

RF Exposure Test Exclusion Exhibit

NRU 1C™, Model Tested: NRU 1C™

FCC ID: 2AM2Z-NRU1C5I4X5

Geophysical Technology Inc.

MPE Test Exclusion, FCC §1.1310

Requirements (Limits): 1 mW/cm²

Evaluation Results: Complies

Details: The maximum permissible exposure (MPE) is predicted by using the following equation:

$$S = PG/4\pi R^2$$

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)

For: P = 0.94 mW (from Intertek test report 104293906MPK-020), G = 2.1 dBi (1.62), and R = 20 cm,

$$S = 0.94 * 1.62 / (4 \times \pi \times 20^2) = 0.0003 \text{ mW/cm}^2$$

No duty cycle was considered.

SAR Test Exclusion

Requirements:

FCC KDB 447498 D01 v06, §4.3.1 a)

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR, and } \leq 7.5 \text{ for 10-g extremity SAR}$$

Evaluation Results: Complies

Details:

max. power = 0.94 mW (from Intertek test report 104293906MPK-020)

min. test separation distance = 5 mm

f = 2.48 GHz

$$[0.94 \text{ mW} / 5 \text{ mm}] \cdot [\sqrt{2.48 \text{ GHz}}] = 0.296 \leq 3.0 \text{ for 1-g SAR, and} \\ \leq 7.5 \text{ for 10-g extremity SAR}$$

No duty cycle was considered.

Results: SAR evaluation is not required since the higher of the maximum conducted or equivalent isotopically radiated power (EIRP) source-based, time averaged output power is below the exemption limit.