

## EXHIBIT C – RF EXPOSURE EVALUATION

### Applicable Standard

According to subpart §1.1310, systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

| (B) Limits for General Population/Uncontrolled Exposure |                               |                               |                                     |                          |
|---------------------------------------------------------|-------------------------------|-------------------------------|-------------------------------------|--------------------------|
| Frequency Range (MHz)                                   | Electric Field Strength (V/m) | Magnetic Field Strength (A/m) | Power Density (mW/cm <sup>2</sup> ) | Averaging Time (minutes) |
| 0.3–1.34                                                | 614                           | 1.63                          | *(100)                              | 30                       |
| 1.34–30                                                 | 824/f                         | 2.19/f                        | *(180/f <sup>2</sup> )              | 30                       |
| 30–300                                                  | 27.5                          | 0.073                         | 0.2                                 | 30                       |
| 300–1500                                                | /                             | /                             | f/1500                              | 30                       |
| 1500–100,000                                            | /                             | /                             | 1.0                                 | 30                       |

f = frequency in MHz; \* = Plane-wave equivalent power density;

According to §1.1310 and §2.1091 RF exposure is calculated.

### Calculation formula

Prediction of power density at the distance of the applicable MPE limit

$S = PG/4\pi R^2$  = power density (in appropriate units, e.g. mW/cm<sup>2</sup>);

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, the power gain factor, is normally numeric gain;

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

For simultaneously transmit system, the calculated power density should comply with:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

**Calculated Data:**

| Operation Modes | Frequency (MHz) | Antenna Gain |           | Conducted output power including Tune-up Tolerance |        | Evaluation Distance (cm) | Power Density (mW/cm <sup>2</sup> ) | MPE Limit (mW/cm <sup>2</sup> ) |
|-----------------|-----------------|--------------|-----------|----------------------------------------------------|--------|--------------------------|-------------------------------------|---------------------------------|
|                 |                 | (dBi)        | (numeric) | (dBm)                                              | (mW)   |                          |                                     |                                 |
| SRD 900MHz      | 904-926         | 2.38         | 1.73      | 28                                                 | 630.96 | 20.00                    | 0.2172                              | 0.6                             |
| SRD 2.4G        | 2403.5-2475.5   | 4.01         | 2.52      | 29                                                 | 794.33 | 20.00                    | 0.3981                              | 1.0                             |
| SRD 5.2G        | 5154-5246       | 3.31         | 2.14      | 18                                                 | 63.10  | 20.00                    | 0.0269                              | 1.0                             |
| SRD 5.8G        | 5728-5847       | 3.35         | 2.16      | 29                                                 | 794.33 | 20.00                    | 0.3419                              | 1.0                             |
| Radar 60G       | 60000-64000     | 10           | 10.00     | 10                                                 | 10.00  | 20.00                    | 0.0199                              | 1.0                             |

**For Simultaneous transmission:**

SRD and 6 Radars can transmit simultaneously:

$$\sum_i \frac{S_i}{S_{Limit,i}} \leq 1$$

$$= S_{SRD} / S_{limit-SRD} + S_{Radar\ 60G} / S_{limit-Radar\ 60G} * 6$$

$$= 0.3981 / 1.0 + 0.0199 / 1 * 6$$

$$= 0.52$$

**Result: Compliant. The device compliant Simultaneous transmission at 20cm distances.**

**\*\*\*\*\* END OF REPORT \*\*\*\*\***