## Length from K2 Laser enclosure on EL-Ring to AO (left Nas)

## fiber for NGAO lasers

measurements taken 19July2010 JC/EW

| relevant photos | segment on DWG | From | To | Inch | Millimeter | Comment | Inch | Millimeter | Comment |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | A | Laser Head | Laser Enclosure wall (exit) | 215.0 | 5461.00 | Measurement | 172.0 | 4368.80 | optimize enclosure routing; reduce by $20 \%$ |
| 2 | B | Laser Enclosure wall (exit) | Elevation Center Ring Corner | 27.0 | 685.80 | Measurement/Calculation; confirmed on model ( 650 mm ) | 27.0 | 685.80 |  |
| 2,3,4 | C | Elevation Center Ring Corner | Elevation Top Ring Corner | 268.0 | 6807.20 | Measurement, confirmed on Medwadowski dwg 2.1 \& model ( 6784 mm ) | 268.0 | 6807.20 |  |
| 5,6 | D | Elevation Top Ring Corner | Elevation Divot | 17.0 | 433.00 | Drawing (Medwadowski 2.2) \& model | 17.0 | 433.00 |  |
| 5,6 | E | Elevation Divot | Elevation Top Center Corner | 123.0 | 3123.30 | Medwadowski dwg 2.2 \& Solidworks model; confirmed by measurement $(122 "=3099 \mathrm{~mm})$ | 118.3 | 3006.00 |  |
| 7 | F | Elevation Top Center Corner | Cable Tray 1 End | 64.0 | 1625.60 | Measurement | 64.0 | 1625.60 |  |
| 8,9 | G | Cable Tray 1 End | Cable Wrap Exit | 36.0 | 914.40 | Measurement | 36.0 | 914.40 |  |
| 10,11 | H | Cable Wrap Exit | Cable Wrap Entrance | 384.0 | 9753.60 | Measurement (perhaps 360 mm long, outside vs center), confirmed on Kockums KE02000 \& KE02030 (9749 mm) | 345.9 | 8785.86 | calculate distance for center of tray (369.9"); don't go to floor, shorten by 24" |
| 11 | 1 | Cable Wrap Entrance | AOE side wall 1 | 21.0 | 533.40 | Measurement | 21.0 | 533.40 |  |
| 11 | J | AOE side wall 1 | AOE side wall 2 | 22.0 | 558.80 | Measurement; confirmed on WKMO 1300-C008 | 22.0 | 558.80 |  |
| 12 | K | AOE side wall 2 | AOE side wall 3 | 36.0 | 914.40 | Measurement | 36.0 | 914.40 |  |
| 12,13,14 | L | AOE side wall 3 | AOE cable tray vertical | 102.0 | 2590.80 | Measurement | 78.0 | 1981.20 | don't go to floor, shortens by 24 " |
|  | M | AOE cable tray vertical | AOE cable tray Horizontal | 128.0 | 3251.20 | Measurement | 70.0 | 1778.00 | position racks closer to wrap (inside AO) |
|  | N | AOE cable tray Horizontal | AOE cable tray down | 99.0 | 2514.60 | Measurement | 65.9 | 1674.72 | don't go to floor |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  | Total distance |  | 39167.10 |  |  | 34067.18 |  |












