



Report No.:

Test Time: 10/09/2018 17:09

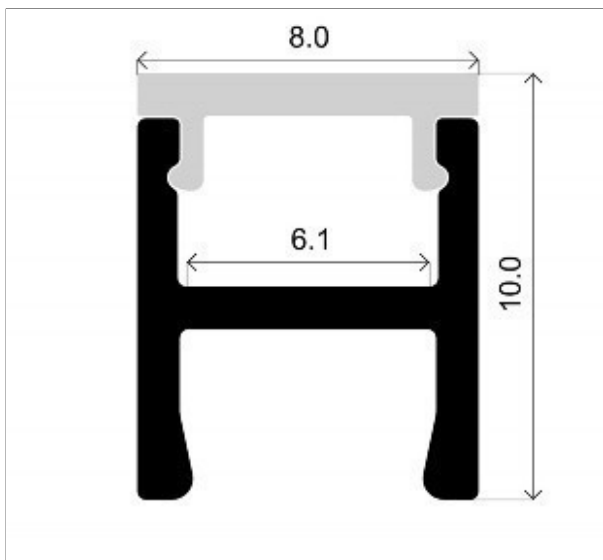
Luminaire Property

Luminaire Manufacturer: Lighting Line
 Luminaire Description: LLP-SL03-02 + LLD-02-FM
 Lamp Description: Strip 9,6W/m 120led/m Number of Lamps: 1
 Lumens per Lamp: 1000 lm Voltage: 24.0 V
 Current: 0.376 A Power: 9.02 W
 Power Factor: 1.000

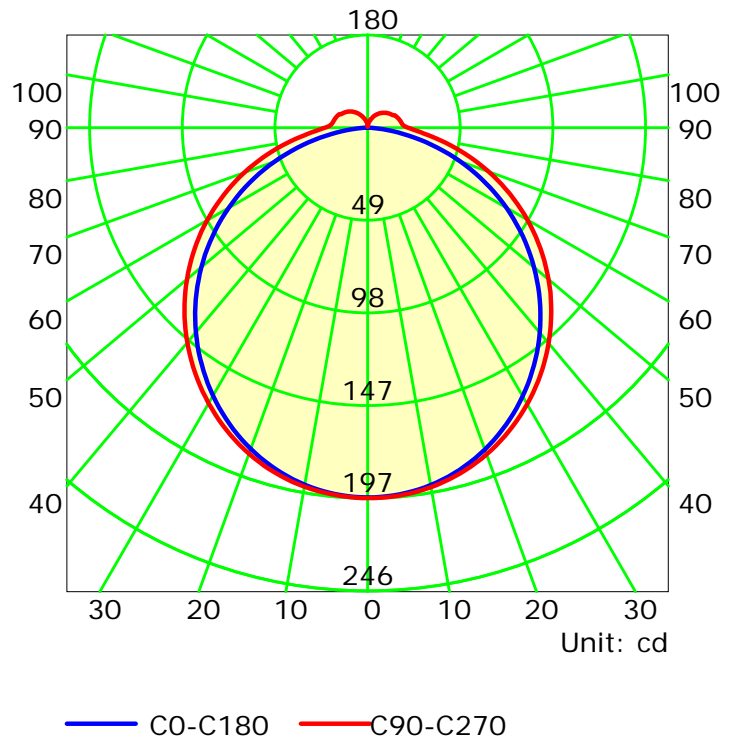
Photometric Results

CIE Class: Direct	Total Rated Lamp Lumens: 1000.0 lm
Measurement Flux: 650.8 lm	Efficiency: 65.08%
Downward Ratio: 59.92%	Upward Ratio: 5.16%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.9, 187.0, 170.9, 170.9	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.6, 119.9, 116.6, 116.7	
Luminaire Efficacy Rating (LER): 72.20	Central Intensity: 196.56 cd
Max. Intensity: 197.03 cd	Pos of Max. Intensity: H170 V0
S/MH(C0/C180): 1.25	S/MH(C90/C270): 1.28

Picture Of Luminaire



Luminous Intensity Distribution Curve

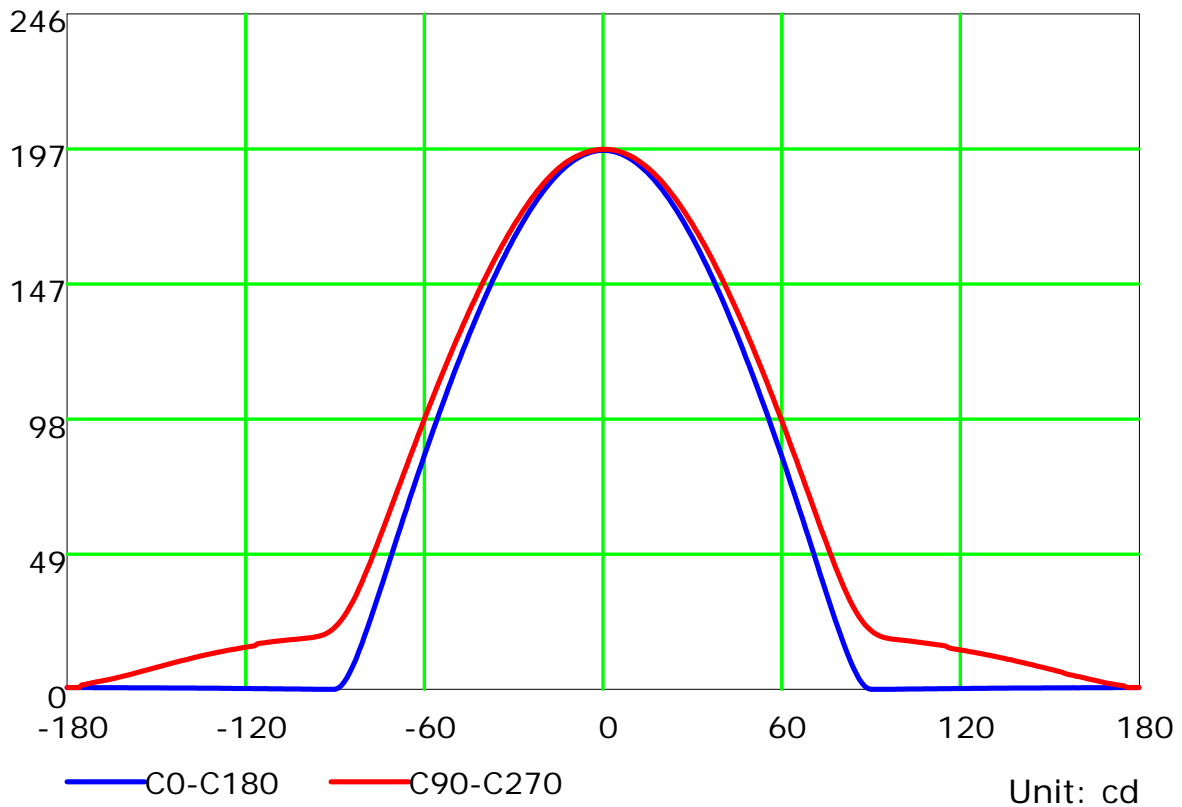
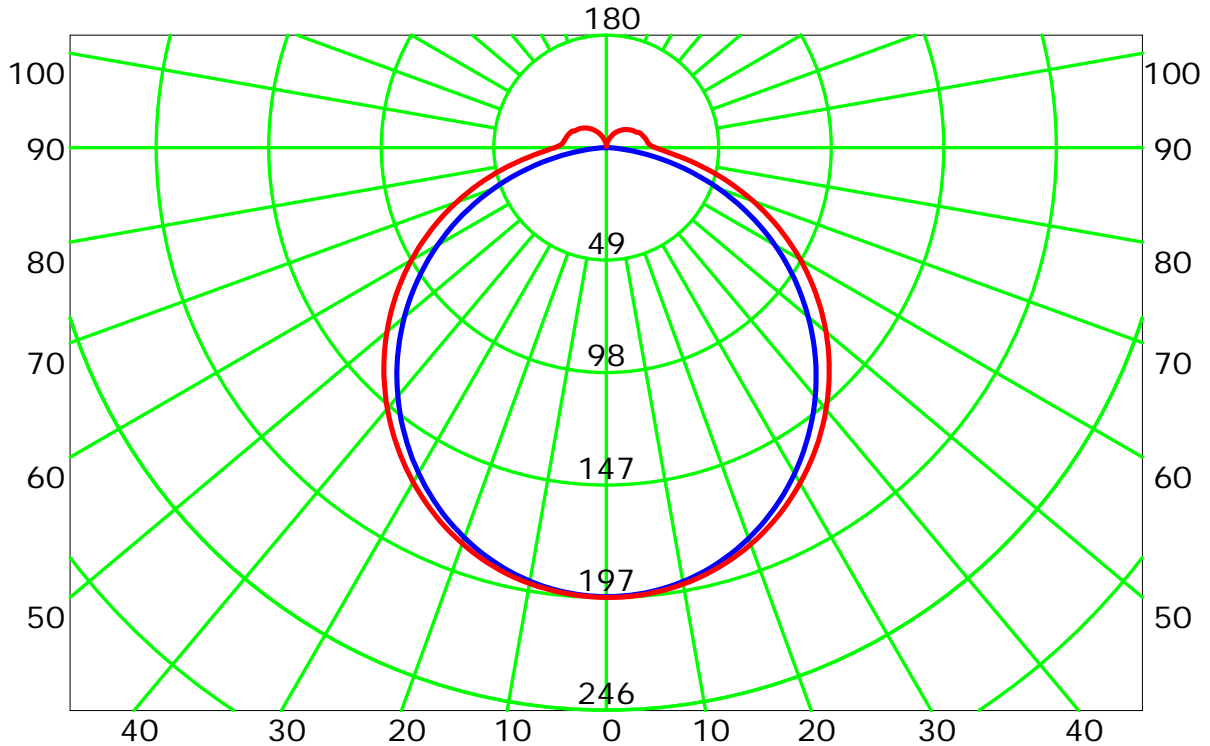


