Revised
ATTACHMENT B

Roger GPS, repeater budget calculator for NTIA regulations

100 Foot Cable

GPS carrier frequency, use code L1 or L2		
L1		
1575	MHz	

Values in light blue cells only can be edited

Distance from Building	
100	ft
30.48	m
0.019	mi
0.030	km

	Avg Receive Power North America Isotropic Antenna		External components: Receiver + Antenna Gain		External components: Cable Loss. This has to be negative value		External components: Attenuator		Repeater unit: Repeater Gain. Adjusted in the repeater		Repeater unit: Repeater Antenna Gain		Repeater unit: Antenna Isotropic vs Dipole		Free Space Loss	
			35.0	dB	-18.0	dB	0.0	dB	36.0	dB	3.0	dB	-2.2	dB	-66.1	dB
Level	-130.0	dBm	-95.0	dBm	-113.0	dBm	-113.0	dBm	-77.0	dBm	-74.0	dBm	-76.2	dBm	-140.1	dBm
															9.8E-18	W
							0.0 Attenuator needed to reach allowed output limit				Effective Radiated Power		Effective Isotropic Radiated Power		Repeated Signal Power @ distance	
															NTIA requires < -140 @ 100 ft	dBm

Roger GPS, repeater budget calculator for NTIA regulations

50 Foot Cable

GPS carrier frequency, use code L1 or L2		
L1		
1575	MHz	

Values in light blue cells only can be edited

Distance from Building	
100	ft
30.48	m
0.019	mi
0.030	km

	Avg Receive Power North America Isotropic Antenna		External components: Receiver + Antenna Gain		External components: Cable Loss. This has to be negative value		External components: Attenuator		Repeater unit: Repeater Gain. Adjusted in the repeater		Repeater unit: Repeater Antenna Gain		Repeater unit: Antenna Isotropic vs Dipole		Free Space Loss	
			35.0	dB	-14.0	dB	0.0	dB	32.0	dB	3.0	dB	-2.2	dB	-66.1	dB
Level	-130.0	dBm	-95.0	dBm	-109.0	dBm	-109.0	dBm	-77.0	dBm	-74.0	dBm	-76.2	dBm	-140.1	dBm
															9.8E-18	W
							0.0 Attenuator needed to reach allowed output limit				Effective Radiated Power		Effective Isotropic Radiated Power		Repeated Signal Power @ distance	
															NTIA requires < -140 @ 100 ft	dBm