

BLUE ORIGIN

$P_{tmax} = P_r + 20 \cdot \log_{10}(f) + 20 \cdot \log_{10}(30+d) - 27.55$				
Name	Value	Unit	Description	
Pr	-140	dBm	received power @ 30 meters from building	
f	1575.42	MHz	center frequency	
d	10.1	m	distance from radiator to closest exterior wall	
Ptmax	-71.54	dBm	maximum permissible EIRP	
Ptmax	70.16	pW	maximum permissible EIRP	
	Gain (dB)	Signal (dBm)	Description	Details
		-126	Received EIRP	IS-GPS-200H, table 3-VA, L1 C/A, +2.5 margin
	3.0	-123.0	Receive antenna	AeroAntenna AT575-62W-TNCF-000-RG-26-NM
	26	-97.0	Built-in receive preamp	see previous line
	-10.2	-107.2	Coax to amplifier	200 feet of LMR-400
	32	-75.2	Repeater amplifier	GPS Source A11 fixed gain (min 30, typ 32, max 33)
	3.0	-72.2	Re-rad transmit antenna	GPS Source L1P