



RF Exposure Exhibit

FCC Rule Part: 47 CFR Part 2.1093

Project Number: 72143353

Manufacturer: Johnson Outdoors, Inc.
Model: SOLIX 12 MSI G2

Module FCC ID: XF6-M15SB

RF Exposure

General Information:

Manufacturer: Johnson Outdoors, Inc.
Device Category: Mobile
Environment: General Population/Uncontrolled Exposure

Technical Information:

Antenna Type: Surface Mount Ceramic Chip

Antenna Gain: 0.99dBi

Maximum Transmitter Conducted Power: Bluetooth LE: 19.58 dBm, 90.78 mW
Bluetooth Classic: 18.92 dBm, 77.98 mW
WLAN: 21.65 dBm, 146.22 mW

Maximum System EIRP: Bluetooth LE: 20.57 dBm, 114.02 mW
Bluetooth Classic: 19.91 dBm, 97.95 mW
WLAN: 22.64 dBm, 183.65 mW

Exposure Conditions: Greater than 20 centimeters

MPE Calculation

The Power Density (mW/cm²) is calculated as follows:

$$S = \frac{PG}{4\pi R^2}$$

Where:

S = power density (in appropriate units, e.g. mW/cm²)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)

Table 1: MPE Calculation

Transmit Frequency (MHz)	Radio Power (dBm)	Power Density Limit (mW/Cm2)	Radio Power (mW)	Antenna Gain (dBi)	Antenna Gain (mW eq.)	Distance (cm)	Power Density (mW/cm^2)
2402	19.58	1.00	90.78	0.99	1.256	20	0.023
2402	18.92	1.00	77.98	0.99	1.256	20	0.019
2412	21.65	1.00	146.22	0.99	1.256	20	0.037

Maximum Peak Conducted Power used as worst-case