

**PHOTOMETRIC RESULTS**

|                   |  |                      |                  |
|-------------------|--|----------------------|------------------|
| <b>Name:</b>      | <b>REBA 65 LED 37W bGLARE [1408mm]</b> |                      |                  |
| <b>Number:</b>    | 01                                     | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 30-01-2017                             | <b>Length:</b>       | 1408 mm          |
| <b>Meas.-no.:</b> | 01                                     | <b>Width:</b>        | 65 mm            |
| <b>Lamp type:</b> | LED 840 - 01                           | <b>Height:</b>       | 80 mm            |
| <b>Number:</b>    | 1                                      | <b>Power:</b>        | 36,74 W          |
| <b>Lamp flux:</b> | 5065,00 lm                             | <b>Operator:</b>     | INDEL AGUE GROUP |
| <b>Date:</b>      | 30-01-2017 16:16:50                    | <b>Output ratio:</b> | 63,6 %           |

**Protocol**

**LiTG-class:** A50  
**UTE-class:** 0,64 C  
**IES-class:** 65 - 90 - 98 - 100 - 64  
**TM5-class:** BZ2/4.00/BZ3

**Divergences in the plane through maximum intensity:**

|                                      | Horizontal | Vertical |
|--------------------------------------|------------|----------|
| <b>One half peak divergence</b>      | 78,5°      | 76,8°    |
| <b>Half peak side angle (left)</b>   | -39,3°     | -38,4°   |
| <b>Half peak side angle (right)</b>  | 39,3°      | 38,4°    |
| <b>One tenth peak divergence</b>     | 130,2°     | 131,9°   |
| <b>Tenth peak side angle (left)</b>  | -65,1°     | -66,0°   |
| <b>Tenth peak side angle (right)</b> | 65,1°      | 66,0°    |

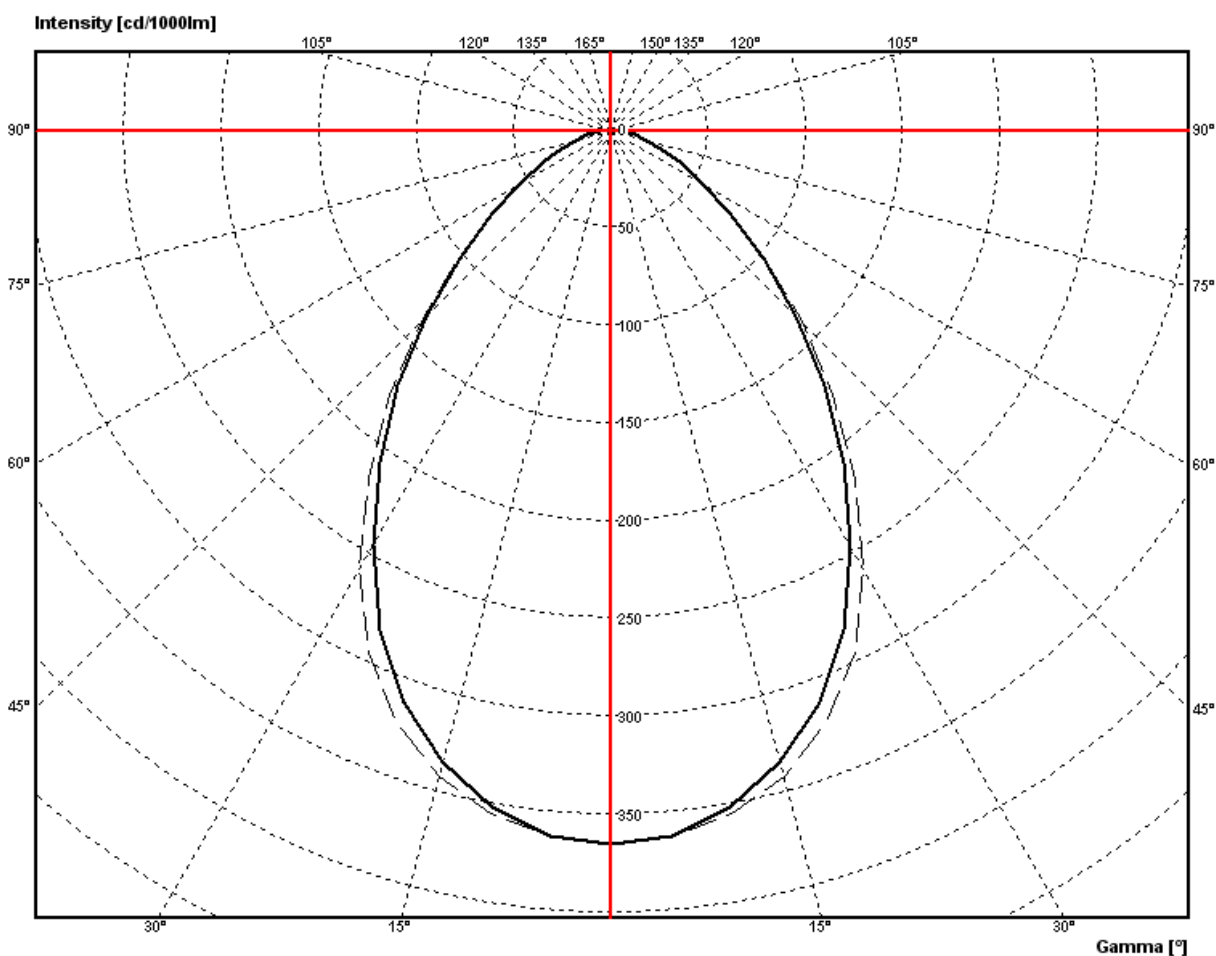
|                  |        |        |        |        |        |        |        |        |        |        |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>C-planes:</b> | 0,0°   | 15,0°  | 30,0°  | 45,0°  | 60,0°  | 75,0°  | 90,0°  | 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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| <b>Number:</b>    | 01                                     | <b>Diameter:</b>     | 0 mm            |
| <b>Report:</b>    | 30-01-2017                             | <b>Length:</b>       | 1408 mm         |
| <b>Meas.-no.:</b> | 01                                     | <b>Width:</b>        | 65 mm           |
| <b>Lamp type:</b> | LED 840 - 01                           | <b>Height:</b>       | 80 mm           |
| <b>Number:</b>    | 1                                      | <b>Power:</b>        | 36,74 W         |
| <b>Lamp flux:</b> | 5065,00 lm                             | <b>Operator:</b>     | INDELAGUE GROUP |
| <b>Date:</b>      | 30-01-2017 16:16:50                    | <b>Output ratio:</b> | 63,6 %          |

Polar diagram REBA 65 LED 37W bGLARE [1408mm] / Direct in 15° C / 5° G



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

UGR values are corrected for lamp flux of 5065 lm by 5,6

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| <b>Report:</b>    | 30-01-2017                             | <b>Length:</b>       | 1408 mm          |
| <b>Meas.-no.:</b> | 01                                     | <b>Width:</b>        | 65 mm            |
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| <b>Number:</b>    | 1                                      | <b>Power:</b>        | 36,74 W          |
| <b>Lamp flux:</b> | 5065,00 lm                             | <b>Operator:</b>     | INDEL AGUE GROUP |
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**Luminance [cd/m<sup>2</sup>] REBA 65 LED 37W bGLARE [1408mm] / 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    | 4850,82 | 4970,73 | 5338,12 | 5959,50 | 6904,24 | 8380,32 | 10927,1 | 8380,32 | 6904,24 |
| 50,00    | 3644,29 | 3693,92 | 3937,66 | 4455,49 | 5229,40 | 6475,25 | 8920,10 | 6475,25 | 5229,40 |
| 55,00    | 2665,91 | 2688,39 | 2889,03 | 3245,59 | 3892,92 | 4888,92 | 7132,52 | 4888,92 | 3892,92 |
| 60,00    | 1961,91 | 1942,85 | 2152,82 | 2403,47 | 2854,22 | 3710,99 | 5764,77 | 3710,99 | 2854,22 |
| 65,00    | 1419,51 | 1415,78 | 1571,60 | 1759,70 | 2088,59 | 2810,99 | 4582,62 | 2810,99 | 2088,59 |
| 70,00    | 1025,59 | 1061,01 | 1150,96 | 1279,33 | 1509,13 | 2121,41 | 3833,57 | 2121,41 | 1509,13 |
| 75,00    | 731,11  | 778,92  | 827,71  | 925,85  | 1093,31 | 1615,40 | 3294,06 | 1615,40 | 1093,31 |
| 80,00    | 500,17  | 513,66  | 551,66  | 608,97  | 751,85  | 1160,92 | 2752,50 | 1160,92 | 751,85  |
| 85,00    | 268,71  | 268,15  | 293,65  | 325,39  | 415,85  | 650,03  | 2253,00 | 650,03  | 415,85  |

| G/C [cd/ | 135,00  | 150,00  | 165,00  | 180,00  | 195,00  | 210,00  | 225,00  | 240,00  | 255,00  |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 45,00    | 5959,50 | 5338,12 | 4970,73 | 4850,82 | 4970,73 | 5338,12 | 5959,50 | 6904,24 | 8380,32 |
| 50,00    | 4455,49 | 3937,66 | 3693,92 | 3644,29 | 3693,92 | 3937,66 | 4455,49 | 5229,40 | 6475,25 |
| 55,00    | 3245,59 | 2889,03 | 2688,39 | 2665,91 | 2688,39 | 2889,03 | 3245,59 | 3892,92 | 4888,92 |
| 60,00    | 2403,47 | 2152,82 | 1942,85 | 1961,91 | 1942,85 | 2152,82 | 2403,47 | 2854,22 | 3710,99 |
| 65,00    | 1759,70 | 1571,60 | 1415,78 | 1419,51 | 1415,78 | 1571,60 | 1759,70 | 2088,59 | 2810,99 |
| 70,00    | 1279,33 | 1150,96 | 1061,01 | 1025,59 | 1061,01 | 1150,96 | 1279,33 | 1509,13 | 2121,41 |
| 75,00    | 925,85  | 827,71  | 778,92  | 731,11  | 778,92  | 827,71  | 925,85  | 1093,31 | 1615,40 |
| 80,00    | 608,97  | 551,66  | 513,66  | 500,17  | 513,66  | 551,66  | 608,97  | 751,85  | 1160,92 |
| 85,00    | 325,39  | 293,65  | 268,15  | 268,71  | 268,15  | 293,65  | 325,39  | 415,85  | 650,03  |

| G/C [cd/ | 270,00  | 285,00  | 300,00  | 315,00  | 330,00  | 345,00  |
|----------|---------|---------|---------|---------|---------|---------|
| 45,00    | 10927,1 | 8380,32 | 6904,24 | 5959,50 | 5338,12 | 4970,73 |
| 50,00    | 8920,10 | 6475,25 | 5229,40 | 4455,49 | 3937,66 | 3693,92 |
| 55,00    | 7132,52 | 4888,92 | 3892,92 | 3245,59 | 2889,03 | 2688,39 |
| 60,00    | 5764,77 | 3710,99 | 2854,22 | 2403,47 | 2152,82 | 1942,85 |
| 65,00    | 4582,62 | 2810,99 | 2088,59 | 1759,70 | 1571,60 | 1415,78 |
| 70,00    | 3833,57 | 2121,41 | 1509,13 | 1279,33 | 1150,96 | 1061,01 |
| 75,00    | 3294,06 | 1615,40 | 1093,31 | 925,85  | 827,71  | 778,92  |
| 80,00    | 2752,50 | 1160,92 | 751,85  | 608,97  | 551,66  | 513,66  |
| 85,00    | 2253,00 | 650,03  | 415,85  | 325,39  | 293,65  | 268,15  |

**HEADQUARTERS**

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