RF Exposure

The equipment under test (EUT) is a Wet Dry Vacuum with Bluetooth 5.0 BLE function operating in 2402-2480MHz. The EUT is powered by DC 21.6V by rechargeable battery and charged by DC 27V through adapter. For more detail information pls. refer to the user manual.

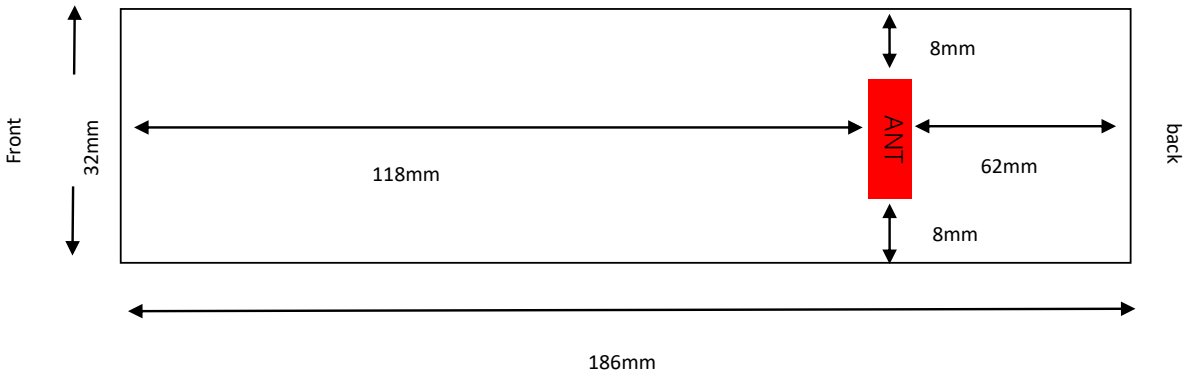
Antenna Type: PCB antenna
Modulation Type: GFSK
Antenna Gain: 2dBi
Bluetooth Version: 5.0 BLE (Single Mode)
The nominal conducted output power specified: 3.04 dBm (±2dB)

According to the KDB 447498 V07:

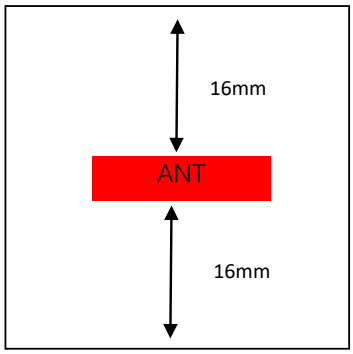
The maximum conducted output power for the EUT is 5.04dBm in the frequency 2.480GHz which is within the production variation.

The minimum conducted output power for the EUT is 3.38dBm in the frequency 2.480GHz which is within the production variation.

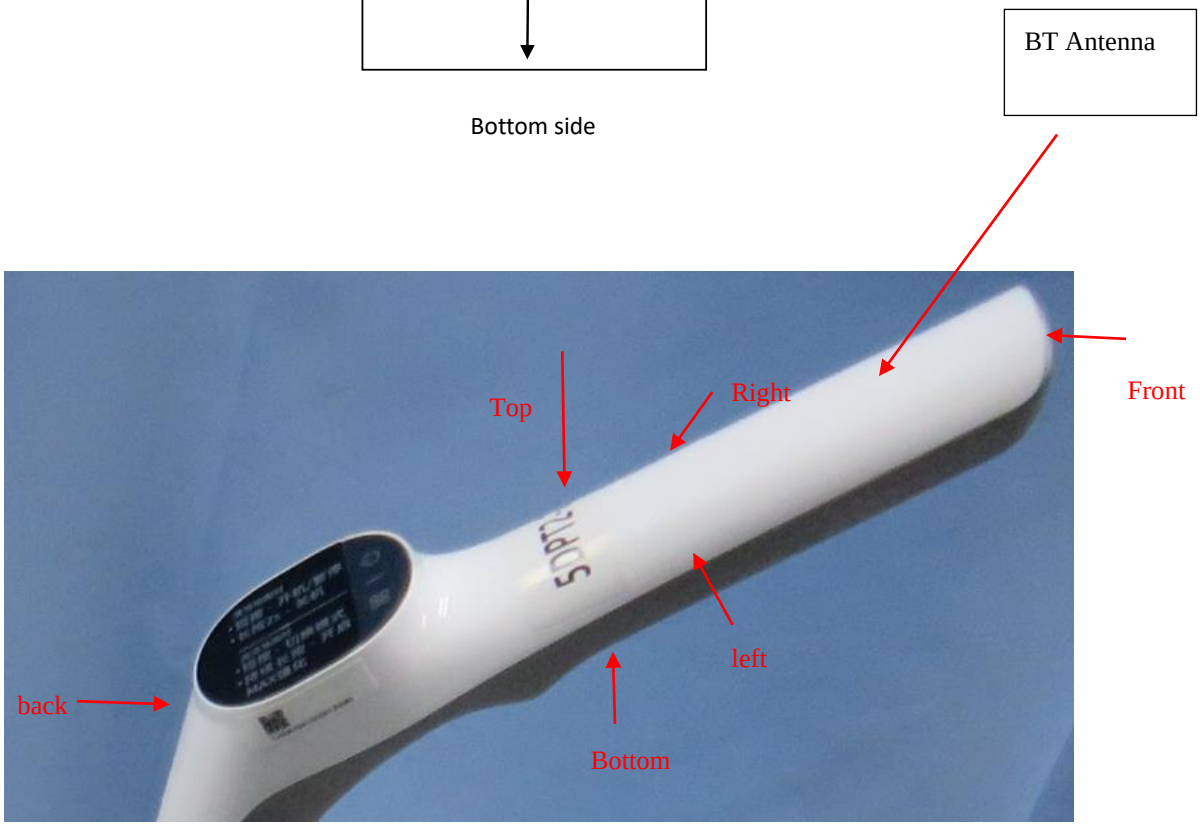
The maximum conducted output power specified is 5.04 dBm= 3.192mW
The maximum ERP specified is 5.04dBm - 2.15dB + 2dBi = 4.89dBm = 3.08mW



Top side



Bottom side



Distance to the host shell:

Distance from BT ANT to Front Side: 118mm

Distance from BT ANT to back Side: 62mm

Distance from BT ANT to Top Side: 16mm

Distance from BT ANT to Bottom Side: 16mm

Distance from BT ANT to Left Side: 8mm

Distance from BT ANT to Right Side: 8mm

Mode	Location	Distance from ANT (mm)	Max. tune-up Power (mW)	Exemption with Max. Allowed Power (1g,mW)	SAR Test
BLE	Front Side	118mm	3.192mW	1124	N/A
	Back Side	62mm		331	N/A
	Top Side	16mm		25	N/A
	Bottom Side	16mm		25	N/A
	Left Side	8mm		6.8	N/A
	Right Side	8mm		6.8	N/A

Since max. conducted output power and effective radiated power (ERP) is well below the SAR low threshold level, so the EUT is considered to comply with SAR requirement without testing.