

## PHOTOMETRIC RESULTS

|                   |  |                      |                  |
|-------------------|--|----------------------|------------------|
| <b>Name:</b>      | REBA 50 /W EXT L2528+INT DIR BLINE K3 840 HO |                      |                  |
| <b>Number:</b>    | 90521+90535L009                              | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 12-02-2020                                   | <b>Length:</b>       | 2528 mm          |
| <b>Meas.-no.:</b> | 01   | <b>Width:</b>        | 90 mm            |
| <b>Lamp type:</b> | LED 840 - 01                                 | <b>Height:</b>       | 54 mm            |
| <b>Number:</b>    | 01   | <b>Power:</b>        | 65,74 W          |
| <b>Lamp flux:</b> | 10620,00 lm                                  | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 12-02-2020 14:49:47                          | <b>Output ratio:</b> | 59,5 %           |

## Protocol

**LiTG-class:** B11  
**UTE-class:** Not available  
**IES-class:** 9 - 32 - 64 - 69 - 60  
**TM5-class:** BZ10

|  |            |          |
|--|------------|----------|
| <b>Divergences in the plane through maximum intensity:</b> | Horizontal | Vertical |
| <b>One half peak divergence</b>                            | 0,0°       | 52,5°    |
| <b>Half peak side angle (left)</b>                         | -9999,0°   | 45,9°    |
| <b>Half peak side angle (right)</b>                        | -9999,0°   | 98,4°    |
| <b>One tenth peak divergence</b>                           | 0,0°       | 138,3°   |
| <b>Tenth peak side angle (left)</b>                        | -9999,0°   | 18,0°    |
| <b>Tenth peak side angle (right)</b>                       | -9999,0°   | 156,3°   |

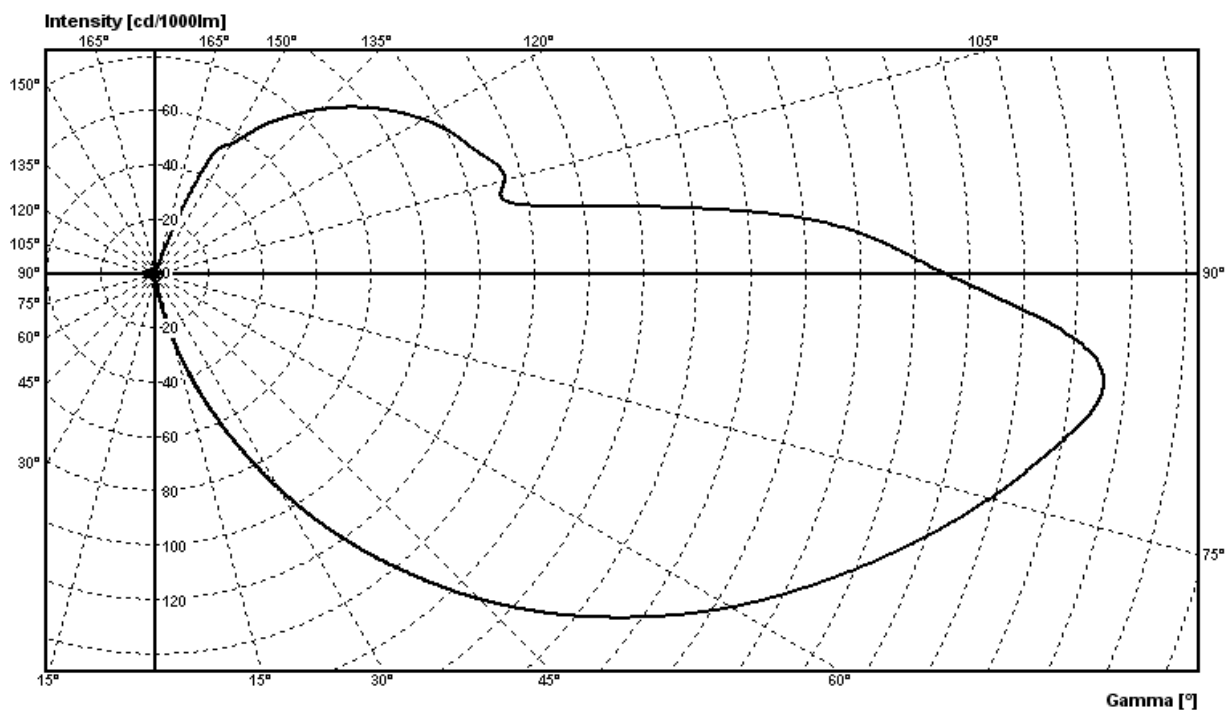
|                  |        |        |        |        |        |        |        |        |        |        |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>C-planes:</b> | 0,0°   | 15,0°  | 30,0°  | 45,0°  | 60,0°  | 75,0°  | 90,0°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

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| Name:      | REBA 50 /W EXT L2528+INT DIR BLINE K3 840 HO |               |                 |
| Number:    | 90521+90535L009                              | Diameter:     | 0 mm            |
| Report:    | 12-02-2020                                   | Length:       | 2528 mm         |
| Meas.-no.: | 01   | Width:        | 90 mm           |
| Lamp type: | LED 840 - 01                                 | Height:       | 54 mm           |
| Number:    | 01   | Power:        | 65,74 W         |
| Lamp flux: | 10620,00 lm                                  | Operator:     | INDELAGUE GROUP |
| Date:      | 12-02-2020 14:49:47                          | Output ratio: | 59,5 %          |

Polar diagram REBA 50 /W EXT L2528+INT DIR BLINE K3 840 HO / Total in 15° C / 5° G



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| <b>Name:</b>      | <b>REBA 50 /W EXT L2528+INT DIR BLINE K3 840 HO</b> |                      |                  |
| <b>Number:</b>    | 90521+90535L009                                     | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 12-02-2020  | <b>Length:</b>       | 2528 mm          |
| <b>Meas.-no.:</b> | 01  | <b>Width:</b>        | 90 mm            |
| <b>Lamp type:</b> | LED 840 - 01  | <b>Height:</b>       | 54 mm            |
| <b>Number:</b>    | 01  | <b>Power:</b>        | 65,74 W          |
| <b>Lamp flux:</b> | 10620,00 lm   | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 12-02-2020 14:49:47                                 | <b>Output ratio:</b> | 59,5 %           |

## 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>  | 19,5             | 20,9       | 20,2       | 21,7       | 22,6       | 13,4           | 14,7       | 14,1       | 15,5       | 16,5       |
| <b>2H</b>                       | <b>3H</b>  | 22,9             | 24,2       | 23,6       | 25,0       | 25,9       | 15,3           | 16,6       | 16,1       | 17,4       | 18,4       |
| <b>2H</b>                       | <b>4H</b>  | 24,6             | 25,8       | 25,3       | 26,6       | 27,6       | 16,3           | 17,6       | 17,1       | 18,4       | 19,3       |
| <b>2H</b>                       | <b>6H</b>  | 26,3             | 27,5       | 27,0       | 28,3       | 29,3       | 17,3           | 18,5       | 18,1       | 19,3       | 20,3       |
| <b>2H</b>                       | <b>8H</b>  | 27,0             | 28,2       | 27,8       | 29,0       | 30,0       | 17,7           | 18,9       | 18,5       | 19,7       | 20,7       |
| <b>2H</b>                       | <b>12H</b> | 27,7             | 28,9       | 28,5       | 29,7       | 30,7       | 18,1           | 19,2       | 18,9       | 20,0       | 21,0       |
| <b>4H</b>                       | <b>2H</b>  | 20,3             | 21,5       | 21,0       | 22,3       | 23,3       | 16,7           | 17,9       | 17,4       | 18,7       | 19,7       |
| <b>4H</b>                       | <b>3H</b>  | 23,8             | 25,0       | 24,6       | 25,8       | 26,8       | 18,9           | 20,1       | 19,7       | 20,9       | 21,9       |
| <b>4H</b>                       | <b>4H</b>  | 25,8             | 26,8       | 26,6       | 27,7       | 28,7       | 20,1           | 21,1       | 20,8       | 21,9       | 23,0       |
| <b>4H</b>                       | <b>6H</b>  | 27,7             | 28,6       | 28,5       | 29,5       | 30,5       | 21,0           | 22,0       | 21,8       | 22,8       | 23,8       |
| <b>4H</b>                       | <b>8H</b>  | 28,6             | 29,5       | 29,4       | 30,3       | 31,3       | 21,4           | 22,3       | 22,2       | 23,2       | 24,2       |
| <b>4H</b>                       | <b>12H</b> | 29,4             | 30,3       | 30,2       | 31,1       | 32,2       | 21,8           | 22,6       | 22,6       | 23,5       | 24,5       |
| <b>8H</b>                       | <b>4H</b>  | 26,2             | 27,1       | 27,0       | 28,0       | 29,0       | 22,1           | 23,0       | 22,9       | 23,9       | 24,9       |
| <b>8H</b>                       | <b>6H</b>  | 28,4             | 29,2       | 29,2       | 30,0       | 31,1       | 23,4           | 24,2       | 24,2       | 25,1       | 26,2       |
| <b>8H</b>                       | <b>8H</b>  | 29,5             | 30,2       | 30,3       | 31,1       | 32,1       | 24,1           | 24,8       | 24,9       | 25,7       | 26,7       |
| <b>8H</b>                       | <b>12H</b> | 30,5             | 31,1       | 31,3       | 32,0       | 33,1       | 24,5           | 25,2       | 25,4       | 26,1       | 27,1       |
| <b>12H</b>                      | <b>4H</b>  | 26,3             | 27,1       | 27,1       | 28,0       | 29,0       | 22,7           | 23,5       | 23,5       | 24,4       | 25,4       |
| <b>12H</b>                      | <b>6H</b>  | 28,5             | 29,3       | 29,4       | 30,1       | 31,2       | 24,2           | 25,0       | 25,1       | 25,8       | 26,9       |
| <b>12H</b>                      | <b>8H</b>  | 29,7             | 30,3       | 30,5       | 31,2       | 32,3       | 25,0           | 25,6       | 25,8       | 26,5       | 27,6       |

UGR values are corrected for lamp flux of 10620 lm by 8,2

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| <b>Lamp type:</b> | LED 840 - 01                                 | <b>Height:</b>       | 54 mm            |
| <b>Number:</b>    | 01   | <b>Power:</b>        | 65,74 W          |
| <b>Lamp flux:</b> | 10620,00 lm                                  | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 12-02-2020 14:49:47                          | <b>Output ratio:</b> | 59,5 %           |

Luminance [cd/m<sup>2</sup>] REBA 50 /W EXT L2528+INT DIR BLINE K3 840 HO / Total in 15° ☺  
/ 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    | 18279,9 | 19033,2 | 18242,9 | 16315,7 | 13537,6 | 7726,72 | 14096,9 | 547,56 | 294,63 |
| 50,00    | 19497,3 | 20134,2 | 19338,8 | 17434,0 | 14756,5 | 9015,37 | 15594,6 | 519,03 | 287,93 |
| 55,00    | 20638,2 | 21184,1 | 20334,1 | 18473,5 | 15858,0 | 10327,5 | 17546,4 | 502,72 | 297,68 |
| 60,00    | 21788,1 | 22223,0 | 21298,7 | 19404,5 | 16904,7 | 11598,5 | 20102,8 | 498,99 | 295,67 |
| 65,00    | 22916,0 | 23321,8 | 22308,5 | 20331,2 | 17859,0 | 12832,2 | 23562,0 | 496,88 | 308,34 |
| 70,00    | 24164,1 | 24479,0 | 23372,9 | 21356,5 | 18853,0 | 14003,5 | 28615,3 | 494,03 | 310,44 |
| 75,00    | 25530,5 | 25750,4 | 24549,1 | 22482,1 | 19932,5 | 15193,2 | 36823,0 | 488,31 | 314,73 |
| 80,00    | 26914,5 | 26951,8 | 25713,4 | 23453,2 | 21004,3 | 16303,5 | 52315,5 | 479,84 | 321,20 |
| 85,00    | 27106,7 | 25396,5 | 24302,9 | 23029,4 | 21014,3 | 16549,4 | 92321,6 | 486,10 | 318,57 |

| G/C [cd/ | 135,00 | 150,00 | 165,00 | 180,00 | 195,00 | 210,00 | 225,00 | 240,00 | 255,00 |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 45,00    | 232,77 | 200,07 | 187,96 | 205,39 | 187,96 | 200,07 | 232,77 | 294,63 | 547,56 |
| 50,00    | 236,29 | 202,15 | 196,73 | 204,77 | 196,73 | 202,15 | 236,29 | 287,93 | 519,03 |
| 55,00    | 241,04 | 213,30 | 198,65 | 219,41 | 198,65 | 213,30 | 241,04 | 297,68 | 502,72 |
| 60,00    | 247,02 | 224,75 | 215,24 | 234,00 | 215,24 | 224,75 | 247,02 | 295,67 | 498,99 |
| 65,00    | 263,02 | 243,97 | 225,43 | 248,95 | 225,43 | 243,97 | 263,02 | 308,34 | 496,88 |
| 70,00    | 262,82 | 249,68 | 248,96 | 264,62 | 248,96 | 249,68 | 262,82 | 310,44 | 494,03 |
| 75,00    | 281,13 | 263,68 | 266,91 | 281,33 | 266,91 | 263,68 | 281,13 | 314,73 | 488,31 |
| 80,00    | 284,53 | 279,06 | 274,17 | 276,40 | 274,17 | 279,06 | 284,53 | 321,20 | 479,84 |
| 85,00    | 289,98 | 276,39 | 265,59 | 262,29 | 265,59 | 276,39 | 289,98 | 318,57 | 486,10 |

| G/C [cd/ | 270,00  | 285,00  | 300,00  | 315,00  | 330,00  | 345,00  |
|----------|---------|---------|---------|---------|---------|---------|
| 45,00    | 14096,9 | 7726,72 | 13537,6 | 16315,7 | 18242,9 | 19033,2 |
| 50,00    | 15594,6 | 9015,37 | 14756,5 | 17434,0 | 19338,8 | 20134,2 |
| 55,00    | 17546,4 | 10327,5 | 15858,0 | 18473,5 | 20334,1 | 21184,1 |
| 60,00    | 20102,8 | 11598,5 | 16904,7 | 19404,5 | 21298,7 | 22223,0 |
| 65,00    | 23562,0 | 12832,2 | 17859,0 | 20331,2 | 22308,5 | 23321,8 |
| 70,00    | 28615,3 | 14003,5 | 18853,0 | 21356,5 | 23372,9 | 24479,0 |
| 75,00    | 36823,0 | 15193,2 | 19932,5 | 22482,1 | 24549,1 | 25750,4 |
| 80,00    | 52315,5 | 16303,5 | 21004,3 | 23453,2 | 25713,4 | 26951,8 |
| 85,00    | 92321,6 | 16549,4 | 21014,3 | 23029,4 | 24302,9 | 25396,5 |

## HEADQUARTERS

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