

# TEST REPORT

## CERTIFICATE OF CONFORMITY

**Standards:** 47 CFR FCC Part 15, Subpart B, Class A  
ANSI C63.4-2014

**Report No.:** FDBGSN-WTW-P20070580D

**FCC ID:** 2AX8C-3545

**Model No:** FL44TE

**Received Date:** Dec. 23, 2021

**Test Date:** Jan. 05, 2022 ~ Jan. 06, 2022

**Issued Date:** Jan. 19, 2022

**Applicant:** Amazon.com Services LLC

**Address:** 410 Terry Ave N, Seattle, Washington 98109

**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. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City 33383, TAIWAN

**FCC Registration /  
Designation Number:** 328930 / TW1050

**Approved by :**



**Date:** Jan. 19, 2022

Ace Wu / Project Engineer

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Prepared by : Vera Huang / Specialist

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### Release Control Record

Issue No.	Description	Date Issued
FDBGSN-WTW-P20070580D	Original release.	Jan. 19, 2022

## 1 Certification

**Product:** Fleet Edge

**Brand:** N/A

**Test Model:** FL44TE

**Sample Status:** Engineering Sample

**Applicant:** Amazon.com Services LLC

**Test Date:** Jan. 05, 2022 ~ Jan. 06, 2022

**Standards:** 47 CFR FCC Part 15, Subpart B, Class A  
ANSI C63.4-2014

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.

## 2 Summary of Test Results

The test items that the EUT needs to perform according to its interfaces and functions evaluation are as follows:

FCC Part 15 Clause	Test Item	Result/Remarks	Verdict
15.109	Radiated Emissions up to 1 GHz	Minimum passing Class A margin is -5.00 dB at 43.775 MHz	Pass
	Radiated Emissions above 1 GHz	Minimum passing Class A margin is -20.74 dB at 6066.85 MHz	Pass

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

### 2.1 Measurement Uncertainty

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

Measurement	Frequency	Expanded Uncertainty (k=2) ( $\pm$ )
Radiated Emissions up to 1 GHz	30MHz ~ 1GHz	4.14 dB
Radiated Emissions above 1 GHz	Above 1GHz	5.04 dB

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

### 2.2 Modification Record

There were no modifications required for compliance.

### 3 General Information

#### 3.1 Description of EUT

Product	Fleet Edge
Brand	N/A
Test Model	FL44TE
Sample Status	Engineering Sample
Operating Software	N/A
Power Supply Rating	12 Vdc (Power Supply)
Accessory Device	Refer to Note as below
Data Cable Supplied	N/A

Note:

1. This report is issued as a supplementary report to BV CPS report no.: FDBGSN-WTW-P20070580C. The difference compared with original report are changing antenna and applicant address. Therefore the EUT is re-tested in this report.
2. The EUT contains following accessory devices.

Product	Brand	Model	Description
BT/WLAN Module	Intel	9560NGW	802.11 a/b/g/n/ac Wireless LAN + Bluetooth 5
WWAN Module	Quectel	EM06-A	WCDMA, LTE
CPU	Intel	i5-9500TE	CFL-S, 6C 35W
SO-DIMM	Innodisk	--	2667MHz, 8G&16G
LTE Main Antenna	Rivian	N/A	Cable length: 2445mm P/N: J7-1
LTE Aux Antenna	Rivian	N/A	Cable length: 3520mm P/N: J6-1
WiFi Main Antenna	Rivian	PT00206181-A	Cable length: 3550mm P/N: J5-1
WiFi Aux Antenna	Rivian	PT00207642-A	Cable length: 2475mm P/N: J4-1

#### 3.2 Primary Clock Frequencies of Internal Source

The highest frequency generated or used within the EUT or on which the EUT operates or tunes is 5 GHz provided by Amazon.com Services LLC, for detailed internal source, please refer to the manufacturer's specifications.

#### 3.3 Features of EUT

The tests reported herein were performed according to the method specified by Amazon.com Services LLC, for detailed feature description, please refer to the manufacturer's specifications or user's manual.

### 3.4 Operating Modes of EUT and Determination of Worst Case Operating Mode

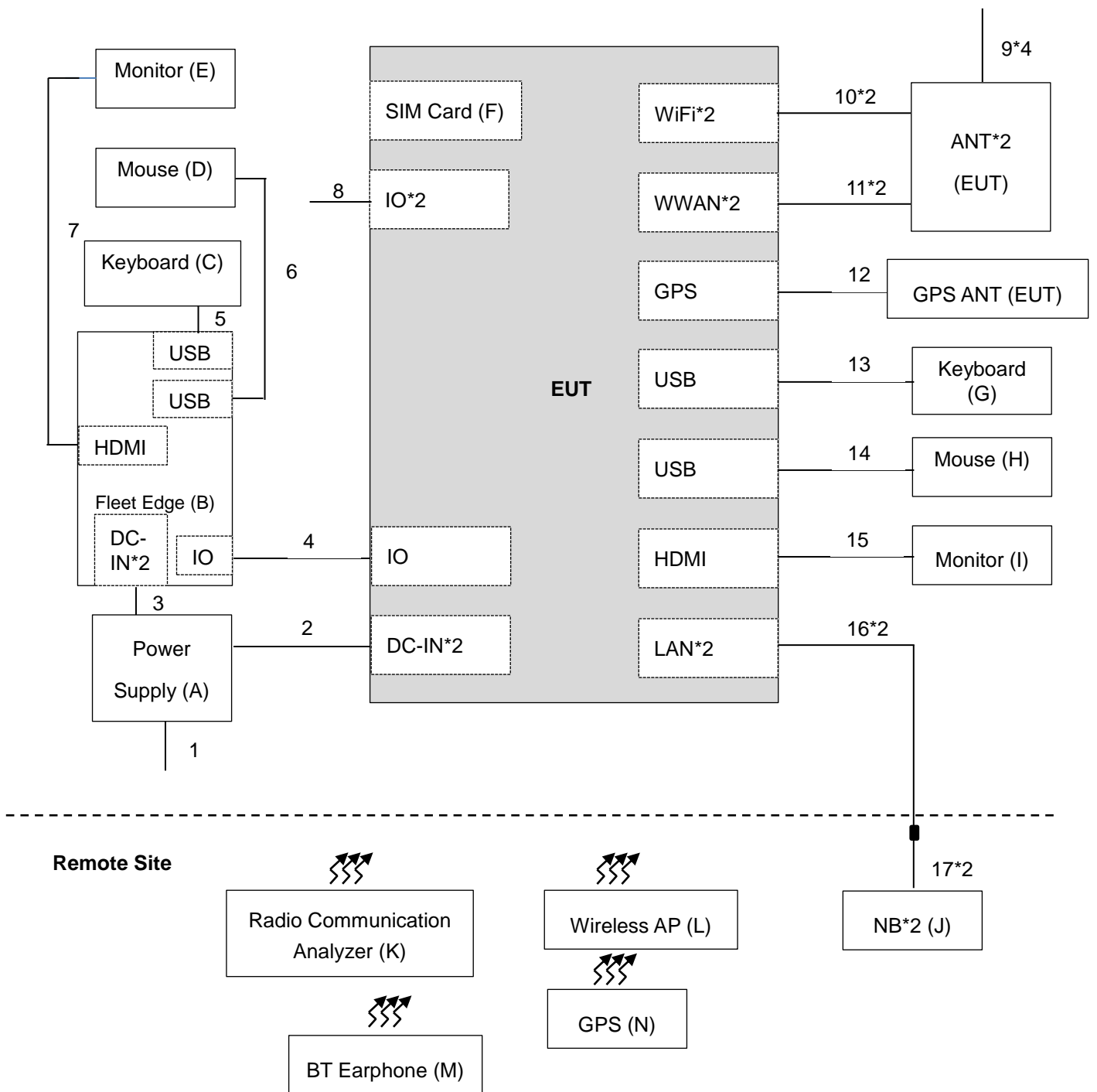
Test modes are presented in the report as below.

Mode	Test Condition
	Radiated Emission
1	EUT (v1.2) + WCDMA850 Link + WLAN 2.4G Link + BT Link + GPS Rx + Ant*2 + HDMI with Monitor (3840*2160 resolution) + USB with Keyboard + USB with Mouse + LAN Link*3 + Real SIM <DC 12V>

### 3.5 Test Program Used and Operation Descriptions

- a. The EUT linked with Bluetooth earphone.
- b. The EUT linked with monitor via HDMI Cable.
- c. The EUT communicated data with notebooks via LAN cables.
- d. The EUT communicated data with the Radio Communication Analyzer, GPS Simulator, and Wireless AP, which acted as communication partners.

### 3.6 Connection Diagram of EUT and Peripheral Devices





### 3.7 Configuration of Peripheral Devices and Cable Connections

ID	Product	Brand	Model No.	Serial No.	FCC ID	Remarks
A.	Power Supply	DELL	D850EF-00	N/A	N/A	Provided by Client
B.	Fleet Edge	N/A	FL44TE	N/A	N/A	Provided by Client
C.	Keyboard	Dell	KB216t	CN-0W33XP-LO300-79R-OUG5-A03	N/A	--
D.	Mouse	DELL	MS111-P	CN-011D3V-71581-1CJ-092T	FCC DoC Approved	--
E.	Monitor	ASUS	MX27U	H3LMRS034164		--
F.	SIM Card	R & S	N/A	N/A	N/A	--
G.	Keyboard	Dell	KB216t	CN-0W33XP-LO300-79R-OUG8-A03	N/A	--
H.	Mouse	DELL	MS111-P	CN-011D3V-71581-1CJ-018C	FCC DoC Approved	--
I.	Monitor	ASUS	MX27U	J3LMRS000059	N/A	--
J.	Notebook PC	DELL	Latitude 5501	F42VP13	N/A	--
		DELL	Latitude 5420	C6F33F3	NA	--
K.	Radio Communication Analyzer	Anritsu	MT8820C	6201010284	NA	--
L.	Wireless AP	D-LINK	DIR826L	QBQ91C9000416	NA	--
M.	Bluetooth Earphone	ELECOM	LBT-MPHS400	N/A	NA	--
N.	GPS Simulator	PENDULUM	GSG-54	191121	NA	--

Note:

1. All power cords of the above support units are non-shielded (1.8m).
2. Items J-N acted as communication partners to transfer data.

ID	Cable Descriptions	Qty.	Length (m)	Shielding (Yes/No)	Cores (Qty.)	Remarks
1.	AC Power cord	1	1.8	No	0	Provided by Client
2.	DC Cable	1	1	No	0	Provided by Client
3.	DC Cable	1	1	No	0	Provided by Client
4.	IO Cable	1	2	No	0	Provided by Client
5.	USB Cable	1	1.8	Yes	0	-
6.	USB Cable	1	1.8	Yes	0	-
7.	HDMI Cable	1	1.8	Yes	0	HDMI 2.0 (Brand: Amber, Model: HDMI-AA120)
8.	IO Cable	1	0.6	No	0	Provided by Client
9.	RF Cable	1	2.4	No	0	Provided by Client
10.	RF Cable	1	2.4	No	0	Provided by Client
11.	RF Cable	1	3.5	No	0	Provided by Client
12.	RF Cable	1	4.9	No	0	Provided by Client
13.	USB Cable	1	1.8	Yes	0	-
14.	USB Cable	1	1.8	Yes	0	-
15.	HDMI Cable	1	1.8	Yes	0	HDMI 2.0 (Brand: Amber, Model: HDMI-AA120)
16.	LAN Cable	1		Yes	0	RJ45, Cat5e
17.	LAN Cable	1	10	Yes	0	RJ45, Cat5e

#### 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 Radiated Emissions up to 1 GHz

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ (V)	ESR	101240	Nov. 03, 2021	Nov. 02, 2022
Test Receiver ROHDE & SCHWARZ (H)	ESR	101264	Apr. 09, 2021	Apr. 08, 2022
BILOG Antenna SCHWARZBECK (V)	VULB9168	9168-148	Oct. 19, 2021	Oct. 18, 2022
BILOG Antenna SCHWARZBECK (H)	VULB9168	9168-156	Oct. 19, 2021	Oct. 18, 2022
Preamplifier Sonoma (V)	310N	352924	Jun. 05, 2021	Jun. 04, 2022
Preamplifier Sonoma (H)	310N	352923	Jun. 05, 2021	Jun. 04, 2022
RF signal cable (with 5dB PAD) Times (V)	LMR-600 (18M) +LMR-400 (7M)	CABLE-CH1 (VER) -01	Sep. 04, 2021	Sep. 03, 2022
RF signal cable (with 5dB PAD) Times (H)	LMR-600 (11.8M) +LMR-400 (7M)	CABLE-CH1 (HOR) -01	Sep. 04, 2021	Sep. 03, 2022
Software BV ADT	BV ADT_Radiated_ V8.7.08	NA	NA	NA
Antenna Tower (V)	MFA-440	9707	NA	NA
Antenna Tower (H)	MFA-440	970705	NA	NA
Turn Table	DS430	50303	NA	NA
Controller (V)	MF7802	074	NA	NA
Controller (H)	MF7802	08093	NA	NA

- Note:
1. The test was performed in HwaYa Chamber 1.
  2. The VCCI Site Registration No. is R-11893.
  3. Test Date: 2022/01/06

## 4.2 Radiated Emissions above 1 GHz

Description & Manufacturer	Model No.	Serial No.	Cal. Date	Cal. Due
Test Receiver ROHDE & SCHWARZ	ESR3	102579	Jul. 05, 2021	Jul. 04, 2022
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Apr. 12, 2021	Apr. 11, 2022
BILOG Antenna SCHWARZBECK	VULB9168	9168-171	Oct. 29, 2021	Oct. 28, 2022
HORN Antenna SCHWARZBECK(with 4dB PAD)	9120D	209	Nov. 14, 2021	Nov. 13, 2022
HORN Antenna SCHWARZBECK(with 3dB PAD)	BBHA 9170	BBHA9170241	Oct. 26, 2021	Oct. 25, 2022
Loop Antenna EMCI	EM-6879	269	Sep. 16, 2021	Sep. 15, 2022
Preamplifier Agilent (Above 1GHz)	8449B	3008A02465	Mar. 22, 2021	Mar. 21, 2022
Pre-amplifier (18GHz-40GHz) EMC	EMC184045SE	980610	Jun. 05, 2021	Jun. 04, 2022
RF Coaxial Cable WOKEN With 5dB PAD	8D-FB	Cable-CH3-01	Jul. 24, 2021	Jul. 23, 2022
RF signal cable HUBER+SUHNER	SUCOFLEX 104	Cable-CH3-03 (223653/4)	Jul. 24, 2021	Jul. 23, 2022
RF signal cable HUBER+SUHNER& EMCI	SUCOFLEX 104&EMC104-SM-SM- 8000	Cable-CH3-03 (309224+170907)	Jul. 24, 2021	Jul. 23, 2022
BandPass Filter (2.4G) MICRO-TRONICS	BRM17690-01	002	Sep. 04, 2021	Sep. 03, 2022
BandPass Filter (5G) MICRO-TRONICS	BRM50716-01	G010	Sep. 04, 2021	Sep. 03, 2022
Software BV ADT	ADT_Radiated_ V7.6.15.9.5	NA	NA	NA
Antenna Tower inn-co GmbH	MA 4000	013303	NA	NA
Antenna Tower Controller BV ADT	AT100	AT93021702	NA	NA
Turn Table BV ADT	TT100	TT93021702	NA	NA
Turn Table Controller BV ADT	SC100	SC93021702	NA	NA
Boresight Antenna Fixture	BAF-02	3	NA	NA

Note: 1. The test was performed in HwaYa Chamber 3 (966 Chamber 2).  
2. Test Date: 2022/01/05

## 5 Limits of Emission

### 5.1 Radiated Emissions up to 1 GHz

Radiated Emissions Limits at 10 meters (dB $\mu$ V/m)				
Frequencies (MHz)	FCC Part 15B, Class A	FCC Part 15B, Class B	CISPR 22, Class A	CISPR 22, Class B
30-88	39	29.5	40	30
88-216	43.5	33.1		
216-230	46.4	35.6		
230-960			47	37
960-1000	49.5	43.5		

Radiated Emissions Limits at 3 meters (dB $\mu$ V/m)				
Frequencies (MHz)	FCC Part 15B, Class A	FCC Part 15B, Class B	CISPR 22, Class A	CISPR 22, Class B
30-88	49.5	40	50.5	40.5
88-216	54	43.5		
216-230	56.9	46		
230-960			57.5	47.5
960-1000	60	54		

Notes: The lower limit shall apply at the transition frequencies.

### 5.2 Radiated Emissions above 1 GHz

Frequency Range (For unintentional radiators)

Highest frequency generated or used in the device or on which the device operates or tunes (MHz)	Upper frequency of measurement range (MHz)
Below 1.705	30
1.705-108	1000
108-500	2000
500-1000	5000
Above 1000	5th harmonic of the highest frequency or 40GHz, whichever is lower

Radiated Emissions Limits at 3 meters (dB $\mu$ V/m)		
Frequency range	Class A	Class B
Above 1GHz	Avg: 60 Peak: 80	Avg: 54 Peak: 74

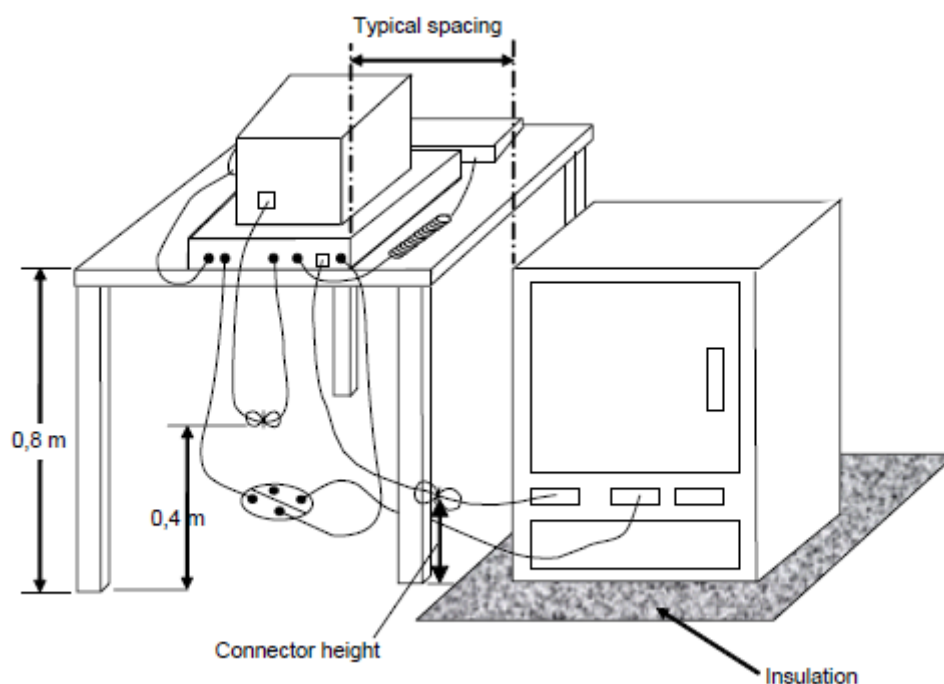
Notes: These limit levels apply for a measurement distance of 3 m. If using a different measurement distance, the measured levels shall be extrapolated to the 3 m limit distance using a factor of 20 dB per decade of distance. The measurement distance shall place the measurement antenna in the far field of the ITE or digital apparatus under test.

