

Report No.:

Test Time: 03/10/2024 17:18

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-DW16-03+LLD-03-FK

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

Lumens per Lamp: 1491

Voltage: 24.0 V

Current: 0.561 A

Power: 13.45 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 1334.5 lm

Downward Ratio: 89.51%

Total Rated Lamp Lumens: 1491.0 lm

Efficiency: 89.51%

Upward Ratio: 0.00%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 144.0, 154.7, 146.9, 146.5

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 107.5, 112.5, 111.9, 112.0

Luminaire Efficacy Rating (LER): 99.27

Central Intensity: 504.19 cd

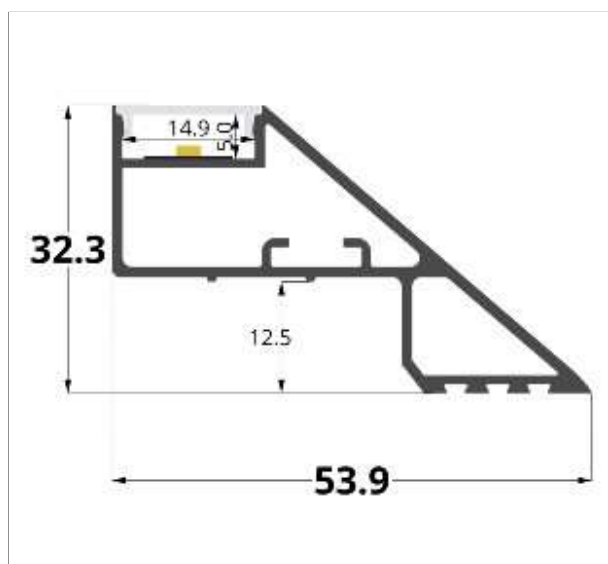
Max. Intensity: 505.03 cd

Pos of Max. Intensity: H0 V4

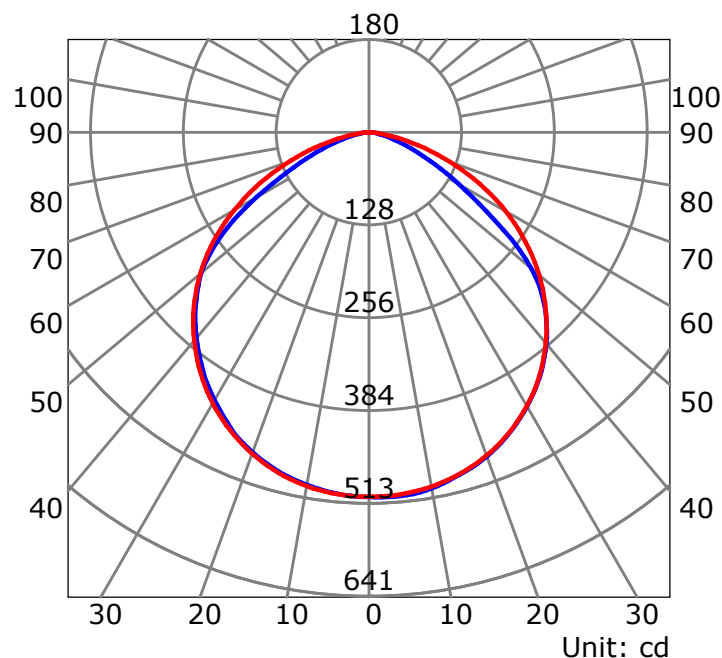
S/MH(C0/C180): 1.27

S/MH(C90/C270): 1.28

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

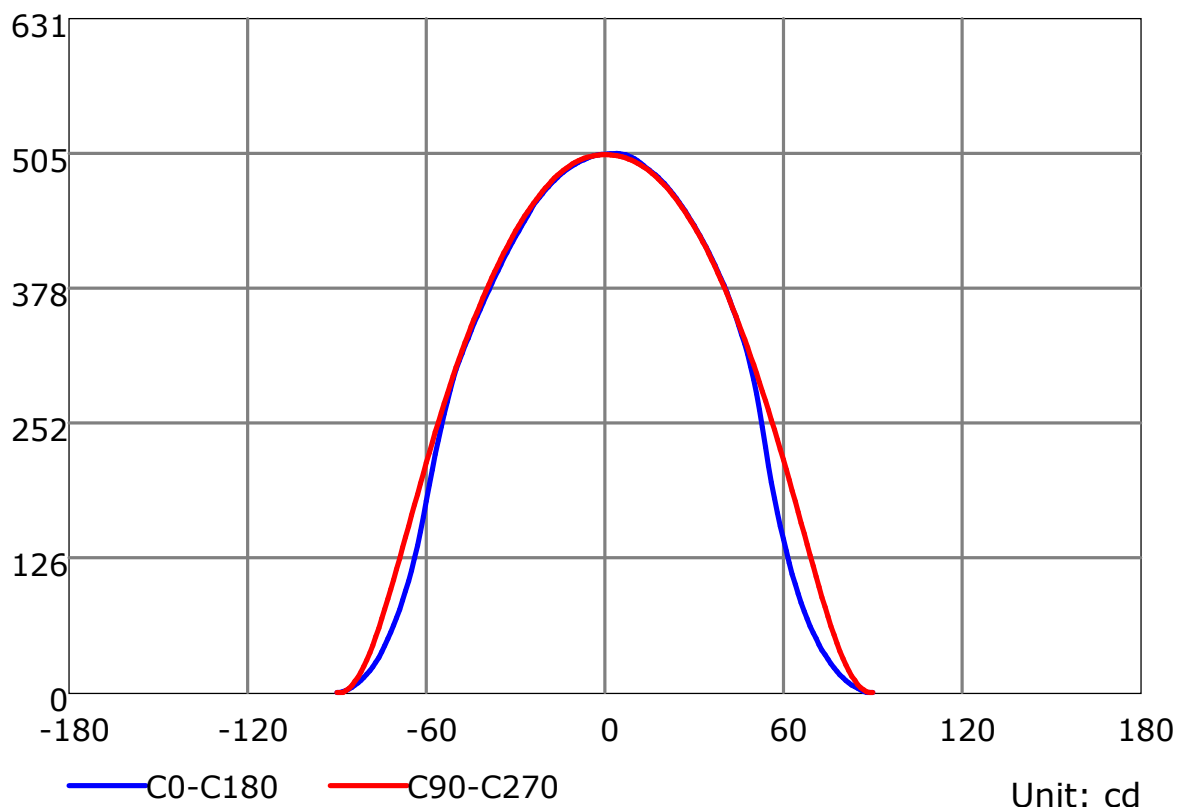
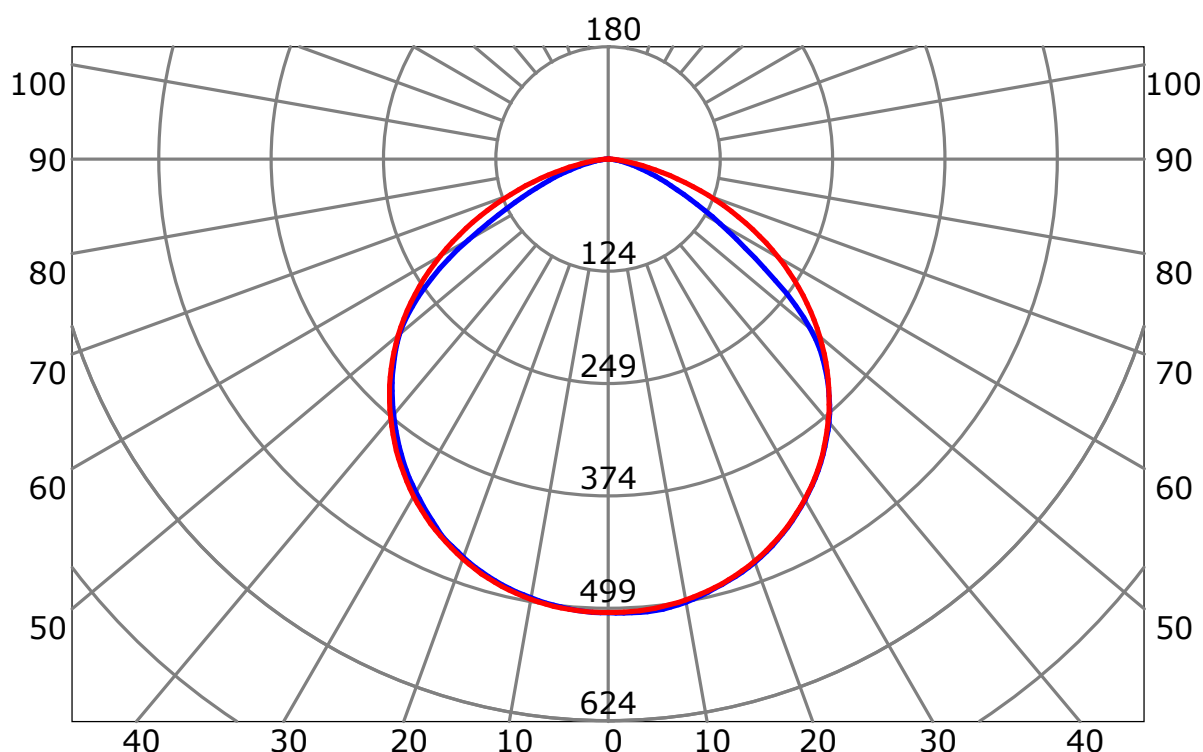
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve

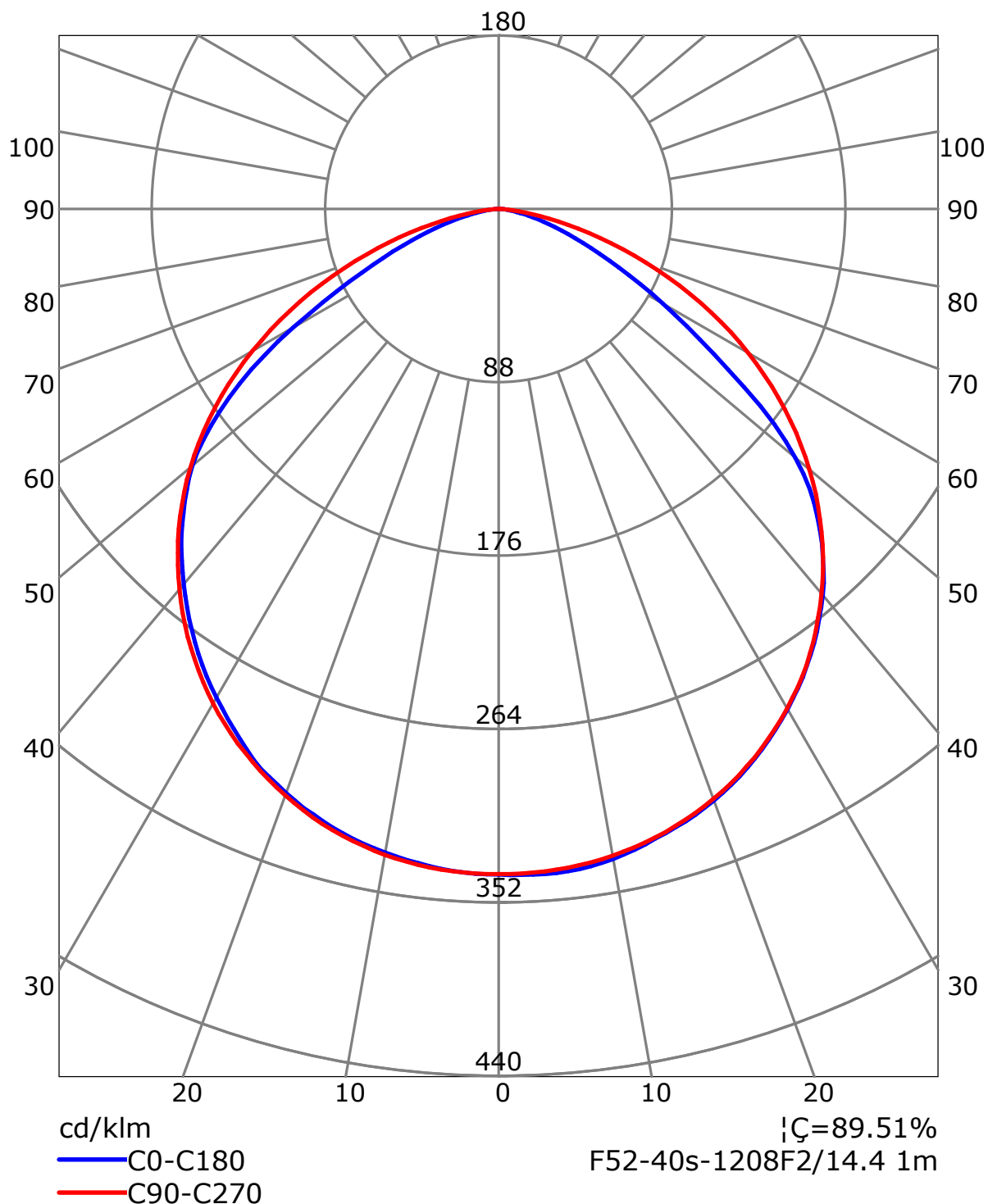


Unit: cd

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:

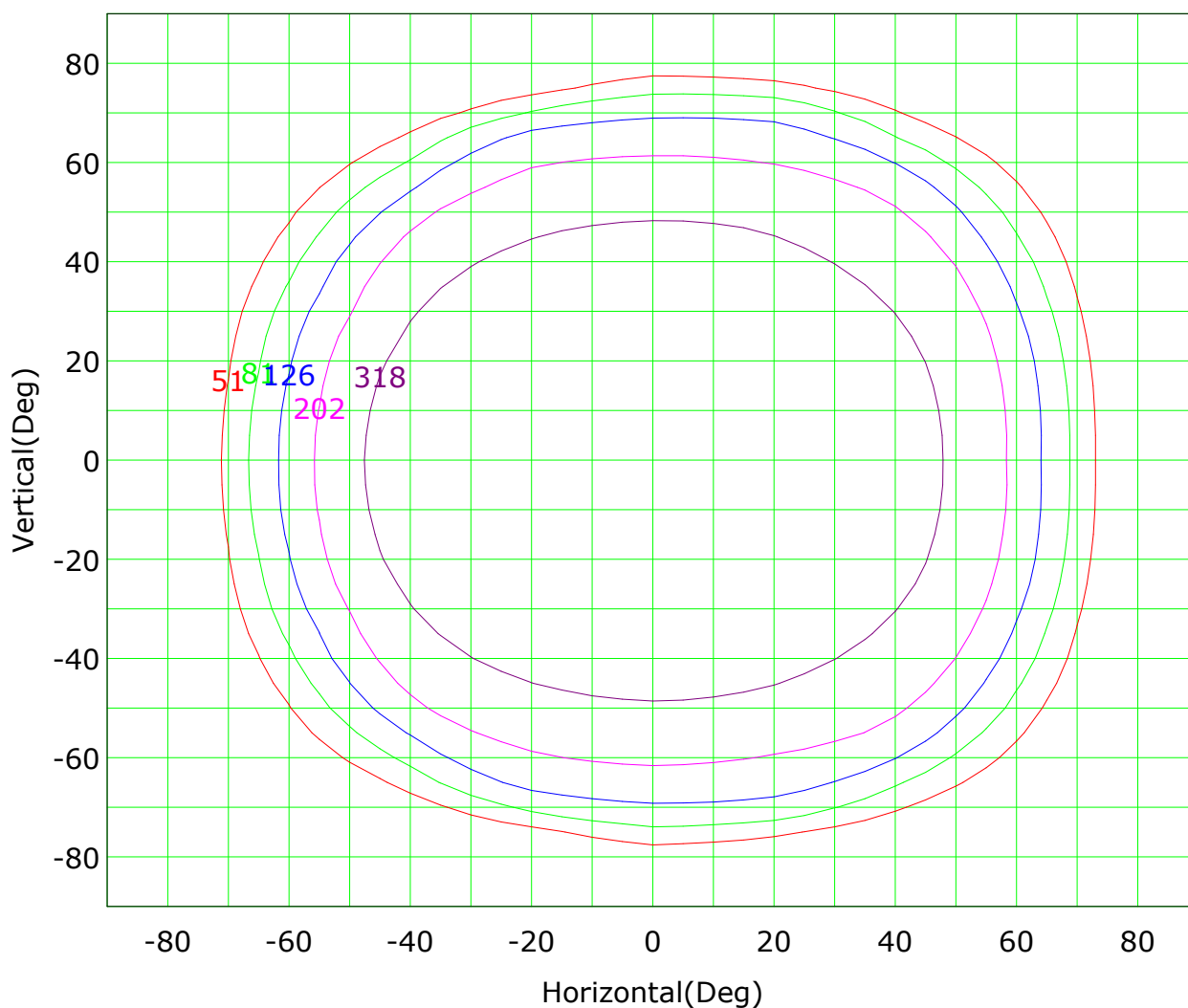
Luminous Intensity Distribution Curve(cd/klm)



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%): 505 cd

(10%):	51 cd	(16%):	81 cd
(25%):	126 cd	(40%):	202 cd
(63%):	318 cd	(100%):	505 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

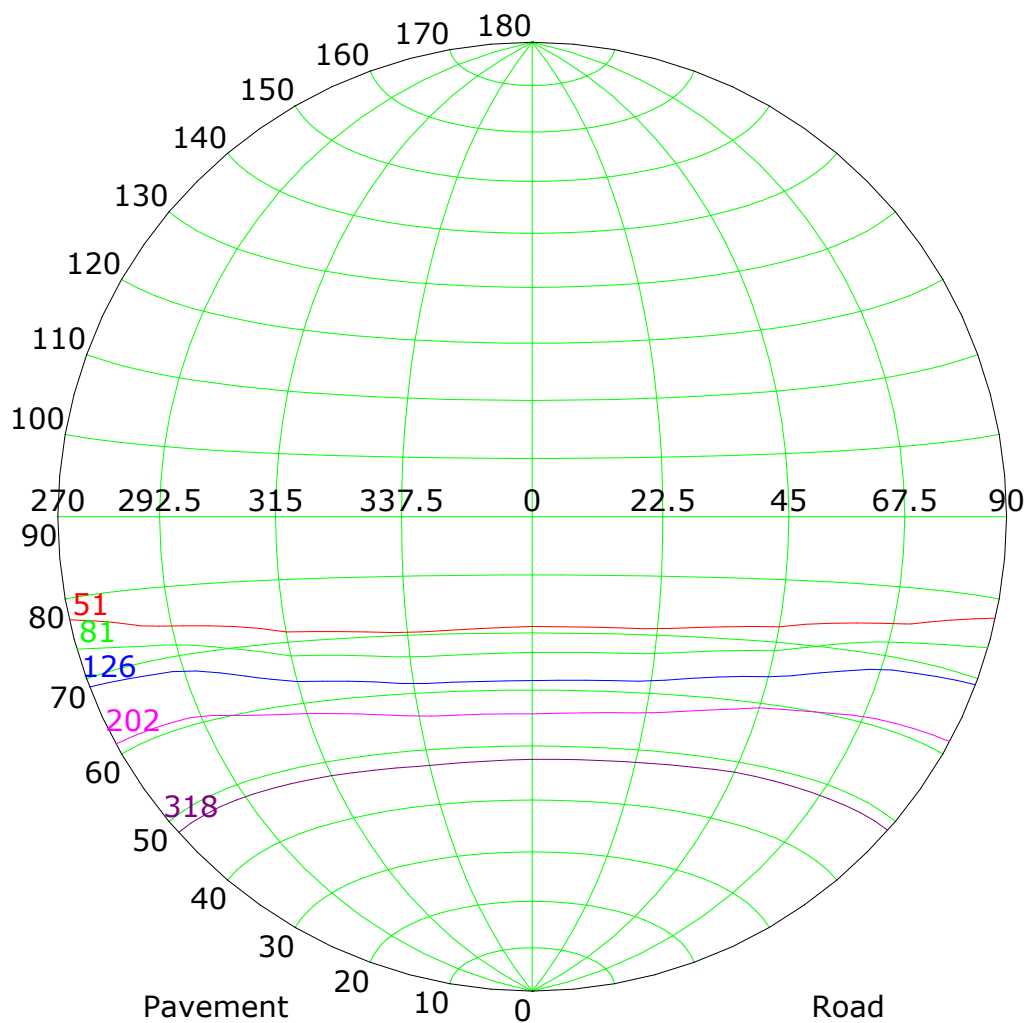
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

Isocandela (sphere)



Imax (100%): 505 cd

(10%): 51 cd	(16%): 81 cd
(25%): 126 cd	(40%): 202 cd
(63%): 318 cd	(100%): 505 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

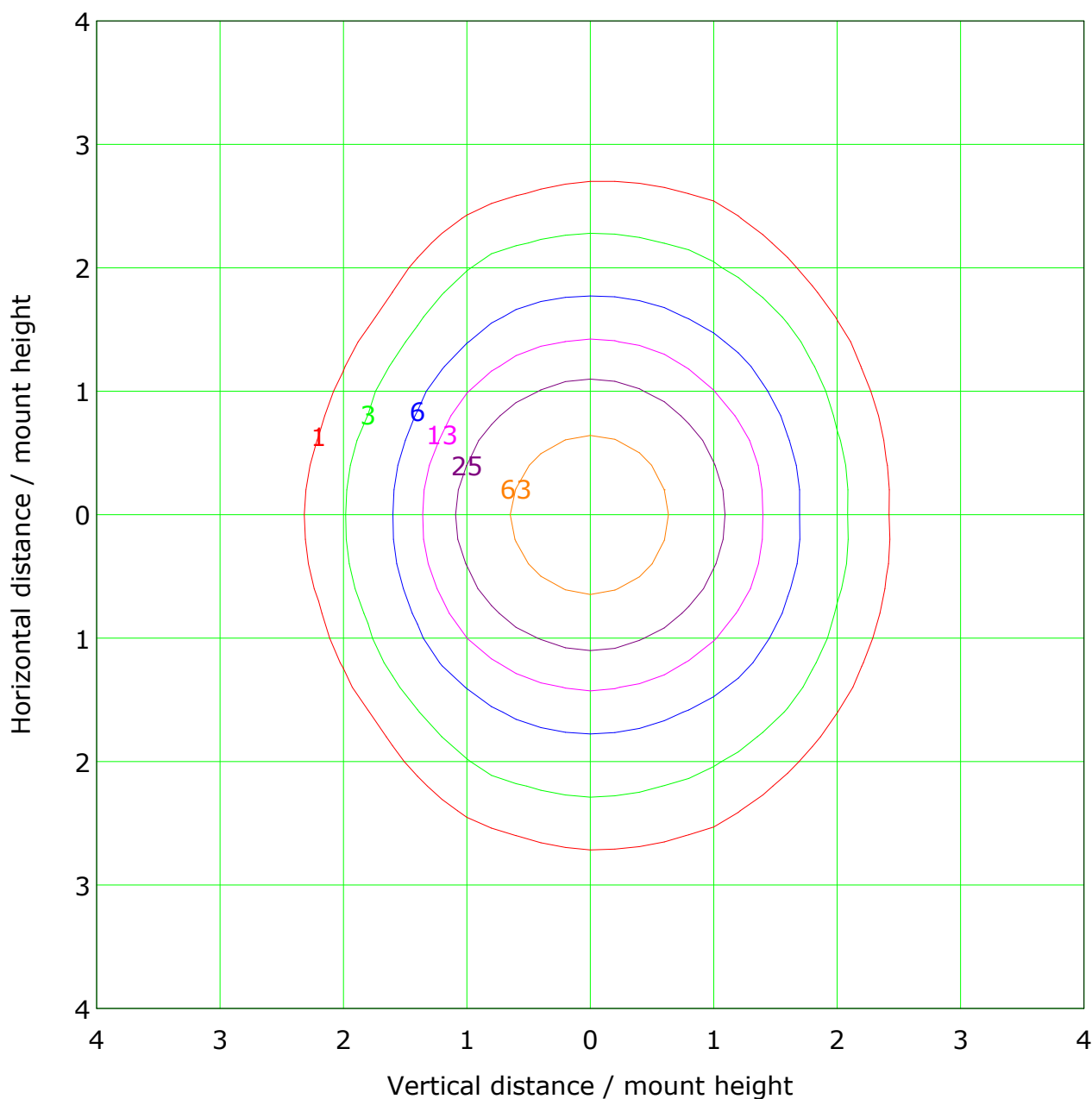
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 2.0m		Max Lux(100%): 126.1 lx	
(1%):	1.3 lx	(2%):	2.5 lx
(5%):	6.3 lx	(10%):	12.6 lx
(20%):	25.2 lx	(50%):	63.1 lx
(100%):	126.1 lx		

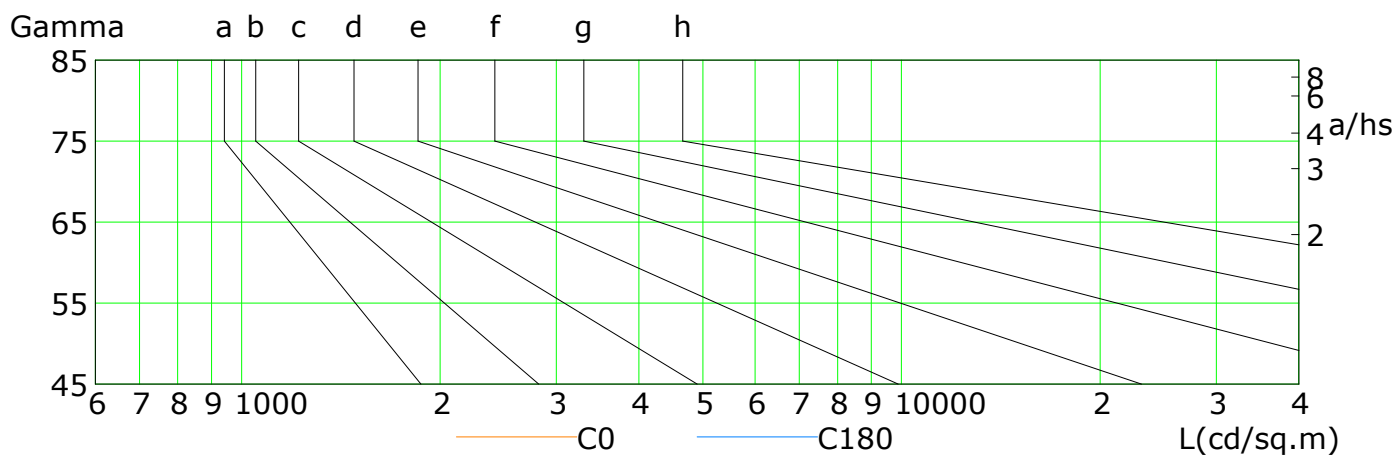
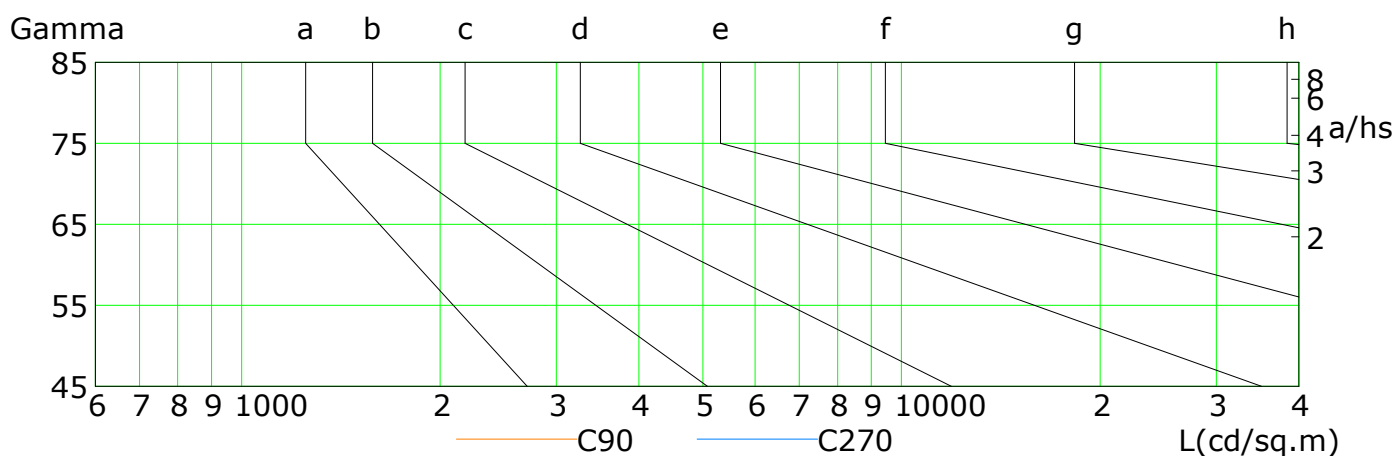
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

