

Report No.:

Test Time: 08/10/2024 16:55

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-MR01-03+LLP-03-FM

Lamp Description: F52-40s-1208F2/14.4 85cm

Number of Lamps: 1

Voltage: 24.0 V

Power: 11.31 W

Lumens per Lamp: 1267

Current: 0.472 A

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 481.1 lm

Downward Ratio: 37.97%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.7, 124.0, 133.7, 133.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 110.3, 87.9, 96.5, 96.6

Luminaire Efficacy Rating (LER): 42.59

Max. Intensity: 213.93 cd

S/MH(C0/C180): 1.24

Total Rated Lamp Lumens: 1267.0 lm

Efficiency: 37.97%

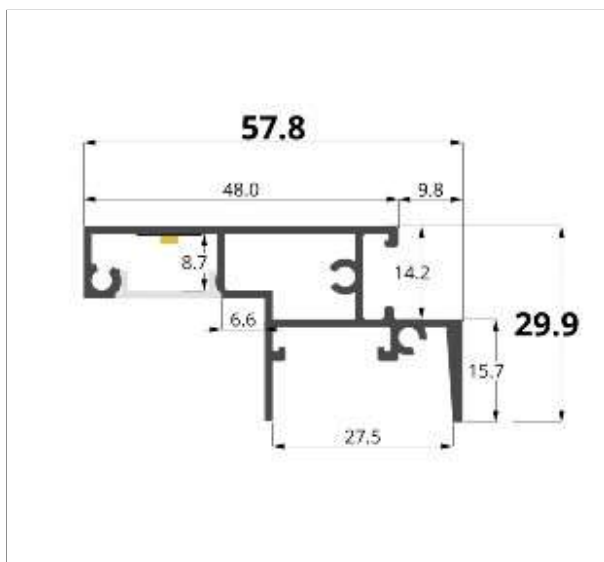
Upward Ratio: 0.00%

Central Intensity: 213.86 cd

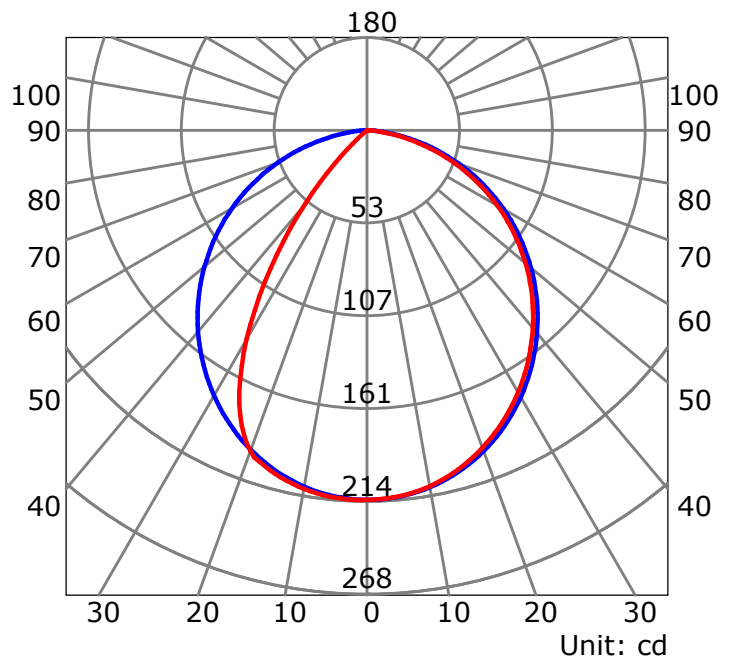
Pos of Max. Intensity: H270 V1

S/MH(C90/C270): 1.12

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

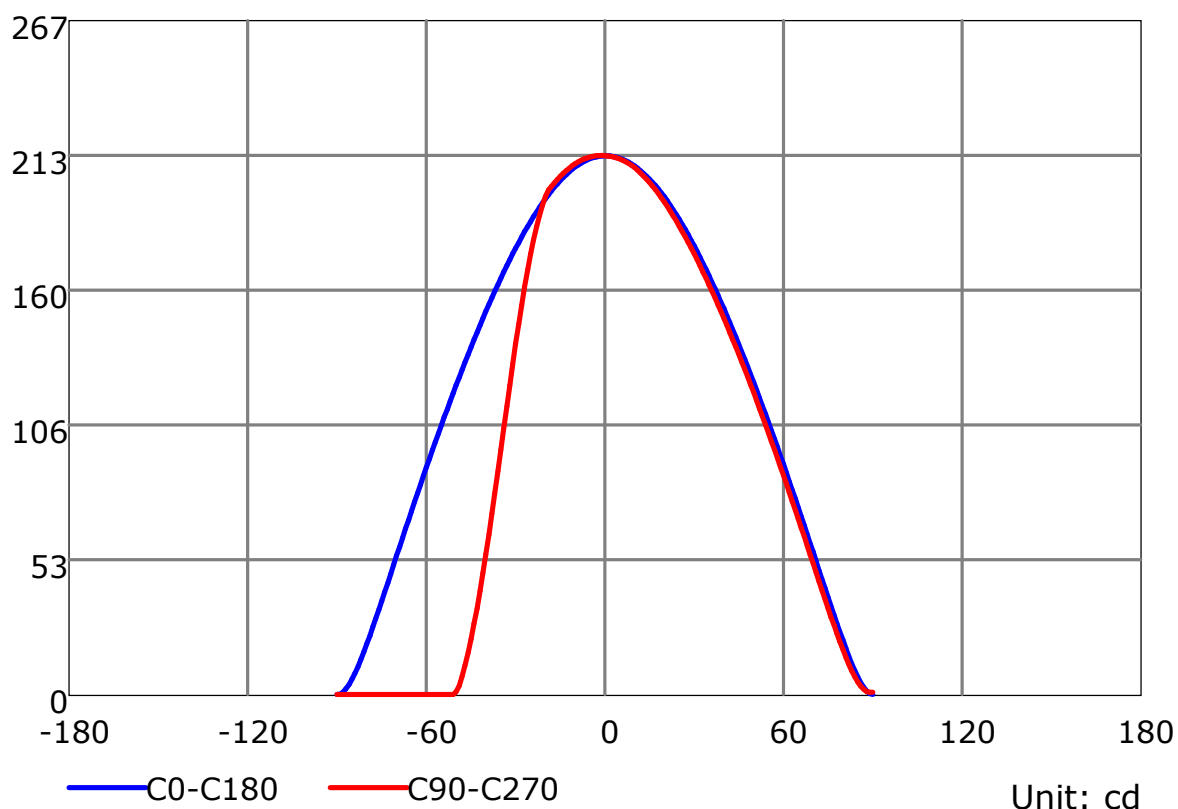
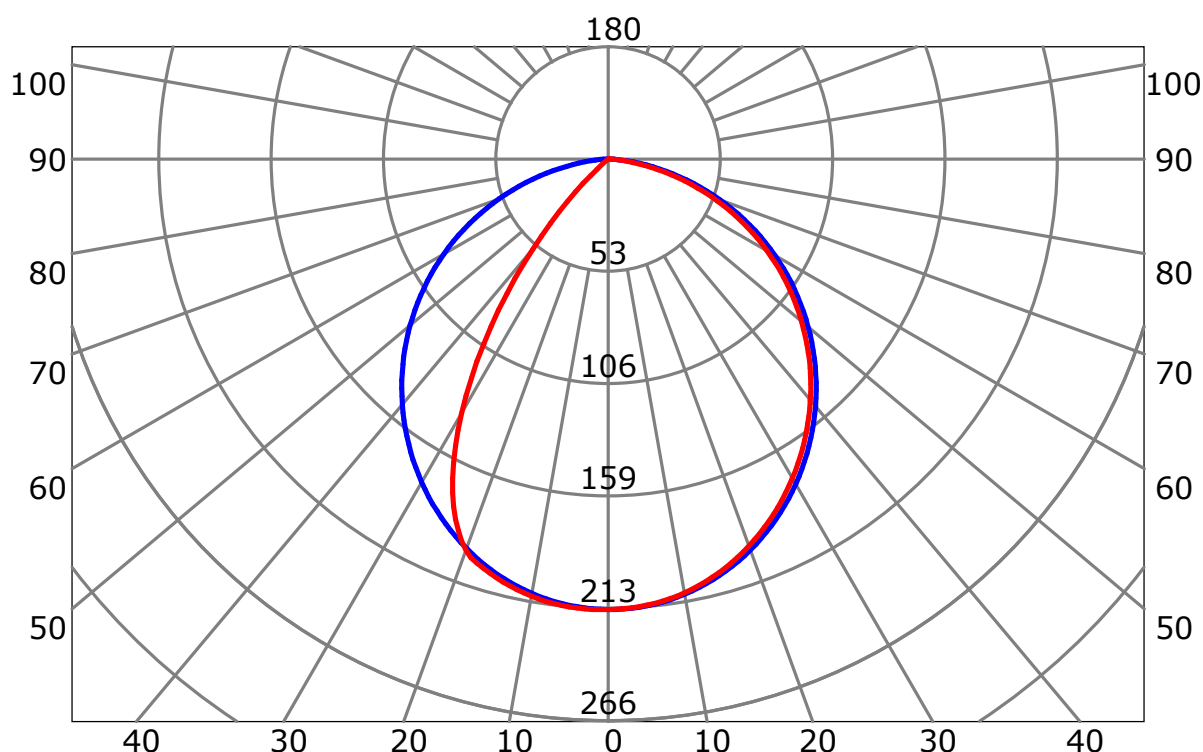
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

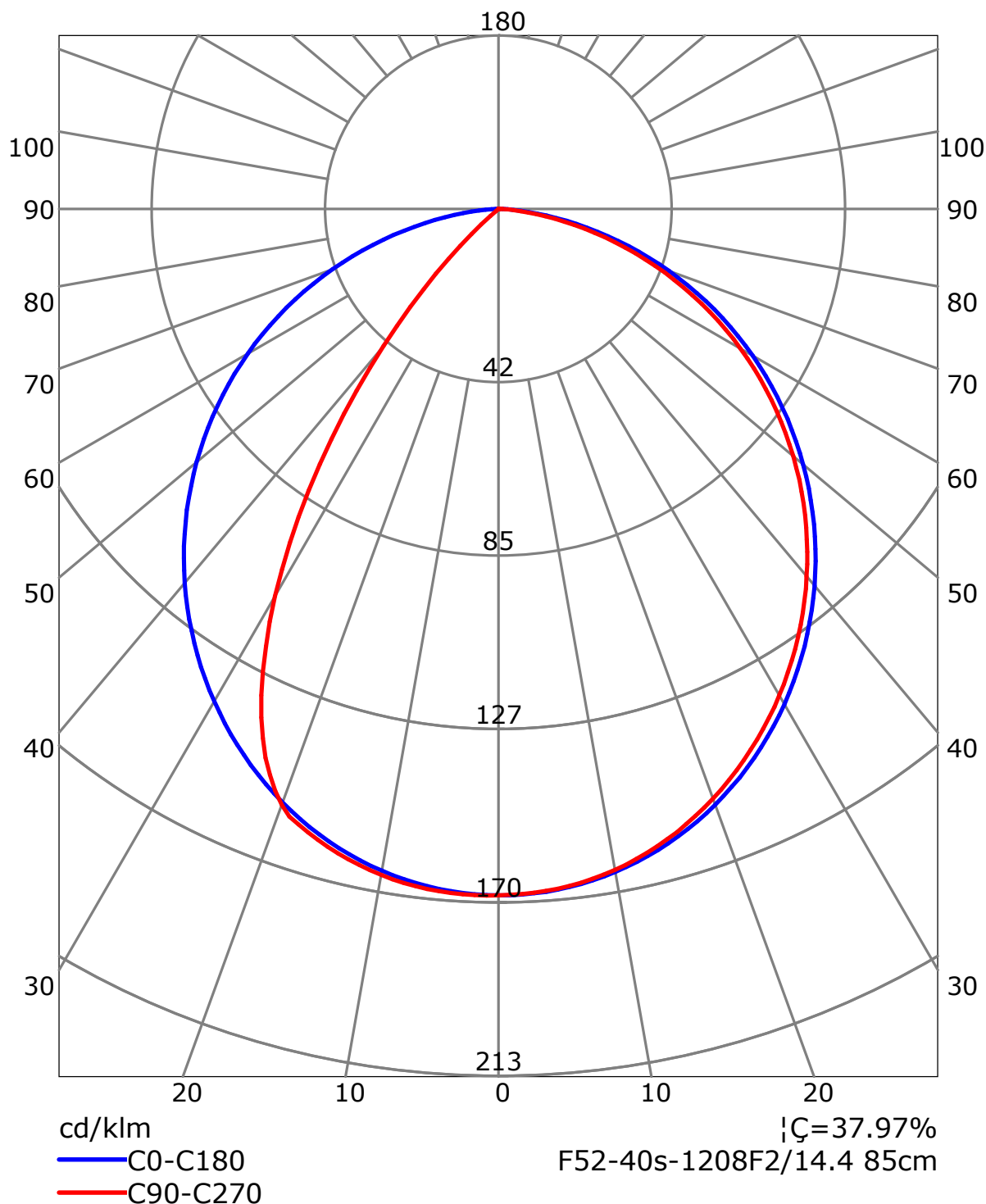
Luminous Intensity Distribution Curve



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:

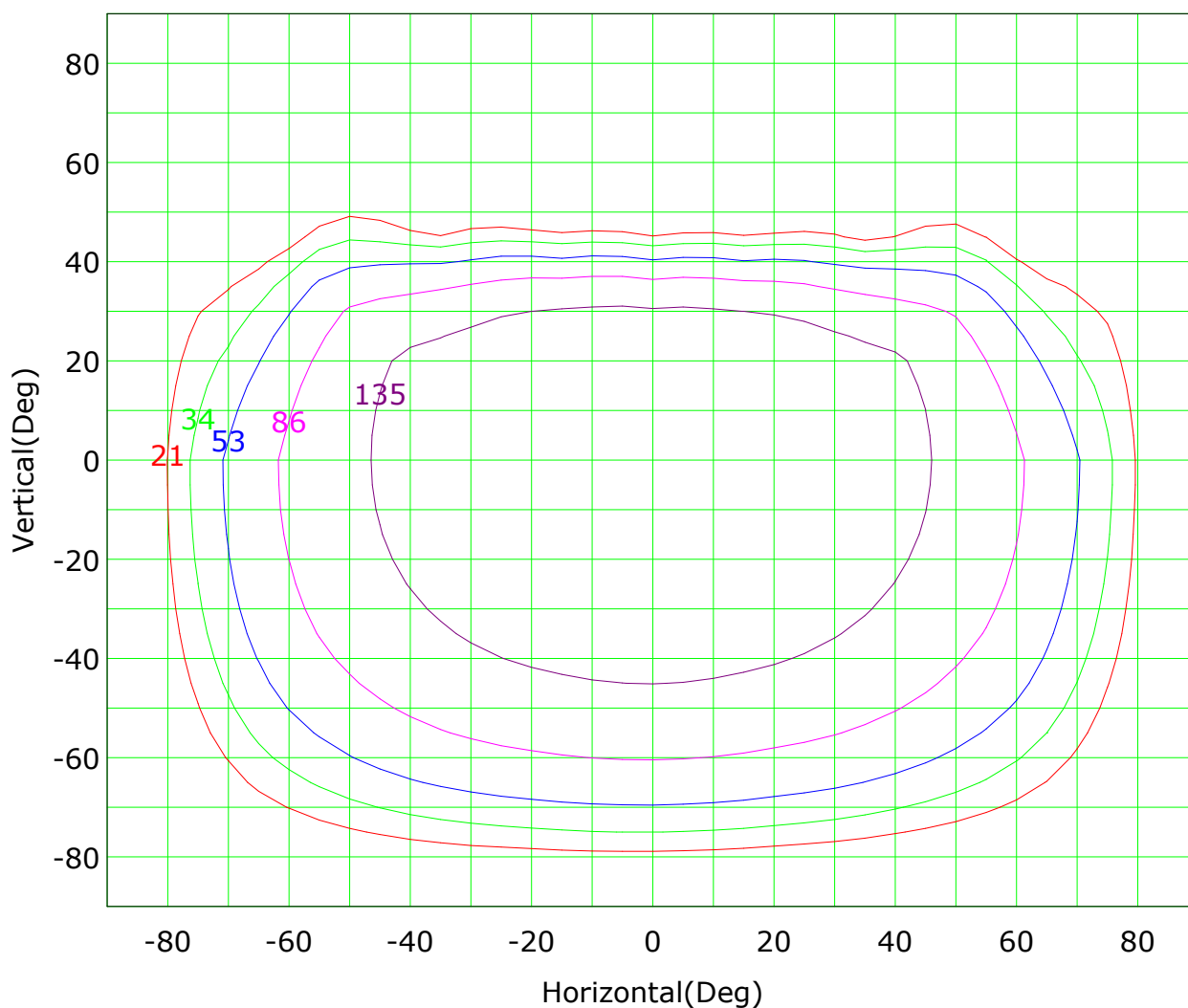
Luminous Intensity Distribution Curve(cd/klm)



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%): 214 cd

(10%):	21 cd	(16%):	34 cd
(25%):	53 cd	(40%):	86 cd
(63%):	135 cd	(100%):	214 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

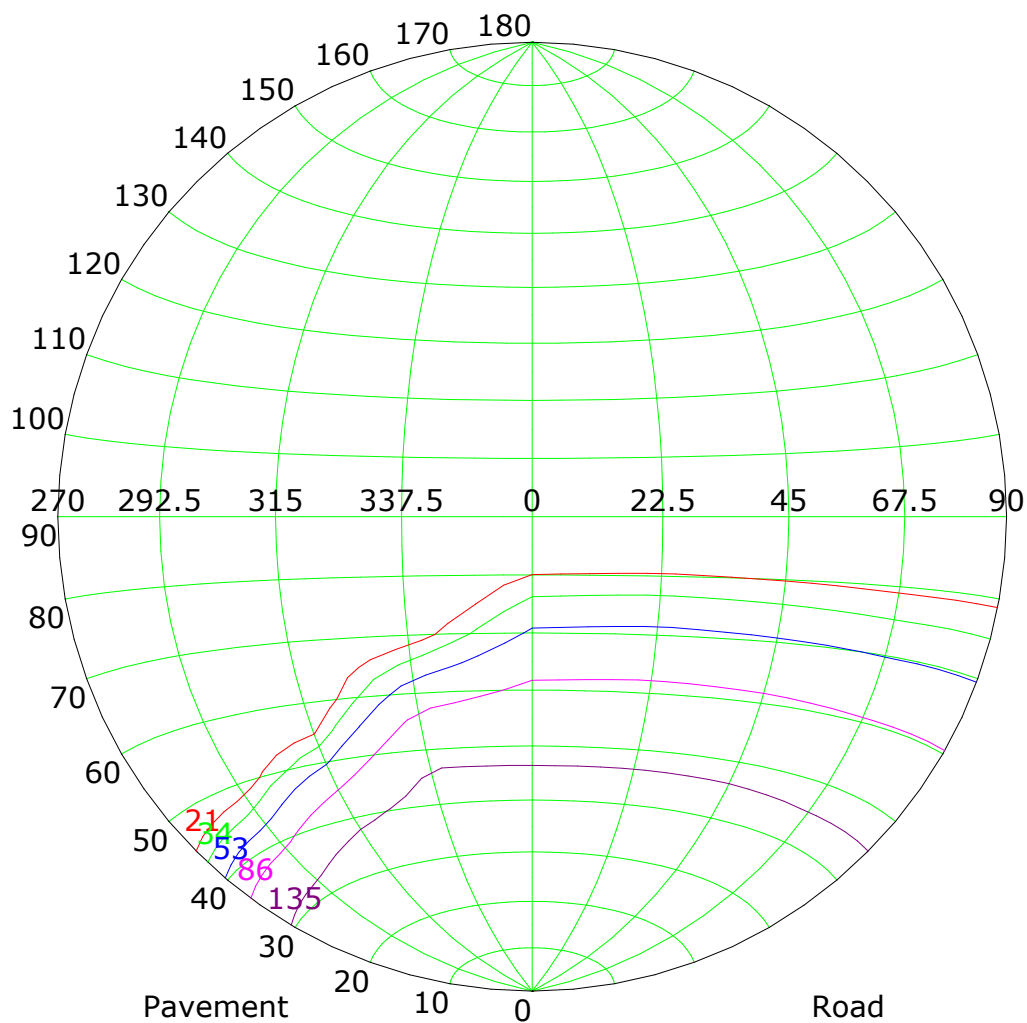
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

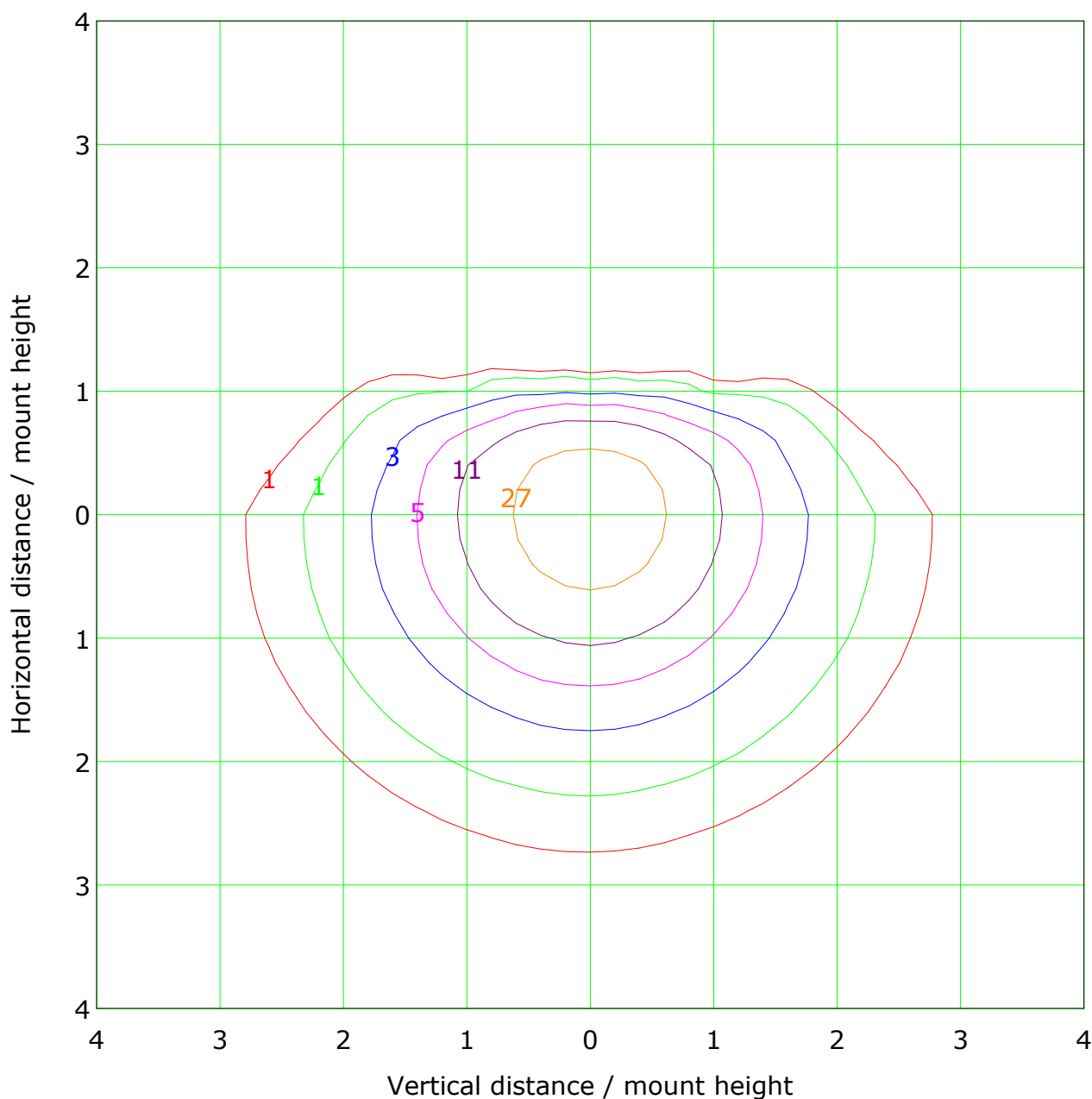
Isocandela (sphere)



Imax (100%): 214 cd

(10%):	21 cd	(16%):	34 cd
(25%):	53 cd	(40%):	86 cd
(63%):	135 cd	(100%):	214 cd

IsoLux Plot



Mounting Height: 2.0m Max Lux(100%): 53.5 lx

(1%): 0.5 lx	(2%): 1.1 lx
(5%): 2.7 lx	(10%): 5.3 lx
(20%): 10.7 lx	(50%): 26.7 lx
(100%): 53.5 lx	

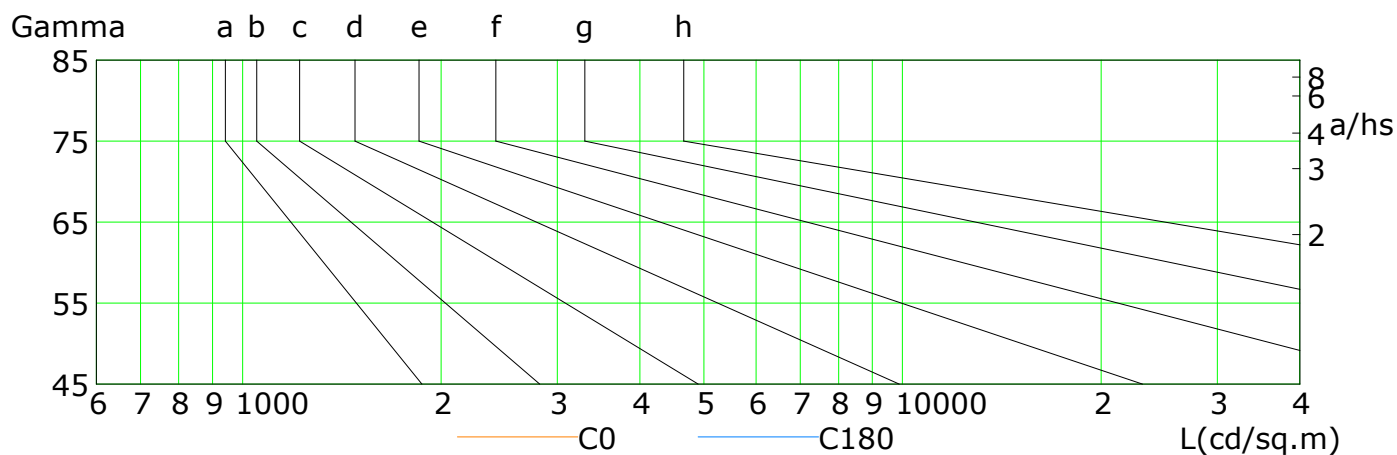
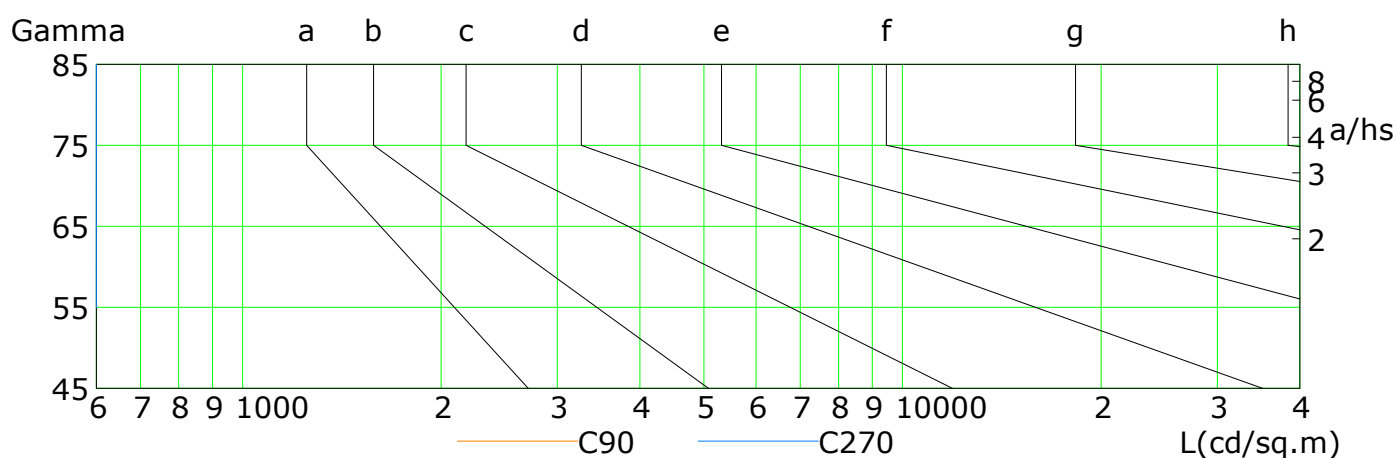
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

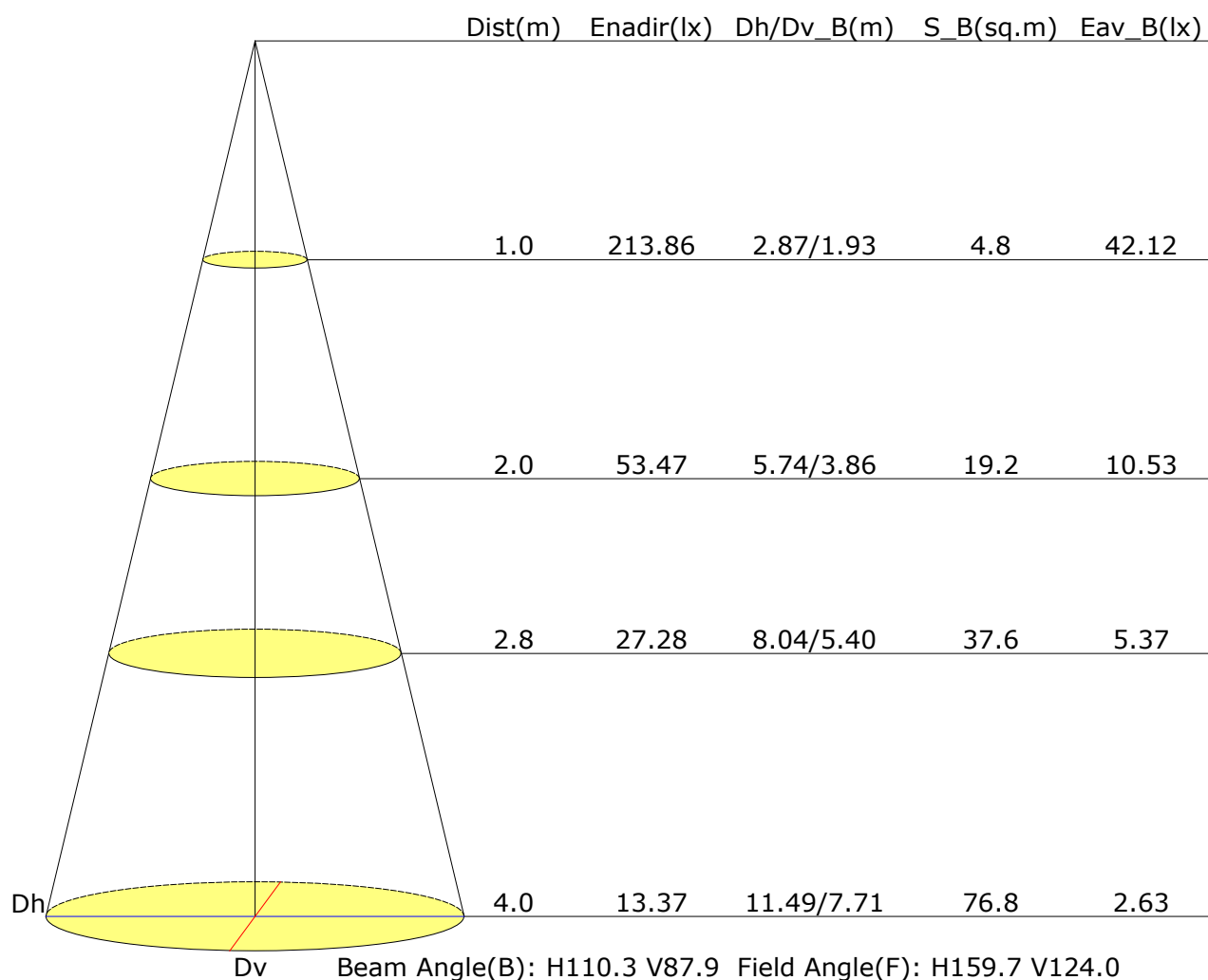


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	139	124	108	92	74	57	39	22	7
C90	135	120	104	87	70	52	34	18	5
C180	138	123	107	90	73	55	37	20	6
C270	22	1	0	0	0	0	0	0	0

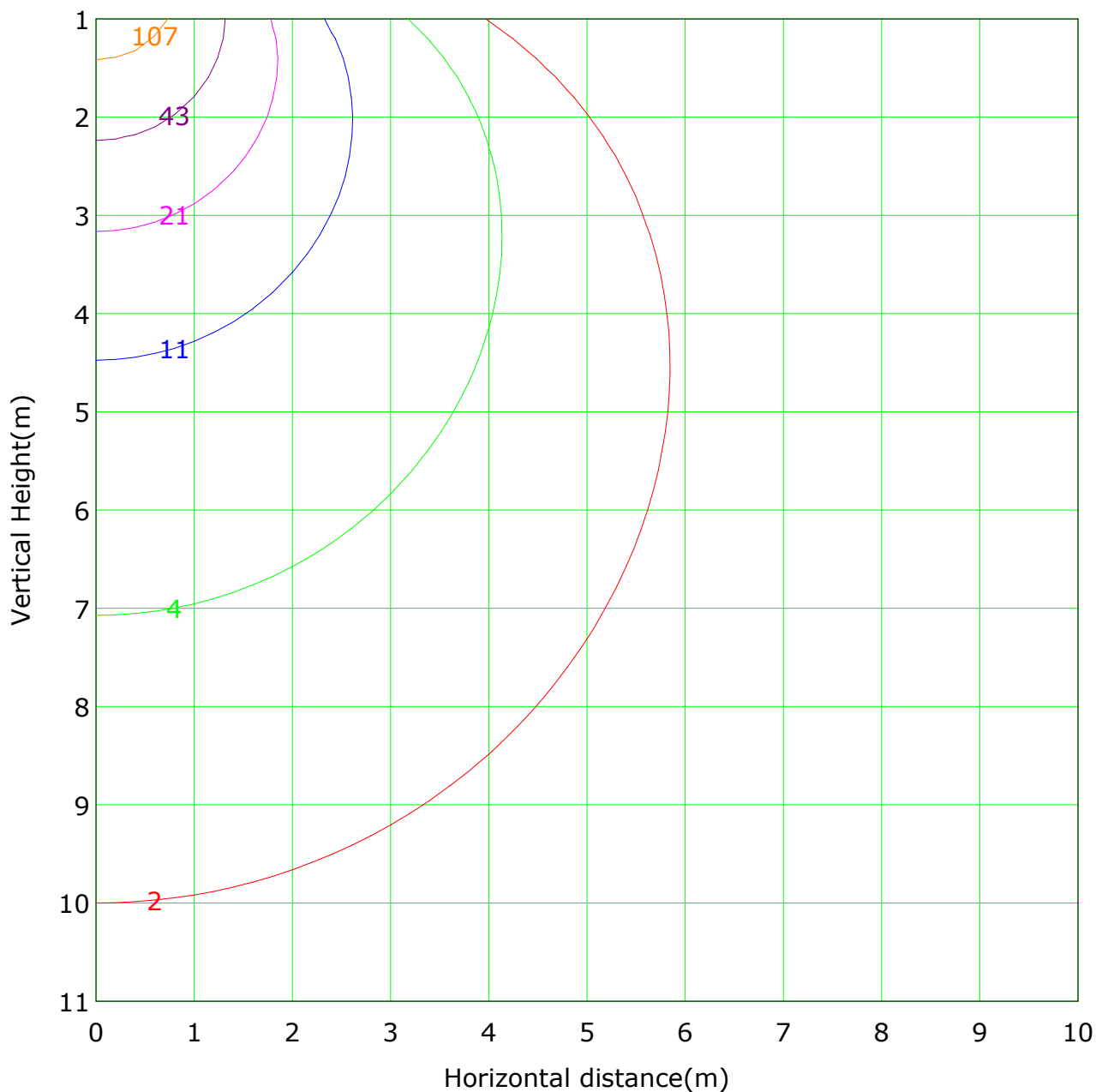
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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: 213.9 lx

— (1%): 2.1 lx	— (2%): 4.3 lx
— (5%): 10.7 lx	— (10%): 21.4 lx
— (20%): 42.8 lx	— (50%): 106.9 lx
— (100%): 213.9 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: 08/10/2024 15:25

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-MR01-03+LLP-03-FS

Lamp Description: F52-40s-1208F2/14.4 85cm

Number of Lamps: 1

Voltage: 24.0 V

Power: 11.35 W

Lumens per Lamp: 1267

Current: 0.473 A

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 422 lm

Downward Ratio: 33.31%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 163.1, 125.9, 135.3, 135.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.5, 88.2, 96.1, 96.2

Luminaire Efficacy Rating (LER): 37.23

Max. Intensity: 186.34 cd

S/MH(C0/C180): 1.23

Total Rated Lamp Lumens: 1267.0 lm

Efficiency: 33.31%

Upward Ratio: 0.00%

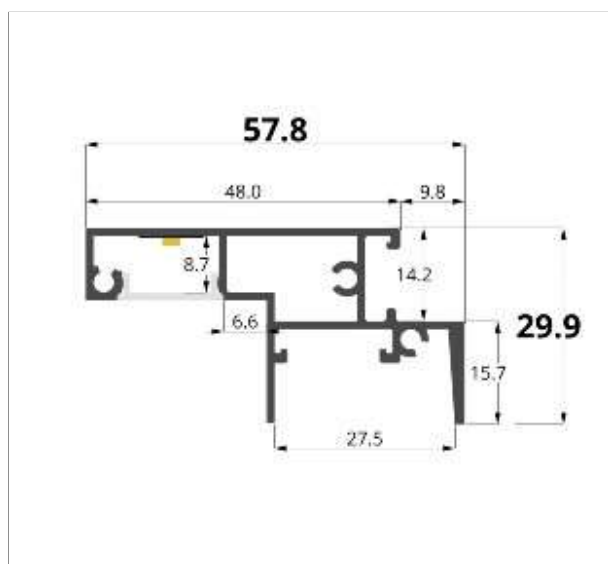
135/315): 163.1, 125.9, 135.

Central Intensity: 186.34 cd

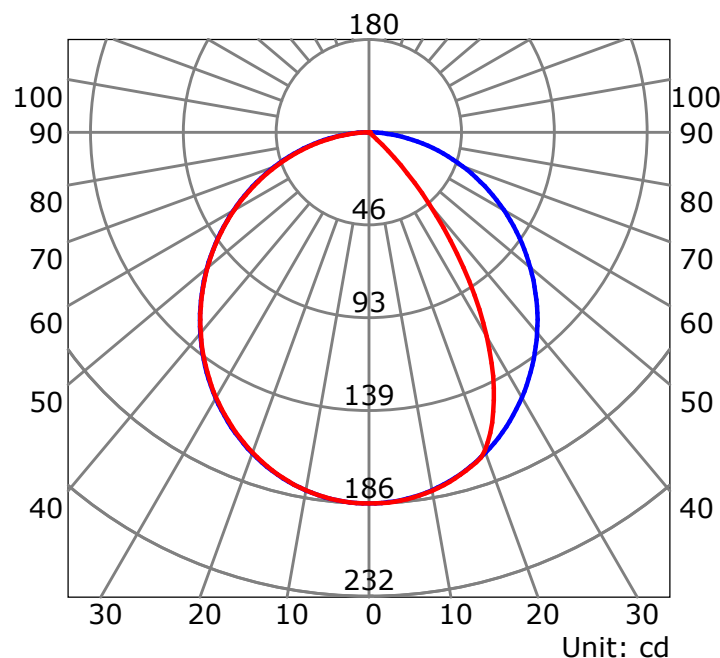
Pos of Max. Intensity: H0 V0

S/MH(C90/C270): 1.11

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

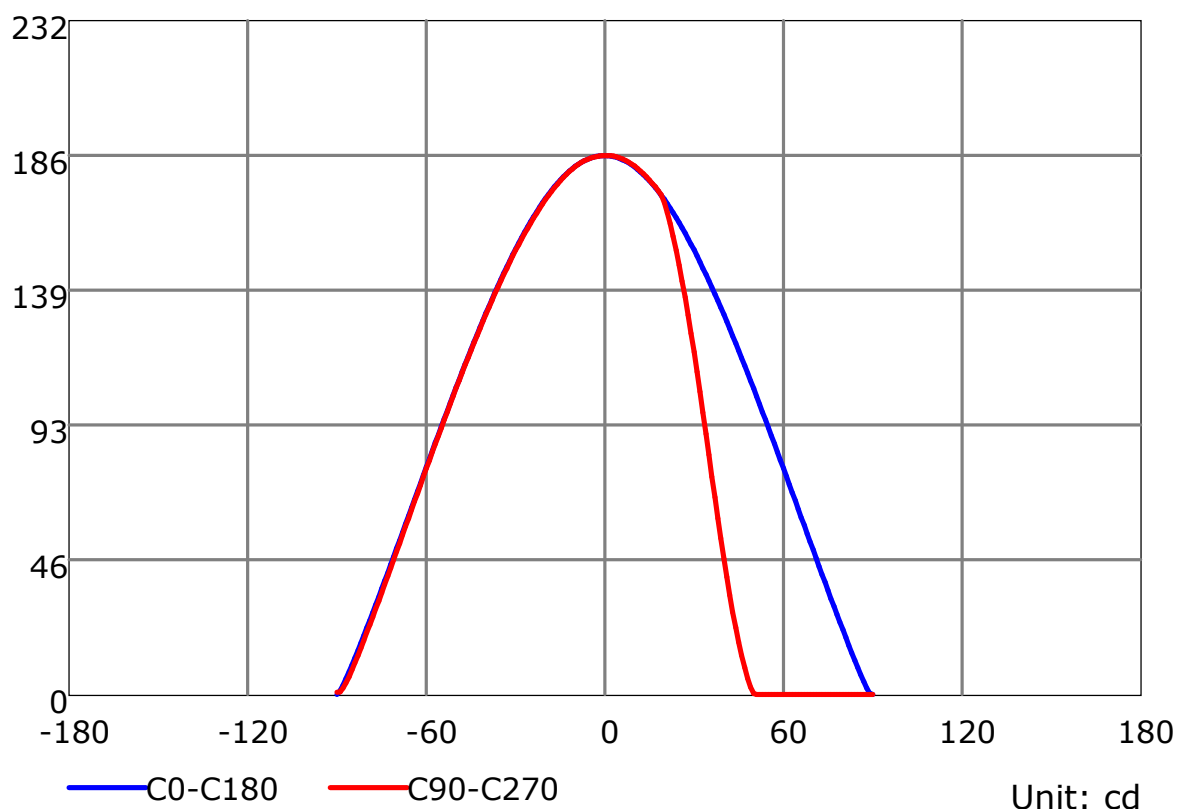
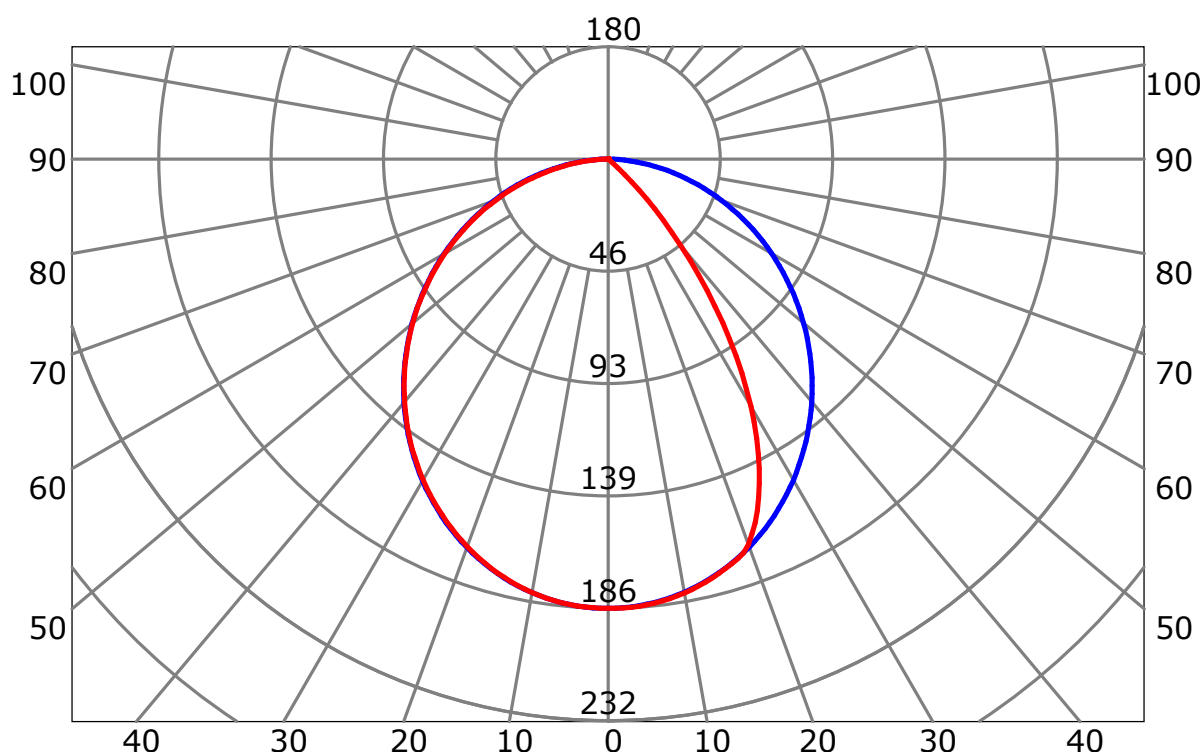
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

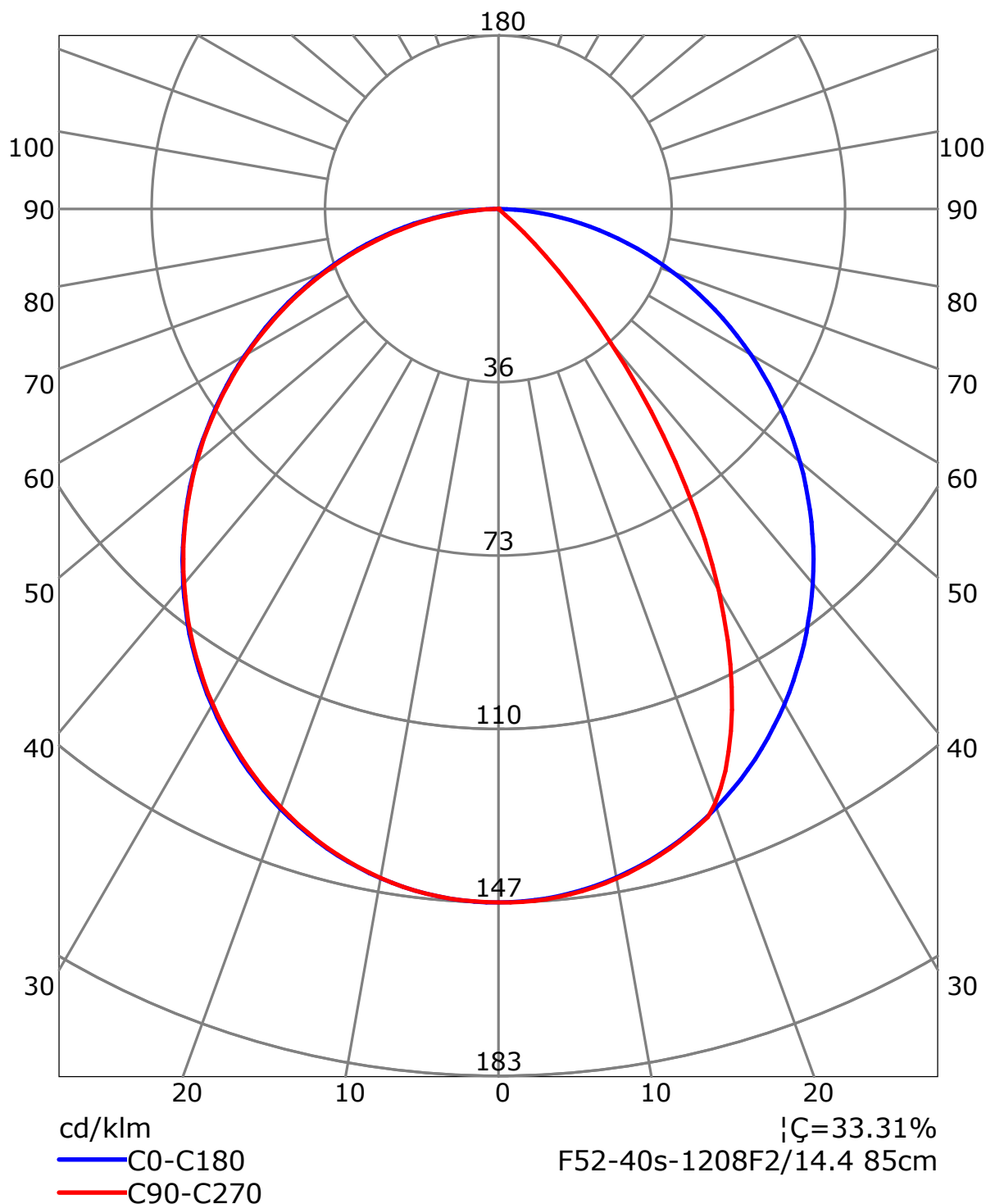
Luminous Intensity Distribution Curve



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:

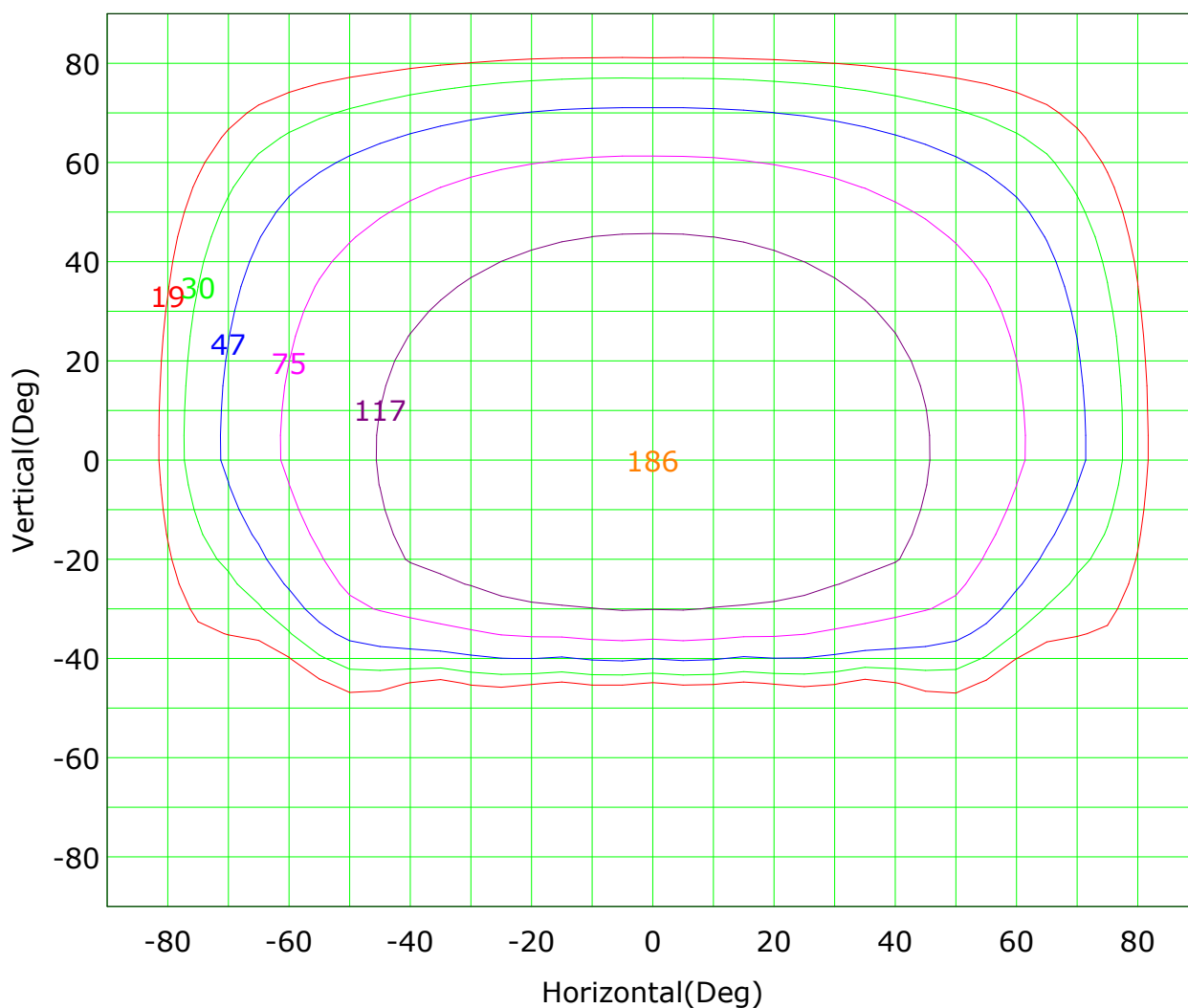
Luminous Intensity Distribution Curve(cd/klm)



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%): 186 cd

(10%):	19 cd	(16%):	30 cd
(25%):	47 cd	(40%):	75 cd
(63%):	117 cd	(100%):	186 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

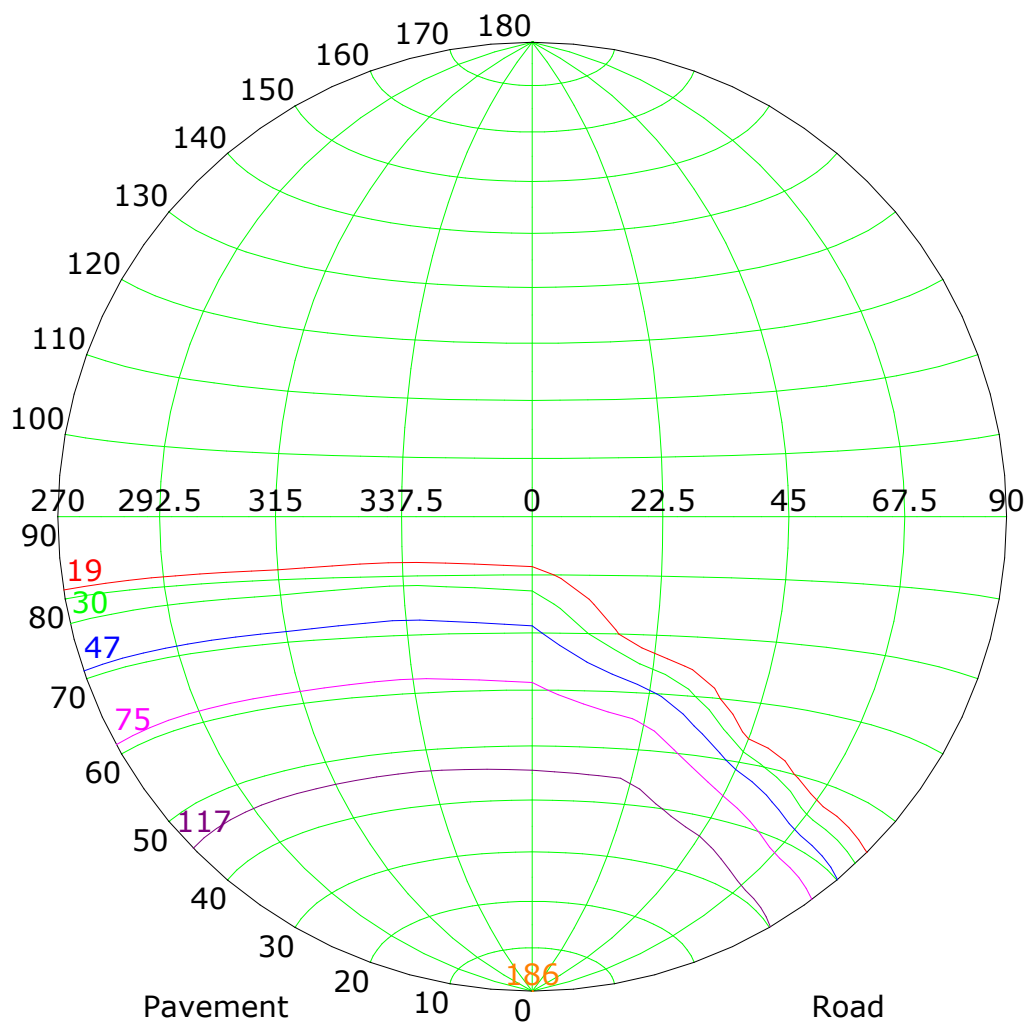
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

Isocandela (sphere)



Imax (100%): 186 cd

(10%): 19 cd	(16%): 30 cd
(25%): 47 cd	(40%): 75 cd
(63%): 117 cd	(100%): 186 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

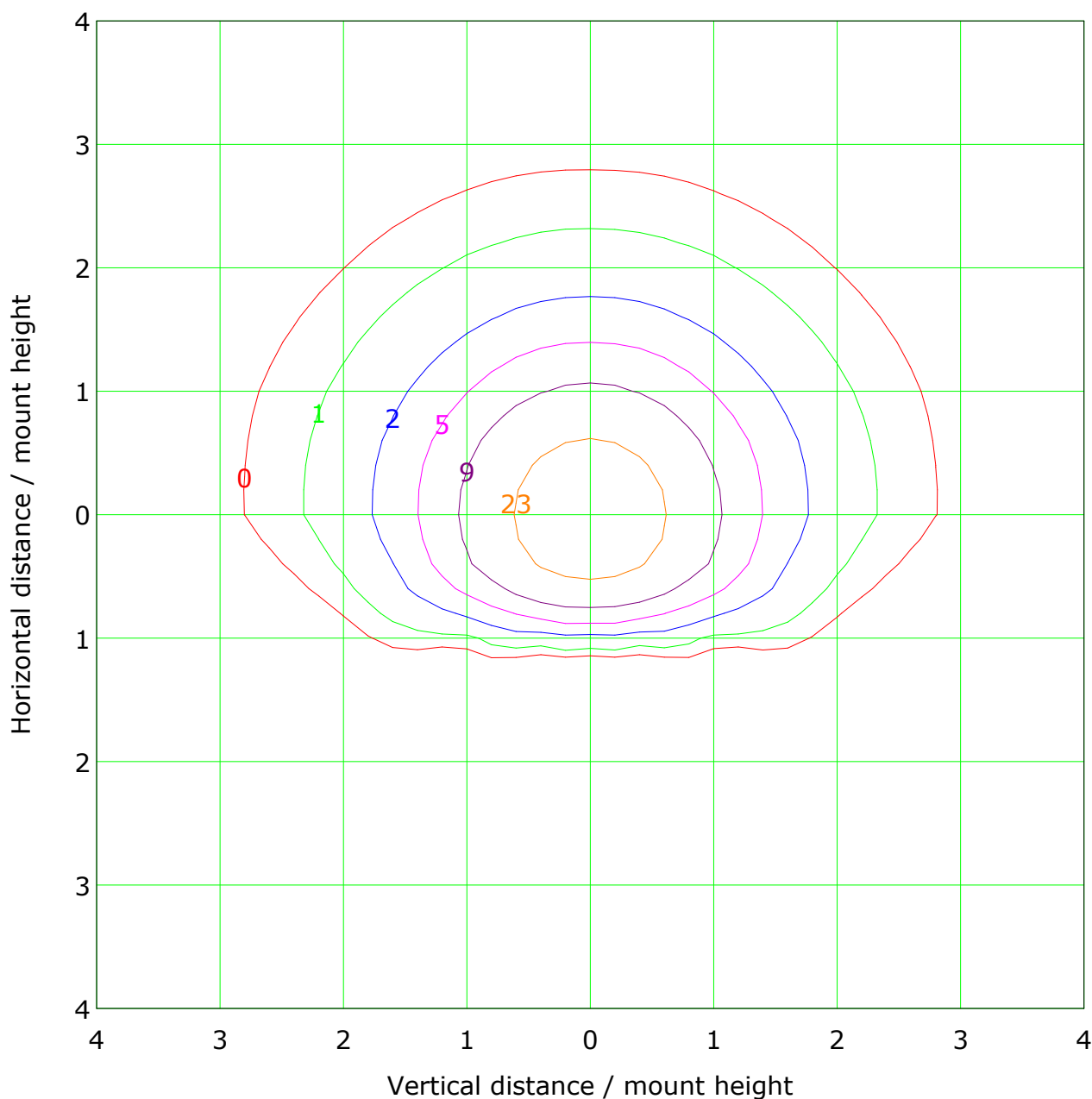
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 2.0m Max Lux(100%): 46.6 lx

(1%): 0.5 lx	(2%): 0.9 lx
(5%): 2.3 lx	(10%): 4.7 lx
(20%): 9.3 lx	(50%): 23.3 lx
(100%): 46.6 lx	

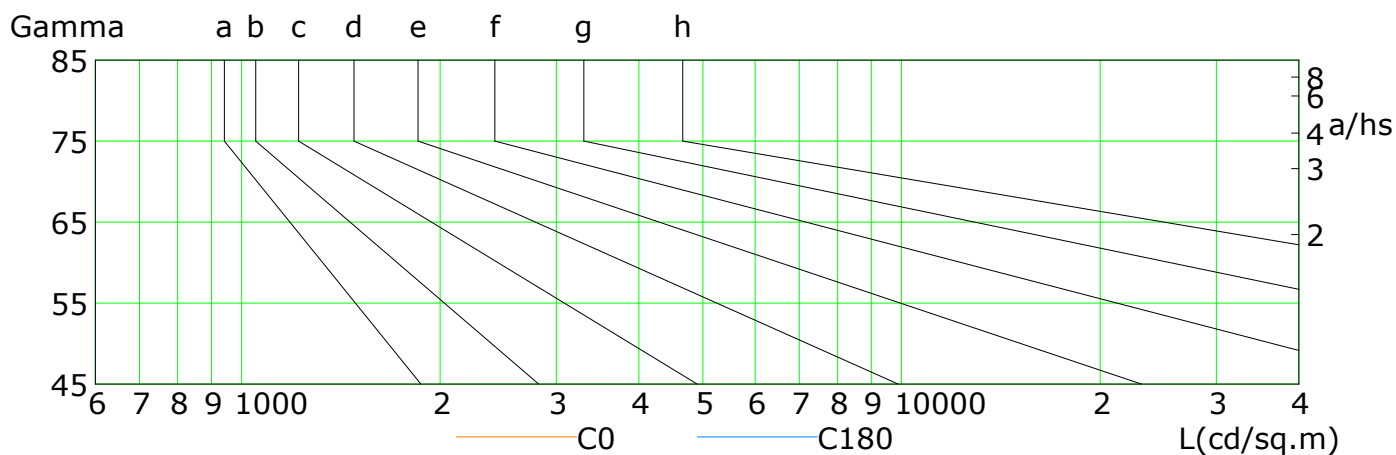
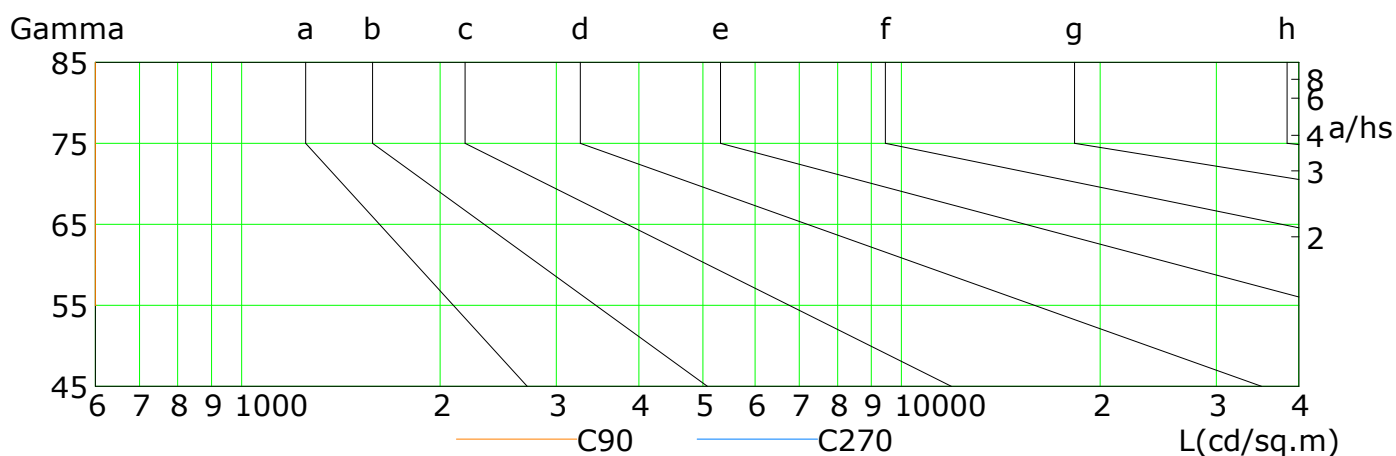
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

a b c d e f g h

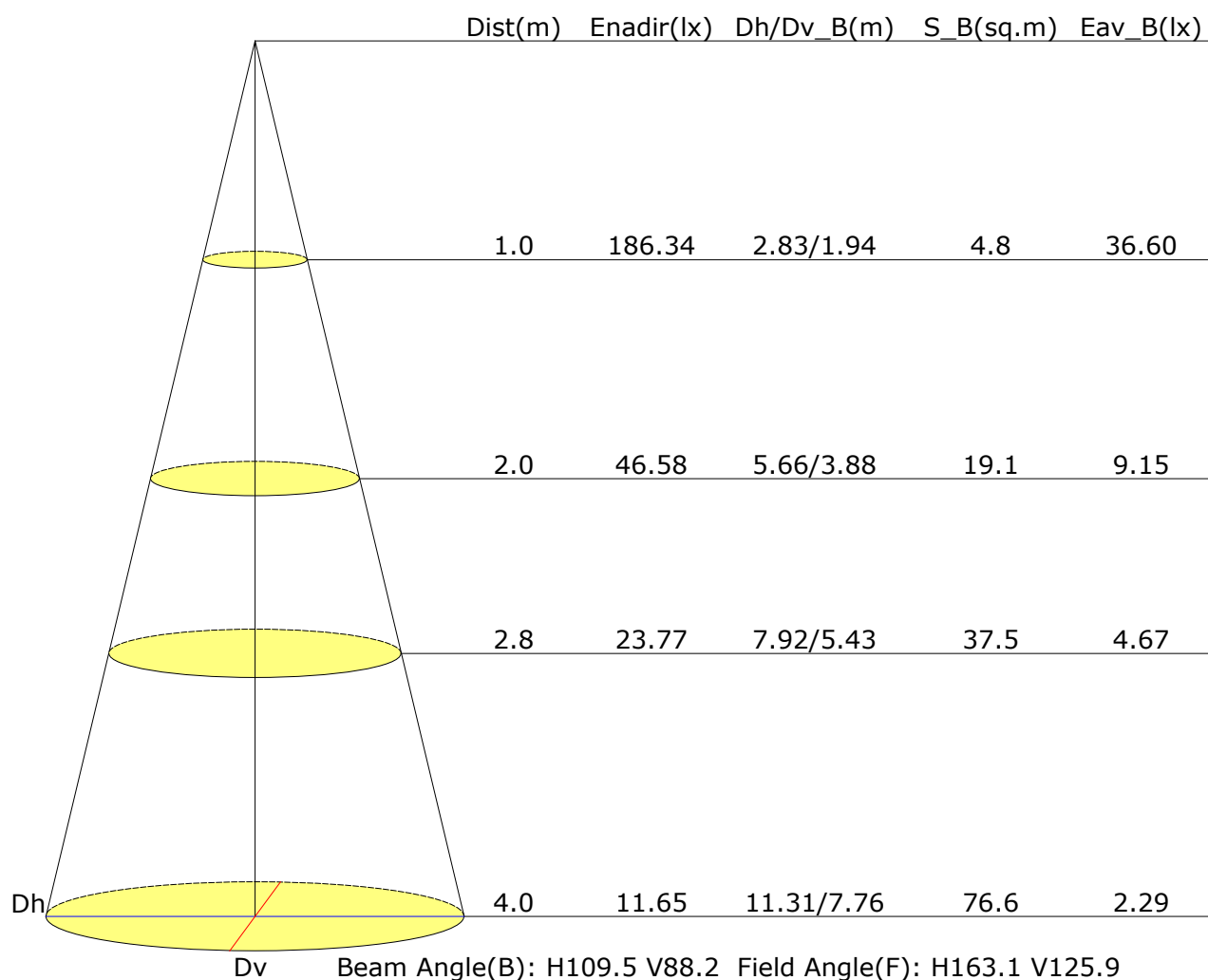


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	119	106	92	78	64	50	36	22	9
C90	18	0	0	0	0	0	0	0	0
C180	119	106	93	79	65	51	37	23	10
C270	119	106	92	78	64	49	35	21	9

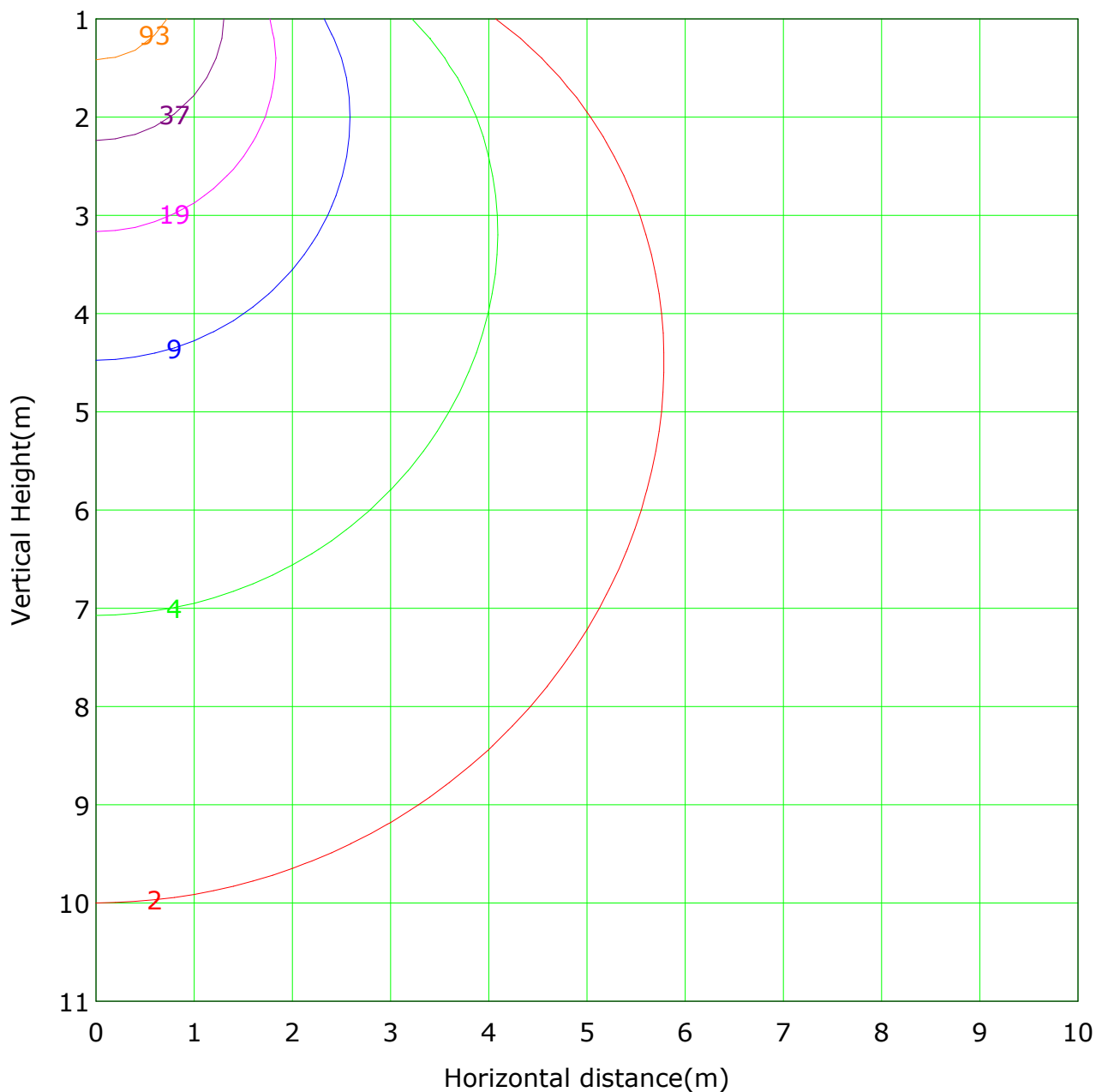
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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: 186.3 lx

— (1%): 1.9 lx	— (2%): 3.7 lx
— (5%): 9.3 lx	— (10%): 18.6 lx
— (20%): 37.3 lx	— (50%): 93.2 lx
— (100%): 186.3 lx	