

## PHOTOMETRIC RESULTS

|                   |   |                      |                  |
|-------------------|---|----------------------|------------------|
| <b>Name:</b>      | REBA 50 /T EXT L1158+INT SYM BLINE 840 HO |                      |                  |
| <b>Number:</b>    | 90519+90497L004                           | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 24-01-2020                                | <b>Length:</b>       | 1158 mm          |
| <b>Meas.-no.:</b> | 01  | <b>Width:</b>        | 70 mm            |
| <b>Lamp type:</b> | LED 840 - 01                              | <b>Height:</b>       | 114 mm           |
| <b>Number:</b>    | 01  | <b>Power:</b>        | 28,70 W          |
| <b>Lamp flux:</b> | 4720,00 lm                                | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 24-01-2020 12:31:16                       | <b>Output ratio:</b> | 62,6 %           |

## Protocol

**LiTG-class:** A50  
**UTE-class:** 0,57 C  
**IES-class:** 60 - 88 - 97 - 100 - 57  
**TM5-class:** BZ3

|  |            |          |
|--|------------|----------|
| <b>Divergences in the plane through maximum intensity:</b> | Horizontal | Vertical |
| <b>One half peak divergence</b>                            | 93,9°      | 54,8°    |
| <b>Half peak side angle (left)</b>                         | -46,9°     | -40,0°   |
| <b>Half peak side angle (right)</b>                        | 46,9°      | 14,8°    |
| <b>One tenth peak divergence</b>                           | 140,7°     | 130,5°   |
| <b>Tenth peak side angle (left)</b>                        | -70,3°     | -62,5°   |
| <b>Tenth peak side angle (right)</b>                       | 70,3°      | 68,0°    |

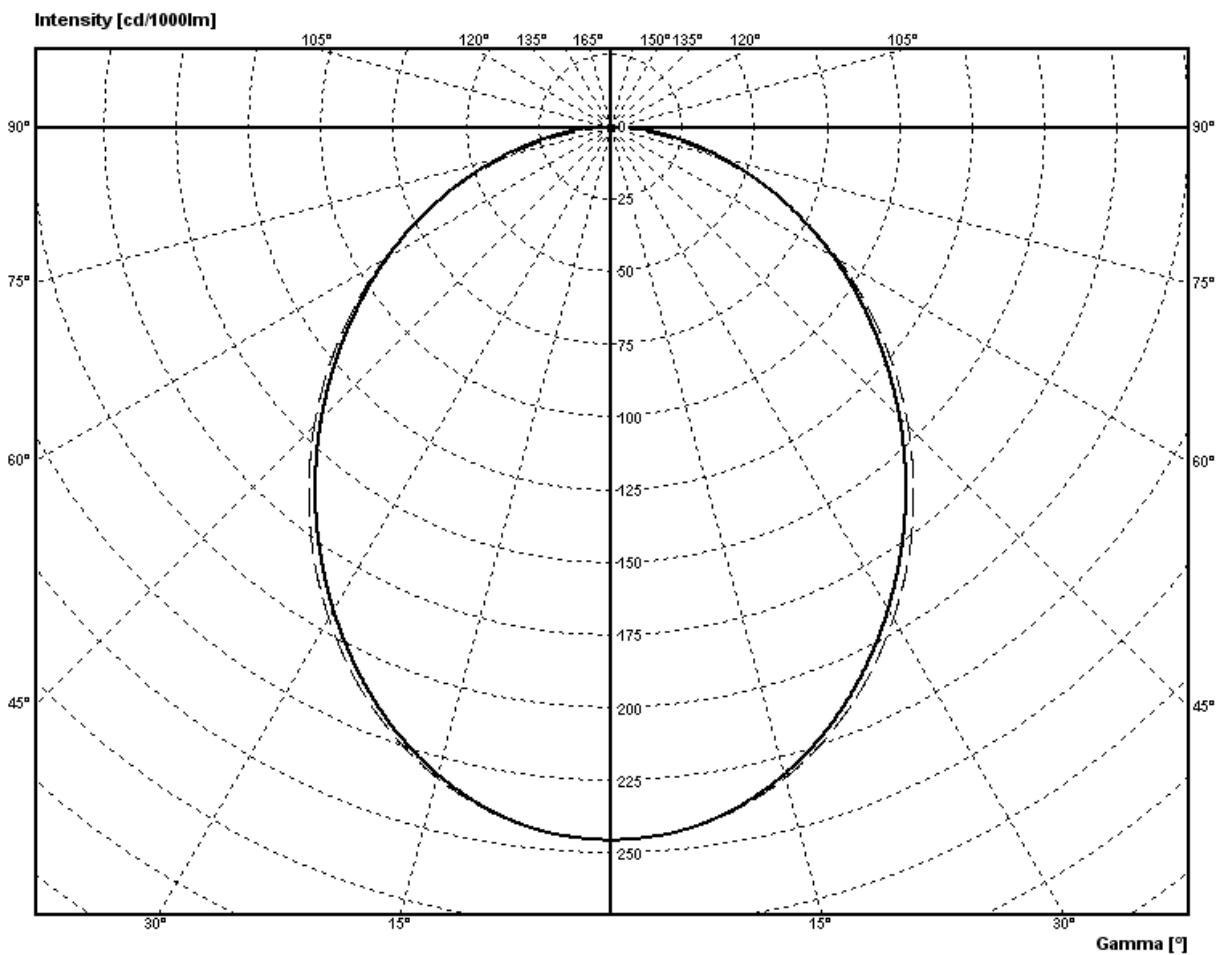
|                  |        |        |        |        |        |        |        |        |        |        |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>C-planes:</b> | 0,0°   | 15,0°  | 30,0°  | 45,0°  | 60,0°  | 75,0°  | 90,0°  | 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° |       |

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| Number:    | 90519+90497L004                           | Diameter:     | 0 mm            |
| Report:    | 24-01-2020                                | Length:       | 1158 mm         |
| Meas.-no.: | 01  | Width:        | 70 mm           |
| Lamp type: | LED 840 - 01                              | Height:       | 114 mm          |
| Number:    | 01  | Power:        | 28,70 W         |
| Lamp flux: | 4720,00 lm                                | Operator:     | INDELAGUE GROUP |
| Date:      | 24-01-2020 12:31:16                       | Output ratio: | 62,6 %          |

Polar diagram REBA 50 /T EXT L1158+INT SYM BLINE 840 HO / Direct in 15° C / 5° 



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| <b>Number:</b>    | 90519+90497L004                           | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 24-01-2020                                | <b>Length:</b>       | 1158 mm          |
| <b>Meas.-no.:</b> | 01  | <b>Width:</b>        | 70 mm            |
| <b>Lamp type:</b> | LED 840 - 01                              | <b>Height:</b>       | 114 mm           |
| <b>Number:</b>    | 01  | <b>Power:</b>        | 28,70 W          |
| <b>Lamp flux:</b> | 4720,00 lm                                | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 24-01-2020 12:31:16                       | <b>Output ratio:</b> | 62,6 %           |

## 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>  | 15,1             | 16,6       | 15,5       | 16,9       | 17,2       | 19,2           | 20,6       | 19,5       | 20,9       | 21,3       |
| <b>2H</b>                       | <b>3H</b>  | 15,6             | 16,9       | 16,0       | 17,2       | 17,6       | 19,8           | 21,1       | 20,2       | 21,5       | 21,8       |
| <b>2H</b>                       | <b>4H</b>  | 15,8             | 17,0       | 16,1       | 17,3       | 17,7       | 20,0           | 21,3       | 20,4       | 21,6       | 22,0       |
| <b>2H</b>                       | <b>6H</b>  | 15,9             | 17,0       | 16,3       | 17,4       | 17,8       | 20,2           | 21,3       | 20,6       | 21,7       | 22,1       |
| <b>2H</b>                       | <b>8H</b>  | 15,9             | 17,0       | 16,3       | 17,3       | 17,7       | 20,2           | 21,3       | 20,6       | 21,7       | 22,1       |
| <b>2H</b>                       | <b>12H</b> | 15,8             | 16,9       | 16,3       | 17,3       | 17,7       | 20,2           | 21,3       | 20,6       | 21,7       | 22,1       |
| <b>4H</b>                       | <b>2H</b>  | 15,6             | 16,8       | 16,0       | 17,2       | 17,5       | 19,2           | 20,4       | 19,5       | 20,7       | 21,1       |
| <b>4H</b>                       | <b>3H</b>  | 16,2             | 17,2       | 16,6       | 17,6       | 18,0       | 19,9           | 20,9       | 20,3       | 21,3       | 21,7       |
| <b>4H</b>                       | <b>4H</b>  | 16,5             | 17,4       | 16,9       | 17,8       | 18,2       | 20,2           | 21,1       | 20,6       | 21,5       | 22,0       |
| <b>4H</b>                       | <b>6H</b>  | 16,6             | 17,4       | 17,1       | 17,9       | 18,3       | 20,4           | 21,2       | 20,8       | 21,6       | 22,1       |
| <b>4H</b>                       | <b>8H</b>  | 16,6             | 17,4       | 17,1       | 17,9       | 18,3       | 20,4           | 21,2       | 20,9       | 21,7       | 22,1       |
| <b>4H</b>                       | <b>12H</b> | 16,7             | 17,4       | 17,2       | 17,8       | 18,3       | 20,5           | 21,2       | 21,0       | 21,6       | 22,1       |
| <b>8H</b>                       | <b>4H</b>  | 16,6             | 17,3       | 17,0       | 17,8       | 18,2       | 20,1           | 20,9       | 20,6       | 21,3       | 21,8       |
| <b>8H</b>                       | <b>6H</b>  | 16,8             | 17,4       | 17,3       | 17,9       | 18,4       | 20,3           | 21,0       | 20,8       | 21,4       | 21,9       |
| <b>8H</b>                       | <b>8H</b>  | 16,9             | 17,4       | 17,4       | 18,0       | 18,4       | 20,5           | 21,0       | 21,0       | 21,5       | 22,0       |
| <b>8H</b>                       | <b>12H</b> | 16,9             | 17,4       | 17,5       | 17,9       | 18,4       | 20,5           | 21,0       | 21,1       | 21,5       | 22,0       |
| <b>12H</b>                      | <b>4H</b>  | 16,6             | 17,3       | 17,1       | 17,7       | 18,2       | 20,1           | 20,8       | 20,6       | 21,3       | 21,8       |
| <b>12H</b>                      | <b>6H</b>  | 16,8             | 17,4       | 17,3       | 17,9       | 18,4       | 20,4           | 20,9       | 20,9       | 21,4       | 21,9       |
| <b>12H</b>                      | <b>8H</b>  | 16,9             | 17,4       | 17,4       | 17,9       | 18,4       | 20,5           | 20,9       | 21,0       | 21,4       | 21,9       |

UGR values are corrected for lamp flux of 4800 lm by 5,4

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| <b>Number:</b>    | 90519+90497L004                                  | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 24-01-2020                                       | <b>Length:</b>       | 1158 mm          |
| <b>Meas.-no.:</b> | 01   | <b>Width:</b>        | 70 mm            |
| <b>Lamp type:</b> | LED 840 - 01                                     | <b>Height:</b>       | 114 mm           |
| <b>Number:</b>    | 01   | <b>Power:</b>        | 28,70 W          |
| <b>Lamp flux:</b> | 4720,00 lm                                       | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 24-01-2020 12:31:16                              | <b>Output ratio:</b> | 62,6 %           |

Luminance [cd/m<sup>2</sup>] REBA 50 /T EXT L1158+INT SYM BLINE 840 HO / Direct 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    | 5238,90 | 5335,83 | 5738,12 | 6543,47 | 7996,72 | 10738,4 | 16980,1 | 10738,4 | 7996,72 |
| 50,00    | 4437,24 | 4525,74 | 4884,12 | 5606,96 | 6946,07 | 9564,44 | 16064,9 | 9564,44 | 6946,07 |
| 55,00    | 3715,49 | 3791,61 | 4107,07 | 4752,72 | 5947,79 | 8403,34 | 15072,9 | 8403,34 | 5947,79 |
| 60,00    | 3065,33 | 3121,65 | 3394,10 | 3939,49 | 4988,97 | 7214,87 | 13996,7 | 7214,87 | 4988,97 |
| 65,00    | 2451,65 | 2502,10 | 2721,58 | 3172,29 | 4062,24 | 5998,80 | 12732,1 | 5998,80 | 4062,24 |
| 70,00    | 1879,76 | 1922,98 | 2086,17 | 2438,51 | 3138,32 | 4744,88 | 11222,7 | 4744,88 | 3138,32 |
| 75,00    | 1351,53 | 1377,38 | 1495,91 | 1735,00 | 2244,58 | 3436,95 | 9207,30 | 3436,95 | 2244,58 |
| 80,00    | 878,49  | 888,50  | 958,31  | 1090,49 | 1402,33 | 2135,41 | 6711,69 | 2135,41 | 1402,33 |
| 85,00    | 475,38  | 476,77  | 507,50  | 548,30  | 670,35  | 968,32  | 3723,56 | 968,32  | 670,35  |

| G/C [cd/ | 135,00  | 150,00  | 165,00  | 180,00  | 195,00  | 210,00  | 225,00  | 240,00  | 255,00  |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 45,00    | 6543,47 | 5738,12 | 5335,83 | 5238,90 | 5335,83 | 5738,12 | 6543,47 | 7996,72 | 10738,4 |
| 50,00    | 5606,96 | 4884,12 | 4525,74 | 4437,24 | 4525,74 | 4884,12 | 5606,96 | 6946,07 | 9564,44 |
| 55,00    | 4752,72 | 4107,07 | 3791,61 | 3715,49 | 3791,61 | 4107,07 | 4752,72 | 5947,79 | 8403,34 |
| 60,00    | 3939,49 | 3394,10 | 3121,65 | 3065,33 | 3121,65 | 3394,10 | 3939,49 | 4988,97 | 7214,87 |
| 65,00    | 3172,29 | 2721,58 | 2502,10 | 2451,65 | 2502,10 | 2721,58 | 3172,29 | 4062,24 | 5998,80 |
| 70,00    | 2438,51 | 2086,17 | 1922,98 | 1879,76 | 1922,98 | 2086,17 | 2438,51 | 3138,32 | 4744,88 |
| 75,00    | 1735,00 | 1495,91 | 1377,38 | 1351,53 | 1377,38 | 1495,91 | 1735,00 | 2244,58 | 3436,95 |
| 80,00    | 1090,49 | 958,31  | 888,50  | 878,49  | 888,50  | 958,31  | 1090,49 | 1402,33 | 2135,41 |
| 85,00    | 548,30  | 507,50  | 476,77  | 475,38  | 476,77  | 507,50  | 548,30  | 670,35  | 968,32  |

| G/C [cd/ | 270,00  | 285,00  | 300,00  | 315,00  | 330,00  | 345,00  |
|----------|---------|---------|---------|---------|---------|---------|
| 45,00    | 16980,1 | 10738,4 | 7996,72 | 6543,47 | 5738,12 | 5335,83 |
| 50,00    | 16064,9 | 9564,44 | 6946,07 | 5606,96 | 4884,12 | 4525,74 |
| 55,00    | 15072,9 | 8403,34 | 5947,79 | 4752,72 | 4107,07 | 3791,61 |
| 60,00    | 13996,7 | 7214,87 | 4988,97 | 3939,49 | 3394,10 | 3121,65 |
| 65,00    | 12732,1 | 5998,80 | 4062,24 | 3172,29 | 2721,58 | 2502,10 |
| 70,00    | 11222,7 | 4744,88 | 3138,32 | 2438,51 | 2086,17 | 1922,98 |
| 75,00    | 9207,30 | 3436,95 | 2244,58 | 1735,00 | 1495,91 | 1377,38 |
| 80,00    | 6711,69 | 2135,41 | 1402,33 | 1090,49 | 958,31  | 888,50  |
| 85,00    | 3723,56 | 968,32  | 670,35  | 548,30  | 507,50  | 476,77  |

## HEADQUARTERS

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