## 6 Test Arrangement

### 6.1 Radiated Emissions up to 1 GHz

- For the table-top EUT is placed on a 0.8 meter to the top of rotating table; for the the floor standing EUT shall be insulated (by insulation of 12 mm) from the horizontal reference ground plane. The rotating table is rotated 360 degrees to determine the position of the highest radiation. If the equipment requires a dedicated ground connection, this shall be provided and bonded to the RGP.
- The EUT was set 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The antenna is a broadband antenna, and its height 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 quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is up to 1 GHz.

Note: The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for quasi-peak detection (QP) at frequency up to 1GHz.

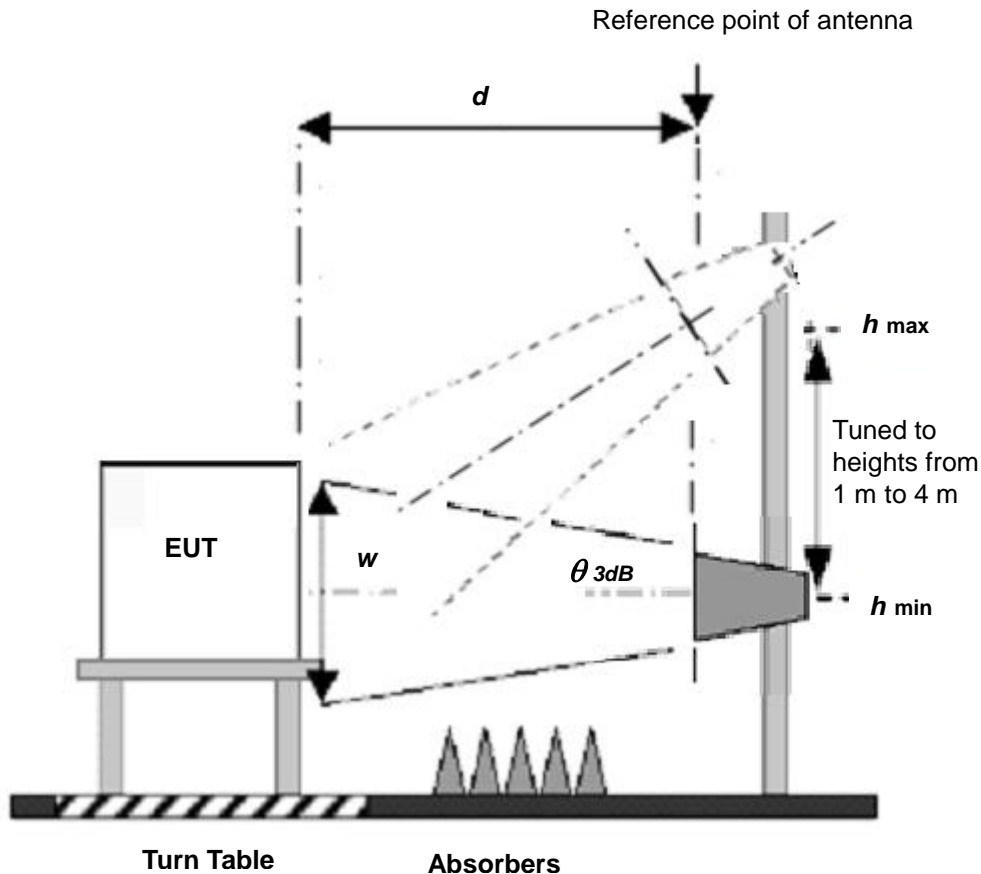


For the actual test configuration, please refer to the related Item – Photographs of the Test Configuration.

## 6.2 Radiated Emissions above 1 GHz

- For the table-top EUT is placed on a 0.8 meter to the top of rotating table; for the the floor standing EUT shall be insulated (by insulation of 12 mm) from the horizontal reference ground plane. The rotating table is rotated 360 degrees to determine the position of the highest radiation. If the equipment requires a dedicated ground connection, this shall be provided and bonded to the RGP.
- The EUT was set  $d = 3$  meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- The height of antenna can be varied from one meter to four meters, the height of adjustment depends on the EUT height and the antenna 3dB beamwidth both, to detect 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 and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
- The spectrum analyzer system was set to peak and average detects function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.

Note: The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for Peak detection (PK) at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz for Average detection (AV) at frequency above 1GHz.



For the actual test configuration, please refer to the related item – Photographs of the Test Configuration.

## 7 Test Results of Emission

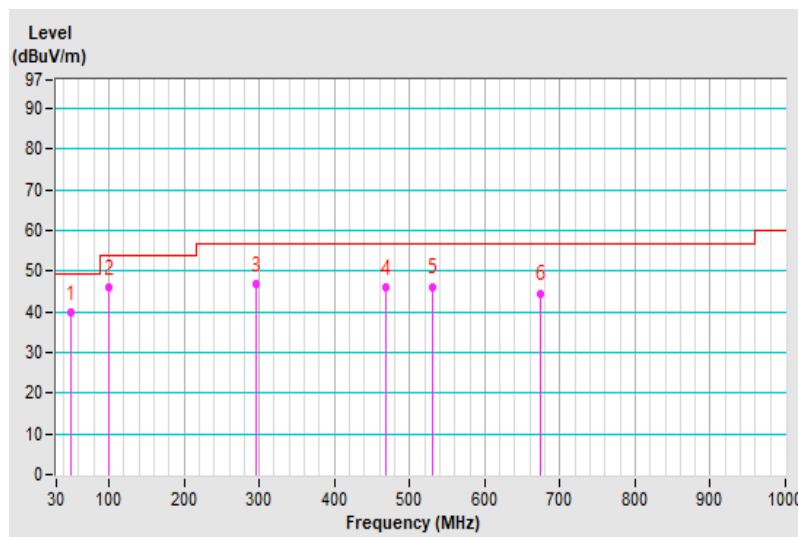
### 7.1 Radiated Emissions up to 1 GHz

Frequency Range	30MHz ~ 1GHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP), 120kHz
Input Power	DC 12V	Environmental Conditions	23°C, 71%RH
Tested By	Kai Chu		

Antenna Polarity & Test Distance : Horizontal at 10 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	48.431	39.90 QP	49.50	-9.60	3.00 H	139	49.15	-9.25
2	99.940	45.92 QP	54.00	-8.08	2.00 H	253	59.21	-13.29
3	296.715	46.82 QP	56.90	-10.08	1.00 H	164	54.19	-7.37
4	468.704	46.14 QP	56.90	-10.76	1.00 H	231	49.08	-2.94
5	530.982	46.23 QP	56.90	-10.67	1.00 H	174	48.18	-1.95
6	674.985	44.54 QP	56.90	-12.36	1.50 H	177	42.86	1.68

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

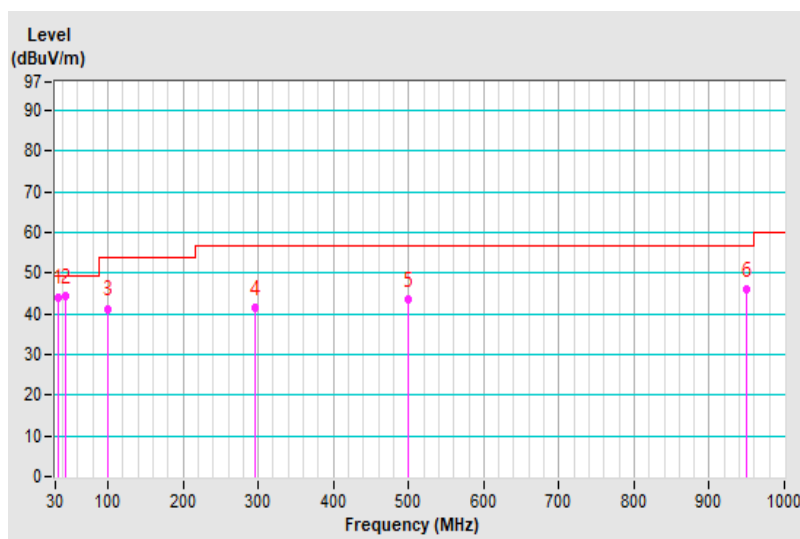


Frequency Range	30MHz ~ 1GHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP), 120kHz
Input Power	DC 12V	Environmental Conditions	23°C, 71%RH
Tested By	Kai Chu		

Antenna Polarity & Test Distance : Vertical at 10 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	34.171	44.17 QP	49.50	-5.33	2.00 V	132	54.70	-10.53
<b>2</b>	<b>43.775</b>	<b>44.50 QP</b>	<b>49.50</b>	<b>-5.00</b>	<b>1.00 V</b>	<b>54</b>	<b>53.97</b>	<b>-9.47</b>
3	99.649	41.30 QP	54.00	-12.70	1.00 V	91	54.64	-13.34
4	296.666	41.40 QP	56.90	-15.50	1.50 V	146	48.78	-7.38
5	499.988	43.62 QP	56.90	-13.28	1.00 V	160	46.00	-2.38
6	949.800	46.13 QP	56.90	-10.77	1.00 V	360	39.95	6.18

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





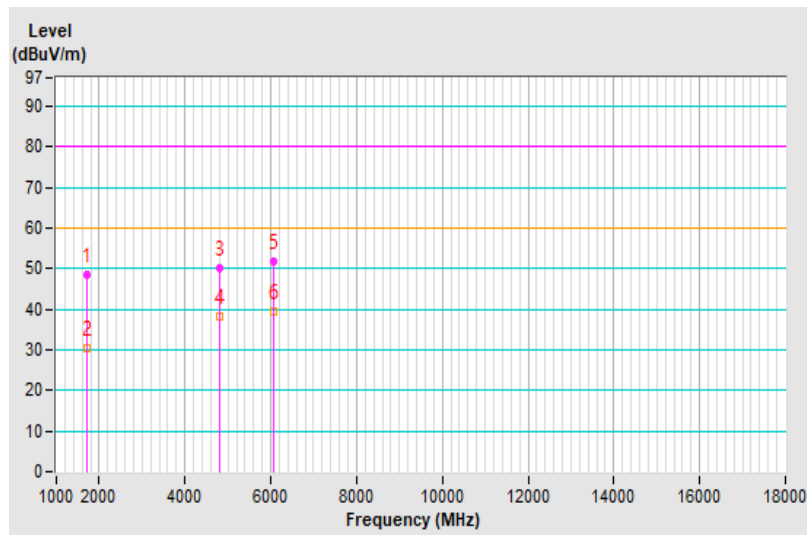
## 7.2 Radiated Emissions above 1 GHz

Frequency Range	1GHz ~ 18GHz	Detector Function & Resolution Bandwidth	Peak (PK) / Average (AV), 1MHz
Input Power	DC 12V	Environmental Conditions	22°C, 70%RH
Tested By	Kai Chu		

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	1714.85	48.60 PK	80.00	-31.40	1.00 H	355	49.55	-0.95
2	1714.85	30.35 AV	60.00	-29.65	1.00 H	355	31.30	-0.95
3	4796.95	49.98 PK	80.00	-30.02	1.00 H	184	42.38	7.60
4	4796.95	38.08 AV	60.00	-21.92	1.00 H	184	30.48	7.60
5	6066.85	51.90 PK	80.00	-28.10	1.56 H	289	42.60	9.30
<b>6</b>	<b>6066.85</b>	<b>39.26 AV</b>	<b>60.00</b>	<b>-20.74</b>	<b>1.56 H</b>	<b>289</b>	<b>29.96</b>	<b>9.30</b>

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

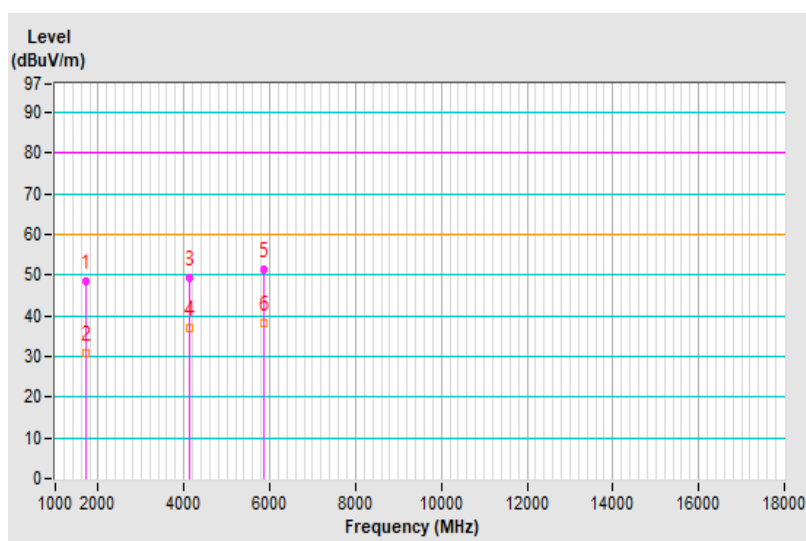


Frequency Range	1GHz ~ 18GHz	Detector Function & Resolution Bandwidth	Peak (PK) / Average (AV), 1MHz
Input Power	DC 12V	Environmental Conditions	22°C, 70%RH
Tested By	Kai Chu		

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	1724.20	48.44 PK	80.00	-31.56	1.87 V	351	49.37	-0.93
2	1724.20	30.76 AV	60.00	-29.24	1.87 V	351	31.69	-0.93
3	4111.85	49.25 PK	80.00	-30.75	1.66 V	256	43.88	5.37
4	4111.85	36.91 AV	60.00	-23.09	1.66 V	256	31.54	5.37
5	5873.90	51.24 PK	80.00	-28.76	1.00 V	159	41.73	9.51
6	5873.90	38.35 AV	60.00	-21.65	1.00 V	159	28.84	9.51

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

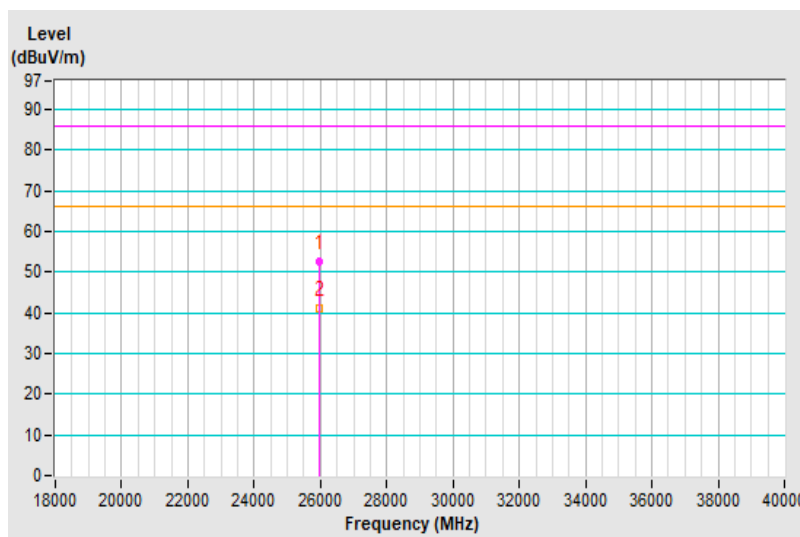


Frequency Range	18GHz ~ 30GHz	Detector Function & Resolution Bandwidth	Peak (PK) / Average (AV), 1MHz
Input Power	DC 12V	Environmental Conditions	22°C, 70%RH
Tested By	Kai Chu		

Antenna Polarity & Test Distance : Horizontal at 1.5 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	25971.46	52.69 PK	86.00	-33.31	1.56 H	354	52.21	0.48
2	25971.46	40.94 AV	66.00	-25.06	1.56 H	354	40.46	0.48

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

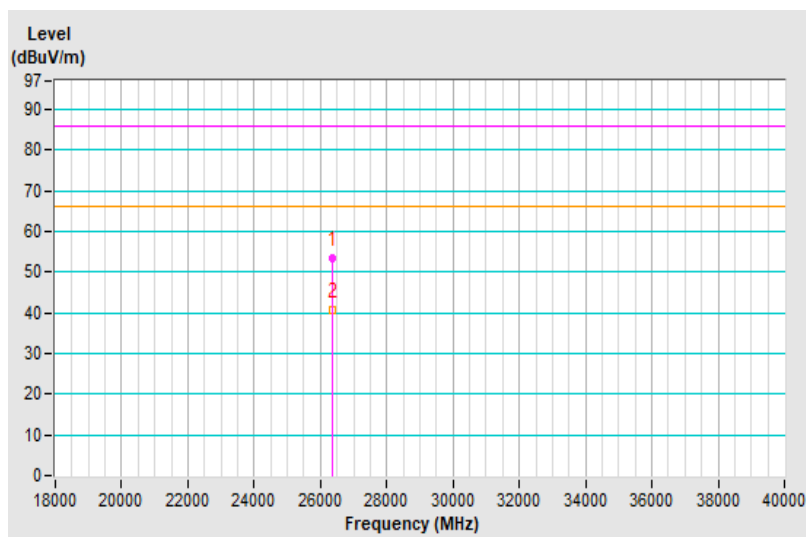


Frequency Range	18GHz ~ 30GHz	Detector Function & Resolution Bandwidth	Peak (PK) / Average (AV), 1MHz
Input Power	DC 12V	Environmental Conditions	22°C, 70%RH
Tested By	Kai Chu		

Antenna Polarity & Test Distance : Vertical at 1.5 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	26375.39	53.34 PK	86.00	-32.66	1.00 V	257	52.74	0.60
2	26375.39	40.57 AV	66.00	-25.43	1.00 V	257	39.97	0.60

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



## 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 accredited and approved according to ISO/IEC 17025.

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

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