

GPS Power Control Re-radiating Worksheet Antenna A1	
L1 (1575.42 MHz)	
Site Information	
Antenna ID	A1
Location Description	South Position, King Air Production Line
Coordinates, NAD 83, ddd-mm-ss.s	37-41-16.1 N; 97-12-37.1 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1A Active Antenna
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1P Passive Antenna
Antenna Height AGL (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	80.0
Free Space Loss @ L1	71.16
Amplifier - Gain Control	
Make and Model	GPS Source Metro-M-P110/6.8-NF (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)***	-140.01
* = 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	South Position, Piston Production Line
Coordinates, NAD 83, ddd-mm-ss.s	37-41-16.1 N; 97-12-36.3 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1A Active Antenna
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1P Passive Antenna
Antenna Height AGL (ft)	25
Gain (dBi) @ L1	3.0
Distance to nearest outer wall (ft)	145.0
Free Space Loss @ L1	73.84
Amplifier - Gain Control	
Make and Model	GPS Source Metro-M-P110/6.8-NF (L1, Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-71
Transmit Power at Terminal (pW)*	65.28
Transmit Power from Antenna (pW ERP)**	79.43
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-142.69
* = 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	North Position, King Air Production Line
Coordinates, NAD 83, ddd-mm-ss.s	37-41-17.0 N; 97-12-37.1 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1A Active Antenna
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1P 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 Metro-M-P110/6.8-NF (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 A4	
L1 (1575.42 MHz)	
Site Information	
Antenna ID	A4
Location Description	North Position, Piston Production Line
Coordinates, NAD 83, ddd-mm-ss.s	37-41-17.0 N; 97-12-36.3 W
Antenna - Receiving (RX)	
Make and Model	GPS Source L1A Active Antenna
Gain (dBi) @ L1 (LNA included)	36
Coax	
Type or Description	C-240
Antenna - Re-radiating (TX)	
Make and Model	GPS Source L1P 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 Metro-M-P110/6.8-NF (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	