

TEST REPORT

FCC MPE Test for ADXV-HPR-436

Certification

APPLICANT
ADRF KOREA, Inc.

REPORT NO.
HCT-RF-2005-FC006

DATE OF ISSUE
May 12, 2020

HCT Co., Ltd.

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**TEST
REPORT**
FCC MPE Test for
ADXV-HPR-436

REPORT NO.
HCT-RF-2005-FC006
DATE OF ISSUE
12 May 2020
Additional Model
-

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

EUT Type DAS
Model Name ADXV-HPR-436

FCC ID N52-ADXV-HPR-436

This test results were applied only to the test methods required by the standard.

Tested by
Kwang Il Yoon

(signature)

Technical Manager
Kwon Jeong

(signature)

(signature)
HCT CO., LTD.

Soo Chan Lee
SooChan Lee / CEO

REVISION HISTORY

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

| Revision No. | Date of Issue | Description |
|--------------|---------------|-----------------|
| 0 | May 12, 2020 | Initial Release |

The result shown in this test report refer only to the sample(s) tested unless otherwise stated.

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.

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

- 600 MHz Service – LTE 20 MHz (Downlink)

| | | |
|---|----------|--------------------|
| Max Peak output Power at antenna input terminal | 43.50 | dBm |
| Max Peak output Power at antenna input terminal | 22387.21 | mW |
| Prediction distance | 250.00 | cm |
| Prediction frequency | 627.00 | MHz |
| Antenna Gain(typical) | 7.40 | dBi |
| Antenna Gain(numeric) | 5.50 | - |
| Power density at prediction frequency(S) | 0.1566 | mW/cm ² |
| MPE limit for uncontrolled exposure at prediction frequency | 0.4180 | mW/cm ² |

- 600 MHz Service – 5G NR 20 MHz (Downlink)

| | | |
|---|----------|--------------------|
| Max Peak output Power at antenna input terminal | 43.50 | dBm |
| Max Peak output Power at antenna input terminal | 22387.21 | mW |
| Prediction distance | 250.00 | cm |
| Prediction frequency | 627.00 | MHz |
| Antenna Gain(typical) | 7.40 | dBi |
| Antenna Gain(numeric) | 5.50 | - |
| Power density at prediction frequency(S) | 0.1566 | mW/cm ² |
| MPE limit for uncontrolled exposure at prediction frequency | 0.4180 | mW/cm ² |