

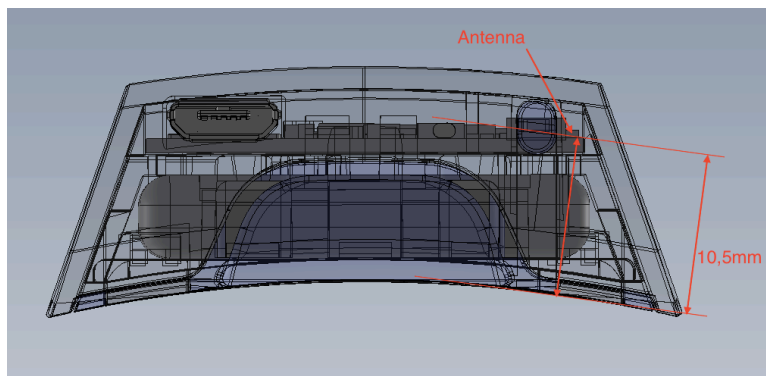
RF Exposure Information – SAR test exemption

Device under test :

Brand : 3D Sound Labs
Description : 3D Audio headtracking device
Model : 3DSLMO1
FCC ID : 2AEBV-3DSLMO1
Operating frequency : 2 402 to 2 480 MHz
Maximum conducted output power plus tune up tolerance = (3.6dBm +/- 0.4dBm)

FCC KDB447498 D01 Section 4.3.1 (1) specifies 1-g head SAR test exclusion threshold conditions for general exposure population condition, for frequencies from 100 MHz to 6 GHz, at test separation distances ≤ 50 mm.

Separation distance:



Minimum separation distance = 10.5 mm

Limit :

1-g SAR test exclusion threshold condition is:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot \sqrt{f(\text{GHz})} \leq 3.0$ 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 result is rounded to one decimal place for comparison
- 3.0 is referred to as the numeric thresholds

Results:

In our case:

P = Max power including tune-up tolerance : 4 dBm, or 2.51 mW, rounded to 3 mW

D = Min separation distance: We consider the thickness of the equipment from Antenna on PCB to equipment surface toward head as the minimum separation distance = 10 mm

F = Operating frequency : 2 402 to 2 480 MHz so $f(\text{GHz}) = 2.48$

We have: $(P / D) \times \sqrt{F} = (3 / 10) \times \sqrt{2.48} = 0.47 \leq 3.0$

Therefore, the SAR test exclusion condition for this equipment is met.

