

RF Exposure evaluation

FCC ID: 2AJEM-HY767

1. Reference

According to 447498 D01 General RF Exposure Guidance v06

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 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 (GHz) is the RF channel transmit frequency in GHz

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

The result is rounded to one decimal place for comparison

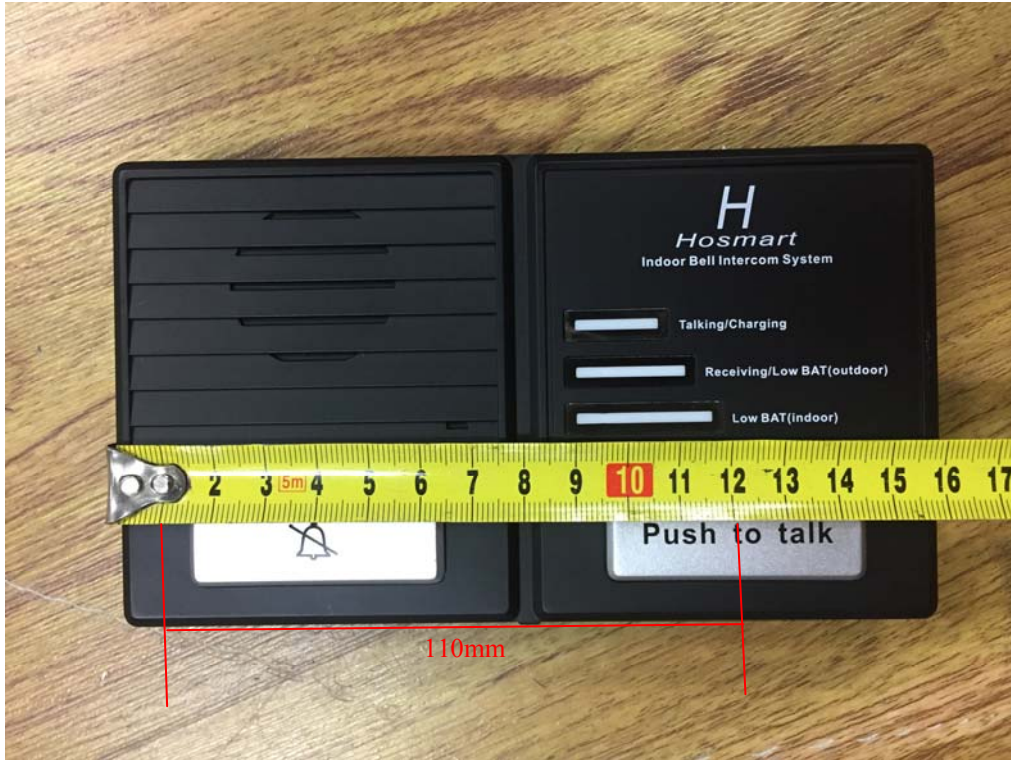
And;

For 100 MHz to 6 GHz and test separation distances > 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

1) $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)]\}$ mW, for 100 MHz to 1500 MHz

2. Test distance

As the plot exhibit below, the minimum distance of hand to the the Antenna (TALK button to Antenna) is 110 mm.



3. Result

Power allowed at 50mm = $7.5 / [\sqrt{f(\text{GHz})}] * 50 = 7.5 / [\sqrt{0.4626375}] * 50 = 551.3290183 \text{mW}$

SAR test exclusion thresholds = $\{[\text{Power allowed at numeric threshold for 50 mm in step a)}] + [(\text{test separation distance} - 50 \text{ mm}) \cdot (f(\text{MHz})/150)]\} \text{ mW} = 551.3290183 + (110 - 50) * (462.6375/150) = 736.3840183 \text{mW} = 28.67 \text{dBm}$

4. Conclusion

The Rate Power with including tune-up tolerance is $0.5 \text{W} (27 \text{dBm}) < 28.67 \text{dBm}$, 10-g extremity SAR test is not required.