

Report No.: 1

Test Time: 15.02.2019 12:48

## Luminaire Property

Luminaire Manufacturer: FAROS

Luminaire Description: FG 55 48LED 0,35A 55W 5000K

Lamp Description: LED

Luminous Width (mm): 55

Voltage: 222.2 V

Power: 53.72 W

Luminous Length (mm): 1245

Luminous Height (mm): 90

Current: 0.245 A

Power Factor: 0.985

## Photometric Results

CIE Class: Direct

Measurement Flux: 7834.2 lm

Downward Ratio: 99%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 156.7, 156.5, 149.8, 148.5

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 116.5, 123.5, 115.5, 115.4

Luminaire Efficacy Rating (LER): 145.88

Max. Intensity: 2686.2 cd

S/MH(C0/C180): 1.30

Total Rated Lamp Lumens: 7834.2 lm

Efficiency: 100%

Upward Ratio: 1%

Central Intensity: 2670.94 cd

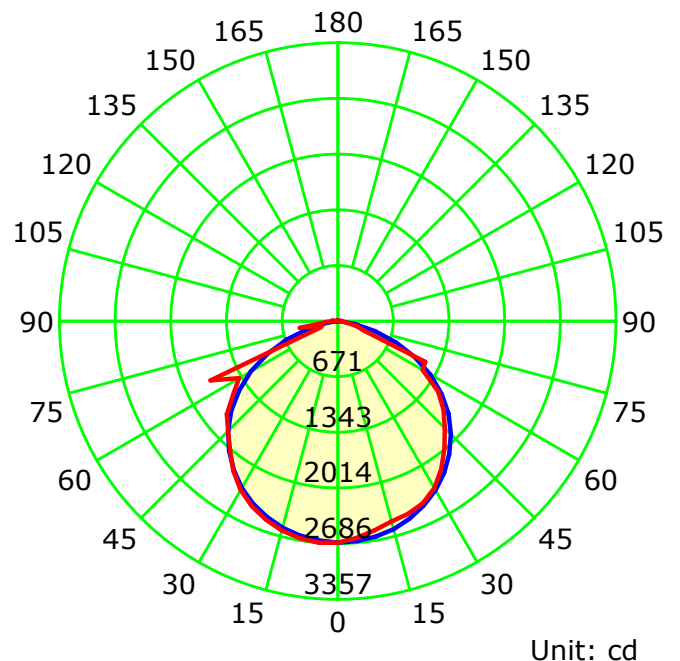
Pos of Max. Intensity: H292.5 V5

S/MH(C90/C270): 1.29

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

Test Device: LSG-1800B

Distance: 12.654 m

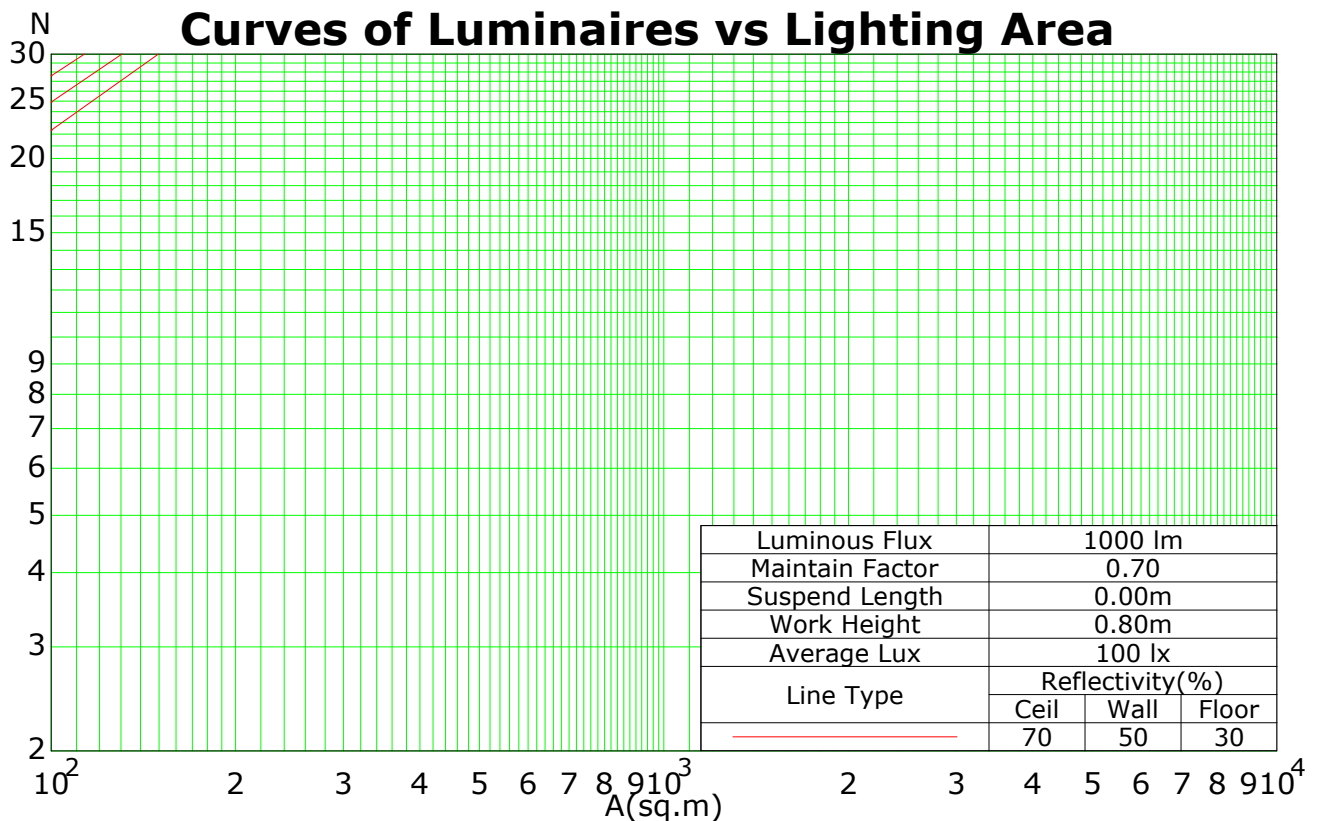
Humidity:

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 | 110 | 110 | 110 | 106 | 106 | 106 | 101 | 101 | 101 | 99 |