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



Luminous Intensity Distribution Curve

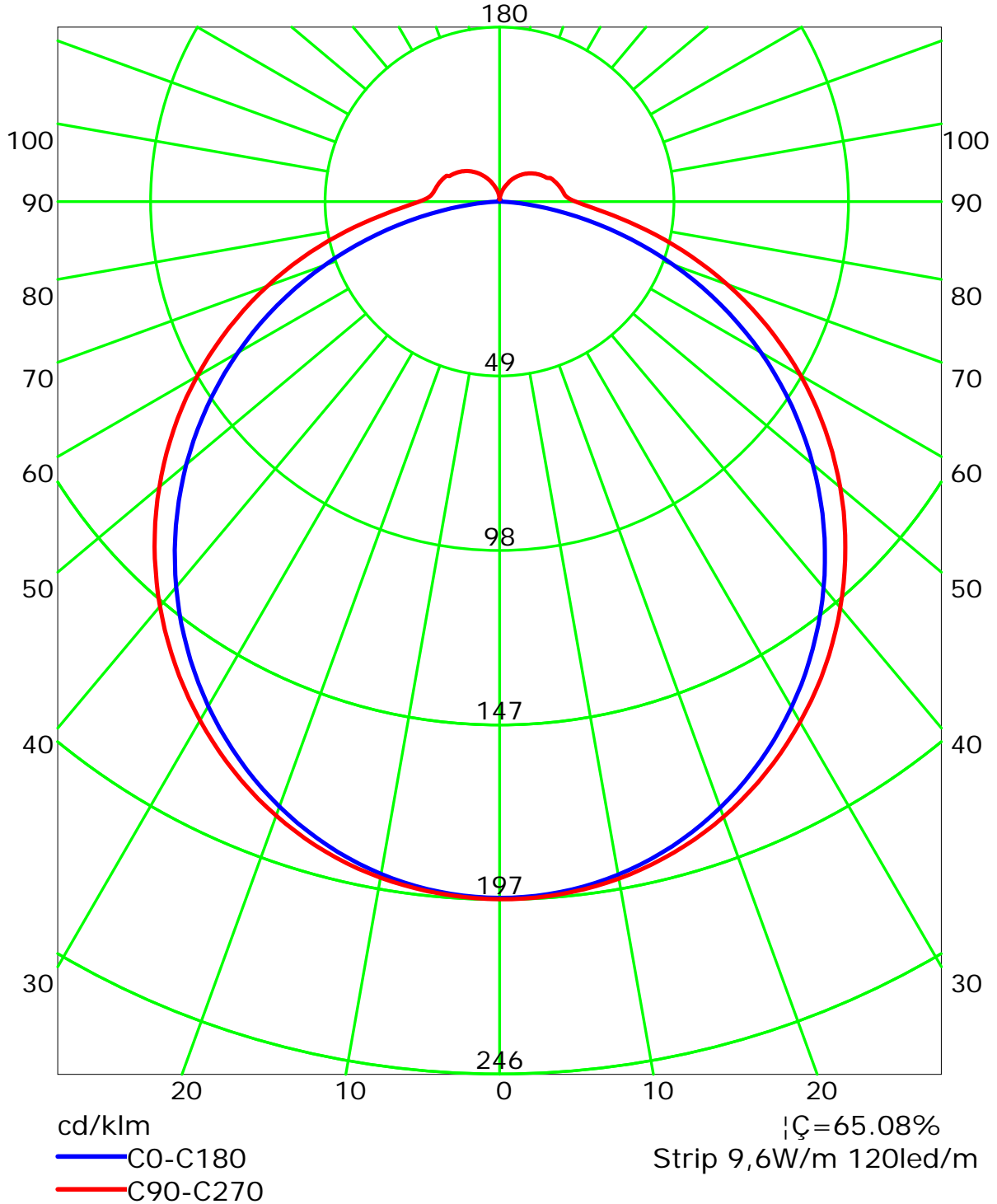


C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



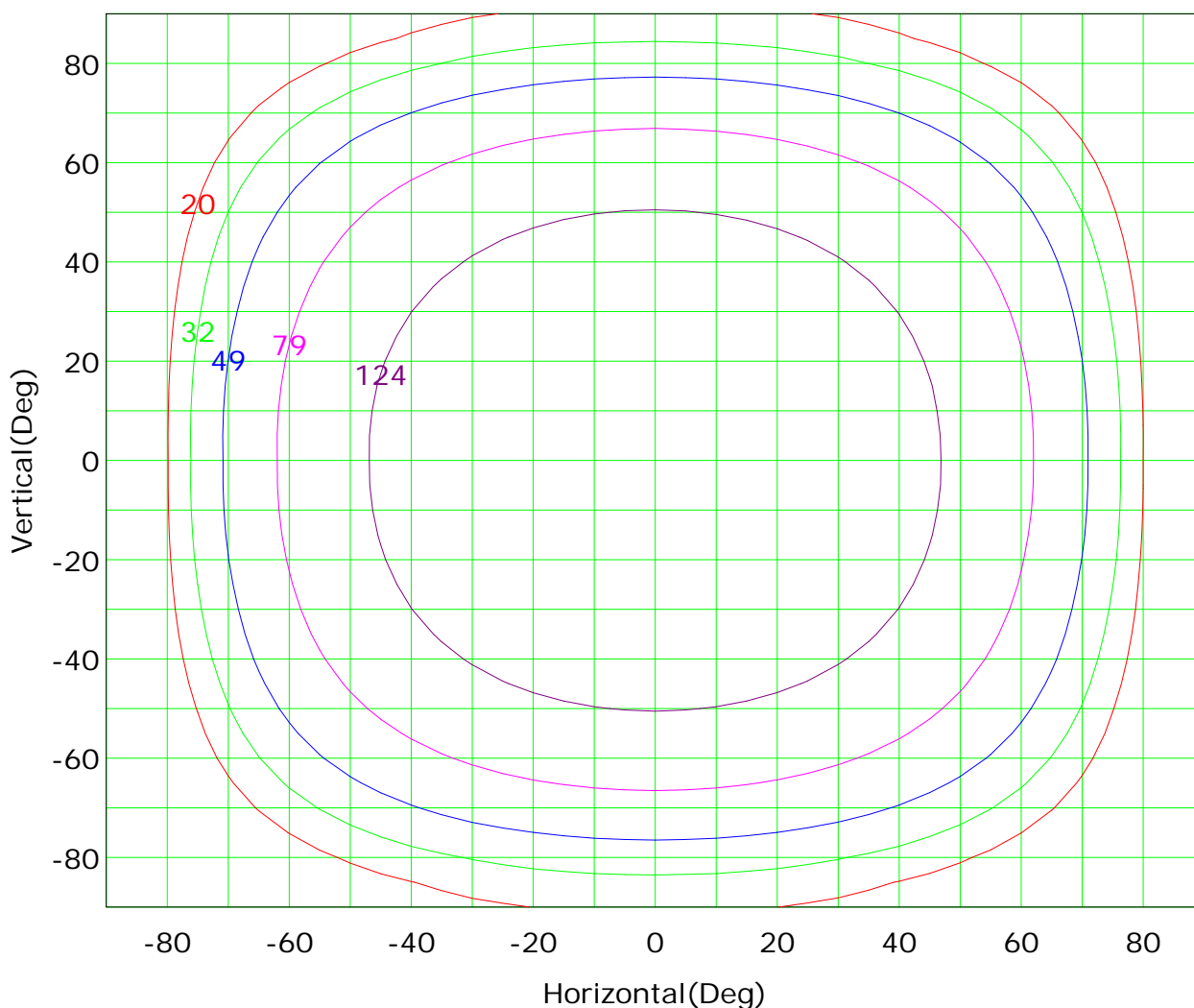
Luminous Intensity Distribution Curve(cd/klm)



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%): 197 cd

— (10%):	20 cd	— (16%):	32 cd
— (25%):	49 cd	— (40%):	79 cd
— (63%):	124 cd	— (100%):	197 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

