

FCC IC RF EXPOSURE REPORT

FOR

Element hub

MODEL NUMBER: E39-G8C

FCC ID: 2AGN8-E39G8C IC: 20888- E39G8C

REPORT NUMBER: 4788140260-3

ISSUE DATE: October 10, 2017

Prepared for

Sengled Co., Ltd.
Room 201/15, Building 1, No.498, Guoshoujing Road, Pilot Free Trade Zone,
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Prepared by

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DATE: October 10, 2017

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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Sengled Co., Ltd.

Address: Room 201/15, Building 1, No.498, Guoshoujing Road, Pilot Free

Trade Zone, Shanghai City, P.R. China

DATE: October 10, 2017

Manufacturer Information

Company Name: Sengled Co., Ltd.

Address: Room 201/15, Building 1, No.498, Guoshoujing Road, Pilot Free

Trade Zone, Shanghai City, P.R. China

EUT Description

Product Name Element hub

Brand Name N/A

Model Name E39-G8C Serial Number 1733D400086

Model Difference N/A

Date Tested Sep. 14, 2017 ~ Sep. 30, 2017

APPLICABLE STANDARDS

STANDARD TEST RESULTS

FCC Guidelines for Human Exposure IEEE

xposure IEEE Complies

C95 1

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v05.

3. FACILITIES AND ACCREDITATION

Test Location	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Address	Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
Accreditation Certificate	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories and any additional program requirements in the identified field of testing. The Certificate Registration Number is 4102.01. UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The Designation Number is CN1187. UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch. EMC Laboratory has been registered and fully described in a report filed with Industry Canada. The Company Number is 21320.

Note: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites.

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4. REQUIREMENT

LIMIT

Limits for General Population/Uncontrolled Exposure

	Limits for General Population/Uncontrolled Exposure							
Frequency Range	Electric Field	Magnetic Field	Power	Averaging Time				
(MHz)	Strength (E)	Strength (H)	Density (S)	$ E ^2$, $ H ^2$ or S				
(IVIDZ)	(V/m)	(A/m) `	(mW/cm ²)	(minutes)				
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/150	30				
1500-100,000			1.0	30				

Note 1: f = frequency in MHz, * means Plane-wave equivalent power density

Note 2: 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 cannot exercise control over their exposure.

Note 3: The limit value 1.0mW/cm² is available for this EUT.

MPE CALCULATION METHOD

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

where: S = power density (in appropriate units, e.g. mW/cm2)

P = power input to the antenna (in appropriate units, e.g., mW) (the measured power value see Report: F12124 Section 6.6)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

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CALCULATED RESULTS

Radio Frequency Radiation Exposure Evaluation

Zigbee (Worst case)									
Frequency	Output Power to Antenna		Antenna Gain		Power Density	Limit	Test Result		
(MHz)	(dBm)	(mW)	(dBi)	(Numeric)	(mW/cm2)	(mW/cm2)			
2405	17.50	56.23	2.8	1.91	0.0213	1	Complies		

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Note: the calculated distance is 20cm.

END OF REPORT