Analysis Report

15040775HKG-001

The Equipment Under Test (EUT) is a 12 Volt FM/AM Car Radio with CD-MP3, USB and Class 3 Bluetooth, also equipped with SD and headphone. It can be paired with Bluetooth device for wireless audio playing. For Bluetooth, the EUT occupies a frequency range from 2402MHz to 2480MHz (79 channels with channel spacing of 1MHz). The EUT is powered by a 12V car battery.

Operating mode	Nominal Radiated Field Strength	Production Tolerance	Modulation Type
Bluetooth 3.0	95.9 dBµV/m at 3m	+/- 3dB	GFSK

Antenna Type: Internal, Integral
Antenna Gain: 0dBi

According to the KDB 447498:

For Bluetooth:
Based on the Maximum allowed field strength of production tolerance was 98.9dBµV/m at 3m in frequency 2.480GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 2.33mW

Conducted power = Radiated Power (EIRP) – Antenna Gain
So;
Conducted Power = 2.33mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW
= 9.53 mW

Since the above conducted output power is well below the SAR Exclusion threshold level, so the EUT is considered to comply with SAR requirement without testing.