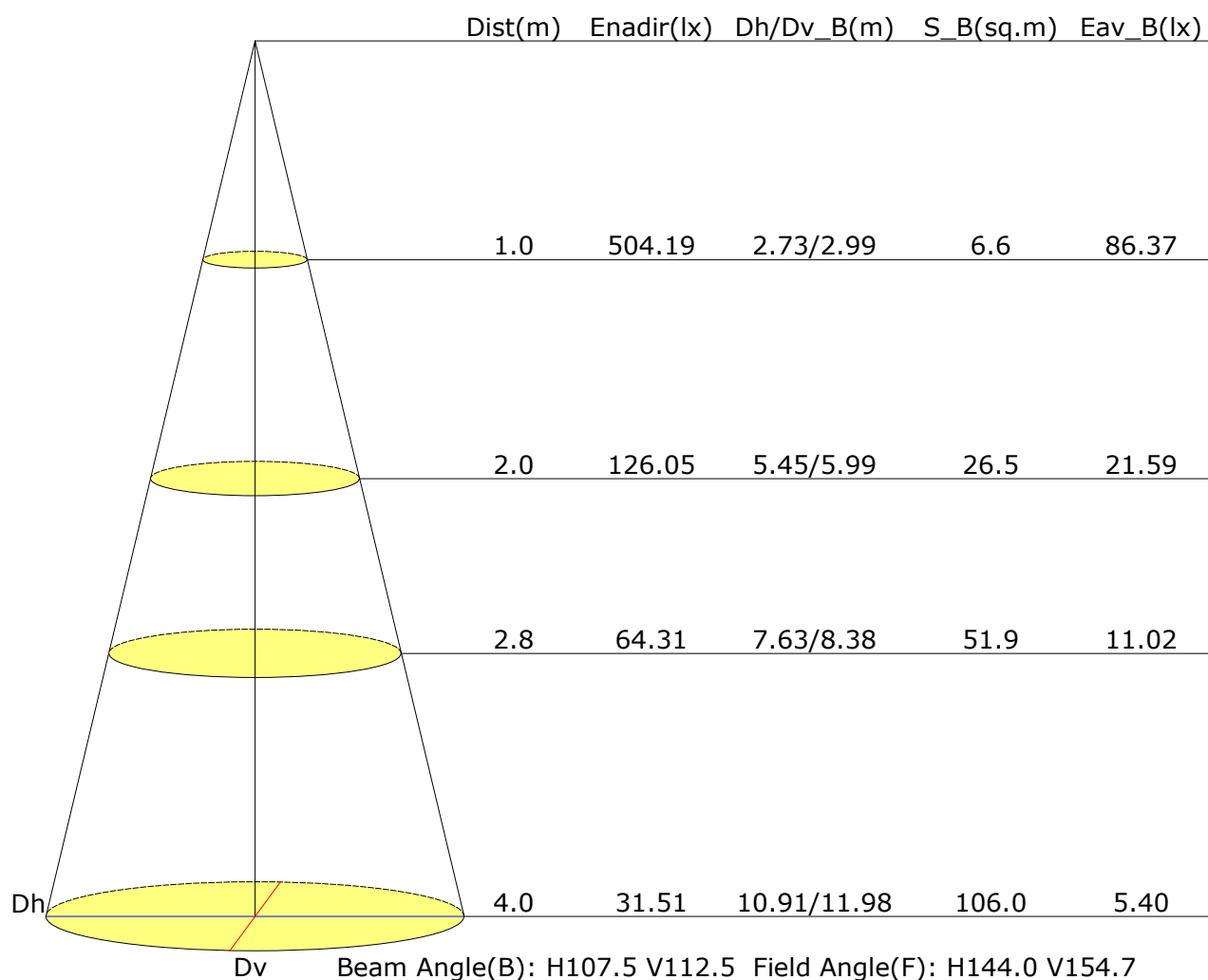


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	344	293	213	144	93	56	31	14	4
C90	346	307	265	218	169	119	71	32	7
C180	339	303	249	179	114	70	38	17	5
C270	343	305	262	215	166	116	69	31	7

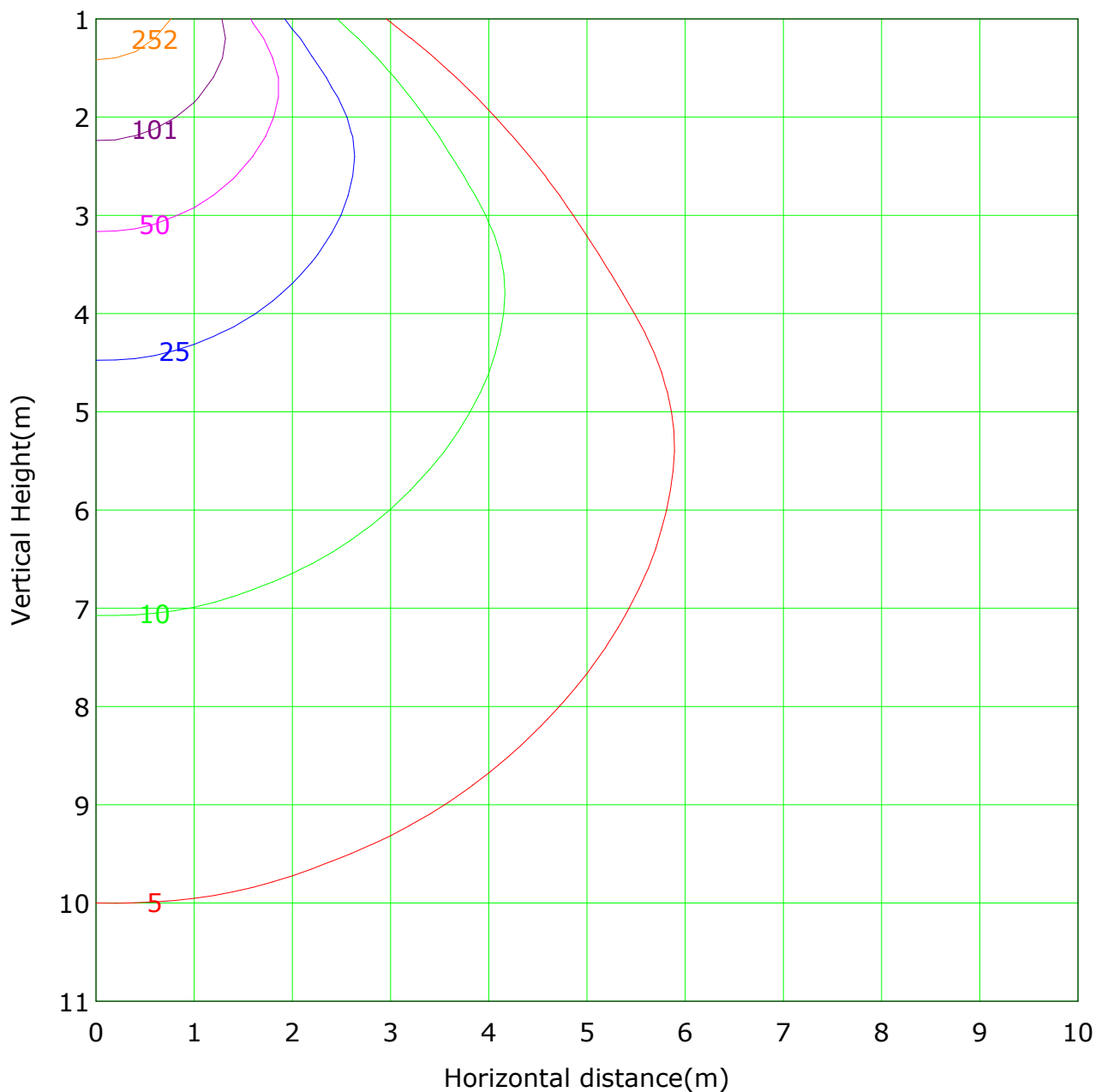
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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: 504.2 lx

— (1%): 5.0 lx	— (2%): 10.1 lx
— (5%): 25.2 lx	— (10%): 50.4 lx
— (20%): 100.8 lx	— (50%): 252.1 lx
— (100%): 504.2 lx	

Report No.:

Test Time: 04/10/2024 10:11

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-DW16-03+LLD-03-FM

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

Lumens per Lamp: 1491

Voltage: 24.0 V

Current: 0.561 A

Power: 13.47 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 1098.4 lm

Downward Ratio: 73.67%

Total Rated Lamp Lumens: 1491.0 lm

Efficiency: 73.67%

Upward Ratio: 0.00%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.5, 159.6, 159.6, 159.5

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.3, 110.8, 111.0, 111.1

Luminaire Efficacy Rating (LER): 81.60

Central Intensity: 393.6 cd

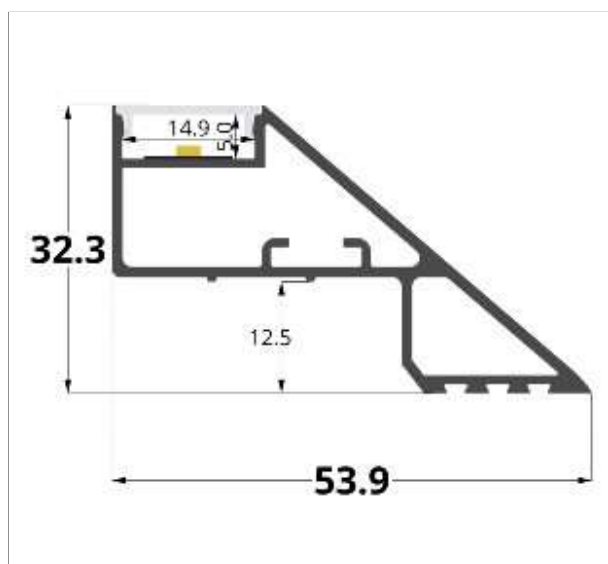
Max. Intensity: 394.08 cd

Pos of Max. Intensity: H22.5 V0

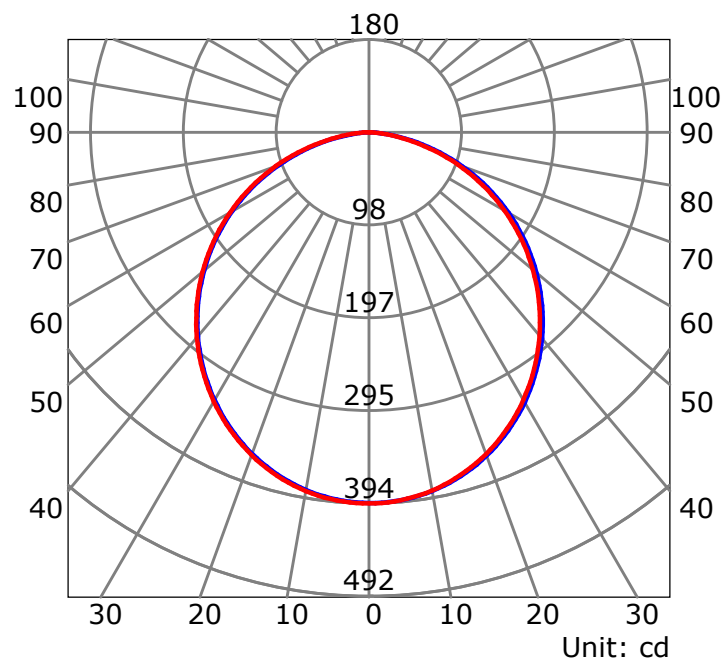
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.24

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

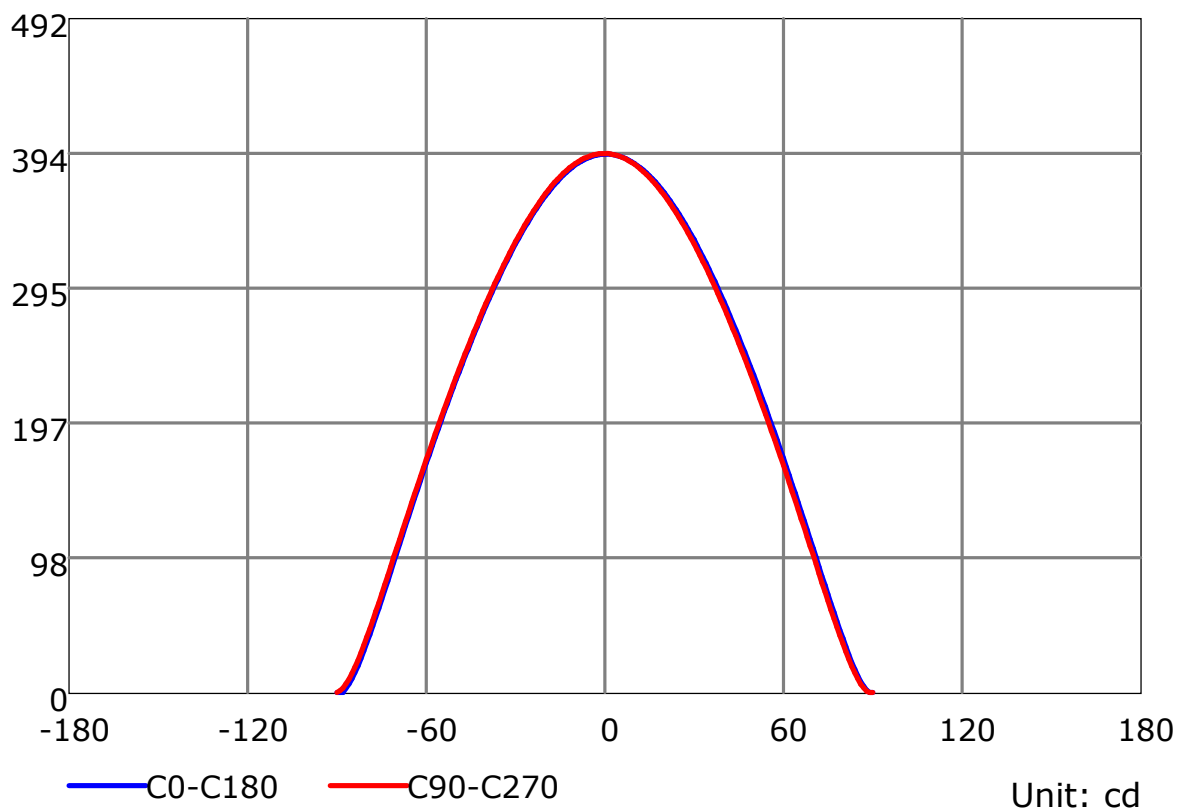
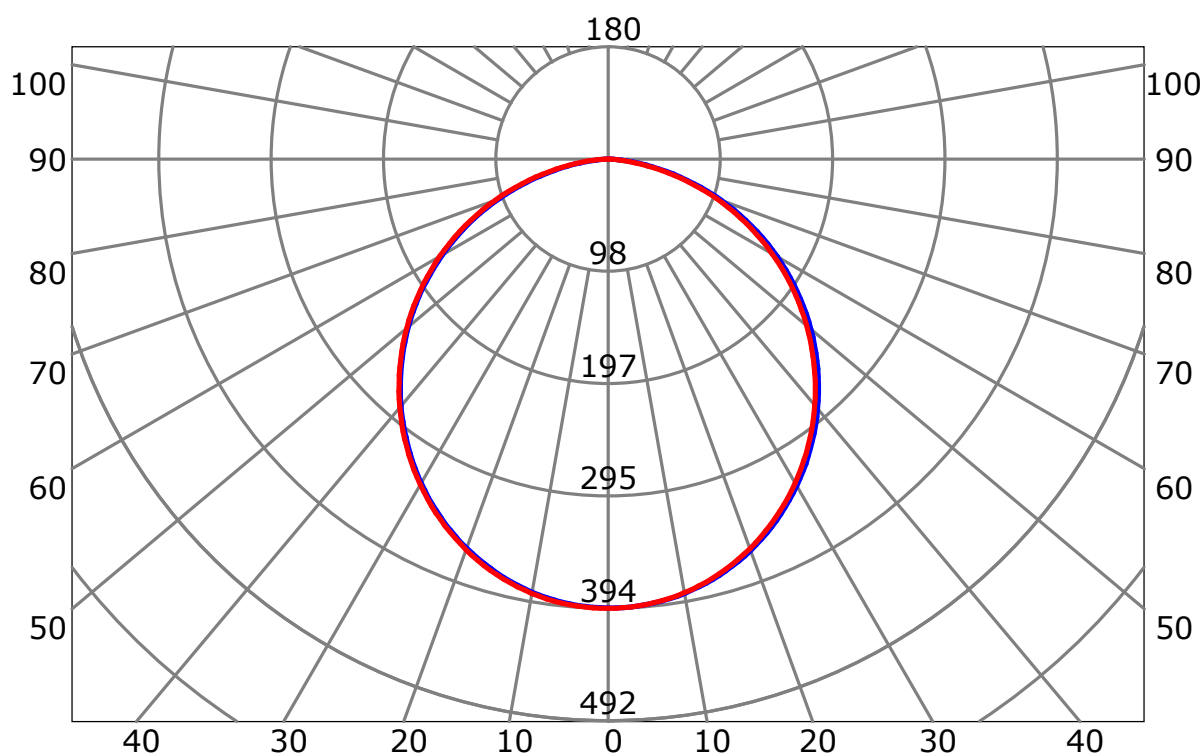
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

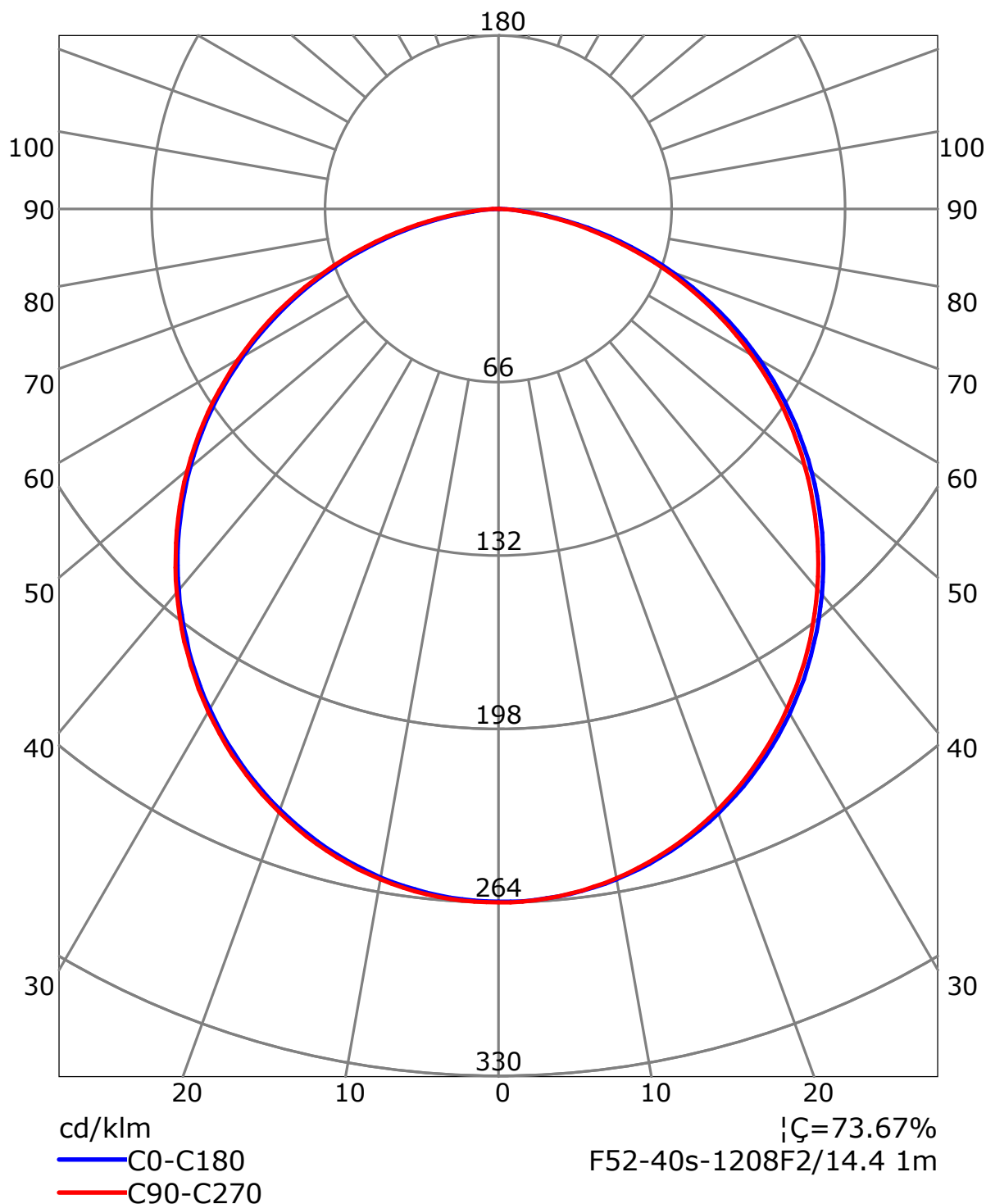
Luminous Intensity Distribution Curve



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:

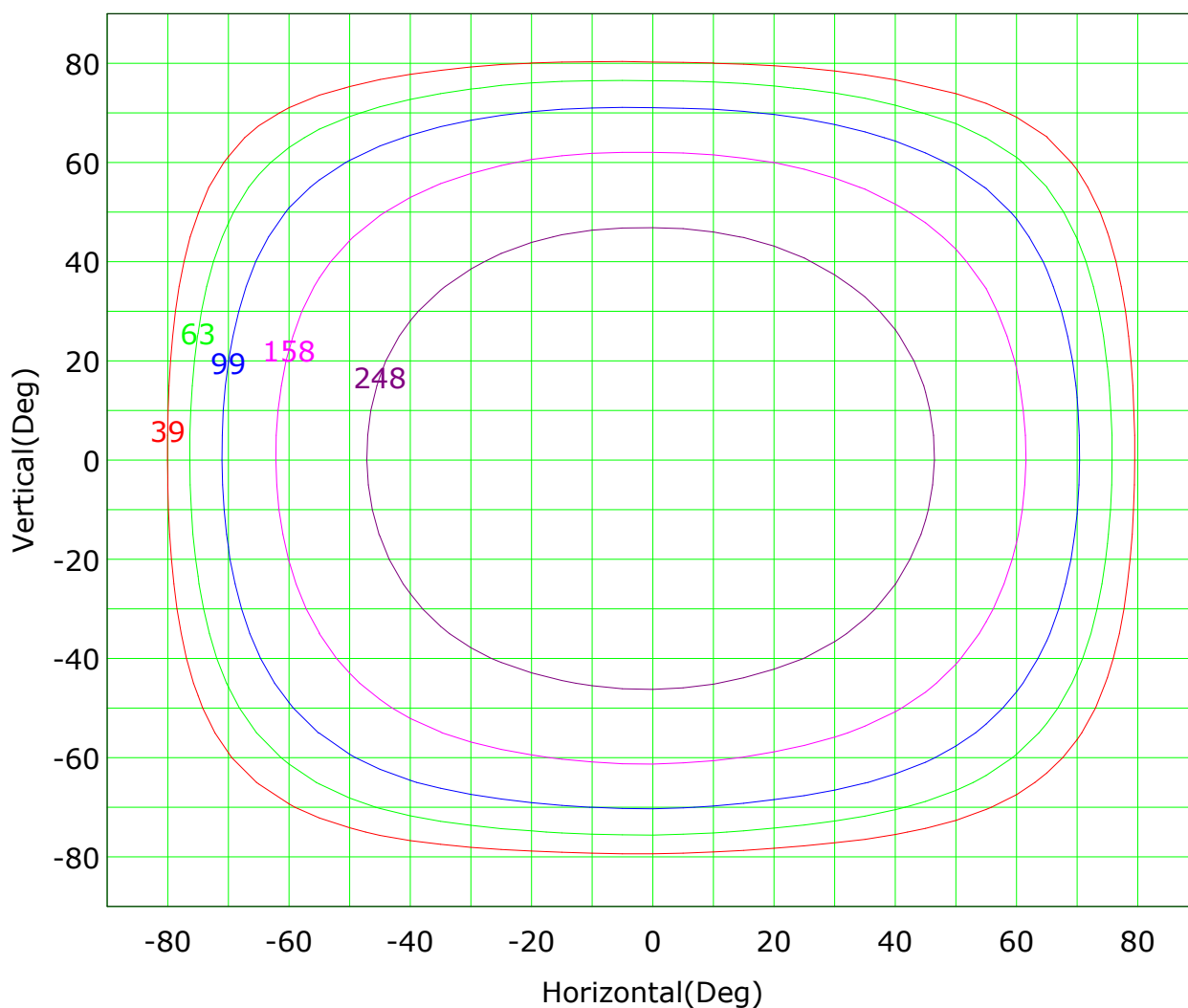
Luminous Intensity Distribution Curve(cd/klm)



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%): 394 cd

(10%):	39 cd	(16%):	63 cd
(25%):	99 cd	(40%):	158 cd
(63%):	248 cd	(100%):	394 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

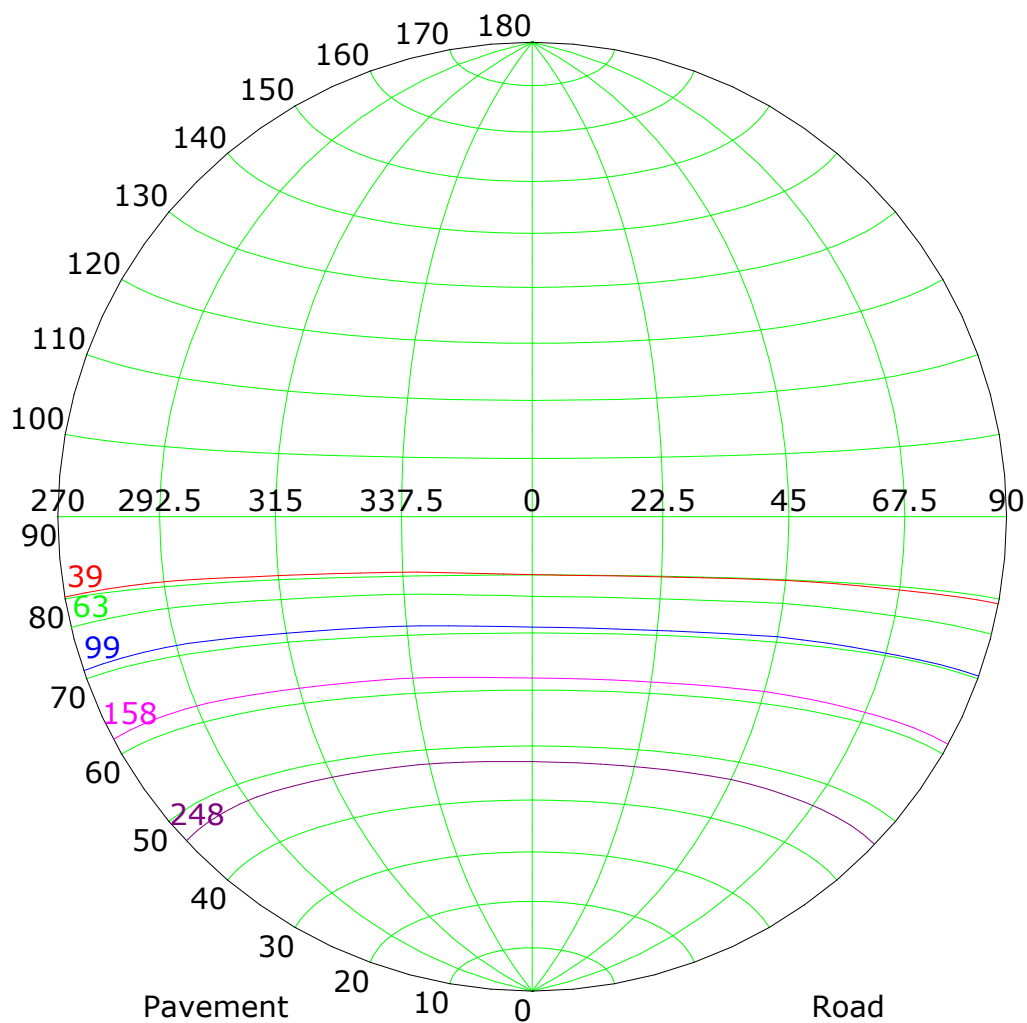
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

Isocandela (sphere)



Imax (100%): 394 cd

(10%):	39 cd	(16%):	63 cd
(25%):	99 cd	(40%):	158 cd
(63%):	248 cd	(100%):	394 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

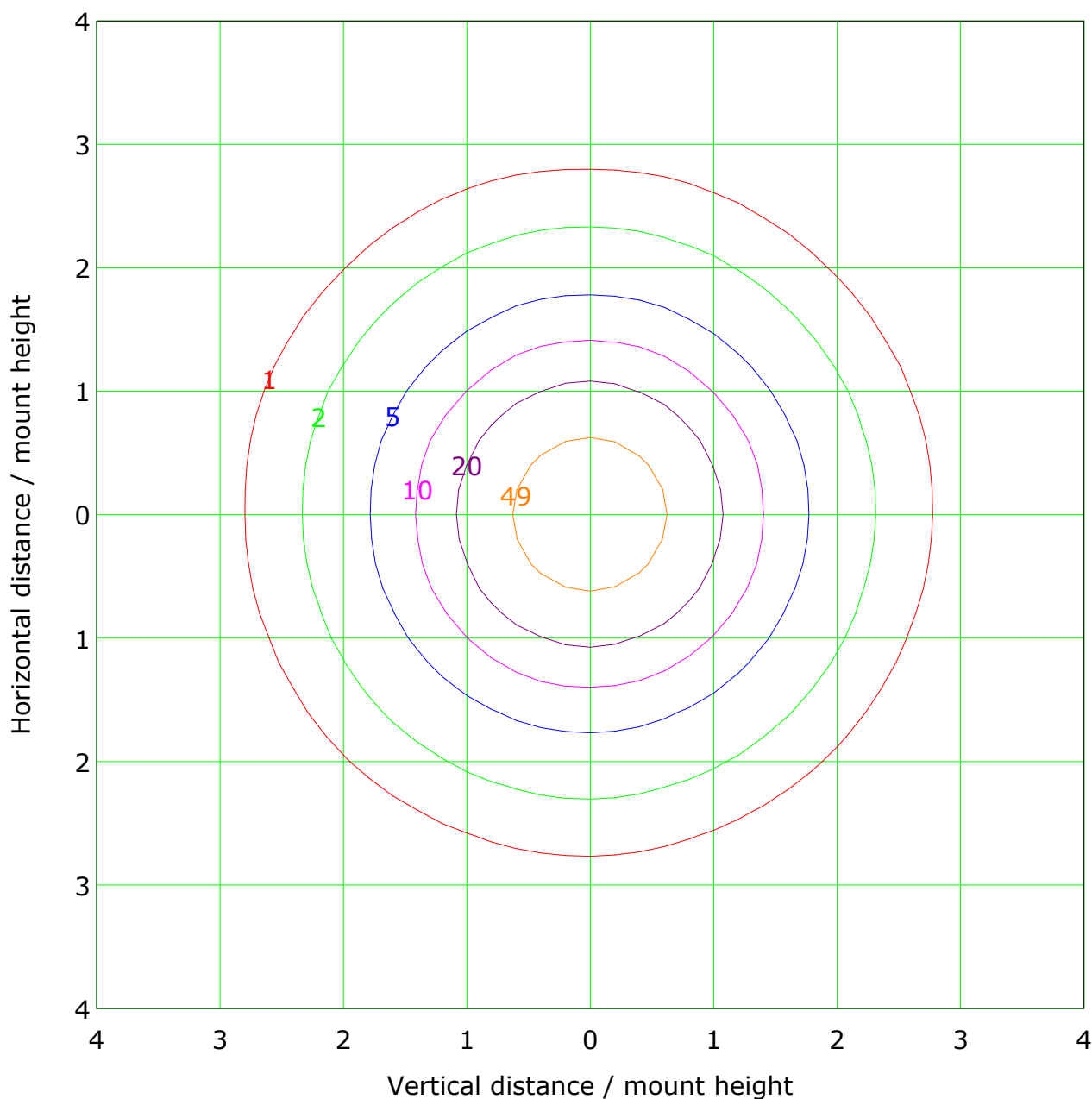
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 2.0m		Max Lux(100%): 98.5 lx	
— (1%):	1.0 lx	— (2%):	2.0 lx
— (5%):	4.9 lx	— (10%):	9.9 lx
— (20%):	19.7 lx	— (50%):	49.3 lx
— (100%):	98.5 lx		

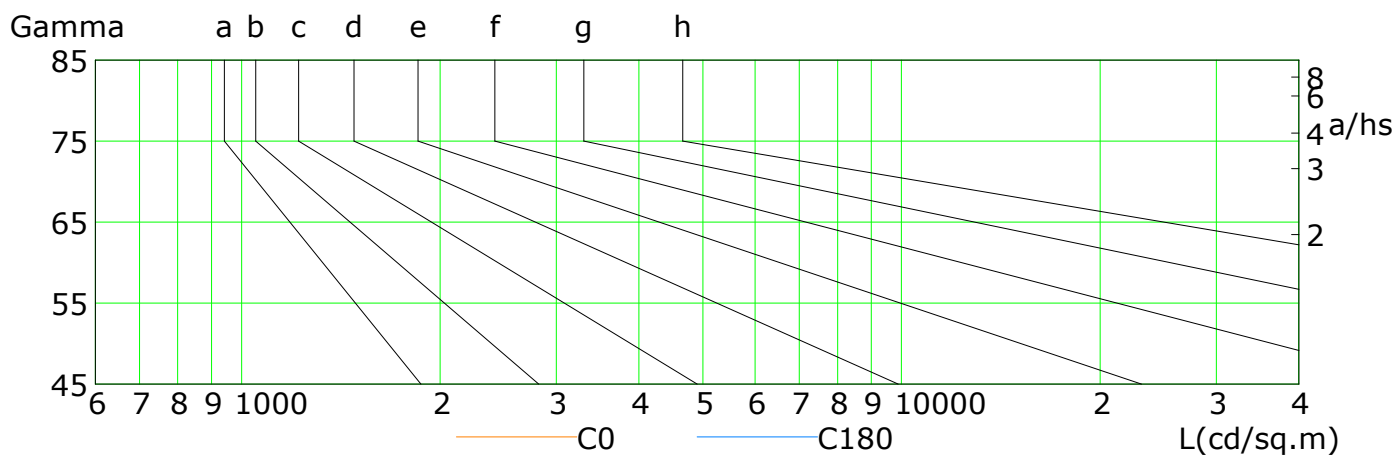
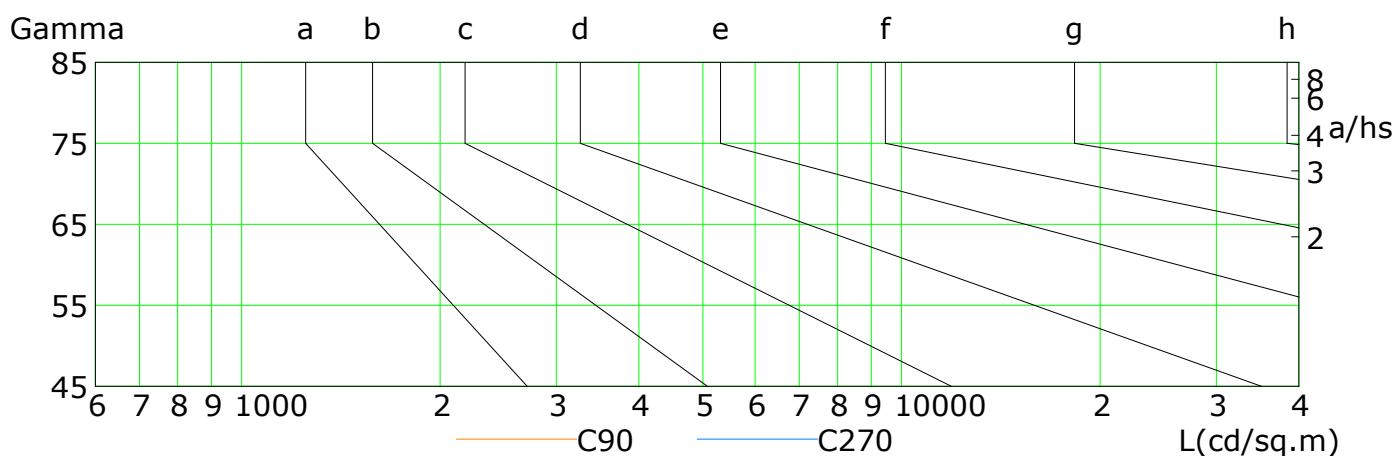
C Plane (°):0.0-360.0: 22.5
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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

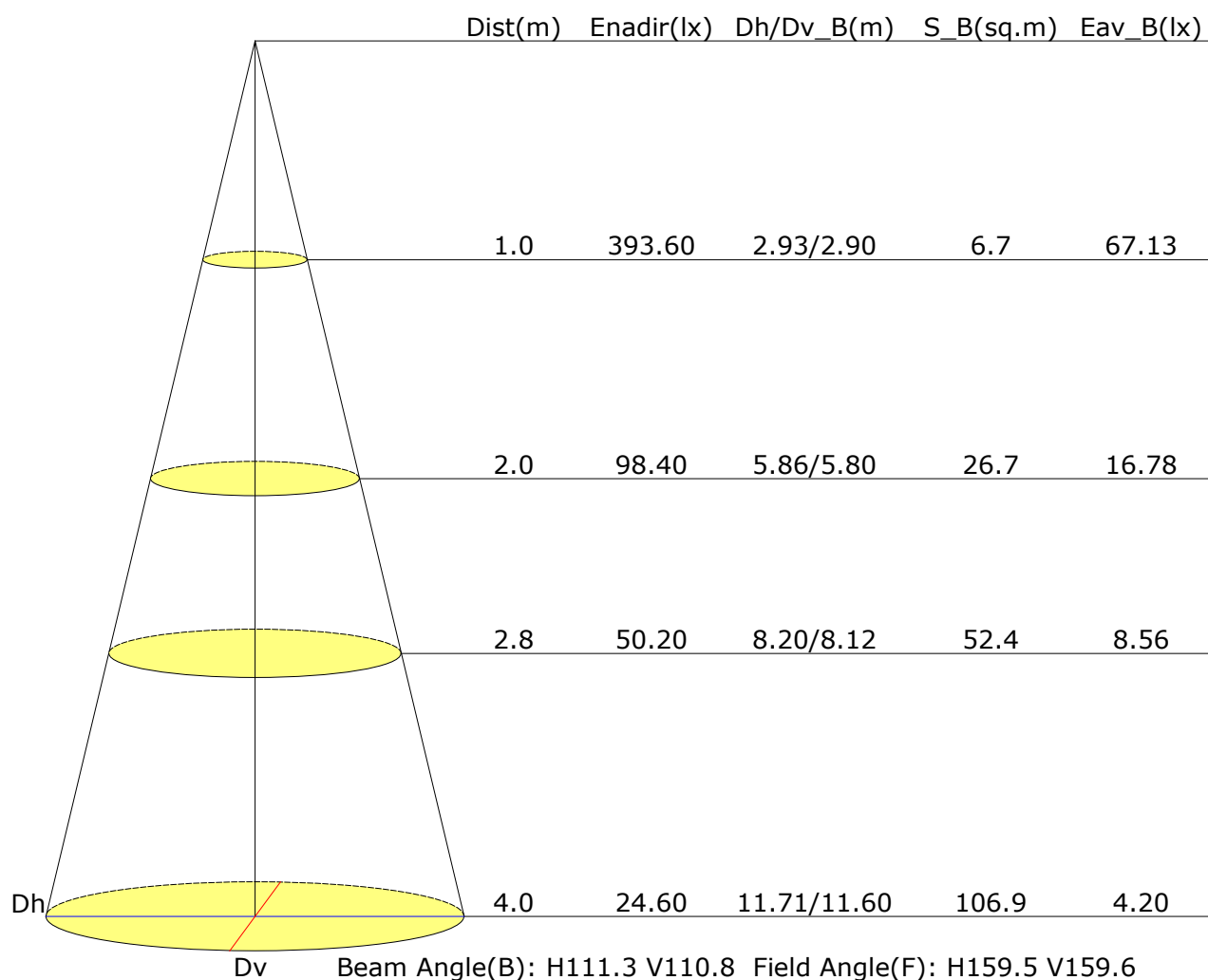


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	260	232	202	172	139	106	72	40	12
C90	255	227	198	166	134	101	67	36	10
C180	257	229	199	168	135	101	68	36	10
C270	259	231	201	171	139	105	72	41	14

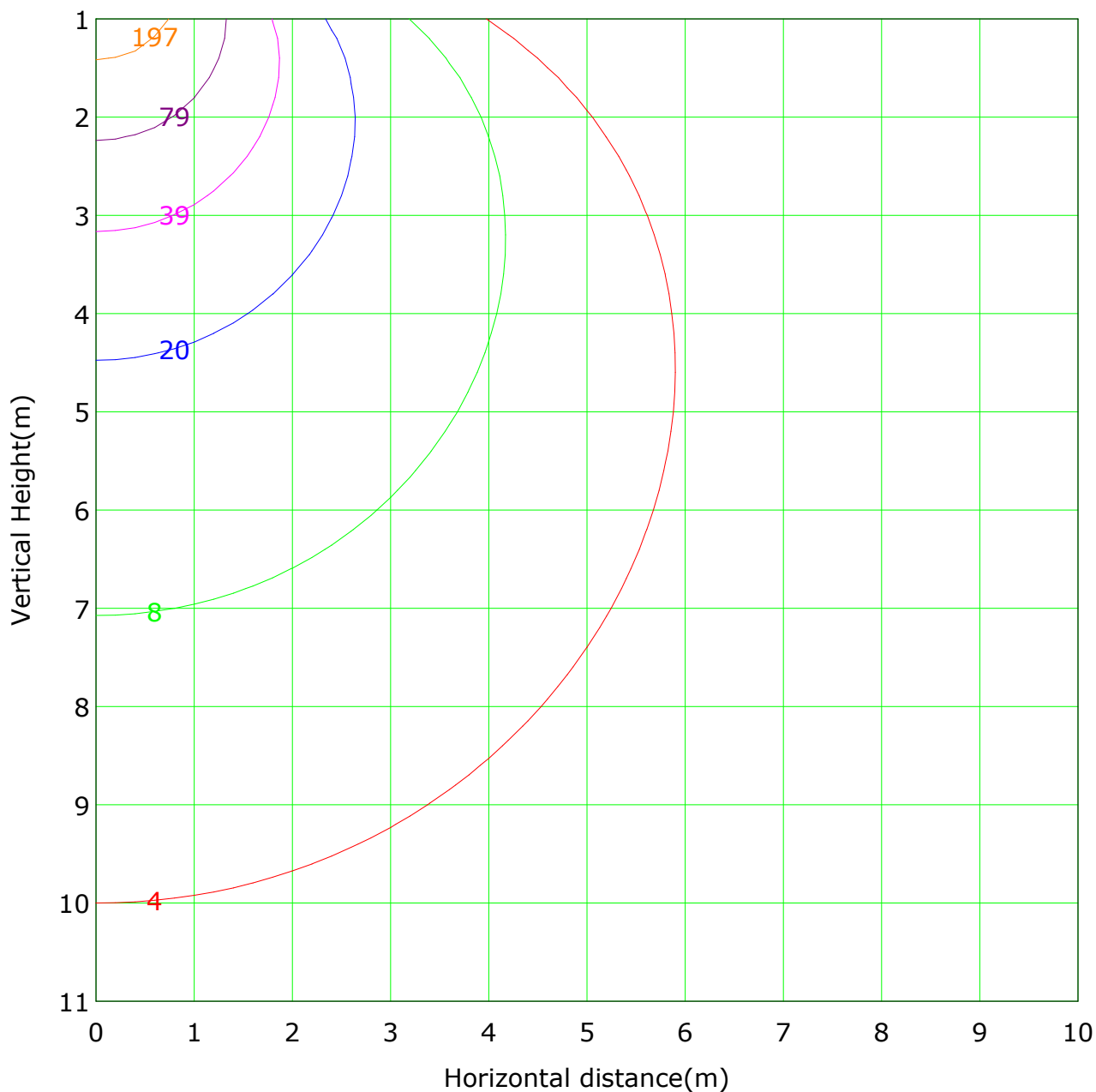
C Plane (°):0.0-360.0: 22.5
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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: 393.6 lx
(1%): 3.9 lx	(2%): 7.9 lx	
(5%): 19.7 lx	(10%): 39.4 lx	
(20%): 78.7 lx	(50%): 196.8 lx	
(100%): 393.6 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: