

FCC Test Report

Report No.: RF190904C02-1

FCC ID: M72-CCX6X7X

Test Model: CCX 700

Series Model: CCX 600 (Refer to item 3.1 for more details)

Received Date: Sep. 04, 2019

Test Date: Sep. 19 ~ Oct. 21, 2019

Issued Date: Nov. 04, 2019

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
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**FCC Registration /
Designation Number:** 788550 / TW0003



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Release Control Record

Issue No.	Description	Date Issued
RF190904C02-1	Original release.	Nov. 04, 2019

1 Certificate of Conformity

Product: Poly Executive

Brand: Poly

Test Model: CCX 700

Series Model: CCX 600 (Refer to item 3.1 for more details)

Sample Status: Engineering sample

Applicant: Polycom Inc.

Test Date: Sep. 19 ~ Oct. 21, 2019

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

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

Prepared by :  , **Date:** Nov. 04, 2019
Polly Chien / Specialist

Approved by :  , **Date:** Nov. 04, 2019
Bruce Chen / Senior Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -10.34dB at 0.15000MHz.
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 -0.3dB at 5150.00MHz.
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.
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	Antenna connector is IPEX MHF connector not a standard connector.

*For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOB test plots were recorded in Annex A. Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) (\pm)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.94 dB
Radiated Emissions up to 1 GHz	9kHz ~ 30MHz	3.04 dB
	30MHz ~ 200MHz	3.59 dB
	200MHz ~ 1000MHz	3.60 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	Poly Executive
Brand	Poly
Test Model	CCX 700
Series Model	CCX 600
Model Difference	Refer to Note for more details
Sample Status	Engineering sample
Power Supply Rating	48Vdc (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: 21.928mW 5260~5320MHz: 20.559mW 5500~5720MHz: 16.255mW 5745~5825MHz: 12.677mW
Antenna Type	Refer to note
Antenna Connector	Refer to note
Accessory Device	Refer to note
Cable Supplied	Refer to note

Note:

1. All models are listed as below.

Model	Optional functions
CCX 700	with Camera
CCX 600	without Camera

* After the pretesting, the CCX 700 was found to be the worst case and chosen to be the final test.

2. 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)

3. The EUT uses the following devices.

Item	Brand	Model	Specification	Remark
Adapter 1	FSP	FSP025-DINANS2	I/P: 100-240Vac, 50/60Hz, 0.9A O/P: 48Vdc, 0.52A MAX Cable: 1.8m power cable with 2 cores	Accessory
Adapter 2	Polycom	FSP025-DINANS	I/P: 100-240Vac, 50/60Hz, 0.9A O/P: 48Vdc, 0.52A MAX Cable: 1.8m power cable with 2 cores	Accessory
Network Cable (RJ45)	NA	NA	1.8m non-shielded RJ45 cable without core	Accessory

4. The following antenna was provided to the EUT.

Ant. Type	PCB		
Connector Type	IPEX MHF		
Antenna Gain(dBi)			
2400~2500MHz	5150~5350MHz	5470~5720MHz	5725~5850MHz
2.91	1.91	1.47	0.94

5. 2.4GHz & 5GHz & BT technology cannot transmit at same time.

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	
A	√	√	√	√	EUT power from adapter 1
B	-	√	√	-	EUT power from adapter 2

Where RE \geq 1G: Radiated Emission above 1GHz & Bandedge Measurement RE<1G: Radiated Emission below 1GHz

PLC: Power Line Conducted Emission

APCM: Antenna Port Conducted Measurement

Note:

1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane**.
2. "-" means no effect.

Radiated Emission Test (Above 1GHz):

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Data Rate (Mbps)
A	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
A	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
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
	802.11n (HT20)		100 to 144	100, 116, 140, 144	OFDM	6.5
	802.11n (HT40)		102 to 142	102, 110, 134, 142	OFDM	13.5
	802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	29.3
A	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)
A, B	802.11a	5180-5240	36 to 48	40	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)
A, B	802.11a	5180-5240	36 to 48	40	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)
A	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
A	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
A	802.11a	5500-5720	100 to 144	100, 116, 140, 144	OFDM	6.0
	802.11n (HT20)		100 to 144	100, 116, 140, 144	OFDM	6.5
	802.11n (HT40)		102 to 142	102, 110, 134, 142	OFDM	13.5
	802.11ac (VHT80)		106 to 138	106, 122, 138	OFDM	29.3
A	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	22deg. C, 66%RH	48Vdc	Adair Peng
RE<1G	25deg. C, 70%RH	48Vdc	Luis Lee
PLC	25deg. C, 75%RH	48Vdc	Jones Chang
APCM	25deg. C, 60%RH	48Vdc	Jisyong Wang

3.3 Duty Cycle of Test Signal

Duty cycle of test signal is $\geq 98\%$, duty factor is not required.

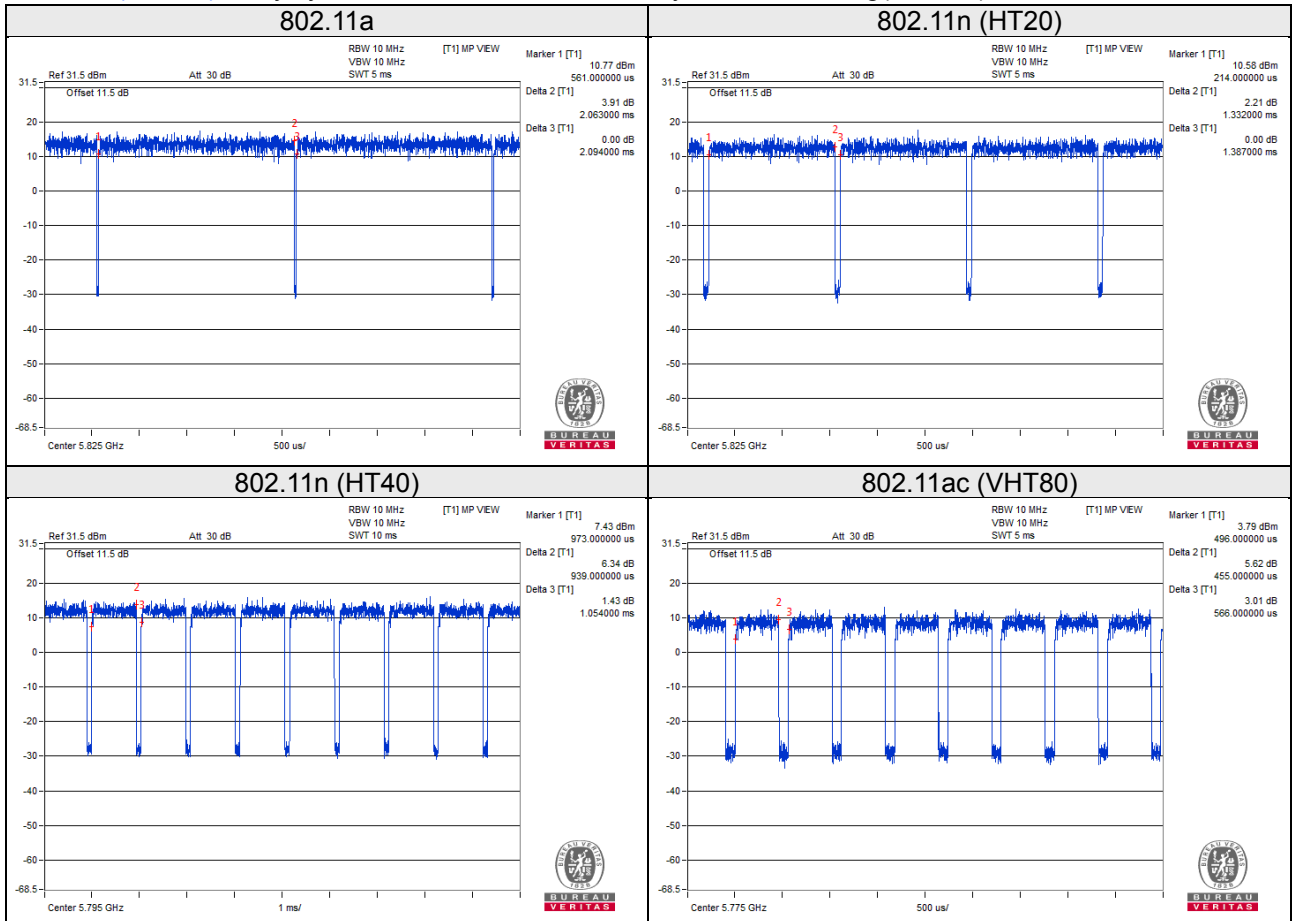
Duty cycle of test signal is $< 98\%$, duty factor is required

802.11a: Duty cycle = $2.063/2.094 = 0.985$

802.11n (HT20): Duty cycle = $1.332/1.387 = 0.960$, Duty factor = $10 * \log(1/0.960) = 0.18$

802.11n (HT40): Duty cycle = $0.939/1.054 = 0.891$, Duty factor = $10 * \log(1/0.891) = 0.50$

802.11ac (VHT80): Duty cycle = $0.455/0.566 = 0.804$, Duty factor = $10 * \log(1/0.804) = 0.95$

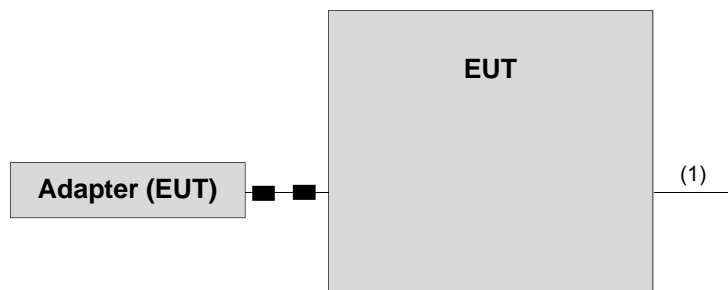


3.4 Description of Support Units

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	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ45, Cat5e	1	1.8	N	0	Accessory of EUT

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards and References

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

Test standard:

FCC Part 15, Subpart E (15.407)

ANSI C63.10:2013

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

References Test Guidance:

KDB 789033 D02 General UNII Test Procedure New Rules v02r01

All test items have been performed as a reference to the above KDB test guidance.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

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

NOTE:

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

Limits of unwanted emission out of the restricted bands

Applicable To		Limit	
789033 D02 General UNII Test Procedure New Rules v02r01		Field Strength at 3m	
		PK: 74 (dBµV/m)	AV: 54 (dBµV/m)
Frequency Band	Applicable To	EIRP Limit	Equivalent Field Strength at 3m
5150~5250 MHz	15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2(dBµV/m)
5250~5350 MHz	15.407(b)(2)		
5470~5725 MHz	15.407(b)(3)		
5725~5850 MHz	<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(dBµV/m) ^{*1} PK: 105.2 (dBµV/m) ^{*2} PK: 110.8(dBµV/m) ^{*3} PK: 122.2 (dBµV/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:

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver KEYSIGHT	N9038A	MY55420137	Apr. 15, 2019	Apr. 14, 2020
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	Jun. 04, 2019	Jun. 03, 2020
BILOG Antenna SCHWARZBECK	VULB9168	9168-160	Nov. 21, 2018	Nov. 20, 2019
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-1169	Nov. 25, 2018	Nov. 24, 2019
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Nov. 25, 2018	Nov. 24, 2019
Loop Antenna TESEQ	HLA 6121	45745	Jul. 01, 2019	Jun. 30, 2020
Preamplifier Agilent (Below 1GHz)	8447D	2944A10638	Jul. 11, 2019	Jul. 10, 2020
Preamplifier Agilent (Above 1GHz)	8449B	3008A02367	Feb. 19, 2019	Feb. 18, 2020
RF signal cable HUBER+SUHNER&EMCI	SUCOFLEX 104 & EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	Jan. 19, 2019	Jan. 18, 2020
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	Jul. 11, 2019	Jul. 10, 2020
RF signal cable Woken	8D-FB	Cable-CH9-01	Jul. 30, 2019	Jul. 29, 2020
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower EMCO	2070/2080	512.835.4684	NA	NA
Turn Table EMCO	2087-2.03	NA	NA	NA
Antenna Tower & Turn BV ADT	AT100	AT93021705	NA	NA
Turn Table BV ADT	TT100	TT93021705	NA	NA
Turn Table Controller BV ADT	SC100	SC93021705	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY55190 004/MY55190007/MY55 210005	Jul. 15, 2019	Jul. 14, 2020
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 9.

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:

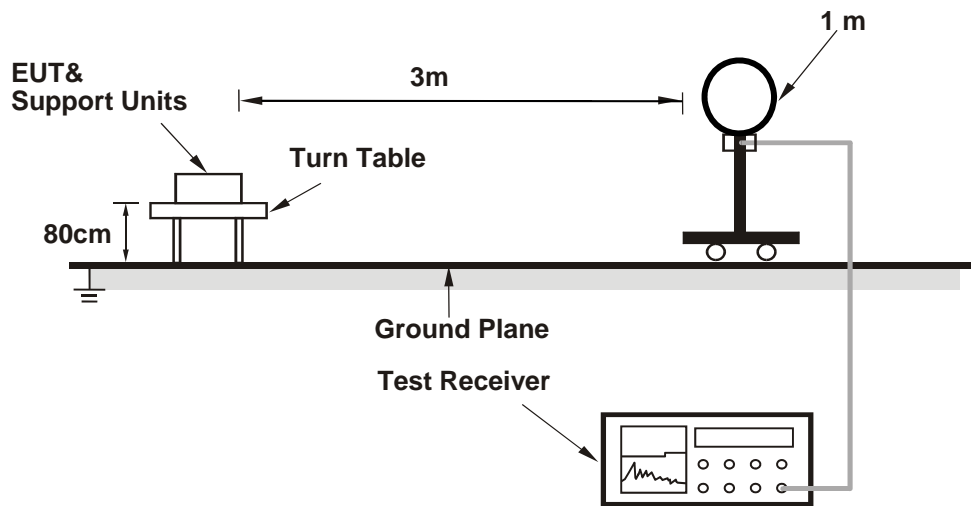
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.
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. (802.11a: RBW = 1MHz, VBW = 1kHz; 802.11n (HT20): RBW = 1MHz, VBW = 1kHz; 802.11n (HT40): RBW = 1MHz, VBW = 3kHz; 11ac (VHT80): RBW = 1MHz, VBW = 10kHz)
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

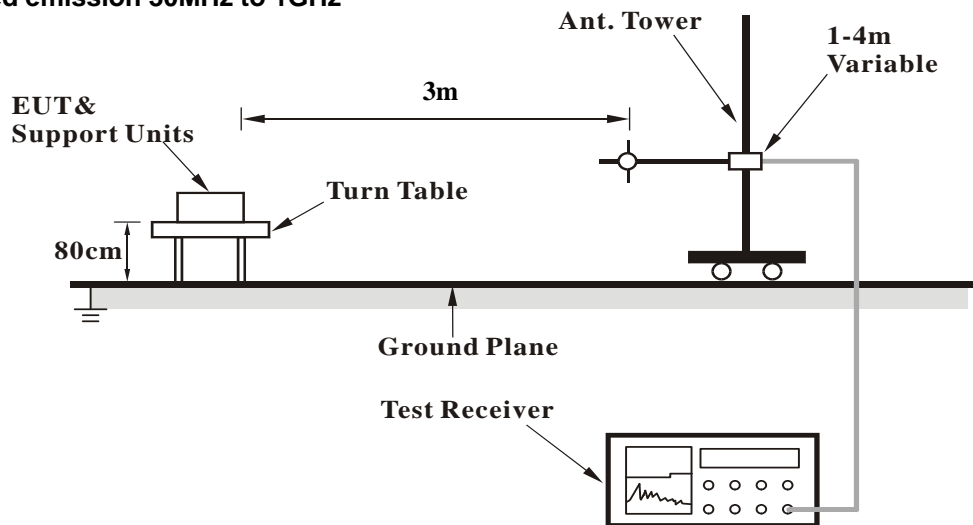
No deviation.

