

STATEMENT ON EXPOSURE TO ELECTROMAGNETIC FIELDS

EQUIPMENT

Type of equipment:	Radio Module
Brand name:	Gantner
Type / Model:	BG BLEM-SL22
Manufacturer:	Silicon Labs

STANDARD

47 CFR §2.1091, 47 CFR §1.1307, 47 CFR §1.1310 KDB 447498 D01 v06

Evaluation

☒ Maximum output power of the transmitter is 6 mW (≈ 7.8 dBm) according to the FCC Grant: QOQ-BGM220S. PCB antenna gain has maximum 3 dBi gain (if it functions as a dipole).

A worst case MPE calculation is as follows:

$$7.8 \text{ dBm} + 3 \text{ dBi} = 10.8 \text{ dBm} \approx 12 \text{ mW}$$

$$S = \frac{EIRP}{\pi * r^2}$$

$$EIRP = 12 \text{ mW}$$

$$r = 20 \text{ cm}$$

$$S = 0,0095 \text{ mW} / \text{cm}^2$$

Limits

Per 47 CFR §1.1310 MPE the limit in the 2.4 GHz range is 1 mW / cm².

RSS-102 clause 2.5.2 Routine rf exposure evaluation exemption limit for transmitters operating at 2480 MHz is 2.74 W eirp.

Transmitter complies with these limits without testing.

Intertek Deutschland GmbH

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