

## Exhibit 11: RF Exposure (MPE)

FCC ID: TA8AKRC161601-1

IC ID: 287AB-AS1616011

IC Model: AS1616011

Date: 28 March 2016

Model: RRUS 32A B66A KRC 161 601/1

Power Output: 4 x 30W

RAT: LTE, WCDMA

### Prediction of MPE limit at a given distance

Reference\_1: Equation from page 51 of EN 50385: Basic standard for the calculation and measurement of electromagnetic field strength and SAR related to human exposure from radio base stations and fixed terminal stations for wireless telecommunication systems (110 MHz - 40 GHz)

Reference 2: Equation from page 18 of OET Bulletin 65, Edition 97-01: Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields.

$$S = \frac{PG}{4\pi R^2}$$

**RRUS 32A B66A Tx: 2110MHz - 2180MHz**

where: S = power density

P = power input to the antenna

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

Power = P\_AVG = 44.5dBm + 6dB = 50.5dBm (Worst Case)

Maximum peak output power at antenna input terminal: 50.50 (dBm)

Maximum peak output power at antenna input terminal: 112201.85 (mW)

Antenna gain(typical): 18.1 (dBi)

Maximum antenna gain: 64.57 (numeric)

Prediction distance: 800 (cm)

Prediction frequency: 2145 (MHz)

MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm<sup>2</sup>)

Power density at prediction frequency: **0.90** (mW/cm<sup>2</sup>)

Maximum allowable antenna gain: **18.55** (dBi)

Margin of Compliance: 0.45 (dB)