4.1.5 Test Set Up

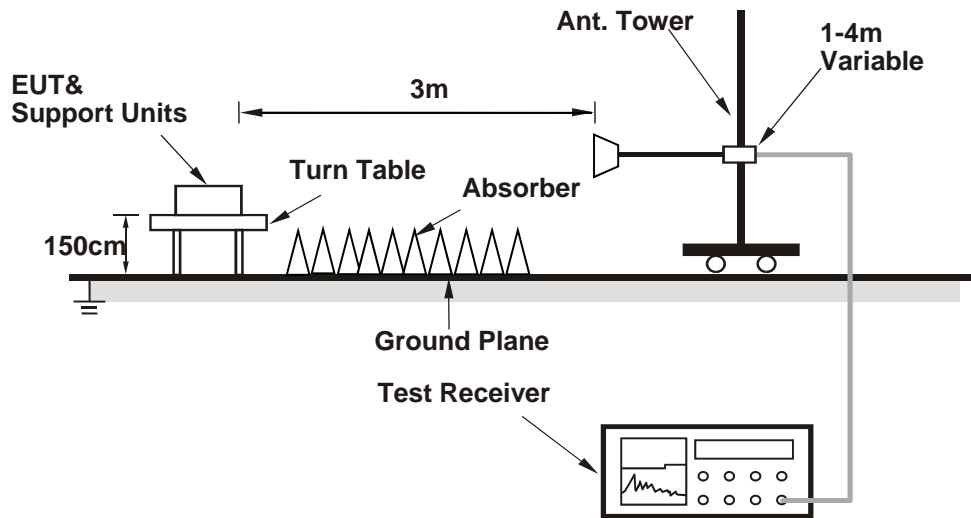
For Radiated emission below 30MHz



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. Placed the EUT on the testing table.
- b. Set the EUT under transmission condition continuously at specific channel frequency.

4.1.7 Test Results

Above 1GHz data:

802.11a

CHANNEL	TX Channel 36	DETECTOR 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	71.2 PK	74.0	-2.8	2.64 H	2	67.1	4.1
2	5150.00	53.7 AV	54.0	-0.3	2.64 H	2	49.6	4.1
3	*5180.00	109.4 PK			2.89 H	2	70.9	38.5
4	*5180.00	100.4 AV			2.89 H	2	61.9	38.5
5	#10360.00	56.3 PK	68.2	-11.9	1.20 H	40	39.8	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	5150.00	69.4 PK	74.0	-4.6	3.10 V	94	65.3	4.1
2	5150.00	51.8 AV	54.0	-2.2	3.10 V	94	47.7	4.1
3	*5180.00	108.5 PK			3.14 V	94	70.0	38.5
4	*5180.00	99.3 AV			3.14 V	94	60.8	38.5
5	#10360.00	56.1 PK	68.2	-12.1	1.84 V	73	39.6	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.
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	109.4 PK			2.60 H	359	71.0	38.4
2	*5200.00	99.8 AV			2.60 H	359	61.4	38.4
3	#10400.00	56.6 PK	68.2	-11.6	1.14 H	37	40.1	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	*5200.00	108.4 PK			3.23 V	96	70.0	38.4
2	*5200.00	98.9 AV			3.23 V	96	60.5	38.4
3	#10400.00	56.6 PK	68.2	-11.6	1.77 V	74	40.1	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.
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	108.0 PK			2.58 H	357	69.7	38.3
2	*5240.00	98.5 AV			2.58 H	357	60.2	38.3
3	5350.00	53.5 PK	74.0	-20.5	2.72 H	353	49.6	3.9
4	5350.00	40.1 AV	54.0	-13.9	2.72 H	353	36.2	3.9
5	#10480.00	56.5 PK	68.2	-11.7	1.04 H	33	40.2	16.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	107.4 PK			3.13 V	96	69.1	38.3
2	*5240.00	97.7 AV			3.13 V	96	59.4	38.3
3	5350.00	52.0 PK	74.0	-22.0	3.11 V	96	48.1	3.9
4	5350.00	38.6 AV	54.0	-15.4	3.11 V	96	34.7	3.9
5	#10480.00	56.3 PK	68.2	-11.9	1.73 V	62	40.0	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 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	53.6 PK	74.0	-20.4	3.00 H	3	49.5	4.1
2	5150.00	40.4 AV	54.0	-13.6	3.00 H	3	36.3	4.1
3	*5260.00	108.3 PK			2.98 H	357	70.1	38.2
4	*5260.00	98.9 AV			2.98 H	357	60.7	38.2
5	#10520.00	56.4 PK	68.2	-11.8	1.02 H	47	40.1	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	53.8 PK	74.0	-20.2	3.23 V	97	49.7	4.1
2	5150.00	40.0 AV	54.0	-14.0	3.23 V	97	35.9	4.1
3	*5260.00	107.7 PK			3.11 V	95	69.5	38.2
4	*5260.00	98.1 AV			3.11 V	95	59.9	38.2
5	#10520.00	56.5 PK	68.2	-11.7	1.85 V	65	40.2	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	108.0 PK			3.06 H	354	69.9	38.1
2	*5300.00	98.6 AV			3.06 H	354	60.5	38.1
3	10600.00	56.1 PK	74.0	-17.9	1.20 H	43	39.6	16.5
4	10600.00	42.7 AV	54.0	-11.3	1.20 H	43	26.2	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	*5300.00	107.3 PK			3.13 V	92	69.2	38.1
2	*5300.00	97.8 AV			3.13 V	92	59.7	38.1
3	10600.00	56.3 PK	74.0	-17.7	1.71 V	68	39.8	16.5
4	10600.00	42.7 AV	54.0	-11.3	1.71 V	68	26.2	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.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	108.5 PK			3.05 H	354	70.3	38.2
2	*5320.00	98.7 AV			3.05 H	354	60.5	38.2
3	5350.00	62.0 PK	74.0	-12.0	3.06 H	351	58.1	3.9
4	5350.00	46.8 AV	54.0	-7.2	3.06 H	351	42.9	3.9
5	10640.00	56.9 PK	74.0	-17.1	1.11 H	45	40.2	16.7
6	10640.00	42.6 AV	54.0	-11.4	1.11 H	45	25.9	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	*5320.00	107.6 PK			3.17 V	95	69.4	38.2
2	*5320.00	97.9 AV			3.17 V	95	59.7	38.2
3	5350.00	60.2 PK	74.0	-13.8	3.16 V	94	56.3	3.9
4	5350.00	44.7 AV	54.0	-9.3	3.16 V	94	40.8	3.9
5	10640.00	56.2 PK	74.0	-17.8	1.69 V	72	39.5	16.7
6	10640.00	42.8 AV	54.0	-11.2	1.69 V	72	26.1	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 100	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	58.5 PK	74.0	-15.5	2.88 H	359	54.1	4.4
2	5460.00	43.4 AV	54.0	-10.6	2.88 H	359	39.0	4.4
3	#5470.00	67.4 PK	68.2	-0.8	2.93 H	356	62.9	4.5
4	*5500.00	105.4 PK			3.36 H	356	66.6	38.8
5	*5500.00	96.0 AV			3.36 H	356	57.2	38.8
6	11000.00	58.0 PK	74.0	-16.0	1.03 H	47	39.6	18.4
7	11000.00	44.4 AV	54.0	-9.6	1.03 H	47	26.0	18.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.8 PK	74.0	-17.2	3.09 V	92	52.4	4.4
2	5460.00	41.9 AV	54.0	-12.1	3.09 V	92	37.5	4.4
3	#5470.00	65.1 PK	68.2	-3.1	3.11 V	96	60.6	4.5
4	*5500.00	104.7 PK			3.09 V	92	65.9	38.8
5	*5500.00	95.0 AV			3.09 V	92	56.2	38.8
6	11000.00	58.5 PK	74.0	-15.5	1.79 V	69	40.1	18.4
7	11000.00	44.4 AV	54.0	-9.6	1.79 V	69	26.0	18.4

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	104.0 PK			3.03 H	203	64.3	39.7
2	*5580.00	92.9 AV			3.03 H	203	53.2	39.7
3	11160.00	60.4 PK	74.0	-13.6	1.90 H	180	41.2	19.2
4	11160.00	46.4 AV	54.0	-7.6	1.90 H	180	27.2	19.2

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	*5580.00	106.1 PK			2.31 V	62	66.4	39.7
2	*5580.00	95.0 AV			2.31 V	62	55.3	39.7
3	11160.00	60.7 PK	74.0	-13.3	1.81 V	190	41.5	19.2
4	11160.00	46.7 AV	54.0	-7.3	1.81 V	190	27.5	19.2

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 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	102.5 PK			2.99 H	233	62.7	39.8
2	*5700.00	91.8 AV			2.99 H	233	52.0	39.8
3	#5725.00	56.1 PK	68.2	-12.1	3.12 H	229	51.4	4.7
4	11400.00	60.6 PK	74.0	-13.4	2.01 H	191	41.5	19.1
5	11400.00	46.6 AV	54.0	-7.4	2.01 H	191	27.5	19.1

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	105.0 PK			2.26 V	60	65.2	39.8
2	*5700.00	93.8 AV			2.26 V	60	54.0	39.8
3	#5725.00	57.0 PK	68.2	-11.2	2.39 V	66	52.3	4.7
4	11400.00	60.8 PK	74.0	-13.2	1.85 V	187	41.7	19.1
5	11400.00	47.0 AV	54.0	-7.0	1.85 V	187	27.9	19.1

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.3 PK	74.0	-17.7	2.77 H	236	51.8	4.5
2	5460.00	42.8 AV	54.0	-11.2	2.77 H	236	38.3	4.5
3	#5470.00	56.5 PK	68.2	-11.7	2.88 H	221	52.0	4.5
4	*5720.00	102.7 PK			2.72 H	228	62.7	40.0
5	*5720.00	93.2 AV			2.72 H	228	53.2	40.0
6	#5825.00	56.7 PK	68.2	-11.5	2.69 H	229	51.5	5.2
7	11440.00	61.0 PK	74.0	-13.0	1.79 H	181	41.8	19.2
8	11440.00	46.9 AV	54.0	-7.1	1.79 H	181	27.7	19.2
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	56.6 PK	74.0	-17.4	1.57 V	60	52.1	4.5
2	5460.00	43.1 AV	54.0	-10.9	1.57 V	60	38.6	4.5
3	#5470.00	56.7 PK	68.2	-11.5	1.61 V	51	52.2	4.5
4	*5720.00	103.7 PK			1.52 V	62	63.7	40.0
5	*5720.00	94.4 AV			1.52 V	62	54.4	40.0
6	#5825.00	56.8 PK	68.2	-11.4	1.63 V	66	51.6	5.2
7	11440.00	61.4 PK	74.0	-12.6	1.93 V	205	42.2	19.2
8	11440.00	47.1 AV	54.0	-6.9	1.93 V	205	27.9	19.2

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5605.60	56.6 PK	68.2	-11.6	1.72 H	155	52.1	4.5
2	*5745.00	101.6 PK			1.72 H	155	61.5	40.1
3	*5745.00	92.1 AV			1.72 H	155	52.0	40.1
4	#5950.40	56.8 PK	68.2	-11.4	1.72 H	155	51.4	5.4
5	11490.00	60.1 PK	74.0	-13.9	1.73 H	199	40.8	19.3
6	11490.00	46.2 AV	54.0	-7.8	1.73 H	199	26.9	19.3
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	#5621.60	56.5 PK	68.2	-11.7	2.11 V	60	52.1	4.4
2	*5745.00	104.5 PK			2.11 V	60	64.4	40.1
3	*5745.00	95.0 AV			2.11 V	60	54.9	40.1
4	#5925.60	57.3 PK	68.2	-10.9	2.11 V	60	51.9	5.4
5	11490.00	60.5 PK	74.0	-13.5	2.08 V	228	41.2	19.3
6	11490.00	46.6 AV	54.0	-7.4	2.08 V	228	27.3	19.3

Remarks:

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

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
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	#5613.60	57.1 PK	68.2	-11.1	1.53 H	153	52.6	4.5
2	*5785.00	102.3 PK			1.53 H	153	62.0	40.3
3	*5785.00	92.8 AV			1.53 H	153	52.5	40.3
4	#5944.00	57.4 PK	68.2	-10.8	1.53 H	153	52.0	5.4
5	11570.00	60.1 PK	74.0	-13.9	1.81 H	209	41.1	19.0
6	11570.00	46.2 AV	54.0	-7.8	1.81 H	209	27.2	19.0
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	#5624.80	56.6 PK	68.2	-11.6	2.12 V	61	52.2	4.4
2	*5785.00	103.1 PK			2.12 V	61	62.8	40.3
3	*5785.00	93.9 AV			2.12 V	61	53.6	40.3
4	#5996.00	56.8 PK	68.2	-11.4	2.12 V	61	51.3	5.5
5	11570.00	60.5 PK	74.0	-13.5	2.07 V	243	41.5	19.0
6	11570.00	46.8 AV	54.0	-7.2	2.07 V	243	27.8	19.0

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	#5605.60	56.3 PK	68.2	-11.9	2.64 H	213	51.8	4.5
2	*5825.00	101.7 PK			2.64 H	213	61.3	40.4
3	*5825.00	92.1 AV			2.64 H	213	51.7	40.4
4	#5941.60	57.3 PK	68.2	-10.9	2.64 H	213	51.9	5.4
5	11650.00	59.4 PK	74.0	-14.6	1.80 H	184	40.5	18.9
6	11650.00	46.2 AV	54.0	-7.8	1.80 H	184	27.3	18.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5616.00	56.8 PK	68.2	-11.4	1.78 V	59	52.3	4.5
2	*5825.00	101.9 PK			1.78 V	59	61.5	40.4
3	*5825.00	92.5 AV			1.78 V	59	52.1	40.4
4	#5958.40	57.1 PK	68.2	-11.1	1.78 V	59	51.7	5.4
5	11650.00	59.9 PK	74.0	-14.1	1.95 V	219	41.0	18.9
6	11650.00	46.7 AV	54.0	-7.3	1.95 V	219	27.8	18.9

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.

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	68.6 PK	74.0	-5.4	2.65 H	2	64.5	4.1
2	5150.00	50.3 AV	54.0	-3.7	2.65 H	2	46.2	4.1
3	*5180.00	110.2 PK			2.78 H	358	71.7	38.5
4	*5180.00	99.8 AV			2.78 H	358	61.3	38.5
5	#10360.00	56.4 PK	68.2	-11.8	1.04 H	45	39.9	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	5150.00	66.4 PK	74.0	-7.6	3.11 V	92	62.3	4.1
2	5150.00	48.7 AV	54.0	-5.3	3.11 V	92	44.6	4.1
3	*5180.00	109.3 PK			3.19 V	93	70.8	38.5
4	*5180.00	99.1 AV			3.19 V	93	60.6	38.5
5	#10360.00	56.1 PK	68.2	-12.1	1.83 V	72	39.6	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.
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	109.7 PK			2.60 H	356	71.3	38.4
2	*5200.00	99.7 AV			2.60 H	356	61.3	38.4
3	#10400.00	56.6 PK	68.2	-11.6	1.03 H	31	40.1	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	*5200.00	108.6 PK			3.19 V	97	70.2	38.4
2	*5200.00	99.0 AV			3.19 V	97	60.6	38.4
3	#10400.00	56.3 PK	68.2	-11.9	1.71 V	66	39.8	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.
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	103.5 PK			3.46 H	173	64.4	39.1
2	*5240.00	93.3 AV			3.46 H	173	54.2	39.1
3	5350.00	57.1 PK	74.0	-16.9	3.33 H	188	53.0	4.1
4	5350.00	43.1 AV	54.0	-10.9	3.33 H	188	39.0	4.1
5	#10480.00	60.4 PK	68.2	-7.8	2.22 H	197	42.0	18.4
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	*5240.00	106.0 PK			1.64 V	67	66.9	39.1
2	*5240.00	95.3 AV			1.64 V	67	56.2	39.1
3	5350.00	56.3 PK	74.0	-17.7	1.70 V	70	52.2	4.1
4	5350.00	43.2 AV	54.0	-10.8	1.70 V	70	39.1	4.1
5	#10480.00	60.7 PK	68.2	-7.5	1.97 V	201	42.3	18.4

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 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	3.33 H	193	51.5	4.2
2	5150.00	42.5 AV	54.0	-11.5	3.33 H	193	38.3	4.2
3	*5260.00	103.6 PK			3.24 H	182	64.5	39.1
4	*5260.00	93.1 AV			3.24 H	182	54.0	39.1
5	#10520.00	61.0 PK	68.2	-7.2	2.05 H	191	42.3	18.7
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	55.8 PK	74.0	-18.2	1.79 V	61	51.6	4.2
2	5150.00	42.7 AV	54.0	-11.3	1.79 V	61	38.5	4.2
3	*5260.00	105.8 PK			1.71 V	68	66.7	39.1
4	*5260.00	95.2 AV			1.71 V	68	56.1	39.1
5	#10520.00	61.2 PK	68.2	-7.0	1.92 V	212	42.5	18.7

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 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	103.7 PK			3.39 H	173	64.6	39.1
2	*5300.00	93.4 AV			3.39 H	173	54.3	39.1
3	10600.00	61.1 PK	74.0	-12.9	1.84 H	192	42.0	19.1
4	10600.00	47.6 AV	54.0	-6.4	1.84 H	192	28.5	19.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	106.0 PK			1.44 V	66	66.9	39.1
2	*5300.00	95.7 AV			1.44 V	66	56.6	39.1
3	10600.00	61.4 PK	74.0	-12.6	1.75 V	184	42.3	19.1
4	10600.00	47.7 AV	54.0	-6.3	1.75 V	184	28.6	19.1

Remarks:

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

CHANNEL	TX Channel 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	104.5 PK			3.49 H	197	65.3	39.2
2	*5320.00	94.0 AV			3.49 H	197	54.8	39.2
3	5350.00	59.2 PK	74.0	-14.8	3.18 H	205	55.1	4.1
4	5350.00	44.3 AV	54.0	-9.7	3.18 H	205	40.2	4.1
5	10640.00	60.9 PK	74.0	-13.1	1.85 H	205	42.0	18.9
6	10640.00	47.0 AV	54.0	-7.0	1.85 H	205	28.1	18.9

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	106.8 PK			1.40 V	67	67.6	39.2
2	*5320.00	96.2 AV			1.40 V	67	57.0	39.2
3	5350.00	59.6 PK	74.0	-14.4	1.61 V	62	55.5	4.1
4	5350.00	44.6 AV	54.0	-9.4	1.61 V	62	40.5	4.1
5	10640.00	61.3 PK	74.0	-12.7	1.99 V	205	42.4	18.9
6	10640.00	47.4 AV	54.0	-6.6	1.99 V	205	28.5	18.9

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	58.6 PK	74.0	-15.4	3.41 H	201	54.1	4.5
2	5460.00	44.2 AV	54.0	-9.8	3.41 H	201	39.7	4.5
3	#5470.00	59.6 PK	68.2	-8.6	3.33 H	199	55.1	4.5
4	*5500.00	106.0 PK			3.28 H	209	66.2	39.8
5	*5500.00	94.7 AV			3.28 H	209	54.9	39.8
6	11000.00	60.5 PK	74.0	-13.5	2.10 H	193	40.5	20.0
7	11000.00	47.5 AV	54.0	-6.5	2.10 H	193	27.5	20.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.0 PK	74.0	-15.0	1.90 V	73	54.5	4.5
2	5460.00	44.3 AV	54.0	-9.7	1.90 V	73	39.8	4.5
3	#5470.00	60.2 PK	68.2	-8.0	1.81 V	60	55.7	4.5
4	*5500.00	108.3 PK			1.94 V	64	68.5	39.8
5	*5500.00	97.0 AV			1.94 V	64	57.2	39.8
6	11000.00	60.9 PK	74.0	-13.1	1.89 V	190	40.9	20.0
7	11000.00	47.8 AV	54.0	-6.2	1.89 V	190	27.8	20.0

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	104.0 PK			3.25 H	205	64.3	39.7
2	*5580.00	93.8 AV			3.25 H	205	54.1	39.7
3	11160.00	60.5 PK	74.0	-13.5	1.99 H	204	41.3	19.2
4	11160.00	46.2 AV	54.0	-7.8	1.99 H	204	27.0	19.2

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	*5580.00	106.3 PK			1.80 V	62	66.6	39.7
2	*5580.00	96.1 AV			1.80 V	62	56.4	39.7
3	11160.00	60.7 PK	74.0	-13.3	1.81 V	199	41.5	19.2
4	11160.00	46.4 AV	54.0	-7.6	1.81 V	199	27.2	19.2

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 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	102.4 PK			2.86 H	231	62.6	39.8
2	*5700.00	91.8 AV			2.86 H	231	52.0	39.8
3	#5725.00	57.2 PK	68.2	-11.0	3.05 H	222	52.5	4.7
4	11400.00	60.0 PK	74.0	-14.0	1.87 H	214	40.9	19.1
5	11400.00	46.9 AV	54.0	-7.1	1.87 H	214	27.8	19.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	104.6 PK			1.94 V	59	64.8	39.8
2	*5700.00	94.0 AV			1.94 V	59	54.2	39.8
3	#5725.00	57.5 PK	68.2	-10.7	2.05 V	61	52.8	4.7
4	11400.00	60.1 PK	74.0	-13.9	1.90 V	205	41.0	19.1
5	11400.00	46.8 AV	54.0	-7.2	1.90 V	205	27.7	19.1

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.3 PK	74.0	-17.7	2.88 H	239	51.8	4.5
2	5460.00	43.1 AV	54.0	-10.9	2.88 H	239	38.6	4.5
3	#5470.00	56.5 PK	68.2	-11.7	2.77 H	240	52.0	4.5
4	*5720.00	103.0 PK			2.73 H	229	63.0	40.0
5	*5720.00	92.5 AV			2.73 H	229	52.5	40.0
6	#5825.00	56.4 PK	68.2	-11.8	2.81 H	220	51.2	5.2
7	11440.00	60.7 PK	74.0	-13.3	1.90 H	181	41.5	19.2
8	11440.00	46.9 AV	54.0	-7.1	1.90 H	181	27.7	19.2
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	56.6 PK	74.0	-17.4	1.51 V	63	52.1	4.5
2	5460.00	43.2 AV	54.0	-10.8	1.51 V	63	38.7	4.5
3	#5470.00	56.7 PK	68.2	-11.5	1.59 V	60	52.2	4.5
4	*5720.00	104.4 PK			1.54 V	62	64.4	40.0
5	*5720.00	94.0 AV			1.54 V	62	54.0	40.0
6	#5825.00	56.6 PK	68.2	-11.6	1.61 V	57	51.4	5.2
7	11440.00	61.0 PK	74.0	-13.0	1.99 V	197	41.8	19.2
8	11440.00	47.0 AV	54.0	-7.0	1.99 V	197	27.8	19.2

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5616.80	57.8 PK	68.2	-10.4	2.47 H	217	53.3	4.5
2	*5745.00	102.6 PK			2.47 H	217	62.5	40.1
3	*5745.00	91.8 AV			2.47 H	217	51.7	40.1
4	#5976.00	57.2 PK	68.2	-11.0	2.47 H	217	51.8	5.4
5	11490.00	60.3 PK	74.0	-13.7	1.85 H	188	41.0	19.3
6	11490.00	46.4 AV	54.0	-7.6	1.85 H	188	27.1	19.3

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	#5621.60	56.7 PK	68.2	-11.5	1.52 V	62	52.3	4.4
2	*5745.00	103.5 PK			1.52 V	62	63.4	40.1
3	*5745.00	93.4 AV			1.52 V	62	53.3	40.1
4	#5966.40	56.7 PK	68.2	-11.5	1.52 V	62	51.3	5.4
5	11490.00	60.6 PK	74.0	-13.4	2.15 V	221	41.3	19.3
6	11490.00	46.7 AV	54.0	-7.3	2.15 V	221	27.4	19.3

Remarks:

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

CHANNEL	TX Channel 157	DETECTOR FUNCTION	Peak (PK)
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	#5625.60	57.3 PK	68.2	-10.9	2.54 H	215	52.9	4.4
2	*5785.00	102.6 PK			2.54 H	215	62.3	40.3
3	*5785.00	91.6 AV			2.54 H	215	51.3	40.3
4	#5948.80	57.6 PK	68.2	-10.6	2.54 H	215	52.2	5.4
5	11570.00	60.3 PK	74.0	-13.7	1.90 H	193	41.3	19.0
6	11570.00	46.5 AV	54.0	-7.5	1.90 H	193	27.5	19.0

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5612.80	56.5 PK	68.2	-11.7	1.63 V	59	52.0	4.5
2	*5785.00	102.9 PK			1.63 V	59	62.6	40.3
3	*5785.00	92.8 AV			1.63 V	59	52.5	40.3
4	#5964.80	56.0 PK	68.2	-12.2	1.63 V	59	50.6	5.4
5	11570.00	60.7 PK	74.0	-13.3	1.93 V	207	41.7	19.0
6	11570.00	46.8 AV	54.0	-7.2	1.93 V	207	27.8	19.0

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	#5608.00	57.2 PK	68.2	-11.0	2.64 H	213	52.7	4.5
2	*5825.00	101.1 PK			2.64 H	213	60.7	40.4
3	*5825.00	91.3 AV			2.64 H	213	50.9	40.4
4	#5926.40	56.8 PK	68.2	-11.4	2.64 H	213	51.4	5.4
5	11650.00	60.3 PK	74.0	-13.7	1.91 H	192	41.4	18.9
6	11650.00	46.4 AV	54.0	-7.6	1.91 H	192	27.5	18.9
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	#5603.20	57.4 PK	68.2	-10.8	1.56 V	59	52.9	4.5
2	*5825.00	102.0 PK			1.56 V	59	61.6	40.4
3	*5825.00	91.9 AV			1.56 V	59	51.5	40.4
4	#5932.80	58.2 PK	68.2	-10.0	1.56 V	59	52.8	5.4
5	11650.00	60.7 PK	74.0	-13.3	2.21 V	237	41.8	18.9
6	11650.00	46.7 AV	54.0	-7.3	2.21 V	237	27.8	18.9

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.

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	65.8 PK	74.0	-8.2	2.62 H	3	61.7	4.1
2	5150.00	51.0 AV	54.0	-3.0	2.62 H	3	46.9	4.1
3	*5190.00	104.5 PK			2.88 H	359	66.1	38.4
4	*5190.00	94.3 AV			2.88 H	359	55.9	38.4
5	#10380.00	56.4 PK	68.2	-11.8	1.16 H	38	39.8	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	5150.00	63.7 PK	74.0	-10.3	3.23 V	92	59.6	4.1
2	5150.00	48.4 AV	54.0	-5.6	3.23 V	92	44.3	4.1
3	*5190.00	103.5 PK			3.17 V	97	65.1	38.4
4	*5190.00	93.4 AV			3.17 V	97	55.0	38.4
5	#10380.00	56.2 PK	68.2	-12.0	1.77 V	60	39.6	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 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	104.3 PK			2.99 H	357	66.1	38.2
2	*5230.00	94.4 AV			2.99 H	357	56.2	38.2
3	5350.00	53.4 PK	74.0	-20.6	3.02 H	1	49.5	3.9
4	5350.00	40.2 AV	54.0	-13.8	3.02 H	1	36.3	3.9
5	#10460.00	56.0 PK	68.2	-12.2	1.05 H	30	39.7	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	*5230.00	100.2 PK			3.17 V	94	62.0	38.2
2	*5230.00	93.7 AV			3.17 V	94	55.5	38.2
3	5350.00	53.4 PK	74.0	-20.6	3.17 V	93	49.5	3.9
4	5350.00	40.0 AV	54.0	-14.0	3.17 V	93	36.1	3.9
5	#10460.00	56.4 PK	68.2	-11.8	1.79 V	72	40.1	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 54	DETECTOR FUNCTION	Peak (PK)
FREQUENCY RANGE	1GHz ~ 40GHz		Average (AV)

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	54.0 PK	74.0	-20.0	3.10 H	1	49.9	4.1
2	5150.00	40.4 AV	54.0	-13.6	3.10 H	1	36.3	4.1
3	*5270.00	103.3 PK			3.11 H	357	65.1	38.2
4	*5270.00	93.4 AV			3.11 H	357	55.2	38.2
5	#10540.00	56.0 PK	68.2	-12.2	1.04 H	33	39.6	16.4

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	54.3 PK	74.0	-19.7	3.13 V	94	50.2	4.1
2	5150.00	40.1 AV	54.0	-13.9	3.13 V	94	36.0	4.1
3	*5270.00	102.3 PK			3.11 V	97	64.1	38.2
4	*5270.00	92.7 AV			3.11 V	97	54.5	38.2
5	#10540.00	56.1 PK	68.2	-12.1	1.85 V	71	39.7	16.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	103.2 PK			2.91 H	356	65.0	38.2
2	*5310.00	93.1 AV			2.91 H	356	54.9	38.2
3	5350.00	65.7 PK	74.0	-8.3	2.90 H	2	61.8	3.9
4	5350.00	48.7 AV	54.0	-5.3	2.90 H	2	44.8	3.9
5	10620.00	56.8 PK	74.0	-17.2	1.09 H	46	40.1	16.7
6	10620.00	42.6 AV	54.0	-11.4	1.09 H	46	25.9	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	*5310.00	102.4 PK			3.21 V	93	64.2	38.2
2	*5310.00	92.1 AV			3.21 V	93	53.9	38.2
3	5350.00	62.5 PK	74.0	-11.5	3.21 V	96	58.6	3.9
4	5350.00	45.8 AV	54.0	-8.2	3.21 V	96	41.9	3.9
5	10620.00	56.3 PK	74.0	-17.7	1.76 V	65	39.6	16.7
6	10620.00	42.9 AV	54.0	-11.1	1.76 V	65	26.2	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.

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	64.1 PK	74.0	-9.9	3.26 H	351	59.7	4.4
2	5460.00	47.5 AV	54.0	-6.5	3.26 H	351	43.1	4.4
3	#5470.00	66.9 PK	68.2	-1.3	3.24 H	356	62.4	4.5
4	*5510.00	102.9 PK			3.22 H	357	64.1	38.8
5	*5510.00	92.5 AV			3.22 H	357	53.7	38.8
6	11020.00	58.0 PK	74.0	-16.0	1.13 H	36	39.9	18.1
7	11020.00	44.1 AV	54.0	-9.9	1.13 H	36	26.0	18.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.5 PK	74.0	-11.5	3.14 V	97	58.1	4.4
2	5460.00	46.7 AV	54.0	-7.3	3.14 V	97	42.3	4.4
3	#5470.00	65.6 PK	68.2	-2.6	3.15 V	94	61.1	4.5
4	*5510.00	101.9 PK			3.19 V	95	63.1	38.8
5	*5510.00	91.8 AV			3.19 V	95	53.0	38.8
6	11020.00	58.1 PK	74.0	-15.9	1.70 V	71	40.0	18.1
7	11020.00	44.3 AV	54.0	-9.7	1.70 V	71	26.2	18.1

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	64.1 PK	74.0	-9.9	3.26 H	351	59.7	4.4
2	5460.00	47.5 AV	54.0	-6.5	3.26 H	351	43.1	4.4
3	#5470.00	66.9 PK	68.2	-1.3	3.24 H	356	62.4	4.5
4	*5510.00	102.9 PK			3.22 H	357	64.1	38.8
5	*5510.00	92.5 AV			3.22 H	357	53.7	38.8
6	11020.00	58.0 PK	74.0	-16.0	1.13 H	36	39.9	18.1
7	11020.00	44.1 AV	54.0	-9.9	1.13 H	36	26.0	18.1

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.5 PK	74.0	-11.5	3.14 V	97	58.1	4.4
2	5460.00	46.7 AV	54.0	-7.3	3.14 V	97	42.3	4.4
3	#5470.00	65.6 PK	68.2	-2.6	3.15 V	94	61.1	4.5
4	*5510.00	101.9 PK			3.19 V	95	63.1	38.8
5	*5510.00	91.8 AV			3.19 V	95	53.0	38.8
6	11020.00	58.1 PK	74.0	-15.9	1.70 V	71	40.0	18.1
7	11020.00	44.3 AV	54.0	-9.7	1.70 V	71	26.2	18.1

Remarks:

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

CHANNEL	TX Channel 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	99.9 PK			3.64 H	347	60.9	39.0
2	*5670.00	90.7 AV			3.64 H	347	51.7	39.0
3	#5725.00	55.3 PK	68.2	-12.9	3.93 H	346	50.7	4.6
4	11340.00	57.3 PK	74.0	-16.7	1.05 H	39	39.6	17.7
5	11340.00	43.8 AV	54.0	-10.2	1.05 H	39	26.1	17.7

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	*5670.00	98.9 PK			3.18 V	97	59.9	39.0
2	*5670.00	89.8 AV			3.18 V	97	50.8	39.0
3	#5725.00	53.8 PK	68.2	-14.4	3.19 V	93	49.2	4.6
4	11340.00	57.7 PK	74.0	-16.3	1.78 V	65	40.0	17.7
5	11340.00	43.9 AV	54.0	-10.1	1.78 V	65	26.2	17.7

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.5 PK	74.0	-17.5	2.80 H	239	52.0	4.5
2	5460.00	42.9 AV	54.0	-11.1	2.80 H	239	38.4	4.5
3	#5470.00	56.6 PK	68.2	-11.6	2.71 H	222	52.1	4.5
4	*5710.00	99.5 PK			2.83 H	231	59.6	39.9
5	*5710.00	89.9 AV			2.83 H	231	50.0	39.9
6	#5825.00	56.7 PK	68.2	-11.5	2.74 H	229	51.5	5.2
7	11420.00	60.0 PK	74.0	-14.0	1.84 H	177	40.9	19.1
8	11420.00	46.8 AV	54.0	-7.2	1.84 H	177	27.7	19.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.0 PK	74.0	-17.0	1.91 V	60	52.5	4.5
2	5460.00	43.2 AV	54.0	-10.8	1.91 V	60	38.7	4.5
3	#5470.00	57.3 PK	68.2	-10.9	1.87 V	57	52.8	4.5
4	*5710.00	102.1 PK			2.03 V	62	62.2	39.9
5	*5710.00	91.7 AV			2.03 V	62	51.8	39.9
6	#5825.00	57.1 PK	68.2	-11.1	2.01 V	66	51.9	5.2
7	11420.00	60.4 PK	74.0	-13.6	1.97 V	211	41.3	19.1
8	11420.00	47.0 AV	54.0	-7.0	1.97 V	211	27.9	19.1

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5612.80	56.9 PK	68.2	-11.3	2.84 H	217	52.4	4.5
2	*5755.00	100.4 PK			2.84 H	217	60.3	40.1
3	*5755.00	90.6 AV			2.84 H	217	50.5	40.1
4	#5990.40	56.8 PK	68.2	-11.4	2.84 H	217	51.3	5.5
5	11510.00	59.9 PK	74.0	-14.1	1.67 H	184	40.5	19.4
6	11510.00	47.3 AV	54.0	-6.7	1.67 H	184	27.9	19.4
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	#5601.60	57.1 PK	68.2	-11.1	2.17 V	62	52.6	4.5
2	*5755.00	101.5 PK			2.17 V	62	61.4	40.1
3	*5755.00	91.4 AV			2.17 V	62	51.3	40.1
4	#5938.40	56.9 PK	68.2	-11.3	2.17 V	62	51.5	5.4
5	11510.00	59.6 PK	74.0	-14.4	2.23 V	232	40.2	19.4
6	11510.00	47.1 AV	54.0	-6.9	2.23 V	232	27.7	19.4

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5616.80	56.8 PK	68.2	-11.4	2.83 H	231	52.3	4.5
2	*5795.00	100.5 PK			2.83 H	231	60.1	40.4
3	*5795.00	90.4 AV			2.83 H	231	50.0	40.4
4	#5936.00	57.7 PK	68.2	-10.5	2.83 H	231	52.3	5.4
5	11590.00	59.6 PK	74.0	-14.4	1.80 H	190	40.7	18.9
6	11590.00	46.9 AV	54.0	-7.1	1.80 H	190	28.0	18.9

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	#5614.40	56.8 PK	68.2	-11.4	1.64 V	62	52.3	4.5
2	*5795.00	101.4 PK			1.64 V	62	61.0	40.4
3	*5795.00	91.1 AV			1.64 V	62	50.7	40.4
4	#5966.40	57.6 PK	68.2	-10.6	1.64 V	62	52.2	5.4
5	11590.00	59.9 PK	74.0	-14.1	1.97 V	221	41.0	18.9
6	11590.00	47.0 AV	54.0	-7.0	1.97 V	221	28.1	18.9

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.

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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	64.5 PK	74.0	-9.5	2.13 H	6	60.4	4.1
2	5150.00	51.7 AV	54.0	-2.3	2.13 H	6	47.6	4.1
3	*5210.00	101.2 PK			3.17 H	1	62.9	38.3
4	*5210.00	91.2 AV			3.17 H	1	52.9	38.3
5	5350.00	53.9 PK	74.0	-20.1	2.12 H	1	50.0	3.9
6	5350.00	41.4 AV	54.0	-12.6	2.12 H	1	37.5	3.9
7	#10420.00	56.4 PK	68.2	-11.8	1.18 H	38	39.9	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	5150.00	62.7 PK	74.0	-11.3	3.24 V	93	58.6	4.1
2	5150.00	49.2 AV	54.0	-4.8	3.24 V	93	45.1	4.1
3	*5210.00	100.6 PK			3.15 V	95	62.3	38.3
4	*5210.00	90.5 AV			3.15 V	95	52.2	38.3
5	5350.00	54.0 PK	74.0	-20.0	3.18 V	96	50.1	3.9
6	5350.00	40.8 AV	54.0	-13.2	3.18 V	96	36.9	3.9
7	#10420.00	56.0 PK	68.2	-12.2	1.81 V	71	39.5	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.
6. " # ": The radiated frequency is out of the restricted band.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.9 PK	74.0	-20.1	3.10 H	356	49.8	4.1
2	5150.00	40.4 AV	54.0	-13.6	3.10 H	356	36.3	4.1
3	*5290.00	98.9 PK			3.11 H	356	60.8	38.1
4	*5290.00	89.1 AV			3.11 H	356	51.0	38.1
5	5350.00	64.6 PK	74.0	-9.4	3.19 H	360	60.7	3.9
6	5350.00	50.4 AV	54.0	-3.6	3.19 H	360	46.5	3.9
7	#10580.00	56.7 PK	68.2	-11.5	1.04 H	31	40.1	16.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	44.3 PK	74.0	-29.7	3.10 V	92	40.2	4.1
2	5150.00	40.2 AV	54.0	-13.8	3.10 V	92	36.1	4.1
3	*5290.00	98.3 PK			3.15 V	92	60.2	38.1
4	*5290.00	88.4 AV			3.15 V	92	50.3	38.1
5	5350.00	62.5 PK	74.0	-11.5	3.18 V	94	58.6	3.9
6	5350.00	48.2 AV	54.0	-5.8	3.18 V	94	44.3	3.9
7	#10580.00	56.6 PK	68.2	-11.6	1.77 V	73	40.0	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 106	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	65.3 PK	74.0	-8.7	3.28 H	352	60.9	4.4
2	5460.00	52.5 AV	54.0	-1.5	3.28 H	352	48.1	4.4
3	#5470.00	66.7 PK	68.2	-1.5	3.25 H	356	62.2	4.5
4	*5530.00	99.3 PK			3.02 H	355	60.6	38.7
5	*5530.00	89.0 AV			3.02 H	355	50.3	38.7
6	#5725.00	54.7 PK	68.2	-13.5	3.24 H	356	50.1	4.6
7	11060.00	58.0 PK	74.0	-16.0	1.07 H	39	40.2	17.8
8	11060.00	43.7 AV	54.0	-10.3	1.07 H	39	25.9	17.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	63.1 PK	74.0	-10.9	3.17 V	96	58.7	4.4
2	5460.00	51.0 AV	54.0	-3.0	3.17 V	96	46.6	4.4
3	#5470.00	64.9 PK	68.2	-3.3	3.20 V	94	60.4	4.5
4	*5530.00	98.3 PK			3.09 V	95	59.6	38.7
5	*5530.00	87.9 AV			3.09 V	95	49.2	38.7
6	#5725.00	54.1 PK	68.2	-14.1	3.17 V	95	49.5	4.6
7	11060.00	57.9 PK	74.0	-16.1	1.85 V	66	40.1	17.8
8	11060.00	44.1 AV	54.0	-9.9	1.85 V	66	26.3	17.8

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	53.9 PK	74.0	-20.1	3.71 H	355	49.5	4.4
2	5460.00	41.7 AV	54.0	-12.3	3.71 H	355	37.3	4.4
3	#5470.00	54.4 PK	68.2	-13.8	3.74 H	352	49.9	4.5
4	*5610.00	97.3 PK			3.74 H	353	58.4	38.9
5	*5610.00	87.7 AV			3.74 H	353	48.8	38.9
6	#5725.00	54.1 PK	68.2	-14.1	3.72 H	355	49.5	4.6
7	11220.00	57.2 PK	74.0	-16.8	1.10 H	30	40.1	17.1
8	11220.00	43.4 AV	54.0	-10.6	1.10 H	30	26.3	17.1

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.2 PK	74.0	-19.8	3.12 V	92	49.8	4.4
2	5460.00	40.6 AV	54.0	-13.4	3.12 V	92	36.2	4.4
3	#5470.00	55.1 PK	68.2	-13.1	3.11 V	93	50.6	4.5
4	*5610.00	96.3 PK			3.10 V	92	57.4	38.9
5	*5610.00	86.8 AV			3.10 V	92	47.9	38.9
6	#5725.00	54.8 PK	68.2	-13.4	3.12 V	96	50.2	4.6
7	11220.00	56.9 PK	74.0	-17.1	1.75 V	72	39.8	17.1
8	11220.00	43.3 AV	54.0	-10.7	1.75 V	72	26.2	17.1

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.0 PK	74.0	-17.0	2.81 H	233	52.5	4.5
2	5460.00	44.1 AV	54.0	-9.9	2.81 H	233	39.6	4.5
3	#5470.00	57.2 PK	68.2	-11.0	2.79 H	230	52.7	4.5
4	*5690.00	98.2 PK			2.76 H	228	58.4	39.8
5	*5690.00	88.3 AV			2.76 H	228	48.5	39.8
6	#5825.00	57.0 PK	68.2	-11.2	2.88 H	237	51.8	5.2
7	11380.00	60.1 PK	74.0	-13.9	1.90 H	181	41.0	19.1
8	11380.00	47.2 AV	54.0	-6.8	1.90 H	181	28.1	19.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	57.4 PK	74.0	-16.6	1.61 V	63	52.9	4.5
2	5460.00	44.3 AV	54.0	-9.7	1.61 V	63	39.8	4.5
3	#5470.00	57.5 PK	68.2	-10.7	1.57 V	57	53.0	4.5
4	*5690.00	100.0 PK			1.49 V	60	60.2	39.8
5	*5690.00	89.8 AV			1.49 V	60	50.0	39.8
6	#5825.00	57.4 PK	68.2	-10.8	1.60 V	63	52.2	5.2
7	11380.00	60.4 PK	74.0	-13.6	1.85 V	213	41.3	19.1
8	11380.00	47.6 AV	54.0	-6.4	1.85 V	213	28.5	19.1

Remarks:

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

CHANNEL	TX Channel 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	#5633.60	52.8 PK	68.2	-15.4	1.00 H	300	48.8	4.0
2	*5775.00	89.8 PK			1.00 H	300	51.2	38.6
3	*5775.00	80.0 AV			1.00 H	300	41.4	38.6
4	#5971.20	53.2 PK	68.2	-15.0	1.00 H	300	48.5	4.7
5	11550.00	55.8 PK	74.0	-18.2	2.90 H	225	40.2	15.6
6	11550.00	42.8 AV	54.0	-11.2	2.90 H	225	27.2	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	#5613.60	53.1 PK	68.2	-15.1	1.07 V	17	49.2	3.9
2	*5775.00	87.0 PK			1.07 V	17	48.4	38.6
3	*5775.00	77.1 AV			1.07 V	17	38.5	38.6
4	#5948.00	53.0 PK	68.2	-15.2	1.07 V	17	48.3	4.7
5	11550.00	56.0 PK	74.0	-18.0	1.96 V	21	40.4	15.6
6	11550.00	43.0 AV	54.0	-11.0	1.96 V	21	27.4	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.

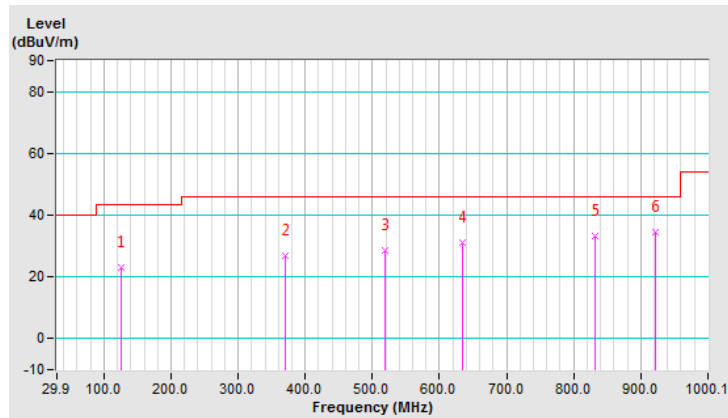
Below 1GHz Worst-Case Data: 802.11a

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	124.98	22.9 QP	43.5	-20.6	1.50 H	120	33.6	-10.7
2	369.47	26.8 QP	46.0	-19.2	1.01 H	204	32.5	-5.7
3	518.88	28.4 QP	46.0	-17.6	1.50 H	6	30.7	-2.3
4	633.36	31.2 QP	46.0	-14.8	1.01 H	199	30.7	0.5
5	831.29	33.2 QP	46.0	-12.8	1.01 H	13	27.7	5.5
6	922.48	34.5 QP	46.0	-11.5	1.01 H	72	27.2	7.3

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 of frequency range 30MHz~1000MHz.
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.

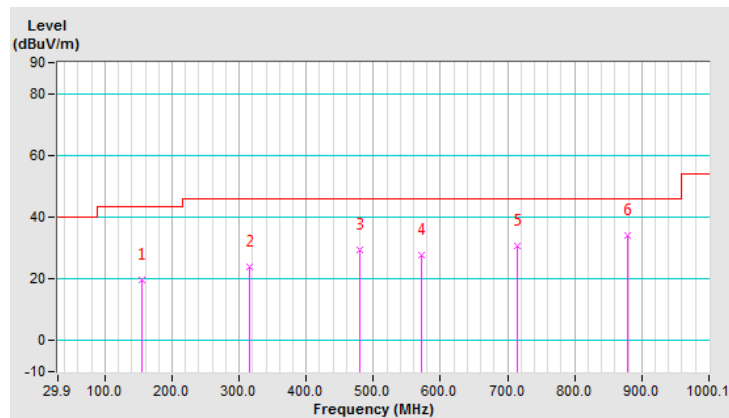


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	A

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	156.03	19.7 QP	43.5	-23.8	1.50 V	293	28.3	-8.6
2	315.14	23.8 QP	46.0	-22.2	1.50 V	46	30.7	-6.9
3	480.07	29.3 QP	46.0	-16.7	1.50 V	140	32.5	-3.2
4	571.27	27.8 QP	46.0	-18.2	1.50 V	6	29.0	-1.2
5	714.86	30.8 QP	46.0	-15.2	1.50 V	105	28.4	2.4
6	877.85	34.1 QP	46.0	-11.9	1.01 V	13	27.9	6.2

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 of frequency range 30MHz~1000MHz.
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.



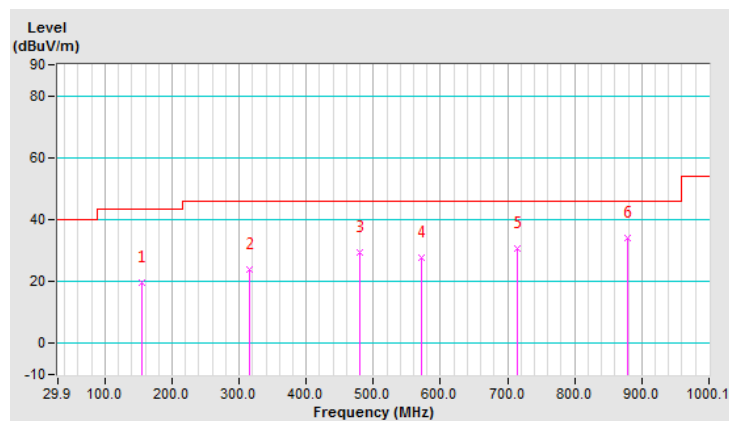
CHANNEL	TX Channel 40	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M

NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	76.47	19.5 QP	40.0	-20.5	1.00 H	133	31.7	-12.2
2	124.98	21.5 QP	43.5	-22.0	1.50 H	132	32.2	-10.7
3	350.07	23.5 QP	46.0	-22.5	1.00 H	349	29.8	-6.3
4	425.74	24.4 QP	46.0	-21.6	1.00 H	47	28.6	-4.2
5	542.17	26.5 QP	46.0	-19.5	1.50 H	118	28.5	-2.0
6	776.95	32.5 QP	46.0	-13.5	1.50 H	239	28.3	4.2

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 of frequency range 30MHz~1000MHz.
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.

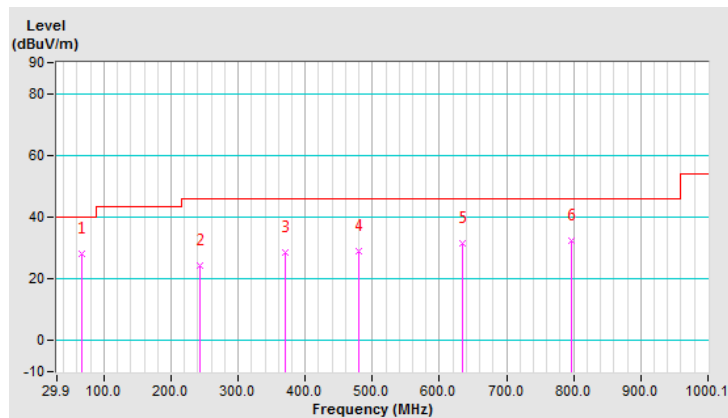


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz	TEST MODE	B

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	66.77	28.2 QP	40.0	-11.8	1.01 V	122	38.6	-10.4
2	243.34	24.5 QP	46.0	-21.5	1.01 V	5	33.8	-9.3
3	369.47	28.7 QP	46.0	-17.3	1.50 V	154	34.4	-5.7
4	480.07	29.1 QP	46.0	-16.9	1.01 V	188	32.3	-3.2
5	633.36	31.5 QP	46.0	-14.5	1.50 V	205	31.0	0.5
6	796.36	32.4 QP	46.0	-13.6	1.01 V	171	27.9	4.5

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 of frequency range 30MHz~1000MHz.
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. 14, 2019	Feb. 13, 2020
RF signal cable (with 10dB PAD) Woken	5D-FB	Cable-cond2-01	Sep. 05, 2019	Sep. 04, 2020
LISN ROHDE & SCHWARZ (EUT)	ESH2-Z5	100100	Jan. 30, 2019	Jan. 29, 2020
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100312	Aug. 13, 2019	Aug. 12, 2020
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-12047.

4.2.3 Test Procedures

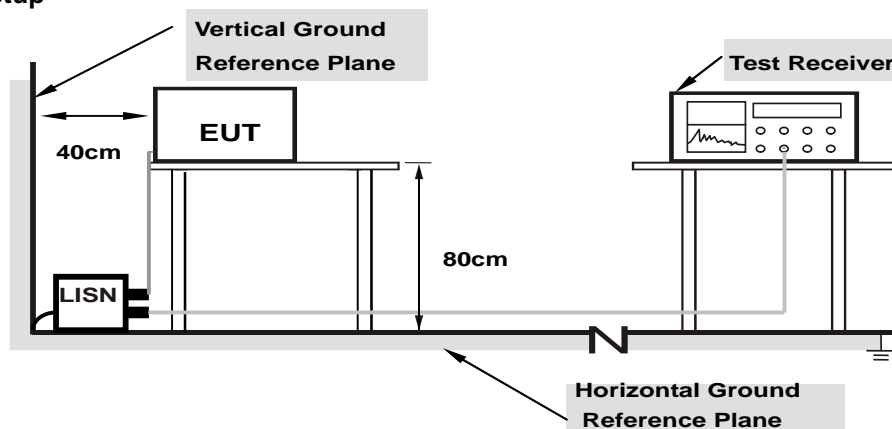
- The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: The resolution bandwidth and video bandwidth of test receiver is 9kHz for quasi-peak detection (QP) and average detection (AV) at frequency 0.15MHz-30MHz.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



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

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

4.2.6 EUT Operating Conditions

Same as 4.1.6.

4.2.7 Test Results

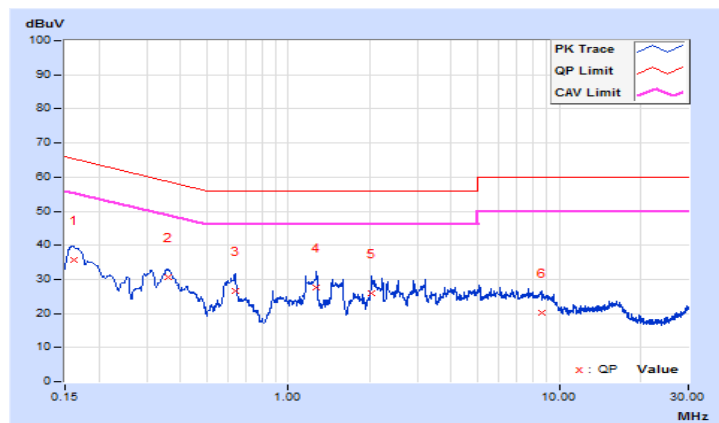
Worst-Case Data: 802.11a

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

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	0.16125	10.17	25.66	12.80	35.83	22.97	65.40	55.40	-29.57	-32.43
2	0.36101	10.27	20.53	16.04	30.80	26.31	58.71	48.71	-27.91	-22.40
3	0.63520	10.32	16.42	8.74	26.74	19.06	56.00	46.00	-29.26	-26.94
4	1.27201	10.40	17.15	8.37	27.55	18.77	56.00	46.00	-28.45	-27.23
5	2.03325	10.44	15.41	8.03	25.85	18.47	56.00	46.00	-30.15	-27.53
6	8.62350	10.64	9.63	4.26	20.27	14.90	60.00	50.00	-39.73	-35.10

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.

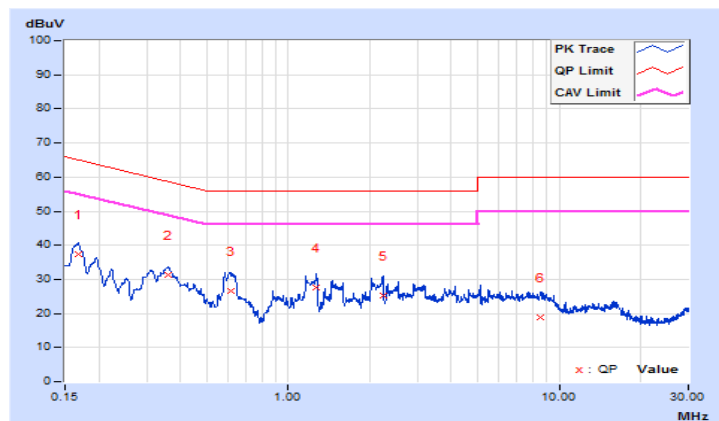


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

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	0.16787	10.24	27.18	16.10	37.42	26.34	65.07	55.07	-27.65	-28.73
2	0.35911	10.33	21.04	16.15	31.37	26.48	58.75	48.75	-27.38	-22.27
3	0.61215	10.38	16.12	9.96	26.50	20.34	56.00	46.00	-29.50	-25.66
4	1.27201	10.47	17.23	8.31	27.70	18.78	56.00	46.00	-28.30	-27.22
5	2.23220	10.53	14.85	5.85	25.38	16.38	56.00	46.00	-30.62	-29.62
6	8.52000	10.76	8.04	3.66	18.80	14.42	60.00	50.00	-41.20	-35.58

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.

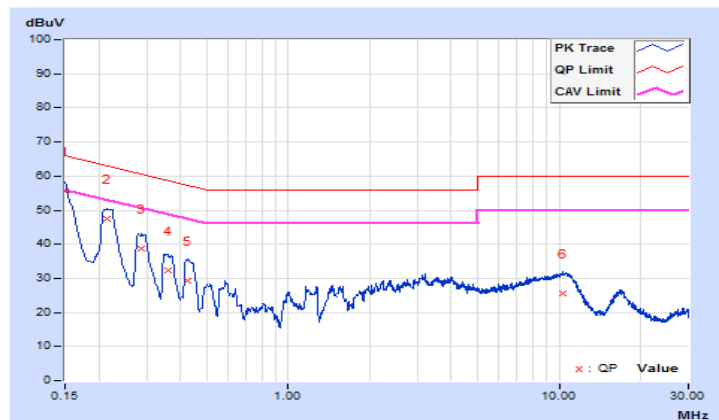


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

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	10.15	45.39	28.76	55.54	38.91	66.00
2	0.21516	10.22	37.26	21.39	47.48	31.61	63.00	53.00	-15.52	-21.39
3	0.28725	10.25	28.54	13.07	38.79	23.32	60.60	50.60	-21.81	-27.28
4	0.35925	10.27	22.16	7.97	32.43	18.24	58.75	48.75	-26.32	-30.51
5	0.42450	10.28	19.10	4.31	29.38	14.59	57.36	47.36	-27.98	-32.77
6	10.32225	10.68	15.04	9.94	25.72	20.62	60.00	50.00	-34.28	-29.38

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.

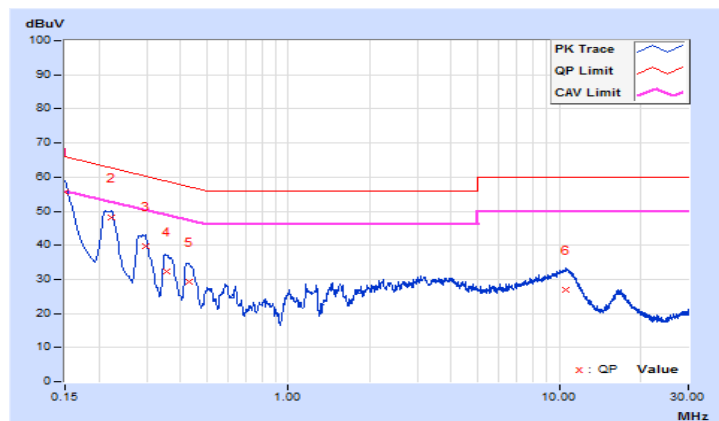


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

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	10.20	45.46	29.03	55.66	39.23	66.00
2	0.22200	10.30	37.93	23.75	48.23	34.05	62.74	52.74	-14.51	-18.69
3	0.29616	10.32	29.32	16.65	39.64	26.97	60.35	50.35	-20.71	-23.38
4	0.35440	10.33	21.85	8.84	32.18	19.17	58.86	48.86	-26.68	-29.69
5	0.43125	10.35	18.85	7.87	29.20	18.22	57.23	47.23	-28.03	-29.01
6	10.62600	10.82	16.04	10.92	26.86	21.74	60.00	50.00	-33.14	-28.26

REMARKS:

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



4.3 Transmit Power Measurement

4.3.1 Limits of Transmit Power Measurement

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

*B is the 26 dB emission bandwidth in megahertz

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} ;

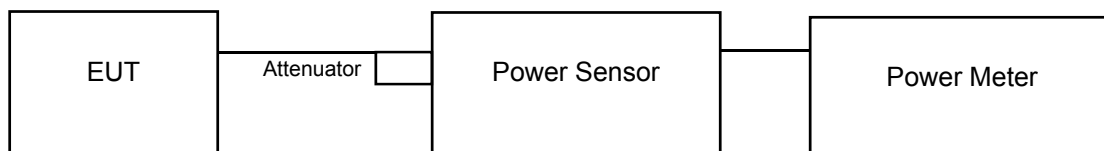
Array Gain = $5 \log(N_{ANT}/N_{SS})$ dB or 3 dB, whichever is less for 20-MHz channel widths with $N_{ANT} \geq 5$.

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

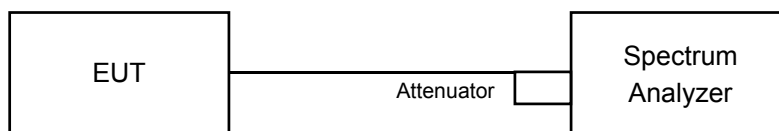
4.3.2 Test Setup

For Power Output

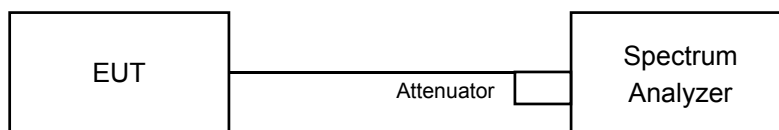
802.11a, 802.11n (HT20), 802.11n (HT40)



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	21.727	13.37	30.00	Pass
40	5200	21.928	13.41	30.00	Pass
48	5240	21.038	13.23	30.00	Pass
52	5260	20.324	13.08	24.00	Pass
60	5300	19.679	12.94	24.00	Pass
64	5320	20.091	13.03	24.00	Pass
100	5500	16.255	12.11	24.00	Pass
116	5580	14.997	11.76	24.00	Pass
140	5700	11.588	10.64	24.00	Pass
144	5720 For U-NII-2C	8.091	9.08	23.20	Pass
144	5720 For U-NII-3	2.000	3.01	30.00	Pass
149	5745	11.722	10.69	30.00	Pass
157	5785	10.765	10.32	30.00	Pass
165	5825	10.023	10.01	30.00	Pass

Note:

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

1. $11\text{dBm} + 10\log(21.46) = 24.31 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.62) = 24.34 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.46) = 24.31 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.59) = 24.34 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.53) = 24.33 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.51) = 24.32 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5708.39) = 23.20 < 24\text{dBm}$

802.11n (HT20)

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	19.770	12.96	30.00	Pass
40	5200	19.724	12.95	30.00	Pass
48	5240	18.664	12.71	30.00	Pass
52	5260	17.742	12.49	24.00	Pass
60	5300	17.824	12.51	24.00	Pass
64	5320	18.281	12.62	24.00	Pass
100	5500	15.171	11.81	24.00	Pass
116	5580	13.521	11.31	24.00	Pass
140	5700	10.399	10.17	24.00	Pass
144	5720 For U-NII-2C	8.904	9.50	23.39	Pass
144	5720 For U-NII-3	2.107	3.24	30.00	Pass
149	5745	10.864	10.36	30.00	Pass
157	5785	9.817	9.92	30.00	Pass
165	5825	9.057	9.57	30.00	Pass

Note:

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

1. $11\text{dBm} + 10\log(21.75) = 24.37 > 24\text{dBm}$
2. $11\text{dBm} + 10\log(21.81) = 24.38 > 24\text{dBm}$
3. $11\text{dBm} + 10\log(21.85) = 24.39 > 24\text{dBm}$
4. $11\text{dBm} + 10\log(21.90) = 24.40 > 24\text{dBm}$
5. $11\text{dBm} + 10\log(21.66) = 24.35 > 24\text{dBm}$
6. $11\text{dBm} + 10\log(21.81) = 24.38 > 24\text{dBm}$
7. $11\text{dBm} + 10\log(5725.00 - 5707.65) = 23.39 < 24\text{dBm}$

802.11n (HT40)

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	19.907	12.99	24.00	Pass
46	5230	21.330	13.29	24.00	Pass
54	5270	20.370	13.09	24.00	Pass
62	5310	20.559	13.13	24.00	Pass
102	5510	15.959	12.03	24.00	Pass
110	5550	15.776	11.98	24.00	Pass
134	5670	12.972	11.13	24.00	Pass
142	5710 For U-NII-2C	9.103	9.59	24.00	Pass
142	5710 For U-NII-3	0.919	-0.37	30.00	Pass
151	5755	12.677	11.03	30.00	Pass
159	5795	10.666	10.28	30.00	Pass

Note:

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

- $11\text{dBm} + 10\log(41.02) = 27.12 > 24\text{dBm}$
- $11\text{dBm} + 10\log(41.14) = 27.14 > 24\text{dBm}$
- $11\text{dBm} + 10\log(41.08) = 27.13 > 24\text{dBm}$
- $11\text{dBm} + 10\log(41.07) = 27.13 > 24\text{dBm}$
- $11\text{dBm} + 10\log(41.29) = 27.15 > 24\text{dBm}$
- $11\text{dBm} + 10\log(5725.00 - 5688.86) = 26.57 > 24\text{dBm}$

802.11ac (VHT80)

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	18.408	12.65	24.00	Pass
58	5290	16.788	12.25	24.00	Pass
106	5530	15.596	11.93	24.00	Pass
122	5610	13.459	11.29	24.00	Pass
138	5690 For U-NII-2C	7.564	8.79	24.00	Pass
138	5690 For U-NII-3	0.350	-4.56	30.00	Pass
155	5775	10.740	10.31	30.00	Pass

Note:

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

- $11\text{dBm} + 10\log(81.80) = 30.12 > 24\text{dBm}$
- $11\text{dBm} + 10\log(82.18) = 30.14 > 24\text{dBm}$
- $11\text{dBm} + 10\log(82.45) = 30.16 > 24\text{dBm}$
- $11\text{dBm} + 10\log(5725.00 - 5648.25) = 29.85 > 24\text{dBm}$

26dB Bandwidth:

802.11a

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
36	5180	21.64
40	5200	21.51
48	5240	21.50
52	5260	21.46
60	5300	21.62
64	5320	21.46
100	5500	21.59
116	5580	21.53
140	5700	21.51
144	5720 For U-NII-2C	16.61

802.11n (HT20)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
36	5180	21.87
40	5200	21.77
48	5240	21.80
52	5260	21.75
60	5300	21.81
64	5320	21.85
100	5500	21.90
116	5580	21.66
140	5700	21.81
144	5720 For U-NII-2C	17.35

802.11n (HT40)

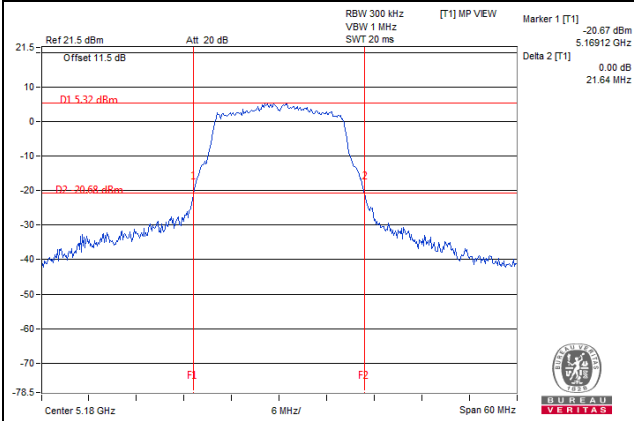
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
38	5190	41.32
46	5230	41.23
54	5270	41.02
62	5310	41.14
102	5510	41.08
110	5550	41.07
134	5670	41.29
142	5710 For U-NII-2C	36.14

802.11ac (VHT80)

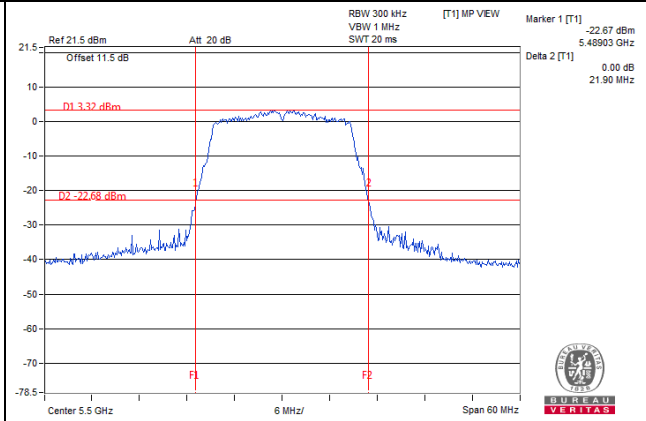
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
42	5210	82.17
58	5290	81.80
106	5530	82.18
122	5610	82.45
138	5690 For U-NII-2C	76.75

Spectrum Plot of Worst Value

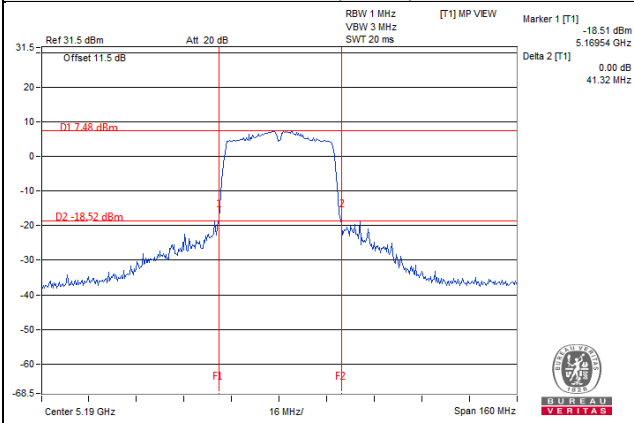
802.11a



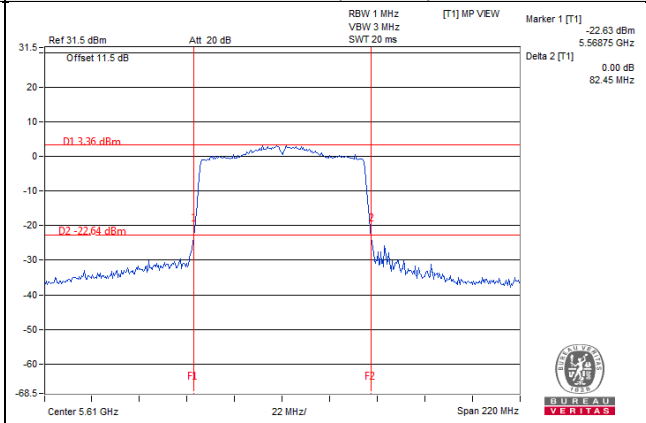
802.11n (HT20)



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	20.324	13.08
5470~5725	16.255	12.11

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	18.281	12.62
5470~5725	15.171	11.81

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	20.559	13.13
5470~5725	15.959	12.03

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

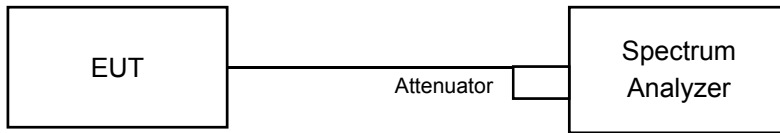
802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	16.788	12.25
5470~5725	15.596	11.93

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	16.92
40	5200	16.92
48	5240	16.92
52	5260	16.92
60	5300	16.92
64	5320	16.92
100	5500	16.92
116	5580	16.92
140	5700	16.92
144	5720 For U-NII-2C	13.28
144	5720 For U-NII-3	3.28
149	5745	16.92
157	5785	16.92
165	5825	16.92

802.11n (HT20)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.00
40	5200	17.88
48	5240	18.12
52	5260	18.12
60	5300	18.12
64	5320	18.00
100	5500	18.12
116	5580	18.12
140	5700	18.12
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	17.88

802.11n (HT40)

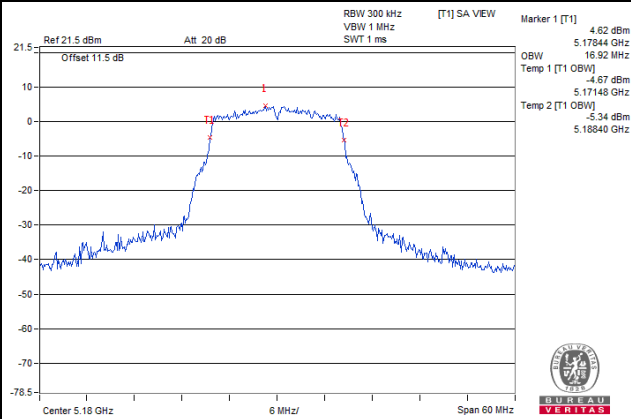
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	36.60
46	5230	36.60
54	5270	36.60
62	5310	36.60
102	5510	36.60
110	5550	36.60
134	5670	36.60
142	5710 For U-NII-2C	33.24
142	5710 For U-NII-3	3.48
151	5755	36.60
159	5795	36.60

802.11ac (VHT80)

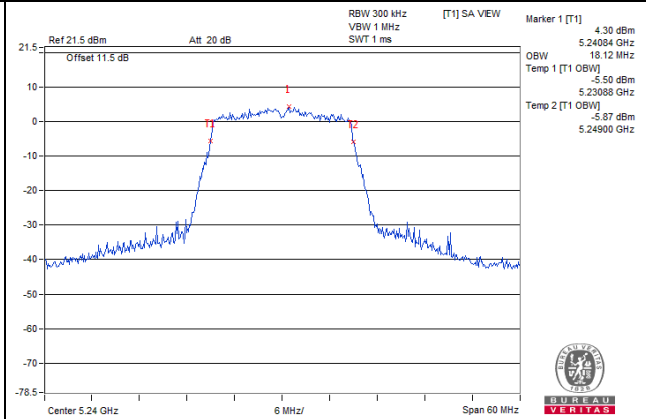
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	75.60
58	5290	75.60
106	5530	75.84
122	5610	75.84
138	5690 For U-NII-2C	72.68
138	5690 For U-NII-3	2.92
155	5775	75.84

Spectrum Plot of Worst Value

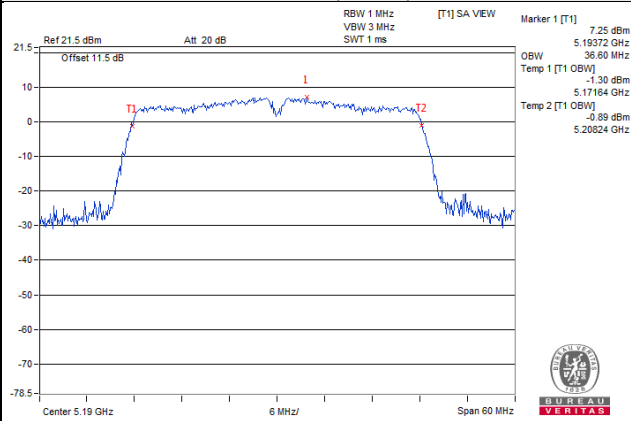
802.11a



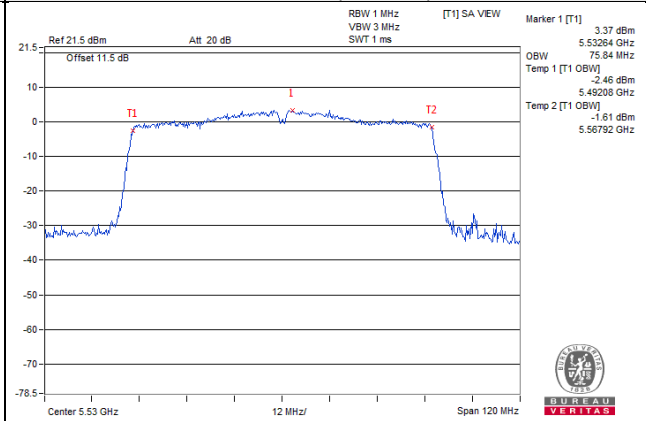
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)

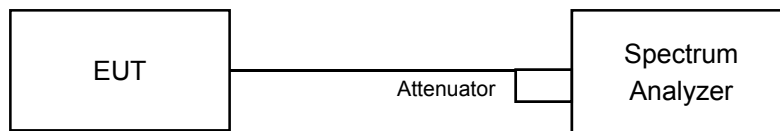


4.5 Peak Power Spectral Density Measurement

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 $\geq 98\%$

Using method SA-1

- 1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
- 2) Set RBW = 1MHz, Set VBW ≥ 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.

