



Report No.:

Test Time: 19/04/2025 00:04

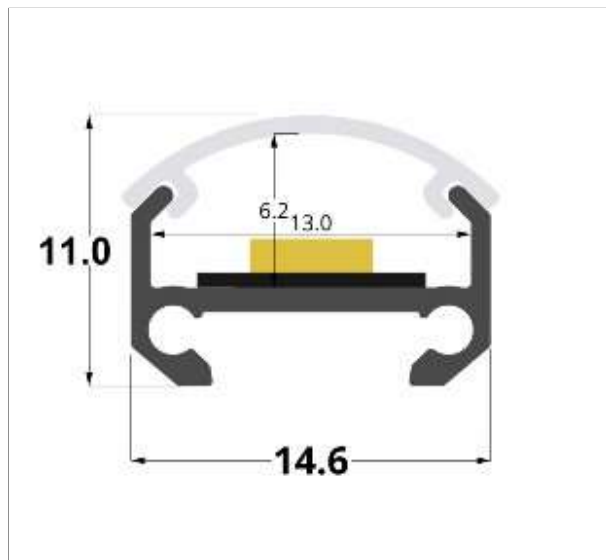
Luminaire Property

Luminaire Manufacturer: Lighting Line
 Luminaire Description: LLP-SL20-20+LLD-20-UK
 Lamp Description: Strip 14,4W/m 120led/m 20cm
 Number of Lamps: 1 Lumens per Lamp: 298
 Voltage: 24.01 V Current: 0.106 A
 Power: 2.6 W Power Factor: 1

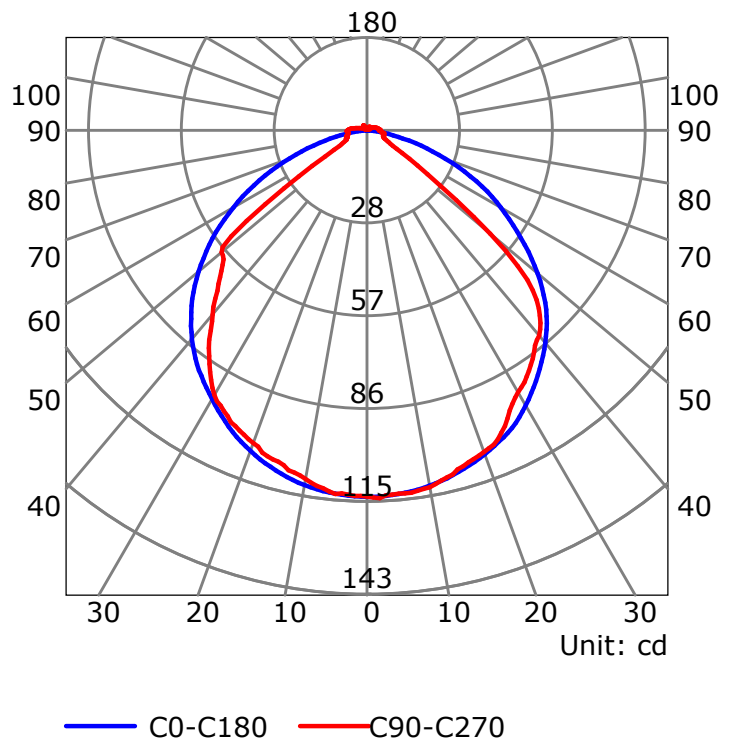
Photometric Results

CIE Class: Direct Total Rated Lamp Lumens: 298.0 lm
 Measurement Flux: 280.6 lm Efficiency: 94.16%
 Downward Ratio: 91.81% Upward Ratio: 2.35%
 Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 154.3, 117.0, 131.9, 130.7
 Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.6, 100.1, 105.8, 105.5
 Luminaire Efficacy Rating (LER): 107.97 Central Intensity: 113.77 cd
 Max. Intensity: 114.27 cd Pos of Max. Intensity: H67.5 V2
 S/MH(C0/C180): 1.27 S/MH(C90/C270): 1.23

Picture Of Luminaire



Luminous Intensity Distribution Curve

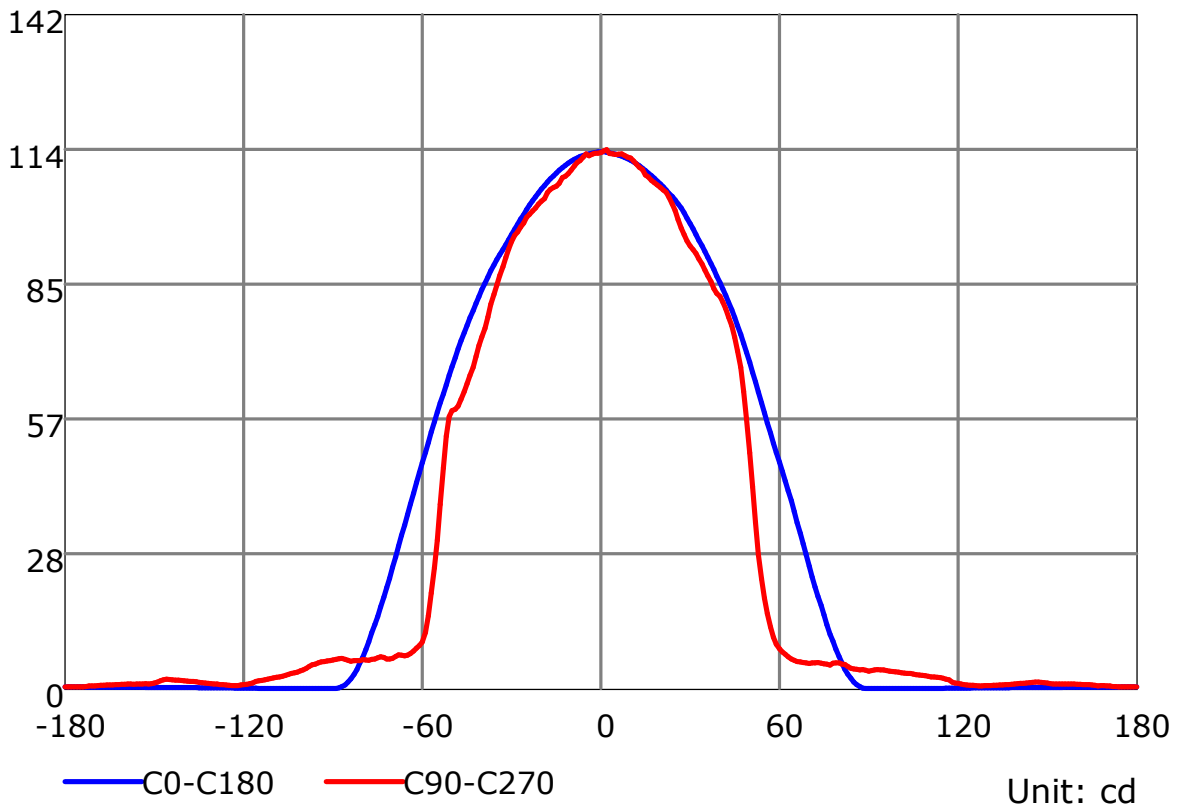
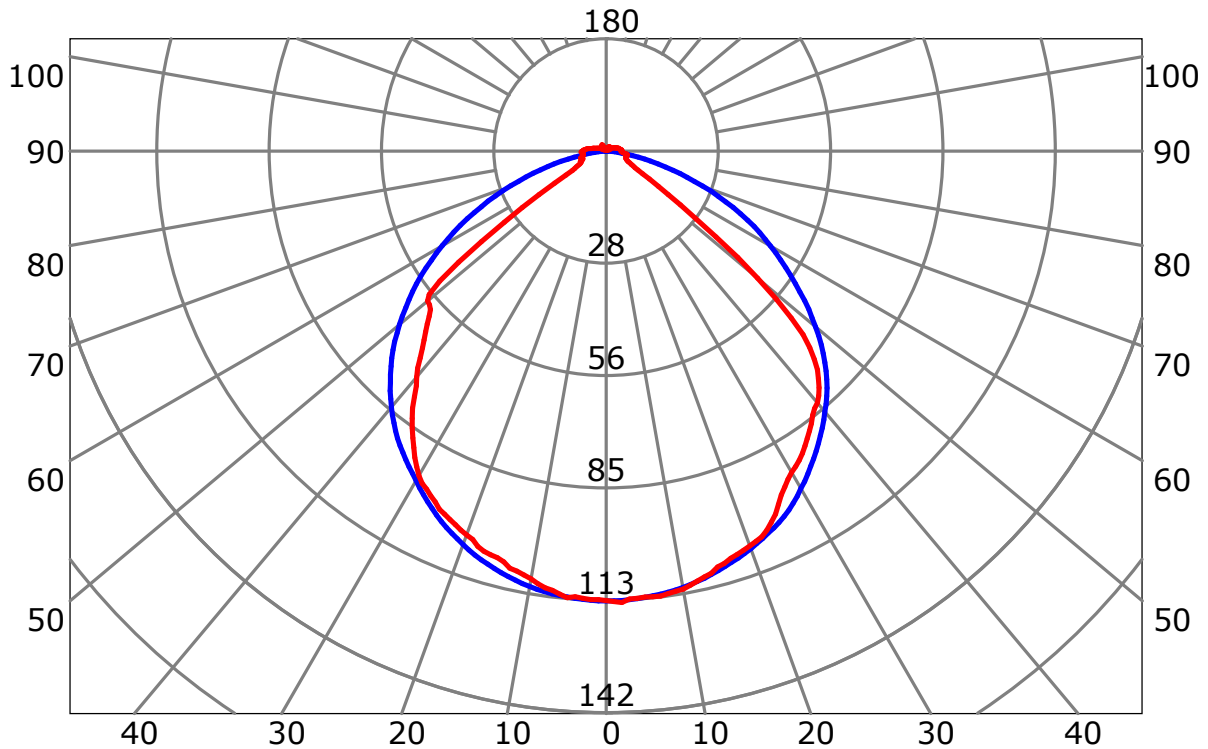


