

FCC RF Exposure

EUT Description: Wireless tour guide system

Model No.: TT2

FCC ID: 2BO2C-TT2

1. Limits

According to KDB 447498 D01 General RF Exposure Guidance v06 The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$[(\text{max power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR,}$$

Where:

Result = $P/D \cdot \sqrt{F}$

F = the RF channel transmit frequency in GHz

P = Maximum turn-up power in mw

D = Min. test separation distance in mm

2. Test Result of RF Exposure Evaluation

Frequency (MHz)	Output power (dBm)	Tune Up Power (dBm)	Max Tune Up power dBm/mW	Min test separation distance mm	Result	Limit	SAR Test Exclusion
2441	5.76	4.8±1(5.8)	3.802	5	1.188	3.0	Pass
2480	7.06	6.1±1(7.1)	5.129	5	1.615	3.0	Pass

Note:

PK Output power = conducted power.

Conducted power see the test report HK2504141860-1E/2E,

EDR antenna gain = 0.21dBi;

BLE antenna gain = 0dBi

EDR MPE (max) = 1.188 (mW/cm²)

BLE (max) = 1.615 (mW/cm²)

simultaneously MPE = $1.188/3 + 1.615/3 = 0.9344 < 1.0$

Per KDB 447498 D01, when the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion. The test exclusion threshold is 0.9344 which is ≤ 1 , SAR testing is not required.

Note: Exclusion Thresholds Results = $[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}]$

f(GHz) is the RF channel transmit frequency in GHz

Distance = 5mm