

GPS Power Control Re-radiating Worksheet Antenna 1	
L1 (1575.42 MHz)	
Site Information	
Antenna ID	A1
Location Description	Northeast
Coordinates, NAD 83, ddd-mm-ss.s	37-41-15.6 N; 097-12-40.3 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1 Active
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1 Passive
Antenna Height Above Floor (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	5.0
Free Space Loss @ L1	66.48
Amplifier - Gain Control	
Make and Model	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-76
Transmit Power at Terminal (pW)*	20.64
Transmit Power from Antenna (pW ERP)**	25.12
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.33
* = Programmed ERP Level - Antenna Gain + 2.148 converted to pW	
** = Programmed ERP Level (includes Antenna Gain) converted to pW	
*** = Programmed ERP Level (includes Antenna Gain) - Free Space Loss + 2.148	

GPS Power Control Re-radiating Worksheet Antenna 2	
L1 (1575.42 MHz)	
Site Information	
Antenna ID	A2
Location Description	Southeast
Coordinates, NAD 83, ddd-mm-ss.s	37-41-14.3 N; 097-12-40.3 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1 Active
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1 Passive
Antenna Height Above Floor (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	30.0
Free Space Loss @ L1	68.33
Amplifier - Gain Control	
Make and Model	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-74
Transmit Power at Terminal (pW)*	32.72
	39.81
Transmit Power from Antenna (pW ERP)**	
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.18
* = Programmed ERP Level - Antenna Gain + 2.148 converted to pW	
** = Programmed ERP Level (includes Antenna Gain) converted to pW	
*** = Programmed ERP Level (includes Antenna Gain) - Free Space Loss + 2.148	

GPS Power Control Re-radiating Worksheet Antenna 3	
L1 (1575.42 MHz)	
Site Information	
Antenna ID	A3
Location Description	West
Coordinates, NAD 83, ddd-mm-ss.s	37-41-14.7 N; 097-12-41.2 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1 Active
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1 Passive
Antenna Height Above Floor (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	108.0
Free Space Loss @ L1	72.42
Amplifier - Gain Control	
Make and Model	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-70
Transmit Power at Terminal (pW)*	82.19
Transmit Power from Antenna (pW ERP)**	100.00
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.27
* = Programmed ERP Level - Antenna Gain + 2.148 converted to pW	
** = Programmed ERP Level (includes Antenna Gain) converted to pW	
*** = Programmed ERP Level (includes Antenna Gain) - Free Space Loss + 2.148	