

# FCC TEST REPORT (WLAN 15.407)

**REPORT NO.:** RF131205E01-1

**MODEL NO.:** RTL8812AEBT

**FCC ID:** TX2RTL8812AEBT

**RECEIVED:** Dec. 04, 2013

**TESTED:** Dec. 24, 2013 to Jan. 17, 2014

**ISSUED:** Feb. 10, 2014

**APPLICANT:** Realtek Semiconductor Corp.

**ADDRESS:** No. 2, Innovation Road II, Hsinchu Science  
Park, Hsinchu 300, Taiwan

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

**LAB ADDRESS :** No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen,  
Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan,  
R.O.C.

**TEST LOCATION (1):** No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen,  
Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan,  
R.O.C.

**TEST LOCATION (2):** No. 49, Ln. 206, Wende Rd., Shangshan Tsuen,  
Chiung Lin Hsiang, Hsin Chu Hsien 307, 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.



This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification

## Table of Contents

RELEASE CONTROL RECORD .....	4
1. CERTIFICATION .....	5
2. SUMMARY OF TEST RESULTS .....	6
2.1 MEASUREMENT UNCERTAINTY .....	7
3. GENERAL INFORMATION .....	8
3.1 GENERAL DESCRIPTION OF EUT (WLAN) .....	8
3.2 DESCRIPTION OF TEST MODES .....	13
3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL .....	14
3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS .....	17
3.4 DUTY CYCLE OF TEST SIGNAL .....	18
3.5 DESCRIPTION OF SUPPORT UNITS .....	23
3.6 CONFIGURATION OF SYSTEM UNDER TEST .....	23
4. TEST TYPES AND RESULTS .....	24
4.1 CONDUCTED EMISSION MEASUREMENT .....	24
4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT .....	24
4.1.2 TEST INSTRUMENTS .....	24
4.1.3 TEST PROCEDURES .....	25
4.1.4 DEVIATION FROM TEST STANDARD .....	25
4.1.5 TEST SETUP .....	25
4.1.6 EUT OPERATING CONDITIONS .....	26
4.1.7 TEST RESULTS .....	27
4.2 RADIATED EMISSION AND BANDEDGE MEASUREMENT .....	29
4.2.1 LIMITS OF RADIATED EMISSION AND BANDEDGE MEASUREMENT .....	29
4.2.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS .....	29
4.2.3 TEST INSTRUMENTS .....	30
4.2.4 TEST PROCEDURES .....	31
4.2.5 DEVIATION FROM TEST STANDARD .....	31
4.2.6 TEST SETUP .....	32
4.2.7 EUT OPERATING CONDITION .....	32
4.2.8 TEST RESULTS (MODE 1) .....	33
4.2.9 TEST RESULTS (MODE 2) .....	80
4.3 TRANSMIT POWER MEASUREMENT .....	127
4.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT .....	127
4.3.2 TEST INSTRUMENTS .....	127
4.3.3 TEST PROCEDURE .....	128
4.3.4 DEVIATION FROM TEST STANDARD .....	128
4.3.5 TEST SETUP .....	128
4.3.6 EUT OPERATING CONDITIONS .....	129



A D T

4.3.7	TEST RESULTS .....	130
4.4	PEAK POWER SPECTRAL DENSITY MEASUREMENT .....	142
4.4.1	LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT .....	142
4.4.2	TEST INSTRUMENTS.....	142
4.4.3	TEST PROCEDURES .....	142
4.4.4	DEVIATION FROM TEST STANDARD .....	142
4.4.5	TEST SETUP .....	142
4.4.6	EUT OPERATING CONDITIONS .....	143
4.4.7	TEST RESULTS .....	144
4.5	PEAK POWER EXCURSION MEASUREMENT .....	150
4.5.1	LIMITS OF PEAK POWER EXCURSION MEASUREMENT .....	150
4.5.2	TEST INSTRUMENTS.....	150
4.5.3	TEST PROCEDURE.....	150
4.5.4	DEVIATION FROM TEST STANDARD .....	150
4.5.5	TEST SETUP .....	150
4.5.6	EUT OPERATING CONDITIONS .....	150
4.5.7	TEST RESULTS .....	151
4.6	FREQUENCY STABILITY.....	154
4.6.1	LIMITS OF FREQUENCY STABILITY MEASUREMENT .....	154
4.6.2	TEST INSTRUMENTS.....	154
4.6.3	TEST PROCEDURE.....	154
4.6.4	DEVIATION FROM TEST STANDARD .....	155
4.6.5	TEST SETUP .....	155
4.6.6	EUT OPERATING CONDITION.....	155
4.6.7	TEST RESULTS .....	156
5.	PHOTOGRAPHS OF THE TEST CONFIGURATION.....	157
6.	INFORMATION ON THE TESTING LABORATORIES .....	158
7.	APPENDIX A - MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB.....	159



A D T

## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
RF131205E01-1	Original release	Feb. 10, 2014

## 1. CERTIFICATION

**PRODUCT:** 802.11a/b/g/n/ac RTL8812AE Combo module  
**BRAND NAME:** Realtek  
**MODEL NO.:** RTL8812AEBT  
**TEST SAMPLE:** ENGINEERING SAMPLE  
**APPLICANT:** Realtek Semiconductor Corp.  
**TESTED:** Dec. 24, 2013 to Jan. 17, 2014  
**STANDARDS:** FCC Part 15, Subpart E (Section 15.407)  
ANSI C63.10-2009

The above equipment (Model: RTL8812AEBT) 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 :** Midoli Peng , **DATE:** Feb. 10, 2014  
( Midoli Peng, Specialist )

**APPROVED BY :** May Chen , **DATE:** Feb. 10, 2014  
( May Chen, Manager )

## 2. SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC PART 15, SUBPART E (SECTION 15.407)			
STANDARD SECTION	TEST TYPE	RESULT	REMARK
15.407(b)(6)	AC Power Conducted Emission	PASS	Meet the requirement of limit. Minimum passing margin is -31.66dB at 1.39453MHz
15.407(b)(1/2/3) (b)(6)	Spurious Emissions	PASS	Meet the requirement of limit. Minimum passing margin is -1.0dB at 5725.0MHz.
15.407(a)(1/2)	Transmit Power	PASS	Meet the requirement of limit.
15.407(a)(6)	Peak Power Excursion	PASS	Meet the requirement of limit.
15.407(a)(1/2)	Peak Power Spectral Density	PASS	Meet the requirement of limit.
15.407(g)	Frequency Stability	PASS	Meet the requirement of limit.
15.203	Antenna Requirement	PASS	Antenna connector is IPEX not a standard connector.

- NOTE:** 1. For WLAN: The EUT was operating in 2400 ~ 2483.5MHz, 5.15~5.35GHz, 5.47~5.6GHz & 5.65~5.725GHz and 5.725~5.850GHz frequencies band. This report was recorded the RF parameters including 5.15~5.35GHz, 5.47~5.6GHz & 5.65~5.725GHz. For the 2400 ~ 2483.5MHz and 5.725~5.850GHz RF parameters was recorded in another test report.
2. The DFS report was recorded in another test report.

## 2.1 MEASUREMENT UNCERTAINTY

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

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

Measurement	Value
Conducted emissions	2.98 dB
Radiated emissions (30MHz-1GHz)	5.37 dB
Radiated emissions (1GHz -6GHz)	3.65 dB
Radiated emissions (6GHz -18GHz)	3.88 dB
Radiated emissions (18GHz -40GHz)	4.11 dB

### 3. GENERAL INFORMATION

#### 3.1 GENERAL DESCRIPTION OF EUT (WLAN)

<b>PRODUCT</b>	802.11a/b/g/n/ac RTL8812AE Combo module
<b>MODEL NO.</b>	RTL8812AEBT
<b>POWER SUPPLY</b>	DC 3.3V from host equipment
<b>MODULATION TYPE</b>	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM BT-LE (GFSK) for DTS 256QAM for OFDM in 11ac mode only
<b>MODULATION TECHNOLOGY</b>	DSSS, OFDM, DTS
<b>TRANSFER RATE</b>	802.11b: up to 11Mbps 802.11a / g: up to 54Mbps 802.11n: up to 300Mbps 802.11ac: up to 866.7Mbps BT-LE (GFSK): 1Mbps
<b>OPERATING FREQUENCY</b>	<b>For 15.407</b> <b>5GHz:</b> 5.18 ~ 5.24GHz, 5.26 ~ 5.32GHz, 5.50 ~ 5.58GHz & 5.66GHz ~ 5.70GHz
	<b>For 15.247</b> <b>2.4GHz:</b> 2.412 ~ 2.462GHz <b>5GHz:</b> 5.745 ~ 5.825GHz <b>BT-LE(GFSK):</b> 2.402 ~ 2.480GHz
<b>NUMBER OF CHANNEL</b>	<b>For 15.407</b> 16 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 7 for 802.11n (HT40), 802.11ac (VHT40) 3 for 802.11ac (VHT80)
	<b>For 15.247 (2.4GHz)</b> 11 for 802.11b, 802.11g, 802.11n (HT20) 7 for 802.11n (HT40) 40 for BT-LE(GFSK) <b>For 15.247 (5GHz)</b> 5 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 2 for 802.11n (HT40), 802.11ac (VHT40) 1 for 802.11ac (VHT80)



<b>MAXIMUM OUTPUT POWER</b>	<b>For 15.407</b> 802.11a: 147.582mW 802.11ac (VHT20): 137.730mW 802.11ac (VHT40): 139.680mW 802.11ac (VHT80): 27.530mW <b>For 15.247 (2.4GHz)</b> 802.11b: 123.310mW 802.11g: 572.434mW 802.11n (HT20): 514.717mW 802.11n (HT40): 393.088mW BT-LE(GFSK): 2.415mW <b>For 15.247 (5GHz)</b> 802.11a: 676.106mW 802.11ac (VHT20): 579.327mW 802.11ac (VHT40): 592.004mW 802.11ac (VHT80): 548.990mW
<b>ANTENNA TYPE</b>	Please see NOTE
<b>DATA CABLE</b>	NA
<b>I/O PORTS</b>	Refer to user's manual
<b>ASSOCIATED DEVICES</b>	NA

**Note:**

1. There are Bluetooth technology and WLAN technology used for the EUT.
2. For WLAN: 2.4GHz and 5GHz technology cannot transmit at same time.
3. WLAN & BT technology can transmit at same time.

## 4. The antennas provided to the EUT, please refer to the following table:

No.	Brand	Model	Antenna Type	Peak gain with cable loss (dBi) (2.4GHz)	Peak gain with cable loss(dBi) (5GHz)	Cable Loss (dB) (2.4GHz)	Cable Loss (dB) (5GHz)	Connector Type
1	LYNwave	ALA110-222050-300010 (Main) ALA110-222050-300010 (Aux)	PIFA	3.5 3.5	5 5	NA	NA	IPEX
2	JOYMAX	TWF-614XMPXX-500 (Main) TWF-614XMPXX-500 (Aux)	Dipole	3 3	5 5	NA	NA	IPEX
3	WGT	SKA91WMPB02+A (Tx1) SKA91WMPB01+A (Tx2)	PIFA	0.82 -2.23	0.94 2.18	-1.32 -0.75	-2.04 -1.17	IPEX
4	JEM	1510-0122-0027 (Tx1) 1510-0122-0027 (Tx2)	PIFA	3.23 2.31	4.89 1.89	NA	NA	RF
5	FVC	K05007014501(6-23-7W25H-010) (Tx1) K05007014501(6-23-7W25H-010) (Tx2)	PIFA	2.85 1.59	2.46 2.91	NA	NA	IPEX
6	JEM	1510-0122-0022(IA-120073) (Tx1) 1510-0122-0022(IA-120073) (Tx2)	PIFA	2.23 2.21	1.69 1.84	NA	NA	RF
7	WGT	SK81WMPB01+A (Tx1) SK81WMPB02+A (Tx2)	PIFA	1.79 0.66	1.49 -0.40	-1.88 -2.95	-3.17 -4.96	IPEX
8	WGT	SKW2UWMPB01+A (Tx1) SKW2UWMPB01+A (Tx2)	PIFA	1.36 2.88	1.92 3.16	NA	NA	IPEX
9	WGT	SKW25WMPB01+A (Tx1) SKW25WMPB01+A (Tx2)	PIFA	0.72 0.49	-0.72 -0.71	-1.41 -1.39	-2.18 -2.15	IPEX
10	WGT	SK549WMPB01+A (Tx1) SK549WMPB02+A (Tx2)	PIFA	-0.17 -2.24	-0.13 0.03	-1.04 -0.88	-1.94 -1.64	IPEX
11	WGT	SK110WMPB01+A (Tx1) SK110WMPB02+A (Tx2)	PIFA	1.05 -0.41	1.08 2.32	-0.98 -0.99	-1.52 -1.54	IPEX
12	WGT	SKW31WMPB01+A (Tx1) SKW31WMPB01+A (Tx2)	PIFA	1.85 3.14	1.74 2.10	NA	NA	IPEX
13	FVC	6-23-7B51M-031 (Tx1) 6-23-7B51M-031 (Tx2)	PIFA	1.58 1.75	2.54 2.24	NA	NA	IPEX
14	FVC	6-23-7E51Q-011 (Tx1) 6-23-7E51Q-011 (Tx2)	PIFA	2.70 2.19	1.57 2.94	NA	NA	IPEX
15	FVC	6-23-7B710-022 (WM1) 6-23-7B710-022 (WM2)	PIFA	1.51 2.04	2.99 3.02	NA	NA	IPEX
16	WGT	SKM11WMPB03+A (Tx1) SKM11WMPB02+D (Tx2)	PIFA	-1.84 -2.93	0.44 1.35	1.17 0.89	2.02 1.54	IPEX
17	WGT	SKW23WMPB01+A (Tx1) SKW23WMPB02+A (Tx2)	PIFA	-1.61 -2.84	-0.14 -0.96	-2.10 -2.07	-3.25 -3.20	IPEX
18	WGT	SKW24WMPB01+B (WM1) SKW24WMPB01+B (WM2)	PIFA	1.25 3.17	1.95 2.42	NA	NA	IPEX

No.	Brand	Model	Antenna Type	Peak gain with cable loss (dBi) (2.4GHz)	Peak gain with cable loss(dBi) (5GHz)	Cable Loss (dB) (2.4GHz)	Cable Loss (dB) (5GHz)	Connector Type
19	FVC	K05007015501(6-23-7W244-020-1) (Tx1) K05007015501(6-23-7W244-020-1) (Tx2)	PIFA	2.53 2.28	2.86 2.97	NA	NA	IPEX
20	FVC	K05007014201(6-23-7W25P-020) (Tx1) K05007014201(6-23-7W25P-020) (Tx2)	PIFA	3.00 1.52	2.82 2.21	NA	NA	IPEX
21	WGT	SKW10WMPB01+A (Tx1) SKW10WMPB02+A (Tx2)	PIFA	0.85 0.44	0.75 1.24	-1.56 -1.53	-2.42 -2.36	IPEX
22	WGT	SKCZTWMPB01+A (Tx1) SKCZTWMPB02+A (Tx2)	PIFA	0.46 -0.79	2.80 1.03	-1.56 -1.53	-2.42 -2.36	IPEX
23	JEM	IA-120266 (Tx1) IA-120267 (Tx2)	PIFA	2.60 0.53	2.61 2.60	2.12 1.76	3.48 2.87	IPEX
24	WGT	SK547WMPB01+A (Tx1) SK549WMPB02+A (Tx2)	PIFA	-0.66 0.78	-0.19 2.06	-1.42 -1.43	-2.20 -2.21	IPEX
25	WGT	SK555WMPB01+B (Tx1) SK555WMPB02+B (Tx2)	PIFA	0.76 0.09	1.97 0.56	-1.83 -1.80	-2.83 -2.78	IPEX
26	WGT	SK65EWMPB01+A (Tx1) SK650WMPB02+A (Tx2)	PIFA	0.42 -0.13	0.11 1.27	-1.56 -0.61	-2.41 -0.94	IPEX
27	WGT	SK670WMPB01+A (Tx1) SK670WMPB02+A (Tx2)	PIFA	1.48 1.15	-0.44 0.42	-2.47 -1.93	-3.82 -2.99	IPEX
28	WGT	SK740WMPB01+A (Tx1) SK740WMPB02+A (Tx2)	PIFA	-0.93 0.20	0.96 0.86	-1.39 -1.26	-2.16 -1.95	IPEX
29	WGT	SK840WMPB01+B_SN (Tx1) SK840WMPB01+B_SN (Tx2)	PIFA	3.03 0.55	4.16 0.90	-1.12 -1.20	-1.74 -1.86	IPEX
30	WGT	SK94SWMPB01+B (TX1) SK94SWMPB01+B (TX2)	PIFA	0.76 0.46	1.12 1.44	-0.32 -0.44	-0.50 -0.68	IPEX
31	WGT	SK94TWMPB01+B (TX1) SK94TWMPB01+B (TX2)	PIFA	1.32 1.86	2.59 1.57	-0.59 -0.71	-0.91 -1.10	IPEX
32	WGT	SK50SWMPB01+A (TX1) SK50SWMPB02+A (TX2)	PIFA	-0.03 -0.13	1.25 2.13	-0.86 -0.72	-1.32 -1.12	IPEX
33	WGT	SK94TWMPB01+D (TX1) SK94TWMPB01+D (TX2)	PIFA	1.32 1.86	2.59 1.57	-0.59 -0.71	-0.91 -1.10	IPEX
34	WGT	SKC45WMPB03+B (WM1) SKC45WMPB03+B (WM2)	PIFA	2.46 2.91	2.90 2.67	NA	NA	IPEX
35	FVC	K05007015801 (WM1) K05007015901 (WM2)	PIFA	3.12 1.01	3.51 1.93	NA	NA	RF
36	WGT	SK345WMPB01+A (WM1) SK345WMPB02+A (WM2)	PIFA	0.86 2.51	2.94 3.25	NA	NA	IPEX
37	FVC	K05007014901 (WM1) K05007015001 (WM2)	PIFA	1.85 1.94	1.35 1.99	NA	NA	IPEX
38	WGT	SKX51WMPB01+C (WM1) SKX51WMPB02+C (WM2)	PIFA	3.2 2.76	2.28 2.51	NA	NA	IPEX

No.	Brand	Model	Antenna Type	Peak gain with cable loss (dBi) (2.4GHz)	Peak gain with cable loss(dBi) (5GHz)	Cable Loss (dB) (2.4GHz)	Cable Loss (dB) (5GHz)	Connector Type
39	INPAQ	WA-P-LB-02-122 (Main) WA-P-LB-01-072 (Aux)	PIFA	-1.41 -0.33	-2.44 -3.87	1.23 1.86	2.06 3.12	IPEX
40	Smart Approach	SE-ECZ50-001 (Tx1) SE-ECZ50-002 (Tx2)	PIFA	-1.37 -2.17	1.83 1.86	0.96 1.45	1.73 2.62	IPEX
41	INPAQ	WA-P-LB-02-121 (Main) WA-P-LB-01-071 (Aux)	PIFA	-2.26 -4.63	-2.87 -2.49	1.32 1.95	2.22 3.28	IPEX
42	Smart Approach	SE-ECZ70-001 (Tx1) SE-ECZ70-002 (Tx2)	PIFA	-0.65 -2.39	1.52 0.58	1.03 1.52	1.87 2.76	IPEX

Antenna 1 & 2 were chosen for final test.

5. The EUT incorporates a MIMO function.

MODULATION MODE	Tx/Rx FUNCTION	Beam forming
802.11a	1Tx/2RX or 2Tx/2Rx	No
802.11b	1Tx/1Rx	No
802.11g	1Tx/2RX or 2Tx/2Rx	No
802.11n (HT20)	1Tx/2RX or 2Tx/2Rx	Yes
802.11n (HT40)	1Tx/2RX or 2Tx/2Rx	Yes
802.11ac (VHT20)	1Tx/2RX or 2Tx/2Rx	Yes
802.11ac (VHT40)	1Tx/2RX or 2Tx/2Rx	Yes
802.11ac (VHT80)	1Tx/2RX or 2Tx/2Rx	Yes

For 1Tx, 1Rx mode will fix transmission on Chain (0).

Note: 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)

- When the EUT operating in 802.11n, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 15.
- When the EUT operating in 802.11ac, the software operation, which is defined by manufacturer, MCS (Modulation and Coding Schemes) from 0 to 9.
- This device implement independent power value in different scenario in U-NII band 1. In the other band only implement one power value in all.
- The above EUT information was declared by the manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

## 3.2 DESCRIPTION OF TEST MODES

### Operated in 5150 ~ 5350MHz band:

8 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

CHANNEL	FREQUENCY	CHANNEL	FREQUENCY
36	5180 MHz	52	5260 MHz
40	5200 MHz	56	5280 MHz
44	5220 MHz	60	5300 MHz
48	5240 MHz	64	5320 MHz

4 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY
38	5190 MHz
46	5230 MHz
54	5270 MHz
62	5310 MHz

2 channels are provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY
42	5210 MHz
58	5290 MHz

### Operated in 5470MHz ~ 5600MHz & 5650MHz ~ 5725MHz bands:

8 channels are provided for 802.11a, 802.11n (HT20), 802.11ac (VHT20):

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

3 channels are provided for 802.11n (HT40), 802.11ac (VHT40):

CHANNEL	FREQUENCY
102	5510 MHz
110	5550 MHz
134	5670 MHz

1 channel is provided for 802.11ac (VHT80):

CHANNEL	FREQUENCY
106	5530 MHz

### 3.2.1 TEST MODE APPLICABILITY AND TESTED CHANNEL DETAIL

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	PLC	RE < 1G	RE ≥ 1G	APCM	
Mode 1	√	√	√	√	With PIFA antenna
Mode 2	-	√	√	-	With Dipole antenna

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

**NOTE:** 1. “-” means no effect.

2. The EUT’s antenna (PIFA) had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **Y-plane** (for below 1GHz) and **X-plane** (for above 1GHz).
3. **For 802.11a/g and UNII band 1 mode:** Same transmitter may have different power setup in 1T and 2T mode as reported in power measurement section.
4. **For 802.11b/n/ac mode:** Same transmitter outputs same power value in 1T and 2T mode.

#### **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.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11n (HT40) / 2Tx	38 to 134	110	OFDM	BPSK	13.5

#### **RADIATED EMISSION TEST (BELOW 1 GHz):**

- ☒ 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.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11n (HT40) / 2Tx	38 to 134	110	OFDM	BPSK	13.5

# **RADIATED EMISSION TEST (ABOVE 1 GHz):**

- ☒ 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.

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a / 1Tx	36 to 140	36, 40, 48, 52, 60, 64, 100, 116, 132, 140	OFDM	BPSK	6
802.11a / 2Tx	36 to 140	36, 40, 48, 52, 60, 64, 100, 116, 132, 140	OFDM	BPSK	6
802.11n (HT20) / 1Tx	36 to 140	36, 40, 48	OFDM	BPSK	6.5
802.11n (HT20) / 2Tx	36 to 140	36, 40, 48, 52, 60, 64, 100, 116, 132, 140	OFDM	BPSK	6.5
802.11n (HT40) / 1Tx	38 to 134	38, 46	OFDM	BPSK	13.5
802.11n (HT40) / 2Tx	38 to 134	38, 46, 54, 62, 102, 110, 134	OFDM	BPSK	13.5
802.11ac (VHT80) / 1Tx	42 to 106	42	OFDM	BPSK	29.3
802.11ac (VHT80) / 2Tx	42 to 106	42, 58, 106	OFDM	BPSK	29.3

### **ANTENNA PORT CONDUCTED MEASUREMENT:**

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

MODE	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	MODULATION TYPE	DATA RATE (Mbps)
802.11a / 1Tx	36 to 140	36, 40, 48, 52, 60, 64, 100, 116, 132, 140	OFDM	BPSK	6
802.11a / 2Tx	36 to 140	36, 40, 48, 52, 60, 64, 100, 116, 132, 140	OFDM	BPSK	6
802.11n (HT20) / 1Tx	36 to 140	36, 40, 48	OFDM	BPSK	6.5
802.11n (HT20) / 2Tx	36 to 140	36, 40, 48, 52, 60, 64, 100, 116, 132, 140	OFDM	BPSK	6.5
802.11n (HT40) / 1Tx	38 to 134	38, 46	OFDM	BPSK	13.5
802.11n (HT40) / 2Tx	38 to 134	38, 46, 54, 62, 102, 110, 134	OFDM	BPSK	13.5
802.11ac (VHT80) / 1Tx	42 to 106	42	OFDM	BPSK	29.3
802.11ac (VHT80) / 2Tx	42 to 106	42, 58, 106	OFDM	BPSK	29.3

### **TEST CONDITION:**

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
PLC	24deg. C, 53%RH	120Vac, 60Hz	Bear Lee
RE<1G	24deg. C, 64%RH	120Vac, 60Hz	Jason Huang
RE <sup>3</sup> 1G	23deg. C, 66%RH	120Vac, 60Hz	Tim Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	Nelson Tseng





A D T

### 3.3 GENERAL DESCRIPTION OF APPLIED STANDARDS

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

**FCC Part 15, Subpart E (15.407)**

**789033 D01 General UNII Test Procedures v01 r03**

**662911 D01 Multiple Transmitter Output v02**

**ANSI C63.10-2009**

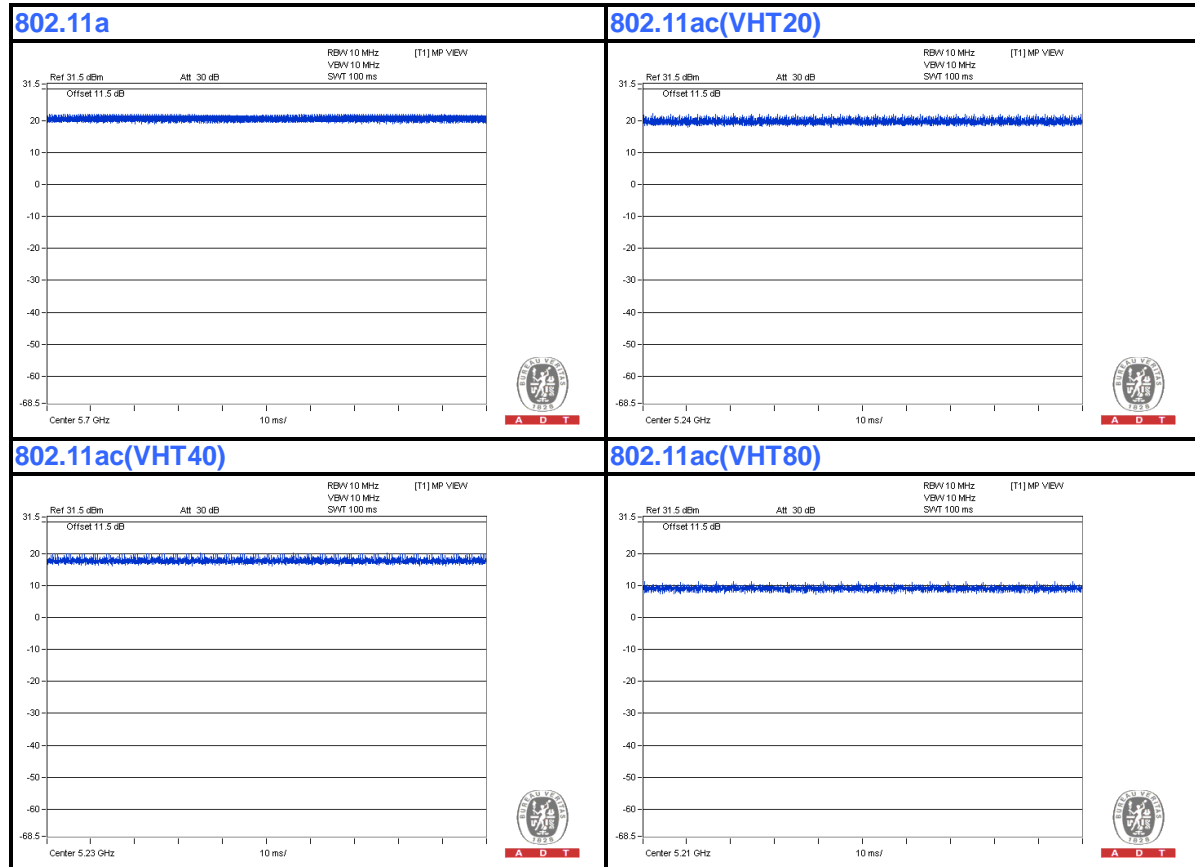
All test items have been performed and recorded as per the above standards.

**Note:** The EUT has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

### 3.4 DUTY CYCLE OF TEST SIGNAL

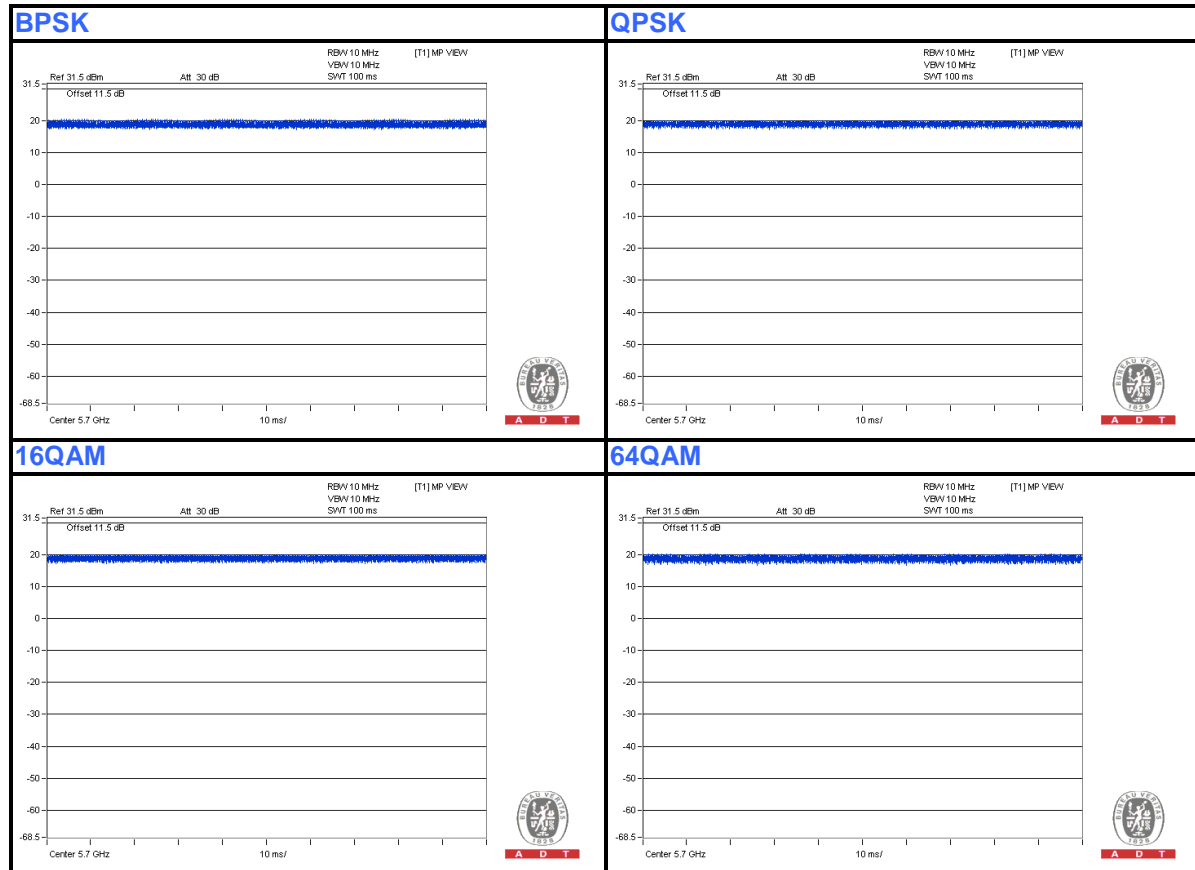
Duty cycle of test signal is 100 %, duty factor is not required.

For 1Tx



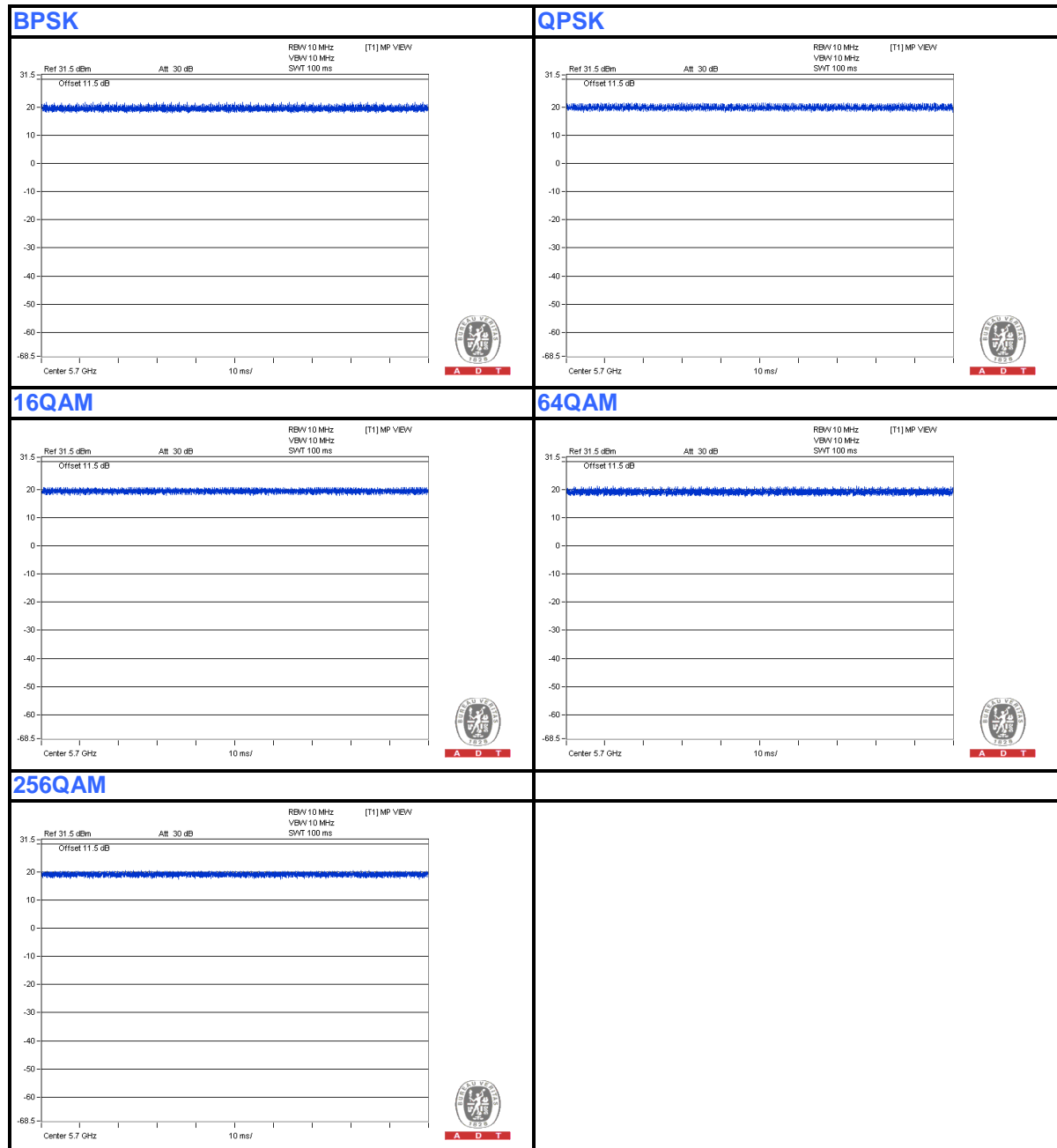
Duty cycle of test signal is 100 %, duty factor is not required.

### 802.11a, 2Tx



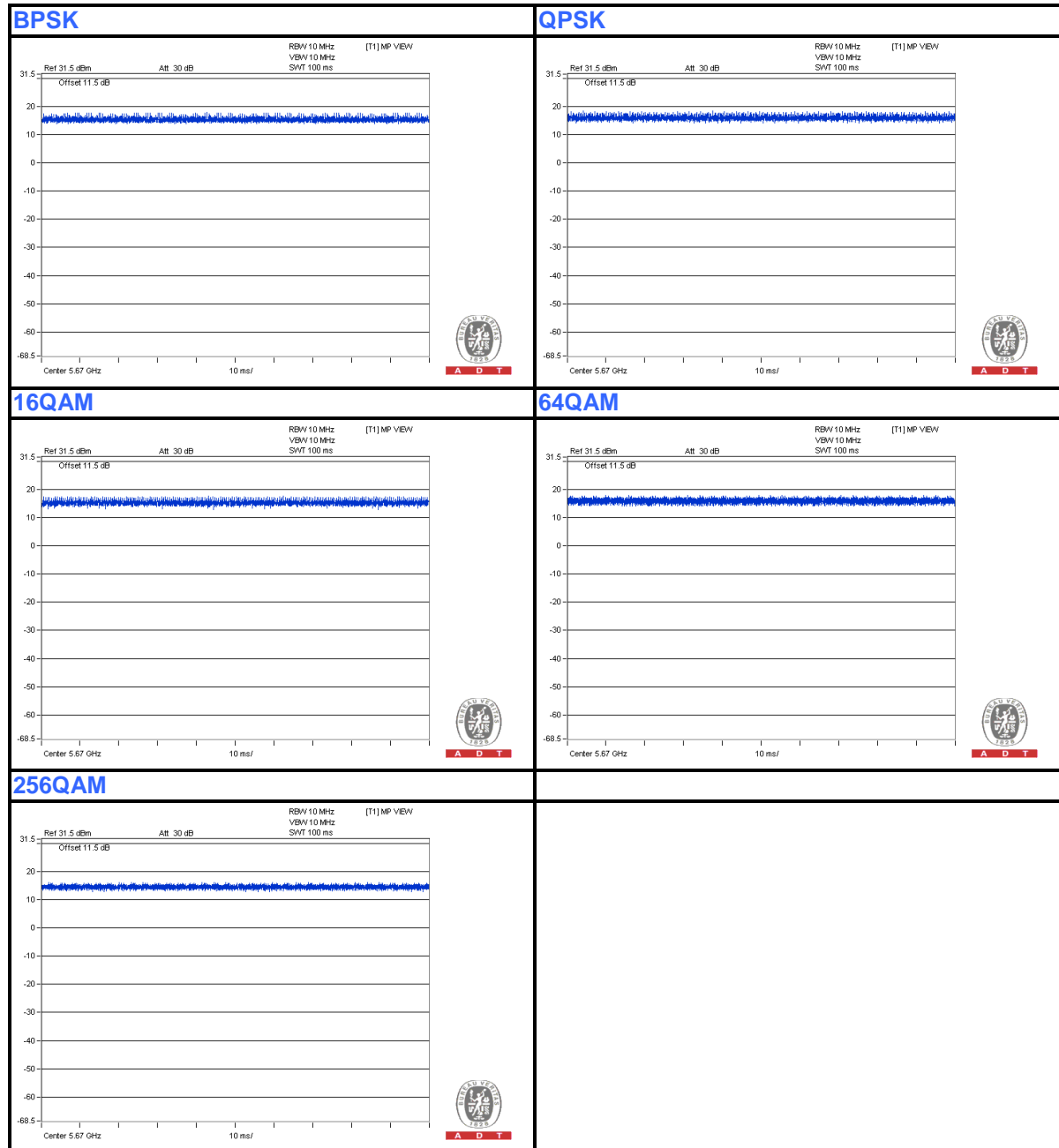
Duty cycle of test signal is 100 %, duty factor is not required.

### 802.11ac(VHT20), 2Tx



Duty cycle of test signal is 100 %, duty factor is not required.

802.11ac(VHT40), 2Tx



Duty cycle of test signal is 100 %, duty factor is not required.

802.11ac(VHT80), 2Tx





A D T

### 3.5 DESCRIPTION OF SUPPORT UNITS

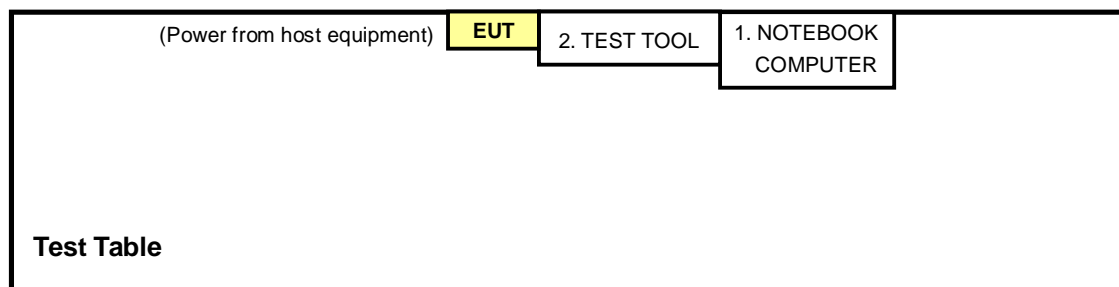
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Product	Brand	Model No.	Serial No.	FCC ID
1	NOTEBOOK COMPUTER	DELL	E6420	482T3R1	FCC DoC
2	TEST TOOL	Realtek	NA	NA	NA

No.	Signal cable description
1	NA
2	NA

Note: The power cords of the above support units were unshielded (1.8m).

### 3.6 CONFIGURATION OF SYSTEM UNDER TEST



## 4. TEST TYPES AND RESULTS

### 4.1 CONDUCTED EMISSION MEASUREMENT

#### 4.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

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

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
  2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

#### 4.1.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver ROHDE & SCHWARZ	ESCS 30	100375	Mar. 08, 2013	Mar. 07, 2014
Line-Impedance Stabilization Network (for EUT) SCHWARZBECK	NSLK8127	8127-522	Sep. 05, 2013	Sep. 04, 2014
Line-Impedance Stabilization Network (for Peripheral)	ENV216	100072	June 06, 2013	June 05, 2014
RF Cable (JYEBAO)	5DFB	COCCAB-001	Mar. 11, 2013	Mar. 10, 2014
50 ohms Terminator	50	EMC-03	Sep. 24, 2013	Sep. 23, 2014
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 Shielded Room No. C.
3. The VCCI Con C Registration No. is C-3611.
4. Tested Date: Dec. 24, 2013



### 4.1.3 TEST PROCEDURES

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

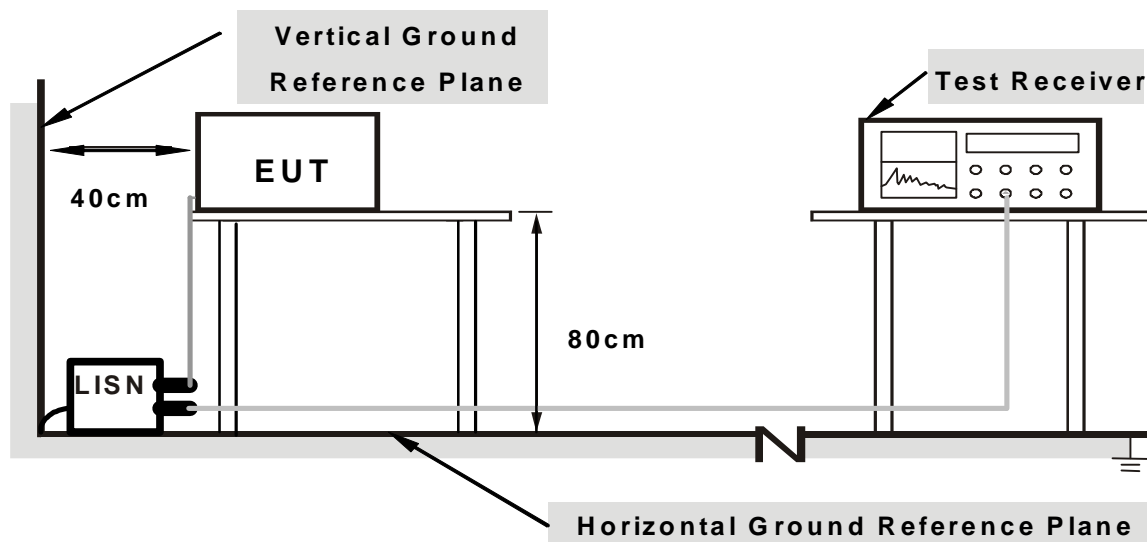
#### NOTE:

- The resolution bandwidth of test receiver is 9kHz for Quasi-peak detection (QP) & Average detection (AV).

### 4.1.4 DEVIATION FROM TEST STANDARD

No deviation

### 4.1.5 TEST SETUP



**Note: 1.Support units were connected to second LISN.**

For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

#### 4.1.6 EUT OPERATING CONDITIONS

1. Connect the EUT with the support unit 1 (Notebook Computer) which is placed on a testing table.
2. The communication partner run test program  
“MP\_Kit\_RTL11ac\_8812AE\_PCIE\_v57\_20131202” to enable EUT under transmission/receiving condition continuously at specific channel frequency.

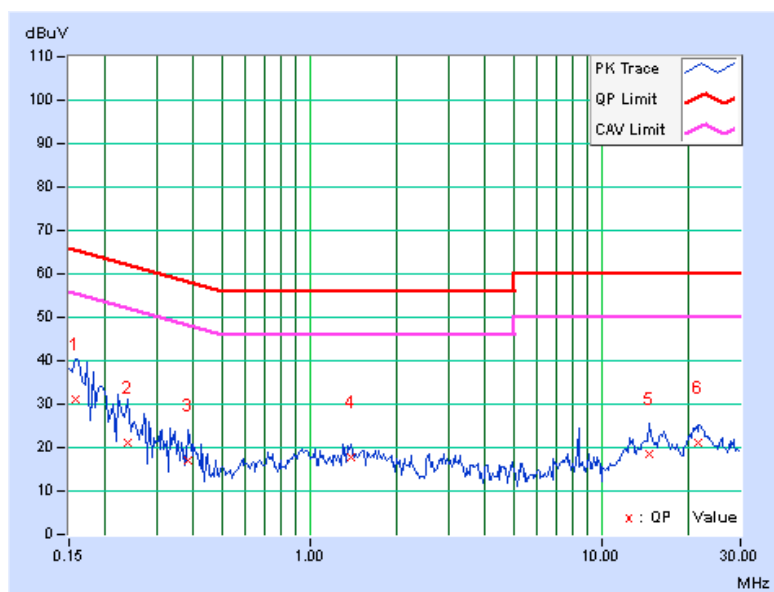
#### 4.1.7 TEST RESULTS

PHASE	Line (L)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)
-------	----------	----------------------	-----------------------------------

No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	0.08	30.98	17.82	31.06	17.90	65.58	55.58	-34.52	-37.68
2	0.23984	0.11	20.93	11.03	21.04	11.14	62.10	52.10	-41.06	-40.96
3	0.38438	0.14	17.02	15.94	17.16	16.08	58.18	48.18	-41.03	-32.11
4	1.39453	0.19	17.48	14.15	17.67	14.34	56.00	46.00	-38.33	-31.66
5	14.64063	0.61	17.79	12.16	18.40	12.77	60.00	50.00	-41.60	-37.23
6	21.58203	0.76	20.40	15.03	21.16	15.79	60.00	50.00	-38.84	-34.21

#### 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

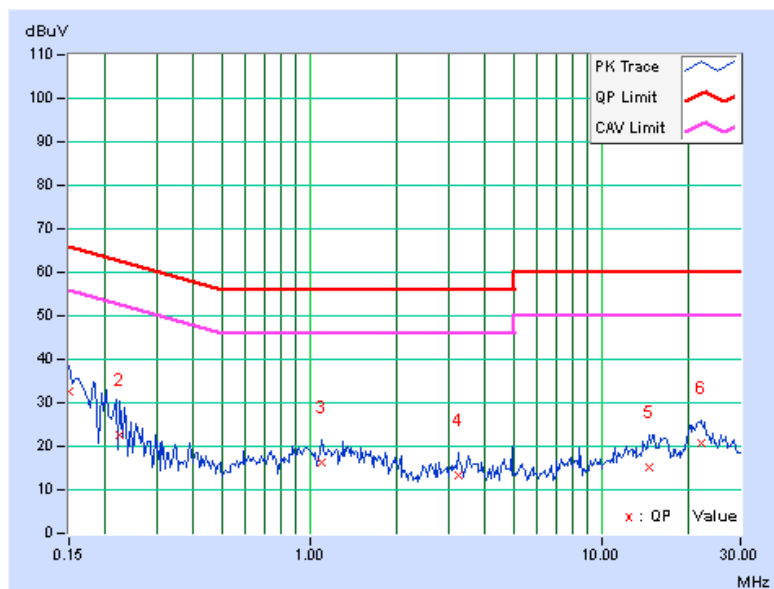


PHASE	Neutral (N)	DETECTOR FUNCTION	Quasi-Peak (QP) / Average (AV)
-------	-------------	----------------------	-----------------------------------

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor [dB]	Q.P. [dB (uV)]	AV. [dB (uV)]	Q.P. [dB (uV)]	AV. [dB (uV)]	Q.P. [dB (uV)]	AV. [dB (uV)]	Q.P. [dB]	AV. [dB]
1	0.15000	0.09	32.41	18.16	32.50	18.25	66.00	56.00	-33.50	-37.75
2	0.22422	0.10	22.48	12.25	22.58	12.35	62.66	52.66	-40.08	-40.31
3	1.10547	0.18	16.08	13.79	16.26	13.97	56.00	46.00	-39.74	-32.03
4	3.23828	0.26	13.20	7.68	13.46	7.94	56.00	46.00	-42.54	-38.06
5	14.51953	0.60	14.66	10.31	15.26	10.91	60.00	50.00	-44.74	-39.09
6	22.06250	0.76	20.11	14.37	20.87	15.13	60.00	50.00	-39.13	-34.87

#### 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



## 4.2 RADIATED EMISSION AND BANDEDGE MEASUREMENT

### 4.2.1 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.

### 4.2.2 LIMITS OF UNWANTED EMISSION OUT OF THE RESTRICTED BANDS

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

**NOTE:**

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

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

#### 4.2.3 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
MXE EMI Receiver Agilent	N9038A	MY51210105	Jan. 29, 2013	Jan. 28, 2014
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-03	Nov. 13, 2013	Nov. 12, 2014
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-360	Mar. 19, 2013	Mar. 18, 2014
RF Cable	NA	CHGCAB_001	Oct. 05, 2013	Oct. 04, 2014
Spectrum Analyzer R&S	FSV40	100964	July 15, 2013	July 14, 2014
Horn_Antenna AISl	AIH.8018	0000320091110	Nov. 18, 2013	Nov. 17, 2014
Pre-Amplifier Agilent	8449B	3008A02578	June 25, 2013	June 24, 2014
RF Cable	NA	RF104-201 RF104-203 RF104-204	Dec. 12, 2013	Dec. 11, 2014
Spectrum Analyzer Agilent	E4446A	MY48250253	Aug. 28, 2013	Aug. 27, 2014
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Nov. 13, 2013	Nov. 12, 2014
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Oct. 08, 2013	Oct. 07, 2014
Software	ADT_Radiated _V8.7.07	NA	NA	NA
Antenna Tower & Turn Table CT	NA	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 horn antenna, preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
- 3 The test was performed in 966 Chamber No. G.
4. The FCC Site Registration No. is 966073.
- 5 The VCCI Site Registration No. is G-137.
- 6 The CANADA Site Registration No. is IC 7450H-2.
- 7 Tested Date: Jan. 17, 2014

#### 4.2.4 TEST PROCEDURES

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. 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 height of antenna 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

**Note:**

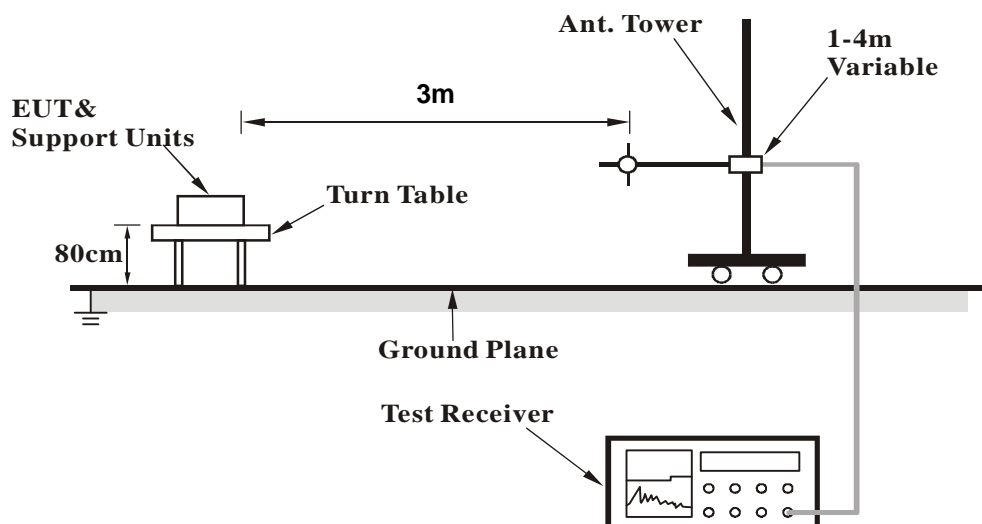
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 3MHz for RMS Average (Duty cycle < 98%) for Average detection (AV) at frequency above 1GHz, then the measurement results was added to a correction factor ( $10 \log(1/\text{duty cycle})$ ).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is 10Hz (Duty cycle  $\geq 98\%$ ) for Average detection (AV) at frequency above 1GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

#### 4.2.5 DEVIATION FROM TEST STANDARD

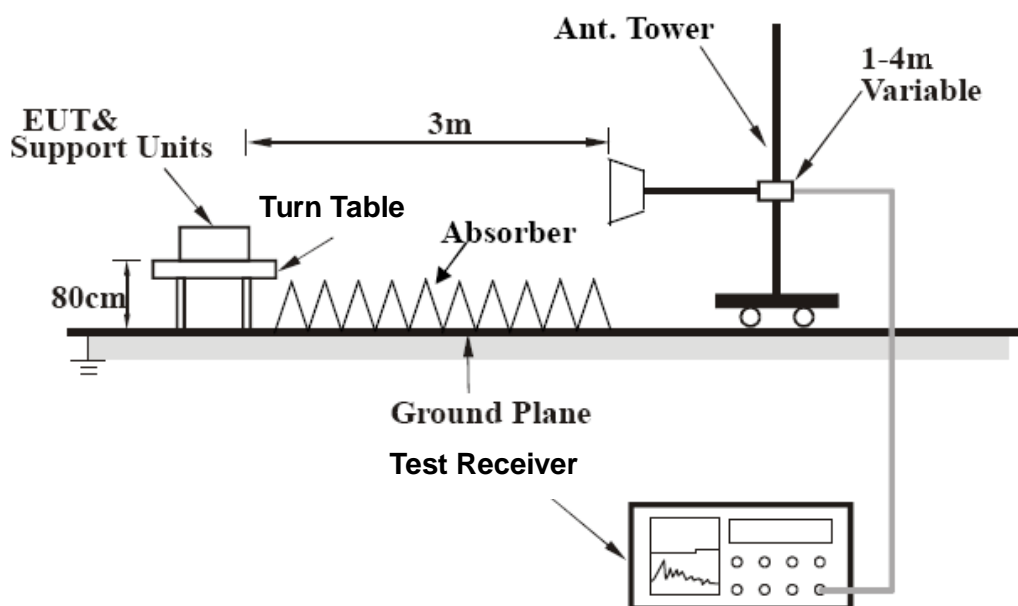
No deviation

## 4.2.6 TEST SETUP

### <Frequency Range below 1GHz>



### <Frequency Range above 1GHz>



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

## 4.2.7 EUT OPERATING CONDITION

Same as 4.1.6



## 4.2.8 TEST RESULTS (MODE 1)

### BELOW 1GHz WORST-CASE DATA

802.11ac(VHT40), 2Tx

CHANNEL	TX Channel 110	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	Below 1GHz		

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	117.93	25.6 QP	43.5	-17.9	1.00 H	277	40.91	-15.32
2	137.13	26.8 QP	43.5	-16.7	1.00 H	183	40.73	-13.92
3	166.83	32.8 QP	43.5	-10.7	1.50 H	233	46.72	-13.88
4	254.16	32.1 QP	46.0	-13.9	1.00 H	280	46.42	-14.32
5	400.01	28.4 QP	46.0	-17.6	1.00 H	168	38.32	-9.91
6	960.00	30.1 QP	46.0	-15.9	2.00 H	174	29.09	1.03
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	117.36	35.2 QP	43.5	-8.3	1.00 V	47	50.60	-15.37
2	146.80	28.2 QP	43.5	-15.3	1.50 V	32	41.79	-13.56
3	250.10	31.6 QP	46.0	-14.4	1.50 V	274	45.91	-14.31
4	337.65	30.0 QP	46.0	-16.0	1.50 V	163	41.44	-11.42
5	400.25	29.4 QP	46.0	-16.6	1.50 V	323	39.32	-9.91
6	960.02	30.4 QP	54.0	-23.6	1.00 V	96	29.38	1.03

#### REMARKS:

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

## ABOVE 1GHz DATA

### 802.11a, 1Tx

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	67.2 PK	74.0	-6.8	1.50 H	88	58.97	8.23
2	5150.00	48.7 AV	54.0	-5.3	1.50 H	88	40.47	8.23
3	*5180.00	110.6 PK			1.48 H	93	102.37	8.23
4	*5180.00	102.1 AV			1.48 H	93	93.87	8.23
5	#10360.00	54.8 PK	74.0	-19.2	1.30 H	246	39.92	14.88
6	#10360.00	43.0 AV	54.0	-11.0	1.30 H	246	28.12	14.88
7	15540.00	58.0 PK	74.0	-16.0	1.09 H	117	37.15	20.85
8	15540.00	46.6 AV	54.0	-7.4	1.09 H	117	25.75	20.85
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	63.0 PK	74.0	-11.0	1.04 V	350	54.77	8.23
2	5150.00	44.5 AV	54.0	-9.5	1.04 V	350	36.27	8.23
3	*5180.00	106.5 PK			1.04 V	350	98.27	8.23
4	*5180.00	97.9 AV			1.04 V	350	89.67	8.23
5	#10360.00	58.5 PK	74.0	-15.5	1.47 V	303	43.62	14.88
6	#10360.00	47.7 AV	54.0	-6.3	1.47 V	303	32.82	14.88
7	15540.00	59.6 PK	74.0	-14.4	1.11 V	34	38.75	20.85
8	15540.00	48.7 AV	54.0	-5.3	1.11 V	34	27.85	20.85

#### REMARKS:

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

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

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	110.0 PK			1.21 H	278	101.76	8.24
2	*5200.00	101.8 AV			1.21 H	278	93.56	8.24
3	#10400.00	54.6 PK	74.0	-19.4	1.24 H	234	39.37	15.23
4	#10400.00	42.4 AV	54.0	-11.6	1.24 H	234	27.17	15.23
5	15600.00	58.0 PK	74.0	-16.0	1.04 H	139	37.12	20.88
6	15600.00	46.6 AV	54.0	-7.4	1.04 H	139	25.72	20.88
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	106.1 PK			1.04 V	350	97.86	8.24
2	*5200.00	98.2 AV			1.04 V	350	89.96	8.24
3	#10400.00	58.7 PK	74.0	-15.3	1.53 V	289	43.47	15.23
4	#10400.00	47.9 AV	54.0	-6.1	1.53 V	289	32.67	15.23
5	15600.00	59.8 PK	74.0	-14.2	1.12 V	49	38.92	20.88
6	15600.00	49.2 AV	54.0	-4.8	1.12 V	49	28.32	20.88

#### REMARKS:

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

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

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			1.49 H	90	102.50	8.40
2	*5240.00	102.4 AV			1.49 H	90	94.00	8.40
3	#10480.00	54.7 PK	74.0	-19.3	1.22 H	243	39.49	15.21
4	#10480.00	42.6 AV	54.0	-11.4	1.22 H	243	27.39	15.21
5	15720.00	57.8 PK	74.0	-16.2	1.02 H	142	36.93	20.87
6	15720.00	46.3 AV	54.0	-7.7	1.02 H	142	25.43	20.87
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	106.9 PK			1.13 V	43	98.50	8.40
2	*5240.00	98.6 AV			1.13 V	43	90.20	8.40
3	#10480.00	57.9 PK	74.0	-16.1	1.48 V	293	42.69	15.21
4	#10480.00	47.2 AV	54.0	-6.8	1.48 V	293	31.99	15.21
5	15720.00	59.7 PK	74.0	-14.3	1.13 V	43	38.83	20.87
6	15720.00	48.9 AV	54.0	-5.1	1.13 V	43	28.03	20.87

#### REMARKS:

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

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	114.0 PK			1.47 H	90	105.54	8.46
2	*5260.00	104.8 AV			1.47 H	90	96.34	8.46
3	#10520.00	54.8 PK	74.0	-19.2	1.23 H	239	39.54	15.26
4	#10520.00	42.5 AV	54.0	-11.5	1.23 H	239	27.24	15.26
5	15780.00	58.0 PK	74.0	-16.0	1.03 H	150	37.25	20.75
6	15780.00	46.4 AV	54.0	-7.6	1.03 H	150	25.65	20.75
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	110.2 PK			1.09 V	28	101.74	8.46
2	*5260.00	100.8 AV			1.09 V	28	92.34	8.46
3	#10520.00	59.0 PK	74.0	-15.0	1.52 V	317	43.74	15.26
4	#10520.00	48.1 AV	54.0	-5.9	1.52 V	317	32.84	15.26
5	15780.00	59.9 PK	74.0	-14.1	1.09 V	46	39.15	20.75
6	15780.00	49.2 AV	54.0	-4.8	1.09 V	46	28.45	20.75

**REMARKS:**

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

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	113.3 PK			1.46 H	91	104.68	8.62
2	*5300.00	104.0 AV			1.46 H	91	95.38	8.62
3	10600.00	54.2 PK	74.0	-19.8	1.22 H	234	38.67	15.53
4	10600.00	41.9 AV	54.0	-12.1	1.22 H	234	26.37	15.53
5	15900.00	57.8 PK	74.0	-16.2	1.00 H	144	36.50	21.30
6	15900.00	46.2 AV	54.0	-7.8	1.00 H	144	24.90	21.30
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	*5300.00	109.4 PK			1.11 V	43	100.78	8.62
2	*5300.00	100.2 AV			1.11 V	43	91.58	8.62
3	10600.00	58.4 PK	74.0	-15.6	1.48 V	311	42.87	15.53
4	10600.00	47.5 AV	54.0	-6.5	1.48 V	311	31.97	15.53
5	15900.00	59.3 PK	74.0	-14.7	1.05 V	34	38.00	21.30
6	15900.00	48.5 AV	54.0	-5.5	1.05 V	34	27.20	21.30

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

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	111.5 PK			1.45 H	91	102.81	8.69
2	*5320.00	102.2 AV			1.45 H	91	93.51	8.69
3	5350.00	70.6 PK	74.0	-3.4	1.46 H	90	61.80	8.80
4	5350.00	52.7 AV	54.0	-1.3	1.46 H	90	43.90	8.80
5	10640.00	54.9 PK	74.0	-19.1	1.26 H	244	39.36	15.54
6	10640.00	42.5 AV	54.0	-11.5	1.26 H	244	26.96	15.54
7	15960.00	58.0 PK	74.0	-16.0	1.04 H	143	37.18	20.82
8	15960.00	46.5 AV	54.0	-7.5	1.04 H	143	25.68	20.82
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	107.7 PK			1.07 V	20	99.01	8.69
2	*5320.00	98.6 AV			1.07 V	20	89.91	8.69
3	5350.00	66.7 PK	74.0	-7.3	1.07 V	20	57.90	8.80
4	5350.00	48.6 AV	54.0	-5.4	1.07 V	20	39.80	8.80
5	10640.00	58.2 PK	74.0	-15.8	1.51 V	309	42.66	15.54
6	10640.00	47.4 AV	54.0	-6.6	1.51 V	309	31.86	15.54
7	15960.00	60.2 PK	74.0	-13.8	1.11 V	33	39.38	20.82
8	15960.00	49.1 AV	54.0	-4.9	1.11 V	33	28.28	20.82

**REMARKS:**

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

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5470.00	70.1 PK	74.0	-3.9	1.46 H	87	60.88	9.22
2	#5470.00	52.7 AV	54.0	-1.3	1.46 H	87	43.48	9.22
3	*5500.00	113.4 PK			1.46 H	87	104.07	9.33
4	*5500.00	104.3 AV			1.46 H	87	94.97	9.33
5	11000.00	55.2 PK	74.0	-18.8	1.23 H	257	38.25	16.95
6	11000.00	42.9 AV	54.0	-11.1	1.23 H	257	25.95	16.95
7	#16500.00	58.4 PK	74.0	-15.6	1.05 H	134	35.36	23.04
8	#16500.00	47.0 AV	54.0	-7.0	1.05 H	134	23.96	23.04
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	#5470.00	66.1 PK	74.0	-7.9	1.10 V	14	56.88	9.22
2	#5470.00	48.6 AV	54.0	-5.4	1.10 V	14	39.38	9.22
3	*5500.00	109.4 PK			1.10 V	14	100.07	9.33
4	*5500.00	100.0 AV			1.10 V	14	90.67	9.33
5	11000.00	58.1 PK	74.0	-15.9	1.49 V	293	41.15	16.95
6	11000.00	47.4 AV	54.0	-6.6	1.49 V	293	30.45	16.95
7	#16500.00	59.5 PK	74.0	-14.5	1.10 V	31	36.46	23.04
8	#16500.00	48.8 AV	54.0	-5.2	1.10 V	31	25.76	23.04

**REMARKS:**

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



CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	114.0 PK			1.38 H	84	104.53	9.47
2	*5580.00	105.2 AV			1.38 H	84	95.73	9.47
3	#5740.00	59.1 PK	74.0	-14.9	1.38 H	84	49.17	9.93
4	#5740.00	49.1 AV	54.0	-4.9	1.38 H	84	39.17	9.93
5	11160.00	55.7 PK	74.0	-18.3	1.21 H	243	39.49	16.21
6	11160.00	43.2 AV	54.0	-10.8	1.21 H	243	26.99	16.21
7	#16740.00	58.1 PK	74.0	-15.9	1.03 H	135	34.42	23.68
8	#16740.00	46.5 AV	54.0	-7.5	1.03 H	135	22.82	23.68
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	109.8 PK			1.08 V	8	100.33	9.47
2	*5580.00	100.9 AV			1.08 V	8	91.43	9.47
3	#5740.00	55.4 PK	74.0	-18.6	1.08 V	8	45.47	9.93
4	#5740.00	45.5 AV	54.0	-8.5	1.08 V	8	35.57	9.93
5	11160.00	58.7 PK	74.0	-15.3	1.45 V	315	42.49	16.21
6	11160.00	47.9 AV	54.0	-6.1	1.45 V	315	31.69	16.21
7	#16740.00	59.5 PK	74.0	-14.5	1.08 V	20	35.82	23.68
8	#16740.00	48.9 AV	54.0	-5.1	1.08 V	20	25.22	23.68

**REMARKS:**

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

CHANNEL	TX Channel 132	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5660.00	114.2 PK			1.37 H	88	104.47	9.73
2	*5660.00	105.4 AV			1.37 H	88	95.67	9.73
3	11320.00	55.1 PK	74.0	-18.9	1.27 H	267	38.18	16.92
4	11320.00	42.5 AV	54.0	-11.5	1.27 H	267	25.58	16.92
5	#16980.00	57.8 PK	74.0	-16.2	1.05 H	124	33.60	24.20
6	#16980.00	46.6 AV	54.0	-7.4	1.05 H	124	22.40	24.20
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	*5660.00	110.1 PK			1.02 V	17	100.37	9.73
2	*5660.00	101.4 AV			1.02 V	17	91.67	9.73
3	11320.00	58.0 PK	74.0	-16.0	1.46 V	298	41.08	16.92
4	11320.00	47.2 AV	54.0	-6.8	1.46 V	298	30.28	16.92
5	#16980.00	60.1 PK	74.0	-13.9	1.16 V	44	35.90	24.20
6	#16980.00	49.1 AV	54.0	-4.9	1.16 V	44	24.90	24.20

#### REMARKS:

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

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	111.3 PK			1.00 H	346	101.42	9.88
2	*5700.00	103.3 AV			1.00 H	346	93.42	9.88
3	#5725.00	69.6 PK	74.0	-4.4	1.00 H	346	59.69	9.91
4	#5725.00	52.5 AV	54.0	-1.5	1.00 H	346	42.59	9.91
5	11400.00	54.7 PK	74.0	-19.3	1.19 H	249	37.95	16.75
6	11400.00	42.6 AV	54.0	-11.4	1.19 H	249	25.85	16.75
7	#17100.00	58.1 PK	74.0	-15.9	1.02 H	112	33.04	25.06
8	#17100.00	46.7 AV	54.0	-7.3	1.02 H	112	21.64	25.06
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	107.3 PK			1.01 V	5	97.42	9.88
2	*5700.00	99.6 AV			1.01 V	5	89.72	9.88
3	#5725.00	65.9 PK	74.0	-8.1	1.01 V	5	55.99	9.91
4	#5725.00	48.6 AV	54.0	-5.4	1.01 V	5	38.69	9.91
5	11400.00	58.7 PK	74.0	-15.3	1.43 V	305	41.95	16.75
6	11400.00	48.0 AV	54.0	-6.0	1.43 V	305	31.25	16.75
7	#17100.00	59.6 PK	74.0	-14.4	1.12 V	46	34.54	25.06
8	#17100.00	48.6 AV	54.0	-5.4	1.12 V	46	23.54	25.06

**REMARKS:**

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

# 802.11ac(VHT20), 1Tx

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	59.2 PK	74.0	-14.8	1.17 H	262	50.97	8.23
2	5150.00	49.4 AV	54.0	-4.6	1.17 H	262	41.17	8.23
3	*5180.00	111.7 PK			1.17 H	262	103.47	8.23
4	*5180.00	102.0 AV			1.17 H	262	93.77	8.23
5	#10360.00	54.6 PK	74.0	-19.4	1.21 H	204	39.72	14.88
6	#10360.00	42.4 AV	54.0	-11.6	1.21 H	204	27.52	14.88
7	15540.00	59.2 PK	74.0	-14.8	1.05 H	148	38.35	20.85
8	15540.00	47.3 AV	54.0	-6.7	1.05 H	148	26.45	20.85
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	55.4 PK	74.0	-18.6	1.16 V	203	47.17	8.23
2	5150.00	45.7 AV	54.0	-8.3	1.16 V	203	37.47	8.23
3	*5180.00	107.4 PK			1.16 V	203	99.17	8.23
4	*5180.00	97.6 AV			1.16 V	203	89.37	8.23
5	#10360.00	58.4 PK	74.0	-15.6	1.48 V	276	43.52	14.88
6	#10360.00	47.6 AV	54.0	-6.4	1.48 V	276	32.72	14.88
7	15540.00	59.4 PK	74.0	-14.6	1.13 V	60	38.55	20.85
8	15540.00	48.5 AV	54.0	-5.5	1.13 V	60	27.65	20.85

## REMARKS:

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

<b>CHANNEL</b>	TX Channel 40	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	5127.00	58.9 PK	74.0	-15.1	1.13 H	256	50.68	8.22
2	5127.00	49.2 AV	54.0	-4.8	1.13 H	256	40.98	8.22
3	*5200.00	116.5 PK			1.13 H	256	108.26	8.24
4	*5200.00	107.2 AV			1.13 H	256	98.96	8.24
5	#10400.00	54.9 PK	74.0	-19.1	1.21 H	204	39.67	15.23
6	#10400.00	42.4 AV	54.0	-11.6	1.21 H	204	27.17	15.23
7	15600.00	58.9 PK	74.0	-15.1	1.07 H	162	38.02	20.88
8	15600.00	47.0 AV	54.0	-7.0	1.07 H	162	26.12	20.88
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	54.7 PK	74.0	-19.3	1.18 V	212	46.47	8.23
2	5150.00	44.7 AV	54.0	-9.3	1.18 V	212	36.47	8.23
3	*5200.00	112.3 PK			1.18 V	212	104.06	8.24
4	*5200.00	102.9 AV			1.18 V	212	94.66	8.24
5	#10400.00	58.7 PK	74.0	-15.3	1.48 V	263	43.47	15.23
6	#10400.00	47.9 AV	54.0	-6.1	1.48 V	263	32.67	15.23
7	15600.00	59.9 PK	74.0	-14.1	1.18 V	67	39.02	20.88
8	15600.00	48.8 AV	54.0	-5.2	1.18 V	67	27.92	20.88

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 48	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	59.7 PK	74.0	-14.3	1.20 H	271	51.47	8.23
2	5150.00	49.8 AV	54.0	-4.2	1.20 H	271	41.57	8.23
3	*5240.00	119.0 PK			1.20 H	271	110.60	8.40
4	*5240.00	109.6 AV			1.20 H	271	101.20	8.40
5	#10480.00	54.4 PK	74.0	-19.6	1.17 H	213	39.19	15.21
6	#10480.00	42.0 AV	54.0	-12.0	1.17 H	213	26.79	15.21
7	15720.00	59.2 PK	74.0	-14.8	1.09 H	146	38.33	20.87
8	15720.00	47.4 AV	54.0	-6.6	1.09 H	146	26.53	20.87
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	56.0 PK	74.0	-18.0	1.10 V	191	47.77	8.23
2	5150.00	45.9 AV	54.0	-8.1	1.10 V	191	37.67	8.23
3	*5240.00	114.6 PK			1.10 V	191	106.20	8.40
4	*5240.00	105.5 AV			1.10 V	191	97.10	8.40
5	#10480.00	58.2 PK	74.0	-15.8	1.52 V	273	42.99	15.21
6	#10480.00	47.7 AV	54.0	-6.3	1.52 V	273	32.49	15.21
7	15720.00	59.3 PK	74.0	-14.7	1.10 V	57	38.43	20.87
8	15720.00	48.1 AV	54.0	-5.9	1.10 V	57	27.23	20.87

**REMARKS:**

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

# 802.11ac(VHT40), 1Tx

<b>CHANNEL</b>	TX Channel 38	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	59.0 PK	74.0	-15.0	1.15 H	275	50.77	8.23
2	5150.00	49.0 AV	54.0	-5.0	1.15 H	275	40.77	8.23
3	*5190.00	102.7 PK			1.15 H	275	94.46	8.24
4	*5190.00	92.5 AV			1.15 H	275	84.26	8.24
5	#10380.00	54.4 PK	74.0	-19.6	1.24 H	209	39.34	15.06
6	#10380.00	42.4 AV	54.0	-11.6	1.24 H	209	27.34	15.06
7	15570.00	59.8 PK	74.0	-14.2	1.02 H	135	38.94	20.86
8	15570.00	47.7 AV	54.0	-6.3	1.02 H	135	26.84	20.86
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	55.5 PK	74.0	-18.5	1.12 V	209	47.27	8.23
2	5150.00	45.3 AV	54.0	-8.7	1.12 V	209	37.07	8.23
3	*5190.00	98.8 PK			1.12 V	209	90.56	8.24
4	*5190.00	88.7 AV			1.12 V	209	80.46	8.24
5	#10380.00	58.9 PK	74.0	-15.1	1.45 V	281	43.84	15.06
6	#10380.00	48.0 AV	54.0	-6.0	1.45 V	281	32.94	15.06
7	15570.00	59.7 PK	74.0	-14.3	1.19 V	65	38.84	20.86
8	15570.00	48.8 AV	54.0	-5.2	1.19 V	65	27.94	20.86

## REMARKS:

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

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

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	5127.00	59.4 PK	74.0	-14.6	1.16 H	257	51.18	8.22
2	5127.00	49.7 AV	54.0	-4.3	1.16 H	257	41.48	8.22
3	*5230.00	113.2 PK			1.16 H	257	104.84	8.36
4	*5230.00	103.4 AV			1.16 H	257	95.04	8.36
5	#10460.00	54.6 PK	74.0	-19.4	1.26 H	192	39.39	15.21
6	#10460.00	42.6 AV	54.0	-11.4	1.26 H	192	27.39	15.21
7	15690.00	59.3 PK	74.0	-14.7	1.09 H	145	38.39	20.91
8	15690.00	47.7 AV	54.0	-6.3	1.09 H	145	26.79	20.91
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	54.7 PK	74.0	-19.3	1.19 V	187	46.47	8.23
2	5150.00	45.2 AV	54.0	-8.8	1.19 V	187	36.97	8.23
3	*5230.00	109.8 PK			1.19 V	187	101.44	8.36
4	*5230.00	99.7 AV			1.19 V	187	91.34	8.36
5	#10460.00	58.0 PK	74.0	-16.0	1.45 V	283	42.79	15.21
6	#10460.00	47.2 AV	54.0	-6.8	1.45 V	283	31.99	15.21
7	15690.00	59.4 PK	74.0	-14.6	1.11 V	70	38.49	20.91
8	15690.00	48.8 AV	54.0	-5.2	1.11 V	70	27.89	20.91

**REMARKS:**

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



# 802.11ac(VHT80), 1Tx

<b>CHANNEL</b>	TX Channel 42	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	59.3 PK	74.0	-14.7	1.22 H	247	51.07	8.23
2	5150.00	49.2 AV	54.0	-4.8	1.22 H	247	40.97	8.23
3	*5210.00	103.6 PK			1.22 H	247	95.33	8.27
4	*5210.00	93.8 AV			1.22 H	247	85.53	8.27
5	#10420.00	54.4 PK	74.0	-19.6	1.18 H	191	39.19	15.21
6	#10420.00	42.1 AV	54.0	-11.9	1.18 H	191	26.89	15.21
7	15630.00	59.0 PK	74.0	-15.0	1.05 H	163	38.11	20.89
8	15630.00	47.1 AV	54.0	-6.9	1.05 H	163	26.21	20.89
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	56.1 PK	74.0	-17.9	1.12 V	212	47.87	8.23
2	5150.00	45.7 AV	54.0	-8.3	1.12 V	212	37.47	8.23
3	*5210.00	99.9 PK			1.12 V	212	91.63	8.27
4	*5210.00	90.1 AV			1.12 V	212	81.83	8.27
5	#10420.00	58.4 PK	74.0	-15.6	1.45 V	277	43.19	15.21
6	#10420.00	47.4 AV	54.0	-6.6	1.45 V	277	32.19	15.21
7	15630.00	59.2 PK	74.0	-14.8	1.17 V	76	38.31	20.89
8	15630.00	48.4 AV	54.0	-5.6	1.17 V	76	27.51	20.89

## REMARKS:

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

# 802.11a, 2Tx

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	5107.00	56.6 PK	74.0	-17.4	1.23 H	102	48.38	8.22
2	5107.00	42.5 AV	54.0	-11.5	1.23 H	102	34.28	8.22
3	*5180.00	106.4 PK			1.23 H	102	98.17	8.23
4	*5180.00	97.5 AV			1.23 H	102	89.27	8.23
5	#10360.00	55.1 PK	74.0	-18.9	1.26 H	234	40.22	14.88
6	#10360.00	43.1 AV	54.0	-10.9	1.26 H	234	28.22	14.88
7	15540.00	59.0 PK	74.0	-15.0	1.01 H	138	38.15	20.85
8	15540.00	47.1 AV	54.0	-6.9	1.01 H	138	26.25	20.85
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	49.9 PK	74.0	-24.1	1.02 V	340	41.67	8.23
2	5150.00	40.4 AV	54.0	-13.6	1.02 V	340	32.17	8.23
3	*5180.00	102.4 PK			1.02 V	340	94.17	8.23
4	*5180.00	93.2 AV			1.02 V	340	84.97	8.23
5	#10360.00	59.3 PK	74.0	-14.7	1.39 V	265	44.42	14.88
6	#10360.00	47.6 AV	54.0	-6.4	1.39 V	265	32.72	14.88
7	15540.00	59.7 PK	74.0	-14.3	1.20 V	72	38.85	20.85
8	15540.00	48.5 AV	54.0	-5.5	1.20 V	72	27.65	20.85

## REMARKS:

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

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

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	5114.00	54.9 PK	74.0	-19.1	1.25 H	78	46.68	8.22
2	5114.00	42.9 AV	54.0	-11.1	1.25 H	78	34.68	8.22
3	*5200.00	106.4 PK			1.25 H	78	98.16	8.24
4	*5200.00	97.2 AV			1.25 H	78	88.96	8.24
5	5360.00	53.9 PK	74.0	-20.1	1.25 H	78	45.07	8.83
6	5360.00	42.8 AV	54.0	-11.2	1.25 H	78	33.97	8.83
7	#10400.00	55.0 PK	74.0	-19.0	1.23 H	220	39.77	15.23
8	#10400.00	43.1 AV	54.0	-10.9	1.23 H	220	27.87	15.23
9	15600.00	58.8 PK	74.0	-15.2	1.03 H	129	37.92	20.88
10	15600.00	46.9 AV	54.0	-7.1	1.03 H	129	26.02	20.88
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	5112.00	51.1 PK	74.0	-22.9	1.00 V	354	42.87	8.23
2	5112.00	41.5 AV	54.0	-12.5	1.00 V	354	33.27	8.23
3	*5200.00	101.9 PK			1.00 V	354	93.66	8.24
4	*5200.00	92.9 AV			1.00 V	354	84.66	8.24
5	5350.00	52.6 PK	74.0	-21.4	1.00 V	354	43.80	8.80
6	5350.00	41.2 AV	54.0	-12.8	1.00 V	354	32.40	8.80
7	#10400.00	58.8 PK	74.0	-15.2	1.40 V	280	43.57	15.23
8	#10400.00	47.6 AV	54.0	-6.4	1.40 V	280	32.37	15.23
9	15600.00	59.7 PK	74.0	-14.3	1.11 V	65	38.82	20.88
10	15600.00	48.3 AV	54.0	-5.7	1.11 V	65	27.42	20.88

#### REMARKS:

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

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

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	51.2 PK	74.0	-22.8	1.23 H	283	42.97	8.23
2	5150.00	40.2 AV	54.0	-13.8	1.23 H	283	31.97	8.23
3	*5240.00	106.8 PK			1.23 H	283	98.40	8.40
4	*5240.00	97.8 AV			1.23 H	283	89.40	8.40
5	5400.00	53.6 PK	74.0	-20.4	1.23 H	283	44.63	8.97
6	5400.00	42.7 AV	54.0	-11.3	1.23 H	283	33.73	8.97
7	#10480.00	54.6 PK	74.0	-19.4	1.21 H	230	39.39	15.21
8	#10480.00	42.8 AV	54.0	-11.2	1.21 H	230	27.59	15.21
9	15720.00	58.4 PK	74.0	-15.6	1.04 H	128	37.53	20.87
10	15720.00	46.7 AV	54.0	-7.3	1.04 H	128	25.83	20.87
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	50.2 PK	74.0	-23.8	1.06 V	345	41.97	8.23
2	5150.00	39.3 AV	54.0	-14.7	1.06 V	345	31.07	8.23
3	*5240.00	102.3 PK			1.06 V	345	93.90	8.40
4	*5240.00	93.4 AV			1.06 V	345	85.00	8.40
5	5400.00	52.6 PK	74.0	-21.4	1.06 V	345	43.63	8.97
6	5400.00	42.0 AV	54.0	-12.0	1.06 V	345	33.03	8.97
7	#10480.00	58.5 PK	74.0	-15.5	1.42 V	287	43.29	15.21
8	#10480.00	47.2 AV	54.0	-6.8	1.42 V	287	31.99	15.21
9	15720.00	59.7 PK	74.0	-14.3	1.10 V	62	38.83	20.87
10	15720.00	48.6 AV	54.0	-5.4	1.10 V	62	27.73	20.87

#### REMARKS:

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

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	118.0 PK			1.45 H	90	109.54	8.46
2	*5260.00	109.3 AV			1.45 H	90	100.84	8.46
3	#10520.00	54.4 PK	74.0	-19.6	1.29 H	224	39.14	15.26
4	#10520.00	42.6 AV	54.0	-11.4	1.29 H	224	27.34	15.26
5	15780.00	59.0 PK	74.0	-15.0	1.00 H	140	38.25	20.75
6	15780.00	47.0 AV	54.0	-7.0	1.00 H	140	26.25	20.75
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	114.3 PK			1.11 V	318	105.84	8.46
2	*5260.00	105.4 AV			1.11 V	318	96.94	8.46
3	#10520.00	58.9 PK	74.0	-15.1	1.46 V	293	43.64	15.26
4	#10520.00	47.1 AV	54.0	-6.9	1.46 V	293	31.84	15.26
5	15780.00	60.1 PK	74.0	-13.9	1.10 V	73	39.35	20.75
6	15780.00	48.6 AV	54.0	-5.4	1.10 V	73	27.85	20.75

#### REMARKS:

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



A D T

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	117.1 PK			1.44 H	95	108.48	8.62
2	*5300.00	108.4 AV			1.44 H	95	99.78	8.62
3	5374.00	61.9 PK	74.0	-12.1	1.41 H	95	53.02	8.88
4	5374.00	51.1 AV	54.0	-2.9	1.41 H	95	42.22	8.88
5	10600.00	55.0 PK	74.0	-19.0	1.27 H	224	39.47	15.53
6	10600.00	42.8 AV	54.0	-11.2	1.27 H	224	27.27	15.53
7	15900.00	58.5 PK	74.0	-15.5	1.00 H	124	37.20	21.30
8	15900.00	46.7 AV	54.0	-7.3	1.00 H	124	25.40	21.30
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	*5300.00	112.1 PK			1.08 V	305	103.48	8.62
2	*5300.00	103.7 AV			1.08 V	305	95.08	8.62
3	5374.00	57.7 PK	74.0	-16.3	1.08 V	305	48.82	8.88
4	5374.00	47.2 AV	54.0	-6.8	1.08 V	305	38.32	8.88
5	10600.00	59.4 PK	74.0	-14.6	1.49 V	271	43.87	15.53
6	10600.00	47.8 AV	54.0	-6.2	1.49 V	271	32.27	15.53
7	15900.00	60.4 PK	74.0	-13.6	1.22 V	55	39.10	21.30
8	15900.00	48.8 AV	54.0	-5.2	1.22 V	55	27.50	21.30

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

<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	114.4 PK			1.45 H	91	105.71	8.69
2	*5320.00	105.8 AV			1.45 H	91	97.11	8.69
3	5350.00	70.9 PK	74.0	-3.1	1.48 H	99	62.10	8.80
4	5350.00	52.8 AV	54.0	-1.2	1.48 H	99	44.00	8.80
5	10640.00	54.7 PK	74.0	-19.3	1.23 H	220	39.16	15.54
6	10640.00	42.5 AV	54.0	-11.5	1.23 H	220	26.96	15.54
7	15960.00	58.9 PK	74.0	-15.1	1.10 H	140	38.08	20.82
8	15960.00	47.1 AV	54.0	-6.9	1.10 H	140	26.28	20.82
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	109.4 PK			1.12 V	292	100.71	8.69
2	*5320.00	100.7 AV			1.12 V	292	92.01	8.69
3	5350.00	66.0 PK	74.0	-8.0	1.12 V	292	57.20	8.80
4	5350.00	48.1 AV	54.0	-5.9	1.12 V	292	39.30	8.80
5	10640.00	59.0 PK	74.0	-15.0	1.47 V	284	43.46	15.54
6	10640.00	47.2 AV	54.0	-6.8	1.47 V	284	31.66	15.54
7	15960.00	59.4 PK	74.0	-14.6	1.15 V	50	38.58	20.82
8	15960.00	48.0 AV	54.0	-6.0	1.15 V	50	27.18	20.82

**REMARKS:**

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

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5414.00	69.5 PK	74.0	-4.5	1.48 H	98	60.49	9.01
2	5414.00	52.8 AV	54.0	-1.2	1.48 H	98	43.79	9.01
3	*5500.00	116.5 PK			1.47 H	89	107.17	9.33
4	*5500.00	107.8 AV			1.47 H	89	98.47	9.33
5	11000.00	54.7 PK	74.0	-19.3	1.21 H	232	37.75	16.95
6	11000.00	42.6 AV	54.0	-11.4	1.21 H	232	25.65	16.95
7	#16500.00	58.8 PK	74.0	-15.2	1.04 H	150	35.76	23.04
8	#16500.00	46.8 AV	54.0	-7.2	1.04 H	150	23.76	23.04
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	#5470.00	65.1 PK	74.0	-8.9	1.11 V	271	55.88	9.22
2	#5470.00	48.8 AV	54.0	-5.2	1.11 V	271	39.58	9.22
3	*5500.00	112.8 PK			1.11 V	271	103.47	9.33
4	*5500.00	103.8 AV			1.11 V	271	94.47	9.33
5	11000.00	59.5 PK	74.0	-14.5	1.43 V	278	42.55	16.95
6	11000.00	47.8 AV	54.0	-6.2	1.43 V	278	30.85	16.95
7	#16500.00	59.0 PK	74.0	-15.0	1.13 V	59	35.96	23.04
8	#16500.00	47.9 AV	54.0	-6.1	1.13 V	59	24.86	23.04

**REMARKS:**

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



CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	117.8 PK			1.46 H	88	108.33	9.47
2	*5580.00	109.2 AV			1.46 H	88	99.73	9.47
3	11160.00	54.6 PK	74.0	-19.4	1.20 H	231	38.39	16.21
4	11160.00	42.4 AV	54.0	-11.6	1.20 H	231	26.19	16.21
5	#16740.00	58.7 PK	74.0	-15.3	1.06 H	125	35.02	23.68
6	#16740.00	47.1 AV	54.0	-6.9	1.06 H	125	23.42	23.68
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	114.3 PK			1.07 V	252	104.83	9.47
2	*5580.00	105.6 AV			1.07 V	252	96.13	9.47
3	11160.00	59.3 PK	74.0	-14.7	1.48 V	291	43.09	16.21
4	11160.00	47.7 AV	54.0	-6.3	1.48 V	291	31.49	16.21
5	#16740.00	59.0 PK	74.0	-15.0	1.11 V	67	35.32	23.68
6	#16740.00	47.8 AV	54.0	-6.2	1.11 V	67	24.12	23.68

**REMARKS:**

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



A D T

CHANNEL	TX Channel 132	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5474.00	62.3 PK	74.0	-11.7	1.39 H	86	53.07	9.23
2	#5474.00	52.4 AV	54.0	-1.6	1.39 H	86	43.17	9.23
3	*5660.00	117.7 PK			1.43 H	91	107.97	9.73
4	*5660.00	108.9 AV			1.43 H	91	99.17	9.73
5	11320.00	54.7 PK	74.0	-19.3	1.23 H	221	37.78	16.92
6	11320.00	42.6 AV	54.0	-11.4	1.23 H	221	25.68	16.92
7	#16980.00	58.6 PK	74.0	-15.4	1.11 H	132	34.40	24.20
8	#16980.00	47.1 AV	54.0	-6.9	1.11 H	132	22.90	24.20
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	#5474.00	58.3 PK	74.0	-15.7	1.05 V	253	49.07	9.23
2	#5474.00	48.7 AV	54.0	-5.3	1.05 V	253	39.47	9.23
3	*5660.00	112.7 PK			1.05 V	253	102.97	9.73
4	*5660.00	104.1 AV			1.05 V	253	94.37	9.73
5	11320.00	58.4 PK	74.0	-15.6	1.37 V	293	41.48	16.92
6	11320.00	47.0 AV	54.0	-7.0	1.37 V	293	30.08	16.92
7	#16980.00	59.8 PK	74.0	-14.2	1.22 V	52	35.60	24.20
8	#16980.00	48.6 AV	54.0	-5.4	1.22 V	52	24.40	24.20

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	114.5 PK			1.41 H	91	104.62	9.88
2	*5700.00	106.0 AV			1.41 H	91	96.12	9.88
3	#5725.00	66.0 PK	74.0	-8.0	1.36 H	88	56.09	9.91
4	#5725.00	52.6 AV	54.0	-1.4	1.36 H	88	42.69	9.91
5	11400.00	54.5 PK	74.0	-19.5	1.28 H	228	37.75	16.75
6	11400.00	42.1 AV	54.0	-11.9	1.28 H	228	25.35	16.75
7	#17100.00	59.1 PK	74.0	-14.9	1.11 H	150	34.04	25.06
8	#17100.00	47.4 AV	54.0	-6.6	1.11 H	150	22.34	25.06
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	109.0 PK			1.01 V	267	99.12	9.88
2	*5700.00	101.0 AV			1.01 V	267	91.12	9.88
3	#5725.00	61.8 PK	74.0	-12.2	1.01 V	267	51.89	9.91
4	#5725.00	48.4 AV	54.0	-5.6	1.01 V	267	38.49	9.91
5	11400.00	59.1 PK	74.0	-14.9	1.44 V	271	42.35	16.75
6	11400.00	47.8 AV	54.0	-6.2	1.44 V	271	31.05	16.75
7	#17100.00	60.2 PK	74.0	-13.8	1.15 V	57	35.14	25.06
8	#17100.00	48.8 AV	54.0	-5.2	1.15 V	57	23.74	25.06

**REMARKS:**

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

### 802.11ac(VHT20), 2Tx

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	5105.00	55.0 PK	74.0	-19.0	1.23 H	279	46.78	8.22
2	5105.00	42.9 AV	54.0	-11.1	1.23 H	279	34.68	8.22
3	*5180.00	108.9 PK			1.23 H	279	100.67	8.23
4	*5180.00	99.7 AV			1.23 H	279	91.47	8.23
5	#10360.00	54.7 PK	74.0	-19.3	1.24 H	210	39.82	14.88
6	#10360.00	42.7 AV	54.0	-11.3	1.24 H	210	27.82	14.88
7	15540.00	58.2 PK	74.0	-15.8	1.10 H	149	37.35	20.85
8	15540.00	46.7 AV	54.0	-7.3	1.10 H	149	25.85	20.85
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	53.0 PK	74.0	-21.0	1.00 V	253	44.77	8.23
2	5150.00	40.8 AV	54.0	-13.2	1.00 V	253	32.57	8.23
3	*5180.00	104.4 PK			1.00 V	253	96.17	8.23
4	*5180.00	95.3 AV			1.00 V	253	87.07	8.23
5	#10360.00	59.1 PK	74.0	-14.9	1.43 V	276	44.22	14.88
6	#10360.00	47.5 AV	54.0	-6.5	1.43 V	276	32.62	14.88
7	15540.00	59.3 PK	74.0	-14.7	1.19 V	47	38.45	20.85
8	15540.00	48.2 AV	54.0	-5.8	1.19 V	47	27.35	20.85

#### REMARKS:

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



A D T

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

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	5116.00	53.3 PK	74.0	-20.7	1.24 H	271	45.07	8.23
2	5116.00	42.0 AV	54.0	-12.0	1.24 H	271	33.77	8.23
3	*5200.00	107.6 PK			1.24 H	291	99.36	8.24
4	*5200.00	98.3 AV			1.24 H	291	90.06	8.24
5	5360.00	53.2 PK	74.0	-20.8	1.24 H	271	44.37	8.83
6	5360.00	43.7 AV	54.0	-10.3	1.24 H	271	34.87	8.83
7	#10400.00	54.8 PK	74.0	-19.2	1.21 H	235	39.57	15.23
8	#10400.00	42.7 AV	54.0	-11.3	1.21 H	235	27.47	15.23
9	15600.00	58.5 PK	74.0	-15.5	1.05 H	140	37.62	20.88
10	15600.00	46.6 AV	54.0	-7.4	1.05 H	140	25.72	20.88
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	5116.00	52.0 PK	74.0	-22.0	1.03 V	239	43.77	8.23
2	5116.00	41.0 AV	54.0	-13.0	1.03 V	239	32.77	8.23
3	*5200.00	103.6 PK			1.03 V	239	95.36	8.24
4	*5200.00	94.3 AV			1.03 V	239	86.06	8.24
5	5360.00	52.0 PK	74.0	-22.0	1.03 V	239	43.17	8.83
6	5360.00	42.8 AV	54.0	-11.2	1.03 V	239	33.97	8.83
7	#10400.00	58.6 PK	74.0	-15.4	1.46 V	280	43.37	15.23
8	#10400.00	47.3 AV	54.0	-6.7	1.46 V	280	32.07	15.23
9	15600.00	59.3 PK	74.0	-14.7	1.11 V	68	38.42	20.88
10	15600.00	47.9 AV	54.0	-6.1	1.11 V	68	27.02	20.88

**REMARKS:**

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

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

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	51.3 PK	74.0	-22.7	1.22 H	281	43.07	8.23
2	5150.00	40.1 AV	54.0	-13.9	1.22 H	281	31.87	8.23
3	*5240.00	109.7 PK			1.22 H	281	101.30	8.40
4	*5240.00	100.5 AV			1.22 H	281	92.10	8.40
5	5400.00	52.5 PK	74.0	-21.5	1.22 H	281	43.53	8.97
6	5400.00	43.3 AV	54.0	-10.7	1.22 H	281	34.33	8.97
7	#10480.00	54.7 PK	74.0	-19.3	1.26 H	215	39.49	15.21
8	#10480.00	42.7 AV	54.0	-11.3	1.26 H	215	27.49	15.21
9	15720.00	58.9 PK	74.0	-15.1	1.15 H	149	38.03	20.87
10	15720.00	46.9 AV	54.0	-7.1	1.15 H	149	26.03	20.87
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	50.3 PK	74.0	-23.7	1.08 V	232	42.07	8.23
2	5150.00	39.4 AV	54.0	-14.6	1.08 V	232	31.17	8.23
3	*5240.00	106.1 PK			1.08 V	232	97.70	8.40
4	*5240.00	96.6 AV			1.08 V	232	88.20	8.40
5	5400.00	50.8 PK	74.0	-23.2	1.08 V	232	41.83	8.97
6	5400.00	41.9 AV	54.0	-12.1	1.08 V	232	32.93	8.97
7	#10480.00	59.2 PK	74.0	-14.8	1.45 V	270	43.99	15.21
8	#10480.00	47.5 AV	54.0	-6.5	1.45 V	270	32.29	15.21
9	15720.00	59.9 PK	74.0	-14.1	1.11 V	52	39.03	20.87
10	15720.00	48.8 AV	54.0	-5.2	1.11 V	52	27.93	20.87

**REMARKS:**

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

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	116.7 PK			1.29 H	84	108.24	8.46
2	*5260.00	107.0 AV			1.29 H	84	98.54	8.46
3	#10520.00	54.2 PK	74.0	-19.8	1.24 H	222	38.94	15.26
4	#10520.00	42.2 AV	54.0	-11.8	1.24 H	222	26.94	15.26
5	15780.00	58.9 PK	74.0	-15.1	1.12 H	130	38.15	20.75
6	15780.00	47.0 AV	54.0	-7.0	1.12 H	130	26.25	20.75
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	112.6 PK			1.07 V	236	104.14	8.46
2	*5260.00	103.0 AV			1.07 V	236	94.54	8.46
3	#10520.00	58.5 PK	74.0	-15.5	1.38 V	291	43.24	15.26
4	#10520.00	47.1 AV	54.0	-6.9	1.38 V	291	31.84	15.26
5	15780.00	59.5 PK	74.0	-14.5	1.21 V	76	38.75	20.75
6	15780.00	48.2 AV	54.0	-5.8	1.21 V	76	27.45	20.75

**REMARKS:**

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

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	116.5 PK			1.27 H	83	107.88	8.62
2	*5300.00	107.5 AV			1.27 H	83	98.88	8.62
3	5380.00	60.5 PK	74.0	-13.5	1.24 H	87	51.60	8.90
4	5380.00	49.6 AV	54.0	-4.4	1.24 H	87	40.70	8.90
5	5460.00	55.9 PK	74.0	-18.1	1.23 H	86	46.71	9.19
6	5460.00	46.7 AV	54.0	-7.3	1.23 H	86	37.51	9.19
7	10600.00	54.8 PK	74.0	-19.2	1.23 H	230	39.27	15.53
8	10600.00	42.7 AV	54.0	-11.3	1.23 H	230	27.17	15.53
9	15900.00	58.9 PK	74.0	-15.1	1.04 H	145	37.60	21.30
10	15900.00	47.2 AV	54.0	-6.8	1.04 H	145	25.90	21.30
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	*5300.00	112.9 PK			1.02 V	234	104.28	8.62
2	*5300.00	103.9 AV			1.02 V	234	95.28	8.62
3	5380.00	56.1 PK	74.0	-17.9	1.02 V	234	47.20	8.90
4	5380.00	45.3 AV	54.0	-8.7	1.02 V	234	36.40	8.90
5	5460.00	51.9 PK	74.0	-22.1	1.02 V	234	42.71	9.19
6	5460.00	43.0 AV	54.0	-11.0	1.02 V	234	33.81	9.19
7	10600.00	59.2 PK	74.0	-14.8	1.48 V	297	43.67	15.53
8	10600.00	47.6 AV	54.0	-6.4	1.48 V	297	32.07	15.53
9	15900.00	60.1 PK	74.0	-13.9	1.15 V	56	38.80	21.30
10	15900.00	48.6 AV	54.0	-5.4	1.15 V	56	27.30	21.30

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



CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	114.1 PK			1.44 H	98	105.41	8.69
2	*5320.00	104.9 AV			1.44 H	98	96.21	8.69
3	5400.00	72.5 PK	74.0	-1.5	1.44 H	98	63.53	8.97
4	5400.00	52.9 AV	54.0	-1.1	1.44 H	98	43.93	8.97
5	10640.00	54.9 PK	74.0	-19.1	1.21 H	209	39.36	15.54
6	10640.00	42.4 AV	54.0	-11.6	1.21 H	209	26.86	15.54
7	15960.00	58.5 PK	74.0	-15.5	1.16 H	125	37.68	20.82
8	15960.00	46.8 AV	54.0	-7.2	1.16 H	125	25.98	20.82
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	109.9 PK			1.03 V	245	101.21	8.69
2	*5320.00	100.6 AV			1.03 V	245	91.91	8.69
3	5350.00	67.4 PK	74.0	-6.6	1.03 V	245	58.60	8.80
4	5350.00	48.0 AV	54.0	-6.0	1.03 V	245	39.20	8.80
5	10640.00	59.1 PK	74.0	-14.9	1.48 V	297	43.56	15.54
6	10640.00	47.5 AV	54.0	-6.5	1.48 V	297	31.96	15.54
7	15960.00	60.0 PK	74.0	-14.0	1.19 V	48	39.18	20.82
8	15960.00	48.4 AV	54.0	-5.6	1.19 V	48	27.58	20.82

**REMARKS:**

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

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5470.00	68.5 PK	74.0	-5.5	1.06 H	100	59.28	9.22
2	#5470.00	52.6 AV	54.0	-1.4	1.06 H	100	43.38	9.22
3	*5500.00	116.2 PK			1.23 H	101	106.87	9.33
4	*5500.00	107.4 AV			1.23 H	101	98.07	9.33
5	11000.00	54.7 PK	74.0	-19.3	1.28 H	229	37.75	16.95
6	11000.00	42.4 AV	54.0	-11.6	1.28 H	229	25.45	16.95
7	#16500.00	58.7 PK	74.0	-15.3	1.16 H	152	35.66	23.04
8	#16500.00	46.8 AV	54.0	-7.2	1.16 H	152	23.76	23.04
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	#5470.00	64.0 PK	74.0	-10.0	1.13 V	205	54.78	9.22
2	#5470.00	48.1 AV	54.0	-5.9	1.13 V	205	38.88	9.22
3	*5500.00	112.6 PK			1.13 V	205	103.27	9.33
4	*5500.00	103.5 AV			1.13 V	205	94.17	9.33
5	11000.00	58.8 PK	74.0	-15.2	1.42 V	290	41.85	16.95
6	11000.00	47.4 AV	54.0	-6.6	1.42 V	290	30.45	16.95
7	#16500.00	59.9 PK	74.0	-14.1	1.20 V	56	36.86	23.04
8	#16500.00	48.4 AV	54.0	-5.6	1.20 V	56	25.36	23.04

**REMARKS:**

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

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	117.8 PK			1.44 H	83	108.33	9.47
2	*5580.00	108.7 AV			1.44 H	83	99.23	9.47
3	11160.00	54.6 PK	74.0	-19.4	1.21 H	204	38.39	16.21
4	11160.00	42.4 AV	54.0	-11.6	1.21 H	204	26.19	16.21
5	#16740.00	59.2 PK	74.0	-14.8	1.05 H	148	35.52	23.68
6	#16740.00	47.3 AV	54.0	-6.7	1.05 H	148	23.62	23.68
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	113.4 PK			1.04 V	245	103.93	9.47
2	*5580.00	104.5 AV			1.04 V	245	95.03	9.47
3	11160.00	58.7 PK	74.0	-15.3	1.48 V	276	42.49	16.21
4	11160.00	47.9 AV	54.0	-6.1	1.48 V	276	31.69	16.21
5	#16740.00	59.0 PK	74.0	-15.0	1.13 V	60	35.32	23.68
6	#16740.00	48.2 AV	54.0	-5.8	1.13 V	60	24.52	23.68

**REMARKS:**

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

CHANNEL	TX Channel 132	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5660.00	118.2 PK			1.47 H	79	108.47	9.73
2	*5660.00	108.9 AV			1.47 H	79	99.17	9.73
3	11320.00	54.5 PK	74.0	-19.5	1.25 H	225	37.58	16.92
4	11320.00	42.6 AV	54.0	-11.4	1.25 H	225	25.68	16.92
5	#16980.00	59.6 PK	74.0	-14.4	1.14 H	149	35.40	24.20
6	#16980.00	47.5 AV	54.0	-6.5	1.14 H	149	23.30	24.20
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	*5660.00	113.9 PK			1.06 V	218	104.17	9.73
2	*5660.00	104.7 AV			1.06 V	218	94.97	9.73
3	11320.00	59.0 PK	74.0	-15.0	1.38 V	280	42.08	16.92
4	11320.00	47.7 AV	54.0	-6.3	1.38 V	280	30.78	16.92
5	#16980.00	59.7 PK	74.0	-14.3	1.08 V	51	35.50	24.20
6	#16980.00	48.6 AV	54.0	-5.4	1.08 V	51	24.40	24.20

#### REMARKS:

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

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	116.4 PK			1.41 H	85	106.52	9.88
2	*5700.00	106.1 AV			1.41 H	85	96.22	9.88
3	#5725.00	66.2 PK	74.0	-7.8	1.41 H	84	56.29	9.91
4	#5725.00	52.7 AV	54.0	-1.3	1.41 H	84	42.79	9.91
5	11400.00	54.4 PK	74.0	-19.6	1.28 H	212	37.65	16.75
6	11400.00	42.5 AV	54.0	-11.5	1.28 H	212	25.75	16.75
7	#17100.00	59.0 PK	74.0	-15.0	1.07 H	147	33.94	25.06
8	#17100.00	47.5 AV	54.0	-6.5	1.07 H	147	22.44	25.06
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	112.2 PK			1.05 V	234	102.32	9.88
2	*5700.00	101.9 AV			1.05 V	234	92.02	9.88
3	#5725.00	61.8 PK	74.0	-12.2	1.05 V	234	51.89	9.91
4	#5725.00	48.6 AV	54.0	-5.4	1.05 V	234	38.69	9.91
5	11400.00	58.9 PK	74.0	-15.1	1.43 V	281	42.15	16.75
6	11400.00	47.4 AV	54.0	-6.6	1.43 V	281	30.65	16.75
7	#17100.00	59.6 PK	74.0	-14.4	1.16 V	61	34.54	25.06
8	#17100.00	48.3 AV	54.0	-5.7	1.16 V	61	23.24	25.06

**REMARKS:**

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

# 802.11ac(VHT40), 2Tx

<b>CHANNEL</b>	TX Channel 38	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.5 PK	74.0	-9.5	1.51 H	88	56.27	8.23
2	5150.00	52.3 AV	54.0	-1.7	1.51 H	88	44.07	8.23
3	*5190.00	105.8 PK			1.51 H	88	97.56	8.24
4	*5190.00	97.2 AV			1.51 H	88	88.96	8.24
5	#10380.00	54.2 PK	74.0	-19.8	1.18 H	215	39.14	15.06
6	#10380.00	42.0 AV	54.0	-12.0	1.18 H	215	26.94	15.06
7	15570.00	59.4 PK	74.0	-14.6	1.10 H	156	38.54	20.86
8	15570.00	47.5 AV	54.0	-6.5	1.10 H	156	26.64	20.86
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	59.5 PK	74.0	-14.5	1.04 V	233	51.27	8.23
2	5150.00	47.6 AV	54.0	-6.4	1.04 V	233	39.37	8.23
3	*5190.00	101.0 PK			1.04 V	233	92.76	8.24
4	*5190.00	92.8 AV			1.04 V	233	84.56	8.24
5	#10380.00	59.4 PK	74.0	-14.6	1.46 V	289	44.34	15.06
6	#10380.00	47.8 AV	54.0	-6.2	1.46 V	289	32.74	15.06
7	15570.00	59.5 PK	74.0	-14.5	1.16 V	69	38.64	20.86
8	15570.00	48.0 AV	54.0	-6.0	1.16 V	69	27.14	20.86

## REMARKS:

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



A D T

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

**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	52.4 PK	74.0	-21.6	1.49 H	84	44.17	8.23
2	5150.00	40.3 AV	54.0	-13.7	1.49 H	84	32.07	8.23
3	*5230.00	107.1 PK			1.49 H	84	98.74	8.36
4	*5230.00	98.2 AV			1.49 H	84	89.84	8.36
5	5350.00	52.8 PK	74.0	-21.2	1.49 H	84	44.00	8.80
6	5350.00	41.8 AV	54.0	-12.2	1.49 H	84	33.00	8.80
7	#10460.00	55.0 PK	74.0	-19.0	1.26 H	217	39.79	15.21
8	#10460.00	42.8 AV	54.0	-11.2	1.26 H	217	27.59	15.21
9	15690.00	58.6 PK	74.0	-15.4	1.16 H	138	37.69	20.91
10	15690.00	46.7 AV	54.0	-7.3	1.16 H	138	25.79	20.91

**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	51.9 PK	74.0	-22.1	1.03 V	239	43.67	8.23
2	5150.00	39.9 AV	54.0	-14.1	1.03 V	239	31.67	8.23
3	*5230.00	102.9 PK			1.03 V	239	94.54	8.36
4	*5230.00	93.9 AV			1.03 V	239	85.54	8.36
5	5350.00	52.8 PK	74.0	-21.2	1.03 V	239	44.00	8.80
6	5350.00	41.8 AV	54.0	-12.2	1.03 V	239	33.00	8.80
7	#10460.00	58.9 PK	74.0	-15.1	1.45 V	299	43.69	15.21
8	#10460.00	47.4 AV	54.0	-6.6	1.45 V	299	32.19	15.21
9	15690.00	60.2 PK	74.0	-13.8	1.05 V	53	39.29	20.91
10	15690.00	48.4 AV	54.0	-5.6	1.05 V	53	27.49	20.91

**REMARKS:**

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

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	114.2 PK			1.49 H	101	72.84	41.36
2	*5270.00	104.7 AV			1.49 H	101	63.34	41.36
3	5350.00	70.0 PK	74.0	-4.0	1.44 H	96	28.39	41.61
4	5350.00	52.4 AV	54.0	-1.6	1.44 H	96	10.79	41.61
5	#10540.00	54.7 PK	74.0	-19.3	1.29 H	227	6.57	48.13
6	#10540.00	42.5 AV	54.0	-11.5	1.29 H	227	-5.63	48.13
7	15810.00	58.8 PK	74.0	-15.2	1.07 H	148	5.79	53.01
8	15810.00	47.1 AV	54.0	-6.9	1.07 H	148	-5.91	53.01
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	110.5 PK			1.02 V	230	69.14	41.36
2	*5270.00	101.0 AV			1.02 V	230	59.64	41.36
3	5350.00	66.0 PK	74.0	-8.0	1.02 V	230	24.39	41.61
4	5350.00	48.4 AV	54.0	-5.6	1.02 V	230	6.79	41.61
5	#10540.00	59.6 PK	74.0	-14.4	1.47 V	302	11.47	48.13
6	#10540.00	48.5 AV	54.0	-5.5	1.47 V	302	0.37	48.13
7	15810.00	60.2 PK	74.0	-13.8	1.10 V	49	7.19	53.01
8	15810.00	48.9 AV	54.0	-5.1	1.10 V	49	-4.11	53.01

**REMARKS:**

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



CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	106.1 PK			1.46 H	84	64.62	41.48
2	*5310.00	96.8 AV			1.46 H	84	55.32	41.48
3	5350.00	67.5 PK	74.0	-6.5	1.46 H	84	25.89	41.61
4	5350.00	52.3 AV	54.0	-1.7	1.46 H	84	10.69	41.61
5	10620.00	54.3 PK	74.0	-19.7	1.28 H	215	6.13	48.17
6	10620.00	42.4 AV	54.0	-11.6	1.28 H	215	-5.77	48.17
7	15930.00	59.2 PK	74.0	-14.8	1.08 H	133	5.86	53.34
8	15930.00	47.2 AV	54.0	-6.8	1.08 H	133	-6.14	53.34
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	101.4 PK			1.01 V	234	59.92	41.48
2	*5310.00	92.1 AV			1.01 V	234	50.62	41.48
3	5350.00	63.3 PK	74.0	-10.7	1.01 V	234	21.69	41.61
4	5350.00	48.7 AV	54.0	-5.3	1.01 V	234	7.09	41.61
5	10620.00	59.1 PK	74.0	-14.9	1.42 V	299	10.93	48.17
6	10620.00	48.1 AV	54.0	-5.9	1.42 V	299	-0.07	48.17
7	15930.00	59.2 PK	74.0	-14.8	1.02 V	49	5.86	53.34
8	15930.00	48.2 AV	54.0	-5.8	1.02 V	49	-5.14	53.34

**REMARKS:**

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



A D T

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

**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	#5470.00	63.6 PK	74.0	-10.4	1.40 H	83	54.38	9.22
2	#5470.00	52.8 AV	54.0	-1.2	1.40 H	83	43.58	9.22
3	*5510.00	107.6 PK			1.47 H	84	98.25	9.35
4	*5510.00	100.6 AV			1.47 H	84	91.25	9.35
5	11020.00	54.6 PK	74.0	-19.4	1.22 H	223	37.79	16.81
6	11020.00	42.3 AV	54.0	-11.7	1.22 H	223	25.49	16.81
7	#16530.00	58.9 PK	74.0	-15.1	1.04 H	150	35.74	23.16
8	#16530.00	47.1 AV	54.0	-6.9	1.04 H	150	23.94	23.16

**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	#5470.00	58.8 PK	74.0	-15.2	1.09 V	244	49.58	9.22
2	#5470.00	47.8 AV	54.0	-6.2	1.09 V	244	38.58	9.22
3	*5510.00	104.0 PK			1.09 V	244	94.65	9.35
4	*5510.00	96.9 AV			1.09 V	244	87.55	9.35
5	11020.00	59.1 PK	74.0	-14.9	1.44 V	306	42.29	16.81
6	11020.00	48.2 AV	54.0	-5.8	1.44 V	306	31.39	16.81
7	#16530.00	59.7 PK	74.0	-14.3	1.06 V	65	36.54	23.16
8	#16530.00	48.6 AV	54.0	-5.4	1.06 V	65	25.44	23.16

**REMARKS:**

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

CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5470.00	65.1 PK	74.0	-8.9	1.45 H	87	55.88	9.22
2	#5470.00	50.6 AV	54.0	-3.4	1.45 H	87	41.38	9.22
3	*5550.00	115.2 PK			1.46 H	84	105.78	9.42
4	*5550.00	105.6 AV			1.46 H	84	96.18	9.42
5	11100.00	55.4 PK	74.0	-18.6	1.32 H	236	39.08	16.32
6	11100.00	43.0 AV	54.0	-11.0	1.32 H	236	26.68	16.32
7	#16650.00	58.7 PK	74.0	-15.3	1.07 H	132	35.25	23.45
8	#16650.00	47.0 AV	54.0	-7.0	1.07 H	132	23.55	23.45
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	#5470.00	60.9 PK	74.0	-13.1	1.08 V	236	51.68	9.22
2	#5470.00	46.4 AV	54.0	-7.6	1.08 V	236	37.18	9.22
3	*5550.00	110.9 PK			1.08 V	236	101.48	9.42
4	*5550.00	101.2 AV			1.08 V	236	91.78	9.42
5	11100.00	58.9 PK	74.0	-15.1	1.44 V	291	42.58	16.32
6	11100.00	47.7 AV	54.0	-6.3	1.44 V	291	31.38	16.32
7	#16650.00	59.8 PK	74.0	-14.2	1.11 V	66	36.35	23.45
8	#16650.00	48.7 AV	54.0	-5.3	1.11 V	66	25.25	23.45

**REMARKS:**

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

CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	112.3 PK			1.67 H	277	102.53	9.77
2	*5670.00	103.1 AV			1.67 H	277	93.33	9.77
3	#5725.00	67.1 PK	74.0	-6.9	1.67 H	277	57.19	9.91
4	#5725.00	52.2 AV	54.0	-1.8	1.67 H	277	42.29	9.91
5	11340.00	54.4 PK	74.0	-19.6	1.19 H	227	37.52	16.88
6	11340.00	42.1 AV	54.0	-11.9	1.19 H	227	25.22	16.88
7	#17010.00	58.9 PK	74.0	-15.1	1.08 H	135	34.65	24.25
8	#17010.00	47.2 AV	54.0	-6.8	1.08 H	135	22.95	24.25
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	108.3 PK			1.08 V	235	98.53	9.77
2	*5670.00	99.1 AV			1.08 V	235	89.33	9.77
3	#5725.00	62.9 PK	74.0	-11.1	1.08 V	235	52.99	9.91
4	#5725.00	47.9 AV	54.0	-6.1	1.08 V	235	37.99	9.91
5	11340.00	59.5 PK	74.0	-14.5	1.46 V	295	42.62	16.88
6	11340.00	48.1 AV	54.0	-5.9	1.46 V	295	31.22	16.88
7	#17010.00	60.2 PK	74.0	-13.8	1.16 V	60	35.95	24.25
8	#17010.00	49.2 AV	54.0	-4.8	1.16 V	60	24.95	24.25

**REMARKS:**

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

# 802.11ac(VHT80), 2Tx

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

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	65.9 PK	74.0	-8.1	1.23 H	277	57.67	8.23
2	5150.00	52.1 AV	54.0	-1.9	1.23 H	277	43.87	8.23
3	*5210.00	104.6 PK			1.23 H	277	96.33	8.27
4	*5210.00	95.0 AV			1.23 H	277	86.73	8.27
5	5350.00	53.2 PK	74.0	-20.8	1.23 H	277	44.40	8.80
6	5350.00	41.6 AV	54.0	-12.4	1.23 H	277	32.80	8.80
7	#10420.00	55.4 PK	74.0	-18.6	1.23 H	208	40.19	15.21
8	#10420.00	42.9 AV	54.0	-11.1	1.23 H	208	27.69	15.21
9	15630.00	58.6 PK	74.0	-15.4	1.10 H	151	37.71	20.89
10	15630.00	46.7 AV	54.0	-7.3	1.10 H	151	25.81	20.89
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	1.07 V	235	53.47	8.23
2	5150.00	48.0 AV	54.0	-6.0	1.07 V	235	39.77	8.23
3	*5210.00	99.8 PK			1.07 V	235	91.53	8.27
4	*5210.00	90.2 AV			1.07 V	235	81.93	8.27
5	5350.00	51.8 PK	74.0	-22.2	1.07 V	235	43.00	8.80
6	5350.00	40.2 AV	54.0	-13.8	1.07 V	235	31.40	8.80
7	#10420.00	54.6 PK	74.0	-19.4	1.31 V	65	39.39	15.21
8	#10420.00	43.6 AV	54.0	-10.4	1.31 V	65	28.39	15.21
9	15630.00	59.2 PK	74.0	-14.8	1.14 V	60	38.31	20.89
10	15630.00	48.3 AV	54.0	-5.7	1.14 V	60	27.41	20.89

## REMARKS:

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

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	51.9 PK	74.0	-22.1	1.19 H	278	43.67	8.23
2	5150.00	40.2 AV	54.0	-13.8	1.19 H	278	31.97	8.23
3	*5290.00	102.6 PK			1.19 H	278	94.01	8.59
4	*5290.00	93.1 AV			1.19 H	278	84.51	8.59
5	5350.00	63.7 PK	74.0	-10.3	1.19 H	278	54.90	8.80
6	5350.00	52.4 AV	54.0	-1.6	1.19 H	278	43.60	8.80
7	#10580.00	55.2 PK	74.0	-18.8	1.20 H	231	39.74	15.46
8	#10580.00	42.8 AV	54.0	-11.2	1.20 H	231	27.34	15.46
9	15870.00	59.4 PK	74.0	-14.6	1.08 H	156	38.29	21.11
10	15870.00	47.3 AV	54.0	-6.7	1.08 H	156	26.19	21.11
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	48.3 PK	74.0	-25.7	1.10 V	232	40.07	8.23
2	5150.00	36.4 AV	54.0	-17.6	1.10 V	232	28.17	8.23
3	*5290.00	98.3 PK			1.10 V	232	89.71	8.59
4	*5290.00	88.8 AV			1.10 V	232	80.21	8.59
5	5350.00	59.5 PK	74.0	-14.5	1.10 V	232	50.70	8.80
6	5350.00	48.2 AV	54.0	-5.8	1.10 V	232	39.40	8.80
7	#10580.00	54.9 PK	74.0	-19.1	1.34 V	52	39.44	15.46
8	#10580.00	43.9 AV	54.0	-10.1	1.34 V	52	28.44	15.46
9	15870.00	59.3 PK	74.0	-14.7	1.11 V	55	38.19	21.11
10	15870.00	48.2 AV	54.0	-5.8	1.11 V	55	27.09	21.11

#### REMARKS:

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

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5470.00	64.3 PK	74.0	-9.7	1.21 H	300	55.08	9.22
2	#5470.00	52.5 AV	54.0	-1.5	1.21 H	300	43.28	9.22
3	*5530.00	106.4 PK			1.21 H	300	97.01	9.39
4	*5530.00	96.7 AV			1.21 H	300	87.31	9.39
5	#5725.00	56.7 PK	74.0	-17.3	1.21 H	300	46.79	9.91
6	#5725.00	43.9 AV	54.0	-10.1	1.21 H	300	33.99	9.91
7	11060.00	54.4 PK	74.0	-19.6	1.24 H	234	37.83	16.57
8	11060.00	42.1 AV	54.0	-11.9	1.24 H	234	25.53	16.57
9	#16590.00	58.6 PK	74.0	-15.4	1.11 H	124	35.19	23.41
10	#16590.00	46.6 AV	54.0	-7.4	1.11 H	124	23.19	23.41
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	#5470.00	59.8 PK	74.0	-14.2	1.07 V	224	50.58	9.22
2	#5470.00	47.8 AV	54.0	-6.2	1.07 V	224	38.58	9.22
3	*5530.00	102.2 PK			1.07 V	224	92.81	9.39
4	*5530.00	92.3 AV			1.07 V	224	82.91	9.39
5	#5725.00	52.4 PK	74.0	-21.6	1.07 V	224	42.49	9.91
6	#5725.00	39.6 AV	54.0	-14.4	1.07 V	224	29.69	9.91
7	11060.00	54.9 PK	74.0	-19.1	1.34 V	69	38.33	16.57
8	11060.00	43.7 AV	54.0	-10.3	1.34 V	69	27.13	16.57
9	#16590.00	59.5 PK	74.0	-14.5	1.11 V	46	36.09	23.41
10	#16590.00	48.6 AV	54.0	-5.4	1.11 V	46	25.19	23.41

#### REMARKS:

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

## 4.2.9 TEST RESULTS (MODE 2)

### BELOW 1GHz WORST-CASE DATA

#### 802.11ac(VHT40), 2Tx

CHANNEL	TX Channel 110	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	Below 1GHz		

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	137.13	26.0 QP	43.5	-17.5	1.00 H	151	39.89	-13.92
2	166.33	33.8 QP	43.5	-9.7	1.00 H	236	47.76	-13.93
3	188.48	30.4 QP	43.5	-13.1	1.50 H	124	46.08	-15.68
4	254.16	32.4 QP	46.0	-13.7	1.50 H	224	46.67	-14.32
5	330.48	28.1 QP	46.0	-17.9	2.00 H	320	39.60	-11.46
6	400.01	29.4 QP	46.0	-16.6	1.50 H	180	39.27	-9.91
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	117.84	34.7 QP	43.5	-8.8	1.00 V	345	50.03	-15.32
2	141.52	33.1 QP	43.5	-10.4	1.00 V	234	46.70	-13.60
3	245.93	31.1 QP	46.0	-15.0	2.00 V	351	45.66	-14.61
4	257.85	31.6 QP	46.0	-14.4	2.00 V	21	45.78	-14.17
5	400.01	26.3 QP	46.0	-19.7	1.50 V	135	36.18	-9.91
6	560.00	28.2 QP	46.0	-17.8	1.00 V	193	34.54	-6.33

#### REMARKS:

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



## ABOVE 1GHz DATA

### 802.11a, 1Tx

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	57.8 PK	74.0	-16.2	1.09 H	244	49.57	8.23
2	5150.00	40.8 AV	54.0	-13.2	1.09 H	244	32.57	8.23
3	*5180.00	103.0 PK			1.09 H	244	94.77	8.23
4	*5180.00	93.6 AV			1.09 H	244	85.37	8.23
5	#10360.00	54.0 PK	74.0	-20.0	1.23 H	225	39.12	14.88
6	#10360.00	41.7 AV	54.0	-12.3	1.23 H	225	26.82	14.88
7	15540.00	58.5 PK	74.0	-15.5	1.08 H	134	37.65	20.85
8	15540.00	46.8 AV	54.0	-7.2	1.08 H	134	25.95	20.85
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	65.7 PK	74.0	-8.3	1.03 V	276	57.47	8.23
2	5150.00	49.0 AV	54.0	-5.0	1.03 V	276	40.77	8.23
3	*5180.00	112.7 PK			1.03 V	276	104.47	8.23
4	*5180.00	103.2 AV			1.03 V	276	94.97	8.23
5	#10360.00	58.1 PK	74.0	-15.9	1.40 V	316	43.22	14.88
6	#10360.00	47.3 AV	54.0	-6.7	1.40 V	316	32.42	14.88
7	15540.00	58.6 PK	74.0	-15.4	1.17 V	43	37.75	20.85
8	15540.00	48.4 AV	54.0	-5.6	1.17 V	43	27.55	20.85

#### REMARKS:

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

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

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	102.8 PK			1.09 H	242	94.56	8.24
2	*5200.00	93.5 AV			1.09 H	242	85.26	8.24
3	#10400.00	55.3 PK	74.0	-18.7	1.31 H	223	40.07	15.23
4	#10400.00	42.9 AV	54.0	-11.1	1.31 H	223	27.67	15.23
5	15600.00	57.9 PK	74.0	-16.1	1.03 H	107	37.02	20.88
6	15600.00	46.5 AV	54.0	-7.5	1.03 H	107	25.62	20.88
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	113.2 PK			1.04 V	275	104.96	8.24
2	*5200.00	103.8 AV			1.04 V	275	95.56	8.24
3	#10400.00	58.9 PK	74.0	-15.1	1.42 V	302	43.67	15.23
4	#10400.00	48.1 AV	54.0	-5.9	1.42 V	302	32.87	15.23
5	15600.00	59.9 PK	74.0	-14.1	1.11 V	30	39.02	20.88
6	15600.00	49.1 AV	54.0	-4.9	1.11 V	30	28.22	20.88

**REMARKS:**

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

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

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	104.4 PK			1.12 H	242	96.00	8.40
2	*5240.00	94.4 AV			1.12 H	242	86.00	8.40
3	#10480.00	53.8 PK	74.0	-20.2	1.14 H	238	38.59	15.21
4	#10480.00	41.6 AV	54.0	-12.4	1.14 H	238	26.39	15.21
5	15720.00	58.4 PK	74.0	-15.6	1.02 H	139	37.53	20.87
6	15720.00	46.9 AV	54.0	-7.1	1.02 H	139	26.03	20.87
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			1.03 V	262	105.90	8.40
2	*5240.00	104.0 AV			1.03 V	262	95.60	8.40
3	#10480.00	58.6 PK	74.0	-15.4	1.45 V	323	43.39	15.21
4	#10480.00	47.9 AV	54.0	-6.1	1.45 V	323	32.69	15.21
5	15720.00	58.9 PK	74.0	-15.1	1.13 V	39	38.03	20.87
6	15720.00	48.4 AV	54.0	-5.6	1.13 V	39	27.53	20.87

#### REMARKS:

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

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	107.4 PK			1.12 H	256	98.94	8.46
2	*5260.00	98.0 AV			1.12 H	256	89.54	8.46
3	#10520.00	53.7 PK	74.0	-20.3	1.29 H	204	38.44	15.26
4	#10520.00	41.4 AV	54.0	-12.6	1.29 H	204	26.14	15.26
5	15780.00	58.1 PK	74.0	-15.9	1.07 H	142	37.35	20.75
6	15780.00	46.6 AV	54.0	-7.4	1.07 H	142	25.85	20.75
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	117.7 PK			1.02 V	264	109.24	8.46
2	*5260.00	108.1 AV			1.02 V	264	99.64	8.46
3	#10520.00	57.6 PK	74.0	-16.4	1.46 V	320	42.34	15.26
4	#10520.00	46.8 AV	54.0	-7.2	1.46 V	320	31.54	15.26
5	15780.00	59.4 PK	74.0	-14.6	1.10 V	43	38.65	20.75
6	15780.00	48.6 AV	54.0	-5.4	1.10 V	43	27.85	20.75

#### REMARKS:

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

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	107.1 PK			1.11 H	244	98.48	8.62
2	*5300.00	97.4 AV			1.11 H	244	88.78	8.62
3	10600.00	53.5 PK	74.0	-20.5	1.21 H	217	37.97	15.53
4	10600.00	41.8 AV	54.0	-12.2	1.21 H	217	26.27	15.53
5	15900.00	58.1 PK	74.0	-15.9	1.12 H	121	36.80	21.30
6	15900.00	46.4 AV	54.0	-7.6	1.12 H	121	25.10	21.30
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	*5300.00	116.6 PK			1.00 V	263	107.98	8.62
2	*5300.00	107.0 AV			1.00 V	263	98.38	8.62
3	10600.00	58.8 PK	74.0	-15.2	1.38 V	298	43.27	15.53
4	10600.00	47.7 AV	54.0	-6.3	1.38 V	298	32.17	15.53
5	15900.00	60.0 PK	74.0	-14.0	1.03 V	29	38.70	21.30
6	15900.00	49.2 AV	54.0	-4.8	1.03 V	29	27.90	21.30

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

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	102.3 PK			1.05 H	232	93.61	8.69
2	*5320.00	93.7 AV			1.05 H	232	85.01	8.69
3	5350.00	62.0 PK	74.0	-12.0	1.05 H	232	53.20	8.80
4	5350.00	42.5 AV	54.0	-11.5	1.05 H	232	33.70	8.80
5	10640.00	54.9 PK	74.0	-19.1	1.31 H	233	39.36	15.54
6	10640.00	42.7 AV	54.0	-11.3	1.31 H	233	27.16	15.54
7	15960.00	58.7 PK	74.0	-15.3	1.03 H	129	37.88	20.82
8	15960.00	47.0 AV	54.0	-7.0	1.03 H	129	26.18	20.82
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	112.2 PK			1.08 V	269	103.51	8.69
2	*5320.00	103.4 AV			1.08 V	269	94.71	8.69
3	5350.00	71.7 PK	74.0	-2.3	1.08 V	269	62.90	8.80
4	5350.00	52.5 AV	54.0	-1.5	1.08 V	269	43.70	8.80
5	10640.00	58.6 PK	74.0	-15.4	1.42 V	311	43.06	15.54
6	10640.00	47.7 AV	54.0	-6.3	1.42 V	311	32.16	15.54
7	15960.00	59.6 PK	74.0	-14.4	1.13 V	38	38.78	20.82
8	15960.00	48.8 AV	54.0	-5.2	1.13 V	38	27.98	20.82

**REMARKS:**

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

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5470.00	60.8 PK	74.0	-13.2	1.07 H	258	51.58	9.22
2	#5470.00	41.7 AV	54.0	-12.3	1.07 H	258	32.48	9.22
3	*5500.00	103.3 PK			1.07 H	258	93.97	9.33
4	*5500.00	94.2 AV			1.07 H	258	84.87	9.33
5	11000.00	52.8 PK	74.0	-21.2	1.14 H	227	35.85	16.95
6	11000.00	40.9 AV	54.0	-13.1	1.14 H	227	23.95	16.95
7	#16500.00	57.4 PK	74.0	-16.6	1.03 H	129	34.36	23.04
8	#16500.00	45.9 AV	54.0	-8.1	1.03 H	129	22.86	23.04
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	#5470.00	70.1 PK	74.0	-3.9	1.05 V	254	60.88	9.22
2	#5470.00	51.2 AV	54.0	-2.8	1.05 V	254	41.98	9.22
3	*5500.00	113.1 PK			1.05 V	254	103.77	9.33
4	*5500.00	104.1 AV			1.05 V	254	94.77	9.33
5	11000.00	58.1 PK	74.0	-15.9	1.33 V	314	41.15	16.95
6	11000.00	47.0 AV	54.0	-7.0	1.33 V	314	30.05	16.95
7	#16500.00	59.0 PK	74.0	-15.0	1.05 V	22	35.96	23.04
8	#16500.00	48.5 AV	54.0	-5.5	1.05 V	22	25.46	23.04

**REMARKS:**

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

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	106.4 PK			1.11 H	246	96.93	9.47
2	*5580.00	96.7 AV			1.11 H	246	87.23	9.47
3	11160.00	53.4 PK	74.0	-20.6	1.18 H	196	37.19	16.21
4	11160.00	41.4 AV	54.0	-12.6	1.18 H	196	25.19	16.21
5	#16740.00	58.3 PK	74.0	-15.7	1.03 H	126	34.62	23.68
6	#16740.00	46.7 AV	54.0	-7.3	1.03 H	126	23.02	23.68
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	116.5 PK			1.06 V	280	107.03	9.47
2	*5580.00	106.9 AV			1.06 V	280	97.43	9.47
3	11160.00	58.0 PK	74.0	-16.0	1.41 V	281	41.79	16.21
4	11160.00	47.7 AV	54.0	-6.3	1.41 V	281	31.49	16.21
5	#16740.00	58.4 PK	74.0	-15.6	1.12 V	47	34.72	23.68
6	#16740.00	48.0 AV	54.0	-6.0	1.12 V	47	24.32	23.68

**REMARKS:**

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



CHANNEL	TX Channel 132	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5660.00	103.7 PK			1.14 H	241	93.97	9.73
2	*5660.00	93.4 AV			1.14 H	241	83.67	9.73
3	11320.00	54.4 PK	74.0	-19.6	1.23 H	214	37.48	16.92
4	11320.00	42.0 AV	54.0	-12.0	1.23 H	214	25.08	16.92
5	#16980.00	58.2 PK	74.0	-15.8	1.12 H	141	34.00	24.20
6	#16980.00	46.4 AV	54.0	-7.6	1.12 H	141	22.20	24.20
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	*5660.00	115.5 PK			1.03 V	281	105.77	9.73
2	*5660.00	105.7 AV			1.03 V	281	95.97	9.73
3	11320.00	58.1 PK	74.0	-15.9	1.37 V	289	41.18	16.92
4	11320.00	47.3 AV	54.0	-6.7	1.37 V	289	30.38	16.92
5	#16980.00	59.2 PK	74.0	-14.8	1.17 V	8	35.00	24.20
6	#16980.00	48.7 AV	54.0	-5.3	1.17 V	8	24.50	24.20

#### REMARKS:

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

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	100.3 PK			1.11 H	240	90.42	9.88
2	*5700.00	90.3 AV			1.11 H	240	80.42	9.88
3	#5725.00	57.4 PK	74.0	-16.6	1.11 H	240	47.49	9.91
4	#5725.00	45.1 AV	54.0	-8.9	1.11 H	240	35.19	9.91
5	11400.00	54.0 PK	74.0	-20.0	1.26 H	206	37.25	16.75
6	11400.00	41.8 AV	54.0	-12.2	1.26 H	206	25.05	16.75
7	#17100.00	57.9 PK	74.0	-16.1	1.11 H	132	32.84	25.06
8	#17100.00	46.5 AV	54.0	-7.5	1.11 H	132	21.44	25.06
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	110.1 PK			1.06 V	323	100.22	9.88
2	*5700.00	101.2 AV			1.06 V	323	91.32	9.88
3	#5725.00	67.2 PK	74.0	-6.8	1.06 V	323	57.29	9.91
4	#5725.00	50.7 AV	54.0	-3.3	1.06 V	323	40.79	9.91
5	11400.00	59.0 PK	74.0	-15.0	1.40 V	303	42.25	16.75
6	11400.00	48.1 AV	54.0	-5.9	1.40 V	303	31.35	16.75
7	#17100.00	59.6 PK	74.0	-14.4	1.09 V	26	34.54	25.06
8	#17100.00	48.9 AV	54.0	-5.1	1.09 V	26	23.84	25.06

**REMARKS:**

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

# 802.11ac(VHT20), 1Tx

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	67.9 PK	74.0	-6.1	1.12 H	95	59.67	8.23
2	5150.00	48.4 AV	54.0	-5.6	1.12 H	95	40.17	8.23
3	*5180.00	101.6 PK			1.12 H	95	93.37	8.23
4	*5180.00	91.3 AV			1.12 H	95	83.07	8.23
5	#10360.00	53.6 PK	74.0	-20.4	1.16 H	229	38.72	14.88
6	#10360.00	42.0 AV	54.0	-12.0	1.16 H	229	27.12	14.88
7	15540.00	58.1 PK	74.0	-15.9	1.13 H	129	37.25	20.85
8	15540.00	46.6 AV	54.0	-7.4	1.13 H	129	25.75	20.85
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	71.8 PK	74.0	-2.2	1.03 V	70	63.57	8.23
2	5150.00	52.6 AV	54.0	-1.4	1.03 V	70	44.37	8.23
3	*5180.00	115.0 PK			1.04 V	75	106.77	8.23
4	*5180.00	104.9 AV			1.04 V	75	96.67	8.23
5	#10360.00	57.6 PK	74.0	-16.4	1.45 V	322	42.72	14.88
6	#10360.00	47.1 AV	54.0	-6.9	1.45 V	322	32.22	14.88
7	15540.00	59.6 PK	74.0	-14.4	1.06 V	35	38.75	20.85
8	15540.00	49.1 AV	54.0	-4.9	1.06 V	35	28.25	20.85

## REMARKS:

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

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

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	5127.00	68.3 PK	74.0	-5.7	1.08 H	85	60.08	8.22
2	5127.00	47.3 AV	54.0	-6.7	1.08 H	85	39.08	8.22
3	*5200.00	104.6 PK			1.08 H	85	96.36	8.24
4	*5200.00	95.2 AV			1.08 H	85	86.96	8.24
5	#10400.00	52.7 PK	74.0	-21.3	1.19 H	224	37.47	15.23
6	#10400.00	41.0 AV	54.0	-13.0	1.19 H	224	25.77	15.23
7	15600.00	58.1 PK	74.0	-15.9	1.18 H	134	37.22	20.88
8	15600.00	46.7 AV	54.0	-7.3	1.18 H	134	25.82	20.88
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	72.5 PK	74.0	-1.5	1.04 V	75	64.27	8.23
2	5150.00	51.5 AV	54.0	-2.5	1.04 V	75	43.27	8.23
3	*5200.00	118.7 PK			1.04 V	75	110.46	8.24
4	*5200.00	109.1 AV			1.04 V	75	100.86	8.24
5	#10400.00	58.0 PK	74.0	-16.0	1.43 V	307	42.77	15.23
6	#10400.00	46.9 AV	54.0	-7.1	1.43 V	307	31.67	15.23
7	15600.00	59.8 PK	74.0	-14.2	1.10 V	15	38.92	20.88
8	15600.00	48.9 AV	54.0	-5.1	1.10 V	15	28.02	20.88

**REMARKS:**

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

<b>CHANNEL</b>	TX Channel 48	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.9 PK	74.0	-9.1	1.17 H	108	56.67	8.23
2	5150.00	44.5 AV	54.0	-9.5	1.17 H	108	36.27	8.23
3	*5240.00	107.6 PK			1.17 H	108	99.20	8.40
4	*5240.00	97.1 AV			1.17 H	108	88.70	8.40
5	#10480.00	52.8 PK	74.0	-21.2	1.17 H	209	37.59	15.21
6	#10480.00	40.8 AV	54.0	-13.2	1.17 H	209	25.59	15.21
7	15720.00	57.8 PK	74.0	-16.2	1.18 H	122	36.93	20.87
8	15720.00	46.4 AV	54.0	-7.6	1.18 H	122	25.53	20.87
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	69.2 PK	74.0	-4.8	1.03 V	95	60.97	8.23
2	5150.00	48.5 AV	54.0	-5.5	1.03 V	95	40.27	8.23
3	*5240.00	122.0 PK			1.03 V	95	113.60	8.40
4	*5240.00	111.6 AV			1.03 V	95	103.20	8.40
5	#10480.00	58.0 PK	74.0	-16.0	1.46 V	307	42.79	15.21
6	#10480.00	47.2 AV	54.0	-6.8	1.46 V	307	31.99	15.21
7	15720.00	59.0 PK	74.0	-15.0	1.10 V	32	38.13	20.87
8	15720.00	48.2 AV	54.0	-5.8	1.10 V	32	27.33	20.87

**REMARKS:**

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

# 802.11ac(VHT40), 1Tx

<b>CHANNEL</b>	TX Channel 38	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	62.2 PK	74.0	-11.8	1.17 H	90	53.97	8.23
2	5150.00	48.2 AV	54.0	-5.8	1.17 H	90	39.97	8.23
3	*5190.00	91.5 PK			1.17 H	90	83.26	8.24
4	*5190.00	81.7 AV			1.17 H	90	73.46	8.24
5	#10380.00	52.6 PK	74.0	-21.4	1.21 H	208	37.54	15.06
6	#10380.00	41.4 AV	54.0	-12.6	1.21 H	208	26.34	15.06
7	15570.00	57.3 PK	74.0	-16.7	1.16 H	134	36.44	20.86
8	15570.00	46.3 AV	54.0	-7.7	1.16 H	134	25.44	20.86
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	66.6 PK	74.0	-7.4	1.06 V	76	58.37	8.23
2	5150.00	52.7 AV	54.0	-1.3	1.06 V	76	44.47	8.23
3	*5190.00	105.5 PK			1.04 V	76	97.26	8.24
4	*5190.00	95.8 AV			1.04 V	76	87.56	8.24
5	#10380.00	58.3 PK	74.0	-15.7	1.39 V	318	43.24	15.06
6	#10380.00	47.3 AV	54.0	-6.7	1.39 V	318	32.24	15.06
7	15570.00	58.4 PK	74.0	-15.6	1.10 V	15	37.54	20.86
8	15570.00	48.0 AV	54.0	-6.0	1.10 V	15	27.14	20.86

## REMARKS:

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

<b>CHANNEL</b>	TX Channel 46	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	5127.00	63.7 PK	74.0	-10.3	1.10 H	107	55.48	8.22
2	5127.00	48.8 AV	54.0	-5.2	1.10 H	107	40.58	8.22
3	*5230.00	100.8 PK			1.10 H	107	92.44	8.36
4	*5230.00	90.6 AV			1.10 H	107	82.24	8.36
5	#10460.00	52.7 PK	74.0	-21.3	1.13 H	226	37.49	15.21
6	#10460.00	41.2 AV	54.0	-12.8	1.13 H	226	25.99	15.21
7	15690.00	58.1 PK	74.0	-15.9	1.17 H	121	37.19	20.91
8	15690.00	46.8 AV	54.0	-7.2	1.17 H	121	25.89	20.91
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	67.9 PK	74.0	-6.1	1.06 V	77	59.67	8.23
2	5150.00	52.7 AV	54.0	-1.3	1.06 V	77	44.47	8.23
3	*5230.00	115.1 PK			1.06 V	77	106.74	8.36
4	*5230.00	105.0 AV			1.06 V	77	96.64	8.36
5	#10460.00	58.2 PK	74.0	-15.8	1.46 V	311	42.99	15.21
6	#10460.00	47.4 AV	54.0	-6.6	1.46 V	311	32.19	15.21
7	15690.00	59.6 PK	74.0	-14.4	1.13 V	42	38.69	20.91
8	15690.00	48.6 AV	54.0	-5.4	1.13 V	42	27.69	20.91

**REMARKS:**

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

# 802.11ac(VHT80), 1Tx

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

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	60.7 PK	74.0	-13.3	1.13 H	105	52.47	8.23
2	5150.00	48.4 AV	54.0	-5.6	1.13 H	105	40.17	8.23
3	*5210.00	92.0 PK			1.13 H	105	83.73	8.27
4	*5210.00	82.3 AV			1.13 H	105	74.03	8.27
5	#10420.00	52.6 PK	74.0	-21.4	1.16 H	227	37.39	15.21
6	#10420.00	41.1 AV	54.0	-12.9	1.16 H	227	25.89	15.21
7	15630.00	57.9 PK	74.0	-16.1	1.11 H	130	37.01	20.89
8	15630.00	46.8 AV	54.0	-7.2	1.11 H	130	25.91	20.89
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	65.0 PK	74.0	-9.0	1.04 V	75	56.77	8.23
2	5150.00	52.7 AV	54.0	-1.3	1.04 V	75	44.47	8.23
3	*5210.00	106.3 PK			1.03 V	75	98.03	8.27
4	*5210.00	96.6 AV			1.03 V	75	88.33	8.27
5	#10420.00	59.0 PK	74.0	-15.0	1.32 V	327	43.79	15.21
6	#10420.00	48.2 AV	54.0	-5.8	1.32 V	327	32.99	15.21
7	15630.00	58.8 PK	74.0	-15.2	1.14 V	52	37.91	20.89
8	15630.00	48.3 AV	54.0	-5.7	1.14 V	52	27.41	20.89

## REMARKS:

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



# 802.11a, 2Tx

<b>CHANNEL</b>	TX Channel 36	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

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	5107.00	54.6 PK	74.0	-19.4	1.00 H	92	46.38	8.22
2	5107.00	43.4 AV	54.0	-10.6	1.00 H	92	35.18	8.22
3	*5180.00	100.3 PK			1.10 H	92	92.07	8.23
4	*5180.00	89.1 AV			1.10 H	92	80.87	8.23
5	#10360.00	53.3 PK	74.0	-20.7	1.19 H	234	38.42	14.88
6	#10360.00	41.5 AV	54.0	-12.5	1.19 H	234	26.62	14.88
7	15540.00	58.2 PK	74.0	-15.8	1.11 H	131	37.35	20.85
8	15540.00	46.7 AV	54.0	-7.3	1.11 H	131	25.85	20.85
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	5094.00	60.6 PK	74.0	-13.4	1.01 V	86	52.41	8.19
2	5094.00	46.0 AV	54.0	-8.0	1.01 V	86	37.81	8.19
3	*5180.00	113.4 PK			1.01 V	86	105.17	8.23
4	*5180.00	103.8 AV			1.01 V	86	95.57	8.23
5	#10360.00	57.4 PK	74.0	-16.6	1.46 V	326	42.52	14.88
6	#10360.00	47.0 AV	54.0	-7.0	1.46 V	326	32.12	14.88
7	15540.00	59.0 PK	74.0	-15.0	1.17 V	22	38.15	20.85
8	15540.00	48.9 AV	54.0	-5.1	1.17 V	22	28.05	20.85

## REMARKS:

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

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

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	99.1 PK			1.16 H	87	90.86	8.24
2	*5200.00	89.8 AV			1.16 H	87	81.56	8.24
3	#10400.00	53.5 PK	74.0	-20.5	1.09 H	224	38.27	15.23
4	#10400.00	41.6 AV	54.0	-12.4	1.09 H	224	26.37	15.23
5	15600.00	57.6 PK	74.0	-16.4	1.00 H	138	36.72	20.88
6	15600.00	46.2 AV	54.0	-7.8	1.00 H	138	25.32	20.88
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	113.6 PK			1.00 V	97	105.36	8.24
2	*5200.00	104.3 AV			1.00 V	97	96.06	8.24
3	#10400.00	57.7 PK	74.0	-16.3	1.41 V	329	42.47	15.23
4	#10400.00	47.0 AV	54.0	-7.0	1.41 V	329	31.77	15.23
5	15600.00	59.3 PK	74.0	-14.7	1.14 V	30	38.42	20.88
6	15600.00	49.2 AV	54.0	-4.8	1.14 V	30	28.32	20.88

#### REMARKS:

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

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

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	99.3 PK			1.05 H	80	90.90	8.40
2	*5240.00	89.2 AV			1.05 H	80	80.80	8.40
3	#10480.00	52.9 PK	74.0	-21.1	1.14 H	208	37.69	15.21
4	#10480.00	40.8 AV	54.0	-13.2	1.14 H	208	25.59	15.21
5	15720.00	57.6 PK	74.0	-16.4	1.13 H	130	36.73	20.87
6	15720.00	46.2 AV	54.0	-7.8	1.13 H	130	25.33	20.87
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	113.0 PK			1.00 V	97	104.60	8.40
2	*5240.00	103.1 AV			1.00 V	97	94.70	8.40
3	#10480.00	57.2 PK	74.0	-16.8	1.50 V	313	41.99	15.21
4	#10480.00	47.0 AV	54.0	-7.0	1.50 V	313	31.79	15.21
5	15720.00	58.9 PK	74.0	-15.1	1.18 V	36	38.03	20.87
6	15720.00	48.6 AV	54.0	-5.4	1.18 V	36	27.73	20.87

#### REMARKS:

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

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	106.6 PK			1.07 H	91	98.14	8.46
2	*5260.00	96.7 AV			1.07 H	91	88.24	8.46
3	#10520.00	53.6 PK	74.0	-20.4	1.14 H	243	38.34	15.26
4	#10520.00	41.6 AV	54.0	-12.4	1.14 H	243	26.34	15.26
5	15780.00	57.8 PK	74.0	-16.2	1.12 H	94	37.05	20.75
6	15780.00	46.3 AV	54.0	-7.7	1.12 H	94	25.55	20.75
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	120.7 PK			1.00 V	97	112.24	8.46
2	*5260.00	110.9 AV			1.00 V	97	102.44	8.46
3	#10520.00	57.3 PK	74.0	-16.7	1.47 V	323	42.04	15.26
4	#10520.00	46.8 AV	54.0	-7.2	1.47 V	323	31.54	15.26
5	15780.00	59.1 PK	74.0	-14.9	1.22 V	14	38.35	20.75
6	15780.00	48.8 AV	54.0	-5.2	1.22 V	14	28.05	20.75

#### REMARKS:

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

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	106.4 PK			1.08 H	79	97.78	8.62
2	*5300.00	96.3 AV			1.08 H	79	87.68	8.62
3	10600.00	52.7 PK	74.0	-21.3	1.19 H	223	37.17	15.53
4	10600.00	41.2 AV	54.0	-12.8	1.19 H	223	25.67	15.53
5	15900.00	57.9 PK	74.0	-16.1	1.16 H	127	36.60	21.30
6	15900.00	46.7 AV	54.0	-7.3	1.16 H	127	25.40	21.30
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	*5300.00	120.1 PK			1.00 V	97	111.48	8.62
2	*5300.00	110.1 AV			1.00 V	97	101.48	8.62
3	10600.00	57.1 PK	74.0	-16.9	1.46 V	320	41.57	15.53
4	10600.00	46.7 AV	54.0	-7.3	1.46 V	320	31.17	15.53
5	15900.00	59.0 PK	74.0	-15.0	1.22 V	8	37.70	21.30
6	15900.00	48.9 AV	54.0	-5.1	1.22 V	8	27.60	21.30

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

<b>CHANNEL</b>	TX Channel 64	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	102.3 PK			1.12 H	79	93.61	8.69
2	*5320.00	92.7 AV			1.12 H	79	84.01	8.69
3	5350.00	65.3 PK	74.0	-8.7	1.12 H	79	56.50	8.80
4	5350.00	48.6 AV	54.0	-5.4	1.12 H	79	39.80	8.80
5	10640.00	52.9 PK	74.0	-21.1	1.14 H	228	37.36	15.54
6	10640.00	41.3 AV	54.0	-12.7	1.14 H	228	25.76	15.54
7	15960.00	58.4 PK	74.0	-15.6	1.16 H	126	37.58	20.82
8	15960.00	46.9 AV	54.0	-7.1	1.16 H	126	26.08	20.82
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	116.2 PK			1.00 V	139	107.51	8.69
2	*5320.00	106.6 AV			1.00 V	139	97.91	8.69
3	5350.00	69.1 PK	74.0	-4.9	1.00 V	134	60.30	8.80
4	5350.00	52.5 AV	54.0	-1.5	1.00 V	134	43.70	8.80
5	10640.00	57.1 PK	74.0	-16.9	1.52 V	330	41.56	15.54
6	10640.00	46.9 AV	54.0	-7.1	1.52 V	330	31.36	15.54
7	15960.00	59.1 PK	74.0	-14.9	1.16 V	21	38.28	20.82
8	15960.00	48.7 AV	54.0	-5.3	1.16 V	21	27.88	20.82

**REMARKS:**

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

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	5414.00	66.9 PK	74.0	-7.1	1.05 H	83	57.89	9.01
2	5414.00	48.5 AV	54.0	-5.5	1.05 H	83	39.49	9.01
3	*5500.00	103.3 PK			1.05 H	83	93.97	9.33
4	*5500.00	93.6 AV			1.05 H	83	84.27	9.33
5	11000.00	53.3 PK	74.0	-20.7	1.18 H	225	36.35	16.95
6	11000.00	41.6 AV	54.0	-12.4	1.18 H	225	24.65	16.95
7	#16500.00	58.3 PK	74.0	-15.7	1.11 H	118	35.26	23.04
8	#16500.00	46.8 AV	54.0	-7.2	1.11 H	118	23.76	23.04
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	#5470.00	71.2 PK	74.0	-2.8	1.00 V	210	61.98	9.22
2	#5470.00	52.7 AV	54.0	-1.3	1.00 V	210	43.48	9.22
3	*5500.00	117.5 PK			1.08 V	223	108.17	9.33
4	*5500.00	107.7 AV			1.08 V	223	98.37	9.33
5	11000.00	57.5 PK	74.0	-16.5	1.40 V	333	40.55	16.95
6	11000.00	47.4 AV	54.0	-6.6	1.40 V	333	30.45	16.95
7	#16500.00	58.8 PK	74.0	-15.2	1.22 V	13	35.76	23.04
8	#16500.00	48.5 AV	54.0	-5.5	1.22 V	13	25.46	23.04

**REMARKS:**

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

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	107.4 PK			1.16 H	98	97.93	9.47
2	*5580.00	98.5 AV			1.16 H	98	89.03	9.47
3	11160.00	52.9 PK	74.0	-21.1	1.19 H	235	36.69	16.21
4	11160.00	41.0 AV	54.0	-13.0	1.19 H	235	24.79	16.21
5	#16740.00	57.5 PK	74.0	-16.5	1.11 H	123	33.82	23.68
6	#16740.00	45.9 AV	54.0	-8.1	1.11 H	123	22.22	23.68
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	121.0 PK			1.03 V	95	111.53	9.47
2	*5580.00	112.2 AV			1.03 V	95	102.73	9.47
3	11160.00	57.8 PK	74.0	-16.2	1.49 V	315	41.59	16.21
4	11160.00	47.5 AV	54.0	-6.5	1.49 V	315	31.29	16.21
5	#16740.00	59.1 PK	74.0	-14.9	1.18 V	35	35.42	23.68
6	#16740.00	48.9 AV	54.0	-5.1	1.18 V	35	25.22	23.68

#### REMARKS:

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



CHANNEL	TX Channel 132	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5660.00	106.1 PK			1.02 H	78	96.37	9.73
2	*5660.00	96.4 AV			1.02 H	78	86.67	9.73
3	11320.00	52.6 PK	74.0	-21.4	1.15 H	231	35.68	16.92
4	11320.00	41.0 AV	54.0	-13.0	1.15 H	231	24.08	16.92
5	#16980.00	58.1 PK	74.0	-15.9	1.14 H	118	33.90	24.20
6	#16980.00	47.1 AV	54.0	-6.9	1.14 H	118	22.90	24.20
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	*5660.00	120.1 PK			1.12 V	92	110.37	9.73
2	*5660.00	110.4 AV			1.12 V	92	100.67	9.73
3	11320.00	57.0 PK	74.0	-17.0	1.50 V	329	40.08	16.92
4	11320.00	46.8 AV	54.0	-7.2	1.50 V	329	29.88	16.92
5	#16980.00	59.3 PK	74.0	-14.7	1.22 V	22	35.10	24.20
6	#16980.00	49.2 AV	54.0	-4.8	1.22 V	22	25.00	24.20

#### REMARKS:

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

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	103.9 PK			1.08 H	74	94.02	9.88
2	*5700.00	94.4 AV			1.08 H	74	84.52	9.88
3	#5780.00	68.5 PK	74.0	-5.5	1.08 H	74	58.51	9.99
4	#5780.00	47.4 AV	54.0	-6.6	1.08 H	74	37.41	9.99
5	11400.00	54.0 PK	74.0	-20.0	1.21 H	221	37.25	16.75
6	11400.00	42.0 AV	54.0	-12.0	1.21 H	221	25.25	16.75
7	#17100.00	58.2 PK	74.0	-15.8	1.15 H	143	33.14	25.06
8	#17100.00	46.7 AV	54.0	-7.3	1.15 H	143	21.64	25.06
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	117.4 PK			1.11 V	284	107.52	9.88
2	*5700.00	108.2 AV			1.11 V	284	98.32	9.88
3	#5725.00	72.7 PK	74.0	-1.3	1.21 V	284	62.79	9.91
4	#5725.00	51.6 AV	54.0	-2.4	1.21 V	284	41.69	9.91
5	11400.00	57.6 PK	74.0	-16.4	1.42 V	337	40.85	16.75
6	11400.00	47.4 AV	54.0	-6.6	1.42 V	337	30.65	16.75
7	#17100.00	58.9 PK	74.0	-15.1	1.13 V	37	33.84	25.06
8	#17100.00	48.6 AV	54.0	-5.4	1.13 V	37	23.54	25.06

**REMARKS:**

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

# 802.11ac (VHT20), 2Tx

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

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	5105.00	61.7 PK	74.0	-12.3	1.02 H	105	53.48	8.22
2	5105.00	43.3 AV	54.0	-10.7	1.02 H	105	35.08	8.22
3	*5180.00	100.1 PK			1.02 H	105	91.87	8.23
4	*5180.00	89.9 AV			1.02 H	105	81.67	8.23
5	#10360.00	53.3 PK	74.0	-20.7	1.13 H	241	38.42	14.88
6	#10360.00	41.6 AV	54.0	-12.4	1.13 H	241	26.72	14.88
7	15540.00	57.8 PK	74.0	-16.2	1.04 H	128	36.95	20.85
8	15540.00	46.2 AV	54.0	-7.8	1.04 H	128	25.35	20.85
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	65.1 PK	74.0	-8.9	1.02 V	94	56.87	8.23
2	5150.00	46.8 AV	54.0	-7.2	1.02 V	94	38.57	8.23
3	*5180.00	113.7 PK			1.12 V	96	105.47	8.23
4	*5180.00	103.6 AV			1.12 V	96	95.37	8.23
5	#10360.00	57.7 PK	74.0	-16.3	1.43 V	312	42.82	14.88
6	#10360.00	47.4 AV	54.0	-6.6	1.43 V	312	32.52	14.88
7	15540.00	59.4 PK	74.0	-14.6	1.13 V	10	38.55	20.85
8	15540.00	49.0 AV	54.0	-5.0	1.13 V	10	28.15	20.85

## REMARKS:

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

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

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	100.0 PK			1.14 H	66	91.76	8.24
2	*5200.00	90.1 AV			1.14 H	66	81.86	8.24
3	#10400.00	53.2 PK	74.0	-20.8	1.14 H	225	37.97	15.23
4	#10400.00	41.7 AV	54.0	-12.3	1.14 H	225	26.47	15.23
5	15600.00	56.7 PK	74.0	-17.3	1.01 H	116	35.82	20.88
6	15600.00	45.2 AV	54.0	-8.8	1.01 H	116	24.32	20.88
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	114.2 PK			1.00 V	81	105.96	8.24
2	*5200.00	104.1 AV			1.00 V	81	95.86	8.24
3	#10400.00	57.5 PK	74.0	-16.5	1.41 V	316	42.27	15.23
4	#10400.00	47.0 AV	54.0	-7.0	1.41 V	316	31.77	15.23
5	15600.00	59.1 PK	74.0	-14.9	1.12 V	14	38.22	20.88
6	15600.00	49.3 AV	54.0	-4.7	1.12 V	14	28.42	20.88

#### REMARKS:

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

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

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	100.2 PK			1.07 H	83	91.80	8.40
2	*5240.00	90.0 AV			1.07 H	83	81.60	8.40
3	#10480.00	53.2 PK	74.0	-20.8	1.16 H	238	37.99	15.21
4	#10480.00	41.3 AV	54.0	-12.7	1.16 H	238	26.09	15.21
5	15720.00	57.5 PK	74.0	-16.5	1.03 H	109	36.63	20.87
6	15720.00	46.3 AV	54.0	-7.7	1.03 H	109	25.43	20.87
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	114.0 PK			1.00 V	82	105.60	8.40
2	*5240.00	104.0 AV			1.00 V	82	95.60	8.40
3	#10480.00	57.2 PK	74.0	-16.8	1.40 V	331	41.99	15.21
4	#10480.00	47.1 AV	54.0	-6.9	1.40 V	331	31.89	15.21
5	15720.00	59.2 PK	74.0	-14.8	1.14 V	11	38.33	20.87
6	15720.00	49.2 AV	54.0	-4.8	1.14 V	11	28.33	20.87

#### REMARKS:

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

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	108.0 PK			1.13 H	78	99.54	8.46
2	*5260.00	98.3 AV			1.13 H	78	89.84	8.46
3	#10520.00	53.1 PK	74.0	-20.9	1.10 H	237	37.84	15.26
4	#10520.00	41.7 AV	54.0	-12.3	1.10 H	237	26.44	15.26
5	15780.00	57.8 PK	74.0	-16.2	1.03 H	126	37.05	20.75
6	15780.00	46.4 AV	54.0	-7.6	1.03 H	126	25.65	20.75
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	122.0 PK			1.00 V	96	113.54	8.46
2	*5260.00	112.1 AV			1.00 V	96	103.64	8.46
3	#10520.00	57.0 PK	74.0	-17.0	1.48 V	327	41.74	15.26
4	#10520.00	46.7 AV	54.0	-7.3	1.48 V	327	31.44	15.26
5	15780.00	58.9 PK	74.0	-15.1	1.15 V	18	38.15	20.75
6	15780.00	48.7 AV	54.0	-5.3	1.15 V	18	27.95	20.75

#### REMARKS:

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

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	106.7 PK			1.12 H	80	98.08	8.62
2	*5300.00	97.0 AV			1.12 H	80	88.38	8.62
3	10600.00	52.5 PK	74.0	-21.5	1.12 H	242	36.97	15.53
4	10600.00	40.9 AV	54.0	-13.1	1.12 H	242	25.37	15.53
5	15900.00	58.0 PK	74.0	-16.0	1.03 H	144	36.70	21.30
6	15900.00	46.3 AV	54.0	-7.7	1.03 H	144	25.00	21.30
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	*5300.00	120.9 PK			1.00 V	95	112.28	8.62
2	*5300.00	111.1 AV			1.00 V	95	102.48	8.62
3	10600.00	58.0 PK	74.0	-16.0	1.42 V	338	42.47	15.53
4	10600.00	47.5 AV	54.0	-6.5	1.42 V	338	31.97	15.53
5	15900.00	59.6 PK	74.0	-14.4	1.16 V	15	38.30	21.30
6	15900.00	49.2 AV	54.0	-4.8	1.16 V	15	27.90	21.30

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

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	102.4 PK			1.11 H	97	93.71	8.69
2	*5320.00	92.5 AV			1.11 H	97	83.81	8.69
3	5400.00	66.4 PK	74.0	-7.6	1.11 H	97	57.43	8.97
4	5400.00	48.4 AV	54.0	-5.6	1.11 H	97	39.43	8.97
5	10640.00	52.4 PK	74.0	-21.6	1.03 H	250	36.86	15.54
6	10640.00	40.8 AV	54.0	-13.2	1.03 H	250	25.26	15.54
7	15960.00	57.8 PK	74.0	-16.2	1.00 H	101	36.98	20.82
8	15960.00	46.2 AV	54.0	-7.8	1.00 H	101	25.38	20.82
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	115.7 PK			1.20 V	277	107.01	8.69
2	*5320.00	106.0 AV			1.20 V	277	97.31	8.69
3	5350.00	70.8 PK	74.0	-3.2	1.19 V	289	62.00	8.80
4	5350.00	52.6 AV	54.0	-1.4	1.19 V	289	43.80	8.80
5	10640.00	59.0 PK	74.0	-15.0	1.43 V	295	43.46	15.54
6	10640.00	48.0 AV	54.0	-6.0	1.43 V	295	32.46	15.54
7	15960.00	59.5 PK	74.0	-14.5	1.11 V	53	38.68	20.82
8	15960.00	48.6 AV	54.0	-5.4	1.11 V	53	27.78	20.82

**REMARKS:**

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



CHANNEL	TX Channel 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5470.00	68.2 PK	74.0	-5.8	1.12 H	80	58.98	9.22
2	#5470.00	48.9 AV	54.0	-5.1	1.12 H	80	39.68	9.22
3	*5500.00	105.3 PK			1.12 H	80	95.97	9.33
4	*5500.00	95.1 AV			1.12 H	80	85.77	9.33
5	11000.00	53.7 PK	74.0	-20.3	1.13 H	248	36.75	16.95
6	11000.00	41.8 AV	54.0	-12.2	1.13 H	248	24.85	16.95
7	#16500.00	57.5 PK	74.0	-16.5	1.01 H	121	34.46	23.04
8	#16500.00	45.7 AV	54.0	-8.3	1.01 H	121	22.66	23.04
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	#5470.00	72.4 PK	74.0	-1.6	1.15 V	259	63.18	9.22
2	#5470.00	52.8 AV	54.0	-1.2	1.15 V	259	43.58	9.22
3	*5500.00	119.4 PK			1.14 V	263	110.07	9.33
4	*5500.00	109.4 AV			1.14 V	263	100.07	9.33
5	11000.00	57.2 PK	74.0	-16.8	1.43 V	336	40.25	16.95
6	11000.00	46.9 AV	54.0	-7.1	1.43 V	336	29.95	16.95
7	#16500.00	59.2 PK	74.0	-14.8	1.20 V	11	36.16	23.04
8	#16500.00	49.3 AV	54.0	-4.7	1.20 V	11	26.26	23.04

**REMARKS:**

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

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	106.2 PK			1.15 H	78	96.73	9.47
2	*5580.00	96.0 AV			1.15 H	78	86.53	9.47
3	11160.00	52.9 PK	74.0	-21.1	1.14 H	223	36.69	16.21
4	11160.00	40.9 AV	54.0	-13.1	1.14 H	223	24.69	16.21
5	#16740.00	57.5 PK	74.0	-16.5	1.05 H	137	33.82	23.68
6	#16740.00	46.0 AV	54.0	-8.0	1.05 H	137	22.32	23.68
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	120.4 PK			1.03 V	95	110.93	9.47
2	*5580.00	110.5 AV			1.03 V	95	101.03	9.47
3	11160.00	57.0 PK	74.0	-17.0	1.43 V	318	40.79	16.21
4	11160.00	46.8 AV	54.0	-7.2	1.43 V	318	30.59	16.21
5	#16740.00	58.3 PK	74.0	-15.7	1.13 V	27	34.62	23.68
6	#16740.00	48.4 AV	54.0	-5.6	1.13 V	27	24.72	23.68

#### REMARKS:

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

CHANNEL	TX Channel 132	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	*5660.00	104.7 PK			1.13 H	106	94.97	9.73
2	*5660.00	94.8 AV			1.13 H	106	85.07	9.73
3	11320.00	52.7 PK	74.0	-21.3	1.07 H	237	35.78	16.92
4	11320.00	41.3 AV	54.0	-12.7	1.07 H	237	24.38	16.92
5	#16980.00	57.5 PK	74.0	-16.5	1.03 H	120	33.30	24.20
6	#16980.00	46.4 AV	54.0	-7.6	1.03 H	120	22.20	24.20
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	*5660.00	118.9 PK			1.02 V	80	109.17	9.73
2	*5660.00	109.0 AV			1.02 V	80	99.27	9.73
3	11320.00	57.9 PK	74.0	-16.1	1.42 V	318	40.98	16.92
4	11320.00	47.4 AV	54.0	-6.6	1.42 V	318	30.48	16.92
5	#16980.00	59.4 PK	74.0	-14.6	1.17 V	9	35.20	24.20
6	#16980.00	49.0 AV	54.0	-5.0	1.17 V	9	24.80	24.20

#### REMARKS:

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

<b>CHANNEL</b>	TX Channel 140	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	104.2 PK			1.13 H	87	94.32	9.88
2	*5700.00	94.3 AV			1.13 H	87	84.42	9.88
3	#5725.00	69.6 PK	74.0	-4.4	1.13 H	87	59.69	9.91
4	#5725.00	49.2 AV	54.0	-4.8	1.13 H	87	39.29	9.91
5	11400.00	53.7 PK	74.0	-20.3	1.17 H	232	36.95	16.75
6	11400.00	42.0 AV	54.0	-12.0	1.17 H	232	25.25	16.75
7	#17100.00	57.6 PK	74.0	-16.4	1.07 H	108	32.54	25.06
8	#17100.00	46.1 AV	54.0	-7.9	1.07 H	108	21.04	25.06
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	118.4 PK			1.11 V	275	108.52	9.88
2	*5700.00	108.5 AV			1.11 V	275	98.62	9.88
3	#5725.00	73.0 PK	74.0	-1.0	1.10 V	275	63.09	9.91
4	#5725.00	53.0 AV	54.0	-1.0	1.10 V	275	43.09	9.91
5	11400.00	58.0 PK	74.0	-16.0	1.40 V	321	41.25	16.75
6	11400.00	47.3 AV	54.0	-6.7	1.40 V	321	30.55	16.75
7	#17100.00	58.8 PK	74.0	-15.2	1.18 V	31	33.74	25.06
8	#17100.00	48.7 AV	54.0	-5.3	1.18 V	31	23.64	25.06

**REMARKS:**

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

# 802.11ac (VHT40), 2Tx

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

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	61.1 PK	74.0	-12.9	1.05 H	84	52.87	8.23
2	5150.00	48.4 AV	54.0	-5.6	1.05 H	84	40.17	8.23
3	*5190.00	92.1 PK			1.05 H	84	83.86	8.24
4	*5190.00	83.6 AV			1.05 H	84	75.36	8.24
5	#10380.00	53.3 PK	74.0	-20.7	1.10 H	234	38.24	15.06
6	#10380.00	41.5 AV	54.0	-12.5	1.10 H	234	26.44	15.06
7	15570.00	56.9 PK	74.0	-17.1	1.09 H	116	36.04	20.86
8	15570.00	45.5 AV	54.0	-8.5	1.09 H	116	24.64	20.86
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	65.1 PK	74.0	-8.9	1.00 V	113	56.87	8.23
2	5150.00	52.5 AV	54.0	-1.5	1.00 V	113	44.27	8.23
3	*5190.00	106.4 PK			1.00 V	113	98.16	8.24
4	*5190.00	97.8 AV			1.00 V	113	89.56	8.24
5	#10380.00	58.3 PK	74.0	-15.7	1.40 V	305	43.24	15.06
6	#10380.00	47.7 AV	54.0	-6.3	1.40 V	305	32.64	15.06
7	15570.00	59.1 PK	74.0	-14.9	1.22 V	17	38.24	20.86
8	15570.00	48.7 AV	54.0	-5.3	1.22 V	17	27.84	20.86

## REMARKS:

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

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

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	97.8 PK			1.11 H	80	89.44	8.36
2	*5230.00	88.4 AV			1.11 H	80	80.04	8.36
3	#10460.00	52.1 PK	74.0	-21.9	1.12 H	244	36.89	15.21
4	#10460.00	40.9 AV	54.0	-13.1	1.12 H	244	25.69	15.21
5	15690.00	57.0 PK	74.0	-17.0	1.00 H	141	36.09	20.91
6	15690.00	45.4 AV	54.0	-8.6	1.00 H	141	24.49	20.91
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	112.2 PK			1.00 V	96	103.84	8.36
2	*5230.00	102.6 AV			1.00 V	96	94.24	8.36
3	#10460.00	58.1 PK	74.0	-15.9	1.45 V	331	42.89	15.21
4	#10460.00	47.4 AV	54.0	-6.6	1.45 V	331	32.19	15.21
5	15690.00	59.0 PK	74.0	-15.0	1.19 V	41	38.09	20.91
6	15690.00	49.2 AV	54.0	-4.8	1.19 V	41	28.29	20.91

#### REMARKS:

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

<b>CHANNEL</b>	TX Channel 54	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	101.5 PK			1.13 H	63	93.00	8.50
2	*5270.00	91.8 AV			1.13 H	63	83.30	8.50
3	5350.00	66.1 PK	74.0	-7.9	1.13 H	63	57.30	8.80
4	5350.00	48.3 AV	54.0	-5.7	1.13 H	63	39.50	8.80
5	#10540.00	53.4 PK	74.0	-20.6	1.18 H	229	38.07	15.33
6	#10540.00	41.9 AV	54.0	-12.1	1.18 H	229	26.57	15.33
7	15810.00	57.0 PK	74.0	-17.0	1.07 H	109	36.24	20.76
8	15810.00	45.8 AV	54.0	-8.2	1.07 H	109	25.04	20.76
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5270.00	116.1 PK			1.09 V	291	107.60	8.50
2	*5270.00	106.2 AV			1.09 V	291	97.70	8.50
3	5350.00	70.7 PK	74.0	-3.3	1.06 V	293	61.90	8.80
4	5350.00	52.6 AV	54.0	-1.4	1.06 V	293	43.80	8.80
5	#10540.00	58.3 PK	74.0	-15.7	1.44 V	310	42.97	15.33
6	#10540.00	47.5 AV	54.0	-6.5	1.44 V	310	32.17	15.33
7	15810.00	58.6 PK	74.0	-15.4	1.14 V	16	37.84	20.76
8	15810.00	48.4 AV	54.0	-5.6	1.14 V	16	27.64	20.76

**REMARKS:**

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

CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	91.7 PK			1.04 H	76	83.05	8.65
2	*5310.00	82.6 AV			1.04 H	76	73.95	8.65
3	5350.00	60.0 PK	74.0	-14.0	1.04 H	76	51.20	8.80
4	5350.00	47.8 AV	54.0	-6.2	1.04 H	76	39.00	8.80
5	10620.00	53.3 PK	74.0	-20.7	1.06 H	244	37.77	15.53
6	10620.00	41.8 AV	54.0	-12.2	1.06 H	244	26.27	15.53
7	15930.00	57.2 PK	74.0	-16.8	1.05 H	131	36.13	21.07
8	15930.00	45.8 AV	54.0	-8.2	1.05 H	131	24.73	21.07
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	105.6 PK			1.05 V	111	96.95	8.65
2	*5310.00	96.5 AV			1.05 V	111	87.85	8.65
3	5350.00	64.3 PK	74.0	-9.7	1.05 V	111	55.50	8.80
4	5350.00	52.2 AV	54.0	-1.8	1.05 V	111	43.40	8.80
5	10620.00	57.8 PK	74.0	-16.2	1.43 V	337	42.27	15.53
6	10620.00	47.0 AV	54.0	-7.0	1.43 V	337	31.47	15.53
7	15930.00	58.8 PK	74.0	-15.2	1.13 V	40	37.73	21.07
8	15930.00	48.9 AV	54.0	-5.1	1.13 V	40	27.83	21.07

**REMARKS:**

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



CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5470.00	61.5 PK	74.0	-12.5	1.04 H	90	52.28	9.22
2	#5470.00	44.7 AV	54.0	-9.3	1.04 H	90	35.48	9.22
3	*5510.00	97.8 PK			1.04 H	90	88.45	9.35
4	*5510.00	87.7 AV			1.04 H	90	78.35	9.35
5	11020.00	52.6 PK	74.0	-21.4	1.05 H	225	35.79	16.81
6	11020.00	41.3 AV	54.0	-12.7	1.05 H	225	24.49	16.81
7	#16530.00	57.4 PK	74.0	-16.6	1.05 H	100	34.24	23.16
8	#16530.00	46.0 AV	54.0	-8.0	1.05 H	100	22.84	23.16
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	#5470.00	65.4 PK	74.0	-8.6	1.17 V	288	56.18	9.22
2	#5470.00	48.5 AV	54.0	-5.5	1.17 V	288	39.28	9.22
3	*5510.00	112.0 PK			1.16 V	288	102.65	9.35
4	*5510.00	102.1 AV			1.16 V	288	92.75	9.35
5	11020.00	58.2 PK	74.0	-15.8	1.34 V	322	41.39	16.81
6	11020.00	47.2 AV	54.0	-6.8	1.34 V	322	30.39	16.81
7	#16530.00	59.1 PK	74.0	-14.9	1.21 V	31	35.94	23.16
8	#16530.00	49.1 AV	54.0	-4.9	1.21 V	31	25.94	23.16

**REMARKS:**

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



A D T

CHANNEL	TX Channel 110	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5470.00	65.5 PK	74.0	-8.5	1.12 H	93	56.28	9.22
2	#5470.00	48.8 AV	54.0	-5.2	1.12 H	93	39.58	9.22
3	*5550.00	106.1 PK			1.12 H	93	96.68	9.42
4	*5550.00	95.9 AV			1.12 H	93	86.48	9.42
5	#5725.00	52.5 PK	74.0	-21.5	1.12 H	93	42.59	9.91
6	#5725.00	41.4 AV	54.0	-12.6	1.12 H	93	31.49	9.91
7	11100.00	52.6 PK	74.0	-21.4	1.07 H	235	36.28	16.32
8	11100.00	41.1 AV	54.0	-12.9	1.07 H	235	24.78	16.32
9	#16650.00	57.4 PK	74.0	-16.6	1.02 H	137	33.95	23.45
10	#16650.00	46.4 AV	54.0	-7.6	1.02 H	137	22.95	23.45
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	#5470.00	69.1 PK	74.0	-4.9	1.17 V	288	59.88	9.22
2	#5470.00	52.5 AV	54.0	-1.5	1.17 V	288	43.28	9.22
3	*5550.00	119.6 PK			1.15 V	287	110.18	9.42
4	*5550.00	109.6 AV			1.15 V	287	100.18	9.42
5	#5725.00	56.7 PK	74.0	-17.3	1.17 V	288	46.79	9.91
6	#5725.00	45.8 AV	54.0	-8.2	1.17 V	288	35.89	9.91
7	11100.00	58.3 PK	74.0	-15.7	1.35 V	308	41.98	16.32
8	11100.00	47.5 AV	54.0	-6.5	1.35 V	308	31.18	16.32
9	#16650.00	58.5 PK	74.0	-15.5	1.21 V	19	35.05	23.45
10	#16650.00	48.7 AV	54.0	-5.3	1.21 V	19	25.25	23.45

#### REMARKS:

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

<b>CHANNEL</b>	TX Channel 134	<b>DETECTOR FUNCTION</b>	Peak (PK)
<b>FREQUENCY RANGE</b>	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	96.9 PK			1.06 H	85	87.13	9.77
2	*5670.00	87.0 AV			1.06 H	85	77.23	9.77
3	#5725.00	55.8 PK	74.0	-18.2	1.06 H	85	45.89	9.91
4	#5725.00	44.8 AV	54.0	-9.2	1.06 H	85	34.89	9.91
5	11340.00	53.2 PK	74.0	-20.8	1.08 H	242	36.32	16.88
6	11340.00	41.4 AV	54.0	-12.6	1.08 H	242	24.52	16.88
7	#17010.00	57.8 PK	74.0	-16.2	1.00 H	114	33.55	24.25
8	#17010.00	46.3 AV	54.0	-7.7	1.00 H	114	22.05	24.25
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	110.8 PK			1.03 V	128	101.03	9.77
2	*5670.00	100.9 AV			1.03 V	128	91.13	9.77
3	#5725.00	59.4 PK	74.0	-14.6	1.03 V	128	49.49	9.91
4	#5725.00	48.3 AV	54.0	-5.7	1.03 V	128	38.39	9.91
5	11340.00	57.5 PK	74.0	-16.5	1.46 V	333	40.62	16.88
6	11340.00	46.9 AV	54.0	-7.1	1.46 V	333	30.02	16.88
7	#17010.00	59.0 PK	74.0	-15.0	1.17 V	37	34.75	24.25
8	#17010.00	48.8 AV	54.0	-5.2	1.17 V	37	24.55	24.25

**REMARKS:**

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

# 802.11ac (VHT80), 2Tx

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

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	60.1 PK	74.0	-13.9	1.10 H	87	51.87	8.23
2	5150.00	47.9 AV	54.0	-6.1	1.10 H	87	39.67	8.23
3	*5210.00	90.3 PK			1.10 H	87	82.03	8.27
4	*5210.00	80.6 AV			1.10 H	87	72.33	8.27
5	#10420.00	53.1 PK	74.0	-20.9	1.06 H	219	37.89	15.21
6	#10420.00	41.5 AV	54.0	-12.5	1.06 H	219	26.29	15.21
7	15630.00	58.2 PK	74.0	-15.8	1.00 H	139	37.31	20.89
8	15630.00	46.4 AV	54.0	-7.6	1.00 H	139	25.51	20.89
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	1.03 V	131	56.07	8.23
2	5150.00	52.2 AV	54.0	-1.8	1.03 V	131	43.97	8.23
3	*5210.00	104.4 PK			1.03 V	131	96.13	8.27
4	*5210.00	94.7 AV			1.03 V	131	86.43	8.27
5	#10420.00	57.7 PK	74.0	-16.3	1.34 V	308	42.49	15.21
6	#10420.00	46.9 AV	54.0	-7.1	1.34 V	308	31.69	15.21
7	15630.00	59.2 PK	74.0	-14.8	1.14 V	40	38.31	20.89
8	15630.00	49.0 AV	54.0	-5.0	1.14 V	40	28.11	20.89

## REMARKS:

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

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	52.5 PK	74.0	-21.5	1.14 H	89	44.27	8.23
2	5150.00	41.0 AV	54.0	-13.0	1.14 H	89	32.77	8.23
3	*5290.00	89.6 PK			1.14 H	89	81.01	8.59
4	*5290.00	79.6 AV			1.14 H	89	71.01	8.59
5	5350.00	59.6 PK	74.0	-14.4	1.14 H	89	50.80	8.80
6	5350.00	48.7 AV	54.0	-5.3	1.14 H	89	39.90	8.80
7	#10580.00	53.5 PK	74.0	-20.5	1.18 H	226	38.04	15.46
8	#10580.00	41.5 AV	54.0	-12.5	1.18 H	226	26.04	15.46
9	15870.00	57.4 PK	74.0	-16.6	1.02 H	120	36.29	21.11
10	15870.00	45.8 AV	54.0	-8.2	1.02 H	120	24.69	21.11
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	51.7 PK	74.0	-22.3	1.07 V	112	43.47	8.23
2	5150.00	40.1 AV	54.0	-13.9	1.07 V	112	31.87	8.23
3	*5290.00	103.6 PK			1.07 V	112	95.01	8.59
4	*5290.00	93.9 AV			1.07 V	112	85.31	8.59
5	5350.00	63.5 PK	74.0	-10.5	1.07 V	112	54.70	8.80
6	5350.00	52.5 AV	54.0	-1.5	1.07 V	112	43.70	8.80
7	#10580.00	57.6 PK	74.0	-16.4	1.42 V	312	42.14	15.46
8	#10580.00	47.1 AV	54.0	-6.9	1.42 V	312	31.64	15.46
9	15870.00	59.2 PK	74.0	-14.8	1.14 V	21	38.09	21.11
10	15870.00	49.1 AV	54.0	-4.9	1.14 V	21	27.99	21.11

#### REMARKS:

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



A D T

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

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	#5470.00	59.9 PK	74.0	-14.1	1.14 H	93	50.68	9.22
2	#5470.00	48.5 AV	54.0	-5.5	1.14 H	93	39.28	9.22
3	*5530.00	89.1 PK			1.14 H	93	79.71	9.39
4	*5530.00	86.0 AV			1.14 H	93	76.61	9.39
5	#5725.00	52.6 PK	74.0	-21.4	1.14 H	93	42.69	9.91
6	#5725.00	40.1 AV	54.0	-13.9	1.14 H	93	30.19	9.91
7	11060.00	53.4 PK	74.0	-20.6	1.14 H	223	36.83	16.57
8	11060.00	42.0 AV	54.0	-12.0	1.14 H	223	25.43	16.57
9	#16590.00	57.5 PK	74.0	-16.5	1.03 H	109	34.09	23.41
10	#16590.00	46.1 AV	54.0	-7.9	1.03 H	109	22.69	23.41
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	#5470.00	64.0 PK	74.0	-10.0	1.08 V	298	54.78	9.22
2	#5470.00	52.4 AV	54.0	-1.6	1.08 V	298	43.18	9.22
3	*5530.00	103.0 PK			1.39 V	128	93.61	9.39
4	*5530.00	99.7 AV			1.39 V	128	90.31	9.39
5	#5725.00	56.9 PK	74.0	-17.1	1.24 V	284	46.99	9.91
6	#5725.00	44.2 AV	54.0	-9.8	1.24 V	284	34.29	9.91
7	11060.00	58.6 PK	74.0	-15.4	1.44 V	332	42.03	16.57
8	11060.00	47.6 AV	54.0	-6.4	1.44 V	332	31.03	16.57
9	#16590.00	58.8 PK	74.0	-15.2	1.23 V	40	35.39	23.41
10	#16590.00	48.6 AV	54.0	-5.4	1.23 V	40	25.19	23.41

**REMARKS:**

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

### 4.3 TRANSMIT POWER MEASUREMENT

#### 4.3.1 LIMITS OF TRANSMIT POWER MEASUREMENT

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

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

Per KDB 662911 D01 Multiple Transmitter Output 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 INSTRUMENTS

##### FOR POWER OUTPUT MEASUREMENT

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power Meter	ML2495A	1014008	Apr. 23, 2013	Apr. 22, 2014
Power Sensor	MA2411B	0917122	Apr. 23, 2013	Apr. 22, 2014

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : Jan. 14 to 16, 2014

##### FOR 26dB OCCUPIED BANDWIDTH

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S Spectrum Analyzer	FSP40	100036	Jan. 21, 2013	Jan. 20, 2014

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : Jan. 14 to 16, 2014

### 4.3.3 TEST PROCEDURE

#### FOR POWER OUTPUT MEASUREMENT

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 26dB OCCUPIED BANDWIDTH

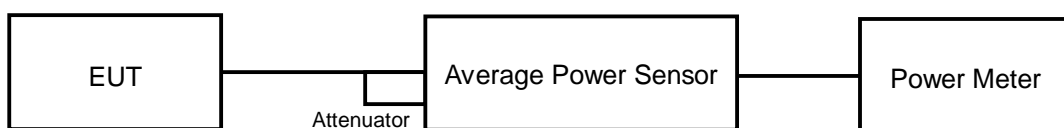
1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement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

### 4.3.4 DEVIATION FROM TEST STANDARD

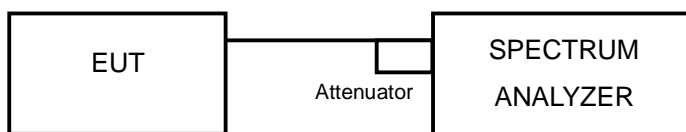
No deviation

### 4.3.5 TEST SETUP

#### FOR POWER OUTPUT MEASUREMENT



#### FOR 26dB OCCUPIED BANDWIDTH





#### 4.3.6 EUT OPERATING CONDITIONS

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



A D T

#### 4.3.7 TEST RESULTS

802.11a, 1Tx

##### POWER OUTPUT

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	46.774	16.70	17	PASS
40	5200	46.881	16.71	17	PASS
48	5240	43.954	16.43	17	PASS
52	5260	73.451	18.66	24	PASS
60	5300	67.143	18.27	24	PASS
64	5320	36.308	15.60	24	PASS
100	5500	64.417	18.09	24	PASS
116	5580	77.090	18.87	24	PASS
132	5660	71.945	18.57	24	PASS
140	5700	38.994	15.91	24	PASS

## 26dB OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)
36	5180	21.75
40	5200	21.63
48	5240	21.64
52	5260	32.40
60	5300	25.38
64	5320	21.59
100	5500	21.48
116	5580	30.47
132	5660	34.62
140	5700	25.16

**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 4dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
36	5180	21.75	17.37 > 17
40	5200	21.63	17.35 > 17
48	5240	21.64	17.35 > 17
Power Limit = 11dBm + 10logB < UNII Band 2~3 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	32.40	26.1 > 24
60	5300	25.38	25.04 > 24
64	5320	21.59	24.34 > 24
100	5500	21.48	24.32 > 24
116	5580	30.47	25.83 > 24
132	5660	34.62	26.39 > 24
140	5700	25.16	25 > 24



A D T

**802.11ac(VHT20), 1Tx**

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
36	5180	41.210	16.15	17	PASS
40	5200	45.290	16.56	17	PASS
48	5240	44.361	16.47	17	PASS

**26dB OCCUPIED BANDWIDTH**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)
36	5180	22.18
40	5200	22.31
48	5240	22.30

**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 4dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
36	5180	22.18	17.45 > 17
40	5200	22.31	17.48 > 17
48	5240	22.30	17.48 > 17



A D T

**802.11ac(VHT40), 1Tx**

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
38	5190	11.402	10.57	17	PASS
46	5230	48.084	16.82	17	PASS

**26dB OCCUPIED BANDWIDTH**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)
38	5190	45.62
46	5230	56.08

**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 4dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
38	5190	45.62	20.59 > 17
46	5230	56.08	21.48 > 17



A D T

**802.11ac(VHT80), 1Tx****POWER OUTPUT**

CHANNEL	CHANNEL FREQUENCY (MHz)	AVERAGE POWER (mW)	AVERAGE POWER (dBm)	POWER LIMIT (dBm)	PASS/FAIL
42	5210	12.190	10.86	17	PASS

**26dB OCCUPIED BANDWIDTH**

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)
42	5210	83.05

**Note:** For output power limitation is determined based on 26dBc bandwidth.

Power Limit = 4dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
42	5210	83.05	23.19 > 17

# 802.11a, 2Tx

## POWER OUTPUT

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	11.75	11.45	28.926	14.61	17	PASS
40	5200	11.44	11.58	28.320	14.52	17	PASS
48	5240	11.57	11.43	28.255	14.51	17	PASS
52	5260	18.66	18.70	147.582	21.69	24	PASS
60	5300	18.27	18.19	133.060	21.24	24	PASS
64	5320	15.16	15.05	64.799	18.12	24	PASS
100	5500	16.95	16.08	90.096	19.55	24	PASS
116	5580	18.87	18.41	146.433	21.66	24	PASS
132	5660	18.57	18.42	141.447	21.51	24	PASS
140	5700	15.58	15.33	70.260	18.47	24	PASS

## 26dB OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
36	5180	21.52	21.17
40	5200	21.50	20.96
48	5240	21.54	21.13
52	5260	28.74	25.87
60	5300	25.28	25.83
64	5320	21.63	21.26
100	5500	21.53	21.34
116	5580	24.30	24.23
132	5660	23.70	24.35
140	5700	21.45	21.37

**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 4dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
36	5180	21.17	17.25 > 17
40	5200	20.96	17.21 > 17
48	5240	21.13	17.24 > 17
Power Limit = 11dBm + 10logB < UNII Band 2~3 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	25.87	25.12 > 24
60	5300	25.28	25.02 > 24
64	5320	21.26	24.27 > 24
100	5500	21.34	24.29 > 24
116	5580	24.23	24.84 > 24
132	5660	23.70	24.74 > 24
140	5700	21.37	24.29 > 24



# 802.11ac(VHT20), 2Tx POWER OUTPUT

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
36	5180	11.32	11.43	27.452	14.39	14.99	PASS
40	5200	11.54	11.16	27.318	14.36	14.99	PASS
48	5240	11.24	11.38	27.045	14.32	14.99	PASS
52	5260	18.38	18.38	137.730	21.39	21.99	PASS
60	5300	18.34	18.39	137.258	21.38	21.99	PASS
64	5320	14.26	14.85	57.218	17.58	21.99	PASS
100	5500	15.75	15.55	73.476	18.66	21.99	PASS
116	5580	18.16	18.57	137.409	21.38	21.99	PASS
132	5660	18.22	18.45	136.358	21.35	21.99	PASS
140	5700	15.72	15.33	71.444	18.54	21.99	PASS

- NOTE:**
1. 5150~5250MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power limit shall be reduced to 17-(8.01-6) = 14.99dBm.
  2. 5250~5350MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power limit shall be reduced to 24-(8.01-6) = 21.99dBm.
  3. 5470~5725MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power limit shall be reduced to 24-(8.01-6) = 21.99dBm.

## 26dB OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
36	5180	22.22	22.27
40	5200	22.12	22.23
48	5240	22.06	22.11
52	5260	24.31	22.34
60	5300	23.91	25.26
64	5320	22.28	22.28
100	5500	22.26	22.36
116	5580	22.64	27.70
132	5660	23.98	26.01
140	5700	22.45	21.95

**Note: For output power limitation is determined based on 26dBc bandwidth.**

Power Limit = 4dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
36	5180	22.22	17.46 > 17
40	5200	22.12	17.44 > 17
48	5240	22.06	17.43 > 17
Power Limit = 11dBm + 10logB < UNII Band 2~3 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	22.34	24.49 > 24
60	5300	23.91	24.78 > 24
64	5320	22.28	24.47 > 24
100	5500	22.26	24.47 > 24
116	5580	22.64	24.54 > 24
132	5660	23.98	24.79 > 24
140	5700	21.95	24.41 > 24

# 802.11ac(VHT40), 2Tx POWER OUTPUT

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
38	5190	10.31	9.94	20.603	13.14	14.99	PASS
46	5230	11.36	11.65	28.299	14.52	14.99	PASS
54	5270	17.34	17.66	112.545	20.51	21.99	PASS
62	5310	10.72	8.61	19.064	12.80	21.99	PASS
102	5510	11.75	11.92	30.522	14.85	21.99	PASS
110	5550	18.12	18.74	139.680	21.45	21.99	PASS
134	5670	15.35	14.63	63.317	18.02	21.99	PASS

- NOTE:**
1. 5150~5250MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power limit shall be reduced to 17-(8.01-6) = 14.99dBm.
  2. 5250~5350MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power limit shall be reduced to 24-(8.01-6) = 21.99dBm.
  3. 5470~5725MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power limit shall be reduced to 24-(8.01-6) = 21.99dBm.

## 26dB OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
38	5190	45.68	45.22
46	5230	45.27	45.47
54	5270	48.88	45.86
62	5310	45.75	45.57
102	5510	44.95	45.31
110	5550	56.07	61.47
134	5670	45.32	45.58

**Note:** For output power limitation is determined based on 26dBc bandwidth.

Power Limit = 4dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
38	5190	45.22	20.55 > 17
46	5230	45.27	20.55 > 17
Power Limit = 11dBm + 10logB < UNII Band 2~3 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	45.86	27.61 > 24
62	5310	45.57	27.58 > 24
102	5510	44.95	27.52 > 24
110	5550	56.07	28.48 > 24
134	5670	45.32	27.56 > 24

## 802.11ac(VHT80), 2Tx

### POWER OUTPUT

CHAN.	CHAN. FREQ. (MHz)	AVERAGE POWER (dBm)		TOTAL POWER (mW)	TOTAL POWER (dBm)	POWER LIMIT (dBm)	PASS / FAIL
		CHAIN 0	CHAIN 1				
42	5210	9.87	9.73	19.102	12.81	14.99	PASS
52	5290	7.83	7.86	12.176	10.86	21.99	PASS
106	5530	11.12	11.64	27.530	14.40	21.99	PASS

- NOTE:**
1. 5150~5250MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power limit shall be reduced to 17-(8.01-6) = 14.99dBm.
  2. 5250~5350MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power limit shall be reduced to 24-(8.01-6) = 21.99dBm.
  3. 5470~5725MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power limit shall be reduced to 24-(8.01-6) = 21.99dBm.

### 26dB OCCUPIED BANDWIDTH

CHANNEL	CHANNEL FREQUENCY (MHz)	26dBc BANDWIDTH (MHz)	
		CHAIN 0	CHAIN 1
42	5210	82.94	83.06
52	5290	82.79	83.04
106	5530	83.08	83.04

**Note:** For output power limitation is determined based on 26dBc bandwidth.

Power Limit = 4dBm + 10logB < UNII Band 1 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
42	5210	82.94	23.18 > 17
Power Limit = 11dBm + 10logB < UNII Band 2~3 >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5290	82.79	30.17 > 24
106	5530	83.04	30.19 > 24

#### 4.4 PEAK POWER SPECTRAL DENSITY MEASUREMENT

##### 4.4.1 LIMITS OF PEAK POWER SPECTRAL DENSITY MEASUREMENT

Frequency Band	Limit
5.15 ~ 5.25GHz	4dBm
5.25 ~ 5.35GHz	11dBm
5.47 ~ 5.725GHz	11dBm
5.725 ~ 5.825GHz	17dBm

##### 4.4.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S Spectrum Analyzer	FSP40	100036	Jan. 21, 2013	Jan. 20, 2014

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : Jan. 14 to 16, 2014

##### 4.4.3 TEST PROCEDURES

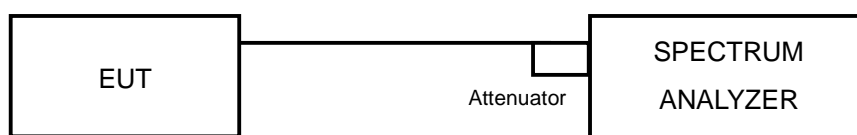
Using method SA-1

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW  $\geq$  3 MHz, 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

##### 4.4.4 DEVIATION FROM TEST STANDARD

No deviation

##### 4.4.5 TEST SETUP



#### 4.4.6 EUT OPERATING CONDITIONS

Same as 4.3.6

#### 4.4.7 TEST RESULTS

##### 802.11a, 1Tx

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	3.52	4	PASS
40	5200	3.57	4	PASS
48	5240	3.76	4	PASS
52	5260	7.54	11	PASS
60	5300	6.05	11	PASS
64	5320	2.75	11	PASS
100	5500	4.81	11	PASS
116	5580	7.24	11	PASS
132	5660	6.36	11	PASS
140	5700	3.43	11	PASS

##### 802.11ac (VHT20), 1Tx

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
36	5180	1.04	4	PASS
40	5200	2.29	4	PASS
48	5240	2.57	4	PASS

##### 802.11ac (VHT40), 1Tx

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
38	5190	-6.22	4	PASS
46	5230	0.47	4	PASS

##### 802.11ac (VHT80), 1Tx

CHANNEL	FREQUENCY (MHz)	PSD (dBm)	MAXIMUM LIMIT (dBm)	PASS/FAIL
42	5210	-7.67	4	PASS

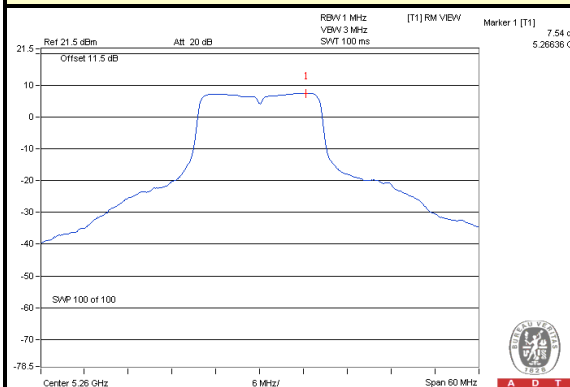




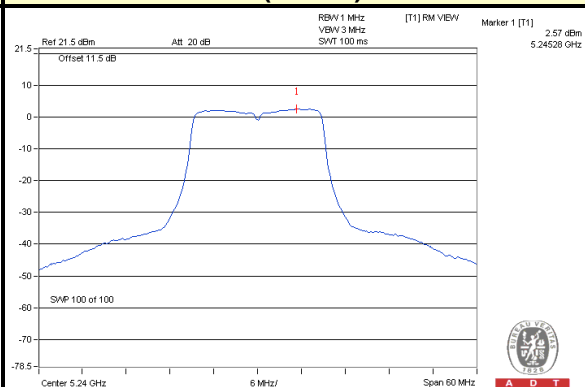
A D T

## SPECTRUM PLOT OF WORST VALUE

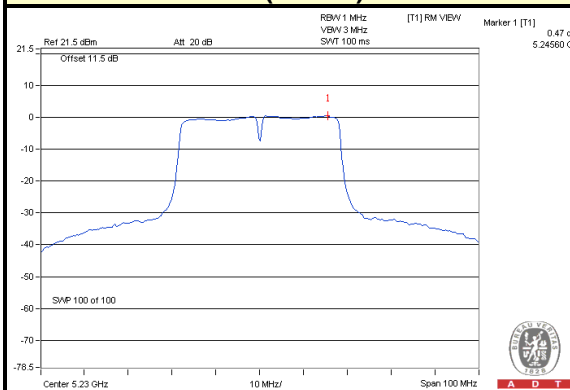
802.11a / CH52



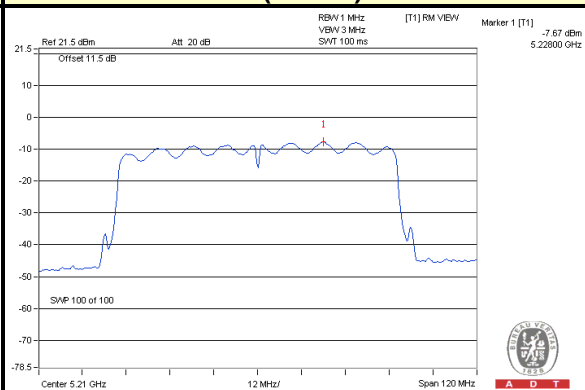
802.11ac (VHT20) / CH48



802.11ac (VHT40) / CH46



802.11ac (VHT80) / CH42



### 802.11a, 2Tx

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1			
36	5180	-2.96	-2.46	0.31	1.99	PASS
40	5200	-3.64	-2.38	0.05	1.99	PASS
48	5240	-2.45	-3.08	0.26	1.99	PASS
52	5260	4.78	4.25	7.53	8.99	PASS
60	5300	4.41	4.43	7.43	8.99	PASS
64	5320	1.62	0.29	4.02	8.99	PASS
100	5500	3.82	3.05	6.46	8.99	PASS
116	5580	5.82	5.72	8.78	8.99	PASS
132	5660	4.60	4.67	7.65	8.99	PASS
140	5700	1.59	1.38	4.50	8.99	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. 5150~5250MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 4-(8.01-6) = 1.99dBm.
3. 5250~5350MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 11-(8.01-6) = 8.99dBm.
4. 5470~5725MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 11-(8.01-6) = 8.99dBm.

### 802.11ac(VHT20), 2Tx

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1			
36	5180	-2.69	-3.01	0.16	1.99	PASS
40	5200	-2.19	-2.51	0.66	1.99	PASS
48	5240	-2.20	-2.45	0.69	1.99	PASS
52	5260	4.45	3.92	7.20	8.99	PASS
60	5300	4.20	4.39	7.31	8.99	PASS
64	5320	-0.14	-0.75	2.58	8.99	PASS
100	5500	2.11	2.14	5.14	8.99	PASS
116	5580	5.08	5.62	8.37	8.99	PASS
132	5660	4.23	4.37	7.31	8.99	PASS
140	5700	2.24	1.48	4.89	8.99	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. 5150~5250MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 4-(8.01-6) = 1.99dBm.
3. 5250~5350MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 11-(8.01-6) = 8.99dBm.
4. 5470~5725MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 11-(8.01-6) = 8.99dBm.

### 802.11ac(VHT40), 2Tx

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1			
38	5190	-6.46	-6.94	-3.68	1.99	PASS
46	5230	-5.06	-5.07	-2.05	1.99	PASS
54	5270	0.05	-0.26	2.91	8.99	PASS
62	5310	-6.38	-7.00	-3.67	8.99	PASS
102	5510	-5.13	-4.59	-1.84	8.99	PASS
110	5550	2.06	2.48	5.29	8.99	PASS
134	5670	-2.00	-1.83	1.10	8.99	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. 5150~5250MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 4-(8.01-6) = 1.99dBm.
3. 5250~5350MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 11-(8.01-6) = 8.99dBm.
4. 5470~5725MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 11-(8.01-6) = 8.99dBm.

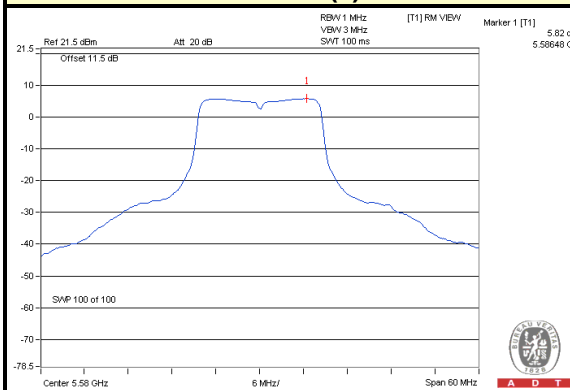
### 802.11ac(VHT80), 2Tx

CHANNEL	CHANNEL FREQUENCY (MHz)	PSD (dBm)		TOTAL POWER DENSITY (dBm)	MAX. LIMIT (dBm)	PASS/FAIL
		CHAIN 0	CHAIN 1			
42	5210	-7.84	-7.61	-4.71	1.99	PASS
58	5290	-9.89	-10.30	-7.08	8.99	PASS
106	5530	-7.38	-7.53	-4.44	8.99	PASS

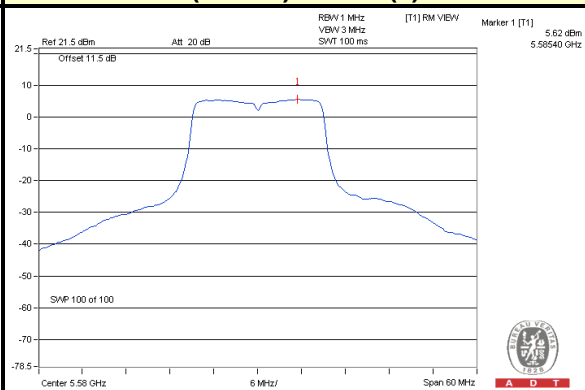
- NOTE:** 1. Method 1) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. 5150~5250MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 4-(8.01-6) = 1.99dBm.
3. 5250~5350MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 11-(8.01-6) = 8.99dBm.
4. 5470~5725MHz: Directional gain = 5dBi + 10log(2) = 8.01dBi > 6dBi , so the power density limit shall be reduced to 11-(8.01-6) = 8.99dBm.

# SPECTRUM PLOT OF WORST VALUE

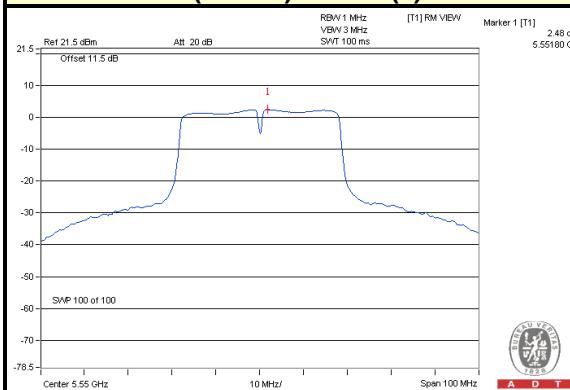
## 802.11a / Chain(0) : CH116



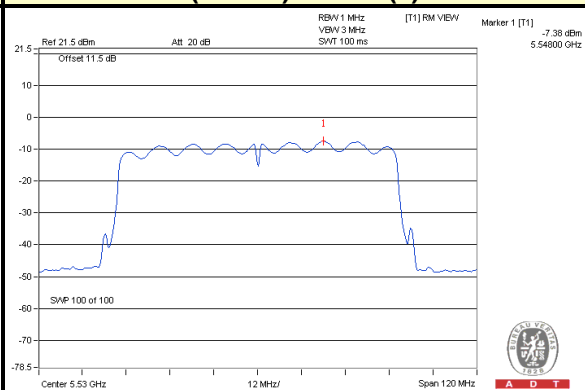
## 802.11ac (VHT20) / Chain(1) : CH116



## 802.11ac (VHT40) / Chain(1) : CH110



## 802.11ac (VHT80) / Chain(0) : CH106



## 4.5 PEAK POWER EXCURSION MEASUREMENT

### 4.5.1 LIMITS OF PEAK POWER EXCURSION MEASUREMENT

Shall not exceed 13 dB

### 4.5.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S Spectrum Analyzer	FSP40	100036	Jan. 21, 2013	Jan. 20, 2014

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : Jan. 14 to 16, 2014

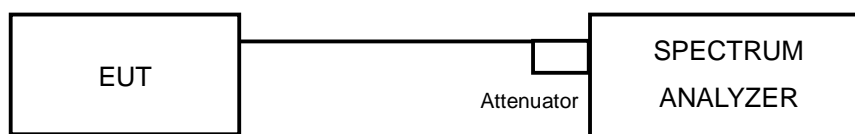
### 4.5.3 TEST PROCEDURE

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

### 4.5.4 DEVIATION FROM TEST STANDARD

No deviation

### 4.5.5 TEST SETUP



### 4.5.6 EUT OPERATING CONDITIONS

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

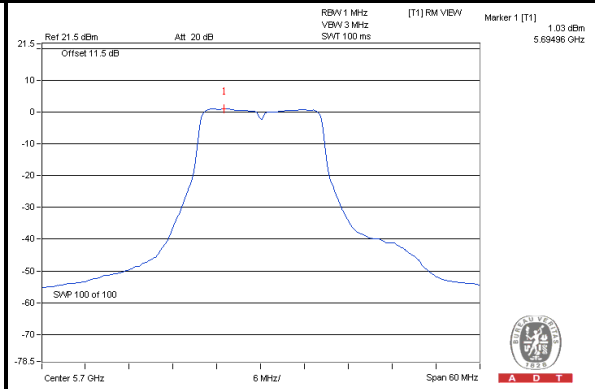
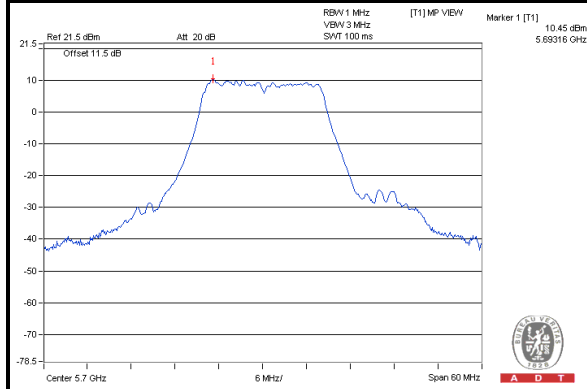
## 4.5.7 TEST RESULTS

### For 2Tx

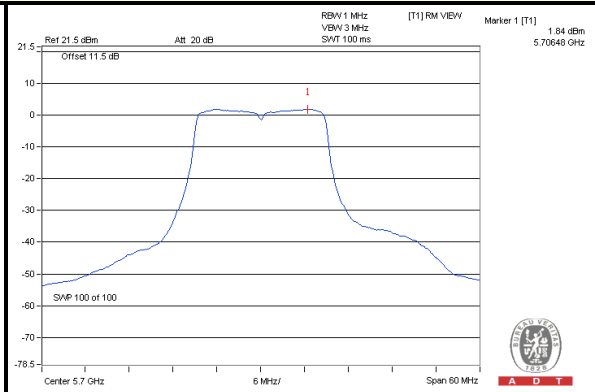
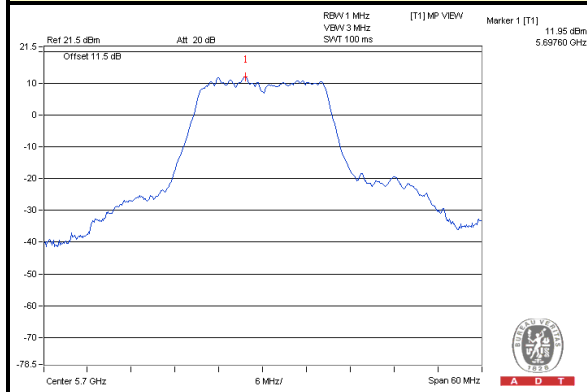
MODULATION MODE	MODULATION TYPE	CHANNEL FREQUENCY (MHz)	PEAK VALUE (dBm)	PPSD (dBm)	PEAK EXCURSION (dB)	LIMIT (dB)	PASS/ FAIL
802.11a	BPSK	5700	9.1	1.61	7.49	13	PASS
	QPSK		10.18	1.18	9	13	PASS
	16QAM		9.96	1.34	8.62	13	PASS
	64QAM		10.45	1.03	9.42	13	PASS
802.11ac (VHT20)	BPSK	5700	9.76	2.24	7.52	13	PASS
	QPSK		10.46	2.13	8.33	13	PASS
	16QAM		11.04	1.94	9.1	13	PASS
	64QAM		11.95	1.84	10.11	13	PASS
	256QAM		10.38	1.47	8.91	13	PASS
802.11ac (VHT40)	BPSK	5670	5.93	-2	7.93	13	PASS
	QPSK		6.45	-2.25	8.7	13	PASS
	16QAM		6.33	-2.43	8.76	13	PASS
	64QAM		7.44	-2.38	9.82	13	PASS
	256QAM		6.62	-3.03	9.65	13	PASS
802.11ac (VHT80)	BPSK	5530	1.05	-7.38	8.43	13	PASS
	QPSK		0.77	-7.5	8.27	13	PASS
	16QAM		1.58	-7.54	9.12	13	PASS
	64QAM		0.68	-7.77	8.45	13	PASS
	256QAM		1.45	-7.37	8.82	13	PASS

## SPECTRUM PLOT OF WORST VALUE

### 802.11a / 64QAM



### 802.11ac (VHT20) / 64QAM

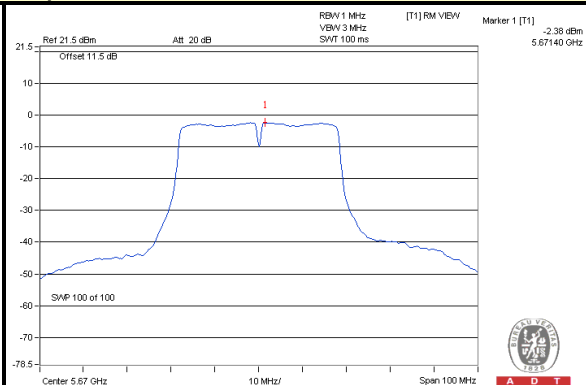
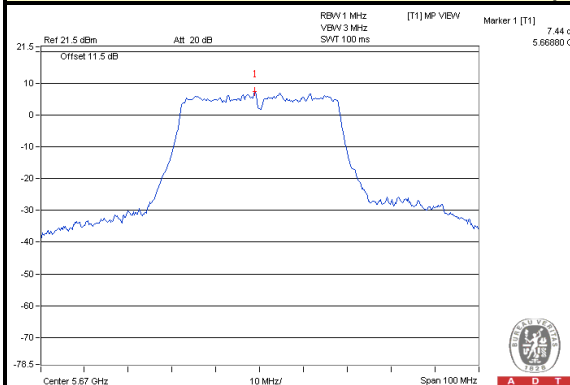




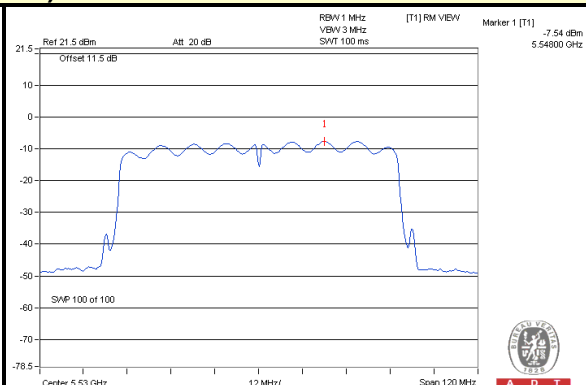
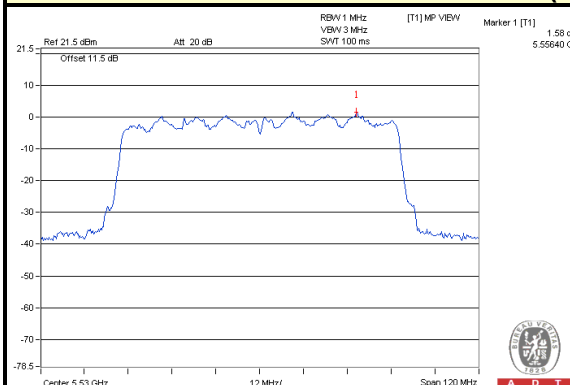


A D T

### 802.11ac (VHT40) / 64QAM



### 802.11ac (VHT80) / 16QAM



## 4.6 FREQUENCY STABILITY

### 4.6.1 LIMITS OF FREQUENCY STABILITY MEASUREMENT

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

### 4.6.2 TEST INSTRUMENTS

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
R&S Spectrum Analyzer	FSP40	100036	Jan. 21, 2013	Jan. 20, 2014
Temperature & Humidity Chamber GIANTFORCE	GTH-150-40-S P-AR	MAA0812-008	Jan. 17, 2013	Jan. 16, 2014

**Note:**

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : Jan. 14 to 16, 2014

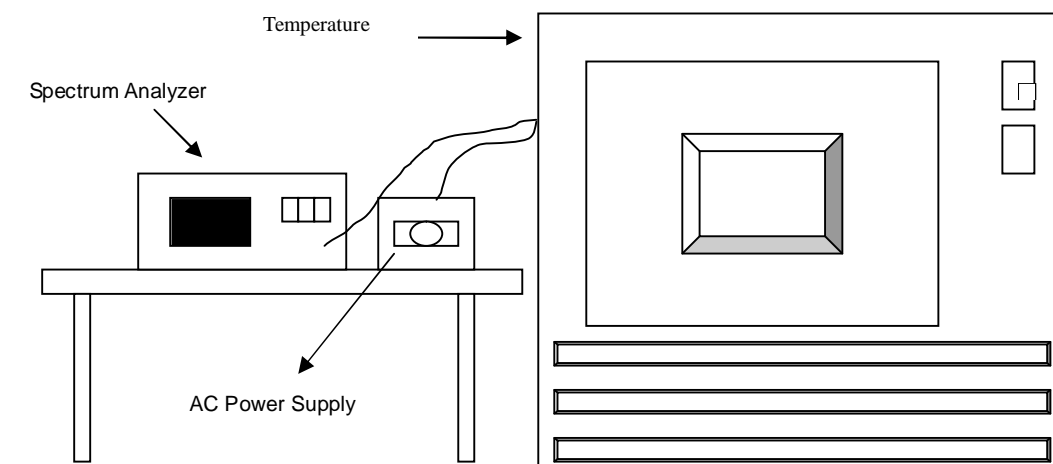
### 4.6.3 TEST PROCEDURE

1. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
2. Turn the EUT on and couple its output to a spectrum analyzer.
3. Turn the EUT off and set the chamber to the highest temperature specified.
4. 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.
5. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
6. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

#### 4.6.4 DEVIATION FROM TEST STANDARD

No deviation

#### 4.6.5 TEST SETUP



#### 4.6.6 EUT OPERATING CONDITION

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

## 4.6.7 TEST RESULTS

For 1Tx

FREQUENCY STABILITY VERSUS TEMP.									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift
		(MHz)	%	(MHz)	%	(MHz)	%	(MHz)	%
50	120	5319.9749	-0.00047	5319.9794	-0.00039	5319.9805	-0.00037	5319.9741	-0.00049
40	120	5319.9809	-0.00036	5319.9874	-0.00024	5319.9805	-0.00037	5319.9899	-0.00019
30	120	5319.9702	-0.00056	5319.9759	-0.00045	5319.9736	-0.00050	5319.979	-0.00039
20	120	5319.9851	-0.00028	5319.9808	-0.00036	5319.9822	-0.00033	5319.9812	-0.00035
10	120	5320.0075	0.00014	5320.0096	0.00018	5320.0077	0.00014	5320.0048	0.00009
0	120	5319.975	-0.00047	5319.9789	-0.00040	5319.9707	-0.00055	5319.9803	-0.00037
-10	120	5320.0131	0.00025	5320.0113	0.00021	5320.011	0.00021	5320.0046	0.00009
-20	120	5320.0215	0.00040	5320.0258	0.00048	5320.0252	0.00047	5320.0208	0.00039
-30	120	5319.9937	-0.00012	5320.0039	0.00007	5319.9974	-0.00005	5319.9978	-0.00004

FREQUENCY STABILITY VERSUS VOLTAGE									
OPERATING FREQUENCY: 5320MHz									
TEMP. (°C)	POWER SUPPLY (Vac)	0 MINUTE		2 MINUTE		5 MINUTE		10 MINUTE	
		Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift	Measured Frequency	Frequency Drift
		(MHz)	%	(MHz)	%	(MHz)	%	(MHz)	%
20	138	5319.986	-0.00026	5319.9799	-0.00038	5319.9818	-0.00034	5319.9807	-0.00036
	120	5319.9851	-0.00028	5319.9808	-0.00036	5319.9822	-0.00033	5319.9812	-0.00035
	102	5319.9858	-0.00027	5319.9802	-0.00037	5319.9829	-0.00032	5319.9813	-0.00035

## 5. PHOTOGRAPHS OF THE TEST CONFIGURATION

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



A D T

## 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: 886-2-26052943

**Hsin Chu EMC/RF Lab:**

Tel: 886-3-5935343

Fax: 886-3-5935342

**Hwa Ya EMC/RF/Safety/Telecom Lab:**

Tel: 886-3-3183232

Fax: 886-3-3270892

**Email:** [service.adt@tw.bureauveritas.com](mailto:service.adt@tw.bureauveritas.com)

**Web Site:** [www.bureauveritas-adt.com](http://www.bureauveritas-adt.com)

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



A D T

## **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 ---**