

FCC Test Report

Report No.: RF181122C10-3

FCC ID: M72-P009

Test Model: P009

Received Date: Nov. 22, 2018

Test Date: Dec. 3 ~ 15, 2018

Issued Date: Dec. 22, 2018

Applicant: Polycom Inc.

Address: 6001 America Center Drive, 95002 San Jose, CA

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

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C.)

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
RF181122C10-3	Original release.	Dec. 22, 2018

1 Certificate of Conformity

Product: POLYCOM STUDIO
Brand: Polycom
Test Model: P009
Sample Status: Engineering sample
Applicant: Polycom Inc.
Test Date: Dec. 3 ~ 15, 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 EMC characteristics under the conditions specified in this report.

Prepared by : Jessica Cheng , **Date:** Dec. 22, 2018
Jessica Cheng / Senior Specialist

Approved by : Rex Lai , **Date:** Dec. 22, 2018
Rex Lai / Associate Technical Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -18.31dB at 0.44474MHz.
15.407(b)(1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -0.2dB at 11590.00 & 11650.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	Pass	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is I-PEX 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	POLYCOM STUDIO
Brand	Polycom
Test Model	P009
Sample Status	Engineering sample
Nominal Voltage	12Vdc (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), 802.11ac (VHT20): 4 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1 5260~5320MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 4 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1 5500~5720MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 12 802.11n (HT40), 802.11ac (VHT40): 6 802.11ac (VHT80): 3 5745~5825MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 5 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1
Output Power	5180~5240MHz: 10.691mW 5260~5320MHz: 11.912mW 5500~5720MHz: 11.561mW 5745~5825MHz: 8.67mW
Antenna Type	Dipole Antenna with 4.62dBi gain
Antenna Connector	I-PEX
Accessory Device	Adapter, Remote Controller, Microphone (optional)
Cable Supplied	5m shielded USB Type C cable without core 7.5m shielded audio cable without core 2.65m non-shielded power cord without core

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 (VHT20)	1TX
802.11ac (VHT40)	1TX
802.11ac (VHT80)	1TX

- * The modulation and bandwidth are similar for 802.11n mode for HT20/HT40 and 802.11ac mode for VHT20/VHT40. After pre-testing, 802.11ac (VHT20/VHT40) power is lower than 802.11n (HT20/HT40), therefore 802.11n (HT20/HT40) is the worst case to representative mode in test report. (Final test mode refer section 3.2.1)

2. The EUT consumes power from the following adapter.

Brand	FSP GROUP INC.
Model	FSP060-DHAN3
Input	100-240Vac, 50-60Hz 1.8A
Output	12Vdc, 5.0A (60W MAX.)
Power Line	1.75m DC cable with 1 core attached on adapter

3. 2.4GHz & 5GHz technologies cannot transmit at same time.
WLAN & BT technologies cannot transmit at same time

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

3.2 Description of Test Modes

5180~5240MHz:

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

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

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
42	5210MHz

5260~5320MHz:

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

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

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

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
58	5290MHz

5500~5720MHz:

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

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

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

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

3 channels are provided for 802.11ac (VHT80):

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

5745~5825MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable to				Description
	RE \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

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)
-	802.11a	5180-5240	36 to 48	100	OFDM	6.0
		5260-5320	52 to 64		OFDM	6.0
		5500-5720	100 to 144		OFDM	6.0
		5745-5825	149 to 165		OFDM	6.0

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)
-	802.11a	5180-5240	36 to 48	100	OFDM	6.0
		5260-5320	52 to 64		OFDM	6.0
		5500-5720	100 to 144		OFDM	6.0
		5745-5825	149 to 165		OFDM	6.0

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	24 deg. C, 67% RH	120Vac, 60Hz	Willy Cheng, Adair Peng
RE<1G	25 deg. C, 70% RH	120Vac, 60Hz	Luis Lee
PLC	25 deg. C, 75% RH	120Vac, 60Hz	Jones Chang
APCM	25 deg. C, 60% RH	120Vac, 60Hz	Alan Wu

3.3 Duty Cycle of Test Signal

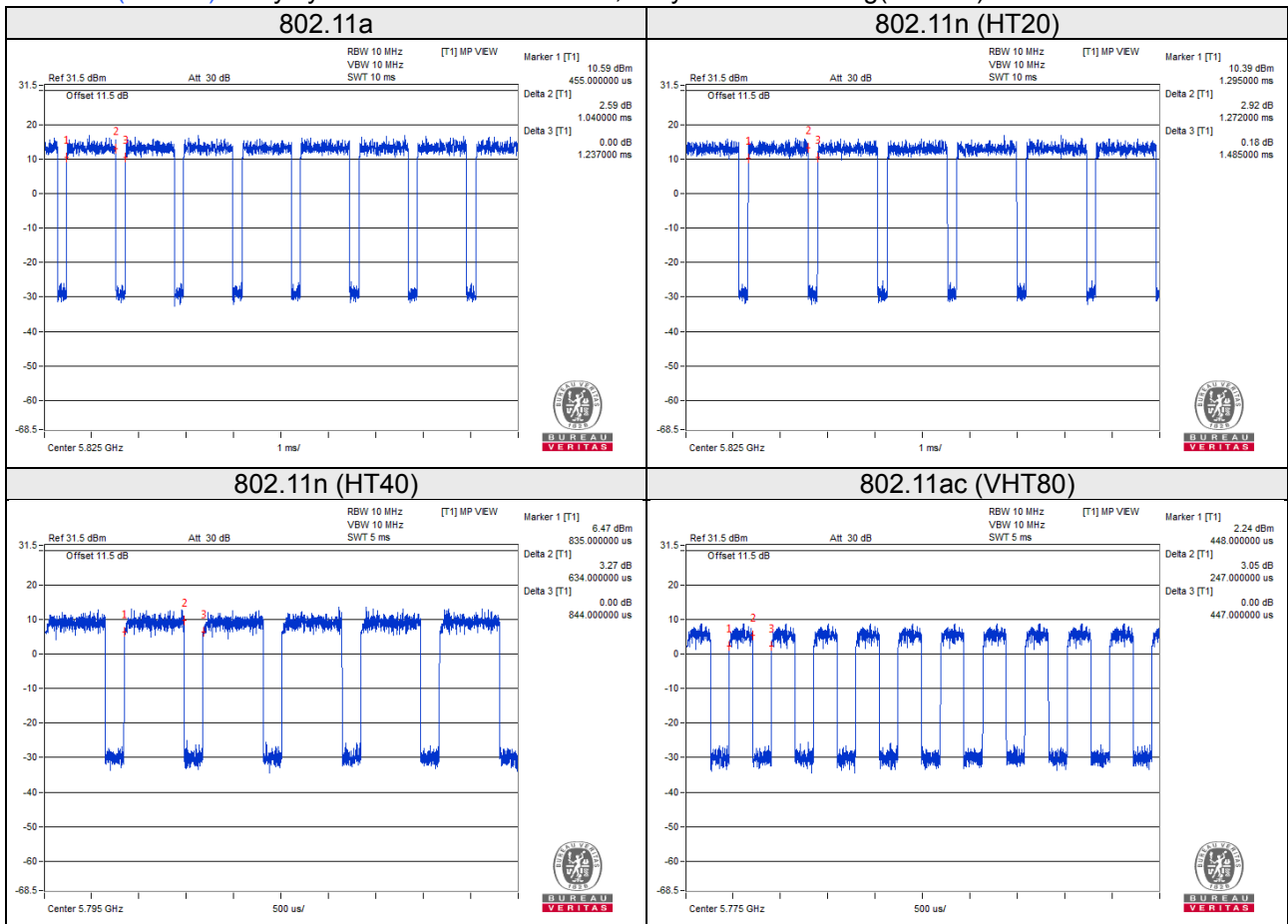
Duty cycle of test signal is < 98 %, duty factor is required

802.11a: Duty cycle = $1.04/1.237 = 0.841$, Duty factor = $10 * \log(1/0.841) = 0.75$

802.11n (HT20): Duty cycle = $1.272/1.485 = 0.857$, Duty factor = $10 * \log(1/0.857) = 0.67$

802.11n (HT40): Duty cycle = $0.634/0.844 = 0.751$, Duty factor = $10 * \log(1/0.751) = 1.24$

802.11ac (VHT80): Duty cycle = $0.247/0.447 = 0.553$, Duty factor = $10 * \log(1/0.553) = 2.58$



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.

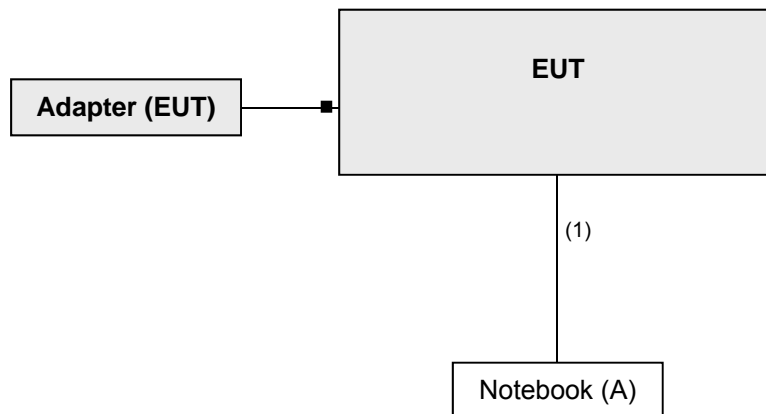
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	E5410	1HC2XM1	FCC DoC Approved	-

Note:

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	USB Type-C cable	1	5	Y	0	Accessory of EUT

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:

- The lower limit shall apply at the transition frequencies.
- Emission level (dBuV/m) = 20 log Emission level (uV/m).
- 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. ^{*3} below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above.		^{*2} below the band edge increasing linearly to 10 dBm/MHz at 25 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:

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESIB7	100187	May 29, 2018	May 28, 2019
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100040	Sep. 25, 2018	Sep. 24, 2019
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Nov. 22, 2018	Nov. 21, 2019
HORN Antenna SCHWARZBECK	9120D	209	Nov. 25, 2018	Nov. 24, 2019
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 25, 2018	Nov. 24, 2019
Loop Antenna TESEQ	HLA 6121	45745	Jun. 14, 2018	Jun. 13, 2019
Preamplifier Agilent (Below 1GHz)	8447D	2944A10738	Aug. 21, 2018	Aug. 20, 2019
Preamplifier Agilent (Above 1GHz)	8449B	3008A02465	Apr. 03, 2018	Apr. 02, 2019
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (223653/4)	Aug. 21, 2018	Aug. 20, 2019
RF signal cable HUBER+SUHNER& EMCI	SUCOFLEX 104&EMC104-SM- SM-8000	Cable-CH3-03 (309224+170907)	Aug. 21, 2018	Aug. 20, 2019
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021702	NA	NA
Turn Table BV ADT	TT100	TT93021702	NA	NA
Turn Table Controller BV ADT	SC100	SC93021702	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY5519000 4/MY55190007/MY55210 005	Jul. 17, 2018	Jul. 16, 2019
Pre-amplifier (18GHz- 40GHz) EMC	EMC184045B	980175	Nov. 14, 2018	Nov. 13, 2019

- 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 3.
 3. The horn antenna and preamplifier (model: 8449B) are used only for the measurement of emission frequency above 1GHz if tested.
 4. The FCC Designation Number is TW0003. The number will be varied with the Lab location and scope as attached.
 5. The IC Site Registration No. is IC 7450F-3.

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:

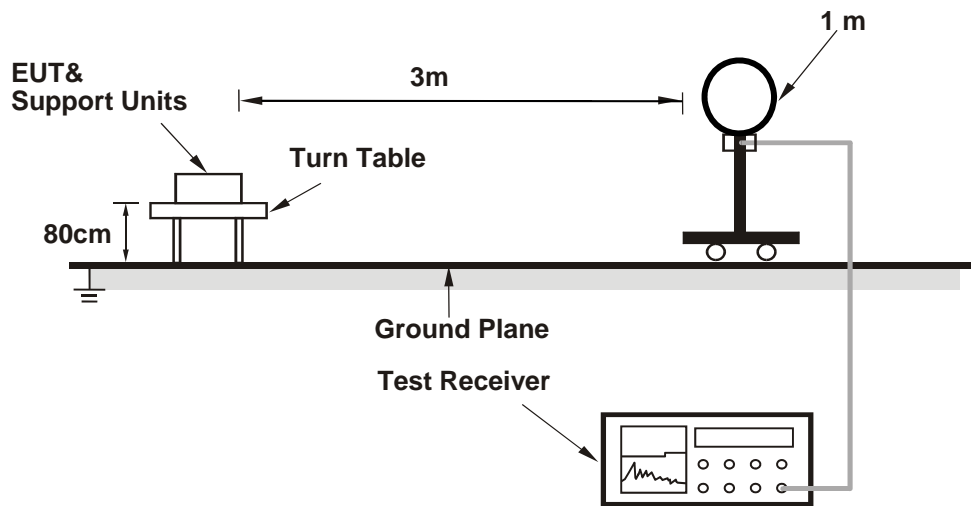
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

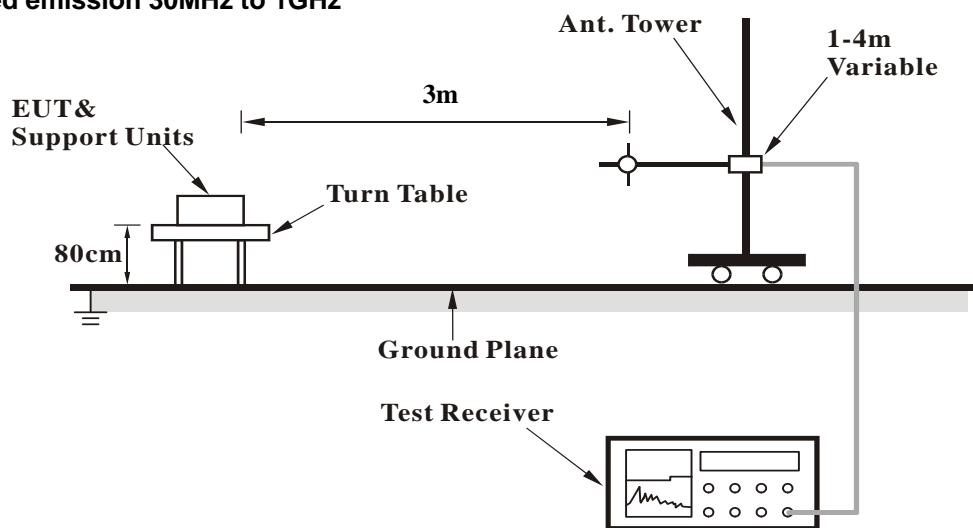
No deviation.

