

# **TEST REPORT**

Report No.:	BCTC2410587438E					
Applicant:	Radxa Computer (Shenzhen) Co., Ltd.					
Product Name:	Radxa E20C					
Test Model:	Radxa E20C D1E8O1					
Tested Date:	2024-10-14 to 2024-10-24					
Issued Date:	2024-10-29					
She	enzhen BCTC Testing Co., Ltd.					
No.: BCTC/RF-EMC-005	Page 1 of 3.1 Edition: B.2					



Product Name:	Radxa E20C
Trademark:	radxa
Model/Type Reference:	Radxa E20C D1E8O1 Radxa E20C D1E0O1, Radxa E20C D1E0O2, Radxa E20C D1E8O2, Radxa E20C D2E0O1, Radxa E20C D2E0O2, Radxa E20C D2E16O1, Radxa E20C D2E16O2, Radxa E20C D4E0O1, Radxa E20C D4E0O2, Radxa E20C D4E32O1, Radxa E20C D4E32O2
Prepared For:	Radxa Computer (Shenzhen) Co., Ltd.
Address:	1602, Smart Valley, tiezai Road, Gongle community, Xixiang, Baoan, Shenzhen
Manufacturer:	Radxa Computer (Shenzhen) Co., Ltd.
Address:	1602, Smart Valley, tiezai Road, Gongle community, Xixiang, Baoan, Shenzhen
Prepared By:	Shenzhen BCTC Testing Co., Ltd.
Address:	1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China.
Sample Received Date:	2024-10-14
Sample Tested Date:	2024-10-14 to 2024-10-24
Issue Date:	2024-10-29
Report No.:	BCTC2410587438E
Test Standards:	EN 55032:2015+A11:2020+A1:2020, EN 55035:2017+A11:2020
Test Results	PASS

Tested by:

Icey Chen

Icey Chen/ Project Handler

Approved by:

Zero Zhou/Reviewer

The test report is effective only with both signature and specialized stamp. This result(s) shown in this report refer only to the sample(s) tested. Without written approval of Shenzhen BCTC Testing Co., Ltd, this report can't be reproduced except in full. The tested sample(s) and the sample information are provided by the client.

No.: BCTC/RF-EMC-005

Page 2 of 31



## Table Of Content

Test R	eport Declaration	Page
1.	Version	
2.	Test Summary	5
3.	Measurement Uncertainty	
4.	Product Information And Test Setup	7
4.1	Product Information	
4.2	Test Setup Configuration	7
4.3	Support Equipment	7
4.4	Test Mode	
5.	Test Facility And Test Instrument Used	9
5.1	Test Facility	
5.2	Test Instrument Used	9
6.	Conducted Emissions	11
6.1	Block Diagram Of Test Setup	
6.2	Limit	
6.3	Test procedure	
6.4	Test Result	
7.	Conducted Emissions	14
7.1	Block Diagram Of Test Setup	
7.2	Limit	
7.3	Test procedure	14
7.4	Test Result	
8.	Radiated Emissions Test	
8.1	Block Diagram Of Test Setup	
8.2	Limits	
8.3	Test Procedure	
8.4	Test Results	
9.	Immunity Test Of General The Performance Criteria	
10.	Electrostatic Discharge (ESD)	20
10.1	Test Specification	20
10.2	Block Diagram of Test Setup	20
10.3		
10.4	Test Results	and the set of the set
11.	Continuous Rf Electromagnetic Field Disturbances (RS)	22
11.1	Test Specification	22
11.2	Test Specification Block Diagram of Test Setup Test Procedure Test Results	22
11.3	Test Procedure	22
11.4	Test Results	23
12.	EUT Photographs	24
13.	EUT Photographs EUT Test Setup Photographs	28

(Note: N/A Means Not Applicable)

JC JC JC

еро



## 1. Version

Report No.	Issue Date	Description	Approved
BCTC2410587438E	2024-10-29	Original	Valid







## 2. Test Summary

The Product has been tested according to the following specifications:

EMISSION				
Standard	Test Item	Test result		
EN 55032	Conducted emissions from the AC mains power ports	Pass		
EN 55032	Asymmetric mode conducted emissions	Pass		
EN 55032	Conducted differential voltage emissions	N/A <sup>2</sup>		
EN 55032	Radiated emissions	Pass		

IMMUNITY (EN 55035)					
Standard	Standard Test Item				
EN 55035	Electrostatic discharge (ESD)	Pass			
EN 55035	Continuous RF electromagnetic field disturbances(RS)	Pass			
EN 55035	Electrical fast transients/burst (EFT)	N/A <sup>3</sup>			
EN 55035	Surges	N/A <sup>3</sup>			
EN 55035	Continuous induced RF disturbances (CS)	N/A <sup>3</sup>			
EN 55035	Broadband impulse noise disturbances, repetitive	N/A <sup>4</sup>			
EN 55035	Broadband impulse noise disturbances, isolated	N/A <sup>4</sup>			
EN 55035	Power frequency magnetic field (PFMF)	N/A <sup>5</sup>			
EN 55035	Voltage dips and interruptions (DIPS)	N/A <sup>3</sup>			

Remark:

- 1. Applicable to ports listed above and intended to connect to cables longer than 3 m.
- 2. The Product has no antenna port.
- 3. The EUT is powered by the DC only, the test item is not applicable
- 4. Applicable only to CPE xDSL ports.
- 5. The Product doesn't contain any device susceptible to magnetic fields.



