

### GPS Power Control Re-radiating Worksheet Antenna 1

	L1 (1575.42 MHz)	L2 (1227.6 MHz)
<b>Site Information</b>		
Antenna ID	A1	A1
Location Description	South Wall of Lab	South Wall of Lab
Coordinates, NAD 83, ddd-mm-ss.s	42-32-16.4 N; 071-09-23.2 W	42-32-16.4 N; 071-09-23.2 W
<b>Antenna - Receiving (RX)</b>		
Make and Model	GPS Source L1L2-2GA	GPS Source L1L2-2GA
Gain (dBi) @ L1 & L2 (LNA included)	36	36
<b>Coax</b>		
Type or Description	C-240	C-240
<b>Antenna - Re-radiating (TX)</b>		
Make and Model	GPS Source L1L2-2GP	GPS Source L1L2-2GP
Antenna Height AGL (ft)	10	10
Gain (dBi) @ L1 and L2	3.0	3.0
Distance to nearest outer wall (ft)	0.0	0.0
Free Space Loss @ L1 and L2	66.06	63.89
<b>Amplifier - Gain Control</b>		
Make and Model	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-79	-79
Transmit Power at Terminal (pW)*	10.35	10.35
Transmit Power from Antenna (pW ERP)**	12.59	12.59
<b>Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***</b>	<b>-142.91</b>	<b>-140.74</b>

\* = 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)	L2 (1227.6 MHz)
<b>Site Information</b>		
Antenna ID	A2	A2
Location Description	NE Wall of Lab	NE Wall of Lab
Coordinates, NAD 83, ddd-mm-ss.s	42-32-16.7 N; 071-09-23.3 W	42-32-16.7 N; 071-09-23.3 W
<b>Antenna - Receiving (RX)</b>		
Make and Model	GPS Source L1L2-2GA	GPS Source L1L2-2GA
Gain (dBi) @ L1 & L2 (LNA included)	36	36
<b>Coax</b>		
Type or Description	C-240	C-240
<b>Antenna - Re-radiating (TX)</b>		
Make and Model	GPS Source L1L2-2GP	GPS Source L1L2-2GP
Antenna Height AGL (ft)	10	10
Gain (dBi) @ L1 and L2	3.0	3.0
Distance to nearest outer wall (ft)	29.0	29.0
Free Space Loss @ L1 and L2	68.27	66.10
<b>Amplifier - Gain Control</b>		
Make and Model	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-77	-77
Transmit Power at Terminal (pW)*	16.40	16.40
Transmit Power from Antenna (pW ERP)**	19.95	19.95
<b>Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***</b>	<b>-143.12</b>	<b>-140.95</b>

\* = 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)	L2 (1227.6 MHz)
<b>Site Information</b>		
Antenna ID	A3	A3
Location Description	NE Wall of Lab	NE Wall of Lab
Coordinates, NAD 83, ddd-mm-ss.s	42-32-17.0 N; 071-09-23.6 W	42-32-17.0 N; 071-09-23.6 W
<b>Antenna - Receiving (RX)</b>		
Make and Model	GPS Source L1L2-2GA	GPS Source L1L2-2GA
Gain (dBi) @ L1 & L2 (LNA included)	36	36
<b>Coax</b>		
Type or Description	C-240	C-240
<b>Antenna - Re-radiating (TX)</b>		
Make and Model	GPS Source L1L2-2GP	GPS Source L1L2-2GP
Antenna Height AGL (ft)	10	10
Gain (dBi) @ L1 and L2	3.0	3.0
Distance to nearest outer wall (ft)	53.0	53.0
Free Space Loss @ L1 and L2	69.75	67.58
<b>Amplifier - Gain Control</b>		
Make and Model	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-75	-75
Transmit Power at Terminal (pW)*	25.99	25.99
Transmit Power from Antenna (pW ERP)**	31.62	31.62
<b>Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***</b>	<b>-142.60</b>	<b>-140.43</b>

\* = 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 4

	L1 (1575.42 MHz)	L2 (1227.6 MHz)
<b>Site Information</b>		
Antenna ID	A4	A4
Location Description	NE Wall of Lab	NE Wall of Lab
Coordinates, NAD 83, ddd-mm-ss.s	42-32-17.2 N; 071-09-23.8 W	42-32-17.2 N; 071-09-23.8 W
<b>Antenna - Receiving (RX)</b>		
Make and Model	GPS Source L1L2-2GA	GPS Source L1L2-2GA
Gain (dBi) @ L1 & L2 (LNA included)	36	36
<b>Coax</b>		
Type or Description	C-240	C-240
<b>Antenna - Re-radiating (TX)</b>		
Make and Model	GPS Source L1L2-2GP	GPS Source L1L2-2GP
Antenna Height AGL (ft)	10	10
Gain (dBi) @ L1 and L2	3.0	3.0
Distance to nearest outer wall (ft)	53.0	53.0
Free Space Loss @ L1 and L2	69.75	67.58
<b>Amplifier - Gain Control</b>		
Make and Model	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-75	-75
Transmit Power at Terminal (pW)*	25.99	25.99
Transmit Power from Antenna (pW ERP)**	31.62	31.62
<b>Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***</b>	<b>-142.60</b>	<b>-140.43</b>

\* = 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 5

	L1 (1575.42 MHz)	L2 (1227.6 MHz)
<b>Site Information</b>		
Antenna ID	A5	A5
Location Description	NE Wall of Lab	NE Wall of Lab
Coordinates, NAD 83, ddd-mm-ss.s	42-32-17.4 N; 071-09-24.2 W	42-32-17.4 N; 071-09-24.2 W
<b>Antenna - Receiving (RX)</b>		
Make and Model	GPS Source L1L2-2GA	GPS Source L1L2-2GA
Gain (dBi) @ L1 & L2 (LNA included)	36	36
<b>Coax</b>		
Type or Description	C-240	C-240
<b>Antenna - Re-radiating (TX)</b>		
Make and Model	GPS Source L1L2-2GP	GPS Source L1L2-2GP
Antenna Height AGL (ft)	10	10
Gain (dBi) @ L1 and L2	3.0	3.0
Distance to nearest outer wall (ft)	53.0	53.0
Free Space Loss @ L1 and L2	69.75	67.58
<b>Amplifier - Gain Control</b>		
Make and Model	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-75	-75
Transmit Power at Terminal (pW)*	25.99	25.99
Transmit Power from Antenna (pW ERP)**	31.62	31.62
<b>Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***</b>	<b>-142.60</b>	<b>-140.43</b>

\* = 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 6

	L1 (1575.42 MHz)	L2 (1227.6 MHz)
<b>Site Information</b>		
Antenna ID	A6	A6
Location Description	SW Lab Area	SW Lab Area
Coordinates, NAD 83, ddd-mm-ss.s	42-32-16.3 N; 071-09-23.7 W	42-32-16.3 N; 071-09-23.7 W
<b>Antenna - Receiving (RX)</b>		
Make and Model	GPS Source L1L2-2GA	GPS Source L1L2-2GA
Gain (dBi) @ L1 & L2 (LNA included)	36	36
<b>Coax</b>		
Type or Description	C-240	C-240
<b>Antenna - Re-radiating (TX)</b>		
Make and Model	GPS Source L1L2-2GP	GPS Source L1L2-2GP
Antenna Height AGL (ft)	10	10
Gain (dBi) @ L1 and L2	3.0	3.0
Distance to nearest outer wall (ft)	24.0	24.0
Free Space Loss @ L1 and L2	67.92	65.76
<b>Amplifier - Gain Control</b>		
Make and Model	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-77	-77
Transmit Power at Terminal (pW)*	16.40	16.40
Transmit Power from Antenna (pW ERP)**	19.95	19.95
<b>Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***</b>	<b>-142.77</b>	<b>-140.61</b>

\* = 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 7

	L1 (1575.42 MHz)	L2 (1227.6 MHz)
<b>Site Information</b>		
Antenna ID	A7	A7
Location Description	Room 9051A	Room 9051A
Coordinates, NAD 83, ddd-mm-ss.s	42-32-16.9 N; 071-09-24.2 W	42-32-16.9 N; 071-09-24.2 W
<b>Antenna - Receiving (RX)</b>		
Make and Model	GPS Source L1L2-2GA	GPS Source L1L2-2GA
Gain (dBi) @ L1 & L2 (LNA included)	36	36
<b>Coax</b>		
Type or Description	C-240	C-240
<b>Antenna - Re-radiating (TX)</b>		
Make and Model	GPS Source L1L2-2GP	GPS Source L1L2-2GP
Antenna Height AGL (ft)	10	10
Gain (dBi) @ L1 and L2	3.0	3.0
Distance to nearest outer wall (ft)	85.0	85.0
Free Space Loss @ L1 and L2	71.40	69.23
<b>Amplifier - Gain Control</b>		
Make and Model	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-73	-73
Transmit Power at Terminal (pW)*	41.19	41.19
Transmit Power from Antenna (pW ERP)**	50.12	50.12
<b>Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***</b>	<b>-142.25</b>	<b>-140.08</b>

\* = 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 8

	L1 (1575.42 MHz)	L2 (1227.6 MHz)
<b>Site Information</b>		
Antenna ID	A8	A8
Location Description	Room 9051A	Room 9051A
Coordinates, NAD 83, ddd-mm-ss.s	42-32-16.6 N; 071-09-24.5 W	42-32-16.6 N; 071-09-24.5 W
<b>Antenna - Receiving (RX)</b>		
Make and Model	GPS Source L1L2-2GA	GPS Source L1L2-2GA
Gain (dBi) @ L1 & L2 (LNA included)	36	36
<b>Coax</b>		
Type or Description	C-240	C-240
<b>Antenna - Re-radiating (TX)</b>		
Make and Model	GPS Source L1L2-2GP	GPS Source L1L2-2GP
Antenna Height AGL (ft)	10	10
Gain (dBi) @ L1 and L2	3.0	3.0
Distance to nearest outer wall (ft)	69.0	69.0
Free Space Loss @ L1 and L2	70.61	68.45
<b>Amplifier - Gain Control</b>		
Make and Model	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)	GPS Source GLI-Metro RK (Oscillation Detect, Antenna Alarm Monitor)
ERP Level Setting on Controller (includes antenna gain) in dBm	-74	-74
Transmit Power at Terminal (pW)*	32.72	32.72
Transmit Power from Antenna (pW ERP)**	39.81	39.81
<b>Calculated Signal Strength 100 ft Outside Building (dBm EIRP)***</b>	<b>-142.46</b>	<b>-140.30</b>

\* = 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