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TEST REPORT

FCC MPE Test for HRDU_2500_FB_TDD_R
Certification

APPLICANT
SOLiD, Inc.

REPORT NO.
HCT-RF-2312-FC020

DATE OF ISSUE
January 8, 2024

Tested by
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TEST REPORT

REPORT NO.
HCT-RF-2312-FC020

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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	HRDU HRDU_2500_FB_TDD_R
FCC ID	W6UNH25FBTDDR
Location of Test	■ Permanent Testing Lab ☐ On Site Testing (Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea)

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	January 08, 2024	Initial Release

Notice

Content
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 results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated. The test results have only been applied with the test methods required by the standard(s).
When confirmation of authenticity of this test report is required, please contact www.hct.co.kr
The above Test Report is not related to the accredited test result by (KS Q) ISO/IEC 17025 and KOLAS(Korea Laboratory Accreditation Scheme) / A2LA(American Association for Laboratory Accreditation)(4114.01), which signed the ILAC-MRA.

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	[a](100)	30
1.34 - 30.....	824/f	2.19/f	[a]($180/f^2$)	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

[a] = 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

3. Result

- [Outdoor] BRS/EBS (Downlink)

Max Peak output Power at antenna input terminal	44.00	dBm
Max Peak output Power at antenna input terminal	25118.86	mW
Prediction distance	450.00	cm
Prediction frequency	2496.00	MHz
Antenna Gain(typical)	12.00	dBi
Antenna Gain(numeric)	15.85	-
Power density at prediction frequency(S)	0.1564	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm^2

Simultaneous band emission conditions

Band	MPE Ratio (Power density / Limit)	Sum of MPE Ratio	
3.45 GHz Service*	0.1564	0.5098	≤ 1
C-band*	0.1970		
BRS/EBS	0.1564		

* Both HRDU_345(3.45 GHz Service Band) and HRDU_Cband_R(C-band) are already certified under FCC ID of W6UNH345 and W6UNHCBANDR(Report No.: HCT-RF-2301-FC001-R1, HCT-RF-2305-FC001).

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

- [Indoor] BRS/EBS (Downlink)

Max Peak output Power at antenna input terminal	44.00	dBm
Max Peak output Power at antenna input terminal	25118.86	mW
Prediction distance	60.00	cm
Prediction frequency	2496.00	MHz
* Total Antenna Gain(typical)	-16.00	dBi
Antenna Gain(numeric)	0.03	-
Power density at prediction frequency(S)	0.0139	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm^2

*** Total Ant. Gain = Antenna Gain + Cable Loss**

Simultaneous band emission conditions

Band	MPE Ratio (Power density / Limit)	Sum of MPE Ratio	
3.45 GHz Service*	0.0139	0.0455	≤ 1
C-band*	0.0176		
BRS/EBS	0.0139		

* Both HRDU_345(3.45 GHz Service Band) and HRDU_Cband_R(C-band) are already certified under FCC ID of W6UNH345 and W6UNHCBANDR(Report No.: HCT-RF-2301-FC001-R1, HCT-RF-2305-FC001).

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