

Report No.:

Test Time: 02/10/2024 12:13

Luminaire Property

Luminaire Manufacturer: Lighting line

Luminaire Description: LLP-SL16-16+LLD-16-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: 13.50 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 883.6 lm

Downward Ratio: 58.09%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.7, 160.1, 155.6, 155.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 105.0, 112.7, 106.1, 105.9

Luminaire Efficacy Rating (LER): 65.50

Total Rated Lamp Lumens: 1491.0 lm

Efficiency: 59.26%

Upward Ratio: 1.17%

Central Intensity: 325.74 cd

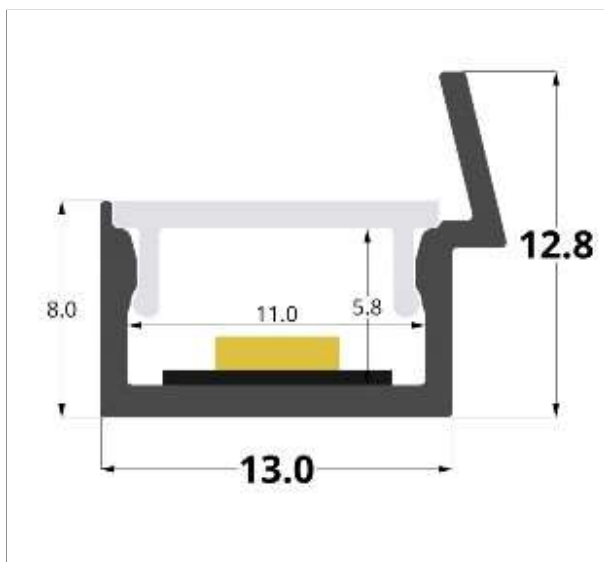
Max. Intensity: 327.56 cd

Pos of Max. Intensity: H170 V4

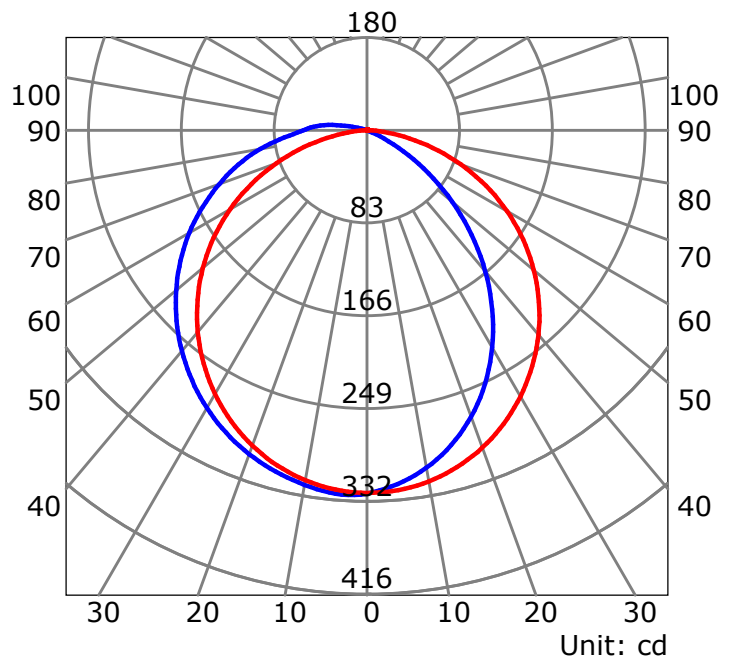
S/MH(C0/C180): 1.18

S/MH(C90/C270): 1.25

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

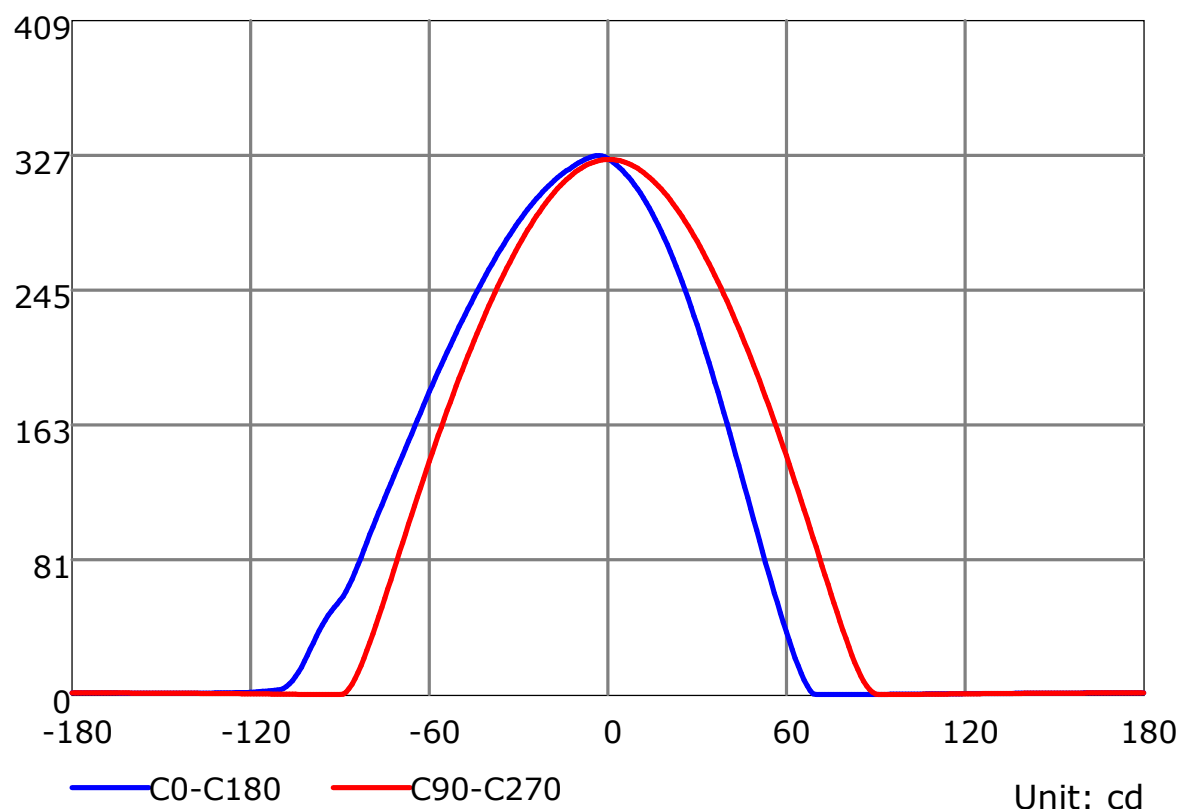
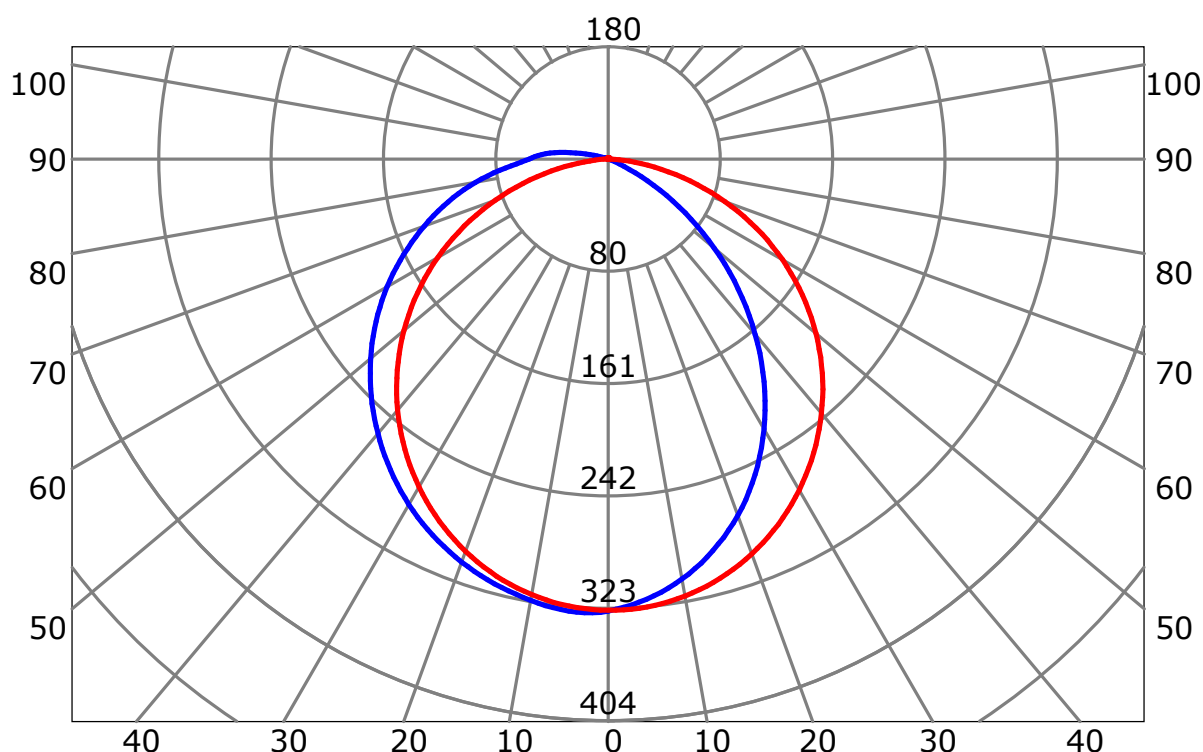
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve

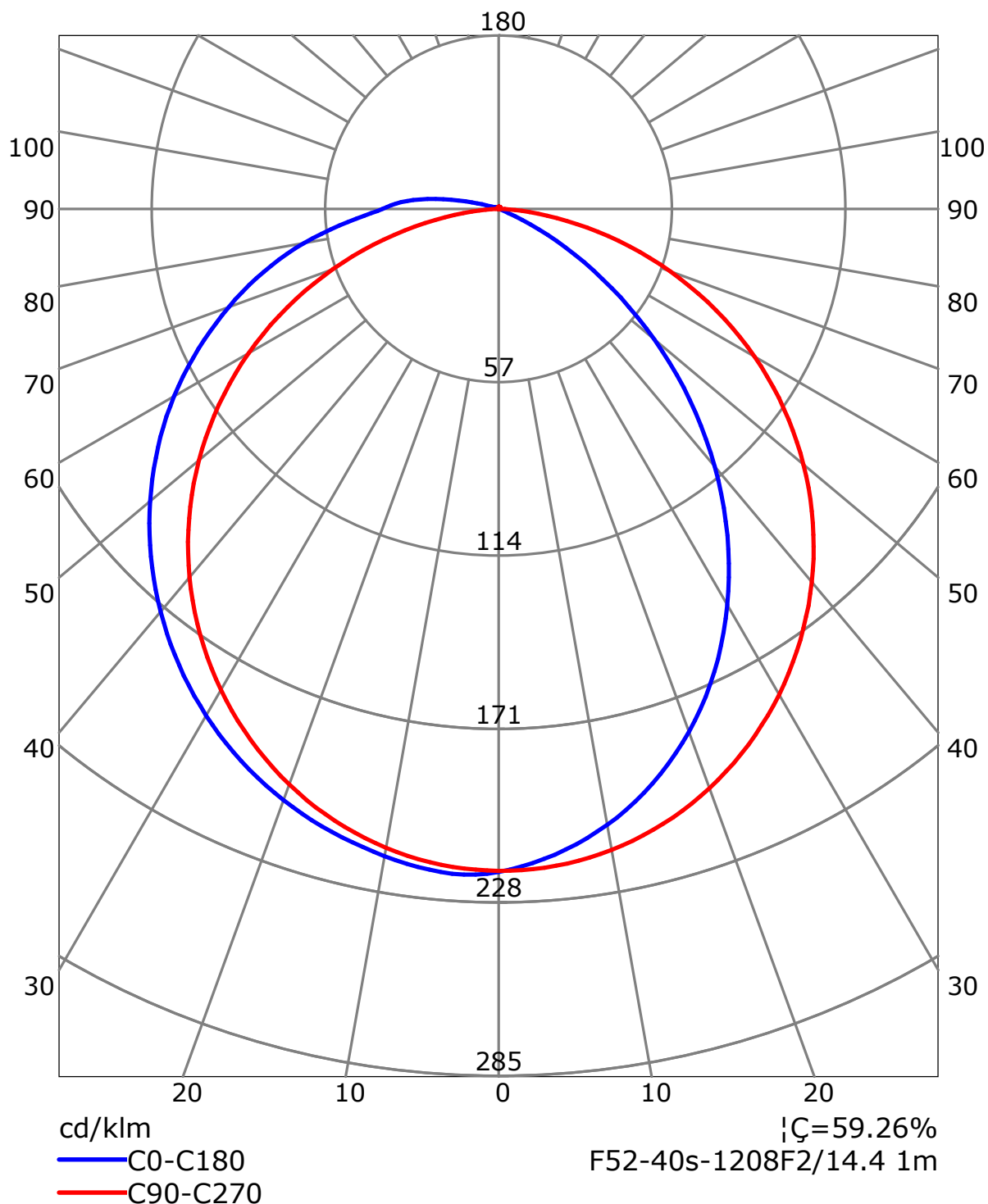


Unit: cd

C Plane (°):0.0-360.0: 10.0
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:

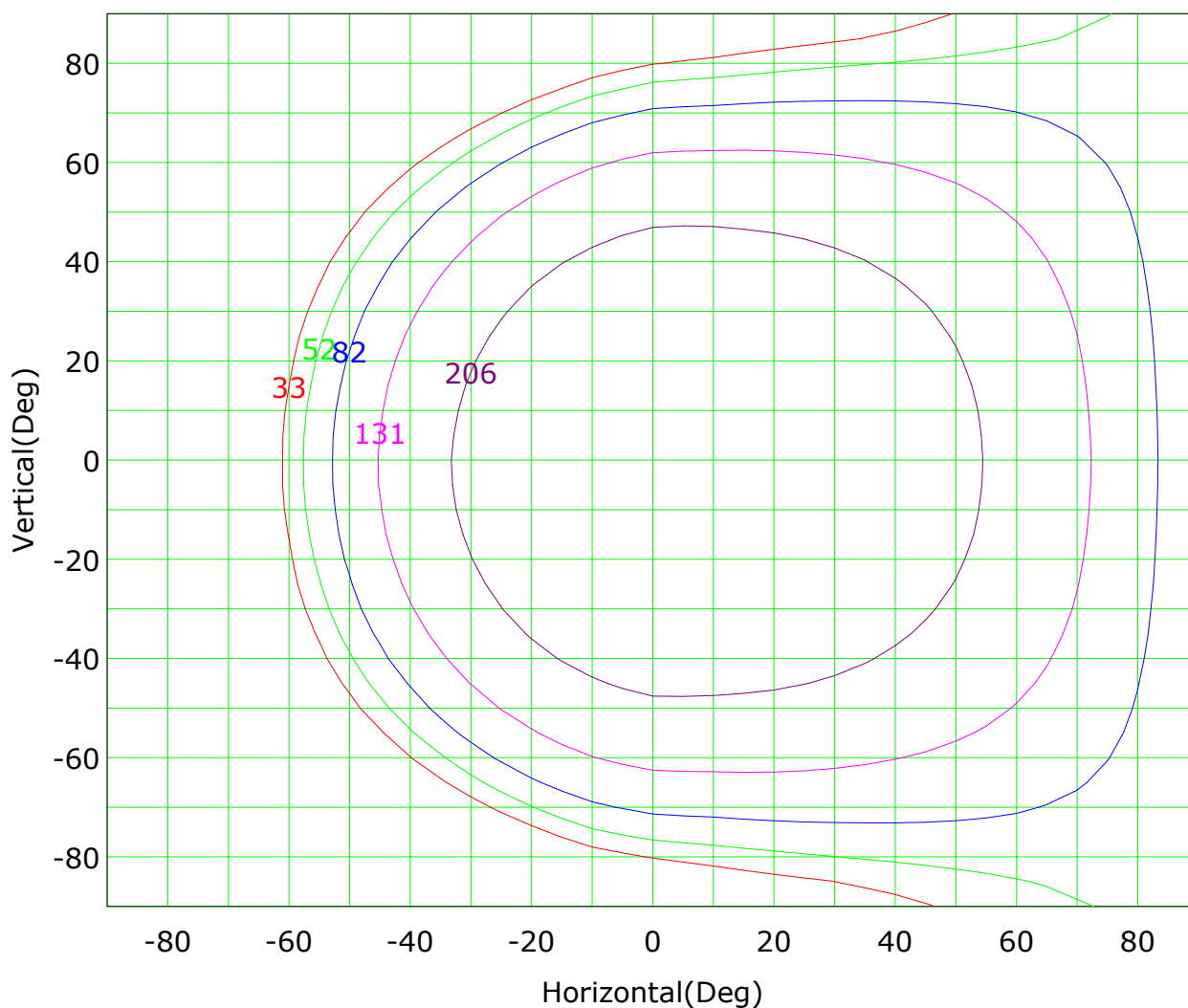
Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 10.0
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)



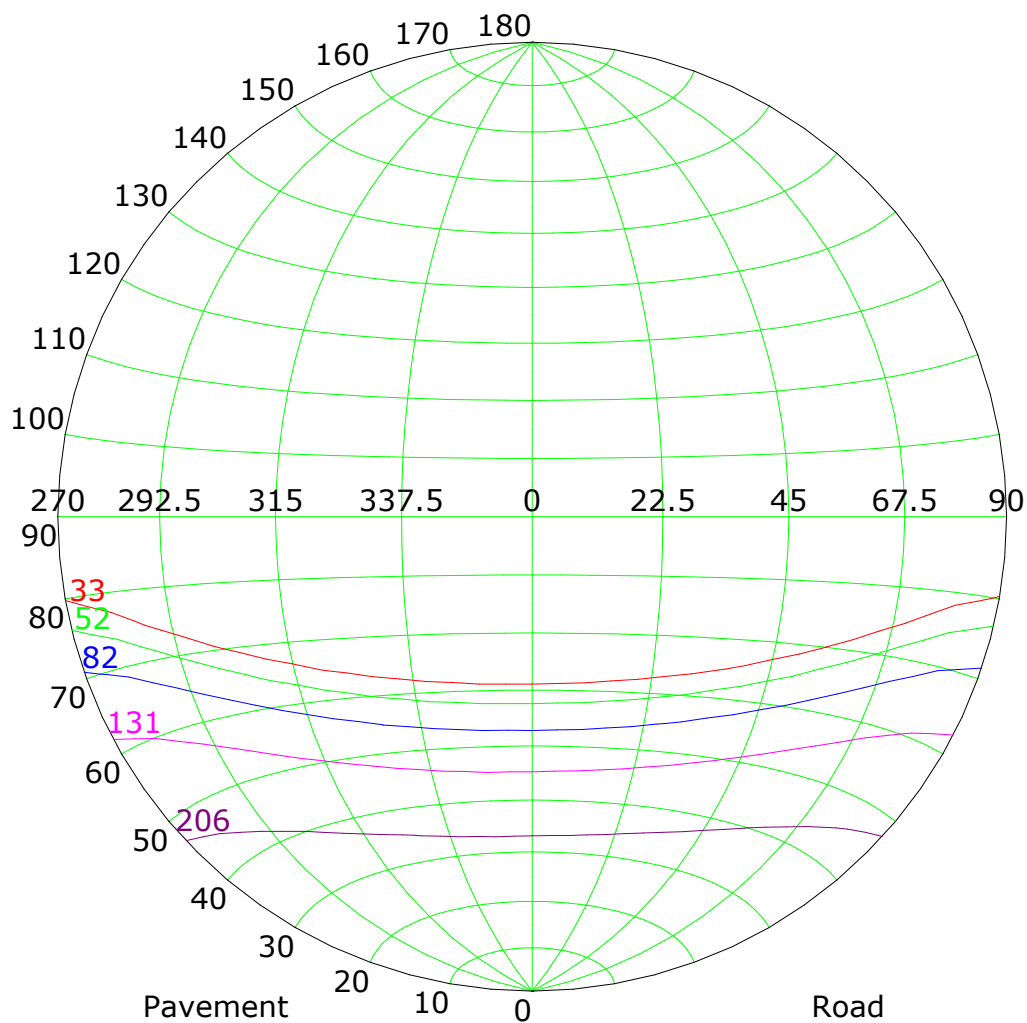
Imax (100%): 328 cd

(10%):	33 cd	(16%):	52 cd
(25%):	82 cd	(40%):	131 cd
(63%):	206 cd	(100%):	328 cd

C Plane (°):0.0-360.0: 10.0
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:

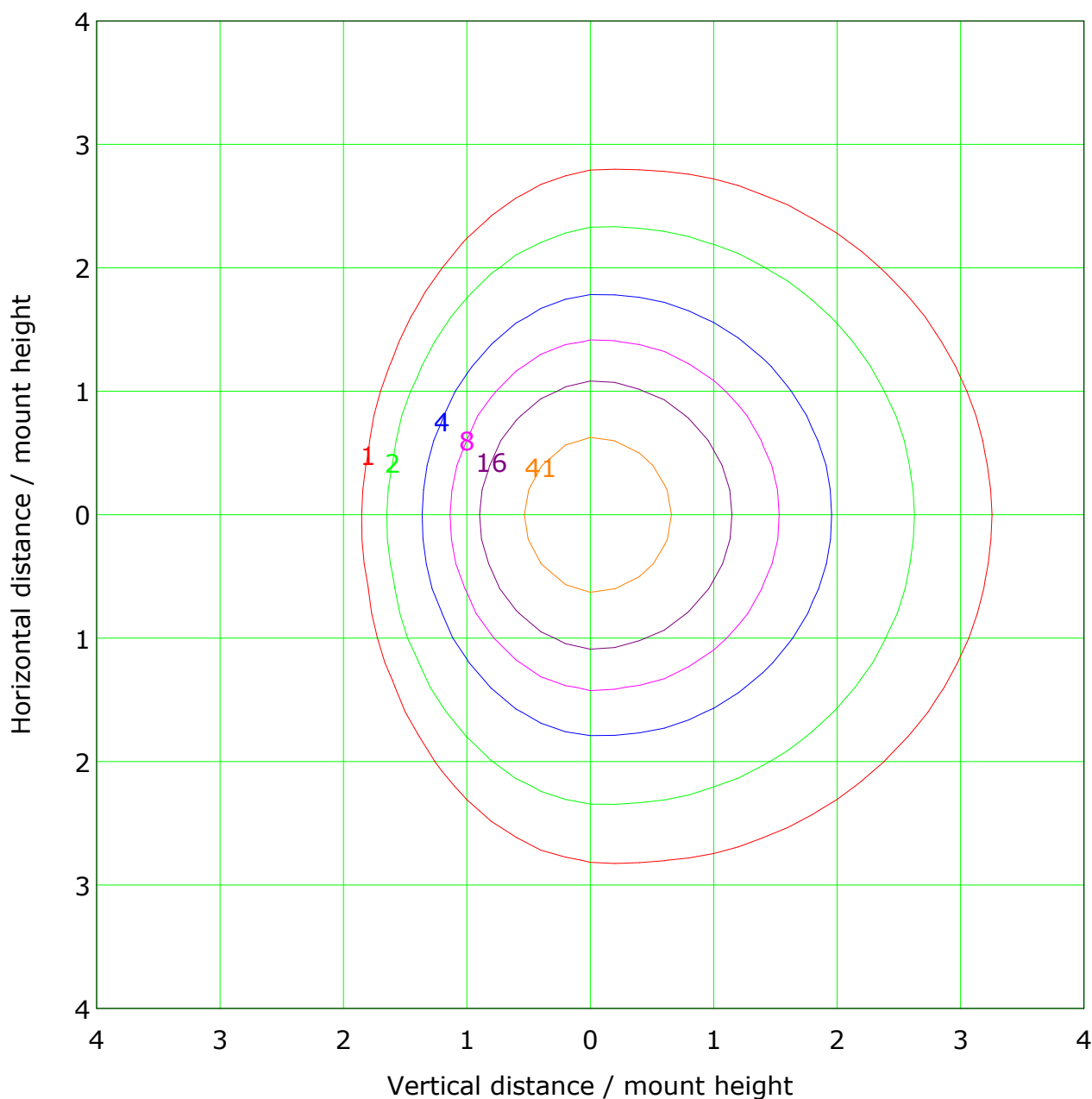
Isocandela (sphere)



Imax (100%): 328 cd

(10%):	33 cd	(16%):	52 cd
(25%):	82 cd	(40%):	131 cd
(63%):	206 cd	(100%):	328 cd

IsoLux Plot



Mounting Height: 2.0m		Max Lux(100%): 81.7 lx	
— (1%):	0.8 lx	— (2%):	1.6 lx
— (5%):	4.1 lx	— (10%):	8.2 lx
— (20%):	16.3 lx	— (50%):	40.8 lx
— (100%):	81.7 lx		

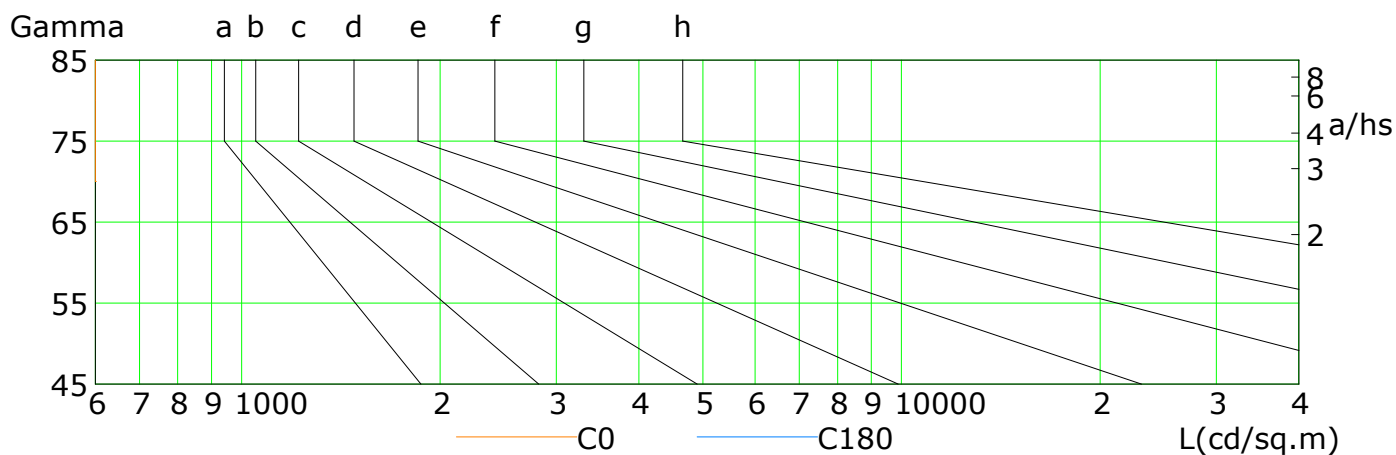
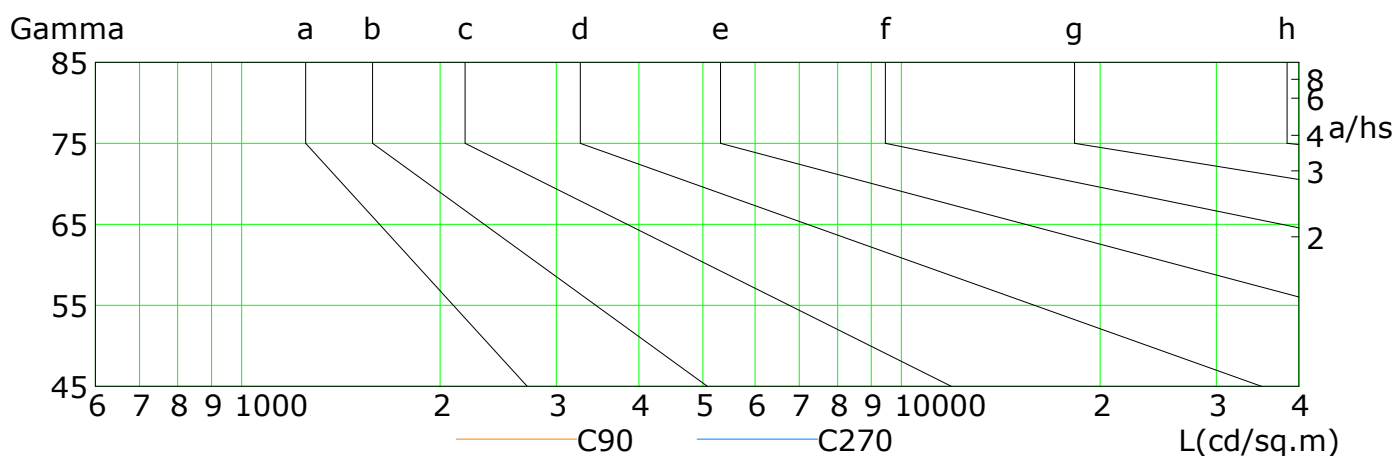
C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

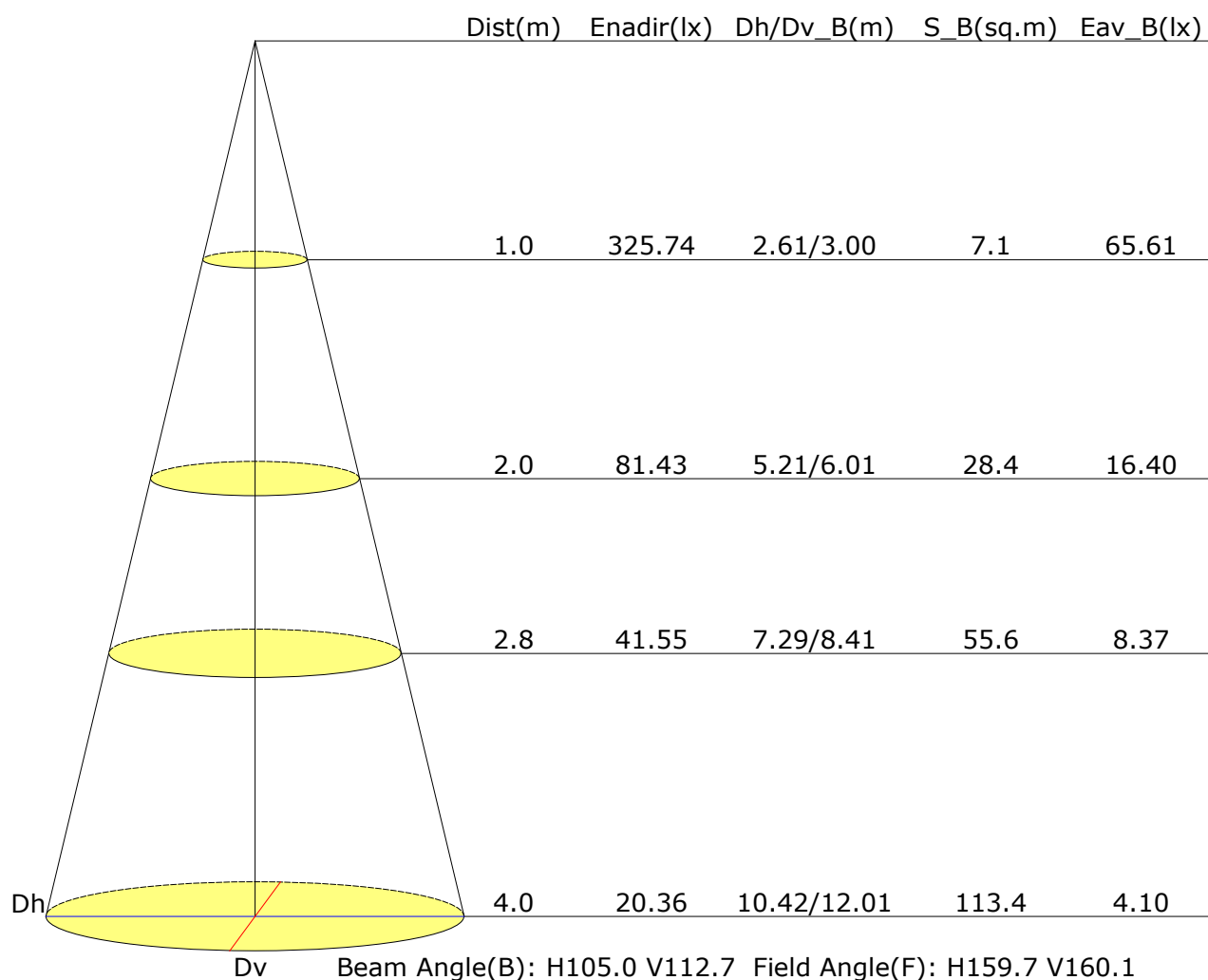


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	133	100	68	38	13	0	0	0	0
C90	218	195	171	145	118	90	61	34	11
C180	242	224	204	184	163	141	120	97	74
C270	215	192	168	142	115	87	59	32	10

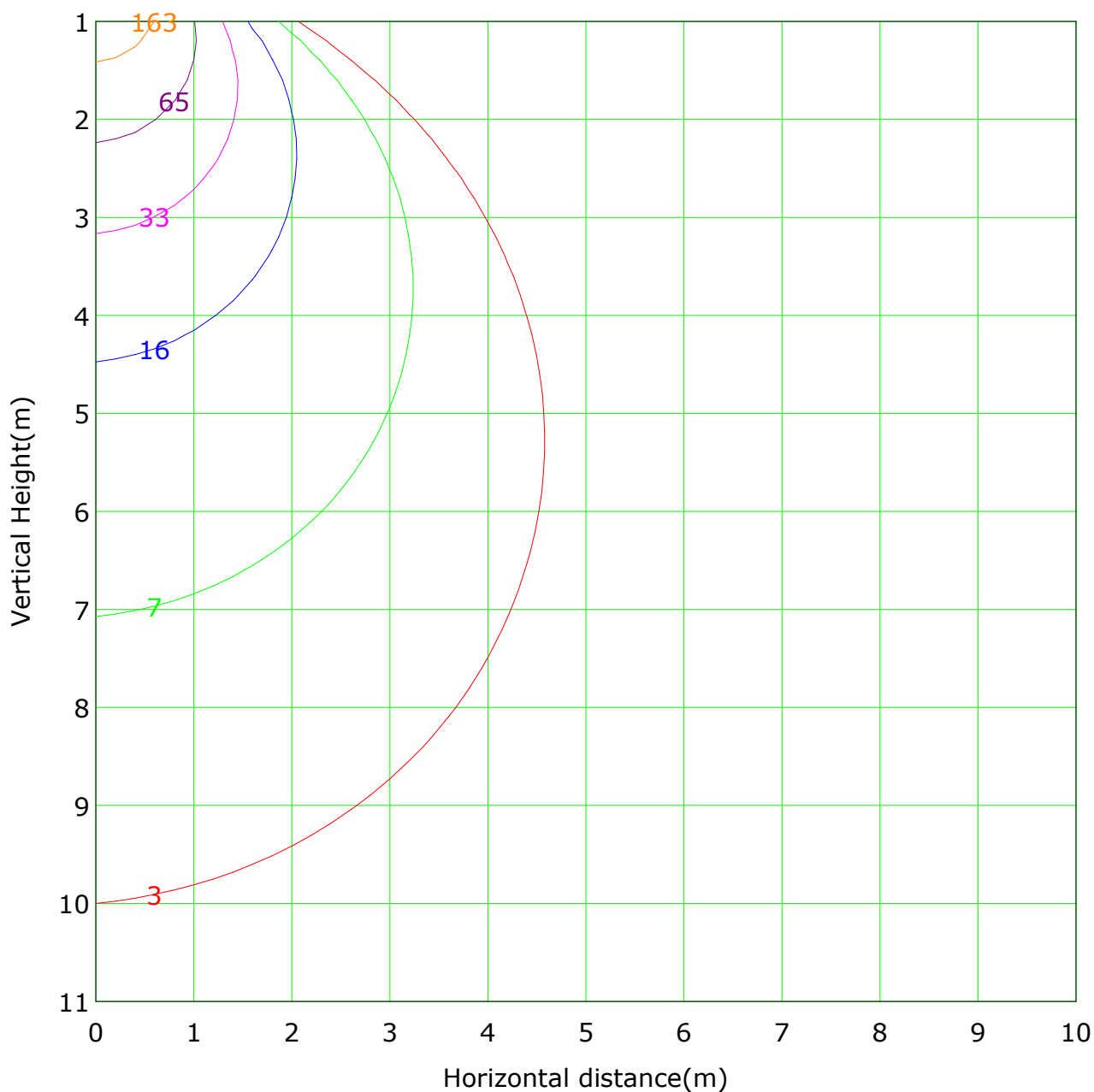
C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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: 325.7 lx

— (1%): 3.3 lx	— (2%): 6.5 lx
— (5%): 16.3 lx	— (10%): 32.6 lx
— (20%): 65.1 lx	— (50%): 162.9 lx
— (100%): 325.7 lx	

