

## PHOTOMETRIC RESULTS

|                   |   |                      |                  |
|-------------------|---|----------------------|------------------|
| <b>Name:</b>      | REBA 50 /E EXT LINE L2244 MID+INT ASYM 830 HO |                      |                  |
| <b>Number:</b>    | 90506+90500L008                               | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 23-01-2020                                    | <b>Length:</b>       | 2244 mm          |
| <b>Meas.-no.:</b> | 01  | <b>Width:</b>        | 62 mm            |
| <b>Lamp type:</b> | LED 830 - 01                                  | <b>Height:</b>       | 72 mm            |
| <b>Number:</b>    | 1   | <b>Power:</b>        | 64,23 W          |
| <b>Lamp flux:</b> | 9600,00 lm                                    | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 23-01-2020 15:43:22                           | <b>Output ratio:</b> | 56,7 %           |

## 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°    |

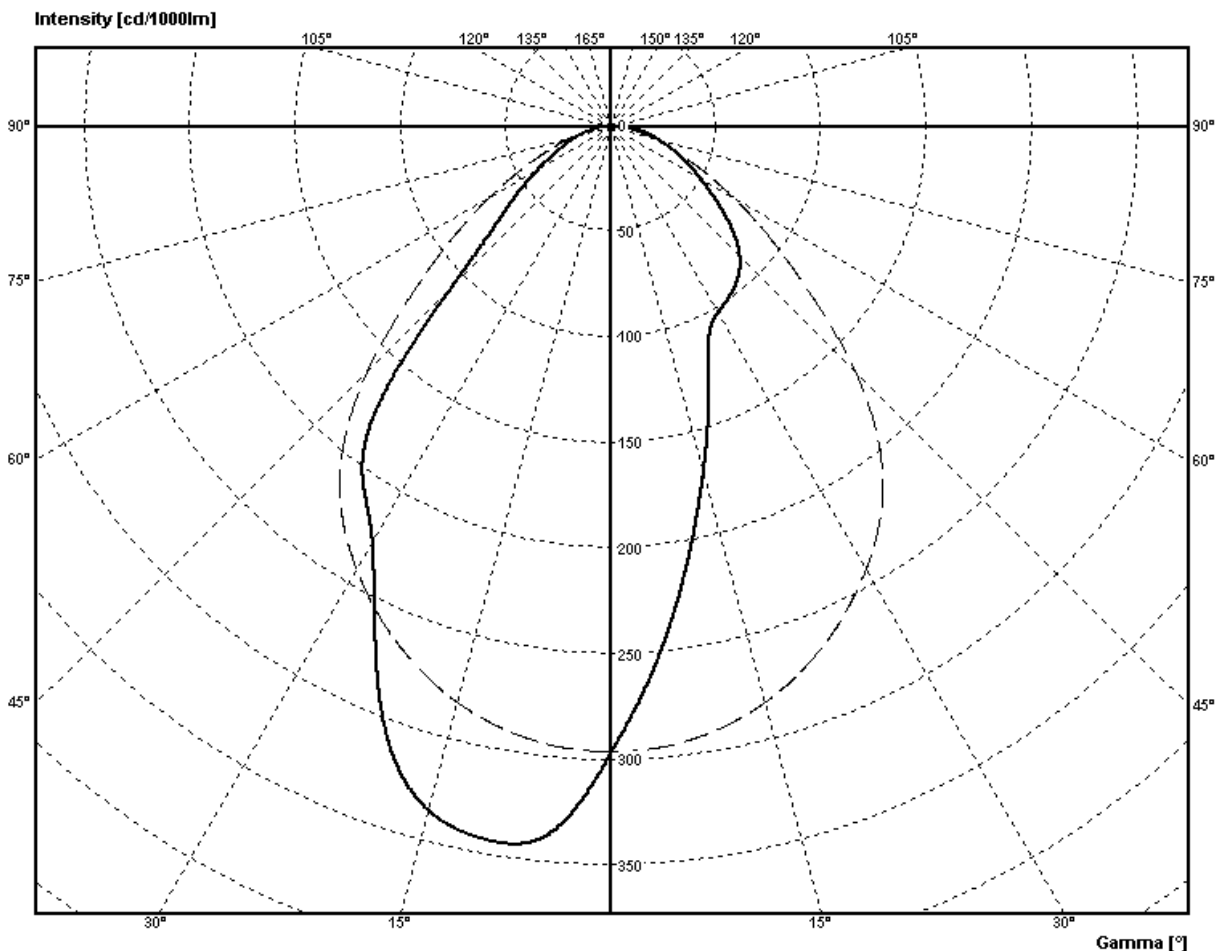
|                  |        |        |        |        |        |        |        |        |        |        |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>C-planes:</b> | 0,0°   | 15,0°  | 30,0°  | 45,0°  | 60,0°  | 75,0°  | 90,0°  | 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:    | 90506+90500L008                               | Diameter:     | 0 mm            |
| Report:    | 23-01-2020                                    | Length:       | 2244 mm         |
| Meas.-no.: | 01  | Width:        | 62 mm           |
| Lamp type: | LED 830 - 01                                  | Height:       | 72 mm           |
| Number:    | 1   | Power:        | 64,23 W         |
| Lamp flux: | 9600,00 lm                                    | Operator:     | INDELAGUE GROUP |
| Date:      | 23-01-2020 15:43:22                           | Output ratio: | 56,7 %          |

Polar diagram REBA 50 /E EXT LINE L2244 MID+INT ASYM 830 HO / Direct in 15° C // 5° G



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| <b>Number:</b>    | 90506+90500L008                                      | <b>Diameter:</b>     | 0 mm            |
| <b>Report:</b>    | 23-01-2020   | <b>Length:</b>       | 2244 mm         |
| <b>Meas.-no.:</b> | 01   | <b>Width:</b>        | 62 mm           |
| <b>Lamp type:</b> | LED 830 - 01   | <b>Height:</b>       | 72 mm           |
| <b>Number:</b>    | 1  | <b>Power:</b>        | 64,23 W         |
| <b>Lamp flux:</b> | 9600,00 lm   | <b>Operator:</b>     | INDELAGUE GROUP |
| <b>Date:</b>      | 23-01-2020 15:43:22                                  | <b>Output ratio:</b> | 56,7 %          |

## 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>           |            | <b>Viewed crosswise</b> |            |            |            |            | <b>Viewed endwise</b> |            |            |            |            |
| <b>2H</b>                       | <b>2H</b>  | 16,2                    | 17,7       | 16,6       | 18,0       | 18,3       | 19,9                  | 21,3       | 20,2       | 21,7       | 22,0       |
| <b>2H</b>                       | <b>3H</b>  | 16,7                    | 18,0       | 17,1       | 18,4       | 18,7       | 20,5                  | 21,9       | 20,9       | 22,2       | 22,6       |
| <b>2H</b>                       | <b>4H</b>  | 16,9                    | 18,1       | 17,3       | 18,5       | 18,9       | 20,8                  | 22,0       | 21,2       | 22,4       | 22,8       |
| <b>2H</b>                       | <b>6H</b>  | 17,0                    | 18,2       | 17,5       | 18,6       | 18,9       | 21,0                  | 22,1       | 21,4       | 22,5       | 22,9       |
| <b>2H</b>                       | <b>8H</b>  | 17,0                    | 18,1       | 17,4       | 18,5       | 18,9       | 21,0                  | 22,1       | 21,4       | 22,5       | 22,9       |
| <b>2H</b>                       | <b>12H</b> | 17,0                    | 18,1       | 17,4       | 18,5       | 18,9       | 21,0                  | 22,1       | 21,5       | 22,5       | 22,9       |
| <b>4H</b>                       | <b>2H</b>  | 16,7                    | 17,9       | 17,1       | 18,3       | 18,6       | 19,9                  | 21,1       | 20,3       | 21,5       | 21,9       |
| <b>4H</b>                       | <b>3H</b>  | 17,3                    | 18,4       | 17,7       | 18,8       | 19,2       | 20,7                  | 21,7       | 21,1       | 22,1       | 22,5       |
| <b>4H</b>                       | <b>4H</b>  | 17,6                    | 18,6       | 18,1       | 19,0       | 19,4       | 21,0                  | 21,9       | 21,5       | 22,4       | 22,8       |
| <b>4H</b>                       | <b>6H</b>  | 17,8                    | 18,6       | 18,3       | 19,1       | 19,5       | 21,2                  | 22,1       | 21,7       | 22,5       | 22,9       |
| <b>4H</b>                       | <b>8H</b>  | 17,8                    | 18,6       | 18,3       | 19,1       | 19,5       | 21,3                  | 22,1       | 21,8       | 22,5       | 23,0       |
| <b>4H</b>                       | <b>12H</b> | 17,9                    | 18,6       | 18,4       | 19,0       | 19,5       | 21,4                  | 22,1       | 21,9       | 22,5       | 23,0       |
| <b>8H</b>                       | <b>4H</b>  | 17,8                    | 18,5       | 18,2       | 19,0       | 19,4       | 21,0                  | 21,7       | 21,4       | 22,2       | 22,6       |
| <b>8H</b>                       | <b>6H</b>  | 18,0                    | 18,6       | 18,5       | 19,1       | 19,6       | 21,2                  | 21,9       | 21,7       | 22,3       | 22,8       |
| <b>8H</b>                       | <b>8H</b>  | 18,1                    | 18,7       | 18,6       | 19,2       | 19,7       | 21,4                  | 21,9       | 21,9       | 22,4       | 22,9       |
| <b>8H</b>                       | <b>12H</b> | 18,2                    | 18,6       | 18,7       | 19,1       | 19,7       | 21,4                  | 21,9       | 22,0       | 22,4       | 22,9       |
| <b>12H</b>                      | <b>4H</b>  | 17,8                    | 18,5       | 18,2       | 18,9       | 19,4       | 21,0                  | 21,7       | 21,4       | 22,1       | 22,6       |
| <b>12H</b>                      | <b>6H</b>  | 18,1                    | 18,6       | 18,6       | 19,1       | 19,6       | 21,3                  | 21,8       | 21,8       | 22,3       | 22,8       |
| <b>12H</b>                      | <b>8H</b>  | 18,2                    | 18,6       | 18,7       | 19,1       | 19,6       | 21,4                  | 21,8       | 21,9       | 22,3       | 22,9       |

UGR values are corrected for lamp flux of 9600 lm by 7,9

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| <b>Number:</b>    | 1  | <b>Power:</b>        | 64,23 W          |
| <b>Lamp flux:</b> | 9600,00 lm   | <b>Operator:</b>     | INDEL AGUE GROUP |
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Luminance [cd/m<sup>2</sup>] REBA 50 /E EXT LINE L2244 MID+INT ASYM 830 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    | 4436,18 | 4552,46 | 4751,63 | 5375,82 | 6969,30 | 11498,6 | 20804,9 | 17011,2 | 13279,8 |
| 50,00    | 3789,28 | 3721,65 | 3942,72 | 4446,54 | 5770,75 | 9030,00 | 17224,3 | 13393,0 | 10173,1 |
| 55,00    | 3063,35 | 3010,06 | 3361,49 | 3712,50 | 4741,74 | 7130,34 | 14243,7 | 10160,1 | 7479,12 |
| 60,00    | 2459,58 | 2395,46 | 2825,07 | 3088,18 | 3856,20 | 5653,39 | 11642,8 | 7537,86 | 5412,83 |
| 65,00    | 1993,13 | 1935,14 | 2244,93 | 2455,42 | 3105,02 | 4329,77 | 9370,70 | 5470,54 | 3815,44 |
| 70,00    | 1582,63 | 1566,17 | 1727,25 | 1919,31 | 2395,20 | 3356,29 | 7562,80 | 3910,97 | 2626,37 |
| 75,00    | 1213,34 | 1177,34 | 1294,86 | 1433,60 | 1802,88 | 2619,14 | 6375,83 | 2785,44 | 1836,90 |
| 80,00    | 894,77  | 787,30  | 903,01  | 1003,18 | 1261,60 | 1898,52 | 5338,86 | 1910,24 | 1232,43 |
| 85,00    | 510,62  | 390,68  | 468,64  | 526,21  | 673,41  | 1029,87 | 3908,08 | 1056,98 | 673,41  |

| G/C [cd/ | 135,00  | 150,00  | 165,00  | 180,00  | 195,00  | 210,00  | 225,00  | 240,00  | 255,00  |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 45,00    | 10459,7 | 8978,59 | 7808,21 | 5436,71 | 7808,21 | 8978,59 | 10459,7 | 13279,8 | 17011,2 |
| 50,00    | 7981,21 | 5958,07 | 4803,52 | 3542,94 | 4803,52 | 5958,07 | 7981,21 | 10173,1 | 13393,0 |
| 55,00    | 5448,15 | 3980,28 | 3330,61 | 2653,46 | 3330,61 | 3980,28 | 5448,15 | 7479,12 | 10160,1 |
| 60,00    | 3749,94 | 2879,72 | 2473,75 | 1977,74 | 2473,75 | 2879,72 | 3749,94 | 5412,83 | 7537,86 |
| 65,00    | 2592,65 | 2087,31 | 1848,25 | 1464,05 | 1848,25 | 2087,31 | 2592,65 | 3815,44 | 5470,54 |
| 70,00    | 1823,35 | 1544,52 | 1397,51 | 1104,16 | 1397,51 | 1544,52 | 1823,35 | 2626,37 | 3910,97 |
| 75,00    | 1333,83 | 1169,40 | 1045,61 | 821,45  | 1045,61 | 1169,40 | 1333,83 | 1836,90 | 2785,44 |
| 80,00    | 931,53  | 809,92  | 693,68  | 505,74  | 693,68  | 809,92  | 931,53  | 1232,43 | 1910,24 |
| 85,00    | 526,21  | 473,52  | 417,31  | 291,79  | 417,31  | 473,52  | 526,21  | 673,41  | 1056,98 |

| G/C [cd/ | 270,00  | 285,00  | 300,00  | 315,00  | 330,00  | 345,00  |
|----------|---------|---------|---------|---------|---------|---------|
| 45,00    | 20804,9 | 11498,6 | 6969,30 | 5375,82 | 4751,63 | 4552,46 |
| 50,00    | 17224,3 | 9030,00 | 5770,75 | 4446,54 | 3942,72 | 3721,65 |
| 55,00    | 14243,7 | 7130,34 | 4741,74 | 3712,50 | 3361,49 | 3010,06 |
| 60,00    | 11642,8 | 5653,39 | 3856,20 | 3088,18 | 2825,07 | 2395,46 |
| 65,00    | 9370,70 | 4329,77 | 3105,02 | 2455,42 | 2244,93 | 1935,14 |
| 70,00    | 7562,80 | 3356,29 | 2395,20 | 1919,31 | 1727,25 | 1566,17 |
| 75,00    | 6375,83 | 2619,14 | 1802,88 | 1433,60 | 1294,86 | 1177,34 |
| 80,00    | 5338,86 | 1898,52 | 1261,60 | 1003,18 | 903,01  | 787,30  |
| 85,00    | 3908,08 | 1029,87 | 673,41  | 526,21  | 468,64  | 390,68  |

## HEADQUARTERS

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