

TEST REPORT

CERTIFICATE OF CONFORMITY

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)
47 CFR FCC Part 15, Subpart E (Section 15.407)

Report No.: RFBEIH-WTW-P24070284-6

FCC ID: P27XER10

Product: Comcast Xfinity WiFi 7 Tri-band Router

Brand: Comcast, Rogers, Cox, Sky

Model No.: XER10

Series Model: XER10xxxxxxx, SCER11BELxxxxxxx (the 1st x should be "blank" or "-"; the rest x could be 0 to 9, A to Z, a to z, "blank" or "-", for marketing purpose)

Received Date: 2024/7/10

Test Date: 2025/2/21

Issued Date: 2025/3/5

Applicant: Sercomm Corporation

Address: 8F, No. 3-1, YuanQu St., NanKang, Taipei 115, Taiwan, R.O.C.

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

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

Test Location: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

FCC Registration / 198487 / TW2021

Designation Number:

Approved by:

Jeremy Lin

Jeremy Lin / Project Engineer

, Date:

2025/3/5

This test report consists of 25 pages in total. It may be duplicated completely for legal use with the approval of the applicant. It should not be reproduced except in full, without the written approval of our laboratory. The test results in the report only apply to the tested sample. The test results in this report are traceable to the national or international standards.



Prepared by : Annie Chang / Senior Specialist

This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

Table of Contents

Release Control Record	3
1 Certificate.....	4
2 Summary of Test Results	5
2.1 Measurement Uncertainty	5
2.2 Supplementary Information	5
3 General Information	6
3.1 General Description of EUT	6
3.2 Antenna Description of EUT	7
3.3 Test Mode Applicability and Tested Channel Detail.....	8
3.4 Test Program Used and Operation Descriptions	9
3.5 Connection Diagram of EUT and Peripheral Devices	9
3.6 Configuration of Peripheral Devices and Cable Connections	9
4 Test Instruments	10
4.1 Unwanted Emissions below 1 GHz	10
4.2 Unwanted Emissions above 1 GHz.....	11
5 Limits of Test Items.....	12
5.1 Unwanted Emissions below 1 GHz	12
5.2 Unwanted Emissions above 1 GHz.....	13
6 Test Arrangements.....	15
6.1 Unwanted Emissions below 1 GHz	15
6.1.1 Test Setup	15
6.1.2 Test Procedure.....	16
6.2 Unwanted Emissions above 1 GHz.....	17
6.2.1 Test Setup	17
6.2.2 Test Procedure.....	17
7 Test Results of Test Item	18
7.1 Unwanted Emissions below 1 GHz	18
7.2 Unwanted Emissions above 1 GHz.....	22
8 Pictures of Test Arrangements	24
9 Information of the Testing Laboratories	25

Release Control Record

Issue No.	Description	Date Issued
RFBEIH-WTW-P24070284-6	Original release.	2025/3/5

1 Certificate

Product: Comcast Xfinity WiFi 7 Tri-band Router

Brand: Comcast, Rogers, Cox, Sky

Test Model: XER10

Series Model: XER10xxxxxxx, SCER11BELxxxxxxx (the 1st x should be "blank" or "-"; the rest x could be 0 to 9, A to Z, a to z, "blank" or "-", for marketing purpose)

Sample Status: Engineering sample

Applicant: Sercomm Corporation

Test Date: 2025/2/21

Standard: 47 CFR FCC Part 15, Subpart C (Section 15.247)
47 CFR FCC Part 15, Subpart E (Section 15.407)

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

2 Summary of Test Results

Standard / Clause	Test Item	Result	Remark
15.205 /15.209 /15.247(d) 15.407(b)(9)	Unwanted Emissions below 1 GHz	Pass	Meet the requirement of limit.
15.205 /15.209 /15.247(d) 15.407(b) (1/2/3/4(i)/10) 15.407(b)(6)/15.407(b)(10)	Unwanted Emissions above 1 GHz	Pass	Meet the requirement of limit.

Note: Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

2.1 Measurement Uncertainty

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

Parameter	Specification	Uncertainty (±)
Radiated Spurious Emissions below 1GHz	9 kHz ~ 30 MHz	2.55 dB
	30 MHz ~ 1 GHz	5.77 dB
Radiated Spurious Emissions above 1GHz	1 GHz ~ 6 GHz	4.71 dB
	6 GHz ~ 18 GHz	5.3 dB
	18 GHz ~ 40 GHz	4.98 dB

The other instruments specified are routine verified to remain within the calibrated levels, no measurement uncertainty is required to be calculated.

2.2 Supplementary Information

There is not any deviation from the test standards for the test method, and no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Comcast Xfinity WiFi 7 Tri-band Router	
Brand	Comcast, Rogers, Cox, Sky	
Test Model	XER10	
Series Model	XER10xxxxxxx, SCER11BELxxxxxxx (the 1st x should be "blank" or "-"; the rest x could be 0 to 9, A to Z, a to z, "blank" or "-", for marketing purpose)	
Model Difference	Marketing Differentiation	
Modulation Technology	BT-LE	DTS
	WLAN	DSSS, OFDM, OFDMA
Operating Frequency	BT-LE	2.402 GHz ~ 2.48 GHz
	Zigbee	2.405 GHz ~ 2.475 GHz
	Matter	2.405 GHz ~ 2.475 GHz
	WLAN	2.412 GHz ~ 2.462 GHz 5.18 GHz ~ 5.25 GHz, 5.25 GHz ~ 5.32 GHz, 5.5 GHz ~ 5.72 GHz 5.745 GHz ~ 5.825 GHz 5.955 GHz ~ 6.415 GHz, 6.425 GHz ~ 6.525 GHz, 6.535 GHz ~ 6.865 GHz, 6.875 GHz ~ 7.115 GHz

Note:

1. The EUT uses following accessories.

Item	Brand	Model	Specification
AC Adapter 1	LEADER	ML55-3120460-A1	AC I/P: 100-120V, 50/60Hz, 1.5A DC O/P: 12.0V, 4.6A Non-shielded DC cable (1.8m)
AC Adapter 2	Netbit	NBC56B120460VU	AC I/P: 120V, 60Hz, 1.5A DC O/P: 12.0V, 4.6A Non-shielded DC cable (1.8m)

2. There are Bluetooth, Zigbee, Matter and WLAN (2.4 GHz & 5 GHz & 6GHz) technology used for the EUT.

3. Simultaneously transmission combination.

Combination	Technology		
1	WLAN (2.4 GHz)	WLAN (5 GHz)	WLAN (6 GHz)

Note: The emission of the simultaneous operation has been evaluated and no non-compliance was found.

4. The directional antenna gain information is declared by manufacturer and more detailed features description please refer to operation description of antenna specifications exhibit.

5. 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 Antenna Description of EUT

The antenna information is listed as below.

Antenna NO.	RF Chain NO.	Brand	Model	Antenna Net Gain(dBi)	Frequency range	Antenna Type	Connector Type
1	DB1	Sercomm	61720044WA	3.5	2.4~2.5	Dipole	ipex(MHF)
				4.9	5.15~5.85	Dipole	ipex(MHF)
2	DB2	Sercomm	61720045WA	3.5	2.4~2.5	Dipole	ipex(MHF)
				4.6	5.15~5.85	Dipole	ipex(MHF)
3	DB3	Sercomm	61720046WA	4.8	2.4~2.5	Dipole	ipex(MHF)
				4.7	5.15~5.85	Dipole	ipex(MHF)
4	DB4	Sercomm	61720047WA	4.8	2.4~2.5	Dipole	ipex(MHF)
				4.6	5.15~5.85	Dipole	ipex(MHF)
5	Chain 0	Sercomm	61720040WA	4.3	5.925~7.125	Dipole	ipex(MHF)
6	Chain 1	Sercomm	61720041WA	3.6	5.925~7.125	Dipole	ipex(MHF)
7	Chain 2	Sercomm	61720042WA	4.5	5.925~7.125	Dipole	ipex(MHF)
8	Chain 3	Sercomm	61720043WA	4.2	5.925~7.125	Dipole	ipex(MHF)
9	ZigBee1	Sercomm	6172003YWA	4	2.4~2.5	Dipole	ipex(MHF)
10	ZigBee2	Sercomm	6172003ZWA	4.3	2.4~2.5	Dipole	ipex(MHF)
11	BT	-	-	3.9	2.4~2.5	PIFA	none

* Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

3.3 Test Mode Applicability and Tested Channel Detail

Pre-Scan:	1. EUT has Adapter1(LEADER)/ Adapter2(Netbit). Pre-scan these adapter and find the worst case as a representative test condition.
Worst Case:	1. Adapter1(LEADER)/ Adapter2(Netbit) Worst Condition: Adapter1(LEADER).

