

GPS Power Control Re-radiating Worksheet

Site Information			
Antenna ID	South	Center	North
Location Description	Bld C-16, Cessna Mid Continent, Wichita, KS	Bld C-16, Cessna Mid Continent, Wichita, KS	Bld C-16, Cessna Mid Continent, Wichita, KS
Coordinates, NAD 83, ddd-mm-ss.s	37-38-36.9N; 097-25-10.5W	37-38-38.2N; 097-25-10.4W	37-38-39.6N; 097-25-10.4W
Antenna - Receiving (RX)			
Make and Model	GPS Source L1A-PM-N(f)	GPS Source L1A-PM-N(f)	GPS Source L1A-PM-N(f)
Gain (dBi)	38.0	38.0	38.0
Coax			
Type or Description	CNT-400	CNT-400	CNT-400
Attenuation @1575 MHz (dB/100 ft)	5.2	5.2	5.2
Length (ft)	60.0	60.0	60.0
Coax Loss* - Not to exceed 8 dB	3.1	3.1	3.1
Power to Controller (-105 to -50 dBm)	-95.1	-95.1	-95.1
Antenna - Re-radiating (TX)			
Make and Model	GPS Source L1P	GPS Source L1P	GPS Source L1P
Antenna Height AGL (ft)	30	30	30
Gain (dBi)	3.0	3.0	3.0
Distance to nearest outer wall (ft)	75.0	75.0	75.0
Free Space Loss	70.916	70.916	70.916
Amplifier - Gain Control			
Make and Model	GPS Source GPSRKXLV-P110/5-NF	GPS Source GPSRKXLV-P110/5-NF	GPS Source GPSRKXLV-P110/5-NF
ERP Level (Programmed in dBm ERP)	-74	-74	-74
EIRP Level	-72.102	-72.102	-72.102
Level Adjust** (Programmed in dBi)	0.25	0.25	0.25
Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***	-140.02	-140.02	-140.02

* 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