

Report No.: SZEM170400312002

No. 1 Workshop, M-10, Middle section, Science & Technology Park,

Shenzhen, Guangdong, China 518057 Telephone: +86 (0) 755 2601 2053 +86 (0) 755 2671 0594 Fax:

Email:

Page: ee.shenzhen@sgs.com

SAR Evaluation Report

SZEM1704003120CR Application No.: Applicant: Spigen Koren Co.,Ltd

Manufacturer: Winners'Sun Plastic & Electronic (Shenzhen) Co., Ltd Factory: Winners'Sun Plastic & Electronic (Shenzhen) Co., Ltd

Velo[™] Wireless Selfie Stick **Product Name:**

S530W Model No.(EUT): VeloTM **Trade Mark:**

FCC ID: 2AFKNS530W

47 CFR Part 1.1307 (2015) Standards:

47 CFR Part 2.1093 (2015)

KDB447498D01 General RF Exposure Guidance v06

Date of Receipt: 2016-11-21(for original report SZEM161100983902)

Date of Test: 2016-12-21 to 2016-12-23(for original report SZEM161100983902)

2017-01-19(for original report SZEM161100983902) Date of Issue: 2017-04-18(for new report SZEM170400312002)

Test Result: PASS*

In the configuration tested, the EUT complied with the standards specified above.

Authorized Signature:



Jack Zhang **EMC Laboratory Manager**

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at http://www.sgs.com/en/Terms-e-Document.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exenerate parties to a transaction form exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawfull and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 30 days only.



Report No.: SZEM170400312002

Page: 2 of 6

2 Version

Revision Record					
Version	Chapter	Date	Modifier	Remark	
01		2017-04-18		Original	

Authorized for issue by:		
Tested By	Bill Chen /Project Engineer	2017-04-18 Date
Checked By	Eric Fu /Reviewer	2017-04-18 Date



Report No.: SZEM170400312002

Page: 3 of 6

3 Contents

		Pa	ıge
1	С	OVER PAGE	1
2	٧	'ERSION	2
3	С	ONTENTS	3
4	G	GENERAL INFORMATION	4
	4.1	CLIENT INFORMATION	4
	4.2	GENERAL DESCRIPTION OF EUT	4
	4.3	TEST LOCATION	5
	4.4	TEST FACILITY	5
	4.5	DEVIATION FROM STANDARDS	5
	4.6	ABNORMALITIES FROM STANDARD CONDITIONS	5
	4.7	OTHER INFORMATION REQUESTED BY THE CUSTOMER	5
5	S	AR EVALUATION	.6
	5.1	RF Exposure Compliance Requirement	6
		i.1.1 Standard Requirement	
	5.	i.1.2 Limits	.6
	5.	i.1.3 EUT RF Exposure	.6



Report No.: SZEM170400312002

Page: 4 of 6

4 General Information

4.1 Client Information

Applicant:	Spigen Koren Co.,Ltd
Address of Applicant:	No.1709 STX-V TOWER, 371-37, GASAN-DONG, GEUMCHEON-GU, SEOUL, KOREA
Manufacturer:	Winners'Sun Plastic & Electronic (Shenzhen) Co., Ltd
Address of Manufacturer:	E Zone, Yingtai Industrial Park, Dalang South Road, Dalang Street, Baoan District, Shenzhen, China
Factory:	Winners'Sun Plastic & Electronic (Shenzhen) Co., Ltd
Address of Factory:	E Zone, Yingtai Industrial Park, Dalang South Road, Dalang Street, Baoan District, Shenzhen, China

4.2 General Description of EUT

Product Name:	Saint Angelo Bluetooth Selfie Stick
Model No.:	WS-SQB908B
Trade Mark:	Dispho
Operation Frequency:	2402MHz~2480MHz
Bluetooth Version:	V3.0
Modulation Type:	GFSK
Number of Channel:	79
Antenna Type:	Inverted F
Antenna Gain:	0dBi
Battery:	Rechargeable battery: DC 3.7V 60mAh (Charge by USB)
Test voltage:	AC 120V 60Hz

Remark:

Original model No. in report SZEM161100983902: WS-SQB908B

There are three colors for WS-SQB908B, only the sample WS-SQB908B with blue was tested in original report SZEM161100983902, since the electrical circuit design, layout, components used, internal wiring and functions were identical for all the above samples, only different on colors.

New model No. in report SZEM170400312002:S530W

This report was an additional report copied from the report SZEM161100983902, just changed the information of applicant, product name, model No. and trade mark. Since the electrical circuit design, layout, components used and internal wiring for the model in the report SZEM161100983902 was exactly the same as the model in this report, only different on model name.

Therefore original data were kept in this report.



Report No.: SZEM170400312002

Page: 5 of 6

4.3 Test Location

All tests were performed at:

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

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

Telephone: +86 (0) 755 2601 2053 Fax: +86 (0) 755 2671 0594

No tests were sub-contracted.

4.4 Test Facility

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

• CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

• 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 10m Semi-anechoic chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-823, R-4188, T-1153 and C-2383 respectively.

• FCC - Registration No.: 556682

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration No.: 556682.

Industry Canada (IC)

Two 3m Semi-anechoic chambers and the 10m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab have been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1, 4620C-2, 4620C-3.

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.



Report No.: SZEM170400312002

Page: 6 of 6

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

5.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f(GHz)}] \le 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

f(GHz) is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation 17

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is \leq 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

5.1.3 EUT RF Exposure

The Max Conducted Peak Output Power is -4.66dBm in Lowest channel(2.402GHz);

-4.66dBm logarithmic terms convert to numeric result is nearly 0.34mW

According to the formula. calculate the test exclusion thresholds:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f(GHz)}]$

2;

General RF Exposure = $(0.34\text{mW} / 5 \text{ mm}) \times \sqrt{2.402\text{GHz}} = 0.105 \text{ }\bigcirc$

SAR requirement:

S= 3.0

(1) < (2).

So the SAR report is not required.