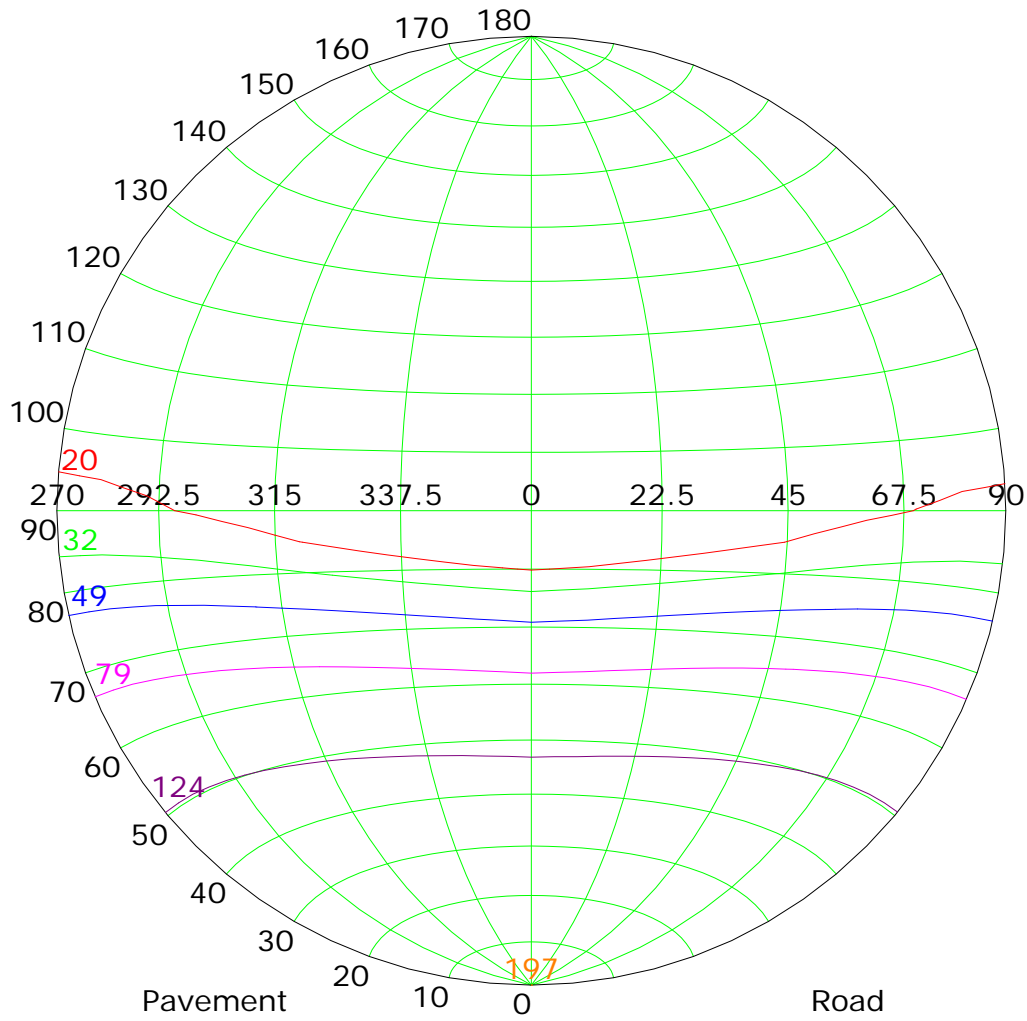
Distance: 7.970 m

Humidity:

Inspector:



Isocandela (sphere)



Imax (100%): 197 cd

- | | | | |
|-----------|--------|-----------|--------|
| — (10%): | 20 cd | — (16%): | 32 cd |
| — (25%): | 49 cd | — (40%): | 79 cd |
| — (63%): | 124 cd | — (100%): | 197 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

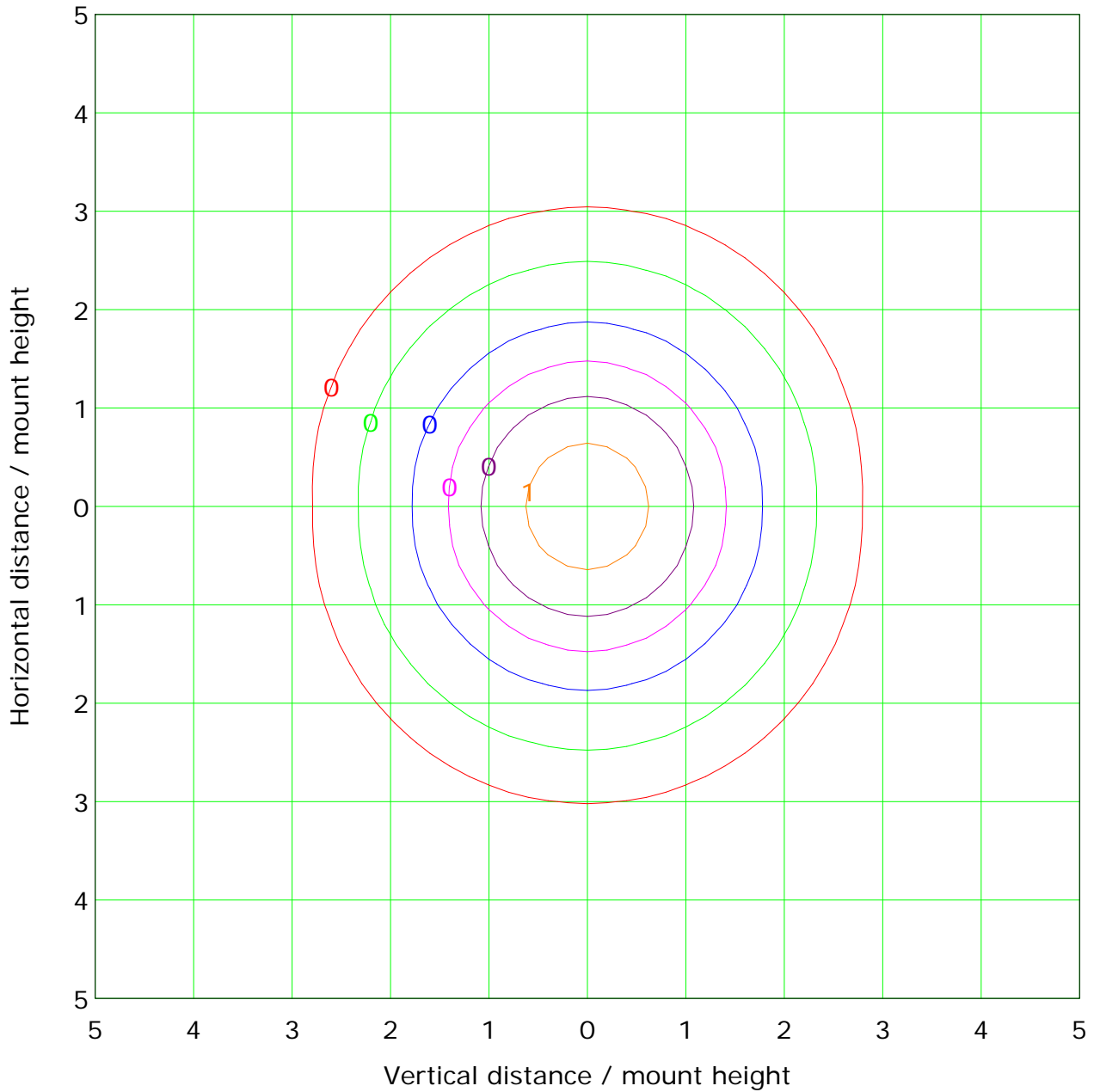
Distance: 7.970 m

Humidity:

Inspector:



IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 2.0 lx	
— (1%):	0.0 lx	— (2%):	0.0 lx
— (5%):	0.1 lx	— (10%):	0.2 lx
— (20%):	0.4 lx	— (50%):	1.0 lx
— (100%):	2.0 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	129	115	101	85	69	52	35	19	6
C90	138	126	112	98	83	68	54	40	28
C180	129	115	101	85	69	53	36	20	6
C270	138	125	112	99	84	70	55	42	30

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

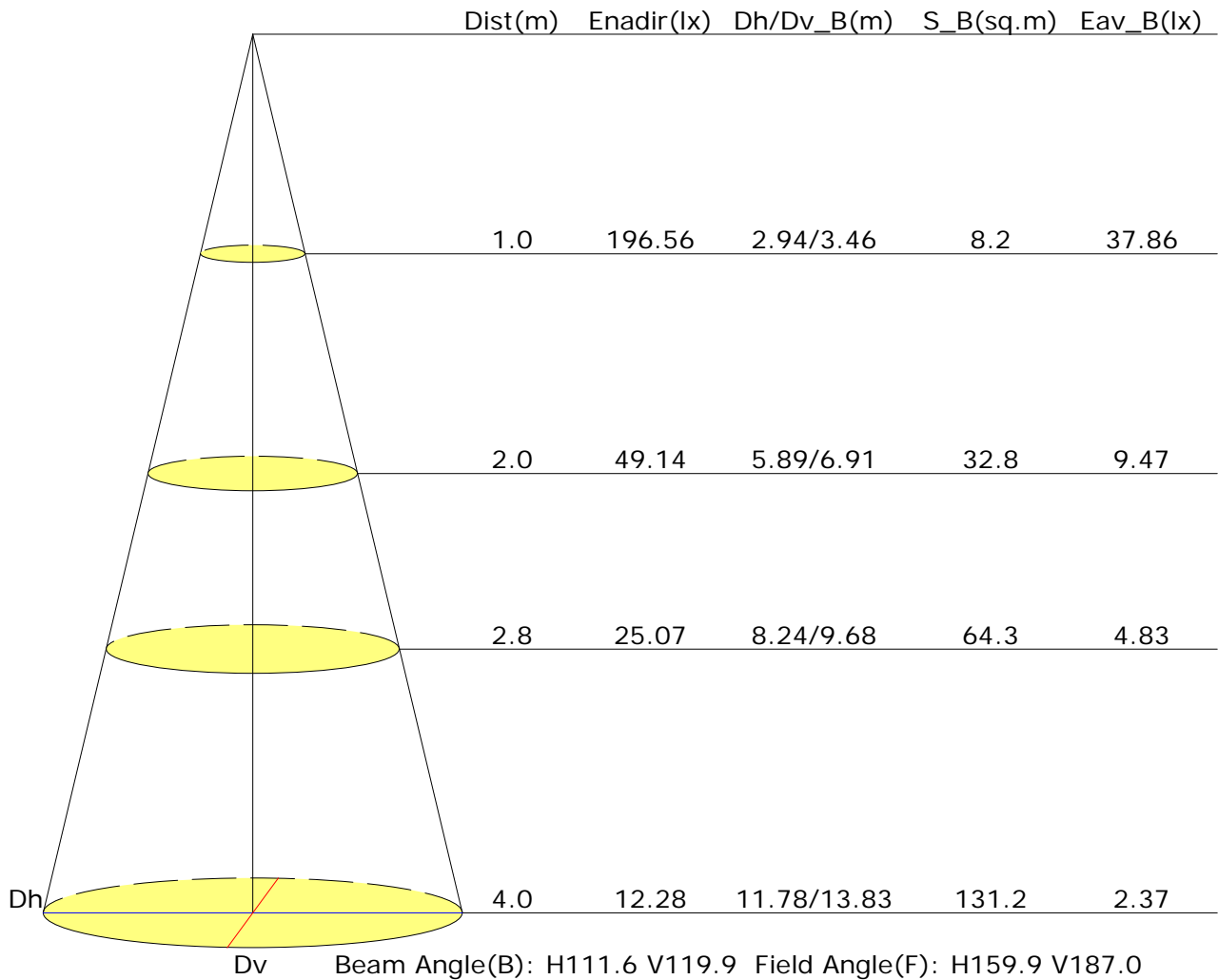
Distance: 7.970 m

Humidity:

Inspector:

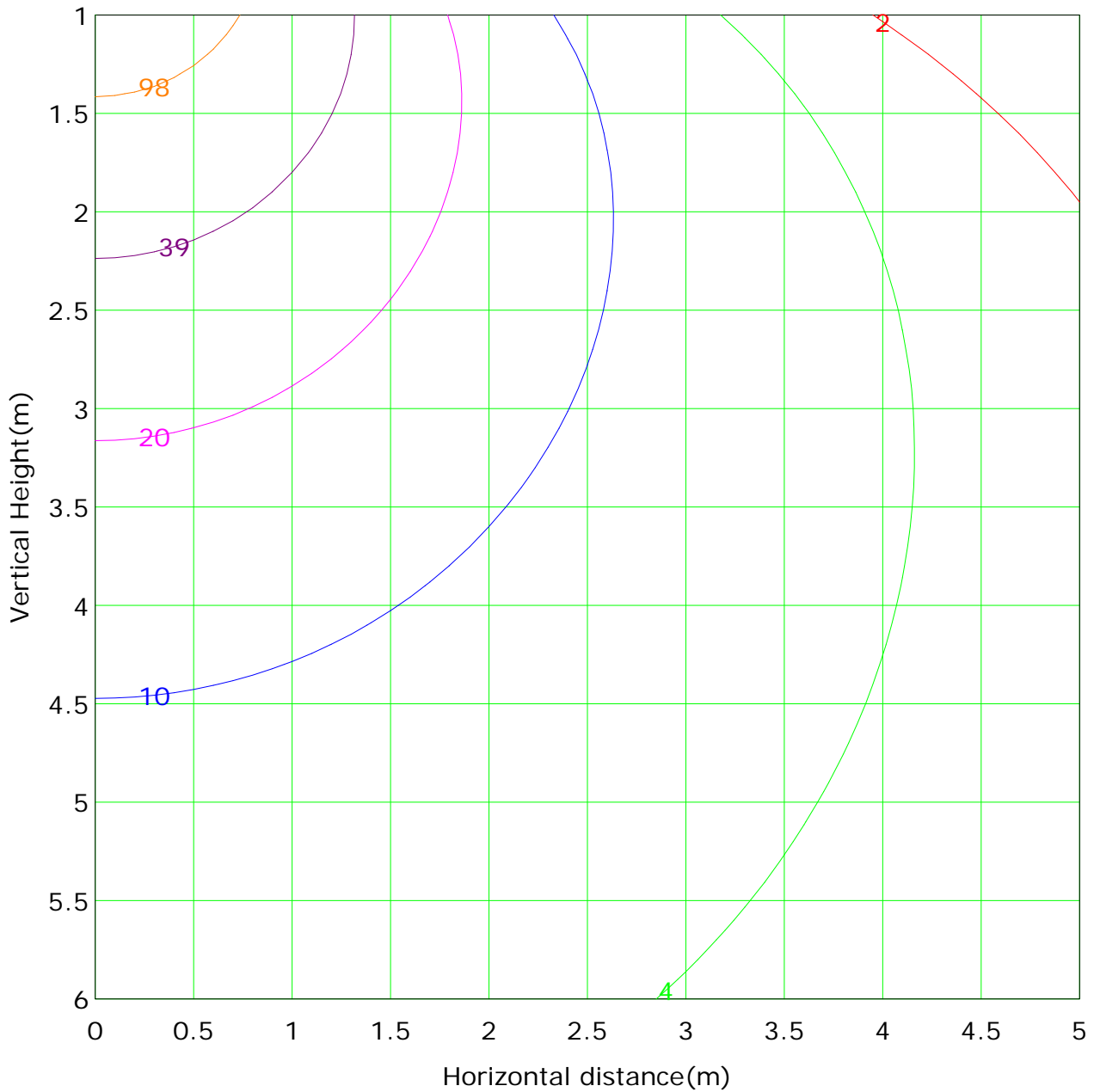


Illuminance at a Distance





Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 6.0m Max Lux: 196.6 lx

— (1%): 2.0 lx	— (2%): 3.9 lx
— (5%): 9.8 lx	— (10%): 19.7 lx
— (20%): 39.3 lx	— (50%): 98.3 lx
— (100%): 196.6 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: 11/09/2018 09:29

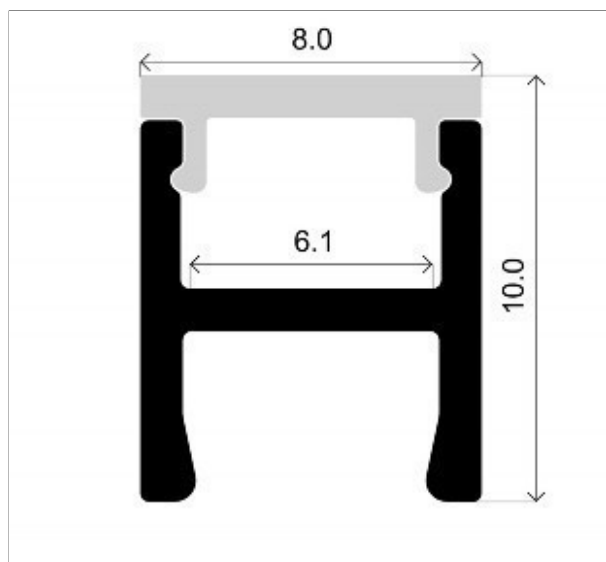
Luminaire Property

Luminaire Manufacturer: Lighting Line
 Luminaire Description: LLP-SL03-02 + LLD-02-FS
 Lamp Description: Strip 9,6W/m 120led/m Number of Lamps: 1
 Lumens per Lamp: 1000 lm Voltage: 24.0 V
 Current: 0.376 A Power: 9.01 W
 Power Factor: 1.000

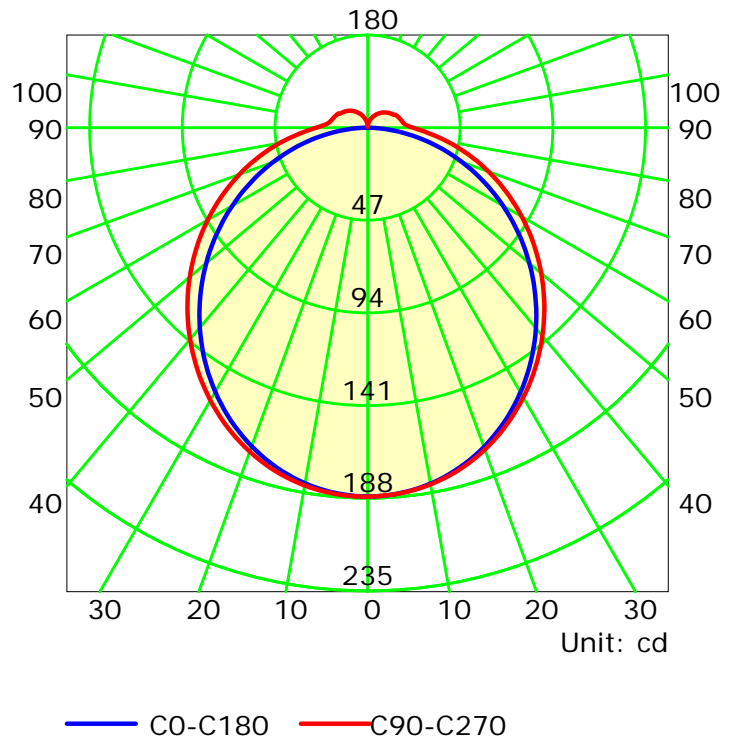
Photometric Results

CIE Class: Direct	Total Rated Lamp Lumens: 1000.0 lm
Measurement Flux: 623.3 lm	Efficiency: 62.33%
Downward Ratio: 57.05%	Upward Ratio: 5.28%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 163.4, 198.6, 175.9, 175.7	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.9, 118.8, 115.1, 115.1	
Luminaire Efficacy Rating (LER): 69.23	Central Intensity: 187.09 cd
Max. Intensity: 187.25 cd	Pos of Max. Intensity: H290 V1
S/MH(C0/C180): 1.23	S/MH(C90/C270): 1.26

Picture Of Luminaire



Luminous Intensity Distribution Curve

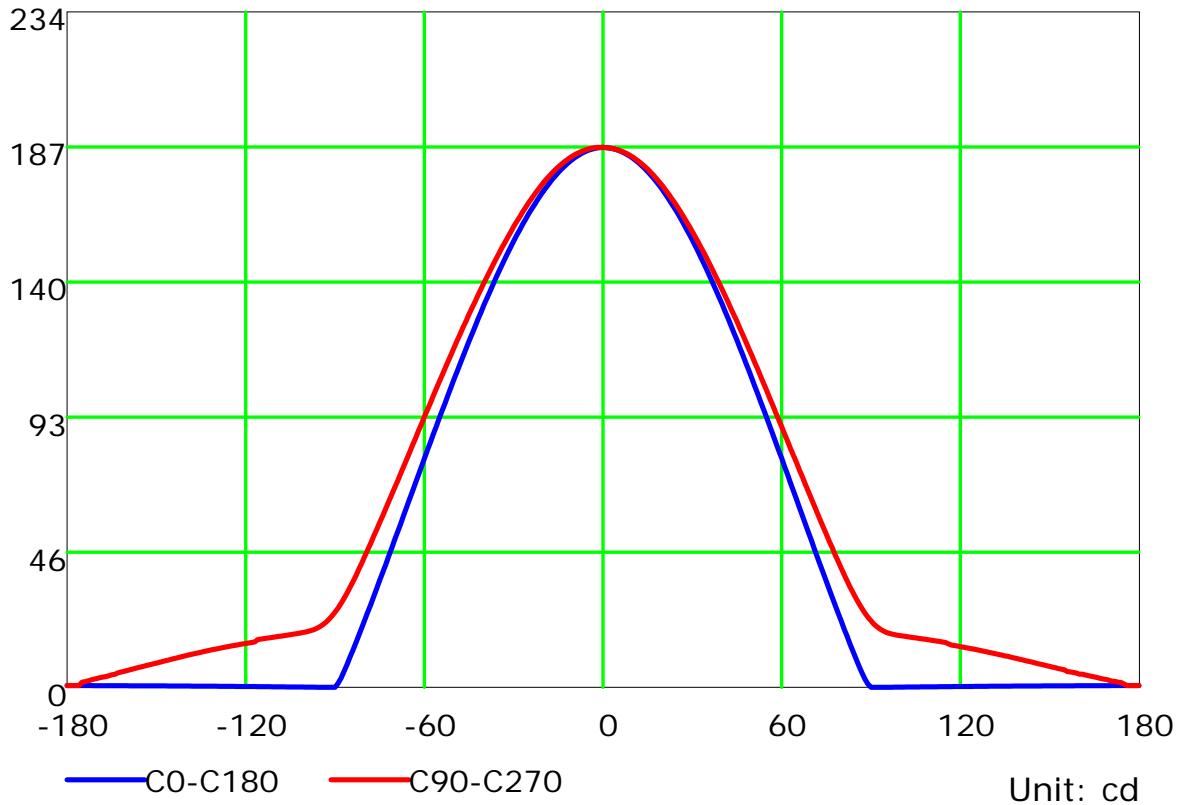
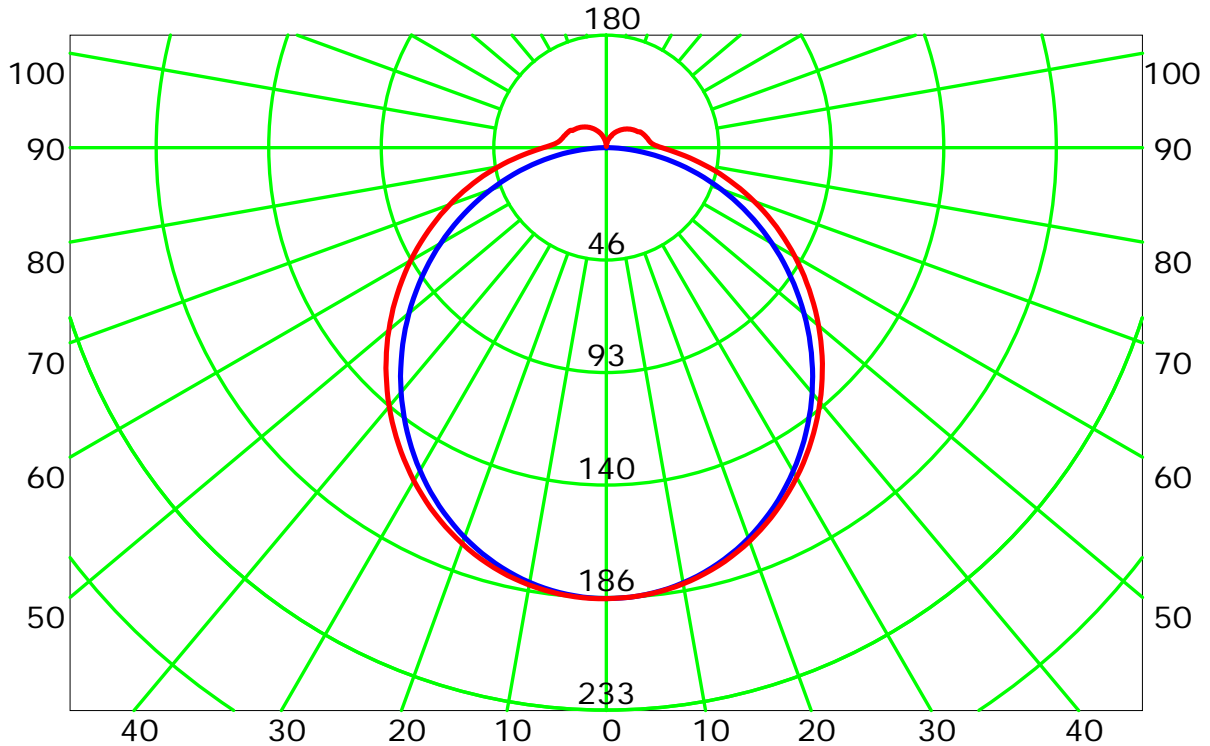


