

INTERTEK TESTING SERVICES

RF Exposure

The equipment under test (EUT) is a OMNIB - Forky:The Lifting Robot operating at 2.4G Band. The EUT can be powered by DC 3.0V (1 x 3.0V CR2032 battery).For more detail information pls. refer to the user manual.

Antenna Type: Integral antenna

Modulation Type: GFSK

Antenna Gain: 3dBi

The normal peak radiated output power (e.i.r.p) is: -2.0dBm (tolerance: +/- 3dB).

The normal peak conducted output power is -5.0dBm (tolerance: +/- 3dB).

According to the KDB 447498 V06:

The Maximum peak radiated emission for the EUT is 96.1dBμV/m at 3m in the frequency 2410MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = 0.87dBm
which is within the production variation.

The Minimum peak radiated emission for the EUT is 94.2dBμV/m at 3m in the frequency 2436MHz

The EIRP = $[(FS \cdot D)^2 / 30]$ mW = -1.03dBm
which is within the production variation.

The maximum conducted output power specified is -2dBm= 0.631mW

The source- based time-averaging conducted output power
=0.631mW

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \text{sqrt} (2.463)$ mW

= 9.56 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.