RF exposure

According to FCC part 1.1310 : The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in § 1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency range (㎒)	Electric field strength(V/m)	Magnetic field strength (A/m)	Power density (㎽/㎠)	Average time
(A) Limits for Occupational / Control Exposures				
300 – 1 500	--	--	f/300	6
1 500 - 100000	--	--	5	6
(B) Limits for General Population / Uncontrol Exposures				
300 – 1 500	--	--	f/1500	30
1 500 – 100 000	--	--	1	30

f= frequency in ㎒

$Pd = EIRP/(4\times pi\times R^2)$
EIRP = Field strength+20Log(D)-104.8
Where,
Pd = power density in ㎽/㎠
EIRP = Equivalent Isotropic Radiated Power
Pi = 3.1416
R = distance between observation point and center of the radiator in cm
D = Measured distance in m

Results

Frequency (㎒)	Field strength (dBuV/m)	EIRP (dBm)	Pd ㎝(㎽/㎠)	Limit (㎽/㎠)
2 410	79.25	-16.01	0.000 005	1
2 435	78.16	-17.10	0.000 004	1
2 465	77.29	-17.97	0.000 003	1

Result: The power density does NOT exceed the limit