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



Luminous Intensity Distribution Curve

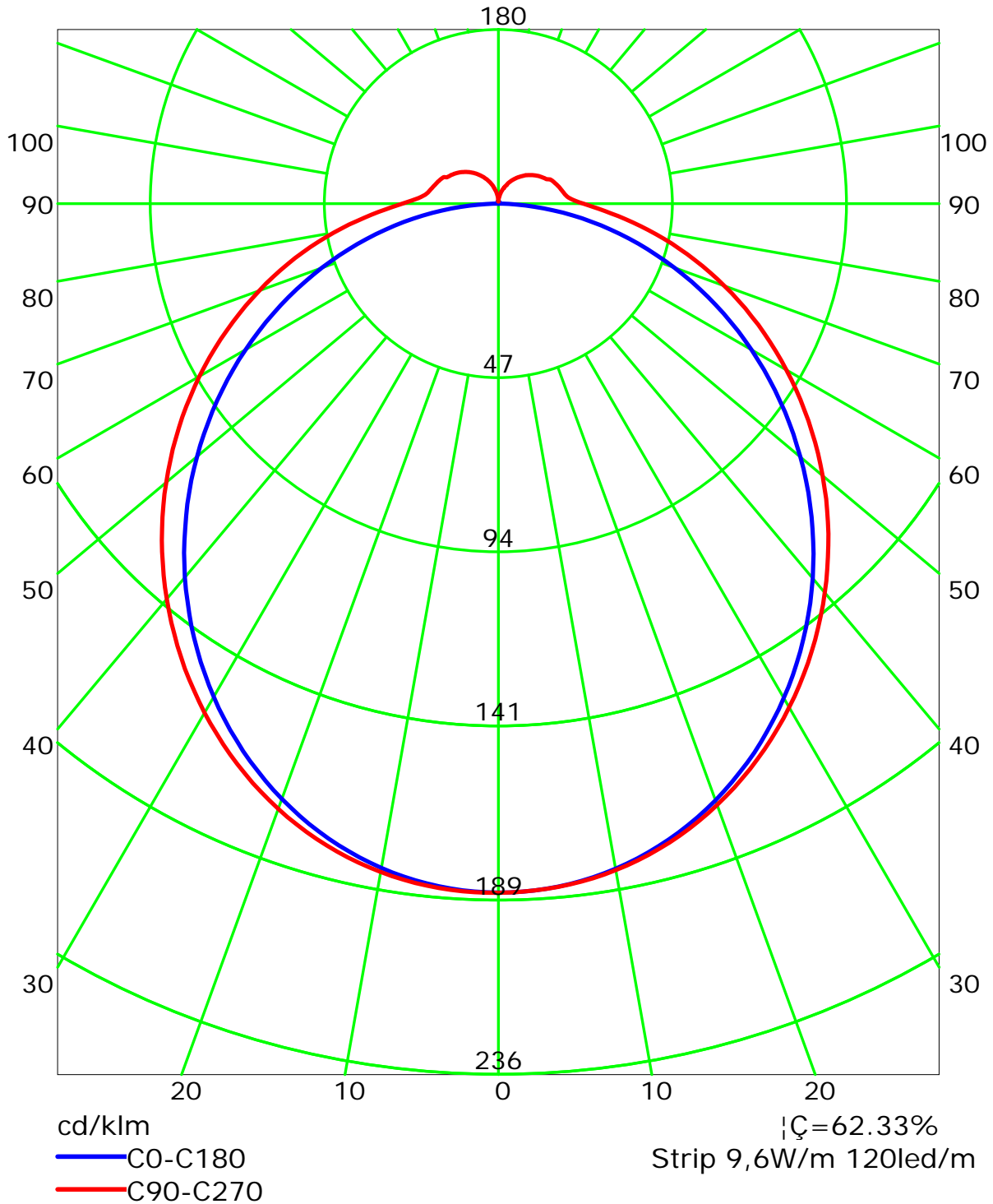


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



Luminous Intensity Distribution Curve(cd/klm)

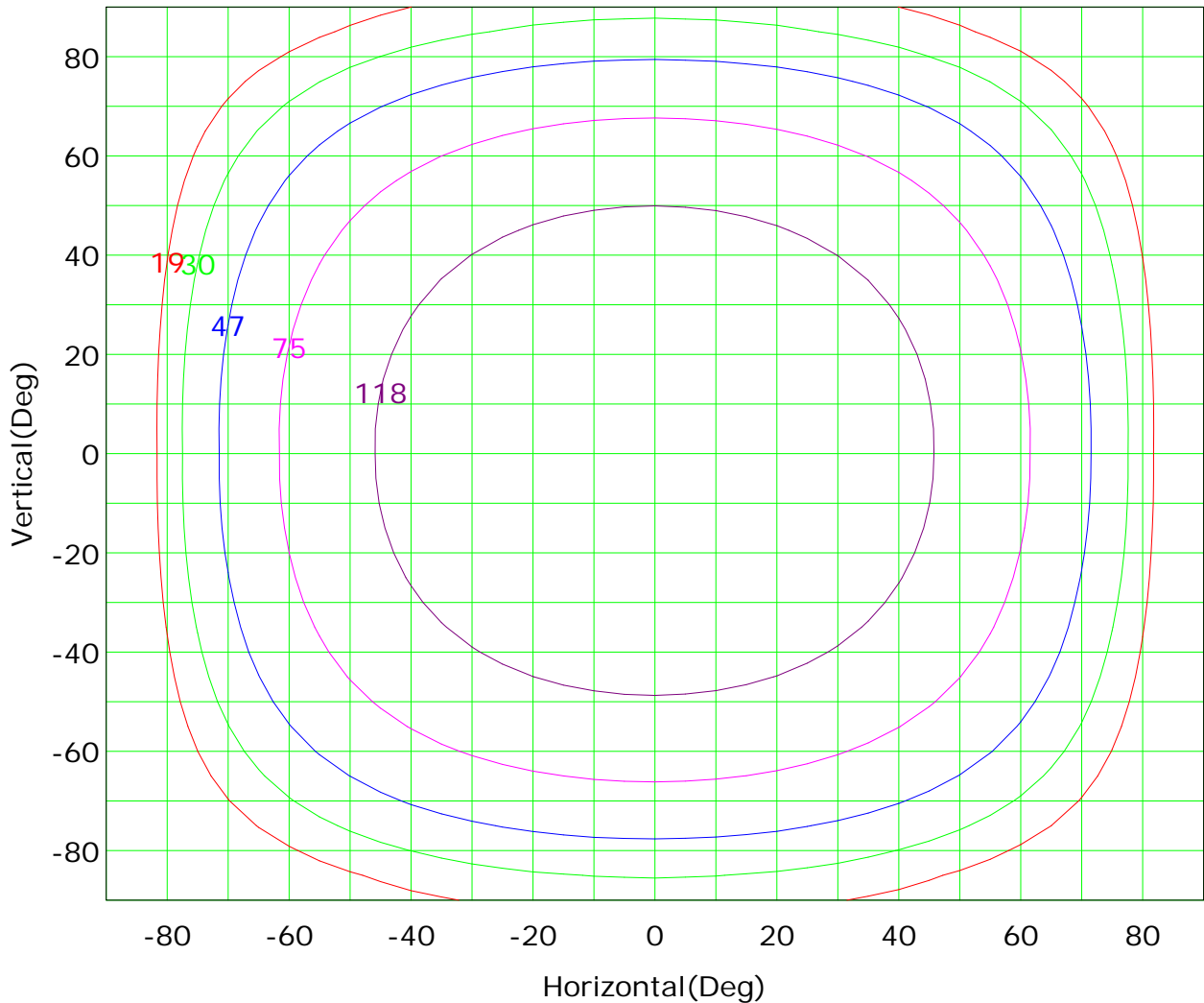


C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



Isocandela (rectangle)



Imax (100%): 187 cd

— (10%):	19 cd	— (16%):	30 cd
— (25%):	47 cd	— (40%):	75 cd
— (63%):	118 cd	— (100%):	187 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

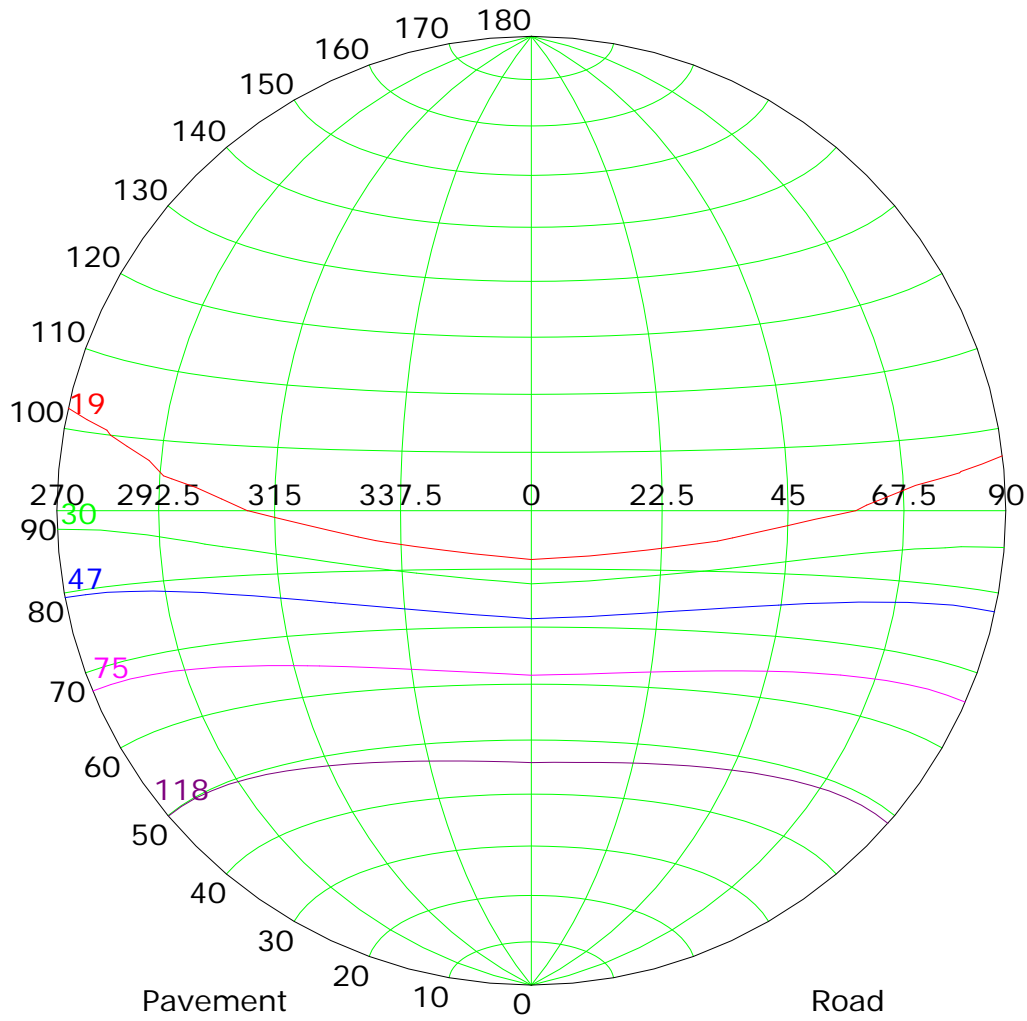
Distance: 7.970 m

Humidity:

Inspector:



Isocandela (sphere)



Imax (100%): 187 cd

— (10%):	19 cd	— (16%):	30 cd
— (25%):	47 cd	— (40%):	75 cd
— (63%):	118 cd	— (100%):	187 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

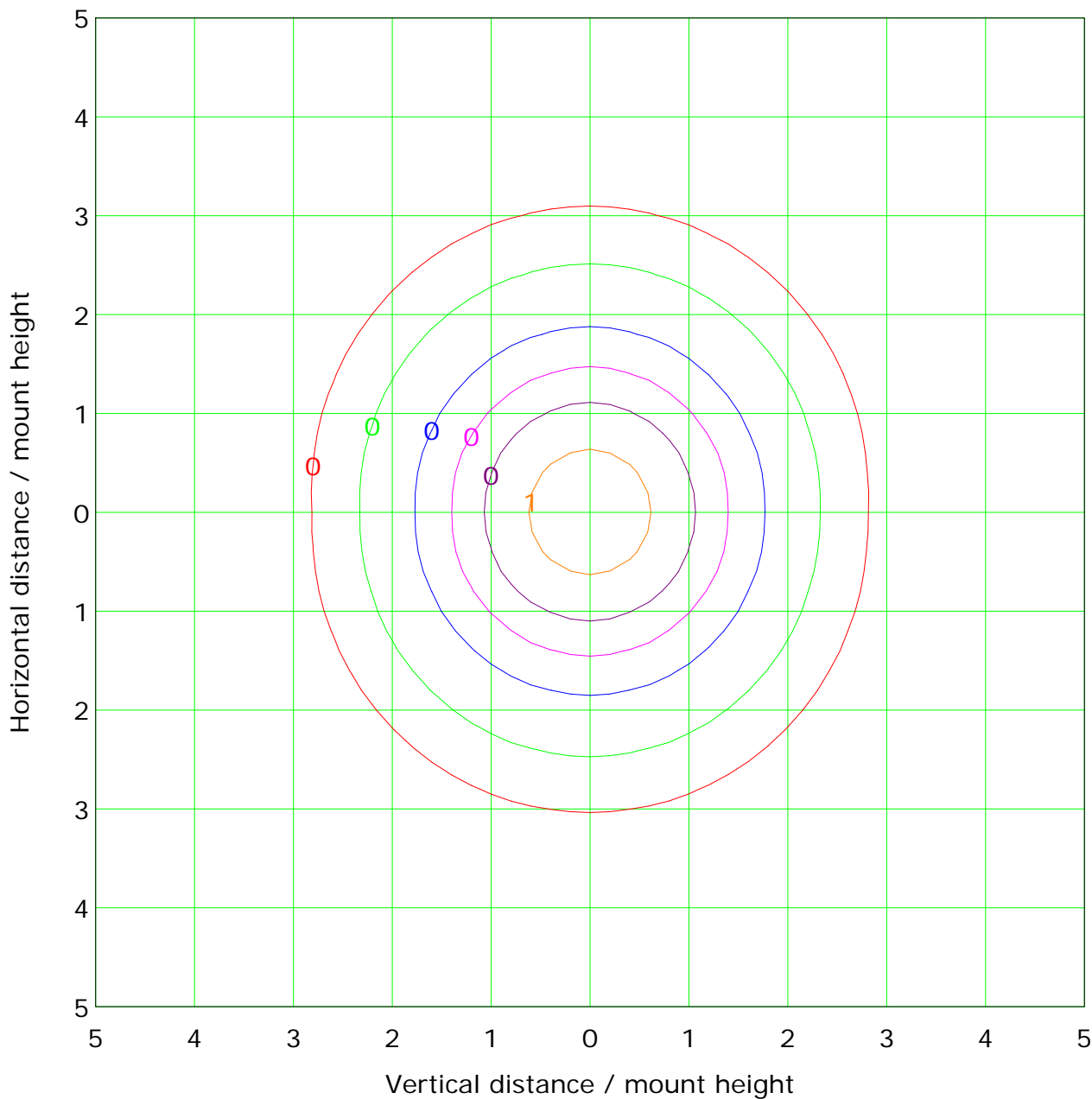
Distance: 7.970 m

Humidity:

Inspector:



IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 1.9 lx	
— (1%):	0.0 lx	— (2%):	0.0 lx
— (5%):	0.1 lx	— (10%):	0.2 lx
— (20%):	0.4 lx	— (50%):	0.9 lx
— (100%):	1.9 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

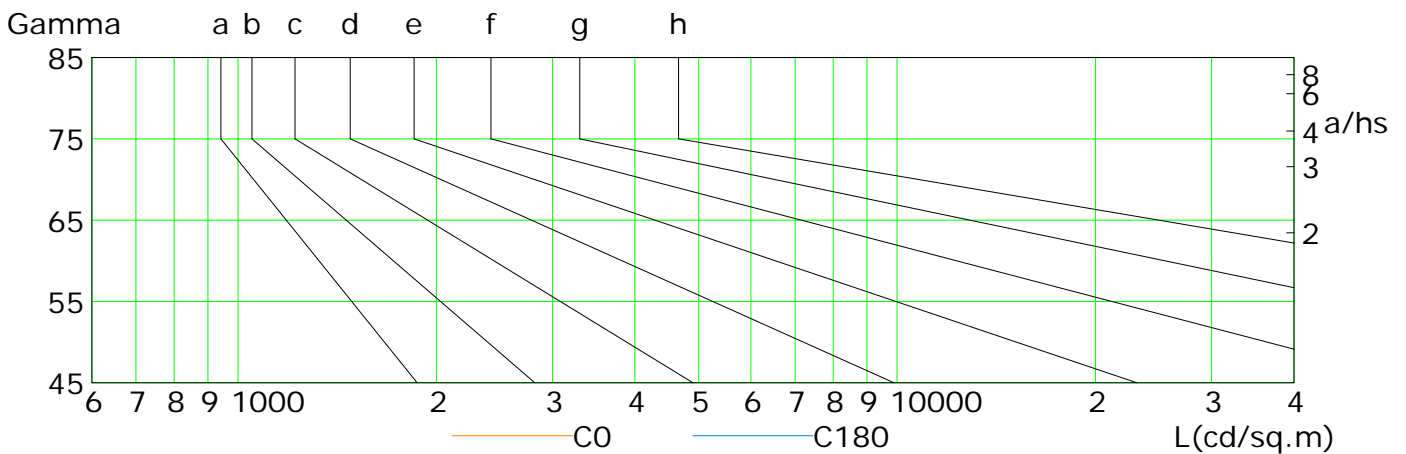
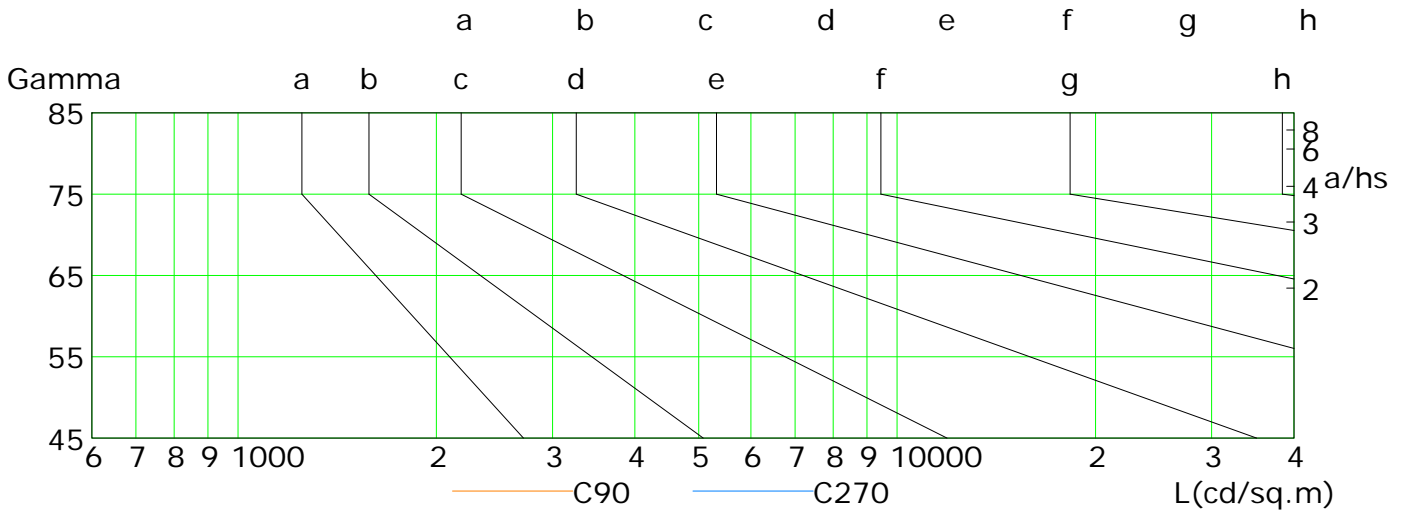
Humidity:

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	120	107	93	79	65	51	37	23	10
C90	127	115	103	90	78	65	53	41	31
C180	120	107	93	79	65	51	37	23	10
C270	129	118	106	94	81	69	57	46	35

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

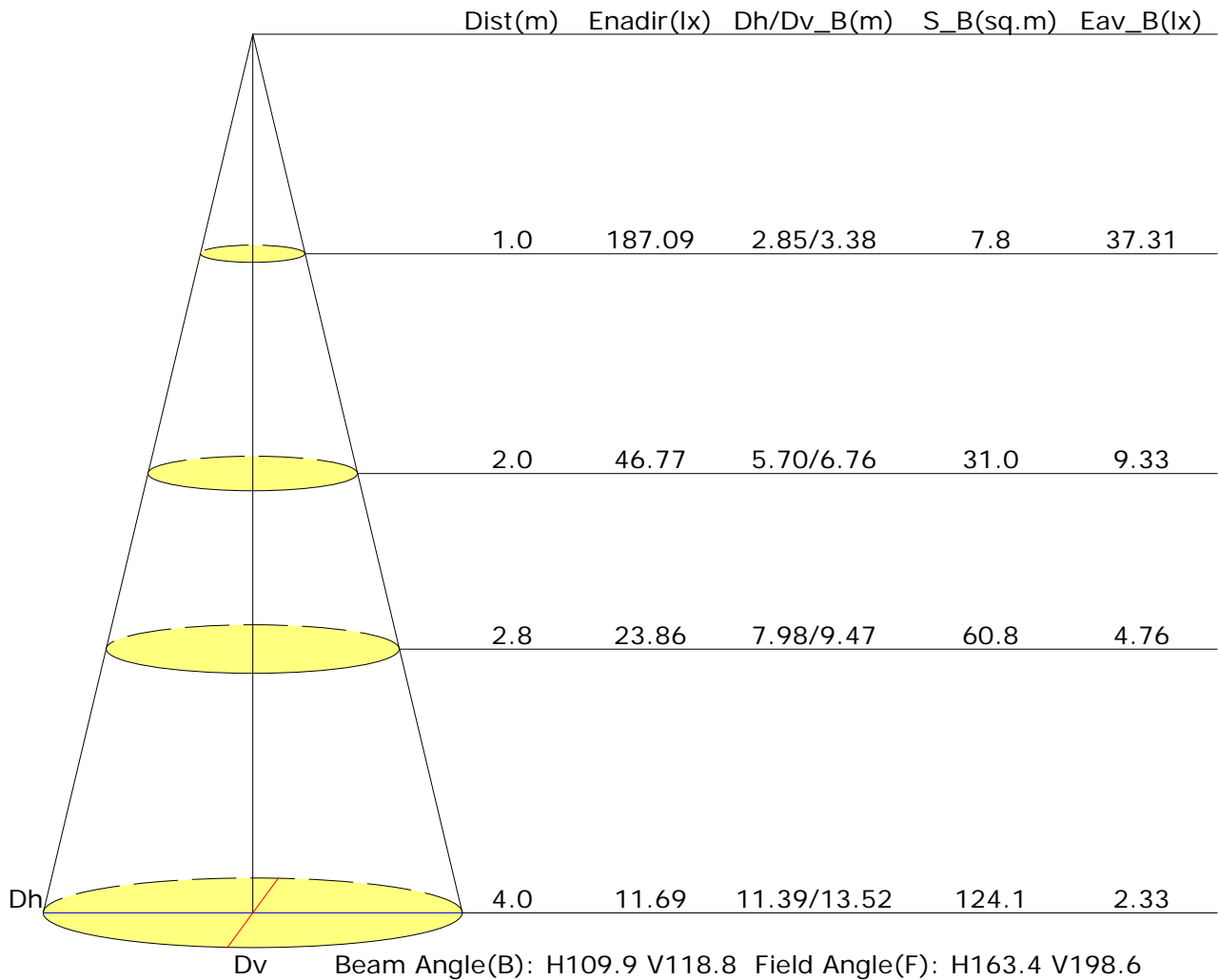
Distance: 7.970 m

Humidity:

Inspector:



Illuminance at a Distance

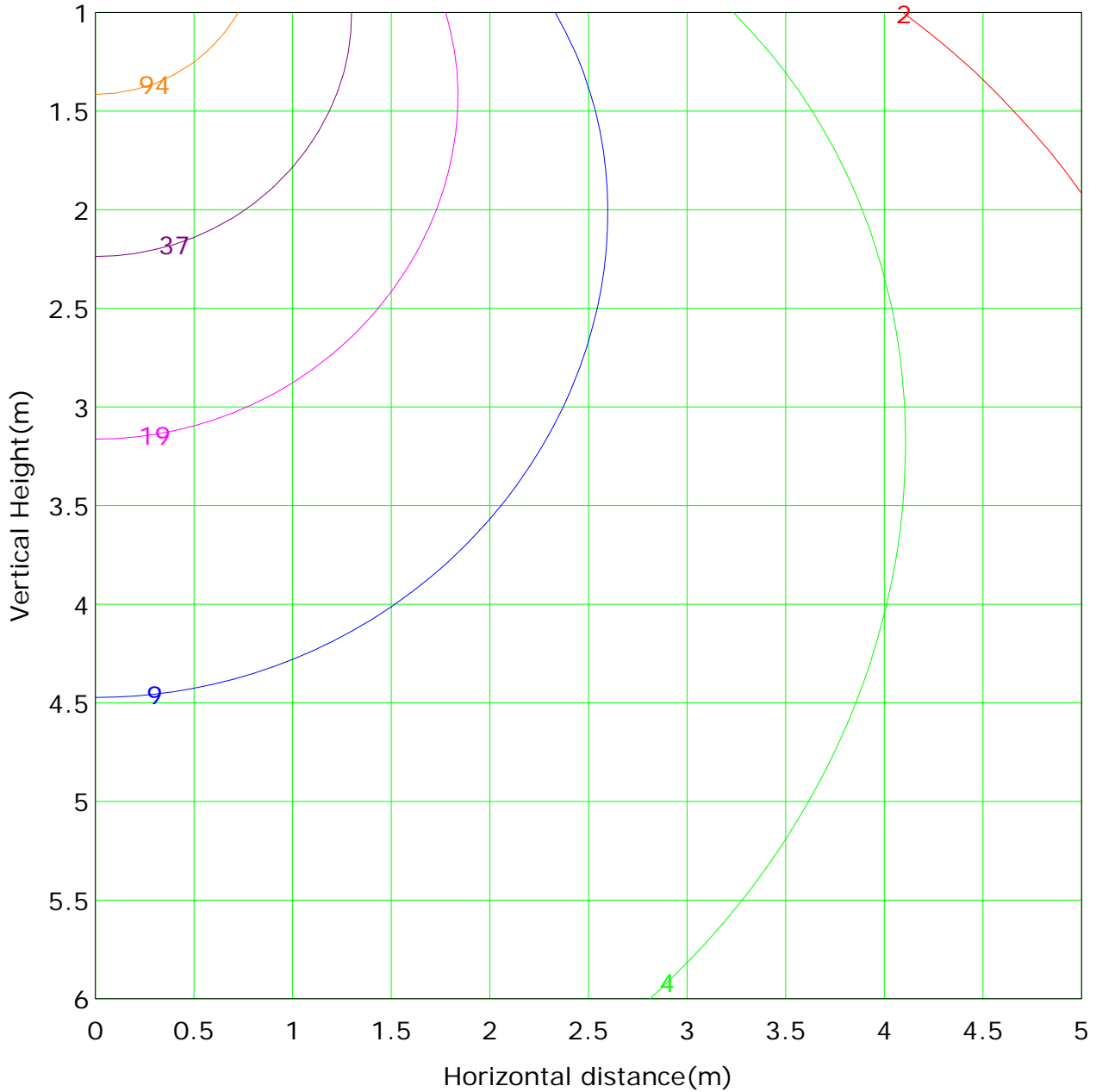


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 187.1 lx
— (1%): 1.9 lx	— (2%): 3.7 lx	
— (5%): 9.4 lx	— (10%): 18.7 lx	
— (20%): 37.4 lx	— (50%): 93.5 lx	
— (100%): 187.1 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: