

RF EXPOSURE EVALUATION

Equipment under test: TRAXENS – BOX V3 DRY
 FCC ID: 2AHZ6TRBV3
 IC number: 25616-TRBV3
 Test report reference: RRA-EMIESS22L010CED-1A v0

MPE calculation

These equations are generally accurate in the far field of an antenna but will over predict power density in the near field, where they could be used for making a “worst case” prediction.

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

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 the isotropic radiator
 R = distance to the centre of radiation of the antenna (appropriate units e.g. cm)

Or

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

Where EIRP = equivalent isotropically radiated power

Calculation:

(Calculated for max. EIRP)

EIRP: -1.8 dBm (0.66 mW)

Calculated at distance $\geq$ 50mm:

Power density = 0.002 mW/cm²

Limit:

309mW/cm² is the reference level for RSS-102 Issue 5 for distance separation $\geq$ 50mm

Ed.	Date	Modified page(s)	Written by		Technical Verification and Quality Approval	
			Name	Visa	Name	Visa
0	02/01/2023	Creation	B.PELLERIN PELLERIN Bruno Assistant to the Radio Laboratory Manager 			

