

Report No.:

Test Time: 03/10/2024 10:50

## Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-DW14-03+LLD-03-FK

Lamp Description: F52-40s-1208F2/14.4 1m Number of Lamps: 1

Lumens per Lamp: 1491

Voltage: 24.0 V

Current: 0.562 A

Power: 13.48 W

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 1160.9 lm

Downward Ratio: 76.68%

Total Rated Lamp Lumens: 1491.0 lm

Efficiency: 77.86%

Upward Ratio: 1.18%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 147.7, 154.9, 145.5, 145.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 72.3, 111.8, 83.9, 83.4

Luminaire Efficacy Rating (LER): 86.17

Central Intensity: 538.36 cd

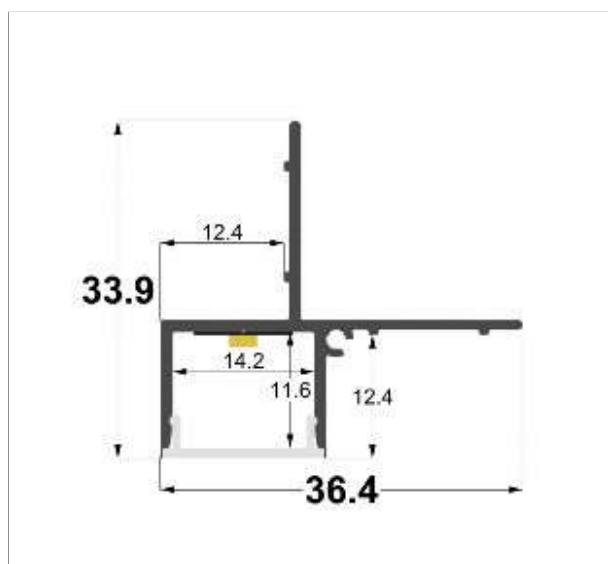
Max. Intensity: 543.97 cd

Pos of Max. Intensity: H180 V11

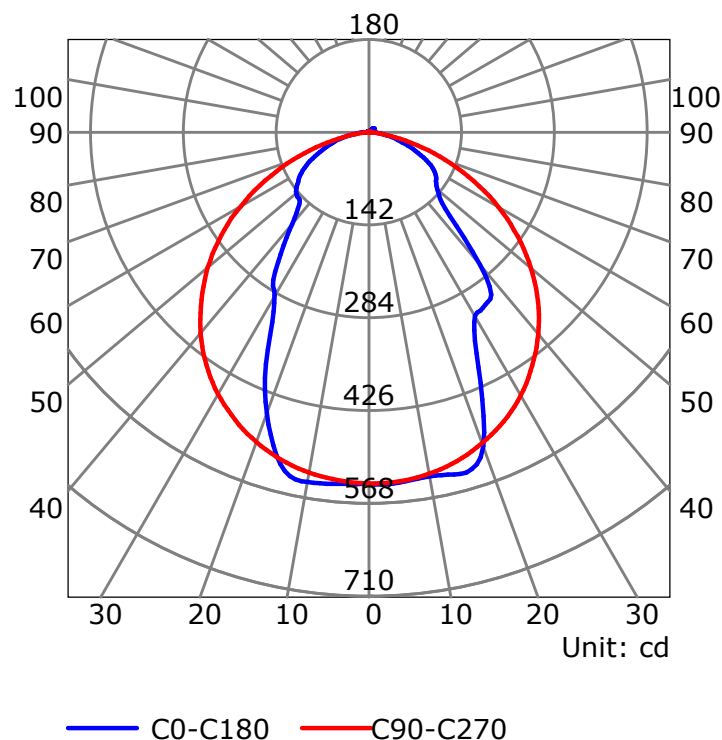
S/MH(C0/C180): 0.96

S/MH(C90/C270): 1.28

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

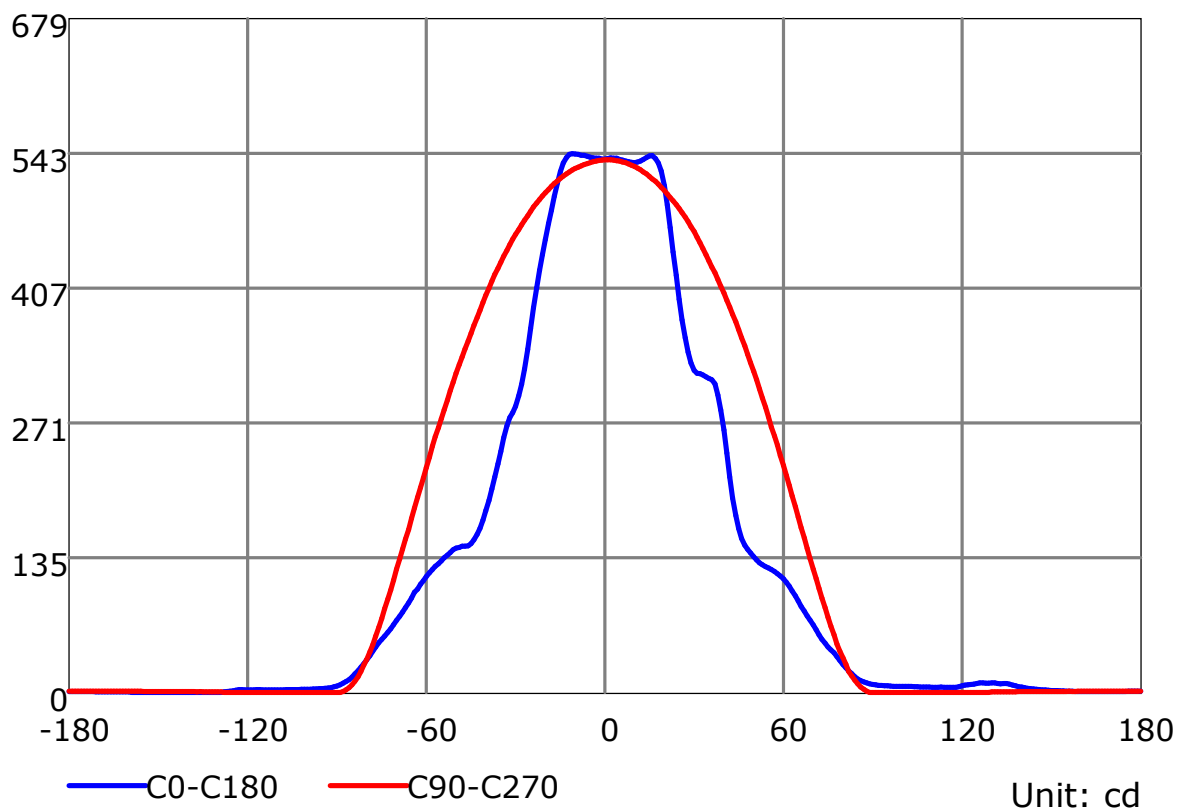
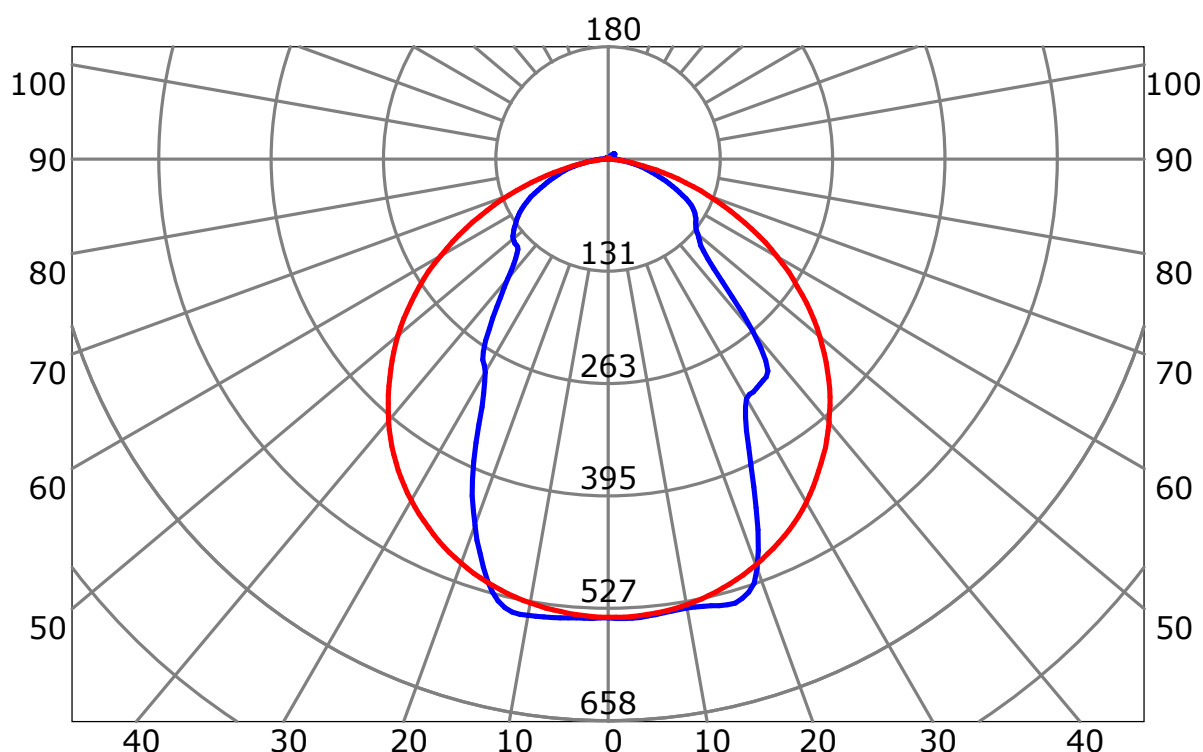
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

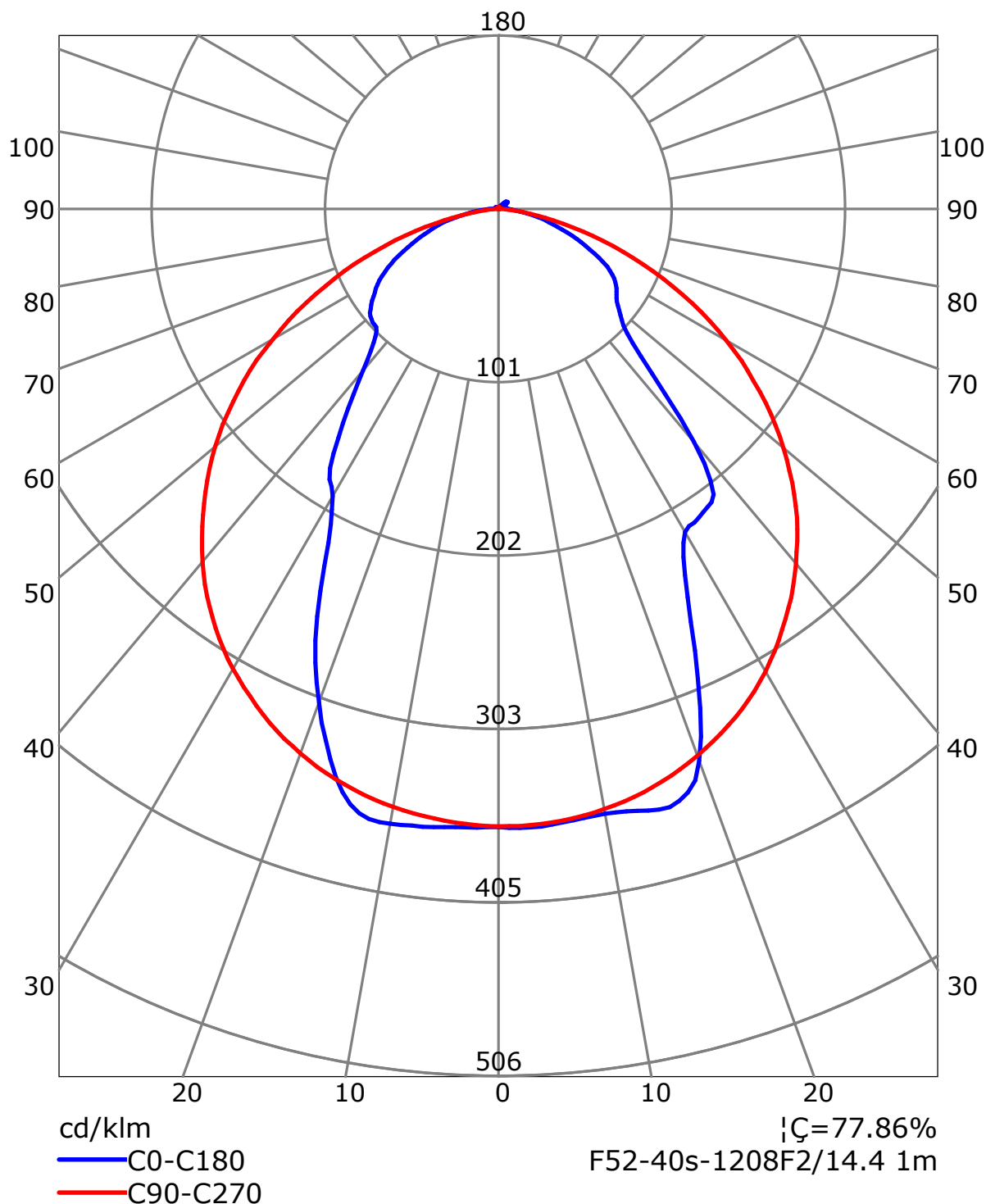
## Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

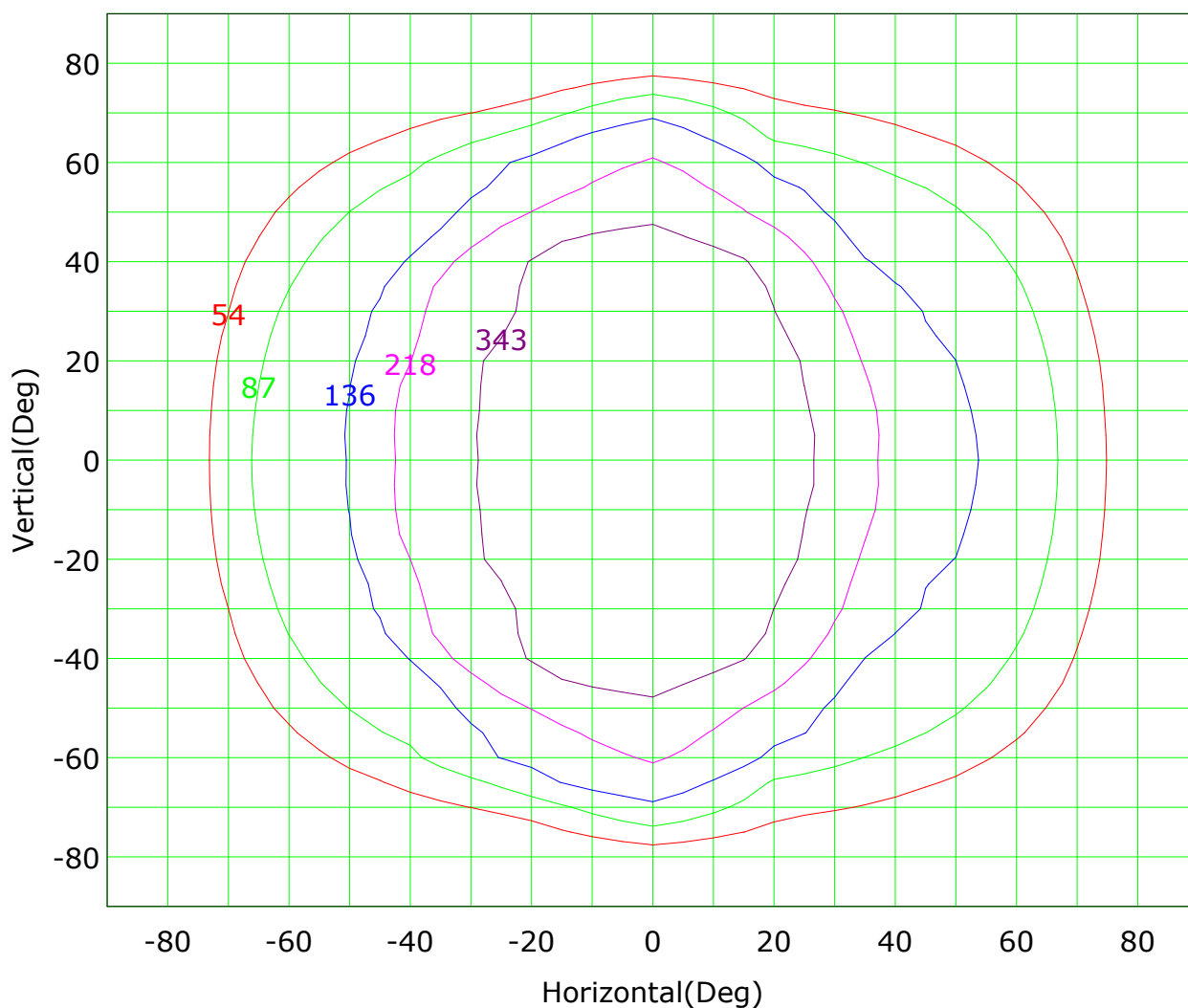
## Luminous Intensity Distribution Curve(cd/klm)



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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

## Isocandela (rectangle)



Imax (100%): 544 cd

|           |        |           |        |
|-----------|--------|-----------|--------|
| — ( 10%): | 54 cd  | — ( 16%): | 87 cd  |
| — ( 25%): | 136 cd | — ( 40%): | 218 cd |
| — ( 63%): | 343 cd | — (100%): | 544 cd |

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

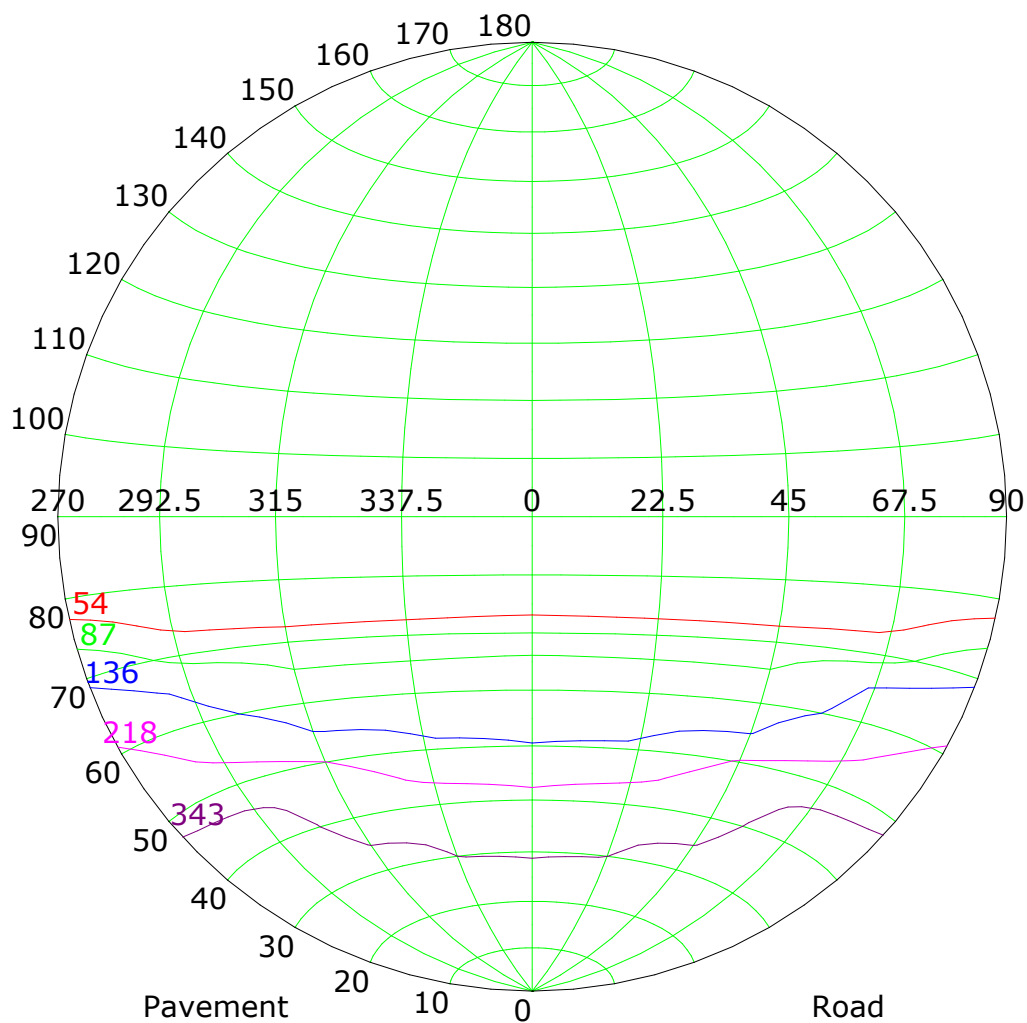
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

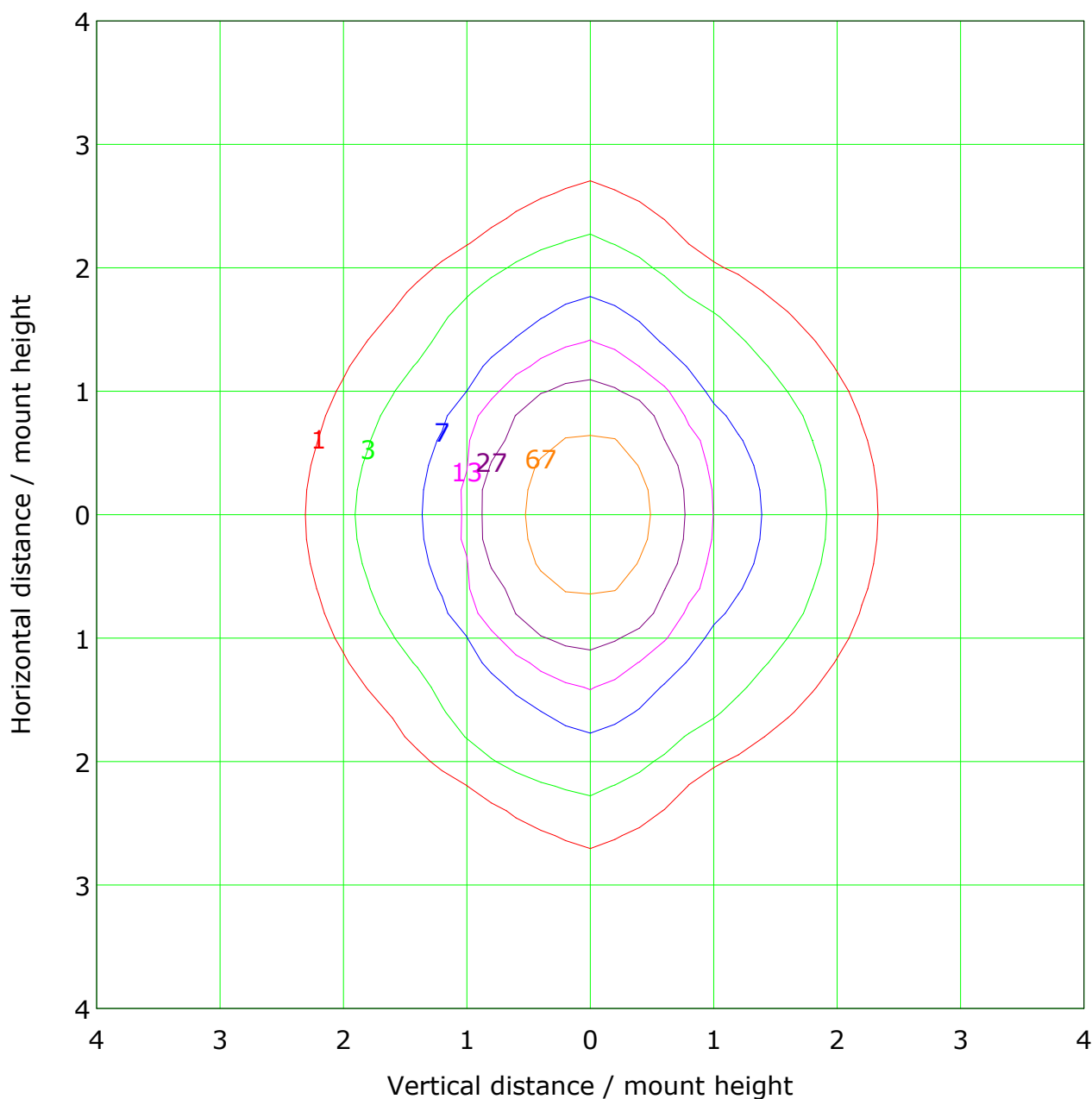
## Isocandela (sphere)



Imax (100%): 544 cd

|                |                |
|----------------|----------------|
| ( 10%): 54 cd  | ( 16%): 87 cd  |
| ( 25%): 136 cd | ( 40%): 218 cd |
| ( 63%): 343 cd | (100%): 544 cd |

## IsoLux Plot



|                       |          |                         |         |
|-----------------------|----------|-------------------------|---------|
| Mounting Height: 2.0m |          | Max Lux(100%): 134.7 lx |         |
| ( 1%):                | 1.3 lx   | ( 2%):                  | 2.7 lx  |
| ( 5%):                | 6.7 lx   | ( 10%):                 | 13.5 lx |
| ( 20%):               | 26.9 lx  | ( 50%):                 | 67.3 lx |
| (100%):               | 134.7 lx |                         |         |

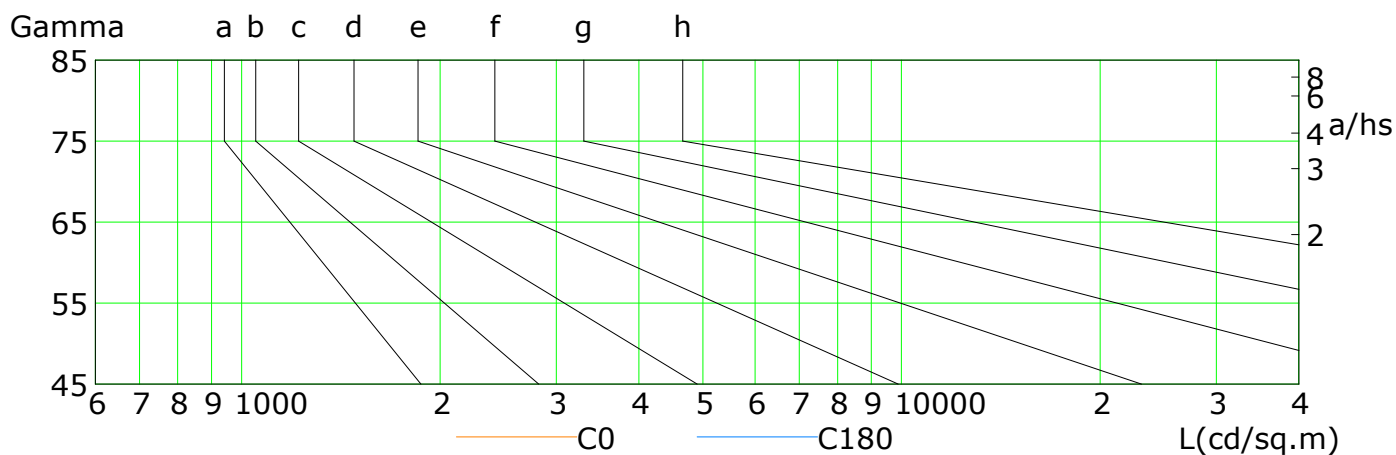
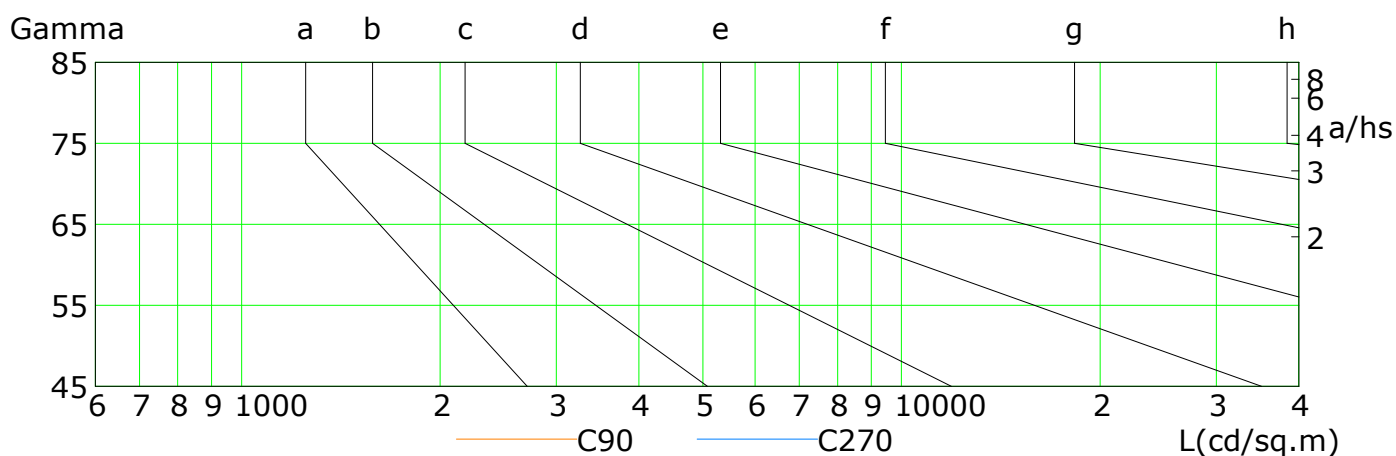
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 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

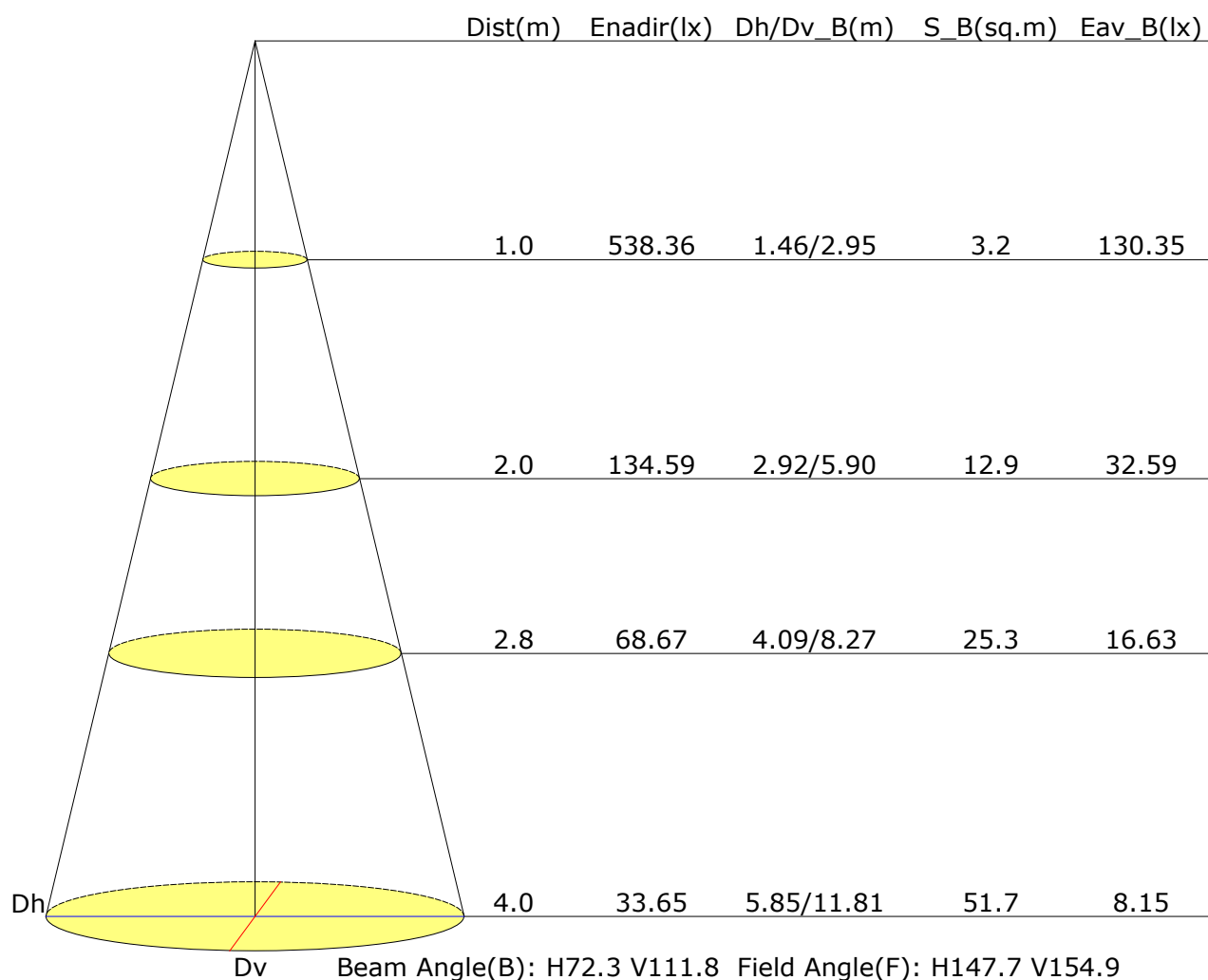


| L(cd/sq.m) | G45 | G50 | G55 | G60 | G65 | G70 | G75 | G80 | G85 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| C0         | 165 | 137 | 126 | 115 | 93  | 68  | 46  | 28  | 14  |
| C90        | 366 | 324 | 278 | 229 | 177 | 125 | 76  | 35  | 9   |
| C180       | 150 | 146 | 133 | 117 | 96  | 73  | 54  | 33  | 16  |
| C270       | 363 | 322 | 276 | 227 | 176 | 124 | 75  | 33  | 8   |

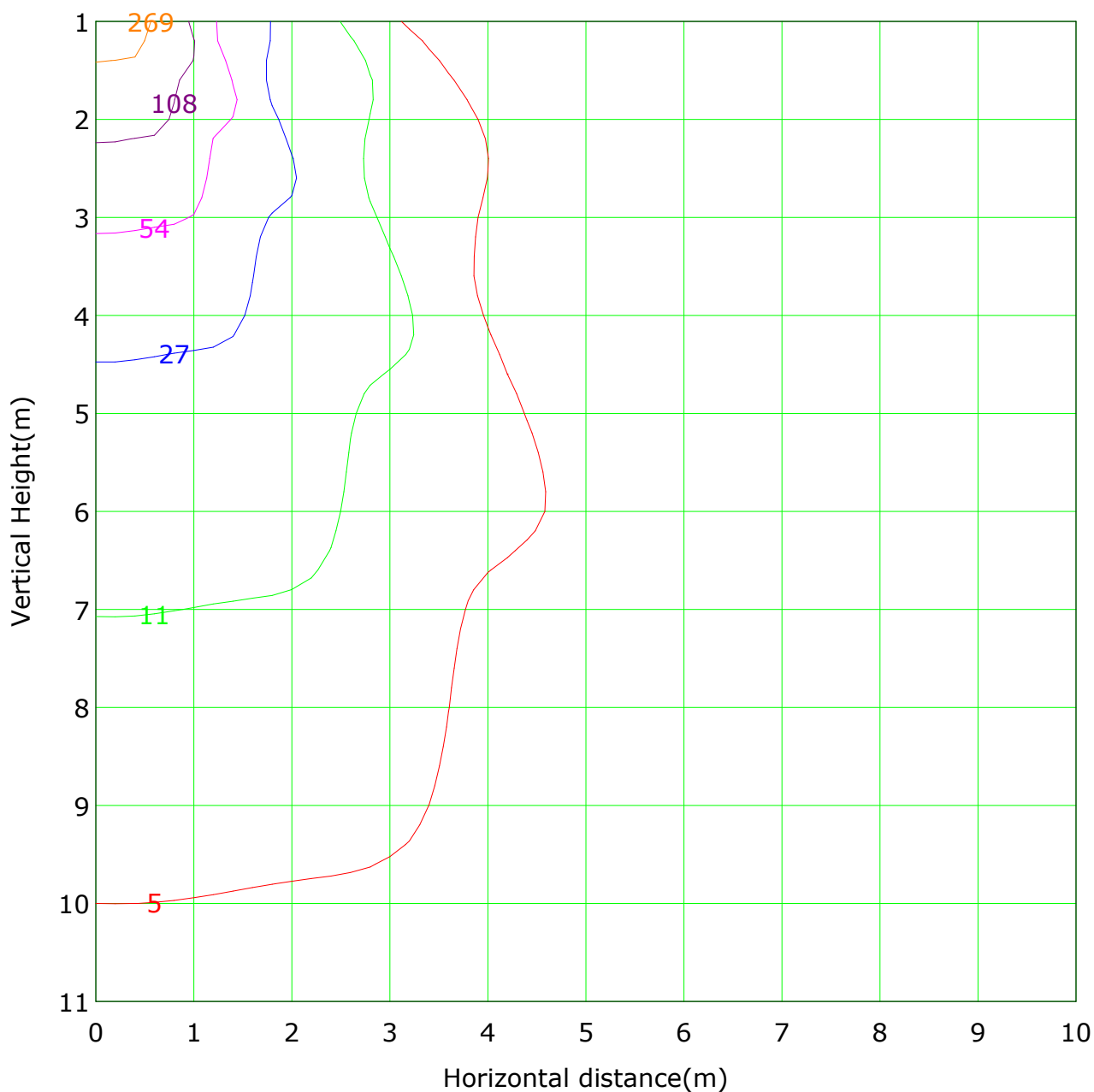
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 538.4 lx

|                    |                    |
|--------------------|--------------------|
| — ( 1%): 5.4 lx    | — ( 2%): 10.8 lx   |
| — ( 5%): 26.9 lx   | — ( 10%): 53.8 lx  |
| — ( 20%): 107.7 lx | — ( 50%): 269.2 lx |
| — (100%): 538.4 lx |                    |

Report No.:

Test Time: 02/10/2024 16:22

## Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-DW14-03+LLD-03-FH

Lamp Description: F52-40s-1208F2/14.4 1m Number of Lamps: 1

Lumens per Lamp: 1491

Voltage: 24.0 V

Current: 0.562 A

Power: 13.49 W

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 1116.6 lm

Downward Ratio: 74.89%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 154.1, 148.7, 150.8, 151.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 100.2, 76.0, 84.4, 84.7

Luminaire Efficacy Rating (LER): 82.82

Central Intensity: 521.15 cd

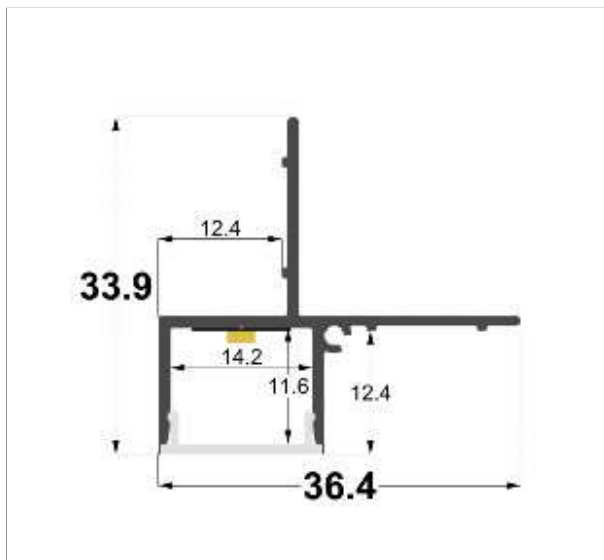
Max. Intensity: 521.54 cd

Pos of Max. Intensity: H22.5 V0

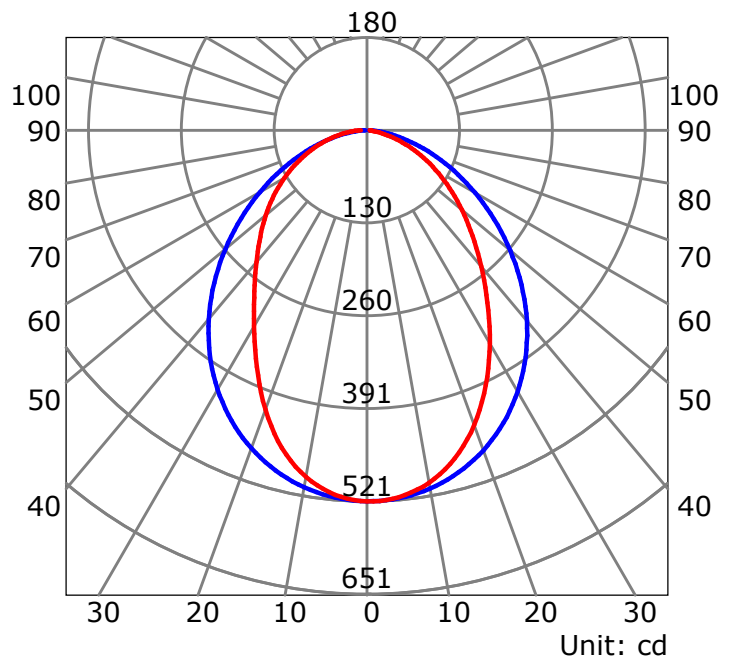
S/MH(C0/C180): 1.21

S/MH(C90/C270): 1.00

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 (°):0.0-90.0:1.0

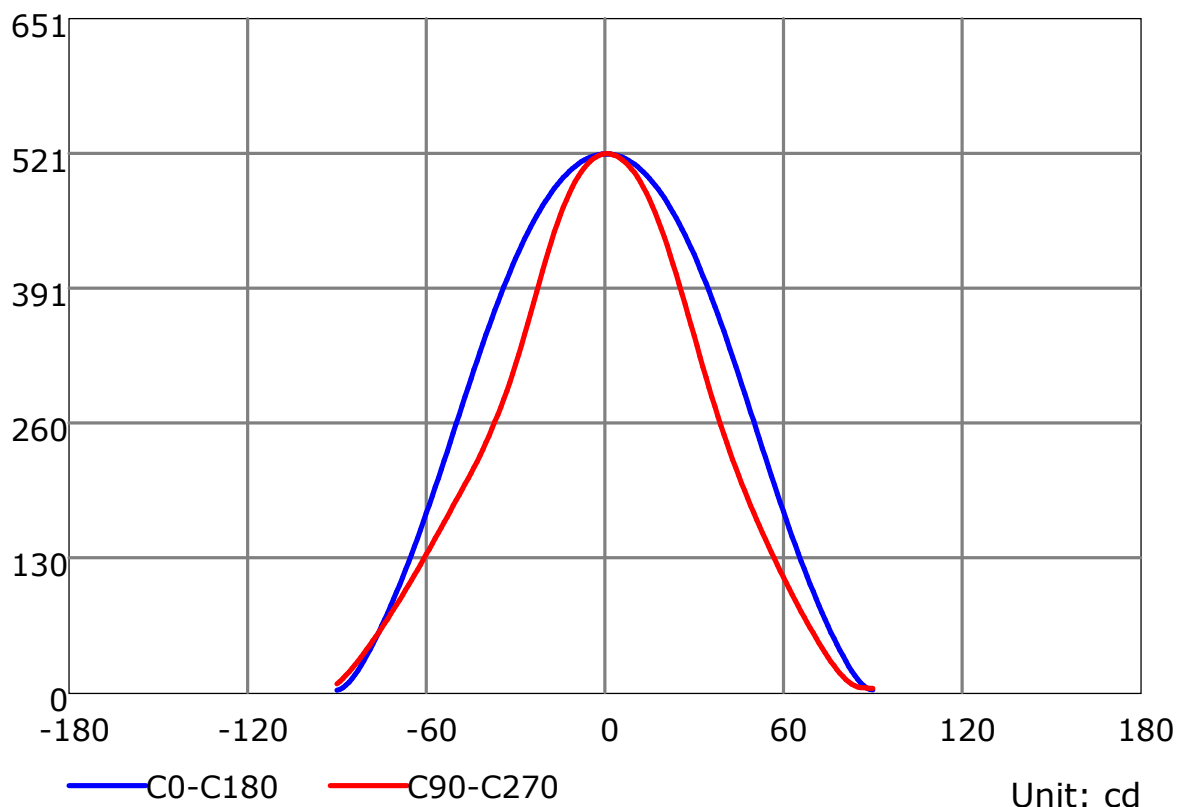
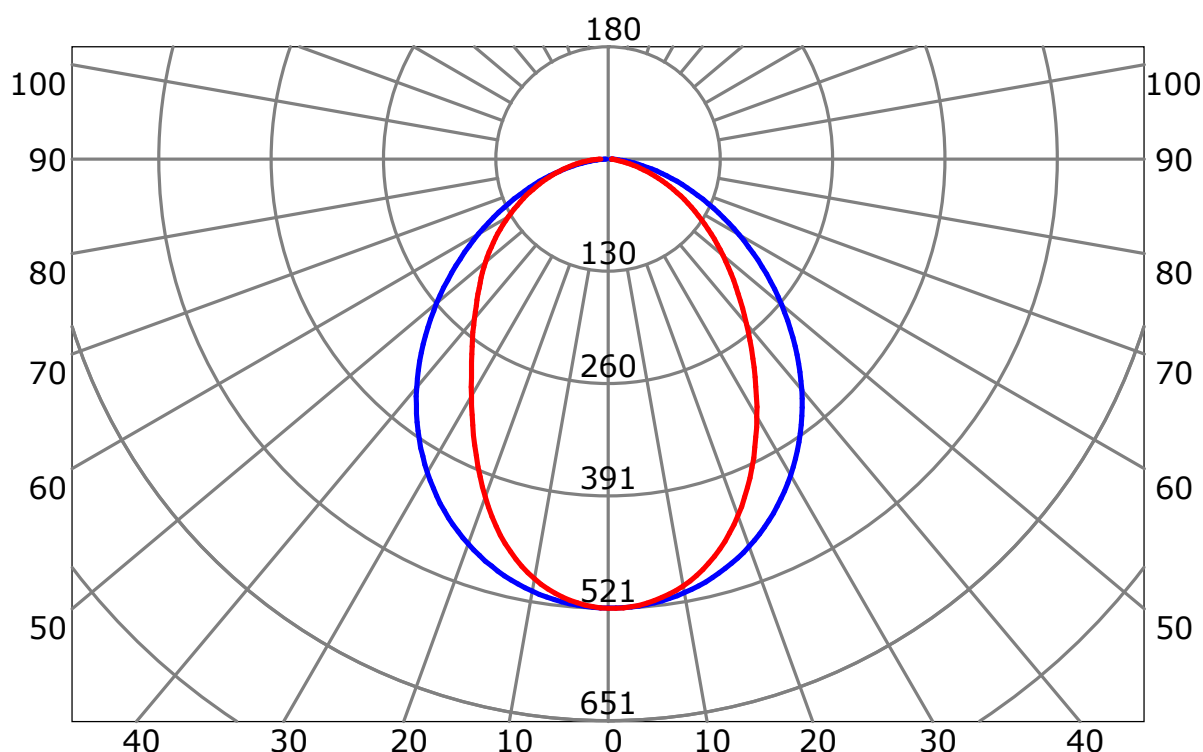
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

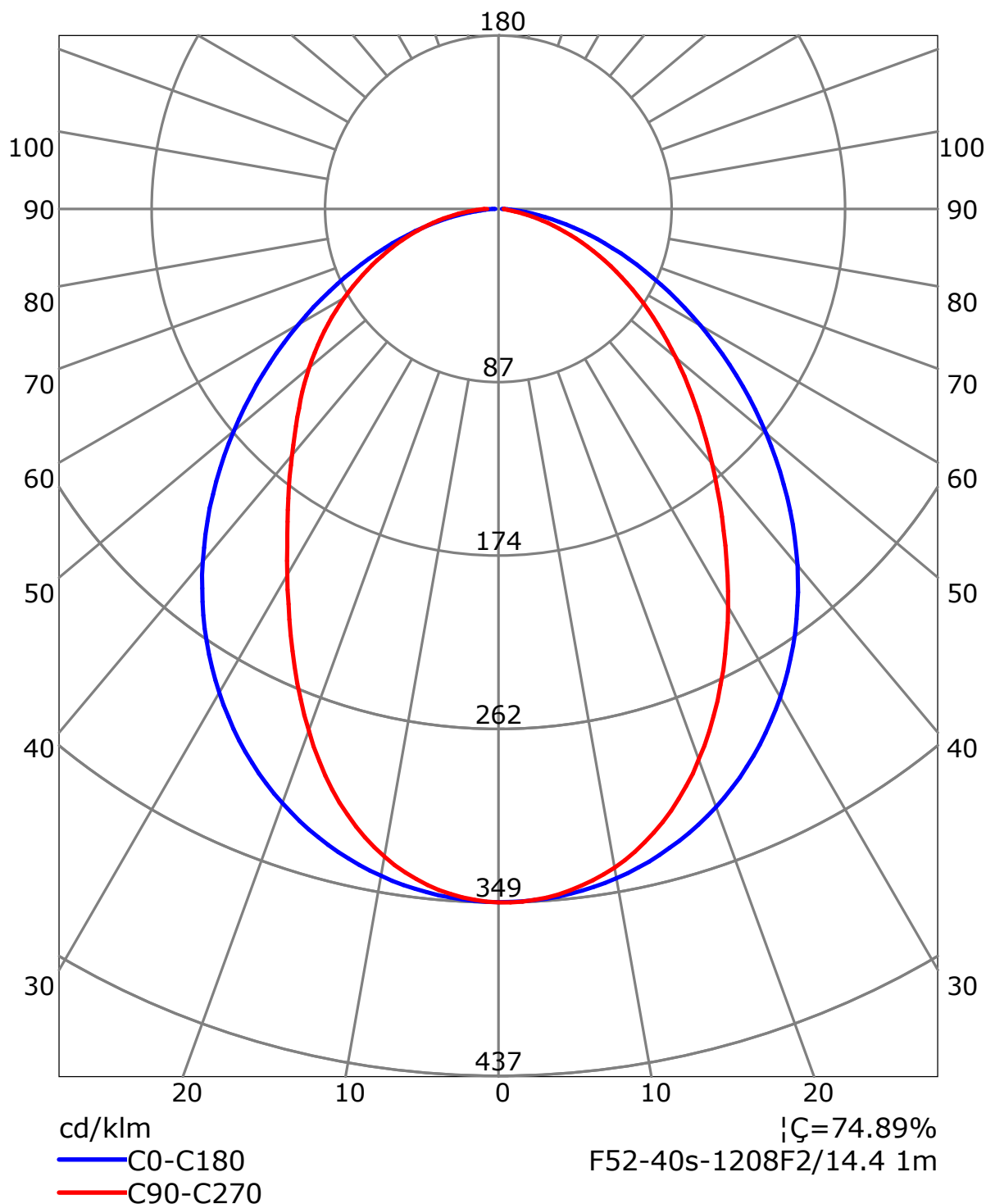
## Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1800B  
 Distance: 7.792 m  
 Humidity:  
 Inspector:

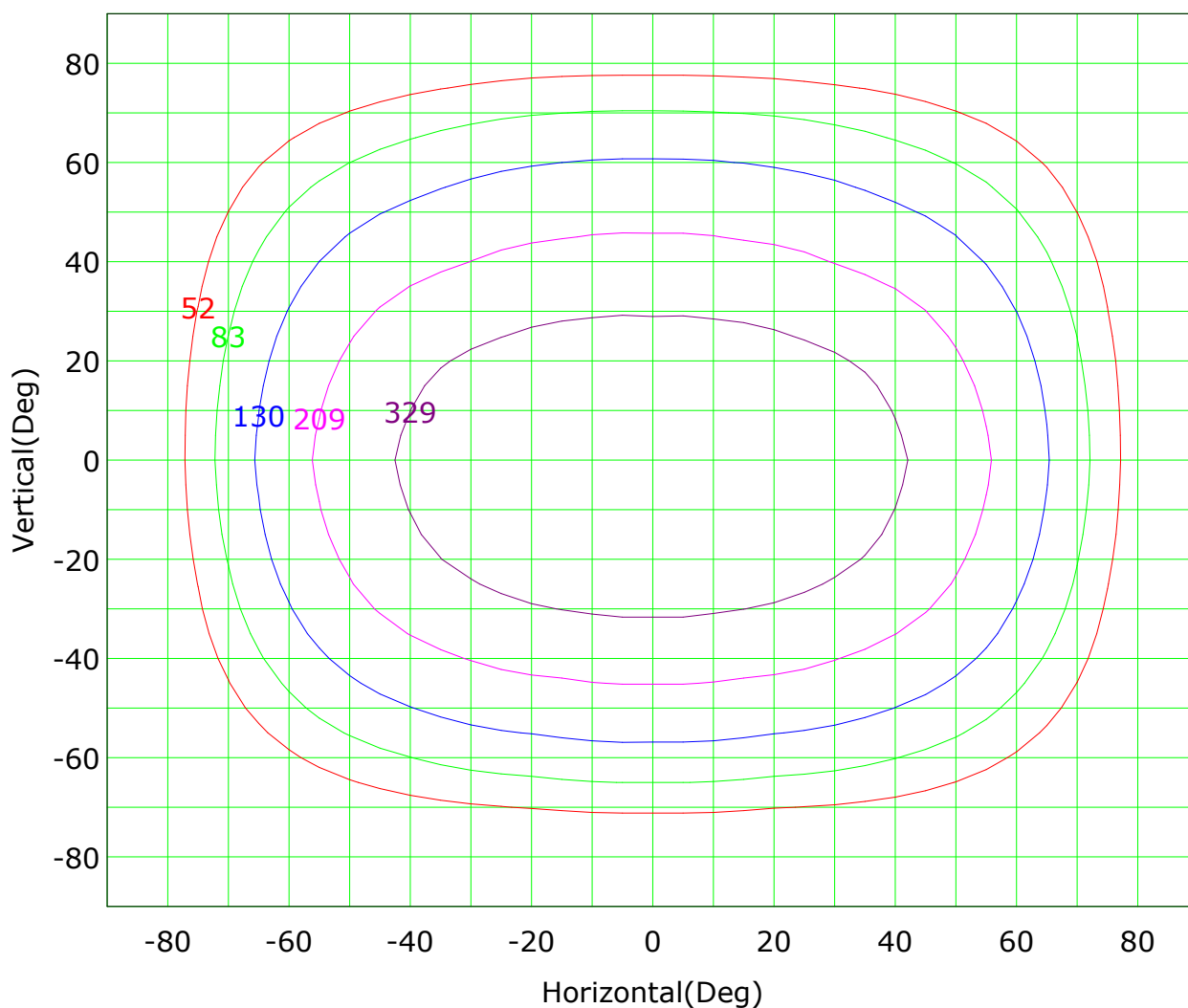
## Luminous Intensity Distribution Curve(cd/klm)



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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

## Isocandela (rectangle)



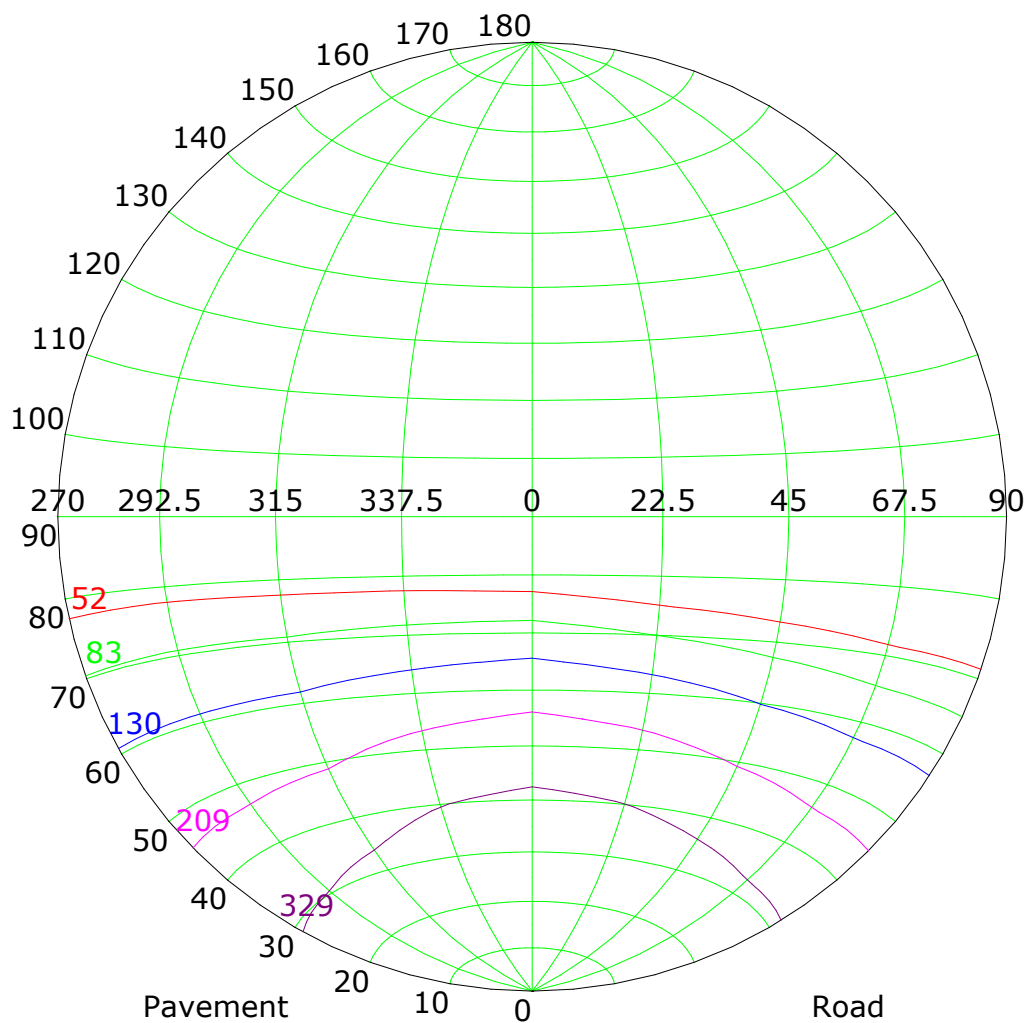
Imax (100%): 522 cd

|         |        |         |        |
|---------|--------|---------|--------|
| ( 10%): | 52 cd  | ( 16%): | 83 cd  |
| ( 25%): | 130 cd | ( 40%): | 209 cd |
| ( 63%): | 329 cd | (100%): | 522 cd |

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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

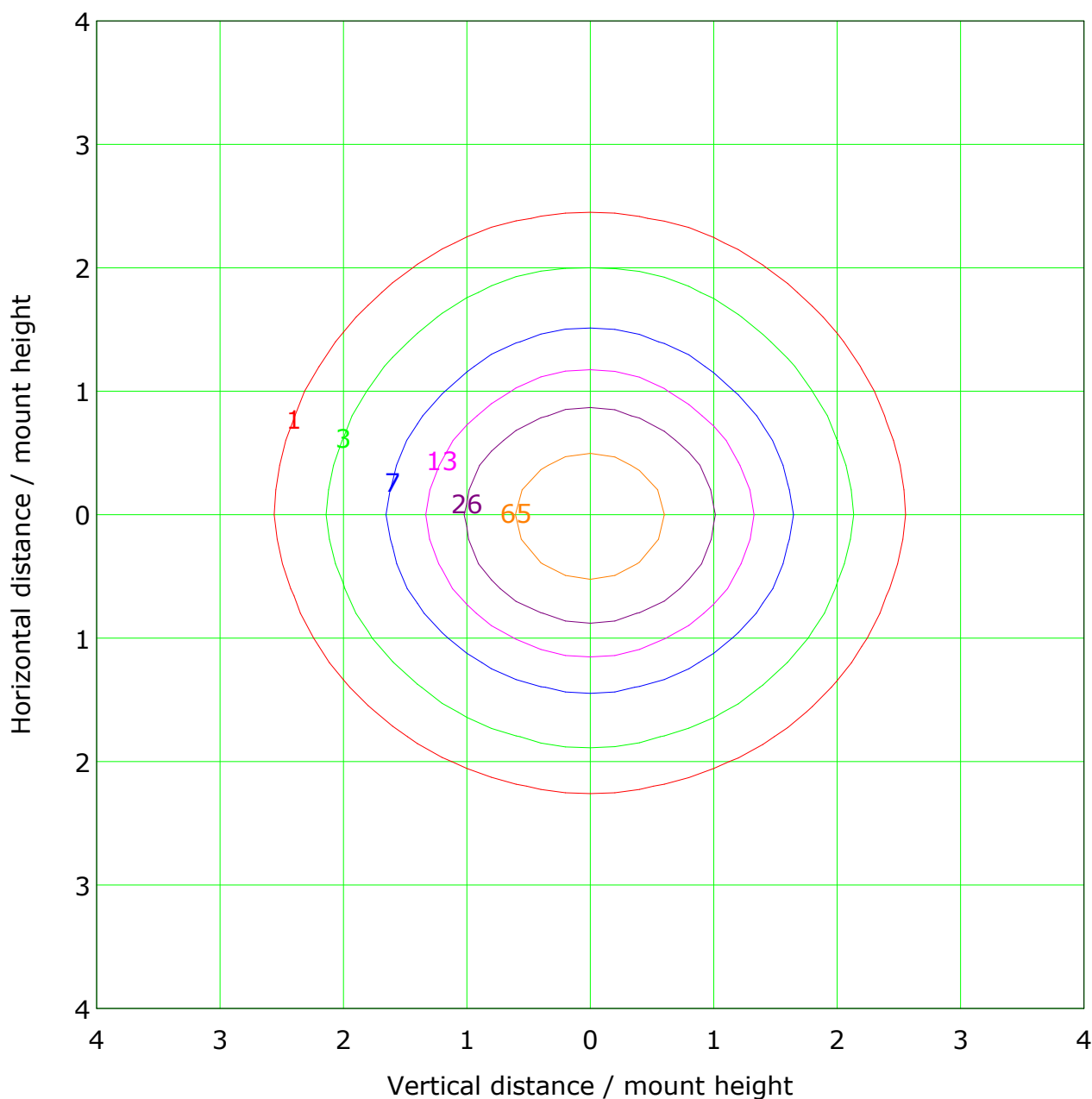
## Isocandela (sphere)



Imax (100%): 522 cd

|                  |                  |
|------------------|------------------|
| — ( 10%): 52 cd  | — ( 16%): 83 cd  |
| — ( 25%): 130 cd | — ( 40%): 209 cd |
| — ( 63%): 329 cd | — (100%): 522 cd |

## IsoLux Plot



|                       |          |                         |         |
|-----------------------|----------|-------------------------|---------|
| Mounting Height: 2.0m |          | Max Lux(100%): 130.4 lx |         |
| — ( 1%):              | 1.3 lx   | — ( 2%):                | 2.6 lx  |
| — ( 5%):              | 6.5 lx   | — ( 10%):               | 13.0 lx |
| — ( 20%):             | 26.1 lx  | — ( 50%):               | 65.2 lx |
| — (100%):             | 130.4 lx |                         |         |

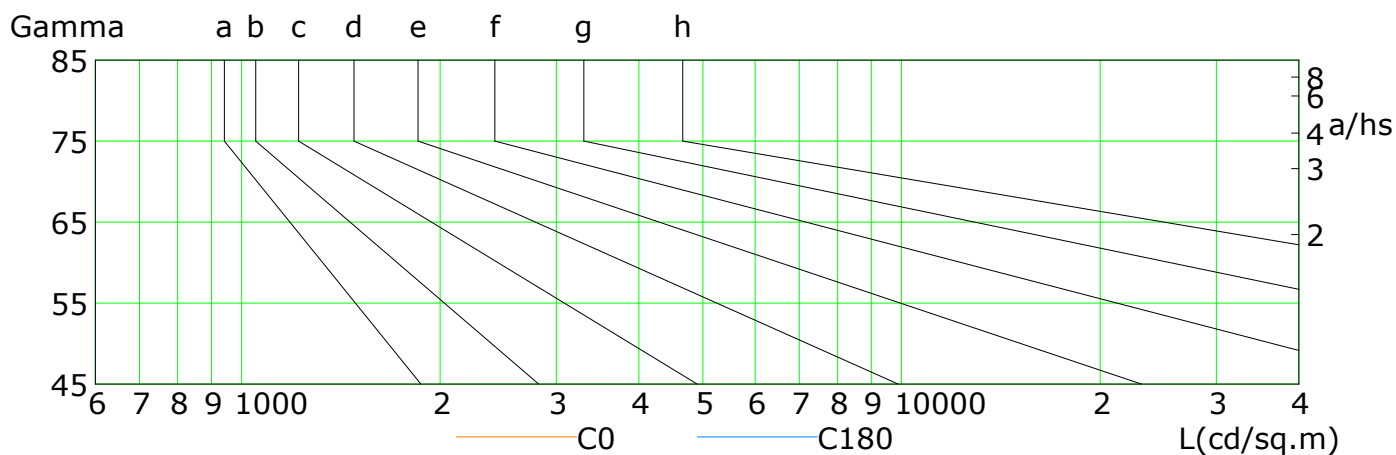
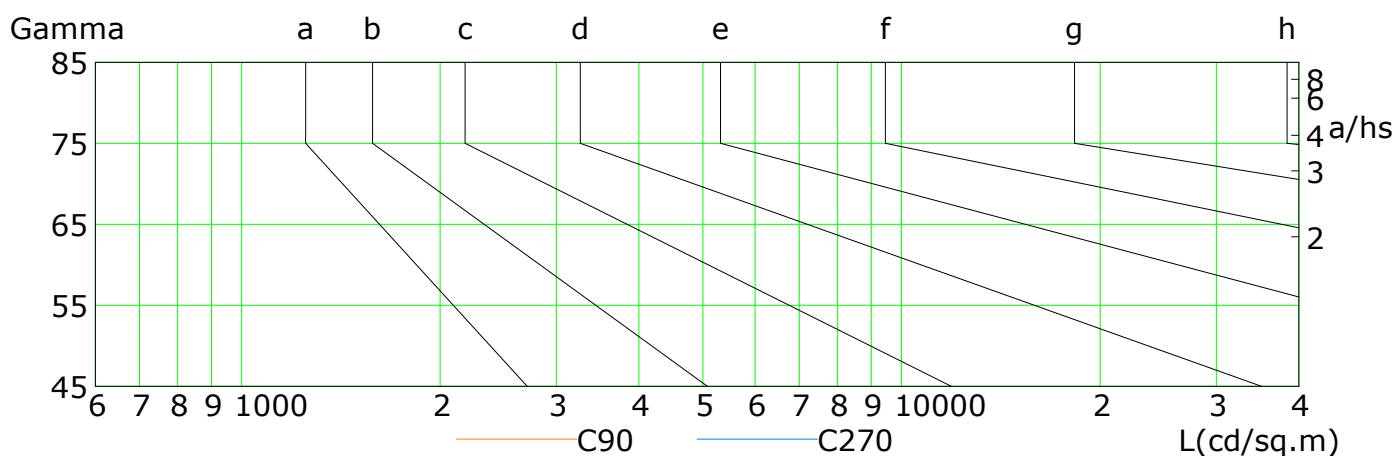
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 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

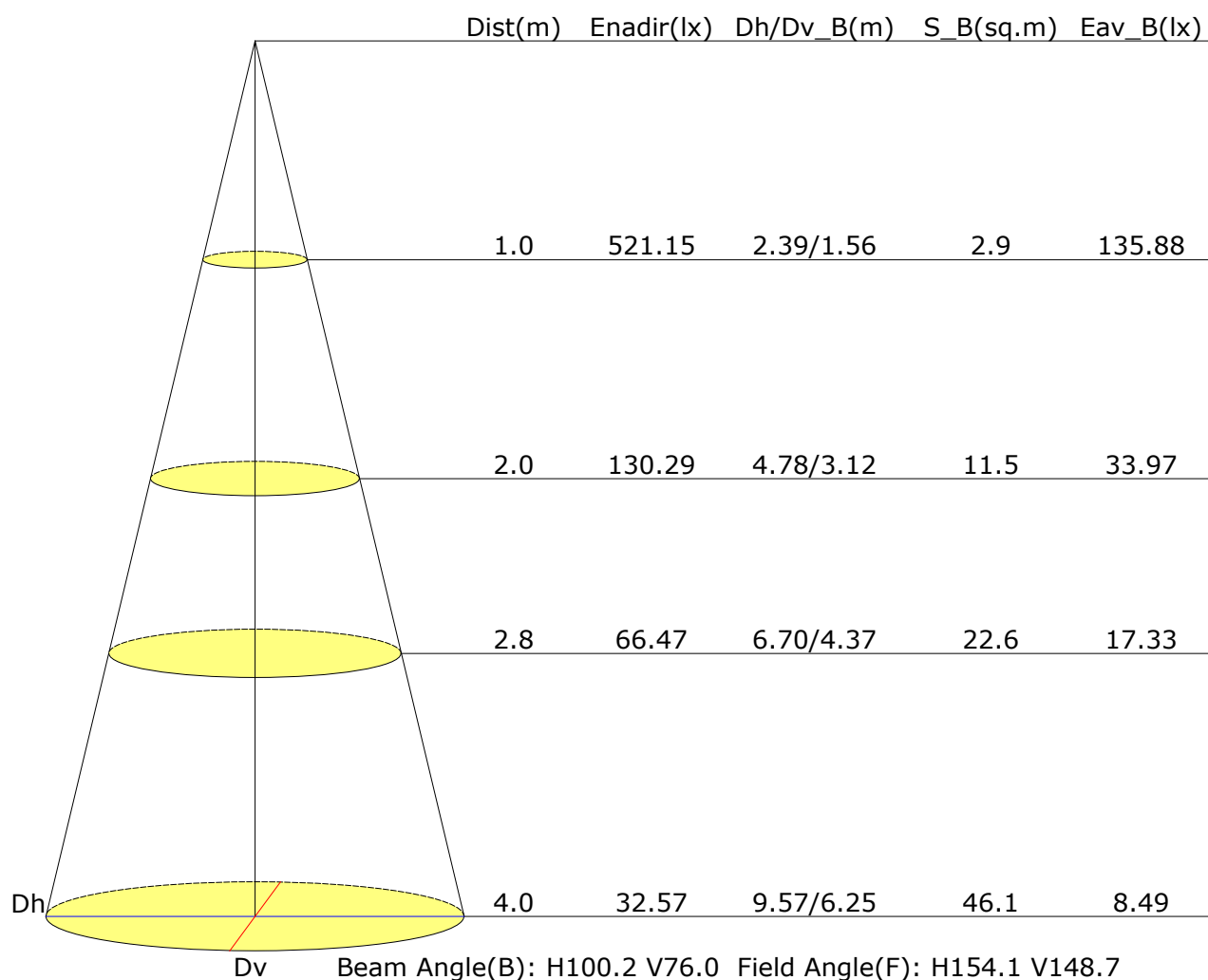


| L(cd/sq.m) | G45 | G50 | G55 | G60 | G65 | G70 | G75 | G80 | G85 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| C0         | 307 | 263 | 218 | 176 | 135 | 98  | 65  | 36  | 13  |
| C90        | 210 | 174 | 142 | 112 | 84  | 58  | 34  | 16  | 5   |
| C180       | 304 | 260 | 216 | 174 | 134 | 98  | 65  | 36  | 14  |
| C270       | 212 | 186 | 160 | 134 | 109 | 85  | 63  | 42  | 23  |

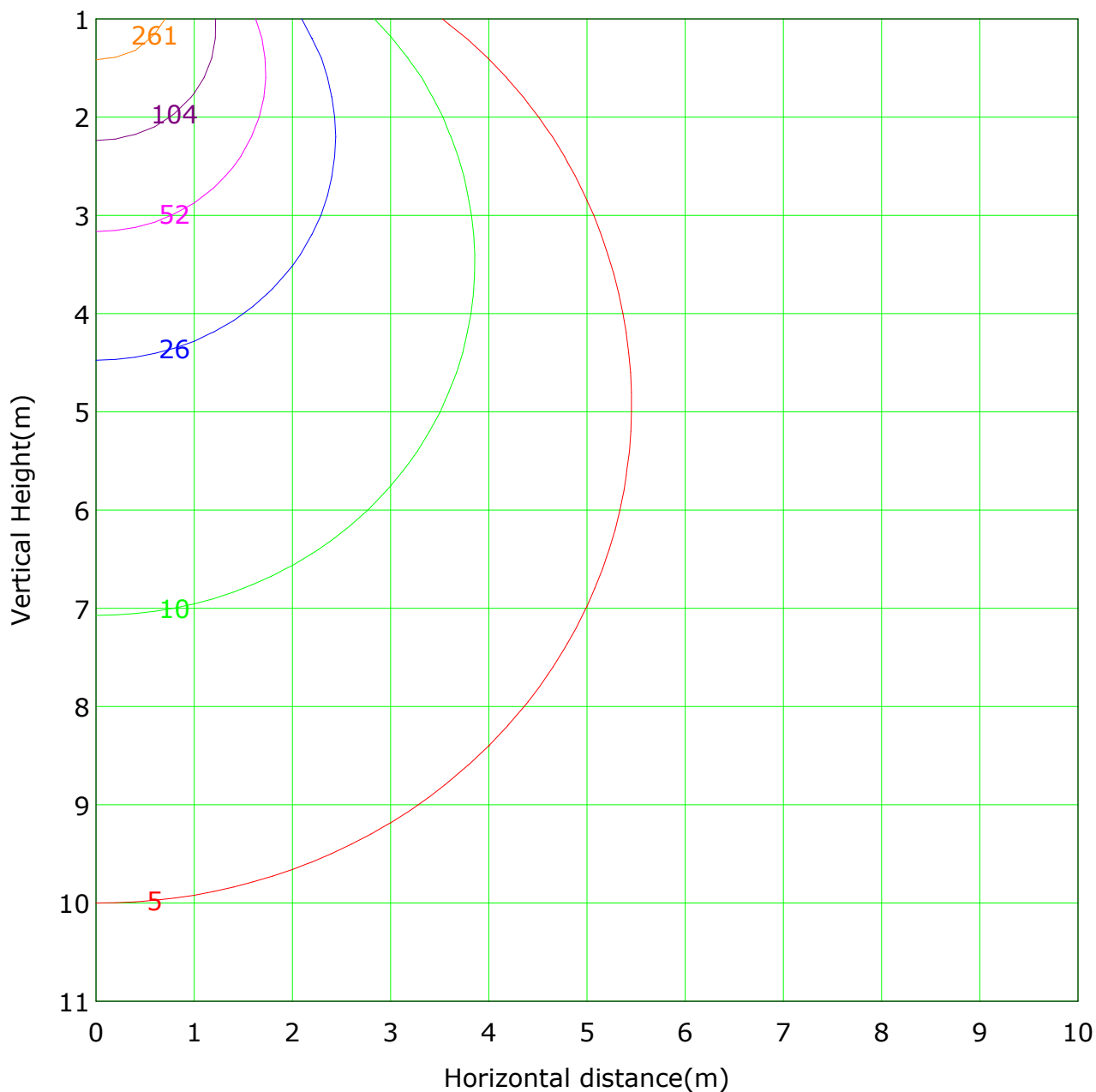
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 521.2 lx

|                    |                    |
|--------------------|--------------------|
| — ( 1%): 5.2 lx    | — ( 2%): 10.4 lx   |
| — ( 5%): 26.1 lx   | — ( 10%): 52.1 lx  |
| — ( 20%): 104.2 lx | — ( 50%): 260.6 lx |
| — (100%): 521.2 lx |                    |

Report No.:

Test Time: 03/10/2024 11:47

## Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-DW14-03+LLD-03-FM

Lamp Description: F52-40s-1208F2/14.4 1m Number of Lamps: 1

Lumens per Lamp: 1491

Voltage: 24.0 V

Current: 0.563 A

Power: 13.52 W

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 904.4 lm

Downward Ratio: 60.66%

Total Rated Lamp Lumens: 1491.0 lm

Efficiency: 60.66%

Upward Ratio: 0.00%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.6, 161.7, 160.4, 161.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.7, 111.0, 111.7, 111.1

Luminaire Efficacy Rating (LER): 66.94

Central Intensity: 320.6 cd

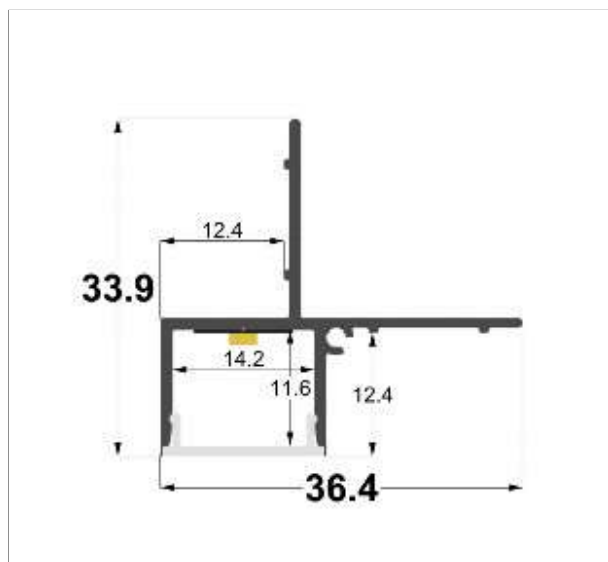
Max. Intensity: 321.31 cd

Pos of Max. Intensity: H135 V1

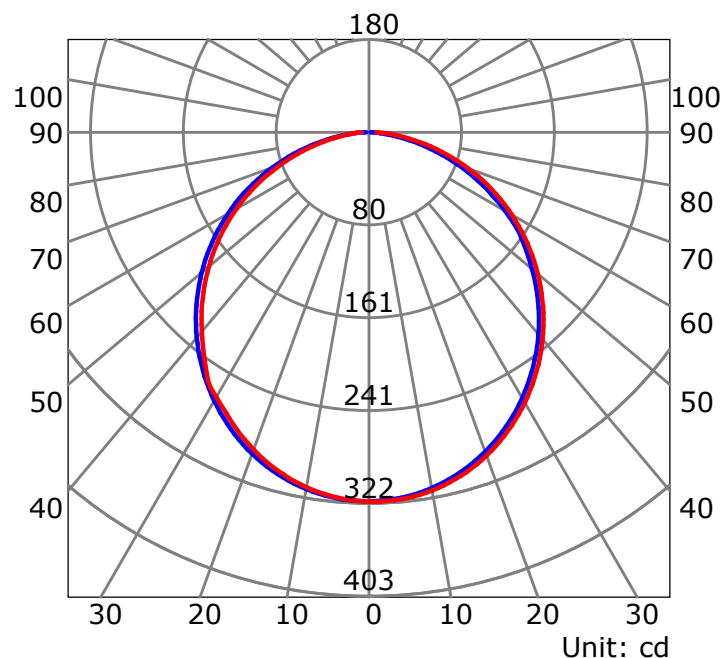
S/MH(C0/C180): 1.24

S/MH(C90/C270): 1.25

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 (°):0.0-90.0:1.0

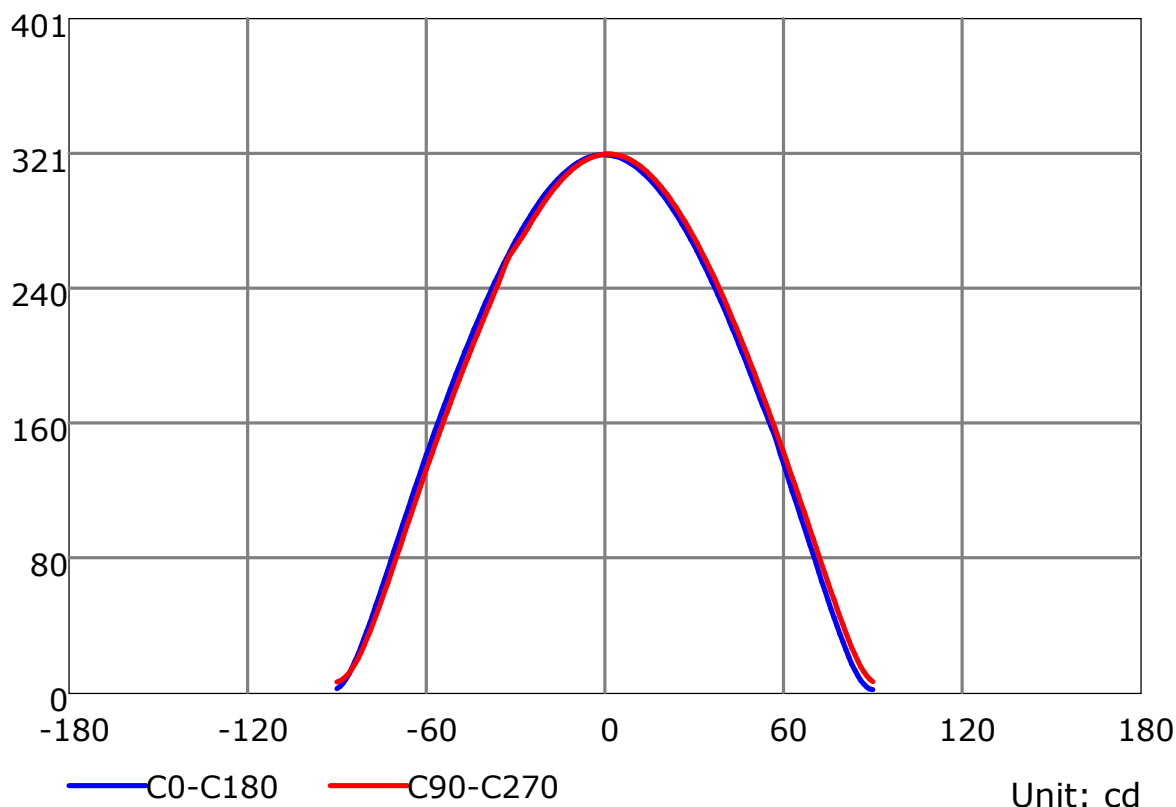
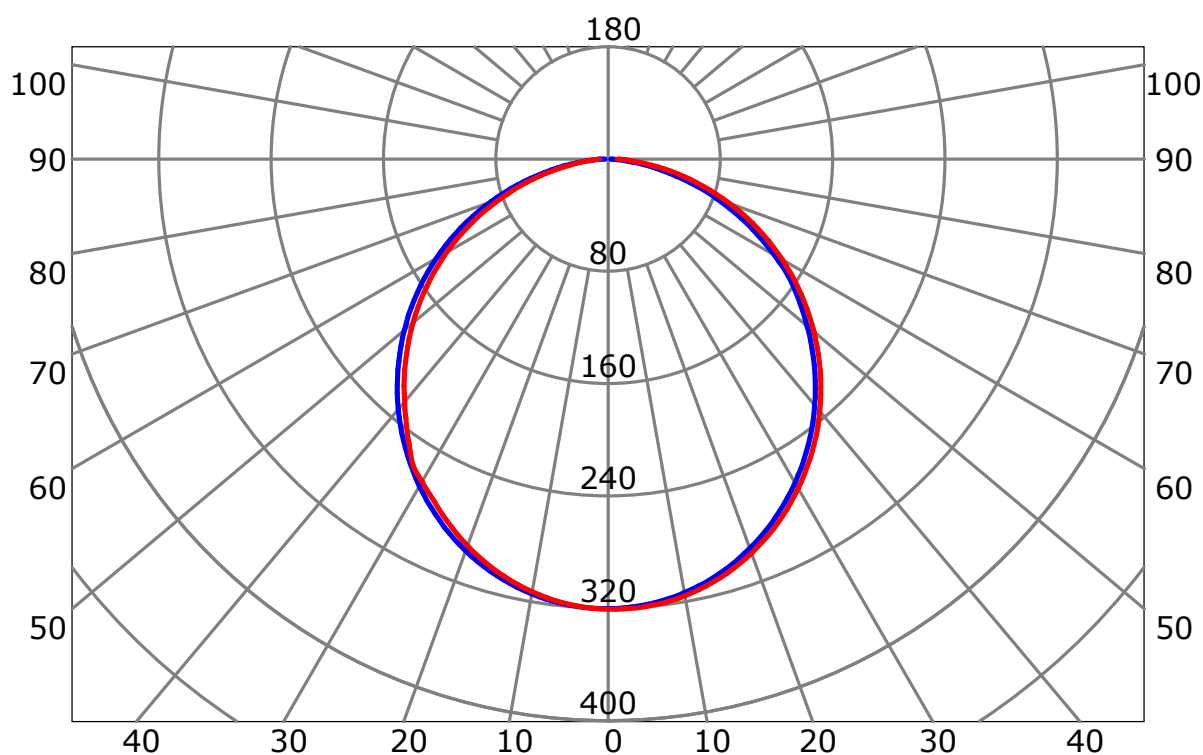
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

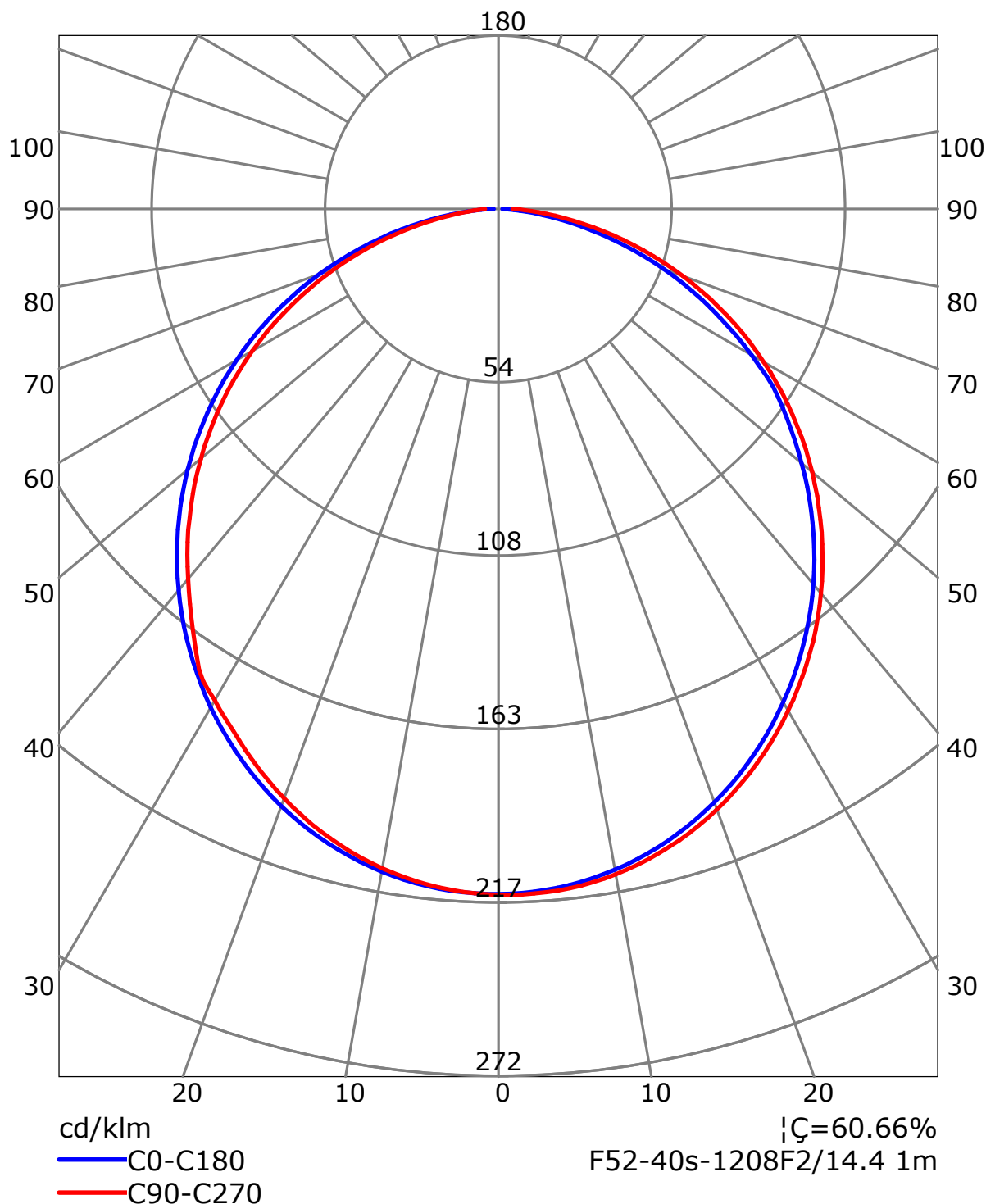
## Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

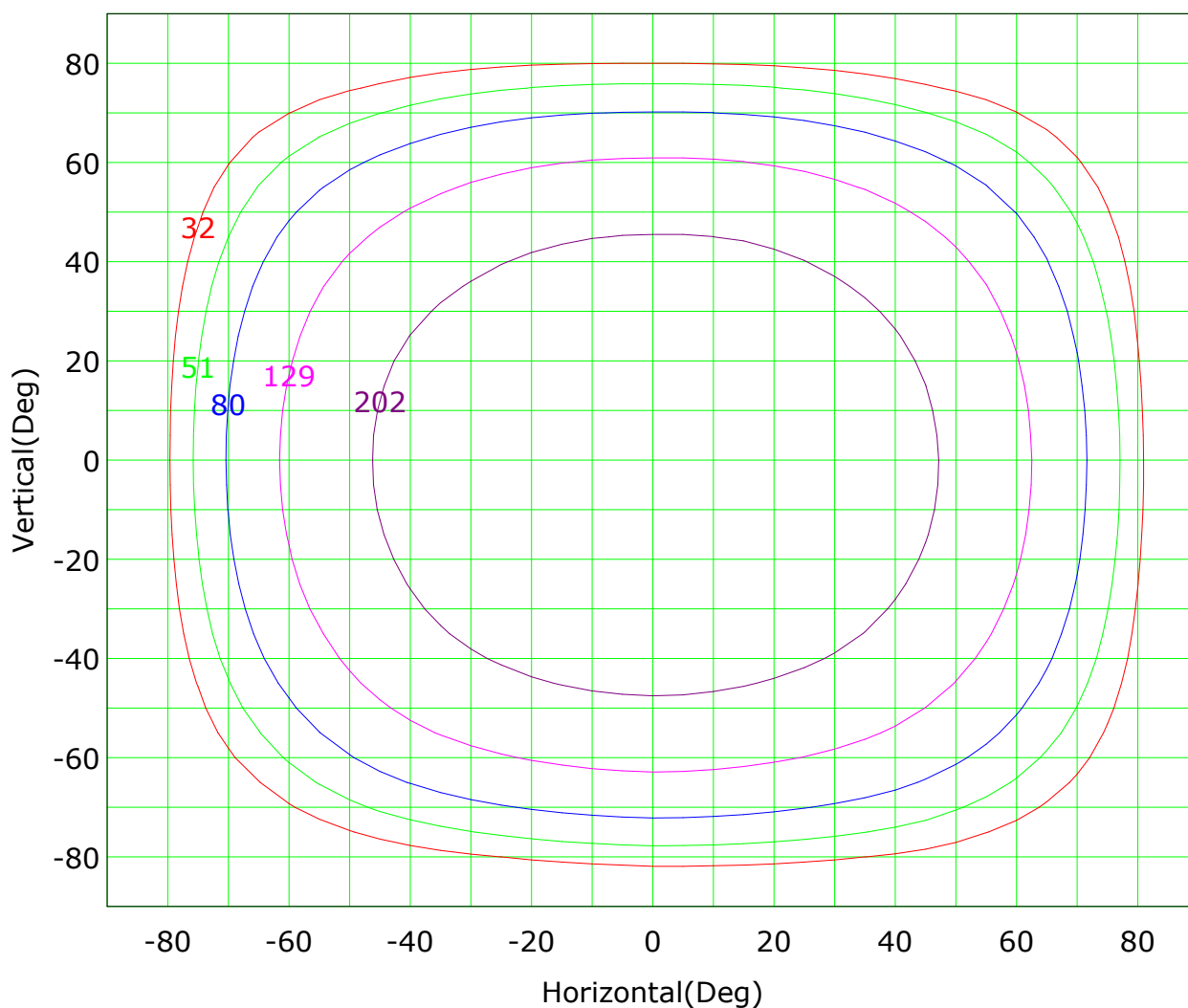
## Luminous Intensity Distribution Curve(cd/klm)



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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1800B  
 Distance: 7.792 m  
 Humidity:  
 Inspector:

## Isocandela (rectangle)



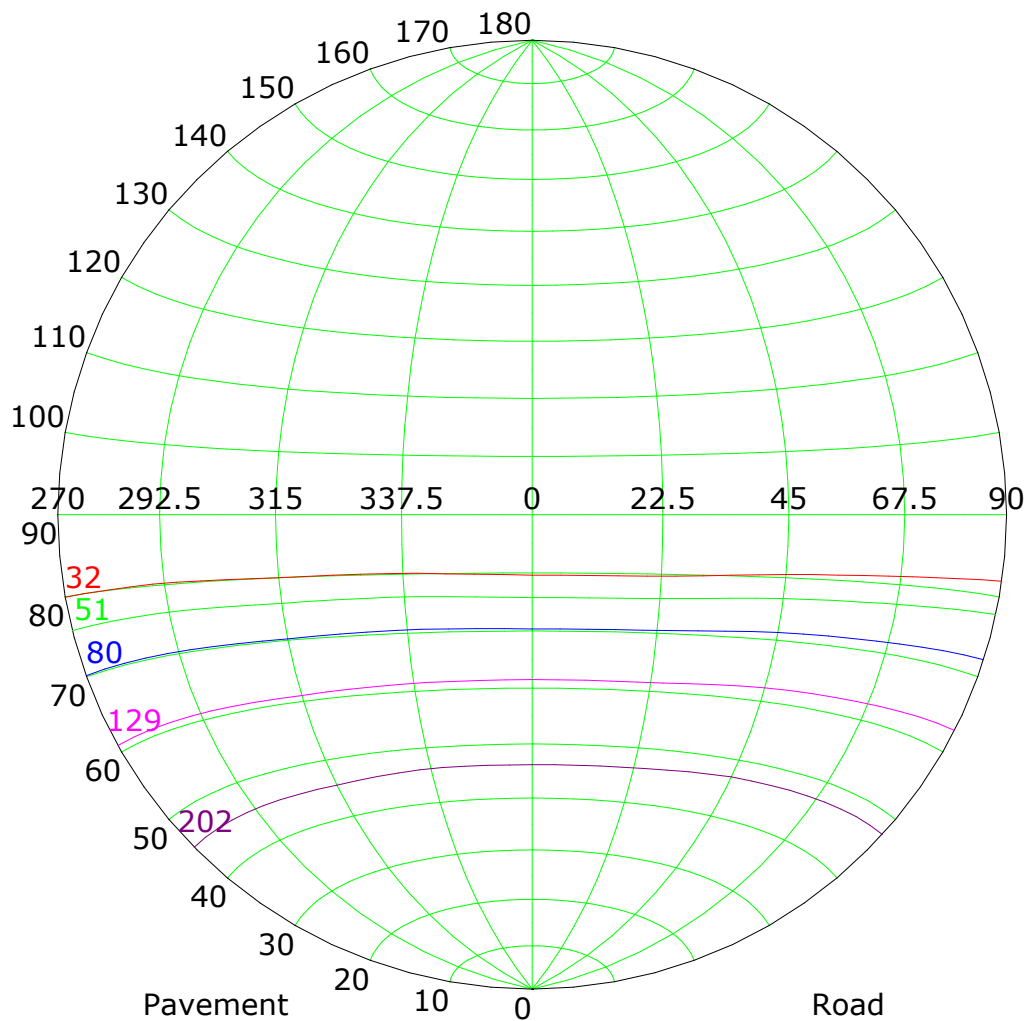
Imax (100%): 321 cd

|         |        |         |        |
|---------|--------|---------|--------|
| ( 10%): | 32 cd  | ( 16%): | 51 cd  |
| ( 25%): | 80 cd  | ( 40%): | 129 cd |
| ( 63%): | 202 cd | (100%): | 321 cd |

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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

## Isocandela (sphere)



Imax (100%): 321 cd

|         |        |         |        |
|---------|--------|---------|--------|
| ( 10%): | 32 cd  | ( 16%): | 51 cd  |
| ( 25%): | 80 cd  | ( 40%): | 129 cd |
| ( 63%): | 202 cd | (100%): | 321 cd |

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

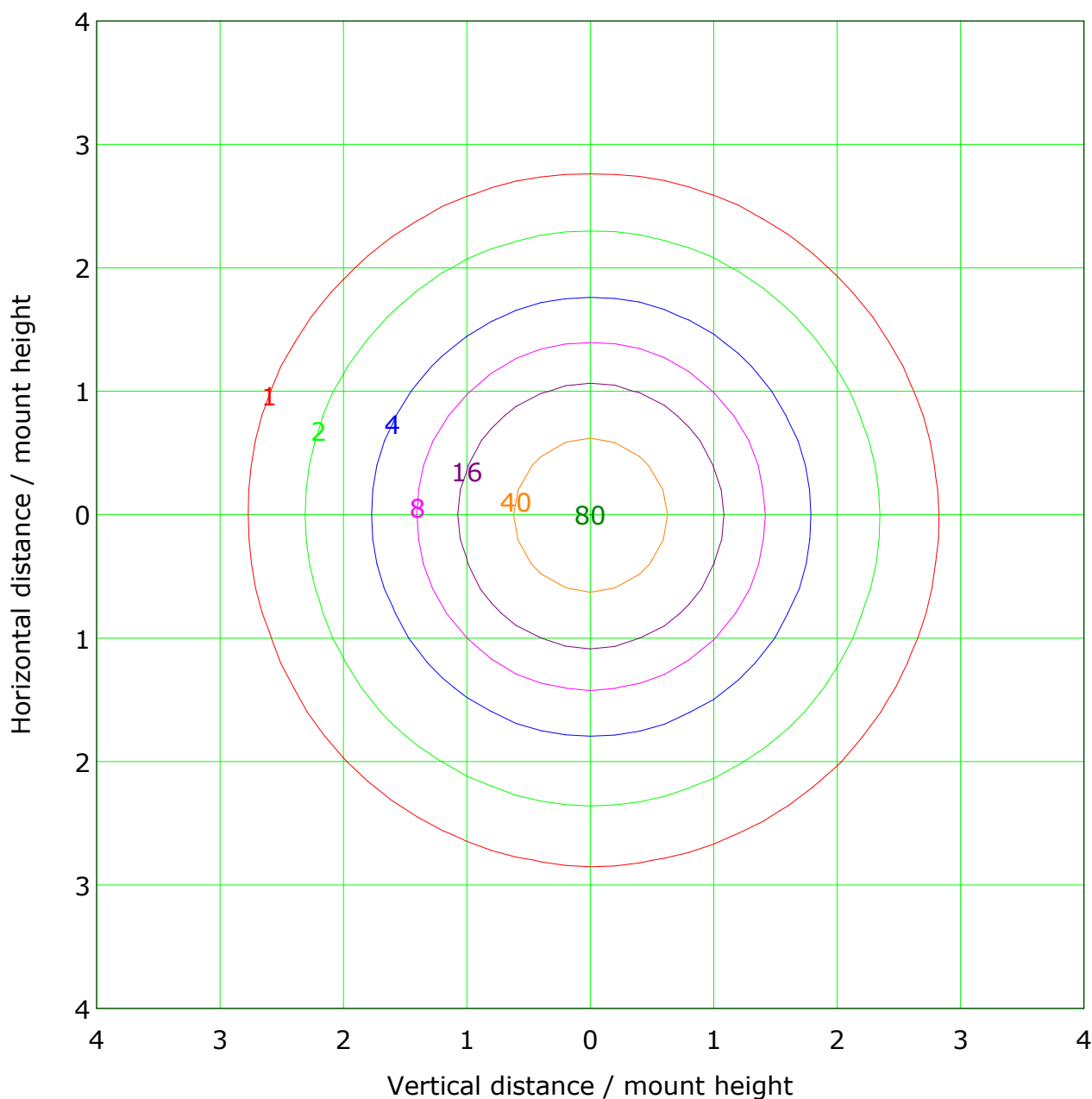
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

## IsoLux Plot



|                       |         |                        |         |
|-----------------------|---------|------------------------|---------|
| Mounting Height: 2.0m |         | Max Lux(100%): 80.3 lx |         |
| — ( 1%):              | 0.8 lx  | — ( 2%):               | 1.6 lx  |
| — ( 5%):              | 4.0 lx  | — ( 10%):              | 8.0 lx  |
| — ( 20%):             | 16.1 lx | — ( 50%):              | 40.2 lx |
| — (100%):             | 80.3 lx |                        |         |

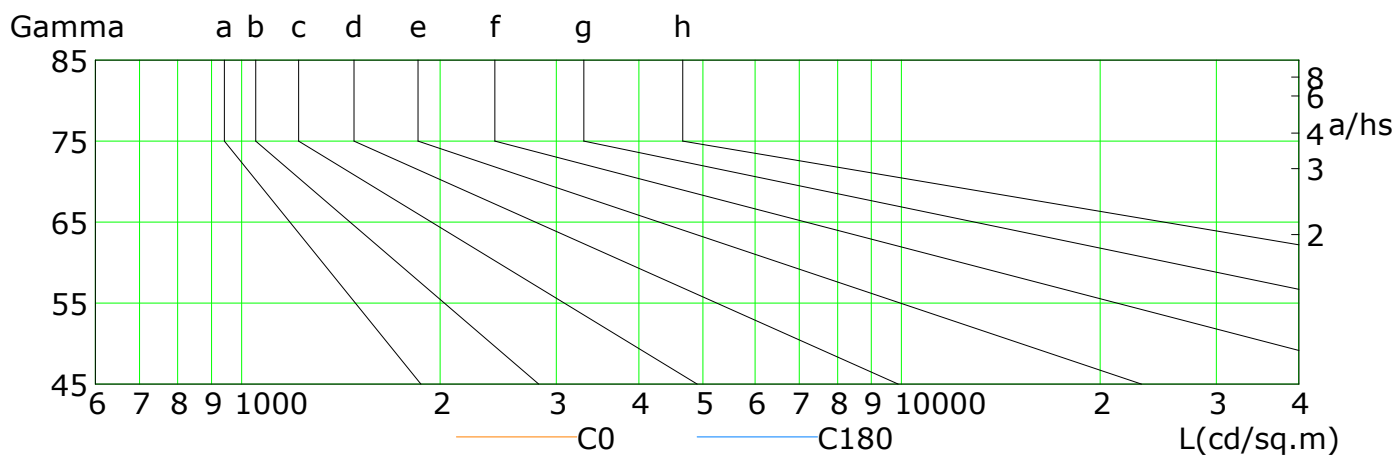
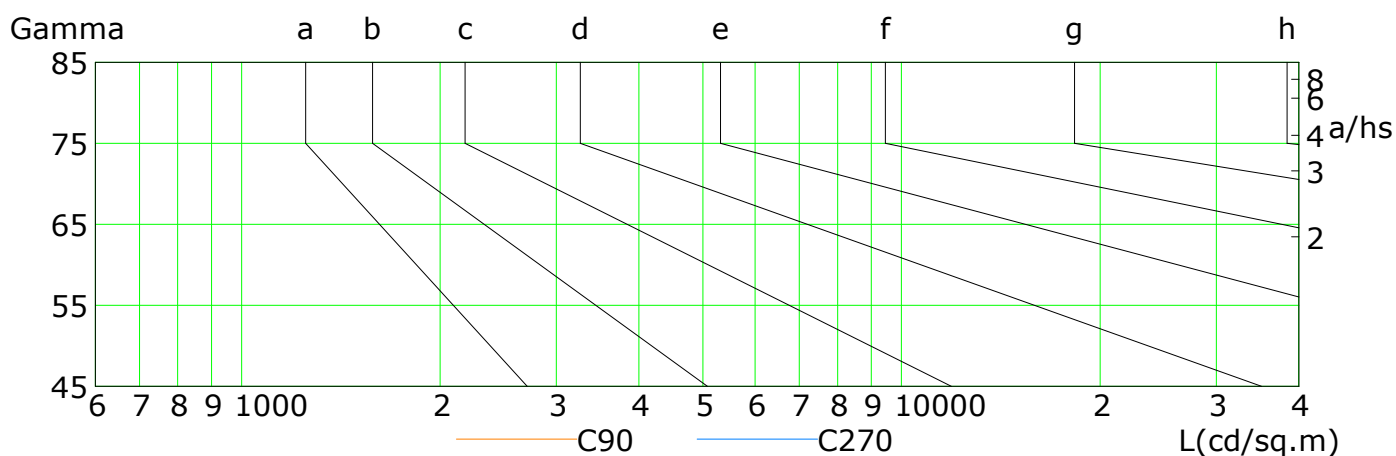
C Plane (°):0.0-360.0: 22.5  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1800B  
 Distance: 7.792 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 |

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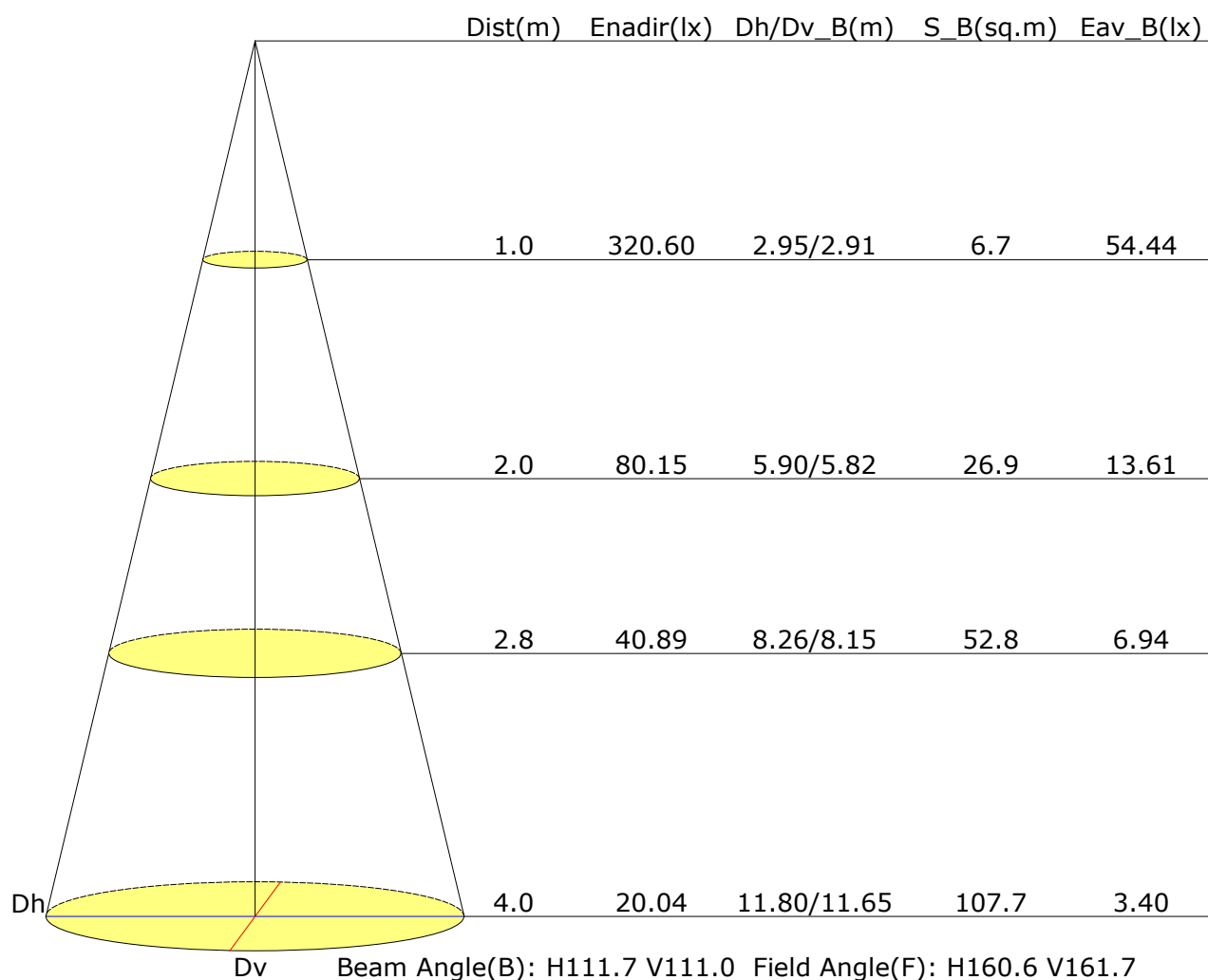


| L(cd/sq.m) | G45 | G50 | G55 | G60 | G65 | G70 | G75 | G80 | G85 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| C0         | 208 | 185 | 163 | 137 | 110 | 82  | 55  | 30  | 10  |
| C90        | 214 | 192 | 168 | 143 | 118 | 92  | 66  | 40  | 19  |
| C180       | 212 | 190 | 166 | 142 | 116 | 89  | 62  | 36  | 15  |
| C270       | 204 | 182 | 158 | 133 | 107 | 81  | 55  | 32  | 14  |

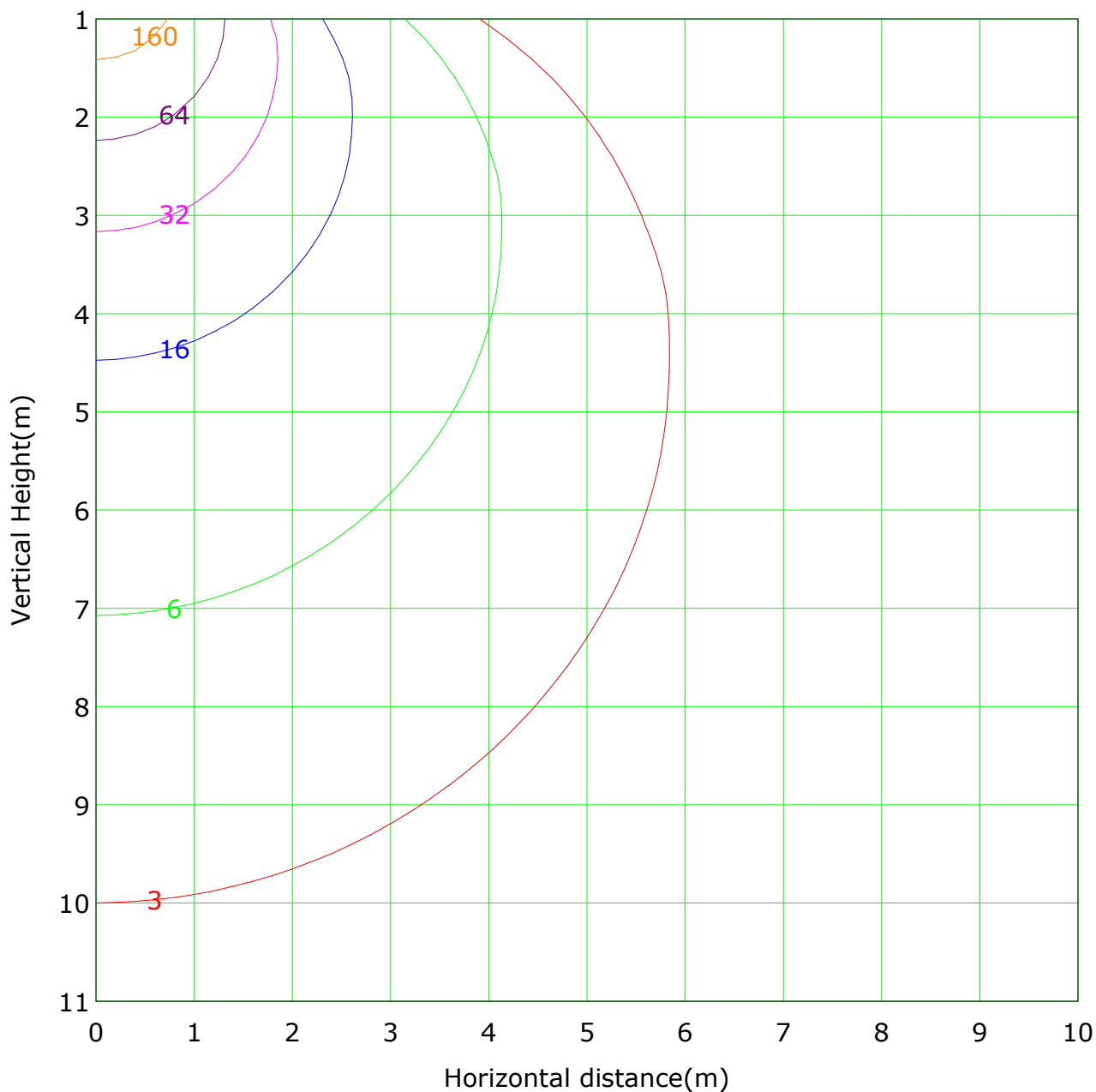
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 320.6 lx

|                  |                  |
|------------------|------------------|
| ( 1%): 3.2 lx    | ( 2%): 6.4 lx    |
| ( 5%): 16.0 lx   | ( 10%): 32.1 lx  |
| ( 20%): 64.1 lx  | ( 50%): 160.3 lx |
| (100%): 320.6 lx |                  |

Report No.:

Test Time: 03/10/2024 12:10

## Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-DW14-03+LLD-03-FW

Lamp Description: F52-40s-1208F2/14.4 1m Number of Lamps: 1

Lumens per Lamp: 1491

Voltage: 24.0 V

Current: 0.561 A

Power: 13.45 W

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 714.4 lm

Downward Ratio: 47.91%

Total Rated Lamp Lumens: 1491.0 lm

Efficiency: 47.91%

Upward Ratio: 0.00%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 165.3, 165.3, 165.7, 164.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 114.3, 114.3, 114.2, 114.2

Luminaire Efficacy Rating (LER): 53.16

Central Intensity: 242.25 cd

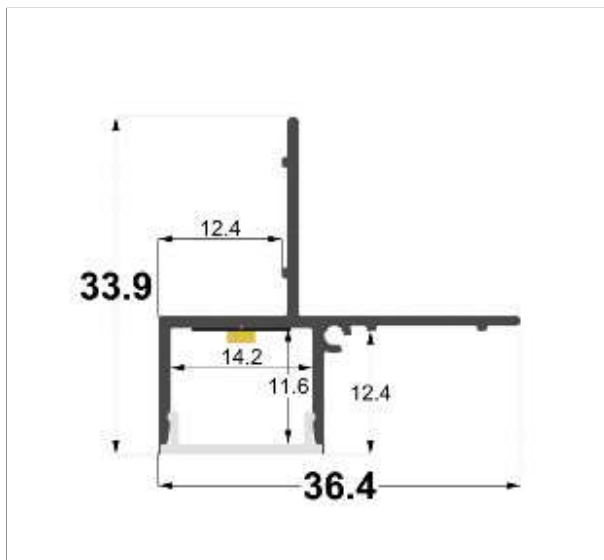
Max. Intensity: 242.39 cd

Pos of Max. Intensity: H157.5 V0

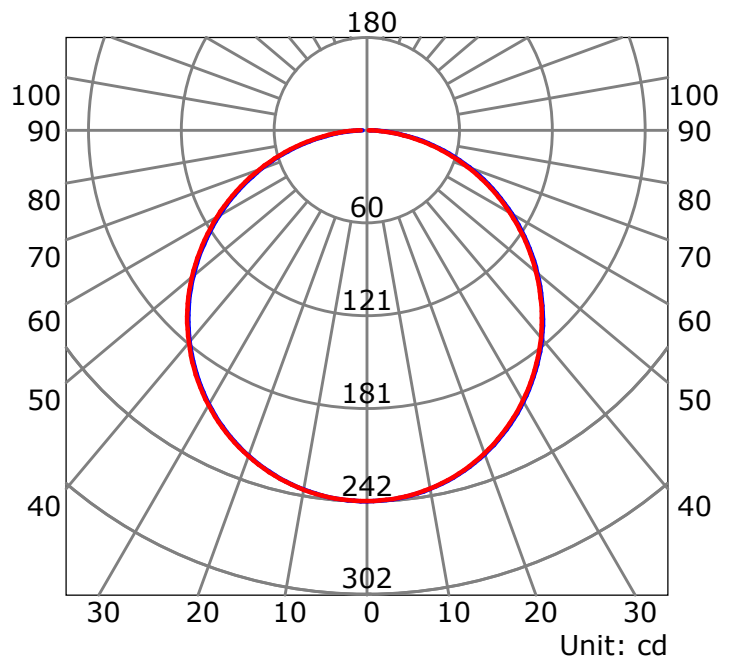
S/MH(C0/C180): 1.26

S/MH(C90/C270): 1.26

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 (°):0.0-90.0:1.0

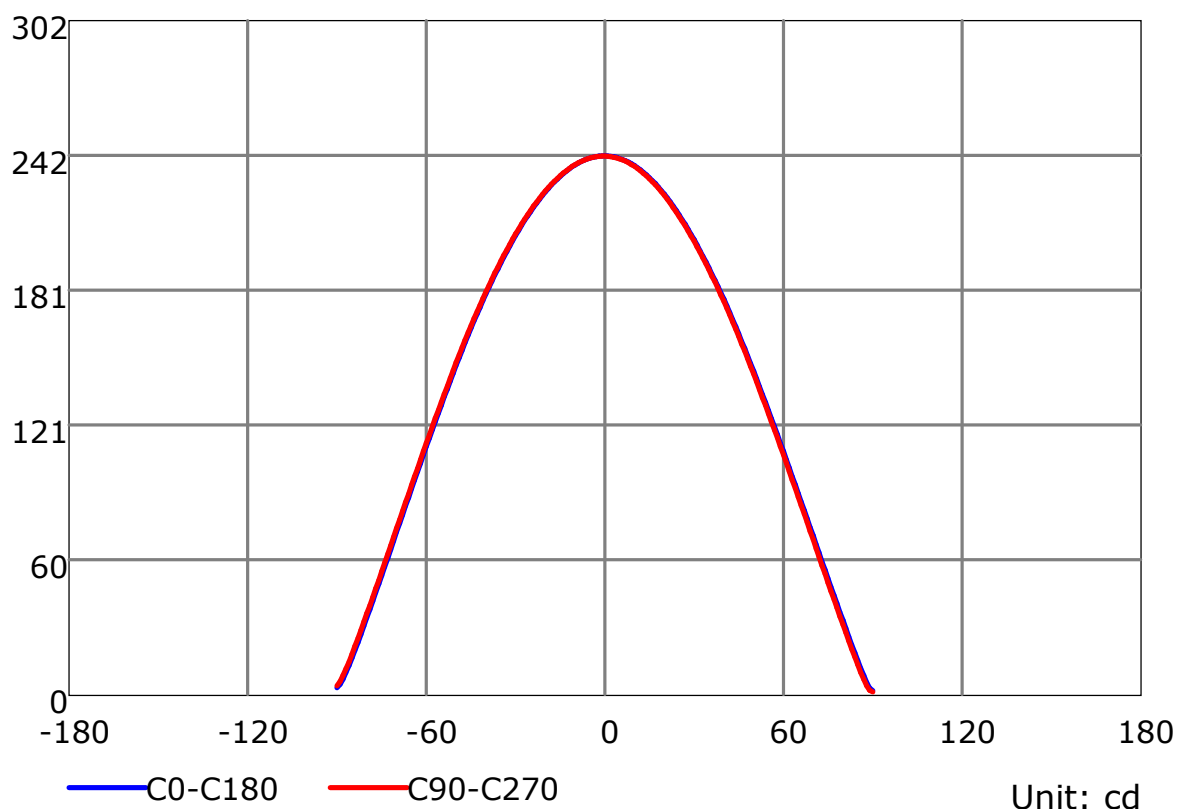
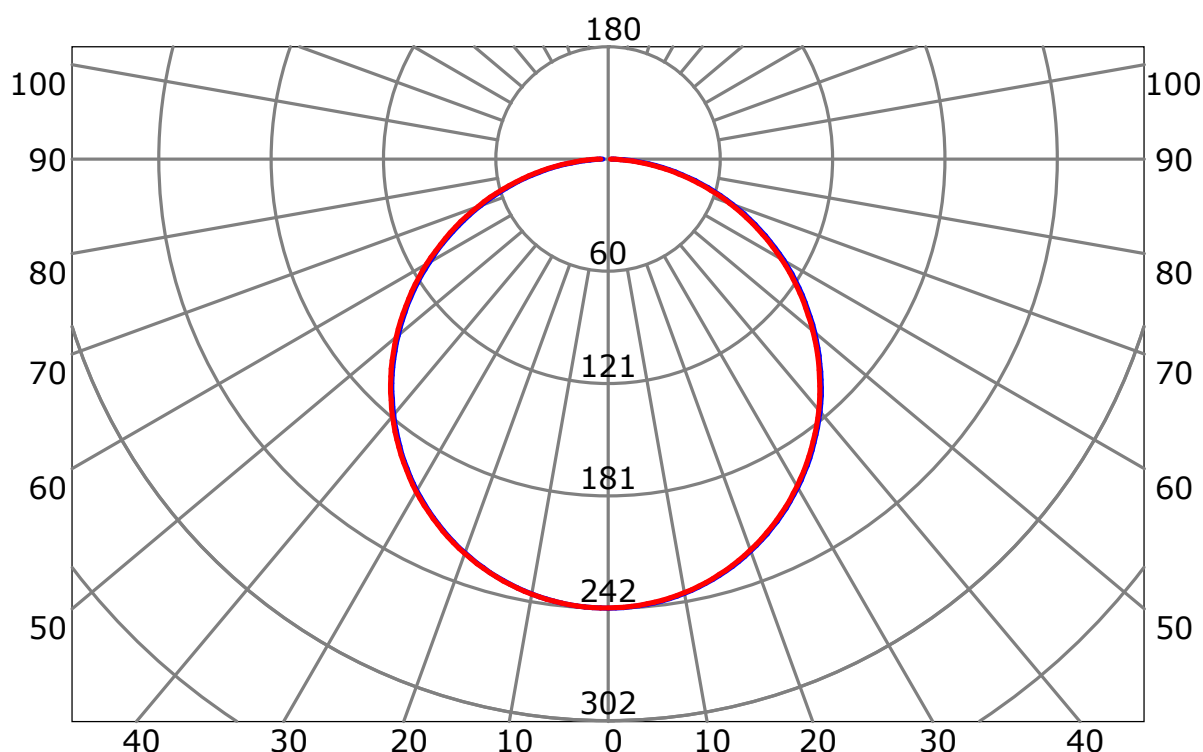
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

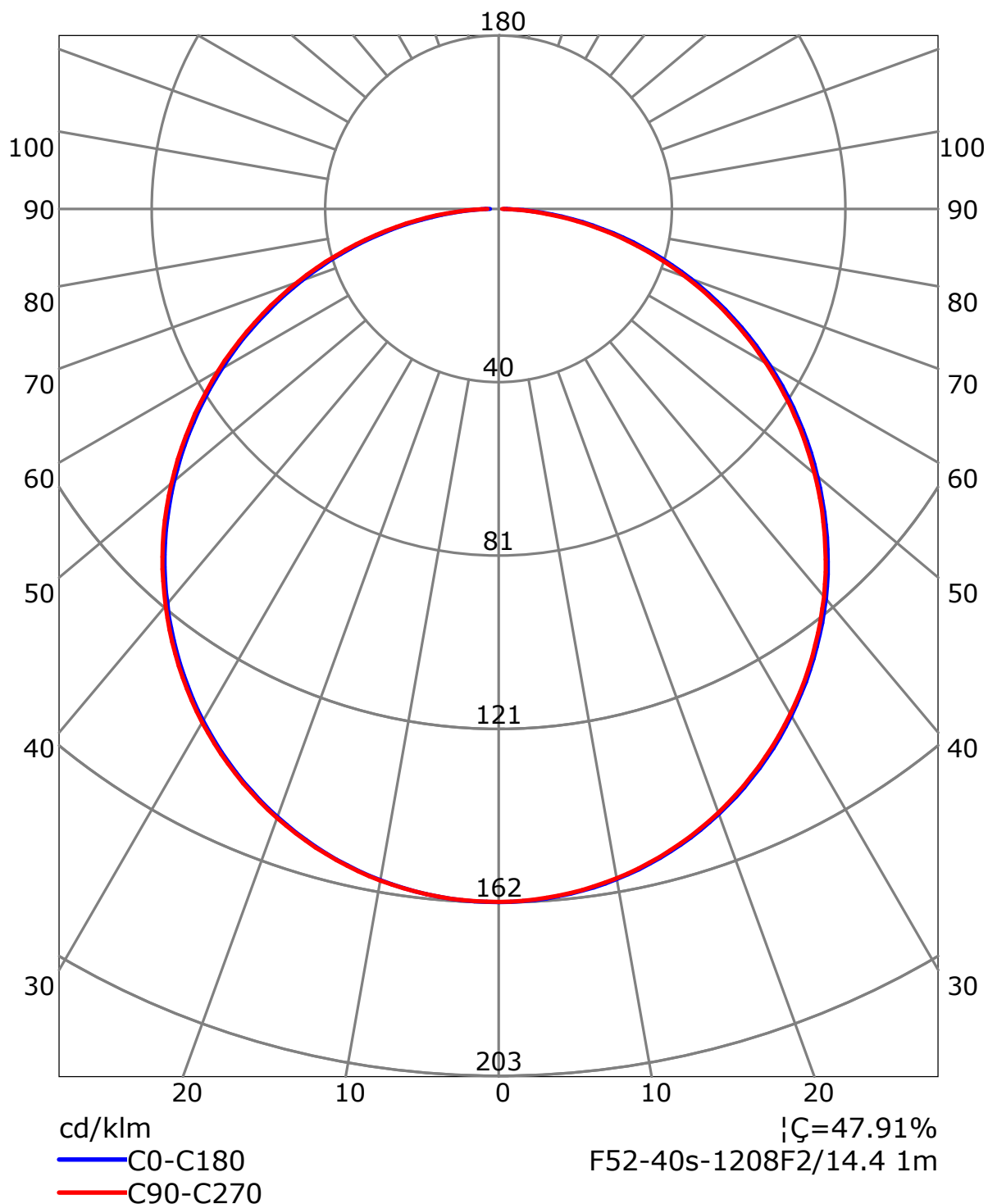
## Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1800B  
 Distance: 7.792 m  
 Humidity:  
 Inspector:

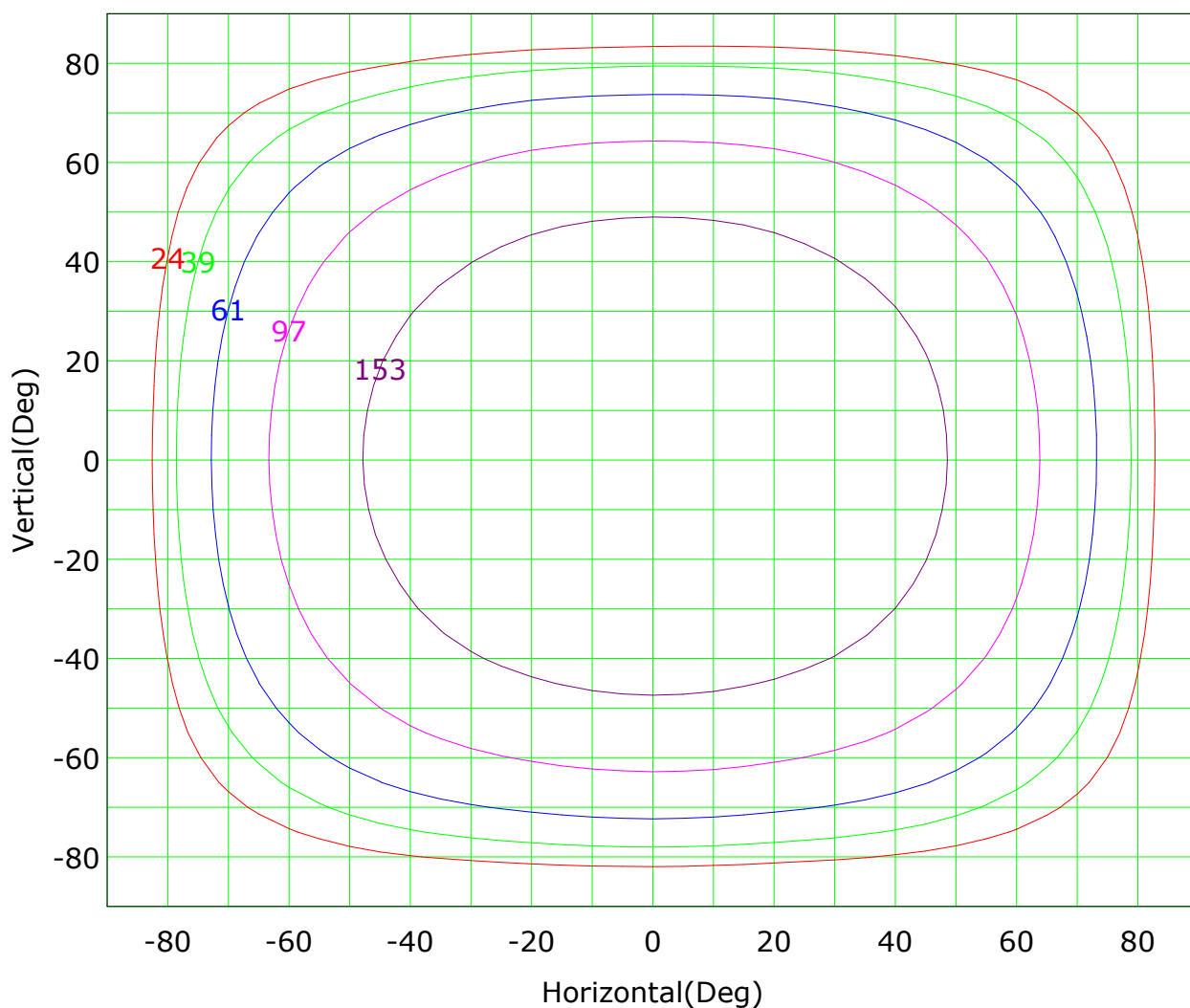
## Luminous Intensity Distribution Curve(cd/klm)



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

Gamma Plane (°):0.0-90.0:1.0  
 Test Device: GPM-1800B  
 Distance: 7.792 m  
 Humidity:  
 Inspector:

## Isocandela (rectangle)



Imax (100%): 242 cd

|         |        |         |        |
|---------|--------|---------|--------|
| ( 10%): | 24 cd  | ( 16%): | 39 cd  |
| ( 25%): | 61 cd  | ( 40%): | 97 cd  |
| ( 63%): | 153 cd | (100%): | 242 cd |

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

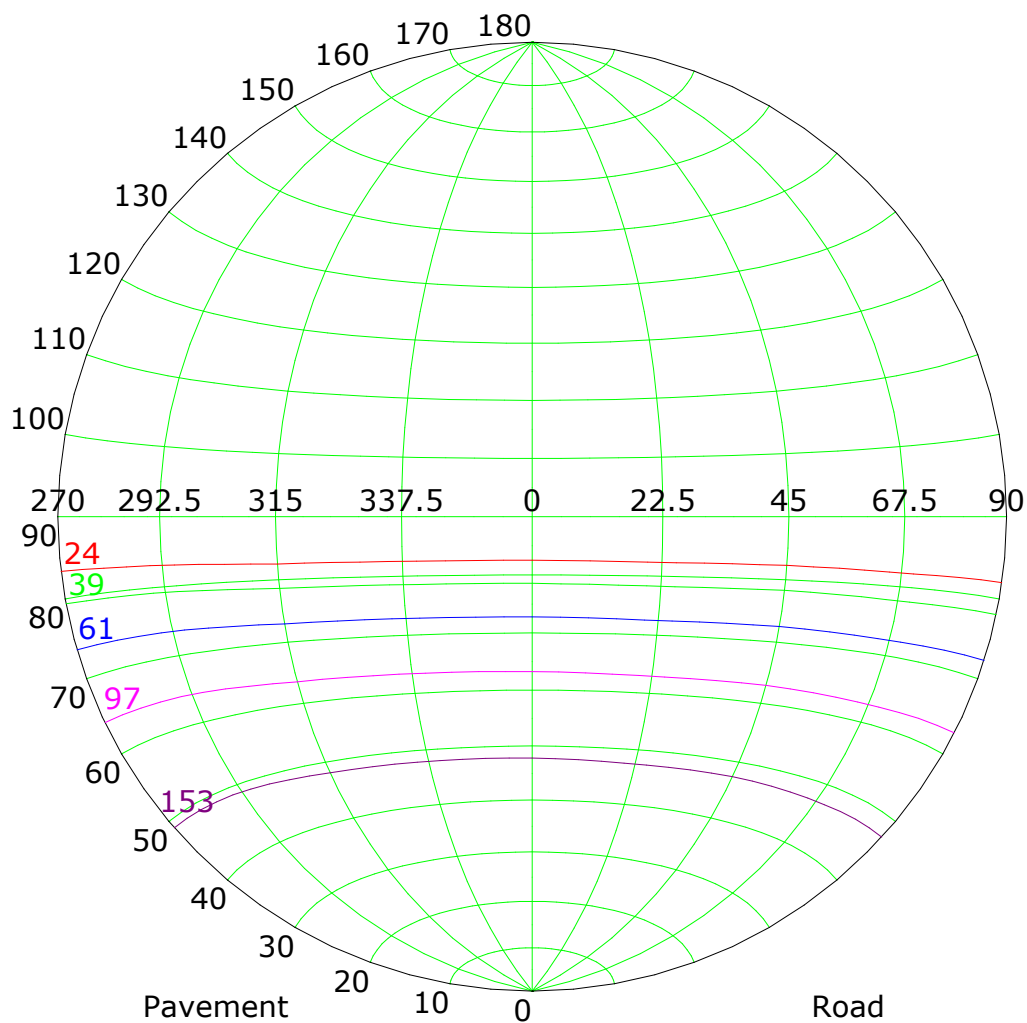
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 242 cd

|         |        |         |        |
|---------|--------|---------|--------|
| ( 10%): | 24 cd  | ( 16%): | 39 cd  |
| ( 25%): | 61 cd  | ( 40%): | 97 cd  |
| ( 63%): | 153 cd | (100%): | 242 cd |

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

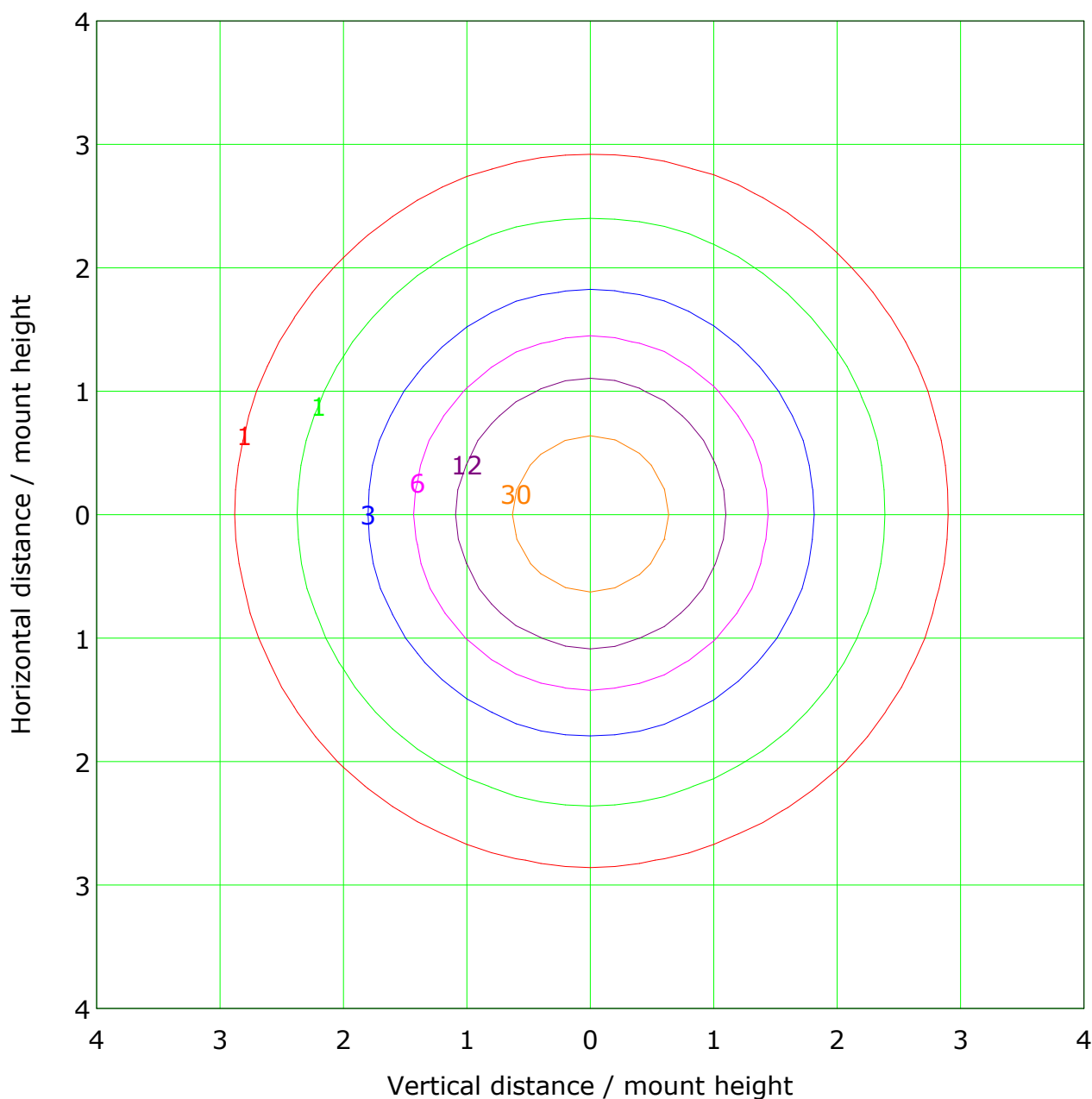
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

## IsoLux Plot



|                       |         |                        |         |
|-----------------------|---------|------------------------|---------|
| Mounting Height: 2.0m |         | Max Lux(100%): 60.6 lx |         |
| — ( 1%):              | 0.6 lx  | — ( 2%):               | 1.2 lx  |
| — ( 5%):              | 3.0 lx  | — ( 10%):              | 6.1 lx  |
| — ( 20%):             | 12.1 lx | — ( 50%):              | 30.3 lx |
| — (100%):             | 60.6 lx |                        |         |

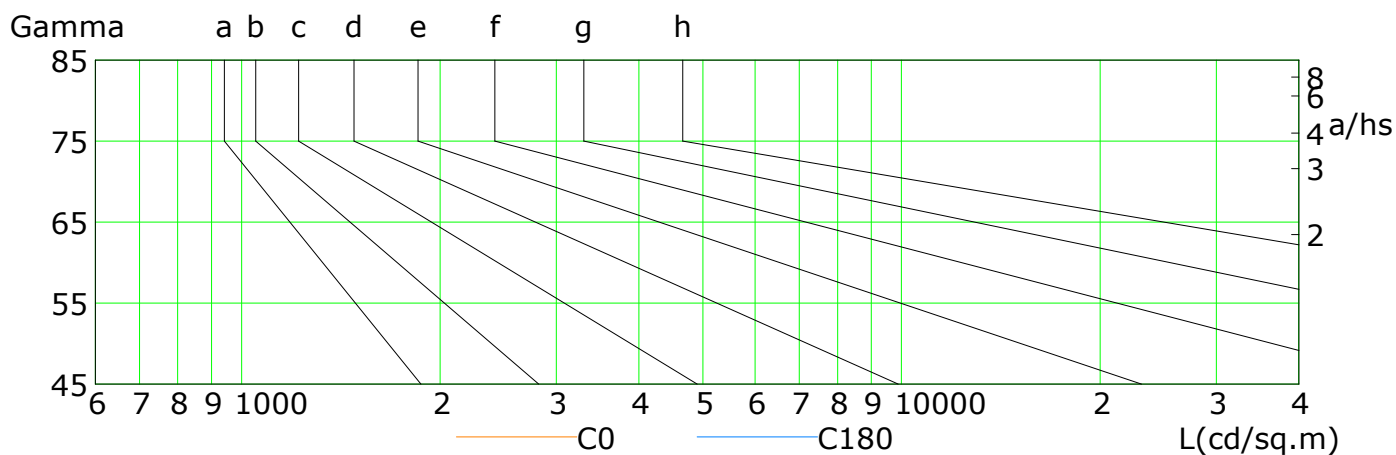
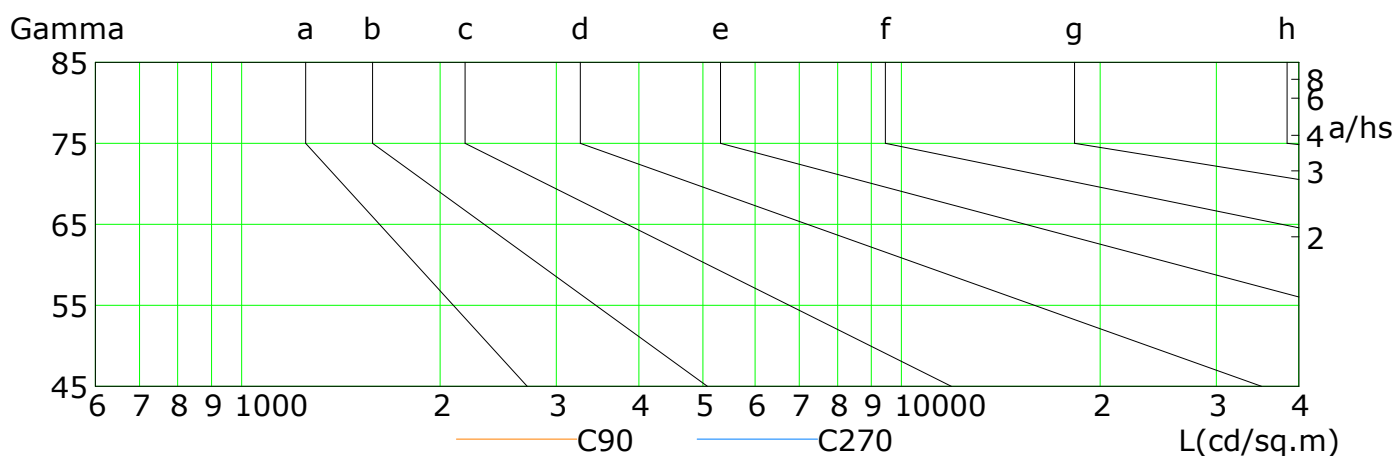
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 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 |

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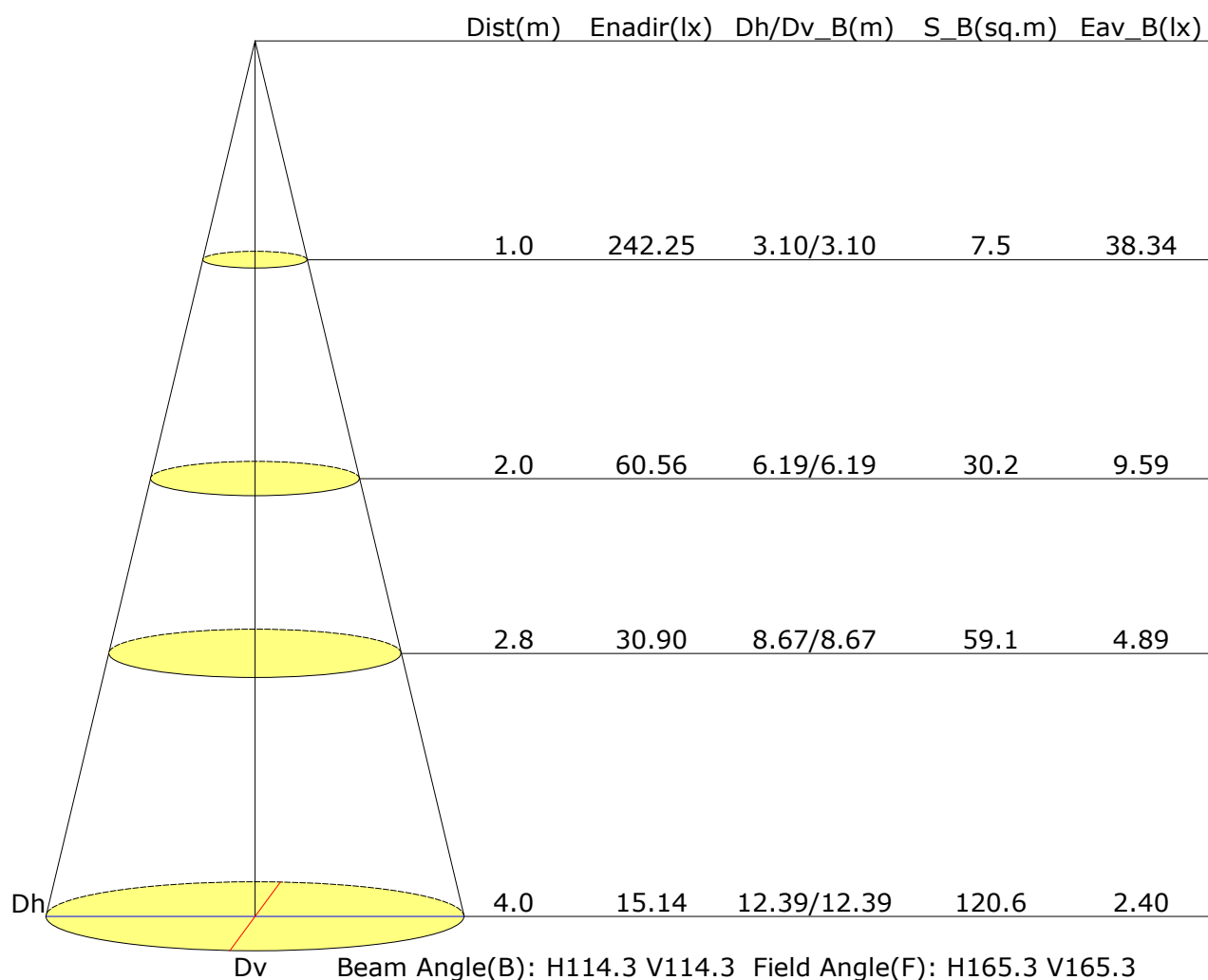


| L(cd/sq.m) | G45 | G50 | G55 | G60 | G65 | G70 | G75 | G80 | G85 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| C0         | 162 | 145 | 128 | 109 | 90  | 71  | 52  | 33  | 15  |
| C90        | 161 | 144 | 126 | 108 | 89  | 70  | 50  | 32  | 13  |
| C180       | 165 | 148 | 130 | 112 | 93  | 73  | 54  | 35  | 16  |
| C270       | 166 | 149 | 131 | 113 | 94  | 75  | 55  | 36  | 18  |

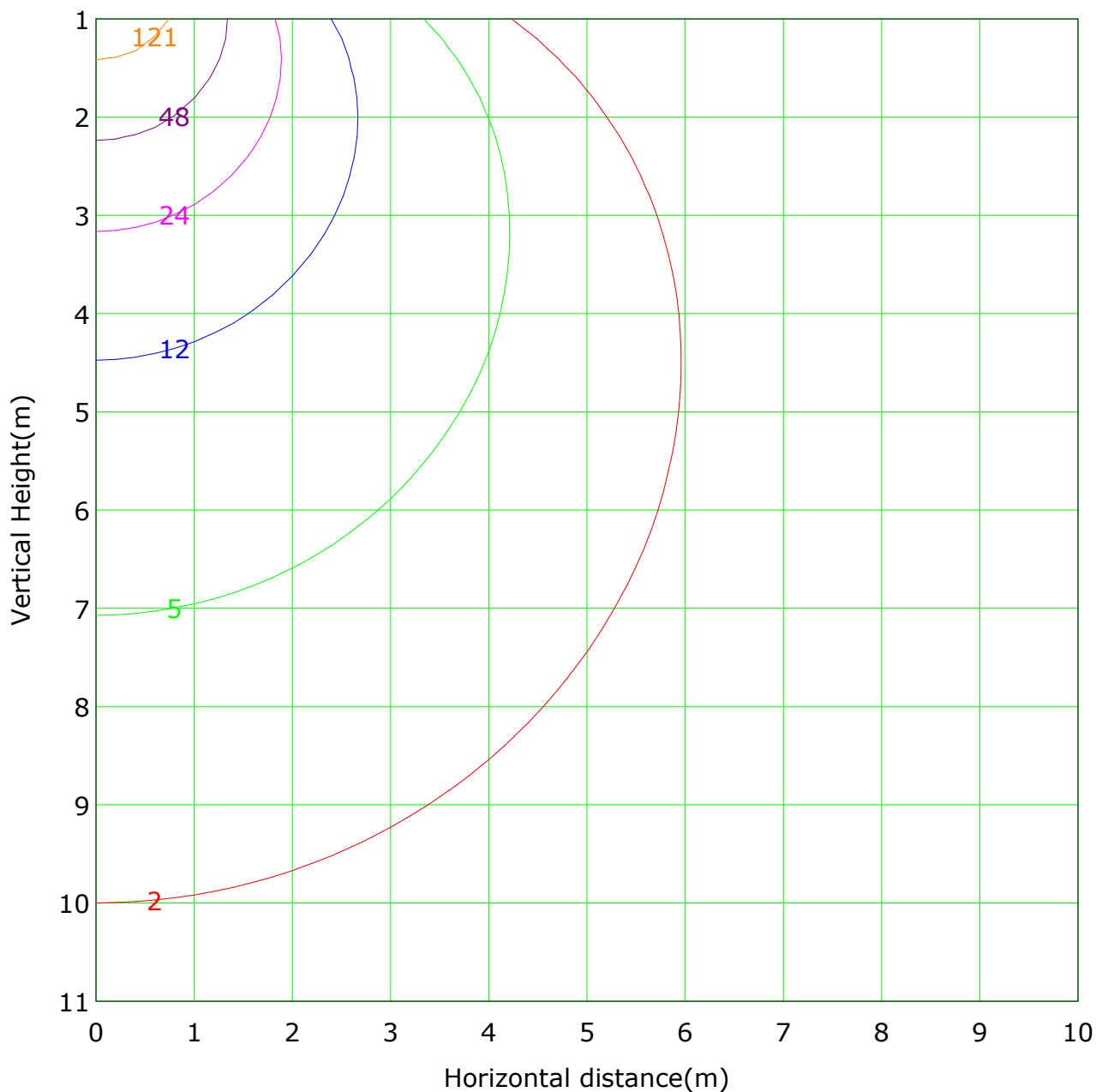
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 242.3 lx

|                    |                    |
|--------------------|--------------------|
| — ( 1%): 2.4 lx    | — ( 2%): 4.8 lx    |
| — ( 5%): 12.1 lx   | — ( 10%): 24.2 lx  |
| — ( 20%): 48.5 lx  | — ( 50%): 121.1 lx |
| — (100%): 242.3 lx |                    |

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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

Report No.:

Test Time: 03/10/2024 15:09

## Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-DW14-03+LLD-03-FXK

Lamp Description: F52-40s-1208F2/14.4 1m Number of Lamps: 1

Lumens per Lamp: 1491

Voltage: 24.0 V

Current: 0.561 A

Power: 13.46 W

Power Factor: 1.000

## Photometric Results

CIE Class: Direct

Measurement Flux: 1208.8 lm

Downward Ratio: 81.07%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 123.4, 142.0, 124.3, 123.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 27.8, 112.7, 36.8, 35.8

Luminaire Efficacy Rating (LER): 89.86

Central Intensity: 972.98 cd

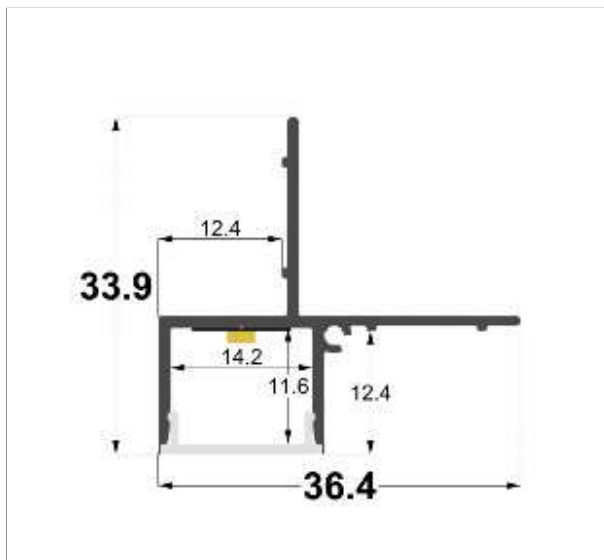
Max. Intensity: 980.64 cd

Pos of Max. Intensity: H157.5 V1

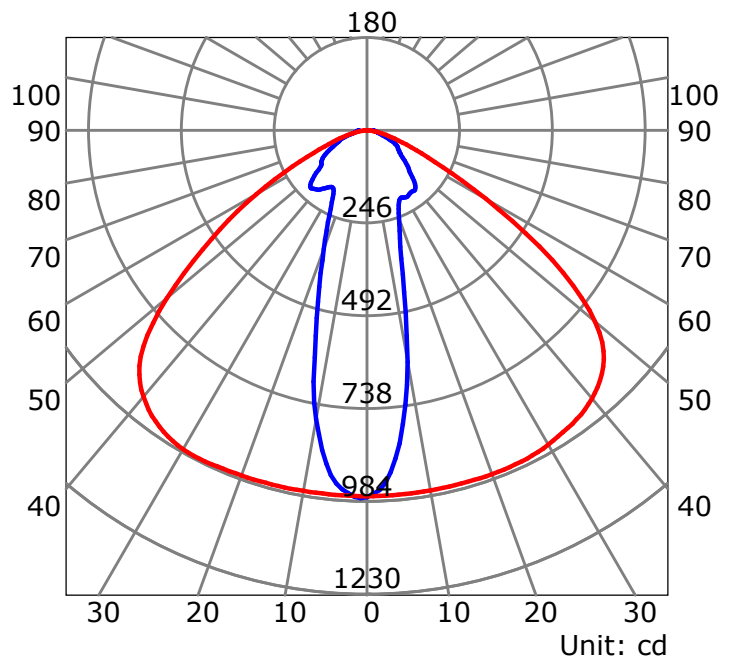
S/MH(C0/C180): 0.46

S/MH(C90/C270): 1.50

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 (°):0.0-90.0:1.0

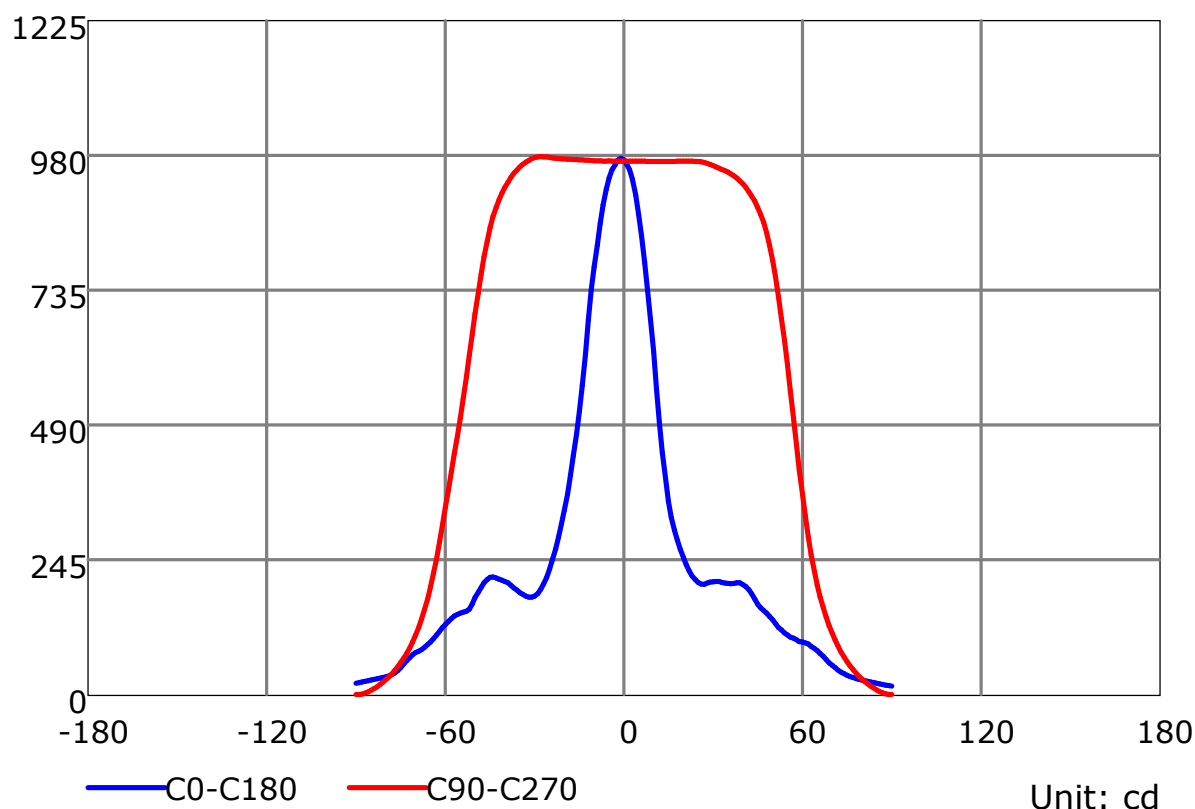
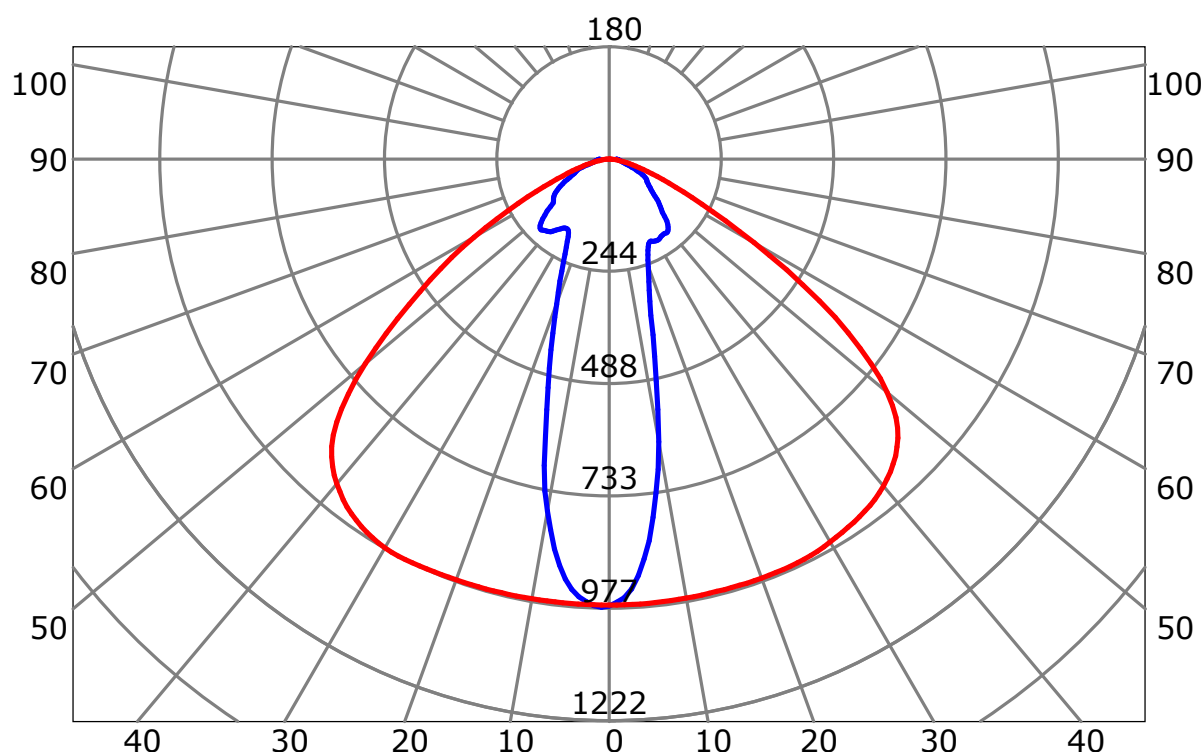
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

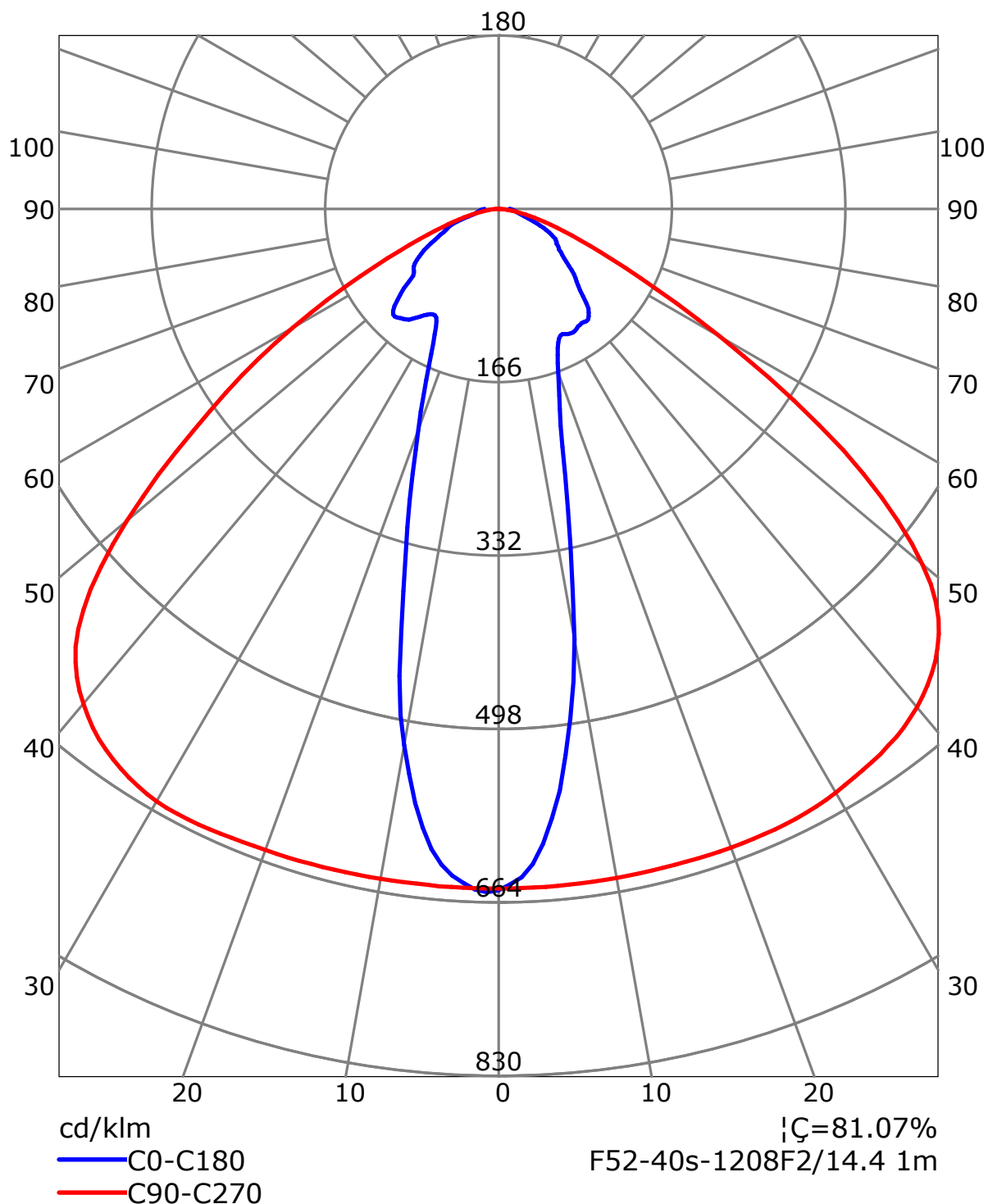
## Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