## 3. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the Product 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.

Test item	Value (dB)
Conducted Emission (150kHz-30MHz)	3.10
Asymmetric mode conducted emissions (150KHz-30MHz)	3.9(cat 3) 4.3(cat 5) 4.8(cat 6)
Radiated disturbance (30MHz-200MHz)	4.60
Radiated disturbance (200MHz-1000MHz)	5.20



## 4. Product Information And Test Setup

#### 4.1 Product Information

Ratings:Input: DC5V 3AModel difference:All models are identical except for the appearance color and model named.

	Cable of Product							
No.	Cable Type	Quantity	Provider	Length (m)	Specification	Note		
1								
2								

#### 4.2 Test Setup Configuration

See test photographs attached in EUT TEST SETUP PHOTOGRAPHS for the actual connections between Product and support equipment.

#### 4.3 Support Equipment

No.	Device Type	Brand	Model	Series No.	Note
1.	PC	Lenovo	ThinkPad E15 Gen 2		
2.	Router	Mi	R4A		
3.	Adapter	Invisible	NVZ469PH		

#### Notes:

1. All the equipment/cables were placed in the worst-case configuration to maximize the emission during the test.

2. Grounding was established in accordance with the manufacturer's requirements and conditions for the intended use.



## 4.4 Test Mode

Test item	Test Mode	Test Voltage
Conducted emissions from the AC mains power ports (150KHz-30MHz) Class B	Working	DC 5V from adapter Input AC 230V/50Hz
Asymmetric mode conducted emissions(150KHz-30MHz) Class B	Working	DC 5V from adapter Input AC 230V/50Hz
Radiated emissions(30MHz-1GHz) Class B	Working	DC 5V from adapter Input AC 230V/50Hz*
Electrostatic discharge (ESD) B Air Discharge: ±8kV Contact Discharge: ±4kV HCP & VCP: ±4Kv 10 times each point/	Working	DC 5V from adapter Input AC 230V/50Hz
Continuous RF electromagnetic field disturbances(RS) 80MHz-1000MHz, 1800MHz, 2600MHz,3500MHz,5000MHz 3V/m,80% AM Front, Rear, Left, Right H/V	Working	DC 5V from adapter Input AC 230V/50Hz





## 5. Test Facility And Test Instrument Used

#### 5.1 Test Facility

All measurement facilities used to collect the measurement data are located at Shenzhen BCTC Testing Co., Ltd. Address: 1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China. The site and apparatus are constructed in conformance with the requirements of ANSI C63.4 and CISPR 16-1-1 other equivalent standards.

#### 5.2 Test Instrument Used

Conducted Emissions Test							
Equipment	Equipment Manufacturer Model# Serial# Last Cal. Next Cal.						
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025		
LISN	R&S	ENV216	101375	May 16, 2024	May 15, 2025		
ISN	HPX	ISN T800	S1509001	May 16, 2024	May 15, 2025		
Software	Frad	EZ-EMC	EMC-CON 3A1	/	/		
Pulse limiter	Schwarzbeck	VTSD 9561-F	01323	May 16, 2024	May 15, 2025		

Radiated Emissions Test (966 Chamber#01)					
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.
966 chamber	ChengYu	966 Room	966	May 15, 2023	May 14, 2026
Receiver	R&S	ESRP	101154	May 16, 2024	May 15, 2025
Receiver	R&S	ESR3	102075	May 16, 2024	May 15, 2025
Amplifier	SKET	LAPA_01G1 8G-45dB	SK202104090 1	May 16, 2024	May 15, 2025
Amplifier	Schwarzbeck	BBV9744	9744-0037	May 16, 2024	May 15, 2025
TRILOG Broadband Antenna	schwarzbeck	VULB9163	942	May 21, 2024	May 20, 2025
Horn Antenna	schwarzbeck	BBHA9120D	1541	May 21, 2024	May 20, 2025
Software	Frad	EZ-EMC	FA-03A2 RE		· · · · · · · · · · · · · · · · · · ·
	1				

Electrostatic Discharge Test						
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.	
Electrostatic Discharge Simulator	3C TEST	EDS 30T	ES031000123 059	Mar. 13, 2024	Mar. 12, 2025	

No.: BCTC/RF-EMC-005





	Continuous RF Electromagnetic Field Disturbances Test							
Equipment	Manufacturer	Model#	Serial#	Last Cal.	Next Cal.			
Power meter	Keysight	E4419	A00065	May 16, 2024	May 15, 2025			
Power sensor	Keysight	E9300A	US39211659	May 16, 2024	May 15, 2025			
Power sensor	Keysight	E9300A	US39211305	May 16, 2024	May 15, 2025			
Amplifier	SKET	HAP_801000 -250W	21201805013	May 16, 2024	May 15, 2025			
Amplifier	SKET	HAP_0103-7 5W	21201805014	May 16, 2024	May 15, 2025			
Amplifier	SKET	HAP_0306-5 0W	21201805015	May 16, 2024	May 15, 2025			
Stacked double LogPer. Antenna	Schwarzbeck	STLP 9129	00077	١	١			
Field Probe	Narda	EP-601	611WX80256	May 25, 2024	May 24, 2025			
Signal Generator	Agilent	N5181A	MY50143748	May 16, 2024	May 15, 2025			
Software	SKET	EMC-S	1.2.0.18	١	١			

No.: BCTC/RF-EMC-005

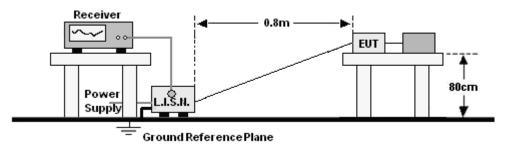
Page 10 of 31



#### **Conducted Emissions** 6.

#### Block Diagram Of Test Setup 6.1

#### For mains ports:



#### 6.2 Limit

Frequency range (MHz)	Limits dB(µV)			
(10112)	Quasi-peak	Average		
0,15 to 0,50	66 to 56*	56 to 46*		
0,50 to 5	56	46		
5 to 30	60	50		

# . . . . .

Notes: 1. \*Decreasing linearly with logarithm of frequency.

2. The lower limit shall apply at the transition frequencies.

#### 6.3 Test procedure

#### For mains ports:

a. The Product was placed on a nonconductive table 0. 8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the main through Line Impedance Stability Network (L.I.S.N).

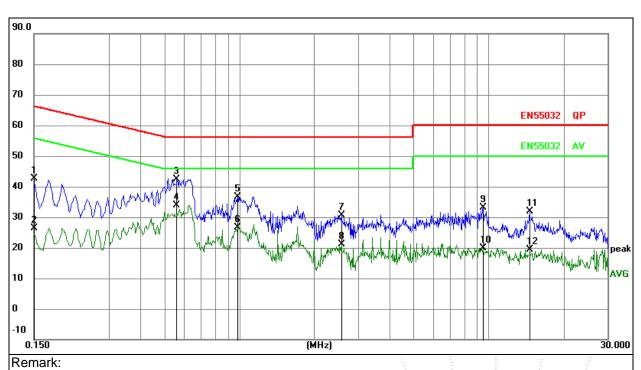
b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.

c. For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.



#### 6.4 Test Result

Temperature:	<b>26</b> ℃	Relative Humidity:	54%RH
Pressure:		Phase :	Line
Test Voltage :	DC 5V from adapter Input AC 230V/50Hz	Test Mode:	Working



1. All readings are Quasi-Peak and Average values.

2. Factor = Insertion Loss + Cable Loss.

3. Measurement = Reading Level + Correct Factor

4. Over = Measurement - Limit

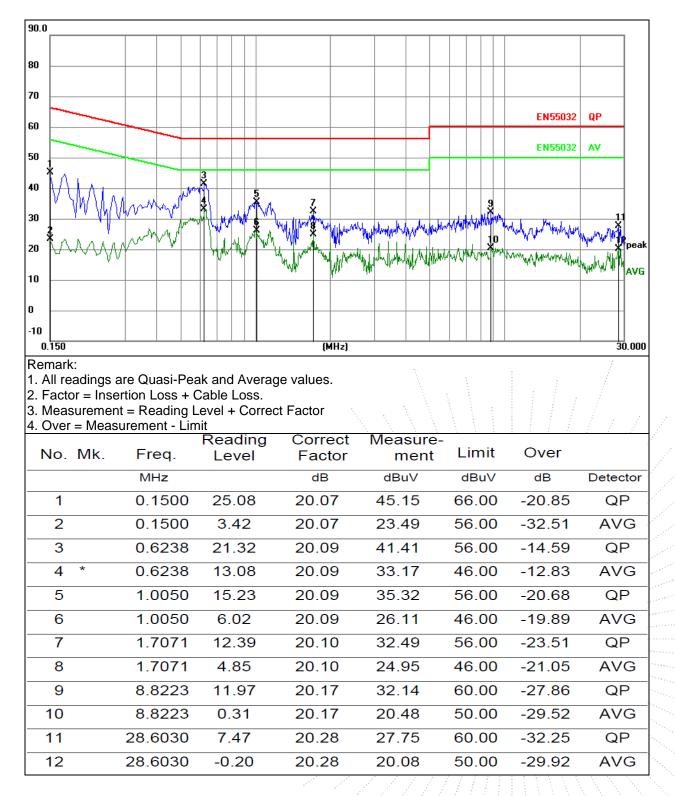
4. Over	= measu	irement - Lin	IIL					
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1500	22.50	20.07	42.57	66.00	-23.43	QP
2		0.1500	6.30	20.07	26.37	56.00	-29.63	AVG
3		0.5611	22.41	20.08	42.49	56.00	-13.51	QP
4	*	0.5611	13.73	20.08	33.81	46.00	-12.19	AVG
5		0.9839	16.65	20.09	36.74	56.00	-19.26	QP
6		0.9839	6.61	20.09	26.70	46.00	-19.30	AVG
7		2.5671	10.56	20.11	30.67	56.00	-25.33	QP
8		2.5671	1.03	20.11	21.14	46.00	-24.86	AVG
9		9.5016	13.03	20.17	33.20	60.00	-26.80	QP
10		9.5016	-0.25	20.17	19.92	50.00	-30.08	AVG
11		14.5942	11.49	20.30	31.79	60.00	-28.21	QP
12		14.5942	-0.92	20.30	19.38	50.00	-30.62	AVG
	CTC (DE			D	40 10 04			

No.: BCTC/RF-EMC-005

Page 12 of 31



Temperature:	<b>26</b> ℃	Relative Humidity:	54%RH
			Neutral
Test Voltage :	DC 5V from adapter Input AC 230V/50Hz	Test Mode:	Working



No.: BCTC/RF-EMC-005

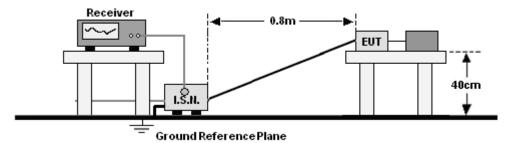
Page 13 of 3



#### 7. Conducted Emissions

#### 7.1 Block Diagram Of Test Setup

#### For asymmetric mode ports:



#### 7.2 Limit

Frequency range (MHz)	Voltage dB(	e Limits μV)	Current Limits dB(µA)		
(11112)	Quasi-peak	Average	Quasi-peak	Average	
0,15 to 0,50	84-74	74-64	40-30	30-20	
0,50 to 30	74	64	30	20	

#### Limits for asymmetric mode conducted emissions of Class B MME

Notes: \*Decreasing linearly with logarithm of frequency.

### 7.3 Test procedure

#### For asymmetric mode ports:

a. The Product was placed on a non-conductive table 0.8 m above the horizontal ground reference plane, and 0.4 m from the vertical ground reference plane, and connected to the associated port through votalge probe.

b. The RBW of the receiver was set at 9 kHz in 150 kHz ~ 30MHz with Peak and AVG detector in Max Hold mode. Run the receiver's pre-scan to record the maximum disturbance generated from Product in all power lines in the full band.

c. For each frequency whose maximum record was higher or close to limit, measure its QP and AVG values and record.

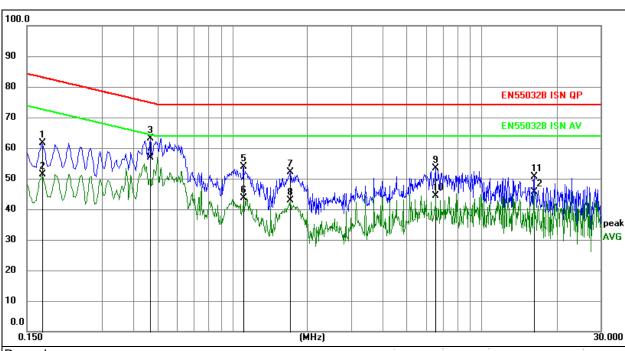


Page 14 of 3



## 7.4 Test Result

Temperature:	<b>26</b> ℃	Relative Humidity:	54%RH
		Phase :	TELE
Test Voltage :	DC 5V from adapter Input AC 230V/50Hz	Test Mode:	Working



Remark:

1. All readings are Quasi-Peak and Average values.

2. Factor = Insertion Loss + Cable Loss.

3. Measurement = Reading Level + Correct Factor

4. Over = Measurement - Limit

				•.				
No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
		MHz		dB	dBuV	dBuV	dB	Detector
1		0.1722	41.87	19.78	61.65	82.85	-21.20	QP
2		0.1722	31.52	19.78	51.30	72.85	-21.55	AVG
3		0.4686	43.07	19.95	63.02	74.54	-11.52	QP
4	*	0.4686	36.88	19.95	56.83	64.54	-7.71	AVG
5		1.1056	33.78	20.08	53.86	74.00	-20.14	QP
6		1.1056	23.54	20.08	43.62	64.00	-20.38	AVG
7		1.7071	32.10	20.03	52.13	74.00	-21.87	QP
8		1.7071	22.91	20.03	42.94	64.00	-21.06	AVG
9		6.5227	33.22	20.22	53.44	74.00	-20.56	QP
10		6.5227	24.18	20.22	44.40	64.00	-19.60	AVG
11		16.2256	30.48	20.26	50.74	74.00	-23.26	QP
12		16.2256	25.40	20.26	45.66	64.00	-18.34	AVG

No.: BCTC/RF-EMC-005

Page 15 of 31

Edition: B.2

JC JC JC

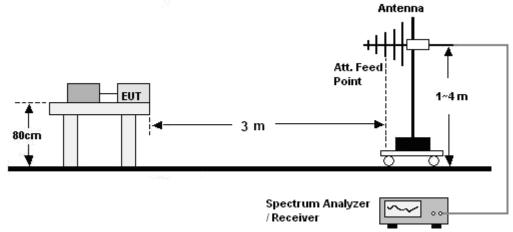
Por



#### 8. Radiated Emissions Test

8.1 Block Diagram Of Test Setup

#### 30MHz ~ 1GHz:



#### 8.2 Limits

#### Limits for radiated disturbance of Class B MME

Frequency (MHz)	Quasi-peak limits at 3m dB(µV/m)					
30-230	40					
230-1000	47					

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

#### 8.3 Test Procedure

#### 30MHz ~ 1GHz:

a. The Product was placed on the nonconductive turntable 0.8m above the ground in a semi anechoic chamber.

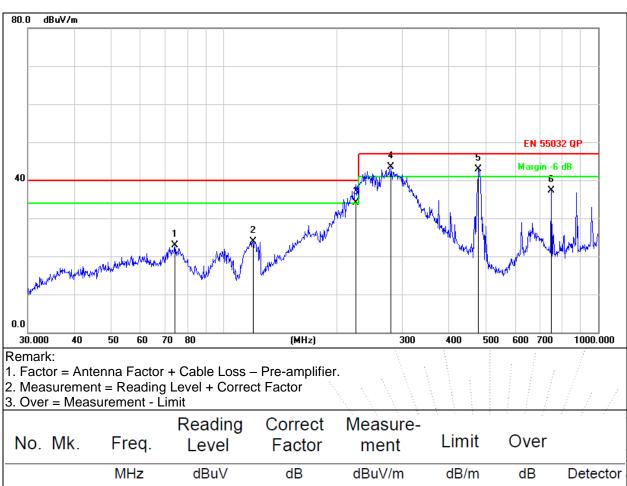
b. Set the spectrum analyzer/receiver in Peak detector, Max Hold mode, and 120 kHz RBW. Record the maximum field strength of all the pre-scan process in the full band when the antenna is varied between 1~4 m in both horizontal and vertical, and the turntable is rotated from 0 to 360 degrees.

c. For each frequency whose maximum record was higher or close to limit, measure its QP value: vary the antenna's height and rotate the turntable from 0 to 360 degrees to find the height and degree where Product radiated the maximum emission, then set the test frequency analyzer/receiver to QP Detector and specified bandwidth with Maximum Hold Mode, and record the maximum value.



#### 8.4 Test Results

Temperature:	<b>26</b> ℃	Relative Humidity:	54%RH
Pressure:		Phase :	Horizontal
Test Voltage :	DC 5V from adapter Input AC 230V/50Hz	Test Mode:	Working



Level	Facior	ment	Linne	0,001	
dBuV	dB	dBuV/m	dB/m	dB	Detector
41.67	-18.72	22.95	40.00	-17.05	QP
41.25	-17.32	23.93	40.00	-16.07	QP
49.06	-15.00	34.06	40.00	-5.94	QP
57.17	-13.66	43.51	47.00	-3.49	QP
51.99	-9.14	42.85	47.00	-4.15	QP
42.28	-4.99	37.29	47.00	-9.71	QP

No.: BCTC/RF-EMC-005

74.1350

119.8555

225.3079

280.0237

478.8455

750.1082

1

2

3 !

5!

6

4 \*



Temperature:	<b>26</b> ℃	Relative Humidity:	54%RH
Pressure:	101KPa		Vertical
Test Voltage :	DC 5V from adapter Input AC 230V/50Hz	Test Mode:	Working



1 ! 36.0007 50.01 -15.49 34.52 40.00 -5.48 QP   2 ! 67.9128 52.28 -17.43 34.85 40.00 -5.15 QP   3 ! 91.1745 53.13 -17.23 35.90 40.00 -4.10 QP   4 287.9904 53.82 -13.49 40.33 47.00 -6.67 QP   5 * 480.5276 52.40 -9.10 43.30 47.00 -3.70 QP	No.	Mk	. Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over	
2 ! 67.9128 52.28 -17.43 34.85 40.00 -5.15 QP   3 ! 91.1745 53.13 -17.23 35.90 40.00 -4.10 QP   4 287.9904 53.82 -13.49 40.33 47.00 -6.67 QP   5 * 480.5276 52.40 -9.10 43.30 47.00 -3.70 QP			MHz	dBuV	dB	dBuV/m	dB/m	dB	Detector
3 ! 91.1745 53.13 -17.23 35.90 40.00 -4.10 QP   4 287.9904 53.82 -13.49 40.33 47.00 -6.67 QP   5 * 480.5276 52.40 -9.10 43.30 47.00 -3.70 QP	1	İ	36.0007	50.01	-15.49	34.52	40.00	-5.48	QP
4 287.9904 53.82 -13.49 40.33 47.00 -6.67 QP   5 * 480.5276 52.40 -9.10 43.30 47.00 -3.70 QP	2	İ	67.9128	52.28	-17.43	34.85	40.00	-5.15	QP
5 * 480.5276 52.40 -9.10 43.30 47.00 -3.70 QP	3	İ	91.1745	53.13	-17.23	35.90	40.00	-4.10	QP
	4		287.9904	53.82	-13.49	40.33	47.00	-6.67	QP
	5	*	480.5276	52.40	-9.10	43.30	47.00	-3.70	QP
0 073.2409 41.02 -3.33 37.47 47.00 -9.33 QF	6		875.2469	41.02	-3.55	37.47	47.00	-9.53	QP

No.: BCTC/RF-EMC-005

n 00.,LT





# 9. Immunity Test Of General The Performance Criteria

Product Standard	EN 55035:2017+A11:2020 clause 8
CRITERION A	The equipment shall continue to operate as intended without operator intervention. No degradation of performance, loss of function or change of operating state is allowed below a performance level specified by the manufacturer when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.
CRITERION B	During the application of the disturbance, degradation of performance is allowed. However, no unintended change of actual operating state or stored data is allowed to persist after the test. After the test, the equipment shall continue to operate as intended without operator intervention; no degradation of performance or loss of function is allowed, below a performance level specified by the manufacturer, when the equipment is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level (or the permissible performance loss), or recovery time, is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the equipment if used as intended.
CRITERION C	Loss of function is allowed, provided the function is self-recoverable, or can be restored by the operation of the controls by the user in accordance with the manufacturer's instructions. A reboot or re-start operation is allowed. Information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

Page 19 of 31

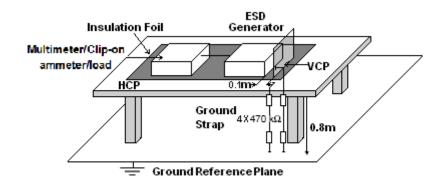


#### 10. Electrostatic Discharge (ESD)

#### 10.1 Test Specification

Basic standard	:	IEC 61000-4-2
Test Port	:	Enclosure port
Discharge Impedance Discharge Mode Discharge Period	:	330 ohm / 150 pF Single Discharge one second between each discharge

#### 10.2 Block Diagram of Test Setup



#### 10.3 Test Procedure

a. Electrostatic discharges were applied only to those points and surfaces of the Product that are accessible to users during normal operation.

b. The test was performed with at least ten single discharges on the pre-selected points in the most sensitive polarity.

c. The time interval between two successive single discharges was at least 1 second.

d. The ESD generator was held perpendicularly to the surface to which the discharge was applied and the return cable was at least 0.2 meters from the Product.

e. Contact discharges were applied to the non-insulating coating, with the pointed tip of the generator penetrating the coating and contacting the conducting substrate.

f. Air discharges were applied with the round discharge tip of the discharge electrode approaching the Product as fast as possible (without causing mechanical damage) to touch the Product. After each discharge, the ESD generator was removed from the Product and re-triggered for a new single discharge. The test was repeated until all discharges were complete.

g. At least ten single discharges (in the most sensitive polarity) were applied to the Horizontal Coupling Plane at points on each side of the Product. The ESD generator was positioned vertically at a distance of 0.1 meters from the Product with the discharge electrode touching the HCP.

h. At least ten single discharges (in the most sensitive polarity) were applied to the center of one vertical edge of the Vertical Coupling Plane in sufficiently different positions that the four faces of the Product were completely illuminated. The VCP (dimensions 0.5m x 0.5m) was placed vertically to and 0.1 meters from the Product.

Page 20 of 31



## 10.4 Test Results

Temperature:	26 °C	Relative Humidity:	54%RH
Pressure:	101kPa		
LAST VOITAGA .	DC 5V from adapter Input AC 230V/50Hz	Test Mode:	Working

Discharge Method	Discharge Position	Voltage (±kV)	Min. No. of Discharge per polarity (Each Point)	Required Level	Performance Criterion
	НСР	4	10	В	A
Contact Discharge	VCP	4	10	В	A
	Surface metal, port, port C, port A	4	10	В	A
Air Discharge	N/A	8	10	В	N/A

,TC 3C PR

ероі



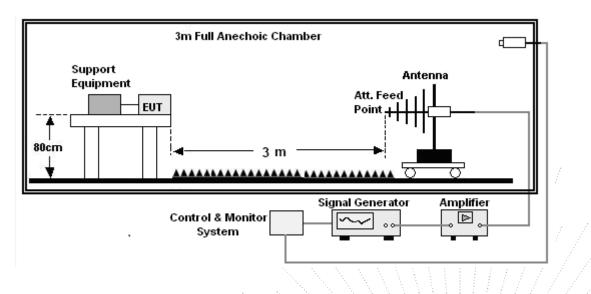


## 11. Continuous Rf Electromagnetic Field Disturbances (RS)

#### 11.1 Test Specification

Basic standard	:	IEC 61000-4-3
Test Port	:	Enclosure port
Step Size	:	1%
Modulation	:	1kHz, 80% AM
Dwell Time Polarization	-	1 second Horizontal & Vertical

#### 11.2 Block Diagram of Test Setup



#### 11.3 Test Procedure

a. The testing was performed in a fully-anechoic chamber. The transmit antenna was located at a distance of 3 meters from the Product.

b. The frequency range is swept from 80MHz to 1000MHz, 1800MHz, 2600MHz, 3500MHz, 5000MHz,with the signal 80% amplitude modulated with a 1 kHz sine wave, and the step size was 1%.

c. The dwell time at each frequency shall not be less than the time necessary for the EUT to be exercised and to be able to respond, but should not exceed 5 s at each of the frequencies during the scan. d. The test was performed with the Product exposed to both vertically and horizontally polarized fields on

each of the four sides.

e. For Broadcast reception function: Group 2 not apply in this test.



se



## 11.4 Test Results

Temperature:	<b>26</b> ℃	Relative Humidity:	54%RH
Pressure:	101kPa		
	DC 5V from adapter Input AC 230V/50Hz	Test Mode:	Working

Frequency	Position	Field Strength (V/m)	Required Level	Performance Criterion
80 - 1000MHz, 1800MHz, 2600MHz, 3500MHz, 5000MHz	Front, Right, Back, Left	3	A	A

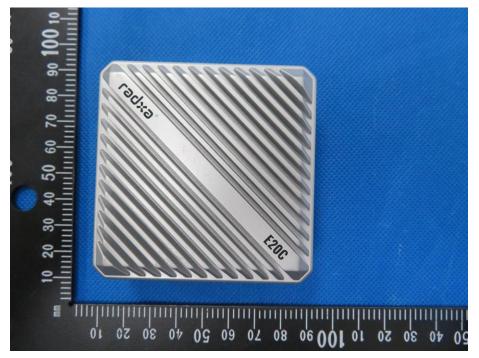


No.: BCTC/RF-EMC-005

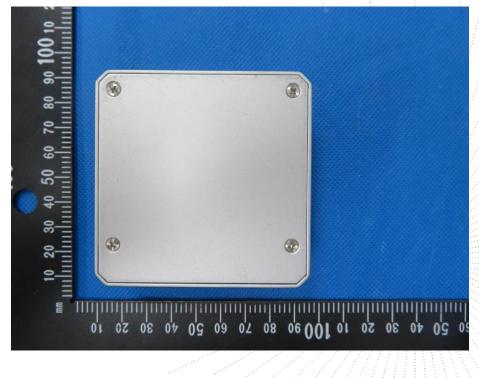


## 12. EUT Photographs

EUT Photo 1



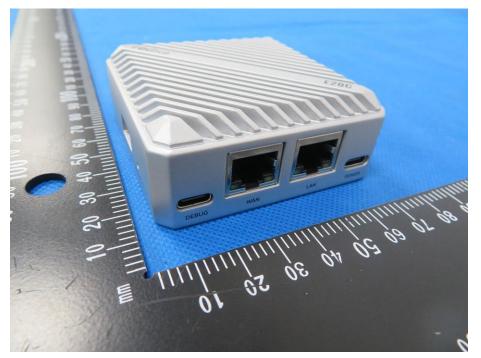
EUT Photo 2



CO.,LT



#### EUT Photo 3



## EUT Photo 4



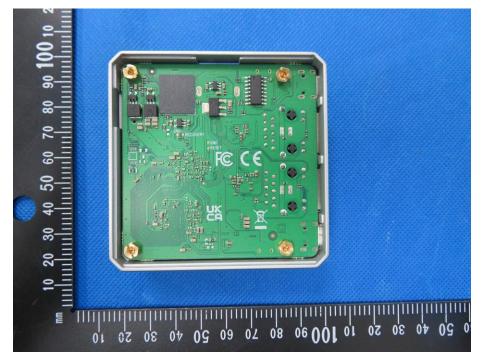
No.: BCTC/RF-EMC-005

Edition: B.2

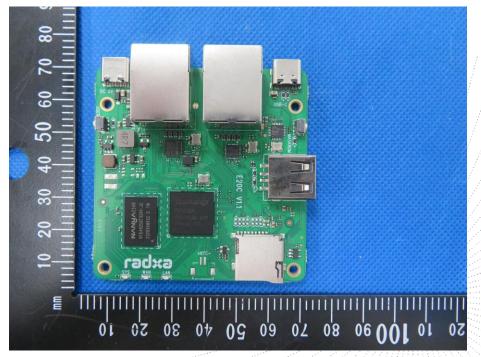
2



#### EUT Photo 5

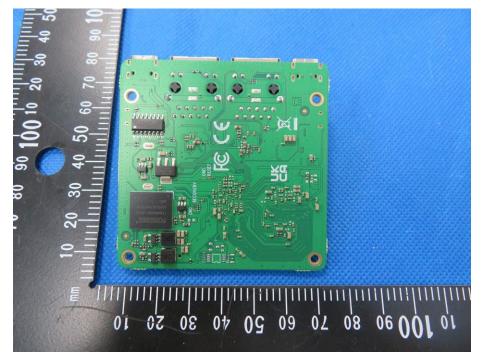


EUT Photo 6





## EUT Photo 7





Page 27 of 3

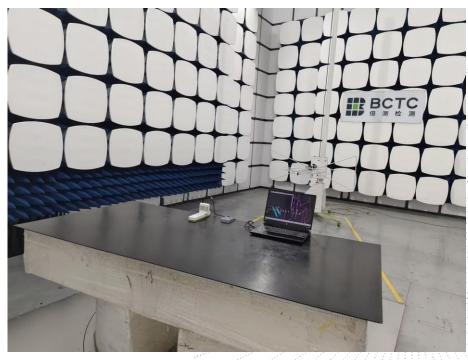


## 13. EUT Test Setup Photographs

#### Conducted emissions



Radiated emissions

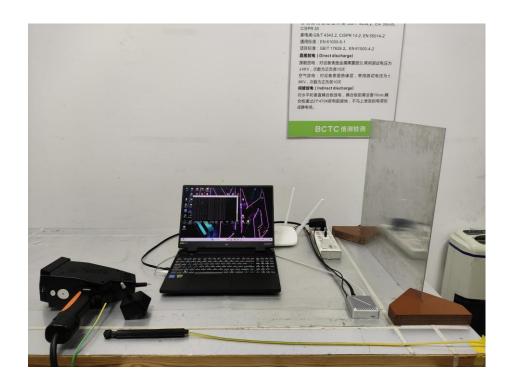


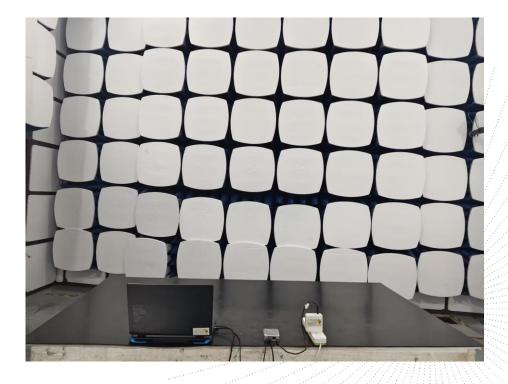
ort

No.: BCTC/RF-EMC-005



#### ESD







TELE







Page 30 of 31



## STATEMENT

- 1. The equipment lists are traceable to the national reference standards.
- 2. The test report can not be partially copied unless prior written approval is issued from our lab.
- 3. The test report is invalid without the "special seal for inspection and testing".
- 4. The test report is invalid without the signature of the approver.
- 5. The test process and test result is only related to the Unit Under Test.

6. Sample information is provided by the client and the laboratory is not responsible for its authenticity.

7. The quality system of our laboratory is in accordance with ISO/IEC17025.

8. If there is any objection to this test report, the client should inform issuing laboratory within 15 days from the date of receiving test report.

Address:

1-2/F., Building B, Pengzhou Industrial Park, No.158, Fuyuan 1st Road, Zhancheng, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, China

TEL: 400-788-9558

P.C.: 518103

FAX: 0755-33229357

Website: http://www.chnbctc.com

Consultation E-mail: bctc@bctc-lab.com.cn

Complaint/Advice E-mail: advice@bctc-lab.com.cn

\*\*\*\*\* END \*\*\*\*\*

No.: BCTC/RF-EMC-005

Page 31 of 31