

Report No.: 1

Test Time: 17.01.2020 15:22

Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 100 DALI 44LED 400W 5000K 60x150gr.

Luminous Length (mm): 440 mm

Luminous Width (mm): 205 mm

Luminous Height (mm): 338 mm

Voltage: 221.1 V

Current: 1.740 A

Power: 398.53 W

Power Factor: 0.982

Photometric Results

CIE Class: Direct

Measurement Flux: 58278.3 lm

Downward Ratio: 99%

Total Rated Lamp Lumens: 58278.3 lm

Efficiency: 100%

Upward Ratio: 1%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 104.9, 141.7, 126.7, 125.4

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 44.3, 131.2, 82.4, 58.1

Luminaire Efficacy Rating (LER): 146.28

Central Intensity: 15562.03 cd

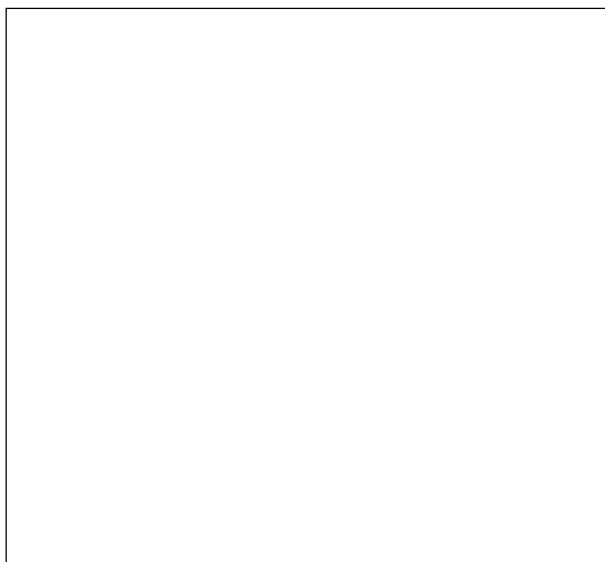
Max. Intensity: 33658.99 cd

Pos of Max. Intensity: H135 V35

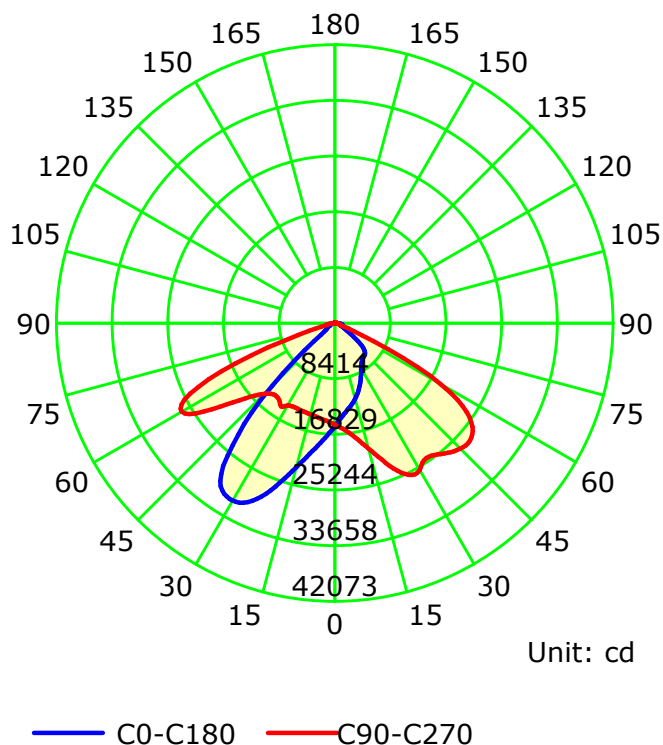
S/MH(C0/C180): 1.61

S/MH(C90/C270): 1.94

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

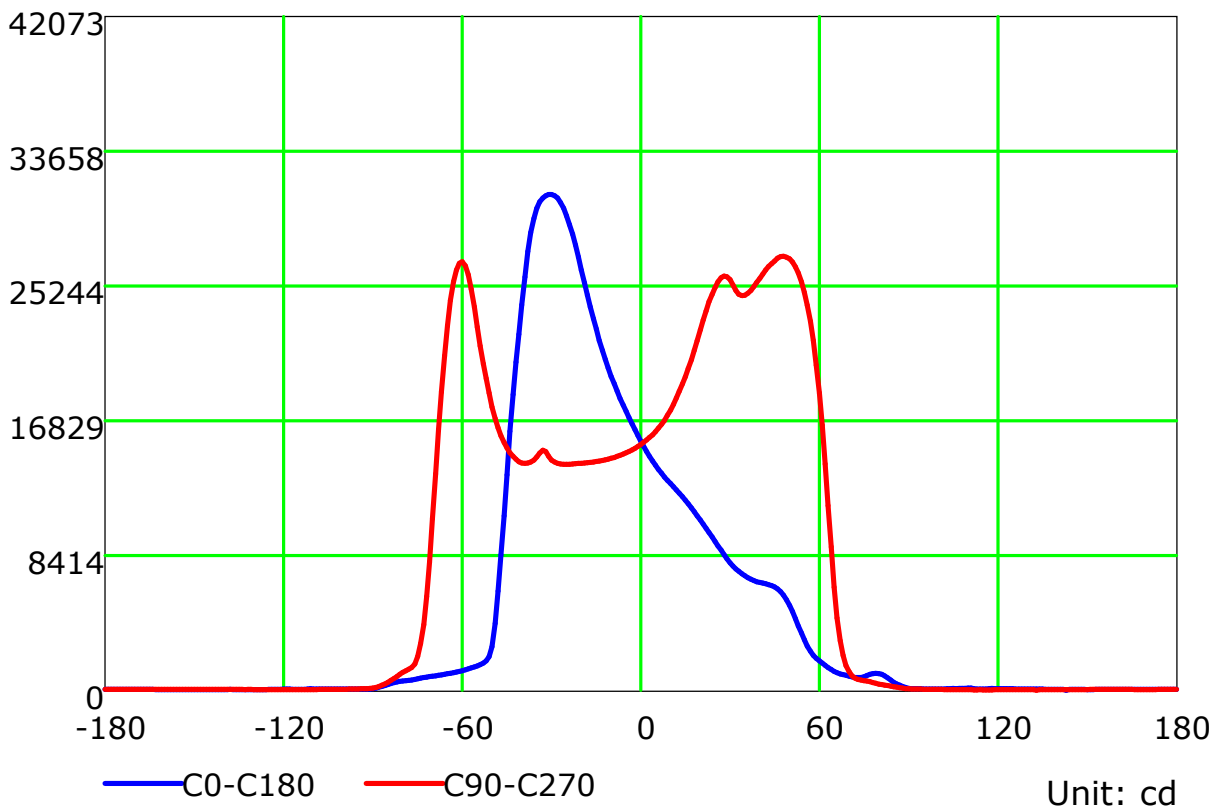
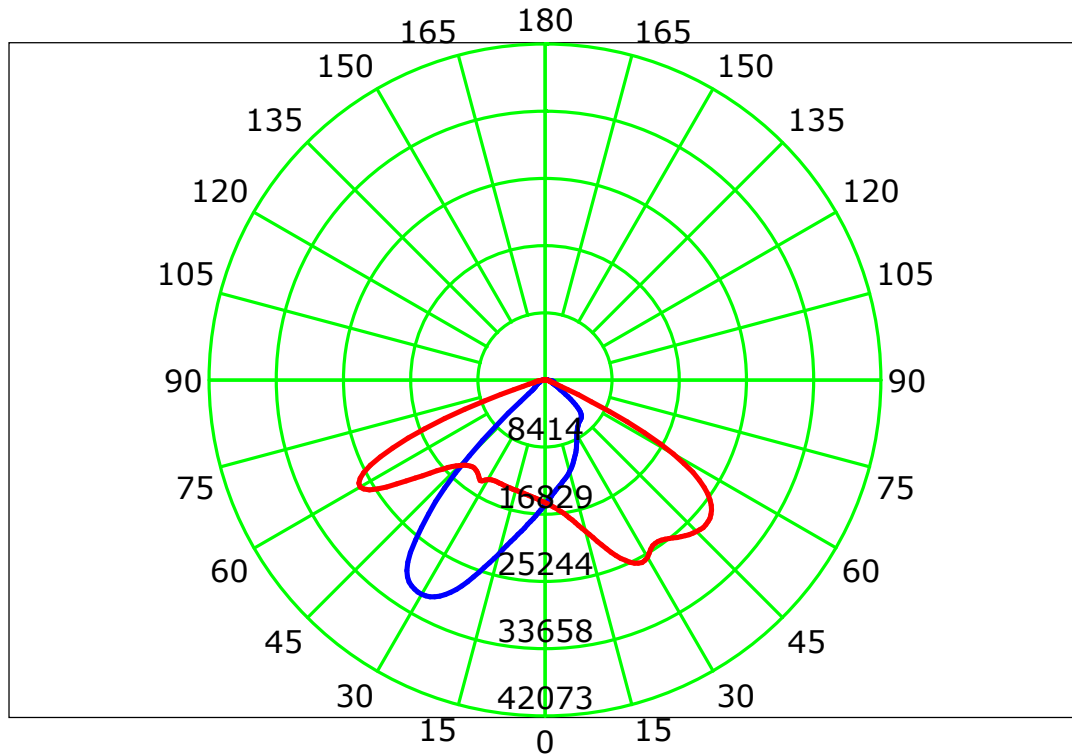
Test Device: LSG-1800B

Distance: 12.677 m

Humidity:

Inspector:

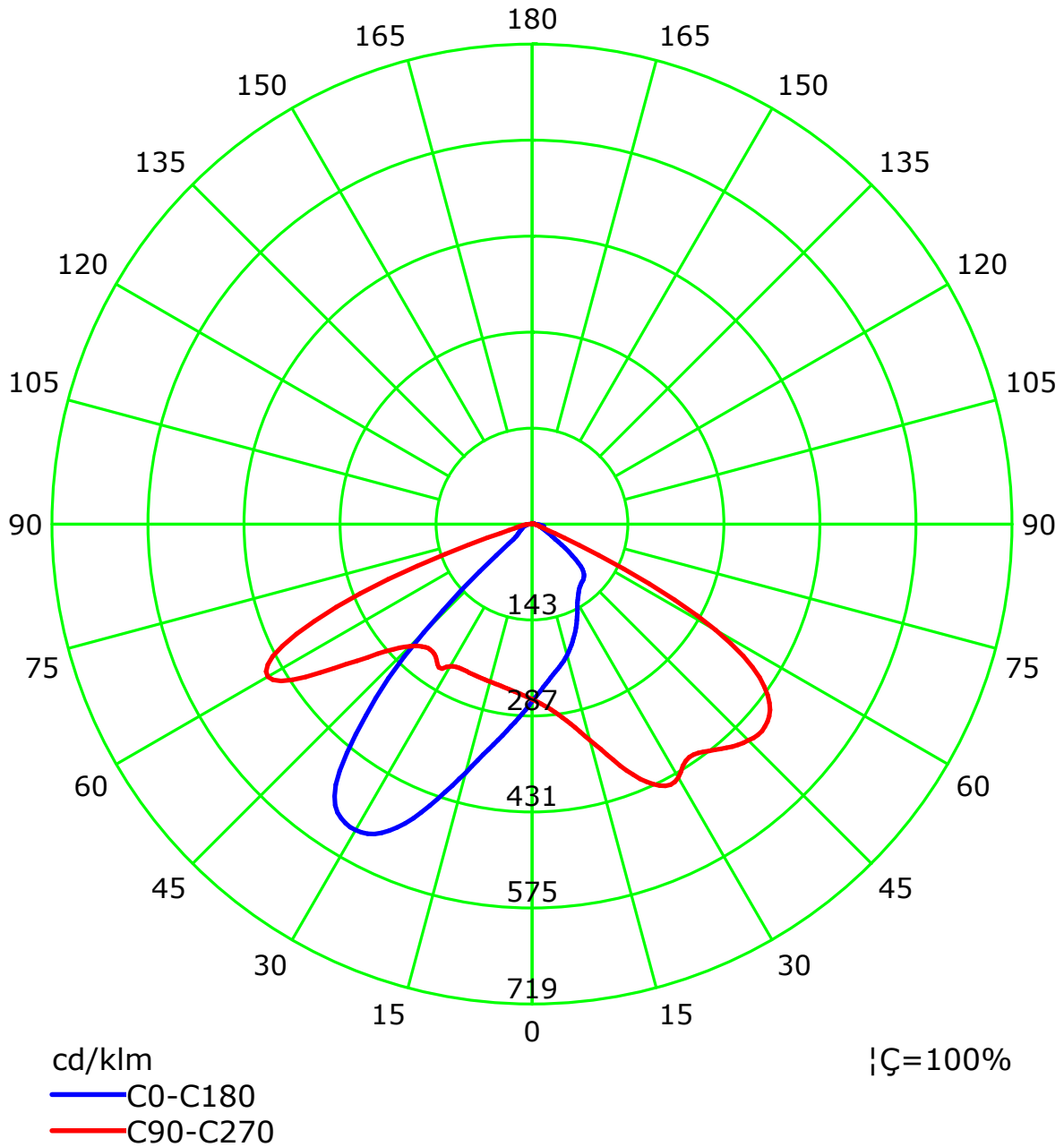
Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



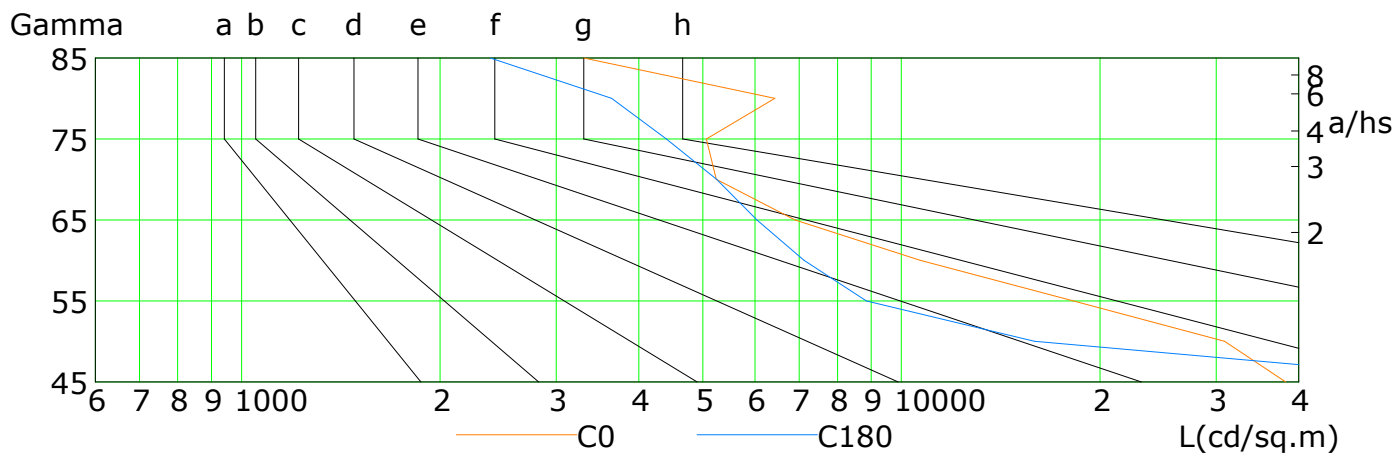
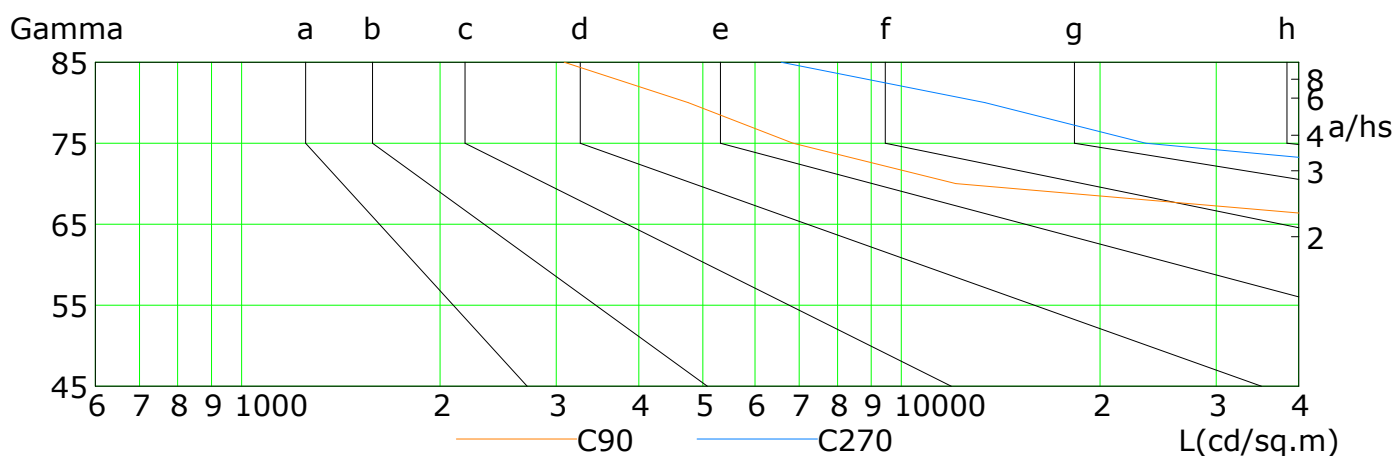
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: LSG-1800B
Distance: 12.677 m
Humidity:
Inspector:

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

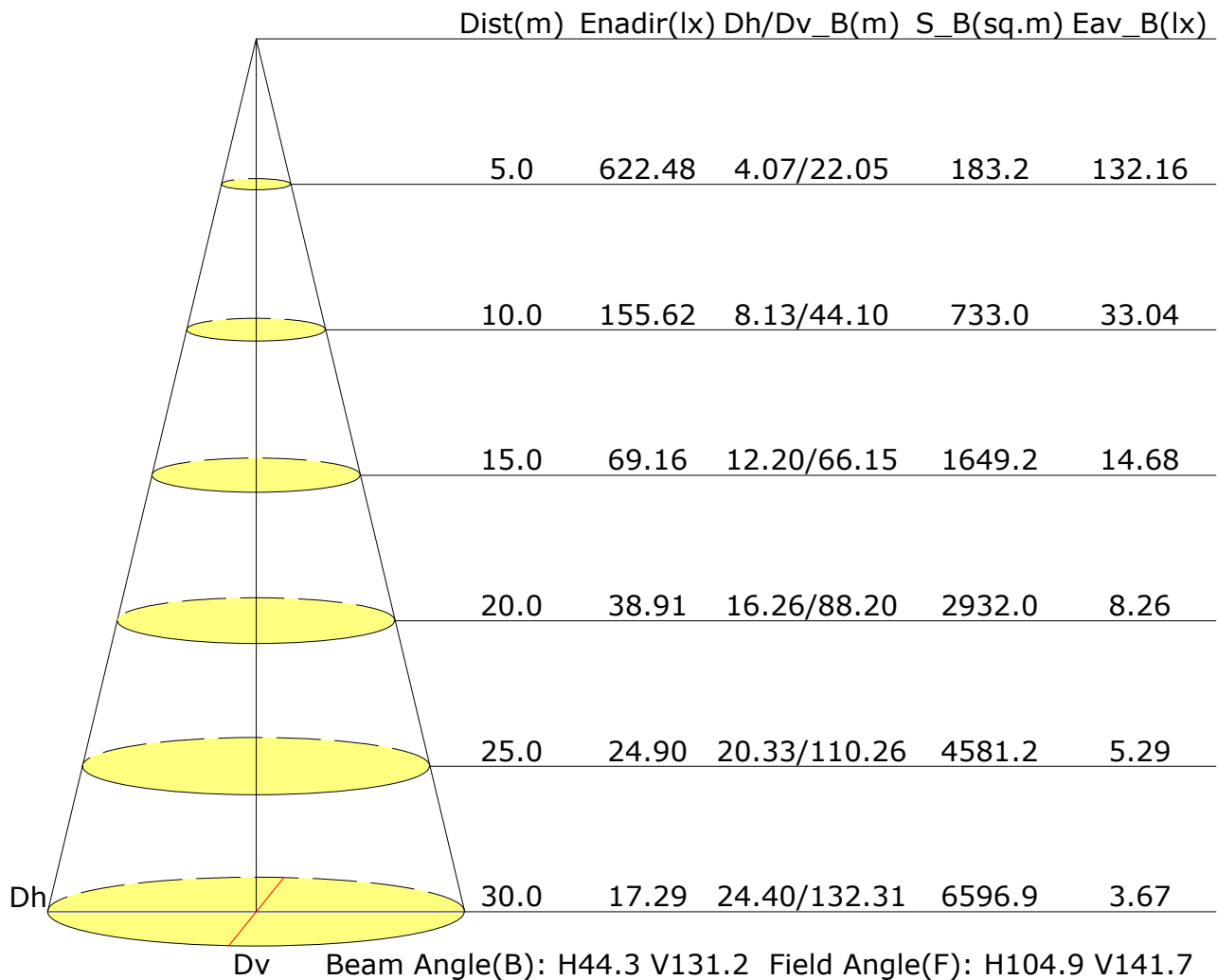


| L(cd/sq.m) | G45 | G50 | G55 | G60 | G65 | G70 | G75 | G80 | G85 |
|------------|--------|--------|--------|--------|--------|--------|-------|-------|------|
| C0 | 38235 | 30881 | 18223 | 10678 | 6895 | 5239 | 5061 | 6431 | 3301 |
| C90 | 237772 | 242625 | 229174 | 176811 | 63959 | 12084 | 6850 | 4753 | 3085 |
| C180 | 79645 | 15903 | 8846 | 7117 | 6039 | 5248 | 4404 | 3638 | 2382 |
| C270 | 134200 | 159287 | 209184 | 254668 | 225766 | 111851 | 23478 | 13375 | 6573 |

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 Inspector:

Illuminance at a Distance



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 | 20.8 | 22.1 | 21.1 | 22.4 | 22.6 | 30.8 | 32.1 | 31.1 | 32.3 | 32.6 |
| 3H | 20.9 | 22.0 | 21.2 | 22.3 | 22.6 | 31.8 | 32.9 | 32.1 | 33.2 | 33.5 |
| 4H | 20.9 | 22.0 | 21.3 | 22.3 | 22.6 | 31.7 | 32.8 | 32.1 | 33.1 | 33.5 |
| 6H | 21.1 | 22.1 | 21.4 | 22.4 | 22.7 | 31.7 | 32.7 | 32.0 | 33.0 | 33.4 |
| 8H | 21.2 | 22.1 | 21.5 | 22.5 | 22.8 | 31.6 | 32.6 | 32.0 | 33.0 | 33.3 |
| 12H | 21.2 | 22.1 | 21.6 | 22.5 | 22.8 | 31.6 | 32.5 | 32.0 | 32.9 | 33.2 |
| X=4H Y=2H | 22.2 | 23.3 | 22.6 | 23.6 | 23.9 | 30.6 | 31.7 | 30.9 | 32.0 | 32.3 |
| 3H | 22.3 | 23.2 | 22.7 | 23.6 | 23.9 | 31.6 | 32.6 | 32.0 | 32.9 | 33.3 |
| 4H | 22.3 | 23.2 | 22.7 | 23.5 | 23.9 | 31.6 | 32.5 | 32.0 | 32.8 | 33.2 |
| 6H | 22.5 | 23.2 | 22.9 | 23.6 | 24.0 | 31.6 | 32.3 | 32.0 | 32.7 | 33.1 |
| 8H | 22.6 | 23.3 | 23.0 | 23.7 | 24.1 | 31.5 | 32.2 | 32.0 | 32.6 | 33.1 |
| 12H | 22.6 | 23.2 | 23.1 | 23.7 | 24.1 | 31.5 | 32.1 | 32.0 | 32.6 | 33.0 |
| X=8H Y=4H | 22.4 | 23.1 | 22.9 | 23.5 | 24.0 | 31.5 | 32.2 | 32.0 | 32.6 | 33.0 |
| 6H | 22.6 | 23.2 | 23.1 | 23.6 | 24.1 | 31.5 | 32.0 | 32.0 | 32.5 | 32.9 |
| 8H | 22.8 | 23.2 | 23.3 | 23.7 | 24.2 | 31.5 | 31.9 | 32.0 | 32.4 | 32.9 |
| 12H | 22.8 | 23.3 | 23.4 | 23.7 | 24.3 | 31.4 | 31.8 | 31.9 | 32.3 | 32.8 |
| X=12H Y=4H | 22.4 | 23.0 | 22.9 | 23.4 | 23.9 | 31.5 | 32.1 | 32.0 | 32.5 | 33.0 |
| 6H | 22.6 | 23.1 | 23.1 | 23.6 | 24.1 | 31.5 | 31.9 | 31.9 | 32.4 | 32.9 |
| 8H | 22.8 | 23.2 | 23.3 | 23.6 | 24.2 | 31.4 | 31.8 | 31.9 | 32.3 | 32.8 |
| Variations with the observer position at spacings: | | | | | | | | | | |
| S=1.0H | +0.6/-1.3 | | | | | +0.7/-0.8 | | | | |
| S=1.5H | +1.6/-3.9 | | | | | +2.5/-2.7 | | | | |
| S=2.0H | +2.4/-5.7 | | | | | +4.3/-6.0 | | | | |

Calculate in accordance with CIE Pub.117. The table is revised with 58278lm ($8\log(F/F_0) = 14.1$).

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

Gamma Plane (°):0.0-180.0:1.0
 Test Device: LSG-1800B
 Distance: 12.677 m
 Humidity:
 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 | 0.75 | 0.82 | 0.87 | 0.94 | 0.98 | 1.01 | 1.04 | 1.06 | |
| | 0.30 | | NA | 0.69 | 0.76 | 0.81 | 0.89 | 0.93 | 0.97 | 1.01 | 1.04 | |
| | 0.20 | | NA | 0.64 | 0.71 | 0.77 | 0.85 | 0.90 | 0.93 | 0.98 | 1.01 | |
| 0.50 | 0.50 | 0.20 | NA | 0.73 | 0.80 | 0.85 | 0.91 | 0.94 | 0.97 | 1.00 | 1.02 | |
| | 0.30 | | NA | 0.68 | 0.75 | 0.80 | 0.87 | 0.91 | 0.94 | 0.97 | 1.00 | |
| | 0.20 | | NA | 0.63 | 0.70 | 0.76 | 0.83 | 0.88 | 0.91 | 0.95 | 0.98 | |
| 0.30 | 0.50 | 0.20 | NA | 0.71 | 0.78 | 0.82 | 0.88 | 0.91 | 0.93 | 0.96 | 0.98 | |
| | 0.30 | | NA | 0.67 | 0.73 | 0.78 | 0.84 | 0.88 | 0.91 | 0.94 | 0.96 | |
| | 0.20 | | NA | 0.63 | 0.69 | 0.75 | 0.81 | 0.86 | 0.88 | 0.92 | 0.95 | |
| 0.00 | 0.00 | 0.00 | NA | 0.60 | 0.67 | 0.72 | 0.78 | 0.82 | 0.84 | 0.88 | 0.90 | |
| Rating:399W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980 | | | | | | | | | | | | |

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 | 0.69 | 0.58 | 0.50 | 0.38 | 0.32 | 0.27 | 0.21 | 0.17 | |
| | 0.30 | | NA | 0.59 | 0.51 | 0.44 | 0.35 | 0.29 | 0.25 | 0.20 | 0.16 | |
| | 0.20 | | NA | 0.52 | 0.45 | 0.39 | 0.32 | 0.27 | 0.23 | 0.18 | 0.15 | |
| 0.50 | 0.50 | 0.20 | NA | 0.66 | 0.55 | 0.47 | 0.36 | 0.34 | 0.25 | 0.19 | 0.16 | |
| | 0.30 | | NA | 0.58 | 0.49 | 0.42 | 0.33 | 0.28 | 0.24 | 0.18 | 0.15 | |
| | 0.20 | | NA | 0.51 | 0.44 | 0.38 | 0.31 | 0.26 | 0.22 | 0.18 | 0.15 | |
| 0.30 | 0.50 | 0.20 | NA | 0.63 | 0.53 | 0.45 | 0.34 | 0.28 | 0.24 | 0.18 | 0.15 | |
| | 0.30 | | NA | 0.56 | 0.47 | 0.41 | 0.32 | 0.26 | 0.23 | 0.17 | 0.14 | |
| | 0.20 | | NA | 0.50 | 0.43 | 0.37 | 0.30 | 0.25 | 0.21 | 0.17 | 0.14 | |
| 0.00 | 0.00 | 0.00 | 0.99 | 0.39 | 0.33 | 0.28 | 0.21 | 0.18 | 0.15 | 0.12 | 0.09 | |
| Rating:399W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980 | | | | | | | | | | | | |

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 | 0.17 | 0.18 | 0.19 | 0.20 | 0.20 | 0.21 | 0.22 | 0.22 | |
| | 0.30 | | NA | 0.12 | 0.13 | 0.14 | 0.16 | 0.17 | 0.18 | 0.19 | 0.20 | |
| | 0.20 | | NA | 0.08 | 0.09 | 0.11 | 0.13 | 0.14 | 0.15 | 0.17 | 0.18 | |
| 0.50 | 0.50 | 0.20 | NA | 0.17 | 0.17 | 0.18 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | |
| | 0.30 | | NA | 0.11 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | |
| | 0.20 | | NA | 0.07 | 0.09 | 0.10 | 0.12 | 0.14 | 0.15 | 0.17 | 0.18 | |
| 0.30 | 0.50 | 0.20 | NA | 0.16 | 0.17 | 0.17 | 0.18 | 0.19 | 0.19 | 0.20 | 0.20 | |
| | 0.30 | | NA | 0.11 | 0.12 | 0.13 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | |
| | 0.20 | | NA | 0.07 | 0.09 | 0.10 | 0.12 | 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:399W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980 | | | | | | | | | | | | |