FCC Test Report (DFS Band)

Report No.:	RF160715E05G-4
FCC ID:	QXO-7622
Test Model:	AP-7622
Received Date:	July 15, 2016
Test Date:	Sep. 13 to 29, 2016
Issued Date:	Sep. 11, 2017
Applicant:	Extreme Networks, Inc.
Address:	6480 Via Del Oro, San Jose, CA 95119
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
RF160715E05G-4	Original release.	Sep. 11, 2017

1 Certificate of Conformity

Product:	Access Point
Brand:	Extreme
Test Model:	AP-7622
Sample Status:	ENGINEERING SAMPLE
Applicant:	Extreme Networks, Inc.
Test Date:	Sep. 13 to 29, 2016
Standard:	47 CFR FCC Part 15, Subpart E (Section 15.407) ANSI C63.10: 2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : _____ , **Date:** Sep. 11, 2017

Wendy Wu / Specialist

Approved by : _____ , **Date:** Sep. 11, 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)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -13.88dB at 22.81250MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.1dB at 5350.00MHz, 5470.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is i-pex(MHF) not a standard connector.

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.83 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	5.43 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	3.72 dB
	6GHz ~ 18GHz	4.00 dB
	18GHz ~ 40GHz	4.11 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT (DFS Band)

Product	Access Point
Brand	Extreme
Test Model	AP-7622
Status of EUT	ENGINEERING SAMPLE
SW Version	esdk 5.0.9.1
HW Version	Extreme_ASPEN-C_BCM47452_V20_D1_20160603_fischer.brd
Power Supply Rating	12Vdc from power adapter or 55Vdc from POE
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode and VHT20/40 mode in 2.4GHz band
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	**2.4GHz:** 2.412 ~ 2.462GHz **5GHz:** 5.18 ~ 5.24GHz, 5.26 ~ 5.32GHz, 5.50 ~ 5.72GHz, 5.745 ~ 5.825GHz
Number of Channel	**2.4GHz:** 802.11b, 802.11g, 802.11n (HT20), VHT20: 11 802.11n (HT40), VHT40: 7 **5GHz:** 802.11a, 802.11n (HT20), 802.11ac (VHT20): 25 802.11n (HT40), 802.11ac (VHT40): 12 802.11ac (VHT80): 6
Output Power	**2.4GHz:** **CDD Mode:** 327.242mW **Beamforming Mode:** 121.377mW **5GHz:** **5.18GHz ~ 5.24GHz:** **CDD Mode:** 205.313mW **Beamforming Mode:** 155.046mW **5.26GHz ~ 5.32GHz:** **CDD Mode:** 159.649mW **Beamforming Mode:** 150.469mW **5.50GHz ~ 5.72GHz:** **CDD Mode:** 146.959mW **Beamforming Mode:** 146.959mW **5.745GHz ~ 5.825GHz:** **CDD Mode:** 293.877mW **Beamforming Mode:** 293.877mW

Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. There are WLAN, BT technology used for the EUT.
2. Simultaneously transmission condition.

Condition	Technology		
1	WLAN (2.4GHz-Chain0)	WLAN (5GHz-Chain1)	BT
2	WLAN (2.4GHz-Chain1)	WLAN (5GHz-Chain0)	BT
3	WLAN (2.4GHz-Chain0)	WLAN (2.4GHz-Chain1)	BT
4	WLAN (5GHz-Chain0)	WLAN (5GHz-Chain1)	BT
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.			

3. The EUT must be supplied with a power adapter and POE as following table:

Adapter (Only for test not for sale)		
Brand	Model No.	Spec.
HIPRO	HP-A0502R3D	Input: 100-240Vac, 50-60Hz, 2.4A Output: 12Vdc, 4.16A DC output cable (Unshielded, 1.8m with one core)
POE(Only for test not for sale)		
Brand	Model No.	Spec.
Symbol	PD-9001GR/AT/AC	Input: 100-240Vac, 50/60Hz, 0.67A Output: 55Vdc, 0.6A P/N : AP-PSBIAS-2P3-ATR
From above adapters and POE, the spurious emission above 1GHz worst case was found in **POE**. Therefore only the test data of the modes were recorded in this report individually.		

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

No.	PCB Chain No	Brand	Model	Antenna Gain(dBi) Including cable loss	Frequency range	Antenna Type	Connector type
1	Chain 0	NA	NA	3.64	2.4~2.4835GHz	Monopole	i-pex(MHF)
				4.14	5.15~5.25GHz	Monopole	i-pex(MHF)
				4.33	5.25~5.35GHz	Monopole	i-pex(MHF)
				4.66	5.47~5.725GHz	Monopole	i-pex(MHF)
				4.85	5.725~5.85GHz	Monopole	i-pex(MHF)
2	Chain 1	NA	NA	2.65	2.4~2.4835GHz	Monopole	i-pex(MHF)
				4.5	5.15~5.25GHz	Monopole	i-pex(MHF)
				5.77	5.25~5.35GHz	Monopole	i-pex(MHF)
				5.54	5.47~5.725GHz	Monopole	i-pex(MHF)
				4.78	5.725~5.85GHz	Monopole	i-pex(MHF)
3	BT	NA	NA	2.42	2.4~2.4835GHz	Monopole	i-pex(MHF)

5. The EUT incorporates a MIMO function:

2.4GHz Band			
MODULATION MODE	**DATA RATE (MCS)**	**TX & RX CONFIGURATION**	
802.11b	1 ~ 11Mbps	2Tx/1Tx diversity	2RX
802.11g	6 ~ 54Mbps	2Tx/1Tx diversity	2RX
802.11n (HT20)	MCS 0~7	2Tx/1Tx diversity	2RX
	MCS 8~15	2TX	2RX
802.11n (HT40)	MCS 0~7	2Tx/1Tx diversity	2RX
	MCS 8~15	2TX	2RX
VHT20	MCS 0~8, Nss=1	2Tx/1Tx diversity	2RX
	MCS 0~8, Nss=2	2TX	2RX
VHT40	MCS 0~9, Nss=1	2Tx/1Tx diversity	2RX
	MCS 0~9, Nss=2	2TX	2RX
5GHz Band			
MODULATION MODE	**DATA RATE (MCS)**	**TX & RX CONFIGURATION**	
802.11a	6 ~ 54Mbps	2Tx/1Tx diversity	2RX
802.11n (HT20)	MCS 0~7	2Tx/1Tx diversity	2RX
	MCS 8~15	2TX	2RX
802.11n (HT40)	MCS 0~7	2Tx/1Tx diversity	2RX
	MCS 8~15	2TX	2RX
802.11ac (VHT20)	MCS 0~8, Nss=1	2Tx/1Tx diversity	2RX
	MCS 0~8, Nss=2	2TX	2RX
802.11ac (VHT40)	MCS 0~9, Nss=1	2Tx/1Tx diversity	2RX
	MCS 0~9, Nss=2	2TX	2RX
802.11ac (VHT80)	MCS 0~9, Nss=1	2Tx/1Tx diversity	2RX
	MCS 0~9, Nss=2	2TX	2RX

Note:
1. All of modulation mode support beamforming function except 802.11a/b/g modulation mode.
2. 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)

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

3.2 Description of Test Modes

FOR 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 ~ 5720MHz

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

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

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

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

3 channels are provided for 802.11ac (VHT80):

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

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To				Description
	RE≥1G	RE<1G	PLC	APCM	
1	√	√	√	√	Power from POE
2	-	√	√	-	Power from adapter

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

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

Radiated Emission Test (Above 1GHz):

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

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

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6
802.11ac (VHT20)		100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	BPSK	29.3

Radiated Emission Test (Below 1GHz):

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

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

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6
802.11ac (VHT20)		100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	BPSK	29.3

Power Line Conducted Emission Test:

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

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11ac (VHT40)	5260-5320	54 to 62	54	OFDM	BPSK	13.5

Antenna Port Conducted Measurement:

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

CDD Mode						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11a	5500-572	100 to 144	100, 116, 140, 144	OFDM	BPSK	6
802.11ac (VHT20)		100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	BPSK	29.3
Beamforming Mode (Output power only)						
Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11ac (VHT20)	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11ac (VHT20)	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	BPSK	29.3

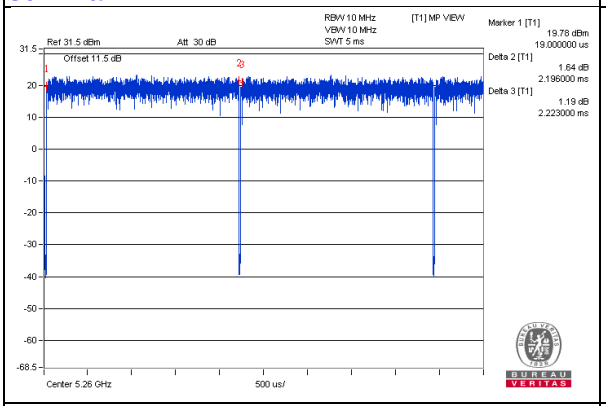
Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested By
RE≥1G	25deg. C, 69%RH	120Vac, 60Hz	Weiwei Lo
RE<1G	28deg. C, 65%RH	120Vac, 60Hz	Andy Ho
PLC	25deg. C, 70%RH	120Vac, 60Hz	Barry Lee
APCM	25deg. C, 60%RH	120Vac, 60Hz	Anderson Chen

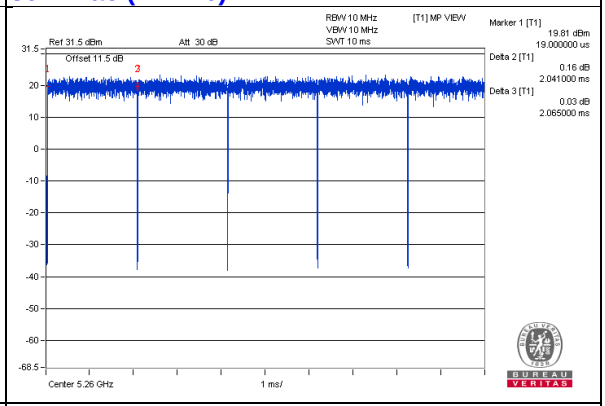
3.3 Duty Cycle of Test Signal

If duty cycle of test signal is ≥ 98 %, duty factor is not required.
If duty cycle of test signal is < 98%, duty factor shall be considered.
802.11a: Duty cycle = 2.196 ms/2.223 ms = 0.988
802.11ac (VHT20): Duty cycle = 2.041 ms/2.065 ms = 0.988
802.11ac (VHT40): Duty cycle = 1.004 ms/1.024 ms = 0.98
802.11ac (VHT80): Duty cycle = 0.487 ms/0.509 ms = 0.957, Duty factor = 10 * log(1/0.957) = 0.19

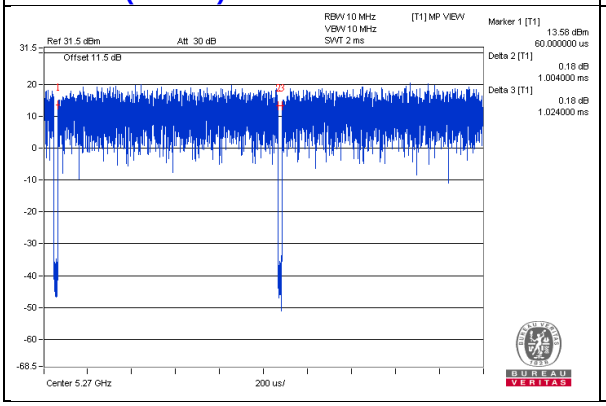
802.11a



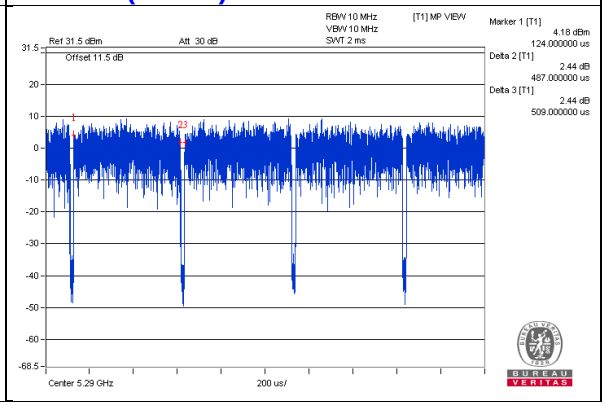
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



3.4 Description of Support Units

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

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Laptop	DELL	E6440	F9LYQ32	FCC DoC	Provided by Lab
B.	POE Adapter	Symbol	PD-9001GR/AT/AC	NA	NA	Supplied by client

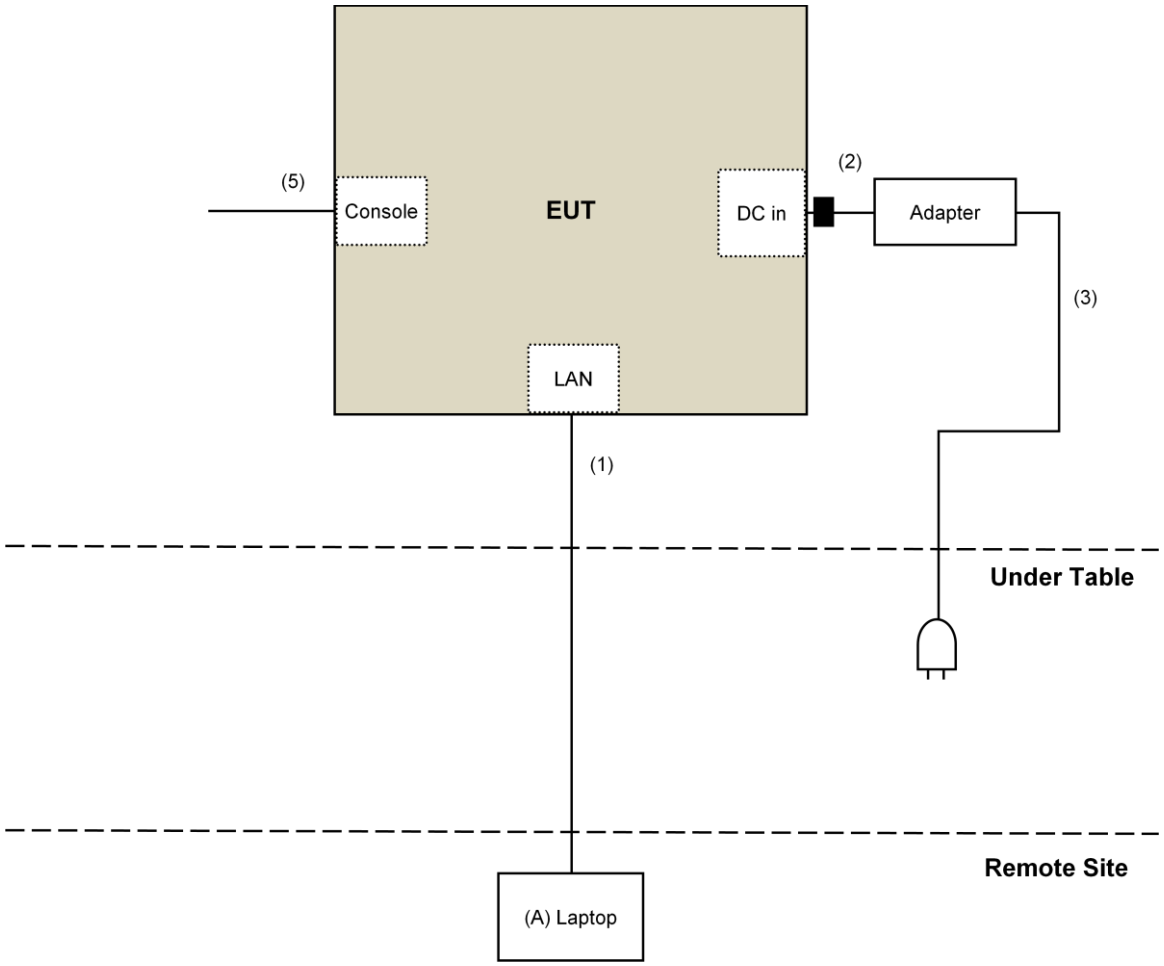
Note:

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

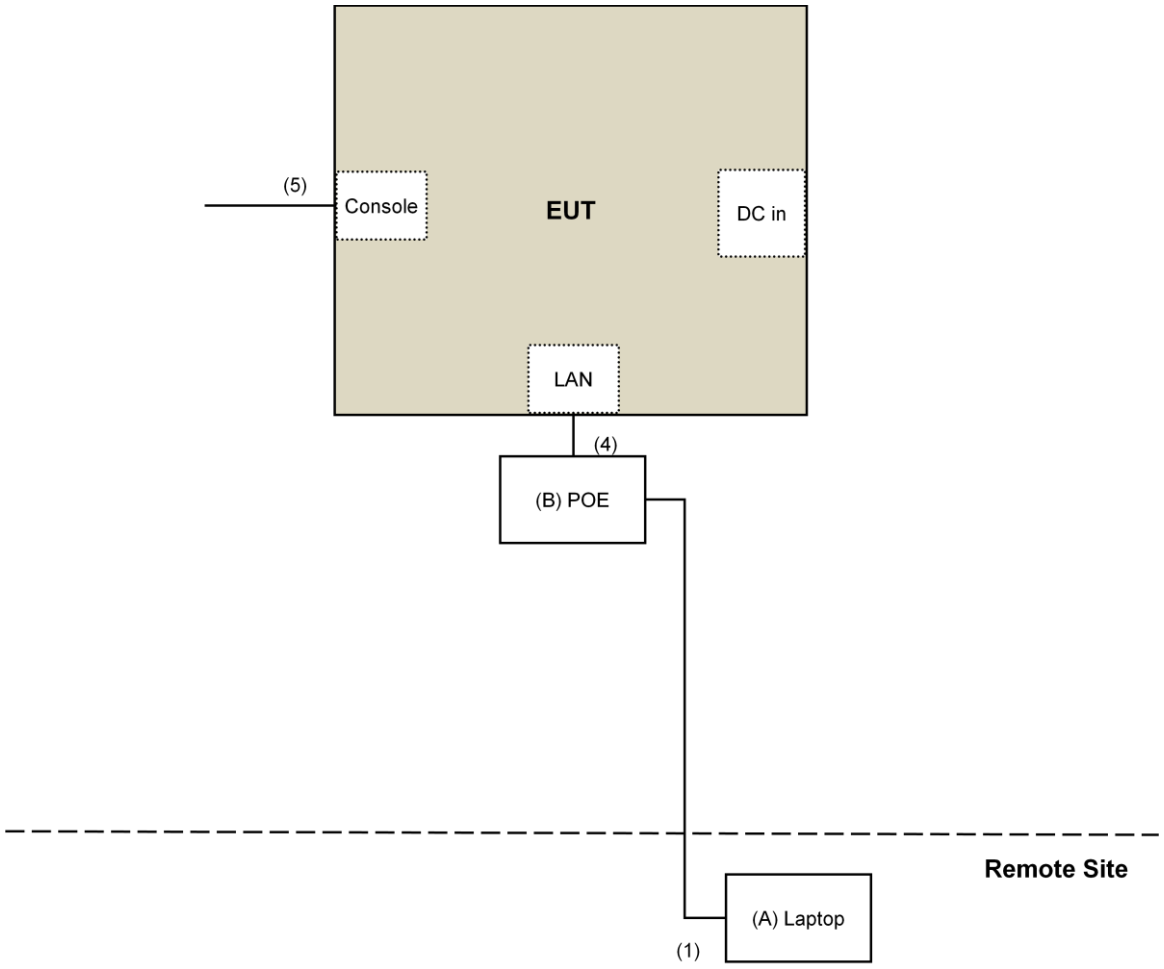
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ-45 Cable	1	10	No	0	Provided by Lab
2.	DC Cable	1	1.8	No	1	Supplied by client
3.	AC Cable	1	1.8	No	0	Provided by Lab
4.	RJ-45 Cable	1	3	No	0	Provided by Lab
5.	Console Cable	1	1.5	No	0	Provided by Lab

3.4.1 Configuration of System under Test

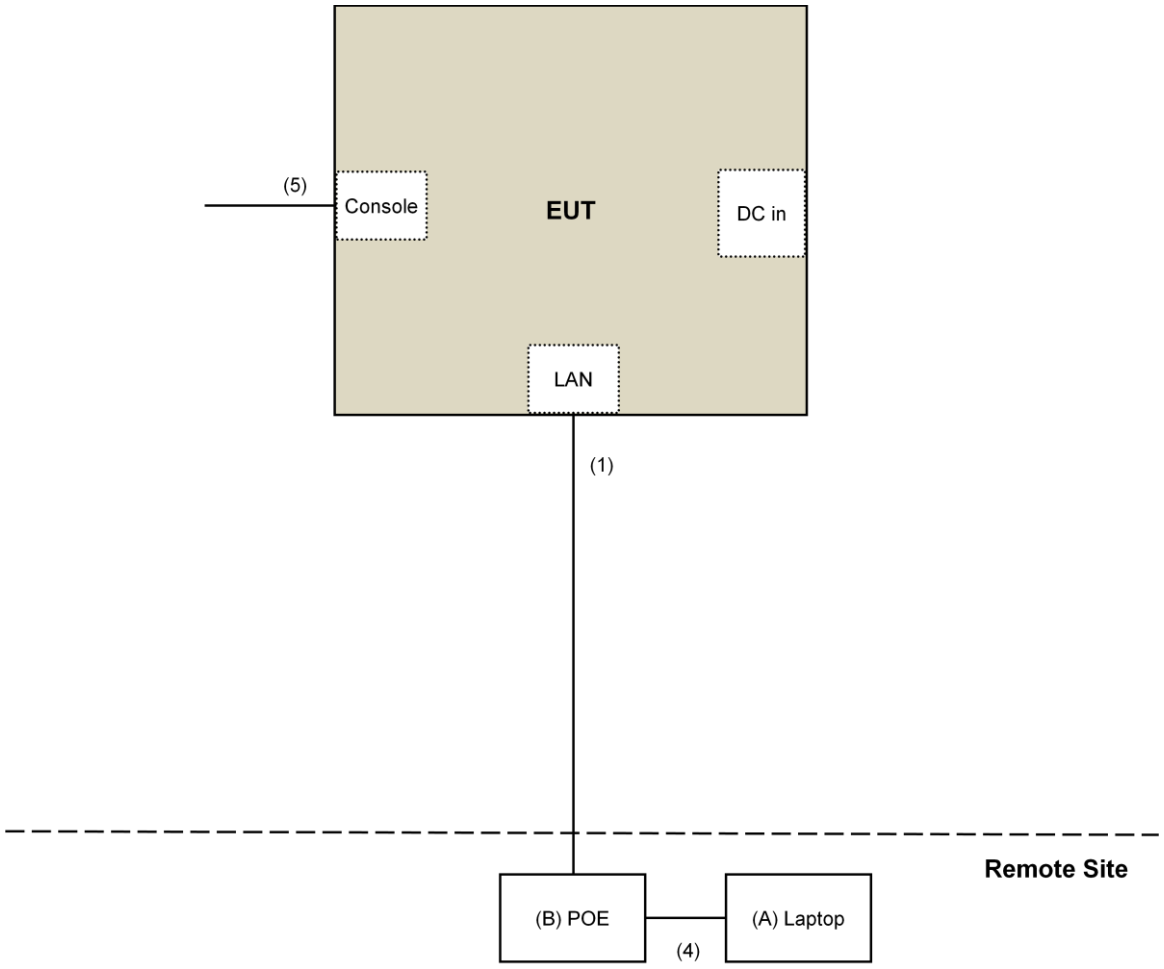
Adapter Mode:



POE Mode (for Conduction test)



POE Mode (for other test)



3.5 General Description of Applied Standard

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

FCC Part 15, Subpart E (15.407)
KDB 789033 D02 General UNII Test Procedure New Rules v01r03
KDB 662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2013

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

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

<table>
<tr><td colspan="2">Applicable To</td><td colspan="2">Limit</td></tr>
<tr><td colspan="2" rowspan="2">789033 D02 General UNII Test Procedure New Rules v01r03</td><td colspan="2">Field Strength at 3m</td></tr>
<tr><td>PK:74 (dBμV/m)</td><td>AV:54 (dBμV/m)</td></tr>
<tr><td>Frequency Band</td><td colspan="2">Applicable To</td><td>EIRP Limit</td><td>Equivalent Field Strength at 3m</td></tr>
<tr><td>5150~5250 MHz</td><td colspan="2">15.407(b)(1)</td><td rowspan="3">PK:-27 (dBm/MHz)</td><td rowspan="3">PK:68.2(dBμV/m)</td></tr>
<tr><td>5250~5350 MHz</td><td colspan="2">15.407(b)(2)</td></tr>
<tr><td>5470~5725 MHz</td><td colspan="2">15.407(b)(3)</td></tr>
<tr><td rowspan="2">5725~5850 MHz</td><td>☒</td><td>15.407(b)(4)(i)</td><td>PK:-27 (dBm/MHz) *1
PK:10 (dBm/MHz) *2
PK:15.6 (dBm/MHz) *3
PK:27 (dBm/MHz) *4</td><td>PK: 68.2(dBμV/m) *1
PK:105.2 (dBμV/m) *2
PK: 110.8(dBμV/m) *3
PK:122.2 (dBμV/m) *4</td></tr>
<tr><td>☐</td><td>15.407(b)(4)(ii)</td><td colspan="2">Emission limits in section 15.247(d)</td></tr>
<tr><td colspan="5">*1 beyond 75 MHz or more above of the band edge.
*2 below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above.
*3 below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.
*4 from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.</td></tr>
</table>

Note:

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

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

4.1.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY51210202	Dec. 16, 2015	Dec. 15, 2016
Pre-Amplifier(*) EMCI	EMC001340	980142	Jan. 20, 2016	Jan. 19, 2018
Loop Antenna(*) Electro-Metrics	EM-6879	264	Dec. 16, 2014	Dec. 15, 2016
RF Cable	NA	LOOPCAB-001 LOOPCAB-002	Jan. 18, 2016	Jan. 17, 2017
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-04	Nov. 11, 2015	Nov. 10, 2016
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Jan. 07, 2016	Jan. 06, 2017
RF Cable	8D-FB	CHHCAB-001-1 CHHCAB-001-2	Oct. 04, 2015	Oct. 03, 2016
	RF-141	CHHCAB-004	Oct. 04, 2015	Oct. 03, 2016
Horn_Antenna FT-RF	HA-07M18G-NF	0000220091110	Jan. 18, 2016	Jan. 17, 2017
Pre-Amplifier Agilent	8449B	3008A01923	Oct. 27, 2015	Oct. 26, 2016
RF Cable	NA	131206 131213 131215 SNMY23685/4	Jan. 15, 2016	Jan. 14, 2017
Spectrum Analyzer Agilent	E4446A	MY48250254	Nov. 25, 2015	Nov. 24, 2016
Pre-Amplifier SPACEK LABS	SLKKa-48-6	9K16	Dec. 11, 2015	Dec. 10, 2016
Horn_Antenna SCHWARZBECK	BBHA 9170	9170-424	Jan. 18, 2016	Jan. 17, 2017
RF Cable	SUCOFLEX 102	36442/2 36434/2	Dec. 10, 2015	Dec.09, 2016
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table CT	CM100	NA	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-WD02	NA	NA
Spectrum Analyzer R&S	FSP40	100060	May 11, 2016	May 10, 2017
Power meter Anritsu	ML2495A	1014008	May 5, 2016	May 4, 2017
Power sensor Anritsu	MA2411B	0917122	May 5, 2016	May 4, 2017
AC Power Source Extech Electronics	6205	1440452	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	Jan. 15, 2016	Jan. 14, 2017
Digital Multimeter FLUKE	87III	73680266	Nov. 10, 2015	Nov. 09, 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. *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. H.
4. The CANADA Site Registration No. is IC 7450H-3.
5. Loop antenna was used for all emissions below 30 MHz.
6. Tested Date: Sep. 16 to 29, 2016

4.1.3 Test Procedure

For Radiated emission below 30MHz

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

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

c. Both X and Y axes of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

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

NOTE:

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

For Radiated emission above 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

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

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

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

e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

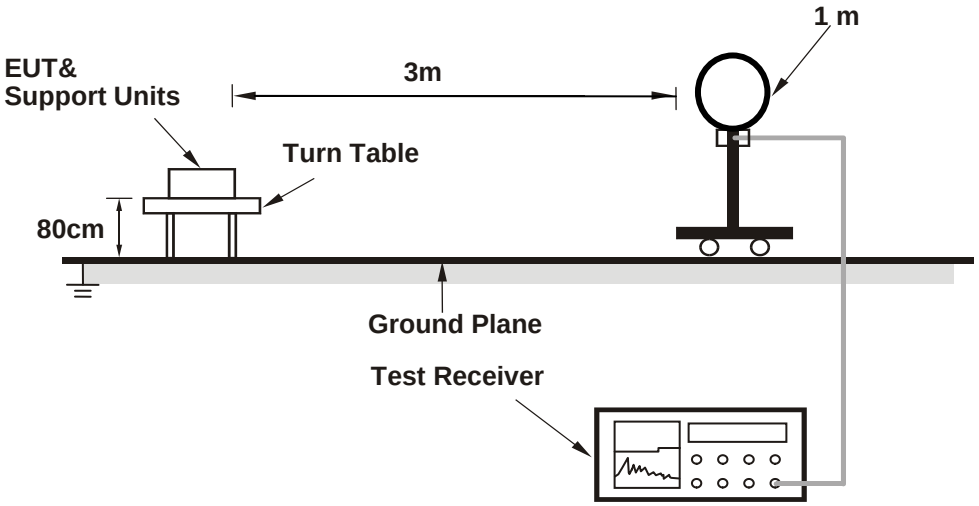
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.4 Deviation from Test Standard

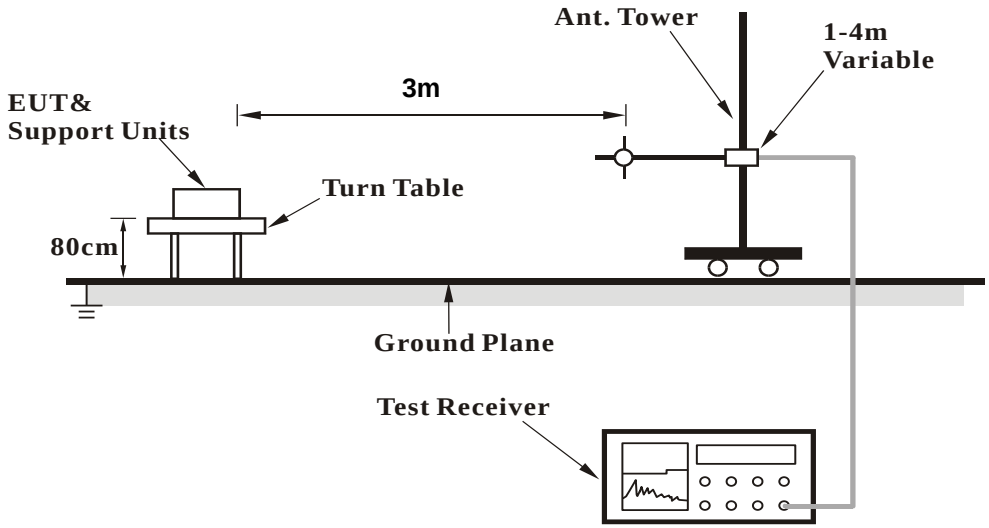
No deviation.

4.1.5 Test Setup

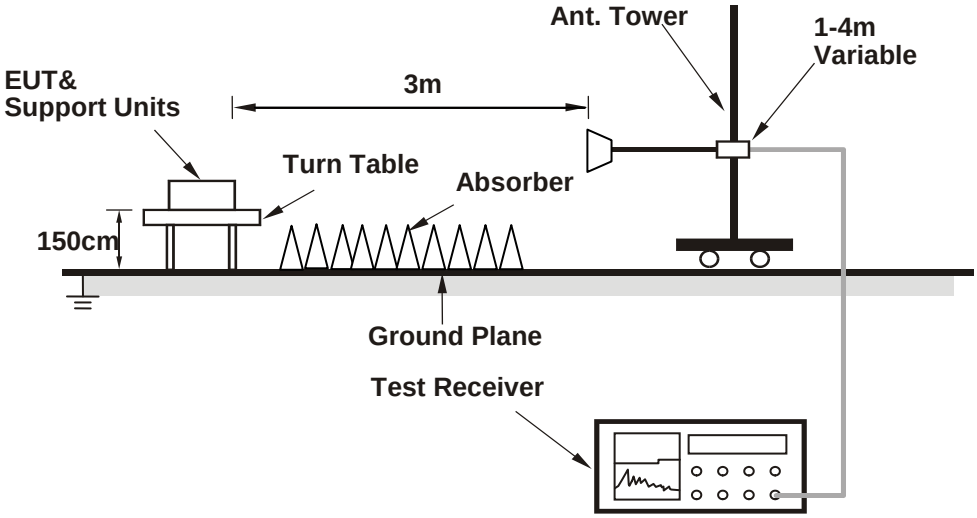
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



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

4.1.6 EUT Operating Condition

a. Connected the EUT with the Laptop which is placed on remote site.

b. Contorlling software (MTool 2.0.2.7.exe) has been activated to set the EUT on specific status.

4.1.7 Test Results (Mode 1)

Above 1GHz Data:

802.11a

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	60.6 PK	74.0	-13.4	1.27 H	309	49.6	11.0
2	5150.00	47.3 AV	54.0	-6.7	1.27 H	309	36.3	11.0
3	*5260.00	116.7 PK			1.27 H	309	105.2	11.5
4	*5260.00	106.6 AV			1.27 H	309	95.1	11.5
5	#10520.00	52.0 PK	74.0	-22.0	1.55 H	326	35.0	17.0
6	#10520.00	38.8 AV	54.0	-15.2	1.55 H	326	21.8	17.0
7	15780.00	55.0 PK	74.0	-19.0	1.29 H	164	33.5	21.5
8	15780.00	43.4 AV	54.0	-10.6	1.29 H	164	21.9	21.5
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	5150.00	57.8 PK	74.0	-16.2	1.60 V	52	46.8	11.0
2	5150.00	44.8 AV	54.0	-9.2	1.60 V	52	33.8	11.0
3	*5260.00	112.9 PK			1.60 V	52	101.4	11.5
4	*5260.00	102.2 AV			1.60 V	52	90.7	11.5
5	#10520.00	52.3 PK	74.0	-21.7	1.36 V	182	35.3	17.0
6	#10520.00	41.8 AV	54.0	-12.2	1.36 V	182	24.8	17.0
7	15780.00	59.2 PK	74.0	-14.8	2.20 V	163	37.7	21.5
8	15780.00	46.4 AV	54.0	-7.6	2.20 V	163	24.9	21.5

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 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	5150.00	59.7 PK	74.0	-14.3	1.19 H	314	48.7	11.0
2	5150.00	50.2 AV	54.0	-3.8	1.19 H	314	39.2	11.0
3	*5300.00	117.2 PK			1.19 H	314	105.8	11.4
4	*5300.00	107.0 AV			1.19 H	314	95.6	11.4
5	5350.00	68.2 PK	74.0	-5.8	1.19 H	314	56.8	11.4
6	5350.00	52.7 AV	54.0	-1.3	1.19 H	314	41.3	11.4
7	10600.00	52.1 PK	74.0	-21.9	1.52 H	335	35.1	17.0
8	10600.00	38.6 AV	54.0	-15.4	1.52 H	335	21.6	17.0
9	15900.00	54.6 PK	74.0	-19.4	1.28 H	171	32.9	21.7
10	15900.00	43.0 AV	54.0	-11.0	1.28 H	171	21.3	21.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.4 PK	74.0	-16.6	1.58 V	50	46.4	11.0
2	5150.00	44.5 AV	54.0	-9.5	1.58 V	50	33.5	11.0
3	*5300.00	114.2 PK			1.58 V	50	102.8	11.4
4	*5300.00	103.2 AV			1.58 V	50	91.8	11.4
5	5350.00	59.1 PK	74.0	-14.9	1.58 V	50	47.7	11.4
6	5350.00	46.1 AV	54.0	-7.9	1.58 V	50	34.7	11.4
7	10600.00	52.8 PK	74.0	-21.2	1.67 V	138	35.8	17.0
8	10600.00	41.0 AV	54.0	-13.0	1.67 V	138	24.0	17.0
9	15900.00	58.3 PK	74.0	-15.7	1.91 V	174	36.6	21.7
10	15900.00	44.8 AV	54.0	-9.2	1.91 V	174	23.1	21.7

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.

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	117.7 PK			1.28 H	308	106.3	11.4
2	*5320.00	106.3 AV			1.28 H	308	94.9	11.4
3	5350.00	72.7 PK	74.0	-1.3	1.28 H	308	61.3	11.4
4	5350.00	52.5 AV	54.0	-1.5	1.28 H	308	41.1	11.4
5	10640.00	51.9 PK	74.0	-22.1	1.52 H	337	34.8	17.1
6	10640.00	38.5 AV	54.0	-15.5	1.52 H	337	21.4	17.1
7	15960.00	54.9 PK	74.0	-19.1	1.24 H	186	33.1	21.8
8	15960.00	43.3 AV	54.0	-10.7	1.24 H	186	21.5	21.8
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	*5320.00	114.7 PK			1.54 V	62	103.3	11.4
2	*5320.00	102.7 AV			1.54 V	62	91.3	11.4
3	5350.00	57.3 PK	74.0	-16.7	1.54 V	62	45.9	11.4
4	5350.00	44.2 AV	54.0	-9.8	1.54 V	62	32.8	11.4
5	10640.00	53.3 PK	74.0	-20.7	1.67 V	156	36.2	17.1
6	10640.00	41.6 AV	54.0	-12.4	1.67 V	156	24.5	17.1
7	15960.00	56.5 PK	74.0	-17.5	1.97 V	164	34.7	21.8
8	15960.00	45.4 AV	54.0	-8.6	1.97 V	164	23.6	21.8

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 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	72.4 PK	74.0	-1.6	1.01 H	302	60.8	11.6
2	#5470.00	52.2 AV	54.0	-1.8	1.01 H	302	40.6	11.6
3	*5500.00	114.2 PK			1.01 H	302	102.4	11.8
4	*5500.00	104.3 AV			1.01 H	302	92.5	11.8
5	11000.00	51.7 PK	74.0	-22.3	1.51 H	333	34.2	17.5
6	11000.00	38.5 AV	54.0	-15.5	1.51 H	333	21.0	17.5
7	#16500.00	54.8 PK	74.0	-19.2	1.21 H	172	30.9	23.9
8	#16500.00	43.2 AV	54.0	-10.8	1.21 H	172	19.3	23.9
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	57.1 PK	74.0	-16.9	1.60 V	52	45.5	11.6
2	#5470.00	44.0 AV	54.0	-10.0	1.60 V	52	32.4	11.6
3	*5500.00	111.2 PK			1.60 V	52	99.4	11.8
4	*5500.00	100.6 AV			1.60 V	52	88.8	11.8
5	11000.00	53.6 PK	74.0	-20.4	1.62 V	143	36.1	17.5
6	11000.00	41.4 AV	54.0	-12.6	1.62 V	143	23.9	17.5
7	#16500.00	57.5 PK	74.0	-16.5	1.47 V	323	33.6	23.9
8	#16500.00	44.3 AV	54.0	-9.7	1.47 V	323	20.4	23.9

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 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	119.9 PK			1.00 H	306	108.2	11.7
2	*5580.00	109.4 AV			1.00 H	306	97.7	11.7
3	#5733.00	58.8 PK	74.0	-15.2	1.00 H	307	46.9	11.9
4	#5733.00	48.3 AV	54.0	-5.7	1.00 H	307	36.4	11.9
5	11160.00	51.6 PK	74.0	-22.4	1.46 H	340	33.9	17.7
6	11160.00	38.7 AV	54.0	-15.3	1.46 H	340	21.0	17.7
7	#16740.00	54.6 PK	74.0	-19.4	1.24 H	181	29.9	24.7
8	#16740.00	43.3 AV	54.0	-10.7	1.24 H	181	18.6	24.7
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	116.7 PK			1.61 V	34	105.0	11.7
2	*5580.00	105.8 AV			1.61 V	34	94.1	11.7
3	#5733.00	61.8 PK	74.0	-12.2	1.61 V	34	49.9	11.9
4	#5733.00	41.8 AV	54.0	-12.2	1.61 V	34	29.9	11.9
5	11160.00	52.1 PK	74.0	-21.9	1.69 V	139	34.4	17.7
6	11160.00	40.2 AV	54.0	-13.8	1.69 V	139	22.5	17.7
7	#16740.00	58.0 PK	74.0	-16.0	1.55 V	321	33.3	24.7
8	#16740.00	44.1 AV	54.0	-9.9	1.55 V	321	19.4	24.7

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 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	114.5 PK			1.00 H	314	102.6	11.9
2	*5700.00	104.4 AV			1.00 H	314	92.5	11.9
3	#5725.00	72.6 PK	74.0	-1.4	1.00 H	314	60.7	11.9
4	#5725.00	52.3 AV	54.0	-1.7	1.00 H	314	40.4	11.9
5	11400.00	51.8 PK	74.0	-22.2	1.51 H	350	34.0	17.8
6	11400.00	38.7 AV	54.0	-15.3	1.51 H	350	20.9	17.8
7	#17100.00	54.6 PK	74.0	-19.4	1.27 H	189	28.8	25.8
8	#17100.00	43.0 AV	54.0	-11.0	1.27 H	189	17.2	25.8
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	*5700.00	112.0 PK			1.61 V	44	100.1	11.9
2	*5700.00	101.5 AV			1.61 V	44	89.6	11.9
3	#5725.00	61.7 PK	74.0	-12.3	1.61 V	44	49.8	11.9
4	#5725.00	41.9 AV	54.0	-12.1	1.61 V	44	30.0	11.9
5	11400.00	52.4 PK	74.0	-21.6	1.53 V	157	34.6	17.8
6	11400.00	42.0 AV	54.0	-12.0	1.53 V	157	24.2	17.8
7	#17100.00	59.6 PK	74.0	-14.4	1.58 V	242	33.8	25.8
8	#17100.00	45.7 AV	54.0	-8.3	1.58 V	242	19.9	25.8

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.5 PK	74.0	-15.5	1.00 H	313	46.9	11.6
2	#5470.00	45.3 AV	54.0	-8.7	1.00 H	313	33.7	11.6
3	*5720.00	119.9 PK			1.00 H	313	108.0	11.9
4	*5720.00	109.3 AV			1.00 H	313	97.4	11.9
5	#5850.00	58.3 PK	74.0	-15.7	1.00 H	313	46.6	11.7
6	#5850.00	47.2 AV	54.0	-6.8	1.00 H	313	35.5	11.7
7	11440.00	52.4 PK	74.0	-21.6	1.57 H	360	34.5	17.9
8	11440.00	39.0 AV	54.0	-15.0	1.57 H	360	21.1	17.9
9	#17160.00	55.2 PK	74.0	-18.8	1.23 H	183	29.1	26.1
10	#17160.00	43.5 AV	54.0	-10.5	1.23 H	183	17.4	26.1
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	#5470.00	61.3 PK	74.0	-12.7	1.72 V	48	49.7	11.6
2	#5470.00	40.9 AV	54.0	-13.1	1.72 V	48	29.3	11.6
3	*5720.00	117.5 PK			1.72 V	48	105.6	11.9
4	*5720.00	106.1 AV			1.72 V	48	94.2	11.9
5	#5850.00	61.1 PK	74.0	-12.9	1.72 V	48	49.4	11.7
6	#5850.00	41.0 AV	54.0	-13.0	1.72 V	48	29.3	11.7
7	11440.00	53.1 PK	74.0	-20.9	1.63 V	137	35.2	17.9
8	11440.00	42.1 AV	54.0	-11.9	1.63 V	137	24.2	17.9
9	#17160.00	58.9 PK	74.0	-15.1	1.64 V	224	32.8	26.1
10	#17160.00	44.8 AV	54.0	-9.2	1.64 V	224	18.7	26.1

REMARKS:

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

802.11ac (VHT20)

CHANNEL	TX Channel 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	57.6 PK	74.0	-16.4	1.53 H	309	46.6	11.0
2	5150.00	47.4 AV	54.0	-6.6	1.53 H	309	36.4	11.0
3	*5260.00	116.4 PK			1.53 H	309	104.9	11.5
4	*5260.00	105.4 AV			1.53 H	309	93.9	11.5
5	#10520.00	51.6 PK	74.0	-22.4	1.54 H	341	34.6	17.0
6	#10520.00	38.7 AV	54.0	-15.3	1.54 H	341	21.7	17.0
7	15780.00	54.9 PK	74.0	-19.1	1.24 H	193	33.4	21.5
8	15780.00	43.5 AV	54.0	-10.5	1.24 H	193	22.0	21.5
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	5150.00	61.4 PK	74.0	-12.6	1.59 V	60	50.4	11.0
2	5150.00	41.1 AV	54.0	-12.9	1.59 V	60	30.1	11.0
3	*5260.00	113.7 PK			1.59 V	60	102.2	11.5
4	*5260.00	103.3 AV			1.59 V	60	91.8	11.5
5	#10520.00	53.4 PK	74.0	-20.6	1.56 V	116	36.4	17.0
6	#10520.00	42.8 AV	54.0	-11.2	1.56 V	116	25.8	17.0
7	15780.00	59.1 PK	74.0	-14.9	1.64 V	230	37.6	21.5
8	15780.00	45.6 AV	54.0	-8.4	1.64 V	230	24.1	21.5

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 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	115.3 PK			1.50 H	315	103.9	11.4
2	*5300.00	105.4 AV			1.50 H	315	94.0	11.4
3	5350.00	67.3 PK	74.0	-6.7	1.50 H	315	55.9	11.4
4	**5350.00**	**52.9 AV**	**54.0**	**-1.1**	**1.50 H**	**315**	**41.5**	**11.4**
5	10600.00	51.3 PK	74.0	-22.7	1.47 H	342	34.3	17.0
6	10600.00	38.2 AV	54.0	-15.8	1.47 H	342	21.2	17.0
7	15900.00	54.5 PK	74.0	-19.5	1.30 H	205	32.8	21.7
8	15900.00	42.9 AV	54.0	-11.1	1.30 H	205	21.2	21.7
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	*5300.00	113.1 PK			1.65 V	31	101.7	11.4
2	*5300.00	103.3 AV			1.65 V	31	91.9	11.4
3	5350.00	61.3 PK	74.0	-12.7	1.65 V	31	49.9	11.4
4	5350.00	41.2 AV	54.0	-12.8	1.65 V	31	29.8	11.4
5	10600.00	53.1 PK	74.0	-20.9	1.63 V	134	36.1	17.0
6	10600.00	42.3 AV	54.0	-11.7	1.63 V	134	25.3	17.0
7	15900.00	58.4 PK	74.0	-15.6	1.63 V	249	36.7	21.7
8	15900.00	44.9 AV	54.0	-9.1	1.63 V	249	23.2	21.7

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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	111.8 PK			1.88 H	313	100.4	11.4
2	*5320.00	102.3 AV			1.88 H	313	90.9	11.4
3	5350.00	68.4 PK	74.0	-5.6	1.88 H	313	57.0	11.4
4	5350.00	52.8 AV	54.0	-1.2	1.88 H	313	41.4	11.4
5	10640.00	52.1 PK	74.0	-21.9	1.55 H	359	35.0	17.1
6	10640.00	39.0 AV	54.0	-15.0	1.55 H	359	21.9	17.1
7	15960.00	54.7 PK	74.0	-19.3	1.21 H	186	32.9	21.8
8	15960.00	43.2 AV	54.0	-10.8	1.21 H	186	21.4	21.8
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	*5320.00	109.5 PK			1.62 V	36	98.1	11.4
2	*5320.00	100.0 AV			1.62 V	36	88.6	11.4
3	5350.00	61.4 PK	74.0	-12.6	1.62 V	36	50.0	11.4
4	5350.00	41.5 AV	54.0	-12.5	1.62 V	36	30.1	11.4
5	10640.00	52.2 PK	74.0	-21.8	1.55 V	143	35.1	17.1
6	10640.00	41.6 AV	54.0	-12.4	1.55 V	143	24.5	17.1
7	15960.00	59.0 PK	74.0	-15.0	1.63 V	234	37.2	21.8
8	15960.00	45.5 AV	54.0	-8.5	1.63 V	234	23.7	21.8

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 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	72.6 PK	74.0	-1.4	1.92 H	308	61.0	11.6
2	#5470.00	50.7 AV	54.0	-3.3	1.92 H	308	39.1	11.6
3	*5500.00	112.2 PK			1.92 H	308	100.4	11.8
4	*5500.00	101.8 AV			1.92 H	308	90.0	11.8
5	11000.00	52.0 PK	74.0	-22.0	1.55 H	336	34.5	17.5
6	11000.00	38.8 AV	54.0	-15.2	1.55 H	336	21.3	17.5
7	#16500.00	54.4 PK	74.0	-19.6	1.29 H	178	30.5	23.9
8	#16500.00	42.6 AV	54.0	-11.4	1.29 H	178	18.7	23.9
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	61.7 PK	74.0	-12.3	1.68 V	31	50.1	11.6
2	#5470.00	41.5 AV	54.0	-12.5	1.68 V	31	29.9	11.6
3	*5500.00	109.5 PK			1.68 V	31	97.7	11.8
4	*5500.00	99.5 AV			1.68 V	31	87.7	11.8
5	11000.00	53.9 PK	74.0	-20.1	1.64 V	134	36.4	17.5
6	11000.00	42.9 AV	54.0	-11.1	1.64 V	134	25.4	17.5
7	#16500.00	58.7 PK	74.0	-15.3	1.66 V	234	34.8	23.9
8	#16500.00	44.7 AV	54.0	-9.3	1.66 V	234	20.8	23.9

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 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	#5470.00	60.6 PK	74.0	-13.4	2.00 H	307	49.0	11.6
2	#5470.00	46.0 AV	54.0	-8.0	2.00 H	307	34.4	11.6
3	*5580.00	118.5 PK			2.00 H	307	106.8	11.7
4	*5580.00	107.9 AV			2.00 H	307	96.2	11.7
5	#5742.00	57.0 PK	74.0	-17.0	2.00 H	307	45.1	11.9
6	#5742.00	46.9 AV	54.0	-7.1	2.00 H	307	35.0	11.9
7	11160.00	51.5 PK	74.0	-22.5	1.46 H	344	33.8	17.7
8	11160.00	38.2 AV	54.0	-15.8	1.46 H	344	20.5	17.7
9	#16740.00	55.1 PK	74.0	-18.9	1.32 H	198	30.4	24.7
10	#16740.00	43.3 AV	54.0	-10.7	1.32 H	198	18.6	24.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	57.8 PK	74.0	-16.2	1.69 V	37	46.2	11.6
2	#5470.00	44.0 AV	54.0	-10.0	1.69 V	37	32.4	11.6
3	*5580.00	115.5 PK			1.69 V	37	103.8	11.7
4	*5580.00	105.4 AV			1.69 V	37	93.7	11.7
5	#5742.00	61.3 PK	74.0	-12.7	1.69 V	37	49.4	11.9
6	#5742.00	41.4 AV	54.0	-12.6	1.69 V	37	29.5	11.9
7	11160.00	52.9 PK	74.0	-21.1	1.55 V	132	35.2	17.7
8	11160.00	41.6 AV	54.0	-12.4	1.55 V	132	23.9	17.7
9	#16740.00	58.6 PK	74.0	-15.4	1.60 V	228	33.9	24.7
10	#16740.00	45.2 AV	54.0	-8.8	1.60 V	228	20.5	24.7

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 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	113.5 PK			2.22 H	304	101.6	11.9
2	*5700.00	103.6 AV			2.22 H	304	91.7	11.9
3	#5725.00	69.1 PK	74.0	-4.9	2.22 H	304	57.2	11.9
4	#5725.00	52.5 AV	54.0	-1.5	2.22 H	304	40.6	11.9
5	11400.00	52.2 PK	74.0	-21.8	1.56 H	360	34.4	17.8
6	11400.00	38.9 AV	54.0	-15.1	1.56 H	360	21.1	17.8
7	#17100.00	54.3 PK	74.0	-19.7	1.31 H	190	28.5	25.8
8	#17100.00	42.5 AV	54.0	-11.5	1.31 H	190	16.7	25.8
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	*5700.00	110.6 PK			1.64 V	66	98.7	11.9
2	*5700.00	101.1 AV			1.64 V	66	89.2	11.9
3	#5725.00	57.4 PK	74.0	-16.6	1.64 V	66	45.5	11.9
4	#5725.00	44.0 AV	54.0	-10.0	1.64 V	66	32.1	11.9
5	11400.00	51.9 PK	74.0	-22.1	1.60 V	148	34.1	17.8
6	11400.00	41.6 AV	54.0	-12.4	1.60 V	148	23.8	17.8
7	#17100.00	58.6 PK	74.0	-15.4	1.62 V	257	32.8	25.8
8	#17100.00	44.6 AV	54.0	-9.4	1.62 V	257	18.8	25.8

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.3 PK	74.0	-15.7	2.27 H	302	46.7	11.6
2	#5470.00	46.8 AV	54.0	-7.2	2.27 H	302	35.2	11.6
3	*5720.00	121.0 PK			2.27 H	302	109.1	11.9
4	*5720.00	111.1 AV			2.27 H	302	99.2	11.9
5	#5850.00	59.7 PK	74.0	-14.3	2.27 H	302	48.0	11.7
6	#5850.00	48.8 AV	54.0	-5.2	2.27 H	302	37.1	11.7
7	11440.00	51.5 PK	74.0	-22.5	1.47 H	341	33.6	17.9
8	11440.00	38.3 AV	54.0	-15.7	1.47 H	341	20.4	17.9
9	#17160.00	54.1 PK	74.0	-19.9	1.27 H	187	28.0	26.1
10	#17160.00	42.6 AV	54.0	-11.4	1.27 H	187	16.5	26.1
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	#5470.00	58.1 PK	74.0	-15.9	1.65 V	51	46.5	11.6
2	#5470.00	44.4 AV	54.0	-9.6	1.65 V	51	32.8	11.6
3	*5720.00	117.5 PK			1.65 V	51	105.6	11.9
4	*5720.00	108.2 AV			1.65 V	51	96.3	11.9
5	#5850.00	61.0 PK	74.0	-13.0	1.65 V	51	49.3	11.7
6	#5850.00	41.5 AV	54.0	-12.5	1.65 V	51	29.8	11.7
7	11440.00	53.1 PK	74.0	-20.9	1.59 V	138	35.2	17.9
8	11440.00	42.7 AV	54.0	-11.3	1.59 V	138	24.8	17.9
9	#17160.00	59.1 PK	74.0	-14.9	1.62 V	234	33.0	26.1
10	#17160.00	45.2 AV	54.0	-8.8	1.62 V	234	19.1	26.1

REMARKS:

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

802.11ac (VHT40)

CHANNEL	TX Channel 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	66.7 PK	74.0	-7.3	1.89 H	319	55.7	11.0
2	5150.00	52.5 AV	54.0	-1.5	1.89 H	319	41.5	11.0
3	*5270.00	115.1 PK			1.89 H	319	103.7	11.4
4	*5270.00	105.8 AV			1.89 H	319	94.4	11.4
5	#10540.00	51.6 PK	74.0	-22.4	1.54 H	338	34.6	17.0
6	#10540.00	38.4 AV	54.0	-15.6	1.54 H	338	21.4	17.0
7	15810.00	54.6 PK	74.0	-19.4	1.28 H	190	33.0	21.6
8	15810.00	42.8 AV	54.0	-11.2	1.28 H	190	21.2	21.6
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	57.7 PK	74.0	-16.3	1.69 V	40	46.7	11.0
2	5150.00	44.3 AV	54.0	-9.7	1.69 V	40	33.3	11.0
3	*5270.00	111.8 PK			1.69 V	40	100.4	11.4
4	*5270.00	104.1 AV			1.69 V	40	92.7	11.4
5	#10540.00	53.0 PK	74.0	-21.0	1.63 V	142	36.0	17.0
6	#10540.00	42.1 AV	54.0	-11.9	1.63 V	142	25.1	17.0
7	15810.00	58.6 PK	74.0	-15.4	1.61 V	229	37.0	21.6
8	15810.00	45.0 AV	54.0	-9.0	1.61 V	229	23.4	21.6

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	107.9 PK			1.84 H	319	96.5	11.4
2	*5310.00	97.8 AV			1.84 H	319	86.4	11.4
3	5350.00	70.4 PK	74.0	-3.6	1.84 H	319	59.0	11.4
4	5350.00	52.6 AV	54.0	-1.4	1.84 H	319	41.2	11.4
5	10620.00	51.1 PK	74.0	-22.9	1.53 H	360	34.1	17.0
6	10620.00	38.3 AV	54.0	-15.7	1.53 H	360	21.3	17.0
7	15930.00	55.2 PK	74.0	-18.8	1.23 H	192	33.5	21.7
8	15930.00	43.5 AV	54.0	-10.5	1.23 H	192	21.8	21.7
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	*5310.00	104.5 PK			1.62 V	32	93.1	11.4
2	*5310.00	95.9 AV			1.62 V	32	84.5	11.4
3	5350.00	60.2 PK	74.0	-13.8	1.62 V	32	48.8	11.4
4	5350.00	41.0 AV	54.0	-13.0	1.62 V	32	29.6	11.4
5	10620.00	53.0 PK	74.0	-21.0	1.57 V	148	36.0	17.0
6	10620.00	42.5 AV	54.0	-11.5	1.57 V	148	25.5	17.0
7	15930.00	58.5 PK	74.0	-15.5	1.66 V	254	36.8	21.7
8	15930.00	45.1 AV	54.0	-8.9	1.66 V	254	23.4	21.7

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.

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	70.2 PK	74.0	-3.8	1.86 H	320	58.6	11.6
2	**#5470.00**	**52.9 AV**	**54.0**	**-1.1**	**1.86 H**	**320**	**41.3**	**11.6**
3	*5510.00	106.5 PK			1.86 H	320	94.8	11.7
4	*5510.00	96.4 AV			1.86 H	320	84.7	11.7
5	11020.00	51.8 PK	74.0	-22.2	1.50 H	360	34.3	17.5
6	11020.00	38.5 AV	54.0	-15.5	1.50 H	360	21.0	17.5
7	#16530.00	53.9 PK	74.0	-20.1	1.32 H	182	30.0	23.9
8	#16530.00	42.6 AV	54.0	-11.4	1.32 H	182	18.7	23.9
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	60.9 PK	74.0	-13.1	1.63 V	40	49.3	11.6
2	#5470.00	41.2 AV	54.0	-12.8	1.63 V	40	29.6	11.6
3	*5510.00	104.0 PK			1.63 V	40	92.3	11.7
4	*5510.00	95.0 AV			1.63 V	40	83.3	11.7
5	11020.00	52.1 PK	74.0	-21.9	1.52 V	171	34.6	17.5
6	11020.00	41.9 AV	54.0	-12.1	1.52 V	171	24.4	17.5
7	#16530.00	58.9 PK	74.0	-15.1	1.63 V	255	35.0	23.9
8	#16530.00	45.3 AV	54.0	-8.7	1.63 V	255	21.4	23.9

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	68.9 PK	74.0	-5.1	2.04 H	319	57.3	11.6
2	**#5470.00**	**52.9 AV**	**54.0**	**-1.1**	**2.04 H**	**319**	**41.3**	**11.6**
3	*5550.00	111.4 PK			2.04 H	319	99.7	11.7
4	*5550.00	101.6 AV			2.04 H	319	89.9	11.7
5	#5725.00	65.2 PK	74.0	-8.8	2.04 H	319	53.3	11.9
6	#5725.00	51.7 AV	54.0	-2.3	2.04 H	319	39.8	11.9
7	11100.00	52.0 PK	74.0	-22.0	1.47 H	349	34.5	17.5
8	11100.00	39.1 AV	54.0	-14.9	1.47 H	349	21.6	17.5
9	#16650.00	54.9 PK	74.0	-19.1	1.25 H	197	30.5	24.4
10	#16650.00	43.2 AV	54.0	-10.8	1.25 H	197	18.8	24.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.7 PK	74.0	-15.3	1.67 V	32	47.1	11.6
2	#5470.00	45.4 AV	54.0	-8.6	1.67 V	32	33.8	11.6
3	*5550.00	107.8 PK			1.67 V	32	96.1	11.7
4	*5550.00	99.6 AV			1.67 V	32	87.9	11.7
5	#5725.00	60.2 PK	74.0	-13.8	1.67 V	32	48.3	11.9
6	#5725.00	40.7 AV	54.0	-13.3	1.67 V	32	28.8	11.9
7	11100.00	52.4 PK	74.0	-21.6	1.53 V	151	34.9	17.5
8	11100.00	41.5 AV	54.0	-12.5	1.53 V	151	24.0	17.5
9	#16650.00	58.8 PK	74.0	-15.2	1.60 V	257	34.4	24.4
10	#16650.00	44.7 AV	54.0	-9.3	1.60 V	257	20.3	24.4

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 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	111.7 PK			1.95 H	320	99.8	11.9
2	*5670.00	101.4 AV			1.95 H	320	89.5	11.9
3	#5725.00	70.7 PK	74.0	-3.3	1.95 H	320	58.8	11.9
4	#5725.00	52.3 AV	54.0	-1.7	1.95 H	320	40.4	11.9
5	11340.00	51.7 PK	74.0	-22.3	1.48 H	342	33.8	17.9
6	11340.00	38.5 AV	54.0	-15.5	1.48 H	342	20.6	17.9
7	#17010.00	54.8 PK	74.0	-19.2	1.30 H	178	28.8	26.0
8	#17010.00	43.0 AV	54.0	-11.0	1.30 H	178	17.0	26.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	108.5 PK			1.60 V	29	96.6	11.9
2	*5670.00	99.5 AV			1.60 V	29	87.6	11.9
3	#5725.00	60.2 PK	74.0	-13.8	1.60 V	29	48.3	11.9
4	#5725.00	40.7 AV	54.0	-13.3	1.60 V	29	28.8	11.9
5	11340.00	53.1 PK	74.0	-20.9	1.52 V	163	35.2	17.9
6	11340.00	42.4 AV	54.0	-11.6	1.52 V	163	24.5	17.9
7	#17010.00	58.6 PK	74.0	-15.4	1.60 V	247	32.6	26.0
8	#17010.00	45.1 AV	54.0	-8.9	1.60 V	247	19.1	26.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	59.8 PK	74.0	-14.2	1.32 H	69	48.2	11.6
2	#5470.00	46.6 AV	54.0	-7.4	1.32 H	69	35.0	11.6
3	*5710.00	115.6 PK			1.32 H	69	103.7	11.9
4	*5710.00	105.0 AV			1.32 H	69	93.1	11.9
5	#5850.00	65.2 PK	74.0	-8.8	1.32 H	69	53.5	11.7
6	#5850.00	51.0 AV	54.0	-3.0	1.32 H	69	39.3	11.7
7	11420.00	51.8 PK	74.0	-22.2	1.48 H	350	34.0	17.8
8	11420.00	38.6 AV	54.0	-15.4	1.48 H	350	20.8	17.8
9	#17130.00	55.3 PK	74.0	-18.7	1.28 H	194	29.2	26.1
10	#17130.00	43.2 AV	54.0	-10.8	1.28 H	194	17.1	26.1
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	#5470.00	59.0 PK	74.0	-15.0	1.68 V	30	47.4	11.6
2	#5470.00	45.8 AV	54.0	-8.2	1.68 V	30	34.2	11.6
3	*5710.00	112.4 PK			1.68 V	30	100.5	11.9
4	*5710.00	103.4 AV			1.68 V	30	91.5	11.9
5	#5850.00	58.7 PK	74.0	-15.3	1.68 V	30	47.0	11.7
6	#5850.00	39.3 AV	54.0	-14.7	1.68 V	30	27.6	11.7
7	11420.00	52.5 PK	74.0	-21.5	1.63 V	133	34.7	17.8
8	11420.00	41.8 AV	54.0	-12.2	1.63 V	133	24.0	17.8
9	#17130.00	59.4 PK	74.0	-14.6	1.61 V	246	33.3	26.1
10	#17130.00	45.8 AV	54.0	-8.2	1.61 V	246	19.7	26.1

REMARKS:

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

802.11ac (VHT80)

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	60.3 PK	74.0	-13.7	1.38 H	67	49.3	11.0
2	5150.00	47.7 AV	54.0	-6.3	1.38 H	67	36.7	11.0
3	*5290.00	104.2 PK			1.38 H	67	92.8	11.4
4	*5290.00	92.7 AV			1.38 H	67	81.3	11.4
5	5350.00	70.9 PK	74.0	-3.1	1.38 H	67	59.5	11.4
6	5350.00	52.5 AV	54.0	-1.5	1.38 H	67	41.1	11.4
7	#10580.00	52.4 PK	74.0	-21.6	1.53 H	356	35.4	17.0
8	#10580.00	39.0 AV	54.0	-15.0	1.53 H	356	22.0	17.0
9	15870.00	54.8 PK	74.0	-19.2	1.35 H	188	33.1	21.7
10	15870.00	42.9 AV	54.0	-11.1	1.35 H	188	21.2	21.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.9 PK	74.0	-16.1	1.70 V	52	46.9	11.0
2	5150.00	40.5 AV	54.0	-13.5	1.70 V	52	29.5	11.0
3	*5290.00	101.4 PK			1.70 V	52	90.0	11.4
4	*5290.00	90.6 AV			1.70 V	52	79.2	11.4
5	5350.00	60.4 PK	74.0	-13.6	1.70 V	52	49.0	11.4
6	5350.00	44.8 AV	54.0	-9.2	1.70 V	52	33.4	11.4
7	#10580.00	53.1 PK	74.0	-20.9	1.58 V	129	36.1	17.0
8	#10580.00	42.3 AV	54.0	-11.7	1.58 V	129	25.3	17.0
9	15870.00	58.9 PK	74.0	-15.1	1.58 V	221	37.2	21.7
10	15870.00	45.3 AV	54.0	-8.7	1.58 V	221	23.6	21.7

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 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	68.6 PK	74.0	-5.4	1.09 H	68	57.0	11.6
2	**#5470.00**	**52.9 AV**	**54.0**	**-1.1**	**1.09 H**	**68**	**41.3**	**11.6**
3	*5530.00	105.4 PK			1.09 H	68	93.7	11.7
4	*5530.00	93.2 AV			1.09 H	68	81.5	11.7
5	#5725.00	59.8 PK	74.0	-14.2	1.09 H	68	47.9	11.9
6	#5725.00	47.5 AV	54.0	-6.5	1.09 H	68	35.6	11.9
7	11060.00	51.5 PK	74.0	-22.5	1.46 H	341	34.0	17.5
8	11060.00	38.2 AV	54.0	-15.8	1.46 H	341	20.7	17.5
9	#16590.00	55.1 PK	74.0	-18.9	1.34 H	186	30.9	24.2
10	#16590.00	43.3 AV	54.0	-10.7	1.34 H	186	19.1	24.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.1 PK	74.0	-15.9	1.60 V	47	46.5	11.6
2	#5470.00	44.2 AV	54.0	-9.8	1.60 V	47	32.6	11.6
3	*5530.00	102.1 PK			1.60 V	47	90.4	11.7
4	*5530.00	90.4 AV			1.60 V	47	78.7	11.7
5	#5725.00	59.8 PK	74.0	-14.2	1.60 V	47	47.9	11.9
6	#5725.00	40.2 AV	54.0	-13.8	1.60 V	47	28.3	11.9
7	11060.00	52.8 PK	74.0	-21.2	1.62 V	112	35.3	17.5
8	11060.00	41.9 AV	54.0	-12.1	1.62 V	112	24.4	17.5
9	#16590.00	59.4 PK	74.0	-14.6	1.57 V	244	35.2	24.2
10	#16590.00	45.9 AV	54.0	-8.1	1.57 V	244	21.7	24.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	108.6 PK			1.12 H	71	97.0	11.6
2	*5610.00	96.4 AV			1.12 H	71	84.8	11.6
3	#5725.00	68.2 PK	74.0	-5.8	1.12 H	71	56.3	11.9
4	#5725.00	52.4 AV	54.0	-1.6	1.12 H	71	40.5	11.9
5	11220.00	51.3 PK	74.0	-22.7	1.45 H	350	33.5	17.8
6	11220.00	38.3 AV	54.0	-15.7	1.45 H	350	20.5	17.8
7	#16830.00	54.6 PK	74.0	-19.4	1.25 H	175	29.4	25.2
8	#16830.00	42.8 AV	54.0	-11.2	1.25 H	175	17.6	25.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	105.9 PK			1.72 V	58	94.3	11.6
2	*5610.00	94.0 AV			1.72 V	58	82.4	11.6
3	#5725.00	57.3 PK	74.0	-16.7	1.72 V	58	45.4	11.9
4	#5725.00	43.6 AV	54.0	-10.4	1.72 V	58	31.7	11.9
5	11220.00	53.0 PK	74.0	-21.0	1.49 V	129	35.2	17.8
6	11220.00	42.3 AV	54.0	-11.7	1.49 V	129	24.5	17.8
7	#16830.00	59.0 PK	74.0	-15.0	1.55 V	252	33.8	25.2
8	#16830.00	45.3 AV	54.0	-8.7	1.55 V	252	20.1	25.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	61.9 PK	74.0	-12.1	1.30 H	68	50.3	11.6
2	#5470.00	48.7 AV	54.0	-5.3	1.30 H	68	37.1	11.6
3	*5690.00	111.1 PK			1.30 H	68	99.1	12.0
4	*5690.00	99.5 AV			1.30 H	68	87.5	12.0
5	#5850.00	68.3 PK	74.0	-5.7	1.30 H	68	56.6	11.7
6	#5850.00	52.4 AV	54.0	-1.6	1.30 H	68	40.7	11.7
7	11380.00	51.9 PK	74.0	-22.1	1.48 H	340	34.1	17.8
8	11380.00	38.8 AV	54.0	-15.2	1.48 H	340	21.0	17.8
9	#17070.00	54.9 PK	74.0	-19.1	1.32 H	179	29.0	25.9
10	#17070.00	43.0 AV	54.0	-11.0	1.32 H	179	17.1	25.9
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	59.8 PK	74.0	-14.2	1.65 V	43	48.2	11.6
2	#5470.00	40.1 AV	54.0	-13.9	1.65 V	43	28.5	11.6
3	*5690.00	108.2 PK			1.65 V	43	96.2	12.0
4	*5690.00	97.2 AV			1.65 V	43	85.2	12.0
5	#5850.00	57.4 PK	74.0	-16.6	1.65 V	43	45.7	11.7
6	#5850.00	43.7 AV	54.0	-10.3	1.65 V	43	32.0	11.7
7	11380.00	52.8 PK	74.0	-21.2	1.55 V	139	35.0	17.8
8	11380.00	42.0 AV	54.0	-12.0	1.55 V	139	24.2	17.8
9	#17070.00	58.6 PK	74.0	-15.4	1.65 V	242	32.7	25.9
10	#17070.00	45.0 AV	54.0	-9.0	1.65 V	242	19.1	25.9

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.

Below 1GHz Data:

802.11a

CHANNEL	TX Channel 52	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	49.19	29.5 QP	40.0	-10.5	2.06 H	106	38.0	-8.5
2	150.45	24.7 QP	43.5	-18.8	1.00 H	290	32.4	-7.7
3	204.99	23.8 QP	43.5	-19.7	1.00 H	64	34.6	-10.8
4	517.54	31.8 QP	46.0	-14.2	1.00 H	297	33.0	-1.2
5	624.91	38.1 QP	46.0	-7.9	1.45 H	319	36.8	1.3
6	949.53	37.2 QP	46.0	-8.8	1.00 H	227	30.3	6.9
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	37.50	35.7 QP	40.0	-4.3	2.02 V	317	44.7	-9.0
2	93.54	30.4 QP	43.5	-13.1	1.54 V	45	43.8	-13.4
3	374.90	30.5 QP	46.0	-15.5	1.05 V	244	35.2	-4.7
4	624.99	38.2 QP	46.0	-7.8	1.04 V	185	36.9	1.3
5	874.95	36.8 QP	46.0	-9.2	1.00 V	301	31.6	5.2
6	1000.00	39.5 QP	54.0	-14.5	1.43 V	64	32.0	7.5

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

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	48.87	29.4 QP	40.0	-10.6	2.04 H	118	37.9	-8.5
2	150.48	24.8 QP	43.5	-18.7	1.00 H	279	32.5	-7.7
3	204.68	23.8 QP	43.5	-19.7	1.03 H	51	34.6	-10.8
4	517.96	31.4 QP	46.0	-14.6	1.01 H	265	32.6	-1.2
5	624.84	38.0 QP	46.0	-8.0	1.46 H	299	36.7	1.3
6	949.44	37.7 QP	46.0	-8.3	1.00 H	247	30.8	6.9
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	37.08	35.7 QP	40.0	-4.3	1.98 V	307	44.8	-9.1
2	93.69	30.3 QP	43.5	-13.2	1.54 V	53	43.7	-13.4
3	375.03	30.3 QP	46.0	-15.7	1.00 V	250	35.0	-4.7
4	624.91	37.9 QP	46.0	-8.1	1.02 V	186	36.6	1.3
5	874.89	37.1 QP	46.0	-8.9	1.00 V	321	31.9	5.2
6	1000.00	40.0 QP	54.0	-14.0	1.45 V	35	32.5	7.5

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

CHANNEL	TX Channel 64	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	48.78	29.4 QP	40.0	-10.6	2.04 H	75	37.9	-8.5
2	149.78	24.7 QP	43.5	-18.8	1.00 H	276	32.4	-7.7
3	204.78	24.2 QP	43.5	-19.3	1.05 H	36	35.0	-10.8
4	517.42	31.8 QP	46.0	-14.2	1.00 H	273	33.0	-1.2
5	624.98	38.1 QP	46.0	-7.9	1.36 H	321	36.8	1.3
6	949.43	37.5 QP	46.0	-8.5	1.00 H	237	30.6	6.9
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	37.27	35.7 QP	40.0	-4.3	2.02 V	311	44.7	-9.0
2	93.68	30.5 QP	43.5	-13.0	1.46 V	57	43.9	-13.4
3	374.86	30.5 QP	46.0	-15.5	1.00 V	225	35.2	-4.7
4	624.94	37.8 QP	46.0	-8.2	1.00 V	171	36.5	1.3
5	875.02	37.1 QP	46.0	-8.9	1.00 V	272	31.9	5.2
6	1000.00	39.7 QP	54.0	-14.3	1.44 V	67	32.2	7.5

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

CHANNEL	TX Channel 100	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	49.05	29.0 QP	40.0	-11.0	1.97 H	104	37.5	-8.5
2	150.12	24.7 QP	43.5	-18.8	1.05 H	287	32.4	-7.7
3	204.82	23.8 QP	43.5	-19.7	1.00 H	59	34.6	-10.8
4	517.43	31.7 QP	46.0	-14.3	1.00 H	289	32.9	-1.2
5	624.88	38.0 QP	46.0	-8.0	1.38 H	312	36.7	1.3
6	949.88	37.3 QP	46.0	-8.7	1.00 H	218	30.4	6.9
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	36.97	35.7 QP	40.0	-4.3	2.03 V	313	44.8	-9.1
2	93.91	30.2 QP	43.5	-13.3	1.46 V	63	43.6	-13.4
3	375.10	30.3 QP	46.0	-15.7	1.02 V	251	35.0	-4.7
4	624.94	38.0 QP	46.0	-8.0	1.00 V	199	36.7	1.3
5	874.93	36.9 QP	46.0	-9.1	1.00 V	317	31.7	5.2
6	1000.00	39.7 QP	54.0	-14.3	1.55 V	52	32.2	7.5

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

CHANNEL	TX Channel 116	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	48.97	29.0 QP	40.0	-11.0	1.91 H	107	37.5	-8.5
2	150.16	24.5 QP	43.5	-19.0	1.00 H	259	32.2	-7.7
3	204.91	24.1 QP	43.5	-19.4	1.00 H	46	34.9	-10.8
4	517.71	31.7 QP	46.0	-14.3	1.00 H	282	32.9	-1.2
5	625.04	38.0 QP	46.0	-8.0	1.49 H	307	36.7	1.3
6	949.70	37.2 QP	46.0	-8.8	1.00 H	233	30.3	6.9
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	37.18	35.7 QP	40.0	-4.3	1.96 V	297	44.7	-9.0
2	93.66	30.3 QP	43.5	-13.2	1.48 V	53	43.7	-13.4
3	375.03	30.2 QP	46.0	-15.8	1.00 V	238	34.9	-4.7
4	624.91	38.2 QP	46.0	-7.8	1.00 V	183	36.9	1.3
5	874.93	37.1 QP	46.0	-8.9	1.00 V	296	31.9	5.2
6	1000.00	39.7 QP	54.0	-14.3	1.46 V	47	32.2	7.5

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

CHANNEL	TX Channel 140	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	48.91	28.9 QP	40.0	-11.1	1.96 H	97	37.4	-8.5
2	150.04	24.7 QP	43.5	-18.8	1.00 H	297	32.4	-7.7
3	204.80	24.1 QP	43.5	-19.4	1.05 H	56	34.9	-10.8
4	517.05	31.3 QP	46.0	-14.7	1.00 H	250	32.5	-1.2
5	625.06	38.2 QP	46.0	-7.8	1.48 H	276	36.9	1.3
6	949.63	37.3 QP	46.0	-8.7	1.05 H	229	30.4	6.9
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	37.29	35.6 QP	40.0	-4.4	1.97 V	319	44.6	-9.0
2	93.51	30.6 QP	43.5	-12.9	1.49 V	41	44.0	-13.4
3	374.91	30.1 QP	46.0	-15.9	1.00 V	243	34.8	-4.7
4	624.87	37.4 QP	46.0	-8.6	1.00 V	179	36.1	1.3
5	874.90	36.8 QP	46.0	-9.2	1.03 V	317	31.6	5.2
6	1000.00	40.1 QP	54.0	-13.9	1.49 V	62	32.6	7.5

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

CHANNEL	TX Channel 144	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	49.21	28.8 QP	40.0	-11.2	1.96 H	104	37.3	-8.5
2	150.21	24.5 QP	43.5	-19.0	1.02 H	273	32.2	-7.7
3	204.98	24.1 QP	43.5	-19.4	1.01 H	39	34.9	-10.8
4	517.54	31.7 QP	46.0	-14.3	1.06 H	262	32.9	-1.2
5	624.98	37.6 QP	46.0	-8.4	1.55 H	322	36.3	1.3
6	949.73	37.4 QP	46.0	-8.6	1.00 H	224	30.5	6.9
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	36.75	35.5 QP	40.0	-4.5	1.96 V	321	44.6	-9.1
2	93.54	30.3 QP	43.5	-13.2	1.45 V	45	43.7	-13.4
3	375.08	30.7 QP	46.0	-15.3	1.00 V	220	35.4	-4.7
4	625.04	38.2 QP	46.0	-7.8	1.00 V	200	36.9	1.3
5	874.94	36.4 QP	46.0	-9.6	1.02 V	323	31.2	5.2
6	1000.00	39.7 QP	54.0	-14.3	1.47 V	76	32.2	7.5

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

802.11ac (VHT20)

CHANNEL	TX Channel 52	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	48.70	29.1 QP	40.0	-10.9	2.01 H	102	37.6	-8.5
2	150.25	24.8 QP	43.5	-18.7	1.00 H	303	32.5	-7.7
3	204.76	23.9 QP	43.5	-19.6	1.00 H	54	34.7	-10.8
4	517.15	31.5 QP	46.0	-14.5	1.00 H	271	32.7	-1.2
5	624.89	38.1 QP	46.0	-7.9	1.51 H	303	36.8	1.3
6	949.53	37.5 QP	46.0	-8.5	1.00 H	240	30.6	6.9
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	37.31	35.6 QP	40.0	-4.4	2.02 V	303	44.6	-9.0
2	93.59	30.6 QP	43.5	-12.9	1.52 V	50	44.0	-13.4
3	374.95	30.4 QP	46.0	-15.6	1.00 V	248	35.1	-4.7
4	624.97	37.5 QP	46.0	-8.5	1.05 V	171	36.2	1.3
5	874.96	36.8 QP	46.0	-9.2	1.00 V	314	31.6	5.2
6	1000.00	40.2 QP	54.0	-13.8	1.44 V	57	32.7	7.5

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

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	48.66	29.0 QP	40.0	-11.0	1.93 H	106	37.5	-8.5
2	150.20	24.7 QP	43.5	-18.8	1.00 H	287	32.4	-7.7
3	204.28	24.0 QP	43.5	-19.5	1.00 H	43	34.8	-10.8
4	517.51	32.0 QP	46.0	-14.0	1.04 H	287	33.2	-1.2
5	625.00	37.9 QP	46.0	-8.1	1.45 H	289	36.6	1.3
6	949.29	36.9 QP	46.0	-9.1	1.05 H	237	30.0	6.9
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	37.34	35.6 QP	40.0	-4.4	2.01 V	292	44.6	-9.0
2	93.93	30.4 QP	43.5	-13.1	1.45 V	54	43.8	-13.4
3	374.92	30.2 QP	46.0	-15.8	1.00 V	243	34.9	-4.7
4	625.06	37.8 QP	46.0	-8.2	1.00 V	202	36.5	1.3
5	874.93	36.8 QP	46.0	-9.2	1.00 V	325	31.6	5.2
6	1000.00	40.0 QP	54.0	-14.0	1.53 V	75	32.5	7.5

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

CHANNEL	TX Channel 64	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	49.21	29.2 QP	40.0	-10.8	1.97 H	92	37.7	-8.5
2	150.07	24.6 QP	43.5	-18.9	1.00 H	272	32.3	-7.7
3	204.59	24.0 QP	43.5	-19.5	1.00 H	43	34.8	-10.8
4	517.98	31.3 QP	46.0	-14.7	1.00 H	286	32.5	-1.2
5	625.10	37.9 QP	46.0	-8.1	1.50 H	318	36.6	1.3
6	949.40	37.6 QP	46.0	-8.4	1.00 H	230	30.7	6.9
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	37.03	35.7 QP	40.0	-4.3	1.98 V	289	44.8	-9.1
2	93.51	30.2 QP	43.5	-13.3	1.52 V	61	43.6	-13.4
3	375.07	30.3 QP	46.0	-15.7	1.00 V	236	35.0	-4.7
4	625.00	38.1 QP	46.0	-7.9	1.00 V	179	36.8	1.3
5	874.91	37.0 QP	46.0	-9.0	1.00 V	299	31.8	5.2
6	1000.00	39.6 QP	54.0	-14.4	1.44 V	37	32.1	7.5

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

CHANNEL	TX Channel 100	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	49.07	28.5 QP	40.0	-11.5	1.98 H	104	37.0	-8.5
2	150.45	24.3 QP	43.5	-19.2	1.02 H	292	32.0	-7.7
3	204.18	23.7 QP	43.5	-19.8	1.00 H	56	34.5	-10.8
4	518.02	31.1 QP	46.0	-14.9	1.00 H	283	32.3	-1.2
5	624.96	37.5 QP	46.0	-8.5	1.46 H	303	36.2	1.3
6	949.45	37.6 QP	46.0	-8.4	1.05 H	238	30.7	6.9
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	37.09	36.0 QP	40.0	-4.0	1.92 V	309	45.1	-9.1
2	93.83	30.5 QP	43.5	-13.0	1.50 V	63	43.9	-13.4
3	374.96	30.3 QP	46.0	-15.7	1.01 V	234	35.0	-4.7
4	625.01	38.2 QP	46.0	-7.8	1.01 V	185	36.9	1.3
5	874.99	36.9 QP	46.0	-9.1	1.00 V	302	31.7	5.2
6	1000.00	40.2 QP	54.0	-13.8	1.41 V	35	32.7	7.5

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

CHANNEL	TX Channel 116	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	49.01	29.2 QP	40.0	-10.8	1.99 H	110	37.7	-8.5
2	149.86	24.7 QP	43.5	-18.8	1.00 H	301	32.4	-7.7
3	204.36	23.9 QP	43.5	-19.6	1.05 H	52	34.7	-10.8
4	517.81	31.6 QP	46.0	-14.4	1.00 H	290	32.8	-1.2
5	624.91	38.0 QP	46.0	-8.0	1.53 H	289	36.7	1.3
6	949.89	37.3 QP	46.0	-8.7	1.05 H	226	30.4	6.9
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	37.21	35.3 QP	40.0	-4.7	2.00 V	292	44.3	-9.0
2	93.79	30.3 QP	43.5	-13.2	1.38 V	59	43.7	-13.4
3	374.92	29.8 QP	46.0	-16.2	1.00 V	232	34.5	-4.7
4	624.97	38.0 QP	46.0	-8.0	1.00 V	183	36.7	1.3
5	874.90	37.2 QP	46.0	-8.8	1.01 V	322	32.0	5.2
6	1000.00	40.1 QP	54.0	-13.9	1.43 V	66	32.6	7.5

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

CHANNEL	TX Channel 140	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	48.99	29.1 QP	40.0	-10.9	2.02 H	93	37.6	-8.5
2	150.04	24.3 QP	43.5	-19.2	1.02 H	261	32.0	-7.7
3	204.65	24.0 QP	43.5	-19.5	1.00 H	60	34.8	-10.8
4	517.54	31.7 QP	46.0	-14.3	1.01 H	299	32.9	-1.2
5	624.95	38.2 QP	46.0	-7.8	1.45 H	325	36.9	1.3
6	949.16	37.7 QP	46.0	-8.3	1.00 H	221	30.8	6.9
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	37.40	35.9 QP	40.0	-4.1	2.02 V	319	44.9	-9.0
2	93.83	29.6 QP	43.5	-13.9	1.47 V	58	43.0	-13.4
3	375.03	30.2 QP	46.0	-15.8	1.00 V	205	34.9	-4.7
4	625.00	38.2 QP	46.0	-7.8	1.05 V	187	36.9	1.3
5	874.98	37.0 QP	46.0	-9.0	1.00 V	298	31.8	5.2
6	1000.00	39.6 QP	54.0	-14.4	1.54 V	60	32.1	7.5

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

CHANNEL	TX Channel 144	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	49.18	28.9 QP	40.0	-11.1	2.00 H	96	37.4	-8.5
2	149.87	24.6 QP	43.5	-18.9	1.00 H	298	32.3	-7.7
3	204.79	24.3 QP	43.5	-19.2	1.00 H	41	35.1	-10.8
4	517.59	31.1 QP	46.0	-14.9	1.00 H	271	32.3	-1.2
5	625.02	37.9 QP	46.0	-8.1	1.45 H	306	36.6	1.3
6	949.63	37.7 QP	46.0	-8.3	1.05 H	232	30.8	6.9
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	36.57	35.8 QP	40.0	-4.2	2.02 V	316	44.9	-9.1
2	94.06	29.6 QP	43.5	-13.9	1.52 V	36	43.0	-13.4
3	375.08	30.5 QP	46.0	-15.5	1.01 V	247	35.2	-4.7
4	625.06	38.1 QP	46.0	-7.9	1.00 V	202	36.8	1.3
5	874.99	36.8 QP	46.0	-9.2	1.00 V	285	31.6	5.2
6	1000.00	40.1 QP	54.0	-13.9	1.43 V	71	32.6	7.5

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

802.11ac (VHT40)

CHANNEL	TX Channel 54	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	49.24	29.0 QP	40.0	-11.0	2.01 H	107	37.5	-8.5
2	150.00	24.8 QP	43.5	-18.7	1.00 H	291	32.5	-7.7
3	204.67	23.7 QP	43.5	-19.8	1.00 H	41	34.5	-10.8
4	517.81	31.4 QP	46.0	-14.6	1.03 H	287	32.6	-1.2
5	625.09	37.5 QP	46.0	-8.5	1.46 H	311	36.2	1.3
6	949.50	37.0 QP	46.0	-9.0	1.00 H	237	30.1	6.9
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	36.85	35.9 QP	40.0	-4.1	1.98 V	287	45.0	-9.1
2	93.65	30.0 QP	43.5	-13.5	1.54 V	75	43.4	-13.4
3	375.05	30.3 QP	46.0	-15.7	1.03 V	251	35.0	-4.7
4	624.95	37.3 QP	46.0	-8.7	1.02 V	176	36.0	1.3
5	875.03	36.1 QP	46.0	-9.9	1.02 V	296	30.9	5.2
6	1000.00	39.8 QP	54.0	-14.2	1.49 V	43	32.3	7.5

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

CHANNEL	TX Channel 62	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	49.14	29.1 QP	40.0	-10.9	2.04 H	84	37.6	-8.5
2	150.28	24.4 QP	43.5	-19.1	1.00 H	284	32.1	-7.7
3	204.88	23.8 QP	43.5	-19.7	1.00 H	58	34.6	-10.8
4	517.86	31.9 QP	46.0	-14.1	1.03 H	280	33.1	-1.2
5	624.98	37.9 QP	46.0	-8.1	1.55 H	317	36.6	1.3
6	949.58	36.8 QP	46.0	-9.2	1.00 H	231	29.9	6.9
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	36.90	35.6 QP	40.0	-4.4	2.01 V	320	44.7	-9.1
2	93.48	30.3 QP	43.5	-13.2	1.51 V	54	43.7	-13.4
3	375.03	29.9 QP	46.0	-16.1	1.00 V	227	34.6	-4.7
4	624.99	37.8 QP	46.0	-8.2	1.04 V	203	36.5	1.3
5	874.86	36.9 QP	46.0	-9.1	1.01 V	308	31.7	5.2
6	1000.00	39.7 QP	54.0	-14.3	1.50 V	67	32.2	7.5

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

CHANNEL	TX Channel 102	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	48.57	29.4 QP	40.0	-10.6	2.02 H	111	37.9	-8.5
2	150.01	24.8 QP	43.5	-18.7	1.03 H	288	32.5	-7.7
3	204.42	24.1 QP	43.5	-19.4	1.00 H	35	34.9	-10.8
4	517.05	31.4 QP	46.0	-14.6	1.03 H	294	32.6	-1.2
5	624.87	38.2 QP	46.0	-7.8	1.44 H	318	36.9	1.3
6	949.50	37.7 QP	46.0	-8.3	1.00 H	209	30.8	6.9
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	37.05	36.1 QP	40.0	-3.9	1.94 V	316	45.2	-9.1
2	93.86	30.2 QP	43.5	-13.3	1.45 V	46	43.6	-13.4
3	374.84	30.4 QP	46.0	-15.6	1.01 V	252	35.1	-4.7
4	625.04	38.0 QP	46.0	-8.0	1.04 V	169	36.7	1.3
5	874.90	36.7 QP	46.0	-9.3	1.00 V	318	31.5	5.2
6	1000.00	40.0 QP	54.0	-14.0	1.51 V	45	32.5	7.5

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

CHANNEL	TX Channel 110	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	48.77	28.9 QP	40.0	-11.1	2.01 H	125	37.4	-8.5
2	150.21	24.1 QP	43.5	-19.4	1.00 H	281	31.8	-7.7
3	204.61	23.5 QP	43.5	-20.0	1.00 H	38	34.3	-10.8
4	517.17	31.6 QP	46.0	-14.4	1.00 H	288	32.8	-1.2
5	624.96	38.2 QP	46.0	-7.8	1.49 H	314	36.9	1.3
6	949.75	37.5 QP	46.0	-8.5	1.00 H	221	30.6	6.9
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	37.11	36.0 QP	40.0	-4.0	1.94 V	303	45.1	-9.1
2	93.30	30.2 QP	43.5	-13.3	1.51 V	49	43.7	-13.5
3	375.06	30.4 QP	46.0	-15.6	1.00 V	242	35.1	-4.7
4	624.95	37.9 QP	46.0	-8.1	1.00 V	197	36.6	1.3
5	875.03	36.5 QP	46.0	-9.5	1.00 V	319	31.3	5.2
6	1000.00	39.9 QP	54.0	-14.1	1.47 V	40	32.4	7.5

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

CHANNEL	TX Channel 134	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	48.58	28.8 QP	40.0	-11.2	2.03 H	109	37.3	-8.5
2	149.52	24.8 QP	43.5	-18.7	1.00 H	272	32.5	-7.7
3	204.36	23.8 QP	43.5	-19.7	1.05 H	41	34.6	-10.8
4	517.90	32.0 QP	46.0	-14.0	1.00 H	288	33.2	-1.2
5	625.03	37.6 QP	46.0	-8.4	1.47 H	319	36.3	1.3
6	949.78	37.4 QP	46.0	-8.6	1.00 H	250	30.5	6.9
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	37.37	35.8 QP	40.0	-4.2	1.97 V	292	44.8	-9.0
2	93.44	30.6 QP	43.5	-12.9	1.49 V	70	44.0	-13.4
3	375.00	30.5 QP	46.0	-15.5	1.03 V	240	35.2	-4.7
4	625.05	37.9 QP	46.0	-8.1	1.01 V	167	36.6	1.3
5	874.99	36.5 QP	46.0	-9.5	1.03 V	317	31.3	5.2
6	1000.00	39.4 QP	54.0	-14.6	1.55 V	60	31.9	7.5

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

CHANNEL	TX Channel 142	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	49.01	28.7 QP	40.0	-11.3	1.96 H	104	37.2	-8.5
2	149.94	24.4 QP	43.5	-19.1	1.00 H	273	32.1	-7.7
3	204.60	24.1 QP	43.5	-19.4	1.00 H	61	34.9	-10.8
4	517.66	31.3 QP	46.0	-14.7	1.00 H	278	32.5	-1.2
5	625.10	38.0 QP	46.0	-8.0	1.55 H	305	36.7	1.3
6	949.86	37.5 QP	46.0	-8.5	1.01 H	237	30.6	6.9
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	37.20	35.6 QP	40.0	-4.4	1.96 V	303	44.6	-9.0
2	93.62	30.2 QP	43.5	-13.3	1.53 V	42	43.6	-13.4
3	374.98	29.6 QP	46.0	-16.4	1.00 V	248	34.3	-4.7
4	624.96	37.7 QP	46.0	-8.3	1.03 V	164	36.4	1.3
5	874.87	37.0 QP	46.0	-9.0	1.00 V	310	31.8	5.2
6	1000.00	40.2 QP	54.0	-13.8	1.45 V	42	32.7	7.5

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

802.11ac (VHT80)

CHANNEL	TX Channel 58	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	48.66	29.0 QP	40.0	-11.0	1.97 H	103	37.5	-8.5
2	150.08	24.6 QP	43.5	-18.9	1.00 H	270	32.3	-7.7
3	204.77	23.9 QP	43.5	-19.6	1.00 H	43	34.7	-10.8
4	517.61	31.9 QP	46.0	-14.1	1.00 H	299	33.1	-1.2
5	624.82	37.7 QP	46.0	-8.3	1.46 H	284	36.4	1.3
6	949.92	37.6 QP	46.0	-8.4	1.02 H	253	30.7	6.9
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	36.94	35.6 QP	40.0	-4.4	1.97 V	283	44.7	-9.1
2	93.51	30.3 QP	43.5	-13.2	1.54 V	60	43.7	-13.4
3	374.95	30.5 QP	46.0	-15.5	1.00 V	239	35.2	-4.7
4	625.02	37.8 QP	46.0	-8.2	1.00 V	173	36.5	1.3
5	874.96	37.1 QP	46.0	-8.9	1.00 V	307	31.9	5.2
6	1000.00	39.9 QP	54.0	-14.1	1.47 V	44	32.4	7.5

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

CHANNEL	TX Channel 106	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	49.17	29.2 QP	40.0	-10.8	1.98 H	101	37.7	-8.5
2	149.61	24.9 QP	43.5	-18.6	1.00 H	289	32.6	-7.7
3	204.52	23.4 QP	43.5	-20.1	1.03 H	37	34.2	-10.8
4	517.42	31.4 QP	46.0	-14.6	1.02 H	278	32.6	-1.2
5	625.08	37.9 QP	46.0	-8.1	1.55 H	314	36.6	1.3
6	949.90	37.7 QP	46.0	-8.3	1.04 H	246	30.8	6.9
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	37.18	35.9 QP	40.0	-4.1	1.94 V	297	44.9	-9.0
2	93.65	29.9 QP	43.5	-13.6	1.49 V	71	43.3	-13.4
3	374.79	30.6 QP	46.0	-15.4	1.00 V	214	35.3	-4.7
4	624.91	37.8 QP	46.0	-8.2	1.00 V	176	36.5	1.3
5	875.07	36.4 QP	46.0	-9.6	1.03 V	311	31.2	5.2
6	1000.00	39.9 QP	54.0	-14.1	1.54 V	65	32.4	7.5

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

CHANNEL	TX Channel 122	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	49.16	28.9 QP	40.0	-11.1	1.97 H	92	37.4	-8.5
2	150.05	24.5 QP	43.5	-19.0	1.00 H	291	32.2	-7.7
3	204.11	23.8 QP	43.5	-19.7	1.00 H	47	34.6	-10.8
4	517.84	31.9 QP	46.0	-14.1	1.00 H	271	33.1	-1.2
5	625.05	37.8 QP	46.0	-8.2	1.44 H	314	36.5	1.3
6	949.76	37.5 QP	46.0	-8.5	1.00 H	248	30.6	6.9
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	36.96	35.7 QP	40.0	-4.3	1.95 V	295	44.8	-9.1
2	93.53	30.1 QP	43.5	-13.4	1.56 V	65	43.5	-13.4
3	375.08	30.1 QP	46.0	-15.9	1.04 V	248	34.8	-4.7
4	624.85	38.1 QP	46.0	-7.9	1.00 V	173	36.8	1.3
5	874.93	37.1 QP	46.0	-8.9	1.04 V	298	31.9	5.2
6	1000.00	39.8 QP	54.0	-14.2	1.49 V	63	32.3	7.5

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

CHANNEL	TX Channel 138	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	48.56	29.2 QP	40.0	-10.8	1.96 H	72	37.7	-8.5
2	150.27	24.8 QP	43.5	-18.7	1.00 H	263	32.5	-7.7
3	204.39	23.7 QP	43.5	-19.8	1.00 H	45	34.5	-10.8
4	517.37	31.7 QP	46.0	-14.3	1.03 H	250	32.9	-1.2
5	625.02	38.0 QP	46.0	-8.0	1.45 H	305	36.7	1.3
6	949.88	37.1 QP	46.0	-8.9	1.02 H	241	30.2	6.9
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	36.69	35.6 QP	40.0	-4.4	2.05 V	321	44.7	-9.1
2	93.68	30.1 QP	43.5	-13.4	1.38 V	55	43.5	-13.4
3	375.02	30.1 QP	46.0	-15.9	1.00 V	235	34.8	-4.7
4	624.80	38.2 QP	46.0	-7.8	1.00 V	183	36.9	1.3
5	874.95	36.5 QP	46.0	-9.5	1.04 V	296	31.3	5.2
6	1000.00	39.6 QP	54.0	-14.4	1.55 V	41	32.1	7.5

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

4.1.8 Test Results (Mode 2)

Below 1GHz Data:

802.11a

CHANNEL	TX Channel 52	**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	48.94	30.4 QP	40.0	-9.6	1.53 H	216	38.9	-8.5
2	150.37	26.5 QP	43.5	-17.0	1.00 H	117	34.2	-7.7
3	204.26	25.8 QP	43.5	-17.7	1.50 H	232	36.6	-10.8
4	517.63	32.4 QP	46.0	-13.6	1.46 H	249	33.6	-1.2
5	624.92	39.2 QP	46.0	-6.8	1.45 H	230	37.9	1.3
6	949.89	38.3 QP	46.0	-7.7	1.41 H	119	31.4	6.9
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	36.66	33.7 QP	40.0	-6.3	1.48 V	259	42.8	-9.1
2	93.30	33.2 QP	43.5	-10.3	1.00 V	250	46.7	-13.5
3	374.94	32.4 QP	46.0	-13.6	1.48 V	208	37.1	-4.7
4	517.04	29.8 QP	46.0	-16.2	1.41 V	310	31.0	-1.2
5	624.95	39.7 QP	46.0	-6.3	1.30 V	216	38.4	1.3
6	874.93	39.0 QP	46.0	-7.0	1.03 V	261	33.8	5.2

REMARKS:

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

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	48.80	30.3 QP	40.0	-9.7	1.49 H	212	38.8	-8.5
2	150.34	26.1 QP	43.5	-17.4	1.00 H	143	33.8	-7.7
3	204.71	26.1 QP	43.5	-17.4	1.48 H	229	36.9	-10.8
4	517.74	32.1 QP	46.0	-13.9	1.54 H	234	33.3	-1.2
5	624.86	39.3 QP	46.0	-6.7	1.47 H	237	38.0	1.3
6	949.91	38.3 QP	46.0	-7.7	1.47 H	148	31.4	6.9
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	37.15	33.5 QP	40.0	-6.5	1.51 V	266	42.5	-9.0
2	93.64	33.2 QP	43.5	-10.3	1.00 V	266	46.6	-13.4
3	375.07	32.4 QP	46.0	-13.6	1.52 V	211	37.1	-4.7
4	516.84	29.9 QP	46.0	-16.1	1.44 V	294	31.1	-1.2
5	624.87	40.5 QP	46.0	-5.5	1.35 V	212	39.2	1.3
6	875.05	38.6 QP	46.0	-7.4	1.04 V	250	33.4	5.2

REMARKS:

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

CHANNEL	TX Channel 64	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	49.08	30.3 QP	40.0	-9.7	1.54 H	226	38.8	-8.5
2	149.90	26.6 QP	43.5	-16.9	1.00 H	118	34.3	-7.7
3	204.77	26.3 QP	43.5	-17.2	1.52 H	237	37.1	-10.8
4	517.41	32.3 QP	46.0	-13.7	1.43 H	248	33.5	-1.2
5	624.93	39.0 QP	46.0	-7.0	1.49 H	212	37.7	1.3
6	949.78	38.5 QP	46.0	-7.5	1.51 H	117	31.6	6.9
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	36.78	33.2 QP	40.0	-6.8	1.48 V	272	42.3	-9.1
2	93.71	33.3 QP	43.5	-10.2	1.00 V	257	46.7	-13.4
3	375.03	31.9 QP	46.0	-14.1	1.54 V	237	36.6	-4.7
4	517.82	29.8 QP	46.0	-16.2	1.43 V	311	31.0	-1.2
5	625.10	40.2 QP	46.0	-5.8	1.35 V	235	38.9	1.3
6	875.02	39.1 QP	46.0	-6.9	1.04 V	267	33.9	5.2

REMARKS:

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

CHANNEL	TX Channel 100	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	48.80	30.8 QP	40.0	-9.2	1.46 H	207	39.3	-8.5
2	149.79	26.6 QP	43.5	-16.9	1.01 H	124	34.3	-7.7
3	204.28	26.0 QP	43.5	-17.5	1.43 H	226	36.8	-10.8
4	517.58	32.5 QP	46.0	-13.5	1.45 H	233	33.7	-1.2
5	624.93	39.2 QP	46.0	-6.8	1.48 H	234	37.9	1.3
6	949.96	38.6 QP	46.0	-7.4	1.40 H	127	31.7	6.9
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	37.09	33.3 QP	40.0	-6.7	1.54 V	276	42.4	-9.1
2	93.88	32.6 QP	43.5	-10.9	1.03 V	275	46.0	-13.4
3	374.93	31.9 QP	46.0	-14.1	1.47 V	211	36.6	-4.7
4	517.40	30.3 QP	46.0	-15.7	1.42 V	314	31.5	-1.2
5	624.84	40.2 QP	46.0	-5.8	1.27 V	225	38.9	1.3
6	875.05	38.7 QP	46.0	-7.3	1.00 V	267	33.5	5.2

REMARKS:

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

CHANNEL	TX Channel 116	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	48.76	30.2 QP	40.0	-9.8	1.43 H	213	38.7	-8.5
2	149.79	26.4 QP	43.5	-17.1	1.01 H	129	34.1	-7.7
3	204.34	25.7 QP	43.5	-17.8	1.52 H	228	36.5	-10.8
4	517.55	32.6 QP	46.0	-13.4	1.47 H	246	33.8	-1.2
5	624.89	39.1 QP	46.0	-6.9	1.41 H	225	37.8	1.3
6	949.76	38.3 QP	46.0	-7.7	1.45 H	127	31.4	6.9
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	37.40	33.6 QP	40.0	-6.4	1.53 V	268	42.6	-9.0
2	93.76	33.4 QP	43.5	-10.1	1.00 V	267	46.8	-13.4
3	374.86	32.4 QP	46.0	-13.6	1.41 V	211	37.1	-4.7
4	517.53	29.5 QP	46.0	-16.5	1.52 V	275	30.7	-1.2
5	625.01	40.2 QP	46.0	-5.8	1.37 V	214	38.9	1.3
6	875.03	38.9 QP	46.0	-7.1	1.00 V	256	33.7	5.2

REMARKS:

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

CHANNEL	TX Channel 140	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	48.27	30.1 QP	40.0	-9.9	1.47 H	212	38.6	-8.5
2	150.06	26.4 QP	43.5	-17.1	1.00 H	141	34.1	-7.7
3	204.48	25.6 QP	43.5	-17.9	1.47 H	233	36.4	-10.8
4	517.64	32.7 QP	46.0	-13.3	1.46 H	238	33.9	-1.2
5	625.03	38.5 QP	46.0	-7.5	1.54 H	194	37.2	1.3
6	949.75	38.8 QP	46.0	-7.2	1.43 H	122	31.9	6.9
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	37.13	33.4 QP	40.0	-6.6	1.54 V	272	42.4	-9.0
2	93.31	33.1 QP	43.5	-10.4	1.00 V	269	46.6	-13.5
3	375.02	32.5 QP	46.0	-13.5	1.45 V	212	37.2	-4.7
4	517.73	29.8 QP	46.0	-16.2	1.48 V	313	31.0	-1.2
5	624.83	40.3 QP	46.0	-5.7	1.38 V	211	39.0	1.3
6	874.91	38.7 QP	46.0	-7.3	1.00 V	250	33.5	5.2

REMARKS:

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

CHANNEL	TX Channel 144	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	48.85	30.3 QP	40.0	-9.7	1.48 H	220	38.8	-8.5
2	150.46	26.3 QP	43.5	-17.2	1.00 H	142	34.0	-7.7
3	204.32	25.7 QP	43.5	-17.8	1.54 H	197	36.5	-10.8
4	517.92	32.5 QP	46.0	-13.5	1.47 H	216	33.7	-1.2
5	624.95	39.0 QP	46.0	-7.0	1.49 H	212	37.7	1.3
6	949.49	38.7 QP	46.0	-7.3	1.48 H	149	31.8	6.9
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	37.22	33.9 QP	40.0	-6.1	1.51 V	256	42.9	-9.0
2	93.36	33.5 QP	43.5	-10.0	1.05 V	271	46.9	-13.4
3	374.76	32.3 QP	46.0	-13.7	1.52 V	226	37.0	-4.7
4	517.01	29.8 QP	46.0	-16.2	1.46 V	300	31.0	-1.2
5	624.92	40.0 QP	46.0	-6.0	1.35 V	200	38.7	1.3
6	874.96	38.9 QP	46.0	-7.1	1.01 V	256	33.7	5.2

REMARKS:

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

802.11ac (VHT20)

CHANNEL	TX Channel 52	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	49.19	30.4 QP	40.0	-9.6	1.55 H	212	38.9	-8.5
2	149.94	26.1 QP	43.5	-17.4	1.00 H	142	33.8	-7.7
3	204.43	26.0 QP	43.5	-17.5	1.49 H	224	36.8	-10.8
4	517.41	32.8 QP	46.0	-13.2	1.51 H	214	34.0	-1.2
5	624.82	39.2 QP	46.0	-6.8	1.45 H	221	37.9	1.3
6	949.46	38.3 QP	46.0	-7.7	1.49 H	141	31.4	6.9
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	37.00	33.5 QP	40.0	-6.5	1.46 V	259	42.6	-9.1
2	93.59	33.5 QP	43.5	-10.0	1.05 V	266	46.9	-13.4
3	375.09	32.5 QP	46.0	-13.5	1.50 V	218	37.2	-4.7
4	517.48	30.1 QP	46.0	-15.9	1.47 V	310	31.3	-1.2
5	624.92	40.3 QP	46.0	-5.7	1.40 V	228	39.0	1.3
6	874.95	39.1 QP	46.0	-6.9	1.03 V	238	33.9	5.2

REMARKS:

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

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	48.49	30.7 QP	40.0	-9.3	1.47 H	225	39.2	-8.5
2	150.14	26.9 QP	43.5	-16.6	1.04 H	120	34.6	-7.7
3	204.55	25.9 QP	43.5	-17.6	1.52 H	228	36.7	-10.8
4	517.51	32.8 QP	46.0	-13.2	1.35 H	235	34.0	-1.2
5	624.95	39.0 QP	46.0	-7.0	1.40 H	213	37.7	1.3
6	949.15	38.6 QP	46.0	-7.4	1.48 H	118	31.7	6.9
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	37.03	33.5 QP	40.0	-6.5	1.54 V	244	42.6	-9.1
2	93.82	32.7 QP	43.5	-10.8	1.01 V	255	46.1	-13.4
3	375.00	32.4 QP	46.0	-13.6	1.47 V	226	37.1	-4.7
4	517.36	29.9 QP	46.0	-16.1	1.43 V	319	31.1	-1.2
5	624.98	40.0 QP	46.0	-6.0	1.36 V	233	38.7	1.3
6	874.91	38.8 QP	46.0	-7.2	1.00 V	268	33.6	5.2

REMARKS:

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

CHANNEL	TX Channel 64	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	48.90	30.5 QP	40.0	-9.5	1.50 H	223	39.0	-8.5
2	150.44	26.8 QP	43.5	-16.7	1.01 H	126	34.5	-7.7
3	204.49	25.8 QP	43.5	-17.7	1.56 H	228	36.6	-10.8
4	517.57	32.5 QP	46.0	-13.5	1.51 H	249	33.7	-1.2
5	624.98	38.9 QP	46.0	-7.1	1.52 H	224	37.6	1.3
6	949.93	38.7 QP	46.0	-7.3	1.46 H	118	31.8	6.9
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	37.18	33.9 QP	40.0	-6.1	1.53 V	246	42.9	-9.0
2	94.03	33.5 QP	43.5	-10.0	1.00 V	265	46.9	-13.4
3	375.07	32.1 QP	46.0	-13.9	1.46 V	220	36.8	-4.7
4	517.26	30.1 QP	46.0	-15.9	1.48 V	300	31.3	-1.2
5	624.92	40.4 QP	46.0	-5.6	1.31 V	211	39.1	1.3
6	875.04	39.0 QP	46.0	-7.0	1.02 V	266	33.8	5.2

REMARKS:

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

CHANNEL	TX Channel 100	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	48.76	30.2 QP	40.0	-9.8	1.53 H	217	38.7	-8.5
2	150.30	26.4 QP	43.5	-17.1	1.00 H	132	34.1	-7.7
3	204.38	25.7 QP	43.5	-17.8	1.43 H	212	36.5	-10.8
4	517.77	32.3 QP	46.0	-13.7	1.51 H	255	33.5	-1.2
5	625.09	38.7 QP	46.0	-7.3	1.49 H	231	37.4	1.3
6	949.64	38.7 QP	46.0	-7.3	1.44 H	149	31.8	6.9
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	36.57	33.7 QP	40.0	-6.3	1.47 V	265	42.8	-9.1
2	93.81	33.2 QP	43.5	-10.3	1.00 V	246	46.6	-13.4
3	374.86	32.5 QP	46.0	-13.5	1.42 V	225	37.2	-4.7
4	517.08	30.1 QP	46.0	-15.9	1.45 V	288	31.3	-1.2
5	624.94	39.9 QP	46.0	-6.1	1.40 V	215	38.6	1.3
6	874.91	38.9 QP	46.0	-7.1	1.03 V	257	33.7	5.2

REMARKS:

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

CHANNEL	TX Channel 116	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	48.87	30.3 QP	40.0	-9.7	1.50 H	213	38.8	-8.5
2	150.00	26.4 QP	43.5	-17.1	1.00 H	140	34.1	-7.7
3	204.47	26.2 QP	43.5	-17.3	1.38 H	207	37.0	-10.8
4	517.60	32.5 QP	46.0	-13.5	1.50 H	221	33.7	-1.2
5	624.88	39.4 QP	46.0	-6.6	1.47 H	209	38.1	1.3
6	949.76	38.1 QP	46.0	-7.9	1.41 H	144	31.2	6.9
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	37.40	33.8 QP	40.0	-6.2	1.55 V	253	42.8	-9.0
2	93.99	33.3 QP	43.5	-10.2	1.00 V	259	46.7	-13.4
3	375.06	32.5 QP	46.0	-13.5	1.48 V	215	37.2	-4.7
4	517.59	30.1 QP	46.0	-15.9	1.52 V	304	31.3	-1.2
5	625.00	40.1 QP	46.0	-5.9	1.29 V	205	38.8	1.3
6	874.82	38.5 QP	46.0	-7.5	1.00 V	258	33.3	5.2

REMARKS:

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

CHANNEL	TX Channel 140	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	48.52	30.6 QP	40.0	-9.4	1.52 H	214	39.1	-8.5
2	150.15	26.8 QP	43.5	-16.7	1.02 H	134	34.5	-7.7
3	204.79	25.8 QP	43.5	-17.7	1.42 H	225	36.6	-10.8
4	517.89	32.5 QP	46.0	-13.5	1.45 H	241	33.7	-1.2
5	624.93	39.3 QP	46.0	-6.7	1.52 H	237	38.0	1.3
6	949.37	37.9 QP	46.0	-8.1	1.39 H	128	31.0	6.9
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	37.35	33.7 QP	40.0	-6.3	1.55 V	247	42.7	-9.0
2	93.45	32.9 QP	43.5	-10.6	1.00 V	273	46.3	-13.4
3	374.82	32.5 QP	46.0	-13.5	1.37 V	211	37.2	-4.7
4	517.21	30.2 QP	46.0	-15.8	1.46 V	303	31.4	-1.2
5	624.92	39.9 QP	46.0	-6.1	1.36 V	219	38.6	1.3
6	874.96	38.6 QP	46.0	-7.4	1.00 V	279	33.4	5.2

REMARKS:

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

CHANNEL	TX Channel 144	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	48.66	30.5 QP	40.0	-9.5	1.47 H	209	39.0	-8.5
2	150.17	26.2 QP	43.5	-17.3	1.00 H	147	33.9	-7.7
3	204.52	25.3 QP	43.5	-18.2	1.46 H	219	36.1	-10.8
4	517.77	32.7 QP	46.0	-13.3	1.54 H	241	33.9	-1.2
5	624.94	39.3 QP	46.0	-6.7	1.52 H	219	38.0	1.3
6	949.36	38.0 QP	46.0	-8.0	1.51 H	123	31.1	6.9
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	37.23	33.2 QP	40.0	-6.8	1.52 V	239	42.2	-9.0
2	93.42	33.4 QP	43.5	-10.1	1.03 V	262	46.8	-13.4
3	374.99	32.6 QP	46.0	-13.4	1.54 V	214	37.3	-4.7
4	517.71	30.3 QP	46.0	-15.7	1.33 V	306	31.5	-1.2
5	624.94	39.7 QP	46.0	-6.3	1.37 V	237	38.4	1.3
6	875.01	38.9 QP	46.0	-7.1	1.00 V	264	33.7	5.2

REMARKS:

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

802.11ac (VHT40)

CHANNEL	TX Channel 54	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	48.83	30.3 QP	40.0	-9.7	1.46 H	216	38.8	-8.5
2	150.30	26.5 QP	43.5	-17.0	1.00 H	134	34.2	-7.7
3	204.71	26.3 QP	43.5	-17.2	1.56 H	213	37.1	-10.8
4	517.71	32.5 QP	46.0	-13.5	1.54 H	234	33.7	-1.2
5	625.01	39.4 QP	46.0	-6.6	1.44 H	216	38.1	1.3
6	949.60	38.2 QP	46.0	-7.8	1.43 H	141	31.3	6.9
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	37.44	33.3 QP	40.0	-6.7	1.49 V	227	42.3	-9.0
2	93.81	33.5 QP	43.5	-10.0	1.00 V	245	46.9	-13.4
3	374.95	32.0 QP	46.0	-14.0	1.52 V	226	36.7	-4.7
4	517.10	30.1 QP	46.0	-15.9	1.55 V	283	31.3	-1.2
5	625.05	39.8 QP	46.0	-6.2	1.35 V	235	38.5	1.3
6	874.90	38.7 QP	46.0	-7.3	1.00 V	269	33.5	5.2

REMARKS:

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

CHANNEL	TX Channel 62	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	48.86	30.3 QP	40.0	-9.7	1.55 H	216	38.8	-8.5
2	150.09	26.3 QP	43.5	-17.2	1.00 H	132	34.0	-7.7
3	204.56	25.9 QP	43.5	-17.6	1.48 H	217	36.7	-10.8
4	517.60	32.3 QP	46.0	-13.7	1.41 H	238	33.5	-1.2
5	624.99	39.3 QP	46.0	-6.7	1.46 H	214	38.0	1.3
6	949.85	38.6 QP	46.0	-7.4	1.50 H	129	31.7	6.9
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	37.12	33.4 QP	40.0	-6.6	1.48 V	266	42.5	-9.1
2	93.28	33.1 QP	43.5	-10.4	1.00 V	254	46.6	-13.5
3	374.97	31.7 QP	46.0	-14.3	1.41 V	220	36.4	-4.7
4	517.28	30.1 QP	46.0	-15.9	1.37 V	319	31.3	-1.2
5	624.91	40.0 QP	46.0	-6.0	1.36 V	235	38.7	1.3
6	875.05	38.9 QP	46.0	-7.1	1.00 V	254	33.7	5.2

REMARKS:

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

CHANNEL	TX Channel 102	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	49.08	30.7 QP	40.0	-9.3	1.54 H	227	39.2	-8.5
2	150.17	26.0 QP	43.5	-17.5	1.00 H	149	33.7	-7.7
3	204.45	26.1 QP	43.5	-17.4	1.48 H	233	36.9	-10.8
4	517.78	32.5 QP	46.0	-13.5	1.48 H	243	33.7	-1.2
5	625.02	39.3 QP	46.0	-6.7	1.48 H	226	38.0	1.3
6	949.76	38.3 QP	46.0	-7.7	1.54 H	136	31.4	6.9
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	37.01	33.4 QP	40.0	-6.6	1.51 V	251	42.5	-9.1
2	93.53	33.2 QP	43.5	-10.3	1.00 V	264	46.6	-13.4
3	375.01	32.1 QP	46.0	-13.9	1.41 V	212	36.8	-4.7
4	517.81	30.2 QP	46.0	-15.8	1.54 V	266	31.4	-1.2
5	624.98	39.7 QP	46.0	-6.3	1.40 V	223	38.4	1.3
6	874.89	38.8 QP	46.0	-7.2	1.00 V	249	33.6	5.2

REMARKS:

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

CHANNEL	TX Channel 110	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	48.62	30.6 QP	40.0	-9.4	1.46 H	234	39.1	-8.5
2	150.10	26.9 QP	43.5	-16.6	1.00 H	154	34.6	-7.7
3	203.91	26.0 QP	43.5	-17.5	1.46 H	220	36.8	-10.8
4	517.61	32.4 QP	46.0	-13.6	1.52 H	228	33.6	-1.2
5	625.00	39.0 QP	46.0	-7.0	1.52 H	234	37.7	1.3
6	949.71	38.1 QP	46.0	-7.9	1.47 H	127	31.2	6.9
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	37.38	33.4 QP	40.0	-6.6	1.46 V	249	42.4	-9.0
2	93.57	33.5 QP	43.5	-10.0	1.06 V	255	46.9	-13.4
3	375.07	32.0 QP	46.0	-14.0	1.49 V	238	36.7	-4.7
4	517.36	29.8 QP	46.0	-16.2	1.56 V	276	31.0	-1.2
5	624.96	40.3 QP	46.0	-5.7	1.33 V	218	39.0	1.3
6	875.03	38.7 QP	46.0	-7.3	1.00 V	243	33.5	5.2

REMARKS:

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

CHANNEL	TX Channel 134	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	48.57	30.5 QP	40.0	-9.5	1.45 H	219	39.0	-8.5
2	150.17	26.0 QP	43.5	-17.5	1.03 H	105	33.7	-7.7
3	204.83	25.7 QP	43.5	-17.8	1.49 H	214	36.5	-10.8
4	517.59	32.2 QP	46.0	-13.8	1.53 H	235	33.4	-1.2
5	624.90	39.5 QP	46.0	-6.5	1.52 H	225	38.2	1.3
6	949.84	38.6 QP	46.0	-7.4	1.46 H	130	31.7	6.9
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	37.12	33.3 QP	40.0	-6.7	1.45 V	270	42.4	-9.1
2	93.76	33.5 QP	43.5	-10.0	1.00 V	265	46.9	-13.4
3	375.01	32.4 QP	46.0	-13.6	1.47 V	212	37.1	-4.7
4	517.65	30.2 QP	46.0	-15.8	1.45 V	306	31.4	-1.2
5	625.04	40.5 QP	46.0	-5.5	1.41 V	217	39.2	1.3
6	875.06	38.7 QP	46.0	-7.3	1.00 V	273	33.5	5.2

REMARKS:

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

CHANNEL	TX Channel 142	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	48.96	30.4 QP	40.0	-9.6	1.55 H	212	38.9	-8.5
2	150.12	26.4 QP	43.5	-17.1	1.03 H	138	34.1	-7.7
3	204.60	25.6 QP	43.5	-17.9	1.53 H	235	36.4	-10.8
4	517.81	32.6 QP	46.0	-13.4	1.48 H	217	33.8	-1.2
5	624.98	39.1 QP	46.0	-6.9	1.46 H	231	37.8	1.3
6	949.75	38.4 QP	46.0	-7.6	1.45 H	124	31.5	6.9
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	37.14	33.0 QP	40.0	-7.0	1.52 V	270	42.0	-9.0
2	93.75	33.3 QP	43.5	-10.2	1.02 V	266	46.7	-13.4
3	374.97	32.6 QP	46.0	-13.4	1.46 V	229	37.3	-4.7
4	516.97	29.4 QP	46.0	-16.6	1.49 V	305	30.6	-1.2
5	624.90	39.6 QP	46.0	-6.4	1.41 V	211	38.3	1.3
6	874.97	38.7 QP	46.0	-7.3	1.01 V	254	33.5	5.2

REMARKS:

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

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CHANNEL	TX Channel 58	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	48.90	30.5 QP	40.0	-9.5	1.52 H	215	39.0	-8.5
2	150.00	26.5 QP	43.5	-17.0	1.00 H	138	34.2	-7.7
3	204.83	25.4 QP	43.5	-18.1	1.53 H	211	36.2	-10.8
4	517.43	32.5 QP	46.0	-13.5	1.41 H	233	33.7	-1.2
5	624.82	38.8 QP	46.0	-7.2	1.45 H	197	37.5	1.3
6	949.77	38.7 QP	46.0	-7.3	1.42 H	125	31.8	6.9
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	37.40	33.5 QP	40.0	-6.5	1.53 V	266	42.5	-9.0
2	93.63	33.3 QP	43.5	-10.2	1.01 V	274	46.7	-13.4
3	374.91	32.1 QP	46.0	-13.9	1.53 V	209	36.8	-4.7
4	517.67	29.8 QP	46.0	-16.2	1.45 V	309	31.0	-1.2
5	624.99	40.4 QP	46.0	-5.6	1.34 V	210	39.1	1.3
6	875.08	38.9 QP	46.0	-7.1	1.00 V	251	33.7	5.2

REMARKS:

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

CHANNEL	TX Channel 106	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	48.86	30.2 QP	40.0	-9.8	1.54 H	212	38.7	-8.5
2	150.37	26.9 QP	43.5	-16.6	1.00 H	145	34.6	-7.7
3	204.40	25.7 QP	43.5	-17.8	1.49 H	209	36.5	-10.8
4	517.44	32.8 QP	46.0	-13.2	1.50 H	254	34.0	-1.2
5	624.90	39.0 QP	46.0	-7.0	1.49 H	203	37.7	1.3
6	949.53	38.4 QP	46.0	-7.6	1.47 H	123	31.5	6.9
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	37.01	33.4 QP	40.0	-6.6	1.49 V	250	42.5	-9.1
2	93.63	33.1 QP	43.5	-10.4	1.00 V	277	46.5	-13.4
3	375.10	32.2 QP	46.0	-13.8	1.53 V	230	36.9	-4.7
4	517.22	29.9 QP	46.0	-16.1	1.47 V	298	31.1	-1.2
5	624.94	40.2 QP	46.0	-5.8	1.32 V	228	38.9	1.3
6	875.08	39.0 QP	46.0	-7.0	1.01 V	251	33.8	5.2

REMARKS:

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

CHANNEL	TX Channel 122	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	48.96	30.3 QP	40.0	-9.7	1.44 H	214	38.8	-8.5
2	149.87	26.6 QP	43.5	-16.9	1.00 H	149	34.3	-7.7
3	204.83	25.9 QP	43.5	-17.6	1.45 H	202	36.7	-10.8
4	517.83	32.5 QP	46.0	-13.5	1.55 H	230	33.7	-1.2
5	624.92	39.0 QP	46.0	-7.0	1.48 H	231	37.7	1.3
6	949.61	38.6 QP	46.0	-7.4	1.46 H	118	31.7	6.9
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	37.09	33.9 QP	40.0	-6.1	1.50 V	255	43.0	-9.1
2	93.36	33.0 QP	43.5	-10.5	1.00 V	250	46.4	-13.4
3	374.96	32.3 QP	46.0	-13.7	1.48 V	235	37.0	-4.7
4	517.07	29.3 QP	46.0	-16.7	1.46 V	305	30.5	-1.2
5	624.97	40.4 QP	46.0	-5.6	1.40 V	228	39.1	1.3
6	875.07	38.7 QP	46.0	-7.3	1.06 V	268	33.5	5.2

REMARKS:

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

CHANNEL	TX Channel 138	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	48.85	30.3 QP	40.0	-9.7	1.51 H	217	38.8	-8.5
2	150.35	26.9 QP	43.5	-16.6	1.00 H	127	34.6	-7.7
3	204.81	26.2 QP	43.5	-17.3	1.50 H	217	37.0	-10.8
4	517.51	32.9 QP	46.0	-13.1	1.45 H	214	34.1	-1.2
5	624.92	39.4 QP	46.0	-6.6	1.55 H	237	38.1	1.3
6	949.64	38.3 QP	46.0	-7.7	1.52 H	140	31.4	6.9
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	36.97	33.3 QP	40.0	-6.7	1.38 V	263	42.4	-9.1
2	93.97	33.5 QP	43.5	-10.0	1.00 V	266	46.9	-13.4
3	374.99	32.4 QP	46.0	-13.6	1.50 V	218	37.1	-4.7
4	517.64	29.9 QP	46.0	-16.1	1.56 V	293	31.1	-1.2
5	624.98	40.5 QP	46.0	-5.5	1.36 V	236	39.2	1.3
6	874.89	38.8 QP	46.0	-7.2	1.03 V	250	33.6	5.2

REMARKS:

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

4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

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

4.2.2 Test Instruments

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver R&S	ESCS 30	100375	May 09, 2016	May 08, 2017
Line-Impedance Stabilization Network (for EUT) SCHWARZBECK	NSLK-8127	8127-522	Aug. 31, 2016	Aug. 30, 2017
Line-Impedance Stabilization Network (for Peripheral) R&S	ENV216	100072	June 13, 2016	June 12, 2017
RF Cable	5D-FB	COACAB-002	Mar. 04, 2016	Mar. 03, 2017
10 dB PAD Mini-Circuits	HAT-10+	CONATT-003	Sep. 13, 2016	Sep. 12, 2017
50 ohms Terminator	N/A	04	Nov. 18, 2015	Nov. 17, 2016
50 ohms Terminator	N/A	EMC-02	Oct. 01, 2015	Sep. 30, 2016
Software BVADT	BVADT_Cond_ V7.3.7.4	NA	NA	NA

Note:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. C.
3 The VCCI Con C Registration No. is C-3611.
4 Tested Date: Sep. 13, 2016

4.2.3 Test Procedure

a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.

b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.

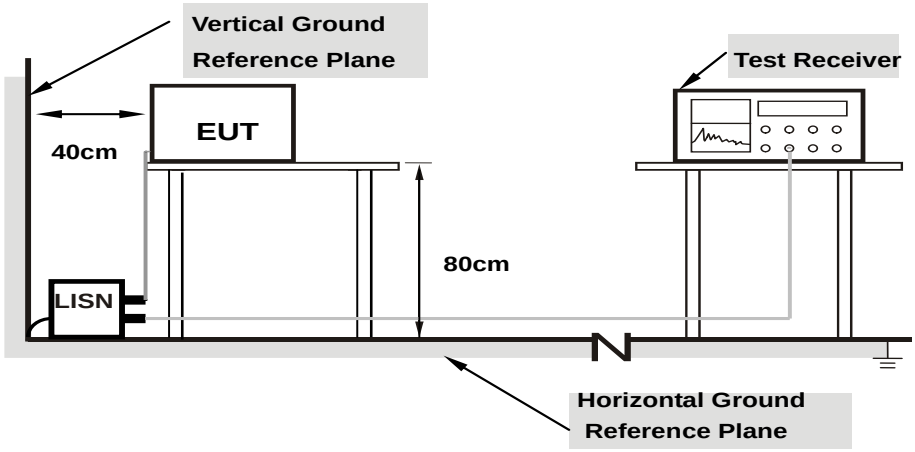
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



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

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

4.2.6 EUT Operating Condition

Same as 4.1.6.

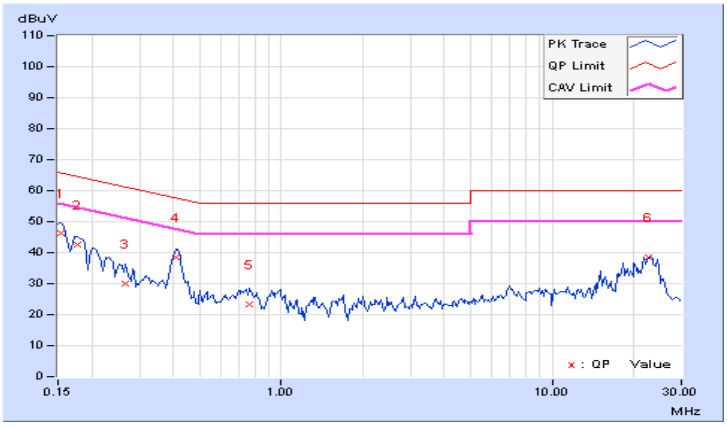
4.2.7 Test Results (Mode 1)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	10.31	36.11	26.29	46.42	36.60	65.79	55.79	-19.37	-19.19
2	0.17734	10.27	32.28	20.39	42.55	30.66	64.61	54.61	-22.06	-23.95
3	0.26719	10.24	19.82	8.18	30.06	18.42	61.20	51.20	-31.14	-32.78
4	0.40781	10.25	28.12	20.90	38.37	31.15	57.69	47.69	-19.32	-16.54
5	0.76719	10.17	13.24	8.21	23.41	18.38	56.00	46.00	-32.59	-27.62
6	**22.81250**	**11.03**	**27.39**	**25.09**	**38.42**	**36.12**	**60.00**	**50.00**	**-21.58**	**-13.88**

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

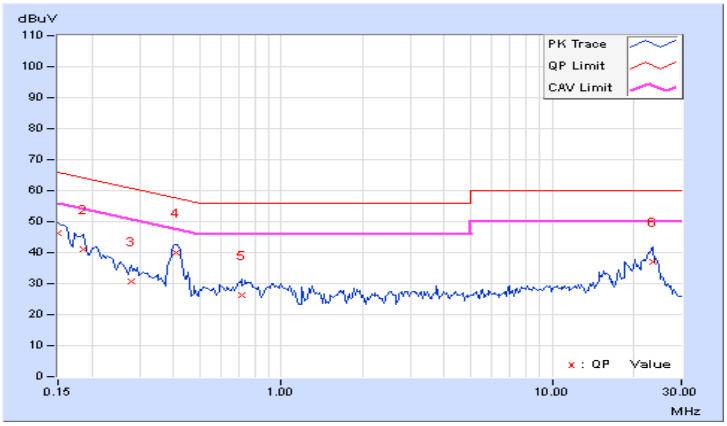


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.36	35.83	23.99	46.19	34.35	66.00	56.00	-19.81	-21.65
2	0.18516	10.24	30.91	19.79	41.15	30.03	64.25	54.25	-23.10	-24.22
3	0.27891	10.21	20.50	11.16	30.71	21.37	60.85	50.85	-30.14	-29.48
4	0.40781	10.23	29.74	22.91	39.97	33.14	57.69	47.69	-17.72	-14.55
5	0.71250	10.22	16.19	11.33	26.41	21.55	56.00	46.00	-29.59	-24.45
6	23.43750	11.07	26.14	23.78	37.21	34.85	60.00	50.00	-22.79	-15.15

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



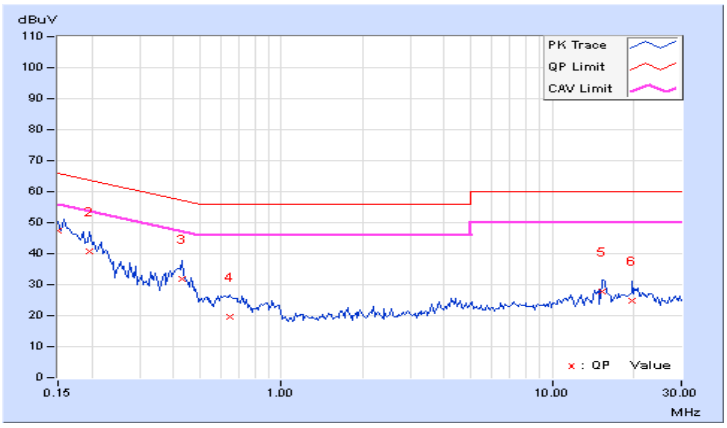
4.2.8 Test Results (Mode 2)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.31	37.08	22.15	47.39	32.46	66.00	56.00	-18.61	-23.54
2	0.19687	10.24	30.65	17.74	40.89	27.98	63.74	53.74	-22.85	-25.76
3	0.43125	10.24	21.66	17.13	31.90	27.37	57.23	47.23	-25.33	-19.86
4	0.64609	10.20	9.57	3.57	19.77	13.77	56.00	46.00	-36.23	-32.23
5	15.37891	10.79	16.90	8.39	27.69	19.18	60.00	50.00	-32.31	-30.82
6	19.70703	10.93	13.74	13.22	24.67	24.15	60.00	50.00	-35.33	-25.85

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.

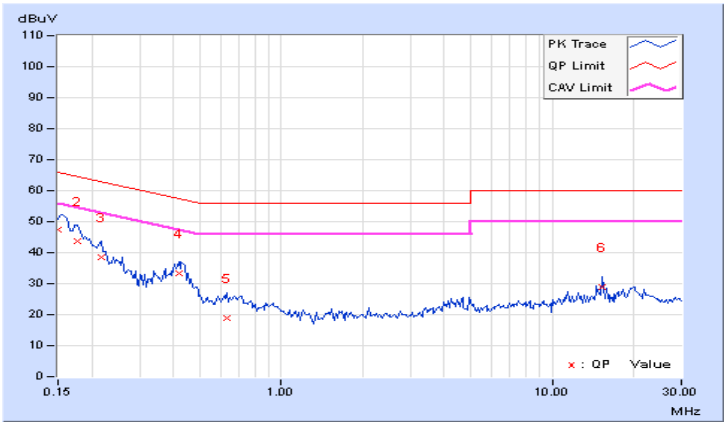


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.36	37.10	22.55	47.46	32.91	66.00	56.00	-18.54	-23.09
2	0.17734	10.27	33.57	19.92	43.84	30.19	64.61	54.61	-20.77	-24.42
3	0.21641	10.19	28.35	15.63	38.54	25.82	62.96	52.96	-24.42	-27.14
4	0.41953	10.23	22.94	16.34	33.17	26.57	57.46	47.46	-24.29	-20.89
5	0.63438	10.22	8.56	2.58	18.78	12.80	56.00	46.00	-37.22	-33.20
6	15.38281	10.83	18.14	11.54	28.97	22.37	60.00	50.00	-31.03	-27.63

REMARKS:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level - Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value.



4.3 Transmit Power Measurment

4.3.1 Limits of Transmit Power Measurement

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

*B is the 26 dB emission bandwidth in megahertz

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

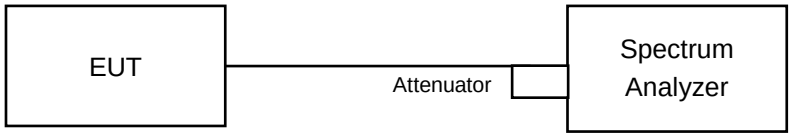
Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};
Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

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

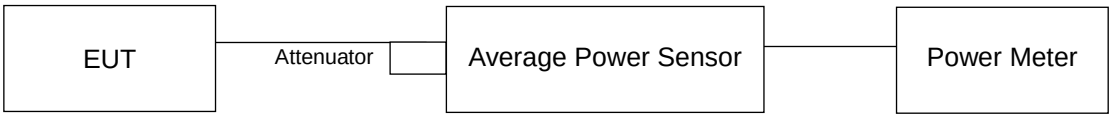
4.3.2 Test Setup

FOR POWER OUTPUT MEASUREMENT

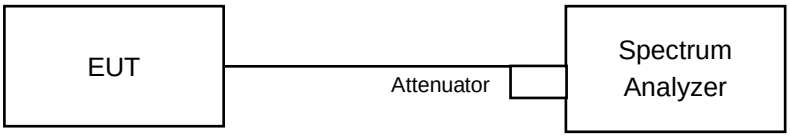
For channel straddling 5725MHz:



For other channels:



FOR 26dB OCCUPIED BANDWIDTH



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

For Average Power Measurement

For channel straddling 5725MHz:

802.11ac (VHT80)

Method SA-2

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

Other Modulation mode

Method SA-1

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

For other channels:

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

FOR 26dB OCCUPIED BANDWIDTH

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

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Condition

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

4.3.7 Test Result

CDD Mode

802.11a

Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
52	5260	18.15	18.75	140.302	21.47	24.00	Pass
60	5300	16.32	16.67	89.307	19.51	24.00	Pass
64	5320	14.25	14.15	52.609	17.21	24.00	Pass
100	5500	13.53	13.09	42.912	16.33	24.00	Pass
116	5580	18.16	18.67	139.085	21.43	24.00	Pass
140	5700	12.79	12.86	38.331	15.84	24.00	Pass
*144 (UNII-2C Band)	5720	14.97	15.06	63.468	18.03	24.00	Pass
*144 (UNII-3 Band)	5720	8.61	8.75	14.76	11.69	30.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*144	5720	78.228	18.93
Note: The total power was calculated through formula and record the value for reference only.			

26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	37.33	36.44
60	5300	23.29	23.42
64	5320	21.72	24.89
100	5500	21.82	21.75
116	5580	33.29	36.72
140	5700	21.75	21.68
144 (UNII-2C Band)	5720	24.09	26.37

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	36.44	26.61 > 24
60	5300	23.29	24.67 > 24
64	5320	21.72	24.36 > 24
100	5500	21.75	24.37 > 24
116	5580	33.29	26.22 > 24
140	5700	21.68	24.36 > 24
144 (UNII-2C Band)	5720	24.09	24.81 > 24

802.11ac (VHT20)

Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
52	5260	18.30	18.77	142.944	21.55	24.00	Pass
60	5300	15.40	16.12	75.6	18.79	24.00	Pass
64	5320	14.29	14.14	52.795	17.23	24.00	Pass
100	5500	13.68	13.12	43.847	16.42	24.00	Pass
116	5580	18.54	18.78	146.959	21.67	24.00	Pass
140	5700	12.77	13.12	39.435	15.96	24.00	Pass
*144 (UNII-2C Band)	5720	14.63	14.92	60.086	17.79	24.00	Pass
*144 (UNII-3 Band)	5720	8.75	9.09	15.609	11.93	30.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*144	5720	75.695	18.79
Note: The total power was calculated through formula and record the value for reference only.			

26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	40.04	42.11
60	5300	29.81	36.55
64	5320	21.96	23.92
100	5500	21.85	22.09
116	5580	36.97	43.36
140	5700	21.73	22.11
144 (UNII-2C Band)	5720	24.09	27.21

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

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	40.04	27.02 > 24
60	5300	29.81	25.74 > 24
64	5320	21.96	24.41 > 24
100	5500	21.85	24.39 > 24
116	5580	36.97	26.67 > 24
140	5700	21.73	24.37 > 24
144 (UNII-2C Band)	5720	24.09	24.81 > 24

802.11ac (VHT40)

Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
54	5270	19.25	18.78	159.649	22.03	24.00	Pass
62	5310	11.91	12.33	32.624	15.14	24.00	Pass
102	5510	10.38	10.22	21.434	13.31	24.00	Pass
110	5550	15.24	15.18	66.381	18.22	24.00	Pass
134	5670	14.12	14.20	52.126	17.17	24.00	Pass
*142 (UNII-2C Band)	5710	16.48	16.14	85.578	19.32	24.00	Pass
*142 (UNII-3 Band)	5710	6.04	5.82	7.837	8.94	30.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*142	5710	93.415	19.7
Note: The total power was calculated through formula and record the value for reference only.			

26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	97.37	98.97
62	5310	41.34	47.70
102	5510	41.55	41.75
110	5550	56.77	74.60
134	5670	50.84	69.27
142 (UNII-2C Band)	5710	64.06	64.73

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	97.37	30.88 > 24
62	5310	41.34	27.16 > 24
102	5510	41.55	27.18 > 24
110	5550	56.77	28.54 > 24
134	5670	50.84	28.06 > 24
142 (UNII-2C Band)	5710	64.06	29.06 > 24

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
58	5290	11.29	11.31	26.98	14.31	24.00	Pass
106	5530	11.13	10.87	25.19	14.01	24.00	Pass
122	5610	14.97	13.70	54.847	17.39	24.00	Pass
*138 (UNII-2C Band)	5690	14.67	14.06	57.252	17.58	24.00	Pass
*138 (UNII-3 Band)	5690	0.29	-0.50	2.049	3.12	30.00	Pass

Note: * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*138	5690	59.301	17.73
Note: The total power was calculated through formula and record the value for reference only.			

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	82.45	82.52
106	5530	82.36	82.61
122	5610	94.42	82.36
138 (UNII-2C Band)	5690	119.67	111.44

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	82.45	30.16 > 24
106	5530	82.36	30.15 > 24
122	5610	82.36	30.15 > 24
138 (UNII-2C Band)	5690	111.44	31.47 > 24

Beamforming Mode

802.11ac (VHT20)

Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
52	5260	18.30	18.77	142.944	21.55	21.91	Pass
60	5300	15.40	16.12	75.6	18.79	21.91	Pass
64	5320	14.29	14.14	52.795	17.23	21.91	Pass
100	5500	13.68	13.12	43.847	16.42	21.88	Pass
116	5580	18.54	18.78	146.959	21.67	21.88	Pass
140	5700	12.77	13.12	39.435	15.96	21.88	Pass
*144 (UNII-2C Band)	5720	14.63	14.92	60.086	17.79	21.88	Pass
*144 (UNII-3 Band)	5720	8.75	9.09	15.609	11.93	28.17	Pass

Note: 1. * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

2. For UNII-2A: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.09dBi > 6dBi , so the power limit shall be reduced to24-(8.09-6) = 21.91dBm.

3. For UNII-2C: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.12dBi > 6dBi , so the power limit shall be reduced to24-(8.12-6) = 21.88dBm.

4. For UNII-3: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 7.83dBi > 6dBi , so the power limit shall be reduced to 30-(7.83-6) = 28.17dBm.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*144	5720	75.695	18.79
Note: The total power was calculated through formula and record the value for reference only.			

26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	40.04	42.11
60	5300	29.81	36.55
64	5320	21.96	23.92
100	5500	21.85	22.09
116	5580	36.97	43.36
140	5700	21.73	22.11
144 (UNII-2C Band)	5720	24.09	27.21

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

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	40.04	27.02 > 24
60	5300	29.81	25.74 > 24
64	5320	21.96	24.41 > 24
100	5500	21.85	24.39 > 24
116	5580	36.97	26.67 > 24
140	5700	21.73	24.37 > 24
144 (UNII-2C Band)	5720	24.09	24.81 > 24

802.11ac (VHT40)

Power Output:

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
54	5270	18.95	18.57	150.469	21.77	21.91	Pass
62	5310	11.91	12.33	32.624	15.14	21.91	Pass
102	5510	10.38	10.22	21.434	13.31	21.88	Pass
110	5550	15.24	15.18	66.381	18.22	21.88	Pass
134	5670	14.12	14.20	52.126	17.17	21.88	Pass
*142 (UNII-2C Band)	5710	16.48	16.14	85.578	19.32	21.88	Pass
*142 (UNII-3 Band)	5710	6.04	5.82	7.837	8.94	28.17	Pass

Note: 1. * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-1 and use spectrum analyzer test.

2. For UNII-2A: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.09dBi > 6dBi , so the power limit shall be reduced to24-(8.09-6) = 21.91dBm.

3. For UNII-2C: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.12dBi > 6dBi , so the power limit shall be reduced to24-(8.12-6) = 21.88dBm.

4. For UNII-3: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 7.83dBi > 6dBi , so the power limit shall be reduced to 30-(7.83-6) = 28.17dBm.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*142	5710	93.415	19.7
Note: The total power was calculated through formula and record the value for reference only.			

26dB BANDWIDTH:

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	97.37	98.97
62	5310	41.34	47.70
102	5510	41.55	41.75
110	5550	56.77	74.60
134	5670	50.84	69.27
142 (UNII-2C Band)	5710	64.06	64.73

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	97.37	30.88 > 24
62	5310	41.34	27.16 > 24
102	5510	41.55	27.18 > 24
110	5550	56.77	28.54 > 24
134	5670	50.84	28.06 > 24
142 (UNII-2C Band)	5710	64.06	29.06 > 24

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
58	5290	11.29	11.31	26.98	14.31	21.91	Pass
106	5530	11.13	10.87	25.19	14.01	21.88	Pass
122	5610	14.97	13.70	54.847	17.39	21.88	Pass
*138 (UNII-2C Band)	5690	14.67	14.06	57.252	17.58	21.88	Pass
*138 (UNII-3 Band)	5690	0.29	-0.50	2.049	3.12	28.17	Pass

Note: 1. * Test was performed in accordance with Measurement follow FCC KDB 789033 UNII test procedure Method SA-2 and use spectrum analyzer test.

2. For UNII-2A: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.09dBi > 6dBi , so the power limit shall be reduced to24-(8.09-6) = 21.91dBm.

3. For UNII-2C: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.12dBi > 6dBi , so the power limit shall be reduced to24-(8.12-6) = 21.88dBm.

4. For UNII-3: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 7.83dBi > 6dBi , so the power limit shall be reduced to 30-(7.83-6) = 28.17dBm.

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
*138	5690	59.301	17.73
Note: The total power was calculated through formula and record the value for reference only.			

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	82.45	82.52
106	5530	82.36	82.61
122	5610	94.42	82.36
138 (UNII-2C Band)	5690	119.67	111.44

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	82.45	30.16 > 24
106	5530	82.36	30.15 > 24
122	5610	82.36	30.15 > 24
138 (UNII-2C Band)	5690	111.44	31.47 > 24

※Add test for each data rate output power (require by manufacturer):

802.11a

CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)							
		Data rate							
		6Mbps	9Mbps	12Mbps	18Mbps	24Mbps	36Mbps	48Mbps	54Mbps
52	5260	21.47	21.45	21.44	21.33	21.13	21.30	21.46	21.28
60	5300	19.51	19.38	19.48	19.35	19.29	19.49	19.32	19.28
64	5320	17.21	17.18	17.01	16.86	16.86	16.69	16.7	16.92
100	5500	16.33	16.19	16.26	16.16	16.29	16.26	16.23	16.1
116	5580	21.43	21.31	21.10	20.96	20.95	21.16	21.06	20.93
140	5700	15.84	15.82	15.70	15.59	15.45	15.58	15.57	15.72
144	5720	21.40	21.22	21.08	21.02	20.82	20.63	20.72	20.89

802.11ac (VHT20)

Nss=1

CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)								
		Data rate								
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
52	5260	21.55	21.49	21.35	21.35	21.47	21.43	21.28	21.41	21.25
60	5300	18.79	18.61	18.73	18.54	18.62	18.68	18.52	18.61	18.62
64	5320	17.23	17.17	17.05	16.98	16.94	17.12	17.19	17.15	16.98
100	5500	16.42	16.33	16.18	15.99	16.09	16.19	16.13	16.04	16.19
116	5580	21.67	21.66	21.51	21.38	21.46	21.5	21.62	21.45	21.35
140	5700	15.96	15.92	15.85	15.84	15.9	15.7	15.54	15.36	15.18
144	5720	21.61	21.49	21.40	21.52	21.48	21.56	21.37	21.52	21.43

Nss=2

CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)								
		Data rate								
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8
52	5260	21.51	21.48	21.34	21.17	21.06	21.11	20.98	21.08	21.19
60	5300	18.73	18.60	18.44	18.61	18.41	18.43	18.46	18.59	18.43
64	5320	17.16	17.01	16.93	17.09	16.91	16.7	16.82	16.87	16.95
100	5500	16.39	16.30	16.30	16.33	16.14	16.09	15.94	15.74	15.71
116	5580	21.66	21.48	21.64	21.42	21.26	21.36	21.35	21.31	21.51
140	5700	15.89	15.80	15.72	15.85	15.72	15.66	15.82	15.76	15.83
144	5720	21.56	21.48	21.39	21.46	21.51	21.53	21.54	21.45	21.47

802.11ac (VHT40)

Nss=1

CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)									
		Data rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
54	5270	22.03	21.94	21.89	21.86	21.92	21.88	21.92	21.87	21.77	21.65
62	5310	15.14	14.97	14.83	15.02	14.98	14.97	15.04	14.87	14.7	14.82
102	5510	13.31	13.20	13.18	13.03	12.92	12.71	12.71	12.9	12.95	12.88
110	5550	18.22	18.21	18.07	17.97	18.13	17.97	17.78	17.65	17.57	17.40
134	5670	17.17	17.10	16.94	17.03	17.15	16.99	17.01	16.93	17.06	17.01
142	5710	22.60	22.40	22.19	22.04	22.13	22.19	22.32	22.29	22.24	22.12

Nss=2

CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)									
		Data rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
54	5270	21.97	21.92	21.94	21.93	21.76	21.81	21.94	21.89	21.95	21.95
62	5310	15.09	14.93	14.94	15.05	14.93	15.07	14.96	14.91	14.95	15.08
102	5510	13.27	13.06	12.89	12.71	12.89	13.1	12.92	13.14	12.92	12.94
110	5550	18.20	18.06	18.17	17.97	18.12	18.03	18.07	17.86	17.82	17.64
134	5670	17.14	17.07	17.10	16.96	16.96	17.11	17.07	16.91	16.81	16.95
142	5710	22.52	22.46	22.39	22.42	22.29	22.32	22.3	22.23	22.16	22.00

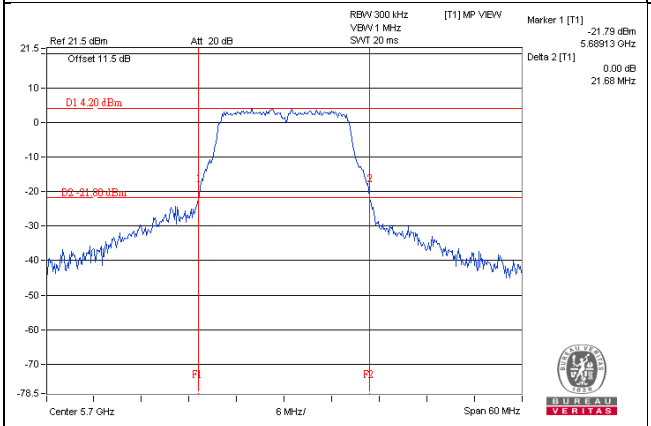
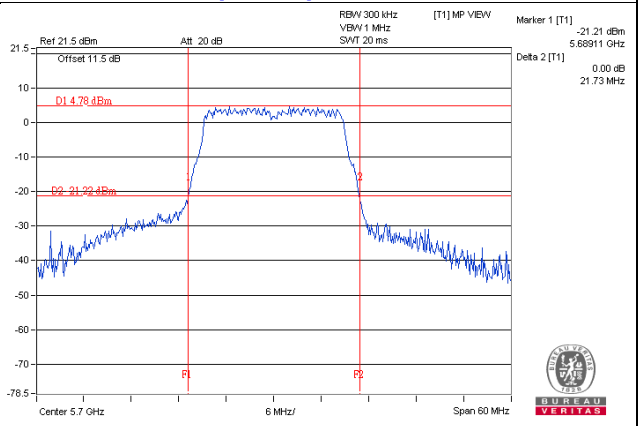
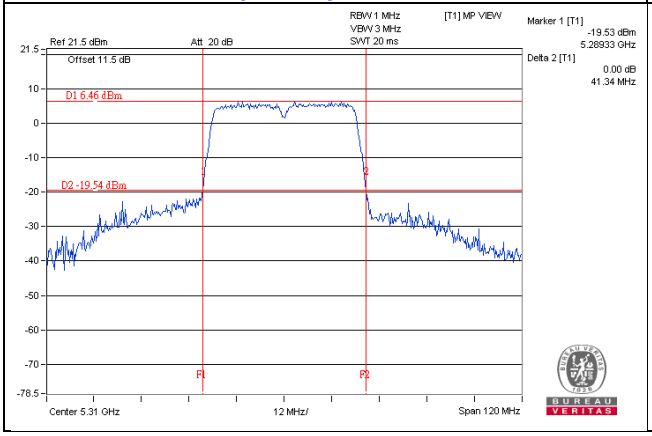
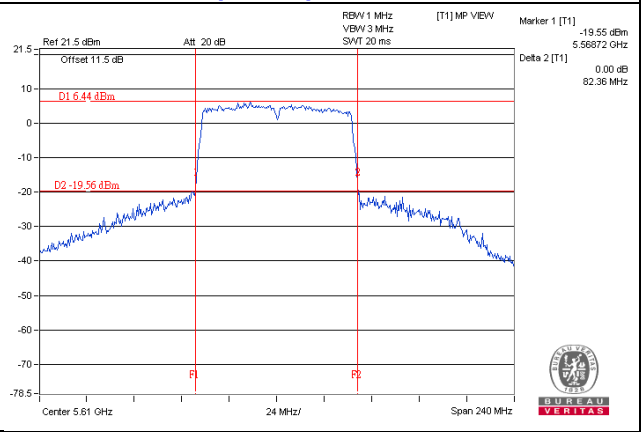
802.11ac (VHT80)

Nss=1

CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)									
		Data rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
58	5290	14.31	14.26	14.26	14.17	14.14	14.10	14.20	14.18	14.22	14.06
106	5530	14.01	13.81	13.99	13.82	13.81	13.71	13.51	13.42	13.62	13.46
122	5610	17.39	17.32	17.27	17.19	17.01	16.81	16.85	16.69	16.71	16.51
138	5690	20.29	20.26	20.15	20.11	20.03	19.82	19.74	19.56	19.74	19.73

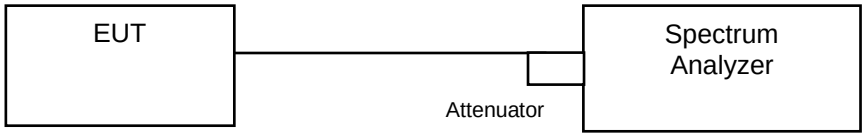
Nss=2

CHANNEL	FREQUENCY (MHz)	AVERAGE POWER (dBm)									
		Data rate									
		MCS0	MCS1	MCS2	MCS3	MCS4	MCS5	MCS6	MCS7	MCS8	MCS9
58	5290	14.25	14.22	14.05	14.12	14.01	13.81	13.72	13.63	13.85	14.03
106	5530	13.94	13.79	13.70	13.68	13.72	13.75	13.82	13.7	13.78	13.68
122	5610	17.31	17.20	17.26	17.11	16.94	16.77	16.66	16.55	16.48	16.41
138	5690	20.23	20.09	19.87	19.93	19.71	19.84	19.95	19.8	19.78	19.82

Spectrum Plot of Worst Value	
802.11a_Chain 1 / CH140	**802.11ac (VHT20)_Chain 0 / CH140**
	
8802.11ac (VHT40) _Chain 0 / CH62	**802.11ac (VHT80) _Chain 1 / CH122**
	

4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

The transmitter output was connected to the spectrum analyzer through an attenuator. The bandwidth of the fundamental frequency was measured by spectrum analyzer with resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3x the resolution bandwidth and set the detector to SAMPLE. The width of a frequency band such that, below the lower and above the upper frequency limits, the mean powers emitted are each equal to a specified percentage 0.5 %of the total mean power of a given emission.

4.4.4 Test Results

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		CHAIN 0	CHAIN 1
52	5260	18.60	18.24
60	5300	17.04	17.16
64	5320	17.04	17.16
100	5500	17.16	17.04
116	5580	17.28	18.12
140	5700	16.92	16.92
144 (UNII-2C Band)	5720	14.36	14.72
144 (UNII-3 Band)	5720	4.24	4.60

802.11ac (VHT20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		CHAIN 0	CHAIN 1
52	5260	18.96	18.96
60	5300	18.24	18.24
64	5320	18.12	18.12
100	5500	18.12	18.12
116	5580	18.60	18.96
140	5700	18.12	18.00
144 (UNII-2C Band)	5720	14.48	15.32
144 (UNII-3 Band)	5720	4.12	4.84

802.11ac (VHT40)

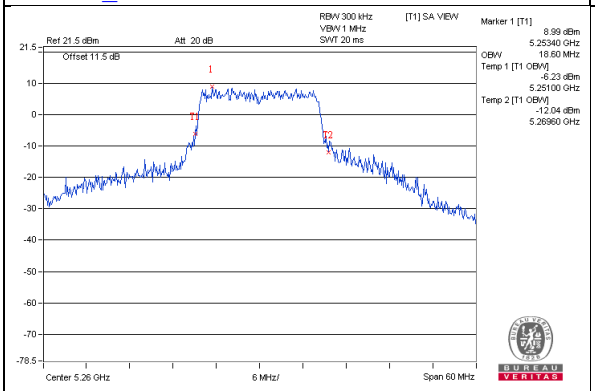
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		CHAIN 0	CHAIN 1
54	5270	44.40	43.20
62	5310	36.72	36.72
102	5510	36.72	36.72
110	5550	36.96	36.96
134	5670	36.72	36.96
142 (UNII-2C Band)	5710	39.20	40.00
142 (UNII-3 Band)	5710	7.20	8.20

802.11ac (VHT80)

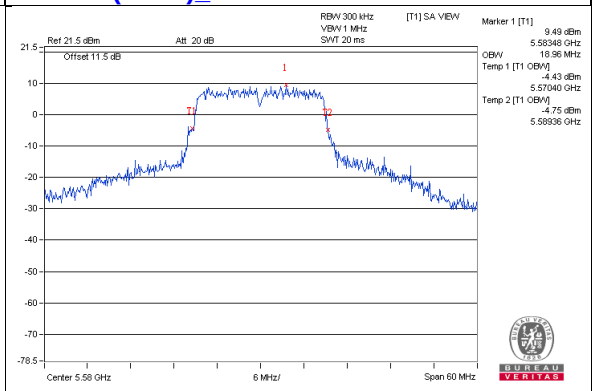
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		CHAIN 0	CHAIN 1
58	5290	75.84	75.84
106	5530	76.32	75.84
122	5610	75.84	76.32
138 (UNII-2C Band)	5690	73.88	73.40
138 (UNII-3 Band)	5690	3.40	2.92

Spectrum Plot of Worst Value

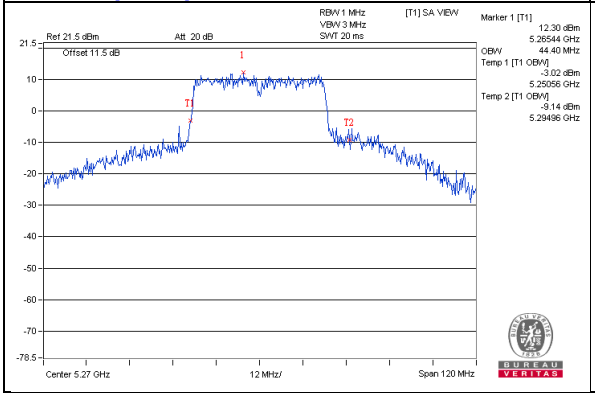
802.11a_Chain0 / CH52



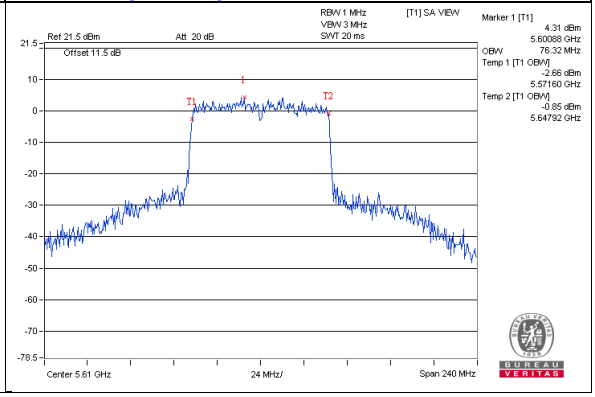
802.11n (HT20)_Chain1 / CH116



802.11n (HT40)_Chain0 / CH54



802.11ac (VHT80)_Chain1 / CH122

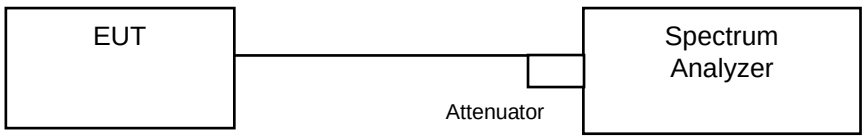


4.5 Peak Power Spectral Density Measurement

4.5.1 Limits of Peak Power Spectral Density Measurement

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

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedure

Using method SA-1

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

Using method SA-2

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

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

Same as Item 4.3.6.

4.5.7 Test Results

For U-NII-1:

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
52	5260	4.63	4.66	7.66	8.91	Pass
60	5300	2.52	2.58	5.56	8.91	Pass
64	5320	0.42	0.44	3.44	8.91	Pass
100	5500	0.04	-0.02	3.02	8.88	Pass
120	5600	4.77	5.40	8.11	8.88	Pass
140	5700	-0.97	-1.33	1.86	8.88	Pass
144 (UNII-2C Band)	5720	4.71	4.84	7.79	8.88	Pass

Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For UNII-2A: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.09dBi > 6dBi , so the power density limit shall be reduced to11-(8.09-6) = 8.91dBm.
3. For UNII-2C: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.12dBi > 6dBi , so the power density limit shall be reduced to11-(8.12-6) = 8.88dBm.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
52	5260	4.28	4.24	7.27	8.91	Pass
60	5300	1.63	1.91	4.78	8.91	Pass
64	5320	-0.04	0.07	3.03	8.91	Pass
100	5500	-0.37	-0.39	2.63	8.88	Pass
120	5600	4.48	4.94	7.73	8.88	Pass
140	5700	-1.47	-1.40	1.58	8.88	Pass
144 (UNII-2C Band)	5720	4.22	4.55	7.40	8.88	Pass

Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For UNII-2A: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.09dBi > 6dBi , so the power density limit shall be reduced to11-(8.09-6) = 8.91dBm.
3. For UNII-2C: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.12dBi > 6dBi , so the power density limit shall be reduced to11-(8.12-6) = 8.88dBm.

802.11ac (VHT40)

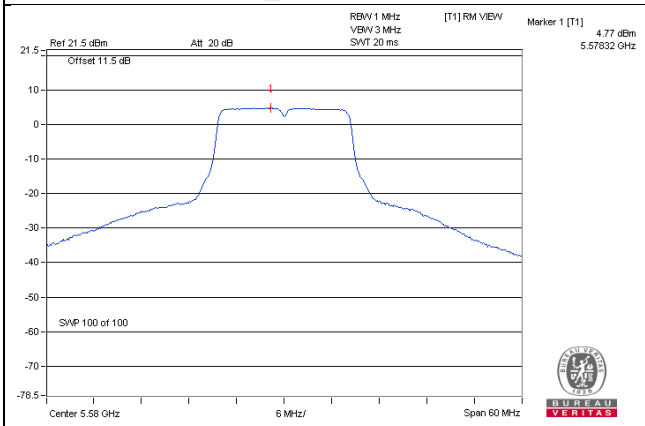
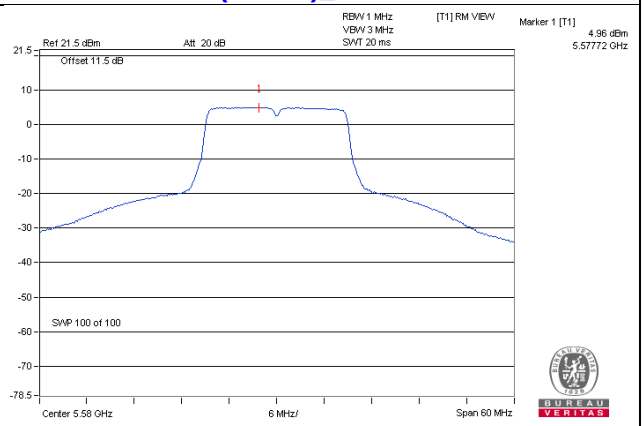
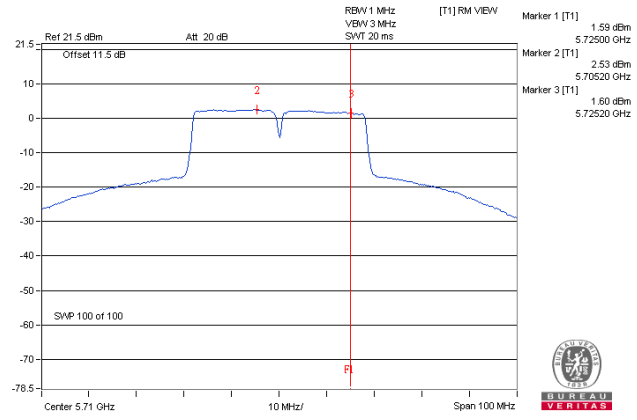
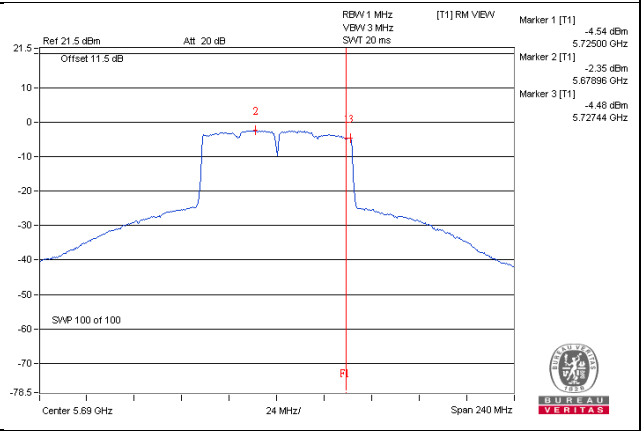
Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)		Total Power Density (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1			
54	5270	1.97	1.70	4.85	8.91	Pass
62	5310	-5.47	-5.27	-2.36	8.91	Pass
102	5510	-6.46	-6.25	-3.34	8.88	Pass
110	5550	-1.30	-1.41	1.66	8.88	Pass
134	5670	-2.99	-3.09	-0.03	8.88	Pass
142 (UNII-2C Band)	5710	2.53	2.15	5.35	8.88	Pass

Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For UNII-2A: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.09dBi > 6dBi , so the power density limit shall be reduced to11-(8.09-6) = 8.91dBm.
3. For UNII-2C: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.12dBi > 6dBi , so the power density limit shall be reduced to11-(8.12-6) = 8.88dBm.

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm)		Duty Factor (dB)	Total PSD With Duty Factor (dBm)	MAX. Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
58	5290	-8.17	-8.96	0.19	-5.34	8.91	Pass
106	5530	-8.27	-8.28	0.19	-5.07	8.88	Pass
122	5610	-5.12	-5.54	0.19	-2.12	8.88	Pass
138 (UNII-2C Band)	5690	-2.35	-2.99	0.19	0.54	8.88	Pass

Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. For UNII-2A: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.09dBi > 6dBi , so the power density limit shall be reduced to11-(8.09-6) = 8.91dBm.
3. For UNII-2C: Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 8.12dBi > 6dBi , so the power density limit shall be reduced to11-(8.12-6) = 8.88dBm.
4. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a_Chain 0 / CH116	**802.11ac (VHT20)_Chain 1 / CH116**
	
802.11ac (VHT40)_Chain 0 / CH142(UNII-2C Band)	**802.11ac (VHT80)_Chain 0 / CH138(UNII-2C Band)**
	

For U-NII-3:

802.11a

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	144 (UNII-3 Band)	5720	-3.74	-1.52	3.01	1.49	28.17	Pass
1	144 (UNII-3 Band)	5720	-3.58	-1.36	3.01	1.65	28.17	Pass

Note: 1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 7.83dBi > 6dBi , so the power density limit shall be reduced to 30-(7.83-6) = 28.17dBm.

802.11ac (VHT20)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	144 (UNII-3 Band)	5720	-4.35	-2.13	3.01	0.88	28.17	Pass
1	144 (UNII-3 Band)	5720	-3.89	-1.67	3.01	1.34	28.17	Pass

Note: 1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 7.83dBi > 6dBi , so the power density limit shall be reduced to 30-(7.83-6) = 28.17dBm.

802.11ac (VHT40)

TX chain	Channel	Freq. (MHz)	PSD (dBm/300kHz)	PSD (dBm/500kHz)	10 log (N=2) dB	Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
0	142 (UNII-3 Band)	5710	-6.59	-4.37	3.01	-1.36	28.17	Pass
1	142 (UNII-3 Band)	5710	-6.66	-4.44	3.01	-1.43	28.17	Pass

Note: 1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 7.83dBi > 6dBi , so the power density limit shall be reduced to 30-(7.83-6) = 28.17dBm.

802.11ac (VHT80)

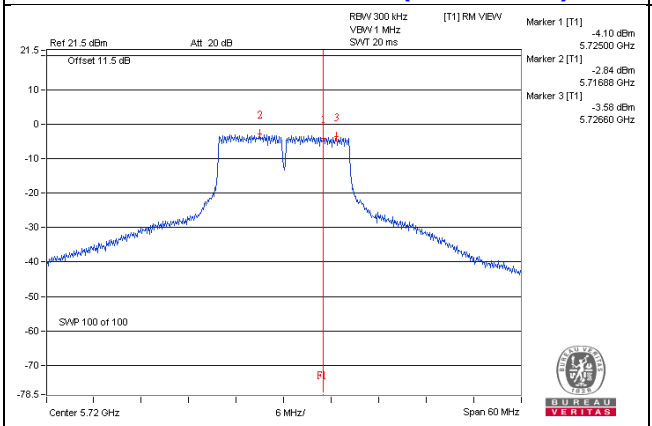
TX chain	Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor		10 log (N=2) dB	Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass /Fail
			(dBm/300kHz)	(dBm/500kHz)					
0	138 (UNII-3 Band)	5690	-12.94	-10.72	3.01	0.19	-7.52	28.17	Pass
1	138 (UNII-3 Band)	5690	-13.30	-11.08	3.01	0.19	-7.88	28.17	Pass

Note: 1. Directional gain = 10 log[$(10^{G1/20} + 10^{G2/20})^2$ / 2] = 7.83dBi > 6dBi , so the power density limit shall be reduced to 30-(7.83-6) = 28.17dBm.

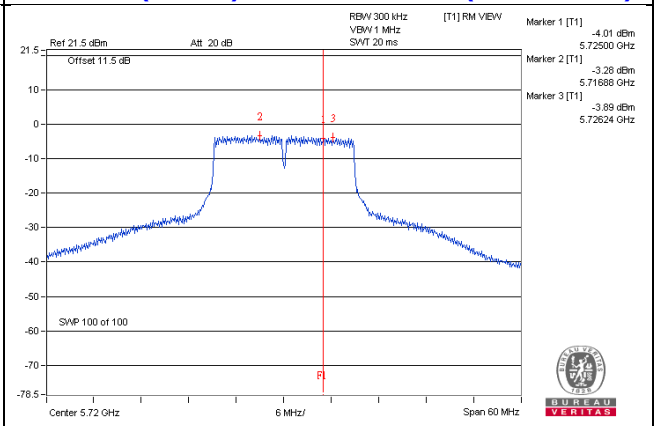
2. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

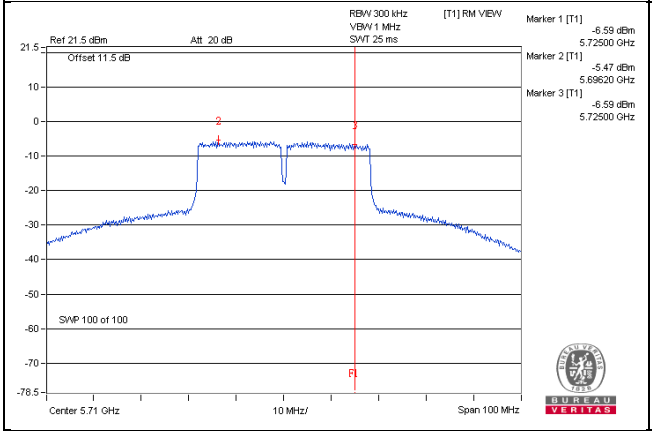
802.11a_Chain 1 / CH144 (UNII-3 Band)



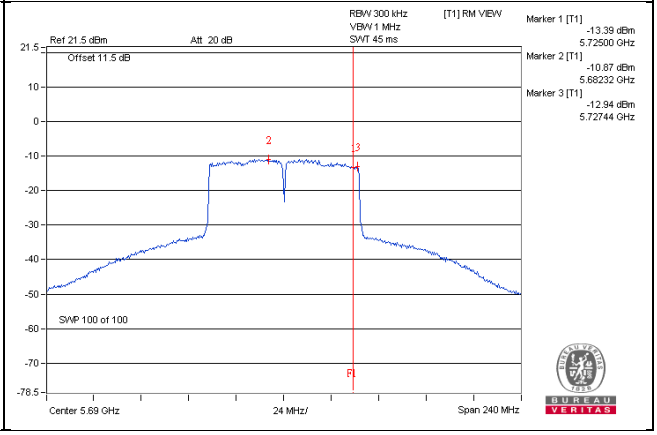
802.11ac (VHT20)_Chain 1 / CH144 (UNII-3 Band)



802.11ac (VHT40)_Chain 0 / CH142 (UNII-3 Band)



802.11ac (VHT80)_Chain 0 / CH138 (UNII-3 Band)

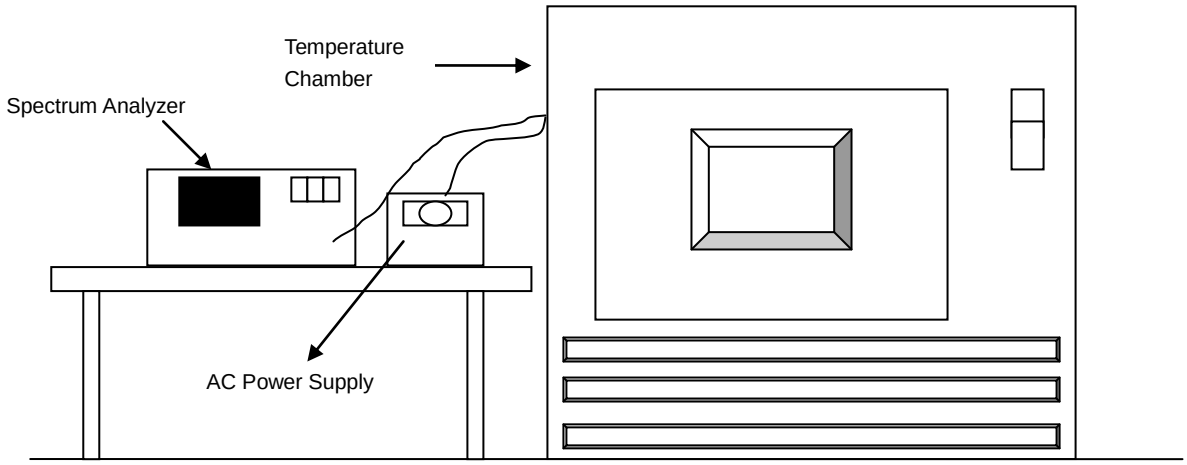


4.6 Frequency Stability Measurement

4.6.1 Limits of Frequency Stability Measurement

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

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

a. The EUT was placed inside the environmental test chamber and powered by nominal AC voltage.
b. Turn the EUT on and couple its output to a spectrum analyzer.
c. Turn the EUT off and set the chamber to the highest temperature specified.
d. Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 Minutes.
e. Repeat step 2 and 3 with the temperature chamber set to the lowest temperature.
f. The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 Minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.
.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5260 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
50	120	5259.9845	Pass	5259.9844	Pass	5259.9835	Pass	5259.9879	Pass
40	120	5259.9943	Pass	5259.9964	Pass	5259.9926	Pass	5259.996	Pass
30	120	5260.0003	Pass	5259.9994	Pass	5260.0007	Pass	5260.0023	Pass
20	120	5259.9813	Pass	5259.9845	Pass	5259.986	Pass	5259.9817	Pass
10	120	5259.9835	Pass	5259.9858	Pass	5259.986	Pass	5259.9838	Pass
0	120	5259.9996	Pass	5259.9978	Pass	5259.9973	Pass	5260.0004	Pass
-10	120	5259.9864	Pass	5259.987	Pass	5259.9858	Pass	5259.9885	Pass
-20	120	5259.9773	Pass	5259.9813	Pass	5259.9789	Pass	5259.9809	Pass
-30	120	5259.9974	Pass	5259.9949	Pass	5259.9935	Pass	5259.9963	Pass

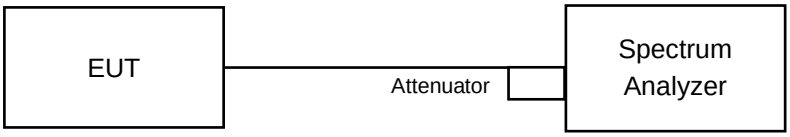
Frequency Stability Versus Voltage									
Operating Frequency: 5260 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
20	138	5259.9819	Pass	5259.9843	Pass	5259.9853	Pass	5259.9814	Pass
	120	5259.9813	Pass	5259.9845	Pass	5259.986	Pass	5259.9817	Pass
	102	5259.9819	Pass	5259.9842	Pass	5259.987	Pass	5259.9817	Pass

4.7 6dB Bandwidth Measurment

4.7.1 Limits of 6dB Bandwidth Measurement

The minimum of 6dB Bandwidth Measurement is 0.5MHz.

4.7.2 Test Setup



4.7.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.7.4 Test Procedure

MEASUREMENT PROCEDURE REF

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

4.7.5 Deviation from Test Standard

No deviation.

4.7.6 EUT Operating Condition

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

4.7.7 Test Results

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
144 (UNII-3 Band)	5720	3.17	3.17	0.5	PASS

Note: The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ac (VHT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
144 (UNII-3 Band)	5720	3.80	3.80	0.5	PASS

Note: The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ac (VHT40)

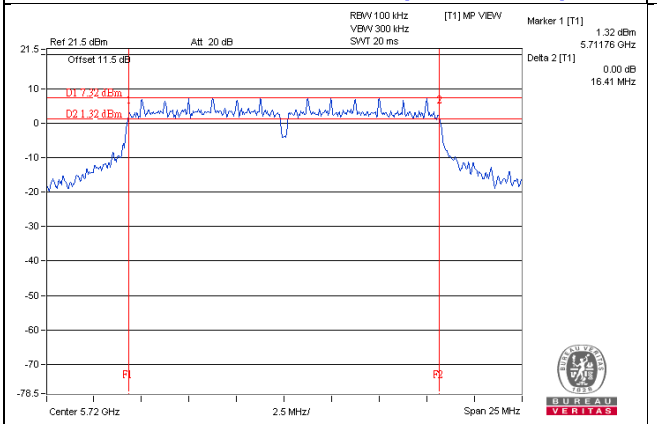
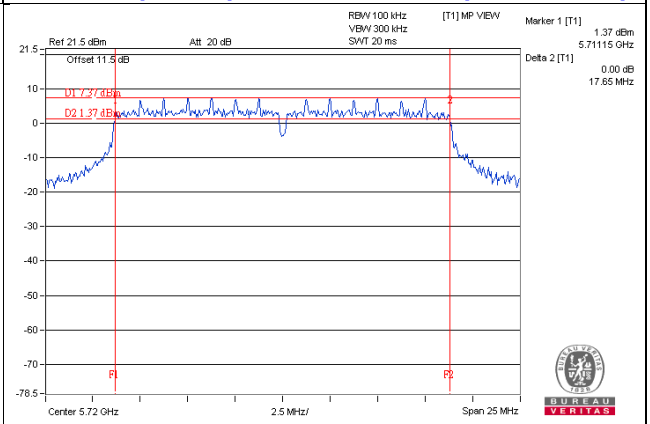
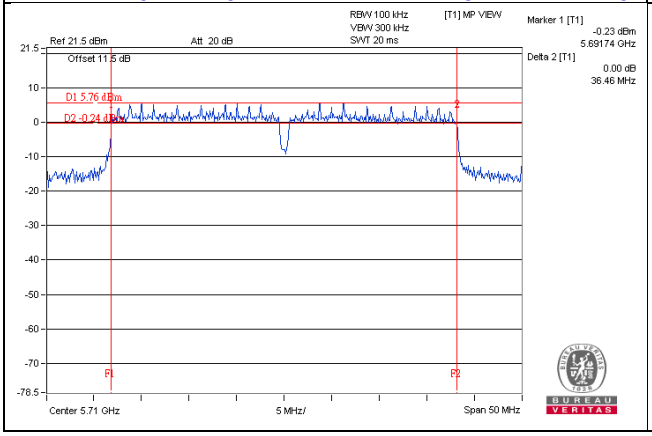
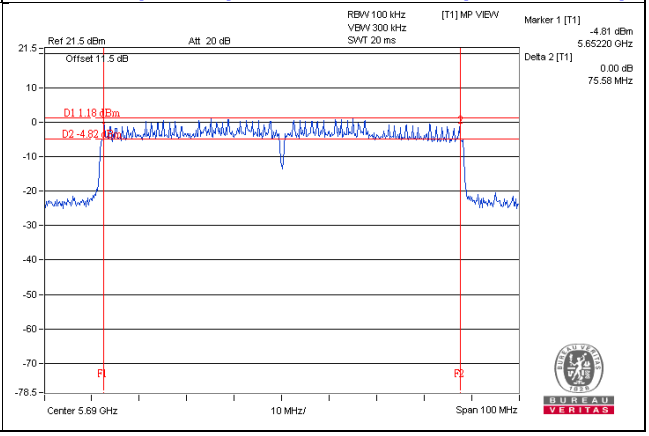
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
142 (UNII-3 Band)	5710	3.20	3.20	0.5	PASS

Note: The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
138 (UNII-3 Band)	5690	2.78	2.79	0.5	PASS

Note: The 6dB bandwidth above 5725MHz = Marker 1 + Delta 2 - 5725MHz

Spectrum Plot of Worst Value	
802.11a_Chain 1 / CH144 (UNII-3 Band)	**802.11ac (VHT20)_Chain 1 / CH144 (UNII-3 Band)**
	
802.11ac (VHT40)_Chain 0 / CH142 (UNII-3 Band)	**802.11ac (VHT80)_Chain 0 / CH138 (UNII-3 Band)**
	

5 Pictures of Test Arrangements

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

Appendix – Information on the Testing Laboratories

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

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

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Fax: 886-2-26051924

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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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