

Report No.:

Test Time: 2021-04-13 17:14

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category: A17016-4000K

Lamp Description: 2835

Current: 0.210 A

Power Factor: 0.937

Lamp Catalog: LED

Voltage: 120.0 V

Power: 23.59 W

## Photometric Results

CIE Class: Direct

Measurement Flux: 2040.9 lm

Downward Ratio: 96%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 163.8, 164.0, 163.9, 163.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.1, 113.5, 113.3, 113.3

Luminaire Efficacy Rating (LER): 86.57

Max. Intensity: 672.42 cd

S/MH(C0/C180): 1.26

Total Rated Lamp Lumens: 2040.9 lm

Efficiency: 100%

Upward Ratio: 4%

Central Intensity: 672.37 cd

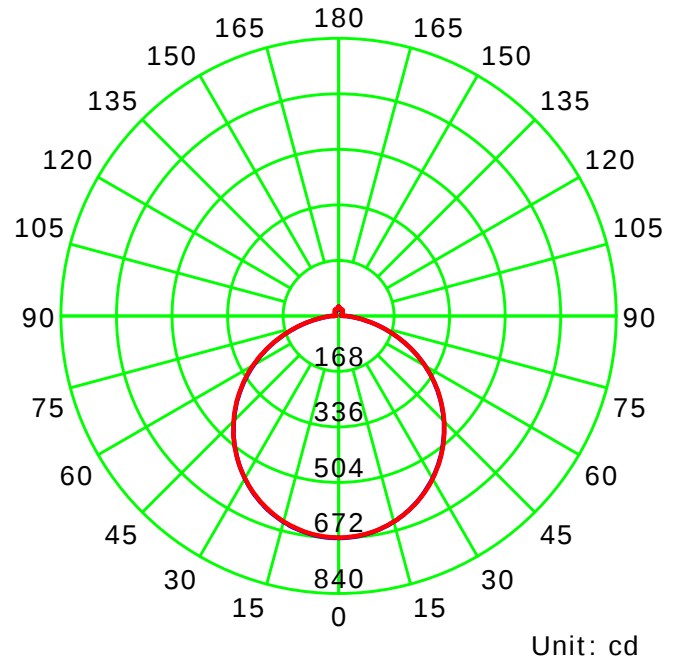
Pos of Max. Intensity: H180 V1

S/MH(C90/C270): 1.26

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator: SUSHUNHUA

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 7.344 m

Humidity:

Inspector:

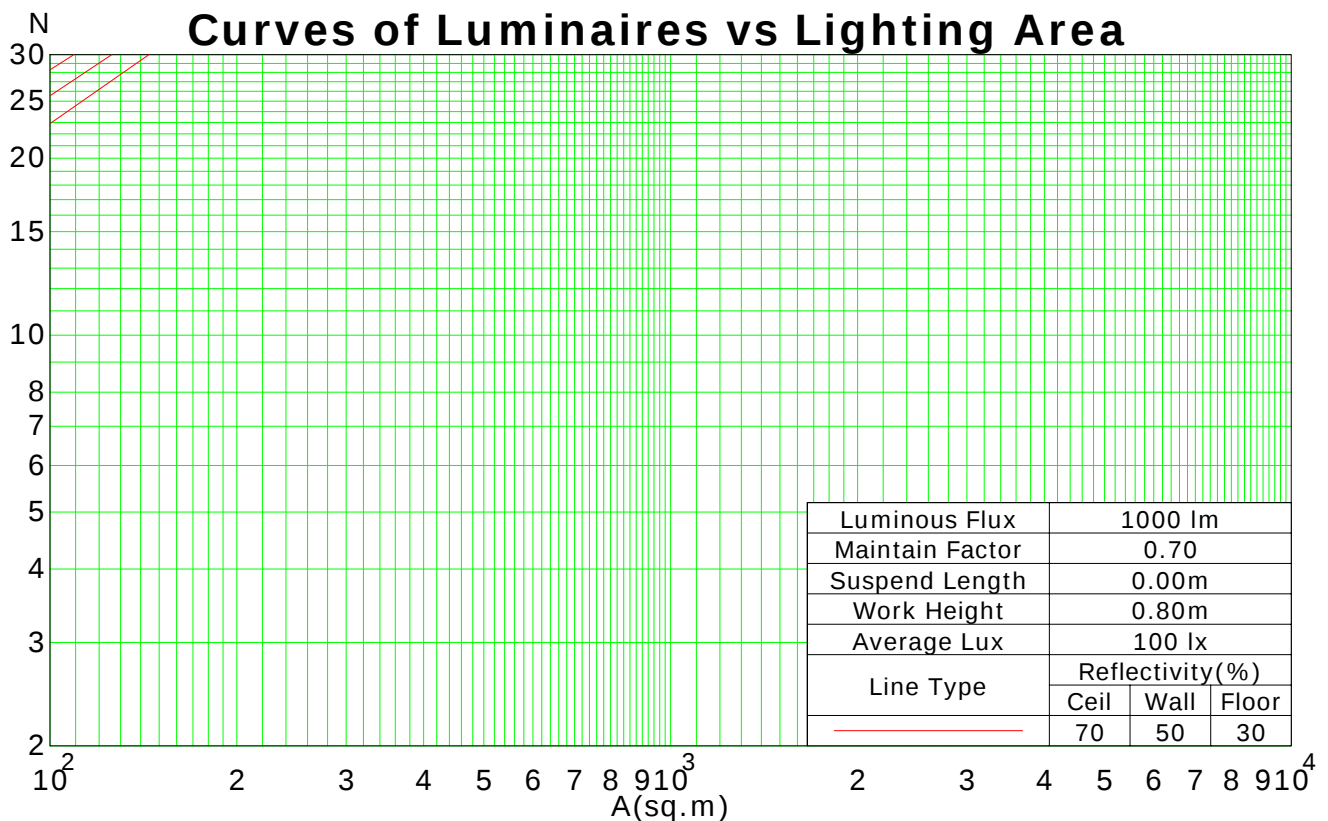
## Coefficients Of Utilization - Zonal Cavity Method

|     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 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   | 118      | 118 | 118 | 118 | 115 | 115 | 115 | 115 | 109 | 109 | 109 | 103 | 103 | 103 | 98  | 98  | 98  | 96 |
| 1   | 107      | 102 | 98  | 94  | 104 | 100 | 96  | 92  | 95  | 91  | 88  | 90  | 87  | 85  | 86  | 84  | 82  | 79 |
| 2   | 97       | 89  | 82  | 76  | 94  | 87  | 80  | 75  | 83  | 77  | 73  | 79  | 74  | 70  | 75  | 71  | 68  | 66 |
| 3   | 89       | 78  | 70  | 63  | 86  | 76  | 69  | 62  | 73  | 66  | 61  | 69  | 64  | 59  | 66  | 62  | 58  | 55 |
| 4   | 81       | 69  | 60  | 53  | 79  | 67  | 59  | 53  | 64  | 57  | 52  | 62  | 55  | 50  | 59  | 54  | 49  | 47 |
| 5   | 75       | 62  | 53  | 46  | 72  | 60  | 52  | 45  | 58  | 50  | 45  | 55  | 49  | 44  | 53  | 47  | 43  | 41 |
| 6   | 69       | 55  | 46  | 40  | 67  | 54  | 46  | 40  | 52  | 45  | 39  | 50  | 43  | 38  | 48  | 42  | 38  | 35 |
| 7   | 64       | 50  | 41  | 35  | 62  | 49  | 41  | 35  | 47  | 40  | 34  | 45  | 39  | 34  | 44  | 38  | 33  | 31 |
| 8   | 59       | 46  | 37  | 31  | 58  | 45  | 37  | 31  | 43  | 36  | 31  | 42  | 35  | 30  | 40  | 34  | 30  | 28 |
| 9   | 55       | 42  | 34  | 28  | 54  | 41  | 33  | 28  | 40  | 33  | 28  | 38  | 32  | 27  | 37  | 31  | 27  | 25 |
| 10  | 52       | 39  | 31  | 25  | 50  | 38  | 30  | 25  | 37  | 30  | 25  | 36  | 29  | 25  | 34  | 29  | 24  | 23 |

Spacing Criteria (0-180): 1.26

Spacing Criteria (90-270): 1.26

Spacing Criteria (Diagonal): 1.38



C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator: SUSHUNHUA

Gamma Plane (°):0.0-180.0:1.0

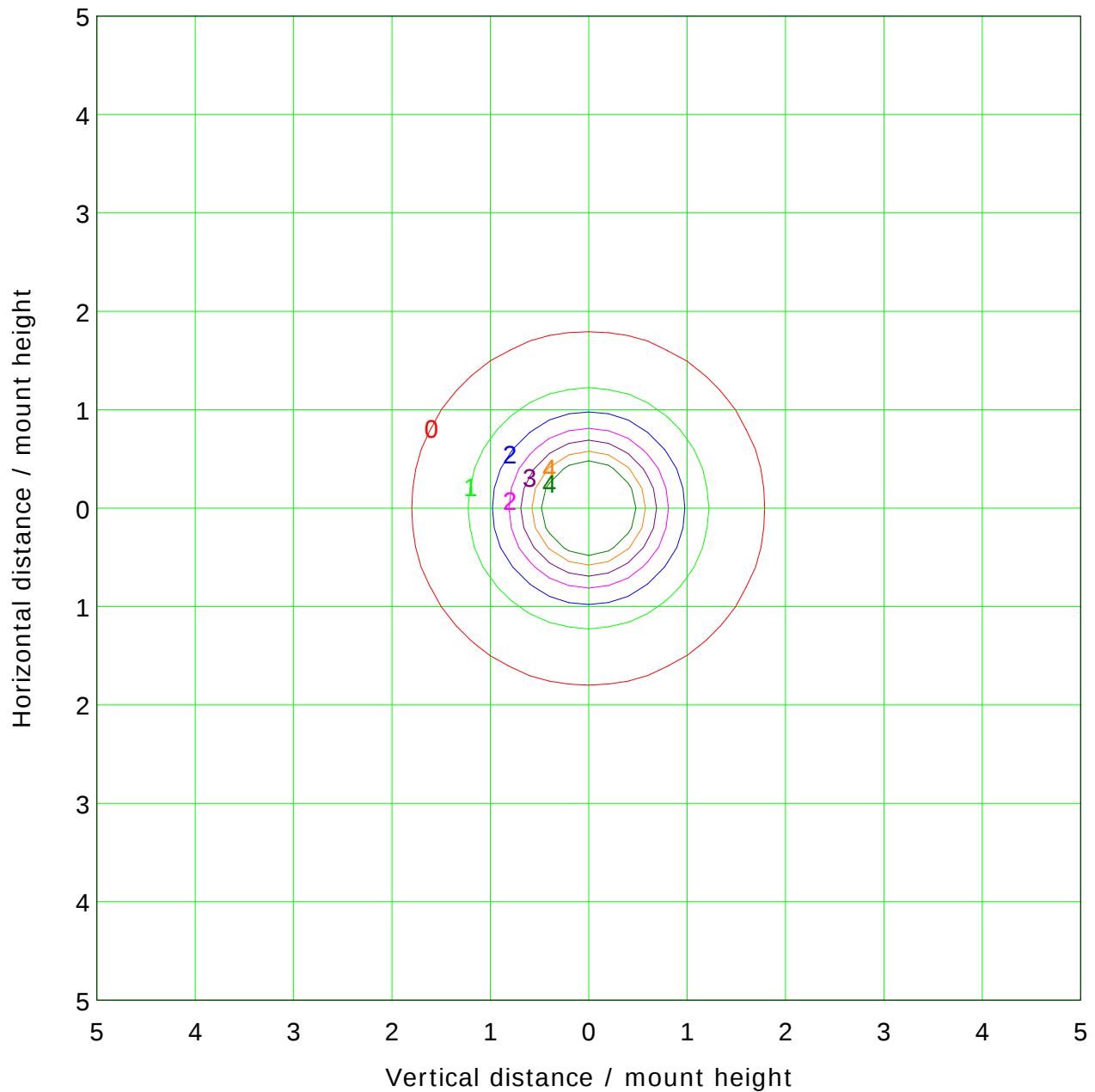
Test Device: GPM-1600L

Distance: 7.344 m

Humidity:

Inspector:

## IsoLux Plot



|                        |        |                       |        |
|------------------------|--------|-----------------------|--------|
| Mounting Height: 10.0m |        | Max Lux(100%): 6.7 lx |        |
| — ( 5%):               | 0.3 lx | — ( 15%):             | 1.0 lx |
| — ( 25%):              | 1.7 lx | — ( 35%):             | 2.4 lx |
| — ( 45%):              | 3.0 lx | — ( 55%):             | 3.7 lx |
| — ( 65%):              | 4.4 lx |                       |        |

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator: SUSHUNHUA

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

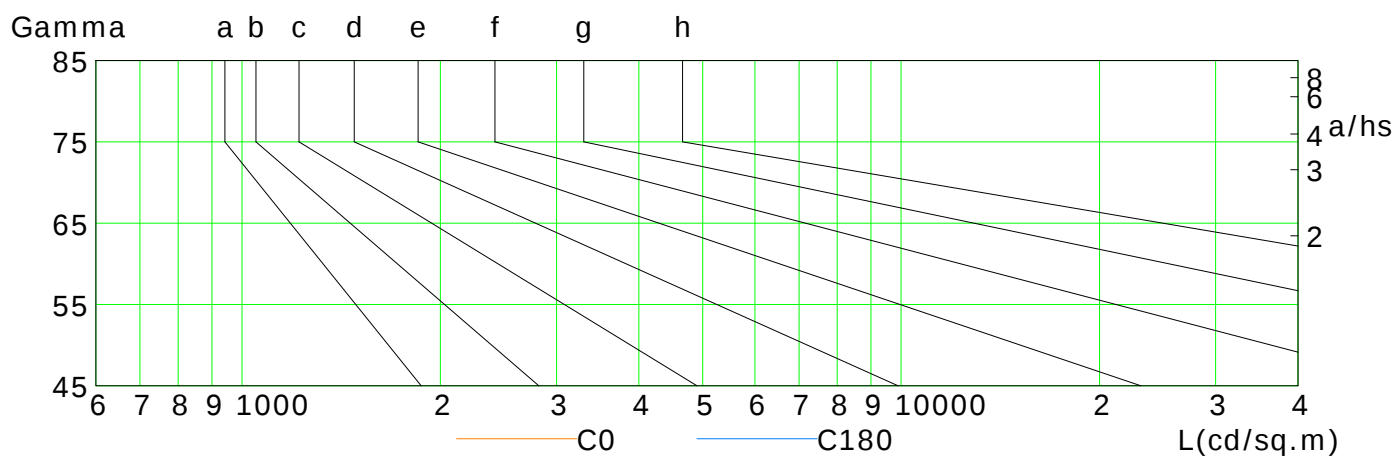
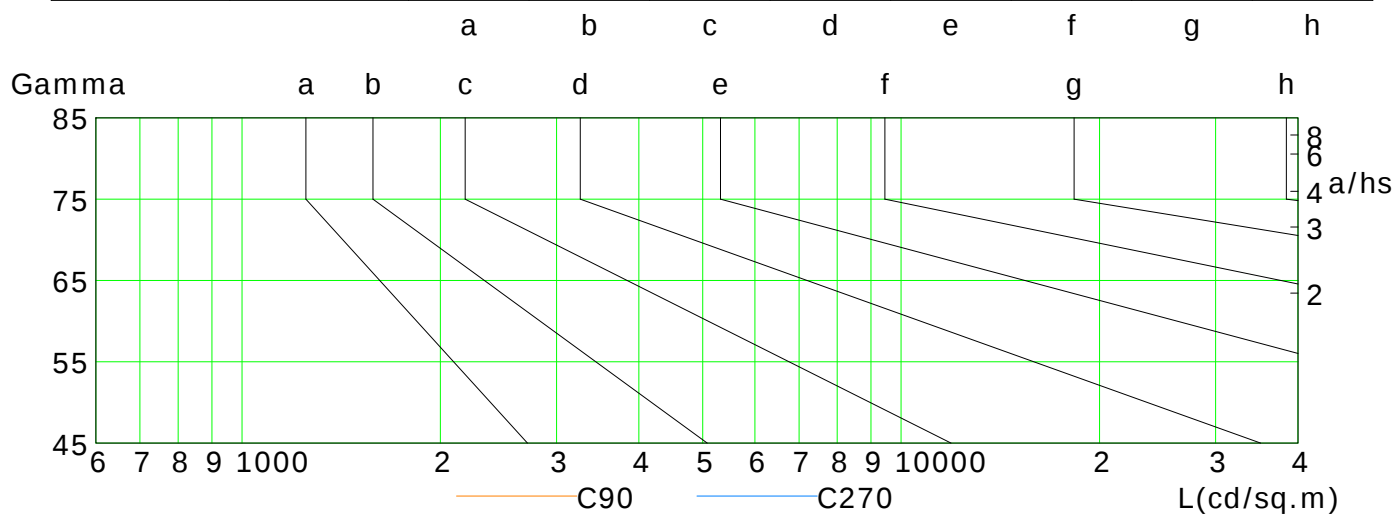
Distance: 7.344 m

Humidity:

Inspector:

## Lum Limit Curve

| Dazzle | Quality | Illuminance (lx) |      |      |       |       |       |       |       |
|--------|---------|------------------|------|------|-------|-------|-------|-------|-------|
| 1.15   | A       | 2000             | 1000 | 500  | <=300 |       |       |       |       |
| 1.50   | B       |                  | 2000 | 1000 | 500   | <=300 |       |       |       |
| 1.85   | C       |                  |      | 2000 | 1000  | 500   | <=300 |       |       |
| 2.20   | D       |                  |      |      | 2000  | 1000  | 500   | <=300 |       |
| 2.55   | E       |                  |      |      |       | 2000  | 1000  | 500   | <=300 |



| L(cd/sq.m) | G45 | G50 | G55 | G60 | G65 | G70 | G75 | G80 | G85 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| C0         | 451 | 404 | 354 | 302 | 248 | 192 | 137 | 87  | 46  |
| C90        | 452 | 405 | 355 | 303 | 248 | 192 | 137 | 87  | 46  |
| C180       | 449 | 402 | 351 | 298 | 242 | 186 | 130 | 81  | 42  |
| C270       | 449 | 403 | 353 | 300 | 244 | 187 | 132 | 82  | 43  |

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator: SUSHUNHUA

Gamma Plane (°):0.0-180.0:1.0

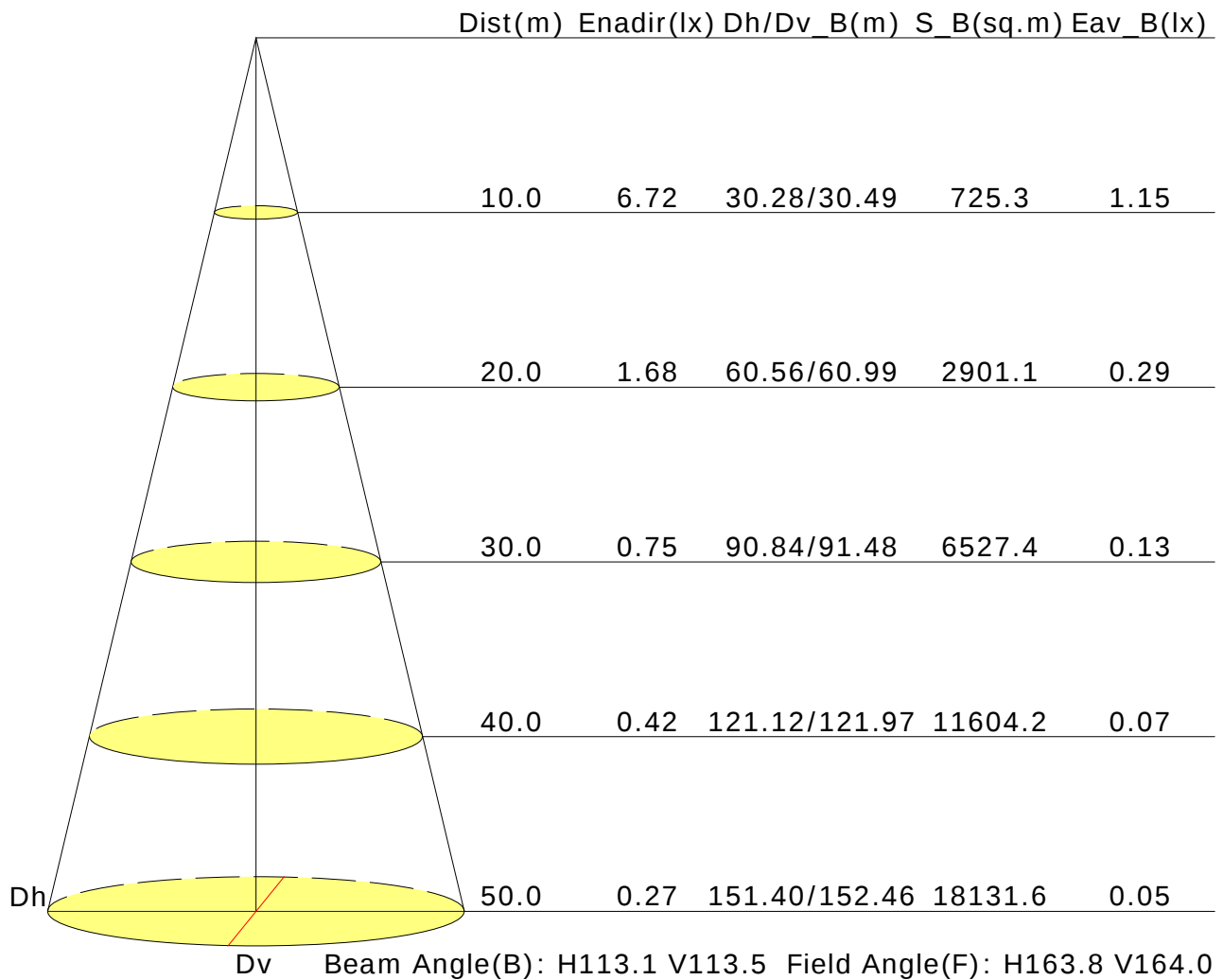
Test Device: GPM-1600L

Distance: 7.344 m

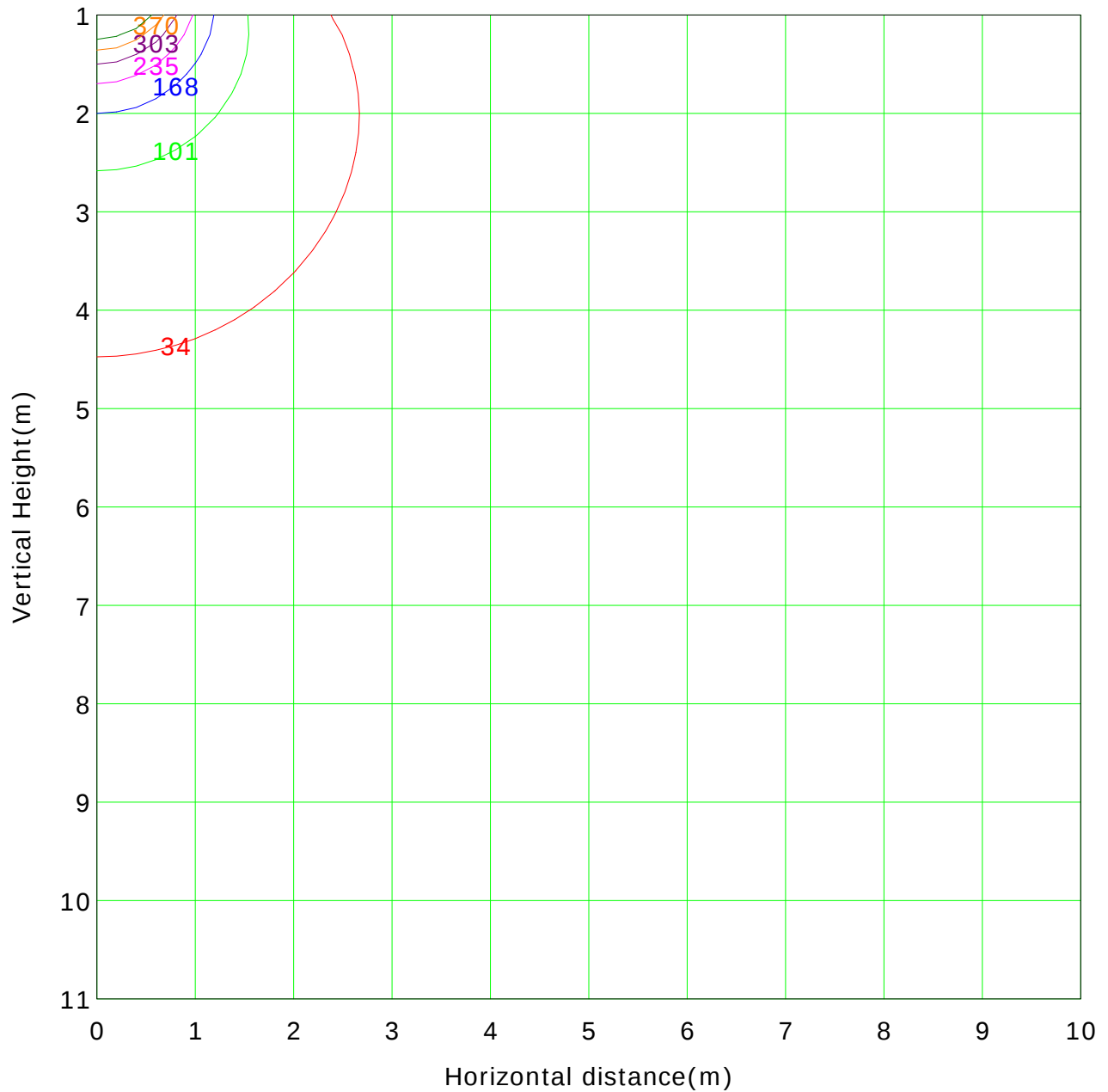
Humidity:

Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot



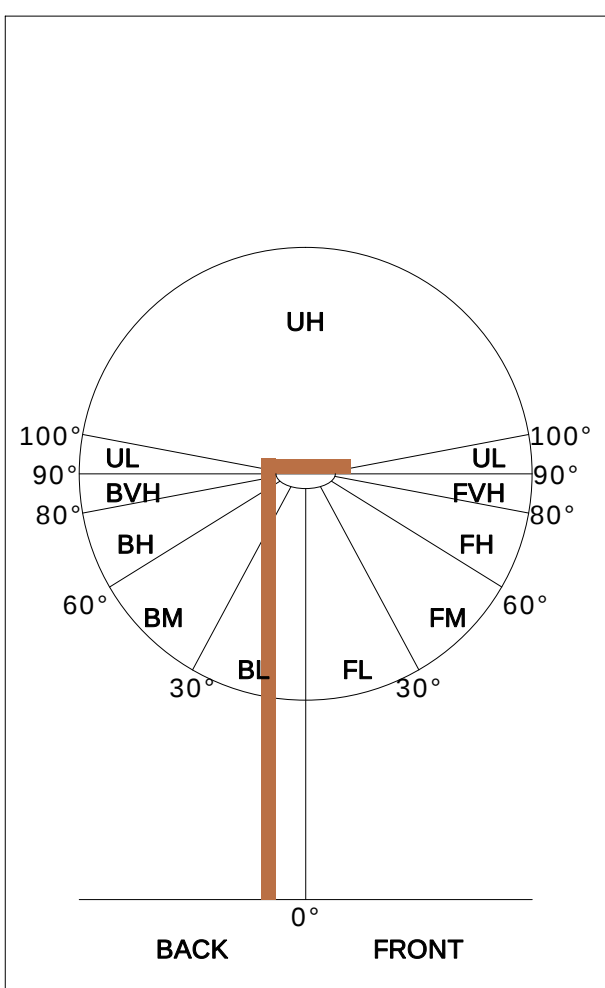
Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 672.4 lx

|                  |                  |
|------------------|------------------|
| ( 5%): 33.6 lx   | ( 15%): 100.9 lx |
| ( 25%): 168.1 lx | ( 35%): 235.3 lx |
| ( 45%): 302.6 lx | ( 55%): 369.8 lx |
| ( 65%): 437.0 lx |                  |

C Plane (°):0.0-360.0: 90.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator: SUSHUNHUA

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1600L  
Distance: 7.344 m  
Humidity:  
Inspector:

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

|                                                                                    | ZONE           | LUMENS | % LAMP LUMENS |
|------------------------------------------------------------------------------------|----------------|--------|---------------|
|  | FORWARD LIGHT  | 980    | 48.0          |
|                                                                                    | FL ( 0°-30°)   | 261    | 12.8          |
|                                                                                    | FM (30°-60°)   | 499    | 24.4          |
|                                                                                    | FH (60°-80°)   | 194    | 9.5           |
|                                                                                    | FVH (80°-90°)  | 26     | 1.3           |
|                                                                                    | BACK LIGHT     | 975    | 47.8          |
|                                                                                    | BL ( 0°-30°)   | 261    | 12.8          |
|                                                                                    | BM (30°-60°)   | 497    | 24.4          |
|                                                                                    | BH (60°-80°)   | 191    | 9.4           |
|                                                                                    | BVH (80°-90°)  | 25     | 1.2           |
|                                                                                    | UP LIGHT       | 87     | 4.3           |
|                                                                                    | UL (90°-100°)  | 11     | 0.6           |
|                                                                                    | UH (100°-180°) | 75     | 3.7           |
|                                                                                    | TRAPPED LIGHT  | NA     | NA            |

| BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07             |          |
|------------------------------------------------------------------|----------|
| Asymmetrical Luminaire Types<br>(Type I,II,III,IV)               | B1 U2 G1 |
| Quadrilateral Symmetrical Luminaire Types<br>(Type V,Area Light) | B1 U2 G1 |

C Plane (°):0.0-360.0: 90.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator: SUSHUNHUA

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1600L

Distance: 7.344 m

Humidity:

Inspector: