

TELEC
Qi
TEST REPORT

ISSUED BY
Shenzhen BALUN Technology Co., Ltd.



FOR
Wireless Charger

ISSUED TO
BCS Automotive Interface Solutions (Suzhou) Co.,Ltd.

No.2052 Taidong Road Xiangcheng Economic Development
District,215143 Suzhou China



Tested by: Xia Long
Xia Long

Date: Oct. 19, 2020

Approved by: Wei Yanquan
Wei Yanquan
(Chief Engineer)

Date: Oct. 19, 2020

Report No: BL-EC2090896-401
EUT Name: Wireless Charger
Model Name: WPC003-1
Brand Name: BCS
Test Standard: 邮政省告示 127 号(昭和 63 年 2 月 25 日)
Test Date: Oct. 09, 2020
Date of Issue: Oct. 19, 2020

NOTE: This test report of test results only related to testing samples, which can be duplicated completely for the legal use with the approval of the applicant; it shall not be reproduced except in full, without the written approval of Shenzhen BALUN Technology Co., Ltd. Any objections should be raised within thirty days from the date of issue. To validate the report, please contact us.

Revision History

<u>Version</u>	<u>Issue Date</u>	<u>Revisions</u>
<u>Rev. 01</u>	<u>Oct. 19, 2020</u>	<u>Initial Issue</u>

TABLE OF CONTENTS

1	GENERAL INFORMATION	3
1.1	Identification of the Testing Laboratory	3
1.2	Identification of the Responsible Testing Location	3
1.3	Test Environment Condition	3
1.4	Announce	3
2	PRODUCT INFORMATION	4
2.1	Applicant.....	4
2.2	Manufacturer	4
2.3	Factory Information	4
2.4	General Description for Equipment under Test (EUT)	4
2.5	Ancillary Equipment.....	4
2.6	Technical Information	4
3	TEST RESULT SUMMARY	5
3.1	MEASUREMENT UNCERTAINTY	5
4	TEST Equipment List.....	6
ANNEX A	TEST DATA.....	7
ANNEX B	TEST SETUP PHOTOS	10

1 GENERAL INFORMATION

1.1 Identification of the Testing Laboratory

Company Name:	Shenzhen BALUN Technology Co., Ltd.
Address:	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, ShenZhen, Guangdong Province, P. R. China
Phone Number:	+86 755 6685 0100
Fax Number:	+86 755 6182 4271

1.2 Identification of the Responsible Testing Location

Test Location	Shenzhen BALUN Technology Co., Ltd.
Address	Block B, 1st FL, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China
Accreditation Certificate	The laboratory has been listed by Industry Canada to perform electromagnetic emission measurements. The recognition numbers of test site are 11524A-1. The laboratory has been listed by US Federal Communications Commission to perform electromagnetic emission measurements. The recognition numbers of test site are 832625. The laboratory is a testing organization accredited by China National Accreditation Service for Conformity Assessment (CNAS) according to ISO/IEC 17025. The accreditation certificate number is L6791.
Description	All measurement facilities used to collect the measurement data are located at Block B, FL 1, Baisha Science and Technology Park, Shahe Xi Road, Nanshan District, Shenzhen, Guangdong Province, P. R. China 518055

1.3 Test Environment Condition

Ambient Temperature	20°C to 25°C
Ambient Relative Humidity	45% to 55%
Ambient Pressure	100 kPa to 102 kPa

1.4 Announce

- (1) The test report reference to the report template version v1.3.
- (2) The test report is invalid if not marked with the signatures of the persons responsible for preparing and approving the test report.
- (3) The test report is invalid if there is any evidence and/or falsification.
- (4) The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein.
- (5) This document may not be altered or revised in any way unless done so by BALUN and all revisions are duly noted in the revisions section.
- (6) Content of the test report, in part or in full, cannot be used for publicity and/or promotional purposes without prior written approval from the laboratory.
- (7) The laboratory is only responsible for the data released by the laboratory, except for the part provided by the applicant.

2 PRODUCT INFORMATION

2.1 Applicant

Applicant	BCS Automotive Interface Solutions (Suzhou) Co.,Ltd.
Address	No.2052 Taidong Road Xiangcheng Economic Development District,215143 Suzhou China

2.2 Manufacturer

Manufacturer	BCS Automotive Interface Solutions (Suzhou) Co.,Ltd.
Address	No.2052 Taidong Road Xiangcheng Economic Development District,215143 Suzhou China

2.3 Factory Information

Factory	N/A
Address	N/A

2.4 General Description for Equipment under Test (EUT)

EUT Name	Wireless Charger
Model Name Under Test	WPC003-1
Series Model Name	N/A
Description of Model name differentiation	N/A
Hardware Version	A4
Software Version	A7
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.5 Ancillary Equipment

Note: Not applicable.

2.6 Technical Information

Network and Wireless connectivity	QI
-----------------------------------	----

The requirement for the following technical information of the EUT was tested in this report:

Antenna Type	Coil Antenna
Frequency Band	105 kHz~115 kHz
Voltage	DC 13.5 V

3 TEST RESULT SUMMARY

No.	Frequency (MHz)	EUT Status	Antenna Polarization	Field strength	
				dBuV/m @3m	uV/m @3m
1	0.111	Horizontal	Vertical	68.86	2773.32

3.1 MEASUREMENT UNCERTAINTY

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	Value
Radiated emissions (9 kHz-30 MHz)	2.79 dB
Radiated emissions (30 MHz-1 GHz)	3.45 dB

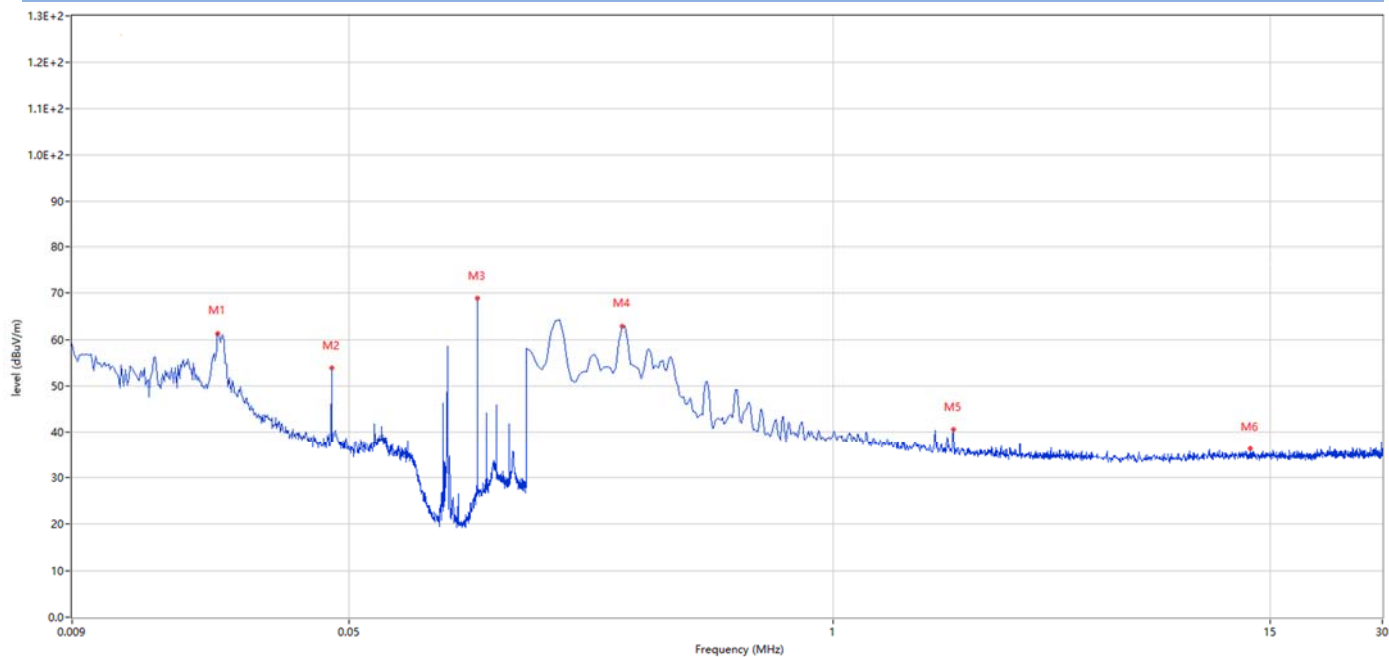
4 TEST Equipment List

Description	Manufacturer	Model	Serial No.	Cal. Date	Cal. Due
EMI Receiver	ROHDE&SCHW ARZ	ESRP	101036	2020.06.09	2021.06.08
Test Antenna-Loop (9 kHz-30 MHz)	SCHWARZBECK	FMZB 1519	1519-037	2019.10.29	2021.10.28
Test Antenna-Bi-Log (30 MHz-1 GHz)	SCHWARZBECK	VULB 9163	9163-624	2019.07.02	2021.07.01
Anechoic Chamber	YIHENG	9m*6m*6m	N/A	2018.07.18	2021.07.17

ANNEX A TEST DATA

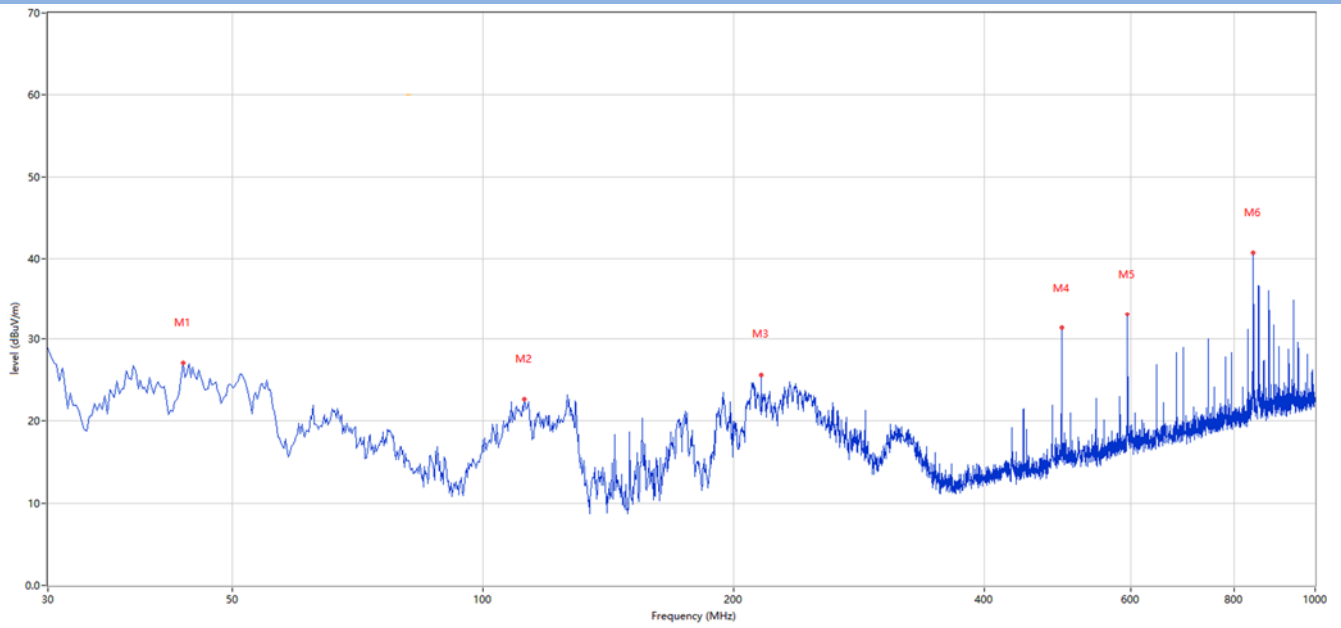
Frequency Range		
9 kHz to 150 kHz	RBW (MHz)	200 Hz
	VBW (MHz)	1 kHz
	Detector mode	Peak
	Trace mode	Max Hold
150 kHz to 30 MHz	RBW (MHz)	10 kHz
	VBW (MHz)	30 kHz
	Detector mode	Peak
	Trace mode	Max Hold
30 MHz to 1000 MHz	RBW (MHz)	100 kHz
	VBW (MHz)	300 kHz
	Detector mode	Peak
	Trace mode	Max Hold

ANT V (9 kHz ~ 30 MHz)



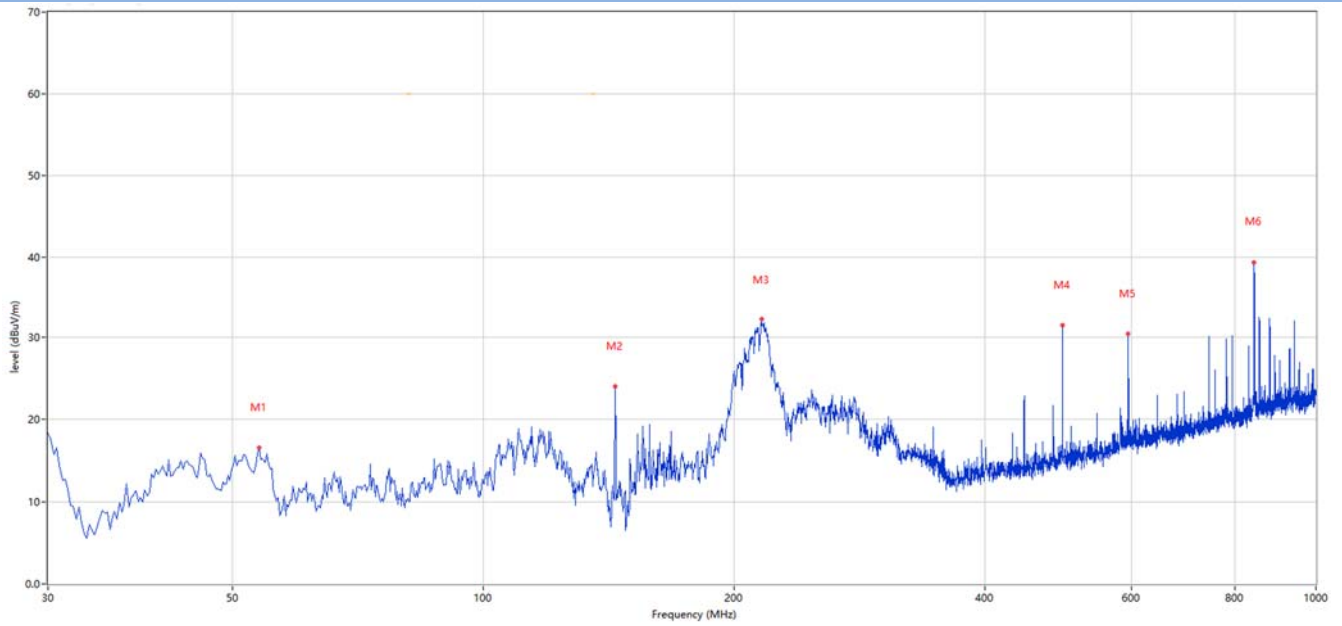
No.	Frequency (MHz)	Results (dBuV/m)	Factor (dB)	Detector	Table (Degree)	Height (cm)	Antenna
1	0.022	61.34	12.62	Peak	49.00	100	Vertical
2	0.045	53.81	12.84	Peak	157.00	100	Vertical
3	0.111	68.86	13.24	Peak	188.00	100	Vertical
4	0.271	62.86	14.55	Peak	149.00	100	Vertical
5	2.103	40.43	20.51	Peak	165.00	100	Vertical
6	13.267	36.17	20.58	Peak	84.00	100	Vertical

ANT V (30 MHz ~ 1 GHz)



Frequency (MHz)	Result (dBm)	Factor (dB)	Table (Degree)	Height (cm)	Antenna
43.580	27.04	-25.37	152.00	100	Vertical
112.207	22.61	-27.63	256.00	100	Vertical
215.998	25.64	-26.01	241.00	100	Vertical
495.842	31.36	-19.28	1.00	100	Vertical
595.025	33.07	-16.53	182.00	100	Vertical
842.860	40.69	-12.30	188.00	100	Vertical

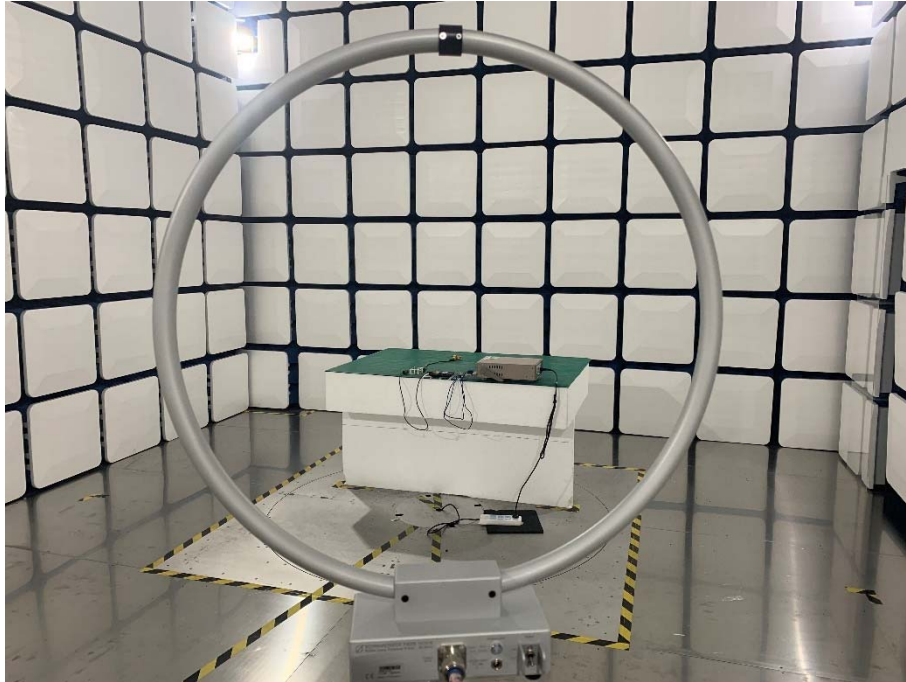
ANT H (30 MHz ~ 1 GHz)



Frequency (MHz)	Result (dBm)	Factor (dB)	Table (Degree)	Height (cm)	Antenna
53.765	16.52	-25.44	0.00	200	Horizontal
143.975	23.99	-31.12	101.00	200	Horizontal
215.755	32.24	-25.85	123.00	100	Horizontal
496.085	31.57	-19.31	122.00	200	Horizontal
595.025	30.49	-16.53	159.00	100	Horizontal
843.102	39.35	-12.27	1.00	100	Horizontal

ANNEX B TEST SETUP PHOTOS

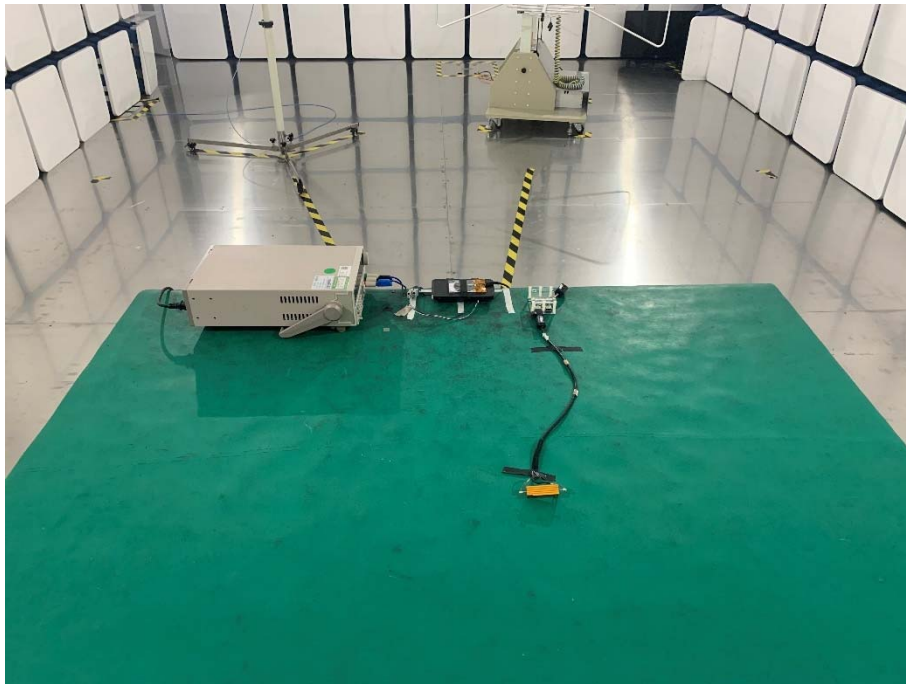
Below 30MHz



30MHz-1 GHz



Close-up



---END REPORT---