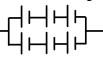


Analysis Report

Report No.: 14051778HKG-004

The W4GD is a 2-in-1 Portable WiFi Scanner.

For 802.11b mode, it operates at frequency range of 2412MHz to 2462MHz (11 channels with 5MHz channel spacing). It transmits via DSSS modulation. Maximum bit rate can be up to 11Mbps. For 802.11g mode, it operates at frequency range of 2412MHz to 2462MHz (11 channels with 5MHz channel spacing). It transmits via OFDM modulation. Maximum bit rate can be up to 54Mbps. For 802.11n (with 20MHz bandwidth) mode, it operates at frequency range of 2412MHz to 2462MHz (11 channels with 5MHz channel spacing). It transmits via OFDM modulation. Maximum but rate can support up to 65Mbps.

The EUT is power by 4.5VDC (3x"AA"size batteries)/power by docking unit 4.5VDC(6*"AA" size batteries ) /USB Port.

Antenna Type: Internal integral antenna

Antenna Gain: +2.3dBi

Nominal rated field strength: 97.5dBμV/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 100.5dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS \cdot D)^2 \cdot 1000 / 30] = 3.366\text{mW}$

Conducted power = Radiated Power (EIRP) – Antenna Gain
So;

Conducted Power = 1.982mW.

The SAR Exclusion Threshold Level:

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

= $3.0 \cdot 5 / \sqrt{2.462} \text{ mW}$

= 9.56 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.