

TEST REPORT

FCC MPE Test for ACB16H6GG
Certification

APPLICANT
HYUNDAI MOBIS CO., LTD

REPORT NO.
HCT-RF-1911-FC002

DATE OF ISSUE
November 05, 2019

HCT Co., Ltd.

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FCC ID
TQ8-ACB16H6GG

Applicant HYUNDAI MOBIS CO., LTD
203, Teheran-ro, Gangnam-gu, Seoul, 135-977, South Korea

Eut Type Car Audio System
Model Name ACB16H6GG
Additional Model ACB17H6GG, ACB16H6GN, ACB16H6GP, ACB16H6MG, ACB16H6EG,
ACB16H6EP, ACB17H6EP

Date of Receipt October 10, 2019

Frequency range 2 402 MHz ~ 2 480 MHz(Bluetooth)

This test results were applied only to the test methods required by the standard.

Tested by
Se Wook Park

(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	November 05, 2019	Initial Release

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)

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.....	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 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 ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

2.1091

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