

Report No.:

Test Time: 2021-03-24 16:55

## Luminaire Property

Luminaire Manufacturer: ASD-LGBR-3D7CC-WH

Luminaire Description:

Voltage: 120.6 V

Current: 0.060 A

Power: 7.01 W

Power Factor: 0.966

## Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 529.9 lm

Measurement Flux: 529.9 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 63.5, 64.8, 63.9, 64.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 35.5, 36.9, 35.9, 36.3

Luminaire Efficacy Rating (LER): 75.64

Central Intensity: 1018.35 cd

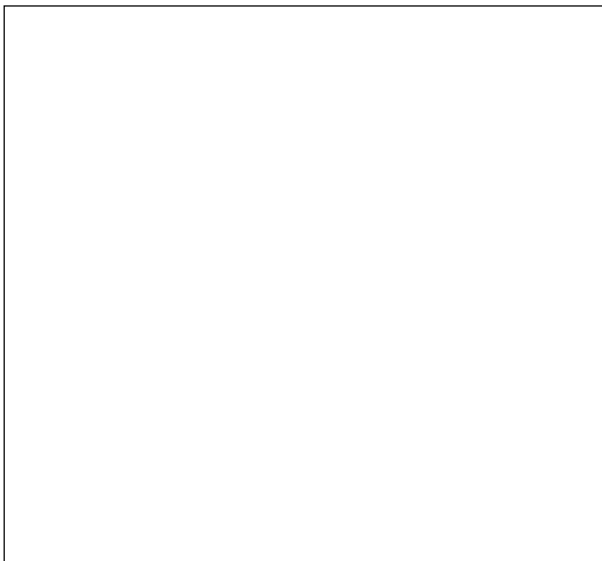
Max. Intensity: 1036.98 cd

Pos of Max. Intensity: H180 V5

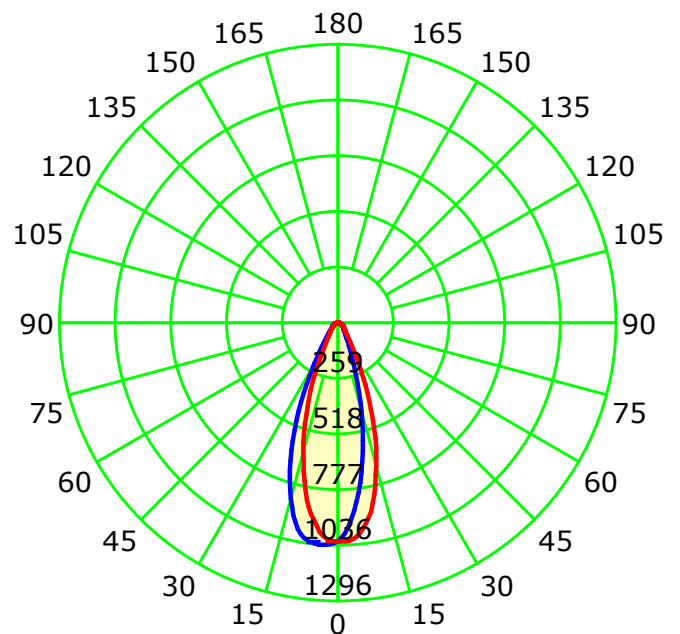
S/MH(C0/C180): 0.59

S/MH(C90/C270): 0.61

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Gamma Plane (°):0.0-90.0:1.0

Test Lab:

Test Device: GPM-1600L

Test Type: TYPE C

Distance: 6.935 m

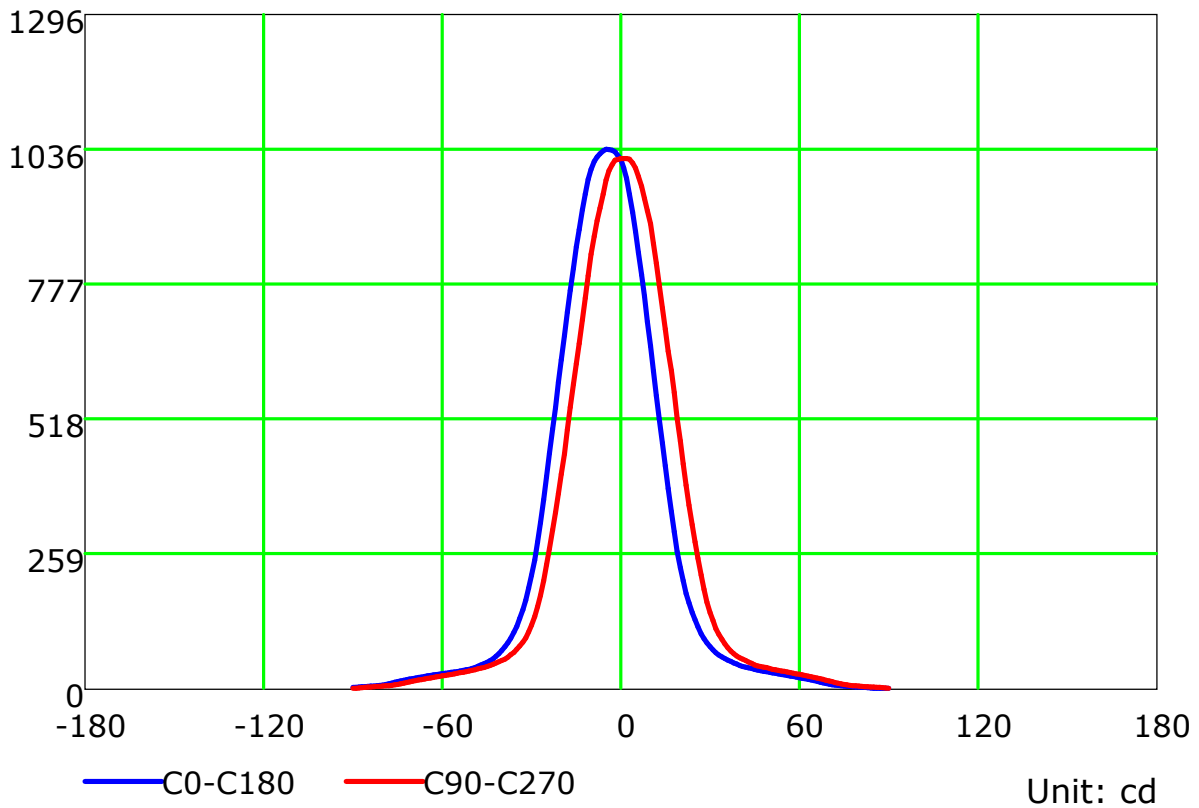
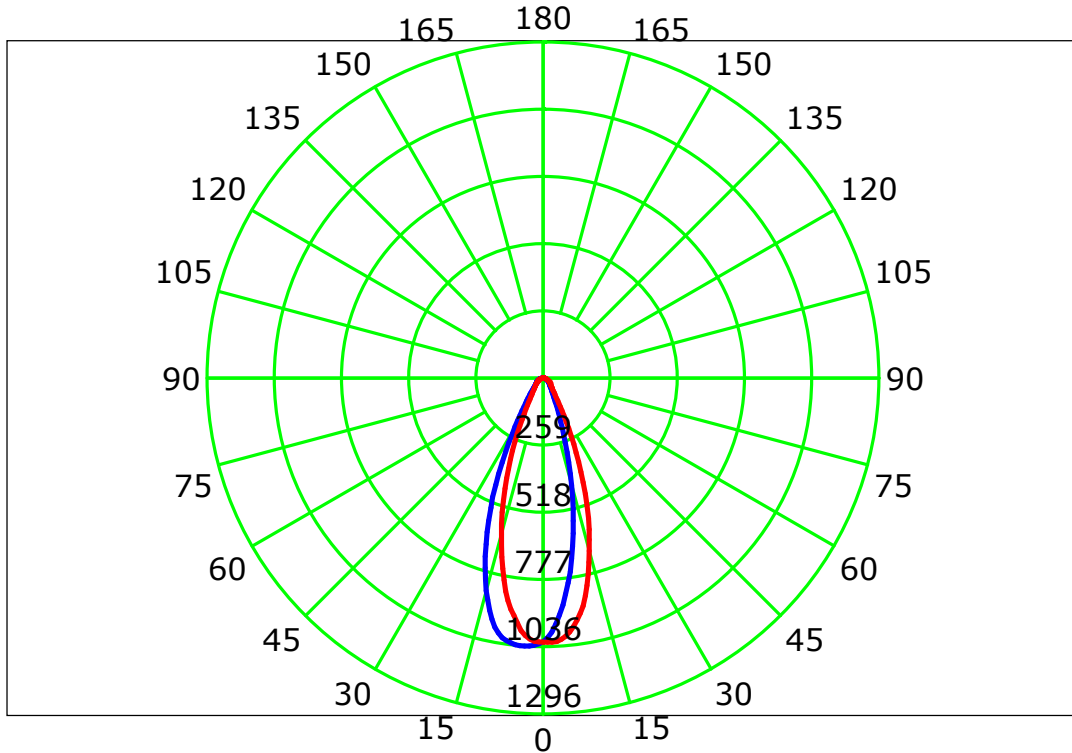
Temperature:

Humidity:

Operator:

Inspector:

## Luminous Intensity Distribution Curve

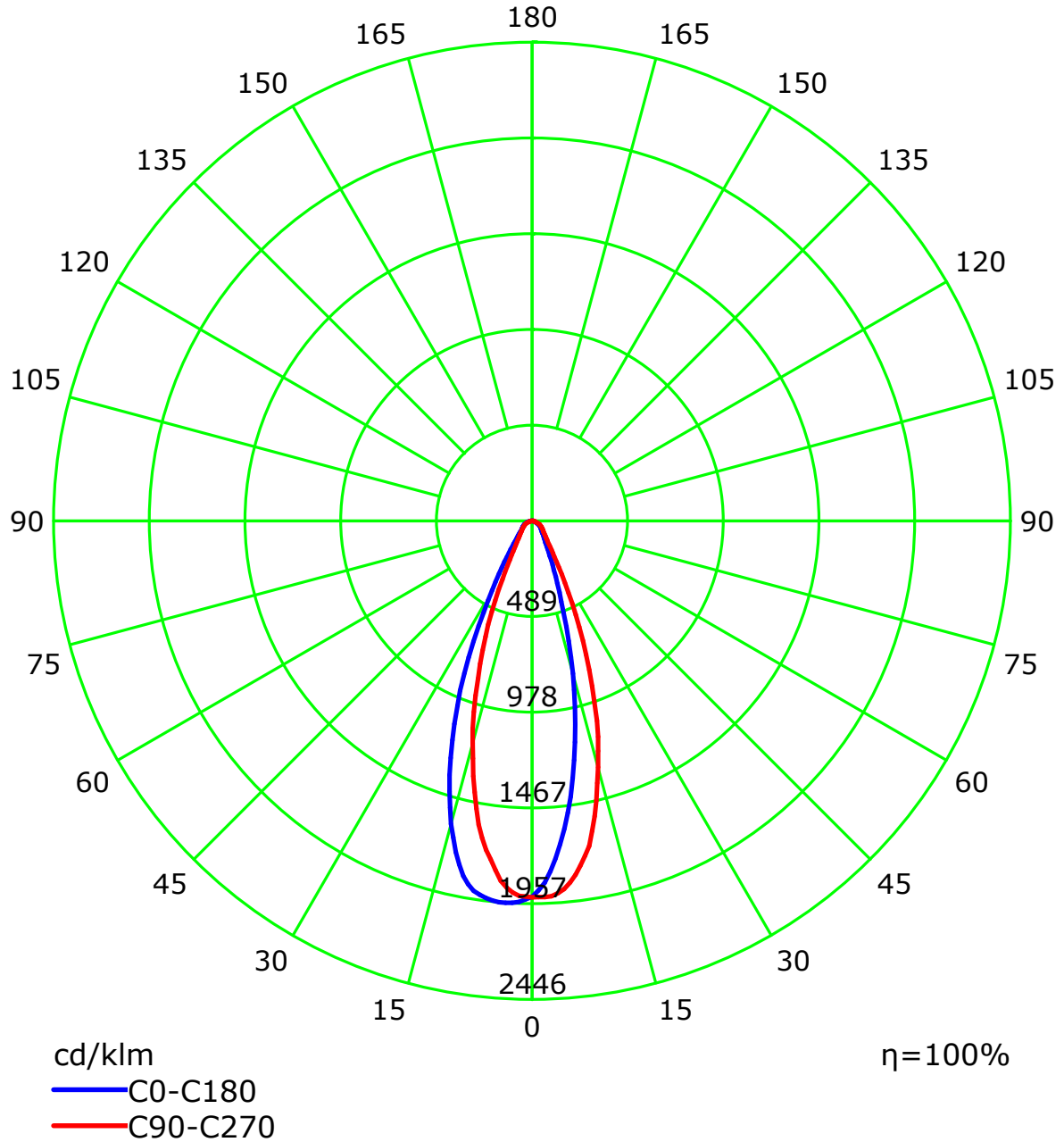


C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

Unit: cd

## Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 6.935 m

Humidity:

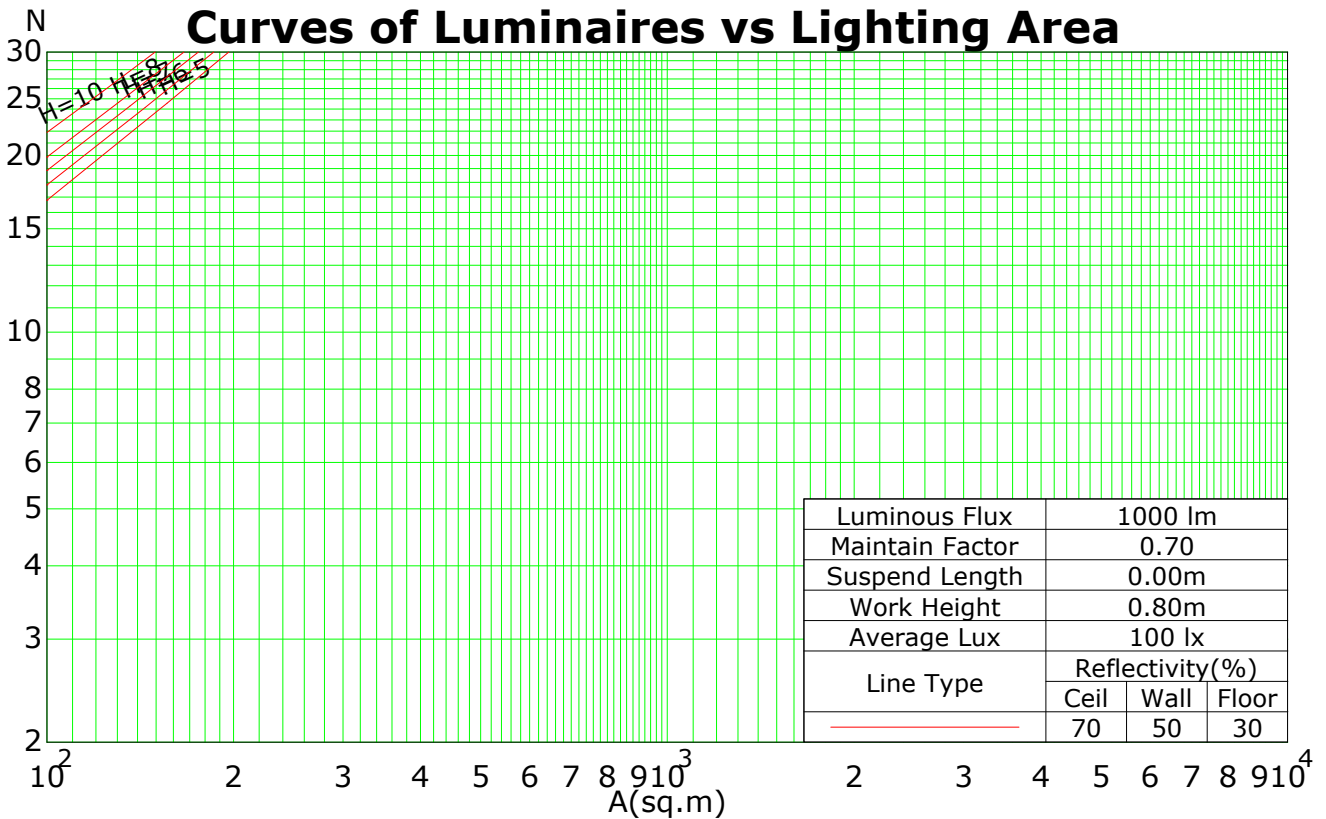
Inspector:

### 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   | 113      | 110 | 107 | 105 | 110 | 108 | 105 | 103 | 104 | 102 | 100 | 100 | 98  | 97  | 96  | 95  | 94  | 92  |
| 2   | 107      | 102 | 97  | 94  | 105 | 100 | 96  | 93  | 97  | 93  | 91  | 94  | 91  | 89  | 91  | 89  | 87  | 85  |
| 3   | 101      | 95  | 89  | 85  | 99  | 93  | 88  | 84  | 91  | 86  | 83  | 88  | 85  | 82  | 86  | 83  | 81  | 79  |
| 4   | 96       | 89  | 83  | 78  | 95  | 87  | 82  | 78  | 85  | 81  | 77  | 83  | 79  | 76  | 81  | 78  | 75  | 74  |
| 5   | 92       | 83  | 77  | 73  | 90  | 82  | 77  | 73  | 80  | 76  | 72  | 79  | 75  | 71  | 77  | 74  | 71  | 69  |
| 6   | 87       | 79  | 73  | 68  | 86  | 78  | 72  | 68  | 76  | 71  | 68  | 75  | 70  | 67  | 74  | 70  | 67  | 65  |
| 7   | 84       | 74  | 68  | 64  | 82  | 74  | 68  | 64  | 72  | 67  | 64  | 71  | 67  | 63  | 70  | 66  | 63  | 62  |
| 8   | 80       | 71  | 65  | 61  | 79  | 70  | 65  | 61  | 69  | 64  | 60  | 68  | 63  | 60  | 67  | 63  | 60  | 59  |
| 9   | 77       | 67  | 62  | 58  | 76  | 67  | 61  | 58  | 66  | 61  | 57  | 65  | 61  | 57  | 64  | 60  | 57  | 56  |
| 10  | 74       | 64  | 59  | 55  | 73  | 64  | 59  | 55  | 63  | 58  | 55  | 62  | 58  | 55  | 62  | 58  | 55  | 53  |

Spacing Criteria (0-180): 0.59  
 Spacing Criteria (90-270): 0.61  
 Spacing Criteria (Diagonal): 0.59

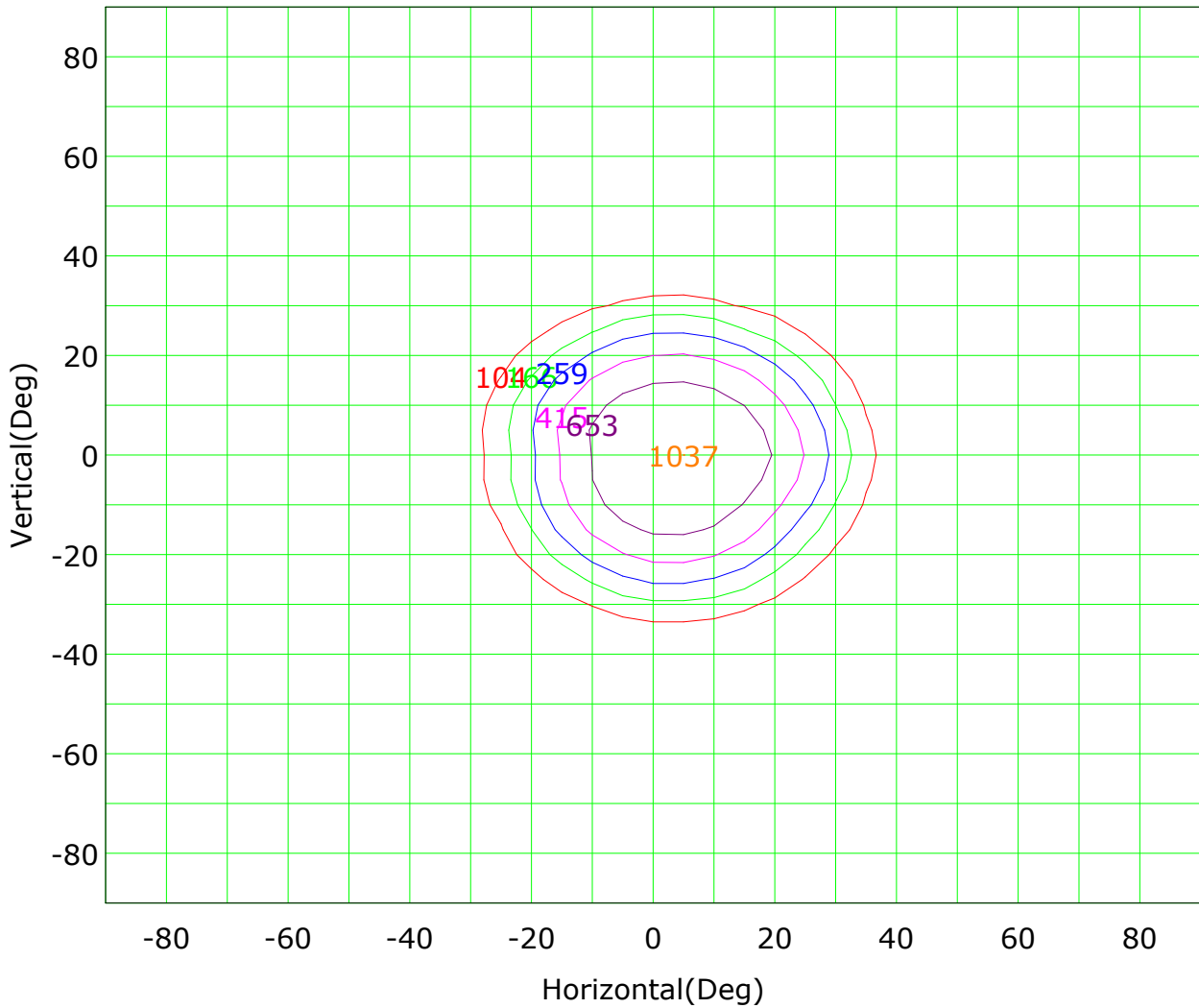
### Curves of Luminaires vs Lighting Area



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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

## Isocandela (rectangle)



Imax (100%): 1037 cd

|                  |                   |
|------------------|-------------------|
| — ( 10%): 104 cd | — ( 16%): 166 cd  |
| — ( 25%): 259 cd | — ( 40%): 415 cd  |
| — ( 63%): 653 cd | — (100%): 1037 cd |

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

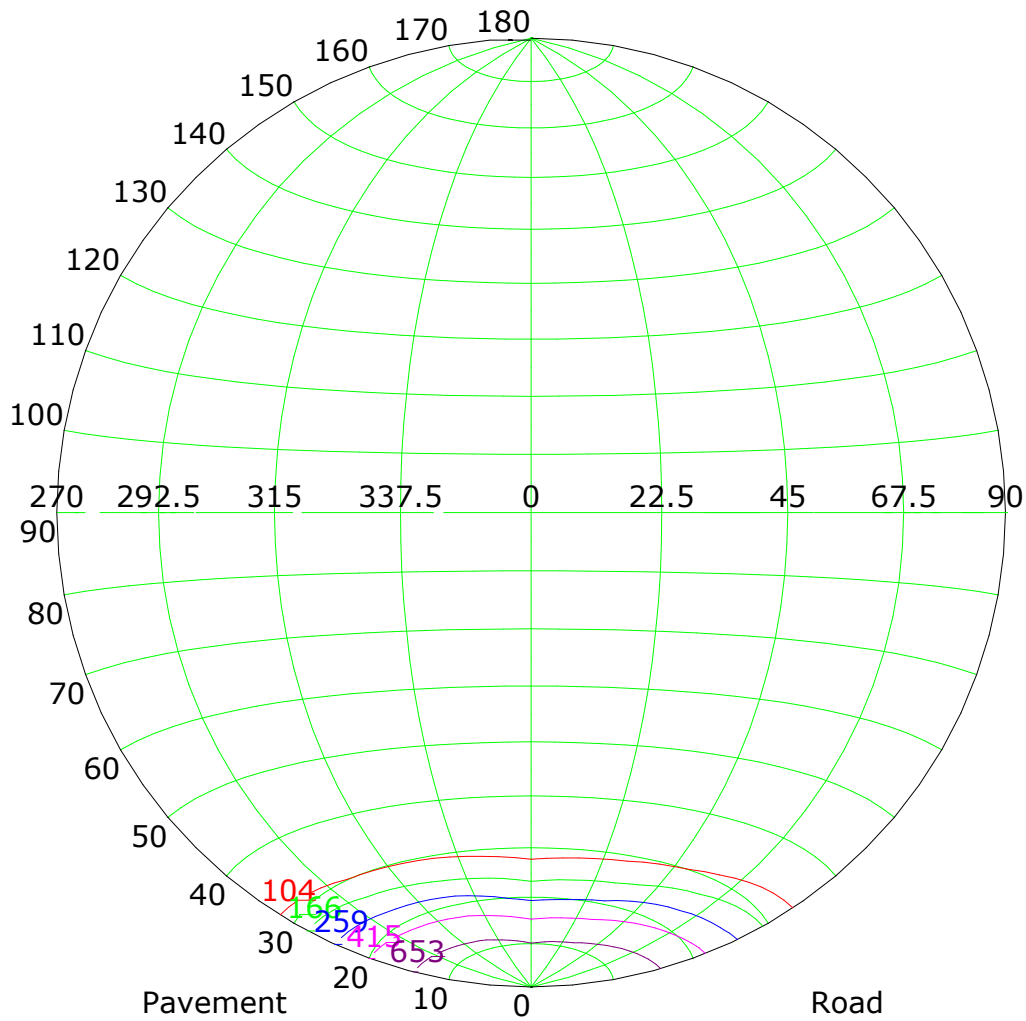
Test Device: GPM-1600L

Distance: 6.935 m

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 1037 cd

|           |        |           |         |
|-----------|--------|-----------|---------|
| — ( 10%): | 104 cd | — ( 16%): | 166 cd  |
| — ( 25%): | 259 cd | — ( 40%): | 415 cd  |
| — ( 63%): | 653 cd | — (100%): | 1037 cd |

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

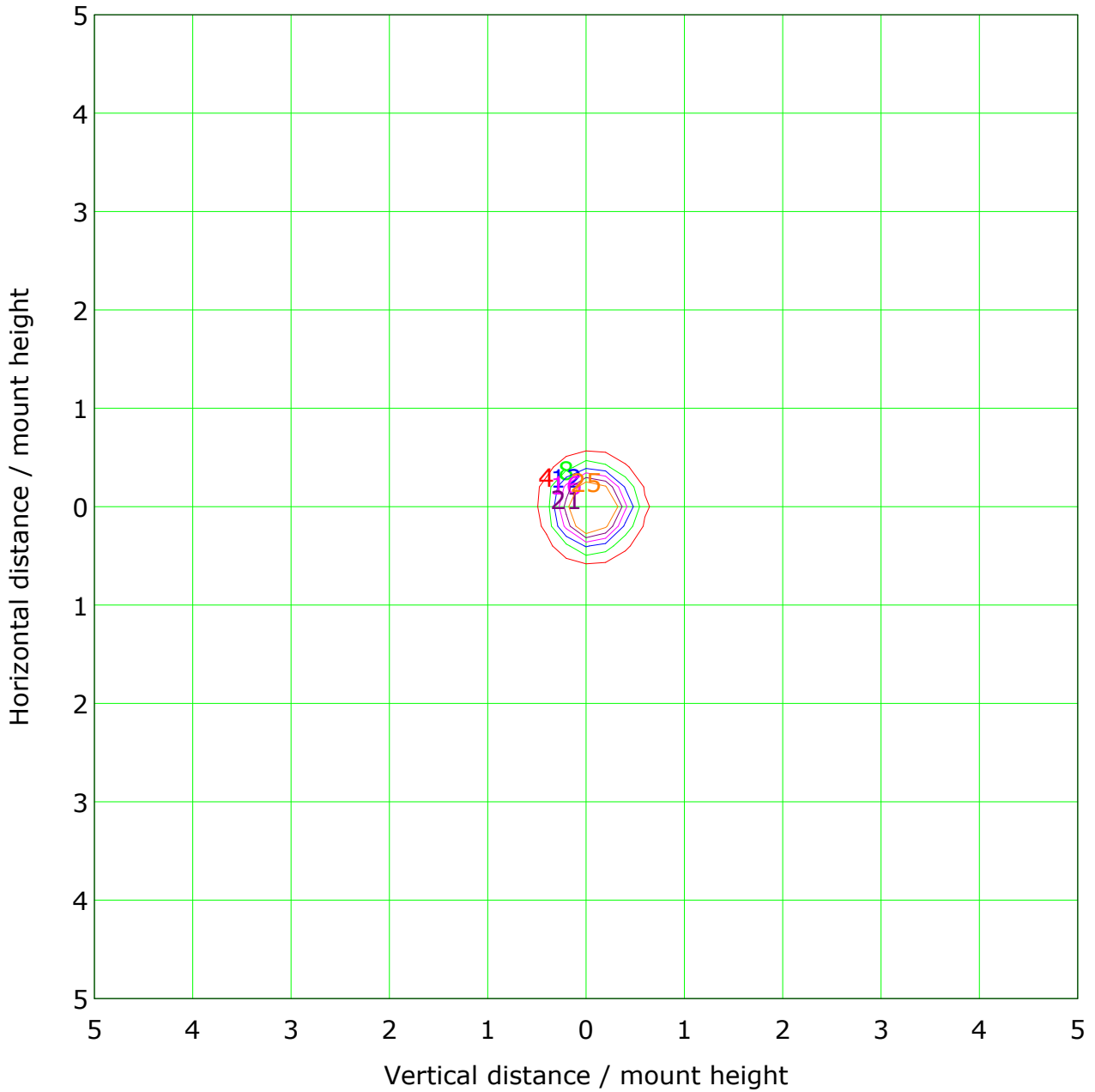
Test Device: GPM-1600L

Distance: 6.935 m

Humidity:

Inspector:

## IsoLux Plot



|  |  |                        |
|--|--|------------------------|
| Mounting Height: 5.0m  |  | Max Lux(100%): 41.2 lx |
| <ul style="list-style-type: none"> <li><span style="color: red;">—</span> ( 10%): 4.1 lx</li> <li><span style="color: blue;">—</span> ( 30%): 12.4 lx</li> <li><span style="color: purple;">—</span> ( 50%): 20.6 lx</li> <li><span style="color: lightgreen;">—</span> (100%): 41.2 lx</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: green;">—</span> ( 20%): 8.2 lx</li> <li><span style="color: magenta;">—</span> ( 40%): 16.5 lx</li> <li><span style="color: orange;">—</span> ( 60%): 24.7 lx</li> </ul> |                        |

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 6.935 m

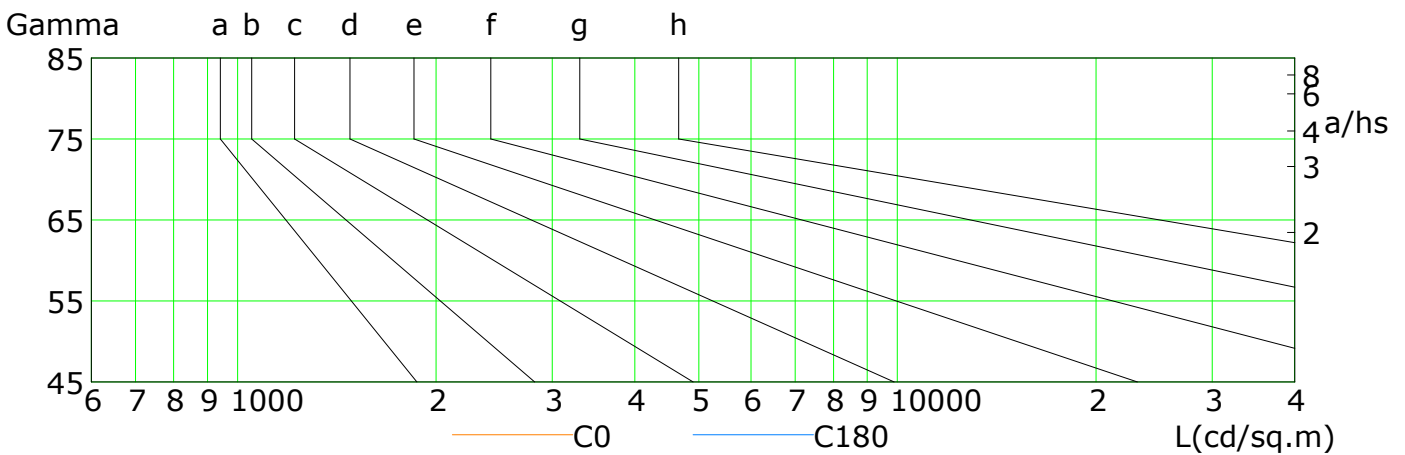
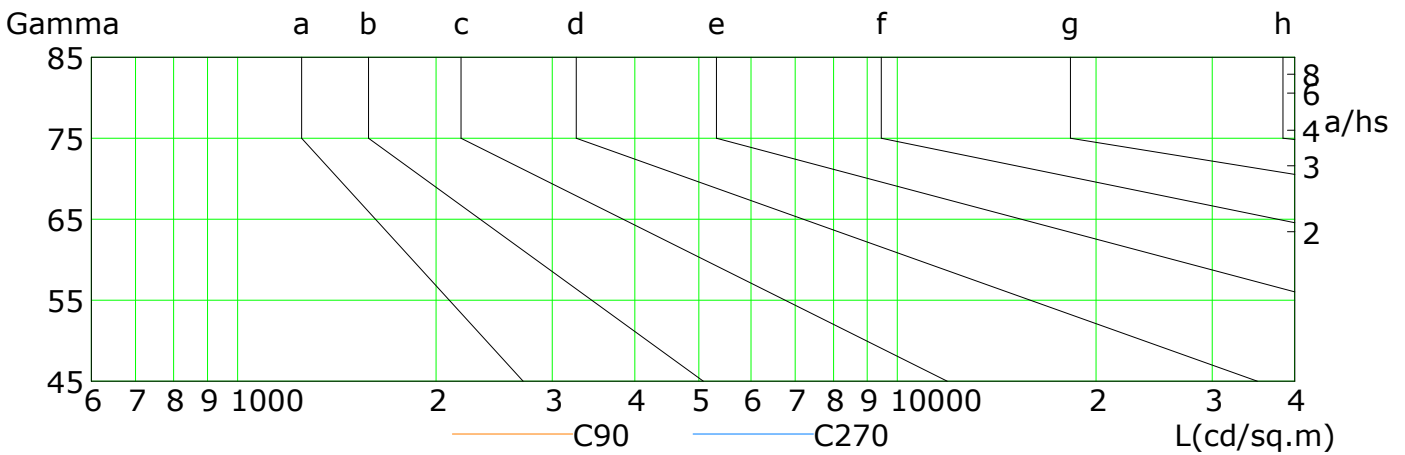
Humidity:

Inspector:

## Lum Limit Curve

| Dazzle | Quality | Illuminance (lx) |      |      |       |       |       |       |       |
|--------|---------|------------------|------|------|-------|-------|-------|-------|-------|
|        |         | 2000             | 1000 | 500  | <=300 |       |       |       |       |
| 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         | 37  | 31  | 26  | 21  | 15  | 8   | 5   | 3   | 0   |
| C90        | 45  | 38  | 33  | 27  | 21  | 14  | 8   | 5   | 3   |
| C180       | 50  | 38  | 32  | 28  | 24  | 19  | 13  | 7   | 4   |
| C270       | 42  | 35  | 29  | 24  | 19  | 14  | 8   | 5   | 3   |

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

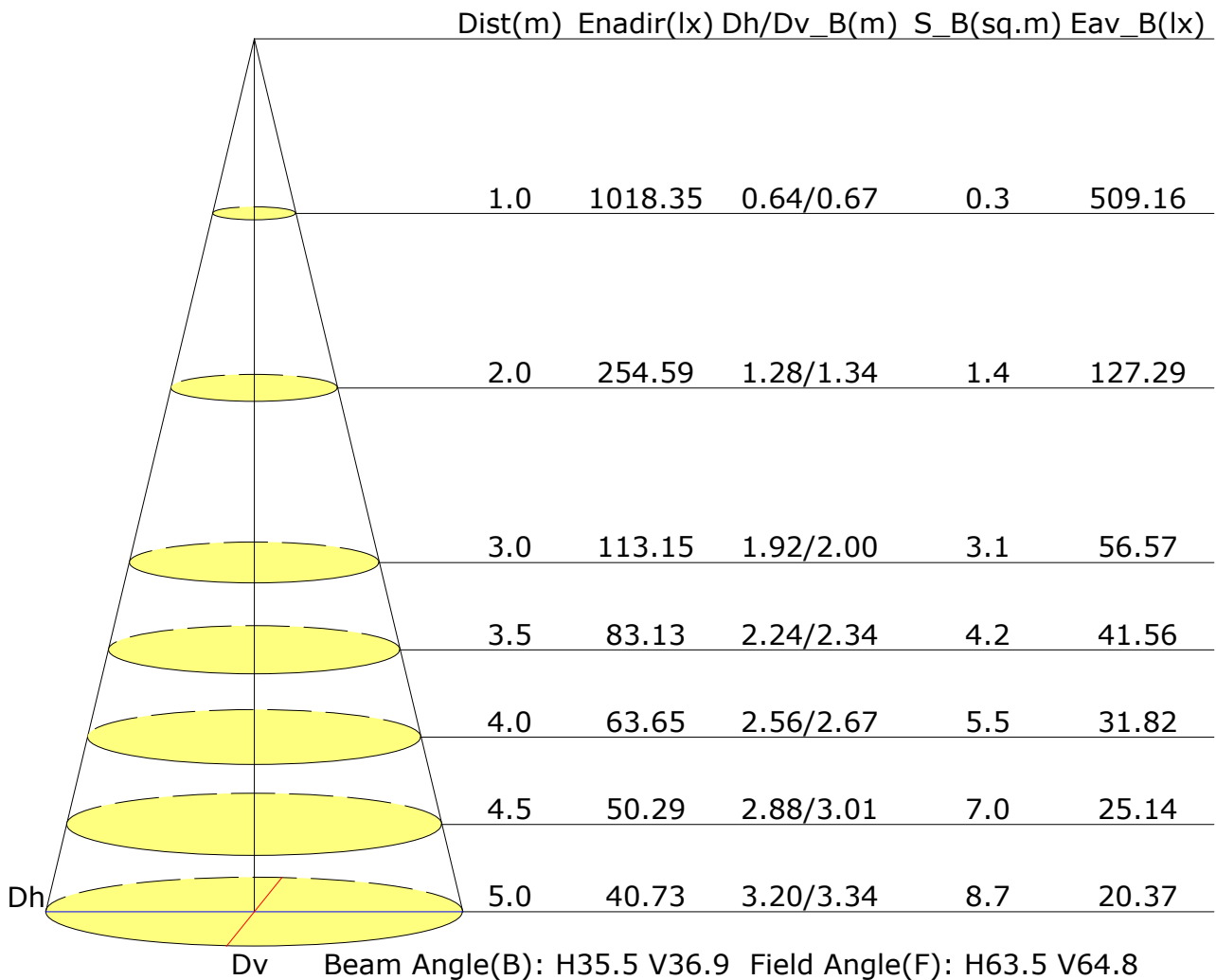
Distance: 6.935 m

Humidity:

Inspector:



## Illuminance at a Distance



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

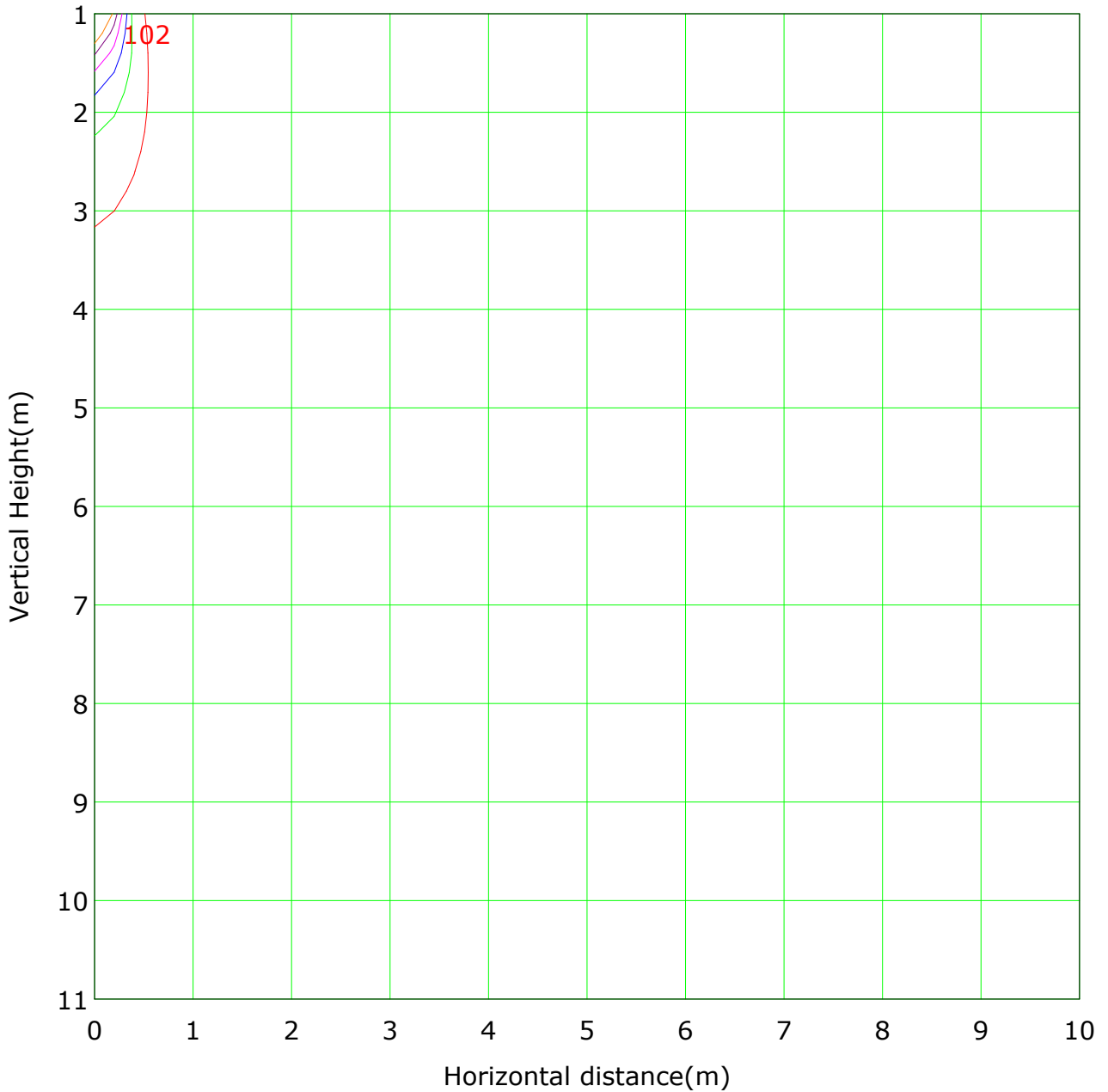
Test Device: GPM-1600L

Distance: 6.935 m

Humidity:

Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 1018.3 lx

|                    |                    |
|--------------------|--------------------|
| — ( 10%): 101.8 lx | — ( 20%): 203.7 lx |
| — ( 30%): 305.5 lx | — ( 40%): 407.3 lx |
| — ( 50%): 509.2 lx | — ( 60%): 611.0 lx |
| — (100%):1018.3 lx |                    |

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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

# Area Flux Table

Unit: lm

|         |     |     |     |     |     |      |      |      |      |       |       |      |      |      |     |     |     |     |     |     |         |         |
|---------|-----|-----|-----|-----|-----|------|------|------|------|-------|-------|------|------|------|-----|-----|-----|-----|-----|-----|---------|---------|
|         | -90 | 0.0 | 0.0 | 0.0 | 0.1 | 0.1  | 0.1  | 0.1  | 0.1  | 0.1   | 0.1   | 0.1  | 0.1  | 0.1  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8     | 0.0     |
|         | -80 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1  | 0.2  | 0.2  | 0.3  | 0.3   | 0.2   | 0.2  | 0.2  | 0.2  | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 | 0.0 | 2.2     | 0.0     |
|         | -70 | 0.0 | 0.0 | 0.1 | 0.2 | 0.3  | 0.4  | 0.5  | 0.6  | 0.6   | 0.6   | 0.5  | 0.4  | 0.3  | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 4.9     | 0.0     |
|         | -60 | 0.0 | 0.0 | 0.1 | 0.3 | 0.5  | 0.6  | 0.8  | 0.9  | 0.9   | 0.9   | 0.8  | 0.7  | 0.5  | 0.4 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 7.6     | 0.0     |
|         | -50 | 0.0 | 0.1 | 0.2 | 0.4 | 0.6  | 0.8  | 1.0  | 1.2  | 1.3   | 1.3   | 1.1  | 0.9  | 0.7  | 0.5 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 10.5    | 0.0     |
|         | -40 | 0.0 | 0.1 | 0.2 | 0.5 | 0.7  | 1.0  | 1.5  | 2.0  | 2.4   | 2.2   | 1.7  | 1.3  | 0.9  | 0.6 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 15.7    | 0.8     |
|         | -30 | 0.0 | 0.1 | 0.3 | 0.5 | 0.8  | 1.4  | 2.8  | 5.3  | 7.4   | 6.5   | 3.7  | 1.9  | 1.1  | 0.7 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 33.2    | 23.3    |
|         | -20 | 0.0 | 0.1 | 0.3 | 0.5 | 1.0  | 2.2  | 6.2  | 14.0 | 19.0  | 16.4  | 8.6  | 3.1  | 1.4  | 0.8 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 74.2    | 66.9    |
|         | -10 | 0.0 | 0.1 | 0.3 | 0.6 | 1.1  | 3.0  | 10.2 | 22.4 | 29.3  | 25.5  | 12.9 | 4.0  | 1.5  | 0.8 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 112.3   | 105.6   |
|         | 0   | 0.0 | 0.1 | 0.3 | 0.6 | 1.1  | 3.0  | 10.0 | 22.1 | 29.5  | 25.5  | 12.4 | 3.8  | 1.5  | 0.8 | 0.5 | 0.2 | 0.0 | 0.0 | 0.0 | 111.3   | 104.6   |
|         | 10  | 0.0 | 0.1 | 0.3 | 0.5 | 1.0  | 2.1  | 6.0  | 14.3 | 20.7  | 17.7  | 8.5  | 2.9  | 1.3  | 0.8 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 76.9    | 69.4    |
|         | 20  | 0.0 | 0.1 | 0.3 | 0.5 | 0.8  | 1.4  | 2.9  | 6.0  | 8.7   | 7.4   | 3.9  | 1.9  | 1.1  | 0.7 | 0.4 | 0.2 | 0.0 | 0.0 | 0.0 | 36.4    | 26.9    |
|         | 30  | 0.0 | 0.1 | 0.2 | 0.5 | 0.7  | 1.0  | 1.6  | 2.3  | 2.8   | 2.5   | 1.9  | 1.3  | 0.9  | 0.6 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 16.8    | 2.2     |
|         | 40  | 0.0 | 0.1 | 0.2 | 0.4 | 0.6  | 0.8  | 1.1  | 1.3  | 1.4   | 1.4   | 1.2  | 1.0  | 0.7  | 0.5 | 0.3 | 0.1 | 0.0 | 0.0 | 0.0 | 11.0    | 0.0     |
|         | 50  | 0.0 | 0.0 | 0.1 | 0.3 | 0.5  | 0.6  | 0.8  | 0.9  | 1.0   | 1.0   | 0.9  | 0.7  | 0.6  | 0.3 | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 8.0     | 0.0     |
|         | 60  | 0.0 | 0.0 | 0.1 | 0.2 | 0.3  | 0.4  | 0.5  | 0.6  | 0.6   | 0.6   | 0.6  | 0.4  | 0.3  | 0.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 5.0     | 0.0     |
|         | 70  | 0.0 | 0.0 | 0.1 | 0.1 | 0.1  | 0.2  | 0.2  | 0.2  | 0.3   | 0.2   | 0.2  | 0.2  | 0.1  | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1     | 0.0     |
|         | 80  | 0.0 | 0.0 | 0.0 | 0.0 | 0.1  | 0.1  | 0.1  | 0.1  | 0.1   | 0.1   | 0.1  | 0.1  | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.8     | 0.0     |
| Flux(T) | 90  | 0.2 | 1.1 | 3.2 | 6.1 | 10.2 | 19.3 | 46.4 | 94.5 | 126.2 | 110.1 | 59.3 | 24.9 | 13.2 | 8.1 | 4.5 | 1.8 | 0.4 | 0.0 | 0.0 | 530     |         |
| Flux(E) |     | 0.0 | 0.0 | 0.0 | 0.0 | 0.0  | 5.4  | 35.4 | 84.2 | 116.1 | 99.9  | 48.2 | 10.3 | 0.0  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |         | 400     |
|         |     | -90 | -80 | -70 | -60 | -50  | -40  | -30  | -20  | -10   | 0     | 10   | 20   | 30   | 40  | 50  | 60  | 70  | 80  | 90  | Flux(T) | Flux(E) |

Gamma Plane (°):0.0-90.0:1.0

Test Device: GPM-1600L

Distance: 6.935 m

Humidity:

Inspector:

C Plane (°):0.0-360.0: 30.0

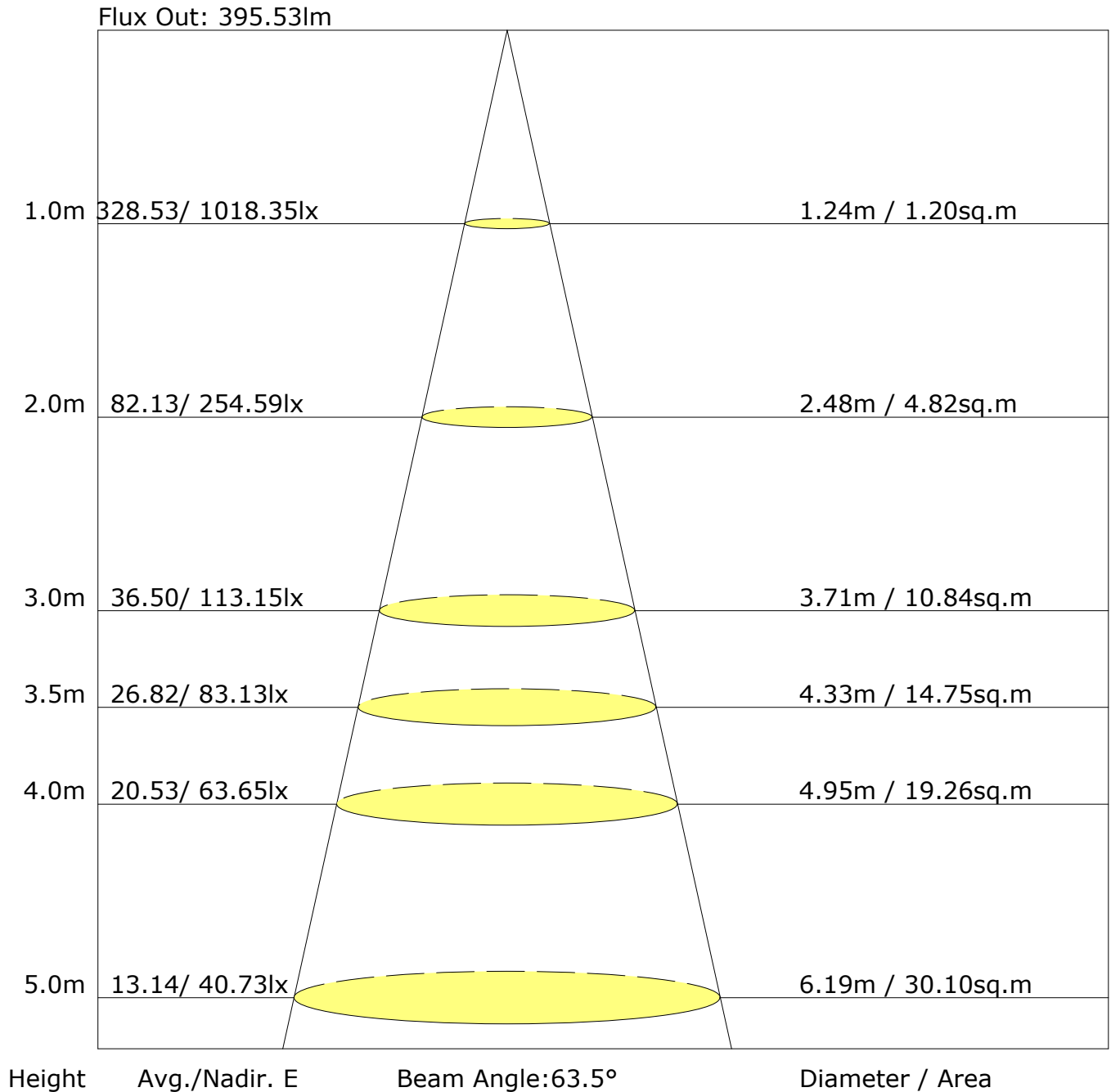
Test Lab:

Test Type: TYPE C

Temperature:

Operator:

## The Average Illuminance Effective Figure



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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 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  | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 3H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 4H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 6H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 8H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 12H  | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| X=4H Y=2H  | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 3H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 4H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 6H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 8H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 12H  | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| X=8H Y=4H  | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 6H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 8H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 12H  | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| X=12H Y=4H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 6H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| 8H   | -1.\$            | -1.\$ | -1.\$ | -1.\$ | -1.\$ | -1.\$          | -1.\$ | -1.\$ | -1.\$ | -1.\$       |
| Variations with the observer position at spacings: |                  |       |       |       |       |                |       |       |       |             |
| S=1.0H   |                  |       |       |       |       |                |       |       |       | -1.\$/-1.\$ |
| S=1.5H   |                  |       |       |       |       |                |       |       |       | -1.\$/-1.\$ |
| S=2.0H   |                  |       |       |       |       |                |       |       |       | -1.\$/-1.\$ |

Calculate in accordance with CIE Pub.117. The table is revised with  $530lm$  ( $8\log(F/F_0) = -2.2$ ).

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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

**FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM**

|  | ZONE           | LUMENS | % LAMP LUMENS |
|--|----------------|--------|---------------|
|  | FORWARD LIGHT  | 268    | 50.6          |
|  | FL ( 0°-30°)   | 194    | 36.6          |
|  | FM (30°-60°)   | 59     | 11.0          |
|  | FH (60°-80°)   | 14     | 2.7           |
|  | FVH (80°-90°)  | 1      | 0.3           |
|  | BACK LIGHT     | 262    | 49.4          |
|  | BL ( 0°-30°)   | 189    | 35.7          |
|  | BM (30°-60°)   | 56     | 10.6          |
|  | BH (60°-80°)   | 14     | 2.7           |
|  | BVH (80°-90°)  | 1      | 0.3           |
|  | UP LIGHT       | 0      | 0.0           |
|  | UL (90°-100°)  | 0      | 0.0           |
|  | UH (100°-180°) | 0      | 0.0           |
|  | TRAPPED LIGHT  | NA     | NA            |

| BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07             |          |
|--|----------|
| Asymmetrical Luminaire Types<br>(Type I,II,III,IV)               | B1 U0 G0 |
| Quadrilateral Symmetrical Luminaire Types<br>(Type V,Area Light) | B1 U0 G0 |

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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:



## Utilisation Factor Table(Floor cavity)

| Utilisation Factors UF(F)   |      |       | SHR NOM = 0.75 |      |      |      |      |      |      |      |      |  |
|---|------|-------|----------------|------|------|------|------|------|------|------|------|--|
| 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  | 0.83           | 0.89 | 0.94 | 0.97 | 1.01 | 1.04 | 1.06 | 1.09 | 1.10 |  |
|   | 0.30 |       | 0.78           | 0.85 | 0.89 | 0.93 | 0.97 | 1.01 | 1.03 | 1.06 | 1.08 |  |
|   | 0.20 |       | 0.75           | 0.81 | 0.86 | 0.89 | 0.94 | 0.98 | 1.00 | 1.04 | 1.06 |  |
| 0.50  | 0.50 | 0.20  | 0.82           | 0.88 | 0.92 | 0.94 | 0.98 | 1.01 | 1.03 | 1.05 | 1.06 |  |
|   | 0.30 |       | 0.78           | 0.84 | 0.88 | 0.91 | 0.95 | 0.98 | 1.00 | 1.03 | 1.04 |  |
|   | 0.20 |       | 0.74           | 0.80 | 0.85 | 0.88 | 0.93 | 0.96 | 0.98 | 1.01 | 1.03 |  |
| 0.30  | 0.50 | 0.20  | 0.81           | 0.86 | 0.90 | 0.92 | 0.96 | 0.98 | 0.99 | 1.01 | 1.03 |  |
|   | 0.30 |       | 0.77           | 0.82 | 0.86 | 0.89 | 0.93 | 0.96 | 0.97 | 1.00 | 1.01 |  |
|   | 0.20 |       | 0.74           | 0.80 | 0.84 | 0.87 | 0.91 | 0.94 | 0.96 | 0.98 | 1.00 |  |
| 0.00  | 0.00 | 0.00  | 0.72           | 0.78 | 0.81 | 0.84 | 0.88 | 0.90 | 0.92 | 0.94 | 0.95 |  |
| <p>Rating:7W Photometrically tested without ceiling board.<br/>           Multiply UF values by service correction factors<br/>           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:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:



## Utilisation Factor Table(Wall)

| Utilisation Factors UF(W)   |      |       | SHR NOM = 0.75 |      |      |      |      |      |      |      |      |  |
|---|------|-------|----------------|------|------|------|------|------|------|------|------|--|
| 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  | 0.62           | 0.51 | 0.43 | 0.37 | 0.30 | 0.25 | 0.21 | 0.16 | 0.13 |  |
|   | 0.30 |       | 0.51           | 0.43 | 0.37 | 0.33 | 0.27 | 0.23 | 0.19 | 0.15 | 0.13 |  |
|   | 0.20 |       | 0.44           | 0.38 | 0.33 | 0.30 | 0.24 | 0.21 | 0.18 | 0.14 | 0.12 |  |
| 0.50  | 0.50 | 0.20  | 0.59           | 0.48 | 0.40 | 0.35 | 0.28 | 0.27 | 0.19 | 0.15 | 0.12 |  |
|   | 0.30 |       | 0.50           | 0.42 | 0.36 | 0.31 | 0.25 | 0.21 | 0.18 | 0.14 | 0.12 |  |
|   | 0.20 |       | 0.43           | 0.37 | 0.32 | 0.28 | 0.23 | 0.20 | 0.17 | 0.14 | 0.11 |  |
| 0.30  | 0.50 | 0.20  | 0.56           | 0.45 | 0.38 | 0.33 | 0.26 | 0.21 | 0.18 | 0.14 | 0.11 |  |
|   | 0.30 |       | 0.48           | 0.40 | 0.34 | 0.30 | 0.24 | 0.20 | 0.17 | 0.13 | 0.11 |  |
|   | 0.20 |       | 0.42           | 0.36 | 0.31 | 0.27 | 0.22 | 0.19 | 0.16 | 0.13 | 0.11 |  |
| 0.00  | 0.00 | 0.00  | 0.29           | 0.24 | 0.20 | 0.17 | 0.14 | 0.11 | 0.10 | 0.07 | 0.06 |  |
| <p>Rating:7W Photometrically tested without ceiling board.<br/>           Multiply UF values by service correction factors<br/>           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:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

## Utilisation Factor Table(Ceiling cavity)

| Utilisation Factors UF(C)   |      |       | SHR NOM = 0.75 |      |      |      |      |      |      |      |      |
|---|------|-------|----------------|------|------|------|------|------|------|------|------|
| 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  | 0.13           | 0.15 | 0.16 | 0.17 | 0.18 | 0.19 | 0.20 | 0.21 | 0.21 |
|   | 0.30 |       | 0.09           | 0.11 | 0.12 | 0.13 | 0.15 | 0.17 | 0.17 | 0.19 | 0.20 |
|   | 0.20 |       | 0.06           | 0.08 | 0.09 | 0.11 | 0.13 | 0.14 | 0.15 | 0.17 | 0.18 |
| 0.50  | 0.50 | 0.20  | 0.13           | 0.14 | 0.15 | 0.16 | 0.18 | 0.18 | 0.19 | 0.20 | 0.20 |
|   | 0.30 |       | 0.09           | 0.11 | 0.12 | 0.13 | 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 | 0.17 | 0.17 |
| 0.30  | 0.50 | 0.20  | 0.12           | 0.14 | 0.15 | 0.16 | 0.17 | 0.18 | 0.18 | 0.19 | 0.19 |
|   | 0.30 |       | 0.09           | 0.10 | 0.12 | 0.13 | 0.14 | 0.16 | 0.16 | 0.17 | 0.18 |
|   | 0.20 |       | 0.06           | 0.08 | 0.09 | 0.10 | 0.12 | 0.14 | 0.15 | 0.16 | 0.17 |
| 0.00  | 0.00 | 0.00  | NA             | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   |
| <p>Rating:7W Photometrically tested without ceiling board.<br/>           Multiply UF values by service correction factors<br/>           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:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

## Zonal Lumen

| Gamma<br>[°] | I <sub>mean</sub><br>[cd] | Zonal Flux<br>[lm] | Sum Zonal Flux<br>[lm] | Rel Zonal Flux<br>[%] | Sum Rel Zonal Flux<br>[%] |
|--------------|---------------------------|--------------------|------------------------|-----------------------|---------------------------|
| 0.0-1.0      | 1017.6                    | 1.0                | 1.0                    | 0.18                  | 0.18                      |
| 1.0-2.0      | 1015.1                    | 2.9                | 3.9                    | 0.55                  | 0.73                      |
| 2.0-3.0      | 1009.4                    | 4.8                | 8.7                    | 0.91                  | 1.64                      |
| 3.0-4.0      | 999.7                     | 6.7                | 15.4                   | 1.26                  | 2.91                      |
| 4.0-5.0      | 986.6                     | 8.5                | 23.9                   | 1.60                  | 4.51                      |
| 5.0-6.0      | 968.7                     | 10.2               | 34.1                   | 1.92                  | 6.43                      |
| 6.0-7.0      | 946.7                     | 11.8               | 45.8                   | 2.22                  | 8.65                      |
| 7.0-8.0      | 922.1                     | 13.2               | 59.0                   | 2.49                  | 11.14                     |
| 8.0-9.0      | 894.1                     | 14.5               | 73.5                   | 2.74                  | 13.88                     |
| 9.0-10.0     | 863.6                     | 15.6               | 89.2                   | 2.95                  | 16.83                     |
| 10.0-11.0    | 829.2                     | 16.6               | 105.7                  | 3.13                  | 19.95                     |
| 11.0-12.0    | 791.0                     | 17.3               | 123.0                  | 3.26                  | 23.22                     |
| 12.0-13.0    | 751.6                     | 17.8               | 140.9                  | 3.37                  | 26.58                     |
| 13.0-14.0    | 709.0                     | 18.2               | 159.0                  | 3.43                  | 30.01                     |
| 14.0-15.0    | 666.1                     | 18.3               | 177.3                  | 3.45                  | 33.46                     |
| 15.0-16.0    | 624.2                     | 18.3               | 195.6                  | 3.45                  | 36.91                     |
| 16.0-17.0    | 581.3                     | 18.1               | 213.7                  | 3.42                  | 40.33                     |
| 17.0-18.0    | 539.3                     | 17.8               | 231.5                  | 3.36                  | 43.69                     |
| 18.0-19.0    | 496.3                     | 17.3               | 248.7                  | 3.26                  | 46.94                     |
| 19.0-20.0    | 454.0                     | 16.6               | 265.4                  | 3.14                  | 50.08                     |
| 20.0-21.0    | 414.5                     | 15.9               | 281.3                  | 3.00                  | 53.08                     |
| 21.0-22.0    | 374.3                     | 15.0               | 296.3                  | 2.84                  | 55.92                     |
| 22.0-23.0    | 336.0                     | 14.1               | 310.4                  | 2.66                  | 58.58                     |
| 23.0-24.0    | 300.5                     | 13.1               | 323.6                  | 2.48                  | 61.06                     |
| 24.0-25.0    | 267.7                     | 12.2               | 335.7                  | 2.30                  | 63.36                     |
| 25.0-26.0    | 239.0                     | 11.3               | 347.0                  | 2.13                  | 65.49                     |
| 26.0-27.0    | 211.6                     | 10.4               | 357.4                  | 1.95                  | 67.45                     |
| 27.0-28.0    | 186.4                     | 9.4                | 366.8                  | 1.78                  | 69.23                     |
| 28.0-29.0    | 164.7                     | 8.6                | 375.4                  | 1.63                  | 70.85                     |
| 29.0-30.0    | 145.5                     | 7.9                | 383.3                  | 1.48                  | 72.34                     |
| 30.0-31.0    | 129.6                     | 7.2                | 390.5                  | 1.36                  | 73.70                     |
| 31.0-32.0    | 115.9                     | 6.6                | 397.1                  | 1.25                  | 74.95                     |
| 32.0-33.0    | 104.1                     | 6.1                | 403.3                  | 1.16                  | 76.11                     |
| 33.0-34.0    | 94.5                      | 5.7                | 409.0                  | 1.08                  | 77.19                     |
| 34.0-35.0    | 86.0                      | 5.3                | 414.3                  | 1.01                  | 78.20                     |
| 35.0-36.0    | 78.7                      | 5.0                | 419.4                  | 0.95                  | 79.14                     |

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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

### Zonal Lumen (Continue 1)

| Gamma<br>[°] | I <sub>mean</sub><br>[cd] | Zonal Flux<br>[lm] | Sum Zonal Flux<br>[lm] | Rel Zonal Flux<br>[%] | Sum Rel Zonal Flux<br>[%] |
|--------------|---------------------------|--------------------|------------------------|-----------------------|---------------------------|
| 36.0-37.0    | 72.5                      | 4.7                | 424.1                  | 0.89                  | 80.03                     |
| 37.0-38.0    | 67.0                      | 4.5                | 428.6                  | 0.84                  | 80.88                     |
| 38.0-39.0    | 62.5                      | 4.3                | 432.8                  | 0.80                  | 81.68                     |
| 39.0-40.0    | 58.4                      | 4.1                | 436.9                  | 0.77                  | 82.45                     |
| 40.0-41.0    | 54.9                      | 3.9                | 440.8                  | 0.74                  | 83.19                     |
| 41.0-42.0    | 51.9                      | 3.8                | 444.6                  | 0.71                  | 83.90                     |
| 42.0-43.0    | 49.1                      | 3.6                | 448.2                  | 0.69                  | 84.59                     |
| 43.0-44.0    | 46.6                      | 3.5                | 451.7                  | 0.66                  | 85.25                     |
| 44.0-45.0    | 44.5                      | 3.4                | 455.1                  | 0.65                  | 85.90                     |
| 45.0-46.0    | 42.5                      | 3.3                | 458.5                  | 0.63                  | 86.53                     |
| 46.0-47.0    | 40.7                      | 3.2                | 461.7                  | 0.61                  | 87.14                     |
| 47.0-48.0    | 39.1                      | 3.2                | 464.9                  | 0.60                  | 87.73                     |
| 48.0-49.0    | 37.7                      | 3.1                | 468.0                  | 0.58                  | 88.32                     |
| 49.0-50.0    | 36.4                      | 3.0                | 471.0                  | 0.57                  | 88.89                     |
| 50.0-51.0    | 35.2                      | 3.0                | 474.0                  | 0.56                  | 89.45                     |
| 51.0-52.0    | 34.0                      | 2.9                | 476.9                  | 0.55                  | 90.00                     |
| 52.0-53.0    | 33.0                      | 2.9                | 479.8                  | 0.54                  | 90.54                     |
| 53.0-54.0    | 31.9                      | 2.8                | 482.6                  | 0.53                  | 91.07                     |
| 54.0-55.0    | 30.8                      | 2.8                | 485.3                  | 0.52                  | 91.59                     |
| 55.0-56.0    | 29.8                      | 2.7                | 488.0                  | 0.51                  | 92.10                     |
| 56.0-57.0    | 28.8                      | 2.6                | 490.7                  | 0.50                  | 92.60                     |
| 57.0-58.0    | 27.8                      | 2.6                | 493.2                  | 0.49                  | 93.09                     |
| 58.0-59.0    | 26.8                      | 2.5                | 495.7                  | 0.47                  | 93.56                     |
| 59.0-60.0    | 25.8                      | 2.4                | 498.2                  | 0.46                  | 94.02                     |
| 60.0-61.0    | 24.8                      | 2.4                | 500.6                  | 0.45                  | 94.47                     |
| 61.0-62.0    | 23.8                      | 2.3                | 502.8                  | 0.43                  | 94.90                     |
| 62.0-63.0    | 22.8                      | 2.2                | 505.1                  | 0.42                  | 95.32                     |
| 63.0-64.0    | 21.7                      | 2.1                | 507.2                  | 0.40                  | 95.72                     |
| 64.0-65.0    | 20.6                      | 2.0                | 509.2                  | 0.38                  | 96.10                     |
| 65.0-66.0    | 19.5                      | 1.9                | 511.2                  | 0.37                  | 96.47                     |
| 66.0-67.0    | 18.4                      | 1.8                | 513.0                  | 0.35                  | 96.82                     |
| 67.0-68.0    | 17.2                      | 1.7                | 514.8                  | 0.33                  | 97.15                     |
| 68.0-69.0    | 16.0                      | 1.6                | 516.4                  | 0.31                  | 97.46                     |
| 69.0-70.0    | 14.7                      | 1.5                | 517.9                  | 0.29                  | 97.74                     |
| 70.0-71.0    | 13.5                      | 1.4                | 519.3                  | 0.26                  | 98.00                     |
| 71.0-72.0    | 12.3                      | 1.3                | 520.6                  | 0.24                  | 98.25                     |

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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:



## Candlepower Table

Unit: cd

| G\C   | C0.0   | C30.0  | C60.0  | C90.0  | C120.0 | C150.0 | C180.0 | C210.0 | C240.0 | C270.0 |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| G0.0  | 1018.3 | 1014.6 | 1018.6 | 1019.3 | 1020.1 | 1019.6 | 1018.3 | 1014.6 | 1018.6 | 1019.3 |
| G1.0  | 1001.5 | 1006.6 | 1015.4 | 1019.2 | 1021.2 | 1021.4 | 1025.3 | 1022.8 | 1021.1 | 1017.5 |
| G2.0  | 981.1  | 991.9  | 1010.6 | 1019.6 | 1022.8 | 1021.6 | 1032.3 | 1026.2 | 1023.1 | 1016.3 |
| G3.0  | 950.4  | 968.5  | 1000.4 | 1018.2 | 1021.7 | 1022.4 | 1035.4 | 1031.4 | 1021.5 | 1007.7 |
| G4.0  | 916.2  | 942.5  | 987.1  | 1010.7 | 1019.7 | 1020.7 | 1036.6 | 1032.5 | 1018.0 | 996.0  |
| G5.0  | 878.8  | 912.0  | 967.6  | 1001.2 | 1014.7 | 1018.0 | 1037.0 | 1033.8 | 1008.8 | 978.2  |
| G6.0  | 838.4  | 875.6  | 940.1  | 984.7  | 1008.2 | 1012.6 | 1034.1 | 1026.8 | 995.3  | 951.0  |
| G7.0  | 796.1  | 838.3  | 909.4  | 965.8  | 994.3  | 1003.4 | 1028.9 | 1019.1 | 976.1  | 923.9  |
| G8.0  | 754.4  | 795.5  | 876.4  | 942.7  | 976.5  | 988.8  | 1022.6 | 1005.7 | 954.7  | 900.1  |
| G9.0  | 705.5  | 753.7  | 839.7  | 918.8  | 954.5  | 969.0  | 1014.2 | 988.3  | 929.1  | 869.6  |
| G10.0 | 658.5  | 712.8  | 803.7  | 893.6  | 931.8  | 947.5  | 998.8  | 965.7  | 900.1  | 835.4  |
| G11.0 | 610.4  | 665.1  | 764.5  | 855.5  | 903.3  | 915.0  | 979.5  | 937.1  | 865.9  | 793.8  |
| G12.0 | 563.4  | 617.3  | 723.6  | 817.9  | 872.3  | 881.8  | 951.0  | 904.0  | 826.8  | 751.2  |
| G13.0 | 518.8  | 571.7  | 682.4  | 776.5  | 836.5  | 846.9  | 920.8  | 867.8  | 789.3  | 709.3  |
| G14.0 | 471.9  | 521.5  | 635.8  | 731.8  | 793.1  | 803.3  | 883.0  | 826.8  | 742.3  | 663.5  |
| G15.0 | 428.3  | 478.5  | 593.1  | 691.3  | 753.6  | 764.8  | 849.3  | 788.4  | 702.4  | 624.7  |
| G16.0 | 384.5  | 432.3  | 549.9  | 648.8  | 712.2  | 721.3  | 808.0  | 746.4  | 656.8  | 585.1  |
| G17.0 | 340.1  | 392.5  | 503.4  | 611.6  | 665.9  | 682.9  | 765.8  | 700.8  | 617.3  | 540.9  |
| G18.0 | 301.2  | 352.5  | 460.0  | 569.2  | 627.9  | 640.7  | 724.1  | 658.0  | 575.9  | 497.6  |
| G19.0 | 263.2  | 311.5  | 415.0  | 519.6  | 582.0  | 591.8  | 678.7  | 610.8  | 531.8  | 451.2  |
| G20.0 | 232.5  | 276.8  | 375.4  | 476.6  | 538.5  | 549.0  | 632.2  | 569.0  | 489.0  | 412.5  |
| G21.0 | 207.3  | 244.9  | 338.6  | 432.0  | 492.4  | 501.5  | 588.7  | 527.8  | 444.8  | 374.8  |
| G22.0 | 182.4  | 215.8  | 297.4  | 390.6  | 442.4  | 449.0  | 539.5  | 476.1  | 396.7  | 338.1  |
| G23.0 | 164.7  | 192.1  | 263.8  | 352.6  | 397.9  | 405.8  | 499.3  | 430.5  | 354.4  | 305.2  |
| G24.0 | 146.5  | 169.1  | 229.4  | 315.1  | 355.6  | 361.2  | 452.0  | 384.3  | 311.0  | 268.9  |
| G25.0 | 132.0  | 152.1  | 202.1  | 281.6  | 318.7  | 327.0  | 407.6  | 343.9  | 276.9  | 238.0  |
| G26.0 | 118.6  | 136.4  | 180.3  | 250.2  | 285.4  | 294.4  | 362.8  | 307.6  | 246.6  | 207.3  |
| G27.0 | 105.2  | 121.6  | 157.6  | 218.1  | 252.9  | 257.6  | 319.0  | 269.5  | 215.3  | 178.7  |
| G28.0 | 95.6   | 109.3  | 140.5  | 190.7  | 223.8  | 225.9  | 281.6  | 238.8  | 188.8  | 157.2  |
| G29.0 | 87.6   | 98.3   | 125.2  | 166.1  | 196.6  | 196.5  | 246.7  | 211.4  | 164.1  | 138.1  |
| G30.0 | 80.3   | 89.8   | 111.7  | 145.9  | 169.7  | 174.5  | 217.6  | 183.6  | 144.5  | 121.8  |
| G31.0 | 74.5   | 82.9   | 101.4  | 130.6  | 149.8  | 155.1  | 192.9  | 163.3  | 128.1  | 108.4  |
| G32.0 | 68.6   | 76.2   | 93.0   | 115.2  | 131.8  | 136.5  | 169.6  | 144.0  | 113.2  | 97.0   |
| G33.0 | 64.1   | 70.9   | 85.3   | 104.6  | 118.0  | 121.5  | 151.3  | 127.6  | 101.6  | 88.8   |
| G34.0 | 60.7   | 66.4   | 78.3   | 94.5   | 106.5  | 109.8  | 134.4  | 114.5  | 92.4   | 81.6   |
| G35.0 | 57.3   | 62.5   | 71.6   | 85.9   | 95.5   | 98.1   | 119.4  | 101.8  | 83.7   | 75.2   |
| G36.0 | 54.6   | 59.0   | 66.8   | 78.5   | 87.2   | 89.1   | 107.8  | 92.4   | 76.7   | 69.5   |

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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 1)

Unit: cd

| G\C   | C0.0 | C30.0 | C60.0 | C90.0 | C120.0 | C150.0 | C180.0 | C210.0 | C240.0 | C270.0 |
|-------|------|-------|-------|-------|--------|--------|--------|--------|--------|--------|
| G37.0 | 52.1 | 55.8  | 62.8  | 71.9  | 79.7   | 80.5   | 96.5   | 83.9   | 70.2   | 64.7   |
| G38.0 | 49.1 | 52.9  | 59.5  | 66.7  | 72.6   | 73.3   | 87.6   | 76.4   | 65.2   | 60.3   |
| G39.0 | 47.0 | 50.4  | 57.0  | 62.6  | 67.0   | 67.5   | 80.5   | 70.4   | 60.7   | 56.6   |
| G40.0 | 43.9 | 47.3  | 54.4  | 59.0  | 62.0   | 62.3   | 73.2   | 64.8   | 57.2   | 54.0   |
| G41.0 | 42.2 | 44.7  | 52.2  | 56.3  | 58.1   | 58.3   | 66.9   | 59.8   | 54.3   | 51.6   |
| G42.0 | 41.0 | 43.0  | 48.8  | 53.9  | 55.1   | 55.1   | 62.1   | 55.9   | 51.7   | 49.2   |
| G43.0 | 39.7 | 41.5  | 46.0  | 50.9  | 52.6   | 51.5   | 57.1   | 52.4   | 48.9   | 46.4   |
| G44.0 | 38.5 | 40.2  | 43.9  | 48.3  | 50.3   | 48.8   | 53.5   | 49.9   | 46.5   | 43.9   |
| G45.0 | 36.8 | 38.9  | 42.7  | 45.4  | 48.0   | 46.1   | 50.2   | 47.3   | 44.0   | 42.0   |
| G46.0 | 35.4 | 37.5  | 41.7  | 43.4  | 44.6   | 43.9   | 47.5   | 45.0   | 41.8   | 40.4   |
| G47.0 | 34.4 | 36.3  | 40.4  | 42.2  | 42.5   | 41.0   | 45.0   | 42.6   | 40.5   | 39.2   |
| G48.0 | 33.2 | 35.2  | 38.4  | 41.1  | 41.0   | 39.3   | 42.7   | 40.3   | 39.0   | 37.8   |
| G49.0 | 32.1 | 33.9  | 37.3  | 40.0  | 40.0   | 38.0   | 40.3   | 38.7   | 38.0   | 36.3   |
| G50.0 | 31.3 | 33.1  | 36.2  | 38.5  | 38.9   | 37.0   | 38.2   | 37.3   | 36.5   | 35.0   |
| G51.0 | 30.1 | 32.1  | 35.2  | 36.9  | 37.4   | 35.9   | 36.8   | 36.3   | 35.3   | 33.7   |
| G52.0 | 29.2 | 31.2  | 34.1  | 36.0  | 36.0   | 34.6   | 35.8   | 35.2   | 34.3   | 32.5   |
| G53.0 | 28.1 | 30.1  | 33.2  | 34.9  | 35.1   | 33.5   | 34.8   | 34.1   | 33.1   | 31.4   |
| G54.0 | 27.0 | 29.0  | 32.0  | 33.8  | 33.9   | 32.8   | 33.5   | 33.1   | 32.0   | 30.2   |
| G55.0 | 26.0 | 28.0  | 31.1  | 32.7  | 33.2   | 31.8   | 32.5   | 32.2   | 31.1   | 29.1   |
| G56.0 | 24.8 | 26.9  | 30.0  | 31.5  | 32.0   | 30.9   | 31.5   | 31.4   | 30.1   | 28.1   |
| G57.0 | 23.9 | 25.8  | 28.9  | 30.5  | 30.9   | 30.1   | 30.9   | 30.5   | 29.2   | 27.0   |
| G58.0 | 22.8 | 24.7  | 27.8  | 29.4  | 30.0   | 29.3   | 30.0   | 29.5   | 28.3   | 26.2   |
| G59.0 | 21.7 | 23.6  | 26.7  | 28.3  | 28.8   | 28.4   | 29.2   | 28.6   | 27.2   | 25.0   |
| G60.0 | 20.7 | 22.7  | 25.6  | 27.2  | 27.8   | 27.6   | 28.3   | 27.8   | 26.2   | 24.2   |
| G61.0 | 19.6 | 21.3  | 24.5  | 26.0  | 26.7   | 26.6   | 27.5   | 27.0   | 25.1   | 23.1   |
| G62.0 | 18.5 | 20.3  | 23.2  | 24.9  | 25.6   | 25.6   | 26.7   | 25.9   | 24.2   | 22.2   |
| G63.0 | 17.5 | 19.2  | 22.1  | 23.8  | 24.5   | 24.7   | 25.9   | 24.9   | 23.2   | 21.3   |
| G64.0 | 16.3 | 18.0  | 20.8  | 22.5  | 23.3   | 23.5   | 24.8   | 23.9   | 22.1   | 20.2   |
| G65.0 | 15.1 | 16.7  | 19.6  | 21.4  | 22.4   | 22.5   | 24.0   | 23.0   | 21.1   | 19.2   |
| G66.0 | 13.7 | 15.4  | 18.3  | 20.3  | 21.1   | 21.5   | 23.0   | 22.0   | 20.2   | 18.2   |
| G67.0 | 12.3 | 14.1  | 16.9  | 18.9  | 20.0   | 20.3   | 21.9   | 20.9   | 19.1   | 17.2   |
| G68.0 | 11.0 | 12.7  | 15.5  | 17.5  | 18.8   | 19.3   | 21.0   | 19.9   | 18.1   | 16.2   |
| G69.0 | 9.7  | 11.2  | 14.0  | 15.9  | 17.5   | 18.2   | 19.9   | 18.9   | 17.1   | 15.2   |
| G70.0 | 8.4  | 9.9   | 12.6  | 14.4  | 15.9   | 17.1   | 18.9   | 17.9   | 16.1   | 14.1   |
| G71.0 | 7.3  | 8.7   | 11.2  | 12.9  | 14.5   | 15.8   | 17.9   | 17.0   | 15.0   | 12.9   |
| G72.0 | 6.3  | 7.4   | 9.7   | 11.4  | 12.8   | 14.2   | 16.8   | 15.9   | 13.9   | 11.6   |
| G73.0 | 5.7  | 6.5   | 8.5   | 10.0  | 11.3   | 12.7   | 15.8   | 14.8   | 12.5   | 10.4   |

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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:





### Candlepower Table (Continue 3)

Unit: cd

| G\C   | C300.0 | C330.0 | C360.0 |  |  |  |  |  |  |
|-------|--------|--------|--------|--|--|--|--|--|--|
| G0.0  | 1020.1 | 1019.6 | 1018.3 |  |  |  |  |  |  |
| G1.0  | 1015.7 | 1013.2 | 1001.5 |  |  |  |  |  |  |
| G2.0  | 1010.2 | 1005.4 | 981.1  |  |  |  |  |  |  |
| G3.0  | 998.3  | 988.8  | 950.4  |  |  |  |  |  |  |
| G4.0  | 980.2  | 967.5  | 916.2  |  |  |  |  |  |  |
| G5.0  | 958.1  | 942.0  | 878.8  |  |  |  |  |  |  |
| G6.0  | 927.0  | 905.9  | 838.4  |  |  |  |  |  |  |
| G7.0  | 896.2  | 870.8  | 796.1  |  |  |  |  |  |  |
| G8.0  | 860.5  | 829.5  | 754.4  |  |  |  |  |  |  |
| G9.0  | 826.5  | 782.9  | 705.5  |  |  |  |  |  |  |
| G10.0 | 786.7  | 740.5  | 658.5  |  |  |  |  |  |  |
| G11.0 | 741.8  | 694.9  | 610.4  |  |  |  |  |  |  |
| G12.0 | 699.2  | 649.6  | 563.4  |  |  |  |  |  |  |
| G13.0 | 654.8  | 604.6  | 518.8  |  |  |  |  |  |  |
| G14.0 | 607.5  | 556.5  | 471.9  |  |  |  |  |  |  |
| G15.0 | 563.6  | 511.0  | 428.3  |  |  |  |  |  |  |
| G16.0 | 518.5  | 468.0  | 384.5  |  |  |  |  |  |  |
| G17.0 | 477.4  | 420.7  | 340.1  |  |  |  |  |  |  |
| G18.0 | 433.8  | 382.2  | 301.2  |  |  |  |  |  |  |
| G19.0 | 390.0  | 341.6  | 263.2  |  |  |  |  |  |  |
| G20.0 | 349.4  | 307.4  | 232.5  |  |  |  |  |  |  |
| G21.0 | 312.9  | 274.3  | 207.3  |  |  |  |  |  |  |
| G22.0 | 275.9  | 238.7  | 182.4  |  |  |  |  |  |  |
| G23.0 | 243.5  | 211.4  | 164.7  |  |  |  |  |  |  |
| G24.0 | 212.4  | 185.7  | 146.5  |  |  |  |  |  |  |
| G25.0 | 187.8  | 165.4  | 132.0  |  |  |  |  |  |  |
| G26.0 | 165.9  | 148.4  | 118.6  |  |  |  |  |  |  |
| G27.0 | 146.5  | 131.4  | 105.2  |  |  |  |  |  |  |
| G28.0 | 130.4  | 118.4  | 95.6   |  |  |  |  |  |  |
| G29.0 | 115.8  | 106.3  | 87.6   |  |  |  |  |  |  |
| G30.0 | 104.6  | 95.9   | 80.3   |  |  |  |  |  |  |
| G31.0 | 94.8   | 88.2   | 74.5   |  |  |  |  |  |  |
| G32.0 | 86.4   | 80.1   | 68.6   |  |  |  |  |  |  |
| G33.0 | 79.5   | 74.3   | 64.1   |  |  |  |  |  |  |
| G34.0 | 73.0   | 68.7   | 60.7   |  |  |  |  |  |  |
| G35.0 | 67.5   | 64.0   | 57.3   |  |  |  |  |  |  |
| G36.0 | 63.2   | 60.4   | 54.6   |  |  |  |  |  |  |

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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

## Candlepower Table (Continue 4)

Unit: cd

| G\C   | C300.0 | C330.0 | C360.0 |  |  |  |  |  |  |
|-------|--------|--------|--------|--|--|--|--|--|--|
| G37.0 | 59.0   | 57.4   | 52.1   |  |  |  |  |  |  |
| G38.0 | 56.3   | 54.6   | 49.1   |  |  |  |  |  |  |
| G39.0 | 53.2   | 51.9   | 47.0   |  |  |  |  |  |  |
| G40.0 | 50.3   | 49.2   | 43.9   |  |  |  |  |  |  |
| G41.0 | 47.8   | 46.7   | 42.2   |  |  |  |  |  |  |
| G42.0 | 45.6   | 44.2   | 41.0   |  |  |  |  |  |  |
| G43.0 | 43.0   | 42.4   | 39.7   |  |  |  |  |  |  |
| G44.0 | 41.5   | 41.1   | 38.5   |  |  |  |  |  |  |
| G45.0 | 40.1   | 39.8   | 36.8   |  |  |  |  |  |  |
| G46.0 | 39.1   | 38.5   | 35.4   |  |  |  |  |  |  |
| G47.0 | 37.7   | 37.1   | 34.4   |  |  |  |  |  |  |
| G48.0 | 36.2   | 35.6   | 33.2   |  |  |  |  |  |  |
| G49.0 | 35.0   | 34.5   | 32.1   |  |  |  |  |  |  |
| G50.0 | 34.0   | 33.5   | 31.3   |  |  |  |  |  |  |
| G51.0 | 32.8   | 32.3   | 30.1   |  |  |  |  |  |  |
| G52.0 | 31.7   | 31.4   | 29.2   |  |  |  |  |  |  |
| G53.0 | 30.7   | 30.1   | 28.1   |  |  |  |  |  |  |
| G54.0 | 29.6   | 29.0   | 27.0   |  |  |  |  |  |  |
| G55.0 | 28.5   | 28.0   | 26.0   |  |  |  |  |  |  |
| G56.0 | 27.4   | 26.9   | 24.8   |  |  |  |  |  |  |
| G57.0 | 26.3   | 26.0   | 23.9   |  |  |  |  |  |  |
| G58.0 | 25.3   | 25.0   | 22.8   |  |  |  |  |  |  |
| G59.0 | 24.3   | 23.9   | 21.7   |  |  |  |  |  |  |
| G60.0 | 23.2   | 22.8   | 20.7   |  |  |  |  |  |  |
| G61.0 | 22.2   | 21.8   | 19.6   |  |  |  |  |  |  |
| G62.0 | 21.3   | 20.8   | 18.5   |  |  |  |  |  |  |
| G63.0 | 20.3   | 19.6   | 17.5   |  |  |  |  |  |  |
| G64.0 | 19.2   | 18.5   | 16.3   |  |  |  |  |  |  |
| G65.0 | 18.3   | 17.5   | 15.1   |  |  |  |  |  |  |
| G66.0 | 17.3   | 16.4   | 13.7   |  |  |  |  |  |  |
| G67.0 | 16.2   | 15.3   | 12.3   |  |  |  |  |  |  |
| G68.0 | 15.2   | 14.0   | 11.0   |  |  |  |  |  |  |
| G69.0 | 14.0   | 12.7   | 9.7    |  |  |  |  |  |  |
| G70.0 | 12.8   | 11.5   | 8.4    |  |  |  |  |  |  |
| G71.0 | 11.5   | 10.3   | 7.3    |  |  |  |  |  |  |
| G72.0 | 10.2   | 9.1    | 6.3    |  |  |  |  |  |  |
| G73.0 | 9.0    | 7.9    | 5.7    |  |  |  |  |  |  |

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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1600L  
 Distance: 6.935 m  
 Humidity:  
 Inspector:

