

FCC Test Report

Report No.: RF180426C03-1

FCC ID: AZ492FT7118

Test Model: M37TXS9PW1AN (HUW1001A)

Received Date: Apr. 26, 2018

Test Date: May 07 ~ May 16, 2018

Issued Date: May 22, 2018

Applicant: Motorola Solutions, Inc.

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

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Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)

**FCC Registration /
Designation Number:** 788550 / TW0003



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Release Control Record

Issue No.	Description	Date Issued
RF180426C03-1	Original release	May 22, 2018

1 Certificate of Conformity

Product: APX8500 All-Band P25 Mobile Radio

Brand: Motorola Solutions

Test Model: M37TXS9PW1AN (HUW1001A)

Sample Status: Engineering sample

Applicant: Motorola Solutions, Inc.

Test Date: May 07 ~ May 16, 2018

Standards: 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 RF characteristics under the conditions specified in this report.

Prepared by : Celine Chou , **Date:** May 22, 2018
Celine Chou / Specialist

Approved by : Bruce Chen , **Date:** May 22, 2018
Bruce Chen / Project Engineer

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 -2.06dB at 10.33555MHz.
15.407(b)(1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.0dB at 5150.00MHz, 5350.00MHz, 5725.00MHz and 5850.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is QMA not a standard connector.

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

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.94 dB
Radiated Emissions up to 1 GHz	30MHz ~ 200MHz	3.63 dB
	200MHz ~ 1000MHz	3.64 dB
Radiated Emissions above 1 GHz	1GHz ~ 18GHz	2.29 dB
	18GHz ~ 40GHz	2.29 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	APX8500 All-Band P25 Mobile Radio
Brand	Motorola Solutions
Test Model	M37TXS9PW1AN (HUW1001A)
Sample Status	Engineering sample
Power Supply Rating	14.1Vdc from Adapter
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n: up to 150Mbps 802.11ac: up to 433.3Mbps
Operating Frequency	5180 ~ 5240MHz, 5260 ~ 5320MHz, 5500 ~ 5720MHz, 5745 ~ 5825MHz
Number of Channel	5180 ~ 5240MHz: 802.11a, 802.11n (HT20): 4 802.11n (HT40): 2 802.11ac (VHT80): 1 5260 ~ 5320MHz: 802.11a, 802.11n (HT20): 4 802.11n (HT40): 2 802.11ac (VHT80): 1 5500 ~ 5720MHz: 802.11a, 802.11n (HT20): 12 802.11n (HT40): 6 802.11ac (VHT80): 3 5745 ~ 5825MHz: 802.11a, 802.11n (HT20): 5 802.11n (HT40): 2 802.11ac (VHT80): 1
Output Power	5180 ~ 5240MHz: 30.903mW 5260 ~ 5320MHz: 30.761mW 5500 ~ 5720MHz: 28.445mW 5745 ~ 5825MHz: 31.333mW
Antenna Type	Trunk roof antenna with 5.15dBi gain
Antenna Connector	QMA
Accessory Device	Adapter
Cable Supplied	NA

Note:

1. The EUT provides 1 completed transmitter and 1 receiver.

Modulation Mode	TX Function
802.11a	1TX
802.11n (HT20)	1TX
802.11n (HT40)	1TX
802.11ac (VHT80)	1TX

2. The EUT consumes power from the following Adapter.

Adapter	
Brand	Motorola Solutions
Model	AE210-3101
Input	100-120Vac, 200-240Vac, 6A/3A, 50/60Hz
Output	14.1Vdc, 8A (cont.) /15A (Max)
Power Line	1.9m cable with one core

3.2 Description of Test Modes

For 5180 ~ 5240MHz:

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

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

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
42	5210MHz

For 5260 ~ 5320MHz:

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

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

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
58	5290MHz

For 5500 ~ 5720MHz:

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

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):

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	122	5610 MHz
138	5690 MHz		

For 5745 ~ 5825MHz:

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

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

2 channels are provided for 802.11n (HT40):

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable to				Description
	RE \geq 1G	RE<1G	PLC	APCM	
-	√	√	√	√	-

Where RE \geq 1G: Radiated Emission above 1GHz & Bandedge Measurement
 RE<1G: Radiated Emission below 1GHz
 PLC: Power Line Conducted Emission
 APCM: Antenna Port Conducted Measurement

Note: The EUT had been pre-tested on the positioned of each 2 axis (X and Z plane). The worst case was found when positioned on X-plane.

Radiated Emission Test (Above 1GHz):

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	6.5
	802.11n (HT40)		38 to 46	38, 46	OFDM	13.5
	802.11ac (VHT80)		42	42	OFDM	29.3
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	6.5
	802.11n (HT40)		54 to 62	54, 62	OFDM	13.5
	802.11ac (VHT80)		58	58	OFDM	29.3
-	802.11a	5500-5720	100 to 144	100, 116, 120, 124, 128, 140, 144	OFDM	6.0
	802.11n (HT20)		100 to 144	100, 116, 120, 124, 128, 140, 144	OFDM	6.5
	802.11n (HT40)		102 to 142	102, 110, 118, 126, 134, 142	OFDM	13.5
	802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	29.3
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	6.5
	802.11n (HT40)		151 to 159	151, 159	OFDM	13.5
	802.11ac (VHT80)		155	155	OFDM	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.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11n (HT20)	5180-5240	36 to 48	144	OFDM	6.5
-	802.11n (HT20)	5260-5320	52 to 64		OFDM	6.5
-	802.11n (HT20)	5500-5720	100 to 144		OFDM	6.5
-	802.11n (HT20)	5745-5825	149 to 165		OFDM	6.5

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.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11n (HT20)	5180-5240	36 to 48	144	OFDM	6.5
-	802.11n (HT20)	5260-5320	52 to 64		OFDM	6.5
-	802.11n (HT20)	5500-5720	100 to 144		OFDM	6.5
-	802.11n (HT20)	5745-5825	149 to 165		OFDM	6.5

Antenna Port Conducted Measurement:

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	6.0
	802.11n (HT20)		36 to 48	36, 40, 48	OFDM	6.5
	802.11n (HT40)		38 to 46	38, 46	OFDM	13.5
	802.11ac (VHT80)		42	42	OFDM	29.3
-	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	6.0
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	6.5
	802.11n (HT40)		54 to 62	54, 62	OFDM	13.5
	802.11ac (VHT80)		58	58	OFDM	29.3
-	802.11a	5500-5720	100 to 144	100, 116, 120, 124, 128, 140, 144	OFDM	6.0
	802.11n (HT20)		100 to 144	100, 116, 120, 124, 128, 140, 144	OFDM	6.5
	802.11n (HT40)		102 to 142	102, 110, 118, 126, 134, 142	OFDM	13.5
	802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	29.3
-	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	6.5
	802.11n (HT40)		151 to 159	151, 159	OFDM	13.5
	802.11ac (VHT80)		155	155	OFDM	29.3

Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE \geq 1G	25 deg. C, 70% RH	120Vac, 60Hz	Noah Chang
RE $<$ 1G	25 deg. C, 70% RH	120Vac, 60Hz	Luis Lee
PLC	25 deg. C, 70% RH	120Vac, 60Hz	Matthew Yang
APCM	25 deg. C, 60% RH	120Vac, 60Hz	Frank Liu

3.3 Duty Cycle of Test Signal

Duty cycle of test signal is < 98%, duty factor is required.

802.11a: Duty cycle = $3.101/3.388 = 0.915$, Duty factor = $10 * \log(1/0.915) = 0.38$

802.11n (HT20): Duty cycle = $9.851/10.163 = 0.969$, Duty factor = $10 * \log(1/0.969) = 0.14$

802.11n (HT40): Duty cycle = $4.713/5.063 = 0.931$, Duty factor = $10 * \log(1/0.931) = 0.31$

802.11ac (VHT80): Duty cycle = $4.488/4.850 = 0.925$, Duty factor = $10 * \log(1/0.925) = 0.34$



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.

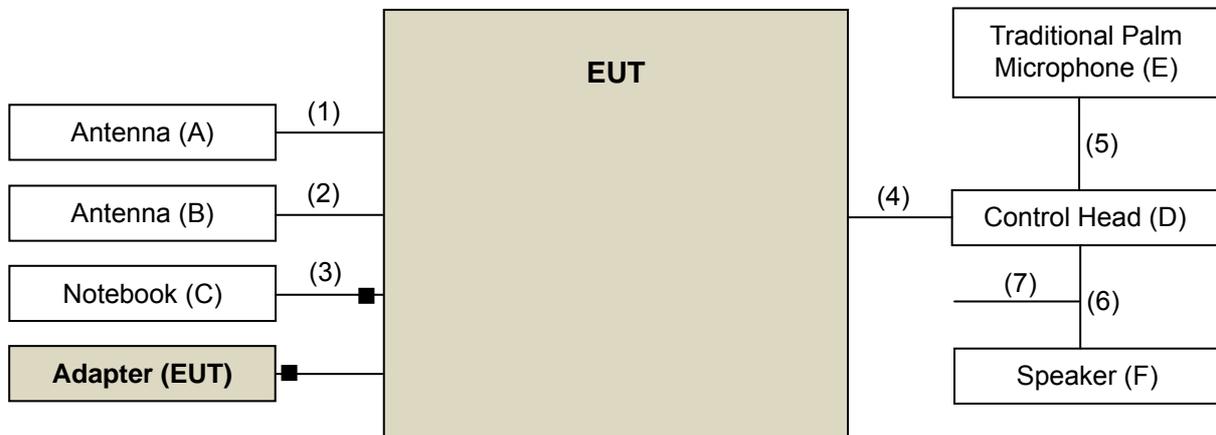
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Antenna	Motorola Solutions	AN000131A01	N/A	N/A	Provided by client
B.	Antenna	Motorola Solutions	AN000163A01	35216-236	N/A	Provided by client
C.	Notebook	HP	Zbook 15 G4	CND80100R8	FCC DoC Approved	Provided by client
D.	Control Head	Motorola Solutions	HLN1471E	MN6BRH5U	N/A	Provided by client
E.	Traditional Palm Microphone	Motorola Solutions	HMN1090A	N/A	N/A	Provided by client
F.	Speaker	Motorola Solutions	HSN4038A	N/A	N/A	Provided by client

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Ant. Cable	1	5.08	Y	0	Provided by client
2.	Ant. Cable	1	5.12	Y	0	Provided by client
3.	USB Cable	1	1.39	N	1	Provided by client
4.	17 CAN Cable	1	5.18	N	0	Provided by client
5.	Cable	1	3.05	N	0	Provided by client
6.	Cable	1	2.82	N	0	Provided by client
7.	Cable	1	3.10	N	0	Provided by client

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

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards

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

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 (dBuV/m)	AV: 54 (dBuV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2(dBuV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	<input checked="" type="checkbox"/> 15.407(b)(4)(i)	PK: -27 (dBm/MHz) ^{*1} PK: 10 (dBm/MHz) ^{*2} PK: 15.6 (dBm/MHz) ^{*3} PK: 27 (dBm/MHz) ^{*4}	PK: 68.2(dBuV/m) ^{*1} PK: 105.2 (dBuV/m) ^{*2} PK: 110.8(dBuV/m) ^{*3} PK: 122.2 (dBuV/m) ^{*4}
	<input type="checkbox"/> 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

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100424	Oct. 17, 2017	Oct. 16, 2018
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Aug. 18, 2017	Aug. 17, 2018
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Dec. 11, 2017	Dec. 10, 2018
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Dec. 13, 2017	Dec. 12, 2018
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Dec. 01, 2017	Nov. 30, 2018
Loop Antenna EMCI	EM-6879	269	Aug. 11, 2017	Aug. 10, 2018
Preamplifier Agilent (Below 1GHz)	8447D	2944A10631	Aug. 08, 2017	Aug. 07, 2018
Preamplifier Agilent (Above 1GHz)	8449B	3008A01922	Sep. 15, 2017	Sep. 14, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Aug. 08, 2017	Aug. 07, 2018
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Aug. 08, 2017	Aug. 07, 2018
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021703	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
26GHz ~ 40GHz Amplifier Agilent	8449B	3008A1960	Aug. 08, 2017	Aug. 07, 2018
High Speed Peak Power Meter	ML2495A	0824012	Aug. 18, 2017	Aug. 17, 2018
Power Sensor	MA2411B	0738171	Aug. 18, 2017	Aug. 17, 2018
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 07, 2017	Jun. 06, 2018
AC Power Supply Exttech	CFW-105	E000603	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 HwaYa Chamber 4.
 3. The FCC Designation Number is TW0003. The number will be varied with the Lab location and scope as attached.
 4. The IC Site Registration No. is IC 7450F-4.

4.1.3 Test Procedures

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 detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

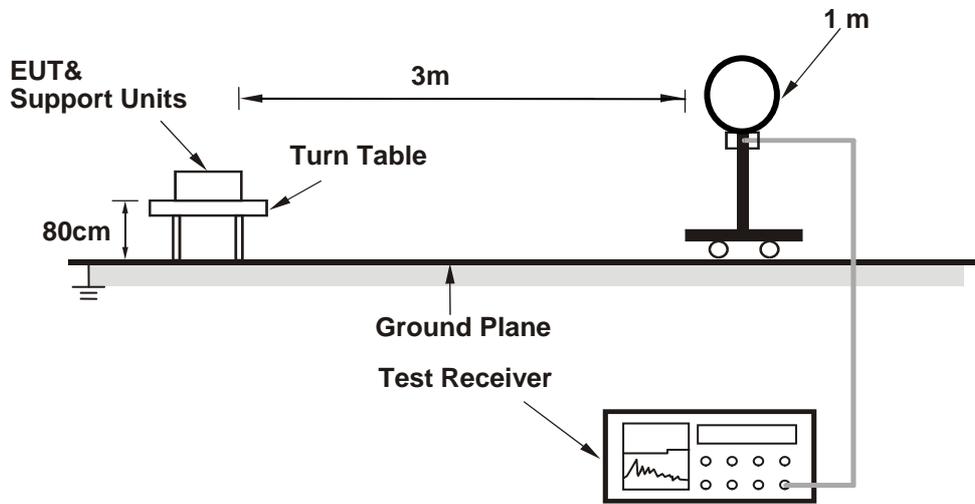
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and the video bandwidth is $\geq 1/T$ (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

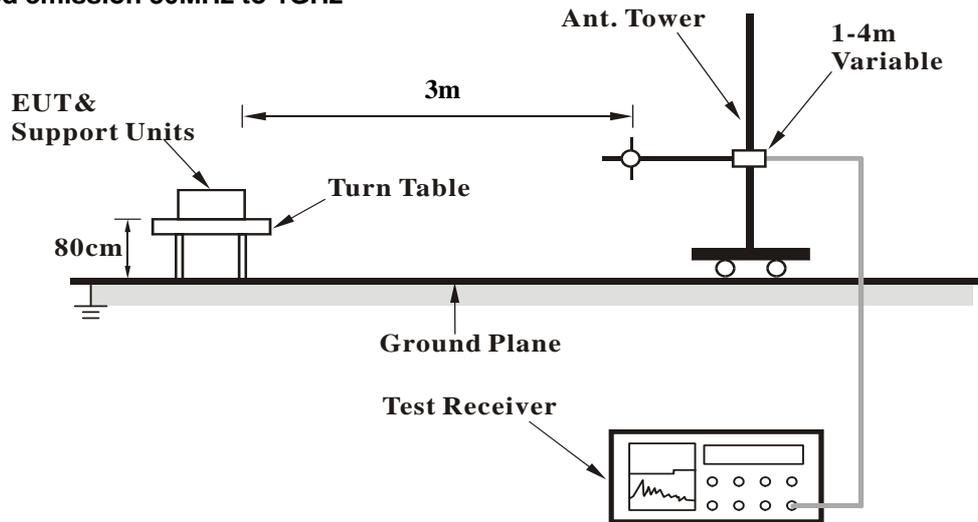
No deviation.

4.1.5 Test Setup

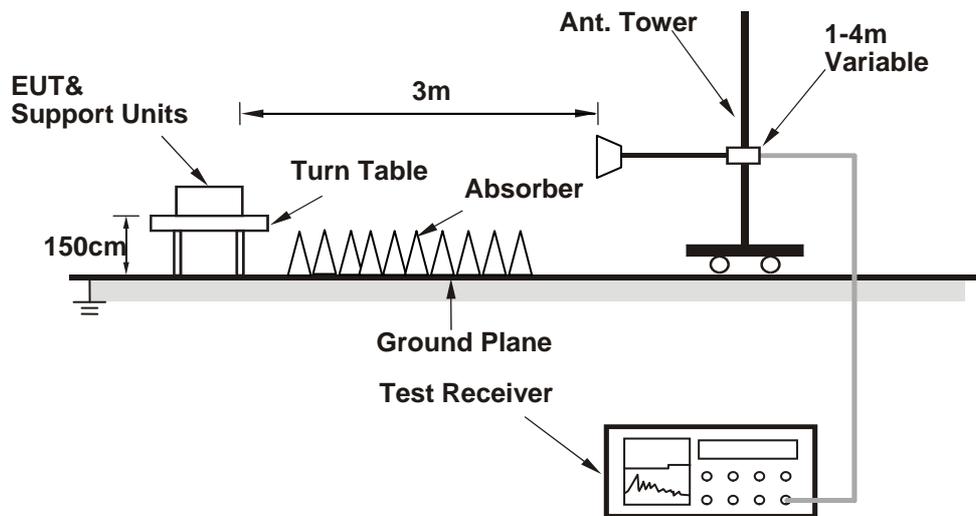
For Radiated emission below 30MHz



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 Conditions

- a. The EUT connected with notebook via USB cable and placed on the testing table.
- b. Set the EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results

Above 1GHz data:

802.11a

CHANNEL	TX Channel 36	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	57.6 PK	74.0	-16.4	2.88 H	300	55.0	2.6
2	5150.00	44.5 AV	54.0	-9.5	2.88 H	300	41.9	2.6
3	*5180.00	95.0 PK			3.44 H	342	54.1	40.9
4	*5180.00	85.3 AV			3.44 H	342	44.4	40.9
5	#10360.00	59.1 PK	74.0	-14.9	1.55 H	22	44.3	14.8
6	#10360.00	45.8 AV	54.0	-8.2	1.55 H	22	31.0	14.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	68.0 PK	74.0	-6.0	2.50 V	222	65.4	2.6
2	5150.00	52.5 AV	54.0	-1.5	2.50 V	222	49.9	2.6
3	*5180.00	105.0 PK			2.57 V	202	64.1	40.9
4	*5180.00	95.3 AV			2.57 V	202	54.4	40.9
5	#10360.00	61.3 PK	74.0	-12.7	1.05 V	25	46.5	14.8
6	#10360.00	48.2 AV	54.0	-5.8	1.05 V	25	33.4	14.8

Remarks:

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

CHANNEL	TX Channel 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	*5200.00	96.4 PK			3.44 H	325	55.5	40.9
2	*5200.00	86.4 AV			3.44 H	325	45.5	40.9
3	#10400.00	59.5 PK	74.0	-14.5	1.77 H	33	44.6	14.9
4	#10400.00	47.4 AV	54.0	-6.6	1.77 H	33	32.5	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	*5200.00	106.4 PK			2.50 V	211	65.5	40.9
2	*5200.00	96.2 AV			2.50 V	211	55.3	40.9
3	#10400.00	61.4 PK	74.0	-12.6	2.22 V	55	46.5	14.9
4	#10400.00	48.5 AV	54.0	-5.5	2.22 V	55	33.6	14.9

Remarks:

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

CHANNEL	TX Channel 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	96.9 PK			3.22 H	344	56.2	40.7
2	*5240.00	86.2 AV			3.22 H	344	45.5	40.7
3	5350.00	57.7 PK	74.0	-16.3	3.26 H	315	54.9	2.8
4	5350.00	43.9 AV	54.0	-10.1	3.26 H	315	41.1	2.8
5	#10480.00	59.2 PK	74.0	-14.8	1.85 H	37	44.5	14.7
6	#10480.00	46.2 AV	54.0	-7.8	1.85 H	37	31.5	14.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	106.9 PK			2.51 V	221	66.2	40.7
2	*5240.00	96.3 AV			2.51 V	221	55.6	40.7
3	5350.00	57.8 PK	74.0	-16.2	2.25 V	206	55.0	2.8
4	5350.00	44.0 AV	54.0	-10.0	2.25 V	206	41.2	2.8
5	#10480.00	61.0 PK	74.0	-13.0	1.85 V	39	46.3	14.7
6	#10480.00	47.9 AV	54.0	-6.1	1.85 V	39	33.2	14.7

Remarks:

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

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
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	57.7 PK	74.0	-16.3	3.44 H	356	55.1	2.6
2	5150.00	43.9 AV	54.0	-10.1	3.44 H	356	41.3	2.6
3	*5260.00	98.5 PK			3.55 H	345	57.8	40.7
4	*5260.00	88.5 AV			3.55 H	345	47.8	40.7
5	#10520.00	59.3 PK	74.0	-14.7	2.88 H	100	44.5	14.8
6	#10520.00	46.4 AV	54.0	-7.6	2.88 H	100	31.6	14.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.8 PK	74.0	-16.2	2.18 V	208	55.2	2.6
2	5150.00	44.1 AV	54.0	-9.9	2.18 V	208	41.5	2.6
3	*5260.00	108.6 PK			2.20 V	221	67.9	40.7
4	*5260.00	98.2 AV			2.20 V	221	57.5	40.7
5	#10520.00	61.0 PK	74.0	-13.0	3.39 V	77	46.2	14.8
6	#10520.00	47.7 AV	54.0	-6.3	3.39 V	77	32.9	14.8

Remarks:

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

CHANNEL	TX Channel 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	97.3 PK			3.15 H	335	56.7	40.6
2	*5300.00	87.4 AV			3.15 H	335	46.8	40.6
3	10600.00	60.0 PK	74.0	-14.0	1.88 H	11	44.8	15.2
4	10600.00	46.7 AV	54.0	-7.3	1.88 H	11	31.5	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	*5300.00	107.5 PK			2.62 V	203	66.9	40.6
2	*5300.00	97.5 AV			2.62 V	203	56.9	40.6
3	10600.00	60.1 PK	74.0	-13.9	1.50 V	359	44.9	15.2
4	10600.00	46.8 AV	54.0	-7.2	1.50 V	359	31.6	15.2

Remarks:

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

CHANNEL	TX Channel 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	94.4 PK			3.60 H	325	53.7	40.7
2	*5320.00	85.0 AV			3.60 H	325	44.3	40.7
3	5350.00	57.8 PK	74.0	-16.2	3.44 H	322	55.0	2.8
4	5350.00	43.8 AV	54.0	-10.2	3.44 H	322	41.0	2.8
5	10640.00	60.0 PK	74.0	-14.0	1.77 H	52	44.6	15.4
6	10640.00	47.0 AV	54.0	-7.0	1.77 H	52	31.6	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	*5320.00	104.5 PK			2.58 V	196	63.8	40.7
2	*5320.00	94.7 AV			2.58 V	196	54.0	40.7
3	5350.00	70.6 PK	74.0	-3.4	2.65 V	189	67.8	2.8
4	5350.00	52.5 AV	54.0	-1.5	2.65 V	189	49.7	2.8
5	10640.00	60.6 PK	74.0	-13.4	1.77 V	55	45.2	15.4
6	10640.00	47.5 AV	54.0	-6.5	1.77 V	55	32.1	15.4

Remarks:

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

CHANNEL	TX Channel 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	61.1 PK	74.0	-12.9	3.50 H	331	57.9	3.2
2	5460.00	46.8 AV	54.0	-7.2	3.50 H	331	43.6	3.2
3	#5470.00	64.5 PK	74.0	-9.5	2.28 H	332	61.3	3.2
4	#5470.00	46.8 AV	54.0	-7.2	2.28 H	332	43.6	3.2
5	*5500.00	95.9 PK			3.55 H	344	54.4	41.5
6	*5500.00	86.9 AV			3.55 H	344	45.4	41.5
7	11000.00	60.6 PK	74.0	-13.4	2.58 H	22	44.6	16.0
8	11000.00	47.5 AV	54.0	-6.5	2.58 H	22	31.5	16.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	61.1 PK	74.0	-12.9	2.30 V	185	57.9	3.2
2	5460.00	48.2 AV	54.0	-5.8	2.30 V	185	45.0	3.2
3	#5470.00	69.5 PK	74.0	-4.5	2.57 V	188	66.3	3.2
4	#5470.00	52.8 AV	54.0	-1.2	2.57 V	188	49.6	3.2
5	*5500.00	106.0 PK			2.58 V	197	64.5	41.5
6	*5500.00	96.8 AV			2.58 V	197	55.3	41.5
7	11000.00	60.8 PK	74.0	-13.2	3.22 V	55	44.8	16.0
8	11000.00	47.6 AV	54.0	-6.4	3.22 V	55	31.6	16.0

Remarks:

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

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
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	98.4 PK			3.55 H	345	56.5	41.9
2	*5580.00	88.4 AV			3.55 H	345	46.5	41.9
3	11160.00	60.3 PK	74.0	-13.7	1.55 H	26	44.6	15.7
4	11160.00	47.2 AV	54.0	-6.8	1.55 H	26	31.5	15.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	108.4 PK			2.58 V	199	66.5	41.9
2	*5580.00	98.4 AV			2.58 V	199	56.5	41.9
3	11160.00	60.4 PK	74.0	-13.6	1.44 V	302	44.7	15.7
4	11160.00	47.3 AV	54.0	-6.7	1.44 V	302	31.6	15.7

Remarks:

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

CHANNEL	TX Channel 120	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	*5600.00	98.2 PK			3.47 H	349	56.2	42.0
2	*5600.00	88.5 AV			3.47 H	349	46.5	42.0
3	#5725.00	57.9 PK	74.0	-16.1	3.10 H	329	54.2	3.7
4	#5725.00	45.5 AV	54.0	-8.5	3.10 H	329	41.8	3.7
5	11200.00	60.7 PK	74.0	-13.3	2.33 H	240	44.9	15.8
6	11200.00	47.9 AV	54.0	-6.1	2.33 H	240	32.1	15.8

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	*5600.00	108.5 PK			2.68 V	202	66.5	42.0
2	*5600.00	98.6 AV			2.68 V	202	56.6	42.0
3	#5725.00	58.6 PK	74.0	-15.4	2.41 V	188	54.9	3.7
4	#5725.00	46.0 AV	54.0	-8.0	2.41 V	188	42.3	3.7
5	11200.00	61.1 PK	74.0	-12.9	1.97 V	255	45.3	15.8
6	11200.00	48.2 AV	54.0	-5.8	1.97 V	255	32.4	15.8

Remarks:

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

CHANNEL	TX Channel 124	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	*5620.00	97.0 PK			3.28 H	337	55.2	41.8
2	*5620.00	86.7 AV			3.28 H	337	44.9	41.8
3	#5725.00	57.9 PK	74.0	-16.1	3.18 H	355	54.2	3.7
4	#5725.00	45.3 AV	54.0	-8.7	3.18 H	355	41.6	3.7
5	11240.00	60.8 PK	74.0	-13.2	2.10 H	263	44.9	15.9
6	11240.00	47.7 AV	54.0	-6.3	2.10 H	263	31.8	15.9
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	*5620.00	107.6 PK			2.60 V	205	65.8	41.8
2	*5620.00	98.1 AV			2.60 V	205	56.3	41.8
3	#5725.00	58.8 PK	74.0	-15.2	2.75 V	187	55.1	3.7
4	#5725.00	46.1 AV	54.0	-7.9	2.75 V	187	42.4	3.7
5	11240.00	61.2 PK	74.0	-12.8	2.00 V	297	45.3	15.9
6	11240.00	48.4 AV	54.0	-5.6	2.00 V	297	32.5	15.9

Remarks:

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

CHANNEL	TX Channel 128	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	*5640.00	95.9 PK			3.29 H	324	54.2	41.7
2	*5640.00	86.8 AV			3.29 H	324	45.1	41.7
3	#5725.00	58.3 PK	74.0	-15.7	3.15 H	352	54.6	3.7
4	#5725.00	35.5 AV	54.0	-18.5	3.15 H	352	31.8	3.7
5	11280.00	61.0 PK	74.0	-13.0	2.11 H	204	45.1	15.9
6	11280.00	47.8 AV	54.0	-6.2	2.11 H	204	31.9	15.9

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	*5640.00	108.2 PK			2.60 V	214	66.5	41.7
2	*5640.00	98.0 AV			2.60 V	214	56.3	41.7
3	#5725.00	59.8 PK	74.0	-14.2	2.65 V	239	56.1	3.7
4	#5725.00	46.2 AV	54.0	-7.8	2.65 V	239	42.5	3.7
5	11280.00	61.2 PK	74.0	-12.8	1.89 V	248	45.3	15.9
6	11280.00	48.3 AV	54.0	-5.7	1.89 V	248	32.4	15.9

Remarks:

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

CHANNEL	TX Channel 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	94.8 PK			3.55 H	346	52.7	42.1
2	*5700.00	84.9 AV			3.55 H	346	42.8	42.1
3	#5725.00	62.7 PK	74.0	-11.3	3.26 H	315	59.0	3.7
4	#5725.00	46.7 AV	54.0	-7.3	3.26 H	315	43.0	3.7
5	11400.00	60.4 PK	74.0	-13.6	3.35 H	66	44.4	16.0
6	11400.00	47.4 AV	54.0	-6.6	3.35 H	66	31.4	16.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	104.8 PK			2.52 V	204	62.7	42.1
2	*5700.00	94.9 AV			2.52 V	204	52.8	42.1
3	#5725.00	69.0 PK	74.0	-5.0	2.55 V	198	65.3	3.7
4	#5725.00	52.7 AV	54.0	-1.3	2.55 V	198	49.0	3.7
5	11400.00	60.5 PK	74.0	-13.5	1.59 V	155	44.5	16.0
6	11400.00	47.6 AV	54.0	-6.4	1.59 V	155	31.6	16.0

Remarks:

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

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK)
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	57.3 PK	74.0	-16.7	3.19 H	330	54.1	3.2
2	#5470.00	45.0 AV	54.0	-9.0	3.19 H	330	41.8	3.2
3	*5720.00	97.5 PK			3.34 H	345	55.4	42.1
4	*5720.00	87.3 AV			3.34 H	345	45.2	42.1
5	#5850.00	58.6 PK	74.0	-15.4	3.27 H	334	54.0	4.6
6	#5850.00	46.1 AV	54.0	-7.9	3.27 H	334	41.5	4.6
7	11440.00	60.9 PK	74.0	-13.1	2.45 H	263	44.8	16.1
8	11440.00	48.0 AV	54.0	-6.0	2.45 H	263	31.9	16.1

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	57.8 PK	74.0	-16.2	2.66 V	297	54.6	3.2
2	#5470.00	45.3 AV	54.0	-8.7	2.66 V	297	42.1	3.2
3	*5720.00	109.0 PK			2.58 V	289	66.9	42.1
4	*5720.00	98.7 AV			2.58 V	289	56.6	42.1
5	#5850.00	58.8 PK	74.0	-15.2	2.42 V	303	54.2	4.6
6	#5850.00	46.5 AV	54.0	-7.5	2.42 V	303	41.9	4.6
7	11440.00	61.4 PK	74.0	-12.6	1.75 V	199	45.3	16.1
8	11440.00	48.9 AV	54.0	-5.1	1.75 V	199	32.8	16.1

Remarks:

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

CHANNEL	TX Channel 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	#5616.00	58.3 PK	68.2	-9.9	3.42 H	343	54.8	3.5
2	*5745.00	97.7 PK			3.42 H	343	55.5	42.2
3	*5745.00	87.2 AV			3.42 H	343	45.0	42.2
4	#5947.20	58.7 PK	68.2	-9.5	3.42 H	343	54.1	4.6
5	11490.00	60.3 PK	74.0	-13.7	1.50 H	144	44.1	16.2
6	11490.00	47.2 AV	54.0	-6.8	1.50 H	144	31.0	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	#5603.20	58.2 PK	68.2	-10.0	2.55 V	200	54.6	3.6
2	*5745.00	108.4 PK			2.55 V	200	66.2	42.2
3	*5745.00	98.3 AV			2.55 V	200	56.1	42.2
4	#5976.00	59.1 PK	68.2	-9.1	2.55 V	200	54.5	4.6
5	11490.00	60.8 PK	74.0	-13.2	2.00 V	55	44.6	16.2
6	11490.00	47.8 AV	54.0	-6.2	2.00 V	55	31.6	16.2

Remarks:

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

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
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	#5606.40	58.3 PK	68.2	-9.9	3.38 H	344	54.8	3.5
2	*5785.00	96.9 PK			3.38 H	344	54.5	42.4
3	*5785.00	86.6 AV			3.38 H	344	44.2	42.4
4	#5944.00	59.4 PK	68.2	-8.8	3.38 H	344	54.9	4.5
5	11570.00	60.2 PK	74.0	-13.8	1.05 H	22	44.2	16.0
6	11570.00	47.3 AV	54.0	-6.7	1.05 H	22	31.3	16.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5635.20	58.2 PK	68.2	-10.0	2.46 V	208	54.7	3.5
2	*5785.00	107.5 PK			2.46 V	208	65.1	42.4
3	*5785.00	97.4 AV			2.46 V	208	55.0	42.4
4	#5938.40	58.1 PK	68.2	-10.1	2.46 V	208	53.6	4.5
5	11570.00	60.5 PK	74.0	-13.5	1.08 V	322	44.5	16.0
6	11570.00	47.5 AV	54.0	-6.5	1.08 V	322	31.5	16.0

Remarks:

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

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
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	#5645.60	57.3 PK	68.2	-10.9	3.06 H	350	53.9	3.4
2	*5825.00	97.6 PK			3.06 H	350	54.8	42.8
3	*5825.00	86.3 AV			3.06 H	350	43.5	42.8
4	#5932.00	59.7 PK	68.2	-8.5	3.06 H	350	55.2	4.5
5	11650.00	59.4 PK	74.0	-14.6	1.02 H	322	44.0	15.4
6	11650.00	46.6 AV	54.0	-7.4	1.02 H	322	31.2	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	#5624.00	58.0 PK	68.2	-10.2	2.47 V	195	54.5	3.5
2	*5825.00	108.4 PK			2.47 V	195	65.6	42.8
3	*5825.00	98.0 AV			2.47 V	195	55.2	42.8
4	#5979.20	59.0 PK	68.2	-9.2	2.47 V	195	54.4	4.6
5	11650.00	60.0 PK	74.0	-14.0	1.05 V	330	44.6	15.4
6	11650.00	47.0 AV	54.0	-7.0	1.05 V	330	31.6	15.4

Remarks:

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

802.11n (HT20)

CHANNEL	TX Channel 36	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	63.1 PK	74.0	-10.9	3.42 H	306	60.5	2.6
2	5150.00	47.7 AV	54.0	-6.3	3.42 H	306	45.1	2.6
3	*5180.00	99.0 PK			3.56 H	327	58.1	40.9
4	*5180.00	87.8 AV			3.56 H	327	46.9	40.9
5	#10360.00	59.3 PK	74.0	-14.7	3.32 H	280	44.5	14.8
6	#10360.00	45.9 AV	54.0	-8.1	3.32 H	280	31.1	14.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	69.8 PK	74.0	-4.2	2.47 V	219	67.2	2.6
2	5150.00	53.0 AV	54.0	-1.0	2.47 V	219	50.4	2.6
3	*5180.00	105.4 PK			2.43 V	222	64.5	40.9
4	*5180.00	94.3 AV			2.43 V	222	53.4	40.9
5	#10360.00	60.0 PK	74.0	-14.0	1.55 V	132	45.2	14.8
6	#10360.00	46.0 AV	54.0	-8.0	1.55 V	132	31.2	14.8

Remarks:

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

CHANNEL	TX Channel 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	*5200.00	99.4 PK			3.56 H	329	58.5	40.9
2	*5200.00	88.6 AV			3.56 H	329	47.7	40.9
3	#10400.00	58.8 PK	74.0	-15.2	2.35 H	110	43.9	14.9
4	#10400.00	45.5 AV	54.0	-8.5	2.35 H	110	30.6	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	*5200.00	106.1 PK			2.30 V	206	65.2	40.9
2	*5200.00	96.0 AV			2.30 V	206	55.1	40.9
3	#10400.00	59.2 PK	74.0	-14.8	1.50 V	55	44.3	14.9
4	#10400.00	45.9 AV	54.0	-8.1	1.50 V	55	31.0	14.9

Remarks:

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

CHANNEL	TX Channel 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	99.9 PK			3.52 H	327	59.2	40.7
2	*5240.00	88.8 AV			3.52 H	327	48.1	40.7
3	5350.00	56.1 PK	74.0	-17.9	3.44 H	312	53.3	2.8
4	5350.00	43.0 AV	54.0	-11.0	3.44 H	312	40.2	2.8
5	#10480.00	58.9 PK	74.0	-15.1	2.13 H	44	44.2	14.7
6	#10480.00	45.2 AV	54.0	-8.8	2.13 H	44	30.5	14.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	107.1 PK			2.50 V	211	66.4	40.7
2	*5240.00	96.1 AV			2.50 V	211	55.4	40.7
3	5350.00	58.2 PK	74.0	-15.8	2.25 V	200	55.4	2.8
4	5350.00	44.2 AV	54.0	-9.8	2.25 V	200	41.4	2.8
5	#10480.00	59.2 PK	74.0	-14.8	1.77 V	33	44.5	14.7
6	#10480.00	45.9 AV	54.0	-8.1	1.77 V	33	31.2	14.7

Remarks:

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

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK)
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	57.3 PK	74.0	-16.7	3.77 H	314	54.7	2.6
2	5150.00	43.7 AV	54.0	-10.3	3.77 H	314	41.1	2.6
3	*5260.00	99.2 PK			3.87 H	328	58.5	40.7
4	*5260.00	88.9 AV			3.87 H	328	48.2	40.7
5	#10520.00	59.7 PK	74.0	-14.3	1.78 H	221	44.9	14.8
6	#10520.00	46.0 AV	54.0	-8.0	1.78 H	221	31.2	14.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.4 PK	74.0	-16.6	2.21 V	209	54.8	2.6
2	5150.00	44.1 AV	54.0	-9.9	2.21 V	209	41.5	2.6
3	*5260.00	108.4 PK			2.36 V	221	67.7	40.7
4	*5260.00	97.9 AV			2.36 V	221	57.2	40.7
5	#10520.00	60.5 PK	74.0	-13.5	3.22 V	75	45.7	14.8
6	#10520.00	46.7 AV	54.0	-7.3	3.22 V	75	31.9	14.8

Remarks:

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

CHANNEL	TX Channel 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	99.8 PK			3.83 H	328	59.2	40.6
2	*5300.00	88.6 AV			3.83 H	328	48.0	40.6
3	5350.00	62.2 PK	74.0	-11.8	3.75 H	310	59.4	2.8
4	5350.00	46.8 AV	54.0	-7.2	3.75 H	310	44.0	2.8
5	10600.00	59.5 PK	74.0	-14.5	2.49 H	211	44.3	15.2
6	10600.00	46.1 AV	54.0	-7.9	2.49 H	211	30.9	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	*5300.00	107.5 PK			2.33 V	187	66.9	40.6
2	*5300.00	97.1 AV			2.33 V	187	56.5	40.6
3	5350.00	70.0 PK	74.0	-4.0	2.32 V	186	67.2	2.8
4	5350.00	53.0 AV	54.0	-1.0	2.32 V	186	50.2	2.8
5	10600.00	60.4 PK	74.0	-13.6	1.50 V	326	45.2	15.2
6	10600.00	46.5 AV	54.0	-7.5	1.50 V	326	31.3	15.2

Remarks:

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

CHANNEL	TX Channel 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	96.5 PK			3.91 H	325	55.8	40.7
2	*5320.00	86.3 AV			3.91 H	325	45.6	40.7
3	5350.00	62.7 PK	74.0	-11.3	3.84 H	310	59.9	2.8
4	5350.00	47.2 AV	54.0	-6.8	3.84 H	310	44.4	2.8
5	10640.00	59.6 PK	74.0	-14.4	1.50 H	149	44.2	15.4
6	10640.00	46.3 AV	54.0	-7.7	1.50 H	149	30.9	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	*5320.00	105.0 PK			2.33 V	232	64.3	40.7
2	*5320.00	95.2 AV			2.33 V	232	54.5	40.7
3	5350.00	73.0 PK	74.0	-1.0	2.21 V	245	70.2	2.8
4	5350.00	53.0 AV	54.0	-1.0	2.21 V	245	50.2	2.8
5	10640.00	60.1 PK	74.0	-13.9	1.45 V	29	44.7	15.4
6	10640.00	46.7 AV	54.0	-7.3	1.45 V	29	31.3	15.4

Remarks:

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

CHANNEL	TX Channel 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	58.0 PK	74.0	-16.0	3.56 H	330	54.8	3.2
2	5460.00	44.5 AV	54.0	-9.5	3.56 H	330	41.3	3.2
3	#5470.00	62.2 PK	74.0	-11.8	3.65 H	315	59.0	3.2
4	#5470.00	46.3 AV	54.0	-7.7	3.65 H	315	43.1	3.2
5	*5500.00	98.3 PK			3.66 H	329	56.8	41.5
6	*5500.00	86.8 AV			3.66 H	329	45.3	41.5
7	11000.00	60.3 PK	74.0	-13.7	1.77 H	189	44.3	16.0
8	11000.00	47.5 AV	54.0	-6.5	1.77 H	189	31.5	16.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.7 PK	74.0	-11.3	2.44 V	352	59.5	3.2
2	5460.00	46.7 AV	54.0	-7.3	2.44 V	352	43.5	3.2
3	#5470.00	68.4 PK	74.0	-5.6	2.60 V	271	65.2	3.2
4	#5470.00	52.5 AV	54.0	-1.5	2.60 V	271	49.3	3.2
5	*5500.00	106.8 PK			2.72 V	280	65.3	41.5
6	*5500.00	95.5 AV			2.72 V	280	54.0	41.5
7	11000.00	60.5 PK	74.0	-13.5	1.55 V	159	44.5	16.0
8	11000.00	47.8 AV	54.0	-6.2	1.55 V	159	31.8	16.0

Remarks:

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

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
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	97.7 PK			3.65 H	348	55.8	41.9
2	*5580.00	87.3 AV			3.65 H	348	45.4	41.9
3	11160.00	59.7 PK	74.0	-14.3	1.57 H	110	44.0	15.7
4	11160.00	46.3 AV	54.0	-7.7	1.57 H	110	30.6	15.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	108.5 PK			2.52 V	282	66.6	41.9
2	*5580.00	98.2 AV			2.52 V	282	56.3	41.9
3	11160.00	60.0 PK	74.0	-14.0	1.59 V	302	44.3	15.7
4	11160.00	47.6 AV	54.0	-6.4	1.59 V	302	31.9	15.7

Remarks:

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

CHANNEL	TX Channel 120	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	*5600.00	97.5 PK			3.51 H	344	55.5	42.0
2	*5600.00	87.5 AV			3.51 H	344	45.5	42.0
3	#5725.00	57.9 PK	74.0	-16.1	3.42 H	335	54.2	3.7
4	#5725.00	45.2 AV	54.0	-8.8	3.42 H	335	41.5	3.7
5	11200.00	60.3 PK	74.0	-13.7	2.55 H	143	44.5	15.8
6	11200.00	47.3 AV	54.0	-6.7	2.55 H	143	31.5	15.8
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	*5600.00	108.8 PK			2.59 V	200	66.8	42.0
2	*5600.00	98.5 AV			2.59 V	200	56.5	42.0
3	#5725.00	58.0 PK	74.0	-16.0	2.49 V	192	54.3	3.7
4	#5725.00	45.5 AV	54.0	-8.5	2.49 V	192	41.8	3.7
5	11200.00	61.4 PK	74.0	-12.6	1.90 V	278	45.6	15.8
6	11200.00	48.6 AV	54.0	-5.4	1.90 V	278	32.8	15.8

Remarks:

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

CHANNEL	TX Channel 124	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	*5620.00	97.7 PK			3.49 H	345	55.9	41.8
2	*5620.00	87.2 AV			3.49 H	345	45.4	41.8
3	#5725.00	58.2 PK	74.0	-15.8	3.30 H	319	54.5	3.7
4	#5725.00	44.7 AV	54.0	-9.3	3.30 H	319	41.0	3.7
5	11240.00	60.1 PK	74.0	-13.9	2.63 H	188	44.2	15.9
6	11240.00	47.6 AV	54.0	-6.4	2.63 H	188	31.7	15.9

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	*5620.00	108.3 PK			2.59 V	198	66.5	41.8
2	*5620.00	98.4 AV			2.59 V	198	56.6	41.8
3	#5725.00	60.5 PK	74.0	-13.5	2.46 V	207	56.8	3.7
4	#5725.00	45.6 AV	54.0	-8.4	2.46 V	207	41.9	3.7
5	11240.00	61.1 PK	74.0	-12.9	1.52 V	290	45.2	15.9
6	11240.00	48.8 AV	54.0	-5.2	1.52 V	290	32.9	15.9

Remarks:

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

CHANNEL	TX Channel 128	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	*5640.00	96.6 PK			3.54 H	342	54.9	41.7
2	*5640.00	87.1 AV			3.54 H	342	45.4	41.7
3	#5725.00	58.3 PK	74.0	-15.7	3.42 H	349	54.6	3.7
4	#5725.00	45.3 AV	54.0	-8.7	3.42 H	349	41.6	3.7
5	11280.00	60.4 PK	74.0	-13.6	2.62 H	159	44.5	15.9
6	11280.00	47.8 AV	54.0	-6.2	2.62 H	159	31.9	15.9

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	*5640.00	108.7 PK			2.60 V	198	67.0	41.7
2	*5640.00	98.0 AV			2.60 V	198	56.3	41.7
3	#5725.00	59.1 PK	74.0	-14.9	2.55 V	189	55.4	3.7
4	#5725.00	46.1 AV	54.0	-7.9	2.55 V	189	42.4	3.7
5	11280.00	61.5 PK	74.0	-12.5	1.62 V	299	45.6	15.9
6	11280.00	48.6 AV	54.0	-5.4	1.62 V	299	32.7	15.9

Remarks:

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

CHANNEL	TX Channel 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	93.9 PK			3.57 H	345	51.8	42.1
2	*5700.00	82.7 AV			3.57 H	345	40.6	42.1
3	#5725.00	61.3 PK	74.0	-12.7	3.55 H	335	57.6	3.7
4	#5725.00	46.3 AV	54.0	-7.7	3.55 H	335	42.6	3.7
5	11400.00	60.1 PK	74.0	-13.9	1.50 H	210	44.1	16.0
6	11400.00	46.9 AV	54.0	-7.1	1.50 H	210	30.9	16.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	105.4 PK			2.52 V	289	63.3	42.1
2	*5700.00	95.2 AV			2.52 V	289	53.1	42.1
3	#5725.00	71.3 PK	74.0	-2.7	2.50 V	287	67.6	3.7
4	#5725.00	53.0 AV	54.0	-1.0	2.50 V	287	49.3	3.7
5	11400.00	60.3 PK	74.0	-13.7	1.55 V	310	44.3	16.0
6	11400.00	47.5 AV	54.0	-6.5	1.55 V	310	31.5	16.0

Remarks:

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

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Peak (PK)
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	57.5 PK	74.0	-16.5	3.39 H	315	54.3	3.2
2	#5470.00	44.4 AV	54.0	-9.6	3.39 H	315	41.2	3.2
3	*5720.00	98.0 PK			3.12 H	347	55.9	42.1
4	*5720.00	87.7 AV			3.12 H	347	45.6	42.1
5	#5850.00	58.4 PK	74.0	-15.6	3.20 H	341	53.8	4.6
6	#5850.00	45.7 AV	54.0	-8.3	3.20 H	341	41.1	4.6
7	11440.00	60.7 PK	74.0	-13.3	2.91 H	211	44.6	16.1
8	11440.00	47.6 AV	54.0	-6.4	2.91 H	211	31.5	16.1

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	57.6 PK	74.0	-16.4	2.44 V	279	54.4	3.2
2	#5470.00	44.7 AV	54.0	-9.3	2.44 V	279	41.5	3.2
3	*5720.00	109.6 PK			2.51 V	288	67.5	42.1
4	*5720.00	99.3 AV			2.51 V	288	57.2	42.1
5	#5850.00	59.1 PK	74.0	-14.9	2.59 V	292	54.5	4.6
6	#5850.00	45.9 AV	54.0	-8.1	2.59 V	292	41.3	4.6
7	11440.00	61.3 PK	74.0	-12.7	1.85 V	241	45.2	16.1
8	11440.00	48.5 AV	54.0	-5.5	1.85 V	241	32.4	16.1

Remarks:

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

CHANNEL	TX Channel 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	#5622.40	57.5 PK	68.2	-10.7	3.25 H	274	54.0	3.5
2	*5745.00	97.5 PK			3.25 H	274	55.3	42.2
3	*5745.00	86.9 AV			3.25 H	274	44.7	42.2
4	#5952.00	58.9 PK	68.2	-9.3	3.25 H	274	54.3	4.6
5	11490.00	59.9 PK	74.0	-14.1	1.88 H	109	43.7	16.2
6	11490.00	47.1 AV	54.0	-6.9	1.88 H	109	30.9	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	#5630.40	58.1 PK	68.2	-10.1	2.52 V	287	54.6	3.5
2	*5745.00	108.5 PK			2.52 V	287	66.3	42.2
3	*5745.00	98.0 AV			2.52 V	287	55.8	42.2
4	#5928.00	59.2 PK	68.2	-9.0	2.52 V	287	54.7	4.5
5	11490.00	60.5 PK	74.0	-13.5	1.09 V	77	44.3	16.2
6	11490.00	47.8 AV	54.0	-6.2	1.09 V	77	31.6	16.2

Remarks:

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

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
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	#5609.60	58.0 PK	68.2	-10.2	3.37 H	279	54.5	3.5
2	*5785.00	97.4 PK			3.37 H	279	55.0	42.4
3	*5785.00	86.5 AV			3.37 H	279	44.1	42.4
4	#5992.00	59.5 PK	68.2	-8.7	3.37 H	279	54.8	4.7
5	11570.00	60.1 PK	74.0	-13.9	1.52 H	177	44.1	16.0
6	11570.00	47.2 AV	54.0	-6.8	1.52 H	177	31.2	16.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5622.40	57.3 PK	68.2	-10.9	2.50 V	289	53.8	3.5
2	*5785.00	108.8 PK			2.50 V	289	66.4	42.4
3	*5785.00	97.8 AV			2.50 V	289	55.4	42.4
4	#5985.60	58.9 PK	68.2	-9.3	2.50 V	289	54.3	4.6
5	11570.00	60.6 PK	74.0	-13.4	3.29 V	106	44.6	16.0
6	11570.00	47.8 AV	54.0	-6.2	3.29 V	106	31.8	16.0

Remarks:

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

CHANNEL	TX Channel 165	DETECTOR FUNCTION	Peak (PK)
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	#5607.20	57.2 PK	68.2	-11.0	3.37 H	276	53.7	3.5
2	*5825.00	97.4 PK			3.37 H	276	54.6	42.8
3	*5825.00	87.1 AV			3.37 H	276	44.3	42.8
4	#5962.40	57.9 PK	68.2	-10.3	3.37 H	276	53.2	4.7
5	11650.00	59.6 PK	74.0	-14.4	1.59 H	144	44.2	15.4
6	11650.00	46.7 AV	54.0	-7.3	1.59 H	144	31.3	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	#5606.40	57.5 PK	68.2	-10.7	2.34 V	290	54.0	3.5
2	*5825.00	108.4 PK			2.34 V	290	65.6	42.8
3	*5825.00	97.7 AV			2.34 V	290	54.9	42.8
4	#5938.40	59.0 PK	68.2	-9.2	2.34 V	290	54.5	4.5
5	11650.00	59.6 PK	74.0	-14.4	3.56 V	47	44.2	15.4
6	11650.00	46.7 AV	54.0	-7.3	3.56 V	47	31.3	15.4

Remarks:

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

802.11n (HT40)

CHANNEL	TX Channel 38	DETECTOR	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz	FUNCTION	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	63.2 PK	74.0	-10.8	3.52 H	326	60.6	2.6
2	5150.00	46.1 AV	54.0	-7.9	3.52 H	326	43.5	2.6
3	*5190.00	94.5 PK			3.67 H	331	53.6	40.9
4	*5190.00	83.6 AV			3.67 H	331	42.7	40.9
5	#10380.00	59.1 PK	74.0	-14.9	1.93 H	242	44.3	14.8
6	#10380.00	46.7 AV	54.0	-7.3	1.93 H	242	31.9	14.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	72.8 PK	74.0	-1.2	2.33 V	206	70.2	2.6
2	5150.00	52.5 AV	54.0	-1.5	2.33 V	206	49.9	2.6
3	*5190.00	102.5 PK			2.49 V	218	61.6	40.9
4	*5190.00	91.9 AV			2.49 V	218	51.0	40.9
5	#10380.00	60.2 PK	74.0	-13.8	1.55 V	326	45.4	14.8
6	#10380.00	47.3 AV	54.0	-6.7	1.55 V	326	32.5	14.8

Remarks:

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

CHANNEL	TX Channel 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	97.3 PK			3.65 H	330	56.6	40.7
2	*5230.00	86.9 AV			3.65 H	330	46.2	40.7
3	5350.00	58.1 PK	74.0	-15.9	3.44 H	310	55.3	2.8
4	5350.00	45.0 AV	54.0	-9.0	3.44 H	310	42.2	2.8
5	#10460.00	59.0 PK	74.0	-15.0	2.08 H	128	44.2	14.8
6	#10460.00	46.3 AV	54.0	-7.7	2.08 H	128	31.5	14.8

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	*5230.00	104.2 PK			2.48 V	202	63.5	40.7
2	*5230.00	94.5 AV			2.48 V	202	53.8	40.7
3	5350.00	63.5 PK	74.0	-10.5	2.59 V	211	60.7	2.8
4	5350.00	49.5 AV	54.0	-4.5	2.59 V	211	46.7	2.8
5	#10460.00	59.7 PK	74.0	-14.3	1.99 V	25	44.9	14.8
6	#10460.00	46.9 AV	54.0	-7.1	1.99 V	25	32.1	14.8

Remarks:

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

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK)
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	57.1 PK	74.0	-16.9	3.66 H	329	54.5	2.6
2	5150.00	44.2 AV	54.0	-9.8	3.66 H	329	41.6	2.6
3	*5270.00	95.6 PK			3.70 H	330	55.0	40.6
4	*5270.00	85.6 AV			3.70 H	330	45.0	40.6
5	#10540.00	58.9 PK	74.0	-15.1	1.58 H	102	44.0	14.9
6	#10540.00	45.8 AV	54.0	-8.2	1.58 H	102	30.9	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	5150.00	56.8 PK	74.0	-17.2	2.66 V	210	54.2	2.6
2	5150.00	44.3 AV	54.0	-9.7	2.66 V	210	41.7	2.6
3	*5270.00	103.8 PK			2.68 V	217	63.2	40.6
4	*5270.00	93.4 AV			2.68 V	217	52.8	40.6
5	#10540.00	59.1 PK	74.0	-14.9	1.45 V	328	44.2	14.9
6	#10540.00	46.1 AV	54.0	-7.9	1.45 V	328	31.2	14.9

Remarks:

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

CHANNEL	TX Channel 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	88.6 PK			3.72 H	341	48.0	40.6
2	*5310.00	78.2 AV			3.72 H	341	37.6	40.6
3	5350.00	57.3 PK	74.0	-16.7	3.77 H	356	54.5	2.8
4	5350.00	44.2 AV	54.0	-9.8	3.77 H	356	41.4	2.8
5	10620.00	59.6 PK	74.0	-14.4	1.56 H	228	44.3	15.3
6	10620.00	46.6 AV	54.0	-7.4	1.56 H	228	31.3	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	*5310.00	101.9 PK			2.37 V	206	61.3	40.6
2	*5310.00	90.9 AV			2.37 V	206	50.3	40.6
3	5350.00	71.5 PK	74.0	-2.5	2.34 V	193	68.7	2.8
4	5350.00	53.0 AV	54.0	-1.0	2.34 V	193	50.2	2.8
5	10620.00	59.6 PK	74.0	-14.4	1.75 V	336	44.3	15.3
6	10620.00	46.2 AV	54.0	-7.8	1.75 V	336	30.9	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. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
6. " # ": The radiated frequency is out of the restricted band.

CHANNEL	TX Channel 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	56.3 PK	74.0	-17.7	3.44 H	351	53.1	3.2
2	5460.00	44.3 AV	54.0	-9.7	3.44 H	351	41.1	3.2
3	#5470.00	64.0 PK	74.0	-10.0	3.39 H	326	60.8	3.2
4	#5470.00	46.5 AV	54.0	-7.5	3.39 H	326	43.3	3.2
5	*5510.00	91.7 PK			3.47 H	341	50.1	41.6
6	*5510.00	81.8 AV			3.47 H	341	40.2	41.6
7	11020.00	60.1 PK	74.0	-13.9	1.09 H	56	44.3	15.8
8	11020.00	46.7 AV	54.0	-7.3	1.09 H	56	30.9	15.8

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	63.9 PK	74.0	-10.1	2.49 V	206	60.7	3.2
2	5460.00	47.0 AV	54.0	-7.0	2.49 V	206	43.8	3.2
3	#5470.00	72.8 PK	74.0	-1.2	2.50 V	199	69.6	3.2
4	#5470.00	50.2 AV	54.0	-3.8	2.50 V	199	47.0	3.2
5	*5510.00	101.1 PK			2.51 V	201	59.5	41.6
6	*5510.00	91.3 AV			2.51 V	201	49.7	41.6
7	11020.00	60.4 PK	74.0	-13.6	1.55 V	332	44.6	15.8
8	11020.00	47.0 AV	54.0	-7.0	1.55 V	332	31.2	15.8

Remarks:

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

CHANNEL	TX Channel 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	#5470.00	48.2 PK	74.0	-25.8	3.35 H	326	45.0	3.2
2	#5470.00	44.9 AV	54.0	-9.1	3.35 H	326	41.7	3.2
3	*5550.00	96.0 PK			3.46 H	340	54.2	41.8
4	*5550.00	85.4 AV			3.46 H	340	43.6	41.8
5	11100.00	60.0 PK	74.0	-14.0	1.56 H	155	44.3	15.7
6	11100.00	46.6 AV	54.0	-7.4	1.56 H	155	30.9	15.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	62.7 PK	74.0	-11.3	2.43 V	188	59.5	3.2
2	#5470.00	48.0 AV	54.0	-6.0	2.43 V	188	44.8	3.2
3	*5550.00	105.8 PK			2.50 V	198	64.0	41.8
4	*5550.00	95.4 AV			2.50 V	198	53.6	41.8
5	11100.00	60.2 PK	74.0	-13.8	1.53 V	22	44.5	15.7
6	11100.00	47.3 AV	54.0	-6.7	1.53 V	22	31.6	15.7

Remarks:

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

CHANNEL	TX Channel 118	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	57.4 PK	74.0	-16.6	3.48 H	336	54.2	3.2
2	#5470.00	44.7 AV	54.0	-9.3	3.48 H	336	41.5	3.2
3	*5590.00	94.5 PK			3.52 H	342	52.6	41.9
4	*5590.00	84.5 AV			3.52 H	342	42.6	41.9
5	#5725.00	58.5 PK	74.0	-15.5	3.55 H	349	54.8	3.7
6	#5725.00	45.3 AV	54.0	-8.7	3.55 H	349	41.6	3.7
7	11180.00	59.9 PK	74.0	-14.1	2.94 H	173	44.2	15.7
8	11180.00	47.6 AV	54.0	-6.4	2.94 H	173	31.9	15.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	58.9 PK	74.0	-15.1	2.42 V	205	55.7	3.2
2	#5470.00	45.3 AV	54.0	-8.7	2.42 V	205	42.1	3.2
3	*5590.00	105.9 PK			2.37 V	198	64.0	41.9
4	*5590.00	95.7 AV			2.37 V	198	53.8	41.9
5	#5725.00	60.6 PK	74.0	-13.4	2.49 V	186	56.9	3.7
6	#5725.00	47.5 AV	54.0	-6.5	2.49 V	186	43.8	3.7
7	11180.00	61.0 PK	74.0	-13.0	1.50 V	298	45.3	15.7
8	11180.00	47.8 AV	54.0	-6.2	1.50 V	298	32.1	15.7

Remarks:

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

CHANNEL	TX Channel 126	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	*5630.00	93.9 PK			3.52 H	340	52.1	41.8
2	*5630.00	84.2 AV			3.52 H	340	42.4	41.8
3	#5725.00	57.7 PK	74.0	-16.3	3.48 H	338	54.0	3.7
4	#5725.00	45.4 AV	54.0	-8.6	3.48 H	338	41.7	3.7
5	11260.00	60.5 PK	74.0	-13.5	2.63 H	148	44.6	15.9
6	11260.00	47.6 AV	54.0	-6.4	2.63 H	148	31.7	15.9
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	*5630.00	105.3 PK			2.43 V	290	63.5	41.8
2	*5630.00	95.1 AV			2.43 V	290	53.3	41.8
3	#5725.00	68.8 PK	74.0	-5.2	2.48 V	299	65.1	3.7
4	#5725.00	52.9 AV	54.0	-1.1	2.48 V	299	49.2	3.7
5	11260.00	61.5 PK	74.0	-12.5	1.72 V	282	45.6	15.9
6	11260.00	48.7 AV	54.0	-5.3	1.72 V	282	32.8	15.9

Remarks:

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

CHANNEL	TX Channel 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	91.5 PK			3.47 H	346	49.7	41.8
2	*5670.00	81.2 AV			3.47 H	346	39.4	41.8
3	#5725.00	59.5 PK	74.0	-14.5	3.36 H	320	55.8	3.7
4	#5725.00	45.4 AV	54.0	-8.6	3.36 H	320	41.7	3.7
5	11340.00	60.3 PK	74.0	-13.7	1.59 H	226	44.3	16.0
6	11340.00	47.2 AV	54.0	-6.8	1.59 H	226	31.2	16.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	102.3 PK			2.50 V	202	60.5	41.8
2	*5670.00	91.7 AV			2.50 V	202	49.9	41.8
3	#5725.00	70.2 PK	74.0	-3.8	2.55 V	198	66.5	3.7
4	#5725.00	52.6 AV	54.0	-1.4	2.55 V	198	48.9	3.7
5	11340.00	60.9 PK	74.0	-13.1	2.26 V	36	44.9	16.0
6	11340.00	47.6 AV	54.0	-6.4	2.26 V	36	31.6	16.0

Remarks:

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

CHANNEL	TX Channel 142	DETECTOR FUNCTION	Peak (PK)
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	*5710.00	94.2 PK			3.45 H	339	52.1	42.1
2	*5710.00	83.9 AV			3.45 H	339	41.8	42.1
3	#5850.00	58.8 PK	74.0	-15.2	3.51 H	340	54.2	4.6
4	#5850.00	46.5 AV	54.0	-7.5	3.51 H	340	41.9	4.6
5	11420.00	61.0 PK	74.0	-13.0	2.90 H	175	44.9	16.1
6	11420.00	47.6 AV	54.0	-6.4	2.90 H	175	31.5	16.1

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	*5710.00	106.8 PK			2.46 V	288	64.7	42.1
2	*5710.00	96.1 AV			2.46 V	288	54.0	42.1
3	#5850.00	61.4 PK	74.0	-12.6	2.40 V	275	56.8	4.6
4	#5850.00	46.8 AV	54.0	-7.2	2.40 V	275	42.2	4.6
5	11420.00	61.5 PK	74.0	-12.5	1.63 V	290	45.4	16.1
6	11420.00	48.2 AV	54.0	-5.8	1.63 V	290	32.1	16.1

Remarks:

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

CHANNEL	TX Channel 151	DETECTOR FUNCTION	Peak (PK)
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	#5601.60	58.3 PK	68.2	-9.9	3.58 H	276	54.7	3.6
2	*5755.00	95.5 PK			3.58 H	276	53.2	42.3
3	*5755.00	84.8 AV			3.58 H	276	42.5	42.3
4	#5996.00	59.2 PK	68.2	-9.0	3.58 H	276	54.5	4.7
5	11510.00	60.2 PK	74.0	-13.8	1.75 H	177	44.2	16.0
6	11510.00	46.9 AV	54.0	-7.1	1.75 H	177	30.9	16.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5649.60	62.3 PK	68.2	-5.9	2.60 V	287	58.9	3.4
2	*5755.00	105.8 PK			2.60 V	287	63.5	42.3
3	*5755.00	95.5 AV			2.60 V	287	53.2	42.3
4	#5924.80	58.7 PK	68.3	-9.6	2.60 V	287	54.3	4.4
5	11510.00	60.6 PK	74.0	-13.4	3.47 V	111	44.6	16.0
6	11510.00	47.5 AV	54.0	-6.5	3.47 V	111	31.5	16.0

Remarks:

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

CHANNEL	TX Channel 159	DETECTOR FUNCTION	Peak (PK)
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	#5622.40	57.0 PK	68.2	-11.2	3.57 H	275	53.5	3.5
2	*5795.00	95.5 PK			3.57 H	275	53.0	42.5
3	*5795.00	85.2 AV			3.57 H	275	42.7	42.5
4	#5975.20	58.4 PK	68.2	-9.8	3.57 H	275	53.8	4.6
5	11590.00	60.1 PK	74.0	-13.9	1.05 H	70	44.3	15.8
6	11590.00	47.0 AV	54.0	-7.0	1.05 H	70	31.2	15.8

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	#5623.20	58.4 PK	68.2	-9.8	2.57 V	288	54.9	3.5
2	*5795.00	105.2 PK			2.57 V	288	62.7	42.5
3	*5795.00	95.2 AV			2.57 V	288	52.7	42.5
4	#5926.40	60.5 PK	68.2	-7.7	2.57 V	288	56.0	4.5
5	11590.00	60.4 PK	74.0	-13.6	2.01 V	109	44.6	15.8
6	11590.00	47.3 AV	54.0	-6.7	2.01 V	109	31.5	15.8

Remarks:

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

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	61.6 PK	74.0	-12.4	3.66 H	325	59.0	2.6
2	5150.00	46.5 AV	54.0	-7.5	3.66 H	325	43.9	2.6
3	*5210.00	91.1 PK			3.68 H	341	50.3	40.8
4	*5210.00	80.0 AV			3.68 H	341	39.2	40.8
5	5350.00	57.9 PK	74.0	-16.1	3.56 H	332	55.1	2.8
6	5350.00	44.2 AV	54.0	-9.8	3.56 H	332	41.4	2.8
7	#10420.00	58.9 PK	74.0	-15.1	1.59 H	205	44.1	14.8
8	#10420.00	45.9 AV	54.0	-8.1	1.59 H	205	31.1	14.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	70.2 PK	74.0	-3.8	2.44 V	216	67.6	2.6
2	5150.00	52.5 AV	54.0	-1.5	2.44 V	216	49.9	2.6
3	*5210.00	98.4 PK			2.43 V	221	57.6	40.8
4	*5210.00	88.2 AV			2.43 V	221	47.4	40.8
5	5350.00	59.4 PK	74.0	-14.6	2.47 V	209	56.6	2.8
6	5350.00	46.8 AV	54.0	-7.2	2.47 V	209	44.0	2.8
7	#10420.00	59.0 PK	74.0	-15.0	3.55 V	77	44.2	14.8
8	#10420.00	45.8 AV	54.0	-8.2	3.55 V	77	31.0	14.8

Remarks:

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

CHANNEL	TX Channel 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	56.7 PK	74.0	-17.3	3.58 H	326	54.1	2.6
2	5150.00	44.2 AV	54.0	-9.8	3.58 H	326	41.6	2.6
3	*5290.00	89.6 PK			4.00 H	330	49.0	40.6
4	*5290.00	78.9 AV			4.00 H	330	38.3	40.6
5	5350.00	61.4 PK	74.0	-12.6	3.85 H	324	58.6	2.8
6	5350.00	45.9 AV	54.0	-8.1	3.85 H	324	43.1	2.8
7	#10580.00	59.2 PK	74.0	-14.8	1.50 H	226	44.1	15.1
8	#10580.00	45.6 AV	54.0	-8.4	1.50 H	226	30.5	15.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.0 PK	74.0	-17.0	2.21 V	266	54.4	2.6
2	5150.00	44.5 AV	54.0	-9.5	2.21 V	266	41.9	2.6
3	*5290.00	97.0 PK			2.41 V	206	56.4	40.6
4	*5290.00	86.6 AV			2.41 V	206	46.0	40.6
5	5350.00	68.2 PK	74.0	-5.8	2.39 V	215	65.4	2.8
6	5350.00	52.5 AV	54.0	-1.5	2.39 V	215	49.7	2.8
7	#10580.00	59.4 PK	74.0	-14.6	2.19 V	55	44.3	15.1
8	#10580.00	45.9 AV	54.0	-8.1	2.19 V	55	30.8	15.1

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
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	58.5 PK	74.0	-15.5	3.29 H	331	55.3	3.2
2	5460.00	45.1 AV	54.0	-8.9	3.29 H	331	41.9	3.2
3	#5470.00	60.3 PK	74.0	-13.7	3.38 H	345	57.1	3.2
4	#5470.00	45.7 AV	54.0	-8.3	3.38 H	345	42.5	3.2
5	*5530.00	88.0 PK			3.46 H	341	46.2	41.8
6	*5530.00	77.1 AV			3.46 H	341	35.3	41.8
7	#5725.00	57.9 PK	74.0	-16.1	3.50 H	348	54.2	3.7
8	#5725.00	45.1 AV	54.0	-8.9	3.50 H	348	41.4	3.7
9	11060.00	60.5 PK	74.0	-13.5	2.10 H	158	44.8	15.7
10	11060.00	47.2 AV	54.0	-6.8	2.10 H	158	31.5	15.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	67.5 PK	74.0	-6.5	2.40 V	189	64.3	3.2
2	5460.00	50.4 AV	54.0	-3.6	2.40 V	189	47.2	3.2
3	#5470.00	69.2 PK	74.0	-4.8	2.45 V	201	66.0	3.2
4	#5470.00	52.5 AV	54.0	-1.5	2.45 V	201	49.3	3.2
5	*5530.00	97.7 PK			2.46 V	197	55.9	41.8
6	*5530.00	87.6 AV			2.46 V	197	45.8	41.8
7	#5725.00	57.7 PK	74.0	-16.3	2.44 V	192	54.0	3.7
8	#5725.00	45.1 AV	54.0	-8.9	2.44 V	192	41.4	3.7
9	11060.00	60.8 PK	74.0	-13.2	1.72 V	236	45.1	15.7
10	11060.00	48.1 AV	54.0	-5.9	1.72 V	236	32.4	15.7

Remarks:

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

CHANNEL	TX Channel 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	5460.00	57.3 PK	74.0	-16.7	3.59 H	351	54.1	3.2
2	5460.00	44.4 AV	54.0	-9.6	3.59 H	351	41.2	3.2
3	#5470.00	57.7 PK	74.0	-16.3	3.44 H	339	54.5	3.2
4	#5470.00	44.7 AV	54.0	-9.3	3.44 H	339	41.5	3.2
5	*5610.00	90.0 PK			3.50 H	343	48.2	41.8
6	*5610.00	79.4 AV			3.50 H	343	37.6	41.8
7	#5725.00	58.2 PK	74.0	-15.8	3.45 H	349	54.5	3.7
8	#5725.00	45.2 AV	54.0	-8.8	3.45 H	349	41.5	3.7
9	11220.00	60.1 PK	74.0	-13.9	2.90 H	187	44.2	15.9
10	11220.00	47.4 AV	54.0	-6.6	2.90 H	187	31.5	15.9

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	59.1 PK	74.0	-14.9	2.45 V	201	55.9	3.2
2	5460.00	45.3 AV	54.0	-8.7	2.45 V	201	42.1	3.2
3	#5470.00	61.7 PK	74.0	-12.3	2.50 V	198	58.5	3.2
4	#5470.00	47.1 AV	54.0	-6.9	2.50 V	198	43.9	3.2
5	*5610.00	100.7 PK			2.59 V	199	58.9	41.8
6	*5610.00	90.4 AV			2.59 V	199	48.6	41.8
7	#5725.00	68.4 PK	74.0	-5.6	2.46 V	200	64.7	3.7
8	#5725.00	53.0 AV	54.0	-1.0	2.46 V	200	49.3	3.7
9	11220.00	61.2 PK	74.0	-12.8	1.90 V	244	45.3	15.9
10	11220.00	48.3 AV	54.0	-5.7	1.90 V	244	32.4	15.9

Remarks:

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

CHANNEL	TX Channel 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	#5470.00	57.8 PK	74.0	-16.2	3.60 H	328	54.6	3.2
2	#5470.00	45.0 AV	54.0	-9.0	3.60 H	328	41.8	3.2
3	*5690.00	90.5 PK			3.49 H	328	48.5	42.0
4	*5690.00	80.2 AV			3.49 H	328	38.2	42.0
5	#5850.00	58.8 PK	74.0	-15.2	3.55 H	342	54.2	4.6
6	#5850.00	46.3 AV	54.0	-7.7	3.55 H	342	41.7	4.6
7	11380.00	60.5 PK	74.0	-13.5	2.66 H	187	44.5	16.0
8	11380.00	47.4 AV	54.0	-6.6	2.66 H	187	31.4	16.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	62.6 PK	74.0	-11.4	2.45 V	288	59.4	3.2
2	#5470.00	47.2 AV	54.0	-6.8	2.45 V	288	44.0	3.2
3	*5690.00	101.0 PK			2.34 V	292	59.0	42.0
4	*5690.00	90.8 AV			2.34 V	292	48.8	42.0
5	#5850.00	67.2 PK	74.0	-6.8	2.47 V	290	62.6	4.6
6	#5850.00	53.0 AV	54.0	-1.0	2.47 V	290	48.4	4.6
7	11380.00	61.1 PK	74.0	-12.9	1.55 V	248	45.1	16.0
8	11380.00	48.5 AV	54.0	-5.5	1.55 V	248	32.5	16.0

Remarks:

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

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK)
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	#5610.40	58.2 PK	68.2	-10.0	3.43 H	277	54.7	3.5
2	#5650.00	58.2 PK	68.2	-10.0	3.33 H	269	54.8	3.4
3	*5775.00	89.9 PK			3.43 H	277	47.5	42.4
4	*5775.00	79.2 AV			3.43 H	277	36.8	42.4
5	#5925.00	58.9 PK	68.2	-9.3	3.29 H	265	54.4	4.5
6	#5997.60	59.2 PK	68.2	-9.0	3.43 H	277	54.5	4.7
7	11550.00	60.6 PK	74.0	-13.4	1.05 H	48	44.6	16.0
8	11550.00	47.5 AV	54.0	-6.5	1.05 H	48	31.5	16.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5633.60	66.7 PK	68.2	-1.5	2.51 V	289	63.2	3.5
2	#5650.00	67.1 PK	68.2	-1.1	2.50 V	288	63.7	3.4
3	*5775.00	100.6 PK			2.51 V	289	58.2	42.4
4	*5775.00	89.8 AV			2.51 V	289	47.4	42.4
5	#5924.00	64.1 PK	68.9	-4.8	2.51 V	289	59.7	4.4
6	#5925.00	64.1 PK	68.2	-4.1	2.45 V	275	59.6	4.5
7	11550.00	61.1 PK	74.0	-12.9	1.56 V	332	45.1	16.0
8	11550.00	47.9 AV	54.0	-6.1	1.56 V	332	31.9	16.0

Remarks:

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

Below 1GHz Worst-Case Data: 802.11n (HT20)

CHANNEL	TX Channel 144	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	53.18	30.7 QP	40.0	-9.3	2.00 H	122	44.7	-14.0
2	86.17	30.8 QP	40.0	-9.2	2.00 H	241	50.0	-19.2
3	355.89	23.4 QP	46.0	-22.6	1.00 H	94	34.6	-11.2
4	427.68	35.0 QP	46.0	-11.0	2.00 H	345	44.7	-9.7
5	462.61	39.7 QP	46.0	-6.3	2.00 H	7	48.7	-9.0
6	742.03	36.0 QP	46.0	-10.0	1.49 H	177	38.9	-2.9
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	57.07	32.3 QP	40.0	-7.7	2.00 V	188	46.5	-14.2
2	101.69	30.4 QP	43.5	-13.1	1.50 V	73	48.5	-18.1
3	427.68	30.2 QP	46.0	-15.8	2.00 V	113	39.9	-9.7
4	462.61	39.1 QP	46.0	-6.9	2.00 V	76	48.1	-9.0
5	745.91	35.9 QP	46.0	-10.1	1.50 V	7	38.6	-2.7
6	848.75	27.3 QP	46.0	-18.7	1.50 V	7	28.4	-1.1

Remarks:

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

4.2 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.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Nov. 23, 2017	Nov. 22, 2018
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond1-01	Sep. 05, 2017	Sep. 04, 2018
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Mar. 06, 2018	Mar. 05, 2019
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 15, 2017	Aug. 14, 2018
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	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 HwaYa Shielded Room 1.

3. The VCCI Site Registration No. is C-2040.

4.2.3 Test Procedures

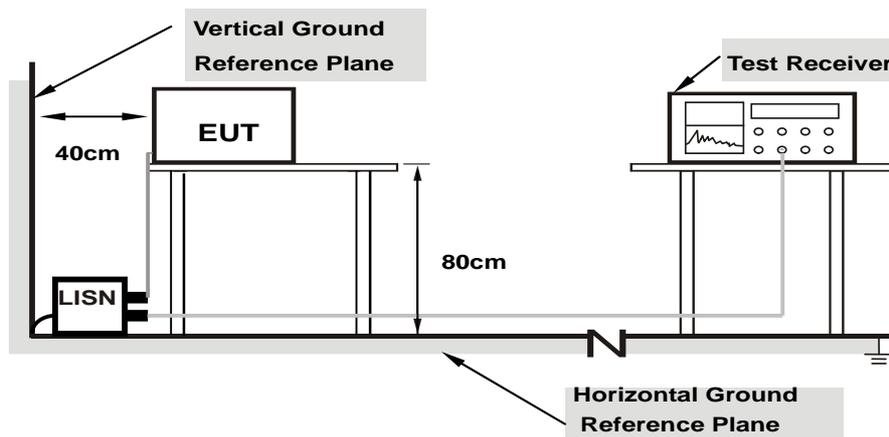
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance 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: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

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 Conditions

Same as 4.1.6.

4.2.7 Test Results

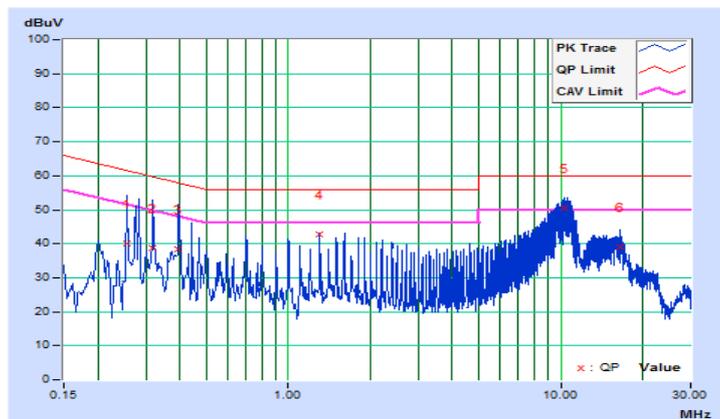
Worst-case data: 802.11n (HT20)

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.25557	10.17	29.97	8.76	40.14	18.93	61.57
2	0.31813	10.18	28.65	10.60	38.83	20.78	59.76	49.76	-20.93	-28.98
3	0.39635	10.21	28.02	15.69	38.23	25.90	57.93	47.93	-19.70	-22.03
4	1.30345	10.19	32.48	32.46	42.67	42.65	56.00	46.00	-13.33	-3.35
5	10.33164	10.67	39.78	37.19	50.45	47.86	60.00	50.00	-9.55	-2.14
6	16.45079	11.04	28.10	23.82	39.14	34.86	60.00	50.00	-20.86	-15.14

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.

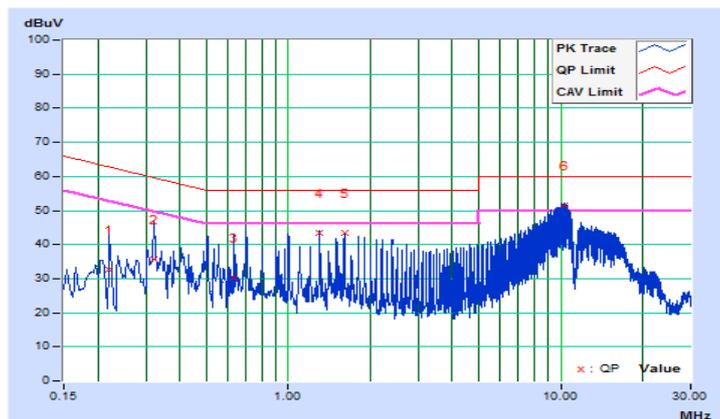


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.22038	10.17	22.40	5.01	32.57	15.18	62.80
2	0.32204	10.18	25.46	10.57	35.64	20.75	59.65	49.65	-24.01	-28.90
3	0.63093	10.20	20.20	6.46	30.40	16.66	56.00	46.00	-25.60	-29.34
4	1.30345	10.21	33.16	33.11	43.37	43.32	56.00	46.00	-12.63	-2.68
5	1.60452	10.22	33.07	32.57	43.29	42.79	56.00	46.00	-12.71	-3.21
6	10.33555	10.58	40.83	37.36	51.41	47.94	60.00	50.00	-8.59	-2.06

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

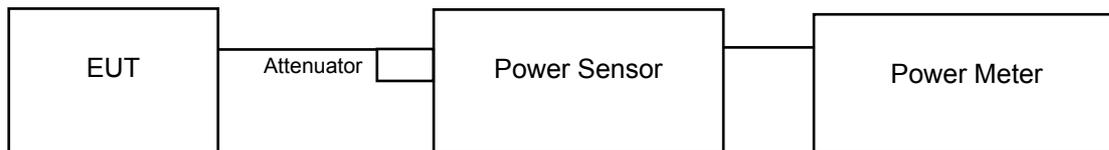
Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p \leq 125mW(21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client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

*B is the 26 dB emission bandwidth in megahertz

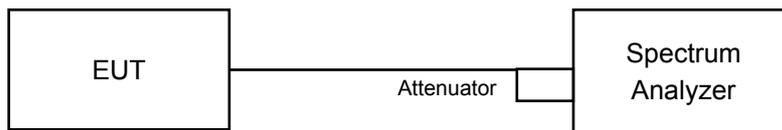
4.3.2 Test Setup

For Power Output

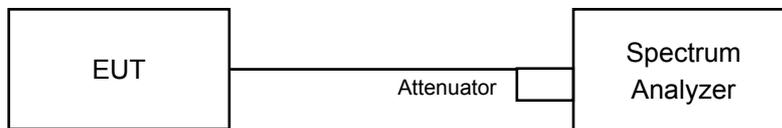
802.11a, 802.11n (HT20), 802.11n (HT40)



802.11ac (VHT80)



For 26dB Bandwidth



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

For Average Power Measurement

802.11a, 802.11n (HT20), 802.11n (HT40)

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 and set the detector to average. Duty factor is not added to measured value.

For 802.11ac (VHT80)

- a. Set span to encompass the entire 26 dB EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal.
- b. Set sweep trigger to “free run”.
- c. Set RBW = 1 MHz.
- d. Set VBW \geq 3 MHz.
- e. Number of points in sweep \geq 2 Span / RBW.
- f. Sweep time \leq (number of points in sweep) * T
- g. Using emission bandwidth to determine the frequency span for integration the channel bandwidth.
- h. Detector = RMS.
- i. Trace mode = max hold.
- j. Allow max hold to run for at least 60 seconds, or longer as needed to allow the trace to stabilize.
- k. Compute power by integrating the spectrum across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the signal using the instrument’s band power measurement function with band limits set equal to the EBW (or occupied bandwidth) band edges. If the instrument does not have a band power function, sum the spectrum levels (in power units) at 1 MHz intervals extending across the EBW (or, alternatively, the entire 99% occupied bandwidth) of the spectrum.

For 26dB Bandwidth

- a. Set RBW = approximately 1% of the emission bandwidth.
- b. Set the VBW > RBW.
- c. Detector = Peak.
- d. Trace mode = max hold.
- e. 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 Conditions

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

4.3.7 Test Result

Power Output:
802.11a

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	22.131	13.45	24.00	Pass
40	5200	29.376	14.68	24.00	Pass
48	5240	16.866	12.27	24.00	Pass
52	5260	28.774	14.59	24.00	Pass
60	5300	27.733	14.43	24.00	Pass
64	5320	15.959	12.03	24.00	Pass
100	5500	18.836	12.75	24.00	Pass
116	5580	26.363	14.21	24.00	Pass
120	5600	26.062	14.16	24.00	Pass
124	5620	25.293	14.03	24.00	Pass
128	5640	25.235	14.02	24.00	Pass
140	5700	12.274	10.89	24.00	Pass
144	5720 For U-NII-2C	4.802	6.81	24.00	Pass
144	5720 For U-NII-3	1.313	1.18	30.00	Pass
149	5745	27.416	14.38	30.00	Pass
157	5785	28.907	14.61	30.00	Pass
165	5825	28.774	14.59	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(41.71) = 27.20 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(42.51) = 27.28 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(34.02) = 26.31 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(37.93) = 26.78 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(43.18) = 27.35 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(42.85) = 27.31 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(44.19) = 27.45 > 24\text{dBm}$
8. $11\text{dBm} + 10\log(43.06) = 27.34 > 24\text{dBm}$
9. $11\text{dBm} + 10\log(32.37) = 26.10 > 24\text{dBm}$
10. $11\text{dBm} + 10\log(5725.00 - 5697.11) = 25.45 > 24\text{dBm}$

802.11n (HT20)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	23.496	13.71	24.00	Pass
40	5200	30.903	14.90	24.00	Pass
48	5240	18.030	12.56	24.00	Pass
52	5260	30.761	14.88	24.00	Pass
60	5300	29.923	14.76	24.00	Pass
64	5320	17.100	12.33	24.00	Pass
100	5500	20.184	13.05	24.00	Pass
116	5580	28.445	14.54	24.00	Pass
120	5600	27.669	14.42	24.00	Pass
124	5620	27.479	14.39	24.00	Pass
128	5640	26.977	14.31	24.00	Pass
140	5700	13.428	11.28	24.00	Pass
144	5720 For U-NII-2C	11.338	10.55	24.00	Pass
144	5720 For U-NII-3	2.457	3.90	30.00	Pass
149	5745	29.854	14.75	30.00	Pass
157	5785	30.974	14.91	30.00	Pass
165	5825	31.261	14.95	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

- $11\text{dBm} + 10\log(47.31) = 27.74 > 24\text{dBm}$
- $11\text{dBm} + 10\log(46.68) = 27.69 > 24\text{dBm}$
- $11\text{dBm} + 10\log(39.73) = 26.99 > 24\text{dBm}$
- $11\text{dBm} + 10\log(39.59) = 26.97 > 24\text{dBm}$
- $11\text{dBm} + 10\log(47.04) = 27.72 > 24\text{dBm}$
- $11\text{dBm} + 10\log(35.00) = 26.44 > 24\text{dBm}$
- $11\text{dBm} + 10\log(47.71) = 27.78 > 24\text{dBm}$
- $11\text{dBm} + 10\log(47.36) = 27.75 > 24\text{dBm}$
- $11\text{dBm} + 10\log(47.15) = 27.73 > 24\text{dBm}$
- $11\text{dBm} + 10\log(5725.00 - 5694.00) = 25.91 > 24\text{dBm}$

802.11n (HT40)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	15.311	11.85	24.00	Pass
46	5230	30.200	14.80	24.00	Pass
54	5270	25.942	14.14	24.00	Pass
62	5310	13.804	11.40	24.00	Pass
102	5510	10.471	10.20	24.00	Pass
110	5550	25.704	14.10	24.00	Pass
118	5590	27.102	14.33	24.00	Pass
126	5630	26.062	14.16	24.00	Pass
134	5670	13.677	11.36	24.00	Pass
142	5710 For U-NII-2C	11.353	10.55	24.00	Pass
142	5710 For U-NII-3	1.0259	0.11	30.00	Pass
151	5755	30.974	14.91	30.00	Pass
159	5795	31.333	14.96	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(94.67) = 30.76 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(73.03) = 29.63 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(71.70) = 29.55 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(99.10) = 30.96 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(100.06) = 31.00 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(101.14) = 31.04 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(91.02) = 30.59 > 24\text{dBm}$
8. $11\text{dBm} + 10\log(5725.00 - 5649.24) = 29.79 > 24\text{dBm}$

802.11ac (VHT80)

Chan.	Freq. (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	14.125	11.50	24.00	Pass
58	5290	12.677	11.03	24.00	Pass
106	5530	8.77	9.43	24.00	Pass
122	5610	15.311	11.85	24.00	Pass
138	5690 For U-NII-2C	11.553	10.63	24.00	Pass
138	5690 For U-NII-3	0.4985	-3.02	30.00	Pass
155	5775	21.478	13.32	30.00	Pass

Note:

For U-NII-2A, U-NII-2C Band:

1. $11\text{dBm} + 10\log(126.81) = 32.03 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(131.29) = 32.18 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(179.17) = 33.53 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(5725.00 - 5582.15) = 32.55 > 24\text{dBm}$

26dB Bandwidth:

802.11a

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
52	5260	41.71
60	5300	42.51
64	5320	34.02
100	5500	37.93
116	5580	43.18
120	5600	42.85
124	5620	44.19
128	5640	43.06
140	5700	32.37
144	5720 For U-NII-2C	27.89
144	5720 For U-NII-3	19.18

802.11n (HT20)

Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
52	5260	47.31
60	5300	46.68
64	5320	39.73
100	5500	39.59
116	5580	47.04
120	5600	47.71
124	5620	47.36
128	5640	47.15
140	5700	35.00
144	5720 For U-NII-2C	31.00
144	5720 For U-NII-3	20.21

802.11n (HT40)

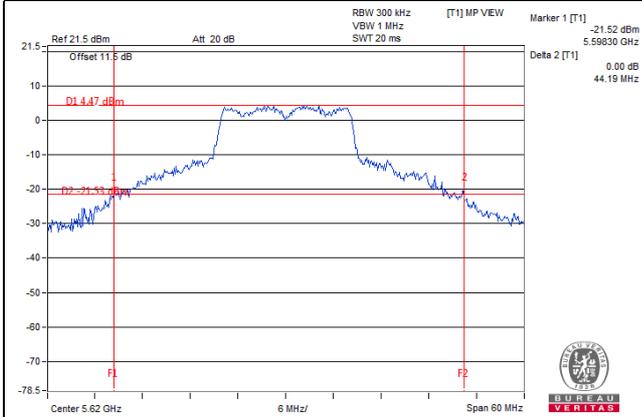
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
54	5270	94.67
62	5310	73.03
102	5510	71.70
110	5550	99.10
118	5590	100.06
126	5630	101.14
134	5670	91.02
142	5710 For U-NII-2C	75.76
142	5710 For U-NII-3	40.79

802.11ac (VHT80)

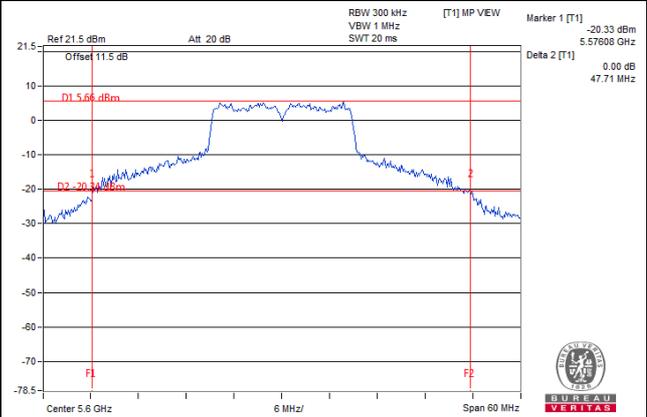
Chan.	Freq. (MHz)	26dBc Bandwidth (MHz)
58	5290	126.81
106	5530	131.29
122	5610	179.17
138	5690 For U-NII-2C	142.85
138	5690 For U-NII-3	66.78

Spectrum Plot of Worst Value

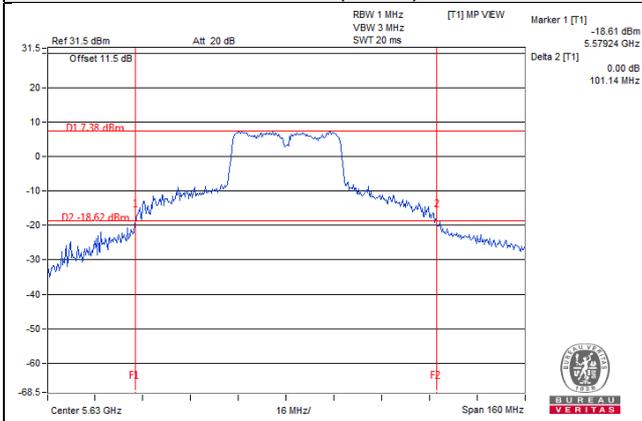
802.11a



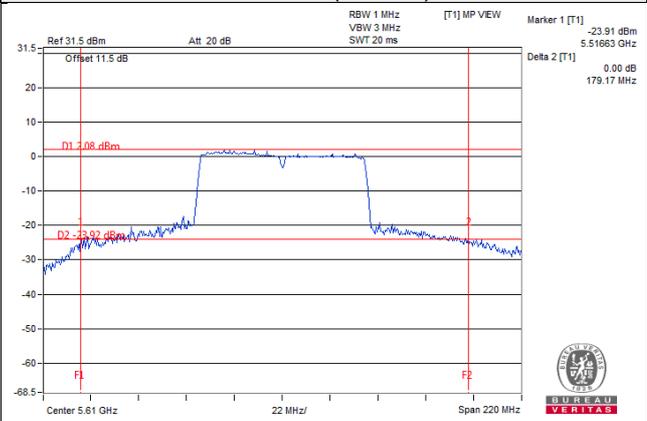
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



EUT Maximum Conducted Power

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	28.774	14.59
5470~5725	26.363	14.21

802.11n (HT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	30.761	14.88
5470~5725	28.445	14.54

802.11n (HT40)

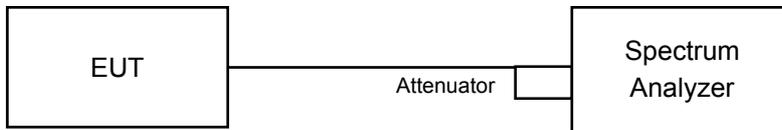
Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	25.942	14.14
5470~5725	27.102	14.33

802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	12.677	11.03
5470~5725	15.311	11.85

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 sampling. 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 Result

802.11a

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
36	5180	17.40
40	5200	21.48
48	5240	17.40
52	5260	22.32
60	5300	21.96
64	5320	17.04
100	5500	17.28
116	5580	25.20
120	5600	25.32
124	5620	25.08
128	5640	25.08
140	5700	16.92
144	5720 For U-NII-2C	20.12
144	5720 For U-NII-3	10.24
149	5745	31.80
157	5785	17.28
165	5825	33.84

802.11n (HT20)

Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
36	5180	18.84
40	5200	27.72
48	5240	18.52
52	5260	27.84
60	5300	27.12
64	5320	18.24
100	5500	18.60
116	5580	29.40
120	5600	29.73
124	5620	30.36
128	5640	30.96
140	5700	18.12
144	5720 For U-NII-2C	22.28
144	5720 For U-NII-3	12.04
149	5745	36.84
157	5785	38.52
165	5825	38.04

802.11n (HT40)

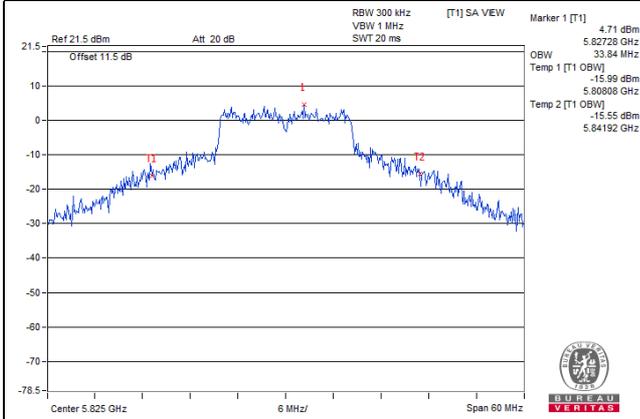
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
38	5190	36.72
46	5230	38.88
54	5270	37.92
62	5310	36.72
102	5510	36.60
110	5550	38.88
118	5590	41.28
126	5630	42.72
134	5670	36.84
142	5710 For U-NII-2C	39.00
142	5710 For U-NII-3	8.64
151	5755	50.88
159	5795	50.64

802.11ac (VHT80)

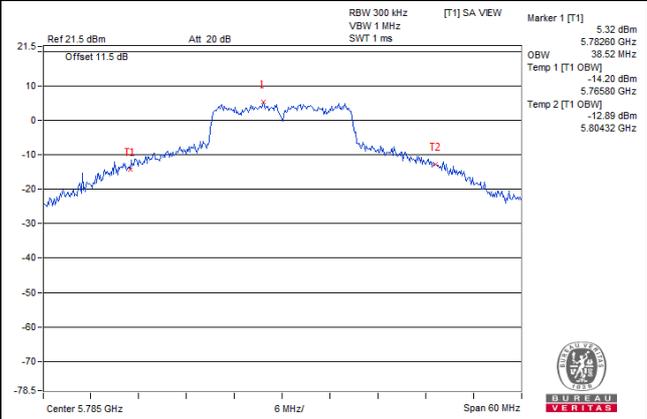
Chan.	Freq. (MHz)	Occupied Bandwidth (MHz)
42	5210	76.32
58	5290	76.32
106	5530	76.56
122	5610	76.56
138	5690 For U-NII-2C	78.92
138	5690 For U-NII-3	7.72
155	5775	79.92

Spectrum Plot of Worst Value

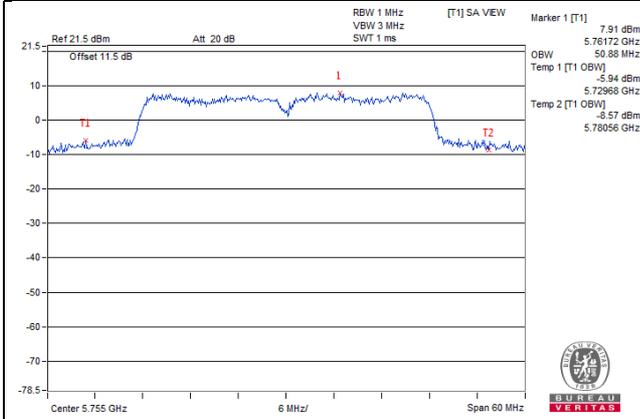
802.11a



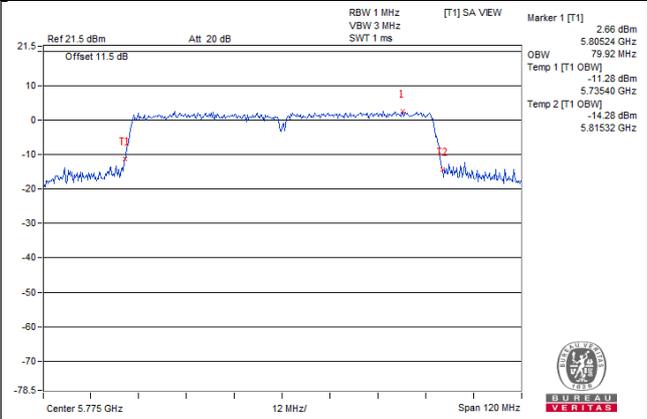
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

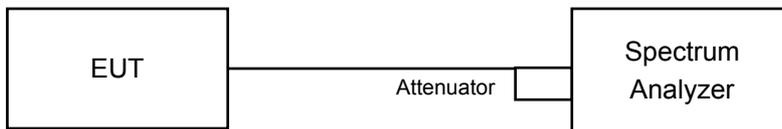


4.5 Peak Power Spectral Density Measurement

4.5.1 Limits of Peak Power Spectral Density Measurement

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

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedures

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

Using method SA-2

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 1MHz, Set VBW \geq 3 MHz, Detector = RMS
- Set Channel power measure = 1MHz
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value and add $10 \log (1/\text{duty cycle})$

For U-NII-3 band:

- Set span to encompass the entire emission bandwidth (EBW) of the signal.
- Set RBW = 300 kHz, Set VBW \geq 1 MHz, Detector = RMS
- Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
- 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 $\text{BWCF} = 10\log(500 \text{ kHz} / 300 \text{ kHz})$
- Sweep time = auto, trigger set to "free run".
- Trace average at least 100 traces in power averaging mode.
- Record the max value and add $10 \log (1/\text{duty cycle})$

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Conditions

Same as 4.3.6.

4.5.7 Test Results

For U-NII-1 band:

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	-0.53	0.38	-0.15	11.00	Pass
40	5200	0.59	0.38	0.97	11.00	Pass
48	5240	-0.98	0.38	-0.60	11.00	Pass
52	5260	0.85	0.38	1.23	11.00	Pass
60	5300	0.03	0.38	0.41	11.00	Pass
64	5320	-2.39	0.38	-2.01	11.00	Pass
100	5500	-3.15	0.38	-2.77	11.00	Pass
116	5580	-0.81	0.38	-0.43	11.00	Pass
120	5600	-1.21	0.38	-0.83	11.00	Pass
124	5620	-1.25	0.38	-0.87	11.00	Pass
128	5640	-0.47	0.38	-0.09	11.00	Pass
140	5700	-3.53	0.38	-3.15	11.00	Pass
144	5720 For U-NII-2C	-0.32	0.38	0.06	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	-1.28	0.14	-1.14	11.00	Pass
40	5200	-0.44	0.14	-0.30	11.00	Pass
48	5240	-0.54	0.14	-0.40	11.00	Pass
52	5260	0.35	0.14	0.49	11.00	Pass
60	5300	0.94	0.14	1.08	11.00	Pass
64	5320	-1.34	0.14	-1.20	11.00	Pass
100	5500	-1.48	0.14	-1.34	11.00	Pass
116	5580	0.33	0.14	0.47	11.00	Pass
120	5600	0.53	0.14	0.67	11.00	Pass
124	5620	0.06	0.14	0.20	11.00	Pass
128	5640	-0.45	0.14	-0.31	11.00	Pass
140	5700	-2.90	0.14	-2.76	11.00	Pass
144	5720 For U-NII-2C	0.03	0.14	0.17	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

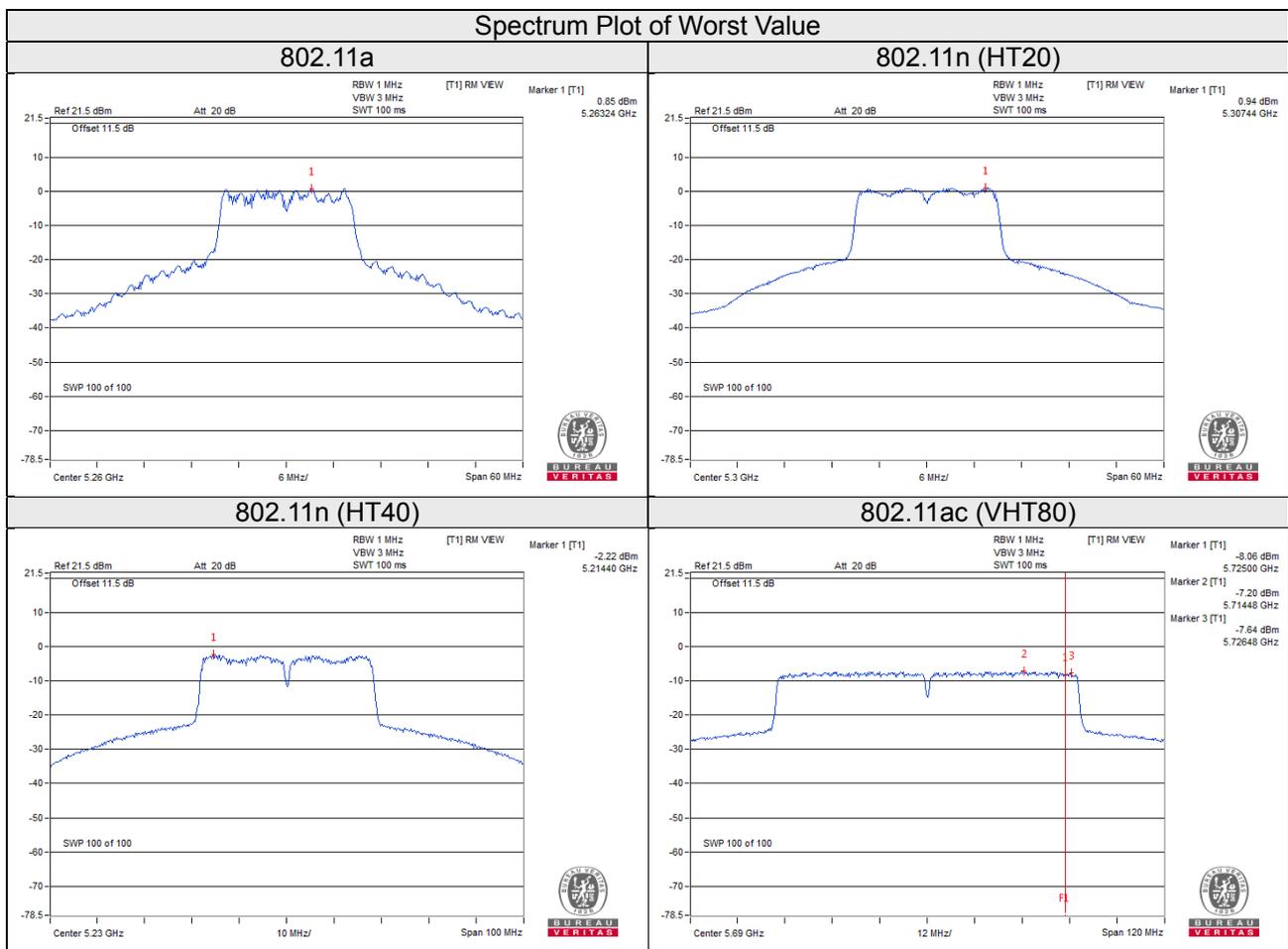
Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
38	5190	-4.90	0.31	-4.59	11.00	Pass
46	5230	-2.22	0.31	-1.91	11.00	Pass
54	5270	-2.84	0.31	-2.53	11.00	Pass
62	5310	-5.46	0.31	-5.15	11.00	Pass
102	5510	-7.26	0.31	-6.95	11.00	Pass
110	5550	-3.81	0.31	-3.50	11.00	Pass
118	5590	-2.41	0.31	-2.10	11.00	Pass
126	5630	-3.29	0.31	-2.98	11.00	Pass
134	5670	-5.51	0.31	-5.20	11.00	Pass
142	5710 For U-NII-2C	-2.79	0.31	-2.48	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD with Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
42	5210	-9.18	0.34	-8.84	11.00	Pass
58	5290	-9.51	0.34	-9.18	11.00	Pass
106	5530	-11.78	0.34	-11.44	11.00	Pass
122	5610	-8.98	0.34	-8.64	11.00	Pass
138	5690 For U-NII-2C	-7.20	0.34	-6.86	11.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.



For U-NII-3 band:

802.11a

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
144	5720 For U-NII-3	-8.98	-6.76	0.38	-6.38	30.00	Pass
149	5745	-7.98	-5.76	0.38	-5.38	30.00	Pass
157	5785	-11.74	-9.52	0.38	-9.14	30.00	Pass
165	5825	-8.79	-6.57	0.38	-6.19	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
144	5720 For U-NII-3	-8.51	-6.29	0.14	-6.15	30.00	Pass
149	5745	-8.47	-6.25	0.14	-6.11	30.00	Pass
157	5785	-8.05	-5.83	0.14	-5.69	30.00	Pass
165	5825	-7.79	-5.57	0.14	-5.43	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
142	5710 For U-NII-3	-12.21	-9.99	0.31	-9.68	30.00	Pass
151	5755	-11.89	-9.67	0.31	-9.36	30.00	Pass
159	5795	-11.26	-9.04	0.31	-8.73	30.00	Pass

Note: Refer to section 3.3 for duty cycle spectrum plot.

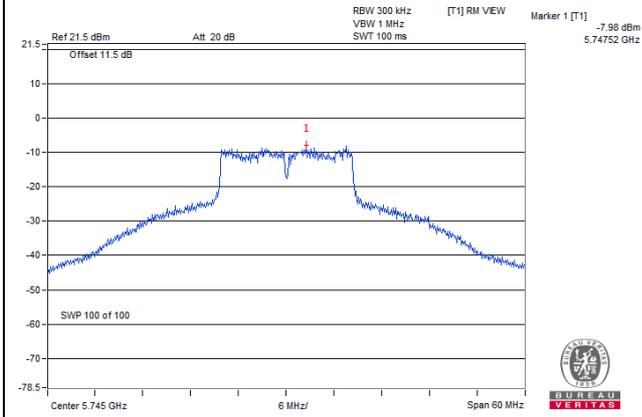
802.11ac (VHT80)

Chan.	Freq. (MHz)	PSD w/o Duty Factor		Duty Factor (dB)	Total PSD with Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
138	5690 For U-NII-3	-16.54	-14.32	0.34	-13.98	30.00	Pass
155	5775	-16.89	-14.67	0.34	-14.33	30.00	Pass

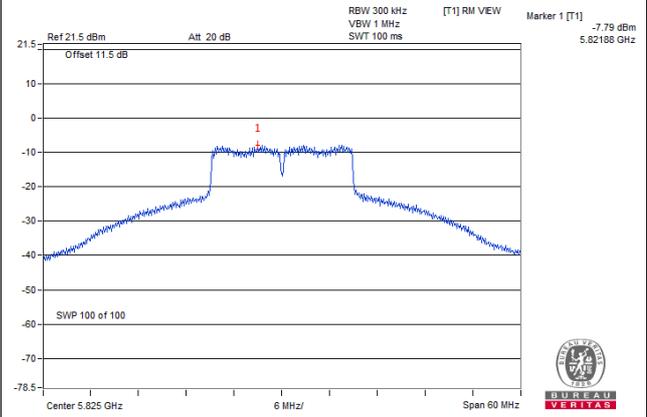
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

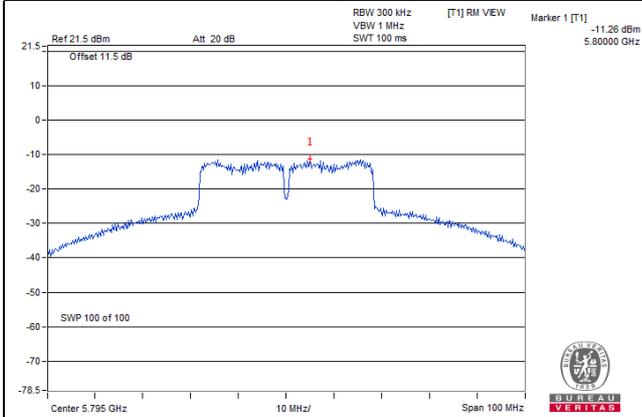
802.11a



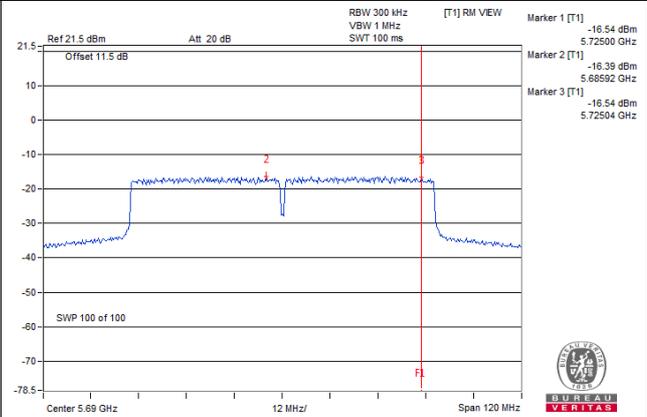
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

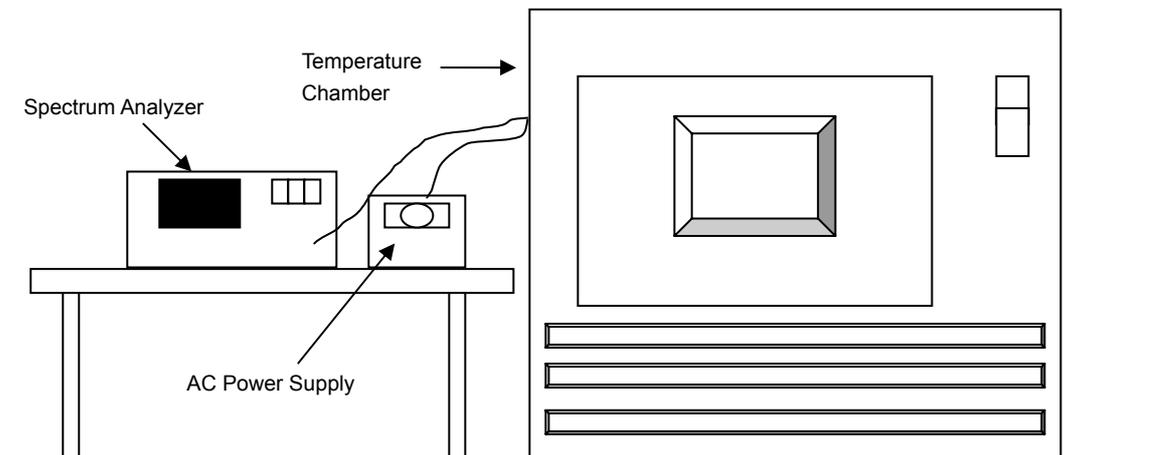


4.6 Frequency Stability

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 AC 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 2 and 3 with the temperature chamber set to the lowest temperature.
- 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: 5180MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
50	120	5179.9893	Pass	5179.9907	Pass	5179.9896	Pass	5179.9872	Pass
40	120	5180.0182	Pass	5180.0181	Pass	5180.0187	Pass	5180.021	Pass
30	120	5179.9844	Pass	5179.9869	Pass	5179.9846	Pass	5179.987	Pass
20	120	5179.9941	Pass	5179.9918	Pass	5179.9946	Pass	5179.9906	Pass
10	120	5180.0018	Pass	5179.9999	Pass	5180.0012	Pass	5180.0037	Pass
0	120	5180.0126	Pass	5180.0117	Pass	5180.0115	Pass	5180.0102	Pass
-10	120	5180.0082	Pass	5180.0096	Pass	5180.0077	Pass	5180.0076	Pass
-20	120	5179.9957	Pass	5179.9993	Pass	5179.9982	Pass	5179.9956	Pass
-30	120	5180.0145	Pass	5180.0124	Pass	5180.0143	Pass	5180.0102	Pass

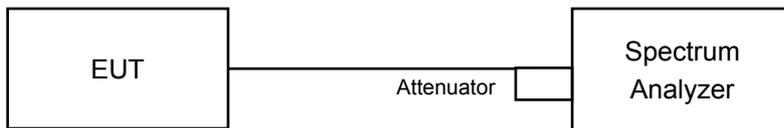
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (°C)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5179.994	Pass	5179.9916	Pass	5179.9942	Pass	5179.9904	Pass
	120	5179.9941	Pass	5179.9918	Pass	5179.9946	Pass	5179.9906	Pass
	102	5179.9944	Pass	5179.9917	Pass	5179.9937	Pass	5179.9901	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
144	5720 For U-NII-3	3.23	0.5	Pass
149	5745	16.42	0.5	Pass
157	5785	16.42	0.5	Pass
165	5825	16.44	0.5	Pass

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 For U-NII-3	3.83	0.5	Pass
149	5745	17.65	0.5	Pass
157	5785	17.66	0.5	Pass
165	5825	17.68	0.5	Pass

802.11n (HT40)

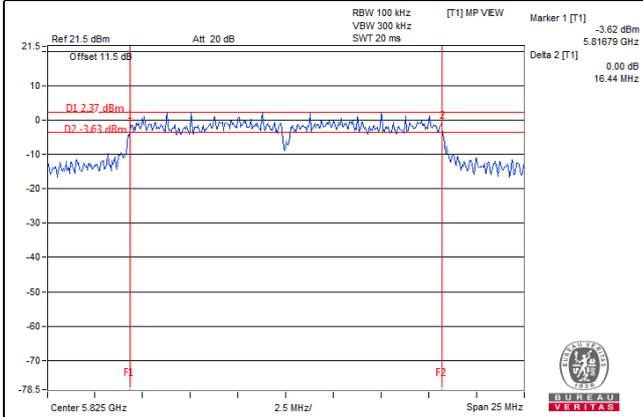
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
142	5710 For U-NII-3	3.20	0.5	Pass
151	5755	36.16	0.5	Pass
159	5795	36.01	0.5	Pass

802.11ac (VHT80)

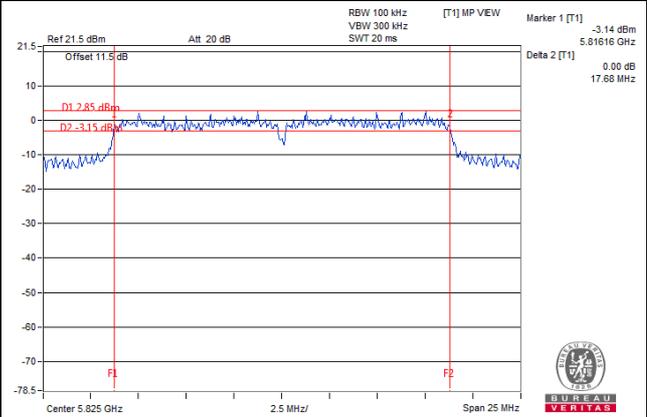
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
138	5690 For U-NII-3	2.78	0.5	Pass
155	5775	75.91	0.5	Pass

Spectrum Plot of Worst Value

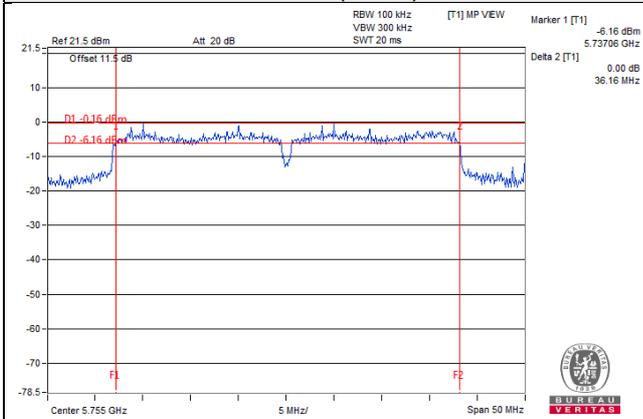
802.11a



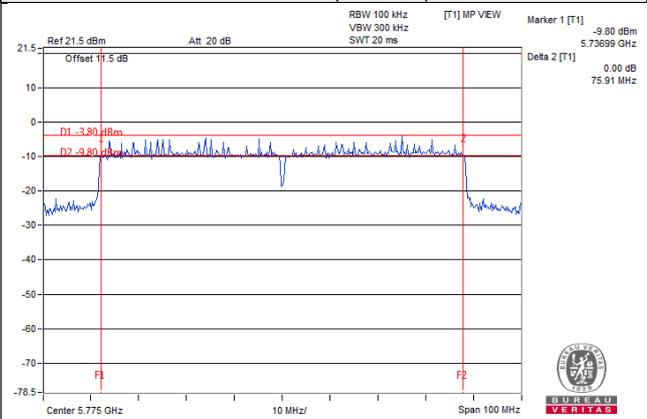
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

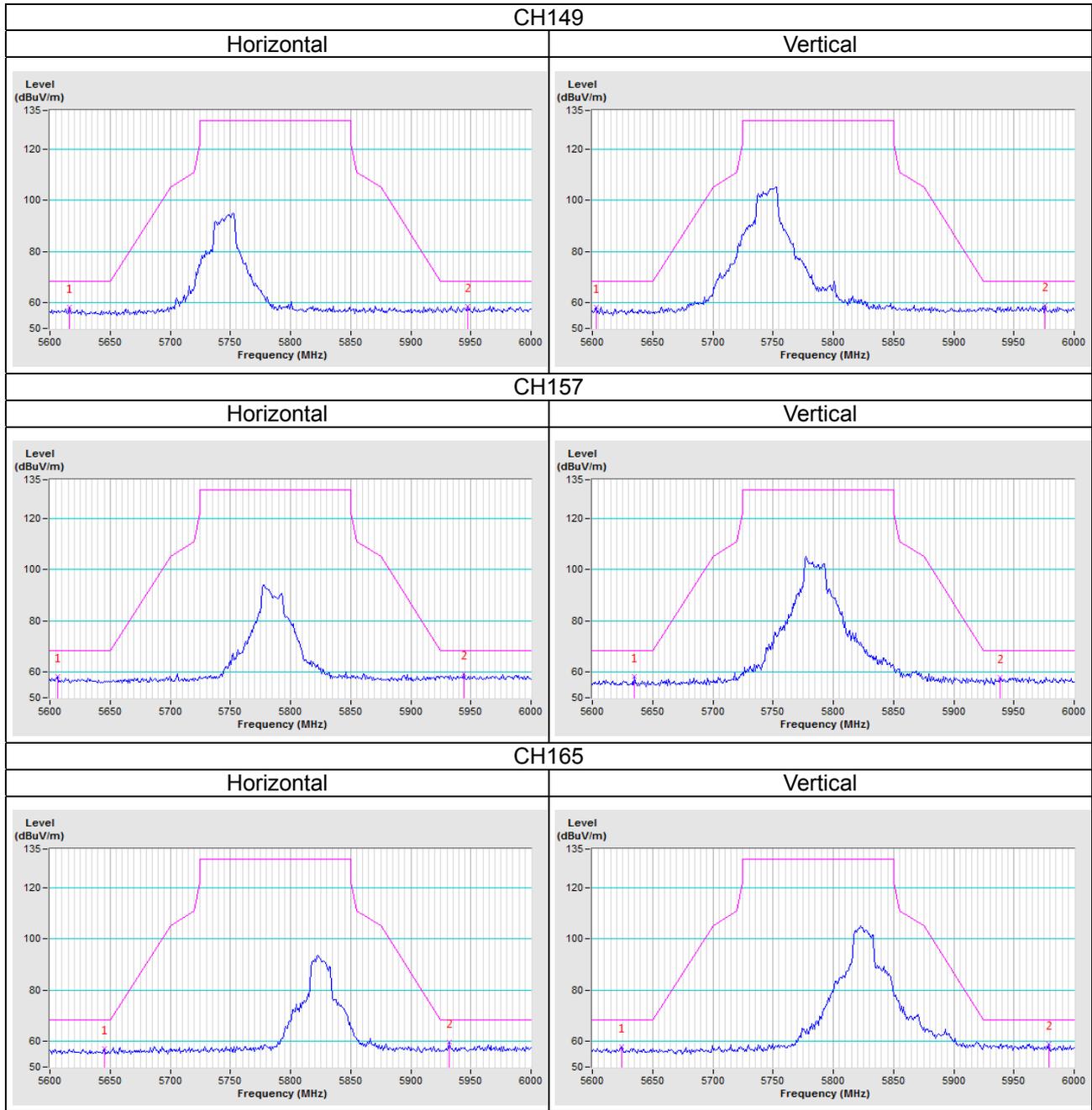


5 Pictures of Test Arrangements

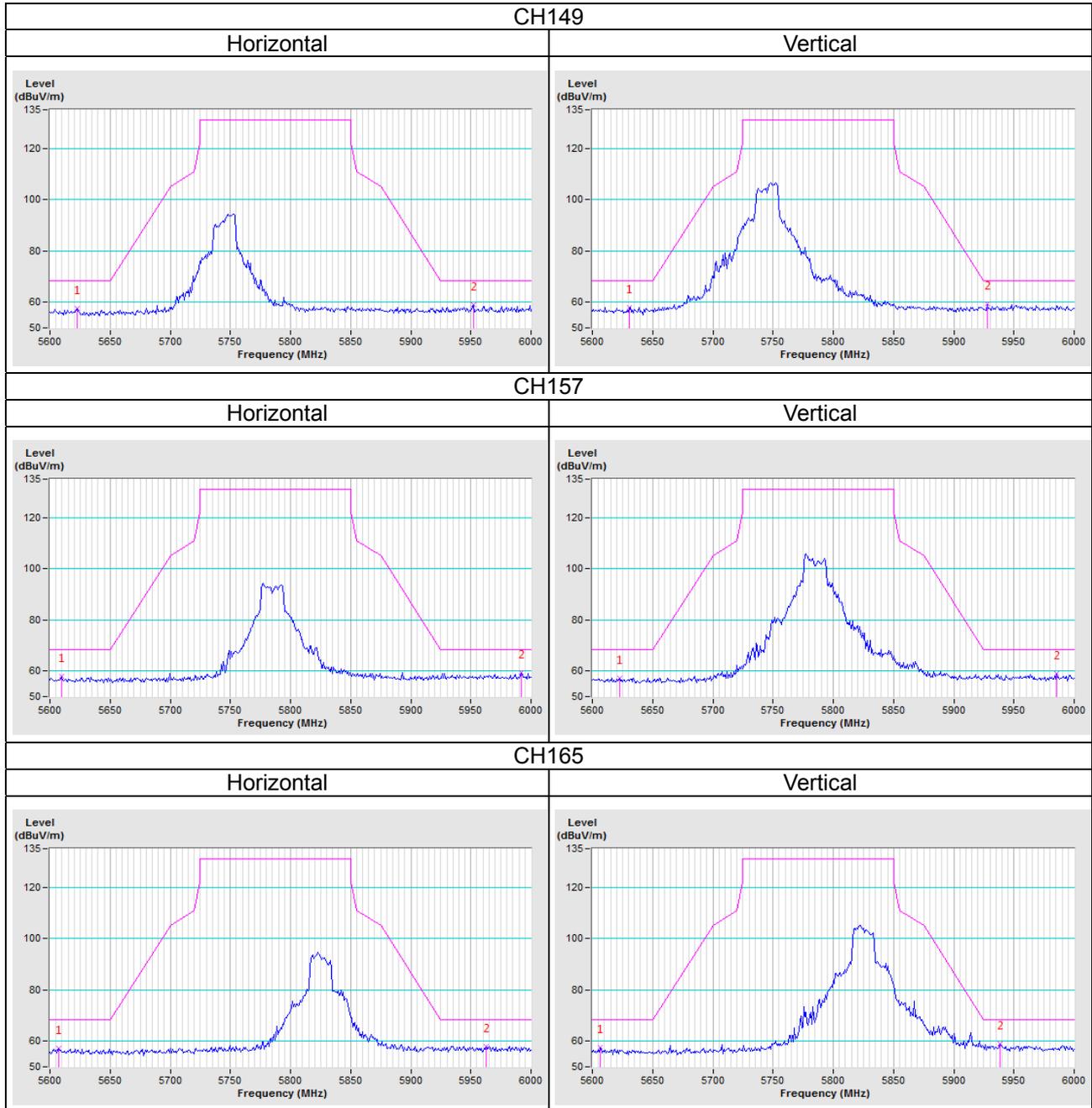
Please refer to the attached file (Test Setup Photo).

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

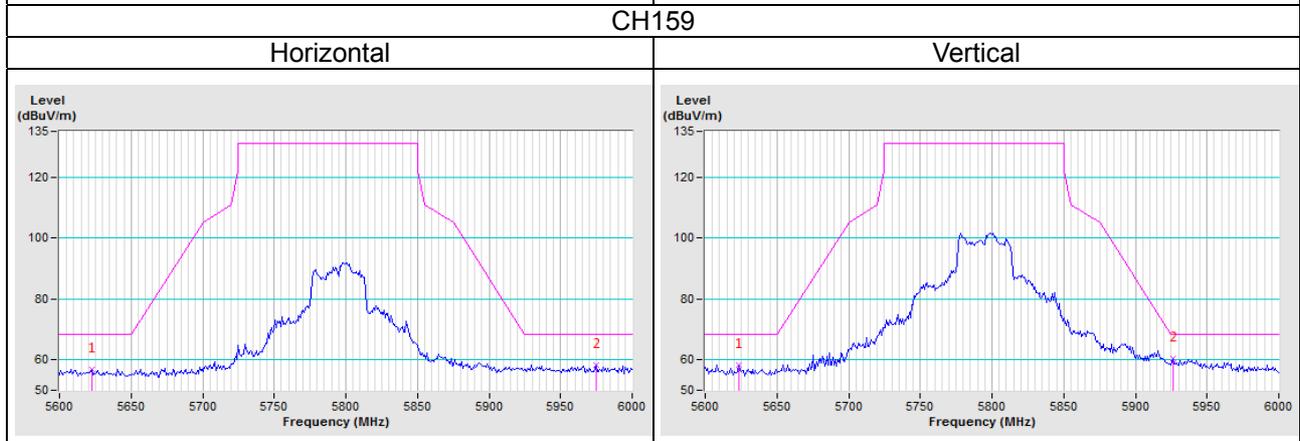
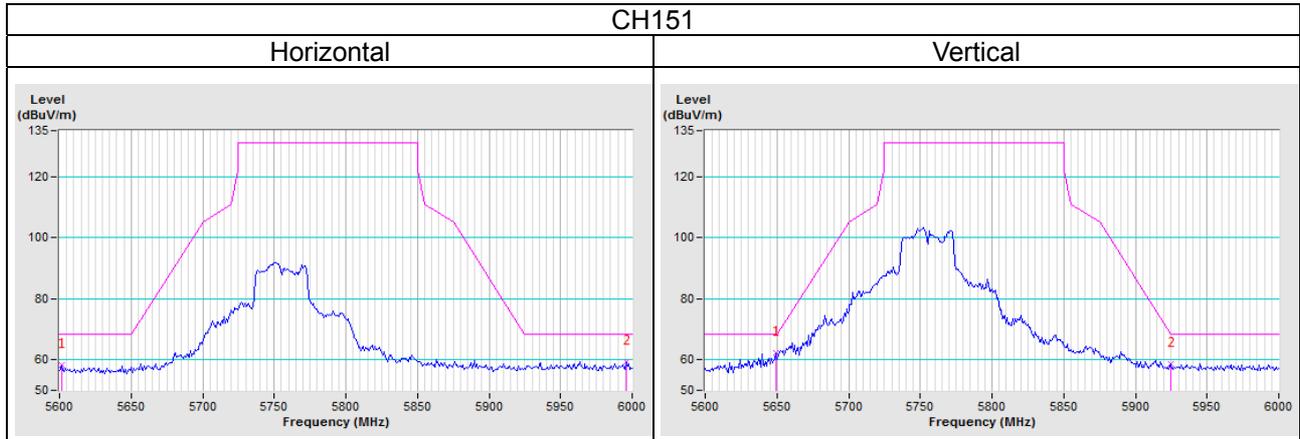
802.11a



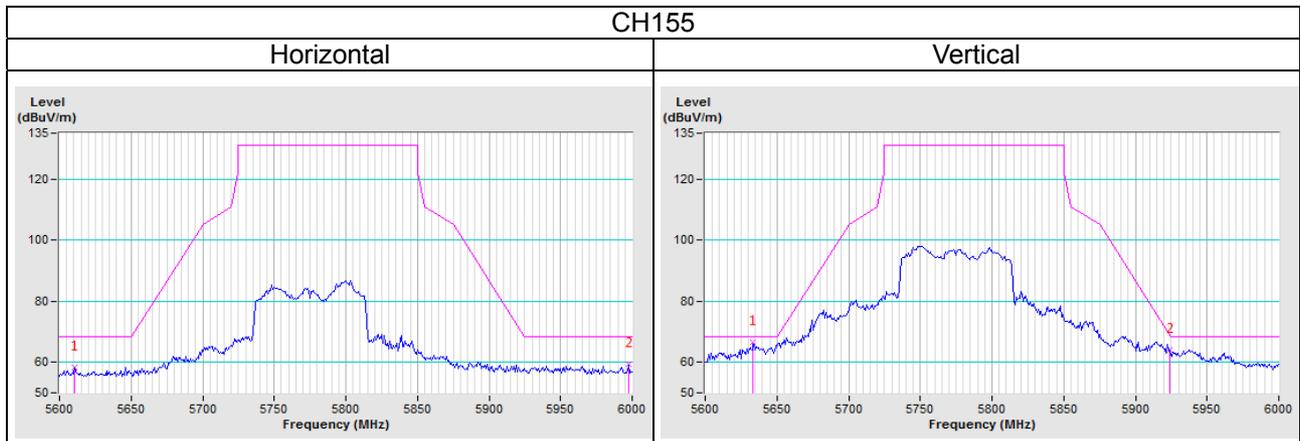
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



Appendix – Information on the Testing Laboratories

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

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

Linko EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

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

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