

# TEST REPORT

FCC MPE Test for ACB16H6GG  
Certification

APPLICANT  
HYUNDAI MOBIS CO., LTD

REPORT NO.  
HCT-RF-2002-FC006

DATE OF ISSUE  
February 24, 2020

**HCT Co., Ltd.**

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# TEST REPORT

FCC MPE Test for  
ACB10HSGG

## REPORT NO.

HCT-RF-2002-FC006

## DATE OF ISSUE

February 24, 2020

## FCC ID

TQ8-ACB10HSGG

## Applicant

HYUNDAI MOBIS CO., LTD

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

## Eut Type

Car Audio System

## Model Name

ACB10HSGG

## Additional Model

ACB11HSGG, ACB10HSGN, ACB10HSGL, ACB11HSMG

## Frequency range

2 402 MHz ~ 2 480 MHz(Bluetooth)

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

Jin Gwan Lee

(signature)

## Technical Manager

Jong Seok Lee

(signature)

HCT CO., LTD.

Soo Chan Lee

SooChan Lee

/ CEO

## REVISION HISTORY

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

Revision No.	Date of Issue	Description
0	February 24, 2020	Initial Release

### 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.

## 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 <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 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	4.00	dBm
Average output Power at antenna input terminal	2.51	mW
Prediction distance	20.00	cm
Prediction frequency	2402 – 2480	MHz
Antenna Gain(typical)	-0.01	dBi
Antenna Gain(numeric)	0.998	-
Power density at prediction frequency( S)	0.00050	mW/cm <sup>2</sup>
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm <sup>2</sup>

#### 2.1091

EIRP	3.99 (dBm)
ERP	1.84 (dBm)
ERP	0.002 (W)
ERP Limit	3.00 (W)
MARGIN	32.93 (dB)