

RF Exposure evaluation

Product Description: HBC Remote
Model Number: HBCR001
FCC ID: NMCHBCR001

According to 447498 D01 General RF Exposure Guidance v05 The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances \leq 50 mm are determined by: $[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

The max output power is $7.76\text{dBm}=0.00597\text{W}=5.97\text{mW}$

The result is rounded to one decimal place for comparison

Worse case is as below: [2402MHz -5.97mW output power]

$(5.97\text{mW} / 5\text{mm}) \cdot [\sqrt{2.402(\text{GHz})}] = 1.85 < 3.0$ for 1-g SAR

Then SAR evaluation is not required

NOTE: For the maximum power, you can refer FCC test report.