

# **TEST REPORT**

#### FCC MPE Test for ADXV-R-337FN

Certification

APPLICANT ADRF KOREA, Inc.

REPORT NO. HCT-RF-2206-FC004-R1

DATE OF ISSUE June 22, 2022

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Pi

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## TEST REPORT

FCC MPE Test for ADXV-R-337FN

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standard.

**Additional Model** 

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Applicant	ADRF KOREA, Inc. 5-5, Mojeon-Ri, Backsa-Myun, Icheon-Citi, Kyunggi-Do, Korea	
Eut Type Model Name	DAS ADXV-R-337FN	
FCC ID	N52-ADXV-R-337FN	
	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	

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#### **REVISION HISTORY**

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

Revision No.	Date of Issue	Description
0	June 15, 2022	Initial Release
1	June 22, 2022	- Changed the antenna gain

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

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## **RF Exposure Statement**

#### 1. Limit

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

#### (B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magneticfield Strength (A/m)	Powerdensity (mW/cm²)	Averaging time (minutes)
0.3 - 1.34	614	1.63	*(100)	30
1.34 - 30	824/f	2.19/f	*(180/f²)	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

## 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

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<sup>\* =</sup> Plane-wave equivalent power density





## 3. RESULTS

## - Lower 700 MHz - LTE 10 MHz (Downlink)

Max Peak output Power at antenna input terminal	33.50	dBm
Max Peak output Power at antenna input terminal	2238.72	mW
Prediction distance	60.00	cm
Prediction frequency	728.00	MHz
Antenna Gain(typical)	2.60	dBi
Antenna Gain(numeric)	1.82	-
Power density at prediction frequency( S)	0.0901	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	0.4853	mW/cm²
Max Peak output Power at antenna input terminal	33.50	dBm
Upper 700 MHz – LTE 10 MHz (Downlink)  Max Peak output Power at antenna input terminal	33 50	dBm
Max Peak output Power at antenna input terminal	2238.72	mW
Prediction distance	60.00	cm
Prediction frequency	746.00	MHz
Antenna Gain(typical)	2.60	dBi
Antenna Gain(numeric)	1.82	-
Power density at prediction frequency( S)	0.0901	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	0.4973	mW/cm <sup>2</sup>

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## - FirstNet – LTE 10 MHz (Downlink)

Max Peak output Power at antenna input terminal	33.50	dBm
Max Peak output Power at antenna input terminal	2238.72	mW
Prediction distance	60.00	cm
Prediction frequency	758.00	MHz
Antenna Gain(typical)	2.60	dBi
Antenna Gain(numeric)	1.82	-
Power density at prediction frequency( S)	0.0901	mW/cm²
MPE limit for uncontrolled exposure at prediction frequency	0.5053	mW/cm <sup>2</sup>

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#### Simultaneous band emission conditions

## [Downlink]

Band	MPE Ratio (Power density / Limit)	Sum of MPE Ratio	
Lower 700 MHz	0.1857		
Upper 700 MHz	0.1812	0.5451	≤ 1
FirstNet	0.1783		

#### \*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) + ...]  $\leq 1$

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