| 1   | 109      | 104 | 100 | 96  | 106 | 102 | 98  | 95  | 97  | 94  | 91  | 93  | 91  | 88  | 90  | 88  | 86  | 83 |
| 2   | 99       | 91  | 84  | 79  | 96  | 89  | 83  | 78  | 85  | 80  | 76  | 82  | 78  | 74  | 79  | 75  | 72  | 70 |
| 3   | 90       | 80  | 72  | 65  | 88  | 78  | 71  | 65  | 75  | 69  | 63  | 72  | 67  | 62  | 69  | 65  | 61  | 59 |
| 4   | 83       | 71  | 62  | 55  | 80  | 69  | 61  | 55  | 67  | 60  | 54  | 64  | 58  | 53  | 62  | 57  | 52  | 50 |
| 5   | 76       | 63  | 54  | 47  | 74  | 62  | 53  | 47  | 60  | 52  | 46  | 57  | 51  | 46  | 56  | 50  | 45  | 43 |
| 6   | 70       | 57  | 48  | 41  | 68  | 56  | 47  | 41  | 54  | 46  | 41  | 52  | 45  | 40  | 50  | 44  | 40  | 38 |
| 7   | 65       | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 49  | 41  | 36  | 47  | 40  | 35  | 46  | 40  | 35  | 33 |
| 8   | 60       | 47  | 38  | 32  | 59  | 46  | 38  | 32  | 45  | 37  | 32  | 43  | 37  | 32  | 42  | 36  | 31  | 29 |
| 9   | 56       | 43  | 35  | 29  | 55  | 42  | 34  | 29  | 41  | 34  | 29  | 40  | 33  | 28  | 39  | 33  | 28  | 26 |
| 10  | 53       | 39  | 32  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 36  | 30  | 26  | 24 |

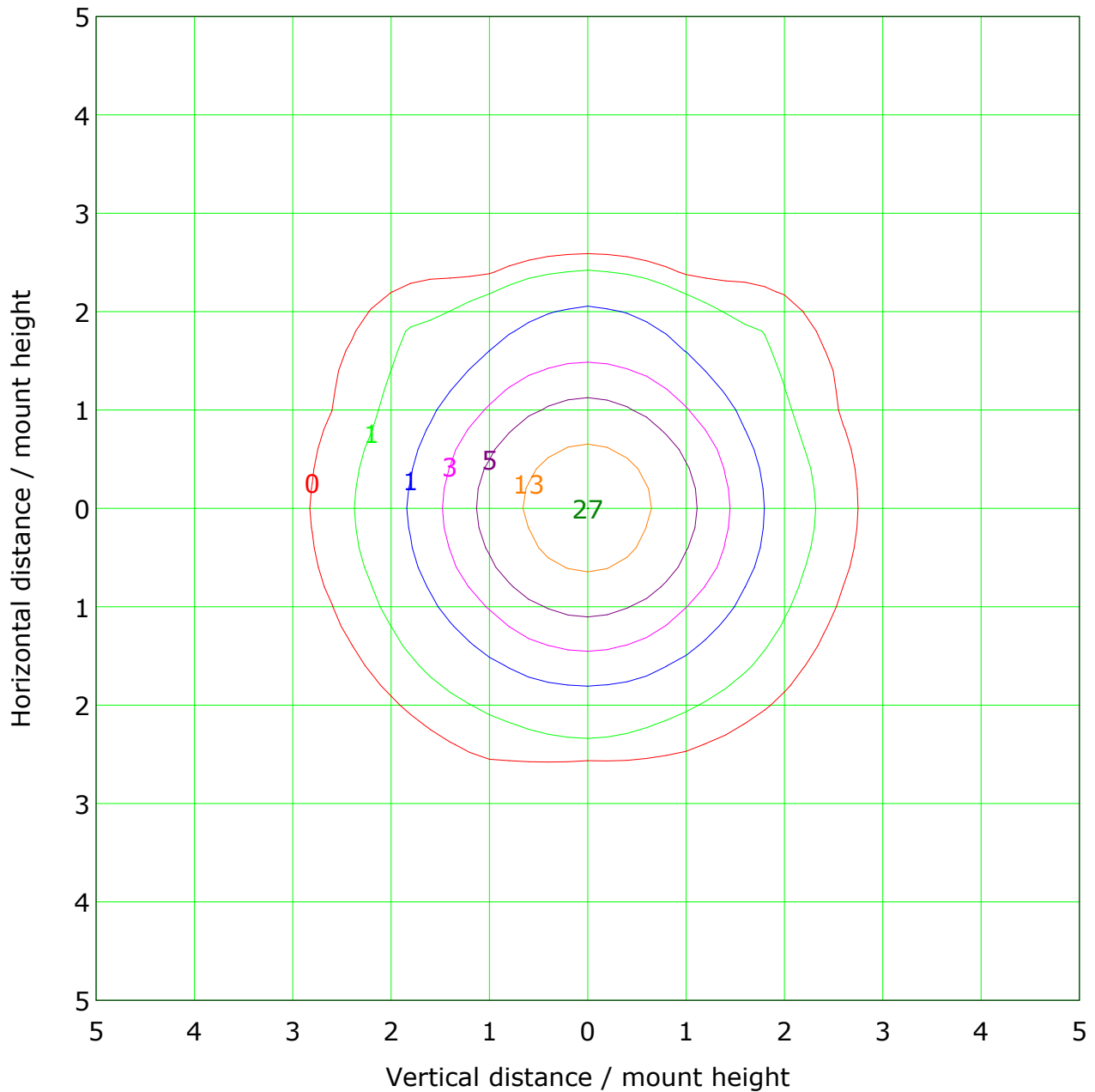
Spacing Criteria (0-180): 1.30  
 Spacing Criteria (90-270): 1.29  
 Spacing Criteria (Diagonal): 1.41



C Plane (°):0.0-360.0: 22.5  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:5.0  
 Test Device: LSG-1800B  
 Distance: 12.654 m  
 Humidity:  
 Inspector:

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 26.8 lx

|                   |                  |
|-------------------|------------------|
| — ( 1%): 0.3 lx   | — ( 2%): 0.5 lx  |
| — ( 5%): 1.3 lx   | — (10%): 2.7 lx  |
| — (20%): 5.4 lx   | — (50%): 13.4 lx |
| — (100%): 26.8 lx |                  |

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

Test Device: LSG-1800B

Distance: 12.654 m

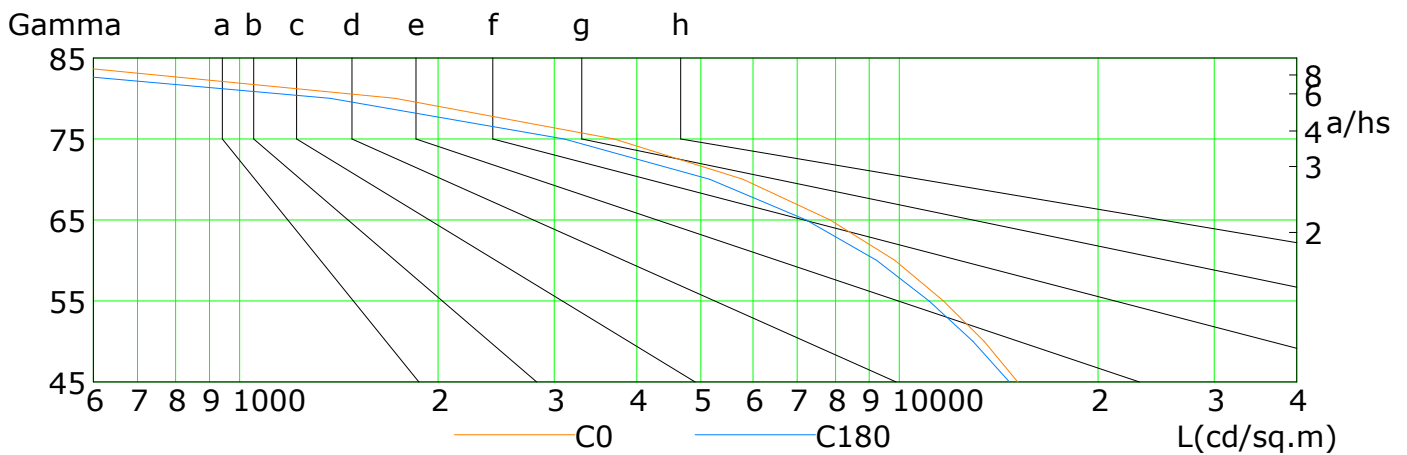
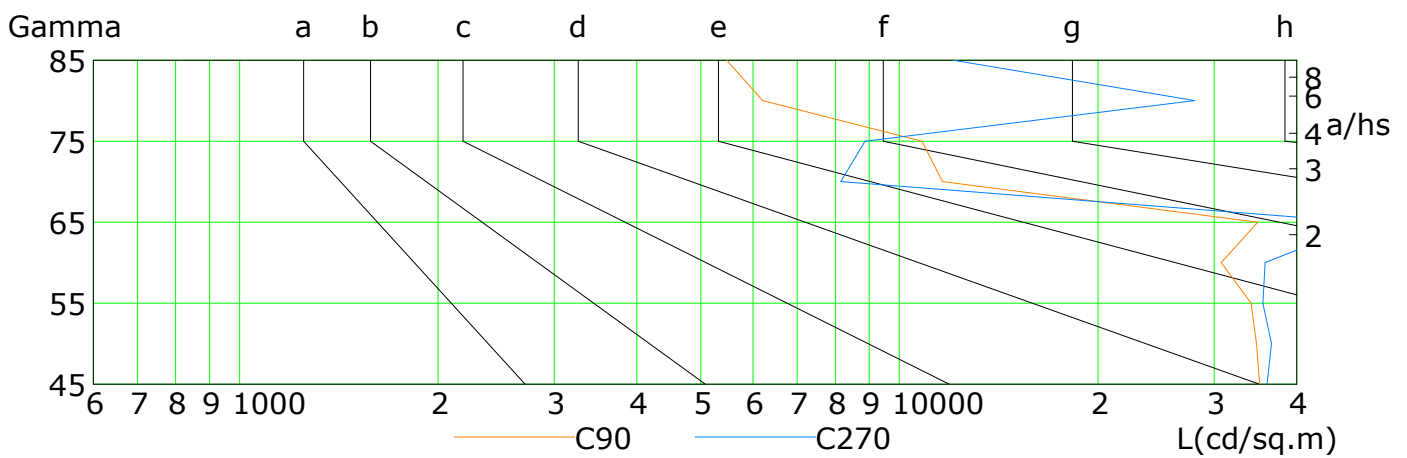
Humidity:

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 |

a b c d e f g h



| L(cd/sq.m) | G45   | G50   | G55   | G60   | G65   | G70   | G75   | G80   | G85   |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| C0         | 15119 | 13441 | 11662 | 9838  | 7857  | 5793  | 3696  | 1721  | 413   |
| C90        | 35169 | 34781 | 34101 | 30747 | 34904 | 11624 | 10823 | 6204  | 5474  |
| C180       | 14684 | 12927 | 11092 | 9238  | 7226  | 5158  | 3104  | 1372  | 283   |
| C270       | 36064 | 36662 | 35572 | 35844 | 50796 | 8150  | 8866  | 28015 | 12072 |

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

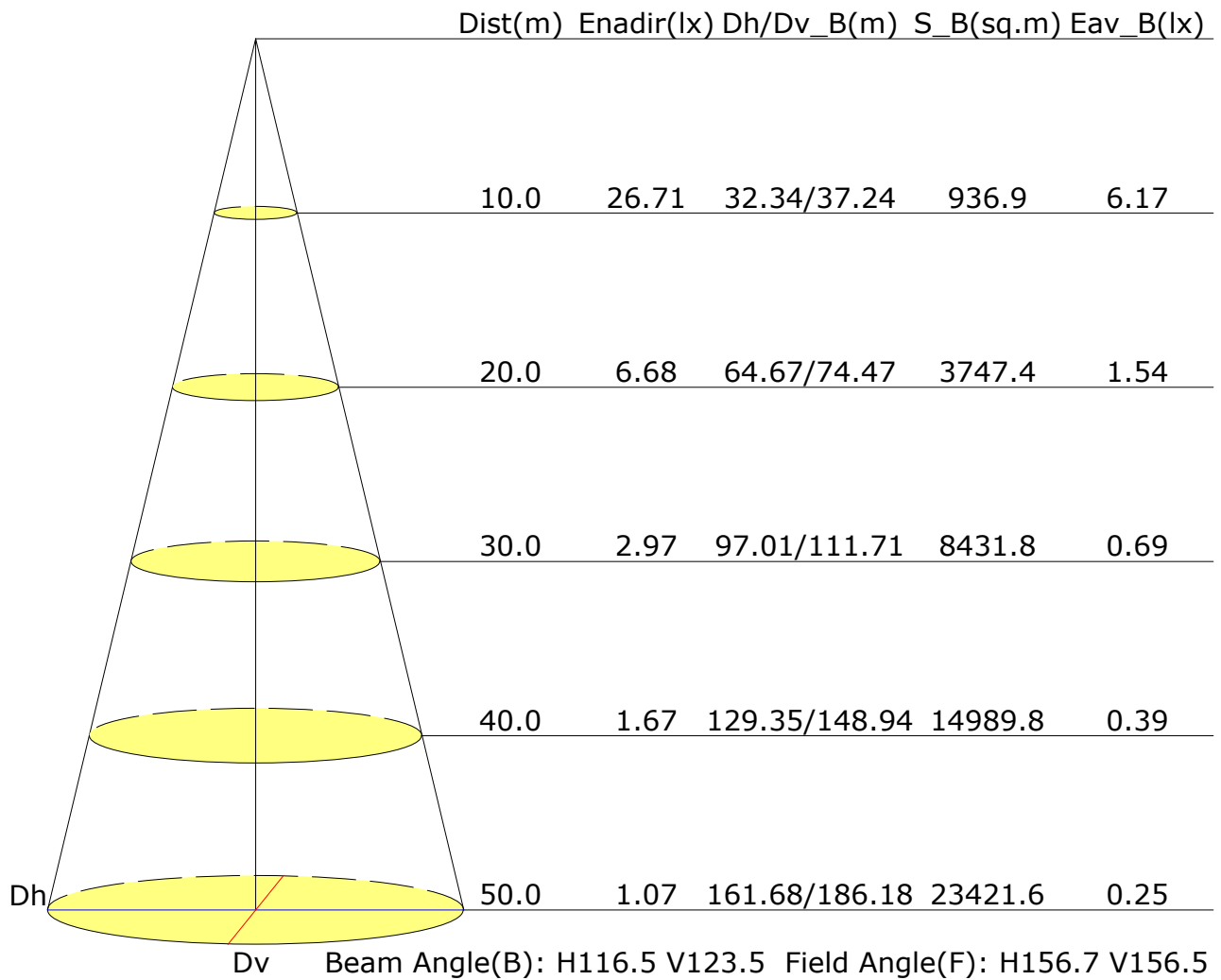
Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

Inspector:

