

GPS Power Control Re-radiating Worksheet Antenna A1	
L1 (1575.42 MHz)	
Site Information	
Antenna ID	A1
Location Description	South End, West Side of W7
Coordinates, NAD 83, ddd-mm-ss.s	37-38-30.8 N; 097-24-55.5 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1 Active Antenna
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1 Passive Antenna
Antenna Height AGL (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	75.0
Free Space Loss @ L1	70.92
Amplifier - Gain Control	
Make and Model	GPS Source GLI-Metro RK (L1, Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-72
Transmit Power at Terminal (pW)*	51.86
Transmit Power from Antenna (pW ERP)**	63.10
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.77
* = 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 A2	
	L1 (1575.42 MHz)
Site Information	
Antenna ID	A2
Location Description	West Side North of A1
Coordinates, NAD 83, ddd-mm-ss.s	37-38-35.1 N; 097-24-55.4 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1 Active Antenna
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1 Passive Antenna
Antenna Height AGL (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	75.0
Free Space Loss @ L1	70.92
Amplifier - Gain Control	
Make and Model	GPS Source GLI-Metro RK (L1, Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-72
Transmit Power at Terminal (pW)*	51.86
	63.10
Transmit Power from Antenna (pW ERP)**	
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.77
* = 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 A3	
	L1 (1575.42 MHz)
Site Information	
Antenna ID	A3
Location Description	West Side North of A2
Coordinates, NAD 83, ddd-mm-ss.s	37-38-35.9 N; 097-24-55.3 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1 Active Antenna
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1 Passive Antenna
Antenna Height AGL (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	85.0
Free Space Loss @ L1	71.40
Amplifier - Gain Control	
Make and Model	GPS Source GLI-Metro RK (L1, Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-71
Transmit Power at Terminal (pW)*	65.28
	79.43
Transmit Power from Antenna (pW ERP)**	
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.25
* = 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 A4	
	L1 (1575.42 MHz)
Site Information	
Antenna ID	A4
Location Description	West Side North of A3
Coordinates, NAD 83, ddd-mm-ss.s	37-38-36.4 N; 097-24-55.3 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1 Active Antenna
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1 Passive Antenna
Antenna Height AGL (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	85.0
Free Space Loss @ L1	71.40
Amplifier - Gain Control	
Make and Model	GPS Source GLI-Metro RK (L1, Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-71
Transmit Power at Terminal (pW)*	65.28
	79.43
Transmit Power from Antenna (pW ERP)**	
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.25
* = 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 A5	
	L1 (1575.42 MHz)
Site Information	
Antenna ID	A5
Location Description	West Side North of A4
Coordinates, NAD 83, ddd-mm-ss.s	37-38-39.1 N; 097-24-55.3 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1 Active Antenna
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1 Passive Antenna
Antenna Height AGL (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	85.0
Free Space Loss @ L1	71.40
Amplifier - Gain Control	
Make and Model	GPS Source GLI-Metro RK (L1, Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-71
Transmit Power at Terminal (pW)*	65.28
	79.43
Transmit Power from Antenna (pW ERP)**	
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.25
* = 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 A6	
	L1 (1575.42 MHz)
Site Information	
Antenna ID	A6
Location Description	West Side North of A5
Coordinates, NAD 83, ddd-mm-ss.s	37-38-40.5 N; 097-24-55.7 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1 Active Antenna
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1 Passive Antenna
Antenna Height AGL (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	48.0
Free Space Loss @ L1	69.46
Amplifier - Gain Control	
Make and Model	GPS Source GLI-Metro RK (L1, Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-73
Transmit Power at Terminal (pW)*	41.19
	50.12
Transmit Power from Antenna (pW ERP)**	
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.31
* = 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 A7	
	L1 (1575.42 MHz)
Site Information	
Antenna ID	A7
Location Description	West Side North of A6
Coordinates, NAD 83, ddd-mm-ss.s	37-38-41.8 N; 097-24-55.3 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1 Active Antenna
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1 Passive Antenna
Antenna Height AGL (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	75.0
Free Space Loss @ L1	70.92
Amplifier - Gain Control	
Make and Model	GPS Source GLI-Metro RK (L1, Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-72
Transmit Power at Terminal (pW)*	51.86
	63.10
Transmit Power from Antenna (pW ERP)**	
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.77
* = 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	