

Report No.:

Test Time: 2017/11/8 18:53

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RB244.4RGB30 (B)

Luminous Length (mm): 500

Luminous Height (mm): 1

Current: 0.055 A

Power Factor: 1.000

Luminaire Description: RB244.4RGB30 (B)

Luminous Width (mm): 10

Voltage: 24.0 V

Power: 1.33 W

Photometric Results

CIE Class: Direct

Measurement Flux: 13.8 lm

Downward Ratio: 100%

Horizontal Diffuse Angle(50%): H125.7

Vertical Diffuse Angle(50%): V125.4

Luminaire Efficacy Rating (LER): 10

Max. Intensity: 4.25 cd

Total Rated Lamp Lumens: 13.8 lm

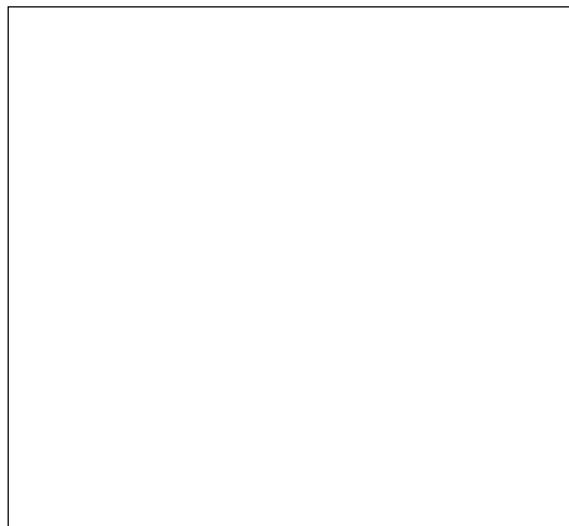
Efficiency: 100%

Upward Ratio: 0%

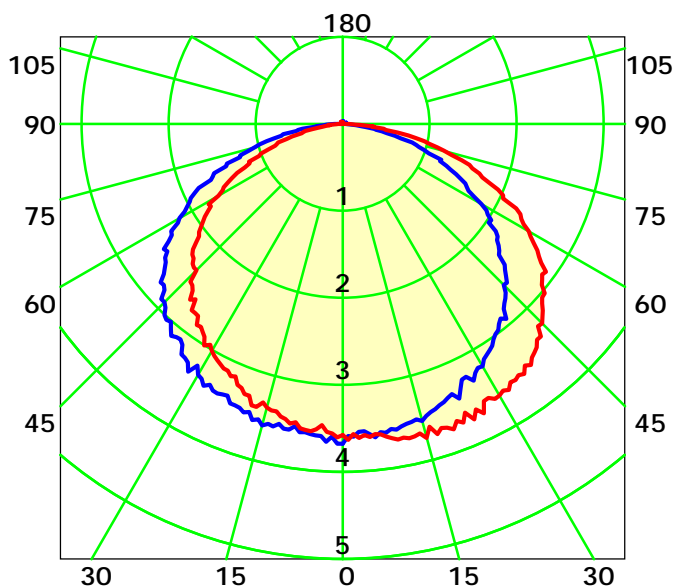
Central Intensity: 4.17 cd

Pos of Max. Intensity: H120 V17

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 125.5° Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25°C

Operator: Aaron

Gamma Plane (°):0.0-180.0: 1.0

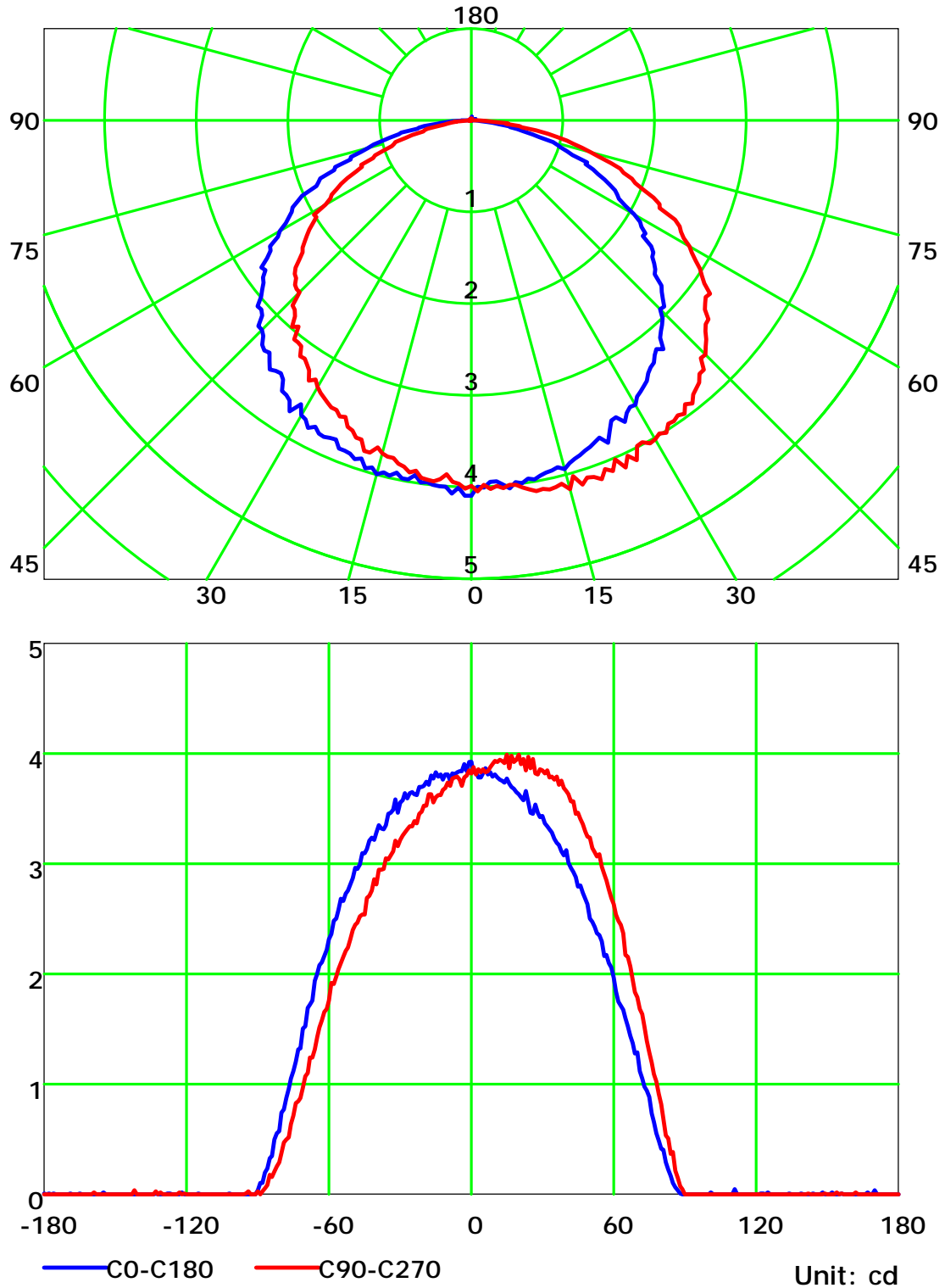
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

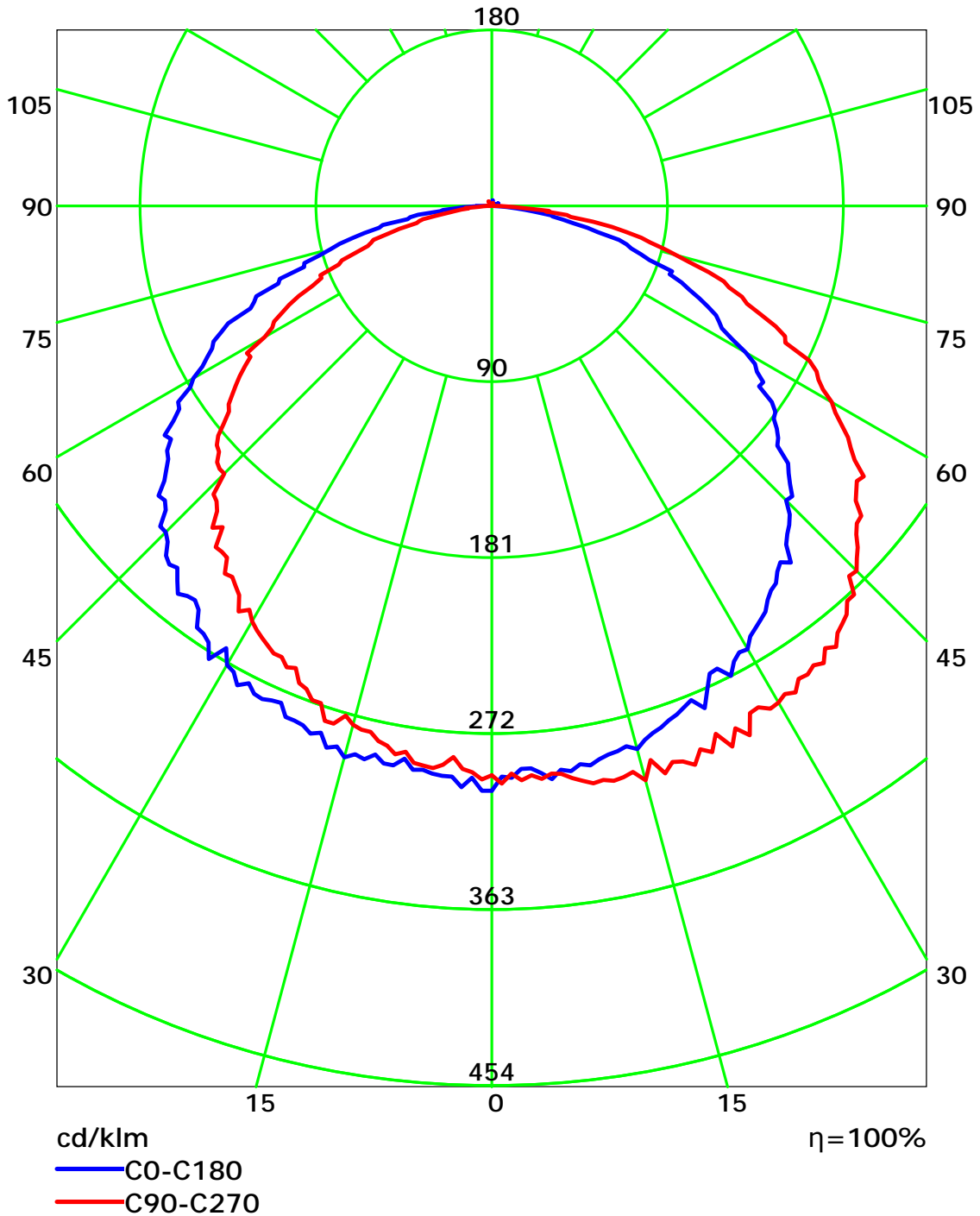
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25°C
Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 9.028 m
Humidity: 60%
Inspector:

Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25°C
Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 9.028 m
Humidity: 60%
Inspector:

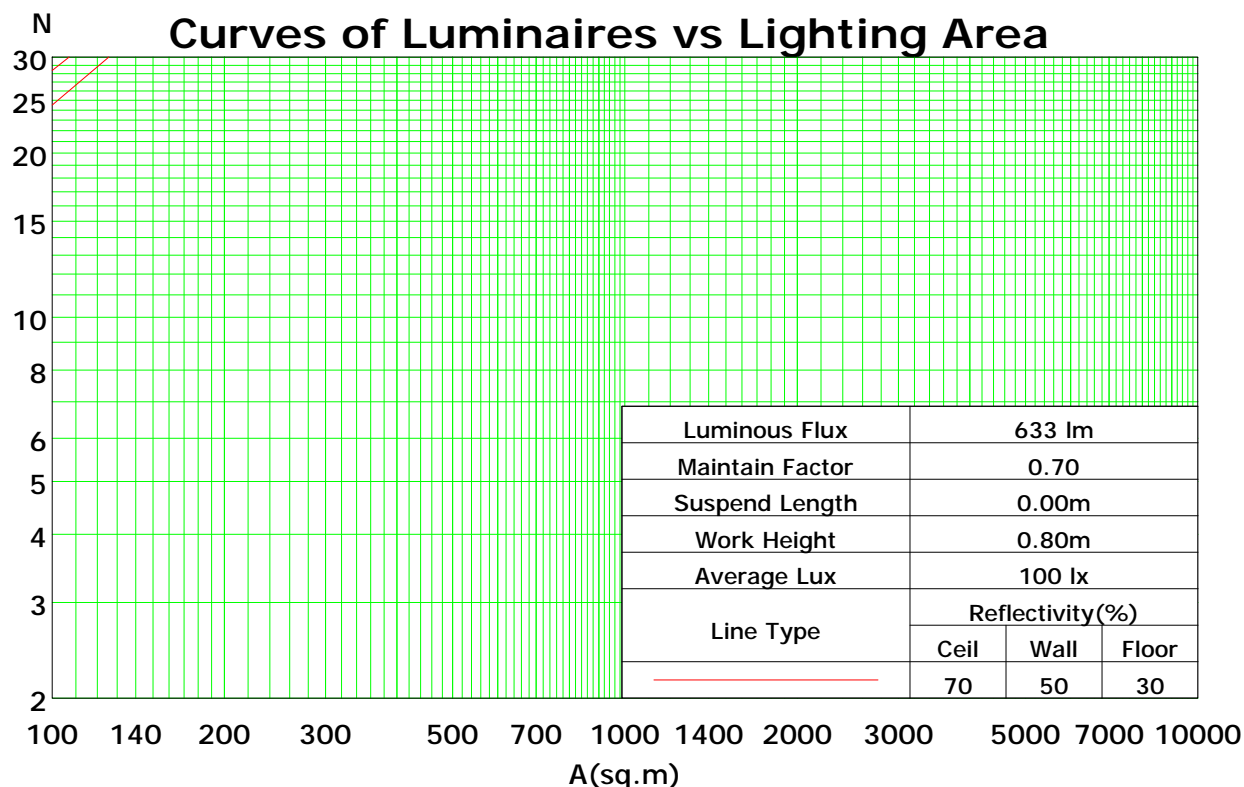
Coefficients Of Utilization - Zonal Cavity Method

| | | | | | | | | | | | | | | | | | | |
|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 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 | 119 | 119 | 119 | 119 | 116 | 116 | 116 | 116 | 111 | 111 | 111 | 106 | 106 | 106 | 102 | 102 | 102 | 100 |
| 1 | 108 | 103 | 99 | 94 | 105 | 101 | 97 | 93 | 96 | 93 | 90 | 93 | 90 | 87 | 89 | 87 | 85 | 82 |
| 2 | 98 | 89 | 82 | 76 | 95 | 87 | 80 | 75 | 83 | 78 | 73 | 80 | 75 | 71 | 77 | 73 | 70 | 68 |
| 3 | 89 | 78 | 69 | 62 | 86 | 76 | 68 | 62 | 73 | 66 | 60 | 70 | 64 | 59 | 67 | 63 | 58 | 56 |
| 4 | 81 | 68 | 59 | 52 | 78 | 67 | 58 | 52 | 64 | 57 | 51 | 62 | 55 | 50 | 60 | 54 | 49 | 47 |
| 5 | 74 | 61 | 51 | 44 | 72 | 59 | 51 | 44 | 57 | 50 | 44 | 55 | 48 | 43 | 53 | 47 | 43 | 40 |
| 6 | 68 | 54 | 45 | 38 | 66 | 53 | 45 | 38 | 51 | 44 | 38 | 50 | 43 | 37 | 48 | 42 | 37 | 35 |
| 7 | 63 | 49 | 40 | 34 | 61 | 48 | 40 | 33 | 47 | 39 | 33 | 45 | 38 | 33 | 44 | 37 | 33 | 31 |
| 8 | 59 | 45 | 36 | 30 | 57 | 44 | 36 | 30 | 43 | 35 | 29 | 41 | 34 | 29 | 40 | 34 | 29 | 27 |
| 9 | 55 | 41 | 32 | 27 | 53 | 40 | 32 | 27 | 39 | 32 | 26 | 38 | 31 | 26 | 37 | 31 | 26 | 24 |
| 10 | 51 | 38 | 29 | 24 | 50 | 37 | 29 | 24 | 36 | 29 | 24 | 35 | 28 | 24 | 34 | 28 | 24 | 22 |

Spacing Criteria (0-180): 1.33

Spacing Criteria (90-270): 1.38

Spacing Criteria (Diagonal): 1.49



C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25°C

Operator: Aaron

Gamma Plane (°):0.0-180.0: 1.0

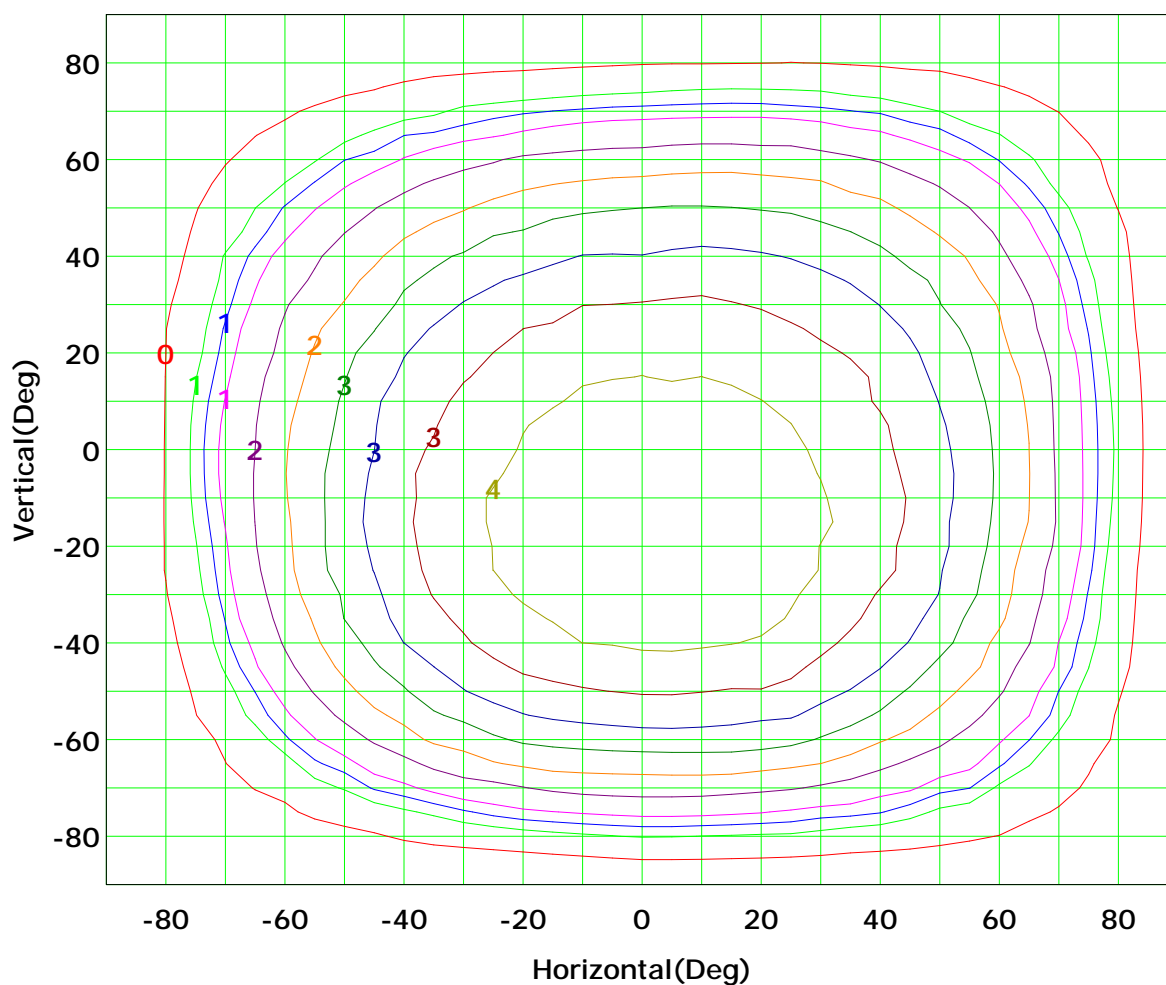
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



I_{max} (100%): 4 cd

| | | | |
|---------|------|---------|------|
| (10%): | 0 cd | (20%): | 1 cd |
| (25%): | 1 cd | (30%): | 1 cd |
| (40%): | 2 cd | (50%): | 2 cd |
| (60%): | 3 cd | (70%): | 3 cd |
| (80%): | 3 cd | (90%): | 4 cd |

C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25℃

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

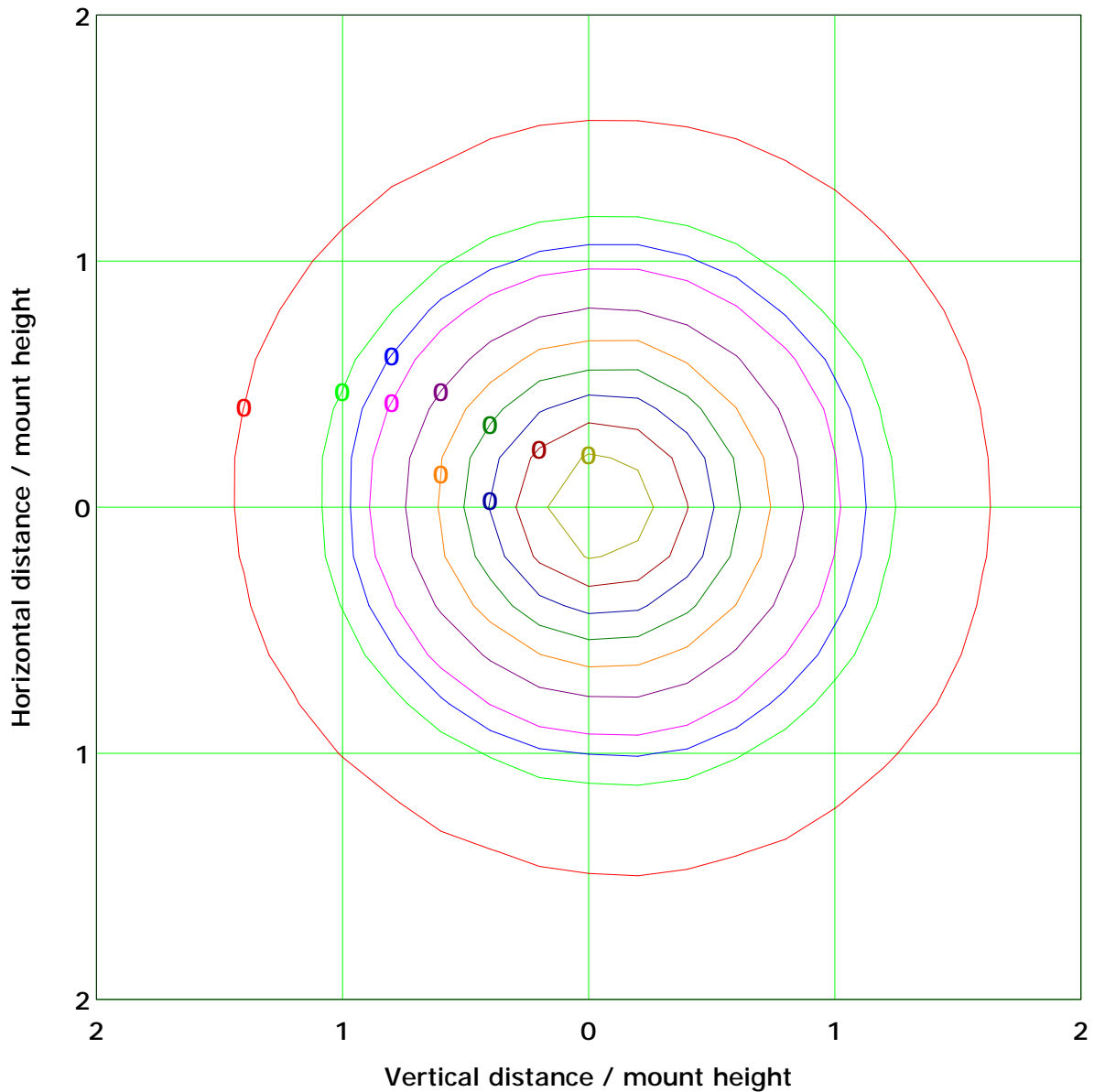
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



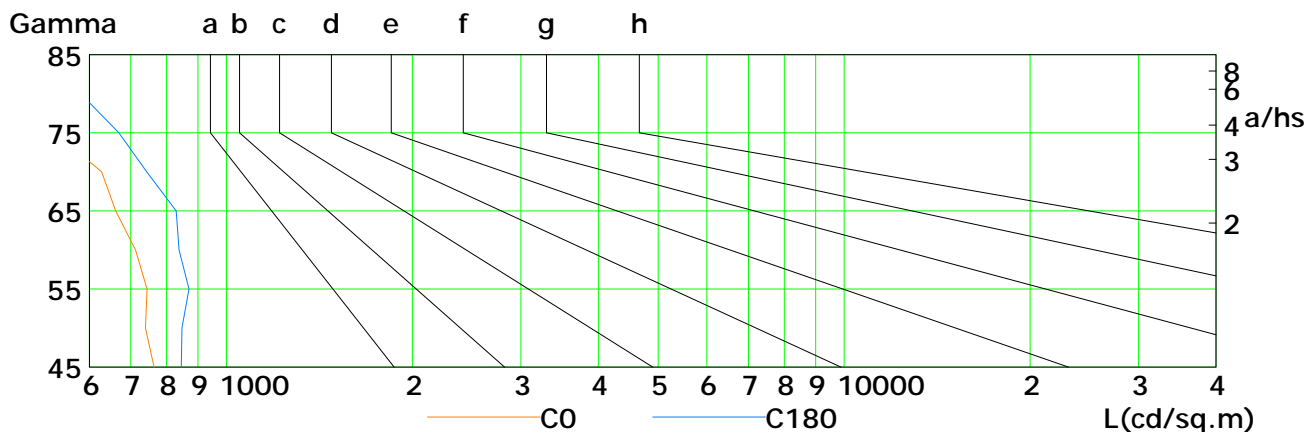
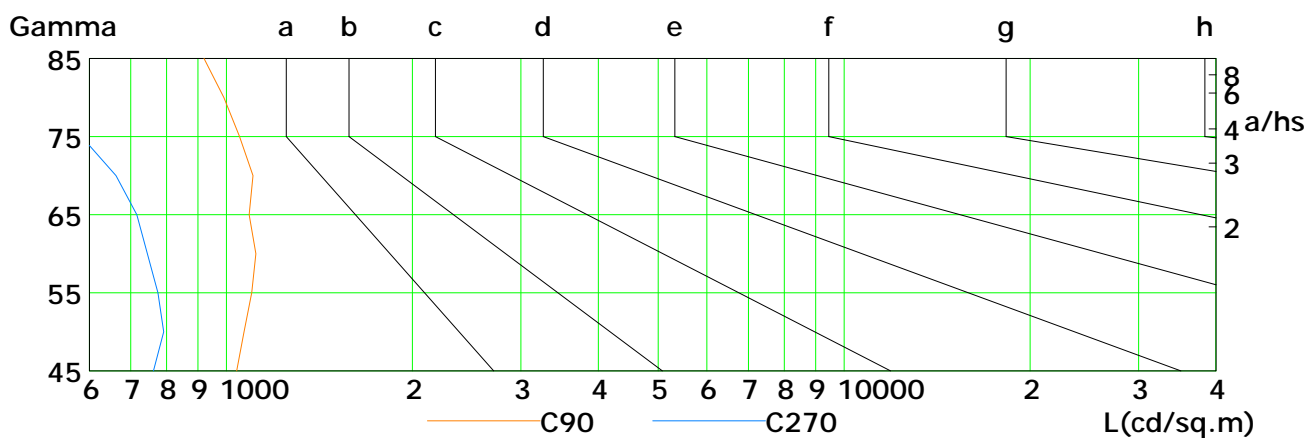
C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25°C
Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 9.028 m
Humidity: 60%
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 | 764 | 740 | 744 | 713 | 662 | 628 | 529 | 323 | 118 |
| C90 | 1039 | 1068 | 1099 | 1116 | 1089 | 1105 | 1051 | 991 | 920 |
| C180 | 846 | 848 | 870 | 839 | 830 | 743 | 670 | 581 | 375 |
| C270 | 762 | 792 | 775 | 745 | 716 | 663 | 583 | 456 | 426 |

C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25℃

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

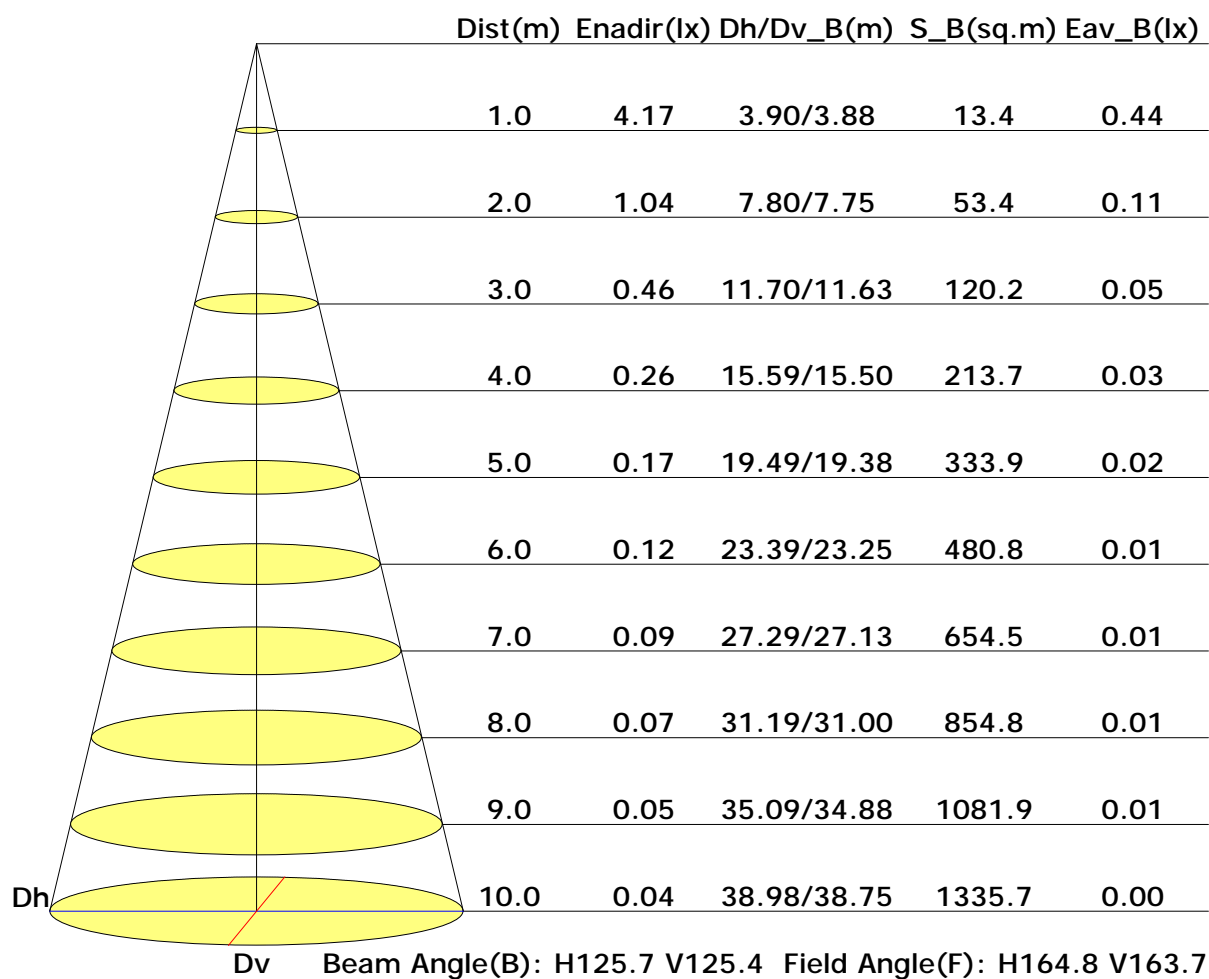
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Illuminance at a Distance



C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25°C

Operator: Aaron

Gamma Plane (°):0.0-180.0: 1.0

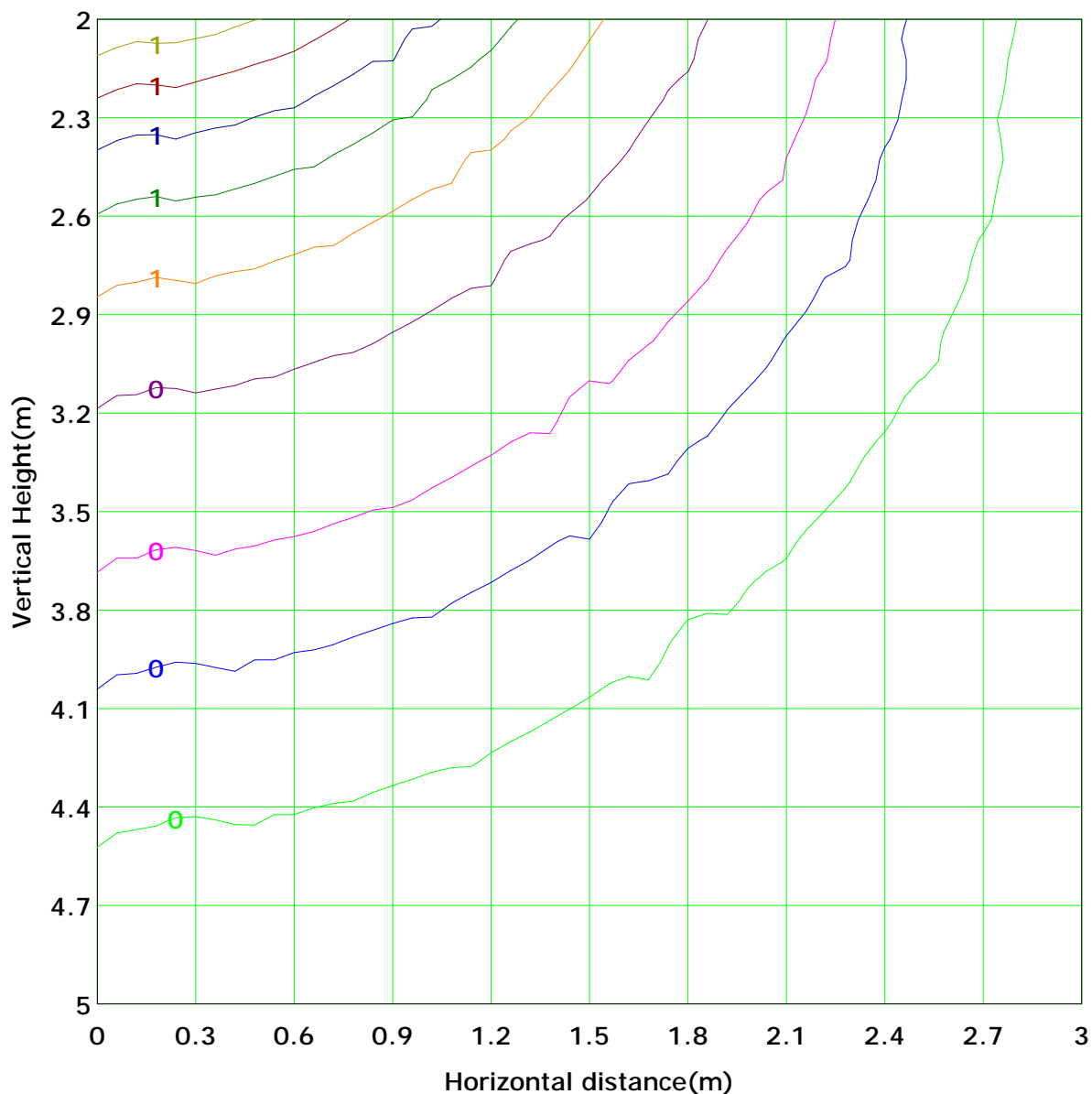
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Vertical IsoLux Plot



C Plane (°):0.0-360.0: 30.0
Test Lab: acolyteled
Test Type: TYPE C
Temperature: 25°C
Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 9.028 m
Humidity: 60%
Inspector:

Area Flux Table

Unit: lm

| | | Vertical plane | | | | | | | | | | | | | | | | | | | | |
|------------------|---------|----------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|---------|
| | | -90 | -80 | -70 | -60 | -50 | -40 | -30 | -20 | -10 | 0 | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | | |
| Horizontal plane | Flux(E) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | Flux(T) | Flux(E) |
| | Flux(T) | 0.0 | 0.1 | 0.3 | 0.6 | 0.8 | 1.1 | 1.1 | 1.3 | 1.4 | 1.5 | 1.5 | 1.4 | 1.2 | 1.0 | 0.7 | 0.5 | 0.2 | 0.1 | 0.0 | 14 | 14 |
| | Flux(E) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14 | 14 |
| | Flux(T) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14 | 14 |
| | Flux(E) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14 | 14 |
| | Flux(T) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14 | 14 |
| | Flux(E) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14 | 14 |
| | Flux(T) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14 | 14 |
| | Flux(E) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14 | 14 |
| | Flux(T) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14 | 14 |

C Plane (°):0.0-360.0: 30.0

Test Lab: acolyteled

Test Type: TYPE C

Temperature: 25℃

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

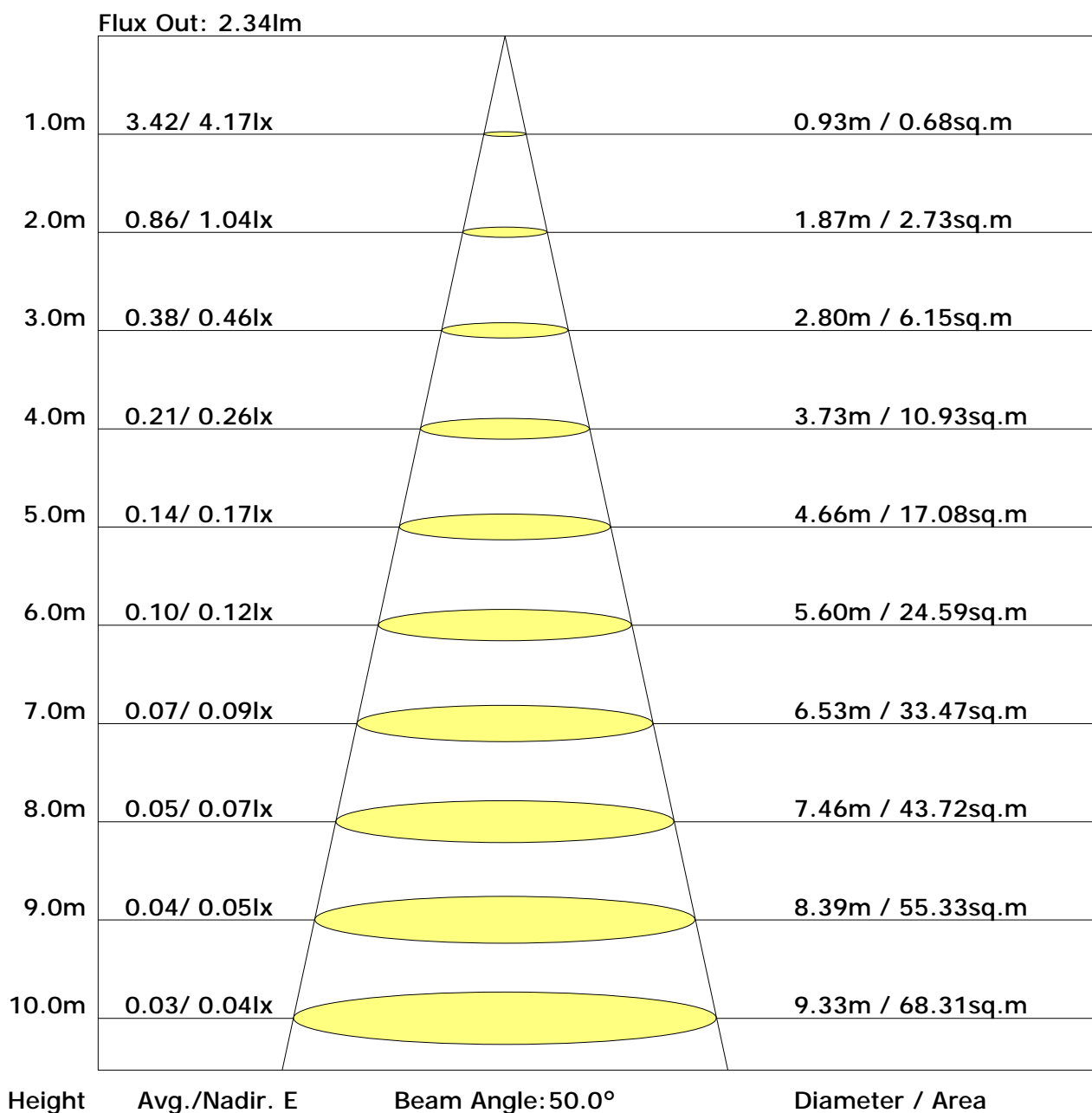
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

The Average Illuminance Effective Figure



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 | 26.3 | 28.0 | 26.7 | 28.3 | 28.7 | 27.8 | 29.5 | 28.2 | 29.8 | 30.1 |
| 3H | 28.1 | 29.7 | 28.5 | 30.0 | 30.4 | 29.8 | 31.3 | 30.1 | 31.6 | 32.0 |
| 4H | 28.8 | 30.3 | 29.2 | 30.6 | 31.0 | 30.5 | 31.9 | 30.9 | 32.3 | 32.6 |
| 6H | 29.2 | 30.5 | 29.6 | 30.9 | 31.3 | 31.0 | 32.3 | 31.4 | 32.7 | 33.1 |
| 8H | 29.3 | 30.5 | 29.7 | 30.9 | 31.3 | 31.1 | 32.4 | 31.5 | 32.8 | 33.2 |
| 12H | 29.3 | 30.5 | 29.7 | 30.9 | 31.3 | 31.2 | 32.4 | 31.6 | 32.8 | 33.2 |
| X=4H Y=2H | 27.0 | 28.5 | 27.4 | 28.8 | 29.2 | 28.5 | 29.9 | 28.9 | 30.3 | 30.7 |
| 3H | 29.0 | 30.3 | 29.4 | 30.7 | 31.1 | 30.6 | 31.9 | 31.0 | 32.3 | 32.7 |
| 4H | 29.8 | 30.9 | 30.2 | 31.3 | 31.8 | 31.5 | 32.6 | 31.9 | 33.0 | 33.4 |
| 6H | 30.2 | 31.2 | 30.7 | 31.6 | 32.1 | 32.1 | 33.1 | 32.6 | 33.5 | 34.0 |
| 8H | 30.4 | 31.3 | 30.8 | 31.7 | 32.2 | 32.3 | 33.2 | 32.7 | 33.6 | 34.1 |
| 12H | 30.4 | 31.2 | 30.9 | 31.7 | 32.2 | 32.4 | 33.2 | 32.9 | 33.7 | 34.1 |
| X=8H Y=4H | 30.1 | 31.0 | 30.5 | 31.4 | 31.9 | 31.8 | 32.7 | 32.3 | 33.1 | 33.6 |
| 6H | 30.6 | 31.4 | 31.1 | 31.8 | 32.3 | 32.5 | 33.3 | 33.0 | 33.8 | 34.3 |
| 8H | 30.8 | 31.4 | 31.3 | 31.9 | 32.4 | 32.8 | 33.4 | 33.3 | 33.9 | 34.4 |
| 12H | 30.8 | 31.4 | 31.3 | 31.9 | 32.5 | 32.9 | 33.5 | 33.4 | 34.0 | 34.6 |
| X=12H Y=4H | 30.1 | 30.9 | 30.6 | 31.4 | 31.9 | 31.8 | 32.6 | 32.3 | 33.1 | 33.6 |
| 6H | 30.7 | 31.3 | 31.2 | 31.8 | 32.3 | 32.6 | 33.3 | 33.1 | 33.7 | 34.3 |
| 8H | 30.8 | 31.4 | 31.3 | 31.9 | 32.5 | 32.9 | 33.5 | 33.4 | 34.0 | 34.5 |

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 30.0
 Test Lab: acolyteled
 Test Type: TYPE C
 Temperature: 25°C
 Operator: Aaron

Gamma Plane (°):0.0-180.0: 1.0
 Test Device: GPM-1800B
 Distance: 9.028 m
 Humidity: 60%
 Inspector:

Utilisation Factor Table(Floor cavity)

| Utilisation Factors UF(F) | | | SHR NOM = 1.50 | | | | | | | | |
|--|------|-------|----------------|------|------|------|------|------|------|------|------|
| 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 | 0.57 | 0.65 | 0.73 | 0.79 | 0.86 | 0.91 | 0.95 | 1.00 | 1.03 |
| | 0.30 | | 0.49 | 0.57 | 0.66 | 0.71 | 0.80 | 0.86 | 0.90 | 0.95 | 0.99 |
| | 0.20 | | 0.43 | 0.51 | 0.60 | 0.66 | 0.74 | 0.81 | 0.85 | 0.92 | 0.96 |
| 0.50 | 0.50 | 0.20 | 0.55 | 0.63 | 0.71 | 0.76 | 0.83 | 0.88 | 0.91 | 0.96 | 0.99 |
| | 0.30 | | 0.48 | 0.56 | 0.64 | 0.70 | 0.78 | 0.83 | 0.87 | 0.92 | 0.96 |
| | 0.20 | | 0.43 | 0.51 | 0.59 | 0.65 | 0.73 | 0.79 | 0.83 | 0.89 | 0.93 |
| 0.30 | 0.50 | 0.20 | 0.54 | 0.61 | 0.68 | 0.73 | 0.80 | 0.85 | 0.88 | 0.92 | 0.95 |
| | 0.30 | | 0.47 | 0.55 | 0.63 | 0.68 | 0.75 | 0.81 | 0.84 | 0.89 | 0.92 |
| | 0.20 | | 0.42 | 0.50 | 0.58 | 0.64 | 0.71 | 0.77 | 0.81 | 0.86 | 0.90 |
| 0.00 | 0.00 | 0.00 | 0.40 | 0.48 | 0.55 | 0.61 | 0.68 | 0.73 | 0.77 | 0.82 | 0.85 |
| <p>Rating: 1W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p> | | | | | | | | | | | |

Utilisation Factor Table(Wall)

| Utilisation Factors UF(W) | | | SHR NOM = 1.50 | | | | | | | | | |
|--|------|-------|----------------|------|------|------|------|------|------|------|------|--|
| 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 | 1.00 | 0.85 | 0.72 | 0.63 | 0.50 | 0.42 | 0.36 | 0.28 | 0.23 | |
| | 0.30 | | 0.83 | 0.73 | 0.63 | 0.56 | 0.46 | 0.38 | 0.33 | 0.26 | 0.22 | |
| | 0.20 | | 0.72 | 0.64 | 0.56 | 0.50 | 0.41 | 0.35 | 0.31 | 0.25 | 0.21 | |
| 0.50 | 0.50 | 0.20 | 0.97 | 0.82 | 0.69 | 0.60 | 0.48 | 0.43 | 0.34 | 0.27 | 0.22 | |
| | 0.30 | | 0.82 | 0.71 | 0.61 | 0.54 | 0.44 | 0.37 | 0.32 | 0.25 | 0.21 | |
| | 0.20 | | 0.71 | 0.63 | 0.55 | 0.49 | 0.41 | 0.34 | 0.30 | 0.24 | 0.20 | |
| 0.30 | 0.50 | 0.20 | 0.94 | 0.79 | 0.67 | 0.58 | 0.46 | 0.38 | 0.33 | 0.25 | 0.21 | |
| | 0.30 | | 0.80 | 0.70 | 0.60 | 0.53 | 0.43 | 0.36 | 0.31 | 0.24 | 0.20 | |
| | 0.20 | | 0.70 | 0.62 | 0.54 | 0.48 | 0.40 | 0.34 | 0.29 | 0.23 | 0.19 | |
| 0.00 | 0.00 | 0.00 | 0.60 | 0.53 | 0.45 | 0.40 | 0.32 | 0.27 | 0.23 | 0.18 | 0.15 | |
| <p>Rating: 1W Photometrically tested without ceiling board.</p> <p>Multiply UF values by service correction factors</p> <p>Calculate in accordance with CIBSE Technical Memorandum NO.5 1980</p> | | | | | | | | | | | | |

Utilisation Factor Table(Ceiling cavity)

| Utilisation Factors UF(C) | | | SHR NOM = 1.50 | | | | | | | | | |
|---|------|-------|----------------|------|------|------|------|------|------|------|------|--|
| 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 | 0.18 | 0.19 | 0.19 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | |
| | 0.30 | | 0.10 | 0.11 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | |
| | 0.20 | | 0.05 | 0.06 | 0.08 | 0.09 | 0.11 | 0.13 | 0.14 | 0.16 | 0.17 | |
| 0.50 | 0.50 | 0.20 | 0.16 | 0.17 | 0.18 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | |
| | 0.30 | | 0.09 | 0.11 | 0.12 | 0.13 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | |
| | 0.20 | | 0.05 | 0.06 | 0.08 | 0.09 | 0.11 | 0.12 | 0.13 | 0.15 | 0.16 | |
| 0.30 | 0.50 | 0.20 | 0.15 | 0.17 | 0.17 | 0.18 | 0.19 | 0.19 | 0.19 | 0.20 | 0.20 | |
| | 0.30 | | 0.09 | 0.11 | 0.12 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | |
| | 0.20 | | 0.05 | 0.06 | 0.07 | 0.09 | 0.11 | 0.12 | 0.13 | 0.15 | 0.16 | |
| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | |
| Rating: 1W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980 | | | | | | | | | | | | |