

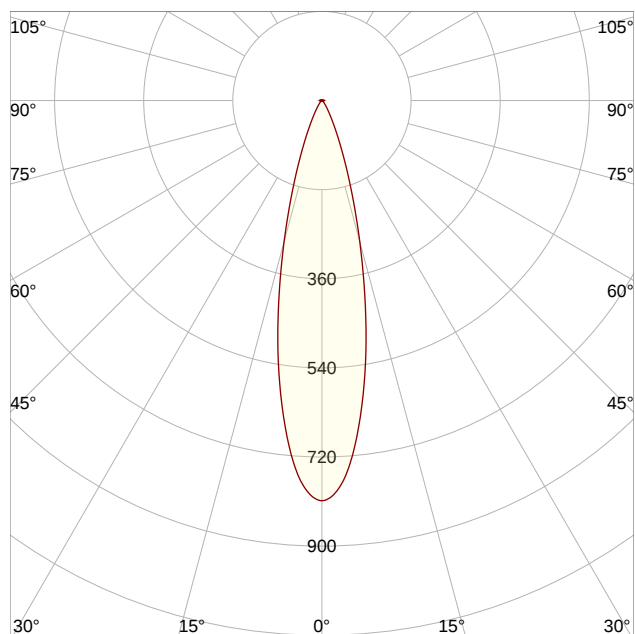
# LM-79

## Test Report

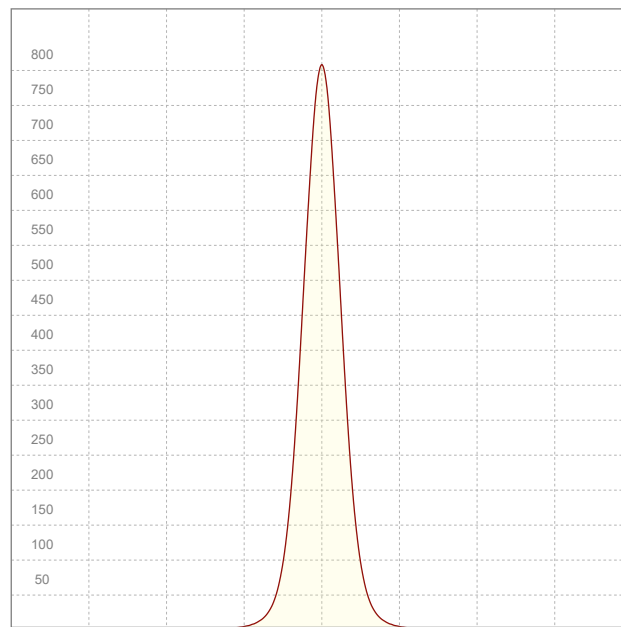
### LM79-TOPAZ-COLOURFLOW-RGB4-MEDIUM [RED]

#### General Discription

|                   |                    |
|-------------------|--------------------|
| Item number       | T-C-XCX-1C-N470-M  |
| Date and time     | 8-12-2025 14:05:09 |
| CCT (Kelvin)      | 0 K                |
| Beam angle        | 24,8°              |
| Luminous flux     | 192 lm             |
| Efficiency        | 18 lm/watt         |
| Weighted energy   | 10,8 kWh/1000h     |
| Power factor      | 0,48               |
| CRI (RA)          | 0,0                |
| Fidelity index Rf | Rf 0,0             |
| Gammut index Rg   | Rg 0,0             |
| Peak              | 807 cd             |



*Polar curve*



*Linear distribution diagram*



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# LM-79

## Test Report

### LM79-TOPAZ-COLOURFLOW-RGB4-MEDIUM [RED]

| Beam details | 1m     | 2m     | 3m    | 4m    | 5m    |
|--------------|--------|--------|-------|-------|-------|
| <b>Lux*</b>  | 807 lx | 202 lx | 90 lx | 50 lx | 32 lx |

24,8°

\*measured at center of beam

|                           |          |          |         |         |         |
|---------------------------|----------|----------|---------|---------|---------|
| <b>Footcandles*</b>       | 75,0 fcd | 18,8 fcd | 8,3 fcd | 4,7 fcd | 3,0 fcd |
| <b>Beam width (meter)</b> | 0,4 m    | 0,9 m    | 1,3 m   | 1,8 m   | 2,2 m   |
| <b>Beam width (Feet)</b>  | 1,4 ft   | 2,9 ft   | 4,3 ft  | 5,8 ft  | 7,2 ft  |

| Beam intensities |         |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |        |
|------------------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1m               | 2m      | 3m     | 4m     | 5m     | 6m     | 7m     | 8m     | 9m     | 10m    | 11m    | 12m    | 13m    | 14m    | 15m    | 16m    | 17m    | 18m    | 19m    | 20m    |
| 807lx            | 202lx   | 90lx   | 50lx   | 32lx   | 22lx   | 16lx   | 13lx   | 10lx   | 8lx    | 7lx    | 6lx    | 5lx    | 4lx    | 4lx    | 3lx    | 3lx    | 2lx    | 2lx    | 2lx    |
| 3,3ft            | 6,6ft   | 9,8ft  | 13,1ft | 16,4ft | 19,7ft | 23ft   | 26,2ft | 29,5ft | 32,8ft | 36,1ft | 39,4ft | 42,7ft | 45,9ft | 49,2ft | 52,5ft | 55,8ft | 59,1ft | 62,3ft | 65,6ft |
| 75fcd            | 18,8fcd | 8,3fcd | 4,7fcd | 3fcd   | 2,1fcd | 1,5fcd | 1,2fcd | 0,9fcd | 0,8fcd | 0,6fcd | 0,5fcd | 0,4fcd | 0,4fcd | 0,3fcd | 0,3fcd | 0,3fcd | 0,2fcd | 0,2fcd | 0,2fcd |

| Intensities in 0° c-plane |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0°                        | 2°  | 4°  | 6°  | 8°  | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
| 807                       | 791 | 748 | 679 | 598 | 512 | 421 | 335 | 259 | 195 | 144 | 104 | 76  | 55  | 40  | 30  | 22  | 17  | 13  | 10  |
| 100%                      | 98% | 93% | 84% | 74% | 63% | 52% | 42% | 32% | 24% | 18% | 13% | 9%  | 7%  | 5%  | 4%  | 3%  | 2%  | 2%  | 1%  |

| Intensities in 90° c-plane |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0°                         | 2°  | 4°  | 6°  | 8°  | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
| 807                        | 791 | 748 | 679 | 598 | 512 | 421 | 335 | 259 | 195 | 144 | 104 | 76  | 55  | 40  | 30  | 22  | 17  | 13  | 10  |
| 100%                       | 98% | 93% | 84% | 74% | 63% | 52% | 42% | 32% | 24% | 18% | 13% | 9%  | 7%  | 5%  | 4%  | 3%  | 2%  | 2%  | 1%  |

| Intensities in 180° c-plane |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0°                          | 2°  | 4°  | 6°  | 8°  | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
| 807                         | 791 | 748 | 679 | 598 | 512 | 421 | 335 | 259 | 195 | 144 | 104 | 76  | 55  | 40  | 30  | 22  | 17  | 13  | 10  |
| 100%                        | 98% | 93% | 84% | 74% | 63% | 52% | 42% | 32% | 24% | 18% | 13% | 9%  | 7%  | 5%  | 4%  | 3%  | 2%  | 2%  | 1%  |

| Intensities in 270° c-plane |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |
|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 0°                          | 2°  | 4°  | 6°  | 8°  | 10° | 12° | 14° | 16° | 18° | 20° | 22° | 24° | 26° | 28° | 30° | 32° | 34° | 36° | 38° |
| 807                         | 791 | 748 | 679 | 598 | 512 | 421 | 335 | 259 | 195 | 144 | 104 | 76  | 55  | 40  | 30  | 22  | 17  | 13  | 10  |
| 100%                        | 98% | 93% | 84% | 74% | 63% | 52% | 42% | 32% | 24% | 18% | 13% | 9%  | 7%  | 5%  | 4%  | 3%  | 2%  | 2%  | 1%  |

|                       |                        |                          |                                     |                                    |
|-----------------------|------------------------|--------------------------|-------------------------------------|------------------------------------|
| <b>Beam angle 50%</b> | <b>Field angle 10%</b> | <b>Cutoff angle 2,5%</b> | <b>Intensity ratio in 120° cone</b> | <b>Intensity ratio in 90° cone</b> |
| 24,8°                 | 47,2°                  | 65,3°                    | 99,0%                               | 97,1%                              |



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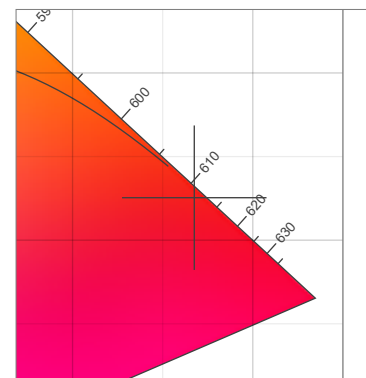
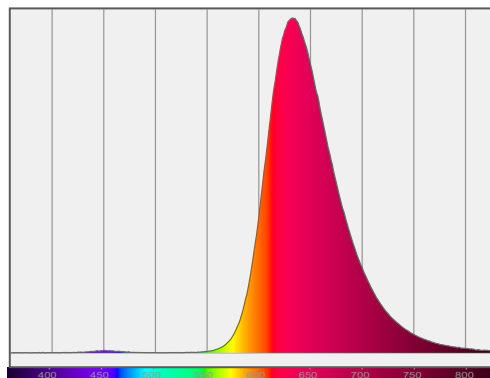
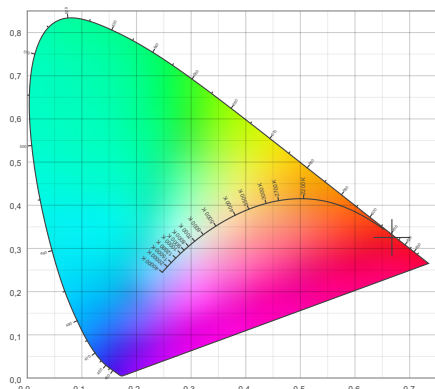
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## LM-79

## Test Report

## LM79-TOPAZ-COLOURFLOW-RGB4-MEDIUM [RED]

## Color details



CIE 1931

x: 0,668

0 K

y: 0,325

Spectra

CIE 1931 ZOOM

 $\Delta uv$ : n/a

CRI: 0,0 (R1-R8)

CRI values, R1-R8 are used to calculate final CRI value

|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
| R1 | R2 | R3 | R4 | R5 | R6 | R7 | R8 | R9 | R10 | R11 | R12 | R13 | R14 | R15 |

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| R1  | R2  | R3  | R4  | R5  | R6  | R7  | R8  |
| 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| R9  | R10 | R11 | R12 | R13 | R14 | R15 |     |
| 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |     |

CQS: 0,0

CQS values

|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| Q1  | Q2  | Q3  | Q4  | Q5  | Q6  | Q7  | Q8  |
| 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| Q9  | Q10 | Q11 | Q12 | Q13 | Q14 | Q15 |     |
| 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |     |

TM30: 0,0

TM30 values, 16 binned values out of total of 99 values

|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
|    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |
| C1 | C2 | C3 | C4 | C5 | C6 | C7 | C8 | C9 | C10 | C11 | C12 | C13 | C14 | C15 |

|     |     |     |     |     |     |     |     |
|-----|-----|-----|-----|-----|-----|-----|-----|
| C1  | C2  | C3  | C4  | C5  | C6  | C7  | C8  |
| 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |
| C9  | C10 | C11 | C12 | C13 | C14 | C15 |     |
| 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 | 0,0 |     |

## Color parameters

|                   |                       |               |                |             |                     |                           |                           |                  |                  |                                 |
|-------------------|-----------------------|---------------|----------------|-------------|---------------------|---------------------------|---------------------------|------------------|------------------|---------------------------------|
| Color temperature | Color rendering index | Red component | Color fidelity | Color gamut | Color quality scale | Color coordinate cie 1931 | Color coordinate cie 1931 | Color coordinate | Color coordinate | Color deviation from black body |
| CCT               | CRI                   | CRI R9        | TM30 Rf        | TM30 Rg     | CQS                 | x                         | y                         | u                | v                | $\Delta uv$                     |
| 0 K               | 0,0                   | 0,0           | 0,0            | 0,0         | 0,0                 | 0,668                     | 0,325                     | 0,479            | 0,351            | n/a                             |



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## LM-79

## Test Report

## LM79-TOPAZ-COLOURFLOW-RGB4-MEDIUM [RED]

## TM30 details

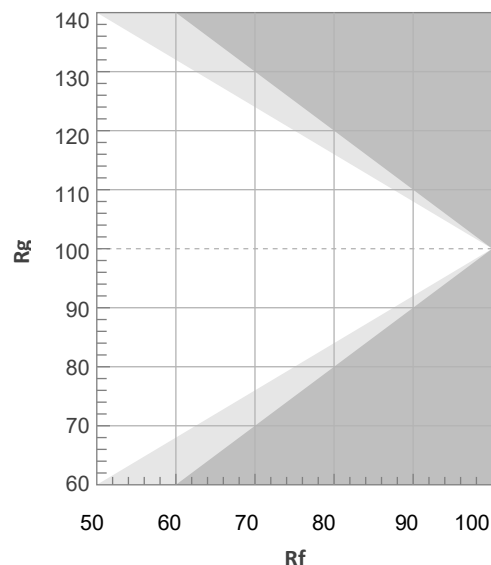
Rf 0,0

Fidelity index Rf

Rg 0,0

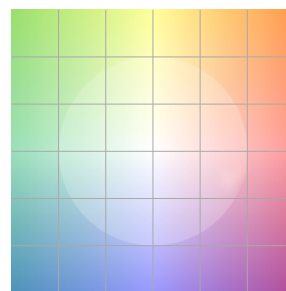
Gammut index Rg

| Hue Bin | R <sub>f</sub> | Graphic shifts (%) |     |
|---------|----------------|--------------------|-----|
|         |                | Chroma             | Hue |
| 1       | 0              | 0%                 | 0%  |
| 2       | 0              | 0%                 | 0%  |
| 3       | 0              | 0%                 | 0%  |
| 4       | 0              | 0%                 | 0%  |
| 5       | 0              | 0%                 | 0%  |
| 6       | 0              | 0%                 | 0%  |
| 7       | 0              | 0%                 | 0%  |
| 8       | 0              | 0%                 | 0%  |
| 9       | 0              | 0%                 | 0%  |
| 10      | 0              | 0%                 | 0%  |
| 11      | 0              | 0%                 | 0%  |
| 12      | 0              | 0%                 | 0%  |
| 13      | 0              | 0%                 | 0%  |
| 14      | 0              | 0%                 | 0%  |
| 15      | 0              | 0%                 | 0%  |
| 16      | 0              | 0%                 | 0%  |



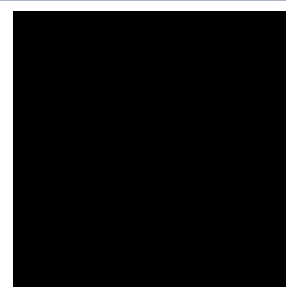
## Hue binH

## Color vector graphics

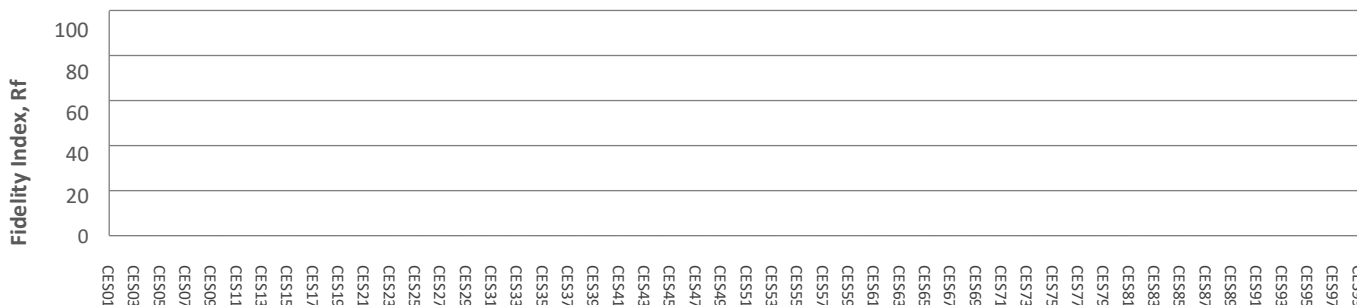


## Hue bin

## Color distortion graphics



## Color Evaluation Sample



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# LM-79

## Test Report

### LM79-TOPAZ-COLOURFLOW-RGB4-MEDIUM [RED]

#### Glare Evaluation According to UGR

|                                                                 |     |                                                |     |     |     |     |                                         |     |     |     |     |
|-----------------------------------------------------------------|-----|------------------------------------------------|-----|-----|-----|-----|-----------------------------------------|-----|-----|-----|-----|
| p Ceiling                                                       |     | 70                                             | 70  | 50  | 50  | 30  | 70                                      | 70  | 50  | 50  | 30  |
| p Walls                                                         |     | 50                                             | 30  | 50  | 30  | 30  | 50                                      | 30  | 50  | 30  | 30  |
| p Floor                                                         |     | 20                                             | 20  | 20  | 20  | 20  | 20                                      | 20  | 20  | 20  | 20  |
| Room size<br>X      Y                                           |     | Viewing direction at right angles to lamp axis |     |     |     |     | Viewing direction parallel to lamp axis |     |     |     |     |
| 2H                                                              | 2H  | 3,8                                            | 4,2 | 3,8 | 4,4 | 4,6 | 3,8                                     | 4,2 | 3,8 | 4,4 | 4,6 |
|                                                                 | 3H  | 3,6                                            | 4,2 | 4,0 | 4,4 | 4,6 | 3,6                                     | 4,2 | 4,0 | 4,4 | 4,6 |
|                                                                 | 4H  | 3,7                                            | 4,3 | 4,1 | 4,5 | 4,7 | 3,7                                     | 4,3 | 4,1 | 4,5 | 4,7 |
|                                                                 | 6H  | 3,8                                            | 4,2 | 4,0 | 4,5 | 4,9 | 3,8                                     | 4,2 | 4,0 | 4,5 | 4,9 |
|                                                                 | 8H  | 3,7                                            | 4,2 | 4,1 | 4,5 | 4,9 | 3,7                                     | 4,2 | 4,1 | 4,5 | 4,9 |
|                                                                 | 12H | 3,7                                            | 4,2 | 4,1 | 4,5 | 4,9 | 3,7                                     | 4,2 | 4,1 | 4,5 | 4,9 |
| 4H                                                              | 2H  | 3,5                                            | 4,1 | 3,9 | 4,3 | 4,5 | 3,5                                     | 4,1 | 3,9 | 4,3 | 4,5 |
|                                                                 | 3H  | 3,7                                            | 4,1 | 4,0 | 4,5 | 4,9 | 3,7                                     | 4,1 | 4,0 | 4,5 | 4,9 |
|                                                                 | 4H  | 3,7                                            | 4,1 | 4,1 | 4,5 | 5,0 | 3,7                                     | 4,1 | 4,1 | 4,5 | 5,0 |
|                                                                 | 6H  | 3,7                                            | 4,2 | 4,2 | 4,5 | 4,9 | 3,7                                     | 4,2 | 4,2 | 4,5 | 4,9 |
|                                                                 | 8H  | 3,7                                            | 4,2 | 4,3 | 4,5 | 4,9 | 3,7                                     | 4,2 | 4,3 | 4,5 | 4,9 |
|                                                                 | 12H | 3,7                                            | 4,1 | 4,2 | 4,5 | 4,9 | 3,7                                     | 4,1 | 4,2 | 4,5 | 4,9 |
| 8H                                                              | 4H  | 3,6                                            | 4,1 | 4,1 | 4,4 | 4,8 | 3,6                                     | 4,1 | 4,1 | 4,4 | 4,8 |
|                                                                 | 6H  | 3,8                                            | 4,0 | 4,3 | 4,5 | 5,0 | 3,8                                     | 4,0 | 4,3 | 4,5 | 5,0 |
|                                                                 | 8H  | 3,8                                            | 4,0 | 4,3 | 4,6 | 5,2 | 3,8                                     | 4,0 | 4,3 | 4,6 | 5,2 |
|                                                                 | 12H | 3,8                                            | 4,0 | 4,4 | 4,5 | 5,1 | 3,8                                     | 4,0 | 4,4 | 4,5 | 5,1 |
| 12H                                                             | 4H  | 3,6                                            | 3,9 | 4,1 | 4,3 | 4,8 | 3,6                                     | 3,9 | 4,1 | 4,3 | 4,8 |
|                                                                 | 6H  | 3,8                                            | 4,0 | 4,3 | 4,5 | 5,1 | 3,8                                     | 4,0 | 4,3 | 4,5 | 5,1 |
|                                                                 | 8H  | 3,8                                            | 4,0 | 4,4 | 4,5 | 5,1 | 3,8                                     | 4,0 | 4,4 | 4,5 | 5,1 |
| Variation of the observer position for the luminaire distance S |     |                                                |     |     |     |     |                                         |     |     |     |     |
| S = 1.0H                                                        |     | 3,6 / -3,0                                     |     |     |     |     | 3,6 / -3,0                              |     |     |     |     |
| S = 1.5H                                                        |     | 6,0 / -3,9                                     |     |     |     |     | 6,0 / -3,9                              |     |     |     |     |
| S = 2.0H                                                        |     | 7,8 / -4,5                                     |     |     |     |     | 7,8 / -4,5                              |     |     |     |     |
| Standard table                                                  |     | n/a                                            |     |     |     |     | n/a                                     |     |     |     |     |
| Correction summand                                              |     | n/a                                            |     |     |     |     | n/a                                     |     |     |     |     |
| Corrected glare indices referring to 192lm total luminous flux  |     |                                                |     |     |     |     |                                         |     |     |     |     |



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