C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



Luminous Intensity Distribution Curve

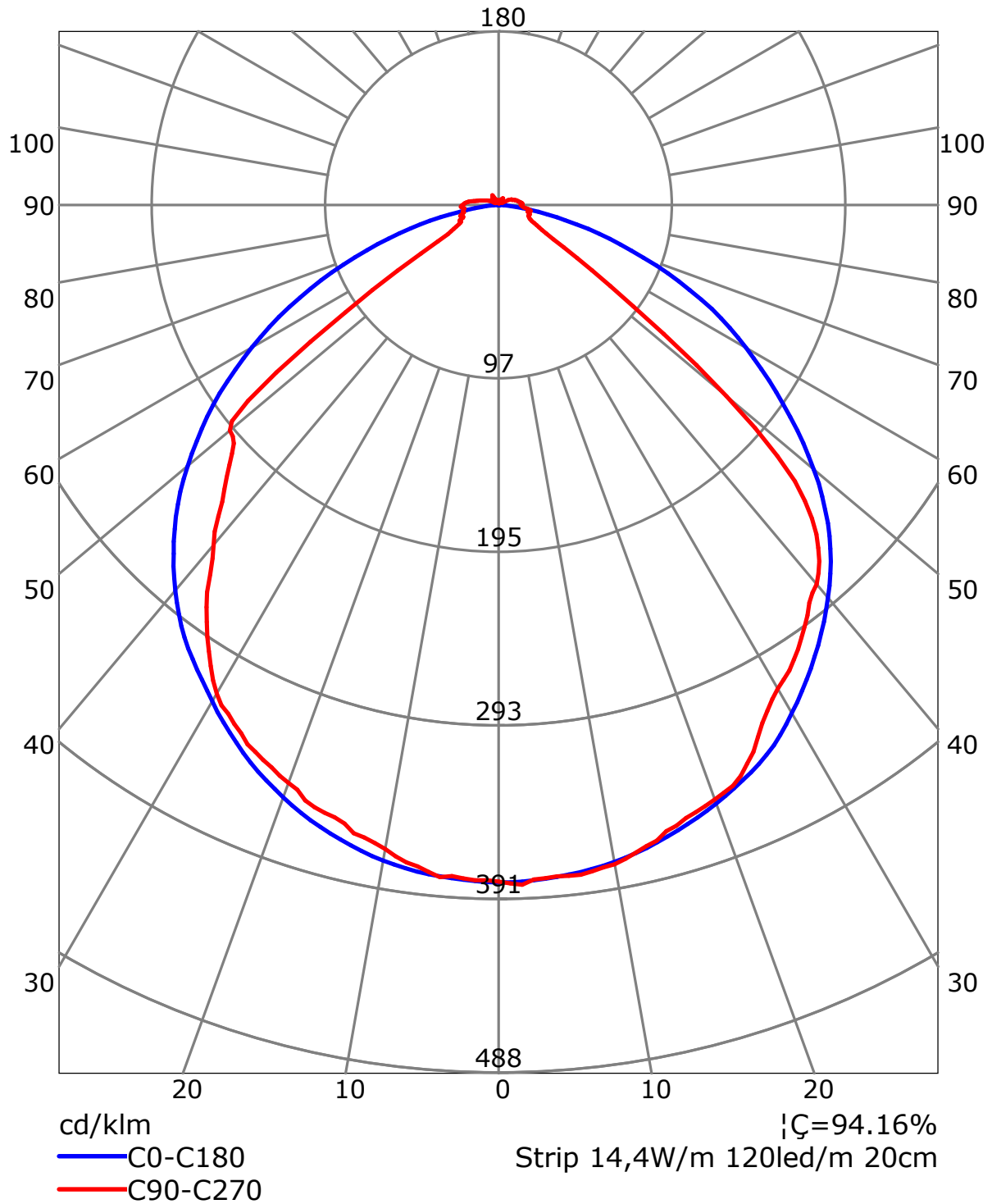


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



Luminous Intensity Distribution Curve(cd/klm)

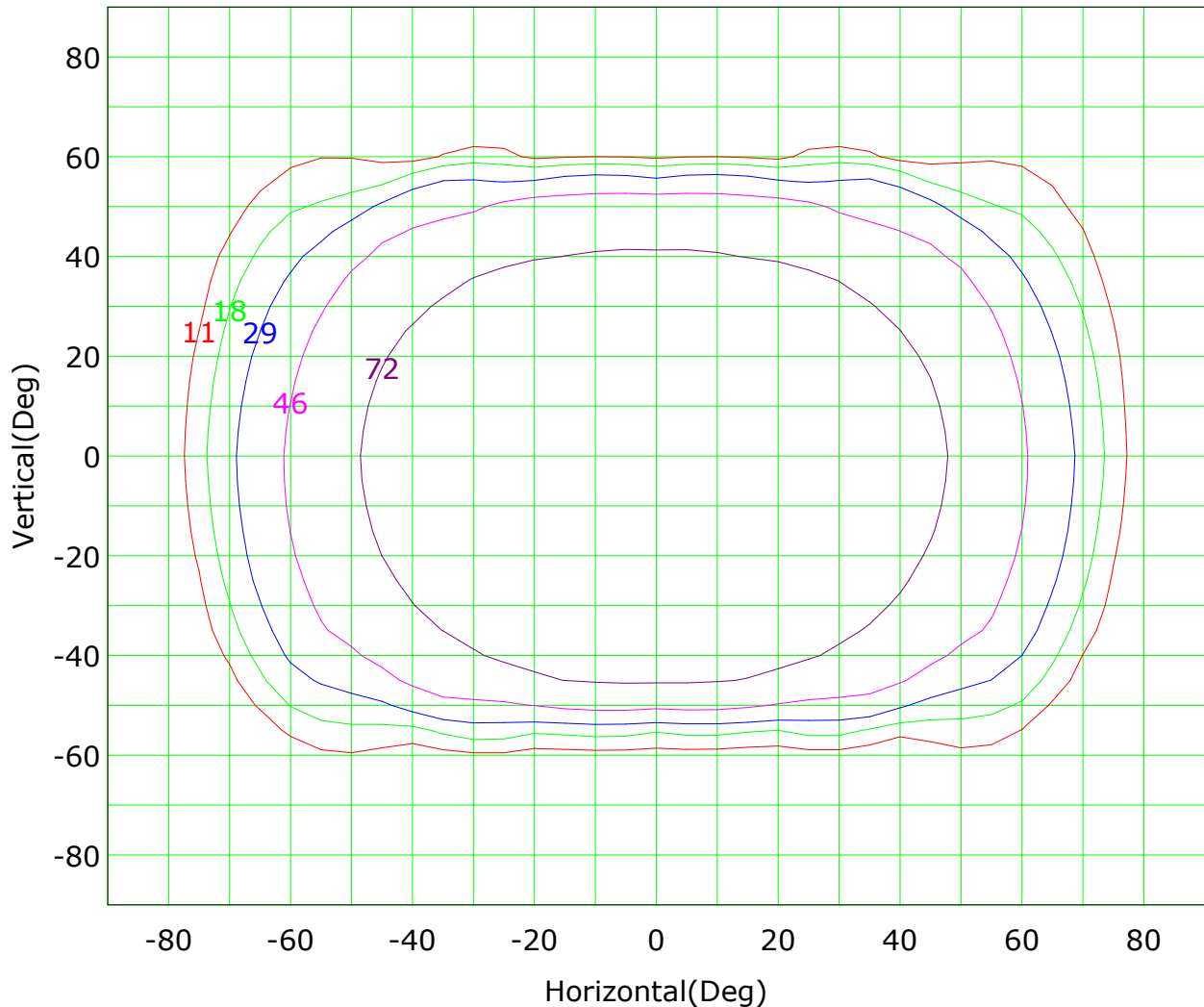


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



Isocandela (rectangle)



Imax (100%): 114 cd

| | | | |
|-----------|-------|-----------|--------|
| — (10%): | 11 cd | — (16%): | 18 cd |
| — (25%): | 29 cd | — (40%): | 46 cd |
| — (63%): | 72 cd | — (100%): | 114 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

