

TEST REPORT

FCC MPE Test for TR_HRDU_A_1900P_B
Certification

APPLICANT
SOLiD, Inc.

REPORT NO.
HCT-RF-2101-FC044

DATE OF ISSUE
January 11, 2021

Tested by
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TR_HRDU_A_1900P_B

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Additional Model

-

Applicant

SOLiD, Inc.

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Gyeonggi-do, 463-400, South Korea

**Eut Type
Model Name**

TR_HRDU_A_1900P_B

TR_HRDU_A_1900P_B

FCC ID

W6UNHA1900PB

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	January 11, 2020	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.

* The report shall not be reproduced except in full(only partly) without approval of the laboratory.

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

- Broadband PCS – GSM (Downlink)

Max Peak output Power at antenna input terminal	44.50	dBm
Max Peak output Power at antenna input terminal	28183.83	mW
Prediction distance	550.00	cm
Prediction frequency	1967.04	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.3716	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

- Broadband PCS – CDMA (Downlink)

Max Peak output Power at antenna input terminal	44.50	dBm
Max Peak output Power at antenna input terminal	28183.83	mW
Prediction distance	550.00	cm
Prediction frequency	1967.04	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.3716	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

- Broadband PCS – WCDMA (Downlink)

Max Peak output Power at antenna input terminal	44.50	dBm
Max Peak output Power at antenna input terminal	28183.83	mW
Prediction distance	550.00	cm
Prediction frequency	1967.04	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.3716	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

- Broadband PCS – LTE 5 MHz (Downlink)

Max Peak output Power at antenna input terminal	44.50	dBm
Max Peak output Power at antenna input terminal	28183.83	mW
Prediction distance	550.00	cm
Prediction frequency	1967.04	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.3716	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

- Broadband PCS – LTE 10 MHz (Downlink)

Max Peak output Power at antenna input terminal	44.50	dBm
Max Peak output Power at antenna input terminal	28183.83	mW
Prediction distance	550.00	cm
Prediction frequency	1967.04	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.3716	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

- Broadband PCS – LTE 20 MHz (Downlink)

Max Peak output Power at antenna input terminal	44.50	dBm
Max Peak output Power at antenna input terminal	28183.83	mW
Prediction distance	550.00	cm
Prediction frequency	1967.04	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.3716	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²