



Report No.:

Test Time: 01/08/2019 14:46

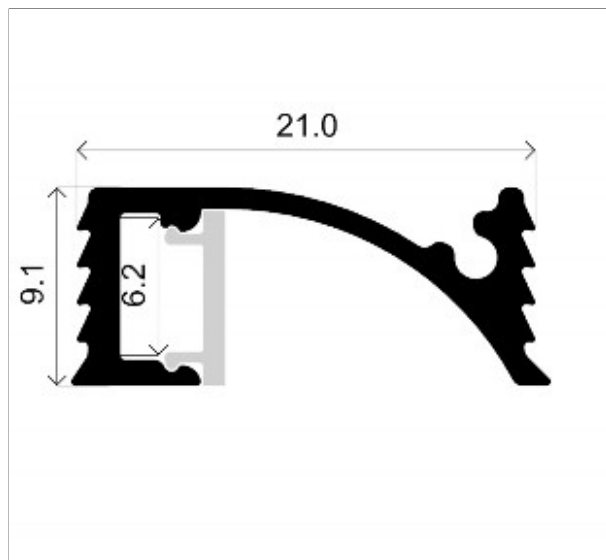
## Luminaire Property

Luminaire Manufacturer: Lighting Line  
 Luminaire Description: LLP-RE10-02 + LLD-02-FM  
 Lamp Description: Strip 9,6W/m 120led/m Number of Lamps: 1  
 Lumens per Lamp: 544 lm Voltage: 24.0 V  
 Current: 0.382 A Power: 9.17 W  
 Power Factor: 1.000

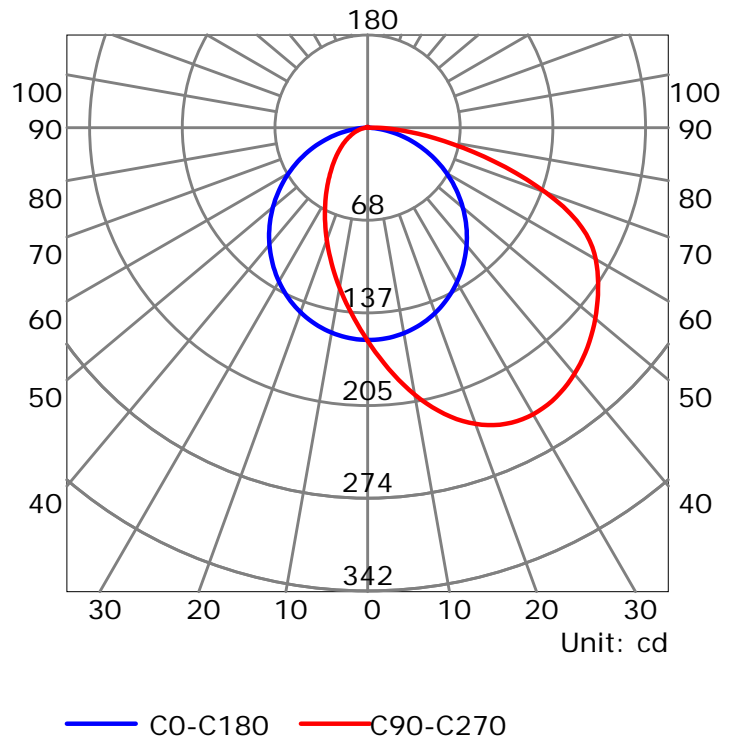
## Photometric Results

CIE Class: Direct	Total Rated Lamp Lumens: 544.0 lm
Measurement Flux: 544.1 lm	Efficiency: 100.02%
Downward Ratio: 99.64%	Upward Ratio: 0.37%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 161.3, 139.2, 144.4, 145.0	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.1, 81.4, 90.3, 91.1	
Luminaire Efficacy Rating (LER): 59.38	Central Intensity: 157.06 cd
Max. Intensity: 244.84 cd	Pos of Max. Intensity: H90 V31
S/MH(C0/C180): 1.25	S/MH(C90/C270): 1.43

Picture Of Luminaire



Luminous Intensity Distribution Curve

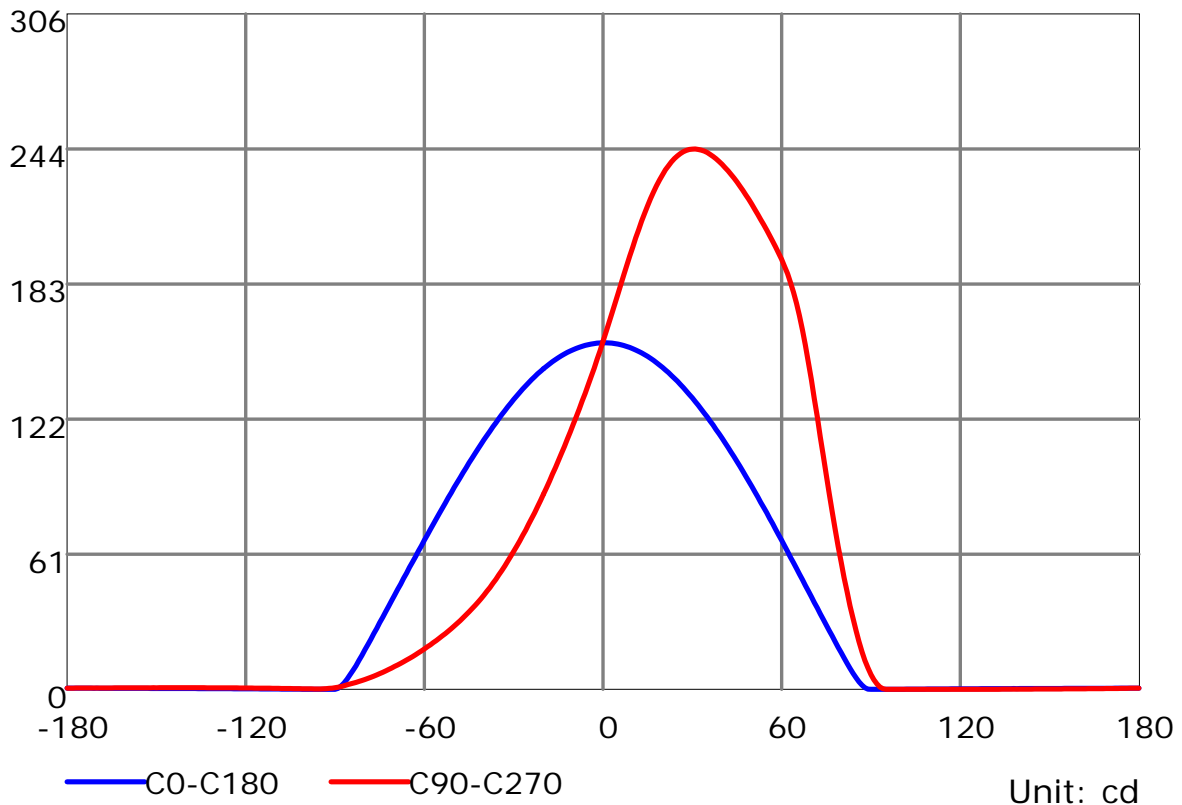
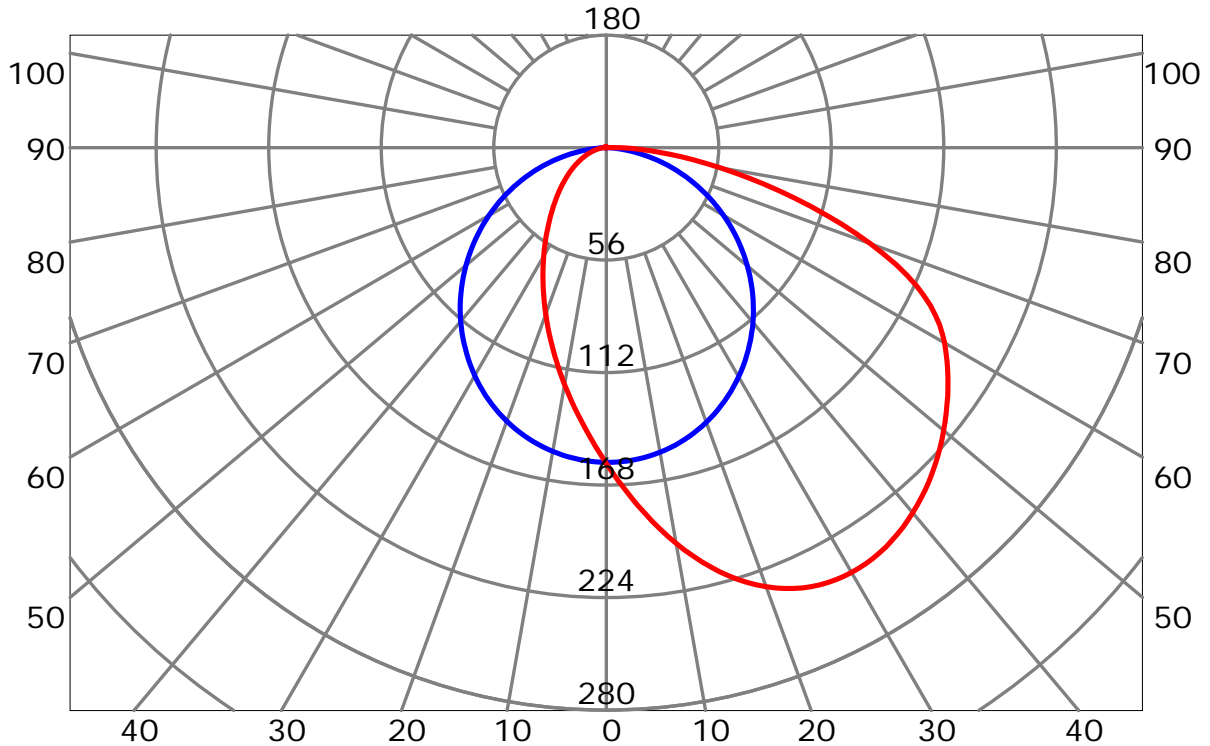


C Plane (°):0.0-360.0: 10.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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



## Luminous Intensity Distribution Curve

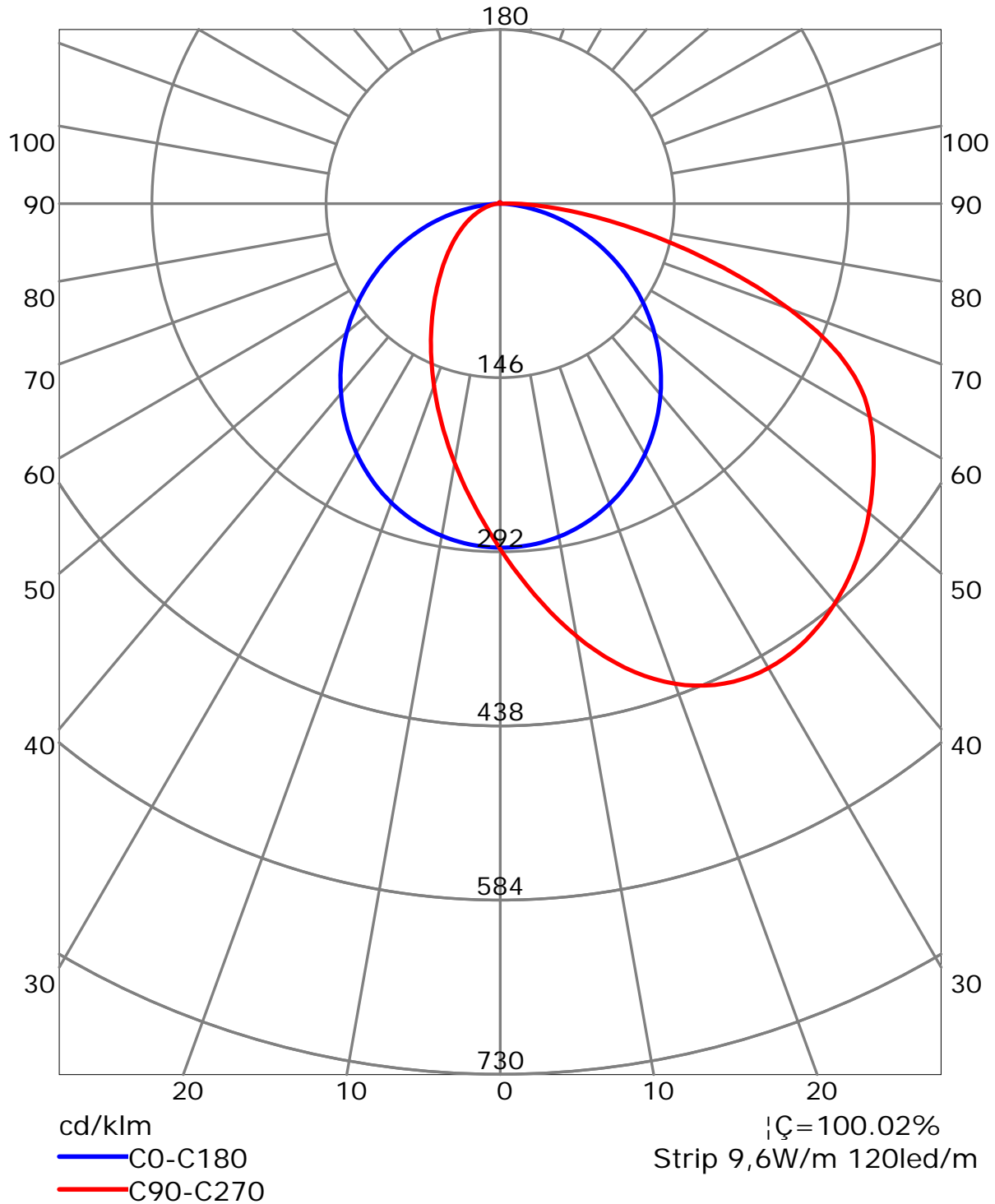


C Plane (°):0.0-360.0: 10.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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



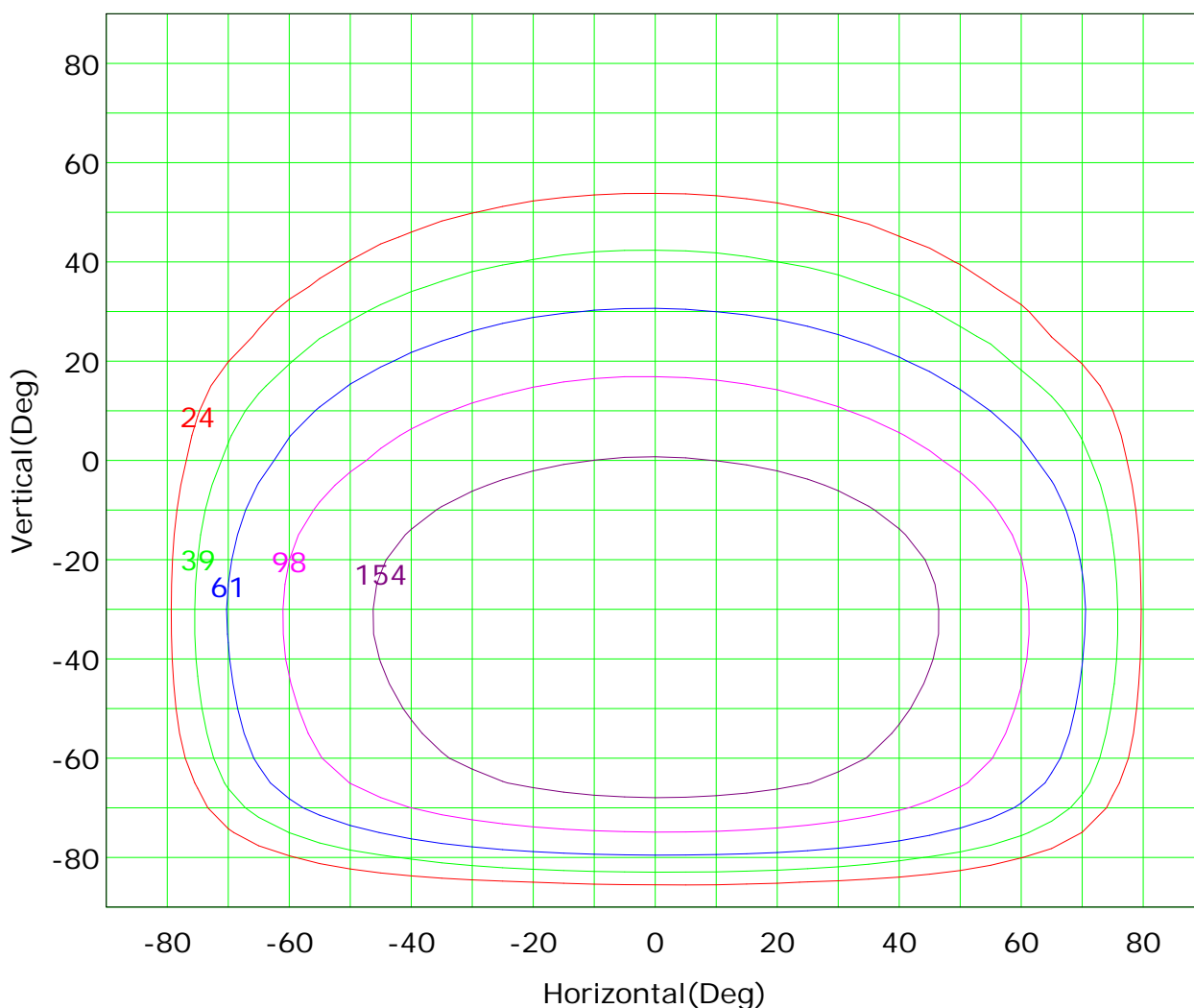
## Luminous Intensity Distribution Curve(cd/klm)



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)



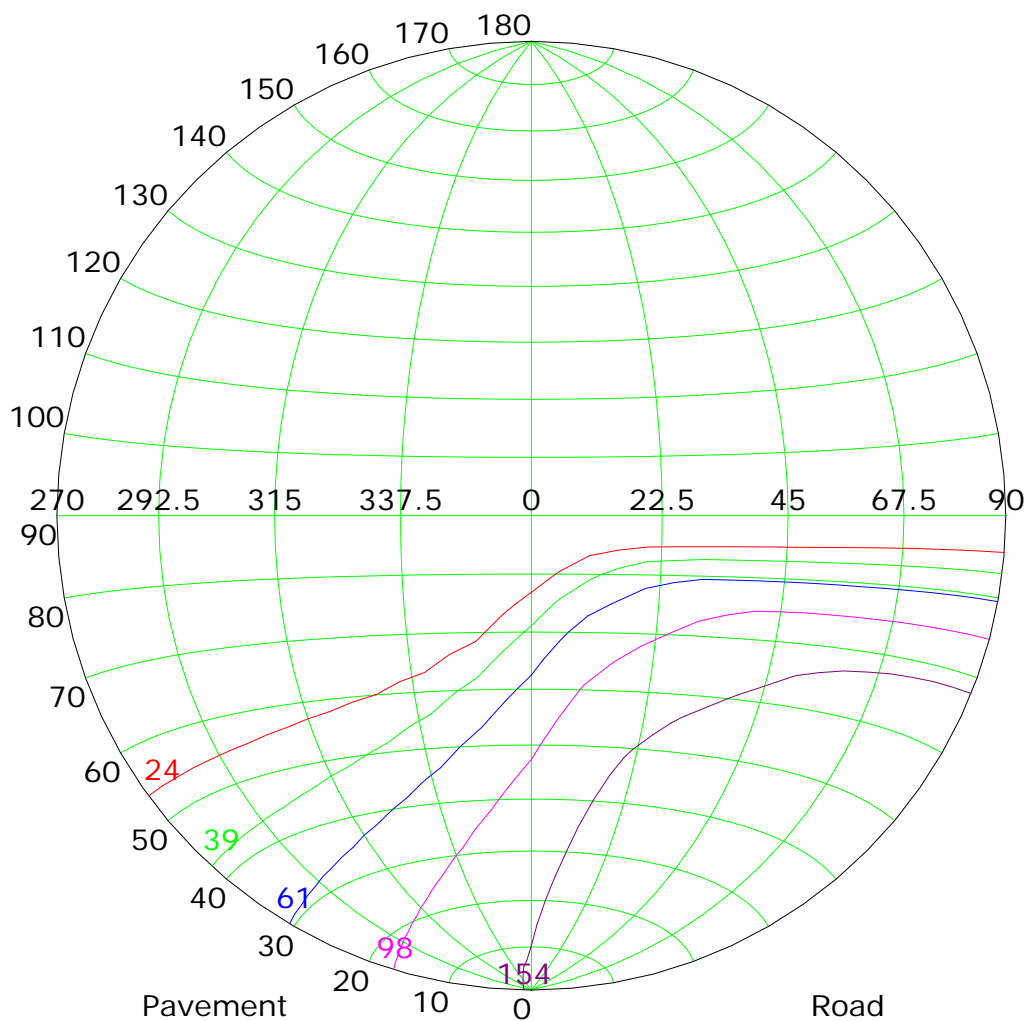
Imax (100%): 245 cd

— ( 10%):	24 cd	— ( 16%):	39 cd
— ( 25%):	61 cd	— ( 40%):	98 cd
— ( 63%):	154 cd	— (100%):	245 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%): 245 cd

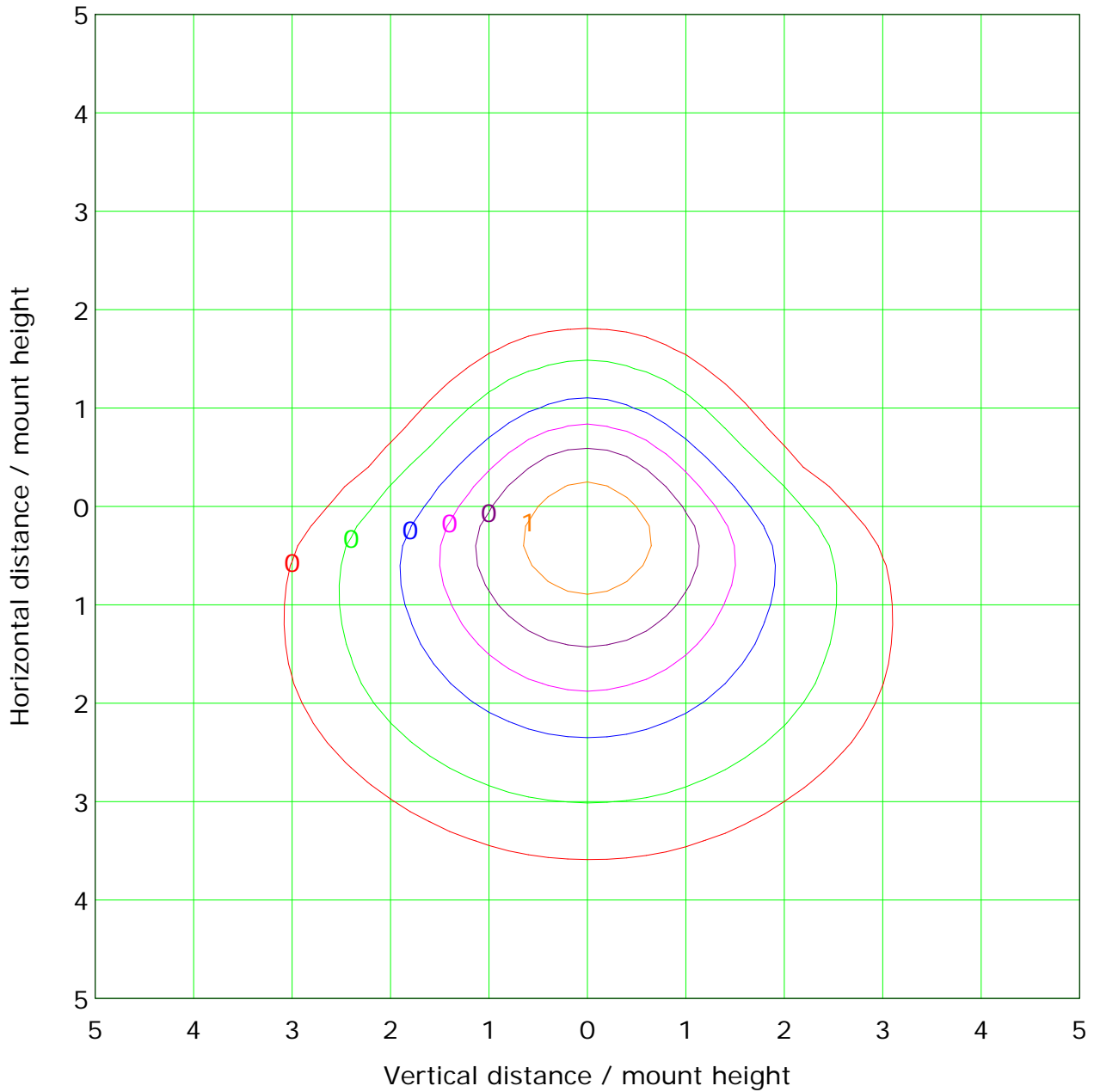
- |           |        |           |        |
|-----------|--------|-----------|--------|
| — ( 10%): | 24 cd  | — ( 16%): | 39 cd  |
| — ( 25%): | 61 cd  | — ( 40%): | 98 cd  |
| — ( 63%): | 154 cd | — (100%): | 245 cd |

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



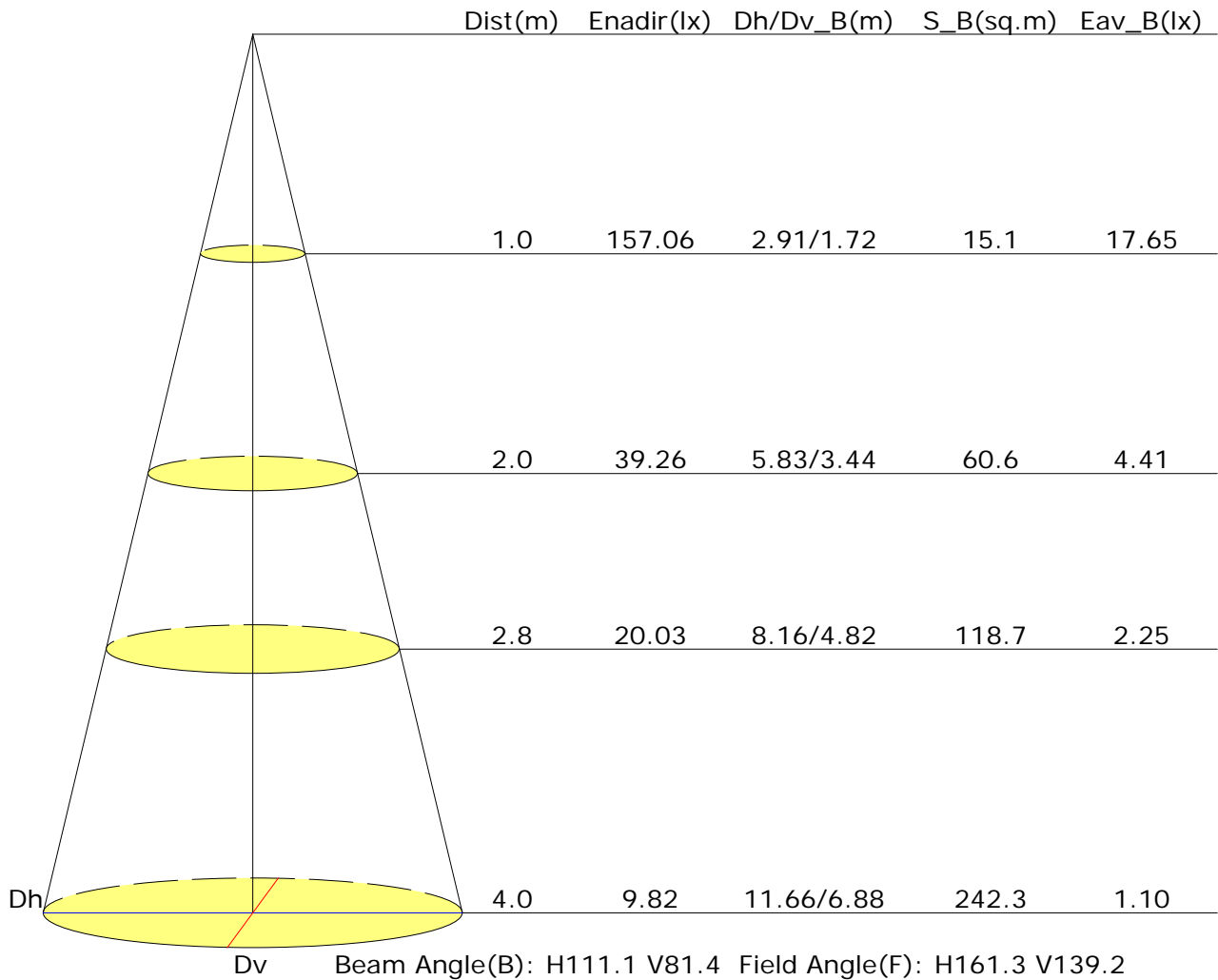
L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	103	92	80	68	55	42	29	17	5
C90	230	220	208	195	175	140	97	58	27
C180	103	91	80	68	55	43	30	18	7
C270	35	29	23	18	14	10	7	4	2

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:



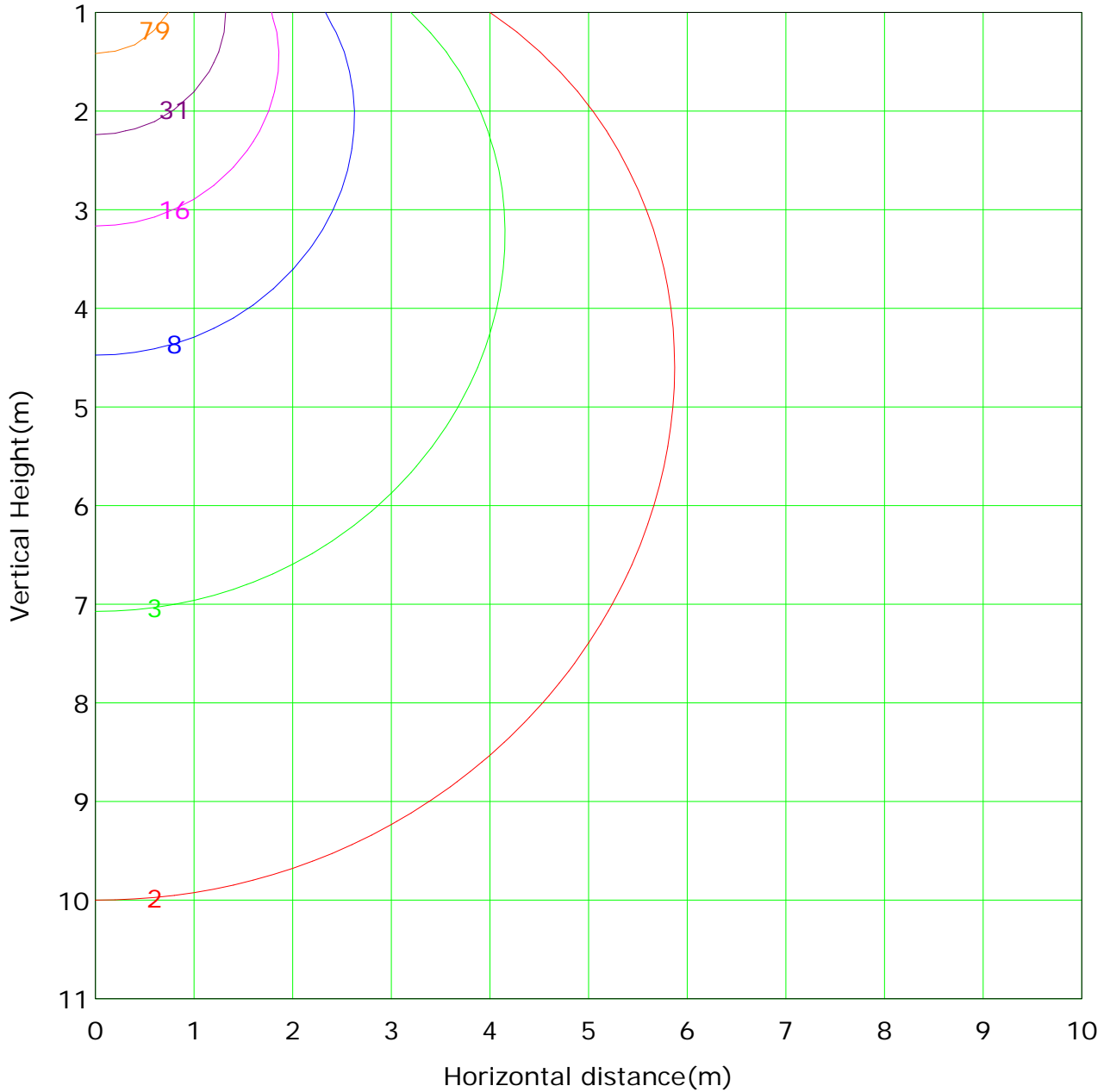
## Illuminance at a Distance







## Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 157.1 lx
— ( 1%): 1.6 lx	— ( 2%): 3.1 lx	
— ( 5%): 7.9 lx	— ( 10%): 15.7 lx	
— ( 20%): 31.4 lx	— ( 50%): 78.5 lx	
— (100%): 157.1 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:



Report No.:

Test Time: 01/08/2019 15:50

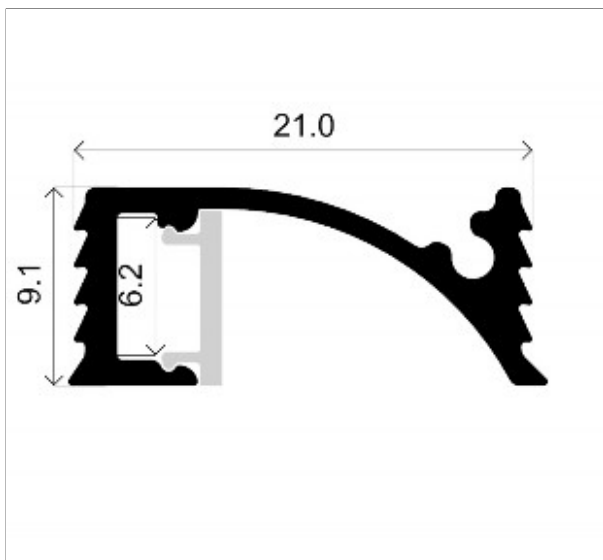
## Luminaire Property

Luminaire Manufacturer: Lighting Line  
 Luminaire Description: LLP-RE10-02 + LLD-02-FS  
 Lamp Description: Strip 9,6W/m 120led/m    Number of Lamps: 1  
 Lumens per Lamp: 503 lm    Voltage: 24.0 V  
 Current: 0.379 A    Power: 9.08 W  
 Power Factor: 1.000

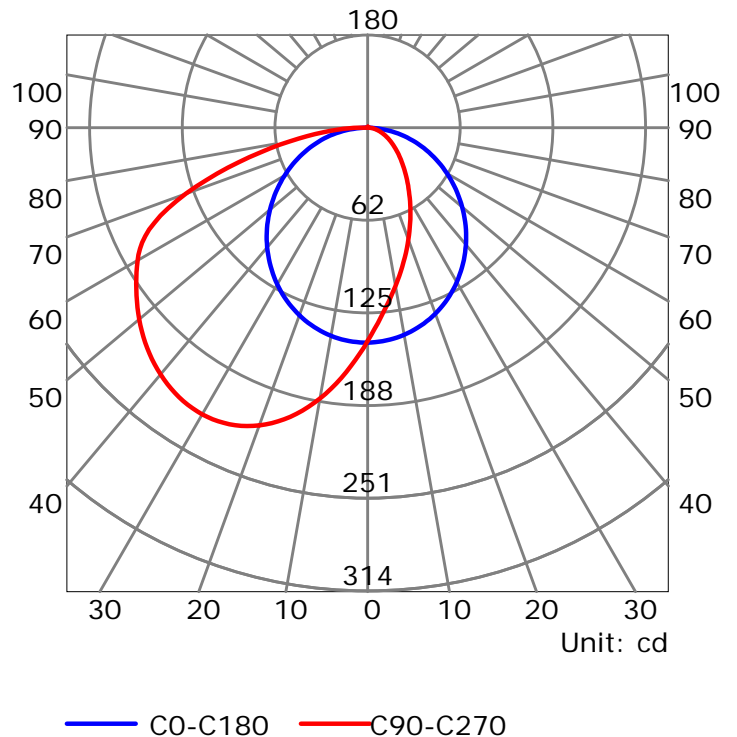
## Photometric Results

CIE Class: Direct	Total Rated Lamp Lumens: 503.0 lm
Measurement Flux: 503.4 lm	Efficiency: 100.07%
Downward Ratio: 99.70%	Upward Ratio: 0.37%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 165.0, 140.0, 144.8, 145.7	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.5, 81.3, 89.7, 90.9	
Luminaire Efficacy Rating (LER): 55.49	Central Intensity: 145.89 cd
Max. Intensity: 224.67 cd	Pos of Max. Intensity: H270 V31
S/MH(C0/C180): 1.24	S/MH(C90/C270): 1.43

Picture Of Luminaire



Luminous Intensity Distribution Curve

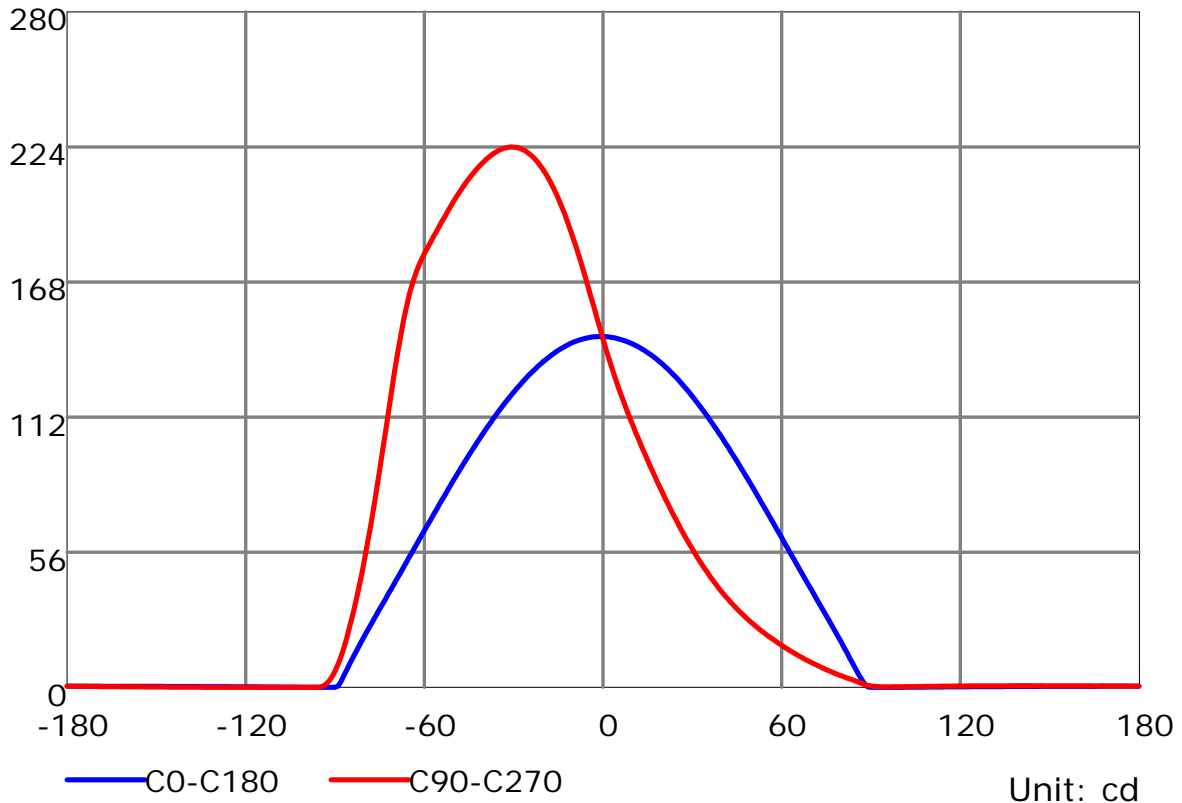
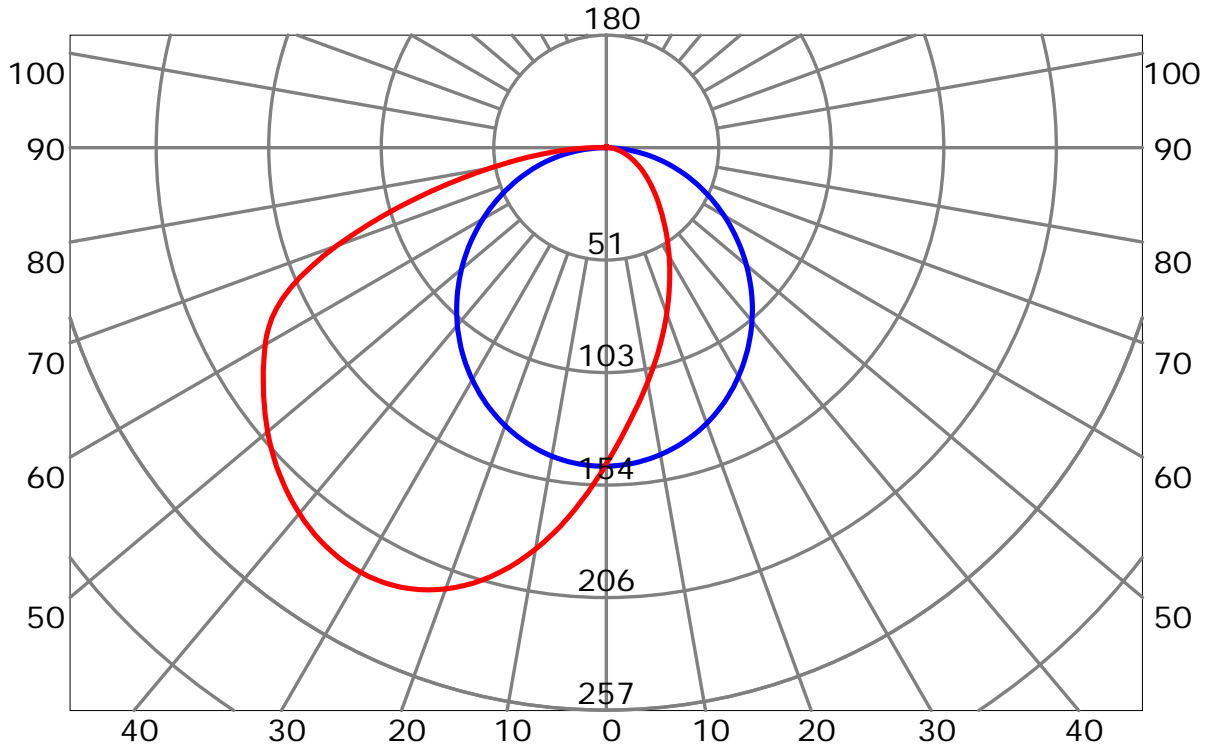


C Plane (°):0.0-360.0: 10.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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



## Luminous Intensity Distribution Curve

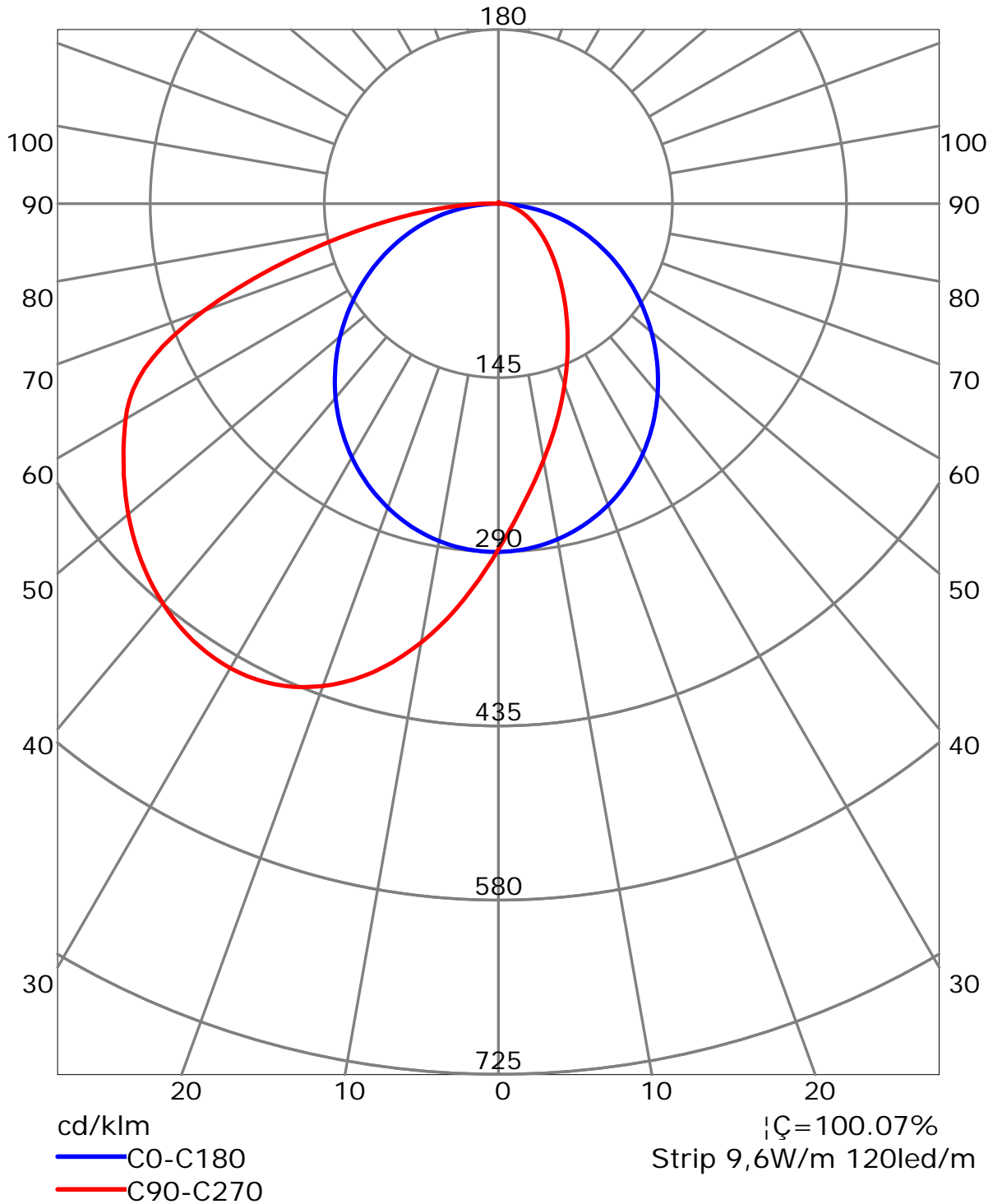


C Plane (°):0.0-360.0: 10.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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



## Luminous Intensity Distribution Curve(cd/klm)

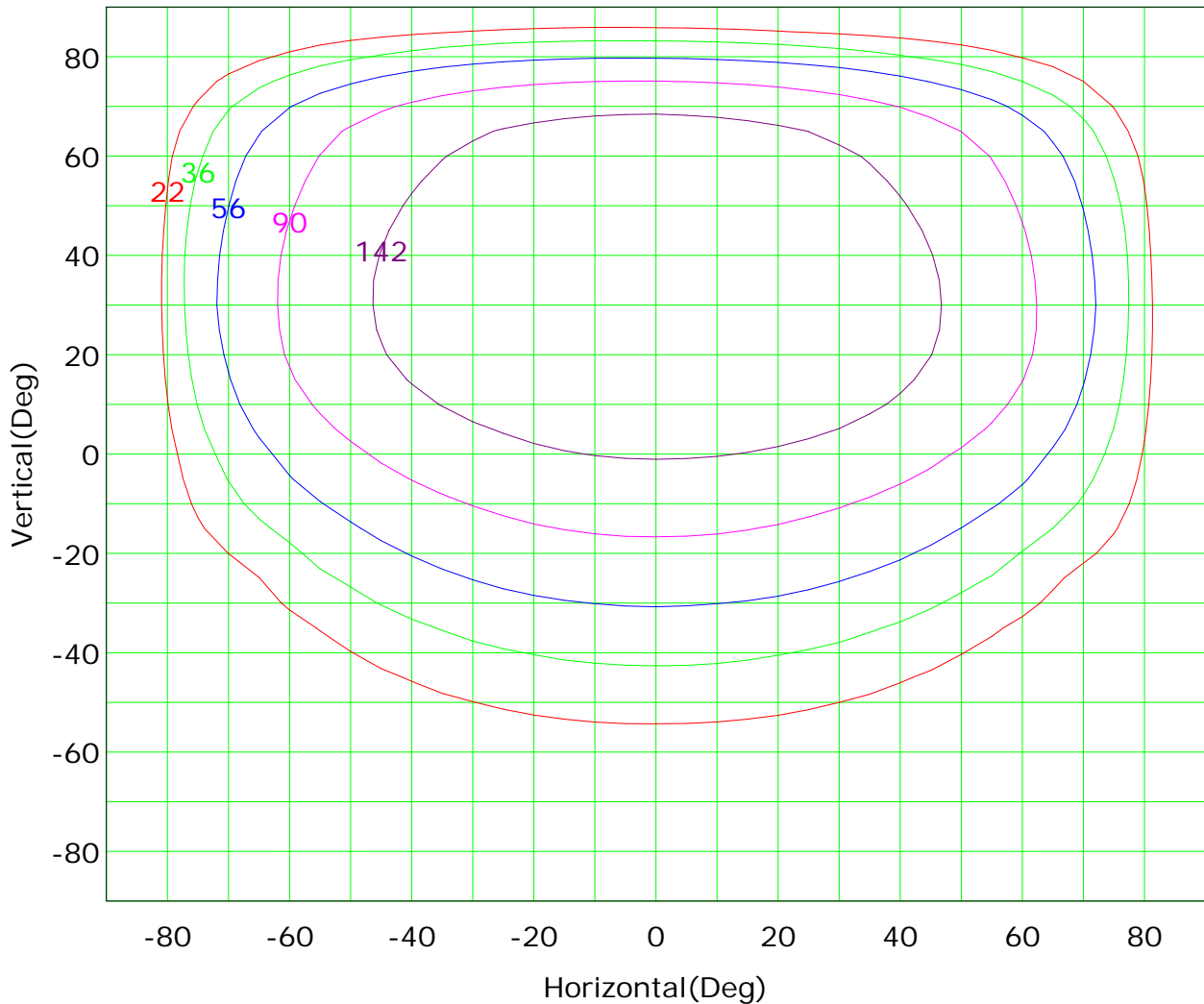


C Plane (°):0.0-360.0: 10.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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



## Isocandela (rectangle)



Imax (100%): 225 cd

— ( 10%):	22 cd	— ( 16%):	36 cd
— ( 25%):	56 cd	— ( 40%):	90 cd
— ( 63%):	142 cd	— (100%):	225 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

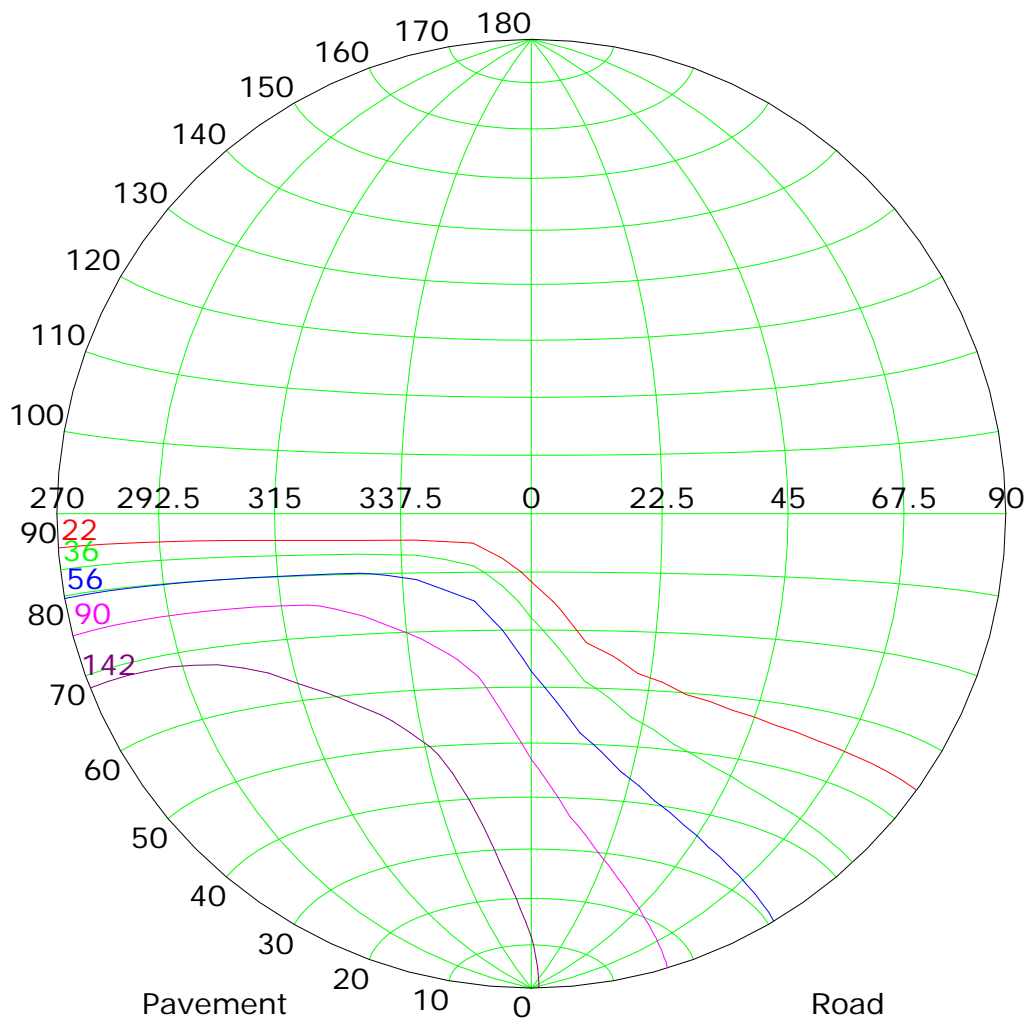
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 225 cd

— ( 10%):	22 cd	— ( 16%):	36 cd
— ( 25%):	56 cd	— ( 40%):	90 cd
— ( 63%):	142 cd	— (100%):	225 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

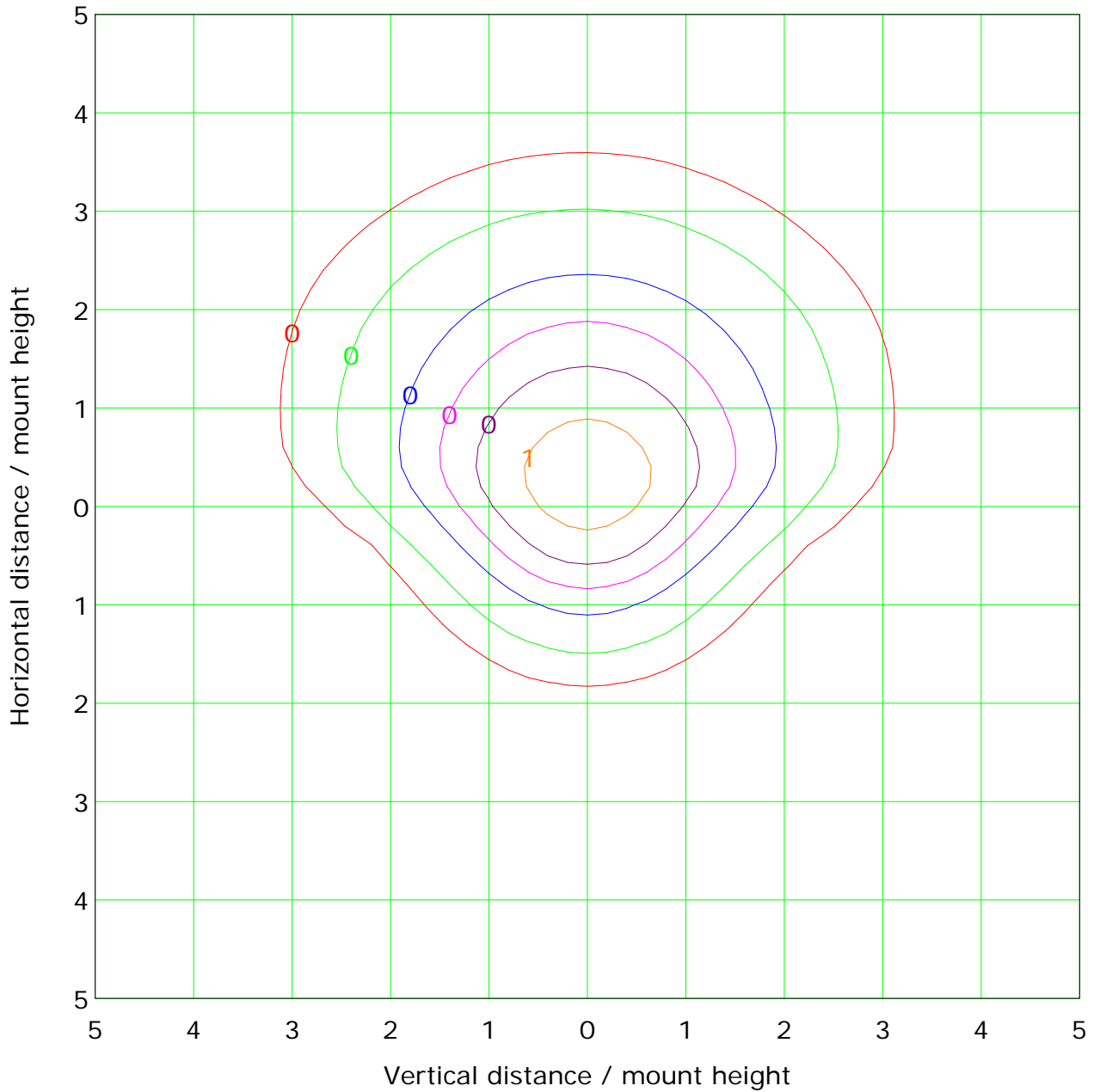
Distance: 7.970 m

Humidity:

Inspector:



## IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 1.8 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%):	1.8 lx		

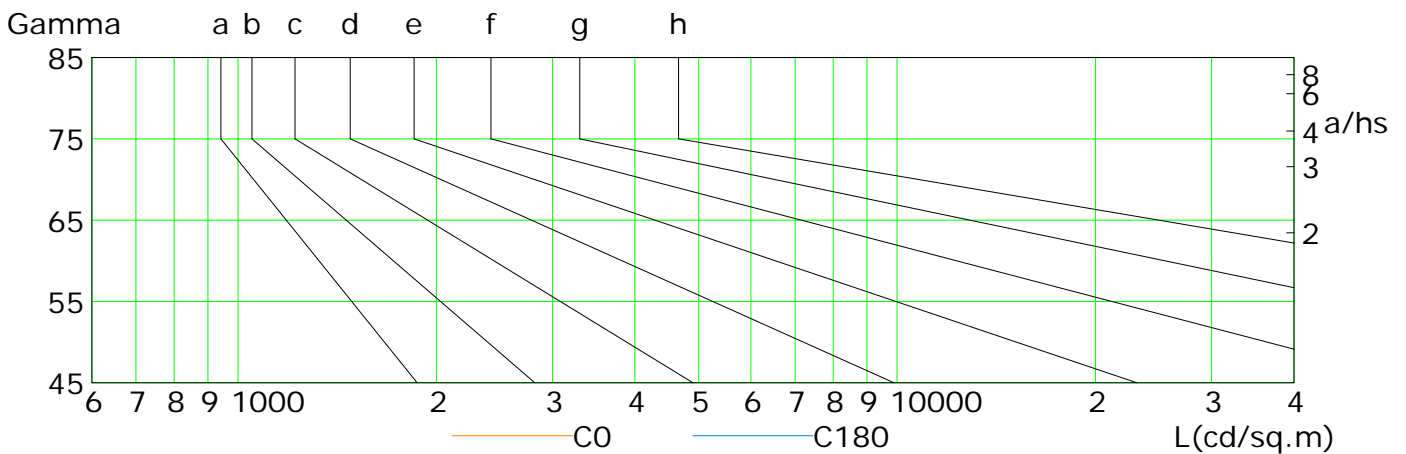
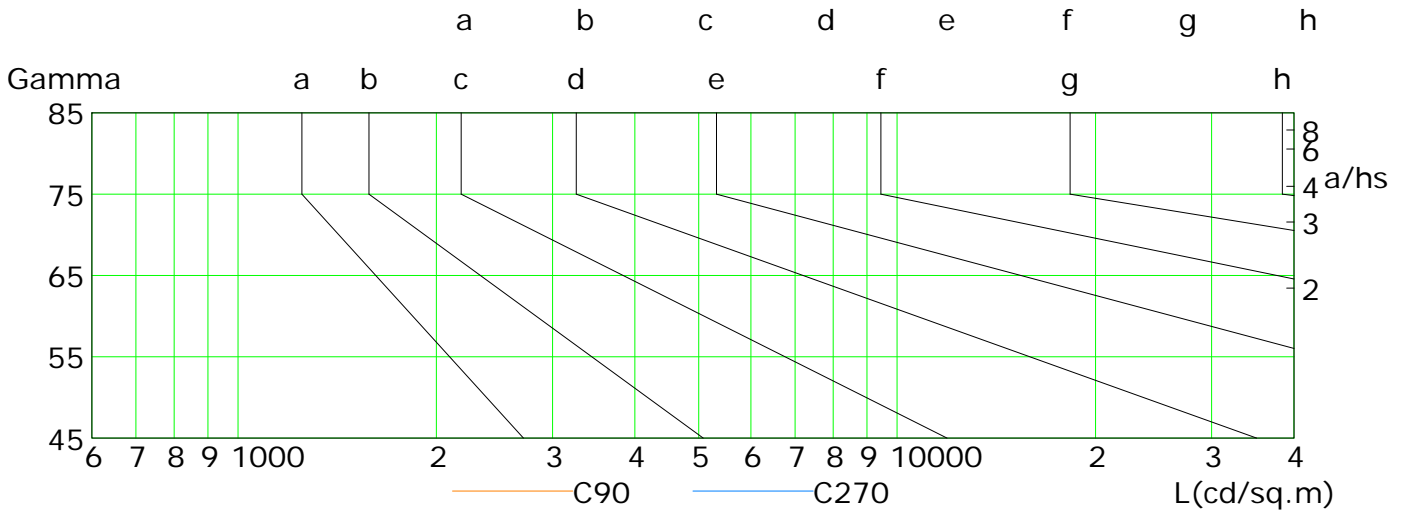
C Plane (°):0.0-360.0: 10.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-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	94	84	73	62	51	41	30	19	7
C90	33	27	22	18	14	10	7	5	3
C180	97	87	76	65	54	43	33	22	10
C270	212	202	192	180	164	131	90	54	26

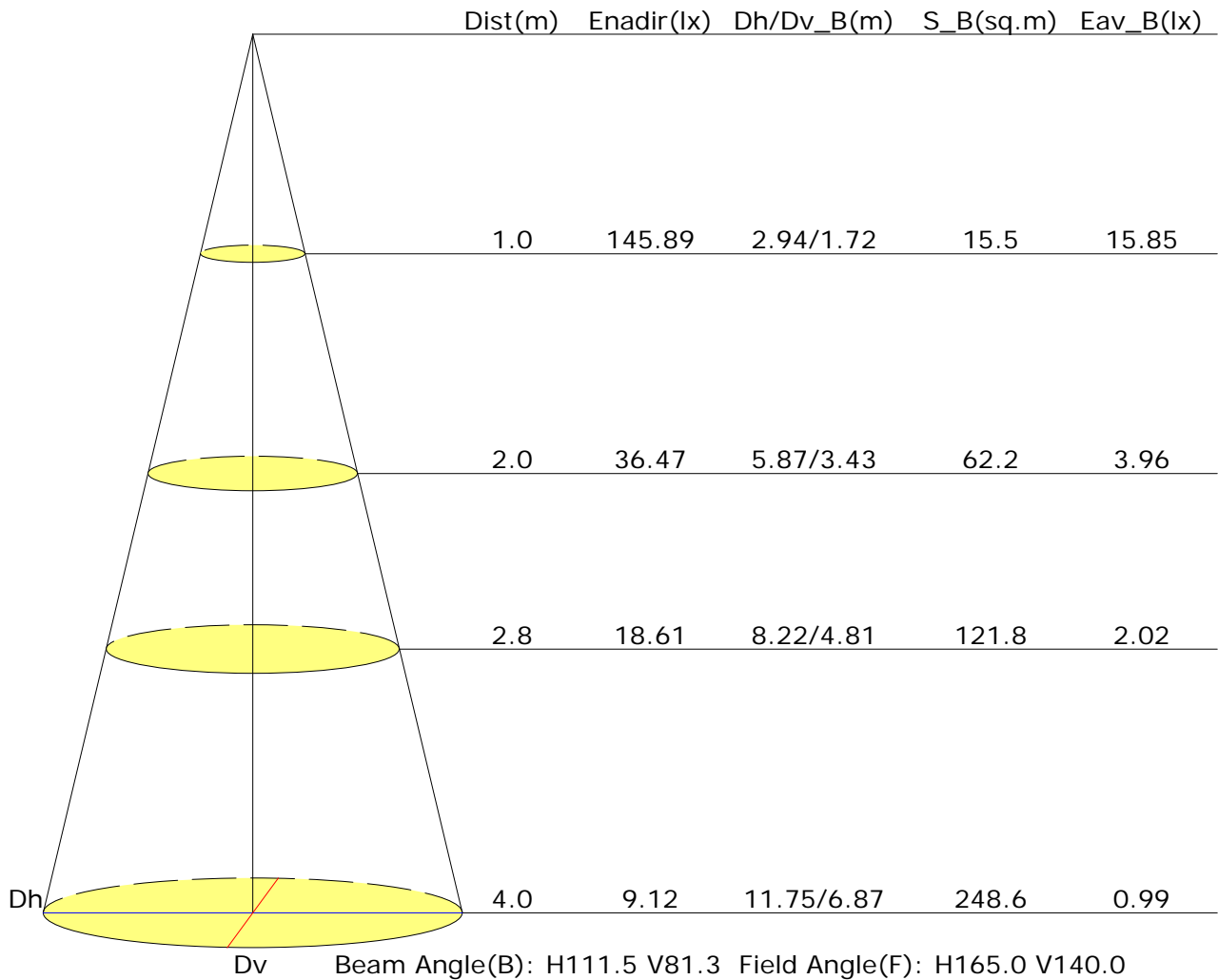
C Plane (°):0.0-360.0: 10.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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



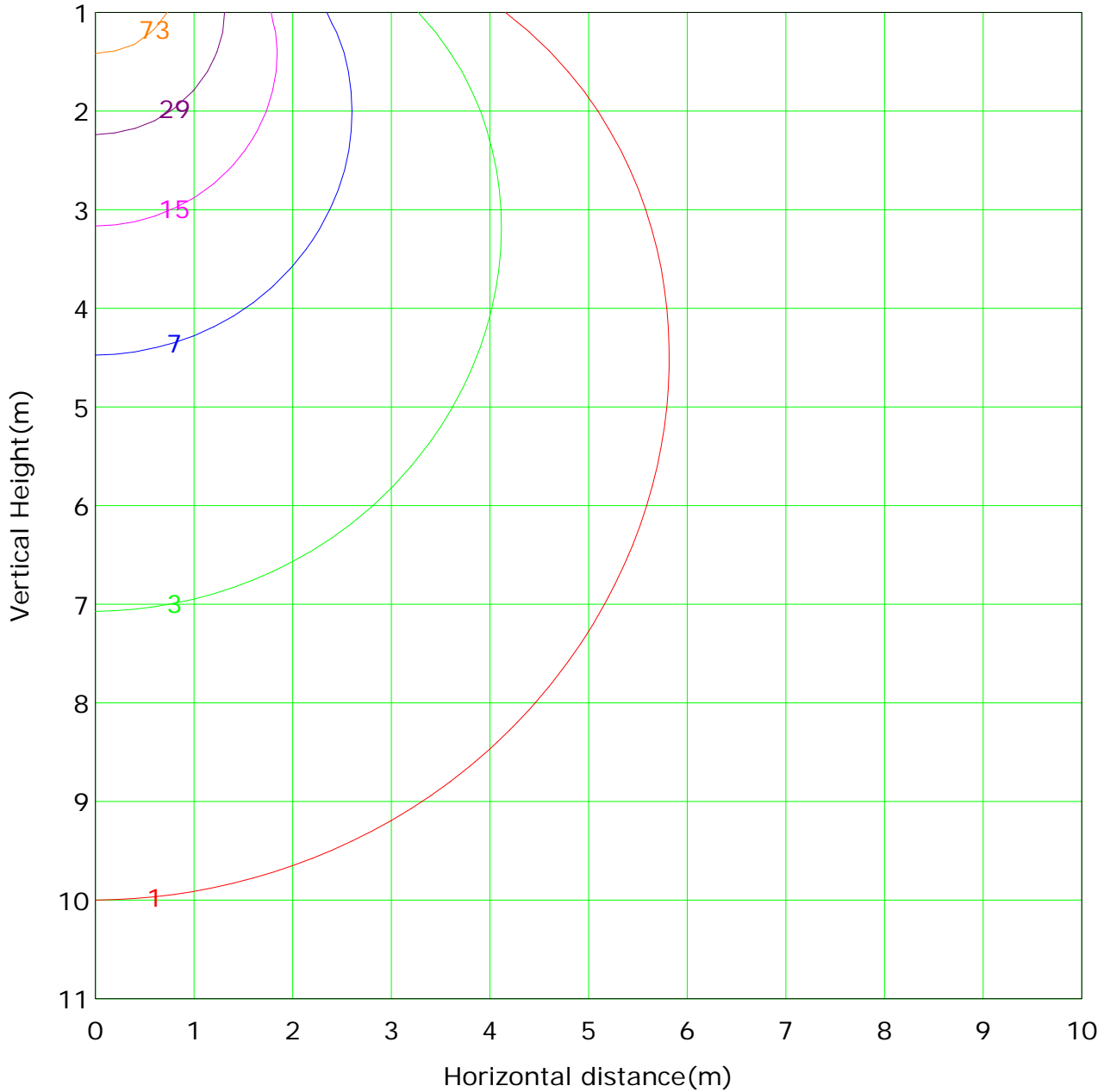


## Illuminance at a Distance





## Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 145.9 lx
— ( 1%): 1.5 lx	— ( 2%): 2.9 lx	
— ( 5%): 7.3 lx	— (10%): 14.6 lx	
— (20%): 29.2 lx	— (50%): 72.9 lx	
— (100%): 145.9 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: