## **TEST REPORT**

2AQ2WQ103					
TCT240104E001	$\langle \mathcal{O} \rangle$				
Jan. 15, 2024					
SHENZHEN TONGCE TESTIN	G LAB				
Fuhai Subdistrict, Bao'an Distric	ct, Shenzhen, Guangdong	•			
Shenzhen Doageas Technology	y Co., Ltd.				
Shenzhen Doageas Technology	y Co., Ltd.				
5/F, 4th Bldg, Hedian Industrial Park, Guanlan, Longhua, Shenzhen, Guangdong 518110, China.					
FCC CFR Title 47 Part 15 Subpart C					
Desktop tray with wireless charger					
DOAGEAS					
Q103					
Input: DC 5V/ DC 9V Output: 15W/10W/7.5W/5W					
Jan. 04, 2024					
Jan. 04, 2024 - Jan. 15, 2024					
Yannie ZHONG	Yannie Zootteczie				
Beryl ZHAO	BoyCom PCT				
	TCT240104E001 Jan. 15, 2024 SHENZHEN TONGCE TESTIN 2101 & 2201, Zhenchang Factor Fuhai Subdistrict, Bao'an District 518103, People's Republic of C Shenzhen Doageas Technology 5/F, 4th Bldg, Hedian Industrial Shenzhen, Guangdong 518110 Shenzhen Doageas Technology 5/F, 4th Bldg, Hedian Industrial Shenzhen, Guangdong 518110 FCC CFR Title 47 Part 15 Subp Desktop tray with wireless chars <b>DOAGEAS</b> Q103 Input: DC 5V/ DC 9V Output: 15W/10W/7.5W/5W Jan. 04, 2024 Jan. 04, 2024 - Jan. 15, 2024 Yannie ZHONG	TCT240104E001         Jan. 15, 2024         SHENZHEN TONGCE TESTING LAB         2101 & 2201, Zhenchang Factory, Renshan Industrial Zor         Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong         518103, People's Republic of China         Shenzhen Doageas Technology Co., Ltd.         5/F, 4th Bldg, Hedian Industrial Park, Guanlan, Longhua,         Shenzhen, Guangdong 518110, China.         Shenzhen Doageas Technology Co., Ltd.         5/F, 4th Bldg, Hedian Industrial Park, Guanlan, Longhua,         Shenzhen, Guangdong 518110, China.         Shenzhen, Guangdong 518110, China.         FCC CFR Title 47 Part 15 Subpart C         Desktop tray with wireless charger         DOAGEAS         Q103         Input: DC 5V/ DC 9V         Output: 15W/10W/7.5W/5W         Jan. 04, 2024         Jan. 04, 2024 - Jan. 15, 2024         Yannie ZHONG			

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TCT通测检测 TESTING CENTRE TECHNOLOGY

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## **1. General Product Information**

## 1.1. EUT description

Product Name:	Desktop tray with wireless cha			
Model/Type reference:	Q103			
Sample Number:	TCT240104E001-0101			
Operation Frequency:	116.32kHz ~ 193.78kHz		S)	
Output power:	15W/10W/7.5W/5W			
Modulation Technology:	Load modulation	$\left( \begin{array}{c} \\ \\ \end{array} \right)$		
Antenna Type:	Inductive loop coil Antenna			
Rating(s):	Input: DC 5V/ DC 9V Output: 15W/10W/7.5W/5W			

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

# 1.2. Model(s) list None. Page 3 of 29 Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com



## 2. Test Result Summary

Requirement		CFR 47 Se	ection		Result		
Antenna requirem	ntenna requirement §15.203 Power Line Conducted §15.207				PASS		
Spurious Emissio	on	§15.209(	(a)(f)		PASS		
Note: 1. PASS: Test item meets 2. Fail: Test item does not		nt.		S		Real of the second seco	
3. N/A: Test case does no 4. The test result judgmen			rd.				
					Page	4 0	

## 3. General Information

#### 3.1. Test environment and mode

Operating Enviro	nment:			
Conditio	n	Co	onducted Emission	Radiated Emission
Temperature:	Temperature: 2		.5 °C	24.2 °C
Humidity:	Humidity: 52		% RH	51 % RH
Atmospheric F	Pressure:	10	10 mbar	1010 mbar
Test Mode:				
	Mode	1	AC/DC adapter(DC 5V) (battery status>95%)	+ EUT + Mobile Phone
Mode 2			AC/DC adapter(DC 5V) (battery status<50%)	+ EUT + Mobile Phone
AC model	Mode	3	AC/DC adapter(DC 5V) (battery status<1%)	+ EUT + Mobile Phone
AC mode:	Mode	4	AC/DC adapter(DC 9V)	+ EUT + Mobile Phone

	Mode 1	AC/DC adapter(DC 5V) + EUT + Mobile Phone (battery status>95%)
	Mode 2	AC/DC adapter(DC 5V) + EUT + Mobile Phone (battery status<50%)
	Mode 3	AC/DC adapter(DC 5V) + EUT + Mobile Phone (battery status<1%)
AC mode:	Mode 4	AC/DC adapter(DC 9V) + EUT + Mobile Phone (battery status>95%)
	Mode 5	AC/DC adapter(DC 9V) + EUT + Mobile Phone (battery status<50%)
	Mode 6	AC/DC adapter(DC 9V) + EUT + Mobile Phone (battery status<1%)
Remark	for Condu	have been tested. The worst mode (Mode 6) reported acted emission test and The worst mode (Mode 3) or Radiated emission test
The sample was place	ed 0.8m fc	or the measurement below above the ground plane of

The sample was placed 0.8m for the measurement below above the ground plane of 3m chamber. Measurements in both horizontal and vertical polarities were performed. During the test, each emission was maximized by: having the EUT continuously working, investigated all operating modes, rotated about all 3 axis (X, Y & Z) and considered typical configuration to obtain worst position, manipulating interconnecting cables, rotating the turntable, varying antenna height from 1m to 4m in both horizontal and vertical polarizations. The emissions worst-case(Z axis) are shown in Test Results of the following pages.

## 3.2. 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.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
Adapter	EP-TA200	R37M4PR7QD 4SE3	/	SAMSUNG

Note:	ile Phone	SM-GS	28HA2ER3	/ maximize the	SAMSU	
2.	Grounding was use.					



## 4. Facilities and Accreditations

### 4.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

• FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC Registration No.: 10668A-1
  - SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

## 4.2. Location

#### SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory, Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China TEL: +86-755-27673339

4.3. Measurement Uncertainty

The reported uncertainty of measurement  $y \pm U$ , where expended uncertainty U is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95 %.

No.	Item	MU
1	Conducted Emission	± 3.10 dB
2	RF power, conducted	± 0.12 dB
3	Spurious emissions, conducted	± 0.11 dB
4	All emissions, radiated(<1 GHz)	± 4.56 dB
5	All emissions, radiated(1 GHz - 18 GHz)	± 4.22 dB
6	All emissions, radiated(18 GHz- 40 GHz)	± 4.36 dB



## 5. Test Results and Measurement Data

## 5.1. Antenna requirement

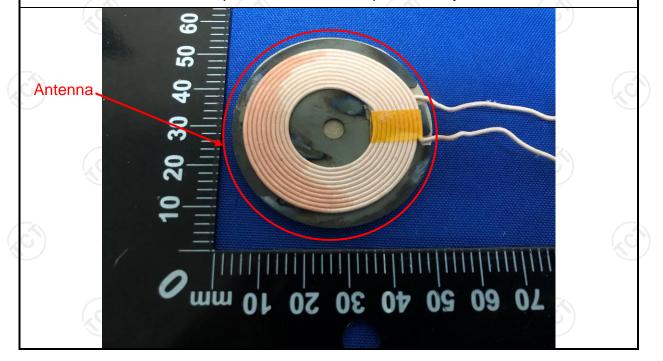
Standard requirement: FCC Part15 C Section 15.203

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

#### E.U.T Antenna:

The antenna is inductive loop coil antenna which permanently attached.





## 5.2. Conducted Emission

#### 5.2.1. Test Specification

Test Requirement:	FCC Part15 C Section	15.207	No.					
Test Method:	ANSI C63.10: 2013	ANSI C63.10: 2013						
Frequency Range:	150 kHz to 30 MHz							
Receiver setup:	RBW=9 kHz, VBW=30 kHz, Sweep time=auto							
Limits:	Frequency range (MHz) 0.15-0.5 0.5-5 5-30	Limit ( Quasi-peak 66 to 56* 56 60	dBuV) Average 56 to 46* 46 50					
	Referenc	e Plane						
Test Setup:	E.U.T AC powe Test table/Insulation plane	Test table/Insulation plane     Filter AC power       Remark:     E.U.T: Equipment Under Test       LISN: Line Impedence Stabilization Network						
Test Mode:	Refer to item 3.1							
Test Procedure:	<ol> <li>The E.U.T is connerimpedance stabilizing provides a 500hm/s measuring equipme</li> <li>The peripheral device power through a Licoupling impedance refer to the block photographs).</li> <li>Both sides of A.C. conducted interferent emission, the relative the interface cables ANSI C63.10: 2013</li> </ol>	zation network 50uH coupling im nt. ces are also conne ISN that provides with 50ohm terr diagram of the line are checke nce. In order to fi e positions of equ s must be chang	(L.I.S.N.). This pedance for the ected to the main s a 50ohm/50uH nination. (Please test setup and ed for maximum nd the maximum ipment and all of jed according to					

#### 5.2.2. Test Instruments

C	Conducted Emission Shielding Room Test Site (843)								
N	Equipment Manufacture		Model	Serial Number	Calibration Due				
	EMI Test Receiver	R&S	ESCI3	100898	Jun. 29, 2024				
	Line Impedance Stabilisation Newtork(LISN)	Schwarzbeck	NSLK 8126	8126453	Feb. 20, 2024				
(	Line-5	тст	CE-05	1	Jul. 03, 2024				
N	EMI Test Software	Shurple Technology	EZ-EMC		/				













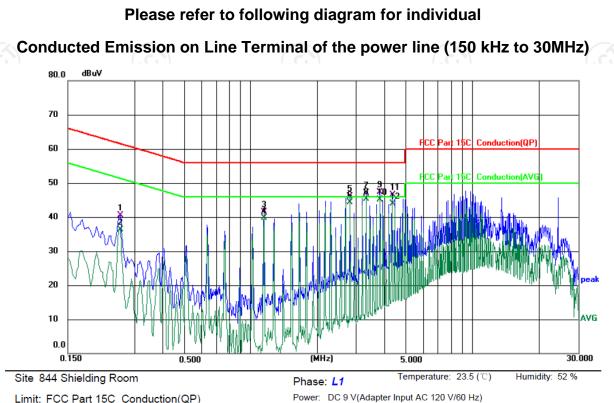


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#### 5.2.3. Test data

TCT 通测检测 TESTING CENTRE TECHNOLOGY



No. Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
	MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	0.2580	30.55	9.95	40.50	61.50	-21.00	QP	
2	0.2580	26.36	9.95	36.31	51.50	-15.19	AVG	
3	1.1500	31.55	9.98	41.53	56.00	-14.47	QP	
4	1.1500	29.72	9.98	39.70	46.00	-6.30	AVG	
5	2.8100	36.12	10.04	46.16	56.00	-9.84	QP	
6	2.8100	34.26	10.04	44.30	46.00	-1.70	AVG	
7	3.3220	37.14	10.04	47.18	56.00	-8.82	QP	
8 *	3.3220	35.19	10.04	45.23	46.00	-0.77	AVG	
9	3.8340	37.26	10.07	47.33	56.00	-8.67	QP	
10	3.8340	35.13	10.07	45.20	46.00	-0.80	AVG	
11	4.3419	36.38	10.07	46.45	56.00	-9.55	QP	
12	4.3419	33.90	10.07	43.97	46.00	-2.03	AVG	

#### Note:

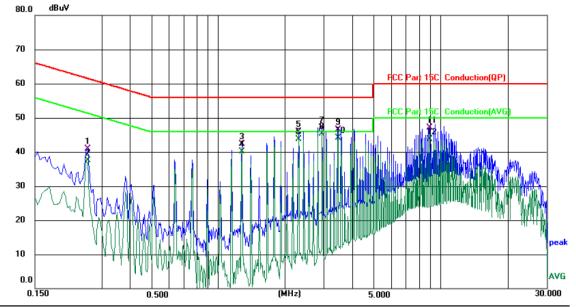
Freq. = Emission frequency in MHz Reading level  $(dB\mu V)$  = Receiver reading Corr. Factor (dB) = LISN factor + Cable loss Measurement  $(dB\mu V)$  = Reading level  $(dB\mu V)$  + Corr. Factor (dB)Limit  $(dB\mu V)$  = Limit stated in standard

Margin (dB) = Measurement (dB $\mu$ V) – Limits (dB $\mu$ V)

Q.P. =Quasi-Peak

AVG =average

\* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz



## Conducted Emission on Neutral Terminal of the power line (150 kHz to 30MHz)

 Site 844 Shielding Room
 Phase: N
 Temperature: 23.5 (°C)
 Humidity: 52 %

 Limit: FCC Part 15C Conduction(QP)
 Power: DC 9 V(Adapter Input AC 120 V/60 Hz)
 Humidity: 52 %

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure- ment	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1		0.2580	30.87	9.95	40.82	61.50	-20.68	QP	
2		0.2580	27.55	9.95	37.50	51.50	-14.00	AVG	
3		1.2780	32.22	10.00	42.22	56.00	-13.78	QP	
4		1.2780	30.13	10.00	40.13	46.00	-5.87	AVG	
5		2.3020	35.85	10.03	45.88	56.00	-10.12	QP	
6		2.3020	33.66	10.03	43.69	46.00	-2.31	AVG	
7		2.9420	37.08	10.04	47.12	56.00	-8.88	QP	
8	*	2.9420	35.20	10.04	45.24	46.00	-0.76	AVG	
9		3.4540	36.50	10.04	46.54	56.00	-9.46	QP	
10		3.4540	33.98	10.04	44.02	46.00	-1.98	AVG	
11		8.9458	36.87	10.14	47.01	60.00	-12.99	QP	
12		8.9458	33.57	10.14	43.71	50.00	-6.29	AVG	

#### Note:

Freq. = Emission frequency in MHz Reading level  $(dB\mu V)$  = Receiver reading Corr. Factor (dB) = LISN factor + Cable loss Measurement  $(dB\mu V)$  = Reading level  $(dB\mu V)$  + Corr. Factor (dB)Limit  $(dB\mu V)$  = Limit stated in standard Margin (dB) = Measurement  $(dB\mu V)$  – Limits  $(dB\mu V)$ Q.P. =Quasi-Peak AVG =average \* is meaning the worst frequency has been tested in the frequency range 150 kHz to 30MHz

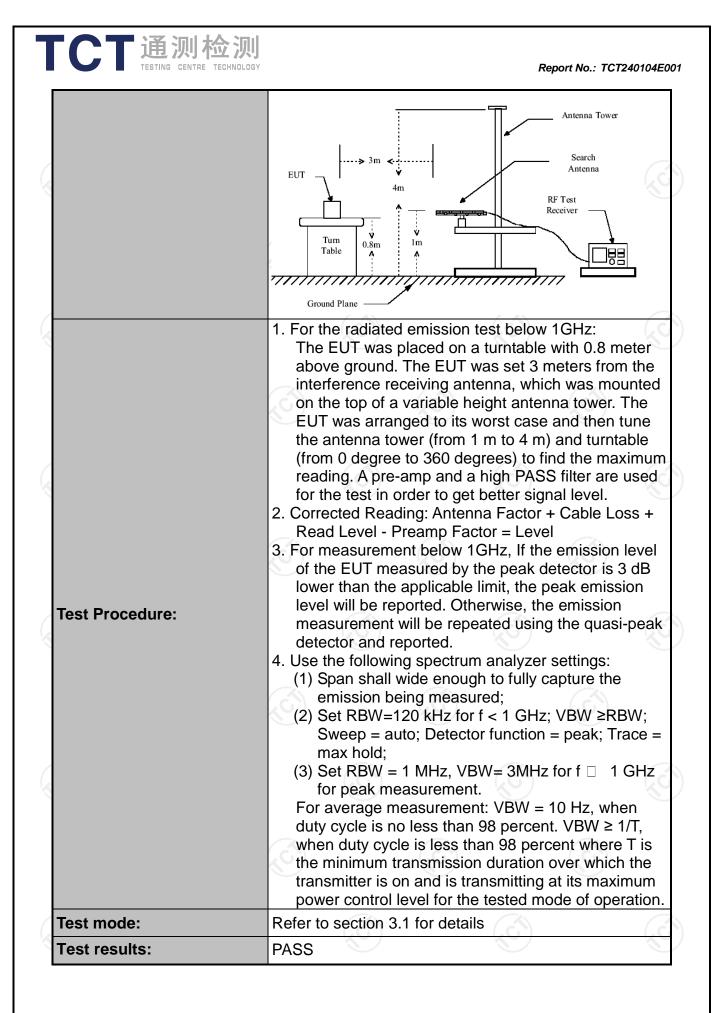
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#### 5.3.1. Test Specification

TCT通测检测 TESTING CENTRE TECHNOLOGY

Test Requirement:	FCC Part15 C Section 15.209										
Test Method:	ANSI C63.10	): 2013									
Frequency Range:	9 kHz to 25 GHz										
Measurement Distance:	3 m										
Antenna Polarization:	Horizontal & Vertical										
Operation mode:	Refer to item 3.1										
	Frequency 9kHz- 150kHz	Detector Quasi-peak	RBW 200Hz	VBW 1kHz	Remark Quasi-peak Value						
Receiver Setup:	150kHz- 30MHz	Quasi-peak	9kHz	30kHz	Quasi-peak Value						
	30MHz-1GHz	Quasi-peak	120KHz	300KHz	Quasi-peak Value						
	Frequen	су	Field Str (microvolts		Measurement Distance (meters)						
	0.009-0.4		2400/F(		300						
	0.490-1.7		24000/F		30						
Limit:	1.705-3		30		30						
	30-88		100		3						
	88-216		150		3						
	216-96 Above 9		200 500		3						
Test setup:	0.3m	Turn table	Im Im		Computer						
			3)		<b>S</b>						
					Page 13 of 2						

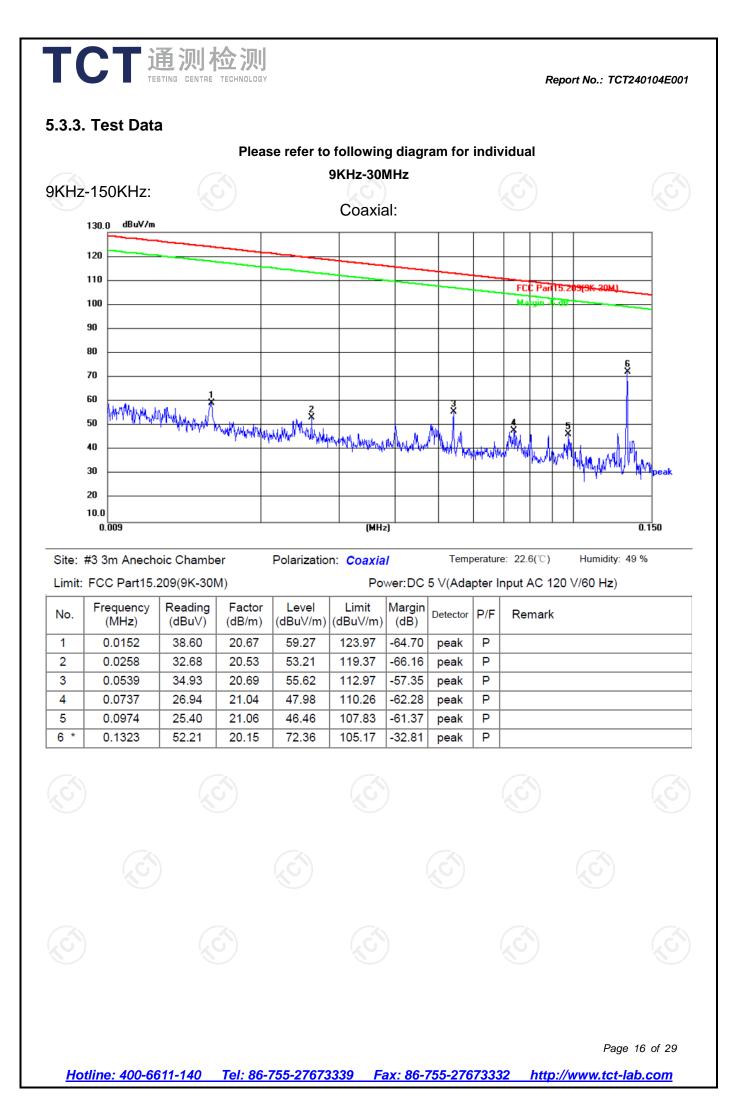


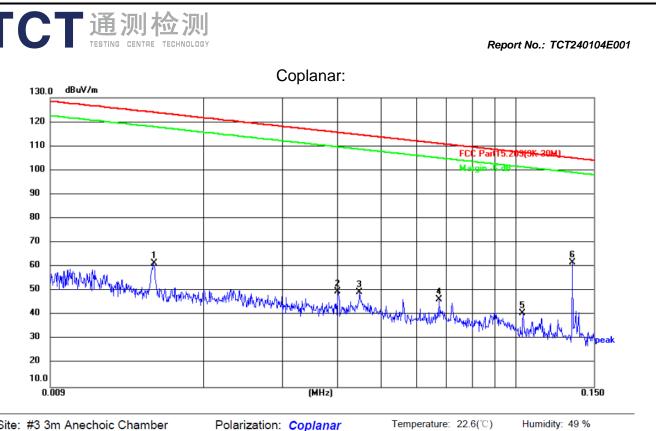
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## 5.3.2. Test Instruments

Radiated Emission Test Site (966)										
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Due						
EMI Test Receiver	R&S	ESIB7	100197	Jun. 29, 2024						
Spectrum Analyzer	R&S	FSQ40	200061	Jun. 29, 2024						
Pre-amplifier	SKET	LNPA_0118G- 45	SK2021012 102	Feb. 20, 2024						
Pre-amplifier	SKET	LNPA_1840G- 50	SK2021092 03500	Feb. 20, 2024						
Pre-amplifier	HP	8447D	2727A05017	Jun. 27, 2024						
Loop antenna	Schwarzbeck	FMZB1519B	00191	Jul. 02, 2024						
Broadband Antenna	Schwarzbeck	VULB9163	340	Jul. 01, 2024						
Horn Antenna	Schwarzbeck	BBHA 9120D	631	Jul. 01, 2024						
Horn Antenna	Schwarzbeck	BBHA 9170	00956	Feb. 24, 2024						
Antenna Mast	Keleto	RE-AM	1							
Coaxial cable	SKET	RC-18G-N-M	1	Feb. 24, 2024						
Coaxial cable	SKET	RC_40G-K-M	1	Feb. 24, 2024						
EMI Test Software	Shurple Technology	EZ-EMC	<i>k</i>	/						

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Site: #3 3m Anechoic Chamber

Polarization: Coplanar

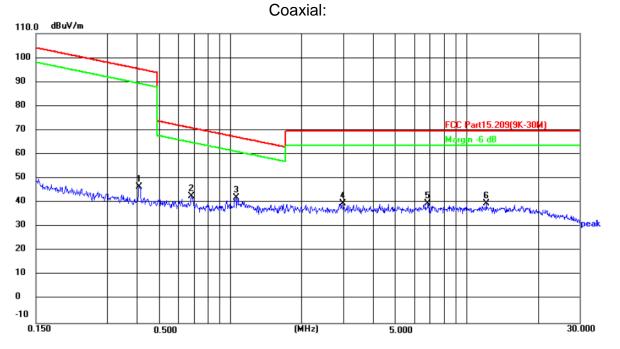
-DC 5 V/(Adapter Input AC 120 V/60 Hz)

Limit:	FCC Part15.	209(9K-30I	(N	Power:DC 5 V(Adapter Input AC 120 V/60 Hz)					
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	0.0152	40.78	20.67	61.45	123.97	-62.52	peak	Ρ	
2	0.0400	29.17	20.54	49.71	115.56	-65.85	peak	Р	
3	0.0446	28.76	20.56	49.32	114.62	-65.30	peak	Р	
4	0.0674	25.45	21.01	46.46	111.03	-64.57	peak	Ρ	
5	0.1039	19.53	21.09	40.62	107.27	-66.65	peak	Ρ	
6 *	0.1344	41.43	20.21	61.64	105.04	-43.40	peak	Ρ	

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#### 150KHz-30MHz:



#### Site: #3 3m Anechoic Chamber Polarization: Coplanar Temperature: 22.6(°C) Humidity: 49 %

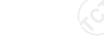
Limit: FCC Part15.209(9K-30M)

Power:DC 5 V(Adapter Input AC 120 V/60 Hz)

	1 00 1 art10.2		•••							
No.	Frequency (MHz)	Reading (dBu∀)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark	
1	0.4126	25.13	21.33	46.46	95.29	-48.83	peak	Р		
2	0.6850	20.79	21.97	42.76	70.90	-28.14	peak	Р		
3 *	1.0540	19.38	22.76	42.14	67.17	-25.03	peak	Р		
4	2.9619	12.94	26.71	39.65	69.50	-29.85	peak	Р		
5	6.8775	5.36	34.22	39.58	69.50	-29.92	peak	Р		
6	12.1025	19.62	19.96	39.58	69.50	-29.92	peak	Р		



