

filename : JUPITER.LDT
 meas. number : 2698
 luminaire number : JUPITER WALL LUMINAIRE
 date / operator : 14-08-2018

default lamp type(s)

| no of lamps | lamp type | mains luminaire lumens | mains input wattage |
|-------------|------------|--------------------------------|---------------------|
| 1 | LED MODULE | 735 lm | 14.8 W |
| | | 3hr emergency luminaire lumens | |
| | | 225 lm | |

dimensions

| luminaire | | luminous area | |
|-----------|----------|---------------|----------|
| length | : 176 mm | length | : 130 mm |
| width | : 80 mm | width | : 35 mm |
| height | : 320 mm | height | : 270 mm |

coordinate system

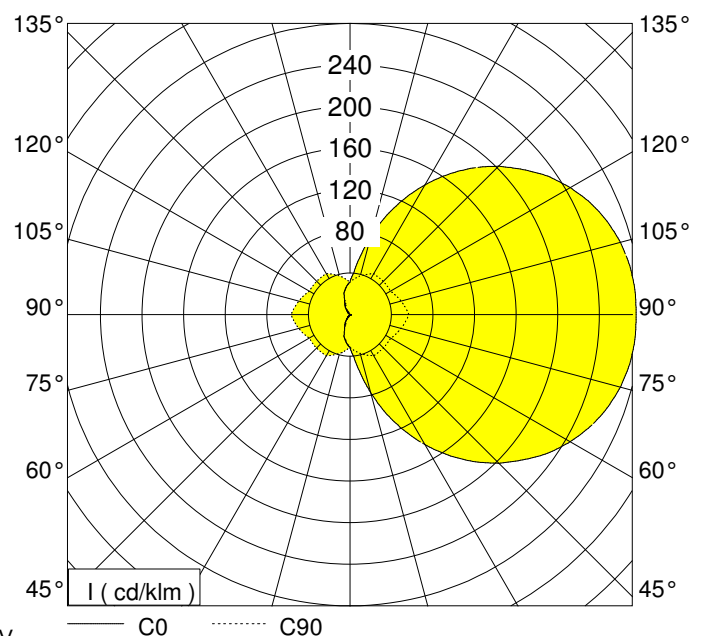
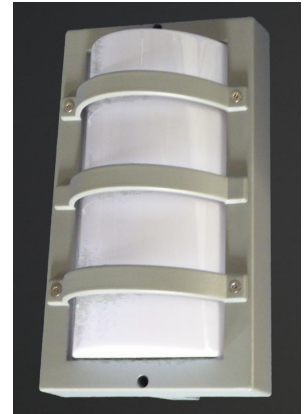
| | | | |
|---------------|--------------|-------------------|-----------|
| no of planes | : 24 | samples / plane | : 37 |
| first c-plane | : 0.0 ° | first gamma-angle | : 0.0 ° |
| step angle | : 15.0 ° | step angle | : 5.0 ° |
| last c-plane | : 345.0 ° | last gamma-angle | : 180.0 ° |
| symmetrics | : asymmetric | | |

performance

| | |
|--------------------|-----------|
| light output ratio | : 100.0 % |
| DFF | : 50.0 % |
| UFF | : 50.0 % |

