

TEST REPORT

FCC MPE Test for PSR-78-9537-U
Class II Permissive Change

APPLICANT
ADRF KOREA, Inc.

REPORT NO.
HCT-RF-2110-FC002

DATE OF ISSUE
October 1, 2021

Tested by
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PSR-78-9537-U

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Additional Model

-

Applicant

ADRF KOREA, Inc.

5-5, Mojeon-Ri, Backsa-Myun, Icheon-City, Kyunggi-Do, Korea

**Eut Type
Model Name**

REPEATER

PSR-78-9537-U

FCC ID

N52-PSR-78-9537A

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	October 01, 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.

If this report is required to confirmation of authenticity, please contact to www.hct.co.kr

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

3. RESULTS

- PS 700_ Downlink

Max Peak output Power at antenna input terminal	38.00	dBm
Max Peak output Power at antenna input terminal	6309.57	mW
Prediction distance	310.00	cm
Prediction frequency	769.00	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.1187	-
Power density at prediction frequency(S)	0.2619	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.5127	mW/cm ²

- PS 800_ Downlink

Max Peak output Power at antenna input terminal	38.00	dBm
Max Peak output Power at antenna input terminal	6309.57	mW
Prediction distance	310.00	cm
Prediction frequency	851.00	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.1187	-
Power density at prediction frequency(S)	0.2619	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.5673	mW/cm ²

- PS 700_ Uplink

Max Peak output Power at antenna input terminal	31.00	dBm
Max Peak output Power at antenna input terminal	1258.93	mW
Prediction distance	310.00	cm
Prediction frequency	799.00	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.1187	-
Power density at prediction frequency(S)	0.0522	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.5327	mW/cm ²

- PS 800_ Uplink

Max Peak output Power at antenna input terminal	31.00	dBm
Max Peak output Power at antenna input terminal	1258.93	mW
Prediction distance	310.00	cm
Prediction frequency	806.00	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.1187	-
Power density at prediction frequency(S)	0.0522	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.5373	mW/cm ²