

## FCC Test Report

**Report No.:** RF160914E09G-1

**FCC ID:** UXX-S5A643A

**Test Model:** S5A643A

**Series Model:** S5A644A

**Received Date:** Mar. 15, 2019

**Test Date:** Apr. 02 to 17, 2019

**Issued Date:** May 02, 2019

**Applicant:** Cradlepoint, Inc

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**Issued By:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch  
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Taiwan R.O.C.

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**FCC Registration /  
Designation Number:** 723255 / TW2022



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### Release Control Record

Issue No.	Description	Date Issued
RF160914E09G-1	Original release.	May 02, 2019

## 1 Certificate of Conformity

**Product:** 2x2 Dual Band Concurrent AP

**Brand:** Cradlepoint

**Test Model:** S5A643A

**Series Model:** S5A644A

**Sample Status:** ENGINEERING SAMPLE

**Applicant:** Cradlepoint, Inc

**Test Date:** Apr. 02 to 17, 2019

**Standard:** 47 CFR FCC Part 15, Subpart E (Section 15.407)  
ANSI C63.10: 2013

The above equipment 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 :** Wendy Wu , **Date:** May 02, 2019  
Wendy Wu / Specialist

**Approved by :** May Chen , **Date:** May 02, 2019  
May Chen / Manager

## 2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement*	Pass	Meet the requirement of limit. Minimum passing margin is -0.1dB at 5150.00MHz, 5470.00MHz, 5725.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.

\*For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A.

Note:

1. This report is prepared for FCC class II permissive change.
2. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

### 2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) ( $\pm$ )
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	4.8 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.0 dB
	6GHz ~ 18GHz	5.0 dB
	18GHz ~ 40GHz	5.3 dB

### 2.2 Modification Record

There were no modifications required for compliance.

### 3 General Information

#### 3.1 General Description of EUT

Product	2x2 Dual Band Concurrent AP
Brand	Cradlepoint
Test Model	S5A643A
Series Model	S5A644A
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	12Vdc from power adapter
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode only.
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b: up to 11Mbps 802.11a/g: up to 54Mbps 802.11n: up to 600Mbps 802.11ac: up to 1733.3Mbps
Operating Frequency	<b>2.4GHz:</b> 2.412 ~ 2.462GHz <b>5GHz:</b> 5.18 ~ 5.24GHz, 5.26 ~ 5.32GHz, 5.50 ~ 5.58GHz & 5.66 ~ 5.70GHz, 5.745 ~ 5.825GHz
Number of Channel	<b>2.4GHz:</b> 802.11b, 802.11g, 802.11n (HT20): 11 802.11n (HT40): 7 <b>5GHz:</b> 802.11a, 802.11n (HT20), 802.11ac (VHT20): 21 802.11n (HT40), 802.11ac (VHT40): 9 802.11ac (VHT80): 4
Output Power	<b>2.4GHz:</b> <b>CDD Mode:</b> 589.71mW <b>Beamforming Mode:</b> 590.041mW <b>5GHz:</b> <b>CDD Mode:</b> <b>5.18 ~ 5.24GHz:</b> 170.344mW <b>5.26 ~ 5.32GHz:</b> 208.225mW <b>5.50 ~ 5.58GHz &amp; 5.66 ~ 5.70GHz:</b> 200.296mW <b>5.745 ~ 5.825GHz:</b> 331.536mW <b>Beamforming Mode:</b> <b>5.18 ~ 5.24GHz:</b> 142.879mW <b>5.26 ~ 5.32GHz:</b> 162.767mW <b>5.50 ~ 5.58GHz &amp; 5.66 ~ 5.70GHz:</b> 155.813mW <b>5.745 ~ 5.825GHz:</b> 327.997mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Adapter x 1
Data Cable Supplied	NA

Note:

1. This report is prepared for FCC class II permissive change. The difference as the following:

◆ Added new antenna.

**Original**

Ant Set	Antenna No.	Antenna Gain(dBi) Including cable loss	Frequency Range (GHz)	Antenna Type	Connector Type
1	1	4.49	2.4~2.4835	Dipole	R-SMA
		4.56	5.15~5.25		
		4.56	5.25~5.35		
		4.63	5.47~5.725		
		4.44	5.725~5.85		
	2	4.49	2.4~2.4835	Dipole	R-SMA
		4.56	5.15~5.25		
		4.56	5.25~5.35		
		4.63	5.47~5.725		
		4.44	5.725~5.85		

**Newly**

Ant Set	Element	Antenna Gain(dBi) Including cable loss	Frequency Range (GHz)	Antenna Type	Connector Type
2	WLAN (Chain 1 & 2)	1.5	2400-2.500	PIFA	R-SMA
		2	5150-5250		
		2	5250-5350		
		1.9	5470-5725		
		1.9	5725-5900		
	LTE (Chain 1 & 2)	3.8	698-960	PIFA	SMA
		4.4	1710-3800		
	GNSS (Chain 1)	RX only: 26dB (with LNA)	1562-1612	Patch	SMA
3	WLAN (Chain 1, 2, 3, 4)	1.5	2400-2.500	Monopole	R-SMA
		1	5150-5250		
		1	5250-5350		
		0.9	5470-5725		
		0.9	5725-5900		
	LTE (Chain 1, 2, 3, 4)	3.8	698-960	PIFA	SMA
		5.4	1710-3800		
	GNSS (Chain 1)	RX only: 26dB (with LNA)	1562-1612	Patch	SMA

Note:

1. Max. gain was selected for Antenna Port Conducted Measurement test.

2. For Antenna set 3, WLAN chain 1 & 2 and LTE chain 1 & 2 was selected by the applicant requirement. And there was not any function for other WLAN and LTE chain.

2. According to above condition, only radiated Emissions and Conducted power need to be performed. And all data were verified to meet the requirements.
3. All models are listed as below.

Model	Different			
	WiFi function	LTE function	Embedded radio	SKU
S5A643A	V	V	Model: MC7455 (FCC ID: N7NMC7455)	IBR900LP6
S5A644A	V	-	-	IBR900NM

From the above models, the worse case was found in model: **S5A643A**. Therefore only the test data of the model was recorded in this report.

4. The EUT (S5A643A) contains certified 3G/LTE modular which FCC ID: N7NMC7455.
5. There are WLAN, GPS and WWAN(LTE) technology used for the EUT.
6. Simultaneously transmission condition.

Condition	Technology		
1	WLAN (2.4GHz)	WLAN (5GHz)	WWAN(LTE)

**Note:** The emission of the simultaneous operation has been evaluated and no non-compliance was found.

7. The EUT must be supplied with a power adapter and following different models could be chosen as following table:

No	Brand	Model No.	Spec.
1	Asian Power Devices Inc.	WA-36A12R	Input: 100-240V~50-60Hz, 0.9A Max. Output: 12V / 3A DC output cable: 1.45m, unshielded
2	LEI	MU30-P120200-A1	Input: 100-240V~50/60Hz, 0.8A Output: 12V / 2A DC output cable: 1.5m, unshielded
3	Ten Pao International Inc.	S024WM1200150	Input: 100-240V~50/60Hz 600mA Max. Output: 12V / 1500mA DC output cable: 2m, unshielded

Note:

In original report, for radiated emissions test, the EUT was pre-tested with above adapters, the worst case was found in adapter 3. Therefore only the test data of the adapter was recorded in this report.

8. The EUT incorporates a MIMO function:

2.4GHz Band		
MODULATION MODE	TX & RX CONFIGURATION	
802.11b	2TX	2RX
802.11g	2TX	2RX
802.11n (HT20)	2TX	2RX
802.11n (HT40)	2TX	2RX
5GHz Band		
MODULATION MODE	TX & RX CONFIGURATION	
802.11a	2TX	2RX
802.11n (HT20)	2TX	2RX
802.11n (HT40)	2TX	2RX
802.11ac (VHT20)	2TX	2RX
802.11ac (VHT40)	2TX	2RX
802.11ac (VHT80)	2TX	2RX

Note:

- All of modulation mode support beamforming function except 802.11a/b/g modulation mode.
- 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)

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



### 3.2 Description of Test Modes

#### FOR 5180 ~ 5240MHz

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

Channel	Frequency	Channel	Frequency
36	5180 MHz	44	5220 MHz
40	5200 MHz	48	5240 MHz

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
42	5210MHz

#### FOR 5260 ~ 5320MHz

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

Channel	Frequency	Channel	Frequency
52	5260 MHz	60	5300 MHz
56	5280 MHz	64	5320 MHz

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

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
58	5290MHz

### FOR 5500 ~ 5580MHz & 5660 ~ 5700MHz

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

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

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

Channel	Frequency	Channel	Frequency
102	5510 MHz	134	5670 MHz
110	5550 MHz		

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
106	5530 MHz

### FOR 5745 ~ 5825MHz:

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

Channel	Frequency	Channel	Frequency
149	5745MHz	161	5805MHz
153	5765MHz	165	5825MHz
157	5785MHz		

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

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775MHz

### 3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To			Description
	RE $\geq$ 1G	RE<1G	APCM	
-	√	√	√	-

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

**NOTE:**

1. The EUT had been pre-tested on the positioned of each 2 axis. The worst case was found when positioned on **X-plane**.

#### **Radiated Emission Test (Above 1GHz):**

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

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
802.11ac (VHT40)		38 to 46	38, 46	OFDM	BPSK	13.5
802.11ac (VHT80)		42	42	OFDM	BPSK	29.3
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11a	5500-5580 & 5660-5700	100 to 140	100, 116, 140	OFDM	BPSK	6
802.11ac (VHT20)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
802.11ac (VHT80)		106	106	OFDM	BPSK	29.3
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6
802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11ac (VHT40)		151 to 159	151, 159	OFDM	BPSK	13.5
802.11ac (VHT80)		155	155	OFDM	BPSK	29.3

#### **Radiated Emission Test (Below 1GHz):**

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

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5180-5320, 5500-5580, 5660-5700, 5745-5825	36 to 48 52 to 64 100 to 140 149 to 165	157	OFDM	BPSK	6

### Antenna Port Conducted Measurement:

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

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
802.11ac (VHT40)		38 to 46	38, 46	OFDM	BPSK	13.5
802.11ac (VHT80)		42	42	OFDM	BPSK	29.3
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11a	5500-5580 & 5660-5700	100 to 140	100, 116, 140	OFDM	BPSK	6
802.11ac (VHT20)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
802.11ac (VHT80)		106	106	OFDM	BPSK	29.3
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6
802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11ac (VHT40)		151 to 159	151, 159	OFDM	BPSK	13.5
802.11ac (VHT80)		155	155	OFDM	BPSK	29.3
Beamforming Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11ac (VHT20)	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.5
802.11ac (VHT40)		38 to 46	38, 46	OFDM	BPSK	13.5
802.11ac (VHT80)		42	42	OFDM	BPSK	29.3
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11ac (VHT20)	5500-5580 & 5660-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
802.11ac (VHT80)		106	106	OFDM	BPSK	29.3
802.11ac (VHT20)	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11ac (VHT40)		151 to 159	151, 159	OFDM	BPSK	13.5
802.11ac (VHT80)		155	155	OFDM	BPSK	29.3

### Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested By
RE≥1G	25deg. C, 65%RH	120Vac, 60Hz	Nelson Teng
RE<1G	23deg. C, 68%RH	120Vac, 60Hz	Robert Cheng
APCM	25deg. C, 60%RH	120Vac, 60Hz	Nelson Teng

### 3.3 Description of Support Units

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

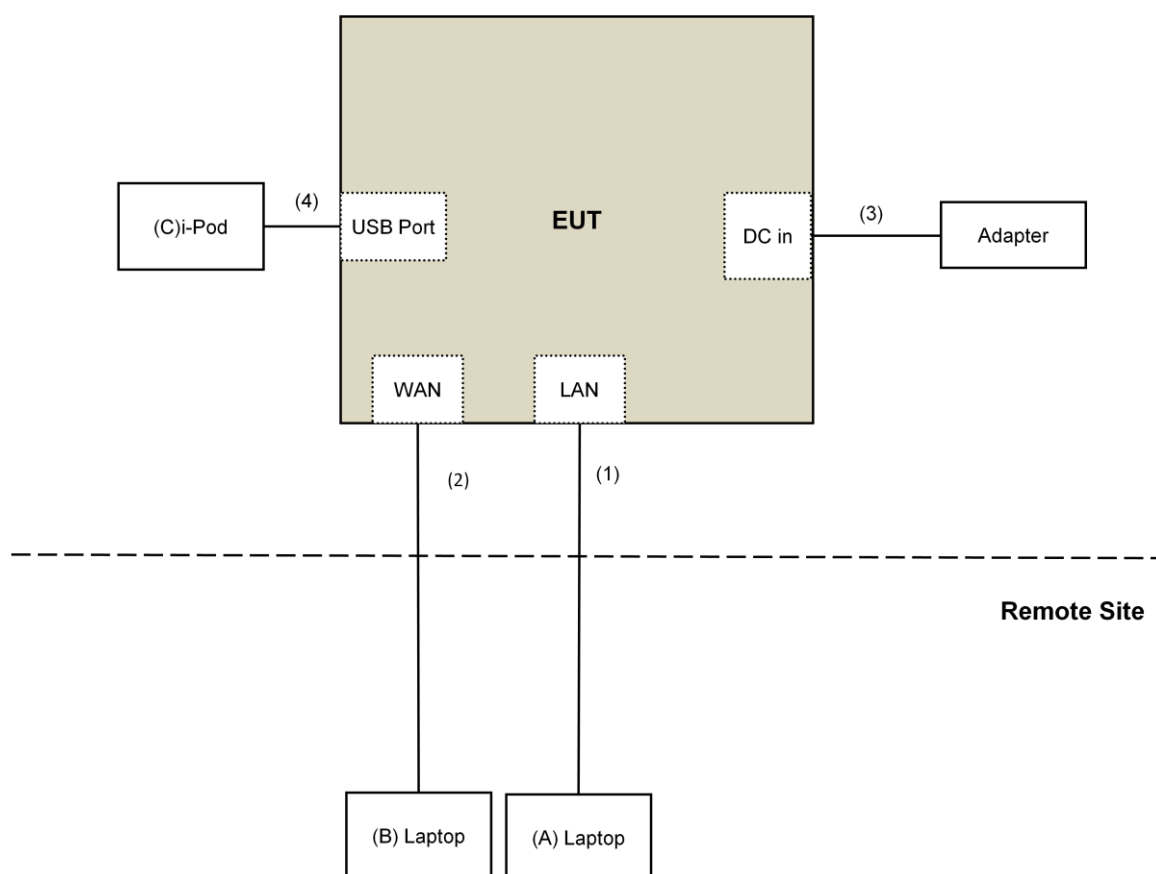
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Laptop	DELL	E5430	HYV4VY1	FCC DoC	Provided by Lab
B.	Laptop	DELL	PP32LA	FSLB32S	FCC DoC	Provided by Lab
C.	i-Pod	Apple	MD778TA/A	CC4JMFL0F4T1	NA	Provided by Lab

Note:

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ-45 Cable	1	10	No	0	Provided by Lab
2.	RJ-45 Cable	1	10	No	0	Provided by Lab
3.	DC Cable	1	2	No	0	Supplied by client
4.	USB Cable	1	0.1	Yes	0	Provided by Lab

#### 3.3.1 Configuration of System under Test



### 3.4 General Description of Applied Standard

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)**

**KDB 789033 D02 General UNII Test Procedure New Rules v02r01**

**KDB 662911 D01 Multiple Transmitter Output v02r01**

**ANSI C63.10-2013**

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

## 4 Test Types and Results

### 4.1 Radiated Emission and Bandedge Measurement

#### 4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F(kHz)	300
0.490 ~ 1.705	24000/F(kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

#### NOTE:

- The lower limit shall apply at the transition frequencies.
- Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 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.

Limits of unwanted emission out of the restricted bands

Applicable To		Limit	
789033 D02 General UNII Test Procedure New Rules v02r01		Field Strength at 3m	
		PK:74 (dBuV/m)	AV:54 (dBuV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)	PK:-27 (dBm/MHz)	PK:68.2(dBuV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	<input checked="" type="checkbox"/> 15.407(b)(4)(i)	PK:-27 (dBm/MHz) <sup>*1</sup> PK:10 (dBm/MHz) <sup>*2</sup> PK:15.6 (dBm/MHz) <sup>*3</sup> PK:27 (dBm/MHz) <sup>*4</sup>	PK: 68.2(dBuV/m) <sup>*1</sup> PK:105.2 (dBuV/m) <sup>*2</sup> PK: 110.8(dBuV/m) <sup>*3</sup> PK:122.2 (dBuV/m) <sup>*4</sup>
	<input type="checkbox"/> 15.407(b)(4)(ii)	Emission limits in section 15.247(d)	
<sup>*1</sup> beyond 75 MHz or more above of the band edge.		<sup>*2</sup> below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.	
<sup>*3</sup> below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.		<sup>*4</sup> from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.	

#### Note:

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

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

#### 4.1.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver ESR7 R&S	ESR7	102026	Apr. 18, 2018	Apr. 17, 2019
Spectrum Analyzer Keysight	N9030B	MY57141948	June 01, 2018	May 31, 2019
Pre-Amplifier EMCI	EMC001340	980142	Jan. 25, 2019	Jan. 24, 2020
Loop Antenna <sup>(1)</sup> Electro-Metrics	EM-6879	269	Sep. 07, 2018	Sep. 06, 2019
RF Cable	NA	LOOPCAB-001	Jan. 14, 2019	Jan. 13, 2020
RF Cable	NA	LOOPCAB-002	Jan. 14, 2019	Jan. 13, 2020
Pre-Amplifier EMCI	EMC330N	980538	May 07, 2018	May 06, 2019
Trilog Broadband Antenna SCHWARZBECK	VULB9168	AMP-ZFL-05	May 07, 2018	May 06, 2019
RF Cable	8D	966-5-1	May 07, 2018	May 06, 2019
RF Cable	8D	966-5-2	May 07, 2018	May 06, 2019
RF Cable	8D	966-5-3	May 07, 2018	May 06, 2019
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-ATT5-02	Jan. 28, 2019	Jan. 27, 2020
Horn_Antenna SCHWARZBECK	BBHA 9120D	9120D-1819	Nov. 25, 2018	Nov. 24, 2019
Pre-Amplifier EMCI	EMC12630SE	980509	May 07, 2018	May 06, 2019
RF Cable EMCI	EMC104-SM-SM-1500	180503	May 07, 2018	May 06, 2019
RF Cable EMCI	EMC104-SM-SM-2000	180501	May 07, 2018	May 06, 2019
RF Cable EMCI	EMC104-SM-SM-6000	180505	May 07, 2018	May 06, 2019
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 28, 2019	Jan. 27, 2020
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 25, 2018	Nov. 24, 2019
RF Cable	EMC102-KM-KM-1200	160924	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC102-KM-KM-1200	160925	Jan. 28, 2019	Jan. 27, 2020
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Boresight Antenna Tower & Turn Table Max-Full	MF-7802BS	MF780208530	NA	NA
Spectrum Analyzer R&S	FSV40	100964	June 20, 2018	June 19, 2019
Power meter Anritsu	ML2495A	1014008	May 09, 2018	May 08, 2019
Power sensor Anritsu	MA2411B	0917122	May 09, 2018	May 08, 2019

#### Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. \*The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in 966 Chamber No. 5.
4. Loop antenna was used for all emissions below 30 MHz.
5. Tested Date: Apr. 02 to 17, 2019



#### 4.1.3 Test Procedure

##### **For Radiated emission below 30MHz**

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. 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. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case 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.

##### **NOTE:**

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9kHz at frequency below 30MHz.