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 ≥ 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 $\geq 98\%$

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

Duty cycle $< 98\%$

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

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 (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	1.27	11	Pass
40	5200	1.15	11	Pass
48	5240	1.29	11	Pass
52	5260	0.92	11	Pass
60	5300	0.84	11	Pass
64	5320	0.90	11	Pass
100	5500	0.35	11	Pass
116	5580	0.06	11	Pass
140	5700	-1.00	11	Pass
144	5720 For U-NII-2C	-0.99	11	Pass

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	0.20	0.18	0.38	11	Pass
40	5200	0.21	0.18	0.39	11	Pass
48	5240	0.12	0.18	0.30	11	Pass
52	5260	-0.10	0.18	0.08	11	Pass
60	5300	-0.15	0.18	0.03	11	Pass
64	5320	0.06	0.18	0.24	11	Pass
100	5500	-0.75	0.18	-0.57	11	Pass
116	5580	-1.08	0.18	-0.90	11	Pass
140	5700	-1.86	0.18	-1.68	11	Pass
144	5720 For U-NII-2C	-1.43	0.18	-1.25	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	-3.02	0.50	-2.52	11	Pass
46	5230	-2.91	0.50	-2.41	11	Pass
54	5270	-3.09	0.50	-2.59	11	Pass
62	5310	-3.09	0.50	-2.59	11	Pass
102	5510	-3.81	0.50	-3.31	11	Pass
110	5550	-3.43	0.50	-2.93	11	Pass
134	5670	-4.61	0.50	-4.11	11	Pass
142	5710 For U-NII-2C	-4.18	0.50	-3.68	11	Pass

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

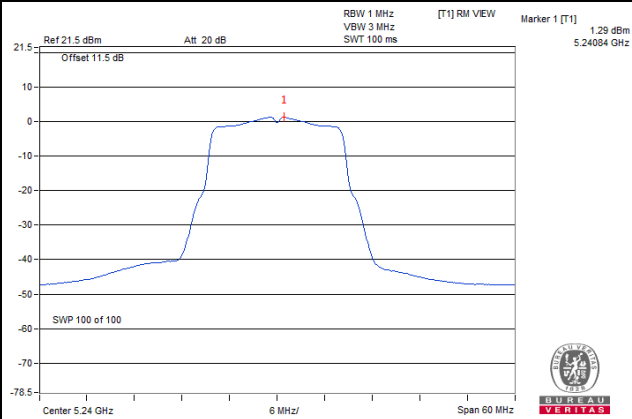
802.11ac (VHT80)

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	-6.40	0.95	-5.45	11	Pass
58	5290	-6.48	0.95	-5.53	11	Pass
106	5530	-7.25	0.95	-6.30	11	Pass
122	5610	-7.80	0.95	-6.85	11	Pass
138	5690 For U-NII-2C	-8.14	0.95	-7.19	11	Pass

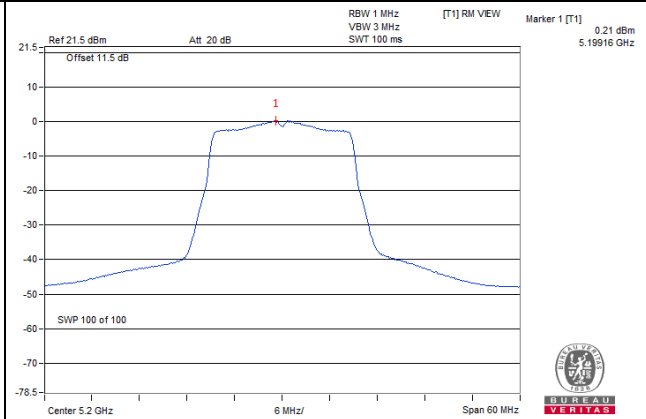
Note: Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

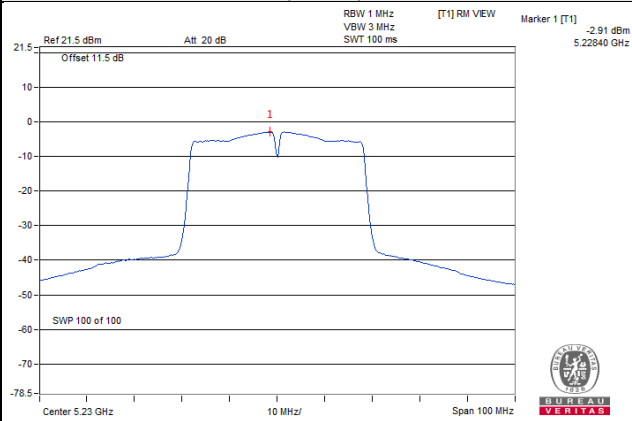
802.11a / CH 48



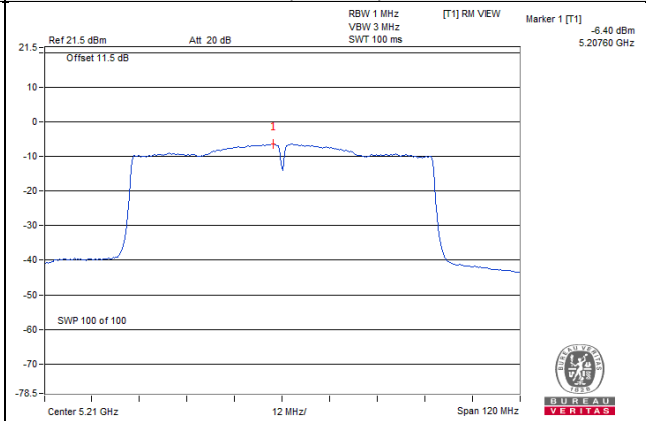
802.11n (HT20) / CH 40



802.11n (HT40) / CH 46



802.11ac (VHT80) / CH 42



For U-NII-3 band:

802.11a

Chan.	Freq. (MHz)	PSD		Total PSD (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)			
144	5720 For U-NII-3	-10.52	-8.30	-8.30	30	Pass
149	5745	-8.63	-6.41	-6.41	30	Pass
157	5785	-9.21	-6.99	-6.99	30	Pass
165	5825	-9.60	-7.38	-7.38	30	Pass

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	-10.90	-8.68	0.18	-8.50	30	Pass
149	5745	-9.76	-7.54	0.18	-7.36	30	Pass
157	5785	-10.30	-8.08	0.18	-7.90	30	Pass
165	5825	-10.59	-8.37	0.18	-8.19	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	-14.43	-12.21	0.50	-11.71	30	Pass
151	5755	-13.35	-11.13	0.50	-10.63	30	Pass
159	5795	-13.85	-11.63	0.50	-11.13	30	Pass

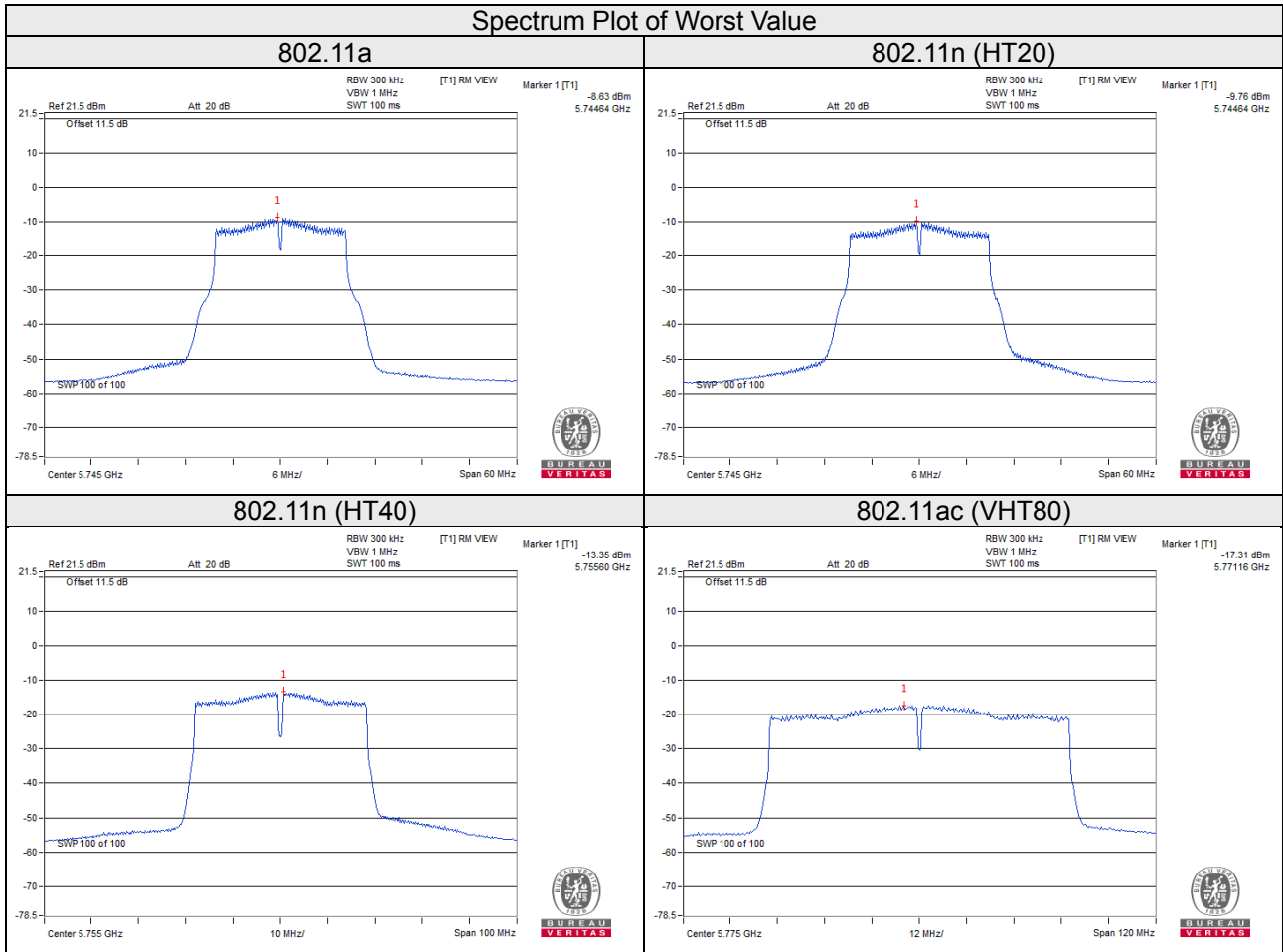
Note: Refer to section 3.3 for duty cycle spectrum plot.

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	-17.68	-15.46	0.95	-14.51	30	Pass
155	5775	-17.31	-15.09	0.95	-14.14	30	Pass

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

Spectrum Plot of Worst Value

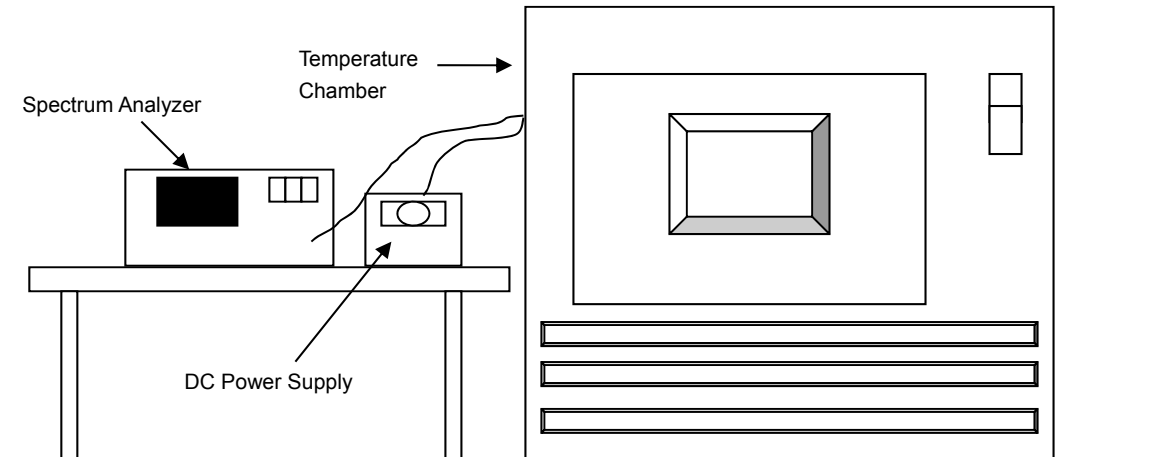


4.6 Frequency Stability

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. 12, 2019	Jun. 11, 2020
WIT Standard Temperature And Humidity Chamber	TH-4S-C	W981030	Jun. 03, 2019	Jun. 02, 2020
Digital Multimeter Fluke	87-III	70360742	Jun. 27, 2019	Jun. 26, 2020
DC Power Supply Topward	6306A	727263	NA	NA

4.6.4 Test Procedure

- The EUT was placed inside the environmental test chamber and powered by nominal DC voltage.
- Turn the EUT on and couple its output to a spectrum analyzer.
- Turn the EUT off and set the chamber to the highest temperature specified.
- Allow sufficient time (approximately 30 min) for the temperature of the chamber to stabilize, turn the EUT on and measure the operating frequency after 2, 5, and 10 minutes.
- Repeat step (d) with the temperature chamber set to the next desired temperature until measurements down to the lowest specified temperature have been completed.
- The test chamber was allowed to stabilize at +20 degree C for a minimum of 30 minutes. The supply voltage was then adjusted on the EUT from 85% to 115% and the frequency record.

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (°C)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
50	48	5180.0057	PASS	5180.0023	PASS	5180.0011	PASS	5180.0058	PASS
40	48	5180.0084	PASS	5180.0064	PASS	5180.0081	PASS	5180.0057	PASS
30	48	5179.9801	PASS	5179.9797	PASS	5179.9774	PASS	5179.9807	PASS
20	48	5179.9872	PASS	5179.9885	PASS	5179.9880	PASS	5179.9861	PASS
10	48	5179.9880	PASS	5179.9890	PASS	5179.9844	PASS	5179.9858	PASS
0	48	5180.0049	PASS	5180.0057	PASS	5180.0066	PASS	5180.0045	PASS
-10	48	5179.9858	PASS	5179.9852	PASS	5179.9846	PASS	5179.9844	PASS
-20	48	5180.0200	PASS	5180.0183	PASS	5180.0179	PASS	5180.0170	PASS

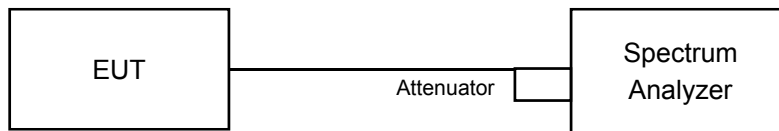
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (°C)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	55.2	5179.9870	PASS	5179.9889	PASS	5179.9877	PASS	5179.9870	PASS
	48.0	5179.9872	PASS	5179.9885	PASS	5179.9880	PASS	5179.9861	PASS
	40.8	5179.9862	PASS	5179.9889	PASS	5179.9872	PASS	5179.9867	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	2.92	0.5	Pass
149	5745	16.40	0.5	Pass
157	5785	16.39	0.5	Pass
165	5825	16.38	0.5	Pass

802.11n (HT20)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 For U-NII-3	3.56	0.5	Pass
149	5745	17.59	0.5	Pass
157	5785	17.58	0.5	Pass
165	5825	17.59	0.5	Pass

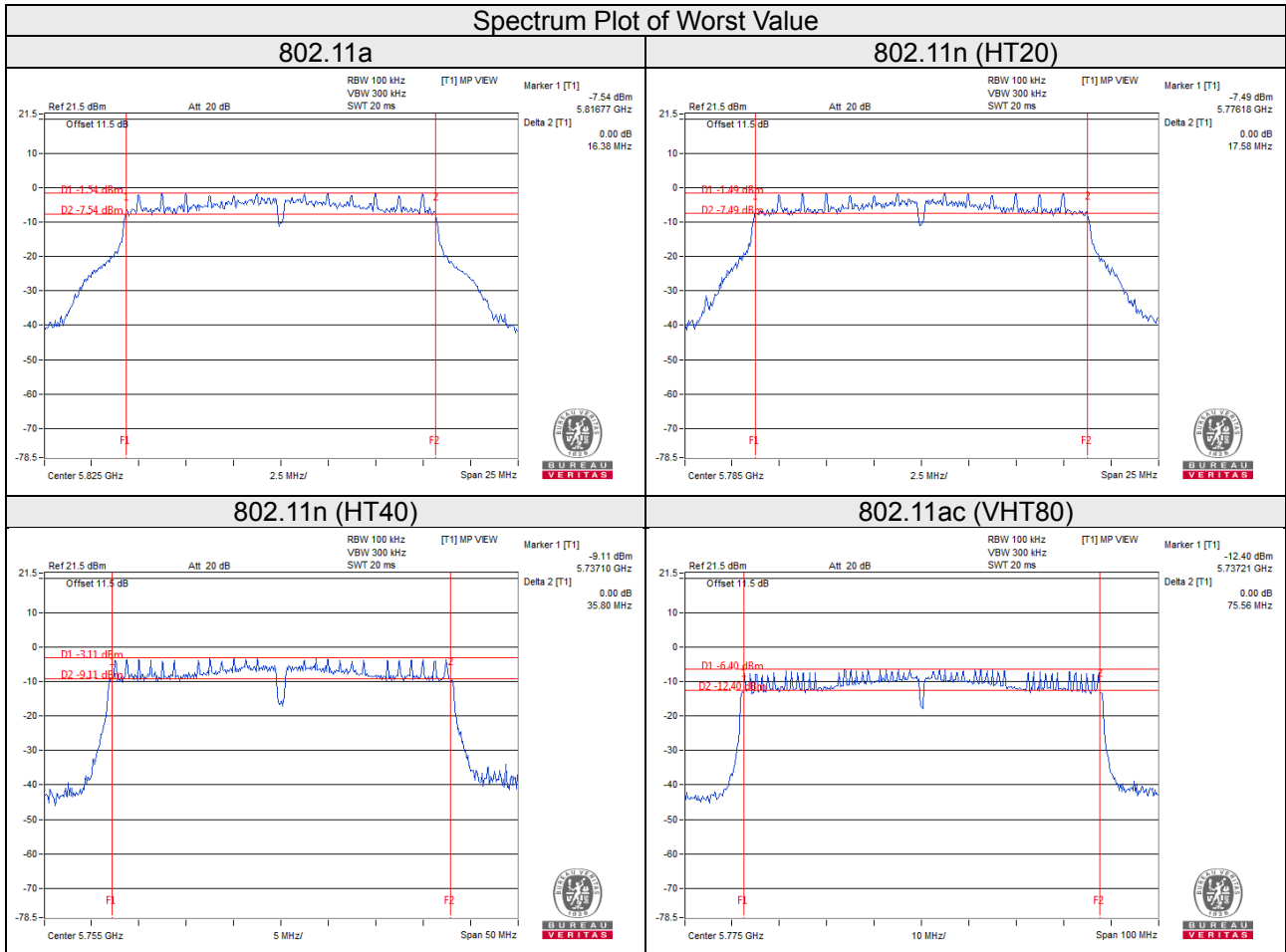
802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
142	5710 For U-NII-3	3.22	0.5	Pass
151	5755	35.80	0.5	Pass
159	5795	35.93	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
138	5690 For U-NII-3	3.20	0.5	Pass
155	5775	75.56	0.5	Pass

Spectrum Plot of Worst Value



*802.11a: Ch 144 (5720MHz for U-NII-3): $15.80-(5725-5712.12) = 2.92$

*802.11n (HT20): Ch 144 (5720MHz for U-NII-3): $16.68-(5725-5711.18) = 3.56$

*802.11n (HT40): Ch 142 (5710MHz for U-NII-3): $36.13-(5725-5692.09) = 3.22$

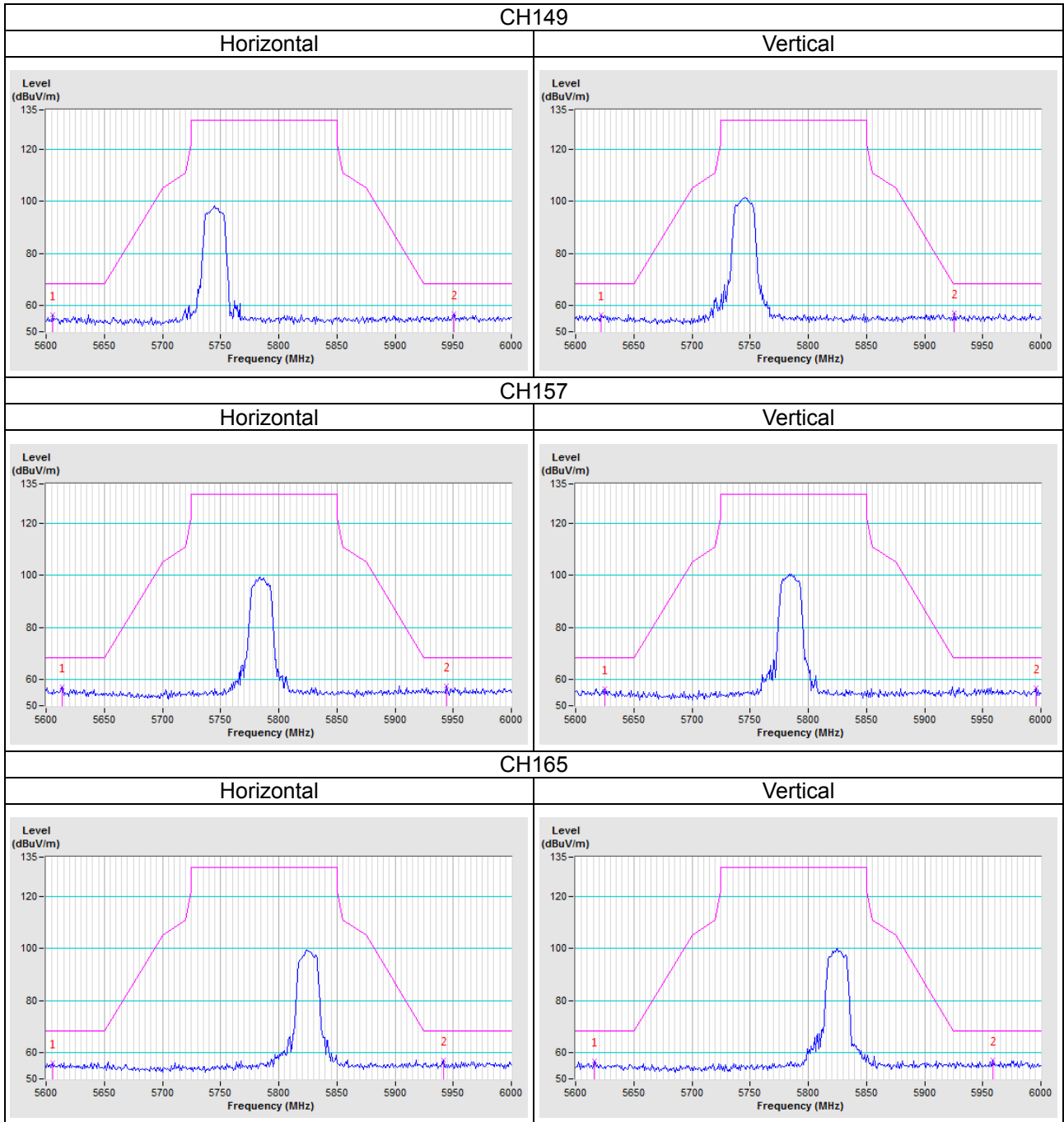
*802.11ac (VHT80): Ch 138 (5690MHz for U-NII-3): $75.91-(5725-5652.29) = 3.20$

5 Pictures of Test Arrangements

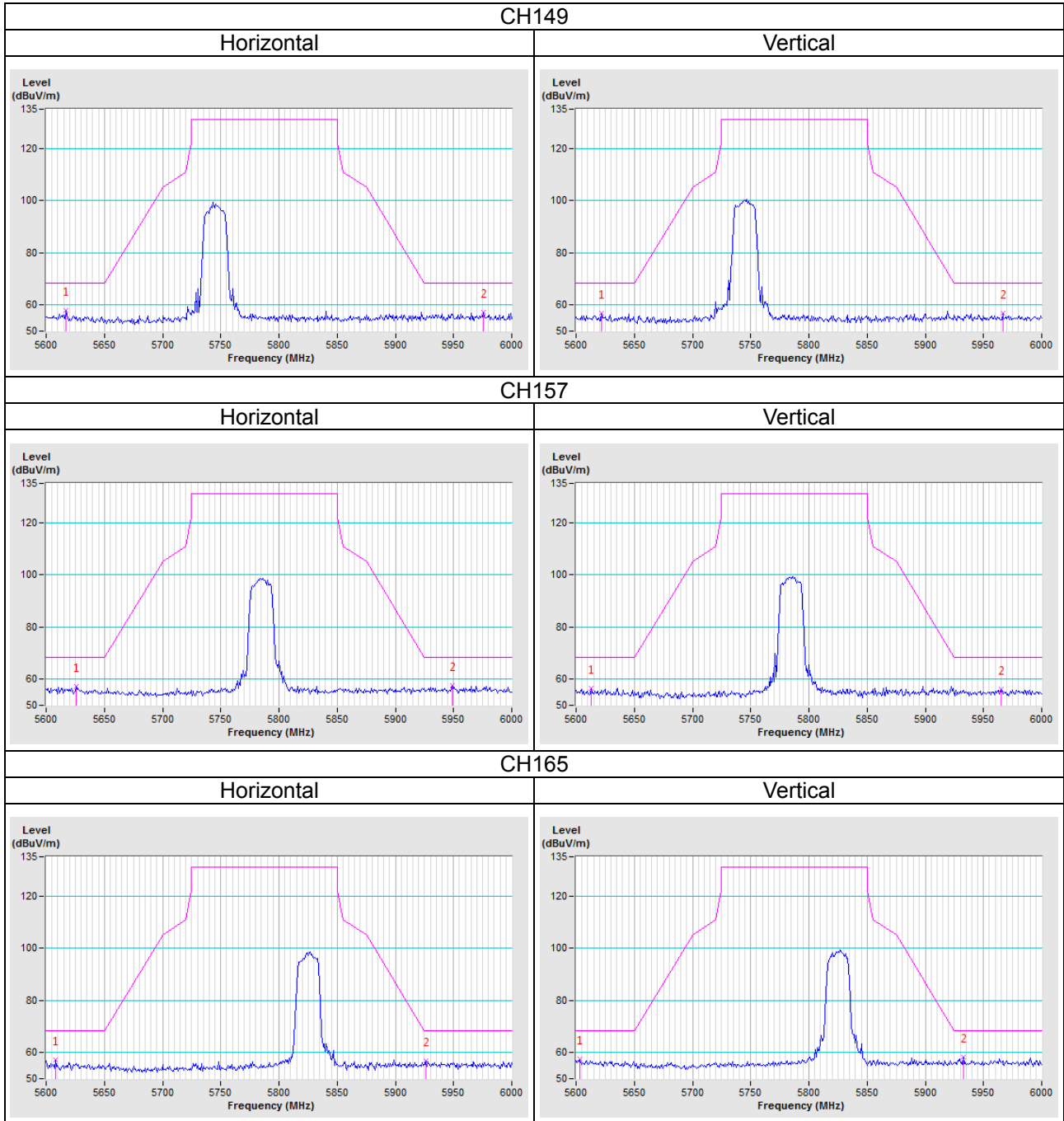
Please refer to the attached file (Test Setup Photo).

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

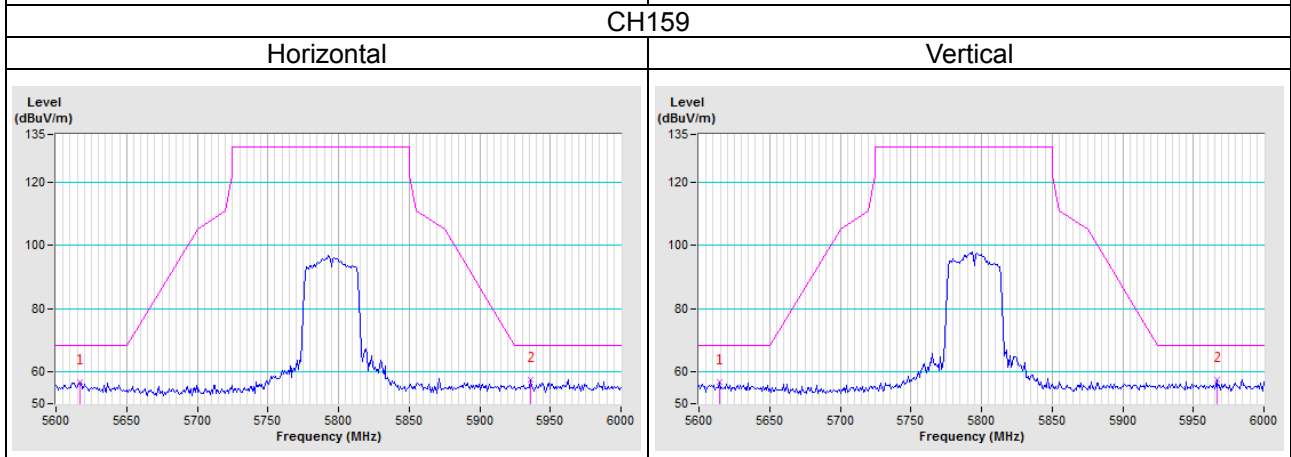
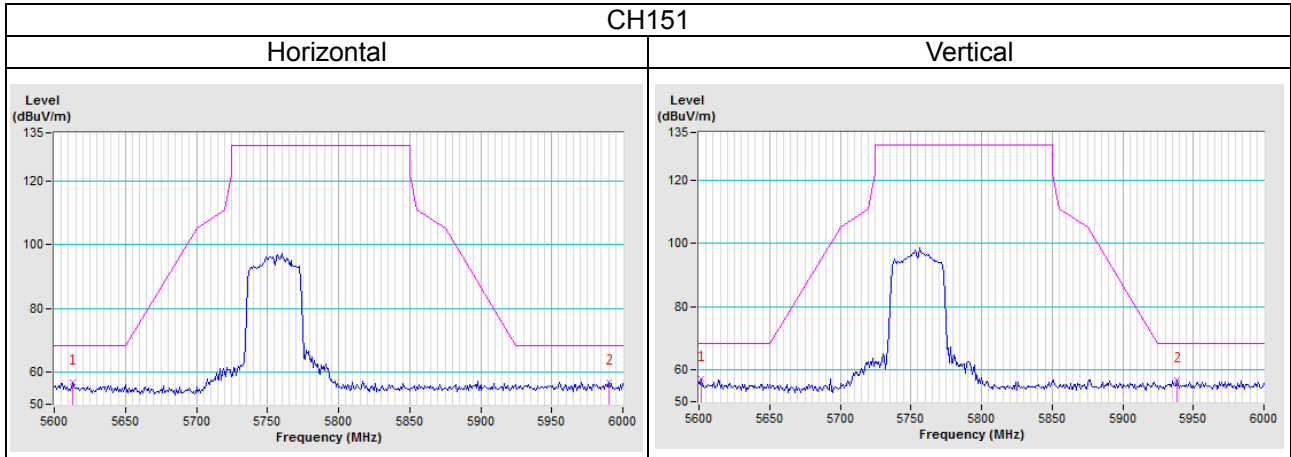
802.11a



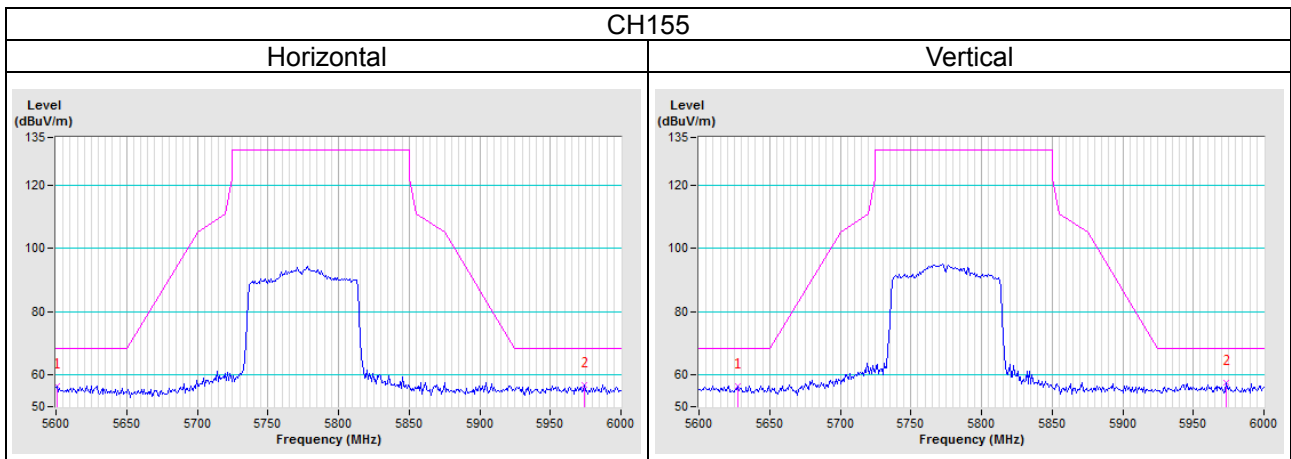
802.11n (HT20)



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 accredited and approved according to ISO/IEC 17025.

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

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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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