

TEST REPORT

FCC MPE Test for MAR130
Certification

APPLICANT
Hyundai Mobis Co., Ltd

REPORT NO.
HCT-RF-2410-FC071

DATE OF ISSUE
October 30, 2024

Tested by
Ki Jae Kwon



Technical Manager
Jong Seok Lee



Accredited by KOLAS, Republic of KOREA

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



HCT CO.,LTD.

2-6, 73, 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea
Tel. +82 31 645 6300 Fax. +82 31 645 6401



TEST REPORT

REPORT NO.
HCT-RF-2410-FC071

DATE OF ISSUE
October 30, 2024

Applicant	Hyundai Mobis Co., Ltd 203, Teheran-ro, Gangnam-gu, Seoul, Republic of Korea
Product Name	UNIT ASSY-RR CORNER RADAR
Model Name	MAR130
FCC ID	TQ8-MAR130
Date of Test	October 01, 2024 ~ October 28, 2024
Location of Test	<input checked="" type="checkbox"/> Permanent Testing Lab <input type="checkbox"/> On Site Testing (Address: 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, Republic of Korea)
Test Standard Used	CFR 47 Part 2.1091
Test Results	PASS
Brand	HYUNDAI MOBIS

REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	October 30, 2024	Initial Release

Notice

Content

Engineering Statement:

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.

The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated.

The test results have only been applied with the test methods required by the standard(s).

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

Information provided by the applicant is marked **.

Test results provided by external providers are marked ***.

When confirmation of authenticity of this test report is required, please contact www.hct.co.kr

This test report provides test result(s) under the scope accredited by the Korea Laboratory Accreditation Scheme (KOLAS), which signed the ILAC-MRA.

(KOLAS (KS Q ISO/IEC 17025) Accreditation No. KT197)

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

Max output Power at antenna input terminal	22.00	dBm
Max output Power at antenna input terminal	158.49	mW
Prediction distance	20.00	cm
Prediction frequency	76 000.00	MHz
Power density at prediction frequency(S)	0.0315	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

EIRP	22.00	(dBm)
ERP	19.85	(dBm)
ERP	0.10	(W)
ERP Limit	3.00	(W)
MARGIN	14.92	(dB)