FCC Test Report

Report No.:	RF190104C22-1
FCC ID:	AZ489FT7119
Test Model:	H55TGT9PW8AN
Received Date:	Jan. 04, 2019
Test Date:	Jan. 10 ~ Jan. 19, 2019
Issued Date:	Jan. 29, 2019
Applicant:	Motorola Solutions, Inc.
Address:	8000 West Sunrise Boulevard, Fort Lauderdale, Florida 33322
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C.)
Test Location:	No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN (R.O.C.)
FCC Registration / Designation Number:	788550 / TW0003

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Release Control Record

Issue No.	Description	Date Issued
RF190104C22-1	Original release.	Jan. 29, 2019

1 Certificate of Conformity

Product:	Portable Radio
Brand:	Motorola Solutions
Test Model:	H55TGT9PW8AN
Sample Status:	Engineering sample
Applicant:	Motorola Solutions, Inc.
Test Date:	Jan. 10 ~ Jan. 19, 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:** Jan. 29, 2019
Polly Chien / Specialist

Approved by : _____ , **Date:** Jan. 29, 2019
Bruce Chen / Project Engineer

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -9.30dB at 0.19687MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.8dB at 5470.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	Pass	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(e)	6dB bandwidth	Pass	Meet the requirement of limit.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	No antenna connector is used.

*For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOBE 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) (±)
Conducted Emissions at mains ports	150kHz ~ 30MHz	2.94 dB
Radiated Emissions up to 1 GHz	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	Portable Radio
Brand	Motorola Solutions
Test Model	H55TGT9PW8AN
Sample Status	Engineering sample
Power Supply Rating	14.5Vdc (Single Unit Charger) 12Vdc (Multi-unit Charger) 5Vdc (host equipment) 7.4Vdc (Battery)
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: 111.429mW 5260~5320MHz: 111.686mW 5500~5700MHz: 110.154mW 5745~5825MHz: 112.980mW
Antenna Type	Refer to Note
Antenna Connector	NA
Accessory Device	Refer to Note
Cable Supplied	Refer to Note

Note:

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

Modulation Mode	TX Function
802.11a	1TX
802.11n (HT20)	1TX
802.11n (HT40)	1TX
802.11ac (VHT20)	1TX
802.11ac (VHT40)	1TX
802.11ac (VHT80)	1TX

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

2. The EUT with follow antennas gain is listed as table below.

Type	Connector	Gain(dBi)					
		2400MHz	2440MHz	2480MHz	5150MHz	5550MHz	5850MHz
Stamped metal	NA	3.1	3.2	2.9	2.8	4.0	1.9

3. The EUT uses following devices.

Item	Brand	Model	Specification	Remark
Single Unit Charger	MOTOROLA	NNTN8845A (Charger Base) +PS000040A01 (Power Supply)	Input: 110-120Vac, ~60Hz, 1A Output: 14.5Vdc, 2.5A 1.5m DC cable with 1 core attached	Accessory
Standard Cap Battery	MOTOROLA	NNTN9087A	BATTERY PACK, IMPRES GEN2, LIION, IP68, 3800T Rating: 7.4Vdc	Accessory
Hi-Cap Battery	MOTOROLA	NNTN9089A	BATTERY PACK, IMPRES GEN2, LIION, IP68, 5650T Rating: 7.4Vdc	Accessory
Multi-unit Charger	MOTOROLA	NNTN9115A (Charger Base) + 3087791G01 (Linecord)	Input: 100-240Vac, 50/60Hz, 3A Output: 12Vdc, 3A 2.2m DC cable without core attached	Accessory

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

3.2 Description of Test Modes

5180~5240MHz:

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

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

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

Channel	Frequency	Channel	Frequency
38	5190 MHz	46	5230 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
42	5210MHz

5260~5320MHz:

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

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

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

Channel	Frequency	Channel	Frequency
54	5270 MHz	62	5310 MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
58	5290MHz

5500~5720MHz:

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

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

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

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

3 channels are provided for 802.11ac (VHT80):

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

5745~5825MHz:

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

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

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

Channel	Frequency	Channel	Frequency
151	5755MHz	159	5795MHz

1 channel is provided for 802.11ac (VHT80):

Channel	Frequency
155	5775MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable to				Description
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	EUT with Notebook
B	-	√	√	-	EUT with single unit charger
C	-	√	√	-	EUT with multi-unit charger

Where RE≥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 **Z-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, 120, 140, 144	OFDM	6.0
	802.11n (HT20)		100 to 144	100, 120, 140, 144	OFDM	6.5
	802.11n (HT40)		102 to 142	102, 118, 134, 142	OFDM	13.5
	802.11ac (VHT80)		106 to 138	106, 112, 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, C	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, C	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, 120, 140, 144	OFDM	6.0
	802.11n (HT20)		100 to 144	100, 120, 140, 144	OFDM	6.5
	802.11n (HT40)		102 to 142	102, 118, 134, 142	OFDM	13.5
	802.11ac (VHT80)		106 to 138	106, 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

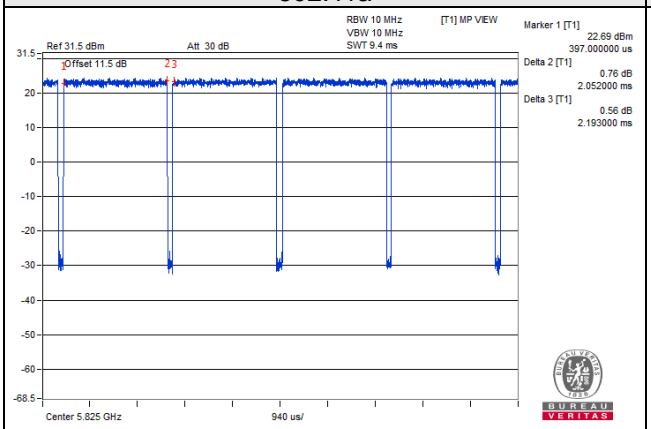
Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	20 deg. C, 69% RH	120Vac, 60Hz	Tim Chen
RE<1G	22 deg. C, 68% RH	120Vac, 60Hz	Greg Lin
PLC	25 deg. C, 75% RH	120Vac, 60Hz	Greg Lin
APCM	25 deg. C, 60% RH	120Vac, 60Hz	Chris Lin

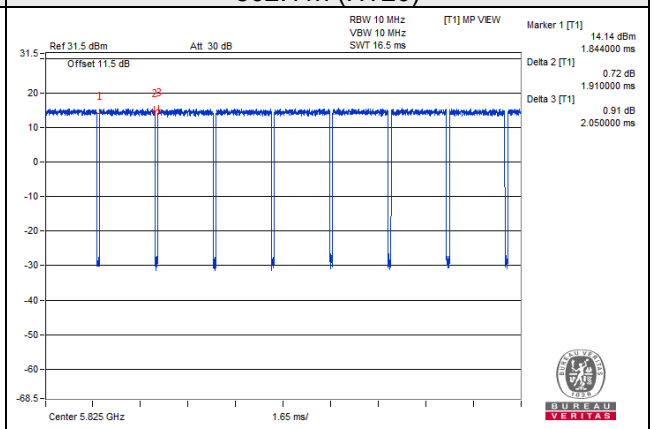
3.3 Duty Cycle of Test Signal

Duty cycle of test signal is < 98 %, duty factor is required
802.11a: Duty cycle = 2.052/2.193 =0.936, Duty factor = 10 * log(1/0.936) = 0.29
802.11n (HT20): Duty cycle = 1.910/2.050 =0.932, Duty factor = 10 * log(1/0.932) = 0.31
802.11n (HT40): Duty cycle = 0.938/1.048 =0.895, Duty factor = 10 * log(1/0.895) = 0.48
802.11ac (VHT80): Duty cycle = 0.458/0.551 =0.831, Duty factor = 10 * log(1/0.831) = 0.80

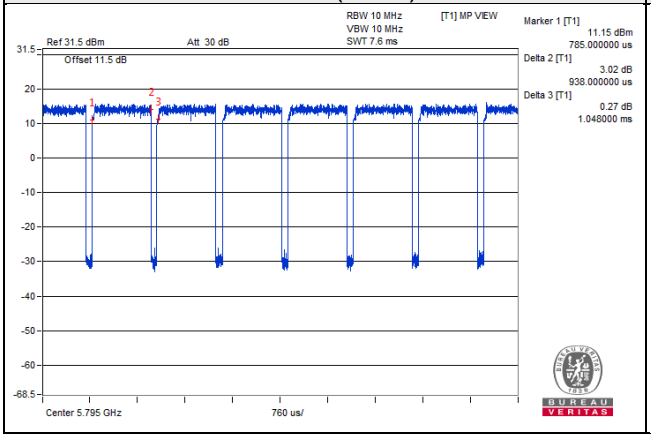
802.11a



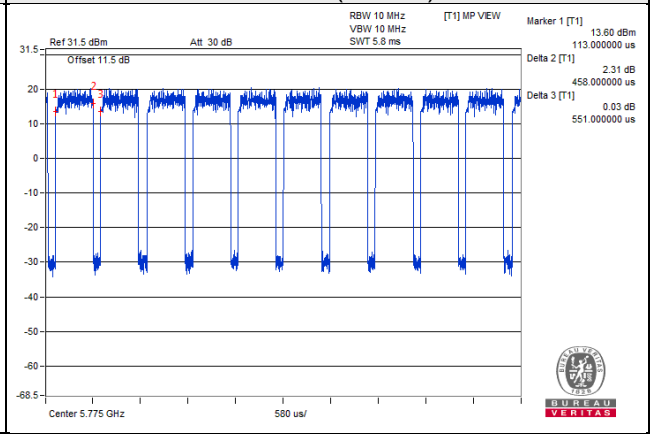
802.11n (HT20)



802.11n (HT40)



802.11ac (VHT80)



3.4 Description of Support Units

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

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	E5420	BPQ7MQ1	FCC DoC Approved	-
B.	Battery	MOTOROLA	NNTN9087A	NA	NA	Accessory
C.	Battery	MOTOROLA	NNTN9089A	NA	NA	Accessory
D.	USB Resistive Load x2	NA	NA	NA	NA	Provided by client
E.	USB Resistive Load x6	NA	NA	NA	NA	Provided by client
F.	Fleet Management Module	NA	NA	NA	NA	Provided by client

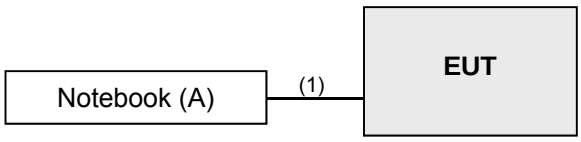
Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Item A acted as communication partner to transfer data.

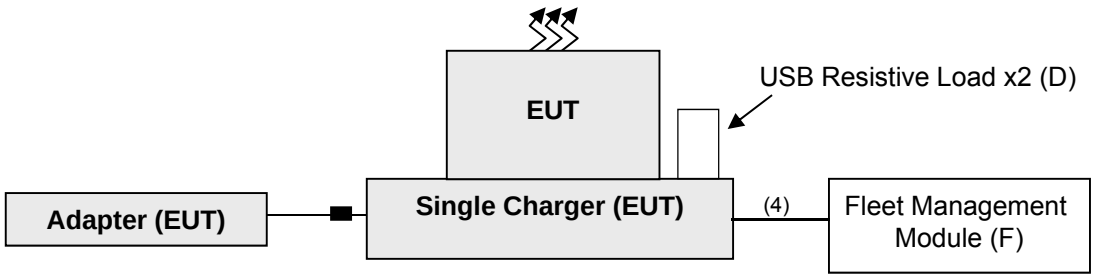
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	USB Cable	1	1.5	Y	0	-
2.	USB Cable	2	1	Y	0	-
3.	Mini USB cable	1	1	Y	0	Provided by client
4.	Cable	1	0.3	N	0	Provided by client

3.4.1 Configuration of System under Test

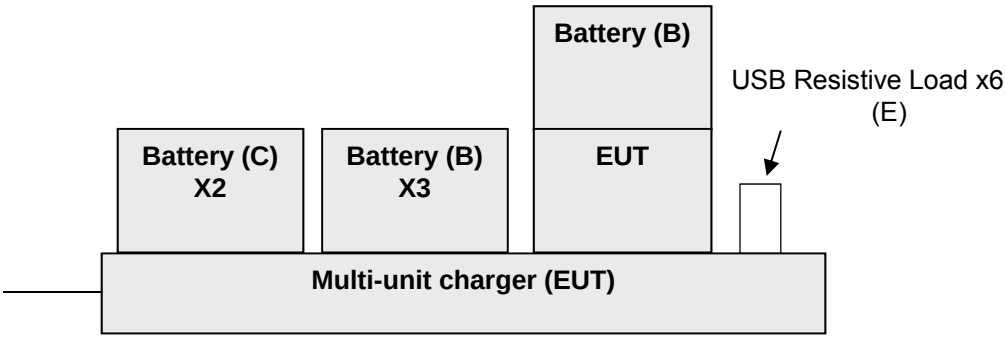
Mode A



Mode B



Mode C



3.5 General Description of Applied Standards

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

FCC Part 15, Subpart E (15.407)
KDB 789033 D02 General UNII Test Procedure New Rules v02r01
ANSI C63.10:2013

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

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

NOTE:

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

Limits of unwanted emission out of the restricted bands

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

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

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

4.1.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver KEYSIGHT	N9038A	MY55420137	Apr. 11, 2018	Apr. 10, 2019
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100269	May 29, 2018	May 28, 2019
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	Jun. 14, 2018	Jun. 13, 2019
Preamplifier Agilent (Below 1GHz)	8447D	2944A10638	Aug. 08, 2018	Aug. 07, 2019
Preamplifier Agilent (Above 1GHz)	8449B	3008A02367	Feb. 22, 2018	Feb. 21, 2019
RF signal cable HUBER+SUHNER&EMCI	SUCOFLEX 104 & EMC104-SM-SM8000	CABLE-CH9-02 (248780+171006)	Jan. 15, 2018	Jan. 14, 2019
			Jan. 19, 2019	Jan. 18, 2020
RF signal cable HUBER+SUHNER	SUCOFLEX 104	CABLE-CH9-(250795/4)	Aug. 08, 2018	Aug. 07, 2019
RF signal cable Woken	8D-FB	Cable-CH9-01	Jul. 31, 2018	Jul. 30, 2019
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
Pre-amplifier (18GHz-40GHz) EMC	EMC184045B	980175	Nov. 14, 2018	Nov. 13, 2019
USB Wideband Power Sensor KEYSIGHT	U2021XA	MY55050005/MY55190004/MY55190007/MY55210005	Jul. 17, 2018	Jul. 16, 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.
3. The FCC Designation Number is TW0003. The number will be varied with the Lab location and scope as attached.
4. The IC Site Registration No. is IC 7450F-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 ≥ 1/T (Duty cycle < 98%) or 10Hz (Duty cycle ≥ 98%) for Average detection (AV) at frequency above 1GHz.

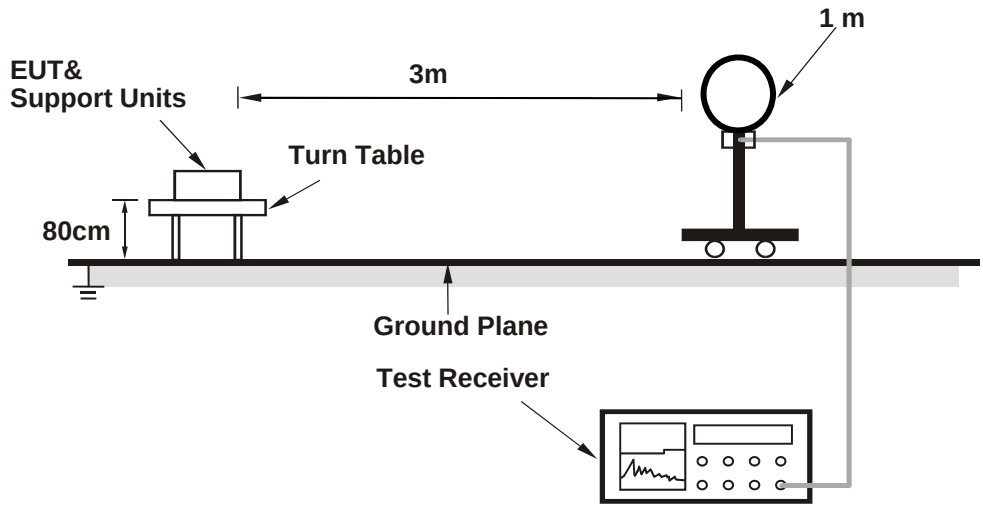
4. All modes of operation were investigated and the worst-case emissions are reported.

4.1.4 Deviation from Test Standard

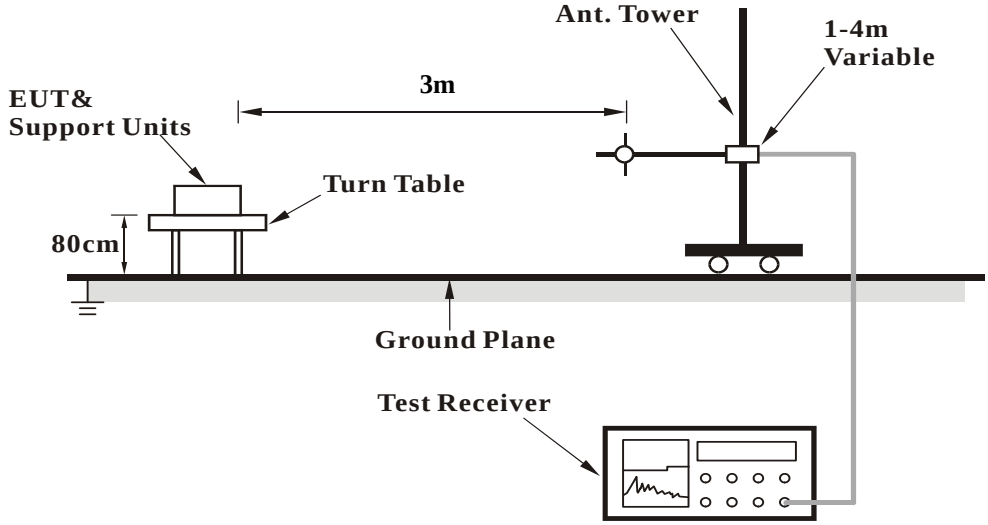
No deviation.

4.1.5 Test Set Up

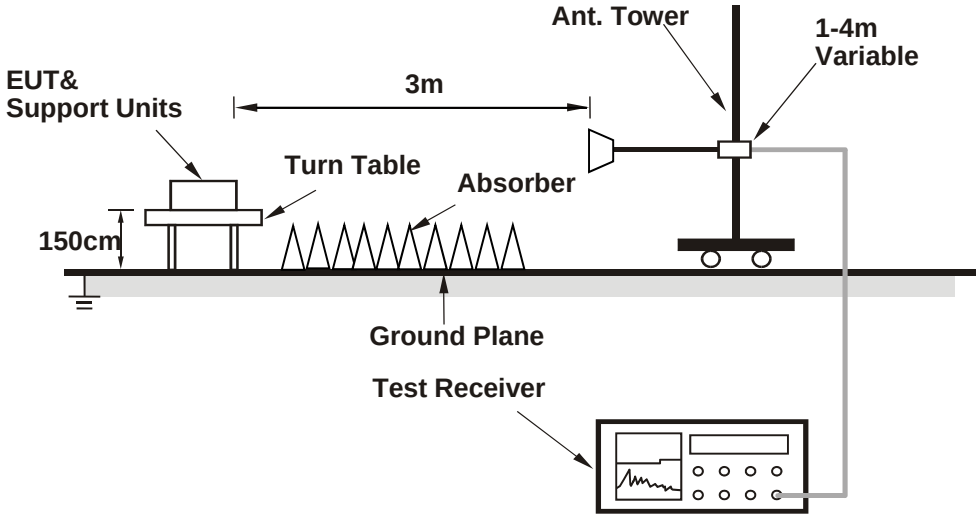
For Radiated emission below 30MHz



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

Mode A

a. Connected the EUT with the notebook.
b. Set the EUT under transmission condition continuously at specific channel frequency.

Mode B

a. Placed the EUT on the charger under charging.
b. Set the EUT under transmission condition continuously at specific channel frequency.

Mode C

a. Placed the EUT and batteries on the charger under charging.
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) 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	61.0 PK	74.0	-13.0	1.96 H	117	59.1	1.9
2	5150.00	45.6 AV	54.0	-8.4	1.96 H	117	43.7	1.9
3	*5180.00	111.0 PK			1.98 H	115	72.3	38.7
4	*5180.00	100.3 AV			1.98 H	115	61.6	38.7
5	#10360.00	53.6 PK	68.2	-14.6	1.00 H	184	39.2	14.4
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	61.1 PK	74.0	-12.9	1.00 V	62	59.2	1.9
2	5150.00	44.2 AV	54.0	-9.8	1.00 V	62	42.3	1.9
3	*5180.00	109.1 PK			1.00 V	71	70.4	38.7
4	*5180.00	98.6 AV			1.00 V	71	59.9	38.7
5	#10360.00	53.7 PK	68.2	-14.5	1.00 V	181	39.3	14.4

Remarks:

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

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) 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	*5200.00	111.9 PK			1.94 H	107	73.3	38.6
2	*5200.00	101.2 AV			1.94 H	107	62.6	38.6
3	#10400.00	54.4 PK	68.2	-13.8	1.00 H	181	39.7	14.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	109.4 PK			1.00 V	78	70.8	38.6
2	*5200.00	98.7 AV			1.00 V	78	60.1	38.6
3	#10400.00	55.2 PK	68.2	-13.0	1.00 V	177	40.5	14.7

Remarks:

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

CHANNEL	TX Channel 48	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	*5240.00	111.5 PK			1.89 H	107	73.0	38.5
2	*5240.00	101.1 AV			1.89 H	107	62.6	38.5
3	5350.00	51.8 PK	74.0	-22.2	1.88 H	109	50.2	1.6
4	5350.00	38.7 AV	54.0	-15.3	1.88 H	109	37.1	1.6
5	#10480.00	54.7 PK	68.2	-13.5	1.00 H	179	40.1	14.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	109.0 PK			1.00 V	80	70.5	38.5
2	*5240.00	97.5 AV			1.00 V	80	59.0	38.5
3	5350.00	51.7 PK	74.0	-22.3	1.00 V	78	50.1	1.6
4	5350.00	38.4 AV	54.0	-15.6	1.00 V	78	36.8	1.6
5	#10480.00	54.3 PK	68.2	-13.9	1.00 V	183	39.7	14.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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) 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	52.6 PK	74.0	-21.4	2.36 H	74	50.7	1.9
2	5150.00	39.6 AV	54.0	-14.4	2.36 H	74	37.7	1.9
3	*5260.00	108.6 PK			2.38 H	76	70.2	38.4
4	*5260.00	98.2 AV			2.38 H	76	59.8	38.4
5	#10520.00	54.8 PK	68.2	-13.4	1.00 H	173	40.1	14.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.2 PK	74.0	-20.8	1.13 V	47	51.3	1.9
2	5150.00	40.0 AV	54.0	-14.0	1.13 V	47	38.1	1.9
3	*5260.00	111.9 PK			1.10 V	44	73.5	38.4
4	*5260.00	101.1 AV			1.10 V	44	62.7	38.4
5	#10520.00	55.1 PK	68.2	-13.1	1.00 V	181	40.4	14.7

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	108.2 PK			2.41 H	77	69.9	38.3
2	*5300.00	97.7 AV			2.41 H	77	59.4	38.3
3	10600.00	54.5 PK	74.0	-19.5	1.00 H	184	39.6	14.9
4	10600.00	41.6 AV	54.0	-12.4	1.00 H	184	26.7	14.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	110.8 PK			1.15 V	51	72.5	38.3
2	*5300.00	100.3 AV			1.15 V	51	62.0	38.3
3	10600.00	54.1 PK	74.0	-19.9	1.00 V	180	39.2	14.9
4	10600.00	41.0 AV	54.0	-13.0	1.00 V	180	26.1	14.9

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	108.1 PK			2.30 H	68	69.7	38.4
2	*5320.00	97.8 AV			2.30 H	68	59.4	38.4
3	5350.00	56.3 PK	74.0	-17.7	2.29 H	75	54.7	1.6
4	5350.00	43.0 AV	54.0	-11.0	2.29 H	75	41.4	1.6
5	10640.00	54.5 PK	74.0	-19.5	1.00 H	186	39.5	15.0
6	10640.00	42.1 AV	54.0	-11.9	1.00 H	186	27.1	15.0
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	*5320.00	111.1 PK			1.10 V	47	72.7	38.4
2	*5320.00	100.6 AV			1.10 V	47	62.2	38.4
3	5350.00	58.9 PK	74.0	-15.1	1.12 V	49	57.3	1.6
4	5350.00	44.8 AV	54.0	-9.2	1.12 V	49	43.2	1.6
5	10640.00	54.8 PK	74.0	-19.2	1.00 V	174	39.8	15.0
6	10640.00	42.3 AV	54.0	-11.7	1.00 V	174	27.3	15.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.8 PK	74.0	-19.2	1.98 H	116	52.7	2.1
2	5460.00	41.1 AV	54.0	-12.9	1.98 H	116	39.0	2.1
3	#5470.00	65.5 PK	68.2	-2.7	1.97 H	113	63.4	2.1
4	*5500.00	111.8 PK			2.07 H	110	72.8	39.0
5	*5500.00	100.9 AV			2.07 H	110	61.9	39.0
6	11000.00	56.9 PK	74.0	-17.1	1.00 H	182	40.2	16.7
7	11000.00	41.9 AV	54.0	-12.1	1.00 H	182	25.2	16.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	55.8 PK	74.0	-18.2	1.55 V	355	53.7	2.1
2	5460.00	41.4 AV	54.0	-12.6	1.55 V	355	39.3	2.1
3	#5470.00	63.5 PK	68.2	-4.7	1.51 V	358	61.4	2.1
4	*5500.00	110.7 PK			1.54 V	357	71.7	39.0
5	*5500.00	100.2 AV			1.54 V	357	61.2	39.0
6	11000.00	57.0 PK	74.0	-17.0	1.00 V	173	40.3	16.7
7	11000.00	42.2 AV	54.0	-11.8	1.00 V	173	25.5	16.7

Remarks:

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

CHANNEL	TX Channel 120	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	*5600.00	111.3 PK			1.99 H	110	72.2	39.1
2	*5600.00	100.6 AV			1.99 H	110	61.5	39.1
3	11200.00	56.0 PK	74.0	-18.0	1.00 H	177	40.4	15.6
4	11200.00	40.9 AV	54.0	-13.1	1.00 H	177	25.3	15.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5600.00	110.9 PK			1.75 V	349	71.8	39.1
2	*5600.00	100.8 AV			1.75 V	349	61.7	39.1
3	11200.00	55.7 PK	74.0	-18.3	1.00 V	178	40.1	15.6
4	11200.00	41.2 AV	54.0	-12.8	1.00 V	178	25.6	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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	109.7 PK			1.90 H	112	70.6	39.1
2	*5700.00	99.2 AV			1.90 H	112	60.1	39.1
3	#5725.00	59.6 PK	68.2	-8.6	1.90 H	112	57.3	2.3
4	11400.00	55.4 PK	74.0	-18.6	1.00 H	183	39.8	15.6
5	11400.00	40.7 AV	54.0	-13.3	1.00 H	183	25.1	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	*5700.00	111.3 PK			1.95 V	355	72.2	39.1
2	*5700.00	100.6 AV			1.95 V	355	61.5	39.1
3	#5725.00	58.8 PK	68.2	-9.4	1.91 V	357	56.5	2.3
4	11400.00	55.3 PK	74.0	-18.7	1.00 V	174	39.7	15.6
5	11400.00	40.8 AV	54.0	-13.2	1.00 V	174	25.2	15.6

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	52.5 PK	74.0	-21.5	1.93 H	112	50.4	2.1
2	5460.00	39.4 AV	54.0	-14.6	1.93 H	112	37.3	2.1
3	#5470.00	52.7 PK	68.2	-15.5	1.91 H	114	50.6	2.1
4	*5720.00	110.3 PK			1.95 H	110	71.2	39.1
5	*5720.00	100.0 AV			1.95 H	110	60.9	39.1
6	#5850.00	53.0 PK	68.2	-15.2	1.92 H	111	50.0	3.0
7	11440.00	55.5 PK	74.0	-18.5	1.00 H	183	40.2	15.3
8	11440.00	41.4 AV	54.0	-12.6	1.00 H	183	26.1	15.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	52.5 PK	74.0	-21.5	1.92 V	356	50.4	2.1
2	5460.00	39.3 AV	54.0	-14.7	1.92 V	356	37.2	2.1
3	#5470.00	52.6 PK	68.2	-15.6	1.93 V	355	50.5	2.1
4	*5720.00	112.5 PK			1.91 V	359	73.4	39.1
5	*5720.00	101.9 AV			1.91 V	359	62.8	39.1
6	#5850.00	53.1 PK	68.2	-15.1	1.89 V	360	50.1	3.0
7	11440.00	55.7 PK	74.0	-18.3	1.00 V	183	40.4	15.3
8	11440.00	40.9 AV	54.0	-13.1	1.00 V	183	25.6	15.3

Remarks:

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

CHANNEL	TX Channel 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	#5632.80	53.1 PK	68.2	-15.1	1.95 H	114	50.8	2.3
2	*5745.00	109.3 PK			1.96 H	115	70.0	39.3
3	*5745.00	98.6 AV			1.96 H	115	59.3	39.3
4	#5934.40	53.8 PK	68.2	-14.4	1.95 H	114	50.6	3.2
5	11490.00	53.2 PK	74.0	-20.8	1.00 H	183	38.2	15.0
6	11490.00	37.4 AV	54.0	-16.6	1.00 H	183	22.4	15.0
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	#5638.40	54.7 PK	68.2	-13.5	2.44 V	343	52.4	2.3
2	*5745.00	110.9 PK			2.44 V	343	71.6	39.3
3	*5745.00	100.3 AV			2.44 V	343	61.0	39.3
4	#5937.60	54.2 PK	68.2	-14.0	2.44 V	343	51.0	3.2
5	11490.00	53.4 PK	74.0	-20.6	1.00 V	178	38.4	15.0
6	11490.00	37.6 AV	54.0	-16.4	1.00 V	178	22.6	15.0

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 157	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	#5640.80	52.7 PK	68.2	-15.5	1.94 H	113	50.4	2.3
2	*5785.00	109.5 PK			1.94 H	113	70.0	39.5
3	*5785.00	98.9 AV			1.94 H	113	59.4	39.5
4	#5951.20	54.3 PK	68.2	-13.9	1.94 H	113	51.1	3.2
5	11570.00	53.3 PK	74.0	-20.7	1.00 H	179	38.5	14.8
6	11570.00	36.9 AV	54.0	-17.1	1.00 H	179	22.1	14.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5638.40	53.4 PK	68.2	-14.8	2.41 V	356	51.1	2.3
2	*5785.00	112.2 PK			2.41 V	357	72.7	39.5
3	*5785.00	101.6 AV			2.41 V	357	62.1	39.5
4	#5936.00	54.6 PK	68.2	-13.6	2.41 V	356	51.4	3.2
5	11570.00	53.7 PK	74.0	-20.3	1.00 V	183	38.9	14.8
6	11570.00	37.2 AV	54.0	-16.8	1.00 V	183	22.4	14.8

Remarks:

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

CHANNEL	TX Channel 165	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	#5640.00	53.1 PK	68.2	-15.1	2.03 H	115	50.8	2.3
2	*5825.00	109.4 PK			2.03 H	115	69.7	39.7
3	*5825.00	98.8 AV			2.03 H	115	59.1	39.7
4	#5936.00	53.9 PK	68.2	-14.3	2.03 H	115	50.7	3.2
5	11650.00	53.1 PK	74.0	-20.9	1.00 H	184	38.3	14.8
6	11650.00	37.6 AV	54.0	-16.4	1.00 H	184	22.8	14.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5624.00	52.9 PK	68.2	-15.3	2.44 V	360	50.7	2.2
2	*5825.00	112.0 PK			2.45 V	360	72.3	39.7
3	*5825.00	101.5 AV			2.45 V	360	61.8	39.7
4	#5938.40	53.8 PK	68.2	-14.4	2.44 V	360	50.6	3.2
5	11650.00	53.3 PK	74.0	-20.7	1.00 V	181	38.5	14.8
6	11650.00	37.4 AV	54.0	-16.6	1.00 V	181	22.6	14.8

Remarks:

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

802.11n (HT20)

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.3 PK	74.0	-13.7	1.91 H	110	58.4	1.9
2	5150.00	45.0 AV	54.0	-9.0	1.91 H	110	43.1	1.9
3	*5180.00	110.5 PK			1.92 H	106	71.8	38.7
4	*5180.00	99.1 AV			1.92 H	106	60.4	38.7
5	#10360.00	54.6 PK	68.2	-13.6	1.00 H	186	40.2	14.4
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	62.0 PK	74.0	-12.0	1.00 V	81	60.1	1.9
2	5150.00	45.0 AV	54.0	-9.0	1.00 V	81	43.1	1.9
3	*5180.00	108.9 PK			1.00 V	79	70.2	38.7
4	*5180.00	98.0 AV			1.00 V	79	59.3	38.7
5	#10360.00	54.2 PK	68.2	-14.0	1.00 V	176	39.8	14.4

Remarks:

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

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Peak (PK) 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	*5200.00	111.3 PK			1.91 H	110	72.7	38.6
2	*5200.00	100.9 AV			1.91 H	110	62.3	38.6
3	#10400.00	54.5 PK	68.2	-13.7	1.00 H	175	39.8	14.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5200.00	109.2 PK			1.00 V	75	70.6	38.6
2	*5200.00	97.9 AV			1.00 V	75	59.3	38.6
3	#10400.00	55.6 PK	68.2	-12.6	1.00 V	179	40.9	14.7

Remarks:

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

CHANNEL	TX Channel 48	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	*5240.00	111.2 PK			1.88 H	112	72.7	38.5
2	*5240.00	100.8 AV			1.88 H	112	62.3	38.5
3	5350.00	51.2 PK	74.0	-22.8	1.92 H	106	49.6	1.6
4	5350.00	38.1 AV	54.0	-15.9	1.92 H	106	36.5	1.6
5	#10480.00	54.2 PK	68.2	-14.0	1.00 H	178	39.6	14.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	109.3 PK			1.00 V	82	70.8	38.5
2	*5240.00	97.9 AV			1.00 V	82	59.4	38.5
3	5350.00	52.0 PK	74.0	-22.0	1.00 V	76	50.4	1.6
4	5350.00	38.7 AV	54.0	-15.3	1.00 V	76	37.1	1.6
5	#10480.00	54.8 PK	68.2	-13.4	1.00 V	182	40.2	14.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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) 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	52.1 PK	74.0	-21.9	2.36 H	80	50.2	1.9
2	5150.00	39.2 AV	54.0	-14.8	2.36 H	80	37.3	1.9
3	*5260.00	109.2 PK			2.31 H	74	70.8	38.4
4	*5260.00	98.7 AV			2.31 H	74	60.3	38.4
5	#10520.00	54.3 PK	68.2	-13.9	1.00 H	174	39.6	14.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.3 PK	74.0	-20.7	1.12 V	45	51.4	1.9
2	5150.00	40.2 AV	54.0	-13.8	1.12 V	45	38.3	1.9
3	*5260.00	111.8 PK			1.14 V	47	73.4	38.4
4	*5260.00	100.5 AV			1.14 V	47	62.1	38.4
5	#10520.00	54.6 PK	68.2	-13.6	1.00 V	185	39.9	14.7

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	108.5 PK			2.33 H	71	70.2	38.3
2	*5300.00	98.0 AV			2.33 H	71	59.7	38.3
3	10600.00	54.7 PK	74.0	-19.3	1.00 H	182	39.8	14.9
4	10600.00	41.2 AV	54.0	-12.8	1.00 H	182	26.3	14.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	110.6 PK			1.15 V	49	72.3	38.3
2	*5300.00	100.0 AV			1.15 V	49	61.7	38.3
3	10600.00	54.5 PK	74.0	-19.5	1.00 V	177	39.6	14.9
4	10600.00	41.3 AV	54.0	-12.7	1.00 V	177	26.4	14.9

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	108.3 PK			2.31 H	71	69.9	38.4
2	*5320.00	98.1 AV			2.31 H	71	59.7	38.4
3	5350.00	56.5 PK	74.0	-17.5	2.36 H	79	54.9	1.6
4	5350.00	43.7 AV	54.0	-10.3	2.36 H	79	42.1	1.6
5	10640.00	54.9 PK	74.0	-19.1	1.00 H	172	39.9	15.0
6	10640.00	41.7 AV	54.0	-12.3	1.00 H	172	26.7	15.0
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	*5320.00	110.9 PK			1.16 V	45	72.5	38.4
2	*5320.00	100.7 AV			1.16 V	45	62.3	38.4
3	5350.00	59.2 PK	74.0	-14.8	1.13 V	46	57.6	1.6
4	5350.00	45.1 AV	54.0	-8.9	1.13 V	46	43.5	1.6
5	10640.00	55.3 PK	74.0	-18.7	1.00 V	158	40.3	15.0
6	10640.00	42.7 AV	54.0	-11.3	1.00 V	158	27.7	15.0

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	54.6 PK	74.0	-19.4	1.94 H	116	52.5	2.1
2	5460.00	41.8 AV	54.0	-12.2	1.94 H	116	39.7	2.1
3	#5470.00	65.7 PK	68.2	-2.5	1.95 H	113	63.6	2.1
4	*5500.00	112.0 PK			1.95 H	114	73.0	39.0
5	*5500.00	100.4 AV			1.95 H	114	61.4	39.0
6	11000.00	57.2 PK	74.0	-16.8	1.00 H	183	40.5	16.7
7	11000.00	42.5 AV	54.0	-11.5	1.00 H	183	25.8	16.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	56.2 PK	74.0	-17.8	2.02 V	355	54.1	2.1
2	5460.00	40.8 AV	54.0	-13.2	2.02 V	355	38.7	2.1
3	#5470.00	62.8 PK	68.2	-5.4	1.97 V	353	60.7	2.1
4	*5500.00	111.5 PK			2.00 V	358	72.5	39.0
5	*5500.00	99.8 AV			2.00 V	358	60.8	39.0
6	11000.00	57.0 PK	74.0	-17.0	1.96 V	353	40.3	16.7
7	11000.00	42.1 AV	54.0	-11.9	1.96 V	353	25.4	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 120	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	*5600.00	111.6 PK			1.98 H	118	72.5	39.1
2	*5600.00	100.9 AV			1.98 H	118	61.8	39.1
3	11200.00	55.7 PK	74.0	-18.3	1.00 H	185	40.1	15.6
4	11200.00	41.2 AV	54.0	-12.8	1.00 H	185	25.6	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	*5600.00	111.2 PK			2.02 V	359	72.1	39.1
2	*5600.00	101.0 AV			2.02 V	359	61.9	39.1
3	11200.00	55.9 PK	74.0	-18.1	1.00 V	184	40.3	15.6
4	11200.00	41.4 AV	54.0	-12.6	1.00 V	184	25.8	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.

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	110.0 PK			1.94 H	118	70.9	39.1
2	*5700.00	99.5 AV			1.94 H	118	60.4	39.1
3	#5725.00	57.9 PK	68.2	-10.3	1.91 H	120	55.6	2.3
4	11400.00	55.7 PK	74.0	-18.3	1.00 H	181	40.1	15.6
5	11400.00	41.1 AV	54.0	-12.9	1.00 H	181	25.5	15.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	111.2 PK			2.05 V	352	72.1	39.1
2	*5700.00	100.9 AV			2.05 V	352	61.8	39.1
3	#5725.00	59.2 PK	68.2	-9.0	1.94 V	353	56.9	2.3
4	11400.00	56.0 PK	74.0	-18.0	1.00 V	186	40.4	15.6
5	11400.00	41.2 AV	54.0	-12.8	1.00 V	186	25.6	15.6

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	52.3 PK	74.0	-21.7	1.96 H	115	50.2	2.1
2	5460.00	39.6 AV	54.0	-14.4	1.96 H	115	37.5	2.1
3	#5470.00	51.8 PK	68.2	-16.4	1.93 H	114	49.7	2.1
4	*5720.00	110.6 PK			1.95 H	111	71.5	39.1
5	*5720.00	100.4 AV			1.95 H	111	61.3	39.1
6	#5850.00	52.7 PK	68.2	-15.5	1.99 H	116	49.7	3.0
7	11440.00	55.8 PK	74.0	-18.2	1.00 H	184	40.5	15.3
8	11440.00	41.9 AV	54.0	-12.1	1.00 H	184	26.6	15.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	52.3 PK	74.0	-21.7	2.01 V	353	50.2	2.1
2	5460.00	38.9 AV	54.0	-15.1	2.01 V	353	36.8	2.1
3	#5470.00	52.3 PK	68.2	-15.9	1.99 V	351	50.2	2.1
4	*5720.00	112.2 PK			2.02 V	356	73.1	39.1
5	*5720.00	101.6 AV			2.02 V	356	62.5	39.1
6	#5850.00	53.6 PK	68.2	-14.6	2.05 V	354	50.6	3.0
7	11440.00	55.4 PK	74.0	-18.6	1.00 V	179	40.1	15.3
8	11440.00	40.6 AV	54.0	-13.4	1.00 V	179	25.3	15.3

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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	#5648.80	54.4 PK	68.2	-13.8	1.30 H	317	52.1	2.3
2	*5745.00	107.6 PK			1.30 H	317	68.3	39.3
3	*5745.00	95.9 AV			1.30 H	317	56.6	39.3
4	#5942.40	55.8 PK	68.2	-12.4	1.30 H	317	52.6	3.2
5	11490.00	53.4 PK	74.0	-20.6	1.28 H	311	38.4	15.0
6	11490.00	37.6 AV	54.0	-16.4	1.28 H	311	22.6	15.0
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	#5629.60	53.9 PK	68.2	-14.3	1.59 V	357	51.7	2.2
2	*5745.00	105.6 PK			1.60 V	357	66.3	39.3
3	*5745.00	93.3 AV			1.60 V	357	54.0	39.3
4	#5940.80	55.0 PK	68.2	-13.2	1.59 V	357	51.8	3.2
5	11490.00	53.7 PK	74.0	-20.3	1.00 V	185	38.7	15.0
6	11490.00	37.9 AV	54.0	-16.1	1.00 V	185	22.9	15.0

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 157	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	#5649.60	53.6 PK	68.2	-14.6	1.21 H	328	51.3	2.3
2	*5785.00	108.4 PK			1.22 H	328	68.9	39.5
3	*5785.00	96.7 AV			1.22 H	328	57.2	39.5
4	#5931.20	54.9 PK	68.2	-13.3	1.21 H	328	51.7	3.2
5	11570.00	53.4 PK	74.0	-20.6	1.00 H	178	38.6	14.8
6	11570.00	37.9 AV	54.0	-16.1	1.00 H	178	23.1	14.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5628.80	54.2 PK	68.2	-14.0	1.80 V	360	52.0	2.2
2	*5785.00	107.1 PK			1.80 V	360	67.6	39.5
3	*5785.00	95.6 AV			1.80 V	360	56.1	39.5
4	#5956.00	55.1 PK	68.2	-13.1	1.80 V	360	51.9	3.2
5	11570.00	52.9 PK	74.0	-21.1	1.80 V	360	38.1	14.8
6	11570.00	37.2 AV	54.0	-16.8	1.80 V	360	22.4	14.8

Remarks:

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

CHANNEL	TX Channel 165	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	53.0 PK	68.2	-15.2	1.20 H	319	50.8	2.2
2	*5825.00	109.9 PK			1.21 H	320	70.2	39.7
3	*5825.00	97.7 AV			1.21 H	320	58.0	39.7
4	#5949.60	54.5 PK	68.2	-13.7	1.20 H	319	51.3	3.2
5	11650.00	52.4 PK	74.0	-21.6	1.00 H	179	37.6	14.8
6	11650.00	37.3 AV	54.0	-16.7	1.00 H	179	22.5	14.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5644.00	53.9 PK	68.2	-14.3	1.43 V	351	51.6	2.3
2	*5825.00	108.4 PK			1.44 V	352	68.7	39.7
3	*5825.00	96.7 AV			1.44 V	352	57.0	39.7
4	#5947.20	55.0 PK	68.2	-13.2	1.43 V	351	51.8	3.2
5	11650.00	53.0 PK	74.0	-21.0	1.00 V	181	38.2	14.8
6	11650.00	37.8 AV	54.0	-16.2	1.00 V	181	23.0	14.8

Remarks:

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

802.11n (HT40)

CHANNEL	TX Channel 38	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	63.7 PK	74.0	-10.3	1.95 H	106	61.8	1.9
2	5150.00	49.9 AV	54.0	-4.1	1.95 H	106	48.0	1.9
3	*5190.00	107.6 PK			1.96 H	108	69.0	38.6
4	*5190.00	95.7 AV			1.96 H	108	57.1	38.6
5	#10380.00	54.2 PK	68.2	-14.0	1.00 H	171	39.6	14.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	62.4 PK	74.0	-11.6	1.00 V	79	60.5	1.9
2	5150.00	48.1 AV	54.0	-5.9	1.00 V	79	46.2	1.9
3	*5190.00	106.1 PK			1.00 V	81	67.5	38.6
4	*5190.00	94.6 AV			1.00 V	81	56.0	38.6
5	#10380.00	55.1 PK	68.2	-13.1	1.00 V	181	40.5	14.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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) 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	*5230.00	109.0 PK			1.93 H	118	70.5	38.5
2	*5230.00	97.7 AV			1.93 H	118	59.2	38.5
3	5350.00	51.8 PK	74.0	-22.2	1.94 H	120	50.2	1.6
4	5350.00	39.3 AV	54.0	-14.7	1.94 H	120	37.7	1.6
5	#10460.00	54.2 PK	68.2	-14.0	1.00 H	186	39.6	14.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	109.7 PK			1.00 V	79	71.2	38.5
2	*5230.00	97.7 AV			1.00 V	79	59.2	38.5
3	5350.00	52.2 PK	74.0	-21.8	1.00 V	82	50.6	1.6
4	5350.00	39.0 AV	54.0	-15.0	1.00 V	82	37.4	1.6
5	#10460.00	54.4 PK	68.2	-13.8	1.00 V	176	39.8	14.6

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. 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) 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	52.3 PK	74.0	-21.7	2.31 H	72	50.4	1.9
2	5150.00	39.8 AV	54.0	-14.2	2.31 H	72	37.9	1.9
3	*5270.00	106.7 PK			2.30 H	76	68.3	38.4
4	*5270.00	95.0 AV			2.30 H	76	56.6	38.4
5	#10540.00	54.5 PK	74.0	-19.5	1.00 H	183	39.7	14.8
6	#10540.00	42.2 AV	54.0	-11.8	1.00 H	183	27.4	14.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	51.8 PK	74.0	-22.2	1.15 V	52	49.9	1.9
2	5150.00	39.3 AV	54.0	-14.7	1.15 V	52	37.4	1.9
3	*5270.00	110.7 PK			1.15 V	50	72.3	38.4
4	*5270.00	98.9 AV			1.15 V	50	60.5	38.4
5	#10540.00	55.1 PK	74.0	-18.9	1.00 V	181	40.3	14.8
6	#10540.00	42.6 AV	54.0	-11.4	1.00 V	181	27.8	14.8

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	105.7 PK			2.39 H	77	67.3	38.4
2	*5310.00	94.1 AV			2.39 H	77	55.7	38.4
3	5350.00	61.7 PK	74.0	-12.3	2.41 H	81	60.1	1.6
4	5350.00	47.6 AV	54.0	-6.4	2.41 H	81	46.0	1.6
5	10620.00	55.0 PK	74.0	-19.0	1.00 H	185	39.9	15.1
6	10620.00	42.2 AV	54.0	-11.8	1.00 H	185	27.1	15.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	107.9 PK			1.13 V	54	69.5	38.4
2	*5310.00	96.3 AV			1.13 V	54	57.9	38.4
3	5350.00	63.1 PK	74.0	-10.9	1.12 V	58	61.5	1.6
4	5350.00	50.0 AV	54.0	-4.0	1.12 V	58	48.4	1.6
5	10620.00	55.4 PK	74.0	-18.6	1.00 V	185	40.3	15.1
6	10620.00	42.6 AV	54.0	-11.4	1.00 V	185	27.5	15.1

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.4 PK	74.0	-11.6	1.96 H	110	60.3	2.1
2	5460.00	49.1 AV	54.0	-4.9	1.96 H	110	47.0	2.1
3	**#5470.00**	**66.4 PK**	**68.2**	**-1.8**	**1.96 H**	**110**	**64.3**	**2.1**
4	*5510.00	108.0 PK			1.96 H	113	69.0	39.0
5	*5510.00	96.3 AV			1.96 H	113	57.3	39.0
6	11020.00	57.1 PK	74.0	-16.9	1.00 H	181	40.5	16.6
7	11020.00	42.1 AV	54.0	-11.9	1.00 H	181	25.5	16.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	62.8 PK	74.0	-11.2	1.56 V	357	60.7	2.1
2	5460.00	48.8 AV	54.0	-5.2	1.56 V	357	46.7	2.1
3	#5470.00	66.2 PK	68.2	-2.0	1.57 V	358	64.1	2.1
4	*5510.00	107.7 PK			1.55 V	360	68.7	39.0
5	*5510.00	96.3 AV			1.55 V	360	57.3	39.0
6	11020.00	56.9 PK	74.0	-17.1	1.00 V	183	40.3	16.6
7	11020.00	42.5 AV	54.0	-11.5	1.00 V	183	25.9	16.6

Remarks:

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

CHANNEL	TX Channel 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	*5590.00	108.1 PK			2.25 H	80	69.1	39.0
2	*5590.00	97.3 AV			2.25 H	80	58.3	39.0
3	11180.00	56.2 PK	74.0	-17.8	1.00 H	184	40.5	15.7
4	11180.00	41.3 AV	54.0	-12.7	1.00 H	184	25.6	15.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5590.00	109.5 PK			1.63 V	357	70.5	39.0
2	*5590.00	97.9 AV			1.63 V	357	58.9	39.0
3	11180.00	56.2 PK	74.0	-17.8	1.61 V	355	40.5	15.7
4	11180.00	41.5 AV	54.0	-12.5	1.61 V	355	25.8	15.7

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	109.2 PK			1.94 H	112	70.0	39.2
2	*5670.00	97.6 AV			1.94 H	112	58.4	39.2
3	#5725.00	59.7 PK	68.2	-8.5	1.95 H	113	57.4	2.3
4	11340.00	56.0 PK	74.0	-18.0	1.00 H	182	40.2	15.8
5	11340.00	41.1 AV	54.0	-12.9	1.00 H	182	25.3	15.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	110.0 PK			1.88 V	357	70.8	39.2
2	*5670.00	98.0 AV			1.88 V	357	58.8	39.2
3	#5725.00	62.4 PK	68.2	-5.8	1.90 V	353	60.1	2.3
4	11340.00	56.3 PK	74.0	-17.7	1.00 V	184	40.5	15.8
5	11340.00	41.5 AV	54.0	-12.5	1.00 V	184	25.7	15.8

Remarks:

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

CHANNEL	TX Channel 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	52.5 PK	74.0	-21.5	1.98 H	112	50.4	2.1
2	5460.00	39.3 AV	54.0	-14.7	1.98 H	112	37.2	2.1
3	#5470.00	52.5 PK	68.2	-15.7	2.02 H	110	50.4	2.1
4	*5710.00	108.3 PK			2.00 H	113	69.2	39.1
5	*5710.00	96.5 AV			2.00 H	113	57.4	39.1
6	#5850.00	53.1 PK	68.2	-15.1	2.00 H	110	50.1	3.0
7	11420.00	55.5 PK	74.0	-18.5	1.00 H	178	40.1	15.4
8	11420.00	41.4 AV	54.0	-12.6	1.00 H	178	26.0	15.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	52.7 PK	74.0	-21.3	1.80 V	360	50.6	2.1
2	5460.00	39.6 AV	54.0	-14.4	1.80 V	360	37.5	2.1
3	#5470.00	51.8 PK	68.2	-16.4	1.82 V	360	49.7	2.1
4	*5710.00	110.2 PK			1.84 V	360	71.1	39.1
5	*5710.00	98.6 AV			1.84 V	360	59.5	39.1
6	#5850.00	53.6 PK	68.2	-14.6	1.81 V	360	50.6	3.0
7	11420.00	55.2 PK	74.0	-18.8	1.00 V	181	39.8	15.4
8	11420.00	41.0 AV	54.0	-13.0	1.00 V	181	25.6	15.4

Remarks:

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

CHANNEL	TX Channel 151	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	#5635.20	53.2 PK	68.2	-15.0	1.27 H	324	50.9	2.3
2	*5755.00	105.8 PK			1.28 H	325	66.4	39.4
3	*5755.00	94.1 AV			1.28 H	325	54.7	39.4
4	#5960.00	55.1 PK	68.2	-13.1	1.27 H	324	51.8	3.3
5	11510.00	53.1 PK	74.0	-20.9	1.00 H	177	38.2	14.9
6	11510.00	37.5 AV	54.0	-16.5	1.00 H	177	22.6	14.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5632.80	54.1 PK	68.2	-14.1	1.81 V	355	51.8	2.3
2	*5755.00	104.4 PK			1.81 V	355	65.0	39.4
3	*5755.00	92.5 AV			1.81 V	355	53.1	39.4
4	#5934.40	54.9 PK	68.2	-13.3	1.81 V	355	51.7	3.2
5	11510.00	52.5 PK	74.0	-21.5	1.00 V	174	37.6	14.9
6	11510.00	37.0 AV	54.0	-17.0	1.00 V	174	22.1	14.9

Remarks:

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

CHANNEL	TX Channel 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	#5608.00	53.5 PK	68.2	-14.7	1.24 H	331	51.3	2.2
2	*5795.00	106.4 PK			1.26 H	332	66.9	39.5
3	*5795.00	94.9 AV			1.26 H	332	55.4	39.5
4	#5980.80	55.1 PK	68.2	-13.1	1.24 H	311	51.8	3.3
5	11590.00	53.1 PK	74.0	-20.9	1.00 H	179	38.3	14.8
6	11590.00	37.3 AV	54.0	-16.7	1.00 H	179	22.5	14.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5643.20	53.5 PK	68.2	-14.7	1.80 V	350	51.2	2.3
2	*5795.00	105.4 PK			1.80 V	350	65.9	39.5
3	*5795.00	93.6 AV			1.80 V	350	54.1	39.5
4	#5944.80	54.8 PK	68.2	-13.4	1.80 V	350	51.6	3.2
5	11590.00	53.3 PK	74.0	-20.7	1.00 V	177	38.5	14.8
6	11590.00	37.7 AV	54.0	-16.3	1.00 V	177	22.9	14.8

Remarks:

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

802.11ac (VHT80)

CHANNEL	TX Channel 42	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	62.2 PK	74.0	-11.8	1.95 H	117	60.3	1.9
2	5150.00	48.3 AV	54.0	-5.7	1.95 H	117	46.4	1.9
3	*5210.00	103.6 PK			1.91 H	115	65.1	38.5
4	*5210.00	91.2 AV			1.91 H	115	52.7	38.5
5	5350.00	52.1 PK	74.0	-21.9	1.98 H	124	50.5	1.6
6	5350.00	39.2 AV	54.0	-14.8	1.98 H	124	37.6	1.6
7	#10420.00	55.0 PK	68.2	-13.2	1.00 H	176	40.3	14.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.7 PK	74.0	-12.3	1.00 V	82	59.8	1.9
2	5150.00	48.0 AV	54.0	-6.0	1.00 V	82	46.1	1.9
3	*5210.00	101.8 PK			1.00 V	78	63.3	38.5
4	*5210.00	88.8 AV			1.00 V	78	50.3	38.5
5	5350.00	51.8 PK	74.0	-22.2	1.00 V	80	50.2	1.6
6	5350.00	38.7 AV	54.0	-15.3	1.00 V	80	37.1	1.6
7	#10420.00	53.8 PK	68.2	-14.4	1.00 V	183	39.1	14.7

Remarks:

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

CHANNEL	TX Channel 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	52.3 PK	74.0	-21.7	2.56 H	71	50.4	1.9
2	5150.00	39.1 AV	54.0	-14.9	2.56 H	71	37.2	1.9
3	*5290.00	100.8 PK			2.58 H	68	62.5	38.3
4	*5290.00	89.1 AV			2.58 H	68	50.8	38.3
5	5350.00	54.6 PK	74.0	-19.4	2.58 H	68	53.0	1.6
6	5350.00	41.4 AV	54.0	-12.6	2.58 H	68	39.8	1.6
7	#10580.00	54.7 PK	68.2	-13.5	1.00 H	173	39.8	14.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	53.2 PK	74.0	-20.8	1.31 V	52	51.3	1.9
2	5150.00	40.3 AV	54.0	-13.7	1.31 V	52	38.4	1.9
3	*5290.00	105.0 PK			1.31 V	52	66.7	38.3
4	*5290.00	92.2 AV			1.31 V	52	53.9	38.3
5	5350.00	55.2 PK	74.0	-18.8	1.33 V	55	53.6	1.6
6	5350.00	41.8 AV	54.0	-12.2	1.33 V	55	40.2	1.6
7	#10580.00	55.0 PK	68.2	-13.2	1.00 V	177	40.1	14.9

Remarks:

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

CHANNEL	TX Channel 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	61.2 PK	74.0	-12.8	1.65 H	43	59.1	2.1
2	5460.00	47.5 AV	54.0	-6.5	1.65 H	43	45.4	2.1
3	#5470.00	63.6 PK	68.2	-4.6	1.66 H	43	61.5	2.1
4	*5530.00	102.7 PK			1.64 H	41	63.7	39.0
5	*5530.00	89.6 AV			1.64 H	41	50.6	39.0
6	#5725.00	51.2 PK	68.2	-17.0	1.62 H	44	48.9	2.3
7	11060.00	56.5 PK	74.0	-17.5	1.00 H	179	40.2	16.3
8	11060.00	42.2 AV	54.0	-11.8	1.00 H	179	25.9	16.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	65.8 PK	74.0	-8.2	1.52 V	360	63.7	2.1
2	5460.00	51.4 AV	54.0	-2.6	1.52 V	360	49.3	2.1
3	#5470.00	66.2 PK	68.2	-2.0	1.53 V	360	64.1	2.1
4	*5530.00	104.6 PK			1.51 V	360	65.6	39.0
5	*5530.00	91.4 AV			1.51 V	360	52.4	39.0
6	#5725.00	51.6 PK	68.2	-16.6	1.54 V	360	49.3	2.3
7	11060.00	56.4 PK	74.0	-17.6	1.00 V	182	40.1	16.3
8	11060.00	41.9 AV	54.0	-12.1	1.00 V	182	25.6	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 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	52.4 PK	74.0	-21.6	1.69 H	53	50.3	2.1
2	5460.00	39.6 AV	54.0	-14.4	1.69 H	53	37.5	2.1
3	#5470.00	54.2 PK	68.2	-14.0	1.74 H	47	52.1	2.1
4	*5610.00	105.4 PK			1.71 H	50	66.3	39.1
5	*5610.00	92.5 AV			1.71 H	50	53.4	39.1
6	#5725.00	54.7 PK	68.2	-13.5	1.73 H	52	52.4	2.3
7	11220.00	55.4 PK	74.0	-18.6	1.00 H	181	39.8	15.6
8	11220.00	40.8 AV	54.0	-13.2	1.00 H	181	25.2	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	5460.00	52.2 PK	74.0	-21.8	1.76 V	330	50.1	2.1
2	5460.00	39.5 AV	54.0	-14.5	1.76 V	330	37.4	2.1
3	#5470.00	55.4 PK	68.2	-12.8	1.71 V	336	53.3	2.1
4	*5610.00	104.9 PK			1.73 V	333	65.8	39.1
5	*5610.00	92.0 AV			1.73 V	333	52.9	39.1
6	#5725.00	55.8 PK	68.2	-12.4	1.70 V	339	53.5	2.3
7	11220.00	55.9 PK	74.0	-18.1	1.00 V	188	40.3	15.6
8	11220.00	41.3 AV	54.0	-12.7	1.00 V	188	25.7	15.6

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	52.2 PK	74.0	-21.8	1.71 H	47	50.1	2.1
2	5460.00	39.4 AV	54.0	-14.6	1.71 H	47	37.3	2.1
3	#5470.00	52.7 PK	68.2	-15.5	1.66 H	52	50.6	2.1
4	*5690.00	105.4 PK			1.69 H	49	66.3	39.1
5	*5690.00	93.3 AV			1.69 H	49	54.2	39.1
6	#5850.00	52.8 PK	68.2	-15.4	1.73 H	54	49.8	3.0
7	11380.00	56.1 PK	74.0	-17.9	1.00 H	182	40.4	15.7
8	11380.00	41.3 AV	54.0	-12.7	1.00 H	182	25.6	15.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	52.4 PK	74.0	-21.6	2.00 V	331	50.3	2.1
2	5460.00	39.3 AV	54.0	-14.7	2.00 V	331	37.2	2.1
3	#5470.00	52.5 PK	68.2	-15.7	1.97 V	338	50.4	2.1
4	*5690.00	105.8 PK			1.98 V	334	66.7	39.1
5	*5690.00	92.7 AV			1.98 V	334	53.6	39.1
6	#5850.00	56.1 PK	68.2	-12.1	2.04 V	334	53.1	3.0
7	11380.00	55.9 PK	74.0	-18.1	1.00 V	175	40.2	15.7
8	11380.00	41.6 AV	54.0	-12.4	1.00 V	175	25.9	15.7

Remarks:

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

CHANNEL	TX Channel 155	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	#5650.00	51.5 PK	68.2	-16.7	1.28 H	314	49.3	2.2
2	#5650.00	51.5 PK	68.2	-16.7	1.28 H	314	49.3	2.2
3	*5775.00	101.2 PK			1.26 H	316	61.8	39.4
4	*5775.00	88.3 AV			1.26 H	316	48.9	39.4
5	#5925.00	52.8 PK	68.2	-15.4	1.28 H	317	49.6	3.2
6	#5925.00	52.8 PK	68.2	-15.4	1.28 H	317	49.6	3.2
7	11550.00	52.5 PK	74.0	-21.5	1.00 H	184	37.6	14.9
8	11550.00	37.0 AV	54.0	-17.0	1.00 H	184	22.1	14.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5650.00	52.8 PK	68.2	-15.4	1.76 V	350	50.6	2.2
2	#5650.00	52.8 PK	68.2	-15.4	1.76 V	350	50.6	2.2
3	*5775.00	99.9 PK			1.79 V	353	60.5	39.4
4	*5775.00	88.6 AV			1.79 V	353	49.2	39.4
5	#5925.00	53.7 PK	68.2	-14.5	1.83 V	355	50.5	3.2
6	#5925.00	53.7 PK	68.2	-14.5	1.83 V	355	50.5	3.2
7	11550.00	52.8 PK	74.0	-21.2	1.00 V	186	37.9	14.9
8	11550.00	37.5 AV	54.0	-16.5	1.00 V	186	22.6	14.9

Remarks:

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

Below 1GHz Worst-Case Data:

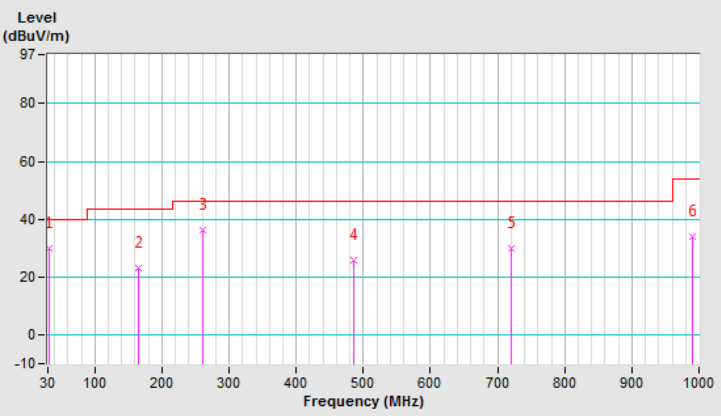
802.11a

CHANNEL	TX Channel 40	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kMHz ~ 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	32.91	30.1 QP	40.0	-9.9	1.00 H	36	41.2	-11.1
2	165.80	23.2 QP	43.5	-20.3	1.00 H	171	32.6	-9.4
3	260.86	36.4 QP	46.0	-9.6	1.50 H	264	45.7	-9.3
4	485.90	25.7 QP	46.0	-20.3	1.25 H	114	30.5	-4.8
5	720.64	30.0 QP	46.0	-16.0	1.50 H	166	30.1	-0.1
6	990.30	34.0 QP	54.0	-20.0	1.50 H	351	29.6	4.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The 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.

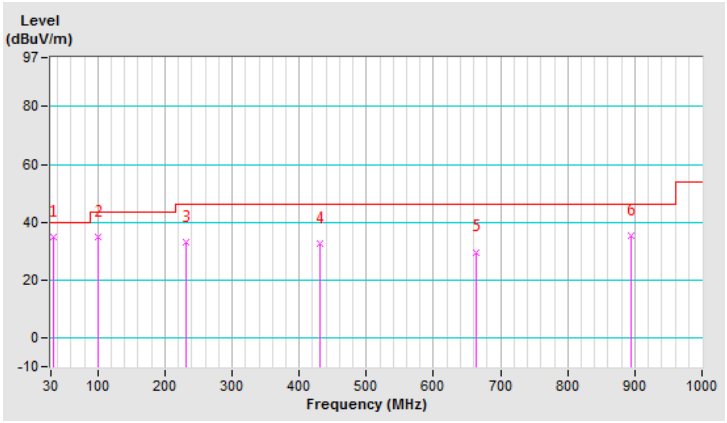


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kMHz ~ 1GHz	TEST MODE	A

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	34.85	34.7 QP	40.0	-5.3	1.25 V	158	45.5	-10.8
2	99.84	34.7 QP	43.5	-8.8	1.00 V	216	48.4	-13.7
3	230.79	33.0 QP	46.0	-13.0	1.50 V	130	43.8	-10.8
4	431.58	32.8 QP	46.0	-13.2	1.25 V	206	38.3	-5.5
5	663.41	29.7 QP	46.0	-16.3	1.00 V	93	30.7	-1.0
6	894.27	35.5 QP	46.0	-10.5	1.50 V	329	32.7	2.8

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The 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.

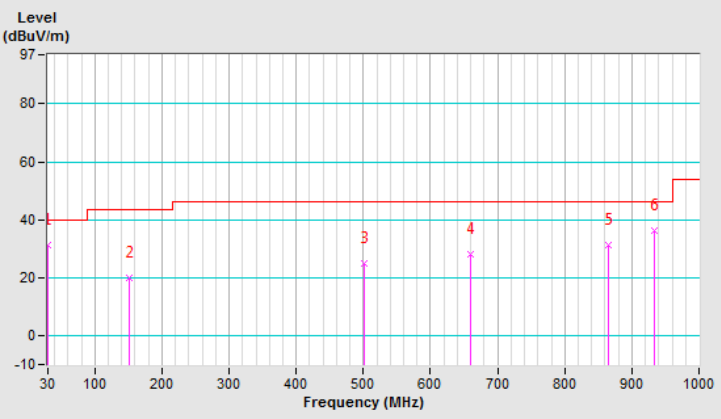


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kMHz ~ 1GHz	TEST MODE	B

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	30.97	31.4 QP	40.0	-8.6	1.00 H	289	42.8	-11.4
2	150.28	19.8 QP	43.5	-23.7	1.25 H	163	29.2	-9.4
3	501.42	25.1 QP	46.0	-20.9	1.00 H	150	29.7	-4.6
4	660.50	27.9 QP	46.0	-18.1	1.50 H	317	29.1	-1.2
5	864.20	31.4 QP	46.0	-14.6	1.50 H	34	28.7	2.7
6	934.04	36.3 QP	46.0	-9.7	1.50 H	8	32.4	3.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The 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.

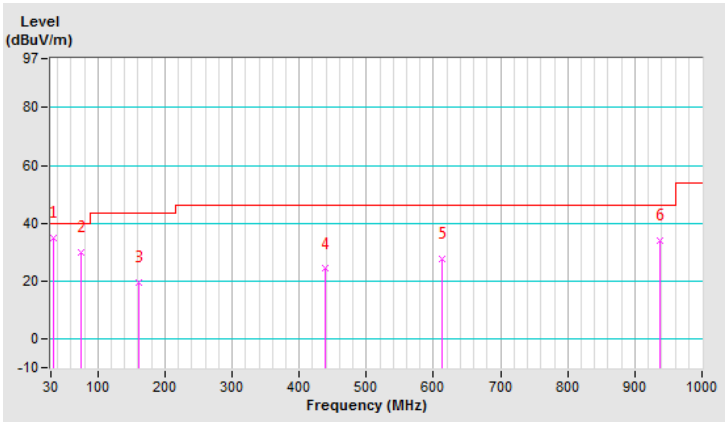


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kMHz ~ 1GHz	TEST MODE	B

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	33.88	34.8 QP	40.0	-5.2	1.25 V	88	45.5	-10.7
2	75.59	30.1 QP	40.0	-9.9	1.00 V	277	43.1	-13.0
3	161.92	19.4 QP	43.5	-24.1	1.50 V	104	28.6	-9.2
4	438.37	24.2 QP	46.0	-21.8	1.00 V	12	29.7	-5.5
5	612.97	27.7 QP	46.0	-18.3	1.25 V	62	29.7	-2.0
6	937.92	33.8 QP	46.0	-12.2	1.00 V	278	29.9	3.9

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The 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.

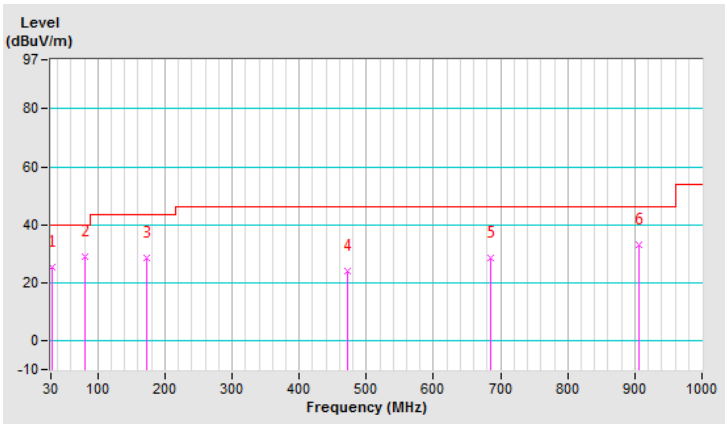


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kMHz ~ 1GHz	TEST MODE	C

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	32.91	25.2 QP	40.0	-14.8	1.50 H	66	36.3	-11.1
2	81.41	29.0 QP	40.0	-11.0	1.50 H	6	43.3	-14.3
3	173.56	28.5 QP	43.5	-15.0	1.00 H	32	38.3	-9.8
4	472.32	23.9 QP	46.0	-22.1	1.00 H	116	28.8	-4.9
5	684.75	28.5 QP	46.0	-17.5	1.00 H	292	29.5	-1.0
6	905.91	32.9 QP	46.0	-13.1	1.50 H	359	29.5	3.4

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The 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.

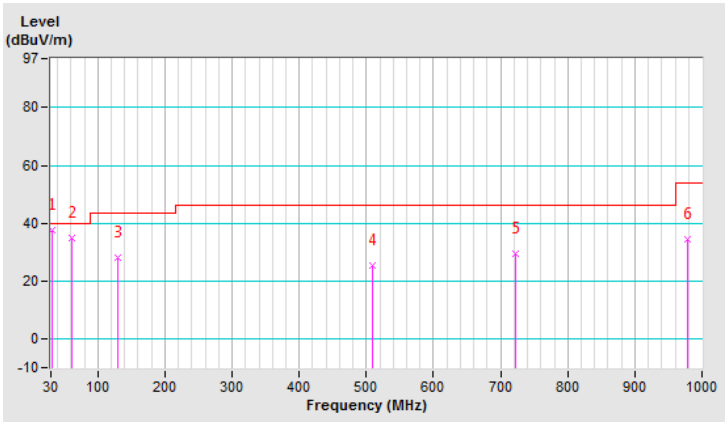


CHANNEL	TX Channel 40	DETECTOR FUNCTION	Quasi-Peak (QP)
FREQUENCY RANGE	9kMHz ~ 1GHz	TEST MODE	C

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	31.94	37.5 QP	40.0	-2.5	1.50 V	8	48.6	-11.1
2	61.04	34.8 QP	40.0	-5.2	1.25 V	126	45.5	-10.7
3	128.94	28.1 QP	43.5	-15.4	1.00 V	16	39.0	-10.9
4	509.18	25.2 QP	46.0	-20.8	1.25 V	17	29.6	-4.4
5	722.58	29.6 QP	46.0	-16.4	1.00 V	269	29.7	-0.1
6	978.66	34.4 QP	54.0	-19.6	1.50 V	115	29.9	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. Margin value = Emission Level – Limit value
4. 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	ESCI	100613	Dec. 10, 2018	Dec. 09, 2019
RF signal cable Woken	5D-FB	Cable-cond1-01	Sep. 05, 2018	Sep. 04, 2019
LISN ROHDE & SCHWARZ (EUT)	ENV216	101826	Feb. 26, 2018	Feb. 25, 2019
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Aug. 19, 2018	Aug. 18, 2019
Software ADT	BV ADT_Cond_ V7.3.7.4	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 1.
3. The VCCI Site Registration No. is C-2040.

4.2.3 Test Procedures

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

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

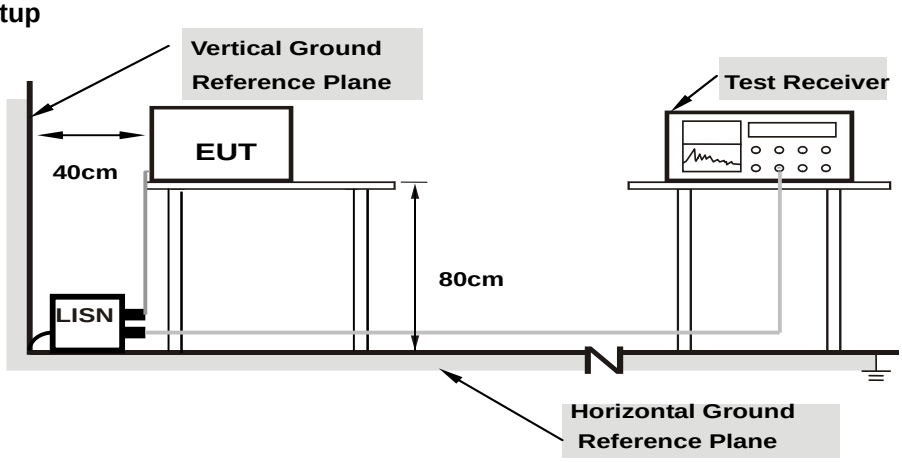
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

NOTE: 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.

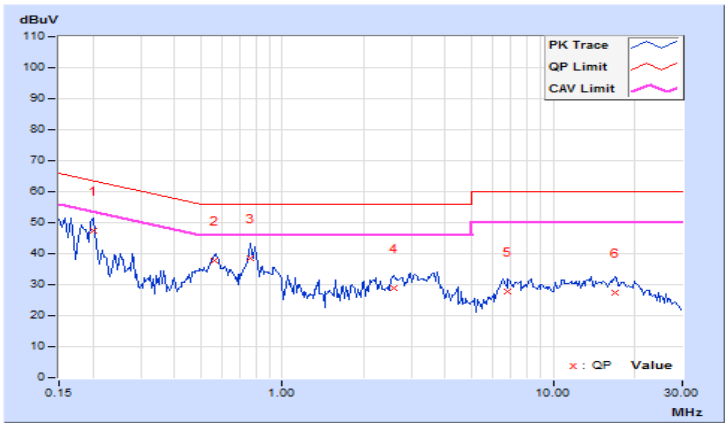
4.2.7 Test Results

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

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.20078	9.67	37.75	21.88	47.42	31.55	63.58	53.58	-16.16	-22.03
2	0.56406	9.66	28.18	19.21	37.84	28.87	56.00	46.00	-18.16	-17.13
3	0.76328	9.65	28.81	15.49	38.46	25.14	56.00	46.00	-17.54	-20.86
4	2.57031	9.69	19.33	13.27	29.02	22.96	56.00	46.00	-26.98	-23.04
5	6.82031	9.79	18.06	12.51	27.85	22.30	60.00	50.00	-32.15	-27.70
6	16.91797	9.89	17.50	12.10	27.39	21.99	60.00	50.00	-32.61	-28.01

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.

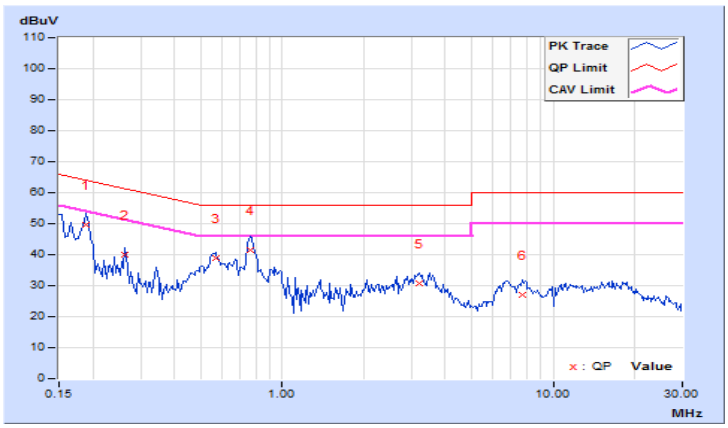


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	A		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.18906	9.67	40.08	23.96	49.75	33.63	64.08	54.08	-14.33	-20.45
2	0.26328	9.67	30.47	22.28	40.14	31.95	61.33	51.33	-21.19	-19.38
3	0.56797	9.66	29.19	22.92	38.85	32.58	56.00	46.00	-17.15	-13.42
4	0.76328	9.66	31.84	17.91	41.50	27.57	56.00	46.00	-14.50	-18.43
5	3.22266	9.71	20.90	15.67	30.61	25.38	56.00	46.00	-25.39	-20.62
6	7.72266	9.81	17.23	12.08	27.04	21.89	60.00	50.00	-32.96	-28.11

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.

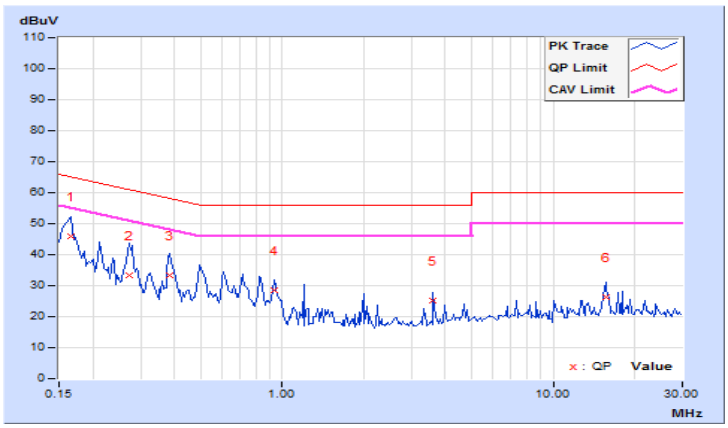


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16562	9.73	36.28	23.75	46.01	33.48	65.18	55.18	-19.17	-21.70
2	0.27109	9.73	23.50	9.95	33.23	19.68	61.08	51.08	-27.85	-31.40
3	0.38438	9.75	23.70	8.20	33.45	17.95	58.18	48.18	-24.73	-30.23
4	0.93125	9.69	18.91	8.79	28.60	18.48	56.00	46.00	-27.40	-27.52
5	3.60547	9.78	15.42	5.23	25.20	15.01	56.00	46.00	-30.80	-30.99
6	15.60547	9.92	16.29	6.98	26.21	16.90	60.00	50.00	-33.79	-33.10

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.

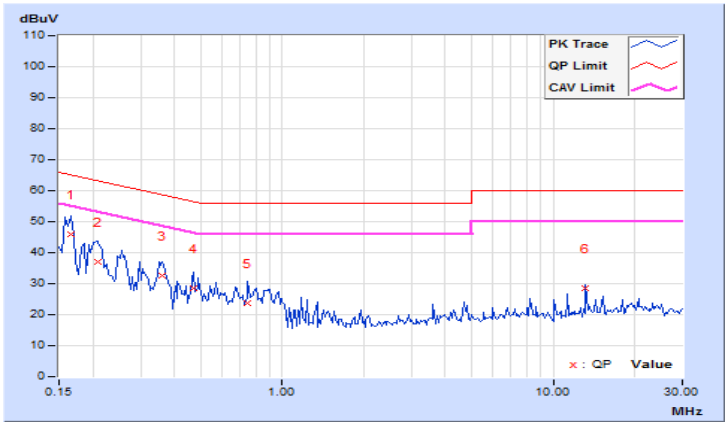


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	B		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16562	9.72	36.19	25.25	45.91	34.97	65.18	55.18	-19.27	-20.21
2	0.20859	9.73	27.42	17.41	37.15	27.14	63.26	53.26	-26.11	-26.12
3	0.36094	9.75	23.02	12.68	32.77	22.43	58.71	48.71	-25.94	-26.28
4	0.47031	9.75	18.61	7.75	28.36	17.50	56.51	46.51	-28.15	-29.01
5	0.74766	9.73	14.01	3.19	23.74	12.92	56.00	46.00	-32.26	-33.08
6	13.20703	9.97	18.73	7.32	28.70	17.29	60.00	50.00	-31.30	-32.71

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.

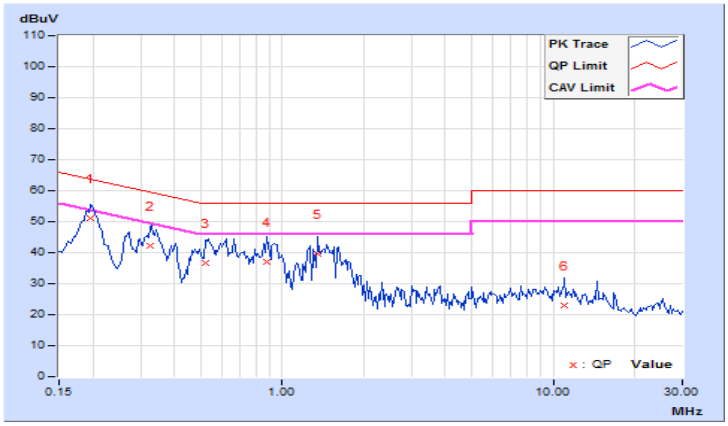


Phase	Line (L)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	C		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.19687	9.67	41.33	33.79	51.00	43.46	63.74	53.74	-12.74	-10.28
2	0.32578	9.66	32.39	25.93	42.05	35.59	59.56	49.56	-17.51	-13.97
3	0.52109	9.66	26.93	20.55	36.59	30.21	56.00	46.00	-19.41	-15.79
4	0.87656	9.65	27.28	18.64	36.93	28.29	56.00	46.00	-19.07	-17.71
5	1.35547	9.66	29.93	22.63	39.59	32.29	56.00	46.00	-16.41	-13.71
6	11.05078	9.86	12.92	5.54	22.78	15.40	60.00	50.00	-37.22	-34.60

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.

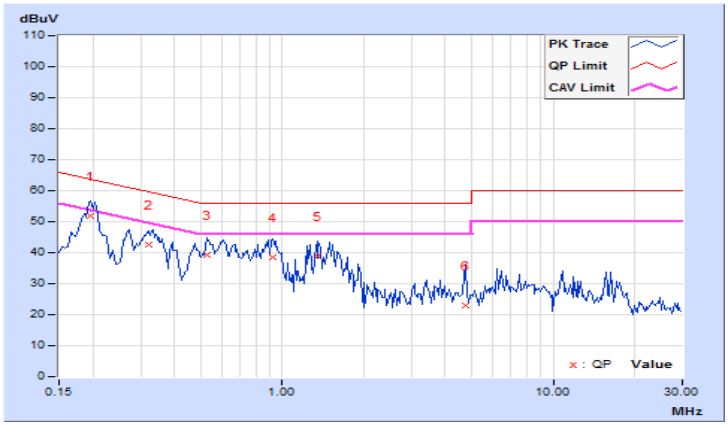


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)
Test Mode	C		

No	Freq.	Corr. Factor	Reading Value		Emission Level		Limit		Margin	
			[dB (uV)]		[dB (uV)]		[dB (uV)]		(dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	**0.19687**	**9.67**	**42.07**	**34.77**	**51.74**	**44.44**	**63.74**	**53.74**	**-12.00**	**-9.30**
2	0.32188	9.67	32.97	26.82	42.64	36.49	59.66	49.66	-17.02	-13.17
3	0.52500	9.67	29.67	22.44	39.34	32.11	56.00	46.00	-16.66	-13.89
4	0.92734	9.65	28.86	19.06	38.51	28.71	56.00	46.00	-17.49	-17.29
5	1.35547	9.66	29.38	22.59	39.04	32.25	56.00	46.00	-16.96	-13.75
6	4.72656	9.75	13.38	7.37	23.13	17.12	56.00	46.00	-32.87	-28.88

Remarks:

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



4.3 Transmit Power Measurement

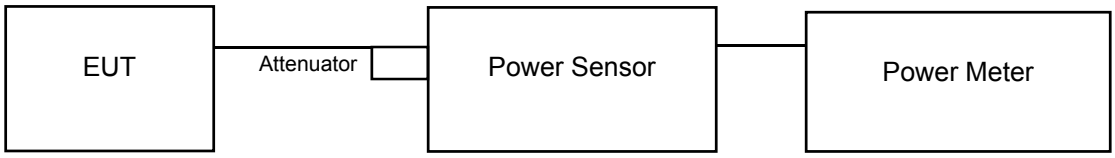
4.3.1 Limits of Transmit Power Measurement

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

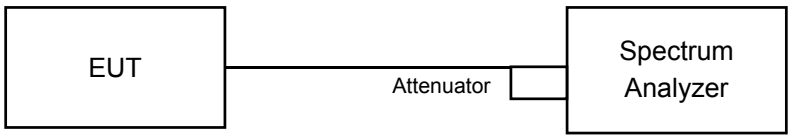
*B is the 26 dB emission bandwidth in megahertz

4.3.2 Test Setup

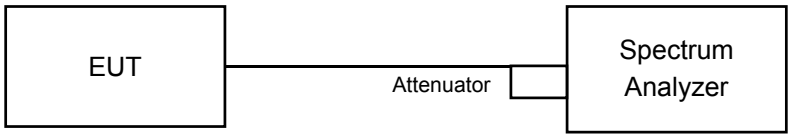
For Power Output
802.11a, 802.11n (HT20), 802.11n (HT40)



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 ≥ 3 MHz
e. Number of points in sweep ≥ 2 Span / RBW
f. Sweep time ≤ (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	**111.429**	20.47	24.00	Pass
40	5200	108.143	20.34	24.00	Pass
48	5240	110.662	20.44	24.00	Pass
52	5260	107.399	20.31	24.00	Pass
60	5300	108.893	20.37	24.00	Pass
64	5320	110.154	20.42	24.00	Pass
100	5500	112.460	20.51	24.00	Pass
120	5600	106.414	20.27	24.00	Pass
140	5700	84.723	19.28	24.00	Pass
144	5720 For U-NII-2C	36.717	15.65	23.31	Pass
144	5720 For U-NII-3	11.530	10.62	30.00	Pass
149	5745	105.196	20.22	30.00	Pass
157	5785	109.901	20.41	30.00	Pass
165	5825	**112.980**	20.53	30.00	Pass

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

1. 11dBm + 10log (24.43) = 24.87 > 24dBm
2. 11dBm + 10log (24.46) = 24.88 > 24dBm
3. 11dBm + 10log (24.42) = 24.87 > 24dBm
4. 11dBm + 10log (24.12) = 24.82 > 24dBm
5. 11dBm + 10log (24.20) = 24.83 > 24dBm
6. 11dBm + 10log (22.51) = 24.52 > 24dBm
7. 11dBm + 10log (5725.00 - 5707.96) = 23.31 < 24dBm

For Reference only-Power meter value
The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
144	5720	48.247	16.83

802.11n (HT20)

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	108.893	20.37	24.00	Pass
40	5200	111.173	20.46	24.00	Pass
48	5240	112.720	20.52	24.00	Pass
52	5260	107.647	20.32	24.00	Pass
60	5300	108.643	20.36	24.00	Pass
64	5320	104.954	20.21	24.00	Pass
100	5500	106.170	20.26	24.00	Pass
120	5600	103.753	20.16	24.00	Pass
140	5700	85.704	19.33	24.00	Pass
144	5720 For U-NII-2C	41.374	16.17	23.60	Pass
144	5720 For U-NII-3	9.925	9.97	30.00	Pass
149	5745	108.893	20.37	30.00	Pass
157	5785	106.905	20.29	30.00	Pass
165	5825	105.196	20.22	30.00	Pass

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

1. 11dBm + 10log (24.16) = 24.83 > 24dBm
2. 11dBm + 10log (25.05) = 24.98 > 24dBm
3. 11dBm + 10log (24.96) = 24.97 > 24dBm
4. 11dBm + 10log (24.87) = 24.95 > 24dBm
5. 11dBm + 10log (24.98) = 24.97 > 24dBm
6. 11dBm + 10log (23.78) = 24.76 > 24dBm
7. 11dBm + 10log (5725.00 - 5706.79) = 23.60 < 24dBm

For Reference only-Power meter value
The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
144	5720	51.299	17.1

802.11n (HT40)

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	76.560	18.84	24.00	Pass
46	5230	116.145	20.65	24.00	Pass
54	5270	**111.686**	20.48	24.00	Pass
62	5310	85.310	19.31	24.00	Pass
102	5510	79.983	19.03	24.00	Pass
118	5590	**110.154**	20.42	24.00	Pass
134	5670	109.396	20.39	24.00	Pass
142	5710 For U-NII-2C	27.616	14.41	24.00	Pass
142	5710 For U-NII-3	3.042	4.83	30.00	Pass
151	5755	109.396	20.39	30.00	Pass
159	5795	105.682	20.24	30.00	Pass

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

1. 11dBm + 10log (42.05) = 27.23 > 24dBm
2. 11dBm + 10log (42.01) = 27.23 > 24dBm
3. 11dBm + 10log (42.01) = 27.23 > 24dBm
4. 11dBm + 10log (42.04) = 27.23 > 24dBm
5. 11dBm + 10log (42.07) = 27.23 > 24dBm
6. 11dBm + 10log (5725.00 - 5689.00) = 26.56 > 24dBm

For Reference only-Power meter value
The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
142	5710	30.658	14.87

802.11ac (VHT80)

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
42	5210	52.602	17.21	24.00	Pass
58	5290	82.985	19.19	24.00	Pass
106	5530	74.302	18.71	24.00	Pass
122	5610	85.901	19.34	24.00	Pass
138	5690 For U-NII-2C	12.773	11.06	24.00	Pass
138	5690 For U-NII-3	0.5798	-2.37	24.00	Pass
155	5775	109.901	20.41	30.00	Pass

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

1. 11dBm + 10log (84.81) = 30.28 > 24dBm
2. 11dBm + 10log (84.88) = 30.28 > 24dBm
3. 11dBm + 10log (84.62) = 30.27 > 24dBm
4. 11dBm + 10log (5725.00 - 5647.85) = 29.87 > 24dBm

For Reference only-Power meter value
The power value was measured by power meter with average sensor

Chan.	Freq. (MHz)	Conducted Power (mW)	Conducted Power (dBm)
138	5690	13.353	11.26

26dB Bandwidth:

802.11a

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
36	5180	24.47
40	5200	24.46
48	5240	24.43
52	5260	24.43
60	5300	24.46
64	5320	24.42
100	5500	24.12
120	5600	24.20
140	5700	22.51
144	5720 For U-NII-2C	17.04

802.11n (HT20)

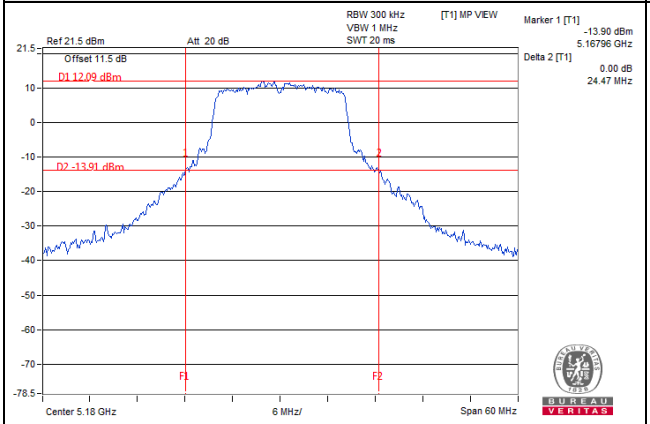
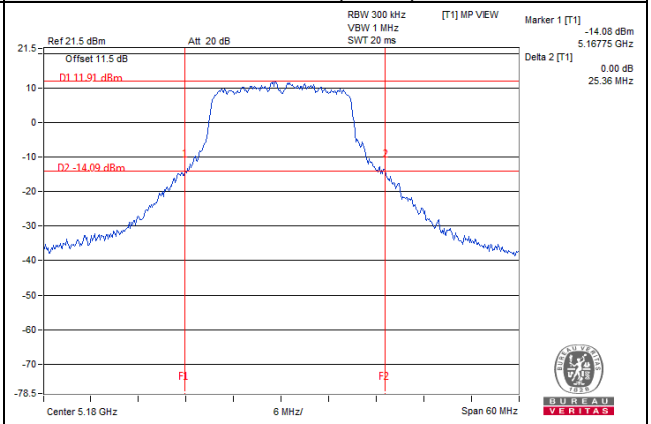
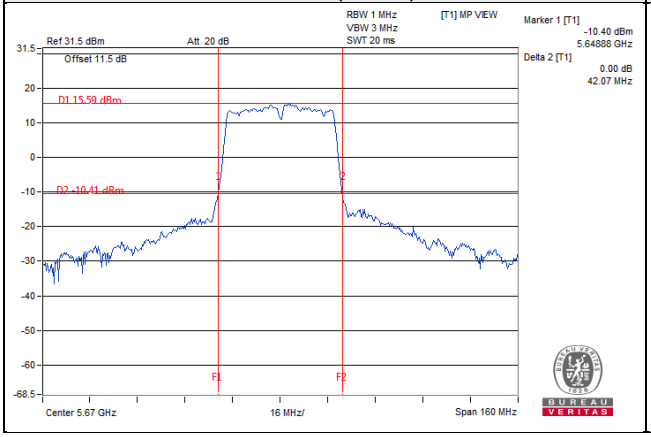
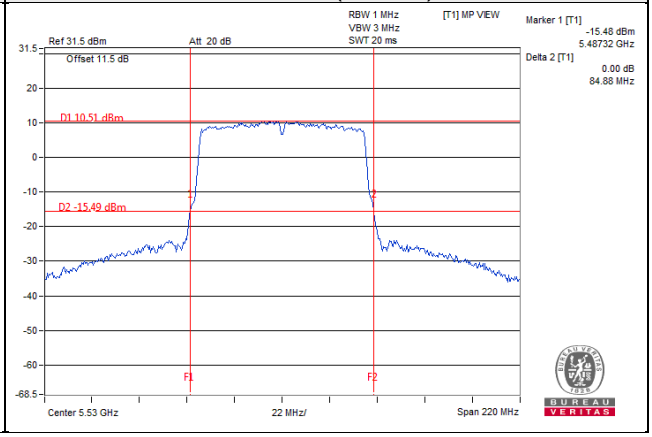
Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
36	5180	25.36
40	5200	25.09
48	5240	24.18
52	5260	24.16
60	5300	25.05
64	5320	24.96
100	5500	24.87
120	5600	24.98
140	5700	23.78
144	5720 For U-NII-2C	18.21

802.11n (HT40)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
38	5190	42.03
46	5230	42.00
54	5270	42.05
62	5310	42.01
102	5510	42.01
118	5590	42.04
134	5670	42.07
142	5710 For U-NII-2C	36.00

802.11ac (VHT80)

Channel	Frequency (MHz)	26dBc Bandwidth (MHz)
42	5210	84.70
58	5290	84.81
106	5530	84.88
122	5610	84.62
138	5690 For U-NII-2C	77.15

Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	802.11ac (VHT80)
	

EUT Maximum Conducted Power

802.11a

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	110.154	20.42
5470~5725	112.460	20.51

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	108.643	20.36
5470~5725	106.170	20.26

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	111.686	20.48
5470~5725	110.154	20.42

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

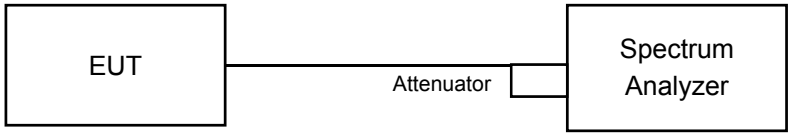
802.11ac (VHT80)

Frequency Band (MHz)	Max. Power	
	Output Power (mW)	Output Power (dBm)
5250~5350	82.985	19.19
5470~5725	85.901	19.34

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

4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

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

4.4.4 Test Result

802.11a

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	17.16
40	5200	17.28
48	5240	17.16
52	5260	17.16
60	5300	17.28
64	5320	17.28
100	5500	16.92
116	5580	16.92
140	5700	16.68
144	5720 For U-NII-2C	13.40
144	5720 For U-NII-3	3.16
149	5745	16.92
157	5785	17.04
165	5825	17.52

802.11n (HT20)

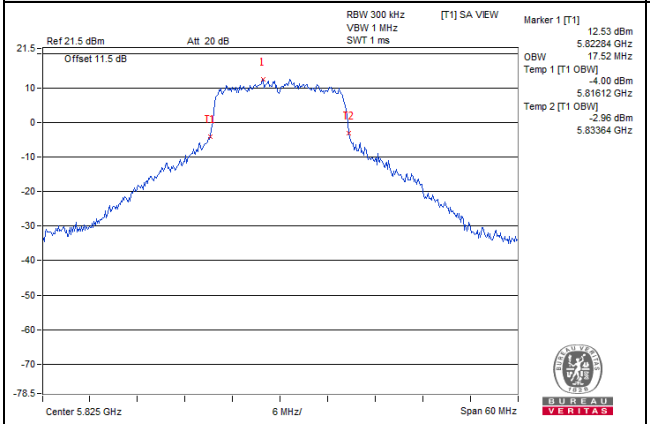
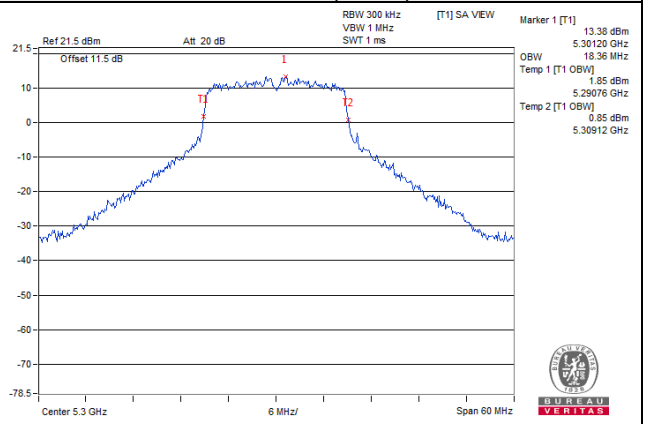
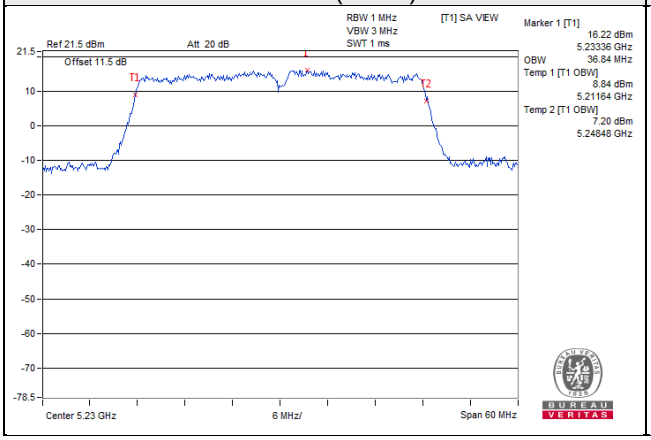
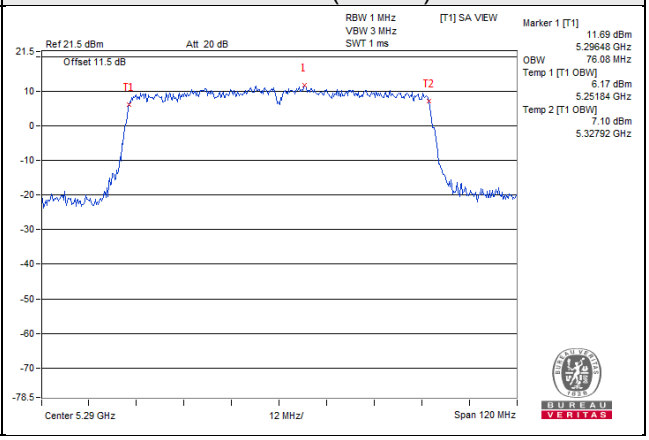
Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
36	5180	18.24
40	5200	18.24
48	5240	18.24
52	5260	18.24
60	5300	18.36
64	5320	18.24
100	5500	18.12
116	5580	18.12
140	5700	18.12
144	5720 For U-NII-2C	14.00
144	5720 For U-NII-3	3.76
149	5745	18.12
157	5785	18.12
165	5825	18.36

802.11n (HT40)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
38	5190	36.72
46	5230	36.84
54	5270	36.72
62	5310	36.60
102	5510	36.60
110	5550	36.72
134	5670	36.72
142	5710 For U-NII-2C	33.36
142	5710 For U-NII-3	3.36
151	5755	36.72
159	5795	36.72

802.11ac (VHT80)

Channel	Frequency (MHz)	Occupied Bandwidth (MHz)
42	5210	75.84
58	5290	76.08
106	5530	75.84
122	5610	76.08
138	5690 For U-NII-2C	72.92
138	5690 For U-NII-3	2.92
155	5775	75.84

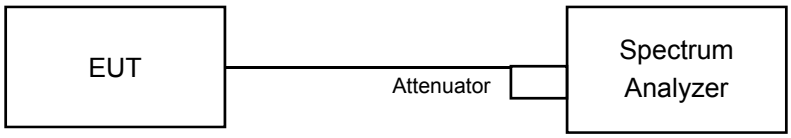
Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	802.11ac (VHT80)
	

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 < 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/duty cycle)

For U-NII-3 band:
Duty cycle of test signal is < 98%
1) Set span to encompass the entire emission bandwidth (EBW) of the signal.
2) Set RBW = 300 kHz, Set VBW ≥ 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 = 10log(500 kHz / 300 kHz)
5) Sweep time = auto, trigger set to “free run”.
6) Trace average at least 100 traces in power averaging mode.
7) Record the max value and add 10 log (1/duty cycle)

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Conditions

Same as 4.3.6.

4.5.7 Test Results

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

802.11a

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	7.46	0.29	7.75	11	Pass
40	5200	7.59	0.29	7.88	11	Pass
48	5240	7.53	0.29	7.82	11	Pass
52	5260	7.51	0.29	7.80	11	Pass
60	5300	8.04	0.29	8.33	11	Pass
64	5320	7.71	0.29	8.00	11	Pass
100	5500	7.42	0.29	7.71	11	Pass
120	5600	7.49	0.29	7.78	11	Pass
140	5700	6.67	0.29	6.96	11	Pass
144	5720 For U-NII-2C	7.80	0.29	8.09	11	Pass

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

802.11n (HT20)

Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
36	5180	7.10	0.31	7.41	11	Pass
40	5200	7.12	0.31	7.43	11	Pass
48	5240	7.10	0.31	7.41	11	Pass
52	5260	7.04	0.31	7.35	11	Pass
60	5300	7.40	0.31	7.71	11	Pass
64	5320	7.28	0.31	7.59	11	Pass
100	5500	6.98	0.31	7.29	11	Pass
120	5600	6.97	0.31	7.28	11	Pass
140	5700	6.41	0.31	6.72	11	Pass
144	5720 For U-NII-2C	7.34	0.31	7.65	11	Pass

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

802.11n (HT40)

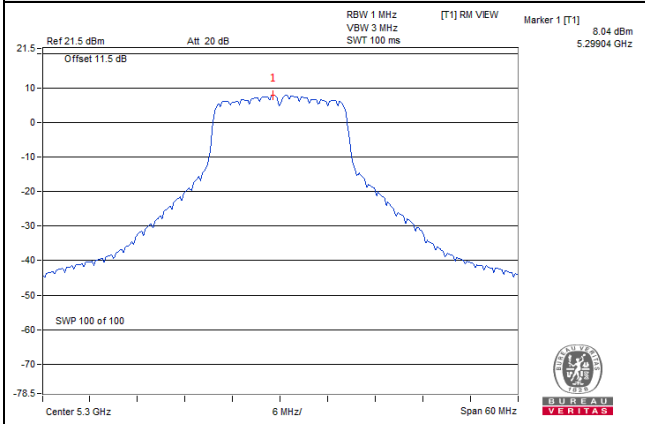
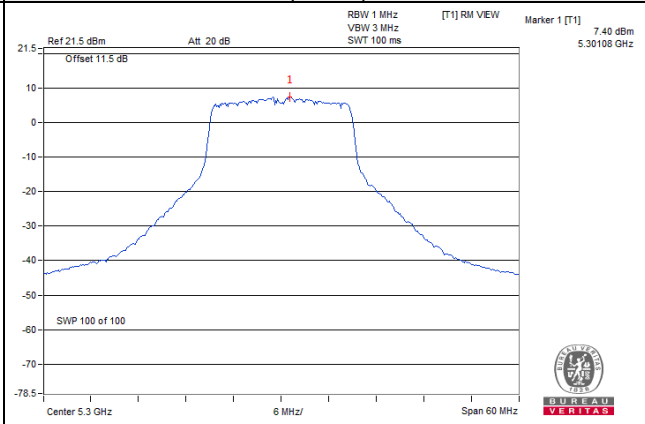
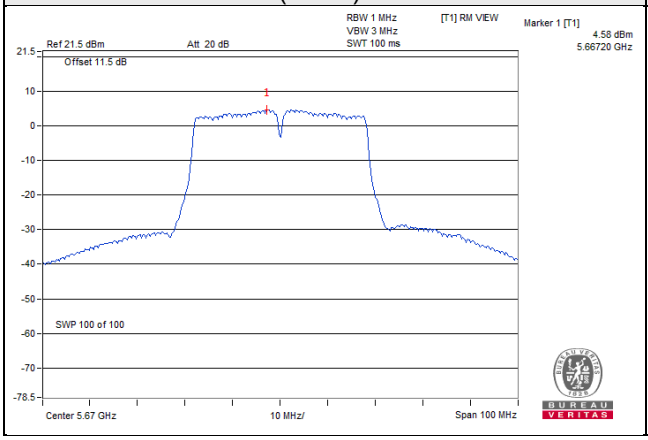
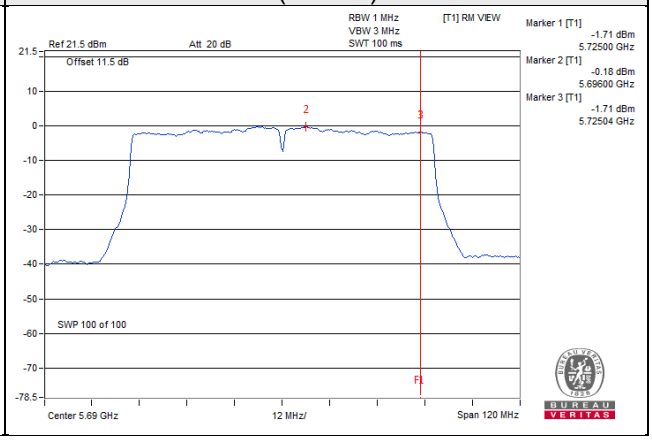
Chan.	Freq. (MHz)	PSD W/O Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	Max. Limit (dBm/MHz)	Pass / Fail
38	5190	1.73	0.48	2.21	11	Pass
46	5230	3.42	0.48	3.90	11	Pass
54	5270	4.01	0.48	4.49	11	Pass
62	5310	3.20	0.48	3.68	11	Pass
102	5510	3.41	0.48	3.89	11	Pass
110	5550	4.08	0.48	4.56	11	Pass
134	5670	4.58	0.48	5.06	11	Pass
142	5710 For U-NII-2C	4.54	0.48	5.02	11	Pass

Note:
1. 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	-2.61	0.80	-1.81	11	Pass
58	5290	-0.23	0.80	0.57	11	Pass
106	5530	-0.33	0.80	0.47	11	Pass
122	5610	-0.77	0.80	0.03	11	Pass
138	5690 For U-NII-2C	-0.18	0.80	0.62	11	Pass

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

Spectrum Plot of Worst Value	
802.11a / CH 60	802.11n (HT20) / CH 60
	
802.11n (HT40) / CH 134	802.11ac (VHT80) / CH 138
	

For U-NII-3 band:

802.11a

Chan.	Freq. (MHz)	PSD W/O Duty Factor		Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
144	5720 For U-NII-3	-2.32	-0.10	0.29	0.19	30	Pass
149	5745	-0.51	1.71	0.29	2.00	30	Pass
157	5785	-0.76	1.46	0.29	1.75	30	Pass
165	5825	-0.18	2.04	0.29	2.33	30	Pass

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

802.11n (HT20)

Chan.	Freq. (MHz)	PSD W/O Duty Factor		Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
144	5720 For U-NII-3	-2.50	-0.28	0.31	0.03	30	Pass
149	5745	-0.63	1.59	0.31	1.90	30	Pass
157	5785	-0.72	1.50	0.31	1.81	30	Pass
165	5825	-0.88	1.34	0.31	1.65	30	Pass

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

802.11n (HT40)

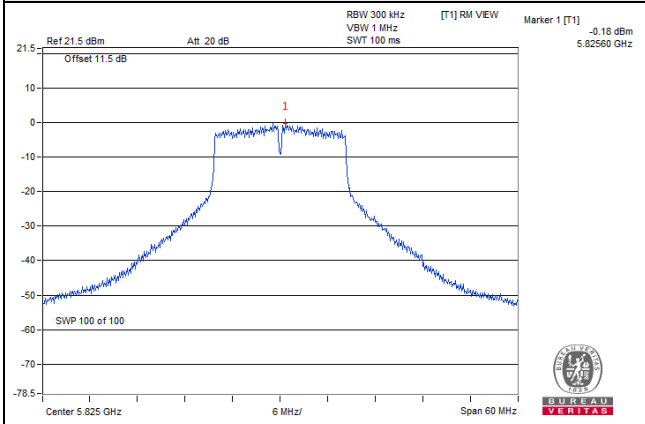
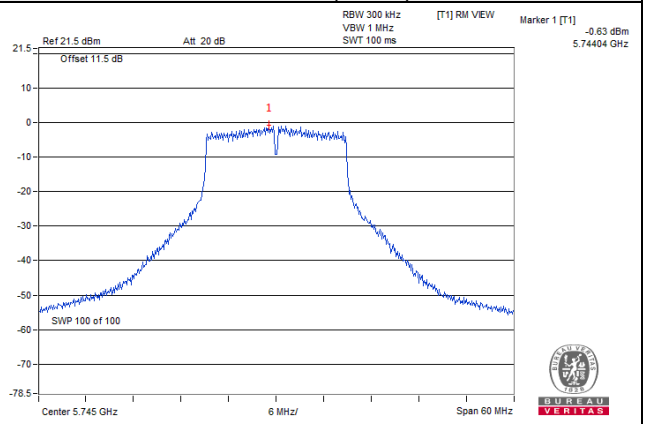
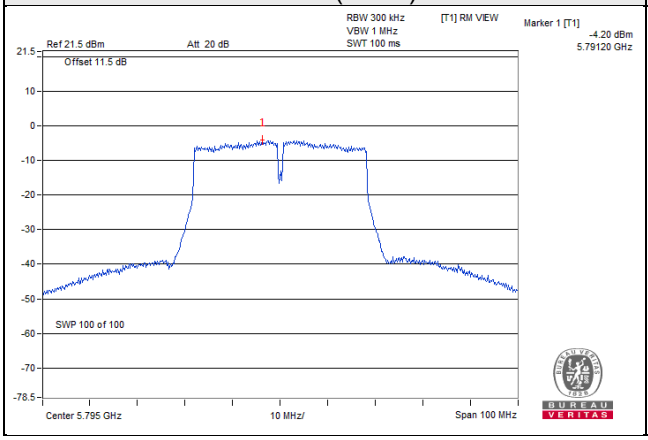
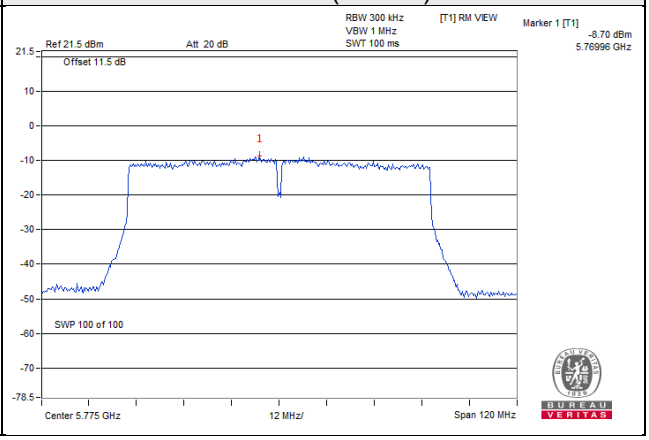
Chan.	Freq. (MHz)	PSD W/O Duty Factor		Duty Factor (dB)	Total PSD With Duty Factor (dBm/500kHz)	Limit (dBm/500kHz)	Pass / Fail
		(dBm/300kHz)	(dBm/500kHz)				
142	5710 For U-NII-3	-5.78	-3.56	0.48	-3.08	30	Pass
151	5755	-4.45	-2.23	0.48	-1.75	30	Pass
159	5795	-4.20	-1.98	0.48	-1.50	30	Pass

Note:
1. 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	-10.52	-8.30	0.80	-7.50	30	Pass
155	5775	-8.70	-6.48	0.80	-5.68	30	Pass

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

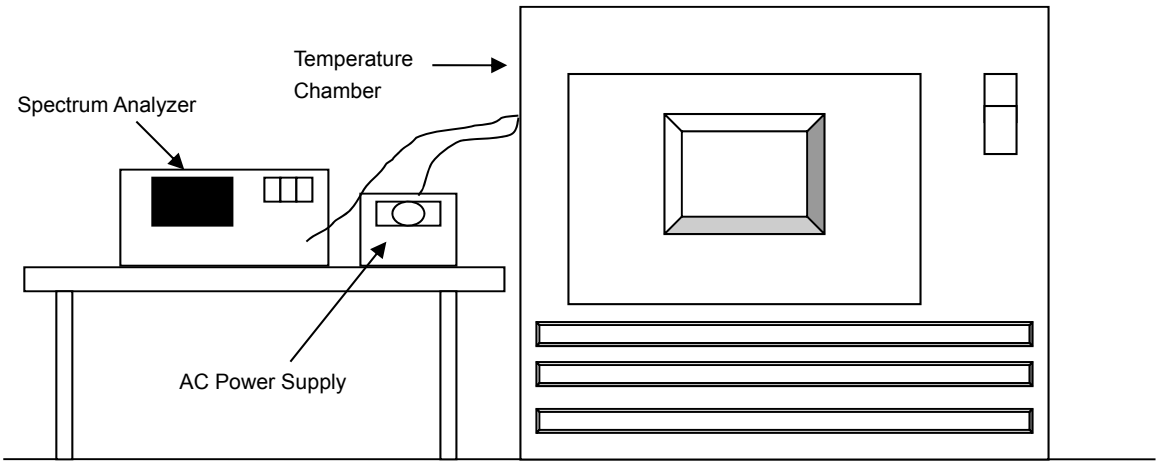
Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	802.11ac (VHT80)
	

4.6 Frequency Stability

4.6.1 Limits of Frequency Stability Measurement

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

4.6.2 Test Setup



4.6.3 Test Instruments

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

4.6.4 Test Procedure

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

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
50	120	5180.0094	PASS	5180.0078	PASS	5180.0095	PASS	5180.0077	PASS
40	120	5179.9811	PASS	5179.9799	PASS	5179.9823	PASS	5179.9832	PASS
30	120	5180.0066	PASS	5180.0078	PASS	5180.0082	PASS	5180.0065	PASS
20	120	5179.9903	PASS	5179.9919	PASS	5179.9921	PASS	5179.9944	PASS
10	120	5179.999	PASS	5179.9945	PASS	5179.997	PASS	5179.9947	PASS
0	120	5179.9939	PASS	5179.9939	PASS	5179.9897	PASS	5179.9939	PASS
-10	120	5180.0015	PASS	5180.0007	PASS	5179.9989	PASS	5180.0021	PASS
-20	120	5179.9993	PASS	5180.0001	PASS	5180.0009	PASS	5180.0016	PASS
-30	120	5179.9841	PASS	5179.9809	PASS	5179.9846	PASS	5179.9841	PASS

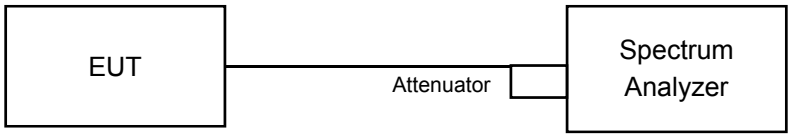
Frequency Stability Versus Voltage									
Operating Frequency: 5180MHz									
Temp. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result	Measured Frequency (MHz)	Result
20	138	5179.9906	PASS	5179.992	PASS	5179.9923	PASS	5179.9954	PASS
	120	5179.9903	PASS	5179.9919	PASS	5179.9921	PASS	5179.9944	PASS
	102	5179.9909	PASS	5179.9917	PASS	5179.9912	PASS	5179.9952	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

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

4.7.5 Deviation from Test Standard

No deviation.