##### **For Radiated emission above 30MHz**

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) 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 detects 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:**

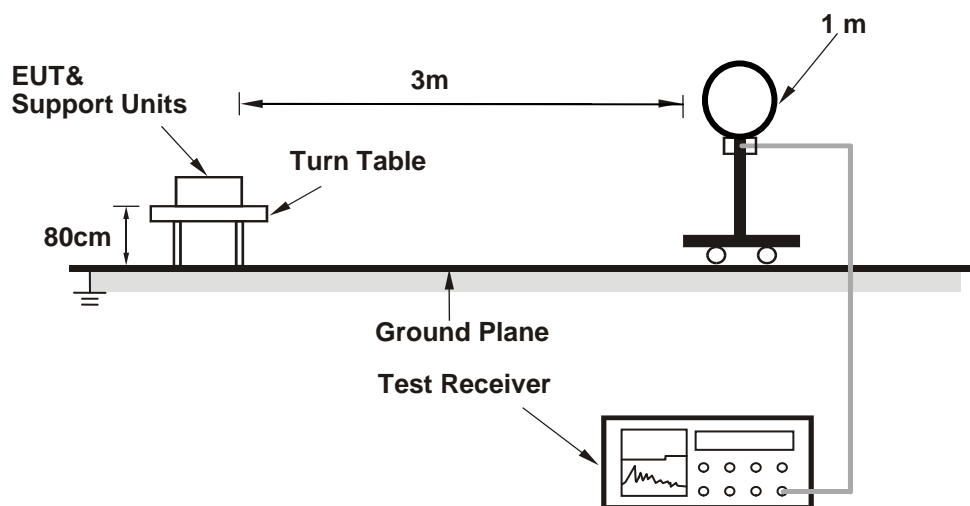
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

#### 4.1.4 Deviation from Test Standard

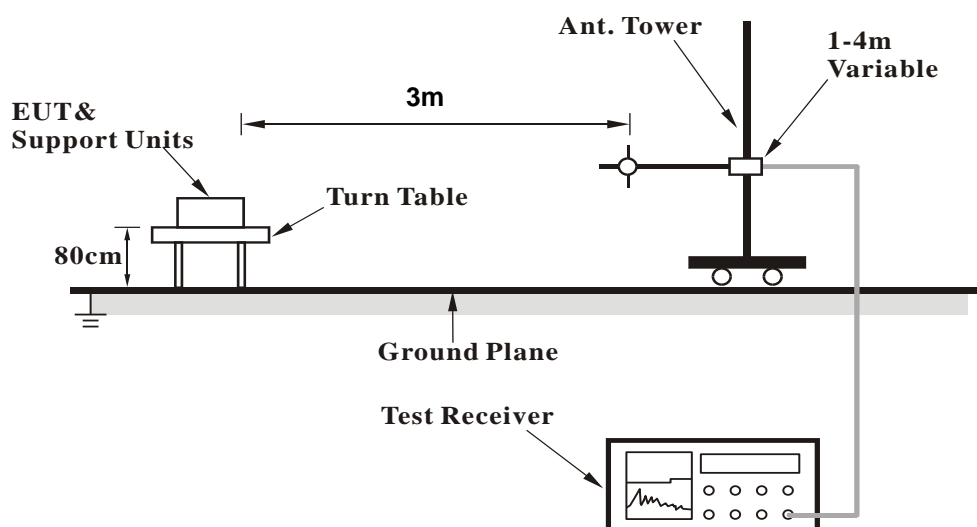
No deviation.

#### 4.1.5 Test Setup

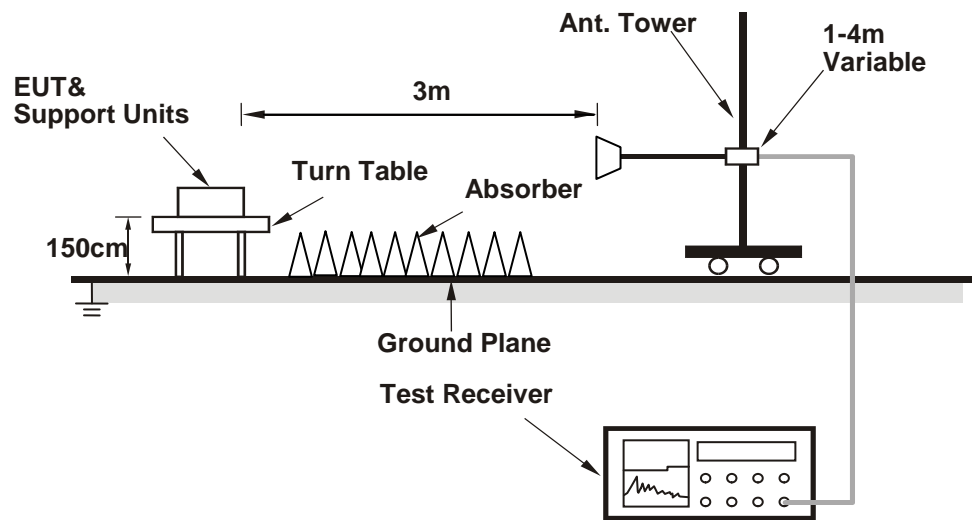
##### For Radiated emission below 30MHz



##### For Radiated emission 30MHz to 1GHz



## For Radiated emission above 1GHz



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

### 4.1.6 EUT Operating Condition

- Connected the EUT with the Laptop which is placed on remote site.
- Controlling software (QDART-connectivity (1.0.44)) has been activated to set the EUT on specific status.

#### 4.1.7 Test Results

##### Antenna Set 2

##### Above 1GHz Data:

##### 802.11a

<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	52.6 PK	74.0	-21.4	2.00 H	320	50.8	1.8
2	5150.00	38.4 AV	54.0	-15.6	2.00 H	320	36.6	1.8
3	*5180.00	100.0 PK			2.01 H	333	98.3	1.7
4	*5180.00	87.7 AV			2.01 H	333	86.0	1.7
5	#10360.00	50.1 PK	68.2	-18.1	1.30 H	224	39.1	11.0
6	15540.00	53.2 PK	74.0	-20.8	1.05 H	142	42.3	10.9
7	15540.00	40.8 AV	54.0	-13.2	1.05 H	142	29.9	10.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	66.5 PK	74.0	-7.5	1.05 V	16	64.7	1.8
2	5150.00	53.1 AV	54.0	-0.9	1.05 V	16	51.3	1.8
3	*5180.00	113.9 PK			1.05 V	16	112.2	1.7
4	*5180.00	104.8 AV			1.05 V	16	103.1	1.7
5	#10360.00	50.3 PK	68.2	-17.9	1.89 V	180	39.3	11.0
6	15540.00	51.2 PK	74.0	-22.8	1.74 V	312	40.3	10.9
7	15540.00	40.0 AV	54.0	-14.0	1.74 V	312	29.1	10.9

#### 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	5150.00	52.2 PK	74.0	-21.8	2.06 H	328	50.4	1.8
2	5150.00	39.3 AV	54.0	-14.7	2.06 H	328	37.5	1.8
3	*5200.00	103.0 PK			1.99 H	318	101.3	1.7
4	*5200.00	93.5 AV			1.99 H	318	91.8	1.7
5	#10400.00	49.1 PK	68.2	-19.1	1.29 H	235	37.8	11.3
6	15600.00	52.7 PK	74.0	-21.3	1.05 H	109	41.5	11.2
7	15600.00	40.3 AV	54.0	-13.7	1.05 H	109	29.1	11.2

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.8 PK	74.0	-8.2	1.04 V	9	64.0	1.8
2	5150.00	53.7 AV	54.0	-0.3	1.04 V	9	51.9	1.8
3	*5200.00	117.4 PK			1.04 V	9	115.7	1.7
4	*5200.00	108.7 AV			1.04 V	9	107.0	1.7
5	#10400.00	49.7 PK	68.2	-18.5	1.79 V	165	38.4	11.3
6	15600.00	50.5 PK	74.0	-23.5	1.70 V	299	39.3	11.2
7	15600.00	39.5 AV	54.0	-14.5	1.70 V	299	28.3	11.2

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	*5240.00	101.4 PK			2.15 H	300	100.0	1.4
2	*5240.00	90.0 AV			2.15 H	300	88.6	1.4
3	5350.00	40.6 PK	74.0	-33.4	2.15 H	309	39.1	1.5
4	5350.00	31.1 AV	54.0	-22.9	2.15 H	309	29.6	1.5
5	#10480.00	50.6 PK	68.2	-17.6	1.20 H	213	39.2	11.4
6	15720.00	53.0 PK	74.0	-21.0	1.12 H	129	42.5	10.5
7	15720.00	40.4 AV	54.0	-13.6	1.12 H	129	29.9	10.5
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	115.8 PK			1.08 V	7	114.4	1.4
2	*5240.00	104.4 AV			1.08 V	7	103.0	1.4
3	5350.00	55.0 PK	74.0	-19.0	1.08 V	7	53.5	1.5
4	5350.00	41.3 AV	54.0	-12.7	1.08 V	7	39.8	1.5
5	#10480.00	49.4 PK	68.2	-18.8	1.77 V	161	38.0	11.4
6	15720.00	51.3 PK	74.0	-22.7	1.66 V	311	40.8	10.5
7	15720.00	39.6 AV	54.0	-14.4	1.66 V	311	29.1	10.5

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 52	<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	48.9 PK	74.0	-25.1	1.07 H	174	47.1	1.8
2	5150.00	36.6 AV	54.0	-17.4	1.07 H	174	34.8	1.8
3	*5260.00	105.8 PK			1.14 H	194	104.6	1.2
4	*5260.00	94.7 AV			1.14 H	194	93.5	1.2
5	#10520.00	52.2 PK	68.2	-16.0	1.69 H	313	40.9	11.3
6	15780.00	52.9 PK	74.0	-21.1	1.59 H	313	42.3	10.6
7	15780.00	42.3 AV	54.0	-11.7	1.59 H	313	31.7	10.6
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	50.5 PK	74.0	-23.5	2.09 V	348	48.7	1.8
2	5150.00	38.6 AV	54.0	-15.4	2.09 V	348	36.8	1.8
3	*5260.00	117.4 PK			2.02 V	360	116.2	1.2
4	*5260.00	105.4 AV			2.02 V	360	104.2	1.2
5	#10520.00	52.0 PK	68.2	-16.2	1.55 V	246	40.7	11.3
6	15780.00	54.1 PK	74.0	-19.9	1.86 V	190	43.5	10.6
7	15780.00	42.5 AV	54.0	-11.5	1.86 V	190	31.9	10.6

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 60	<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	*5300.00	105.5 PK			1.22 H	197	104.2	1.3
2	*5300.00	94.3 AV			1.22 H	197	93.0	1.3
3	10600.00	51.9 PK	74.0	-22.1	1.76 H	324	40.7	11.2
4	10600.00	39.3 AV	54.0	-14.7	1.76 H	324	28.1	11.2
5	15900.00	53.1 PK	74.0	-20.9	1.60 H	331	42.5	10.6
6	15900.00	42.1 AV	54.0	-11.9	1.60 H	331	31.5	10.6
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	117.3 PK			1.98 V	350	116.0	1.3
2	*5300.00	105.7 AV			1.98 V	350	104.4	1.3
3	10600.00	52.2 PK	74.0	-21.8	1.52 V	238	41.0	11.2
4	10600.00	39.5 AV	54.0	-14.5	1.52 V	238	28.3	11.2
5	15900.00	53.1 PK	74.0	-20.9	1.89 V	210	42.5	10.6
6	15900.00	42.0 AV	54.0	-12.0	1.89 V	210	31.4	10.6

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	104.7 PK			1.17 H	218	103.2	1.5
2	*5320.00	92.5 AV			1.17 H	218	91.0	1.5
3	5350.00	56.6 PK	74.0	-17.4	1.10 H	189	55.1	1.5
4	5350.00	42.9 AV	54.0	-11.1	1.10 H	189	41.4	1.5
5	10640.00	51.5 PK	74.0	-22.5	1.85 H	327	40.5	11.0
6	10640.00	39.3 AV	54.0	-14.7	1.85 H	327	28.3	11.0
7	15960.00	52.5 PK	74.0	-21.5	1.61 H	341	41.6	10.9
8	15960.00	41.7 AV	54.0	-12.3	1.61 H	341	30.8	10.9
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	115.6 PK			1.97 V	360	114.1	1.5
2	*5320.00	103.7 AV			1.97 V	360	102.2	1.5
3	5350.00	69.1 PK	74.0	-4.9	2.06 V	356	67.6	1.5
4	5350.00	53.4 AV	54.0	-0.6	2.06 V	356	51.9	1.5
5	10640.00	52.3 PK	74.0	-21.7	1.49 V	249	41.3	11.0
6	10640.00	39.2 AV	54.0	-14.8	1.49 V	249	28.2	11.0
7	15960.00	53.9 PK	74.0	-20.1	1.85 V	211	43.0	10.9
8	15960.00	42.4 AV	54.0	-11.6	1.85 V	211	31.5	10.9

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.

<b>CHANNEL</b>	TX Channel 100	<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	5460.00	48.2 PK	74.0	-25.8	1.05 H	204	46.6	1.6
2	5460.00	36.3 AV	54.0	-17.7	1.05 H	204	34.7	1.6
3	#5470.00	60.0 PK	68.2	-8.2	1.15 H	227	58.4	1.6
4	*5500.00	103.1 PK			1.16 H	204	101.5	1.6
5	*5500.00	91.5 AV			1.16 H	204	89.9	1.6
6	11000.00	51.9 PK	74.0	-22.1	1.71 H	304	39.8	12.1
7	11000.00	39.4 AV	54.0	-14.6	1.71 H	304	27.3	12.1
8	#16500.00	52.7 PK	68.2	-15.5	1.63 H	325	39.3	13.4

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	63.9 PK	74.0	-10.1	1.96 V	360	62.3	1.6
2	5460.00	43.6 AV	54.0	-10.4	1.96 V	360	42.0	1.6
3	#5470.00	68.0 PK	68.2	-0.2	1.92 V	360	66.4	1.6
4	*5500.00	112.5 PK			1.91 V	356	110.9	1.6
5	*5500.00	101.5 AV			1.91 V	356	99.9	1.6
6	11000.00	52.2 PK	74.0	-21.8	1.57 V	230	40.1	12.1
7	11000.00	39.0 AV	54.0	-15.0	1.57 V	230	26.9	12.1
8	#16500.00	52.9 PK	68.2	-15.3	1.92 V	228	39.5	13.4

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 116	<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	*5580.00	105.5 PK			1.07 H	193	103.8	1.7
2	*5580.00	94.4 AV			1.07 H	193	92.7	1.7
3	11160.00	52.1 PK	74.0	-21.9	1.75 H	294	40.7	11.4
4	11160.00	39.2 AV	54.0	-14.8	1.75 H	294	27.8	11.4
5	#16740.00	52.8 PK	68.2	-15.4	1.66 H	292	37.4	15.4
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	116.1 PK			1.95 V	360	114.4	1.7
2	*5580.00	105.2 AV			1.95 V	360	103.5	1.7
3	11160.00	51.6 PK	74.0	-22.4	1.58 V	202	40.2	11.4
4	11160.00	38.9 AV	54.0	-15.1	1.58 V	202	27.5	11.4
5	#16740.00	54.0 PK	68.2	-14.2	1.98 V	214	38.6	15.4

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	100.8 PK			1.16 H	203	98.8	2.0
2	*5700.00	89.3 AV			1.16 H	203	87.3	2.0
3	#5725.00	60.3 PK	68.2	-7.9	1.22 H	225	58.3	2.0
4	11400.00	52.2 PK	74.0	-21.8	1.71 H	318	40.9	11.3
5	11400.00	39.3 AV	54.0	-14.7	1.71 H	318	28.0	11.3
6	#17100.00	52.9 PK	68.2	-15.3	1.54 H	318	36.7	16.2
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	111.0 PK			1.77 V	356	109.0	2.0
2	*5700.00	99.3 AV			1.77 V	356	97.3	2.0
3	#5725.00	67.4 PK	68.2	-0.8	1.84 V	360	65.4	2.0
4	11400.00	51.0 PK	74.0	-23.0	1.58 V	232	39.7	11.3
5	11400.00	38.4 AV	54.0	-15.6	1.58 V	232	27.1	11.3
6	#17100.00	53.4 PK	68.2	-14.8	1.93 V	224	37.2	16.2

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 149	<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	#5562.52	58.1 PK	68.2	-10.1	2.05 H	303	56.4	1.7
2	*5745.00	108.8 PK			2.05 H	303	106.8	2.0
3	*5745.00	101.0 AV			2.05 H	303	99.0	2.0
4	#6009.51	58.5 PK	68.2	-9.7	2.05 H	303	56.0	2.5
5	11490.00	52.6 PK	74.0	-21.4	1.23 H	213	40.9	11.7
6	11490.00	40.6 AV	54.0	-13.4	1.23 H	213	28.9	11.7
7	#17235.00	54.7 PK	68.2	-13.5	1.02 H	127	37.9	16.8
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	#5565.94	58.3 PK	68.2	-9.9	1.10 V	0	56.6	1.7
2	*5745.00	114.0 PK			1.10 V	0	112.0	2.0
3	*5745.00	105.6 AV			1.10 V	0	103.6	2.0
4	#5986.24	60.9 PK	68.2	-7.3	1.10 V	0	58.4	2.5
5	11490.00	51.8 PK	74.0	-22.2	1.72 V	150	40.1	11.7
6	11490.00	40.5 AV	54.0	-13.5	1.72 V	150	28.8	11.7
7	#17235.00	54.8 PK	68.2	-13.4	1.70 V	299	38.0	16.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 157	<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	#5606.35	58.9 PK	68.2	-9.3	2.08 H	297	57.2	1.7
2	*5785.00	108.7 PK			2.08 H	297	106.6	2.1
3	*5785.00	101.3 AV			2.08 H	297	99.2	2.1
4	#5953.09	58.1 PK	68.2	-10.1	2.08 H	297	55.7	2.4
5	11570.00	53.3 PK	74.0	-20.7	1.23 H	222	41.8	11.5
6	11570.00	40.9 AV	54.0	-13.1	1.23 H	222	29.4	11.5
7	#17355.00	54.9 PK	68.2	-13.3	1.11 H	126	38.0	16.9
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	#5629.54	58.8 PK	68.2	-9.4	1.11 V	0	57.1	1.7
2	*5785.00	114.9 PK			1.11 V	0	112.8	2.1
3	*5785.00	105.5 AV			1.11 V	0	103.4	2.1
4	#5936.06	59.4 PK	68.2	-8.8	1.11 V	0	57.0	2.4
5	11570.00	52.0 PK	74.0	-22.0	1.68 V	161	40.5	11.5
6	11570.00	40.8 AV	54.0	-13.2	1.68 V	161	29.3	11.5
7	#17355.00	55.4 PK	68.2	-12.8	1.70 V	331	38.5	16.9

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 165	<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	#5569.67	58.4 PK	68.2	-9.8	2.11 H	326	56.7	1.7
2	*5825.00	108.9 PK			2.11 H	326	106.7	2.2
3	*5825.00	101.1 AV			2.11 H	326	98.9	2.2
4	#5981.49	58.5 PK	68.2	-9.7	2.11 H	326	56.0	2.5
5	11650.00	51.8 PK	74.0	-22.2	1.29 H	223	40.7	11.1
6	11650.00	40.3 AV	54.0	-13.7	1.29 H	223	29.2	11.1
7	#17475.00	55.3 PK	68.2	-12.9	1.03 H	122	37.0	18.3

**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	#5627.08	58.8 PK	68.2	-9.4	1.12 V	9	57.0	1.8
2	*5825.00	115.0 PK			1.12 V	9	112.8	2.2
3	*5825.00	105.6 AV			1.12 V	9	103.4	2.2
4	#6024.72	61.3 PK	68.2	-6.9	1.12 V	9	58.8	2.5
5	11650.00	52.1 PK	74.0	-21.9	1.61 V	164	41.0	11.1
6	11650.00	40.6 AV	54.0	-13.4	1.61 V	164	29.5	11.1
7	#17475.00	55.7 PK	68.2	-12.5	1.70 V	293	37.4	18.3

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

# 802.11ac (VHT20)

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	5150.00	53.4 PK	74.0	-20.6	1.98 H	330	51.6	1.8
2	5150.00	39.4 AV	54.0	-14.6	1.98 H	330	37.6	1.8
3	*5180.00	97.7 PK			2.03 H	346	96.0	1.7
4	*5180.00	85.8 AV			2.03 H	346	84.1	1.7
5	#10360.00	49.5 PK	68.2	-18.7	1.22 H	239	38.5	11.0
6	15540.00	52.3 PK	74.0	-21.7	1.03 H	155	41.4	10.9
7	15540.00	40.0 AV	54.0	-14.0	1.03 H	155	29.1	10.9
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	69.7 PK	74.0	-4.3	1.15 V	360	67.9	1.8
2	5150.00	53.9 AV	54.0	-0.1	1.15 V	360	52.1	1.8
3	*5180.00	112.3 PK			1.06 V	353	110.6	1.7
4	*5180.00	101.6 AV			1.06 V	353	99.9	1.7
5	#10360.00	50.5 PK	68.2	-17.7	1.76 V	164	39.5	11.0
6	15540.00	51.6 PK	74.0	-22.4	1.52 V	317	40.7	10.9
7	15540.00	39.9 AV	54.0	-14.1	1.52 V	317	29.0	10.9

## 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	5150.00	51.8 PK	74.0	-22.2	2.03 H	336	50.0	1.8
2	5150.00	39.1 AV	54.0	-14.9	2.03 H	336	37.3	1.8
3	*5200.00	103.5 PK			1.98 H	357	101.8	1.7
4	*5200.00	94.2 AV			1.98 H	357	92.5	1.7
5	#10400.00	49.5 PK	68.2	-18.7	1.14 H	219	38.2	11.3
6	15600.00	52.4 PK	74.0	-21.6	1.13 H	124	41.2	11.2
7	15600.00	40.0 AV	54.0	-14.0	1.13 H	124	28.8	11.2

**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	70.6 PK	74.0	-3.4	1.06 V	360	68.8	1.8
2	5150.00	53.2 AV	54.0	-0.8	1.06 V	360	51.4	1.8
3	*5200.00	117.4 PK			1.14 V	355	115.7	1.7
4	*5200.00	108.6 AV			1.14 V	355	106.9	1.7
5	#10400.00	50.2 PK	68.2	-18.0	1.82 V	168	38.9	11.3
6	15600.00	50.9 PK	74.0	-23.1	1.61 V	328	39.7	11.2
7	15600.00	39.8 AV	54.0	-14.2	1.61 V	328	28.6	11.2

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	*5240.00	101.7 PK			2.08 H	298	100.3	1.4
2	*5240.00	90.5 AV			2.08 H	298	89.1	1.4
3	5350.00	40.8 PK	74.0	-33.2	2.03 H	290	39.3	1.5
4	5350.00	31.4 AV	54.0	-22.6	2.03 H	290	29.9	1.5
5	#10480.00	50.8 PK	68.2	-17.4	1.28 H	210	39.4	11.4
6	15720.00	53.0 PK	74.0	-21.0	1.06 H	130	42.5	10.5
7	15720.00	40.6 AV	54.0	-13.4	1.06 H	130	30.1	10.5
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	115.9 PK			1.06 V	360	114.5	1.4
2	*5240.00	105.4 AV			1.06 V	360	104.0	1.4
3	5350.00	54.3 PK	74.0	-19.7	1.09 V	358	52.8	1.5
4	5350.00	41.0 AV	54.0	-13.0	1.09 V	358	39.5	1.5
5	#10480.00	50.4 PK	68.2	-17.8	1.71 V	168	39.0	11.4
6	15720.00	51.4 PK	74.0	-22.6	1.69 V	332	40.9	10.5
7	15720.00	40.1 AV	54.0	-13.9	1.69 V	332	29.6	10.5

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 52	<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	48.2 PK	74.0	-25.8	1.17 H	217	46.4	1.8
2	5150.00	35.8 AV	54.0	-18.2	1.17 H	217	34.0	1.8
3	*5260.00	105.4 PK			1.13 H	189	104.2	1.2
4	*5260.00	94.4 AV			1.13 H	189	93.2	1.2
5	#10520.00	50.9 PK	68.2	-17.3	1.73 H	297	39.6	11.3
6	15780.00	52.9 PK	74.0	-21.1	1.62 H	312	42.3	10.6
7	15780.00	42.3 AV	54.0	-11.7	1.62 H	312	31.7	10.6
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	50.7 PK	74.0	-23.3	2.03 V	360	48.9	1.8
2	5150.00	38.4 AV	54.0	-15.6	2.03 V	360	36.6	1.8
3	*5260.00	117.7 PK			2.06 V	360	116.5	1.2
4	*5260.00	105.7 AV			2.06 V	360	104.5	1.2
5	#10520.00	52.3 PK	68.2	-15.9	1.55 V	224	41.0	11.3
6	15780.00	52.7 PK	74.0	-21.3	1.91 V	230	42.1	10.6
7	15780.00	41.6 AV	54.0	-12.4	1.91 V	230	31.0	10.6

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 60	<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	*5300.00	105.2 PK			1.12 H	198	103.9	1.3
2	*5300.00	94.6 AV			1.12 H	198	93.3	1.3
3	10600.00	50.9 PK	74.0	-23.1	1.76 H	323	39.7	11.2
4	10600.00	38.8 AV	54.0	-15.2	1.76 H	323	27.6	11.2
5	15900.00	52.3 PK	74.0	-21.7	1.53 H	317	41.7	10.6
6	15900.00	41.2 AV	54.0	-12.8	1.53 H	317	30.6	10.6
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	117.2 PK			2.11 V	340	115.9	1.3
2	*5300.00	105.2 AV			2.11 V	340	103.9	1.3
3	10600.00	52.2 PK	74.0	-21.8	1.57 V	246	41.0	11.2
4	10600.00	39.6 AV	54.0	-14.4	1.57 V	246	28.4	11.2
5	15900.00	54.4 PK	74.0	-19.6	1.91 V	225	43.8	10.6
6	15900.00	42.7 AV	54.0	-11.3	1.91 V	225	32.1	10.6

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	105.5 PK			1.11 H	185	104.0	1.5
2	*5320.00	93.0 AV			1.11 H	185	91.5	1.5
3	5350.00	56.4 PK	74.0	-17.6	1.04 H	201	54.9	1.5
4	5350.00	42.6 AV	54.0	-11.4	1.04 H	201	41.1	1.5
5	10640.00	50.8 PK	74.0	-23.2	1.71 H	287	39.8	11.0
6	10640.00	38.2 AV	54.0	-15.8	1.71 H	287	27.2	11.0
7	15960.00	52.9 PK	74.0	-21.1	1.61 H	313	42.0	10.9
8	15960.00	42.0 AV	54.0	-12.0	1.61 H	313	31.1	10.9
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	113.8 PK			1.91 V	262	112.3	1.5
2	*5320.00	103.4 AV			1.91 V	262	101.9	1.5
3	5350.00	71.5 PK	74.0	-2.5	1.93 V	264	70.0	1.5
4	5350.00	53.8 AV	54.0	-0.2	1.93 V	264	52.3	1.5
5	10640.00	52.0 PK	74.0	-22.0	1.63 V	223	41.0	11.0
6	10640.00	39.4 AV	54.0	-14.6	1.63 V	223	28.4	11.0
7	15960.00	54.1 PK	74.0	-19.9	1.91 V	204	43.2	10.9
8	15960.00	42.3 AV	54.0	-11.7	1.91 V	204	31.4	10.9

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.

<b>CHANNEL</b>	TX Channel 100	<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	5460.00	48.2 PK	74.0	-25.8	1.14 H	193	46.6	1.6
2	5460.00	36.6 AV	54.0	-17.4	1.14 H	193	35.0	1.6
3	#5470.00	59.8 PK	68.2	-8.4	1.11 H	190	58.2	1.6
4	*5500.00	102.5 PK			1.15 H	199	100.9	1.6
5	*5500.00	91.5 AV			1.15 H	199	89.9	1.6
6	11000.00	52.2 PK	74.0	-21.8	1.75 H	316	40.1	12.1
7	11000.00	39.5 AV	54.0	-14.5	1.75 H	316	27.4	12.1
8	#16500.00	52.6 PK	68.2	-15.6	1.59 H	330	39.2	13.4

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.4 PK	74.0	-11.6	1.85 V	247	60.8	1.6
2	5460.00	42.5 AV	54.0	-11.5	1.85 V	247	40.9	1.6
3	#5470.00	67.7 PK	68.2	-0.5	1.85 V	247	66.1	1.6
4	*5500.00	112.9 PK			1.85 V	247	111.3	1.6
5	*5500.00	102.2 AV			1.85 V	247	100.6	1.6
6	11000.00	52.8 PK	74.0	-21.2	1.60 V	232	40.7	12.1
7	11000.00	39.7 AV	54.0	-14.3	1.60 V	232	27.6	12.1
8	#16500.00	52.9 PK	68.2	-15.3	1.97 V	197	39.5	13.4

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 116	<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	*5580.00	105.5 PK			1.12 H	198	103.8	1.7
2	*5580.00	94.8 AV			1.12 H	198	93.1	1.7
3	11160.00	51.7 PK	74.0	-22.3	1.77 H	329	40.3	11.4
4	11160.00	38.9 AV	54.0	-15.1	1.77 H	329	27.5	11.4
5	#16740.00	52.4 PK	68.2	-15.8	1.54 H	302	37.0	15.4
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	115.5 PK			1.73 V	12	113.8	1.7
2	*5580.00	105.3 AV			1.73 V	12	103.6	1.7
3	11160.00	52.6 PK	74.0	-21.4	1.56 V	220	41.2	11.4
4	11160.00	39.4 AV	54.0	-14.6	1.56 V	220	28.0	11.4
5	#16740.00	52.7 PK	68.2	-15.5	1.98 V	222	37.3	15.4

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	100.2 PK			1.19 H	181	98.2	2.0
2	*5700.00	89.5 AV			1.19 H	181	87.5	2.0
3	#5725.00	61.0 PK	68.2	-7.2	1.13 H	183	59.0	2.0
4	11400.00	51.2 PK	74.0	-22.8	1.82 H	325	39.9	11.3
5	11400.00	38.6 AV	54.0	-15.4	1.82 H	325	27.3	11.3
6	#17100.00	51.8 PK	68.2	-16.4	1.58 H	327	35.6	16.2
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	110.0 PK			1.72 V	360	108.0	2.0
2	*5700.00	99.8 AV			1.72 V	360	97.8	2.0
3	#5725.00	67.4 PK	68.2	-0.8	1.71 V	346	65.4	2.0
4	11400.00	51.7 PK	74.0	-22.3	1.56 V	212	40.4	11.3
5	11400.00	38.7 AV	54.0	-15.3	1.56 V	212	27.4	11.3
6	#17100.00	52.6 PK	68.2	-15.6	1.87 V	208	36.4	16.2

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 149	<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	#5572.70	60.8 PK	68.2	-7.4	1.18 H	194	59.1	1.7
2	*5745.00	110.8 PK			1.18 H	194	108.8	2.0
3	*5745.00	99.3 AV			1.18 H	194	97.3	2.0
4	#5939.73	59.7 PK	68.2	-8.5	1.18 H	194	57.3	2.4
5	11490.00	52.4 PK	74.0	-21.6	1.21 H	211	40.7	11.7
6	11490.00	40.1 AV	54.0	-13.9	1.21 H	211	28.4	11.7
7	#17235.00	54.7 PK	68.2	-13.5	1.04 H	130	37.9	16.8
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	#5640.94	60.1 PK	68.2	-8.1	1.18 V	299	58.4	1.7
2	*5745.00	115.2 PK			1.18 V	299	113.2	2.0
3	*5745.00	104.3 AV			1.18 V	299	102.3	2.0
4	#5991.36	61.3 PK	68.2	-6.9	1.18 V	299	58.8	2.5
5	11490.00	53.5 PK	74.0	-20.5	1.61 V	160	41.8	11.7
6	11490.00	41.5 AV	54.0	-12.5	1.61 V	160	29.8	11.7
7	#17235.00	55.2 PK	68.2	-13.0	1.66 V	296	38.4	16.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 157	<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	#5611.11	59.3 PK	68.2	-8.9	2.02 H	319	57.5	1.8
2	*5785.00	108.4 PK			2.02 H	319	106.3	2.1
3	*5785.00	97.4 AV			2.02 H	319	95.3	2.1
4	#6001.48	59.7 PK	68.2	-8.5	2.02 H	319	57.2	2.5
5	11570.00	52.7 PK	74.0	-21.3	1.22 H	210	41.2	11.5
6	11570.00	40.5 AV	54.0	-13.5	1.22 H	210	29.0	11.5
7	#17355.00	55.2 PK	68.2	-13.0	1.07 H	128	38.3	16.9
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	#5623.90	59.5 PK	68.2	-8.7	1.16 V	314	57.7	1.8
2	*5785.00	113.0 PK			1.16 V	314	110.9	2.1
3	*5785.00	102.5 AV			1.16 V	314	100.4	2.1
4	#5988.61	58.5 PK	68.2	-9.7	1.16 V	314	56.0	2.5
5	11570.00	53.0 PK	74.0	-21.0	1.67 V	161	41.5	11.5
6	11570.00	41.6 AV	54.0	-12.4	1.67 V	161	30.1	11.5
7	#17355.00	55.3 PK	68.2	-12.9	1.64 V	318	38.4	16.9

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 165	<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	#5596.22	57.6 PK	68.2	-10.6	2.06 H	309	55.9	1.7
2	*5825.00	109.4 PK			2.06 H	309	107.2	2.2
3	*5825.00	98.4 AV			2.06 H	309	96.2	2.2
4	#5939.69	57.7 PK	68.2	-10.5	2.06 H	309	55.3	2.4
5	11650.00	53.4 PK	74.0	-20.6	1.26 H	239	42.3	11.1
6	11650.00	40.8 AV	54.0	-13.2	1.26 H	239	29.7	11.1
7	#17475.00	56.5 PK	68.2	-11.7	1.07 H	123	38.2	18.3

**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	#5594.30	57.7 PK	68.2	-10.5	1.10 V	310	56.0	1.7
2	*5825.00	114.5 PK			1.10 V	310	112.3	2.2
3	*5825.00	103.4 AV			1.10 V	310	101.2	2.2
4	#5990.46	57.9 PK	68.2	-10.3	1.10 V	310	55.4	2.5
5	11650.00	51.4 PK	74.0	-22.6	1.63 V	179	40.3	11.1
6	11650.00	40.1 AV	54.0	-13.9	1.63 V	179	29.0	11.1
7	#17475.00	55.4 PK	68.2	-12.8	1.67 V	310	37.1	18.3

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## 802.11ac (VHT40)

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	52.6 PK	74.0	-21.4	1.94 H	357	50.8	1.8
2	5150.00	40.2 AV	54.0	-13.8	1.94 H	357	38.4	1.8
3	*5190.00	95.2 PK			1.96 H	349	93.5	1.7
4	*5190.00	83.8 AV			1.96 H	349	82.1	1.7
5	5350.00	39.9 PK	74.0	-34.1	1.92 H	330	38.4	1.5
6	5350.00	30.3 AV	54.0	-23.7	1.92 H	330	28.8	1.5
7	#10380.00	50.2 PK	68.2	-18.0	1.27 H	237	39.0	11.2
8	15570.00	53.2 PK	74.0	-20.8	1.01 H	151	42.1	11.1
9	15570.00	40.9 AV	54.0	-13.1	1.01 H	151	29.8	11.1
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	1.06 V	345	63.9	1.8
2	5150.00	53.4 AV	54.0	-0.6	1.06 V	345	51.6	1.8
3	*5190.00	108.7 PK			1.11 V	360	107.0	1.7
4	*5190.00	96.9 AV			1.11 V	360	95.2	1.7
5	5350.00	54.0 PK	74.0	-20.0	1.06 V	357	52.5	1.5
6	5350.00	41.6 AV	54.0	-12.4	1.06 V	357	40.1	1.5
7	#10380.00	50.8 PK	68.2	-17.4	1.80 V	180	39.6	11.2
8	15570.00	51.9 PK	74.0	-22.1	1.58 V	326	40.8	11.1
9	15570.00	40.3 AV	54.0	-13.7	1.58 V	326	29.2	11.1

## REMARKS:

- Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
- Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
- Margin value = Emission Level – Limit value
- The other emission levels were very low against the limit.
- " \* ": Fundamental frequency.
- " # ": 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	*5230.00	108.6 PK			2.06 H	318	107.1	1.5
2	*5230.00	97.7 AV			2.06 H	318	96.2	1.5
3	5350.00	39.9 PK	74.0	-34.1	1.94 H	323	38.4	1.5
4	5350.00	30.5 AV	54.0	-23.5	1.94 H	323	29.0	1.5
5	#10460.00	53.3 PK	68.2	-14.9	1.24 H	218	42.0	11.3
6	15690.00	54.8 PK	74.0	-19.2	1.00 H	138	44.3	10.5
7	15690.00	44.0 AV	54.0	-10.0	1.00 H	138	33.5	10.5

**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	112.0 PK			1.13 V	357	110.5	1.5
2	*5230.00	100.8 AV			1.13 V	357	99.3	1.5
3	5350.00	53.5 PK	74.0	-20.5	1.09 V	351	52.0	1.5
4	5350.00	42.1 AV	54.0	-11.9	1.09 V	351	40.6	1.5
5	#10460.00	50.5 PK	68.2	-17.7	1.75 V	167	39.2	11.3
6	15690.00	51.2 PK	74.0	-22.8	1.63 V	340	40.7	10.5
7	15690.00	39.8 AV	54.0	-14.2	1.63 V	340	29.3	10.5

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	5150.00	48.1 PK	74.0	-25.9	1.15 H	192	46.3	1.8
2	5150.00	35.8 AV	54.0	-18.2	1.15 H	192	34.0	1.8
3	*5270.00	104.8 PK			1.10 H	192	103.6	1.2
4	*5270.00	92.8 AV			1.10 H	192	91.6	1.2
5	5350.00	57.6 PK	74.0	-16.4	1.12 H	211	56.1	1.5
6	5350.00	43.6 AV	54.0	-10.4	1.12 H	211	42.1	1.5
7	#10540.00	51.5 PK	68.2	-16.7	1.84 H	306	40.2	11.3
8	15810.00	53.6 PK	74.0	-20.4	1.60 H	340	42.9	10.7
9	15810.00	42.7 AV	54.0	-11.3	1.60 H	340	32.0	10.7
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	58.5 PK	74.0	-15.5	1.89 V	360	56.7	1.8
2	5150.00	46.8 AV	54.0	-7.2	1.89 V	360	45.0	1.8
3	*5270.00	113.1 PK			1.79 V	355	111.9	1.2
4	*5270.00	102.5 AV			1.79 V	355	101.3	1.2
5	5350.00	66.9 PK	74.0	-7.1	1.84 V	346	65.4	1.5
6	5350.00	52.8 AV	54.0	-1.2	1.84 V	346	51.3	1.5
7	#10540.00	52.1 PK	68.2	-16.1	1.57 V	212	40.8	11.3
8	15810.00	53.5 PK	74.0	-20.5	1.93 V	207	42.8	10.7
9	15810.00	42.0 AV	54.0	-12.0	1.93 V	207	31.3	10.7

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 62	<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	*5310.00	96.8 PK			1.11 H	182	95.4	1.4
2	*5310.00	86.1 AV			1.11 H	182	84.7	1.4
3	5350.00	57.4 PK	74.0	-16.6	1.13 H	205	55.9	1.5
4	5350.00	43.4 AV	54.0	-10.6	1.13 H	205	41.9	1.5
5	10620.00	52.3 PK	74.0	-21.7	1.75 H	316	41.3	11.0
6	10620.00	39.8 AV	54.0	-14.2	1.75 H	316	28.8	11.0
7	15930.00	53.1 PK	74.0	-20.9	1.51 H	306	42.3	10.8
8	15930.00	42.0 AV	54.0	-12.0	1.51 H	306	31.2	10.8
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	107.1 PK			1.89 V	0	105.7	1.4
2	*5310.00	97.4 AV			1.89 V	0	96.0	1.4
3	5350.00	71.0 PK	74.0	-3.0	1.87 V	0	69.5	1.5
4	5350.00	53.1 AV	54.0	-0.9	1.87 V	0	51.6	1.5
5	10620.00	52.9 PK	74.0	-21.1	1.56 V	205	41.9	11.0
6	10620.00	39.9 AV	54.0	-14.1	1.56 V	205	28.9	11.0
7	15930.00	53.6 PK	74.0	-20.4	1.93 V	231	42.8	10.8
8	15930.00	42.1 AV	54.0	-11.9	1.93 V	231	31.3	10.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.

