

## PHOTOMETRIC RESULTS

|                   |  |                      |                  |
|-------------------|--|----------------------|------------------|
| <b>Name:</b>      | REBA 50 /E EXT LINE L2249 SRT/END+INT SYM BLINE 840 HO |                      |                  |
| <b>Number:</b>    | 90506-83+90497L008                                     | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 24-01-2020   | <b>Length:</b>       | 2249 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>    | 1  | <b>Power:</b>        | 57,62 W          |
| <b>Lamp flux:</b> | 9440,00 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:** A40  
**UTE-class:** 0,63 E  
**IES-class:** 50 - 80 - 95 - 100 - 63  
**TM5-class:** BZ5/0.75/BZ4

## Divergences in the plane through maximum intensity:

|                               | Horizontal | Vertical |
|-------------------------------|------------|----------|
| One half peak divergence      | 102,2°     | 100,4°   |
| Half peak side angle (left)   | -51,1°     | -50,2°   |
| Half peak side angle (right)  | 51,1°      | 50,2°    |
| One tenth peak divergence     | 157,2°     | 160,5°   |
| Tenth peak side angle (left)  | -78,6°     | -80,3°   |
| Tenth peak side angle (right) | 78,6°      | 80,3°    |

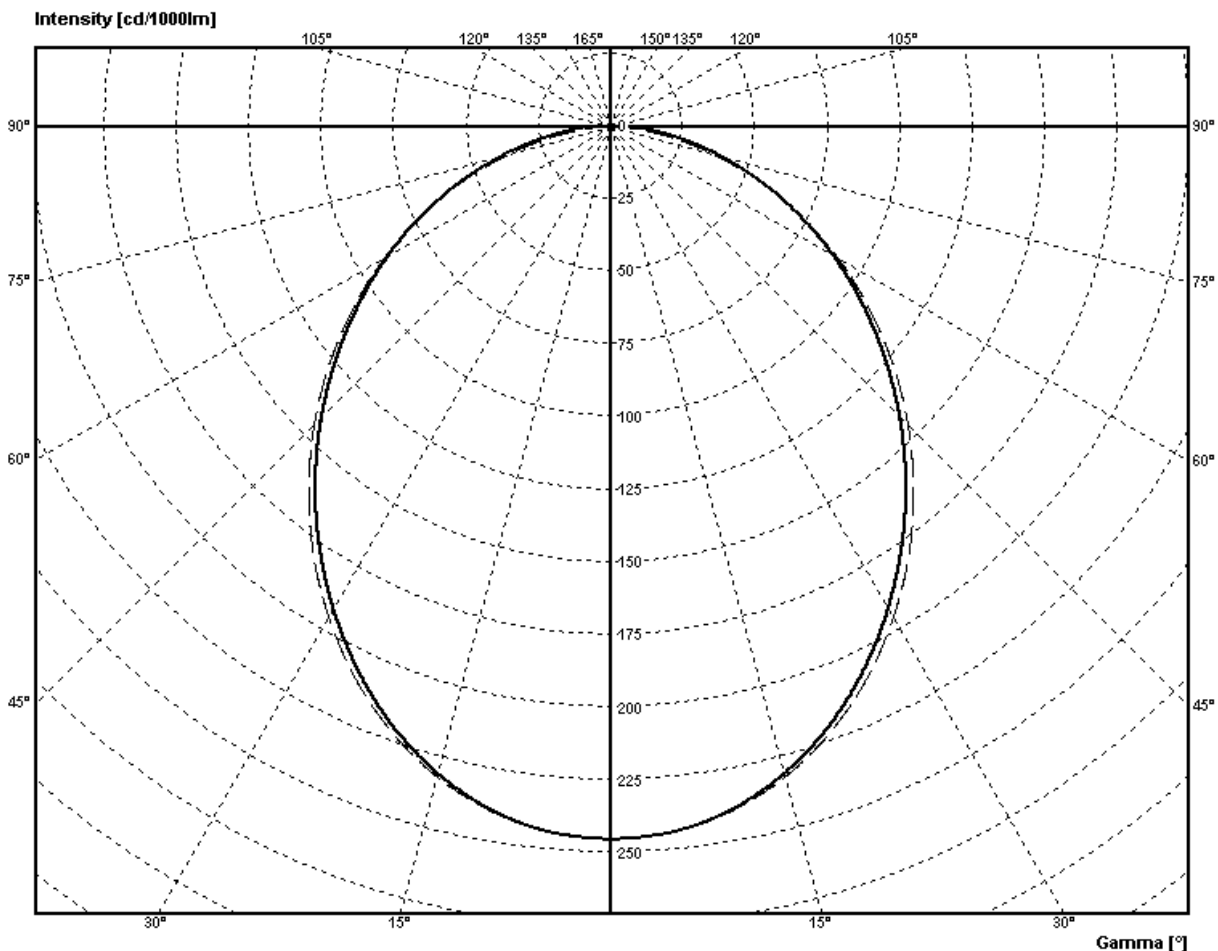
|                  |        |        |        |        |        |        |        |        |        |        |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>C-planes:</b> | 0,0°   | 15,0°  | 30,0°  | 45,0°  | 60,0°  | 75,0°  | 90,0°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

