

FCC MPE REPORT

Certification

Applicant Name:
HYUNDAI MOBIS CO., LTD.

Address:
203, Teheran-ro, Gangnam-gu, Seoul, 135-977, South
Korea

Date of Issue:

May 03, 2019

Location:

HCT CO., LTD.,
74, Seoicheon-ro 578beon-gil, Majang-myeon,
Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA

Report No.: HCT-RF-1904-FI009-R1

FCC ID: TQ8-ADB24SNAN

APPLICANT: HYUNDAI MOBIS CO., LTD.

Model: ADB24SNAN

EUT Type: Car Audio System

Frequency Range: 2402 MHz - 2480 MHz (Bluetooth)

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)



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Engineer of Telecommunication testing center



Approved by : Kwon Jeong
Manager of Telecommunication testing center

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Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-1904-FI009	April 29, 2019	- First Approval Report
HCT-RF-1904-FI009-R1	May 03, 2019	- Revised the Result on page.04

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.....	-				
1.34	-	614	1.63	*(100)	30
30.....	-	824/f	2.19/f	*(180/ f ²)	30
30 - 300.....	-	27.5	0.073	0.2	30
300	-	f/1500	30
1500.....	-	1.0	30
1500	-				
100.000.....	-				

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. Bluetooth

Average output Power at antenna input terminal	4.000	dBm
Average output Power at antenna input terminal	2.51	mW
Prediction distance	20.00	cm
Prediction frequency	2402 – 2480	MHz
Antenna Gain(typical)	0.07	dBi
Antenna Gain(numeric)	1.016	-
Power density at prediction frequency(S)	0.000508	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

2.1091

EIRP	4.07 (dBm)
ERP	1.92 (dBm)
ERP	0.00 (W)
ERP Limit	1.50 (W)
MARGIN	29.84 (dB)