

Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz Transceiver (Dress Unit) for a Cape operating at 2420 to 2478MHz with 1MHz channel spacing. The EUT is powered by 3X 1.5V AAA batteries. After switch on the EUT, The LED in the Dress and Cape will be twinkling when the dress detected movement.

Antenna Type: External integral antenna

Antenna Gain: 0dBi

Nominal rated field strength: 61.8dB μ V/m at 3m

Maximum allowed field strength of production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 64.8dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS * D)^2 * 1000 / 30] = 0.001\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain

So;

Conducted Power = 0.001mW.

The SAR Exclusion Threshold Level:

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

= $3.0 * 5 / \text{sqrt}(2.478) \text{ mW}$

= 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.