

# TEST REPORT

FCC MPE Test for ADXV-HPR-46N77L  
Certification

**APPLICANT**  
ADRF KOREA, Inc.

**REPORT NO.**  
HCT-RF-2303-FC002

**DATE OF ISSUE**  
March 17, 2023

**Tested by**  
Sang Su Lee

**Technical Manager**  
Jong Seok Lee

**HCT CO., LTD.**  
*Bongjai Huh*  
BongJai Huh / CEO



**HCT Co., Ltd.**

74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383 KOREA  
Tel. +82 31 634 6300 Fax. +82 31 645 6401

**TEST  
REPORT**

FCC MPE Test for  
ADXV-HPR-46N77L

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Additional Model  
-

**Applicant**      **ADRF KOREA, Inc.**  
5-5, Mojeon-Ri, Backsa-Myun, Icheon-Citi, Kyunggi-Do, Korea

**Eut Type**      DAS  
**Model Name**    ADXV-HPR-46N77L

**FCC ID**        N52-ADXV-HPR-N77L

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	March 17, 2023	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](http://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 <sup>2</sup> )	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/f <sup>2</sup> )	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. Result

- 3.45 GHz Service 5G NR 20 MHz (Downlink), [Antenna gain: 2.8 dBi, Separation distance: 100 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	100.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	2.80	dBi
Antenna Gain(numeric)	1.91	-
Power density at prediction frequency(S)	0.6773	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

- 3.45 GHz Service 5G NR 40 MHz (Downlink), [Antenna gain: 2.8 dBi, Separation distance: 100 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	100.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	2.80	dBi
Antenna Gain(numeric)	1.91	-
Power density at prediction frequency(S)	0.6773	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>



- 3.45 GHz Service 5G NR 60 MHz (Downlink), [Antenna gain: 2.8 dBi, Separation distance: 100 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	100.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	2.80	dBi
Antenna Gain(numeric)	1.91	-
Power density at prediction frequency(S)	0.6773	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

- 3.45 GHz Service 5G NR 80 MHz (Downlink), [Antenna gain: 2.8 dBi, Separation distance: 100 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	100.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	2.80	dBi
Antenna Gain(numeric)	1.91	-
Power density at prediction frequency(S)	0.6773	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

- 3.45 GHz Service 5G NR 100 MHz (Downlink), [Antenna gain: 2.8 dBi, Separation distance: 100 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	100.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	2.80	dBi
Antenna Gain(numeric)	1.91	-
Power density at prediction frequency(S)	0.6773	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

- 3.45 GHz Service 5G NR 20 MHz (Downlink), [Antenna gain: 8.8 dBi, Separation distance: 200 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	200.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	8.80	dBi
Antenna Gain(numeric)	7.59	-
Power density at prediction frequency(S)	0.6741	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

- 3.45 GHz Service 5G NR 40 MHz (Downlink), [Antenna gain: 8.8 dBi, Separation distance: 200 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	200.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	8.80	dBi
Antenna Gain(numeric)	7.59	-
Power density at prediction frequency(S)	0.6741	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>





- 3.45 GHz Service 5G NR 60 MHz (Downlink), [Antenna gain: 8.8 dBi, Separation distance: 200 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	200.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	8.80	dBi
Antenna Gain(numeric)	7.59	-
Power density at prediction frequency(S)	0.6741	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

- 3.45 GHz Service 5G NR 80 MHz (Downlink), [Antenna gain: 8.8 dBi, Separation distance: 200 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	200.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	8.80	dBi
Antenna Gain(numeric)	7.59	-
Power density at prediction frequency(S)	0.6741	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>



- 3.45 GHz Service 5G NR 100 MHz (Downlink), [Antenna gain: 8.8 dBi, Separation distance: 200 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	200.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	8.80	dBi
Antenna Gain(numeric)	7.59	-
Power density at prediction frequency(S)	0.6741	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>



- 3.45 GHz Service 5G NR 20 MHz (Downlink), [Antenna gain: 12.3 dBi, Separation distance: 300 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	300.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	12.30	dBi
Antenna Gain(numeric)	16.98	-
Power density at prediction frequency(S)	0.6707	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

- 3.45 GHz Service 5G NR 40 MHz (Downlink), [Antenna gain: 12.3 dBi, Separation distance: 300 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	300.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	12.30	dBi
Antenna Gain(numeric)	16.98	-
Power density at prediction frequency(S)	0.6707	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>



- 3.45 GHz Service 5G NR 60 MHz (Downlink), [Antenna gain: 12.3 dBi, Separation distance: 300 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	300.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	12.30	dBi
Antenna Gain(numeric)	16.98	-
Power density at prediction frequency(S)	0.6707	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>

- 3.45 GHz Service 5G NR 80 MHz (Downlink), [Antenna gain: 12.3 dBi, Separation distance: 300 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	300.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	12.30	dBi
Antenna Gain(numeric)	16.98	-
Power density at prediction frequency(S)	0.6707	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>



- 3.45 GHz Service 5G NR 100 MHz (Downlink), [Antenna gain: 12.3 dBi, Separation distance: 300 cm]

Max Peak output Power at antenna input terminal	46.50	dBm
Max Peak output Power at antenna input terminal	44 668.36	mW
Prediction distance	300.00	cm
Prediction frequency	3 450.00	MHz
Antenna Gain(typical)	12.30	dBi
Antenna Gain(numeric)	16.98	-
Power density at prediction frequency(S)	0.6707	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm <sup>2</sup>