

RF Exposure Analysis – SAR Test Exemption – Top Holder RFID Reader

FCC ID: 2ANSW-THRE

The Top Holder operates using a 13.56MHz transmitter.

The following FCC Rule Parts and Procedures are applicable:

KDB447498 D04 V01 – Interim General RF Exposure Guidance

Part 1.1307(b)(3)(i)(A) - Blanket RF exposure exemption

For the Top Holder

Operating Frequency: 13.56MHz

Specified output power = -27.5dBm +/-6dB = -21.5dBm max.

Antenna gain = +1.76dBi

ERP = -21.5 + 1.76 -2.15dBm = -21.89dBm

Evaluation

From Part 1.1307, RF exposure exemption applies if the maximum transmitted power is less than the maximum of the following three criteria:

- i) Less than 1 mw Blanket exemption. $P_{TH} = 0.001 \text{ W}$ – §1.1307(b)(3)(i)(A)
- ii) determination of exemption under the MPE-based §1.1307(b)(3)(i)(C), if i) not met
- iii) determination of exemption under the SAR-based §1.1307(b)(3)(i)(B) if both i) and ii) are not met;

Conclusion

The Top Holder source-based, time-averaged power is less than 1mW (0dBm), so complies with the RF exposure blanket exemption in accordance with §1.1307(b)(3)(i)(A).