MPE Calculation page

MPE Calculation	page						
MPE Calculator	Trig Avionics		Test Number	er	091002	2	
MPE uses EIRP for cal	culation. EIRP is	based on TX power a	dded to the	antenna ga	in in dBi.		
	dBi = dB gain co	mpared to an isotropi	c radiator.				
	S = power densi	ty in mW/cm^2			Antenna Gain (dBi	2.2	
			dBd + 2.17 = dBi		dBi to dBo	2.17	
Γx Frequency (MHz)	1090		(Watts) 270.000000			0.03	
• •		Antenna minus cable (dBi			2.20		
Cable Loss (dB)	0.0	(dBm)	54.31				
Calcı	ulated ERP (mw)	271871.551			Radiated (EIRP) dBr	n 56.514	
Calcu	lated EIRP (mw)	448088.465					
					Radiated (ERP) dBr	n 54.344	
Occ	upational Limit	Power density (S) =				
5.00000			<i>'</i>				
	III V V CIII	= mW/cm	^2				
Gene	ral Public Limit	4 p r^2					
1.00000	_	[r (cm), EIRP (r	nW)]				
1.00000	mW/cm ²						
		FCC radio frequency radiation exposure limits per 1.1310					
				_	-		
		Frequency (MHz)	Occupational Limit		Public Limit		
		300-1,500	f/30		f/1500		
		1,500-10,000	5		1		
					1 1 1210		
		FCC radio frequency radiation exposure			limits per 1.1310		
			Occupational Limit @		Public Limit @ Tx		
		Frequency (MHz)	Tx Freq (mW/cm^2)		Freq (mW/cm^2)		
					<u> </u>		
		300-1,500	3.6333		0.726666667		
		1,500-10,000	5		1		
		TTD D			.		
		EIRP	Distance		Distance	S	
		milliwatts	cm		inches	mW/cm ²	
		448088.465	300.00		118.11	0.40	
		448088.465	250.		98.43	0.57	
		448088.465	240		94.49	0.62	
		448088.465	230		90.55	0.67	
		448088.465	223.		87.80	0.72	
		448088.465	220		86.61	0.74	
		448088.465	200		78.74	0.89	
		448088.465	175.		68.90	1.16	
		448088.465	150		59.06	1.58	
		448088.465	140		55.12	1.82	
		448088.465	130		51.18	2.11	
		448088.465	120.		47.24	2.48	
		448088.465	110.		43.31	2.95	
		448088.465	100.		39.37	3.57	
		448088.465	95.	00	37.40	3.95	
			Occupatio	nal Limit	Dublic Limit		
		Frequency (MHz)	minimum Distance		Public Limit minimum	'	
			(cn	n)	distance (cm)		
		300-1,500	N/.		N/A		
					223.00		

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Revision 1

Trig Avionics Limited Model: TT22 Test #: 091002

Test to: FCC Parts 2, 15 and 87

Page 1 of 1

FCC ID#: VZI00745

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