

PHOTOMETRIC RESULTS

| | | | |
|-------------------|--|----------------------|------------------|
| Name: | REBA 50 /E EXT LINE L1964 MID+INT SYM BFLEX 830 HO | | |
| Number: | 90506+90499L007 | Diameter: | 0 mm |
| Report: | 24-01-2020 | Length: | 1964 mm |
| Meas.-no.: | 01 | Width: | 62 mm |
| Lamp type: | LED 830 - 01 | Height: | 72 mm |
| Number: | 1 | Power: | 50,77 W |
| Lamp flux: | 7560,00 lm | Operator: | INDEL AGUE GROUP |
| Date: | 24-01-2020 14:11:52 | Output ratio: | 64,1 % |

Protocol

LiTG-class: A40
UTE-class: 0,64 E
IES-class: 46 - 76 - 93 - 100 - 64
TM5-class: BZ4/0.75/BZ5

| | | |
|--|------------|----------|
| Divergences in the plane through maximum intensity: | Horizontal | Vertical |
| One half peak divergence | 109,0° | 113,2° |
| Half peak side angle (left) | -54,5° | -56,6° |
| Half peak side angle (right) | 54,5° | 56,6° |
| One tenth peak divergence | 163,2° | 174,7° |
| Tenth peak side angle (left) | -81,6° | -87,3° |
| Tenth peak side angle (right) | 81,6° | 87,3° |

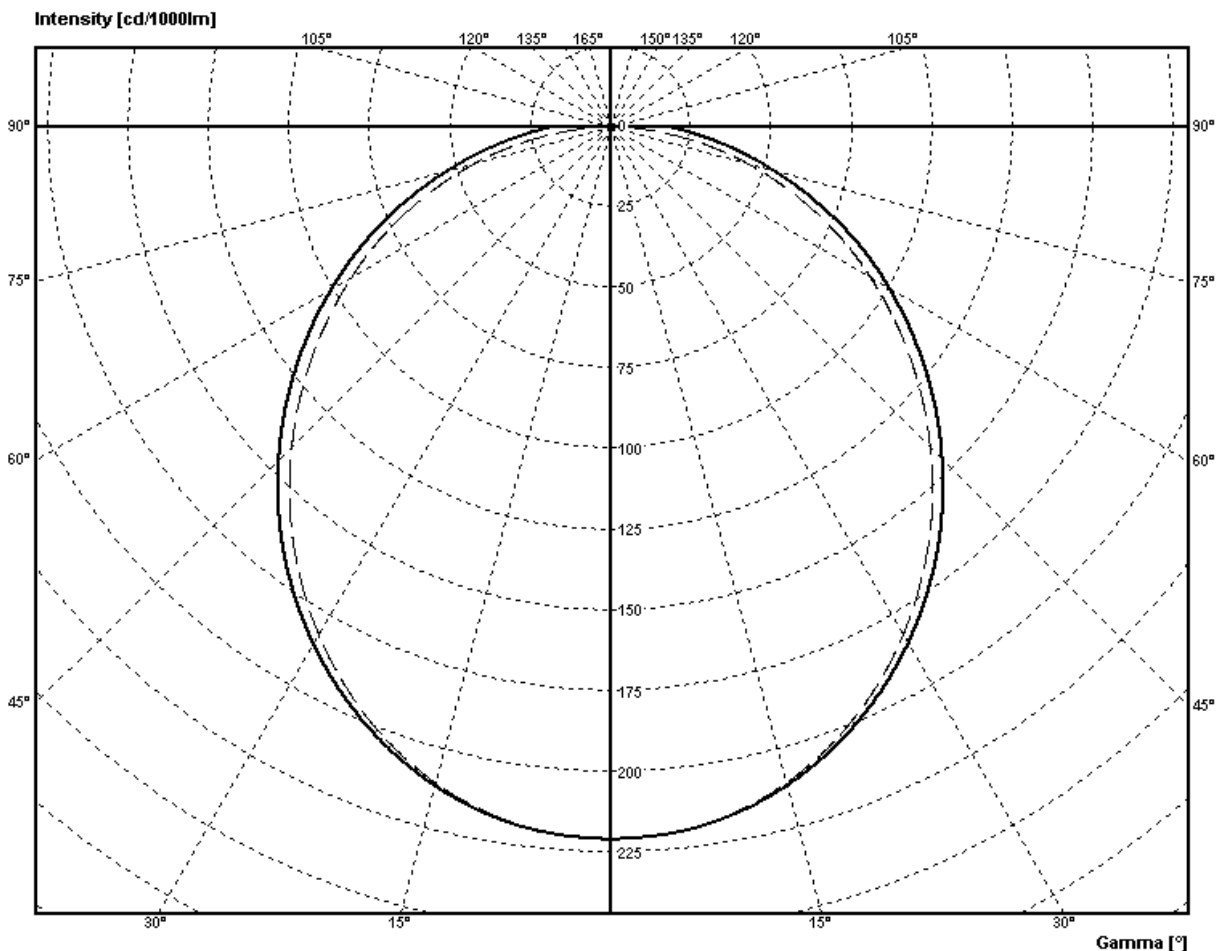
| | | | | | | | | | | |
|------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| C-planes: | 0,0° | 15,0° | 30,0° | 45,0° | 60,0° | 75,0° | 90,0° | 105,0° | 120,0° | 135,0° |
| | 150,0° | 165,0° | 180,0° | 195,0° | 210,0° | 225,0° | 240,0° | 255,0° | 270,0° | 285,0° |
| | 300,0° | 315,0° | 330,0° | 345,0° | | | | | | |

| | | | | | | | | | | |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Gamma: | 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° | |

PHOTOMETRIC RESULTS

| | | | |
|------------|--|---------------|-----------------|
| Name: | REBA 50 /E EXT LINE L1964 MID+INT SYM BFLEX 830 HO | | |
| Number: | 90506+90499L007 | Diameter: | 0 mm |
| Report: | 24-01-2020 | Length: | 1964 mm |
| Meas.-no.: | 01 | Width: | 62 mm |
| Lamp type: | LED 830 - 01 | Height: | 72 mm |
| Number: | 1 | Power: | 50,77 W |
| Lamp flux: | 7560,00 lm | Operator: | INDELAGUE GROUP |
| Date: | 24-01-2020 14:11:52 | Output ratio: | 64,1 % |

Polar diagram REBA 50 /E EXT LINE L1964 MID+INT SYM BFLEX 830 HO / Direct in
15° C / 5° G



PHOTOMETRIC RESULTS

| | | | |
|-------------------|---|----------------------|------------------|
| Name: | REBA 50 /E EXT LINE L1964 MID+INT SYM BFLEX 830 HO | | |
| Number: | 90506+90499L007 | Diameter: | 0 mm |
| Report: | 24-01-2020 | Length: | 1964 mm |
| Meas.-no.: | 01 | Width: | 62 mm |
| Lamp type: | LED 830 - 01 | Height: | 72 mm |
| Number: | 1 | Power: | 50,77 W |
| Lamp flux: | 7560,00 lm | Operator: | INDEL AGUE GROUP |
| Date: | 24-01-2020 14:11:52 | Output ratio: | 64,1 % |

UGR Unified Glare Ratios

| | | | | | | | | | | | |
|---------------------------------|------------|------------------|------------|------------|------------|------------|----------------|------------|------------|------------|------------|
| Ceiling reflectance | | 0,7 | 0,7 | 0,5 | 0,5 | 0,3 | 0,7 | 0,7 | 0,5 | 0,5 | 0,3 |
| Wall reflectance | | 0,5 | 0,3 | 0,5 | 0,3 | 0,3 | 0,5 | 0,3 | 0,5 | 0,3 | 0,3 |
| Floor cavity reflectance | | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 | 0,2 |
| Room dimension | | Viewed crosswise | | | | | Viewed endwise | | | | |
| 2H | 2H | 18,3 | 19,9 | 18,6 | 20,3 | 20,6 | 20,1 | 21,8 | 20,4 | 22,1 | 22,4 |
| 2H | 3H | 19,5 | 21,0 | 19,9 | 21,4 | 21,7 | 21,7 | 23,2 | 22,1 | 23,6 | 23,9 |
| 2H | 4H | 20,0 | 21,4 | 20,4 | 21,8 | 22,1 | 22,4 | 23,8 | 22,8 | 24,2 | 24,5 |
| 2H | 6H | 20,4 | 21,7 | 20,8 | 22,1 | 22,5 | 22,9 | 24,3 | 23,3 | 24,6 | 25,0 |
| 2H | 8H | 20,5 | 21,8 | 20,9 | 22,2 | 22,6 | 23,1 | 24,4 | 23,5 | 24,7 | 25,1 |
| 2H | 12H | 20,6 | 21,8 | 21,0 | 22,2 | 22,6 | 23,1 | 24,4 | 23,6 | 24,8 | 25,2 |
| 4H | 2H | 19,0 | 20,4 | 19,4 | 20,8 | 21,1 | 20,4 | 21,9 | 20,8 | 22,2 | 22,6 |
| 4H | 3H | 20,4 | 21,6 | 20,8 | 22,0 | 22,4 | 22,2 | 23,4 | 22,6 | 23,8 | 24,2 |
| 4H | 4H | 21,0 | 22,1 | 21,4 | 22,5 | 23,0 | 23,0 | 24,1 | 23,4 | 24,5 | 24,9 |
| 4H | 6H | 21,5 | 22,4 | 21,9 | 22,9 | 23,3 | 23,6 | 24,6 | 24,0 | 25,0 | 25,4 |
| 4H | 8H | 21,6 | 22,6 | 22,1 | 23,0 | 23,5 | 23,8 | 24,7 | 24,2 | 25,1 | 25,6 |
| 4H | 12H | 21,8 | 22,7 | 22,3 | 23,1 | 23,6 | 23,9 | 24,8 | 24,4 | 25,2 | 25,7 |
| 8H | 4H | 21,3 | 22,2 | 21,7 | 22,6 | 23,1 | 23,1 | 24,0 | 23,5 | 24,5 | 24,9 |
| 8H | 6H | 21,8 | 22,6 | 22,3 | 23,1 | 23,6 | 23,7 | 24,5 | 24,2 | 25,0 | 25,5 |
| 8H | 8H | 22,1 | 22,8 | 22,7 | 23,3 | 23,8 | 24,0 | 24,7 | 24,6 | 25,2 | 25,7 |
| 8H | 12H | 22,4 | 22,9 | 22,9 | 23,5 | 24,0 | 24,2 | 24,8 | 24,7 | 25,3 | 25,8 |
| 12H | 4H | 21,3 | 22,2 | 21,8 | 22,6 | 23,1 | 23,1 | 24,0 | 23,6 | 24,4 | 24,9 |
| 12H | 6H | 22,0 | 22,6 | 22,5 | 23,1 | 23,6 | 23,8 | 24,5 | 24,3 | 25,0 | 25,5 |
| 12H | 8H | 22,2 | 22,8 | 22,8 | 23,3 | 23,8 | 24,1 | 24,7 | 24,6 | 25,2 | 25,7 |

UGR values are corrected for lamp flux of 7560 lm by 7,0

PHOTOMETRIC RESULTS

| | | | |
|-------------------|---|----------------------|------------------|
| Name: | REBA 50 /E EXT LINE L1964 MID+INT SYM BFLEX 830 HO | | |
| Number: | 90506+90499L007 | Diameter: | 0 mm |
| Report: | 24-01-2020 | Length: | 1964 mm |
| Meas.-no.: | 01 | Width: | 62 mm |
| Lamp type: | LED 830 - 01 | Height: | 72 mm |
| Number: | 1 | Power: | 50,77 W |
| Lamp flux: | 7560,00 lm | Operator: | INDEL AGUE GROUP |
| Date: | 24-01-2020 14:11:52 | Output ratio: | 64,1 % |

Luminance [cd/m²] REBA 50 /E EXT LINE L1964 MID+INT SYM BFLEX 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 | 6715,09 | 6818,08 | 7192,70 | 7946,21 | 9237,07 | 11548,9 | 15984,4 | 11548,9 | 9237,07 |
| 50,00 | 5943,24 | 6039,55 | 6391,32 | 7082,35 | 8364,59 | 10682,2 | 15553,5 | 10682,2 | 8364,59 |
| 55,00 | 5201,33 | 5293,15 | 5610,77 | 6275,58 | 7462,76 | 9804,79 | 15084,4 | 9804,79 | 7462,76 |
| 60,00 | 4500,90 | 4574,38 | 4862,74 | 5456,04 | 6581,78 | 8843,75 | 14597,8 | 8843,75 | 6581,78 |
| 65,00 | 3814,97 | 3876,00 | 4126,19 | 4649,40 | 5671,97 | 7819,22 | 14053,7 | 7819,22 | 5671,97 |
| 70,00 | 3131,34 | 3181,98 | 3398,15 | 3843,59 | 4732,92 | 6702,52 | 13290,4 | 6702,52 | 4732,92 |
| 75,00 | 2475,03 | 2508,54 | 2667,56 | 3003,44 | 3722,12 | 5432,37 | 12396,3 | 5432,37 | 3722,12 |
| 80,00 | 1866,88 | 1882,54 | 1974,95 | 2175,61 | 2653,22 | 3931,30 | 10828,3 | 3931,30 | 2653,22 |
| 85,00 | 1320,80 | 1320,30 | 1355,48 | 1417,36 | 1617,23 | 2228,85 | 7561,89 | 2228,85 | 1617,23 |

| G/C [cd/ | 135,00 | 150,00 | 165,00 | 180,00 | 195,00 | 210,00 | 225,00 | 240,00 | 255,00 |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 45,00 | 7946,21 | 7192,70 | 6818,08 | 6715,09 | 6818,08 | 7192,70 | 7946,21 | 9237,07 | 11548,9 |
| 50,00 | 7082,35 | 6391,32 | 6039,55 | 5943,24 | 6039,55 | 6391,32 | 7082,35 | 8364,59 | 10682,2 |
| 55,00 | 6275,58 | 5610,77 | 5293,15 | 5201,33 | 5293,15 | 5610,77 | 6275,58 | 7462,76 | 9804,79 |
| 60,00 | 5456,04 | 4862,74 | 4574,38 | 4500,90 | 4574,38 | 4862,74 | 5456,04 | 6581,78 | 8843,75 |
| 65,00 | 4649,40 | 4126,19 | 3876,00 | 3814,97 | 3876,00 | 4126,19 | 4649,40 | 5671,97 | 7819,22 |
| 70,00 | 3843,59 | 3398,15 | 3181,98 | 3131,34 | 3181,98 | 3398,15 | 3843,59 | 4732,92 | 6702,52 |
| 75,00 | 3003,44 | 2667,56 | 2508,54 | 2475,03 | 2508,54 | 2667,56 | 3003,44 | 3722,12 | 5432,37 |
| 80,00 | 2175,61 | 1974,95 | 1882,54 | 1866,88 | 1882,54 | 1974,95 | 2175,61 | 2653,22 | 3931,30 |
| 85,00 | 1417,36 | 1355,48 | 1320,30 | 1320,80 | 1320,30 | 1355,48 | 1417,36 | 1617,23 | 2228,85 |

| G/C [cd/ | 270,00 | 285,00 | 300,00 | 315,00 | 330,00 | 345,00 |
|----------|---------|---------|---------|---------|---------|---------|
| 45,00 | 15984,4 | 11548,9 | 9237,07 | 7946,21 | 7192,70 | 6818,08 |
| 50,00 | 15553,5 | 10682,2 | 8364,59 | 7082,35 | 6391,32 | 6039,55 |
| 55,00 | 15084,4 | 9804,79 | 7462,76 | 6275,58 | 5610,77 | 5293,15 |
| 60,00 | 14597,8 | 8843,75 | 6581,78 | 5456,04 | 4862,74 | 4574,38 |
| 65,00 | 14053,7 | 7819,22 | 5671,97 | 4649,40 | 4126,19 | 3876,00 |
| 70,00 | 13290,4 | 6702,52 | 4732,92 | 3843,59 | 3398,15 | 3181,98 |
| 75,00 | 12396,3 | 5432,37 | 3722,12 | 3003,44 | 2667,56 | 2508,54 |
| 80,00 | 10828,3 | 3931,30 | 2653,22 | 2175,61 | 1974,95 | 1882,54 |
| 85,00 | 7561,89 | 2228,85 | 1617,23 | 1417,36 | 1355,48 | 1320,30 |

HEADQUARTERS

INDÚSTRIA ELÉTRICA DE ÁGUEDA S.A.

Rua da Mina 465 | Covão | Zona industrial EN1 Norte

3750-792 Trofa ÁGUEDA | PORTUGAL

www.indelague.com | www.roxolighting.com

indelague@indelague.pt | roxo.london@roxolighting.com

Tel. (+351) 234 612 310

Fax (+351) 234 624 058