

Analysis Report

The Equipment Under Test (EUT) operates at frequency range of 2405MHz to 2475MHz with 1MHz spacing for 71 channels

The EUT is power by 2 x1.5V AAA batteries.

For FCC, the Model(s): 84552 is the same as the Model: 84551 in electronics/electrical designs including software & firmware, PCB layout and construction design/physical design/enclosure. The only differences between these models are non-conductive outer casing to be sold for marketing purpose.

Antenna Type: Internal antenna

Antenna Gain: 0dBi

Nominal field strength is 99.8 dB μ V/m at 3m

Maximum allowed production tolerance: +/- 3dB

According to the KDB 447498:

Based on the Maximum allowed field strength of production tolerance was 102.8dB μ V/m at 3m in frequency 2.4GHz, thus;

The EIRP = $[(FS * D)^2 * 1000 / 30] = 5.72mW$

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

Conducted Power = 5.72mW.

The SAR Exclusion Threshold Level:

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

= $3.0 * 5 / \text{sqrt}(2.475) \text{ mW}$

= 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.