

Report No.:

Test Time: 2018/8/30 10:56

Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RIBBONLYTE

Luminaire Description: RBS2244.427PH 1FT(300mm)

Luminous Length (mm): 300

Luminous Width (mm): 8

Luminous Height (mm): 1

Voltage: 24.0 V

Current: 0.176 A

Power: 4.22 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 522.6 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H116.5

Vertical Diffuse Angle(50%): V116.5

Luminaire Efficacy Rating (LER): 124

Max. Intensity: 174.89 cd

Total Rated Lamp Lumens: 522.6 lm

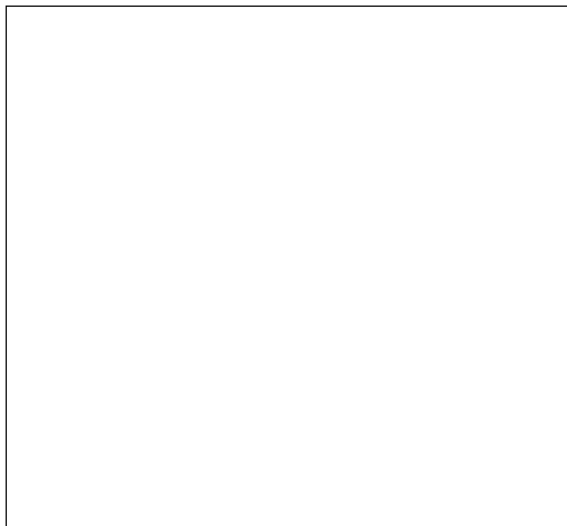
Efficiency: 100%

Upward Ratio: 1%

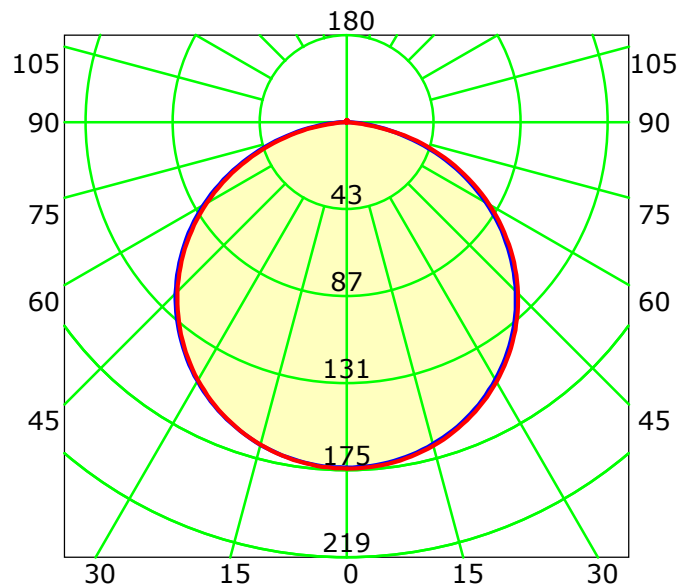
Central Intensity: 174.25 cd

Pos of Max. Intensity: H150 V1

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 116.5° Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

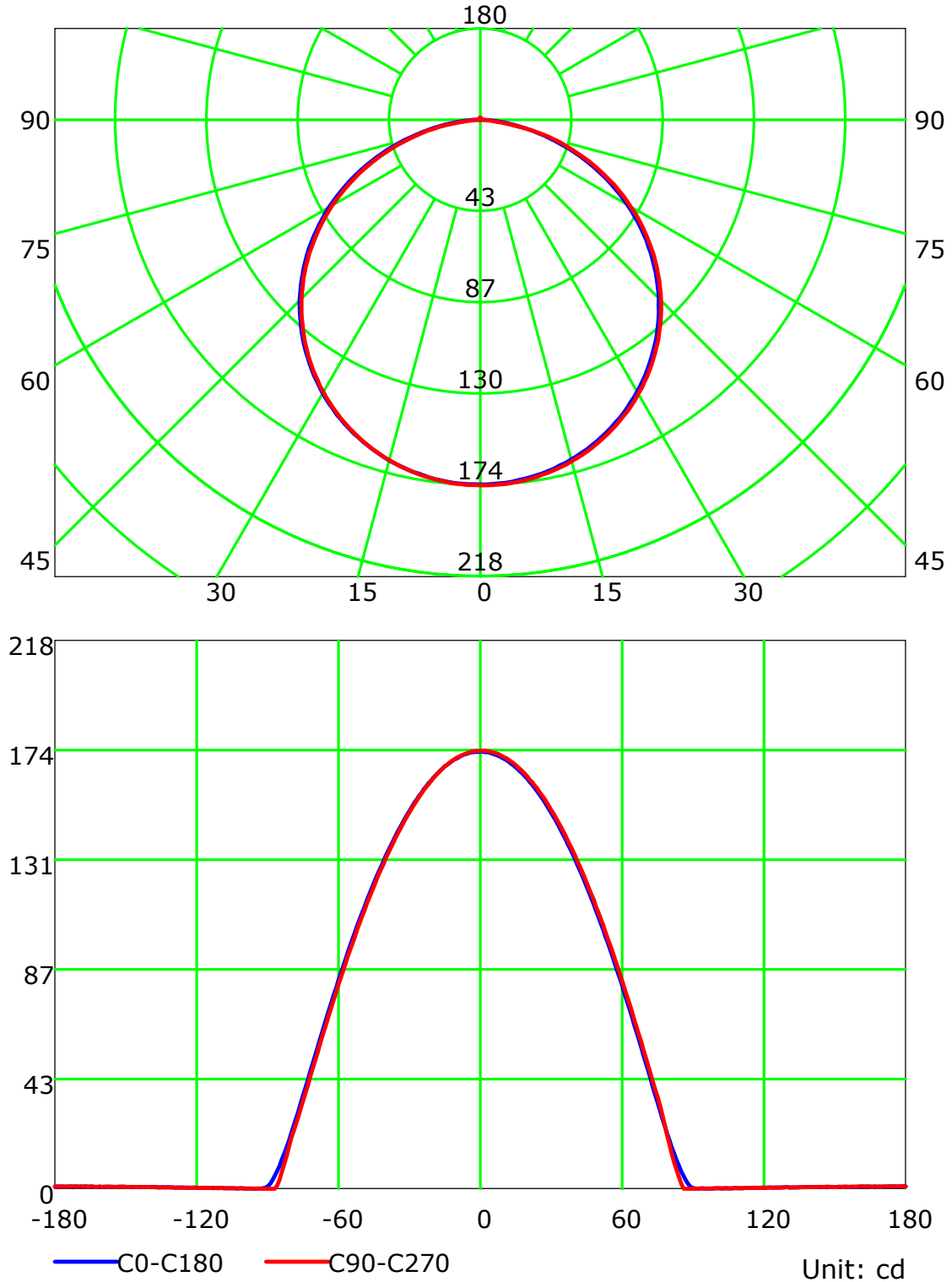
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

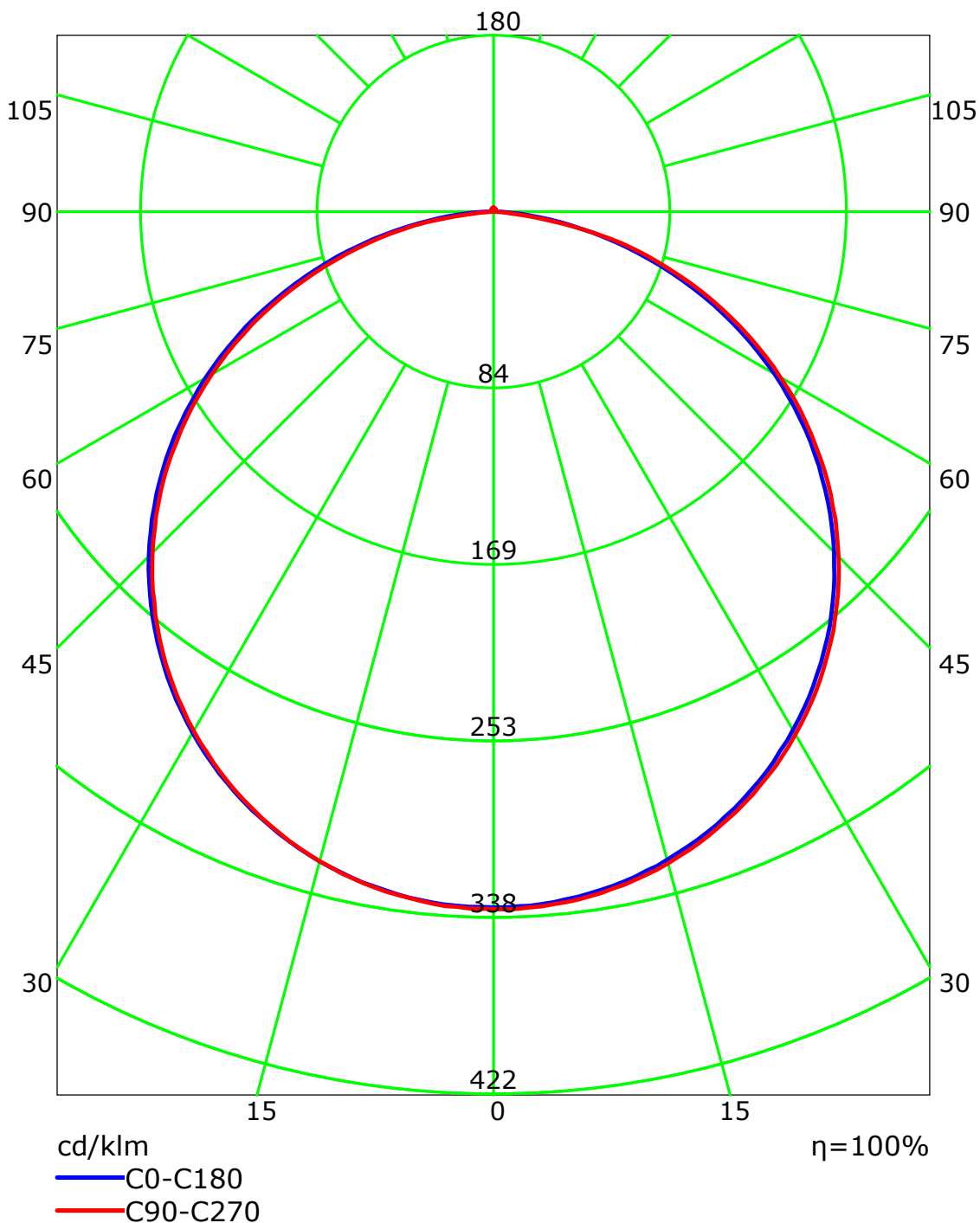
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0
Test Lab:
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:

Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 30.0

Test Lab:

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:

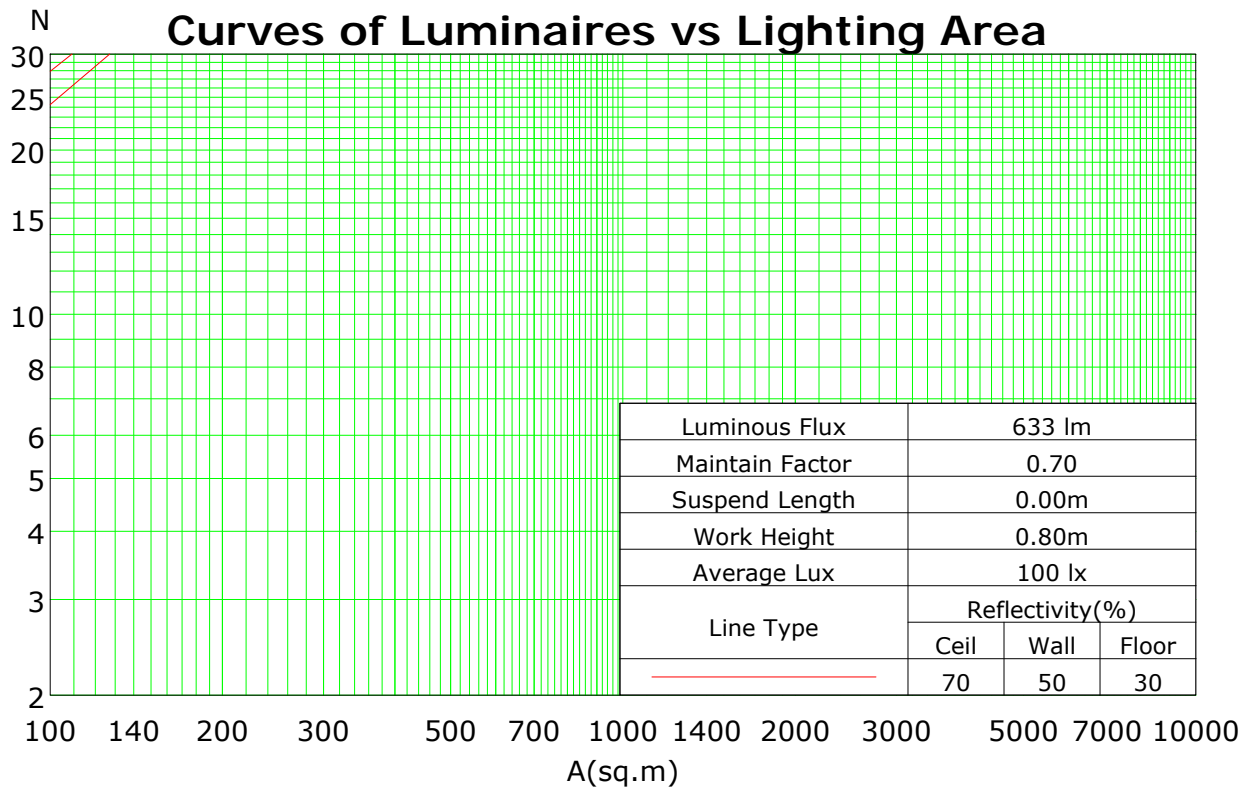
Coefficients Of Utilization - Zonal Cavity Method

| | | | | | | | | | | | | | | | | | | |
|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 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 | 99 |
| 1 | 108 | 104 | 99 | 95 | 106 | 101 | 97 | 94 | 97 | 94 | 91 | 93 | 90 | 88 | 89 | 87 | 85 | 83 |
| 2 | 98 | 90 | 83 | 77 | 96 | 88 | 82 | 76 | 84 | 79 | 74 | 81 | 77 | 73 | 78 | 74 | 71 | 69 |
| 3 | 90 | 79 | 71 | 64 | 87 | 77 | 70 | 63 | 74 | 68 | 62 | 71 | 66 | 61 | 69 | 64 | 60 | 58 |
| 4 | 82 | 70 | 61 | 54 | 79 | 68 | 60 | 54 | 66 | 58 | 53 | 63 | 57 | 52 | 61 | 56 | 51 | 49 |
| 5 | 75 | 62 | 53 | 46 | 73 | 61 | 52 | 46 | 59 | 51 | 45 | 57 | 50 | 45 | 55 | 49 | 44 | 42 |
| 6 | 69 | 56 | 47 | 40 | 67 | 55 | 46 | 40 | 53 | 45 | 40 | 51 | 44 | 39 | 50 | 44 | 39 | 37 |
| 7 | 64 | 51 | 42 | 35 | 62 | 50 | 41 | 35 | 48 | 41 | 35 | 47 | 40 | 35 | 45 | 39 | 34 | 32 |
| 8 | 60 | 46 | 37 | 32 | 58 | 45 | 37 | 31 | 44 | 37 | 31 | 43 | 36 | 31 | 41 | 35 | 31 | 29 |
| 9 | 56 | 42 | 34 | 28 | 54 | 42 | 34 | 28 | 40 | 33 | 28 | 39 | 33 | 28 | 38 | 32 | 28 | 26 |
| 10 | 52 | 39 | 31 | 26 | 51 | 38 | 31 | 26 | 37 | 30 | 25 | 36 | 30 | 25 | 35 | 29 | 25 | 23 |

Spacing Criteria (0-180): 1.28

Spacing Criteria (90-270): 1.28

Spacing Criteria (Diagonal): 1.41



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

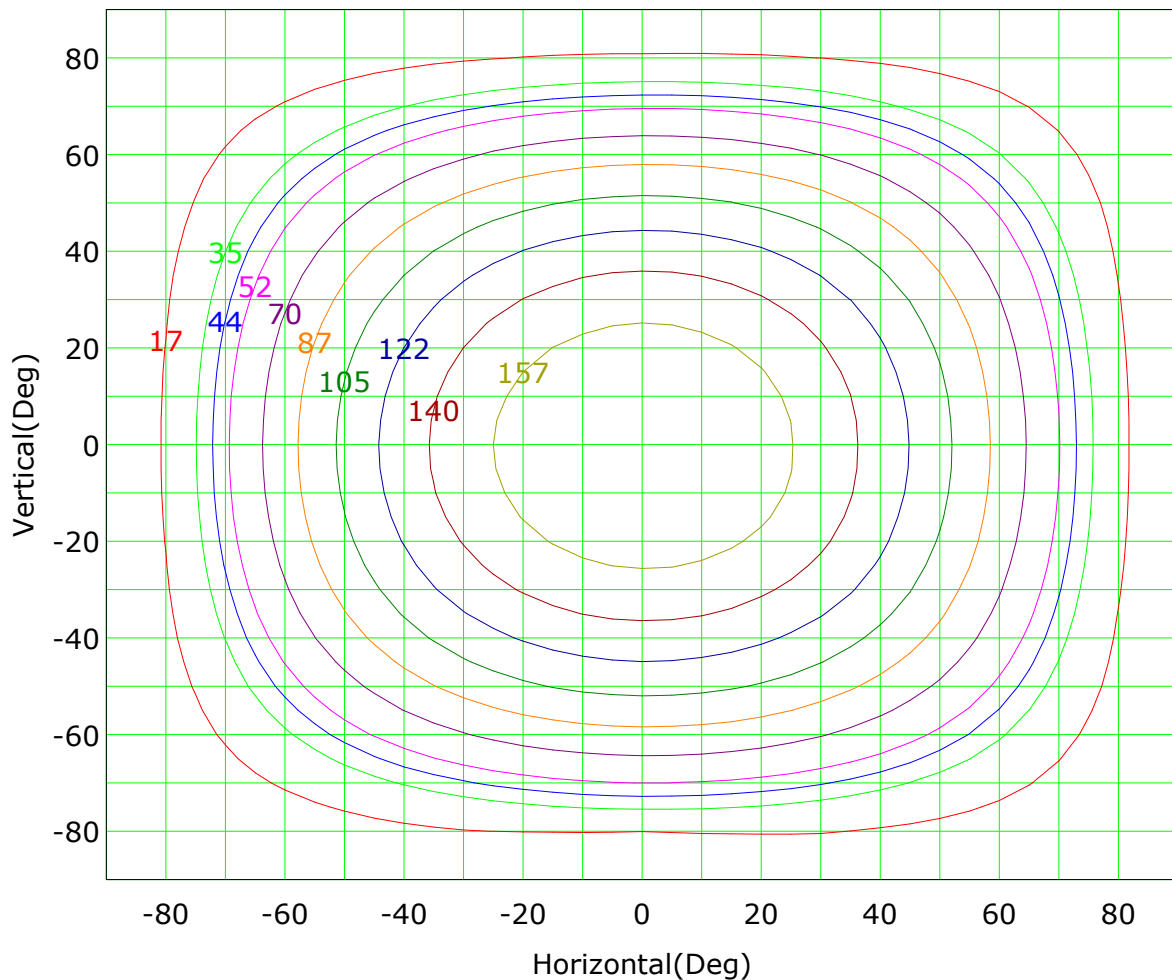
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Isocandela (rectangle)



I_{max} (100%): 175 cd

| | |
|----------------|----------------|
| (10%): 17 cd | (20%): 35 cd |
| (25%): 44 cd | (30%): 52 cd |
| (40%): 70 cd | (50%): 87 cd |
| (60%): 105 cd | (70%): 122 cd |
| (80%): 140 cd | (90%): 157 cd |

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

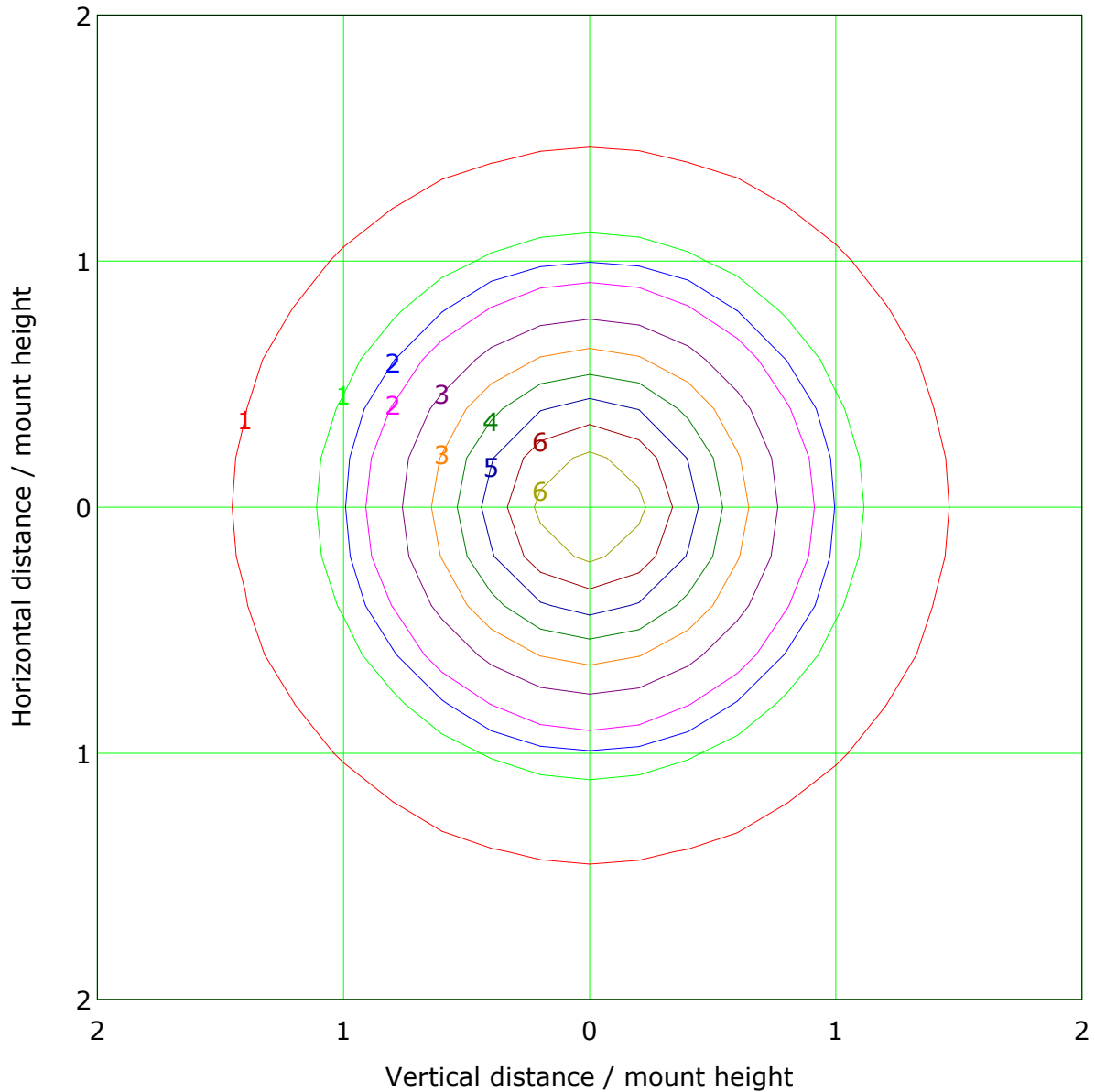
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

IsoLux Plot



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 9.028 m

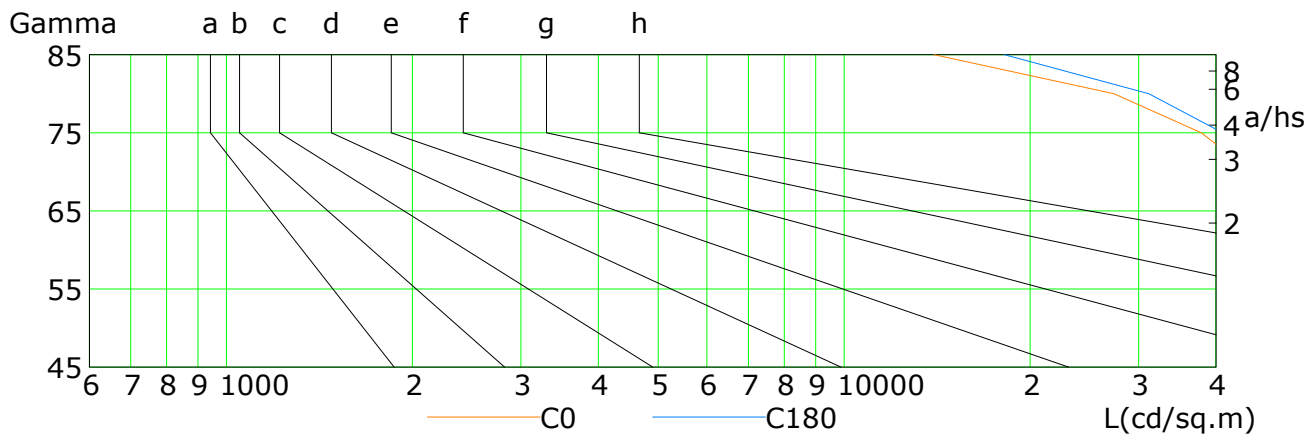
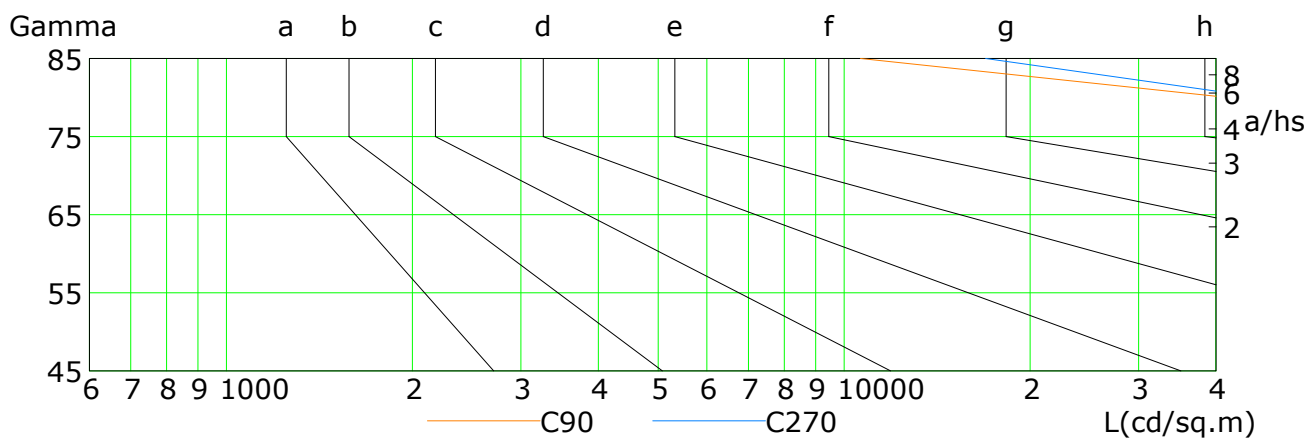
Humidity: 60%

Inspector:

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 | 63200 | 61185 | 58798 | 55596 | 51393 | 45704 | 37884 | 27352 | 13995 |
| C90 | 71791 | 71164 | 70188 | 68761 | 66704 | 63486 | 58404 | 42083 | 10638 |
| C180 | 63970 | 62211 | 60000 | 57076 | 53344 | 48070 | 41034 | 31143 | 18188 |
| C270 | 70957 | 70273 | 69075 | 67560 | 65196 | 61482 | 55860 | 47759 | 16947 |

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

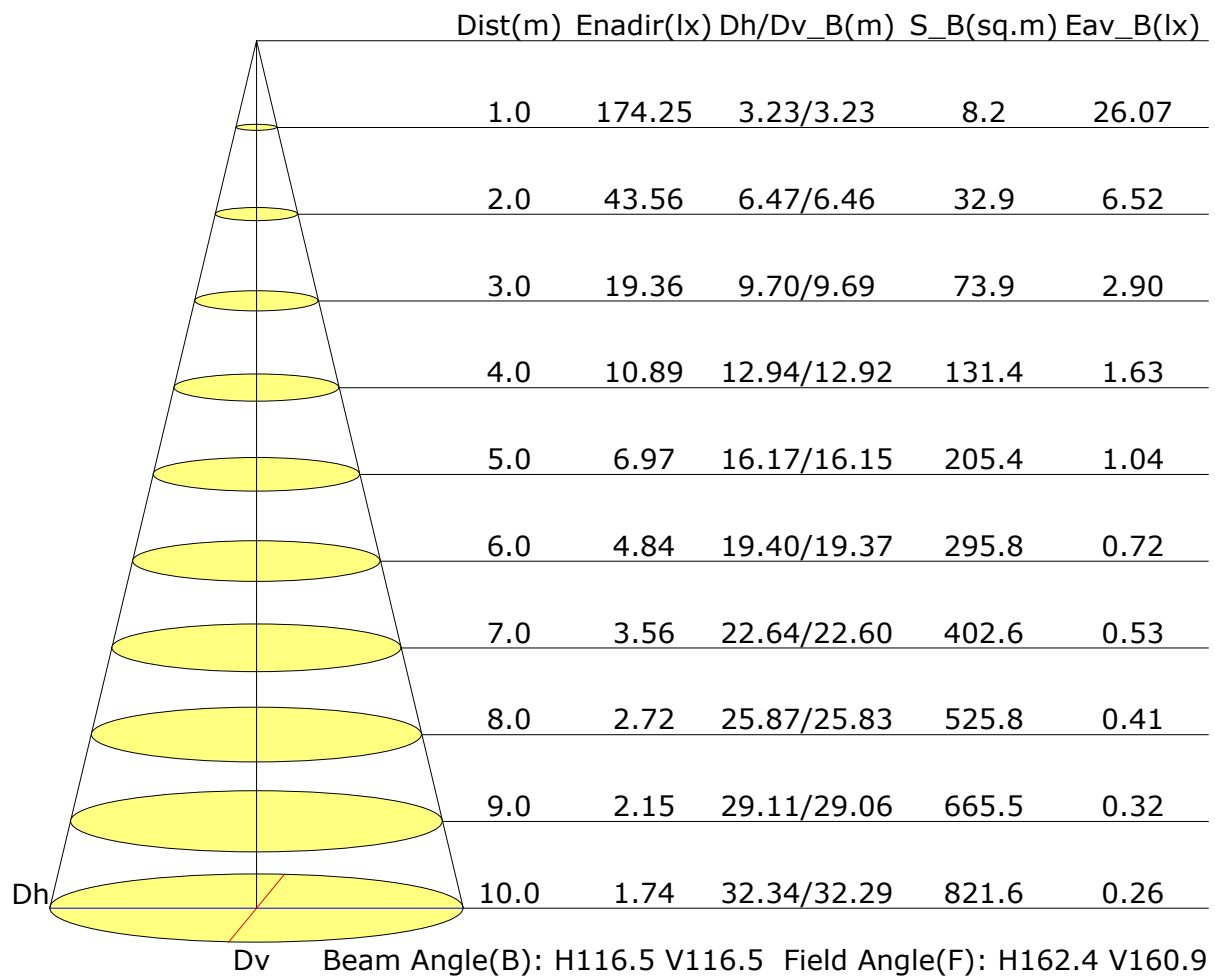
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Illuminance at a Distance



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

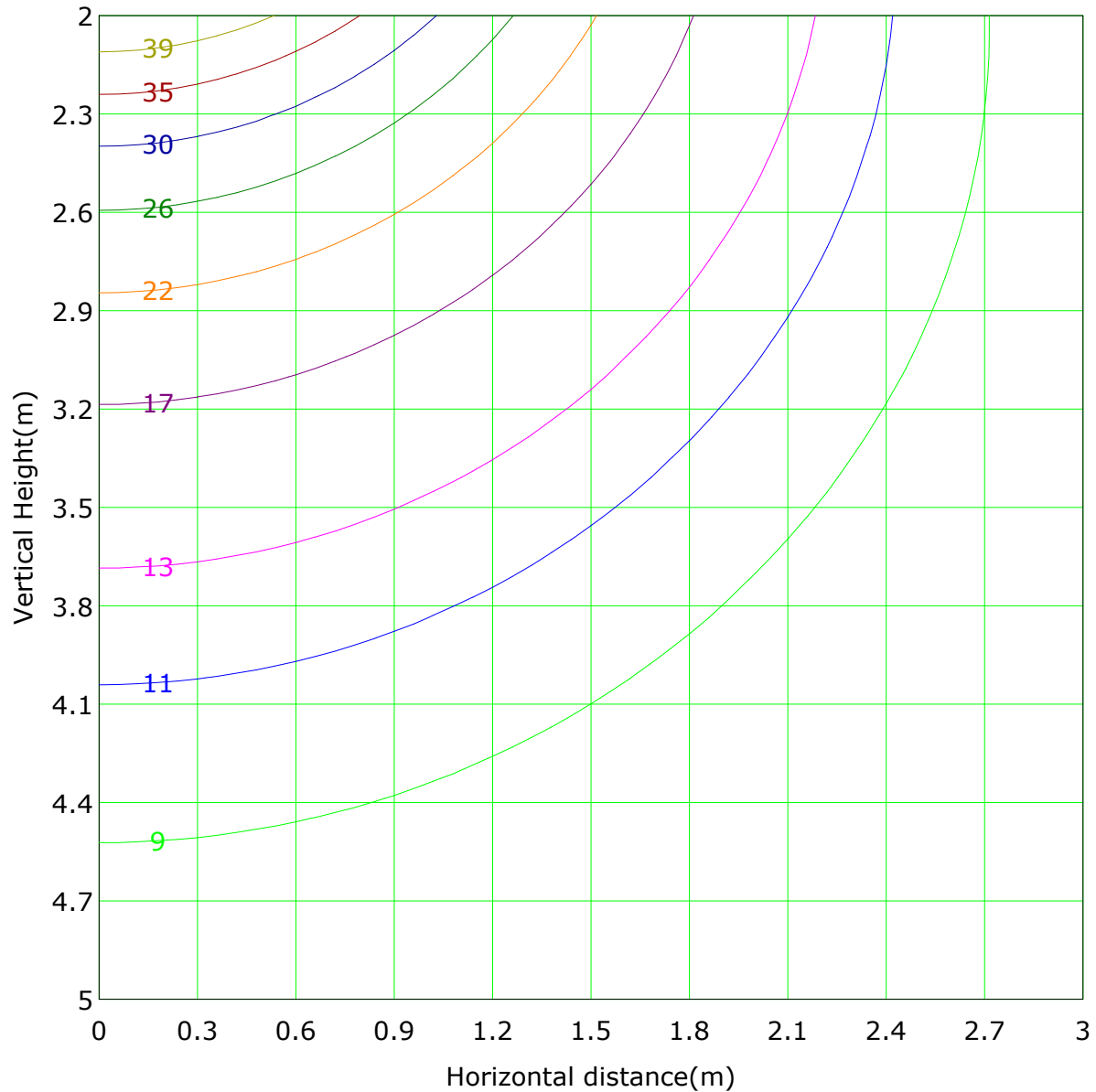
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

Vertical IsoLux Plot



| | | |
|-----------------|------------------|------------------|
| Lowest(m): 2.0m | Highest(m): 5.0m | Max Lux: 43.6 lx |
| (10%): 4.4 lx | (20%): 8.7 lx | |
| (25%): 10.9 lx | (30%): 13.1 lx | |
| (40%): 17.4 lx | (50%): 21.8 lx | |
| (60%): 26.1 lx | (70%): 30.5 lx | |
| (80%): 34.9 lx | (90%): 39.2 lx | |

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature: 25

Operator: Aaron

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 9.028 m

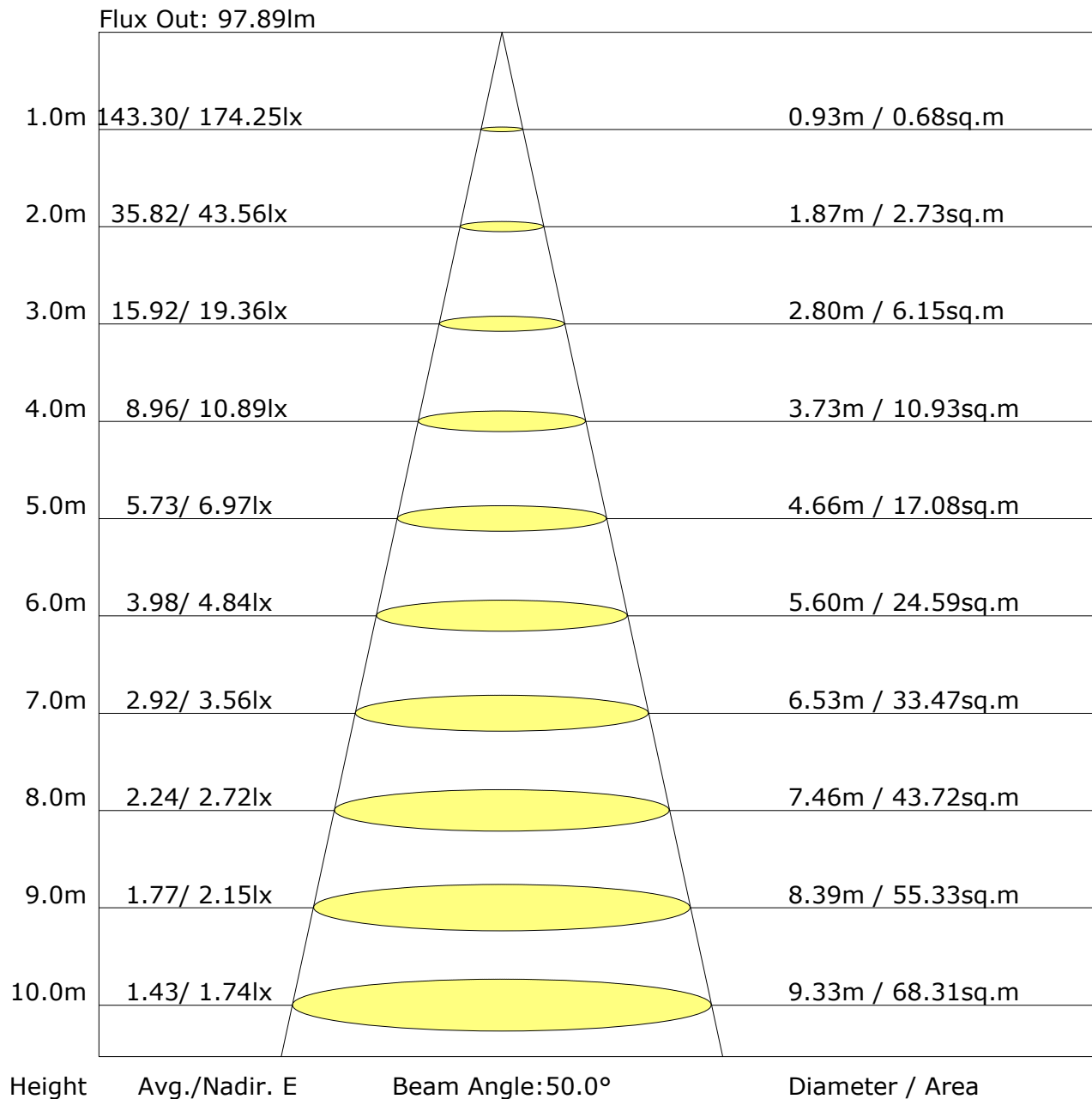
Humidity: 60%

Inspector:

Unit: lm

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

The Average Illuminance Effective Figure



C Plane (°):0.0-360.0: 30.0
 Test Lab:
 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:

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 | 28.9 | 30.5 | 29.3 | 30.9 | 31.2 | 28.7 | 30.3 | 29.1 | 30.7 | 31.0 |
| 3H | 30.7 | 32.2 | 31.1 | 32.5 | 32.9 | 30.4 | 31.9 | 30.8 | 32.2 | 32.6 |
| 4H | 31.4 | 32.8 | 31.8 | 33.1 | 33.5 | 31.0 | 32.4 | 31.4 | 32.8 | 33.2 |
| 6H | 31.8 | 33.1 | 32.2 | 33.5 | 33.9 | 31.3 | 32.6 | 31.8 | 33.0 | 33.4 |
| 8H | 31.9 | 33.2 | 32.4 | 33.6 | 34.0 | 31.4 | 32.6 | 31.8 | 33.0 | 33.4 |
| 12H | 32.0 | 33.2 | 32.4 | 33.6 | 34.0 | 31.4 | 32.6 | 31.8 | 33.0 | 33.4 |
| X=4H Y=2H | 29.5 | 30.9 | 29.9 | 31.2 | 31.6 | 29.3 | 30.7 | 29.8 | 31.1 | 31.5 |
| 3H | 31.5 | 32.7 | 31.9 | 33.1 | 33.5 | 31.3 | 32.5 | 31.7 | 32.9 | 33.3 |
| 4H | 32.2 | 33.3 | 32.7 | 33.7 | 34.2 | 32.0 | 33.0 | 32.4 | 33.5 | 33.9 |
| 6H | 32.8 | 33.7 | 33.2 | 34.2 | 34.6 | 32.4 | 33.3 | 32.9 | 33.8 | 34.3 |
| 8H | 32.9 | 33.8 | 33.4 | 34.3 | 34.7 | 32.5 | 33.3 | 32.9 | 33.8 | 34.3 |
| 12H | 33.0 | 33.8 | 33.5 | 34.3 | 34.8 | 32.5 | 33.3 | 33.0 | 33.8 | 34.2 |
| X=8H Y=4H | 32.5 | 33.3 | 32.9 | 33.8 | 34.3 | 32.3 | 33.2 | 32.8 | 33.6 | 34.1 |
| 6H | 33.1 | 33.8 | 33.6 | 34.3 | 34.8 | 32.8 | 33.5 | 33.3 | 34.0 | 34.5 |
| 8H | 33.3 | 34.0 | 33.8 | 34.5 | 35.0 | 32.9 | 33.6 | 33.4 | 34.1 | 34.6 |
| 12H | 33.4 | 34.0 | 34.0 | 34.5 | 35.1 | 33.0 | 33.5 | 33.5 | 34.0 | 34.6 |
| X=12H Y=4H | 32.5 | 33.3 | 33.0 | 33.8 | 34.2 | 32.3 | 33.1 | 32.8 | 33.6 | 34.1 |
| 6H | 33.1 | 33.8 | 33.7 | 34.3 | 34.8 | 32.9 | 33.5 | 33.4 | 34.0 | 34.5 |
| 8H | 33.4 | 33.9 | 33.9 | 34.4 | 35.0 | 33.0 | 33.6 | 33.5 | 34.1 | 34.7 |

Calculate in accordance with CIE 190:2010

C Plane (°):0.0-360.0: 30.0
 Test Lab:
 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:

Utilisation Factor Table(Floor cavity)

| Utilisation Factors UF(F) | | | SHR NOM = 1.25 | | | | | | | | |
|--|------|-------|----------------|------|------|------|------|------|------|------|------|
| 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 | 0.55 | 0.66 | 0.73 | 0.79 | 0.86 | 0.92 | 0.95 | 1.00 | 1.03 |
| | 0.30 | | 0.47 | 0.58 | 0.66 | 0.72 | 0.80 | 0.86 | 0.90 | 0.96 | 0.99 |
| | 0.20 | | 0.42 | 0.52 | 0.60 | 0.66 | 0.75 | 0.81 | 0.86 | 0.92 | 0.96 |
| 0.50 | 0.50 | 0.20 | 0.54 | 0.64 | 0.71 | 0.76 | 0.83 | 0.88 | 0.91 | 0.96 | 0.99 |
| | 0.30 | | 0.47 | 0.57 | 0.64 | 0.70 | 0.78 | 0.83 | 0.87 | 0.92 | 0.96 |
| | 0.20 | | 0.41 | 0.52 | 0.59 | 0.65 | 0.73 | 0.79 | 0.83 | 0.89 | 0.93 |
| 0.30 | 0.50 | 0.20 | 0.52 | 0.62 | 0.69 | 0.73 | 0.80 | 0.85 | 0.88 | 0.92 | 0.95 |
| | 0.30 | | 0.46 | 0.56 | 0.63 | 0.68 | 0.76 | 0.81 | 0.84 | 0.89 | 0.92 |
| | 0.20 | | 0.41 | 0.51 | 0.58 | 0.64 | 0.72 | 0.77 | 0.81 | 0.87 | 0.90 |
| 0.00 | 0.00 | 0.00 | 0.39 | 0.48 | 0.55 | 0.61 | 0.68 | 0.73 | 0.77 | 0.82 | 0.85 |
| Rating:4W 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 = 1.25 | | | | | | | | | |
|--|------|-------|----------------|------|------|------|------|------|------|------|------|--|
| 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 | 1.01 | 0.84 | 0.71 | 0.62 | 0.50 | 0.41 | 0.35 | 0.27 | 0.22 | |
| | 0.30 | | 0.85 | 0.72 | 0.62 | 0.55 | 0.45 | 0.38 | 0.33 | 0.26 | 0.21 | |
| | 0.20 | | 0.73 | 0.63 | 0.55 | 0.49 | 0.41 | 0.35 | 0.30 | 0.24 | 0.20 | |
| 0.50 | 0.50 | 0.20 | 0.98 | 0.81 | 0.68 | 0.60 | 0.47 | 0.43 | 0.34 | 0.26 | 0.21 | |
| | 0.30 | | 0.83 | 0.70 | 0.60 | 0.53 | 0.43 | 0.36 | 0.31 | 0.25 | 0.20 | |
| | 0.20 | | 0.72 | 0.62 | 0.54 | 0.48 | 0.40 | 0.34 | 0.29 | 0.23 | 0.19 | |
| 0.30 | 0.50 | 0.20 | 0.95 | 0.77 | 0.66 | 0.57 | 0.45 | 0.37 | 0.32 | 0.25 | 0.20 | |
| | 0.30 | | 0.81 | 0.68 | 0.59 | 0.52 | 0.42 | 0.35 | 0.30 | 0.24 | 0.19 | |
| | 0.20 | | 0.71 | 0.61 | 0.53 | 0.47 | 0.39 | 0.33 | 0.29 | 0.23 | 0.19 | |
| 0.00 | 0.00 | 0.00 | 0.61 | 0.51 | 0.44 | 0.39 | 0.31 | 0.26 | 0.23 | 0.18 | 0.14 | |
| Rating:4W 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 = 1.25 | | | | | | | | | |
|--|------|-------|----------------|------|------|------|------|------|------|------|------|--|
| 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 | 0.17 | 0.18 | 0.19 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.22 | |
| | 0.30 | | 0.10 | 0.12 | 0.13 | 0.14 | 0.16 | 0.17 | 0.18 | 0.19 | 0.20 | |
| | 0.20 | | 0.05 | 0.07 | 0.08 | 0.09 | 0.12 | 0.13 | 0.14 | 0.16 | 0.17 | |
| 0.50 | 0.50 | 0.20 | 0.16 | 0.18 | 0.18 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 | 0.21 | |
| | 0.30 | | 0.10 | 0.11 | 0.13 | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | |
| | 0.20 | | 0.05 | 0.07 | 0.08 | 0.09 | 0.11 | 0.13 | 0.14 | 0.16 | 0.17 | |
| 0.30 | 0.50 | 0.20 | 0.16 | 0.17 | 0.18 | 0.18 | 0.19 | 0.20 | 0.20 | 0.20 | 0.21 | |
| | 0.30 | | 0.10 | 0.11 | 0.12 | 0.13 | 0.15 | 0.16 | 0.17 | 0.18 | 0.18 | |
| | 0.20 | | 0.05 | 0.07 | 0.08 | 0.09 | 0.11 | 0.13 | 0.14 | 0.15 | 0.16 | |
| 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:4W Photometrically tested without ceiling board. Multiply UF values by service correction factors Calculate in accordance with CIBSE Technical Memorandum NO.5 1980 | | | | | | | | | | | | |