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| Number:    | 90506-83+90497L008                                     | Diameter:     | 0 mm             |
| Report:    | 24-01-2020   | Length:       | 2249 mm          |
| Meas.-no.: | 01   | Width:        | 62 mm            |
| Lamp type: | LED 840 - 01   | Height:       | 72 mm            |
| Number:    | 1  | Power:        | 57,62 W          |
| Lamp flux: | 9440,00 lm   | Operator:     | INDEL AGUE GROUP |
| Date:      | 24-01-2020 12:31:16                                    | Output ratio: | 62,6 %           |

Polar diagram REBA 50 /E EXT LINE L2249 SRT/END+INT SYM BLINE 840 HO / Direct  
in 15° C / 5° G



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| <b>Number:</b>    | 90506-83+90497L008  | <b>Diameter:</b>     | 0 mm             |
| <b>Report:</b>    | 24-01-2020  | <b>Length:</b>       | 2249 mm          |
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| <b>Number:</b>    | 1   | <b>Power:</b>        | 57,62 W          |
| <b>Lamp flux:</b> | 9440,00 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>           |            | <b>Viewed crosswise</b> |            |            |            |            | <b>Viewed endwise</b> |            |            |            |            |
| <b>2H</b>                       | <b>2H</b>  | 18,3                    | 19,9       | 18,6       | 20,2       | 20,5       | 20,5                  | 22,1       | 20,8       | 22,4       | 22,7       |
| <b>2H</b>                       | <b>3H</b>  | 19,3                    | 20,7       | 19,6       | 21,1       | 21,4       | 21,9                  | 23,3       | 22,2       | 23,7       | 24,0       |
| <b>2H</b>                       | <b>4H</b>  | 19,6                    | 21,0       | 20,0       | 21,3       | 21,7       | 22,4                  | 23,8       | 22,8       | 24,1       | 24,5       |
| <b>2H</b>                       | <b>6H</b>  | 19,8                    | 21,1       | 20,2       | 21,5       | 21,9       | 22,8                  | 24,0       | 23,2       | 24,4       | 24,8       |
| <b>2H</b>                       | <b>8H</b>  | 19,8                    | 21,1       | 20,3       | 21,5       | 21,9       | 22,8                  | 24,1       | 23,2       | 24,4       | 24,8       |
| <b>2H</b>                       | <b>12H</b> | 19,9                    | 21,0       | 20,3       | 21,4       | 21,8       | 22,9                  | 24,0       | 23,3       | 24,4       | 24,8       |
| <b>4H</b>                       | <b>2H</b>  | 18,9                    | 20,3       | 19,3       | 20,7       | 21,0       | 20,7                  | 22,1       | 21,1       | 22,5       | 22,8       |
| <b>4H</b>                       | <b>3H</b>  | 20,1                    | 21,2       | 20,5       | 21,6       | 22,0       | 22,2                  | 23,4       | 22,7       | 23,8       | 24,2       |
| <b>4H</b>                       | <b>4H</b>  | 20,5                    | 21,6       | 21,0       | 22,0       | 22,4       | 22,9                  | 23,9       | 23,3       | 24,4       | 24,8       |
| <b>4H</b>                       | <b>6H</b>  | 20,8                    | 21,7       | 21,2       | 22,2       | 22,6       | 23,3                  | 24,2       | 23,7       | 24,7       | 25,1       |
| <b>4H</b>                       | <b>8H</b>  | 20,9                    | 21,7       | 21,3       | 22,2       | 22,6       | 23,4                  | 24,3       | 23,9       | 24,7       | 25,2       |
| <b>4H</b>                       | <b>12H</b> | 20,9                    | 21,7       | 21,4       | 22,2       | 22,7       | 23,5                  | 24,3       | 24,0       | 24,7       | 25,2       |
| <b>8H</b>                       | <b>4H</b>  | 20,7                    | 21,6       | 21,2       | 22,0       | 22,5       | 22,9                  | 23,8       | 23,4       | 24,2       | 24,7       |
| <b>8H</b>                       | <b>6H</b>  | 21,1                    | 21,8       | 21,5       | 22,3       | 22,8       | 23,4                  | 24,1       | 23,9       | 24,6       | 25,1       |
| <b>8H</b>                       | <b>8H</b>  | 21,2                    | 21,9       | 21,8       | 22,4       | 22,9       | 23,6                  | 24,2       | 24,1       | 24,7       | 25,2       |
| <b>8H</b>                       | <b>12H</b> | 21,3                    | 21,9       | 21,8       | 22,4       | 22,9       | 23,7                  | 24,2       | 24,2       | 24,7       | 25,2       |
| <b>12H</b>                      | <b>4H</b>  | 20,8                    | 21,6       | 21,2       | 22,0       | 22,5       | 22,9                  | 23,7       | 23,4       | 24,2       | 24,7       |
| <b>12H</b>                      | <b>6H</b>  | 21,1                    | 21,8       | 21,7       | 22,3       | 22,8       | 23,4                  | 24,1       | 23,9       | 24,6       | 25,1       |
| <b>12H</b>                      | <b>8H</b>  | 21,3                    | 21,8       | 21,8       | 22,3       | 22,8       | 23,6                  | 24,1       | 24,1       | 24,6       | 25,1       |

UGR values are corrected for lamp flux of 9440 lm by 7,8

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Luminance [cd/m<sup>2</sup>] REBA 50 /E EXT LINE L2249 SRT/END+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    | 7103,59 | 7241,18 | 7735,41 | 8678,39 | 10279,1 | 13007,5 | 18123,9 | 13007,5 | 10279,1 |
| 50,00    | 6122,28 | 6252,03 | 6707,88 | 7585,86 | 9122,02 | 11840,5 | 17346,9 | 11840,5 | 9122,02 |
| 55,00    | 5212,95 | 5328,34 | 5743,50 | 6557,46 | 7982,33 | 10647,5 | 16503,9 | 10647,5 | 7982,33 |
| 60,00    | 4371,60 | 4460,95 | 4831,70 | 5543,10 | 6846,62 | 9375,26 | 15593,3 | 9375,26 | 6846,62 |
| 65,00    | 3553,51 | 3635,60 | 3943,98 | 4553,46 | 5706,37 | 8016,09 | 14508,0 | 8016,09 | 5706,37 |
| 70,00    | 2769,41 | 2841,44 | 3078,43 | 3572,96 | 4519,19 | 6544,60 | 13192,6 | 6544,60 | 4519,19 |
| 75,00    | 2024,69 | 2070,58 | 2249,09 | 2597,62 | 3320,15 | 4918,36 | 11340,6 | 4918,36 | 3320,15 |
| 80,00    | 1339,07 | 1359,81 | 1469,37 | 1670,71 | 2136,70 | 3193,52 | 8950,46 | 3193,52 | 2136,70 |
| 85,00    | 738,01  | 743,65  | 794,62  | 861,33  | 1056,14 | 1529,55 | 5888,38 | 1529,55 | 1056,14 |

| G/C [cd/ | 135,00  | 150,00  | 165,00  | 180,00  | 195,00  | 210,00  | 225,00  | 240,00  | 255,00  |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 45,00    | 8678,39 | 7735,41 | 7241,18 | 7103,59 | 7241,18 | 7735,41 | 8678,39 | 10279,1 | 13007,5 |
| 50,00    | 7585,86 | 6707,88 | 6252,03 | 6122,28 | 6252,03 | 6707,88 | 7585,86 | 9122,02 | 11840,5 |
| 55,00    | 6557,46 | 5743,50 | 5328,34 | 5212,95 | 5328,34 | 5743,50 | 6557,46 | 7982,33 | 10647,5 |
| 60,00    | 5543,10 | 4831,70 | 4460,95 | 4371,60 | 4460,95 | 4831,70 | 5543,10 | 6846,62 | 9375,26 |
| 65,00    | 4553,46 | 3943,98 | 3635,60 | 3553,51 | 3635,60 | 3943,98 | 4553,46 | 5706,37 | 8016,09 |
| 70,00    | 3572,96 | 3078,43 | 2841,44 | 2769,41 | 2841,44 | 3078,43 | 3572,96 | 4519,19 | 6544,60 |
| 75,00    | 2597,62 | 2249,09 | 2070,58 | 2024,69 | 2070,58 | 2249,09 | 2597,62 | 3320,15 | 4918,36 |
| 80,00    | 1670,71 | 1469,37 | 1359,81 | 1339,07 | 1359,81 | 1469,37 | 1670,71 | 2136,70 | 3193,52 |
| 85,00    | 861,33  | 794,62  | 743,65  | 738,01  | 743,65  | 794,62  | 861,33  | 1056,14 | 1529,55 |

| G/C [cd/ | 270,00  | 285,00  | 300,00  | 315,00  | 330,00  | 345,00  |
|----------|---------|---------|---------|---------|---------|---------|
| 45,00    | 18123,9 | 13007,5 | 10279,1 | 8678,39 | 7735,41 | 7241,18 |
| 50,00    | 17346,9 | 11840,5 | 9122,02 | 7585,86 | 6707,88 | 6252,03 |
| 55,00    | 16503,9 | 10647,5 | 7982,33 | 6557,46 | 5743,50 | 5328,34 |
| 60,00    | 15593,3 | 9375,26 | 6846,62 | 5543,10 | 4831,70 | 4460,95 |
| 65,00    | 14508,0 | 8016,09 | 5706,37 | 4553,46 | 3943,98 | 3635,60 |
| 70,00    | 13192,6 | 6544,60 | 4519,19 | 3572,96 | 3078,43 | 2841,44 |
| 75,00    | 11340,6 | 4918,36 | 3320,15 | 2597,62 | 2249,09 | 2070,58 |
| 80,00    | 8950,46 | 3193,52 | 2136,70 | 1670,71 | 1469,37 | 1359,81 |
| 85,00    | 5888,38 | 1529,55 | 1056,14 | 861,33  | 794,62  | 743,65  |

## HEADQUARTERS

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