Industry Canada

MPE Calculator	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 de	ensity in mW/cm^2				
					Antenna Gain (dBi)	
		Output Power		dBd + 2.17 = dBi	dBi to dBd	
Tx Frequency (MHz)	915	Maximum (Watts)	1.600000		Antenna Gain (dBd)	11.8
Cable Loss (dB)	0.0	(dBm)	32.04	Ante	enna minus cable (dBi)	14.0
Cdd-+-4EBB ()		24204 044		FIRD - D-/4D3 O + C-	-i (4D)	
Calculated ERP (mw) Calculated EIRP (mw)				EIRP = Po(dBM) + Ga		16.01
Calcula	ted EIRP (mw)	40190.183		ERP = EIRP - 2.17 dB	Radiated (EIRP) dBm	46.04
Occur	ational Limit	Power density (S)		ERF - EIRF - 2.17 db	Radiated (ERP) dBm	43.87
19.52571	_	EIRP			readaced (Erd.) doin	45.07
19.5257	W/m	= mW/cm^2				
Cenera	l Public Limit	4 p r^2				
2.76675 W/m ²		r (cm) EIRP (mW)				
2.7667	W/m²					
		TC 4'- 6		Dec 103		
			cy radiation exposure limits			
		Frequency (MHz)	Occupational Limit (W/m ²)	Public Limit (W/m ²)		
		100-6,000	0.6455 f ^{0.5}			
		6,000-15,000	50			
		300-6,000		0.02619f ^{0.6834}		
		6,000-15,000		10		
			cy radiation exposure limits p			
		Frequency (MHz)	Occupational Limit (W/m2)			
		915	19.53	2.77		
EIRP	S	S	Distance	Distance	Distance	Distance
milliwatts	mW/cm ²	W/m^2	cm	meter	inches	Feet
40190.183	0.01279	0.12793	500.00	5.00	196.85	16.40
40190.183	0.01999	0.19989	400.00	4.00	157.48	13.12
40190.183	0.03554	0.35536	300.00	3.00	118.11	9.84
40190.183	0.07996	0.79956	200.00	2.00	78.74	6.56
40190.183	0.27420	2.74197	108.00	1.08	42.52	3.54
40190.183	0.31982	3.19823	100.00	1.00	39.37	3.28
40190.183	0.39484	3.94844	90.00	0.90	35.43	2.95
40190.183	0.49972	4.99724	80.00	0.80	31.50	2.62
40190.183	0.65270	6.52701	70.00	0.70	27.56	2.30
40190.183	0.88840	8.88398	60.00	0.60	23.62	1.97
40190.183	1.27929	12.79293	50.00	0.500	19.69	1.64
40190.183	1.90258	19.02578	41.00	0.410	16.14	1.35
40190.183				0.400	15.75	1.31
40100 102	1.99890	19.98896	40.00			4
40190.183	2.61080	26.10803	35.00	0.350	13.78	1.15
40190.183	2.61080 3.55359	26.10803 35.53592	35.00 30.00	0.350 0.300	13.78 11.81	0.98
40190.183 40190.183	2.61080 3.55359 7.99558	26.10803 35.53592 79.95583	35.00 30.00 20.00	0.350 0.300 0.200	13.78 11.81 7.87	0.98 0.66
40190.183	2.61080 3.55359	26.10803 35.53592	35.00 30.00	0.350 0.300	13.78 11.81	0.98
40190.183 40190.183	2.61080 3.55359 7.99558	26.10803 35.53592 79.95583	35.00 30.00 20.00 10.00	0.350 0.300 0.200 0.100	13.78 11.81 7.87 3.94	0.98 0.66 0.33
40190.183 40190.183	2.61080 3.55359 7.99558	26.10803 35.53592 79.95583	35.00 30.00 20.00 10.00 Occupational Limit	0.350 0.300 0.200 0.100 Occupational Limit	13.78 11.81 7.87 3.94 Public Limit minimum	0.98 0.66 0.33
40190.183 40190.183	2.61080 3.55359 7.99558	26.10803 35.53592 79.95583	35.00 30.00 20.00 10.00 Occupational Limit minimum Distance	0.350 0.300 0.200 0.100 Occupational Limit minimum Distance	13.78 11.81 7.87 3.94	0.98 0.66 0.33 Public Limit minimu distance (cm /
40190.183 40190.183	2.61080 3.55359 7.99558	26.10803 35.53592 79.95583	35.00 30.00 20.00 10.00 Occupational Limit	0.350 0.300 0.200 0.100 Occupational Limit	13.78 11.81 7.87 3.94 Public Limit minimum	0.98 0.66 0.33

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Revision 1

STAR Systems International, Limited Model: Orion S/N: 4124359

Test #: 150203

Test to: CFR47 Parts 2, 90 and RSS-137

File: RFExp Orion

FCC ID#: 2AA7K-ORION IC: 20068-ORION Date: May 19, 2015 Page 1 of 1