4.1.5 Test Set Up

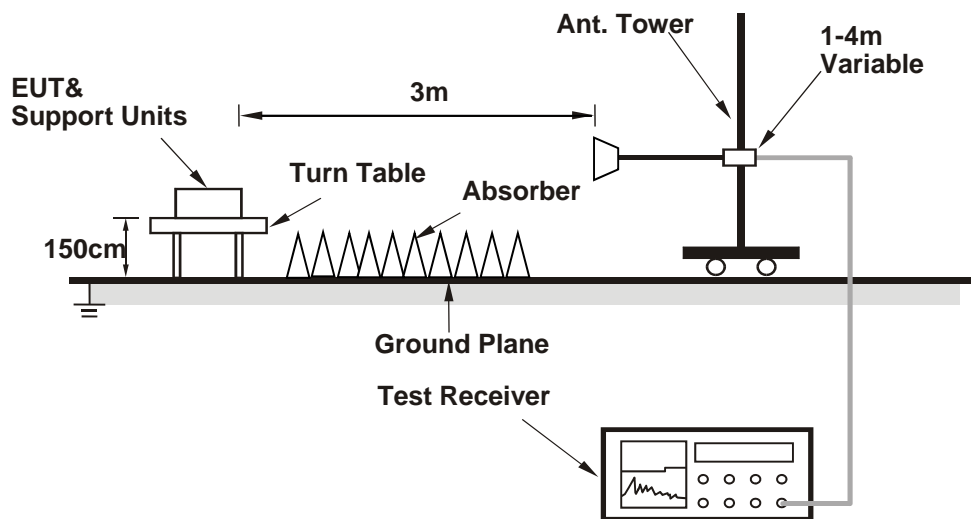
For Radiated emission below 30MHz



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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	58.8 PK	74.0	-15.2	3.50 H	242	55.3	3.5
2	5150.00	42.1 AV	54.0	-11.9	3.50 H	242	38.6	3.5
3	*5180.00	101.8 PK			3.40 H	242	62.6	39.2
4	*5180.00	90.9 AV			3.40 H	242	51.7	39.2
5	#10360.00	56.7 PK	68.2	-11.5	1.83 H	172	41.3	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	5150.00	59.8 PK	74.0	-14.2	3.43 V	297	56.3	3.5
2	5150.00	41.5 AV	54.0	-12.5	3.43 V	297	38.0	3.5
3	*5180.00	102.2 PK			3.93 V	302	63.0	39.2
4	*5180.00	90.6 AV			3.93 V	302	51.4	39.2
5	#10360.00	56.7 PK	68.2	-11.5	2.45 V	233	41.3	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 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	103.2 PK			3.42 H	242	63.9	39.3
2	*5200.00	91.9 AV			3.42 H	242	52.6	39.3
3	#10400.00	57.1 PK	68.2	-11.1	2.35 H	163	41.5	15.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	101.6 PK			3.77 V	302	62.3	39.3
2	*5200.00	91.1 AV			3.77 V	302	51.8	39.3
3	#10400.00	57.3 PK	68.2	-10.9	2.12 V	183	41.7	15.6

REMARKS:

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

CHANNEL	TX Channel 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	103.0 PK			3.47 H	245	63.9	39.1
2	*5240.00	92.0 AV			3.47 H	245	52.9	39.1
3	5350.00	57.2 PK	74.0	-16.8	3.68 H	210	53.5	3.7
4	5350.00	43.0 AV	54.0	-11.0	3.68 H	210	39.3	3.7
5	#10480.00	58.0 PK	68.2	-10.2	1.96 H	231	41.8	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	*5240.00	101.6 PK			3.75 V	301	62.5	39.1
2	*5240.00	90.9 AV			3.75 V	301	51.8	39.1
3	5350.00	57.1 PK	74.0	-16.9	3.41 V	315	53.4	3.7
4	5350.00	42.5 AV	54.0	-11.5	3.41 V	315	38.8	3.7
5	#10480.00	57.8 PK	68.2	-10.4	2.55 V	236	41.6	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 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	56.3 PK	74.0	-17.7	3.36 H	273	52.8	3.5
2	5150.00	42.7 AV	54.0	-11.3	3.36 H	273	39.2	3.5
3	*5260.00	102.8 PK			3.51 H	256	63.8	39.0
4	*5260.00	91.3 AV			3.51 H	256	52.3	39.0
5	#10520.00	58.8 PK	68.2	-9.4	2.56 H	233	42.5	16.3

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	57.0 PK	74.0	-17.0	3.55 V	287	53.5	3.5
2	5150.00	43.4 AV	54.0	-10.6	3.55 V	287	39.9	3.5
3	*5260.00	103.0 PK			3.80 V	297	64.0	39.0
4	*5260.00	91.7 AV			3.80 V	297	52.7	39.0
5	#10520.00	58.5 PK	68.2	-9.7	3.03 V	216	42.2	16.3

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	102.9 PK			3.48 H	262	63.9	39.0
2	*5300.00	91.4 AV			3.48 H	262	52.4	39.0
3	10600.00	58.6 PK	74.0	-15.4	1.96 H	255	42.0	16.6
4	10600.00	45.6 AV	54.0	-8.4	1.96 H	255	29.0	16.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	103.0 PK			3.74 V	299	64.0	39.0
2	*5300.00	91.9 AV			3.74 V	299	52.9	39.0
3	10600.00	59.3 PK	74.0	-14.7	2.41 V	197	42.7	16.6
4	10600.00	45.5 AV	54.0	-8.5	2.41 V	197	28.9	16.6

REMARKS:

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

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
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	104.0 PK			3.73 H	252	64.9	39.1
2	*5320.00	92.8 AV			3.73 H	252	53.7	39.1
3	5350.00	60.5 PK	74.0	-13.5	3.47 H	282	56.8	3.7
4	5350.00	43.6 AV	54.0	-10.4	3.47 H	282	39.9	3.7
5	10640.00	58.7 PK	74.0	-15.3	2.03 H	196	42.2	16.5
6	10640.00	44.9 AV	54.0	-9.1	2.03 H	196	28.4	16.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	104.3 PK			3.87 V	299	65.2	39.1
2	*5320.00	93.2 AV			3.87 V	299	54.1	39.1
3	5350.00	61.1 PK	74.0	-12.9	3.79 V	298	57.4	3.7
4	5350.00	44.1 AV	54.0	-9.9	3.79 V	298	40.4	3.7
5	10640.00	58.8 PK	74.0	-15.2	2.56 V	183	42.3	16.5
6	10640.00	45.1 AV	54.0	-8.9	2.56 V	183	28.6	16.5

REMARKS:

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

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	62.2 PK	74.0	-11.8	3.29 H	266	58.2	4.0
2	5460.00	43.7 AV	54.0	-10.3	3.29 H	266	39.7	4.0
3	#5470.00	65.7 PK	68.2	-2.5	3.33 H	273	61.7	4.0
4	*5500.00	105.9 PK			3.25 H	258	66.3	39.6
5	*5500.00	94.8 AV			3.25 H	258	55.2	39.6
6	11000.00	59.0 PK	74.0	-15.0	1.63 H	120	41.1	17.9
7	11000.00	48.2 AV	54.0	-5.8	1.63 H	120	30.3	17.9

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	56.7 PK	74.0	-17.3	3.57 V	293	52.7	4.0
2	5460.00	43.7 AV	54.0	-10.3	3.57 V	293	39.7	4.0
3	#5470.00	58.5 PK	68.2	-9.7	3.63 V	321	54.5	4.0
4	*5500.00	102.4 PK			3.40 V	306	62.8	39.6
5	*5500.00	91.8 AV			3.40 V	306	52.2	39.6
6	11000.00	60.4 PK	74.0	-13.6	3.03 V	311	42.5	17.9
7	11000.00	49.6 AV	54.0	-4.4	3.03 V	311	31.7	17.9

REMARKS:

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

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
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	104.8 PK			3.12 H	255	65.2	39.6
2	*5580.00	94.2 AV			3.12 H	255	54.6	39.6
3	11160.00	59.0 PK	74.0	-15.0	1.73 H	113	42.3	16.7
4	11160.00	49.3 AV	54.0	-4.7	1.73 H	113	32.6	16.7

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	101.9 PK			3.39 V	309	62.3	39.6
2	*5580.00	91.2 AV			3.39 V	309	51.6	39.6
3	11160.00	60.5 PK	74.0	-13.5	2.99 V	312	43.8	16.7
4	11160.00	50.2 AV	54.0	-3.8	2.99 V	312	33.5	16.7

REMARKS:

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

CHANNEL	TX Channel 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	105.0 PK			3.19 H	257	65.2	39.8
2	*5600.00	93.8 AV			3.19 H	257	54.0	39.8
3	11200.00	59.4 PK	74.0	-14.6	1.59 H	119	42.7	16.7
4	11200.00	50.0 AV	54.0	-4.0	1.59 H	119	33.3	16.7

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	*5600.00	102.6 PK			3.59 V	296	62.8	39.8
2	*5600.00	91.7 AV			3.59 V	296	51.9	39.8
3	11200.00	60.8 PK	74.0	-13.2	3.64 V	331	44.1	16.7
4	11200.00	51.6 AV	54.0	-2.4	3.64 V	331	34.9	16.7

REMARKS:

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

CHANNEL	TX Channel 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	104.3 PK			3.17 H	251	64.5	39.8
2	*5620.00	93.8 AV			3.17 H	251	54.0	39.8
3	11240.00	59.2 PK	74.0	-14.8	1.73 H	123	42.5	16.7
4	11240.00	50.0 AV	54.0	-4.0	1.73 H	123	33.3	16.7

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	*5620.00	102.6 PK			3.61 V	295	62.8	39.8
2	*5620.00	92.0 AV			3.61 V	295	52.2	39.8
3	11240.00	60.6 PK	74.0	-13.4	3.60 V	323	43.9	16.7
4	11240.00	51.4 AV	54.0	-2.6	3.60 V	323	34.7	16.7

REMARKS:

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

CHANNEL	TX Channel 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	105.0 PK			3.18 H	252	65.2	39.8
2	*5640.00	93.8 AV			3.18 H	252	54.0	39.8
3	11280.00	59.2 PK	74.0	-14.8	1.53 H	111	42.3	16.9
4	11280.00	50.0 AV	54.0	-4.0	1.53 H	111	33.1	16.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5640.00	103.0 PK			3.69 V	294	63.2	39.8
2	*5640.00	92.0 AV			3.69 V	294	52.2	39.8
3	11280.00	60.8 PK	74.0	-13.2	3.49 V	333	43.9	16.9
4	11280.00	51.4 AV	54.0	-2.6	3.49 V	333	34.5	16.9

REMARKS:

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

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	103.8 PK			3.04 H	260	64.2	39.6
2	*5700.00	93.2 AV			3.04 H	260	53.6	39.6
3	#5725.00	65.2 PK	68.2	-3.0	3.11 H	258	61.1	4.1
4	11400.00	58.6 PK	74.0	-15.4	1.63 H	118	42.0	16.6
5	11400.00	48.4 AV	54.0	-5.6	1.63 H	118	31.8	16.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	102.5 PK			3.60 V	297	62.9	39.6
2	*5700.00	91.7 AV			3.60 V	297	52.1	39.6
3	#5725.00	61.6 PK	68.2	-6.6	3.72 V	295	57.5	4.1
4	11400.00	59.8 PK	74.0	-14.2	3.42 V	336	43.2	16.6
5	11400.00	49.7 AV	54.0	-4.3	3.42 V	336	33.1	16.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	*5720.00	103.5 PK			2.98 H	256	63.8	39.7
2	*5720.00	92.5 AV			2.98 H	256	52.8	39.7
3	#5825.00	57.0 PK	68.2	-11.2	3.12 H	269	52.4	4.6
4	11440.00	57.9 PK	74.0	-16.1	1.58 H	114	41.2	16.7
5	11440.00	47.6 AV	54.0	-6.4	1.58 H	114	30.9	16.7

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	*5720.00	102.0 PK			3.54 V	292	62.3	39.7
2	*5720.00	91.0 AV			3.54 V	292	51.3	39.7
3	#5825.00	56.7 PK	68.2	-11.5	3.69 V	303	52.1	4.6
4	11440.00	58.8 PK	74.0	-15.2	3.45 V	336	42.1	16.7
5	11440.00	49.2 AV	54.0	-4.8	3.45 V	336	32.5	16.7

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 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	#5639.10	55.0 PK	68.2	-13.2	2.97 H	332	50.8	4.2
2	*5745.00	100.6 PK			2.97 H	332	60.8	39.8
3	*5745.00	89.2 AV			2.97 H	332	49.4	39.8
4	#5991.03	55.6 PK	68.2	-12.6	2.97 H	332	50.6	5.0
5	11490.00	58.3 PK	74.0	-15.7	3.78 H	267	41.5	16.8
6	11490.00	48.0 AV	54.0	-6.0	3.78 H	267	31.2	16.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5610.26	55.2 PK	68.2	-13.0	3.80 V	286	51.0	4.2
2	*5745.00	100.5 PK			3.80 V	286	60.7	39.8
3	*5745.00	89.5 AV			3.80 V	286	49.7	39.8
4	#5975.20	62.3 PK	68.2	-5.9	1.00 V	40	48.6	13.7
5	11490.00	59.8 PK	74.0	-14.2	3.89 V	13	43.0	16.8
6	11490.00	53.0 AV	54.0	-1.0	3.89 V	13	36.2	16.8

REMARKS:

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

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	#5607.69	55.3 PK	68.2	-12.9	2.85 H	251	51.1	4.2
2	*5785.00	102.9 PK			2.85 H	251	62.8	40.1
3	*5785.00	91.6 AV			2.85 H	251	51.5	40.1
4	#5995.51	55.5 PK	68.2	-12.7	2.85 H	251	50.5	5.0
5	11570.00	60.5 PK	74.0	-13.5	2.93 H	266	43.5	17.0
6	11570.00	51.0 AV	54.0	-3.0	2.93 H	266	34.0	17.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5621.15	54.5 PK	68.2	-13.7	3.62 V	288	50.3	4.2
2	*5785.00	99.9 PK			3.62 V	288	59.8	40.1
3	*5785.00	89.3 AV			3.62 V	288	49.2	40.1
4	#5940.38	55.1 PK	68.2	-13.1	3.62 V	288	50.3	4.8
5	11570.00	61.4 PK	74.0	-12.6	3.82 V	14	44.4	17.0
6	11570.00	53.3 AV	54.0	-0.7	3.82 V	14	36.3	17.0

REMARKS:

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

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	#5630.77	54.2 PK	68.2	-14.0	3.05 H	258	50.0	4.2
2	*5825.00	102.9 PK			3.05 H	258	62.6	40.3
3	*5825.00	92.2 AV			3.05 H	258	51.9	40.3
4	#5992.95	55.6 PK	68.2	-12.6	3.05 H	258	50.6	5.0
5	11650.00	61.4 PK	74.0	-12.6	2.74 H	15	44.8	16.6
6	11650.00	53.5 AV	54.0	-0.5	2.74 H	15	36.9	16.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5604.49	54.7 PK	68.2	-13.5	3.79 V	281	50.5	4.2
2	*5825.00	100.5 PK			3.79 V	281	60.2	40.3
3	*5825.00	89.1 AV			3.79 V	281	48.8	40.3
4	#5933.33	55.1 PK	68.2	-13.1	3.79 V	281	50.2	4.9
5	11650.00	61.8 PK	74.0	-12.2	3.76 V	14	45.2	16.6
6	11650.00	53.7 AV	54.0	-0.3	3.76 V	14	37.1	16.6

REMARKS:

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

802.11n (HT20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	46.8 PK	74.0	-27.2	2.96 H	205	43.3	3.5
2	5150.00	42.5 AV	54.0	-11.5	2.96 H	205	39.0	3.5
3	*5180.00	101.6 PK			3.31 H	239	62.4	39.2
4	*5180.00	90.3 AV			3.31 H	239	51.1	39.2
5	#10360.00	57.2 PK	68.2	-11.0	2.67 H	148	41.8	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	5150.00	57.5 PK	74.0	-16.5	3.62 V	284	54.0	3.5
2	5150.00	42.4 AV	54.0	-11.6	3.62 V	284	38.9	3.5
3	*5180.00	101.5 PK			3.73 V	305	62.3	39.2
4	*5180.00	90.5 AV			3.73 V	305	51.3	39.2
5	#10360.00	56.6 PK	68.2	-11.6	1.96 V	235	41.2	15.4

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	102.6 PK			3.44 H	241	63.3	39.3
2	*5200.00	91.4 AV			3.44 H	241	52.1	39.3
3	#10400.00	56.9 PK	68.2	-11.3	1.97 H	262	41.3	15.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	101.8 PK			3.59 V	306	62.5	39.3
2	*5200.00	90.6 AV			3.59 V	306	51.3	39.3
3	#10400.00	56.9 PK	68.2	-11.3	2.48 V	221	41.3	15.6

REMARKS:

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

CHANNEL	TX Channel 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	101.9 PK			3.42 H	246	62.8	39.1
2	*5240.00	91.1 AV			3.42 H	246	52.0	39.1
3	5350.00	56.5 PK	74.0	-17.5	3.16 H	225	52.8	3.7
4	5350.00	42.6 AV	54.0	-11.4	3.16 H	225	38.9	3.7
5	#10480.00	57.9 PK	68.2	-10.3	2.56 H	211	41.7	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	*5240.00	102.5 PK			3.87 V	295	63.4	39.1
2	*5240.00	91.5 AV			3.87 V	295	52.4	39.1
3	5350.00	56.0 PK	74.0	-18.0	3.43 V	274	52.3	3.7
4	5350.00	42.9 AV	54.0	-11.1	3.43 V	274	39.2	3.7
5	#10480.00	58.0 PK	68.2	-10.2	2.76 V	235	41.8	16.2

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	55.7 PK	74.0	-18.3	3.55 H	256	52.2	3.5
2	5150.00	43.0 AV	54.0	-11.0	3.55 H	256	39.5	3.5
3	*5260.00	102.5 PK			3.70 H	244	63.5	39.0
4	*5260.00	91.3 AV			3.70 H	244	52.3	39.0
5	#10520.00	58.1 PK	68.2	-10.1	2.36 H	225	41.8	16.3

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	56.1 PK	74.0	-17.9	3.71 V	265	52.6	3.5
2	5150.00	43.1 AV	54.0	-10.9	3.71 V	265	39.6	3.5
3	*5260.00	102.3 PK			3.81 V	297	63.3	39.0
4	*5260.00	91.3 AV			3.81 V	297	52.3	39.0
5	#10520.00	58.4 PK	68.2	-9.8	2.64 V	199	42.1	16.3

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	103.6 PK			3.46 H	248	64.6	39.0
2	*5300.00	92.5 AV			3.46 H	248	53.5	39.0
3	10600.00	58.9 PK	74.0	-15.1	2.89 H	261	42.3	16.6
4	10600.00	45.4 AV	54.0	-8.6	2.89 H	261	28.8	16.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	103.9 PK			3.90 V	296	64.9	39.0
2	*5300.00	92.3 AV			3.90 V	296	53.3	39.0
3	10600.00	58.6 PK	74.0	-15.4	2.86 V	235	42.0	16.6
4	10600.00	45.2 AV	54.0	-8.8	2.86 V	235	28.6	16.6

REMARKS:

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

CHANNEL	TX Channel 64	DETECTOR FUNCTION	Peak (PK)
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	104.4 PK			3.47 H	254	65.3	39.1
2	*5320.00	93.1 AV			3.47 H	254	54.0	39.1
3	5350.00	60.0 PK	74.0	-14.0	3.23 H	252	56.3	3.7
4	5350.00	43.9 AV	54.0	-10.1	3.23 H	252	40.2	3.7
5	10640.00	59.0 PK	74.0	-15.0	2.83 H	316	42.5	16.5
6	10640.00	44.8 AV	54.0	-9.2	2.83 H	316	28.3	16.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	104.5 PK			3.89 V	296	65.4	39.1
2	*5320.00	93.1 AV			3.89 V	296	54.0	39.1
3	5350.00	58.3 PK	74.0	-15.7	3.84 V	296	54.6	3.7
4	5350.00	44.3 AV	54.0	-9.7	3.84 V	296	40.6	3.7
5	10640.00	58.5 PK	74.0	-15.5	2.21 V	189	42.0	16.5
6	10640.00	44.8 AV	54.0	-9.2	2.21 V	189	28.3	16.5

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.0 PK	74.0	-17.0	2.89 H	211	53.0	4.0
2	5460.00	44.0 AV	54.0	-10.0	2.89 H	211	40.0	4.0
3	#5470.00	64.5 PK	68.2	-3.7	2.65 H	248	60.5	4.0
4	*5500.00	105.0 PK			3.25 H	252	65.4	39.6
5	*5500.00	93.9 AV			3.25 H	252	54.3	39.6
6	11000.00	59.6 PK	74.0	-14.4	2.85 H	324	41.7	17.9
7	11000.00	46.8 AV	54.0	-7.2	2.85 H	324	28.9	17.9

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	55.0 PK	74.0	-19.0	3.45 V	311	51.0	4.0
2	5460.00	43.2 AV	54.0	-10.8	3.45 V	311	39.2	4.0
3	#5470.00	65.0 PK	68.2	-3.2	3.51 V	264	61.0	4.0
4	*5500.00	102.5 PK			3.66 V	306	62.9	39.6
5	*5500.00	91.6 AV			3.66 V	306	52.0	39.6
6	11000.00	60.1 PK	74.0	-13.9	3.04 V	309	42.2	17.9
7	11000.00	49.6 AV	54.0	-4.4	3.04 V	309	31.7	17.9

REMARKS:

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

CHANNEL	TX Channel 116	DETECTOR FUNCTION	Peak (PK)
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	104.2 PK			3.12 H	258	64.6	39.6
2	*5580.00	93.6 AV			3.12 H	258	54.0	39.6
3	11160.00	60.3 PK	74.0	-13.7	3.00 H	173	43.6	16.7
4	11160.00	48.6 AV	54.0	-5.4	3.00 H	173	31.9	16.7

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	102.0 PK			3.58 V	308	62.4	39.6
2	*5580.00	91.2 AV			3.58 V	308	51.6	39.6
3	11160.00	60.9 PK	74.0	-13.1	3.06 V	329	44.2	16.7
4	11160.00	50.4 AV	54.0	-3.6	3.06 V	329	33.7	16.7

REMARKS:

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

CHANNEL	TX Channel 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	104.4 PK			3.07 H	259	64.6	39.8
2	*5600.00	93.5 AV			3.07 H	259	53.7	39.8
3	11200.00	60.0 PK	74.0	-14.0	2.86 H	343	43.3	16.7
4	11200.00	47.9 AV	54.0	-6.1	2.86 H	343	31.2	16.7

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	*5600.00	102.2 PK			3.64 V	298	62.4	39.8
2	*5600.00	91.4 AV			3.64 V	298	51.6	39.8
3	11200.00	60.8 PK	74.0	-13.2	3.78 V	333	44.1	16.7
4	11200.00	51.0 AV	54.0	-3.0	3.78 V	333	34.3	16.7

REMARKS:

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

CHANNEL	TX Channel 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	104.9 PK			3.20 H	254	65.1	39.8
2	*5620.00	93.5 AV			3.20 H	254	53.7	39.8
3	11240.00	60.9 PK	74.0	-13.1	2.66 H	286	44.2	16.7
4	11240.00	47.5 AV	54.0	-6.5	2.66 H	286	30.8	16.7

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	*5620.00	102.7 PK			3.75 V	293	62.9	39.8
2	*5620.00	91.5 AV			3.75 V	293	51.7	39.8
3	11240.00	61.3 PK	74.0	-12.7	3.78 V	18	44.6	16.7
4	11240.00	51.6 AV	54.0	-2.4	3.78 V	18	34.9	16.7

REMARKS:

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

CHANNEL	TX Channel 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	104.9 PK			3.20 H	251	65.1	39.8
2	*5640.00	93.7 AV			3.20 H	251	53.9	39.8
3	11280.00	60.6 PK	74.0	-13.4	3.20 H	314	43.7	16.9
4	11280.00	49.1 AV	54.0	-4.9	3.20 H	314	32.2	16.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5640.00	102.7 PK			3.71 V	295	62.9	39.8
2	*5640.00	91.8 AV			3.71 V	295	52.0	39.8
3	11280.00	61.6 PK	74.0	-12.4	3.59 V	18	44.7	16.9
4	11280.00	52.8 AV	54.0	-1.2	3.59 V	18	35.9	16.9

REMARKS:

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

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	103.3 PK			3.01 H	257	63.7	39.6
2	*5700.00	92.6 AV			3.01 H	257	53.0	39.6
3	#5725.00	64.9 PK	68.2	-3.3	2.84 H	266	60.8	4.1
4	11400.00	59.0 PK	74.0	-15.0	2.98 H	315	42.4	16.6
5	11400.00	48.9 AV	54.0	-5.1	2.98 H	315	32.3	16.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	102.2 PK			3.52 V	298	62.6	39.6
2	*5700.00	91.2 AV			3.52 V	298	51.6	39.6
3	#5725.00	62.7 PK	68.2	-5.5	3.48 V	296	58.6	4.1
4	11400.00	60.4 PK	74.0	-13.6	3.67 V	19	43.8	16.6
5	11400.00	52.2 AV	54.0	-1.8	3.67 V	19	35.6	16.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	56.3 PK	68.2	-11.9	2.81 H	262	52.3	4.0
2	*5720.00	103.2 PK			3.00 H	259	63.5	39.7
3	*5720.00	92.1 AV			3.00 H	259	52.4	39.7
4	#5825.00	56.8 PK	68.2	-11.4	3.14 H	251	52.2	4.6
5	11440.00	58.8 PK	74.0	-15.2	3.05 H	314	42.1	16.7
6	11440.00	49.3 AV	54.0	-4.7	3.05 H	314	32.6	16.7

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	56.2 PK	68.2	-12.0	3.67 V	305	52.2	4.0
2	*5720.00	101.9 PK			3.49 V	298	62.2	39.7
3	*5720.00	90.7 AV			3.49 V	298	51.0	39.7
4	#5825.00	56.9 PK	68.2	-11.3	3.19 V	322	52.3	4.6
5	11440.00	60.5 PK	74.0	-13.5	4.00 V	19	43.8	16.7
6	11440.00	52.6 AV	54.0	-1.4	4.00 V	19	35.9	16.7

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 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	#5625.64	54.9 PK	68.2	-13.3	3.13 H	259	50.7	4.2
2	*5745.00	103.1 PK			3.13 H	259	63.3	39.8
3	*5745.00	91.9 AV			3.13 H	259	52.1	39.8
4	#5980.13	55.5 PK	68.2	-12.7	3.13 H	259	50.5	5.0
5	11490.00	58.0 PK	74.0	-16.0	3.63 H	268	41.2	16.8
6	11490.00	50.0 AV	54.0	-4.0	3.63 H	268	33.2	16.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5630.77	55.1 PK	68.2	-13.1	3.63 V	291	50.9	4.2
2	*5745.00	100.7 PK			3.63 V	291	60.9	39.8
3	*5745.00	89.7 AV			3.63 V	291	49.9	39.8
4	#5962.18	56.7 PK	68.2	-11.5	3.63 V	291	51.9	4.8
5	11490.00	59.7 PK	74.0	-14.3	3.88 V	12	42.9	16.8
6	11490.00	52.7 AV	54.0	-1.3	3.88 V	12	35.9	16.8

REMARKS:

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

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	#5614.10	55.2 PK	68.2	-13.0	3.08 H	259	51.0	4.2
2	*5785.00	102.8 PK			3.08 H	259	62.7	40.1
3	*5785.00	92.0 AV			3.08 H	259	51.9	40.1
4	#5970.51	54.8 PK	68.2	-13.4	3.08 H	259	49.9	4.9
5	11570.00	61.0 PK	74.0	-13.0	3.19 H	15	44.0	17.0
6	11570.00	51.8 AV	54.0	-2.2	3.19 H	15	34.8	17.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5609.62	55.0 PK	68.2	-13.2	3.63 V	285	50.8	4.2
2	*5785.00	100.1 PK			3.63 V	285	60.0	40.1
3	*5785.00	89.0 AV			3.63 V	285	48.9	40.1
4	#5986.54	55.8 PK	68.2	-12.4	3.63 V	285	50.8	5.0
5	11570.00	60.8 PK	74.0	-13.2	3.75 V	11	43.8	17.0
6	11570.00	53.3 AV	54.0	-0.7	3.75 V	11	36.3	17.0

REMARKS:

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

CHANNEL	TX Channel 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	#5601.28	54.8 PK	68.2	-13.4	3.10 H	260	50.6	4.2
2	*5825.00	103.2 PK			3.10 H	260	62.9	40.3
3	*5825.00	92.1 AV			3.10 H	260	51.8	40.3
4	#5995.51	55.5 PK	68.2	-12.7	3.10 H	260	50.5	5.0
5	11650.00	61.3 PK	74.0	-12.7	3.33 H	22	44.7	16.6
6	11650.00	53.4 AV	54.0	-0.6	3.33 H	22	36.8	16.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5616.67	54.3 PK	68.2	-13.9	3.65 V	283	50.1	4.2
2	*5825.00	100.1 PK			3.65 V	283	59.8	40.3
3	*5825.00	89.1 AV			3.65 V	283	48.8	40.3
4	#5964.74	54.8 PK	68.2	-13.4	3.65 V	283	50.0	4.8
5	11650.00	61.6 PK	74.0	-12.4	3.77 V	19	45.0	16.6
6	11650.00	53.8 AV	54.0	-0.2	3.77 V	19	37.2	16.6

REMARKS:

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

802.11n (HT40)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.1 PK	74.0	-13.9	3.45 H	244	56.6	3.5
2	5150.00	45.0 AV	54.0	-9.0	3.45 H	244	41.5	3.5
3	*5190.00	99.3 PK			3.43 H	241	60.0	39.3
4	*5190.00	87.4 AV			3.43 H	241	48.1	39.3
5	#10380.00	56.9 PK	68.2	-11.3	2.76 H	164	41.4	15.5

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.2 PK	74.0	-13.8	3.77 V	301	56.7	3.5
2	5150.00	44.7 AV	54.0	-9.3	3.77 V	301	41.2	3.5
3	*5190.00	97.7 PK			3.73 V	303	58.4	39.3
4	*5190.00	86.3 AV			3.73 V	303	47.0	39.3
5	#10380.00	56.4 PK	68.2	-11.8	1.99 V	235	40.9	15.5

REMARKS:

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

CHANNEL	TX Channel 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	96.9 PK			3.80 H	249	57.8	39.1
2	*5230.00	85.4 AV			3.80 H	249	46.3	39.1
3	5350.00	57.1 PK	74.0	-16.9	3.59 H	218	53.4	3.7
4	5350.00	43.4 AV	54.0	-10.6	3.59 H	218	39.7	3.7
5	#10460.00	57.9 PK	68.2	-10.3	1.89 H	231	41.9	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	*5230.00	98.4 PK			3.88 V	297	59.3	39.1
2	*5230.00	86.8 AV			3.88 V	297	47.7	39.1
3	5350.00	56.0 PK	74.0	-18.0	3.61 V	305	52.3	3.7
4	5350.00	43.4 AV	54.0	-10.6	3.61 V	305	39.7	3.7
5	#10460.00	57.2 PK	68.2	-11.0	2.07 V	182	41.2	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 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	56.2 PK	74.0	-17.8	3.26 H	267	52.7	3.5
2	5150.00	43.1 AV	54.0	-10.9	3.26 H	267	39.6	3.5
3	*5270.00	99.9 PK			3.55 H	246	60.9	39.0
4	*5270.00	88.4 AV			3.55 H	246	49.4	39.0
5	#10540.00	58.1 PK	68.2	-10.1	2.21 H	158	41.7	16.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.8 PK	74.0	-18.2	3.64 V	305	52.3	3.5
2	5150.00	43.1 AV	54.0	-10.9	3.64 V	305	39.6	3.5
3	*5270.00	99.2 PK			3.77 V	296	60.2	39.0
4	*5270.00	88.2 AV			3.77 V	296	49.2	39.0
5	#10540.00	58.6 PK	68.2	-9.6	2.76 V	181	42.2	16.4

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	100.5 PK			3.44 H	246	61.5	39.0
2	*5310.00	89.1 AV			3.44 H	246	50.1	39.0
3	5350.00	67.4 PK	74.0	-6.6	3.41 H	254	63.7	3.7
4	5350.00	47.3 AV	54.0	-6.7	3.41 H	254	43.6	3.7
5	10620.00	58.8 PK	74.0	-15.2	3.19 H	174	42.2	16.6
6	10620.00	45.5 AV	54.0	-8.5	3.19 H	174	28.9	16.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	99.9 PK			3.88 V	293	60.9	39.0
2	*5310.00	88.8 AV			3.88 V	293	49.8	39.0
3	5350.00	66.2 PK	74.0	-7.8	3.84 V	297	62.5	3.7
4	5350.00	46.9 AV	54.0	-7.1	3.84 V	297	43.2	3.7
5	10620.00	58.6 PK	74.0	-15.4	2.83 V	197	42.0	16.6
6	10620.00	45.1 AV	54.0	-8.9	2.83 V	197	28.5	16.6

REMARKS:

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

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK)
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	57.2 PK	74.0	-16.8	2.91 H	283	53.2	4.0
2	5460.00	43.9 AV	54.0	-10.1	2.91 H	283	39.9	4.0
3	#5470.00	63.1 PK	68.2	-5.1	3.26 H	271	59.1	4.0
4	*5510.00	101.8 PK			3.20 H	257	62.1	39.7
5	*5510.00	91.2 AV			3.20 H	257	51.5	39.7
6	11020.00	59.3 PK	74.0	-14.7	3.59 H	281	41.7	17.6
7	11020.00	47.8 AV	54.0	-6.2	3.59 H	281	30.2	17.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.6 PK	74.0	-17.4	3.19 V	335	52.6	4.0
2	5460.00	43.4 AV	54.0	-10.6	3.19 V	335	39.4	4.0
3	#5470.00	62.6 PK	68.2	-5.6	3.26 V	341	58.6	4.0
4	*5510.00	99.7 PK			3.56 V	306	60.0	39.7
5	*5510.00	88.0 AV			3.56 V	306	48.3	39.7
6	11020.00	60.9 PK	74.0	-13.1	3.48 V	358	43.3	17.6
7	11020.00	48.7 AV	54.0	-5.3	3.48 V	358	31.1	17.6

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	101.6 PK			3.32 H	255	62.0	39.6
2	*5550.00	91.1 AV			3.32 H	255	51.5	39.6
3	11100.00	59.5 PK	74.0	-14.5	3.08 H	358	42.7	16.8
4	11100.00	47.1 AV	54.0	-6.9	3.08 H	358	30.3	16.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5550.00	97.9 PK			3.55 V	299	58.3	39.6
2	*5550.00	87.6 AV			3.55 V	299	48.0	39.6
3	11100.00	59.6 PK	74.0	-14.4	3.37 V	356	42.8	16.8
4	11100.00	49.0 AV	54.0	-5.0	3.37 V	356	32.2	16.8

REMARKS:

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

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	*5590.00	100.6 PK			3.26 H	261	61.0	39.6
2	*5590.00	90.0 AV			3.26 H	261	50.4	39.6
3	11180.00	59.7 PK	74.0	-14.3	3.63 H	259	43.0	16.7
4	11180.00	47.2 AV	54.0	-6.8	3.63 H	259	30.5	16.7

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	*5590.00	98.0 PK			3.65 V	298	58.4	39.6
2	*5590.00	87.3 AV			3.65 V	298	47.7	39.6
3	11180.00	61.1 PK	74.0	-12.9	3.72 V	326	44.4	16.7
4	11180.00	51.2 AV	54.0	-2.8	3.72 V	326	34.5	16.7

REMARKS:

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

CHANNEL	TX Channel 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	100.4 PK			3.23 H	255	60.6	39.8
2	*5630.00	89.9 AV			3.23 H	255	50.1	39.8
3	11260.00	60.3 PK	74.0	-13.7	3.12 H	255	43.5	16.8
4	11260.00	48.2 AV	54.0	-5.8	3.12 H	255	31.4	16.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5630.00	98.4 PK			3.61 V	294	58.6	39.8
2	*5630.00	87.8 AV			3.61 V	294	48.0	39.8
3	11260.00	60.8 PK	74.0	-13.2	3.84 V	332	44.0	16.8
4	11260.00	51.3 AV	54.0	-2.7	3.84 V	332	34.5	16.8

REMARKS:

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

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	97.3 PK			2.90 H	333	57.5	39.8
2	*5670.00	86.7 AV			2.90 H	333	46.9	39.8
3	#5725.00	55.5 PK	68.2	-12.7	2.84 H	225	51.4	4.1
4	11340.00	59.5 PK	74.0	-14.5	3.17 H	315	42.7	16.8
5	11340.00	48.6 AV	54.0	-5.4	3.17 H	315	31.8	16.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	98.9 PK			3.71 V	299	59.1	39.8
2	*5670.00	88.2 AV			3.71 V	299	48.4	39.8
3	#5725.00	57.2 PK	68.2	-11.0	3.52 V	314	53.1	4.1
4	11340.00	61.1 PK	74.0	-12.9	3.55 V	19	44.3	16.8
5	11340.00	53.0 AV	54.0	-1.0	3.55 V	19	36.2	16.8

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	#5470.00	56.3 PK	68.2	-11.9	3.15 H	265	52.3	4.0
2	*5710.00	98.3 PK			2.99 H	334	58.6	39.7
3	*5710.00	87.3 AV			2.99 H	334	47.6	39.7
4	#5825.00	56.9 PK	68.2	-11.3	2.91 H	357	52.3	4.6
5	11420.00	58.9 PK	74.0	-15.1	2.96 H	314	42.3	16.6
6	11420.00	48.9 AV	54.0	-5.1	2.96 H	314	32.3	16.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	56.7 PK	68.2	-11.5	3.09 V	326	52.7	4.0
2	*5710.00	98.5 PK			3.72 V	298	58.8	39.7
3	*5710.00	87.8 AV			3.72 V	298	48.1	39.7
4	#5825.00	56.8 PK	68.2	-11.4	3.27 V	318	52.2	4.6
5	11420.00	60.1 PK	74.0	-13.9	3.49 V	19	43.5	16.6
6	11420.00	52.5 AV	54.0	-1.5	3.49 V	19	35.9	16.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	#5619.87	54.5 PK	68.2	-13.7	3.13 H	260	50.3	4.2
2	*5755.00	100.7 PK			3.13 H	260	60.9	39.8
3	*5755.00	87.1 AV			3.13 H	260	47.3	39.8
4	#5989.10	55.7 PK	68.2	-12.5	3.13 H	260	50.7	5.0
5	11510.00	59.0 PK	74.0	-15.0	3.33 H	23	42.1	16.9
6	11510.00	49.0 AV	54.0	-5.0	3.33 H	23	32.1	16.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.69	54.8 PK	68.2	-13.4	3.60 V	292	50.6	4.2
2	*5755.00	96.8 PK			3.60 V	292	57.0	39.8
3	*5755.00	84.8 AV			3.60 V	292	45.0	39.8
4	#5957.69	56.3 PK	68.2	-11.9	3.60 V	292	51.5	4.8
5	11510.00	59.4 PK	74.0	-14.6	3.96 V	111	42.5	16.9
6	11510.00	50.6 AV	54.0	-3.4	3.96 V	111	33.7	16.9

REMARKS:

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

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	#5600.64	53.8 PK	68.2	-14.4	2.98 H	262	49.6	4.2
2	*5795.00	100.4 PK			2.98 H	262	60.3	40.1
3	*5795.00	86.9 AV			2.98 H	262	46.8	40.1
4	#5953.21	55.0 PK	68.2	-13.2	2.98 H	262	50.2	4.8
5	11590.00	61.0 PK	74.0	-13.0	3.25 H	16	44.0	17.0
6	11590.00	52.9 AV	54.0	-1.1	3.25 H	16	35.9	17.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5601.28	54.4 PK	68.2	-13.8	3.61 V	283	50.2	4.2
2	*5795.00	97.2 PK			3.61 V	283	57.1	40.1
3	*5795.00	85.0 AV			3.61 V	283	44.9	40.1
4	#5974.36	56.1 PK	68.2	-12.1	3.61 V	283	51.1	5.0
5	11590.00	61.6 PK	74.0	-12.4	3.80 V	13	44.6	17.0
6	11590.00	53.8 AV	54.0	-0.2	3.80 V	13	36.8	17.0

REMARKS:

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

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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	56.5 PK	74.0	-17.5	3.40 H	241	53.0	3.5
2	5150.00	44.8 AV	54.0	-9.2	3.40 H	241	41.3	3.5
3	*5210.00	92.4 PK			3.29 H	239	53.2	39.2
4	*5210.00	82.9 AV			3.29 H	239	43.7	39.2
5	5350.00	56.6 PK	74.0	-17.4	3.02 H	255	52.9	3.7
6	5350.00	44.6 AV	54.0	-9.4	3.02 H	255	40.9	3.7
7	#10420.00	56.6 PK	68.2	-11.6	1.79 H	151	40.9	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	5150.00	57.5 PK	74.0	-16.5	4.00 V	302	54.0	3.5
2	5150.00	45.2 AV	54.0	-8.8	4.00 V	302	41.7	3.5
3	*5210.00	93.0 PK			3.91 V	300	53.8	39.2
4	*5210.00	83.5 AV			3.91 V	300	44.3	39.2
5	5350.00	56.0 PK	74.0	-18.0	3.64 V	343	52.3	3.7
6	5350.00	44.7 AV	54.0	-9.3	3.64 V	343	41.0	3.7
7	#10420.00	57.0 PK	68.2	-11.2	2.56 V	233	41.3	15.7

REMARKS:

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

CHANNEL	TX Channel 58	DETECTOR FUNCTION	Peak (PK)
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	56.0 PK	74.0	-18.0	2.99 H	236	52.5	3.5
2	5150.00	44.2 AV	54.0	-9.8	2.99 H	236	40.7	3.5
3	*5290.00	94.3 PK			3.53 H	253	55.3	39.0
4	*5290.00	84.9 AV			3.53 H	253	45.9	39.0
5	5350.00	59.4 PK	74.0	-14.6	3.41 H	249	55.7	3.7
6	5350.00	46.5 AV	54.0	-7.5	3.41 H	249	42.8	3.7
7	#10580.00	59.9 PK	68.2	-8.3	2.69 H	234	43.2	16.7

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	55.7 PK	74.0	-18.3	3.65 V	262	52.2	3.5
2	5150.00	44.5 AV	54.0	-9.5	3.65 V	262	41.0	3.5
3	*5290.00	94.3 PK			3.88 V	296	55.3	39.0
4	*5290.00	85.3 AV			3.88 V	296	46.3	39.0
5	5350.00	58.9 PK	74.0	-15.1	4.00 V	296	55.2	3.7
6	5350.00	46.8 AV	54.0	-7.2	4.00 V	296	43.1	3.7
7	#10580.00	58.9 PK	68.2	-9.3	1.79 V	196	42.2	16.7

REMARKS:

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

CHANNEL	TX Channel 106	DETECTOR FUNCTION	Peak (PK)
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	58.3 PK	74.0	-15.7	3.09 H	260	54.3	4.0
2	5460.00	46.9 AV	54.0	-7.1	3.09 H	260	42.9	4.0
3	#5470.00	60.0 PK	68.2	-8.2	3.16 H	254	56.0	4.0
4	*5530.00	96.5 PK			3.25 H	246	56.8	39.7
5	*5530.00	86.7 AV			3.25 H	246	47.0	39.7
6	#5725.00	55.3 PK	68.2	-12.9	2.98 H	205	51.2	4.1
7	11060.00	59.2 PK	74.0	-14.8	2.58 H	320	42.0	17.2
8	11060.00	48.8 AV	54.0	-5.2	2.58 H	320	31.6	17.2

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	5460.00	57.9 PK	74.0	-16.1	3.81 V	294	53.9	4.0
2	5460.00	46.2 AV	54.0	-7.8	3.81 V	294	42.2	4.0
3	#5470.00	59.2 PK	68.2	-9.0	4.00 V	304	55.2	4.0
4	*5530.00	94.0 PK			3.76 V	301	54.3	39.7
5	*5530.00	85.0 AV			3.76 V	301	45.3	39.7
6	#5725.00	55.0 PK	68.2	-13.2	3.89 V	296	50.9	4.1
7	11060.00	60.6 PK	74.0	-13.4	4.00 V	324	43.4	17.2
8	11060.00	52.6 AV	54.0	-1.4	4.00 V	324	35.4	17.2

REMARKS:

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

CHANNEL	TX Channel 122	DETECTOR FUNCTION	Peak (PK)
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	57.2 PK	68.2	-11.0	2.53 H	71	53.2	4.0
2	*5610.00	92.0 PK			2.71 H	64	52.2	39.8
3	*5610.00	82.5 AV			2.71 H	64	42.7	39.8
4	#5725.00	54.7 PK	68.2	-13.5	2.22 H	14	50.6	4.1
5	11220.00	60.0 PK	74.0	-14.0	2.72 H	342	43.2	16.8
6	11220.00	50.2 AV	54.0	-3.8	2.72 H	342	33.4	16.8

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	56.5 PK	68.2	-11.7	3.55 V	312	52.5	4.0
2	*5610.00	93.6 PK			3.75 V	294	53.8	39.8
3	*5610.00	84.0 AV			3.75 V	294	44.2	39.8
4	#5725.00	54.9 PK	68.2	-13.3	3.51 V	317	50.8	4.1
5	11220.00	61.0 PK	74.0	-13.0	3.90 V	325	44.2	16.8
6	11220.00	53.5 AV	54.0	-0.5	3.90 V	325	36.7	16.8

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	56.3 PK	68.2	-11.9	2.43 H	78	52.3	4.0
2	*5690.00	92.3 PK			2.73 H	57	52.6	39.7
3	*5690.00	82.7 AV			2.73 H	57	43.0	39.7
4	#5825.00	56.4 PK	68.2	-11.8	2.25 H	69	51.8	4.6
5	11380.00	59.2 PK	74.0	-14.8	1.36 H	321	42.6	16.6
6	11380.00	49.8 AV	54.0	-4.2	1.36 H	321	33.2	16.6

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	56.2 PK	68.2	-12.0	3.26 V	318	52.2	4.0
2	*5690.00	94.1 PK			3.76 V	304	54.4	39.7
3	*5690.00	84.5 AV			3.76 V	304	44.8	39.7
4	#5825.00	56.6 PK	68.2	-11.6	3.69 V	355	52.0	4.6
5	11380.00	60.7 PK	74.0	-13.3	3.60 V	19	44.1	16.6
6	11380.00	53.7 AV	54.0	-0.3	3.60 V	19	37.1	16.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	#5639.10	54.4 PK	68.2	-13.8	3.75 H	210	50.2	4.2
2	#5650.00	56.2 PK	68.2	-12.0	3.53 H	229	51.9	4.3
3	*5775.00	93.8 PK			3.75 H	210	53.8	40.0
4	*5775.00	84.3 AV			3.75 H	210	44.3	40.0
5	#5925.00	57.7 PK	68.2	-10.5	3.83 H	256	52.8	4.9
6	#5976.92	55.2 PK	68.2	-13.0	3.75 H	210	50.2	5.0
7	11550.00	58.7 PK	74.0	-15.3	1.49 H	316	41.7	17.0
8	11550.00	50.0 AV	54.0	-4.0	1.49 H	316	33.0	17.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5610.26	54.9 PK	68.2	-13.3	3.62 V	289	50.7	4.2
2	#5650.00	56.2 PK	68.2	-12.0	3.73 V	281	51.9	4.3
3	*5775.00	93.0 PK			3.62 V	289	53.0	40.0
4	*5775.00	83.2 AV			3.62 V	289	43.2	40.0
5	#5925.00	58.3 PK	68.2	-9.9	3.77 V	292	53.4	4.9
6	#5942.31	55.5 PK	68.2	-12.7	3.62 V	289	50.7	4.8
7	11550.00	60.9 PK	74.0	-13.1	3.94 V	14	43.9	17.0
8	11550.00	53.7 AV	54.0	-0.3	3.94 V	14	36.7	17.0

REMARKS:

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

BELOW 1GHz WORST-CASE DATA

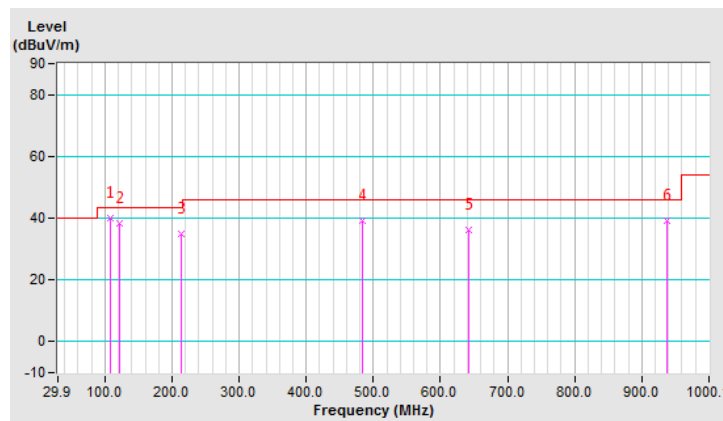
802.11a

CHANNEL	TX Channel 100	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	107.67	40.0 QP	43.5	-3.5	1.50 H	1	52.2	-12.2
2	121.28	38.4 QP	43.5	-5.1	1.50 H	347	49.4	-11.0
3	214.61	34.8 QP	43.5	-8.7	1.01 H	29	45.9	-11.1
4	482.92	39.3 QP	46.0	-6.7	1.50 H	33	44.6	-5.3
5	642.35	36.0 QP	46.0	-10.0	1.01 H	216	37.6	-1.6
6	937.88	39.1 QP	46.0	-6.9	1.01 H	6	35.1	4.0

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. The emission levels were very low against the limit of frequency range 9kHz~30MHz: the amplitude of spurious emissions attenuated more than 20dB below the permissible value to be report.



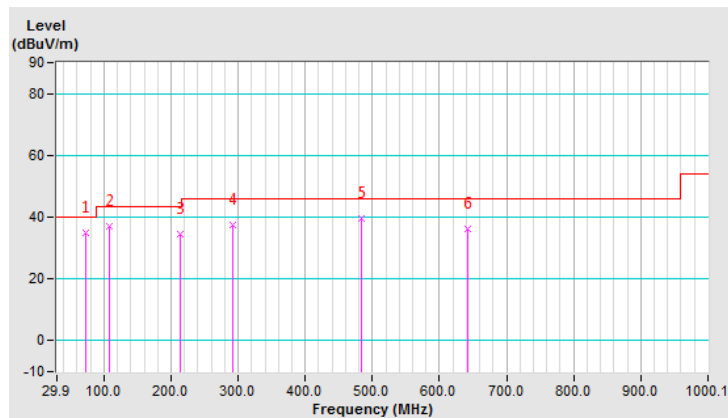
CHANNEL	TX Channel 100	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	72.67	34.9 QP	40.0	-5.1	1.00 V	246	46.6	-11.7
2	107.67	37.2 QP	43.5	-6.3	1.00 V	343	49.4	-12.2
3	214.61	34.6 QP	43.5	-8.9	1.00 V	13	45.7	-11.1
4	292.38	37.6 QP	46.0	-8.4	1.50 V	217	45.7	-8.1
5	482.92	39.5 QP	46.0	-6.5	1.00 V	103	44.8	-5.3
6	642.35	36.0 QP	46.0	-10.0	1.50 V	200	37.6	-1.6

REMARKS:

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



4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

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

Note: 1. The lower limit shall apply at the transition frequencies.

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESR3	102412	Feb. 08, 2018	Feb. 07, 2019
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond2-01	Sep. 05, 2018	Sep. 04, 2019
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Feb. 05, 2018	Feb. 04, 2019
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Aug. 13, 2018	Aug. 12, 2019
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 2.

3. The VCCI Site Registration No. is C-2047.

4.2.3 Test Procedures

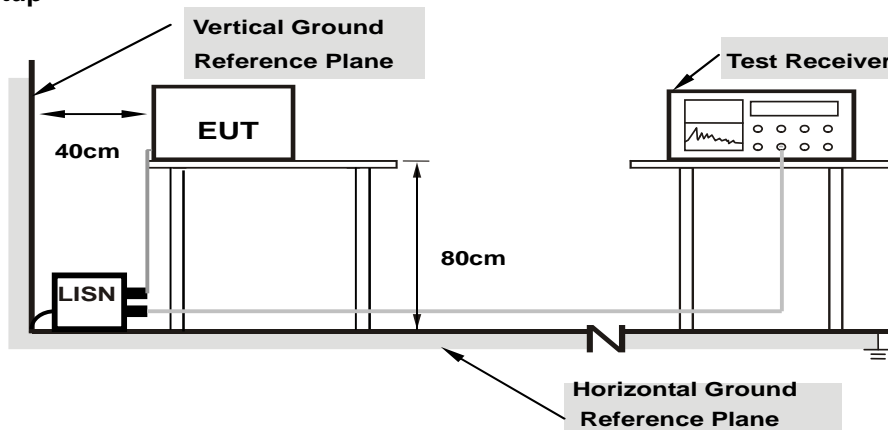
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance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

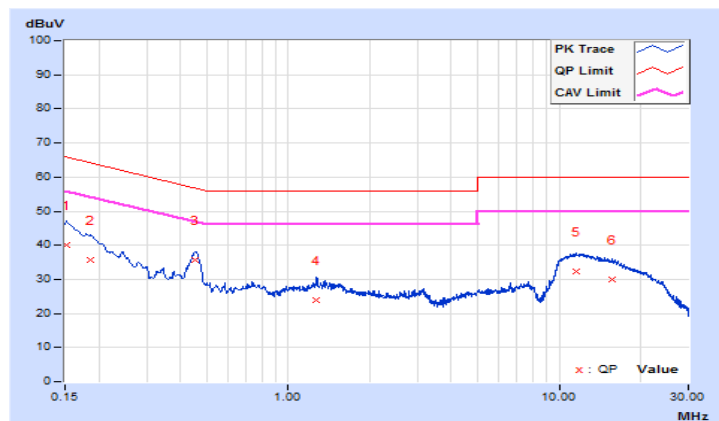
802.11a CH 100

Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15225	10.05	30.16	15.36	40.21	25.41	65.88	55.88	-25.67	-30.47
2	0.18608	10.06	25.59	11.17	35.65	21.23	64.21	54.21	-28.56	-32.98
3	0.45065	10.06	25.48	16.96	35.54	27.02	56.86	46.86	-21.32	-19.84
4	1.27050	10.07	13.98	6.90	24.05	16.97	56.00	46.00	-31.95	-29.03
5	11.58225	10.33	22.03	16.61	32.36	26.94	60.00	50.00	-27.64	-23.06
6	15.66825	10.43	19.46	14.41	29.89	24.84	60.00	50.00	-30.11	-25.16

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.

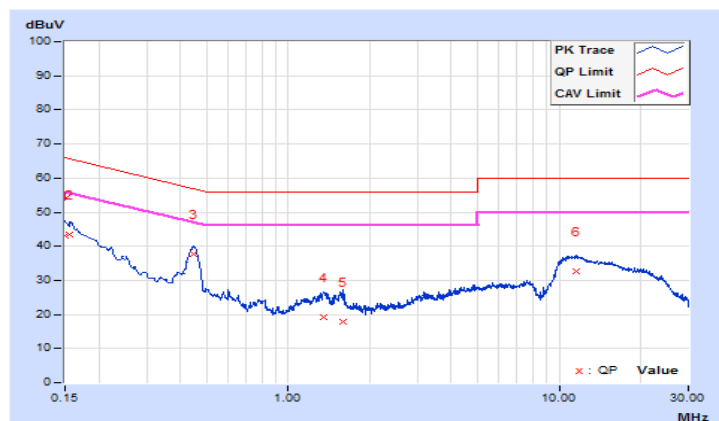


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
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No	Freq. [MHz]	Corr. Factor (dB)	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
			1	0.15000	10.06	33.06	17.47	43.12	27.53	66.00
2	0.15674	10.06	33.43	19.20	43.49	29.26	65.63	55.63	-22.14	-26.37
3	0.44474	10.07	27.52	18.59	37.59	28.66	56.97	46.97	-19.38	-18.31
4	1.34700	10.08	9.16	3.29	19.24	13.37	56.00	46.00	-36.76	-32.63
5	1.58785	10.09	7.64	1.71	17.73	11.80	56.00	46.00	-38.27	-34.20
6	11.52600	10.41	22.09	16.70	32.50	27.11	60.00	50.00	-27.50	-22.89

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

*B is the 26 dB emission bandwidth in megahertz

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

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

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

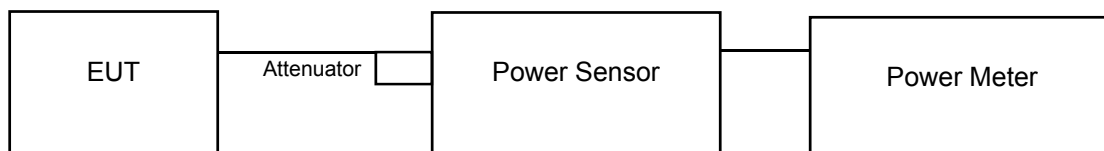
Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

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

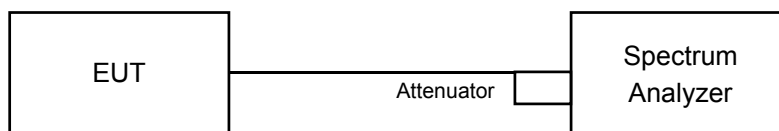
4.3.2 Test Setup

For Power Output

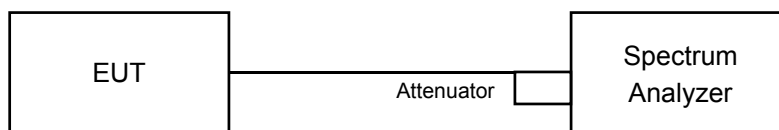
802.11a, 802.11n (HT20), 802.11n (HT40)



802.11ac (VHT80)



For 26dB and Occupied Bandwidth



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

For Average Power Measurement

For 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%.

For Occupied Bandwidth

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.

4.3.5 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)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	9.12	9.60	24.00	Pass
40	5200	10.233	10.10	24.00	Pass
48	5240	10.593	10.25	24.00	Pass
52	5260	11.041	10.43	24.00	Pass
60	5300	10.568	10.24	24.00	Pass
64	5320	11.912	10.76	24.00	Pass
100	5500	8.995	9.54	24.00	Pass
116	5580	10.544	10.23	24.00	Pass
120	5600	10.94	10.39	24.00	Pass
124	5620	10.914	10.38	24.00	Pass
128	5640	11.169	10.48	24.00	Pass
140	5700	11.376	10.56	24.00	Pass
144	5720 For U-NII-2C	2.694	4.30	22.27	Pass
144	5720 For U-NII-3	0.8005	-0.97	30.00	Pass
149	5745	8.67	9.38	30.00	Pass
157	5785	8.492	9.29	30.00	Pass
165	5825	7.464	8.73	30.00	Pass

Note:

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

1. $11\text{dBm} + 10\log(22.63) = 24.55\text{dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(22.39) = 24.50\text{dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(22.68) = 24.56\text{dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(22.76) = 24.57\text{dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(22.61) = 24.54\text{dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(22.36) = 24.49\text{dBm} > 24\text{dBm}$
7. $11\text{dBm} + 10\log(22.80) = 24.58\text{dBm} > 24\text{dBm}$
8. $11\text{dBm} + 10\log(23.00) = 24.62\text{dBm} > 24\text{dBm}$
9. $11\text{dBm} + 10\log(22.48) = 24.52\text{dBm} > 24\text{dBm}$
10. $11\text{dBm} + 10\log(5725.00 - 5711.60) = 22.27\text{ dBm} < 24\text{dBm}$.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
144	5720	3.4945	5.43

802.11n (HT20)

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	9.036	9.56	24.00	Pass
40	5200	10.328	10.14	24.00	Pass
48	5240	10.691	10.29	24.00	Pass
52	5260	11.298	10.53	24.00	Pass
60	5300	10.74	10.31	24.00	Pass
64	5320	11.22	10.50	24.00	Pass
100	5500	9.141	9.61	24.00	Pass
116	5580	10.52	10.22	24.00	Pass
120	5600	10.789	10.33	24.00	Pass
124	5620	10.789	10.33	24.00	Pass
128	5640	11.561	10.63	24.00	Pass
140	5700	11.508	10.61	24.00	Pass
144	5720 For U-NII-2C	2.462	3.91	22.42	Pass
144	5720 For U-NII-3	0.4878	-3.12	30.00	Pass
149	5745	8.375	9.23	30.00	Pass
157	5785	8.414	9.25	30.00	Pass
165	5825	7.745	8.89	30.00	Pass

Note:

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

1. $11\text{dBm} + 10\log(22.86) = 24.59\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(22.64) = 24.55\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(23.38) = 24.69\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(23.21) = 24.66\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(22.94) = 24.61\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(24.50) = 24.89\text{ dBm} > 24\text{dBm}$
7. $11\text{dBm} + 10\log(23.14) = 24.64\text{ dBm} > 24\text{dBm}$
8. $11\text{dBm} + 10\log(23.27) = 24.67\text{ dBm} > 24\text{dBm}$
9. $11\text{dBm} + 10\log(23.27) = 24.67\text{ dBm} > 24\text{dBm}$
10. $11\text{dBm} + 10\log(5725.00 - 5711.12) = 22.42\text{ dBm} < 24\text{dBm}$.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
144	5720	3.4945	5.43

802.11n (HT40)

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	8.551	9.32	24.00	Pass
46	5230	8.492	9.29	24.00	Pass
54	5270	9.057	9.57	24.00	Pass
62	5310	8.61	9.35	24.00	Pass
102	5510	8.166	9.12	24.00	Pass
110	5550	8.67	9.38	24.00	Pass
118	5590	8.73	9.41	24.00	Pass
126	5630	9.204	9.64	24.00	Pass
134	5670	9.528	9.79	24.00	Pass
142	5710 For U-NII-2C	0.7182	-1.44	24.00	Pass
142	5710 For U-NII-3	0.08714	-10.60	30.00	Pass
151	5755	7.727	8.88	30.00	Pass
159	5795	7.78	8.91	30.00	Pass

Note:

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

1. $11\text{dBm} + 10\log(44.98) = 27.53\text{ dBm} > 24\text{dBm}$
2. $11\text{dBm} + 10\log(46.00) = 27.63\text{ dBm} > 24\text{dBm}$
3. $11\text{dBm} + 10\log(45.16) = 27.55\text{ dBm} > 24\text{dBm}$
4. $11\text{dBm} + 10\log(45.21) = 27.55\text{ dBm} > 24\text{dBm}$
5. $11\text{dBm} + 10\log(46.01) = 27.63\text{ dBm} > 24\text{dBm}$
6. $11\text{dBm} + 10\log(45.88) = 27.62\text{ dBm} > 24\text{dBm}$
7. $11\text{dBm} + 10\log(45.89) = 27.62\text{ dBm} > 24\text{dBm}$
8. $11\text{dBm} + 10\log(5725.00 - 5691.64) = 26.23\text{ dBm} > 24\text{dBm}$.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
142	5710	0.80534	-0.94

802.11ac (VHT80)

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	6.237	7.95	24.00	Pass
58	5290	6.383	8.05	24.00	Pass
106	5530	6.324	8.01	24.00	Pass
122	5610	6.871	8.37	24.00	Pass
138	5690 For U-NII-2C	0.15763	-8.02	24.00	Pass
138	5690 For U-NII-3	0.004193	-23.77	30.00	Pass
155	5775	7.396	8.69	30.00	Pass

Note:

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

- $11\text{dBm} + 10\log(85.36) = 30.31\text{ dBm} > 24\text{dBm}$
- $11\text{dBm} + 10\log(85.43) = 30.32\text{ dBm} > 24\text{dBm}$
- $11\text{dBm} + 10\log(85.21) = 30.30\text{ dBm} > 24\text{dBm}$
- $11\text{dBm} + 10\log(5725.00 - 5652.56) = 29.60\text{ dBm} > 24\text{dBm}$.

For Reference only-Power meter value

The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
138	5690	0.161823	-7.91

26dB Bandwidth:
802.11a

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
36	5180	22.70
40	5200	22.62
48	5240	22.57
52	5260	22.63
60	5300	22.39
64	5320	22.68
100	5500	22.76
116	5580	22.61
120	5600	22.80
124	5620	23.00
128	5640	22.48
140	5700	22.36
144	5720 For U-NII-2C	16.71

802.11n (HT20)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
36	5180	22.89
40	5200	23.24
48	5240	22.59
52	5260	22.86
60	5300	22.64
64	5320	23.38
100	5500	23.21
116	5580	22.94
120	5600	23.14
124	5620	23.27
128	5640	23.27
140	5700	24.50
144	5720 For U-NII-2C	16.89

802.11n (HT40)

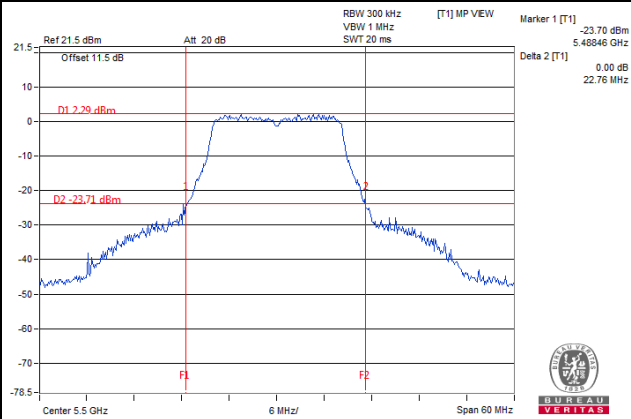
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
38	5190	45.85
46	5230	45.41
54	5270	44.98
62	5310	46.00
102	5510	45.16
110	5550	45.21
118	5590	45.88
126	5630	45.89
134	5670	46.01
142	5710 For U-NII-2C	37.98

802.11ac (VHT80)

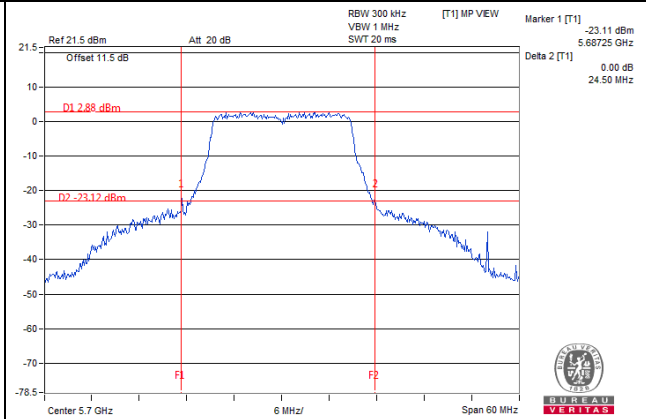
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
42	5210	85.55
58	5290	85.36
106	5530	85.43
122	5610	85.21
138	5690 For U-NII-2C	77.15

Spectrum Plot of Worst Value

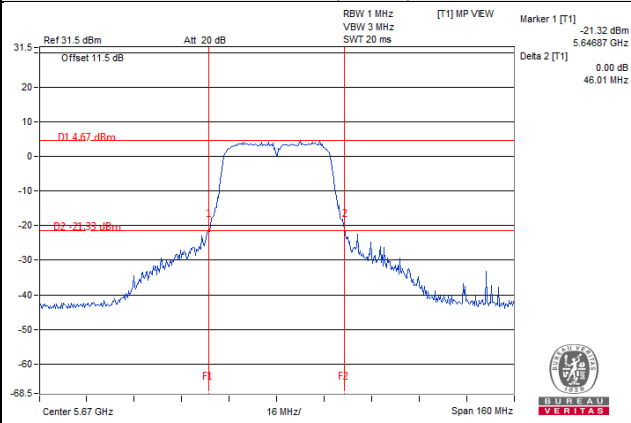
802.11a



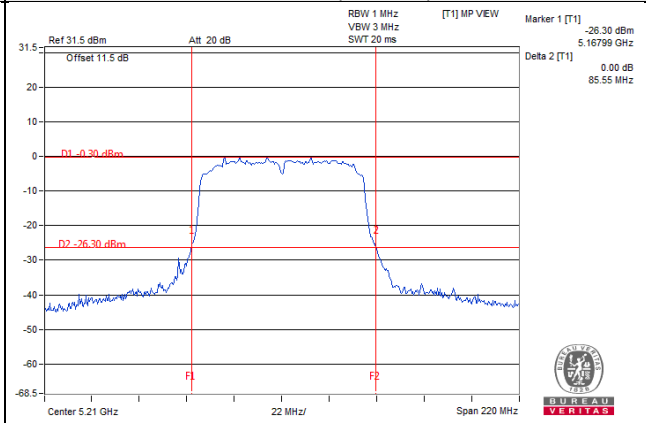
802.11n (HT20)



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	11.912	10.76
5470~5725	11.376	10.56

Note: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (HT20)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	11.298	10.53
5470~5725	11.561	10.63

Note: Manufacturer provides Transmit Power Control description to meet this requirement.

802.11n (HT40)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	9.057	9.57
5470~5725	9.528	9.79

Note: Manufacturer provides Transmit Power Control description to meet this requirement.

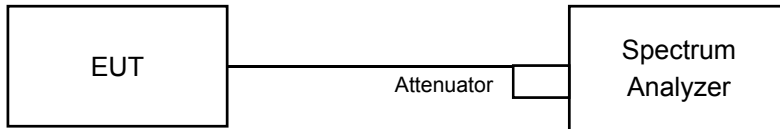
802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	6.383	8.05
5470~5725	6.871	8.37

Note: Manufacturer provides Transmit Power Control description to meet this requirement.

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

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.04
40	5200	17.04
48	5240	17.04
52	5260	17.16
60	5300	17.16
64	5320	17.16
100	5500	17.04
116	5580	17.16
120	5600	17.16
124	5620	17.16
128	5640	17.16
140	5700	17.16
144	5720 For U-NII-2C	13.40
144	5720 For U-NII-3	3.28
149	5745	17.16
157	5785	17.16
165	5825	17.16

802.11n (HT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.12
40	5200	18.12
48	5240	18.24
52	5260	18.24
60	5300	18.12
64	5320	18.12
100	5500	18.12
116	5580	18.12
120	5600	18.12
124	5620	18.24
128	5640	18.12
140	5700	18.24
144	5720 For U-NII-2C	13.88
144	5720 For U-NII-3	3.88
149	5745	18.12
157	5785	18.12
165	5825	18.12

802.11n (HT40)

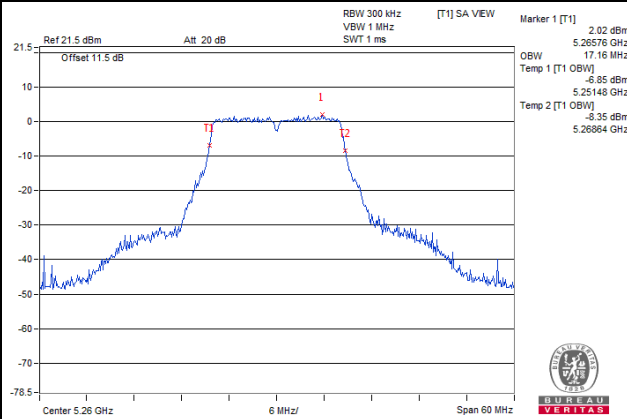
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	36.60
46	5230	36.48
54	5270	36.72
62	5310	36.72
102	5510	36.72
110	5550	36.60
118	5590	36.72
126	5630	36.72
134	5670	36.72
142	5710 For U-NII-2C	33.36
142	5710 For U-NII-3	3.36
151	5755	36.60
159	5795	36.60

802.11ac (VHT80)

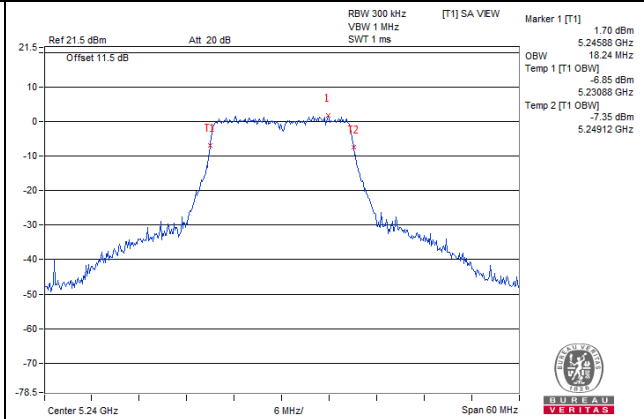
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	74.64
58	5290	74.88
106	5530	74.88
122	5610	74.88
138	5690 For U-NII-2C	72.44
138	5690 For U-NII-3	2.44
155	5775	74.88

Spectrum Plot of Worst Value

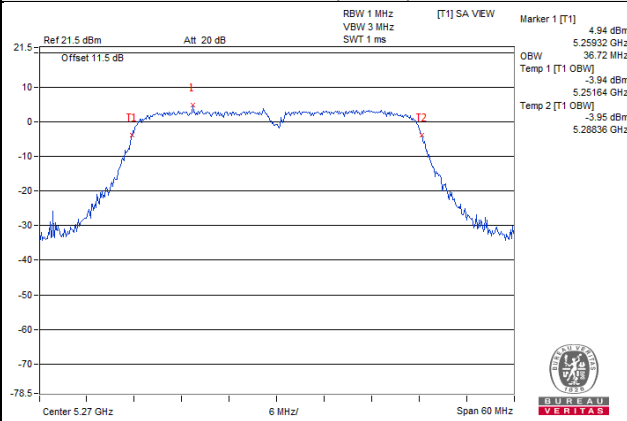
802.11a



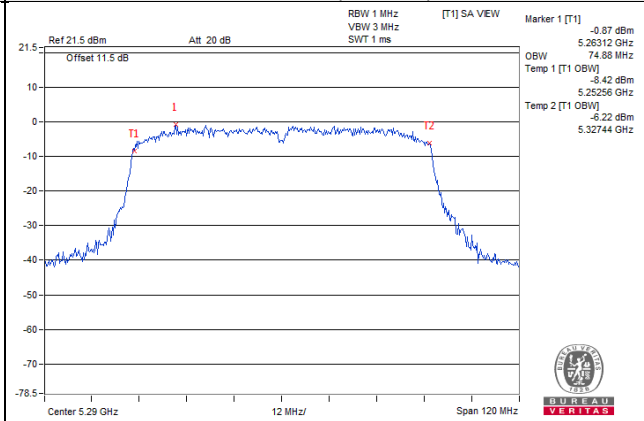
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

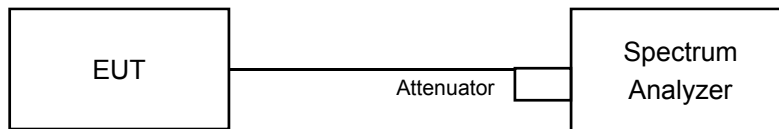


4.5 Peak Power Spectral Density Measurement

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, U-NII-2C band:

Duty cycle of test signal is < 98%

Using method SA-2

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

For U-NII-3 band:

Duty cycle of test signal is < 98%

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

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, U-NII-2A, U-NII-2C 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	-4.25	0.75	-3.50	11	Pass
40	5200	-3.58	0.75	-2.83	11	Pass
48	5240	-3.22	0.75	-2.47	11	Pass
52	5260	-3.27	0.75	-2.52	11	Pass
60	5300	-3.33	0.75	-2.58	11	Pass
64	5320	-2.56	0.75	-1.81	11	Pass
100	5500	-3.84	0.75	-3.09	11	Pass
116	5580	-3.29	0.75	-2.54	11	Pass
120	5600	-3.40	0.75	-2.65	11	Pass
124	5620	-3.10	0.75	-2.35	11	Pass
128	5640	-3.38	0.75	-2.63	11	Pass
140	5700	-2.31	0.75	-1.56	11	Pass
144	5720 For U-NII-2C	-2.64	0.75	-1.89	11	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	-4.63	0.67	-3.96	11	Pass
40	5200	-3.68	0.67	-3.01	11	Pass
48	5240	-3.34	0.67	-2.67	11	Pass
52	5260	-3.36	0.67	-2.69	11	Pass
60	5300	-3.85	0.67	-3.18	11	Pass
64	5320	-3.15	0.67	-2.48	11	Pass
100	5500	-3.44	0.67	-2.77	11	Pass
116	5580	-3.96	0.67	-3.29	11	Pass
120	5600	-3.82	0.67	-3.15	11	Pass
124	5620	-3.60	0.67	-2.93	11	Pass
128	5640	-3.47	0.67	-2.80	11	Pass
140	5700	-2.88	0.67	-2.21	11	Pass
144	5720 For U-NII-2C	-2.32	0.67	-1.65	11	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	-8.91	1.24	-7.67	11	Pass
46	5230	-8.38	1.24	-7.14	11	Pass
54	5270	-8.00	1.24	-6.76	11	Pass
62	5310	-8.50	1.24	-7.26	11	Pass
102	5510	-8.23	1.24	-6.99	11	Pass
110	5550	-8.20	1.24	-6.96	11	Pass
118	5590	-8.22	1.24	-6.98	11	Pass
126	5630	-8.63	1.24	-7.39	11	Pass
134	5670	-8.33	1.24	-7.09	11	Pass
142	5710 For U-NII-2C	-8.09	1.24	-6.85	11	Pass

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

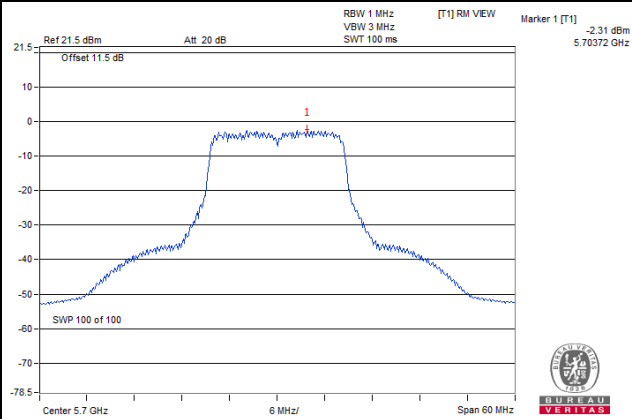
802.11ac (VHT80)

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	-13.58	2.58	-11.00	11	Pass
58	5290	-14.26	2.58	-11.68	11	Pass
106	5530	-13.73	2.58	-11.15	11	Pass
122	5610	-13.78	2.58	-11.20	11	Pass
138	5690 For U-NII-2C	-13.13	2.58	-10.55	11	Pass

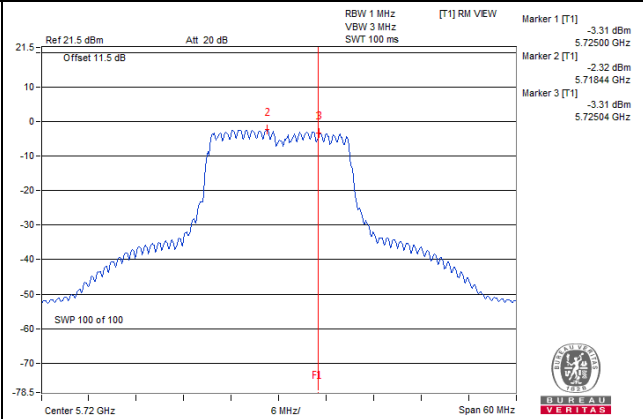
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

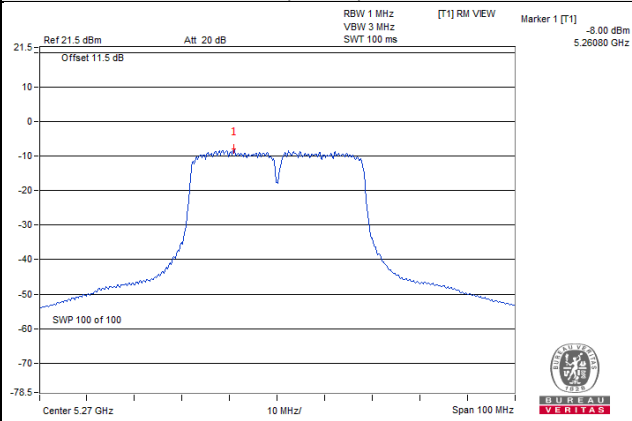
802.11a / CH 140



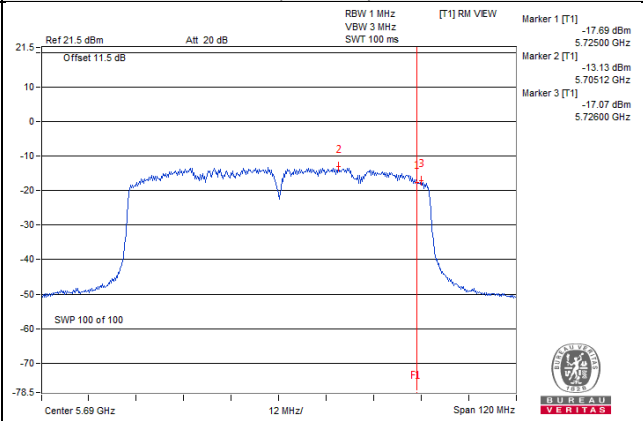
802.11n (HT20) / CH 144



802.11n (HT40) / CH 54



802.11ac (VHT80) / CH 138



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	-10.92	-8.70	0.75	-7.95	30	Pass
149	5745	-12.85	-10.63	0.75	-9.88	30	Pass
157	5785	-12.55	-10.33	0.75	-9.58	30	Pass
165	5825	-13.09	-10.87	0.75	-10.12	30	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	-12.41	-10.19	0.67	-9.52	30	Pass
149	5745	-12.88	-10.66	0.67	-9.99	30	Pass
157	5785	-12.52	-10.30	0.67	-9.63	30	Pass
165	5825	-13.57	-11.35	0.67	-10.68	30	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	-17.74	-15.52	1.24	-14.28	30	Pass
151	5755	-18.12	-15.90	1.24	-14.66	30	Pass
159	5795	-17.81	-15.59	1.24	-14.35	30	Pass

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

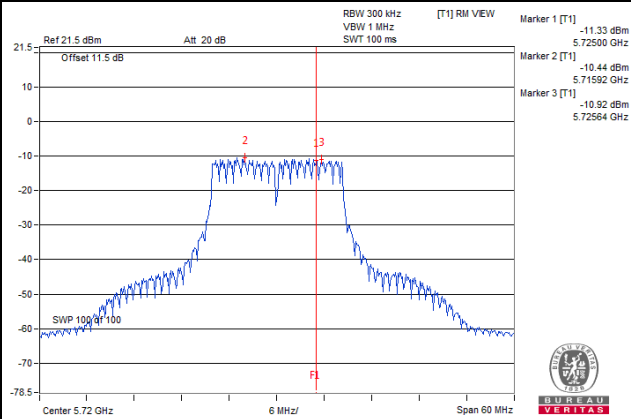
802.11ac (VHT80)

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	-26.47	-24.25	2.58	-21.67	30	Pass
155	5775	-22.64	-20.42	2.58	-17.84	30	Pass

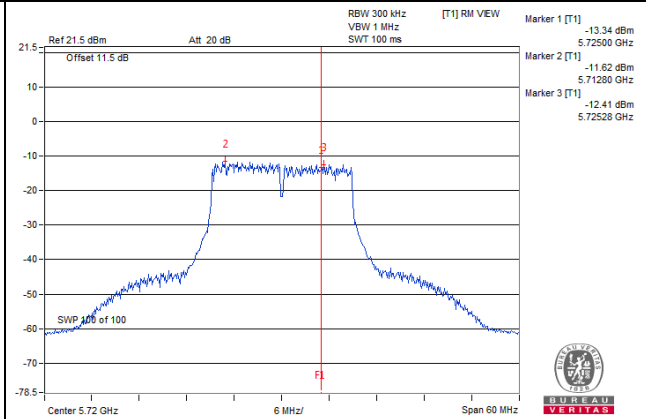
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

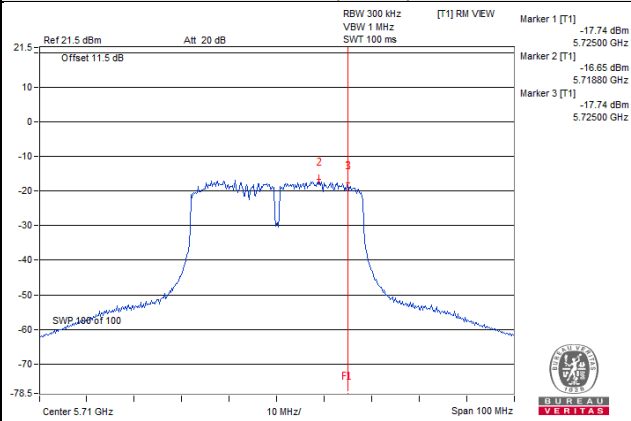
802.11a



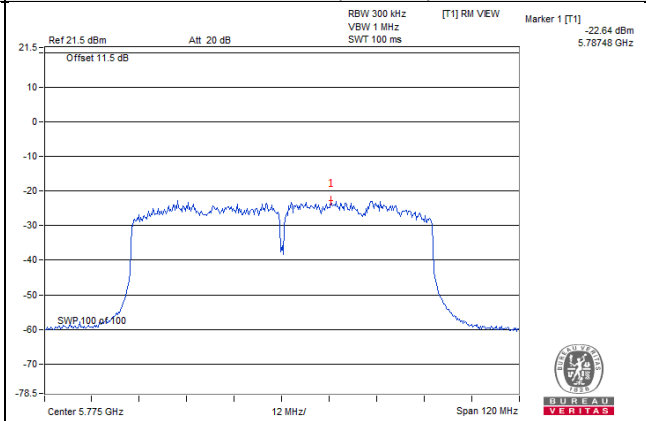
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

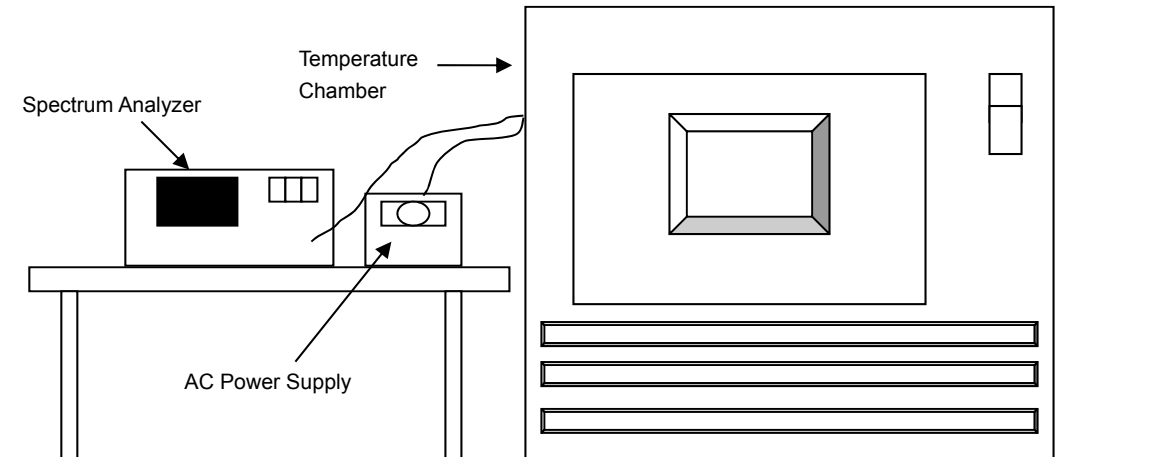


4.6 Frequency Stability

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

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100039	Jun. 11, 2018	Jun. 10, 2019
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 04, 2018	Jun. 03, 2019
Digital Multimeter Fluke	87-III	70360742	Jun. 29, 2018	Jun. 28, 2019
AC Power Supply Exttech	CFW-105	E000603	NA	NA

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 d with the temperature chamber set to the next desire 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. ()	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
60	120	5179.9958	PASS	5179.9952	PASS	5179.9976	PASS	5179.9944	PASS
50	120	5179.9847	PASS	5179.9869	PASS	5179.9845	PASS	5179.9864	PASS
40	120	5179.9772	PASS	5179.9759	PASS	5179.9761	PASS	5179.9749	PASS
30	120	5179.9822	PASS	5179.9856	PASS	5179.9809	PASS	5179.9834	PASS
20	120	5179.9775	PASS	5179.9751	PASS	5179.9749	PASS	5179.973	PASS
10	120	5179.9775	PASS	5179.9737	PASS	5179.9772	PASS	5179.9767	PASS
0	120	5180.016	PASS	5180.0122	PASS	5180.0146	PASS	5180.0123	PASS
-10	120	5180.0052	PASS	5180.0075	PASS	5180.0057	PASS	5180.0063	PASS
-20	120	5179.9773	PASS	5179.9799	PASS	5179.9789	PASS	5179.9785	PASS

Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. ()	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	5179.9785	PASS	5179.9746	PASS	5179.9755	PASS	5179.9727	PASS
	120	5179.9775	PASS	5179.9751	PASS	5179.9749	PASS	5179.973	PASS
	102	5179.9776	PASS	5179.9744	PASS	5179.975	PASS	5179.9732	PASS

802.11n (HT40)

Frequency Stability Versus Temp.									
Operating Frequency: 5190MHz									
Temp. ()	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
60	120	5190.0137	PASS	5190.0155	PASS	5190.0173	PASS	5190.0166	PASS
50	120	5190.0028	PASS	5190.004	PASS	5190.0019	PASS	5190.005	PASS
40	120	5190.001	PASS	5189.9998	PASS	5190.0019	PASS	5190.0027	PASS
30	120	5190.0261	PASS	5190.0217	PASS	5190.0231	PASS	5190.0215	PASS
20	120	5189.9976	PASS	5190	PASS	5189.9994	PASS	5190.0016	PASS
10	120	5190.0048	PASS	5190.0021	PASS	5190.0039	PASS	5190.0026	PASS
0	120	5189.9744	PASS	5189.976	PASS	5189.9753	PASS	5189.9781	PASS
-10	120	5190.001	PASS	5190.0014	PASS	5190.0011	PASS	5190.0028	PASS
-20	120	5189.9781	PASS	5189.9789	PASS	5189.979	PASS	5189.9761	PASS

Frequency Stability Versus Voltage									
Operating Frequency: 5190MHz									
Temp. ()	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	5189.9979	PASS	5190.0005	PASS	5189.9992	PASS	5190.0021	PASS
	120	5189.9976	PASS	5190	PASS	5189.9994	PASS	5190.0016	PASS
	102	5189.9969	PASS	5189.9999	PASS	5189.9999	PASS	5190.0018	PASS

802.11ac (VHT80)

Frequency Stability Versus Temp.									
Operating Frequency: 5210MHz									
Temp. ()	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
60	120	5210.0067	PASS	5210.0046	PASS	5210.0078	PASS	5210.0059	PASS
50	120	5209.9825	PASS	5209.984	PASS	5209.98	PASS	5209.98	PASS
40	120	5209.9868	PASS	5209.9907	PASS	5209.9894	PASS	5209.989	PASS
30	120	5210.0088	PASS	5210.0127	PASS	5210.0087	PASS	5210.0104	PASS
20	120	5209.9808	PASS	5209.9817	PASS	5209.9798	PASS	5209.981	PASS
10	120	5209.9843	PASS	5209.9849	PASS	5209.9847	PASS	5209.9849	PASS
0	120	5210.0188	PASS	5210.0157	PASS	5210.0168	PASS	5210.0187	PASS
-10	120	5209.9884	PASS	5209.9871	PASS	5209.9842	PASS	5209.989	PASS
-20	120	5209.9818	PASS	5209.9818	PASS	5209.9812	PASS	5209.9836	PASS

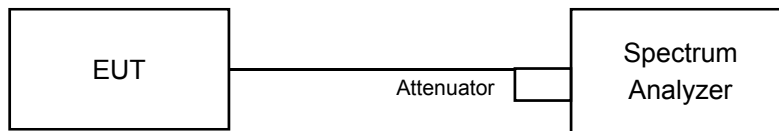
Frequency Stability Versus Voltage									
Operating Frequency: 5210MHz									
Temp. ()	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5209.9801	PASS	5209.982	PASS	5209.9806	PASS	5209.9804	PASS
	120	5209.9808	PASS	5209.9817	PASS	5209.9798	PASS	5209.981	PASS
	102	5209.9807	PASS	5209.982	PASS	5209.9798	PASS	5209.9802	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	3.21 ^{Note*}	0.5	Pass
149	5745	16.44	0.5	Pass
157	5785	16.46	0.5	Pass
165	5825	16.46	0.5	Pass

Note*: 3.21MHz= 5711.78MHz + 16.43MHz-5725MHz

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 For U-NII-3	3.82 ^{Note*}	0.5	Pass
149	5745	17.65	0.5	Pass
157	5785	17.65	0.5	Pass
165	5825	17.65	0.5	Pass

Note*: 3.82MHz= 5711.18MHz + 17.64MHz-5725MHz

802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
142	5710 For U-NII-3	2.67 ^{Note*}	0.5	Pass
151	5755	35.35	0.5	Pass
159	5795	35.32	0.5	Pass

Note*: 2.67MHz= 5692.32MHz + 35.35MHz-5725MHz

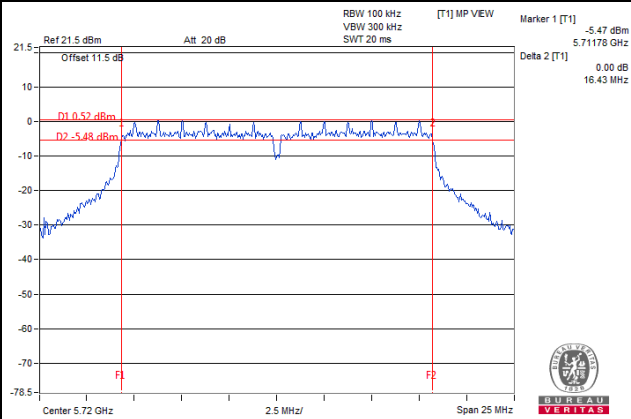
802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
138	5690 For U-NII-3	2.65 ^{Note*}	0.5	Pass
155	5775	75.31	0.5	Pass

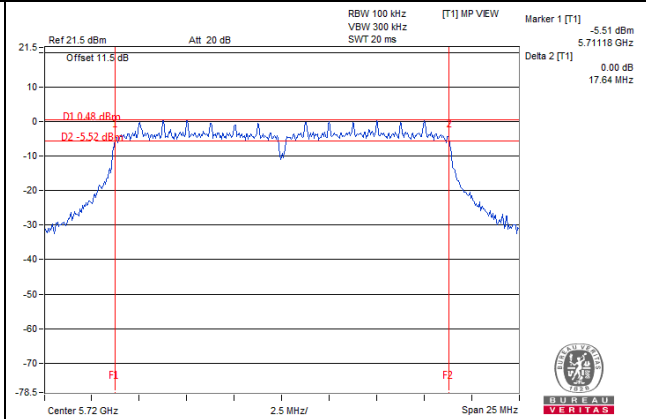
Note*: 2.65MHz= 5652.34MHz + 75.31MHz-5725MHz

Spectrum Plot of Worst Value

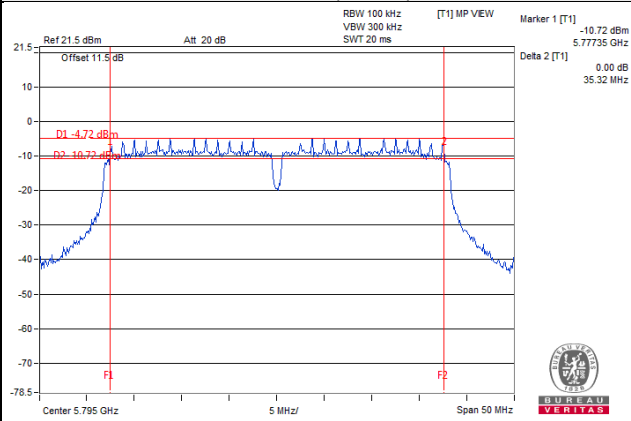
802.11a



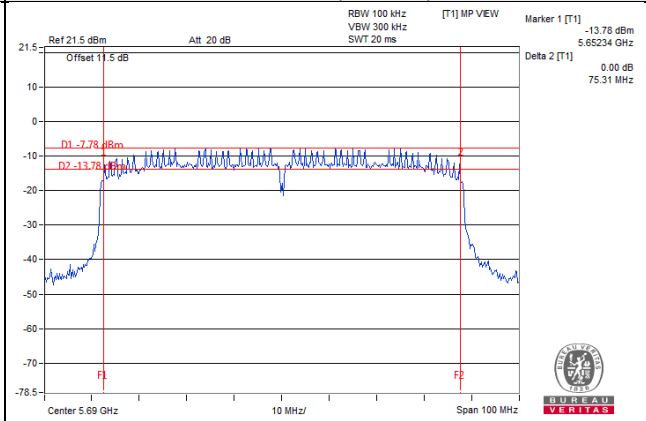
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

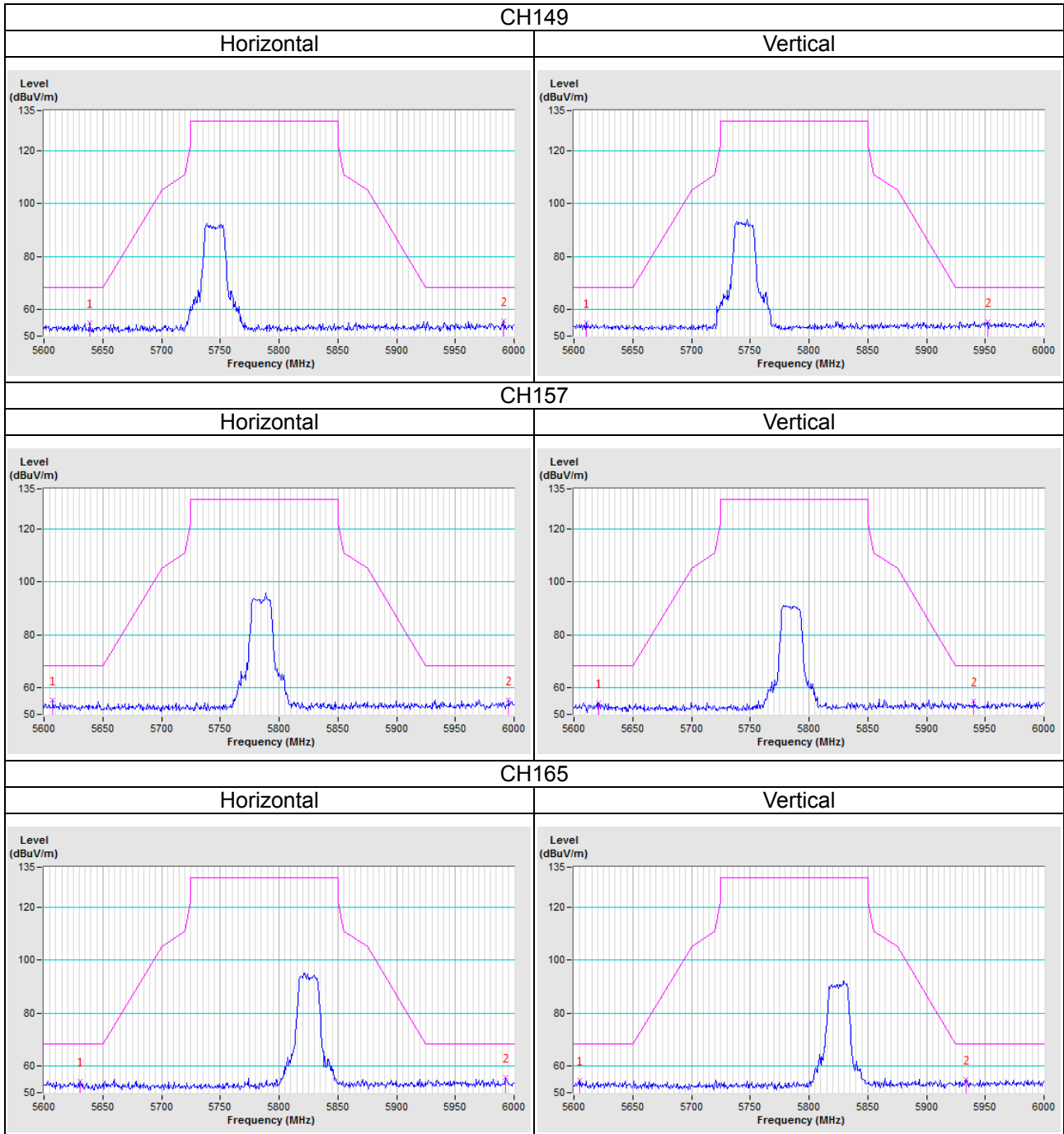


5 Pictures of Test Arrangements

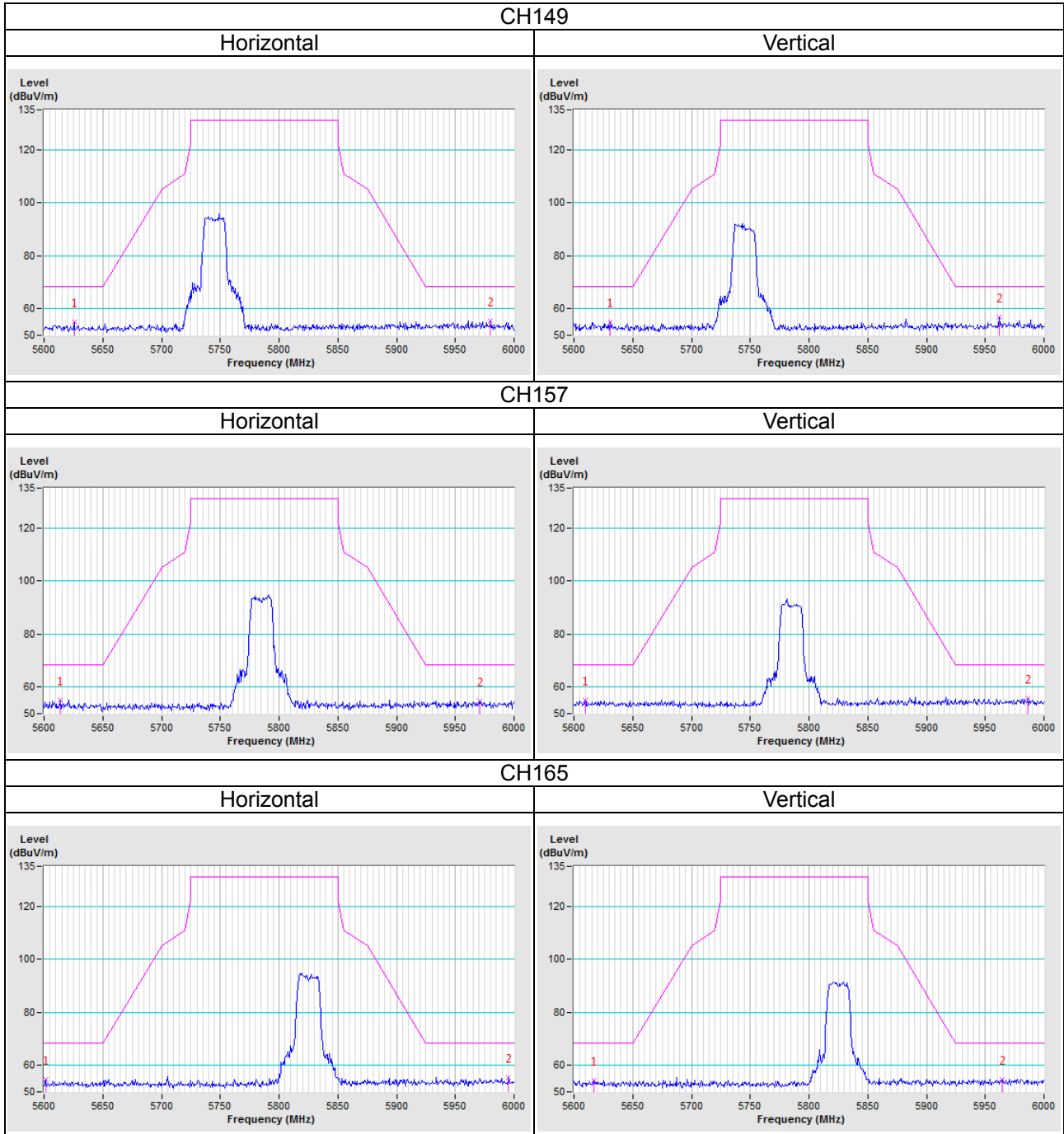
Please refer to the attached file (Test Setup Photo).

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

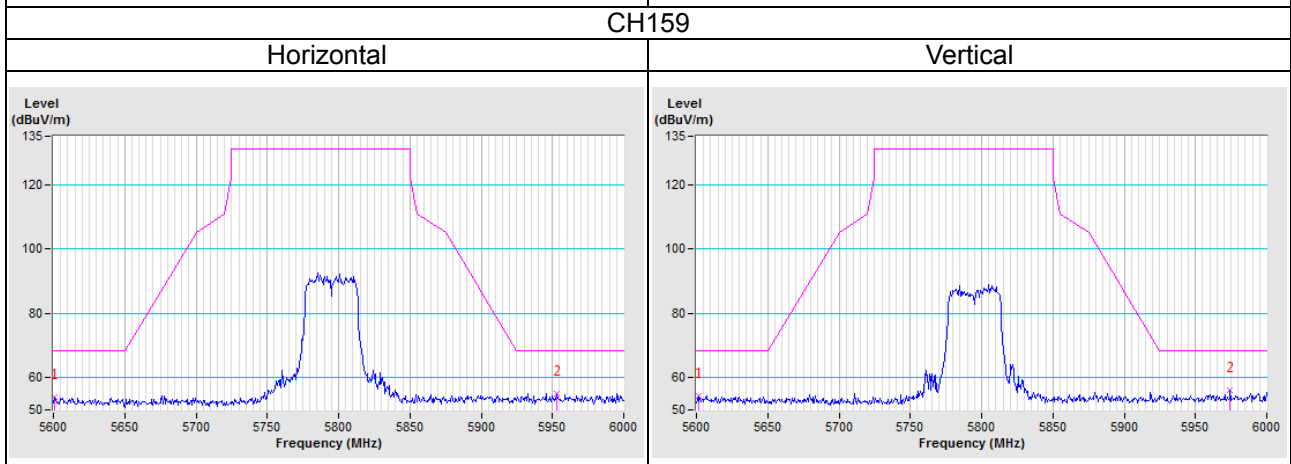
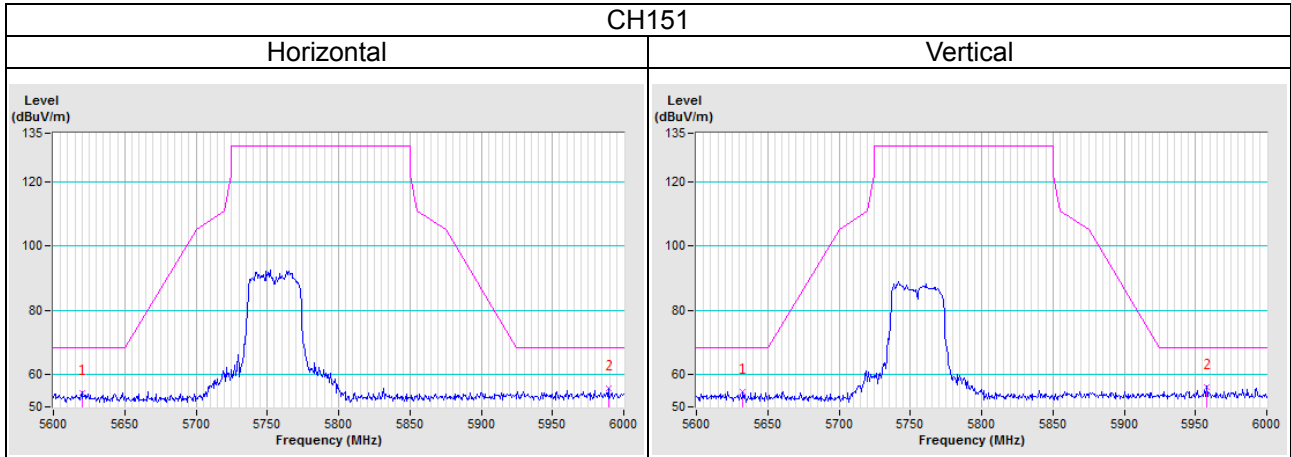
802.11a



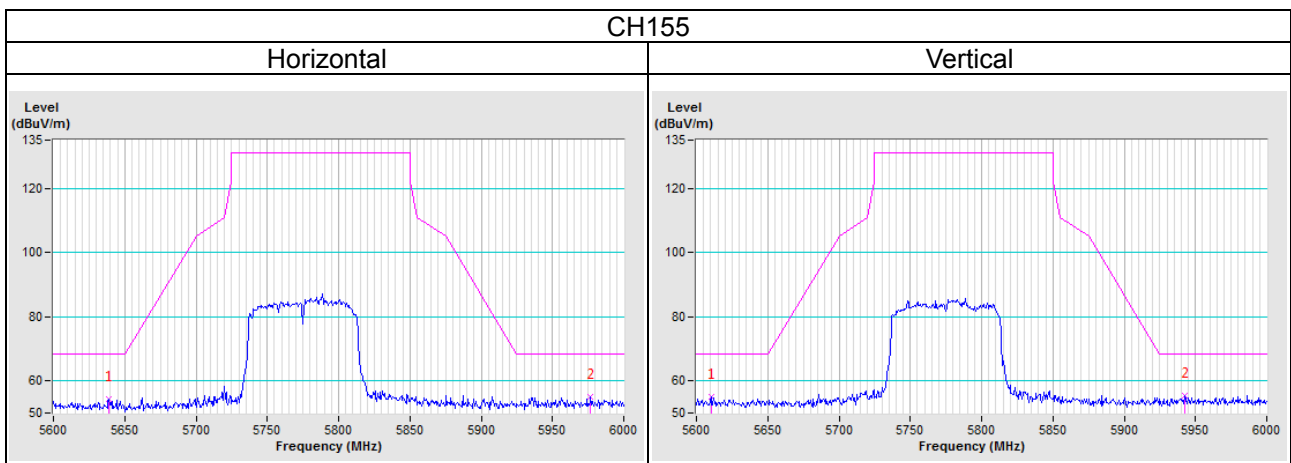
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



Appendix – Information of the Testing Laboratories

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

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

Lin Kou EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

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

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