FCC TEST REPORT
(15.407)

REPORT NO.:	RF140217C18A
MODEL NO.:	PCE4502AN
FCC ID:	TVE-120502
RECEIVED:	Aug. 25, 2014
TESTED:	Sep. 02 ~ Sep. 26, 2014
ISSUED:	Oct. 03, 2014

APPLICANT:	Fortinet Inc.
ADDRESS:	899 Kifer Road Sunnyvale, CA 94086, USA

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

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

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF140217C18A	Original release.	Oct. 03, 2014

1. CERTIFICATION

PRODUCT:	802.11 ac Module
MODEL:	PCE4502AN
BRAND:	Fortinet
APPLICANT:	Fortinet Inc.
TESTED:	Sep. 02 ~ Sep. 26, 2014
TEST SAMPLE:	ENGINEERING SAMPLE
STANDARDS:	**FCC Part 15, Subpart E (Section 15.407)**
	ANSI C63.10-2009

The above equipment (model: PCE4502AN) 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 : _____ **, DATE :** Oct. 03, 2014

Pettie Chen / Senior Specialist

APPROVED BY : _____ **, DATE :** Oct. 03, 2014

Ken Liu / Senior Manager

2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407)			
STANDARD SECTION	**TEST TYPE**	**RESULT**	**REMARK**
15.407(b)(6)	AC Power Conducted Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -3.84dB at 0.15000MHz.
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -1.1dB at 5722.00, 6906.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(e)	6dB bandwidth	PASS	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	For PIFA antenna: No antenna connector is used. For Dipole antenna: Antenna connector is RSMA not a standard connector.

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	3.63 dB
	200MHz ~1000MHz	3.64 dB
	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 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	802.11 ac Module
MODEL NO.	PCE4502AN
POWER SUPPLY	5Vdc (host equipment)
MODULATION TYPE	256QAM, 64QAM, 16QAM, QPSK, BPSK
MODULATION TECHNOLOGY	OFDM
TRANSFER RATE	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300.0Mbps 802.11ac: up to 866.7Mbps
OPERATING FREQUENCY	5180 ~ 5240MHz, 5745 ~ 5825MHz
NUMBER OF CHANNEL	5180 ~ 5240MHz: 4 for 802.11a, 802.11n (20MHz), 802.11ac (20MHz) 2 for 802.11n (40MHz), 802.11ac (40MHz) 1 for 802.11ac (80MHz) 5745 ~ 5825MHz: 5 for 802.11a, 802.11n (20MHz), 802.11ac (20MHz) 2 for 802.11n (40MHz), 802.11ac (40MHz) 1 for 802.11ac (80MHz)
OUTPUT POWER	5180 ~ 5240MHz: 189.691mW 5745 ~ 5825MHz: 194.158mW
ANTENNA TYPE	PIFA antenna with 5.5dBi & 6dBi gain Dipole antenna with 4dBi gain Dipole antenna with 3dBi gain (New)
ANTENNA CONNECTOR	For PIFA antenna: NA For Dipole antenna: RSMA
DATA CABLE	NA
I/O PORTS	Refer to user's manual
ACCESSORY DEVICES	NA

NOTE:

1. This report is prepared for FCC class II permissive change. This report is issued as a supplementary report of BV ADT report no.: RF140217C18 R1 & RF140217C18-1 R1. Differences compared with the original report are adding a dipole antenna and updating standard to New Rule. Therefore, the EUT was re-tested and presented in the test report. (PIFA antenna and Dipole antenna with 4dBi gain was chosen for the final tests.)
2. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers.

MODULATION MODE	TX FUNCTION
802.11a	2TX
802.11n (20MHz)	2TX
802.11n (40MHz)	2TX
802.11ac (20MHz)	2TX
802.11ac (40MHz)	2TX
802.11ac (80MHz)	2TX

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

3. The above EUT information is declared by manufacturer and for more detailed feature 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), 802.11ac (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), 802.11ac (40MHz):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
38	5190 MHz	46	5230 MHz

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

CHANNEL	FREQUENCY
42	5210MHz

FOR 5745 ~ 5825MHz:

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

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

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

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
151	5755MHz	159	5795MHz

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

CHANNEL	FREQUENCY
155	5775MHz

3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	For PIFA antenna
B	√	√	√	-	For Dipole antenna

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

NOTE:
1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.
2. "-" means no effect.

RADIATED EMISSION TEST (ABOVE 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A, B	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
A, B	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	7.2
A, B	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	15.0
A, B	802.11ac (80MHz)		42	42	OFDM	BPSK	65.0
A, B	802.11a	5745-5825	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
A, B	802.11ac (80MHz)		155	155	OFDM	BPSK	65.0

RADIATED EMISSION TEST (BELOW 1GHz):

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A, B	802.11a	5180-5320 5745-5825	36 to 64 149 to 165	48	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)
A, B	802.11a	5180-5320 5745-5825	36 to 64 149 to 165	48	OFDM	BPSK	6.0

ANTENNA PORT CONDUCTED MEASUREMENT:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

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

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

EUT CONFIGURE MODE	MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
A	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0
A	802.11n (20MHz)		36 to 48	36, 40, 48	OFDM	BPSK	7.2
A	802.11n (40MHz)		38 to 46	38, 46	OFDM	BPSK	15.0
A	802.11ac (80MHz)		42	42	OFDM	BPSK	65.0
A	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0
A	802.11n (20MHz)		149 to 165	149, 157, 165	OFDM	BPSK	7.2
A	802.11n (40MHz)		151 to 159	151, 159	OFDM	BPSK	15.0
A	802.11ac (80MHz)		155	155	OFDM	BPSK	65.0

TEST CONDITION:

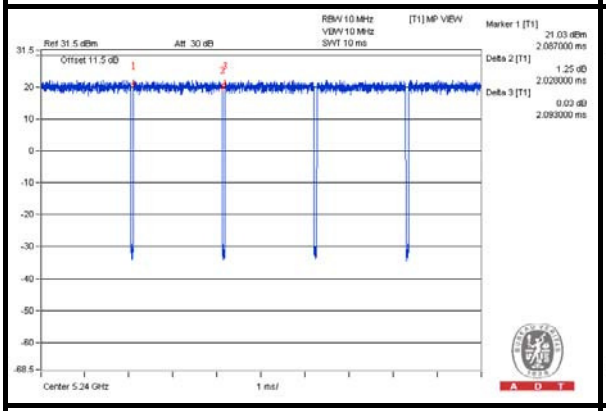
APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER	TESTED BY
RE≥1G	22deg. C, 71%RH 22deg. C, 64%RH	120Vac, 60Hz	Nick Hsu Jones Chang
RE<1G	22deg. C, 71%RH	120Vac, 60Hz	Nick Hsu
PLC	22deg. C, 71%RH	120Vac, 60Hz	Nick Hsu
APCM	25deg. C, 60%RH	120Vac, 60Hz	Nick Chen

3.3 DUTY CYCLE OF TEST SIGNAL

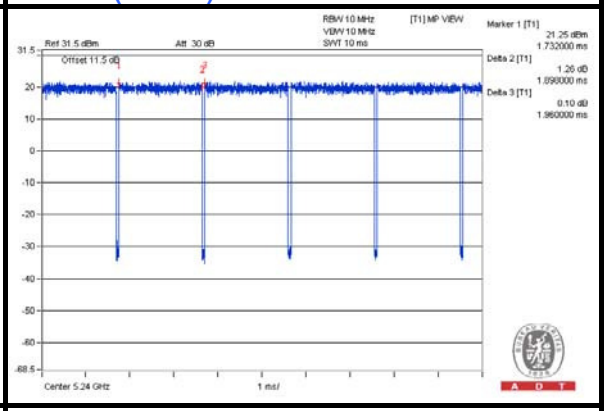
Duty cycle of test signal is < 98 %, duty factor is required.

802.11a: Duty cycle = 2.028/2.093 = 0.969, Duty factor = 10 * log(1/0.969) = 0.14
802.11n (20MHz): Duty cycle = 1.898/1.96 = 0.968, Duty factor = 10 * log(1/0.968) = 0.14
802.11n (40MHz): Duty cycle = 0.932/0.997 = 0.935, Duty factor = 10 * log(1/0.935) = 0.29
802.11ac (80MHz): Duty cycle = 0.455/0.518 = 0.878, Duty factor = 10 * log(1/0.878) = 0.56

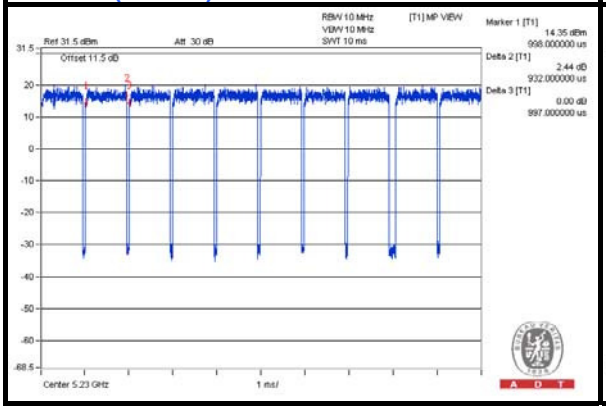
802.11a



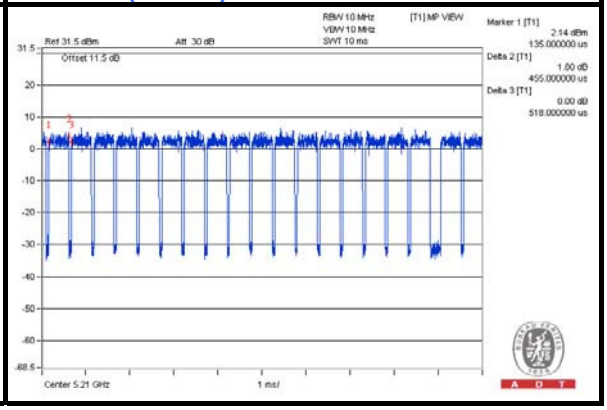
802.11n (20MHz)



802.11n (40MHz)



802.11ac (80MHz)



3.4 DESCRIPTION OF SUPPORT UNITS

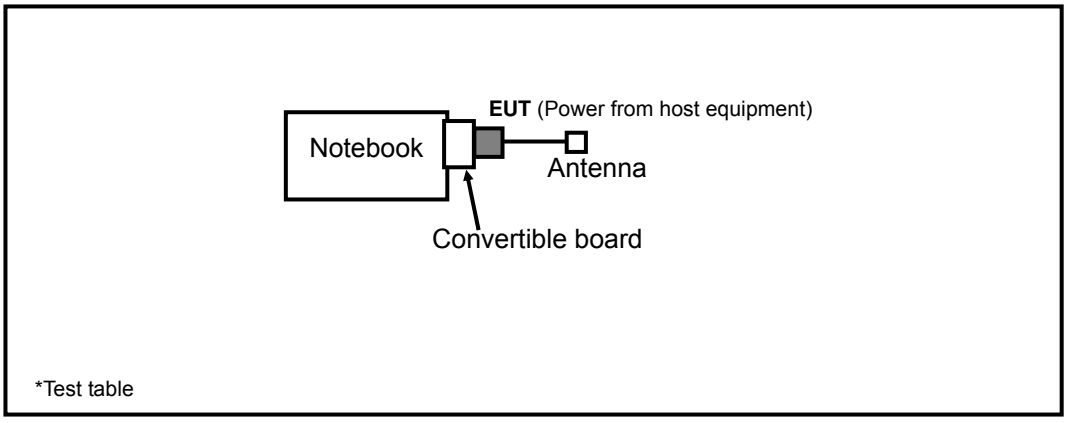
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Notebook	DELL	E5420	33MLMQ1	FCC DoC Approved
2	Convertible board	NA	NA	NA	NA

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

NOTE:
1. All power cords of the above support units are non-shielded (1.8m).
2. Item 2 was provided by client.

3.4.1 CONFIGURATION OF SYSTEM UNDER TEST



3.5 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

FCC Part 15, Subpart E (15.407)
789033 D02 General UNII Test Procedures New Rules v01
662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2009

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

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	
789033 D02 General UNII Test Procedures New Rules v01	FIELD STRENGTH AT 3m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
APPLICABLE TO	**EIRP LIMIT**	**EQUIVALENT FIELD STRENGTH AT 3m**
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	PK: -27 (dBm/MHz) *1 PK: -17 (dBm/MHz) *2	PK: 68.2 (dBμV/m) *1 PK: 78.2 (dBμV/m) *2

NOTE: *1 beyond 10MHz of the band edge *2 within 10 MHz of band edge

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

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

4.1.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100289	Nov. 29, 2013	Nov. 28, 2014
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Feb. 11, 2014	Feb. 10, 2015
BILOG Antenna SCHWARZBECK	VULB9168	9168-156	Feb. 25, 2014	Feb. 24, 2015
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-209	Sep. 12, 2013	Sep. 11, 2014
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Feb. 17, 2014	Feb. 16, 2015
Preamplifier Agilent	8449B	3008A01911	Aug. 09, 2014	Aug. 08, 2015
Preamplifier Agilent	8447D	2944A10638	Oct. 18, 2013	Oct. 17, 2014
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	248780/4 309222/4 274092/4	Aug. 09, 2014	Aug. 08, 2015
RF signal cable Worken	5D-FB	Cable-HYCH9-01	Aug. 11, 2014	Aug. 10, 2015
Software BV ADT	ADT_Radiated_ V7.6.15.9.4	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower &Turn Table Controller EMCO	2090	NA	NA	NA
26GHz ~ 40GHz Amplifier	EM26400	815221	Oct. 18, 2013	Oct. 17, 2014
High Speed Peak Power Meter	ML2495A	0824011	Jul. 26, 2014	Jul. 25, 2015
Power Sensor	MA2411B	0738171	Jul. 26, 2014	Jul. 25, 2015
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 9, 2014	Jun. 08, 2015

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

2. The test was performed in HwaYa Chamber 9.

3. The horn antenna and HP preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.

4. The FCC Site Registration No. is 215374.

5. The IC Site Registration No. is IC 7450F-9.

4.1.4 TEST PROCEDURES

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The antenna is a broadband antenna, and its height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

f. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.

NOTE:

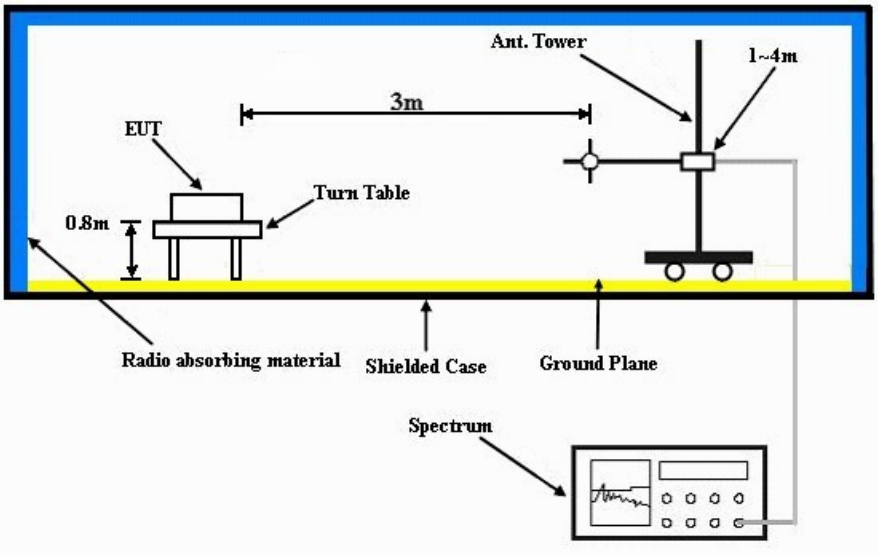
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is ≥ 1/T (Duty cycle < 98%) or 10Hz(Duty cycle > 98%) for Average detection (AV) at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.5 DEVIATION FROM TEST STANDARD

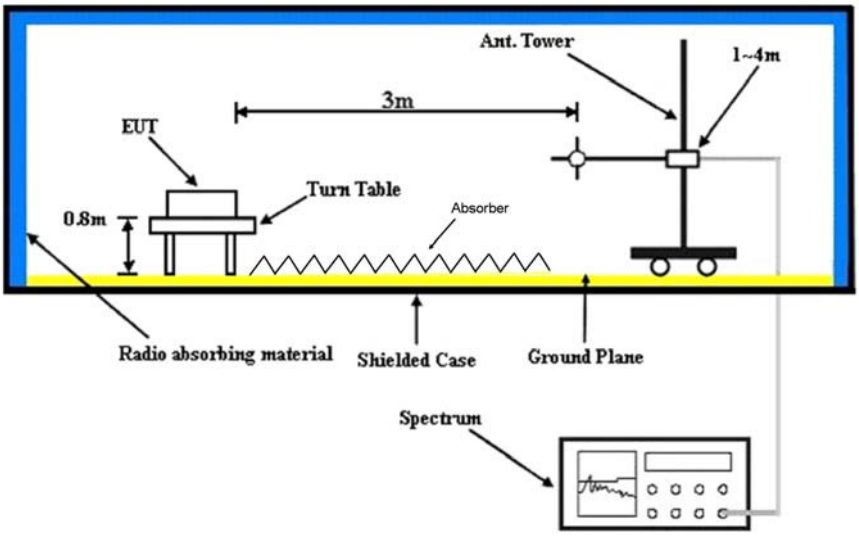
No deviation.

4.1.6 TEST SETUP

Frequency range 30MHz~1GHz



Frequency range above 1GHz



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

4.1.7 EUT OPERATING CONDITION

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

4.1.8 TEST RESULTS

ABOVE 1GHz DATA

802.11a

CHANNEL	TX Channel 36	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	57.3 PK	74.0	-16.7	1.11 H	200	50.90	6.40
2	5150.00	45.4 AV	54.0	-8.6	1.11 H	200	39.00	6.40
3	*5180.00	103.5 PK			1.05 H	220	63.60	39.90
4	*5180.00	92.9 AV			1.05 H	220	53.00	39.90
5	#6906.00	65.1 PK	68.2	-3.1	1.35 H	240	52.90	12.20
6	#10360.00	60.7 PK	74.0	-13.3	1.15 H	121	42.00	18.70
7	#10360.00	47.7 AV	54.0	-6.3	1.15 H	121	29.00	18.70
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	61.7 PK	74.0	-12.3	1.00 V	168	55.30	6.40
2	5150.00	47.0 AV	54.0	-7.0	1.00 V	168	40.60	6.40
3	*5180.00	112.9 PK			1.00 V	356	73.00	39.90
4	*5180.00	102.2 AV			1.00 V	356	62.30	39.90
5	**#6906.00**	**67.1 PK**	**68.2**	**-1.1**	**1.95 V**	**176**	**54.90**	**12.20**
6	#10360.00	61.6 PK	74.0	-12.4	1.13 V	221	42.90	18.70
7	#10360.00	48.6 AV	54.0	-5.4	1.13 V	221	29.90	18.70

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.

CHANNEL	TX Channel 40	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*5200.00	107.5 PK			1.05 H	220	67.50	40.00
2	*5200.00	96.7 AV			1.05 H	220	56.70	40.00
3	#6933.00	63.9 PK	68.2	-4.3	1.41 H	241	51.50	12.40
4	#10400.00	61.4 PK	74.0	-12.6	1.16 H	180	42.40	19.00
5	#10400.00	48.0 AV	54.0	-6.0	1.16 H	180	29.00	19.00
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	*5200.00	115.6 PK			1.13 V	327	75.60	40.00
2	*5200.00	104.8 AV			1.13 V	327	64.80	40.00
3	#6933.00	66.6 PK	68.2	-1.6	2.15 V	204	54.20	12.40
4	#10400.00	62.1 PK	74.0	-11.9	1.06 V	90	43.10	19.00
5	#10400.00	49.0 AV	54.0	-5.0	1.06 V	90	30.00	19.00

REMARKS:

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

CHANNEL	TX Channel 48	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*5240.00	110.9 PK			1.03 H	219	70.90	40.00
2	*5240.00	100.5 AV			1.03 H	219	60.50	40.00
3	5350.00	59.0 PK	74.0	-15.0	1.08 H	162	52.60	6.40
4	5350.00	45.8 AV	54.0	-8.2	1.08 H	162	39.40	6.40
5	#6986.00	61.8 PK	68.2	-6.4	1.40 H	241	49.10	12.70
6	#10480.00	61.2 PK	74.0	-12.8	1.11 H	228	42.00	19.20
7	#10480.00	48.3 AV	54.0	-5.7	1.11 H	228	29.10	19.20
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	*5240.00	118.4 PK			1.12 V	331	78.40	40.00
2	*5240.00	108.2 AV			1.12 V	331	68.20	40.00
3	5350.00	59.6 PK	74.0	-14.4	1.34 V	90	53.20	6.40
4	5350.00	47.4 AV	54.0	-6.6	1.34 V	90	41.00	6.40
5	#6986.00	63.4 PK	68.2	-4.8	2.27 V	179	50.70	12.70
6	#10480.00	62.4 PK	74.0	-11.6	1.21 V	168	43.20	19.20
7	#10480.00	49.7 AV	54.0	-4.3	1.21 V	168	30.50	19.20

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)

CHANNEL	TX Channel 36	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	57.5 PK	74.0	-16.5	1.11 H	204	51.10	6.40
2	5150.00	45.9 AV	54.0	-8.1	1.11 H	204	39.50	6.40
3	*5180.00	102.9 PK			1.00 H	199	63.00	39.90
4	*5180.00	92.9 AV			1.00 H	199	53.00	39.90
5	#6906.00	65.2 PK	68.2	-3.0	1.38 H	244	53.00	12.20
6	#10360.00	60.5 PK	74.0	-13.5	1.19 H	122	41.80	18.70
7	#10360.00	47.4 AV	54.0	-6.6	1.19 H	122	28.70	18.70
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	61.1 PK	74.0	-12.9	1.00 V	167	54.70	6.40
2	5150.00	47.4 AV	54.0	-6.6	1.00 V	167	41.00	6.40
3	*5180.00	112.1 PK			1.00 V	355	72.20	39.90
4	*5180.00	101.6 AV			1.00 V	355	61.70	39.90
5	#6906.00	66.4 PK	68.2	-1.8	1.92 V	175	54.20	12.20
6	#10360.00	61.1 PK	74.0	-12.9	1.16 V	202	42.40	18.70
7	#10360.00	48.2 AV	54.0	-5.8	1.16 V	202	29.50	18.70

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.

CHANNEL	TX Channel 40	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*5200.00	104.3 PK			1.09 H	196	64.30	40.00
2	*5200.00	94.3 AV			1.09 H	196	54.30	40.00
3	#6933.00	63.4 PK	68.2	-4.8	1.39 H	243	51.00	12.40
4	#10400.00	61.2 PK	74.0	-12.8	1.20 H	192	42.20	19.00
5	#10400.00	47.8 AV	54.0	-6.2	1.20 H	192	28.80	19.00
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	*5200.00	115.3 PK			1.10 V	332	75.30	40.00
2	*5200.00	104.8 AV			1.10 V	332	64.80	40.00
3	#6933.00	66.4 PK	68.2	-1.8	2.15 V	205	54.00	12.40
4	#10400.00	61.7 PK	74.0	-12.3	1.08 V	105	42.70	19.00
5	#10400.00	48.8 AV	54.0	-5.2	1.08 V	105	29.80	19.00

REMARKS:

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

CHANNEL	TX Channel 48	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*5240.00	111.1 PK			1.05 H	218	71.10	40.00
2	*5240.00	101.1 AV			1.05 H	218	61.10	40.00
3	5350.00	58.5 PK	74.0	-15.5	1.07 H	233	52.10	6.40
4	5350.00	47.2 AV	54.0	-6.8	1.07 H	233	40.80	6.40
5	#6986.00	61.1 PK	68.2	-7.1	1.36 H	254	48.40	12.70
6	#10480.00	61.2 PK	74.0	-12.8	1.09 H	76	42.00	19.20
7	#10480.00	48.1 AV	54.0	-5.9	1.09 H	76	28.90	19.20
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	*5240.00	119.3 PK			1.00 V	357	79.30	40.00
2	*5240.00	108.9 AV			1.00 V	357	68.90	40.00
3	5350.00	62.0 PK	74.0	-12.0	1.10 V	288	55.60	6.40
4	5350.00	49.5 AV	54.0	-4.5	1.10 V	288	43.10	6.40
5	#6986.00	63.5 PK	68.2	-4.7	2.29 V	178	50.80	12.70
6	#10480.00	61.7 PK	74.0	-12.3	1.29 V	188	42.50	19.20
7	#10480.00	48.8 AV	54.0	-5.2	1.29 V	188	29.60	19.20

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)

CHANNEL	TX Channel 38	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	57.5 PK	74.0	-16.5	1.09 H	185	51.10	6.40
2	5150.00	45.4 AV	54.0	-8.6	1.09 H	185	39.00	6.40
3	*5190.00	98.3 PK			1.00 H	200	58.40	39.90
4	*5190.00	88.3 AV			1.00 H	200	48.40	39.90
5	#6920.00	62.3 PK	68.2	-5.9	1.40 H	218	50.00	12.30
6	#10380.00	59.8 PK	74.0	-14.2	1.02 H	134	41.00	18.80
7	#10380.00	46.8 AV	54.0	-7.2	1.02 H	134	28.00	18.80
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	60.2 PK	74.0	-13.8	1.00 V	166	53.80	6.40
2	5150.00	47.1 AV	54.0	-6.9	1.00 V	166	40.70	6.40
3	*5190.00	106.2 PK			1.00 V	355	66.30	39.90
4	*5190.00	96.7 AV			1.00 V	355	56.80	39.90
5	#6920.00	66.3 PK	68.2	-1.9	2.16 V	178	54.00	12.30
6	#10380.00	60.1 PK	74.0	-13.9	1.22 V	324	41.30	18.80
7	#10380.00	47.0 AV	54.0	-7.0	1.22 V	324	28.20	18.80

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.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	106.0 PK			1.00 H	198	66.00	40.00
2	*5230.00	95.9 AV			1.00 H	198	55.90	40.00
3	5350.00	58.0 PK	74.0	-16.0	1.26 H	91	51.60	6.40
4	5350.00	46.2 AV	54.0	-7.8	1.26 H	91	39.80	6.40
5	#6973.00	61.6 PK	68.2	-6.6	1.34 H	208	48.90	12.70
6	#10460.00	60.1 PK	74.0	-13.9	1.05 H	226	41.00	19.10
7	#10460.00	47.0 AV	54.0	-7.0	1.05 H	226	27.90	19.10
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	*5230.00	116.3 PK			1.00 V	355	76.30	40.00
2	*5230.00	105.6 AV			1.00 V	355	65.60	40.00
3	5350.00	58.7 PK	74.0	-15.3	1.06 V	201	52.30	6.40
4	5350.00	46.5 AV	54.0	-7.5	1.06 V	201	40.10	6.40
5	#6973.00	63.4 PK	68.2	-4.8	2.14 V	178	50.70	12.70
6	#10460.00	60.4 PK	74.0	-13.6	1.15 V	176	41.30	19.10
7	#10460.00	47.3 AV	54.0	-6.7	1.15 V	176	28.20	19.10

REMARKS:

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

802.11ac (80MHz)

CHANNEL	TX Channel 42	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	57.6 PK	74.0	-16.4	1.33 H	118	51.20	6.40
2	5150.00	44.6 AV	54.0	-9.4	1.33 H	118	38.20	6.40
3	*5210.00	92.0 PK			1.00 H	174	52.00	40.00
4	*5210.00	79.4 AV			1.00 H	174	39.40	40.00
5	#6946.00	58.7 PK	68.2	-9.5	1.48 H	161	46.20	12.50
6	#10420.00	59.6 PK	74.0	-14.4	1.35 H	70	40.70	18.90
7	#10420.00	46.4 AV	54.0	-7.6	1.35 H	70	27.50	18.90
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	5150.00	64.3 PK	74.0	-9.7	1.00 V	193	57.90	6.40
2	5150.00	52.3 AV	54.0	-1.7	1.00 V	193	45.90	6.40
3	*5210.00	102.8 PK			1.00 V	166	62.80	40.00
4	*5210.00	90.7 AV			1.00 V	166	50.70	40.00
5	#6946.00	58.0 PK	68.2	-10.2	1.00 V	324	45.50	12.50
6	#10420.00	59.4 PK	74.0	-14.6	1.08 V	98	40.50	18.90
7	#10420.00	46.4 AV	54.0	-7.6	1.08 V	98	27.50	18.90

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

802.11a

CHANNEL	TX Channel 149	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	#5714.00	59.1 PK	74.0	-14.9	1.20 H	207	52.10	7.00
2	#5714.00	46.5 AV	54.0	-7.5	1.20 H	207	39.50	7.00
3	#5722.00	69.6 PK	78.2	-8.6	1.16 H	207	62.60	7.00
4	#5725.00	69.1 PK	78.2	-9.1	1.16 H	207	62.00	7.10
5	*5745.00	106.4 PK			1.14 H	207	65.80	40.60
6	*5745.00	95.9 AV			1.14 H	207	55.30	40.60
7	11490.00	59.5 PK	74.0	-14.5	1.15 H	120	42.20	17.30
8	11490.00	46.4 AV	54.0	-7.6	1.15 H	120	29.10	17.30
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	#5714.00	70.2 PK	74.0	-3.8	1.00 V	0	63.20	7.00
2	#5714.00	51.2 AV	54.0	-2.8	1.00 V	0	44.20	7.00
3	#5722.00	76.4 PK	78.2	-1.8	1.00 V	355	69.40	7.00
4	#5725.00	73.9 PK	78.2	-4.3	1.00 V	348	66.80	7.10
5	*5745.00	116.5 PK			1.00 V	335	75.90	40.60
6	*5745.00	106.1 AV			1.00 V	335	65.50	40.60
7	11490.00	60.0 PK	74.0	-14.0	1.26 V	333	42.70	17.30
8	11490.00	46.9 AV	54.0	-7.1	1.26 V	333	29.60	17.30

REMARKS:

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

CHANNEL	TX Channel 157	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*5785.00	111.3 PK			1.32 H	268	70.60	40.70
2	*5785.00	100.8 AV			1.32 H	268	60.10	40.70
3	11570.00	60.1 PK	74.0	-13.9	1.16 H	200	42.70	17.40
4	11570.00	47.0 AV	54.0	-7.0	1.16 H	200	29.60	17.40
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	118.9 PK			1.00 V	3	78.20	40.70
2	*5785.00	108.5 AV			1.00 V	3	67.80	40.70
3	11570.00	60.9 PK	74.0	-13.1	1.36 V	2	43.50	17.40
4	11570.00	47.9 AV	54.0	-6.1	1.36 V	2	30.50	17.40

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	108.8 PK			1.25 H	224	68.10	40.70
2	*5825.00	98.4 AV			1.25 H	224	57.70	40.70
3	#5850.00	61.0 PK	78.2	-17.2	1.48 H	220	54.00	7.00
4	#5853.00	61.7 PK	78.2	-16.5	1.50 H	220	54.60	7.10
5	#5861.00	59.8 PK	74.0	-14.2	1.48 H	218	52.70	7.10
6	#5861.00	46.6 AV	54.0	-7.4	1.48 H	218	39.50	7.10
7	11650.00	60.2 PK	74.0	-13.8	1.23 H	202	42.40	17.80
8	11650.00	47.3 AV	54.0	-6.7	1.23 H	202	29.50	17.80
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	*5825.00	116.6 PK			1.08 V	343	75.90	40.70
2	*5825.00	105.9 AV			1.08 V	343	65.20	40.70
3	#5850.00	67.4 PK	78.2	-10.8	1.00 V	0	60.40	7.00
4	#5853.00	68.9 PK	78.2	-9.3	1.01 V	5	61.80	7.10
5	#5861.00	65.8 PK	74.0	-8.2	1.00 V	3	58.70	7.10
6	#5861.00	50.2 AV	54.0	-3.8	1.00 V	3	43.10	7.10
7	11650.00	61.2 PK	74.0	-12.8	1.33 V	172	43.40	17.80
8	11650.00	48.2 AV	54.0	-5.8	1.33 V	172	30.40	17.80

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.

802.11n (20MHz)

CHANNEL	TX Channel 149	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	#5714.00	60.3 PK	74.0	-13.7	1.00 H	189	53.30	7.00
2	#5714.00	47.1 AV	54.0	-6.9	1.00 H	189	40.10	7.00
3	#5722.00	70.2 PK	78.2	-8.0	1.00 H	191	63.20	7.00
4	*5745.00	106.8 PK			1.00 H	189	66.20	40.60
5	*5745.00	96.8 AV			1.00 H	189	56.20	40.60
6	#5825.00	70.1 PK	78.2	-8.1	1.00 H	189	63.00	7.10
7	11490.00	60.6 PK	74.0	-13.4	1.17 H	125	41.90	18.70
8	11490.00	47.6 AV	54.0	-6.4	1.17 H	125	28.90	18.70
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	#5714.00	68.2 PK	74.0	-5.8	1.00 V	359	61.20	7.00
2	#5714.00	49.8 AV	54.0	-4.2	1.00 V	359	42.80	7.00
3	#5722.00	76.4 PK	78.2	-1.8	1.00 V	348	69.40	7.00
4	#5725.00	75.7 PK	78.2	-2.5	1.00 V	358	68.60	7.10
5	*5745.00	115.9 PK			1.00 V	340	75.30	40.60
6	*5745.00	105.7 AV			1.00 V	340	65.10	40.60
7	11490.00	60.8 PK	74.0	-13.2	1.26 V	340	42.10	18.70
8	11490.00	47.9 AV	54.0	-6.1	1.26 V	340	29.20	18.70

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.

CHANNEL	TX Channel 157	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*5785.00	111.4 PK			1.55 H	259	70.70	40.70
2	*5785.00	101.1 AV			1.55 H	259	60.40	40.70
3	11570.00	61.2 PK	74.0	-12.8	1.16 H	200	42.40	18.80
4	11570.00	48.1 AV	54.0	-5.9	1.16 H	200	29.30	18.80
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	*5785.00	118.1 PK			1.00 V	357	77.40	40.70
2	*5785.00	107.9 AV			1.00 V	357	67.20	40.70
3	11570.00	61.8 PK	74.0	-12.2	1.38 V	359	43.00	18.80
4	11570.00	48.9 AV	54.0	-5.1	1.38 V	359	30.10	18.80

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	110.5 PK			1.54 H	257	69.80	40.70
2	*5825.00	99.9 AV			1.54 H	257	59.20	40.70
3	#5850.00	67.5 PK	78.2	-10.7	1.54 H	254	60.50	7.00
4	#5853.00	68.7 PK	78.2	-9.5	1.54 H	254	61.60	7.10
5	#5861.00	60.7 PK	74.0	-13.3	1.54 H	255	53.60	7.10
6	#5861.00	47.5 AV	54.0	-6.5	1.54 H	255	40.40	7.10
7	11650.00	61.3 PK	74.0	-12.7	1.21 H	212	42.10	19.20
8	11650.00	48.5 AV	54.0	-5.5	1.21 H	212	29.30	19.20
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	*5825.00	118.3 PK			1.00 V	338	77.60	40.70
2	*5825.00	108.1 AV			1.00 V	338	67.40	40.70
3	#5850.00	74.4 PK	78.2	-3.8	1.00 V	350	67.40	7.00
4	#5853.00	75.6 PK	78.2	-2.6	1.00 V	350	68.50	7.10
5	#5861.00	62.7 PK	74.0	-11.3	1.00 V	350	55.60	7.10
6	#5861.00	50.3 AV	54.0	-3.7	1.00 V	350	43.20	7.10
7	11650.00	62.2 PK	74.0	-11.8	1.35 V	170	43.00	19.20
8	11650.00	49.3 AV	54.0	-4.7	1.35 V	170	30.10	19.20

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)

CHANNEL	TX Channel 151	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	#5714.00	58.2 PK	74.0	-15.8	1.00 H	177	51.20	7.00
2	#5714.00	46.1 AV	54.0	-7.9	1.00 H	177	39.10	7.00
3	#5722.00	61.7 PK	78.2	-16.5	1.00 H	149	54.70	7.00
4	#5725.00	54.6 PK	78.2	-23.6	1.00 H	360	47.50	7.10
5	*5755.00	100.2 PK			1.00 H	306	59.50	40.70
6	*5755.00	90.2 AV			1.00 H	306	49.50	40.70
7	11510.00	59.0 PK	74.0	-15.0	1.15 H	213	40.30	18.70
8	11510.00	46.8 AV	54.0	-7.2	1.15 H	213	28.10	18.70
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	#5714.00	68.0 PK	74.0	-6.0	1.01 V	174	61.00	7.00
2	#5714.00	52.6 AV	54.0	-1.4	1.01 V	174	45.60	7.00
3	**#5722.00**	**77.1 PK**	**78.2**	**-1.1**	**1.00 V**	**166**	**70.10**	**7.00**
4	#5725.00	65.2 PK	78.2	-13.0	1.00 V	164	58.10	7.10
5	*5755.00	111.0 PK			1.00 V	165	70.30	40.70
6	*5755.00	100.7 AV			1.00 V	165	60.00	40.70
7	11510.00	60.0 PK	74.0	-14.0	1.15 V	85	41.30	18.70
8	11510.00	46.8 AV	54.0	-7.2	1.15 V	85	28.10	18.70

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.

CHANNEL	TX Channel 159	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*5795.00	104.5 PK			1.00 H	303	63.80	40.70
2	*5795.00	94.3 AV			1.00 H	303	53.60	40.70
3	#5850.00	45.4 PK	78.2	-32.8	1.02 H	268	38.40	7.00
4	#5853.00	57.3 PK	78.2	-20.9	1.02 H	280	50.20	7.10
5	#5861.00	57.3 PK	74.0	-16.7	1.16 H	47	50.20	7.10
6	#5861.00	44.7 AV	54.0	-9.3	1.16 H	47	37.60	7.10
7	11590.00	59.2 PK	74.0	-14.8	1.11 H	294	40.30	18.90
8	11590.00	46.9 AV	54.0	-7.1	1.11 H	294	28.00	18.90
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	*5795.00	114.3 PK			1.00 V	1	73.60	40.70
2	*5795.00	104.3 AV			1.00 V	1	63.60	40.70
3	#5850.00	51.4 PK	78.2	-26.8	1.10 V	186	44.40	7.00
4	#5853.00	64.4 PK	78.2	-13.8	1.10 V	177	57.30	7.10
5	#5861.00	64.0 PK	74.0	-10.0	1.00 V	191	56.90	7.10
6	#5861.00	49.0 AV	54.0	-5.0	1.00 V	191	41.90	7.10
7	11590.00	59.5 PK	74.0	-14.5	1.10 V	70	40.60	18.90
8	11590.00	46.9 AV	54.0	-7.1	1.10 V	70	28.00	18.90

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

802.11ac (80MHz)

CHANNEL	TX Channel 155	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	#5714.00	58.6 PK	74.0	-15.4	1.00 H	164	51.60	7.00
2	#5714.00	46.4 AV	54.0	-7.6	1.00 H	164	39.40	7.00
3	#5722.00	62.8 PK	78.2	-15.4	1.22 H	173	55.80	7.00
4	#5725.00	51.8 PK	78.2	-26.4	1.21 H	169	44.70	7.10
5	*5775.00	92.1 PK			1.00 H	305	51.40	40.70
6	*5775.00	81.2 AV			1.00 H	305	40.50	40.70
7	#5850.00	45.5 PK	78.2	-32.7	1.17 H	98	38.50	7.00
8	#5853.00	56.7 PK	78.2	-21.5	1.05 H	104	49.60	7.10
9	#5861.00	57.2 PK	74.0	-16.8	1.17 H	140	50.10	7.10
10	#5861.00	44.1 AV	54.0	-9.9	1.17 H	140	37.00	7.10
11	11550.00	58.7 PK	74.0	-15.3	1.13 H	264	40.00	18.70
12	11550.00	46.3 AV	54.0	-7.7	1.13 H	264	27.60	18.70
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	#5714.00	67.9 PK	74.0	-6.1	1.00 V	9	60.90	7.00
2	#5714.00	52.7 AV	54.0	-1.3	1.00 V	9	45.70	7.00
3	#5722.00	75.4 PK	78.2	-2.8	1.00 V	167	68.40	7.00
4	#5725.00	63.2 PK	78.2	-15.0	1.00 V	163	56.10	7.10
5	*5775.00	101.8 PK			1.00 V	189	61.10	40.70
6	*5775.00	91.1 AV			1.00 V	189	50.40	40.70
7	#5850.00	45.6 PK	78.2	-32.6	1.38 V	44	38.60	7.00
8	#5853.00	44.7 PK	78.2	-33.5	1.23 V	41	37.60	7.10
9	#5861.00	57.2 PK	74.0	-16.8	1.14 V	120	50.10	7.10
10	#5861.00	44.5 AV	54.0	-9.5	1.14 V	120	37.40	7.10
11	11550.00	59.4 PK	74.0	-14.6	1.02 V	278	40.70	18.70
12	11550.00	46.1 AV	54.0	-7.9	1.02 V	278	27.40	18.70

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.

802.11a

CHANNEL	TX Channel 36	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	57.0 PK	74.0	-17.0	1.10 H	222	50.60	6.40
2	5150.00	45.0 AV	54.0	-9.0	1.10 H	222	38.60	6.40
3	*5180.00	104.8 PK			1.00 H	141	64.90	39.90
4	*5180.00	92.5 AV			1.00 H	141	52.60	39.90
5	#6906.00	58.4 PK	68.2	-9.8	1.19 H	211	46.20	12.20
6	#10360.00	59.9 PK	74.0	-14.1	1.14 H	134	41.20	18.70
7	#10360.00	46.7 AV	54.0	-7.3	1.14 H	134	28.00	18.70
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	64.7 PK	74.0	-9.3	1.01 V	170	58.30	6.40
2	5150.00	47.7 AV	54.0	-6.3	1.01 V	170	41.30	6.40
3	*5180.00	113.3 PK			1.01 V	167	73.40	39.90
4	*5180.00	101.5 AV			1.01 V	167	61.60	39.90
5	#6906.00	66.9 PK	68.2	-1.3	1.00 V	180	54.70	12.20
6	#10360.00	59.5 PK	74.0	-14.5	1.21 V	88	40.80	18.70
7	#10360.00	46.7 AV	54.0	-7.3	1.21 V	88	28.00	18.70

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.

CHANNEL	TX Channel 40	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*5200.00	106.1 PK			1.00 H	139	66.10	40.00
2	*5200.00	93.9 AV			1.00 H	139	53.90	40.00
3	#6933.00	56.4 PK	68.2	-11.8	1.00 H	172	44.00	12.40
4	#10400.00	60.0 PK	74.0	-14.0	1.10 H	72	41.00	19.00
5	#10400.00	47.3 AV	54.0	-6.7	1.10 H	72	28.30	19.00
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	*5200.00	116.2 PK			1.00 V	167	76.20	40.00
2	*5200.00	103.9 AV			1.00 V	167	63.90	40.00
3	#6933.00	66.6 PK	68.2	-1.6	1.10 V	179	54.20	12.40
4	#10400.00	60.6 PK	74.0	-13.4	1.06 V	88	41.60	19.00
5	#10400.00	47.2 AV	54.0	-6.8	1.06 V	88	28.20	19.00

REMARKS:

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

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	104.7 PK			1.00 H	151	64.70	40.00
2	*5240.00	92.8 AV			1.00 H	151	52.80	40.00
3	5350.00	57.2 PK	74.0	-16.8	1.30 H	294	50.80	6.40
4	5350.00	44.7 AV	54.0	-9.3	1.30 H	294	38.30	6.40
5	#6986.00	54.7 PK	68.2	-13.5	1.19 H	253	42.00	12.70
6	#10480.00	60.4 PK	74.0	-13.6	1.10 H	76	41.20	19.20
7	#10480.00	47.8 AV	54.0	-6.2	1.10 H	76	28.60	19.20
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	*5240.00	114.1 PK			1.00 V	166	74.10	40.00
2	*5240.00	101.6 AV			1.00 V	166	61.60	40.00
3	5350.00	60.1 PK	74.0	-13.9	1.41 V	149	53.70	6.40
4	5350.00	47.8 AV	54.0	-6.2	1.41 V	149	41.40	6.40
5	#6986.00	61.5 PK	68.2	-6.7	1.00 V	180	48.80	12.70
6	#10480.00	60.3 PK	74.0	-13.7	1.09 V	168	41.10	19.20
7	#10480.00	48.1 AV	54.0	-5.9	1.09 V	168	28.90	19.20

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)

CHANNEL	TX Channel 36	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	57.3 PK	74.0	-16.7	1.19 H	45	50.90	6.40
2	5150.00	44.7 AV	54.0	-9.3	1.19 H	45	38.30	6.40
3	*5180.00	103.1 PK			1.07 H	209	63.20	39.90
4	*5180.00	91.5 AV			1.07 H	209	51.60	39.90
5	#6906.00	58.4 PK	68.2	-9.8	1.20 H	210	46.20	12.20
6	#10360.00	59.8 PK	74.0	-14.2	1.08 H	145	41.10	18.70
7	#10360.00	46.3 AV	54.0	-7.7	1.08 H	145	27.60	18.70
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	65.4 PK	74.0	-8.6	1.12 V	172	59.00	6.40
2	5150.00	47.8 AV	54.0	-6.2	1.12 V	172	41.40	6.40
3	*5180.00	112.1 PK			1.12 V	167	72.20	39.90
4	*5180.00	99.9 AV			1.12 V	167	60.00	39.90
5	#6906.00	66.5 PK	68.2	-1.7	1.21 V	175	54.30	12.20
6	#10360.00	58.5 PK	74.0	-15.5	1.24 V	228	39.80	18.70
7	#10360.00	46.2 AV	54.0	-7.8	1.24 V	228	27.50	18.70

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.

CHANNEL	TX Channel 40	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*5200.00	103.4 PK			1.00 H	153	63.40	40.00
2	*5200.00	91.3 AV			1.00 H	153	51.30	40.00
3	#6933.00	59.0 PK	68.2	-9.2	1.32 H	312	46.60	12.40
4	#10400.00	59.7 PK	74.0	-14.3	1.11 H	152	40.70	19.00
5	#10400.00	47.4 AV	54.0	-6.6	1.11 H	152	28.40	19.00
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	*5200.00	113.3 PK			1.11 V	167	73.30	40.00
2	*5200.00	100.6 AV			1.11 V	167	60.60	40.00
3	#6933.00	66.6 PK	68.2	-1.6	1.00 V	174	54.20	12.40
4	#10400.00	59.8 PK	74.0	-14.2	1.09 V	110	40.80	19.00
5	#10400.00	47.5 AV	54.0	-6.5	1.09 V	110	28.50	19.00

REMARKS:

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

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	104.2 PK			1.00 H	148	64.20	40.00
2	*5240.00	92.3 AV			1.00 H	148	52.30	40.00
3	5350.00	57.6 PK	74.0	-16.4	1.19 H	332	51.20	6.40
4	5350.00	44.8 AV	54.0	-9.2	1.19 H	332	38.40	6.40
5	#6986.00	54.8 PK	68.2	-13.4	1.10 H	208	42.10	12.70
6	#10480.00	59.8 PK	74.0	-14.2	1.12 H	94	40.60	19.20
7	#10480.00	47.2 AV	54.0	-6.8	1.12 H	94	28.00	19.20
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	*5240.00	114.3 PK			1.11 V	166	74.30	40.00
2	*5240.00	101.8 AV			1.11 V	166	61.80	40.00
3	5350.00	60.8 PK	74.0	-13.2	1.07 V	169	54.40	6.40
4	5350.00	48.2 AV	54.0	-5.8	1.07 V	169	41.80	6.40
5	#6986.00	59.7 PK	68.2	-8.5	1.00 V	152	47.00	12.70
6	#10480.00	60.3 PK	74.0	-13.7	1.09 V	56	41.10	19.20
7	#10480.00	47.5 AV	54.0	-6.5	1.09 V	56	28.30	19.20

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)

CHANNEL	TX Channel 38	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	57.6 PK	74.0	-16.4	1.09 H	305	51.20	6.40
2	5150.00	46.0 AV	54.0	-8.0	1.09 H	305	39.60	6.40
3	*5190.00	99.9 PK			1.08 H	316	60.00	39.90
4	*5190.00	89.5 AV			1.08 H	316	49.60	39.90
5	#6920.00	60.1 PK	68.2	-8.1	1.41 H	285	47.80	12.30
6	#10380.00	60.5 PK	74.0	-13.5	1.21 H	270	41.70	18.80
7	#10380.00	46.8 AV	54.0	-7.2	1.21 H	270	28.00	18.80
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	67.1 PK	74.0	-6.9	1.00 V	168	60.70	6.40
2	5150.00	51.8 AV	54.0	-2.2	1.00 V	168	45.40	6.40
3	*5190.00	108.1 PK			1.34 V	42	68.20	39.90
4	*5190.00	97.5 AV			1.34 V	42	57.60	39.90
5	#6920.00	66.5 PK	68.2	-1.7	1.00 V	8	54.20	12.30
6	#10380.00	60.8 PK	74.0	-13.2	1.16 V	112	42.00	18.80
7	#10380.00	47.5 AV	54.0	-6.5	1.16 V	112	28.70	18.80

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.

CHANNEL	TX Channel 46	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	102.3 PK			1.09 H	33	62.30	40.00
2	*5230.00	92.4 AV			1.09 H	33	52.40	40.00
3	5350.00	58.2 PK	74.0	-15.8	1.10 H	36	51.80	6.40
4	5350.00	45.9 AV	54.0	-8.1	1.10 H	36	39.50	6.40
5	#6973.00	57.9 PK	68.2	-10.3	1.42 H	285	45.20	12.70
6	#10460.00	60.8 PK	74.0	-13.2	1.23 H	285	41.70	19.10
7	#10460.00	47.5 AV	54.0	-6.5	1.23 H	285	28.40	19.10
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	*5230.00	111.9 PK			1.34 V	41	71.90	40.00
2	*5230.00	100.8 AV			1.34 V	41	60.80	40.00
3	5350.00	58.5 PK	74.0	-15.5	1.28 V	133	52.10	6.40
4	5350.00	47.3 AV	54.0	-6.7	1.28 V	133	40.90	6.40
5	#6973.00	62.4 PK	68.2	-5.8	1.68 V	309	49.70	12.70
6	#10460.00	61.0 PK	74.0	-13.0	1.06 V	200	41.90	19.10
7	#10460.00	47.8 AV	54.0	-6.2	1.06 V	200	28.70	19.10

REMARKS:

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

802.11ac (80MHz)

CHANNEL	TX Channel 42	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	59.5 PK	74.0	-14.5	1.00 H	175	53.10	6.40
2	5150.00	46.2 AV	54.0	-7.8	1.00 H	175	39.80	6.40
3	*5210.00	93.9 PK			1.00 H	159	53.90	40.00
4	*5210.00	83.1 AV			1.00 H	159	43.10	40.00
5	#6946.00	53.7 PK	68.2	-14.5	1.00 H	59	41.20	12.50
6	#10420.00	58.5 PK	74.0	-15.5	1.08 H	69	39.60	18.90
7	#10420.00	45.2 AV	54.0	-8.8	1.08 H	69	26.30	18.90
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	5150.00	67.2 PK	74.0	-6.8	1.13 V	183	60.80	6.40
2	5150.00	52.6 AV	54.0	-1.4	1.13 V	183	46.20	6.40
3	*5210.00	101.9 PK			1.00 V	149	61.90	40.00
4	*5210.00	91.0 AV			1.00 V	149	51.00	40.00
5	#6946.00	58.9 PK	68.2	-9.3	1.59 V	295	46.40	12.50
6	#10420.00	58.8 PK	74.0	-15.2	1.12 V	143	39.90	18.90
7	#10420.00	46.4 AV	54.0	-7.6	1.12 V	143	27.50	18.90

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

802.11a

CHANNEL	TX Channel 149	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.00	57.4 PK	74.0	-16.6	1.00 H	202	50.40	7.00
2	#5714.00	46.5 AV	54.0	-7.5	1.00 H	202	39.50	7.00
3	#5722.00	67.2 PK	78.2	-11.0	1.00 H	203	60.20	7.00
4	#5725.00	69.9 PK	78.2	-8.3	1.00 H	205	62.80	7.10
5	*5745.00	103.5 PK			1.17 H	45	62.90	40.60
6	*5745.00	93.5 AV			1.17 H	45	52.90	40.60
7	11490.00	60.4 PK	74.0	-13.6	1.13 H	324	41.70	18.70
8	11490.00	47.4 AV	54.0	-6.6	1.13 H	324	28.70	18.70
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	#5714.00	67.9 PK	74.0	-6.1	1.12 V	165	60.90	7.00
2	#5714.00	50.9 AV	54.0	-3.1	1.12 V	165	43.90	7.00
3	#5722.00	77.0 PK	78.2	-1.2	1.21 V	32	70.00	7.00
4	#5725.00	76.0 PK	78.2	-2.2	1.15 V	167	68.90	7.10
5	*5745.00	115.7 PK			1.00 V	165	75.10	40.60
6	*5745.00	104.3 AV			1.00 V	165	63.70	40.60
7	11490.00	61.3 PK	74.0	-12.7	1.33 V	19	42.60	18.70
8	11490.00	48.3 AV	54.0	-5.7	1.33 V	19	29.60	18.70

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.

CHANNEL	TX Channel 157	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*5785.00	106.1 PK			1.05 H	176	65.40	40.70
2	*5785.00	96.0 AV			1.05 H	176	55.30	40.70
3	11570.00	60.7 PK	74.0	-13.3	1.19 H	102	41.90	18.80
4	11570.00	47.6 AV	54.0	-6.4	1.19 H	102	28.80	18.80
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	*5785.00	116.0 PK			1.00 V	165	75.30	40.70
2	*5785.00	105.7 AV			1.00 V	165	65.00	40.70
3	11570.00	64.1 PK	74.0	-9.9	1.62 V	168	45.30	18.80
4	11570.00	51.4 AV	54.0	-2.6	1.62 V	168	32.60	18.80

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	104.0 PK			1.00 H	191	63.30	40.70
2	*5825.00	93.4 AV			1.00 H	191	52.70	40.70
3	#5850.00	59.0 PK	78.2	-19.2	1.10 H	193	52.00	7.00
4	#5853.00	58.4 PK	78.2	-19.8	1.00 H	190	51.30	7.10
5	#5861.00	57.1 PK	74.0	-16.9	1.00 H	200	50.00	7.10
6	#5861.00	45.9 AV	54.0	-8.1	1.00 H	200	38.80	7.10
7	11650.00	60.4 PK	74.0	-13.6	1.16 H	325	41.20	19.20
8	11650.00	47.6 AV	54.0	-6.4	1.16 H	325	28.40	19.20
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	*5825.00	114.2 PK			1.00 V	165	73.50	40.70
2	*5825.00	104.2 AV			1.00 V	165	63.50	40.70
3	#5850.00	67.3 PK	78.2	-10.9	1.10 V	164	60.30	7.00
4	#5853.00	67.8 PK	78.2	-10.4	1.10 V	167	60.70	7.10
5	#5861.00	63.4 PK	74.0	-10.6	1.10 V	164	56.30	7.10
6	#5861.00	51.1 AV	54.0	-2.9	1.10 V	164	44.00	7.10
7	11650.00	60.6 PK	74.0	-13.4	1.35 V	25	41.40	19.20
8	11650.00	47.9 AV	54.0	-6.1	1.35 V	25	28.70	19.20

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)

CHANNEL	TX Channel 149	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	#5714.00	59.7 PK	74.0	-14.3	1.00 H	199	52.70	7.00
2	#5714.00	48.0 AV	54.0	-6.0	1.00 H	199	41.00	7.00
3	#5722.00	66.7 PK	78.2	-11.5	1.00 H	201	59.70	7.00
4	#5725.00	70.4 PK	78.2	-7.8	1.00 H	201	63.30	7.10
5	*5745.00	101.4 PK			1.00 H	200	60.80	40.60
6	*5745.00	90.9 AV			1.00 H	200	50.30	40.60
7	11490.00	59.4 PK	74.0	-14.6	1.18 H	186	40.70	18.70
8	11490.00	47.1 AV	54.0	-6.9	1.18 H	186	28.40	18.70
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	#5714.00	65.4 PK	74.0	-8.6	1.21 V	40	58.40	7.00
2	#5714.00	49.6 AV	54.0	-4.4	1.21 V	40	42.60	7.00
3	#5722.00	76.7 PK	78.2	-1.5	1.21 V	212	69.70	7.00
4	#5725.00	70.7 PK	78.2	-7.5	1.21 V	212	63.60	7.10
5	*5745.00	115.1 PK			1.00 V	165	74.50	40.60
6	*5745.00	103.9 AV			1.00 V	165	63.30	40.60
7	11490.00	59.6 PK	74.0	-14.4	1.28 V	18	40.90	18.70
8	11490.00	47.4 AV	54.0	-6.6	1.28 V	18	28.70	18.70

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.

CHANNEL	TX Channel 157	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	*5785.00	106.0 PK			1.10 H	63	65.30	40.70
2	*5785.00	95.4 AV			1.10 H	63	54.70	40.70
3	11570.00	60.9 PK	74.0	-13.1	1.17 H	61	42.10	18.80
4	11570.00	47.8 AV	54.0	-6.2	1.17 H	61	29.00	18.80
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	*5785.00	115.1 PK			1.00 V	164	74.40	40.70
2	*5785.00	105.0 AV			1.00 V	164	64.30	40.70
3	11570.00	63.1 PK	74.0	-10.9	1.67 V	164	44.30	18.80
4	11570.00	50.4 AV	54.0	-3.6	1.67 V	164	31.60	18.80

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.

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5825.00	102.9 PK			1.00 H	161	62.20	40.70
2	*5825.00	92.9 AV			1.00 H	161	52.20	40.70
3	#5850.00	61.0 PK	78.2	-17.2	1.19 H	163	54.00	7.00
4	#5853.00	62.1 PK	78.2	-16.1	1.19 H	161	55.00	7.10
5	#5861.00	58.6 PK	74.0	-15.4	1.19 H	162	51.50	7.10
6	#5861.00	47.8 AV	54.0	-6.2	1.19 H	162	40.70	7.10
7	11650.00	60.2 PK	74.0	-13.8	1.20 H	333	41.00	19.20
8	11650.00	47.3 AV	54.0	-6.7	1.20 H	333	28.10	19.20
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	*5825.00	113.8 PK			1.00 V	176	73.10	40.70
2	*5825.00	103.7 AV			1.00 V	176	63.00	40.70
3	#5850.00	70.4 PK	78.2	-7.8	1.00 V	177	63.40	7.00
4	#5853.00	71.1 PK	78.2	-7.1	1.00 V	180	64.00	7.10
5	#5861.00	64.4 PK	74.0	-9.6	1.00 V	177	57.30	7.10
6	#5861.00	49.4 AV	54.0	-4.6	1.00 V	177	42.30	7.10
7	11650.00	60.9 PK	74.0	-13.1	1.06 V	186	41.70	19.20
8	11650.00	47.8 AV	54.0	-6.2	1.06 V	186	28.60	19.20

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)

CHANNEL	TX Channel 151	**DETECTOR FUNCTION**	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	#5714.00	60.5 PK	74.0	-13.5	1.00 H	201	53.50	7.00
2	#5714.00	47.3 AV	54.0	-6.7	1.00 H	201	40.30	7.00
3	#5722.00	63.8 PK	78.2	-14.4	1.00 H	202	56.80	7.00
4	#5725.00	66.5 PK	78.2	-11.7	1.00 H	205	59.40	7.10
5	*5755.00	97.0 PK			1.00 H	192	56.30	40.70
6	*5755.00	87.3 AV			1.00 H	192	46.60	40.70
7	11510.00	59.4 PK	74.0	-14.6	1.22 H	192	40.70	18.70
8	11510.00	46.4 AV	54.0	-7.6	1.22 H	192	27.70	18.70
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	#5714.00	67.0 PK	74.0	-7.0	1.22 V	130	60.00	7.00
2	#5714.00	52.4 AV	54.0	-1.6	1.22 V	130	45.40	7.00
3	#5722.00	75.5 PK	78.2	-2.7	1.22 V	133	68.50	7.00
4	#5725.00	72.5 PK	78.2	-5.7	1.21 V	133	65.40	7.10
5	*5755.00	109.6 PK			1.00 V	165	68.90	40.70
6	*5755.00	98.8 AV			1.00 V	165	58.10	40.70
7	11510.00	59.6 PK	74.0	-14.4	1.12 V	26	40.90	18.70
8	11510.00	46.6 AV	54.0	-7.4	1.12 V	26	27.90	18.70

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.

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5795.00	101.2 PK			1.00 H	174	60.50	40.70
2	*5795.00	91.0 AV			1.00 H	174	50.30	40.70
3	#5850.00	60.3 PK	78.2	-17.9	1.00 H	198	53.30	7.00
4	#5853.00	61.5 PK	78.2	-16.7	1.00 H	200	54.40	7.10
5	#5861.00	57.5 PK	74.0	-16.5	1.01 H	200	50.40	7.10
6	#5861.00	46.7 AV	54.0	-7.3	1.01 H	200	39.60	7.10
7	11590.00	60.3 PK	74.0	-13.7	1.00 H	151	41.40	18.90
8	11590.00	47.2 AV	54.0	-6.8	1.00 H	151	28.30	18.90
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	*5795.00	112.6 PK			1.00 V	164	71.90	40.70
2	*5795.00	102.3 AV			1.00 V	164	61.60	40.70
3	#5850.00	63.7 PK	78.2	-14.5	1.20 V	19	56.70	7.00
4	#5853.00	62.6 PK	78.2	-15.6	1.21 V	19	55.50	7.10
5	#5861.00	60.9 PK	74.0	-13.1	1.20 V	2	53.80	7.10
6	#5861.00	47.8 AV	54.0	-6.2	1.20 V	2	40.70	7.10
7	11590.00	61.6 PK	74.0	-12.4	1.00 V	184	42.70	18.90
8	11590.00	48.5 AV	54.0	-5.5	1.00 V	184	29.60	18.90

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

802.11ac (80MHz)

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5714.00	58.8 PK	74.0	-15.2	1.00 H	167	51.80	7.00
2	#5714.00	46.6 AV	54.0	-7.4	1.00 H	167	39.60	7.00
3	#5722.00	63.4 PK	78.2	-14.8	1.00 H	176	56.40	7.00
4	#5725.00	55.5 PK	78.2	-22.7	1.00 H	175	48.40	7.10
5	*5775.00	92.1 PK			1.20 H	175	51.40	40.70
6	*5775.00	81.2 AV			1.20 H	175	40.50	40.70
7	#5850.00	45.5 PK	78.2	-32.7	1.16 H	115	38.50	7.00
8	#5853.00	57.4 PK	78.2	-20.8	1.05 H	133	50.30	7.10
9	#5861.00	57.4 PK	74.0	-16.6	1.14 H	161	50.30	7.10
10	#5861.00	44.1 AV	54.0	-9.9	1.14 H	161	37.00	7.10
11	11550.00	58.4 PK	74.0	-15.6	1.09 H	170	39.70	18.70
12	11550.00	45.9 AV	54.0	-8.1	1.09 H	170	27.20	18.70

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	#5714.00	67.2 PK	74.0	-6.8	1.00 V	338	60.20	7.00
2	#5714.00	52.7 AV	54.0	-1.3	1.00 V	338	45.70	7.00
3	#5722.00	74.4 PK	78.2	-3.8	1.12 V	153	67.40	7.00
4	#5725.00	61.9 PK	78.2	-16.3	1.12 V	149	54.80	7.10
5	*5775.00	103.3 PK			1.00 V	187	62.60	40.70
6	*5775.00	90.9 AV			1.00 V	187	50.20	40.70
7	#5850.00	45.9 PK	78.2	-32.3	1.20 V	64	38.90	7.00
8	#5853.00	57.1 PK	78.2	-21.1	1.08 V	73	50.00	7.10
9	#5861.00	57.4 PK	74.0	-16.6	1.27 V	16	50.30	7.10
10	#5861.00	44.7 AV	54.0	-9.3	1.27 V	16	37.60	7.10
11	11550.00	58.7 PK	74.0	-15.3	1.12 V	121	40.00	18.70
12	11550.00	46.0 AV	54.0	-8.0	1.12 V	121	27.30	18.70

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

CHANNEL	TX Channel 48	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	A		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	57.12	28.1 QP	40.0	-11.9	1.00 H	262	42.70	-14.60
2	166.00	36.3 QP	43.5	-7.2	1.00 H	158	50.30	-14.00
3	199.05	35.8 QP	43.5	-7.7	1.00 H	16	52.40	-16.60
4	239.88	42.2 QP	46.0	-3.8	1.00 H	158	56.90	-14.70
5	298.21	43.7 QP	46.0	-2.3	1.00 H	16	56.00	-12.30
6	864.00	39.2 QP	46.0	-6.8	1.00 H	53	40.40	-1.20
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	166.00	35.0 QP	43.5	-8.5	1.00 V	117	49.00	-14.00
2	298.21	34.2 QP	46.0	-11.8	1.49 V	118	46.50	-12.30
3	498.47	35.0 QP	46.0	-11.0	1.49 V	85	43.30	-8.30
4	751.23	42.4 QP	46.0	-3.6	1.49 V	231	45.40	-3.00
5	864.00	41.8 QP	46.0	-4.2	1.00 V	57	43.00	-1.20
6	953.44	40.4 QP	46.0	-5.6	1.00 V	196	39.80	0.60

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

802.11a

CHANNEL	TX Channel 48	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	30MHz ~ 1GHz		
TEST MODE	B		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	57.12	31.0 QP	40.0	-9.0	1.49 H	125	45.60	-14.60
2	166.00	37.2 QP	43.5	-6.3	1.49 H	165	51.20	-14.00
3	239.88	42.5 QP	46.0	-3.5	1.00 H	155	57.20	-14.70
4	300.16	43.7 QP	46.0	-2.3	1.00 H	8	55.90	-12.20
5	498.47	39.0 QP	46.0	-7.0	1.49 H	58	47.30	-8.30
6	897.05	40.5 QP	46.0	-5.5	1.49 H	59	41.00	-0.50
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	39.62	29.2 QP	40.0	-10.8	1.49 V	16	44.30	-15.10
2	97.95	31.2 QP	43.5	-12.3	1.00 V	99	50.20	-19.00
3	166.00	37.5 QP	43.5	-6.0	1.99 V	123	51.50	-14.00
4	199.05	32.3 QP	43.5	-11.2	1.49 V	121	48.90	-16.60
5	300.16	34.5 QP	46.0	-11.5	1.49 V	121	46.70	-12.20
6	499.49	41.6 QP	46.0	-4.4	1.58 V	92	49.90	-8.30

REMARKS:

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

4.2 CONDUCTED EMISSION MEASUREMENT

4.2.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

NOTE: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

3. All emanations from a class A/B digital device or system, including any network of conductors and apparatus connected thereto, shall not exceed the level of field strengths specified above.

4.2.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver ROHDE & SCHWARZ	ESCS30	100288	Apr. 24, 2014	Apr. 23, 2015
RF signal cable Woken	5D-FB	Cable-HYCO2-01	Dec. 27, 2013	Dec. 26, 2014
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Dec. 23, 2013	Dec. 22, 2014
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Jul. 10, 2014	Jul. 09, 2015
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

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

2. The test was performed in HwaYa Shielded Room 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.

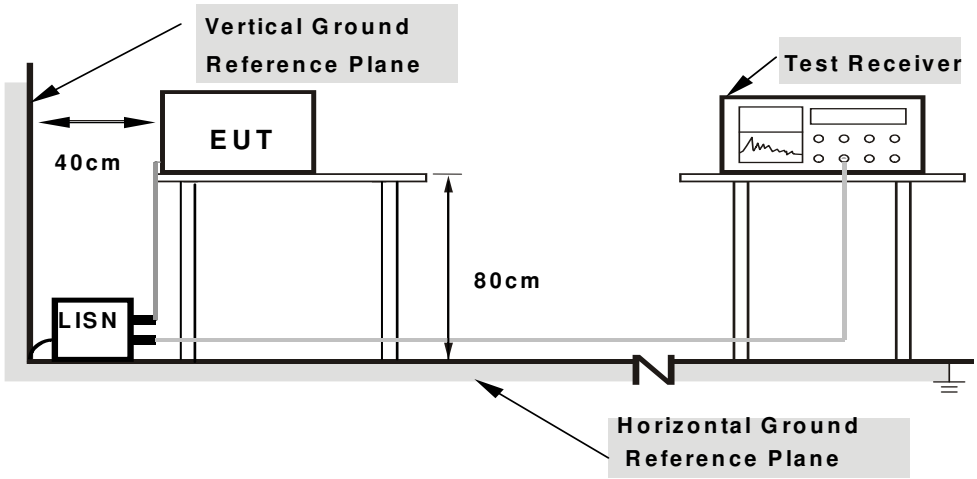
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

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

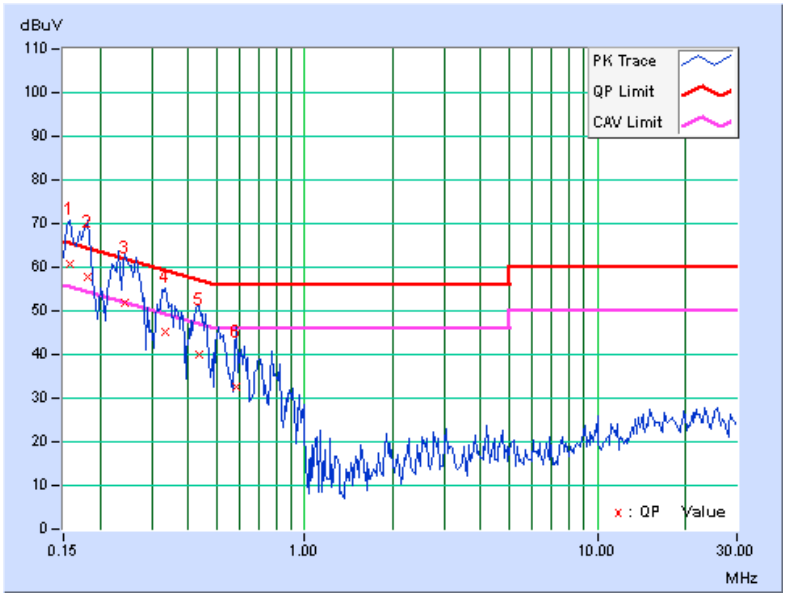
CONDUCTED WORST-CASE DATA: 802.11a

PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	0.27	60.33	40.42	60.60	40.69	65.58	55.58	-4.98	-14.89
2	0.18125	0.27	57.56	36.50	57.83	36.77	64.43	54.43	-6.59	-17.65
3	0.24375	0.28	51.69	36.43	51.97	36.71	61.97	51.97	-9.99	-15.25
4	0.33359	0.29	45.02	26.36	45.31	26.65	59.36	49.36	-14.05	-22.71
5	0.43516	0.30	39.53	20.09	39.83	20.39	57.15	47.15	-17.32	-26.76
6	0.58359	0.31	32.11	13.17	32.42	13.48	56.00	46.00	-23.58	-32.52

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

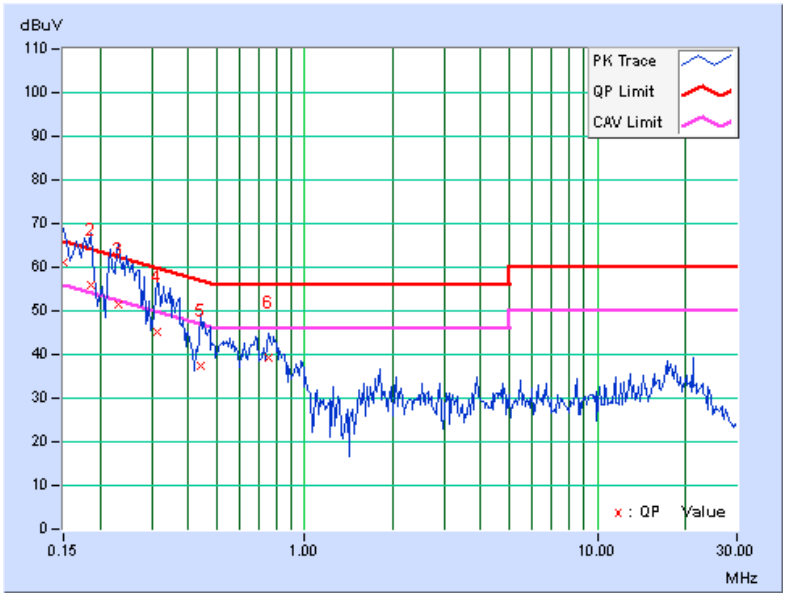


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	0.26	60.73	41.53	60.99	41.79	66.00	56.00	-5.01	-14.21
2	0.18516	0.28	55.71	35.63	55.99	35.91	64.25	54.25	-8.27	-18.35
3	0.23203	0.28	51.37	37.03	51.65	37.31	62.38	52.38	-10.72	-15.06
4	0.31406	0.29	44.78	25.02	45.07	25.31	59.86	49.86	-14.79	-24.55
5	0.43906	0.30	37.21	20.88	37.51	21.18	57.08	47.08	-19.57	-25.90
6	0.75547	0.32	38.96	22.21	39.28	22.53	56.00	46.00	-16.72	-23.47

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

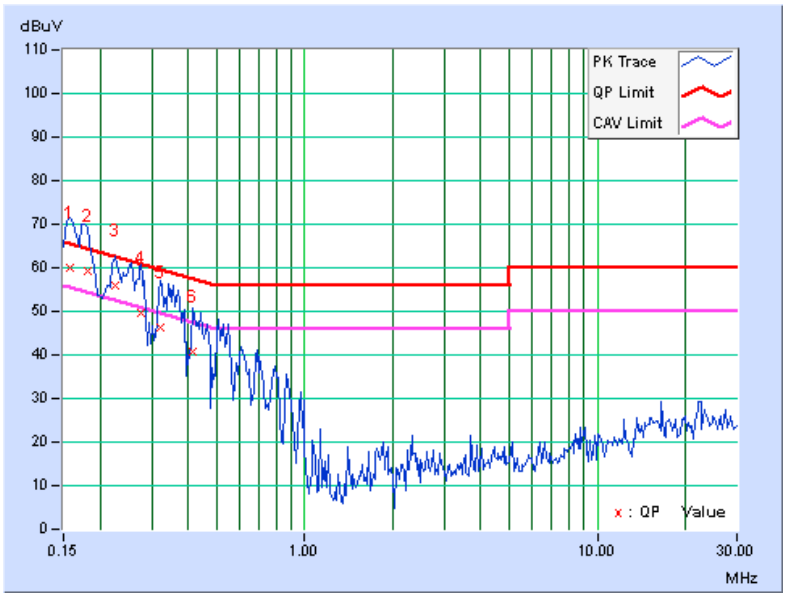


PHASE	Line 1	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	0.27	59.71	40.18	59.98	40.45	65.58	55.58	-5.60	-15.13
2	0.18125	0.27	58.95	36.58	59.22	36.85	64.43	54.43	-5.20	-17.57
3	0.22422	0.28	55.59	39.22	55.87	39.50	62.66	52.66	-6.79	-13.16
4	0.27500	0.29	49.17	32.24	49.46	32.53	60.97	50.97	-11.51	-18.44
5	0.32188	0.29	46.12	26.23	46.41	26.52	59.66	49.66	-13.25	-23.14
6	0.41563	0.30	40.47	20.53	40.77	20.83	57.54	47.54	-16.76	-26.70

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

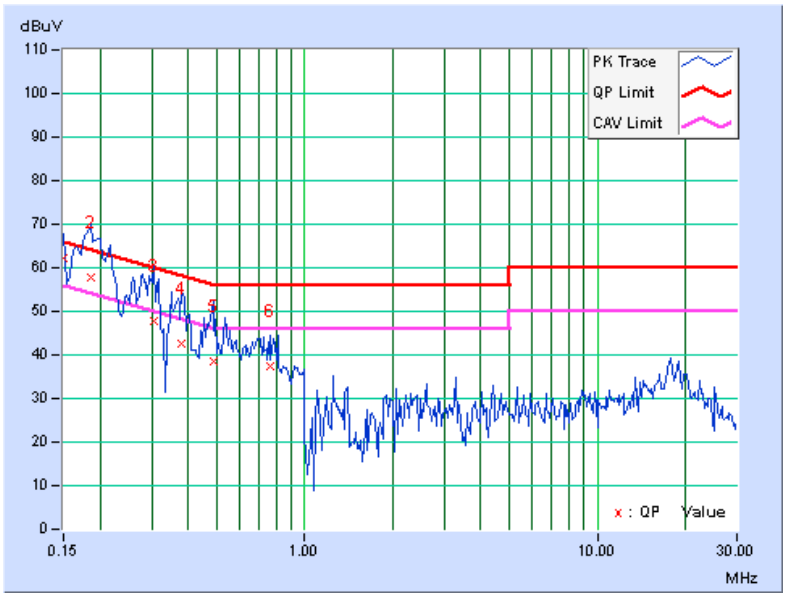


PHASE	Line 2	6dB BANDWIDTH	9kHz
TEST MODE	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.15000**	**0.26**	**61.90**	**44.82**	**62.16**	**45.08**	**66.00**	**56.00**	**-3.84**	**-10.92**
2	0.18516	0.28	57.54	39.75	57.82	40.03	64.25	54.25	-6.44	-14.23
3	0.30625	0.29	47.61	28.95	47.90	29.24	60.07	50.07	-12.17	-20.83
4	0.38047	0.30	42.25	23.17	42.55	23.47	58.27	48.27	-15.72	-24.80
5	0.48594	0.31	38.07	24.43	38.38	24.74	56.24	46.24	-17.86	-21.50
6	0.76328	0.32	36.99	20.35	37.31	20.67	56.00	46.00	-18.69	-25.33

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 TRANSMIT POWER MEASUREMENT

4.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125mW (21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client device	250mW (24 dBm)
U-NII-2A		---	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C		---	250mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√	---	1 Watt (30 dBm)

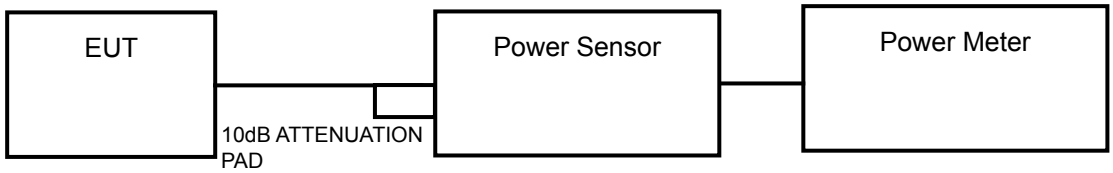
*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 D01 Multiple Transmitter Output v02r01 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



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)

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

For 802.11ac (80MHz)

1) Set span to encompass the entire 26 dB EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
2) Set sweep trigger to “free run”.
3) Set RBW = 1 MHz.
4) Set VBW ≥ 3 MHz
5) Number of points in sweep ≥ 2 Span / RBW.
6) Sweep time ≤ (number of points in sweep) * T
7) Detector = RMS.
8) Trace mode = max hold.
9) Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.

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

CHAN.	FREQ. (MHz)	MAXIMUM CONDUCTED POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	11.70	14.47	42.781	16.31	24	PASS
40	5200	16.13	17.46	96.739	19.86	24	PASS
48	5240	19.81	19.73	**189.691**	22.78	24	PASS
149	5745	18.22	15.67	103.272	20.14	30	PASS
157	5785	20.06	18.82	177.599	22.49	30	PASS
165	5825	18.32	18.17	133.535	21.26	30	PASS

802.11n (20MHz)

CHAN.	FREQ. (MHz)	MAXIMUM CONDUCTED POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	11.61	14.87	45.178	16.55	24	PASS
40	5200	16.29	17.46	98.279	19.92	24	PASS
48	5240	19.41	19.85	183.902	22.65	24	PASS
149	5745	18.34	15.78	106.078	20.26	30	PASS
157	5785	19.74	19.34	180.090	22.55	30	PASS
165	5825	18.29	18.46	137.599	21.39	30	PASS

802.11n (40MHz)

CHAN.	FREQ. (MHz)	MAXIMUM CONDUCTED POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	10.05	11.79	25.217	14.02	24	PASS
46	5230	19.13	19.56	172.211	22.36	24	PASS
151	5755	15.32	12.81	53.14	17.25	30	PASS
159	5795	20.28	19.42	**194.158**	22.88	30	PASS

802.11ac (80MHz)

CHAN.	CHAN. FREQ. (MHz)	MAXIMUM CONDUCTED POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
42	5210	8.60	9.43	16.014	12.04	24	PASS
155	5775	10.32	8.31	17.541	12.44	30	PASS

4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Operation Band	EUT Category		LIMIT
U-NII-1		Outdoor Access Point	17dBm/ MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11dBm/ MHz
U-NII-2A		---	11dBm/ MHz
U-NII-2C		---	11dBm/ MHz
U-NII-3	√	---	30dBm/ 500kHz

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

For U-NII-1 band:

Using method SA-2

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

For U-NII-3 band:

1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 300 kHz, Set VBW ≥ 3 RBW, Detector = RMS
3) Sweep time = auto, trigger set to "free run".
4) Trace average at least 100 traces in power averaging mode.
5) Record the max value and add 10 log (1/duty cycle)
6) Scale the observed power level to an equivalent value in 300 kHz by adjusting the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz/300kHz)

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

For U-NII-1 Band

802.11a

CHAN.	FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
36	5180	-2.39	-0.28	1.80	0.14	1.94	8.24	PASS
40	5200	2.27	2.89	5.60	0.14	5.74	8.24	PASS
48	5240	5.11	5.04	8.09	0.14	8.22	8.24	PASS

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2 / ^2$] = 8.76dBi > 6dBi , so the power density limit shall be reduced to 11-(8.76-6) = 8.24dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (20MHz)

CHAN.	FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
36	5180	-3.43	-0.22	1.48	0.14	1.62	8.24	PASS
40	5200	1.76	2.41	5.11	0.14	5.25	8.24	PASS
48	5240	4.89	5.07	7.99	0.14	8.13	8.24	PASS

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2 / ^2$] = 8.76dBi > 6dBi , so the power density limit shall be reduced to 11-(8.76-6) = 8.24dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (40MHz)

CHAN.	FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
38	5190	-7.51	-6.50	-3.97	0.29	-3.67	8.24	PASS
46	5230	1.38	1.61	4.51	0.29	4.80	8.24	PASS

NOTE:

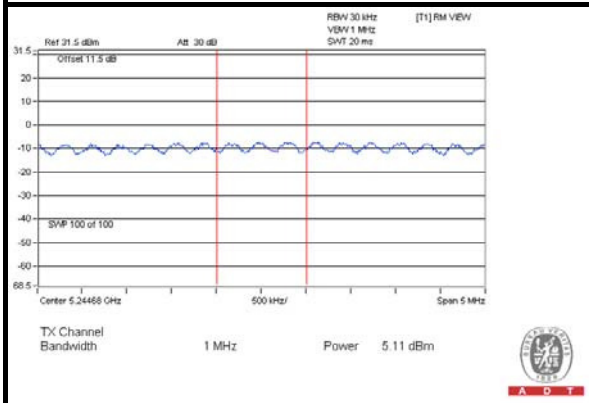
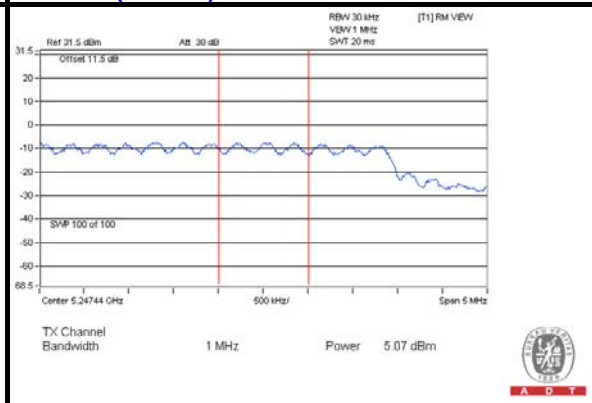
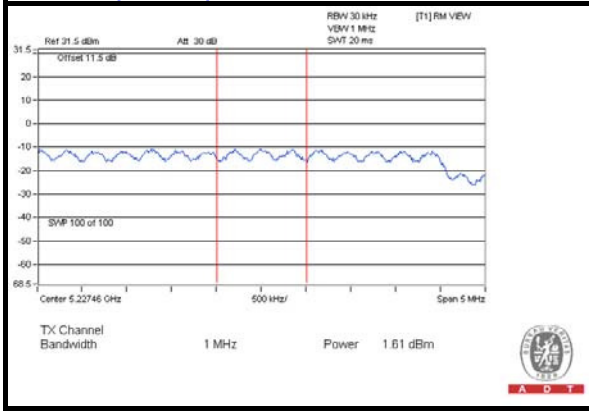
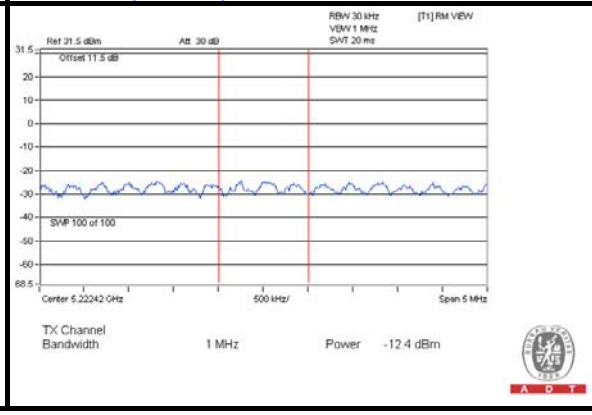
1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2 / ^2$] = 8.76dBi > 6dBi , so the power density limit shall be reduced to 11-(8.76-6) = 8.24dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (80MHz)

CHAN.	FREQ. (MHz)	PSD (dBm)		TOTAL PSD W/O DUTY FACTOR (dBm)	DUTY FACTOR	TOTAL PSD WITH DUTY FACTOR (dBm)	MAX. LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1					
42	5210	-12.69	-12.40	-9.53	0.56	-8.97	8.24	PASS

NOTE:

1. Method 1 of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. **For U-NII-1 Band:**
   Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2 / ^2$] = 8.76dBi > 6dBi , so the power density limit shall be reduced to 11-(8.76-6) = 8.24dBm.
3. Refer to section 3.3 for duty cycle spectrum plot.

SPECTRUM PLOT OF WORST VALUE	
802.11a	**802.11n (20MHz)**
	
802.11n (40MHz)	**802.11ac (80MHz)**
	

For U-NII-3 Band

802.11a

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS /FAIL
0	149	5745	-4.53	-2.31	3.01	0.84	27.24	PASS
	157	5785	-3.40	-1.18	3.01	1.97	27.24	PASS
	165	5825	-4.79	-2.57	3.01	0.58	27.24	PASS
1	149	5745	-6.68	-4.46	3.01	-1.31	27.24	PASS
	157	5785	-3.98	-1.76	3.01	1.39	27.24	PASS
	165	5825	-4.84	-2.62	3.01	0.53	27.24	PASS

NOTE: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2 / 2$] = 8.76dBi > 6dBi , so the power density limit shall be reduced to 30-(8.76-6) = 27.24dBm.

802.11n (20MHz)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS /FAIL
0	149	5745	-5.56	-3.34	3.01	-0.19	27.24	PASS
	157	5785	-3.58	-1.36	3.01	1.79	27.24	PASS
	165	5825	-5.69	-3.47	3.01	-0.32	27.24	PASS
1	149	5745	-6.61	-4.39	3.01	-1.24	27.24	PASS
	157	5785	-4.09	-1.87	3.01	1.28	27.24	PASS
	165	5825	-5.06	-2.84	3.01	0.31	27.24	PASS

NOTE: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2 / 2$] = 8.76dBi > 6dBi , so the power density limit shall be reduced to 30-(8.76-6) = 27.24dBm.

802.11n (40MHz)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS /FAIL
0	151	5755	-10.33	-8.11	3.01	-4.81	27.24	PASS
	159	5795	-7.64	-5.42	3.01	-2.12	27.24	PASS
1	151	5755	-11.73	-9.51	3.01	-6.21	27.24	PASS
	159	5795	-7.68	-5.46	3.01	-2.16	27.24	PASS

NOTE: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2 / 2$] = 8.76dBi > 6dBi , so the power density limit shall be reduced to 30-(8.76-6) = 27.24dBm.

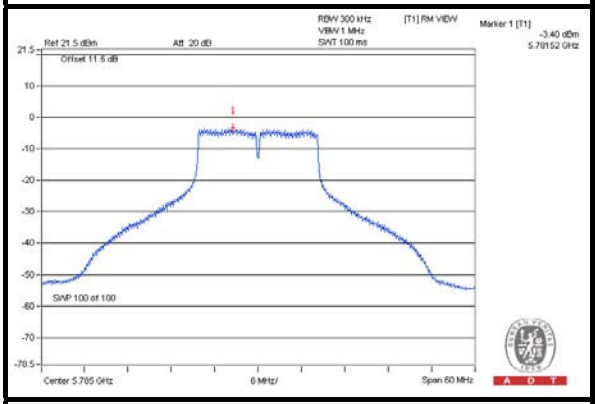
802.11ac (80MHz)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	PASS /FAIL
0	155	5775	-19.22	-17.00	3.01	-13.43	27.24	PASS
1	155	5775	-20.84	-18.62	3.01	-15.05	27.24	PASS

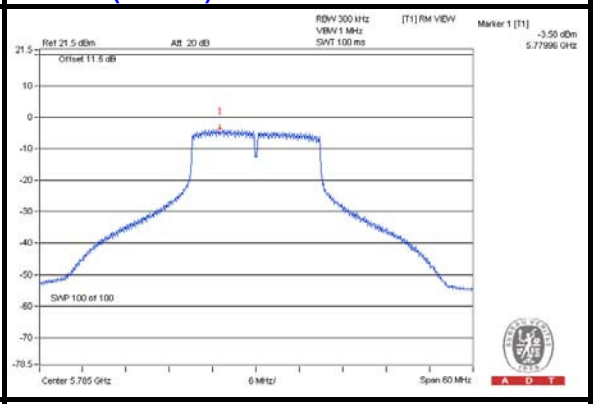
NOTE: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2 / 2$] = 8.76dBi > 6dBi , so the power density limit shall be reduced to 30-(8.76-6) = 27.24dBm.

SPECTRUM PLOT OF WORST VALUE

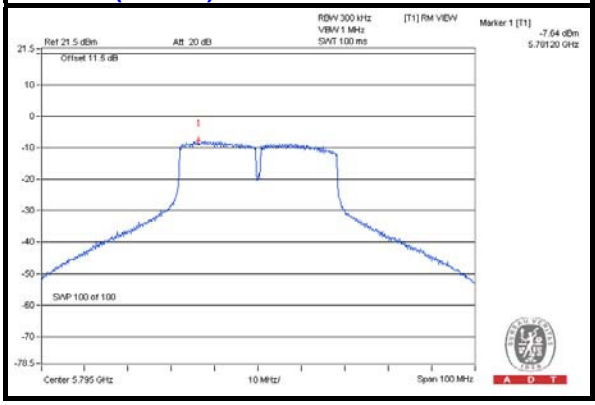
802.11a



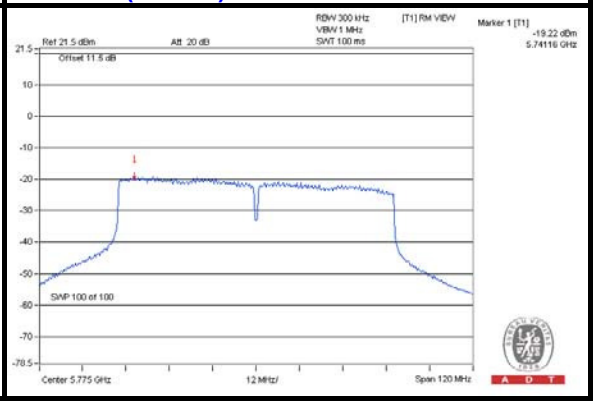
802.11n (20MHz)



802.11n (40MHz)



802.11ac (80MHz)

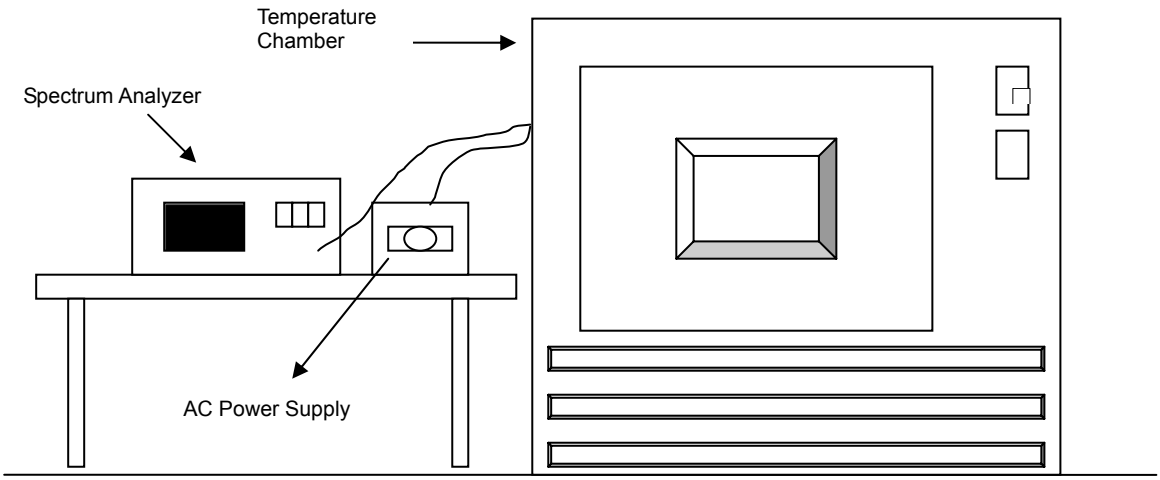


4.5 FREQUENCY STABILITY

4.5.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

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

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.

4.5.5 DEVIATION FROM TEST STANDARD

No deviation.

4.5.6 EUT OPERATING CONDITION

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

4.5.7 TEST RESULTS

FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5240MHz									
TEMP. (℃)	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 (%)
50	120	5240.0203	0.00039	5240.0180	0.00034	5240.0188	0.00036	5240.0171	0.00033
40	120	5240.0150	0.00029	5240.0108	0.00021	5240.0143	0.00027	5240.0147	0.00028
30	120	5240.0034	0.00006	5240.0047	0.00009	5240.0022	0.00004	5240.0013	0.00002
20	120	5239.9769	-0.00044	5239.9790	-0.00040	5239.9802	-0.00038	5239.9772	-0.00044
10	120	5239.9980	-0.00004	5239.9977	-0.00004	5239.9955	-0.00009	5239.9944	-0.00011
0	120	5239.9843	-0.00030	5239.9808	-0.00037	5239.9846	-0.00029	5239.9828	-0.00033
-10	120	5239.9791	-0.00040	5239.9757	-0.00046	5239.9792	-0.00040	5239.9796	-0.00039
-20	120	5240.0186	0.00035	5240.0157	0.00030	5240.0196	0.00037	5240.0190	0.00036
-30	120	5239.9990	-0.00002	5239.9976	-0.00005	5239.9986	-0.00003	5239.9985	-0.00003

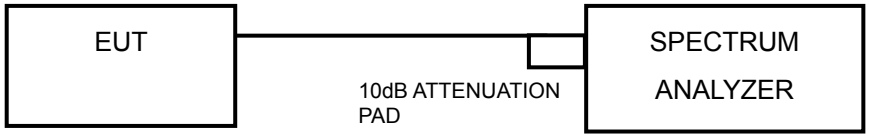
FREQUEMCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5240MHz									
TEMP. (℃)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)	Measured Frequency (MHz)	Frequency Drift (%)
20	138	5239.9776	-0.00043	5239.9796	-0.00039	5239.9797	-0.00039	5239.9776	-0.00043
	120	5239.9769	-0.00044	5239.9790	-0.00040	5239.9802	-0.00038	5239.9772	-0.00044
	102	5239.9773	-0.00043	5239.9782	-0.00042	5239.9801	-0.00038	5239.9765	-0.00045

4.6 6dB BANDWIDTH MEASUREMENT

4.6.1 LIMITS OF 6dB BANDWIDTH MEASUREMENT

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.6.2 TEST SETUP



4.6.3 TEST INSTRUMENTS

Refer to section 4.1.2 to get information of above instrument.

4.6.4 TEST PROCEDURE

a. Set resolution bandwidth (RBW) = 100kHz
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.6.5 DEVIATION FROM TEST STANDARD

No deviation.

4.6.6 EUT OPERATING CONDITIONS

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.6.7 TEST RESULTS

802.11a

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
149	5745	16.08	15.79	0.5	PASS
157	5785	16.36	16.39	0.5	PASS
165	5825	15.96	16.34	0.5	PASS

802.11n (20MHz)

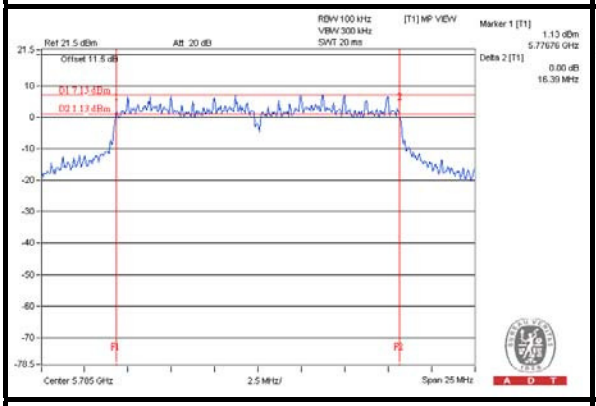
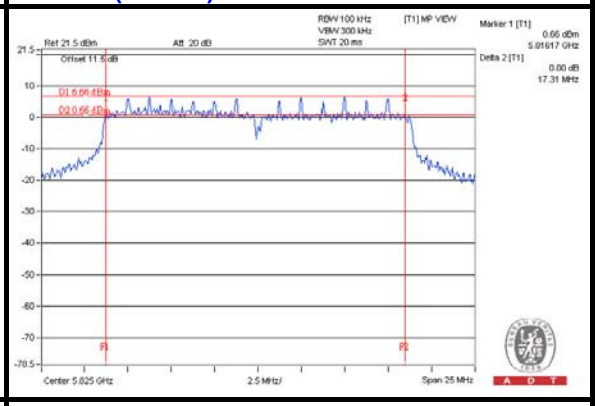
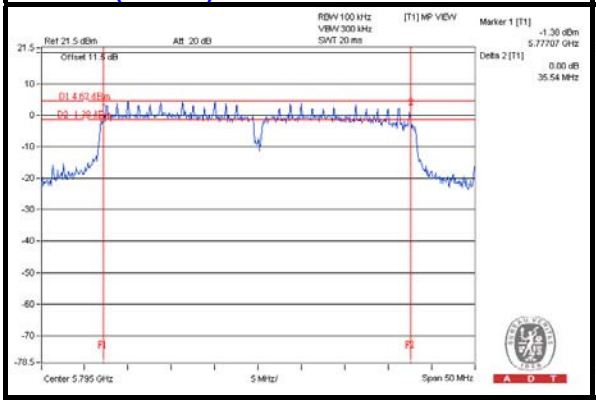
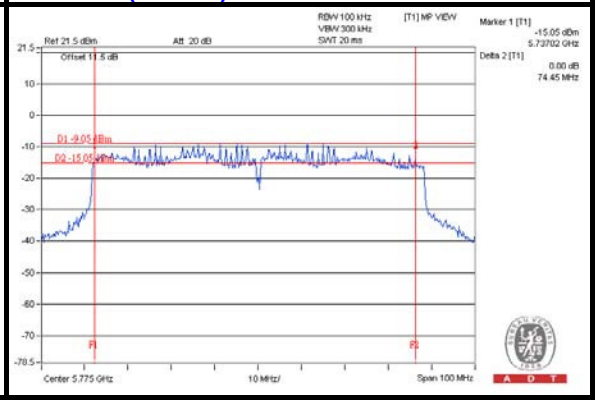
CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
149	5745	17.18	16.00	0.5	PASS
157	5785	16.13	16.96	0.5	PASS
165	5825	17.17	17.31	0.5	PASS

802.11n (40MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
151	5755	35.41	35.47	0.5	PASS
159	5795	35.54	35.51	0.5	PASS

802.11ac (80MHz)

CHANNEL	FREQUENCY (MHz)	6dB BANDWIDTH (MHz)		MINIMUM LIMIT (MHz)	PASS / FAIL
		CHAIN 0	CHAIN 1		
155	5775	70.91	74.45	0.5	PASS

SPECTRUM PLOT OF WORST VALUE	
802.11a	802.11n (20MHz)
	
802.11n (40MHz)	802.11ac (80MHz)
	

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:

Linko EMC/RF Lab:
Tel: 886-2-26052180
Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab:
Tel: 886-3-5935343
Fax: 886-3-5935342

Hwa Ya EMC/RF/Safety Lab:
Tel: 886-3-3183232
Fax: 886-3-3270892

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.

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---