

## PHOTOMETRIC RESULTS

|                   |  |                      |                  |
|-------------------|--|----------------------|------------------|
| <b>Name:</b>      | REBA 50 /E EXT L1710+INT SYM BGLARE 840 HO |                      |                  |
| <b>Number:</b>    | 90520+90498L006                            | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 25-01-2020                                 | <b>Length:</b>       | 1710 mm          |
| <b>Meas.-no.:</b> | 01   | <b>Width:</b>        | 62 mm            |
| <b>Lamp type:</b> | LED 840 - 01                               | <b>Height:</b>       | 72 mm            |
| <b>Number:</b>    | 01   | <b>Power:</b>        | 43,57 W          |
| <b>Lamp flux:</b> | 7080,00 lm                                 | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 25-01-2020 9:35:24                         | <b>Output ratio:</b> | 63,1 %           |

## Protocol

**LiTG-class:** A50  
**UTE-class:** 0,63 C  
**IES-class:** 62 - 88 - 97 - 100 - 63  
**TM5-class:** BZ2/1.00/BZ3

## Divergences in the plane through maximum intensity:

|                               | Horizontal | Vertical |
|-------------------------------|------------|----------|
| One half peak divergence      | 81,8°      | 80,3°    |
| Half peak side angle (left)   | -40,9°     | -40,2°   |
