



Human Exposure Report

Application No.: SZEM2001000349CR
Applicant: Micro Star International Co Ltd.
Address of Applicant: No.69, Li-de St., Zhonghe Dist., New Taipei City 235, Taiwan
Manufacturer: Dongguan Chuand Science and Technology Co., Ltd.
Address of Manufacturer: Xihe Industrial Area, Sijia Village, Shijie Town, Dongguan City, Guangdong Province, China
Factory: Dongguan Chuand Science and Technology Co., Ltd.
Address of Factory: Xihe Industrial Area, Sijia Village, Shijie Town, Dongguan City, Guangdong Province, China
Equipment Under Test (EUT):
EUT Name: GA60 WIRELESS Qi CHARGER 15W
Model No.: GA60
Trade mark: msi
FCC ID: I4L-GA60
Standard(s) : 47 CFR PART 1, Subpart I, Section 1.1310
47 CFR PART 2, Subpart J, Section 2.1091
Date of Receipt: 2020-01-13
Date of Test: 2020-01-26 to 2020-04-13
Date of Issue: 2020-04-17

Test Result:	Pass*
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* In the configuration tested, the EUT complied with the standards specified above

Kenx. Xu

Kenx Xu
EMC Laboratory Manager



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Shenzhen Branch EMC Laboratory

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Report No.: SZEM200100034902

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Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2020-04-17		Original

Authorized for issue by:			
			
		Leo Li /Project Engineer	
			
		Eric Fu /Reviewer	



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Shenzhen Branch Testing Center, EMC Laboratory

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2 General Information

2.1 Details of E.U.T.

Power supply: Input: DC 5V/2A, 9.0V/2A, 12V/1.5A
WPC Output: 5/7.5/10/15W

Cable: Type C cable: 150cm, shielded

Operation Frequency: 126.779KHz to 130.096kHz

Modulation Type: Load Modulation

Antenna Gain: 0dBi

Antenna Type: Loop Antenna

Remark: This device has been tested the worst status of full load and the device has been tested with load at 5W,7.5W, 10W and 15W, the worst case 15W(9V/1.67A) is reported only.

2.2 Description of Support Units

Description	Manufacturer	Model No.	Serial No.
Dummy load(client supply)	EESON	N/A	N/A
HUAWEI MATE 20 Pro	HUAWEI	LYA-AL00	S2D7N19124014116
Adapter (for WPC 5W/7.5W/10W Output)	SAMSUNG	EP-TA200	R37J8YA7W71DK3
Adapter (for WPC 15W Output)	XIAOMI	MDY-10-EH	AA61904Q207433G



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2.3 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

2.4 Test Facility

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

• A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation (A2LA). Certificate No. 3816.01.

• VCCI

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC –Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

• Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C..

2.5 Deviation from Standards

None.

2.6 Abnormalities from Standard Conditions

None.



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3 Equipments Used during Test

Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal. Due date
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2020-06-10
2	Electric and Magnetic Field Analyzer	Narda	EHP-50F	EMC092	2020-11-26



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4 Test Results

4.1 RF Exposure test

Test Requirement: 47 CFR PART 1, Subpart I, Section 1.1310

Measurement Distance: 15cm

Limit:

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	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/f ²)	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/f ²)	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 RF exposure compliance will need to be determined with respect to 1.1307(c) and (d) of the FCC rules. The emissions should be within the limits at 300kHz in Table 1 of 1.1310(use the 300kHz limits for 150kHz:614V/m,1.63A/m).				

4.1.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 52 % RH Atmospheric Pressure: 1015 mbar

EUT Operation:

This device has been tested the worst status of full load and the device has been tested with mobile phone at zero charge, intermediate charge, and full charge.



4.1.2 Measurement Data

Output Voltage=DC 9V; The max output power =15W;Calculation of resistor value=5.4Ω

Magnetic Field Emissions

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result (A/m)	50% Limit (A/m)
128.077 kHz	15	Side 1	0.2863	0.815
		Side 2	0.2894	0.815
		Side 3	0.1938	0.815
		Side 4	0.2677	0.815
		Top	0.2234	0.815

Mobile phone has been charge at zero charge, intermediate charge, and full charge.

Magnetic Field Emissions

Operation frequency	Test Distance (cm)	Test Position	Probe Measure Result(A/m)			50%Limit (A/m)
			zero charge	intermediate charge	full charge	
128.077 kHz	15	Side 1	0.2956	0.2796	0.2754	0.815
		Side 2	0.3023	0.2873	0.2828	0.815
		Side 3	0.2050	0.1897	0.1849	0.815
		Side 4	0.2784	0.2653	0.2609	0.815
		Top	0.2339	0.2182	0.2138	0.815

- End of the Report -



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