

GPS Power Control Re-radiating Worksheet

Site Information		
Antenna ID	A1	A2
Location Description	South Antenna	North Antenna
Coordinates, NAD 83, ddd-mm-ss.s	37-38-46.1N; 097-25-06.3W	37-38-46.9N; 097-25-06.3W
Antenna - Receiving (RX)		
Make and Model	GPS Source L1A-PM-N(f)	GPS Source L1A-PM-N(f)
Gain (dBi)	38.0	38.0
Coax		
Type or Description	LMR-400	LMR-400
Attenuation @1575 MHz (dB/100 ft)	5.2	5.2
Length (ft)	100.0	100.0
Coax Loss* - Not to exceed 8 dB	5.2	5.2
Power to Controller (-105 to -50 dBm)	-97.2	-97.2
Antenna - Re-radiating (TX)		
Make and Model	GPS Source L1P	GPS Source L1P
Antenna Height AGL (ft)	32	32
Gain (dBi)	3.0	3.0
Distance to nearest outer wall (ft)	53.0	53.0
Free Space Loss	69.749	69.749
Amplifier - Gain Control		
Make and Model	GPS Source GPSRKXLV-P110/5-NF	GPS Source GPSRKXLV-P110/5-NF
ERP Level (Programmed in dBm ERP)	-76	-76
EIRP Level	-73.352	-73.352
Level Adjust** (Programmed in dBi)	-0.50	-0.50
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.10	-140.10

* Coax Loss calculated to ensure adequate power to the Power Controller

** Level Adjust attenuates output power by the value entered (1/4 dB steps)

*** = ERP Level + Antenna Gain - Level Adjust - Free Space Loss + 2.148