Suzhou Seitek Co., Ltd.

MPE ASSESSMENT REPORT

Report Type:
FCC MPE assessment report

Model:
RB-SSC LED

REPORT NUMBER:
200301693SHA-002

ISSUE DATE:
May 10, 2020

DOCUMENT CONTROL NUMBER:
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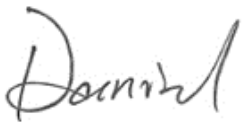
TEST REPORT

Report no.: 200301693SHA-002

Applicant:	Suzhou Seitek Co., Ltd. 19 LianfengRoad, 1st district, Yushan Industrial Park, Changshu, Jiangsu, P.R.China.
Manufacturer:	Suzhou Seitek Co., Ltd. 19 LianfengRoad, 1st district, Yushan Industrial Park, Changshu, Jiangsu, P.R.China.
Manufacturing Site 1:	Suzhou Seitek Co., Ltd. 19 LianfengRoad, 1st district, Yushan Industrial Park, Changshu, Jiangsu, P.R.China.
Manufacturing site 2:	Suzhou Seitek Cooling System Co., Ltd. #19-1，Lianfeng Road, High-tech Industrial Park, Economic and Technological Development Area, Changshu City, Jiangsu, P.R.China
FCC ID:	2AVZS-VC221944

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:
KDB447498 D01 General RF Exposure Guidance v06 FCC Part2.1091, FCC Part2.1093 FCC Part1.1307(b)

PREPARED BY:	**REVIEWED BY:**
	
Project Engineer Eric Li	Reviewer Daniel Zhao

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Revision History

Report No.	Version	Description	Issued Date
200301693SHA-002	Rev. 01	Initial issue of report	May 10, 2020

TEST REPORT

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	Beverage Cooler
Type/Model:	RB-SSC LED
Description of EUT:	This EUT is beverage cooler which supports Bluetooth function. There is one mode, we test it and list the worst results in this report.
Rating:	Input: 100-240V~ 50/60Hz 2.5A Output: 13.5V dc 6.0A Working: 12V dc Material No. VC221944***(“***” is 3 characters as abbr. for country code)
Category of EUT:	Class B
EUT type:	☒ Table top ☐ Floor standing
Software Version:	/
Hardware Version:	/
Sample received date:	2020.3.15
Date of test:	2020.3.16-2020.3.19

1.2 Technical Specification

Frequency Range:	2400MHz ~ 2483.5MHz
Support Standards:	Bluetooth 4.2 (BR+EDR)
Modulation Technique:	Frequency Hopping Spread Spectrum(FHSS)
Type of Modulation:	GFSK, π/4 DQPSK, 8DPSK
Channel Number:	79 (0 - 78)
Channel Separation:	1 MHz
Antenna:	Internal PCB antenna, 0dBi Peak gain

1.3 Description of Test Facility

Name:	Intertek Testing Services Shanghai
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L0139
	FCC Accredited Lab Designation Number: CN1175
	IC Registration Lab Registration code No.: 2042B-1
	VCCI Registration Lab Registration No.: R-4243, G-845, C-4723, T-2252
	A2LA Accreditation Lab Certificate Number: 3309.02

2 MPE Assessment

Test result: Pass

2.1 MPE Assessment Limit

Mobile device exposure for standalone operations:

Frequency range	E-field strength (V/m)	H-field strength (A/m)	B-field (uT)	Equivalent plane wave power density S_{eq} (W/m^2)
0-1 Hz	-	$3,2 \times 10^4$	4×10^4	-
1-8 Hz	10 000	$3,2 \times 10^4/f^2$	$4 \times 10^4/f^2$	-
8-25 Hz	10 000	4 000/f	5 000/f	-
0,025-0,8 kHz	250/f	4/f	5/f	-
0,8-3 kHz	250/f	5	6,25	-
3-150 kHz	87	5	6,25	-
0,15-1 MHz	87	0,73/f	0,92/f	-
1-10 MHz	$87/f^{1/2}$	0,73/f	0,92/f	-
10-400 MHz	28	0,073	0,092	2
400-2 000 MHz	$1,375\ f^{1/2}$	$0,0037\ f^{1/2}$	$0,0046\ f^{1/2}$	f/200
2-300 GHz	61	0,16	0,20	10

Mobile device exposure for simultaneous transmission operations: **the sum of the MPE ratios for all simultaneously transmitting antennas incorporated in a host device is ≤ 1.0**

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2.2 Assessment Results

Power density (S) is calculated according to the formula:

$S = P / (4\pi R^2)$

Where S = power density in mW/cm^2

P = Radiated transmit power in mW

G = numeric gain of transmit antenna

R = distance (cm)

As we can see from the test report 200301693SHA-001:
The maximum radiated power = 5dBm = 3.16mW;
Here R is chosen to be 20cm,

$S = P / (4\pi R^2) = 3.16/ (4 * 3.14 * 20 * 20) = 0.0006\ mW/cm^2 < 1\ mW/cm^2$

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Appendix I

Definition below must be outlined in the User Manual:

To satisfy FCC RF exposure requirements, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation.
To ensure compliance, operations at closer than this distance is not recommended.

********** END **********