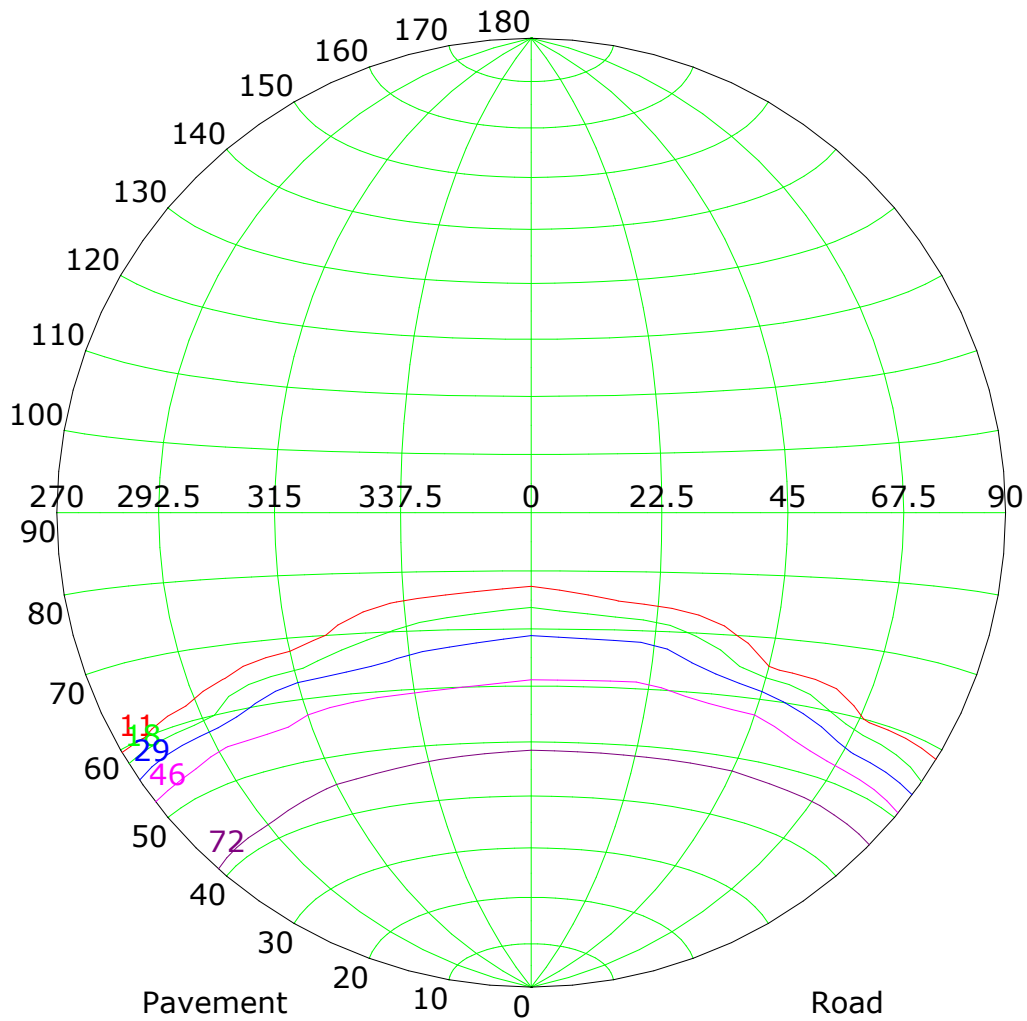
Distance: 7.792 m

Humidity:

Inspector:



Isocandela (sphere)



Imax (100%): 114 cd

- | | | | |
|-----------|-------|-----------|--------|
| — (10%): | 11 cd | — (16%): | 18 cd |
| — (25%): | 29 cd | — (40%): | 46 cd |
| — (63%): | 72 cd | — (100%): | 114 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

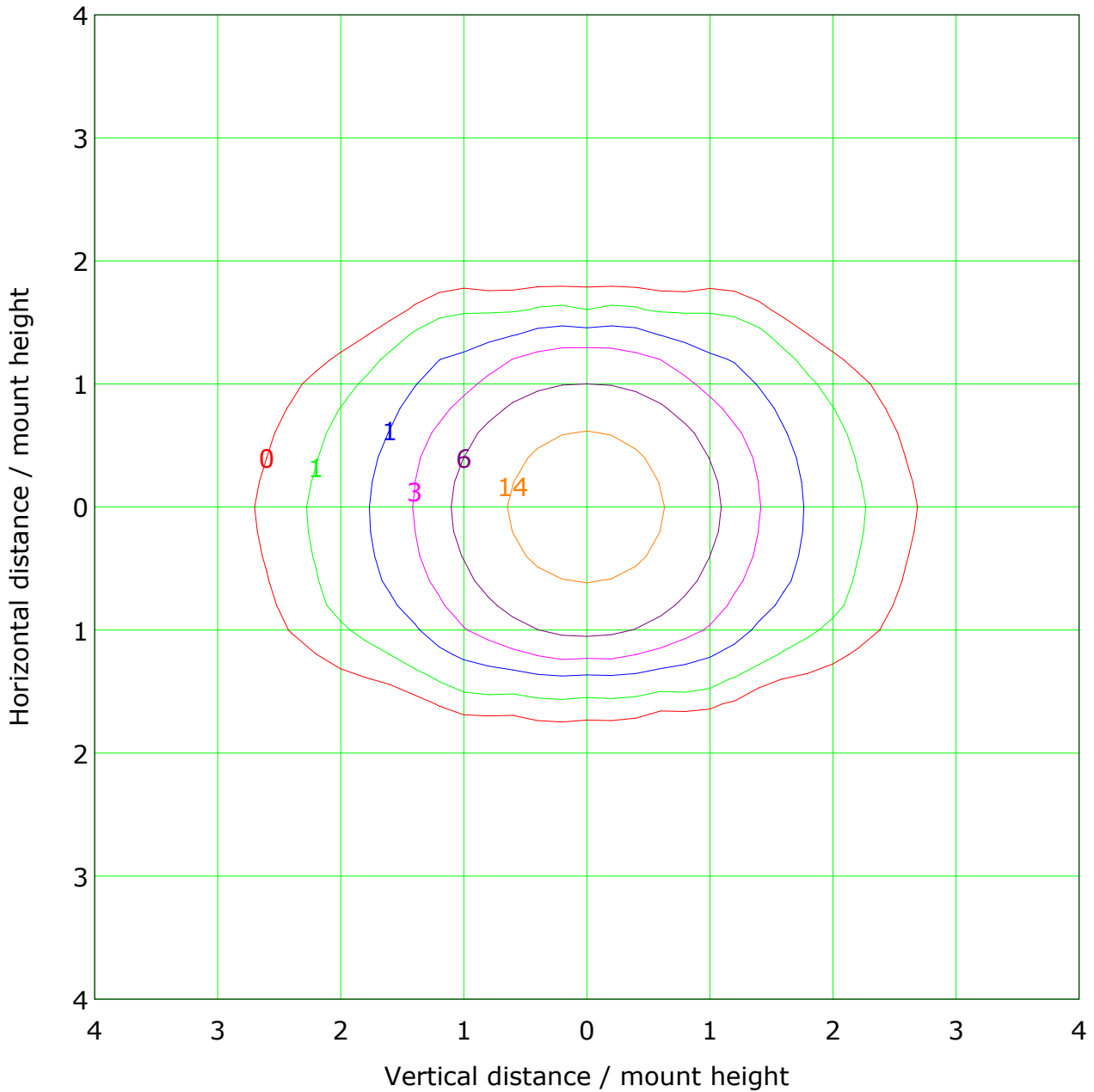
Distance: 7.792 m

Humidity:

Inspector:



IsoLux Plot



| | | |
|-----------------------|---------|------------------------|
| Mounting Height: 2.0m | | Max Lux(100%): 28.5 lx |
| — (1%): | 0.3 lx | — (2%): 0.6 lx |
| — (5%): | 1.4 lx | — (10%): 2.9 lx |
| — (20%): | 5.7 lx | — (50%): 14.3 lx |
| — (100%): | 28.5 lx | |

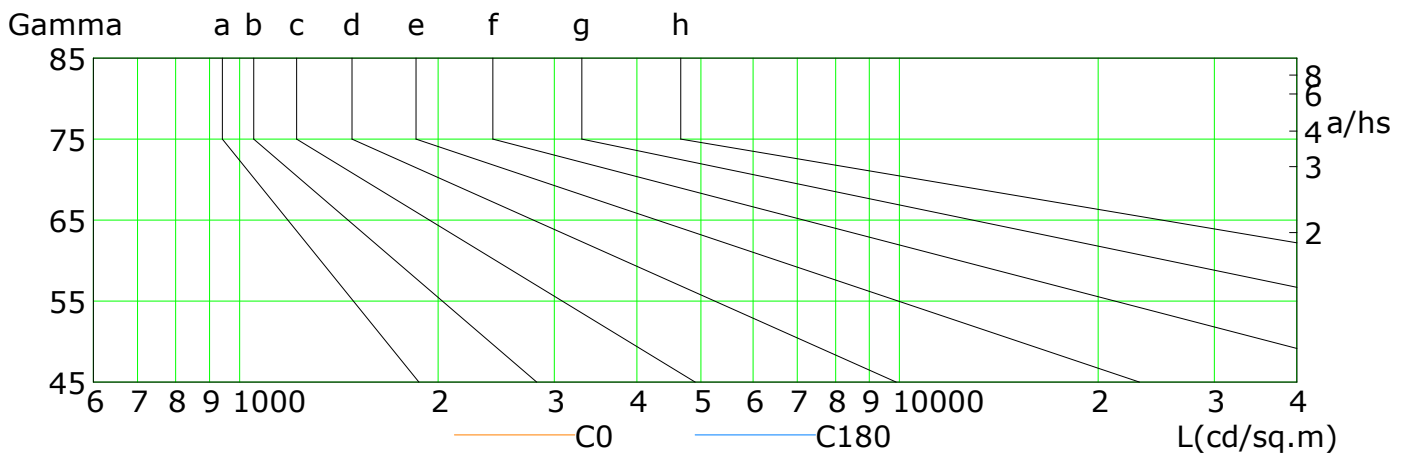
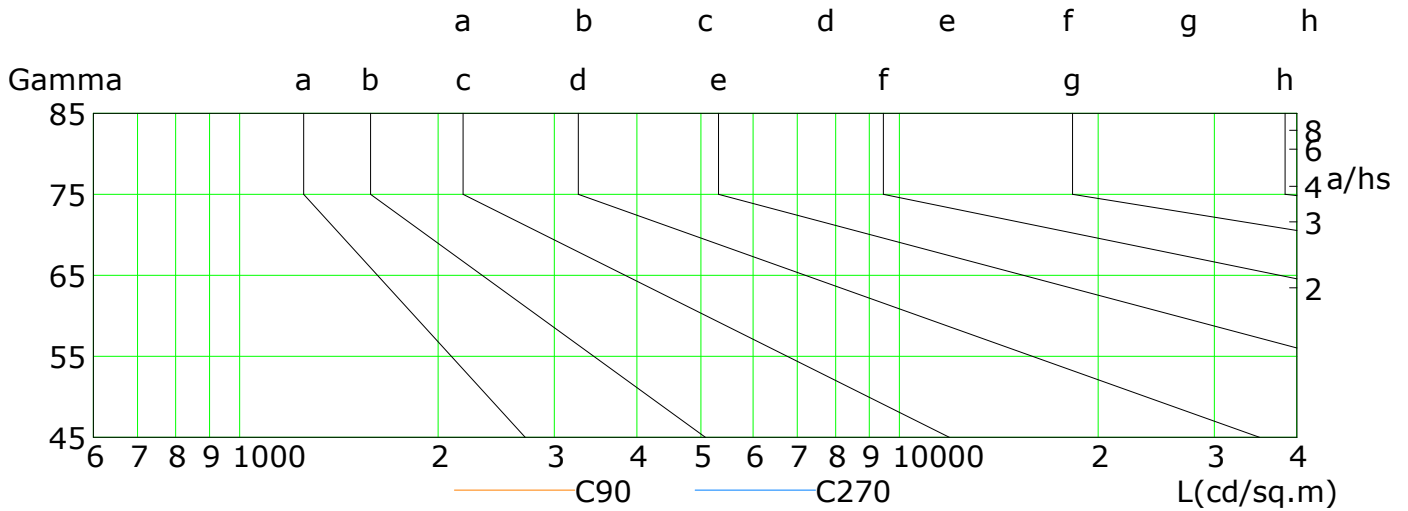
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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) | | | | | | | |
|--------|---------|------------------|------|------|-------|-------|-------|-------|-------|
| | | a | b | c | d | e | f | g | h |
| 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 | 79 | 69 | 58 | 48 | 38 | 26 | 16 | 7 | 1 |
| C90 | 74 | 50 | 19 | 8 | 6 | 5 | 5 | 5 | 4 |
| C180 | 77 | 68 | 59 | 48 | 37 | 26 | 15 | 7 | 1 |
| C270 | 65 | 59 | 31 | 10 | 7 | 6 | 7 | 6 | 6 |

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

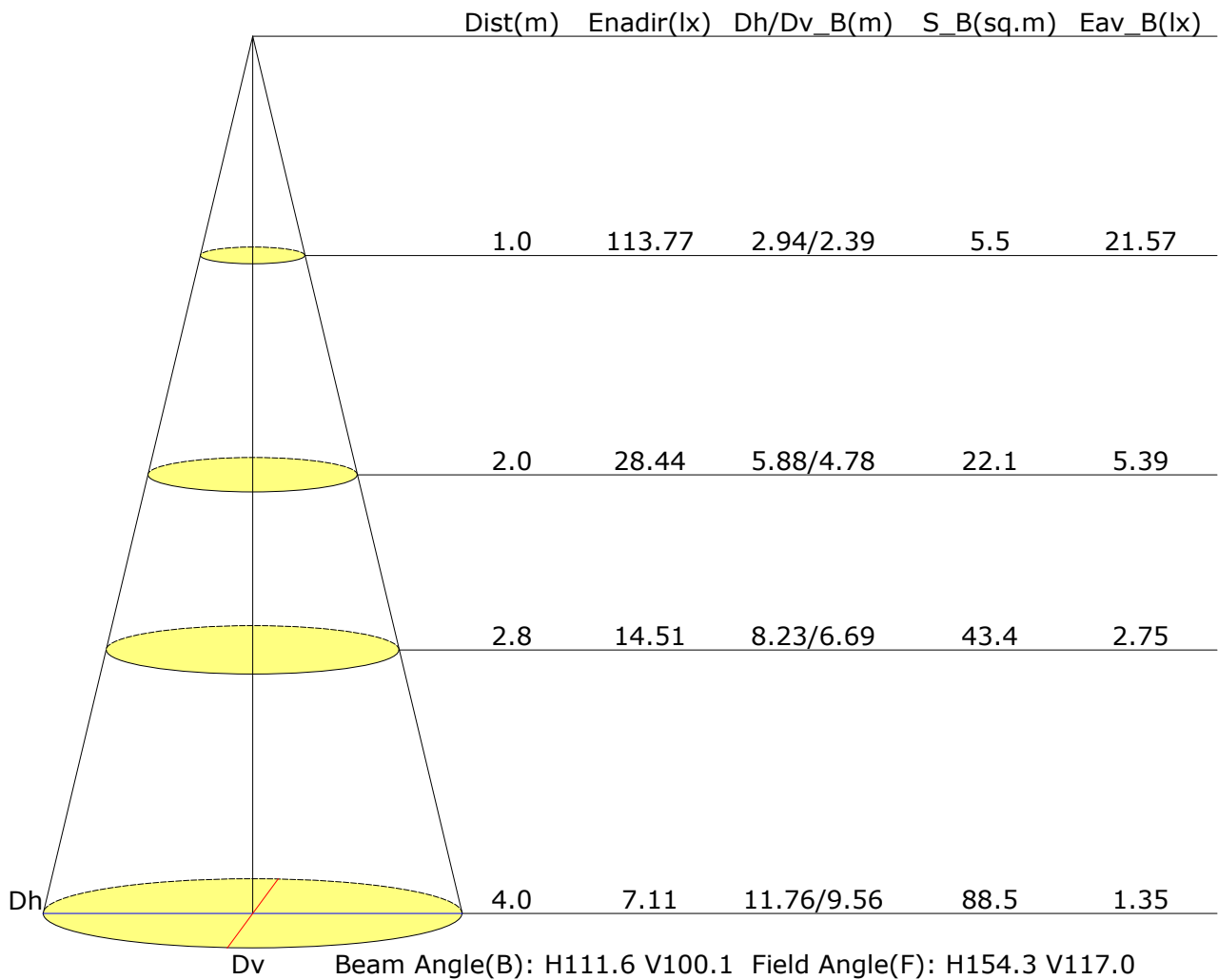
Distance: 7.792 m

Humidity:

Inspector:



Illuminance at a Distance

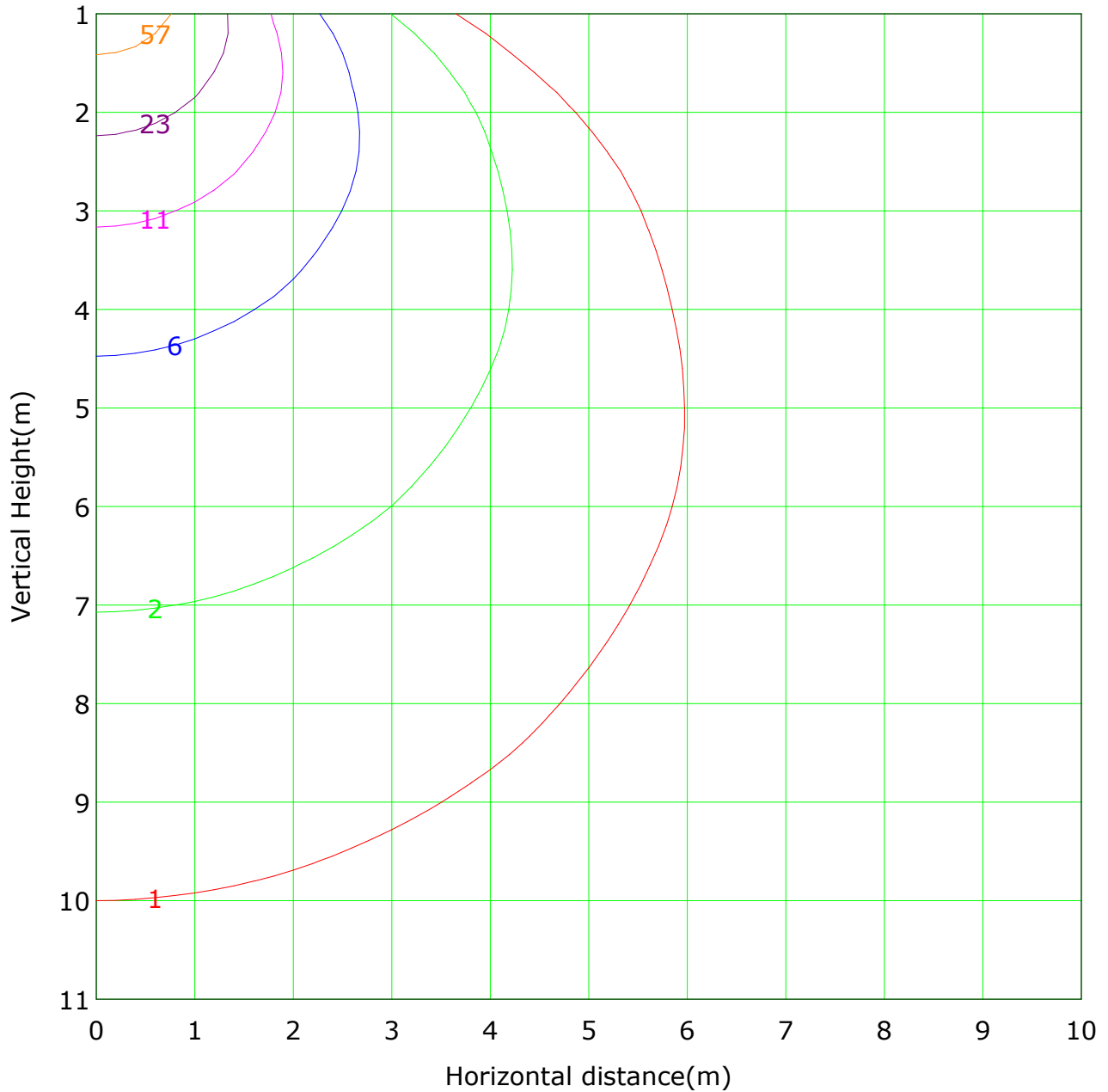


C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



Vertical IsoLux Plot



| | | |
|--------------------|-------------------|-------------------|
| Lowest(m): 1.0m | Highest(m): 11.0m | Max Lux: 113.8 lx |
| — (1%): 1.1 lx | — (2%): 2.3 lx | |
| — (5%): 5.7 lx | — (10%): 11.4 lx | |
| — (20%): 22.8 lx | — (50%): 56.9 lx | |
| — (100%): 113.8 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:



Report No.:

Test Time: 19/04/2025 01:12

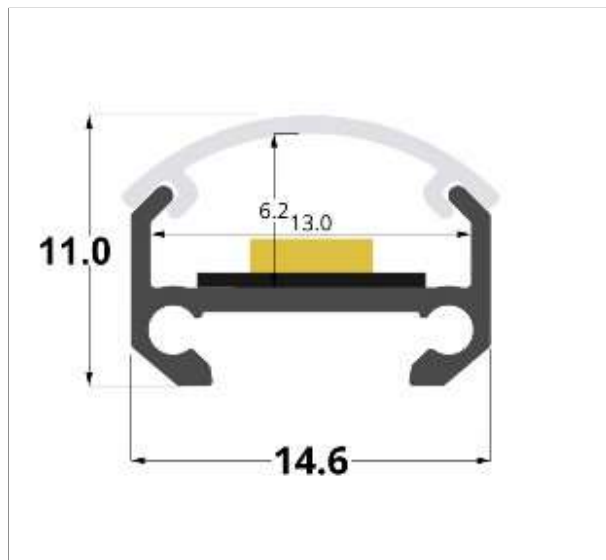
Luminaire Property

Luminaire Manufacturer: Lighting Line
Luminaire Description: LLP-SL20-20+LLD-20-UM
Lamp Description: Strip 14,4W/m 120led/m 20cm
Number of Lamps: 1
Voltage: 24.01 V
Power: 13.26 W
Lumens per Lamp: 298
Current: 0.502A
Power Factor: 1

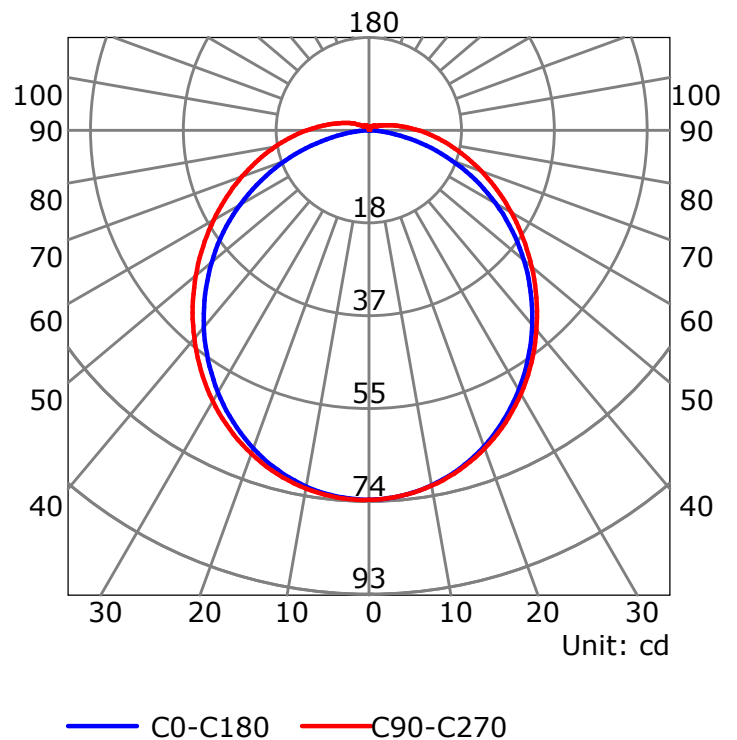
Photometric Results

CIE Class: Direct
Measurement Flux: 228 lm
Downward Ratio: 72.93%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 158.2, 195.6, 175.3, 175.9
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 107.1, 114.6, 110.2, 110.3
Luminaire Efficacy Rating (LER): 17.24
Max. Intensity: 74.34 cd
S/MH(C0/C180): 1.21
Total Rated Lamp Lumens: 298.0 lm
Efficiency: 76.51%
Upward Ratio: 3.57%
Central Intensity: 74.28 cd
Pos of Max. Intensity: H270 V1
S/MH(C90/C270): 1.24

Picture Of Luminaire



Luminous Intensity Distribution Curve

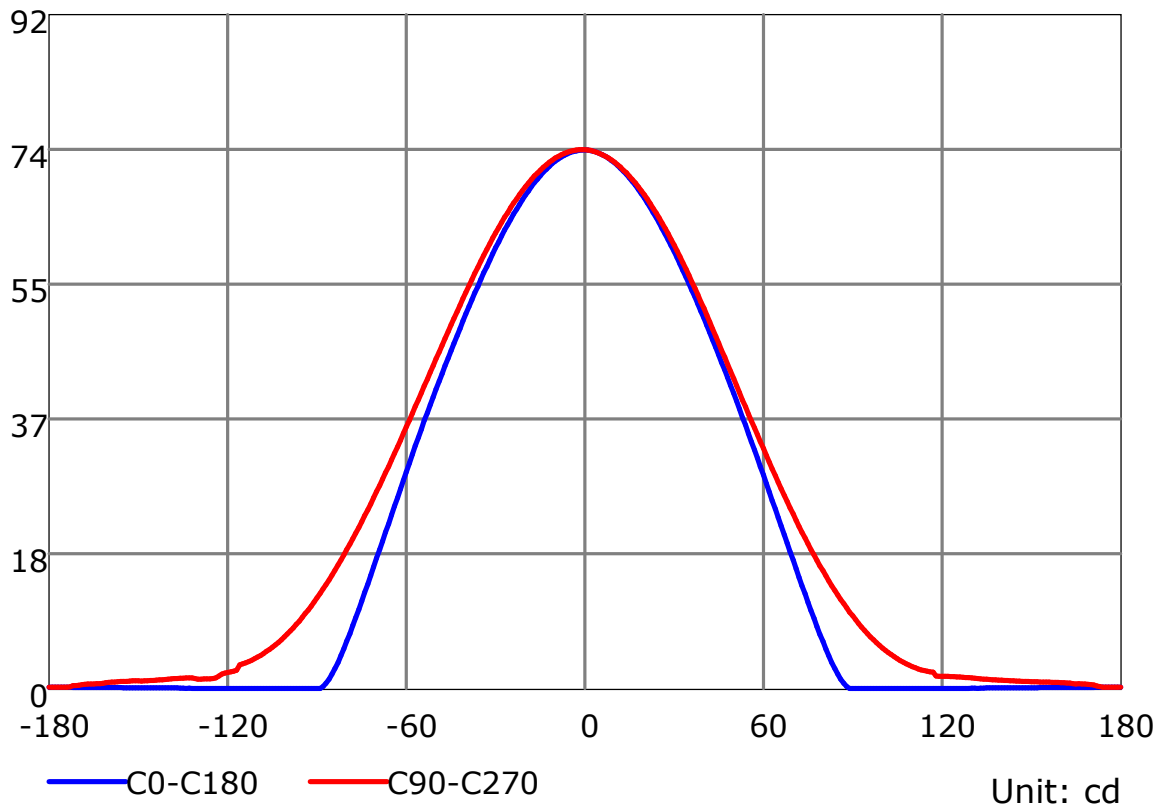
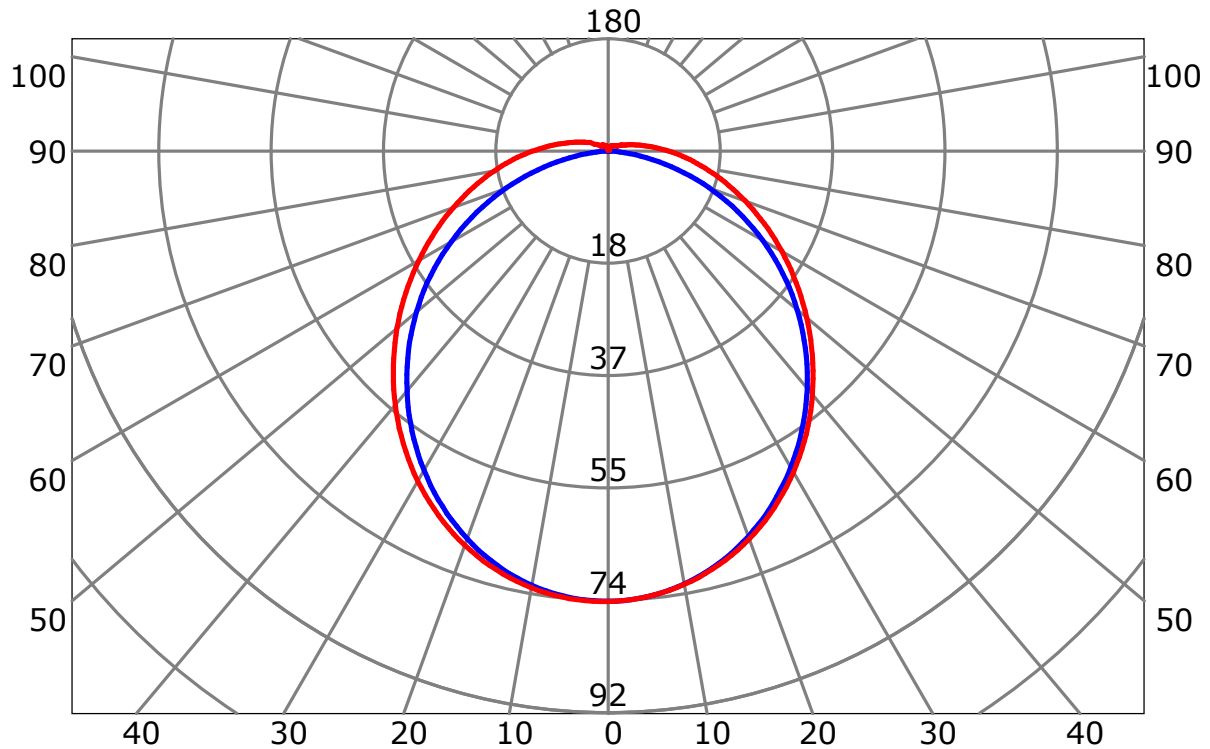


