



Complete Integrated LED Lighting Solutions

Acolyte

www.acolyteled.com

Tel: +1 210 360 1444(USA)

Fax: + 85 755 85290710(China) Page 1 of 15 Pages

Report No.:

Test Time: 2018/10/15 11:04

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: RIBBONLYTE

Luminous Length (mm): 500

Luminous Height (mm): 1

Current: 0.206 A

Power Factor: 1.000

Luminaire Description: RBS220243.0B

Luminous Width (mm): 8

Voltage: 24.0 V

Power: 4.95 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 125 lm

Downward Ratio: 99%

Horizontal Diffuse Angle(50%): H130.2

Vertical Diffuse Angle(50%): V129.4

Luminaire Efficacy Rating (LER): 25

Max. Intensity: 35.82 cd

Total Rated Lamp Lumens: 125.0 lm

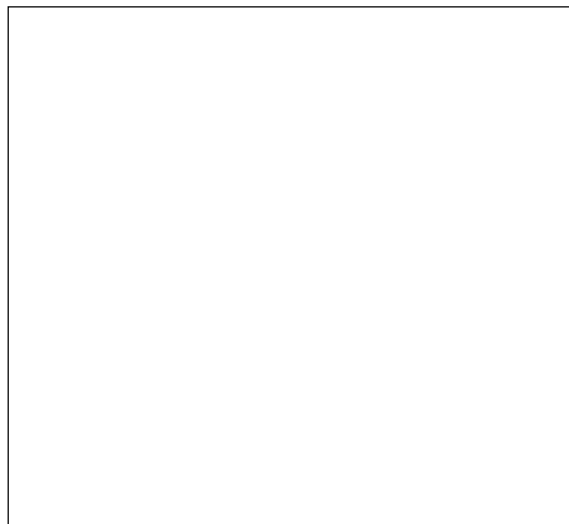
Efficiency: 100%

Upward Ratio: 1%

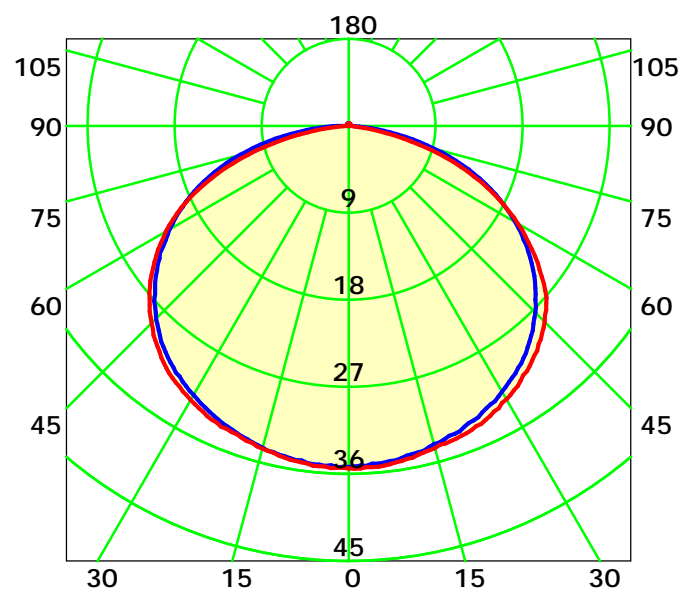
Central Intensity: 35.51 cd

Pos of Max. Intensity: H150 V3

Picture Of Luminaire



Luminous Intensity Distribution Curve



Average Diffuse Angle(50%): 129.8° 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

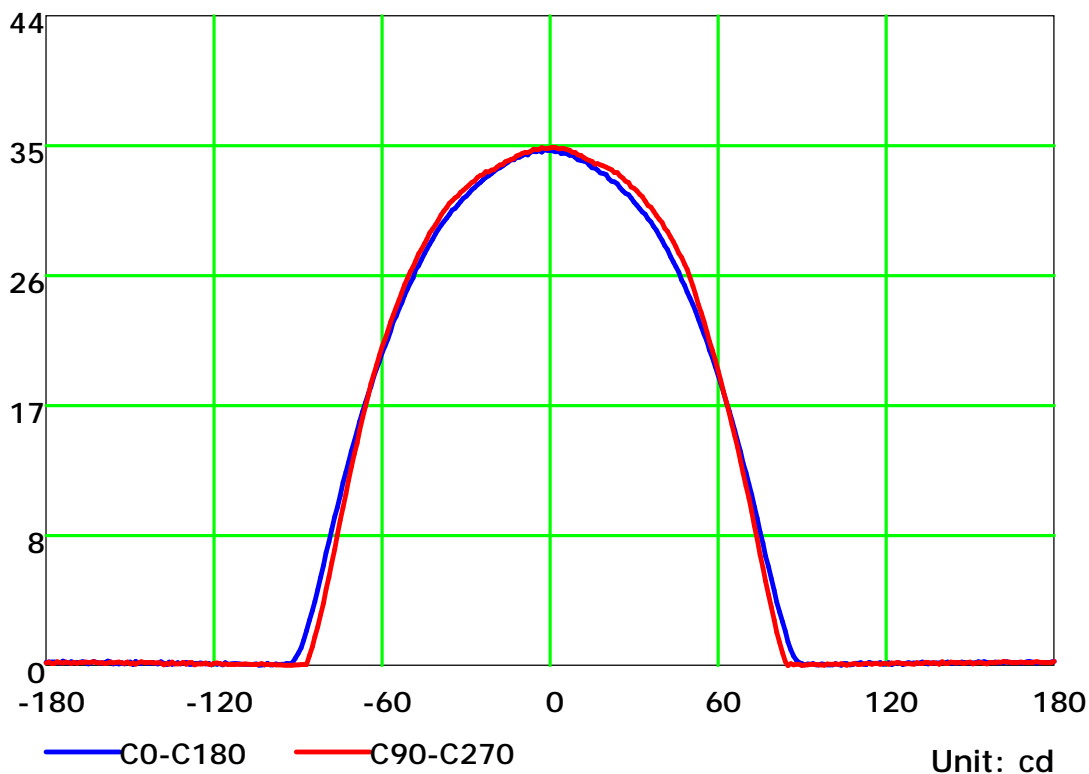
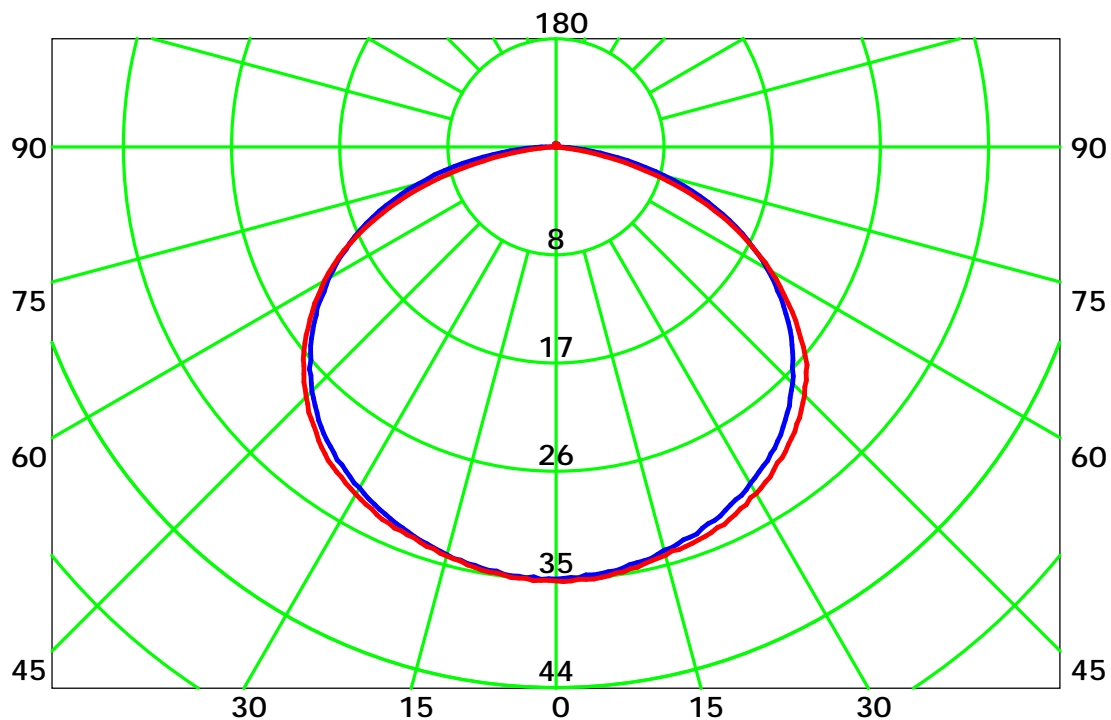
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

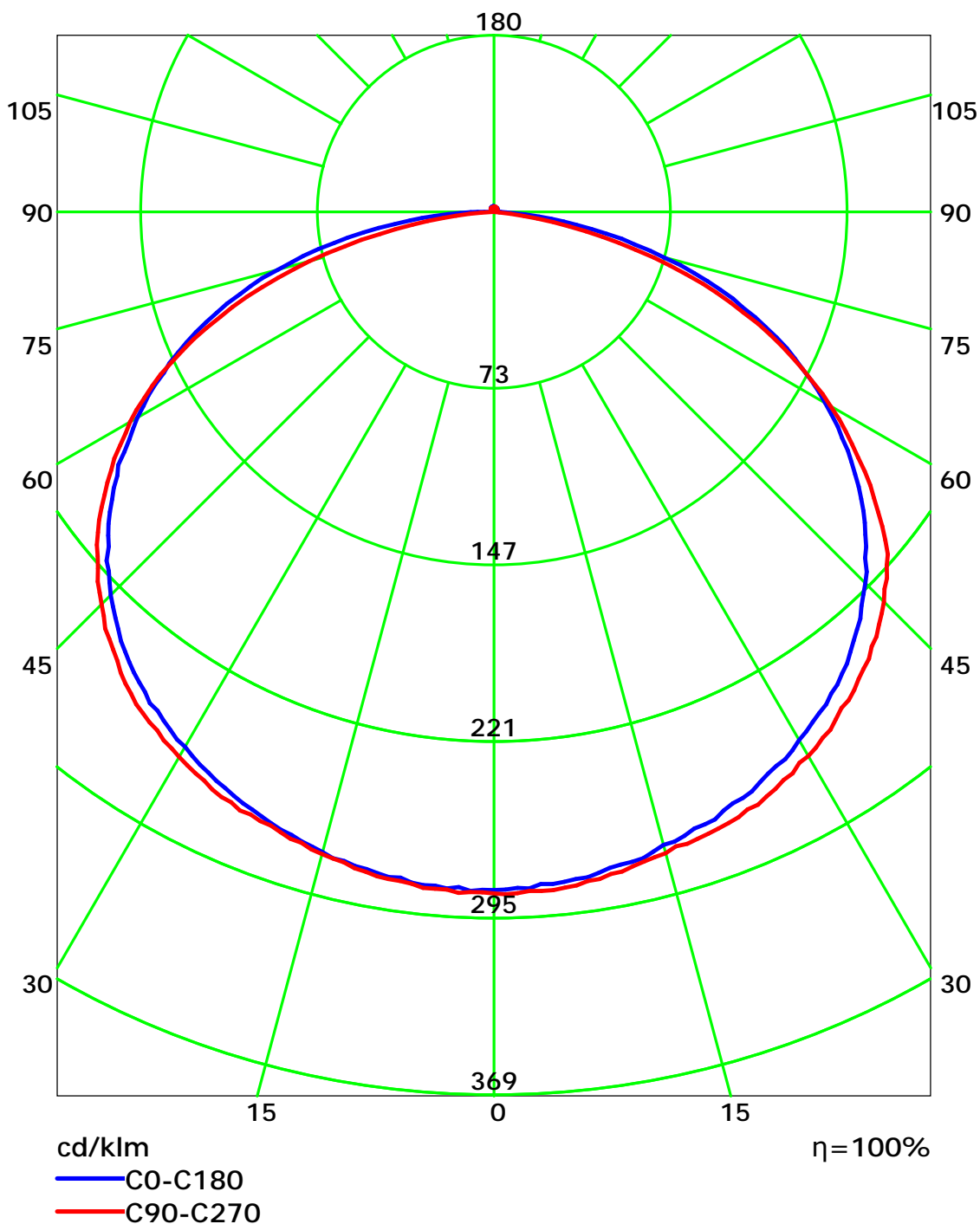
## Luminous Intensity Distribution Curve



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:



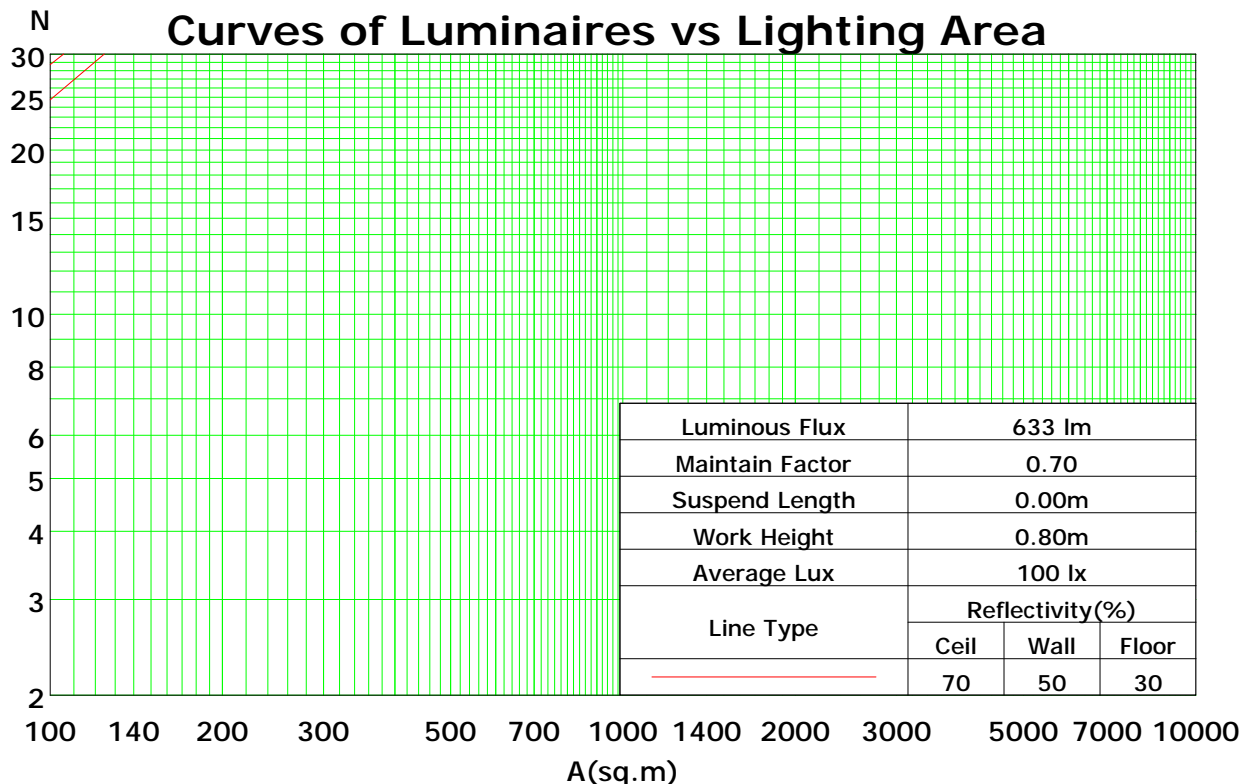
## Coefficients Of Utilization - Zonal Cavity Method

|     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 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 | 101 | 101 | 101 | 99 |
| 1   | 108      | 102 | 98  | 94  | 105 | 100 | 96  | 92  | 96  | 92  | 89  | 92  | 89  | 86  | 88  | 86  | 83  | 81 |
| 2   | 97       | 88  | 81  | 75  | 94  | 86  | 80  | 74  | 83  | 77  | 72  | 79  | 74  | 70  | 76  | 72  | 68  | 66 |
| 3   | 88       | 77  | 68  | 61  | 85  | 75  | 67  | 60  | 72  | 65  | 59  | 69  | 63  | 58  | 66  | 61  | 57  | 55 |
| 4   | 80       | 67  | 58  | 51  | 78  | 66  | 57  | 51  | 63  | 56  | 50  | 61  | 54  | 49  | 59  | 53  | 48  | 46 |
| 5   | 73       | 60  | 50  | 43  | 71  | 59  | 50  | 43  | 56  | 49  | 42  | 54  | 47  | 42  | 52  | 46  | 41  | 39 |
| 6   | 68       | 54  | 44  | 37  | 65  | 53  | 44  | 37  | 51  | 43  | 37  | 49  | 42  | 36  | 47  | 41  | 36  | 34 |
| 7   | 62       | 48  | 39  | 33  | 61  | 47  | 39  | 33  | 46  | 38  | 32  | 44  | 37  | 32  | 43  | 36  | 32  | 30 |
| 8   | 58       | 44  | 35  | 29  | 56  | 43  | 35  | 29  | 42  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 26 |
| 9   | 54       | 40  | 32  | 26  | 53  | 40  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 25  | 36  | 30  | 25  | 23 |
| 10  | 51       | 37  | 29  | 23  | 49  | 36  | 29  | 23  | 35  | 28  | 23  | 34  | 28  | 23  | 33  | 27  | 23  | 21 |

Spacing Criteria (0-180): 1.35

Spacing Criteria (90-270): 1.38

Spacing Criteria (Diagonal): 1.52



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

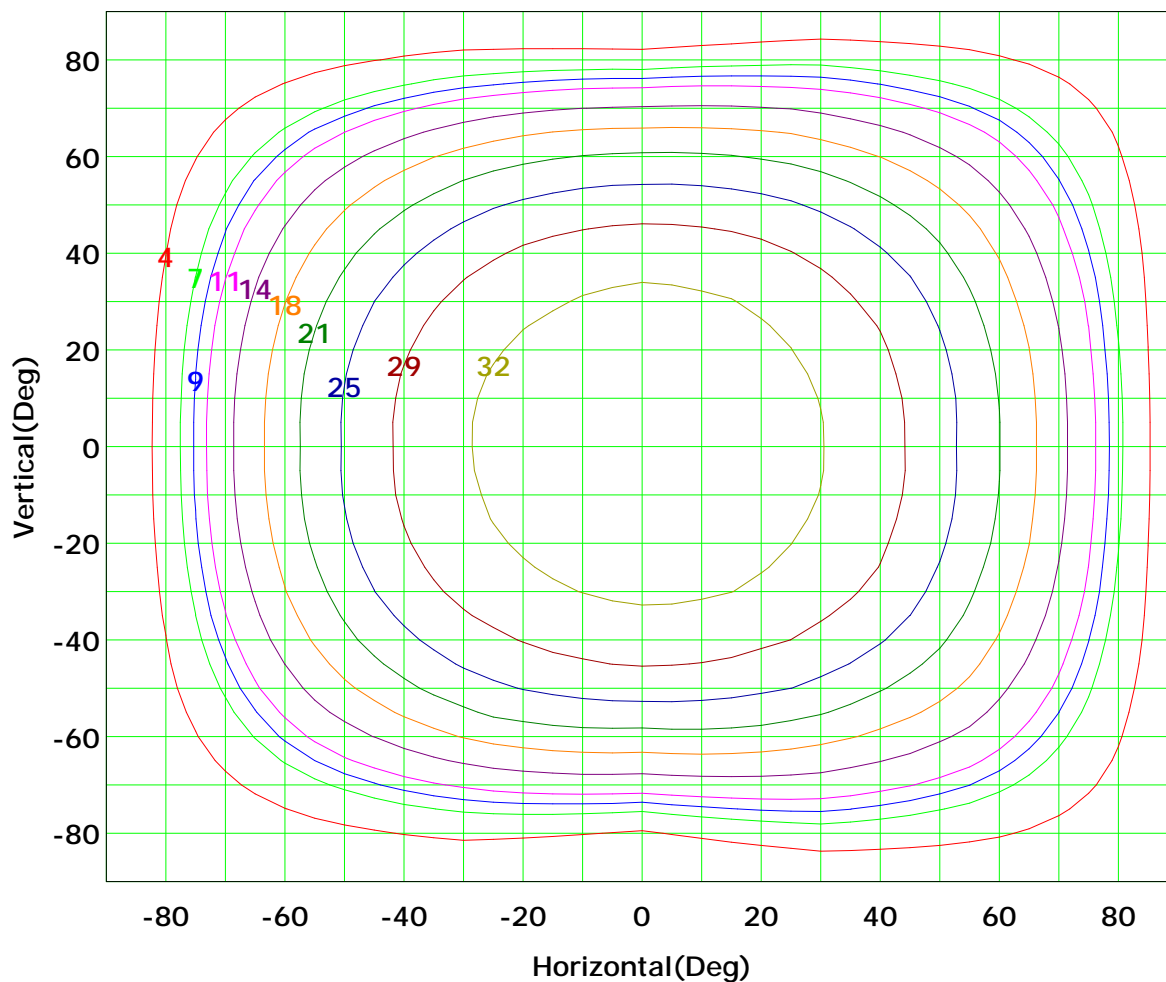
Test Device: GPM-1800B

Distance: 9.028 m

Humidity: 60%

Inspector:

## Isocandela (rectangle)



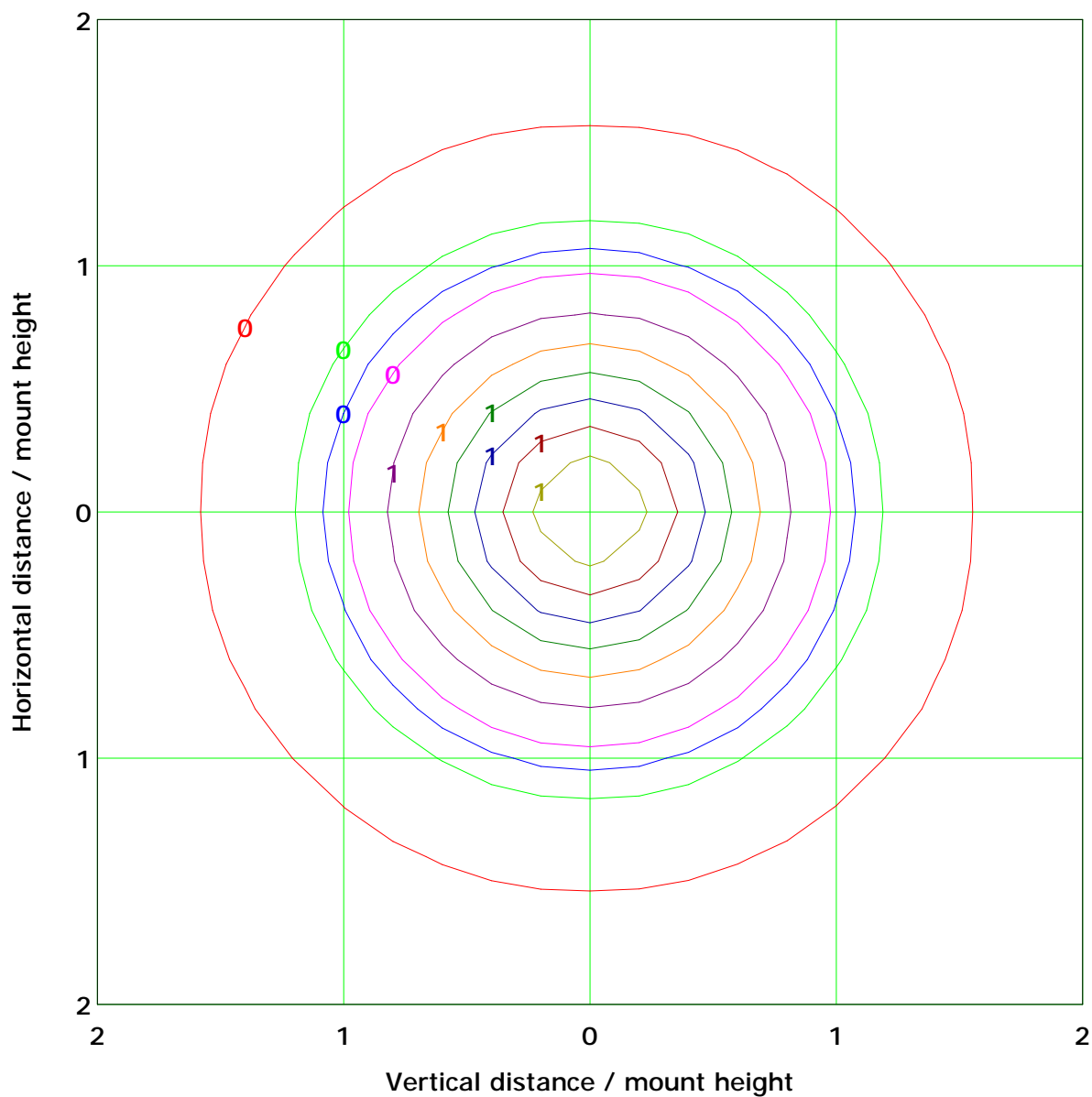
Imax (100%): 36 cd

|         |       |         |       |
|---------|-------|---------|-------|
| ( 10%): | 4 cd  | ( 20%): | 7 cd  |
| ( 25%): | 9 cd  | ( 30%): | 11 cd |
| ( 40%): | 14 cd | ( 50%): | 18 cd |
| ( 60%): | 21 cd | ( 70%): | 25 cd |
| ( 80%): | 29 cd | ( 90%): | 32 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



Mounting Height: 5.0m Max Lux(100%): 1.4 lx

|                |                |
|----------------|----------------|
| ( 10%): 0.1 lx | ( 20%): 0.3 lx |
| ( 25%): 0.4 lx | ( 30%): 0.4 lx |
| ( 40%): 0.6 lx | ( 50%): 0.7 lx |
| ( 60%): 0.9 lx | ( 70%): 1.0 lx |
| ( 80%): 1.1 lx | ( 90%): 1.3 lx |

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

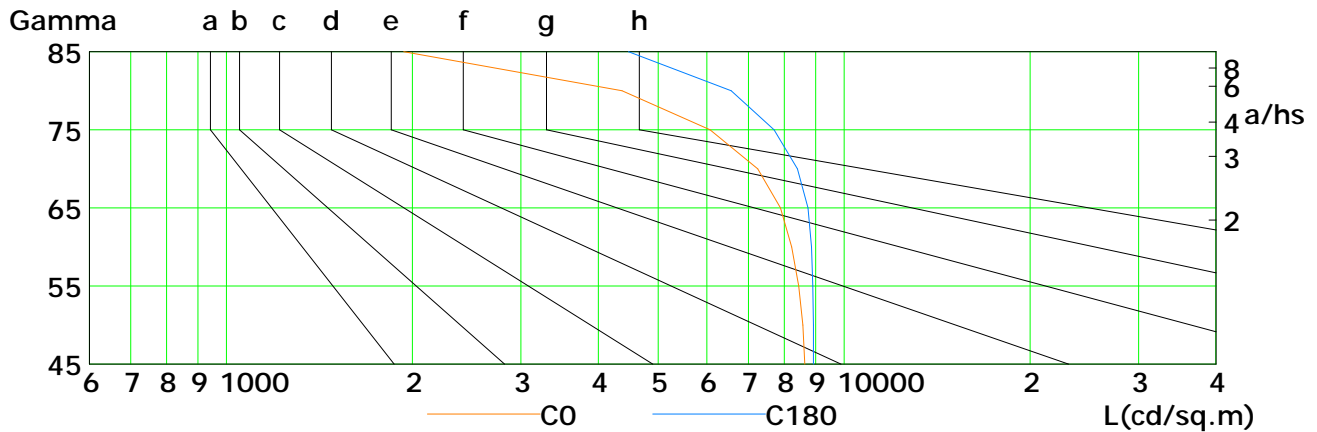
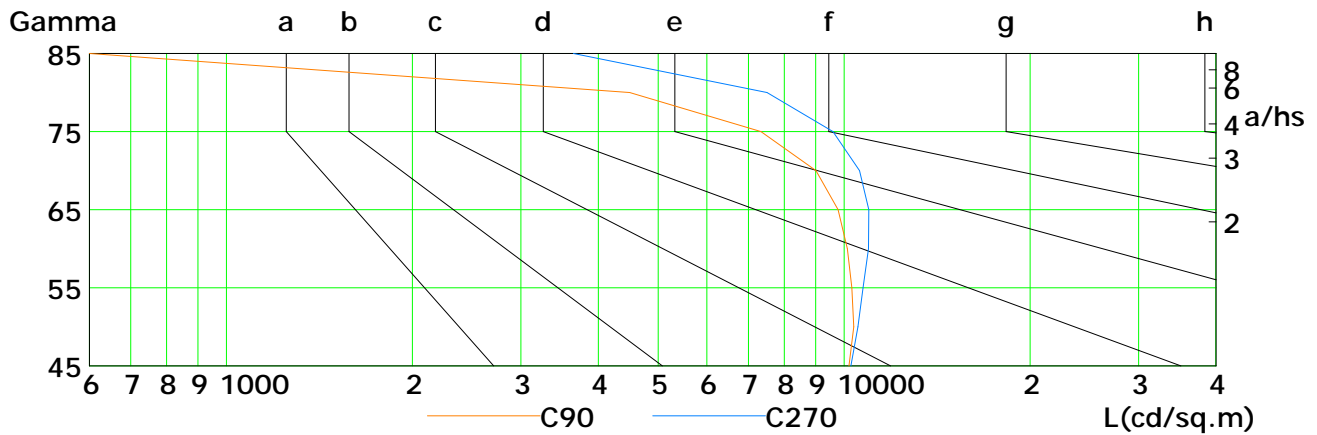
Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-1800B  
 Distance: 9.028 m  
 Humidity: 60%  
 Inspector:



## 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         | 8639  | 8574  | 8447  | 8228  | 7888  | 7247  | 6066 | 4372 | 1937 |
| C90        | 10183 | 10375 | 10301 | 10130 | 9784  | 9007  | 7335 | 4498 | 0    |
| C180       | 8919  | 8923  | 8902  | 8861  | 8742  | 8406  | 7706 | 6563 | 4476 |
| C270       | 10254 | 10527 | 10735 | 10957 | 10968 | 10592 | 9597 | 7502 | 3646 |

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

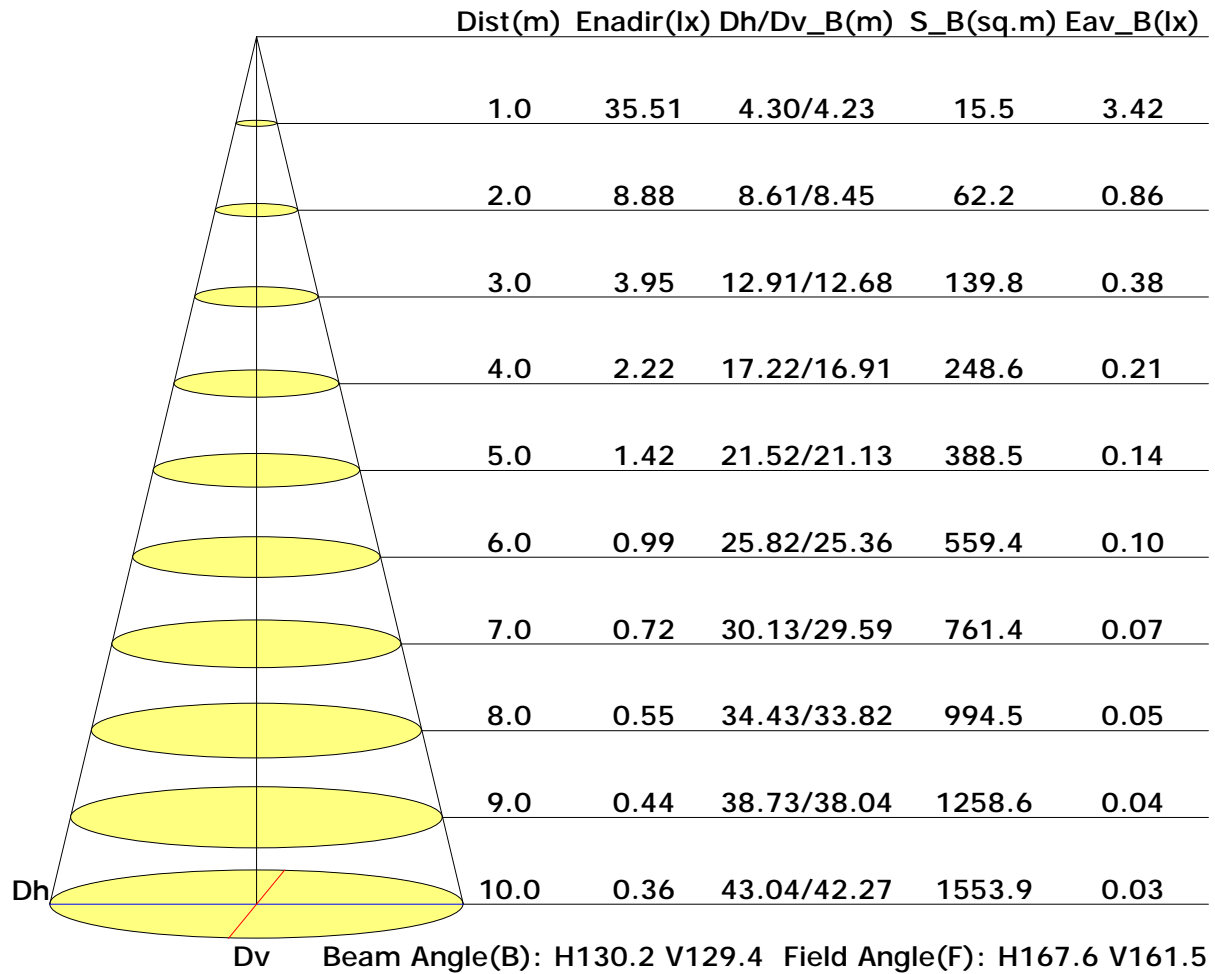
Distance: 9.028 m

Humidity: 60%

Inspector:

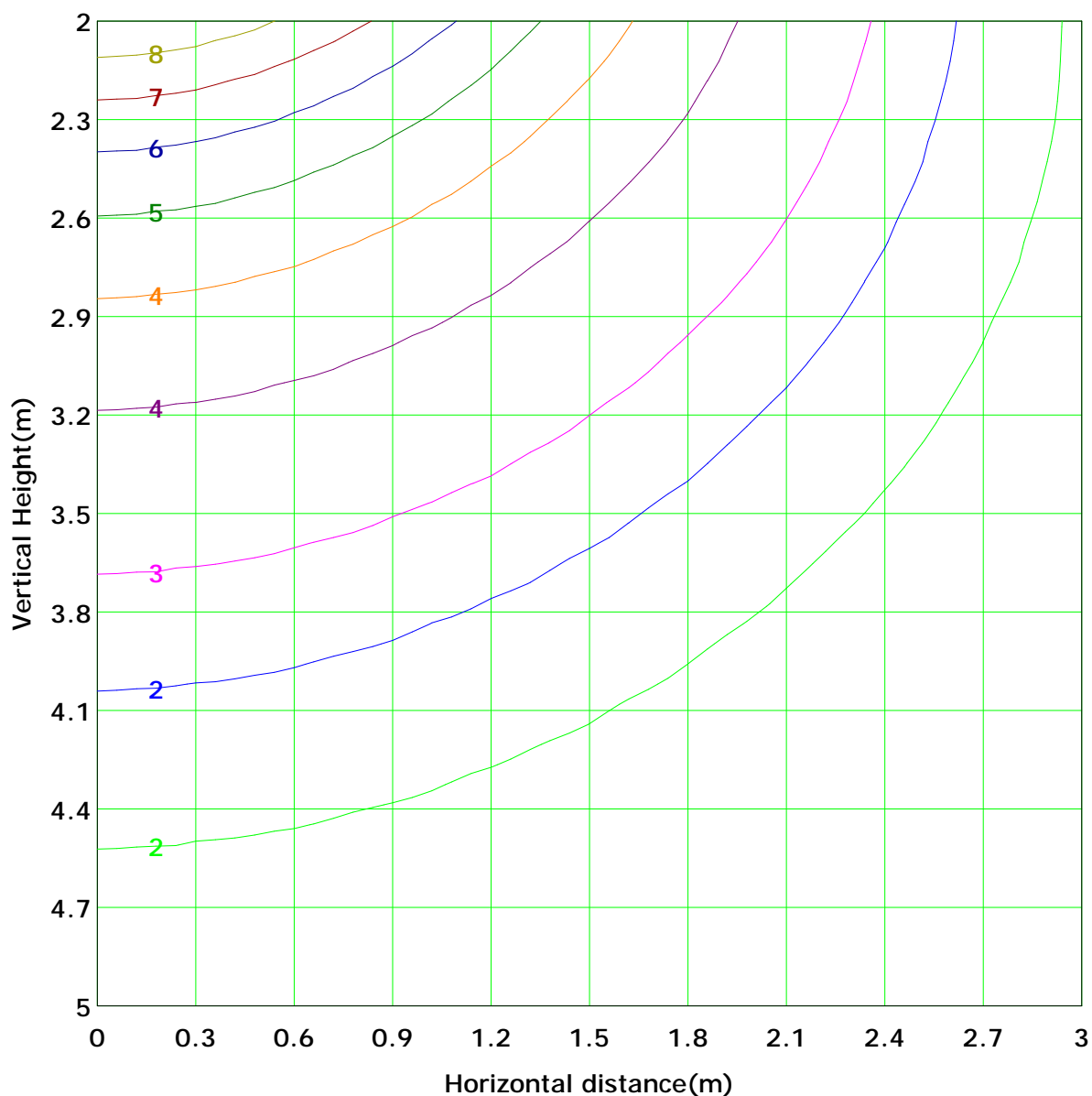


## Illuminance at a Distance





## Vertical IsoLux Plot



|                 |                  |                 |
|-----------------|------------------|-----------------|
| Lowest(m): 2.0m | Highest(m): 5.0m | Max Lux: 8.9 lx |
| ( 10%): 0.9 lx  | ( 20%): 1.8 lx   | ( 30%): 2.7 lx  |
| ( 25%): 2.2 lx  | ( 50%): 4.4 lx   | ( 70%): 6.2 lx  |
| ( 40%): 3.6 lx  | ( 80%): 7.1 lx   | ( 90%): 8.0 lx  |
| ( 60%): 5.3 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:



[www.acolyteled.com](http://www.acolyteled.com)

Fax: + 85 755 85290710(China) Page 10 of 15 Pages

Complete Integrated LED Lighting Solutions

## Unit: lm

### Horizontal plane

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



acolyte®

Complete Integrated LED Lighting Solutions

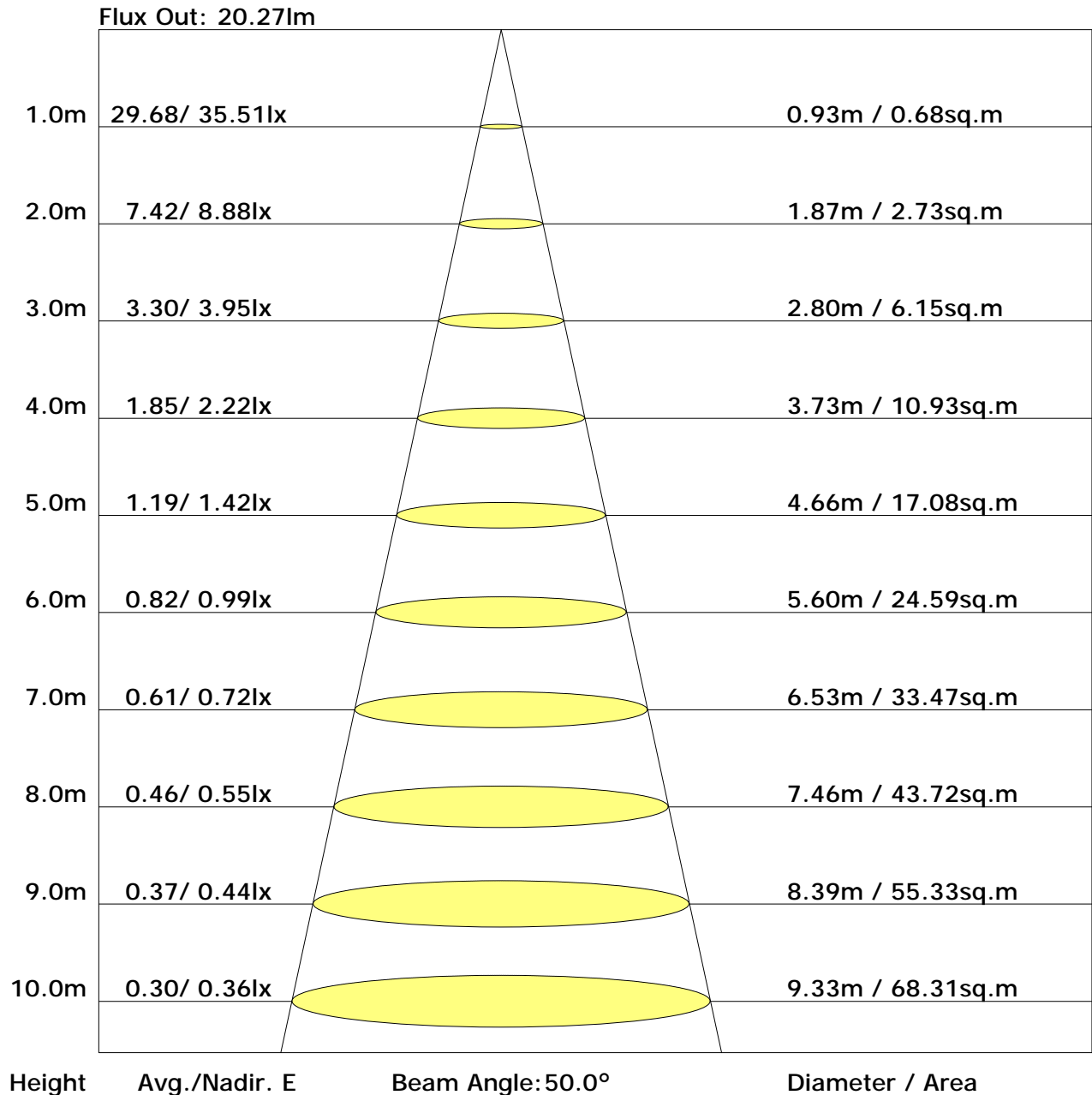
Acolyte

www.acolyteled.com

Tel: +1 210 360 1444(USA)

Fax: + 85 755 85290710(China) Page 11 of 15 Pages

## 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        | 27.4             | 29.1 | 27.7 | 29.4 | 29.7 | 27.2           | 28.9 | 27.6 | 29.2 | 29.5 |
| 3H               | 29.4             | 30.9 | 29.8 | 31.3 | 31.6 | 28.9           | 30.4 | 29.3 | 30.8 | 31.1 |
| 4H               | 30.1             | 31.6 | 30.5 | 31.9 | 32.3 | 29.4           | 30.8 | 29.8 | 31.2 | 31.6 |
| 6H               | 30.6             | 32.0 | 31.0 | 32.3 | 32.7 | 29.6           | 31.0 | 30.0 | 31.3 | 31.8 |
| 8H               | 30.7             | 32.0 | 31.2 | 32.4 | 32.8 | 29.6           | 30.9 | 30.1 | 31.3 | 31.7 |
| 12H              | 30.8             | 32.0 | 31.2 | 32.4 | 32.9 | 29.6           | 30.8 | 30.0 | 31.2 | 31.7 |
| X=4H Y=2H        | 28.1             | 29.5 | 28.5 | 29.9 | 30.3 | 27.9           | 29.4 | 28.3 | 29.8 | 30.2 |
| 3H               | 30.3             | 31.5 | 30.7 | 31.9 | 32.4 | 29.9           | 31.1 | 30.3 | 31.5 | 31.9 |
| 4H               | 31.1             | 32.3 | 31.6 | 32.7 | 33.1 | 30.5           | 31.7 | 31.0 | 32.1 | 32.5 |
| 6H               | 31.7             | 32.7 | 32.2 | 33.2 | 33.6 | 30.9           | 31.9 | 31.3 | 32.3 | 32.8 |
| 8H               | 31.9             | 32.8 | 32.4 | 33.3 | 33.7 | 30.9           | 31.8 | 31.4 | 32.3 | 32.8 |
| 12H              | 32.0             | 32.8 | 32.5 | 33.3 | 33.8 | 30.9           | 31.7 | 31.4 | 32.2 | 32.7 |
| X=8H Y=4H        | 31.4             | 32.3 | 31.9 | 32.8 | 33.3 | 31.0           | 31.9 | 31.4 | 32.3 | 32.8 |
| 6H               | 32.1             | 32.9 | 32.6 | 33.4 | 33.9 | 31.4           | 32.2 | 31.9 | 32.7 | 33.2 |
| 8H               | 32.3             | 33.0 | 32.8 | 33.5 | 34.0 | 31.5           | 32.2 | 32.0 | 32.7 | 33.2 |
| 12H              | 32.5             | 33.1 | 33.0 | 33.6 | 34.1 | 31.6           | 32.2 | 32.1 | 32.7 | 33.2 |
| X=12H Y=4H       | 31.4             | 32.3 | 31.9 | 32.8 | 33.2 | 31.0           | 31.8 | 31.5 | 32.3 | 32.8 |
| 6H               | 32.2             | 32.8 | 32.7 | 33.3 | 33.9 | 31.5           | 32.2 | 32.1 | 32.7 | 33.3 |
| 8H               | 32.4             | 33.0 | 32.9 | 33.5 | 34.1 | 31.7           | 32.3 | 32.2 | 32.8 | 33.4 |

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 = 1.50 |      |      |      |      |      |      |      |      |
|---|------|-------|----------------|------|------|------|------|------|------|------|------|
| 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  | 0.55           | 0.64 | 0.72 | 0.78 | 0.85 | 0.90 | 0.94 | 0.99 | 1.02 |
|   | 0.30 |       | 0.47           | 0.56 | 0.64 | 0.70 | 0.79 | 0.84 | 0.89 | 0.94 | 0.98 |
|   | 0.20 |       | 0.42           | 0.50 | 0.58 | 0.64 | 0.73 | 0.79 | 0.84 | 0.91 | 0.95 |
| 0.50  | 0.50 | 0.20  | 0.54           | 0.62 | 0.69 | 0.75 | 0.82 | 0.87 | 0.90 | 0.95 | 0.98 |
|   | 0.30 |       | 0.47           | 0.55 | 0.63 | 0.68 | 0.76 | 0.82 | 0.86 | 0.91 | 0.95 |
|   | 0.20 |       | 0.41           | 0.49 | 0.57 | 0.63 | 0.72 | 0.77 | 0.82 | 0.88 | 0.92 |
| 0.30  | 0.50 | 0.20  | 0.52           | 0.60 | 0.67 | 0.72 | 0.79 | 0.83 | 0.87 | 0.91 | 0.94 |
|   | 0.30 |       | 0.46           | 0.54 | 0.61 | 0.67 | 0.74 | 0.79 | 0.83 | 0.88 | 0.91 |
|   | 0.20 |       | 0.41           | 0.49 | 0.56 | 0.62 | 0.70 | 0.76 | 0.80 | 0.85 | 0.89 |
| 0.00  | 0.00 | 0.00  | 0.39           | 0.46 | 0.54 | 0.59 | 0.66 | 0.72 | 0.76 | 0.81 | 0.84 |
| <p>Rating:5W 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> |      |       |                |      |      |      |      |      |      |      |      |



acolyte®

Acolyte

www.acolyteled.com

Tel: +1 210 360 1444(USA)

Complete Integrated LED Lighting Solutions

Fax: + 85 755 85290710(China) Page 14 of 15 Pages

## 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  | 1.01           | 0.87 | 0.73 | 0.64 | 0.51 | 0.43 | 0.37 | 0.29 | 0.23 |
|   | 0.30 |       | 0.84           | 0.74 | 0.64 | 0.57 | 0.46 | 0.39 | 0.34 | 0.27 | 0.22 |
|   | 0.20 |       | 0.72           | 0.65 | 0.57 | 0.51 | 0.42 | 0.36 | 0.32 | 0.25 | 0.21 |
| 0.50  | 0.50 | 0.20  | 0.98           | 0.83 | 0.70 | 0.61 | 0.49 | 0.44 | 0.35 | 0.27 | 0.22 |
|   | 0.30 |       | 0.83           | 0.72 | 0.62 | 0.55 | 0.45 | 0.38 | 0.33 | 0.26 | 0.21 |
|   | 0.20 |       | 0.72           | 0.64 | 0.56 | 0.50 | 0.41 | 0.35 | 0.31 | 0.24 | 0.20 |
| 0.30  | 0.50 | 0.20  | 0.95           | 0.80 | 0.68 | 0.59 | 0.47 | 0.39 | 0.33 | 0.26 | 0.21 |
|   | 0.30 |       | 0.81           | 0.70 | 0.61 | 0.53 | 0.43 | 0.37 | 0.31 | 0.25 | 0.20 |
|   | 0.20 |       | 0.71           | 0.63 | 0.55 | 0.49 | 0.40 | 0.34 | 0.30 | 0.24 | 0.20 |
| 0.00  | 0.00 | 0.00  | 0.61           | 0.53 | 0.46 | 0.40 | 0.33 | 0.28 | 0.24 | 0.19 | 0.15 |
| <p>Rating:5W 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> |      |       |                |      |      |      |      |      |      |      |      |

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(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  | 0.17           | 0.19 | 0.19 | 0.20 | 0.21 | 0.21 | 0.22 | 0.22 | 0.23 |
|   | 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 | 0.10 | 0.12 | 0.13 | 0.14 | 0.16 | 0.17 |
| 0.50  | 0.50 | 0.20  | 0.17           | 0.18 | 0.19 | 0.19 | 0.20 | 0.21 | 0.21 | 0.21 | 0.22 |
|   | 0.30 |       | 0.10           | 0.12 | 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 | 0.19 | 0.19 | 0.20 | 0.20 | 0.21 | 0.21 |
|   | 0.30 |       | 0.10           | 0.11 | 0.13 | 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 |
| <p>Rating:5W 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> |      |       |                |      |      |      |      |      |      |      |      |