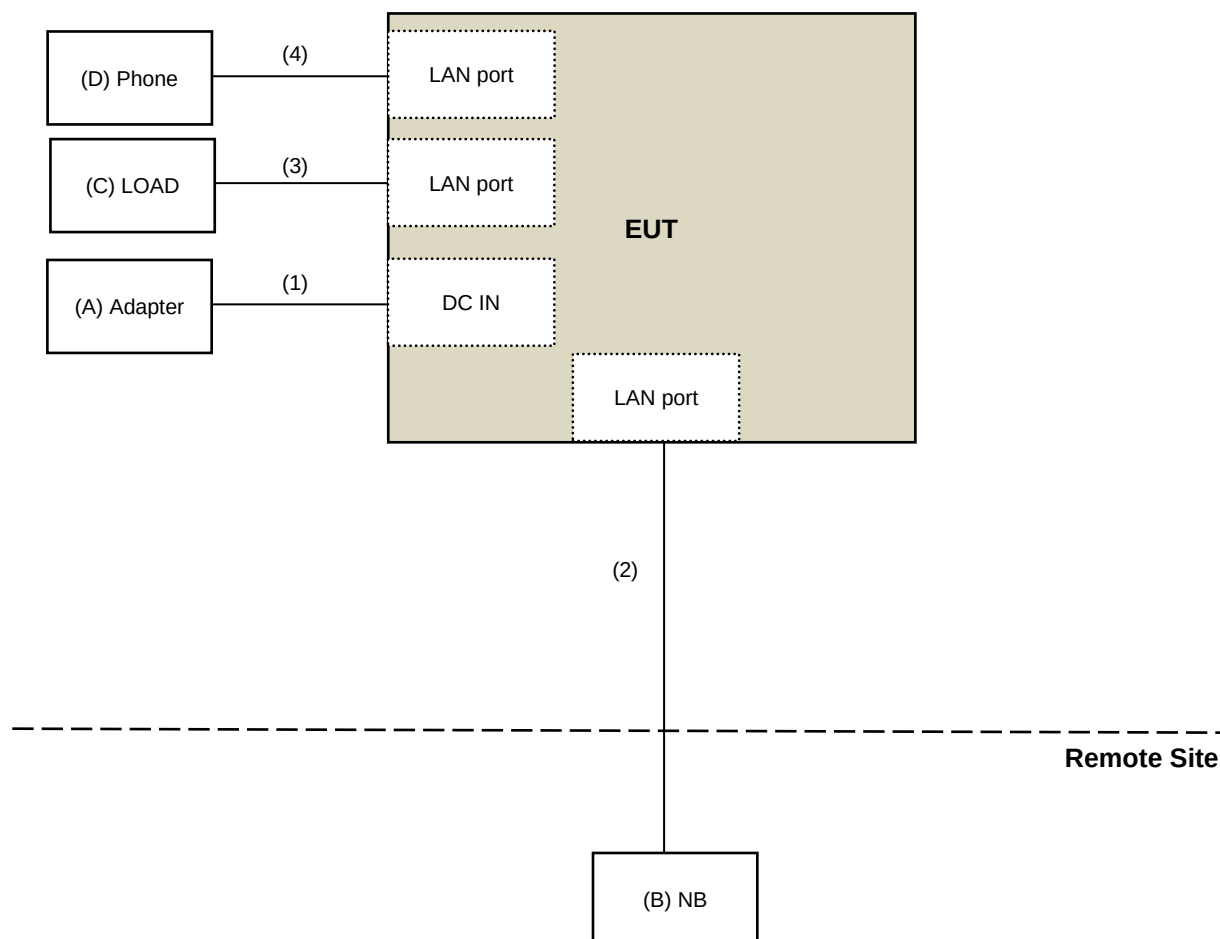
Following channel(s) was (were) selected for the final test as listed below:

Test Item	EUT Configure Mode	Combination	Mode	Tested Channel
Unwanted Emissions below 1 GHz	A	1	802.11be (EHT20)	6
			802.11be (EHT20)	149
			802.11be (EHT320)	95
	B	1	802.11be (EHT20)	6
			802.11be (EHT40)	149
			802.11be (EHT320)	95
Unwanted Emissions above 1 GHz	A	1	802.11be (EHT20)	6
				149
			802.11be (EHT320)	95
	B		802.11be (EHT20)	6
			802.11be (EHT40)	149
			802.11be (EHT320)	95
EUT Configure Mode:	A	CDD Mode		
	B	Beamforming Mode		

3.4 Test Program Used and Operation Descriptions

Controlling software (accessMTool 3.3.0.8) has been activated to set the EUT under transmission condition continuously at specific channel frequency.

3.5 Connection Diagram of EUT and Peripheral Devices



3.6 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A	Adapter	LEADER	ML55-3120460-A1	N/A	N/A	Supplied by applicant
B	NB	DELL	LA65NS2-01	N/A	N/A	Provided by Lab
C	LOAD	BV	BV	N/A	N/A	Provided by Lab
D	Phone	ISit0	IS-333	N/A	N/A	Provided by Lab

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1	DC cable	1	1.8	N	0	Supplied by applicant
2	LAN cable	1	10	N	0	Provided by Lab
3	LAN cable	4	1.5	N	0	Provided by Lab
4	LAN cable	1	2.17	N	0	Provided by Lab

4 Test Instruments

The calibration interval of the all test instruments are 12 months and the calibrations are traceable to NML/ROC and NIST/USA.

4.1 Unwanted Emissions below 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Bi_Log Antenna Schwarzbeck	VULB 9168	137	2024/10/9	2025/10/8
Coupling / Decoupling Network Schwarzbeck	CDNE-M2	00097	2024/5/28	2025/5/27
	CDNE-M3	00091	2024/5/28	2025/5/27
MXE EMI Receiver Keysight	N9038A	MY55420137	2024/5/8	2025/5/7
Preamplifier Agilent	8447D	2944A11064	2025/2/14	2026/2/13
Preamplifier EMCI	EMC001340	980269	2024/6/25	2025/6/24
Radiating Loop Antenna TESEQ	RLA 6120-20	80002	2024/7/30	2025/7/29
RF Coaxial Cable Pacific	8D-FB	Cable-CH6-02	2024/6/25	2025/6/24
Signal Analyzer R&S	FSV40	101544	2024/6/20	2025/6/19
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
	Radiated_V8.7.08	N/A	N/A	N/A
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

1. The test was performed in Linkou 966 Chamber 6 (CH 6).
2. Tested Date: 2025/2/21

4.2 Unwanted Emissions above 1 GHz

Description Manufacturer	Model No.	Serial No.	Calibrated Date	Calibrated Until
Boresight antenna tower fixture BV	BAF-02	6	N/A	N/A
High Pass Filter Wainwright	WHK 3.1/18G-10SS	SN 8	2024/5/24	2025/5/23
Horn Antenna EMCO	3115	00028257	2024/11/10	2025/11/9
Horn Antenna ETS-Lindgren	3117-PA	00215857	2024/11/10	2025/11/9
Horn Antenna Schwarzbeck	BBHA 9170	212	2024/10/18	2025/10/17
		BBHA9170190	2024/11/10	2025/11/9
MXE EMI Receiver Keysight	N9038A	MY55420137	2024/5/8	2025/5/7
Notch Filter Micro-Tronics	BRC50703-01	010	2024/5/24	2025/5/23
	BRM17690	005	2024/5/24	2025/5/23
Preamplifier EMCI	EMC0126545	980076	2025/2/14	2026/2/13
	EMC184045B	980175	2024/8/25	2025/8/24
		980235	2025/2/14	2026/2/13
Preamplifier HP	8449B	3008A01201	2025/2/14	2026/2/13
RF Coaxial Cable EMCI	EMC104	190801	2024/7/5	2025/7/4
		190804	2024/7/5	2025/7/4
RF Coaxial Cable EMEC	EM102-KMKM-100	02	2024/7/5	2025/7/4
RF Coaxial Cable HUBER+SUHNER	SF-104	Cable-CH6-01	2024/7/5	2025/7/4
Signal Analyzer R&S	FSV40	101042	2024/9/12	2025/9/11
		101544	2024/6/20	2025/6/19
Software BVADT	Radiated_V7.7.1.1.1	N/A	N/A	N/A
	Radiated_V8.7.08	N/A	N/A	N/A
Tower ADT	AT100	0306	N/A	N/A
Turn Table ADT	TT100	0306	N/A	N/A

Notes:

1. The test was performed in Linkou 966 Chamber 6 (CH 6).
2. Tested Date: 2025/2/21

5 Limits of Test Items

5.1 Unwanted Emissions below 1 GHz

For FCC 15.247:

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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

For FCC 15.407:

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

Notes:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).

5.2 Unwanted Emissions above 1 GHz

For FCC 15.247:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
Above 960	500	3

Notes:

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 1000 MHz, 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 20 dB under any condition of modulation.

For FCC 15.407 transmitters operating in the 5.150-5.850 GHz band:

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)
Above 960	500	3

Notes:

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 1000 MHz, 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 20 dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Applicable To	Limit	
789033 D02 General UNII Test Procedure New Rules v02r01	Field Strength at 3 m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)

Applicable To	EIRP Limit	Equivalent Field Strength at 3 m
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m) *
15.407(b)(2)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m) *
15.407(b)(3)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m) *
15.407(b)(4)(i)	PK: -27 (dBm/MHz) ^{*1} PK: 10 (dBm/MHz) ^{*2} PK: 15.6 (dBm/MHz) ^{*3} PK: 27 (dBm/MHz) ^{*4}	PK: 68.2 (dBμV/m) ^{*1} PK: 105.2 (dBμV/m) ^{*2} PK: 110.8 (dBμV/m) ^{*3} PK: 122.2 (dBμV/m) ^{*4}

^{*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.

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

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

For FCC 15.407 transmitters operating in the 5.925-7.125 GHz band:

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)
Above 960	500	3

Notes:

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 1000 MHz, 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 20 dB under any condition of modulation.

Limits of unwanted emission out of the restricted bands

Frequencies (MHz)	EIRP Limit	Equivalent Field Strength at 3 m
5925 MHz > F > 7125 MHz	Peak: -7 (dBm/MHz)	88.2 (dBuV/m)
	Average: -27 (dBm/MHz)	68.2 (dBuV/m)

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

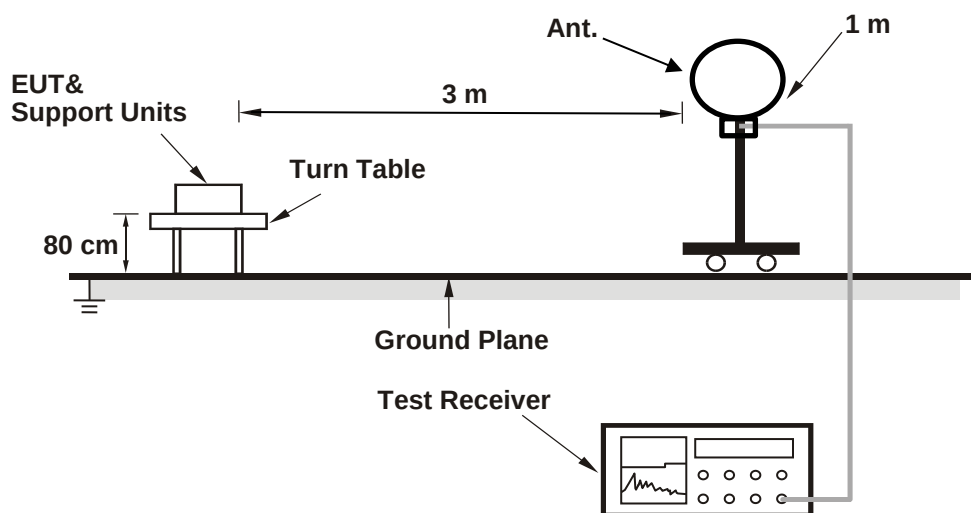
$$E = \frac{1000000\sqrt{30P}}{3} \quad \mu\text{V/m, where P is the eirp (Watts).}$$

6 Test Arrangements

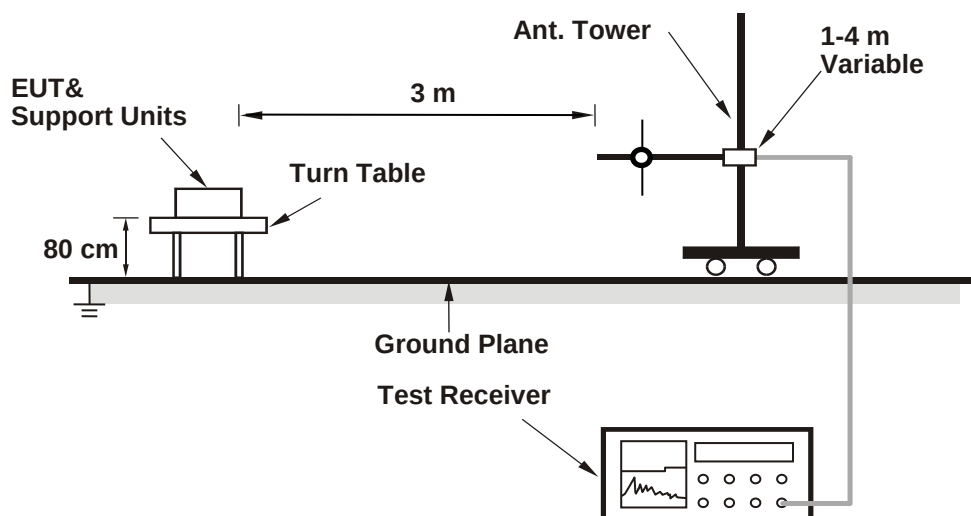
6.1 Unwanted Emissions below 1 GHz

6.1.1 Test Setup

For Radiated emission below 30 MHz



For Radiated emission above 30 MHz



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

6.1.2 Test Procedure

For Radiated emission below 30 MHz

- a. The EUT was placed on the top of a rotating table 0.8 meters 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. Parallel, perpendicular, and ground-parallel orientations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak Detect Function and Specified Bandwidth with Maximum Hold Mode, except for the frequency band (9 kHz to 90 kHz and 110 kHz to 490 kHz) set to average detect function and peak detect function.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 200 Hz at frequency below 150 kHz.
2. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 9 kHz or 10 kHz at frequency (150 kHz to 30 MHz).
3. All modes of operation were investigated and the worst-case emissions are reported.

For Radiated emission above 30 MHz

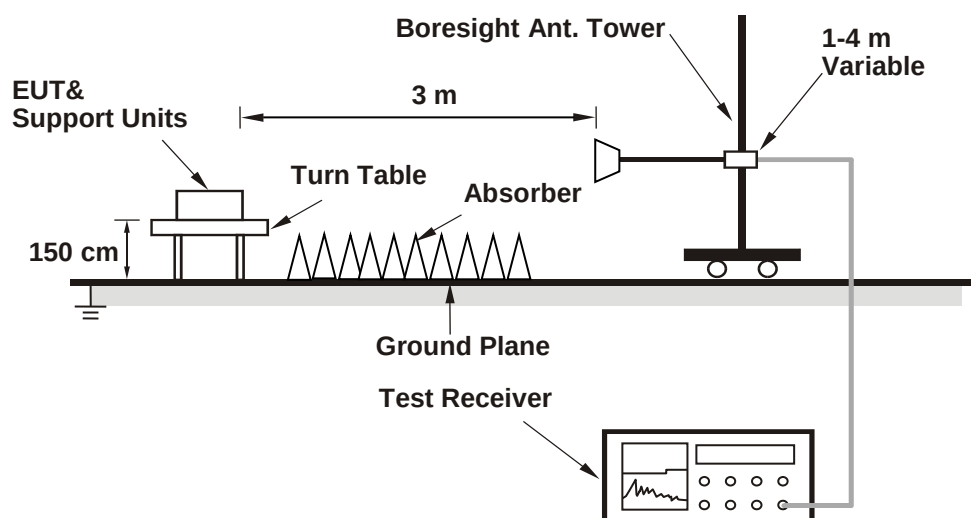
- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the 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.

Notes:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. All modes of operation were investigated and the worst-case emissions are reported.

6.2 Unwanted Emissions above 1 GHz

6.2.1 Test Setup



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

6.2.2 Test Procedure

- The EUT was placed on the top of a rotating table 1.5 meters above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
- The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- 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.
- 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.
- The test-receiver system was set to peak and average detects 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.

Notes:

- The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) and Average detection (AV) at frequency above 1 GHz.
- All modes of operation were investigated and the worst-case emissions are reported.

7 Test Results of Test Item

7.1 Unwanted Emissions below 1 GHz

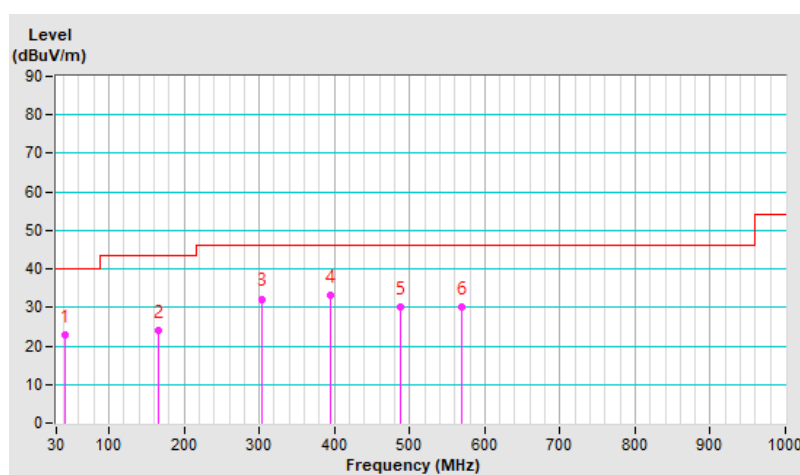
Mode A

RF Mode	802.11be (EHT20) 802.11be (EHT20) 802.11be (EHT320)	Channel	CH 6 : 2437 MHz CH 149 : 5745 MHz CH 95 : 6425 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	42.56	22.9 QP	40.0	-17.1	1.96 H	267	31.8	-8.9
2	166.38	24.0 QP	43.5	-19.5	1.27 H	77	31.5	-7.5
3	303.73	32.2 QP	46.0	-13.8	1.35 H	255	37.3	-5.1
4	395.01	33.3 QP	46.0	-12.7	1.86 H	245	36.6	-3.3
5	487.06	30.1 QP	46.0	-15.9	1.78 H	267	31.2	-1.1
6	569.47	30.2 QP	46.0	-15.8	1.68 H	142	29.7	0.5

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

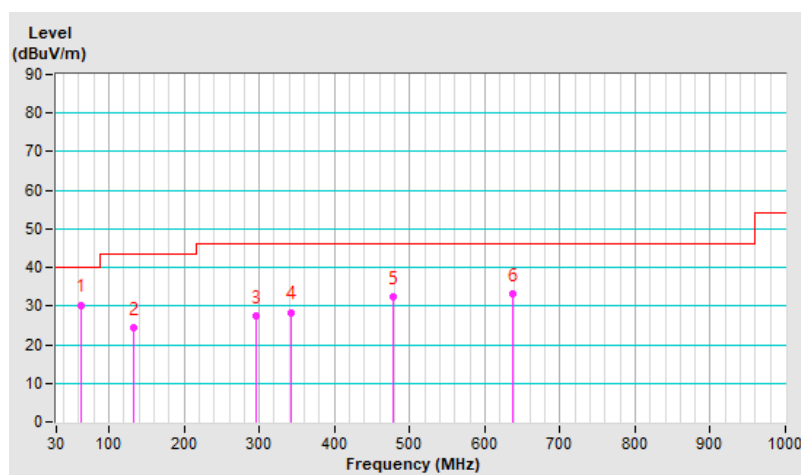


RF Mode	802.11be (EHT20) 802.11be (EHT20) 802.11be (EHT320)	Channel	CH 6 : 2437 MHz CH 149 : 5745 MHz CH 95 : 6425 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	62.11	30.3 QP	40.0	-9.7	1.13 V	211	39.6	-9.3
2	133.31	24.5 QP	43.5	-19.0	1.28 V	198	33.2	-8.7
3	295.39	27.4 QP	46.0	-18.6	1.56 V	166	32.9	-5.5
4	343.12	28.4 QP	46.0	-17.6	1.43 V	18	32.8	-4.4
5	478.29	32.5 QP	46.0	-13.5	1.39 V	261	33.8	-1.3
6	637.46	33.1 QP	46.0	-12.9	1.78 V	83	30.4	2.7

Remarks:

1. Emission Level(dBuV/m) = Raw Value(dBuV) + Correction Factor(dB/m)
2. Correction Factor(dB/m) = Antenna Factor(dB/m) + Cable Factor(dB) – Pre-Amplifier Factor(dB)
3. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



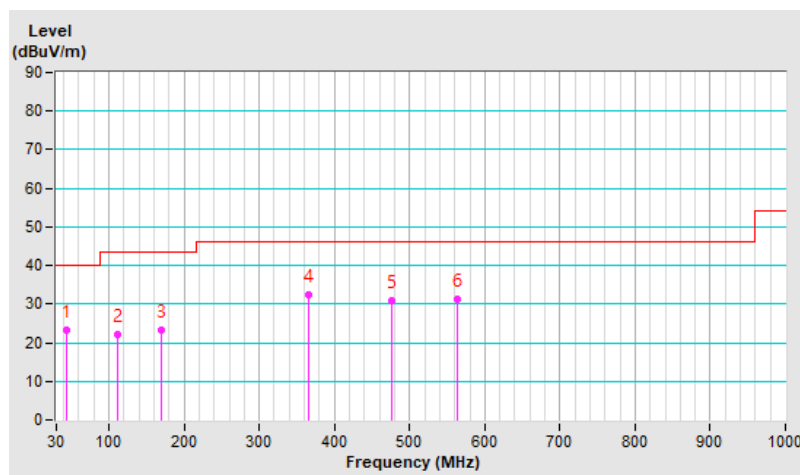
Mode B

RF Mode	802.11be (EHT20) 802.11be (EHT20) 802.11be (EHT320)	Channel	CH 6 : 2437 MHz CH 149 : 5745 MHz CH 95 : 6425 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	42.90	23.4 QP	40.0	-16.6	1.86 H	165	32.3	-8.9
2	110.70	22.2 QP	43.5	-21.3	1.72 H	101	33.5	-11.3
3	169.97	23.2 QP	43.5	-20.3	1.38 H	258	31.0	-7.8
4	365.23	32.3 QP	46.0	-13.7	1.42 H	249	36.2	-3.9
5	475.96	30.8 QP	46.0	-15.2	1.68 H	129	32.1	-1.3
6	563.60	31.2 QP	46.0	-14.8	1.99 H	234	30.9	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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.

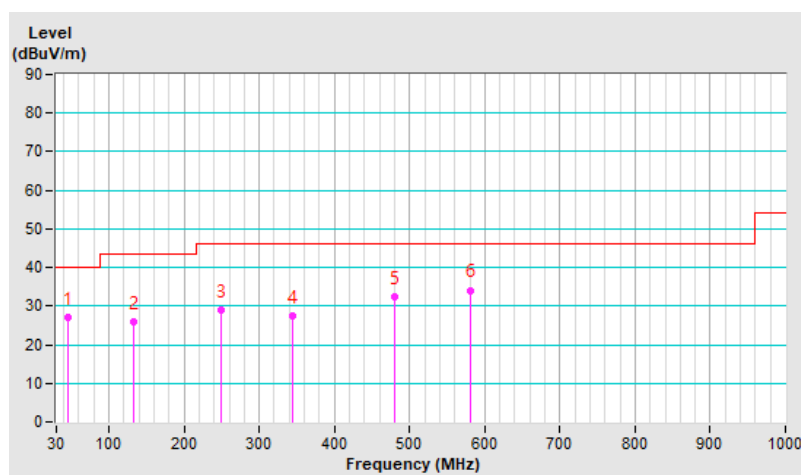


RF Mode	802.11be (EHT20) 802.11be (EHT20) 802.11be (EHT320)	Channel	CH 6 : 2437 MHz CH 149 : 5745 MHz CH 95 : 6425 MHz
Frequency Range	30 MHz ~ 1 GHz	Detector Function & Bandwidth	QP: RB=120kHz, DET=Quasi-Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	45.96	26.9 QP	40.0	-13.1	1.12 V	160	35.5	-8.6
2	132.77	25.9 QP	43.5	-17.6	1.46 V	193	34.7	-8.8
3	250.00	28.9 QP	46.0	-17.1	1.78 V	160	36.3	-7.4
4	343.65	27.5 QP	46.0	-18.5	1.35 V	360	31.9	-4.4
5	480.76	32.5 QP	46.0	-13.5	1.69 V	97	33.7	-1.2
6	580.91	34.1 QP	46.0	-11.9	1.28 V	118	33.0	1.1

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. Margin value = Emission Level – Limit value
4. The other emission levels were very low against the limit of frequency range 30 MHz ~ 1 GHz.
5. The frequency range 9 kHz ~ 30 MHz: all emissions are more than 20 dB below the limit, therefore do not be recorded in this report.



7.2 Unwanted Emissions above 1 GHz

Mode A

RF Mode	802.11be (EHT20) 802.11be (EHT20) 802.11be (EHT320)	Channel	CH 6 : 2437 MHz CH 149 : 5745 MHz CH 95 : 6425 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4874.00	48.0 PK	74.0	-26.0	3.18 H	165	40.5	7.5
2	4874.00	38.8 AV	54.0	-15.2	3.18 H	165	31.3	7.5
3	#5639.30	61.0 PK	68.2	-7.2	3.43 H	315	52.0	9.0
4	#5961.35	60.0 PK	68.2	-8.2	3.43 H	315	51.0	9.0
5	11490.00	56.8 PK	74.0	-17.2	3.06 H	298	39.6	17.2
6	11490.00	44.3 AV	54.0	-9.7	3.06 H	298	27.1	17.2
7	#12850.00	57.2 PK	88.2	-31.0	1.90 H	311	37.0	20.2
8	#12850.00	44.9 AV	68.2	-23.3	1.90 H	311	24.7	20.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4874.00	47.7 PK	74.0	-26.3	1.53 V	120	40.2	7.5
2	4874.00	37.6 AV	54.0	-16.4	1.53 V	120	30.1	7.5
3	#5648.32	61.1 PK	68.2	-7.1	2.51 V	192	52.2	8.9
4	#5969.90	59.5 PK	68.2	-8.7	2.51 V	192	50.5	9.0
5	11490.00	57.3 PK	74.0	-16.7	2.33 V	15	40.1	17.2
6	11490.00	44.7 AV	54.0	-9.3	2.33 V	15	27.5	17.2
7	#12850.00	58.0 PK	88.2	-30.2	2.09 V	181	37.8	20.2
8	#12850.00	45.6 AV	68.2	-22.6	2.09 V	181	25.4	20.2

Remarks:

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

Mode B

RF Mode	802.11be (EHT20) 802.11be (EHT20) 802.11be (EHT320)	Channel	CH 6 : 2437 MHz CH 149 : 5745 MHz CH 95 : 6425 MHz
Frequency Range	1 GHz ~ 40 GHz	Detector Function & Bandwidth	PK: RB=1 MHz, VB=3 MHz, DET=Peak AV: RB=1 MHz, VB=10 Hz, DET=Peak
Input Power	120 Vac, 60 Hz	Environmental Conditions	25 °C, 75 % RH
Tested By	Jed Wu		

Antenna Polarity & Test Distance : Horizontal at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4874.00	47.0 PK	74.0	-27.0	3.30 H	171	39.5	7.5
2	4874.00	37.2 AV	54.0	-16.8	3.30 H	171	29.7	7.5
3	#5640.40	53.9 PK	68.2	-14.3	1.69 H	247	44.9	9.0
4	#5954.40	54.6 PK	68.2	-13.6	1.69 H	247	45.5	9.1
5	11490.00	55.1 PK	74.0	-18.9	1.04 H	128	37.9	17.2
6	11490.00	45.9 AV	54.0	-8.1	1.04 H	128	28.7	17.2
7	#12850.00	57.4 PK	88.2	-30.8	1.19 H	149	37.2	20.2
8	#12850.00	47.5 AV	68.2	-20.7	1.19 H	149	27.3	20.2
Antenna Polarity & Test Distance : Vertical at 3 m								
No	Frequency (MHz)	Emission Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Antenna Height (m)	Table Angle (Degree)	Raw Value (dBuV)	Correction Factor (dB/m)
1	4874.00	47.8 PK	74.0	-26.2	1.54 V	138	40.3	7.5
2	4874.00	37.6 AV	54.0	-16.4	1.54 V	138	30.1	7.5
3	#5649.20	54.7 PK	68.2	-13.5	2.38 V	14	45.8	8.9
4	#5944.40	53.8 PK	68.2	-14.4	2.38 V	14	44.7	9.1
5	11490.00	55.5 PK	74.0	-18.5	1.77 V	300	38.3	17.2
6	11490.00	46.0 AV	54.0	-8.0	1.77 V	300	28.8	17.2
7	#12850.00	57.9 PK	88.2	-30.3	1.48 V	174	37.7	20.2
8	#12850.00	47.8 AV	68.2	-20.4	1.48 V	174	27.6	20.2

Remarks:

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

8 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo)

9 Information of the Testing Laboratories

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

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

Lin Kou EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@bureauveritas.com

Web Site: <http://ee.bureauveritas.com.tw>

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

--- END ---