

## PHOTOMETRIC RESULTS

|                   |   |                      |                  |
|-------------------|---|----------------------|------------------|
| <b>Name:</b>      | <b>TTP 50 LINE L1460 TOP 830 SRT/MID HO</b> |                      |                  |
| <b>Number:</b>    | 90482L150-58                                | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 07-01-2020                                  | <b>Length:</b>       | 1460 mm          |
| <b>Meas.-no.:</b> | 01  | <b>Width:</b>        | 50 mm            |
| <b>Lamp type:</b> | LED 830 - 01                                | <b>Height:</b>       | 50 mm            |
| <b>Number:</b>    | 1   | <b>Power:</b>        | 66,91 W          |
| <b>Lamp flux:</b> | 9250,00 lm                                  | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 07-01-2020 11:52:57                         | <b>Output ratio:</b> | 77,2 %           |

## Protocol

**LiTG-class:** A31  
**UTE-class:** 0,72 G + 0,05 T  
**IES-class:** 43 - 73 - 91 - 94 - 77  
**TM5-class:** BZ5

## Divergences in the plane through maximum intensity:

|                               | Horizontal | Vertical |
|-------------------------------|------------|----------|
| One half peak divergence      | 112,4°     | 125,2°   |
| Half peak side angle (left)   | -56,2°     | -62,6°   |
| Half peak side angle (right)  | 56,2°      | 62,6°    |
| One tenth peak divergence     | 160,8°     | 205,6°   |
| Tenth peak side angle (left)  | -80,4°     | -102,8°  |
| Tenth peak side angle (right) | 80,4°      | 102,8°   |

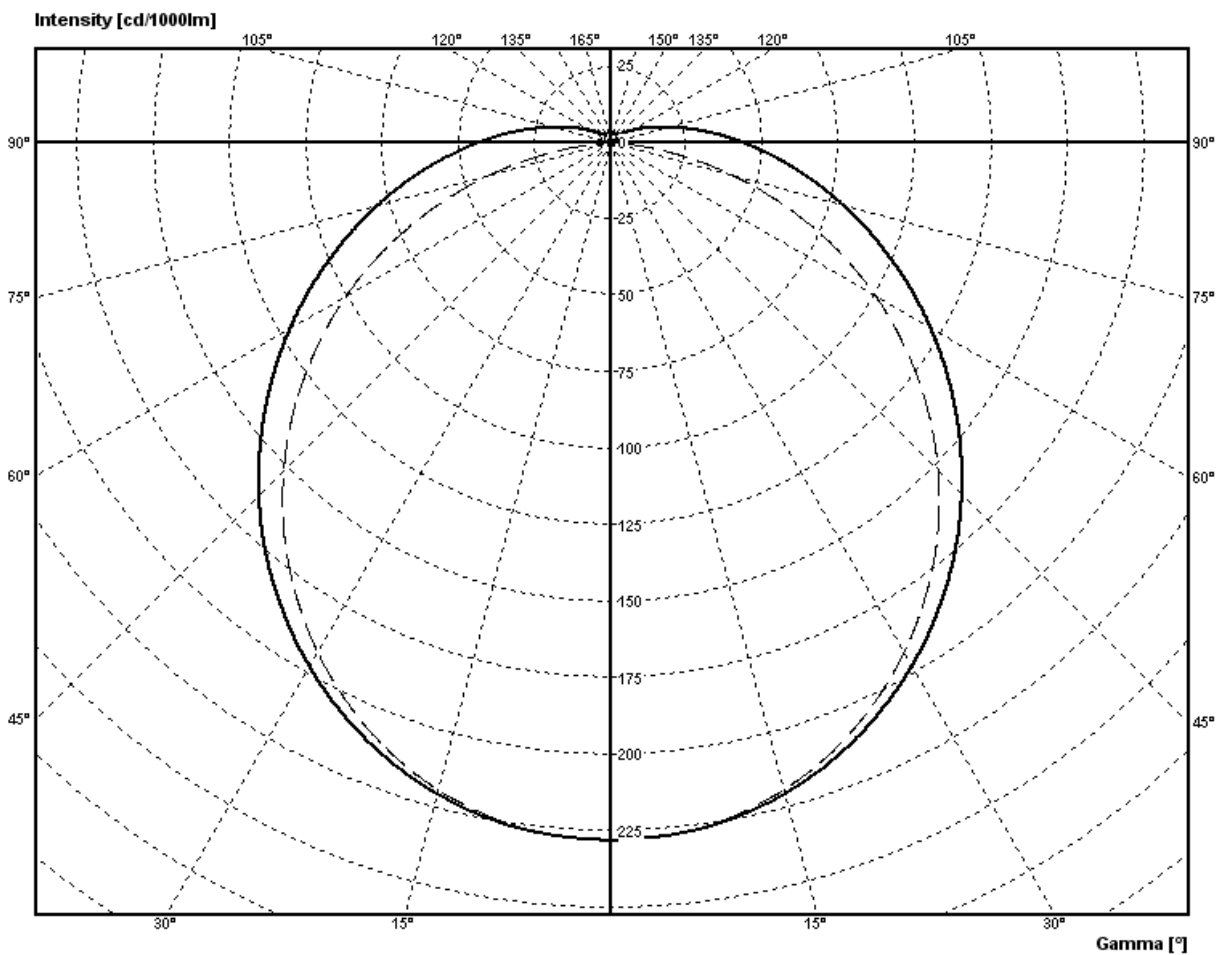
|                  |        |        |        |        |        |        |        |        |        |        |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>C-planes:</b> | 0,0°   | 15,0°  | 30,0°  | 45,0°  | 60,0°  | 75,0°  | 90,0°  | 105,0° | 120,0° | 135,0° |
|                  | 150,0° | 165,0° | 180,0° | 195,0° | 210,0° | 225,0° | 240,0° | 255,0° | 270,0° | 285,0° |
|                  | 300,0° | 315,0° | 330,0° | 345,0° |        |        |        |        |        |        |

