

FCC Test Report (WLAN)

Report No.: RF190628E01-1

FCC ID: RAS-MT7663

Test Model: MT7663

Received Date: June 28, 2019

Test Date: July 08 to Sep. 10, 2019

Issued Date: Dec. 31, 2019

Applicant: MediaTek Inc.

Address: No.1, Duxing 1st Rd., East District, Hsinchu City 300, Taiwan (R.O.C.)

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,
Taiwa.

Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
Taiwan.

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



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

Table of Contents

Release Control Record	4
1 Certificate of Conformity	5
2 Summary of Test Results	6
2.1 Measurement Uncertainty	6
2.2 Modification Record	6
3 General Information	7
3.1 General Description of EUT (WLAN)	7
Chain 0	8
3.2 Description of Test Modes	9
3.2.1 Test Mode Applicability and Tested Channel Detail	11
3.3 Duty Cycle of Test Signal	13
3.4 Description of Support Units	14
3.4.1 Configuration of System under Test	15
3.5 General Description of Applied Standard	16
4 Test Types and Results	17
4.1 Radiated Emission and Bandedge Measurement	17
4.1.1 Limits of Radiated Emission and Bandedge Measurement	17
4.1.2 Test Instruments	18
4.1.3 Test Procedure	21
4.1.4 Deviation from Test Standard	21
4.1.5 Test Setup	22
4.1.6 EUT Operating Condition	23
4.1.7 Test Results (Mode 1)	24
4.1.8 Test Results (Mode 2)	68
4.2 Conducted Emission Measurement	112
4.2.1 Limits of Conducted Emission Measurement	112
4.2.2 Test Instruments	112
4.2.3 Test Procedure	113
4.2.4 Deviation from Test Standard	113
4.2.5 Test Setup	113
4.2.6 EUT Operating Condition	113
4.2.7 Test Results	114
4.3 Transmit Power Measurement	116
4.3.1 Limits of Transmit Power Measurement	116
4.3.2 Test Setup	116
4.3.3 Test Instruments	117
4.3.4 Test Procedure	117
4.3.5 Deviation from Test Standard	117
4.3.6 EUT Operating Condition	117
4.3.7 Test Results	118
4.4 Occupied Bandwidth Measurement	130
4.4.1 Test Setup	130
4.4.2 Test Instruments	130
4.4.3 Test Procedure	130
4.4.4 Test Results	131
4.5 Peak Power Spectral Density Measurement	138
4.5.1 Limits of Peak Power Spectral Density Measurement	138
4.5.2 Test Setup	138
4.5.3 Test Instruments	138
4.5.4 Test Procedure	138
4.5.5 Deviation from Test Standard	139
4.5.6 EUT Operating Condition	139

4.5.7 Test Results	140
4.6 Frequency Stability Measurement	147
4.6.1 Limits of Frequency Stability Measurement	147
4.6.2 Test Setup.....	147
4.6.3 Test Instruments	147
4.6.4 Test Procedure	147
4.6.5 Deviation from Test Standard	147
4.6.6 EUT Operating Condition	147
4.6.7 Test Results	148
4.7 6dB Bandwidth Measurement.....	149
4.7.1 Limits of 6dB Bandwidth Measurement.....	149
4.7.2 Test Setup.....	149
4.7.3 Test Instruments	149
4.7.4 Test Procedure	149
4.7.5 Deviation from Test Standard	149
4.7.6 EUT Operating Condition	149
4.7.7 Test Results	150
5 Pictures of Test Arrangements.....	152
Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band) (Mode 1)	153
Annex B- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band) (Mode 2)	156
Appendix – Information of the Testing Laboratories	159

Release Control Record

Issue No.	Description	Date Issued
RF190628E01-1	Original release.	Dec. 31, 2019

1 Certificate of Conformity

Product: 2TX 11ac + BLE Combo Card

Brand: MTK

Test Model: MT7663

Sample Status: ENGINEERING SAMPLE

Applicant: MediaTek Inc.

Test Date: July 08 to Sep. 10, 2019

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

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

Prepared by : Joyce Kuo , **Date:** Dec. 31, 2019
Joyce Kuo / Specialist

Approved by : Clark Lin , **Date:** Dec. 31, 2019
Clark Lin / Technical 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 -14.28dB at 0.2125MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement*	Pass	Meet the requirement of limit. Minimum passing margin is -0.1dB at 5150.00MHz.
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	No antenna connector is used.

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

Note:

Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) ($\pm$)
Conducted Emissions at mains ports	150kHz ~ 30MHz	1.8 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.0 dB
	30MHz ~ 1GHz	5.1 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.1 dB
	6GHz ~ 18GHz	5.0 dB
	18GHz ~ 40GHz	5.2 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT (WLAN)

Product	2TX 11ac + BLE Combo Card
Brand	MTK
Test Model	MT7663
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	DC 3.3V from host equipment
Modulation Type	CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode only
Modulation Technology	DSSS, OFDM
Transfer Rate	802.11b: up to 11Mbps 802.11a/g: up to 54Mbps 802.11n: up to 300Mbps 802.11ac: up to 866.7Mbps
Operating Frequency	2.4GHz: 2.412 ~ 2.462GHz 5GHz: 5.18~ 5.24GHz, 5.26GHz ~ 5.32GHz, 5.50GHz ~ 5.72GHz, 5.745 ~ 5.825GHz
Number of Channel	2.4GHz: 802.11b, 802.11g, 802.11n (HT20): 11 802.11n (HT40): 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: 195.924 mW 5.18 ~ 5.24GHz: 160.801 mW 5.26 ~ 5.32GHz: 157.614 mW 5.5 ~ 5.72GHz: 157.067 mW 5.745 ~ 5.825GHz: 186.71 mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	NA
Cable Supplied	NA

Note:

1. There are WLAN, BT technology used for the EUT.
2. The EUT has two interfaces. Please refer to the following table:

Interface	Difference
PCIe	PCIe and SDIO interface signal switch by IC bonding on the same pin, most of the layout including RF, PMU, and the control signal is the same.
SDIO	

From the above Interface, the worst case was found in **PCIe** interface. Therefore only the test data of the modes were recorded in this report.

3. Simultaneously transmission condition.

Condition	Technology	
1	WLAN 2.4GHz	Bluetooth
2	WLAN 5GHz	Bluetooth

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

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

Antenna Set	RF Chain No.	Brand	Model	Ant. Net Gain (dBi)	Frequency range (GHz)	Antenna Type	Connector Type	Cable Length
1	Chain 0	LYNwave	ALA110-222050-300011	3.5	2.4~2.4835	PIFA	i-pex(MHF)	55mm
				5	5.15~5.85			
	Chain 1	LYNwave	ALA110-222050-300011	3.5	2.4~2.4835	PIFA	i-pex(MHF)	55mm
				5	5.15~5.85			
2	Chain 0	Cortec	AN2450-4902BRS	2.42	2.4~2.4835	Dipole	R-SMA	150mm
				3.87	5.15~5.85			
	Chain 1	Cortec	AN2450-4902BRS	2.42	2.4~2.4835	Dipole	R-SMA	150mm
				3.87	5.15~5.85			
3	Chain 0	PSA	RFMTA340718EMLB301	2.92	2.4~2.4835	PIFA	i-pex(MHF)	199.4mm
				4.94	5.15~5.85			
	Chain 1	PSA	RFMTA340718EMLB301	2.92	2.4~2.4835	PIFA	i-pex(MHF)	199.4mm
				4.94	5.15~5.85			

Note: The Max. gain was selected for Radiated emission Measurement test.

5. The EUT incorporates a MIMO function.

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

Note: 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 refers to the manufacturer's specifications or user's manual.

3.2 Description of Test Modes

FOR 5180 ~ 5240MHz

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

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

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
42	5210 MHz

FOR 5260 ~ 5320MHz

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

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

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

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
58	5290 MHz

FOR 5500 ~ 5720MHz

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

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

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

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

3 channels are provided for 802.11ac (VHT80):

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

FOR 5745 ~ 5825MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775 MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To				Description
	RE≥1G	RE<1G	PLC	APCM	
1	√	√	√	√	With PIFA Antenna
2	√	√	-	-	With Dipole Antenna

Where **RE≥1G**: Radiated Emission above 1GHz

RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

Note: The EUT's antenna (PIFA) had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on Y-plane (below 1GHz) & Z-plane (above 1GHz).

Radiated Emission Test (Above 1GHz):

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

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

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
802.11ac (VHT40)		38 to 46	38, 46	OFDM	BPSK	13.5
802.11ac (VHT80)		42	42	OFDM	BPSK	29.3
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6
802.11ac (VHT20)		100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	BPSK	29.3
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6
802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11ac (VHT40)		151 to 159	151, 159	OFDM	BPSK	13.5
802.11ac (VHT80)		155	155	OFDM	BPSK	29.3

Radiated Emission Test (Below 1GHz):

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

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

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

Power Line Conducted Emission Test:

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

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

Antenna Port Conducted Measurement:

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

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6
802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	BPSK	6.5
802.11ac (VHT40)		38 to 46	38, 46	OFDM	BPSK	13.5
802.11ac (VHT80)		42	42	OFDM	BPSK	29.3
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	BPSK	6
802.11ac (VHT20)		100 to 144	100, 116, 140, 144	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 142	102, 110, 134, 142	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	BPSK	29.3
802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6
802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	BPSK	6.5
802.11ac (VHT40)		151 to 159	151, 159	OFDM	BPSK	13.5
802.11ac (VHT80)		155	155	OFDM	BPSK	29.3

Test Condition:

Applicable To	Environmental Conditions	Input Power (system)	Tested By
RE $\geq$ 1G	22deg. C, 68%RH	120Vac, 60Hz	Tank Wu Nelson Teng
RE<1G	22deg. C, 66%RH	120Vac, 60Hz	Ryan Du
PLC	24deg. C, 75%RH	120Vac, 60Hz	Andy Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	Anderson Chen

3.3 Duty Cycle of Test Signal

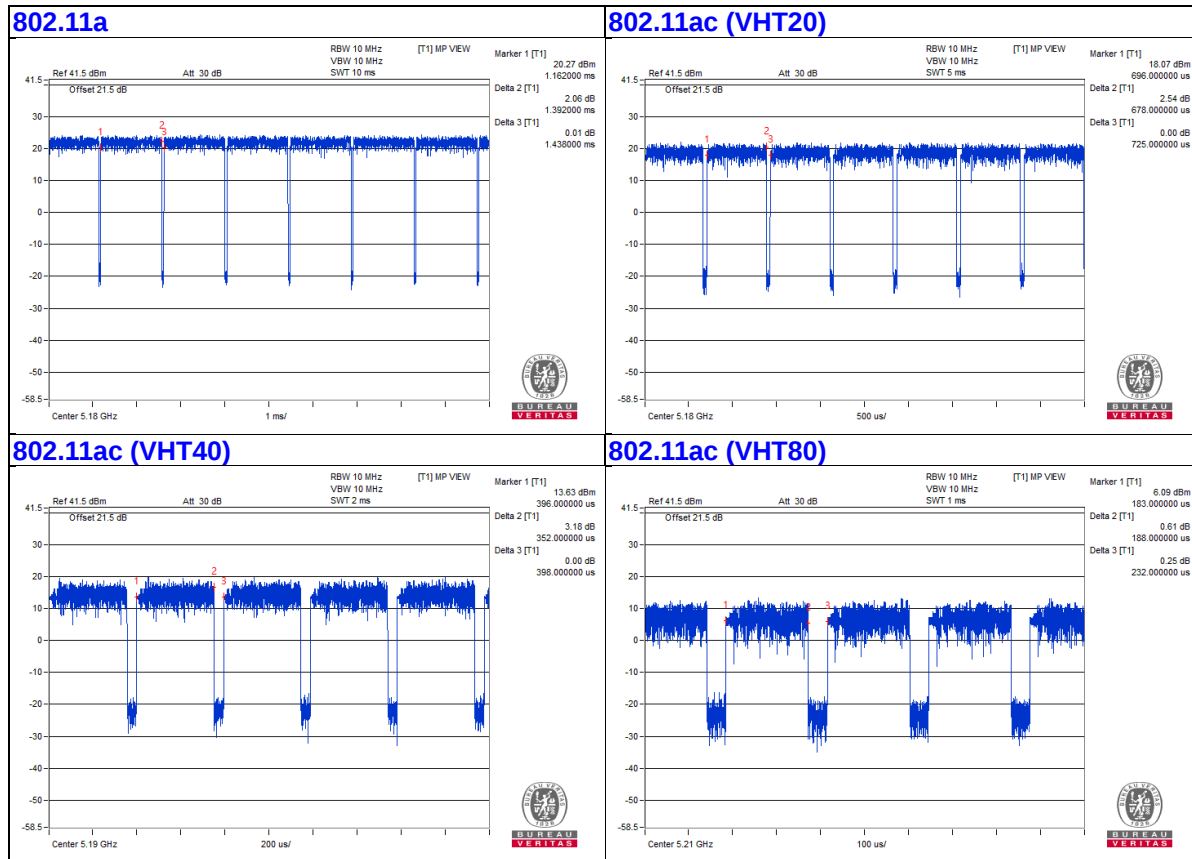
If duty cycle of test signal is < 98%, duty factor shall be considered.

802.11a: Duty cycle = 1.392 ms/1.438 ms = 0.968, Duty factor = $10 * \log (1/\text{Duty cycle}) = 0.14$

802.11ac (VHT20): Duty cycle = 0.678 ms/0.725 ms = 0.935, Duty factor = $10 * \log (1/\text{Duty cycle}) = 0.29$

802.11ac (VHT40): Duty cycle = 0.352 ms/0.398 ms = 0.884, Duty factor = $10 * \log (1/\text{Duty cycle}) = 0.53$

802.11ac (VHT80): Duty cycle = 0.188 ms/0.232 ms = 0.81, Duty factor = $10 * \log (1/\text{Duty cycle}) = 0.91$



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	E5430	GM1SKV1	FCC DoC	Provided by Lab
B.	Test Tool	MTK	NA	NA	NA	Supplied by client
C.	Adapter	DELL	DA90PM111	NA	NA	Provided by Lab
D.	Laptop	DELL	E6420	B92T3R1	FCC DoC	Provided by Lab (For Conduction)

Note:

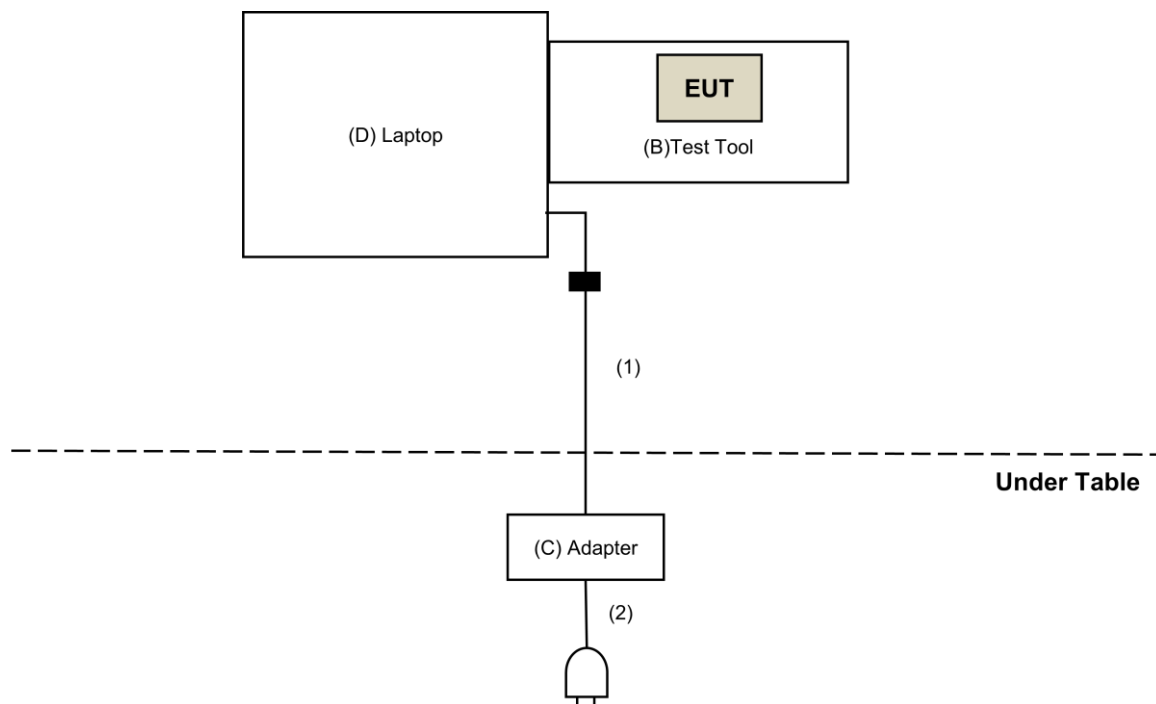
1. All power cords of the above support units are non-shielded (1.8m).

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	DC Cable	1	1.8	No	1	Provided by Lab
2.	AC Cable	1	0.9	No	0	Provided by Lab

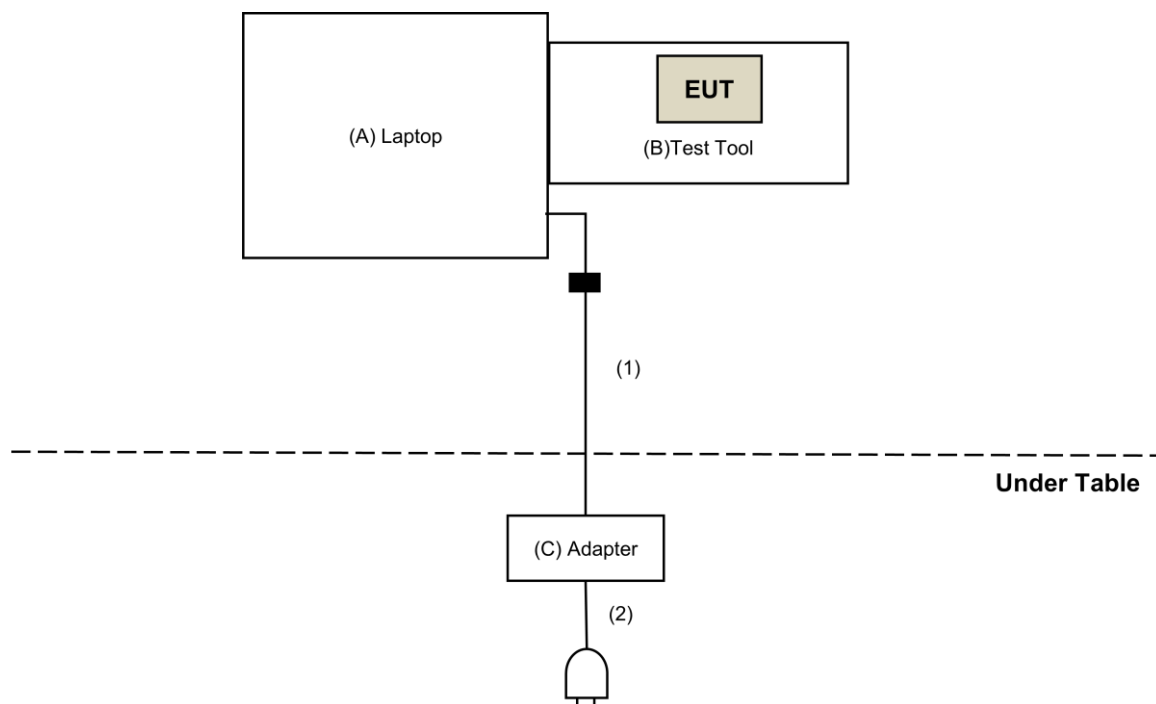
Note: The core(s) is(are) originally attached to the cable(s).

3.4.1 Configuration of System under Test

For Conducted Emissions test:



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 v02r01

KDB 662911 D01 Multiple Transmitter Output v02r01

ANSI C63.10-2013

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

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

NOTE:

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

Limits of unwanted emission out of the restricted bands

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

Note:

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

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

4.1.2 Test Instruments

For OOB test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY50010156	July 17, 2019	July 16, 2020
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Nov. 25, 2018	Nov. 24, 2019
Pre-Amplifier EMCI	EMC12630SE	980384	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC104-SM-SM-1200	160922	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC104-SM-SM-2000	180601	June 10, 2019	June 09, 2020
RF Cable	EMC104-SM-SM-6000	180602	June 10, 2019	June 09, 2020
Spectrum Analyzer Keysight	N9030A	MY54490679	July 17, 2019	July 16, 2020
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 28, 2019	Jan. 27, 2020
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 25, 2018	Nov. 24, 2019
RF Cable	EMC102-KM-KM-1200	160924	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC102-KM-KM-1200	160925	Jan. 28, 2019	Jan. 27, 2020
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 3.
3. Loop antenna was used for all emissions below 30 MHz.
4. Tested Date: July 18, 2019

For other test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY50010156	July 17, 2019	July 16, 2020
Pre-Amplifier EMCI	EMC001340	980142	May 30, 2019	May 29, 2020
Loop Antenna Electro-Metrics	EM-6879	264	Jan. 22, 2019	Jan. 21, 2020
RF Cable	NA	LOOPCAB-001	Jan. 14, 2019	Jan. 13, 2020
RF Cable	NA	LOOPCAB-002	Jan. 14, 2019	Jan. 13, 2020
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-05	Apr. 30, 2019	Apr. 29, 2020
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Nov. 22, 2018	Nov. 21, 2019
RF Cable	8D	966-3-1	Mar. 18, 2019	Mar. 17, 2020
RF Cable	8D	966-3-2	Mar. 18, 2019	Mar. 17, 2020
RF Cable	8D	966-3-3	Mar. 18, 2019	Mar. 17, 2020
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	Sep. 27, 2018	Sep. 26, 2019
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Nov. 25, 2018	Nov. 24, 2019
Pre-Amplifier EMCI	EMC12630SE	980384	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC104-SM-SM-1200	160922	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC104-SM-SM-2000	180601	June 10, 2019	June 09, 2020
RF Cable	EMC104-SM-SM-6000	180602	June 10, 2019	June 09, 2020
Spectrum Analyzer Keysight	N9030A	MY54490679	July 17, 2019	July 16, 2020
Pre-Amplifier EMCI	EMC184045SE	980387	Jan. 28, 2019	Jan. 27, 2020
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170519	Nov. 25, 2018	Nov. 24, 2019
RF Cable	EMC102-KM-KM-1200	160924	Jan. 28, 2019	Jan. 27, 2020
RF Cable	EMC102-KM-KM-1200	160925	Jan. 28, 2019	Jan. 27, 2020
Software	ADT_Radiated V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Spectrum Analyzer R&S	FSV40	100964	June 04, 2019	June 03, 2020
Power meter Anritsu	ML2495A	1014008	May 13, 2019	May 12, 2020
Power sensor Anritsu	MA2411B	0917122	May 13, 2019	May 12, 2020
Fixed Attenuator Mini-Circuits	MDCS18N-10	MDCS18N-10-01	Apr. 15, 2019	Apr. 14, 2020
DC Power Supply Topward	6603D	795558	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	Jan. 09, 2019	Jan. 08, 2020
True RMS Clamp Meter FLUKE	325	31130711WS	May 21, 2019	May 20, 2020

Note:

1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in 966 Chamber No. 3.
3. Loop antenna was used for all emissions below 30 MHz.
4. Tested Date: Sep. 05 to 09, 2019

4.1.3 Test Procedure

For Radiated emission below 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

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

For Radiated emission above 30MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
- f. The test-receiver system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

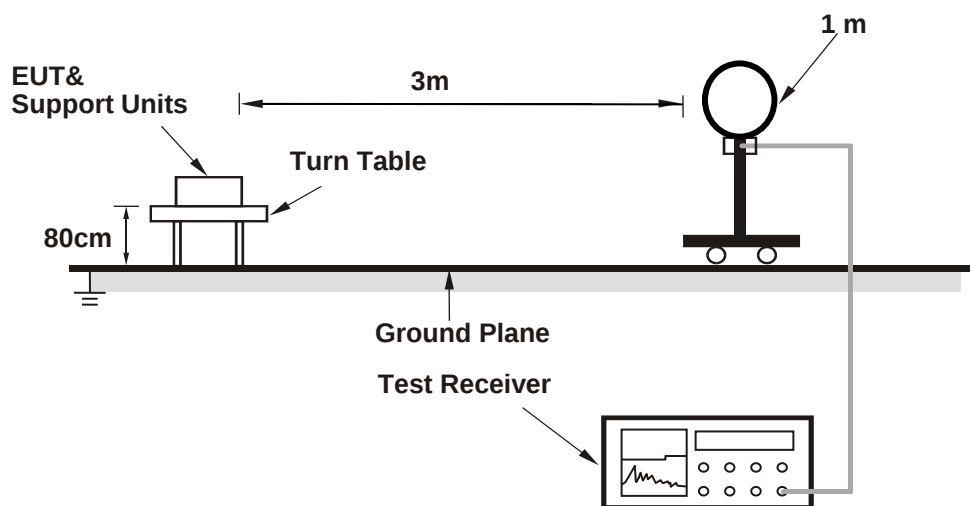
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.4 Deviation from Test Standard

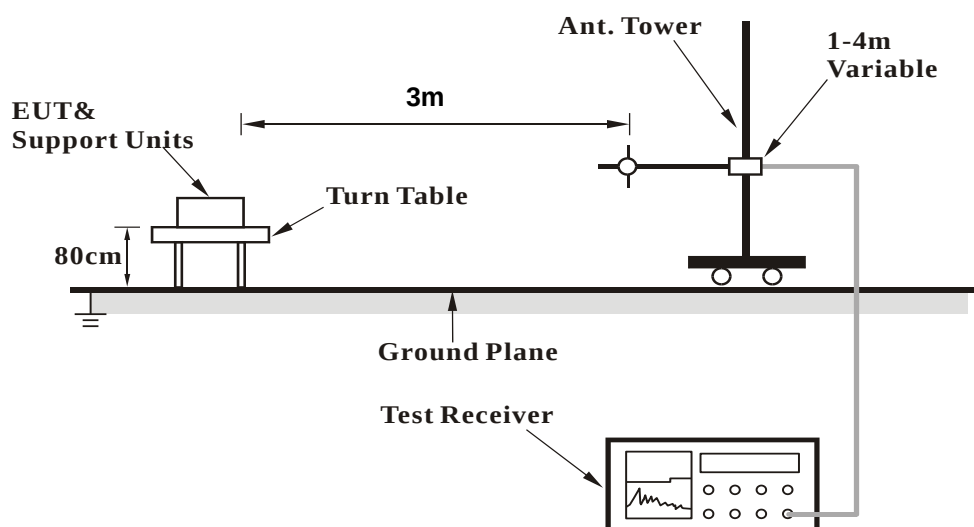
No deviation.

4.1.5 Test Setup

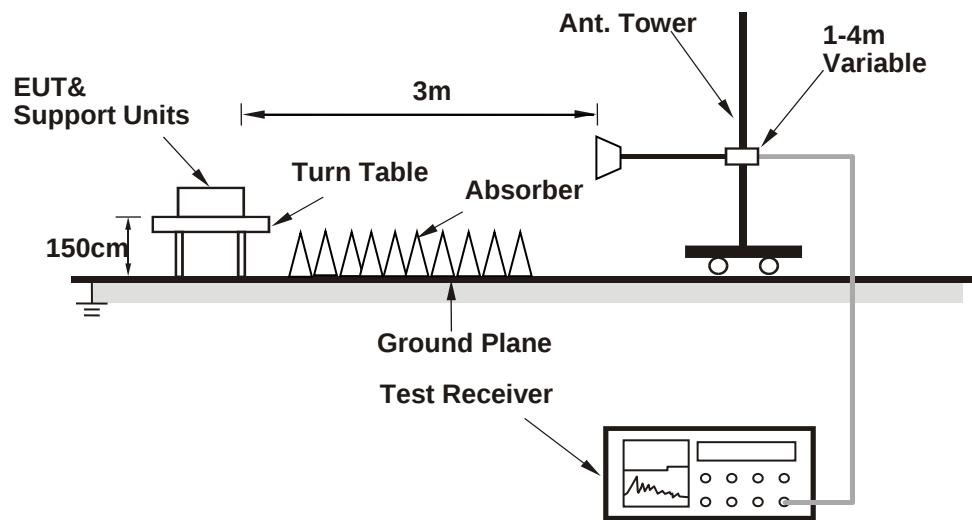
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



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

4.1.6 EUT Operating Condition

- Placed the EUT on the testing table.
- Controlling software (QA tool (0.0.2.6)) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results (Mode 1)

Above 1GHz Data:

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.6 PK	74.0	-9.4	2.23 H	310	61.3	3.3
2	5150.00	50.5 AV	54.0	-3.5	2.23 H	310	47.2	3.3
3	*5180.00	112.3 PK			2.23 H	310	109.0	3.3
4	*5180.00	104.6 AV			2.23 H	310	101.3	3.3
5	#10360.00	46.8 PK	68.2	-21.4	2.05 H	305	34.6	12.2
6	15540.00	48.1 PK	74.0	-25.9	3.54 H	167	34.9	13.2
7	15540.00	38.7 AV	54.0	-15.3	3.54 H	167	25.5	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	66.4 PK	74.0	-7.6	2.16 V	198	63.1	3.3
2	5150.00	53.9 AV	54.0	-0.1	2.16 V	198	50.6	3.3
3	*5180.00	114.6 PK			2.16 V	198	111.3	3.3
4	*5180.00	107.8 AV			2.16 V	198	104.5	3.3
5	#10360.00	48.3 PK	68.2	-19.9	1.18 V	360	36.1	12.2
6	15540.00	47.3 PK	74.0	-26.7	1.36 V	65	34.1	13.2
7	15540.00	36.3 AV	54.0	-17.7	1.36 V	65	23.1	13.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.5 PK	74.0	-15.5	2.23 H	323	55.2	3.3
2	5150.00	45.8 AV	54.0	-8.2	2.23 H	323	42.5	3.3
3	*5200.00	115.6 PK			2.23 H	323	112.5	3.1
4	*5200.00	107.9 AV			2.23 H	323	104.8	3.1
5	#10400.00	47.3 PK	68.2	-20.9	2.08 H	307	34.9	12.4
6	15600.00	47.4 PK	74.0	-26.6	3.91 H	166	34.2	13.2
7	15600.00	37.9 AV	54.0	-16.1	3.91 H	166	24.7	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.7 PK	74.0	-12.3	2.16 V	199	58.4	3.3
2	5150.00	49.1 AV	54.0	-4.9	2.16 V	199	45.8	3.3
3	*5200.00	117.3 PK			2.16 V	199	114.2	3.1
4	*5200.00	110.4 AV			2.16 V	199	107.3	3.1
5	#10400.00	49.3 PK	68.2	-18.9	1.33 V	317	36.9	12.4
6	15600.00	47.8 PK	74.0	-26.2	1.16 V	20	34.6	13.2
7	15600.00	38.1 AV	54.0	-15.9	1.16 V	20	24.9	13.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	115.0 PK			2.23 H	336	112.2	2.8
2	*5240.00	107.4 AV			2.23 H	336	104.6	2.8
3	5350.00	53.8 PK	74.0	-20.2	2.23 H	336	50.8	3.0
4	5350.00	40.7 AV	54.0	-13.3	2.23 H	336	37.7	3.0
5	#10480.00	47.8 PK	68.2	-20.4	2.11 H	304	35.3	12.5
6	15720.00	46.8 PK	74.0	-27.2	3.86 H	169	34.5	12.3
7	15720.00	37.5 AV	54.0	-16.5	3.86 H	169	25.2	12.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	118.2 PK			1.96 V	188	115.4	2.8
2	*5240.00	110.5 AV			1.96 V	188	107.7	2.8
3	5350.00	56.3 PK	74.0	-17.7	1.96 V	188	53.3	3.0
4	5350.00	43.3 AV	54.0	-10.7	1.96 V	188	40.3	3.0
5	#10480.00	49.4 PK	68.2	-18.8	1.29 V	326	36.9	12.5
6	15720.00	47.4 PK	74.0	-26.6	1.18 V	12	35.1	12.3
7	15720.00	37.9 AV	54.0	-16.1	1.18 V	12	25.6	12.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	54.0 PK	74.0	-20.0	2.18 H	350	50.7	3.3
2	5150.00	40.8 AV	54.0	-13.2	2.18 H	350	37.5	3.3
3	*5260.00	115.1 PK			2.18 H	350	112.4	2.7
4	*5260.00	107.7 AV			2.18 H	350	105.0	2.7
5	#10520.00	47.5 PK	68.2	-20.7	2.16 H	315	34.9	12.6
6	15780.00	46.2 PK	74.0	-27.8	3.92 H	170	34.2	12.0
7	15780.00	37.0 AV	54.0	-17.0	3.92 H	170	25.0	12.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.1 PK	74.0	-15.9	3.09 V	188	54.8	3.3
2	5150.00	42.9 AV	54.0	-11.1	3.09 V	188	39.6	3.3
3	*5260.00	118.6 PK			3.09 V	188	115.9	2.7
4	*5260.00	111.1 AV			3.09 V	188	108.4	2.7
5	#10520.00	49.6 PK	68.2	-18.6	1.32 V	330	37.0	12.6
6	15780.00	47.2 PK	74.0	-26.8	1.22 V	2	35.2	12.0
7	15780.00	37.6 AV	54.0	-16.4	1.22 V	2	25.6	12.0

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	115.0 PK			2.21 H	339	112.2	2.8
2	*5300.00	107.4 AV			2.21 H	339	104.6	2.8
3	5350.00	56.0 PK	74.0	-18.0	2.21 H	339	53.0	3.0
4	5350.00	43.0 AV	54.0	-11.0	2.21 H	339	40.0	3.0
5	10600.00	48.0 PK	74.0	-26.0	2.13 H	312	35.5	12.5
6	10600.00	37.8 AV	54.0	-16.2	2.13 H	312	25.3	12.5
7	15900.00	46.4 PK	74.0	-27.6	3.95 H	154	34.1	12.3
8	15900.00	37.4 AV	54.0	-16.6	3.95 H	154	25.1	12.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	118.6 PK			3.11 V	203	115.8	2.8
2	*5300.00	111.6 AV			3.11 V	203	108.8	2.8
3	5350.00	59.7 PK	74.0	-14.3	3.11 V	203	56.7	3.0
4	5350.00	47.9 AV	54.0	-6.1	3.11 V	203	44.9	3.0
5	10600.00	49.0 PK	74.0	-25.0	1.26 V	331	36.5	12.5
6	10600.00	38.0 AV	54.0	-16.0	1.26 V	331	25.5	12.5
7	15900.00	47.2 PK	74.0	-26.8	1.19 V	5	34.9	12.3
8	15900.00	37.4 AV	54.0	-16.6	1.19 V	5	25.1	12.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	114.7 PK			2.27 H	328	111.9	2.8
2	*5320.00	107.1 AV			2.27 H	328	104.3	2.8
3	5350.00	65.3 PK	74.0	-8.7	2.27 H	328	62.3	3.0
4	5350.00	51.0 AV	54.0	-3.0	2.27 H	328	48.0	3.0
5	10640.00	47.9 PK	74.0	-26.1	2.10 H	305	35.4	12.5
6	10640.00	37.6 AV	54.0	-16.4	2.10 H	305	25.1	12.5
7	15960.00	47.0 PK	74.0	-27.0	3.92 H	169	34.3	12.7
8	15960.00	37.8 AV	54.0	-16.2	3.92 H	169	25.1	12.7

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	*5320.00	116.8 PK			2.97 V	203	114.0	2.8
2	*5320.00	109.4 AV			2.97 V	203	106.6	2.8
3	5350.00	68.6 PK	74.0	-5.4	2.97 V	203	65.6	3.0
4	5350.00	53.7 AV	54.0	-0.3	2.97 V	203	50.7	3.0
5	10640.00	49.5 PK	74.0	-24.5	1.20 V	341	37.0	12.5
6	10640.00	38.2 AV	54.0	-15.8	1.20 V	341	25.7	12.5
7	15960.00	47.7 PK	74.0	-26.3	1.15 V	7	35.0	12.7
8	15960.00	37.7 AV	54.0	-16.3	1.15 V	7	25.0	12.7

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.1 PK	74.0	-17.9	2.23 H	329	52.8	3.3
2	5460.00	43.3 AV	54.0	-10.7	2.23 H	329	40.0	3.3
3	#5470.00	64.9 PK	68.2	-3.3	2.23 H	329	61.6	3.3
4	*5500.00	113.2 PK			2.23 H	329	109.9	3.3
5	*5500.00	105.9 AV			2.23 H	329	102.6	3.3
6	11000.00	48.1 PK	74.0	-25.9	2.08 H	308	35.0	13.1
7	11000.00	37.6 AV	54.0	-16.4	2.08 H	308	24.5	13.1
8	#16500.00	47.3 PK	68.2	-20.9	3.90 H	158	33.0	14.3

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	61.5 PK	74.0	-12.5	2.98 V	205	58.2	3.3
2	5460.00	47.6 AV	54.0	-6.4	2.98 V	205	44.3	3.3
3	#5470.00	67.7 PK	68.2	-0.5	2.98 V	205	64.4	3.3
4	*5500.00	115.4 PK			2.98 V	205	112.1	3.3
5	*5500.00	108.2 AV			2.98 V	205	104.9	3.3
6	11000.00	49.8 PK	74.0	-24.2	1.26 V	343	36.7	13.1
7	11000.00	38.6 AV	54.0	-15.4	1.26 V	343	25.5	13.1
8	#16500.00	47.3 PK	68.2	-20.9	1.12 V	14	33.0	14.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	115.4 PK			2.12 H	348	112.1	3.3
2	*5580.00	108.2 AV			2.12 H	348	104.9	3.3
3	11160.00	47.8 PK	74.0	-26.2	2.05 H	297	34.9	12.9
4	11160.00	37.3 AV	54.0	-16.7	2.05 H	297	24.4	12.9
5	#16740.00	47.7 PK	68.2	-20.5	3.95 H	146	32.3	15.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	120.3 PK			2.83 V	203	117.0	3.3
2	*5580.00	112.5 AV			2.83 V	203	109.2	3.3
3	11160.00	49.3 PK	74.0	-24.7	1.29 V	350	36.4	12.9
4	11160.00	38.3 AV	54.0	-15.7	1.29 V	350	25.4	12.9
5	#16740.00	47.4 PK	68.2	-20.8	1.17 V	9	32.0	15.4

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	112.8 PK			2.11 H	349	109.4	3.4
2	*5700.00	105.7 AV			2.11 H	349	102.3	3.4
3	#5725.00	65.1 PK	68.2	-3.1	2.10 H	335	61.6	3.5
4	11400.00	48.2 PK	74.0	-25.8	2.07 H	295	34.9	13.3
5	11400.00	37.9 AV	54.0	-16.1	2.07 H	295	24.6	13.3
6	#17100.00	47.2 PK	68.2	-21.0	3.90 H	168	30.8	16.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	115.3 PK			2.93 V	194	111.9	3.4
2	*5700.00	108.4 AV			2.93 V	194	105.0	3.4
3	#5725.00	67.8 PK	68.2	-0.4	2.93 V	194	64.3	3.5
4	11400.00	50.3 PK	74.0	-23.7	1.30 V	332	37.0	13.3
5	11400.00	39.0 AV	54.0	-15.0	1.30 V	332	25.7	13.3
6	#17100.00	47.5 PK	68.2	-20.7	1.12 V	9	31.1	16.4

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	49.6 PK	74.0	-24.4	2.09 H	354	46.3	3.3
2	5460.00	38.7 AV	54.0	-15.3	2.09 H	354	35.4	3.3
3	#5470.00	49.7 PK	68.2	-18.5	2.09 H	354	46.4	3.3
4	*5720.00	115.6 PK			2.09 H	354	112.1	3.5
5	*5720.00	108.2 AV			2.09 H	354	104.7	3.5
6	#5850.00	59.8 PK	68.2	-8.4	2.09 H	354	55.8	4.0
7	11440.00	47.9 PK	74.0	-26.1	2.05 H	306	34.7	13.2
8	11440.00	37.2 AV	54.0	-16.8	2.05 H	306	24.0	13.2
9	#17160.00	47.9 PK	68.2	-20.3	3.89 H	160	31.1	16.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	49.9 PK	74.0	-24.1	2.89 V	203	46.6	3.3
2	5460.00	39.2 AV	54.0	-14.8	2.89 V	203	35.9	3.3
3	#5470.00	50.1 PK	68.2	-18.1	2.89 V	203	46.8	3.3
4	*5720.00	120.4 PK			2.89 V	203	116.9	3.5
5	*5720.00	112.7 AV			2.89 V	203	109.2	3.5
6	#5850.00	63.1 PK	68.2	-5.1	2.89 V	203	59.1	4.0
7	11440.00	49.7 PK	74.0	-24.3	1.20 V	359	36.5	13.2
8	11440.00	38.3 AV	54.0	-15.7	1.20 V	359	25.1	13.2
9	#17160.00	46.7 PK	68.2	-21.5	1.07 V	4	29.9	16.8

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5588.82	62.1 PK	68.2	-6.1	1.52 H	171	58.8	3.3
2	*5745.00	114.3 PK			1.52 H	171	110.7	3.6
3	*5745.00	106.6 AV			1.52 H	171	103.0	3.6
4	#5961.18	62.1 PK	68.2	-6.1	1.52 H	171	57.9	4.2
5	11490.00	48.1 PK	74.0	-25.9	2.07 H	284	35.0	13.1
6	11490.00	37.6 AV	54.0	-16.4	2.07 H	284	24.5	13.1
7	#17235.00	47.9 PK	68.2	-20.3	3.99 H	151	30.9	17.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5614.09	62.4 PK	68.2	-5.8	2.27 V	192	59.1	3.3
2	*5745.00	119.9 PK			2.27 V	192	116.3	3.6
3	*5745.00	111.8 AV			2.27 V	192	108.2	3.6
4	#5939.75	62.0 PK	68.2	-6.2	2.27 V	192	57.8	4.2
5	11490.00	53.6 PK	74.0	-20.4	1.27 V	26	40.5	13.1
6	11490.00	42.7 AV	54.0	-11.3	1.27 V	26	29.6	13.1
7	#17235.00	53.9 PK	68.2	-14.3	1.78 V	180	36.9	17.0

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5574.32	62.3 PK	68.2	-5.9	1.50 H	169	59.0	3.3
2	*5785.00	113.7 PK			1.50 H	169	109.9	3.8
3	*5785.00	106.2 AV			1.50 H	169	102.4	3.8
4	#5934.25	63.4 PK	68.2	-4.8	1.50 H	169	59.2	4.2
5	11570.00	49.5 PK	74.0	-24.5	1.15 H	322	36.8	12.7
6	11570.00	38.7 AV	54.0	-15.3	1.15 H	322	26.0	12.7
7	#17355.00	52.6 PK	68.2	-15.6	1.72 H	193	35.7	16.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5604.16	61.8 PK	68.2	-6.4	2.22 V	192	58.5	3.3
2	*5785.00	120.9 PK			2.22 V	192	117.1	3.8
3	*5785.00	112.7 AV			2.22 V	192	108.9	3.8
4	#5949.10	61.9 PK	68.2	-6.3	2.22 V	192	57.7	4.2
5	11570.00	53.8 PK	74.0	-20.2	1.24 V	27	41.1	12.7
6	11570.00	43.3 AV	54.0	-10.7	1.24 V	27	30.6	12.7
7	#17355.00	56.5 PK	68.2	-11.7	1.71 V	170	39.6	16.9

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5608.63	61.7 PK	68.2	-6.5	1.45 H	170	58.4	3.3
2	*5825.00	113.9 PK			1.45 H	170	110.0	3.9
3	*5825.00	106.1 AV			1.45 H	170	102.2	3.9
4	#5992.80	62.0 PK	68.2	-6.2	1.45 H	170	57.9	4.1
5	11650.00	47.9 PK	74.0	-26.1	2.09 H	298	35.1	12.8
6	11650.00	37.1 AV	54.0	-16.9	2.09 H	298	24.3	12.8
7	#17475.00	47.6 PK	68.2	-20.6	3.98 H	144	30.1	17.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5552.96	62.9 PK	68.2	-5.3	2.16 V	191	59.6	3.3
2	*5825.00	120.5 PK			2.16 V	191	116.6	3.9
3	*5825.00	112.2 AV			2.16 V	191	108.3	3.9
4	#5951.10	62.2 PK	68.2	-6.0	2.16 V	191	58.0	4.2
5	11650.00	49.4 PK	74.0	-24.6	1.30 V	328	36.6	12.8
6	11650.00	38.5 AV	54.0	-15.5	1.30 V	328	25.7	12.8
7	#17475.00	47.5 PK	68.2	-20.7	1.13 V	6	30.0	17.5

REMARKS:

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

802.11ac (VHT20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.2 PK	74.0	-17.8	1.48 H	175	52.9	3.3
2	5150.00	45.7 AV	54.0	-8.3	1.48 H	175	42.4	3.3
3	*5180.00	106.5 PK			1.48 H	175	103.2	3.3
4	*5180.00	98.9 AV			1.48 H	175	95.6	3.3
5	#10360.00	48.4 PK	68.2	-19.8	2.16 H	294	36.2	12.2
6	15540.00	47.3 PK	74.0	-26.7	3.93 H	154	34.1	13.2
7	15540.00	38.2 AV	54.0	-15.8	3.93 H	154	25.0	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.7 PK	74.0	-15.3	2.15 V	187	55.4	3.3
2	5150.00	48.3 AV	54.0	-5.7	2.15 V	187	45.0	3.3
3	*5180.00	112.2 PK			2.15 V	187	108.9	3.3
4	*5180.00	104.7 AV			2.15 V	187	101.4	3.3
5	#10360.00	49.2 PK	68.2	-19.0	1.24 V	326	37.0	12.2
6	15540.00	47.5 PK	74.0	-26.5	1.09 V	12	34.3	13.2
7	15540.00	38.0 AV	54.0	-16.0	1.09 V	12	24.8	13.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	52.6 PK	74.0	-21.4	1.44 H	168	49.3	3.3
2	5150.00	42.0 AV	54.0	-12.0	1.44 H	168	38.7	3.3
3	*5200.00	106.8 PK			1.44 H	168	103.7	3.1
4	*5200.00	99.3 AV			1.44 H	168	96.2	3.1
5	#10400.00	47.7 PK	68.2	-20.5	2.15 H	300	35.3	12.4
6	15600.00	47.1 PK	74.0	-26.9	3.92 H	157	33.9	13.2
7	15600.00	38.0 AV	54.0	-16.0	3.92 H	157	24.8	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.5 PK	74.0	-18.5	2.06 V	196	52.2	3.3
2	5150.00	45.1 AV	54.0	-8.9	2.06 V	196	41.8	3.3
3	*5200.00	113.1 PK			2.06 V	196	110.0	3.1
4	*5200.00	105.8 AV			2.06 V	196	102.7	3.1
5	#10400.00	49.4 PK	68.2	-18.8	1.32 V	341	37.0	12.4
6	15600.00	47.1 PK	74.0	-26.9	1.08 V	20	33.9	13.2
7	15600.00	37.5 AV	54.0	-16.5	1.08 V	20	24.3	13.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	106.9 PK			1.38 H	180	104.1	2.8
2	*5240.00	99.5 AV			1.38 H	180	96.7	2.8
3	5350.00	53.0 PK	74.0	-21.0	1.38 H	180	50.0	3.0
4	5350.00	40.3 AV	54.0	-13.7	1.38 H	180	37.3	3.0
5	#10480.00	47.4 PK	68.2	-20.8	2.11 H	319	34.9	12.5
6	15720.00	46.7 PK	74.0	-27.3	3.90 H	178	34.4	12.3
7	15720.00	37.4 AV	54.0	-16.6	3.90 H	178	25.1	12.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	114.1 PK			2.07 V	199	111.3	2.8
2	*5240.00	106.0 AV			2.07 V	199	103.2	2.8
3	5350.00	54.2 PK	74.0	-19.8	2.07 V	199	51.2	3.0
4	5350.00	41.5 AV	54.0	-12.5	2.07 V	199	38.5	3.0
5	#10480.00	49.0 PK	68.2	-19.2	1.33 V	323	36.5	12.5
6	15720.00	47.3 PK	74.0	-26.7	1.11 V	14	35.0	12.3
7	15720.00	37.6 AV	54.0	-16.4	1.11 V	14	25.3	12.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	52.7 PK	74.0	-21.3	1.42 H	169	49.4	3.3
2	5150.00	40.0 AV	54.0	-14.0	1.42 H	169	36.7	3.3
3	*5260.00	106.7 PK			1.42 H	169	104.0	2.7
4	*5260.00	99.3 AV			1.42 H	169	96.6	2.7
5	#10520.00	47.7 PK	68.2	-20.5	2.08 H	310	35.1	12.6
6	15780.00	47.5 PK	74.0	-26.5	3.95 H	181	35.5	12.0
7	15780.00	38.2 AV	54.0	-15.8	3.95 H	181	26.2	12.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	54.2 PK	74.0	-19.8	3.18 V	191	50.9	3.3
2	5150.00	42.3 AV	54.0	-11.7	3.18 V	191	39.0	3.3
3	*5260.00	113.9 PK			3.18 V	191	111.2	2.7
4	*5260.00	106.6 AV			3.18 V	191	103.9	2.7
5	#10520.00	49.8 PK	68.2	-18.4	1.33 V	318	37.2	12.6
6	15780.00	47.4 PK	74.0	-26.6	1.07 V	19	35.4	12.0
7	15780.00	37.4 AV	54.0	-16.6	1.07 V	19	25.4	12.0

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	106.5 PK			1.47 H	184	103.7	2.8
2	*5300.00	98.9 AV			1.47 H	184	96.1	2.8
3	5350.00	52.9 PK	74.0	-21.1	1.47 H	184	49.9	3.0
4	5350.00	42.3 AV	54.0	-11.7	1.47 H	184	39.3	3.0
5	10600.00	47.6 PK	74.0	-26.4	2.14 H	321	35.1	12.5
6	10600.00	37.2 AV	54.0	-16.8	2.14 H	321	24.7	12.5
7	15900.00	47.2 PK	74.0	-26.8	3.87 H	170	34.9	12.3
8	15900.00	38.1 AV	54.0	-15.9	3.87 H	170	25.8	12.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	113.5 PK			3.11 V	187	110.7	2.8
2	*5300.00	106.1 AV			3.11 V	187	103.3	2.8
3	5350.00	56.1 PK	74.0	-17.9	3.11 V	187	53.1	3.0
4	5350.00	45.5 AV	54.0	-8.5	3.11 V	187	42.5	3.0
5	10600.00	50.0 PK	74.0	-24.0	1.30 V	306	37.5	12.5
6	10600.00	38.5 AV	54.0	-15.5	1.30 V	306	26.0	12.5
7	15900.00	47.3 PK	74.0	-26.7	1.11 V	20	35.0	12.3
8	15900.00	37.5 AV	54.0	-16.5	1.11 V	20	25.2	12.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	107.1 PK			1.43 H	189	104.3	2.8
2	*5320.00	99.3 AV			1.43 H	189	96.5	2.8
3	5350.00	56.8 PK	74.0	-17.2	1.43 H	189	53.8	3.0
4	5350.00	46.0 AV	54.0	-8.0	1.43 H	189	43.0	3.0
5	10640.00	48.1 PK	74.0	-25.9	2.06 H	311	35.6	12.5
6	10640.00	37.8 AV	54.0	-16.2	2.06 H	311	25.3	12.5
7	15960.00	46.4 PK	74.0	-27.6	3.89 H	155	33.7	12.7
8	15960.00	37.4 AV	54.0	-16.6	3.89 H	155	24.7	12.7
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	*5320.00	113.7 PK			3.17 V	192	110.9	2.8
2	*5320.00	106.5 AV			3.17 V	192	103.7	2.8
3	5350.00	57.2 PK	74.0	-16.8	3.17 V	192	54.2	3.0
4	5350.00	47.5 AV	54.0	-6.5	3.17 V	192	44.5	3.0
5	10640.00	50.0 PK	74.0	-24.0	1.34 V	327	37.5	12.5
6	10640.00	38.6 AV	54.0	-15.4	1.34 V	327	26.1	12.5
7	15960.00	47.0 PK	74.0	-27.0	1.04 V	21	34.3	12.7
8	15960.00	37.2 AV	54.0	-16.8	1.04 V	21	24.5	12.7

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.9 PK	74.0	-19.1	1.39 H	195	51.6	3.3
2	5460.00	42.9 AV	54.0	-11.1	1.39 H	195	39.6	3.3
3	#5470.00	63.8 PK	68.2	-4.4	1.39 H	195	60.5	3.3
4	*5500.00	106.9 PK			1.39 H	195	103.6	3.3
5	*5500.00	99.1 AV			1.39 H	195	95.8	3.3
6	11000.00	48.3 PK	74.0	-25.7	2.12 H	297	35.2	13.1
7	11000.00	37.8 AV	54.0	-16.2	2.12 H	297	24.7	13.1
8	#16500.00	46.6 PK	68.2	-21.6	3.91 H	163	32.3	14.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.3 PK	74.0	-16.7	3.16 V	191	54.0	3.3
2	5460.00	45.3 AV	54.0	-8.7	3.16 V	191	42.0	3.3
3	#5470.00	67.3 PK	68.2	-0.9	3.16 V	191	64.0	3.3
4	*5500.00	113.1 PK			3.16 V	191	109.8	3.3
5	*5500.00	106.3 AV			3.16 V	191	103.0	3.3
6	11000.00	49.6 PK	74.0	-24.4	1.34 V	333	36.5	13.1
7	11000.00	38.2 AV	54.0	-15.8	1.34 V	333	25.1	13.1
8	#16500.00	47.0 PK	68.2	-21.2	1.02 V	25	32.7	14.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	107.2 PK			1.45 H	191	103.9	3.3
2	*5580.00	99.6 AV			1.45 H	191	96.3	3.3
3	11160.00	47.7 PK	74.0	-26.3	2.13 H	302	34.8	12.9
4	11160.00	37.2 AV	54.0	-16.8	2.13 H	302	24.3	12.9
5	#16740.00	47.5 PK	68.2	-20.7	3.95 H	180	32.1	15.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	113.2 PK			3.10 V	192	109.9	3.3
2	*5580.00	106.3 AV			3.10 V	192	103.0	3.3
3	11160.00	50.4 PK	74.0	-23.6	1.37 V	332	37.5	12.9
4	11160.00	39.1 AV	54.0	-14.9	1.37 V	332	26.2	12.9
5	#16740.00	47.6 PK	68.2	-20.6	1.02 V	32	32.2	15.4

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	108.3 PK			1.43 H	181	104.9	3.4
2	*5700.00	101.3 AV			1.43 H	181	97.9	3.4
3	#5725.00	64.2 PK	68.2	-4.0	1.43 H	181	60.7	3.5
4	11400.00	47.8 PK	74.0	-26.2	2.09 H	313	34.5	13.3
5	11400.00	37.5 AV	54.0	-16.5	2.09 H	313	24.2	13.3
6	#17100.00	47.5 PK	68.2	-20.7	3.92 H	175	31.1	16.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	114.4 PK			2.91 V	203	111.0	3.4
2	*5700.00	107.5 AV			2.91 V	203	104.1	3.4
3	#5725.00	68.0 PK	68.2	-0.2	2.91 V	203	64.5	3.5
4	11400.00	49.8 PK	74.0	-24.2	1.35 V	309	36.5	13.3
5	11400.00	38.4 AV	54.0	-15.6	1.35 V	309	25.1	13.3
6	#17100.00	47.1 PK	68.2	-21.1	1.02 V	15	30.7	16.4

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	49.8 PK	74.0	-24.2	1.46 H	183	46.5	3.3
2	5460.00	38.4 AV	54.0	-15.6	1.46 H	183	35.1	3.3
3	#5470.00	46.3 PK	68.2	-21.9	1.46 H	183	43.0	3.3
4	*5720.00	107.8 PK			1.46 H	183	104.3	3.5
5	*5720.00	101.1 AV			1.46 H	183	97.6	3.5
6	#5850.00	54.6 PK	68.2	-13.6	1.46 H	183	50.6	4.0
7	11440.00	47.7 PK	74.0	-26.3	2.11 H	300	34.5	13.2
8	11440.00	37.3 AV	54.0	-16.7	2.11 H	300	24.1	13.2
9	#17160.00	47.3 PK	68.2	-20.9	3.95 H	166	30.5	16.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	50.1 PK	74.0	-23.9	2.99 V	193	46.8	3.3
2	5460.00	38.8 AV	54.0	-15.2	2.99 V	193	35.5	3.3
3	#5470.00	49.4 PK	68.2	-18.8	2.99 V	193	46.1	3.3
4	*5720.00	114.7 PK			2.99 V	193	111.2	3.5
5	*5720.00	107.1 AV			2.99 V	193	103.6	3.5
6	#5850.00	57.9 PK	68.2	-10.3	2.99 V	193	53.9	4.0
7	11440.00	50.0 PK	74.0	-24.0	1.37 V	302	36.8	13.2
8	11440.00	38.9 AV	54.0	-15.1	1.37 V	302	25.7	13.2
9	#17160.00	47.2 PK	68.2	-21.0	1.02 V	11	30.4	16.8

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5586.72	61.6 PK	68.2	-6.6	1.51 H	171	58.3	3.3
2	*5745.00	108.3 PK			1.51 H	171	104.7	3.6
3	*5745.00	100.9 AV			1.51 H	171	97.3	3.6
4	#5953.56	62.4 PK	68.2	-5.8	1.51 H	171	58.2	4.2
5	11490.00	47.6 PK	74.0	-26.4	2.10 H	329	34.5	13.1
6	11490.00	37.6 AV	54.0	-16.4	2.10 H	329	24.5	13.1
7	#17235.00	47.3 PK	68.2	-20.9	3.87 H	189	30.3	17.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5583.90	61.8 PK	68.2	-6.4	2.37 V	191	58.5	3.3
2	*5745.00	113.9 PK			2.37 V	191	110.3	3.6
3	*5745.00	106.6 AV			2.37 V	191	103.0	3.6
4	#6022.24	61.8 PK	68.2	-6.4	2.32 V	191	57.7	4.1
5	11490.00	49.6 PK	74.0	-24.4	1.38 V	314	36.5	13.1
6	11490.00	38.3 AV	54.0	-15.7	1.38 V	314	25.2	13.1
7	#17235.00	47.6 PK	68.2	-20.6	1.08 V	28	30.6	17.0

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5631.89	62.6 PK	68.2	-5.6	1.08 H	172	59.3	3.3
2	*5785.00	108.2 PK			1.08 H	172	104.4	3.8
3	*5785.00	100.7 AV			1.08 H	172	96.9	3.8
4	#5966.35	62.6 PK	68.2	-5.6	1.08 H	172	58.4	4.2
5	11570.00	48.0 PK	74.0	-26.0	2.04 H	317	35.3	12.7
6	11570.00	37.5 AV	54.0	-16.5	2.04 H	317	24.8	12.7
7	#17355.00	47.0 PK	68.2	-21.2	3.88 H	181	30.1	16.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5616.35	62.3 PK	68.2	-5.9	2.24 V	192	59.0	3.3
2	*5785.00	114.4 PK			2.24 V	192	110.6	3.8
3	*5785.00	106.9 AV			2.24 V	192	103.1	3.8
4	#5950.97	62.4 PK	68.2	-5.8	2.24 V	192	58.2	4.2
5	11570.00	49.9 PK	74.0	-24.1	1.36 V	304	37.2	12.7
6	11570.00	38.5 AV	54.0	-15.5	1.36 V	304	25.8	12.7
7	#17355.00	47.9 PK	68.2	-20.3	1.06 V	13	31.0	16.9

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5559.48	61.9 PK	68.2	-6.3	1.17 H	172	58.6	3.3
2	*5825.00	108.3 PK			1.17 H	172	104.4	3.9
3	*5825.00	100.9 AV			1.17 H	172	97.0	3.9
4	#5945.25	61.9 PK	68.2	-6.3	1.17 H	172	57.7	4.2
5	11650.00	47.6 PK	74.0	-26.4	2.04 H	316	34.8	12.8
6	11650.00	37.2 AV	54.0	-16.8	2.04 H	316	24.4	12.8
7	#17475.00	47.3 PK	68.2	-20.9	3.96 H	169	29.8	17.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5621.83	62.9 PK	68.2	-5.3	2.18 V	190	59.6	3.3
2	*5825.00	114.4 PK			2.18 V	190	110.5	3.9
3	*5825.00	106.8 AV			2.18 V	190	102.9	3.9
4	#6011.56	62.4 PK	68.2	-5.8	2.18 V	190	58.3	4.1
5	11650.00	49.2 PK	74.0	-24.8	1.38 V	319	36.4	12.8
6	11650.00	38.2 AV	54.0	-15.8	1.38 V	319	25.4	12.8
7	#17475.00	47.6 PK	68.2	-20.6	1.12 V	6	30.1	17.5

REMARKS:

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

802.11ac (VHT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.6 PK	74.0	-15.4	1.13 H	166	55.3	3.3
2	5150.00	48.1 AV	54.0	-5.9	1.13 H	166	44.8	3.3
3	*5190.00	102.8 PK			1.13 H	166	99.6	3.2
4	*5190.00	95.2 AV			1.13 H	166	92.0	3.2
5	5350.00	52.0 PK	74.0	-22.0	1.13 H	166	49.0	3.0
6	5350.00	41.2 AV	54.0	-12.8	1.13 H	166	38.2	3.0
7	#10380.00	47.5 PK	68.2	-20.7	2.07 H	321	35.1	12.4
8	15570.00	47.8 PK	74.0	-26.2	3.92 H	178	34.5	13.3
9	15570.00	36.4 AV	54.0	-17.6	3.92 H	178	23.1	13.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.6 PK	74.0	-13.4	3.04 V	191	57.3	3.3
2	5150.00	51.7 AV	54.0	-2.3	3.04 V	191	48.4	3.3
3	*5190.00	108.7 PK			3.04 V	191	105.5	3.2
4	*5190.00	101.1 AV			3.04 V	191	97.9	3.2
5	5350.00	52.3 PK	74.0	-21.7	3.04 V	191	49.3	3.0
6	5350.00	41.6 AV	54.0	-12.4	3.04 V	191	38.6	3.0
7	#10380.00	48.9 PK	68.2	-19.3	1.42 V	323	36.5	12.4
8	15570.00	47.2 PK	74.0	-26.8	1.11 V	24	33.9	13.3
9	15570.00	37.1 AV	54.0	-16.9	1.11 V	24	23.8	13.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	102.1 PK			1.12 H	163	99.2	2.9
2	*5230.00	94.8 AV			1.12 H	163	91.9	2.9
3	5350.00	51.5 PK	74.0	-22.5	1.12 H	163	48.5	3.0
4	5350.00	41.1 AV	54.0	-12.9	1.12 H	163	38.1	3.0
5	#10460.00	48.4 PK	68.2	-19.8	2.06 H	319	35.9	12.5
6	15690.00	47.5 PK	74.0	-26.5	3.92 H	179	35.0	12.5
7	15690.00	37.9 AV	54.0	-16.1	3.92 H	179	25.4	12.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	108.9 PK			2.03 V	197	106.0	2.9
2	*5230.00	101.8 AV			2.03 V	197	98.9	2.9
3	5350.00	51.8 PK	74.0	-22.2	2.03 V	197	48.8	3.0
4	5350.00	41.8 AV	54.0	-12.2	2.03 V	197	38.8	3.0
5	#10460.00	48.8 PK	68.2	-19.4	1.42 V	315	36.3	12.5
6	15690.00	46.7 PK	74.0	-27.3	1.10 V	11	34.2	12.5
7	15690.00	36.8 AV	54.0	-17.2	1.10 V	11	24.3	12.5

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	51.7 PK	74.0	-22.3	1.18 H	163	48.4	3.3
2	5150.00	41.4 AV	54.0	-12.6	1.18 H	163	38.1	3.3
3	*5270.00	102.3 PK			1.18 H	163	99.6	2.7
4	*5270.00	95.2 AV			1.18 H	163	92.5	2.7
5	5350.00	55.4 PK	74.0	-18.6	1.18 H	163	52.4	3.0
6	5350.00	44.6 AV	54.0	-9.4	1.18 H	163	41.6	3.0
7	#10540.00	47.8 PK	68.2	-20.4	2.06 H	316	35.2	12.6
8	15810.00	47.9 PK	74.0	-26.1	3.88 H	191	35.9	12.0
9	15810.00	38.2 AV	54.0	-15.8	3.88 H	191	26.2	12.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.5 PK	74.0	-20.5	2.04 V	199	50.2	3.3
2	5150.00	43.1 AV	54.0	-10.9	2.04 V	199	39.8	3.3
3	*5270.00	110.6 PK			2.04 V	199	107.9	2.7
4	*5270.00	102.5 AV			2.04 V	199	99.8	2.7
5	5350.00	59.2 PK	74.0	-14.8	2.04 V	199	56.2	3.0
6	5350.00	48.5 AV	54.0	-5.5	2.04 V	199	45.5	3.0
7	#10540.00	48.8 PK	68.2	-19.4	1.42 V	324	36.2	12.6
8	15810.00	47.2 PK	74.0	-26.8	1.10 V	16	35.2	12.0
9	15810.00	37.1 AV	54.0	-16.9	1.10 V	16	25.1	12.0

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	102.4 PK			1.21 H	163	99.6	2.8
2	*5310.00	95.0 AV			1.21 H	163	92.2	2.8
3	5350.00	59.4 PK	74.0	-14.6	1.21 H	163	56.4	3.0
4	5350.00	48.7 AV	54.0	-5.3	1.21 H	163	45.7	3.0
5	10620.00	48.8 PK	74.0	-25.2	2.07 H	313	36.3	12.5
6	10620.00	38.2 AV	54.0	-15.8	2.07 H	313	25.7	12.5
7	15930.00	48.3 PK	74.0	-25.7	3.90 H	176	35.9	12.4
8	15930.00	38.4 AV	54.0	-15.6	3.90 H	176	26.0	12.4
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	*5310.00	111.1 PK			2.08 V	197	108.3	2.8
2	*5310.00	102.6 AV			2.08 V	197	99.8	2.8
3	5350.00	63.6 PK	74.0	-10.4	2.08 V	197	60.6	3.0
4	5350.00	53.8 AV	54.0	-0.2	2.08 V	197	50.8	3.0
5	10620.00	48.7 PK	74.0	-25.3	1.42 V	331	36.2	12.5
6	10620.00	37.6 AV	54.0	-16.4	1.42 V	331	25.1	12.5
7	15930.00	47.0 PK	74.0	-27.0	1.14 V	8	34.6	12.4
8	15930.00	37.1 AV	54.0	-16.9	1.14 V	8	24.7	12.4

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.1 PK	74.0	-17.9	1.21 H	170	52.8	3.3
2	5460.00	46.0 AV	54.0	-8.0	1.21 H	170	42.7	3.3
3	#5470.00	65.3 PK	68.2	-2.9	1.21 H	170	62.0	3.3
4	*5510.00	102.1 PK			1.21 H	170	98.8	3.3
5	*5510.00	94.6 AV			1.21 H	170	91.3	3.3
6	11020.00	48.6 PK	74.0	-25.4	2.07 H	326	35.6	13.0
7	11020.00	37.9 AV	54.0	-16.1	2.07 H	326	24.9	13.0
8	#16530.00	47.7 PK	68.2	-20.5	3.90 H	187	33.1	14.6

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	5460.00	59.2 PK	74.0	-14.8	2.77 V	204	55.9	3.3
2	5460.00	49.2 AV	54.0	-4.8	2.77 V	204	45.9	3.3
3	#5470.00	67.6 PK	68.2	-0.6	2.77 V	204	64.3	3.3
4	*5510.00	109.9 PK			2.77 V	204	106.6	3.3
5	*5510.00	102.3 AV			2.77 V	204	99.0	3.3
6	11020.00	48.2 PK	74.0	-25.8	1.37 V	335	35.2	13.0
7	11020.00	37.6 AV	54.0	-16.4	1.37 V	335	24.6	13.0
8	#16530.00	47.1 PK	68.2	-21.1	1.15 V	13	32.5	14.6

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	103.2 PK			1.23 H	183	99.9	3.3
2	*5550.00	95.7 AV			1.23 H	183	92.4	3.3
3	11100.00	48.2 PK	74.0	-25.8	2.07 H	321	35.5	12.7
4	11100.00	37.8 AV	54.0	-16.2	2.07 H	321	25.1	12.7
5	#16650.00	47.3 PK	68.2	-20.9	3.97 H	194	32.1	15.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	110.5 PK			3.01 V	202	107.2	3.3
2	*5550.00	103.1 AV			3.01 V	202	99.8	3.3
3	11100.00	48.3 PK	74.0	-25.7	1.46 V	338	35.6	12.7
4	11100.00	37.6 AV	54.0	-16.4	1.46 V	338	24.9	12.7
5	#16650.00	46.7 PK	68.2	-21.5	1.16 V	31	31.5	15.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	103.8 PK			1.21 H	176	100.4	3.4
2	*5670.00	96.3 AV			1.21 H	176	92.9	3.4
3	#5725.00	57.9 PK	68.2	-10.3	1.21 H	176	54.4	3.5
4	11340.00	48.0 PK	74.0	-26.0	2.11 H	309	34.6	13.4
5	11340.00	37.4 AV	54.0	-16.6	2.11 H	309	24.0	13.4
6	#17010.00	47.3 PK	68.2	-20.9	3.92 H	188	31.1	16.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	111.2 PK			2.99 V	192	107.8	3.4
2	*5670.00	104.3 AV			2.99 V	192	100.9	3.4
3	#5725.00	61.8 PK	68.2	-6.4	2.99 V	192	58.3	3.5
4	11340.00	48.8 PK	74.0	-25.2	1.42 V	327	35.4	13.4
5	11340.00	37.9 AV	54.0	-16.1	1.42 V	327	24.5	13.4
6	#17010.00	47.0 PK	68.2	-21.2	1.14 V	27	30.8	16.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	49.5 PK	68.2	-18.7	1.09 H	153	46.2	3.3
2	*5710.00	102.1 PK			1.09 H	153	98.6	3.5
3	*5710.00	94.7 AV			1.09 H	153	91.2	3.5
4	#5850.00	52.7 PK	68.2	-15.5	1.09 H	153	48.7	4.0
5	11420.00	48.3 PK	74.0	-25.7	2.02 H	319	35.1	13.2
6	11420.00	37.6 AV	54.0	-16.4	2.02 H	319	24.4	13.2
7	#17130.00	47.7 PK	68.2	-20.5	3.95 H	165	31.1	16.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	49.9 PK	68.2	-18.3	2.91 V	192	46.6	3.3
2	*5710.00	108.5 PK			2.91 V	192	105.0	3.5
3	*5710.00	101.1 AV			2.91 V	192	97.6	3.5
4	#5850.00	53.3 PK	68.2	-14.9	2.91 V	192	49.3	4.0
5	11420.00	48.2 PK	74.0	-25.8	1.50 V	331	35.0	13.2
6	11420.00	37.6 AV	54.0	-16.4	1.50 V	331	24.4	13.2
7	#17130.00	46.5 PK	68.2	-21.7	1.14 V	41	29.9	16.6

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5558.00	61.6 PK	68.2	-6.6	1.21 H	170	58.3	3.3
2	*5755.00	104.9 PK			1.21 H	170	101.2	3.7
3	*5755.00	97.4 AV			1.21 H	170	93.7	3.7
4	#5986.41	61.6 PK	68.2	-6.6	1.21 H	170	57.5	4.1
5	11510.00	48.0 PK	74.0	-26.0	2.06 H	316	35.0	13.0
6	11510.00	37.3 AV	54.0	-16.7	2.06 H	316	24.3	13.0
7	#17265.00	47.4 PK	68.2	-20.8	3.90 H	183	30.5	16.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5553.44	61.7 PK	68.2	-6.5	2.11 V	191	58.4	3.3
2	*5755.00	109.6 PK			2.11 V	191	105.9	3.7
3	*5755.00	102.1 AV			2.11 V	191	98.4	3.7
4	#5965.85	61.9 PK	68.2	-6.3	2.11 V	191	57.7	4.2
5	11510.00	48.0 PK	74.0	-26.0	1.48 V	336	35.0	13.0
6	11510.00	37.5 AV	54.0	-16.5	1.48 V	336	24.5	13.0
7	#17265.00	46.1 PK	68.2	-22.1	1.17 V	22	29.2	16.9

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5614.21	62.0 PK	68.2	-6.2	1.00 H	171	58.7	3.3
2	*5795.00	104.9 PK			1.00 H	171	101.1	3.8
3	*5795.00	97.3 AV			1.00 H	171	93.5	3.8
4	#5936.16	61.7 PK	68.2	-6.5	1.00 H	171	57.5	4.2
5	11590.00	48.7 PK	74.0	-25.3	2.09 H	315	35.9	12.8
6	11590.00	37.8 AV	54.0	-16.2	2.09 H	315	25.0	12.8
7	#17385.00	47.8 PK	68.2	-20.4	3.93 H	194	31.0	16.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5626.49	61.6 PK	68.2	-6.6	2.17 V	192	58.3	3.3
2	*5795.00	109.8 PK			2.17 V	192	106.0	3.8
3	*5795.00	102.6 AV			2.17 V	192	98.8	3.8
4	#5926.64	62.5 PK	68.2	-5.7	2.17 V	192	58.4	4.1
5	11590.00	48.2 PK	74.0	-25.8	1.41 V	324	35.4	12.8
6	11590.00	37.4 AV	54.0	-16.6	1.41 V	324	24.6	12.8
7	#17385.00	46.5 PK	68.2	-21.7	1.18 V	29	29.7	16.8

REMARKS:

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

802.11ac (VHT80)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.3 PK	74.0	-12.7	1.22 H	149	58.0	3.3
2	5150.00	50.5 AV	54.0	-3.5	1.22 H	149	47.2	3.3
3	*5210.00	98.2 PK			1.22 H	149	95.2	3.0
4	*5210.00	90.7 AV			1.22 H	149	87.7	3.0
5	5350.00	51.2 PK	74.0	-22.8	1.22 H	149	48.2	3.0
6	5350.00	41.3 AV	54.0	-12.7	1.22 H	149	38.3	3.0
7	#10420.00	48.2 PK	68.2	-20.0	2.11 H	318	35.7	12.5
8	15630.00	47.6 PK	74.0	-26.4	3.95 H	185	34.7	12.9
9	15630.00	38.3 AV	54.0	-15.7	3.95 H	185	25.4	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.4 PK	74.0	-9.6	2.11 V	196	61.1	3.3
2	5150.00	53.8 AV	54.0	-0.2	2.11 V	196	50.5	3.3
3	*5210.00	103.7 PK			2.11 V	196	100.7	3.0
4	*5210.00	96.4 AV			2.11 V	196	93.4	3.0
5	5350.00	51.5 PK	74.0	-22.5	2.11 V	196	48.5	3.0
6	5350.00	41.8 AV	54.0	-12.2	2.11 V	196	38.8	3.0
7	#10420.00	48.4 PK	68.2	-19.8	1.45 V	324	35.9	12.5
8	15630.00	46.7 PK	74.0	-27.3	1.15 V	38	33.8	12.9
9	15630.00	36.7 AV	54.0	-17.3	1.15 V	38	23.8	12.9

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	51.5 PK	74.0	-22.5	1.18 H	148	48.2	3.3
2	5150.00	41.7 AV	54.0	-12.3	1.18 H	148	38.4	3.3
3	*5290.00	99.9 PK			1.18 H	148	97.2	2.7
4	*5290.00	92.6 AV			1.18 H	148	89.9	2.7
5	5350.00	61.8 PK	74.0	-12.2	1.18 H	148	58.8	3.0
6	5350.00	51.0 AV	54.0	-3.0	1.18 H	148	48.0	3.0
7	#10580.00	48.3 PK	68.2	-19.9	2.07 H	327	35.7	12.6
8	15870.00	46.8 PK	74.0	-27.2	3.89 H	183	34.7	12.1
9	15870.00	37.8 AV	54.0	-16.2	3.89 H	183	25.7	12.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.4 PK	74.0	-20.6	2.09 V	196	50.1	3.3
2	5150.00	43.8 AV	54.0	-10.2	2.09 V	196	40.5	3.3
3	*5290.00	107.1 PK			2.09 V	196	104.4	2.7
4	*5290.00	98.7 AV			2.09 V	196	96.0	2.7
5	5350.00	64.3 PK	74.0	-9.7	2.09 V	196	61.3	3.0
6	5350.00	53.7 AV	54.0	-0.3	2.09 V	196	50.7	3.0
7	#10580.00	48.4 PK	68.2	-19.8	1.47 V	341	35.8	12.6
8	15870.00	46.4 PK	74.0	-27.6	1.11 V	15	34.3	12.1
9	15870.00	36.7 AV	54.0	-17.3	1.11 V	15	24.6	12.1

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	61.5 PK	74.0	-12.5	1.22 H	141	58.2	3.3
2	5460.00	50.6 AV	54.0	-3.4	1.22 H	141	47.3	3.3
3	#5470.00	62.7 PK	68.2	-5.5	1.22 H	141	59.4	3.3
4	*5530.00	98.3 PK			1.22 H	141	95.0	3.3
5	*5530.00	90.6 AV			1.22 H	141	87.3	3.3
6	#5725.00	51.2 PK	68.2	-17.0	1.22 H	141	47.7	3.5
7	11060.00	48.6 PK	74.0	-25.4	2.00 H	328	35.7	12.9
8	11060.00	37.8 AV	54.0	-16.2	2.00 H	328	24.9	12.9
9	#16590.00	47.3 PK	68.2	-20.9	3.91 H	179	32.4	14.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	63.4 PK	74.0	-10.6	2.21 V	197	60.1	3.3
2	5460.00	53.6 AV	54.0	-0.4	2.21 V	197	50.3	3.3
3	#5470.00	65.2 PK	68.2	-3.0	2.21 V	197	61.9	3.3
4	*5530.00	103.9 PK			2.21 V	197	100.6	3.3
5	*5530.00	95.7 AV			2.21 V	197	92.4	3.3
6	#5725.00	51.6 PK	68.2	-16.6	2.21 V	197	48.1	3.5
7	11060.00	48.9 PK	74.0	-25.1	1.52 V	331	36.0	12.9
8	11060.00	38.1 AV	54.0	-15.9	1.52 V	331	25.2	12.9
9	#16590.00	46.2 PK	68.2	-22.0	1.21 V	38	31.3	14.9

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	100.2 PK			1.14 H	145	96.9	3.3
2	*5610.00	93.0 AV			1.14 H	145	89.7	3.3
3	#5725.00	51.8 PK	68.2	-16.4	1.14 H	145	48.3	3.5
4	11220.00	48.4 PK	74.0	-25.6	2.07 H	331	35.4	13.0
5	11220.00	37.7 AV	54.0	-16.3	2.07 H	331	24.7	13.0
6	#16830.00	47.1 PK	68.2	-21.1	3.94 H	176	31.8	15.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	107.4 PK			2.16 V	196	104.1	3.3
2	*5610.00	98.7 AV			2.16 V	196	95.4	3.3
3	#5725.00	54.6 PK	68.2	-13.6	2.16 V	196	51.1	3.5
4	11220.00	48.6 PK	74.0	-25.4	1.40 V	333	35.6	13.0
5	11220.00	38.0 AV	54.0	-16.0	1.40 V	333	25.0	13.0
6	#16830.00	46.6 PK	68.2	-21.6	1.18 V	26	31.3	15.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	50.5 PK	74.0	-23.5	1.09 H	137	47.2	3.3
2	5460.00	40.9 AV	54.0	-13.1	1.09 H	137	37.6	3.3
3	#5470.00	51.0 PK	68.2	-17.2	1.09 H	137	47.7	3.3
4	*5690.00	99.7 PK			1.09 H	137	96.3	3.4
5	*5690.00	92.5 AV			1.09 H	137	89.1	3.4
6	#5850.00	53.3 PK	68.2	-14.9	1.09 H	137	49.3	4.0
7	11380.00	47.9 PK	74.0	-26.1	2.12 H	328	34.6	13.3
8	11380.00	36.9 AV	54.0	-17.1	2.12 H	328	23.6	13.3
9	#17070.00	47.6 PK	68.2	-20.6	3.86 H	191	31.3	16.3

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	50.6 PK	74.0	-23.4	2.14 V	194	47.3	3.3
2	5460.00	41.2 AV	54.0	-12.8	2.14 V	194	37.9	3.3
3	#5470.00	51.2 PK	68.2	-17.0	2.14 V	194	47.9	3.3
4	*5690.00	106.9 PK			2.14 V	194	103.5	3.4
5	*5690.00	99.2 AV			2.14 V	194	95.8	3.4
6	#5850.00	53.6 PK	68.2	-14.6	2.14 V	194	49.6	4.0
7	11380.00	48.5 PK	74.0	-25.5	1.43 V	327	35.2	13.3
8	11380.00	37.6 AV	54.0	-16.4	1.43 V	327	24.3	13.3
9	#17070.00	46.8 PK	68.2	-21.4	1.16 V	36	30.5	16.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5644.58	62.2 PK	68.2	-6.0	1.12 H	171	58.9	3.3
2	#5725.00	60.2 PK	68.2	-8.0	1.12 H	171	56.7	3.5
3	*5775.00	102.1 PK			1.12 H	171	98.4	3.7
4	*5775.00	95.2 AV			1.12 H	171	91.5	3.7
5	#5935.41	62.0 PK	68.2	-6.2	1.12 H	171	57.8	4.2
6	11550.00	48.3 PK	74.0	-25.7	2.07 H	326	35.4	12.9
7	11550.00	37.5 AV	54.0	-16.5	2.07 H	326	24.6	12.9
8	#17325.00	47.6 PK	68.2	-20.6	3.95 H	182	30.6	17.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5642.17	63.5 PK	68.2	-4.7	2.51 V	190	60.2	3.3
2	#5725.00	63.5 PK	68.2	-4.7	2.51 V	190	60.0	3.5
3	*5775.00	107.2 PK			2.51 V	190	103.5	3.7
4	*5775.00	99.1 AV			2.51 V	190	95.4	3.7
5	#5966.14	62.8 PK	68.2	-5.4	2.51 V	190	58.6	4.2
6	11550.00	47.6 PK	74.0	-26.4	1.44 V	324	34.7	12.9
7	11550.00	37.2 AV	54.0	-16.8	1.44 V	324	24.3	12.9
8	#17325.00	46.9 PK	68.2	-21.3	1.17 V	18	29.9	17.0

REMARKS:

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

Below 1GHz Data:

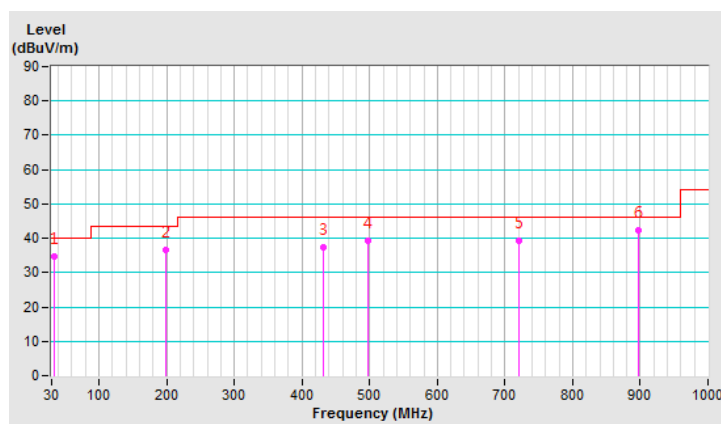
802.11a

CHANNEL	TX Channel 165	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	33.11	34.7 QP	40.0	-5.3	1.00 H	25	44.2	-9.5
2	199.46	36.5 QP	43.5	-7.0	2.00 H	140	46.6	-10.1
3	432.02	37.5 QP	46.0	-8.5	1.50 H	263	40.7	-3.2
4	497.88	39.4 QP	46.0	-6.6	1.50 H	10	40.9	-1.5
5	720.01	39.4 QP	46.0	-6.6	1.00 H	145	37.0	2.4
6	896.30	42.3 QP	46.0	-3.7	1.50 H	166	36.6	5.7

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

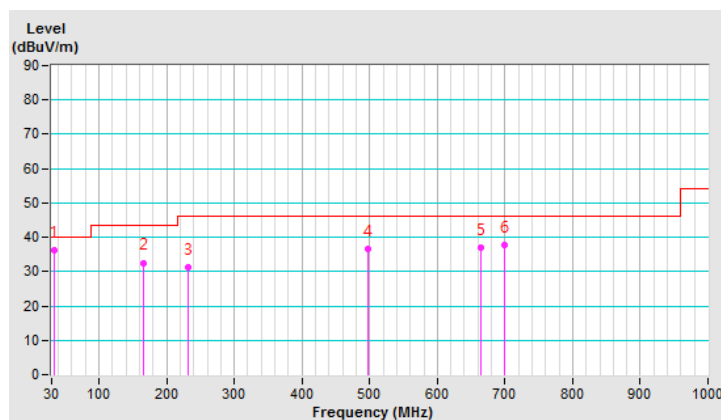


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	33.30	36.3 QP	40.0	-3.7	1.50 V	141	45.7	-9.4
2	165.92	32.6 QP	43.5	-10.9	1.00 V	277	41.0	-8.4
3	232.09	31.4 QP	46.0	-14.6	1.50 V	166	40.6	-9.2
4	497.97	36.7 QP	46.0	-9.3	1.00 V	355	38.2	-1.5
5	663.68	37.0 QP	46.0	-9.0	1.00 V	99	35.2	1.8
6	698.38	37.8 QP	46.0	-8.2	1.00 V	222	35.4	2.4

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



4.1.8 Test Results (Mode 2)

Above 1GHz Data:

802.11a

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.9 PK	74.0	-14.1	1.96 H	277	56.6	3.3
2	5150.00	46.5 AV	54.0	-7.5	1.96 H	277	43.2	3.3
3	*5180.00	109.8 PK			1.96 H	277	106.5	3.3
4	*5180.00	101.7 AV			1.96 H	277	98.4	3.3
5	#10360.00	47.1 PK	68.2	-21.1	2.02 H	294	34.9	12.2
6	15540.00	48.3 PK	74.0	-25.7	3.59 H	169	35.1	13.2
7	15540.00	38.7 AV	54.0	-15.3	3.59 H	169	25.5	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.9 PK	74.0	-11.1	1.25 V	18	59.6	3.3
2	5150.00	49.4 AV	54.0	-4.6	1.25 V	18	46.1	3.3
3	*5180.00	113.2 PK			1.25 V	18	109.9	3.3
4	*5180.00	105.2 AV			1.25 V	18	101.9	3.3
5	#10360.00	48.6 PK	68.2	-19.6	1.20 V	354	36.4	12.2
6	15540.00	47.4 PK	74.0	-26.6	1.30 V	56	34.2	13.2
7	15540.00	36.1 AV	54.0	-17.9	1.30 V	56	22.9	13.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.3 PK	74.0	-17.7	1.93 H	285	53.0	3.3
2	5150.00	43.3 AV	54.0	-10.7	1.93 H	285	40.0	3.3
3	*5200.00	109.1 PK			1.93 H	285	106.0	3.1
4	*5200.00	101.3 AV			1.93 H	285	98.2	3.1
5	#10400.00	47.1 PK	68.2	-21.1	2.08 H	293	34.7	12.4
6	15600.00	47.9 PK	74.0	-26.1	3.61 H	173	34.7	13.2
7	15600.00	38.3 AV	54.0	-15.7	3.61 H	173	25.1	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.0 PK	74.0	-14.0	1.30 V	30	56.7	3.3
2	5150.00	46.5 AV	54.0	-7.5	1.30 V	30	43.2	3.3
3	*5200.00	114.2 PK			1.30 V	30	111.1	3.1
4	*5200.00	106.0 AV			1.30 V	30	102.9	3.1
5	#10400.00	48.4 PK	68.2	-19.8	1.19 V	360	36.0	12.4
6	15600.00	47.6 PK	74.0	-26.4	1.34 V	69	34.4	13.2
7	15600.00	36.3 AV	54.0	-17.7	1.34 V	69	23.1	13.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	109.1 PK			1.93 H	282	106.3	2.8
2	*5240.00	101.4 AV			1.93 H	282	98.6	2.8
3	5350.00	54.5 PK	74.0	-19.5	1.93 H	282	51.5	3.0
4	5350.00	41.5 AV	54.0	-12.5	1.93 H	282	38.5	3.0
5	#10480.00	47.7 PK	68.2	-20.5	2.06 H	304	35.2	12.5
6	15720.00	47.7 PK	74.0	-26.3	3.61 H	181	35.4	12.3
7	15720.00	38.3 AV	54.0	-15.7	3.61 H	181	26.0	12.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	114.4 PK			1.35 V	40	111.6	2.8
2	*5240.00	106.2 AV			1.35 V	40	103.4	2.8
3	5350.00	55.3 PK	74.0	-18.7	1.35 V	40	52.3	3.0
4	5350.00	42.4 AV	54.0	-11.6	1.35 V	40	39.4	3.0
5	#10480.00	48.6 PK	68.2	-19.6	1.14 V	342	36.1	12.5
6	15720.00	47.6 PK	74.0	-26.4	1.35 V	48	35.3	12.3
7	15720.00	36.5 AV	54.0	-17.5	1.35 V	48	24.2	12.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5260.00	109.4 PK			1.98 H	277	106.7	2.7
2	*5260.00	101.6 AV			1.98 H	277	98.9	2.7
3	5350.00	54.9 PK	74.0	-19.1	1.98 H	277	51.9	3.0
4	5350.00	41.9 AV	54.0	-12.1	1.98 H	277	38.9	3.0
5	#10520.00	47.0 PK	68.2	-21.2	2.07 H	285	34.4	12.6
6	15780.00	48.5 PK	74.0	-25.5	3.54 H	166	36.5	12.0
7	15780.00	38.7 AV	54.0	-15.3	3.54 H	166	26.7	12.0
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	*5260.00	114.9 PK			1.38 V	25	112.2	2.7
2	*5260.00	106.6 AV			1.38 V	25	103.9	2.7
3	5350.00	56.0 PK	74.0	-18.0	1.38 V	25	53.0	3.0
4	5350.00	43.2 AV	54.0	-10.8	1.38 V	25	40.2	3.0
5	#10520.00	48.7 PK	68.2	-19.5	1.23 V	339	36.1	12.6
6	15780.00	47.1 PK	74.0	-26.9	1.29 V	56	35.1	12.0
7	15780.00	35.7 AV	54.0	-18.3	1.29 V	56	23.7	12.0

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	109.6 PK			2.01 H	277	106.8	2.8
2	*5300.00	101.9 AV			2.01 H	277	99.1	2.8
3	5350.00	56.0 PK	74.0	-18.0	2.01 H	277	53.0	3.0
4	5350.00	43.3 AV	54.0	-10.7	2.01 H	277	40.3	3.0
5	10600.00	47.1 PK	74.0	-26.9	2.04 H	294	34.6	12.5
6	10600.00	37.0 AV	54.0	-17.0	2.04 H	294	24.5	12.5
7	15900.00	48.0 PK	74.0	-26.0	3.64 H	177	35.7	12.3
8	15900.00	38.5 AV	54.0	-15.5	3.64 H	177	26.2	12.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	114.9 PK			1.29 V	56	112.1	2.8
2	*5300.00	106.5 AV			1.29 V	56	103.7	2.8
3	5350.00	57.5 PK	74.0	-16.5	1.29 V	56	54.5	3.0
4	5350.00	45.2 AV	54.0	-8.8	1.29 V	56	42.2	3.0
5	10600.00	48.6 PK	74.0	-25.4	1.18 V	359	36.1	12.5
6	10600.00	37.2 AV	54.0	-16.8	1.18 V	359	24.7	12.5
7	15900.00	47.3 PK	74.0	-26.7	1.35 V	72	35.0	12.3
8	15900.00	35.8 AV	54.0	-18.2	1.35 V	72	23.5	12.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	109.5 PK			2.06 H	284	106.7	2.8
2	*5320.00	101.6 AV			2.06 H	284	98.8	2.8
3	5350.00	57.4 PK	74.0	-16.6	2.06 H	284	54.4	3.0
4	5350.00	45.3 AV	54.0	-8.7	2.06 H	284	42.3	3.0
5	10640.00	47.0 PK	74.0	-27.0	1.98 H	297	34.5	12.5
6	10640.00	36.5 AV	54.0	-17.5	1.98 H	297	24.0	12.5
7	15960.00	47.9 PK	74.0	-26.1	3.55 H	175	35.2	12.7
8	15960.00	38.3 AV	54.0	-15.7	3.55 H	175	25.6	12.7
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	*5320.00	113.4 PK			1.08 V	293	110.6	2.8
2	*5320.00	106.1 AV			1.08 V	293	103.3	2.8
3	5350.00	59.6 PK	74.0	-14.4	1.08 V	293	56.6	3.0
4	5350.00	47.1 AV	54.0	-6.9	1.08 V	293	44.1	3.0
5	10640.00	48.5 PK	74.0	-25.5	1.20 V	339	36.0	12.5
6	10640.00	37.5 AV	54.0	-16.5	1.20 V	339	25.0	12.5
7	15960.00	47.4 PK	74.0	-26.6	1.33 V	41	34.7	12.7
8	15960.00	35.8 AV	54.0	-18.2	1.33 V	41	23.1	12.7

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	55.2 PK	74.0	-18.8	2.05 H	284	51.9	3.3
2	5460.00	42.1 AV	54.0	-11.9	2.05 H	284	38.8	3.3
3	#5470.00	64.3 PK	68.2	-3.9	2.05 H	284	61.0	3.3
4	*5500.00	109.7 PK			2.05 H	284	106.4	3.3
5	*5500.00	101.7 AV			2.05 H	284	98.4	3.3
6	11000.00	46.9 PK	74.0	-27.1	2.07 H	305	33.8	13.1
7	11000.00	36.7 AV	54.0	-17.3	2.07 H	305	23.6	13.1
8	#16500.00	48.3 PK	68.2	-19.9	3.54 H	155	34.0	14.3

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.4 PK	74.0	-17.6	1.05 V	292	53.1	3.3
2	5460.00	44.4 AV	54.0	-9.6	1.05 V	292	41.1	3.3
3	#5470.00	66.4 PK	68.2	-1.8	1.05 V	292	63.1	3.3
4	*5500.00	113.1 PK			1.05 V	292	109.8	3.3
5	*5500.00	106.1 AV			1.05 V	292	102.8	3.3
6	11000.00	48.9 PK	74.0	-25.1	1.25 V	349	35.8	13.1
7	11000.00	37.8 AV	54.0	-16.2	1.25 V	349	24.7	13.1
8	#16500.00	47.0 PK	68.2	-21.2	1.28 V	44	32.7	14.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	53.0 PK	74.0	-21.0	2.00 H	299	49.7	3.3
2	5460.00	40.8 AV	54.0	-13.2	2.00 H	299	37.5	3.3
3	#5470.00	56.1 PK	68.2	-12.1	2.00 H	299	52.8	3.3
4	*5580.00	109.1 PK			2.00 H	299	105.8	3.3
5	*5580.00	101.3 AV			2.00 H	299	98.0	3.3
6	11160.00	47.0 PK	74.0	-27.0	2.02 H	295	34.1	12.9
7	11160.00	36.6 AV	54.0	-17.4	2.02 H	295	23.7	12.9
8	#16740.00	48.1 PK	68.2	-20.1	3.64 H	156	32.7	15.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.3 PK	74.0	-19.7	1.09 V	304	51.0	3.3
2	5460.00	42.2 AV	54.0	-11.8	1.09 V	304	38.9	3.3
3	#5470.00	58.3 PK	68.2	-9.9	1.09 V	304	55.0	3.3
4	*5580.00	113.5 PK			1.09 V	304	110.2	3.3
5	*5580.00	106.5 AV			1.09 V	304	103.2	3.3
6	11160.00	48.8 PK	74.0	-25.2	1.29 V	340	35.9	12.9
7	11160.00	37.6 AV	54.0	-16.4	1.29 V	340	24.7	12.9
8	#16740.00	47.3 PK	68.2	-20.9	1.25 V	53	31.9	15.4

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	109.4 PK			2.03 H	291	106.0	3.4
2	*5700.00	101.8 AV			2.03 H	291	98.4	3.4
3	#5725.00	62.3 PK	68.2	-5.9	2.03 H	291	58.8	3.5
4	11400.00	47.0 PK	74.0	-27.0	2.08 H	298	33.7	13.3
5	11400.00	36.5 AV	54.0	-17.5	2.08 H	298	23.2	13.3
6	#17100.00	48.0 PK	68.2	-20.2	3.60 H	171	31.6	16.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	112.4 PK			1.04 V	285	109.0	3.4
2	*5700.00	104.9 AV			1.04 V	285	101.5	3.4
3	#5725.00	64.9 PK	68.2	-3.3	1.04 V	285	61.4	3.5
4	11400.00	48.4 PK	74.0	-25.6	1.26 V	345	35.1	13.3
5	11400.00	37.6 AV	54.0	-16.4	1.26 V	345	24.3	13.3
6	#17100.00	46.9 PK	68.2	-21.3	1.25 V	33	30.5	16.4

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	53.3 PK	74.0	-20.7	2.05 H	286	50.0	3.3
2	5460.00	41.0 AV	54.0	-13.0	2.05 H	286	37.7	3.3
3	#5470.00	51.2 PK	68.2	-17.0	2.05 H	286	47.9	3.3
4	*5720.00	108.8 PK			2.05 H	286	105.3	3.5
5	*5720.00	101.5 AV			2.05 H	286	98.0	3.5
6	#5850.00	59.6 PK	68.2	-8.6	2.05 H	286	55.6	4.0
7	11440.00	47.2 PK	74.0	-26.8	2.02 H	308	34.0	13.2
8	11440.00	36.8 AV	54.0	-17.2	2.02 H	308	23.6	13.2
9	#17160.00	47.9 PK	68.2	-20.3	3.54 H	173	31.1	16.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.1 PK	74.0	-19.9	1.09 V	286	50.8	3.3
2	5460.00	41.8 AV	54.0	-12.2	1.09 V	286	38.5	3.3
3	#5470.00	53.9 PK	68.2	-14.3	1.09 V	286	50.6	3.3
4	*5720.00	114.0 PK			1.09 V	286	110.5	3.5
5	*5720.00	106.4 AV			1.09 V	286	102.9	3.5
6	#5850.00	62.1 PK	68.2	-6.1	1.09 V	286	58.1	4.0
7	11440.00	48.3 PK	74.0	-25.7	1.23 V	340	35.1	13.2
8	11440.00	37.3 AV	54.0	-16.7	1.23 V	340	24.1	13.2
9	#17160.00	47.0 PK	68.2	-21.2	1.32 V	32	30.2	16.8

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5628.66	61.9 PK	68.2	-6.3	1.04 H	349	58.6	3.3
2	*5745.00	108.4 PK			1.04 H	349	104.8	3.6
3	*5745.00	100.9 AV			1.04 H	349	97.3	3.6
4	#5939.26	61.2 PK	68.2	-7.0	1.04 H	349	57.0	4.2
5	11490.00	47.1 PK	74.0	-26.9	2.01 H	305	34.0	13.1
6	11490.00	36.6 AV	54.0	-17.4	2.01 H	305	23.5	13.1
7	#17235.00	48.3 PK	68.2	-19.9	3.57 H	168	31.3	17.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5585.61	61.5 PK	68.2	-6.7	1.51 V	172	58.2	3.3
2	*5745.00	116.2 PK			1.51 V	172	112.6	3.6
3	*5745.00	108.6 AV			1.51 V	172	105.0	3.6
4	#5934.33	62.0 PK	68.2	-6.2	1.51 V	172	57.8	4.2
5	11490.00	48.8 PK	74.0	-25.2	1.19 V	352	35.7	13.1
6	11490.00	37.5 AV	54.0	-16.5	1.19 V	352	24.4	13.1
7	#17235.00	46.9 PK	68.2	-21.3	1.24 V	34	29.9	17.0

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5569.90	61.5 PK	68.2	-6.7	1.04 H	354	58.2	3.3
2	*5785.00	108.5 PK			1.04 H	354	104.7	3.8
3	*5785.00	101.0 AV			1.04 H	354	97.2	3.8
4	#5933.99	60.5 PK	68.2	-7.7	1.04 H	354	56.3	4.2
5	11570.00	46.7 PK	74.0	-27.3	2.03 H	293	34.0	12.7
6	11570.00	36.6 AV	54.0	-17.4	2.03 H	293	23.9	12.7
7	#17355.00	48.4 PK	68.2	-19.8	3.56 H	170	31.5	16.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5605.90	61.6 PK	68.2	-6.6	1.50 V	164	58.3	3.3
2	*5785.00	116.0 PK			1.50 V	164	112.2	3.8
3	*5785.00	108.6 AV			1.50 V	164	104.8	3.8
4	#5983.90	61.7 PK	68.2	-6.5	1.50 V	164	57.6	4.1
5	11570.00	49.2 PK	74.0	-24.8	1.24 V	346	36.5	12.7
6	11570.00	38.2 AV	54.0	-15.8	1.24 V	346	25.5	12.7
7	#17355.00	47.0 PK	68.2	-21.2	1.25 V	55	30.1	16.9

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5582.38	61.1 PK	68.2	-7.1	1.00 H	359	57.8	3.3
2	*5825.00	108.3 PK			1.00 H	359	104.4	3.9
3	*5825.00	100.6 AV			1.00 H	359	96.7	3.9
4	#5969.79	61.2 PK	68.2	-7.0	1.00 H	359	57.0	4.2
5	11650.00	46.5 PK	74.0	-27.5	2.03 H	303	33.7	12.8
6	11650.00	36.5 AV	54.0	-17.5	2.03 H	303	23.7	12.8
7	#17475.00	47.6 PK	68.2	-20.6	3.61 H	180	30.1	17.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5561.04	61.6 PK	68.2	-6.6	1.54 V	176	58.3	3.3
2	*5825.00	116.0 PK			1.54 V	176	112.1	3.9
3	*5825.00	108.7 AV			1.54 V	176	104.8	3.9
4	#5994.04	61.1 PK	68.2	-7.1	1.54 V	176	57.0	4.1
5	11650.00	49.0 PK	74.0	-25.0	1.22 V	340	36.2	12.8
6	11650.00	37.7 AV	54.0	-16.3	1.22 V	340	24.9	12.8
7	#17475.00	47.0 PK	68.2	-21.2	1.33 V	33	29.5	17.5

REMARKS:

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

802.11ac (VHT20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.9 PK	74.0	-18.1	1.26 H	346	52.6	3.3
2	5150.00	45.1 AV	54.0	-8.9	1.26 H	346	41.8	3.3
3	*5180.00	105.9 PK			1.26 H	346	102.6	3.3
4	*5180.00	98.0 AV			1.26 H	346	94.7	3.3
5	#10360.00	46.6 PK	68.2	-21.6	2.02 H	289	34.4	12.2
6	15540.00	47.6 PK	74.0	-26.4	3.66 H	172	34.4	13.2
7	15540.00	38.4 AV	54.0	-15.6	3.66 H	172	25.2	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.9 PK	74.0	-14.1	1.05 V	298	56.6	3.3
2	5150.00	48.7 AV	54.0	-5.3	1.05 V	298	45.4	3.3
3	*5180.00	112.2 PK			1.05 V	298	108.9	3.3
4	*5180.00	104.5 AV			1.05 V	298	101.2	3.3
5	#10360.00	48.6 PK	68.2	-19.6	1.18 V	350	36.4	12.2
6	15540.00	46.5 PK	74.0	-27.5	1.31 V	27	33.3	13.2
7	15540.00	35.7 AV	54.0	-18.3	1.31 V	27	22.5	13.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.6 PK	74.0	-18.4	1.20 H	350	52.3	3.3
2	5150.00	44.2 AV	54.0	-9.8	1.20 H	350	40.9	3.3
3	*5200.00	106.5 PK			1.20 H	350	103.4	3.1
4	*5200.00	98.8 AV			1.20 H	350	95.7	3.1
5	#10400.00	46.7 PK	68.2	-21.5	2.01 H	300	34.3	12.4
6	15600.00	48.1 PK	74.0	-25.9	3.55 H	192	34.9	13.2
7	15600.00	38.5 AV	54.0	-15.5	3.55 H	192	25.3	13.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.4 PK	74.0	-17.6	1.09 V	284	53.1	3.3
2	5150.00	45.3 AV	54.0	-8.7	1.09 V	284	42.0	3.3
3	*5200.00	113.0 PK			1.09 V	284	109.9	3.1
4	*5200.00	105.3 AV			1.09 V	284	102.2	3.1
5	#10400.00	48.2 PK	68.2	-20.0	1.19 V	348	35.8	12.4
6	15600.00	47.3 PK	74.0	-26.7	1.36 V	20	34.1	13.2
7	15600.00	36.3 AV	54.0	-17.7	1.36 V	20	23.1	13.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	52.8 PK	74.0	-21.2	1.28 H	339	49.5	3.3
2	5150.00	41.6 AV	54.0	-12.4	1.28 H	339	38.3	3.3
3	*5240.00	106.5 PK			1.28 H	339	103.7	2.8
4	*5240.00	98.6 AV			1.28 H	339	95.8	2.8
5	#10480.00	46.2 PK	68.2	-22.0	2.01 H	307	33.7	12.5
6	15720.00	47.9 PK	74.0	-26.1	3.60 H	192	35.6	12.3
7	15720.00	38.5 AV	54.0	-15.5	3.60 H	192	26.2	12.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	52.8 PK	74.0	-21.2	1.09 V	275	49.5	3.3
2	5150.00	41.8 AV	54.0	-12.2	1.09 V	275	38.5	3.3
3	*5240.00	112.9 PK			1.09 V	275	110.1	2.8
4	*5240.00	105.4 AV			1.09 V	275	102.6	2.8
5	#10480.00	49.3 PK	68.2	-18.9	1.23 V	324	36.8	12.5
6	15720.00	47.4 PK	74.0	-26.6	1.34 V	27	35.1	12.3
7	15720.00	36.3 AV	54.0	-17.7	1.34 V	27	24.0	12.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	51.4 PK	74.0	-22.6	1.21 H	343	48.1	3.3
2	5150.00	41.6 AV	54.0	-12.4	1.21 H	343	38.3	3.3
3	*5260.00	105.9 PK			1.21 H	343	103.2	2.7
4	*5260.00	98.4 AV			1.21 H	343	95.7	2.7
5	#10520.00	46.6 PK	68.2	-21.6	2.00 H	315	34.0	12.6
6	15780.00	47.7 PK	74.0	-26.3	3.55 H	185	35.7	12.0
7	15780.00	38.5 AV	54.0	-15.5	3.55 H	185	26.5	12.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.1 PK	74.0	-20.9	1.05 V	295	49.8	3.3
2	5150.00	43.0 AV	54.0	-11.0	1.05 V	295	39.7	3.3
3	*5260.00	112.1 PK			1.05 V	295	109.4	2.7
4	*5260.00	104.9 AV			1.05 V	295	102.2	2.7
5	#10520.00	49.4 PK	68.2	-18.8	1.28 V	332	36.8	12.6
6	15780.00	46.4 PK	74.0	-27.6	1.29 V	40	34.4	12.0
7	15780.00	35.5 AV	54.0	-18.5	1.29 V	40	23.5	12.0

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	106.1 PK			1.30 H	341	103.3	2.8
2	*5300.00	98.2 AV			1.30 H	341	95.4	2.8
3	5350.00	53.0 PK	74.0	-21.0	1.30 H	341	50.0	3.0
4	5350.00	42.7 AV	54.0	-11.3	1.30 H	341	39.7	3.0
5	10600.00	46.4 PK	74.0	-27.6	1.99 H	310	33.9	12.5
6	10600.00	36.1 AV	54.0	-17.9	1.99 H	310	23.6	12.5
7	15900.00	47.4 PK	74.0	-26.6	3.56 H	184	35.1	12.3
8	15900.00	37.9 AV	54.0	-16.1	3.56 H	184	25.6	12.3

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	112.4 PK			1.08 V	280	109.6	2.8
2	*5300.00	105.1 AV			1.08 V	280	102.3	2.8
3	5350.00	56.5 PK	74.0	-17.5	1.08 V	280	53.5	3.0
4	5350.00	46.6 AV	54.0	-7.4	1.08 V	280	43.6	3.0
5	10600.00	49.2 PK	74.0	-24.8	1.20 V	353	36.7	12.5
6	10600.00	38.0 AV	54.0	-16.0	1.20 V	353	25.5	12.5
7	15900.00	46.7 PK	74.0	-27.3	1.32 V	42	34.4	12.3
8	15900.00	35.5 AV	54.0	-18.5	1.32 V	42	23.2	12.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	106.2 PK			1.22 H	360	103.4	2.8
2	*5320.00	98.4 AV			1.22 H	360	95.6	2.8
3	5350.00	58.2 PK	74.0	-15.8	1.22 H	360	55.2	3.0
4	5350.00	48.2 AV	54.0	-5.8	1.22 H	360	45.2	3.0
5	10640.00	46.7 PK	74.0	-27.3	2.06 H	294	34.2	12.5
6	10640.00	36.5 AV	54.0	-17.5	2.06 H	294	24.0	12.5
7	15960.00	47.9 PK	74.0	-26.1	3.57 H	165	35.2	12.7
8	15960.00	38.7 AV	54.0	-15.3	3.57 H	165	26.0	12.7

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	*5320.00	112.3 PK			1.11 V	286	109.5	2.8
2	*5320.00	104.9 AV			1.11 V	286	102.1	2.8
3	5350.00	59.6 PK	74.0	-14.4	1.11 V	286	56.6	3.0
4	5350.00	49.7 AV	54.0	-4.3	1.11 V	286	46.7	3.0
5	10640.00	49.5 PK	74.0	-24.5	1.18 V	329	37.0	12.5
6	10640.00	38.1 AV	54.0	-15.9	1.18 V	329	25.6	12.5
7	15960.00	46.8 PK	74.0	-27.2	1.28 V	41	34.1	12.7
8	15960.00	36.1 AV	54.0	-17.9	1.28 V	41	23.4	12.7

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.8 PK	74.0	-16.2	1.22 H	357	54.5	3.3
2	5460.00	45.3 AV	54.0	-8.7	1.22 H	357	42.0	3.3
3	#5470.00	63.8 PK	68.2	-4.4	1.22 H	357	60.5	3.3
4	*5500.00	107.2 PK			1.22 H	357	103.9	3.3
5	*5500.00	99.2 AV			1.22 H	357	95.9	3.3
6	11000.00	46.5 PK	74.0	-27.5	2.00 H	291	33.4	13.1
7	11000.00	36.7 AV	54.0	-17.3	2.00 H	291	23.6	13.1
8	#16500.00	47.4 PK	68.2	-20.8	3.57 H	186	33.1	14.3

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	58.9 PK	74.0	-15.1	1.12 V	294	55.6	3.3
2	5460.00	46.7 AV	54.0	-7.3	1.12 V	294	43.4	3.3
3	#5470.00	66.2 PK	68.2	-2.0	1.12 V	294	62.9	3.3
4	*5500.00	114.0 PK			1.12 V	294	110.7	3.3
5	*5500.00	106.2 AV			1.12 V	294	102.9	3.3
6	11000.00	49.3 PK	74.0	-24.7	1.23 V	348	36.2	13.1
7	11000.00	37.9 AV	54.0	-16.1	1.23 V	348	24.8	13.1
8	#16500.00	46.5 PK	68.2	-21.7	1.34 V	25	32.2	14.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	107.3 PK			1.23 H	339	104.0	3.3
2	*5580.00	99.4 AV			1.23 H	339	96.1	3.3
3	11160.00	46.4 PK	74.0	-27.6	2.04 H	288	33.5	12.9
4	11160.00	36.3 AV	54.0	-17.7	2.04 H	288	23.4	12.9
5	#16740.00	47.6 PK	68.2	-20.6	3.66 H	183	32.2	15.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	113.8 PK			1.11 V	292	110.5	3.3
2	*5580.00	106.1 AV			1.11 V	292	102.8	3.3
3	11160.00	49.2 PK	74.0	-24.8	1.25 V	350	36.3	12.9
4	11160.00	37.7 AV	54.0	-16.3	1.25 V	350	24.8	12.9
5	#16740.00	46.9 PK	68.2	-21.3	1.37 V	22	31.5	15.4

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	107.9 PK			1.31 H	330	104.5	3.4
2	*5700.00	99.7 AV			1.31 H	330	96.3	3.4
3	#5725.00	64.5 PK	68.2	-3.7	1.31 H	330	61.0	3.5
4	11400.00	46.6 PK	74.0	-27.4	1.99 H	310	33.3	13.3
5	11400.00	36.5 AV	54.0	-17.5	1.99 H	310	23.2	13.3
6	#17100.00	47.9 PK	68.2	-20.3	3.65 H	184	31.5	16.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	113.7 PK			1.10 V	245	110.3	3.4
2	*5700.00	105.8 AV			1.10 V	245	102.4	3.4
3	#5725.00	67.1 PK	68.2	-1.1	1.10 V	245	63.6	3.5
4	11400.00	49.1 PK	74.0	-24.9	1.19 V	346	35.8	13.3
5	11400.00	37.7 AV	54.0	-16.3	1.19 V	346	24.4	13.3
6	#17100.00	46.8 PK	68.2	-21.4	1.37 V	37	30.4	16.4

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	49.9 PK	74.0	-24.1	1.22 H	357	46.6	3.3
2	5460.00	38.3 AV	54.0	-15.7	1.22 H	357	35.0	3.3
3	#5470.00	54.4 PK	68.2	-13.8	1.22 H	357	51.1	3.3
4	*5720.00	107.6 PK			1.22 H	357	104.1	3.5
5	*5720.00	99.4 AV			1.22 H	357	95.9	3.5
6	#5850.00	46.3 PK	68.2	-21.9	1.22 H	357	42.3	4.0
7	11440.00	46.6 PK	74.0	-27.4	2.04 H	298	33.4	13.2
8	11440.00	36.7 AV	54.0	-17.3	2.04 H	298	23.5	13.2
9	#17160.00	47.8 PK	68.2	-20.4	3.55 H	194	31.0	16.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	50.8 PK	74.0	-23.2	1.04 V	232	47.5	3.3
2	5460.00	39.7 AV	54.0	-14.3	1.04 V	232	36.4	3.3
3	#5470.00	58.1 PK	68.2	-10.1	1.04 V	232	54.8	3.3
4	*5720.00	113.3 PK			1.04 V	232	109.8	3.5
5	*5720.00	105.3 AV			1.04 V	232	101.8	3.5
6	#5850.00	49.8 PK	68.2	-18.4	1.04 V	232	45.8	4.0
7	11440.00	48.9 PK	74.0	-25.1	1.27 V	331	35.7	13.2
8	11440.00	37.8 AV	54.0	-16.2	1.27 V	331	24.6	13.2
9	#17160.00	47.5 PK	68.2	-20.7	1.35 V	26	30.7	16.8

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5595.81	60.9 PK	68.2	-7.3	1.02 H	341	57.6	3.3
2	*5745.00	104.3 PK			1.02 H	341	100.7	3.6
3	*5745.00	97.5 AV			1.02 H	341	93.9	3.6
4	#5954.94	62.5 PK	68.2	-5.7	1.02 H	341	58.3	4.2
5	11490.00	46.4 PK	74.0	-27.6	1.99 H	288	33.3	13.1
6	11490.00	36.5 AV	54.0	-17.5	1.99 H	288	23.4	13.1
7	#17235.00	47.8 PK	68.2	-20.4	3.58 H	185	30.8	17.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5612.43	61.0 PK	68.2	-7.2	1.50 V	172	57.7	3.3
2	*5745.00	112.3 PK			1.50 V	172	108.7	3.6
3	*5745.00	105.0 AV			1.50 V	172	101.4	3.6
4	#5937.04	62.2 PK	68.2	-6.0	1.50 V	172	58.0	4.2
5	11490.00	48.6 PK	74.0	-25.4	1.21 V	348	35.5	13.1
6	11490.00	37.4 AV	54.0	-16.6	1.21 V	348	24.3	13.1
7	#17235.00	46.8 PK	68.2	-21.4	1.30 V	29	29.8	17.0

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5606.24	61.4 PK	68.2	-6.8	1.10 H	340	58.1	3.3
2	*5785.00	104.4 PK			1.10 H	340	100.6	3.8
3	*5785.00	97.7 AV			1.10 H	340	93.9	3.8
4	#5958.65	61.0 PK	68.2	-7.2	1.10 H	340	56.8	4.2
5	11570.00	45.9 PK	74.0	-28.1	2.02 H	299	33.2	12.7
6	11570.00	36.1 AV	54.0	-17.9	2.02 H	299	23.4	12.7
7	#17355.00	47.4 PK	68.2	-20.8	3.63 H	187	30.5	16.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5606.57	61.0 PK	68.2	-7.2	1.47 V	163	57.7	3.3
2	*5785.00	111.6 PK			1.47 V	163	107.8	3.8
3	*5785.00	104.5 AV			1.47 V	163	100.7	3.8
4	#5932.99	61.3 PK	68.2	-6.9	1.47 V	163	57.2	4.1
5	11570.00	49.3 PK	74.0	-24.7	1.26 V	328	36.6	12.7
6	11570.00	38.0 AV	54.0	-16.0	1.26 V	328	25.3	12.7
7	#17355.00	47.3 PK	68.2	-20.9	1.35 V	48	30.4	16.9

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5612.68	60.8 PK	68.2	-7.4	1.03 H	342	57.5	3.3
2	*5825.00	104.9 PK			1.03 H	342	101.0	3.9
3	*5825.00	98.0 AV			1.03 H	342	94.1	3.9
4	#5982.12	62.4 PK	68.2	-5.8	1.03 H	342	58.3	4.1
5	11650.00	46.6 PK	74.0	-27.4	2.06 H	304	33.8	12.8
6	11650.00	36.5 AV	54.0	-17.5	2.06 H	304	23.7	12.8
7	#17475.00	47.1 PK	68.2	-21.1	3.57 H	190	29.6	17.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5594.21	61.8 PK	68.2	-6.4	1.46 V	161	58.5	3.3
2	*5825.00	112.4 PK			1.46 V	161	108.5	3.9
3	*5825.00	104.8 AV			1.46 V	161	100.9	3.9
4	#5936.93	62.0 PK	68.2	-6.2	1.46 V	161	57.8	4.2
5	11650.00	48.9 PK	74.0	-25.1	1.28 V	336	36.1	12.8
6	11650.00	37.6 AV	54.0	-16.4	1.28 V	336	24.8	12.8
7	#17475.00	47.2 PK	68.2	-21.0	1.30 V	29	29.7	17.5

REMARKS:

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

802.11ac (VHT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.3 PK	74.0	-14.7	1.21 H	287	56.0	3.3
2	5150.00	51.2 AV	54.0	-2.8	1.21 H	287	47.9	3.3
3	*5190.00	102.9 PK			1.21 H	287	99.7	3.2
4	*5190.00	94.9 AV			1.21 H	287	91.7	3.2
5	#10380.00	46.6 PK	68.2	-21.6	2.05 H	312	34.2	12.4
6	15570.00	47.9 PK	74.0	-26.1	3.57 H	171	34.6	13.3
7	15570.00	38.6 AV	54.0	-15.4	3.57 H	171	25.3	13.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.8 PK	74.0	-13.2	1.12 V	347	57.5	3.3
2	5150.00	53.0 AV	54.0	-1.0	1.12 V	347	49.7	3.3
3	*5190.00	109.1 PK			1.12 V	347	105.9	3.2
4	*5190.00	101.2 AV			1.12 V	347	98.0	3.2
5	#10380.00	49.1 PK	68.2	-19.1	1.26 V	355	36.7	12.4
6	15570.00	46.9 PK	74.0	-27.1	1.35 V	36	33.6	13.3
7	15570.00	35.7 AV	54.0	-18.3	1.35 V	36	22.4	13.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	102.7 PK			1.20 H	287	99.8	2.9
2	*5230.00	94.4 AV			1.20 H	287	91.5	2.9
3	5350.00	52.0 PK	74.0	-22.0	1.20 H	287	49.0	3.0
4	5350.00	41.9 AV	54.0	-12.1	1.20 H	287	38.9	3.0
5	#10460.00	46.2 PK	68.2	-22.0	2.00 H	317	33.7	12.5
6	15690.00	47.9 PK	74.0	-26.1	3.55 H	194	35.4	12.5
7	15690.00	38.6 AV	54.0	-15.4	3.55 H	194	26.1	12.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	109.7 PK			1.10 V	344	106.8	2.9
2	*5230.00	101.6 AV			1.10 V	344	98.7	2.9
3	5350.00	53.2 PK	74.0	-20.8	1.10 V	344	50.2	3.0
4	5350.00	43.6 AV	54.0	-10.4	1.10 V	344	40.6	3.0
5	#10460.00	49.7 PK	68.2	-18.5	1.21 V	329	37.2	12.5
6	15690.00	46.8 PK	74.0	-27.2	1.34 V	19	34.3	12.5
7	15690.00	36.1 AV	54.0	-17.9	1.34 V	19	23.6	12.5

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	54.3 PK	74.0	-19.7	1.26 H	282	51.0	3.3
2	5150.00	43.6 AV	54.0	-10.4	1.26 H	282	40.3	3.3
3	*5270.00	102.3 PK			1.26 H	282	99.6	2.7
4	*5270.00	94.5 AV			1.26 H	282	91.8	2.7
5	5350.00	55.3 PK	74.0	-18.7	1.26 H	282	52.3	3.0
6	5350.00	44.7 AV	54.0	-9.3	1.26 H	282	41.7	3.0
7	#10540.00	46.6 PK	68.2	-21.6	2.04 H	294	34.0	12.6
8	15810.00	47.1 PK	74.0	-26.9	3.58 H	169	35.1	12.0
9	15810.00	38.0 AV	54.0	-16.0	3.58 H	169	26.0	12.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.6 PK	74.0	-18.4	1.16 V	3	52.3	3.3
2	5150.00	45.0 AV	54.0	-9.0	1.16 V	3	41.7	3.3
3	*5270.00	109.5 PK			1.16 V	3	106.8	2.7
4	*5270.00	102.4 AV			1.16 V	3	99.7	2.7
5	5350.00	58.6 PK	74.0	-15.4	1.16 V	3	55.6	3.0
6	5350.00	49.2 AV	54.0	-4.8	1.16 V	3	46.2	3.0
7	#10540.00	49.3 PK	68.2	-18.9	1.24 V	328	36.7	12.6
8	15810.00	46.6 PK	74.0	-27.4	1.28 V	36	34.6	12.0
9	15810.00	35.7 AV	54.0	-18.3	1.28 V	36	23.7	12.0

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	102.7 PK			1.25 H	282	99.9	2.8
2	*5310.00	94.7 AV			1.25 H	282	91.9	2.8
3	5350.00	58.4 PK	74.0	-15.6	1.25 H	282	55.4	3.0
4	5350.00	49.0 AV	54.0	-5.0	1.25 H	282	46.0	3.0
5	10620.00	46.4 PK	74.0	-27.6	2.04 H	310	33.9	12.5
6	10620.00	36.5 AV	54.0	-17.5	2.04 H	310	24.0	12.5
7	15930.00	47.8 PK	74.0	-26.2	3.61 H	195	35.4	12.4
8	15930.00	38.6 AV	54.0	-15.4	3.61 H	195	26.2	12.4
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	*5310.00	109.5 PK			1.10 V	347	106.7	2.8
2	*5310.00	102.2 AV			1.10 V	347	99.4	2.8
3	5350.00	65.0 PK	74.0	-9.0	1.10 V	347	62.0	3.0
4	5350.00	52.3 AV	54.0	-1.7	1.10 V	347	49.3	3.0
5	10620.00	49.4 PK	74.0	-24.6	1.24 V	330	36.9	12.5
6	10620.00	38.1 AV	54.0	-15.9	1.24 V	330	25.6	12.5
7	15930.00	46.6 PK	74.0	-27.4	1.28 V	30	34.2	12.4
8	15930.00	35.6 AV	54.0	-18.4	1.28 V	30	23.2	12.4

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.5 PK	74.0	-14.5	1.20 H	287	56.2	3.3
2	5460.00	44.9 AV	54.0	-9.1	1.20 H	287	41.6	3.3
3	#5470.00	64.5 PK	68.2	-3.7	1.20 H	287	61.2	3.3
4	*5510.00	103.5 PK			1.20 H	287	100.2	3.3
5	*5510.00	95.2 AV			1.20 H	287	91.9	3.3
6	11020.00	46.5 PK	74.0	-27.5	1.98 H	290	33.5	13.0
7	11020.00	36.7 AV	54.0	-17.3	1.98 H	290	23.7	13.0
8	#16530.00	47.6 PK	68.2	-20.6	3.67 H	184	33.0	14.6

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	5460.00	62.0 PK	74.0	-12.0	1.13 V	348	58.7	3.3
2	5460.00	47.2 AV	54.0	-6.8	1.13 V	348	43.9	3.3
3	#5470.00	67.3 PK	68.2	-0.9	1.13 V	348	64.0	3.3
4	*5510.00	109.6 PK			1.13 V	348	106.3	3.3
5	*5510.00	102.6 AV			1.13 V	348	99.3	3.3
6	11020.00	49.4 PK	74.0	-24.6	1.23 V	348	36.4	13.0
7	11020.00	37.9 AV	54.0	-16.1	1.23 V	348	24.9	13.0
8	#16530.00	47.0 PK	68.2	-21.2	1.37 V	45	32.4	14.6

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	104.6 PK			1.20 H	294	101.3	3.3
2	*5550.00	96.1 AV			1.20 H	294	92.8	3.3
3	11100.00	46.9 PK	74.0	-27.1	2.01 H	305	34.2	12.7
4	11100.00	36.8 AV	54.0	-17.2	2.01 H	305	24.1	12.7
5	#16650.00	47.6 PK	68.2	-20.6	3.56 H	175	32.4	15.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	110.0 PK			1.16 V	354	106.7	3.3
2	*5550.00	102.9 AV			1.16 V	354	99.6	3.3
3	11100.00	48.8 PK	74.0	-25.2	1.20 V	345	36.1	12.7
4	11100.00	37.3 AV	54.0	-16.7	1.20 V	345	24.6	12.7
5	#16650.00	47.4 PK	68.2	-20.8	1.38 V	28	32.2	15.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	103.9 PK			1.23 H	290	100.5	3.4
2	*5670.00	95.4 AV			1.23 H	290	92.0	3.4
3	#5725.00	58.1 PK	68.2	-10.1	1.23 H	290	54.6	3.5
4	11340.00	46.1 PK	74.0	-27.9	2.04 H	297	32.7	13.4
5	11340.00	36.1 AV	54.0	-17.9	2.04 H	297	22.7	13.4
6	#17010.00	47.3 PK	68.2	-20.9	3.59 H	193	31.1	16.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	109.7 PK			1.12 V	6	106.3	3.4
2	*5670.00	102.4 AV			1.12 V	6	99.0	3.4
3	#5725.00	62.3 PK	68.2	-5.9	1.12 V	6	58.8	3.5
4	11340.00	48.4 PK	74.0	-25.6	1.21 V	329	35.0	13.4
5	11340.00	37.4 AV	54.0	-16.6	1.21 V	329	24.0	13.4
6	#17010.00	46.6 PK	68.2	-21.6	1.29 V	26	30.4	16.2

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	49.0 PK	74.0	-25.0	1.18 H	299	45.7	3.3
2	5460.00	39.3 AV	54.0	-14.7	1.18 H	299	36.0	3.3
3	#5470.00	50.1 PK	68.2	-18.1	1.18 H	299	46.8	3.3
4	*5710.00	103.6 PK			1.18 H	299	100.1	3.5
5	*5710.00	95.6 AV			1.18 H	299	92.1	3.5
6	#5850.00	52.9 PK	68.2	-15.3	1.18 H	299	48.9	4.0
7	11420.00	45.9 PK	74.0	-28.1	2.02 H	312	32.7	13.2
8	11420.00	36.0 AV	54.0	-18.0	2.02 H	312	22.8	13.2
9	#17130.00	47.8 PK	68.2	-20.4	3.56 H	185	31.2	16.6

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	5460.00	49.1 PK	74.0	-24.9	1.09 V	13	45.8	3.3
2	5460.00	39.2 AV	54.0	-14.8	1.09 V	13	35.9	3.3
3	#5470.00	50.2 PK	68.2	-18.0	1.09 V	13	46.9	3.3
4	*5710.00	109.5 PK			1.09 V	13	106.0	3.5
5	*5710.00	102.4 AV			1.09 V	13	98.9	3.5
6	#5850.00	53.5 PK	68.2	-14.7	1.09 V	13	49.5	4.0
7	11420.00	48.6 PK	74.0	-25.4	1.20 V	339	35.4	13.2
8	11420.00	37.3 AV	54.0	-16.7	1.20 V	339	24.1	13.2
9	#17130.00	47.3 PK	68.2	-20.9	1.30 V	37	30.7	16.6

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5638.83	61.3 PK	68.2	-6.9	1.04 H	295	58.0	3.3
2	*5755.00	101.5 PK			1.04 H	295	97.8	3.7
3	*5755.00	93.5 AV			1.04 H	295	89.8	3.7
4	#5955.08	61.7 PK	68.2	-6.5	1.04 H	295	57.5	4.2
5	11510.00	46.9 PK	74.0	-27.1	2.07 H	288	33.9	13.0
6	11510.00	37.0 AV	54.0	-17.0	2.07 H	288	24.0	13.0
7	#17265.00	47.3 PK	68.2	-20.9	3.58 H	191	30.4	16.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5588.68	62.5 PK	68.2	-5.7	1.44 V	169	59.2	3.3
2	*5755.00	109.2 PK			1.44 V	169	105.5	3.7
3	*5755.00	101.7 AV			1.44 V	169	98.0	3.7
4	#5941.12	61.6 PK	68.2	-6.6	1.44 V	169	57.4	4.2
5	11510.00	49.0 PK	74.0	-25.0	1.19 V	343	36.0	13.0
6	11510.00	37.9 AV	54.0	-16.1	1.19 V	343	24.9	13.0
7	#17265.00	46.8 PK	68.2	-21.4	1.32 V	36	29.9	16.9

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5635.61	60.7 PK	68.2	-7.5	1.02 H	309	57.4	3.3
2	*5795.00	101.9 PK			1.02 H	309	98.1	3.8
3	*5795.00	93.9 AV			1.02 H	309	90.1	3.8
4	#5987.60	62.1 PK	68.2	-6.1	1.02 H	309	58.0	4.1
5	11590.00	46.4 PK	74.0	-27.6	2.06 H	290	33.6	12.8
6	11590.00	36.7 AV	54.0	-17.3	2.06 H	290	23.9	12.8
7	#17385.00	47.6 PK	68.2	-20.6	3.59 H	189	30.8	16.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5578.20	62.9 PK	68.2	-5.3	1.42 V	181	59.6	3.3
2	*5795.00	109.0 PK			1.42 V	181	105.2	3.8
3	*5795.00	101.6 AV			1.42 V	181	97.8	3.8
4	#5986.76	62.6 PK	68.2	-5.6	1.42 V	181	58.5	4.1
5	11590.00	49.4 PK	74.0	-24.6	1.21 V	330	36.6	12.8
6	11590.00	38.0 AV	54.0	-16.0	1.21 V	330	25.2	12.8
7	#17385.00	47.5 PK	68.2	-20.7	1.30 V	22	30.7	16.8

REMARKS:

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

802.11ac (VHT80)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.2 PK	74.0	-15.8	1.23 H	293	54.9	3.3
2	5150.00	51.3 AV	54.0	-2.7	1.23 H	293	48.0	3.3
3	*5210.00	94.9 PK			1.23 H	293	91.9	3.0
4	*5210.00	88.9 AV			1.23 H	293	85.9	3.0
5	5350.00	51.2 PK	74.0	-22.8	1.23 H	293	48.2	3.0
6	5350.00	40.7 AV	54.0	-13.3	1.23 H	293	37.7	3.0
7	#10420.00	45.9 PK	68.2	-22.3	2.06 H	317	33.4	12.5
8	15630.00	47.4 PK	74.0	-26.6	3.64 H	165	34.5	12.9
9	15630.00	38.1 AV	54.0	-15.9	3.64 H	165	25.2	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.4 PK	74.0	-13.6	1.13 V	348	57.1	3.3
2	5150.00	53.7 AV	54.0	-0.3	1.13 V	348	50.4	3.3
3	*5210.00	101.7 PK			1.13 V	348	98.7	3.0
4	*5210.00	94.7 AV			1.13 V	348	91.7	3.0
5	5350.00	51.5 PK	74.0	-22.5	1.13 V	348	48.5	3.0
6	5350.00	41.0 AV	54.0	-13.0	1.13 V	348	38.0	3.0
7	#10420.00	48.9 PK	68.2	-19.3	1.17 V	334	36.4	12.5
8	15630.00	47.6 PK	74.0	-26.4	1.38 V	49	34.7	12.9
9	15630.00	36.4 AV	54.0	-17.6	1.38 V	49	23.5	12.9

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	51.8 PK	74.0	-22.2	1.19 H	292	48.5	3.3
2	5150.00	43.6 AV	54.0	-10.4	1.19 H	292	40.3	3.3
3	*5290.00	96.5 PK			1.19 H	292	93.8	2.7
4	*5290.00	90.4 AV			1.19 H	292	87.7	2.7
5	5350.00	58.8 PK	74.0	-15.2	1.19 H	292	55.8	3.0
6	5350.00	51.7 AV	54.0	-2.3	1.19 H	292	48.7	3.0
7	#10580.00	46.6 PK	68.2	-21.6	1.97 H	289	34.0	12.6
8	15870.00	48.0 PK	74.0	-26.0	3.64 H	169	35.9	12.1
9	15870.00	38.7 AV	54.0	-15.3	3.64 H	169	26.6	12.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	52.3 PK	74.0	-21.7	1.05 V	288	49.0	3.3
2	5150.00	44.8 AV	54.0	-9.2	1.05 V	288	41.5	3.3
3	*5290.00	103.6 PK			1.05 V	288	100.9	2.7
4	*5290.00	97.0 AV			1.05 V	288	94.3	2.7
5	5350.00	61.8 PK	74.0	-12.2	1.05 V	288	58.8	3.0
6	5350.00	53.6 AV	54.0	-0.4	1.05 V	288	50.6	3.0
7	#10580.00	49.0 PK	68.2	-19.2	1.21 V	350	36.4	12.6
8	15870.00	46.8 PK	74.0	-27.2	1.32 V	20	34.7	12.1
9	15870.00	36.0 AV	54.0	-18.0	1.32 V	20	23.9	12.1

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.4 PK	74.0	-11.6	1.22 H	289	59.1	3.3
2	5460.00	52.0 AV	54.0	-2.0	1.22 H	289	48.7	3.3
3	#5470.00	62.7 PK	68.2	-5.5	1.22 H	289	59.4	3.3
4	*5530.00	96.9 PK			1.22 H	289	93.6	3.3
5	*5530.00	90.9 AV			1.22 H	289	87.6	3.3
6	#5725.00	50.1 PK	68.2	-18.1	1.22 H	289	46.6	3.5
7	11060.00	46.8 PK	74.0	-27.2	2.04 H	299	33.9	12.9
8	11060.00	37.0 AV	54.0	-17.0	2.04 H	299	24.1	12.9
9	#16590.00	47.2 PK	68.2	-21.0	3.60 H	180	32.3	14.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	63.9 PK	74.0	-10.1	1.11 V	293	60.6	3.3
2	5460.00	53.7 AV	54.0	-0.3	1.11 V	293	50.4	3.3
3	#5470.00	64.2 PK	68.2	-4.0	1.11 V	293	60.9	3.3
4	*5530.00	104.3 PK			1.11 V	293	101.0	3.3
5	*5530.00	96.6 AV			1.11 V	293	93.3	3.3
6	#5725.00	50.7 PK	68.2	-17.5	1.11 V	293	47.2	3.5
7	11060.00	49.7 PK	74.0	-24.3	1.17 V	330	36.8	12.9
8	11060.00	38.1 AV	54.0	-15.9	1.17 V	330	25.2	12.9
9	#16590.00	46.6 PK	68.2	-21.6	1.28 V	42	31.7	14.9

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	99.2 PK			1.20 H	291	95.9	3.3
2	*5610.00	92.9 AV			1.20 H	291	89.6	3.3
3	#5725.00	57.6 PK	68.2	-10.6	1.20 H	291	54.1	3.5
4	11220.00	46.7 PK	74.0	-27.3	2.07 H	290	33.7	13.0
5	11220.00	36.4 AV	54.0	-17.6	2.07 H	290	23.4	13.0
6	#16830.00	47.5 PK	68.2	-20.7	3.60 H	179	32.2	15.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	105.9 PK			1.14 V	280	102.6	3.3
2	*5610.00	99.4 AV			1.14 V	280	96.1	3.3
3	#5725.00	60.3 PK	68.2	-7.9	1.14 V	280	56.8	3.5
4	11220.00	48.6 PK	74.0	-25.4	1.26 V	341	35.6	13.0
5	11220.00	37.2 AV	54.0	-16.8	1.26 V	341	24.2	13.0
6	#16830.00	47.0 PK	68.2	-21.2	1.36 V	33	31.7	15.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	51.5 PK	74.0	-22.5	1.23 H	307	48.2	3.3
2	5460.00	41.4 AV	54.0	-12.6	1.23 H	307	38.1	3.3
3	#5470.00	50.5 PK	68.2	-17.7	1.23 H	307	47.2	3.3
4	*5690.00	99.4 PK			1.23 H	307	96.0	3.4
5	*5690.00	93.2 AV			1.23 H	307	89.8	3.4
6	#5850.00	52.5 PK	68.2	-15.7	1.23 H	307	48.5	4.0
7	11380.00	46.0 PK	74.0	-28.0	1.98 H	315	32.7	13.3
8	11380.00	36.2 AV	54.0	-17.8	1.98 H	315	22.9	13.3
9	#17070.00	47.5 PK	68.2	-20.7	3.62 H	173	31.2	16.3

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	52.0 PK	74.0	-22.0	1.14 V	284	48.7	3.3
2	5460.00	41.6 AV	54.0	-12.4	1.14 V	284	38.3	3.3
3	#5470.00	50.9 PK	68.2	-17.3	1.14 V	284	47.6	3.3
4	*5690.00	105.5 PK			1.14 V	284	102.1	3.4
5	*5690.00	99.1 AV			1.14 V	284	95.7	3.4
6	#5850.00	54.9 PK	68.2	-13.3	1.14 V	284	50.9	4.0
7	11380.00	49.1 PK	74.0	-24.9	1.27 V	338	35.8	13.3
8	11380.00	37.5 AV	54.0	-16.5	1.27 V	338	24.2	13.3
9	#17070.00	46.8 PK	68.2	-21.4	1.29 V	18	30.5	16.3

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5598.62	62.3 PK	68.2	-5.9	1.14 H	350	59.0	3.3
2	*5775.00	97.7 PK			1.14 H	350	94.0	3.7
3	*5775.00	90.0 AV			1.14 H	350	86.3	3.7
4	#6011.45	60.9 PK	68.2	-7.3	1.14 H	350	56.8	4.1
5	11550.00	45.8 PK	74.0	-28.2	2.02 H	312	32.9	12.9
6	11550.00	36.0 AV	54.0	-18.0	2.02 H	312	23.1	12.9
7	#17325.00	47.3 PK	68.2	-20.9	3.58 H	165	30.3	17.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5643.67	62.6 PK	68.2	-5.6	2.97 V	40	59.3	3.3
2	*5775.00	106.5 PK			2.97 V	40	102.8	3.7
3	*5775.00	98.9 AV			2.97 V	40	95.2	3.7
4	#5989.08	61.7 PK	68.2	-6.5	2.97 V	40	57.6	4.1
5	11550.00	49.0 PK	74.0	-25.0	1.17 V	345	36.1	12.9
6	11550.00	37.6 AV	54.0	-16.4	1.17 V	345	24.7	12.9
7	#17325.00	46.9 PK	68.2	-21.3	1.27 V	34	29.9	17.0

REMARKS:

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

Below 1GHz Data:

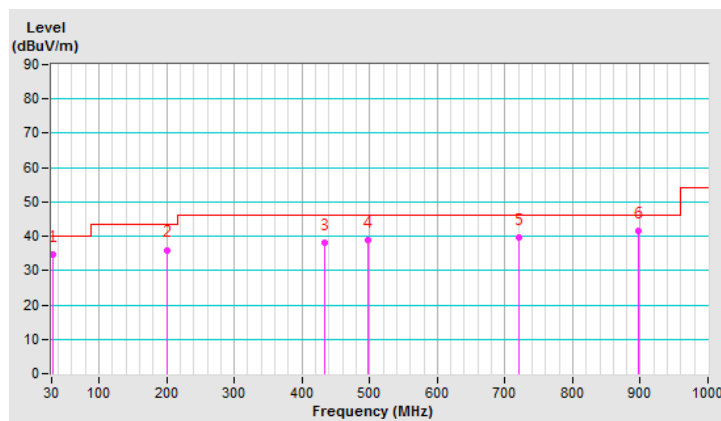
802.11a

CHANNEL	TX Channel 165	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	32.77	34.7 QP	40.0	-5.3	1.00 H	73	44.2	-9.5
2	199.92	36.0 QP	43.5	-7.5	1.50 H	86	46.1	-10.1
3	432.74	38.0 QP	46.0	-8.0	1.50 H	142	41.2	-3.2
4	498.38	39.0 QP	46.0	-7.0	1.50 H	66	40.5	-1.5
5	719.99	39.7 QP	46.0	-6.3	1.50 H	49	37.4	2.3
6	896.73	41.6 QP	46.0	-4.4	1.50 H	29	35.9	5.7

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.

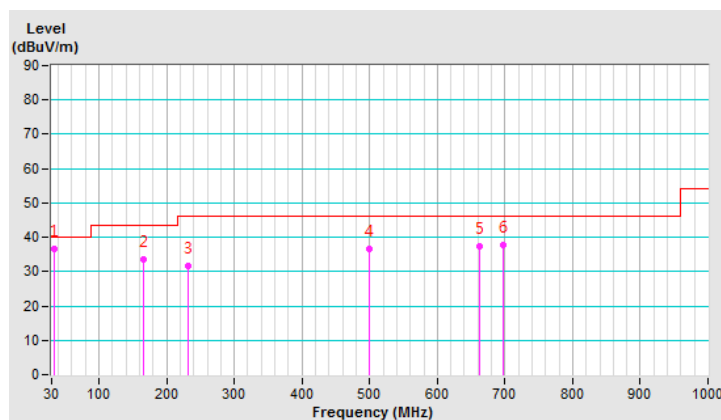


CHANNEL	TX Channel 165	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	33.80	36.7 QP	40.0	-3.3	1.50 V	122	46.0	-9.3
2	165.08	33.5 QP	43.5	-10.0	1.00 V	246	42.0	-8.5
3	231.32	31.6 QP	46.0	-14.4	1.50 V	211	40.9	-9.3
4	498.61	36.5 QP	46.0	-9.5	1.50 V	196	38.0	-1.5
5	662.70	37.3 QP	46.0	-8.7	1.00 V	155	35.5	1.8
6	698.21	37.7 QP	46.0	-8.3	1.50 V	122	35.3	2.4

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30MHz~1000MHz.
5. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20 dB below the permissible value to be report.



4.2 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	847124/029	Oct. 24, 2018	Oct. 23, 2019
Line-Impedance Stabilization Network (for EUT) R&S	ESH3-Z5	848773/004	Oct. 22, 2018	Oct. 21, 2019
Line-Impedance Stabilization Network (for Peripheral) R&S	ESH3-Z5	835239/001	Mar. 17, 2019	Mar. 16, 2020
50 ohms Terminator	N/A	3	Oct. 22, 2018	Oct. 21, 2019
RF Cable	5D-FB	COCCAB-001	Sep. 28, 2018	Sep. 27, 2019
Fixed attenuator EMCI	STI02-2200-10	003	Mar. 14, 2019	Mar. 13, 2020
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 Conduction 1.
- 3 Tested Date: Sep. 10, 2019

4.2.3 Test Procedure

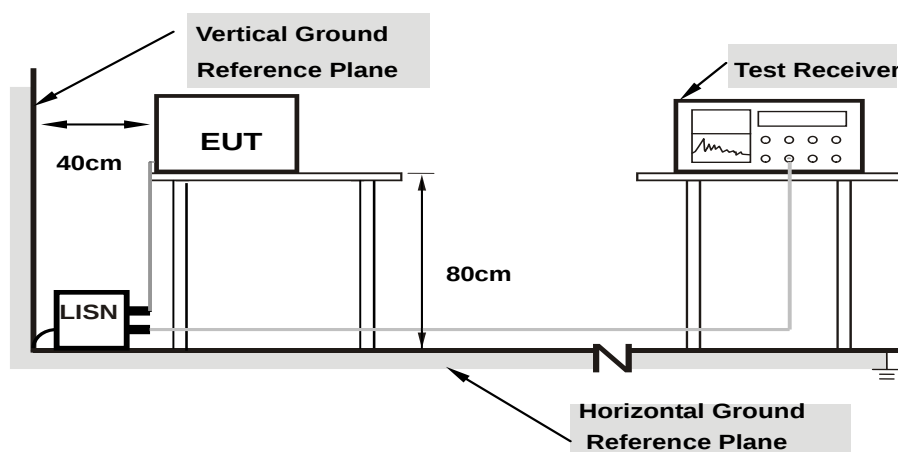
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission 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.

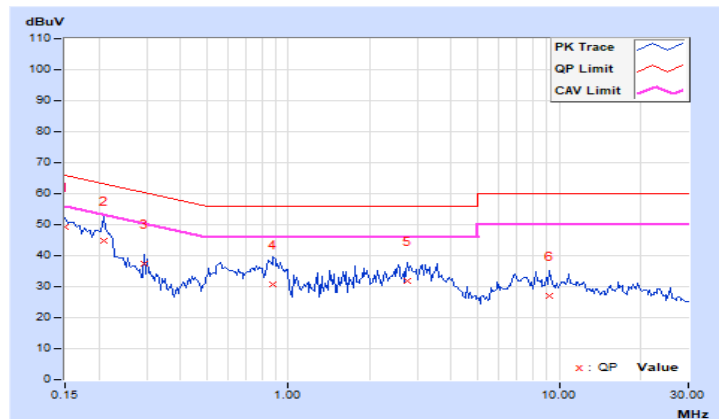
4.2.7 Test Results

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

No	Freq. [MHz]	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	9.95	39.27	21.81	49.22	31.76	66.00	56.00	-16.78	-24.24
2	0.20859	9.96	34.97	19.94	44.93	29.90	63.26	53.26	-18.33	-23.36
3	0.29453	9.96	27.43	6.80	37.39	16.76	60.40	50.40	-23.01	-33.64
4	0.88047	10.00	20.90	8.59	30.90	18.59	56.00	46.00	-25.10	-27.41
5	2.74219	10.11	21.75	14.41	31.86	24.52	56.00	46.00	-24.14	-21.48
6	9.17188	10.44	16.44	10.70	26.88	21.14	60.00	50.00	-33.12	-28.86

REMARKS:

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

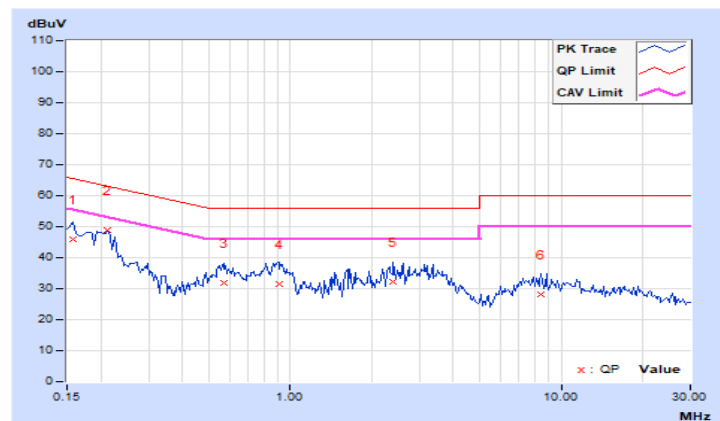


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
-------	-------------	-------------------	--------------------------------

No	Freq.	Corr.	Reading Value		Emission Level		Limit		Margin	
	[MHz]	Factor	[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
		(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15781	9.93	35.97	16.41	45.90	26.34	65.58	55.58	-19.68	-29.24
2	0.21250	9.94	38.89	19.76	48.83	29.70	63.11	53.11	-14.28	-23.41
3	0.57188	9.96	21.91	10.84	31.87	20.80	56.00	46.00	-24.13	-25.20
4	0.90781	9.98	21.57	10.13	31.55	20.11	56.00	46.00	-24.45	-25.89
5	2.40625	10.06	22.06	14.13	32.12	24.19	56.00	46.00	-23.88	-21.81
6	8.42188	10.30	17.96	12.30	28.26	22.60	60.00	50.00	-31.74	-27.40

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 Measurement

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

*B is the 26 dB emission bandwidth in megahertz

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

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

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

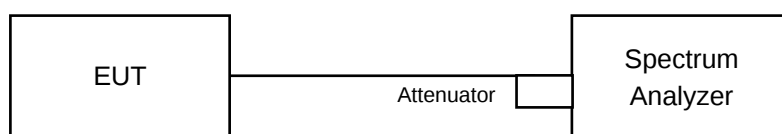
Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

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

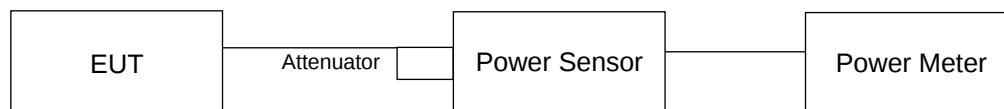
4.3.2 Test Setup

FOR POWER OUTPUT MEASUREMENT

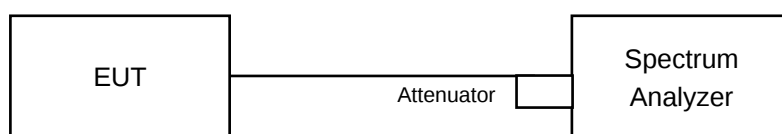
For channel straddling 5725MHz:



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 POWER OUTPUT MEASUREMENT

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 channel straddling 5725MHz:

Follow FCC KDB 789033 UNII test procedure:

Method SA-2

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

FOR 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 Results

802.11a

POWER OUTPUT

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	18.90	19.20	160.801	22.06	24.00	Pass
40	5200	18.88	19.02	157.067	21.96	24.00	Pass
48	5240	18.52	18.73	145.766	21.64	24.00	Pass
52	5260	18.89	19.04	157.614	21.98	24.00	Pass
60	5300	18.75	19.03	154.972	21.90	24.00	Pass
64	5320	18.52	18.94	149.464	21.75	24.00	Pass
100	5500	18.53	18.70	145.416	21.63	24.00	Pass
116	5580	18.88	19.02	157.067	21.96	24.00	Pass
140	5700	17.29	17.12	105.103	20.22	24.00	Pass
*144 (U-NII-2C Band)	5720	17.67	16.42	105.714	20.24	22.84	Pass
*144 (U-NII-3 Band)	5720	10.12	8.94	18.713	12.72	30.00	Pass
149	5745	19.53	19.83	185.904	22.69	30.00	Pass
157	5785	19.57	19.78	185.633	22.69	30.00	Pass
165	5825	19.59	19.81	186.71	22.71	30.00	Pass

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

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
144	5720	124.427	20.95

Note: The total power was calculated through formula and record the value for reference only.

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	24.62	20.88
60	5300	24.14	23.04
64	5320	20.61	20.48
100	5500	20.53	20.56
116	5580	22.97	20.65
140	5700	20.78	20.40
144 (U-NII-2C Band)	5720	17.65	15.30

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	20.88	24.19 > 24
60	5300	23.04	24.62 > 24
64	5320	20.48	24.11 > 24
100	5500	20.53	24.12 > 24
116	5580	20.65	24.14 > 24
140	5700	20.40	24.09 > 24
144 (U-NII-2C Band)	5720	15.30	22.84 < 24

802.11ac (VHT20)

POWER OUTPUT

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	16.69	16.73	93.764	19.72	24.00	Pass
40	5200	16.42	16.88	92.606	19.67	24.00	Pass
48	5240	16.46	16.91	93.35	19.70	24.00	Pass
52	5260	16.54	16.84	93.388	19.70	24.00	Pass
60	5300	16.50	16.91	93.759	19.72	24.00	Pass
64	5320	16.69	16.98	96.554	19.85	24.00	Pass
100	5500	16.42	16.58	89.352	19.51	24.00	Pass
116	5580	16.60	16.99	95.712	19.81	24.00	Pass
140	5700	16.74	16.98	97.094	19.87	24.00	Pass
*144 (U-NII-2C Band)	5720	15.05	14.95	67.635	18.30	22.82	Pass
*144 (U-NII-3 Band)	5720	7.89	7.88	13.142	11.19	30.00	Pass
149	5745	16.68	16.98	96.447	19.84	30.00	Pass
157	5785	16.67	16.99	96.455	19.84	30.00	Pass
165	5825	16.68	16.95	96.104	19.83	30.00	Pass

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

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
144	5720	80.777	19.07

Note: The total power was calculated through formula and record the value for reference only.

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
52	5260	20.84	20.64
60	5300	20.85	20.73
64	5320	20.74	20.62
100	5500	20.74	20.54
116	5580	20.77	20.55
140	5700	20.81	20.61
144 (U-NII-2C Band)	5720	15.32	15.24

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	20.64	24.14 > 24
60	5300	20.73	24.16 > 24
64	5320	20.62	24.14 > 24
100	5500	20.54	24.12 > 24
116	5580	20.55	24.12 > 24
140	5700	20.61	24.14 > 24
144 (U-NII-2C Band)	5720	15.24	22.82 < 24

802.11ac (VHT40)

POWER OUTPUT

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	15.36	14.54	62.801	17.98	24.00	Pass
46	5230	15.10	15.55	68.251	18.34	24.00	Pass
54	5270	15.58	16.12	77.067	18.87	24.00	Pass
62	5310	15.61	16.14	77.507	18.89	24.00	Pass
102	5510	15.89	16.22	80.694	19.07	24.00	Pass
110	5550	15.87	16.38	82.088	19.14	24.00	Pass
134	5670	15.94	16.34	82.317	19.15	24.00	Pass
*142 (U-NII-2C Band)	5710	14.49	14.46	63.368	18.02	24.00	Pass
*142 (U-NII-3 Band)	5710	2.54	2.48	4.031	6.05	30.00	Pass
151	5755	15.71	16.16	78.544	18.95	30.00	Pass
159	5795	15.79	16.21	79.714	19.02	30.00	Pass

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

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
142	5710	67.399	18.29

Note: The total power was calculated through formula and record the value for reference only.

26dB OCCUPIED BANDWIDTH

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
54	5270	42.01	41.89
62	5310	42.32	41.68
102	5510	42.17	41.75
110	5550	42.10	41.94
134	5670	41.90	41.99
142 (U-NII-2C Band)	5710	36.03	35.93

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	41.89	27.22 > 24
62	5310	41.68	27.19 > 24
102	5510	41.75	27.2 > 24
110	5550	41.94	27.22 > 24
134	5670	41.90	27.22 > 24
142 (U-NII-2C Band)	5710	35.93	26.55 > 24

802.11ac (VHT80)

POWER OUTPUT

Chan.	Chan. Freq. (MHz)	Maximum Conducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
42	5210	11.84	11.66	29.931	14.76	24.00	Pass
58	5290	14.92	14.19	57.288	17.58	24.00	Pass
106	5530	13.96	13.58	47.692	16.78	24.00	Pass
122	5610	15.34	15.65	70.926	18.51	24.00	Pass
*138 (U-NII-2C Band)	5690	12.88	13.74	53.148	17.25	24.00	Pass
*138 (U-NII-3 Band)	5690	-1.94	-1.04	1.7606	2.46	30.00	Pass
155	5775	15.31	15.61	70.355	18.47	30.00	Pass

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

The Total Power for the straddle channel:

Chan.	Chan. Freq. (MHz)	Average Power (mW)	Average Power (dBm)
138	5690	54.9086	17.4

Note: The total power was calculated through formula and record the value for reference only.

26dB OCCUPIED BANDWIDTH

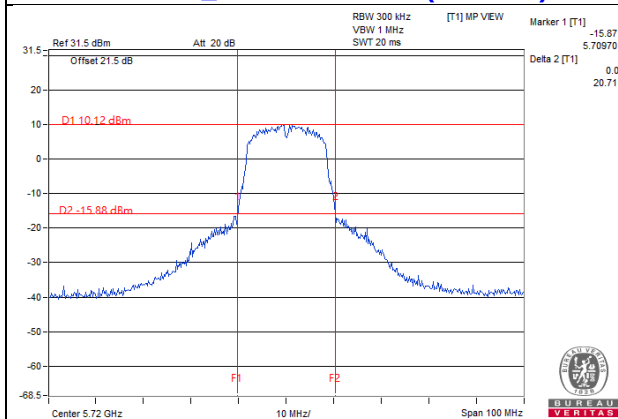
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)	
		Chain 0	Chain 1
58	5290	81.91	81.68
106	5530	82.14	81.57
122	5610	82.21	81.99
138 (U-NII-2C Band)	5690	76.06	75.82

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

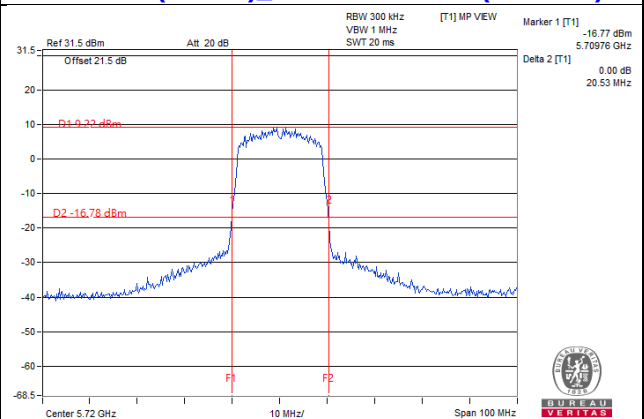
Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	81.68	30.12 > 24
106	5530	81.57	30.11 > 24
122	5610	81.99	30.13 > 24
138 (U-NII-2C Band)	5690	75.82	29.79 > 24

Spectrum Plot of Worst Value

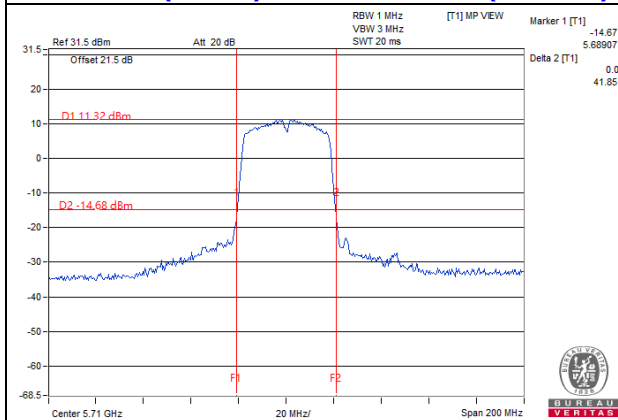
802.11a_Chain 1 / CH144 (U-NII-2C)



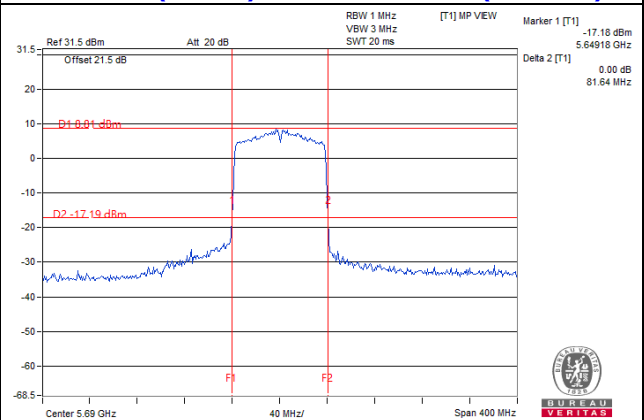
802.11ac (VHT20)_Chain 1 / CH144 (U-NII-2C)



802.11ac (VHT40)_Chain 1 / CH142 (U-NII-2C)



802.11ac (VHT80)_Chain 1 / CH138 (U-NII-2C)



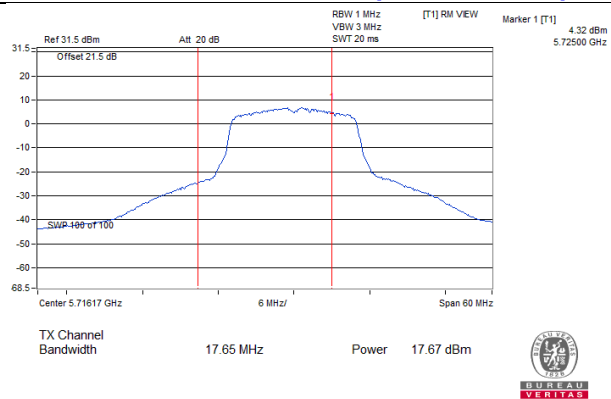
Note:

- For CH144 (U-NII-2C) = 5725MHz - Marker 1
- For CH142 (U-NII-2C) = 5725MHz - Marker 1
- For CH138 (U-NII-2C) = 5725MHz - Marker 1

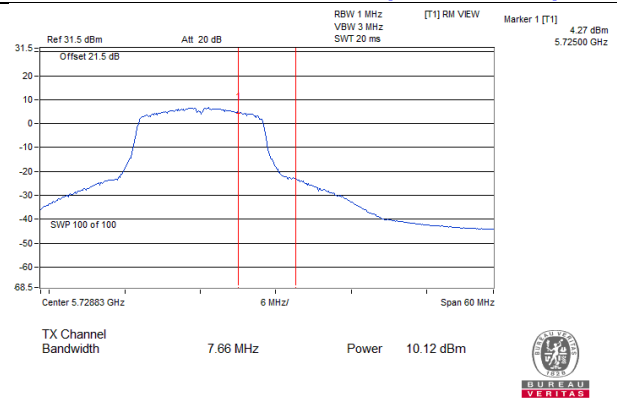
For channel straddling 5725MHz of Power

Spectrum Plot Value of Power

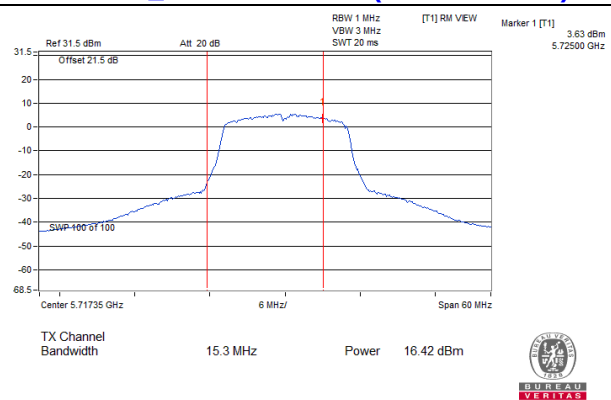
802.11a_Chain 0 / CH144 (U-NII-2C Band)



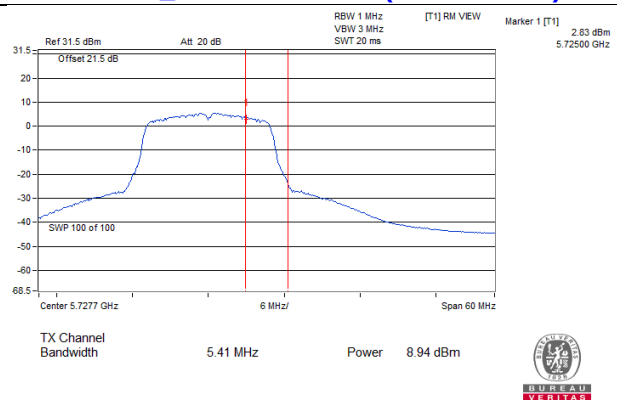
802.11a_Chain 0 / CH144 (U-NII-3 Band)



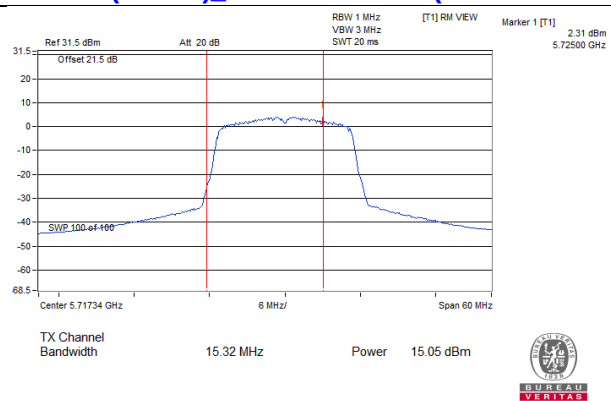
802.11a_Chain 1 / CH144 (U-NII-2C Band)



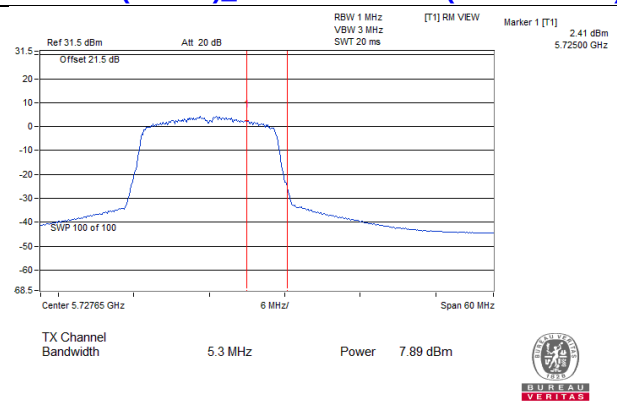
802.11a_Chain 1 / CH144 (U-NII-3 Band)



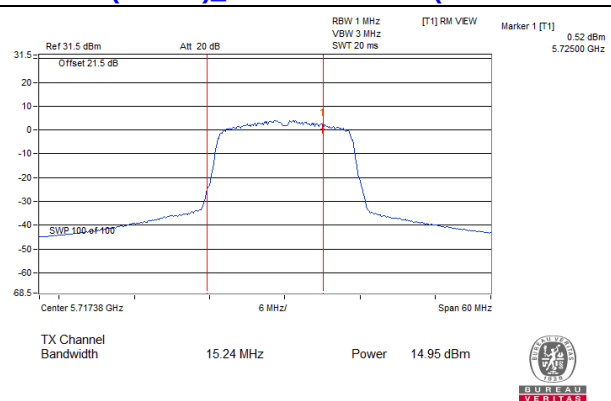
802.11ac (VHT20)_Chain 0 / CH144 (U-NII-2C Band)



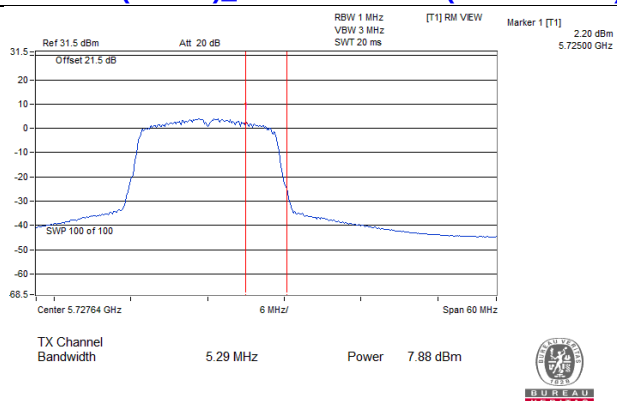
802.11ac (VHT20)_Chain 0 / CH144 (U-NII-3 Band)



802.11ac (VHT20)_Chain 1 / CH144 (U-NII-2C Band)

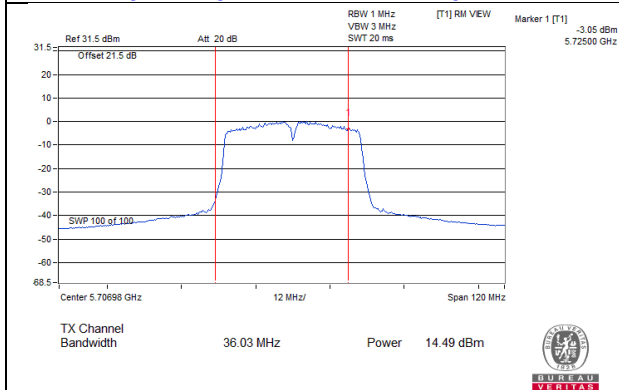


802.11ac (VHT20)_Chain 1 / CH144 (U-NII-3 Band)

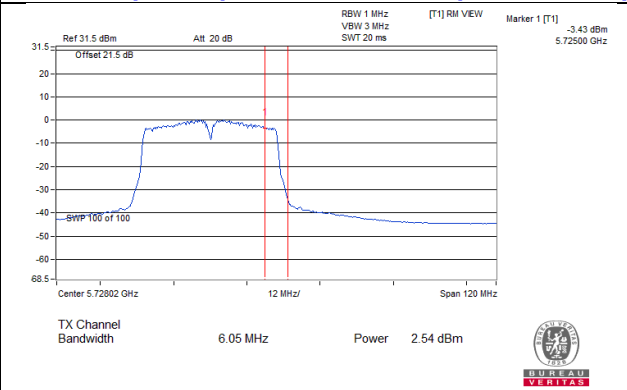


Spectrum Plot Value of Power

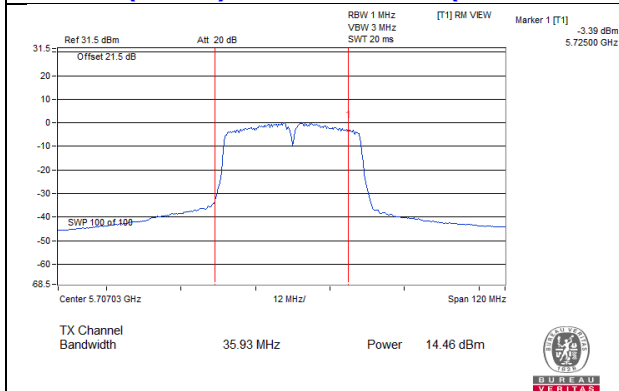
802.11ac (VHT40)_Chain 0 / CH142 (U-NII-2C Band)



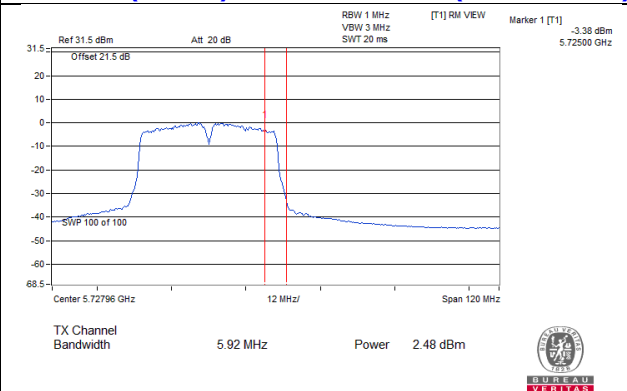
802.11ac (VHT40)_Chain 0 / CH142 (U-NII-3 Band)



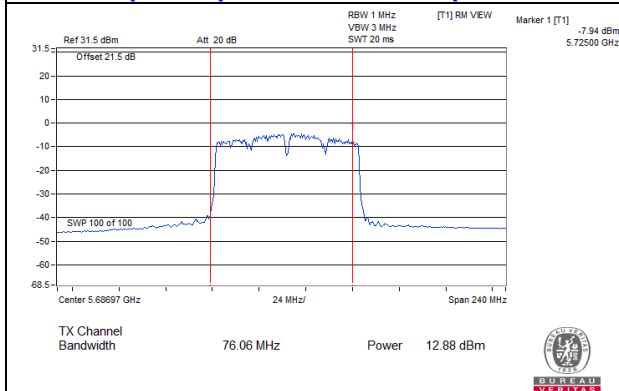
802.11ac (VHT40)_Chain 1 / CH142 (U-NII-2C Band)



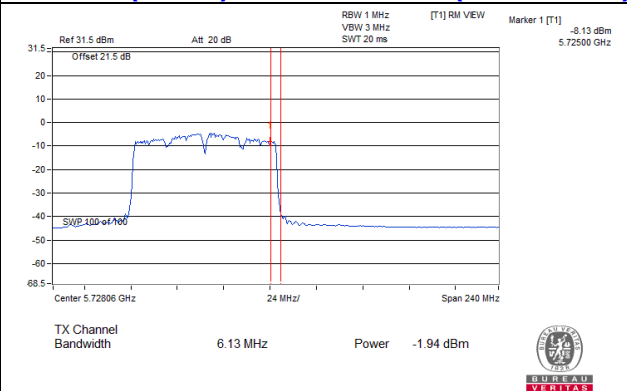
802.11ac (VHT40)_Chain 1 / CH142 (U-NII-3 Band)



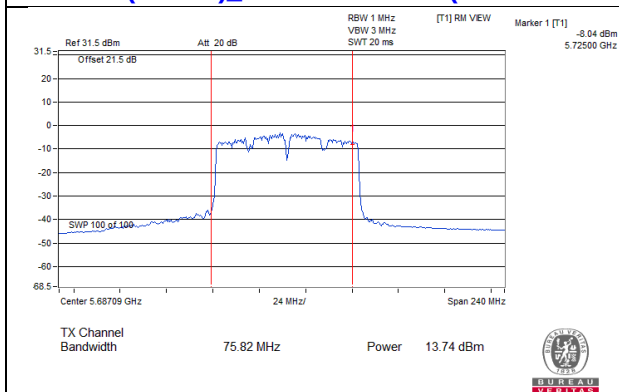
802.11ac (VHT80)_Chain 0 / CH138 (U-NII-2C Band)



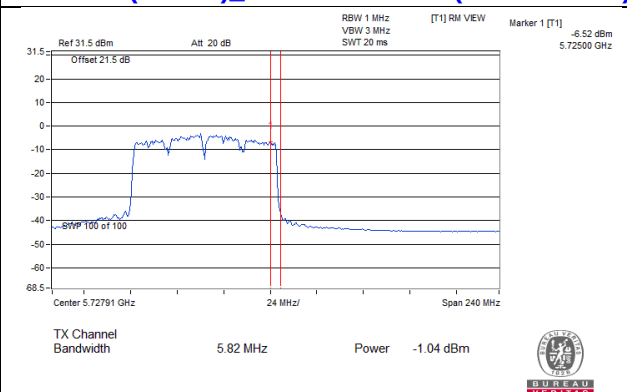
802.11ac (VHT80)_Chain 0 / CH138 (U-NII-3 Band)



802.11ac (VHT80)_Chain 1 / CH138 (U-NII-2C Band)



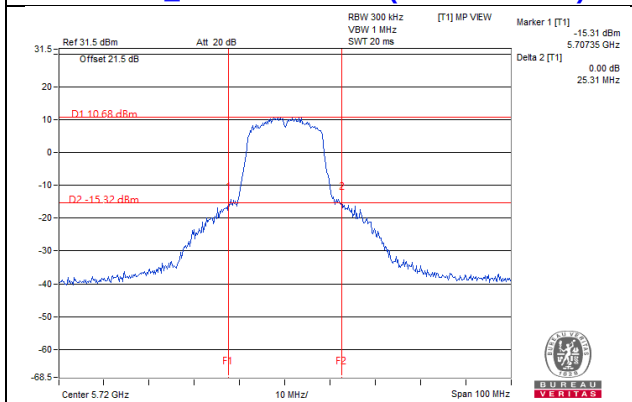
802.11ac (VHT80)_Chain 1 / CH138 (U-NII-3 Band)



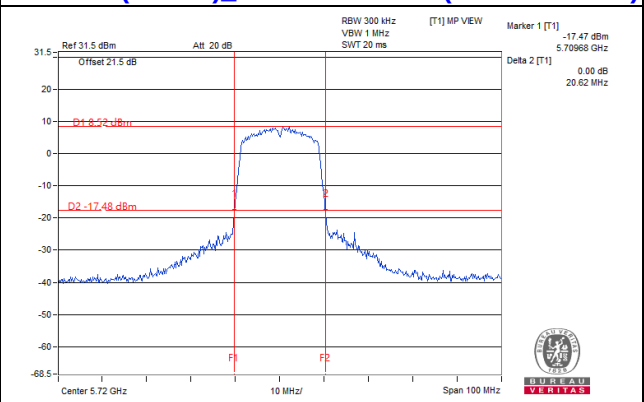
For channel straddling 5725MHz of 26dB BW

Spectrum Plot Value of 26dB BW

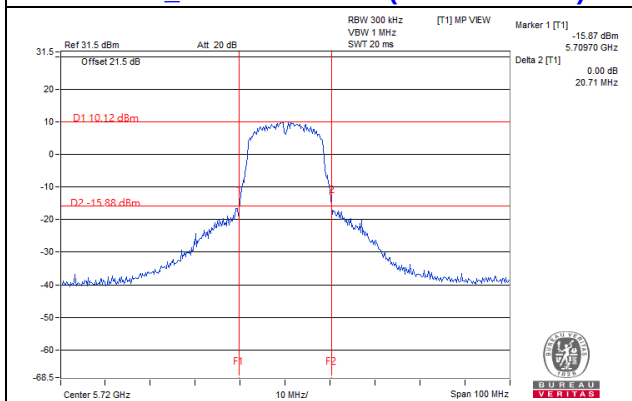
802.11a_Chain 0 / CH144 (U-NII-2C Band)



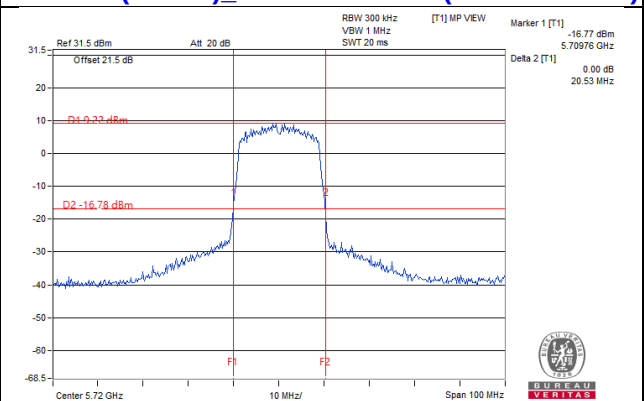
802.11ac (VHT20)_Chain 0 / CH144 (U-NII-2C Band)



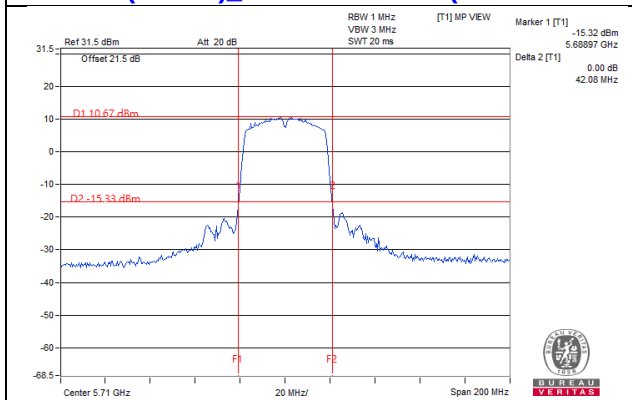
802.11a_Chain 1 / CH144 (U-NII-2C Band)



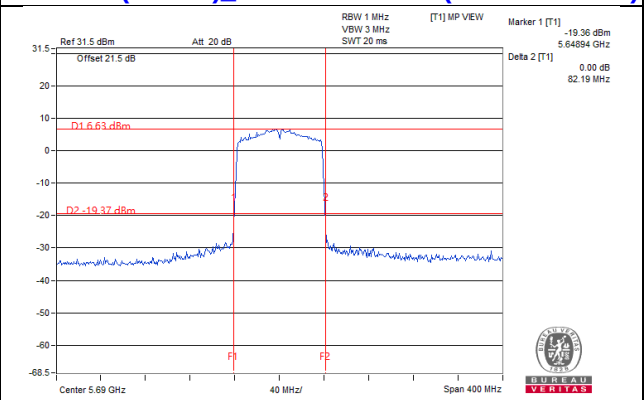
802.11ac (VHT20)_Chain 1 / CH144 (U-NII-2C Band)



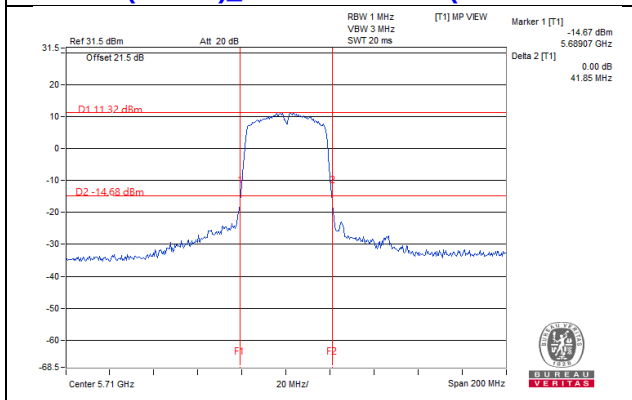
802.11ac (VHT40)_Chain 0 / CH142 (U-NII-2C Band)



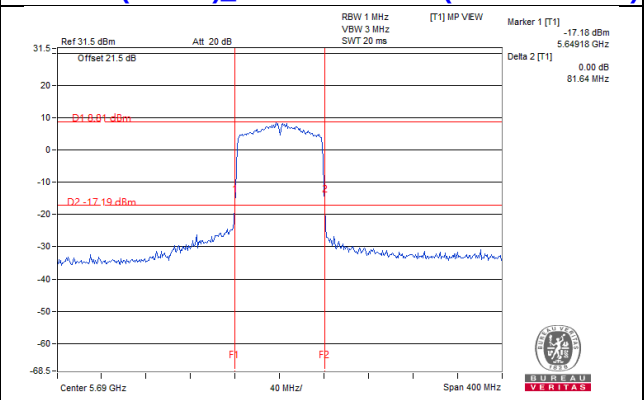
802.11ac (VHT80)_Chain 0 / CH138 (U-NII-2C Band)



802.11ac (VHT40)_Chain 1 / CH142 (U-NII-2C Band)



802.11ac (VHT80)_Chain 1 / CH138 (U-NII-2C Band)



Note:

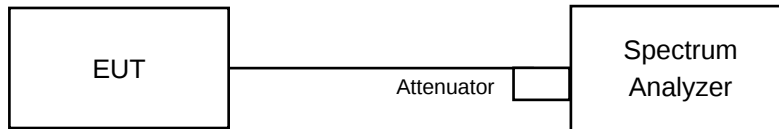
For CH144 (U-NII-2C) = 5725MHz - Marker 1

For CH142 (U-NII-2C) = 5725MHz - Marker 1

For CH138 (U-NII-2C) = 5725MHz - Marker 1

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
36	5180	16.68	16.68
40	5200	16.80	16.68
48	5240	16.80	16.80
52	5260	16.92	16.80
60	5300	16.92	16.80
64	5320	16.80	16.56
100	5500	16.68	16.56
116	5580	16.92	16.68
140	5700	16.80	16.56
144 (U-NII-2C Band)	5720	13.40	13.40
144 (U-NII-3 Band)	5720	3.52	3.40
149	5745	17.28	16.80
157	5785	17.40	16.92
165	5825	17.28	16.92

802.11ac (VHT20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
36	5180	17.64	17.64
40	5200	17.76	17.64
48	5240	17.76	17.64
52	5260	17.76	17.64
60	5300	17.76	17.64
64	5320	17.76	17.64
100	5500	17.64	17.64
116	5580	17.76	17.64
140	5700	17.76	17.64
144 (U-NII-2C Band)	5720	13.88	13.88
144 (U-NII-3 Band)	5720	3.76	3.88
149	5745	17.76	17.76
157	5785	17.76	17.76
165	5825	17.76	17.76

802.11ac (VHT40)

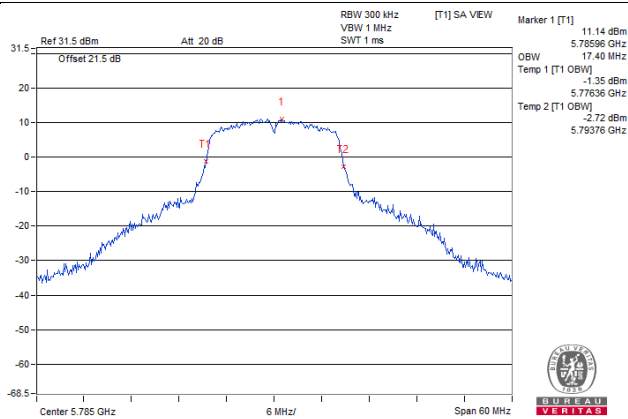
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
38	5190	36.48	36.24
46	5230	36.24	36.48
54	5270	36.48	36.24
62	5310	36.48	36.24
102	5510	36.48	36.24
110	5550	36.24	36.24
134	5670	36.24	36.24
142 (U-NII-2C Band)	5710	33.24	33.24
142 (U-NII-3 Band)	5710	3.24	3.00
151	5755	36.24	36.48
159	5795	36.48	36.24

802.11ac (VHT80)

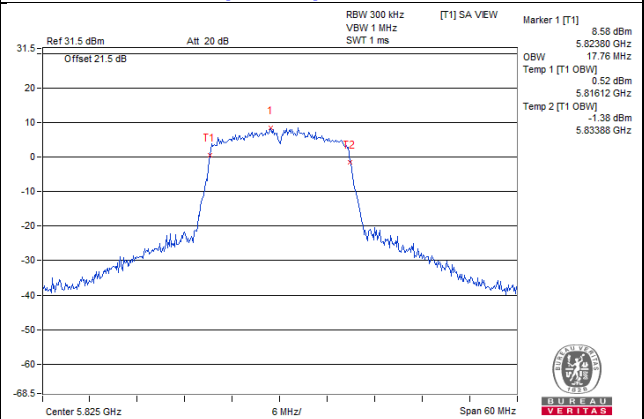
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)	
		Chain 0	Chain 1
42	5210	75.84	75.36
58	5290	75.36	75.36
106	5530	75.36	75.36
122	5610	75.36	75.36
138 (U-NII-2C Band)	5690	72.92	72.92
138 (U-NII-3 Band)	5690	2.92	2.44
155	5775	75.84	75.36

Spectrum Plot of Max. Value

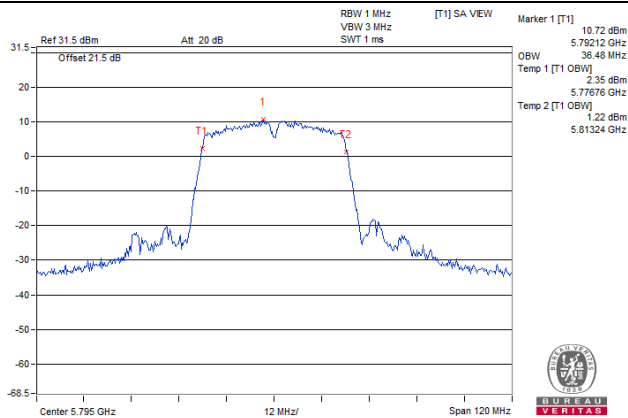
802.11a_Chain 0 / CH157



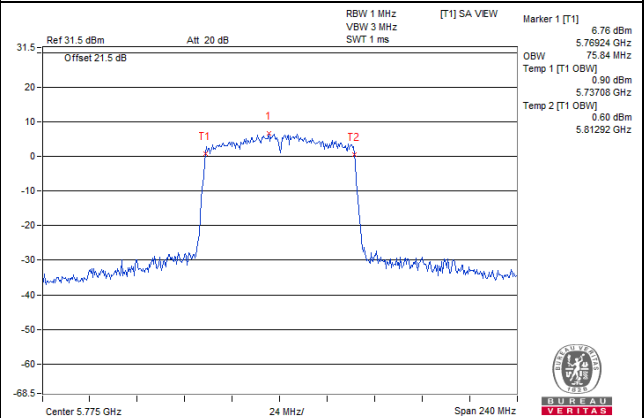
802.11ac (VHT20)_Chain 0 / CH165



802.11ac (VHT40)_Chain 0 / CH159



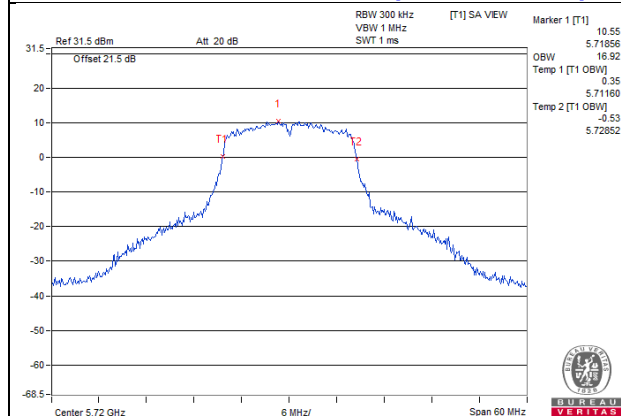
802.11ac (VHT80)_Chain 0 / CH155



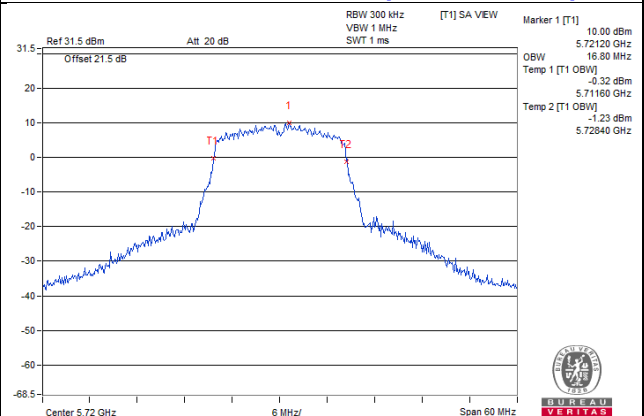
For channel straddling 5725MHz

Spectrum Plot Value of channel straddling 5725MHz

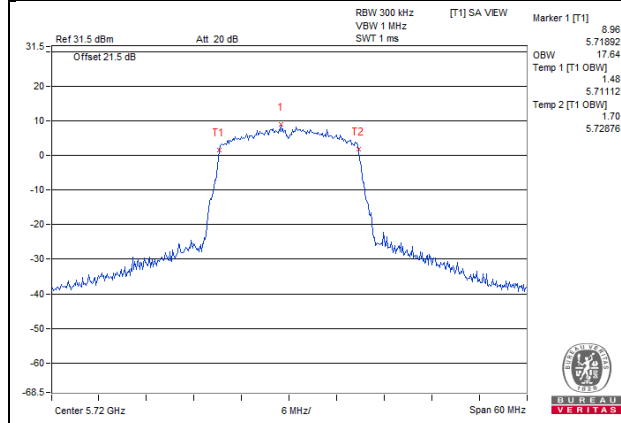
802.11a_Chain 0 / CH144 (U-NII-2C Band)



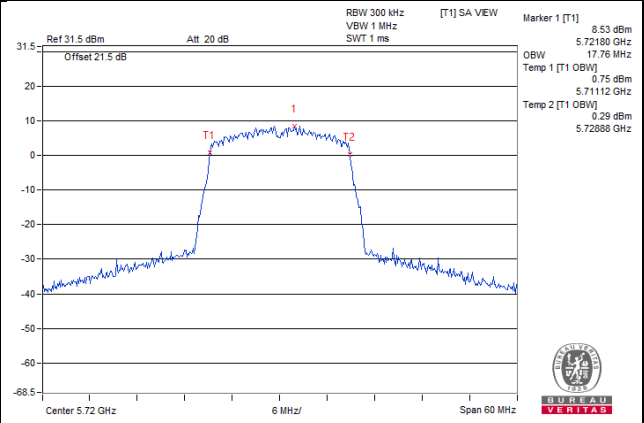
802.11a_Chain 1 / CH144 (U-NII-2C Band)



802.11ac (VHT20)_Chain 0 / CH144 (U-NII-2C Band)



802.11ac (VHT20)_Chain 1 / CH144 (U-NII-2C Band)



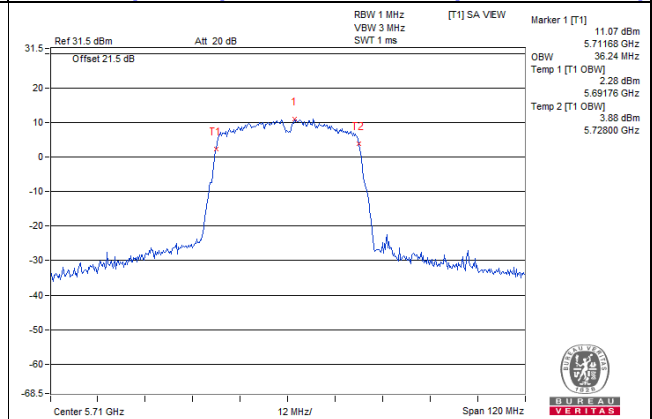
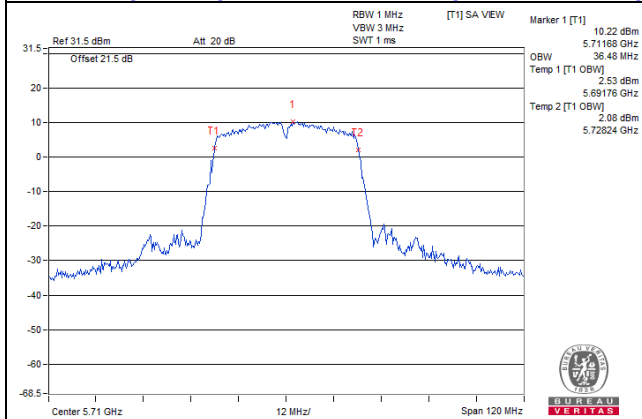
Note:

For CH144 (U-NII-2C) = 5725MHz - Temp 1

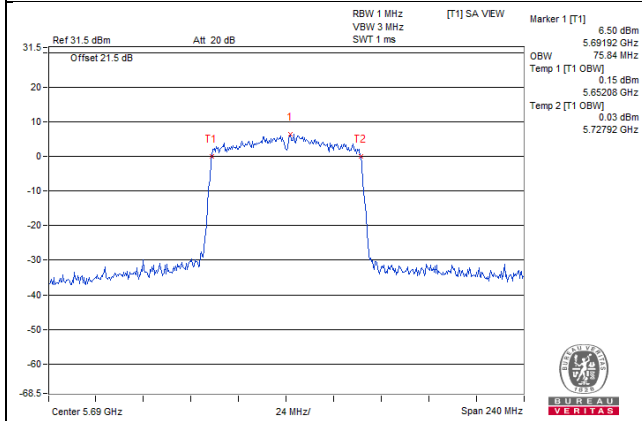
For CH144 (U-NII-3) = Temp 2 - 5725MHz

Spectrum Plot Value of channel straddling 5725MHz

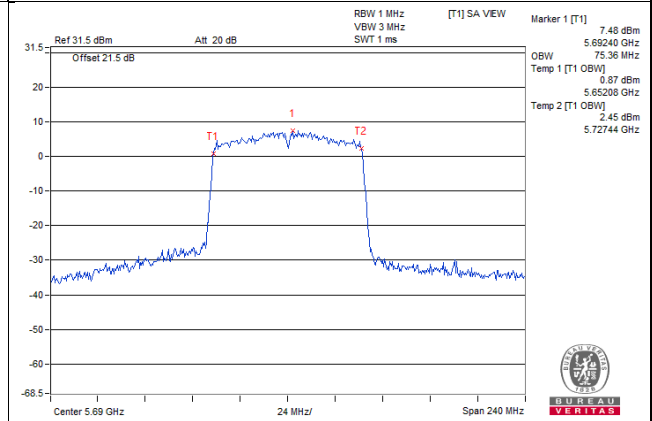
802.11ac (VHT40)_Chain 0 / CH142 (U-NII-2C Band) 802.11ac (VHT40)_Chain 1 / CH142 (U-NII-2C Band)



802.11ac (VHT80)_Chain 0 / CH138 (U-NII-2C Band)



802.11ac (VHT80)_Chain 1 / CH138 (U-NII-2C Band)

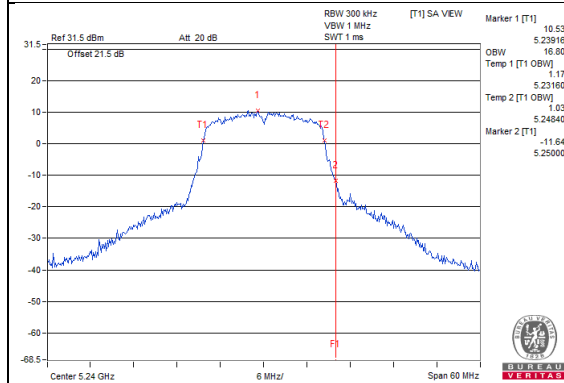


Note:

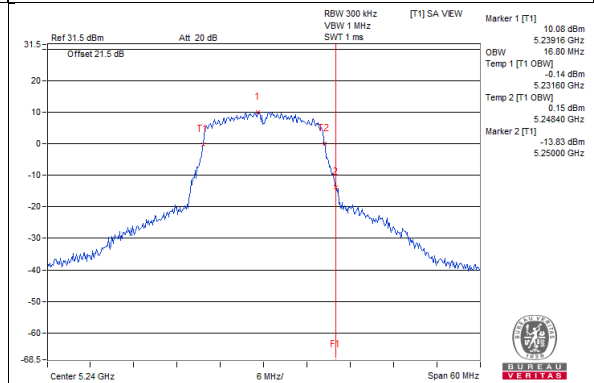
- For CH142 (U-NII-2C) = 5725MHz - Temp 1
- For CH138 (U-NII-2C) = 5725MHz - Temp 1
- For CH142 (U-NII-3) = Temp 2 - 5725MHz
- For CH138 (U-NII-3) = Temp 2 - 5725MHz

Spectrum Plot for near by DFS band
(DFS is required, if 99% OCP straddle into U-NII-2A band)

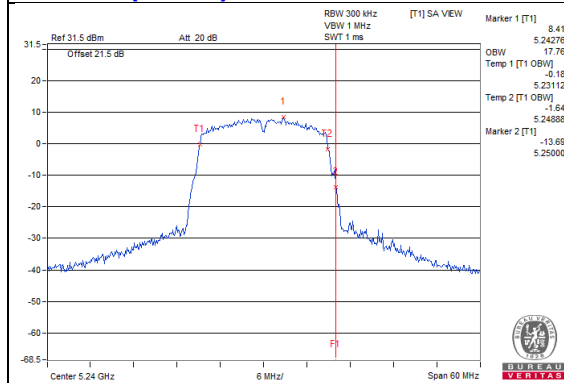
802.11a_Chain 0 / CH48



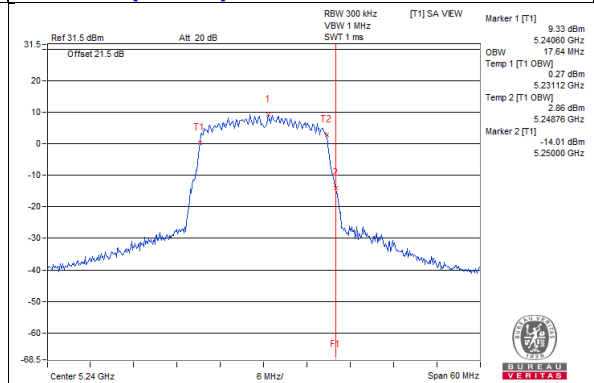
802.11a_Chain 1 / CH48



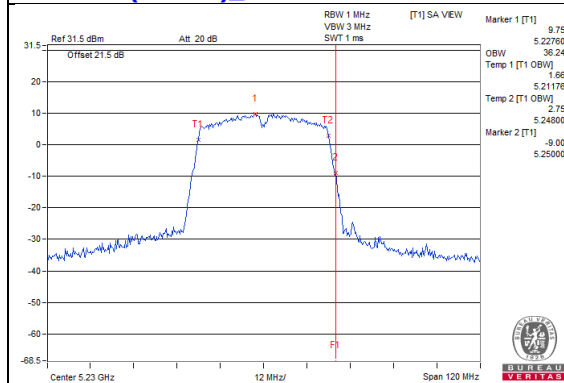
802.11ac (VHT20)_Chain 0 / CH48



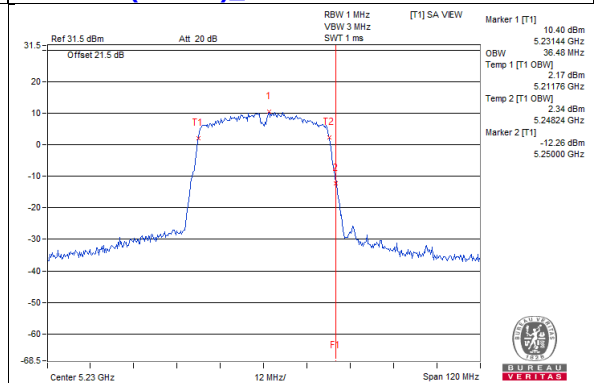
802.11ac (VHT20)_Chain 1 / CH48



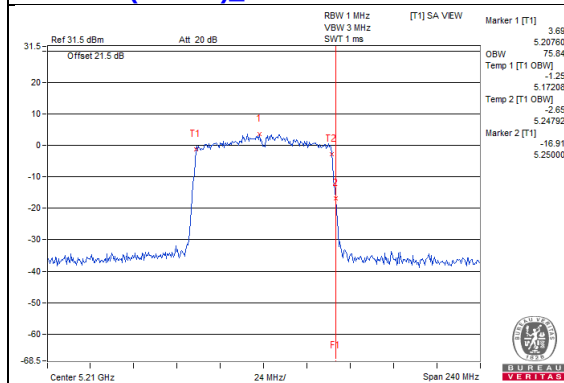
802.11ac (VHT40)_Chain 0 / CH46



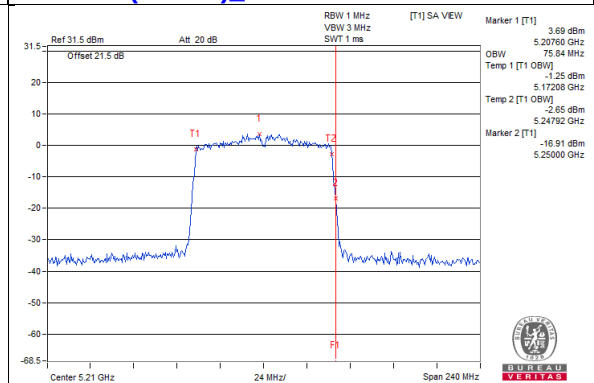
802.11ac (VHT40)_Chain 1 / CH46



802.11ac (VHT80)_Chain 0 / CH42

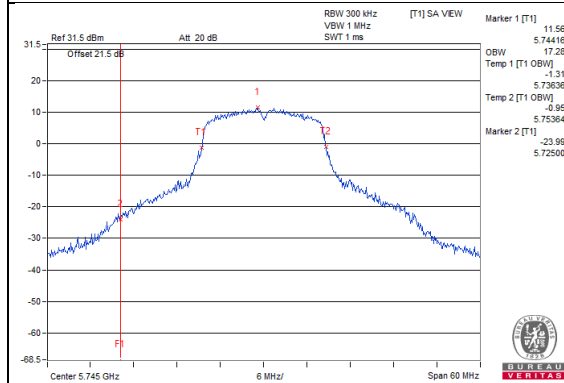


802.11ac (VHT80)_Chain 1 / CH42

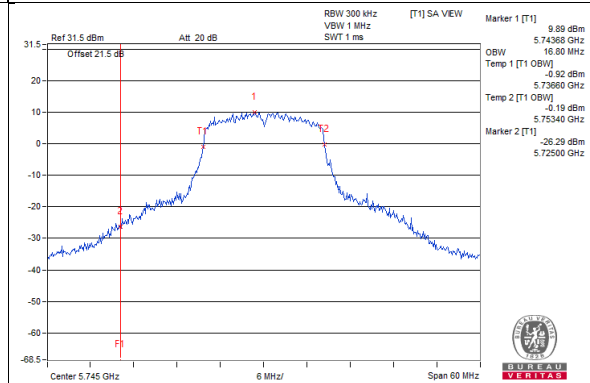


Spectrum Plot for near by DFS band
(DFS is required, if 99% OCP straddle into U-NII-2C band)

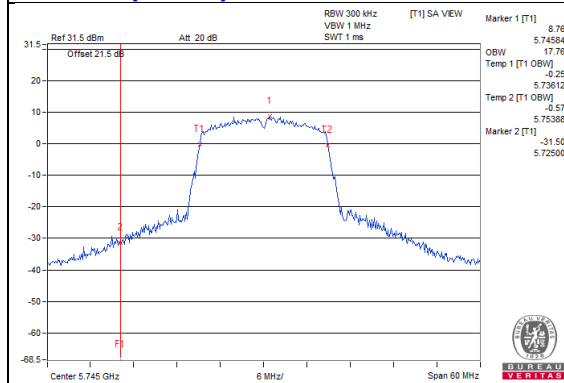
802.11a_Chain 0 / CH149



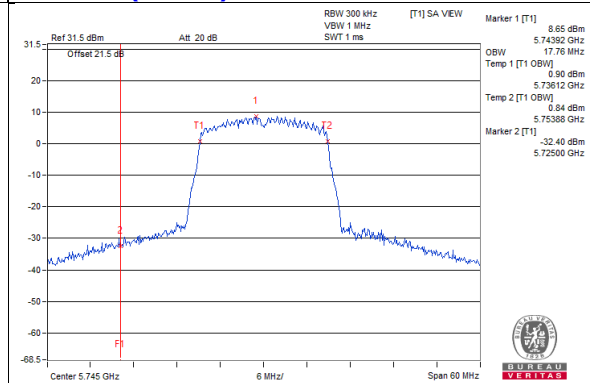
802.11a_Chain 1 / CH149



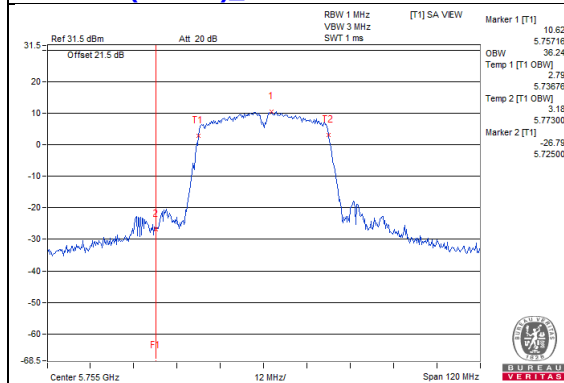
802.11ac (VHT20)_Chain 0 / CH149



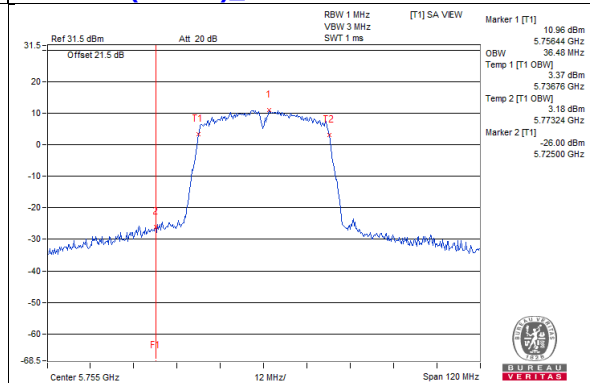
802.11ac (VHT20)_Chain 1 / CH149



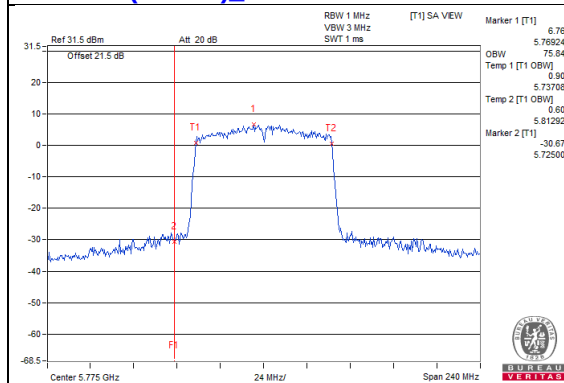
802.11ac (VHT40)_Chain 0 / CH151



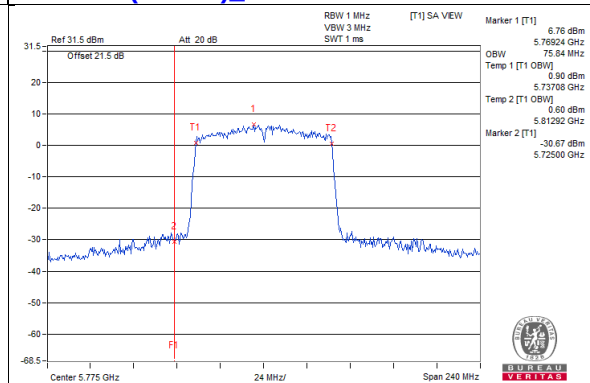
802.11ac (VHT40)_Chain 1 / CH151



802.11ac (VHT80)_Chain 0 / CH155



802.11ac (VHT80)_Chain 1 / CH155

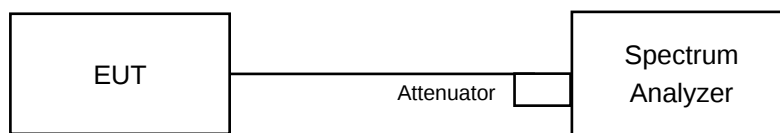


4.5 Peak Power Spectral Density Measurement

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	
	√	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

For U-NII-1, U-NII-2A, U-NII-2C band:

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)

For U-NII-3 band:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log(500\text{ kHz}/300\text{ kHz})$
5. Sweep time = auto, trigger set to "free run".
6. Trace average at least 100 traces in power averaging mode.
7. 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, U-NII-2A, U-NII-2C:

802.11a

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	5.62	5.59	0.14	8.76	8.99	Pass
40	5200	5.38	5.66	0.14	8.67	8.99	Pass
48	5240	5.37	5.39	0.14	8.53	8.99	Pass
52	5260	5.63	5.71	0.14	8.82	8.99	Pass
60	5300	5.76	5.63	0.14	8.85	8.99	Pass
64	5320	5.55	5.98	0.14	8.92	8.99	Pass
100	5500	5.82	5.73	0.14	8.93	8.99	Pass
116	5580	5.77	5.61	0.14	8.84	8.99	Pass
140	5700	5.31	4.22	0.14	7.95	8.99	Pass
144 (U-NII-2C Band)	5720	5.60	5.78	0.14	8.84	8.99	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. The directional gain = $5\text{dBi} + 10\log(2) = 8.01\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11-(8.01-6)=8.99\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
36	5180	4.16	3.87	0.29	7.32	8.99	Pass
40	5200	3.99	4.29	0.29	7.44	8.99	Pass
48	5240	4.18	4.20	0.29	7.49	8.99	Pass
52	5260	4.11	4.22	0.29	7.47	8.99	Pass
60	5300	4.19	4.47	0.29	7.63	8.99	Pass
64	5320	4.37	4.30	0.29	7.64	8.99	Pass
100	5500	4.32	4.54	0.29	7.73	8.99	Pass
116	5580	4.41	4.91	0.29	7.97	8.99	Pass
140	5700	4.27	4.47	0.29	7.67	8.99	Pass
144 (U-NII-2C Band)	5720	4.09	3.88	0.29	7.29	8.99	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. The directional gain = $5\text{dBi} + 10\log(2) = 8.01\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11 - (8.01 - 6) = 8.99\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
38	5190	-0.26	-0.06	0.53	3.38	8.99	Pass
46	5230	-0.50	-0.41	0.53	3.09	8.99	Pass
54	5270	0.14	-0.26	0.53	3.49	8.99	Pass
62	5310	0.07	-0.01	0.53	3.57	8.99	Pass
102	5510	0.29	0.33	0.53	3.85	8.99	Pass
110	5550	0.10	-0.08	0.53	3.55	8.99	Pass
134	5670	0.22	0.26	0.53	3.78	8.99	Pass
142 (U-NII-2C Band)	5710	0.45	0.38	0.53	3.96	8.99	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. The directional gain = $5\text{dBi} + 10\log(2) = 8.01\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11-(8.01-6)=8.99\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

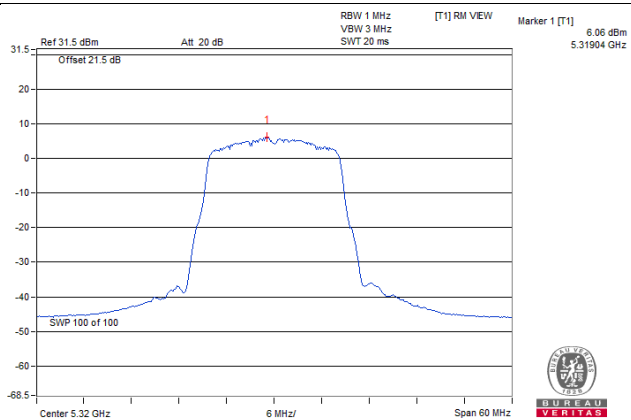
802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)		Duty Factor (dB)	Total PSD With Duty Factor (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
		Chain 0	Chain 1				
42	5210	-6.70	-6.64	0.91	-2.75	8.99	Pass
58	5290	-4.46	-3.64	0.91	-0.11	8.99	Pass
106	5530	-4.14	-4.74	0.91	-0.51	8.99	Pass
122	5610	-4.14	-2.84	0.91	0.48	8.99	Pass
138 (U-NII-2C Band)	5690	-4.70	-3.77	0.91	-0.29	8.99	Pass

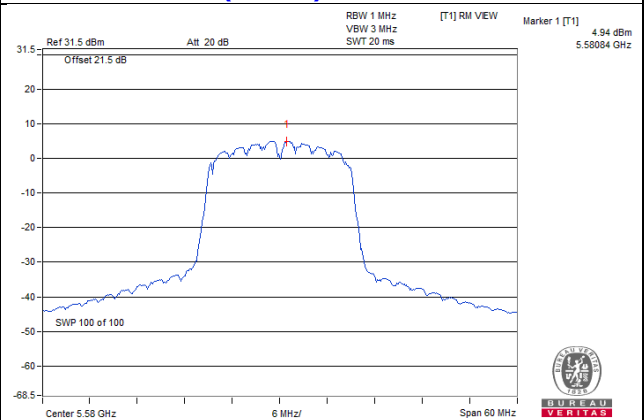
- Note: 1. Method a) of power density measurement of KDB 662911 is using for calculating total power density. Total power density is summing entire spectra across corresponding frequency bins on the various outputs by computer.
2. The directional gain = $5\text{dBi} + 10\log(2) = 8.01\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $11-(8.01-6)=8.99\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

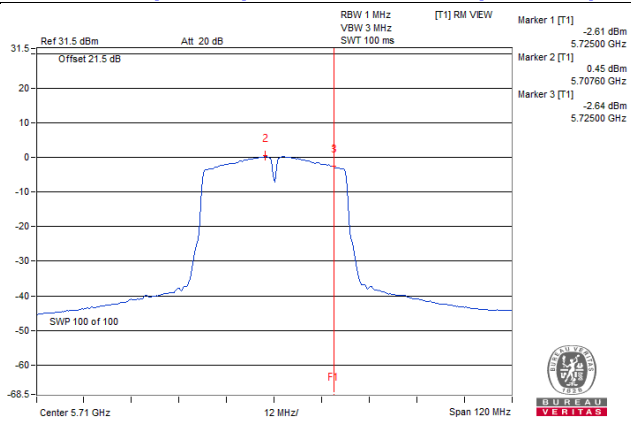
802.11a_Chain 1 / CH64



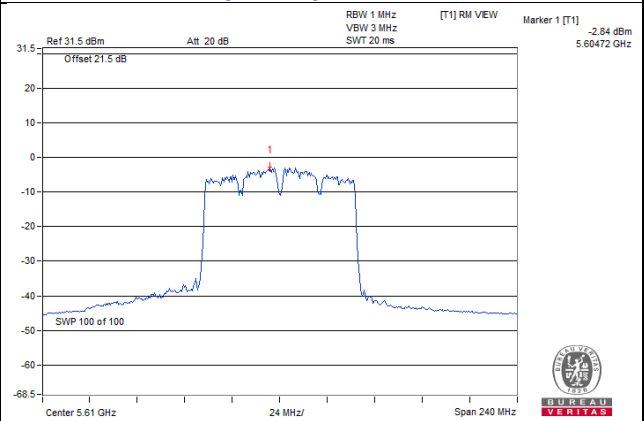
802.11ac (VHT20)_Chain 1 / CH116



802.11ac (VHT40)_Chain 0 / CH142 (U-NII-2C)



802.11ac (VHT80)_Chain 1 / CH122



For U-NII-3:

802.11a

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/300kHz)		Duty Factor (dB)	Total PSD With Duty Factor		Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass /Fail
		Chain 0	Chain 1		mW/ 300kHz	dBm/ 300kHz			
144 (U-NII-3 Band)	5720	-4.85	-5.40	0.14	0.6361	-1.96	0.26	27.99	Pass
149	5745	-1.25	-2.53	0.14	1.3516	1.31	3.53	27.99	Pass
157	5785	-1.24	-2.24	0.14	1.3932	1.44	3.66	27.99	Pass
165	5825	-0.96	-2.92	0.14	1.3555	1.32	3.54	27.99	Pass

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. The directional gain = $5\text{dBi} + 10\log(2) = 8.01\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (8.01 - 6) = 27.99\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT20)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/300kHz)		Duty Factor (dB)	Total PSD With Duty Factor		Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass /Fail
		Chain 0	Chain 1		mW/ 300kHz	dBm/ 300kHz			
144 (U-NII-3 Band)	5720	-6.87	-5.60	0.29	0.5144	-2.89	-0.67	27.99	Pass
149	5745	-4.25	-4.08	0.29	0.8198	-0.86	1.36	27.99	Pass
157	5785	-4.12	-4.36	0.29	0.8059	-0.94	1.28	27.99	Pass
165	5825	-3.81	-4.56	0.29	0.8189	-0.87	1.35	27.99	Pass

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. The directional gain = $5\text{dBi} + 10\log(2) = 8.01\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (8.01 - 6) = 27.99\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT40)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/300kHz)		Duty Factor (dB)	Total PSD With Duty Factor		Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass /Fail
		Chain 0	Chain 1		mW/ 300kHz	dBm/ 300kHz			
142 (U-NII-3 Band)	5710	-11.61	-11.70	0.53	0.15449	-8.11	-5.89	27.99	Pass
151	5755	-9.01	-8.92	0.53	0.287	-5.42	-3.20	27.99	Pass
159	5795	-8.88	-8.81	0.53	0.295	-5.30	-3.08	27.99	Pass

- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. The directional gain = $5\text{dBi} + 10\log(2) = 8.01\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (8.01 - 6) = 27.99\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

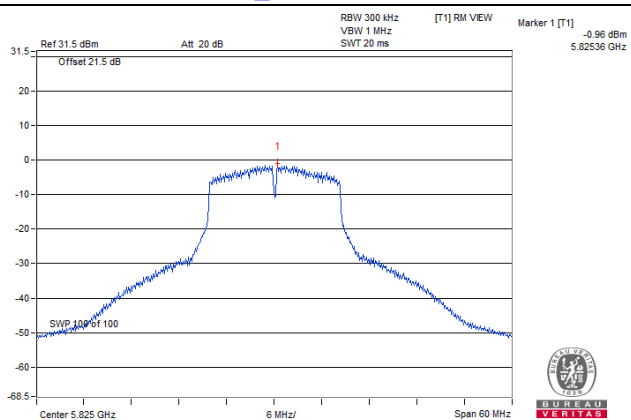
802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/300kHz)		Duty Factor (dB)	Total PSD With Duty Factor		Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/ 500kHz)	Pass /Fail
		Chain 0	Chain 1		mW/ 300kHz	dBm/ 300kHz			
138 (U-NII-3 Band)	5690	-16.30	-15.13	0.91	0.0668	-11.75	-9.53	27.99	Pass
155	5775	-12.46	-11.43	0.91	0.15882	-7.99	-5.77	27.99	Pass

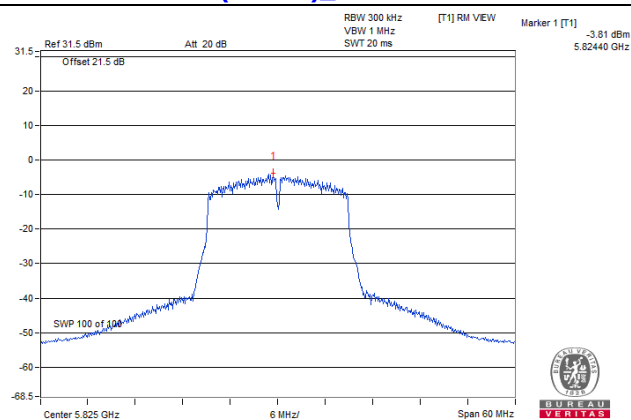
- Note: 1. Method b) Measure and sum spectral maxima across the outputs of KDB 662911 is using for calculating total power density.
2. The directional gain = $5\text{dBi} + 10\log(2) = 8.01\text{dBi} > 6\text{dBi}$, so the power density limit shall be reduced to $30 - (8.01 - 6) = 27.99\text{dBm}$.
3. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

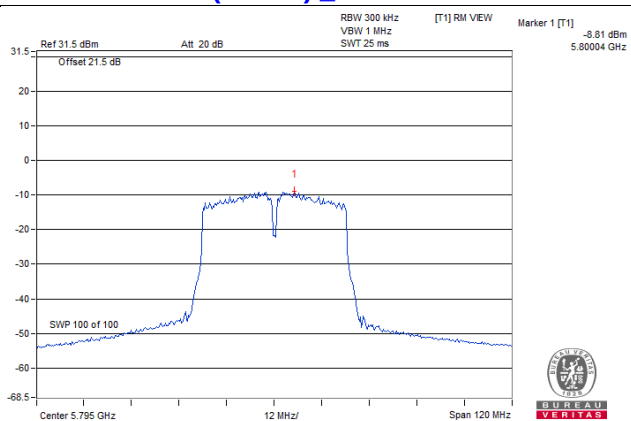
802.11a_Chain 0 / CH165



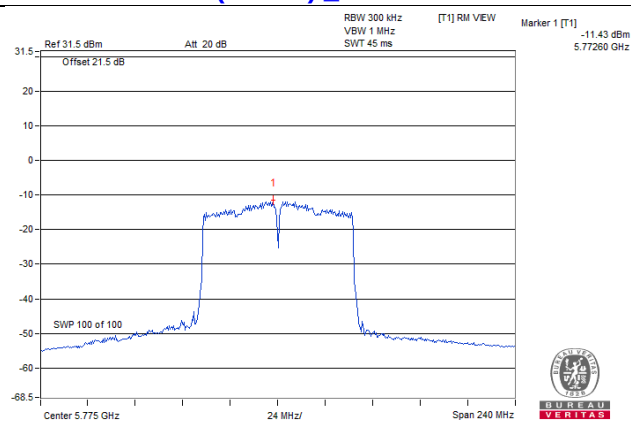
802.11ac (VHT20)_Chain 0 / CH165



802.11ac (VHT40)_Chain 1 / CH159



802.11ac (VHT80)_Chain 1 / CH155

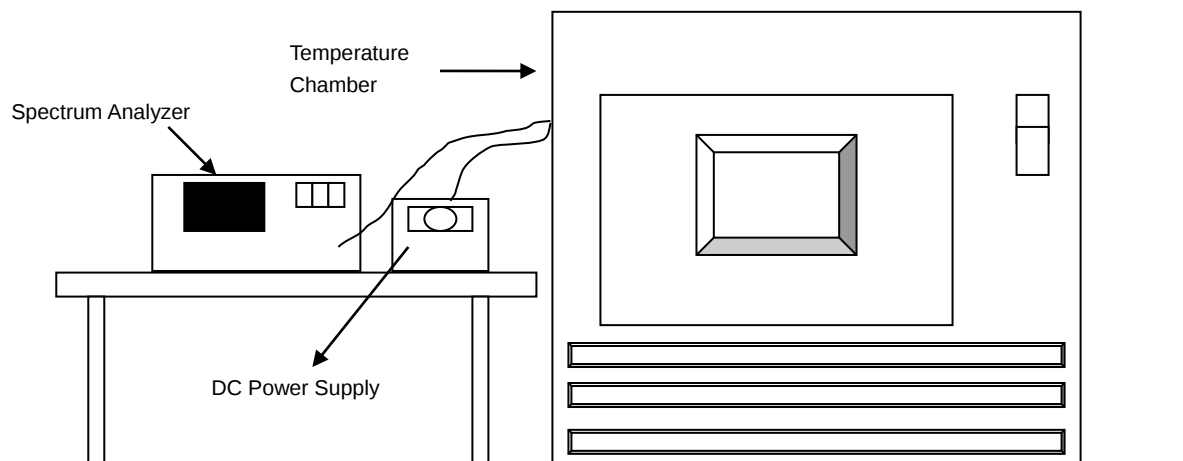


4.6 Frequency Stability Measurement

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

- The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- 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.
- Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
- 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: 5180 MHz									
TEMP. (°C)	Power Supply (Vdc)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
70	3.3	5179.9913	PASS	5179.9932	PASS	5179.9937	PASS	5179.9924	PASS
60	3.3	5180.0208	PASS	5180.02	PASS	5180.0181	PASS	5180.021	PASS
50	3.3	5180.0175	PASS	5180.0171	PASS	5180.0163	PASS	5180.0149	PASS
40	3.3	5179.9762	PASS	5179.9739	PASS	5179.9721	PASS	5179.9748	PASS
30	3.3	5179.993	PASS	5179.9956	PASS	5179.9968	PASS	5179.9952	PASS
20	3.3	5179.9956	PASS	5179.9919	PASS	5179.9956	PASS	5179.996	PASS
10	3.3	5179.9774	PASS	5179.9761	PASS	5179.9802	PASS	5179.9783	PASS
0	3.3	5179.9822	PASS	5179.9808	PASS	5179.9797	PASS	5179.9801	PASS
-10	3.3	5179.9923	PASS	5179.9892	PASS	5179.992	PASS	5179.9909	PASS

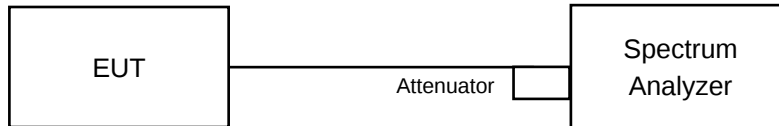
Frequency Stability Versus Voltage									
Operating Frequency: 5180 MHz									
TEMP. (°C)	Power Supply (Vdc)	0 Minute		2 Minutes		5 Minutes		10 Minutes	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
20	3.795	5179.9964	PASS	5179.9918	PASS	5179.9948	PASS	5179.9962	PASS
	3.3	5179.9956	PASS	5179.9919	PASS	5179.9956	PASS	5179.996	PASS
	2.805	5179.9959	PASS	5179.9918	PASS	5179.9956	PASS	5179.9957	PASS

4.7 6dB Bandwidth Measurement

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

- Set resolution bandwidth (RBW) = 100kHz
- Set the video bandwidth (VBW) $\geq 3 \times$ RBW, Detector = Peak.
- Trace mode = max hold.
- Sweep = auto couple.
- 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 (U-NII-3 Band)	5720	2.62	2.63	0.5	Pass
149	5745	15.18	15.20	0.5	Pass
157	5785	15.20	15.19	0.5	Pass
165	5825	15.19	15.18	0.5	Pass

802.11ac (VHT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
144 (U-NII-3 Band)	5720	2.57	3.16	0.5	Pass
149	5745	15.50	16.32	0.5	Pass
157	5785	15.18	15.76	0.5	Pass
165	5825	15.19	15.74	0.5	Pass

802.11ac (VHT40)

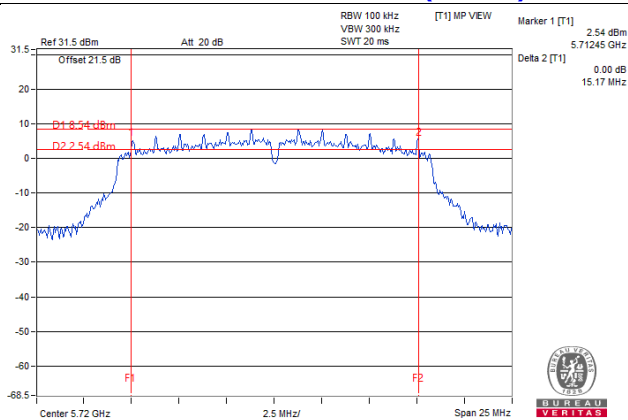
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
142 (U-NII-3 Band)	5710	2.64	2.64	0.5	Pass
151	5755	35.28	35.25	0.5	Pass
159	5795	35.27	35.27	0.5	Pass

802.11ac (VHT80)

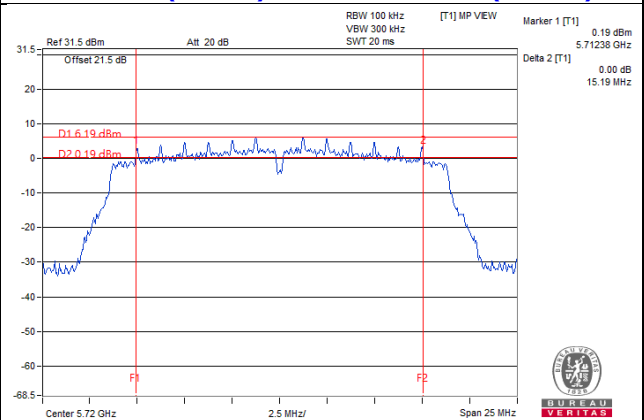
Channel	Frequency (MHz)	6dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
138 (U-NII-3 Band)	5690	2.71	2.72	0.5	Pass
155	5775	75.42	75.41	0.5	Pass

Spectrum Plot of Worst Value

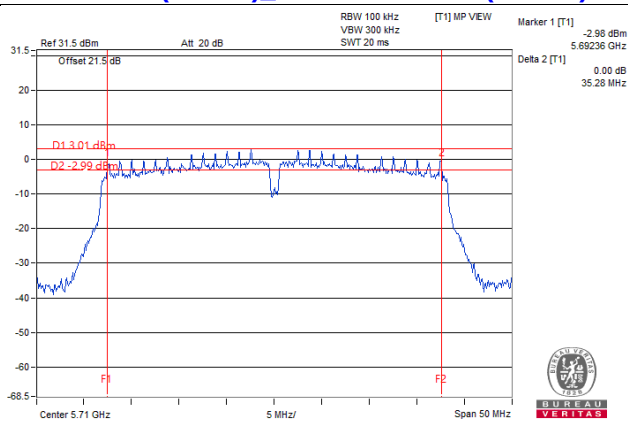
802.11a_Chain 0 / CH144 (U-NII-3)



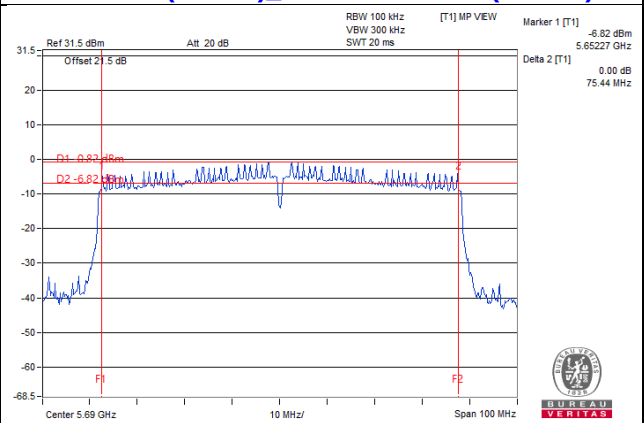
802.11ac (VHT20)_Chain 0 / CH144 (U-NII-3)



802.11ac (VHT40)_Chain 0 / CH142 (U-NII-3)



802.11ac (VHT80)_Chain 0 / CH138 (U-NII-3)



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

5 Pictures of Test Arrangements

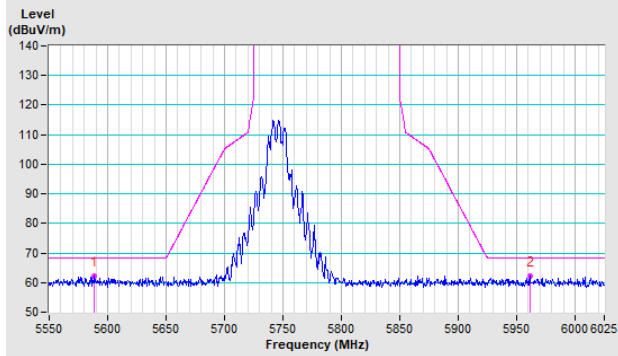
Please refer to the attached file (Test Setup Photo).

Annex A- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band) (Mode 1)

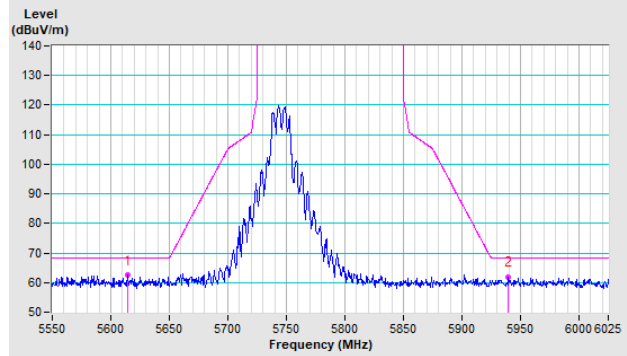
802.11a

CH 149 5745 MHz

Horizontal

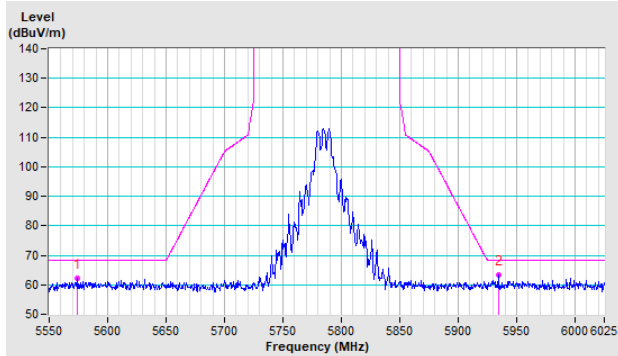


Vertical

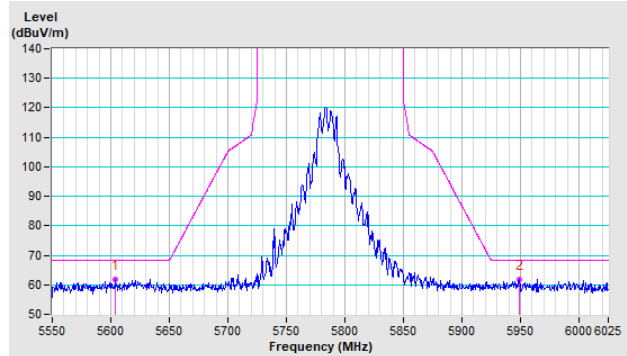


CH 157 5785 MHz

Horizontal

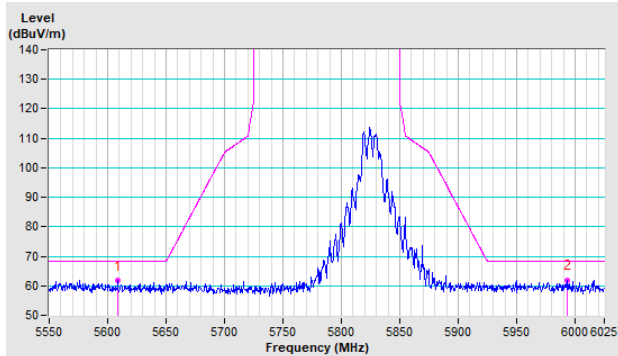


Vertical

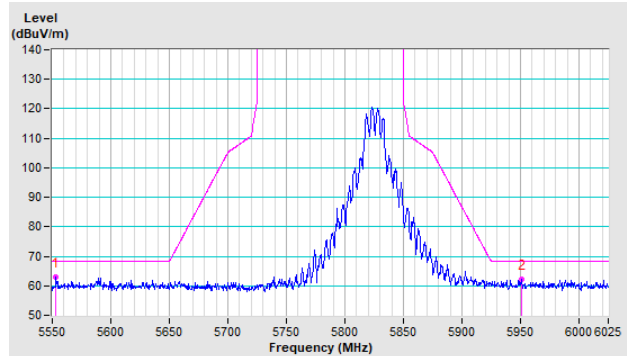


CH 165 5825 MHz

Horizontal



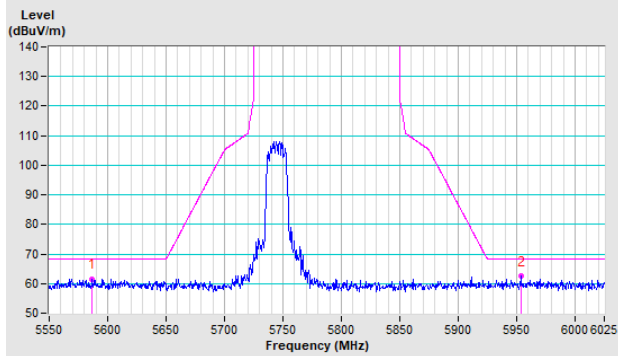
Vertical



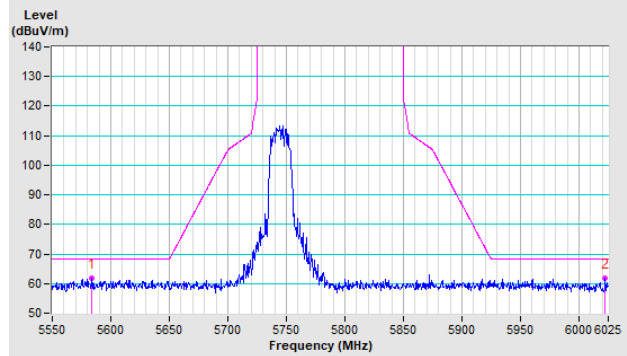
802.11ac (VHT20)

CH 149 5745 MHz

Horizontal

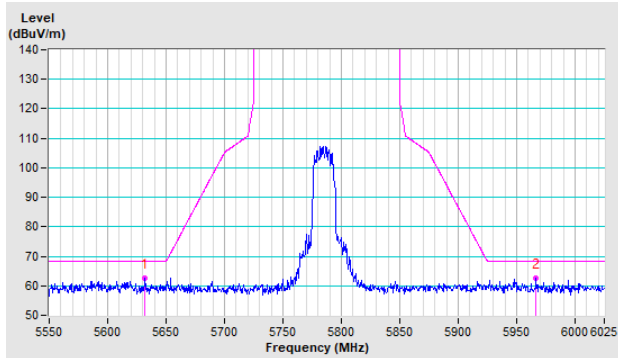


Vertical

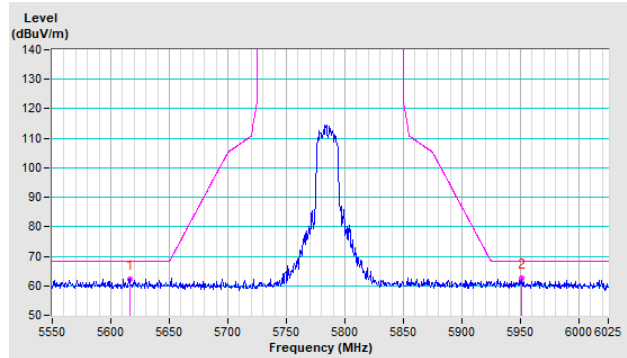


CH 157 5785 MHz

Horizontal

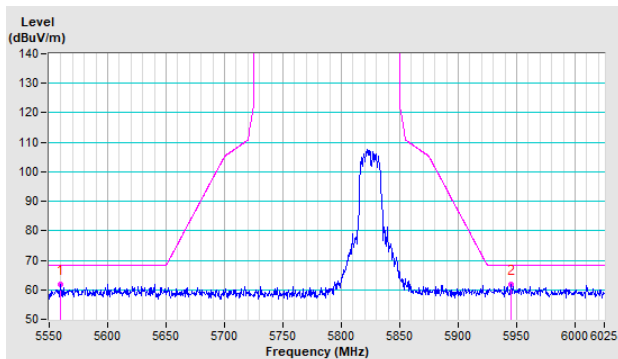


Vertical

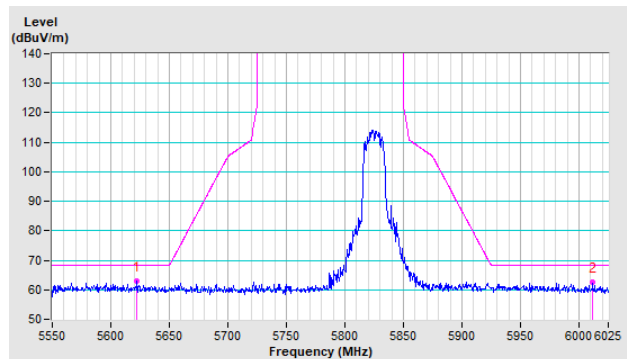


CH 165 5825 MHz

Horizontal



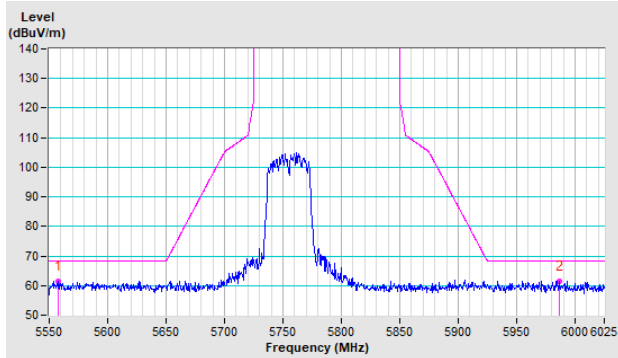
Vertical



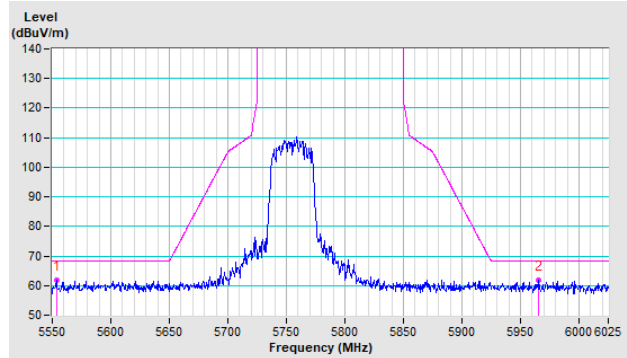
802.11ac (VHT40)

CH 151 5755 MHz

Horizontal

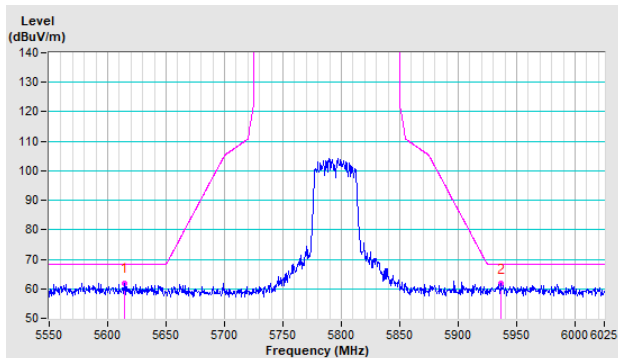


Vertical

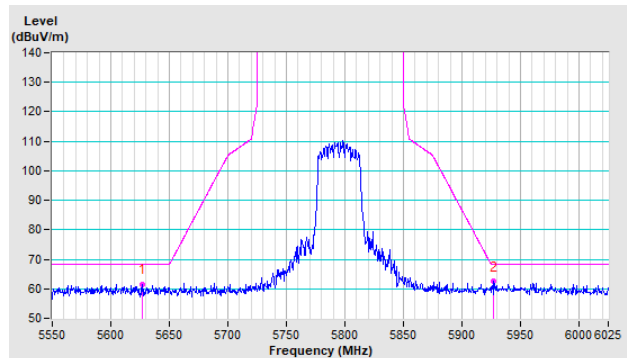


CH 159 5795 MHz

Horizontal



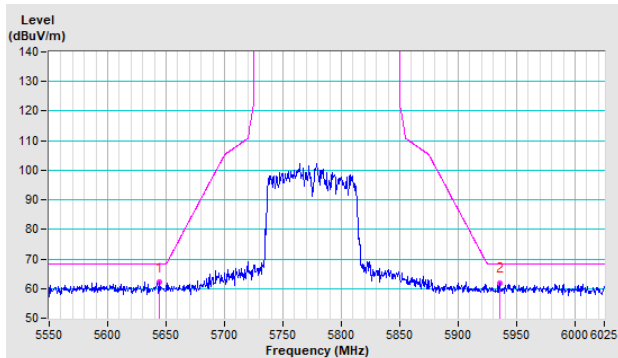
Vertical



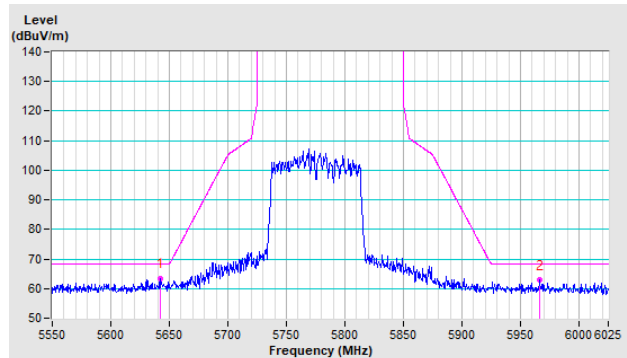
802.11ac (VHT80)

CH 155 5775 MHz

Horizontal



Vertical

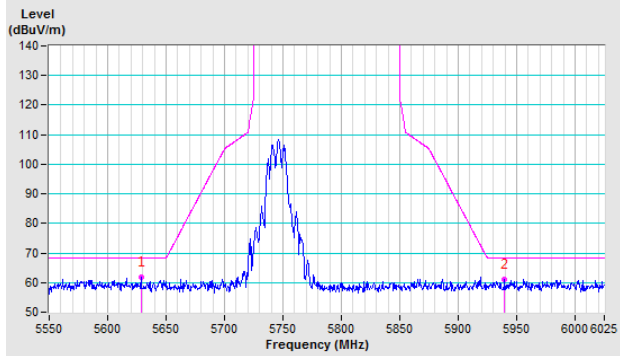


Annex B- Radiated Out of Band Emission (OOBE) Measurement (For U-NII-3 band) (Mode 2)

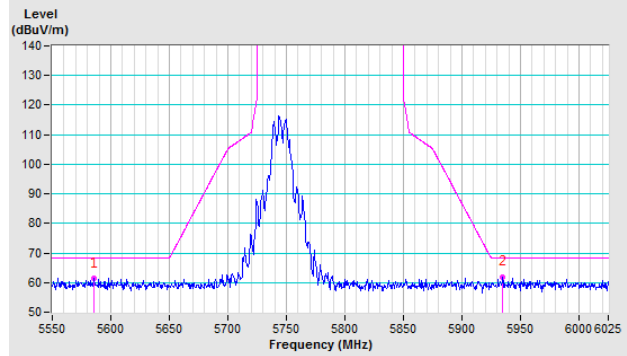
802.11a

CH 149 5745 MHz

Horizontal

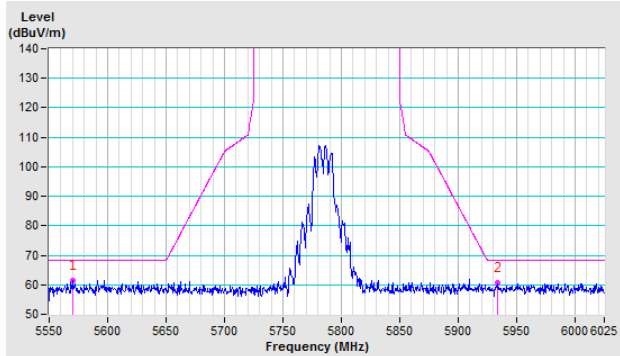


Vertical

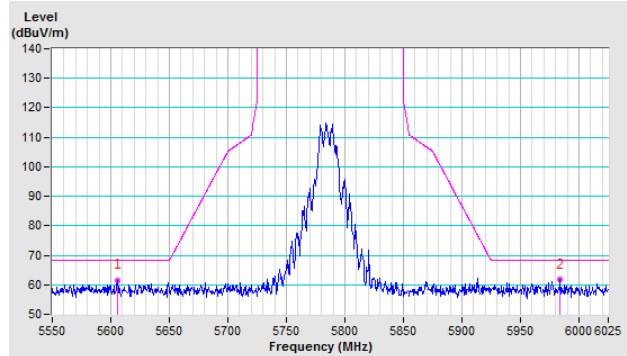


CH 157 5785 MHz

Horizontal

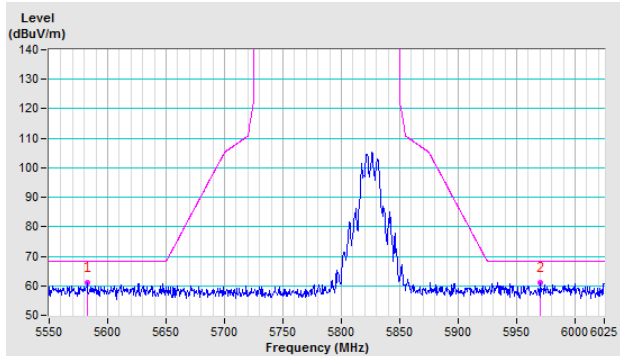


Vertical

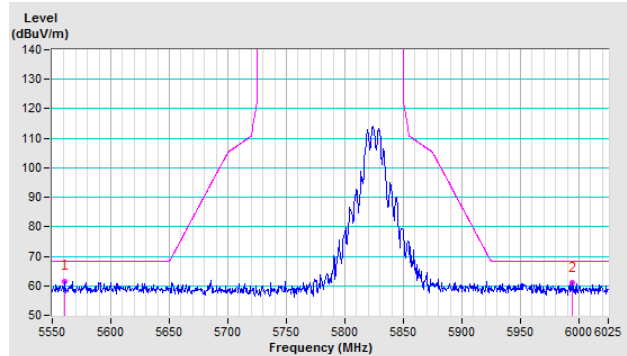


CH 165 5825 MHz

Horizontal



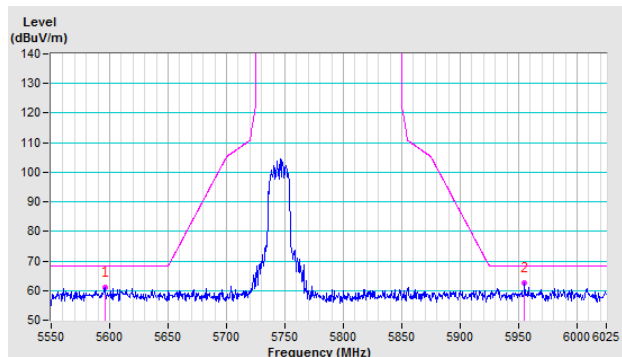
Vertical



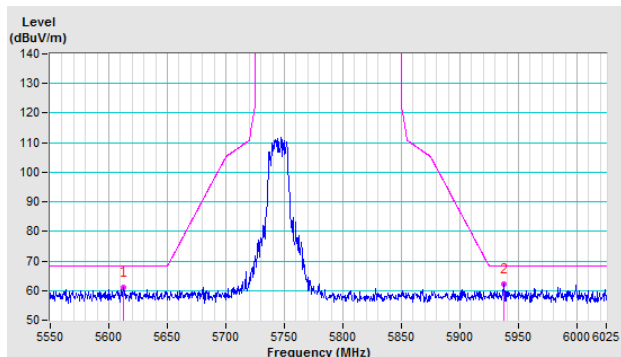
802.11ac (VHT20)

CH 149 5745 MHz

Horizontal

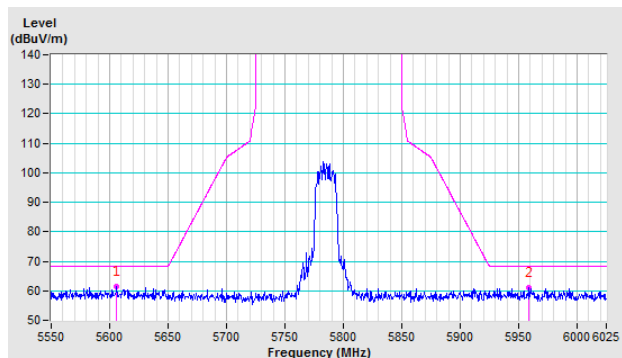


Vertical

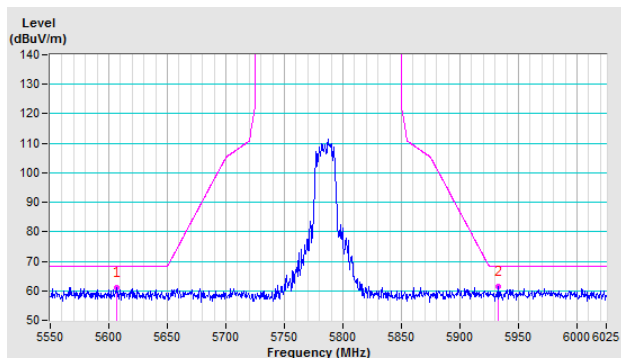


CH 157 5785 MHz

Horizontal

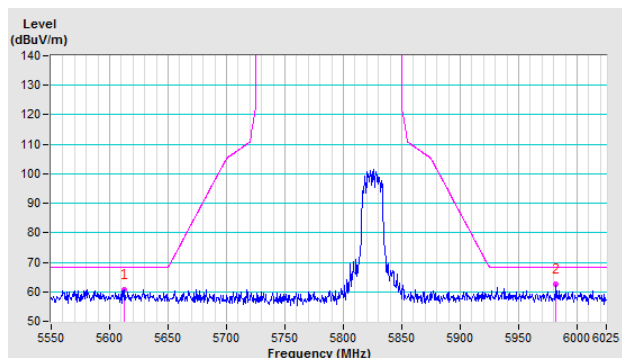


Vertical

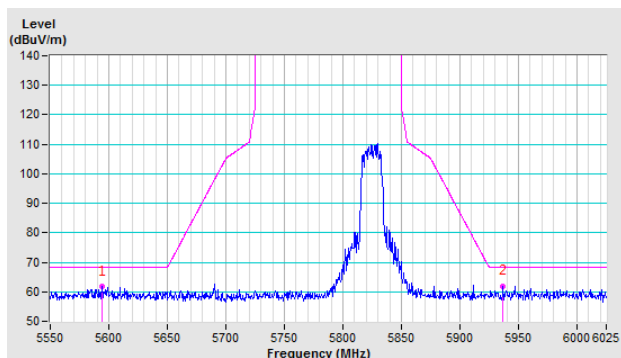


CH 165 5825 MHz

Horizontal



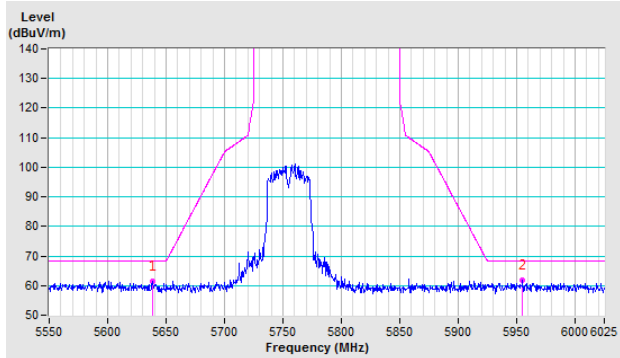
Vertical



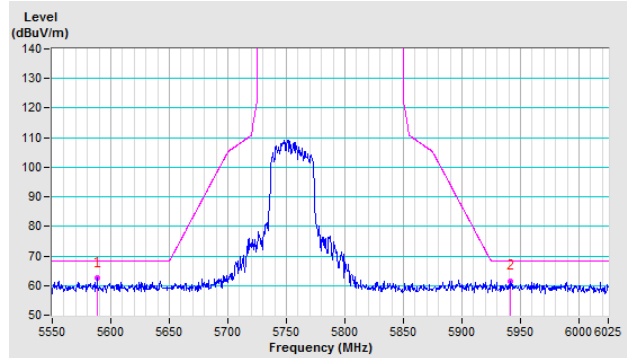
802.11ac (VHT40)

CH 151 5755 MHz

Horizontal

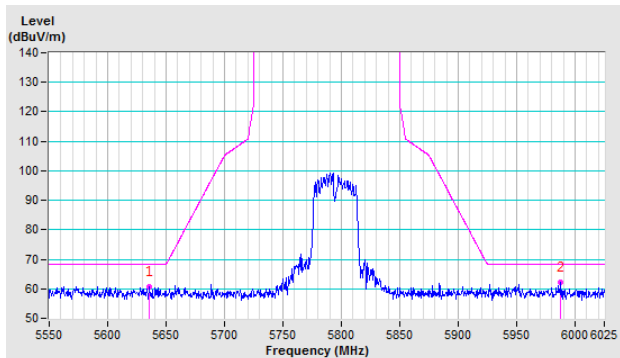


Vertical

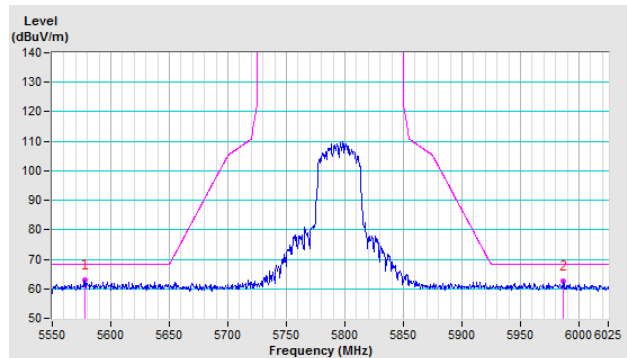


CH 159 5795 MHz

Horizontal



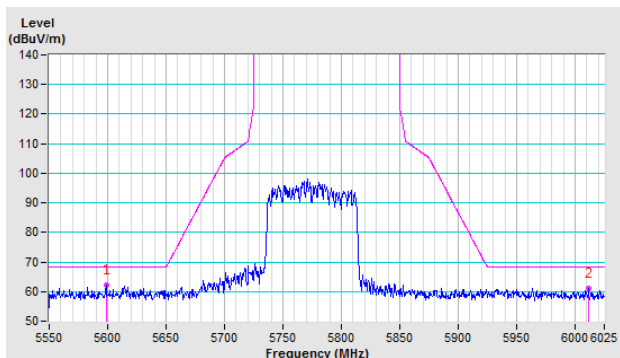
Vertical



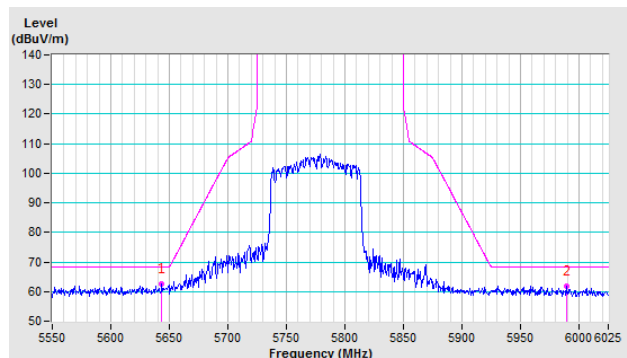
802.11ac (VHT80)

CH 155 5775 MHz

Horizontal



Vertical



Appendix – Information of the Testing Laboratories

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

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

Lin Kou EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

--- END ---