

US Tech Test Report:
FCC ID:
IC:
Test Report Number:
Issue Date:
Customer:
Model:

FCC Part 15 Certification/ RSS 210
KE3-3003679
2721A-3003679
20-0276
October 30, 2020
Radio Systems Corporation
RAC00-17202

Maximum Public Exposure to RF (MPE), CFR 1.1310 (e)

General SAR test exclusion per KDB 447498 D01 V06 section 4.3

Test exclusion conditions are based on source-based time averaged maximum conducted output power of the RF channel, adjusted for tune-up tolerance, and the minimum test separation distance required for the exposure conditions.

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$$[(\text{max. power of channel mW}) / (\text{min. test separation distance, mm})] * [(\sqrt{f_{\text{GHz}}})]$$

Where the result must be ≤ 3.0 for 1-g SAR and ≤ 7.0 for 10-g SAR

EUT source based time averaged (SBTA) = (output power + antenna gain * duty cycle)

$$\text{SBTA} = +16.0 \text{ dBm (worst case output pwr)} + -19.0 \text{ dBm (antenna gain)} + 1.0 \text{ (worst case Duty Cycle)} = -3.0 \text{ dBm} = 0.5 \text{ mW}$$

$$0.5 \text{ mW}/50 \text{ mm} * (\sqrt{0.15182 \text{ GHz}}) = 0.004 \ll 3.0 \text{ for 1-g SAR and } \leq 7.0 \text{ for 10-g SAR}$$