|               |        |        |        |        |        |        |        |        |        |        |
|---------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Gamma:</b> | 0,0°   | 5,0°   | 10,0°  | 15,0°  | 20,0°  | 25,0°  | 30,0°  | 35,0°  | 40,0°  | 45,0°  |
|               | 50,0°  | 55,0°  | 60,0°  | 65,0°  | 70,0°  | 75,0°  | 80,0°  | 85,0°  | 90,0°  | 95,0°  |
|               | 100,0° | 105,0° | 110,0° | 115,0° | 120,0° | 125,0° | 130,0° | 135,0° | 140,0° | 145,0° |
|               | 150,0° | 155,0° | 160,0° | 165,0° | 170,0° | 175,0° | 180,0° |        |        |        |

## PHOTOMETRIC RESULTS

|            |                                      |               |                 |
|------------|--------------------------------------|---------------|-----------------|
| Name:      | TTP 50 LINE L1460 TOP 830 SRT/MID HO |               |                 |
| Number:    | 90482L150-58                         | Diameter:     | 0 mm            |
| Report:    | 07-01-2020                           | Length:       | 1460 mm         |
| Meas.-no.: | 01                                   | Width:        | 50 mm           |
| Lamp type: | LED 830 - 01                         | Height:       | 50 mm           |
| Number:    | 1                                    | Power:        | 66,91 W         |
| Lamp flux: | 9250,00 lm                           | Operator:     | INDELAGUE GROUP |
| Date:      | 07-01-2020 11:52:57                  | Output ratio: | 77,2 %          |

Polar diagram TTP 50 LINE L1460 TOP 830 SRT/MID HO / Total in 15° C / 5° G



## PHOTOMETRIC RESULTS

|                   |   |                      |                  |
|-------------------|---|----------------------|------------------|
| <b>Name:</b>      | <b>TTP 50 LINE L1460 TOP 830 SRT/MID HO</b> |                      |                  |
| <b>Number:</b>    | 90482L150-58                                | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 07-01-2020                                  | <b>Length:</b>       | 1460 mm          |
| <b>Meas.-no.:</b> | 01  | <b>Width:</b>        | 50 mm            |
| <b>Lamp type:</b> | LED 830 - 01                                | <b>Height:</b>       | 50 mm            |
| <b>Number:</b>    | 1   | <b>Power:</b>        | 66,91 W          |
| <b>Lamp flux:</b> | 9250,00 lm                                  | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 07-01-2020 11:52:57                         | <b>Output ratio:</b> | 77,2 %           |

## UGR Unified Glare Ratios

|                                 |            |                  |            |            |            |            |                |            |            |            |            |
|---------------------------------|------------|------------------|------------|------------|------------|------------|----------------|------------|------------|------------|------------|
| <b>Ceiling reflectance</b>      |            | <b>0,7</b>       | <b>0,7</b> | <b>0,5</b> | <b>0,5</b> | <b>0,3</b> | <b>0,7</b>     | <b>0,7</b> | <b>0,5</b> | <b>0,5</b> | <b>0,3</b> |
| <b>Wall reflectance</b>         |            | <b>0,5</b>       | <b>0,3</b> | <b>0,5</b> | <b>0,3</b> | <b>0,3</b> | <b>0,5</b>     | <b>0,3</b> | <b>0,5</b> | <b>0,3</b> | <b>0,3</b> |
| <b>Floor cavity reflectance</b> |            | <b>0,2</b>       | <b>0,2</b> | <b>0,2</b> | <b>0,2</b> | <b>0,2</b> | <b>0,2</b>     | <b>0,2</b> | <b>0,2</b> | <b>0,2</b> | <b>0,2</b> |
| <b>Room dimension</b>           |            | Viewed crosswise |            |            |            |            | Viewed endwise |            |            |            |            |
| <b>2H</b>                       | <b>2H</b>  | 20,8             | 22,4       | 21,3       | 22,8       | 23,3       | 21,7           | 23,3       | 22,2       | 23,7       | 24,2       |
| <b>2H</b>                       | <b>3H</b>  | 22,5             | 23,9       | 22,9       | 24,3       | 24,8       | 23,2           | 24,7       | 23,7       | 25,1       | 25,6       |
| <b>2H</b>                       | <b>4H</b>  | 23,2             | 24,6       | 23,7       | 25,0       | 25,5       | 23,8           | 25,2       | 24,3       | 25,7       | 26,2       |
| <b>2H</b>                       | <b>6H</b>  | 23,9             | 25,2       | 24,4       | 25,7       | 26,2       | 24,3           | 25,5       | 24,8       | 26,0       | 26,5       |
| <b>2H</b>                       | <b>8H</b>  | 24,2             | 25,4       | 24,7       | 25,9       | 26,4       | 24,4           | 25,6       | 24,9       | 26,1       | 26,6       |
| <b>2H</b>                       | <b>12H</b> | 24,5             | 25,6       | 25,0       | 26,1       | 26,7       | 24,4           | 25,6       | 24,9       | 26,1       | 26,6       |
| <b>4H</b>                       | <b>2H</b>  | 21,5             | 22,9       | 22,0       | 23,4       | 23,9       | 22,2           | 23,6       | 22,7       | 24,0       | 24,5       |
| <b>4H</b>                       | <b>3H</b>  | 23,3             | 24,5       | 23,8       | 25,0       | 25,6       | 23,9           | 25,1       | 24,4       | 25,6       | 26,1       |
| <b>4H</b>                       | <b>4H</b>  | 24,3             | 25,3       | 24,8       | 25,8       | 26,4       | 24,6           | 25,7       | 25,2       | 26,2       | 26,8       |
| <b>4H</b>                       | <b>6H</b>  | 25,1             | 26,0       | 25,6       | 26,6       | 27,1       | 25,1           | 26,1       | 25,7       | 26,6       | 27,2       |
| <b>4H</b>                       | <b>8H</b>  | 25,5             | 26,3       | 26,0       | 26,9       | 27,5       | 25,3           | 26,2       | 25,8       | 26,7       | 27,3       |
| <b>4H</b>                       | <b>12H</b> | 25,8             | 26,7       | 26,4       | 27,2       | 27,8       | 25,4           | 26,2       | 25,9       | 26,7       | 27,4       |
| <b>8H</b>                       | <b>4H</b>  | 24,5             | 25,4       | 25,1       | 26,0       | 26,6       | 24,9           | 25,8       | 25,4       | 26,3       | 26,9       |
| <b>8H</b>                       | <b>6H</b>  | 25,5             | 26,3       | 26,1       | 26,8       | 27,5       | 25,5           | 26,2       | 26,0       | 26,8       | 27,4       |
| <b>8H</b>                       | <b>8H</b>  | 26,1             | 26,7       | 26,7       | 27,4       | 28,0       | 25,8           | 26,4       | 26,3       | 27,0       | 27,6       |
| <b>8H</b>                       | <b>12H</b> | 26,6             | 27,2       | 27,2       | 27,8       | 28,4       | 25,9           | 26,5       | 26,5       | 27,1       | 27,7       |
| <b>12H</b>                      | <b>4H</b>  | 24,6             | 25,4       | 25,2       | 26,0       | 26,6       | 24,9           | 25,7       | 25,5       | 26,3       | 26,9       |
| <b>12H</b>                      | <b>6H</b>  | 25,7             | 26,3       | 26,3       | 26,9       | 27,5       | 25,6           | 26,3       | 26,2       | 26,9       | 27,5       |
| <b>12H</b>                      | <b>8H</b>  | 26,2             | 26,8       | 26,8       | 27,4       | 28,0       | 25,9           | 26,5       | 26,5       | 27,1       | 27,7       |

UGR values are corrected for lamp flux of 9250 lm by 7,7

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| <b>Number:</b>    | 90482L150-58                                | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 07-01-2020                                  | <b>Length:</b>       | 1460 mm          |
| <b>Meas.-no.:</b> | 01  | <b>Width:</b>        | 50 mm            |
| <b>Lamp type:</b> | LED 830 - 01                                | <b>Height:</b>       | 50 mm            |
| <b>Number:</b>    | 1   | <b>Power:</b>        | 66,91 W          |
| <b>Lamp flux:</b> | 9250,00 lm                                  | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 07-01-2020 11:52:57                         | <b>Output ratio:</b> | 77,2 %           |

Luminance [cd/m<sup>2</sup>] TTP 50 LINE L1460 TOP 830 SRT/MID HO / Total in 15° C / 5° G

| G/C [cd/ | 0,00    | 15,00   | 30,00   | 45,00   | 60,00   | 75,00   | 90,00   | 105,00  | 120,00  |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 45,00    | 14660,5 | 14765,1 | 15283,5 | 16314,5 | 18128,0 | 21202,1 | 26399,3 | 21202,1 | 18128,0 |
| 50,00    | 13507,8 | 13600,4 | 14066,2 | 15026,8 | 16820,1 | 20026,6 | 25800,7 | 20026,6 | 16820,1 |
| 55,00    | 12390,2 | 12454,0 | 12859,3 | 13734,8 | 15426,2 | 18688,9 | 25038,1 | 18688,9 | 15426,2 |
| 60,00    | 11312,9 | 11340,9 | 11672,5 | 12410,6 | 13960,6 | 17141,8 | 24138,4 | 17141,8 | 13960,6 |
| 65,00    | 10258,1 | 10255,0 | 10482,4 | 11056,8 | 12345,4 | 15351,1 | 22834,3 | 15351,1 | 12345,4 |
| 70,00    | 9233,47 | 9185,17 | 9332,10 | 9701,09 | 10650,7 | 13205,4 | 21021,0 | 13205,4 | 10650,7 |
| 75,00    | 8253,21 | 8167,73 | 8201,58 | 8329,27 | 8880,27 | 10681,6 | 18490,3 | 10681,6 | 8880,27 |
| 80,00    | 7308,76 | 7190,50 | 7126,16 | 7031,24 | 7101,05 | 7899,86 | 14697,8 | 7899,86 | 7101,05 |
| 85,00    | 6418,74 | 6273,23 | 6100,79 | 5807,85 | 5455,37 | 5121,05 | 9497,32 | 5121,05 | 5455,37 |

| G/C [cd/ | 135,00  | 150,00  | 165,00  | 180,00  | 195,00  | 210,00  | 225,00  | 240,00  | 255,00  |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 45,00    | 16314,5 | 15283,5 | 14765,1 | 14660,5 | 14765,1 | 15283,5 | 16314,5 | 18128,0 | 21202,1 |
| 50,00    | 15026,8 | 14066,2 | 13600,4 | 13507,8 | 13600,4 | 14066,2 | 15026,8 | 16820,1 | 20026,6 |
| 55,00    | 13734,8 | 12859,3 | 12454,0 | 12390,2 | 12454,0 | 12859,3 | 13734,8 | 15426,2 | 18688,9 |
| 60,00    | 12410,6 | 11672,5 | 11340,9 | 11312,9 | 11340,9 | 11672,5 | 12410,6 | 13960,6 | 17141,8 |
| 65,00    | 11056,8 | 10482,4 | 10255,0 | 10258,1 | 10255,0 | 10482,4 | 11056,8 | 12345,4 | 15351,1 |
| 70,00    | 9701,09 | 9332,10 | 9185,17 | 9233,47 | 9185,17 | 9332,10 | 9701,09 | 10650,7 | 13205,4 |
| 75,00    | 8329,27 | 8201,58 | 8167,73 | 8253,21 | 8167,73 | 8201,58 | 8329,27 | 8880,27 | 10681,6 |
| 80,00    | 7031,24 | 7126,16 | 7190,50 | 7308,76 | 7190,50 | 7126,16 | 7031,24 | 7101,05 | 7899,86 |
| 85,00    | 5807,85 | 6100,79 | 6273,23 | 6418,74 | 6273,23 | 6100,79 | 5807,85 | 5455,37 | 5121,05 |

| G/C [cd/ | 270,00  | 285,00  | 300,00  | 315,00  | 330,00  | 345,00  |
|----------|---------|---------|---------|---------|---------|---------|
| 45,00    | 26399,3 | 21202,1 | 18128,0 | 16314,5 | 15283,5 | 14765,1 |
| 50,00    | 25800,7 | 20026,6 | 16820,1 | 15026,8 | 14066,2 | 13600,4 |
| 55,00    | 25038,1 | 18688,9 | 15426,2 | 13734,8 | 12859,3 | 12454,0 |
| 60,00    | 24138,4 | 17141,8 | 13960,6 | 12410,6 | 11672,5 | 11340,9 |
| 65,00    | 22834,3 | 15351,1 | 12345,4 | 11056,8 | 10482,4 | 10255,0 |
| 70,00    | 21021,0 | 13205,4 | 10650,7 | 9701,09 | 9332,10 | 9185,17 |
| 75,00    | 18490,3 | 10681,6 | 8880,27 | 8329,27 | 8201,58 | 8167,73 |
| 80,00    | 14697,8 | 7899,86 | 7101,05 | 7031,24 | 7126,16 | 7190,50 |
| 85,00    | 9497,32 | 5121,05 | 5455,37 | 5807,85 | 6100,79 | 6273,23 |

## HEADQUARTERS

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