RF EXPOSURE

FCC ID: Q78-R8964S26H

Applicable standard: FCC §2.1091 §1.1307

Limit

According to §1.1307(b)(1), 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 level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated. Limits for Maximum Permissible Exposure (MPE)

(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	--	--	f/1500	30
1500-100,000	--	--	1.0	30

Test Data

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

Where: S = power density

P = power input to 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

Maximum output power at antenna input terminal: 49(dBm) ,the Torrance is ± 2.7dB ,the cable loss is 1dB.

Predication frequency range: 2540M-2690MHz

Antenna Gain (typical): 18(dBi)

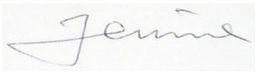
Power density at predication frequency at 770 cm: 1(mW/cm^2)

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

PG=49.02+2.7+18-1=68.72dBm

PG=7447319.74mW
S = PG/ 4πR²<1(mW/cm^2)
R=770cm

Test Result: pass



2014-10-25

Jennie HE – Certification Engineer Date