

FCC MPE REPORT

FCC Certification

Applicant Name:

HYUNDAI MOBIS CO., LTD.

Address:

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

Date of Issue:

February 20, 2018

Test Site/Location:

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

Report No.: HCT-RF-1802-FC008

FCC ID : TQ8-AVC31J5AN

APPLICANT : HYUNDAI MOBIS CO., LTD.

Model: AVC31J5AN

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)



Report prepared by : Jung Ki Lim
Engineer of Telecommunication testing center



Approved by : Jong Seok Lee
Manager of Telecommunication testing center

This report only responds to the tested sample and may not be reproduced, except in full, without written approval of the HCT Co., Ltd.

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-RF-1802-FC008	February 20, 2017	- First Approval Report

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

BT Only

Max Peak output Power at antenna input terminal	2.723 (dBm)
Max Peak output Power at antenna input terminal	1.872 (mW)
Prediction distance	20.000 (cm)
Prediction frequency	2480.000 (MHz)
Antenna Gain(typical)	1.470 (dBi)
Antenna Gain(numeric)	1.403 -
Power density at prediction frequency(S)	0.000522 (mW/cm ²)
MPE limit for uncontrolled exposure at prediction frequency	1.000 (mW/cm ²)

2.1091

EIRP	4.193 (dBm)
ERP	2.04 (dBm)
ERP	0.002 (W)
ERP Limit	3.00 (W)
MARGIN	32.73 (dB)