**OOO "FAROS"**
www.farosled.ru
Tel: +7 (8422) 583-386, 583-387
E-mail: info@farosled.ru


Report No.: Test Time: 26.03.2020 19:07

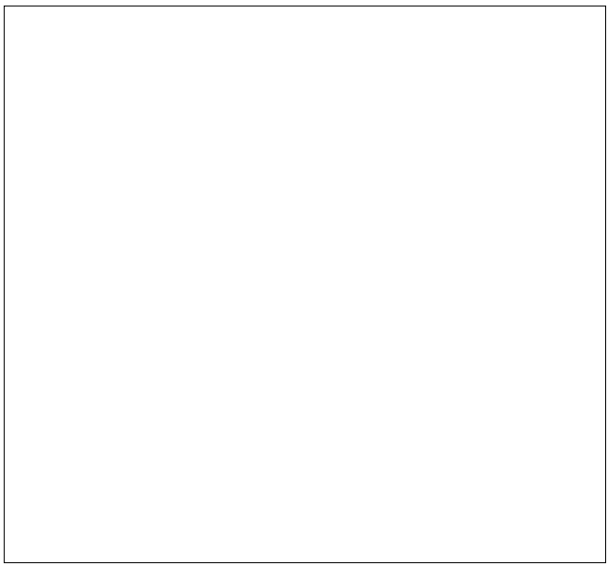
## Luminaire Property

Luminaire Manufacturer:
Luminaire Description: FG 50 (900) 3x39LED 42W 5000K прозрачный с линзой 60 гр. DALI
Luminous Length (mm): 945 Luminous Width (mm): 55
Luminous Height (mm): 80 Voltage: 229.3 V
Current: 0.184 A Power: 41.32 W
Power Factor: 0.977

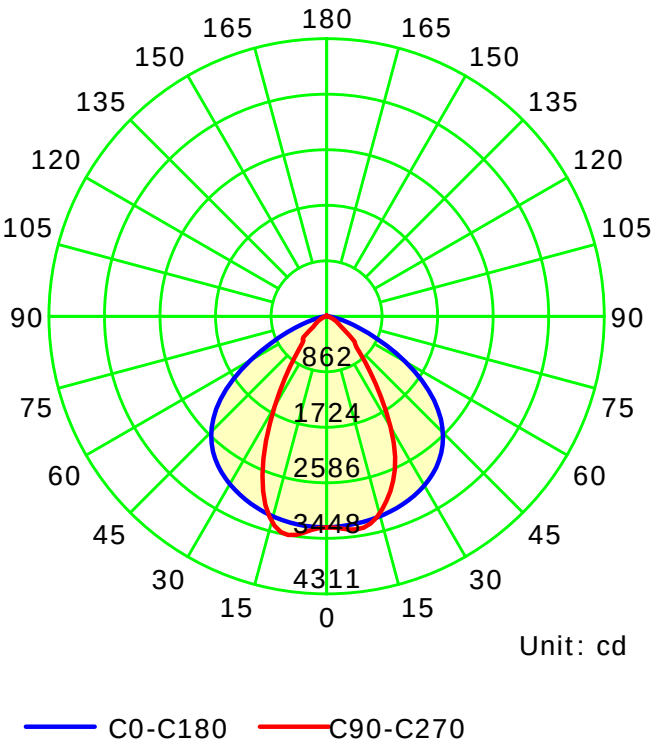
## Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 5894.7 lm
Measurement Flux: 5894.7 lm Efficiency: 100%
Downward Ratio: 99% Upward Ratio: 1%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 147.9, 102.6, 114.9, 115.9
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 114.8, 61.4, 73.7, 74.4
Luminaire Efficacy Rating (LER): 142.71 Central Intensity: 3276.23 cd
Max. Intensity: 3448.9 cd Pos of Max. Intensity: H270 V10
S/MH(C0/C180): 1.37 S/MH(C90/C270): 0.98

Picture Of Luminaire

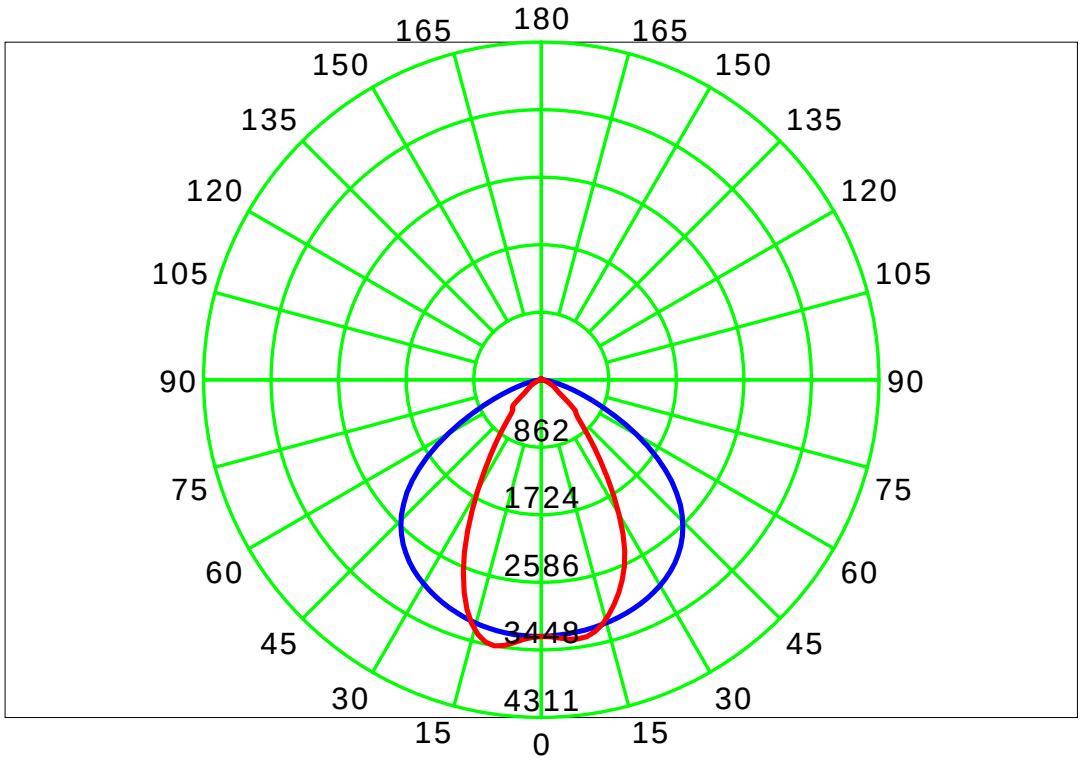


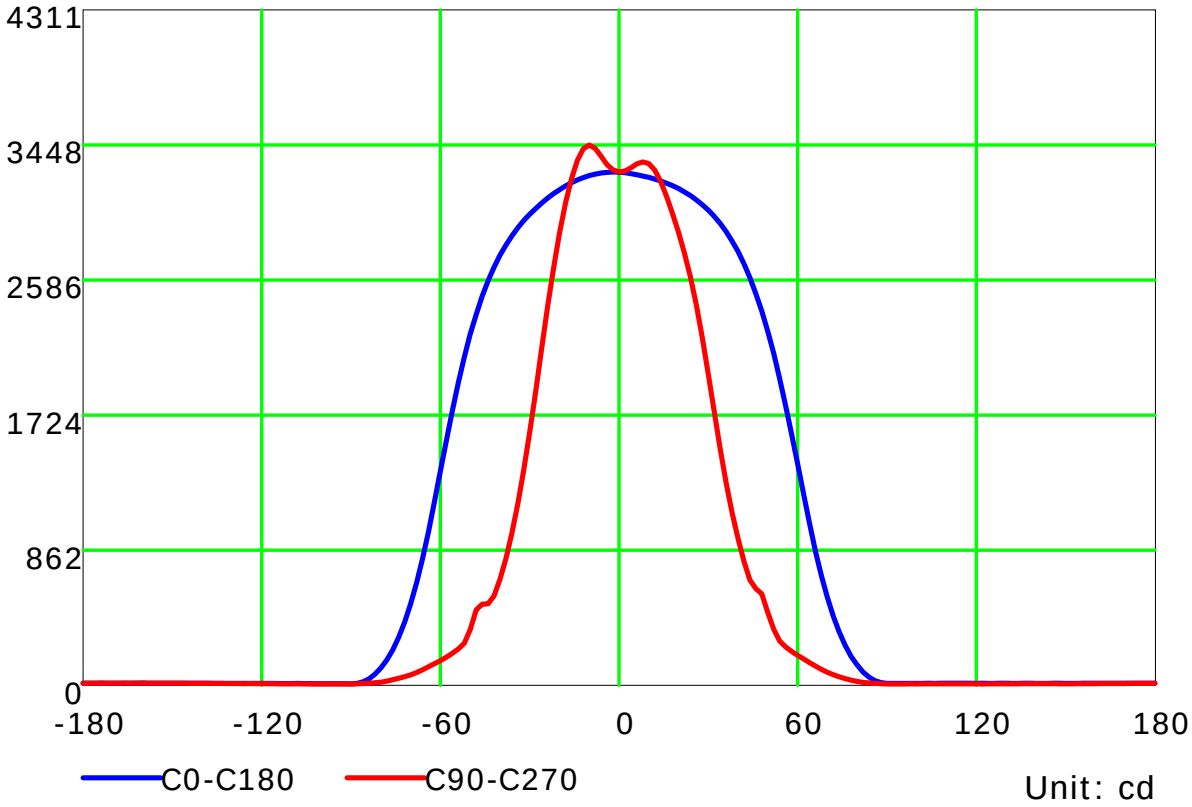
Luminous Intensity Distribution Curve




C Plane (°):0.0-360.0: 22.5 Gamma Plane (°):0.0-180.0:2.0
Test Lab: Test Device: LSG-1800B
Test Type: TYPE C Distance: 12.677 m
Temperature: Humidity:
Operator: Inspector:

# Luminous Intensity Distribution Curve

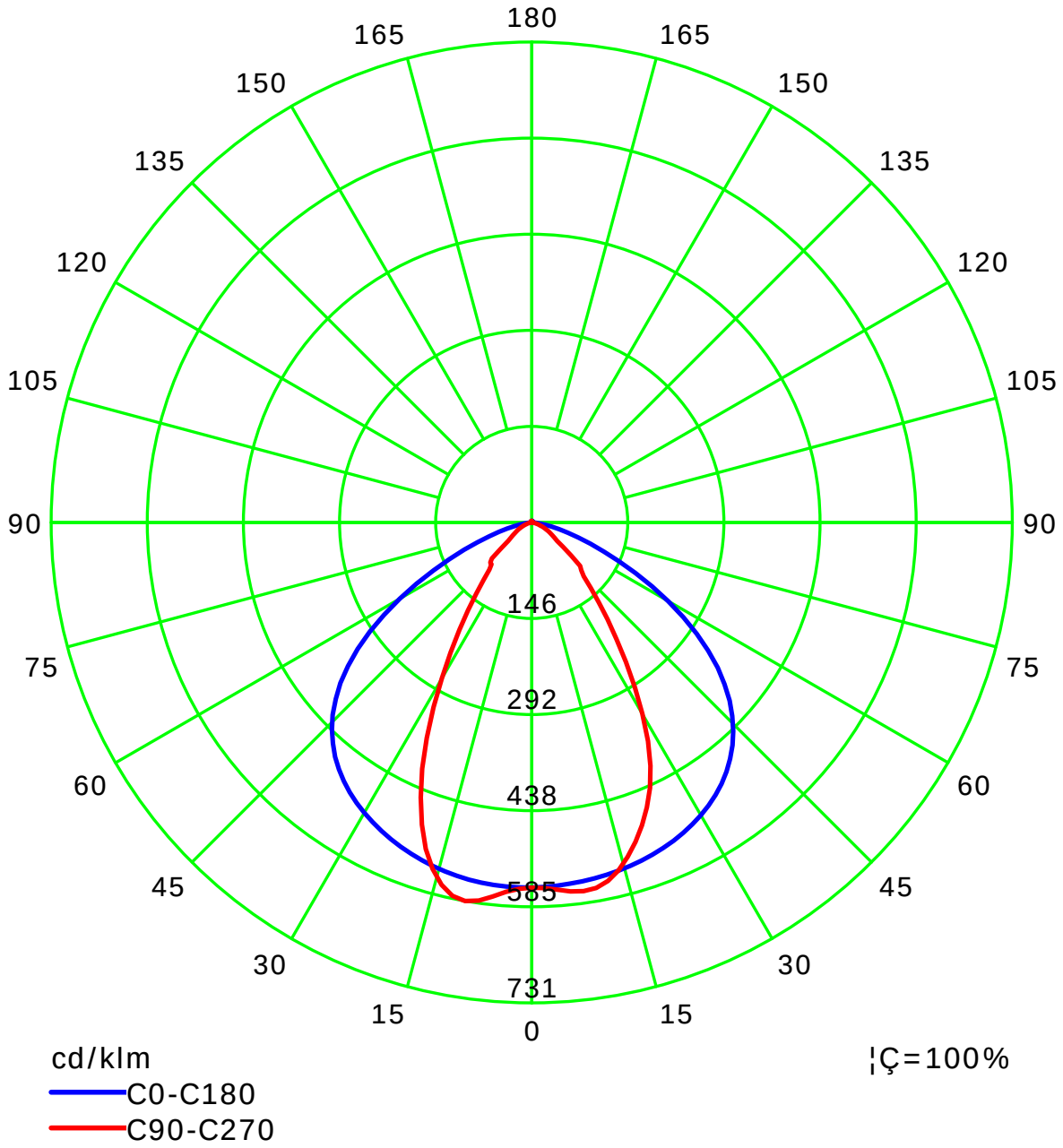



C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:2.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

# Luminous Intensity Distribution Curve(cd/klm)



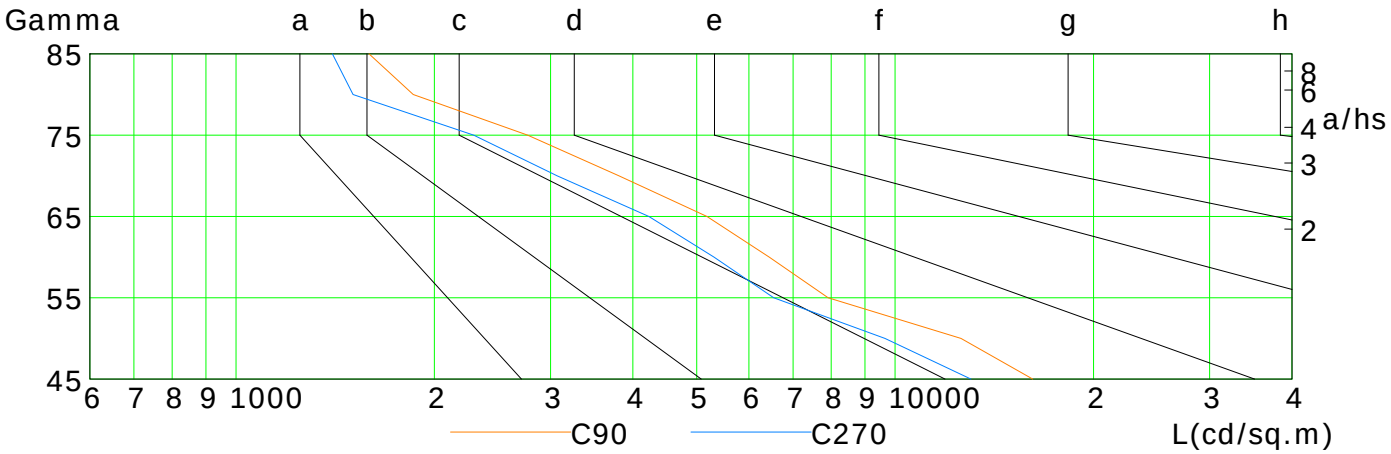

C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

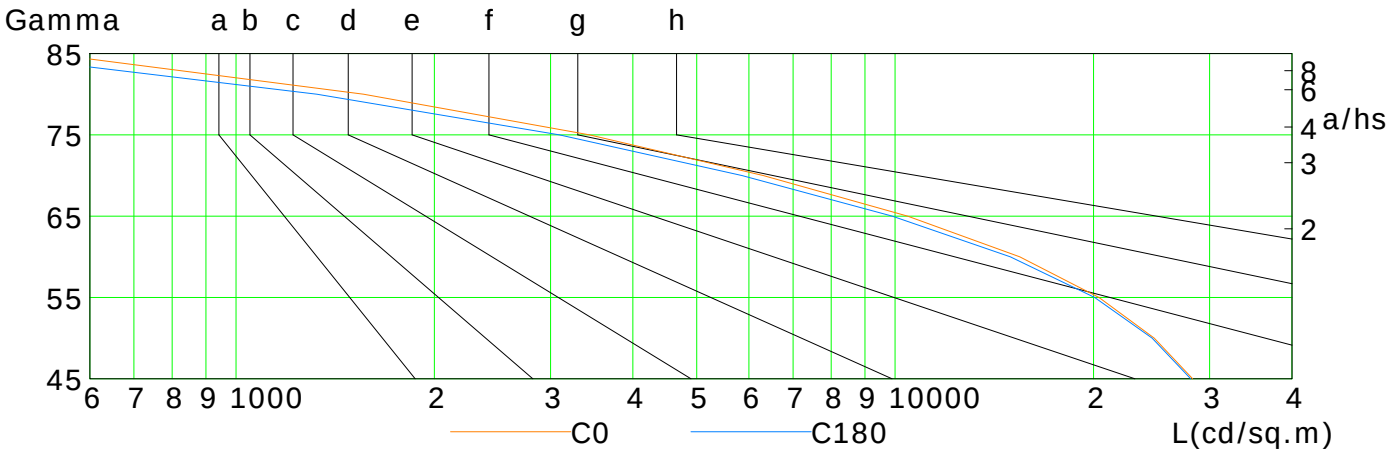
Gamma Plane (°):0.0-180.0:2.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

**OOO "FAROS"**
www.farosled.ru
Tel: +7 (8422) 583-386, 583-387
E-mail: info@farosled.ru


# Lum Limit Curve

| Dazzle | Quality | Illuminance (lx) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 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 |



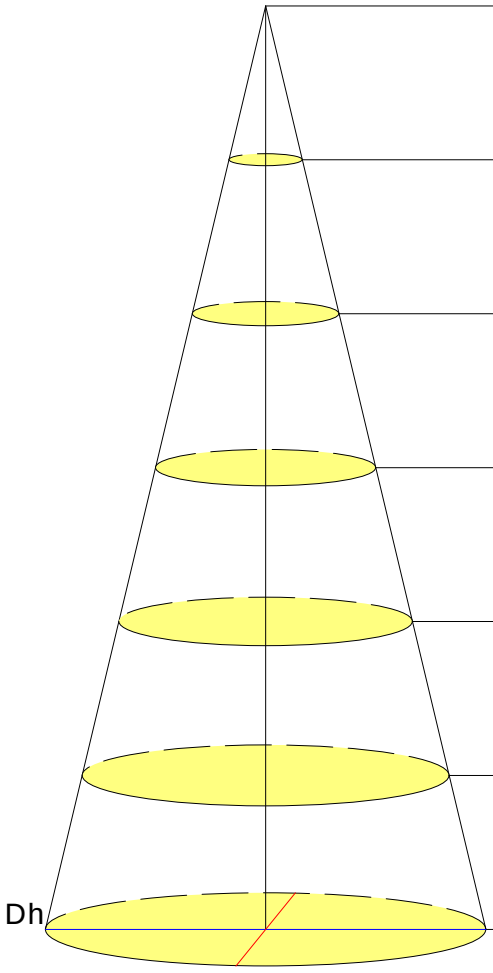




| L(cd/sq.m) | G45 | G50 | G55 | G60 | G65 | G70 | G75 | G80 | G85 |
|---|---|---|---|---|---|---|---|---|---|
| C0 | 28278 | 24718 | 20387 | 15458 | 10452 | 6307 | 3438 | 1562 | 519 |
| C90 | 16175 | 12589 | 7913 | 6442 | 5182 | 3811 | 2771 | 1857 | 1591 |
| C180 | 28079 | 24540 | 20081 | 14951 | 9904 | 5854 | 3095 | 1326 | 407 |
| C270 | 13035 | 9654 | 6545 | 5310 | 4229 | 3071 | 2294 | 1505 | 1400 |

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

Gamma Plane (°):0.0-180.0:2.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

# Illuminance at a Distance




| Dist(m) | Enadir(lx) | Dh/Dv_B(m) | S_B(sq.m) | Eav_B(lx) |
|---|---|---|---|---|
| 5.0 | 131.05 | 15.65/5.93 | 67.5 | 47.91 |
| 10.0 | 32.76 | 31.30/11.87 | 269.9 | 11.98 |
| 15.0 | 14.56 | 46.95/17.80 | 607.3 | 5.32 |
| 20.0 | 8.19 | 62.59/23.73 | 1079.6 | 2.99 |
| 25.0 | 5.24 | 78.24/29.67 | 1686.9 | 1.92 |
| 30.0 | 3.64 | 93.89/35.60 | 2429.2 | 1.33 |

Beam Angle(B): H114.8 V61.4 Field Angle(F): H147.9 V102.6

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

Gamma Plane (°):0.0-180.0:2.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
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 | 22.4 | 23.5 | 22.7 | 23.8 | 24.0 | 16.6 | 17.7 | 16.9 | 18.0 | 18.2 |
| 3H | 22.9 | 24.0 | 23.3 | 24.2 | 24.5 | 16.8 | 17.8 | 17.1 | 18.1 | 18.4 |
| 4H | 23.0 | 24.0 | 23.4 | 24.3 | 24.6 | 16.8 | 17.8 | 17.1 | 18.1 | 18.4 |
| 6H | 23.0 | 23.9 | 23.4 | 24.2 | 24.5 | 16.8 | 17.7 | 17.1 | 18.0 | 18.3 |
| 8H | 23.0 | 23.8 | 23.4 | 24.2 | 24.5 | 16.8 | 17.6 | 17.1 | 17.9 | 18.3 |
| 12H | 22.9 | 23.8 | 23.3 | 24.1 | 24.5 | 16.7 | 17.6 | 17.1 | 17.9 | 18.3 |
| X=4H Y=2H | 22.2 | 23.2 | 22.6 | 23.5 | 23.8 | 16.9 | 17.8 | 17.2 | 18.1 | 18.4 |
| 3H | 22.8 | 23.6 | 23.2 | 24.0 | 24.3 | 17.1 | 17.9 | 17.5 | 18.3 | 18.6 |
| 4H | 22.9 | 23.7 | 23.3 | 24.0 | 24.4 | 17.1 | 17.9 | 17.6 | 18.2 | 18.6 |
| 6H | 23.0 | 23.6 | 23.4 | 24.0 | 24.4 | 17.1 | 17.8 | 17.6 | 18.2 | 18.6 |
| 8H | 22.9 | 23.5 | 23.4 | 23.9 | 24.4 | 17.1 | 17.7 | 17.6 | 18.1 | 18.6 |
| 12H | 22.9 | 23.4 | 23.4 | 23.9 | 24.3 | 17.1 | 17.6 | 17.6 | 18.1 | 18.5 |
| X=8H Y=4H | 22.8 | 23.4 | 23.3 | 23.8 | 24.3 | 17.2 | 17.8 | 17.6 | 18.2 | 18.6 |
| 6H | 22.9 | 23.3 | 23.4 | 23.8 | 24.3 | 17.2 | 17.7 | 17.7 | 18.1 | 18.6 |
| 8H | 22.9 | 23.3 | 23.4 | 23.8 | 24.3 | 17.2 | 17.6 | 17.7 | 18.1 | 18.6 |
| 12H | 22.8 | 23.2 | 23.4 | 23.7 | 24.2 | 17.2 | 17.5 | 17.7 | 18.0 | 18.5 |
| X=12H Y=4H | 22.8 | 23.3 | 23.3 | 23.8 | 24.2 | 17.1 | 17.7 | 17.6 | 18.1 | 18.6 |
| 6H | 22.8 | 23.3 | 23.3 | 23.7 | 24.2 | 17.2 | 17.6 | 17.7 | 18.1 | 18.6 |
| 8H | 22.8 | 23.2 | 23.3 | 23.7 | 24.2 | 17.2 | 17.5 | 17.7 | 18.0 | 18.5 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S=1.0H | +0.6/-1.0 | | | | | +1.5/-2.2 | | | | |
| S=1.5H | +2.0/-2.9 | | | | | +2.9/-3.2 | | | | |
| S=2.0H | +3.6/-4.9 | | | | | +4.4/-4.4 | | | | |

Calculate in accordance with CIE Pub.117. The table is revised with 5895lm (8log(F/F0) = 6.2).

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

Gamma Plane (°):0.0-180.0:2.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

# Utilisation Factor Table(Floor cavity)

| Utilisation Factors UF(F) | | | SHR NOM = 1.00 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.67 | 0.77 | 0.83 | 0.88 | 0.94 | 0.98 | 1.01 | 1.04 | 1.07 |
| | 0.30 | | 0.61 | 0.71 | 0.77 | 0.82 | 0.89 | 0.94 | 0.97 | 1.01 | 1.04 |
| | 0.20 | | 0.56 | 0.66 | 0.73 | 0.78 | 0.85 | 0.90 | 0.94 | 0.98 | 1.01 |
| 0.50 | 0.50 | 0.20 | 0.66 | 0.75 | 0.81 | 0.85 | 0.91 | 0.95 | 0.97 | 1.00 | 1.02 |
| | 0.30 | | 0.60 | 0.70 | 0.76 | 0.81 | 0.87 | 0.91 | 0.94 | 0.98 | 1.00 |
| | 0.20 | | 0.56 | 0.65 | 0.72 | 0.77 | 0.83 | 0.88 | 0.91 | 0.95 | 0.98 |
| 0.30 | 0.50 | 0.20 | 0.64 | 0.73 | 0.79 | 0.83 | 0.88 | 0.91 | 0.94 | 0.96 | 0.98 |
| | 0.30 | | 0.59 | 0.68 | 0.74 | 0.79 | 0.85 | 0.88 | 0.91 | 0.94 | 0.97 |
| | 0.20 | | 0.55 | 0.65 | 0.71 | 0.75 | 0.82 | 0.86 | 0.89 | 0.93 | 0.95 |
| 0.00 | 0.00 | 0.00 | 0.53 | 0.62 | 0.68 | 0.72 | 0.78 | 0.82 | 0.85 | 0.88 | 0.90 |

Rating:41W Photometrically tested without ceiling board.

Multiply UF values by service correction factors

Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

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

Gamma Plane (°):0.0-180.0:2.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

# Utilisation Factor Table(Wall)

| Utilisation Factors UF(W) | | | | | | | | | | | SHR NOM = 1.00 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.83 | 0.67 | 0.56 | 0.48 | 0.38 | 0.31 | 0.26 | 0.20 | 0.16 |
| | 0.30 | | 0.69 | 0.57 | 0.49 | 0.43 | 0.34 | 0.29 | 0.24 | 0.19 | 0.16 |
| | 0.20 | | 0.59 | 0.50 | 0.43 | 0.38 | 0.31 | 0.26 | 0.23 | 0.18 | 0.15 |
| 0.50 | 0.50 | 0.20 | 0.79 | 0.64 | 0.53 | 0.46 | 0.36 | 0.33 | 0.25 | 0.19 | 0.15 |
| | 0.30 | | 0.67 | 0.55 | 0.47 | 0.41 | 0.33 | 0.27 | 0.23 | 0.18 | 0.15 |
| | 0.20 | | 0.58 | 0.49 | 0.42 | 0.37 | 0.30 | 0.25 | 0.22 | 0.17 | 0.14 |
| 0.30 | 0.50 | 0.20 | 0.77 | 0.61 | 0.51 | 0.43 | 0.34 | 0.27 | 0.23 | 0.18 | 0.14 |
| | 0.30 | | 0.65 | 0.53 | 0.45 | 0.39 | 0.31 | 0.26 | 0.22 | 0.17 | 0.14 |
| | 0.20 | | 0.57 | 0.48 | 0.41 | 0.36 | 0.29 | 0.24 | 0.21 | 0.16 | 0.13 |
| 0.00 | 0.00 | 0.00 | 0.46 | 0.37 | 0.31 | 0.26 | 0.21 | 0.17 | 0.14 | 0.11 | 0.09 |

Rating:41W Photometrically tested without ceiling board.

Multiply UF values by service correction factors

Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

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

Gamma Plane (°):0.0-180.0:2.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

# Utilisation Factor Table(Ceiling cavity)

| Utilisation Factors UF(C) | | | SHR NOM = 1.00 | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 0.16 | 0.17 | 0.18 | 0.19 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 |
| | 0.30 | | 0.10 | 0.12 | 0.13 | 0.15 | 0.16 | 0.17 | 0.18 | 0.20 | 0.20 |
| | 0.20 | | 0.06 | 0.08 | 0.10 | 0.11 | 0.13 | 0.15 | 0.16 | 0.17 | 0.19 |
| 0.50 | 0.50 | 0.20 | 0.15 | 0.17 | 0.18 | 0.18 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 |
| | 0.30 | | 0.10 | 0.12 | 0.13 | 0.14 | 0.16 | 0.17 | 0.18 | 0.19 | 0.20 |
| | 0.20 | | 0.06 | 0.08 | 0.10 | 0.11 | 0.13 | 0.14 | 0.15 | 0.17 | 0.18 |
| 0.30 | 0.50 | 0.20 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | 0.19 | 0.20 | 0.20 | 0.20 |
| | 0.30 | | 0.10 | 0.12 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 |
| | 0.20 | | 0.06 | 0.08 | 0.09 | 0.11 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 |
| 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |

Rating:41W Photometrically tested without ceiling board.

Multiply UF values by service correction factors

Calculate in accordance with CIBSE Technical Memorandum NO.5 1980

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

Gamma Plane (°):0.0-180.0:2.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector: