



Report No.:

Test Time: 31/07/2018 16:22

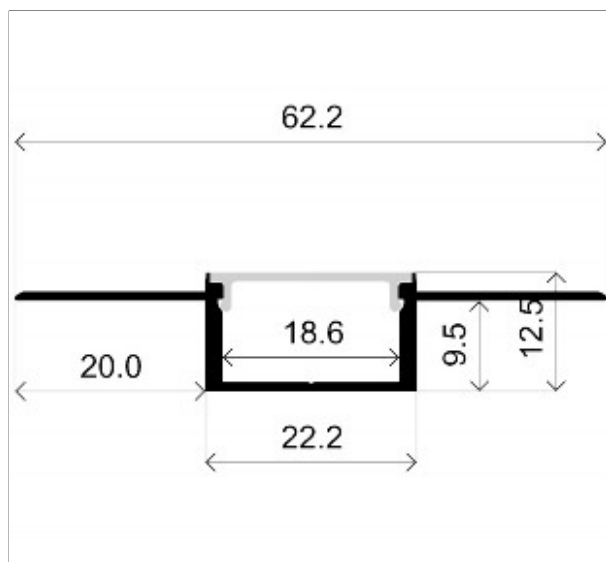
Luminaire Property

Luminaire Manufacturer: Lighting Line
 Luminaire Description: LLP-DW01-01 + LLD-01-FM
 Lamp Description: Strip 14,4W/m 60led/m Number of Lamps: 1
 Lumens per Lamp: 1579 lm Voltage: 24.0 V
 Current: 0.595 A Power: 14.28 W
 Power Factor: 1.000

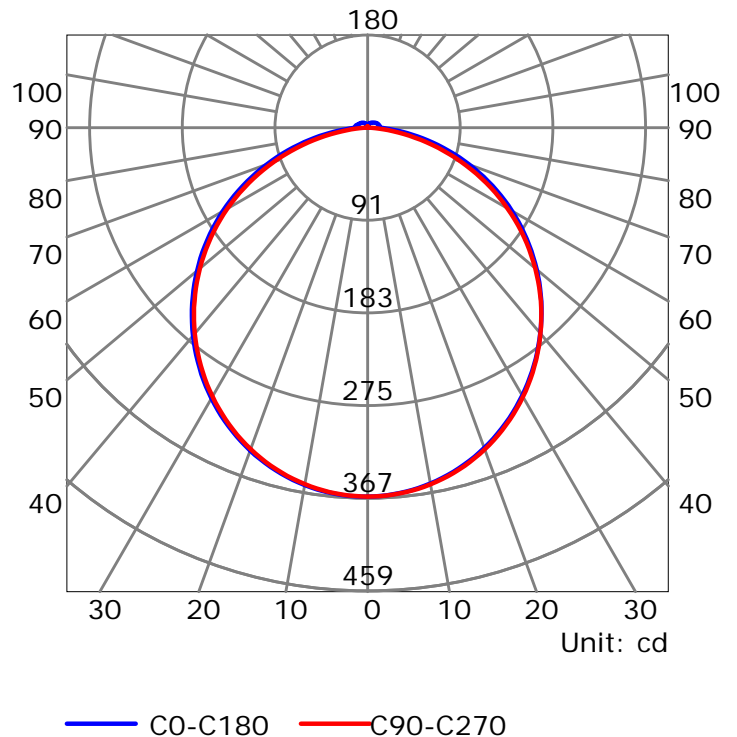
Photometric Results

CIE Class: Direct	Total Rated Lamp Lumens: 1579.0 lm
Measurement Flux: 1091.3 lm	Efficiency: 69.11%
Downward Ratio: 66.97%	Upward Ratio: 2.14%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.9, 160.0, 163.0, 163.0	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.8, 112.3, 113.3, 113.3	
Luminaire Efficacy Rating (LER): 76.47	Central Intensity: 366.31 cd
Max. Intensity: 366.46 cd	Pos of Max. Intensity: H170 V1
S/MH(C0/C180): 1.25	S/MH(C90/C270): 1.25

Picture Of Luminaire



Luminous Intensity Distribution Curve

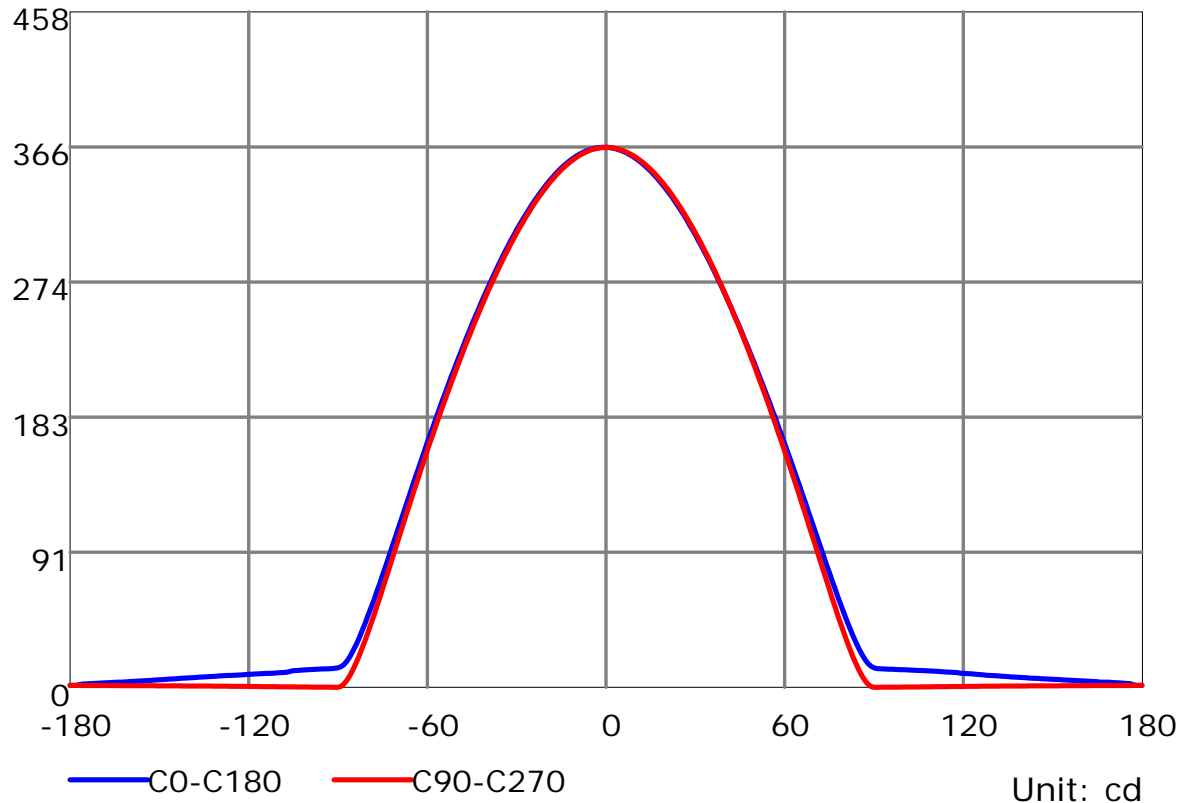
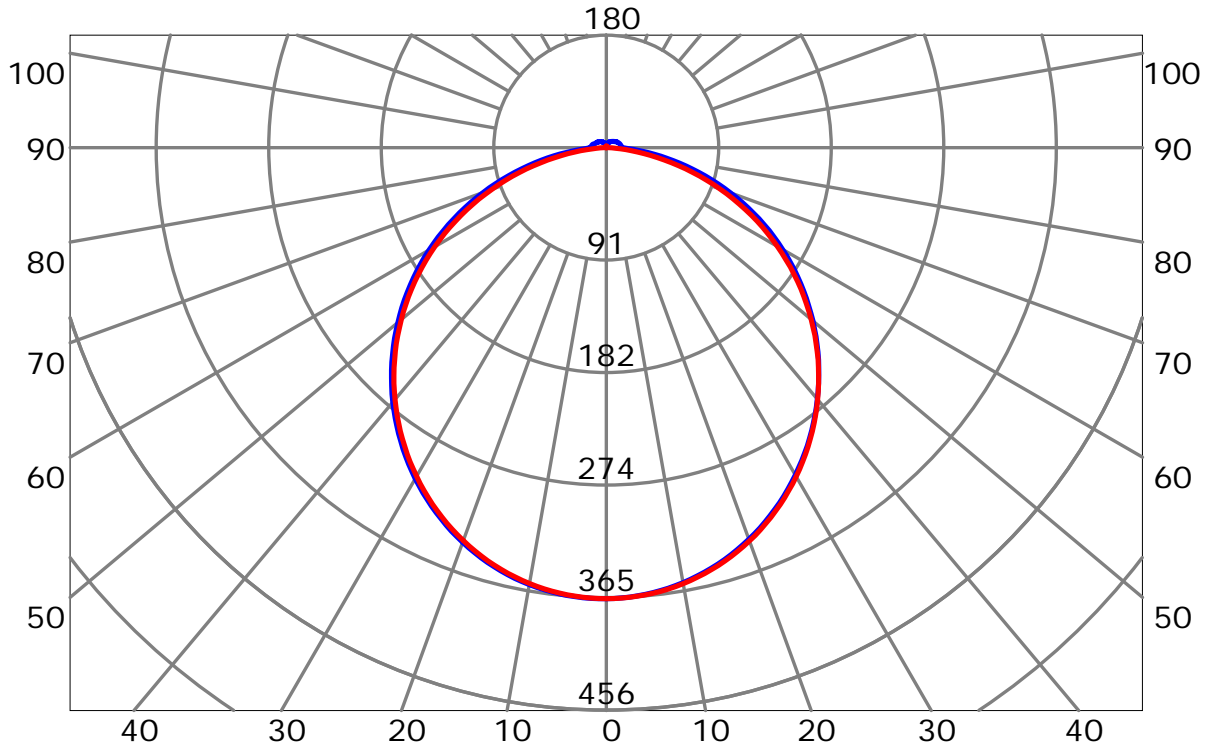


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 7.970 m
 Humidity:
 Inspector:



Luminous Intensity Distribution Curve

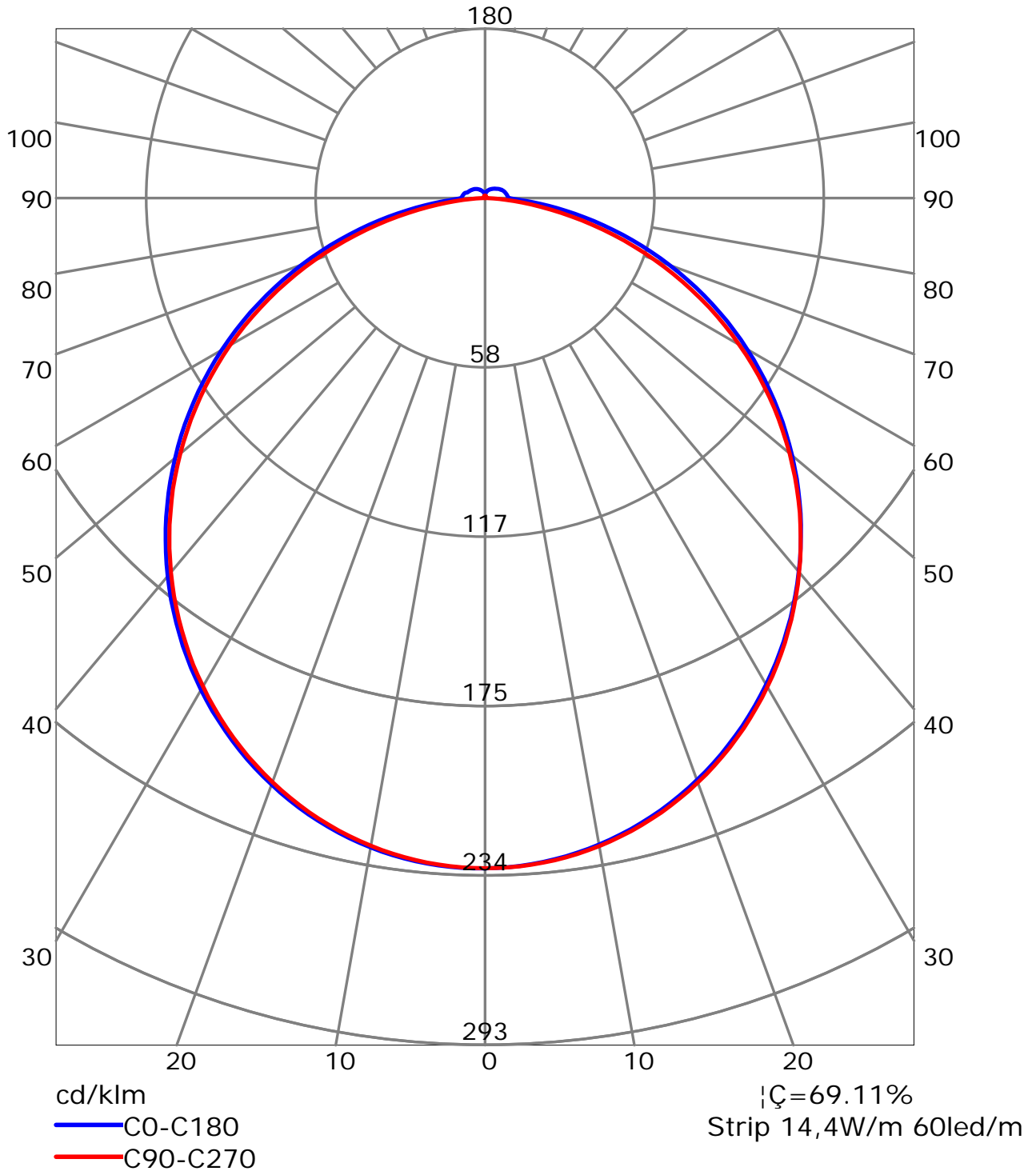


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 7.970 m
 Humidity:
 Inspector:



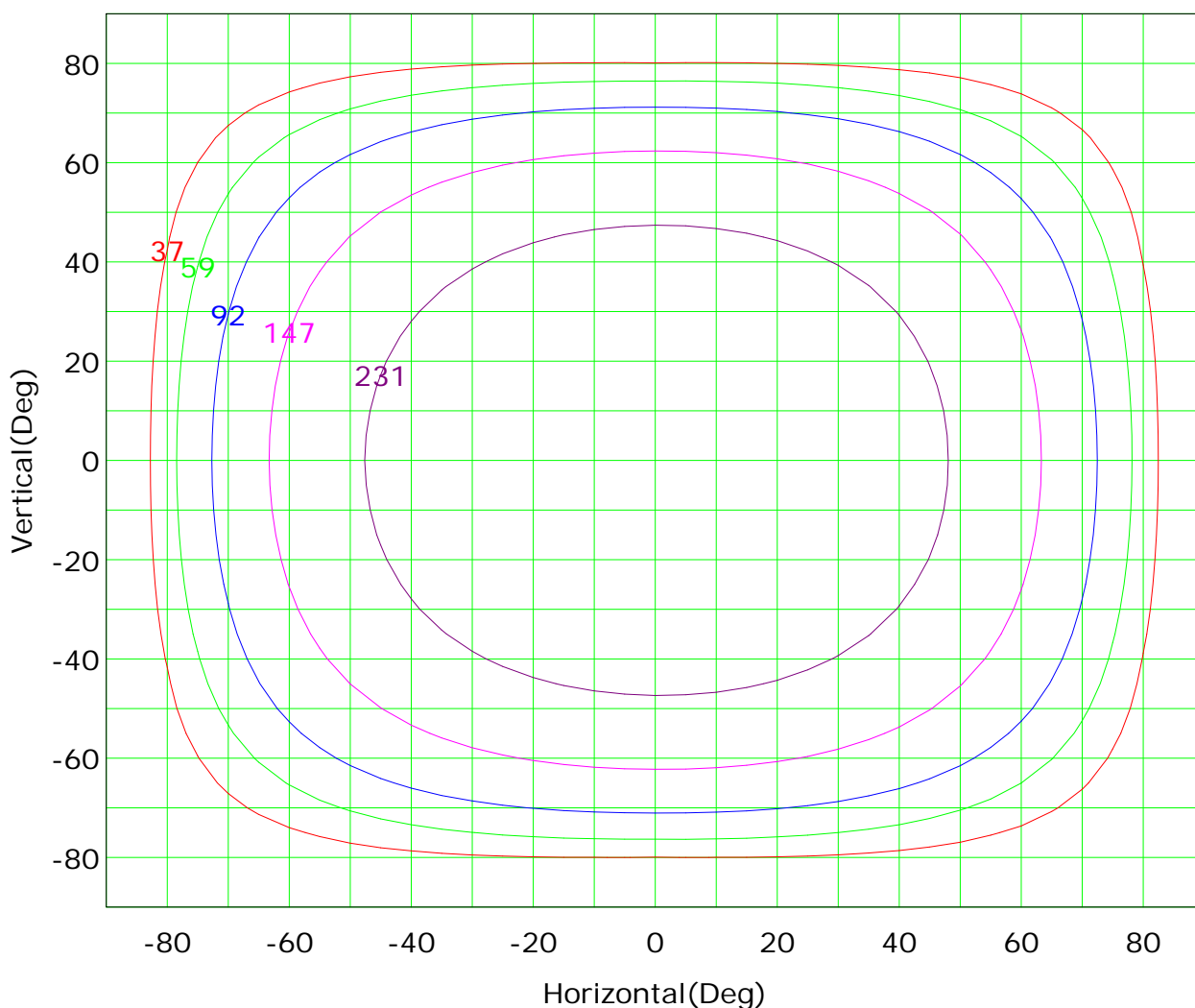
Luminous Intensity Distribution Curve(cd/klm)



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-2000
Distance: 7.970 m
Humidity:
Inspector:

Isocandela (rectangle)



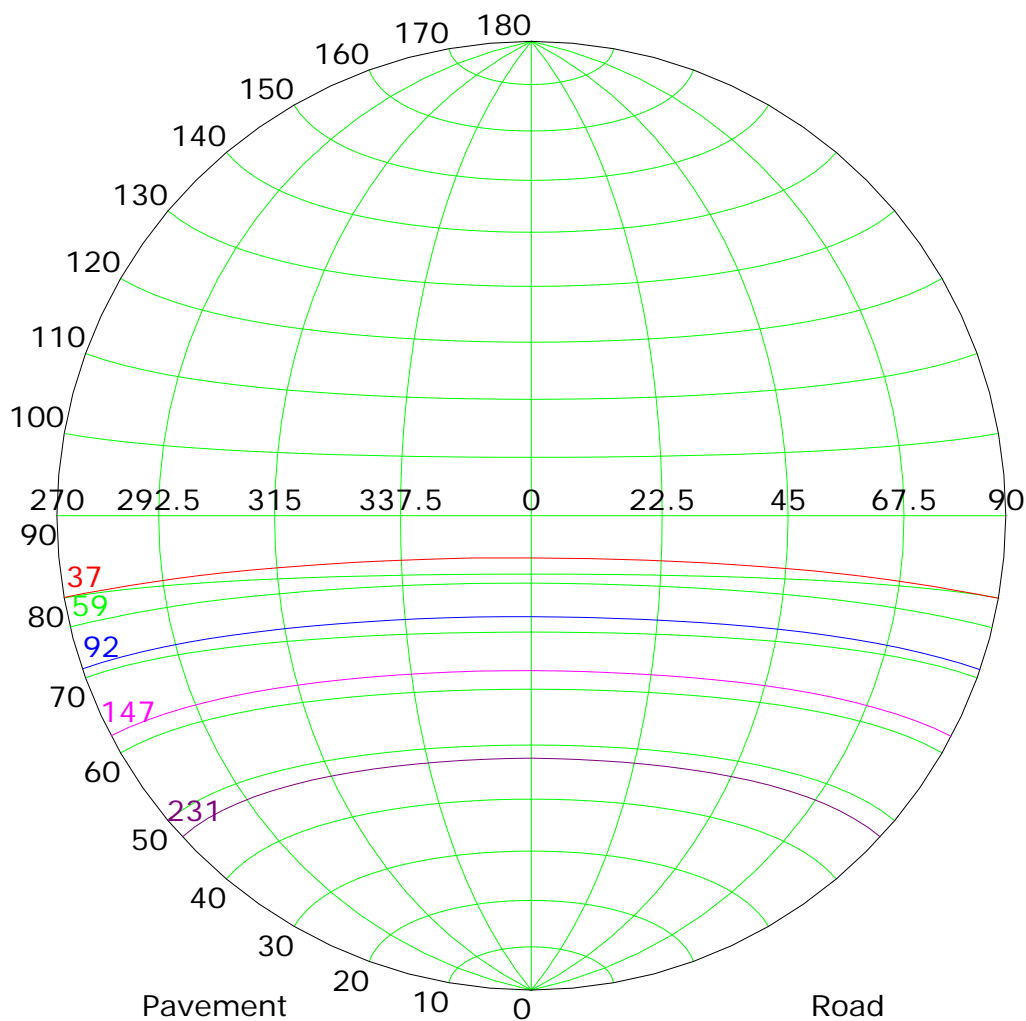
Imax (100%): 366 cd

— (10%):	37 cd	— (16%):	59 cd
— (25%):	92 cd	— (40%):	147 cd
— (63%):	231 cd	— (100%):	366 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-2000
 Distance: 7.970 m
 Humidity:
 Inspector:

Isocandela (sphere)



Imax (100%): 366 cd

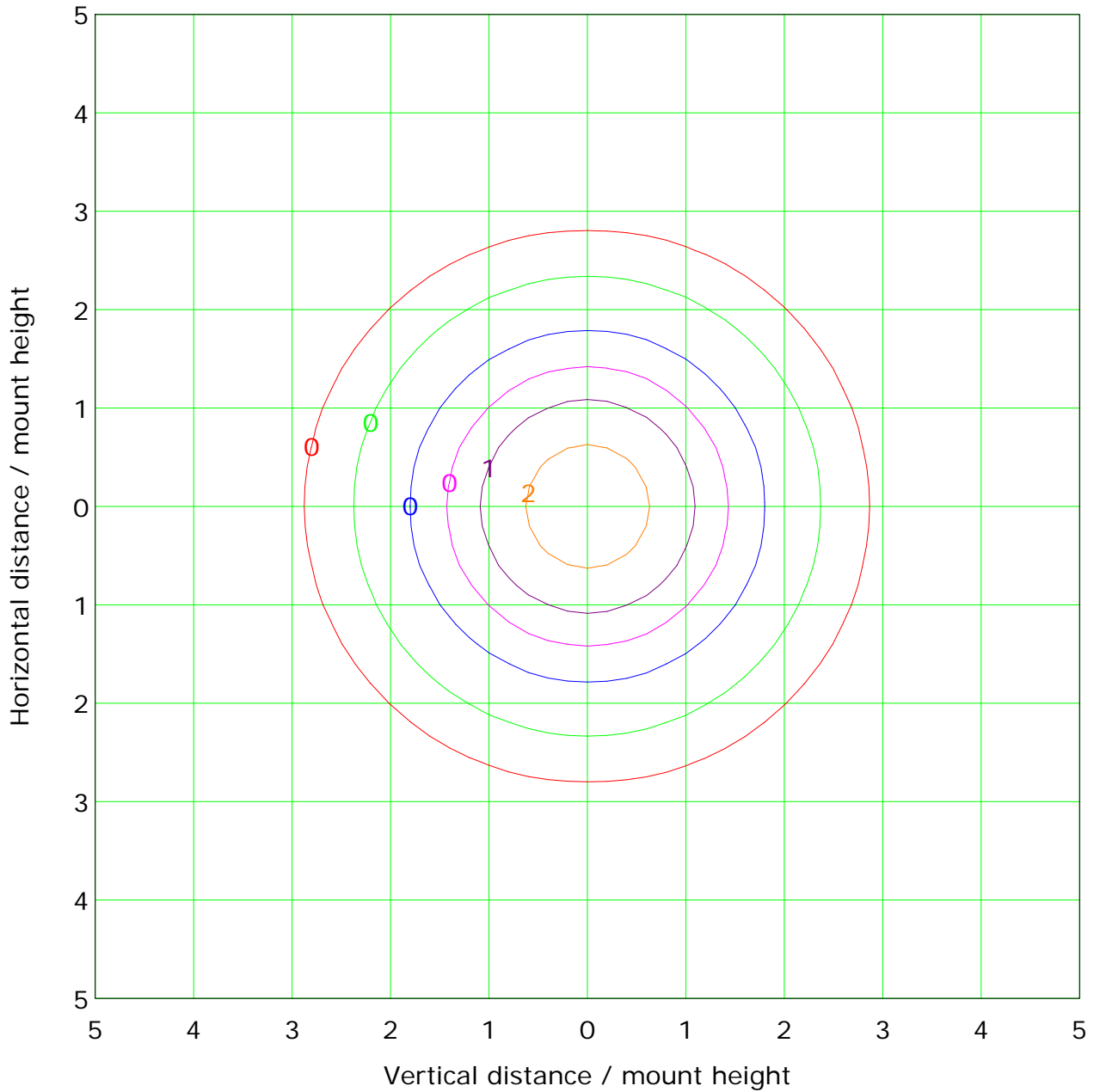
— (10%):	37 cd	— (16%):	59 cd
— (25%):	92 cd	— (40%):	147 cd
— (63%):	231 cd	— (100%):	366 cd

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-2000
 Distance: 7.970 m
 Humidity:
 Inspector:



IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 3.7 lx	
— (1%):	0.0 lx	— (2%):	0.1 lx
— (5%):	0.2 lx	— (10%):	0.4 lx
— (20%):	0.7 lx	— (50%):	1.8 lx
— (100%):	3.7 lx		

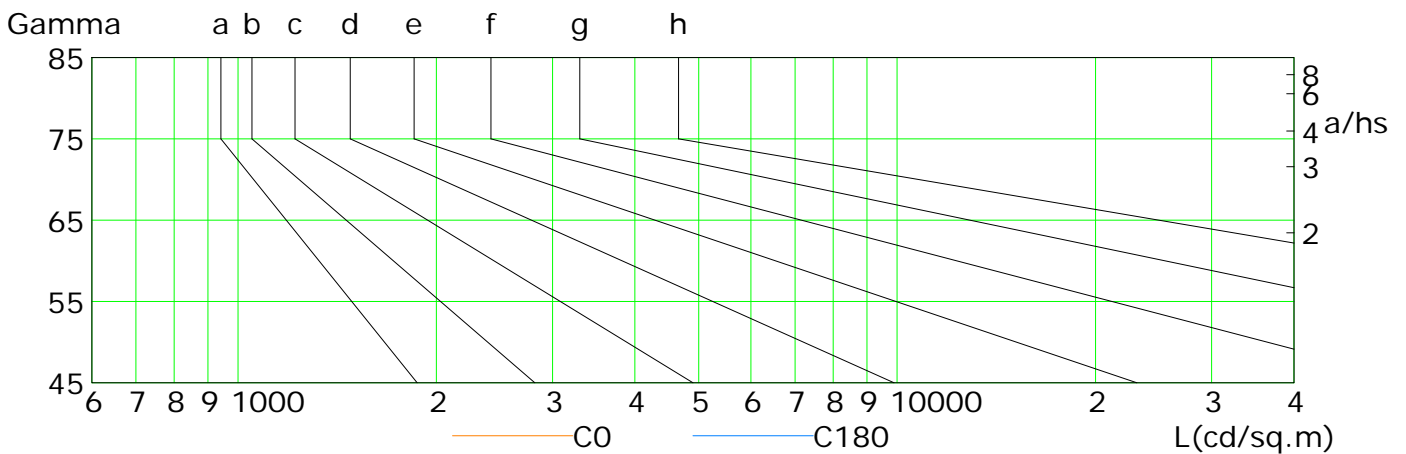
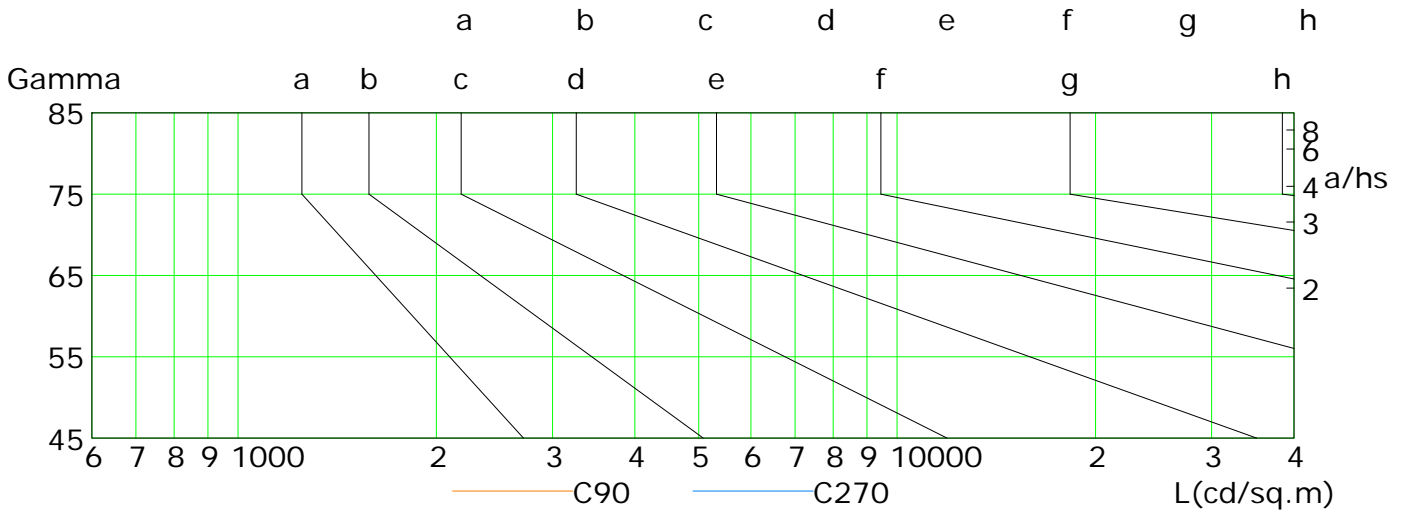
C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 7.970 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



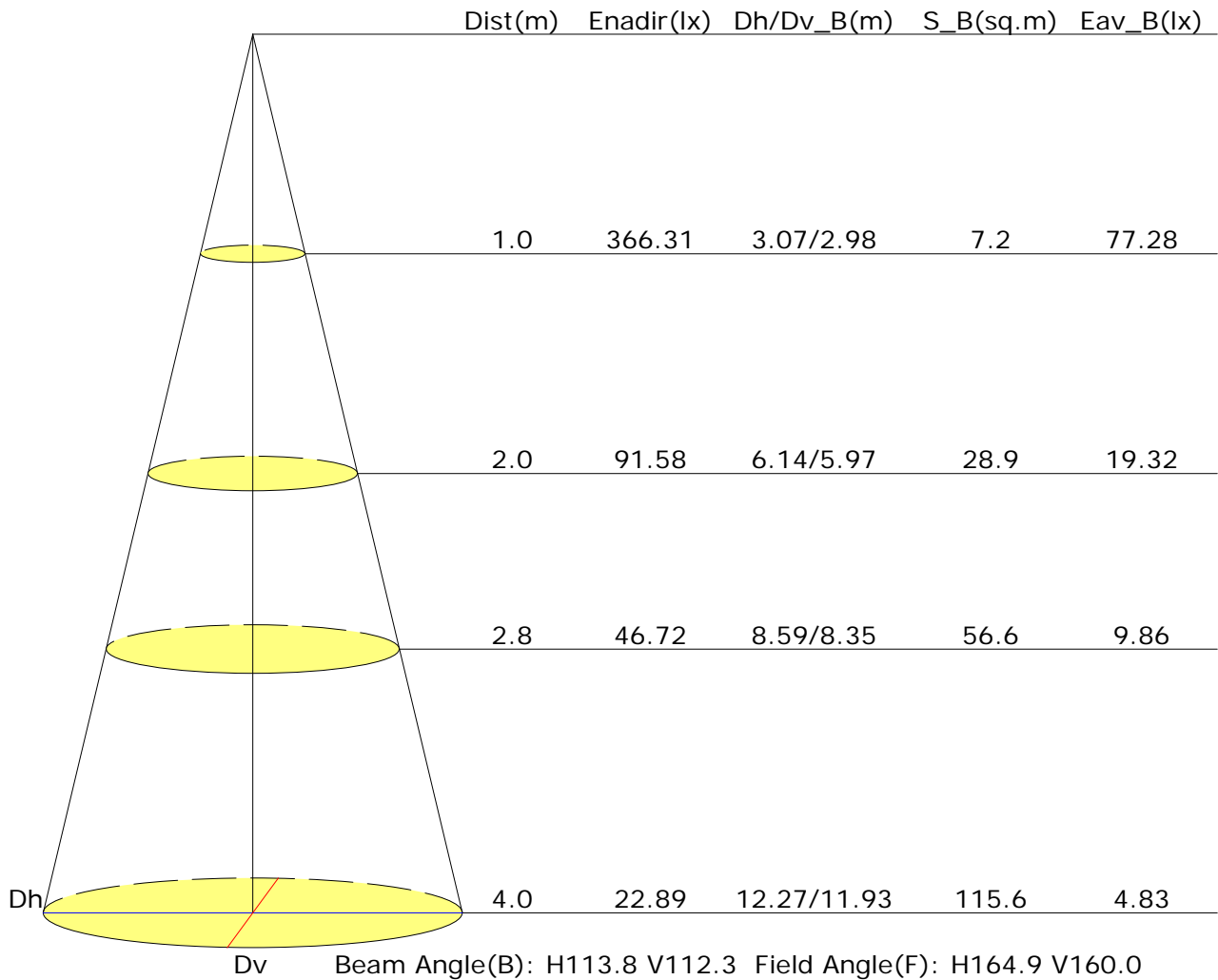
L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	244	219	193	165	137	107	78	50	26
C90	243	217	190	160	130	98	67	36	12
C180	246	221	194	166	137	106	76	48	25
C270	243	217	190	161	130	99	67	37	12

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-2000
 Distance: 7.970 m
 Humidity:
 Inspector:

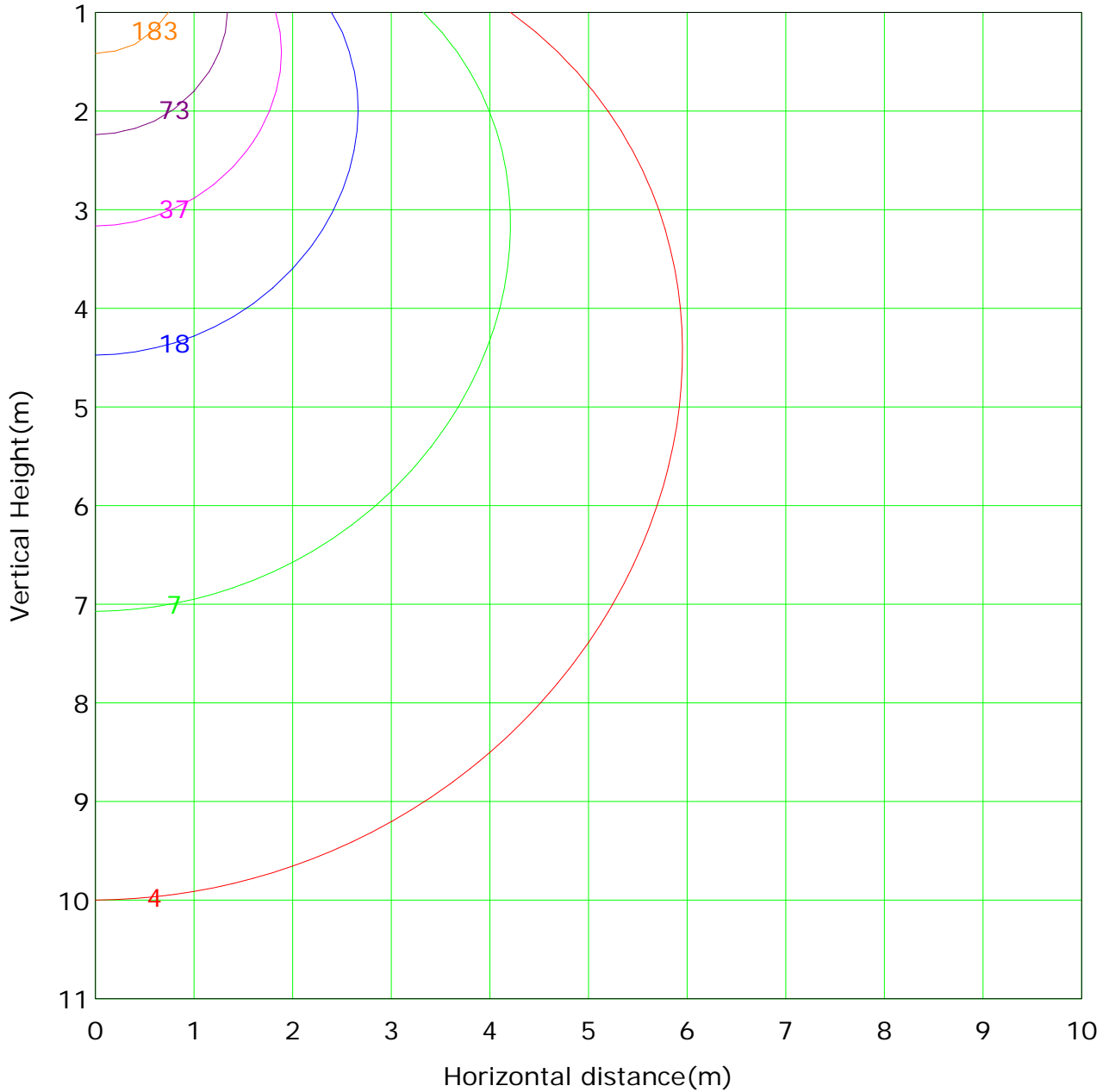


Illuminance at a Distance





Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 366.3 lx

— (1%): 3.7 lx	— (2%): 7.3 lx
— (5%): 18.3 lx	— (10%): 36.6 lx
— (20%): 73.3 lx	— (50%): 183.2 lx
— (100%): 366.3 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-2000
Distance: 7.970 m
Humidity:
Inspector:



Report No.:

Test Time: 01/08/2018 11:22

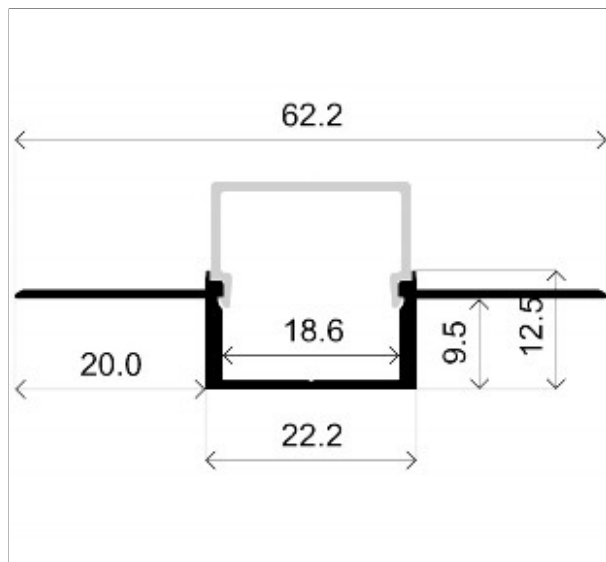
Luminaire Property

Luminaire Manufacturer: Lighting Line
 Luminaire Description: LLP-DW07-01 + LLD-01-CM
 Lamp Description: Strip 14,4W/m 60led/m Number of Lamps: 1
 Lumens per Lamp: 1579 lm Voltage: 24.0 V
 Current: 0.595 A Power: 14.29 W
 Power Factor: 1.000

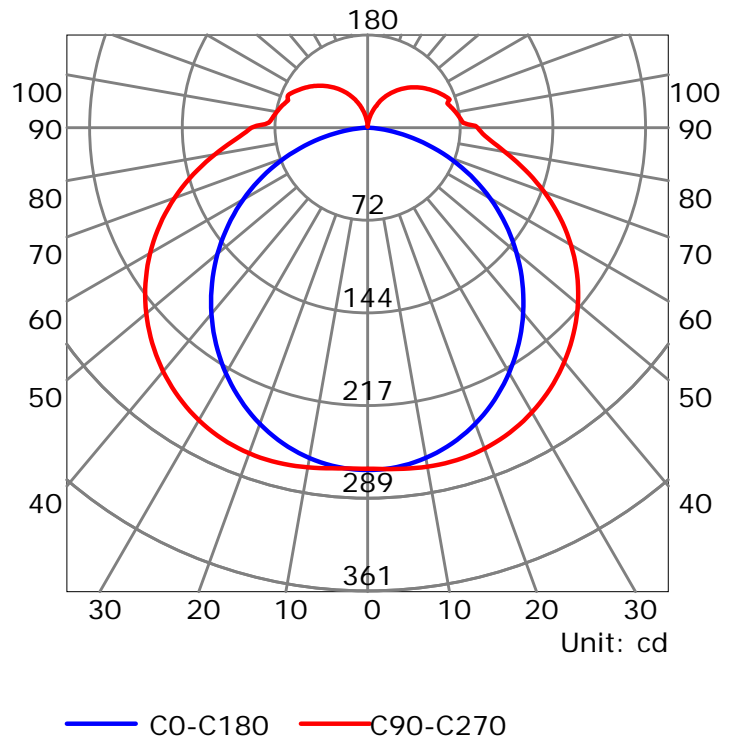
Photometric Results

CIE Class: Semi-Direct	Total Rated Lamp Lumens: 1579.0 lm
Measurement Flux: 1189.8 lm	Efficiency: 75.35%
Downward Ratio: 62.49%	Upward Ratio: 12.86%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.2, 304.3, 278.9, 278.3	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.3, 149.2, 135.1, 134.9	
Luminaire Efficacy Rating (LER): 83.31	Central Intensity: 267.42 cd
Max. Intensity: 271.05 cd	Pos of Max. Intensity: H270 V17
S/MH(C0/C180): 1.23	S/MH(C90/C270): 1.45

Picture Of Luminaire



Luminous Intensity Distribution Curve

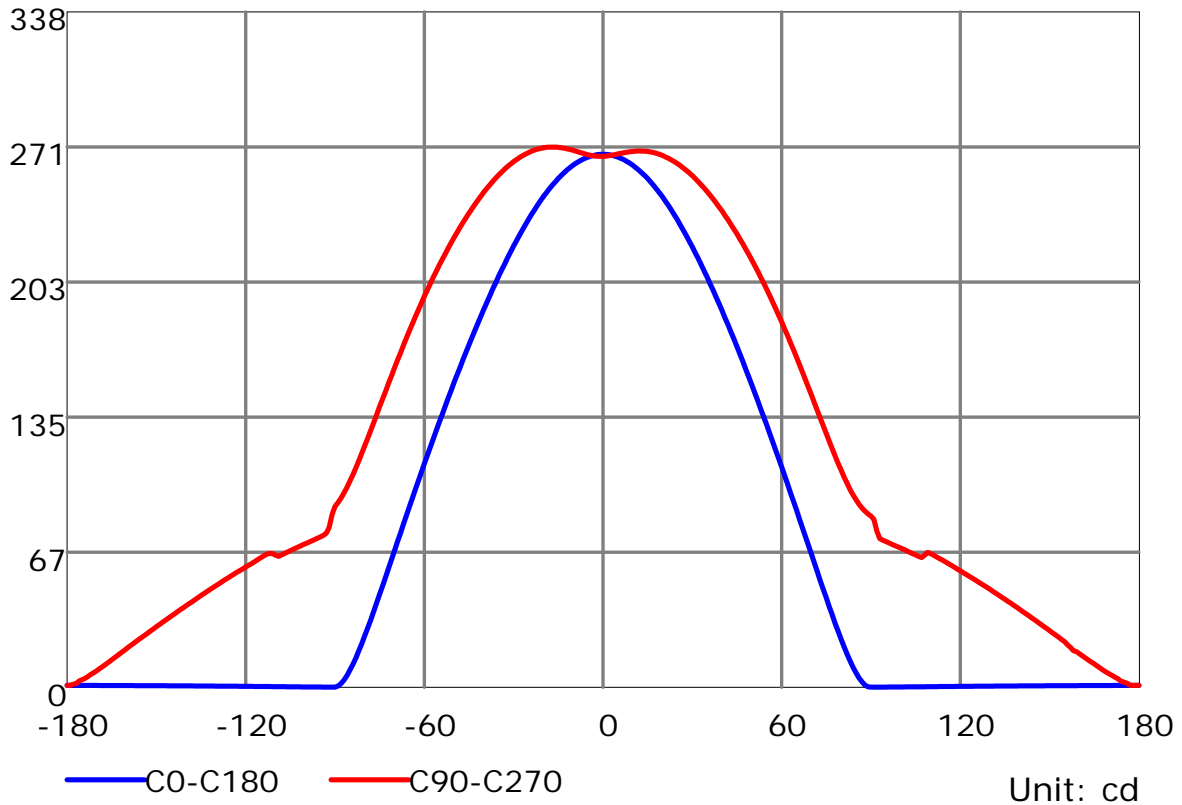
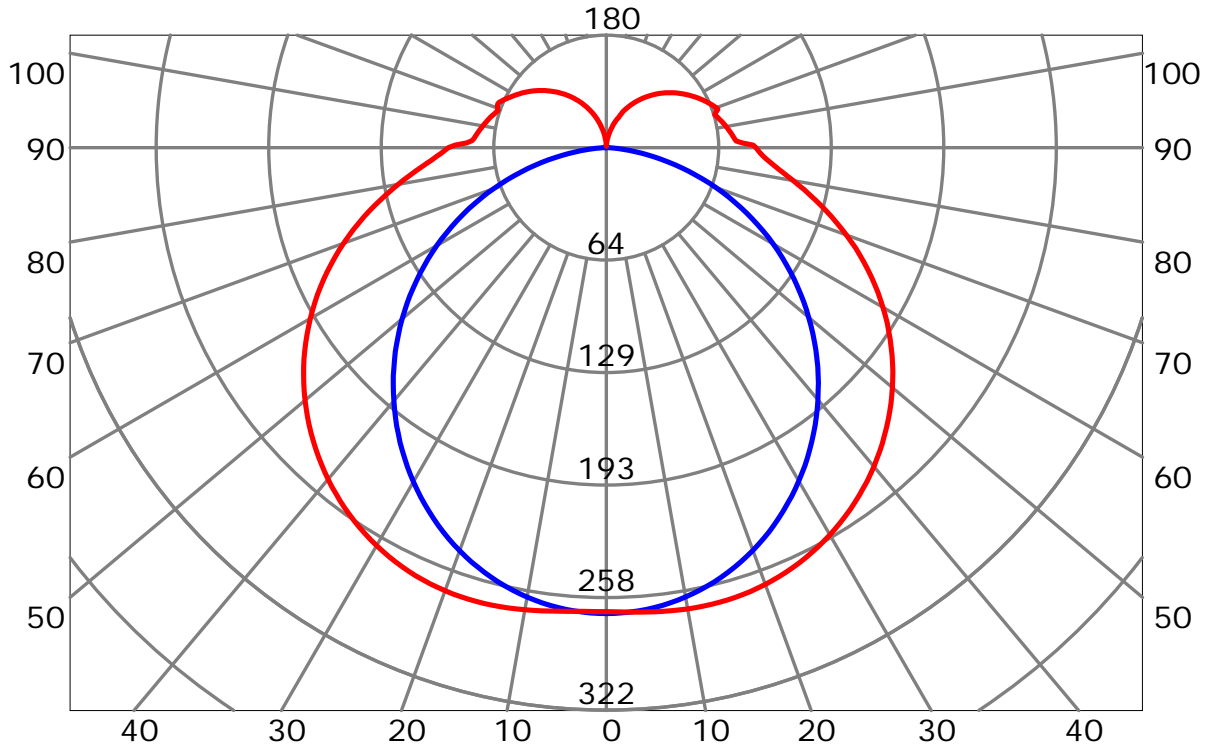


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 7.970 m
 Humidity:
 Inspector:



Luminous Intensity Distribution Curve

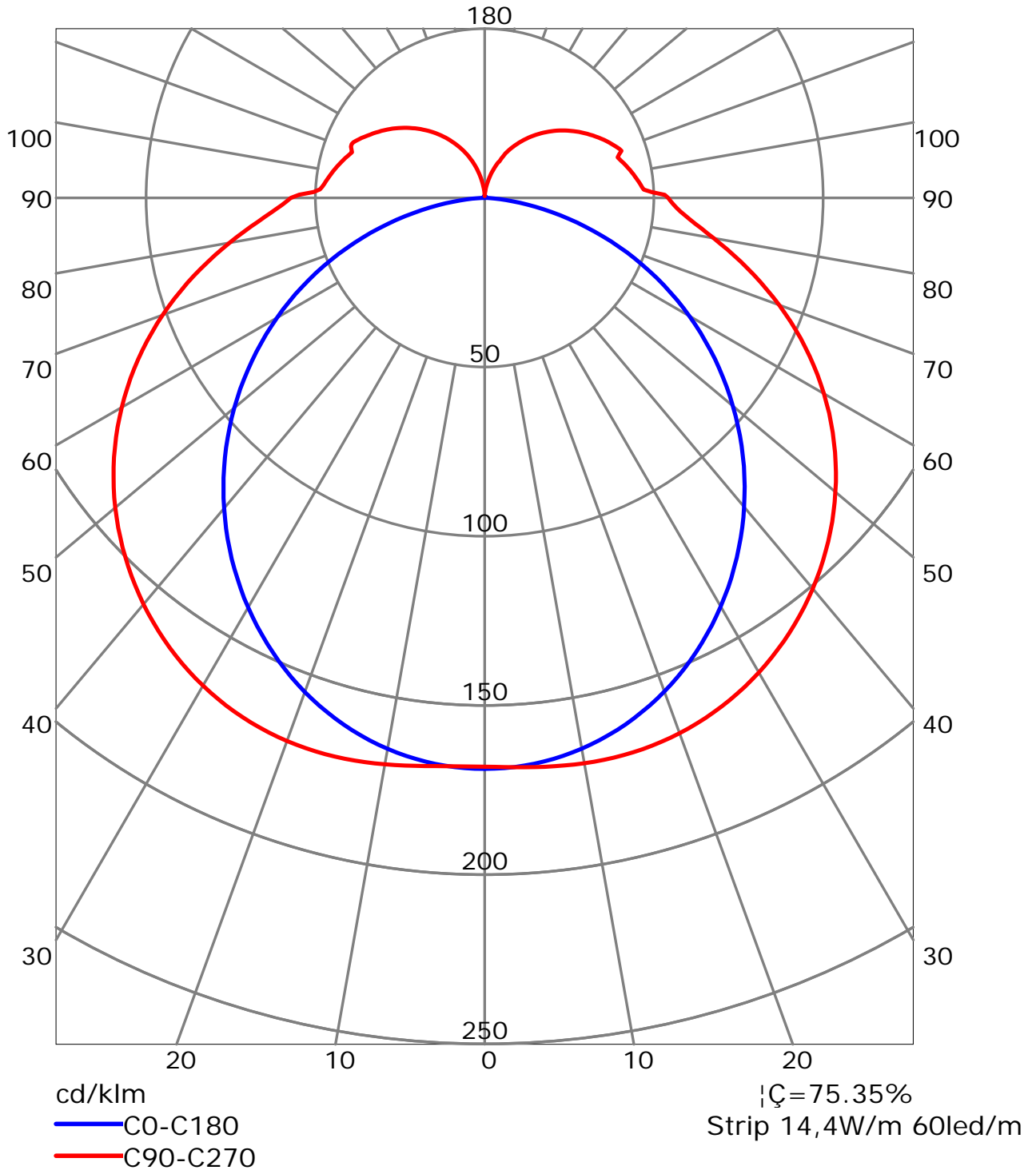


C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-2000
Distance: 7.970 m
Humidity:
Inspector:



Luminous Intensity Distribution Curve(cd/klm)

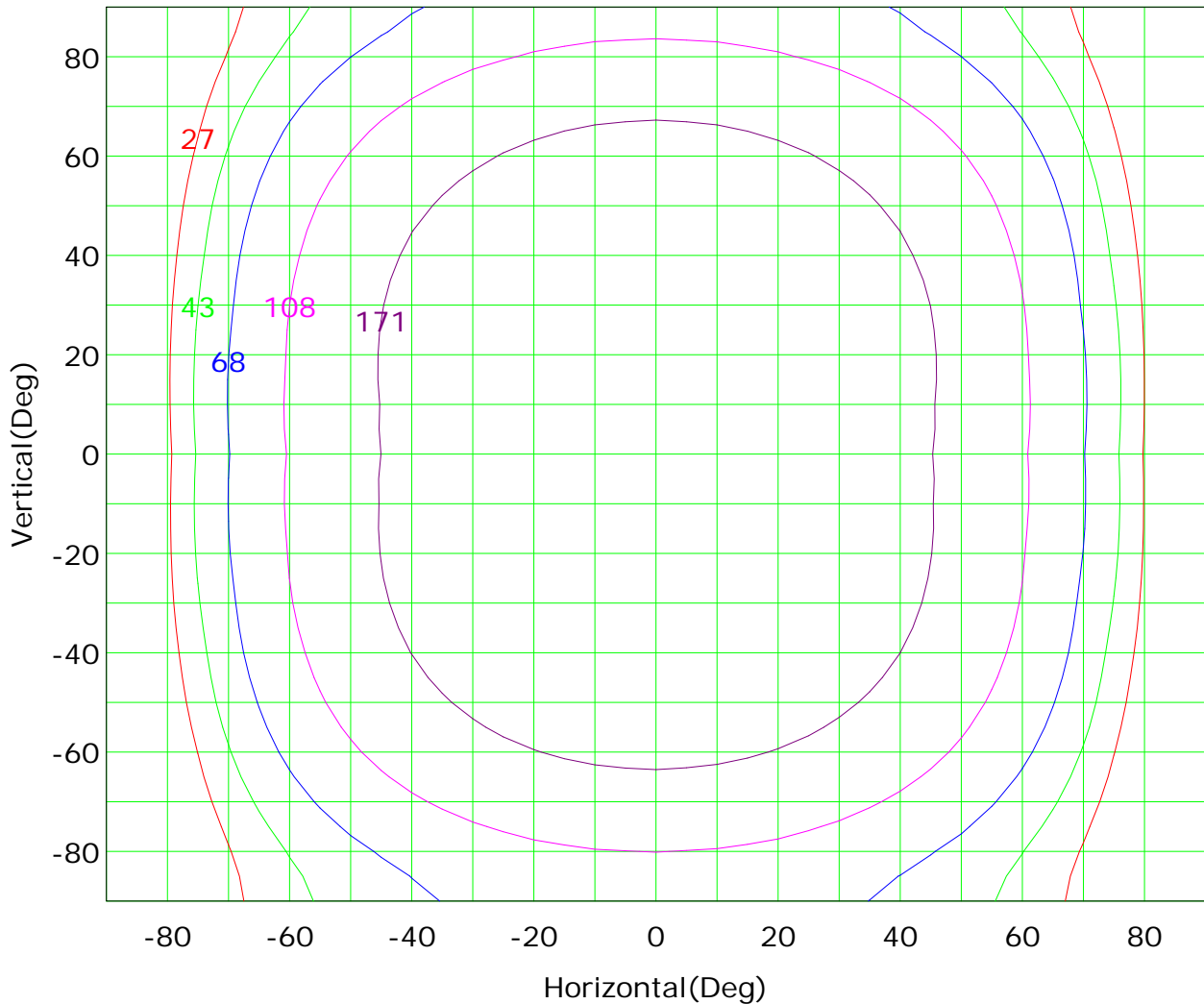


C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-2000
Distance: 7.970 m
Humidity:
Inspector:



Isocandela (rectangle)



Imax (100%): 271 cd

- | | | | |
|-----------|--------|-----------|--------|
| — (10%): | 27 cd | — (16%): | 43 cd |
| — (25%): | 68 cd | — (40%): | 108 cd |
| — (63%): | 171 cd | — (100%): | 271 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

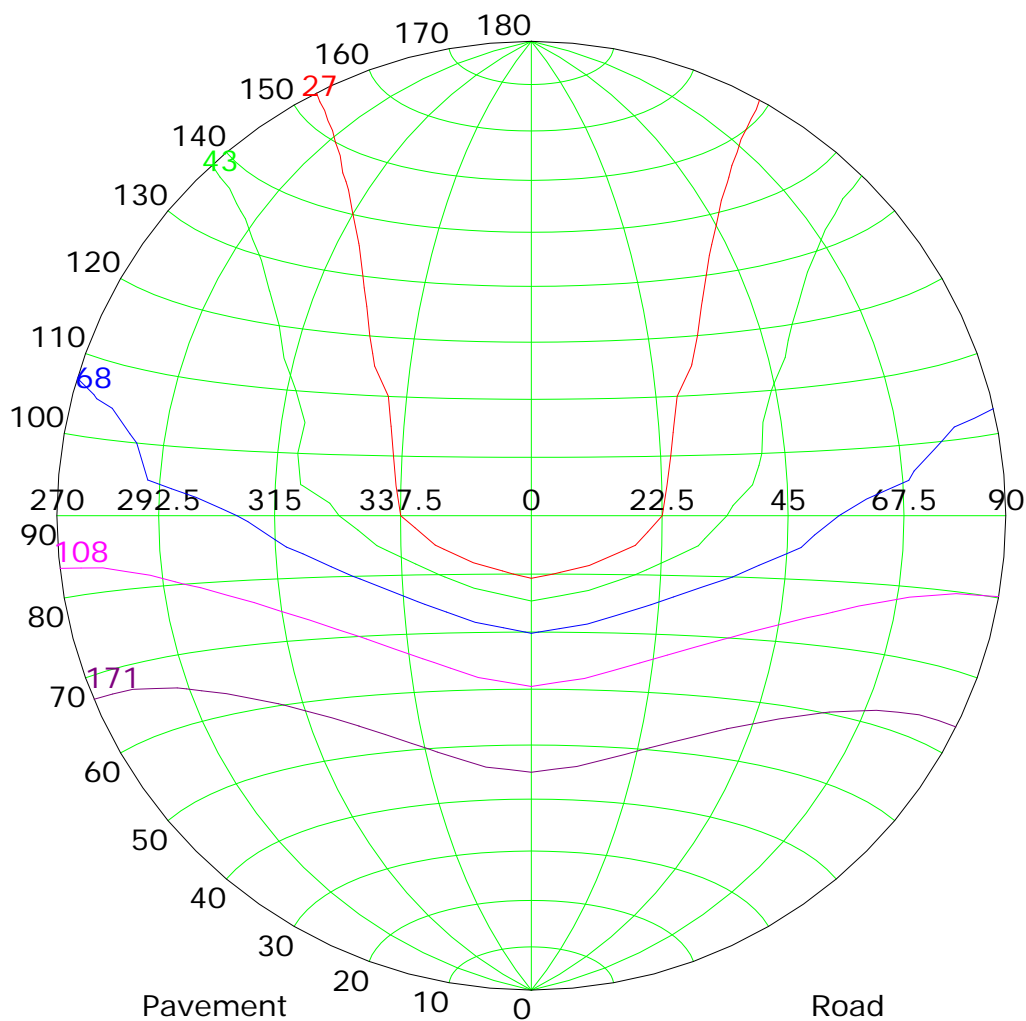
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



Imax (100%): 271 cd

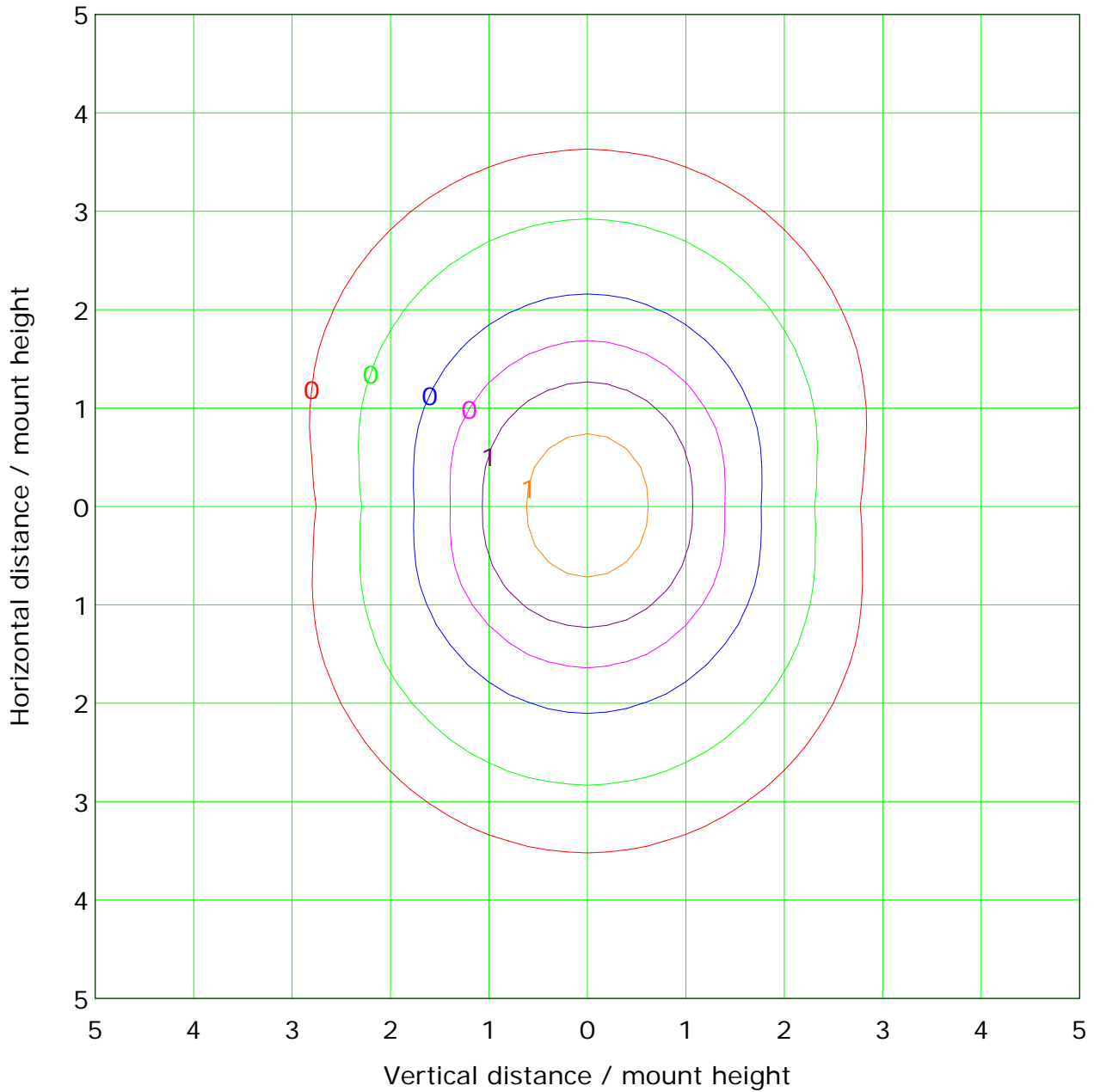
— (10%):	27 cd	— (16%):	43 cd
— (25%):	68 cd	— (40%):	108 cd
— (63%):	171 cd	— (100%):	271 cd

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-2000
 Distance: 7.970 m
 Humidity:
 Inspector:



IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 2.7 lx	
— (1%):	0.0 lx	— (2%):	0.1 lx
— (5%):	0.1 lx	— (10%):	0.3 lx
— (20%):	0.5 lx	— (50%):	1.3 lx
— (100%):	2.7 lx		

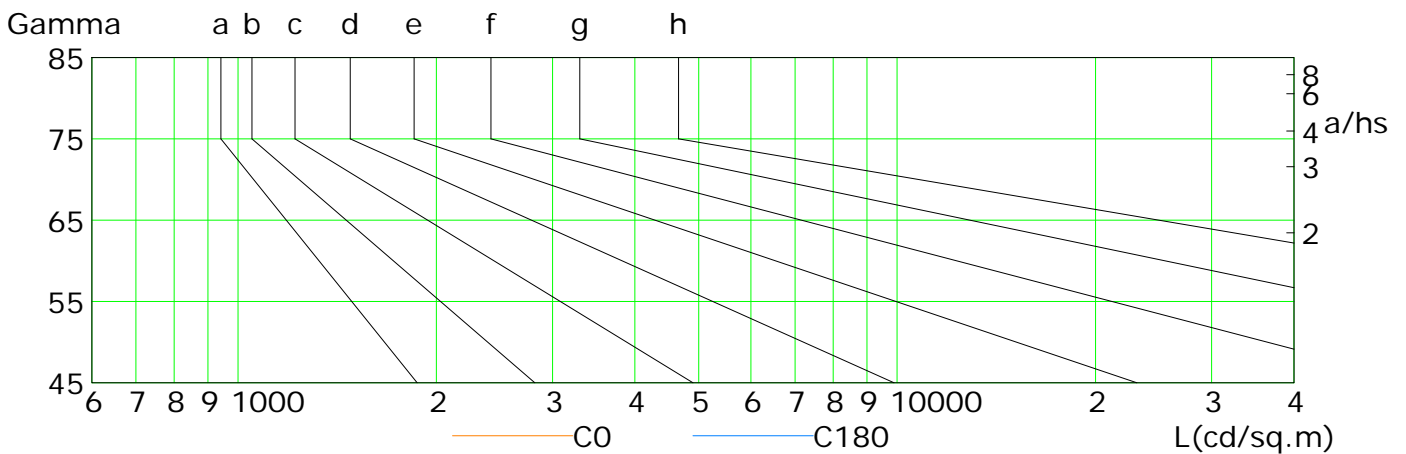
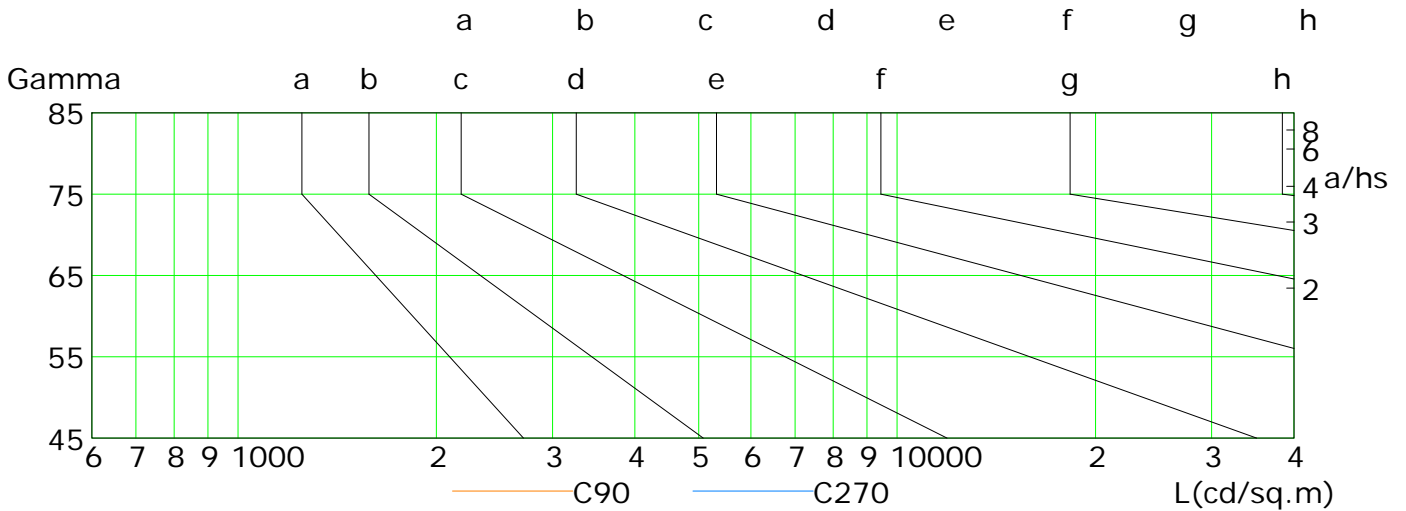
C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-2000
 Distance: 7.970 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	171	152	132	111	89	67	45	24	7
C90	227	214	200	183	166	147	127	109	94
C180	172	153	133	112	91	69	47	26	9
C270	238	226	212	196	179	160	141	121	103

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-2000

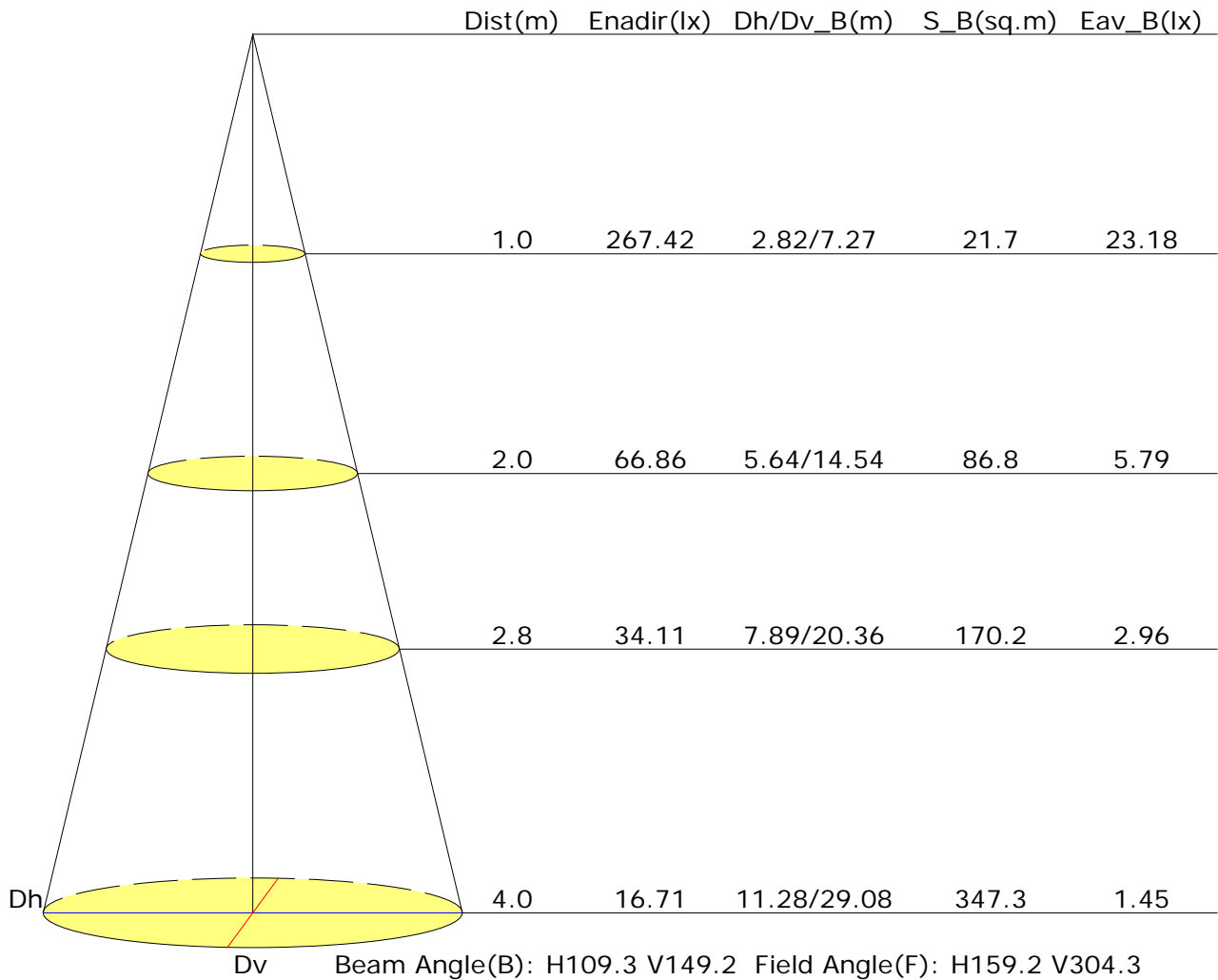
Distance: 7.970 m

Humidity:

Inspector:

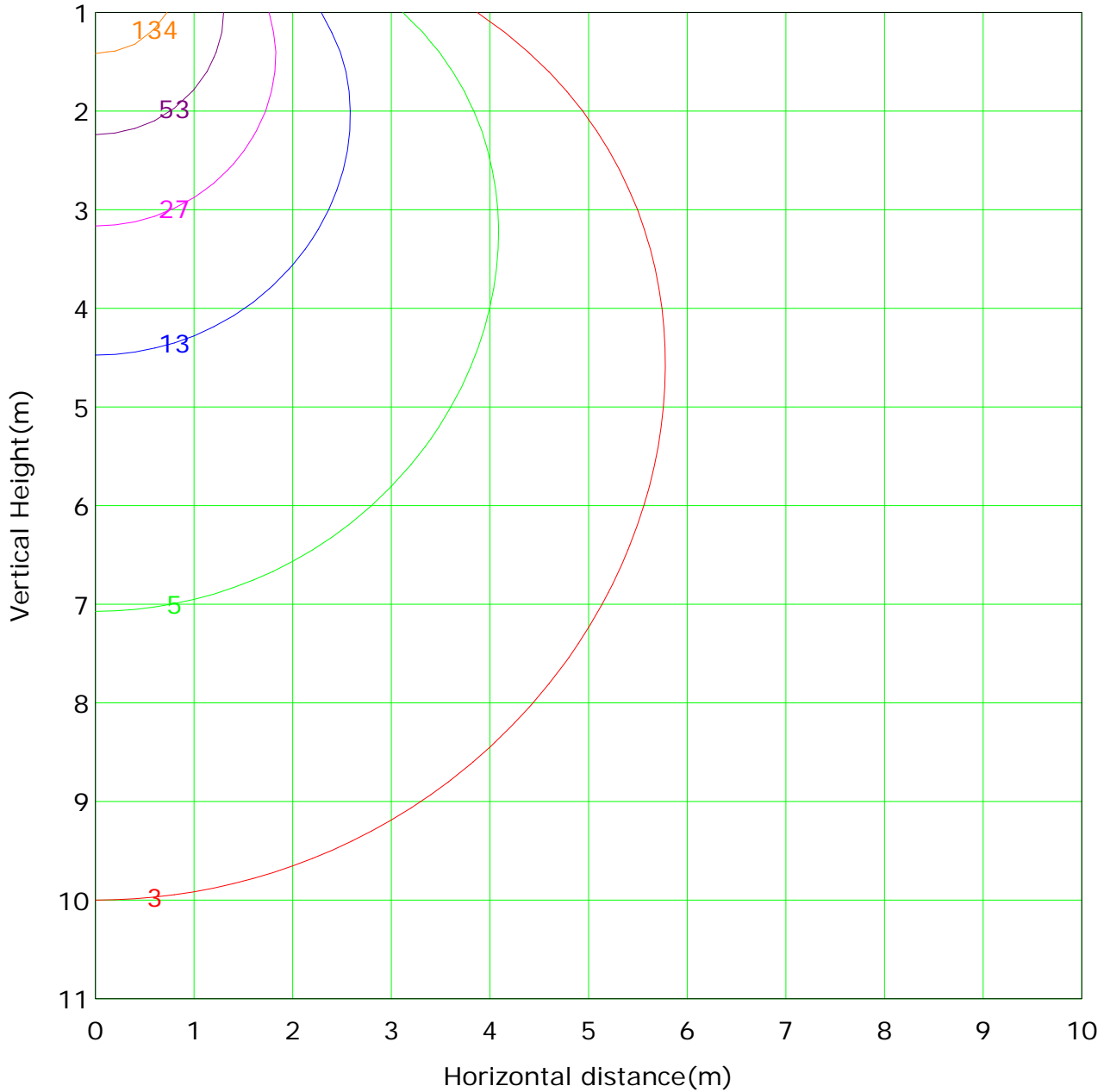


Illuminance at a Distance





Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 267.4 lx
— (1%): 2.7 lx	— (2%): 5.3 lx	
— (5%): 13.4 lx	— (10%): 26.7 lx	
— (20%): 53.5 lx	— (50%): 133.7 lx	
— (100%): 267.4 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-2000
 Distance: 7.970 m
 Humidity:
 Inspector: