RF Exposure / MPE Calculation

No.	14324388H
Customer	HERUTU ELECTRONICS CORPORATION
Description of EUT	Sub-GHz Wireless Module
Model Number of EUT	HRF-SG01-US
FCC ID	T82-HRFSG01US

HERUTU ELECTRONICS CORPORATION declares that Model: HRF-SG01-US complies with FCC radiation exposure requirement specified in the FCC Rule 2.1091 (for mobile).

RF Exposure Calculations:

The following information provides the minimum separation distance for the highest gain antenna provided with the "HRF-SG01-US" as calculated from (B) Limits for General Population / Uncontrolled Exposure of TABLE 1- LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE) of §1.1310 Radiofrequency radiation exposure limits.

This calculation is based on the highest EIRP possible from the system, considering maximum power and antenna gain, and considering a 1mW/cm^2 uncontrolled exposure limit. The Friis formula used was:

$$S = \frac{P \times G}{4 \times \pi \times r^2}$$

Where

P = 24.27 mW (Maximum average output power)

☐ Time average was used for the above value in consideration of 6-minutes time-ave

☑ Burst power average was used for the above value in consideration of worst condit

G = 1.585 Numerical Antenna gain; equal to 2dBi*

*The worst antenna gain was applied.

r = 20 cm (Separation distance)

Power Density Result S = **0.00765 mW/cm^2**