

FCC RF EXPOSURE REPORT

For

Sutro Hub + Charger

MODEL NUMBER: SHC-1

FCC ID:2ATKG-RAD78235

REPORT NUMBER: 4788967474-5

ISSUE DATE: June 27, 2019

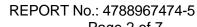
Prepared for

Sutro Connect Inc. 181 2nd St. San Francisco, CA 94105, US

Prepared by

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Page 2 of 7

Revision History

Rev.	Issue Date	Revisions	Revised By
V0	06/27/2019	Initial Issue	

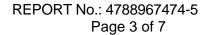
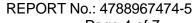




TABLE OF CONTENTS

1.	ATTESTATION OF TEST RESULTS	4
2.	TEST METHODOLOGY	5
3.	FACILITIES AND ACCREDITATION	5
1	RECHIREMENT	6





Page 4 of 7

1. ATTESTATION OF TEST RESULTS

Applicant Informatio

Company Name: Sutro Connect Inc.

Address: 181 2nd St. San Francisco, CA 94105, US

Manufacturer Information

Company Name: Sutro Connect Inc.

Address: 181 2nd St. San Francisco, CA 94105, US

EUT Description

EUT Name: Sutro Hub + Charger

Model: SHC-1
Sample Status: Normal
Sample ID: 2299611
Sample Received Date: May 20, 2019

Date of Tested: May 28 ~ June 3, 2019

APPLICABLE STANDARDS

STANDARD TEST RESULTS

FCC 47CFR§2.1091 KDB-447498 D01 V06 Complies

KDB-447498 DUT VU6

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Approved By:

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Laboratory Manager



2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06.

3. FACILITIES AND ACCREDITATION

<u> </u>	AND AGGREDITATION
	A2LA (Certificate No.: 4102.01)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with A2LA.
	FCC (FCC Designation No.: CN1187)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	Has been recognized to perform compliance testing on equipment subject
	to the Commission's Delcaration of Conformity (DoC) and Certification
	rules
Accreditation	IC(Company No.: 21320)
Certificate	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Continioato	has been registered and fully described in a report filed with
	Industry Canada. The Company Number is 21320.
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with VCCI, the
	Membership No. is 3793.
	Facility Name:
	Chamber D, the VCCI registration No. is G-20019 and R-20004
	Shielding Room B, the VCCI registration No. is C-20012 and T-20011

Note:

- All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China
- 2. 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 and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.
- 3. For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30MHz had been correlated to measurements performed on an OFS.



4. REQUIREMENT

LIMIT

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure							
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time E ² , H ² or S (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)

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)



CALCULATED RESULTS

Radio Frequency Radiation Exposure Evaluation

2.4G WIFI Mode (Worst case)							
Operating Mode	Max. Tune up Power	Antenn	a Gain	Power density	Limit		
	(dBm)	(dBi)	(num)	(mW/ cm ²)	Liiiii		
802.11b	11	1.90	1.55	0.0039	1		

915MHz Mode (Worst case)								
Operating Mode	Max. Tune up Power	Antenn	a Gain	Power density	Limit			
	(dBm)	(dBi)	(num)	(mW/ cm ²)				
2FSK	12	2.38	1.73	0.0055	6.1			

LTE Band 2 Mode (Worst case)							
Operating	Max. Tune up Power	Antenn	a Gain	Power density	Limit		
Mode	(dBm)	(dBi)	(num)	(mW/ cm ²)			
QPSK	23	3.68	2.33	0.092	1		

LTE Band 4 Mode (Worst case)							
Operating	Max. Tune up Power	Antenn	a Gain	Power density	Limit		
Mode	(dBm)	(dBi)	(num)	(mW/ cm ²)			
QPSK	23	3.18	2.08	0.083	1		

LTE Band 12 Mode (Worst case)							
Operating Mode	Max. Tune up Power	Antenn	a Gain	Power density	Limit		
	(dBm)	(dBi)	(num)	(mW/ cm ²)			
QPSK	23.5	3.09	2.04	0.091	4.66		

Note 1: The calculated distance is 20cm.

Note 2: All the modes had been tested, but only the worst case recorded in the report.

Note 3: The EUT doesn't support transmit simultaneously.

END OF REPORT