Analysis Report

The Equipment Under Test (EUT) is a 2.4GHz BT 4.0 BLE transceiver for a Baby bottle Warmer that operating from 2402MHz to 2480MHz with 2MHz channel spacing. The EUT is powered by AC120V/60Hz. After paired with smart device, the user can set the command from the smart device to control the EUT.

Antenna Type: Internal antenna
Antenna Gain: 0dBi
Nominal rated field strength: 93.3 dBμV/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 96.3dBμV/m at 3m in frequency 2.4GHz, thus;

The EIRP = [(FS*D) ^2*1000 / 30] = 1.28mW

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

Conducted Power =1.28mW.

The SAR Exclusion Threshold Level:
= 3.0 * (min. test separation distance, mm) / sqrt(freq. in GHz)
= 3.0 * 5 / sqrt (2.480) mW
= 9.52 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.