

SBSC RF Exposure Statement

As an FCC 2.1091 mobile device, FCC 1.310 maximum power density limit of 1 mW/cm² at 20 cm applies. Given the device EIRP of .431 mW, power density can be calculated as

$$S = \text{EIRP} / 4 * \pi * 20 \text{cm}^2$$

=8.6E-5 mW/cm², which is well under the limit of 1mW/cm².

If calculated as a portable device, the device is not intended to be body worn, however it is possible that the device position will be adjusted by hand while the device is operating. Therefore extremity limits and exclusions could apply.

As the picture below illustrates, the closest distance from user hand while holding outside of device case to radiating antenna is 3.5 mm. Using KDB 447498 D01V5r01 exclusion factor formula: min SAR Evaluation Limit = (mW/mm distance)*f^{.5}, < 7.5 for extremity contact, the extremity factor is calculated to be .191, leaving a margin of 7.309. Therefore device does not require additional SAR testing.

Tabulated Exclusion Factor

FCC Spec Reference	Spec Data	Distance (mm)	Frequency (GHz)	Maximum IRP Data (mW)	Extremity / Body Contact Factor	Extremity / Body Contact Limit	Margin
KDB 447498 D01V5r01	min SAR Evaluation Limit = (mW/distance)*f ^{.5} < 3 for body contact, < 7.5 for extremity contact	3.50	2.400	0.431	0.191	7.500	7.309

Distance Measurement

