

# TEST REPORT

## (ICES-003)


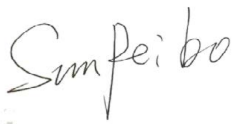
Applicant:	Particle Industries, Inc
Address:	325 9th Street, San Francisco, CA 94103, United States Of America

Manufacturer or Supplier:	Particle Industries, Inc
Address:	325 9th Street, San Francisco, CA 94103, United States Of America
Product:	B SoM
Brand Name:	Particle
Model Name:	B504e
IC:	20127-B504
Date of tests:	Mar. 31, 2025 ~ Apr. 18, 2025

The submitted sample of the above equipment has been tested for according to the requirements of the following standards:

- ☒ ICES-003 Issue 7: 2020
- ☒ ANSI C63.4:2014

**CONCLUSION:** The submitted sample was found to COMPLY with the test requirement

Prepared by Hanwen Xu Engineer / Mobile Department	Approved by Peibo Sun Manager / Mobile Department
	
Date: Apr. 18, 2025	Date: Apr. 18, 2025

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.

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
PSU-QSU2503280115EM01	Original release	Apr. 18, 2025



## 1 GENERAL INFORMATION

### 1.1 GENERAL DESCRIPTION OF EUT

<b>PRODUCT</b>	B SoM	
<b>BRAND NAME</b>	Particle	
<b>MODEL NAME</b>	B504e	
<b>NOMINAL VOLTAGE</b>	VCC: 3.8V. 3V3:3.3V	
<b>MODULATION TYPE</b>	<b>WCDMA</b>	BPSK/QPSK
	<b>LTE</b>	QPSK/16QAM
<b>OPERATING FREQUENCY</b>	<b>WCDMA</b>	1852.4MHz ~ 1907.6MHz(FOR WCDMA Band 2) 1712.4MHz ~ 1752.6MHz(FOR WCDMA Band 4) 826.4MHz ~ 846.6MHz (FOR WCDMA Band 5)
	<b>LTE</b>	1850.7MHz ~ 1909.3MHz (FOR LTE Band2) 1710.7MHz ~ 1754.3MHz (FOR LTE Band4) 824.7MHz ~ 848.3MHz (FOR LTE Band5) 699.7MHz ~ 715.3MHz (FOR LTE Band12) 779.5MHz ~ 784.5MHz (FOR LTE Band13) 1850.7MHz ~ 1914.3MHz (FOR LTE Band25) 824.7MHz ~ 848.3MHz (FOR LTE Band26)
<b>HW VERSION</b>	R1.0	
<b>SW VERSION</b>	EG91NAXGAR07A03M1G	
<b>I/O PORTS</b>	Refer to user's manual	
<b>CABLE SUPPLIED</b>	N/A	
<b>ACCESSORY DEVICES</b>	Refer to note as below	

#### NOTE:

1. \*Since the above data and/or information is provided by the client relevant results or conclusions of this report are only made for these data and/or information , Test Lab is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.
2. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.
3. For the test results, the EUT had been tested with all conditions. But only the worst case was shown in test report.



## 1.2 SUMMARY OF TEST RESULTS

The EUT has been tested according to the following specifications:

APPLIED STANDARD: ICES-003 Issue 7		
Standard Section	Test Item	Result
ICES-003 Issue 7: 2020	Conducted Test	Compliance
	Radiated Emission Test (30MHz ~ 1GHz)	Compliance
	Radiated Emission Test (Above 1GHz)	Compliance

### \*Test Lab Information Reference

Huarui 7Layers High Technology (Suzhou) Co., Ltd.

#### Lab Address:

Tower N, Innovation Centre 88 Zuyi Road, High-tech District, Suzhou City, Anhui Province, P.R.C.

#### Accredited Test Lab Cert 6613.01

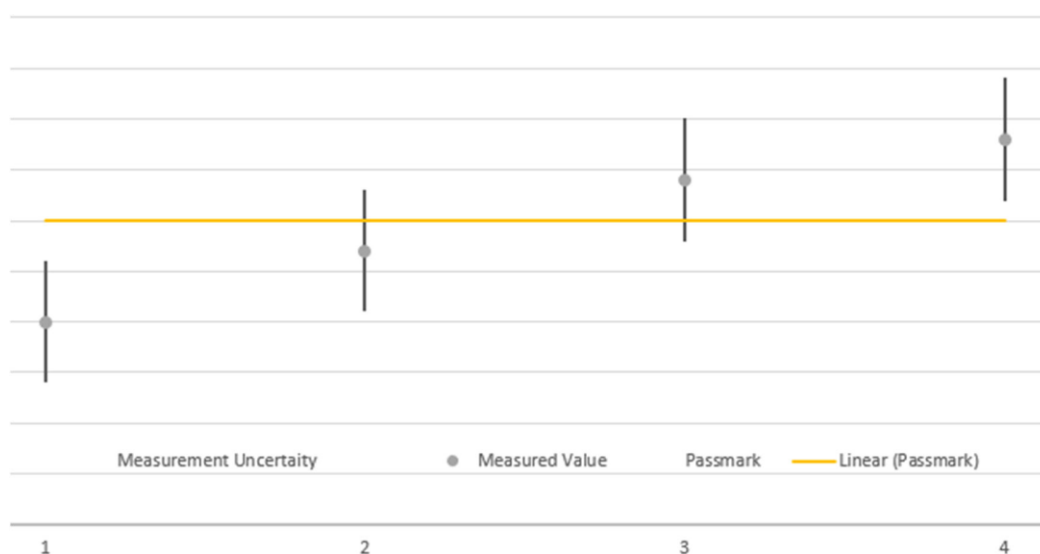
The IC Company Number is 28371; The CAB Identifier No. is CN0131.

### 1.3 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:

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

MEASUREMENT	FREQUENCY	UNCERTAINTY
Conducted emissions	150kHz ~ 30MHz	±2.70dB
Radiated emissions	30MHz~1GHz	±4.98dB
	1GHz ~6GHz	±4.70dB
	6GHz ~18GHz	±4.60dB
	18GHz ~40GHz	±4.12dB



The verdicts in this test report are given according the above diagram:

Case	Measured Value	Uncertainty Range	Verdict
1	below pass mark	below pass mark	Passed
2	below pass mark	within pass mark	Passed
3	above pass mark	within pass mark	Failed
4	above pass mark	above pass mark	Failed

That means, the laboratory applies, as decision rule (see ISO/IEC 17025:2017), the so-called shared risk principle.



## 1.4 DESCRIPTION OF TEST MODES

Test Mode	Test Condition
<b>Radiated emission test</b>	
1	WCDMA B5 Idle+Adapter+USB Cable+BT Idle+Battery
2	LTE B5 Idle+Adapter+USB Cable+BT Idle+Battery
3	LTE B12 Idle+Adapter+USB Cable+BT Idle+Battery
4	LTE B13 Idle+Adapter+USB Cable+BT Idle+Battery
5	LTE B26 Idle+Adapter+USB Cable+BT Idle+Battery

<b>Conducted emission test</b>	
1	WCDMA B5 Idle+Adapter+USB Cable+BT Idle+Battery
2	LTE B5 Idle+Adapter+USB Cable+BT Idle+Battery
3	LTE B12 Idle+Adapter+USB Cable+BT Idle+Battery
4	LTE B13 Idle+Adapter+USB Cable+BT Idle+Battery
5	LTE B26 Idle+Adapter+USB Cable+BT Idle+Battery

**NOTE:**

1. For conducted emission test, Pre-scan all mode, mode 1 was the worst case and only this mode was presented in this report.
2. For radiated emission test, Pre-scan all mode, test mode 1 was the worst case and only this mode was presented in this report



## 1.5 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.

### FOR ALL TESTS

NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	Laptop	Lenovo	Thinkpad L440	R90FTFKP	N/A
2	Universal radio communication tester	Rohde&Schwarz	CMW500	N/A	N/A
3	DC source	Kikusui/JP	PMX18-5A	0000001	N/A

NO.	SIGNAL CABLE DESCRIPTION OF THE ABOVE SUPPORT UNITS
1	USB Line: Shielded, Detachable 1m;





## 2 EMISSION TEST

### 2.1 CONDUCTED EMISSION MEASUREMENT

#### 2.1.1 LIMITS OF CONDUCTED EMISSION MEASUREMENT

**TEST STANDARD: ICES-003 (Class A: section 5.2)**

**(Class B: section 5.3)**

FREQUENCY OF EMISSION (MHz)	CONDUCTED LIMIT (dB $\mu$ V)	
	Quasi-peak	Average
0.15 ~ 0.5	66 to 56	56 to 46
0.5 ~ 5	56	46
5 ~ 30	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.

3. All emanations from a class A/B digital device or system, including any network of conductors

and apparatus connected thereto, shall not exceed the level of field strengths specified above.

#### 2.1.2 TEST INSTRUMENTS

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
WIDEBANDRADIO COMMUNICATION TESTER	Rohde&Schwarz	CMW500	169399	Jun.26,24	Jun.25,26
EMI Test Receiver	Rohde&Schwarz	ESR3	102749	Feb.24,24	Feb.23,26
ELEKTRA test software	Rohde&Schwarz	ELEKTRA	NA	N/A	N/A
LISN network	Rohde&Schwarz	ENV216	102640	Feb.16,24	Feb.15,26
CABLE	Rohde&Schwarz	W61.01	N/A	Apr.27,24	Apr.26,25
CABLE	Rohde&Schwarz	W601	N/A	Apr.27,24	Apr.26,25

**NOTE:** 1. The test was performed in CE shielded room.

2. The calibration interval of the above test instruments is 12 months or 24 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA



### 2.1.3 TEST PROCEDURES

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
- c. The frequency range from 150 kHz to 30MHz was searched. Emission levels under (Limit - 20dB) were not recorded.

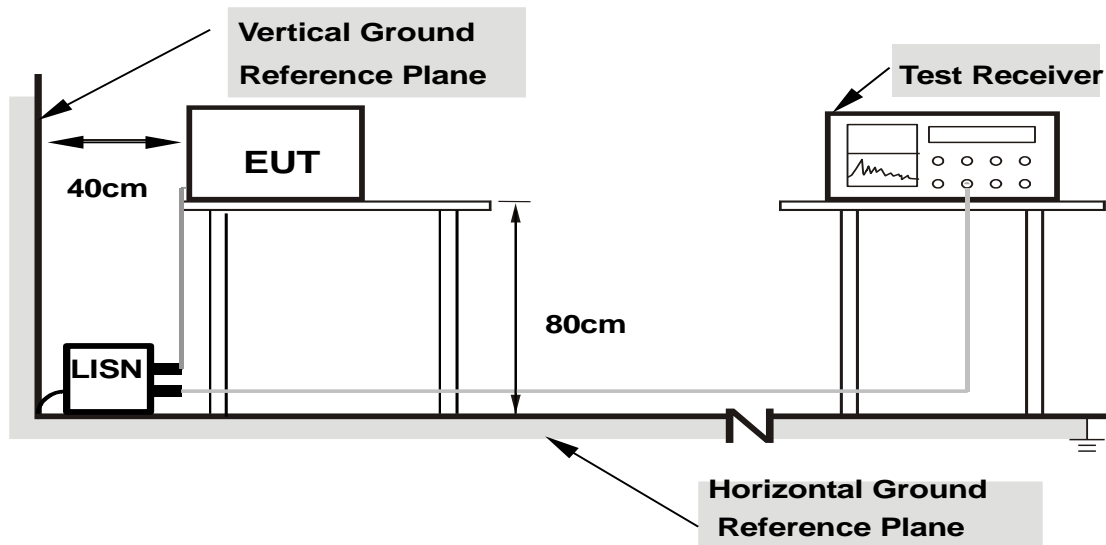
**NOTE:** All modes of operation were investigated and the worst-case emissions are reported.

### 2.1.4 DEVIATION FROM TEST STANDARD

No deviation.



## 2.1.5 TEST SETUP



**Note: 1.Support units were connected to second LISN.**

**2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes**

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

## 2.1.6 EUT OPERATING CONDITIONS

- Turned on the power and connected of all equipment.
- EUT was operated according to the use type described in the manufacturer's specifications or the user's manual.

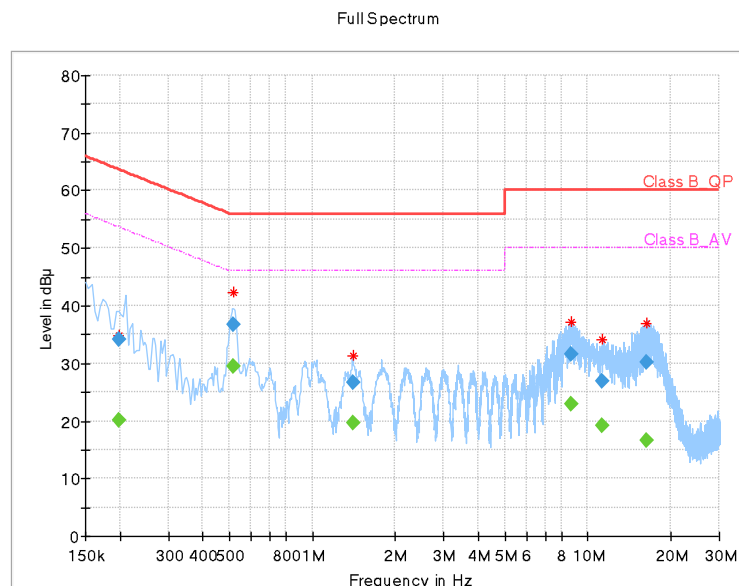


## 2.1.7 TEST RESULTS

<b>TEST VOLTAGE</b>	Input 120 Vac, 60 Hz	<b>Detector Function &amp; Resolution Bandwidth</b>	Quasi-Peak (QP) / Average (AV), 9 kHz
<b>ENVIRONMENTAL CONDITIONS</b>	26deg. C, 51%RH	<b>TESTED BY</b>	Carl xie

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.198000	---	20.04	53.69	33.65	L1	ON	9.8
0.198000	34.16	---	63.69	29.53	L1	ON	9.8
0.516000	---	29.58	46.00	16.42	L1	ON	9.8
0.516000	36.68	---	56.00	19.32	L1	ON	9.8
1.400000	---	19.59	46.00	26.41	L1	ON	9.8
1.400000	26.61	---	56.00	29.39	L1	ON	9.8
8.680000	---	23.02	50.00	26.98	L1	ON	10.3
8.680000	31.60	---	60.00	28.40	L1	ON	10.3
11.284000	---	19.19	50.00	30.81	L1	ON	10.6
11.284000	26.94	---	60.00	33.06	L1	ON	10.6
16.416000	---	16.57	50.00	33.43	L1	ON	11.0
16.416000	30.18	---	60.00	29.82	L1	ON	11.0

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Limit value - Emission level
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.



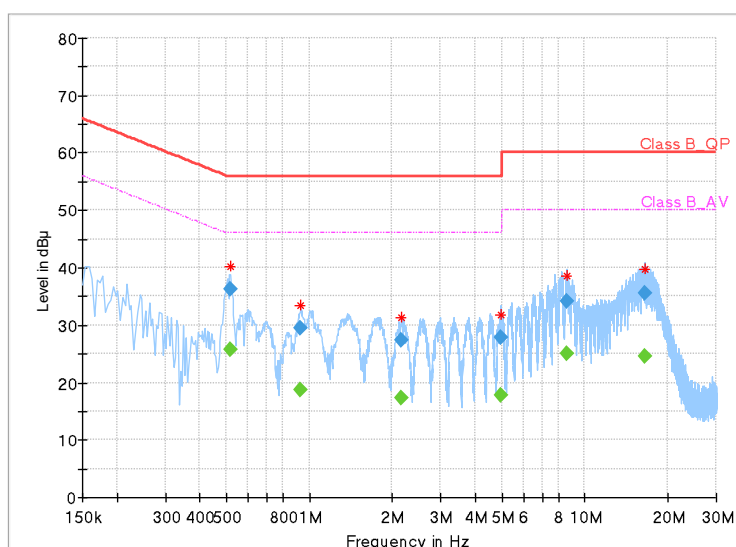


<b>TEST VOLTAGE</b>	Input 120 Vac, 60 Hz	<b>Detector Function &amp; Resolution Bandwidth</b>	Quasi-Peak (QP) / Average (AV), 9 kHz
<b>ENVIRONMENTAL CONDITIONS</b>	26deg. C, 51%RH	<b>TESTED BY</b>	Carl xie

Frequency (MHz)	QuasiPeak (dBuV)	CAverage (dBuV)	Limit (dBuV)	Margin (dB)	Line	Filter	Corr. (dB)
0.516000	---	25.74	46.00	20.26	N	ON	9.7
0.516000	36.34	---	56.00	19.66	N	ON	9.7
0.932000	---	18.80	46.00	27.20	N	ON	9.7
0.932000	29.44	---	56.00	26.56	N	ON	9.7
2.160000	---	17.26	46.00	28.74	N	ON	9.8
2.160000	27.37	---	56.00	28.63	N	ON	9.8
4.936000	---	17.76	46.00	28.24	N	ON	9.7
4.936000	27.77	---	56.00	28.23	N	ON	9.7
8.624000	---	25.04	50.00	24.96	N	ON	10.3
8.624000	34.20	---	60.00	25.80	N	ON	10.3
16.490000	---	24.57	50.00	25.43	N	ON	11.0
16.490000	35.45	---	60.00	24.55	N	ON	11.0

- REMARKS:**
1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
  2. "-": The Quasi-peak reading value also meets average limit and measurement with the average detector is unnecessary.
  3. The emission levels of other frequencies were very low against the limit.
  4. Margin value = Limit value - Emission level
  5. Correction factor = Insertion loss + Cable loss
  6. Emission Level = Correction Factor + Reading Value.

Full Spectrum





## 2.2 RADIATED EMISSION MEASUREMENT

### 2.2.1 LIMITS OF RADIATED EMISSION MEASUREMENT

#### ICES-003 Table 2, Table 4

Emissions radiated outside of the specified bands, shall be according to the general radiated limits as following:

Radiated Emissions Limits at 10 meters (dB $\mu$ V/m)				
Frequencies (MHz)	ICES-003, Class A	ICES-003, Class B	/	/
30-88	39	29.5	/	/
88-216	43.5	33.1		
216-230	46.4	35.6		
230-960	47.0	37.0	/	/
960-1000	49.5	43.5		
1000-3000	Avg: 49.5	Avg: 43.5	/	/
3000+	Peak: 69.5	Peak: 63.5	/	/

Radiated Emissions Limits at 3 meters (dB $\mu$ V/m)				
Frequencies (MHz)	ICES-003, Class A	ICES-003, Class B	/	/
30-88	49.5	40	/	/
88-216	54	43.5		
216-230	56.9	46		
230-960	57.0	47.0	/	/
960-1000	60	54		
1000-3000	Avg: 60	Avg: 54	/	/
3000+	Peak: 80	Peak: 74	/	/

**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	5 <sup>th</sup> harmonic of the highest frequency or 40GHz, whichever is lower

- NOTE:**
1. The lower limit shall apply at the transition frequencies.
  2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
  3. As shown in 15.35(b), 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.
  4. QP detector shall be applied if not specified.



## 2.2.2 TEST INSTRUMENTS

### Frequency range below 1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
WIDEBANDRADIO COMMUNICATION TESTER	Rohde&Schwarz	CMW500	169399	Jun.26,24	Jun.25,26
3m Semi-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-02Chamber	Nov.24,22	Nov.23,25
Bilog Antenna	SCHWARZBECK	VULB 9163	1264	Feb.27,24	Feb.26,26
EMI Test Receiver	R&S	ESW44	101973	Feb.24,24	Feb.23,26
Measurement Software	R&S	ELEKTRA	N/A	N/A	N/A
6DB attenuator	Tonscend Technology Co., Ltd	N/A	23062787	N/A	N/A
Pre-Amplifier	R&S	SCU08F1	101028	Sep.15,24	Sep.14,26
CABLE	R&S	W13.01	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	W13.02	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	W12.14	N/A	Apr.27,24	Apr.26,25

### Frequency range above 1GHz

Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Next Cal.
WIDEBANDRADIO COMMUNICATION TESTER	Rohde&Schwarz	CMW500	169399	Jun.26,24	Jun.25,26
3m Fully-anechoic Chamber	TDK	9m*6m*6m	HRSW-SZ-EMC-01Chamber	Nov.24,22	Nov.23,25
Horn Antenna	ETS-LINDGREN	3117	227836	Aug.21,24	Aug.20,26
EMI Test Receiver	R&S	ESW44	101973	Feb.24,24	Feb.23,26
Pre-Amplifier	R&S	SCU08F1	101028	Sep.15,24	Sep.14,26
Measurement Software	R&S	ELEKTRA	N/A	N/A	N/A
CABLE	R&S	W13.01	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	W13.02	N/A	Apr.27,24	Apr.26,25
CABLE	R&S	W12.14	N/A	Apr.27,24	Apr.26,25

- NOTE: 1. The calibration interval of the above test instruments is 12 months or 24 months or 36 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.
2. The test was performed in 3 Chamber.
3. The IC Company Number is 28371; The CAB Identifier No. is CN0131.



## 2.2.3 TEST PROCEDURE

The basic test procedure was in accordance with ANSI C63.4a:2017 (section 12).

- a. The EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 meters chamber room. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 meters (below 1GHz) and 3 meters (above 1GHz) 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. The bore sight should be used during the test above 1GHz.
- 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/spectrum was set to peak and average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz.

### NOTE:

1. The resolution bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak detection (QP) at frequency below 1GHz.
2. The resolution bandwidth is 1MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Peak detection at frequency above 1GHz. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and video bandwidth of test receiver/spectrum analyzer is 3MHz for Average detection (AV) at frequency above 1GHz.
3. For measurement of frequency above 1000 MHz, the EUT was set 3 meters away from the receiver antenna.
4.  $\text{Emission level(dBuV/m)} = \text{Raw Value(dBuV)} + \text{Correction Factor(dB/m)}$
5.  $\text{Correction Factor(dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Factor (dB)}$  (if the raw value not contains the amplifier);
6.  $\text{Correction Factor(dB/m)} = \text{Antenna Factor (dB/m)} + \text{Cable Factor (dB)} - \text{Amplifier Gain(dB)}$  (if the raw value contains the amplifier)
7.  $\text{Margin value} = \text{Limit value} - \text{Emission level}$ .

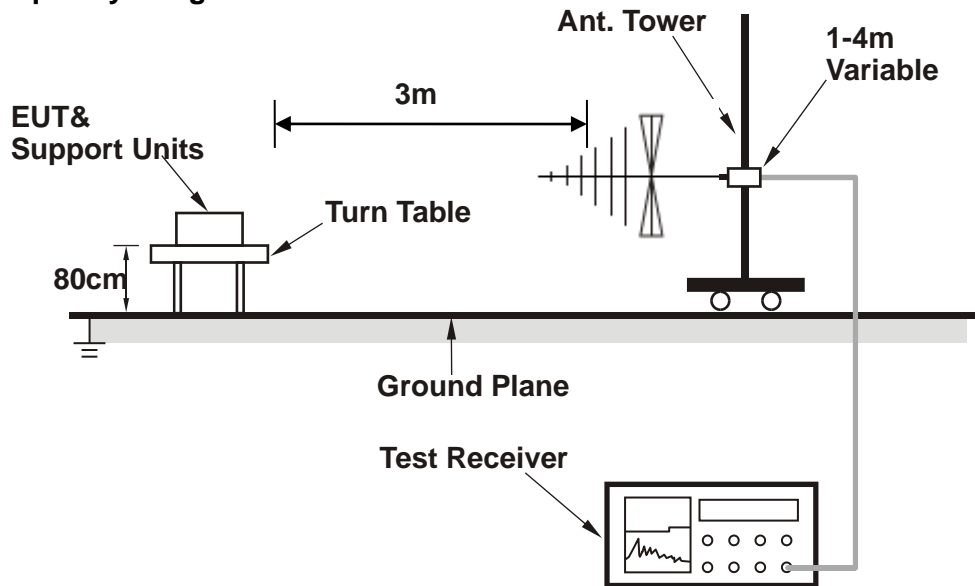
## 2.2.4 DEVIATION FROM TEST STANDARD

No deviation.

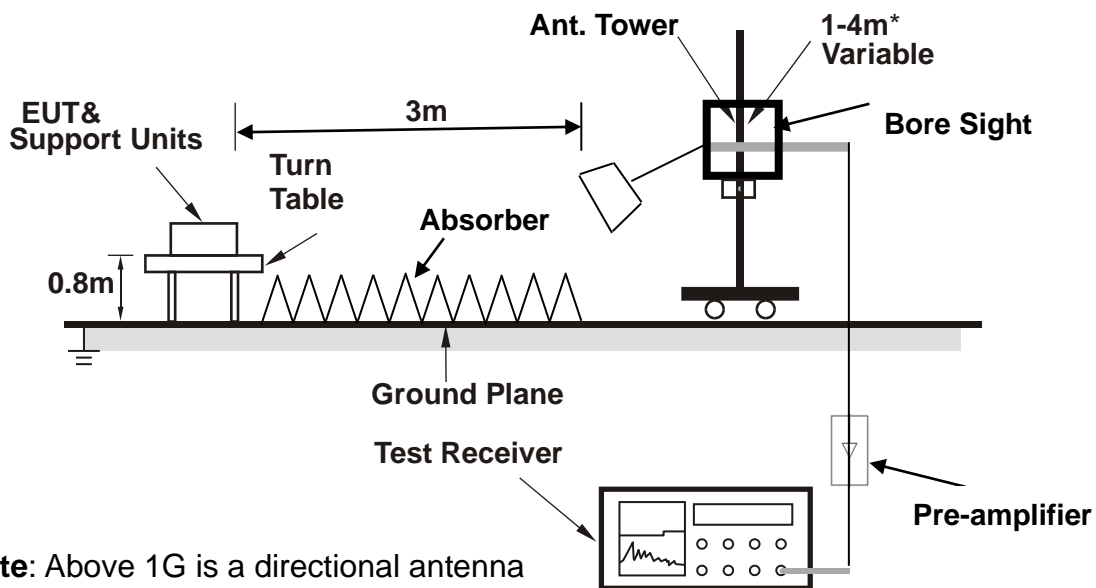


## 2.2.5 TEST SETUP

<Frequency Range below 1GHz>



<Frequency Range above 1GHz>



**Note:** Above 1G is a directional antenna

depends on the EUT height and the antenna 3dB bandwidth both, refer to section 7.3 of CISPR 16-2-3.

## 2.2.6 EUT OPERATING CONDITIONS

Same as item 2.1.6.

## 2.2.7 TEST RESULTS

**Note:** The FCC Limit meets the IC Limit requirements



**BUREAU VERITAS** Test Report No. PSU-QSU2503280115EM01

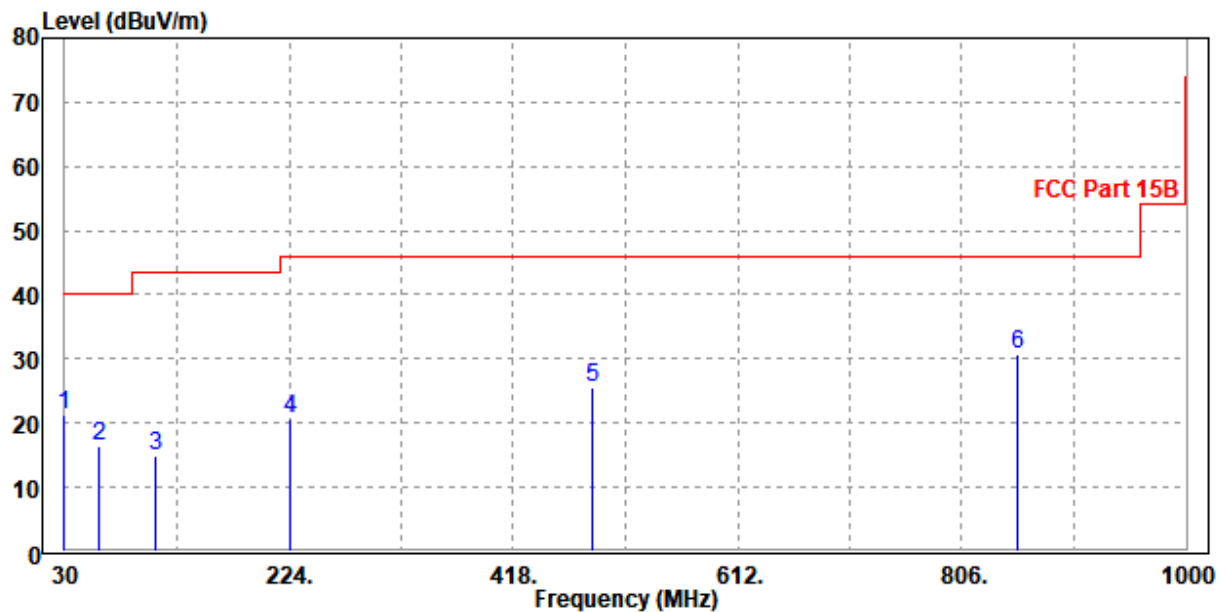
Worst case below 1G:

<b>TEST VOLTAGE</b>	Input 120 Vac, 60 Hz	<b>FREQUENCY RANGE</b>	30-1000 MHz
<b>ENVIRONMENTAL CONDITIONS</b>	23deg. C, 70 %RH	<b>DETECTOR FUNCTION &amp; RESOLUTION BANDWIDTH</b>	Quasi-Peak, 120 kHz
<b>TESTED BY</b>	Jace Hu		

**ANTENNA POLARITY & TEST DISTANCE: HORIZONTAL AT 3 M**

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	30.000	21.40	27.71	40.00	-18.60	-6.31	Peak	Horizontal
2	60.070	16.45	31.45	40.00	-23.55	-15.00	Peak	Horizontal
3	108.570	15.02	30.02	43.50	-28.48	-15.00	Peak	Horizontal
4	224.970	20.76	33.26	46.00	-25.24	-12.50	Peak	Horizontal
5	486.870	25.53	30.63	46.00	-20.47	-5.10	Peak	Horizontal
6 PP	854.500	30.81	30.61	46.00	-15.19	0.20	Peak	Horizontal

- REMARKS:** 1. Emission level(dBuV/m)=Read Value(dBuV) + Correction Factor(dB/m)  
2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB)- Amplifier Gain  
3. The other emission levels were very low against the limit.  
4. Margin value = Emission level – Limit value.



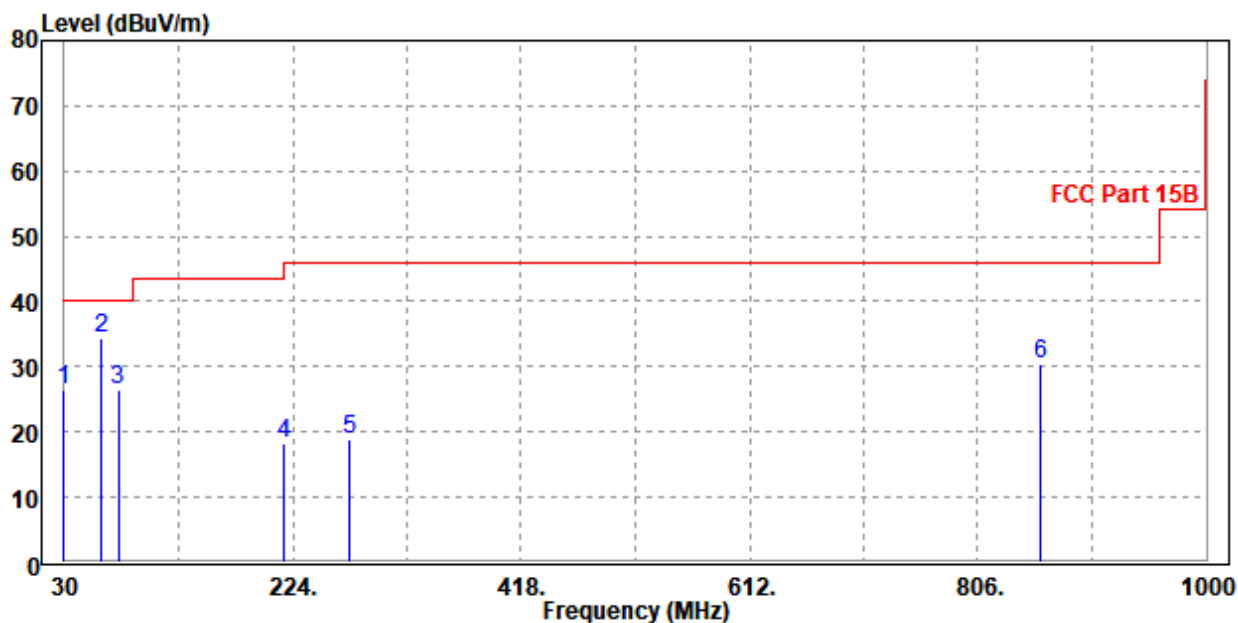


TEST VOLTAGE	Input 120 Vac, 60 Hz	FREQUENCY RANGE	30-1000 MHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70% RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Quasi-Peak , 120 kHz
TESTED BY	Jace Hu		

## ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	30.000	26.36	32.67	40.00	-13.64	-6.31	Peak	Vertical
2 PP	61.040	34.43	49.81	40.00	-5.57	-15.38	Peak	Vertical
3	75.590	26.44	44.35	40.00	-13.56	-17.91	Peak	Vertical
4	216.240	18.28	31.08	46.00	-27.72	-12.80	Peak	Vertical
5	272.500	18.90	29.21	46.00	-27.10	-10.31	Peak	Vertical
6	858.380	30.49	30.21	46.00	-15.51	0.28	Peak	Vertical

- REMARKS:**
1. Emission level(dBuV/m)=Read Value(dBuV) + Correction Factor(dB/m)
  2. Correction Factor(dB/m) = Antenna Factor (dB/m) + Cable Factor (dB) -Amplifier Gain
  3. The other emission levels were very low against the limit.
  4. Margin value = Emission level – Limit value.



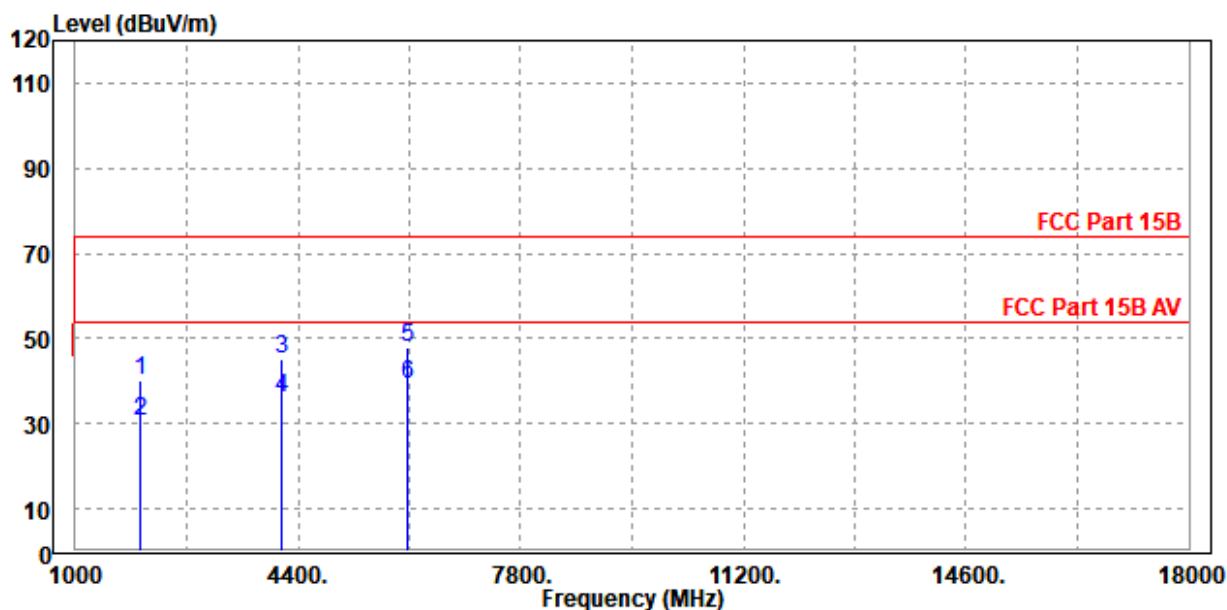


TEST VOLTAGE	Input 120 Vac, 60 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Jace Hu		

## ANTENNA POLARITY &amp; TEST DISTANCE: HORIZONTAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	1986.000	40.33	46.90	74.00	-33.67	-6.57	Peak	Horizontal
2	1986.000	30.57	37.14	54.00	-23.43	-6.57	Average	Horizontal
3	4162.000	45.03	47.13	74.00	-28.97	-2.10	Peak	Horizontal
4	4162.000	36.15	38.25	54.00	-17.85	-2.10	Average	Horizontal
5 PK	6066.000	47.83	47.20	74.00	-26.17	0.63	Peak	Horizontal
6 PP	6066.000	39.40	38.77	54.00	-14.60	0.63	Average	Horizontal

- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
  2. Negative sign (-) in the margin column signify levels below the limit.
  3. Frequency range scanned: 1GHz to 5<sup>th</sup> harmonic of the highest frequency or 40GHz, whichever is lower .For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet.
  4. Only emissions significantly above equipment noise floor are reported.



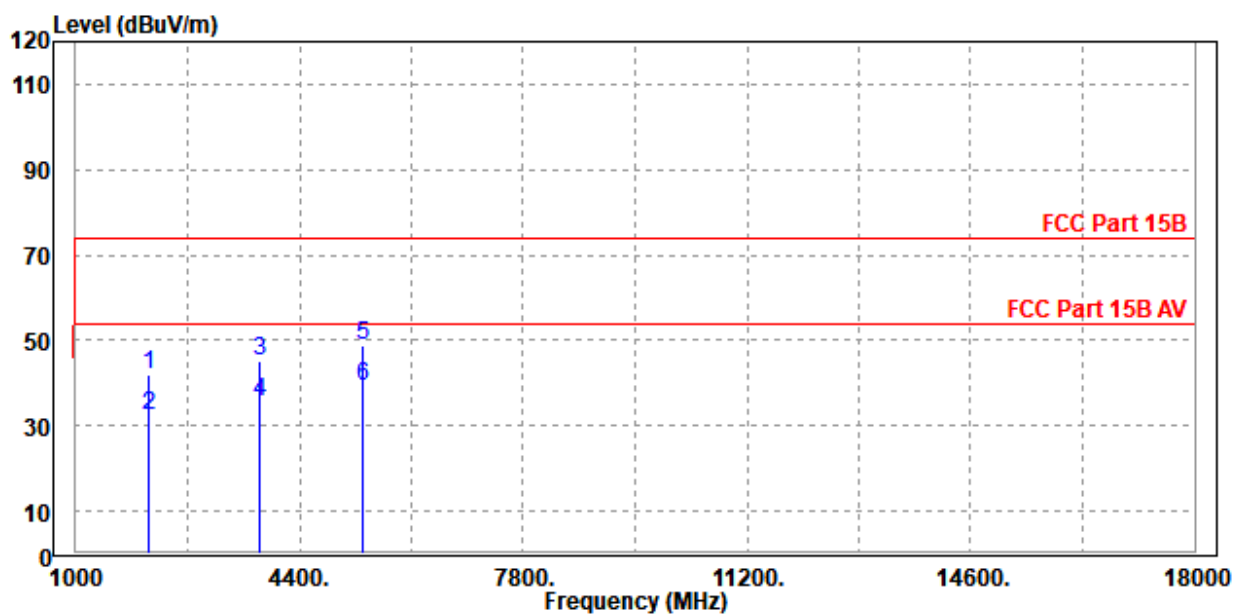


TEST VOLTAGE	Input 120 Vac, 60 Hz	FREQUENCY RANGE	1-18 GHz
ENVIRONMENTAL CONDITIONS	23deg. C, 70 %RH	DETECTOR FUNCTION & RESOLUTION BANDWIDTH	Peak/Average, 1 MHz
TESTED BY	Jace Hu		

## ANTENNA POLARITY &amp; TEST DISTANCE: VERTICAL AT 3 M

	Freq	Level	Read Level	Limit Line	Over Limit	Factor	Remark	Pol/Phase
	MHz	dBuV/m	dBuV	dBuV/m	dB	dB/m		
1	2105.000	42.16	47.78	74.00	-31.84	-5.62	Peak	Vertical
2	2105.000	32.26	37.88	54.00	-21.74	-5.62	Average	Vertical
3	3805.000	45.31	48.06	74.00	-28.69	-2.75	Peak	Vertical
4	3805.000	35.81	38.56	54.00	-18.19	-2.75	Average	Vertical
5 PK	5369.000	48.66	49.10	74.00	-25.34	-0.44	Peak	Vertical
6 PP	5369.000	39.45	39.89	54.00	-14.55	-0.44	Average	Vertical

- REMARKS:**
1. Peak detector quick scan is showed on the graph and final quasi-peak detector data is measured corresponding to relevant limit and recorded in the data table.
  2. Negative sign (-) in the margin column signify levels below the limit.
  3. Frequency range scanned: 1GHz to 5th harmonic of the highest frequency or 40GHz, whichever is lower .For frequency above 18GHz, the emission was tested 20db below the limit so the data not recorded in the sheet.
  4. Only emissions significantly above equipment noise floor are reported.





### **3 APPENDIX A – MODIFICATIONS RECORDERS FOR ENGINEERING CHANGES TO THE EUT BY THE LAB**

No any modifications were made to the EUT by the lab during the test.

**---END---**