

INTERTEK TESTING SERVICES

Analysis Report

The equipment under test (EUT) is a Compact Performance PA System with Bluetooth operating 2402-2480MHz. The EUT can be powered by AC 100V, 110-120V, 220-240V, 50/60Hz. For more detailed features description, please refer to the user's manual.

Modulation Type: GFSK, $\pi/4$ DQPSK, 8DPSK

Antenna Type: Integral antenna (Gain: 2 dBi)

The nominal radiated output power (e.i.r.p) specified: 5dBm (Tolerance: +/-3dB)

The nominal conducted output power specified: 3dBm (Tolerance: +/-3dB)

According to the KDB 447498:

The maximum radiated emission for the EUT is $99.8 \text{ dB}\mu\text{V/m}$ at 3m

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

$= 4.6 \text{ dBm}$ which is within the production variation

The maximum conducted output power specified is 6dBm = 4.0mW

The source-based time-averaging conducted output power

$= 4.0 * \text{Duty cycle mW} \leq 4.0 \text{ mW}$ (Duty Cycle $\leq 100\%$)

The SAR Exclusion Threshold Level:

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

$= 3.0 * 5 / \sqrt{2.480} \text{ mW}$

$= 9.5 \text{ mW}$

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.

FCC ID: Y4O-TCL2