

RF Exposure Requirements

Product Description: Thermal Bluetooth printer

Model No.: S85

FCC ID: 2AQKI-S85

According to the KDB 447498 D01 V06, the following RF exposure evaluation shall to demonstrate RF exposure compliance.

Bluetooth LE Technique

Tx frequency range: 2402~2480MHz

Type of Modulation: GFSK

Device category: Portable device (Distance: 5mm)

The maximum conducted output power: 8.06 dBm (Peak)

The maximum conducted output power specified is 7 dBm

Tolerance: ± 2 dB

The source- based time-averaging conducted output power

$= (7 + 2) * \text{Duty cycle mW} = 7.9433 \text{ mW}$ (Duty Cycle $\leq 100\%$)

Maximum Conducted Output Power: 7.9433 mW

Limit: 10mW

Source-based time-averaged Conducted output power is $7.9433 \text{ mW} < 10\text{mW}$

Bluetooth EDR Technique

Tx frequency range: 2402~2480MHz

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

Device category: Portable device (Distance: 5mm)

The maximum conducted output power: 6.84 dBm (Peak)

The maximum conducted output power specified is 6 dBm

Tolerance: ± 2 dB

The source- based time-averaging conducted output power

$= (6 + 2) * \text{Duty cycle mW} = 6.3096 \text{ mW}$ (Duty Cycle $\leq 100\%$)

Maximum Conducted Output Power: 6.3096 mW

Limit: 10mW

Source-based time-averaged Conducted output power is $6.3096 \text{ mW} < 10\text{mW}$

So the transmitter complies with the RF exposure requirements and the SAR is not required.