

Report No.:

Test Time: 14.12.2020 14:55

## Luminaire Property

Luminaire Manufacturer:

Luminaire Description: FG 595 18LED 0.3A 36W 4000K opal IP54 Cesal

Luminous Length (mm): 600

Luminous Width (mm): 600

Luminous Height (mm): 45

Voltage: 221.3 V

Current: 0.169 A

Power: 36.63 W

Power Factor: 0.976

## Photometric Results

CIE Class: Direct

Measurement Flux: 3960.9 lm

Downward Ratio: 100%

Total Rated Lamp Lumens: 3960.9 lm

Efficiency: 100%

Upward Ratio: 0%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.2, 164.1, 164.2, 164.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.9, 112.2, 112.0, 112.0

Luminaire Efficacy Rating (LER): 108.18

Central Intensity: 1370.5 cd

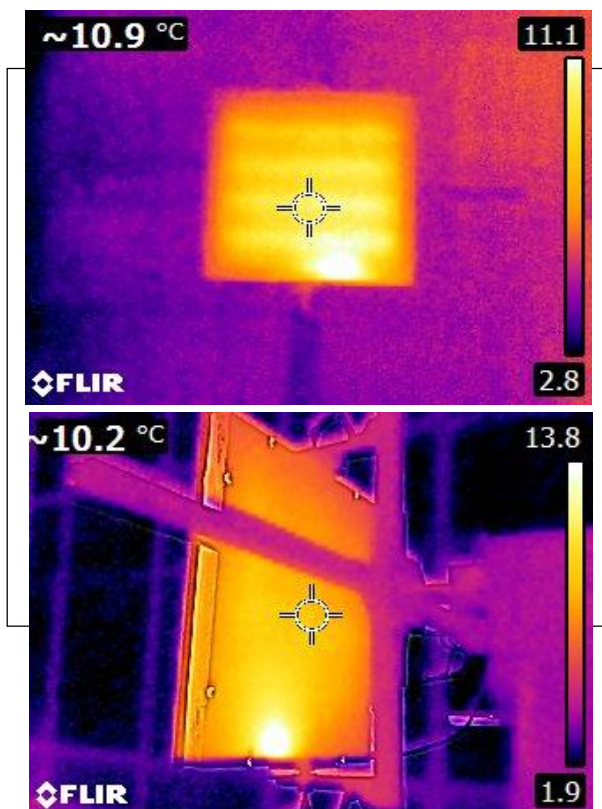
Max. Intensity: 1371 cd

Pos of Max. Intensity: H157.5 V0

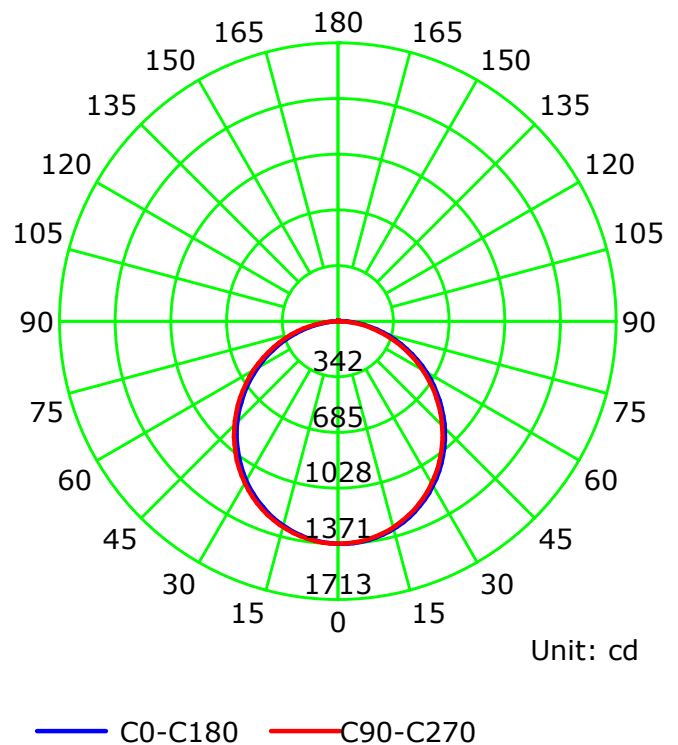
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.25

Termogramma



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

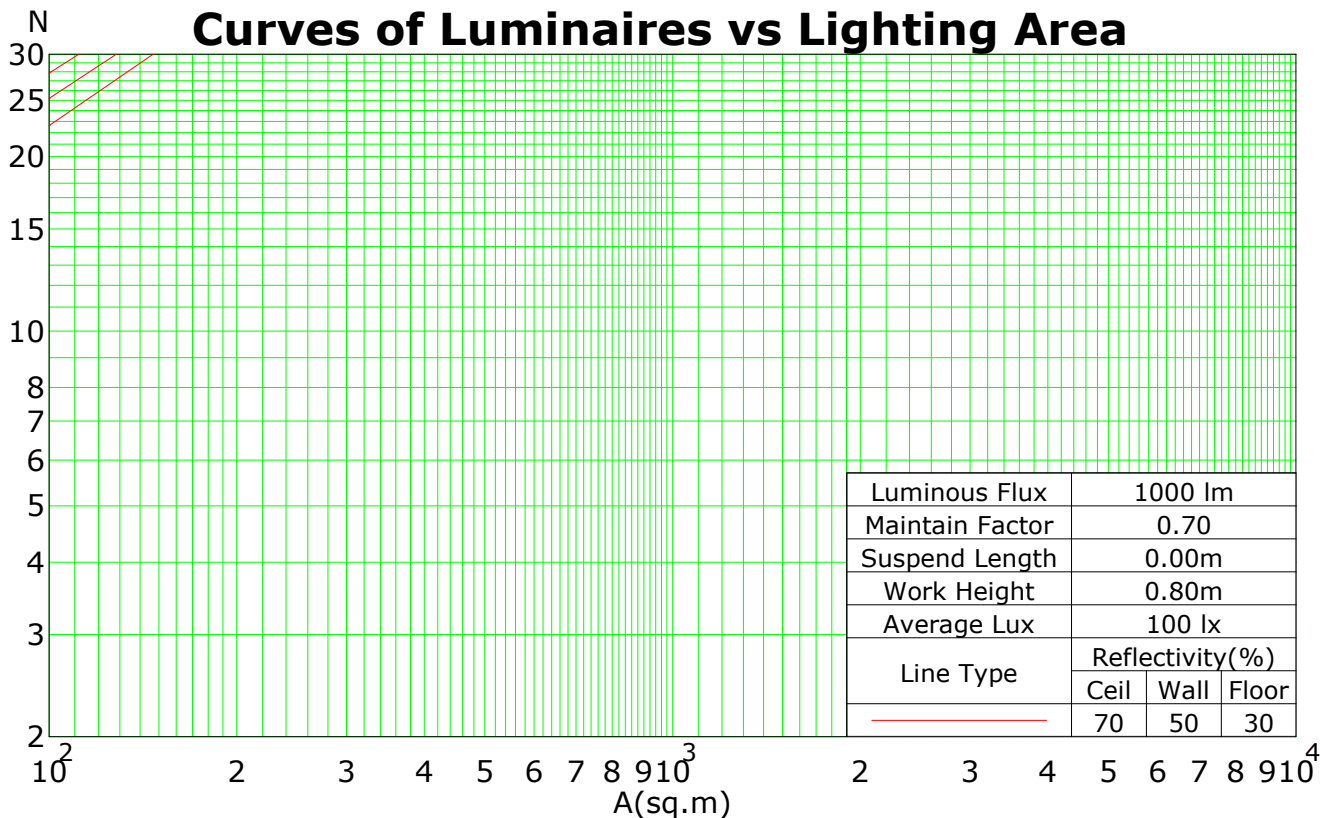
## Coefficients Of Utilization - Zonal Cavity Method

|     |          |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |     |    |
|-----|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 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 | 99 |
| 1   | 108      | 103 | 99  | 95  | 106 | 101 | 97  | 93  | 97  | 93  | 90  | 93  | 90  | 87  | 89  | 87  | 85  | 83 |
| 2   | 98       | 90  | 83  | 77  | 96  | 88  | 81  | 76  | 84  | 79  | 74  | 81  | 76  | 72  | 78  | 74  | 71  | 68 |
| 3   | 90       | 79  | 70  | 64  | 87  | 77  | 69  | 63  | 74  | 67  | 62  | 71  | 66  | 61  | 69  | 64  | 60  | 58 |
| 4   | 82       | 70  | 61  | 54  | 80  | 68  | 60  | 54  | 66  | 58  | 53  | 63  | 57  | 52  | 61  | 56  | 51  | 49 |
| 5   | 75       | 62  | 53  | 46  | 73  | 61  | 53  | 46  | 59  | 51  | 46  | 57  | 50  | 45  | 55  | 49  | 44  | 42 |
| 6   | 69       | 56  | 47  | 40  | 68  | 55  | 46  | 40  | 53  | 46  | 40  | 51  | 45  | 39  | 50  | 44  | 39  | 37 |
| 7   | 64       | 51  | 42  | 36  | 63  | 50  | 42  | 36  | 48  | 41  | 35  | 47  | 40  | 35  | 45  | 39  | 35  | 33 |
| 8   | 60       | 46  | 38  | 32  | 58  | 46  | 37  | 32  | 44  | 37  | 31  | 43  | 36  | 31  | 42  | 36  | 31  | 29 |
| 9   | 56       | 42  | 34  | 29  | 55  | 42  | 34  | 29  | 41  | 33  | 28  | 40  | 33  | 28  | 39  | 32  | 28  | 26 |
| 10  | 53       | 39  | 31  | 26  | 51  | 39  | 31  | 26  | 38  | 31  | 26  | 37  | 30  | 26  | 36  | 30  | 25  | 24 |

Spacing Criteria (0-180): 1.25

Spacing Criteria (90-270): 1.25

Spacing Criteria (Diagonal): 1.37



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

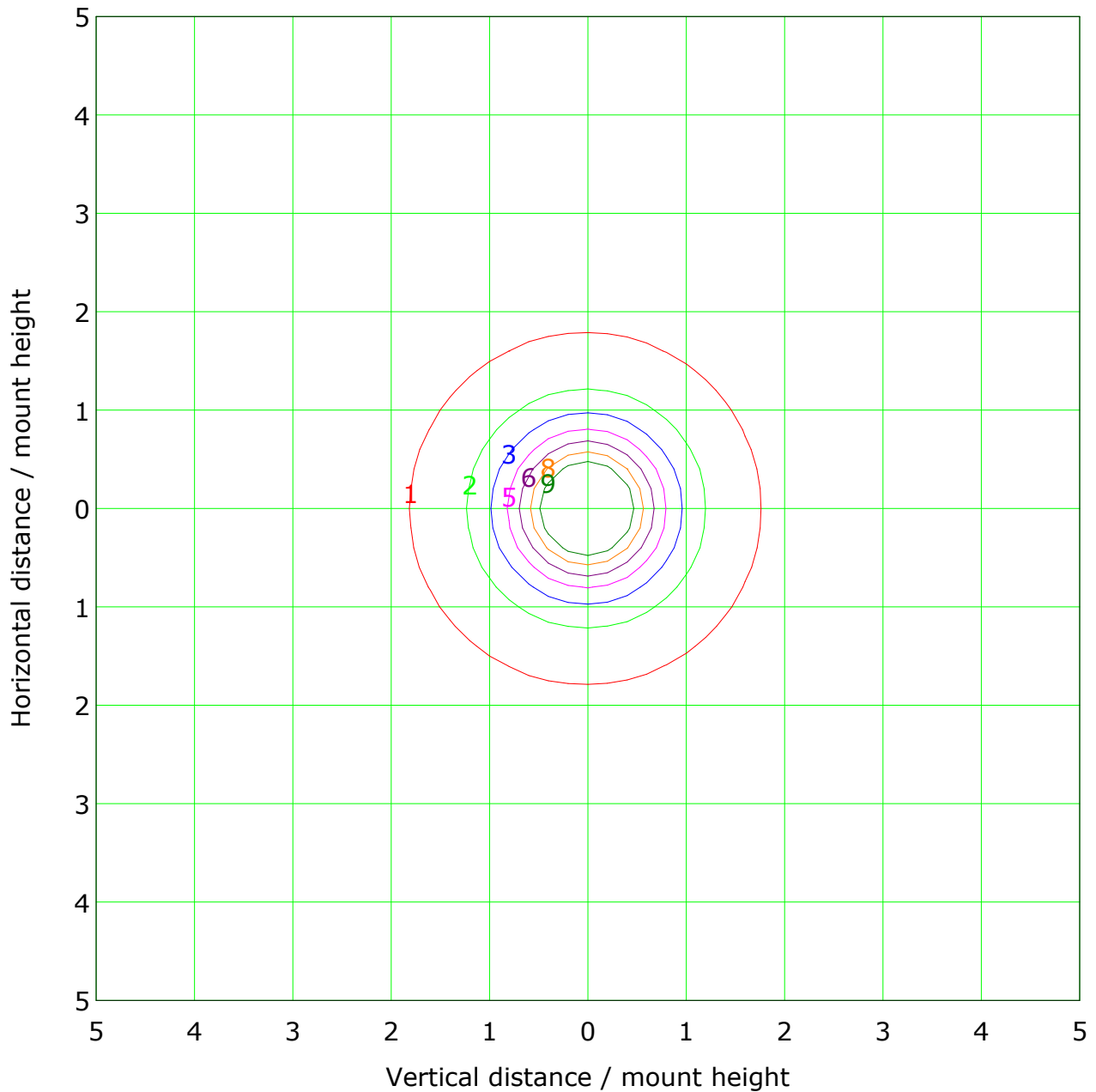
Test Device: LSG-1800B

Distance: 12.682 m

Humidity:

Inspector:

## IsoLux Plot



|                        |        |                        |        |
|------------------------|--------|------------------------|--------|
| Mounting Height: 10.0m |        | Max Lux(100%): 13.7 lx |        |
| ( 5%):                 | 0.7 lx | ( 15%):                | 2.1 lx |
| ( 25%):                | 3.4 lx | ( 35%):                | 4.8 lx |
| ( 45%):                | 6.2 lx | ( 55%):                | 7.5 lx |
| ( 65%):                | 8.9 lx |                        |        |

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

Test Device: LSG-1800B

Distance: 12.682 m

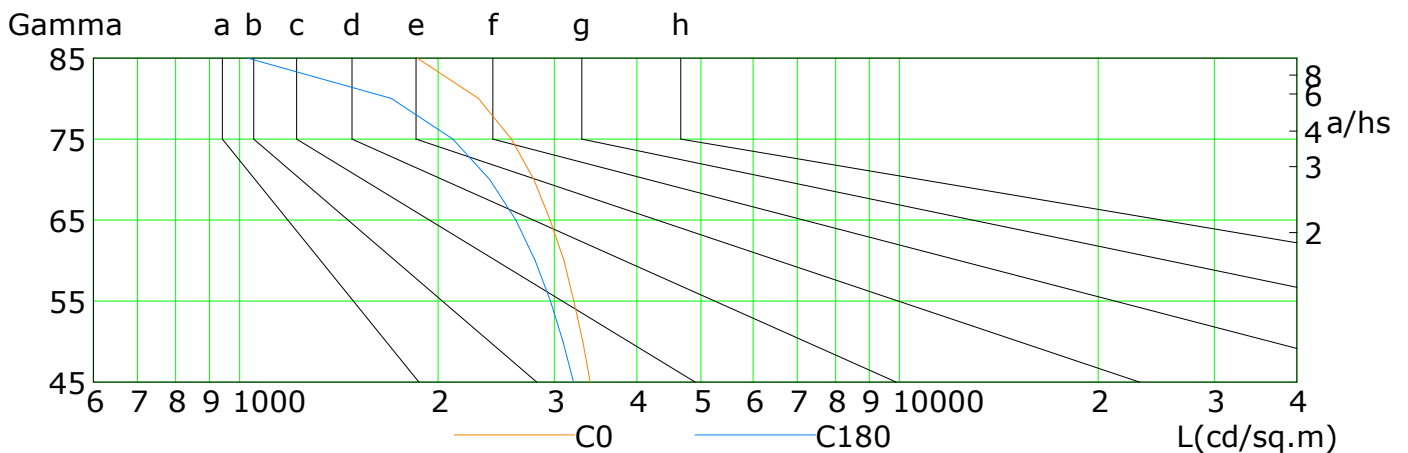
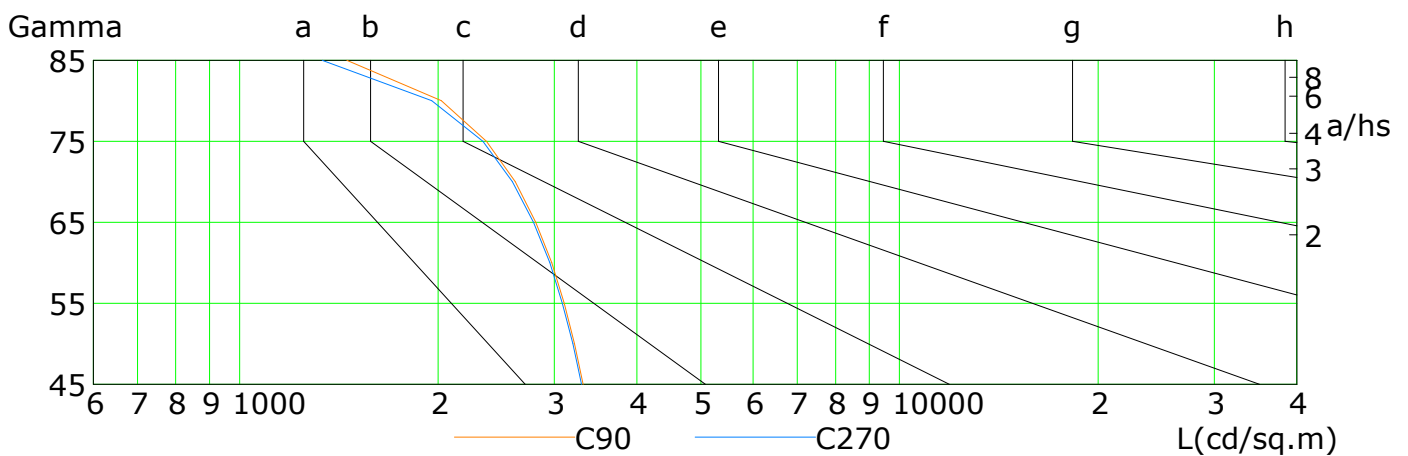
Humidity:

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         | 3399 | 3311 | 3210 | 3100 | 2957 | 2791 | 2580 | 2301 | 1858 |
| C90        | 3317 | 3218 | 3105 | 2972 | 2811 | 2617 | 2367 | 2021 | 1455 |
| C180       | 3206 | 3090 | 2959 | 2803 | 2623 | 2392 | 2104 | 1698 | 1029 |
| C270       | 3299 | 3198 | 3083 | 2953 | 2788 | 2591 | 2338 | 1955 | 1335 |

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:2.0

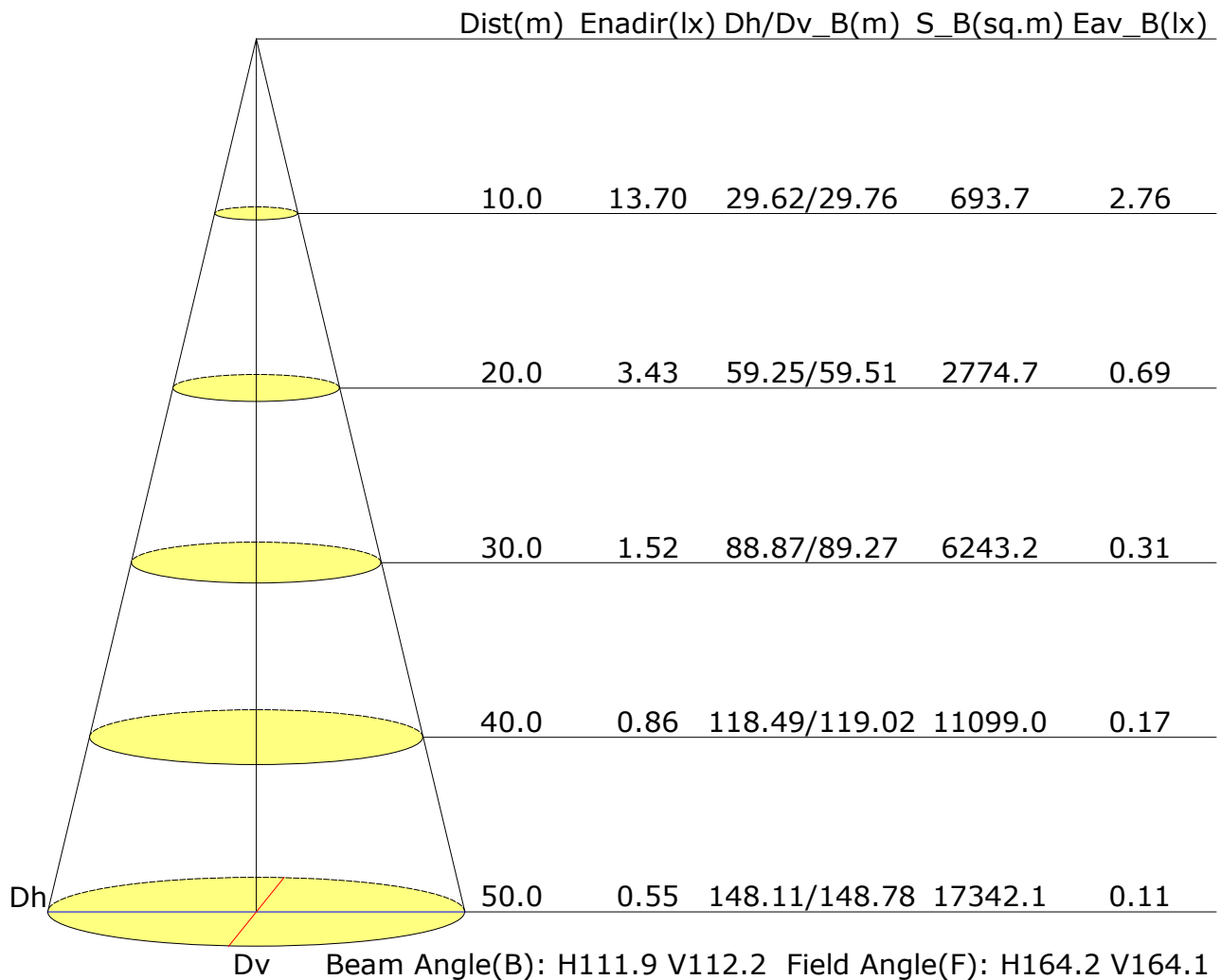
Test Device: LSG-1800B

Distance: 12.682 m

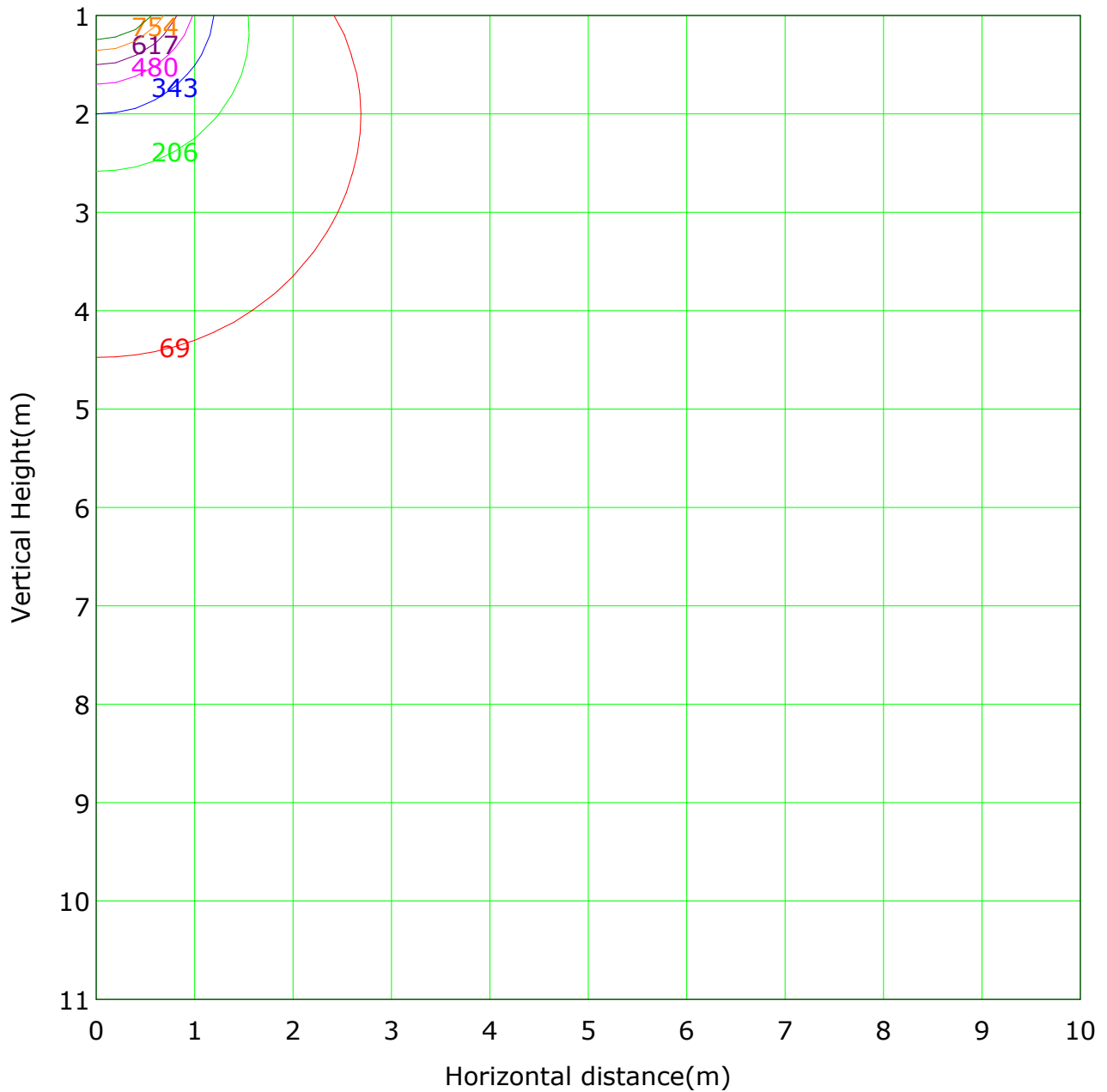
Humidity:

Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 1370.5 lx

|                  |                  |
|------------------|------------------|
| ( 5%): 68.5 lx   | ( 15%): 205.6 lx |
| ( 25%): 342.6 lx | ( 35%): 479.7 lx |
| ( 45%): 616.7 lx | ( 55%): 753.8 lx |
| ( 65%): 890.8 lx |                  |

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Gamma Plane (°):0.0-180.0:2.0  
Test Device: LSG-1800B  
Distance: 12.682 m  
Humidity:  
Inspector: