FCC Test Report (WLAN)

Report No.:	RF140605E01L-1
FCC ID:	TLZ-CB178NF
Test Model:	AW-CB178NF, AW-CB178NF(UART)
Series Model:	AW-CB178NF-ZP
Received Date:	June 19, 2017
Test Date:	July 11 to 18, 2017
Issued Date:	July 25, 2017
Applicant:	AzureWave Technologies, Inc.
Address:	8F., No.94, Baozhong Rd. , Xindian Dist., New Taipei City , Taiwan 231
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location (1):	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location (2):	No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan R.O.C.

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Release Control Record

Issue No.	Description	Date Issued
RF140605E01L-1	Original release.	July 25, 2017

1 Certificate of Conformity

Product:	802.11ac/a/b/g/n 2X2 MIMO WLAN & Bluetooth M.2 module
Brand:	AzureWave
Test Model:	AW-CB178NF, AW-CB178NF(UART)
Series Model:	AW-CB178NF-ZP
Sample Status:	ENGINEERING SAMPLE
Applicant:	AzureWave Technologies, Inc.
Test Date:	July 11 to 18, 2017
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:** July 25, 2017

Claire Kuan / Specialist

Approved by : _____ , **Date:** July 25, 2017

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) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	PASS	Meet the requirement of limit. Minimum passing margin is -1.6dB at 5350.00MHz
15.407(a)(1/2/3)	Max Average Transmit Power	PASS	Meet the requirement of limit.

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

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	5.32 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.14 dB
	6GHz ~ 18GHz	5.04 dB
	18GHz ~ 40GHz	5.25 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT (WLAN)

Product	802.11ac/a/b/g/n 2X2 MIMO WLAN & Bluetooth M.2 module
Brand	AzureWave
Test Model	AW-CB178NF, AW-CB178NF(UART)
Series Model	AW-CB178NF-ZP
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	3.3Vdc from host equipment
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode
Modulation Technology	DSSS,OFDM
Transfer Rate	802.11b: up to 11Mbps 802.11a/g: up to 54Mbps 802.11n : up to 300Mbps 802.11ac: up to 866.7Mbps
Operating Frequency	For 15.407 5.18 ~ 5.24GHz, 5.26 ~ 5.32GHz, 5.50 ~ 5.58GHz & 5.66 ~ 5.70GHz, 5.745 ~ 5.825GHz
	For 15.247 2.412 ~ 2.462GHz
Number of Channel	For 15.407 21 for 802.11a, 802.11n (HT20), 802.11ac (VHT20) 9 for 802.11n (HT40), 802.11ac (VHT40) 4 for 802.11ac (VHT80)
	For 15.247 11 for 802.11b/g, 802.11n (HT20) 7 for 802.11n (HT40)
Output Power	**For 15.407** 802.11a: 88.452mW 802.11ac (VHT20): 95.932mW 802.11ac (VHT40): 69.218mW 802.11ac (VHT80): 14.66mW
	For 15.247: 802.11b: 182.395mW 802.11g: 680.997mW 802.11n (HT20): 715.475mW 802.11n (HT40): 288.679mW
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.: RF140605E01D-1 design is as the following:

   ◆ Add two sets of new Dippole antennas (Set 5, Set 6) as below table:

Original Antenna

Set 1 Antenna

Transmitter Circuit	Brand	Model	Ant. Gain (dBi) < Excluding cable loss>	Cable Loss (dB)		Net. Gain (dBi)	Frequency range (MHz to MHz)	Ant. Type	Connecter Type	Cable Length (mm)
				100 mm	180 mm					
Chain (0)	TE	2118433-1	2.18	1	0.54	0.64	2400~2484	PCB	R-SMA	100+180
			2.34	1.3	0.96	0.08	5150~5850			
Chain (1)	TE	2118433-1	2.18	1	0.54	0.64	2400~2484	PCB	R-SMA	100+180
			2.34	1.3	0.96	0.08	5150~5850			

Set 2 Antenna

Transmitter Circuit	Brand	Model	Ant. Gain(dBi) <Including cable loss>	Frequency range (MHz to MHz)	Ant. Type	Connecter Type	Cable Length (mm)
Chain (0)	Walsin	RFPCA310715EMLB301	3.06	2400~2500	PIFA	mini - ipex	150
			4.81	5150~5850			
Chain (1)	Walsin	RFPCA310715EMLB301	3.06	2400~2500	PIFA	mini - ipex	150
			4.81	5150~5850			

Set 3 Antenna

Transmitter Circuit	Brand	Model	Ant. Gain(dBi) <Including cable loss>	Frequency range (MHz to MHz)	Ant. Type	Connecter Type	Cable Length (mm)
Chain (0)	Wistron NeWeb Corporation	81EAAX15.G12	1.02	2400~2484	PIFA	mini - ipex	254
			-1.03	5150~5850			
Chain (1)	Wistron NeWeb Corporation	81EAAX15.G12	1.02	2400~2484	PIFA	mini - ipex	563
			-1.03	5150~5850			

Set 4 Antenna

Transmitter Circuit	Brand	Model	Antenna Gain(dBi) Including 1285mm cable loss Excluding 60mm cable loss	Cable Loss (dB)		Net. Gain (dBi)	Frequency range (MHz to MHz)	Ant. Type	Connecter Type	Cable Length (mm)
				1285 mm	60 mm					
Chain (0)	TE	2118406-3	0.38	NA	-0.35	0.03	2300~3800	PCB	R-SMA	1285 +60
			-0.18	NA	-0.73	-0.91	5150~5875			
Chain (1)	TE	2118406-3	0.38	NA	-0.35	0.03	2300~3800	PCB	R-SMA	1285 +60
			-0.18	NA	-0.73	-0.91	5150~5875			

Newly Antenna

Set 5 Antenna

Transmitter Circuit	Brand	Model	Ant. Gain(dBi) <Including cable loss>	Frequency range (MHz to MHz)	Ant. Type	Connecter Type	Cable Length (mm)
Chain (0)	Ventev	Main Antenna: 593861-MWAS-2382-5.50	2.4	2400~2500	Dipole	N Plug	140 +/- 10
			3.55	4900~5825			
Chain (1)	Ventev	Aux Antenna:593861-MWAS-2382-9.00	2.4	2400~2500	Dipole	N Plug	230 +/- 10
			3.55	4900~5825			

Set 6 Antenna							
Transmitter Circuit	Brand	Model	Antenna Gain(dBi) Including Cable loss	Frequency range (MHz to MHz)	Ant. Type	Connecter Type	Cable Length (mm)
Chain (0)	Cortec	AN2450-74L02BRS+ SMASFR8-3200B-40X00	1.5	2400~2500	Dipole	SMA Male Reverse/ SMA Female Reverse	200 +/- 3
			2.0	5150~5850			
Chain (1)	Cortec	AN2450-74L02BRS+ SMASFR8-3200B-40X00I	1.5	2400~2500	Dipole	SMA Male Reverse/ SMA Female Reverse	200 +/- 3

Note: 1. From the above 1TX configuration mode, the worst case was found in transmission circuit on Chain (1).
2. For BT mode will fix transmission on Chain (0).
3. From the above antenna sets, Set 1, Set 2 and Set 5 Antenna were selected as representative antenna for the test and its data was recorded in this report.

2. According to above conditions only radiated emissions and max average transmit power test items of the newly antenna need to be performed. And all data was verified to meet the requirements.

3. The EUT has three model names, which are identical to each other in all aspects except for the following:

Brand	Model	Description
AzureWave	AW-CB178NF(UART)	With UART interface
	AW-CB178NF	Without UART interface
	AW-CB178NF-ZP	With UART interface

From the model names, the radiated emission worst case was found in model No.: **AW-CB178NF**. Therefore only the test data of the mode was recorded in this report.

4. For the new antenna sources, their antenna types are identical to original and the gains are smaller, therefore no addition test has to be performed.

5. There are Bluetooth 4.0 technology and WLAN (2.4GHz and 5GHz) technology used for the EUT.

6. For WLAN: 2.4GHz and 5GHz technology cannot transmit at same time.

7. WLAN/BT coexistence mode:

Condition	Technology	
1	WLAN(2.4GHz) 1TX only	BT
2	WLAN(5GHz) 1TX only	BT

From above coexistence mode, radiated emission of the simultaneous operation has been evaluated and no non-compliance was found.

8. The EUT incorporates a MIMO function.

MODULATION MODE	DATA RATE (MCS)	TX & RX CONFIGURATION	
802.11a	6 ~ 54Mbps	1Tx (diversity)	1Rx (diversity)
		2TX(CDD)	2Rx
802.11b	1 ~ 11Mbps	1Tx (diversity)	1Rx (diversity)
		2TX(CDD)	2Rx
802.11g	6 ~ 54Mbps	1Tx (diversity)	1Rx (diversity)
		2TX(CDD)	2Rx
802.11n (HT20)	MCS 0~7	1Tx (diversity)	1Rx (diversity)
	MCS 8~15	2Tx	2Rx
802.11n (HT40)	MCS 0~7	1Tx (diversity)	1Rx (diversity)
	MCS 8~15	2Tx	2Rx
802.11ac (VHT20) (5GHz)	MCS0~8 Nss=1	1Tx (diversity)	1Rx (diversity)
	MCS0~8 Nss=2	2Tx	2Rx
802.11ac (VHT40) (5GHz)	MCS0~9 Nss=1	1Tx (diversity)	1Rx (diversity)
	MCS0~9 Nss=2	2Tx	2Rx
802.11ac (VHT80) (5GHz)	MCS0~9 Nss=1	1Tx (diversity)	1Rx (diversity)
	MCS0~9 Nss=2	2Tx	2Rx
Note: The modulation and bandwidth are similar for 802.11n mode for 20MHz (40MHz) and 802.11ac mode for 20MHz (40MHz), therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)			

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

3.2 Description of Test Modes

FOR 5180 ~ 5240MHz

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

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

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
42	5210MHz

FOR 5260 ~ 5320MHz

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

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

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

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
58	5290MHz

FOR 5500 ~ 5580MHz & 5660MHz ~ 5.700MHz

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

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

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

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

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
106	5530MHz

FOR 5745 ~ 5825MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT CONFIGURE MODE	APPLICABLE TO				DESCRIPTION
	RE≥1G	RE<1G	PLC	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: "-"means no effect.

Radiated Emission Test (Above 1GHz):

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

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

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	DATA RATE (Mbps)
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6
802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	13
802.11ac (VHT40)		38 to 46	38, 46	OFDM	27
802.11ac (VHT80)		42	42	OFDM	58.5
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6
802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	13
802.11ac (VHT40)		54 to 62	54, 62	OFDM	27
802.11ac (VHT80)		58	58	OFDM	58.5
802.11a	5500 ~ 5580 & 5660 ~ 5700	100 to 140	100, 116, 132, 140	OFDM	6
802.11ac (VHT20)		100 to 140	100, 116, 132, 140	OFDM	13
802.11ac (VHT40)		102 to 134	102, 110, 134	OFDM	27
802.11ac (VHT80)		106	106	OFDM	58.5
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6
802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	13
802.11ac (VHT40)		151 to 159	151, 159	OFDM	27
802.11ac (VHT80)		155	155	OFDM	58.5

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	DATA RATE (Mbps)
802.11a	5180-5320, 5500 ~ 5580 & 5660 ~ 5700, 5745-5825	36 to 64, 100 to 140, 149 to 165	60	OFDM	6

Antenna Port Conducted Measurement:

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

MODE	FREQ. BAND (MHz)	AVAILABLE CHANNEL	TESTED CHANNEL	MODULATION TECHNOLOGY	DATA RATE (Mbps)
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6
802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	13
802.11ac (VHT40)		38 to 46	38, 46	OFDM	27
802.11ac (VHT80)		42	42	OFDM	58.5
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6
802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	13
802.11ac (VHT40)		54 to 62	54, 62	OFDM	27
802.11ac (VHT80)		58	58	OFDM	58.5
802.11a	5500 ~ 5580 & 5660 ~ 5700	100 to 140	100, 116, 132, 140	OFDM	6
802.11ac (VHT20)		100 to 140	100, 116, 132, 140	OFDM	13
802.11ac (VHT40)		102 to 134	102, 110, 134	OFDM	27
802.11ac (VHT80)		106	106	OFDM	58.5
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6
802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	13
802.11ac (VHT40)		151 to 159	151, 159	OFDM	27
802.11ac (VHT80)		155	155	OFDM	58.5

Test Condition:

APPLICABLE TO	ENVIRONMENTAL CONDITIONS	INPUT POWER (SYSTEM)	TESTED BY
RE≥1G	25deg. C, 68%RH	120Vac, 60Hz	Weiwei Lo
RE<1G	25deg. C, 65%RH	120Vac, 60Hz	Weiwei Lo
APCM	25deg. C, 60%RH	120Vac, 60Hz	Anderson Chen

3.3 Description of Support Units

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

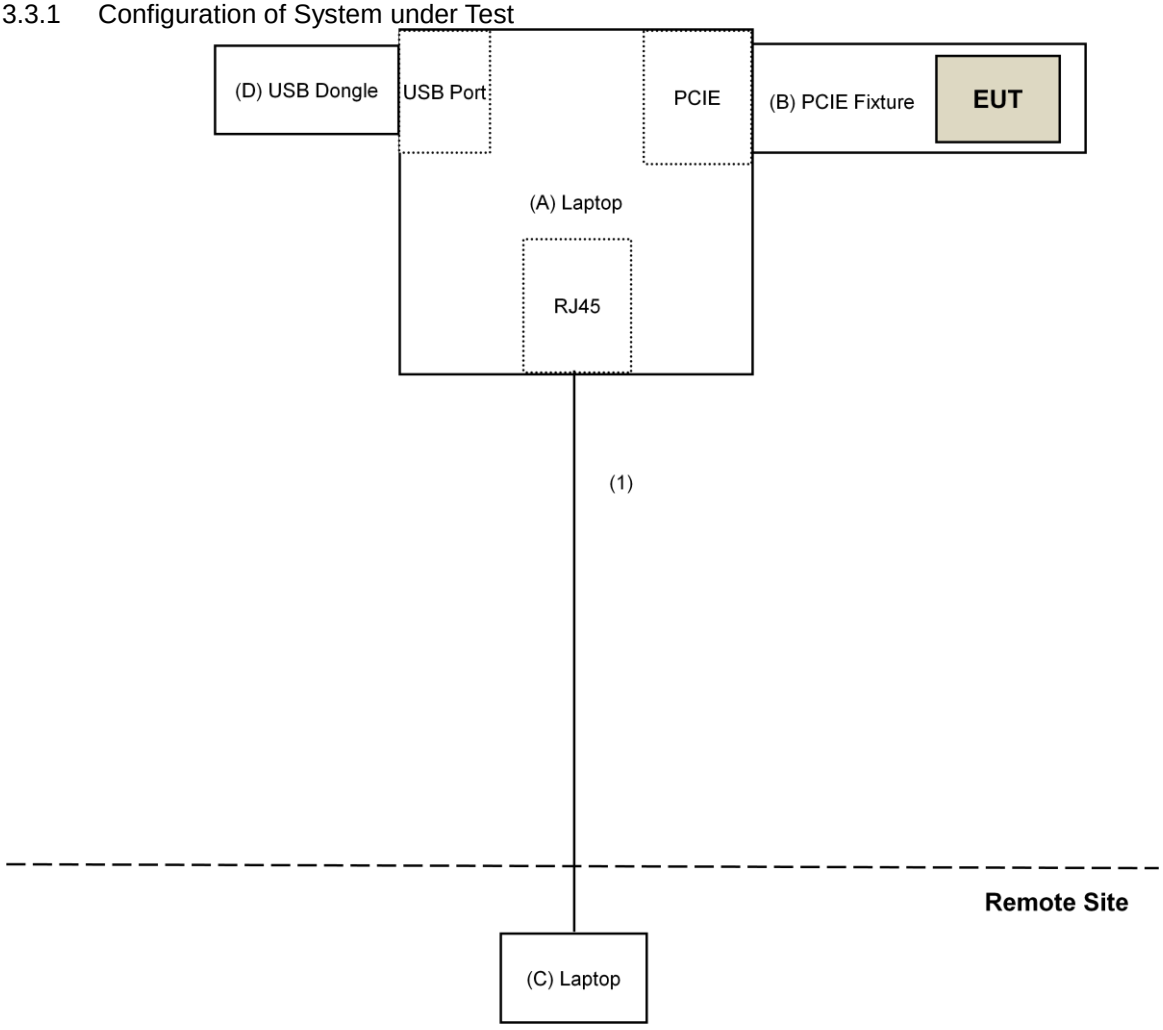
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	NOTEBOOK COMPUTER	Lenovo	N200	NA	NA	Supplied by client
B.	PCI-E Test Tool	AzureWave	NA	NA	NA	Supplied by client
C.	NOTEBOOK COMPUTER	DELL	E5430	4YV4VY1	FCC DoC	Provided by Lab

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.	UTP	1	10	No	0	Provided by Lab

3.3.1 Configuration of System under Test



3.4 General Description of Applied Standard

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

FCC Part 15, Subpart E (15.407)
KDB 789033 D02 General UNII Test Procedure New Rules v01r04
KDB 662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2013

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

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

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 v01r04	FIELD STRENGTH AT 3m	
	PK:74 (dBμV/m)	AV:54 (dBμV/m)
APPLICABLE TO	**EIRP LIMIT**	**EQUIVALENT FIELD STRENGTH AT 3m**
15.407(b)(1)	PK:-27 (dBm/MHz)	PK:68.2(dBμV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	PK:-27 (dBm/MHz) *1 PK:-17 (dBm/MHz) *2	PK: 68.2(dBμV/m) *1 PK:78.2 (dBμV/m) *2

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

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

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

4.1.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	DATE OF CALIBRATION	DUE DATE OF CALIBRATION
Test Receiver Agilent	N9038A	MY50010156	Aug. 18, 2016	Aug. 17, 2017
Pre-Amplifier(*) EMCI	EMC001340	980142	Jan. 20, 2016	Jan. 19, 2018
Loop Antenna(*) Electro-Metrics	EM-6879	264	Dec. 16, 2016	Dec. 15, 2018
RF Cable	NA	LOOPCAB-001 LOOPCAB-002	Jan. 17, 2017	Jan. 16, 2018
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-05	May 06, 2017	May 05, 2018
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Dec. 29, 2016	Dec. 28, 2017
RF Cable	8D	966-3-1 966-3-2 966-3-3	Apr. 01, 2017	Mar. 31, 2018
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	Oct. 05, 2016	Oct. 04, 2017
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Dec. 28, 2016	Dec. 27, 2017
Pre-Amplifier EMCI	EMC12630SE	980384	Feb. 02, 2017	Feb. 01, 2018
RF Cable	EMC104-SM-SM-1200 EMC104-SM-SM-2000 EMC104-SM-SM-5000	160922 150317 150322	Feb. 02, 2017 Mar. 29, 2017 Mar. 29, 2017	Feb. 01, 2018 Mar. 28, 2018 Mar. 28, 2018
Spectrum Analyzer Keysight	N9030A	MY54490520	July 29, 2016	July 28, 2017
Pre-Amplifier EMCI	EMC184045SE	980386	Feb. 02, 2017	Feb. 01, 2018
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170608	Dec. 15, 2016	Dec. 14, 2017
RF Cable	SUCOFLEX 102	36432/2 36433/2	Jan. 15, 2017	Jan. 14, 2018
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Spectrum Analyzer R&S	FSv40	100964	July 1, 2017	June 30, 2018
Power meter Anritsu	ML2495A	1014008	May 11, 2017	May 10, 2018
Power sensor Anritsu	MA2411B	0917122	May 11, 2017	May 10, 2018

NOTE:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. *The calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in 966 Chamber No. 3.
4. The CANADA Site Registration No. is 20331-1.
5. Loop antenna was used for all emissions below 30 MHz.
6. Tested Date: July 11 to 17, 2017.

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:

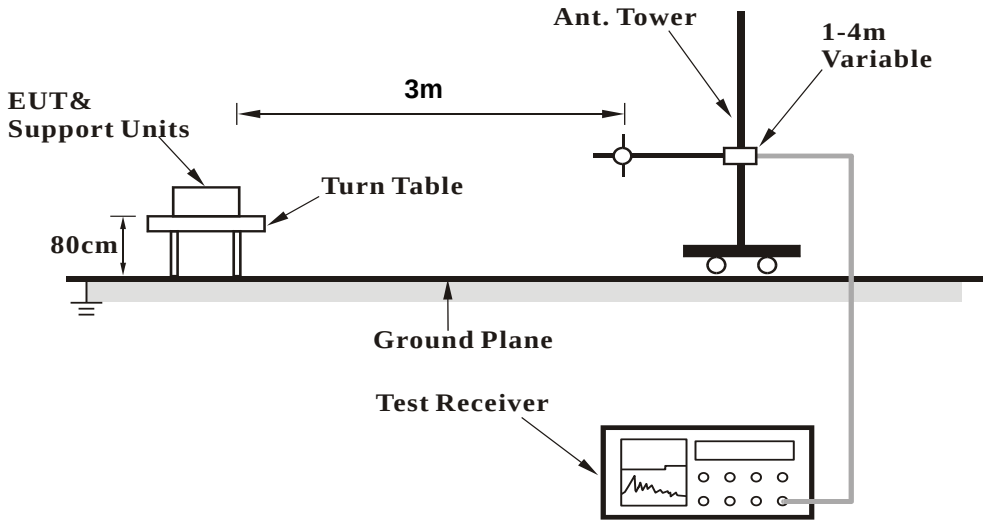
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.4 Deviation from Test Standard

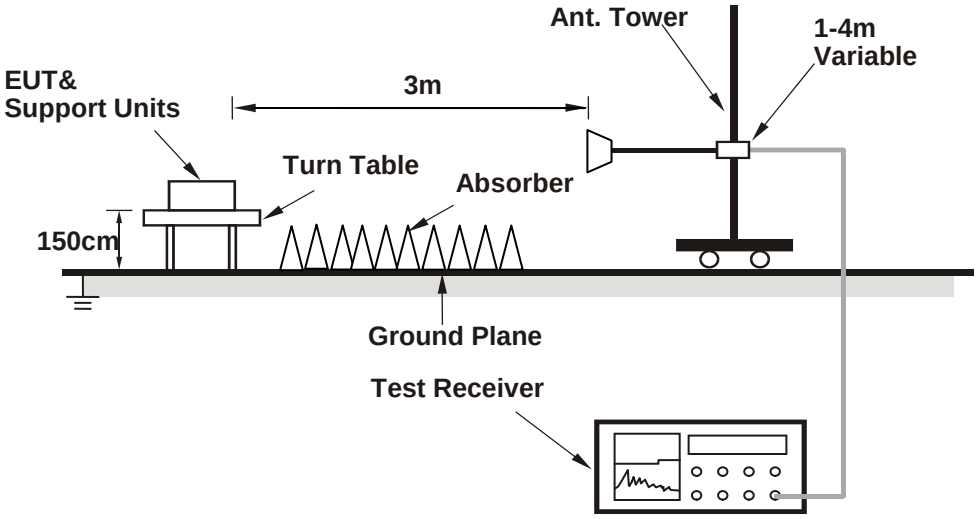
No deviation.

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 A (Notebook Computer) which is placed on test table.
2. The support unit C (Notebook Computer) runs test program "DutApiMimoBtFmBrdigeEth.exe[ver.2.0.0.43]" to enable EUT under transmission/receiving condition continuously at specific channel frequency.

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	57.9 PK	74.0	-16.1	1.99 H	183	54.2	3.7
2	5150.00	44.8 AV	54.0	-9.2	1.99 H	183	41.1	3.7
3	*5180.00	95.2 PK			1.99 H	183	91.5	3.7
4	*5180.00	84.8 AV			1.99 H	183	81.1	3.7
5	#10360.00	46.2 PK	74.0	-27.8	1.75 H	204	33.2	13.0
6	#10360.00	34.1 AV	54.0	-19.9	1.75 H	204	21.1	13.0
7	15540.00	46.4 PK	74.0	-27.6	1.57 H	302	33.3	13.1
8	15540.00	33.9 AV	54.0	-20.1	1.57 H	302	20.8	13.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.5 PK	74.0	-13.5	2.24 V	139	56.8	3.7
2	5150.00	45.9 AV	54.0	-8.1	2.24 V	139	42.2	3.7
3	*5180.00	107.3 PK			3.93 V	150	103.6	3.7
4	*5180.00	98.0 AV			3.93 V	150	94.3	3.7
5	#10360.00	48.9 PK	74.0	-25.1	3.35 V	347	35.9	13.0
6	#10360.00	39.7 AV	54.0	-14.3	3.35 V	347	26.7	13.0
7	15540.00	46.6 PK	74.0	-27.4	2.04 V	311	33.5	13.1
8	15540.00	34.1 AV	54.0	-19.9	2.04 V	311	21.0	13.1

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 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	95.0 PK			1.95 H	176	91.3	3.7
2	*5200.00	84.6 AV			1.95 H	176	80.9	3.7
3	#10400.00	46.4 PK	74.0	-27.6	1.79 H	205	33.4	13.0
4	#10400.00	34.1 AV	54.0	-19.9	1.79 H	205	21.1	13.0
5	15600.00	46.9 PK	74.0	-27.1	1.54 H	308	33.6	13.3
6	15600.00	33.1 AV	54.0	-20.9	1.54 H	308	19.8	13.3
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	*5200.00	107.9 PK			3.94 V	148	104.2	3.7
2	*5200.00	98.0 AV			3.94 V	148	94.3	3.7
3	#10400.00	49.2 PK	74.0	-24.8	3.30 V	339	36.2	13.0
4	#10400.00	39.7 AV	54.0	-14.3	3.30 V	339	26.7	13.0
5	15600.00	46.2 PK	74.0	-27.8	2.10 V	322	32.9	13.3
6	15600.00	33.9 AV	54.0	-20.1	2.10 V	322	20.6	13.3

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 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	94.7 PK			1.94 H	188	90.9	3.8
2	*5240.00	84.5 AV			1.94 H	188	80.7	3.8
3	5350.00	47.3 PK	74.0	-26.7	1.94 H	188	43.2	4.1
4	5350.00	33.5 AV	54.0	-20.5	1.94 H	188	29.4	4.1
5	#10480.00	46.7 PK	74.0	-27.3	1.76 H	210	33.5	13.2
6	#10480.00	34.4 AV	54.0	-19.6	1.76 H	210	21.2	13.2
7	15720.00	46.3 PK	74.0	-27.7	1.58 H	309	32.7	13.6
8	15720.00	33.5 AV	54.0	-20.5	1.58 H	309	19.9	13.6
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	*5240.00	108.9 PK			3.84 V	158	105.1	3.8
2	*5240.00	99.1 AV			3.84 V	158	95.3	3.8
3	5350.00	50.3 PK	74.0	-23.7	3.84 V	158	46.2	4.1
4	5350.00	37.2 AV	54.0	-16.8	3.84 V	158	33.1	4.1
5	#10480.00	48.7 PK	74.0	-25.3	3.37 V	355	35.5	13.2
6	#10480.00	39.5 AV	54.0	-14.5	3.37 V	355	26.3	13.2
7	15720.00	46.6 PK	74.0	-27.4	1.99 V	323	33.0	13.6
8	15720.00	34.4 AV	54.0	-19.6	1.99 V	323	20.8	13.6

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 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	46.5 PK	74.0	-27.5	1.86 H	165	42.8	3.7
2	5150.00	33.6 AV	54.0	-20.4	1.86 H	165	29.9	3.7
3	*5260.00	98.7 PK			1.86 H	165	94.7	4.0
4	*5260.00	87.9 AV			1.86 H	165	83.9	4.0
5	#10520.00	46.7 PK	74.0	-27.3	1.73 H	205	33.5	13.2
6	#10520.00	34.1 AV	54.0	-19.9	1.73 H	205	20.9	13.2
7	15780.00	46.3 PK	74.0	-27.7	1.55 H	323	32.7	13.6
8	15780.00	33.5 AV	54.0	-20.5	1.55 H	323	19.9	13.6
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	49.2 PK	74.0	-24.8	3.99 V	147	45.5	3.7
2	5150.00	36.4 AV	54.0	-17.6	3.99 V	147	32.7	3.7
3	*5260.00	112.7 PK			3.99 V	147	108.7	4.0
4	*5260.00	102.4 AV			3.99 V	147	98.4	4.0
5	#10520.00	48.7 PK	74.0	-25.3	3.33 V	340	35.5	13.2
6	#10520.00	39.4 AV	54.0	-14.6	3.33 V	340	26.2	13.2
7	15780.00	46.3 PK	74.0	-27.7	1.97 V	319	32.7	13.6
8	15780.00	33.9 AV	54.0	-20.1	1.97 V	319	20.3	13.6

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 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	98.1 PK			1.85 H	161	94.0	4.1
2	*5300.00	87.4 AV			1.85 H	161	83.3	4.1
3	10600.00	47.4 PK	74.0	-26.6	1.75 H	210	33.9	13.5
4	10600.00	34.8 AV	54.0	-19.2	1.75 H	210	21.3	13.5
5	15900.00	46.5 PK	74.0	-27.5	1.54 H	311	33.6	12.9
6	15900.00	33.5 AV	54.0	-20.5	1.54 H	311	20.6	12.9
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	*5300.00	113.5 PK			3.97 V	148	109.4	4.1
2	*5300.00	103.8 AV			3.97 V	148	99.7	4.1
3	10600.00	48.9 PK	74.0	-25.1	3.37 V	351	35.4	13.5
4	10600.00	39.6 AV	54.0	-14.4	3.37 V	351	26.1	13.5
5	15900.00	46.8 PK	74.0	-27.2	2.04 V	307	33.9	12.9
6	15900.00	34.6 AV	54.0	-19.4	2.04 V	307	21.7	12.9

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.

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	94.4 PK			1.83 H	150	90.3	4.1
2	*5320.00	84.1 AV			1.83 H	150	80.0	4.1
3	5350.00	46.3 PK	74.0	-27.7	1.83 H	150	42.2	4.1
4	5350.00	33.7 AV	54.0	-20.3	1.83 H	150	29.6	4.1
5	10640.00	47.0 PK	74.0	-27.0	1.74 H	199	33.5	13.5
6	10640.00	34.6 AV	54.0	-19.4	1.74 H	199	21.1	13.5
7	15960.00	46.1 PK	74.0	-27.9	1.56 H	307	33.2	12.9
8	15960.00	33.1 AV	54.0	-20.9	1.56 H	307	20.2	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	108.7 PK			3.93 V	149	104.6	4.1
2	*5320.00	99.0 AV			3.93 V	149	94.9	4.1
3	5350.00	68.6 PK	74.0	-5.4	3.93 V	149	64.5	4.1
4	5350.00	46.2 AV	54.0	-7.8	3.93 V	149	42.1	4.1
5	10640.00	48.9 PK	74.0	-25.1	3.34 V	359	35.4	13.5
6	10640.00	39.7 AV	54.0	-14.3	3.34 V	359	26.2	13.5
7	15960.00	46.5 PK	74.0	-27.5	2.01 V	311	33.6	12.9
8	15960.00	34.1 AV	54.0	-19.9	2.01 V	311	21.2	12.9

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.

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	46.3 PK	74.0	-27.7	1.88 H	166	42.1	4.2
2	#5470.00	33.2 AV	54.0	-20.8	1.88 H	166	29.0	4.2
3	*5500.00	92.6 PK			1.88 H	166	88.4	4.2
4	*5500.00	82.7 AV			1.88 H	166	78.5	4.2
5	11000.00	46.8 PK	74.0	-27.2	1.77 H	211	32.7	14.1
6	11000.00	34.8 AV	54.0	-19.2	1.77 H	211	20.7	14.1
7	#16500.00	46.1 PK	74.0	-27.9	1.61 H	299	31.6	14.5
8	#16500.00	33.5 AV	54.0	-20.5	1.61 H	299	19.0	14.5
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	58.6 PK	74.0	-15.4	3.14 V	360	54.4	4.2
2	#5470.00	44.4 AV	54.0	-9.6	3.14 V	360	40.2	4.2
3	*5500.00	106.7 PK			3.14 V	360	102.5	4.2
4	*5500.00	97.2 AV			3.14 V	360	93.0	4.2
5	11000.00	48.9 PK	74.0	-25.1	3.37 V	340	34.8	14.1
6	11000.00	39.9 AV	54.0	-14.1	3.37 V	340	25.8	14.1
7	#16500.00	46.7 PK	74.0	-27.3	1.97 V	335	32.2	14.5
8	#16500.00	34.7 AV	54.0	-19.3	1.97 V	335	20.2	14.5

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 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	99.8 PK			1.82 H	177	95.6	4.2
2	*5580.00	89.7 AV			1.82 H	177	85.5	4.2
3	11160.00	46.4 PK	74.0	-27.6	1.76 H	226	32.7	13.7
4	11160.00	34.1 AV	54.0	-19.9	1.76 H	226	20.4	13.7
5	#16740.00	46.0 PK	74.0	-28.0	1.55 H	312	30.3	15.7
6	#16740.00	33.3 AV	54.0	-20.7	1.55 H	312	17.6	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	*5580.00	114.7 PK			2.93 V	360	110.5	4.2
2	*5580.00	104.7 AV			2.93 V	360	100.5	4.2
3	11160.00	48.1 PK	74.0	-25.9	3.40 V	360	34.4	13.7
4	11160.00	39.1 AV	54.0	-14.9	3.40 V	360	25.4	13.7
5	#16740.00	46.4 PK	74.0	-27.6	2.03 V	311	30.7	15.7
6	#16740.00	34.2 AV	54.0	-19.8	2.03 V	311	18.5	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 132	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	*5660.00	100.0 PK			1.89 H	166	95.7	4.3
2	*5660.00	89.4 AV			1.89 H	166	85.1	4.3
3	11320.00	46.5 PK	74.0	-27.5	1.72 H	222	32.9	13.6
4	11320.00	34.4 AV	54.0	-19.6	1.72 H	222	20.8	13.6
5	#16980.00	46.1 PK	74.0	-27.9	1.55 H	320	29.1	17.0
6	#16980.00	33.3 AV	54.0	-20.7	1.55 H	320	16.3	17.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5660.00	114.2 PK			2.89 V	360	109.9	4.3
2	*5660.00	104.3 AV			2.89 V	360	100.0	4.3
3	11320.00	49.0 PK	74.0	-25.0	3.38 V	348	35.4	13.6
4	11320.00	39.7 AV	54.0	-14.3	3.38 V	348	26.1	13.6
5	#16980.00	46.3 PK	74.0	-27.7	1.94 V	331	29.3	17.0
6	#16980.00	34.3 AV	54.0	-19.7	1.94 V	331	17.3	17.0

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	93.2 PK			1.85 H	157	88.7	4.5
2	*5700.00	83.1 AV			1.85 H	157	78.6	4.5
3	#5725.00	45.5 PK	74.0	-28.5	1.85 H	157	41.1	4.4
4	#5725.00	32.9 AV	54.0	-21.1	1.85 H	157	28.5	4.4
5	11400.00	46.8 PK	74.0	-27.2	1.78 H	213	33.2	13.6
6	11400.00	34.6 AV	54.0	-19.4	1.78 H	213	21.0	13.6
7	#17100.00	46.1 PK	74.0	-27.9	1.58 H	323	28.7	17.4
8	#17100.00	33.5 AV	54.0	-20.5	1.58 H	323	16.1	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	*5700.00	107.5 PK			2.93 V	360	103.0	4.5
2	*5700.00	97.9 AV			2.93 V	360	93.4	4.5
3	#5725.00	65.6 PK	74.0	-8.4	2.93 V	360	61.2	4.4
4	#5725.00	48.8 AV	54.0	-5.2	2.93 V	360	44.4	4.4
5	11400.00	48.0 PK	74.0	-26.0	3.37 V	360	34.4	13.6
6	11400.00	39.0 AV	54.0	-15.0	3.37 V	360	25.4	13.6
7	#17100.00	46.8 PK	74.0	-27.2	2.03 V	334	29.4	17.4
8	#17100.00	34.6 AV	54.0	-19.4	2.03 V	334	17.2	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 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	#5616.44	52.6 PK	68.2	-15.6	3.96 H	134	48.2	4.4
2	*5745.00	96.7 PK			3.96 H	134	92.3	4.4
3	*5745.00	86.8 AV			3.96 H	134	82.4	4.4
4	#6009.14	54.5 PK	68.2	-13.7	3.96 H	134	49.7	4.8
5	11490.00	50.6 PK	74.0	-23.4	1.70 H	214	37.1	13.5
6	11490.00	41.7 AV	54.0	-12.3	1.70 H	214	28.2	13.5
7	#17235.00	46.2 PK	74.0	-27.8	1.63 H	315	28.9	17.3
8	#17235.00	33.4 AV	54.0	-20.6	1.63 H	315	16.1	17.3
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	#5651.69	52.9 PK	69.5	-16.6	2.78 V	333	48.6	4.3
2	*5745.00	108.9 PK			2.78 V	333	104.5	4.4
3	*5745.00	98.9 AV			2.78 V	333	94.5	4.4
4	#6018.41	53.3 PK	68.2	-14.9	2.78 V	333	48.5	4.8
5	11490.00	51.8 PK	74.0	-22.2	3.56 V	357	38.3	13.5
6	11490.00	46.4 AV	54.0	-7.6	3.56 V	357	32.9	13.5
7	#17235.00	48.0 PK	74.0	-26.0	3.46 V	360	30.7	17.3
8	#17235.00	39.3 AV	54.0	-14.7	3.46 V	360	22.0	17.3

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 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	#5574.91	51.8 PK	68.2	-16.4	2.27 H	115	47.6	4.2
2	*5785.00	96.0 PK			2.27 H	115	91.6	4.4
3	*5785.00	86.0 AV			2.27 H	115	81.6	4.4
4	#6022.57	53.1 PK	68.2	-15.1	2.27 H	115	48.3	4.8
5	11570.00	50.3 PK	74.0	-23.7	1.63 H	200	36.8	13.5
6	11570.00	41.2 AV	54.0	-12.8	1.63 H	200	27.7	13.5
7	#17355.00	46.8 PK	74.0	-27.2	1.56 H	337	28.8	18.0
8	#17355.00	34.0 AV	54.0	-20.0	1.56 H	337	16.0	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	#5591.31	52.3 PK	68.2	-15.9	2.78 V	335	48.0	4.3
2	*5785.00	109.0 PK			2.78 V	335	104.6	4.4
3	*5785.00	99.3 AV			2.78 V	335	94.9	4.4
4	#5939.24	52.7 PK	68.2	-15.5	2.78 V	335	48.0	4.7
5	11570.00	52.9 PK	74.0	-21.1	3.29 V	360	39.4	13.5
6	11570.00	47.7 AV	54.0	-6.3	3.29 V	360	34.2	13.5
7	#17355.00	48.3 PK	74.0	-25.7	3.39 V	355	30.3	18.0
8	#17355.00	39.3 AV	54.0	-14.7	3.39 V	355	21.3	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 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	#5586.01	53.2 PK	68.2	-15.0	1.40 H	254	49.0	4.2
2	*5825.00	95.0 PK			1.40 H	254	90.6	4.4
3	*5825.00	85.1 AV			1.40 H	254	80.7	4.4
4	#5962.56	53.4 PK	68.2	-14.8	1.40 H	254	48.7	4.7
5	11650.00	50.3 PK	74.0	-23.7	1.65 H	211	36.6	13.7
6	11650.00	41.3 AV	54.0	-12.7	1.65 H	211	27.6	13.7
7	#17475.00	46.3 PK	74.0	-27.7	1.54 H	325	27.7	18.6
8	#17475.00	33.6 AV	54.0	-20.4	1.54 H	325	15.0	18.6
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	#5593.53	52.7 PK	68.2	-15.5	2.76 V	316	48.4	4.3
2	*5825.00	109.1 PK			2.76 V	316	104.7	4.4
3	*5825.00	99.6 AV			2.76 V	316	95.2	4.4
4	#5976.16	54.5 PK	68.2	-13.7	2.76 V	316	49.8	4.7
5	11650.00	54.0 PK	74.0	-20.0	3.29 V	360	40.3	13.7
6	11650.00	48.8 AV	54.0	-5.2	3.29 V	360	35.1	13.7
7	#17475.00	48.6 PK	74.0	-25.4	3.42 V	360	30.0	18.6
8	#17475.00	39.5 AV	54.0	-14.5	3.42 V	360	20.9	18.6

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 (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	46.0 PK	74.0	-28.0	2.02 H	184	42.3	3.7
2	5150.00	33.3 AV	54.0	-20.7	2.02 H	184	29.6	3.7
3	*5180.00	95.3 PK			2.02 H	184	91.6	3.7
4	*5180.00	85.1 AV			2.02 H	184	81.4	3.7
5	#10360.00	46.7 PK	74.0	-27.3	1.78 H	202	33.7	13.0
6	#10360.00	34.3 AV	54.0	-19.7	1.78 H	202	21.3	13.0
7	15540.00	46.4 PK	74.0	-27.6	1.61 H	308	33.3	13.1
8	15540.00	33.9 AV	54.0	-20.1	1.61 H	308	20.8	13.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.4 PK	74.0	-9.6	3.96 V	143	60.7	3.7
2	5150.00	45.2 AV	54.0	-8.8	3.96 V	143	41.5	3.7
3	*5180.00	104.7 PK			3.96 V	143	101.0	3.7
4	*5180.00	94.9 AV			3.96 V	143	91.2	3.7
5	#10360.00	48.9 PK	74.0	-25.1	3.34 V	356	35.9	13.0
6	#10360.00	39.5 AV	54.0	-14.5	3.34 V	356	26.5	13.0
7	15540.00	46.3 PK	74.0	-27.7	2.08 V	318	33.2	13.1
8	15540.00	33.8 AV	54.0	-20.2	2.08 V	318	20.7	13.1

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 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	95.1 PK			1.94 H	187	91.4	3.7
2	*5200.00	84.5 AV			1.94 H	187	80.8	3.7
3	#10400.00	46.0 PK	74.0	-28.0	1.73 H	198	33.0	13.0
4	#10400.00	34.0 AV	54.0	-20.0	1.73 H	198	21.0	13.0
5	15600.00	46.8 PK	74.0	-27.2	1.58 H	319	33.5	13.3
6	15600.00	34.1 AV	54.0	-19.9	1.58 H	319	20.8	13.3
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	*5200.00	109.8 PK			3.94 V	148	106.1	3.7
2	*5200.00	99.6 AV			3.94 V	148	95.9	3.7
3	#10400.00	48.4 PK	74.0	-25.6	3.40 V	354	35.4	13.0
4	#10400.00	39.5 AV	54.0	-14.5	3.40 V	354	26.5	13.0
5	15600.00	46.7 PK	74.0	-27.3	2.03 V	325	33.4	13.3
6	15600.00	33.9 AV	54.0	-20.1	2.03 V	325	20.6	13.3

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 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	94.5 PK			1.96 H	181	90.7	3.8
2	*5240.00	84.1 AV			1.96 H	181	80.3	3.8
3	5350.00	45.8 PK	74.0	-28.2	1.96 H	181	41.7	4.1
4	5350.00	33.3 AV	54.0	-20.7	1.96 H	181	29.2	4.1
5	#10480.00	46.3 PK	74.0	-27.7	1.74 H	194	33.1	13.2
6	#10480.00	33.9 AV	54.0	-20.1	1.74 H	194	20.7	13.2
7	15720.00	47.0 PK	74.0	-27.0	1.50 H	320	33.4	13.6
8	15720.00	34.2 AV	54.0	-19.8	1.50 H	320	20.6	13.6
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	*5240.00	110.0 PK			3.84 V	178	106.2	3.8
2	*5240.00	99.8 AV			3.84 V	178	96.0	3.8
3	5350.00	49.7 PK	74.0	-24.3	3.84 V	178	45.6	4.1
4	5350.00	37.5 AV	54.0	-16.5	3.84 V	178	33.4	4.1
5	#10480.00	49.2 PK	74.0	-24.8	3.31 V	358	36.0	13.2
6	#10480.00	40.1 AV	54.0	-13.9	3.31 V	358	26.9	13.2
7	15720.00	46.2 PK	74.0	-27.8	2.03 V	303	32.6	13.6
8	15720.00	33.8 AV	54.0	-20.2	2.03 V	303	20.2	13.6

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 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	45.2 PK	74.0	-28.8	1.83 H	154	41.5	3.7
2	5150.00	33.0 AV	54.0	-21.0	1.83 H	154	29.3	3.7
3	*5260.00	98.5 PK			1.83 H	154	94.5	4.0
4	*5260.00	87.5 AV			1.83 H	154	83.5	4.0
5	#10520.00	46.1 PK	74.0	-27.9	1.85 H	219	32.9	13.2
6	#10520.00	33.7 AV	54.0	-20.3	1.85 H	219	20.5	13.2
7	15780.00	46.5 PK	74.0	-27.5	1.49 H	323	32.9	13.6
8	15780.00	34.1 AV	54.0	-19.9	1.49 H	323	20.5	13.6
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	49.8 PK	74.0	-24.2	3.85 V	208	46.1	3.7
2	5150.00	37.1 AV	54.0	-16.9	3.85 V	208	33.4	3.7
3	*5260.00	112.8 PK			3.85 V	208	108.8	4.0
4	*5260.00	103.2 AV			3.85 V	208	99.2	4.0
5	#10520.00	48.6 PK	74.0	-25.4	3.33 V	355	35.4	13.2
6	#10520.00	39.4 AV	54.0	-14.6	3.33 V	355	26.2	13.2
7	15780.00	46.6 PK	74.0	-27.4	1.99 V	324	33.0	13.6
8	15780.00	34.2 AV	54.0	-19.8	1.99 V	324	20.6	13.6

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 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	98.2 PK			1.84 H	164	94.1	4.1
2	*5300.00	87.2 AV			1.84 H	164	83.1	4.1
3	10600.00	46.0 PK	74.0	-28.0	1.76 H	193	32.5	13.5
4	10600.00	33.6 AV	54.0	-20.4	1.76 H	193	20.1	13.5
5	15900.00	46.9 PK	74.0	-27.1	1.53 H	309	34.0	12.9
6	15900.00	34.4 AV	54.0	-19.6	1.53 H	309	21.5	12.9
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	*5300.00	112.1 PK			3.83 V	140	108.0	4.1
2	*5300.00	102.7 AV			3.83 V	140	98.6	4.1
3	10600.00	48.6 PK	74.0	-25.4	3.30 V	334	35.1	13.5
4	10600.00	39.6 AV	54.0	-14.4	3.30 V	334	26.1	13.5
5	15900.00	46.6 PK	74.0	-27.4	2.00 V	310	33.7	12.9
6	15900.00	34.4 AV	54.0	-19.6	2.00 V	310	21.5	12.9

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.

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	94.6 PK			1.78 H	161	90.5	4.1
2	*5320.00	84.2 AV			1.78 H	161	80.1	4.1
3	5350.00	46.4 PK	74.0	-27.6	1.80 H	139	42.3	4.1
4	5350.00	34.0 AV	54.0	-20.0	1.80 H	139	29.9	4.1
5	10640.00	47.7 PK	74.0	-26.3	1.78 H	213	34.2	13.5
6	10640.00	35.0 AV	54.0	-19.0	1.78 H	213	21.5	13.5
7	15960.00	46.4 PK	74.0	-27.6	1.51 H	299	33.5	12.9
8	15960.00	33.1 AV	54.0	-20.9	1.51 H	299	20.2	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	107.0 PK			3.94 V	179	102.9	4.1
2	*5320.00	97.7 AV			3.94 V	179	93.6	4.1
3	**5350.00**	**72.4 PK**	**74.0**	**-1.6**	**3.94 V**	**179**	**68.3**	**4.1**
4	5350.00	47.5 AV	54.0	-6.5	3.94 V	179	43.4	4.1
5	10640.00	49.0 PK	74.0	-25.0	3.30 V	335	35.5	13.5
6	10640.00	39.6 AV	54.0	-14.4	3.30 V	335	26.1	13.5
7	15960.00	46.3 PK	74.0	-27.7	2.09 V	295	33.4	12.9
8	15960.00	33.9 AV	54.0	-20.1	2.09 V	295	21.0	12.9

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.

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	46.0 PK	74.0	-28.0	1.90 H	173	41.8	4.2
2	#5470.00	33.0 AV	54.0	-21.0	1.90 H	173	28.8	4.2
3	*5500.00	92.0 PK			1.88 H	178	87.8	4.2
4	*5500.00	82.2 AV			1.88 H	178	78.0	4.2
5	11000.00	46.8 PK	74.0	-27.2	1.83 H	203	32.7	14.1
6	11000.00	34.8 AV	54.0	-19.2	1.83 H	203	20.7	14.1
7	#16500.00	45.8 PK	74.0	-28.2	1.58 H	293	31.3	14.5
8	#16500.00	33.3 AV	54.0	-20.7	1.58 H	293	18.8	14.5
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	59.9 PK	74.0	-14.1	3.14 V	360	55.7	4.2
2	#5470.00	43.3 AV	54.0	-10.7	3.14 V	360	39.1	4.2
3	*5500.00	106.8 PK			3.14 V	360	102.6	4.2
4	*5500.00	97.1 AV			3.14 V	360	92.9	4.2
5	11000.00	48.7 PK	74.0	-25.3	3.33 V	334	34.6	14.1
6	11000.00	39.8 AV	54.0	-14.2	3.33 V	334	25.7	14.1
7	#16500.00	46.5 PK	74.0	-27.5	2.01 V	312	32.0	14.5
8	#16500.00	33.9 AV	54.0	-20.1	2.01 V	312	19.4	14.5

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 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	99.8 PK			1.86 H	162	95.6	4.2
2	*5580.00	89.5 AV			1.86 H	162	85.3	4.2
3	11160.00	46.2 PK	74.0	-27.8	1.74 H	225	32.5	13.7
4	11160.00	33.7 AV	54.0	-20.3	1.74 H	225	20.0	13.7
5	#16740.00	45.7 PK	74.0	-28.3	1.61 H	320	30.0	15.7
6	#16740.00	33.1 AV	54.0	-20.9	1.61 H	320	17.4	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	*5580.00	109.3 PK			3.22 V	360	105.1	4.2
2	*5580.00	100.3 AV			3.22 V	360	96.1	4.2
3	11160.00	48.9 PK	74.0	-25.1	3.35 V	357	35.2	13.7
4	11160.00	40.0 AV	54.0	-14.0	3.35 V	357	26.3	13.7
5	#16740.00	46.4 PK	74.0	-27.6	2.09 V	325	30.7	15.7
6	#16740.00	33.7 AV	54.0	-20.3	2.09 V	325	18.0	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 132	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	*5660.00	99.7 PK			1.83 H	167	95.4	4.3
2	*5660.00	89.1 AV			1.83 H	167	84.8	4.3
3	11320.00	46.8 PK	74.0	-27.2	1.67 H	209	33.2	13.6
4	11320.00	34.4 AV	54.0	-19.6	1.67 H	209	20.8	13.6
5	#16980.00	46.3 PK	74.0	-27.7	1.60 H	315	29.3	17.0
6	#16980.00	33.3 AV	54.0	-20.7	1.60 H	315	16.3	17.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5660.00	109.2 PK			3.21 V	347	104.9	4.3
2	*5660.00	100.2 AV			3.21 V	347	95.9	4.3
3	11320.00	49.1 PK	74.0	-24.9	3.31 V	360	35.5	13.6
4	11320.00	40.0 AV	54.0	-14.0	3.31 V	360	26.4	13.6
5	#16980.00	46.6 PK	74.0	-27.4	2.06 V	311	29.6	17.0
6	#16980.00	34.3 AV	54.0	-19.7	2.06 V	311	17.3	17.0

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	93.2 PK			1.84 H	162	88.7	4.5
2	*5700.00	82.8 AV			1.84 H	162	78.3	4.5
3	#5725.00	44.8 PK	74.0	-29.2	1.86 H	153	40.4	4.4
4	#5725.00	32.5 AV	54.0	-21.5	1.86 H	153	28.1	4.4
5	11400.00	46.5 PK	74.0	-27.5	1.79 H	219	32.9	13.6
6	11400.00	34.2 AV	54.0	-19.8	1.79 H	219	20.6	13.6
7	#17100.00	46.9 PK	74.0	-27.1	1.63 H	311	29.5	17.4
8	#17100.00	34.0 AV	54.0	-20.0	1.63 H	311	16.6	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	*5700.00	107.2 PK			3.37 V	360	102.7	4.5
2	*5700.00	97.4 AV			3.37 V	360	92.9	4.5
3	#5725.00	66.0 PK	74.0	-8.0	3.37 V	360	61.6	4.4
4	#5725.00	46.6 AV	54.0	-7.4	3.37 V	360	42.2	4.4
5	11400.00	48.7 PK	74.0	-25.3	3.39 V	357	35.1	13.6
6	11400.00	39.4 AV	54.0	-14.6	3.39 V	357	25.8	13.6
7	#17100.00	46.2 PK	74.0	-27.8	2.00 V	318	28.8	17.4
8	#17100.00	33.7 AV	54.0	-20.3	2.00 V	318	16.3	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 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	#5591.98	52.0 PK	68.2	-16.2	3.32 H	108	47.7	4.3
2	*5745.00	95.5 PK			3.32 H	108	91.1	4.4
3	*5745.00	85.5 AV			3.32 H	108	81.1	4.4
4	#5942.65	52.7 PK	68.2	-15.5	3.32 H	108	48.0	4.7
5	11490.00	50.1 PK	74.0	-23.9	1.68 H	220	36.6	13.5
6	11490.00	40.9 AV	54.0	-13.1	1.68 H	220	27.4	13.5
7	#17235.00	46.1 PK	74.0	-27.9	1.57 H	320	28.8	17.3
8	#17235.00	33.4 AV	54.0	-20.6	1.57 H	320	16.1	17.3
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	#5609.83	53.1 PK	68.2	-15.1	2.68 V	360	48.7	4.4
2	*5745.00	109.7 PK			2.68 V	360	105.3	4.4
3	*5745.00	99.9 AV			2.68 V	360	95.5	4.4
4	#5988.48	54.1 PK	68.2	-14.1	2.68 V	360	49.4	4.7
5	11490.00	53.3 PK	74.0	-20.7	3.29 V	360	39.8	13.5
6	11490.00	48.3 AV	54.0	-5.7	3.29 V	360	34.8	13.5
7	#17235.00	48.6 PK	74.0	-25.4	3.40 V	360	31.3	17.3
8	#17235.00	39.2 AV	54.0	-14.8	3.40 V	360	21.9	17.3

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 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	#5608.82	52.1 PK	68.2	-16.1	3.32 H	106	47.7	4.4
2	*5785.00	96.5 PK			3.32 H	106	92.1	4.4
3	*5785.00	86.4 AV			3.32 H	106	82.0	4.4
4	#5977.20	52.7 PK	68.2	-15.5	3.32 H	106	48.0	4.7
5	11570.00	50.8 PK	74.0	-23.2	1.62 H	198	37.3	13.5
6	11570.00	41.7 AV	54.0	-12.3	1.62 H	198	28.2	13.5
7	#17355.00	46.0 PK	74.0	-28.0	1.51 H	321	28.0	18.0
8	#17355.00	33.5 AV	54.0	-20.5	1.51 H	321	15.5	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	#5571.34	52.9 PK	68.2	-15.3	2.64 V	360	48.7	4.2
2	*5785.00	110.3 PK			2.64 V	360	105.9	4.4
3	*5785.00	100.1 AV			2.64 V	360	95.7	4.4
4	#5929.44	53.6 PK	68.2	-14.6	2.64 V	360	48.9	4.7
5	11570.00	53.6 PK	74.0	-20.4	3.25 V	354	40.1	13.5
6	11570.00	48.4 AV	54.0	-5.6	3.25 V	354	34.9	13.5
7	#17355.00	48.7 PK	74.0	-25.3	3.44 V	360	30.7	18.0
8	#17355.00	39.7 AV	54.0	-14.3	3.44 V	360	21.7	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 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	#5567.18	51.8 PK	68.2	-16.4	3.32 H	108	47.6	4.2
2	*5825.00	96.9 PK			3.32 H	108	92.5	4.4
3	*5825.00	86.8 AV			3.32 H	108	82.4	4.4
4	#6019.32	53.1 PK	68.2	-15.1	3.32 H	108	48.3	4.8
5	11650.00	49.7 PK	74.0	-24.3	1.65 H	203	36.0	13.7
6	11650.00	41.0 AV	54.0	-13.0	1.65 H	203	27.3	13.7
7	#17475.00	45.8 PK	74.0	-28.2	1.51 H	315	27.2	18.6
8	#17475.00	33.4 AV	54.0	-20.6	1.51 H	315	14.8	18.6
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	#5558.84	52.6 PK	68.2	-15.6	2.50 V	360	48.4	4.2
2	*5825.00	110.2 PK			2.50 V	360	105.8	4.4
3	*5825.00	100.1 AV			2.50 V	360	95.7	4.4
4	#5971.41	53.6 PK	68.2	-14.6	2.50 V	360	48.9	4.7
5	11650.00	53.7 PK	74.0	-20.3	3.28 V	360	40.0	13.7
6	11650.00	48.7 AV	54.0	-5.3	3.28 V	360	35.0	13.7
7	#17475.00	48.1 PK	74.0	-25.9	3.39 V	360	29.5	18.6
8	#17475.00	39.2 AV	54.0	-14.8	3.39 V	360	20.6	18.6

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.

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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	48.0 PK	74.0	-26.0	1.81 H	184	44.3	3.7
2	5150.00	38.0 AV	54.0	-16.0	1.81 H	184	34.3	3.7
3	*5190.00	87.4 PK			1.81 H	184	83.7	3.7
4	*5190.00	78.0 AV			1.81 H	184	74.3	3.7
5	5350.00	49.0 PK	74.0	-25.0	1.81 H	184	44.9	4.1
6	5350.00	35.7 AV	54.0	-18.3	1.81 H	184	31.6	4.1
7	#10380.00	46.5 PK	74.0	-27.5	1.77 H	219	33.4	13.1
8	#10380.00	34.1 AV	54.0	-19.9	1.77 H	219	21.0	13.1
9	15570.00	46.6 PK	74.0	-27.4	1.58 H	326	33.3	13.3
10	15570.00	34.0 AV	54.0	-20.0	1.58 H	326	20.7	13.3
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	5150.00	57.4 PK	74.0	-16.6	3.70 V	128	53.7	3.7
2	5150.00	46.2 AV	54.0	-7.8	3.70 V	128	42.5	3.7
3	*5190.00	100.0 PK			3.70 V	128	96.3	3.7
4	*5190.00	89.4 AV			3.70 V	128	85.7	3.7
5	5350.00	49.3 PK	74.0	-24.7	3.70 V	128	45.2	4.1
6	5350.00	36.2 AV	54.0	-17.8	3.70 V	128	32.1	4.1
7	#10380.00	48.7 PK	74.0	-25.3	3.35 V	360	35.6	13.1
8	#10380.00	39.4 AV	54.0	-14.6	3.35 V	360	26.3	13.1
9	15570.00	46.6 PK	74.0	-27.4	1.98 V	308	33.3	13.3
10	15570.00	34.0 AV	54.0	-20.0	1.98 V	308	20.7	13.3

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 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	5150.00	49.1 PK	74.0	-24.9	1.83 H	176	45.4	3.7
2	5150.00	37.2 AV	54.0	-16.8	1.83 H	176	33.5	3.7
3	*5230.00	91.3 PK			1.86 H	182	87.5	3.8
4	*5230.00	83.4 AV			1.86 H	182	79.6	3.8
5	5350.00	48.5 PK	74.0	-25.5	1.81 H	195	44.4	4.1
6	5350.00	36.9 AV	54.0	-17.1	1.81 H	195	32.8	4.1
7	#10460.00	46.5 PK	74.0	-27.5	1.76 H	223	33.4	13.1
8	#10460.00	34.0 AV	54.0	-20.0	1.76 H	223	20.9	13.1
9	15690.00	47.0 PK	74.0	-27.0	1.60 H	300	33.2	13.8
10	15690.00	33.9 AV	54.0	-20.1	1.60 H	300	20.1	13.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	50.3 PK	74.0	-23.7	3.68 V	150	46.6	3.7
2	5150.00	38.5 AV	54.0	-15.5	3.68 V	150	34.8	3.7
3	*5230.00	103.9 PK			3.68 V	150	100.1	3.8
4	*5230.00	94.8 AV			3.68 V	150	91.0	3.8
5	5350.00	49.2 PK	74.0	-24.8	3.68 V	150	45.1	4.1
6	5350.00	37.9 AV	54.0	-16.1	3.68 V	150	33.8	4.1
7	#10460.00	49.2 PK	74.0	-24.8	3.44 V	360	36.1	13.1
8	#10460.00	39.6 AV	54.0	-14.4	3.44 V	360	26.5	13.1
9	15690.00	46.5 PK	74.0	-27.5	2.04 V	318	32.7	13.8
10	15690.00	34.0 AV	54.0	-20.0	2.04 V	318	20.2	13.8

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	49.1 PK	74.0	-24.9	1.85 H	191	45.4	3.7
2	5150.00	37.2 AV	54.0	-16.8	1.85 H	191	33.5	3.7
3	*5270.00	94.6 PK			1.85 H	191	90.6	4.0
4	*5270.00	86.5 AV			1.85 H	191	82.5	4.0
5	5350.00	59.2 PK	74.0	-14.8	1.85 H	191	55.1	4.1
6	5350.00	44.2 AV	54.0	-9.8	1.85 H	191	40.1	4.1
7	#10540.00	46.5 PK	74.0	-27.5	1.74 H	223	33.2	13.3
8	#10540.00	34.0 AV	54.0	-20.0	1.74 H	223	20.7	13.3
9	15810.00	47.2 PK	74.0	-26.8	1.60 H	310	33.8	13.4
10	15810.00	34.4 AV	54.0	-19.6	1.60 H	310	21.0	13.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	50.4 PK	74.0	-23.6	3.99 V	147	46.7	3.7
2	5150.00	39.6 AV	54.0	-14.4	3.99 V	147	35.9	3.7
3	*5270.00	107.3 PK			3.99 V	147	103.3	4.0
4	*5270.00	97.8 AV			3.99 V	147	93.8	4.0
5	5350.00	63.3 PK	74.0	-10.7	3.99 V	147	59.2	4.1
6	5350.00	45.8 AV	54.0	-8.2	3.99 V	147	41.7	4.1
7	#10540.00	48.9 PK	74.0	-25.1	3.37 V	342	35.6	13.3
8	#10540.00	39.7 AV	54.0	-14.3	3.37 V	342	26.4	13.3
9	15810.00	45.8 PK	74.0	-28.2	2.03 V	313	32.4	13.4
10	15810.00	33.5 AV	54.0	-20.5	2.03 V	313	20.1	13.4

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	90.0 PK			1.80 H	179	85.9	4.1
2	*5310.00	82.4 AV			1.80 H	179	78.3	4.1
3	5350.00	59.0 PK	74.0	-15.0	1.80 H	179	54.9	4.1
4	5350.00	44.0 AV	54.0	-10.0	1.80 H	179	39.9	4.1
5	10620.00	46.3 PK	74.0	-27.7	1.80 H	214	32.8	13.5
6	10620.00	34.2 AV	54.0	-19.8	1.80 H	214	20.7	13.5
7	15930.00	47.0 PK	74.0	-27.0	1.61 H	325	34.2	12.8
8	15930.00	34.0 AV	54.0	-20.0	1.61 H	325	21.2	12.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	102.6 PK			3.96 V	176	98.5	4.1
2	*5310.00	93.8 AV			3.96 V	176	89.7	4.1
3	5350.00	57.8 PK	74.0	-16.2	3.96 V	176	53.7	4.1
4	5350.00	46.8 AV	54.0	-7.2	3.96 V	176	42.7	4.1
5	10620.00	48.6 PK	74.0	-25.4	3.36 V	360	35.1	13.5
6	10620.00	39.1 AV	54.0	-14.9	3.36 V	360	25.6	13.5
7	15930.00	46.5 PK	74.0	-27.5	2.02 V	329	33.7	12.8
8	15930.00	33.9 AV	54.0	-20.1	2.02 V	329	21.1	12.8

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.

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	59.0 PK	74.0	-15.0	1.81 H	192	54.8	4.2
2	#5470.00	43.8 AV	54.0	-10.2	1.81 H	192	39.6	4.2
3	*5510.00	88.5 PK			1.81 H	192	84.3	4.2
4	*5510.00	81.6 AV			1.81 H	192	77.4	4.2
5	11020.00	46.3 PK	74.0	-27.7	1.83 H	226	32.3	14.0
6	11020.00	33.9 AV	54.0	-20.1	1.83 H	226	19.9	14.0
7	#16530.00	47.1 PK	74.0	-26.9	1.60 H	312	32.2	14.9
8	#16530.00	34.1 AV	54.0	-19.9	1.60 H	312	19.2	14.9
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	#5470.00	64.9 PK	74.0	-9.1	3.99 V	174	60.7	4.2
2	#5470.00	50.2 AV	54.0	-3.8	3.99 V	174	46.0	4.2
3	*5510.00	101.2 PK			3.99 V	174	97.0	4.2
4	*5510.00	92.8 AV			3.99 V	174	88.6	4.2
5	11020.00	48.7 PK	74.0	-25.3	3.39 V	360	34.7	14.0
6	11020.00	39.2 AV	54.0	-14.8	3.39 V	360	25.2	14.0
7	#16530.00	46.0 PK	74.0	-28.0	2.04 V	323	31.1	14.9
8	#16530.00	33.7 AV	54.0	-20.3	2.04 V	323	18.8	14.9

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 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	#5470.00	59.7 PK	74.0	-14.3	1.83 H	185	55.5	4.2
2	#5470.00	44.4 AV	54.0	-9.6	1.83 H	185	40.2	4.2
3	*5550.00	95.3 PK			1.83 H	185	91.1	4.2
4	*5550.00	87.2 AV			1.83 H	185	83.0	4.2
5	#5725.00	48.8 PK	74.0	-25.2	1.83 H	185	44.4	4.4
6	#5725.00	37.1 AV	54.0	-16.9	1.83 H	185	32.7	4.4
7	11100.00	46.3 PK	74.0	-27.7	1.80 H	229	32.5	13.8
8	11100.00	33.9 AV	54.0	-20.1	1.80 H	229	20.1	13.8
9	#16650.00	47.0 PK	74.0	-27.0	1.68 H	316	31.4	15.6
10	#16650.00	34.0 AV	54.0	-20.0	1.68 H	316	18.4	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	#5470.00	64.2 PK	74.0	-9.8	3.97 V	176	60.0	4.2
2	#5470.00	45.8 AV	54.0	-8.2	3.97 V	176	41.6	4.2
3	*5550.00	108.1 PK			3.97 V	176	103.9	4.2
4	*5550.00	98.6 AV			3.97 V	176	94.4	4.2
5	#5725.00	51.6 PK	74.0	-22.4	3.97 V	176	47.2	4.4
6	#5725.00	38.1 AV	54.0	-15.9	3.97 V	176	33.7	4.4
7	11100.00	48.5 PK	74.0	-25.5	3.36 V	357	34.7	13.8
8	11100.00	39.2 AV	54.0	-14.8	3.36 V	357	25.4	13.8
9	#16650.00	46.7 PK	74.0	-27.3	1.96 V	333	31.1	15.6
10	#16650.00	34.1 AV	54.0	-19.9	1.96 V	333	18.5	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 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	95.8 PK			1.81 H	210	91.5	4.3
2	*5670.00	86.8 AV			1.81 H	210	82.5	4.3
3	#5725.00	62.1 PK	74.0	-11.9	1.81 H	210	57.7	4.4
4	#5725.00	45.9 AV	54.0	-8.1	1.81 H	210	41.5	4.4
5	11340.00	46.5 PK	74.0	-27.5	1.79 H	208	32.9	13.6
6	11340.00	33.9 AV	54.0	-20.1	1.79 H	208	20.3	13.6
7	#17010.00	46.7 PK	74.0	-27.3	1.60 H	306	29.6	17.1
8	#17010.00	33.8 AV	54.0	-20.2	1.60 H	306	16.7	17.1
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	*5670.00	107.9 PK			3.94 V	183	103.6	4.3
2	*5670.00	97.9 AV			3.94 V	183	93.6	4.3
3	#5725.00	64.9 PK	74.0	-9.1	3.94 V	183	60.5	4.4
4	#5725.00	47.1 AV	54.0	-6.9	3.94 V	183	42.7	4.4
5	11340.00	48.9 PK	74.0	-25.1	3.35 V	360	35.3	13.6
6	11340.00	39.8 AV	54.0	-14.2	3.35 V	360	26.2	13.6
7	#17010.00	46.5 PK	74.0	-27.5	2.01 V	327	29.4	17.1
8	#17010.00	34.0 AV	54.0	-20.0	2.01 V	327	16.9	17.1

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 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	#5641.14	52.1 PK	68.2	-16.1	3.27 H	109	47.7	4.4
2	*5755.00	89.3 PK			3.27 H	109	84.9	4.4
3	*5755.00	80.2 AV			3.27 H	109	75.8	4.4
4	#5959.02	51.4 PK	68.2	-16.8	3.27 H	109	46.7	4.7
5	11510.00	51.1 PK	74.0	-22.9	1.61 H	192	37.5	13.6
6	11510.00	41.8 AV	54.0	-12.2	1.61 H	192	28.2	13.6
7	#17265.00	45.6 PK	74.0	-28.4	1.51 H	312	28.0	17.6
8	#17265.00	33.3 AV	54.0	-20.7	1.51 H	312	15.7	17.6
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	#5605.19	51.0 PK	68.2	-17.2	3.96 V	184	46.6	4.4
2	*5755.00	100.7 PK			3.96 V	184	96.3	4.4
3	*5755.00	91.9 AV			3.96 V	184	87.5	4.4
4	#5982.02	50.1 PK	68.2	-18.1	3.96 V	184	45.4	4.7
5	11510.00	52.9 PK	74.0	-21.1	3.20 V	360	39.3	13.6
6	11510.00	48.0 AV	54.0	-6.0	3.20 V	360	34.4	13.6
7	#17265.00	48.9 PK	74.0	-25.1	3.42 V	360	31.3	17.6
8	#17265.00	39.7 AV	54.0	-14.3	3.42 V	360	22.1	17.6

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 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	#5634.11	51.0 PK	68.2	-17.2	3.22 H	109	46.6	4.4
2	*5795.00	93.5 PK			3.22 H	109	89.1	4.4
3	*5795.00	84.4 AV			3.22 H	109	80.0	4.4
4	#5964.45	50.5 PK	68.2	-17.7	3.22 H	109	45.8	4.7
5	11590.00	51.3 PK	74.0	-22.7	1.61 H	185	37.8	13.5
6	11590.00	42.1 AV	54.0	-11.9	1.61 H	185	28.6	13.5
7	#17385.00	46.5 PK	74.0	-27.5	1.46 H	316	28.2	18.3
8	#17385.00	34.0 AV	54.0	-20.0	1.46 H	316	15.7	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	#5583.20	52.5 PK	68.2	-15.7	3.94 V	182	48.3	4.2
2	*5795.00	105.9 PK			3.94 V	182	101.5	4.4
3	*5795.00	97.4 AV			3.94 V	182	93.0	4.4
4	#5956.71	51.1 PK	68.2	-17.1	3.94 V	182	46.4	4.7
5	11590.00	53.6 PK	74.0	-20.4	3.28 V	350	40.1	13.5
6	11590.00	48.5 AV	54.0	-5.5	3.28 V	350	35.0	13.5
7	#17385.00	48.8 PK	74.0	-25.2	3.44 V	360	30.5	18.3
8	#17385.00	39.8 AV	54.0	-14.2	3.44 V	360	21.5	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.

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	50.9 PK	74.0	-23.1	1.82 H	207	47.2	3.7
2	5150.00	41.8 AV	54.0	-12.2	1.82 H	207	38.1	3.7
3	*5210.00	83.1 PK			1.82 H	207	79.4	3.7
4	*5210.00	74.8 AV			1.82 H	207	71.1	3.7
5	5350.00	46.9 PK	74.0	-27.1	1.82 H	207	42.8	4.1
6	5350.00	34.4 AV	54.0	-19.6	1.82 H	207	30.3	4.1
7	#10420.00	46.4 PK	74.0	-27.6	1.78 H	211	33.3	13.1
8	#10420.00	34.1 AV	54.0	-19.9	1.78 H	211	21.0	13.1
9	15630.00	46.5 PK	74.0	-27.5	1.67 H	324	32.9	13.6
10	15630.00	33.5 AV	54.0	-20.5	1.67 H	324	19.9	13.6
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	61.1 PK	74.0	-12.9	3.99 V	131	57.4	3.7
2	5150.00	47.9 AV	54.0	-6.1	3.99 V	131	44.2	3.7
3	*5210.00	94.5 PK			3.99 V	131	90.8	3.7
4	*5210.00	85.5 AV			3.99 V	131	81.8	3.7
5	5350.00	49.1 PK	74.0	-24.9	3.99 V	131	45.0	4.1
6	5350.00	36.6 AV	54.0	-17.4	3.99 V	131	32.5	4.1
7	#10420.00	48.7 PK	74.0	-25.3	3.38 V	360	35.6	13.1
8	#10420.00	39.7 AV	54.0	-14.3	3.38 V	360	26.6	13.1
9	15630.00	46.1 PK	74.0	-27.9	1.97 V	318	32.5	13.6
10	15630.00	33.9 AV	54.0	-20.1	1.97 V	318	20.3	13.6

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 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	5150.00	47.2 PK	74.0	-26.8	1.78 H	212	43.5	3.7
2	5150.00	34.5 AV	54.0	-19.5	1.78 H	212	30.8	3.7
3	*5290.00	85.0 PK			1.78 H	212	80.9	4.1
4	*5290.00	76.5 AV			1.78 H	212	72.4	4.1
5	5350.00	51.2 PK	74.0	-22.8	1.78 H	212	47.1	4.1
6	5350.00	42.2 AV	54.0	-11.8	1.78 H	212	38.1	4.1
7	#10580.00	46.4 PK	74.0	-27.6	1.75 H	218	33.0	13.4
8	#10580.00	34.3 AV	54.0	-19.7	1.75 H	218	20.9	13.4
9	15870.00	47.0 PK	74.0	-27.0	1.64 H	318	34.0	13.0
10	15870.00	34.1 AV	54.0	-19.9	1.64 H	318	21.1	13.0
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	49.1 PK	74.0	-24.9	3.98 V	174	45.4	3.7
2	5150.00	36.5 AV	54.0	-17.5	3.98 V	174	32.8	3.7
3	*5290.00	97.2 PK			3.98 V	174	93.1	4.1
4	*5290.00	87.4 AV			3.98 V	174	83.3	4.1
5	5350.00	61.6 PK	74.0	-12.4	3.98 V	174	57.5	4.1
6	5350.00	48.0 AV	54.0	-6.0	3.98 V	174	43.9	4.1
7	#10580.00	49.1 PK	74.0	-24.9	3.42 V	360	35.7	13.4
8	#10580.00	39.7 AV	54.0	-14.3	3.42 V	360	26.3	13.4
9	15870.00	45.7 PK	74.0	-28.3	2.03 V	330	32.7	13.0
10	15870.00	33.3 AV	54.0	-20.7	2.03 V	330	20.3	13.0

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	51.3 PK	74.0	-22.7	1.80 H	210	47.1	4.2
2	#5470.00	42.4 AV	54.0	-11.6	1.80 H	210	38.2	4.2
3	*5530.00	84.0 PK			1.80 H	210	79.8	4.2
4	*5530.00	75.6 AV			1.80 H	210	71.4	4.2
5	#5725.00	47.5 PK	74.0	-26.5	1.80 H	210	43.1	4.4
6	#5725.00	34.6 AV	54.0	-19.4	1.80 H	210	30.2	4.4
7	11060.00	46.8 PK	74.0	-27.2	1.84 H	215	32.9	13.9
8	11060.00	34.6 AV	54.0	-19.4	1.84 H	215	20.7	13.9
9	#16590.00	47.2 PK	74.0	-26.8	1.64 H	307	31.6	15.6
10	#16590.00	34.4 AV	54.0	-19.6	1.64 H	307	18.8	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	#5470.00	64.2 PK	74.0	-9.8	3.18 V	326	60.0	4.2
2	#5470.00	49.3 AV	54.0	-4.7	3.18 V	326	45.1	4.2
3	*5530.00	96.1 PK			3.18 V	326	91.9	4.2
4	*5530.00	86.9 AV			3.18 V	326	82.7	4.2
5	#5725.00	49.0 PK	74.0	-25.0	3.18 V	326	44.6	4.4
6	#5725.00	36.4 AV	54.0	-17.6	3.18 V	326	32.0	4.4
7	11060.00	49.0 PK	74.0	-25.0	3.37 V	357	35.1	13.9
8	11060.00	39.5 AV	54.0	-14.5	3.37 V	357	25.6	13.9
9	#16590.00	46.2 PK	74.0	-27.8	2.05 V	309	30.6	15.6
10	#16590.00	33.4 AV	54.0	-20.6	2.05 V	309	17.8	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 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	#5644.52	51.9 PK	68.2	-16.3	3.34 H	122	47.5	4.4
2	*5775.00	83.9 PK			3.34 H	122	79.5	4.4
3	*5775.00	74.4 AV			3.34 H	122	70.0	4.4
4	#5930.51	49.7 PK	68.2	-18.5	3.34 H	122	45.0	4.7
5	11550.00	50.7 PK	74.0	-23.3	1.68 H	208	37.2	13.5
6	11550.00	41.5 AV	54.0	-12.5	1.68 H	208	28.0	13.5
7	#17325.00	45.8 PK	74.0	-28.2	1.57 H	315	28.0	17.8
8	#17325.00	33.2 AV	54.0	-20.8	1.57 H	315	15.4	17.8
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	#5592.12	50.4 PK	68.2	-17.8	2.61 V	324	46.1	4.3
2	*5775.00	96.7 PK			2.61 V	324	92.3	4.4
3	*5775.00	87.8 AV			2.61 V	324	83.4	4.4
4	#5958.65	50.1 PK	68.2	-18.1	2.61 V	324	45.4	4.7
5	11550.00	53.8 PK	74.0	-20.2	3.28 V	349	40.3	13.5
6	11550.00	48.5 AV	54.0	-5.5	3.28 V	349	35.0	13.5
7	#17325.00	48.3 PK	74.0	-25.7	3.41 V	360	30.5	17.8
8	#17325.00	39.4 AV	54.0	-14.6	3.41 V	360	21.6	17.8

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.

Below 1GHz Data

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CHANNEL	TX Channel 60	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	130.02	32.8 QP	43.5	-10.7	2.63 H	342	42.5	-9.7
2	254.43	39.9 QP	46.0	-6.1	1.80 H	280	49.3	-9.4
3	556.90	27.2 QP	46.0	-18.8	1.00 H	71	29.2	-2.0
4	619.45	30.6 QP	46.0	-15.4	1.28 H	300	31.2	-0.6
5	737.31	33.1 QP	46.0	-12.9	1.54 H	286	31.9	1.2
6	869.29	33.6 QP	46.0	-12.4	1.00 H	83	31.0	2.6
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	42.92	36.1 QP	40.0	-3.9	1.40 V	360	44.5	-8.4
2	208.54	30.5 QP	43.5	-13.0	1.46 V	254	42.1	-11.6
3	431.36	27.2 QP	46.0	-18.8	2.00 V	343	31.4	-4.2
4	507.85	29.8 QP	46.0	-16.2	1.27 V	357	32.6	-2.8
5	730.69	28.6 QP	46.0	-17.4	1.70 V	40	27.7	0.9
6	823.31	32.3 QP	46.0	-13.7	2.17 V	304	30.0	2.3

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

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)

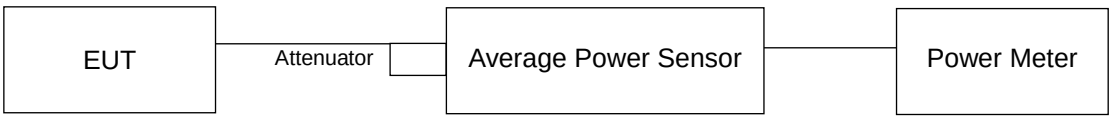
*B is the 26 dB emission bandwidth in megahertz

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

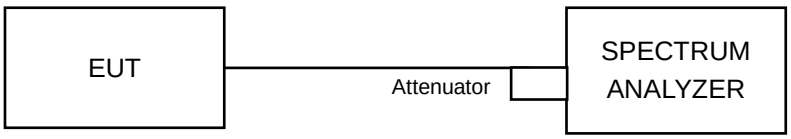
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

4.2.2 Test Setup

FOR POWER OUTPUT MEASUREMENT



FOR 26dB OCCUPIED BANDWIDTH



4.2.3 Test Instruments

FOR POWER OUTPUT MEASUREMENT

FOR UNII-2A & UNII-2C & U-NII-1 & U-NII-3

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Power meter Anritsu	ML2495A	0824006	June 26, 2017	June 25, 2018
Power sensor Anritsu	MA2411B	0738172	June 26, 2017	June 25, 2018

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date: July 18, 2017.

FOR 26dB OCCUPIED BANDWIDTH

FOR UNII-2A & UNII-2C

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSV 40	100964	July 05, 2014	July 04, 2015

Note:

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

FOR U-NII-1 & U-NII-3

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Spectrum Analyzer R&S	FSP40	100060	May 08, 2015	May 07, 2016

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. Tested date : Dec. 09, 2015

4.2.4 Test Procedure

FOR AVERAGE POWER MEASUREMENT

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

FOR 26dB OCCUPIED BANDWIDTH

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

4.2.5 Deviation from Test Standard

No deviation.

4.2.6 EUT Operating Condition

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

4.2.7 Test Result

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POWER OUTPUT

CHAN.	FREQ. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	14.35	14.22	53.651	17.30	24	Pass
40	5200	14.76	13.93	54.64	17.38	24	Pass
48	5240	14.71	13.75	53.294	17.27	24	Pass
52	5260	16.00	16.87	88.452	19.47	24	Pass
60	5300	15.98	16.62	85.548	19.32	24	Pass
64	5320	13.31	13.89	45.92	16.62	23.99	Pass
100	5500	13.30	13.65	44.554	16.49	24	Pass
116	5580	15.87	15.78	76.481	18.84	24	Pass
132	5660	15.44	15.32	69.036	18.39	24	Pass
140	5700	11.23	11.65	27.896	14.46	24	Pass
149	5745	14.45	14.15	53.863	17.31	30	Pass
157	5785	14.69	15.34	63.642	18.04	30	Pass
165	5825	14.79	15.32	64.171	18.07	30	Pass

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	24.10	22.67
40	5200	21.29	22.08
48	5240	19.97	23.48
52	5260	45.79	40.71
60	5300	43.45	39.90
64	5320	20.06	19.94
100	5500	27.01	20.10
116	5580	40.66	45.87
132	5660	42.45	40.23
140	5700	22.59	20.87

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	40.71	27.09 > 24
60	5300	39.90	27 > 24
64	5320	19.94	23.99 < 24
100	5500	20.10	24.03 > 24
116	5580	40.66	27.09 > 24
132	5660	40.23	27.04 > 24
140	5700	20.87	24.19 > 24

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POWER OUTPUT

CHAN.	FREQ. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	13.31	13.65	44.603	16.49	24	Pass
40	5200	14.82	14.15	56.341	17.51	24	Pass
48	5240	14.95	13.85	55.527	17.45	24	Pass
52	5260	16.38	17.20	95.932	19.82	24	Pass
60	5300	15.93	15.65	75.902	18.80	24	Pass
64	5320	13.32	13.96	46.367	16.66	24	Pass
100	5500	12.43	12.67	35.991	15.56	24	Pass
116	5580	15.88	15.57	74.784	18.74	24	Pass
132	5660	15.68	15.66	73.796	18.68	24	Pass
140	5700	10.66	11.18	24.763	13.94	24	Pass
149	5745	13.48	14.16	48.346	16.84	30	Pass
157	5785	14.66	15.66	66.055	18.20	30	Pass
165	5825	14.94	15.46	66.345	18.22	30	Pass

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	20.54	31.73
40	5200	27.19	30.99
48	5240	25.21	26.45
52	5260	47.82	39.50
60	5300	44.85	44.08
64	5320	24.99	20.73
100	5500	21.41	20.32
116	5580	46.62	50.72
132	5660	44.64	41.43
140	5700	21.75	20.33

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	39.50	26.96 > 24
60	5300	44.08	27.44 > 24
64	5320	20.73	24.16 > 24
100	5500	20.32	24.07 > 24
116	5580	46.62	27.68 > 24
132	5660	41.43	27.17 > 24
140	5700	20.33	24.08 > 24

802.11ac (VHT40)

POWER OUTPUT

CHAN.	FREQ. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	8.08	8.82	14.048	11.48	24	Pass
46	5230	14.00	13.45	47.25	16.74	24	Pass
54	5270	15.14	15.63	69.218	18.40	24	Pass
62	5310	10.85	11.00	24.751	13.94	24	Pass
102	5510	9.42	9.85	18.411	12.65	24	Pass
110	5550	14.82	15.02	62.108	17.93	24	Pass
134	5670	12.66	12.96	38.22	15.82	24	Pass
151	5755	9.65	10.66	20.867	13.19	30	Pass
159	5795	13.98	14.97	56.408	17.51	30	Pass

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	41.42	41.71
46	5230	48.87	93.67
54	5270	85.76	76.63
62	5310	47.40	46.99
102	5510	42.24	41.64
110	5550	85.52	83.73
134	5670	56.64	52.65

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	76.63	29.84 > 24
62	5310	46.99	27.72 > 24
102	5510	41.64	27.19 > 24
110	5550	83.73	30.22 > 24
134	5670	52.65	28.21 > 24

802.11ac (VHT80)

POWER OUTPUT

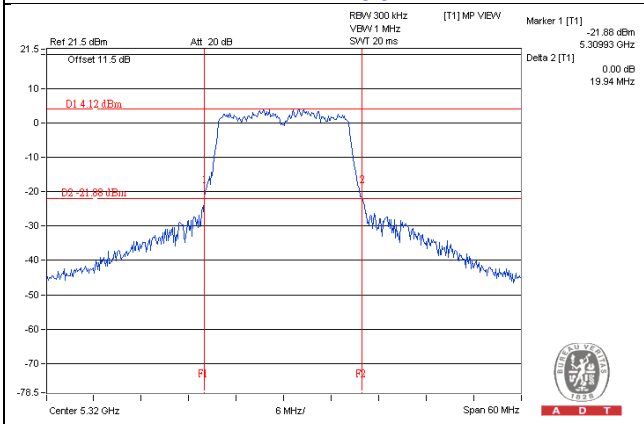
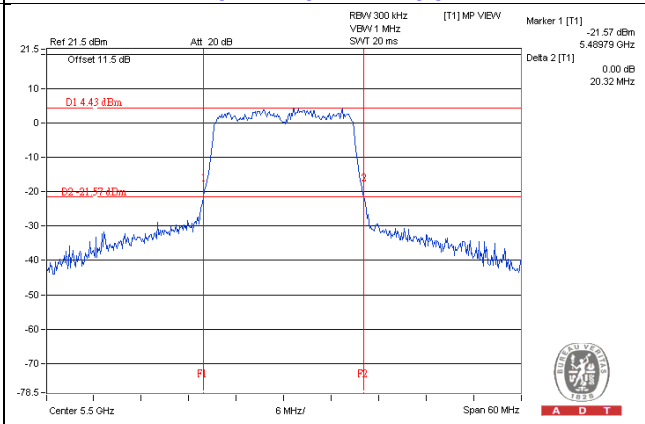
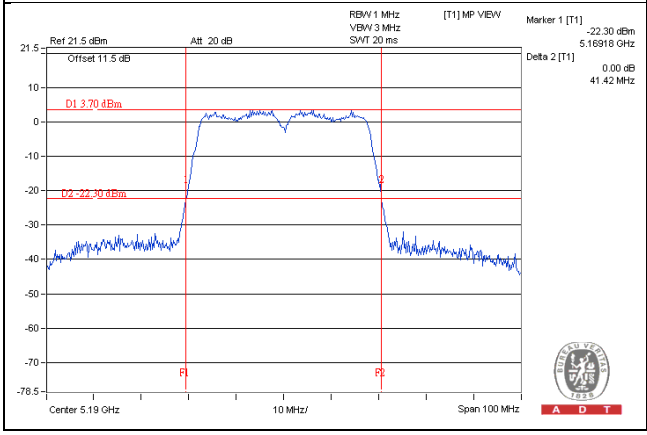
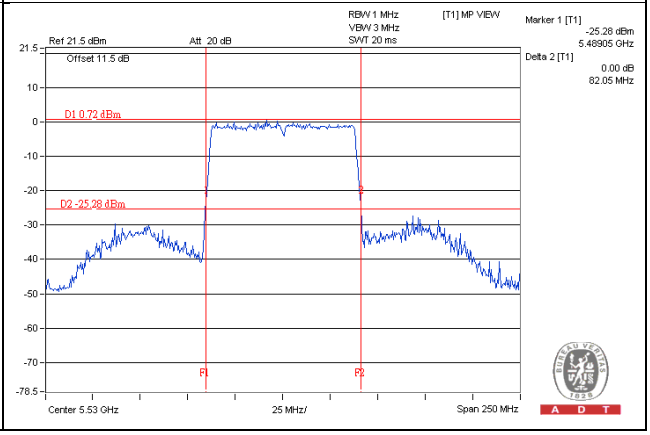
CHAN.	FREQ. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	8.12	8.89	14.231	11.53	24	Pass
58	5290	8.56	8.74	14.66	11.66	24	Pass
106	5530	8.33	8.65	14.136	11.50	24	Pass
155	5775	8.42	8.66	14.295	11.55	30	Pass

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	82.18	82.70
58	5290	112.72	94.41
106	5530	113.28	82.05

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	94.41	30.75 > 24
106	5530	82.05	30.14 > 24

Spectrum Plot of Worst Value	
802.11a / Chain(1) : CH64	**802.11ac (VHT20) / Chain(1) : CH100**
	
802.11ac (VHT40) / Chain(0) : CH38	**802.11ac (VHT80) / Chain(1) : CH106**
	

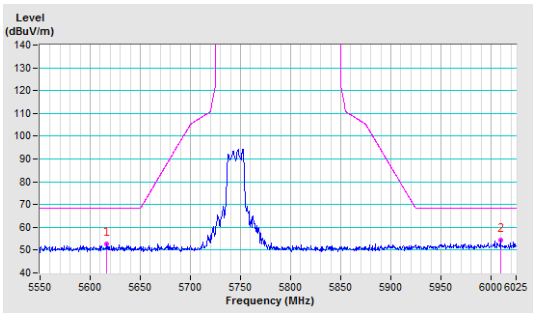
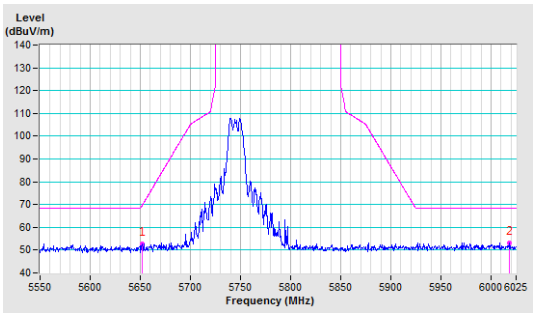
5 Pictures of Test Arrangements

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

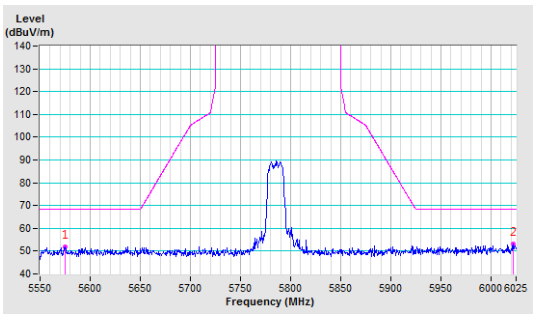
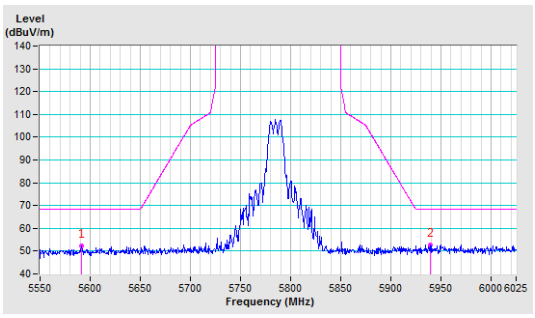
Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band)

802.11a

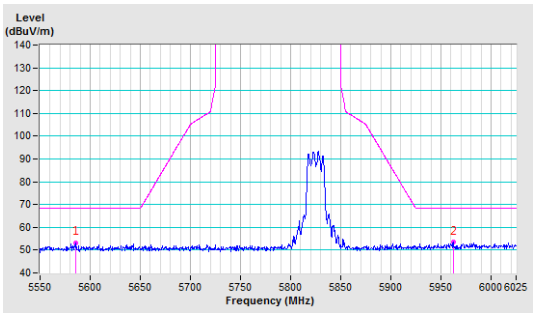
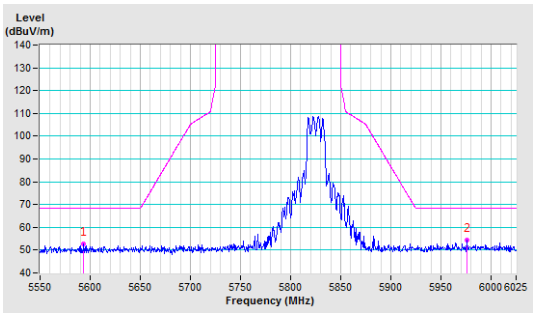
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

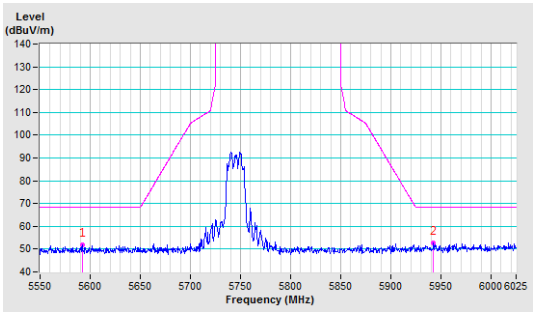
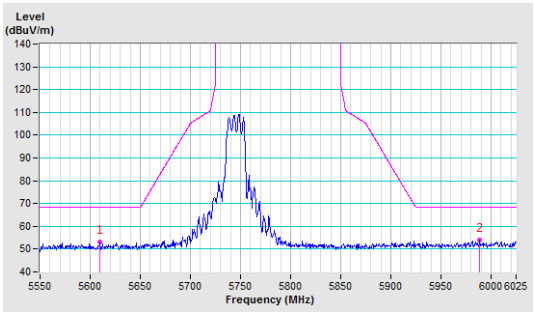
Horizontal	Vertical
	

CH 165 5825 MHz

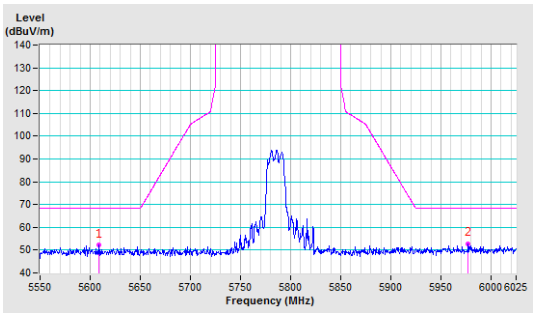
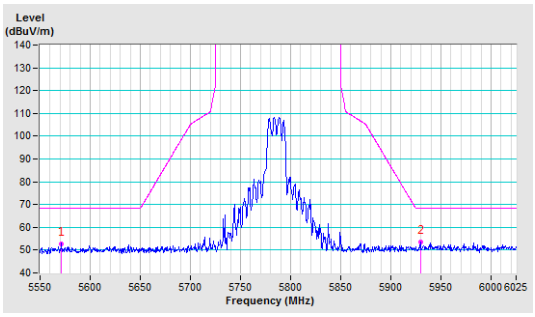
Horizontal	Vertical
	

802.11ac (VHT20)

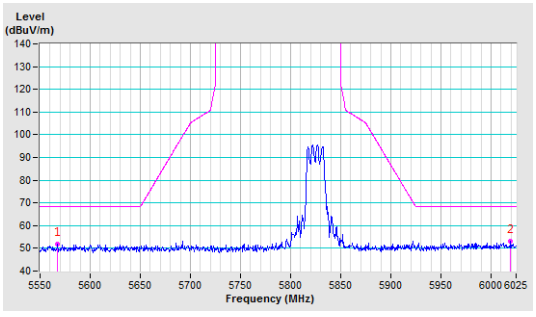
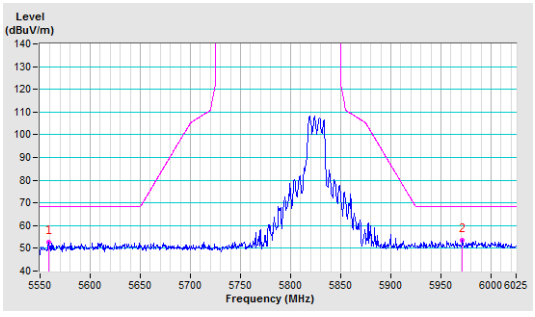
CH 149 5745 MHz

Horizontal	Vertical
	

CH 157 5785 MHz

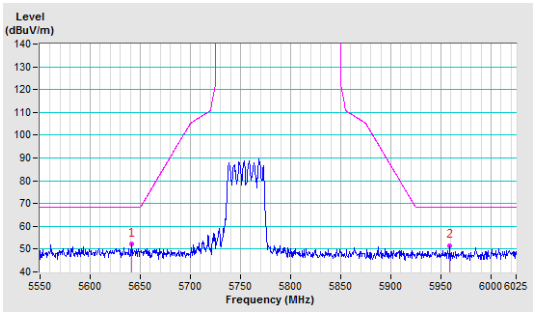
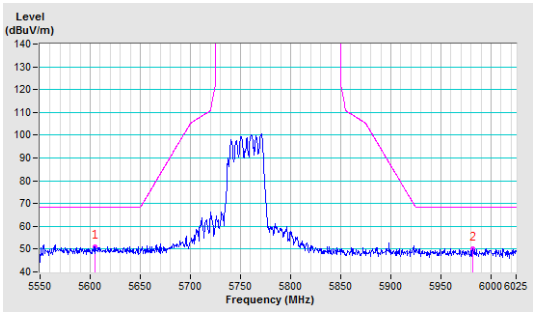
Horizontal	Vertical
	

CH 165 5825 MHz

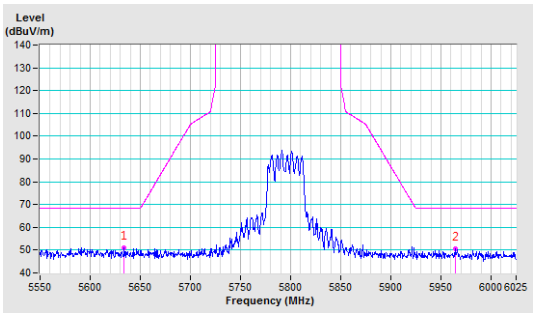
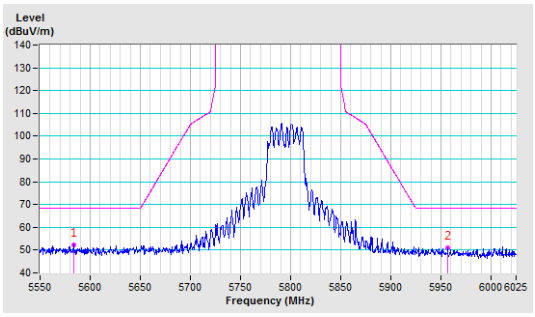
Horizontal	Vertical
	

802.11ac (VHT40)

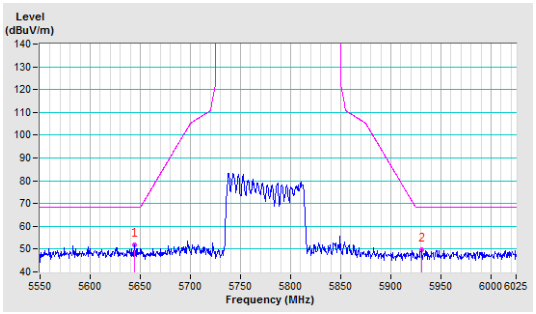
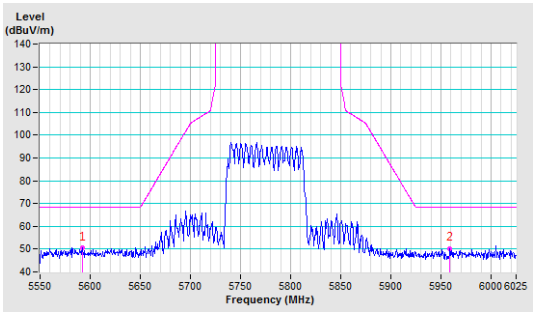
CH 151 5755 MHz

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.

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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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