## Illuminance at a Distance



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:5.0

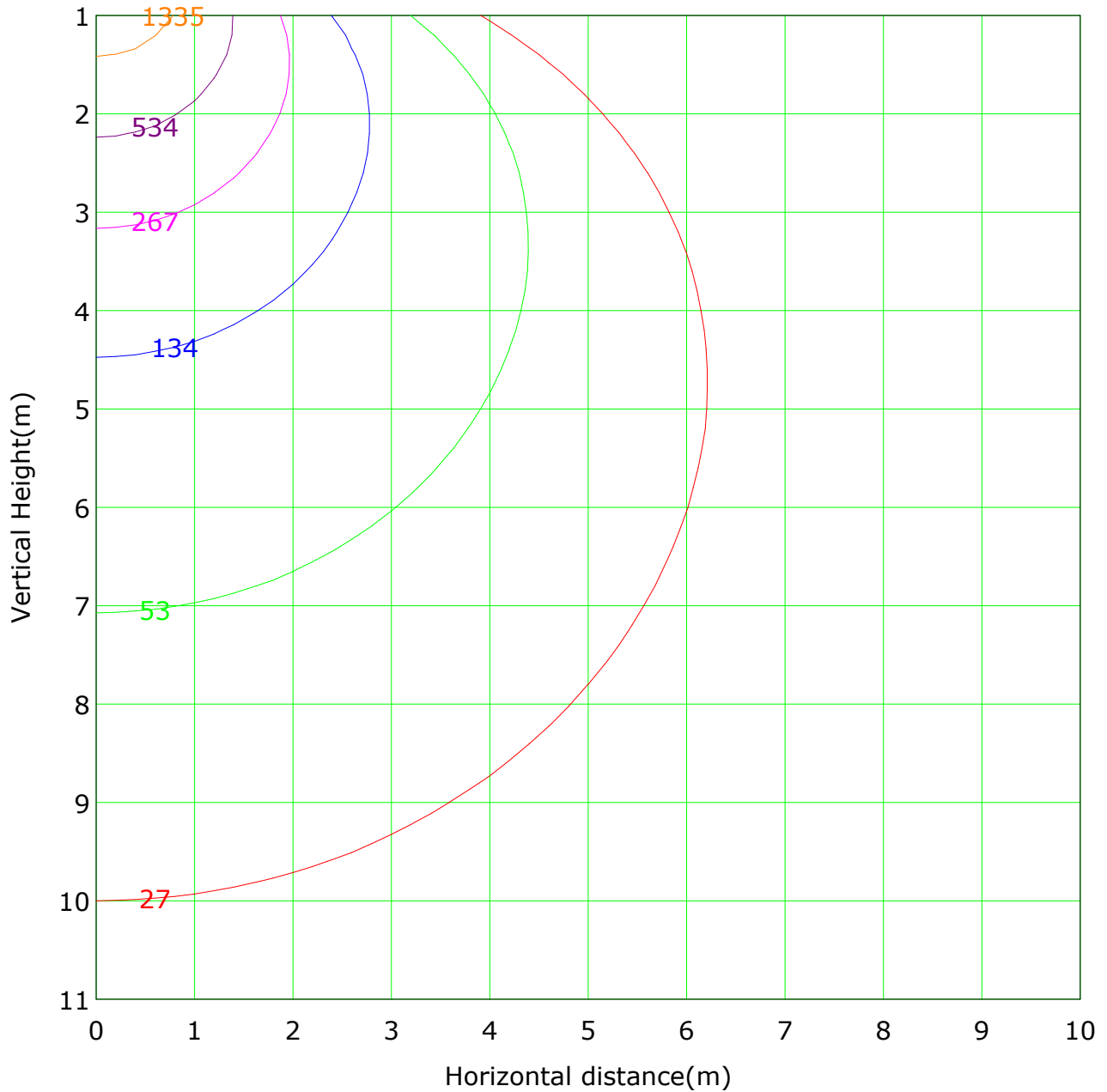
Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m   Highest(m): 11.0m   Max Lux: 2670.9 lx  
— ( 1%): 26.7 lx   — ( 2%): 53.4 lx  
— ( 5%): 133.5 lx   — ( 10%): 267.1 lx  
— ( 20%): 534.2 lx   — ( 50%): 1335.5 lx  
— (100%): 2670.9 lx

C Plane (°): 0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°): 0.0-180.0: 5.0

Test Device: LSG-1800B

Distance: 12.654 m

Humidity:

Inspector:

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

| ZONE           | LUMENS | % LAMP LUMENS |
|----------------|--------|---------------|
| FORWARD LIGHT  | 3781   | 48.3          |
| FL ( 0°-30°)   | 1035   | 13.2          |
| FM (30°-60°)   | 2045   | 26.1          |
| FH (60°-80°)   | 663    | 8.5           |
| FVH (80°-90°)  | 39     | 0.5           |
| BACK LIGHT     | 3963   | 50.6          |
| BL ( 0°-30°)   | 1063   | 13.6          |
| BM (30°-60°)   | 2089   | 26.7          |
| BH (60°-80°)   | 738    | 9.4           |
| BVH (80°-90°)  | 72     | 0.9           |
| UP LIGHT       | 90     | 1.2           |
| UL (90°-100°)  | 36     | 0.5           |
| UH (100°-180°) | 54     | 0.7           |
| TRAPPED LIGHT  | NA     | NA            |

| BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07             |          |
|------------------------------------------------------------------|----------|
| Asymmetrical Luminaire Types<br>(Type I,II,III,IV)               | B3 U2 G2 |
| Quadrilateral Symmetrical Luminaire Types<br>(Type V,Area Light) | B3 U2 G1 |

C Plane (°):0.0-360.0: 22.5  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:5.0  
 Test Device: LSG-1800B  
 Distance: 12.654 m  
 Humidity:  
 Inspector: