FCC Test Report

Report No.:	RF170301C16F-1
FCC ID:	PY317100372
Test Model:	EX8000
Received Date:	Aug. 10, 2018
Test Date:	Aug. 10 ~ Aug. 21, 2018
Issued Date:	Aug. 28, 2018
Applicant:	NETGEAR, INC.
Address:	350 East Plumeria Drive San Jose, CA 95134
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

Testing Laboratory
2021

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Release Control Record

Issue No.	Description	Date Issued
RF170301C16F-1	Original release.	Aug. 28, 2018

1 Certificate of Conformity

Product:	Nighthawk X6S AC3000 Tri-Band WiFi Range Extender
Brand:	NETGEAR
Test Model:	EX8000
Sample Status:	Engineering sample
Applicant:	NETGEAR, INC.
Test Date:	Aug. 10 ~ Aug. 21, 2018
Standards:	47 CFR FCC Part 15, Subpart E (Section 15.407) ANSI C63.10:2013

This report is issued as a supplementary report of RF170301C16-1, RF170301C16-3. This report shall be used combined together with its original report.

Prepared by : _____ , **Date:** Aug. 28, 2018

Suntee Liu / Specialist

Approved by : _____ , **Date:** Aug. 28, 2018

Bruce Chen / Project Engineer

Note: Radiated emission and AC power conducted emission items are performed for the addendum. Refer to original report for the other test data.

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 -5.82dB at 0.35332MHz.
15.407(b) (1/2/3/4(i/ii)/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -0.1dB at 5150.00, 5470.00, 5632.80MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	N/A	Refer to Note
---	Occupied Bandwidth Measurement	N/A	Refer to Note
15.407(a)(1/2/3)	Peak Power Spectral Density	N/A	Refer to Note
15.407(e)	6dB bandwidth	N/A	Refer to Note
15.407(g)	Frequency Stability	N/A	Refer to Note
15.203	Antenna Requirement	Pass	Antenna connector is I-PEX not a standard connector.

*For U-NII-3 band compliance with rule part 15.407(b)(4)(i), the OOBE test plots were recorded in Annex A.
Note: Radiated emission and AC power conducted emission items are performed for the addendum. Refer to original report for the other test data.

2.1 Measurement Uncertainty

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

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

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Nighthawk X6S AC3000 Tri-Band WiFi Range Extender
Brand	NETGEAR
Test Model	EX8000
Sample Status	Engineering sample
Power Supply Rating	12Vdc (adapter)
Modulation Type	256QAM, 64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: 54/48/36/24/18/12/9/6Mbps 802.11n: up to 600Mbps 802.11ac: up to 1733.3Mbps
Operating Frequency	5180~5240MHz, 5260~5320MHz, 5500~5700MHz, 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 5500~5700MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 11 802.11n (HT40), 802.11ac (VHT40): 5 802.11ac (VHT80): 2 5745~5825MHz: 802.11a, 802.11n (HT20), 802.11ac (VHT20): 5 802.11n (HT40), 802.11ac (VHT40): 2 802.11ac (VHT80): 1
Output Power	CDD Mode: 5180~5240MHz: 835.541mW 5745~5825MHz: 900.957Mw 5260~5320MHz: 211.852mW 5500~5700MHz: 207.409mW Beamforming Mode_NSS1: 5180~5240MHz: 834.992mW 5745~5825MHz: 593.833mW 5260~5320MHz: 211.852mW 5500~5700MHz: 130.081mW Beamforming Mode_NSS2: 5745~5825MHz: 900.957mW

Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Adapter
Data Cable	NA

Note:

1. This report is prepared for FCC class II permissive change. This report is issued as a supplementary report of the original BV CPS report no.: RF170301C16-1, RF170301C16-3. Please refer to the Operational Description for difference compared to the original report. After evaluation, receiver parameter and the RF portion of the EUT remain unchanged, therefore original conducted emission report data was kept. Radiated emission and AC power conducted emission items are retested in this report. Refer to original report for the other test data.
2. The EUT incorporates a MIMO function. Physically, the EUT provides 4 completed transmitters and 4 receivers.

Band	Modulation Mode	Beamforming Mode	TX Function
5G Band 1	802.11a	Not Support	2TX
	802.11n (HT20)	Support (CDD / NSS=1)	
	802.11n (HT40)	Support (CDD / NSS=1)	
	802.11ac (VHT20)	Support (CDD / NSS=1)	
	802.11ac (VHT40)	Support (CDD / NSS=1)	
	802.11ac (VHT80)	Support (CDD / NSS=1)	
5GHz Band 2	802.11a	Not Support	2TX
	802.11n (HT20)	Support (CDD / NSS=1)	
	802.11n (HT40)	Support (CDD / NSS=1)	
	802.11ac (VHT20)	Support (CDD / NSS=1)	
	802.11ac (VHT40)	Support (CDD / NSS=1)	
	802.11ac (VHT80)	Support (CDD / NSS=1)	
5GHz Band 3	802.11a	Not Support	4TX
	802.11n (HT20)	Support (CDD / NSS=1)	
	802.11n (HT40)	Support (CDD / NSS=1)	
	802.11ac (VHT20)	Support (CDD / NSS=1)	
	802.11ac (VHT40)	Support (CDD / NSS=1)	
	802.11ac (VHT80)	Support (CDD / NSS=1)	
5G Band 4	802.11a	Not Support	4TX
	802.11n (HT20)	Support (CDD / NSS=1 / NSS=2)	
	802.11n (HT40)	Support (CDD / NSS=1 / NSS=2)	
	802.11ac (VHT20)	Support (CDD / NSS=1 / NSS=2)	
	802.11ac (VHT40)	Support (CDD / NSS=1 / NSS=2)	
	802.11ac (VHT80)	Support (CDD / NSS=1 / NSS=2)	

* The modulation and bandwidth are similar for 802.11n mode for 20MHz/40MHz and 802.11ac mode for 20MHz/40MHz, therefore investigated worst case to representative mode in test report. (Final test mode refer section 3.2.1)

* For 802.11n and 802.11ac, CDD mode is the worst case for final tests after pretesting.

3. The EUT uses following antenna.

Ant. Type	Dipole					
Connecter Type	I-PEX (WLAN)					
Directional Antenna Gain (dBi)						
Item	2.4G	5G Band 1	5G Band 2	5G Band 3	5G Band 4	
					NSS1	NSS2
-	2.61	4.18	4.18	7.76	7.43	4.86

4. The following filters are provided to this EUT.

RF Module	Filter	Filter No.	Position	Gasket	Remark
Module 1	1st	Filter 1	TFL1 ,TFL2	With TFL1, TFL2 gasket	passive filter (pin to pin & Same design)
	2nd	Filter 2	TFL1 ,TFL2	Without TFL1, TFL2 gasket	passive filter (pin to pin & Same design)
Module 2	1st	Filter 3	BHPF1 ,BHPF2 BHPF3 ,BHPF4	With BHPF1, BHPF2, BHPF3, BHPF4 gasket	passive filter (pin to pin & Same design)
	2nd	Filter 4	BHPF1 ,BHPF2 BHPF3 ,BHPF4	Without BHPF1, BHPF2, BHPF3, BHPF4 gasket	passive filter (pin to pin & Same design)

Note: The 1st Filter is the worst case for final test.
RF Module 1 (2TX) supports WLAN 2.4GHz band & 5GHz band 1 & 5GHz band 2 functionally.
RF Module 2 (4TX) supports WLAN 5GHz band 3 & 5GHz band 4 functionally.

5. The following options are provided to this EUT.

Option 1	Heat sink 1 without gasket
Option 2	Heat sink 2 with gasket

* Option 1 was worse case for final test.

6. The EUT uses following adapters. (Adapter 1 is chosen for final test.)

Adapter 1 (US)	
Brand	NETGEAR
Model	2ABN042F NA (PN:332-10761-01)
Input Power	100-240Vac, 50/60Hz, 1.3A
Output Power	12Vdc, 3.5A
Power Line	1.85m DC cable without core attached on adapter

Adapter 2 (US)	
Brand	NETGEAR
Model	AD2080F20 (PN:332-10876-01)
Input Power	100-240Vac, 50/60Hz, 1.0A
Output Power	12Vdc, 3.5A
Power Line	1.8m DC cable without core attached on adapter

7. 2.4GHz & 5GHz band 4 technologies can transmit at same time.
   2.4GHz & 5GHz band 3 technologies can transmit at same time.
   5GHz band 1 & 5GHz band 3 technologies can transmit at same time.
   5GHz band 1 & 5GHz band 4 technologies can transmit at same time.
   5GHz band 2 & 5GHz band 3 technologies can transmit at same time.
   5GHz band 2 & 5GHz band 4 technologies can transmit at same time.
8. Spurious emission of the simultaneous operation (refer to above operation) has been evaluated and no non-compliance was found.

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

5500~5700MHz:

11 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		

5 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		

2 channels are provided for 802.11ac (VHT80):

Channel	Frequency	Channel	Frequency
106	5530MHz	122	5610 MHz

3.2.1 Test Mode Applicability and Tested Channel Detail

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

Where RE≥1G: Radiated Emission above 1GHz & Bandedge Measurement RE<1G: Radiated Emission below 1GHz
PLC: Power Line Conducted Emission

Note:
1. The antenna had been pre-tested on the positioned of each 3 axis. The worst cases were found when positioned on Z-plane.

Radiated Emission Test (Above 1GHz):

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

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)	Remark
-	802.11a	5180-5240	36 to 48	36, 40, 48	OFDM	BPSK	6.0	2TX
	802.11ac (VHT20)		36 to 48	36, 40, 48	OFDM	BPSK	13.0	2TX
	802.11ac (VHT40)		38 to 46	38, 46	OFDM	BPSK	27.0	2TX
	802.11ac (VHT80)		42	42	OFDM	BPSK	58.5	2TX
	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0	2TX
	802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	BPSK	13.0	2TX
	802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	27.0	2TX
	802.11ac (VHT80)		58	58	OFDM	BPSK	58.5	2TX
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0	4TX
	802.11ac (VHT20)		100 to 140	100, 116, 140	OFDM	BPSK	13.0	4TX
	802.11ac (VHT40)		102 to 134	102, 110, 134	OFDM	BPSK	27.0	4TX
	802.11ac (VHT80)		106 to 122	106, 122	OFDM	BPSK	130.0	4TX
	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0	4TX
	802.11ac (VHT20)		149 to 165	149, 157, 165	OFDM	BPSK	13.0	4TX
	802.11ac (VHT40)		151 to 159	151, 159	OFDM	BPSK	27.0	4TX
	802.11ac (VHT80)		155	155	OFDM	BPSK	130.0	4TX

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	Modulation Type	Data Rate (Mbps)	Remark
-	802.11a	5180-5240	36 to 48	52	OFDM	BPSK	6.0	2TX
		5260-5320	52 to 64		OFDM	BPSK	6.0	2TX
	802.11a	5500-5700	100 to 140	149	OFDM	BPSK	6.0	4TX
		5745-5825	149 to 165		OFDM	BPSK	6.0	4TX

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	Modulation Type	Data Rate (Mbps)	Remark
-	802.11a	5180-5240	36 to 48	52	OFDM	BPSK	6.0	2TX
		5260-5320	52 to 64		OFDM	BPSK	6.0	2TX
	802.11a	5500-5700	100 to 140	149	OFDM	BPSK	6.0	4TX
		5745-5825	149 to 165		OFDM	BPSK	6.0	4TX

Test Condition:

Applicable to	Environmental Conditions	Input Power	Tested by
RE≥1G	25 deg. C, 70% RH	120Vac, 60Hz	Luis Lee
RE<1G	25 deg. C, 68% RH	120Vac, 60Hz	Noah Chang
PLC	22 deg. C, 66% RH	120Vac, 60Hz	Noah Chang

3.3 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.

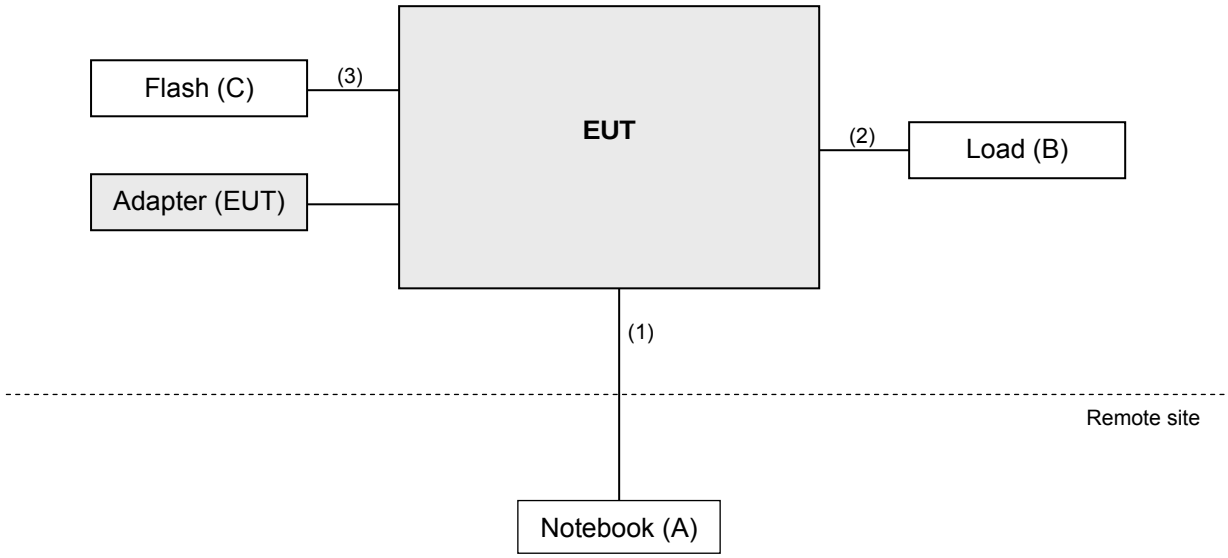
ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Notebook	DELL	E5420	BPQ8MQ1	FCC DoC Approved	-
B.	Load	NA	NA	NA	NA	-
C.	Flash	HP	v250W	03	FCC DoC Approved	-

Note:

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

ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	RJ45	1	10	N	0	-
2.	RJ45	3	1.8	N	0	-
3.	USB	1	0.5	Y	0	-

3.3.1 Configuration of System under Test



3.4 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
KDB 662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10:2013

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

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

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

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

NOTE:

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

Limits of unwanted emission out of the restricted bands

<table>
<tr><td colspan="3">Applicable To</td><td colspan="2">Limit</td></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 ROHDE & SCHWARZ	ESCI	100424	Oct. 17, 2017	Oct. 16, 2018
Spectrum Analyzer ROHDE & SCHWARZ	FSP40	100041	Dec. 12, 2017	Dec. 11, 2018
BILOG Antenna SCHWARZBECK	VULB9168	9168-155	Dec. 11, 2017	Dec. 10, 2018
HORN Antenna SCHWARZBECK	BBHA 9120D	9120D-1170	Dec. 13, 2017	Dec. 12, 2018
HORN Antenna SCHWARZBECK	BBHA 9170	BBHA9170241	Dec. 01, 2017	Nov. 30, 2018
Loop Antenna TESEQ	HLA 6121	45745	Jun. 14, 2018	Jun. 13, 2019
Preamplifier Agilent (Below 1GHz)	8447D	2944A10631	Aug. 08, 2018	Aug. 07, 2019
Preamplifier KEYSIGHT (Above 1GHz)	83017A	MY53270295	Jul. 02, 2018	Jul. 01, 2019
RF signal cable HUBER+SUHNER	SUCOFLEX 104	MY 13380+295012/04	Aug. 08, 2018	Aug. 07, 2019
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH4-03 (250724)	Aug. 08, 2018	Aug. 07, 2019
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	010303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021703	NA	NA
Turn Table BV ADT	TT100	TT93021703	NA	NA
Turn Table Controller BV ADT	SC100	SC93021703	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
26GHz ~ 40GHz Amplifier Agilent	8449B	3008A01961	Oct. 16, 2017	Oct. 15, 2018
High Speed Peak Power Meter	ML2495A	0824012	Dec. 13, 2017	Dec. 12, 2018
Power Sensor	MA2411B	0738171	Dec. 13, 2017	Dec. 12, 2018

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 4.
3. The FCC Designation Number is TW0003. The number will be varied with the Lab location and scope as attached.
4. The IC Site Registration No. is IC 7450F-4.

4.1.3 Test Procedures

For Radiated emission below 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meter chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.

Note:

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

For Radiated emission above 30MHz

a. The EUT was placed on the top of a rotating table 0.8 meters (for 30MHz ~ 1GHz) / 1.5 meters (for above 1GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.

b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.

c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.

d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.

e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.

f. The test-receiver system was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

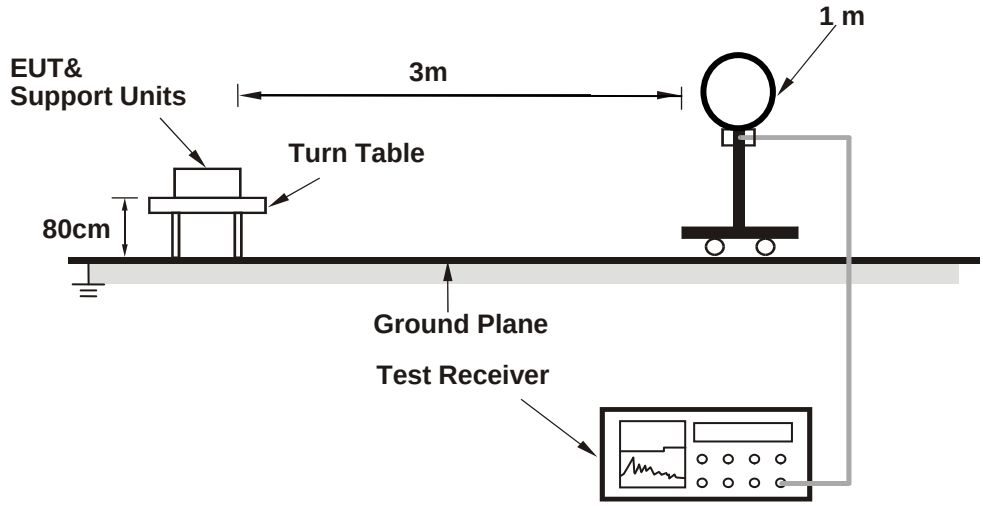
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.4 Deviation from Test Standard

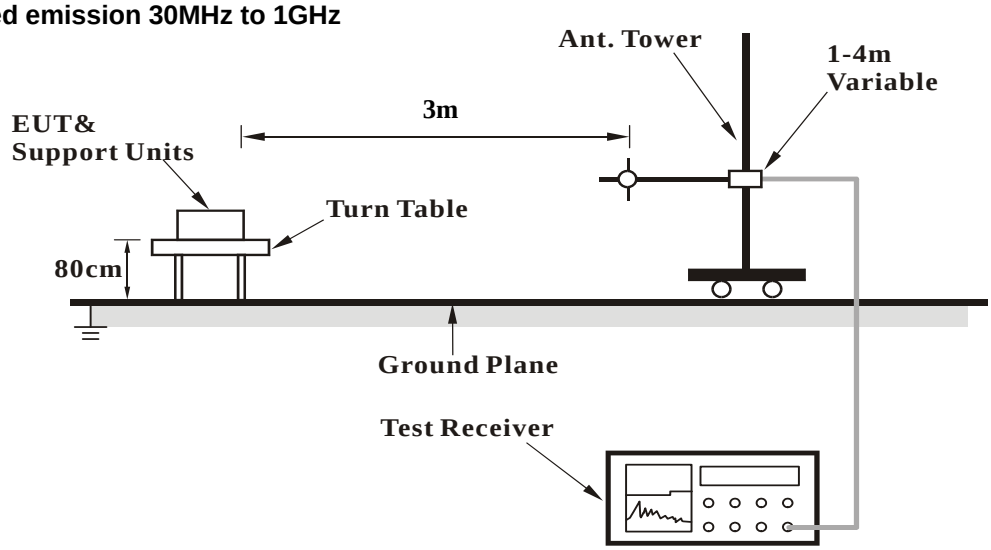
No deviation.

4.1.5 Test Setup

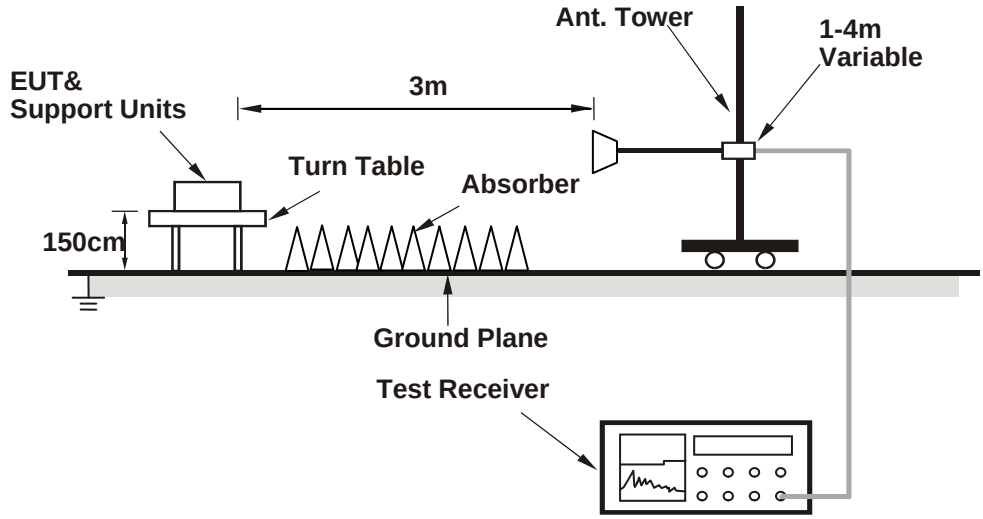
For Radiated emission below 30MHz



For Radiated emission 30MHz to 1GHz



For Radiated emission above 1GHz



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

4.1.6 EUT Operating Conditions

a. Placed the EUT on the testing table.
b. Prepared a notebook to act as a communication partner and placed it outside of testing area.
c. The communication partner connected with EUT via a RJ45 cable and ran a test program (provided by manufacturer) to enable EUT under transmission condition continuously at specific channel frequency.
d. The communication partner sent data to EUT by command "PING".
e. The necessary accessories enable the system in full functions.

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	60.6 PK	74.0	-13.4	1.00 H	25	48.8	11.8
2	5150.00	47.4 AV	54.0	-6.6	1.00 H	25	35.6	11.8
3	*5180.00	104.5 PK			1.00 H	25	63.7	40.8
4	*5180.00	94.1 AV			1.00 H	25	53.3	40.8
5	#10360.00	61.9 PK	68.2	-6.3	2.01 H	114	39.8	22.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.0 PK	74.0	-9.0	1.00 V	188	53.2	11.8
2	5150.00	51.9 AV	54.0	-2.1	1.00 V	188	40.1	11.8
3	*5180.00	116.2 PK			1.00 V	188	75.4	40.8
4	*5180.00	105.9 AV			1.00 V	188	65.1	40.8
5	#10360.00	62.8 PK	68.2	-5.4	1.28 V	274	40.7	22.1

Remarks:

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

CHANNEL	TX Channel 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	108.5 PK			1.00 H	25	67.7	40.8
2	*5200.00	97.8 AV			1.00 H	25	57.0	40.8
3	#10400.00	62.3 PK	68.2	-5.9	2.20 H	142	39.9	22.4
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	*5200.00	118.6 PK			1.06 V	197	77.8	40.8
2	*5200.00	108.7 AV			1.06 V	197	67.9	40.8
3	#10400.00	63.2 PK	68.2	-5.0	1.52 V	210	40.8	22.4

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 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	108.3 PK			1.27 H	30	67.8	40.5
2	*5240.00	98.3 AV			1.27 H	30	57.8	40.5
3	5350.00	60.4 PK	74.0	-13.6	1.27 H	30	48.5	11.9
4	5350.00	47.3 AV	54.0	-6.7	1.27 H	30	35.4	11.9
5	#10480.00	62.4 PK	68.2	-5.8	2.16 H	158	40.2	22.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	117.6 PK			1.16 V	218	77.1	40.5
2	*5240.00	107.5 AV			1.16 V	218	67.0	40.5
3	5350.00	60.1 PK	74.0	-13.9	1.16 V	218	48.2	11.9
4	5350.00	46.6 AV	54.0	-7.4	1.16 V	218	34.7	11.9
5	#10480.00	63.1 PK	68.2	-5.1	1.65 V	220	40.9	22.2

Remarks:

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

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) 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	60.2 PK	74.0	-13.8	1.00 H	27	48.4	11.8
2	5150.00	46.4 AV	54.0	-7.6	1.00 H	27	34.6	11.8
3	*5260.00	104.6 PK			1.00 H	27	64.1	40.5
4	*5260.00	94.1 AV			1.00 H	27	53.6	40.5
5	#10520.00	62.1 PK	68.2	-6.1	2.99 H	233	39.8	22.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	61.0 PK	74.0	-13.0	1.00 V	216	49.2	11.8
2	5150.00	46.5 AV	54.0	-7.5	1.00 V	216	34.7	11.8
3	*5260.00	112.5 PK			1.00 V	216	72.0	40.5
4	*5260.00	102.7 AV			1.00 V	216	62.2	40.5
5	#10520.00	62.7 PK	68.2	-5.5	2.65 V	288	40.4	22.3

Remarks:

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

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) 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	102.9 PK			1.00 H	28	62.5	40.4
2	*5300.00	92.4 AV			1.00 H	28	52.0	40.4
3	10600.00	61.7 PK	74.0	-12.3	2.99 H	245	39.4	22.3
4	10600.00	49.1 AV	54.0	-4.9	2.99 H	245	26.8	22.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	112.4 PK			1.00 V	220	72.0	40.4
2	*5300.00	102.2 AV			1.00 V	220	61.8	40.4
3	10600.00	62.7 PK	74.0	-11.3	2.10 V	269	40.4	22.3
4	10600.00	49.9 AV	54.0	-4.1	2.10 V	269	27.6	22.3

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 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	101.6 PK			1.03 H	28	61.0	40.6
2	*5320.00	91.2 AV			1.03 H	28	50.6	40.6
3	5350.00	61.7 PK	74.0	-12.3	1.03 H	28	49.8	11.9
4	5350.00	47.8 AV	54.0	-6.2	1.03 H	28	35.9	11.9
5	10640.00	62.4 PK	74.0	-11.6	2.87 H	241	39.9	22.5
6	10640.00	49.0 AV	54.0	-5.0	2.87 H	241	26.5	22.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	111.7 PK			1.22 V	219	71.1	40.6
2	*5320.00	101.4 AV			1.22 V	219	60.8	40.6
3	5350.00	61.9 PK	74.0	-12.1	1.22 V	219	50.0	11.9
4	5350.00	48.0 AV	54.0	-6.0	1.22 V	219	36.1	11.9
5	10640.00	63.0 PK	74.0	-11.0	2.66 V	300	40.5	22.5
6	10640.00	49.8 AV	54.0	-4.2	2.66 V	300	27.3	22.5

Remarks:

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

CHANNEL	TX Channel 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	59.7 PK	74.0	-14.3	1.00 H	6	47.2	12.5
2	5460.00	47.6 AV	54.0	-6.4	1.00 H	6	35.1	12.5
3	#5470.00	61.1 PK	68.2	-7.1	1.00 H	6	48.6	12.5
4	*5500.00	109.5 PK			1.00 H	6	68.0	41.5
5	*5500.00	99.2 AV			1.00 H	6	57.7	41.5
6	11000.00	62.9 PK	74.0	-11.1	1.96 H	252	40.2	22.7
7	11000.00	49.2 AV	54.0	-4.8	1.96 H	252	26.5	22.7
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	61.6 PK	74.0	-12.4	1.00 V	159	49.1	12.5
2	5460.00	47.6 AV	54.0	-6.4	1.00 V	159	35.1	12.5
3	#5470.00	63.2 PK	68.2	-5.0	1.00 V	159	50.7	12.5
4	*5500.00	119.2 PK			1.00 V	159	77.7	41.5
5	*5500.00	108.6 AV			1.00 V	159	67.1	41.5
6	11000.00	63.1 PK	74.0	-10.9	1.88 V	266	40.4	22.7
7	11000.00	49.9 AV	54.0	-4.1	1.88 V	266	27.2	22.7

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	109.9 PK			1.02 H	10	68.1	41.8
2	*5580.00	99.0 AV			1.02 H	10	57.2	41.8
3	11160.00	62.8 PK	74.0	-11.2	2.63 H	232	40.1	22.7
4	11160.00	49.6 AV	54.0	-4.4	2.63 H	232	26.9	22.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	120.0 PK			1.00 V	164	78.2	41.8
2	*5580.00	109.1 AV			1.00 V	164	67.3	41.8
3	11160.00	63.1 PK	74.0	-10.9	2.85 V	245	40.4	22.7
4	11160.00	49.9 AV	54.0	-4.1	2.85 V	245	27.2	22.7

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 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	109.8 PK			1.04 H	5	67.7	42.1
2	*5700.00	98.9 AV			1.04 H	5	56.8	42.1
3	#5725.00	61.2 PK	68.2	-7.0	1.04 H	5	48.4	12.8
4	11400.00	63.7 PK	74.0	-10.3	1.59 H	155	39.9	23.8
5	11400.00	50.3 AV	54.0	-3.7	1.59 H	155	26.5	23.8
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	*5700.00	120.0 PK			1.19 V	166	77.9	42.1
2	*5700.00	109.2 AV			1.19 V	166	67.1	42.1
3	#5725.00	63.8 PK	68.2	-4.4	1.19 V	166	51.0	12.8
4	11400.00	64.3 PK	74.0	-9.7	2.96 V	226	40.5	23.8
5	11400.00	50.7 AV	54.0	-3.3	2.96 V	226	26.9	23.8

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 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	#5606.40	64.6 PK	68.2	-3.6	1.00 H	10	52.1	12.5
2	*5745.00	117.8 PK			1.00 H	10	75.6	42.2
3	*5745.00	107.7 AV			1.00 H	10	65.5	42.2
4	#5995.20	65.4 PK	68.2	-2.8	1.00 H	10	51.7	13.7
5	11490.00	63.5 PK	74.0	-10.5	2.15 H	244	40.0	23.5
6	11490.00	50.1 AV	54.0	-3.9	2.15 H	244	26.6	23.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5646.40	67.0 PK	68.2	-1.2	1.08 V	176	54.6	12.4
2	*5745.00	125.9 PK			1.08 V	176	83.7	42.2
3	*5745.00	115.3 AV			1.08 V	176	73.1	42.2
4	#5994.40	63.3 PK	68.2	-4.9	1.08 V	176	49.6	13.7
5	11490.00	63.9 PK	74.0	-10.1	2.66 V	232	40.4	23.5
6	11490.00	50.4 AV	54.0	-3.6	2.66 V	232	26.9	23.5

Remarks:

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

CHANNEL	TX Channel 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	#5619.20	64.2 PK	68.2	-4.0	1.00 H	11	51.6	12.6
2	*5785.00	117.7 PK			1.00 H	11	75.2	42.5
3	*5785.00	107.5 AV			1.00 H	11	65.0	42.5
4	#5999.20	65.6 PK	68.2	-2.6	1.00 H	11	51.9	13.7
5	11570.00	62.7 PK	74.0	-11.3	2.71 H	209	39.5	23.2
6	11570.00	49.4 AV	54.0	-4.6	2.71 H	209	26.2	23.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5621.60	63.2 PK	68.2	-5.0	1.09 V	174	50.6	12.6
2	*5785.00	126.2 PK			1.09 V	174	83.7	42.5
3	*5785.00	115.5 AV			1.09 V	174	73.0	42.5
4	#5999.20	64.0 PK	68.2	-4.2	1.09 V	174	50.3	13.7
5	11570.00	63.1 PK	74.0	-10.9	2.66 V	231	39.9	23.2
6	11570.00	50.1 AV	54.0	-3.9	2.66 V	231	26.9	23.2

Remarks:

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

CHANNEL	TX Channel 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	#5622.40	63.9 PK	68.2	-4.3	1.01 H	11	51.3	12.6
2	*5825.00	116.8 PK			1.01 H	11	74.0	42.8
3	*5825.00	106.3 AV			1.01 H	11	63.5	42.8
4	#5988.80	66.0 PK	68.2	-2.2	1.01 H	11	52.3	13.7
5	11650.00	63.1 PK	74.0	-10.9	2.08 H	203	40.2	22.9
6	11650.00	50.0 AV	54.0	-4.0	2.08 H	203	27.1	22.9
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	#5635.20	64.1 PK	68.2	-4.1	1.63 V	176	51.5	12.6
2	*5825.00	126.6 PK			1.63 V	176	83.8	42.8
3	*5825.00	115.5 AV			1.63 V	176	72.7	42.8
4	#5987.20	64.4 PK	68.2	-3.8	1.63 V	176	50.7	13.7
5	11650.00	63.6 PK	74.0	-10.4	2.65 V	296	40.7	22.9
6	11650.00	50.3 AV	54.0	-3.7	2.65 V	296	27.4	22.9

Remarks:

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

802.11n (HT20)

CHANNEL	TX Channel 36	DETECTOR FUNCTION	Peak (PK) 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	60.1 PK	74.0	-13.9	1.25 H	29	48.3	11.8
2	5150.00	47.1 AV	54.0	-6.9	1.25 H	29	35.3	11.8
3	*5180.00	104.5 PK			1.25 H	29	63.7	40.8
4	*5180.00	93.2 AV			1.25 H	29	52.4	40.8
5	#10360.00	62.3 PK	68.2	-5.9	2.36 H	148	40.2	22.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	65.9 PK	74.0	-8.1	1.00 V	188	54.1	11.8
2	5150.00	52.4 AV	54.0	-1.6	1.00 V	188	40.6	11.8
3	*5180.00	114.7 PK			1.00 V	188	73.9	40.8
4	*5180.00	104.5 AV			1.00 V	188	63.7	40.8
5	#10360.00	62.8 PK	68.2	-5.4	2.55 V	197	40.7	22.1

Remarks:

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

CHANNEL	TX Channel 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	107.8 PK			1.20 H	28	67.0	40.8
2	*5200.00	96.7 AV			1.20 H	28	55.9	40.8
3	#10400.00	62.5 PK	68.2	-5.7	2.63 H	152	40.1	22.4
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	*5200.00	119.0 PK			1.00 V	181	78.2	40.8
2	*5200.00	108.2 AV			1.00 V	181	67.4	40.8
3	#10400.00	62.9 PK	68.2	-5.3	2.33 V	187	40.5	22.4

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 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	108.2 PK			1.26 H	28	67.7	40.5
2	*5240.00	96.7 AV			1.26 H	28	56.2	40.5
3	5350.00	59.7 PK	74.0	-14.3	1.26 H	28	47.8	11.9
4	5350.00	46.7 AV	54.0	-7.3	1.26 H	28	34.8	11.9
5	#10480.00	62.4 PK	68.2	-5.8	2.11 H	187	40.2	22.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5240.00	118.5 PK			1.00 V	205	78.0	40.5
2	*5240.00	107.7 AV			1.00 V	205	67.2	40.5
3	5350.00	59.6 PK	74.0	-14.4	1.00 V	205	47.7	11.9
4	5350.00	46.7 AV	54.0	-7.3	1.00 V	205	34.8	11.9
5	#10480.00	63.1 PK	68.2	-5.1	2.54 V	185	40.9	22.2

Remarks:

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

CHANNEL	TX Channel 52	DETECTOR FUNCTION	Peak (PK) 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	58.6 PK	74.0	-15.4	1.04 H	33	46.8	11.8
2	5150.00	46.6 AV	54.0	-7.4	1.04 H	33	34.8	11.8
3	*5260.00	111.2 PK			1.04 H	33	70.7	40.5
4	*5260.00	91.9 AV			1.04 H	33	51.4	40.5
5	#10520.00	62.2 PK	68.2	-6.0	1.59 H	310	39.9	22.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.7 PK	74.0	-14.3	1.00 V	196	47.9	11.8
2	5150.00	46.8 AV	54.0	-7.2	1.00 V	196	35.0	11.8
3	*5260.00	112.5 PK			1.00 V	196	72.0	40.5
4	*5260.00	102.2 AV			1.00 V	196	61.7	40.5
5	#10520.00	63.0 PK	68.2	-5.2	2.98 V	245	40.7	22.3

Remarks:

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

CHANNEL	TX Channel 60	DETECTOR FUNCTION	Peak (PK) 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	102.4 PK			1.09 H	30	62.0	40.4
2	*5300.00	92.0 AV			1.09 H	30	51.6	40.4
3	10600.00	62.1 PK	74.0	-11.9	2.71 H	210	39.8	22.3
4	10600.00	48.9 AV	54.0	-5.1	2.71 H	210	26.6	22.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	111.4 PK			1.00 V	216	71.0	40.4
2	*5300.00	101.0 AV			1.00 V	216	60.6	40.4
3	10600.00	62.4 PK	74.0	-11.6	2.77 V	140	40.1	22.3
4	10600.00	49.6 AV	54.0	-4.4	2.77 V	140	27.3	22.3

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 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	103.2 PK			1.05 H	40	62.6	40.6
2	*5320.00	91.8 AV			1.05 H	40	51.2	40.6
3	5350.00	59.1 PK	74.0	-14.9	1.05 H	40	47.2	11.9
4	5350.00	47.3 AV	54.0	-6.7	1.05 H	40	35.4	11.9
5	10640.00	62.5 PK	74.0	-11.5	2.25 H	177	40.0	22.5
6	10640.00	49.6 AV	54.0	-4.4	2.25 H	177	27.1	22.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	112.4 PK			1.00 V	207	71.8	40.6
2	*5320.00	101.0 AV			1.00 V	207	60.4	40.6
3	5350.00	61.3 PK	74.0	-12.7	1.00 V	207	49.4	11.9
4	5350.00	48.5 AV	54.0	-5.5	1.00 V	207	36.6	11.9
5	10640.00	62.8 PK	74.0	-11.2	1.59 V	320	40.3	22.5
6	10640.00	49.8 AV	54.0	-4.2	1.59 V	320	27.3	22.5

Remarks:

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

CHANNEL	TX Channel 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	60.3 PK	74.0	-13.7	1.12 H	15	47.8	12.5
2	5460.00	47.5 AV	54.0	-6.5	1.12 H	15	35.0	12.5
3	#5470.00	61.0 PK	68.2	-7.2	1.12 H	15	48.5	12.5
4	*5500.00	108.5 PK			1.12 H	15	67.0	41.5
5	*5500.00	97.7 AV			1.12 H	15	56.2	41.5
6	11000.00	62.3 PK	74.0	-11.7	2.51 H	255	39.6	22.7
7	11000.00	49.1 AV	54.0	-4.9	2.51 H	255	26.4	22.7
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	60.9 PK	74.0	-13.1	1.06 V	156	48.4	12.5
2	5460.00	47.8 AV	54.0	-6.2	1.06 V	156	35.3	12.5
3	#5470.00	62.3 PK	68.2	-5.9	1.06 V	156	49.8	12.5
4	*5500.00	118.8 PK			1.06 V	156	77.3	41.5
5	*5500.00	108.0 AV			1.06 V	156	66.5	41.5
6	11000.00	63.0 PK	74.0	-11.0	2.65 V	289	40.3	22.7
7	11000.00	50.0 AV	54.0	-4.0	2.65 V	289	27.3	22.7

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	108.8 PK			1.08 H	20	67.0	41.8
2	*5580.00	97.7 AV			1.08 H	20	55.9	41.8
3	11160.00	62.7 PK	74.0	-11.3	1.99 H	105	40.0	22.7
4	11160.00	49.6 AV	54.0	-4.4	1.99 H	105	26.9	22.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5580.00	118.9 PK			1.08 V	163	77.1	41.8
2	*5580.00	107.8 AV			1.08 V	163	66.0	41.8
3	11160.00	63.0 PK	74.0	-11.0	2.06 V	223	40.3	22.7
4	11160.00	50.3 AV	54.0	-3.7	2.06 V	223	27.6	22.7

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 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	109.2 PK			1.00 H	8	67.1	42.1
2	*5700.00	98.4 AV			1.00 H	8	56.3	42.1
3	#5725.00	61.1 PK	68.2	-7.1	1.25 H	185	48.3	12.8
4	11400.00	63.3 PK	74.0	-10.7	2.68 H	211	39.5	23.8
5	11400.00	50.4 AV	54.0	-3.6	2.68 H	211	26.6	23.8
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	*5700.00	119.5 PK			1.24 V	166	77.4	42.1
2	*5700.00	108.7 AV			1.24 V	166	66.6	42.1
3	#5725.00	64.9 PK	68.2	-3.3	1.24 V	166	52.1	12.8
4	11400.00	63.7 PK	74.0	-10.3	2.65 V	277	39.9	23.8
5	11400.00	51.1 AV	54.0	-2.9	2.65 V	277	27.3	23.8

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5605.60	63.2 PK	68.2	-5.0	1.00 H	9	50.6	12.6
2	*5745.00	117.1 PK			1.00 H	9	74.9	42.2
3	*5745.00	106.8 AV			1.00 H	9	64.6	42.2
4	#5967.20	64.0 PK	68.2	-4.2	1.00 H	9	50.3	13.7
5	11490.00	63.7 PK	74.0	-10.3	2.51 H	247	40.2	23.5
6	11490.00	50.6 AV	54.0	-3.4	2.51 H	247	27.1	23.5
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5648.00	64.4 PK	68.2	-3.8	1.00 V	167	52.0	12.4
2	*5745.00	125.4 PK			1.00 V	167	83.2	42.2
3	*5745.00	114.8 AV			1.00 V	167	72.6	42.2
4	#5948.00	64.1 PK	68.2	-4.1	1.00 V	167	50.4	13.7
5	11490.00	63.9 PK	74.0	-10.1	2.66 V	244	40.4	23.5
6	11490.00	50.7 AV	54.0	-3.3	2.66 V	244	27.2	23.5

Remarks:

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

CHANNEL	TX Channel 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	#5646.40	63.0 PK	68.2	-5.2	1.00 H	10	50.6	12.4
2	*5785.00	117.4 PK			1.00 H	10	74.9	42.5
3	*5785.00	106.6 AV			1.00 H	10	64.1	42.5
4	#5927.20	64.0 PK	68.2	-4.2	1.00 H	10	50.4	13.6
5	11570.00	62.7 PK	74.0	-11.3	2.17 H	150	39.5	23.2
6	11570.00	49.9 AV	54.0	-4.1	2.17 H	150	26.7	23.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5616.00	63.6 PK	68.2	-4.6	1.13 V	169	51.0	12.6
2	*5785.00	125.8 PK			1.13 V	169	83.3	42.5
3	*5785.00	115.5 AV			1.13 V	169	73.0	42.5
4	#5999.20	64.3 PK	68.2	-3.9	1.13 V	169	50.6	13.7
5	11570.00	63.1 PK	74.0	-10.9	2.56 V	233	39.9	23.2
6	11570.00	50.5 AV	54.0	-3.5	2.56 V	233	27.3	23.2

Remarks:

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

CHANNEL	TX Channel 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	#5608.80	63.5 PK	68.2	-4.7	1.05 H	11	50.9	12.6
2	*5825.00	116.1 PK			1.05 H	11	73.3	42.8
3	*5825.00	105.9 AV			1.05 H	11	63.1	42.8
4	#5994.40	63.1 PK	68.2	-5.1	1.05 H	11	49.4	13.7
5	11650.00	62.1 PK	74.0	-11.9	2.18 H	216	39.2	22.9
6	11650.00	49.6 AV	54.0	-4.4	2.18 H	216	26.7	22.9
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	#5621.60	62.8 PK	68.2	-5.4	1.57 V	176	50.2	12.6
2	*5825.00	125.7 PK			1.57 V	176	82.9	42.8
3	*5825.00	115.2 AV			1.57 V	176	72.4	42.8
4	#5959.20	63.5 PK	68.2	-4.7	1.57 V	176	49.8	13.7
5	11650.00	62.5 PK	74.0	-11.5	2.22 V	296	39.6	22.9
6	11650.00	49.8 AV	54.0	-4.2	2.22 V	296	26.9	22.9

Remarks:

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

802.11n (HT40)

CHANNEL	TX Channel 38	DETECTOR FUNCTION	Peak (PK) 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	60.4 PK	74.0	-13.6	1.90 H	199	48.6	11.8
2	5150.00	47.3 AV	54.0	-6.7	1.90 H	199	35.5	11.8
3	*5190.00	103.4 PK			1.90 H	199	62.6	40.8
4	*5190.00	92.9 AV			1.90 H	199	52.1	40.8
5	#10380.00	62.5 PK	68.2	-5.7	2.63 H	174	40.2	22.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	64.7 PK	74.0	-9.3	1.00 V	180	52.9	11.8
2	5150.00	51.7 AV	54.0	-2.3	1.00 V	180	39.9	11.8
3	*5190.00	112.1 PK			1.00 V	180	71.3	40.8
4	*5190.00	102.1 AV			1.00 V	180	61.3	40.8
5	#10380.00	63.0 PK	68.2	-5.2	2.91 V	142	40.7	22.3

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 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	107.1 PK			1.90 H	172	66.5	40.6
2	*5230.00	96.8 AV			1.90 H	172	56.2	40.6
3	5350.00	60.1 PK	74.0	-13.9	1.90 H	172	48.2	11.9
4	5350.00	46.6 AV	54.0	-7.4	1.90 H	172	34.7	11.9
5	#10460.00	62.4 PK	68.2	-5.8	2.65 H	188	40.1	22.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5230.00	116.1 PK			1.00 V	190	75.5	40.6
2	*5230.00	105.7 AV			1.00 V	190	65.1	40.6
3	5350.00	60.1 PK	74.0	-13.9	1.00 V	190	48.2	11.9
4	5350.00	46.9 AV	54.0	-7.1	1.00 V	190	35.0	11.9
5	#10460.00	62.9 PK	68.2	-5.3	2.98 V	163	40.6	22.3

Remarks:

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

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) 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	58.6 PK	74.0	-15.4	1.09 H	22	46.8	11.8
2	5150.00	46.3 AV	54.0	-7.7	1.09 H	22	34.5	11.8
3	*5270.00	102.1 PK			1.09 H	22	61.7	40.4
4	*5270.00	90.7 AV			1.09 H	22	50.3	40.4
5	#10540.00	61.7 PK	68.2	-6.5	2.71 H	196	39.5	22.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	59.5 PK	74.0	-14.5	1.48 V	207	47.7	11.8
2	5150.00	46.6 AV	54.0	-7.4	1.48 V	207	34.8	11.8
3	*5270.00	111.5 PK			1.48 V	207	71.1	40.4
4	*5270.00	100.1 AV			1.48 V	207	59.7	40.4
5	#10540.00	62.1 PK	68.2	-6.1	2.89 V	102	39.9	22.2

Remarks:

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

CHANNEL	TX Channel 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	99.3 PK			1.00 H	23	58.8	40.5
2	*5310.00	89.1 AV			1.00 H	23	48.6	40.5
3	5350.00	59.1 PK	74.0	-14.9	1.00 H	23	47.2	11.9
4	5350.00	48.2 AV	54.0	-5.8	1.00 H	23	36.3	11.9
5	10620.00	62.5 PK	74.0	-11.5	3.04 H	235	40.2	22.3
6	10620.00	49.2 AV	54.0	-4.8	3.04 H	235	26.9	22.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	109.4 PK			1.00 V	206	68.9	40.5
2	*5310.00	99.2 AV			1.00 V	206	58.7	40.5
3	5350.00	63.5 PK	74.0	-10.5	1.00 V	206	51.6	11.9
4	5350.00	51.3 AV	54.0	-2.7	1.00 V	206	39.4	11.9
5	10620.00	62.7 PK	74.0	-11.3	2.66 V	101	40.4	22.3
6	10620.00	49.6 AV	54.0	-4.4	2.66 V	101	27.3	22.3

Remarks:

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

CHANNEL	TX Channel 102	DETECTOR FUNCTION	Peak (PK) 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	60.6 PK	74.0	-13.4	1.05 H	26	48.1	12.5
2	5460.00	49.4 AV	54.0	-4.6	1.05 H	26	36.9	12.5
3	#5470.00	60.9 PK	68.2	-7.3	1.05 H	26	48.4	12.5
4	*5510.00	104.8 PK			1.05 H	26	63.2	41.6
5	*5510.00	94.8 AV			1.05 H	26	53.2	41.6
6	11020.00	62.4 PK	74.0	-11.6	2.14 H	209	39.7	22.7
7	11020.00	49.2 AV	54.0	-4.8	2.14 H	209	26.5	22.7
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	62.0 PK	74.0	-12.0	1.24 V	180	49.5	12.5
2	5460.00	49.5 AV	54.0	-4.5	1.24 V	180	37.0	12.5
3	#5470.00	63.7 PK	68.2	-4.5	1.24 V	180	51.2	12.5
4	*5510.00	115.1 PK			1.24 V	180	73.5	41.6
5	*5510.00	105.1 AV			1.24 V	180	63.5	41.6
6	11020.00	63.0 PK	74.0	-11.0	2.69 V	266	40.3	22.7
7	11020.00	49.6 AV	54.0	-4.4	2.69 V	266	26.9	22.7

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 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	*5550.00	106.0 PK			1.05 H	12	64.3	41.7
2	*5550.00	96.2 AV			1.05 H	12	54.5	41.7
3	11100.00	62.4 PK	74.0	-11.6	1.58 H	215	39.5	22.9
4	11100.00	49.3 AV	54.0	-4.7	1.58 H	215	26.4	22.9
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	*5550.00	116.2 PK			1.21 V	173	74.5	41.7
2	*5550.00	106.4 AV			1.21 V	173	64.7	41.7
3	11100.00	62.7 PK	74.0	-11.3	2.62 V	350	39.8	22.9
4	11100.00	50.0 AV	54.0	-4.0	2.62 V	350	27.1	22.9

Remarks:

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

CHANNEL	TX Channel 134	DETECTOR FUNCTION	Peak (PK) 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	106.2 PK			1.05 H	10	64.5	41.7
2	*5670.00	95.9 AV			1.05 H	10	54.2	41.7
3	#5725.00	61.3 PK	68.2	-6.9	1.05 H	10	48.5	12.8
4	11340.00	63.3 PK	74.0	-10.7	2.85 H	246	40.0	23.3
5	11340.00	50.1 AV	54.0	-3.9	2.85 H	246	26.8	23.3
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	*5670.00	116.2 PK			1.17 V	174	74.5	41.7
2	*5670.00	105.9 AV			1.17 V	174	64.2	41.7
3	#5725.00	62.7 PK	68.2	-5.5	1.17 V	174	49.9	12.8
4	11340.00	63.6 PK	74.0	-10.4	2.65 V	244	40.3	23.3
5	11340.00	50.3 AV	54.0	-3.7	2.65 V	244	27.0	23.3

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 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	#5624.80	63.2 PK	68.2	-5.0	1.02 H	12	50.6	12.6
2	*5755.00	114.5 PK			1.02 H	12	72.2	42.3
3	*5755.00	104.5 AV			1.02 H	12	62.2	42.3
4	#5982.40	64.4 PK	68.2	-3.8	1.02 H	12	50.7	13.7
5	11510.00	63.1 PK	74.0	-10.9	2.18 H	230	39.8	23.3
6	11510.00	50.0 AV	54.0	-4.0	2.18 H	230	26.7	23.3
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	#5648.00	67.8 PK	68.2	-0.4	1.45 V	172	55.4	12.4
2	*5755.00	123.0 PK			1.45 V	172	80.7	42.3
3	*5755.00	112.8 AV			1.45 V	172	70.5	42.3
4	#5954.40	63.3 PK	68.2	-4.9	1.45 V	172	49.6	13.7
5	11510.00	63.3 PK	74.0	-10.7	2.66 V	211	40.0	23.3
6	11510.00	50.4 AV	54.0	-3.6	2.66 V	211	27.1	23.3

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 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	#5620.00	63.7 PK	68.2	-4.5	1.00 H	7	51.1	12.6
2	*5795.00	114.0 PK			1.00 H	7	71.4	42.6
3	*5795.00	104.2 AV			1.00 H	7	61.6	42.6
4	#5936.80	63.9 PK	68.2	-4.3	1.00 H	7	50.3	13.6
5	11590.00	63.0 PK	74.0	-11.0	2.18 H	240	40.1	22.9
6	11590.00	49.8 AV	54.0	-4.2	2.18 H	240	26.9	22.9
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	#5649.60	63.2 PK	68.2	-5.0	1.03 V	171	50.8	12.4
2	*5795.00	122.8 PK			1.03 V	171	80.2	42.6
3	*5795.00	112.6 AV			1.03 V	171	70.0	42.6
4	#5972.80	63.2 PK	68.2	-5.0	1.03 V	171	49.5	13.7
5	11590.00	63.3 PK	74.0	-10.7	2.66 V	299	40.4	22.9
6	11590.00	50.2 AV	54.0	-3.8	2.66 V	299	27.3	22.9

Remarks:

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

802.11ac (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	61.2 PK	74.0	-12.8	1.89 H	197	49.4	11.8
2	5150.00	47.7 AV	54.0	-6.3	1.89 H	197	35.9	11.8
3	*5210.00	98.8 PK			1.89 H	197	58.1	40.7
4	*5210.00	88.6 AV			1.89 H	197	47.9	40.7
5	5350.00	50.5 PK	74.0	-23.5	1.89 H	197	38.6	11.9
6	5350.00	47.1 AV	54.0	-6.9	1.89 H	197	35.2	11.9
7	#10420.00	62.0 PK	68.2	-6.2	2.71 H	152	39.7	22.3
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	68.5 PK	74.0	-5.5	1.00 V	180	56.7	11.8
2	**5150.00**	**53.9 AV**	**54.0**	**-0.1**	**1.00 V**	**180**	**42.1**	**11.8**
3	*5210.00	107.4 PK			1.00 V	180	66.7	40.7
4	*5210.00	97.5 AV			1.00 V	180	56.8	40.7
5	5350.00	59.7 PK	74.0	-14.3	1.00 V	180	47.8	11.9
6	5350.00	46.6 AV	54.0	-7.4	1.00 V	180	34.7	11.9
7	#10420.00	62.5 PK	68.2	-5.7	1.95 V	271	40.2	22.3

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 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	59.4 PK	74.0	-14.6	1.04 H	19	47.6	11.8
2	5150.00	46.2 AV	54.0	-7.8	1.04 H	19	34.4	11.8
3	*5290.00	96.5 PK			1.04 H	19	56.1	40.4
4	*5290.00	86.7 AV			1.04 H	19	46.3	40.4
5	5350.00	62.6 PK	74.0	-11.4	1.04 H	19	50.7	11.9
6	5350.00	49.3 AV	54.0	-4.7	1.04 H	19	37.4	11.9
7	#10580.00	61.9 PK	68.2	-6.3	2.85 H	243	39.7	22.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	60.1 PK	74.0	-13.9	1.00 V	218	48.3	11.8
2	5150.00	46.5 AV	54.0	-7.5	1.00 V	218	34.7	11.8
3	*5290.00	105.5 PK			1.00 V	218	65.1	40.4
4	*5290.00	95.7 AV			1.00 V	218	55.3	40.4
5	5350.00	65.6 PK	74.0	-8.4	1.00 V	218	53.7	11.9
6	5350.00	51.3 AV	54.0	-2.7	1.00 V	218	39.4	11.9
7	#10580.00	62.5 PK	68.2	-5.7	2.15 V	155	40.3	22.2

Remarks:

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

CHANNEL	TX Channel 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	61.1 PK	74.0	-12.9	1.50 H	13	48.6	12.5
2	5460.00	47.7 AV	54.0	-6.3	1.50 H	13	35.2	12.5
3	#5470.00	63.1 PK	68.2	-5.1	1.05 H	13	50.6	12.5
4	*5530.00	101.9 PK			1.05 H	13	60.2	41.7
5	*5530.00	91.8 AV			1.05 H	13	50.1	41.7
6	#5725.00	60.9 PK	68.2	-7.3	1.05 H	13	48.1	12.8
7	11060.00	62.6 PK	74.0	-11.4	2.17 H	148	39.8	22.8
8	11060.00	49.3 AV	54.0	-4.7	2.17 H	148	26.5	22.8
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	63.4 PK	74.0	-10.6	1.19 V	162	50.9	12.5
2	5460.00	50.1 AV	54.0	-3.9	1.19 V	162	37.6	12.5
3	**#5470.00**	**68.1 PK**	**68.2**	**-0.1**	**1.19 V**	**162**	**55.6**	**12.5**
4	*5530.00	112.1 PK			1.19 V	162	70.4	41.7
5	*5530.00	102.0 AV			1.19 V	162	60.3	41.7
6	#5725.00	61.2 PK	68.2	-7.0	1.19 V	162	48.4	12.8
7	11060.00	63.0 PK	74.0	-11.0	2.88 V	266	40.2	22.8
8	11060.00	49.9 AV	54.0	-4.1	2.88 V	266	27.1	22.8

Remarks:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.7 PK	74.0	-14.3	1.00 H	2	47.2	12.5
2	5460.00	46.7 AV	54.0	-7.3	1.00 H	2	34.2	12.5
3	#5470.00	60.9 PK	68.2	-7.3	1.00 H	2	48.4	12.5
4	*5610.00	101.8 PK			1.00 H	2	60.1	41.7
5	*5610.00	91.7 AV			1.00 H	2	50.0	41.7
6	#5725.00	61.7 PK	68.2	-6.5	1.00 H	2	48.9	12.8
7	11220.00	62.6 PK	74.0	-11.4	2.85 H	245	40.0	22.6
8	11220.00	49.7 AV	54.0	-4.3	2.85 H	245	27.1	22.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5460.00	59.9 PK	74.0	-14.1	1.10 V	172	47.4	12.5
2	5460.00	47.0 AV	54.0	-7.0	1.10 V	172	34.5	12.5
3	#5470.00	61.2 PK	68.2	-7.0	1.10 V	172	48.7	12.5
4	*5610.00	111.8 PK			1.10 V	172	70.1	41.7
5	*5610.00	101.7 AV			1.10 V	172	60.0	41.7
6	#5725.00	62.5 PK	68.2	-5.7	1.10 V	172	49.7	12.8
7	11220.00	62.8 PK	74.0	-11.2	2.56 V	288	40.2	22.6
8	11220.00	49.9 AV	54.0	-4.1	2.56 V	288	27.3	22.6

Remarks:

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

CHANNEL	TX Channel 155	DETECTOR FUNCTION	Peak (PK) 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	#5613.60	64.3 PK	68.2	-3.9	1.00 H	10	51.7	12.6
2	*5775.00	108.9 PK			1.00 H	10	66.4	42.5
3	*5775.00	98.5 AV			1.00 H	10	56.0	42.5
4	#5943.20	64.6 PK	68.2	-3.6	1.00 H	10	51.0	13.6
5	11550.00	62.4 PK	74.0	-11.6	2.69 H	258	39.2	23.2
6	11550.00	49.5 AV	54.0	-4.5	2.69 H	258	26.3	23.2
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	**#5632.80**	**68.1 PK**	**68.2**	**-0.1**	**1.00 V**	**157**	**55.5**	**12.6**
2	*5775.00	116.5 PK			1.00 V	157	74.0	42.5
3	*5775.00	106.6 AV			1.00 V	157	64.1	42.5
4	#5965.60	64.2 PK	68.2	-4.0	1.00 V	157	50.4	13.8
5	11550.00	63.2 PK	74.0	-10.8	2.22 V	302	40.0	23.2
6	11550.00	50.2 AV	54.0	-3.8	2.22 V	302	27.0	23.2

Remarks:

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

Below 1GHz Worst-Case Data:

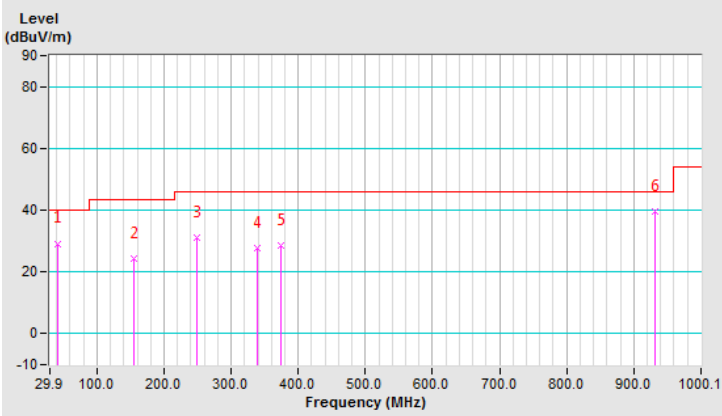
802.11a

FREQUENCY RANGE	9kHz ~ 1GHz	DETECTOR FUNCTION	Quasi-Peak (QP)
CHANNEL	TX Channel 52		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	41.54	29.2 QP	40.0	-10.8	1.00 H	243	37.9	-8.7
2	156.03	24.5 QP	43.5	-19.0	1.50 H	271	32.3	-7.8
3	249.17	31.0 QP	46.0	-15.0	1.00 H	70	39.7	-8.7
4	338.42	27.9 QP	46.0	-18.1	1.50 H	193	34.2	-6.3
5	373.35	28.5 QP	46.0	-17.5	2.00 H	257	34.1	-5.6
6	932.19	39.4 QP	46.0	-6.6	1.00 H	133	33.0	6.4

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.

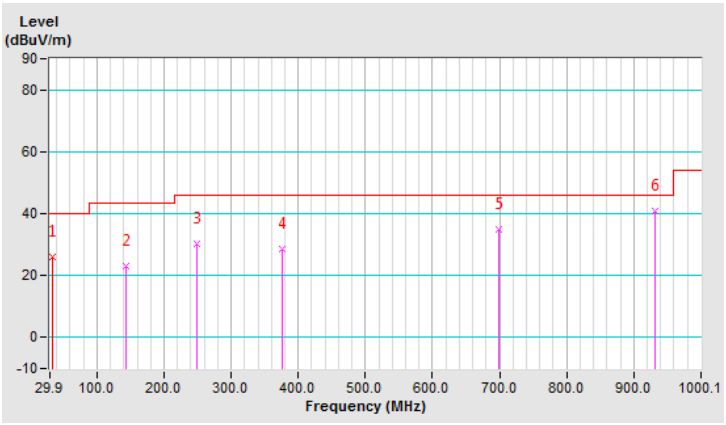


FREQUENCY RANGE	9kHz ~ 1GHz	DETECTOR FUNCTION	Quasi-Peak (QP)
CHANNEL	TX Channel 52		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	33.45	26.0 QP	40.0	-14.0	2.00 V	32	35.8	-9.8
2	142.44	23.0 QP	43.5	-20.5	1.00 V	358	31.4	-8.4
3	249.17	30.2 QP	46.0	-15.8	1.00 V	175	38.9	-8.7
4	375.29	28.7 QP	46.0	-17.3	1.00 V	70	34.3	-5.6
5	699.34	35.0 QP	46.0	-11.0	1.00 V	322	33.3	1.7
6	932.19	40.8 QP	46.0	-5.2	1.50 V	64	34.4	6.4

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.

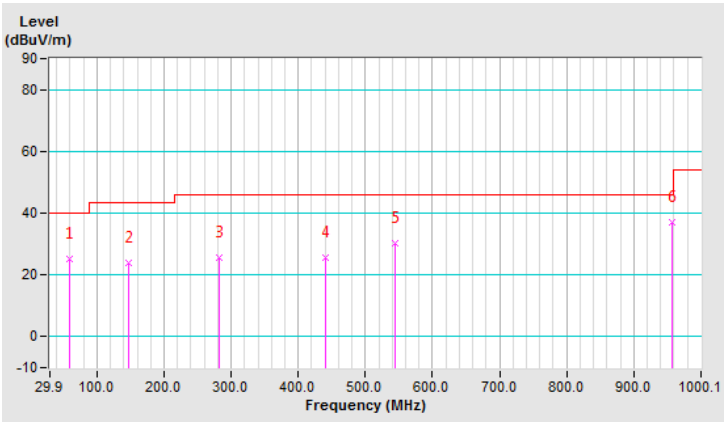


FREQUENCY RANGE	9kHz ~ 1GHz	DETECTOR FUNCTION	Quasi-Peak (QP)
CHANNEL	TX Channel 149		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	59.01	25.1 QP	40.0	-14.9	1.00 H	251	33.5	-8.4
2	146.32	23.8 QP	43.5	-19.7	1.00 H	234	32.0	-8.2
3	282.15	25.5 QP	46.0	-20.5	1.00 H	244	32.8	-7.3
4	441.26	25.4 QP	46.0	-20.6	1.00 H	231	29.6	-4.2
5	544.11	30.3 QP	46.0	-15.7	1.00 H	23	32.9	-2.6
6	957.41	36.9 QP	46.0	-9.1	1.00 H	208	30.1	6.8

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.

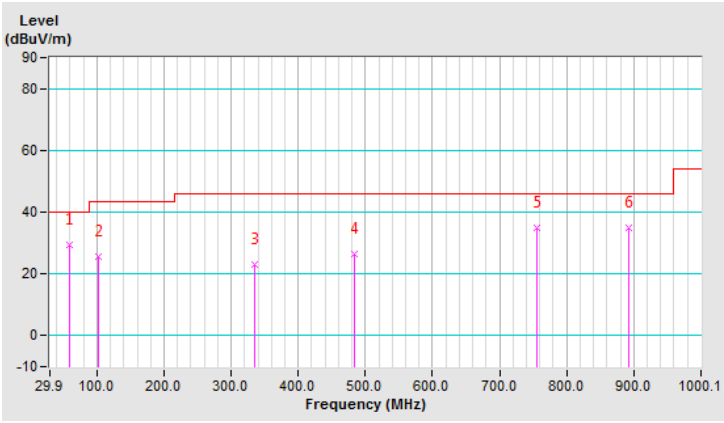


FREQUENCY RANGE	9kHz ~ 1GHz	DETECTOR FUNCTION	Quasi-Peak (QP)
CHANNEL	TX Channel 149		

ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	59.01	29.2 QP	40.0	-10.8	1.50 V	7	37.6	-8.4
2	101.69	25.8 QP	43.5	-17.7	1.50 V	154	38.2	-12.4
3	334.54	23.1 QP	46.0	-22.9	1.00 V	181	29.3	-6.2
4	483.95	26.3 QP	46.0	-19.7	1.00 V	53	30.0	-3.7
5	755.61	35.0 QP	46.0	-11.0	2.00 V	309	31.4	3.6
6	893.38	34.9 QP	46.0	-11.1	1.00 V	93	29.2	5.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The 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	Nov. 23, 2017	Nov. 22, 2018
RF signal cable Woken	5D-FB	Cable-cond1-01	Sep. 05, 2017	Sep. 04, 2018
LISN ROHDE & SCHWARZ (EUT)	ENV216	101826	Feb. 26, 2018	Feb. 25, 2019
LISN ROHDE & SCHWARZ (Peripheral)	ENV216	101196	Apr. 24, 2018	Apr. 23, 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.

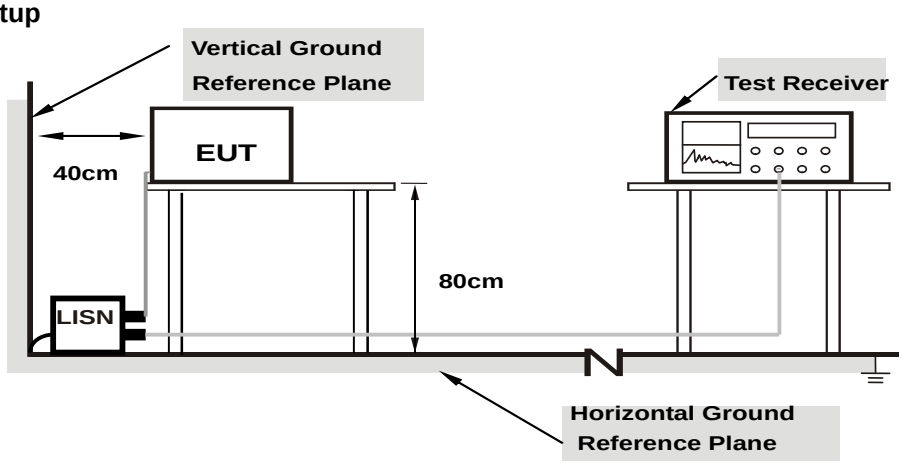
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

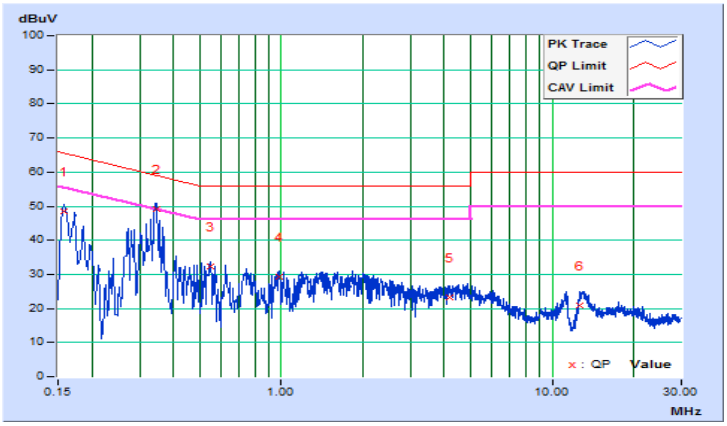
Worst-case data: 802.11a

Channel	Channel 52	Detector Function	Quasi-Peak (QP) / Average (AV)
Phase	Line (L)		

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	0.15802	10.16	38.42	28.06	48.58	38.22	65.57	55.57	-16.99	-17.35
2	0.34550	10.19	39.11	32.11	49.30	42.30	59.07	49.07	-9.77	-6.77
3	0.54518	10.20	22.27	14.21	32.47	24.41	56.00	46.00	-23.53	-21.59
4	0.98283	10.17	19.00	11.51	29.17	21.68	56.00	46.00	-26.83	-24.32
5	4.20467	10.36	13.04	5.90	23.40	16.26	56.00	46.00	-32.60	-29.74
6	12.66591	10.81	10.13	5.51	20.94	16.32	60.00	50.00	-39.06	-33.68

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.

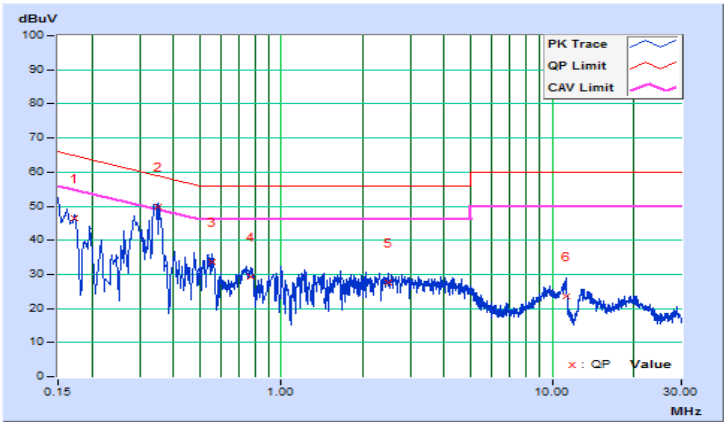


Channel	Channel 52	Detector Function	Quasi-Peak (QP) / Average (AV)
Phase	Neutral (N)		

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	0.17328	10.15	36.40	25.15	46.55	35.30	64.80	54.80	-18.25	-19.50
2	**0.35332**	**10.19**	**39.70**	**32.87**	**49.89**	**43.06**	**58.88**	**48.88**	**-8.99**	**-5.82**
3	0.55273	10.20	23.33	14.84	33.53	25.04	56.00	46.00	-22.47	-20.96
4	0.76789	10.20	19.18	12.42	29.38	22.62	56.00	46.00	-26.62	-23.38
5	2.48818	10.25	17.24	9.73	27.49	19.98	56.00	46.00	-28.51	-26.02
6	11.21139	10.62	12.99	8.18	23.61	18.80	60.00	50.00	-36.39	-31.20

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.

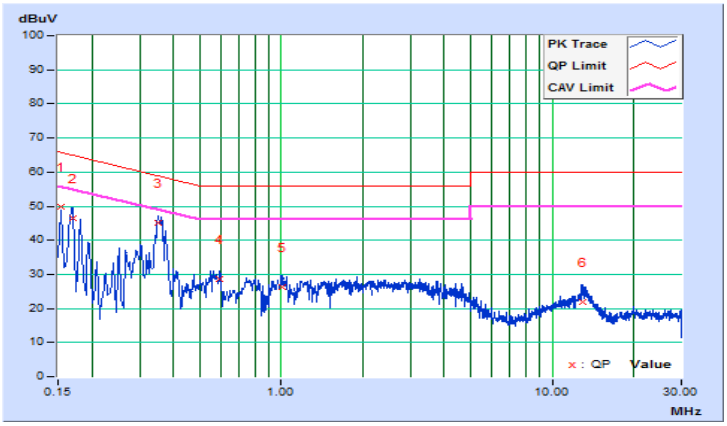


Channel	Channel 149	Detector Function	Quasi-Peak (QP) / Average (AV)
Phase	Line (L)		

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	0.15391	10.14	39.66	23.46	49.80	33.60	65.79	55.79	-15.99	-22.19
2	0.16955	10.15	36.30	19.47	46.45	29.62	64.98	54.98	-18.53	-25.36
3	0.35018	10.17	35.05	27.27	45.22	37.44	58.96	48.96	-13.74	-11.52
4	0.59183	10.19	18.56	9.91	28.75	20.10	56.00	46.00	-27.25	-25.90
5	1.01411	10.22	16.08	8.67	26.30	18.89	56.00	46.00	-29.70	-27.11
6	13.04127	10.87	11.07	5.99	21.94	16.86	60.00	50.00	-38.06	-33.14

REMARKS:

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

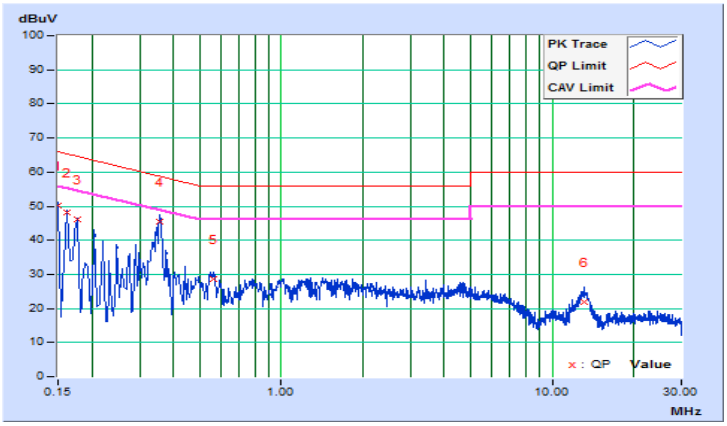


Channel	Channel 149	Detector Function	Quasi-Peak (QP) / Average (AV)
Phase	Neutral (N)		

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	0.15000	10.18	40.13	23.52	50.31	33.70	66.00	56.00	-15.69	-22.30
2	0.16173	10.17	37.89	22.15	48.06	32.32	65.37	55.37	-17.31	-23.05
3	0.17737	10.16	35.84	21.61	46.00	31.77	64.61	54.61	-18.61	-22.84
4	0.35670	10.14	35.16	29.03	45.30	39.17	58.80	48.80	-13.50	-9.63
5	0.56055	10.16	18.61	12.18	28.77	22.34	56.00	46.00	-27.23	-23.66
6	13.11947	10.75	11.00	6.49	21.75	17.24	60.00	50.00	-38.25	-32.76

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.

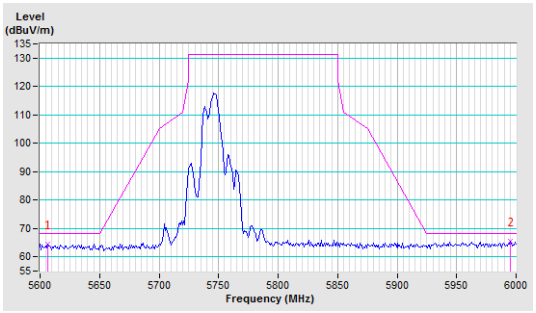
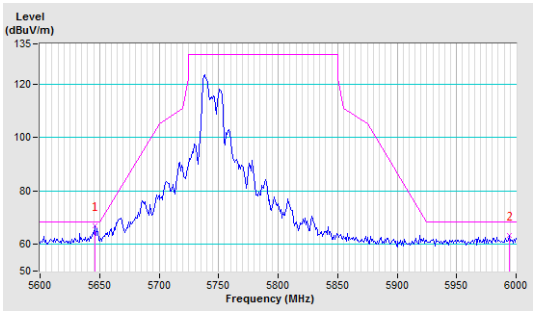
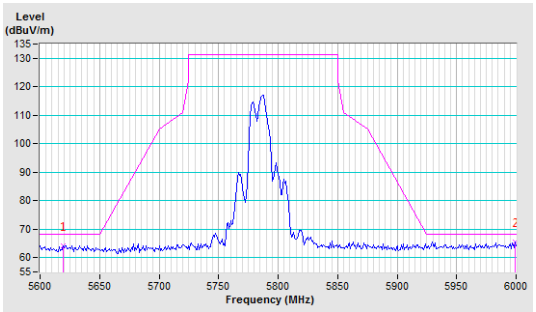
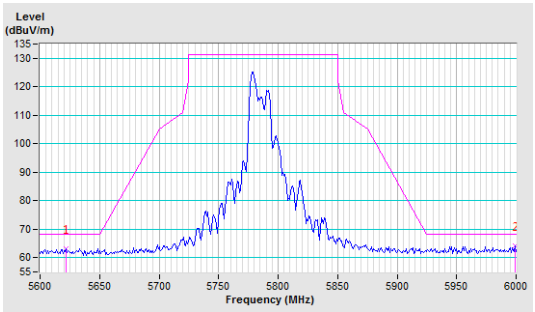
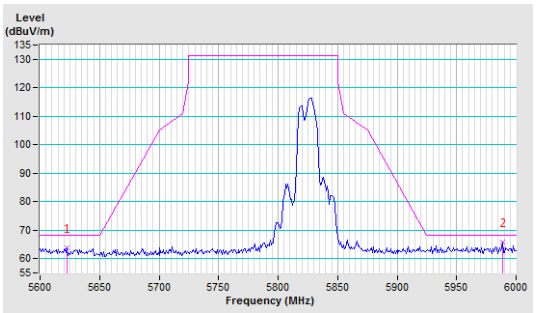
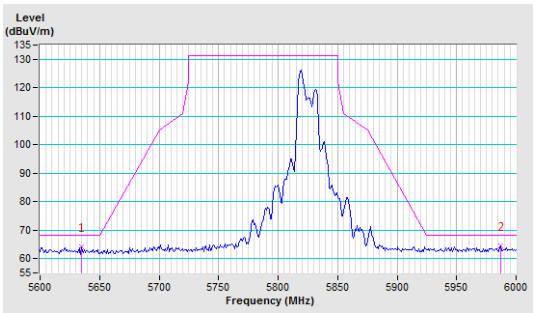


5 Pictures of Test Arrangements

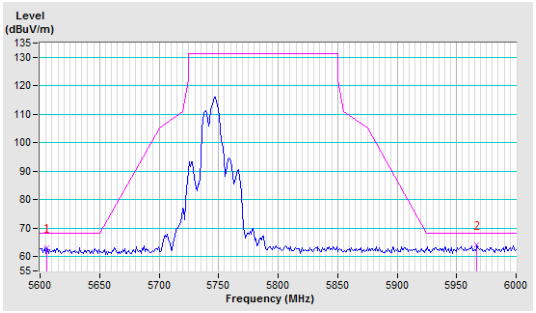
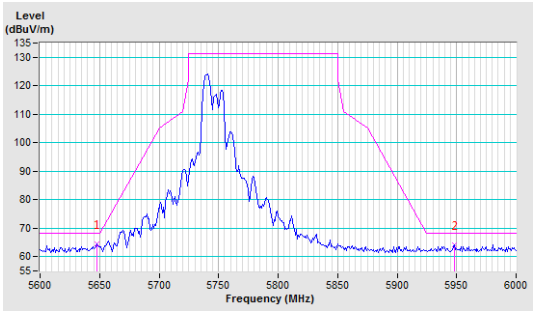
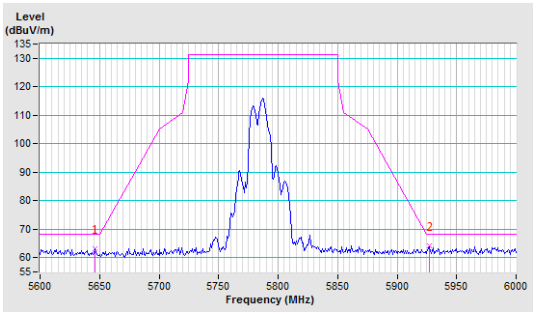
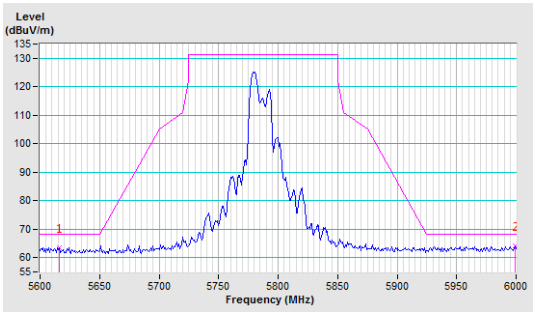
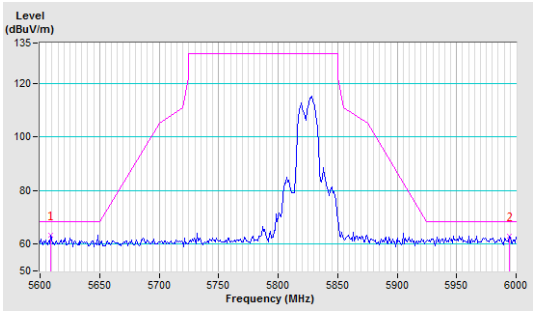
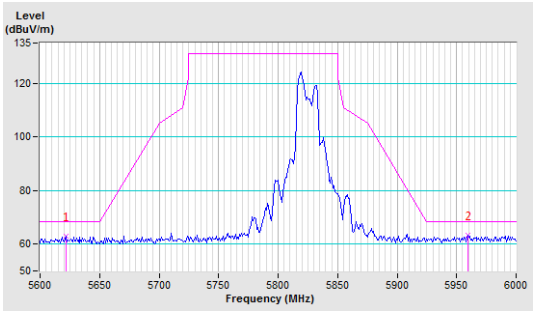
Please refer to the attached file (Test Setup Photo).

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

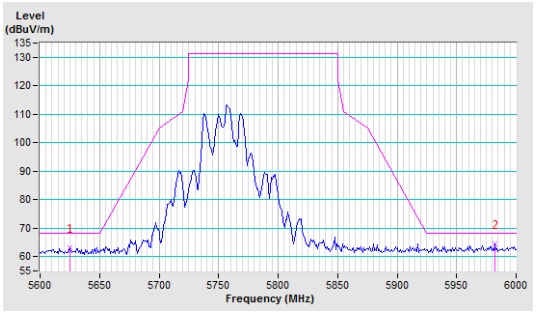
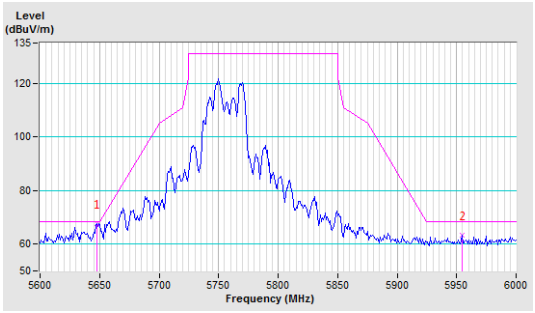
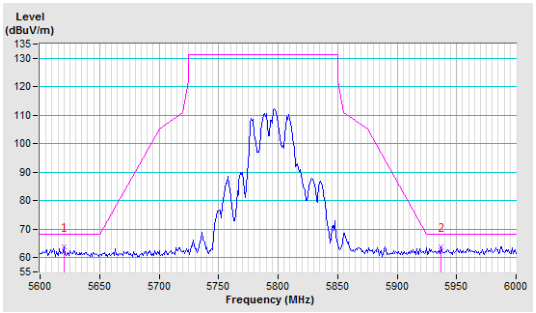
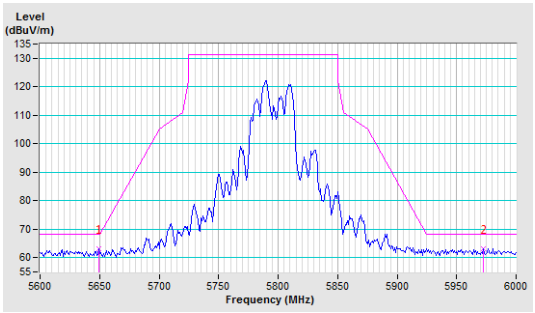
802.11a

CH149	
Horizontal	Vertical
	
CH157	
Horizontal	Vertical
	
CH165	
Horizontal	Vertical
	

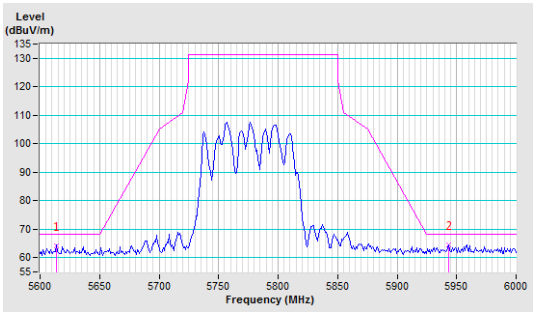
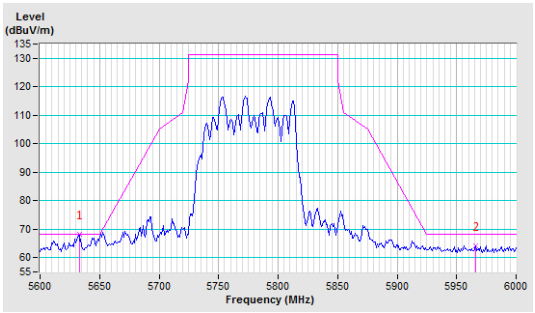
802.11n (HT20)

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 on the Testing Laboratories

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

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

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Web Site: www.bureauveritas-adt.com

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

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