Bering Glacier Camp Solar Array

Parts List:
- Pipes schedule 40 2" steel 2.375"OD (4 x 20' sticks cut as follows)
  2 Front Legs @ 96°
  4 Cross @ 96° (three front, one back)
  2 Back Legs @ 78°
  4 Deadmen @ 24° (from scrap)
- Hollaender Structural Fittings
  14 #5-9, 2" tee
  2 #17-9 2" adjustable el/tee
  2 #65-9 2" plug sched 40
  6 2"x2"x0.25" L bracket 59.45" long (30' total)
  18 "U" bolts >2.375" wide, with nuts and lockwashers
  36 M10 nuts & bolts solar frame to L
- 3 BP3125 solar panels
- 13' 1/2" flex & 50' 1" flex conduit
- 6 1/2" conduit fitting, 1" fitting
- 4.75" square box with cover
- 6 - 8 hose clamps
- 165' #8 AWG wire @ red & black (see chart to right)
- 6 solar regulators at least 7.1 amps each
- 300 blocking diodes
- 8 sackcrete (2 for each leg)

Dimensions in inches or degrees

<table>
<thead>
<tr>
<th>Panels produce 7.1 amps each, 0.1428Ω for 1 volt drop</th>
<th>AWG</th>
<th>Ω/kft</th>
<th>1v rt</th>
<th>0.5v ow</th>
<th>380.5v ow</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>2.525</td>
<td>56'</td>
<td>14'</td>
<td>5'</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1.588</td>
<td>90'</td>
<td>23'</td>
<td>7.5'</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>0.9989</td>
<td>143'</td>
<td>36'</td>
<td>12'</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>0.6282</td>
<td>229'</td>
<td>57'</td>
<td>19'</td>
<td></td>
</tr>
</tbody>
</table>

rt - round trip
ow - one way (hut to swing set)