

Report No.: PKS190411002-10

Test Time: 2019-4-15 10:49

Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Luminaire Description: NPLS051610LAJD1SN Lamp Catalog:

Lamp Description:

Number of Lamps:

Lumens per Lamp:

Luminous Length (mm):

Luminous Width (mm):

Luminous Height (mm):

Voltage: 120.0 V

Current: 0.108 A

Power: 12.42 W

Power Factor: 0.962

Photometric Results

CIE Class: General Diffuse

Total Rated Lamp Lumens: 851.9 lm

Measurement Flux: 851.9 lm

Efficiency: 100%

Downward Ratio: 50%

Upward Ratio: 50%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 358.2, 353.9, 356.4, 355.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 351.0, 181.4, 173.1, 168.1

Luminaire Efficacy Rating (LER): 68.64

C0r0 Intensity: 76.2 cd

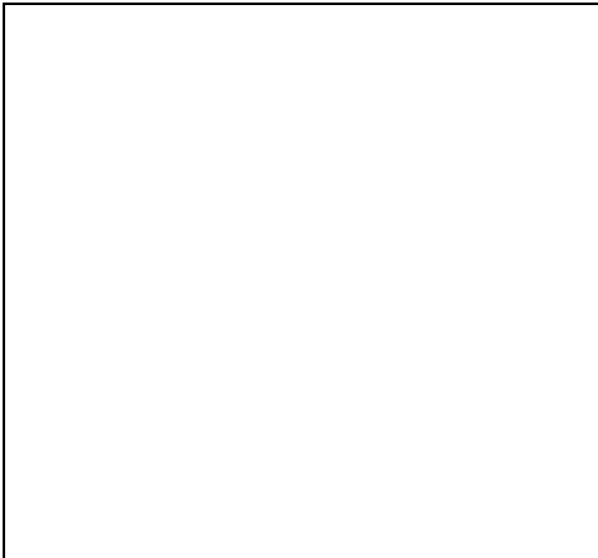
Max. Intensity: 211.4 cd

Pos of Max. Intensity: H90 V90

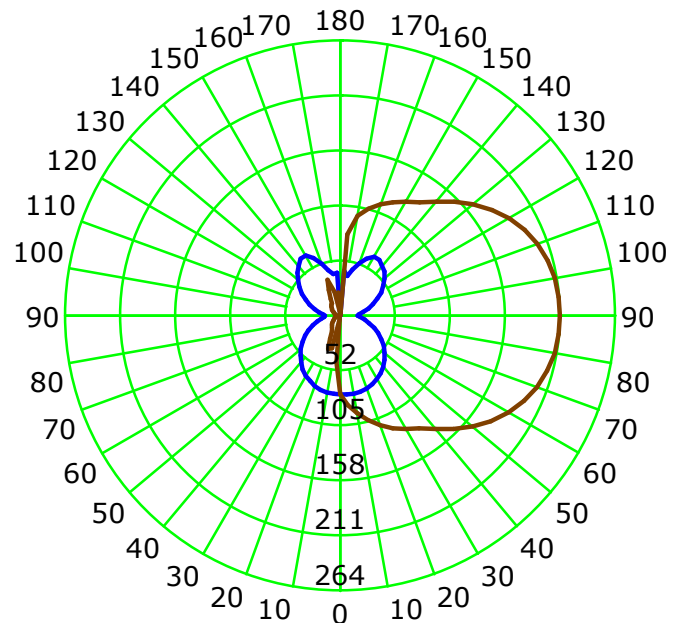
S/MH(C0/C180): 1.34

S/MH(C90/C270): 1.51

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

Average Diffuse Angle(50%): 266.2°

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Gamma Plane (°):0.0-180.0:5.0

Test Lab: Bacl

Test Device: GPM-3000

Test Type: TYPE C

Distance: 14.073 m

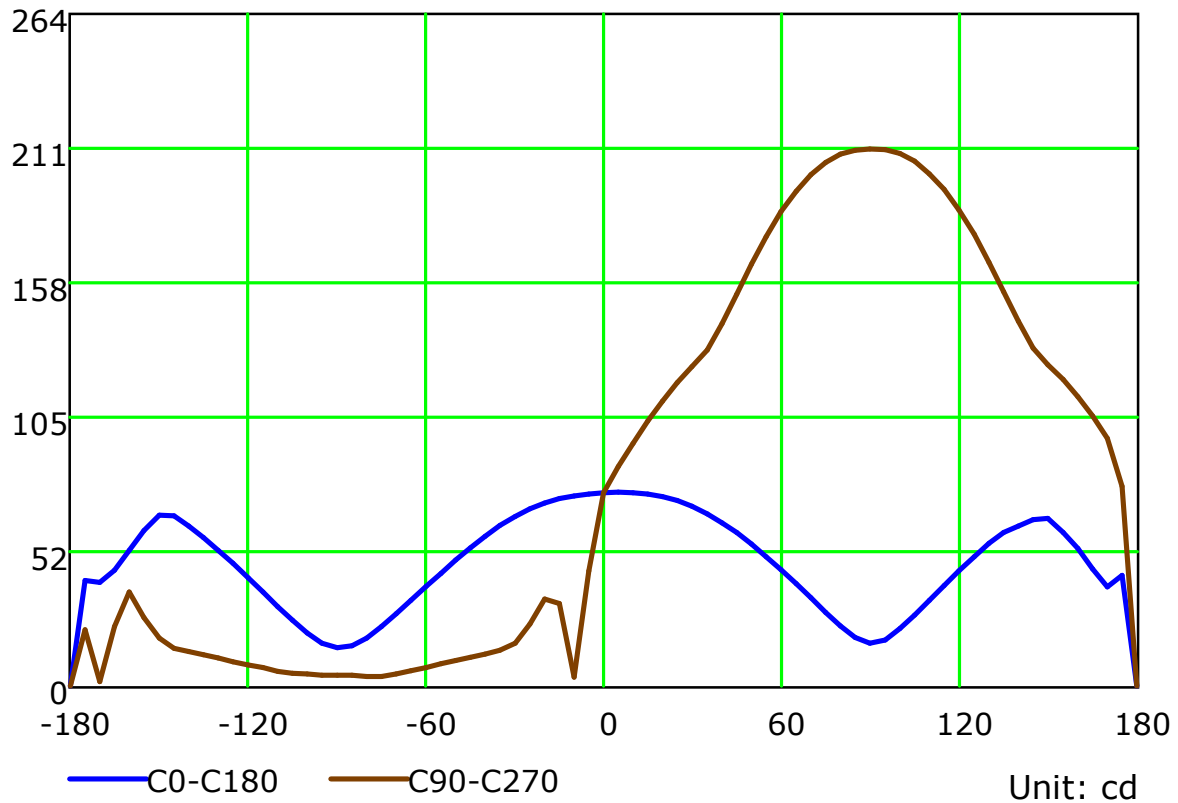
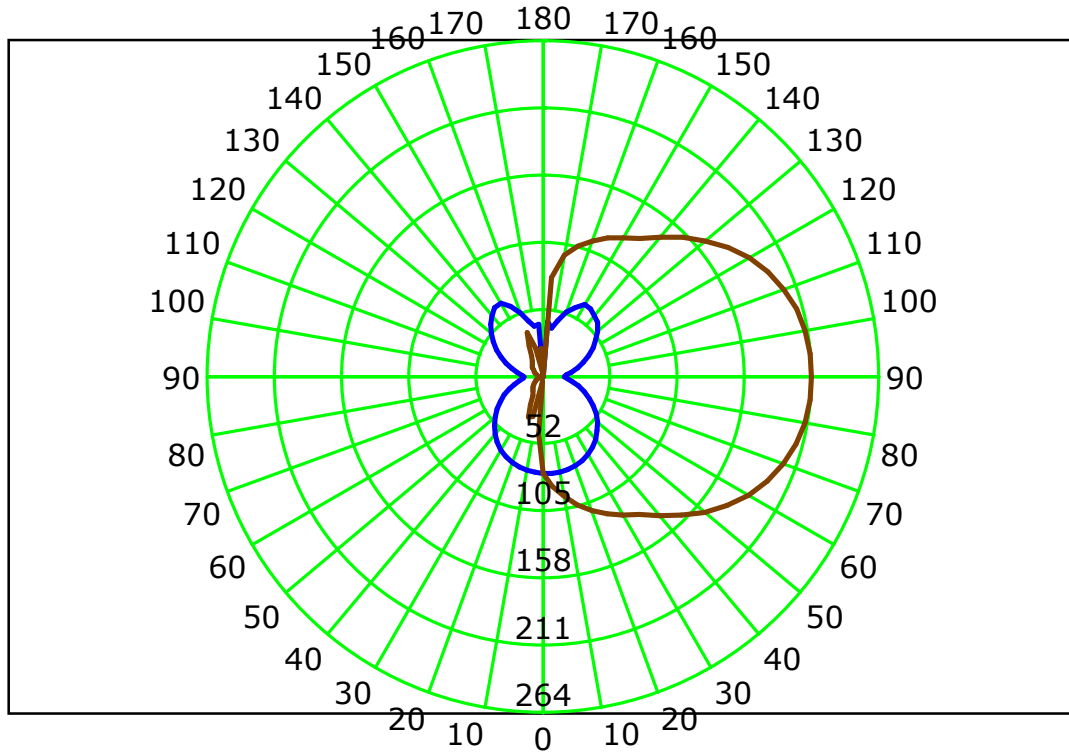
Temperature: 24.8 °C

Humidity: 48

Operator: KOBE

Inspector:

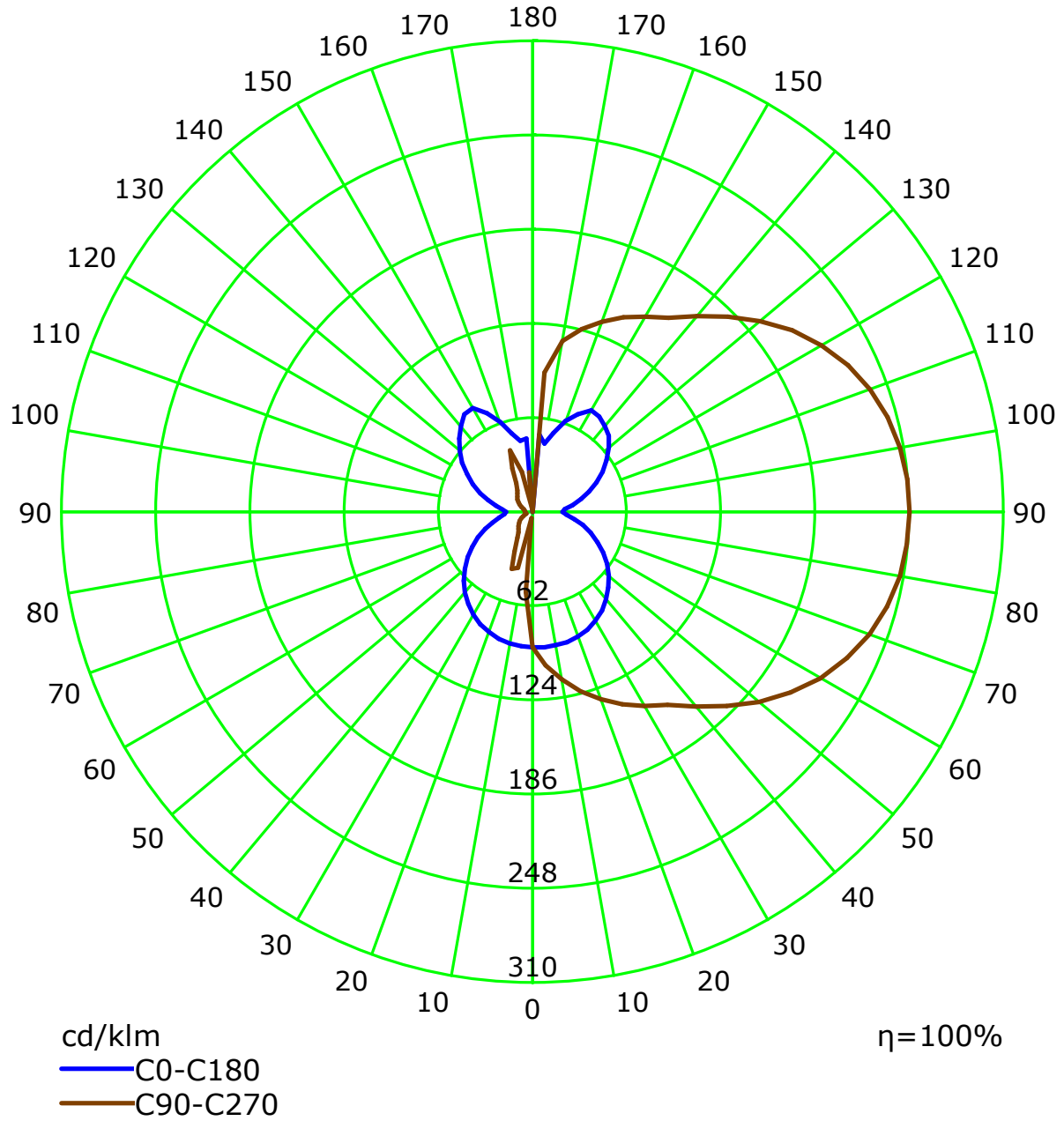
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5
 Test Lab: Bacl
 Test Type: TYPE C
 Temperature: 24.8 'C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-3000
 Distance: 14.073 m
 Humidity: 48
 Inspector:

Luminous Intensity Distribution Curve(cd/klm)



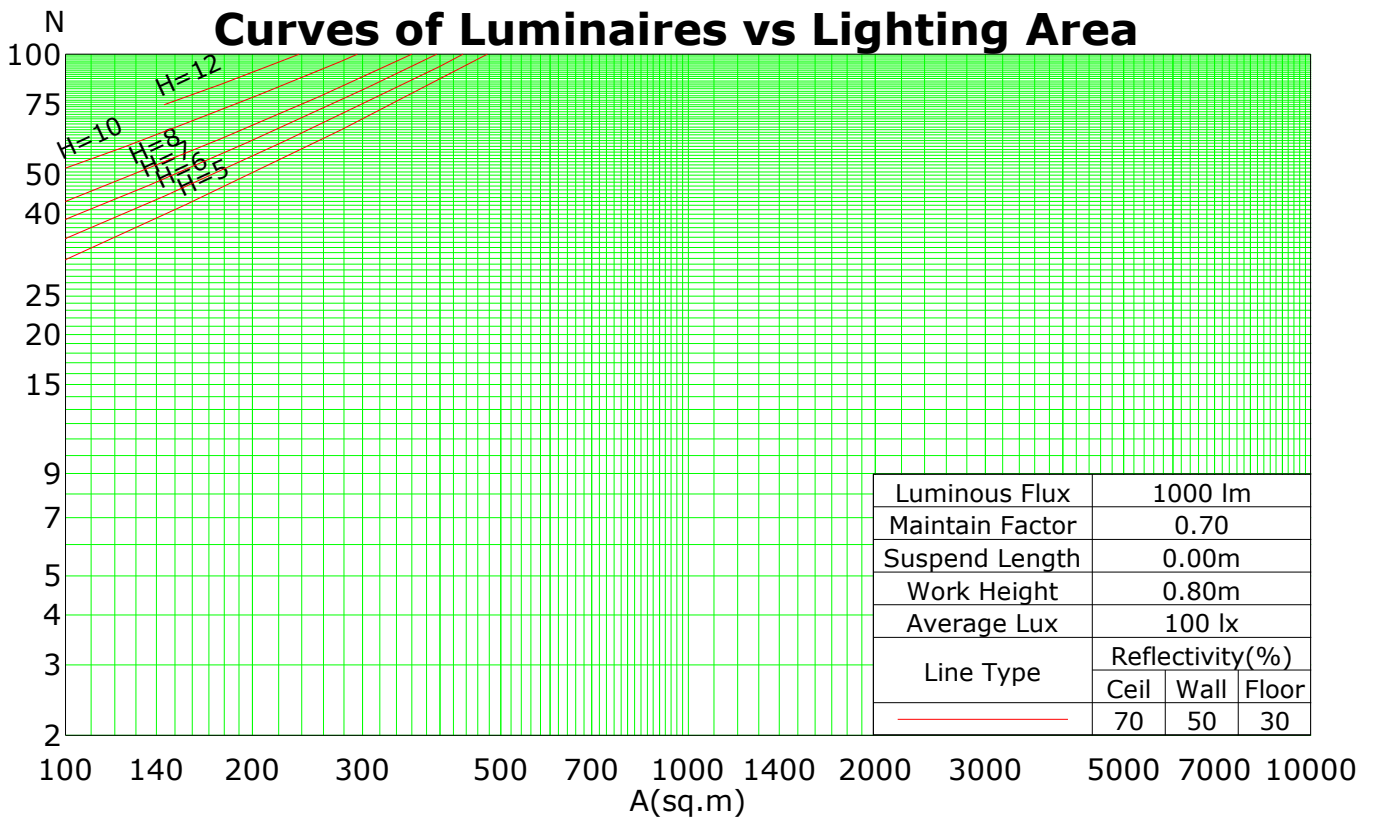
C Plane (°):0.0-360.0: 22.5
 Test Lab: Bacl
 Test Type: TYPE C
 Temperature: 24.8 °C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-3000
 Distance: 14.073 m
 Humidity: 48
 Inspector:

Coefficients Of Utilization - Zonal Cavity Method

| | | | | | | | | | | | | | | | | | | |
|-----|----------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| RC | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.7 | 0.7 | 0.5 | 0.5 | 0.5 | 0.3 | 0.3 | 0.3 | 0.1 | 0.1 | 0.1 | 0 |
| RW | 0.7 | 0.5 | 0.3 | 0.1 | 0.7 | 0.5 | 0.3 | 0.1 | 0.5 | 0.3 | 0.1 | 0.5 | 0.3 | 0.1 | 0.5 | 0.3 | 0.1 | 0 |
| RCR | RF = 0.2 | | | | | | | | | | | | | | | | | |
| 0 | 1.07 | 1.07 | 1.07 | 1.07 | .99 | .99 | .99 | .99 | .83 | .83 | .83 | .69 | .69 | .69 | .56 | .56 | .56 | .50 |
| 1 | .93 | .87 | .82 | .77 | .85 | .80 | .75 | .71 | .67 | .63 | .59 | .54 | .51 | .49 | .43 | .41 | .39 | .33 |
| 2 | .83 | .74 | .66 | .59 | .76 | .68 | .61 | .55 | .56 | .51 | .46 | .45 | .41 | .38 | .35 | .32 | .30 | .25 |
| 3 | .75 | .64 | .55 | .48 | .68 | .58 | .50 | .44 | .48 | .42 | .37 | .39 | .34 | .30 | .30 | .27 | .24 | .19 |
| 4 | .68 | .56 | .46 | .39 | .62 | .51 | .43 | .36 | .42 | .36 | .30 | .34 | .29 | .25 | .26 | .22 | .19 | .15 |
| 5 | .62 | .49 | .40 | .33 | .57 | .45 | .37 | .30 | .37 | .31 | .26 | .30 | .25 | .21 | .23 | .19 | .16 | .13 |
| 6 | .57 | .44 | .34 | .28 | .52 | .40 | .32 | .26 | .33 | .27 | .22 | .27 | .22 | .18 | .21 | .17 | .14 | .11 |
| 7 | .53 | .39 | .30 | .24 | .48 | .36 | .28 | .22 | .30 | .23 | .19 | .24 | .19 | .15 | .19 | .15 | .12 | .09 |
| 8 | .49 | .35 | .27 | .21 | .44 | .32 | .25 | .19 | .27 | .21 | .16 | .22 | .17 | .13 | .17 | .13 | .10 | .08 |
| 9 | .45 | .32 | .24 | .18 | .41 | .29 | .22 | .17 | .25 | .19 | .14 | .20 | .15 | .12 | .16 | .12 | .09 | .07 |
| 10 | .42 | .29 | .21 | .16 | .39 | .27 | .20 | .15 | .23 | .17 | .13 | .19 | .14 | .11 | .15 | .11 | .08 | .06 |

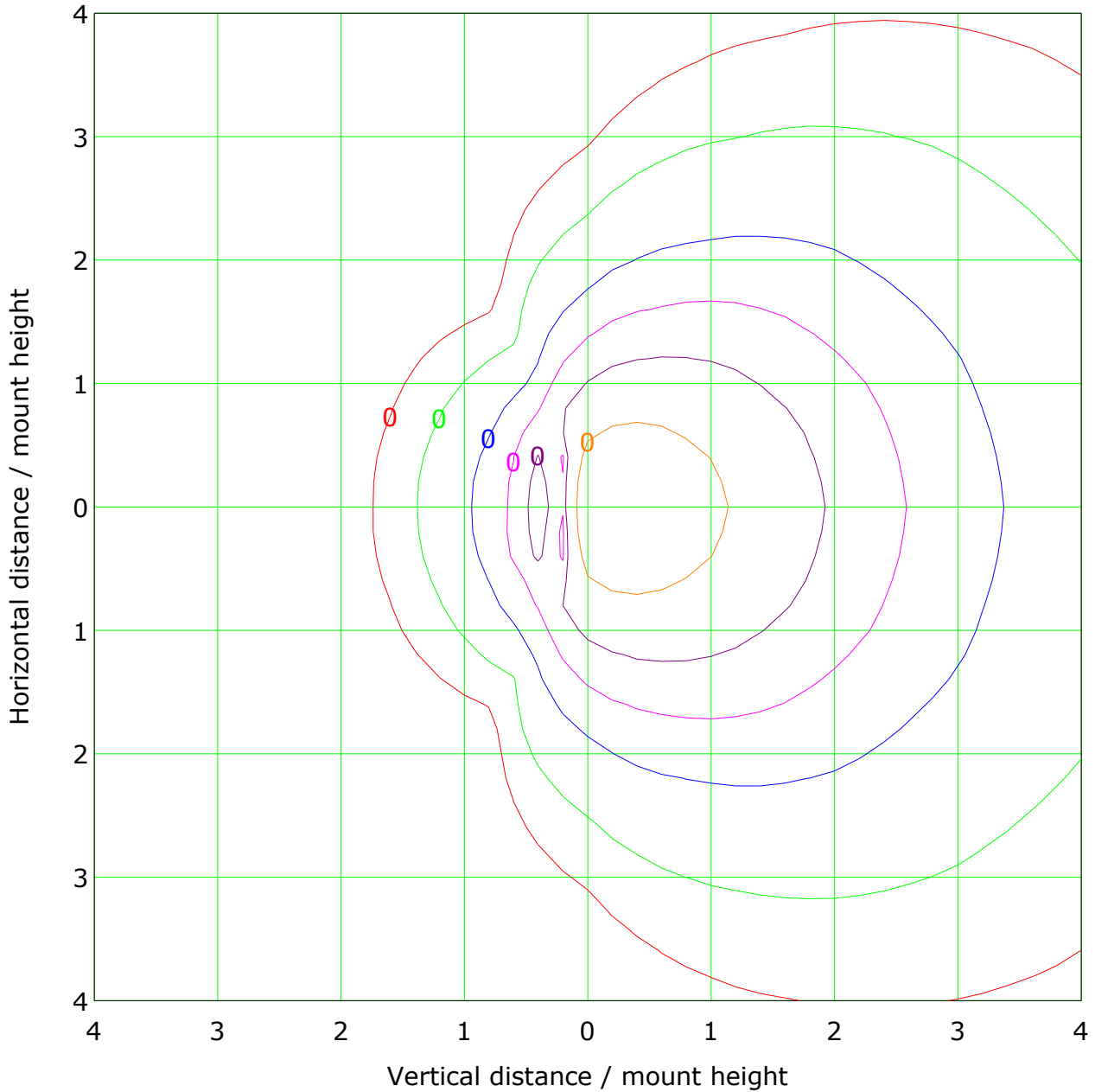
Spacing Criteria (0-180): 1.34
 Spacing Criteria (90-270): 1.51
 Spacing Criteria (Diagonal): 1.61



C Plane (°):0.0-360.0: 22.5
 Test Lab: Bacl
 Test Type: TYPE C
 Temperature: 24.8 'C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-3000
 Distance: 14.073 m
 Humidity: 48
 Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 0.9 lx

| | |
|----------------|----------------|
| (1%): 0.0 lx | (2%): 0.0 lx |
| (5%): 0.0 lx | (10%): 0.1 lx |
| (20%): 0.2 lx | (50%): 0.5 lx |

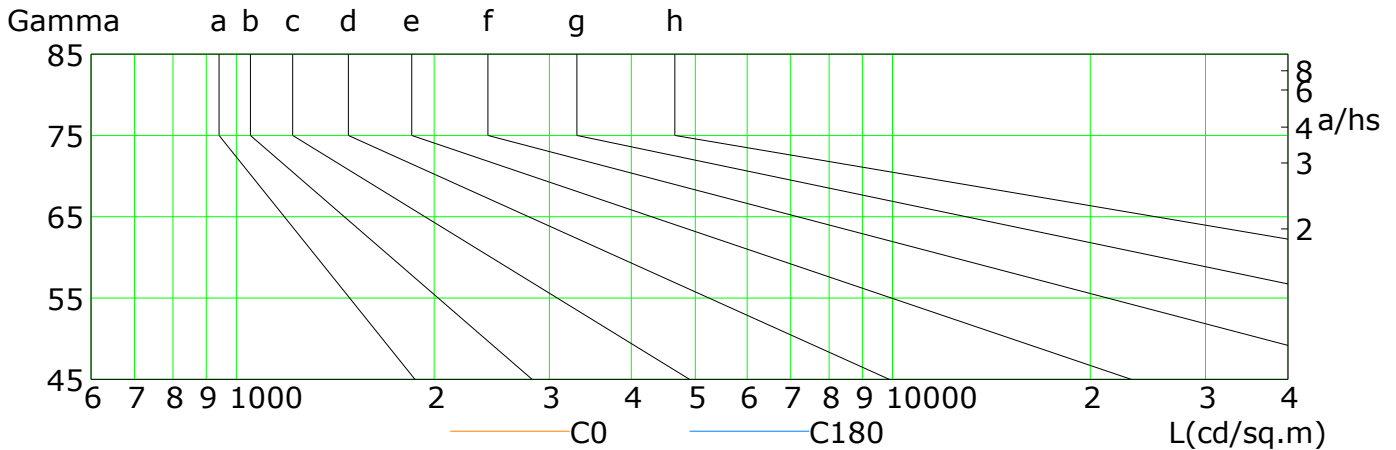
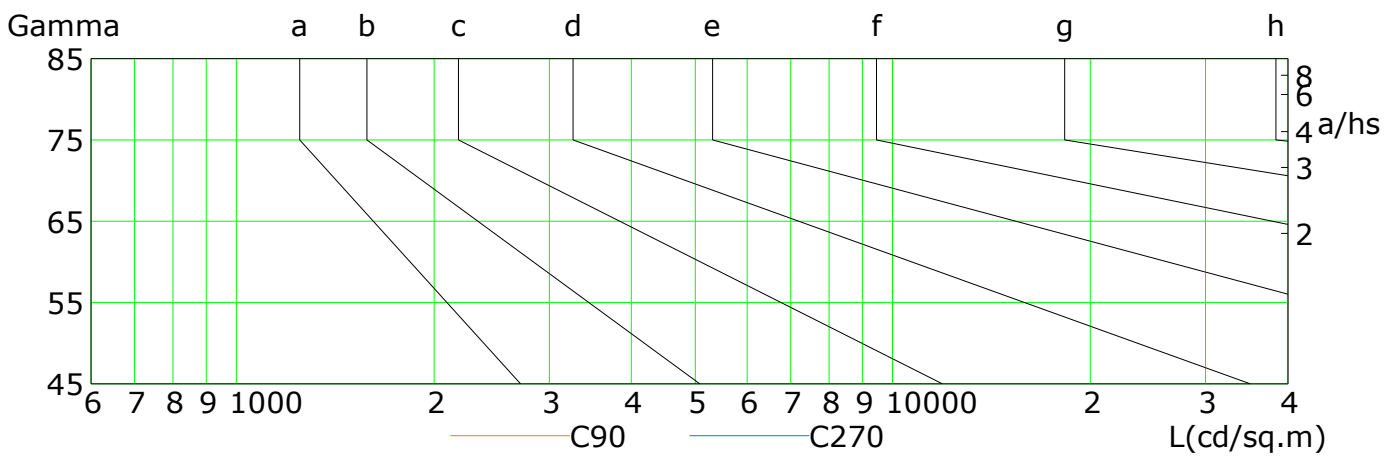
C Plane (°):0.0-360.0: 22.5
Test Lab: Bacl
Test Type: TYPE C
Temperature: 24.8 'C
Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
Test Device: GPM-3000
Distance: 14.073 m
Humidity: 48
Inspector:

Lum Limit Curve

| Dazzle | Quality | Illuminance (lx) | | | | | | | |
|--------|---------|------------------|------|------|-------|-------|-------|-------|-------|
| | | 2000 | 1000 | 500 | <=300 | | | | |
| 1.15 | A | 2000 | 1000 | 500 | <=300 | | | | |
| 1.50 | B | | 2000 | 1000 | 500 | <=300 | | | |
| 1.85 | C | | | 2000 | 1000 | 500 | <=300 | | |
| 2.20 | D | | | | 2000 | 1000 | 500 | <=300 | |
| 2.55 | E | | | | | 2000 | 1000 | 500 | <=300 |

a b c d e f g h

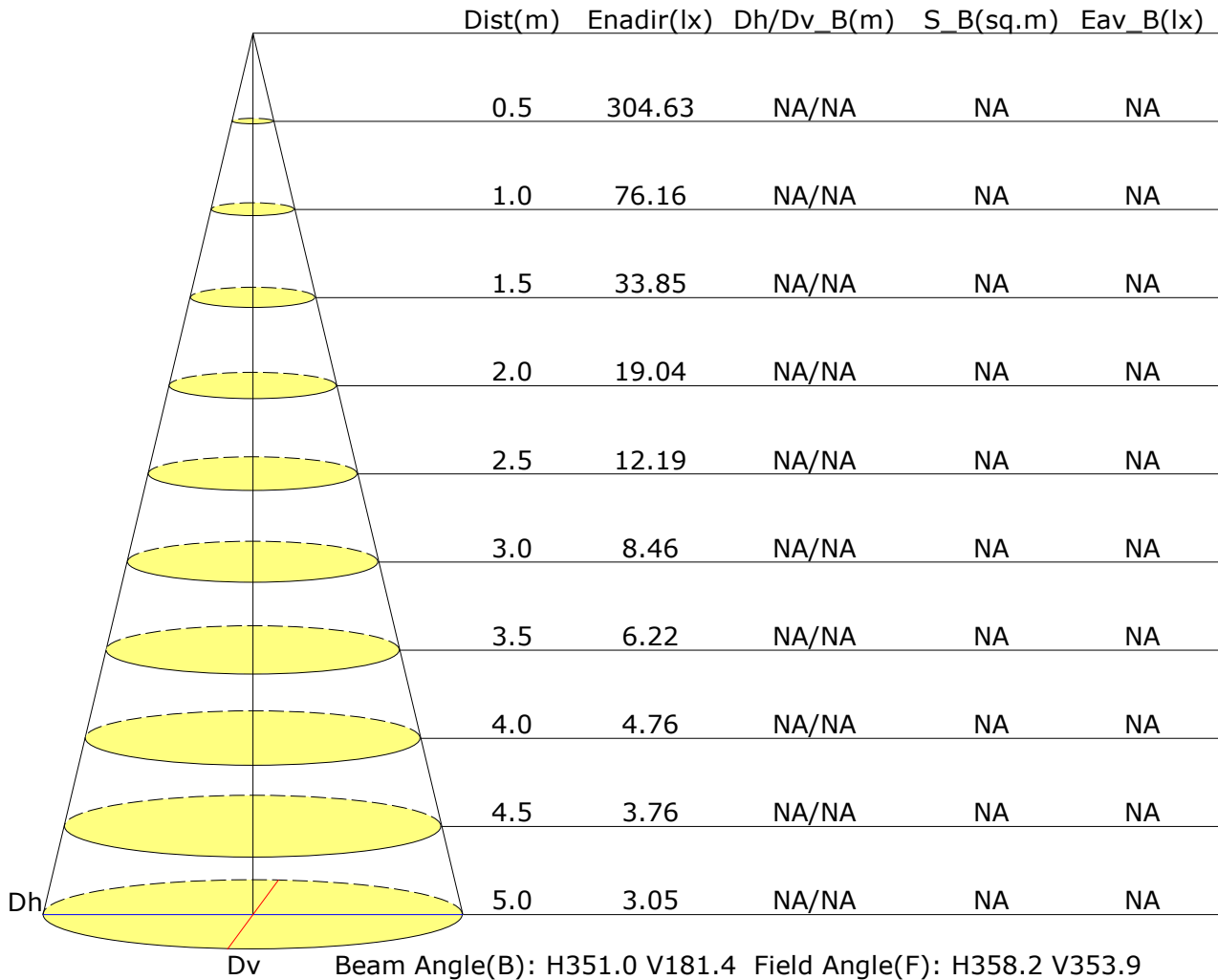


| L(cd/sq.m) | G45 | G50 | G55 | G60 | G65 | G70 | G75 | G80 | G85 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| C0 | 60 | 56 | 51 | 46 | 41 | 35 | 29 | 24 | 19 |
| C90 | 154 | 166 | 177 | 187 | 195 | 201 | 206 | 209 | 211 |
| C180 | 55 | 50 | 45 | 39 | 34 | 28 | 23 | 19 | 16 |
| C270 | 11 | 10 | 9 | 7 | 6 | 5 | 4 | 4 | 4 |

C Plane (°):0.0-360.0: 22.5
Test Lab: Bacl
Test Type: TYPE C
Temperature: 24.8 'C
Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
Test Device: GPM-3000
Distance: 14.073 m
Humidity: 48
Inspector:

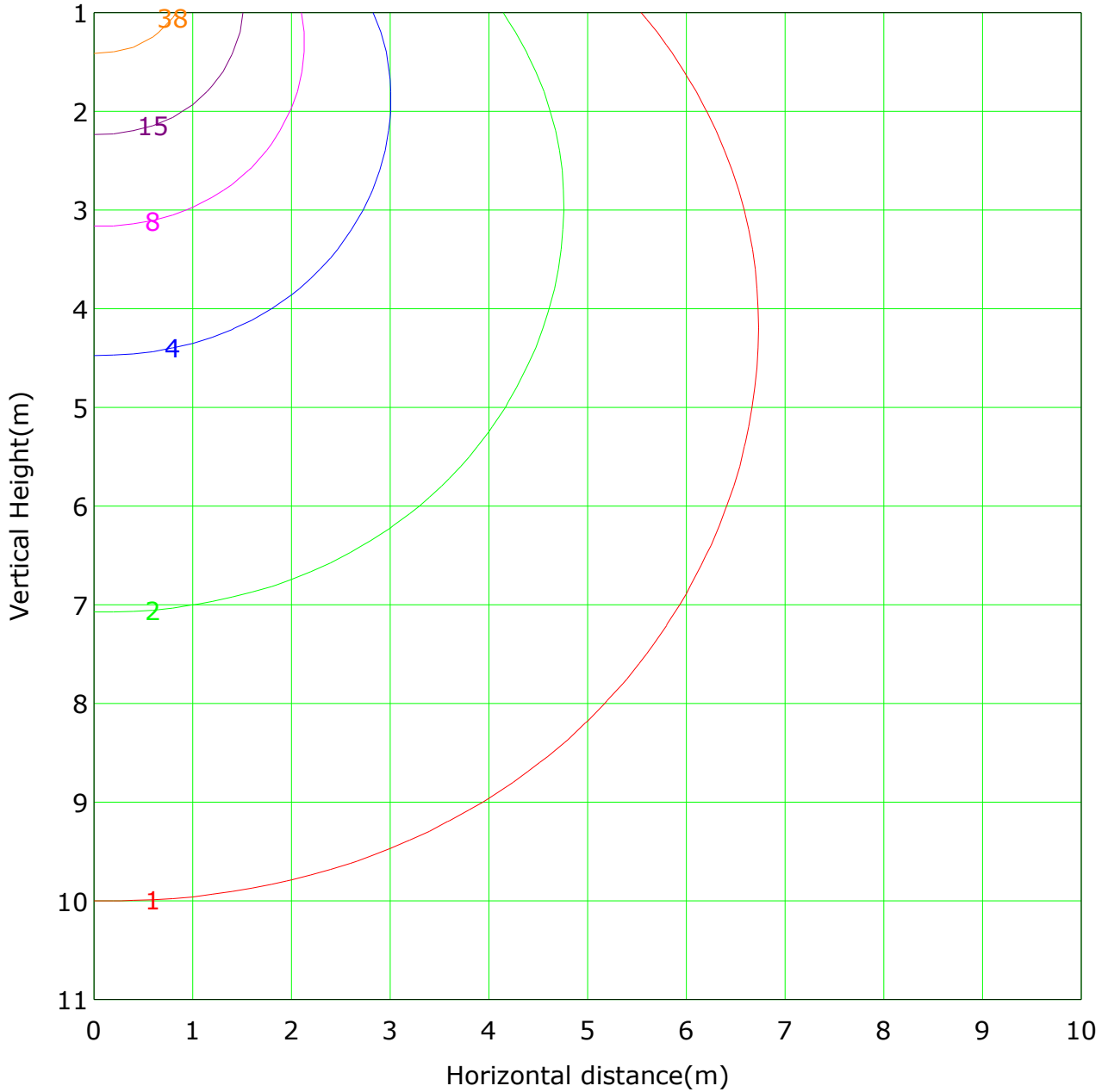
Illuminance at a Distance



C Plane (°):0.0-360.0: 22.5
Test Lab: Bacl
Test Type: TYPE C
Temperature: 24.8 'C
Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
Test Device: GPM-3000
Distance: 14.073 m
Humidity: 48
Inspector:

Vertical IsoLux Plot

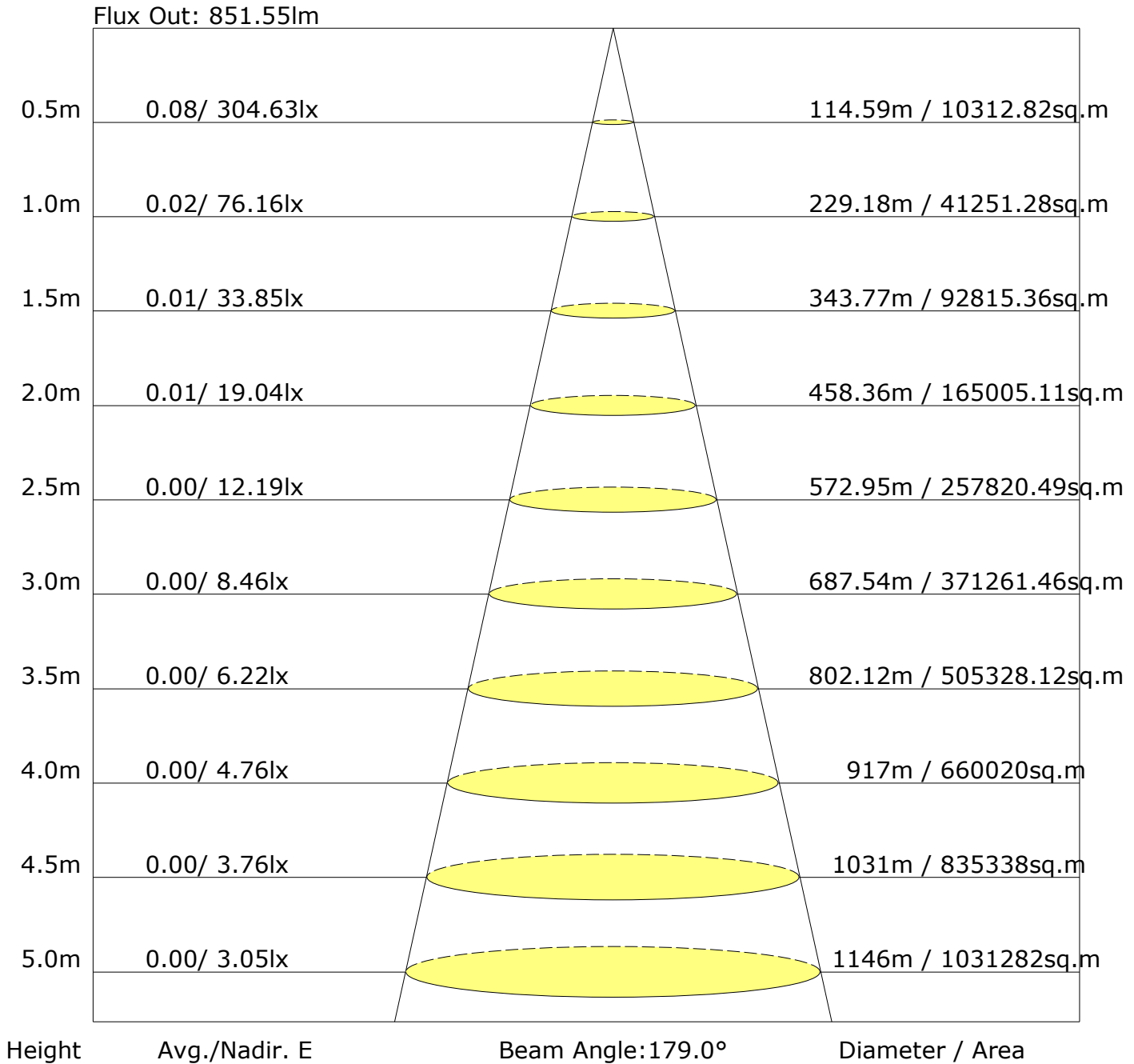


| | | |
|-----------------|-------------------|------------------|
| Lowest(m): 1.0m | Highest(m): 11.0m | Max Lux: 76.2 lx |
| (1%): 0.8 lx | (2%): 1.5 lx | |
| (5%): 3.8 lx | (10%): 7.6 lx | |
| (20%): 15.2 lx | (50%): 38.1 lx | |

C Plane (°):0.0-360.0: 22.5
 Test Lab: Bacl
 Test Type: TYPE C
 Temperature: 24.8 'C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-3000
 Distance: 14.073 m
 Humidity: 48
 Inspector:

The Average Illuminance Effective Figure



C Plane (°):0.0-360.0: 22.5
 Test Lab: Bacl
 Test Type: TYPE C
 Temperature: 24.8 °C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-3000
 Distance: 14.073 m
 Humidity: 48
 Inspector:

UGR Table

| | | | | | | | | | | |
|--|------------------|-------|-------|-------|-------|----------------|-------|-------|-------|-------|
| Reflectance: | | | | | | | | | | |
| Ceiling (cavity) | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 | 0.7 | 0.7 | 0.5 | 0.5 | 0.3 |
| Wall | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 | 0.5 | 0.3 | 0.5 | 0.3 | 0.3 |
| Reference plane | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Room dimensions | Viewed crosswise | | | | | Viewed endwise | | | | |
| X=2H Y=2H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 3H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 4H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 6H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 8H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 12H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| X=4H Y=2H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 3H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 4H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 6H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 8H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 12H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| X=8H Y=4H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 6H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 8H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 12H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| X=12H Y=4H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 6H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| 8H | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$ |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S=1.0H | | | | | | | | | | |
| S=1.5H | | | | | | | | | | |
| S=2.0H | | | | | | | | | | |

Calculate in accordance with CIE Pub.117. The table is revised with $852lm (8\log(F/F_0) = -0.6)$.

C Plane (°):0.0-360.0: 22.5
 Test Lab: Bacl
 Test Type: TYPE C
 Temperature: 24.8 'C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-3000
 Distance: 14.073 m
 Humidity: 48
 Inspector:

Utilisation Factor Table(Floor cavity)

| Utilisation Factors UF(F) | | | SHR NOM = 1.75 | | | | | | | | | |
|--|------|-------|----------------|------|------|------|------|------|------|------|------|--|
| Room Reflectance | | | Room Index(RI) | | | | | | | | | |
| Ceiling | Wall | Floor | 0.75 | 1.00 | 1.25 | 1.50 | 2.00 | 2.50 | 3.00 | 4.00 | 5.00 | |
| 0.70 | 0.50 | 0.20 | NA | 0.47 | 0.53 | 0.58 | 0.64 | 0.69 | 0.73 | 0.78 | 0.81 | |
| | | 0.30 | NA | 0.39 | 0.45 | 0.50 | 0.57 | 0.63 | 0.67 | 0.72 | 0.76 | |
| | | 0.20 | NA | 0.33 | 0.39 | 0.44 | 0.51 | 0.57 | 0.61 | 0.68 | 0.72 | |
| 0.50 | 0.50 | 0.20 | NA | 0.39 | 0.44 | 0.48 | 0.54 | 0.58 | 0.60 | 0.65 | 0.67 | |
| | | 0.30 | NA | 0.33 | 0.38 | 0.42 | 0.48 | 0.52 | 0.56 | 0.61 | 0.64 | |
| | | 0.20 | NA | 0.29 | 0.33 | 0.37 | 0.43 | 0.48 | 0.52 | 0.57 | 0.60 | |
| 0.30 | 0.50 | 0.20 | NA | 0.32 | 0.36 | 0.39 | 0.44 | 0.47 | 0.49 | 0.53 | 0.55 | |
| | | 0.30 | NA | 0.27 | 0.31 | 0.34 | 0.39 | 0.43 | 0.46 | 0.50 | 0.52 | |
| | | 0.20 | NA | 0.23 | 0.27 | 0.31 | 0.36 | 0.40 | 0.43 | 0.47 | 0.50 | |
| 0.00 | 0.00 | 0.00 | NA | 0.15 | 0.18 | 0.20 | 0.24 | 0.27 | 0.29 | 0.32 | 0.34 | |
| <p>Rating:12W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p> | | | | | | | | | | | | |

Utilisation Factor Table(Wall)

| Utilisation Factors UF(W) | | | SHR NOM = 1.75 | | | | | | | | | |
|--|------|-------|----------------|------|------|------|------|------|------|------|------|--|
| Room Reflectance | | | Room Index(RI) | | | | | | | | | |
| Ceiling | Wall | Floor | 0.75 | 1.00 | 1.25 | 1.50 | 2.00 | 2.50 | 3.00 | 4.00 | 5.00 | |
| 0.70 | 0.50 | 0.20 | NA | 0.86 | 0.75 | 0.67 | 0.56 | 0.48 | 0.42 | 0.34 | 0.29 | |
| | 0.30 | | NA | 0.73 | 0.66 | 0.60 | 0.51 | 0.44 | 0.39 | 0.32 | 0.28 | |
| | 0.20 | | NA | 0.64 | 0.58 | 0.53 | 0.46 | 0.41 | 0.37 | 0.31 | 0.26 | |
| 0.50 | 0.50 | 0.20 | NA | 0.74 | 0.65 | 0.58 | 0.49 | 0.43 | 0.37 | 0.30 | 0.26 | |
| | 0.30 | | NA | 0.64 | 0.57 | 0.52 | 0.45 | 0.39 | 0.35 | 0.29 | 0.25 | |
| | 0.20 | | NA | 0.56 | 0.51 | 0.47 | 0.41 | 0.36 | 0.33 | 0.27 | 0.24 | |
| 0.30 | 0.50 | 0.20 | NA | 0.63 | 0.55 | 0.50 | 0.42 | 0.36 | 0.32 | 0.26 | 0.23 | |
| | 0.30 | | NA | 0.55 | 0.50 | 0.45 | 0.39 | 0.34 | 0.30 | 0.25 | 0.22 | |
| | 0.20 | | NA | 0.49 | 0.45 | 0.41 | 0.36 | 0.32 | 0.29 | 0.24 | 0.21 | |
| 0.00 | 0.00 | 0.00 | 0.50 | 0.35 | 0.32 | 0.30 | 0.26 | 0.23 | 0.21 | 0.18 | 0.16 | |
| <p>Rating:12W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p> | | | | | | | | | | | | |

Utilisation Factor Table(Ceiling cavity)

| Utilisation Factors UF(C) | | | SHR NOM = 1.75 | | | | | | | | |
|--|------|-------|----------------|------|------|------|------|------|------|------|------|
| Room Reflectance | | | Room Index(RI) | | | | | | | | |
| Ceiling | Wall | Floor | 0.75 | 1.00 | 1.25 | 1.50 | 2.00 | 2.50 | 3.00 | 4.00 | 5.00 |
| 0.70 | 0.50 | 0.20 | NA | 0.66 | 0.67 | 0.68 | 0.68 | 0.69 | 0.69 | 0.69 | 0.70 |
| | | 0.30 | NA | 0.60 | 0.61 | 0.61 | 0.63 | 0.64 | 0.64 | 0.65 | 0.66 |
| | | 0.20 | NA | 0.54 | 0.56 | 0.57 | 0.58 | 0.59 | 0.60 | 0.62 | 0.63 |
| 0.50 | 0.50 | 0.20 | NA | 0.64 | 0.65 | 0.65 | 0.66 | 0.66 | 0.66 | 0.66 | 0.67 |
| | | 0.30 | NA | 0.58 | 0.59 | 0.60 | 0.61 | 0.62 | 0.62 | 0.63 | 0.64 |
| | | 0.20 | NA | 0.54 | 0.55 | 0.56 | 0.57 | 0.58 | 0.59 | 0.60 | 0.61 |
| 0.30 | 0.50 | 0.20 | NA | 0.62 | 0.62 | 0.63 | 0.63 | 0.63 | 0.64 | 0.64 | 0.64 |
| | | 0.30 | NA | 0.57 | 0.58 | 0.58 | 0.59 | 0.60 | 0.60 | 0.61 | 0.61 |
| | | 0.20 | NA | 0.53 | 0.54 | 0.55 | 0.56 | 0.57 | 0.57 | 0.58 | 0.59 |
| 0.00 | 0.00 | 0.00 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 | 0.50 |
| <p>Rating:12W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p> | | | | | | | | | | | |

Zonal Lumen

| Gamma [°] | I _{mean} [cd] | Zonal Flux [lm] | Sum Zonal Flux [lm] | Rel Zonal Flux [%] | Sum Rel Zonal Flux [%] |
|--------------|---------------------------|--------------------|------------------------|-----------------------|---------------------------|
| 0.0-5.0 | 73.4 | 1.8 | 1.8 | 0.21 | 0.21 |
| 5.0-10.0 | 64.8 | 4.6 | 6.4 | 0.54 | 0.75 |
| 10.0-15.0 | 60.4 | 7.2 | 13.6 | 0.84 | 1.59 |
| 15.0-20.0 | 63.5 | 10.5 | 24.0 | 1.23 | 2.82 |
| 20.0-25.0 | 65.4 | 13.7 | 37.7 | 1.61 | 4.43 |
| 25.0-30.0 | 65.6 | 16.6 | 54.3 | 1.95 | 6.38 |
| 30.0-35.0 | 66.0 | 19.4 | 73.8 | 2.28 | 8.66 |
| 35.0-40.0 | 66.7 | 22.2 | 96.0 | 2.61 | 11.27 |
| 40.0-45.0 | 67.0 | 24.8 | 120.8 | 2.91 | 14.18 |
| 45.0-50.0 | 67.4 | 27.2 | 148.1 | 3.20 | 17.38 |
| 50.0-55.0 | 67.9 | 29.5 | 177.6 | 3.47 | 20.85 |
| 55.0-60.0 | 68.4 | 31.6 | 209.2 | 3.71 | 24.56 |
| 60.0-65.0 | 68.9 | 33.5 | 242.7 | 3.93 | 28.49 |
| 65.0-70.0 | 69.2 | 35.1 | 277.8 | 4.12 | 32.61 |
| 70.0-75.0 | 69.4 | 36.3 | 314.1 | 4.26 | 36.87 |
| 75.0-80.0 | 69.4 | 37.1 | 351.2 | 4.36 | 41.23 |
| 80.0-85.0 | 69.3 | 37.7 | 388.9 | 4.42 | 45.65 |
| 85.0-90.0 | 69.2 | 37.9 | 426.8 | 4.45 | 50.10 |
| 90.0-95.0 | 69.2 | 37.9 | 464.7 | 4.45 | 54.55 |
| 95.0-100.0 | 69.5 | 37.8 | 502.5 | 4.44 | 58.98 |
| 100.0-105.0 | 69.8 | 37.4 | 539.8 | 4.39 | 63.37 |
| 105.0-110.0 | 69.9 | 36.5 | 576.4 | 4.29 | 67.66 |
| 110.0-115.0 | 69.9 | 35.4 | 611.8 | 4.15 | 71.81 |
| 115.0-120.0 | 69.7 | 33.9 | 645.6 | 3.98 | 75.79 |
| 120.0-125.0 | 69.3 | 32.1 | 677.7 | 3.76 | 79.55 |
| 125.0-130.0 | 69.0 | 30.0 | 707.7 | 3.52 | 83.07 |
| 130.0-135.0 | 68.5 | 27.7 | 735.4 | 3.25 | 86.32 |
| 135.0-140.0 | 68.2 | 25.3 | 760.6 | 2.96 | 89.29 |
| 140.0-145.0 | 67.5 | 22.5 | 783.1 | 2.64 | 91.93 |
| 145.0-150.0 | 66.6 | 19.6 | 802.7 | 2.30 | 94.23 |
| 150.0-155.0 | 65.7 | 16.6 | 819.4 | 1.95 | 96.18 |
| 155.0-160.0 | 63.9 | 13.4 | 832.8 | 1.57 | 97.76 |
| 160.0-165.0 | 57.9 | 9.5 | 842.3 | 1.12 | 98.88 |
| 165.0-170.0 | 49.3 | 5.8 | 848.2 | 0.69 | 99.56 |
| 170.0-175.0 | 44.5 | 3.2 | 851.4 | 0.37 | 99.94 |
| 175.0-180.0 | 21.9 | 0.5 | 851.9 | 0.06 | 100.00 |

C Plane (°):0.0-360.0: 22.5
 Test Lab: Bacl
 Test Type: TYPE C
 Temperature: 24.8 'C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-3000
 Distance: 14.073 m
 Humidity: 48
 Inspector:

Candlepower Table

Unit: cd

| G\C | C0.0 | C22.5 | C45.0 | C67.5 | C90.0 | C112.5 | C135.0 | C157.5 | C180.0 | C202.5 |
|--------|------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| G0.0 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 |
| G5.0 | 76.4 | 80.3 | 83.5 | 85.7 | 86.5 | 85.5 | 83.2 | 79.8 | 75.7 | 67.5 |
| G10.0 | 76.2 | 84.1 | 90.2 | 94.4 | 95.5 | 93.7 | 89.7 | 83.1 | 74.9 | 52.4 |
| G15.0 | 75.7 | 87.4 | 96.5 | 102.4 | 104.2 | 101.6 | 95.5 | 85.9 | 73.8 | 34.1 |
| G20.0 | 74.7 | 89.9 | 102.0 | 109.9 | 112.0 | 108.8 | 100.4 | 87.7 | 72.0 | 4.6 |
| G25.0 | 73.1 | 91.5 | 106.8 | 116.8 | 119.3 | 115.2 | 104.8 | 89.0 | 69.8 | 5.9 |
| G30.0 | 70.9 | 92.6 | 111.1 | 122.8 | 125.8 | 120.9 | 108.5 | 89.3 | 66.8 | 16.1 |
| G35.0 | 67.9 | 93.0 | 114.4 | 128.2 | 132.2 | 126.1 | 111.4 | 89.1 | 63.3 | 29.6 |
| G40.0 | 64.4 | 92.6 | 117.2 | 135.6 | 142.6 | 132.9 | 113.7 | 88.1 | 59.1 | 24.4 |
| G45.0 | 60.4 | 91.7 | 119.8 | 145.4 | 154.1 | 142.4 | 115.3 | 86.6 | 54.6 | 18.8 |
| G50.0 | 56.0 | 90.1 | 124.5 | 155.6 | 166.1 | 152.1 | 119.2 | 84.5 | 49.8 | 13.7 |
| G55.0 | 51.1 | 87.6 | 129.7 | 165.1 | 176.8 | 161.4 | 123.8 | 81.7 | 44.5 | 9.9 |
| G60.0 | 45.9 | 85.1 | 135.1 | 173.5 | 186.7 | 169.6 | 128.5 | 78.4 | 39.3 | 7.7 |
| G65.0 | 40.5 | 83.3 | 139.7 | 180.8 | 194.7 | 176.5 | 132.7 | 75.6 | 33.9 | 6.2 |
| G70.0 | 34.8 | 82.5 | 143.4 | 186.7 | 201.3 | 182.2 | 136.1 | 73.7 | 28.5 | 4.9 |
| G75.0 | 29.2 | 81.7 | 145.9 | 190.9 | 205.9 | 186.3 | 138.5 | 72.3 | 23.4 | 3.4 |
| G80.0 | 23.9 | 81.3 | 147.7 | 193.7 | 209.3 | 189.3 | 140.1 | 71.4 | 19.0 | 2.3 |
| G85.0 | 19.4 | 80.7 | 148.5 | 195.3 | 210.8 | 190.8 | 141.1 | 70.9 | 16.0 | 1.9 |
| G90.0 | 16.9 | 80.3 | 148.6 | 195.4 | 211.4 | 191.0 | 141.2 | 70.6 | 15.2 | 2.0 |
| G95.0 | 18.4 | 80.6 | 148.4 | 195.3 | 211.0 | 190.9 | 141.4 | 71.2 | 17.0 | 2.0 |
| G100.0 | 22.8 | 81.2 | 147.9 | 193.9 | 209.5 | 189.6 | 140.7 | 72.1 | 21.0 | 3.1 |
| G105.0 | 28.2 | 81.8 | 146.3 | 191.3 | 206.4 | 186.9 | 139.3 | 73.2 | 26.0 | 4.3 |
| G110.0 | 33.9 | 82.3 | 143.8 | 187.0 | 201.6 | 182.9 | 136.9 | 74.5 | 31.4 | 5.6 |
| G115.0 | 39.7 | 83.3 | 140.4 | 181.5 | 195.4 | 177.6 | 133.5 | 76.7 | 37.1 | 6.9 |
| G120.0 | 45.5 | 84.6 | 135.8 | 174.5 | 187.3 | 170.7 | 129.6 | 79.7 | 42.7 | 8.7 |
| G125.0 | 51.0 | 87.4 | 130.7 | 166.2 | 177.8 | 162.8 | 124.8 | 83.1 | 48.4 | 11.9 |
| G130.0 | 56.1 | 90.2 | 125.3 | 156.7 | 166.7 | 153.6 | 120.2 | 86.0 | 53.6 | 16.4 |
| G135.0 | 60.6 | 92.5 | 120.6 | 146.8 | 155.2 | 144.1 | 116.5 | 88.2 | 58.6 | 21.5 |
| G140.0 | 63.1 | 93.8 | 117.4 | 137.0 | 143.5 | 134.9 | 114.9 | 89.8 | 63.0 | 26.8 |
| G145.0 | 65.6 | 94.5 | 115.3 | 129.1 | 133.1 | 127.8 | 112.8 | 90.5 | 66.9 | 20.0 |
| G150.0 | 66.0 | 94.5 | 112.3 | 123.8 | 126.6 | 122.8 | 109.9 | 90.8 | 67.3 | 10.1 |
| G155.0 | 60.5 | 93.5 | 108.5 | 118.2 | 120.6 | 117.2 | 106.3 | 89.3 | 61.2 | 2.3 |
| G160.0 | 54.3 | 89.7 | 104.1 | 111.7 | 113.8 | 110.7 | 101.8 | 80.8 | 53.6 | 14.3 |
| G165.0 | 46.1 | 79.9 | 98.5 | 104.7 | 106.5 | 103.5 | 90.2 | 61.5 | 45.7 | 25.2 |
| G170.0 | 39.1 | 68.4 | 88.0 | 95.4 | 97.6 | 90.8 | 59.1 | 47.3 | 40.8 | 31.0 |
| G175.0 | 43.6 | 47.3 | 65.9 | 78.3 | 78.5 | 49.8 | 43.6 | 47.6 | 41.6 | 37.6 |
| G180.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |

C Plane (°):0.0-360.0: 22.5
 Test Lab: Bacl
 Test Type: TYPE C
 Temperature: 24.8 'C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-3000
 Distance: 14.073 m
 Humidity: 48
 Inspector:

Candlepower Table (Continue 1)

Unit: cd

| G\C | C225.0 | C247.5 | C270.0 | C292.5 | C315.0 | C337.5 | C360.0 | | | |
|--------|--------|--------|--------|--------|--------|--------|--------|--|--|--|
| G0.0 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | 76.2 | | | |
| G5.0 | 55.8 | 47.6 | 45.3 | 48.7 | 58.0 | 69.3 | 76.4 | | | |
| G10.0 | 19.7 | 1.8 | 3.7 | 1.6 | 26.3 | 56.6 | 76.2 | | | |
| G15.0 | 7.6 | 23.8 | 32.7 | 22.0 | 5.1 | 41.6 | 75.7 | | | |
| G20.0 | 30.0 | 36.7 | 34.3 | 37.5 | 23.4 | 18.6 | 74.7 | | | |
| G25.0 | 36.4 | 27.1 | 24.6 | 28.1 | 38.4 | 2.2 | 73.1 | | | |
| G30.0 | 28.5 | 19.2 | 17.1 | 20.1 | 30.7 | 9.8 | 70.9 | | | |
| G35.0 | 21.2 | 14.7 | 14.1 | 15.1 | 23.3 | 19.1 | 67.9 | | | |
| G40.0 | 15.9 | 13.0 | 12.7 | 13.4 | 17.5 | 27.1 | 64.4 | | | |
| G45.0 | 13.4 | 11.6 | 11.5 | 11.9 | 14.2 | 21.6 | 60.4 | | | |
| G50.0 | 11.5 | 10.2 | 10.2 | 10.5 | 12.1 | 16.3 | 56.0 | | | |
| G55.0 | 9.9 | 9.1 | 8.9 | 9.1 | 10.4 | 11.9 | 51.1 | | | |
| G60.0 | 8.5 | 7.8 | 7.5 | 7.9 | 8.9 | 8.6 | 45.9 | | | |
| G65.0 | 7.5 | 6.6 | 6.1 | 6.9 | 7.7 | 6.7 | 40.5 | | | |
| G70.0 | 7.4 | 6.0 | 5.0 | 5.7 | 6.9 | 5.3 | 34.8 | | | |
| G75.0 | 7.4 | 5.1 | 3.9 | 5.2 | 6.7 | 4.0 | 29.2 | | | |
| G80.0 | 7.6 | 5.1 | 4.0 | 5.4 | 7.2 | 2.7 | 23.9 | | | |
| G85.0 | 7.9 | 5.2 | 4.3 | 5.8 | 8.1 | 1.9 | 19.4 | | | |
| G90.0 | 7.1 | 5.4 | 4.4 | 5.9 | 8.4 | 2.1 | 16.9 | | | |
| G95.0 | 7.1 | 5.4 | 4.5 | 5.9 | 8.3 | 2.3 | 18.4 | | | |
| G100.0 | 6.7 | 5.5 | 4.8 | 6.0 | 7.7 | 3.0 | 22.8 | | | |
| G105.0 | 6.7 | 5.4 | 5.1 | 6.1 | 7.3 | 4.2 | 28.2 | | | |
| G110.0 | 7.1 | 6.2 | 6.0 | 6.7 | 7.4 | 5.4 | 33.9 | | | |
| G115.0 | 8.0 | 7.3 | 7.3 | 7.6 | 8.0 | 6.7 | 39.7 | | | |
| G120.0 | 9.5 | 8.5 | 8.5 | 8.5 | 9.1 | 8.7 | 45.5 | | | |
| G125.0 | 11.1 | 9.8 | 9.8 | 9.7 | 10.6 | 12.0 | 51.0 | | | |
| G130.0 | 12.9 | 11.2 | 11.2 | 10.9 | 12.5 | 16.7 | 56.1 | | | |
| G135.0 | 14.7 | 12.6 | 12.4 | 12.2 | 14.4 | 21.9 | 60.6 | | | |
| G140.0 | 18.3 | 14.0 | 13.7 | 13.8 | 18.1 | 27.5 | 63.1 | | | |
| G145.0 | 24.5 | 15.9 | 14.9 | 15.6 | 24.1 | 19.5 | 65.6 | | | |
| G150.0 | 31.5 | 21.8 | 19.0 | 21.6 | 31.7 | 10.4 | 66.0 | | | |
| G155.0 | 38.2 | 29.9 | 27.1 | 29.6 | 38.0 | 2.8 | 60.5 | | | |
| G160.0 | 19.4 | 38.8 | 37.0 | 38.6 | 20.7 | 11.9 | 54.3 | | | |
| G165.0 | 3.0 | 17.5 | 23.6 | 18.5 | 4.5 | 23.0 | 46.1 | | | |
| G170.0 | 17.1 | 2.4 | 2.0 | 1.4 | 17.0 | 27.3 | 39.1 | | | |
| G175.0 | 30.2 | 24.2 | 22.4 | 31.4 | 27.9 | 29.8 | 43.6 | | | |
| G180.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | | |

C Plane (°):0.0-360.0: 22.5
 Test Lab: Bacl
 Test Type: TYPE C
 Temperature: 24.8 'C
 Operator: KOBE

Gamma Plane (°):0.0-180.0:5.0
 Test Device: GPM-3000
 Distance: 14.073 m
 Humidity: 48
 Inspector: