

74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA  
TEL: +82-31-645-6300 FAX: +82-31-645-6401

## FCC MPE REPORT

### FCC Certification

**Applicant Name:**  
HYUNDAI MOBIS CO., LTD.

**Address:**  
203, Teheran-ro, Gangnam-gu, Seoul, Korea (135-977)

**Date of Issue:**  
May 12, 2016  
**Test Site/Location:**  
HCT CO., LTD., 74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA  
**Report No.:** HCT-R-1605-E001  
**HCT FRN:** 0005866421  
**IC Recognition No.:** 5944A-5

**FCC ID** :TQ8-ACB10HDGN

**APPLICANT** : HYUNDAI MOBIS CO., LTD.

**Model(s):** ACB10HDGN

**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  
: Kyung Soo Kang  
Test engineer of RF Team



Approved by  
: Jong Seok Lee  
Manager of RF Team

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-R-1605-E001	May 12, 2016	- 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 <sup>2</sup> )	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/ f <sup>2</sup> )	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

Average Max output Power at antenna input terminal(dBm)	4.1120
Average Max output Power at antenna input terminal(mW)	2.578
Prediction distance (cm)	20.00000
Prediction frequency (MHz)	2402.00000
Antenna Gain(peak) (dBi)	-0.10000
Antenna Gain(numeric)	0.97724
Power density at prediction frequency (mW/cm <sup>2</sup> )	0.000501
MPE limit for uncontrolled exposure at prediction frequency (mW/cm <sup>2</sup> )	1.00000