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

FCC Certification

Applicant Name:
HYUNDAI MOBIS CO., LTD.

Address:

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

Date of Issue:
August 16, 2016
Test Site/Location:
HCT CO., LTD., 74,Seoicheon-ro 578beon-gil,Majang-myeo, Icheon-si, Gyeonggi-do, 17383, Rep. of KOREA
Report No.: HCT-R-1608-E008-1
HCT FRN: 0005866421
IC Recognition No.: 5944A-5

FCC ID	**: TQ8-AVBB0H9AN**
APPLICANT	**: HYUNDAI MOBIS CO., LTD.**

Model(s):	AVBB0H9AN
EUT Type:	Car Audio System
Frequency Range:	2 402 MHz – 2 480 MHz (Bluetooth)
	2 412 MHz – 2 462 MHz (2.4 GHz Band)
	5 180 MHz – 5 825 MHz (5 GHz Band)

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

Version

TEST REPORT NO.	DATE	DESCRIPTION
HCT-R-1608-E008	August 04, 2016	- First Approval Report
HCT-R-1608-E008-1	August 16, 2016	- Revised the Maximum output power.

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

***Bluetooth mode**

Max Average output Power at antenna input terminal	4.000	dBm
Max Average output Power at antenna input terminal	2.512	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)	0.001	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm^2

***WLAN DTS Band (802.11b, g, n)**

Max Average output Power at antenna input terminal	18.000	dBm
Max Average output Power at antenna input terminal	63.096	mW
Prediction distance	20.000	cm
Prediction frequency	2412.000	MHz
Antenna Gain(typical)	4.110	dBi
Antenna Gain(numeric)	2.576	-
Power density at prediction frequency(S)	0.032	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm^2

UNII Band 1(802.11a, n, ac)

Max Average output Power at antenna input terminal	14.000	dBm
Max Average output Power at antenna input terminal	25.119	mW
Prediction distance	20.000	cm
Prediction frequency	5200.000	MHz
Antenna Gain(typical)	2.420	dBi
Antenna Gain(numeric)	1.746	-
Power density at prediction frequency(S)	0.009	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm^2

UNII Band 2A(802.11a, n, ac)

Max Average output Power at antenna input terminal	14.000	dBm
Max Average output Power at antenna input terminal	25.119	mW
Prediction distance	20.000	cm
Prediction frequency	5300.000	MHz
Antenna Gain(typical)	2.420	dBi
Antenna Gain(numeric)	1.746	-
Power density at prediction frequency(S)	0.009	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm^2

UNII Band 2C(802.11a, n, ac)

Max Average output Power at antenna input terminal	14.000	dBm
Max Average output Power at antenna input terminal	25.119	mW
Prediction distance	20.000	cm
Prediction frequency	5580.000	MHz
Antenna Gain(typical)	2.420	dBi
Antenna Gain(numeric)	1.746	-
Power density at prediction frequency(S)	0.009	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm^2

UNII Band 3(802.11a, n, ac)

Max Average output Power at antenna input terminal	14.000	dBm
Max Average output Power at antenna input terminal	25.119	mW
Prediction distance	20.000	cm
Prediction frequency	5785.000	MHz
Antenna Gain(typical)	2.420	dBi
Antenna Gain(numeric)	1.746	-
Power density at prediction frequency(S)	0.009	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm^2