Certificate # 2951.01

RF EXPOSURE TEST REPORT

Applicant	MerchSource, LLC.
Address	7755 Irvine Center Drive, Suite 100, Irvine, CA 92618

Manufacturer or Supplier	Dongguan Synst Electronics Co.,Ltd.
Address	Fudong Road,No.20, Houjie Town,Dongguan City, China.
Product	Wireless Charger with Mirror Round LED 8inch
Brand Name	Sharper Image
Model	1014289
Additional Model & Model Difference	N/A
Date of tests	Jul. 06, 2021 ~ Jul. 12, 2021

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

☒ **47 CFR PART 1, Subpart I, Section 1.1310**
☒ **KDB 680106 D01**

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

Tested by Lucas Chen Project Engineer / EMC Department	Approved by Glyn He Assistant Manager / EMC Department
	 Data: Aug. 04, 2021

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FM2106WDG0113	Original release	Aug. 04, 2021

1. GENERAL INFORMATION

1.1. GENERAL DESCRIPTION OF EUT

FCC ID	2AEVM1014289
PRODUCT	Wireless Charger with Mirror Round LED 8inch
MODEL NO.	1014289
ADDITIONAL MODEL	N/A
SAMPLE STATUS	Engineering sample
POWER SUPPLY	DC 12V from Adapter
MODULATION TECHNOLOGY	ASK
OPERATING FREQUENCY RANGE	111-205KHz
ANTENNA TYPE	Coil Antenna
I/O PORTS	Refer to user's manual
CABLE SUPPLIED	N/A

NOTES:

1. For a more detailed features description, please refer to the manufacturer's specifications or the user's manual.

2. For the test results, the EUT had been tested with all conditions, but only the worst case was shown in test report.

3. Please refer to the EUT photo document (Reference No.: 2106WDG0113-1) for detailed product photo.

4. The EUT were powered by the following adapters, full test were performed for the adapter 1 and adapter 2. But only the worst case was (adapter 1) showed in test report.

ADAPTER 1	
BRAND:	N/A
MODEL:	AD0301-1202000UB
INPUT:	AC 100-240V, 50-60Hz 0.8A Max.
OUTPUT:	DC 12V, 2A 24W
DC LINE:	Unshielded, Non-detachable, 155cm
ADAPTER 2	
BRAND:	
MODEL:	BQ30A-1202000-U
INPUT:	AC 100-240V, 50-60Hz 0.8A Max.
OUTPUT:	DC 12V, 2A
DC LINE:	Unshielded, Non-detachable, 155cm

2. RF EXPOSURE MEASUREMENT

2.1 LIMITS

§ 1.1310 The criteria listed in table 1 shall be used to evaluate the environmental impact of human exposure to radiofrequency(RF) radiation as specified in § 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of § 2.1093 of this chapter.

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f²)	6
30–300	61.4	0.163	1.0	6
300–1500	.....	.....	f/300	6
1500–100,000	.....	.....	5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3–1.34	614	1.63	*(100)	30
1.34–30	824/f	2.19/f	*(180/f²)	30
30–300	27.5	0.073	0.2	30
300–1500	.....	.....	f/1500	30
1500–100,000	.....	.....	1.0	30

f = frequency in MHz
* = Plane-wave equivalent power density

NOTE 1 TO TABLE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

NOTE 2 TO TABLE 1: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.

Reference KDB 680106 D01 RF Exposure Wireless Charging App v03

The aggregate H-field strengths at 15 cm surrounding the device and 20 cm above the top surface from all simultaneous transmitting coils are demonstrated to be less than 50% of the MPE limit.

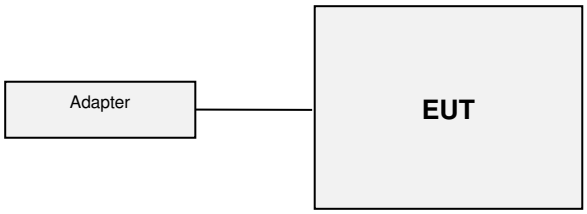
2.2 DESCRIPTION OF SUPPORT UNITS

The EUT has been tested with associated equipment below

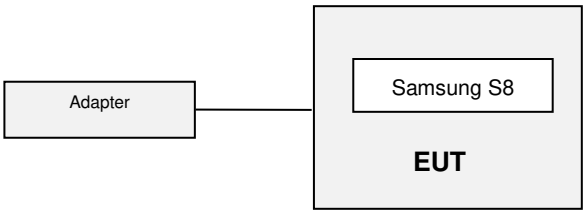
NO.	PRODUCT	BRAND	MODEL NO.	SERIAL NO.	FCC ID
1	S8	Samsung	G9500	N/A	N/A

2.3 CONFIGURATION OF SYSTEM UNDER TEST

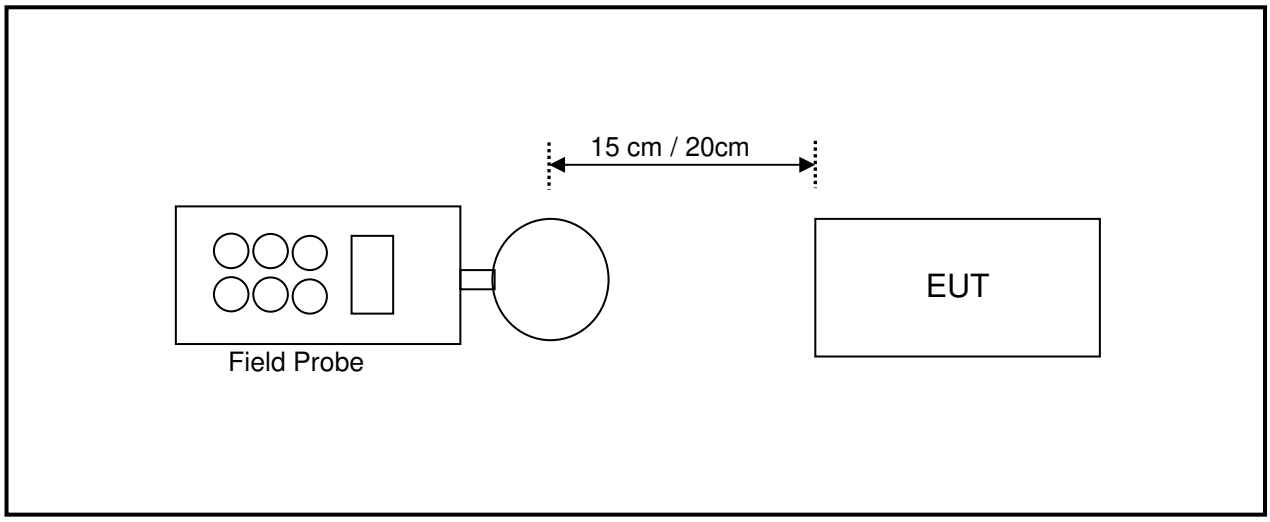
Standby
(Powered by adapter)



Charging Mode with Samsung S8
(Powered by adapter)



2.4 TEST SETUP FOR WPT



Note: Measurements should be made from all sides and the top of the primary/client pair, with the 15 cm or 20 cm measured from the center of the probe(s) to the edge of the device.

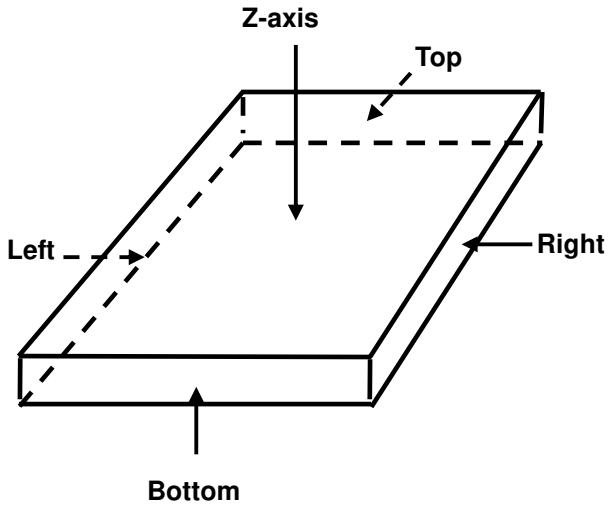
The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.5 EQUIPMENTS USED DURING TEST

Item	Test Equipment	Manufacturer	Model No.	Frequency Range	Next Cal.
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	7m*4m*3m	NSEMC003	2022-03-21
2	Narda Broadband Field Meter	Narda	NBM-520	100KHz-90GHz	2021-12-22
3	E-Field probe	Narda	EF0691	100KHz-6GHz	2021-12-22
4	Exposure Level Tester	Narda	ELT-400	1Hz-400KHz	2021-12-22

NOTES: 1. The test was performed in RS chamber.
2. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to CEPREI/CHINA, GRGT/CHINA and NIM/CHINA.

2.6 TEST POINT DESCRIPTION



2.7 TEST RESULTS

Mode 1 Standby

E-Field Measurement					
Distance	15cm				20cm
EUT Side	Left	Right	Top	Bottom	Z-axis
Max E-field (V/m)	1.19	1.01	1.49	0.89	2.14
Limit (V/m)	614	614	614	614	614
Margin (V/m)	-612.81	-612.99	-612.51	-613.11	-611.86
50% Limit (V/m)	307	307	307	307	307
50% Margin (V/m)	-305.81	-305.99	-305.51	-306.11	-304.86

H-Field Measurement					
Distance	15cm				20cm
EUT Side	Left	Right	Top	Bottom	Z-axis
Max H-field (uT)	0.231	0.229	0.233	0.228	0.234
Max H-field (A/m)	0.184	0.182	0.186	0.182	0.186
Limit (A/m)	1.63	1.63	1.63	1.63	1.63
Margin (A/m)	-1.446	-1.448	-1.444	-1.448	-1.444
50% Limit (A/m)	0.815	0.815	0.815	0.815	0.815
50% Margin (A/m)	-0.631	-0.633	-0.629	-0.633	-0.629

Measurements was made from all sides and the top of the primary/client pair, with the 15 cm or 20 cm measured from the center of the probe(s) to the edge of the device. The highest emission level was recorded.

Mode 2: Operating with Samsung S8 10% Charger

E-Field Measurement					
Distance	15cm				20cm
EUT Side	Left	Right	Top	Bottom	Z-axis
Max E-field (V/m)	1.34	1.54	1.86	1.37	1.42
Limit (V/m)	614	614	614	614	614
Margin (V/m)	-612.66	-612.46	-612.14	-612.63	-612.58
50% Limit (V/m)	307	307	307	307	307
50% Margin (V/m)	-305.66	-305.46	-305.14	-305.63	-305.58

H-Field Measurement					
Distance	15cm				20cm
EUT Side	Left	Right	Top	Bottom	Z-axis
Max H-field (uT)	0.228	0.235	0.229	0.23	0.229
Max H-field (A/m)	0.182	0.187	0.182	0.183	0.182
Limit (A/m)	1.63	1.63	1.63	1.63	1.63
Margin (A/m)	-1.448	-1.443	-1.448	-1.447	-1.448
50% Limit (A/m)	0.815	0.815	0.815	0.815	0.815
50% Margin (A/m)	-0.633	-0.628	-0.633	-0.632	-0.633

Measurements was made from all sides and the top of the primary/client pair, with the 15 cm or 20 cm measured from the center of the probe(s) to the edge of the device. The highest emission level was recorded.

Mode 3: Operating with Samsung S8 50% Charger

E-Field Measurement					
Distance	15cm				20cm
EUT Side	Left	Right	Top	Bottom	Z-axis
Max E-field (V/m)	1.39	1.38	1.67	1.52	1.39
Limit (V/m)	614	614	614	614	614
Margin (V/m)	-612.61	-612.62	-612.33	-612.48	-612.61
50% Limit (V/m)	307	307	307	307	307
50% Margin (V/m)	-305.61	-305.62	-305.33	-305.48	-305.61

H-Field Measurement					
Distance	15cm				20cm
EUT Side	Left	Right	Top	Bottom	Z-axis
Max H-field (uT)	0.229	0.231	0.228	0.231	0.23
Max H-field (A/m)	0.182	0.184	0.182	0.184	0.183
Limit (A/m)	1.63	1.63	1.63	1.63	1.63
Margin (A/m)	-1.448	-1.446	-1.448	-1.446	-1.447
50% Limit (A/m)	0.815	0.815	0.815	0.815	0.815
50% Margin (A/m)	-0.633	-0.631	-0.633	-0.631	-0.632

Measurements was made from all sides and the top of the primary/client pair, with the 15 cm or 20 cm measured from the center of the probe(s) to the edge of the device. The highest emission level was recorded.

Mode 4: Operating with Samsung S8 90% Charger

E-Field Measurement					
Distance	15cm				20cm
EUT Side	Left	Right	Top	Bottom	Z-axis
Max E-field (V/m)	1.32	1.29	1.38	1.46	1.62
Limit (V/m)	614	614	614	614	614
Margin (V/m)	-612.68	-612.71	-612.62	-612.54	-612.38
50% Limit (V/m)	307	307	307	307	307
50% Margin (V/m)	-305.68	-305.71	-305.62	-305.54	-305.38

H-Field Measurement					
Distance	15cm				20cm
EUT Side	Left	Right	Top	Bottom	Z-axis
Max H-field (uT)	0.227	0.229	0.231	0.229	0.229
Max H-field (A/m)	0.181	0.182	0.184	0.182	0.182
Limit (A/m)	1.63	1.63	1.63	1.63	1.63
Margin (A/m)	-1.449	-1.448	-1.446	-1.448	-1.448
50% Limit (A/m)	0.815	0.815	0.815	0.815	0.815
50% Margin (A/m)	-0.634	-0.633	-0.631	-0.633	-0.633

Measurements was made from all sides and the top of the primary/client pair, with the 15 cm or 20 cm measured from the center of the probe(s) to the edge of the device. The highest emission level was recorded.

3. PHOTOGRAPHS OF THE TEST CONFIGURATION

Please refer to the attached file (FCC MPE Test Photo).

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