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



Luminous Intensity Distribution Curve

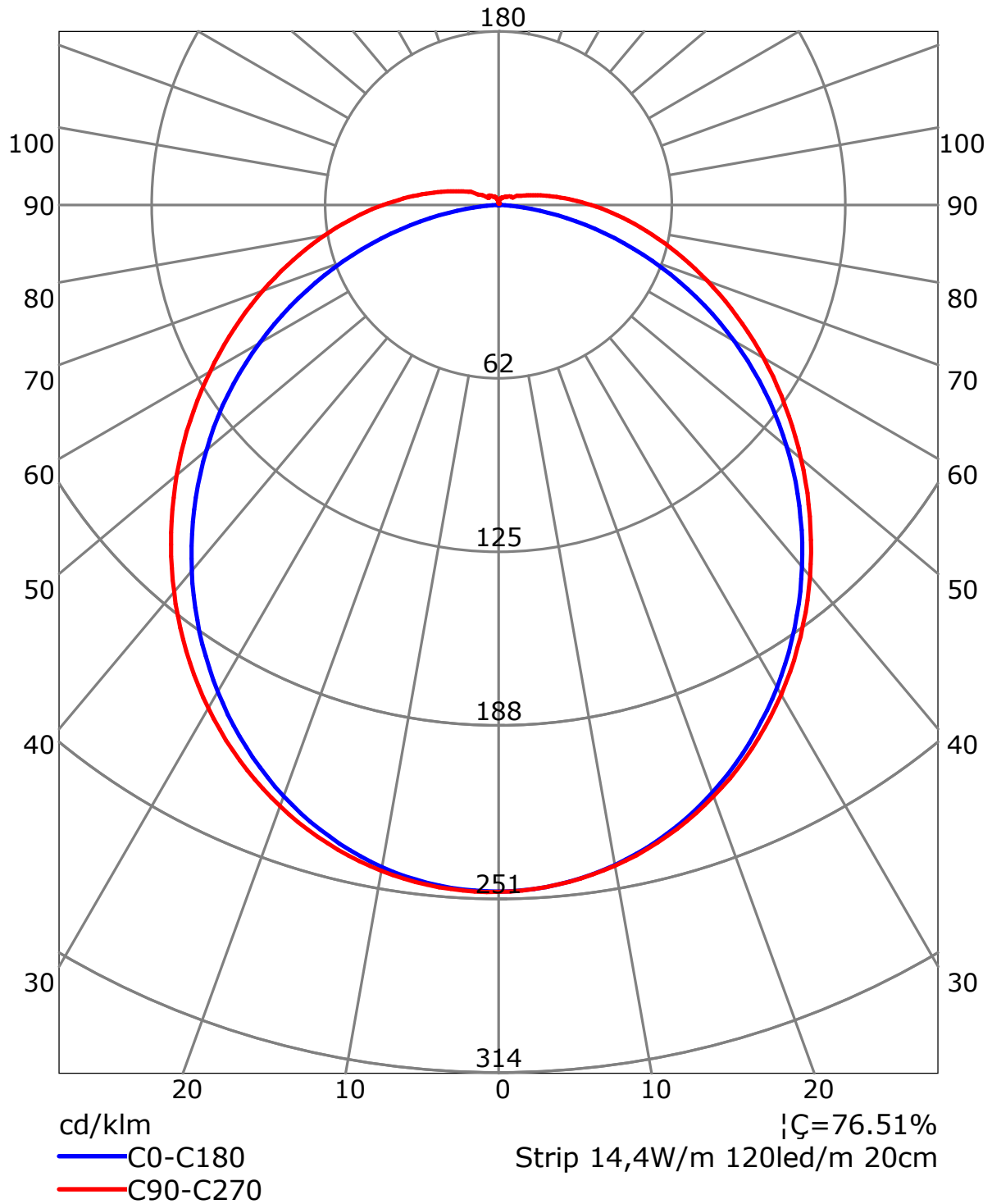


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



Luminous Intensity Distribution Curve(cd/klm)

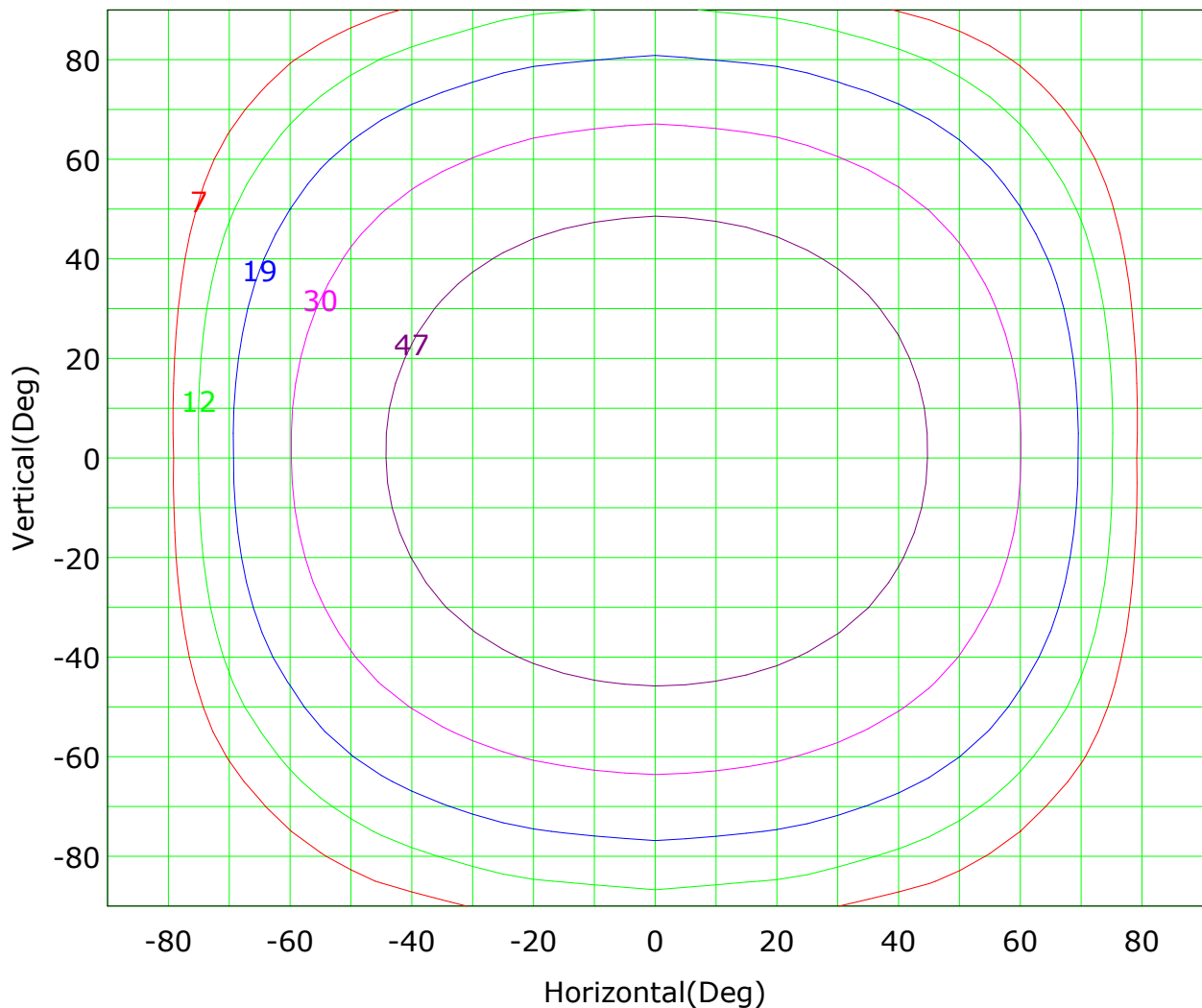


C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



Isocandela (rectangle)



Imax (100%): 74 cd

| | | | |
|-----------|-------|-----------|-------|
| — (10%): | 7 cd | — (16%): | 12 cd |
| — (25%): | 19 cd | — (40%): | 30 cd |
| — (63%): | 47 cd | — (100%): | 74 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

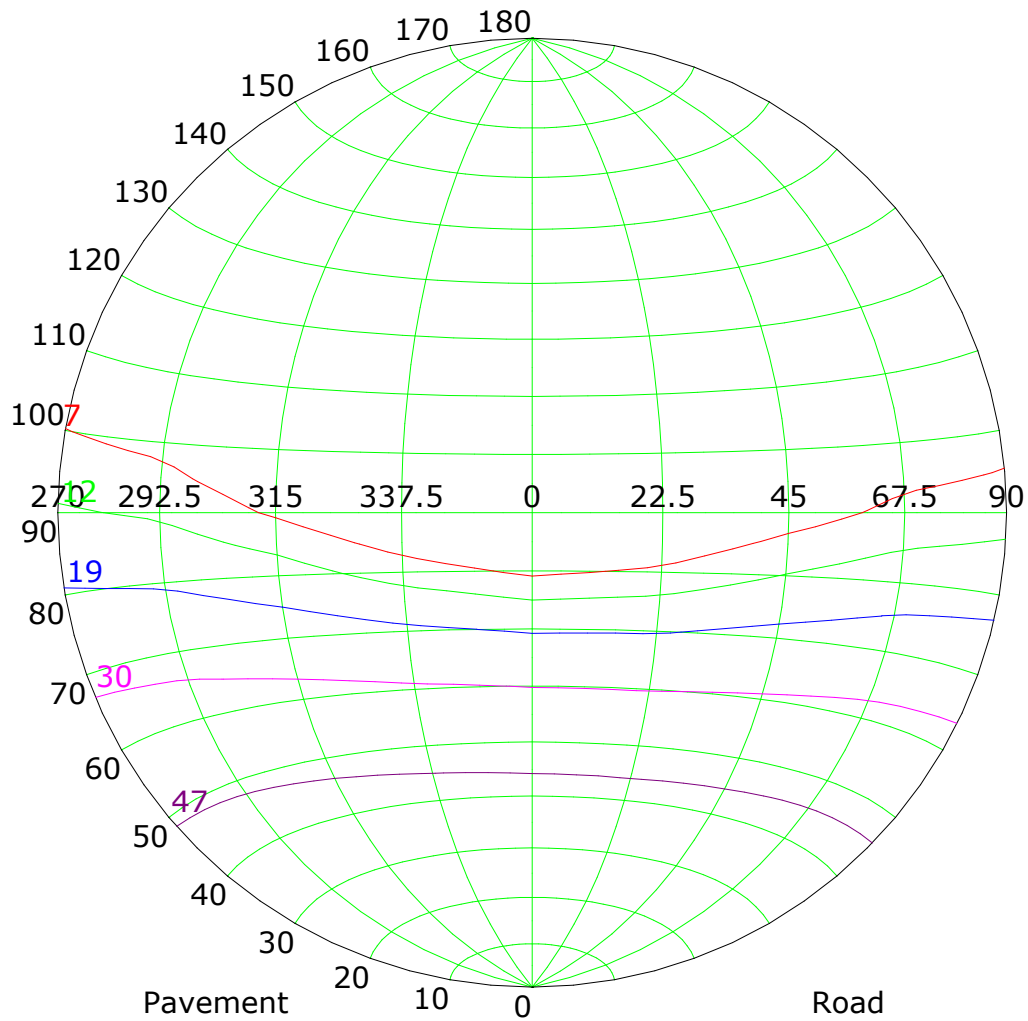
Distance: 7.792 m

Humidity:

Inspector:



Isocandela (sphere)



Imax (100%): 74 cd

| | | | |
|-----------|-------|-----------|-------|
| — (10%): | 7 cd | — (16%): | 12 cd |
| — (25%): | 19 cd | — (40%): | 30 cd |
| — (63%): | 47 cd | — (100%): | 74 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

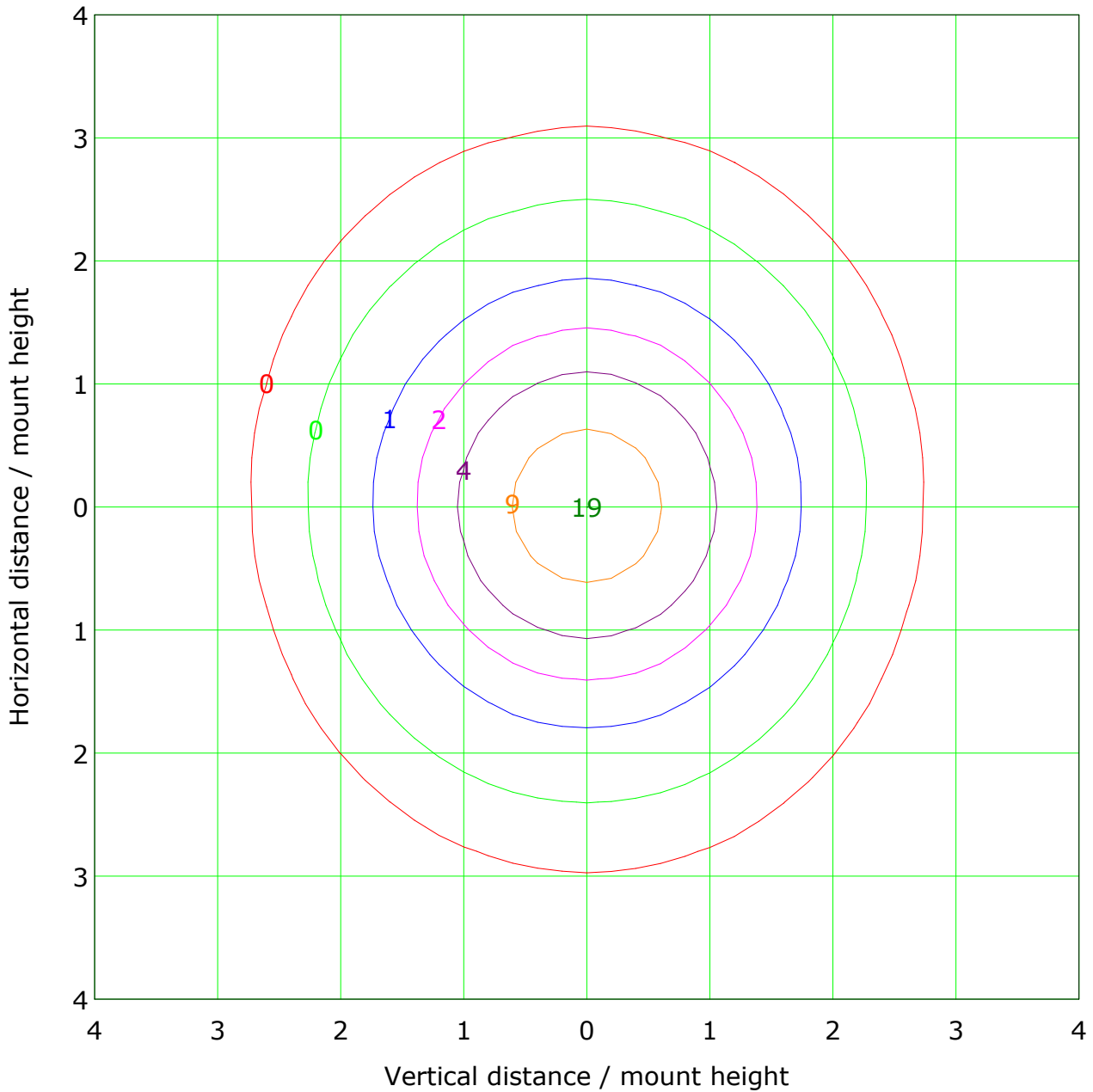
Distance: 7.792 m

Humidity:

Inspector:



IsoLux Plot



| | | | |
|---|---|------------------------|--|
| Mounting Height: 2.0m | | Max Lux(100%): 18.6 lx | |
| <ul style="list-style-type: none"> — (1%): 0.2 lx — (5%): 0.9 lx — (20%): 3.7 lx — (100%): 18.6 lx | <ul style="list-style-type: none"> — (2%): 0.4 lx — (10%): 1.9 lx — (50%): 9.3 lx | | |

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

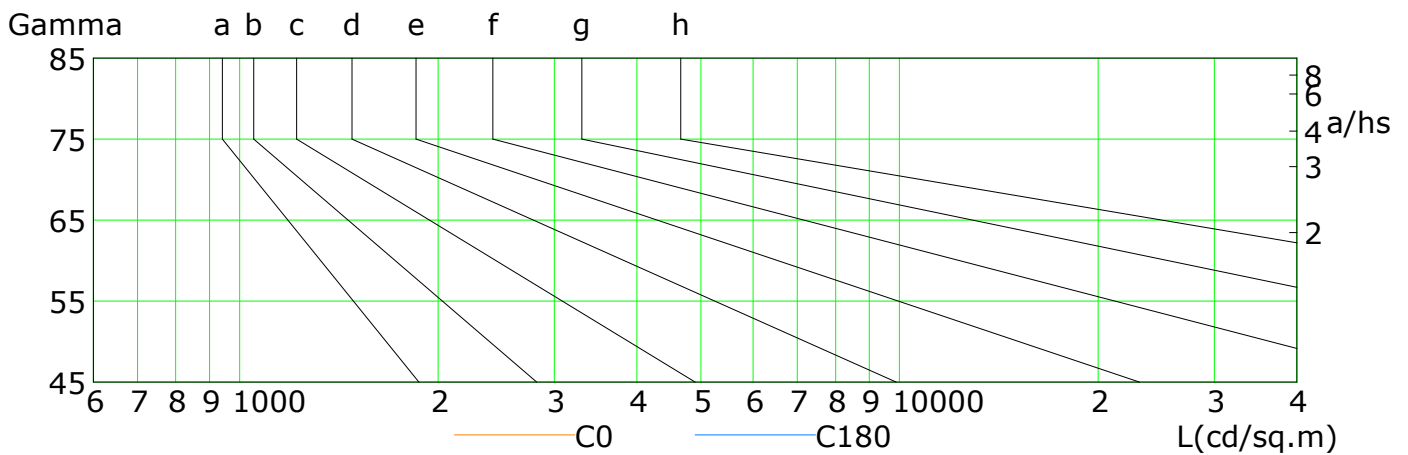
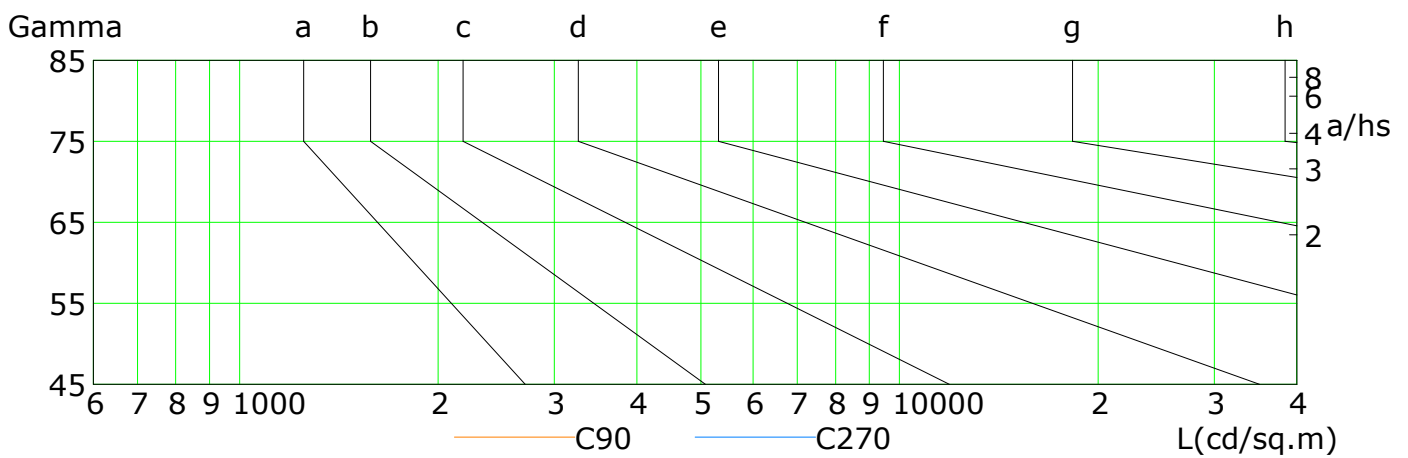
Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 7.792 m
 Humidity:
 Inspector:



Lum Limit Curve

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

a b c d e f g h



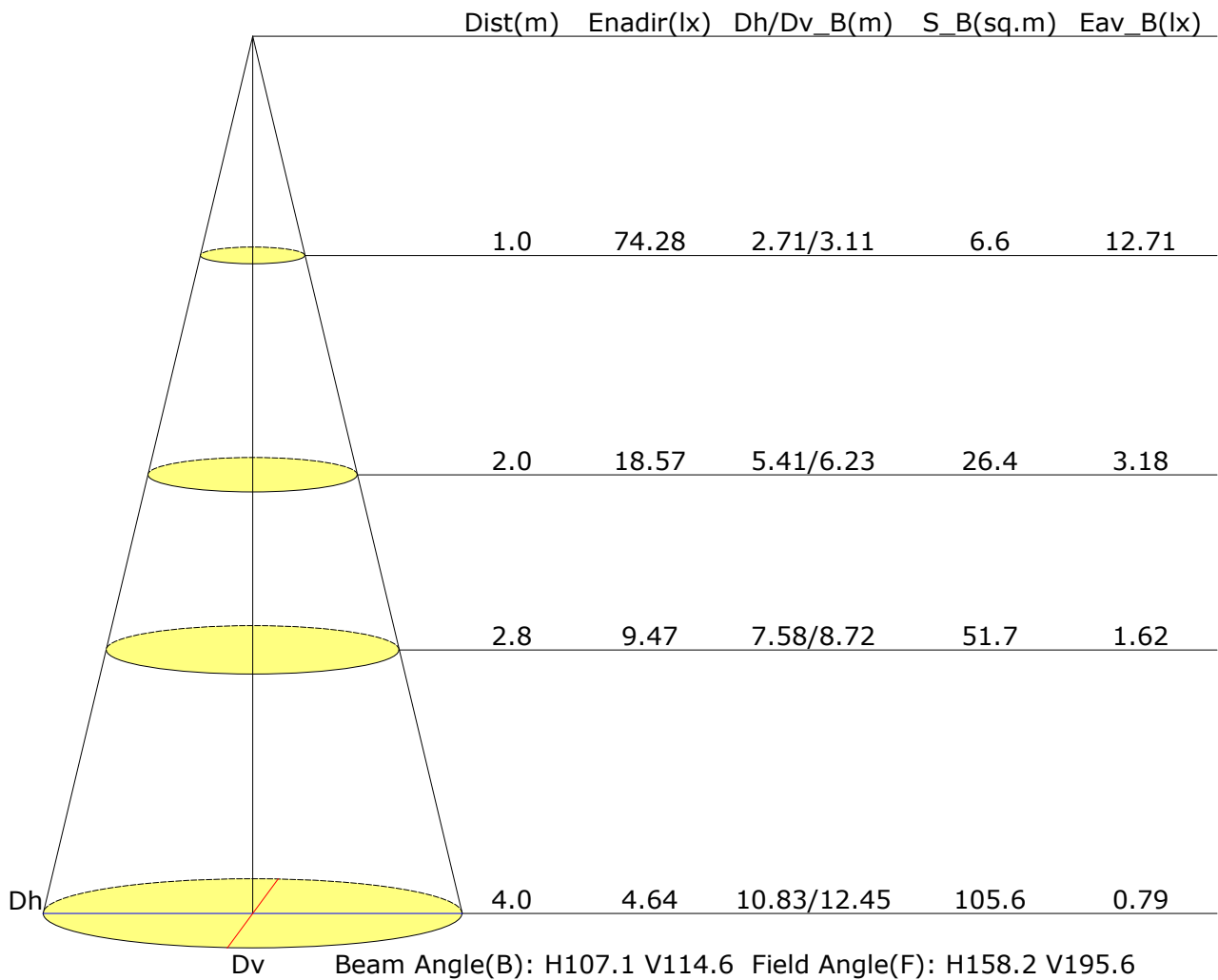
| L(cd/sq.m) | G45 | G50 | G55 | G60 | G65 | G70 | G75 | G80 | G85 |
|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| C0 | 46 | 41 | 35 | 29 | 24 | 18 | 12 | 6 | 2 |
| C90 | 48 | 43 | 38 | 33 | 28 | 24 | 20 | 16 | 13 |
| C180 | 47 | 41 | 36 | 30 | 24 | 18 | 12 | 7 | 2 |
| C270 | 50 | 46 | 41 | 36 | 32 | 27 | 23 | 19 | 16 |

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

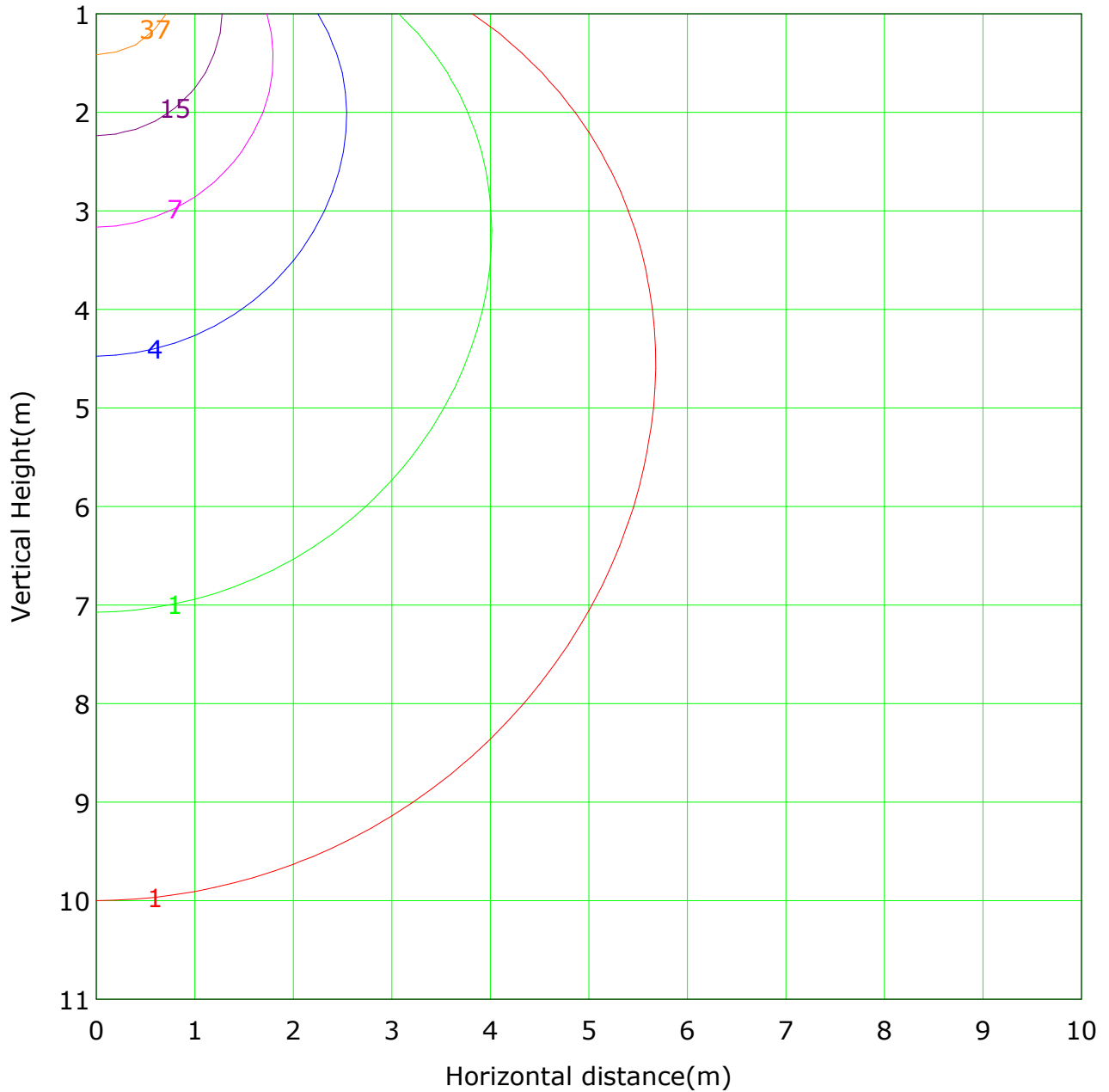


C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



Vertical IsoLux Plot



| | | |
|-------------------|-------------------|------------------|
| Lowest(m): 1.0m | Highest(m): 11.0m | Max Lux: 74.3 lx |
| — (1%): 0.7 lx | — (2%): 1.5 lx | |
| — (5%): 3.7 lx | — (10%): 7.4 lx | |
| — (20%): 14.9 lx | — (50%): 37.1 lx | |
| — (100%): 74.3 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: