

GPS Power Control Re-radiating Worksheet		
Site Information		
Antenna ID	A1	A2
Location Description	C5 North Hangar	C5 South Hangar
Coordinates, NAD 83, ddd-mm-ss.s	37-38-27.2N; 097-25-21.6W	37-38-24.9N; 097-25-21.5W
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	LDF4.5RN-50 Helix	LDF4.5RN-50 Helix
Attenuation @1575 MHz (dB/100 ft)	2.1	2.1
Length (ft)	25.0	25.0
Coax Loss* - Not to exceed 8 dB	0.5	0.5
Power to Controller (-105 to -50 dBm)	-92.5	-92.5
Antenna - Re-radiating (TX)		
Make and Model	GPS Source L1P-NF	GPS Source L1P-NF
Antenna Height AGL (ft)	26	26
Gain (dBi)	3.0	3.0
Distance to nearest outer wall (ft)	125.0	126.0
Free Space Loss	73.10	73.14
Amplifier - Gain Control		
Make and Model	GPS Source GLI-Metro RK (L1 Filtered, Oscillation Detect, Antenna Alarm Monitor)	GPS Source GLI-Metro RK (L1 Filtered, Oscillation Detect, Antenna Alarm Monitor)
ERP Level at Controller Output (Programmed in dBm ERP)	-72	-72
EIRP Level at Controller Output (dBm)	-69.9	-69.9
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)**	-140.0	-140.0

* Coax Loss calculated to ensure adequate signal at Power Controller input

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