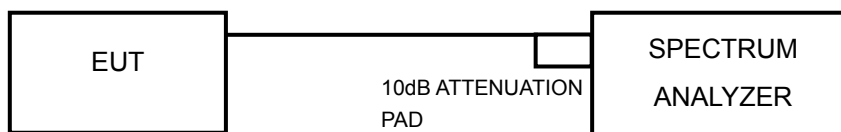
For 802.11a, 802.11n (20MHz), 802.11n (40MHz)



For 802.11ac (80MHz)



FOR 26dB BANDWIDTH



4.3.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.3.4 TEST PROCEDURE

FOR AVERAGE POWER MEASUREMENT

For 802.11a, 802.11n (20MHz), 802.11n (40MHz)

If duty cycle > 98%

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

If duty cycle < 98%

Duty cycle of test signal is < 98 %. Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is added to measured value.

For 802.11ac (80MHz)

Method SA-1

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1 MHz.
- 3) Set VBW \geq 3 MHz.
- 4) Number of points in sweep \geq 2 Span / RBW.
- 5) Sweep time = auto.
- 6) Set trigger to free run (duty cycle \geq 98 percent); Set video trigger (duty cycle < 98 percent)
- 7) Detector = RMS.
- 8) Trace average at least 100 traces in power averaging mode
- 9) Compute power by integrating the spectrum across the 26 dB EBW of the signal.

FOR 26dB BANDWIDTH

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

4.3.5 DEVIATION FROM TEST STANDARD

No deviation.

4.3.6 EUT OPERATING CONDITIONS

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

4.3.7 TEST RESULTS

POWER OUTPUT:

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	42.170	16.25	17	PASS
40	5200	43.752	16.41	17	PASS
48	5240	44.875	16.52	17	PASS
52	5260	54.325	17.35	24	PASS
60	5300	59.156	17.72	24	PASS
64	5320	61.944	17.92	24	PASS
100	5500	99.541	19.98	24	PASS
116	5580	117.490	20.70	24	PASS
140	5700	130.317	21.15	24	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	42.756	16.31	17	PASS
40	5200	44.259	16.46	17	PASS
48	5240	43.853	16.42	17	PASS
52	5260	54.325	17.35	24	PASS
60	5300	59.156	17.72	24	PASS
64	5320	58.076	17.64	24	PASS
100	5500	107.152	20.30	24	PASS
116	5580	130.017	21.14	24	PASS
140	5700	127.057	21.04	24	PASS



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	39.264	15.94	17	PASS
46	5230	42.855	16.32	17	PASS
54	5270	41.400	16.17	24	PASS
62	5310	41.115	16.14	24	PASS
102	5510	67.920	18.32	24	PASS
110	5550	100.000	20.00	24	PASS
134	5670	112.460	20.51	24	PASS

802.11ac (80MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
42	5210	39.264	15.94	17	PASS
58	5290	29.174	14.65	24	PASS
106	5530	43.152	16.35	24	PASS



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26dB BANDWIDTH:

802.11a

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
36	5180	19.65	PASS
40	5200	19.92	PASS
48	5240	19.68	PASS
52	5260	19.59	PASS
60	5300	20.08	PASS
64	5320	19.73	PASS
100	5500	22.97	PASS
116	5580	29.43	PASS
140	5700	30.54	PASS

802.11n (20MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
36	5180	20.22	PASS
40	5200	20.63	PASS
48	5240	20.04	PASS
52	5260	20.13	PASS
60	5300	20.26	PASS
64	5320	20.46	PASS
100	5500	23.54	PASS
116	5580	25.12	PASS
140	5700	28.93	PASS



802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
38	5190	44.62	PASS
46	5230	44.51	PASS
54	5270	51.27	PASS
62	5310	44.92	PASS
102	5510	51.14	PASS
110	5550	72.50	PASS
134	5670	76.91	PASS

802.11ac (80MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	PASS / FAIL
42	5210	86.65	PASS
58	5290	84.50	PASS
106	5530	86.40	PASS

EUT MAXIMUM CONDUCTED POWER

802.11a

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	61.944	17.92
5470~5725	130.317	21.15

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (20MHz)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	59.156	17.72
5470~5725	130.017	21.14

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (40MHz)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	41.400	16.17
5470~5725	112.460	20.51

NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11ac (80MHz)

FREQUENCY BAND (MHz)	MAX. POWER	
	OUTPUT POWER (mW)	OUTPUT POWER (dBm)
5250~5350	29.174	14.65
5470~5725	43.152	16.35

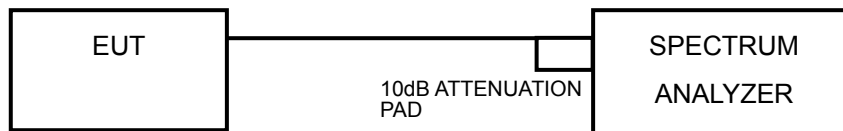
NOTE: Manufacturer provides Transmit Power Control description to meet this requirement.

4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

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

4.4.2 TEST SETUP



4.4.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.4.4 TEST PROCEDURES

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

4.4.5 DEVIATION FROM TEST STANDARD

No deviation.

4.4.6 EUT OPERATING CONDITIONS

Same as 4.3.6.



4.4.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS / FAIL
36	5180	1.30	0.41	1.71	4	PASS
40	5200	1.26	0.41	1.67	4	PASS
48	5240	1.91	0.41	2.32	4	PASS
52	5260	2.64	0.41	3.05	11	PASS
60	5300	3.18	0.41	3.59	11	PASS
64	5320	3.25	0.41	3.66	11	PASS
100	5500	5.11	0.41	5.52	11	PASS
116	5580	5.39	0.41	5.80	11	PASS
140	5700	5.38	0.41	5.79	11	PASS

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

802.11n (20MHz)

CHANNEL	FREQUENCY (MHz)	PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	PSD WITH DUTY FACTOR (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	1.30	0.37	1.67	4	PASS
40	5200	1.74	0.37	2.11	4	PASS
48	5240	1.48	0.37	1.85	4	PASS
52	5260	2.25	0.37	2.62	11	PASS
60	5300	2.80	0.37	3.17	11	PASS
64	5320	2.75	0.37	3.12	11	PASS
100	5500	5.23	0.37	5.60	11	PASS
116	5580	5.50	0.37	5.87	11	PASS
140	5700	5.55	0.37	5.92	11	PASS

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



802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
38	5190	-1.36	4	PASS
46	5230	-0.90	4	PASS
54	5270	1.58	11	PASS
62	5310	-0.37	11	PASS
102	5510	1.91	11	PASS
110	5550	3.23	11	PASS
134	5670	3.46	11	PASS

802.11ac (80MHz)

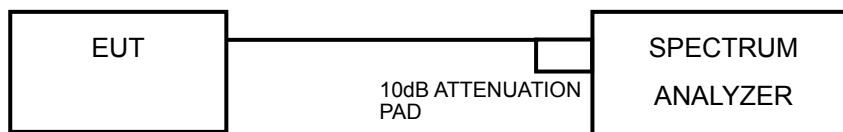
CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
42	5210	-2.01	4	PASS
58	5290	-4.07	11	PASS
106	5530	-1.36	11	PASS

4.5 PEAK POWER EXCURSION MEASUREMENT

4.5.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

Shall not exceed 13 dB.

4.5.2 TEST SETUP



4.5.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.5.4 TEST PROCEDURE

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

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITIONS

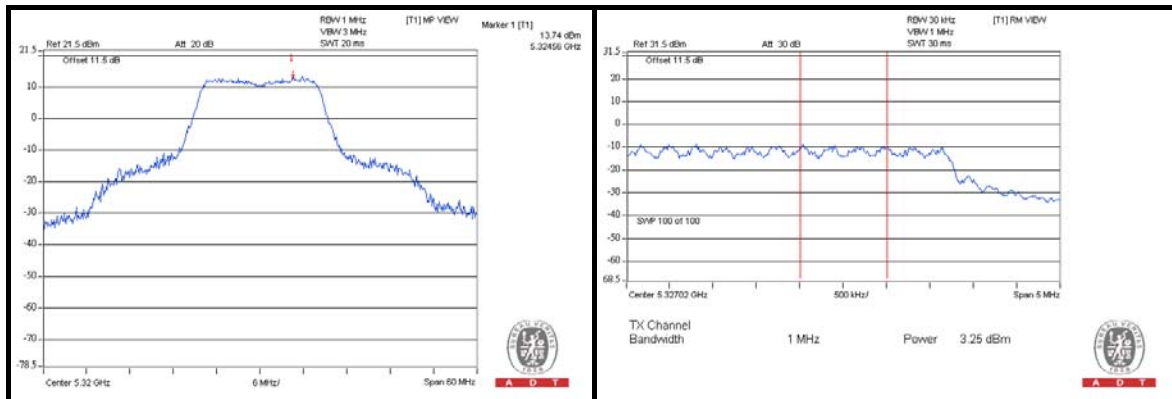
Same as 4.2.6

4.5.7 TEST RESULTS

802.11a

CHAN.	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD WITHOUT DUTY FACTOR (dBm)	PPSD WITH DUTY FACTOR (dBm)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS /FAIL
36	5180	11.07	1.30	1.71	9.77	13	PASS
40	5200	11.07	1.26	1.67	9.81	13	PASS
48	5240	12.05	1.91	2.32	10.14	13	PASS
52	5260	13.08	2.64	3.05	10.44	13	PASS
60	5300	13.43	3.18	3.59	10.25	13	PASS
64	5320	13.74	3.25	3.66	10.49	13	PASS
100	5500	15.39	5.11	5.52	10.28	13	PASS
116	5580	15.78	5.39	5.80	10.39	13	PASS
140	5700	15.47	5.38	5.79	10.09	13	PASS

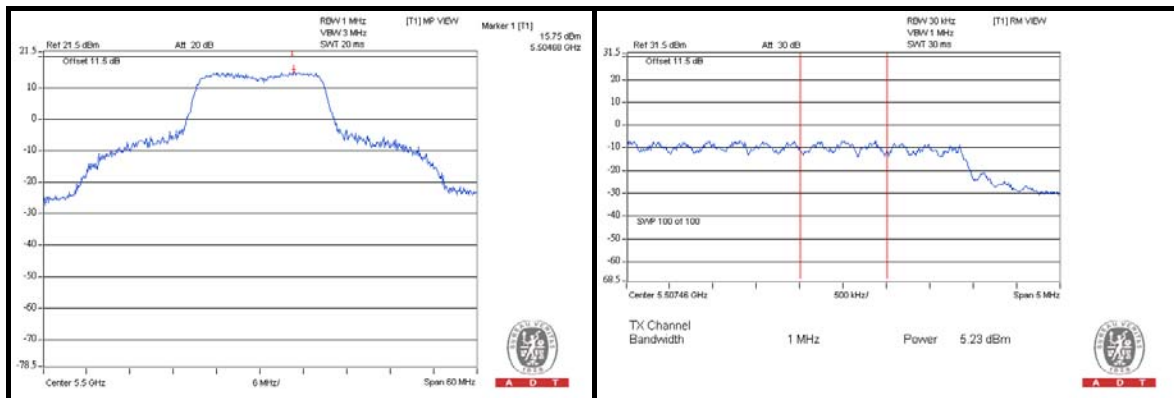
NOTE: Refer to section 3.3 for duty cycle spectrum plot.



802.11n (20MHz)

CHAN.	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD WITHOUT DUTY FACTOR (dBm)	PPSD WITH DUTY FACTOR (dBm)	PEAK POWER EXCURSION (dB)	PEAK to AVERAGE EXCURSION LIMIT (dB)	PASS /FAIL
36	5180	11.06	1.30	1.67	9.76	13	PASS
40	5200	12.02	1.74	2.11	10.28	13	PASS
48	5240	11.58	1.48	1.85	10.10	13	PASS
52	5260	12.58	2.25	2.62	10.33	13	PASS
60	5300	13.25	2.80	3.17	10.45	13	PASS
64	5320	13.14	2.75	3.12	10.39	13	PASS
100	5500	15.75	5.23	5.60	10.52	13	PASS
116	5580	15.50	5.50	5.87	10.00	13	PASS
140	5700	15.92	5.55	5.92	10.37	13	PASS

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

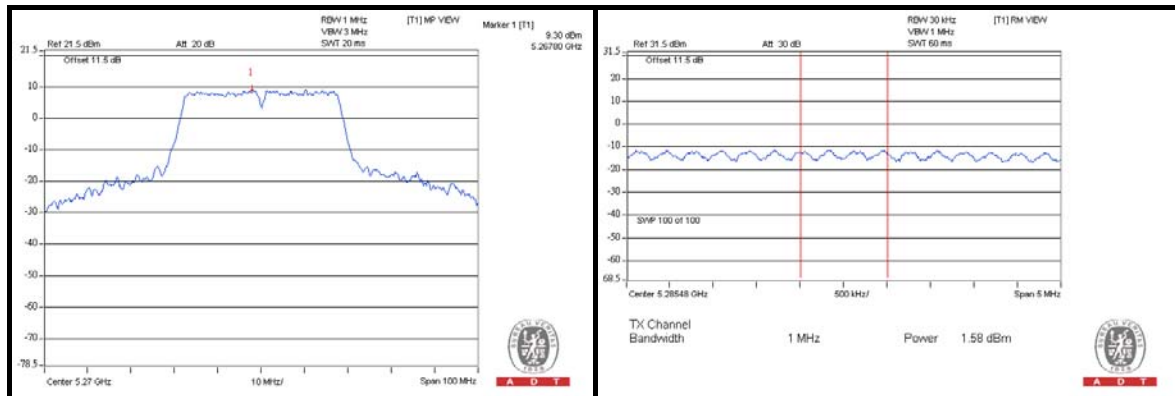




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802.11n (40MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD (dBm)	PEAK EXCURSION (dB)	LIMIT (dB)	PASS/FAIL
38	5190	6.11	-1.36	7.47	13	PASS
46	5230	6.62	-0.90	7.52	13	PASS
54	5270	9.30	1.58	7.72	13	PASS
62	5310	6.96	-0.37	7.33	13	PASS
102	5510	9.15	1.91	7.24	13	PASS
110	5550	10.58	3.23	7.35	13	PASS
134	5670	11.01	3.46	7.55	13	PASS

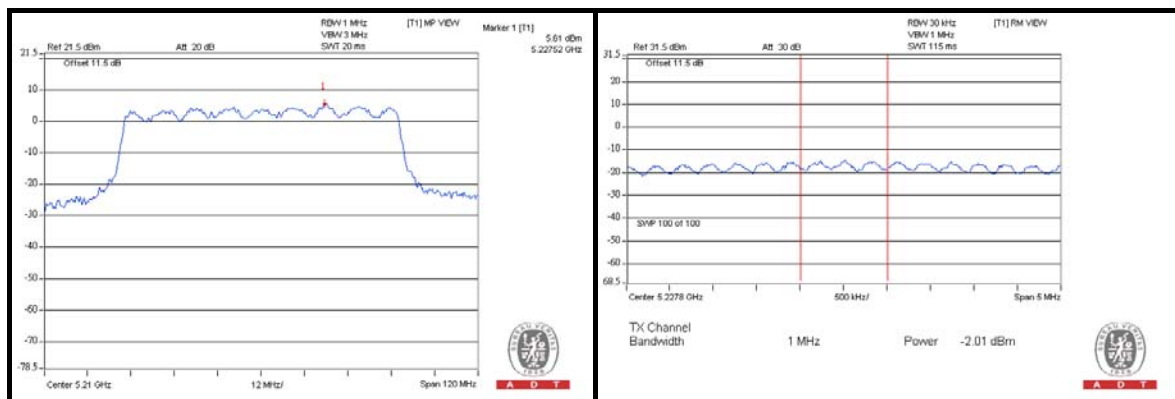




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802.11ac (80MHz)

CHANNEL	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD (dBm)	PEAK EXCURSION (dB)	LIMIT (dB)	PASS/FAIL
42	5210	5.61	-2.01	7.62	13	PASS
58	5290	3.37	-4.07	7.44	13	PASS
106	5530	6.05	-1.36	7.41	13	PASS

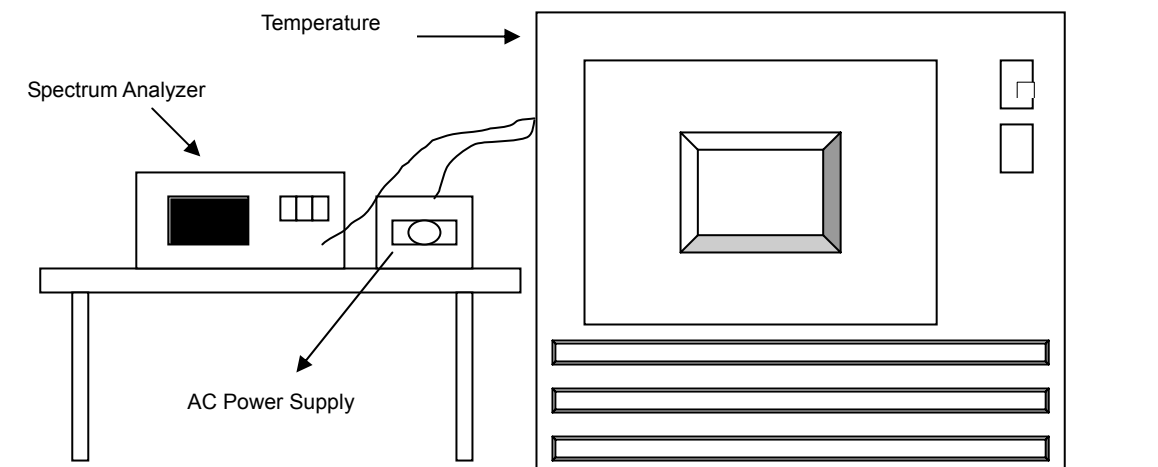


4.6 FREQUENCY STABILITY

4.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.3 to get information of above instrument.

4.6.4 TEST PROCEDURE

- a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
- b. Turn the EUT on and couple its output to a spectrum analyzer.
- c. Turn the EUT off and set the chamber to the highest temperature specified.
- d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
- f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITION

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

4.6.7 TEST RESULTS

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5300MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
60	120	5299.9916	-0.0002	5300.0097	0.0002	5299.9908	-0.0002	5300.0059	0.0001
50	120	5300.0118	0.0002	5300.0098	0.0002	5300.0104	0.0002	5300.0053	0.0001
40	120	5300.0150	0.0003	5300.0149	0.0003	5300.0113	0.0002	5300.0120	0.0002
30	120	5300.0238	0.0004	5300.0207	0.0004	5300.0180	0.0003	5300.0219	0.0004
20	120	5300.0250	0.0005	5300.0256	0.0005	5300.0271	0.0005	5300.0267	0.0005
10	120	5299.9966	-0.0001	5299.9974	0.0000	5299.9976	0.0000	5299.9990	0.0000
0	120	5300.0104	0.0002	5300.0123	0.0002	5300.0088	0.0002	5300.0123	0.0002
-10	120	5299.9755	-0.0005	5299.9747	-0.0005	5299.9811	-0.0004	5299.9764	-0.0004
-20	120	5300.0188	0.0004	5300.0252	0.0005	5300.0284	0.0005	5300.0220	0.0004
-30	120	5300.0281	0.0005	5300.0277	0.0005	5300.0240	0.0005	5300.0274	0.0005

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5300MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
20	138	5300.0261	0.0005	5300.0257	0.0005	5300.0280	0.0005	5300.0266	0.0005
	120	5300.0250	0.0005	5300.0256	0.0005	5300.0271	0.0005	5300.0267	0.0005
	102	5300.0254	0.0005	5300.0251	0.0005	5300.0288	0.0005	5300.0264	0.0005

5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



6. INFORMATION ON THE TESTING LABORATORIES

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

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

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Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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



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7. APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB

No modifications were made to the EUT by the lab during the test.

---END---