

Analysis Report

The Equipment Under Test (EUT) is a KegSpeed Tracking Device which is operating in the 2.4GHz ISM band. Only three frequency channels are used as declared by the applicant (2402MHz, 2426MHz and 2480MHz). The EUT is powered by 3VDC (1 X CR2450 battery).

2.4GHz Bluetooth portion

Antenna Type: Internal, Integral

Antenna Gain: 0dBi

Modulation Type: GFSK

Frequency Range: 2402MHz, 2426MHz, 2480MHz, 3 channels

EIRP range is -10dBm to 0dBm

According to the KDB 447498:

Conducted Power (max) = EIRP – Antenna gain

= 0 dBm - 0 dBi

= 0 dBm (1 mW)

The SAR Exclusion Threshold Level:

= $3.0 * (\text{min. test separation distance, mm}) / \text{sqrt}(\text{freq. in GHz})$

= $3.0 * 5 / \text{sqrt}(2.480)$ 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.