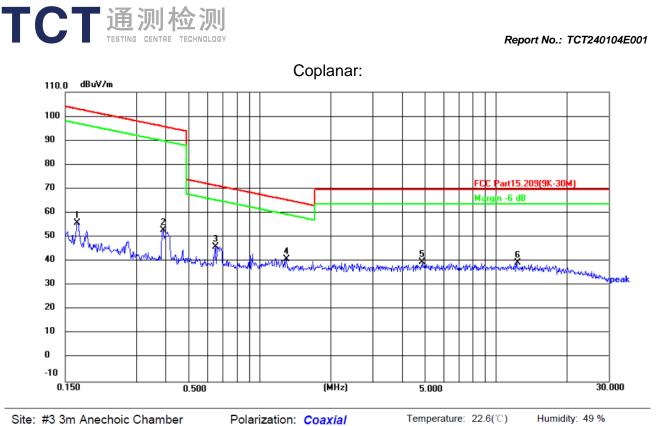








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Site: #3 3m Anechoic Chamber

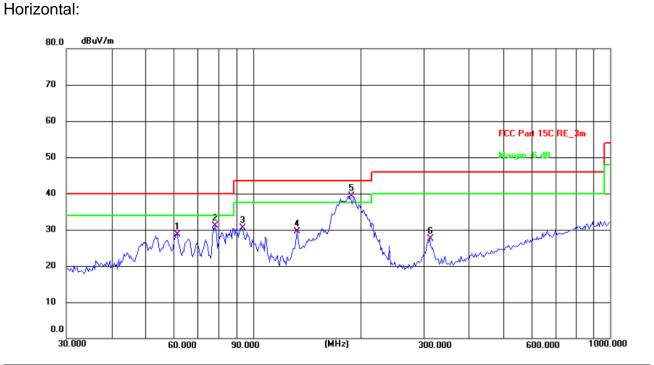
Limit: FCC Part15.209(9K-30M)

Power: DC 5 V(Adapter Input AC 120 V/60 Hz)

Ennine.	1 00 1 alt10.2	.00(01(-000							
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark
1	0.1691	35.21	20.77	55.98	103.04	-47.06	peak	Р	
2	0.3892	31.50	21.28	52.78	95.80	-43.02	peak	Р	
3	0.6485	24.17	21.88	46.05	71.37	-25.32	peak	Р	
4 *	1.2983	17.71	23.28	40.99	65.36	-24.37	peak	Р	
5	4.8910	9.20	30.42	39.62	69.50	-29.88	peak	Р	
6	12.3182	19.49	19.87	39.36	69.50	-30.14	peak	Р	



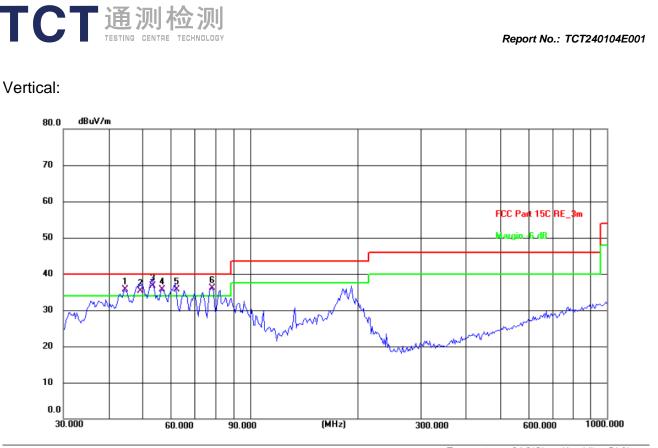
#### 30MHz-1GHz



#### Site: #1 3m Anechoic Chamber Polarization: Horizontal Temperature: 24.2(C) Humidity: 51 %

Limit:	FCC Part 15C F	RE_3m		Power: DC 5 V(Adapter Input AC 120 V/60 Hz)						
No.	Frequency (MHz)	Reading (dBuV)	Factor (dB/m)	Level (dBuV/m)	Limit (dBuV/m)	Margin (dB)	Detector	P/F	Remark	
1	60.9176	16.05	12.71	28.76	40.00	-11.24	QP	Ρ		
2	78.4133	21.23	9.95	31.18	40.00	-8.82	QP	Ρ		
3	92.7871	20.57	9.96	30.53	43.50	-12.97	QP	Ρ		
4	132.6850	16.23	13.33	29.56	43.50	-13.94	QP	Ρ		
5 *	187.0958	28.34	11.04	39.38	43.50	-4.12	QP	Ρ		
6	312.1794	13.05	14.36	27.41	46.00	-18.59	QP	Ρ		

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#### Temperature: 24.2(C) Humidity: 51 % Site: #1 3m Anechoic Chamber Polarization: Vertical

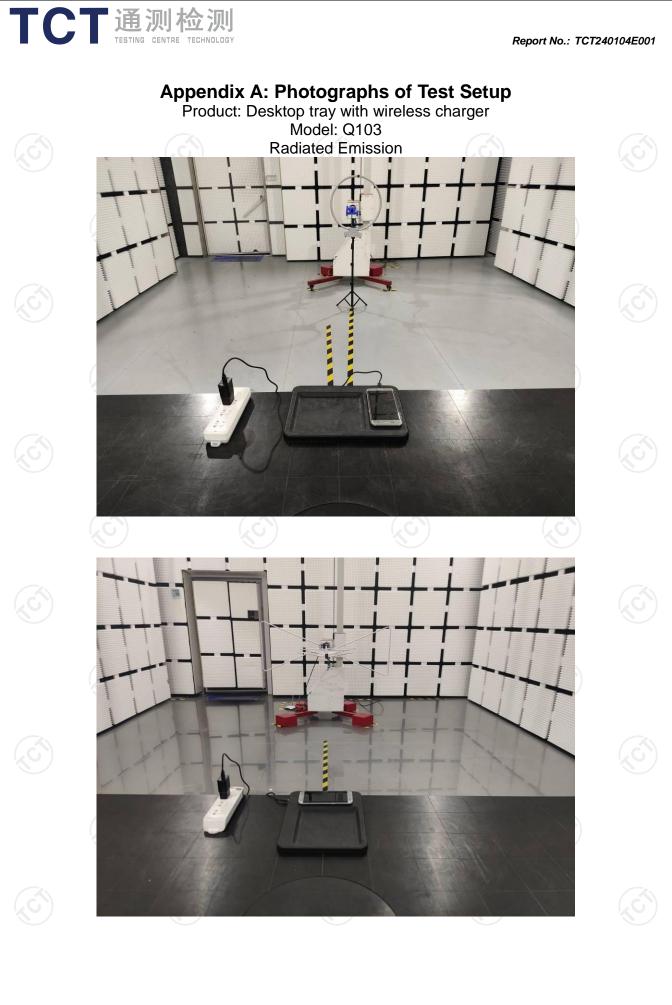
Limit: FCC Part 15C RE\_3m

Power: DC 5 V(Adapter Input AC 120 V/60 Hz) Margin Frequency Reading Factor Level Limit Detector No. P/F Remark (MHz) (dBuV) (dB/m) (dBuV/m)|(dBuV/m)|(dB) 1 ! 44.4308 21.88 13.80 35.68 40.00 -4.32 QP Ρ 49.1745 21.71 13.66 35.37 40.00 -4.63 QP Ρ 2 ! \* 53.0779 23.26 40.00 -3.38 Ρ 3 13.36 36.62 QP 56.3948 22.63 35.76 40.00 -4.24 Ρ 13.13 QP 4 ! 61.7781 35.61 -4.39 Ρ 5! 23.00 12.61 40.00 QP 6! 78.4133 26.12 9.95 36.07 40.00 -3.93 QP Ρ

#### Note:

Emission Level=Peak Reading + Correction Factor; Correction Factor= Antenna Factor + Cable loss - Pre-amplifier















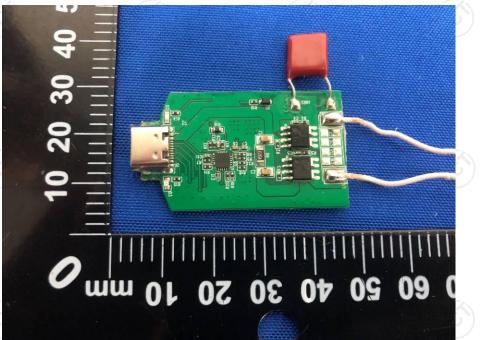
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#### Product: Desktop tray with wireless charger Model: Q103 Internal Photos





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