FCC Test Report

Report No.: RF160701E08A

FCC ID: ACQ-MT76125G

Test Model: MT7612 5G

Received Date: Aug. 10, 2016

Test Date: Aug. 17 to 18, 2016

Issued Date: Aug. 26, 2016

Applicant: ARRIS Group, Inc.

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

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Release Control Record

Issue No.	Description	Date Issued
RF160701E08A	Original release.	Aug. 26, 2016

1 Certificate of Conformity

Product: WiFi Wireless Module

Brand: ARRIS

Test Model: MT7612 5G

Sample Status: ENGINEERING SAMPLE

Applicant: ARRIS Group, Inc.

Test Date: Aug. 17 to 18, 2016

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 : _____ , **Date:** Aug. 26, 2016
Midoli Peng / Specialist

Approved by : _____ , **Date:** Aug. 26, 2016
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 5470.00MHz
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is i-pex(MHF) not a standard connector.

Note: 1. *For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOBE test plots were recorded in Annex A.

2. This report is prepared for FCC Class II change. (Added 2 sets of new antennas)

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	Expended Uncertainty (k=2) (±)
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	5.31 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	3.40 dB
	6GHz ~ 18GHz	3.73 dB
	18GHz ~ 40GHz	4.11 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	WiFi Wireless Module
Brand	ARRIS
Test Model	MT7612 5G
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	DC 3.3V from host equipment
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: up to 54Mbps 802.11n: up to 300Mbps 802.11ac: up to 866.7Mbps
Operating Frequency	5180 MHz ~ 5240 MHz, 5260 MHz ~5320 MHz, 5500 MHz ~ 5720 MHz, 5745 MHz ~ 5825 MHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20): 25 802.11n (HT40), 802.11ac (VHT40): 12 802.11ac (VHT80): 6
Output Power	5180-5240MHz : 75.952mW 5260-5320MHz : 74.823mW 5500-5720MHz : 76.301mW 5745-5825MHz : 76.919mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. This report is prepared for FCC class II change. The difference compared with the Report No.: RF160701E08 R3 design is as the following:
   - Added 2 sets of new antennas as below table:

Original antenna

Set 1

Transmitter Circuit	Brand	Model	Gain (dBi) (Include cable loss)	Antenna Type	Connecter Type	Frequency range (GHz to GHz)	Cable Length (mm)
Chain (0)	Amphenol	N5X20SC-G112U	3.57	PCB	i-pex(MHF)	5.15~5.25	112
			3.41			5.25~5.35	
			3.01			5.47~5.725	
			3.48			5.725~5.85	
Chain (1)	Amphenol	N5X20SC-G162U	3.57	PCB	i-pex(MHF)	5.15~5.25	162
			3.41			5.25~5.35	
			3.01			5.47~5.725	
			3.48			5.725~5.85	

Set 2

Transmitter Circuit	Brand	Model	Gain (dBi) (Include cable loss)	Antenna Type	Connecter Type	Frequency range (GHz to GHz)	Cable Length (mm)
Chain (0)	Airgain	AMSTD-112-00	2	PCB	i-pex(MHF)	5.15~5.25	112
			2			5.25~5.35	
			2			5.47~5.725	
			2			5.725~5.85	
Chain (1)	Airgain	AMSTD-162-00	2	PCB	i-pex(MHF)	5.15~5.25	162
			2			5.25~5.35	
			2			5.47~5.725	
			2			5.725~5.85	

Newly antenna

Set 3

Transmitter Circuit	Brand	Model	Gain (dBi) (Include cable loss)	Antenna Type	Connecter Type	Frequency range (GHz to GHz)	Cable Length (mm)
Chain (0)	Airgain	N2420DCSSM-T6 L-PK1-G44U	3.4	PCB	i-pex(MHF)	5.15~5.25	44
			3.7			5.25~5.35	
			4.8			5.47~5.725	
			5			5.725~5.85	
Chain (1)	Airgain	N2420DCSSM-T6 L-PK1-G77U	3	PCB	i-pex(MHF)	5.15~5.25	47
			3.5			5.25~5.35	
			5.5			5.47~5.725	
			5.2			5.725~5.85	

Set 4

Transmitter Circuit	Brand	Model	Gain (dBi) (Include cable loss)	Antenna Type	Connecter Type	Frequency range (GHz to GHz)	Cable Length (mm)
Chain (0)	Amphenol	RR7512-15-000-C	3.5	PCB	i-pex(MHF)	5.15~5.25	42
			3.3			5.25~5.35	
			3			5.47~5.725	
			3.4			5.725~5.85	
Chain (1)	Amphenol	RR7513-15-000-C	4.61	PCB	i-pex(MHF)	5.15~5.25	81
			4.45			5.25~5.35	
			4.58			5.47~5.725	
			4.51			5.725~5.85	

Note : 1. For U-NII-1 / U-NII-2A band: Antenna set 4 was chosn for test.
2. For U-NII-2C / U-NII-3 band: Antenna set 3 was chosn for test.

2. This report is prepared for FCC class II permissive change. Only Radiated Emissions and Transmit Power were presented in this test report.

3. The EUT incorporates a MIMO function

802.11a	6 ~ 54Mbps	2TX	2RX
802.11n (HT20) & 802.11n (HT40)	MCS 0~7	2TX	2RX
	MCS 8~15	2TX	2RX
802.11ac (VHT20)	MCS0~8 Nss=1	2TX	2RX
	MCS0~8 Nss=2	2TX	2RX
802.11ac (VHT40) & 802.11ac (VHT80)	MCS0~9 Nss=1	2TX	2RX
	MCS0~9 Nss=2	2TX	2RX
Note: 1. 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)			

4. 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	5210 MHz

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	5290 MHz

FOR 5500 ~ 5720MHz

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

Channel	Frequency	Channel	Frequency
100	5500 MHz	124	5620 MHz
104	5520 MHz	128	5640 MHz
108	5540 MHz	132	5660 MHz
112	5560 MHz	136	5680 MHz
116	5580 MHz	140	5700 MHz
120	5600 MHz	144	5720 MHz

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

Channel	Frequency	Channel	Frequency
102	5510 MHz	126	5630 MHz
110	5550 MHz	134	5670 MHz
118	5590 MHz	142	5710 MHz

3 channels are provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
106	5530 MHz	138	5690 MHz
122	5610 MHz		

FOR 5745 ~ 5825MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775 MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To			Description
	RE≥1G	RE<1G	APCM	
-	√	√	√	-

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

NOTE:
1. In original report : The EUT had been pre-tested on the positioned of each 3 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.

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	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6
802.11ac (VHT20)		100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	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.

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5180-5240	36 to 48	140	OFDM	BPSK	6
	5260-5320	52 to 64				
	5500-5720	100 to 144				
	5745-5825	149 to 165				

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.

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	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6
802.11ac (VHT20)		100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	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

Test Condition:

Applicable To	Environmental Conditions	Input Power (System)	Tested By
RE≥1G	25deg. C, 64%RH	120Vac, 60Hz	Jyunchun Lin
RE<1G	24deg. C, 63%RH	120Vac, 60Hz	Tim Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	Anderson Chen

3.3 Duty Cycle of Test Signal

Duty cycle of test signal is < 98%, duty factor shall be considered.

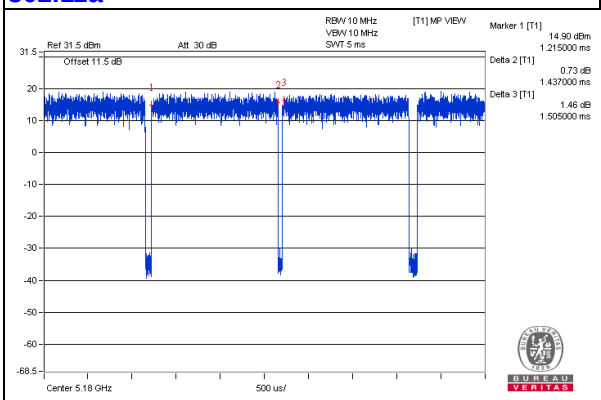
802.11a: Duty cycle = 1.437 ms/1.505 ms = 0.955, Duty factor = 10 * log(1/0.955) = 0.20

802.11ac (VHT20): Duty cycle = 1.36 ms/1.514 ms = 0.898, Duty factor = 10 * log(1/0.898) = 0.47

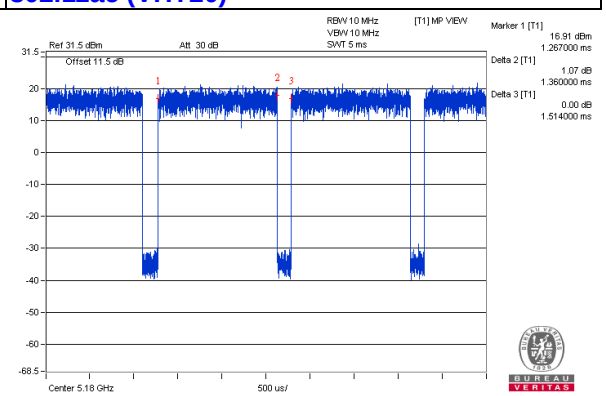
802.11ac (VHT40): Duty cycle = 0.675 ms/0.829 ms = 0.814, Duty factor = 10 * log(1/0.814) = 0.89

802.11ac (VHT80): Duty cycle = 0.336 ms/0.471 ms = 0.713, Duty factor = 10 * log(1/0.713) = 1.47

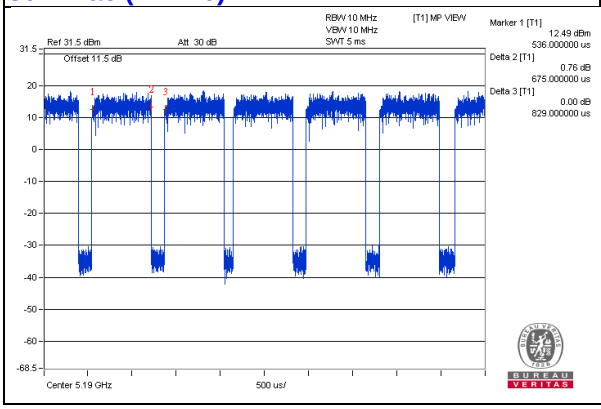
802.11a



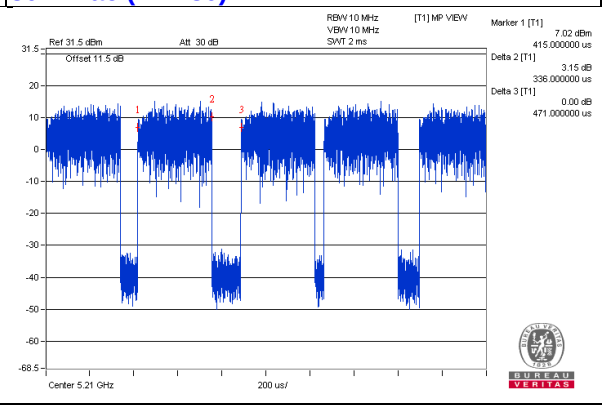
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



3.4 Description of Support Units

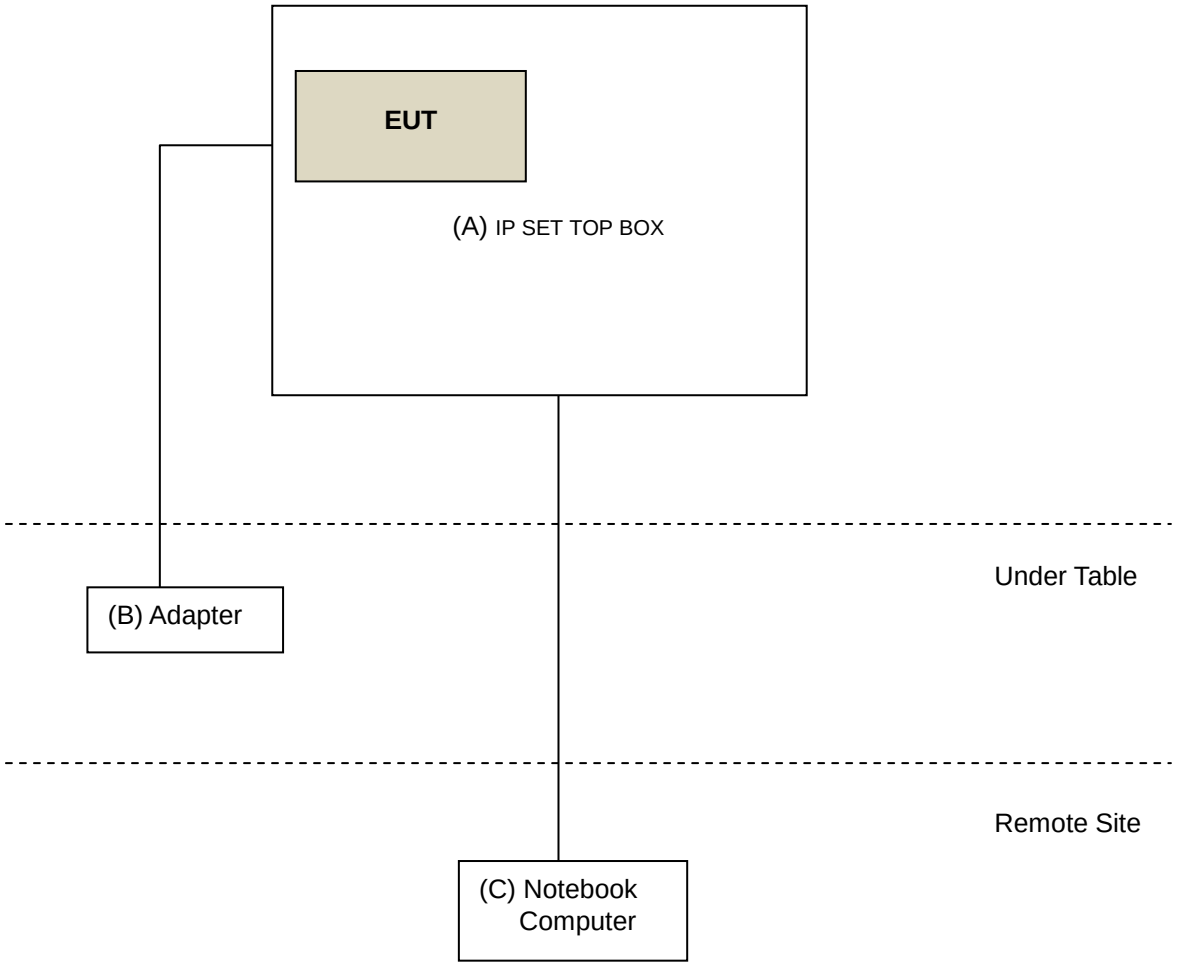
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	IP SET TOP BOX	ARRIS	VIP4402W	NA	NA	Supplied by client
B.	Adapter	APD	WB-18D12FU-FD AA	NA	NA	Supplied by client
C.	Notebook Computer	DELL	E5430	HYV4VY1	FCC DoC	Provided by Lab

Note:
1. 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.	DC cable	1	1.5	No	0	Supplied by client
2.	RJ-45 cable	1	10	No	0	Provided by Lab

3.4.1 Configuration of System under Test



3.5 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 v01r03
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:

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

Limits of unwanted emission out of the restricted bands

Applicable To			Limit	
789033 D02 General UNII Test Procedure New Rules v01r03			Field Strength at 3m	
			PK:74 (dBμV/m)	AV:54 (dBμV/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(dBμV/m)
5250~5350 MHz	15.407(b)(2)			
5470~5725 MHz	15.407(b)(3)			
5725~5850 MHz	☒	15.407(b)(4)(i)	PK:-27 (dBm/MHz) *1 PK:10 (dBm/MHz) *2 PK:15.6 (dBm/MHz) *3 PK:27 (dBm/MHz) *4	PK: 68.2(dBμV/m) *1 PK:105.2 (dBμV/m) *2 PK: 110.8(dBμV/m) *3 PK:122.2 (dBμV/m) *4
	☐	15.407(b)(4)(ii)	Emission limits in section 15.247(d)	

*1 beyond 75 MHz or more above of the band edge.

*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.

*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.

*4 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:

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

4.1.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Pre-Amplifier(*) EMCI	EMC001340	980142	Jan. 20, 2016	Jan. 19, 2018
Loop Antenna(*) Electro-Metrics	EM-6879	264	Dec. 16, 2014	Dec. 15, 2016
RF Cable	NA	LOOPCAB-001 LOOPCAB-002	Jan. 18, 2016	Jan. 17, 2017
Pre-Amplifier Mini-Circuits	ZFL-1000VH2 B	AMP-ZFL-05	May 07, 2016	May 06, 2017
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-156	Jan. 04, 2016	Jan. 03, 2017
RF Cable	8D	966-3-1 966-3-2 966-3-3	Apr. 02, 2016	Apr. 01, 2017
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Jan. 20, 2016	Jan. 19, 2017
Pre-Amplifier Agilent	8449B	3008A02465	Apr. 05, 2016	Apr. 04, 2017
RF Cable	EMC104-SM-SM-2000 EMC104-SM-SM-5000 EMC104-SM-SM-5000	150317 150321 150322	Mar. 30, 2016	Mar. 29, 2017
Spectrum Analyzer Keysight	N9030A	MY54490520	July 29, 2016	July 28, 2017
Pre-Amplifier EMCI	EMC184045	980143	Jan. 15, 2016	Jan. 14, 2017
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170608	Jan. 08, 2016	Jan. 07, 2017
RF Cable	SUCOFLEX 102	36432/2 36441/2	Jan. 16, 2016	Jan. 15, 2017
Software	ADT_Radiated _V8.7.07	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Power meter Anritsu	ML2495A	0824006	May 26, 2016	May 25, 2017
Power sensor Anritsu	MA2411B	0738172	May 26, 2016	May 25, 2017

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 Loop antenna was used for all emissions below 30 MHz.
4. The test was performed in 966 Chamber No. 3.
5. The FCC Site Registration No. is 147459
6. The CANADA Site Registration No. is 20331-1
7. Tested Date: Aug. 17 to 22, 2016

4.1.3 Test Procedure

a. The EUT was placed on the top of a rotating table 0.8 meters (for below 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 detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

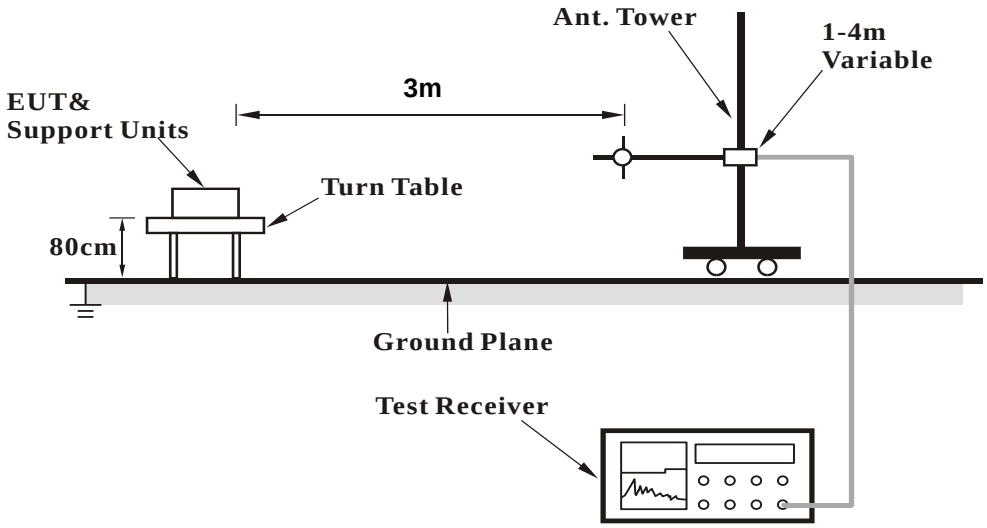
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.4 Deviation from Test Standard

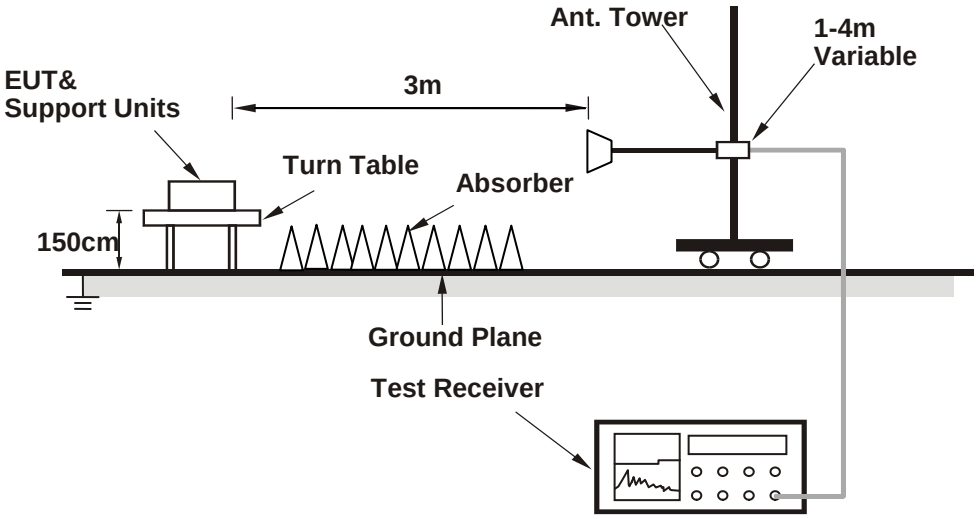
No deviation.

4.1.5 Test Setup

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



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

4.1.6 EUT Operating Condition

1. Connect the EUT with the support unit C (Notebook Computer) which is placed on remote site.
2. Controlling software (QATool V1.0.3.14) has been activated to set the EUT on specific status.

4.1.7 Test Results

Above 1GHz Data：

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	57.7 PK	74.0	-16.3	1.16 H	144	54.7	3.0
2	5150.00	44.1 AV	54.0	-9.9	1.16 H	144	41.1	3.0
3	*5180.00	110.4 PK			1.16 H	144	107.3	3.1
4	*5180.00	101.1 AV			1.16 H	144	98.0	3.1
5	#10360.00	57.1 PK	74.0	-16.9	4.00 H	264	43.5	13.6
6	#10360.00	45.0 AV	54.0	-9.0	4.00 H	264	31.4	13.6
7	15540.00	58.7 PK	74.0	-15.3	1.29 H	198	43.0	15.7
8	15540.00	45.8 AV	54.0	-8.2	1.29 H	198	30.1	15.7
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	53.1 PK	74.0	-20.9	3.87 V	95	50.1	3.0
2	5150.00	40.7 AV	54.0	-13.3	3.87 V	95	37.7	3.0
3	*5180.00	105.5 PK			3.87 V	95	102.4	3.1
4	*5180.00	95.9 AV			3.87 V	95	92.8	3.1
5	#10360.00	59.7 PK	74.0	-14.3	2.22 V	187	46.1	13.6
6	#10360.00	47.1 AV	54.0	-6.9	2.22 V	187	33.5	13.6
7	15540.00	56.3 PK	74.0	-17.7	2.21 V	132	40.6	15.7
8	15540.00	43.4 AV	54.0	-10.6	2.21 V	132	27.7	15.7

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	110.9 PK			1.21 H	139	107.8	3.1
2	*5200.00	101.5 AV			1.21 H	139	98.4	3.1
3	#10400.00	56.3 PK	74.0	-17.7	4.00 H	243	42.7	13.6
4	#10400.00	44.3 AV	54.0	-9.7	4.00 H	243	30.7	13.6
5	15600.00	59.0 PK	74.0	-15.0	1.28 H	211	43.3	15.7
6	15600.00	45.6 AV	54.0	-8.4	1.28 H	211	29.9	15.7
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	*5200.00	106.4 PK			3.97 V	85	103.3	3.1
2	*5200.00	97.2 AV			3.97 V	85	94.1	3.1
3	#10400.00	59.4 PK	74.0	-14.6	2.29 V	192	45.8	13.6
4	#10400.00	47.0 AV	54.0	-7.0	2.29 V	192	33.4	13.6
5	15600.00	56.7 PK	74.0	-17.3	2.26 V	132	41.0	15.7
6	15600.00	43.9 AV	54.0	-10.1	2.26 V	132	28.2	15.7

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	110.4 PK			1.59 H	193	107.2	3.2
2	*5240.00	101.3 AV			1.59 H	193	98.1	3.2
3	5350.00	53.6 PK	74.0	-20.4	1.59 H	193	50.1	3.5
4	5350.00	41.1 AV	54.0	-12.9	1.59 H	193	37.6	3.5
5	#10480.00	57.2 PK	74.0	-16.8	3.97 H	254	43.2	14.0
6	#10480.00	44.7 AV	54.0	-9.3	3.97 H	254	30.7	14.0
7	15720.00	59.2 PK	74.0	-14.8	1.35 H	195	43.8	15.4
8	15720.00	45.8 AV	54.0	-8.2	1.35 H	195	30.4	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	*5240.00	105.8 PK			3.79 V	82	102.6	3.2
2	*5240.00	96.2 AV			3.79 V	82	93.0	3.2
3	5350.00	54.5 PK	74.0	-19.5	3.79 V	82	51.0	3.5
4	5350.00	42.0 AV	54.0	-12.0	3.79 V	82	38.5	3.5
5	#10480.00	58.8 PK	74.0	-15.2	2.28 V	163	44.8	14.0
6	#10480.00	46.7 AV	54.0	-7.3	2.28 V	163	32.7	14.0
7	15720.00	56.2 PK	74.0	-17.8	2.20 V	142	40.8	15.4
8	15720.00	43.4 AV	54.0	-10.6	2.20 V	142	28.0	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. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	53.1 PK	74.0	-20.9	1.02 H	184	50.1	3.0
2	5150.00	40.9 AV	54.0	-13.1	1.02 H	184	37.9	3.0
3	*5260.00	111.7 PK			1.02 H	184	108.4	3.3
4	*5260.00	102.0 AV			1.02 H	184	98.7	3.3
5	#10520.00	56.1 PK	74.0	-17.9	3.95 H	278	42.0	14.1
6	#10520.00	43.9 AV	54.0	-10.1	3.95 H	278	29.8	14.1
7	15780.00	59.4 PK	74.0	-14.6	1.18 H	159	44.2	15.2
8	15780.00	46.3 AV	54.0	-7.7	1.18 H	159	31.1	15.2
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	53.9 PK	74.0	-20.1	3.88 V	90	50.9	3.0
2	5150.00	41.7 AV	54.0	-12.3	3.88 V	90	38.7	3.0
3	*5260.00	106.2 PK			3.88 V	90	102.9	3.3
4	*5260.00	96.9 AV			3.88 V	90	93.6	3.3
5	#10520.00	59.6 PK	74.0	-14.4	2.28 V	156	45.5	14.1
6	#10520.00	47.1 AV	54.0	-6.9	2.28 V	156	33.0	14.1
7	15780.00	56.8 PK	74.0	-17.2	2.21 V	108	41.6	15.2
8	15780.00	44.2 AV	54.0	-9.8	2.21 V	108	29.0	15.2

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	111.6 PK			1.47 H	209	108.3	3.3
2	*5300.00	102.2 AV			1.47 H	209	98.9	3.3
3	10600.00	57.3 PK	74.0	-16.7	3.90 H	259	43.0	14.3
4	10600.00	45.2 AV	54.0	-8.8	3.90 H	259	30.9	14.3
5	15900.00	58.5 PK	74.0	-15.5	1.29 H	172	43.4	15.1
6	15900.00	45.6 AV	54.0	-8.4	1.29 H	172	30.5	15.1
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	*5300.00	106.7 PK			3.83 V	88	103.4	3.3
2	*5300.00	96.8 AV			3.83 V	88	93.5	3.3
3	10600.00	59.5 PK	74.0	-14.5	2.18 V	208	45.2	14.3
4	10600.00	46.8 AV	54.0	-7.2	2.18 V	208	32.5	14.3
5	15900.00	55.9 PK	74.0	-18.1	2.26 V	140	40.8	15.1
6	15900.00	43.1 AV	54.0	-10.9	2.26 V	140	28.0	15.1

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	111.2 PK			1.07 H	140	107.7	3.5
2	*5320.00	101.7 AV			1.07 H	140	98.2	3.5
3	5350.00	57.0 PK	74.0	-17.0	1.07 H	140	53.5	3.5
4	5350.00	44.2 AV	54.0	-9.8	1.07 H	140	40.7	3.5
5	10640.00	57.0 PK	74.0	-17.0	3.97 H	278	42.7	14.3
6	10640.00	44.7 AV	54.0	-9.3	3.97 H	278	30.4	14.3
7	15960.00	58.5 PK	74.0	-15.5	1.29 H	210	43.4	15.1
8	15960.00	45.4 AV	54.0	-8.6	1.29 H	210	30.3	15.1
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	*5320.00	106.9 PK			3.87 V	67	103.4	3.5
2	*5320.00	97.3 AV			3.87 V	67	93.8	3.5
3	5350.00	53.5 PK	74.0	-20.5	3.87 V	67	50.0	3.5
4	5350.00	40.9 AV	54.0	-13.1	3.87 V	67	37.4	3.5
5	10640.00	59.9 PK	74.0	-14.1	2.36 V	194	45.6	14.3
6	10640.00	47.2 AV	54.0	-6.8	2.36 V	194	32.9	14.3
7	15960.00	55.8 PK	74.0	-18.2	2.25 V	129	40.7	15.1
8	15960.00	43.2 AV	54.0	-10.8	2.25 V	129	28.1	15.1

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	57.8 PK	74.0	-16.2	1.07 H	140	54.1	3.7
2	#5470.00	45.2 AV	54.0	-8.8	1.07 H	140	41.5	3.7
3	*5500.00	111.0 PK			1.07 H	140	107.2	3.8
4	*5500.00	101.7 AV			1.07 H	140	97.9	3.8
5	11000.00	56.4 PK	74.0	-17.6	4.00 H	261	41.2	15.2
6	11000.00	44.3 AV	54.0	-9.7	4.00 H	261	29.1	15.2
7	#16500.00	58.9 PK	74.0	-15.1	1.32 H	200	41.5	17.4
8	#16500.00	45.6 AV	54.0	-8.4	1.32 H	200	28.2	17.4
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	#5470.00	54.2 PK	74.0	-19.8	3.95 V	88	50.5	3.7
2	#5470.00	41.4 AV	54.0	-12.6	3.95 V	88	37.7	3.7
3	*5500.00	105.9 PK			3.95 V	88	102.1	3.8
4	*5500.00	96.5 AV			3.95 V	88	92.7	3.8
5	11000.00	60.0 PK	74.0	-14.0	2.21 V	181	44.8	15.2
6	11000.00	47.5 AV	54.0	-6.5	2.21 V	181	32.3	15.2
7	#16500.00	56.5 PK	74.0	-17.5	2.20 V	100	39.1	17.4
8	#16500.00	43.7 AV	54.0	-10.3	2.20 V	100	26.3	17.4

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	111.5 PK			1.05 H	210	107.6	3.9
2	*5580.00	102.0 AV			1.05 H	210	98.1	3.9
3	11160.00	56.6 PK	74.0	-17.4	4.00 H	248	41.4	15.2
4	11160.00	44.0 AV	54.0	-10.0	4.00 H	248	28.8	15.2
5	#16740.00	59.2 PK	74.0	-14.8	1.31 H	177	40.9	18.3
6	#16740.00	45.6 AV	54.0	-8.4	1.31 H	177	27.3	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	*5580.00	106.1 PK			3.85 V	70	102.2	3.9
2	*5580.00	97.0 AV			3.85 V	70	93.1	3.9
3	11160.00	59.8 PK	74.0	-14.2	2.27 V	192	44.6	15.2
4	11160.00	47.0 AV	54.0	-7.0	2.27 V	192	31.8	15.2
5	#16740.00	55.2 PK	74.0	-18.8	2.33 V	115	36.9	18.3
6	#16740.00	42.7 AV	54.0	-11.3	2.33 V	115	24.4	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. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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			1.05 H	226	106.8	4.2
2	*5700.00	101.8 AV			1.05 H	226	97.6	4.2
3	#5725.00	65.4 PK	74.0	-8.6	1.05 H	226	61.2	4.2
4	#5725.00	50.1 AV	54.0	-3.9	1.05 H	226	45.9	4.2
5	11400.00	56.5 PK	74.0	-17.5	4.00 H	261	41.0	15.5
6	11400.00	44.1 AV	54.0	-9.9	4.00 H	261	28.6	15.5
7	#17100.00	58.9 PK	74.0	-15.1	1.16 H	180	38.8	20.1
8	#17100.00	45.3 AV	54.0	-8.7	1.16 H	180	25.2	20.1
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	*5700.00	106.9 PK			3.99 V	59	102.7	4.2
2	*5700.00	97.3 AV			3.99 V	59	93.1	4.2
3	#5725.00	52.7 PK	74.0	-21.3	3.99 V	59	48.5	4.2
4	#5725.00	40.8 AV	54.0	-13.2	3.99 V	59	36.6	4.2
5	11400.00	59.8 PK	74.0	-14.2	2.26 V	179	44.3	15.5
6	11400.00	47.1 AV	54.0	-6.9	2.26 V	179	31.6	15.5
7	#17100.00	56.3 PK	74.0	-17.7	2.25 V	112	36.2	20.1
8	#17100.00	43.5 AV	54.0	-10.5	2.25 V	112	23.4	20.1

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

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	53.2 PK	74.0	-20.8	1.00 H	216	49.5	3.7
2	#5470.00	40.0 AV	54.0	-14.0	1.00 H	216	36.3	3.7
3	*5720.00	110.7 PK			1.03 H	210	106.5	4.2
4	*5720.00	101.7 AV			1.03 H	210	97.5	4.2
5	#5850.00	53.6 PK	74.0	-20.4	1.03 H	210	49.4	4.2
6	#5850.00	40.8 AV	54.0	-13.2	1.03 H	210	36.6	4.2
7	11440.00	56.8 PK	74.0	-17.2	3.97 H	250	41.5	15.3
8	11440.00	44.3 AV	54.0	-9.7	3.97 H	250	29.0	15.3
9	#17160.00	58.7 PK	74.0	-15.3	1.27 H	173	38.9	19.8
10	#17160.00	45.7 AV	54.0	-8.3	1.27 H	173	25.9	19.8
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	#5470.00	53.9 PK	74.0	-20.1	3.91 V	88	50.2	3.7
2	#5470.00	40.8 AV	54.0	-13.2	3.91 V	88	37.1	3.7
3	*5720.00	105.4 PK			3.95 V	65	101.2	4.2
4	*5720.00	96.6 AV			3.95 V	65	92.4	4.2
5	#5850.00	54.0 PK	74.0	-20.0	3.95 V	65	49.8	4.2
6	#5850.00	40.7 AV	54.0	-13.3	3.95 V	65	36.5	4.2
7	11440.00	59.8 PK	74.0	-14.2	2.26 V	205	44.5	15.3
8	11440.00	47.3 AV	54.0	-6.7	2.26 V	205	32.0	15.3
9	#17160.00	56.5 PK	74.0	-17.5	2.28 V	93	36.7	19.8
10	#17160.00	43.9 AV	54.0	-10.1	2.28 V	93	24.1	19.8

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5575.18	55.1 PK	68.2	-13.1	1.00 H	181	51.2	3.9
2	*5745.00	112.9 PK			1.00 H	181	108.7	4.2
3	*5745.00	104.0 AV			1.00 H	181	99.8	4.2
4	#6001.25	55.2 PK	68.2	-13.0	1.00 H	181	50.7	4.5
5	11490.00	57.6 PK	74.0	-16.4	3.92 H	272	42.4	15.2
6	11490.00	45.2 AV	54.0	-8.8	3.92 H	272	30.0	15.2
7	#17235.00	58.5 PK	74.0	-15.5	1.14 H	172	38.5	20.0
8	#17235.00	46.0 AV	54.0	-8.0	1.14 H	172	26.0	20.0
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	#5623.62	52.8 PK	68.2	-15.4	3.34 V	265	48.8	4.0
2	*5745.00	104.9 PK			3.34 V	265	100.7	4.2
3	*5745.00	95.5 AV			3.34 V	265	91.3	4.2
4	#5933.80	52.9 PK	68.2	-15.3	3.34 V	265	48.5	4.4
5	11490.00	59.6 PK	74.0	-14.4	2.22 V	179	44.4	15.2
6	11490.00	47.1 AV	54.0	-6.9	2.22 V	179	31.9	15.2
7	#17235.00	56.5 PK	74.0	-17.5	2.29 V	131	36.5	20.0
8	#17235.00	43.4 AV	54.0	-10.6	2.29 V	131	23.4	20.0

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5589.43	53.8 PK	68.2	-14.4	1.46 H	186	49.9	3.9
2	*5785.00	109.7 PK			1.46 H	186	105.6	4.1
3	*5785.00	101.9 AV			1.46 H	186	97.8	4.1
4	#5976.55	54.3 PK	68.2	-13.9	1.46 H	186	49.8	4.5
5	11570.00	56.4 PK	74.0	-17.6	3.94 H	277	41.3	15.1
6	11570.00	44.0 AV	54.0	-10.0	3.94 H	277	28.9	15.1
7	#17355.00	58.3 PK	74.0	-15.7	1.25 H	172	37.8	20.5
8	#17355.00	45.3 AV	54.0	-8.7	1.25 H	172	24.8	20.5
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	#5643.10	52.7 PK	68.2	-15.5	3.50 V	311	48.7	4.0
2	*5785.00	104.8 PK			3.50 V	311	100.7	4.1
3	*5785.00	96.0 AV			3.50 V	311	91.9	4.1
4	#5950.90	53.8 PK	68.2	-14.4	3.50 V	311	49.4	4.4
5	11570.00	59.6 PK	74.0	-14.4	2.27 V	191	44.5	15.1
6	11570.00	46.9 AV	54.0	-7.1	2.27 V	191	31.8	15.1
7	#17355.00	57.1 PK	74.0	-16.9	2.26 V	115	36.6	20.5
8	#17355.00	44.0 AV	54.0	-10.0	2.26 V	115	23.5	20.5

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.65	53.6 PK	68.2	-14.6	1.00 H	229	49.6	4.0
2	*5825.00	110.4 PK			1.00 H	229	106.2	4.2
3	*5825.00	102.1 AV			1.00 H	229	97.9	4.2
4	#6010.75	53.3 PK	68.2	-14.9	1.00 H	229	48.8	4.5
5	11650.00	57.4 PK	74.0	-16.6	3.88 H	240	42.4	15.0
6	11650.00	44.7 AV	54.0	-9.3	3.88 H	240	29.7	15.0
7	#17475.00	59.4 PK	74.0	-14.6	1.34 H	178	38.3	21.1
8	#17475.00	45.9 AV	54.0	-8.1	1.34 H	178	24.8	21.1
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	#5649.27	53.3 PK	68.2	-14.9	3.40 V	292	49.3	4.0
2	*5825.00	104.6 PK			3.40 V	292	100.4	4.2
3	*5825.00	96.6 AV			3.40 V	292	92.4	4.2
4	#5942.82	53.7 PK	68.2	-14.5	3.40 V	292	49.3	4.4
5	11650.00	59.7 PK	74.0	-14.3	2.23 V	200	44.7	15.0
6	11650.00	46.7 AV	54.0	-7.3	2.23 V	200	31.7	15.0
7	#17475.00	56.0 PK	74.0	-18.0	2.32 V	115	34.9	21.1
8	#17475.00	43.5 AV	54.0	-10.5	2.32 V	115	22.4	21.1

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

802.11ac (VHT20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.0 PK	74.0	-17.0	1.00 H	196	54.0	3.0
2	5150.00	44.2 AV	54.0	-9.8	1.00 H	196	41.2	3.0
3	*5180.00	109.1 PK			1.00 H	196	106.0	3.1
4	*5180.00	100.0 AV			1.00 H	196	96.9	3.1
5	#10360.00	56.3 PK	74.0	-17.7	3.97 H	278	42.7	13.6
6	#10360.00	43.7 AV	54.0	-10.3	3.97 H	278	30.1	13.6
7	15540.00	58.7 PK	74.0	-15.3	1.27 H	183	43.0	15.7
8	15540.00	45.9 AV	54.0	-8.1	1.27 H	183	30.2	15.7
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	53.7 PK	74.0	-20.3	3.81 V	76	50.7	3.0
2	5150.00	40.7 AV	54.0	-13.3	3.81 V	76	37.7	3.0
3	*5180.00	103.7 PK			3.81 V	76	100.6	3.1
4	*5180.00	95.1 AV			3.81 V	76	92.0	3.1
5	#10360.00	59.2 PK	74.0	-14.8	2.27 V	196	45.6	13.6
6	#10360.00	46.6 AV	54.0	-7.4	2.27 V	196	33.0	13.6
7	15540.00	55.7 PK	74.0	-18.3	2.24 V	133	40.0	15.7
8	15540.00	42.6 AV	54.0	-11.4	2.24 V	133	26.9	15.7

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	109.3 PK			1.28 H	156	106.2	3.1
2	*5200.00	100.3 AV			1.28 H	156	97.2	3.1
3	#10400.00	56.3 PK	74.0	-17.7	3.91 H	265	42.7	13.6
4	#10400.00	44.2 AV	54.0	-9.8	3.91 H	265	30.6	13.6
5	15600.00	58.3 PK	74.0	-15.7	1.20 H	157	42.6	15.7
6	15600.00	45.2 AV	54.0	-8.8	1.20 H	157	29.5	15.7
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	*5200.00	104.7 PK			4.00 V	84	101.6	3.1
2	*5200.00	95.8 AV			4.00 V	84	92.7	3.1
3	#10400.00	59.7 PK	74.0	-14.3	2.23 V	182	46.1	13.6
4	#10400.00	46.9 AV	54.0	-7.1	2.23 V	182	33.3	13.6
5	15600.00	56.3 PK	74.0	-17.7	2.26 V	118	40.6	15.7
6	15600.00	43.4 AV	54.0	-10.6	2.26 V	118	27.7	15.7

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	109.9 PK			1.29 H	159	106.7	3.2
2	*5240.00	101.1 AV			1.29 H	159	97.9	3.2
3	5350.00	53.4 PK	74.0	-20.6	1.29 H	159	49.9	3.5
4	5350.00	40.4 AV	54.0	-13.6	1.29 H	159	36.9	3.5
5	#10480.00	56.9 PK	74.0	-17.1	3.96 H	278	42.9	14.0
6	#10480.00	44.0 AV	54.0	-10.0	3.96 H	278	30.0	14.0
7	15720.00	58.5 PK	74.0	-15.5	1.30 H	201	43.1	15.4
8	15720.00	45.4 AV	54.0	-8.6	1.30 H	201	30.0	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	*5240.00	106.1 PK			3.86 V	90	102.9	3.2
2	*5240.00	96.6 AV			3.86 V	90	93.4	3.2
3	5350.00	54.5 PK	74.0	-19.5	3.86 V	90	51.0	3.5
4	5350.00	41.5 AV	54.0	-12.5	3.86 V	90	38.0	3.5
5	#10480.00	58.9 PK	74.0	-15.1	2.36 V	181	44.9	14.0
6	#10480.00	46.5 AV	54.0	-7.5	2.36 V	181	32.5	14.0
7	15720.00	55.6 PK	74.0	-18.4	2.35 V	127	40.2	15.4
8	15720.00	43.0 AV	54.0	-11.0	2.35 V	127	27.6	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. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	53.3 PK	74.0	-20.7	1.10 H	188	50.3	3.0
2	5150.00	40.4 AV	54.0	-13.6	1.10 H	188	37.4	3.0
3	*5260.00	110.7 PK			1.10 H	188	107.4	3.3
4	*5260.00	101.4 AV			1.10 H	188	98.1	3.3
5	#10520.00	57.5 PK	74.0	-16.5	3.97 H	276	43.4	14.1
6	#10520.00	45.1 AV	54.0	-8.9	3.97 H	276	31.0	14.1
7	15780.00	58.9 PK	74.0	-15.1	1.29 H	166	43.7	15.2
8	15780.00	45.6 AV	54.0	-8.4	1.29 H	166	30.4	15.2
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	54.7 PK	74.0	-19.3	3.95 V	65	51.7	3.0
2	5150.00	41.1 AV	54.0	-12.9	3.95 V	65	38.1	3.0
3	*5260.00	106.0 PK			3.95 V	65	102.7	3.3
4	*5260.00	96.3 AV			3.95 V	65	93.0	3.3
5	#10520.00	59.4 PK	74.0	-14.6	2.31 V	197	45.3	14.1
6	#10520.00	46.9 AV	54.0	-7.1	2.31 V	197	32.8	14.1
7	15780.00	56.3 PK	74.0	-17.7	2.33 V	127	41.1	15.2
8	15780.00	43.1 AV	54.0	-10.9	2.33 V	127	27.9	15.2

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	110.6 PK			1.00 H	167	107.3	3.3
2	*5300.00	101.4 AV			1.00 H	167	98.1	3.3
3	10600.00	57.4 PK	74.0	-16.6	3.85 H	273	43.1	14.3
4	10600.00	44.7 AV	54.0	-9.3	3.85 H	273	30.4	14.3
5	15900.00	58.7 PK	74.0	-15.3	1.23 H	176	43.6	15.1
6	15900.00	45.7 AV	54.0	-8.3	1.23 H	176	30.6	15.1
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	*5300.00	105.8 PK			3.83 V	100	102.5	3.3
2	*5300.00	96.6 AV			3.83 V	100	93.3	3.3
3	10600.00	59.7 PK	74.0	-14.3	2.21 V	180	45.4	14.3
4	10600.00	47.1 AV	54.0	-6.9	2.21 V	180	32.8	14.3
5	15900.00	55.9 PK	74.0	-18.1	2.29 V	112	40.8	15.1
6	15900.00	43.5 AV	54.0	-10.5	2.29 V	112	28.4	15.1

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	110.4 PK			1.07 H	157	106.9	3.5
2	*5320.00	100.9 AV			1.07 H	157	97.4	3.5
3	5350.00	60.1 PK	74.0	-13.9	1.07 H	157	56.6	3.5
4	5350.00	45.2 AV	54.0	-8.8	1.07 H	157	41.7	3.5
5	10640.00	57.2 PK	74.0	-16.8	3.88 H	263	42.9	14.3
6	10640.00	44.6 AV	54.0	-9.4	3.88 H	263	30.3	14.3
7	15960.00	59.1 PK	74.0	-14.9	1.25 H	164	44.0	15.1
8	15960.00	46.1 AV	54.0	-7.9	1.25 H	164	31.0	15.1
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	*5320.00	105.3 PK			3.89 V	93	101.8	3.5
2	*5320.00	95.8 AV			3.89 V	93	92.3	3.5
3	5350.00	54.5 PK	74.0	-19.5	3.89 V	93	51.0	3.5
4	5350.00	41.5 AV	54.0	-12.5	3.89 V	93	38.0	3.5
5	10640.00	59.6 PK	74.0	-14.4	2.29 V	193	45.3	14.3
6	10640.00	46.8 AV	54.0	-7.2	2.29 V	193	32.5	14.3
7	15960.00	55.6 PK	74.0	-18.4	2.29 V	136	40.5	15.1
8	15960.00	42.7 AV	54.0	-11.3	2.29 V	136	27.6	15.1

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	57.8 PK	74.0	-16.2	1.03 H	176	54.1	3.7
2	#5470.00	44.9 AV	54.0	-9.1	1.03 H	176	41.2	3.7
3	*5500.00	111.6 PK			1.03 H	176	107.8	3.8
4	*5500.00	102.1 AV			1.03 H	176	98.3	3.8
5	11000.00	56.9 PK	74.0	-17.1	3.93 H	248	41.7	15.2
6	11000.00	44.7 AV	54.0	-9.3	3.93 H	248	29.5	15.2
7	#16500.00	58.0 PK	74.0	-16.0	1.30 H	196	40.6	17.4
8	#16500.00	45.0 AV	54.0	-9.0	1.30 H	196	27.6	17.4
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	#5470.00	53.7 PK	74.0	-20.3	3.99 V	65	50.0	3.7
2	#5470.00	40.9 AV	54.0	-13.1	3.99 V	65	37.2	3.7
3	*5500.00	105.2 PK			3.99 V	65	101.4	3.8
4	*5500.00	96.1 AV			3.99 V	65	92.3	3.8
5	11000.00	59.9 PK	74.0	-14.1	2.29 V	173	44.7	15.2
6	11000.00	47.1 AV	54.0	-6.9	2.29 V	173	31.9	15.2
7	#16500.00	56.6 PK	74.0	-17.4	2.38 V	113	39.2	17.4
8	#16500.00	43.9 AV	54.0	-10.1	2.38 V	113	26.5	17.4

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	110.9 PK			1.11 H	210	107.0	3.9
2	*5580.00	101.6 AV			1.11 H	210	97.7	3.9
3	11160.00	56.9 PK	74.0	-17.1	3.97 H	245	41.7	15.2
4	11160.00	44.6 AV	54.0	-9.4	3.97 H	245	29.4	15.2
5	#16740.00	59.3 PK	74.0	-14.7	1.15 H	166	41.0	18.3
6	#16740.00	46.3 AV	54.0	-7.7	1.15 H	166	28.0	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	*5580.00	105.8 PK			3.80 V	72	101.9	3.9
2	*5580.00	96.9 AV			3.80 V	72	93.0	3.9
3	11160.00	59.3 PK	74.0	-14.7	2.23 V	196	44.1	15.2
4	11160.00	46.7 AV	54.0	-7.3	2.23 V	196	31.5	15.2
5	#16740.00	56.6 PK	74.0	-17.4	2.20 V	124	38.3	18.3
6	#16740.00	43.5 AV	54.0	-10.5	2.20 V	124	25.2	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. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	112.3 PK			1.04 H	186	108.1	4.2
2	*5700.00	102.6 AV			1.04 H	186	98.4	4.2
3	#5725.00	67.2 PK	74.0	-6.8	1.04 H	186	63.0	4.2
4	#5725.00	50.6 AV	54.0	-3.4	1.04 H	186	46.4	4.2
5	11400.00	56.7 PK	74.0	-17.3	4.00 H	262	41.2	15.5
6	11400.00	44.3 AV	54.0	-9.7	4.00 H	262	28.8	15.5
7	#17100.00	57.9 PK	74.0	-16.1	1.31 H	162	37.8	20.1
8	#17100.00	45.1 AV	54.0	-8.9	1.31 H	162	25.0	20.1
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	*5700.00	106.9 PK			3.91 V	66	102.7	4.2
2	*5700.00	97.2 AV			3.91 V	66	93.0	4.2
3	#5725.00	53.7 PK	74.0	-20.3	3.91 V	66	49.5	4.2
4	#5725.00	40.8 AV	54.0	-13.2	3.91 V	66	36.6	4.2
5	11400.00	60.1 PK	74.0	-13.9	2.23 V	173	44.6	15.5
6	11400.00	47.6 AV	54.0	-6.4	2.23 V	173	32.1	15.5
7	#17100.00	56.7 PK	74.0	-17.3	2.19 V	117	36.6	20.1
8	#17100.00	43.6 AV	54.0	-10.4	2.19 V	117	23.5	20.1

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

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	53.5 PK	74.0	-20.5	1.01 H	226	49.8	3.7
2	#5470.00	40.8 AV	54.0	-13.2	1.01 H	226	37.1	3.7
3	*5720.00	110.7 PK			1.01 H	226	106.5	4.2
4	*5720.00	101.5 AV			1.01 H	226	97.3	4.2
5	#5850.00	53.8 PK	74.0	-20.2	1.01 H	226	49.6	4.2
6	#5850.00	41.1 AV	54.0	-12.9	1.01 H	226	36.9	4.2
7	11440.00	55.8 PK	74.0	-18.2	3.88 H	267	40.5	15.3
8	11440.00	43.8 AV	54.0	-10.2	3.88 H	267	28.5	15.3
9	#17160.00	59.2 PK	74.0	-14.8	1.28 H	178	39.4	19.8
10	#17160.00	46.0 AV	54.0	-8.0	1.28 H	178	26.2	19.8
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	#5470.00	53.9 PK	74.0	-20.1	3.82 V	85	50.2	3.7
2	#5470.00	41.2 AV	54.0	-12.8	3.82 V	85	37.5	3.7
3	*5720.00	106.0 PK			3.82 V	85	101.8	4.2
4	*5720.00	96.5 AV			3.82 V	85	92.3	4.2
5	#5850.00	54.0 PK	74.0	-20.0	3.82 V	85	49.8	4.2
6	#5850.00	41.2 AV	54.0	-12.8	3.82 V	85	37.0	4.2
7	11440.00	59.1 PK	74.0	-14.9	2.24 V	194	43.8	15.3
8	11440.00	46.3 AV	54.0	-7.7	2.24 V	194	31.0	15.3
9	#17160.00	56.0 PK	74.0	-18.0	2.28 V	120	36.2	19.8
10	#17160.00	43.1 AV	54.0	-10.9	2.28 V	120	23.3	19.8

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5629.80	53.5 PK	68.2	-14.7	1.04 H	180	49.5	4.0
2	*5745.00	111.2 PK			1.04 H	180	107.0	4.2
3	*5745.00	101.9 AV			1.04 H	180	97.7	4.2
4	#5992.23	53.2 PK	68.2	-15.0	1.04 H	180	48.7	4.5
5	11490.00	57.0 PK	74.0	-17.0	3.97 H	266	41.8	15.2
6	11490.00	44.9 AV	54.0	-9.1	3.97 H	266	29.7	15.2
7	#17235.00	58.9 PK	74.0	-15.1	1.21 H	194	38.9	20.0
8	#17235.00	45.7 AV	54.0	-8.3	1.21 H	194	25.7	20.0
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	#5648.80	53.1 PK	68.2	-15.1	3.16 V	105	49.1	4.0
2	*5745.00	104.2 PK			3.16 V	105	100.0	4.2
3	*5745.00	95.1 AV			3.16 V	105	90.9	4.2
4	#5985.60	53.7 PK	68.2	-14.5	3.16 V	105	49.2	4.5
5	11490.00	59.7 PK	74.0	-14.3	2.22 V	206	44.5	15.2
6	11490.00	47.2 AV	54.0	-6.8	2.22 V	206	32.0	15.2
7	#17235.00	56.5 PK	74.0	-17.5	2.33 V	125	36.5	20.0
8	#17235.00	43.7 AV	54.0	-10.3	2.33 V	125	23.7	20.0

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5636.93	54.1 PK	68.2	-14.1	1.14 H	200	50.1	4.0
2	*5785.00	109.6 PK			1.14 H	200	105.5	4.1
3	*5785.00	100.7 AV			1.14 H	200	96.6	4.1
4	#5926.68	54.7 PK	68.2	-13.5	1.14 H	200	50.3	4.4
5	11570.00	56.7 PK	74.0	-17.3	3.97 H	254	41.6	15.1
6	11570.00	44.5 AV	54.0	-9.5	3.97 H	254	29.4	15.1
7	#17355.00	58.5 PK	74.0	-15.5	1.25 H	173	38.0	20.5
8	#17355.00	45.4 AV	54.0	-8.6	1.25 H	173	24.9	20.5
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	#5550.00	53.5 PK	68.2	-14.7	2.57 V	286	49.6	3.9
2	*5785.00	101.9 PK			2.57 V	286	97.8	4.1
3	*5785.00	92.8 AV			2.57 V	286	88.7	4.1
4	#5940.45	53.7 PK	68.2	-14.5	2.57 V	286	49.3	4.4
5	11570.00	59.1 PK	74.0	-14.9	2.20 V	191	44.0	15.1
6	11570.00	46.7 AV	54.0	-7.3	2.20 V	191	31.6	15.1
7	#17355.00	56.8 PK	74.0	-17.2	2.31 V	106	36.3	20.5
8	#17355.00	43.7 AV	54.0	-10.3	2.31 V	106	23.2	20.5

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5636.93	53.8 PK	68.2	-14.4	1.09 H	230	49.8	4.0
2	*5825.00	109.8 PK			1.09 H	230	105.6	4.2
3	*5825.00	100.9 AV			1.09 H	230	96.7	4.2
4	#5992.70	54.9 PK	68.2	-13.3	1.09 H	230	50.4	4.5
5	11650.00	56.4 PK	74.0	-17.6	3.94 H	282	41.4	15.0
6	11650.00	44.6 AV	54.0	-9.4	3.94 H	282	29.6	15.0
7	#17475.00	59.2 PK	74.0	-14.8	1.26 H	172	38.1	21.1
8	#17475.00	46.2 AV	54.0	-7.8	1.26 H	172	25.1	21.1
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	#5611.75	53.2 PK	68.2	-15.0	2.62 V	83	49.3	3.9
2	*5825.00	103.3 PK			2.62 V	83	99.1	4.2
3	*5825.00	94.7 AV			2.62 V	83	90.5	4.2
4	#6004.57	52.6 PK	68.2	-15.6	2.62 V	83	48.1	4.5
5	11650.00	60.0 PK	74.0	-14.0	2.36 V	180	45.0	15.0
6	11650.00	47.3 AV	54.0	-6.7	2.36 V	180	32.3	15.0
7	#17475.00	56.6 PK	74.0	-17.4	2.23 V	106	35.5	21.1
8	#17475.00	43.7 AV	54.0	-10.3	2.23 V	106	22.6	21.1

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

802.11ac (VHT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	68.1 PK	74.0	-5.9	1.42 H	169	65.1	3.0
2	5150.00	49.7 AV	54.0	-4.3	1.42 H	169	46.7	3.0
3	*5190.00	106.1 PK			1.42 H	169	103.0	3.1
4	*5190.00	97.8 AV			1.42 H	169	94.7	3.1
5	#10380.00	56.6 PK	74.0	-17.4	4.00 H	243	42.9	13.7
6	#10380.00	44.3 AV	54.0	-9.7	4.00 H	243	30.6	13.7
7	15570.00	59.6 PK	74.0	-14.4	1.28 H	166	44.0	15.6
8	15570.00	46.3 AV	54.0	-7.7	1.28 H	166	30.7	15.6
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	53.9 PK	74.0	-20.1	3.96 V	77	50.9	3.0
2	5150.00	40.7 AV	54.0	-13.3	3.96 V	77	37.7	3.0
3	*5190.00	101.0 PK			3.96 V	77	97.9	3.1
4	*5190.00	92.7 AV			3.96 V	77	89.6	3.1
5	#10380.00	59.4 PK	74.0	-14.6	2.31 V	168	45.7	13.7
6	#10380.00	46.8 AV	54.0	-7.2	2.31 V	168	33.1	13.7
7	15570.00	56.0 PK	74.0	-18.0	2.22 V	142	40.4	15.6
8	15570.00	43.1 AV	54.0	-10.9	2.22 V	142	27.5	15.6

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	106.9 PK			1.70 H	206	103.7	3.2
2	*5230.00	98.4 AV			1.70 H	206	95.2	3.2
3	5350.00	53.7 PK	74.0	-20.3	1.70 H	206	50.2	3.5
4	5350.00	42.0 AV	54.0	-12.0	1.70 H	206	38.5	3.5
5	#10460.00	56.9 PK	74.0	-17.1	3.94 H	271	43.0	13.9
6	#10460.00	44.4 AV	54.0	-9.6	3.94 H	271	30.5	13.9
7	15690.00	59.6 PK	74.0	-14.4	1.27 H	162	44.0	15.6
8	15690.00	46.3 AV	54.0	-7.7	1.27 H	162	30.7	15.6
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	*5230.00	101.9 PK			3.91 V	102	98.7	3.2
2	*5230.00	93.5 AV			3.91 V	102	90.3	3.2
3	5350.00	53.8 PK	74.0	-20.2	3.91 V	102	50.3	3.5
4	5350.00	40.9 AV	54.0	-13.1	3.91 V	102	37.4	3.5
5	#10460.00	59.5 PK	74.0	-14.5	2.26 V	186	45.6	13.9
6	#10460.00	46.4 AV	54.0	-7.6	2.26 V	186	32.5	13.9
7	15690.00	56.0 PK	74.0	-18.0	2.21 V	113	40.4	15.6
8	15690.00	43.2 AV	54.0	-10.8	2.21 V	113	27.6	15.6

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	53.3 PK	74.0	-20.7	1.24 H	185	50.3	3.0
2	5150.00	41.2 AV	54.0	-12.8	1.24 H	185	38.2	3.0
3	*5270.00	106.8 PK			1.24 H	185	103.5	3.3
4	*5270.00	98.3 AV			1.24 H	185	95.0	3.3
5	#10540.00	56.9 PK	74.0	-17.1	3.96 H	266	42.7	14.2
6	#10540.00	44.7 AV	54.0	-9.3	3.96 H	266	30.5	14.2
7	15810.00	58.5 PK	74.0	-15.5	1.30 H	181	43.5	15.0
8	15810.00	45.0 AV	54.0	-9.0	1.30 H	181	30.0	15.0
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	5150.00	53.7 PK	74.0	-20.3	3.94 V	89	50.7	3.0
2	5150.00	40.7 AV	54.0	-13.3	3.94 V	89	37.7	3.0
3	*5270.00	102.7 PK			3.94 V	89	99.4	3.3
4	*5270.00	93.7 AV			3.94 V	89	90.4	3.3
5	#10540.00	60.2 PK	74.0	-13.8	2.23 V	187	46.0	14.2
6	#10540.00	47.3 AV	54.0	-6.7	2.23 V	187	33.1	14.2
7	15810.00	57.2 PK	74.0	-16.8	2.33 V	133	42.2	15.0
8	15810.00	44.1 AV	54.0	-9.9	2.33 V	133	29.1	15.0

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	107.5 PK			1.06 H	191	104.1	3.4
2	*5310.00	99.1 AV			1.06 H	191	95.7	3.4
3	5350.00	67.5 PK	74.0	-6.5	1.06 H	191	64.0	3.5
4	5350.00	50.3 AV	54.0	-3.7	1.06 H	191	46.8	3.5
5	10620.00	56.2 PK	74.0	-17.8	4.00 H	266	41.9	14.3
6	10620.00	44.2 AV	54.0	-9.8	4.00 H	266	29.9	14.3
7	15930.00	59.2 PK	74.0	-14.8	1.26 H	214	44.1	15.1
8	15930.00	45.9 AV	54.0	-8.1	1.26 H	214	30.8	15.1
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	*5310.00	101.3 PK			3.80 V	100	97.9	3.4
2	*5310.00	93.4 AV			3.80 V	100	90.0	3.4
3	5350.00	53.8 PK	74.0	-20.2	3.80 V	100	50.3	3.5
4	5350.00	40.6 AV	54.0	-13.4	3.80 V	100	37.1	3.5
5	10620.00	59.9 PK	74.0	-14.1	2.28 V	215	45.6	14.3
6	10620.00	47.2 AV	54.0	-6.8	2.28 V	215	32.9	14.3
7	15930.00	56.5 PK	74.0	-17.5	2.30 V	115	41.4	15.1
8	15930.00	43.4 AV	54.0	-10.6	2.30 V	115	28.3	15.1

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	69.5 PK	74.0	-4.5	1.02 H	194	65.8	3.7
2	**#5470.00**	**53.9 AV**	**54.0**	**-0.1**	**1.02 H**	**194**	**50.2**	**3.7**
3	*5510.00	107.1 PK			1.02 H	194	103.3	3.8
4	*5510.00	98.4 AV			1.02 H	194	94.6	3.8
5	11020.00	56.2 PK	74.0	-17.8	3.99 H	247	41.1	15.1
6	11020.00	43.8 AV	54.0	-10.2	3.99 H	247	28.7	15.1
7	#16530.00	59.0 PK	74.0	-15.0	1.23 H	201	41.5	17.5
8	#16530.00	45.6 AV	54.0	-8.4	1.23 H	201	28.1	17.5

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	#5470.00	54.4 PK	74.0	-19.6	3.92 V	61	50.7	3.7
2	#5470.00	41.3 AV	54.0	-12.7	3.92 V	61	37.6	3.7
3	*5510.00	103.1 PK			3.92 V	61	99.3	3.8
4	*5510.00	93.8 AV			3.92 V	61	90.0	3.8
5	11020.00	59.0 PK	74.0	-15.0	2.35 V	190	43.9	15.1
6	11020.00	46.8 AV	54.0	-7.2	2.35 V	190	31.7	15.1
7	#16530.00	55.2 PK	74.0	-18.8	2.31 V	122	37.7	17.5
8	#16530.00	42.6 AV	54.0	-11.4	2.31 V	122	25.1	17.5

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	108.7 PK			1.01 H	170	104.8	3.9
2	*5550.00	99.8 AV			1.01 H	170	95.9	3.9
3	11100.00	56.9 PK	74.0	-17.1	3.96 H	275	41.8	15.1
4	11100.00	44.8 AV	54.0	-9.2	3.96 H	275	29.7	15.1
5	#16650.00	58.2 PK	74.0	-15.8	1.22 H	191	40.2	18.0
6	#16650.00	45.4 AV	54.0	-8.6	1.22 H	191	27.4	18.0
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	*5550.00	102.4 PK			3.92 V	61	98.5	3.9
2	*5550.00	93.8 AV			3.92 V	61	89.9	3.9
3	11100.00	59.6 PK	74.0	-14.4	2.34 V	183	44.5	15.1
4	11100.00	47.2 AV	54.0	-6.8	2.34 V	183	32.1	15.1
5	#16650.00	56.2 PK	74.0	-17.8	2.30 V	118	38.2	18.0
6	#16650.00	43.1 AV	54.0	-10.9	2.30 V	118	25.1	18.0

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	108.0 PK			1.22 H	215	104.0	4.0
2	*5670.00	99.0 AV			1.22 H	215	95.0	4.0
3	#5725.00	58.4 PK	74.0	-15.6	1.22 H	215	54.2	4.2
4	#5725.00	45.3 AV	54.0	-8.7	1.22 H	215	41.1	4.2
5	11340.00	56.0 PK	74.0	-18.0	4.00 H	269	40.7	15.3
6	11340.00	43.9 AV	54.0	-10.1	4.00 H	269	28.6	15.3
7	#17010.00	58.6 PK	74.0	-15.4	1.20 H	156	38.7	19.9
8	#17010.00	45.3 AV	54.0	-8.7	1.20 H	156	25.4	19.9

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	*5670.00	103.7 PK			3.92 V	76	99.7	4.0
2	*5670.00	94.3 AV			3.92 V	76	90.3	4.0
3	#5725.00	53.8 PK	74.0	-20.2	3.92 V	76	49.6	4.2
4	#5725.00	40.8 AV	54.0	-13.2	3.92 V	76	36.6	4.2
5	11340.00	59.7 PK	74.0	-14.3	2.27 V	204	44.4	15.3
6	11340.00	47.2 AV	54.0	-6.8	2.27 V	204	31.9	15.3
7	#17010.00	56.6 PK	74.0	-17.4	2.23 V	89	36.7	19.9
8	#17010.00	43.7 AV	54.0	-10.3	2.23 V	89	23.8	19.9

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

CHANNEL	TX Channel 142	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5710.00	107.3 PK			1.09 H	211	103.1	4.2
2	*5710.00	98.2 AV			1.09 H	211	94.0	4.2
3	11420.00	56.8 PK	74.0	-17.2	3.93 H	255	41.4	15.4
4	11420.00	44.9 AV	54.0	-9.1	3.93 H	255	29.5	15.4
5	#17130.00	59.3 PK	74.0	-14.7	1.27 H	204	39.3	20.0
6	#17130.00	46.4 AV	54.0	-7.6	1.27 H	204	26.4	20.0
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	*5710.00	102.8 PK			3.94 V	75	98.6	4.2
2	*5710.00	93.6 AV			3.94 V	75	89.4	4.2
3	11420.00	59.2 PK	74.0	-14.8	2.29 V	202	43.8	15.4
4	11420.00	46.3 AV	54.0	-7.7	2.29 V	202	30.9	15.4
5	#17130.00	57.0 PK	74.0	-17.0	2.24 V	120	37.0	20.0
6	#17130.00	44.0 AV	54.0	-10.0	2.24 V	120	24.0	20.0

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5628.37	54.2 PK	68.2	-14.0	1.04 H	188	50.2	4.0
2	*5755.00	107.7 PK			1.04 H	188	103.5	4.2
3	*5755.00	97.9 AV			1.04 H	188	93.7	4.2
4	#5988.43	54.3 PK	68.2	-13.9	1.04 H	188	49.8	4.5
5	11510.00	56.0 PK	74.0	-18.0	3.95 H	257	40.9	15.1
6	11510.00	43.7 AV	54.0	-10.3	3.95 H	257	28.6	15.1
7	#17265.00	58.8 PK	74.0	-15.2	1.28 H	192	38.9	19.9
8	#17265.00	45.8 AV	54.0	-8.2	1.28 H	192	25.9	19.9

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	#5616.98	53.2 PK	68.2	-15.0	3.88 V	149	49.3	3.9
2	*5755.00	99.9 PK			3.88 V	149	95.7	4.2
3	*5755.00	90.5 AV			3.88 V	149	86.3	4.2
4	#5980.82	53.9 PK	68.2	-14.3	3.88 V	149	49.4	4.5
5	11510.00	59.7 PK	74.0	-14.3	2.22 V	194	44.6	15.1
6	11510.00	46.5 AV	54.0	-7.5	2.22 V	194	31.4	15.1
7	#17265.00	56.0 PK	74.0	-18.0	2.23 V	107	36.1	19.9
8	#17265.00	43.2 AV	54.0	-10.8	2.23 V	107	23.3	19.9

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5631.70	53.0 PK	68.2	-15.2	1.00 H	176	49.0	4.0
2	*5795.00	107.0 PK			1.00 H	176	102.9	4.1
3	*5795.00	97.8 AV			1.00 H	176	93.7	4.1
4	#5945.68	53.2 PK	68.2	-15.0	1.00 H	176	48.8	4.4
5	11590.00	56.3 PK	74.0	-17.7	3.92 H	244	41.2	15.1
6	11590.00	44.5 AV	54.0	-9.5	3.92 H	244	29.4	15.1
7	#17385.00	59.5 PK	74.0	-14.5	1.20 H	173	38.9	20.6
8	#17385.00	45.8 AV	54.0	-8.2	1.20 H	173	25.2	20.6
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	#5606.52	51.9 PK	68.2	-16.3	3.89 V	123	48.0	3.9
2	*5795.00	100.6 PK			3.89 V	123	96.5	4.1
3	*5795.00	92.1 AV			3.89 V	123	88.0	4.1
4	#5932.55	53.9 PK	68.2	-14.3	3.89 V	123	49.5	4.4
5	11590.00	59.9 PK	74.0	-14.1	2.18 V	193	44.8	15.1
6	11590.00	47.2 AV	54.0	-6.8	2.18 V	193	32.1	15.1
7	#17385.00	55.1 PK	74.0	-18.9	2.31 V	112	34.5	20.6
8	#17385.00	42.4 AV	54.0	-11.6	2.31 V	112	21.8	20.6

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

802.11ac (VHT80)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	67.8 PK	74.0	-6.2	1.06 H	165	64.8	3.0
2	5150.00	53.7 AV	54.0	-0.3	1.06 H	165	50.7	3.0
3	*5210.00	103.2 PK			1.06 H	165	100.0	3.2
4	*5210.00	93.9 AV			1.06 H	165	90.7	3.2
5	#10420.00	57.1 PK	74.0	-16.9	3.85 H	258	43.3	13.8
6	#10420.00	44.8 AV	54.0	-9.2	3.85 H	258	31.0	13.8
7	15630.00	59.6 PK	74.0	-14.4	1.22 H	183	43.9	15.7
8	15630.00	46.2 AV	54.0	-7.8	1.22 H	183	30.5	15.7
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	53.8 PK	74.0	-20.2	3.85 V	91	50.8	3.0
2	5150.00	40.7 AV	54.0	-13.3	3.85 V	91	37.7	3.0
3	*5210.00	98.7 PK			3.85 V	91	95.5	3.2
4	*5210.00	89.0 AV			3.85 V	91	85.8	3.2
5	#10420.00	59.3 PK	74.0	-14.7	2.32 V	170	45.5	13.8
6	#10420.00	46.4 AV	54.0	-7.6	2.32 V	170	32.6	13.8
7	15630.00	56.8 PK	74.0	-17.2	2.19 V	114	41.1	15.7
8	15630.00	43.6 AV	54.0	-10.4	2.19 V	114	27.9	15.7

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5290.00	104.3 PK			1.02 H	143	101.0	3.3
2	*5290.00	95.1 AV			1.02 H	143	91.8	3.3
3	5350.00	67.0 PK	74.0	-7.0	1.02 H	143	63.5	3.5
4	5350.00	53.6 AV	54.0	-0.4	1.02 H	143	50.1	3.5
5	#10580.00	56.4 PK	74.0	-17.6	3.90 H	272	42.1	14.3
6	#10580.00	44.3 AV	54.0	-9.7	3.90 H	272	30.0	14.3
7	15870.00	58.5 PK	74.0	-15.5	1.27 H	195	43.5	15.0
8	15870.00	45.4 AV	54.0	-8.6	1.27 H	195	30.4	15.0
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	*5290.00	100.0 PK			3.82 V	90	96.7	3.3
2	*5290.00	90.8 AV			3.82 V	90	87.5	3.3
3	5350.00	54.5 PK	74.0	-19.5	3.82 V	90	51.0	3.5
4	5350.00	41.5 AV	54.0	-12.5	3.82 V	90	38.0	3.5
5	#10580.00	59.7 PK	74.0	-14.3	2.29 V	193	45.4	14.3
6	#10580.00	47.1 AV	54.0	-6.9	2.29 V	193	32.8	14.3
7	15870.00	56.4 PK	74.0	-17.6	2.33 V	104	41.4	15.0
8	15870.00	43.7 AV	54.0	-10.3	2.33 V	104	28.7	15.0

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	66.3 PK	74.0	-7.7	1.01 H	194	62.6	3.7
2	**#5470.00**	**53.9 AV**	**54.0**	**-0.1**	**1.01 H**	**194**	**50.2**	**3.7**
3	*5530.00	102.4 PK			1.01 H	194	98.5	3.9
4	*5530.00	93.1 AV			1.01 H	194	89.2	3.9
5	11060.00	56.6 PK	74.0	-17.4	4.00 H	256	41.5	15.1
6	11060.00	44.5 AV	54.0	-9.5	4.00 H	256	29.4	15.1
7	#16590.00	58.3 PK	74.0	-15.7	1.31 H	188	40.6	17.7
8	#16590.00	45.2 AV	54.0	-8.8	1.31 H	188	27.5	17.7

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	#5470.00	53.4 PK	74.0	-20.6	3.84 V	57	49.7	3.7
2	#5470.00	40.1 AV	54.0	-13.9	3.84 V	57	36.4	3.7
3	*5530.00	96.3 PK			3.84 V	57	92.4	3.9
4	*5530.00	87.2 AV			3.84 V	57	83.3	3.9
5	11060.00	59.3 PK	74.0	-14.7	2.22 V	193	44.2	15.1
6	11060.00	47.0 AV	54.0	-7.0	2.22 V	193	31.9	15.1
7	#16590.00	56.4 PK	74.0	-17.6	2.21 V	149	38.7	17.7
8	#16590.00	43.3 AV	54.0	-10.7	2.21 V	149	25.6	17.7

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

CHANNEL	TX Channel 122	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	106.4 PK			1.02 H	164	102.5	3.9
2	*5610.00	97.3 AV			1.02 H	164	93.4	3.9
3	#5725.00	57.6 PK	74.0	-16.4	1.02 H	164	53.4	4.2
4	#5725.00	47.6 AV	54.0	-6.4	1.02 H	164	43.4	4.2
5	11220.00	56.9 PK	74.0	-17.1	3.99 H	251	41.7	15.2
6	11220.00	44.6 AV	54.0	-9.4	3.99 H	251	29.4	15.2
7	#16830.00	58.7 PK	74.0	-15.3	1.25 H	178	40.2	18.5
8	#16830.00	45.8 AV	54.0	-8.2	1.25 H	178	27.3	18.5

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	*5610.00	100.4 PK			3.90 V	92	96.5	3.9
2	*5610.00	91.2 AV			3.90 V	92	87.3	3.9
3	#5725.00	53.5 PK	74.0	-20.5	3.90 V	92	49.3	4.2
4	#5725.00	40.7 AV	54.0	-13.3	3.90 V	92	36.5	4.2
5	11220.00	59.8 PK	74.0	-14.2	2.21 V	164	44.6	15.2
6	11220.00	46.8 AV	54.0	-7.2	2.21 V	164	31.6	15.2
7	#16830.00	56.9 PK	74.0	-17.1	2.24 V	105	38.4	18.5
8	#16830.00	44.0 AV	54.0	-10.0	2.24 V	105	25.5	18.5

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

CHANNEL	TX Channel 138	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (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	53.0 PK	74.0	-21.0	1.21 H	203	49.3	3.7
2	#5470.00	41.3 AV	54.0	-12.7	1.21 H	203	37.6	3.7
3	*5690.00	107.0 PK			1.14 H	181	102.8	4.2
4	*5690.00	97.7 AV			1.14 H	181	93.5	4.2
5	#5850.00	54.6 PK	74.0	-19.4	1.14 H	181	50.4	4.2
6	#5850.00	43.3 AV	54.0	-10.7	1.14 H	181	39.1	4.2
7	11380.00	57.4 PK	74.0	-16.6	3.89 H	248	42.0	15.4
8	11380.00	45.1 AV	54.0	-8.9	3.89 H	248	29.7	15.4
9	#17070.00	58.5 PK	74.0	-15.5	1.27 H	172	38.5	20.0
10	#17070.00	45.2 AV	54.0	-8.8	1.27 H	172	25.2	20.0
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	#5470.00	54.2 PK	74.0	-19.8	3.92 V	92	50.5	3.7
2	#5470.00	41.3 AV	54.0	-12.7	3.92 V	92	37.6	3.7
3	*5690.00	101.5 PK			3.98 V	81	97.3	4.2
4	*5690.00	92.2 AV			3.98 V	81	88.0	4.2
5	#5850.00	54.3 PK	74.0	-19.7	3.98 V	81	50.1	4.2
6	#5850.00	41.3 AV	54.0	-12.7	3.98 V	81	37.1	4.2
7	11380.00	59.5 PK	74.0	-14.5	2.25 V	174	44.1	15.4
8	11380.00	46.7 AV	54.0	-7.3	2.25 V	174	31.3	15.4
9	#17070.00	56.6 PK	74.0	-17.4	2.28 V	109	36.6	20.0
10	#17070.00	44.0 AV	54.0	-10.0	2.28 V	109	24.0	20.0

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5631.70	53.9 PK	68.2	-14.3	1.05 H	177	49.9	4.0
2	*5775.00	104.5 PK			1.05 H	177	100.3	4.2
3	*5775.00	96.0 AV			1.05 H	177	91.8	4.2
4	#5929.30	54.6 PK	68.2	-13.6	1.05 H	177	50.2	4.4
5	11550.00	56.8 PK	74.0	-17.2	3.93 H	245	41.6	15.2
6	11550.00	44.1 AV	54.0	-9.9	3.93 H	245	28.9	15.2
7	#17325.00	58.2 PK	74.0	-15.8	1.21 H	200	37.9	20.3
8	#17325.00	45.3 AV	54.0	-8.7	1.21 H	200	25.0	20.3
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	#5554.75	52.8 PK	68.2	-15.4	3.66 V	78	48.9	3.9
2	*5775.00	99.7 PK			3.66 V	78	95.5	4.2
3	*5775.00	90.1 AV			3.66 V	78	85.9	4.2
4	#5987.00	52.5 PK	68.2	-15.7	3.66 V	78	48.0	4.5
5	11550.00	59.4 PK	74.0	-14.6	2.29 V	201	44.2	15.2
6	11550.00	46.9 AV	54.0	-7.1	2.29 V	201	31.7	15.2
7	#17325.00	56.6 PK	74.0	-17.4	2.27 V	115	36.3	20.3
8	#17325.00	43.6 AV	54.0	-10.4	2.27 V	115	23.3	20.3

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

Below 1GHz Data:

802.11a

CHANNEL	TX Channel 140	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	Below 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	35.48	34.7 QP	40.0	-5.3	1.50 H	360	44.4	-9.7
2	66.42	31.0 QP	40.0	-9.0	2.00 H	158	40.8	-9.8
3	299.61	33.8 QP	46.0	-12.2	1.00 H	238	41.3	-7.5
4	371.97	32.2 QP	46.0	-13.8	1.00 H	308	37.8	-5.6
5	488.52	33.2 QP	46.0	-12.8	2.00 H	310	36.0	-2.8
6	599.20	31.9 QP	46.0	-14.1	1.50 H	36	32.1	-0.2
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	69.96	32.3 QP	40.0	-7.7	2.50 V	74	42.4	-10.1
2	112.94	31.1 QP	43.5	-12.4	1.00 V	0	42.4	-11.3
3	299.66	34.2 QP	46.0	-11.8	1.50 V	360	41.7	-7.5
4	464.03	32.8 QP	46.0	-13.2	1.00 V	0	35.9	-3.1
5	490.70	32.7 QP	46.0	-13.3	1.00 V	330	35.4	-2.7
6	602.20	32.6 QP	46.0	-13.4	1.00 V	250	32.7	-0.1

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. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value

4.2 Transmit Power Measurment

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

*B is the 26 dB emission bandwidth in megahertz

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

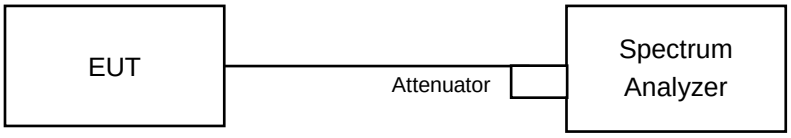
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

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

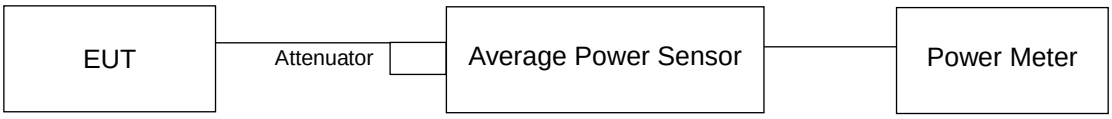
4.2.2 Test Setup

FOR POWER OUTPUT MEASUREMENT

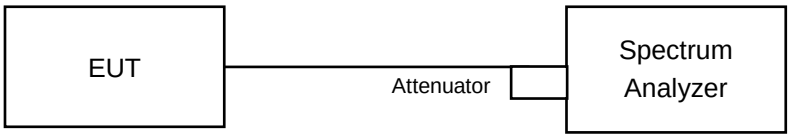
For channel straddling 5725MHz:



For other channels:



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

For channel straddling 5725MHz:

Method SA-2

1. Set span to encompass the emission bandwidth (EBW) of the signal.
2. Set RBW =1MHz.
3. Set the VBW ≥ 3 x RBW.
4. Number of points in sweep ≥ 2 Span / RBW.
5. Sweep time = auto.
6. Detector = RMS.
7. Trace average at least 100 traces in power averaging mode
8. Compute power by integrating the spectrum across the 26 dB EBW of the signal.
9. Duty factor need added to measured value (duty cycle < 98 percent).

For other channels:

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

802.11a

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	15.78	15.46	73	18.63	24	Pass
40	5200	15.83	15.76	75.952	18.81	24	Pass
48	5240	15.46	15.57	71.214	18.53	24	Pass
52	5260	15.61	15.74	73.889	18.69	24	Pass
60	5300	15.71	15.75	74.823	18.74	24	Pass
64	5320	15.62	15.47	71.712	18.56	24	Pass
100	5500	15.82	15.81	76.301	18.83	24	Pass
116	5580	15.71	15.62	73.714	18.68	24	Pass
140	5700	15.73	15.61	73.803	18.68	24	Pass
*144 (UNII-2c Band)	5720	9.37	9.74	18.924	12.77	24	Pass
*144 (UNII-3 Band)	5720	2.55	3.03	3.988	6.01	30	Pass
149	5745	15.58	15.61	72.533	18.61	30	Pass
157	5785	15.76	15.58	73.811	18.68	30	Pass
165	5825	15.83	15.87	76.919	18.86	30	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*144	5720	22.912	13.6
Note: The total power was calculated through formula and record the value for reference only.			

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	32.91	32.98
60	5300	32.95	31.96
64	5320	32.96	30.70
100	5500	33.06	30.23
116	5580	29.81	29.98
140	5700	33.94	32.58
144 (UNII-2c Band)	5720	21.22	20.46

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	32.91	26.17 > 24
60	5300	31.96	26.04 > 24
64	5320	30.70	25.87 > 24
100	5500	30.23	25.8 > 24
116	5580	29.81	25.74 > 24
140	5700	32.58	26.12 > 24
144 (UNII-2c Band)	5720	20.46	24.1 > 24

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	15.02	15.11	64.203	18.08	24	Pass
40	5200	15.04	15.09	64.2	18.08	24	Pass
48	5240	15.21	15.26	66.763	18.25	24	Pass
52	5260	15.26	15.35	67.851	18.32	24	Pass
60	5300	15.11	15.21	65.623	18.17	24	Pass
64	5320	15.24	15.18	66.381	18.22	24	Pass
100	5500	15.11	15.21	65.623	18.17	24	Pass
116	5580	15.42	15.32	68.875	18.38	24	Pass
140	5700	15.37	15.11	66.869	18.25	24	Pass
*144 (UNII-2c Band)	5720	8.62	9.69	18.467	12.66	24	Pass
*144 (UNII-3 Band)	5720	2.12	2.53	3.807	5.81	30	Pass
149	5745	15.28	15.25	67.226	18.28	30	Pass
157	5785	15.23	15.24	66.763	18.25	30	Pass
165	5825	15.31	15.22	67.229	18.28	30	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*144	5720	22.274	13.48
Note: The total power was calculated through formula and record the value for reference only.			

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	30.73	30.86
60	5300	33.15	33.29
64	5320	33.51	30.24
100	5500	32.17	28.60
116	5580	33.13	29.82
140	5700	34.56	35.91
144 (UNII-2c Band)	5720	20.85	20.51

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	30.73	25.87 > 24
60	5300	33.15	26.2 > 24
64	5320	30.24	25.8 > 24
100	5500	28.60	25.56 > 24
116	5580	29.82	25.74 > 24
140	5700	34.56	26.38 > 24
144 (UNII-2c Band)	5720	20.51	24.11 > 24

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	15.11	15.06	64.497	18.10	24	Pass
46	5230	15.13	15.02	64.353	18.09	24	Pass
54	5270	15.21	15.23	66.532	18.23	24	Pass
62	5310	15.29	15.24	67.226	18.28	24	Pass
102	5510	14.87	14.62	59.663	17.76	24	Pass
110	5500	15.21	15.41	67.943	18.32	24	Pass
134	5670	15.11	15.36	66.79	18.25	24	Pass
*142 (UNII-2c Band)	5710	7.63	6.43	12.514	10.97	24	Pass
*142 (UNII-3 Band)	5710	-3.34	-3.85	1.0752	0.31	24	Pass
151	5755	15.21	15.26	66.763	18.25	30	Pass
159	5795	15.26	15.28	67.303	18.28	30	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*142	5710	13.5892	11.33
Note: The total power was calculated through formula and record the value for reference only.			

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	63.10	66.28
62	5310	50.80	63.06
102	5510	54.08	50.39
110	5500	63.41	57.28
134	5670	62.85	76.22
142 (UNII-2c Band)	5710	45.40	49.40

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	63.10	29 > 24
62	5310	50.80	28.05 > 24
102	5510	50.39	28.02 > 24
110	5500	57.28	28.58 > 24
134	5670	62.85	28.98 > 24
142 (UNII-2c Band)	5710	45.40	27.57 > 24

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	14.79	15.31	64.093	18.07	24	Pass
58	5290	15.17	14.75	62.739	17.98	24	Pass
106	5530	12.52	12.37	35.123	15.46	24	Pass
122	5610	15.25	15.17	66.382	18.22	24	Pass
*138 (UNII-2c Band)	5690	5.85	4.80	9.625	9.83	24	Pass
*138 (UNII-3 Band)	5690	-8.85	-10.88	0.29715	-5.27	30	Pass
155	5775	15.19	15.31	67	18.26	30	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

The Total Power for the straddle channel:

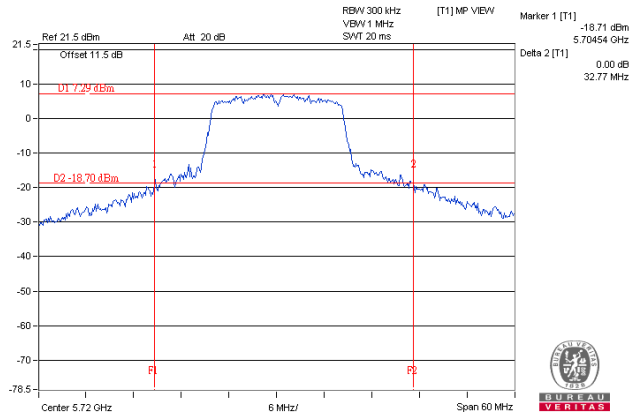
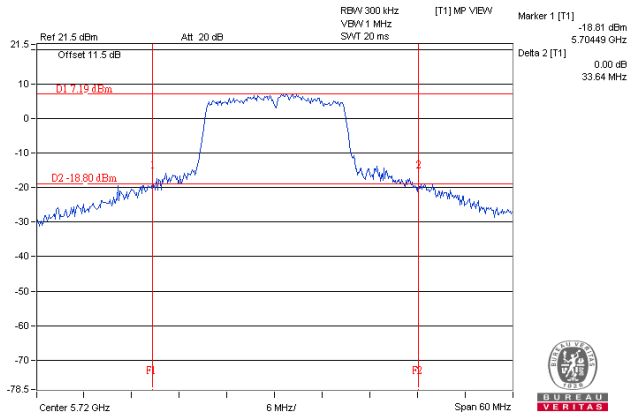
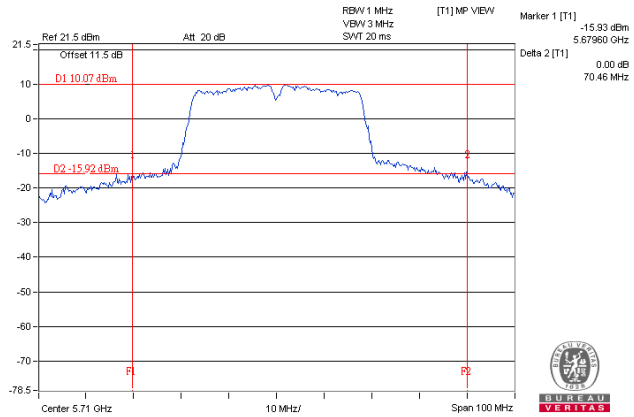
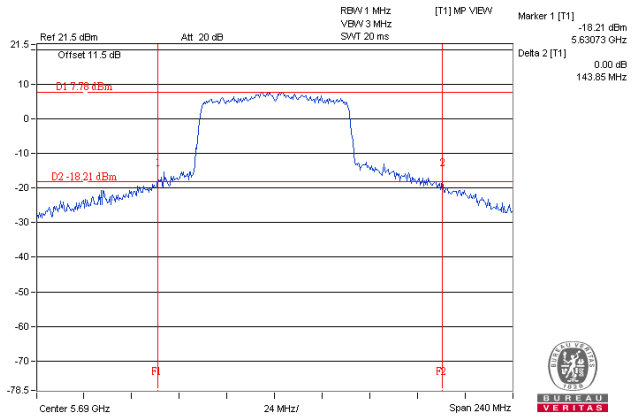
Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*138	5690	9.92215	9.97
Note: The total power was calculated through formula and record the value for reference only.			

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	123.16	125.40
106	5530	124.88	131.34
122	5610	130.21	133.05
138 (UNII-2c Band)	5690	103.37	94.27

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	123.16	31.9 > 24
106	5530	124.88	31.96 > 24
122	5610	130.21	32.14 > 24
138 (UNII-2c Band)	5690	94.27	30.74 > 24

Spectrum Plot of Worst Value	
802.11a / Chain 1 - CH144 (UNII-2c Band)	**802.11ac (VHT20) / Chain 1 - CH144 (UNII-2c Band)**
	
802.11ac (VHT40) / Chain 0 - CH142 (UNII-2c Band)	**802.11ac (VHT80) / Chain 1 - CH138 (UNII-2c Band)**
	

NOTE:

For CH144 (UNII-2c Band) = 5725MHz - Marker 1
For CH142 (UNII-2c Band) = 5725MHz - Marker 1
For CH138 (UNII-2c Band) = 5725MHz - Marker 1

For Reference only – Power meter value

The power value was measured by power meter with average sensor.

Chan.	Chan. Freq. (MHz)	Average Power (dBm)		Total Power (mW)	Total Power (dBm)
		Chain 0	Chain 1		
802.11a					
144	5720	15.67	15.54	72.708	18.62
802.11ac (VHT20)					
144	5720	15.21	15.21	66.378	18.22
802.11ac (VHT40)					
142	5710	15.26	15.21	66.763	18.25
802.11ac (VHT80)					
138	5690	15.21	15.25	66.686	18.24
Note: The total power was calculated through formula and record the value for reference only.					

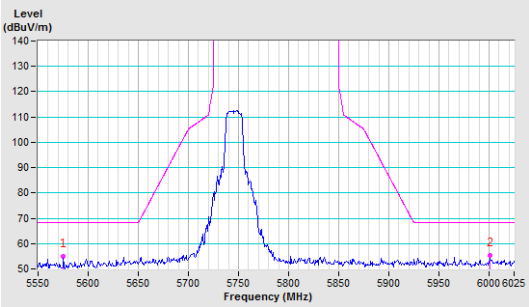
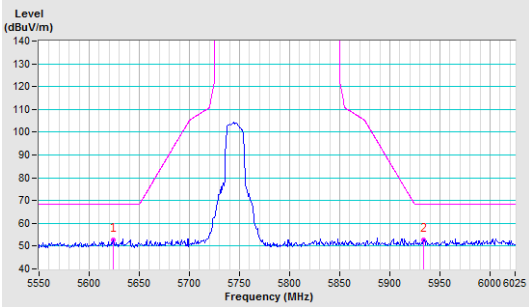
5 Pictures of Test Arrangements

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

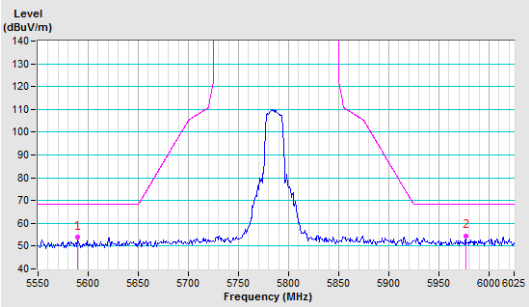
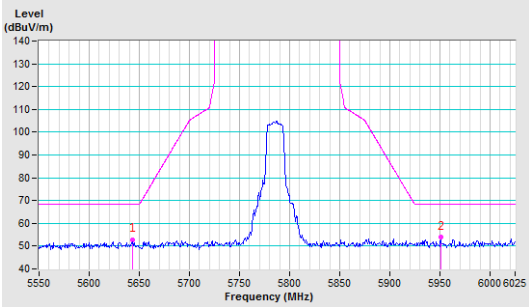
Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

802.11a

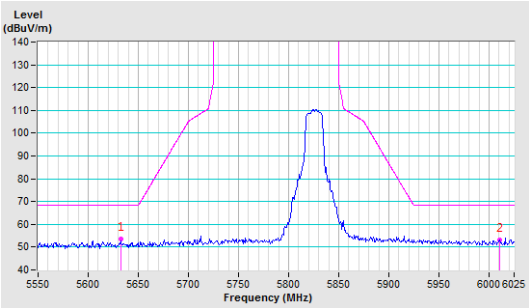
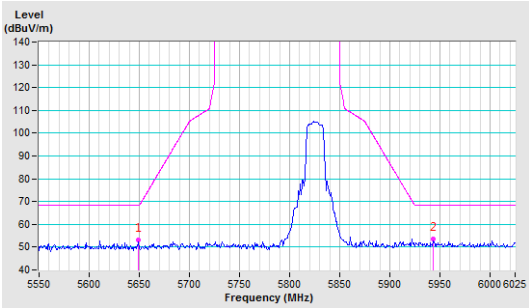
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

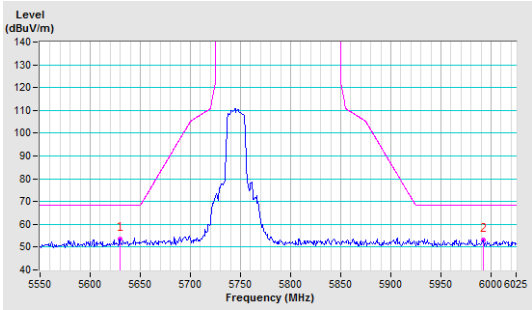
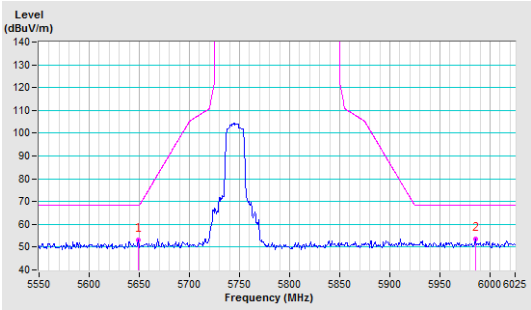
Horizontal	Vertical
	

CH 165 5825 MHz

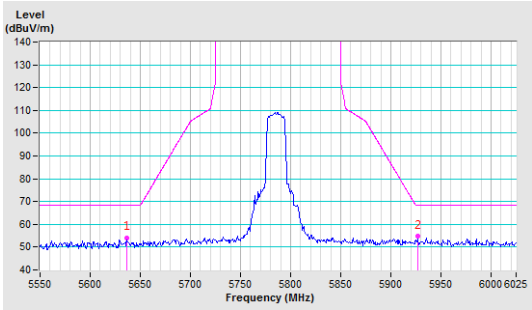
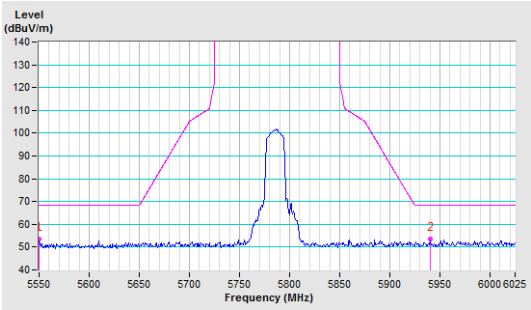
Horizontal	Vertical
	

802.11ac (VHT20)

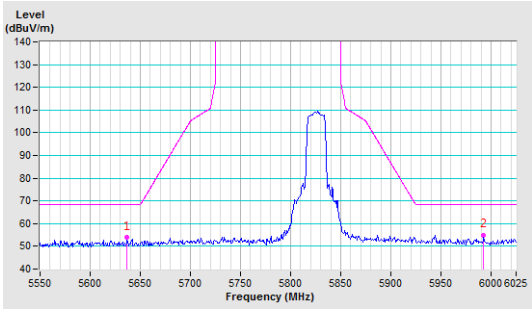
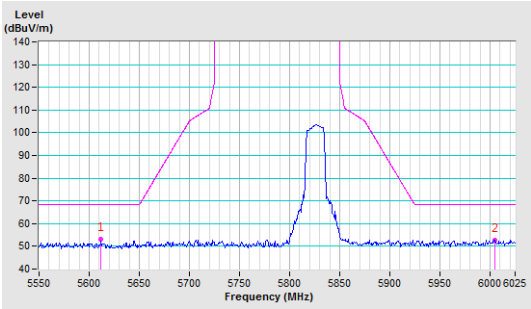
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

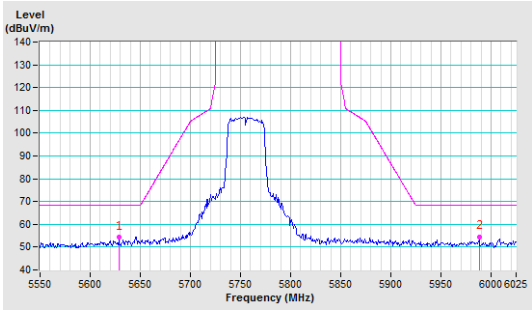
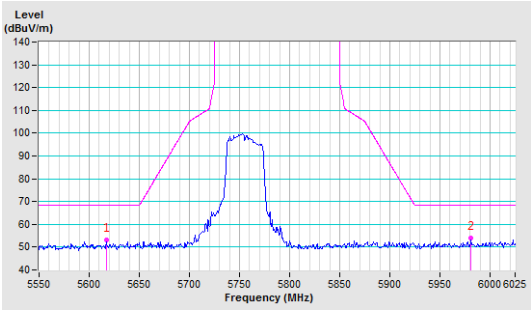
Horizontal	Vertical
	

CH 165 5825 MHz

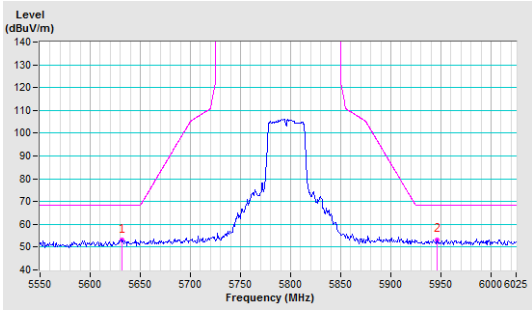
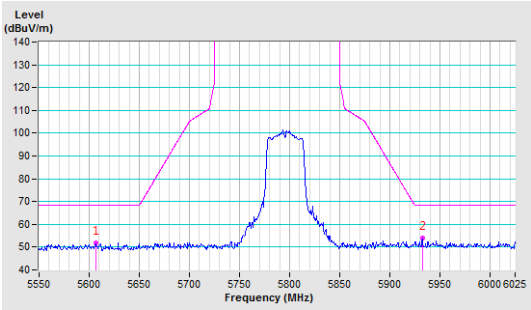
Horizontal	Vertical
	

802.11ac (VHT40)

CH 151 5755 MHz

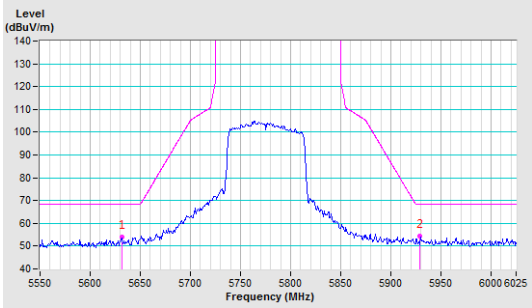
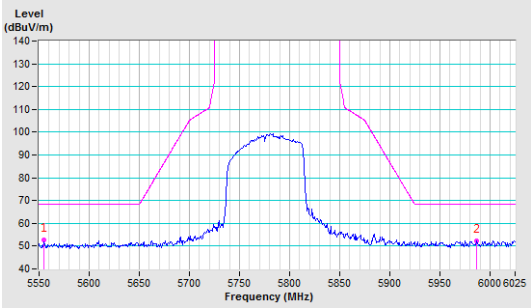
Horizontal	Vertical
	

CH 159 5795 MHz

Horizontal	Vertical
	

802.11ac (VHT80)

CH 155 5775 MHz

Horizontal	Vertical
	

Appendix – Information on the Testing Laboratories

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

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

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

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