FCC Test Report

Report No.:	RF170322E05A-1
FCC ID:	PY317100371
Test Model:	ABC1000
Received Date:	Mar. 22, 2017
Test Date:	Mar. 30 to May 10, 2017
Issued Date:	May 28, 2017
Applicant:	NETGEAR, INC
Address:	350 East Plumeria Drive San Jose, CA 95134
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location (1):	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan R.O.C.
Test Location (2):	No. 49, Ln. 206, Wende Rd., Shangshan Tsuen, Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan R.O.C.

Testing Laboratory
2022

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
RF170322E05A-1	Original release.	May 28, 2017

1 Certificate of Conformity

Product:	Arlo Baby
Brand:	NETGEAR
Test Model:	ABC1000
Sample Status:	ENGINEERING SAMPLE
Applicant:	NETGEAR, INC
Test Date:	Mar. 30 to May 10, 2017
Standard:	47 CFR FCC Part 15, Subpart E (Section 15.407) ANSI C63.10: 2013

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

Prepared by : _____ , **Date:** May 28, 2017

Wendy Wu / Specialist

Approved by : _____ , **Date:** May 28, 2017

May Chen / Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	Test Item	Result	Remarks
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -6.3dB at 0.17344MHz.
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 5350.00MHz, 5470.00MHz, 5725.00MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
---	Occupied Bandwidth Measurement	-	Reference only.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	No antenna connector is used.

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	1.84 dB
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	5.32 dB
Radiated Emissions above 1 GHz	1GHz ~ 6GHz	5.14 dB
	6GHz ~ 18GHz	5.04 dB
	18GHz ~ 40GHz	5.25 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Arlo Baby
Brand	NETGEAR
Test Model	ABC1000
Status of EUT	ENGINEERING SAMPLE
Power Supply Rating	5Vdc from power adapter or 3.6V from battery
Modulation Type	64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode only
Modulation Technology	OFDM
Transfer Rate	802.11a: up to 54Mbps 802.11n: up to 150Mbps 802.11ac: up to 433.3Mbps
Operating Frequency	5.26GHz ~ 5.32GHz, 5.50GHz ~ 5.70GHz
Number of Channel	802.11a, 802.11n (HT20), 802.11ac (VHT20): 15 802.11n (HT40), 802.11ac (VHT40): 7 802.11ac (VHT80): 3
Output Power	**5.26 ~ 5.32GHz:** 101.625mW **5.50 ~ 5.70GHz:** 112.72mW
Antenna Type	Refer to Note
Antenna Connector	Refer to Note
Accessory Device	Adapter x 1
Data Cable Supplied	USB cable x 1 (3m, unshielded)

Note:

1. This report is prepared for FCC class II permissive change. The difference compared with the Report No.: RF170322E05-1 as the following:
   - ◆ Add DFS band <5.26 ~ 5.32GHz, 5.50 ~ 5.70GHz>
2. According to above condition, all test items need to be performed. And all data weres verified to meet the requirements.
3. The EUT must be supplied with a power adapter or battery and following different models could be chosen as following table:

Adapter

No	Brand Name	Model No.	P/N	Spec.
1	NETGEAR	AD2037320	332-10924-01	Input: 100-240Vac, 50/60Hz, 0.3A Output: 5Vdc, 2A
2	NETGEAR	AD2037520	332-10925-01	Input: 100-240Vac, 50/60Hz, 0.3A Output: 5Vdc, 2A

Battery

No	Brand Name	Model No.	P/N	Rating	Min. Capacity
1	NETGEAR	A-3	308-10033-01	3.6V 8.78Wh	2440mAh

Note:
1. The adapter 2 is as same as adapter 1; except for color is different.
2. From the above adapters and battery, the radiated emissions worse case was found in Adapter 1. Therefore only the test data of the mode was recorded in this report.

4. Simultaneously transmission condition.

Condition	Technology	
1	WLAN (5GHz)	Bluetooth
Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.		

5. The antennas provided to the EUT, please refer to the following table:

Chain No.	Ant. Gain(dBi)	Frequency range (GHz)	Antenna Type	Connecter Type
Chain 0	2.64	2.4~2.4835	PIFA	NA
	5.61	5.15~5.25		
	4.92	5.25~5.35		
	4.83	5.47~5.725		
	5.38	5.725~5.85		
Chain 1	3.18	2.4~2.4835	Monopole	NA
	4.13	5.15~5.25		
	4.23	5.25~5.35		
	3.14	5.47~5.725		
	2.82	5.725~5.85		

6. The EUT incorporates a SISO function.

For 2.4GHz Band			
MODULATION MODE	**DATA RATE (MCS)**	**TX & RX CONFIGURATION**	
802.11b	1~11Mbps	1TX diversity	1RX diversity
802.11g	6~54Mbps	1TX diversity	1RX diversity
802.11n (HT20)	MCS 0~7	1TX diversity	1RX diversity
802.11n (HT40)	MCS 0~7	1TX diversity	1RX diversity
For 5GHz Band			
MODULATION MODE	**DATA RATE (MCS)**	**TX & RX CONFIGURATION**	
802.11a	6~54Mbps	1TX diversity	1RX diversity
802.11n (HT20)	MCS 0~7	1TX diversity	1RX diversity
802.11n (HT40)	MCS 0~7	1TX diversity	1RX diversity
802.11ac (VHT20)	MCS 0~8, Nss=1	1TX diversity	1RX diversity
802.11ac (VHT40)	MCS 0~9, Nss=1	1TX diversity	1RX diversity
802.11ac (VHT80)	MCS 0~9, Nss=1	1TX diversity	1RX diversity

Note:
1. 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)

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

3.2 Description of Test Modes

FOR 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

FOR 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	APCM	
1	√	√	√	√	EUT+ PIFA antenna (Power from Adapter)
2	-	-	√	-	EUT+ PIFA antenna (Power from Laptop)
3	√	-	-	-	EUT+ Monopole antenna (Power from Adapter)

Where **RE≥1G:** Radiated Emission above 1GHz **RE<1G:** Radiated Emission below 1GHz
PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

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

Radiated Emission Test (Above 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6
802.11ac (VHT20)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 122	106, 122	OFDM	BPSK	29.3

Radiated Emission Test (Below 1GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5260-5320 5500-5700	52 to 64 100 to 140	116	OFDM	BPSK	6

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.

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5260-5320 5500-5700	52 to 64 100 to 140	116	OFDM	BPSK	6

Antenna Port Conducted Measurement:

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

Mode	FREQ. Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6
802.11ac (VHT20)		52 to 64	52, 60, 64	OFDM	BPSK	6.5
802.11ac (VHT40)		54 to 62	54, 62	OFDM	BPSK	13.5
802.11ac (VHT80)		58	58	OFDM	BPSK	29.3
802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6
802.11ac (VHT20)		100 to 140	100, 116, 140	OFDM	BPSK	6.5
802.11ac (VHT40)		102 to 134	102, 110, 134	OFDM	BPSK	13.5
802.11ac (VHT80)		106 to 122	106, 122	OFDM	BPSK	29.3

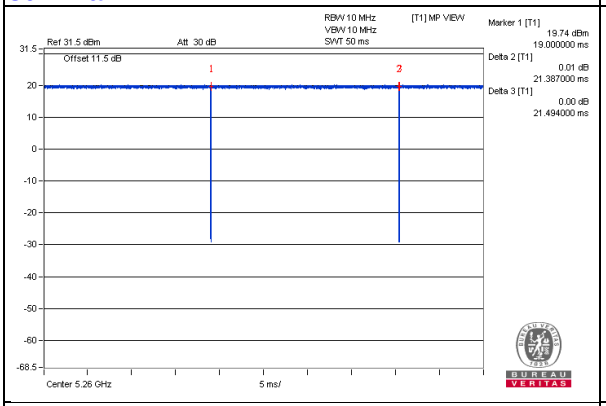
Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested By
RE≥1G	23deg. C, 72%RH	120Vac, 60Hz	Rey Chen
RE<1G	25deg. C, 67%RH	120Vac, 60Hz	Rey Chen
PLC	24deg. C, 68%RH	120Vac, 60Hz	Andy Ho
APCM	25deg. C, 60%RH	120Vac, 60Hz	Robert Cheng

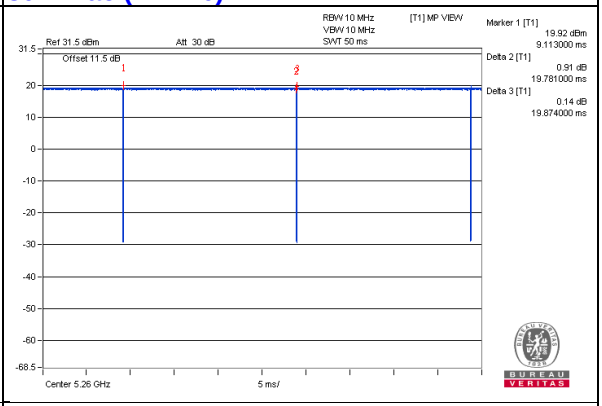
3.3 Duty Cycle of Test Signal

If duty cycle of test signal is ≥ 98 %, duty factor is not required.
If duty cycle of test signal is < 98%, duty factor shall be considered.
802.11a: Duty cycle = 21.387 ms/21.494 ms = 0.995
802.11ac (VHT20): Duty cycle = 19.781 ms/19.874 ms = 0.995
802.11ac (VHT40): Duty cycle = 9.538 ms/9.633 ms = 0.99
802.11ac (VHT80): Duty cycle = 4.428 ms/4.535 ms = 0.976, Duty factor = 10 * log(1/0.976) = 0.11

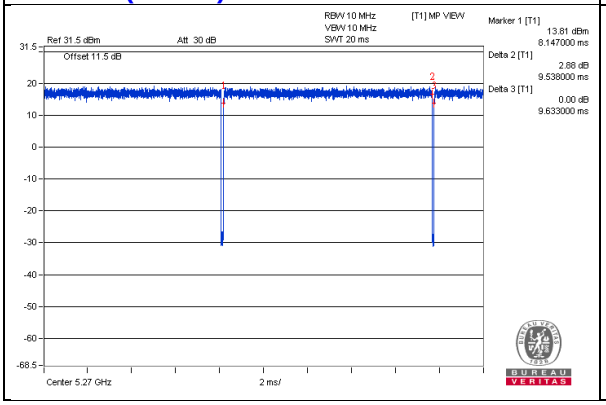
802.11a



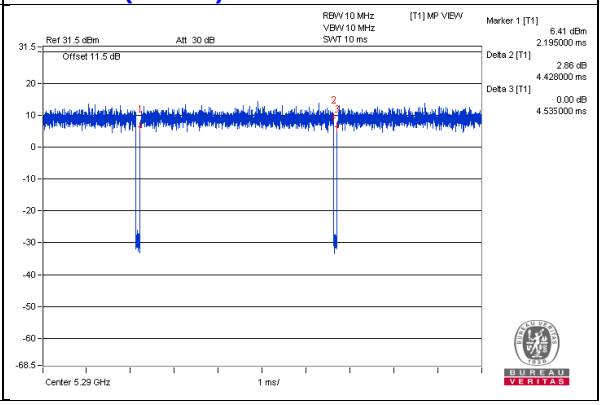
802.11ac (VHT20)



802.11ac (VHT40)



802.11ac (VHT80)



3.4 Description of Support Units

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

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Laptop	DELL	PP32LA	DSLB32S	FCC DoC	Provided by Lab

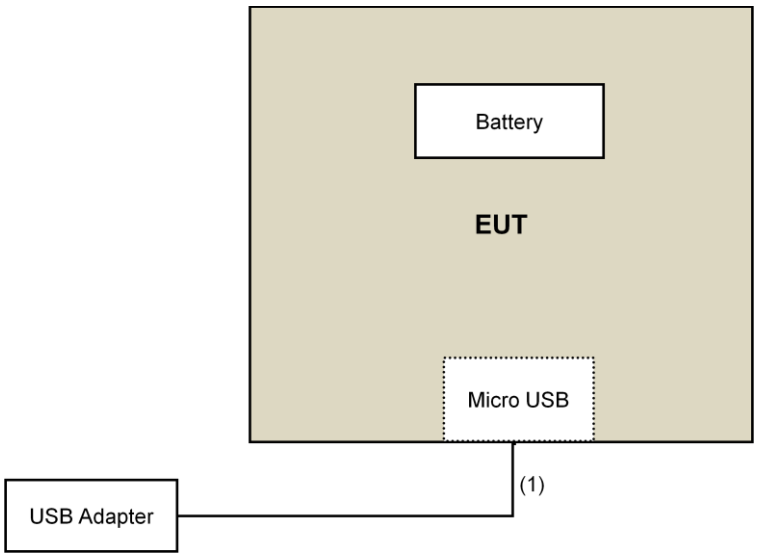
Note:

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

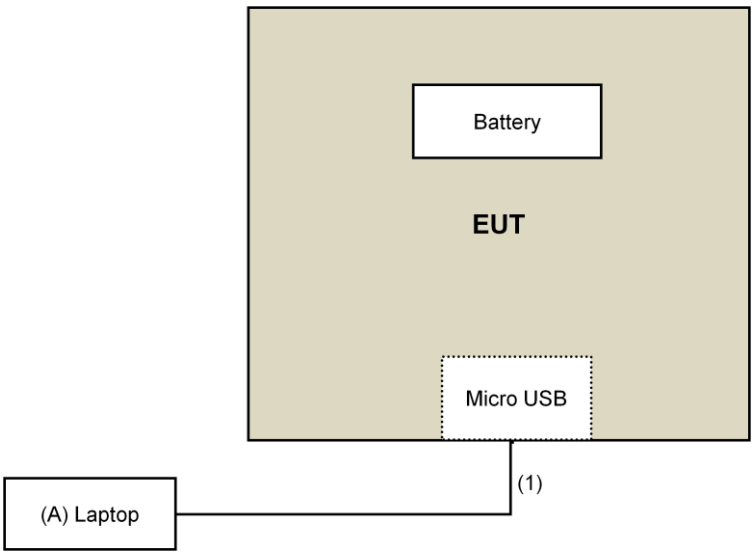
ID	Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	Micro USB Cable	1	3	No	0	Supplied by client

3.4.1 Configuration of System under Test

Adapter mode



Laptop mode



3.5 General Description of Applied Standard

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 v01r04
ANSI C63.10-2013

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

NOTE: The EUT has been verified to comply with the requirements of FCC Part 15, Subpart B, Class B (DoC). The test report has been issued separately.

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="2">Applicable To</td><td colspan="2">Limit</td></tr>
<tr><td colspan="2" rowspan="2">789033 D02 General UNII Test Procedure New Rules v01r04</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

For Below 1GHz test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY50010156	Aug. 18, 2016	Aug. 17, 2017
Pre-Amplifier(*) EMCI	EMC001340	980142	Jan. 20, 2016	Jan. 19, 2018
Loop Antenna(*) Electro-Metrics	EM-6879	264	Dec. 16, 2016	Dec. 15, 2018
RF Cable	NA	LOOPCAB-001 LOOPCAB-002	Jan. 17, 2017	Jan. 16, 2018
Pre-Amplifier Mini-Circuits	ZFL-1000VH2B	AMP-ZFL-05	May 07, 2016	May 06, 2017
Trilog Broadband Antenna SCHWARZBECK	VULB 9168	9168-361	Dec. 29, 2016	Dec. 28, 2017
RF Cable	8D	966-3-1 966-3-2 966-3-3	Apr. 02, 2016	Apr. 01, 2017
Fixed attenuator Mini-Circuits	UNAT-5+	PAD-3m-3-01	Oct. 05, 2016	Oct. 04, 2017
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	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 calibration interval of the above test instruments is 24 months and the calibrations are traceable to NML/ROC and NIST/USA.
3. The test was performed in 966 Chamber No. 3.
4. The FCC Site Registration No. is 147459
5. The CANADA Site Registration No. is 20331-1
6 Loop antenna was used for all emissions below 30 MHz.
7. Tested Date: Mar. 30, 2017

For other test:

DESCRIPTION & MANUFACTURER	MODEL NO.	SERIAL NO.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver Agilent	N9038A	MY50010156	Aug. 18, 2016	Aug. 17, 2017
Horn_Antenna SCHWARZBECK	BBHA9120-D	9120D-406	Dec. 28, 2016	Dec. 27, 2017
Pre-Amplifier EMCI	EMC12630SE	980384	Feb. 02, 2017	Feb. 01, 2018
RF Cable	EMC104-SM-SM-1200 EMC104-SM-SM-2000 EMC104-SM-SM-5000	160922 150317 150322	Feb. 02, 2017 Mar. 29, 2017 Mar. 29, 2017	Feb. 01, 2018 Mar. 28, 2018 Mar. 28, 2018
Spectrum Analyzer Keysight	N9030A	MY54490520	July 29, 2016	July 28, 2017
Pre-Amplifier EMCI	EMC184045SE	980386	Feb. 02, 2017	Feb. 01, 2018
Horn_Antenna SCHWARZBECK	BBHA 9170	BBHA9170608	Dec. 15, 2016	Dec. 14, 2017
RF Cable	SUCOFLEX 102	36432/2 36433/2	Jan. 15, 2017	Jan. 14, 2018
Software	ADT_Radiated_V8.7.08	NA	NA	NA
Antenna Tower & Turn Table Max-Full	MF-7802	MF780208406	NA	NA
Boresight Antenna Fixture	FBA-01	FBA-SIP01	NA	NA
Spectrum Analyzer R&S	FSv40	100964	June 28, 2016	June 27, 2017
Power meter Anritsu	ML2495A	0824006	May 26, 2016	May 25, 2017
Power sensor Anritsu	MA2411B	0738172	May 26, 2016	May 25, 2017
AC Power Source Extech Electronics	6205	1440452	NA	NA
Temperature & Humidity Chamber Giant Force	GTH-150-40-SP-AR	MAA0812-008	Jan. 11, 2017	Jan. 10, 2018
Digital Multimeter FLUKE	87III	73680266	Nov. 10, 2016	Nov. 09, 2017

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 966 Chamber No. 3.
3. The FCC Site Registration No. is 147459
4. The CANADA Site Registration No. is 20331-1
5. Tested Date: May 09 to 10, 2017

4.1.3 Test Procedure

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. Both X and Y axes of the antenna are set to make the measurement.

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

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

NOTE:

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

For Radiated emission above 30MHz

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

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

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

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

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

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

Note:

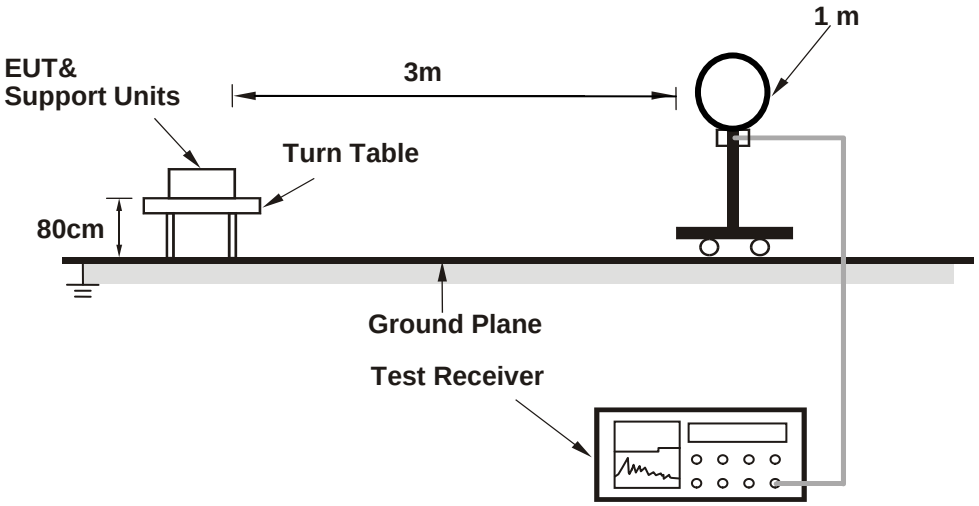
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1GHz.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

4.1.4 Deviation from Test Standard

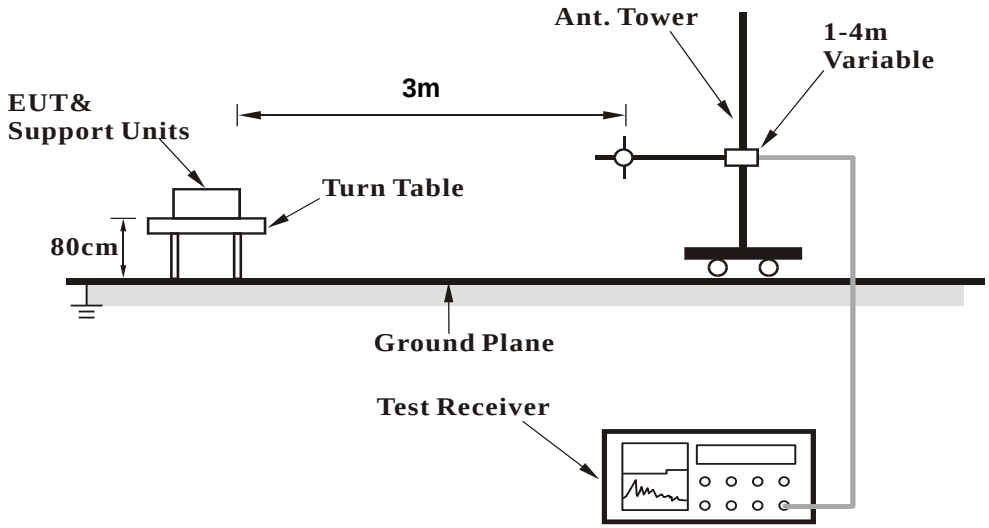
No deviation.

4.1.5 Test Setup

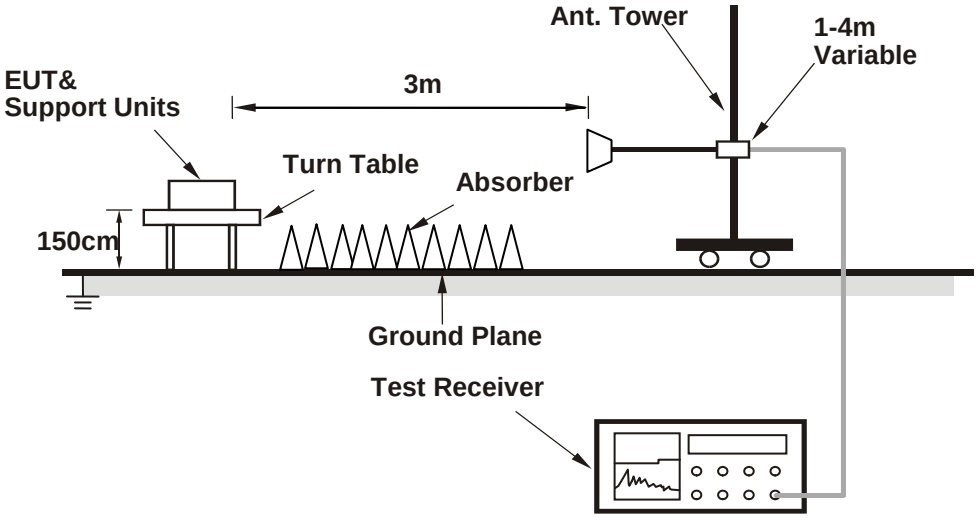
For Radiated emission below 30MHz



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 Condition

a. Connected the EUT with the Laptop which is placed on remote site.

b. Contorlling software (QRCT.EXE V3.0.219.0) has been activated to set the EUT on specific status.

4.1.7 Test Results (Mode 1)

Above 1GHz Data:

802.11a

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	48.7 PK	74.0	-25.3	3.40 H	130	45.0	3.7
2	5150.00	38.3 AV	54.0	-15.7	3.40 H	130	34.6	3.7
3	*5260.00	113.2 PK			3.40 H	130	109.2	4.0
4	*5260.00	103.0 AV			3.40 H	130	99.0	4.0
5	5350.00	56.3 PK	74.0	-17.7	3.40 H	130	52.2	4.1
6	5350.00	44.1 AV	54.0	-9.9	3.40 H	130	40.0	4.1
7	#10520.00	57.7 PK	74.0	-16.3	1.88 H	333	44.5	13.2
8	#10520.00	45.3 AV	54.0	-8.7	1.88 H	333	32.1	13.2
9	15780.00	47.1 PK	74.0	-26.9	1.47 H	325	33.5	13.6
10	15780.00	35.6 AV	54.0	-18.4	1.47 H	325	22.0	13.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	47.7 PK	74.0	-26.3	2.04 V	72	44.0	3.7
2	5150.00	37.1 AV	54.0	-16.9	2.04 V	72	33.4	3.7
3	*5260.00	109.4 PK			2.04 V	72	105.4	4.0
4	*5260.00	98.5 AV			2.04 V	72	94.5	4.0
5	5350.00	52.6 PK	74.0	-21.4	2.04 V	72	48.5	4.1
6	5350.00	39.9 AV	54.0	-14.1	2.04 V	72	35.8	4.1
7	#10520.00	56.5 PK	74.0	-17.5	1.25 V	327	43.3	13.2
8	#10520.00	44.8 AV	54.0	-9.2	1.25 V	327	31.6	13.2
9	15780.00	46.8 PK	74.0	-27.2	1.61 V	230	33.2	13.6
10	15780.00	34.6 AV	54.0	-19.4	1.61 V	230	21.0	13.6

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 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	111.7 PK			3.38 H	146	107.6	4.1
2	*5300.00	101.5 AV			3.38 H	146	97.4	4.1
3	5350.00	69.7 PK	74.0	-4.3	3.38 H	146	65.6	4.1
4	**5350.00**	**53.9 AV**	**54.0**	**-0.1**	**3.38 H**	**146**	**49.8**	**4.1**
5	10600.00	54.5 PK	74.0	-19.5	1.84 H	340	41.0	13.5
6	10600.00	42.8 AV	54.0	-11.2	1.84 H	340	29.3	13.5
7	15900.00	46.4 PK	74.0	-27.6	1.40 H	303	33.5	12.9
8	15900.00	34.9 AV	54.0	-19.1	1.40 H	303	22.0	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	107.6 PK			2.02 V	69	103.5	4.1
2	*5300.00	97.2 AV			2.02 V	69	93.1	4.1
3	5350.00	67.3 PK	74.0	-6.7	2.02 V	69	63.2	4.1
4	5350.00	51.8 AV	54.0	-2.2	2.02 V	69	47.7	4.1
5	10600.00	54.3 PK	74.0	-19.7	1.22 V	330	40.8	13.5
6	10600.00	42.6 AV	54.0	-11.4	1.22 V	330	29.1	13.5
7	15900.00	45.7 PK	74.0	-28.3	1.61 V	215	32.8	12.9
8	15900.00	34.4 AV	54.0	-19.6	1.61 V	215	21.5	12.9

REMARKS:

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

CHANNEL	TX Channel 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	110.9 PK			3.44 H	127	106.8	4.1
2	*5320.00	100.9 AV			3.44 H	127	96.8	4.1
3	5350.00	68.7 PK	74.0	-5.3	3.44 H	127	64.6	4.1
4	**5350.00**	**53.9 AV**	**54.0**	**-0.1**	**3.44 H**	**127**	**49.8**	**4.1**
5	10640.00	54.6 PK	74.0	-19.4	1.82 H	348	41.1	13.5
6	10640.00	42.7 AV	54.0	-11.3	1.82 H	348	29.2	13.5
7	15960.00	46.6 PK	74.0	-27.4	1.39 H	324	33.7	12.9
8	15960.00	35.0 AV	54.0	-19.0	1.39 H	324	22.1	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	107.5 PK			1.98 V	68	103.4	4.1
2	*5320.00	96.3 AV			1.98 V	68	92.2	4.1
3	5350.00	66.3 PK	74.0	-7.7	1.98 V	68	62.2	4.1
4	5350.00	51.5 AV	54.0	-2.5	1.98 V	68	47.4	4.1
5	10640.00	53.2 PK	74.0	-20.8	1.21 V	327	39.7	13.5
6	10640.00	42.1 AV	54.0	-11.9	1.21 V	327	28.6	13.5
7	15960.00	45.7 PK	74.0	-28.3	1.63 V	238	32.8	12.9
8	15960.00	34.5 AV	54.0	-19.5	1.63 V	238	21.6	12.9

REMARKS:

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

CHANNEL	TX Channel 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	#5470.00	68.6 PK	74.0	-5.4	3.42 H	111	64.4	4.2
2	#5470.00	53.8 AV	54.0	-0.2	3.42 H	111	49.6	4.2
3	*5500.00	110.6 PK			3.42 H	111	106.4	4.2
4	*5500.00	100.7 AV			3.42 H	111	96.5	4.2
5	11000.00	54.0 PK	74.0	-20.0	1.88 H	329	39.9	14.1
6	11000.00	42.5 AV	54.0	-11.5	1.88 H	329	28.4	14.1
7	#16500.00	46.0 PK	74.0	-28.0	1.53 H	321	31.5	14.5
8	#16500.00	34.7 AV	54.0	-19.3	1.53 H	321	20.2	14.5
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	#5470.00	67.5 PK	74.0	-6.5	1.96 V	54	63.3	4.2
2	#5470.00	51.7 AV	54.0	-2.3	1.96 V	54	47.5	4.2
3	*5500.00	106.9 PK			1.96 V	54	102.7	4.2
4	*5500.00	96.0 AV			1.96 V	54	91.8	4.2
5	11000.00	53.1 PK	74.0	-20.9	1.20 V	324	39.0	14.1
6	11000.00	42.2 AV	54.0	-11.8	1.20 V	324	28.1	14.1
7	#16500.00	45.9 PK	74.0	-28.1	1.59 V	206	31.4	14.5
8	#16500.00	34.6 AV	54.0	-19.4	1.59 V	206	20.1	14.5

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 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	#5470.00	49.5 PK	74.0	-24.5	3.39 H	118	45.3	4.2
2	#5470.00	37.9 AV	54.0	-16.1	3.39 H	118	33.7	4.2
3	*5580.00	113.5 PK			3.39 H	118	109.3	4.2
4	*5580.00	103.2 AV			3.39 H	118	99.0	4.2
5	#5725.00	50.3 PK	74.0	-23.7	3.39 H	118	45.9	4.4
6	#5725.00	38.3 AV	54.0	-15.7	3.39 H	118	33.9	4.4
7	11160.00	57.2 PK	74.0	-16.8	1.86 H	317	43.5	13.7
8	11160.00	45.3 AV	54.0	-8.7	1.86 H	317	31.6	13.7
9	#16740.00	46.4 PK	74.0	-27.6	1.45 H	329	30.7	15.7
10	#16740.00	35.1 AV	54.0	-18.9	1.45 H	329	19.4	15.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	48.3 PK	74.0	-25.7	1.94 V	72	44.1	4.2
2	#5470.00	36.4 AV	54.0	-17.6	1.94 V	72	32.2	4.2
3	*5580.00	109.2 PK			1.94 V	72	105.0	4.2
4	*5580.00	98.7 AV			1.94 V	72	94.5	4.2
5	#5725.00	49.4 PK	74.0	-24.6	1.94 V	72	45.0	4.4
6	#5725.00	36.4 AV	54.0	-17.6	1.94 V	72	32.0	4.4
7	11160.00	56.5 PK	74.0	-17.5	1.14 V	350	42.8	13.7
8	11160.00	45.1 AV	54.0	-8.9	1.14 V	350	31.4	13.7
9	#16740.00	46.8 PK	74.0	-27.2	1.63 V	220	31.1	15.7
10	#16740.00	34.6 AV	54.0	-19.4	1.63 V	220	18.9	15.7

REMARKS:

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

CHANNEL	TX Channel 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	109.6 PK			3.41 H	117	105.1	4.5
2	*5700.00	100.2 AV			3.41 H	117	95.7	4.5
3	#5725.00	68.2 PK	74.0	-5.8	3.41 H	117	63.8	4.4
4	**#5725.00**	**53.9 AV**	**54.0**	**-0.1**	**3.41 H**	**117**	**49.5**	**4.4**
5	11400.00	53.9 PK	74.0	-20.1	1.91 H	360	40.3	13.6
6	11400.00	42.1 AV	54.0	-11.9	1.91 H	360	28.5	13.6
7	#17100.00	46.1 PK	74.0	-27.9	1.47 H	311	28.7	17.4
8	#17100.00	34.8 AV	54.0	-19.2	1.47 H	311	17.4	17.4
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	*5700.00	106.8 PK			1.94 V	64	102.3	4.5
2	*5700.00	95.9 AV			1.94 V	64	91.4	4.5
3	#5725.00	67.3 PK	74.0	-6.7	1.94 V	64	62.9	4.4
4	#5725.00	51.5 AV	54.0	-2.5	1.94 V	64	47.1	4.4
5	11400.00	53.0 PK	74.0	-21.0	1.16 V	325	39.4	13.6
6	11400.00	41.6 AV	54.0	-12.4	1.16 V	325	28.0	13.6
7	#17100.00	45.8 PK	74.0	-28.2	1.69 V	200	28.4	17.4
8	#17100.00	34.6 AV	54.0	-19.4	1.69 V	200	17.2	17.4

REMARKS:

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

802.11ac (VHT20)

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	47.5 PK	74.0	-26.5	3.90 H	117	43.8	3.7
2	5150.00	36.7 AV	54.0	-17.3	3.90 H	117	33.0	3.7
3	*5260.00	113.0 PK			3.90 H	117	109.0	4.0
4	*5260.00	102.7 AV			3.90 H	117	98.7	4.0
5	5350.00	50.6 PK	74.0	-23.4	3.90 H	117	46.5	4.1
6	5350.00	39.4 AV	54.0	-14.6	3.90 H	117	35.3	4.1
7	#10520.00	58.4 PK	74.0	-15.6	1.81 H	349	45.2	13.2
8	#10520.00	45.9 AV	54.0	-8.1	1.81 H	349	32.7	13.2
9	15780.00	46.5 PK	74.0	-27.5	1.48 H	288	32.9	13.6
10	15780.00	34.9 AV	54.0	-19.1	1.48 H	288	21.3	13.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	46.3 PK	74.0	-27.7	2.08 V	108	42.6	3.7
2	5150.00	34.5 AV	54.0	-19.5	2.08 V	108	30.8	3.7
3	*5260.00	108.1 PK			2.08 V	108	104.1	4.0
4	*5260.00	97.8 AV			2.08 V	108	93.8	4.0
5	5350.00	49.5 PK	74.0	-24.5	2.08 V	108	45.4	4.1
6	5350.00	37.3 AV	54.0	-16.7	2.08 V	108	33.2	4.1
7	#10520.00	56.3 PK	74.0	-17.7	1.24 V	311	43.1	13.2
8	#10520.00	44.5 AV	54.0	-9.5	1.24 V	311	31.3	13.2
9	15780.00	47.2 PK	74.0	-26.8	1.57 V	230	33.6	13.6
10	15780.00	35.2 AV	54.0	-18.8	1.57 V	230	21.6	13.6

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 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	110.7 PK			3.88 H	149	106.6	4.1
2	*5300.00	100.9 AV			3.88 H	149	96.8	4.1
3	5350.00	68.9 PK	74.0	-5.1	3.88 H	149	64.8	4.1
4	5350.00	53.8 AV	54.0	-0.2	3.88 H	149	49.7	4.1
5	10600.00	54.2 PK	74.0	-19.8	1.80 H	360	40.7	13.5
6	10600.00	42.5 AV	54.0	-11.5	1.80 H	360	29.0	13.5
7	15900.00	46.5 PK	74.0	-27.5	1.39 H	298	33.6	12.9
8	15900.00	34.9 AV	54.0	-19.1	1.39 H	298	22.0	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	106.2 PK			2.10 V	99	102.1	4.1
2	*5300.00	96.2 AV			2.10 V	99	92.1	4.1
3	5350.00	67.3 PK	74.0	-6.7	2.10 V	99	63.2	4.1
4	5350.00	51.5 AV	54.0	-2.5	2.10 V	99	47.4	4.1
5	10600.00	54.1 PK	74.0	-19.9	1.19 V	357	40.6	13.5
6	10600.00	42.2 AV	54.0	-11.8	1.19 V	357	28.7	13.5
7	15900.00	46.2 PK	74.0	-27.8	1.62 V	205	33.3	12.9
8	15900.00	34.7 AV	54.0	-19.3	1.62 V	205	21.8	12.9

REMARKS:

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

CHANNEL	TX Channel 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	109.2 PK			3.85 H	138	105.1	4.1
2	*5320.00	99.3 AV			3.85 H	138	95.2	4.1
3	5350.00	68.0 PK	74.0	-6.0	3.85 H	138	63.9	4.1
4	5350.00	53.8 AV	54.0	-0.2	3.85 H	138	49.7	4.1
5	10640.00	54.3 PK	74.0	-19.7	1.80 H	354	40.8	13.5
6	10640.00	42.7 AV	54.0	-11.3	1.80 H	354	29.2	13.5
7	15960.00	46.5 PK	74.0	-27.5	1.37 H	323	33.6	12.9
8	15960.00	35.3 AV	54.0	-18.7	1.37 H	323	22.4	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	108.2 PK			2.08 V	77	104.1	4.1
2	*5320.00	95.3 AV			2.08 V	77	91.2	4.1
3	5350.00	66.9 PK	74.0	-7.1	2.08 V	77	62.8	4.1
4	5350.00	51.6 AV	54.0	-2.4	2.08 V	77	47.5	4.1
5	10640.00	54.0 PK	74.0	-20.0	1.27 V	345	40.5	13.5
6	10640.00	42.4 AV	54.0	-11.6	1.27 V	345	28.9	13.5
7	15960.00	45.8 PK	74.0	-28.2	1.54 V	229	32.9	12.9
8	15960.00	34.5 AV	54.0	-19.5	1.54 V	229	21.6	12.9

REMARKS:

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

CHANNEL	TX Channel 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	#5470.00	72.7 PK	74.0	-1.3	3.82 H	113	68.5	4.2
2	#5470.00	53.7 AV	54.0	-0.3	3.82 H	113	49.5	4.2
3	*5500.00	110.2 PK			3.82 H	113	106.0	4.2
4	*5500.00	100.2 AV			3.82 H	113	96.0	4.2
5	11000.00	53.8 PK	74.0	-20.2	1.98 H	329	39.7	14.1
6	11000.00	42.2 AV	54.0	-11.8	1.98 H	329	28.1	14.1
7	#16500.00	46.7 PK	74.0	-27.3	1.56 H	308	32.2	14.5
8	#16500.00	35.3 AV	54.0	-18.7	1.56 H	308	20.8	14.5
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	#5470.00	71.2 PK	74.0	-2.8	2.07 V	93	67.0	4.2
2	#5470.00	51.8 AV	54.0	-2.2	2.07 V	93	47.6	4.2
3	*5500.00	106.1 PK			2.07 V	93	101.9	4.2
4	*5500.00	96.4 AV			2.07 V	93	92.2	4.2
5	11000.00	53.2 PK	74.0	-20.8	1.14 V	334	39.1	14.1
6	11000.00	41.9 AV	54.0	-12.1	1.14 V	334	27.8	14.1
7	#16500.00	45.1 PK	74.0	-28.9	1.56 V	196	30.6	14.5
8	#16500.00	34.0 AV	54.0	-20.0	1.56 V	196	19.5	14.5

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 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	#5470.00	51.6 PK	74.0	-22.4	3.49 H	108	47.4	4.2
2	#5470.00	38.6 AV	54.0	-15.4	3.49 H	108	34.4	4.2
3	*5580.00	113.0 PK			3.49 H	108	108.8	4.2
4	*5580.00	102.6 AV			3.49 H	108	98.4	4.2
5	#5725.00	50.3 PK	74.0	-23.7	3.49 H	108	45.9	4.4
6	#5725.00	37.7 AV	54.0	-16.3	3.49 H	108	33.3	4.4
7	11160.00	57.1 PK	74.0	-16.9	1.85 H	310	43.4	13.7
8	11160.00	45.2 AV	54.0	-8.8	1.85 H	310	31.5	13.7
9	#16740.00	47.6 PK	74.0	-26.4	1.36 H	311	31.9	15.7
10	#16740.00	35.8 AV	54.0	-18.2	1.36 H	311	20.1	15.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	50.8 PK	74.0	-23.2	2.03 V	82	46.6	4.2
2	#5470.00	36.3 AV	54.0	-17.7	2.03 V	82	32.1	4.2
3	*5580.00	108.3 PK			2.03 V	82	104.1	4.2
4	*5580.00	97.8 AV			2.03 V	82	93.6	4.2
5	#5725.00	49.4 PK	74.0	-24.6	2.03 V	82	45.0	4.4
6	#5725.00	35.5 AV	54.0	-18.5	2.03 V	82	31.1	4.4
7	11160.00	56.3 PK	74.0	-17.7	1.22 V	338	42.6	13.7
8	11160.00	44.5 AV	54.0	-9.5	1.22 V	338	30.8	13.7
9	#16740.00	47.0 PK	74.0	-27.0	1.54 V	216	31.3	15.7
10	#16740.00	35.1 AV	54.0	-18.9	1.54 V	216	19.4	15.7

REMARKS:

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

CHANNEL	TX Channel 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	109.1 PK			3.47 H	127	104.6	4.5
2	*5700.00	99.2 AV			3.47 H	127	94.7	4.5
3	#5725.00	69.2 PK	74.0	-4.8	3.47 H	127	64.8	4.4
4	#5725.00	53.6 AV	54.0	-0.4	3.47 H	127	49.2	4.4
5	11400.00	54.6 PK	74.0	-19.4	1.80 H	336	41.0	13.6
6	11400.00	42.8 AV	54.0	-11.2	1.80 H	336	29.2	13.6
7	#17100.00	46.2 PK	74.0	-27.8	1.45 H	339	28.8	17.4
8	#17100.00	35.1 AV	54.0	-18.9	1.45 H	339	17.7	17.4
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	*5700.00	106.3 PK			2.08 V	82	101.8	4.5
2	*5700.00	95.5 AV			2.08 V	82	91.0	4.5
3	#5725.00	68.4 PK	74.0	-5.6	2.08 V	82	64.0	4.4
4	#5725.00	51.3 AV	54.0	-2.7	2.08 V	82	46.9	4.4
5	11400.00	53.5 PK	74.0	-20.5	1.25 V	342	39.9	13.6
6	11400.00	41.9 AV	54.0	-12.1	1.25 V	342	28.3	13.6
7	#17100.00	46.3 PK	74.0	-27.7	1.67 V	208	28.9	17.4
8	#17100.00	34.7 AV	54.0	-19.3	1.67 V	208	17.3	17.4

REMARKS:

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

802.11ac (VHT40)

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	50.7 PK	74.0	-23.3	2.91 H	134	47.0	3.7
2	5150.00	41.4 AV	54.0	-12.6	2.91 H	134	37.7	3.7
3	*5270.00	107.2 PK			2.91 H	134	103.2	4.0
4	*5270.00	97.6 AV			2.91 H	134	93.6	4.0
5	5350.00	67.3 PK	74.0	-6.7	2.91 H	134	63.2	4.1
6	5350.00	53.6 AV	54.0	-0.4	2.91 H	134	49.5	4.1
7	#10540.00	54.4 PK	74.0	-19.6	1.76 H	356	41.1	13.3
8	#10540.00	42.4 AV	54.0	-11.6	1.76 H	356	29.1	13.3
9	15810.00	46.2 PK	74.0	-27.8	1.34 H	283	32.8	13.4
10	15810.00	34.9 AV	54.0	-19.1	1.34 H	283	21.5	13.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	49.5 PK	74.0	-24.5	2.53 V	30	45.8	3.7
2	5150.00	39.5 AV	54.0	-14.5	2.53 V	30	35.8	3.7
3	*5270.00	103.6 PK			2.53 V	30	99.6	4.0
4	*5270.00	93.5 AV			2.53 V	30	89.5	4.0
5	5350.00	66.1 PK	74.0	-7.9	2.53 V	30	62.0	4.1
6	5350.00	51.3 AV	54.0	-2.7	2.53 V	30	47.2	4.1
7	#10540.00	53.4 PK	74.0	-20.6	1.24 V	321	40.1	13.3
8	#10540.00	42.3 AV	54.0	-11.7	1.24 V	321	29.0	13.3
9	15810.00	45.8 PK	74.0	-28.2	1.67 V	198	32.4	13.4
10	15810.00	34.7 AV	54.0	-19.3	1.67 V	198	21.3	13.4

REMARKS:

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

CHANNEL	TX Channel 62	DETECTOR FUNCTION	Peak (PK) 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	102.2 PK			2.88 H	143	98.1	4.1
2	*5310.00	93.2 AV			2.88 H	143	89.1	4.1
3	5350.00	66.3 PK	74.0	-7.7	2.88 H	143	62.2	4.1
4	5350.00	53.8 AV	54.0	-0.2	2.88 H	143	49.7	4.1
5	10620.00	53.8 PK	74.0	-20.2	1.80 H	360	40.3	13.5
6	10620.00	42.2 AV	54.0	-11.8	1.80 H	360	28.7	13.5
7	15930.00	47.1 PK	74.0	-26.9	1.50 H	338	34.3	12.8
8	15930.00	35.8 AV	54.0	-18.2	1.50 H	338	23.0	12.8
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	*5310.00	98.3 PK			2.60 V	36	94.2	4.1
2	*5310.00	89.5 AV			2.60 V	36	85.4	4.1
3	5350.00	65.4 PK	74.0	-8.6	2.60 V	36	61.3	4.1
4	5350.00	51.6 AV	54.0	-2.4	2.60 V	36	47.5	4.1
5	10620.00	52.8 PK	74.0	-21.2	1.20 V	298	39.3	13.5
6	10620.00	41.7 AV	54.0	-12.3	1.20 V	298	28.2	13.5
7	15930.00	46.0 PK	74.0	-28.0	1.59 V	201	33.2	12.8
8	15930.00	34.6 AV	54.0	-19.4	1.59 V	201	21.8	12.8

REMARKS:

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

CHANNEL	TX Channel 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	#5470.00	68.0 PK	74.0	-6.0	2.91 H	122	63.8	4.2
2	**#5470.00**	**53.9 AV**	**54.0**	**-0.1**	**2.91 H**	**122**	**49.7**	**4.2**
3	*5510.00	102.5 PK			2.91 H	122	98.3	4.2
4	*5510.00	93.1 AV			2.91 H	122	88.9	4.2
5	11020.00	54.2 PK	74.0	-19.8	1.81 H	334	40.2	14.0
6	11020.00	42.3 AV	54.0	-11.7	1.81 H	334	28.3	14.0
7	#16530.00	47.1 PK	74.0	-26.9	1.57 H	347	32.2	14.9
8	#16530.00	35.6 AV	54.0	-18.4	1.57 H	347	20.7	14.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	67.3 PK	74.0	-6.7	2.54 V	29	63.1	4.2
2	#5470.00	51.5 AV	54.0	-2.5	2.54 V	29	47.3	4.2
3	*5510.00	98.6 PK			2.54 V	29	94.4	4.2
4	*5510.00	89.1 AV			2.54 V	29	84.9	4.2
5	11020.00	52.9 PK	74.0	-21.1	1.18 V	317	38.9	14.0
6	11020.00	42.0 AV	54.0	-12.0	1.18 V	317	28.0	14.0
7	#16530.00	46.1 PK	74.0	-27.9	1.60 V	207	31.2	14.9
8	#16530.00	34.6 AV	54.0	-19.4	1.60 V	207	19.7	14.9

REMARKS:

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

CHANNEL	TX Channel 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	#5470.00	68.1 PK	74.0	-5.9	2.91 H	119	63.9	4.2
2	**#5470.00**	**53.9 AV**	**54.0**	**-0.1**	**2.91 H**	**119**	**49.7**	**4.2**
3	*5550.00	107.7 PK			2.91 H	119	103.5	4.2
4	*5550.00	98.0 AV			2.91 H	119	93.8	4.2
5	11100.00	53.6 PK	74.0	-20.4	1.88 H	353	39.8	13.8
6	11100.00	42.6 AV	54.0	-11.4	1.88 H	353	28.8	13.8
7	#16650.00	46.3 PK	74.0	-27.7	1.43 H	323	30.7	15.6
8	#16650.00	34.9 AV	54.0	-19.1	1.43 H	323	19.3	15.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	67.2 PK	74.0	-6.8	2.52 V	38	63.0	4.2
2	#5470.00	51.9 AV	54.0	-2.1	2.52 V	38	47.7	4.2
3	*5550.00	103.5 PK			2.52 V	38	99.3	4.2
4	*5550.00	94.2 AV			2.52 V	38	90.0	4.2
5	11100.00	53.6 PK	74.0	-20.4	1.21 V	318	39.8	13.8
6	11100.00	41.5 AV	54.0	-12.5	1.21 V	318	27.7	13.8
7	#16650.00	46.2 PK	74.0	-27.8	1.62 V	224	30.6	15.6
8	#16650.00	34.8 AV	54.0	-19.2	1.62 V	224	19.2	15.6

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	107.0 PK			2.93 H	126	102.7	4.3
2	*5670.00	97.7 AV			2.93 H	126	93.4	4.3
3	#5725.00	67.9 PK	74.0	-6.1	2.93 H	126	63.5	4.4
4	**#5725.00**	**53.9 AV**	**54.0**	**-0.1**	**2.93 H**	**126**	**49.5**	**4.4**
5	11340.00	54.9 PK	74.0	-19.1	1.87 H	339	41.3	13.6
6	11340.00	43.1 AV	54.0	-10.9	1.87 H	339	29.5	13.6
7	#17010.00	46.8 PK	74.0	-27.2	1.47 H	289	29.7	17.1
8	#17010.00	35.3 AV	54.0	-18.7	1.47 H	289	18.2	17.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	103.3 PK			2.61 V	25	99.0	4.3
2	*5670.00	93.6 AV			2.61 V	25	89.3	4.3
3	#5725.00	66.5 PK	74.0	-7.5	2.61 V	25	62.1	4.4
4	#5725.00	51.8 AV	54.0	-2.2	2.61 V	25	47.4	4.4
5	11340.00	53.6 PK	74.0	-20.4	1.08 V	331	40.0	13.6
6	11340.00	42.5 AV	54.0	-11.5	1.08 V	331	28.9	13.6
7	#17010.00	44.8 PK	74.0	-29.2	1.65 V	168	27.7	17.1
8	#17010.00	34.3 AV	54.0	-19.7	1.65 V	168	17.2	17.1

REMARKS:

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

802.11ac (VHT80)

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	51.4 PK	74.0	-22.6	3.86 H	119	47.7	3.7
2	5150.00	40.5 AV	54.0	-13.5	3.86 H	119	36.8	3.7
3	*5290.00	99.6 PK			3.86 H	119	95.5	4.1
4	*5290.00	89.5 AV			3.86 H	119	85.4	4.1
5	5350.00	67.9 PK	74.0	-6.1	3.86 H	119	63.8	4.1
6	5350.00	53.7 AV	54.0	-0.3	3.86 H	119	49.6	4.1
7	#10580.00	53.9 PK	74.0	-20.1	1.85 H	320	40.5	13.4
8	#10580.00	42.1 AV	54.0	-11.9	1.85 H	320	28.7	13.4
9	15870.00	46.5 PK	74.0	-27.5	1.41 H	318	33.5	13.0
10	15870.00	35.1 AV	54.0	-18.9	1.41 H	318	22.1	13.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	50.3 PK	74.0	-23.7	2.58 V	55	46.6	3.7
2	5150.00	38.3 AV	54.0	-15.7	2.58 V	55	34.6	3.7
3	*5290.00	95.7 PK			2.58 V	55	91.6	4.1
4	*5290.00	85.6 AV			2.58 V	55	81.5	4.1
5	5350.00	66.7 PK	74.0	-7.3	2.58 V	55	62.6	4.1
6	5350.00	51.5 AV	54.0	-2.5	2.58 V	55	47.4	4.1
7	#10580.00	51.9 PK	74.0	-22.1	1.27 V	308	38.5	13.4
8	#10580.00	41.0 AV	54.0	-13.0	1.27 V	308	27.6	13.4
9	15870.00	45.4 PK	74.0	-28.6	1.60 V	232	32.4	13.0
10	15870.00	34.7 AV	54.0	-19.3	1.60 V	232	21.7	13.0

REMARKS:

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

CHANNEL	TX Channel 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	#5470.00	67.8 PK	74.0	-6.2	3.81 H	118	63.6	4.2
2	#5470.00	53.6 AV	54.0	-0.4	3.81 H	118	49.4	4.2
3	*5530.00	100.3 PK			3.81 H	118	96.1	4.2
4	*5530.00	90.5 AV			3.81 H	118	86.3	4.2
5	#5725.00	50.5 PK	74.0	-23.5	3.81 H	118	46.1	4.4
6	#5725.00	38.6 AV	54.0	-15.4	3.81 H	118	34.2	4.4
7	11060.00	53.6 PK	74.0	-20.4	1.92 H	334	39.7	13.9
8	11060.00	41.9 AV	54.0	-12.1	1.92 H	334	28.0	13.9
9	#16590.00	46.8 PK	74.0	-27.2	1.36 H	331	31.2	15.6
10	#16590.00	35.3 AV	54.0	-18.7	1.36 H	331	19.7	15.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	66.7 PK	74.0	-7.3	2.41 V	60	62.5	4.2
2	#5470.00	51.3 AV	54.0	-2.7	2.41 V	60	47.1	4.2
3	*5530.00	96.4 PK			2.41 V	60	92.2	4.2
4	*5530.00	86.3 AV			2.41 V	60	82.1	4.2
5	#5725.00	49.6 PK	74.0	-24.4	2.41 V	60	45.2	4.4
6	#5725.00	37.8 AV	54.0	-16.2	2.41 V	60	33.4	4.4
7	11060.00	53.1 PK	74.0	-20.9	1.18 V	289	39.2	13.9
8	11060.00	41.7 AV	54.0	-12.3	1.18 V	289	27.8	13.9
9	#16590.00	46.0 PK	74.0	-28.0	1.63 V	219	30.4	15.6
10	#16590.00	34.6 AV	54.0	-19.4	1.63 V	219	19.0	15.6

REMARKS:

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

CHANNEL	TX Channel 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	*5610.00	103.7 PK			3.78 H	129	99.3	4.4
2	*5610.00	93.4 AV			3.78 H	129	89.0	4.4
3	#5725.00	68.9 PK	74.0	-5.1	3.78 H	129	64.5	4.4
4	#5725.00	53.8 AV	54.0	-0.2	3.78 H	129	49.4	4.4
5	11220.00	54.5 PK	74.0	-19.5	1.96 H	331	40.8	13.7
6	11220.00	42.9 AV	54.0	-11.1	1.96 H	331	29.2	13.7
7	#16830.00	46.4 PK	74.0	-27.6	1.37 H	303	30.5	15.9
8	#16830.00	34.8 AV	54.0	-19.2	1.37 H	303	18.9	15.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	99.8 PK			2.49 V	53	95.4	4.4
2	*5610.00	89.1 AV			2.49 V	53	84.7	4.4
3	#5725.00	67.8 PK	74.0	-6.2	2.49 V	53	63.4	4.4
4	#5725.00	51.2 AV	54.0	-2.8	2.49 V	53	46.8	4.4
5	11220.00	53.4 PK	74.0	-20.6	1.18 V	332	39.7	13.7
6	11220.00	42.1 AV	54.0	-11.9	1.18 V	332	28.4	13.7
7	#16830.00	44.6 PK	74.0	-29.4	1.64 V	178	28.7	15.9
8	#16830.00	34.3 AV	54.0	-19.7	1.64 V	178	18.4	15.9

REMARKS:

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

Below 1GHz Data:

802.11a

CHANNEL	TX Channel 116	**DETECTOR FUNCTION**	Quasi-Peak (QP)
FREQUENCY RANGE	9kHz ~ 1GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	148.58	32.7 QP	43.5	-10.8	1.00 H	99	41.0	-8.3
2	201.62	36.1 QP	43.5	-7.4	1.00 H	40	47.5	-11.4
3	281.23	42.8 QP	46.0	-3.2	1.00 H	217	50.8	-8.0
4	332.03	38.3 QP	46.0	-7.7	2.00 H	304	44.7	-6.4
5	459.01	26.4 QP	46.0	-19.6	3.00 H	222	29.8	-3.4
6	720.18	29.9 QP	46.0	-16.1	1.00 H	108	28.8	1.1
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	145.53	34.2 QP	43.5	-9.3	1.00 V	23	42.5	-8.3
2	230.43	39.2 QP	46.0	-6.8	2.00 V	45	49.7	-10.5
3	283.34	39.0 QP	46.0	-7.0	1.00 V	214	46.8	-7.8
4	342.44	33.2 QP	46.0	-12.8	2.00 V	178	39.5	-6.3
5	513.01	30.0 QP	46.0	-16.0	1.00 V	38	32.3	-2.3
6	645.10	24.9 QP	46.0	-21.1	3.00 V	189	24.6	0.3

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

4.1.8 Test Results (Mode 3)

Above 1GHz Data:

802.11a

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	47.9 PK	74.0	-26.1	2.02 H	260	44.2	3.7
2	5150.00	37.4 AV	54.0	-16.6	2.02 H	260	33.7	3.7
3	*5260.00	114.3 PK			2.02 H	260	110.3	4.0
4	*5260.00	104.3 AV			2.02 H	260	100.3	4.0
5	5350.00	55.3 PK	74.0	-18.7	2.02 H	260	51.2	4.1
6	5350.00	42.7 AV	54.0	-11.3	2.02 H	260	38.6	4.1
7	#10520.00	57.7 PK	74.0	-16.3	1.88 H	346	44.5	13.2
8	#10520.00	45.3 AV	54.0	-8.7	1.88 H	346	32.1	13.2
9	15780.00	46.6 PK	74.0	-27.4	1.43 H	314	33.0	13.6
10	15780.00	35.3 AV	54.0	-18.7	1.43 H	314	21.7	13.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	**FREQ. (MHz)**	**EMISSION LEVEL (dBuV/m)**	**LIMIT (dBuV/m)**	**MARGIN (dB)**	**ANTENNA HEIGHT (m)**	**TABLE ANGLE (Degree)**	**RAW VALUE (dBuV)**	**CORRECTION FACTOR (dB/m)**
1	5150.00	47.6 PK	74.0	-26.4	2.07 V	82	43.9	3.7
2	5150.00	36.8 AV	54.0	-17.2	2.07 V	82	33.1	3.7
3	*5260.00	110.3 PK			2.07 V	82	106.3	4.0
4	*5260.00	99.6 AV			2.07 V	82	95.6	4.0
5	5350.00	52.6 PK	74.0	-21.4	2.07 V	82	48.5	4.1
6	5350.00	40.1 AV	54.0	-13.9	2.07 V	82	36.0	4.1
7	#10520.00	56.5 PK	74.0	-17.5	1.21 V	335	43.3	13.2
8	#10520.00	44.7 AV	54.0	-9.3	1.21 V	335	31.5	13.2
9	15780.00	47.1 PK	74.0	-26.9	1.58 V	214	33.5	13.6
10	15780.00	35.0 AV	54.0	-19.0	1.58 V	214	21.4	13.6

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 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	113.0 PK			2.11 H	242	108.9	4.1
2	*5300.00	102.8 AV			2.11 H	242	98.7	4.1
3	5350.00	64.9 PK	74.0	-9.1	2.11 H	242	60.8	4.1
4	5350.00	53.7 AV	54.0	-0.3	2.11 H	242	49.6	4.1
5	10600.00	54.9 PK	74.0	-19.1	1.86 H	354	41.4	13.5
6	10600.00	42.9 AV	54.0	-11.1	1.86 H	354	29.4	13.5
7	15900.00	46.6 PK	74.0	-27.4	1.40 H	300	33.7	12.9
8	15900.00	35.2 AV	54.0	-18.8	1.40 H	300	22.3	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	109.3 PK			2.14 V	91	105.2	4.1
2	*5300.00	98.1 AV			2.14 V	91	94.0	4.1
3	5350.00	62.3 PK	74.0	-11.7	2.14 V	91	58.2	4.1
4	5350.00	51.5 AV	54.0	-2.5	2.14 V	91	47.4	4.1
5	10600.00	53.8 PK	74.0	-20.2	1.23 V	338	40.3	13.5
6	10600.00	42.4 AV	54.0	-11.6	1.23 V	338	28.9	13.5
7	15900.00	46.1 PK	74.0	-27.9	1.58 V	214	33.2	12.9
8	15900.00	34.8 AV	54.0	-19.2	1.58 V	214	21.9	12.9

REMARKS:

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

CHANNEL	TX Channel 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	111.6 PK			2.11 H	234	107.5	4.1
2	*5320.00	100.9 AV			2.11 H	234	96.8	4.1
3	5350.00	65.5 PK	74.0	-8.5	2.11 H	234	61.4	4.1
4	5350.00	53.8 AV	54.0	-0.2	2.11 H	234	49.7	4.1
5	10640.00	54.4 PK	74.0	-19.6	1.83 H	356	40.9	13.5
6	10640.00	42.7 AV	54.0	-11.3	1.83 H	356	29.2	13.5
7	15960.00	46.5 PK	74.0	-27.5	1.43 H	313	33.6	12.9
8	15960.00	35.1 AV	54.0	-18.9	1.43 H	313	22.2	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	107.3 PK			2.01 V	83	103.2	4.1
2	*5320.00	96.2 AV			2.01 V	83	92.1	4.1
3	5350.00	63.2 PK	74.0	-10.8	2.01 V	83	59.1	4.1
4	5350.00	51.1 AV	54.0	-2.9	2.01 V	83	47.0	4.1
5	10640.00	53.5 PK	74.0	-20.5	1.23 V	327	40.0	13.5
6	10640.00	42.3 AV	54.0	-11.7	1.23 V	327	28.8	13.5
7	15960.00	45.9 PK	74.0	-28.1	1.58 V	222	33.0	12.9
8	15960.00	34.7 AV	54.0	-19.3	1.58 V	222	21.8	12.9

REMARKS:

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

CHANNEL	TX Channel 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	#5470.00	71.3 PK	74.0	-2.7	2.10 H	219	67.1	4.2
2	**#5470.00**	**53.9 AV**	**54.0**	**-0.1**	**2.10 H**	**219**	**49.7**	**4.2**
3	*5500.00	110.3 PK			2.10 H	219	106.1	4.2
4	*5500.00	100.6 AV			2.10 H	219	96.4	4.2
5	11000.00	54.2 PK	74.0	-19.8	1.89 H	341	40.1	14.1
6	11000.00	42.5 AV	54.0	-11.5	1.89 H	341	28.4	14.1
7	#16500.00	46.5 PK	74.0	-27.5	1.48 H	313	32.0	14.5
8	#16500.00	35.1 AV	54.0	-18.9	1.48 H	313	20.6	14.5
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	#5470.00	69.8 PK	74.0	-4.2	2.08 V	95	65.6	4.2
2	#5470.00	51.0 AV	54.0	-3.0	2.08 V	95	46.8	4.2
3	*5500.00	107.1 PK			2.08 V	95	102.9	4.2
4	*5500.00	96.1 AV			2.08 V	95	91.9	4.2
5	11000.00	53.3 PK	74.0	-20.7	1.17 V	324	39.2	14.1
6	11000.00	42.1 AV	54.0	-11.9	1.17 V	324	28.0	14.1
7	#16500.00	45.9 PK	74.0	-28.1	1.56 V	198	31.4	14.5
8	#16500.00	34.7 AV	54.0	-19.3	1.56 V	198	20.2	14.5

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 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	#5470.00	54.9 PK	74.0	-19.1	1.96 H	222	50.7	4.2
2	#5470.00	40.5 AV	54.0	-13.5	1.96 H	222	36.3	4.2
3	*5580.00	114.1 PK			1.96 H	222	109.9	4.2
4	*5580.00	104.1 AV			1.96 H	222	99.9	4.2
5	#5725.00	50.0 PK	74.0	-24.0	1.96 H	222	45.6	4.4
6	#5725.00	38.3 AV	54.0	-15.7	1.96 H	222	33.9	4.4
7	11160.00	56.9 PK	74.0	-17.1	1.86 H	331	43.2	13.7
8	11160.00	44.8 AV	54.0	-9.2	1.86 H	331	31.1	13.7
9	#16740.00	46.6 PK	74.0	-27.4	1.47 H	316	30.9	15.7
10	#16740.00	35.2 AV	54.0	-18.8	1.47 H	316	19.5	15.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	54.2 PK	74.0	-19.8	2.03 V	78	50.0	4.2
2	#5470.00	40.3 AV	54.0	-13.7	2.03 V	78	36.1	4.2
3	*5580.00	110.1 PK			2.03 V	78	105.9	4.2
4	*5580.00	99.8 AV			2.03 V	78	95.6	4.2
5	#5725.00	49.2 PK	74.0	-24.8	2.03 V	78	44.8	4.4
6	#5725.00	36.7 AV	54.0	-17.3	2.03 V	78	32.3	4.4
7	11160.00	56.9 PK	74.0	-17.1	1.20 V	338	43.2	13.7
8	11160.00	45.2 AV	54.0	-8.8	1.20 V	338	31.5	13.7
9	#16740.00	47.1 PK	74.0	-26.9	1.61 V	216	31.4	15.7
10	#16740.00	34.9 AV	54.0	-19.1	1.61 V	216	19.2	15.7

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5700.00	110.5 PK			1.97 H	226	106.0	4.5
2	*5700.00	100.8 AV			1.97 H	226	96.3	4.5
3	#5725.00	67.9 PK	74.0	-6.1	1.97 H	226	63.5	4.4
4	**#5725.00**	**53.9 AV**	**54.0**	**-0.1**	**1.97 H**	**226**	**49.5**	**4.4**
5	11400.00	54.1 PK	74.0	-19.9	1.86 H	350	40.5	13.6
6	11400.00	42.3 AV	54.0	-11.7	1.86 H	350	28.7	13.6
7	#17100.00	46.4 PK	74.0	-27.6	1.48 H	320	29.0	17.4
8	#17100.00	35.0 AV	54.0	-19.0	1.48 H	320	17.6	17.4
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	*5700.00	107.3 PK			2.12 V	59	102.8	4.5
2	*5700.00	96.2 AV			2.12 V	59	91.7	4.5
3	#5725.00	66.3 PK	74.0	-7.7	2.12 V	59	61.9	4.4
4	#5725.00	51.2 AV	54.0	-2.8	2.12 V	59	46.8	4.4
5	11400.00	53.0 PK	74.0	-21.0	1.20 V	324	39.4	13.6
6	11400.00	41.9 AV	54.0	-12.1	1.20 V	324	28.3	13.6
7	#17100.00	45.9 PK	74.0	-28.1	1.67 V	208	28.5	17.4
8	#17100.00	34.8 AV	54.0	-19.2	1.67 V	208	17.4	17.4

REMARKS:

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

802.11ac (VHT20)

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	47.8 PK	74.0	-26.2	2.00 H	260	44.1	3.7
2	5150.00	37.2 AV	54.0	-16.8	2.00 H	260	33.5	3.7
3	*5260.00	112.0 PK			2.00 H	260	108.0	4.0
4	*5260.00	102.2 AV			2.00 H	260	98.2	4.0
5	5350.00	53.4 PK	74.0	-20.6	2.00 H	260	49.3	4.1
6	5350.00	41.6 AV	54.0	-12.4	2.00 H	260	37.5	4.1
7	#10520.00	57.8 PK	74.0	-16.2	1.82 H	343	44.6	13.2
8	#10520.00	45.4 AV	54.0	-8.6	1.82 H	343	32.2	13.2
9	15780.00	46.6 PK	74.0	-27.4	1.42 H	299	33.0	13.6
10	15780.00	35.2 AV	54.0	-18.8	1.42 H	299	21.6	13.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	46.9 PK	74.0	-27.1	2.06 V	93	43.2	3.7
2	5150.00	36.3 AV	54.0	-17.7	2.06 V	93	32.6	3.7
3	*5260.00	108.4 PK			2.06 V	93	104.4	4.0
4	*5260.00	97.7 AV			2.06 V	93	93.7	4.0
5	5350.00	52.5 PK	74.0	-21.5	2.06 V	93	48.4	4.1
6	5350.00	39.3 AV	54.0	-14.7	2.06 V	93	35.2	4.1
7	#10520.00	56.7 PK	74.0	-17.3	1.19 V	324	43.5	13.2
8	#10520.00	45.0 AV	54.0	-9.0	1.19 V	324	31.8	13.2
9	15780.00	47.3 PK	74.0	-26.7	1.60 V	230	33.7	13.6
10	15780.00	35.1 AV	54.0	-18.9	1.60 V	230	21.5	13.6

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 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	111.3 PK			1.96 H	259	107.2	4.1
2	*5300.00	101.5 AV			1.96 H	259	97.4	4.1
3	5350.00	65.3 PK	74.0	-8.7	1.96 H	259	61.2	4.1
4	**5350.00**	**53.9 AV**	**54.0**	**-0.1**	**1.96 H**	**259**	**49.8**	**4.1**
5	10600.00	54.4 PK	74.0	-19.6	1.82 H	355	40.9	13.5
6	10600.00	42.8 AV	54.0	-11.2	1.82 H	355	29.3	13.5
7	15900.00	46.4 PK	74.0	-27.6	1.34 H	293	33.5	12.9
8	15900.00	35.0 AV	54.0	-19.0	1.34 H	293	22.1	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5300.00	107.4 PK			2.04 V	77	103.3	4.1
2	*5300.00	97.1 AV			2.04 V	77	93.0	4.1
3	5350.00	63.4 PK	74.0	-10.6	2.04 V	77	59.3	4.1
4	5350.00	51.3 AV	54.0	-2.7	2.04 V	77	47.2	4.1
5	10600.00	54.3 PK	74.0	-19.7	1.25 V	353	40.8	13.5
6	10600.00	42.4 AV	54.0	-11.6	1.25 V	353	28.9	13.5
7	15900.00	46.3 PK	74.0	-27.7	1.60 V	217	33.4	12.9
8	15900.00	34.8 AV	54.0	-19.2	1.60 V	217	21.9	12.9

REMARKS:

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

CHANNEL	TX Channel 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	109.7 PK			1.97 H	259	105.6	4.1
2	*5320.00	100.1 AV			1.97 H	259	96.0	4.1
3	5350.00	64.0 PK	74.0	-10.0	1.97 H	259	59.9	4.1
4	5350.00	53.8 AV	54.0	-0.2	1.97 H	259	49.7	4.1
5	10640.00	54.6 PK	74.0	-19.4	1.85 H	342	41.1	13.5
6	10640.00	42.9 AV	54.0	-11.1	1.85 H	342	29.4	13.5
7	15960.00	46.7 PK	74.0	-27.3	1.39 H	323	33.8	12.9
8	15960.00	35.4 AV	54.0	-18.6	1.39 H	323	22.5	12.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5320.00	108.3 PK			2.12 V	96	104.2	4.1
2	*5320.00	96.1 AV			2.12 V	96	92.0	4.1
3	5350.00	63.2 PK	74.0	-10.8	2.12 V	96	59.1	4.1
4	5350.00	51.6 AV	54.0	-2.4	2.12 V	96	47.5	4.1
5	10640.00	53.6 PK	74.0	-20.4	1.23 V	338	40.1	13.5
6	10640.00	42.2 AV	54.0	-11.8	1.23 V	338	28.7	13.5
7	15960.00	45.7 PK	74.0	-28.3	1.53 V	227	32.8	12.9
8	15960.00	34.6 AV	54.0	-19.4	1.53 V	227	21.7	12.9

REMARKS:

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

CHANNEL	TX Channel 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	#5470.00	68.4 PK	74.0	-5.6	2.04 H	261	64.2	4.2
2	**#5470.00**	**53.9 AV**	**54.0**	**-0.1**	**2.04 H**	**261**	**49.7**	**4.2**
3	*5500.00	108.3 PK			2.04 H	261	104.1	4.2
4	*5500.00	99.6 AV			2.04 H	261	95.4	4.2
5	11000.00	53.8 PK	74.0	-20.2	1.92 H	336	39.7	14.1
6	11000.00	42.3 AV	54.0	-11.7	1.92 H	336	28.2	14.1
7	#16500.00	46.5 PK	74.0	-27.5	1.51 H	308	32.0	14.5
8	#16500.00	34.9 AV	54.0	-19.1	1.51 H	308	20.4	14.5
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	#5470.00	67.5 PK	74.0	-6.5	2.08 V	90	63.3	4.2
2	#5470.00	51.7 AV	54.0	-2.3	2.08 V	90	47.5	4.2
3	*5500.00	105.2 PK			2.08 V	90	101.0	4.2
4	*5500.00	95.3 AV			2.08 V	90	91.1	4.2
5	11000.00	53.7 PK	74.0	-20.3	1.12 V	333	39.6	14.1
6	11000.00	42.2 AV	54.0	-11.8	1.12 V	333	28.1	14.1
7	#16500.00	45.2 PK	74.0	-28.8	1.61 V	184	30.7	14.5
8	#16500.00	34.3 AV	54.0	-19.7	1.61 V	184	19.8	14.5

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 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	#5470.00	52.3 PK	74.0	-21.7	2.04 H	224	48.1	4.2
2	#5470.00	39.3 AV	54.0	-14.7	2.04 H	224	35.1	4.2
3	*5580.00	112.1 PK			2.04 H	224	107.9	4.2
4	*5580.00	103.2 AV			2.04 H	224	99.0	4.2
5	#5725.00	49.7 PK	74.0	-24.3	2.04 H	224	45.3	4.4
6	#5725.00	37.7 AV	54.0	-16.3	2.04 H	224	33.3	4.4
7	11160.00	56.8 PK	74.0	-17.2	1.82 H	325	43.1	13.7
8	11160.00	44.9 AV	54.0	-9.1	1.82 H	325	31.2	13.7
9	#16740.00	47.1 PK	74.0	-26.9	1.42 H	322	31.4	15.7
10	#16740.00	35.7 AV	54.0	-18.3	1.42 H	322	20.0	15.7
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	51.1 PK	74.0	-22.9	2.09 V	93	46.9	4.2
2	#5470.00	37.2 AV	54.0	-16.8	2.09 V	93	33.0	4.2
3	*5580.00	108.2 PK			2.09 V	93	104.0	4.2
4	*5580.00	98.7 AV			2.09 V	93	94.5	4.2
5	#5725.00	48.5 PK	74.0	-25.5	2.09 V	93	44.1	4.4
6	#5725.00	35.3 AV	54.0	-18.7	2.09 V	93	30.9	4.4
7	11160.00	56.5 PK	74.0	-17.5	1.17 V	353	42.8	13.7
8	11160.00	44.7 AV	54.0	-9.3	1.17 V	353	31.0	13.7
9	#16740.00	47.3 PK	74.0	-26.7	1.58 V	224	31.6	15.7
10	#16740.00	34.9 AV	54.0	-19.1	1.58 V	224	19.2	15.7

REMARKS:

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

CHANNEL	TX Channel 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	107.5 PK			1.98 H	219	103.0	4.5
2	*5700.00	98.9 AV			1.98 H	219	94.4	4.5
3	#5725.00	68.2 PK	74.0	-5.8	1.98 H	219	63.8	4.4
4	#5725.00	53.8 AV	54.0	-0.2	1.98 H	219	49.4	4.4
5	11400.00	54.2 PK	74.0	-19.8	1.84 H	335	40.6	13.6
6	11400.00	42.4 AV	54.0	-11.6	1.84 H	335	28.8	13.6
7	#17100.00	46.6 PK	74.0	-27.4	1.46 H	323	29.2	17.4
8	#17100.00	35.4 AV	54.0	-18.6	1.46 H	323	18.0	17.4
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	*5700.00	105.1 PK			2.10 V	84	100.6	4.5
2	*5700.00	94.2 AV			2.10 V	84	89.7	4.5
3	#5725.00	67.3 PK	74.0	-6.7	2.10 V	84	62.9	4.4
4	#5725.00	51.6 AV	54.0	-2.4	2.10 V	84	47.2	4.4
5	11400.00	53.8 PK	74.0	-20.2	1.21 V	338	40.2	13.6
6	11400.00	42.2 AV	54.0	-11.8	1.21 V	338	28.6	13.6
7	#17100.00	46.1 PK	74.0	-27.9	1.68 V	217	28.7	17.4
8	#17100.00	34.8 AV	54.0	-19.2	1.68 V	217	17.4	17.4