| Half peak side angle (right)  | 40,9°      | 40,2°    |
| One tenth peak divergence     | 134,6°     | 139,4°   |
| Tenth peak side angle (left)  | -67,3°     | -69,7°   |
| Tenth peak side angle (right) | 67,3°      | 69,7°    |

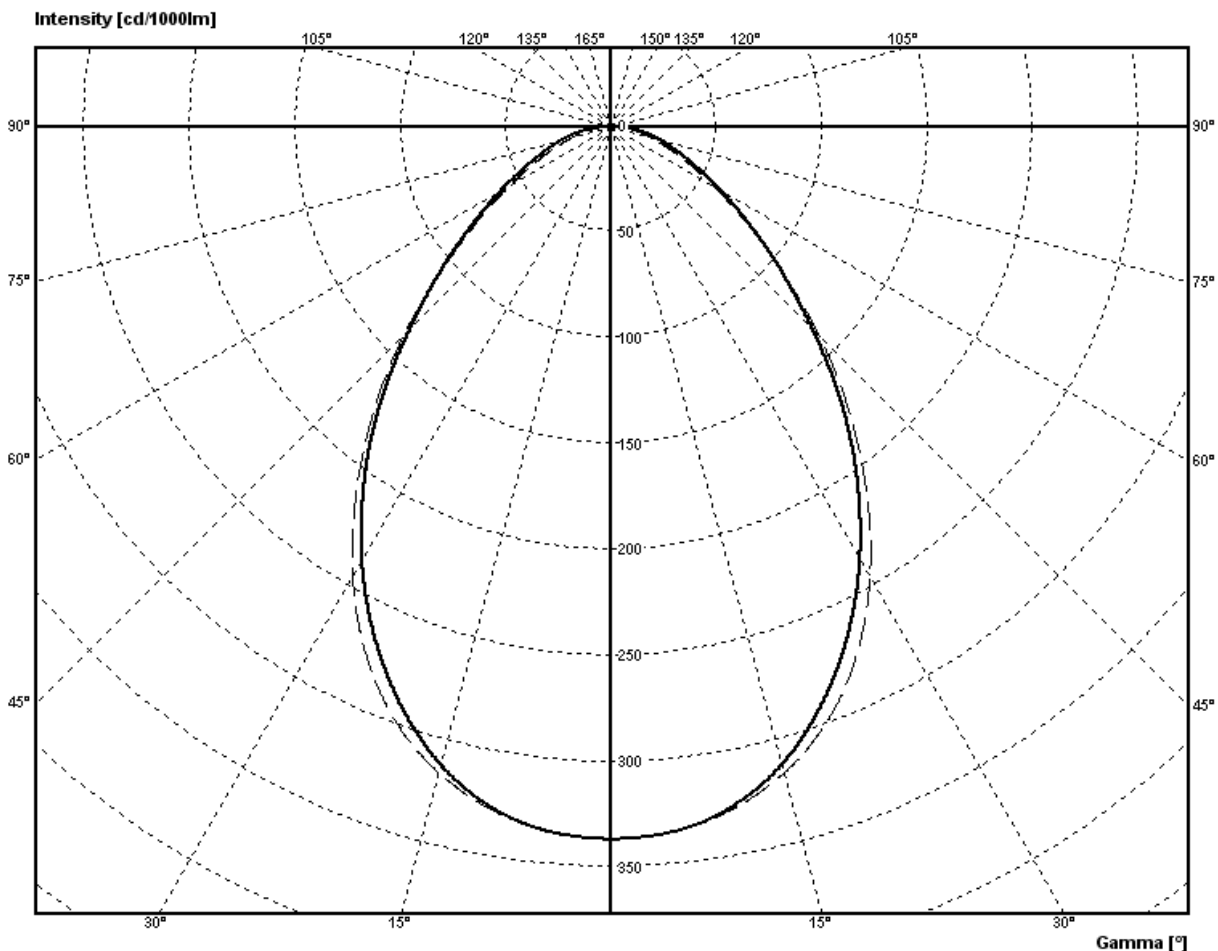
|                  |        |        |        |        |        |        |        |        |        |        |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>C-planes:</b> | 0,0°   | 15,0°  | 30,0°  | 45,0°  | 60,0°  | 75,0°  | 90,0°  | 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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| Name:      | REBA 50 /E EXT L1710+INT SYM BGLARE 840 HO |               |                 |
| Number:    | 90520+90498L006                            | Diameter:     | 0 mm            |
| Report:    | 25-01-2020                                 | Length:       | 1710 mm         |
| Meas.-no.: | 01   | Width:        | 62 mm           |
| Lamp type: | LED 840 - 01                               | Height:       | 72 mm           |
| Number:    | 01   | Power:        | 43,57 W         |
| Lamp flux: | 7080,00 lm                                 | Operator:     | INDELAGUE GROUP |
| Date:      | 25-01-2020 9:35:24                         | Output ratio: | 63,1 %          |

Polar diagram REBA 50 /E EXT L1710+INT SYM BGLARE 840 HO / Direct in 15° C / 5° G



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| <b>Number:</b>    | 90520+90498L006                            | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 25-01-2020                                 | <b>Length:</b>       | 1710 mm          |
| <b>Meas.-no.:</b> | 01   | <b>Width:</b>        | 62 mm            |
| <b>Lamp type:</b> | LED 840 - 01                               | <b>Height:</b>       | 72 mm            |
| <b>Number:</b>    | 01   | <b>Power:</b>        | 43,57 W          |
| <b>Lamp flux:</b> | 7080,00 lm                                 | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 25-01-2020 9:35:24                         | <b>Output ratio:</b> | 63,1 %           |

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

UGR values are corrected for lamp flux of 7080 lm by 6,8

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| <b>Meas.-no.:</b> | 01  | <b>Width:</b>        | 62 mm            |
| <b>Lamp type:</b> | LED 840 - 01                                      | <b>Height:</b>       | 72 mm            |
| <b>Number:</b>    | 01  | <b>Power:</b>        | 43,57 W          |
| <b>Lamp flux:</b> | 7080,00 lm  | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 25-01-2020 9:35:24                                | <b>Output ratio:</b> | 63,1 %           |

Luminance [cd/m<sup>2</sup>] REBA 50 /E EXT L1710+INT SYM BGLARE 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    | 6787,05 | 7006,24 | 7612,56 | 8662,32 | 10126,2 | 12480,6 | 17204,0 | 12480,6 | 10126,2 |
| 50,00    | 5190,70 | 5278,75 | 5750,69 | 6604,94 | 7826,13 | 9779,73 | 14076,6 | 9779,73 | 7826,13 |
| 55,00    | 3923,80 | 3965,31 | 4341,90 | 4942,23 | 5934,43 | 7505,86 | 11490,1 | 7505,86 | 5934,43 |
| 60,00    | 2955,18 | 2947,14 | 3278,11 | 3686,06 | 4436,65 | 5745,75 | 9413,09 | 5745,75 | 4436,65 |
| 65,00    | 2207,04 | 2217,92 | 2448,97 | 2711,03 | 3302,29 | 4376,35 | 7777,49 | 4376,35 | 3302,29 |
| 70,00    | 1664,59 | 1703,96 | 1834,57 | 2015,39 | 2443,18 | 3335,94 | 6513,16 | 3335,94 | 2443,18 |
| 75,00    | 1246,73 | 1275,99 | 1362,11 | 1489,34 | 1808,32 | 2567,99 | 5663,92 | 2567,99 | 1808,32 |
| 80,00    | 848,59  | 867,31  | 937,84  | 1015,84 | 1253,90 | 1830,01 | 4884,82 | 1830,01 | 1253,90 |
| 85,00    | 456,86  | 472,56  | 524,66  | 557,81  | 689,15  | 1023,46 | 3697,88 | 1023,46 | 689,15  |

| G/C [cd/ | 135,00  | 150,00  | 165,00  | 180,00  | 195,00  | 210,00  | 225,00  | 240,00  | 255,00  |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 45,00    | 8662,32 | 7612,56 | 7006,24 | 6787,05 | 7006,24 | 7612,56 | 8662,32 | 10126,2 | 12480,6 |
| 50,00    | 6604,94 | 5750,69 | 5278,75 | 5190,70 | 5278,75 | 5750,69 | 6604,94 | 7826,13 | 9779,73 |
| 55,00    | 4942,23 | 4341,90 | 3965,31 | 3923,80 | 3965,31 | 4341,90 | 4942,23 | 5934,43 | 7505,86 |
| 60,00    | 3686,06 | 3278,11 | 2947,14 | 2955,18 | 2947,14 | 3278,11 | 3686,06 | 4436,65 | 5745,75 |
| 65,00    | 2711,03 | 2448,97 | 2217,92 | 2207,04 | 2217,92 | 2448,97 | 2711,03 | 3302,29 | 4376,35 |
| 70,00    | 2015,39 | 1834,57 | 1703,96 | 1664,59 | 1703,96 | 1834,57 | 2015,39 | 2443,18 | 3335,94 |
| 75,00    | 1489,34 | 1362,11 | 1275,99 | 1246,73 | 1275,99 | 1362,11 | 1489,34 | 1808,32 | 2567,99 |
| 80,00    | 1015,84 | 937,84  | 867,31  | 848,59  | 867,31  | 937,84  | 1015,84 | 1253,90 | 1830,01 |
| 85,00    | 557,81  | 524,66  | 472,56  | 456,86  | 472,56  | 524,66  | 557,81  | 689,15  | 1023,46 |

| G/C [cd/ | 270,00  | 285,00  | 300,00  | 315,00  | 330,00  | 345,00  |
|----------|---------|---------|---------|---------|---------|---------|
| 45,00    | 17204,0 | 12480,6 | 10126,2 | 8662,32 | 7612,56 | 7006,24 |
| 50,00    | 14076,6 | 9779,73 | 7826,13 | 6604,94 | 5750,69 | 5278,75 |
| 55,00    | 11490,1 | 7505,86 | 5934,43 | 4942,23 | 4341,90 | 3965,31 |
| 60,00    | 9413,09 | 5745,75 | 4436,65 | 3686,06 | 3278,11 | 2947,14 |
| 65,00    | 7777,49 | 4376,35 | 3302,29 | 2711,03 | 2448,97 | 2217,92 |
| 70,00    | 6513,16 | 3335,94 | 2443,18 | 2015,39 | 1834,57 | 1703,96 |
| 75,00    | 5663,92 | 2567,99 | 1808,32 | 1489,34 | 1362,11 | 1275,99 |
| 80,00    | 4884,82 | 1830,01 | 1253,90 | 1015,84 | 937,84  | 867,31  |
| 85,00    | 3697,88 | 1023,46 | 689,15  | 557,81  | 524,66  | 472,56  |

## HEADQUARTERS

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