

TEST REPORT

FCC MPE Test for ARX.IUMS435

Certification

APPLICANT
AERIX.Co.Ltd.

REPORT NO.
HCT-RF-1911-FC004

DATE OF ISSUE
November 05, 2019

HCT Co., Ltd.

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FCC ID

2AULC-ARX-IUMS435

Applicant

AERIX.Co.Ltd.

10, Cheolgangsandan-ro 66beon-gil, Daesong-myeon, Nam-gu, Pohang-si,
Gyeongsangbuk-do, Republic of Korea

**Eut Type
Model Name**

Sensor data Transmitter
ARX.IUMS435

Date of Receipt

September 27, 2019

Frequency range

917.3 MHz – 923.3 MHz

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.

Tested by

Se Wook Park

(signature)

Technical Manager

Jong Seok Lee

(signature)

HCT CO., LTD.

Soo Chan Lee

SooChan Lee / CEO
Accredited by KOLAS, Republic of KOREA

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	November 05, 2019	Initial Release

The measurements shown in this report were made in accordance with the procedures specified in § 2.947. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998, 21 U.S. C.853(a)

This laboratory is not accredited for the test results marked *.

The above Test Report is the accredited test result by KOLAS(Korea Laboratory Accreditation Scheme), which signed the ILAC-MRA.(HCT Accreditation No.: KT197)

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)	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 to the antenna in the direction of interest relative to an isotropic radiator

R = Distance to the center of radiation of the antenna

3. RESULTS

3-1. DTS

Average output Power at antenna input terminal	10.50	dBm
Average output Power at antenna input terminal	11.22	mW
Prediction distance	20.00	cm
Prediction frequency	917.3 – 923.3	MHz
Antenna Gain(typical)	2.3	dBi
Antenna Gain(numeric)	1.698	-
Power density at prediction frequency(S)	0.00379	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.612	mW/cm ²

2.1091

EIRP	12.8 (dBm)
ERP	10.65 (dBm)
ERP	0.01 (W)
ERP Limit	1.50 (W)
MARGIN	21.11 (dB)