classification

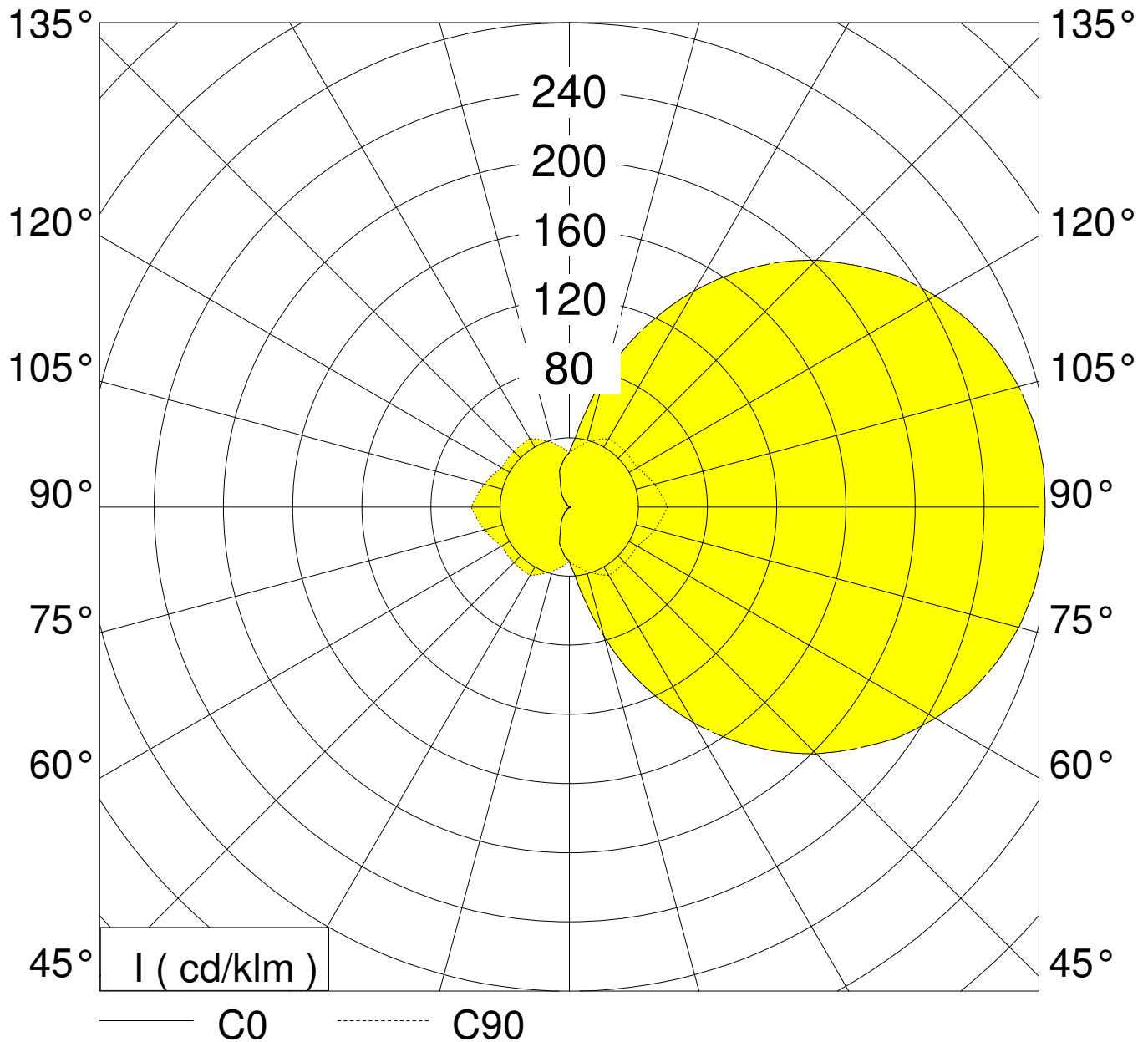
| | |
|-------------------------|---|
| LITG / DIN | : C11 |
| UTE | : 0.50J+0.50T |
| CIE | : 18 43 70 50 100 |
| BZ | : 10 9 10 10 10 10 10 10 |
| Ambient Temperature | : 25 degC |
| Input Voltage | : 240 V |
| Circuit Watts | : 14.8W |
| Amps (running) | : 0.075A |
| V.A. | : 18.02VA |
| Power Factor | : 0.81 |
| CCT | : 3923K (measured): 4000K (declared) |
| CRI (Ra) | : 90 |
| S/P Ratio | : 1.8 |
| Mains Luminaire Lumens: | 735 LLm : EM 3hr - 225 LLm |
| Output Current DC | : 350mA |
| Output Voltage DC | : 28.6V |
| Output Power | : 10.01W |
| Luminaire Lm/circ.Watt | : 50 LLm/circ.Watt |
| Driver Efficiency | : 68% |
| Driver Details | : TRIDONIC LC25 350-600mA FLEXC SC ADV 87500677 |



Measurements made are in absolute units. The luminaire is treated as if it was a lamp as it is not possible to measure each LED separately - hence an LOR of 100%

The Light output ratio in real terms would be less than 100%. If it was possible to compare real LED lumens with the total output from the luminaire we could obtain an actual LOR

This also means that the total lumens emitted from the LED's would be greater than the Luminaire Lumens measured. In reality the LED lumens would approximate to this value divided by the actual Light Output.



| | C 0.0 | C 15.0 | C 30.0 | C 45.0 | C 60.0 | C 75.0 | C 90.0 | C 105.0 |
|--------|----------|--------|--------|--------|--------|--------|--------|---------|
| 0.0° | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 |
| 5.0° | 40.00 | 40.40 | 40.20 | 39.40 | 37.90 | 36.00 | 33.70 | 32.60 |
| 10.0° | 56.20 | 56.50 | 54.60 | 50.70 | 45.00 | 40.90 | 36.10 | 33.20 |
| 15.0° | 77.20 | 76.60 | 72.10 | 64.20 | 55.30 | 46.10 | 38.50 | 33.10 |
| 20.0° | 100.40 | 98.40 | 90.90 | 79.10 | 65.20 | 51.60 | 40.80 | 32.40 |
| 25.0° | 122.30 | 119.40 | 109.50 | 94.10 | 76.00 | 58.20 | 43.20 | 31.20 |
| 30.0° | 144.20 | 140.00 | 127.30 | 108.40 | 86.00 | 64.40 | 45.60 | 29.70 |
| 35.0° | 164.70 | 159.60 | 144.60 | 121.90 | 95.10 | 68.30 | 45.50 | 27.20 |
| 40.0° | 184.10 | 177.80 | 160.70 | 134.40 | 102.10 | 71.40 | 45.40 | 24.50 |
| 45.0° | 201.80 | 194.70 | 175.60 | 144.40 | 108.40 | 74.50 | 45.40 | 22.00 |
| 50.0° | 217.00 | 209.90 | 188.70 | 153.00 | 113.90 | 77.30 | 45.30 | 19.70 |
| 55.0° | 232.20 | 223.80 | 198.80 | 160.30 | 118.50 | 79.70 | 45.20 | 17.40 |
| 60.0° | 244.30 | 236.10 | 207.20 | 166.10 | 122.20 | 81.70 | 45.20 | 15.00 |
| 65.0° | 254.80 | 246.80 | 213.60 | 170.60 | 126.20 | 85.10 | 47.10 | 15.00 |
| 70.0° | 262.90 | 252.90 | 218.20 | 175.90 | 131.90 | 88.40 | 49.00 | 15.80 |
| 75.0° | 269.00 | 256.50 | 222.30 | 182.80 | 137.00 | 91.50 | 50.90 | 16.70 |
| 80.0° | 273.00 | 260.50 | 229.20 | 188.60 | 141.20 | 94.30 | 52.80 | 17.90 |
| 85.0° | 275.00 | 265.50 | 234.40 | 193.00 | 144.70 | 96.70 | 54.70 | 19.40 |
| 90.0° | 275.00 | 265.50 | 237.60 | 196.10 | 147.30 | 98.90 | 56.70 | 21.10 |
| 95.0° | 275.00 | 265.50 | 234.40 | 193.00 | 144.70 | 96.70 | 54.70 | 19.40 |
| 100.0° | 273.00 | 260.50 | 229.20 | 188.60 | 141.20 | 94.30 | 52.80 | 17.90 |
| 105.0° | 269.00 | 256.50 | 222.30 | 182.80 | 137.00 | 91.50 | 50.90 | 16.70 |
| 110.0° | 262.90 | 252.90 | 218.20 | 175.90 | 131.90 | 88.40 | 49.00 | 15.80 |
| 115.0° | 254.80 | 246.80 | 213.60 | 170.60 | 126.20 | 85.10 | 47.10 | 15.00 |
| 120.0° | 244.30 | 236.10 | 207.20 | 166.10 | 122.20 | 81.70 | 45.20 | 15.00 |
| 125.0° | 232.20 | 223.80 | 198.80 | 160.30 | 118.50 | 79.70 | 45.20 | 17.40 |
| 130.0° | 217.00 | 209.90 | 188.70 | 153.00 | 113.90 | 77.30 | 45.30 | 19.70 |
| 135.0° | 201.80 | 194.70 | 175.60 | 144.40 | 108.40 | 74.50 | 45.40 | 22.00 |
| 140.0° | 184.10 | 177.80 | 160.70 | 134.40 | 102.10 | 71.40 | 45.40 | 24.50 |
| 145.0° | 164.70 | 159.60 | 144.60 | 121.90 | 95.10 | 68.30 | 45.50 | 27.20 |
| 150.0° | 144.20 | 140.00 | 127.30 | 108.40 | 86.00 | 64.40 | 45.60 | 29.70 |
| 155.0° | 122.30 | 119.40 | 109.50 | 94.10 | 76.00 | 58.20 | 43.20 | 31.20 |
| 160.0° | 100.40 | 98.40 | 90.90 | 79.10 | 65.20 | 51.60 | 40.80 | 32.40 |
| 165.0° | 77.20 | 76.60 | 72.10 | 64.20 | 55.30 | 46.10 | 38.50 | 33.10 |
| 170.0° | 56.20 | 56.50 | 54.60 | 50.70 | 45.00 | 40.90 | 36.10 | 33.20 |
| 175.0° | 40.00 | 40.40 | 40.20 | 39.40 | 37.90 | 36.00 | 33.70 | 32.60 |
| 180.0° | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 |
| | cd / klm | | | | | | | |

| | C 120.0 | C 135.0 | C 150.0 | C 165.0 | C 180.0 | C 195.0 | C 210.0 | C 225.0 |
|--------|----------|---------|---------|---------|---------|---------|---------|---------|
| 0.0° | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 |
| 5.0° | 31.50 | 30.50 | 29.70 | 29.10 | 28.80 | 29.10 | 29.70 | 30.50 |
| 10.0° | 30.50 | 28.10 | 26.30 | 25.40 | 25.10 | 25.40 | 26.30 | 28.10 |
| 15.0° | 28.20 | 24.60 | 22.70 | 21.90 | 22.00 | 21.90 | 22.70 | 24.60 |
| 20.0° | 25.20 | 21.30 | 18.10 | 15.70 | 14.80 | 15.70 | 18.10 | 21.30 |
| 25.0° | 22.50 | 17.50 | 13.80 | 12.10 | 11.50 | 12.10 | 13.80 | 17.50 |
| 30.0° | 19.50 | 14.30 | 11.20 | 9.60 | 9.10 | 9.60 | 11.20 | 14.30 |
| 35.0° | 16.90 | 12.20 | 9.20 | 6.80 | 6.00 | 6.80 | 9.20 | 12.20 |
| 40.0° | 13.80 | 10.30 | 6.70 | 4.20 | 3.40 | 4.20 | 6.70 | 10.30 |
| 45.0° | 10.70 | 7.90 | 4.60 | 2.70 | 2.30 | 2.70 | 4.60 | 7.90 |
| 50.0° | 8.00 | 5.20 | 3.00 | 1.10 | 0.00 | 1.10 | 3.00 | 5.20 |
| 55.0° | 5.60 | 2.80 | 1.90 | 0.00 | 0.00 | 0.00 | 1.90 | 2.80 |
| 60.0° | 3.60 | 1.40 | 0.40 | 0.00 | 0.00 | 0.00 | 0.40 | 1.40 |
| 65.0° | 2.50 | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.40 |
| 70.0° | 2.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 75.0° | 2.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 80.0° | 2.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 85.0° | 2.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 90.0° | 2.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 95.0° | 2.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 100.0° | 2.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 105.0° | 2.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 110.0° | 2.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 115.0° | 2.50 | 0.40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.40 |
| 120.0° | 3.60 | 1.40 | 0.40 | 0.00 | 0.00 | 0.00 | 0.40 | 1.40 |
| 125.0° | 5.60 | 2.80 | 1.90 | 0.00 | 0.00 | 0.00 | 1.90 | 2.80 |
| 130.0° | 8.00 | 5.20 | 3.00 | 1.10 | 0.00 | 1.10 | 3.00 | 5.20 |
| 135.0° | 10.70 | 7.90 | 4.60 | 2.70 | 2.30 | 2.70 | 4.60 | 7.90 |
| 140.0° | 13.80 | 10.30 | 6.70 | 4.20 | 3.40 | 4.20 | 6.70 | 10.30 |
| 145.0° | 16.90 | 12.20 | 9.20 | 6.80 | 6.00 | 6.80 | 9.20 | 12.20 |
| 150.0° | 19.50 | 14.30 | 11.20 | 9.60 | 9.10 | 9.60 | 11.20 | 14.30 |
| 155.0° | 22.50 | 17.50 | 13.80 | 12.10 | 11.50 | 12.10 | 13.80 | 17.50 |
| 160.0° | 25.20 | 21.30 | 18.10 | 15.70 | 14.80 | 15.70 | 18.10 | 21.30 |
| 165.0° | 28.20 | 24.60 | 22.70 | 21.90 | 22.00 | 21.90 | 22.70 | 24.60 |
| 170.0° | 30.50 | 28.10 | 26.30 | 25.40 | 25.10 | 25.40 | 26.30 | 28.10 |
| 175.0° | 31.50 | 30.50 | 29.70 | 29.10 | 28.80 | 29.10 | 29.70 | 30.50 |
| 180.0° | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 |
| | cd / klm | | | | | | | |

| | C 240.0 | C 255.0 | C 270.0 | C 285.0 | C 300.0 | C 315.0 | C 330.0 | C 345.0 |
|--------|----------|---------|---------|---------|---------|---------|---------|---------|
| 0.0° | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 |
| 5.0° | 31.50 | 32.60 | 33.70 | 36.00 | 37.90 | 39.40 | 40.20 | 40.40 |
| 10.0° | 30.50 | 33.20 | 36.10 | 40.90 | 45.00 | 50.70 | 54.60 | 56.50 |
| 15.0° | 28.20 | 33.10 | 38.50 | 46.10 | 55.30 | 64.20 | 72.10 | 76.60 |
| 20.0° | 25.20 | 32.40 | 40.80 | 51.60 | 65.20 | 79.10 | 90.90 | 98.40 |
| 25.0° | 22.50 | 31.20 | 43.20 | 58.20 | 76.00 | 94.10 | 109.50 | 119.40 |
| 30.0° | 19.50 | 29.70 | 45.60 | 64.40 | 86.00 | 108.40 | 127.30 | 140.00 |
| 35.0° | 16.90 | 27.20 | 45.50 | 68.30 | 95.10 | 121.90 | 144.60 | 159.60 |
| 40.0° | 13.80 | 24.50 | 45.40 | 71.40 | 102.10 | 134.40 | 160.70 | 177.80 |
| 45.0° | 10.70 | 22.00 | 45.40 | 74.50 | 108.40 | 144.40 | 175.60 | 194.70 |
| 50.0° | 8.00 | 19.70 | 45.30 | 77.30 | 113.90 | 153.00 | 188.70 | 209.90 |
| 55.0° | 5.60 | 17.40 | 45.20 | 79.70 | 118.50 | 160.30 | 198.80 | 223.80 |
| 60.0° | 3.60 | 15.00 | 45.20 | 81.70 | 122.20 | 166.10 | 207.20 | 236.10 |
| 65.0° | 2.50 | 15.00 | 47.10 | 85.10 | 126.20 | 170.60 | 213.60 | 246.80 |
| 70.0° | 2.50 | 15.80 | 49.00 | 88.40 | 131.90 | 175.90 | 218.20 | 252.90 |
| 75.0° | 2.50 | 16.70 | 50.90 | 91.50 | 137.00 | 182.80 | 222.30 | 256.50 |
| 80.0° | 2.50 | 17.90 | 52.80 | 94.30 | 141.20 | 188.60 | 229.20 | 260.50 |
| 85.0° | 2.40 | 19.40 | 54.70 | 96.70 | 144.70 | 193.00 | 234.40 | 265.50 |
| 90.0° | 2.40 | 21.10 | 56.70 | 98.90 | 147.30 | 196.10 | 237.60 | 265.50 |
| 95.0° | 2.40 | 19.40 | 54.70 | 96.70 | 144.70 | 193.00 | 234.40 | 265.50 |
| 100.0° | 2.50 | 17.90 | 52.80 | 94.30 | 141.20 | 188.60 | 229.20 | 260.50 |
| 105.0° | 2.50 | 16.70 | 50.90 | 91.50 | 137.00 | 182.80 | 222.30 | 256.50 |
| 110.0° | 2.50 | 15.80 | 49.00 | 88.40 | 131.90 | 175.90 | 218.20 | 252.90 |
| 115.0° | 2.50 | 15.00 | 47.10 | 85.10 | 126.20 | 170.60 | 213.60 | 246.80 |
| 120.0° | 3.60 | 15.00 | 45.20 | 81.70 | 122.20 | 166.10 | 207.20 | 236.10 |
| 125.0° | 5.60 | 17.40 | 45.20 | 79.70 | 118.50 | 160.30 | 198.80 | 223.80 |
| 130.0° | 8.00 | 19.70 | 45.30 | 77.30 | 113.90 | 153.00 | 188.70 | 209.90 |
| 135.0° | 10.70 | 22.00 | 45.40 | 74.50 | 108.40 | 144.40 | 175.60 | 194.70 |
| 140.0° | 13.80 | 24.50 | 45.40 | 71.40 | 102.10 | 134.40 | 160.70 | 177.80 |
| 145.0° | 16.90 | 27.20 | 45.50 | 68.30 | 95.10 | 121.90 | 144.60 | 159.60 |
| 150.0° | 19.50 | 29.70 | 45.60 | 64.40 | 86.00 | 108.40 | 127.30 | 140.00 |
| 155.0° | 22.50 | 31.20 | 43.20 | 58.20 | 76.00 | 94.10 | 109.50 | 119.40 |
| 160.0° | 25.20 | 32.40 | 40.80 | 51.60 | 65.20 | 79.10 | 90.90 | 98.40 |
| 165.0° | 28.20 | 33.10 | 38.50 | 46.10 | 55.30 | 64.20 | 72.10 | 76.60 |
| 170.0° | 30.50 | 33.20 | 36.10 | 40.90 | 45.00 | 50.70 | 54.60 | 56.50 |
| 175.0° | 31.50 | 32.60 | 33.70 | 36.00 | 37.90 | 39.40 | 40.20 | 40.40 |
| 180.0° | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 | 31.30 |
| | cd / klm | | | | | | | |

| glare rating according to UGR | | | | | | | | | | | |
|---|------|---------------------------------|------|------|------|---------------------------------|----------------|------|------|------|------|
| ρ-ceiling | | 70 | 70 | 50 | 50 | 30 | 70 | 70 | 50 | 50 | 30 |
| ρ-walls | | 50 | 30 | 50 | 30 | 30 | 50 | 30 | 50 | 30 | 30 |
| ρ-workplane | | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 | 20 |
| room dimensions X Y | | viewed crosswise | | | | | viewed endwise | | | | |
| 2H | 2H | 18.4 | 19.5 | 19.3 | 20.4 | 21.6 | 12.0 | 13.2 | 12.9 | 14.1 | 15.2 |
| | 3H | 21.9 | 23.2 | 23.0 | 24.5 | 26.4 | 14.9 | 16.2 | 16.1 | 17.5 | 19.5 |
| | 4H | 23.3 | 24.6 | 24.5 | 25.9 | 28.0 | 16.2 | 17.4 | 17.4 | 18.8 | 20.9 |
| | 6H | 24.7 | 25.9 | 25.9 | 27.3 | 29.5 | 17.5 | 18.6 | 18.7 | 20.0 | 22.3 |
| | 8H | 25.4 | 26.6 | 26.7 | 28.0 | 30.3 | 18.2 | 19.3 | 19.4 | 20.8 | 23.1 |
| | 12H | 26.1 | 27.3 | 27.4 | 28.7 | 31.1 | 18.9 | 20.0 | 20.2 | 21.5 | 23.9 |
| 4H | 2H | 19.6 | 20.8 | 20.7 | 22.1 | 24.2 | 14.4 | 15.7 | 15.6 | 17.0 | 19.1 |
| | 3H | 22.7 | 23.8 | 24.0 | 25.3 | 27.7 | 16.8 | 18.0 | 18.1 | 19.4 | 21.8 |
| | 4H | 24.4 | 25.5 | 25.7 | 27.1 | 29.7 | 18.2 | 19.3 | 19.5 | 20.8 | 23.5 |
| | 6H | 25.8 | 26.8 | 27.2 | 28.3 | 30.8 | 19.3 | 20.2 | 20.6 | 21.7 | 24.2 |
| | 8H | 26.6 | 27.5 | 28.0 | 29.1 | 31.7 | 20.0 | 20.8 | 21.4 | 22.4 | 25.0 |
| | 12H | 27.5 | 28.4 | 29.0 | 30.0 | 33.0 | 20.7 | 21.6 | 22.2 | 23.2 | 26.3 |
| 8H | 4H | 24.5 | 25.4 | 25.9 | 27.0 | 29.6 | 19.1 | 20.0 | 20.5 | 21.6 | 24.2 |
| | 6H | 26.6 | 27.4 | 28.1 | 29.1 | 32.4 | 20.8 | 21.6 | 22.4 | 23.4 | 26.6 |
| | 8H | 27.7 | 28.4 | 29.3 | 30.2 | 33.8 | 21.7 | 22.5 | 23.3 | 24.3 | 27.8 |
| | 12H | 28.5 | 29.2 | 30.1 | 31.0 | 34.3 | 22.3 | 23.0 | 24.0 | 24.8 | 28.1 |
| 12H | 4H | 24.7 | 25.5 | 26.1 | 27.2 | 30.2 | 19.5 | 20.4 | 21.0 | 22.0 | 25.1 |
| | 6H | 26.8 | 27.6 | 28.4 | 29.4 | 32.9 | 21.4 | 22.1 | 23.0 | 23.9 | 27.5 |
| | 8H | 27.7 | 28.4 | 29.3 | 30.2 | 33.5 | 22.1 | 22.8 | 23.7 | 24.6 | 27.9 |
| variation of observer position | | | | | | | | | | | |
| S = | 1.0H | +0.1/ -0.1 | | | | +0.1/ -0.1 | | | | | |
| | 1.5H | +0.2/ -0.2 | | | | +0.2/ -0.2 | | | | | |
| | 2.0H | +0.2/ -0.2 | | | | +0.3/ -0.3 | | | | | |
| standard-table | | BK12 | | | | | BK11 | | | | |
| correction for luminaire | | 12.3 | | | | | 5.7 | | | | |
| correct glare indices for a total flux of 735lm | | | | | | | | | | | |

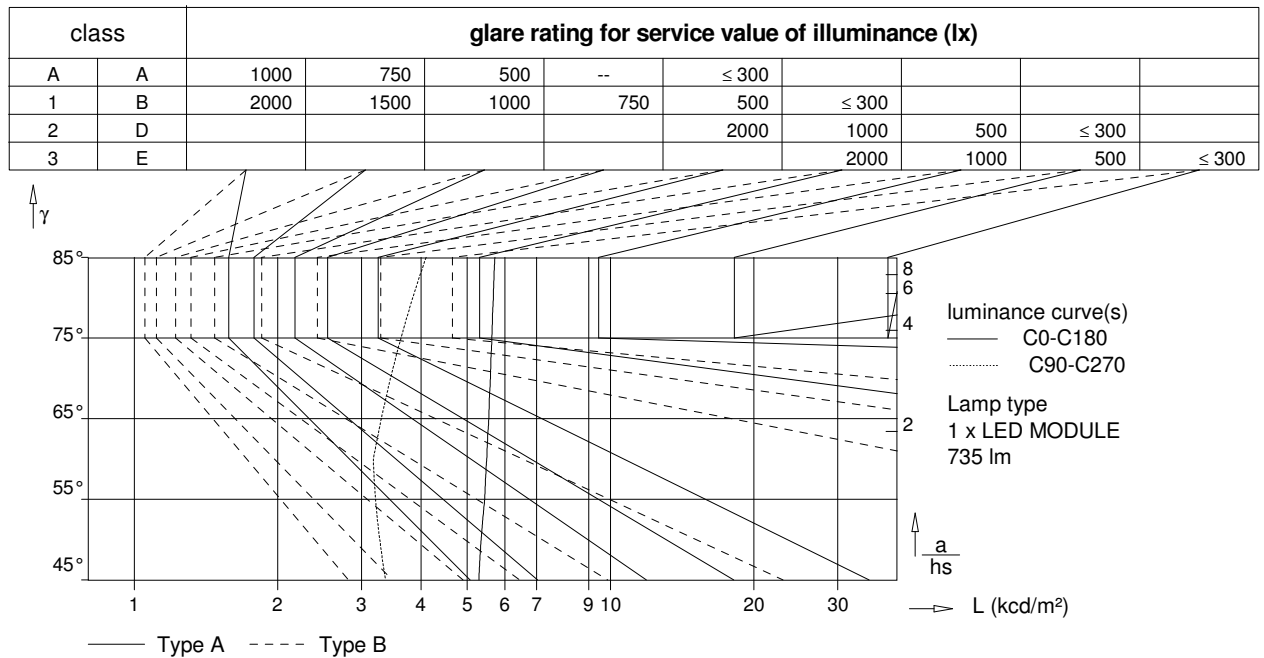


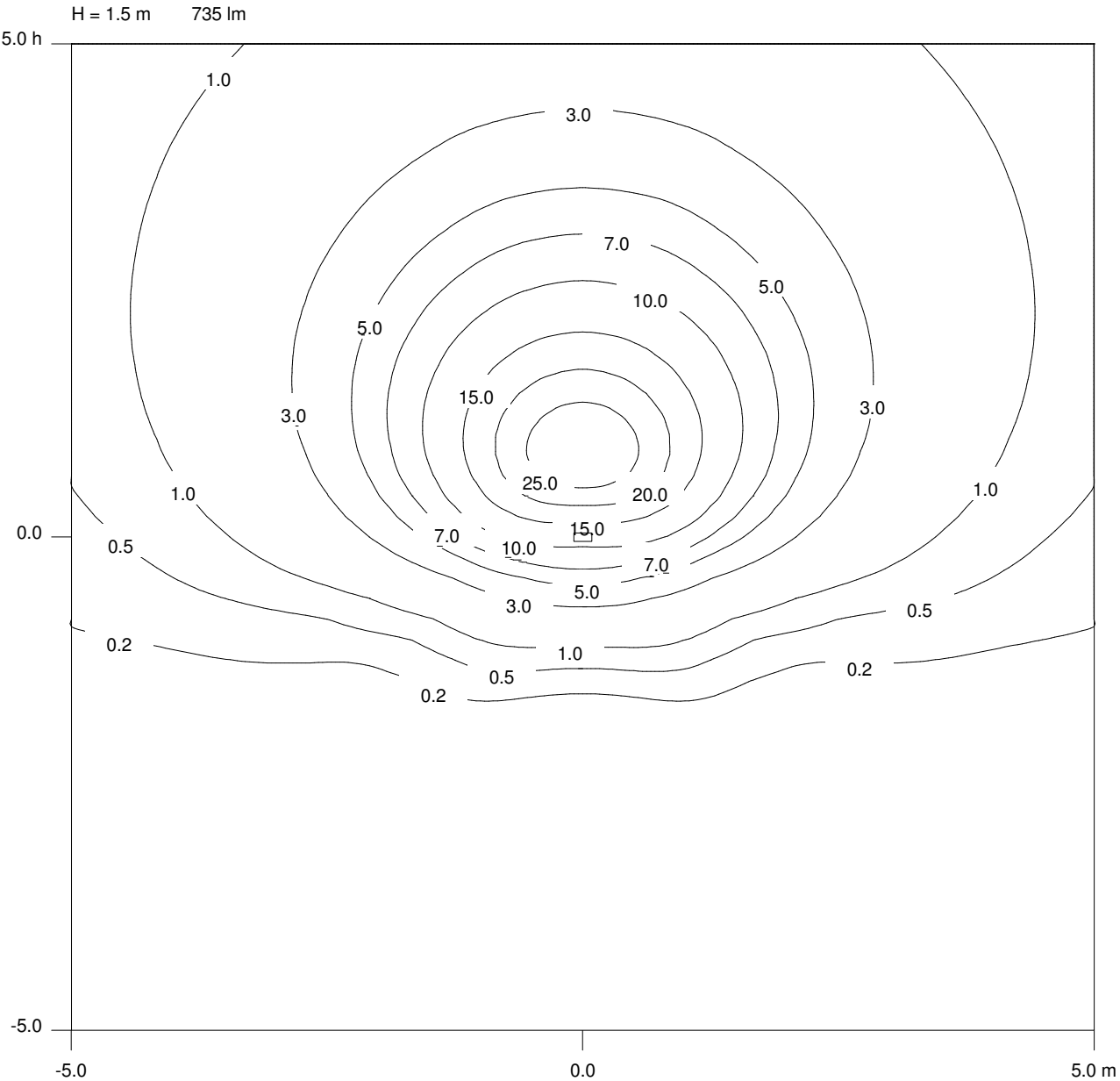
Table of intensities

| gamma | C 0 | C 90 | C 180 | C 270 |
|-------|--------|--------|-------|--------|
| 45° | 5290.3 | 3370.8 | 60.3 | 3370.8 |
| 50° | 5349.9 | 3275.9 | 0.0 | 3275.9 |
| 55° | 5441.8 | 3209.6 | 0.0 | 3209.6 |
| 60° | 5495.8 | 3176.4 | 0.0 | 3176.4 |
| 65° | 5551.6 | 3300.9 | 0.0 | 3300.9 |
| 70° | 5594.5 | 3450.9 | 0.0 | 3450.9 |
| 75° | 5635.9 | 3630.2 | 0.0 | 3630.2 |
| 80° | 5675.1 | 3843.7 | 0.0 | 3843.7 |
| 85° | 5715.7 | 4098.1 | 0.0 | 4098.1 |

all values in cd/m²

| utilization factors / TM5 | | | | | | | | | | | |
|----------------------------------|----|----|------------|-----|------|----------------|-----|-----|-----|-----|-----|
| reflection | | | room index | | | | | | | | |
| C | W | F | 0.75 | 1.0 | 1.25 | 1.5 | 2.0 | 2.5 | 3.0 | 4.0 | 5.0 |
| 70 | 50 | 20 | 35 | 43 | 49 | 54 | 61 | 66 | 70 | 75 | 79 |
| 70 | 30 | 20 | 27 | 35 | 41 | 46 | 54 | 59 | 63 | 70 | 74 |
| 70 | 10 | 20 | 21 | 28 | 34 | 39 | 47 | 53 | 58 | 64 | 69 |
| 50 | 50 | 20 | 29 | 35 | 40 | 44 | 50 | 55 | 58 | 62 | 65 |
| 50 | 30 | 20 | 22 | 29 | 34 | 38 | 44 | 49 | 53 | 58 | 61 |
| 50 | 10 | 20 | 17 | 23 | 28 | 33 | 39 | 44 | 48 | 54 | 58 |
| 30 | 50 | 20 | 23 | 28 | 32 | 35 | 40 | 44 | 47 | 50 | 53 |
| 30 | 30 | 20 | 18 | 23 | 27 | 30 | 36 | 40 | 43 | 47 | 50 |
| 30 | 10 | 20 | 14 | 19 | 23 | 26 | 32 | 36 | 39 | 44 | 47 |
| 0 | 0 | 0 | 7 | 10 | 13 | 16 | 20 | 23 | 25 | 29 | 32 |
| BZ-class | | | 10 | 9 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| SHRnom : 0.50 | | | | | | SHRmax : 0.474 | | | | | |

MAINS OPERATION



EMERGENCY OPERATION

