

Applicant: President Electronics, USA **FCC ID**:

Test Report S/N: 45461902-R1.0 **Project:** 1657

EXHIBIT 7B - FCC RF EXPOSURE (MPE) REPORT

Prediction of MPE Limit 47 CFR § 2.1091

$$S_{20} = \frac{P_A G_N}{4\pi R_{20}^2}$$

$$S_C = \frac{P_A G_N}{4\pi R_C^2}$$

$$R_{\rm C} = \sqrt{\frac{P_{\rm A}G_{\rm N}}{4\pi\,S_{\rm I}}}$$

2AEOCPC219

$$S_L = \frac{180}{f^2} (mW/cm^2)$$

 S_{20} = Power Density of the Device at 20cm

S_L = Power Density Limit

 S_c = Power Density of the Device at the Compliance Distance R_C

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

R_c = Minimum Distance to the Radiating Element to Meet Compliance

 P_T = Power Input to Antenna

 P_A = Adjust Power

 G_N = Numeric Gain of the Antenna

f = Transmit Frequency

Transmit Duty Cycle = 75%

Use Group = General Popuation

| Transmit Duty Cycle: | 75.00 | (%) |
|---|---------|-----------|
| Tx Frequency (f): | 27.405 | (MHz) |
| RF Power at Antenna Input Port (P _T): | 4000.00 | (mW) |
| Antenna Gain: | 3.00 | (dBi) |
| Numeric Antenna Gain (G _N): | 2.00 | (numeric) |
| Cable or Other Loss: | 0.00 | (dB) |
| Duty Cycle/Loss Adjusted Power (P _A): | 3000.00 | (mW) |

| S _L = | 0.240 | (mW/cm ²) |
|---------------------------|-------|-----------------------|
| S ₂₀ at 20cm = | 1.191 | (mW/cm ²) |
| $R_c =$ | 44.6 | (cm) |
| s _c = | 0.24 | (mW/cm ²) |

User's Manual must indicate a minimum separation distance of:

45cm