	Model:	E5/E6 Interrogate	or	Test Number:	210107				
MPE Calculator	RF Exposure uses EIRP for calculation. EIRP is based on dBi = dB gain compared to an isotropic radiator. S = power density in mW/cm^2								
		nsmitter Output p							
	Transmitter Output power (W		-						
Output Power for %	uty Cycle operation (Watts) 100				Antenna Gain (dBi)	14			
	Output Power for 100%	duty Cycle operation (Watts)		2.04	Antenna Gain (Numeric)		25.12		
Tx Frequency (MHz)	910	Calculation po	wer (Watts)	2.04	dBd + 2.17 = dBi		2.2		
C-11- I (1P)	0.0	A 1' (ID (ID)		22.10		Antenna Gain (dBd)	11.83		
Cable Loss (dB)	0.0	Adjusted Power (dBm)		33.10	Antenna minus cable (dBi)				
	Calculated ERP (mw) 31117.163				Antenna Gain (Numeric) EIRP = Po(dBm) + Gain (dB)				
	Calculated EIRP (mw) 51286.138			Radiated (EIRP) dBm					
				ERP = EIRP - 2.17					
	Power density (S) mW/cm ² = EIRP			Radiated (ERP) dBn					
						damea (Era) abiii	111,550		
		4 p r^2							
	r (cm) EIRP (mW)								
	(, (, , , ,)								
			-						
	Occupational Limit	J	FCC radio f	requency radiation exposure limits p	per 1.1310				
3.033333333 30	mW/cm ²	Frequency ((MHz)	Occupational Limit (mW/cm ²)	Public Limit (mW/cm ²)				
	W/m^2	30-30	0	1	0.2				
	General Public Limit	300-1,500		f/300	f/1500				
0.60666667		1,500-10,000		5	1				
6.00000000	W/m ²	1,500 10	,000		-				
0	W/III								
	Occupational Limit								
$0.6455f^{0.5}$		IC radio fre		quency radiation exposure limits per	· RSS-102				
				1	2				
24.2		Frequency (MHz)		Occupational Limit (W/m²)	Public Limit (W/m²)				
	General Public Limit	100-6,0		$0.6455 f^{0.5}$					
0.02619 <i>f</i> ^{0.6834} W/m ²		6,000-15,000		50					
8.7	W/m^2	48-300			1.291				
		300-6,0	00		$0.02619 f^{0.6834}$				
		6,000-15	,000	50	10				
f = Transmit Frequency (MHz)					f (MHz) =	910	MHz		
P _T = Power Input to Antenna (mW)					P_{T} (mW) =	2,041.7379	mW		
Duty cycle (percentage of operation)					% =	100 %			
P _A = Adjusted Power due to Duty cycle or Cable Loss (mW)					$P_{A}(mW) =$	2,041.74	2,041.74 mW		
G _N = Numeric Gain of the Antenna					GN (numeric) =	25.12	25.12 numeric		
S_{20} = Power Density of device at $20cm (mW/m^2)$			$S_{20}=(P_AG_N)/(4\pi R_{20})^2$	$S_{20} (mW/m^2) =$	10.20 mW/m^2				
S ₂₀ = Power Density of device at 20cm (W/m ²)			$S_{20} = (P_A G_N)/(4\pi R_{20})^2$	$S_{20} (W/m^2) =$	102.03 W/m ²				
S _L = Power Density Limit (W/m ²)				20/	$S_L (W/m^2) =$				
R _C = Minimum distance to the Radiating Element for Compliance (cm)				$R_C = \sqrt{(P_A G_N / 4\pi S_L)}$	R_{C} (cm) =	68.4 cm			
S_C = Power Density of the device at the Compliance Distance R_C (W/m ²)			C	$S_{C}(W/m^{2}) =$					
			$S_C = (P_A G_N)/(4\pi R_C)^2$		8.73 W/m ² 20 cm				
$R_{20} = 20cm$					R20=	20	CIII		
	For Compliance with Canada General Population Limits			s, User Manual must indicate a minimum separation distance of a General Population Limits, a minimum separation distance of					
			-						
	-	s for Compliance	with Canad	a General Population Limite a minir					
	-	s for Compliance	with Canad	a General Population Limits, a minir	mum separation distance of	0.08	Meters		
Summary: Standalone MPF Ca	Or in Meter	s for Compliance	with Canad	a General Population Limits, a minir	mum separation distance of	0.08	Meters		
Summary: Standalone MPE Ca Band (MHZ)	Or in Meter	s for Compliance Tx Frequency		a General Population Limits, a minii Power Total (mW)	Antenna Gain (numeric)	S _L (W/m ²)	S ₂₀ (W/m ²)	R _C (cm)	S _C (W/m ²

Rogers Labs, Inc. 4405 West 259th Terrace Louisburg, KS 66053

risburg, KS 66053 Test: 21010

Phone/Fax: (913) 837-3214 Revision 1 Transcore HVIN: E6V1 Test: 210107

Test to: 47CFR Parts 2, 90 and RSS-137

File: E6V1 RFExp

SN: 3431565

FCC ID: FIHE6PT90V1 IC: 1584A-E6RSS137V1 Date: February 15, 2021

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