

# FCC ID: 2BFCM-X5

## 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
- GFSK

| Modulation   | Frequency (MHz) | Max. Power (dBm) | Max. Tune up Power (dBm) | Max. Tune up Power (mW) | Test distance (mm) | Result | exclusion thresholds for 1-g SAR |
|--------------|-----------------|------------------|--------------------------|-------------------------|--------------------|--------|----------------------------------|
| 8DPSK        | 2402            | 0.91             | 1                        | 1.26                    | 5                  | 0.391  | 3.0                              |
| GFSK (1Mbps) | 2440            | 2.8              | 3                        | 2.0                     | 5                  | 0.625  | 3.0                              |

#### Conclusion:

For the max result:  $0.625 \leq \text{FCC Limit } 3.0$  for 1g SAR. The Product unsupported at the same time to Transmitting.