REMARKS:

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

802.11ac (VHT40)

CHANNEL	TX Channel 54	DETECTOR FUNCTION	Peak (PK) Average (AV)
FREQUENCY RANGE	1GHz ~ 40GHz		

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	52.1 PK	74.0	-21.9	1.98 H	260	48.4	3.7
2	5150.00	40.6 AV	54.0	-13.4	1.98 H	260	36.9	3.7
3	*5270.00	107.8 PK			1.98 H	260	103.8	4.0
4	*5270.00	98.2 AV			1.98 H	260	94.2	4.0
5	5350.00	66.3 PK	74.0	-7.7	1.98 H	260	62.2	4.1
6	**5350.00**	**53.9 AV**	**54.0**	**-0.1**	**1.98 H**	**260**	**49.8**	**4.1**
7	#10540.00	54.8 PK	74.0	-19.2	1.81 H	348	41.5	13.3
8	#10540.00	42.8 AV	54.0	-11.2	1.81 H	348	29.5	13.3
9	15810.00	46.0 PK	74.0	-28.0	1.37 H	289	32.6	13.4
10	15810.00	34.9 AV	54.0	-19.1	1.37 H	289	21.5	13.4
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	50.0 PK	74.0	-24.0	2.56 V	22	46.3	3.7
2	5150.00	37.3 AV	54.0	-16.7	2.56 V	22	33.6	3.7
3	*5270.00	103.9 PK			2.56 V	22	99.9	4.0
4	*5270.00	93.7 AV			2.56 V	22	89.7	4.0
5	5350.00	65.4 PK	74.0	-8.6	2.56 V	22	61.3	4.1
6	5350.00	51.7 AV	54.0	-2.3	2.56 V	22	47.6	4.1
7	#10540.00	53.4 PK	74.0	-20.6	1.28 V	339	40.1	13.3
8	#10540.00	42.2 AV	54.0	-11.8	1.28 V	339	28.9	13.3
9	15810.00	45.7 PK	74.0	-28.3	1.64 V	202	32.3	13.4
10	15810.00	34.6 AV	54.0	-19.4	1.64 V	202	21.2	13.4

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5310.00	105.8 PK			1.96 H	259	101.7	4.1
2	*5310.00	95.8 AV			1.96 H	259	91.7	4.1
3	5350.00	65.9 PK	74.0	-8.1	1.96 H	260	61.8	4.1
4	**5350.00**	**53.9 AV**	**54.0**	**-0.1**	**1.96 H**	**260**	**49.8**	**4.1**
5	10620.00	54.3 PK	74.0	-19.7	1.81 H	349	40.8	13.5
6	10620.00	42.7 AV	54.0	-11.3	1.81 H	349	29.2	13.5
7	15930.00	46.5 PK	74.0	-27.5	1.51 H	331	33.7	12.8
8	15930.00	35.3 AV	54.0	-18.7	1.51 H	331	22.5	12.8
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	*5310.00	101.6 PK			2.56 V	14	97.5	4.1
2	*5310.00	91.7 AV			2.56 V	14	87.6	4.1
3	5350.00	64.5 PK	74.0	-9.5	2.56 V	14	60.4	4.1
4	5350.00	51.3 AV	54.0	-2.7	2.56 V	14	47.2	4.1
5	10620.00	53.3 PK	74.0	-20.7	1.15 V	311	39.8	13.5
6	10620.00	42.1 AV	54.0	-11.9	1.15 V	311	28.6	13.5
7	15930.00	46.3 PK	74.0	-27.7	1.62 V	205	33.5	12.8
8	15930.00	34.9 AV	54.0	-19.1	1.62 V	205	22.1	12.8

REMARKS:

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

CHANNEL	TX Channel 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	#5470.00	68.1 PK	74.0	-5.9	1.96 H	226	63.9	4.2
2	#5470.00	53.6 AV	54.0	-0.4	1.96 H	226	49.4	4.2
3	*5510.00	103.6 PK			1.96 H	226	99.4	4.2
4	*5510.00	94.2 AV			1.96 H	226	90.0	4.2
5	11020.00	53.9 PK	74.0	-20.1	1.90 H	343	39.9	14.0
6	11020.00	41.9 AV	54.0	-12.1	1.90 H	343	27.9	14.0
7	#16530.00	46.4 PK	74.0	-27.6	1.42 H	318	31.5	14.9
8	#16530.00	34.8 AV	54.0	-19.2	1.42 H	318	19.9	14.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	67.2 PK	74.0	-6.8	2.52 V	33	63.0	4.2
2	#5470.00	51.5 AV	54.0	-2.5	2.52 V	33	47.3	4.2
3	*5510.00	100.1 PK			2.52 V	33	95.9	4.2
4	*5510.00	90.3 AV			2.52 V	33	86.1	4.2
5	11020.00	53.0 PK	74.0	-21.0	1.20 V	313	39.0	14.0
6	11020.00	41.8 AV	54.0	-12.2	1.20 V	313	27.8	14.0
7	#16530.00	46.1 PK	74.0	-27.9	1.62 V	214	31.2	14.9
8	#16530.00	34.8 AV	54.0	-19.2	1.62 V	214	19.9	14.9

REMARKS:

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

CHANNEL	TX Channel 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	#5470.00	68.2 PK	74.0	-5.8	2.12 H	228	64.0	4.2
2	#5470.00	53.7 AV	54.0	-0.3	2.12 H	228	49.5	4.2
3	*5550.00	108.9 PK			2.12 H	228	104.7	4.2
4	*5550.00	99.6 AV			2.12 H	228	95.4	4.2
5	#5725.00	49.3 PK	74.0	-24.7	2.12 H	228	44.9	4.4
6	#5725.00	37.7 AV	54.0	-16.3	2.12 H	228	33.3	4.4
7	11100.00	54.6 PK	74.0	-19.4	1.84 H	354	40.8	13.8
8	11100.00	42.7 AV	54.0	-11.3	1.84 H	354	28.9	13.8
9	#16650.00	46.5 PK	74.0	-27.5	1.45 H	304	30.9	15.6
10	#16650.00	35.2 AV	54.0	-18.8	1.45 H	304	19.6	15.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	67.1 PK	74.0	-6.9	2.56 V	34	62.9	4.2
2	#5470.00	51.5 AV	54.0	-2.5	2.56 V	34	47.3	4.2
3	*5550.00	104.7 PK			2.56 V	34	100.5	4.2
4	*5550.00	95.3 AV			2.56 V	34	91.1	4.2
5	#5725.00	48.4 PK	74.0	-25.6	2.56 V	34	44.0	4.4
6	#5725.00	35.5 AV	54.0	-18.5	2.56 V	34	31.1	4.4
7	11100.00	53.7 PK	74.0	-20.3	1.25 V	332	39.9	13.8
8	11100.00	42.8 AV	54.0	-11.2	1.25 V	332	29.0	13.8
9	#16650.00	46.0 PK	74.0	-28.0	1.58 V	234	30.4	15.6
10	#16650.00	34.8 AV	54.0	-19.2	1.58 V	234	19.2	15.6

REMARKS:

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

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

ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	106.7 PK			2.07 H	220	102.4	4.3
2	*5670.00	97.6 AV			2.07 H	220	93.3	4.3
3	#5725.00	68.0 PK	74.0	-6.0	2.07 H	220	63.6	4.4
4	**#5725.00**	**53.9 AV**	**54.0**	**-0.1**	**2.07 H**	**220**	**49.5**	**4.4**
5	11340.00	53.4 PK	74.0	-20.6	1.95 H	329	39.8	13.6
6	11340.00	42.1 AV	54.0	-11.9	1.95 H	329	28.5	13.6
7	#17010.00	46.5 PK	74.0	-27.5	1.46 H	312	29.4	17.1
8	#17010.00	34.8 AV	54.0	-19.2	1.46 H	312	17.7	17.1
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5670.00	102.5 PK			2.58 V	20	98.2	4.3
2	*5670.00	93.7 AV			2.58 V	20	89.4	4.3
3	#5725.00	67.3 PK	74.0	-6.7	2.58 V	20	62.9	4.4
4	#5725.00	51.6 AV	54.0	-2.4	2.58 V	20	47.2	4.4
5	11340.00	53.8 PK	74.0	-20.2	1.13 V	332	40.2	13.6
6	11340.00	42.5 AV	54.0	-11.5	1.13 V	332	28.9	13.6
7	#17010.00	44.8 PK	74.0	-29.2	1.62 V	184	27.7	17.1
8	#17010.00	34.1 AV	54.0	-19.9	1.62 V	184	17.0	17.1

REMARKS:

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

802.11ac (VHT80)

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	48.5 PK	74.0	-25.5	1.96 H	260	44.8	3.7
2	5150.00	38.5 AV	54.0	-15.5	1.96 H	260	34.8	3.7
3	*5290.00	98.6 PK			1.96 H	260	94.5	4.1
4	*5290.00	89.1 AV			1.96 H	260	85.0	4.1
5	5350.00	64.1 PK	74.0	-9.9	1.96 H	260	60.0	4.1
6	5350.00	53.7 AV	54.0	-0.3	1.96 H	260	49.6	4.1
7	#10580.00	54.1 PK	74.0	-19.9	1.87 H	330	40.7	13.4
8	#10580.00	42.1 AV	54.0	-11.9	1.87 H	330	28.7	13.4
9	15870.00	46.5 PK	74.0	-27.5	1.41 H	314	33.5	13.0
10	15870.00	35.0 AV	54.0	-19.0	1.41 H	314	22.0	13.0
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	5150.00	47.4 PK	74.0	-26.6	2.61 V	21	43.7	3.7
2	5150.00	36.3 AV	54.0	-17.7	2.61 V	21	32.6	3.7
3	*5290.00	94.7 PK			2.61 V	21	90.6	4.1
4	*5290.00	85.2 AV			2.61 V	21	81.1	4.1
5	5350.00	63.3 PK	74.0	-10.7	2.61 V	21	59.2	4.1
6	5350.00	51.5 AV	54.0	-2.5	2.61 V	21	47.4	4.1
7	#10580.00	52.5 PK	74.0	-21.5	1.24 V	308	39.1	13.4
8	#10580.00	41.5 AV	54.0	-12.5	1.24 V	308	28.1	13.4
9	15870.00	45.8 PK	74.0	-28.2	1.66 V	217	32.8	13.0
10	15870.00	34.8 AV	54.0	-19.2	1.66 V	217	21.8	13.0

REMARKS:

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

CHANNEL	TX Channel 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	#5470.00	68.0 PK	74.0	-6.0	2.17 H	226	63.8	4.2
2	#5470.00	53.7 AV	54.0	-0.3	2.17 H	226	49.5	4.2
3	*5530.00	100.9 PK			2.17 H	226	96.7	4.2
4	*5530.00	91.3 AV			2.17 H	226	87.1	4.2
5	#5725.00	51.6 PK	74.0	-22.4	2.17 H	226	47.2	4.4
6	#5725.00	38.6 AV	54.0	-15.4	2.17 H	226	34.2	4.4
7	11060.00	53.7 PK	74.0	-20.3	1.89 H	335	39.8	13.9
8	11060.00	41.7 AV	54.0	-12.3	1.89 H	335	27.8	13.9
9	#16590.00	46.8 PK	74.0	-27.2	1.37 H	326	31.2	15.6
10	#16590.00	35.1 AV	54.0	-18.9	1.37 H	326	19.5	15.6
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	#5470.00	66.9 PK	74.0	-7.1	2.61 V	30	62.7	4.2
2	#5470.00	51.5 AV	54.0	-2.5	2.61 V	30	47.3	4.2
3	*5530.00	96.6 PK			2.61 V	30	92.4	4.2
4	*5530.00	87.5 AV			2.61 V	30	83.3	4.2
5	#5725.00	50.7 PK	74.0	-23.3	2.61 V	30	46.3	4.4
6	#5725.00	36.5 AV	54.0	-17.5	2.61 V	30	32.1	4.4
7	11060.00	53.3 PK	74.0	-20.7	1.20 V	299	39.4	13.9
8	11060.00	42.1 AV	54.0	-11.9	1.20 V	299	28.2	13.9
9	#16590.00	45.6 PK	74.0	-28.4	1.65 V	203	30.0	15.6
10	#16590.00	34.4 AV	54.0	-19.6	1.65 V	203	18.8	15.6

REMARKS:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. The other emission levels were very low against the limit.
4. Margin value = Emission Level – Limit value
5. " * ": Fundamental frequency.
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	*5610.00	104.4 PK			2.14 H	224	100.0	4.4
2	*5610.00	94.5 AV			2.14 H	224	90.1	4.4
3	#5725.00	68.3 PK	74.0	-5.7	2.14 H	224	63.9	4.4
4	#5725.00	53.7 AV	54.0	-0.3	2.14 H	224	49.3	4.4
5	11220.00	54.3 PK	74.0	-19.7	1.96 H	335	40.6	13.7
6	11220.00	42.7 AV	54.0	-11.3	1.96 H	335	29.0	13.7
7	#16830.00	46.7 PK	74.0	-27.3	1.43 H	297	30.8	15.9
8	#16830.00	34.9 AV	54.0	-19.1	1.43 H	297	19.0	15.9
ANTENNA POLARITY & TEST DISTANCE: VERTICAL AT 3 M								
NO.	FREQ. (MHz)	EMISSION LEVEL (dBuV/m)	LIMIT (dBuV/m)	MARGIN (dB)	ANTENNA HEIGHT (m)	TABLE ANGLE (Degree)	RAW VALUE (dBuV)	CORRECTION FACTOR (dB/m)
1	*5610.00	100.5 PK			2.60 V	26	96.1	4.4
2	*5610.00	90.6 AV			2.60 V	26	86.2	4.4
3	#5725.00	67.4 PK	74.0	-6.6	2.60 V	26	63.0	4.4
4	#5725.00	51.5 AV	54.0	-2.5	2.60 V	26	47.1	4.4
5	11220.00	53.1 PK	74.0	-20.9	1.13 V	329	39.4	13.7
6	11220.00	41.8 AV	54.0	-12.2	1.13 V	329	28.1	13.7
7	#16830.00	44.5 PK	74.0	-29.5	1.58 V	172	28.6	15.9
8	#16830.00	33.9 AV	54.0	-20.1	1.58 V	172	18.0	15.9

REMARKS:

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

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.	CALIBRATED DATE	CALIBRATED UNTIL
Test Receiver R&S	ESCS 30	847124/029	Oct. 24, 2016	Oct. 23, 2017
Line-Impedance Stabilization Network (for EUT) R&S	ESH3-Z5	848773/004	Oct. 26, 2016	Oct. 25, 2017
Line-Impedance Stabilization Network (for Peripheral) R&S	ENV216	100072	June 13, 2016	June 12, 2017
50 ohms Terminator	N/A	EMC-02	Sep. 29, 2016	Sep. 28, 2017
RF Cable	5D-FB	COCCAB-001	Sep. 30, 2016	Sep. 29, 2017
10 dB PAD Mini-Circuits	HAT-10+	CONATT-004	June 20, 2016	June 19, 2017
Software BVADT	BVADT_Cond_ V7.3.7.4	NA	NA	NA

Note:

1. The calibration interval of the above test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in Shielded Room No. 1.
3 Tested Date: Mar. 30, 2017

4.2.3 Test Procedure

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.

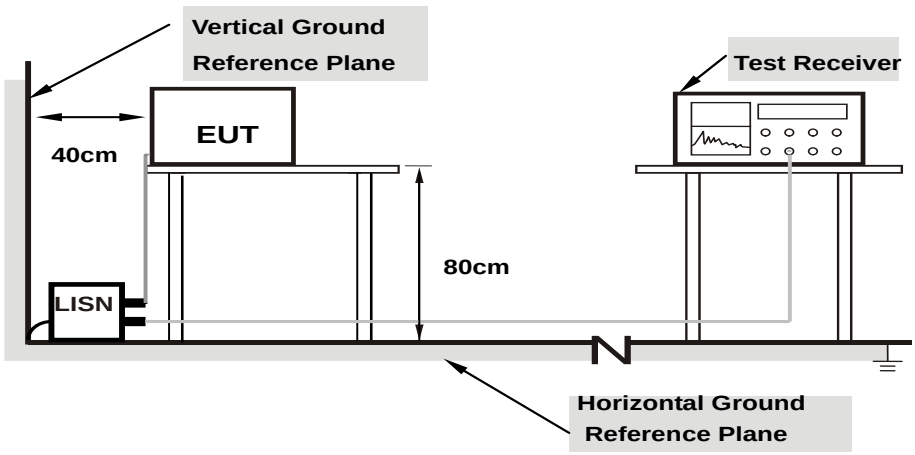
c. The frequency range from 150kHz to 30MHz was searched. Emission levels under (Limit - 20dB) was not recorded.

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

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 Condition

Same as 4.1.6.

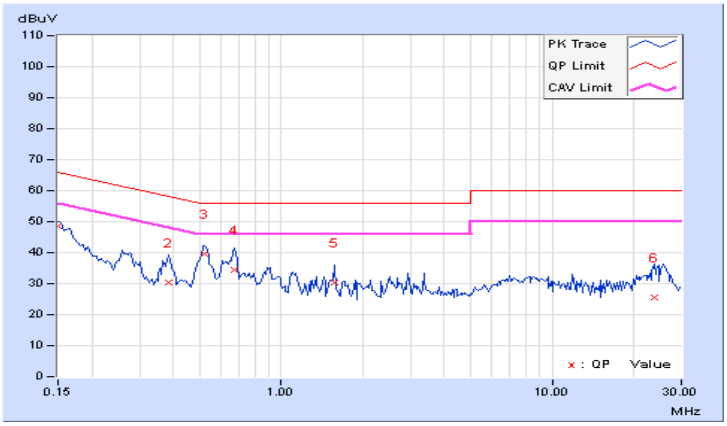
4.2.7 Test Results (Mode 1)

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

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.20	38.22	28.01	48.42	38.21	66.00	56.00	-17.58	-17.79
2	0.38438	10.24	20.10	12.16	30.34	22.40	58.18	48.18	-27.84	-25.78
3	0.52109	10.25	29.26	20.72	39.51	30.97	56.00	46.00	-16.49	-15.03
4	0.67344	10.27	24.15	14.92	34.42	25.19	56.00	46.00	-21.58	-20.81
5	1.57422	10.29	20.12	11.94	30.41	22.23	56.00	46.00	-25.59	-23.77
6	23.82422	11.76	13.63	5.75	25.39	17.51	60.00	50.00	-34.61	-32.49

REMARKS:

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

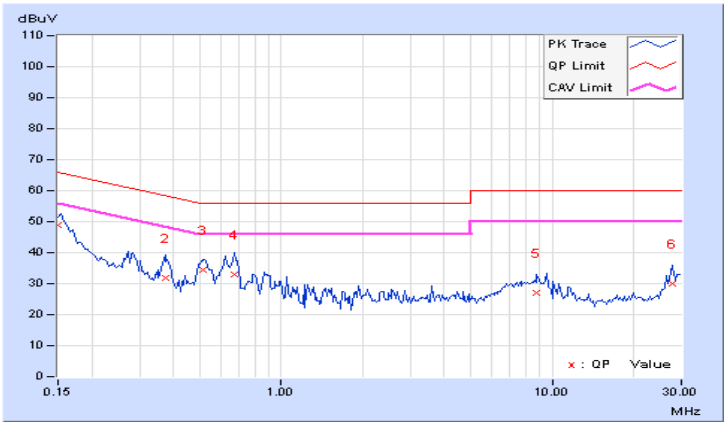


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.19	38.64	24.20	48.83	34.39	66.00	56.00	-17.17	-21.61
2	0.37266	10.23	21.53	10.27	31.76	20.50	58.44	48.44	-26.68	-27.94
3	0.51328	10.24	24.29	17.87	34.53	28.11	56.00	46.00	-21.47	-17.89
4	0.67344	10.25	22.55	10.55	32.80	20.80	56.00	46.00	-23.20	-25.20
5	8.75781	10.55	16.58	9.45	27.13	20.00	60.00	50.00	-32.87	-30.00
6	27.67969	11.40	18.60	10.19	30.00	21.59	60.00	50.00	-30.00	-28.41

REMARKS:

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



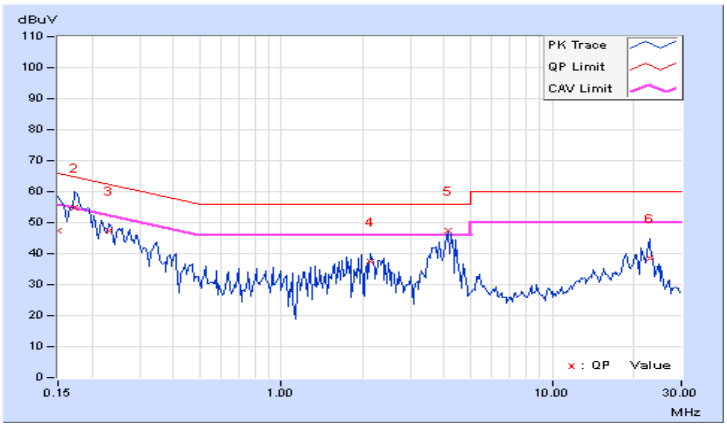
4.2.8 Test Results (Mode 2)

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

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.19	37.13	10.91	47.32	21.10	66.00	56.00	-18.68	-34.90
2	0.17344	10.19	44.51	37.91	54.70	48.10	64.79	54.79	-10.09	-6.69
3	0.23203	10.19	37.27	28.49	47.46	38.68	62.38	52.38	-14.92	-13.70
4	2.14844	10.24	27.05	21.07	37.29	31.31	56.00	46.00	-18.71	-14.69
5	4.12500	10.25	37.14	20.42	47.39	30.67	56.00	46.00	-8.61	-15.33
6	22.93750	11.41	27.02	18.59	38.43	30.00	60.00	50.00	-21.57	-20.00

REMARKS:

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

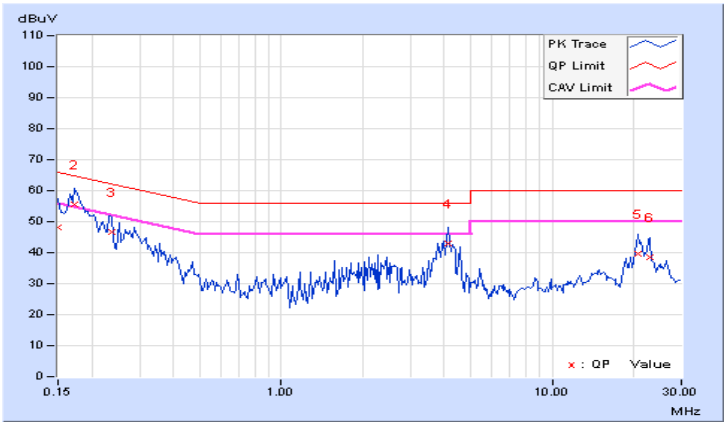


Phase	Neutral (N)	Detector Function	Quasi-Peak (QP) / Average (AV)

No	Freq.	Corr. Factor	Reading Value [dB (uV)]		Emission Level [dB (uV)]		Limit [dB (uV)]		Margin (dB)	
	[MHz]	(dB)	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15000	10.18	37.83	11.75	48.01	21.93	66.00	56.00	-17.99	-34.07
2	**0.17344**	**10.17**	**45.22**	**38.32**	**55.39**	**48.49**	**64.79**	**54.79**	**-9.40**	**-6.30**
3	0.23594	10.17	36.52	30.73	46.69	40.90	62.24	52.24	-15.55	-11.34
4	4.14063	10.17	32.92	17.53	43.09	27.70	56.00	46.00	-12.91	-18.30
5	20.82813	11.10	28.63	21.41	39.73	32.51	60.00	50.00	-20.27	-17.49
6	22.86719	11.09	27.30	20.70	38.39	31.79	60.00	50.00	-21.61	-18.21

REMARKS:

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



4.3 Transmit Power Measurment

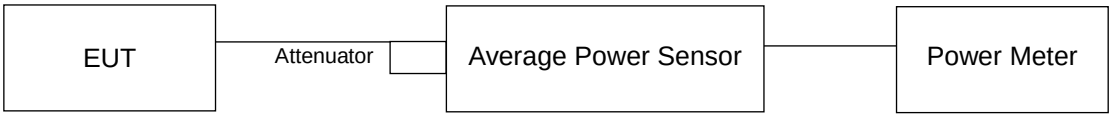
4.3.1 Limits of Transmit Power Measurement

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

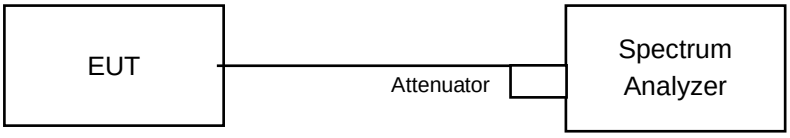
*B is the 26 dB emission bandwidth in megahertz

4.3.2 Test Setup

FOR POWER OUTPUT MEASUREMENT



FOR 26dB OCCUPIED BANDWIDTH



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

For Average Power Measurement

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

FOR 26dB OCCUPIED BANDWIDTH

1. Set RBW = approximately 1% of the emission bandwidth.
2. Set the VBW > RBW.
3. Detector = Peak.
4. Trace mode = max hold.
5. Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1%.

4.3.5 Deviation from Test Standard

No deviation.

4.3.6 EUT Operating Condition

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

4.3.7 Test Result

802.11a

Power Output:

Channel	Channel Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass/Fail
52	5260	101.625	20.07	24.00	Pass
60	5300	69.502	18.42	24.00	Pass
64	5320	44.157	16.45	24.00	Pass
100	5500	39.355	15.95	24.00	Pass
116	5580	112.72	20.52	24.00	Pass
140	5700	46.452	16.67	24.00	Pass

26dB BANDWIDTH:

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)
52	5260	54.02
60	5300	36.62
64	5320	20.93
100	5500	22.90
116	5580	49.86
140	5700	20.53

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	54.02	28.32 > 24
60	5300	36.62	26.63 > 24
64	5320	20.93	24.2 > 24
100	5500	22.90	24.59 > 24
116	5580	49.86	27.97 > 24
140	5700	20.53	24.12 > 24

802.11ac (VHT20)

Power Output:

Channel	Channel Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass/Fail
52	5260	100.693	20.03	24.00	Pass
60	5300	63.387	18.02	24.00	Pass
64	5320	34.356	15.36	24.00	Pass
100	5500	35.075	15.45	24.00	Pass
116	5580	103.514	20.15	24.00	Pass
140	5700	32.885	15.17	24.00	Pass

26dB BANDWIDTH:

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)
52	5260	55.63
60	5300	37.72
64	5320	21.32
100	5500	20.84
116	5580	55.52
140	5700	20.49

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
52	5260	55.63	28.45 > 24
60	5300	37.72	26.76 > 24
64	5320	21.32	24.28 > 24
100	5500	20.84	24.18 > 24
116	5580	55.52	28.44 > 24
140	5700	20.49	24.11 > 24

802.11ac (VHT40)

Power Output:

Channel	Channel Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass/Fail
54	5270	68.234	18.34	24.00	Pass
62	5310	25.41	14.05	24.00	Pass
102	5510	18.836	12.75	24.00	Pass
110	5550	46.132	16.64	24.00	Pass
134	5670	49.204	16.92	24.00	Pass

26dB BANDWIDTH:

Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)
54	5270	87.72
62	5310	42.67
102	5510	43.50
110	5550	84.61
134	5670	45.51

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
54	5270	87.72	30.43 > 24
62	5310	42.67	27.3 > 24
102	5510	43.50	27.38 > 24
110	5550	84.61	30.27 > 24
134	5670	45.51	27.58 > 24

802.11ac (VHT80)

Power Output:

Channel	Channel Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass/Fail
58	5290	22.439	13.51	24.00	Pass
106	5530	23.496	13.71	24.00	Pass
122	5610	35.81	15.54	24.00	Pass

26dB BANDWIDTH:

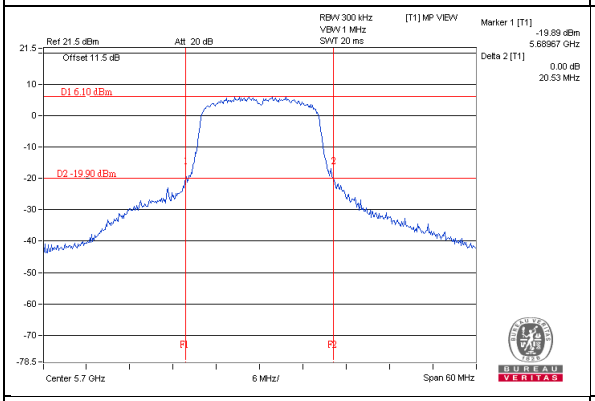
Channel	Channel Frequency (MHz)	26dBc Bandwidth (MHz)
58	5290	83.92
106	5530	84.07
122	5610	86.70

Note: For U-NII-2A, U-NII-2C Band output power limitation is determined based on 26dBc bandwidth

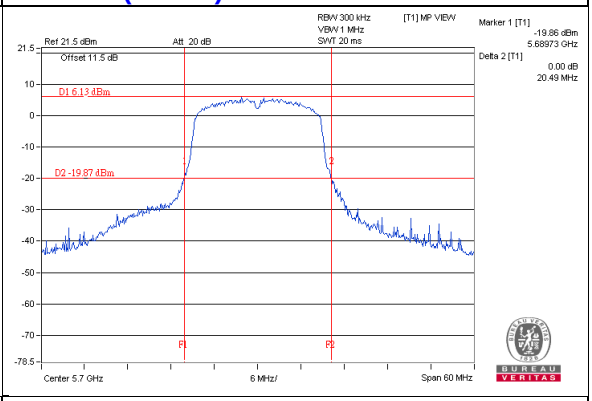
Power Limit = 11dBm + 10logB < U-NII-2A, U-NII-2C >			
Channel Number	Freq.(MHz)	Min. B(MHz)	Determined Conducted Limit (dBm)
58	5290	83.92	30.23 > 24
106	5530	84.07	30.24 > 24
122	5610	86.70	30.38 > 24

Spectrum Plot of Worst Value

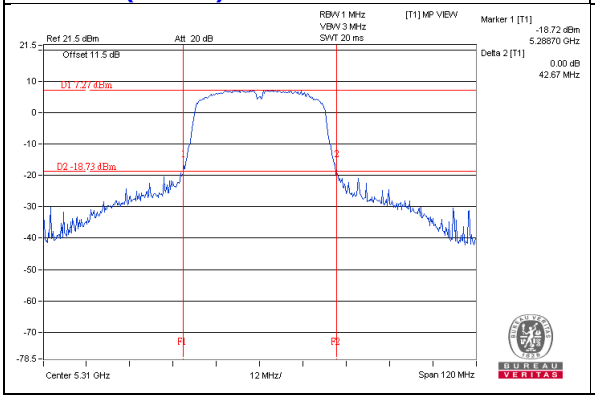
802.11a / CH140



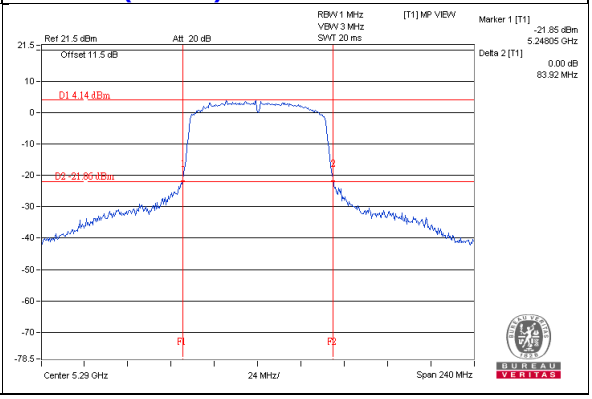
802.11ac (VHT20) / CH140



802.11ac (VHT40) / CH62

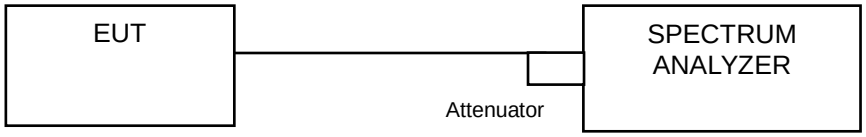


802.11ac (VHT80) / CH58



4.4 Occupied Bandwidth Measurement

4.4.1 Test Setup



4.4.2 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.4.3 Test Procedure

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

4.4.4 Test Results

802.11a

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
52	5260	36.08
60	5300	21.24
64	5320	16.44
100	5500	16.44
116	5580	34.08
140	5700	16.32

802.11ac (VHT20)

Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
52	5260	38.28
60	5300	20.40
64	5320	17.40
100	5500	17.52
116	5580	37.13
140	5700	17.40

802.11ac (VHT40)

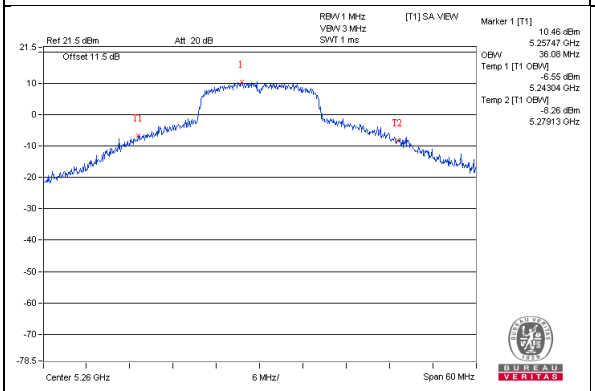
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
54	5270	50.64
62	5310	36.24
102	5510	36.24
110	5550	47.76
134	5670	36.24

802.11ac (VHT80)

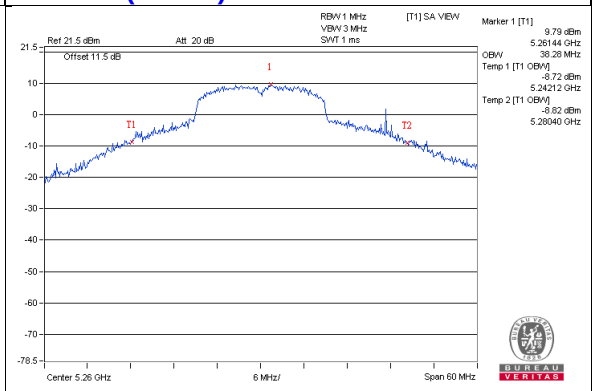
Channel	Channel Frequency (MHz)	Occupied Bandwidth (MHz)
58	5290	75.36
106	5530	75.36
122	5610	75.36

Spectrum Plot of Worst Value

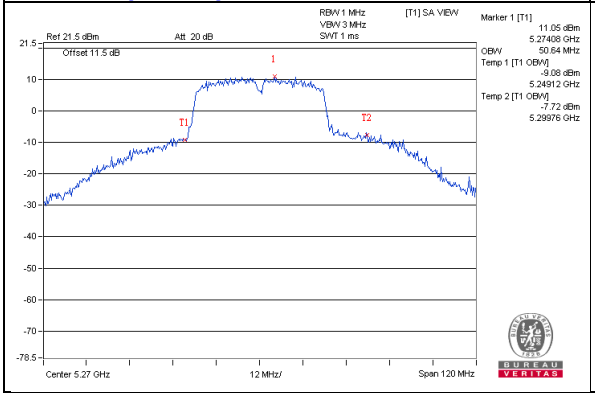
802.11a / CH52



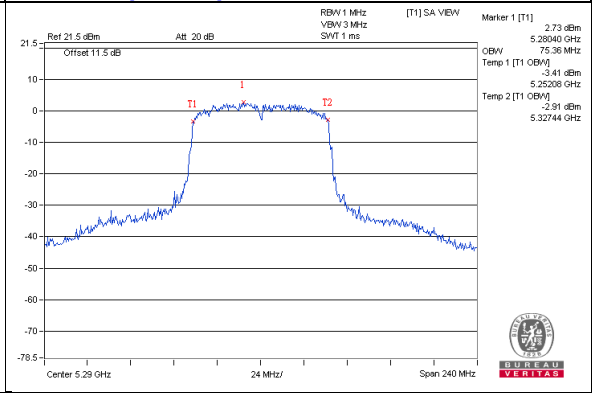
802.11ac (VHT20) / CH52



802.11ac (VHT40) / CH54



802.11ac (VHT80) / CH58

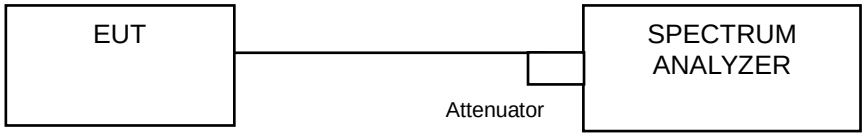


4.5 Peak Power Spectral Density Measurement

4.5.1 Limits of Peak Power Spectral Density Measurement

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

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.5.4 Test Procedure

802.11a, 802.11ac (VHT20), 802.11ac (VHT40)

Using method SA-1

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value

802.11ac (VHT80)

Using method SA-2

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value and add 10 log (1/duty cycle)

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

Same as Item 4.3.6.

4.5.7 Test Results

802.11a

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
52	5260	5.68	11.00	Pass
60	5300	4.53	11.00	Pass
64	5320	2.73	11.00	Pass
100	5500	2.00	11.00	Pass
116	5580	4.90	11.00	Pass
140	5700	1.49	11.00	Pass

802.11ac (VHT20)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
52	5260	5.14	11.00	Pass
60	5300	4.28	11.00	Pass
64	5320	1.03	11.00	Pass
100	5500	1.11	11.00	Pass
116	5580	4.86	11.00	Pass
140	5700	0.99	11.00	Pass

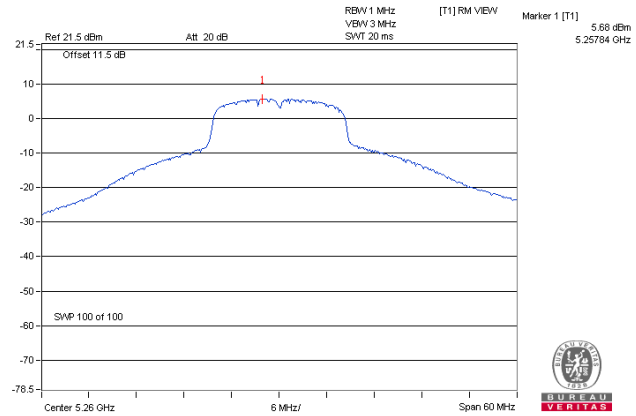
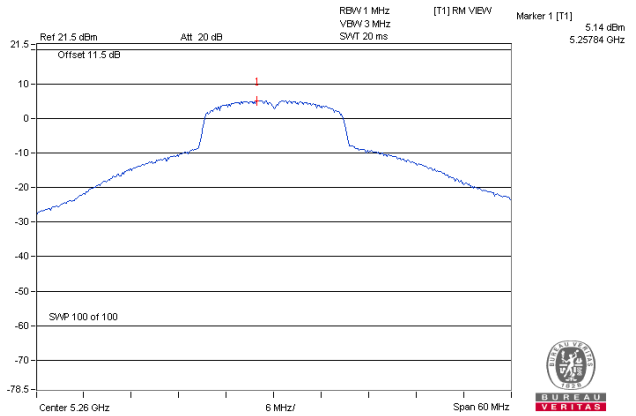
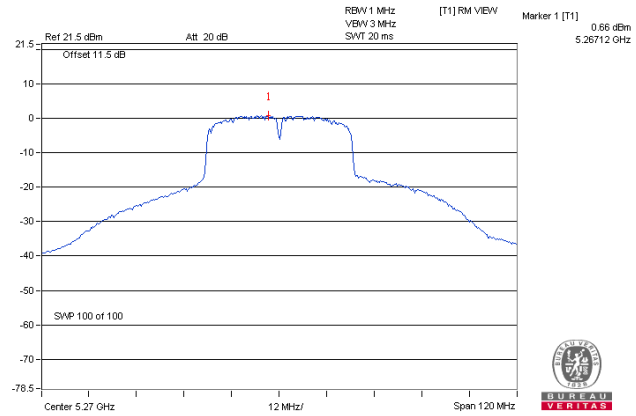
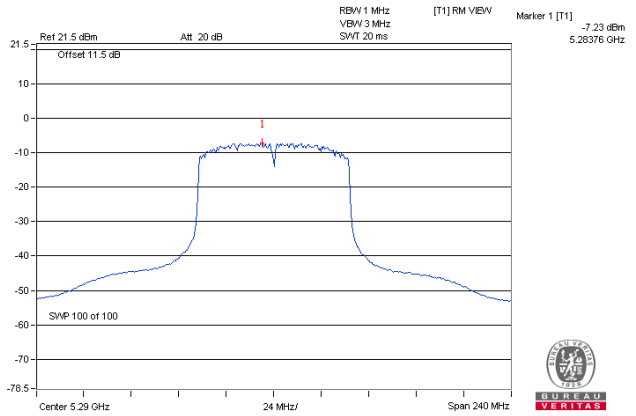
802.11ac (VHT40)

Chan.	Chan. Freq. (MHz)	PSD (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
54	5270	0.66	11.00	Pass
62	5310	-3.10	11.00	Pass
102	5510	-5.20	11.00	Pass
110	5550	-1.18	11.00	Pass
134	5670	-1.43	11.00	Pass

802.11ac (VHT80)

Chan.	Chan. Freq. (MHz)	PSD w/o Duty Factor (dBm/MHz)	Duty Factor (dB)	PSD With Duty Factor (dBm/MHz)	MAX. Limit (dBm/MHz)	Pass / Fail
58	5290	-7.23	0.10	-7.13	11.00	Pass
106	5530	-7.32	0.10	-7.21	11.00	Pass
122	5610	-7.73	0.10	-7.62	11.00	Pass

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

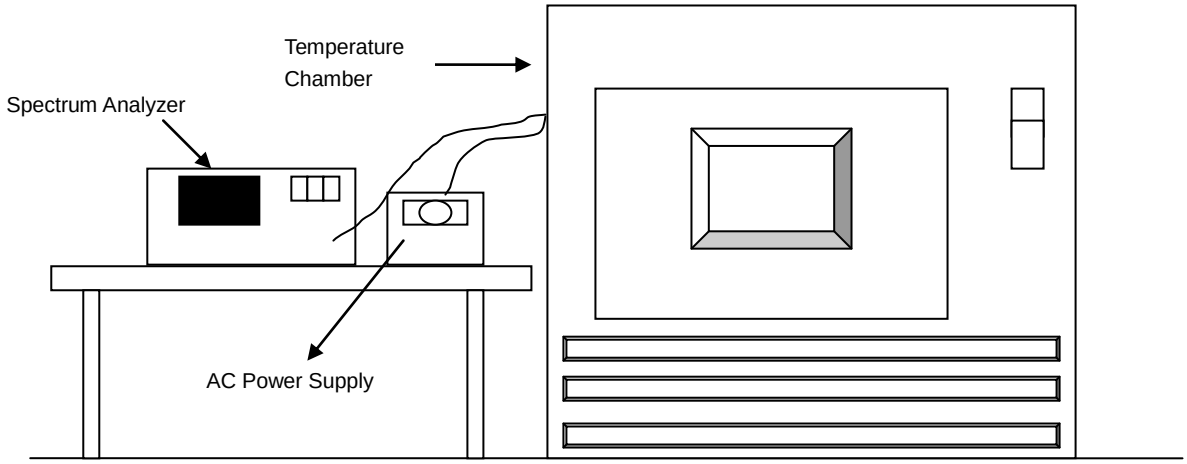
Spectrum Plot of Worst Value	
802.11a / CH52	**802.11ac (VHT20) / CH52**
	
802.11ac (VHT40) / CH54	**802.11ac (VHT80) / CH58**
	

4.6 Frequency Stability Measurement

4.6.1 Limits of Frequency Stability Measurement

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

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.6.4 Test Procedure

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

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

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

4.6.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5260 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
50	120	5259.9958	PASS	5259.995	PASS	5259.9937	PASS	5259.9915	PASS
40	120	5260.0202	PASS	5260.0187	PASS	5260.0179	PASS	5260.0204	PASS
30	120	5259.9967	PASS	5259.9943	PASS	5259.992	PASS	5259.9967	PASS
20	120	5259.9732	PASS	5259.9746	PASS	5259.9738	PASS	5259.9736	PASS
10	120	5260.0012	PASS	5260.0032	PASS	5260.0016	PASS	5260.0022	PASS
0	120	5260.0115	PASS	5260.012	PASS	5260.0125	PASS	5260.0098	PASS
-10	120	5260.0019	PASS	5260.0038	PASS	5260.0012	PASS	5260.0002	PASS
-20	120	5259.9893	PASS	5259.9904	PASS	5259.9889	PASS	5259.9908	PASS
-30	120	5259.999	PASS	5259.9986	PASS	5259.9987	PASS	5259.9945	PASS

Frequency Stability Versus Voltage									
Operating Frequency: 5260 MHz									
TEMP. (℃)	Power Supply (Vac)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail	Measured Frequency (MHz)	Pass/Fail
20	138	5259.9736	PASS	5259.9751	PASS	5259.9739	PASS	5259.973	PASS
	120	5259.9732	PASS	5259.9746	PASS	5259.9738	PASS	5259.9736	PASS
	102	5259.9737	PASS	5259.9755	PASS	5259.9735	PASS	5259.9736	PASS

5 Pictures of Test Arrangements

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

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 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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