

RF Exposure Information - SAR test exemption

Device under test:

Brand: 3D Sound Labs

Description: 3D Audio headtracking device

Model: 3DSLM01

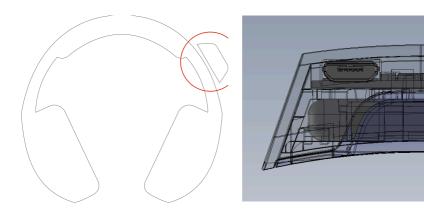
FCC ID: 2AEBV-3DSLM01

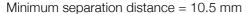
Operating frequency: 2 402 to 2 480 MHz

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 \leq 50 mm.

Separation distance:







Limit:

1-g SAR test exclusion threshold condition is:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] \cdot [$\sqrt{f(GHz)}$] \leq 3.0 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
- 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(GHz) = 2.48

We have: $(P / D) \times \sqrt{F} = (3 / 10) \times \sqrt{2}.48 = 0.47 \le 3.0$

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

