

RF Exposure requirements

Product name	KDC380 Wireless Barcode Scanner
Model number	KDC380
FCC ID	VH9-KDC380
Radio specification	2.402 – 2.480 GHz Bluetooth LE transceiver 2.412 – 2.462 GHz WiFi transceiver 13.56 MHz NFC transceiver
Antenna	Internal Chip antenna (For Bluetooth LE) Internal Omni-directional antenna (For WiFi) Internal PCB Pattern antenna (For NFC)
Power source	DC 3.7 V (Battery)

According to the KDB 447498 D01 General RF Exposure Guidance v06, the equation and threshold in 4.3.1 were applied to determine SAR test exclusion.

4.3.1 Standalone SAR test exclusion consideration

- a) For 100 MHz to 6 GHz and the test separation distances $\leq 50\text{mm}$, the 1-g SAR test exclusion thresholds are determined by the following:

$$[(\text{maximum power, mW}) / (\text{min. test separation distance, mm})] \cdot [v_f(\text{GHz})] \leq 3.0$$

SAR test exclusion thresholds

Frequency [GHz]	RF output power		Minimum test separation distance [mm]	1-g SAR test exclusion thresholds	
	[dBm]	[mW]		Calculated	Limit
2.4 GHz Bluetooth LE transceiver)					
2.402	-9.85	0.10	5	0.05	≤ 3
2.4 GHz WiFi transceiver					
2.412	5.67	3.69	5	1.78	≤ 3

Note: RF Output power means the Bluetooth is peak power and The WiFi is Average power.

The RF output power was low enough to satisfy the SAR test exclusion thresholds when the distance of 5 mm was applied.