<b>CHANNEL</b>	TX Channel 102	<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	5460.00	48.1 PK	74.0	-25.9	1.12 H	194	46.5	1.6
2	5460.00	36.9 AV	54.0	-17.1	1.12 H	194	35.3	1.6
3	#5470.00	60.1 PK	68.2	-8.1	1.14 H	185	58.5	1.6
4	*5510.00	96.4 PK			1.18 H	195	94.8	1.6
5	*5510.00	85.9 AV			1.18 H	195	84.3	1.6
6	11020.00	51.1 PK	74.0	-22.9	1.76 H	311	39.2	11.9
7	11020.00	38.8 AV	54.0	-15.2	1.76 H	311	26.9	11.9
8	#16530.00	53.3 PK	68.2	-14.9	1.63 H	336	39.5	13.8

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.3 PK	74.0	-11.7	1.89 V	348	60.7	1.6
2	5460.00	48.6 AV	54.0	-5.4	1.89 V	348	47.0	1.6
3	#5470.00	68.1 PK	68.2	-0.1	1.88 V	359	66.5	1.6
4	*5510.00	107.7 PK			1.91 V	359	106.1	1.6
5	*5510.00	97.3 AV			1.91 V	359	95.7	1.6
6	11020.00	52.6 PK	74.0	-21.4	1.59 V	254	40.7	11.9
7	11020.00	39.3 AV	54.0	-14.7	1.59 V	254	27.4	11.9
8	#16530.00	53.4 PK	68.2	-14.8	1.83 V	214	39.6	13.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 110	<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	5460.00	49.6 PK	74.0	-24.4	1.21 H	219	48.0	1.6
2	5460.00	37.5 AV	54.0	-16.5	1.21 H	219	35.9	1.6
3	#5470.00	59.3 PK	68.2	-8.9	1.20 H	201	57.7	1.6
4	*5550.00	105.7 PK			1.21 H	219	104.0	1.7
5	*5550.00	93.4 AV			1.21 H	219	91.7	1.7
6	11100.00	52.2 PK	74.0	-21.8	1.75 H	295	40.6	11.6
7	11100.00	39.3 AV	54.0	-14.7	1.75 H	295	27.7	11.6
8	#16650.00	53.3 PK	68.2	-14.9	1.52 H	326	38.6	14.7

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	63.2 PK	74.0	-10.8	1.87 V	345	61.6	1.6
2	5460.00	48.8 AV	54.0	-5.2	1.87 V	345	47.2	1.6
3	#5470.00	67.4 PK	68.2	-0.8	1.92 V	360	65.8	1.6
4	*5550.00	115.1 PK			1.87 V	345	113.4	1.7
5	*5550.00	103.3 AV			1.87 V	345	101.6	1.7
6	11100.00	51.8 PK	74.0	-22.2	1.50 V	218	40.2	11.6
7	11100.00	39.2 AV	54.0	-14.8	1.50 V	218	27.6	11.6
8	#16650.00	54.2 PK	68.2	-14.0	1.85 V	203	39.5	14.7

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	98.0 PK			1.05 H	197	96.3	1.7
2	*5670.00	88.4 AV			1.05 H	197	86.7	1.7
3	#5725.00	60.0 PK	68.2	-8.2	1.13 H	219	58.0	2.0
4	11340.00	50.9 PK	74.0	-23.1	1.76 H	309	39.3	11.6
5	11340.00	38.9 AV	54.0	-15.1	1.76 H	309	27.3	11.6
6	#17010.00	53.2 PK	68.2	-15.0	1.61 H	334	37.2	16.0
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	110.4 PK			1.94 V	343	108.7	1.7
2	*5670.00	99.9 AV			1.94 V	343	98.2	1.7
3	#5725.00	67.8 PK	68.2	-0.4	1.91 V	344	65.8	2.0
4	11340.00	52.3 PK	74.0	-21.7	1.57 V	232	40.7	11.6
5	11340.00	39.7 AV	54.0	-14.3	1.57 V	232	28.1	11.6
6	#17010.00	53.2 PK	68.2	-15.0	1.87 V	230	37.2	16.0

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 151	<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	#5639.93	62.8 PK	68.2	-5.4	2.10 H	292	61.1	1.7
2	*5755.00	109.2 PK			2.10 H	292	107.2	2.0
3	*5755.00	98.2 AV			2.10 H	292	96.2	2.0
4	#5958.67	58.1 PK	68.2	-10.1	2.10 H	292	55.7	2.4
5	11510.00	52.5 PK	74.0	-21.5	1.20 H	202	40.7	11.8
6	11510.00	40.2 AV	54.0	-13.8	1.20 H	202	28.4	11.8
7	#17265.00	55.1 PK	68.2	-13.1	1.01 H	128	38.3	16.8

**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	#5647.04	62.1 PK	68.2	-6.1	1.13 V	360	60.4	1.7
2	*5755.00	112.3 PK			1.13 V	360	110.3	2.0
3	*5755.00	100.4 AV			1.13 V	360	98.4	2.0
4	#5962.96	58.8 PK	68.2	-9.4	1.13 V	360	56.4	2.4
5	11510.00	51.7 PK	74.0	-22.3	1.70 V	147	39.9	11.8
6	11510.00	40.2 AV	54.0	-13.8	1.70 V	147	28.4	11.8
7	#17265.00	56.7 PK	68.2	-11.5	1.79 V	305	39.9	16.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 159	<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	#5649.46	60.1 PK	68.2	-8.1	2.13 H	328	58.4	1.7
2	*5795.00	108.4 PK			2.13 H	328	106.2	2.2
3	*5795.00	97.4 AV			2.13 H	328	95.2	2.2
4	#5938.74	62.8 PK	68.2	-5.4	2.13 H	328	60.4	2.4
5	11590.00	52.5 PK	74.0	-21.5	1.20 H	232	41.1	11.4
6	11590.00	40.2 AV	54.0	-13.8	1.20 H	232	28.8	11.4
7	#17385.00	55.3 PK	68.2	-12.9	1.09 H	132	38.3	17.0
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	#5644.68	58.5 PK	68.2	-9.7	1.06 V	360	56.8	1.7
2	*5795.00	113.3 PK			1.06 V	360	111.1	2.2
3	*5795.00	101.2 AV			1.06 V	360	99.0	2.2
4	#5924.93	61.0 PK	68.3	-7.3	1.06 V	360	58.7	2.3
5	11590.00	52.0 PK	74.0	-22.0	1.69 V	169	40.6	11.4
6	11590.00	40.5 AV	54.0	-13.5	1.69 V	169	29.1	11.4
7	#17385.00	55.3 PK	68.2	-12.9	1.70 V	305	38.3	17.0

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## 802.11ac (VHT80)

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	52.8 PK	74.0	-21.2	1.95 H	318	51.0	1.8
2	5150.00	39.9 AV	54.0	-14.1	1.95 H	318	38.1	1.8
3	*5210.00	90.9 PK			1.97 H	338	89.2	1.7
4	*5210.00	80.0 AV			1.97 H	338	78.3	1.7
5	5350.00	40.6 PK	74.0	-33.4	2.00 H	335	39.1	1.5
6	5350.00	30.8 AV	54.0	-23.2	2.00 H	335	29.3	1.5
7	#10420.00	49.3 PK	68.2	-18.9	1.32 H	219	38.1	11.2
8	15630.00	52.7 PK	74.0	-21.3	1.08 H	140	41.8	10.9
9	15630.00	40.7 AV	54.0	-13.3	1.08 H	140	29.8	10.9
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	67.4 PK	74.0	-6.6	1.14 V	350	65.6	1.8
2	5150.00	53.0 AV	54.0	-1.0	1.14 V	350	51.2	1.8
3	*5210.00	104.5 PK			1.14 V	360	102.8	1.7
4	*5210.00	91.7 AV			1.14 V	360	90.0	1.7
5	5350.00	54.1 PK	74.0	-19.9	1.16 V	345	52.6	1.5
6	5350.00	42.5 AV	54.0	-11.5	1.16 V	345	41.0	1.5
7	#10420.00	49.2 PK	68.2	-19.0	1.62 V	162	38.0	11.2
8	15630.00	50.6 PK	74.0	-23.4	1.63 V	319	39.7	10.9
9	15630.00	39.5 AV	54.0	-14.5	1.63 V	319	28.6	10.9

## 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 58	<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	48.9 PK	74.0	-25.1	1.04 H	194	47.1	1.8
2	5150.00	36.4 AV	54.0	-17.6	1.04 H	194	34.6	1.8
3	*5290.00	92.7 PK			1.07 H	217	91.4	1.3
4	*5290.00	83.2 AV			1.07 H	217	81.9	1.3
5	5350.00	58.2 PK	74.0	-15.8	1.11 H	223	56.7	1.5
6	5350.00	43.8 AV	54.0	-10.2	1.11 H	223	42.3	1.5
7	#10580.00	52.6 PK	68.2	-15.6	1.74 H	314	41.4	11.2
8	15870.00	53.6 PK	74.0	-20.4	1.60 H	311	42.9	10.7
9	15870.00	42.4 AV	54.0	-11.6	1.60 H	311	31.7	10.7
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	59.3 PK	74.0	-14.7	1.88 V	360	57.5	1.8
2	5150.00	46.7 AV	54.0	-7.3	1.88 V	360	44.9	1.8
3	*5290.00	103.7 PK			1.88 V	360	102.4	1.3
4	*5290.00	94.6 AV			1.88 V	360	93.3	1.3
5	5350.00	65.8 PK	74.0	-8.2	1.90 V	360	64.3	1.5
6	5350.00	53.6 AV	54.0	-0.4	1.90 V	360	52.1	1.5
7	#10580.00	51.2 PK	68.2	-17.0	1.57 V	255	40.0	11.2
8	15870.00	53.7 PK	74.0	-20.3	1.89 V	206	43.0	10.7
9	15870.00	42.5 AV	54.0	-11.5	1.89 V	206	31.8	10.7

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 106	<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	5460.00	49.2 PK	74.0	-24.8	1.12 H	227	47.6	1.6
2	5460.00	37.2 AV	54.0	-16.8	1.12 H	227	35.6	1.6
3	#5470.00	48.2 PK	68.2	-20.0	1.15 H	217	46.6	1.6
4	*5530.00	93.9 PK			1.13 H	219	92.2	1.7
5	*5530.00	84.2 AV			1.13 H	219	82.5	1.7
6	#5725.00	56.0 PK	68.2	-12.2	1.12 H	227	54.0	2.0
7	11060.00	51.8 PK	74.0	-22.2	1.73 H	293	40.1	11.7
8	11060.00	39.0 AV	54.0	-15.0	1.73 H	293	27.3	11.7
9	#16590.00	52.6 PK	68.2	-15.6	1.65 H	295	38.3	14.3
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	67.5 PK	68.2	-0.7	1.87 V	360	65.9	1.6
2	*5530.00	104.8 PK			1.98 V	351	103.1	1.7
3	*5530.00	95.5 AV			1.98 V	351	93.8	1.7
4	#5725.00	65.1 PK	68.2	-3.1	1.95 V	360	63.1	2.0
5	11060.00	52.1 PK	74.0	-21.9	1.55 V	236	40.4	11.7
6	11060.00	39.7 AV	54.0	-14.3	1.55 V	236	28.0	11.7
7	#16590.00	53.3 PK	68.2	-14.9	1.83 V	236	39.0	14.3

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 155	<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	#5649.18	64.3 PK	68.2	-3.9	1.97 H	334	62.6	1.7
2	*5775.00	100.2 PK			1.97 H	334	98.1	2.1
3	*5775.00	91.2 AV			1.97 H	334	89.1	2.1
4	#5937.73	64.2 PK	68.2	-4.0	1.97 H	337	61.8	2.4
5	11550.00	52.1 PK	74.0	-21.9	1.27 H	213	40.5	11.6
6	11550.00	40.0 AV	54.0	-14.0	1.27 H	213	28.4	11.6
7	#17325.00	54.4 PK	68.2	-13.8	1.01 H	127	37.6	16.8

**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	#5647.92	66.0 PK	68.2	-2.2	1.05 V	360	64.3	1.7
2	*5775.00	106.9 PK			1.05 V	360	104.8	2.1
3	*5775.00	97.9 AV			1.05 V	360	95.8	2.1
4	#5926.82	68.0 PK	68.2	-0.2	1.05 V	360	65.7	2.3
5	11550.00	51.5 PK	74.0	-22.5	1.60 V	173	39.9	11.6
6	11550.00	40.2 AV	54.0	-13.8	1.60 V	173	28.6	11.6
7	#17325.00	56.1 PK	68.2	-12.1	1.80 V	315	39.3	16.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



# Below 1GHz Data:

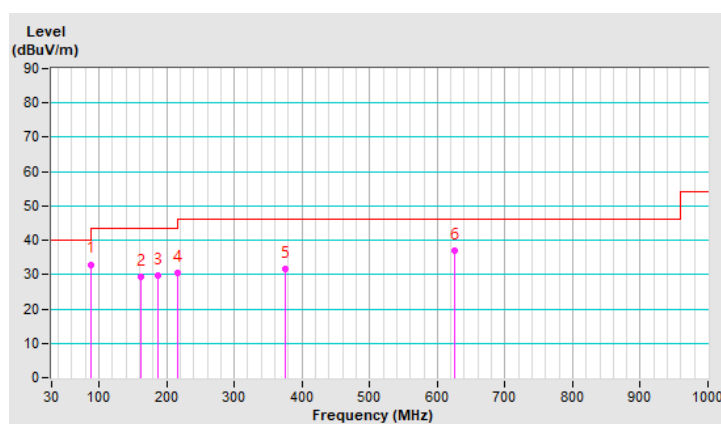
## 802.11a

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 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	87.76	33.0 QP	40.0	-7.0	2.00 H	84	51.6	-18.6
2	162.09	29.4 QP	43.5	-14.1	1.71 H	69	42.4	-13.0
3	187.21	29.7 QP	43.5	-13.8	1.52 H	129	45.0	-15.3
4	215.32	30.4 QP	43.5	-13.1	1.50 H	108	46.0	-15.6
5	375.56	31.8 QP	46.0	-14.2	1.25 H	360	42.4	-10.6
6	625.86	36.8 QP	46.0	-9.2	1.50 H	185	41.8	-5.0

### 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

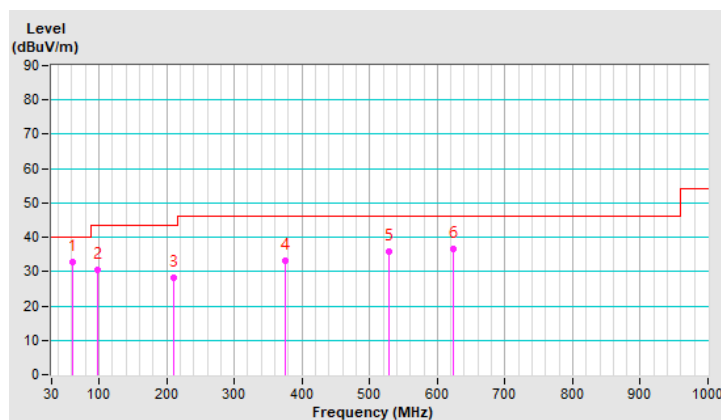


<b>CHANNEL</b>	TX Channel 157	<b>DETECTOR FUNCTION</b>	Quasi-Peak (QP)
<b>FREQUENCY RANGE</b>	9kHz ~ 1GHz		

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	60.79	32.7 QP	40.0	-7.3	1.20 V	100	46.7	-14.0
2	98.48	30.5 QP	43.5	-13.0	1.65 V	134	48.2	-17.7
3	210.39	28.3 QP	43.5	-15.2	1.55 V	200	44.0	-15.7
4	375.50	33.1 QP	46.0	-12.9	1.75 V	250	43.7	-10.6
5	529.42	35.7 QP	46.0	-10.3	1.70 V	125	42.9	-7.2
6	624.52	36.5 QP	46.0	-9.5	1.47 V	125	41.5	-5.0

#### 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



### Antenna Set 3

#### Above 1GHz Data:

#### 802.11a

<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	52.8 PK	74.0	-21.2	2.04 H	321	51.0	1.8
2	5150.00	38.4 AV	54.0	-15.6	2.04 H	321	36.6	1.8
3	*5180.00	99.5 PK			1.97 H	340	97.8	1.7
4	*5180.00	87.4 AV			1.97 H	340	85.7	1.7
5	#10360.00	49.8 PK	68.2	-18.4	1.29 H	211	38.8	11.0
6	15540.00	53.4 PK	74.0	-20.6	1.05 H	126	42.5	10.9
7	15540.00	40.9 AV	54.0	-13.1	1.05 H	126	30.0	10.9
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	66.2 PK	74.0	-7.8	1.02 V	22	64.4	1.8
2	5150.00	53.0 AV	54.0	-1.0	1.02 V	22	51.2	1.8
3	*5180.00	114.5 PK			1.07 V	20	112.8	1.7
4	*5180.00	105.2 AV			1.07 V	20	103.5	1.7
5	#10360.00	50.9 PK	68.2	-17.3	1.91 V	194	39.9	11.0
6	15540.00	51.2 PK	74.0	-22.8	1.76 V	323	40.3	10.9
7	15540.00	40.1 AV	54.0	-13.9	1.76 V	323	29.2	10.9

#### 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	5150.00	51.9 PK	74.0	-22.1	2.06 H	313	50.1	1.8
2	5150.00	38.9 AV	54.0	-15.1	2.06 H	313	37.1	1.8
3	*5200.00	102.6 PK			2.02 H	324	100.9	1.7
4	*5200.00	93.1 AV			2.02 H	324	91.4	1.7
5	#10400.00	49.6 PK	68.2	-18.6	1.31 H	243	38.3	11.3
6	15600.00	53.0 PK	74.0	-21.0	1.07 H	107	41.8	11.2
7	15600.00	40.5 AV	54.0	-13.5	1.07 H	107	29.3	11.2
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	1.02 V	24	64.8	1.8
2	5150.00	53.9 AV	54.0	-0.1	1.02 V	24	52.1	1.8
3	*5200.00	117.8 PK			1.09 V	0	116.1	1.7
4	*5200.00	109.2 AV			1.09 V	0	107.5	1.7
5	#10400.00	49.5 PK	68.2	-18.7	1.76 V	162	38.2	11.3
6	15600.00	50.5 PK	74.0	-23.5	1.73 V	308	39.3	11.2
7	15600.00	39.7 AV	54.0	-14.3	1.73 V	308	28.5	11.2

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	*5240.00	101.2 PK			2.10 H	292	99.8	1.4
2	*5240.00	89.9 AV			2.10 H	292	88.5	1.4
3	5350.00	40.3 PK	74.0	-33.7	2.21 H	312	38.8	1.5
4	5350.00	31.1 AV	54.0	-22.9	2.21 H	312	29.6	1.5
5	#10480.00	50.2 PK	68.2	-18.0	1.16 H	222	38.8	11.4
6	15720.00	52.9 PK	74.0	-21.1	1.10 H	113	42.4	10.5
7	15720.00	40.2 AV	54.0	-13.8	1.10 H	113	29.7	10.5
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	115.4 PK			1.07 V	13	114.0	1.4
2	*5240.00	104.2 AV			1.07 V	13	102.8	1.4
3	5350.00	55.3 PK	74.0	-18.7	1.08 V	5	53.8	1.5
4	5350.00	41.3 AV	54.0	-12.7	1.08 V	5	39.8	1.5
5	#10480.00	49.4 PK	68.2	-18.8	1.76 V	151	38.0	11.4
6	15720.00	51.2 PK	74.0	-22.8	1.65 V	297	40.7	10.5
7	15720.00	39.5 AV	54.0	-14.5	1.65 V	297	29.0	10.5

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 52	<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	48.9 PK	74.0	-25.1	1.10 H	158	47.1	1.8
2	5150.00	36.6 AV	54.0	-17.4	1.10 H	158	34.8	1.8
3	*5260.00	105.7 PK			1.18 H	196	104.5	1.2
4	*5260.00	94.5 AV			1.18 H	196	93.3	1.2
5	#10520.00	52.0 PK	68.2	-16.2	1.65 H	321	40.7	11.3
6	15780.00	53.4 PK	74.0	-20.6	1.65 H	314	42.8	10.6
7	15780.00	42.7 AV	54.0	-11.3	1.65 H	314	32.1	10.6
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	50.7 PK	74.0	-23.3	2.06 V	340	48.9	1.8
2	5150.00	38.9 AV	54.0	-15.1	2.06 V	340	37.1	1.8
3	*5260.00	117.3 PK			1.98 V	360	116.1	1.2
4	*5260.00	105.5 AV			1.98 V	360	104.3	1.2
5	#10520.00	51.5 PK	68.2	-16.7	1.50 V	255	40.2	11.3
6	15780.00	53.7 PK	74.0	-20.3	1.88 V	179	43.1	10.6
7	15780.00	42.2 AV	54.0	-11.8	1.88 V	179	31.6	10.6

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 60	<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	*5300.00	105.5 PK			1.20 H	213	104.2	1.3
2	*5300.00	94.4 AV			1.20 H	213	93.1	1.3
3	10600.00	52.2 PK	74.0	-21.8	1.70 H	337	41.0	11.2
4	10600.00	39.3 AV	54.0	-14.7	1.70 H	337	28.1	11.2
5	15900.00	52.9 PK	74.0	-21.1	1.64 H	317	42.3	10.6
6	15900.00	42.1 AV	54.0	-11.9	1.64 H	317	31.5	10.6
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	116.7 PK			1.98 V	360	115.4	1.3
2	*5300.00	105.4 AV			1.98 V	360	104.1	1.3
3	10600.00	52.8 PK	74.0	-21.2	1.53 V	239	41.6	11.2
4	10600.00	39.9 AV	54.0	-14.1	1.53 V	239	28.7	11.2
5	15900.00	52.9 PK	74.0	-21.1	1.93 V	194	42.3	10.6
6	15900.00	42.1 AV	54.0	-11.9	1.93 V	194	31.5	10.6

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	104.9 PK			1.11 H	230	103.4	1.5
2	*5320.00	92.6 AV			1.11 H	230	91.1	1.5
3	5350.00	56.6 PK	74.0	-17.4	1.10 H	202	55.1	1.5
4	5350.00	43.2 AV	54.0	-10.8	1.10 H	202	41.7	1.5
5	10640.00	52.2 PK	74.0	-21.8	1.90 H	325	41.2	11.0
6	10640.00	39.7 AV	54.0	-14.3	1.90 H	325	28.7	11.0
7	15960.00	52.1 PK	74.0	-21.9	1.58 H	326	41.2	10.9
8	15960.00	41.4 AV	54.0	-12.6	1.58 H	326	30.5	10.9
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			2.00 V	360	114.2	1.5
2	*5320.00	103.6 AV			2.00 V	360	102.1	1.5
3	5350.00	68.6 PK	74.0	-5.4	2.00 V	360	67.1	1.5
4	5350.00	53.2 AV	54.0	-0.8	2.00 V	360	51.7	1.5
5	10640.00	52.1 PK	74.0	-21.9	1.55 V	253	41.1	11.0
6	10640.00	39.1 AV	54.0	-14.9	1.55 V	253	28.1	11.0
7	15960.00	53.8 PK	74.0	-20.2	1.79 V	222	42.9	10.9
8	15960.00	42.3 AV	54.0	-11.7	1.79 V	222	31.4	10.9

