Annex acc. to FCC Title 47 CFR Part 15
relating to
VALIDFILL
VF POS Puck

Annex no. 11
RF exposure

Title 47 - Telecommunication
Part 15 - Radio Frequency Devices
Subpart C – Intentional Radiators
ANSI C63.4-2014
ANSI C63.10-2013

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Radio frequency hazard

Regulation

15.247(i) 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 levels in excess of the Commission's guidelines.

Test result

MPE calculation to the FCC ID: ODB-PS000SA011

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.

$$S = PG/4\pi R^2 \quad \text{or} \quad S = EIRP/(4\pi R^2)$$

Where
S = power density (in appropriate units, e.g. mW/cm^2)
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 center of radiation of the antenna (appropriate units e.g. cm)
EIRP = equivalent isotropically radiated power

Calculation:

Radio frequency hazard					
Max. EIRP		**Distance**	**Calculated Power Density**	**Limit**	**Margin**
dBm	**mW**	**cm**	**mW / cm²**	**mW / cm²**	**mW / cm²**
23.05	**201.93**	20	**0.04017**	0.601	**0.5593**
***Limit: the reference level for general public exposure according to the OET Bulletin 65, edition 97-01 Table 1.**					

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