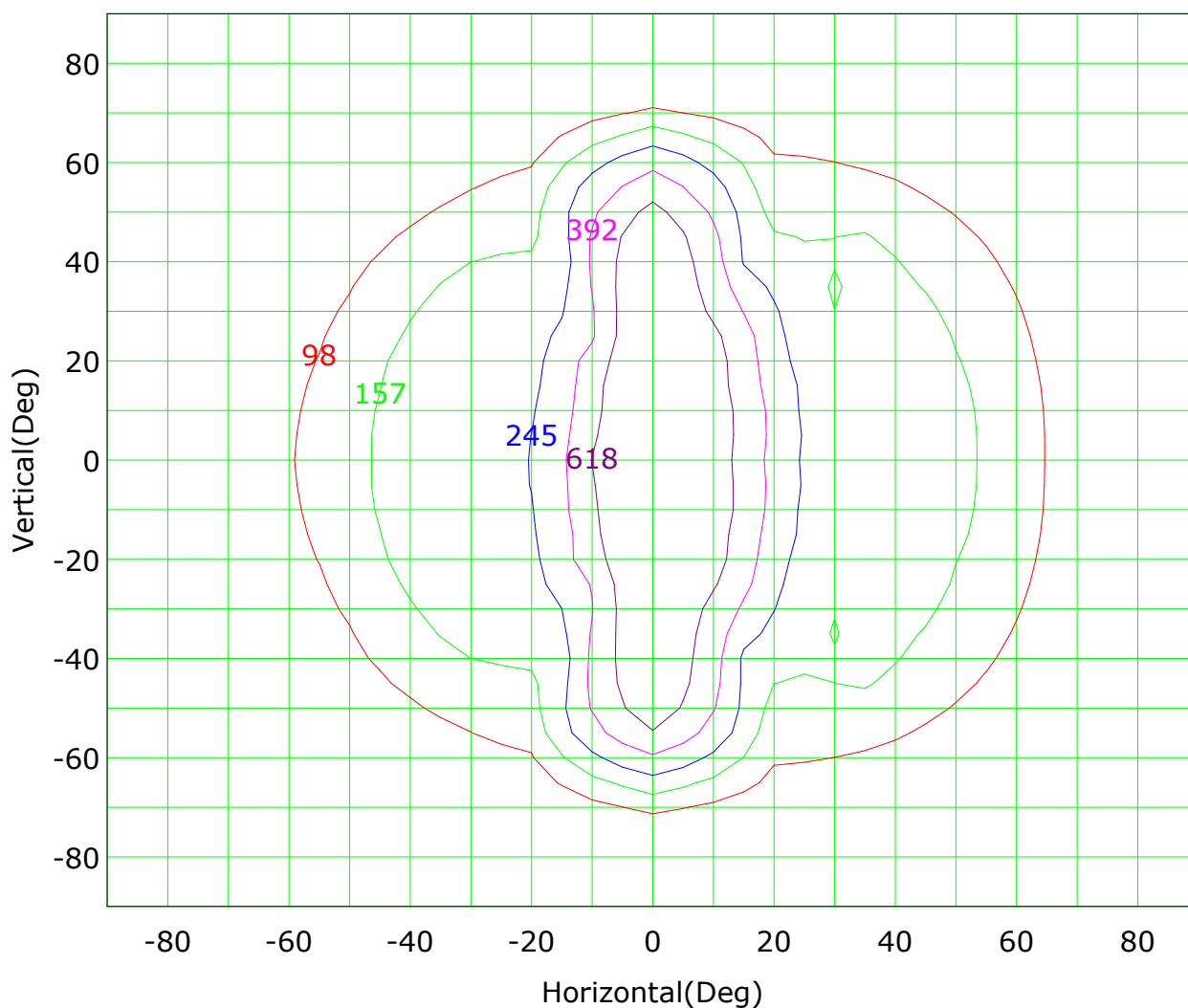
## Luminous Intensity Distribution Curve(cd/klm)



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

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

## Isocandela (rectangle)



Imax (100%): 981 cd

|         |        |         |        |
|---------|--------|---------|--------|
| ( 10%): | 98 cd  | ( 16%): | 157 cd |
| ( 25%): | 245 cd | ( 40%): | 392 cd |
| ( 63%): | 618 cd | (100%): | 981 cd |

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

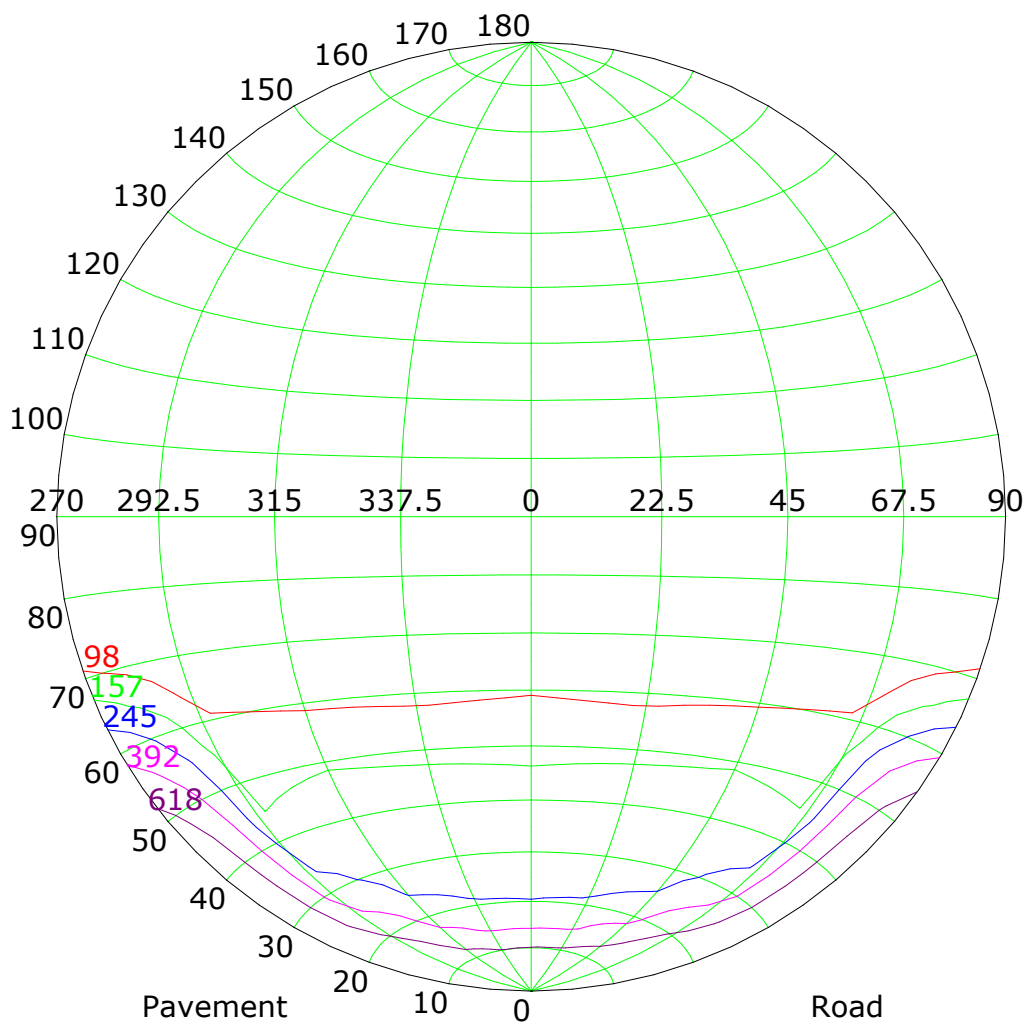
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 981 cd

|                |                |
|----------------|----------------|
| ( 10%): 98 cd  | ( 16%): 157 cd |
| ( 25%): 245 cd | ( 40%): 392 cd |
| ( 63%): 618 cd | (100%): 981 cd |

C Plane (°):0.0-360.0: 22.5

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:1.0

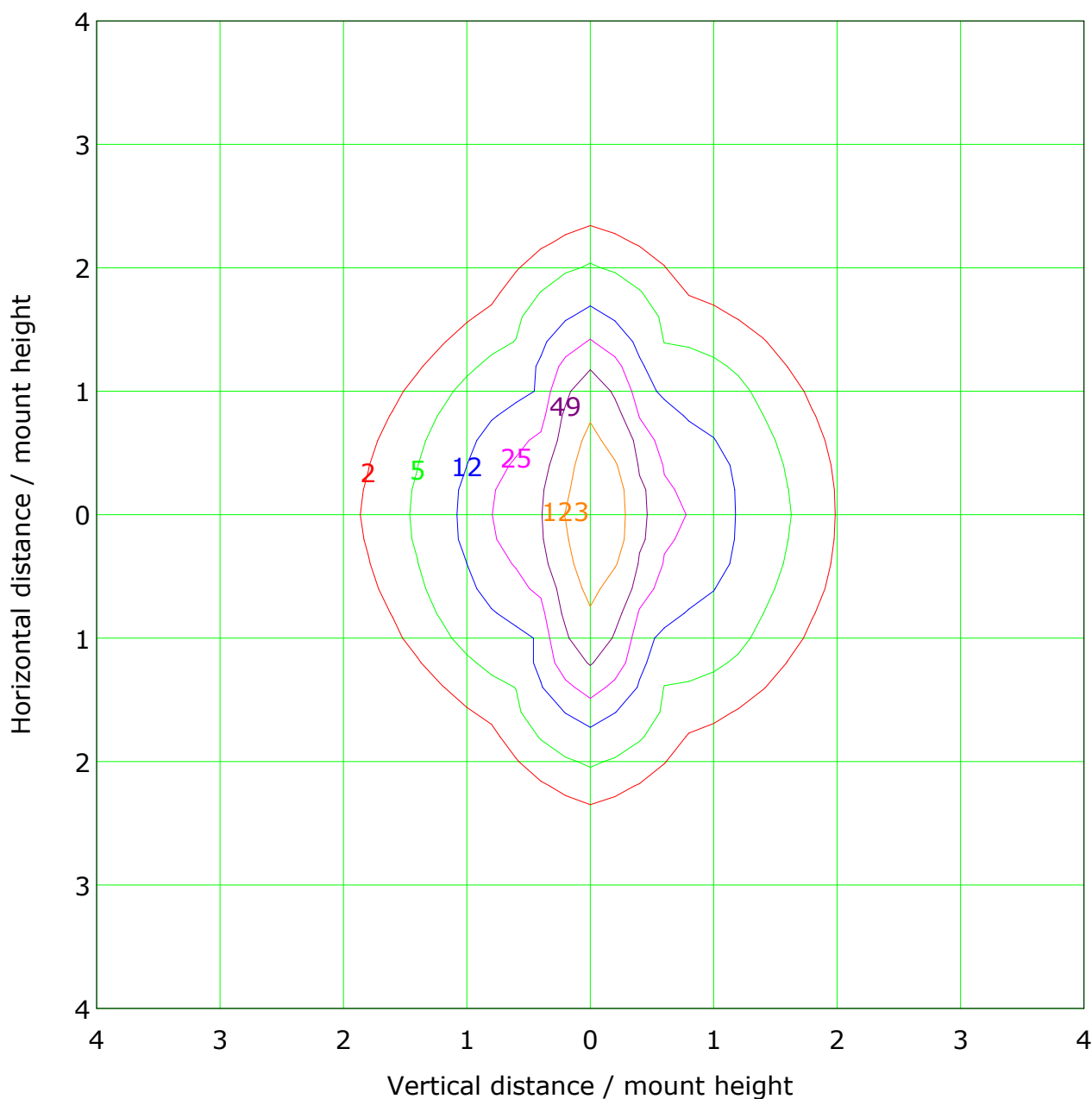
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

## IsoLux Plot



|                       |          |                         |          |
|-----------------------|----------|-------------------------|----------|
| Mounting Height: 2.0m |          | Max Lux(100%): 245.0 lx |          |
| — ( 1%):              | 2.5 lx   | — ( 2%):                | 4.9 lx   |
| — ( 5%):              | 12.3 lx  | — ( 10%):               | 24.5 lx  |
| — ( 20%):             | 49.0 lx  | — ( 50%):               | 122.5 lx |
| — (100%):             | 245.0 lx |                         |          |

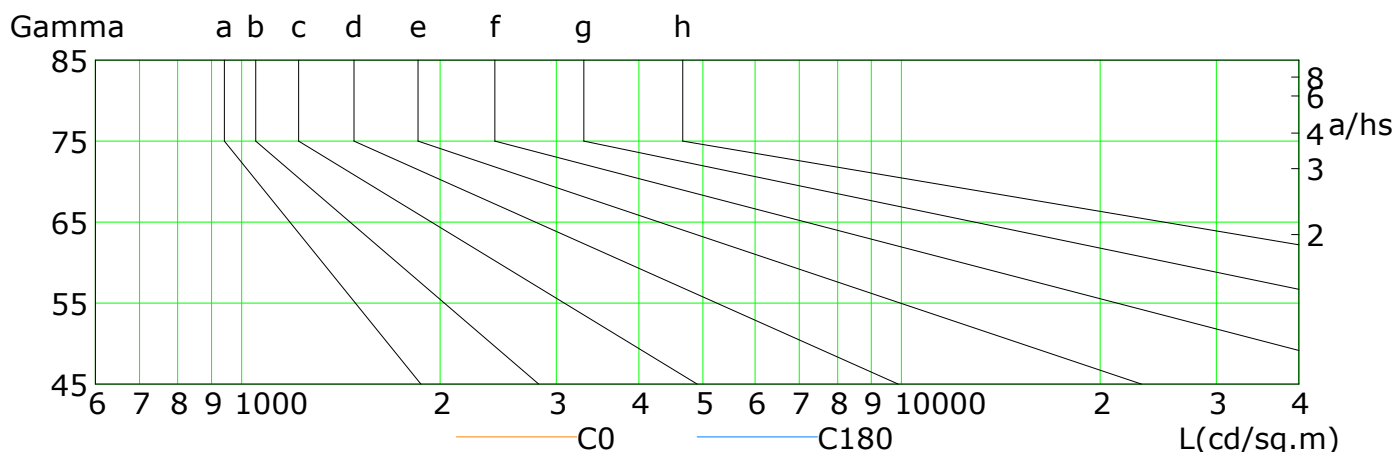
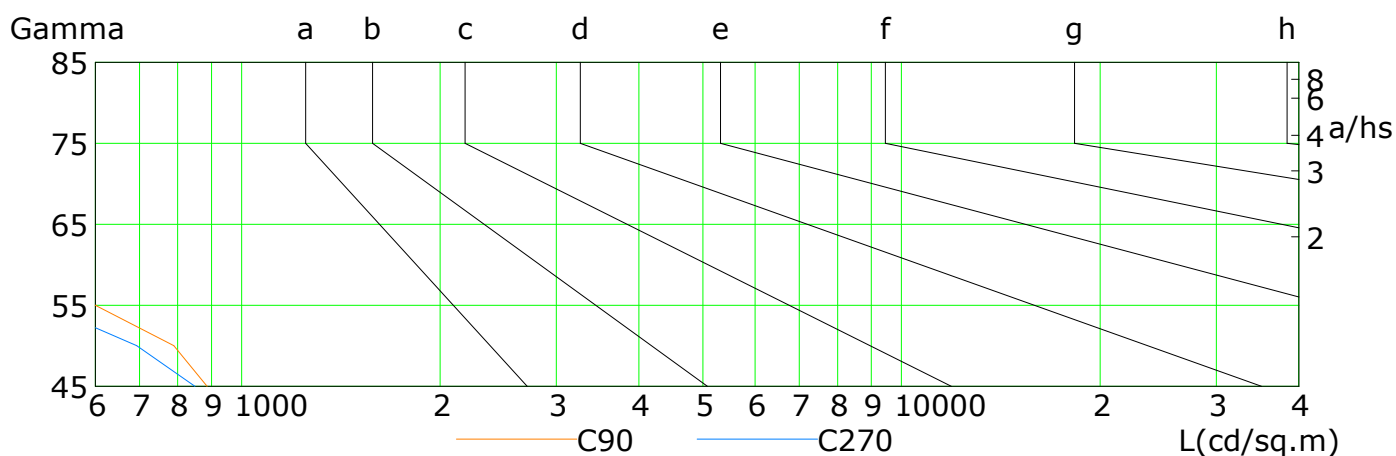
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 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 |

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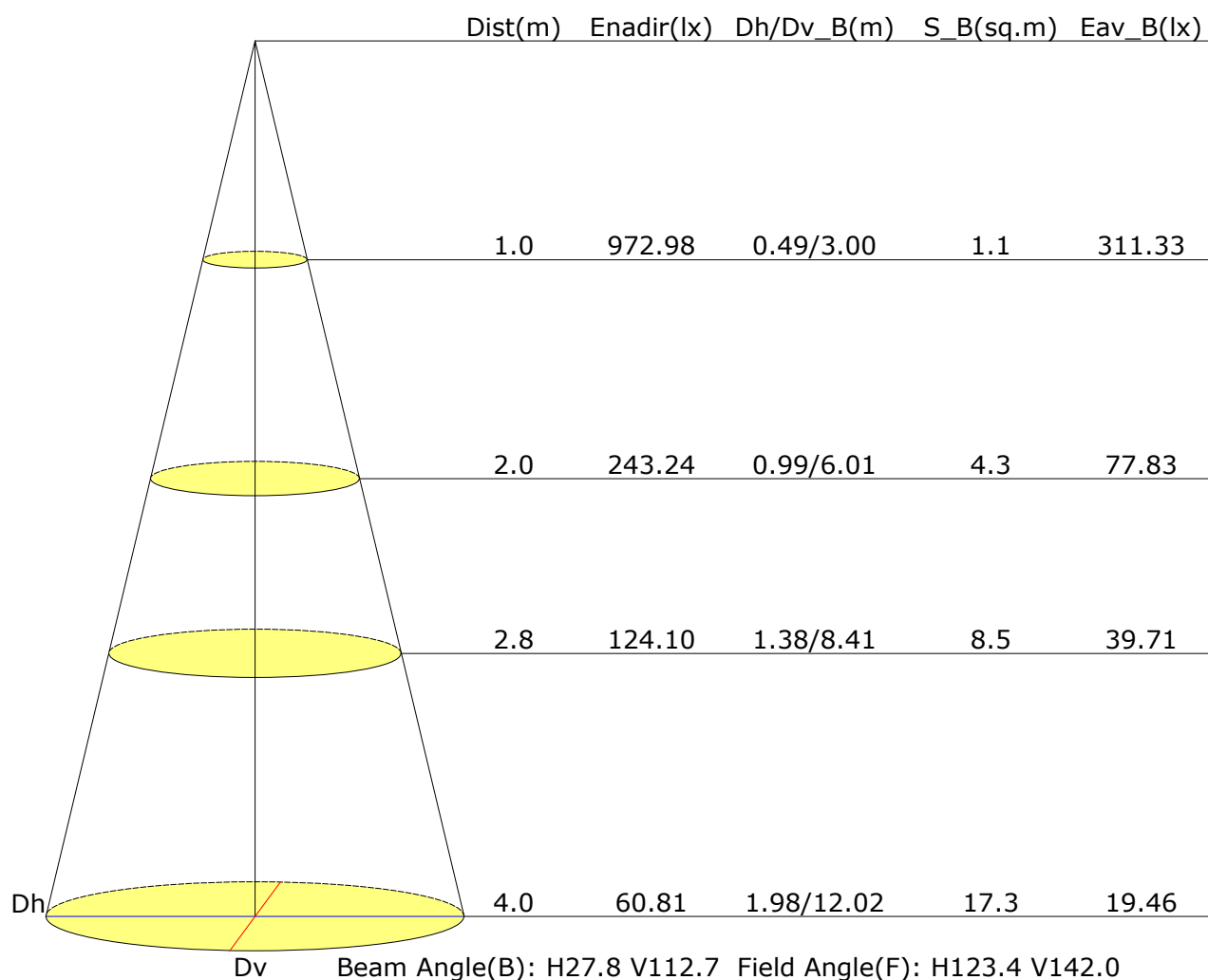


| L(cd/sq.m) | G45 | G50 | G55 | G60 | G65 | G70 | G75 | G80 | G85 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| C0         | 164 | 136 | 109 | 96  | 80  | 53  | 35  | 26  | 21  |
| C90        | 886 | 790 | 601 | 365 | 199 | 111 | 60  | 28  | 8   |
| C180       | 213 | 177 | 148 | 127 | 96  | 76  | 49  | 33  | 26  |
| C270       | 849 | 693 | 503 | 340 | 196 | 108 | 58  | 27  | 8   |

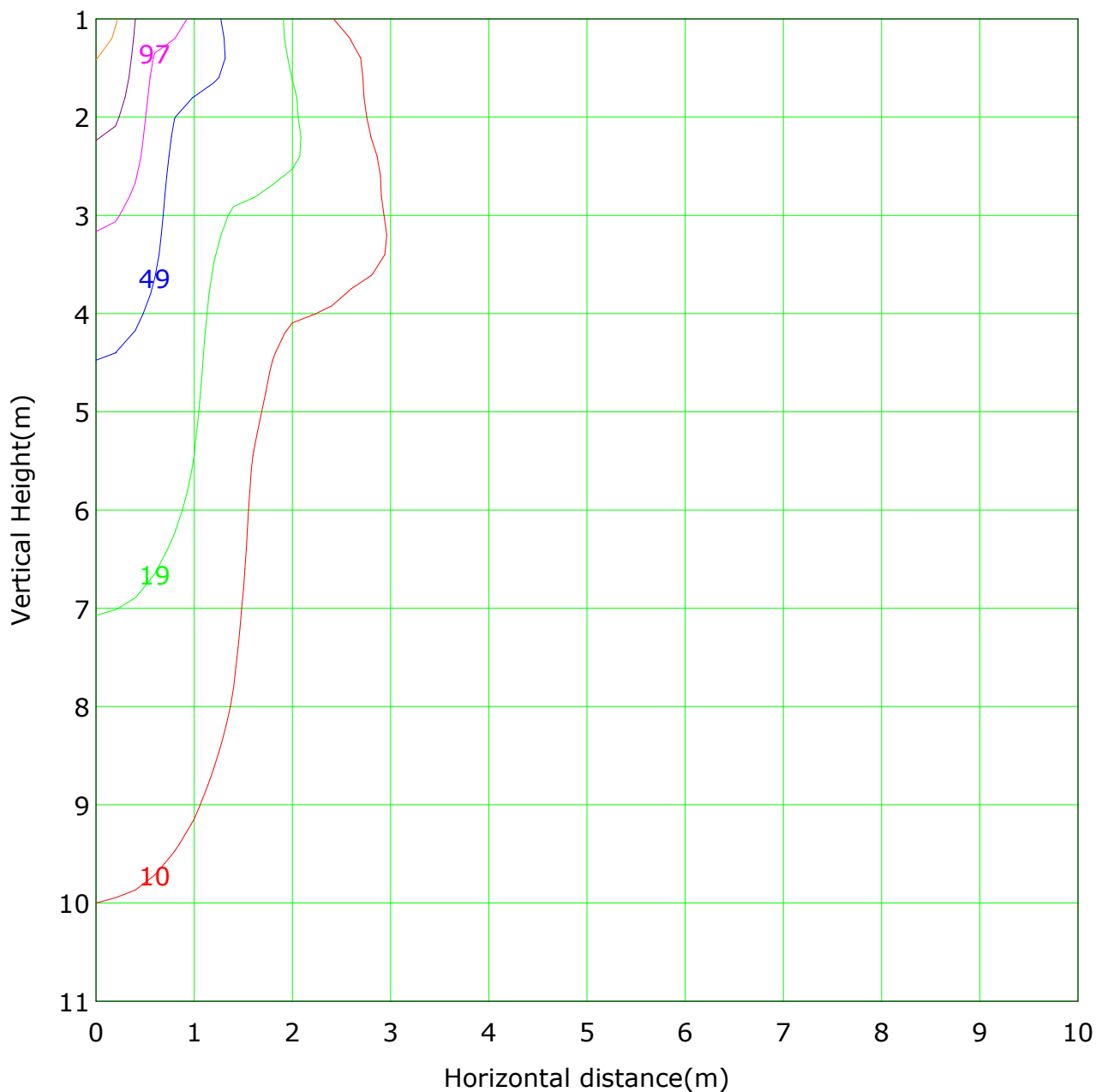
C Plane (°):0.0-360.0: 22.5  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

Gamma Plane (°):0.0-90.0:1.0  
Test Device: GPM-1800B  
Distance: 7.792 m  
Humidity:  
Inspector:

## Illuminance at a Distance



## Vertical IsoLux Plot



Lowest(m): 1.0m    Highest(m): 11.0m    Max Lux: 973.0 lx

|                    |                    |
|--------------------|--------------------|
| — ( 1%): 9.7 lx    | — ( 2%): 19.5 lx   |
| — ( 5%): 48.6 lx   | — ( 10%): 97.3 lx  |
| — ( 20%): 194.6 lx | — ( 50%): 486.5 lx |
| — (100%): 973.0 lx |                    |