#### 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.



<b>CHANNEL</b>	TX Channel 100	<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	5460.00	48.3 PK	74.0	-25.7	1.00 H	189	46.7	1.6
2	5460.00	36.3 AV	54.0	-17.7	1.00 H	189	34.7	1.6
3	#5470.00	60.0 PK	68.2	-8.2	1.14 H	216	58.4	1.6
4	*5500.00	102.9 PK			1.10 H	205	101.3	1.6
5	*5500.00	91.1 AV			1.10 H	205	89.5	1.6
6	11000.00	52.1 PK	74.0	-21.9	1.68 H	295	40.0	12.1
7	11000.00	39.3 AV	54.0	-14.7	1.68 H	295	27.2	12.1
8	#16500.00	53.1 PK	68.2	-15.1	1.59 H	312	39.7	13.4

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	63.6 PK	74.0	-10.4	1.94 V	346	62.0	1.6
2	5460.00	43.5 AV	54.0	-10.5	1.94 V	346	41.9	1.6
3	#5470.00	68.0 PK	68.2	-0.2	1.96 V	360	66.4	1.6
4	*5500.00	112.5 PK			1.87 V	357	110.9	1.6
5	*5500.00	101.4 AV			1.87 V	357	99.8	1.6
6	11000.00	51.9 PK	74.0	-22.1	1.51 V	231	39.8	12.1
7	11000.00	38.8 AV	54.0	-15.2	1.51 V	231	26.7	12.1
8	#16500.00	52.9 PK	68.2	-15.3	1.92 V	220	39.5	13.4

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 116	<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	*5580.00	105.3 PK			1.10 H	202	103.6	1.7
2	*5580.00	94.1 AV			1.10 H	202	92.4	1.7
3	11160.00	52.8 PK	74.0	-21.2	1.79 H	291	41.4	11.4
4	11160.00	39.6 AV	54.0	-14.4	1.79 H	291	28.2	11.4
5	#16740.00	52.7 PK	68.2	-15.5	1.65 H	282	37.3	15.4
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	115.9 PK			1.99 V	360	114.2	1.7
2	*5580.00	104.9 AV			1.99 V	360	103.2	1.7
3	11160.00	52.2 PK	74.0	-21.8	1.55 V	208	40.8	11.4
4	11160.00	39.3 AV	54.0	-14.7	1.55 V	208	27.9	11.4
5	#16740.00	54.2 PK	68.2	-14.0	1.94 V	219	38.8	15.4

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	101.5 PK			1.20 H	217	99.5	2.0
2	*5700.00	89.7 AV			1.20 H	217	87.7	2.0
3	#5725.00	60.2 PK	68.2	-8.0	1.22 H	222	58.2	2.0
4	11400.00	51.8 PK	74.0	-22.2	1.65 H	314	40.5	11.3
5	11400.00	39.1 AV	54.0	-14.9	1.65 H	314	27.8	11.3
6	#17100.00	52.4 PK	68.2	-15.8	1.57 H	306	36.2	16.2
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	110.4 PK			1.77 V	360	108.4	2.0
2	*5700.00	98.9 AV			1.77 V	360	96.9	2.0
3	#5725.00	67.0 PK	68.2	-1.2	1.79 V	360	65.0	2.0
4	11400.00	50.3 PK	74.0	-23.7	1.55 V	218	39.0	11.3
5	11400.00	38.0 AV	54.0	-16.0	1.55 V	218	26.7	11.3
6	#17100.00	52.7 PK	68.2	-15.5	1.92 V	208	36.5	16.2

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 149	<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	#5562.33	58.0 PK	68.2	-10.2	2.06 H	318	56.3	1.7
2	*5745.00	109.1 PK			2.06 H	318	107.1	2.0
3	*5745.00	100.8 AV			2.06 H	318	98.8	2.0
4	#6009.54	59.0 PK	68.2	-9.2	2.06 H	318	56.5	2.5
5	11490.00	52.3 PK	74.0	-21.7	1.29 H	219	40.6	11.7
6	11490.00	40.9 AV	54.0	-13.1	1.29 H	219	29.2	11.7
7	#17235.00	55.3 PK	68.2	-12.9	1.04 H	125	38.5	16.8

**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	#5565.87	58.5 PK	68.2	-9.7	1.09 V	0	56.8	1.7
2	*5745.00	113.7 PK			1.09 V	0	111.7	2.0
3	*5745.00	105.4 AV			1.09 V	0	103.4	2.0
4	#5986.33	60.5 PK	68.2	-7.7	1.09 V	0	58.0	2.5
5	11490.00	51.7 PK	74.0	-22.3	1.76 V	137	40.0	11.7
6	11490.00	40.3 AV	54.0	-13.7	1.76 V	137	28.6	11.7
7	#17235.00	54.2 PK	68.2	-14.0	1.74 V	315	37.4	16.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 157	<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	#5606.29	58.7 PK	68.2	-9.5	2.13 H	315	57.0	1.7
2	*5785.00	109.0 PK			2.13 H	315	106.9	2.1
3	*5785.00	100.6 AV			2.13 H	315	98.5	2.1
4	#5953.13	58.1 PK	68.2	-10.1	2.13 H	315	55.7	2.4
5	11570.00	52.1 PK	74.0	-21.9	1.37 H	219	40.6	11.5
6	11570.00	40.8 AV	54.0	-13.2	1.37 H	219	29.3	11.5
7	#17355.00	55.5 PK	68.2	-12.7	1.08 H	121	38.6	16.9

**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	#5629.67	58.9 PK	68.2	-9.3	1.14 V	0	57.2	1.7
2	*5785.00	115.5 PK			1.14 V	0	113.4	2.1
3	*5785.00	105.9 AV			1.14 V	0	103.8	2.1
4	#5936.21	59.0 PK	68.2	-9.2	1.14 V	0	56.6	2.4
5	11570.00	52.3 PK	74.0	-21.7	1.63 V	176	40.8	11.5
6	11570.00	41.0 AV	54.0	-13.0	1.63 V	176	29.5	11.5
7	#17355.00	55.8 PK	68.2	-12.4	1.69 V	316	38.9	16.9

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 165	<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	#5569.76	58.2 PK	68.2	-10.0	2.08 H	323	56.5	1.7
2	*5825.00	108.9 PK			2.08 H	323	106.7	2.2
3	*5825.00	100.8 AV			2.08 H	323	98.6	2.2
4	#5981.43	58.2 PK	68.2	-10.0	2.08 H	323	55.7	2.5
5	11650.00	51.9 PK	74.0	-22.1	1.33 H	232	40.8	11.1
6	11650.00	40.5 AV	54.0	-13.5	1.33 H	232	29.4	11.1
7	#17475.00	55.4 PK	68.2	-12.8	1.03 H	118	37.1	18.3

**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	#5627.13	58.6 PK	68.2	-9.6	1.11 V	0	56.8	1.8
2	*5825.00	114.7 PK			1.11 V	0	112.5	2.2
3	*5825.00	105.4 AV			1.11 V	0	103.2	2.2
4	#6024.76	61.5 PK	68.2	-6.7	1.11 V	0	59.0	2.5
5	11650.00	52.5 PK	74.0	-21.5	1.64 V	162	41.4	11.1
6	11650.00	40.9 AV	54.0	-13.1	1.64 V	162	29.8	11.1
7	#17475.00	56.1 PK	68.2	-12.1	1.69 V	287	37.8	18.3

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## 802.11ac (VHT20)

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	5150.00	53.4 PK	74.0	-20.6	1.95 H	343	51.6	1.8
2	5150.00	39.4 AV	54.0	-14.6	1.95 H	343	37.6	1.8
3	*5180.00	98.5 PK			2.04 H	346	96.8	1.7
4	*5180.00	86.3 AV			2.04 H	346	84.6	1.7
5	#10360.00	49.5 PK	68.2	-18.7	1.22 H	252	38.5	11.0
6	15540.00	52.0 PK	74.0	-22.0	1.05 H	160	41.1	10.9
7	15540.00	39.8 AV	54.0	-14.2	1.05 H	160	28.9	10.9
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	69.8 PK	74.0	-4.2	1.16 V	360	68.0	1.8
2	5150.00	53.7 AV	54.0	-0.3	1.16 V	360	51.9	1.8
3	*5180.00	112.9 PK			1.03 V	360	111.2	1.7
4	*5180.00	102.1 AV			1.03 V	360	100.4	1.7
5	#10360.00	49.9 PK	68.2	-18.3	1.75 V	161	38.9	11.0
6	15540.00	51.5 PK	74.0	-22.5	1.53 V	323	40.6	10.9
7	15540.00	39.7 AV	54.0	-14.3	1.53 V	323	28.8	10.9

## 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	5150.00	52.3 PK	74.0	-21.7	2.07 H	340	50.5	1.8
2	5150.00	39.3 AV	54.0	-14.7	2.07 H	340	37.5	1.8
3	*5200.00	103.5 PK			1.99 H	346	101.8	1.7
4	*5200.00	94.1 AV			1.99 H	346	92.4	1.7
5	#10400.00	49.6 PK	68.2	-18.6	1.10 H	229	38.3	11.3
6	15600.00	52.6 PK	74.0	-21.4	1.15 H	130	41.4	11.2
7	15600.00	40.1 AV	54.0	-13.9	1.15 H	130	28.9	11.2
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	70.9 PK	74.0	-3.1	1.08 V	360	69.1	1.8
2	5150.00	53.4 AV	54.0	-0.6	1.08 V	360	51.6	1.8
3	*5200.00	117.5 PK			1.09 V	342	115.8	1.7
4	*5200.00	108.7 AV			1.09 V	342	107.0	1.7
5	#10400.00	50.1 PK	68.2	-18.1	1.81 V	166	38.8	11.3
6	15600.00	50.8 PK	74.0	-23.2	1.56 V	341	39.6	11.2
7	15600.00	39.8 AV	54.0	-14.2	1.56 V	341	28.6	11.2

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	*5240.00	101.7 PK			2.10 H	294	100.3	1.4
2	*5240.00	90.2 AV			2.10 H	294	88.8	1.4
3	5350.00	40.6 PK	74.0	-33.4	2.08 H	286	39.1	1.5
4	5350.00	31.5 AV	54.0	-22.5	2.08 H	286	30.0	1.5
5	#10480.00	51.1 PK	68.2	-17.1	1.22 H	199	39.7	11.4
6	15720.00	52.7 PK	74.0	-21.3	1.10 H	126	42.2	10.5
7	15720.00	40.2 AV	54.0	-13.8	1.10 H	126	29.7	10.5

**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	116.2 PK			1.01 V	360	114.8	1.4
2	*5240.00	105.7 AV			1.01 V	360	104.3	1.4
3	5350.00	54.5 PK	74.0	-19.5	1.06 V	351	53.0	1.5
4	5350.00	41.0 AV	54.0	-13.0	1.06 V	351	39.5	1.5
5	#10480.00	50.3 PK	68.2	-17.9	1.66 V	163	38.9	11.4
6	15720.00	51.1 PK	74.0	-22.9	1.72 V	327	40.6	10.5
7	15720.00	40.0 AV	54.0	-14.0	1.72 V	327	29.5	10.5

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 52	<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	47.9 PK	74.0	-26.1	1.12 H	209	46.1	1.8
2	5150.00	35.3 AV	54.0	-18.7	1.12 H	209	33.5	1.8
3	*5260.00	105.5 PK			1.15 H	188	104.3	1.2
4	*5260.00	94.6 AV			1.15 H	188	93.4	1.2
5	#10520.00	50.2 PK	68.2	-18.0	1.69 H	299	38.9	11.3
6	15780.00	52.8 PK	74.0	-21.2	1.65 H	305	42.2	10.6
7	15780.00	42.2 AV	54.0	-11.8	1.65 H	305	31.6	10.6

**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	50.4 PK	74.0	-23.6	2.03 V	360	48.6	1.8
2	5150.00	38.2 AV	54.0	-15.8	2.03 V	360	36.4	1.8
3	*5260.00	117.8 PK			2.04 V	360	116.6	1.2
4	*5260.00	106.0 AV			2.04 V	360	104.8	1.2
5	#10520.00	51.8 PK	68.2	-16.4	1.53 V	211	40.5	11.3
6	15780.00	52.4 PK	74.0	-21.6	1.90 V	235	41.8	10.6
7	15780.00	41.4 AV	54.0	-12.6	1.90 V	235	30.8	10.6

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 60	<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	*5300.00	105.2 PK			1.18 H	210	103.9	1.3
2	*5300.00	94.7 AV			1.18 H	210	93.4	1.3
3	10600.00	51.0 PK	74.0	-23.0	1.74 H	329	39.8	11.2
4	10600.00	38.7 AV	54.0	-15.3	1.74 H	329	27.5	11.2
5	15900.00	52.0 PK	74.0	-22.0	1.57 H	328	41.4	10.6
6	15900.00	41.0 AV	54.0	-13.0	1.57 H	328	30.4	10.6
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	117.2 PK			2.11 V	336	115.9	1.3
2	*5300.00	105.1 AV			2.11 V	336	103.8	1.3
3	10600.00	52.1 PK	74.0	-21.9	1.59 V	240	40.9	11.2
4	10600.00	39.4 AV	54.0	-14.6	1.59 V	240	28.2	11.2
5	15900.00	53.9 PK	74.0	-20.1	1.92 V	218	43.3	10.6
6	15900.00	42.5 AV	54.0	-11.5	1.92 V	218	31.9	10.6

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	105.9 PK			1.16 H	171	104.4	1.5
2	*5320.00	93.3 AV			1.16 H	171	91.8	1.5
3	5350.00	56.4 PK	74.0	-17.6	1.01 H	188	54.9	1.5
4	5350.00	42.6 AV	54.0	-11.4	1.01 H	188	41.1	1.5
5	10640.00	51.2 PK	74.0	-22.8	1.74 H	288	40.2	11.0
6	10640.00	38.5 AV	54.0	-15.5	1.74 H	288	27.5	11.0
7	15960.00	53.0 PK	74.0	-21.0	1.66 H	314	42.1	10.9
8	15960.00	41.8 AV	54.0	-12.2	1.66 H	314	30.9	10.9
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	113.5 PK			1.87 V	265	112.0	1.5
2	*5320.00	102.9 AV			1.87 V	265	101.4	1.5
3	5350.00	72.1 PK	74.0	-1.9	1.94 V	271	70.6	1.5
4	5350.00	53.8 AV	54.0	-0.2	1.94 V	271	52.3	1.5
5	10640.00	51.6 PK	74.0	-22.4	1.58 V	221	40.6	11.0
6	10640.00	39.1 AV	54.0	-14.9	1.58 V	221	28.1	11.0
7	15960.00	53.8 PK	74.0	-20.2	1.94 V	198	42.9	10.9
8	15960.00	41.9 AV	54.0	-12.1	1.94 V	198	31.0	10.9

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.

<b>CHANNEL</b>	TX Channel 100	<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	5460.00	48.2 PK	74.0	-25.8	1.14 H	206	46.6	1.6
2	5460.00	36.3 AV	54.0	-17.7	1.14 H	206	34.7	1.6
3	#5470.00	59.6 PK	68.2	-8.6	1.09 H	203	58.0	1.6
4	*5500.00	102.3 PK			1.21 H	206	100.7	1.6
5	*5500.00	91.5 AV			1.21 H	206	89.9	1.6
6	11000.00	51.5 PK	74.0	-22.5	1.72 H	310	39.4	12.1
7	11000.00	39.0 AV	54.0	-15.0	1.72 H	310	26.9	12.1
8	#16500.00	52.9 PK	68.2	-15.3	1.60 H	317	39.5	13.4

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.2 PK	74.0	-11.8	1.89 V	232	60.6	1.6
2	5460.00	42.5 AV	54.0	-11.5	1.89 V	232	40.9	1.6
3	#5470.00	67.7 PK	68.2	-0.5	1.84 V	254	66.1	1.6
4	*5500.00	112.7 PK			1.87 V	249	111.1	1.6
5	*5500.00	102.1 AV			1.87 V	249	100.5	1.6
6	11000.00	52.8 PK	74.0	-21.2	1.62 V	217	40.7	12.1
7	11000.00	39.4 AV	54.0	-14.6	1.62 V	217	27.3	12.1
8	#16500.00	52.6 PK	68.2	-15.6	1.98 V	189	39.2	13.4

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 116	<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	*5580.00	104.8 PK			1.08 H	207	103.1	1.7
2	*5580.00	94.4 AV			1.08 H	207	92.7	1.7
3	11160.00	52.3 PK	74.0	-21.7	1.73 H	314	40.9	11.4
4	11160.00	39.4 AV	54.0	-14.6	1.73 H	314	28.0	11.4
5	#16740.00	52.2 PK	68.2	-16.0	1.51 H	297	36.8	15.4
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	116.1 PK			1.71 V	16	114.4	1.7
2	*5580.00	105.6 AV			1.71 V	16	103.9	1.7
3	11160.00	52.8 PK	74.0	-21.2	1.60 V	216	41.4	11.4
4	11160.00	39.8 AV	54.0	-14.2	1.60 V	216	28.4	11.4
5	#16740.00	51.9 PK	68.2	-16.3	1.98 V	230	36.5	15.4

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	99.8 PK			1.22 H	175	97.8	2.0
2	*5700.00	89.2 AV			1.22 H	175	87.2	2.0
3	#5725.00	60.8 PK	68.2	-7.4	1.17 H	193	58.8	2.0
4	11400.00	51.5 PK	74.0	-22.5	1.79 H	311	40.2	11.3
5	11400.00	38.9 AV	54.0	-15.1	1.79 H	311	27.6	11.3
6	#17100.00	51.7 PK	68.2	-16.5	1.57 H	332	35.5	16.2
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	110.5 PK			1.76 V	348	108.5	2.0
2	*5700.00	100.2 AV			1.76 V	348	98.2	2.0
3	#5725.00	67.5 PK	68.2	-0.7	1.71 V	351	65.5	2.0
4	11400.00	51.9 PK	74.0	-22.1	1.60 V	227	40.6	11.3
5	11400.00	39.2 AV	54.0	-14.8	1.60 V	227	27.9	11.3
6	#17100.00	52.8 PK	68.2	-15.4	1.91 V	214	36.6	16.2

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 149	<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	#5572.75	61.4 PK	68.2	-6.8	1.12 H	183	59.7	1.7
2	*5745.00	111.4 PK			1.12 H	183	109.4	2.0
3	*5745.00	99.8 AV			1.12 H	183	97.8	2.0
4	#5939.83	60.1 PK	68.2	-8.1	1.12 H	183	57.7	2.4
5	11490.00	52.3 PK	74.0	-21.7	1.23 H	204	40.6	11.7
6	11490.00	39.8 AV	54.0	-14.2	1.23 H	204	28.1	11.7
7	#17235.00	54.6 PK	68.2	-13.6	1.00 H	121	37.8	16.8

**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	#5640.98	59.5 PK	68.2	-8.7	1.19 V	298	57.8	1.7
2	*5745.00	115.5 PK			1.19 V	298	113.5	2.0
3	*5745.00	104.8 AV			1.19 V	298	102.8	2.0
4	#5991.41	61.0 PK	68.2	-7.2	1.19 V	298	58.5	2.5
5	11490.00	54.0 PK	74.0	-20.0	1.65 V	151	42.3	11.7
6	11490.00	42.0 AV	54.0	-12.0	1.65 V	151	30.3	11.7
7	#17235.00	55.9 PK	68.2	-12.3	1.68 V	310	39.1	16.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.



<b>CHANNEL</b>	TX Channel 157	<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	#5611.16	59.7 PK	68.2	-8.5	2.04 H	311	57.9	1.8
2	*5785.00	108.2 PK			2.04 H	311	106.1	2.1
3	*5785.00	97.4 AV			2.04 H	311	95.3	2.1
4	#6001.54	59.3 PK	68.2	-8.9	2.04 H	311	56.8	2.5
5	11570.00	52.9 PK	74.0	-21.1	1.25 H	216	41.4	11.5
6	11570.00	40.6 AV	54.0	-13.4	1.25 H	216	29.1	11.5
7	#17355.00	55.3 PK	68.2	-12.9	1.06 H	136	38.4	16.9
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	#5623.96	59.1 PK	68.2	-9.1	1.12 V	316	57.3	1.8
2	*5785.00	112.3 PK			1.12 V	316	110.2	2.1
3	*5785.00	102.1 AV			1.12 V	316	100.0	2.1
4	#5988.68	58.1 PK	68.2	-10.1	1.12 V	316	55.6	2.5
5	11570.00	52.6 PK	74.0	-21.4	1.65 V	159	41.1	11.5
6	11570.00	41.4 AV	54.0	-12.6	1.65 V	159	29.9	11.5
7	#17355.00	55.4 PK	68.2	-12.8	1.60 V	316	38.5	16.9

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 165	<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	#5596.33	57.2 PK	68.2	-11.0	2.02 H	323	55.5	1.7
2	*5825.00	109.6 PK			2.02 H	323	107.4	2.2
3	*5825.00	98.6 AV			2.02 H	323	96.4	2.2
4	#5939.62	57.4 PK	68.2	-10.8	2.02 H	323	55.0	2.4
5	11650.00	53.1 PK	74.0	-20.9	1.25 H	250	42.0	11.1
6	11650.00	40.3 AV	54.0	-13.7	1.25 H	250	29.2	11.1
7	#17475.00	56.9 PK	68.2	-11.3	1.08 H	121	38.6	18.3
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	#5594.44	57.4 PK	68.2	-10.8	1.10 V	301	55.7	1.7
2	*5825.00	114.4 PK			1.10 V	301	112.2	2.2
3	*5825.00	103.1 AV			1.10 V	301	100.9	2.2
4	#5990.52	58.3 PK	68.2	-9.9	1.10 V	301	55.8	2.5
5	11650.00	52.0 PK	74.0	-22.0	1.60 V	165	40.9	11.1
6	11650.00	40.5 AV	54.0	-13.5	1.60 V	165	29.4	11.1
7	#17475.00	55.4 PK	68.2	-12.8	1.61 V	302	37.1	18.3

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

## 802.11ac (VHT40)

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	52.8 PK	74.0	-21.2	1.93 H	360	51.0	1.8
2	5150.00	40.5 AV	54.0	-13.5	1.93 H	360	38.7	1.8
3	*5190.00	94.9 PK			2.00 H	359	93.2	1.7
4	*5190.00	83.8 AV			2.00 H	359	82.1	1.7
5	5350.00	39.9 PK	74.0	-34.1	1.96 H	335	38.4	1.5
6	5350.00	30.1 AV	54.0	-23.9	1.96 H	335	28.6	1.5
7	#10380.00	50.8 PK	68.2	-17.4	1.23 H	233	39.6	11.2
8	15570.00	53.5 PK	74.0	-20.5	1.03 H	140	42.4	11.1
9	15570.00	41.3 AV	54.0	-12.7	1.03 H	140	30.2	11.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.4 PK	74.0	-8.6	1.00 V	360	63.6	1.8
2	5150.00	53.0 AV	54.0	-1.0	1.00 V	360	51.2	1.8
3	*5190.00	108.6 PK			1.10 V	360	106.9	1.7
4	*5190.00	96.9 AV			1.10 V	360	95.2	1.7
5	5350.00	53.8 PK	74.0	-20.2	1.04 V	360	52.3	1.5
6	5350.00	41.3 AV	54.0	-12.7	1.04 V	360	39.8	1.5
7	#10380.00	51.0 PK	68.2	-17.2	1.82 V	181	39.8	11.2
8	15570.00	52.3 PK	74.0	-21.7	1.60 V	332	41.2	11.1
9	15570.00	40.6 AV	54.0	-13.4	1.60 V	332	29.5	11.1

## 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	*5230.00	108.6 PK			2.02 H	329	107.1	1.5
2	*5230.00	97.7 AV			2.02 H	329	96.2	1.5
3	5350.00	40.1 PK	74.0	-33.9	1.89 H	326	38.6	1.5
4	5350.00	30.3 AV	54.0	-23.7	1.89 H	326	28.8	1.5
5	#10460.00	53.5 PK	68.2	-14.7	1.29 H	230	42.2	11.3
6	15690.00	55.5 PK	74.0	-18.5	1.02 H	124	45.0	10.5
7	15690.00	44.5 AV	54.0	-9.5	1.02 H	124	34.0	10.5
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	112.0 PK			1.14 V	360	110.5	1.5
2	*5230.00	100.8 AV			1.14 V	360	99.3	1.5
3	5350.00	53.4 PK	74.0	-20.6	1.06 V	356	51.9	1.5
4	5350.00	41.8 AV	54.0	-12.2	1.06 V	356	40.3	1.5
5	#10460.00	51.0 PK	68.2	-17.2	1.75 V	182	39.7	11.3
6	15690.00	51.6 PK	74.0	-22.4	1.64 V	342	41.1	10.5
7	15690.00	39.9 AV	54.0	-14.1	1.64 V	342	29.4	10.5

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	5150.00	48.2 PK	74.0	-25.8	1.13 H	181	46.4	1.8
2	5150.00	36.0 AV	54.0	-18.0	1.13 H	181	34.2	1.8
3	*5270.00	104.6 PK			1.14 H	203	103.4	1.2
4	*5270.00	92.5 AV			1.14 H	203	91.3	1.2
5	5350.00	57.6 PK	74.0	-16.4	1.09 H	210	56.1	1.5
6	5350.00	43.7 AV	54.0	-10.3	1.09 H	210	42.2	1.5
7	#10540.00	52.1 PK	68.2	-16.1	1.79 H	313	40.8	11.3
8	15810.00	53.6 PK	74.0	-20.4	1.63 H	337	42.9	10.7
9	15810.00	43.0 AV	54.0	-11.0	1.63 H	337	32.3	10.7
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	58.6 PK	74.0	-15.4	1.84 V	359	56.8	1.8
2	5150.00	47.1 AV	54.0	-6.9	1.84 V	359	45.3	1.8
3	*5270.00	113.1 PK			1.84 V	359	111.9	1.2
4	*5270.00	102.6 AV			1.84 V	359	101.4	1.2
5	5350.00	66.7 PK	74.0	-7.3	1.83 V	331	65.2	1.5
6	5350.00	52.5 AV	54.0	-1.5	1.83 V	331	51.0	1.5
7	#10540.00	52.3 PK	68.2	-15.9	1.60 V	216	41.0	11.3
8	15810.00	53.5 PK	74.0	-20.5	1.91 V	212	42.8	10.7
9	15810.00	42.3 AV	54.0	-11.7	1.91 V	212	31.6	10.7

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 62	<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	*5310.00	97.2 PK			1.12 H	174	95.8	1.4
2	*5310.00	86.4 AV			1.12 H	174	85.0	1.4
3	5350.00	57.0 PK	74.0	-17.0	1.13 H	217	55.5	1.5
4	5350.00	43.0 AV	54.0	-11.0	1.13 H	217	41.5	1.5
5	10620.00	52.2 PK	74.0	-21.8	1.79 H	303	41.2	11.0
6	10620.00	39.9 AV	54.0	-14.1	1.79 H	303	28.9	11.0
7	15930.00	53.0 PK	74.0	-21.0	1.46 H	295	42.2	10.8
8	15930.00	41.9 AV	54.0	-12.1	1.46 H	295	31.1	10.8
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	107.6 PK			1.84 V	0	106.2	1.4
2	*5310.00	97.6 AV			1.84 V	0	96.2	1.4
3	5350.00	71.1 PK	74.0	-2.9	1.86 V	8	69.6	1.5
4	5350.00	53.4 AV	54.0	-0.6	1.86 V	8	51.9	1.5
5	10620.00	52.8 PK	74.0	-21.2	1.51 V	210	41.8	11.0
6	10620.00	40.0 AV	54.0	-14.0	1.51 V	210	29.0	11.0
7	15930.00	53.6 PK	74.0	-20.4	1.87 V	219	42.8	10.8
8	15930.00	42.2 AV	54.0	-11.8	1.87 V	219	31.4	10.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.

<b>CHANNEL</b>	TX Channel 102	<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	5460.00	47.9 PK	74.0	-26.1	1.11 H	208	46.3	1.6
2	5460.00	36.8 AV	54.0	-17.2	1.11 H	208	35.2	1.6
3	#5470.00	60.3 PK	68.2	-7.9	1.13 H	179	58.7	1.6
4	*5510.00	96.5 PK			1.13 H	191	94.9	1.6
5	*5510.00	86.0 AV			1.13 H	191	84.4	1.6
6	11020.00	51.1 PK	74.0	-22.9	1.81 H	318	39.2	11.9
7	11020.00	39.1 AV	54.0	-14.9	1.81 H	318	27.2	11.9
8	#16530.00	53.6 PK	68.2	-14.6	1.60 H	342	39.8	13.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.6 PK	74.0	-11.4	1.83 V	354	61.0	1.6
2	5460.00	49.1 AV	54.0	-4.9	1.83 V	354	47.5	1.6
3	#5470.00	67.6 PK	68.2	-0.6	1.86 V	344	66.0	1.6
4	*5510.00	107.3 PK			1.88 V	360	105.7	1.6
5	*5510.00	97.1 AV			1.88 V	360	95.5	1.6
6	11020.00	51.9 PK	74.0	-22.1	1.59 V	260	40.0	11.9
7	11020.00	38.9 AV	54.0	-15.1	1.59 V	260	27.0	11.9
8	#16530.00	53.6 PK	68.2	-14.6	1.87 V	217	39.8	13.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 110	<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	5460.00	48.2 PK	74.0	-25.8	1.21 H	223	46.6	1.6
2	5460.00	37.0 AV	54.0	-17.0	1.21 H	223	35.4	1.6
3	#5470.00	59.5 PK	68.2	-8.7	1.22 H	199	57.9	1.6
4	*5550.00	105.6 PK			1.21 H	223	103.9	1.7
5	*5550.00	93.4 AV			1.21 H	223	91.7	1.7
6	11100.00	52.3 PK	74.0	-21.7	1.72 H	292	40.7	11.6
7	11100.00	39.1 AV	54.0	-14.9	1.72 H	292	27.5	11.6
8	#16650.00	52.8 PK	68.2	-15.4	1.50 H	314	38.1	14.7

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	63.5 PK	74.0	-10.5	1.92 V	356	61.9	1.6
2	5460.00	50.0 AV	54.0	-4.0	1.92 V	356	48.4	1.6
3	#5470.00	67.2 PK	68.2	-1.0	1.93 V	360	65.6	1.6
4	*5550.00	114.9 PK			1.92 V	356	113.2	1.7
5	*5550.00	103.0 AV			1.92 V	356	101.3	1.7
6	11100.00	51.5 PK	74.0	-22.5	1.50 V	214	39.9	11.6
7	11100.00	39.2 AV	54.0	-14.8	1.50 V	214	27.6	11.6
8	#16650.00	54.0 PK	68.2	-14.2	1.82 V	200	39.3	14.7

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
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	98.7 PK			1.11 H	187	97.0	1.7
2	*5670.00	88.8 AV			1.11 H	187	87.1	1.7
3	#5725.00	60.6 PK	68.2	-7.6	1.13 H	205	58.6	2.0
4	11340.00	50.6 PK	74.0	-23.4	1.73 H	307	39.0	11.6
5	11340.00	38.5 AV	54.0	-15.5	1.73 H	307	26.9	11.6
6	#17010.00	53.4 PK	68.2	-14.8	1.66 H	343	37.4	16.0
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	110.5 PK			1.93 V	332	108.8	1.7
2	*5670.00	100.1 AV			1.93 V	332	98.4	1.7
3	#5725.00	68.1 PK	68.2	-0.1	1.87 V	346	66.1	2.0
4	11340.00	52.0 PK	74.0	-22.0	1.61 V	232	40.4	11.6
5	11340.00	39.2 AV	54.0	-14.8	1.61 V	232	27.6	11.6
6	#17010.00	53.4 PK	68.2	-14.8	1.85 V	238	37.4	16.0

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 151	<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	#5639.98	62.4 PK	68.2	-5.8	2.14 H	308	60.7	1.7
2	*5755.00	109.0 PK			2.14 H	308	107.0	2.0
3	*5755.00	97.9 AV			2.14 H	308	95.9	2.0
4	#5958.71	58.4 PK	68.2	-9.8	2.14 H	308	56.0	2.4
5	11510.00	52.8 PK	74.0	-21.2	1.19 H	200	41.0	11.8
6	11510.00	40.4 AV	54.0	-13.6	1.19 H	200	28.6	11.8
7	#17265.00	55.8 PK	68.2	-12.4	1.00 H	122	39.0	16.8
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	#5647.15	62.5 PK	68.2	-5.7	1.16 V	360	60.8	1.7
2	*5755.00	112.7 PK			1.16 V	360	110.7	2.0
3	*5755.00	100.7 AV			1.16 V	360	98.7	2.0
4	#5962.92	58.5 PK	68.2	-9.7	1.16 V	360	56.1	2.4
5	11510.00	51.7 PK	74.0	-22.3	1.71 V	147	39.9	11.8
6	11510.00	40.2 AV	54.0	-13.8	1.71 V	147	28.4	11.8
7	#17265.00	56.7 PK	68.2	-11.5	1.85 V	292	39.9	16.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 159	<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	#5649.52	60.5 PK	68.2	-7.7	2.10 H	334	58.8	1.7
2	*5795.00	107.9 PK			2.10 H	334	105.7	2.2
3	*5795.00	97.1 AV			2.10 H	334	94.9	2.2
4	#5938.70	62.5 PK	68.2	-5.7	2.10 H	334	60.1	2.4
5	11590.00	52.6 PK	74.0	-21.4	1.15 H	246	41.2	11.4
6	11590.00	40.5 AV	54.0	-13.5	1.15 H	246	29.1	11.4
7	#17385.00	55.3 PK	68.2	-12.9	1.05 H	134	38.3	17.0

**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	#5644.72	58.1 PK	68.2	-10.1	1.10 V	360	56.4	1.7
2	*5795.00	113.6 PK			1.10 V	360	111.4	2.2
3	*5795.00	101.5 AV			1.10 V	360	99.3	2.2
4	#5924.98	60.7 PK	68.2	-7.5	1.10 V	360	58.4	2.3
5	11590.00	52.8 PK	74.0	-21.2	1.73 V	180	41.4	11.4
6	11590.00	41.0 AV	54.0	-13.0	1.73 V	180	29.6	11.4
7	#17385.00	54.6 PK	68.2	-13.6	1.65 V	304	37.6	17.0

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

**802.11ac (VHT80)**

<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	52.3 PK	74.0	-21.7	1.96 H	322	50.5	1.8
2	5150.00	39.5 AV	54.0	-14.5	1.96 H	322	37.7	1.8
3	*5210.00	91.1 PK			1.92 H	328	89.4	1.7
4	*5210.00	80.4 AV			1.92 H	328	78.7	1.7
5	5350.00	40.4 PK	74.0	-33.6	1.97 H	335	38.9	1.5
6	5350.00	30.9 AV	54.0	-23.1	1.97 H	335	29.4	1.5
7	#10420.00	49.2 PK	68.2	-19.0	1.37 H	212	38.0	11.2
8	15630.00	52.8 PK	74.0	-21.2	1.08 H	142	41.9	10.9
9	15630.00	40.6 AV	54.0	-13.4	1.08 H	142	29.7	10.9
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	67.6 PK	74.0	-6.4	1.16 V	360	65.8	1.8
2	5150.00	52.9 AV	54.0	-1.1	1.16 V	360	51.1	1.8
3	*5210.00	103.9 PK			1.15 V	360	102.2	1.7
4	*5210.00	91.3 AV			1.15 V	360	89.6	1.7
5	5350.00	54.5 PK	74.0	-19.5	1.10 V	355	53.0	1.5
6	5350.00	43.0 AV	54.0	-11.0	1.10 V	355	41.5	1.5
7	#10420.00	49.2 PK	68.2	-19.0	1.56 V	163	38.0	11.2
8	15630.00	50.6 PK	74.0	-23.4	1.62 V	306	39.7	10.9
9	15630.00	39.2 AV	54.0	-14.8	1.62 V	306	28.3	10.9

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 58	<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	49.0 PK	74.0	-25.0	1.06 H	196	47.2	1.8
2	5150.00	36.6 AV	54.0	-17.4	1.06 H	196	34.8	1.8
3	*5290.00	92.5 PK			1.09 H	215	91.2	1.3
4	*5290.00	82.8 AV			1.09 H	215	81.5	1.3
5	5350.00	58.2 PK	74.0	-15.8	1.07 H	229	56.7	1.5
6	5350.00	43.8 AV	54.0	-10.2	1.07 H	229	42.3	1.5
7	#10580.00	52.0 PK	68.2	-16.2	1.73 H	320	40.8	11.2
8	15870.00	53.5 PK	74.0	-20.5	1.63 H	326	42.8	10.7
9	15870.00	42.5 AV	54.0	-11.5	1.63 H	326	31.8	10.7
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	1.92 V	360	57.7	1.8
2	5150.00	47.1 AV	54.0	-6.9	1.92 V	360	45.3	1.8
3	*5290.00	103.0 PK			1.92 V	360	101.7	1.3
4	*5290.00	94.2 AV			1.92 V	360	92.9	1.3
5	5350.00	65.7 PK	74.0	-8.3	1.89 V	360	64.2	1.5
6	5350.00	53.7 AV	54.0	-0.3	1.89 V	360	52.2	1.5
7	#10580.00	51.5 PK	68.2	-16.7	1.59 V	257	40.3	11.2
8	15870.00	53.6 PK	74.0	-20.4	1.88 V	195	42.9	10.7
9	15870.00	42.2 AV	54.0	-11.8	1.88 V	195	31.5	10.7

#### 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 106	<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	5460.00	49.0 PK	74.0	-25.0	1.16 H	212	47.4	1.6
2	5460.00	37.1 AV	54.0	-16.9	1.16 H	212	35.5	1.6
3	#5470.00	47.6 PK	68.2	-20.6	1.18 H	215	46.0	1.6
4	*5530.00	94.1 PK			1.16 H	212	92.4	1.7
5	*5530.00	84.6 AV			1.16 H	212	82.9	1.7
6	#5725.00	56.1 PK	68.2	-12.1	1.09 H	232	54.1	2.0
7	11060.00	52.3 PK	74.0	-21.7	1.73 H	285	40.6	11.7
8	11060.00	39.2 AV	54.0	-14.8	1.73 H	285	27.5	11.7
9	#16590.00	52.1 PK	68.2	-16.1	1.69 H	284	37.8	14.3

**ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M**

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.8 PK	74.0	-11.2	1.97 V	357	61.2	1.6
2	5460.00	48.4 AV	54.0	-5.6	1.97 V	357	46.8	1.6
3	#5470.00	67.4 PK	68.2	-0.8	1.88 V	360	65.8	1.6
4	*5530.00	105.3 PK			1.97 V	357	103.6	1.7
5	*5530.00	96.0 AV			1.97 V	357	94.3	1.7
6	#5725.00	65.2 PK	68.2	-3.0	1.99 V	360	63.2	2.0
7	11060.00	51.9 PK	74.0	-22.1	1.52 V	239	40.2	11.7
8	11060.00	39.4 AV	54.0	-14.6	1.52 V	239	27.7	11.7
9	#16590.00	53.1 PK	68.2	-15.1	1.81 V	224	38.8	14.3

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

<b>CHANNEL</b>	TX Channel 155	<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	#5649.22	64.6 PK	68.2	-3.6	1.92 H	329	62.9	1.7
2	*5775.00	100.5 PK			1.92 H	329	98.4	2.1
3	*5775.00	91.5 AV			1.92 H	329	89.4	2.1
4	#5937.77	63.9 PK	68.2	-4.3	1.92 H	329	61.5	2.4
5	11550.00	52.6 PK	74.0	-21.4	1.23 H	202	41.0	11.6
6	11550.00	40.4 AV	54.0	-13.6	1.23 H	202	28.8	11.6
7	#17325.00	54.9 PK	68.2	-13.3	1.04 H	113	38.1	16.8

**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	#5647.96	65.6 PK	68.2	-2.6	1.03 V	352	63.9	1.7
2	*5775.00	106.7 PK			1.03 V	352	104.6	2.1
3	*5775.00	97.8 AV			1.03 V	352	95.7	2.1
4	#5926.85	67.7 PK	68.2	-0.5	1.03 V	352	65.4	2.3
5	11550.00	51.4 PK	74.0	-22.6	1.57 V	178	39.8	11.6
6	11550.00	40.2 AV	54.0	-13.8	1.57 V	178	28.6	11.6
7	#17325.00	56.5 PK	68.2	-11.7	1.84 V	327	39.7	16.8

**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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit.
5. " \* ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

# Below 1GHz Data:

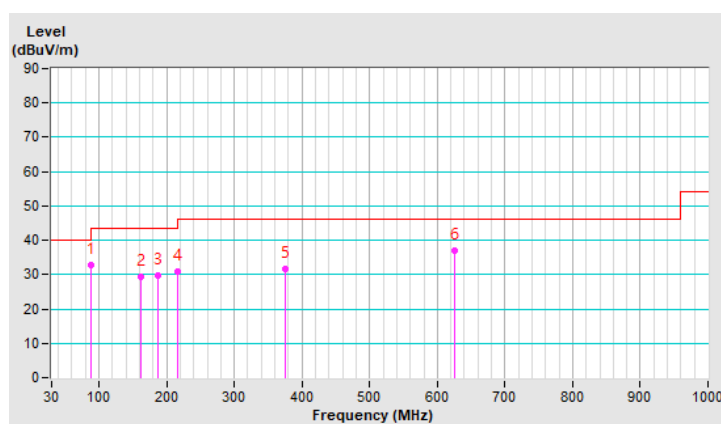
## 802.11a

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 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	87.81	32.6 QP	40.0	-7.4	2.03 H	84	51.2	-18.6
2	162.14	29.5 QP	43.5	-14.0	1.75 H	70	42.5	-13.0
3	187.36	29.8 QP	43.5	-13.7	1.46 H	148	45.1	-15.3
4	215.36	30.9 QP	43.5	-12.6	1.45 H	91	46.5	-15.6
5	375.59	31.8 QP	46.0	-14.2	1.24 H	105	42.4	-10.6
6	625.76	36.9 QP	46.0	-9.1	1.52 H	82	41.9	-5.0

### 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



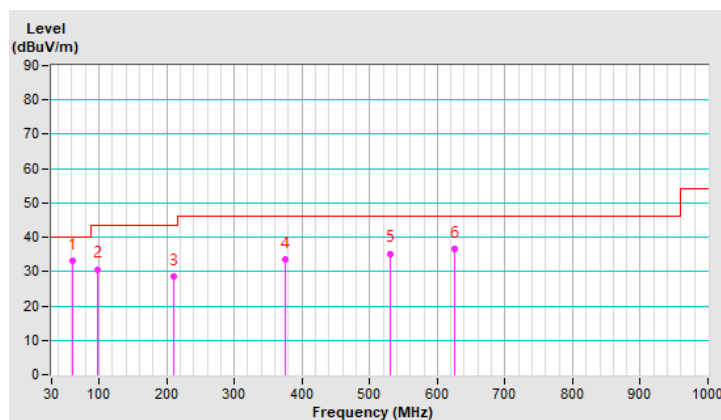


<b>CHANNEL</b>	TX Channel 157	<b>DETECTOR FUNCTION</b>	Quasi-Peak (QP)
<b>FREQUENCY RANGE</b>	9kHz ~ 1GHz		

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	61.09	33.0 QP	40.0	-7.0	1.20 V	103	47.1	-14.1
2	98.66	30.7 QP	43.5	-12.8	1.69 V	131	48.3	-17.6
3	210.61	28.6 QP	43.5	-14.9	1.36 V	210	44.3	-15.7
4	375.71	33.5 QP	46.0	-12.5	1.74 V	205	44.1	-10.6
5	529.60	35.3 QP	46.0	-10.7	1.63 V	91	42.5	-7.2
6	624.81	36.6 QP	46.0	-9.4	1.43 V	92	41.6	-5.0

#### 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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



## 4.2 Transmit Power Measurement

### 4.2.1 Limits of Transmit Power Measurement

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

\*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for  $N_{ANT} \leq 4$ ;

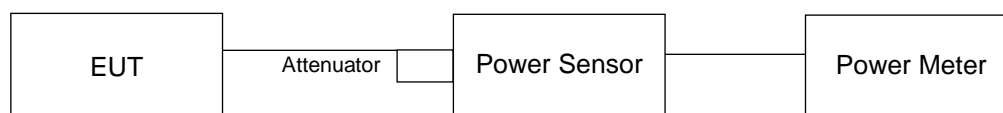
Array Gain = 0 dB (i.e., no array gain) for channel widths  $\geq 40$  MHz for any  $N_{ANT}$ ;

Array Gain =  $5 \log(N_{ANT}/N_{SS})$  dB or 3 dB, whichever is less for 20-MHz channel widths with  $N_{ANT} \geq 5$ .

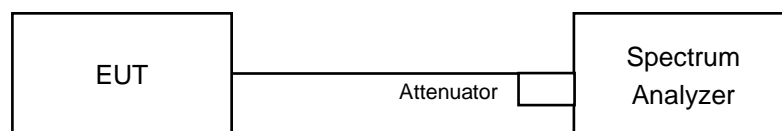
For power measurements on all other devices: Array Gain =  $10 \log(N_{ANT}/N_{SS})$  dB.

### 4.2.2 Test Setup

#### FOR POWER OUTPUT MEASUREMENT



#### FOR 26dB OCCUPIED BANDWIDTH



### 4.2.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

#### 4.2.4 Test Procedure

##### For Average Power 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%.

#### 4.2.5 Deviation from Test Standard

No deviation.

#### 4.2.6 EUT Operating Condition

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

#### 4.2.7 Test Result

##### CDD Mode

##### 802.11a

##### Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	17.90	17.64	119.736	20.78	30.00	Pass
40	5200	18.69	18.48	144.43	21.60	30.00	Pass
48	5240	19.01	18.39	148.64	21.72	30.00	Pass
52	5260	19.23	19.11	165.223	22.18	24.00	Pass
60	5300	19.32	18.99	164.757	22.17	24.00	Pass
64	5320	17.81	17.41	115.476	20.62	24.00	Pass
100	5500	17.34	17.49	110.305	20.43	24.00	Pass
116	5580	18.85	19.11	158.206	21.99	24.00	Pass
140	5700	15.03	14.34	59.006	17.71	24.00	Pass
149	5745	21.80	22.04	311.312	24.93	30.00	Pass
157	5785	21.85	22.20	319.068	25.04	30.00	Pass
165	5825	21.89	22.48	331.536	25.21	30.00	Pass

### 26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	35.67	36.59
60	5300	34.88	34.88
64	5320	25.83	25.57
100	5500	25.65	25.37
116	5580	34.92	34.60
140	5700	24.32	22.35

**Note: For U\_NII-2A, U\_NII-2C Band output power limitation is determined based on 26dBc bandwidth**

Power Limit = 11dBm + 10logB < U_NII-2A, U_NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	35.67	26.52 > 24
60	5300	34.88	26.42 > 24
64	5320	25.57	25.07 > 24
100	5500	25.37	25.04 > 24
116	5580	34.60	26.39 > 24
140	5700	22.35	24.49 > 24

## 802.11ac (VHT20)

### Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	17.72	17.62	116.966	20.68	30.00	Pass
40	5200	18.87	18.55	148.704	21.72	30.00	Pass
48	5240	18.99	18.38	148.115	21.71	30.00	Pass
52	5260	19.22	19.02	163.359	22.13	24.00	Pass
60	5300	19.31	18.99	164.56	22.16	24.00	Pass
64	5320	17.53	17.25	109.712	20.40	24.00	Pass
100	5500	16.13	16.18	82.515	19.17	24.00	Pass
116	5580	18.77	19.24	159.282	22.02	24.00	Pass
140	5700	13.93	13.96	49.606	16.96	24.00	Pass
149	5745	21.81	22.07	312.77	24.95	30.00	Pass
157	5785	21.88	22.23	321.279	25.07	30.00	Pass
165	5825	21.90	22.32	325.49	25.13	30.00	Pass

### 26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	42.61	42.15
60	5300	38.10	39.99
64	5320	26.76	25.64
100	5500	24.31	23.33
116	5580	35.86	37.07
140	5700	23.90	23.21

**Note: For U\_NII-2A, U\_NII-2C Band output power limitation is determined based on 26dBc bandwidth**

Power Limit = 11dBm + 10logB < U_NII-2A, U_NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	42.15	27.24 > 24
60	5300	38.10	26.8 > 24
64	5320	25.64	25.08 > 24
100	5500	23.33	24.67 > 24
116	5580	35.86	26.54 > 24
140	5700	23.21	24.65 > 24

## 802.11ac (VHT40)

### Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	15.94	15.82	77.458	18.89	30.00	Pass
46	5230	19.84	18.69	170.344	22.31	30.00	Pass
54	5270	20.19	20.16	208.225	23.19	24.00	Pass
62	5310	15.07	14.48	60.191	17.80	24.00	Pass
102	5510	14.90	15.10	63.262	18.01	24.00	Pass
110	5550	19.68	20.31	200.296	23.02	24.00	Pass
134	5670	17.38	17.28	108.158	20.34	24.00	Pass
151	5755	21.86	22.25	321.342	25.07	30.00	Pass
159	5795	21.51	22.20	307.538	24.88	30.00	Pass

### 26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	85.90	85.44
62	5310	48.64	47.17
102	5510	46.58	46.79
110	5550	84.63	86.16
134	5670	70.85	70.41

**Note: For U\_NII-2A, U\_NII-2C Band output power limitation is determined based on 26dBc bandwidth**

Power Limit = 11dBm + 10logB < U_NII-2A, U_NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	85.44	30.31 > 24
62	5310	47.17	27.73 > 24
102	5510	46.58	27.68 > 24
110	5550	84.63	30.27 > 24
134	5670	70.41	29.47 > 24



## 802.11ac (VHT80)

### Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	14.28	14.01	51.969	17.16	30.00	Pass
58	5290	12.74	13.31	40.222	16.04	24.00	Pass
106	5530	13.91	13.96	49.493	16.95	24.00	Pass
155	5775	19.50	20.37	198.018	22.97	30.00	Pass

### 26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	90.99	89.27
106	5530	90.65	88.71

**Note: For U\_NII-2A, U\_NII-2C Band output power limitation is determined based on 26dBc bandwidth**

Power Limit = 11dBm + 10logB < U_NII-2A, U_NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	89.27	30.5 > 24
106	5530	88.71	30.47 > 24

## Beamforming Mode

### 802.11ac (VHT20)

#### Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	17.40	17.36	109.404	20.39	28.43	Pass
40	5200	18.73	18.34	142.879	21.55	28.43	Pass
48	5240	18.74	18.18	140.583	21.48	28.43	Pass
52	5260	19.05	19.16	162.767	22.12	22.43	Pass
60	5300	18.93	19.27	162.691	22.11	22.43	Pass
64	5320	17.63	17.49	114.048	20.57	22.43	Pass
100	5500	16.00	16.20	81.498	19.11	22.36	Pass
116	5580	18.53	19.27	155.813	21.93	22.36	Pass
140	5700	13.61	14.21	49.324	16.93	22.36	Pass
149	5745	21.83	22.21	318.746	25.03	28.55	Pass
157	5785	21.79	22.39	324.388	25.11	28.55	Pass
165	5825	21.73	22.53	327.997	25.16	28.55	Pass

#### Note:

1. For U-NII-1 & U-NII-2A band: Directional gain =  $4.56\text{dBi} + 10\log(2) = 7.57\text{dBi} > 6\text{dBi}$ , therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(7.57-6)".
2. For U-NII-2C band: Directional gain =  $4.63\text{dBi} + 10\log(2) = 7.64\text{dBi} > 6\text{dBi}$ , therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(7.64-6)".
3. For U-NII-3 band: Directional gain =  $4.44\text{dBi} + 10\log(2) = 7.45\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30-(7.45-6) = 28.55\text{dBm}$ .

#### 26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	42.61	42.15
60	5300	38.10	39.99
64	5320	26.76	25.64
100	5500	24.31	23.33
116	5580	35.86	37.07
140	5700	23.90	23.21

**Note: For U\_NII-2A, U\_NII-2C Band output power limitation is determined based on 26dBc bandwidth**

Power Limit = 11dBm + 10logB < U_NII-2A, U_NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	42.15	27.24 > 24
60	5300	38.10	26.8 > 24
64	5320	25.64	25.08 > 24
100	5500	23.33	24.67 > 24
116	5580	35.86	26.54 > 24
140	5700	23.21	24.65 > 24

## 802.11ac (VHT40)

### Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	15.26	15.53	69.301	18.41	28.43	Pass
46	5230	18.86	17.97	139.574	21.45	28.43	Pass
54	5270	18.82	18.82	152.416	21.83	22.43	Pass
62	5310	15.04	14.10	57.619	17.61	22.43	Pass
102	5510	14.92	15.05	63.035	18.00	22.36	Pass
110	5550	18.39	18.99	148.274	21.71	22.36	Pass
134	5670	17.50	17.55	113.119	20.54	22.36	Pass
151	5755	21.97	15.48	192.716	22.85	28.55	Pass
159	5795	21.83	18.59	224.682	23.52	28.55	Pass

#### Note:

1. For U-NII-1 & U-NII-2A band: Directional gain =  $4.56\text{dBi} + 10\log(2) = 7.57\text{dBi} > 6\text{dBi}$ , therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(7.57-6)".
2. For U-NII-2C band: Directional gain =  $4.63\text{dBi} + 10\log(2) = 7.64\text{dBi} > 6\text{dBi}$ , therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(7.64-6)".
3. For U-NII-3 band: Directional gain =  $4.44\text{dBi} + 10\log(2) = 7.45\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30 - (7.45 - 6) = 28.55\text{dBm}$ .

### 26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	85.90	85.44
62	5310	48.64	47.17
102	5510	46.58	46.79
110	5550	84.63	86.16
134	5670	70.85	70.41

**Note: For U\_NII-2A, U\_NII-2C Band output power limitation is determined based on 26dBc bandwidth**

Power Limit = 11dBm + 10logB < U_NII-2A, U_NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	85.44	30.31 > 24
62	5310	47.17	27.73 > 24
102	5510	46.58	27.68 > 24
110	5550	84.63	30.27 > 24
134	5670	70.41	29.47 > 24

## 802.11ac (VHT80)

### Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	14.96	14.69	60.777	17.84	28.43	Pass
58	5290	13.06	12.66	38.68	15.87	22.43	Pass
106	5530	14.13	14.15	51.884	17.15	22.36	Pass
155	5775	19.66	20.58	206.758	23.15	28.55	Pass

#### Note:

1. For U-NII-1 & U-NII-2A band: Directional gain =  $4.56\text{dBi} + 10\log(2) = 7.57\text{dBi} > 6\text{dBi}$ , therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(7.57-6)".
2. For U-NII-2C band: Directional gain =  $4.63\text{dBi} + 10\log(2) = 7.64\text{dBi} > 6\text{dBi}$ , therefore the limit needs to reduce, so the power limit shall be reduced to "Determined Conducted Limit-(7.64-6)".
3. For U-NII-3 band: Directional gain =  $4.44\text{dBi} + 10\log(2) = 7.45\text{dBi} > 6\text{dBi}$ , so the power limit shall be reduced to  $30-(7.45-6) = 28.55\text{dBm}$ .

### 26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	90.99	89.27
106	5530	90.65	88.71

**Note: For U\_NII-2A, U\_NII-2C Band output power limitation is determined based on 26dBc bandwidth**

Power Limit = $11\text{dBm} + 10\log B < \text{U\_NII-2A, U\_NII-2C} >$			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	89.27	$30.5 > 24$
106	5530	88.71	$30.47 > 24$

## 5 Pictures of Test Arrangements

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

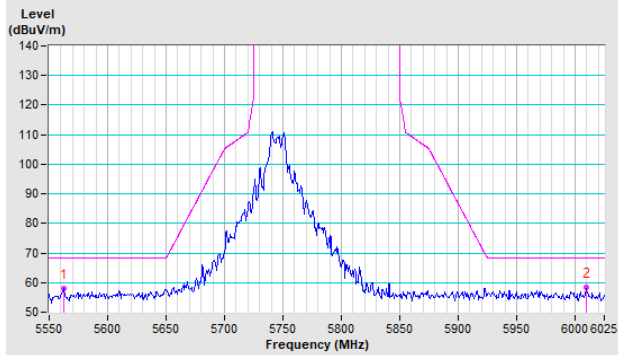
## Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

### Antenna Set 2

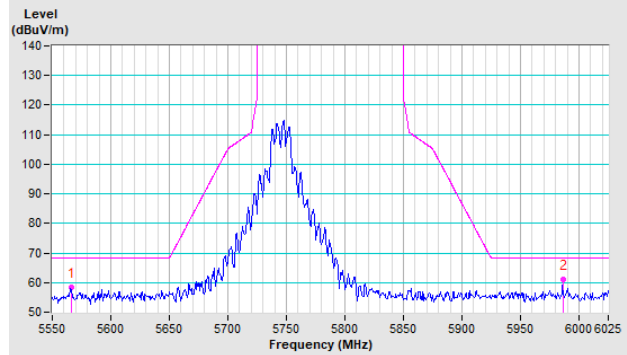
802.11a

#### CH 149 5745 MHz

##### Horizontal

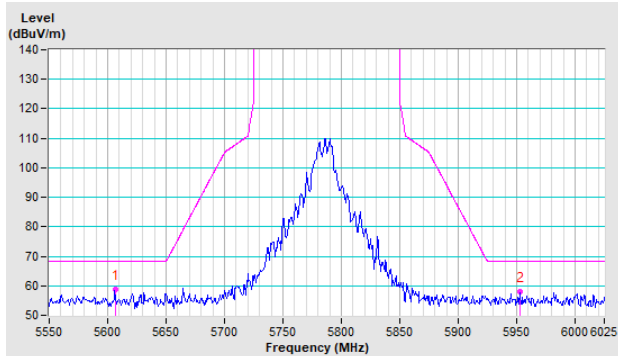


##### Vertical

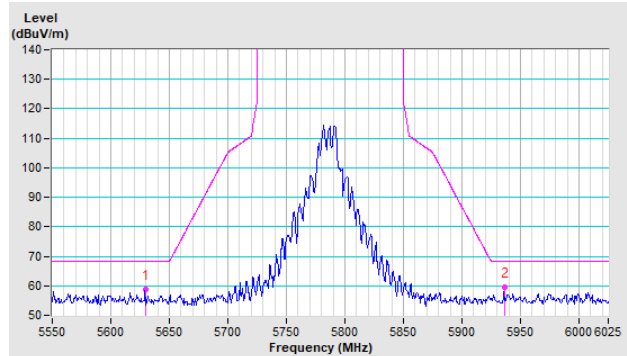


#### CH 157 5785 MHz

##### Horizontal

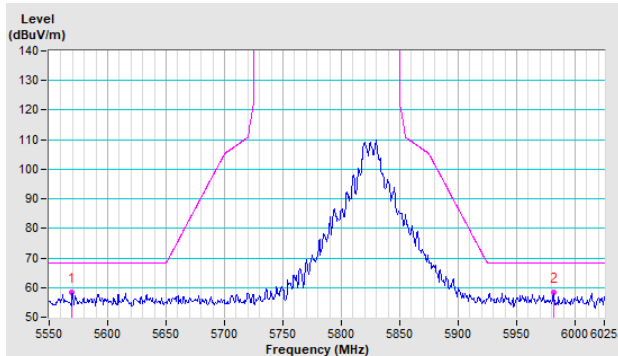


##### Vertical

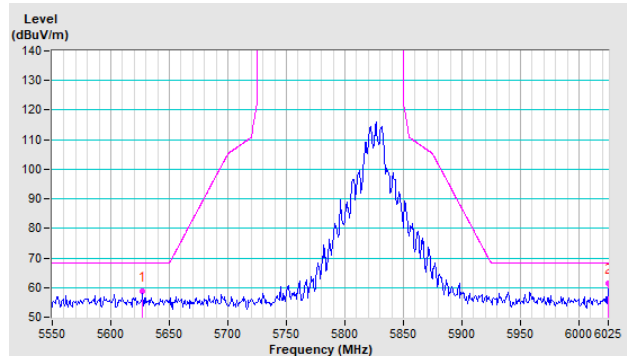


#### CH 165 5825 MHz

##### Horizontal



##### Vertical

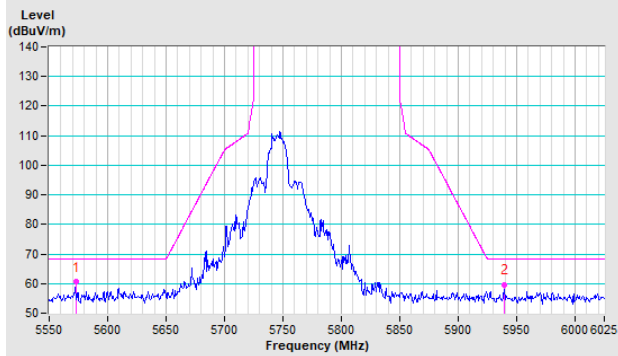




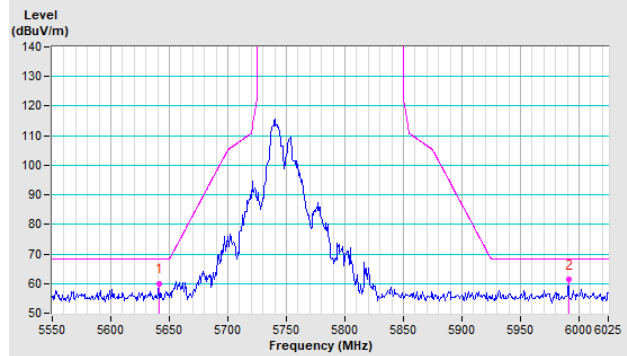
## 802.11ac (VHT20)

### CH 149 5745 MHz

Horizontal

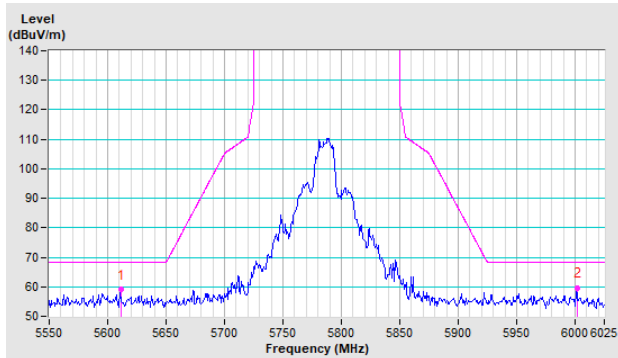


Vertical

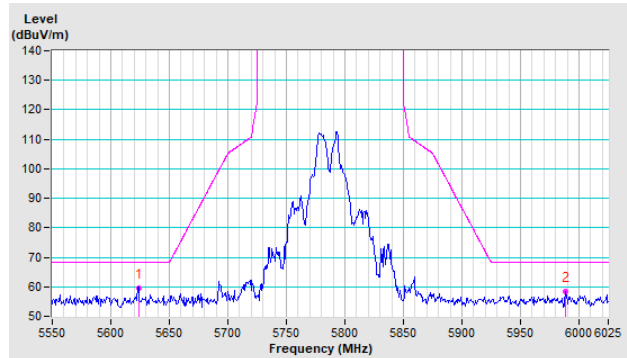


### CH 157 5785 MHz

Horizontal

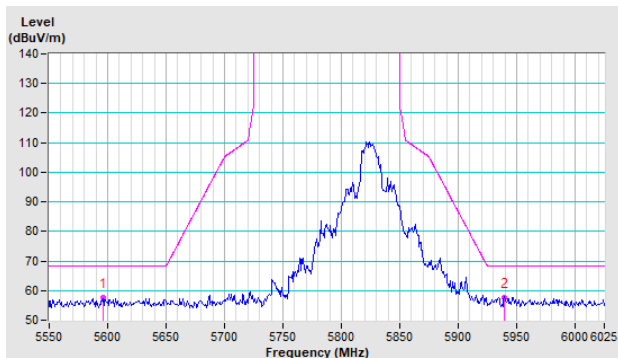


Vertical

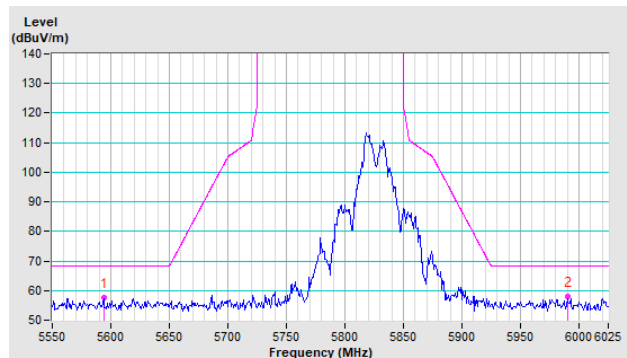


### CH 165 5825 MHz

Horizontal



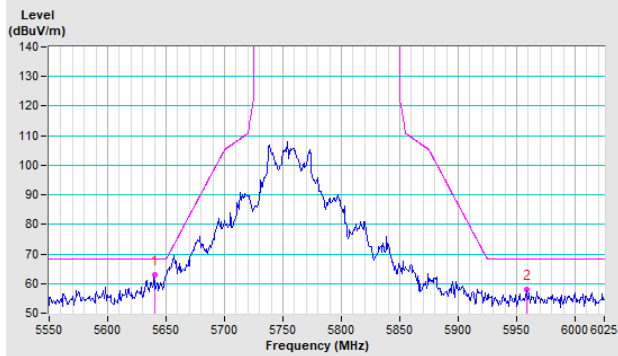
Vertical



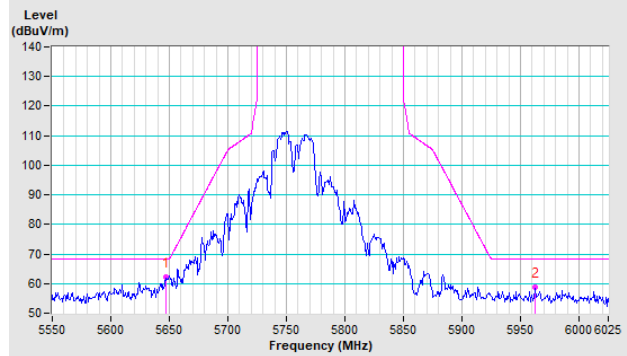
## 802.11ac (VHT40)

CH 151 5755 MHz

Horizontal

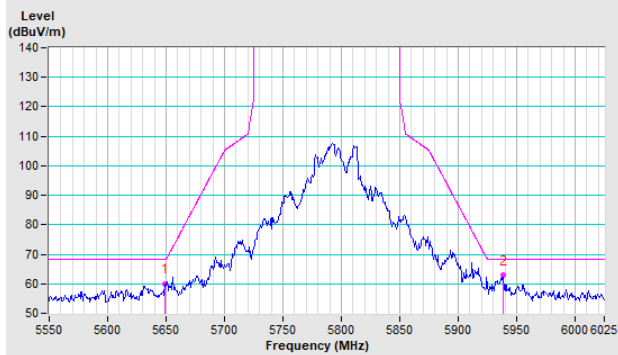


Vertical

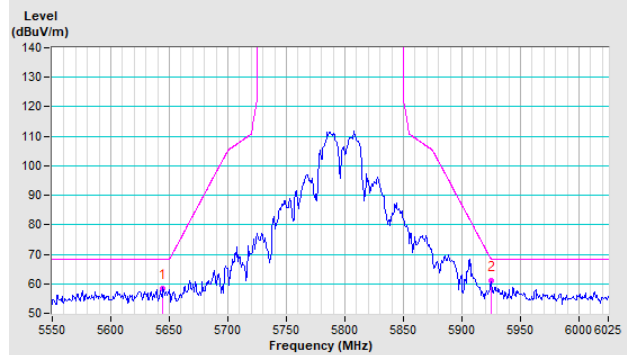


CH 159 5795 MHz

Horizontal



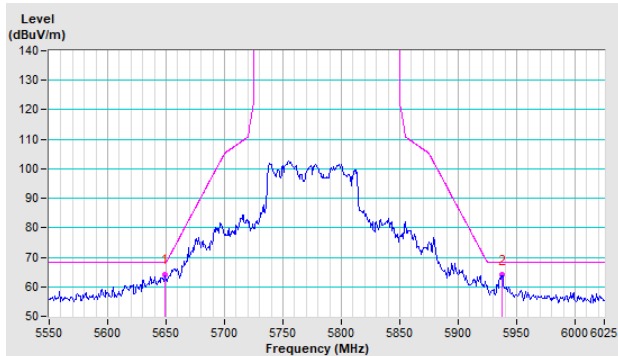
Vertical



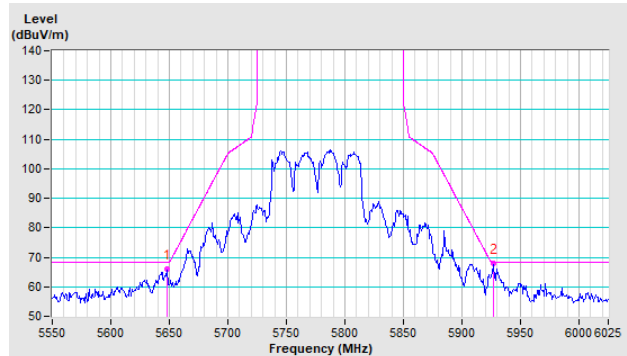
## 802.11ac (VHT80)

CH 155 5775 MHz

Horizontal



Vertical

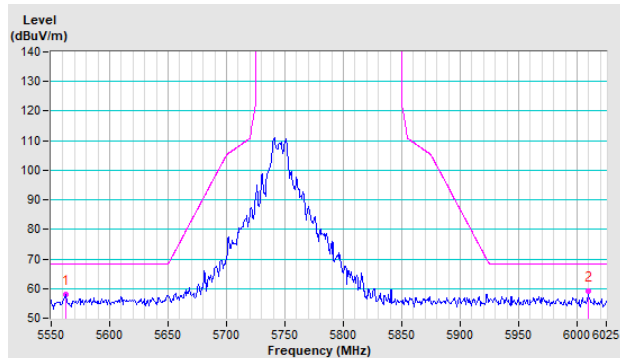


## Antenna Set 3

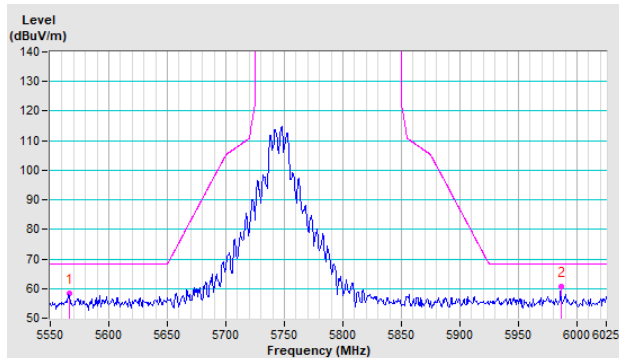
802.11a

CH 149 5745 MHz

Horizontal

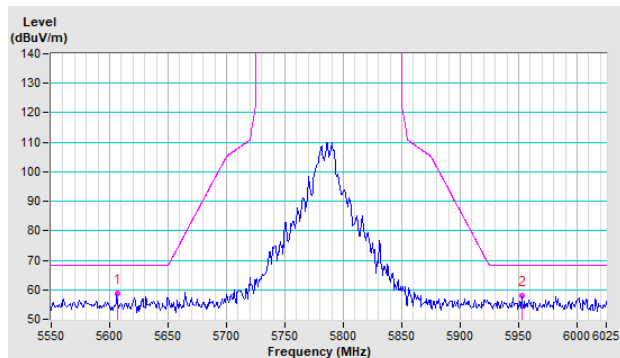


Vertical

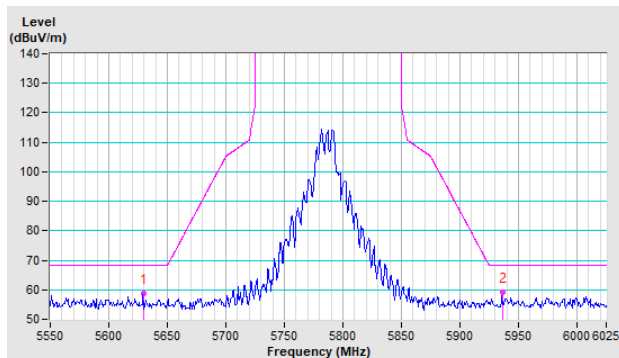


CH 157 5785 MHz

Horizontal

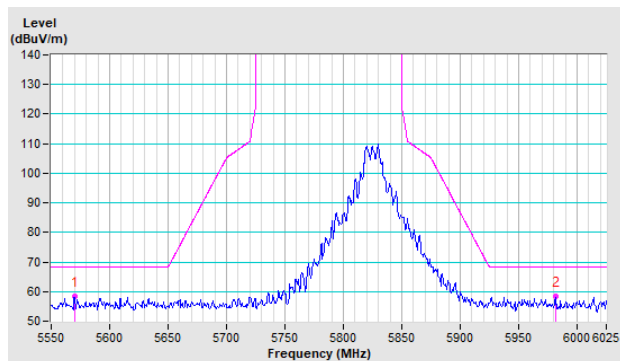


Vertical

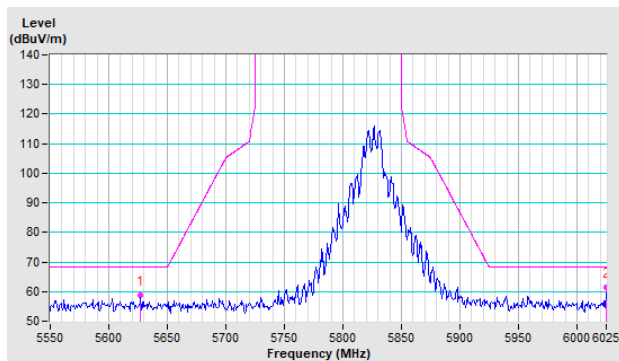


CH 165 5825 MHz

Horizontal



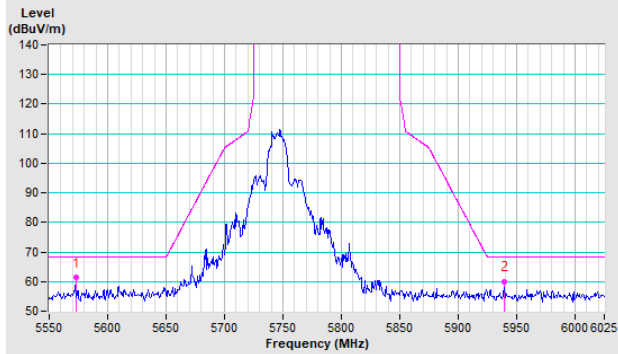
Vertical



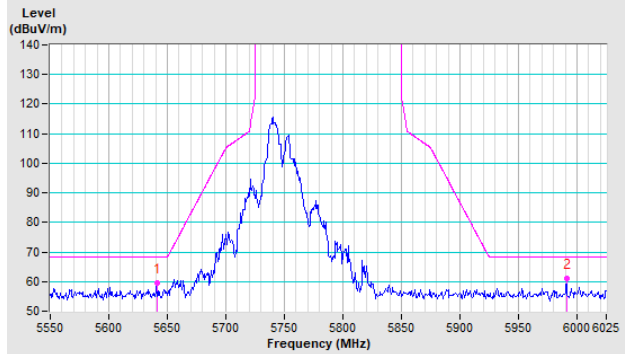
## 802.11ac (VHT20)

### CH 149 5745 MHz

#### Horizontal

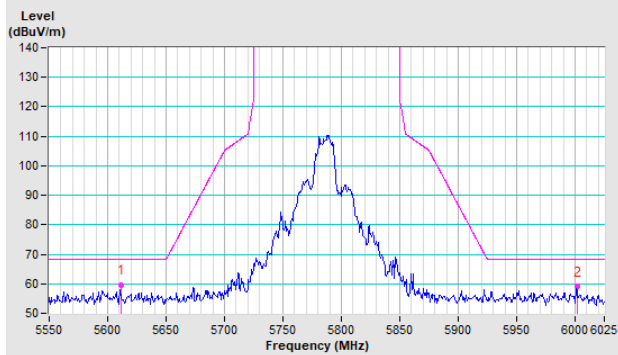


#### Vertical

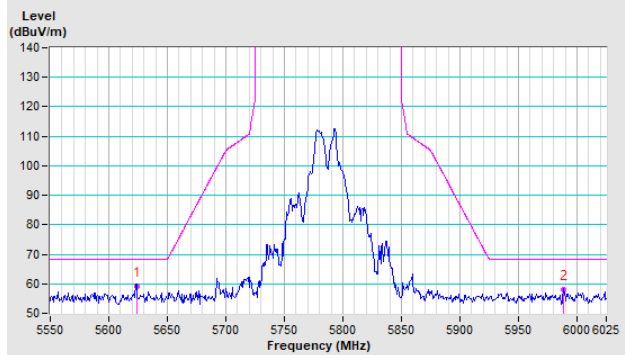


### CH 157 5785 MHz

#### Horizontal

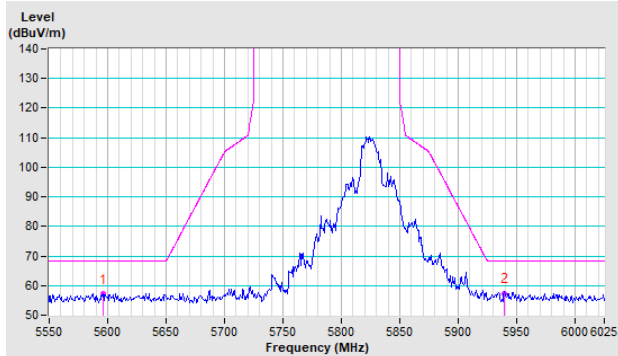


#### Vertical

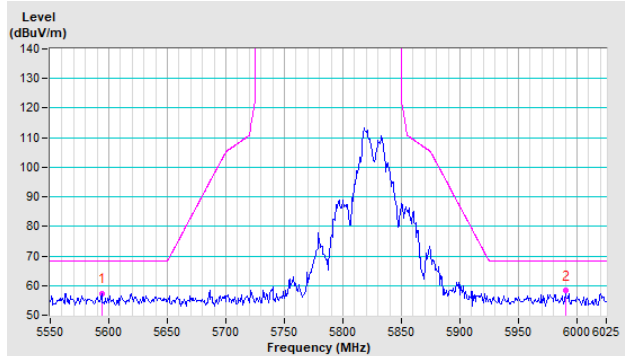


### CH 165 5825 MHz

#### Horizontal



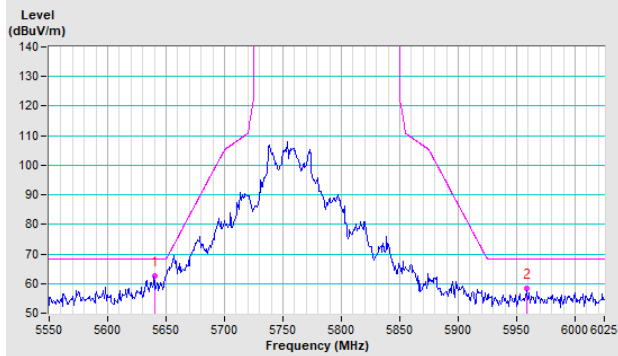
#### Vertical



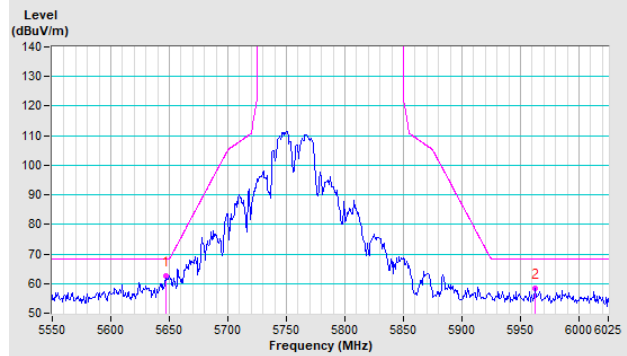
## 802.11ac (VHT40)

CH 151 5755 MHz

Horizontal

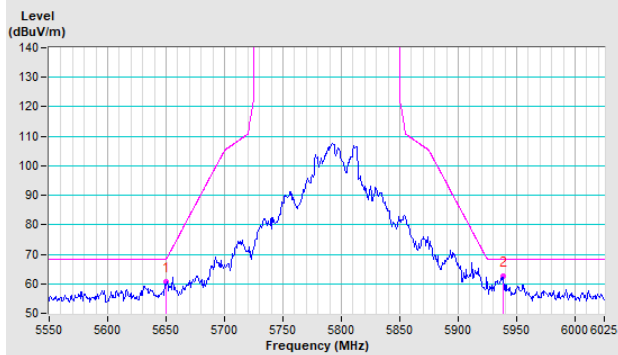


Vertical

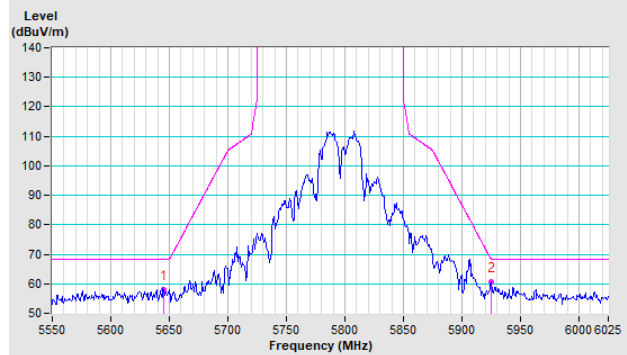


CH 159 5795 MHz

Horizontal



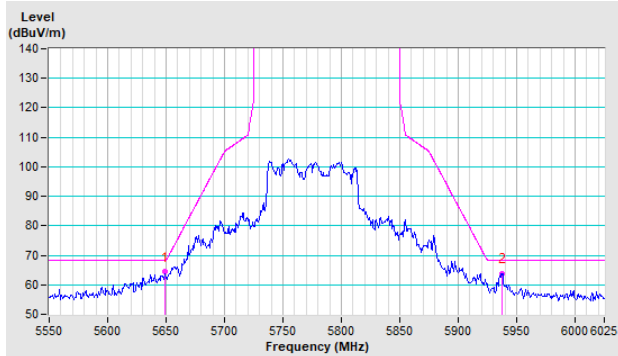
Vertical



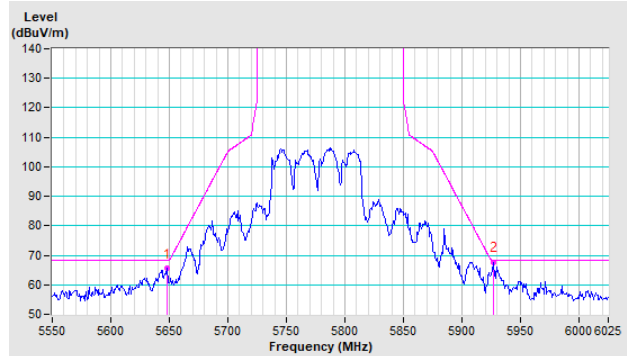
## 802.11ac (VHT80)

CH 155 5775 MHz

Horizontal



Vertical



## Appendix – Information of 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 FCC recognized accredited test firms and accredited according to ISO/IEC 17025.

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

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