

INTERTEK TESTING SERVICES

RF Exposure

The Equipment Under Test (EUT) is a Radio Frequency Hub Module (RFHM) operating at 125 kHz. The EUT is powered by DC 12V Car battery. The EUT is equipped with five antennas (Antenna 1: Rear Left Door LF mid-range Antenna, Antenna 2: Rear Right Door LF mid-range Antenna, Antenna 3: Trunk LF standard antenna, Antenna 4: Front Console LF standard Antenna, Antenna 5: Rear bumper LF standard antenna), but cannot be simultaneous operation, only one antenna is active at a time. EUT will select the antenna during time sharing cycle. For more detailed features description, please refer to the user's manual

Antenna Type: External: "Standard" and "Mid-range"
Modulation: OOK

According to the KDB 447498 D04 Interim General RF Exposure Guidance v01 (D01 447498 General RF Exposure Guidance v07):

The Maximum peak radiated emission for the EUT is 22.9 dBμV/m at 300m in the frequency 0.125MHz

The EIRP = E + 20 log (d) -104.7 dBm

=22.9 + 20log (300) -104.7 dBm

= -32.3 dBm

which is within the production variation.

The nominal radiated output power (e.i.r.p) specified: -32.0 dBm (Tolerance: ±2dB)

The max. nominal radiated output power (e.i.r.p) is -30dBm = 0.001mW

1-mW Test Exemption:

Since max. effective radiated power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.