

FCC ID: 2AL8L-RC03

RF exposure evaluation

§ 2.1093 Radiofrequency radiation exposure evaluation: Portable Devices.

According to § 15.247(i) and § 1.1307b(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the commission's guidance.

The 1-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, 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
- When the minimum test separation distance is $<$ 5 mm, a distance of 5 mm according is applied to determine SAR test exclusion.
- The result is rounded to one decimal place for comparison
-

| Modulation | Frequency (GHz) | Max. Power (dBm) | Tune up Power (dBm) | Max. Tune up Power (dBm) | Max. Tune up Power (mW) | Test distance (mm) | Result | exclusion thresholds for 1-g SAR |
|------------|-----------------|------------------|---------------------|--------------------------|-------------------------|--------------------|--------|----------------------------------|
| GFSK | 2.450 | 0.29 | 0±1 | 1 | 1.26 | 5 | 0.394 | 3.0 |

Conclusion:

For the max result : 0.394W/Kg \leq FCC Limit 3.0 for 1g SAR.