

GPS L1 Re-radiating Information & Calculations

Site Information			
Antenna ID		12100	
Location Description		Hangar - Approx southwest corner	
Coordinates, NAD 83, ddd-mm-ss.s		33-04-26N-096-04-29W	
Antenna - Receiving (RX)			
Make and Model		ANTCOM Corp L1/L2GPSSA-N	
Gain (dBi)		36.5	
Amplifier / Splitter			
Make and Model		LA30RPDC-N	
Gain (typical, in dB at each output)		30	
Amplifier / Splitter			
Make and Model		NHIAPDC1X4/5/110	
Gain (typical, in dB at each output)		18.4	
Amplifier / Splitter			
Make and Model		VGRRKAMP-N (-3-23)	
Gain (typical, in dB at each output)		7	
Antenna - Re-radiating (TX)			
Make and Model	ANTCOM Corp L1/L2RRKPA-S	ANTCOM Corp L1/L2RRKPA-S	ANTCOM Corp L1/L2RRKPA-S
Gain (dBi)	3.5	3.5	3.5
Distance to nearest outer wall (ft)	54	54	54
Location Description	Bay 1	Bay 2	Bay 3
Antenna Height AGL (ft)	60	60	60
Free Space Loss	69.81	69.81	69.81
Coax - RX Antenna to VGRRKAMP-N Amp			
Type or Description		LMR400	
Attenuation @1575 MHz (dB/100 ft)		5.1	
Length (ft)		50	
Coax Loss - RX Antenna to Amp		2.55	
Coax - Amp to TX Antenna			
Type or Description	LMR400	LMR400	LMR400
Attenuation @1575 MHz (dB/100 ft)	5.1	5.1	5.1
Length (ft)	210	480	780
Coax Loss - Amp to TX Antenna	10.71	24.48	39.78
Attenuator			
Make & Model	GPS Networking ATTENPDC (1-30)	GPS Networking ATTENPDC (1-30)	
Attenuation @1575 MHz (dB)	29	15	
Calculated Signal Strength 100 ft Outside Building (dBm)*	-146.67	-146.44	-146.74

* This value MUST be less than negative 140 dBm