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TEST REPORT

FCC MPE Test for eROU_67835L2_X
Certification

APPLICANT
SOLiD, Inc.

REPORT NO.
HCT-RF-2102-FC009

DATE OF ISSUE
February 18, 2021

Tested by
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Additional Model
-

Applicant	**SOLiD, Inc.** 10, 9th Floor, SOLiD Space, Pangyoyeok-ro 220, Bundang-gu, Seongnam-si, Gyeonggi-do, 463-400, South Korea
Eut Type Model Name	DAS System eROU_67835L2_X
FCC ID	W6UEROU67835L2

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.
This test results were applied only to the test methods required by the standard.

REVISION HISTORY

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	February 18, 2021	Initial Release

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them. It is further stated that upon the basis of the measurements made, the equipment tested is capable of operation in accordance with the requirements of the FCC Rules under normal use and maintenance.

RF Exposure Statement

1. LIMITS

According to § 1.1310 and § 2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
0.3 - 1.34	614	1.63	*(100)	30
1.34 - 30	824/f	2.19/f	*(180/f^2)	30
30 - 300	27.5	0.073	0.2	30
300 - 1500	.....	.....	f/1500	30
1500 - 100.000	.....	.....	1.0	30

F = frequency in MHz

* = Plane-wave equivalent power density

2. MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

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

S = Power density

P = power input to antenna

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

- 600 MHz Service – LTE 5 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	619.50	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.4130	mW/cm^2

- 600 MHz Service – LTE 10 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	622.00	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.4147	mW/cm^2

- 600 MHz Service – LTE 20 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	627.00	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.4180	mW/cm^2

- Lower 700 MHz - LTE 5 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	730.50	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.4870	mW/cm^2

- Lower 700 MHz - LTE 10 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	733.00	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.4887	mW/cm^2

- Upper 700 MHz - LTE 5 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	748.50	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.4990	mW/cm^2

- Upper 700 MHz - LTE 10 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	751.00	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5007	mW/cm^2

- FirstNet - LTE 5 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	760.50	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5070	mW/cm^2

- FirstNet - LTE 10 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	763.00	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5087	mW/cm^2

- ESMR - CDMA (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	863.25	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5755	mW/cm^2

- ESMR – WCDMA (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	864.50	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5763	mW/cm^2

- ESMR - LTE 5 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	864.50	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5763	mW/cm^2

- Cellular – CDMA (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	870.25	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5802	mW/cm^2

- Cellular - WCDMA (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	871.50	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5810	mW/cm^2

- Cellular – LTE 5 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	871.50	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5810	mW/cm^2

- Cellular - LTE 10 MHz (Downlink)

Max Peak output Power at antenna input terminal	18.50	dBm
Max Peak output Power at antenna input terminal	70.79	mW
Prediction distance	70.00	cm
Prediction frequency	874.00	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.0576	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.5827	mW/cm^2

Simultaneous band emission conditions

[Downlink]

Band	MPE Ratio (Power density / Limit)	Sum of MPE Ratio	
600 MHz Service	0.1395	0.6846	≤ 1
Lower 700 MHz	0.1183		
Upper 700 MHz	0.1179		
FirstNet	0.1093		
ESMR	0.1001		
Cellular	0.0993		

*Note
1. The result of each band was applied to the worst value.
2. MPE ratios are calculated as
[(Power density1 / MPE Limit) + [(Power density2 / MPE Limit) + …] ≤ 1