Rhein Tech Laboratories, Inc.
360 Herndon Parkway
Suite 1400
Herndon, VA 20170
http://www.rheintech.com

Client: Banner Engineering Corp.
Model: SX243
Standards: FCC 15.247/ISED RSS-247/RSS-Gen
ID's: FCC ID: UE3SX243 / IC: 7044A-SX243
Report #: 2019159DSS

Appendix A: FCC Part 1.1307, 1.1310, 2.1091, 2.1093; ISED RSS-102: RF Exposure

MPE Calculation

Using FCC 1.1310 Table 1B as guidance, the maximum permissible RF exposure for an uncontrolled environment is 1.0 mW/cm^2 for the frequencies used in this device (2402 to 2479 MHz). The worst case power is used for the calculation below.

The actual power density for the EUT calculated as shown below.

$$S = (P \times G)/(4 \times \pi \times d^2)$$

where:
S = power density
P = transmitter conducted power in (W)
G = antenna numeric gain
d = distance to radiation center (m)

Per the manufacturer, the worst-case maximum conducted power is 19.9 dBm (97.7 mW).

FCC

Frequency (MHz)	Antenna Gain (dBi)	Conducted Power (mW)	Separation Distance (cm)	Calculated Power Density (mW/cm^2)	FCC Power Density Limit (mW/cm^2)
2402 - 2479	2.0	97.7	20	0.03	1.0

ISED Canada

Frequency (MHz)	Antenna Gain (dBi)	Conducted Power (mW)	Separation Distance (cm)	Calculated Power Density (mW/cm^2)	ISED Canada Power Density Limit (mW/cm^2)
2402 - 2479	2.0	97.7	20	0.03	0.54

NOTICE:

FCC Radiation Exposure Statement

The calculated power density is below the limit. Nonetheless, the recommended separation distance for this equipment is 20 cm.

ISED Radiation Exposure Statement

The calculated power density is below the limit. Nonetheless, the required separation distance for this equipment is 20 cm.