

IVQFAL-HR equipment MPE Calculation

MPE Calculator

Kuston Signal IVQFAL-HR

Test

061107

MPE uses EIRP for calculation. EIRP is based on TX power added to the antenna gain in dBi.

dBi = dB gain compared to an isotropic radiator.

S = power density in mW/cm²

S = power density in mW/cm^2		Antenna Gain (dBi)		2.17	
Output Power		dBd + 2.17 = dBi		2.17	
Tx Frequency (MHz)	24125	(Watts)	0.2570	Antenna Gain (dBd)	0
Cable Loss (dB)	0.0	(dBm)	24.10	Antenna minus cable (dBi)	2.17

Calculated ERP (mw) 257.000

Calculated EIRP (mw) 423.578

EIRP = Po(dBm) + Gain (dB)

Radiated (EIRP) dBm 26.269

ERP = EIRP - 2.17 dB

Radiated (ERP) dBm 24.099

Occupational Limit

5.00000

mW/cm²

General Public Limit

1.00000

mW/cm²

Power density (S)
EIRP
----- = mW/cm²
4 π r²
r (cm) EIRP (mW)

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit	Public Limit
300-1,500	f/300	f/1500
1,500-10,000	5	1

FCC radio frequency radiation exposure limits per 1.1310		
Frequency (MHz)	Occupational Limit @ Tx Freq (mW/cm ²)	Public Limit @ Tx Freq (mW/cm ²)
300-1,500	80.41666667	16.08333333
1,500-10,000	5	1

EIRP	Distance	Distance	S
milliwatts	cm	inches	mW/cm ²
423.578	50.00	19.69	0.01348
423.578	40.00	15.75	0.02107
423.578	30.00	11.81	0.03745
423.578	25.00	9.84	0.05393
423.578	20.00	7.87	0.08427
423.578	15.00	5.91	0.14981
423.578	14.00	5.51	0.17198
423.578	13.00	5.12	0.19945
423.578	12.60	4.96	0.21232
423.578	11.00	4.33	0.27857
423.578	10.00	3.94	0.33707
423.578	9.00	3.54	0.41614
423.578	8.00	3.15	0.52668
423.578	7.00	2.76	0.68790
423.578	6.00	2.36	0.93631
423.578	5.80	2.28	1.00200
423.578	5.70	2.24	1.03747
423.578	5.00	1.97	1.34829
423.578	4.00	1.57	2.10670
423.578	3.00	1.18	3.74525
423.578	2.90	1.14	4.00800
423.578	2.80	1.10	4.29939
423.578	2.60	1.02	4.98628
423.578	2.00	0.79	8.42681
423.578	1.00	0.39	33.70725

Frequency (MHz)	Occupational Limit minimum Distance (cm)	Public Limit minimum distance (cm)
300-1,500	2.60	5.80
1,500-10,000	N/A	N/A

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Kustom Signals Inc.
MODEL: Falcon/HR
Test #: 061107
Test to: FCC Parts 2 and 90

FCCID#: IVQFAL-HR
S/N:FH01001

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