4.7.6 EUT Operating Condition

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

4.7.7 Test Results

802.11a

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 For U-NII-3	15.56	0.5	Pass
149	5745	15.39	0.5	Pass
157	5785	15.56	0.5	Pass
165	5825	15.54	0.5	Pass

802.11n (HT20)

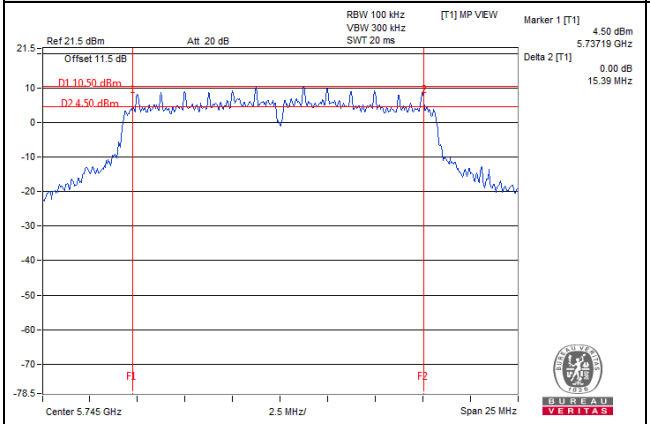
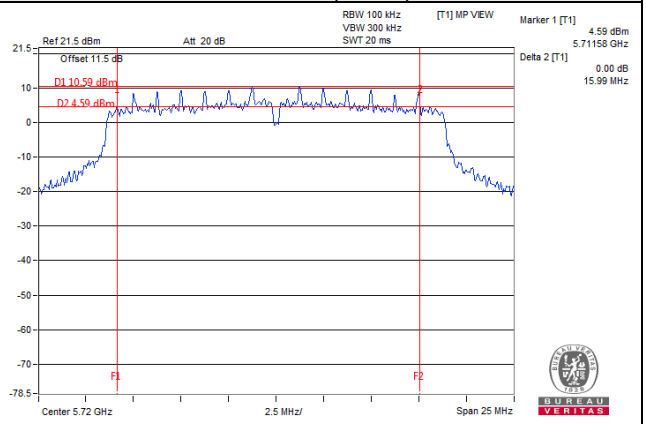
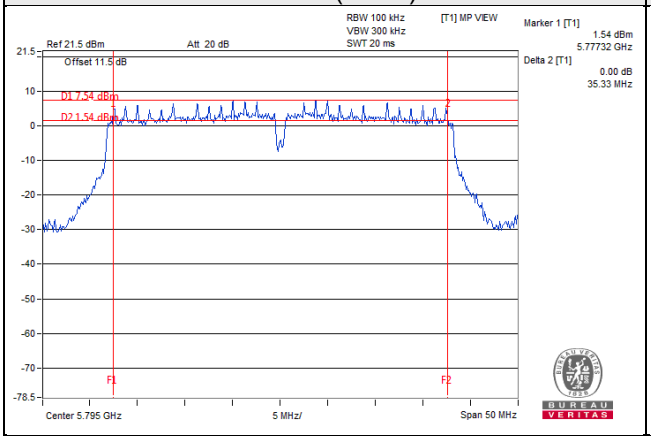
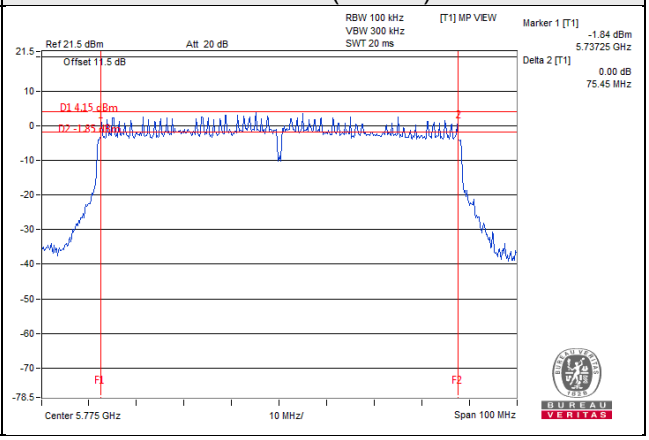
Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
144	5720 For U-NII-3	15.99	0.5	Pass
149	5745	16.01	0.5	Pass
157	5785	16.02	0.5	Pass
165	5825	16.00	0.5	Pass

802.11n (HT40)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
142	5710 For U-NII-3	35.34	0.5	Pass
151	5755	35.34	0.5	Pass
159	5795	35.33	0.5	Pass

802.11ac (VHT80)

Channel	Frequency (MHz)	6dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
138	5690 For U-NII-3	75.47	0.5	Pass
155	5775	75.45	0.5	Pass

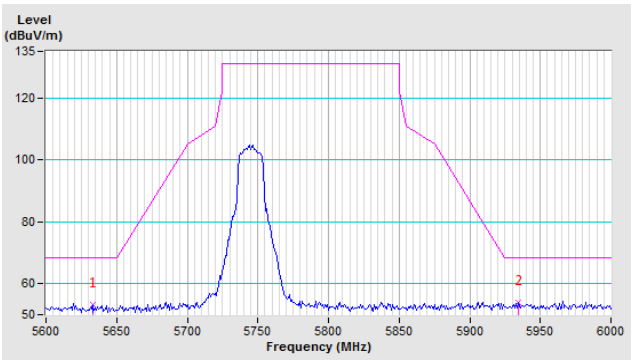
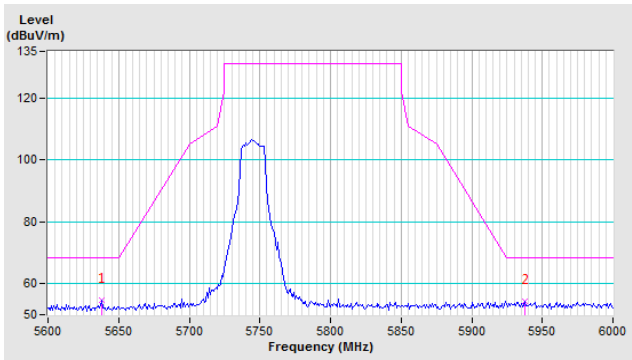
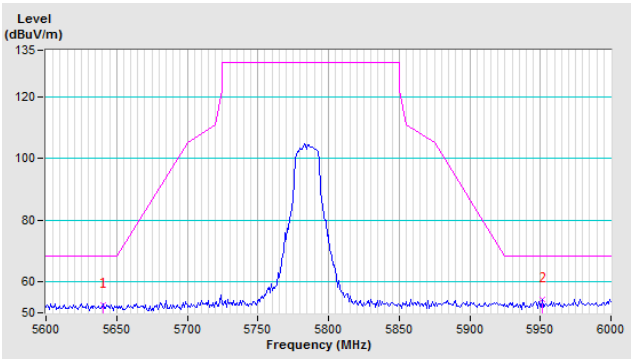
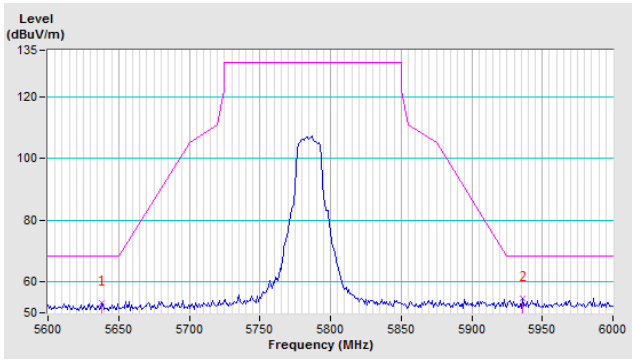
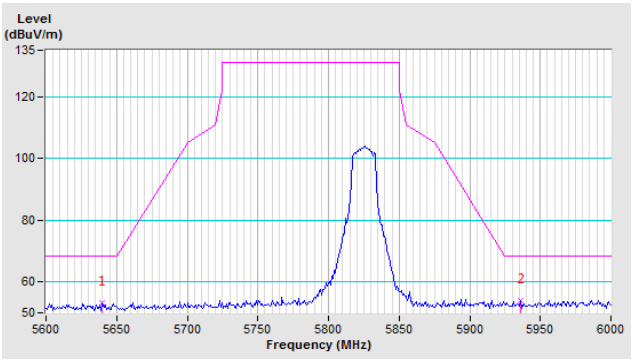
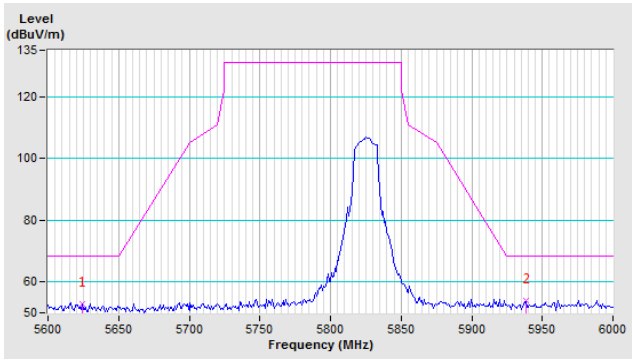
Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	802.11ac (VHT80)
	

5 Pictures of Test Arrangements

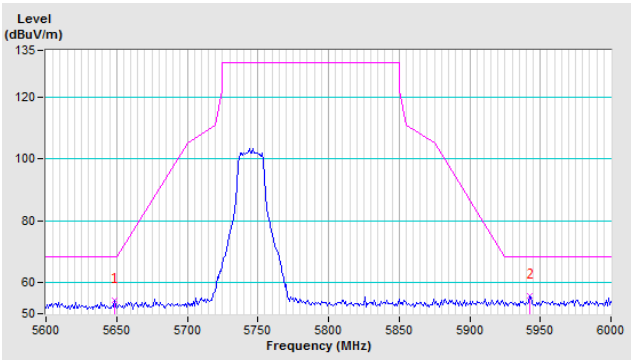
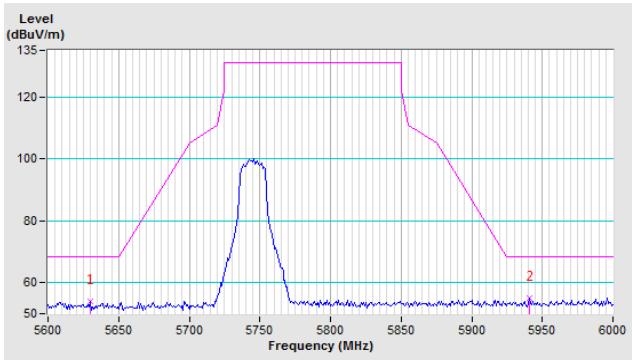
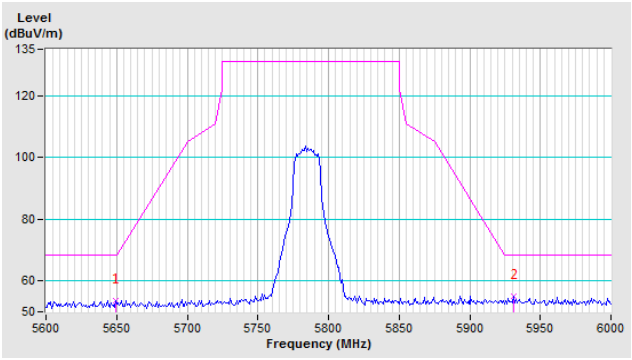
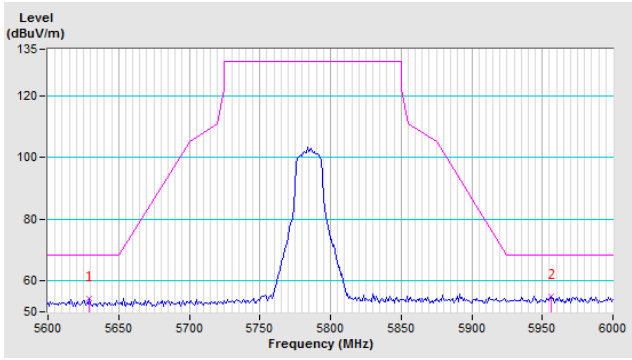
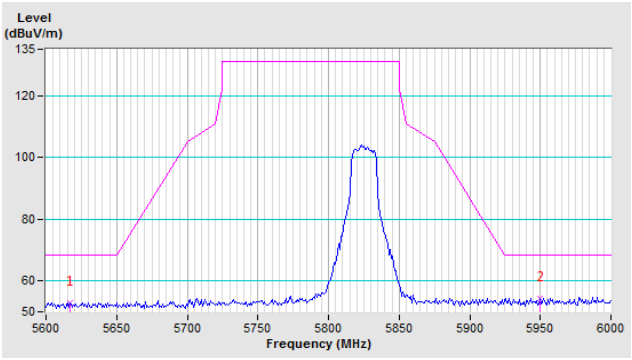
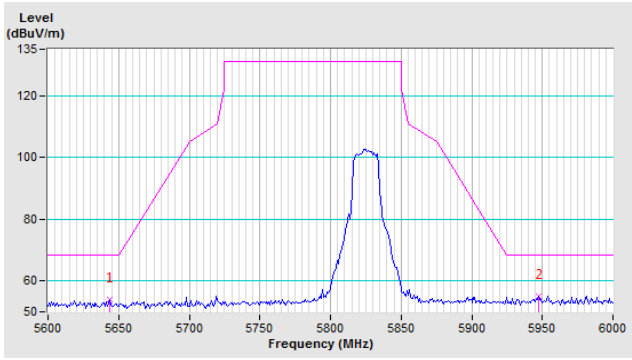
Please refer to the attached file (Test Setup Photo).

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

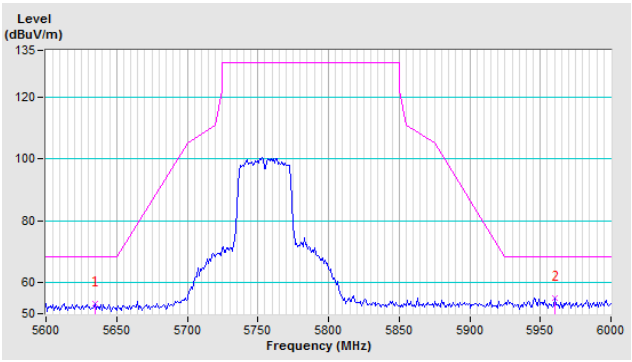
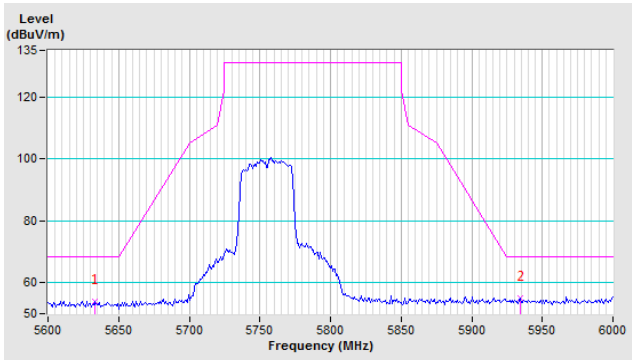
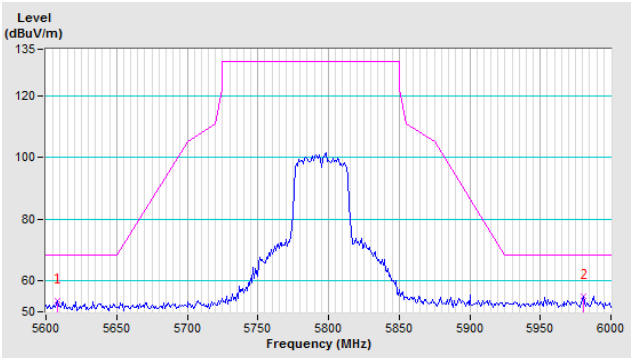
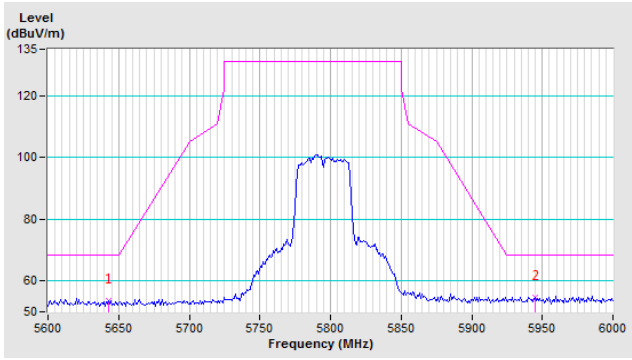
802.11a

CH149	
Horizontal	Vertical
	
CH157	
Horizontal	Vertical
	
CH165	
Horizontal	Vertical
	

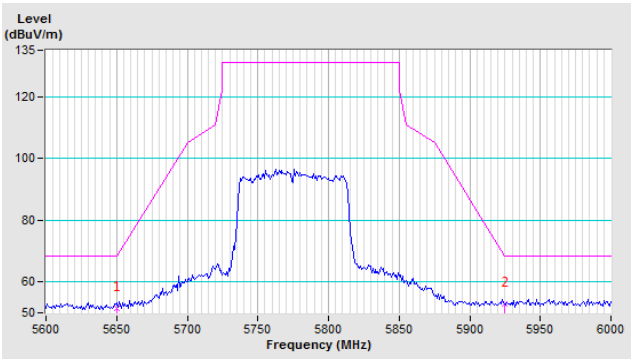
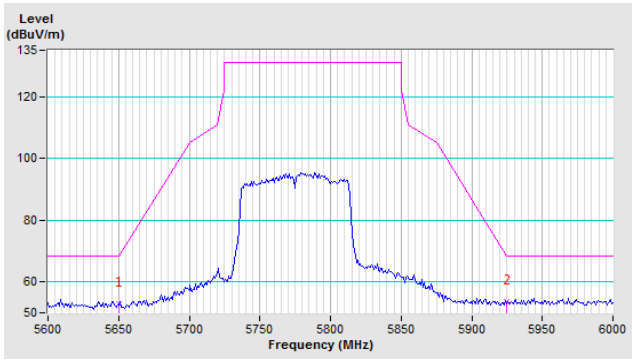
802.11n (HT20)

CH149	
Horizontal	Vertical
	
CH157	
Horizontal	Vertical
	
CH165	
Horizontal	Vertical
	

802.11n (HT40)

CH151	
Horizontal	Vertical
	
CH159	
Horizontal	Vertical
	

802.11ac (VHT80)

CH155	
Horizontal	Vertical
	

Appendix – Information of the Testing Laboratories

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

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

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