C Plane (°):0.0-360.0: 10.0
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: 02/10/2024 10:47

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-SL16-16+PRD-16-FS

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: 878.2 lm

Downward Ratio: 57.44%

Total Rated Lamp Lumens: 1491.0 lm

Efficiency: 58.90%

Upward Ratio: 1.46%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 163.9, 161.3, 159.0, 158.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.9, 105.6, 105.8, 105.8

Luminaire Efficacy Rating (LER): 65.15

Central Intensity: 317.26 cd

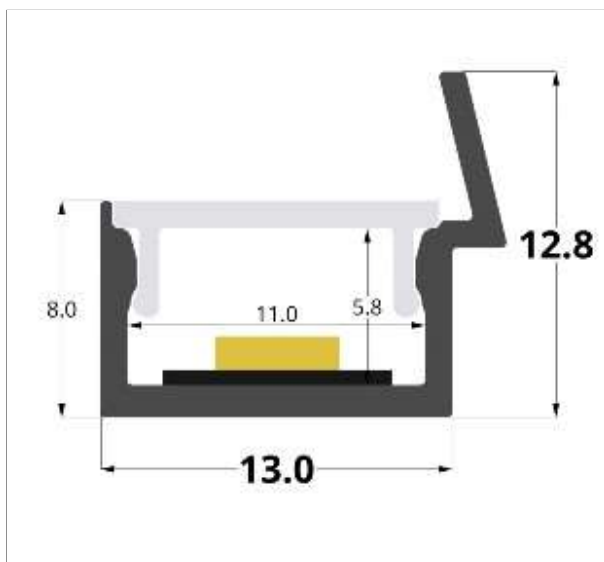
Max. Intensity: 321.5 cd

Pos of Max. Intensity: H270 V5

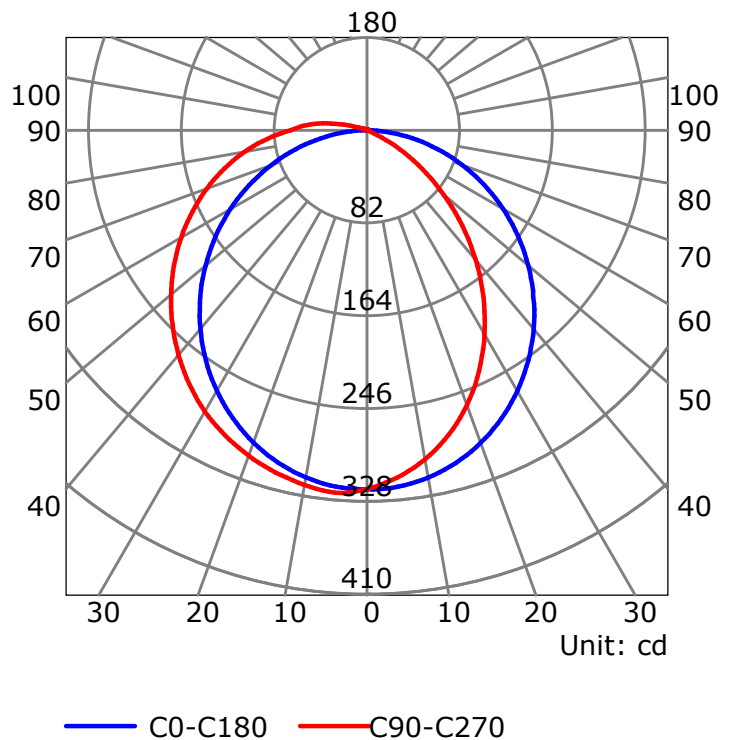
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.17

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

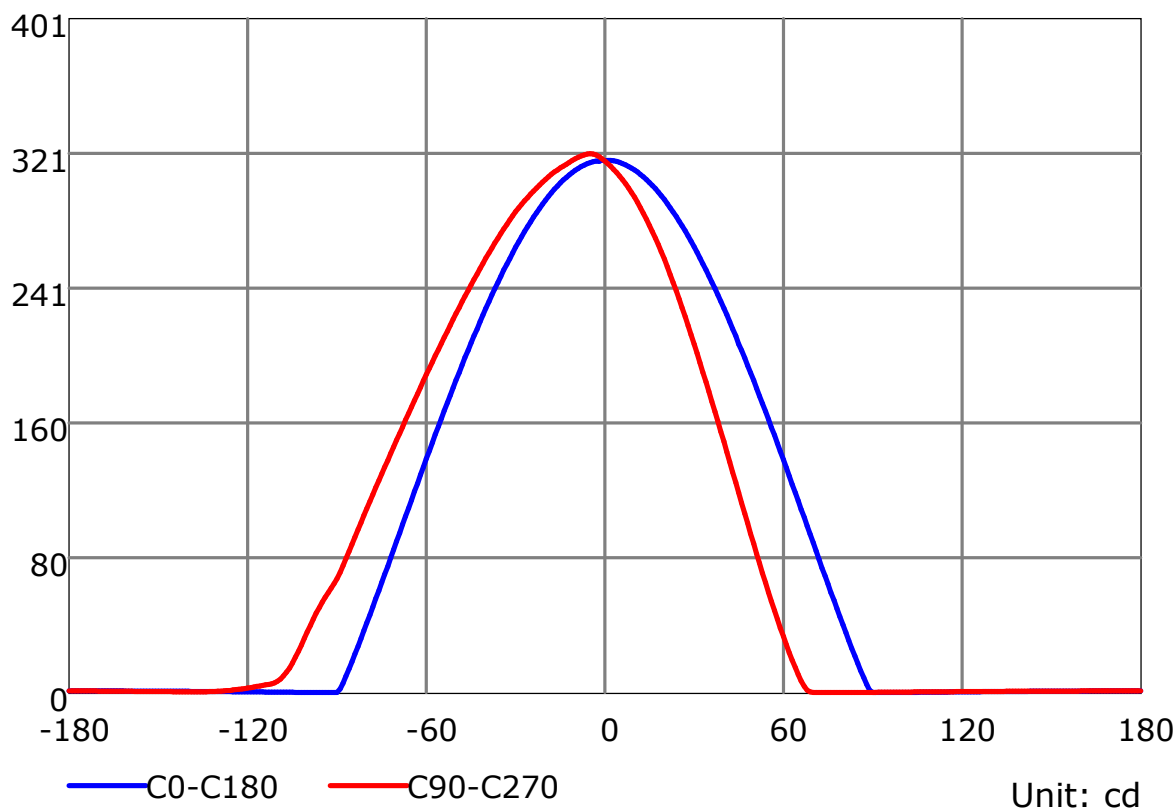
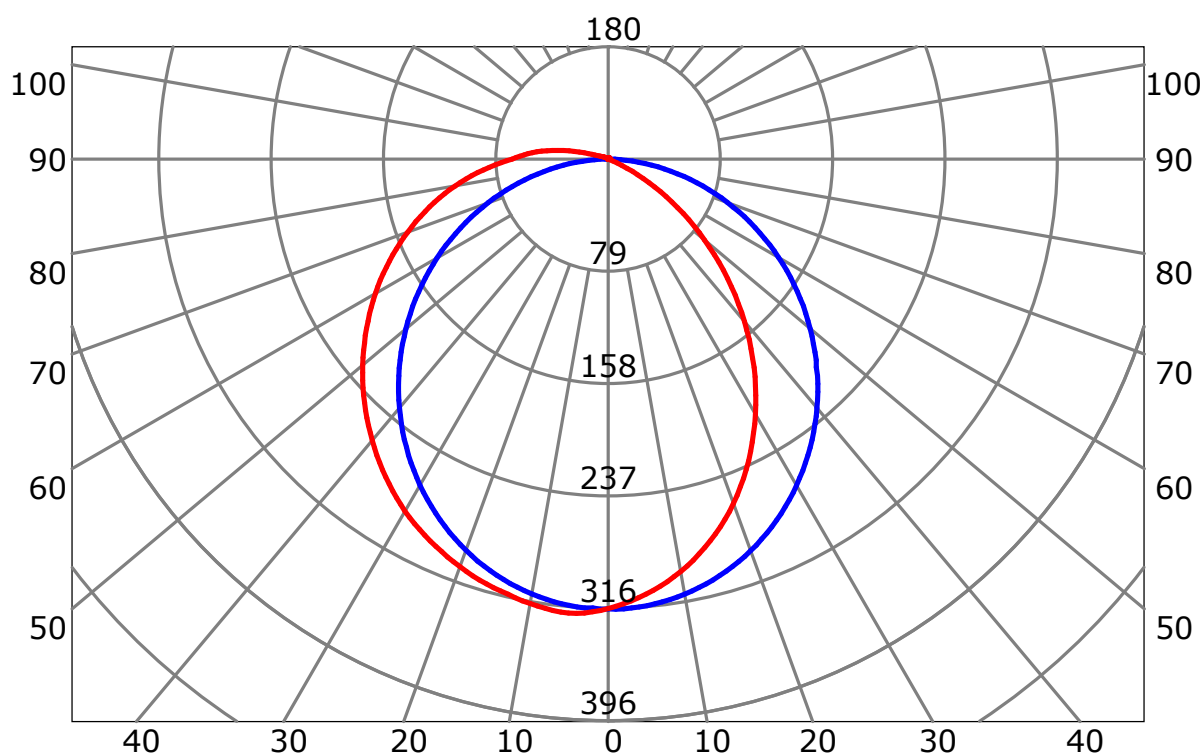
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

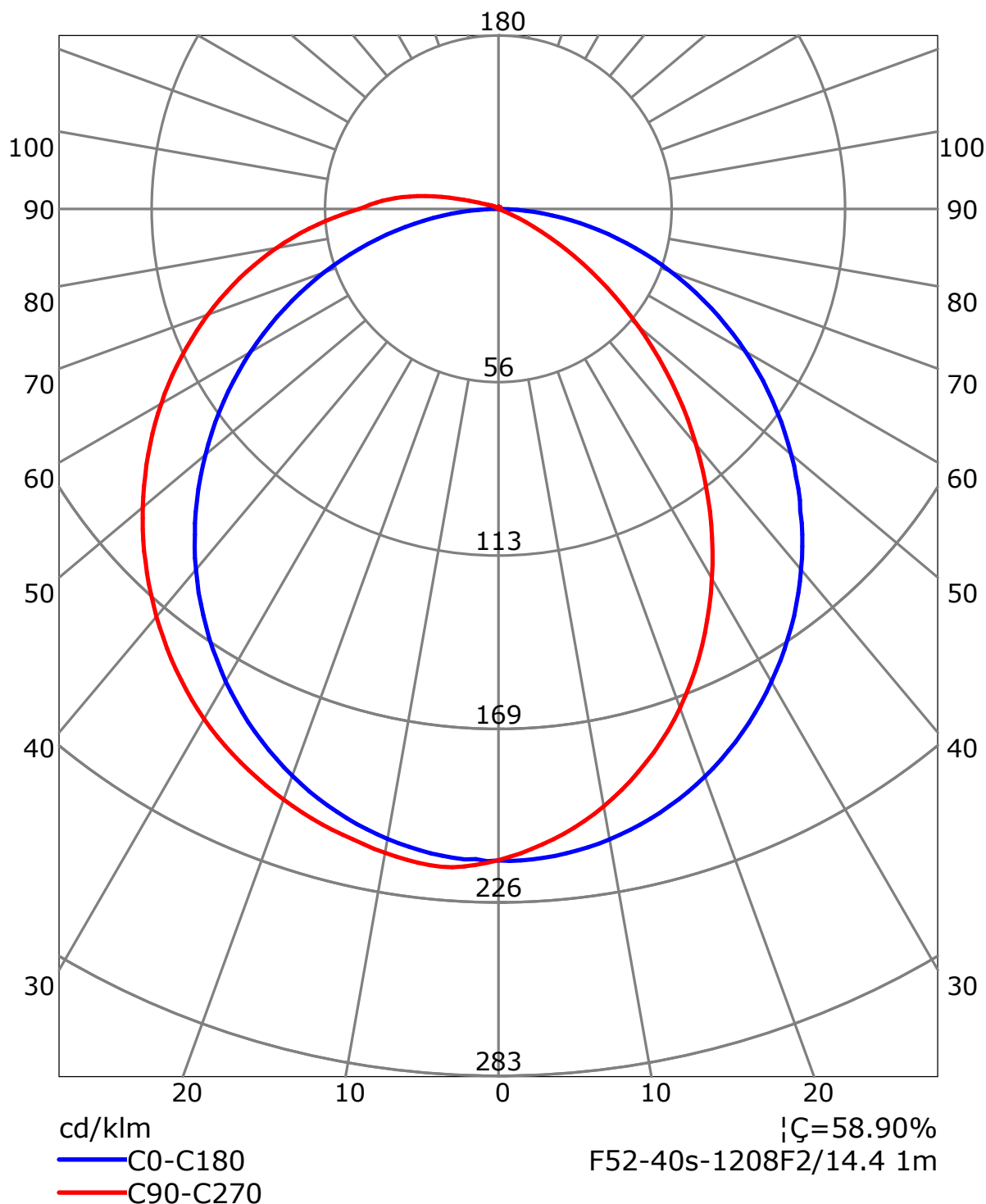
Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 10.0
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:

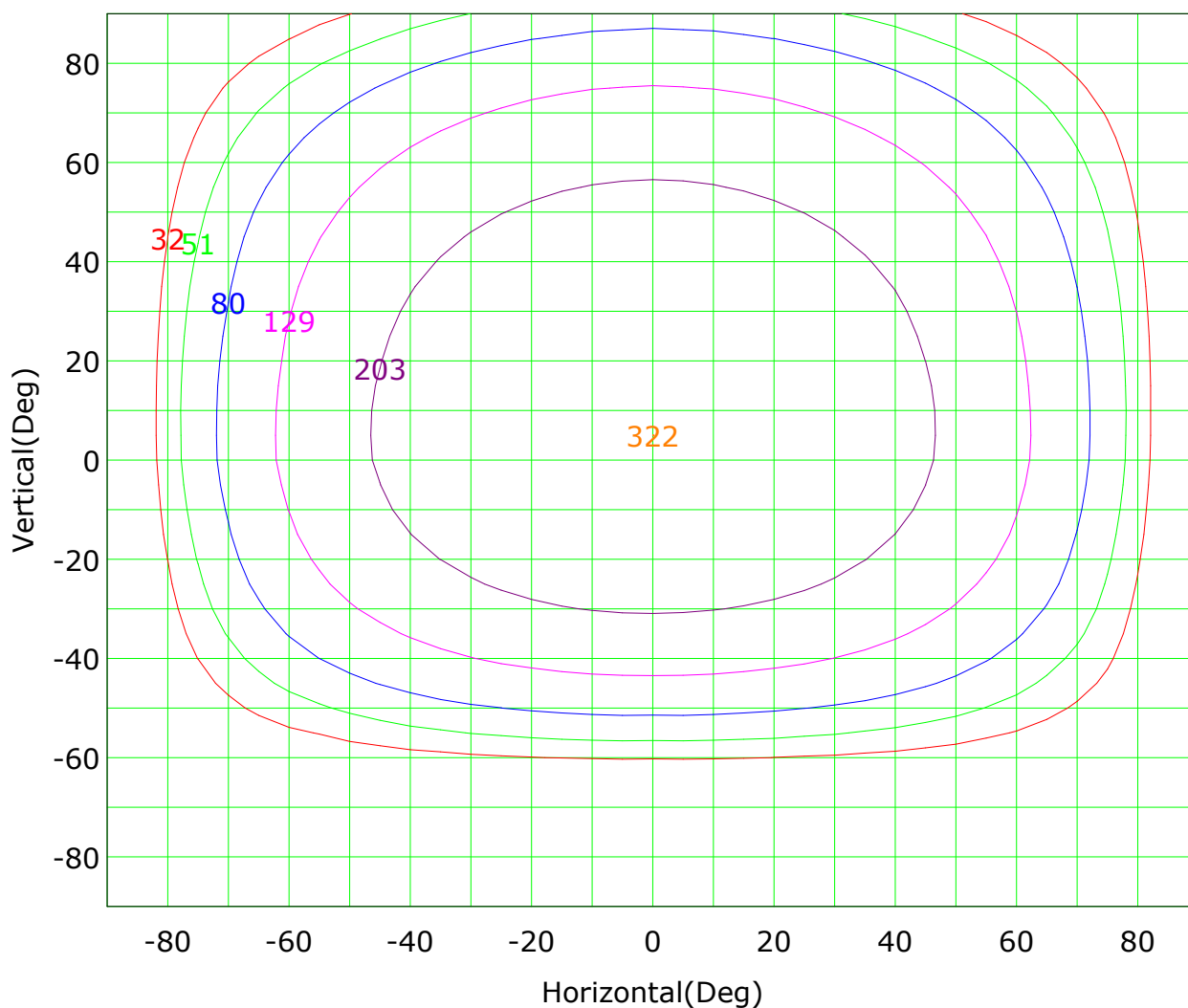
Luminous Intensity Distribution Curve(cd/klm)



C Plane (°):0.0-360.0: 10.0
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%): 322 cd

(10%):	32 cd	(16%):	51 cd
(25%):	80 cd	(40%):	129 cd
(63%):	203 cd	(100%):	322 cd

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

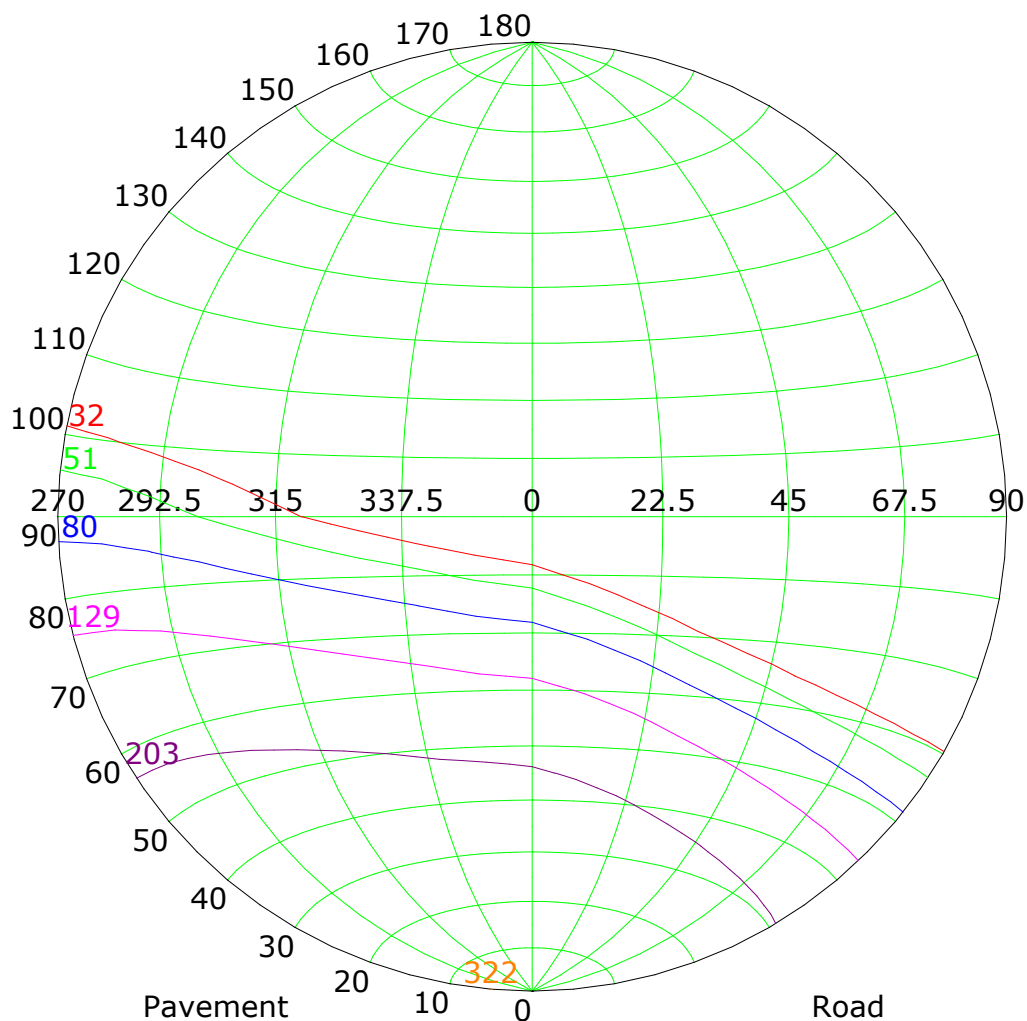
Test Device: GPM-1800B

Distance: 7.792 m

Humidity:

Inspector:

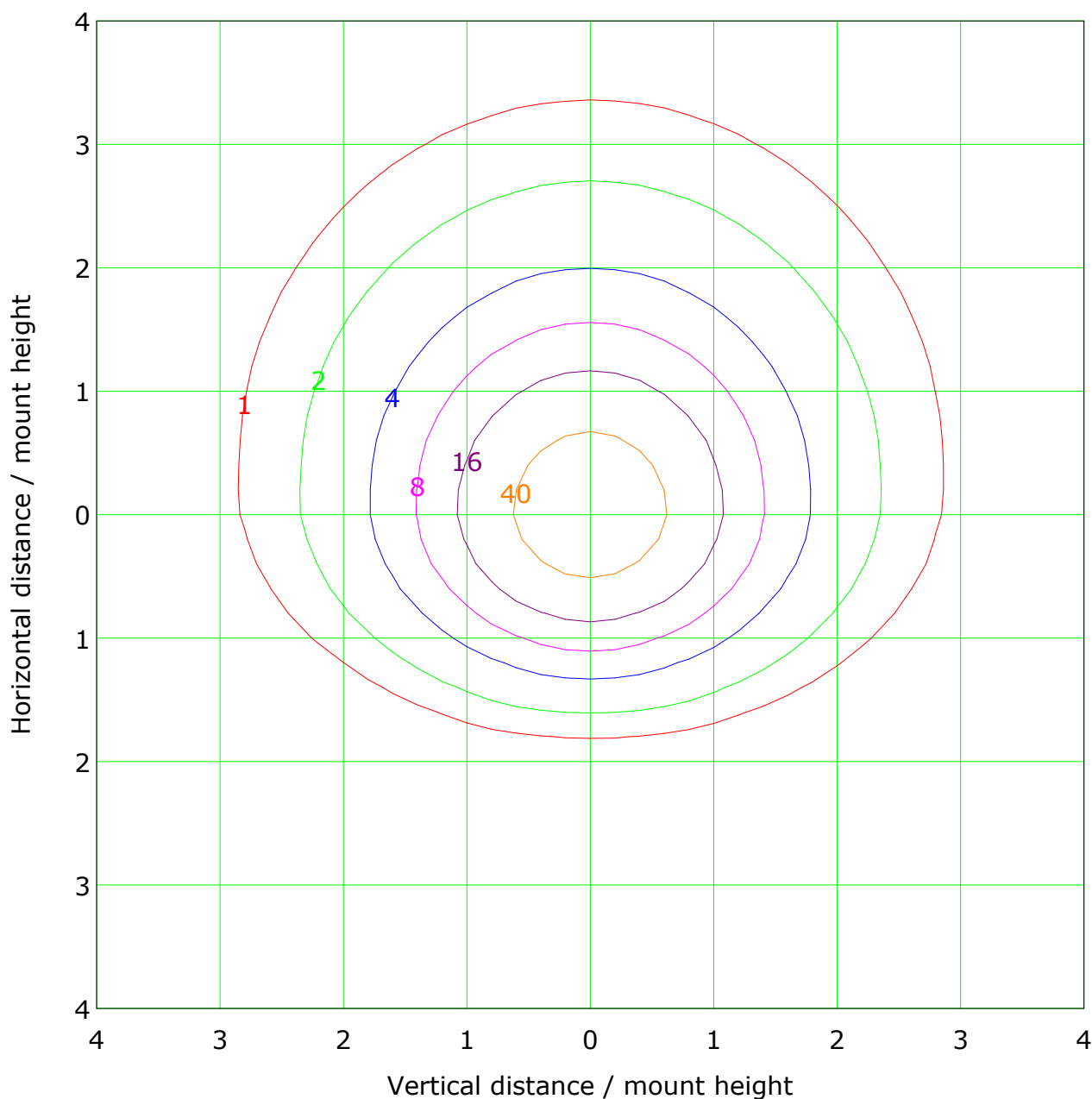
Isocandela (sphere)



Imax (100%): 322 cd

(10%):	32 cd	(16%):	51 cd
(25%):	80 cd	(40%):	129 cd
(63%):	203 cd	(100%):	322 cd

IsoLux Plot



Mounting Height: 2.0m		Max Lux(100%): 79.8 lx	
(1%):	0.8 lx	(2%):	1.6 lx
(5%):	4.0 lx	(10%):	8.0 lx
(20%):	16.0 lx	(50%):	39.9 lx
(100%):	79.8 lx		

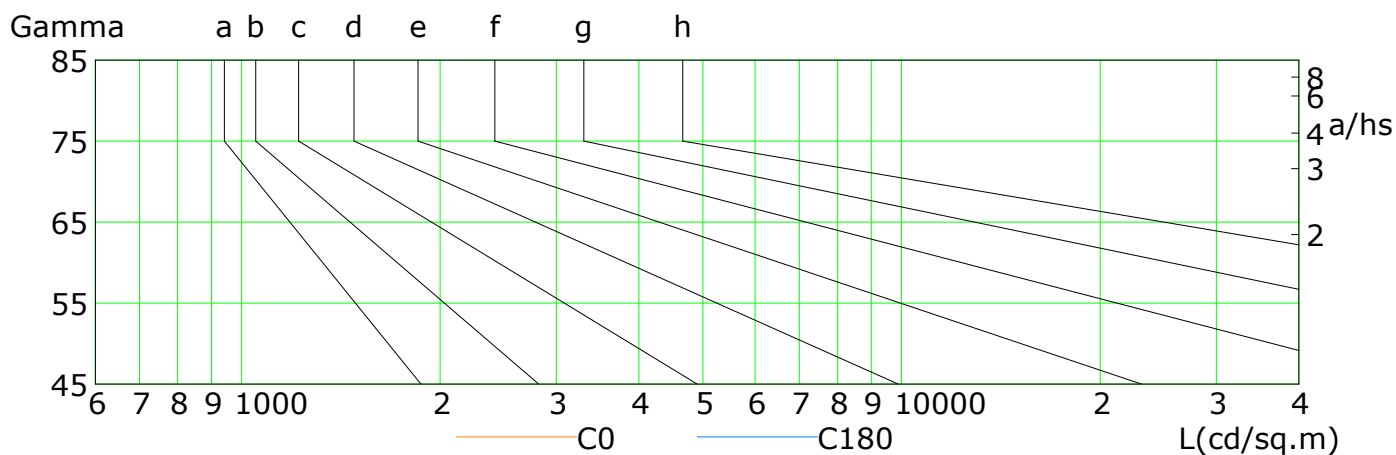
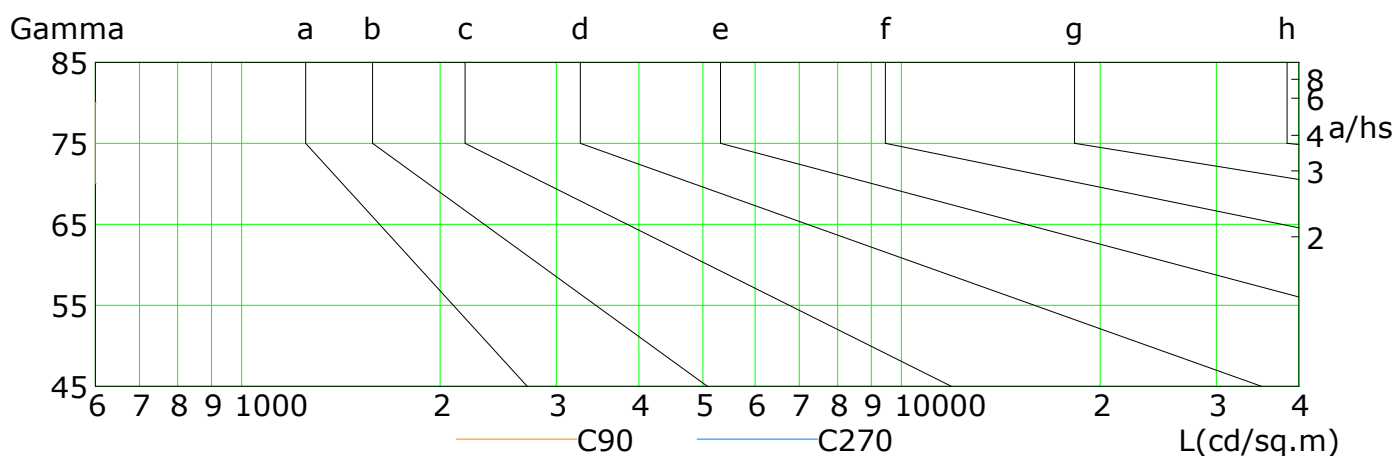
C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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

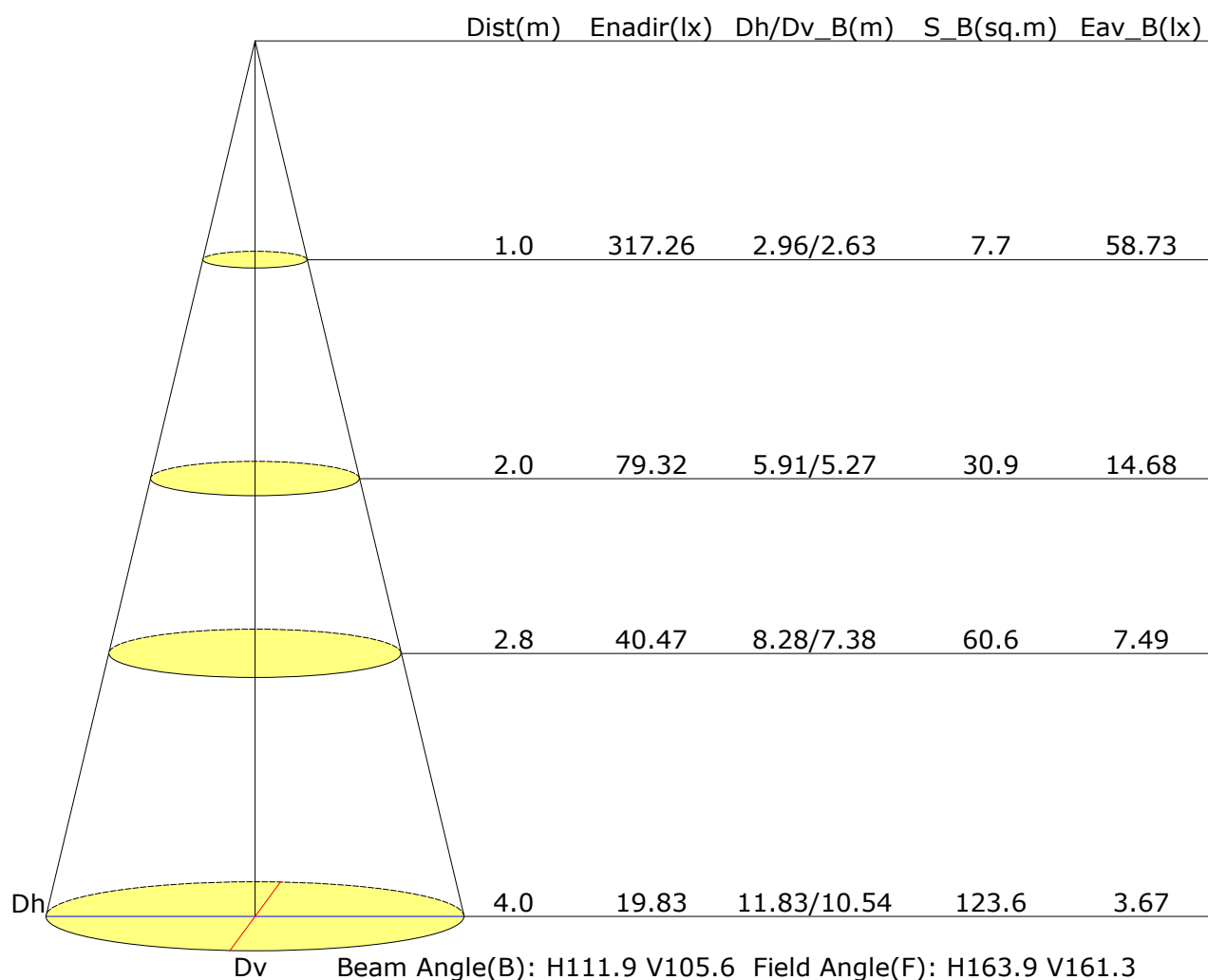


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	208	186	163	139	114	89	65	40	17
C90	119	89	60	34	11	0	0	0	0
C180	209	186	163	140	115	90	66	41	18
C270	243	226	208	190	170	151	131	110	89

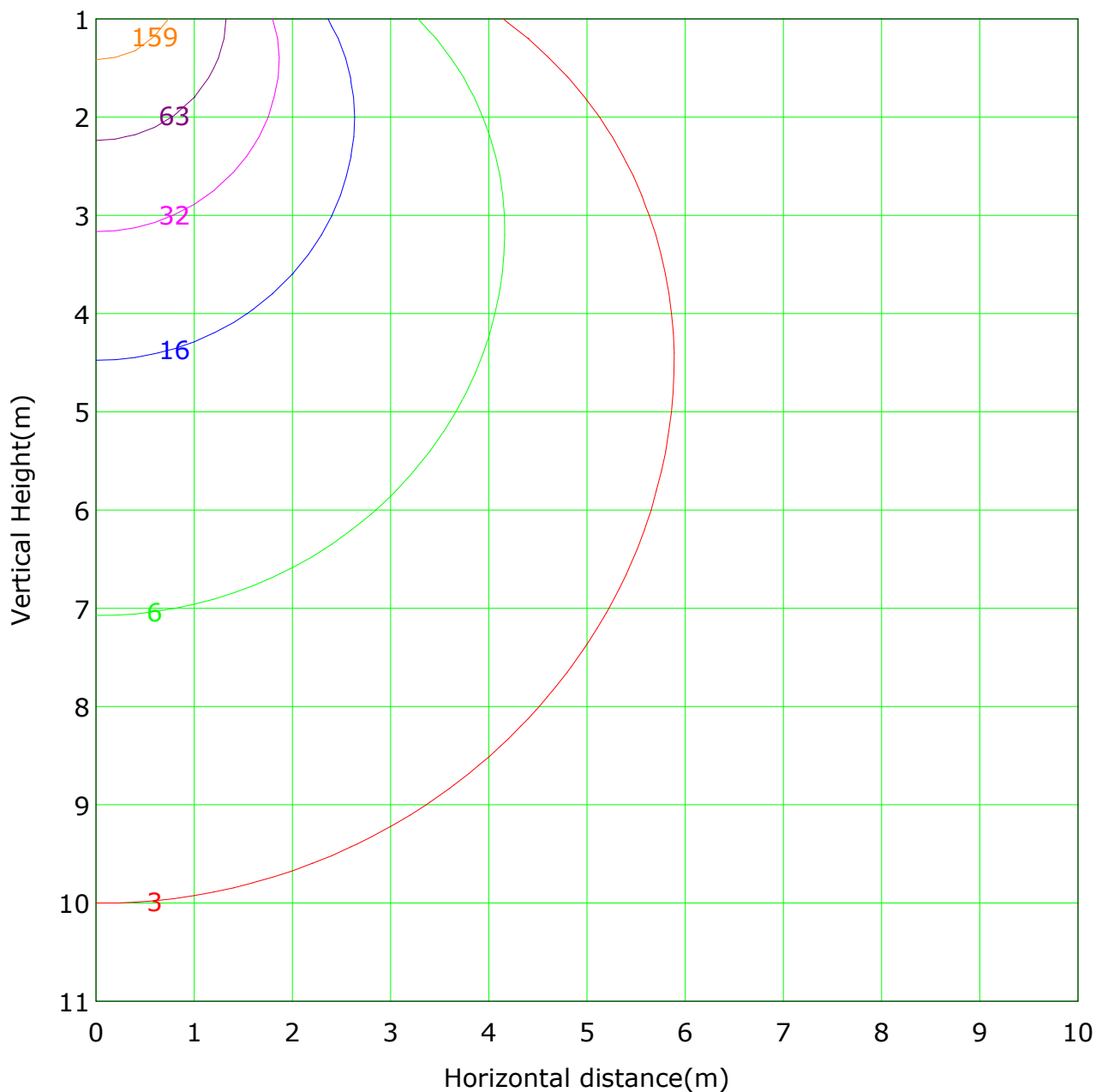
C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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: 317.3 lx

— (1%): 3.2 lx	— (2%): 6.3 lx
— (5%): 15.9 lx	— (10%): 31.7 lx
— (20%): 63.5 lx	— (50%): 158.6 lx
— (100%): 317.3 lx	

C Plane (°):0.0-360.0: 10.0
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: