



Report No.:

Test Time: 30/08/2018 11:03

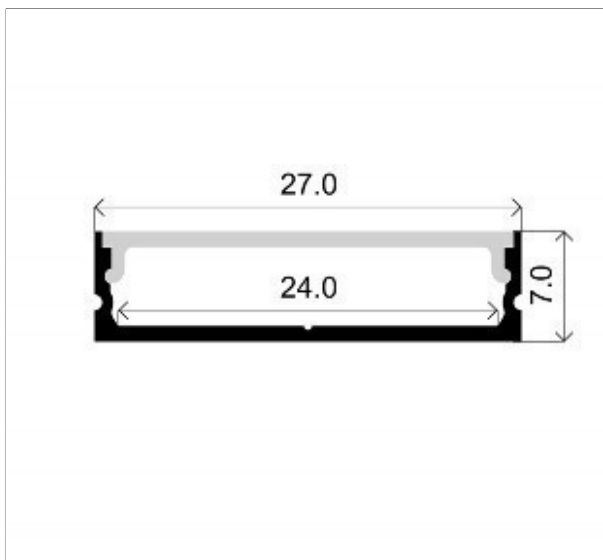
## Luminaire Property

Luminaire Manufacturer: Lighting Line  
 Luminaire Description: LLP-SL07-05 + LLD-05-FK  
 Lamp Description: Strip 14,4W/m 60led/m      Number of Lamps: 1  
 Lumens per Lamp: 1579 lm      Voltage: 24.0 V  
 Current: 0.590 A      Power: 14.16 W  
 Power Factor: 1.000

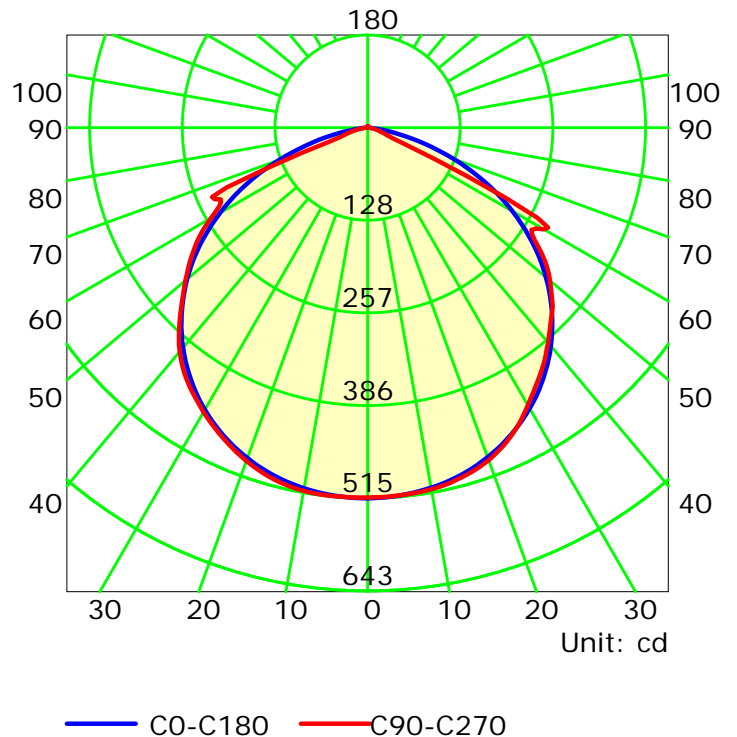
## Photometric Results

CIE Class: Direct	Total Rated Lamp Lumens: 1579.0 lm
Measurement Flux: 1456.4 lm	Efficiency: 92.23%
Downward Ratio: 91.88%	Upward Ratio: 0.35%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 155.3, 136.5, 147.0, 147.6	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 115.3, 121.6, 115.3, 115.0	
Luminaire Efficacy Rating (LER): 102.90	Central Intensity: 515.04 cd
Max. Intensity: 515.04 cd	Pos of Max. Intensity: H0 V0
S/MH(C0/C180): 1.30	S/MH(C90/C270): 1.30

Picture Of Luminaire



Luminous Intensity Distribution Curve

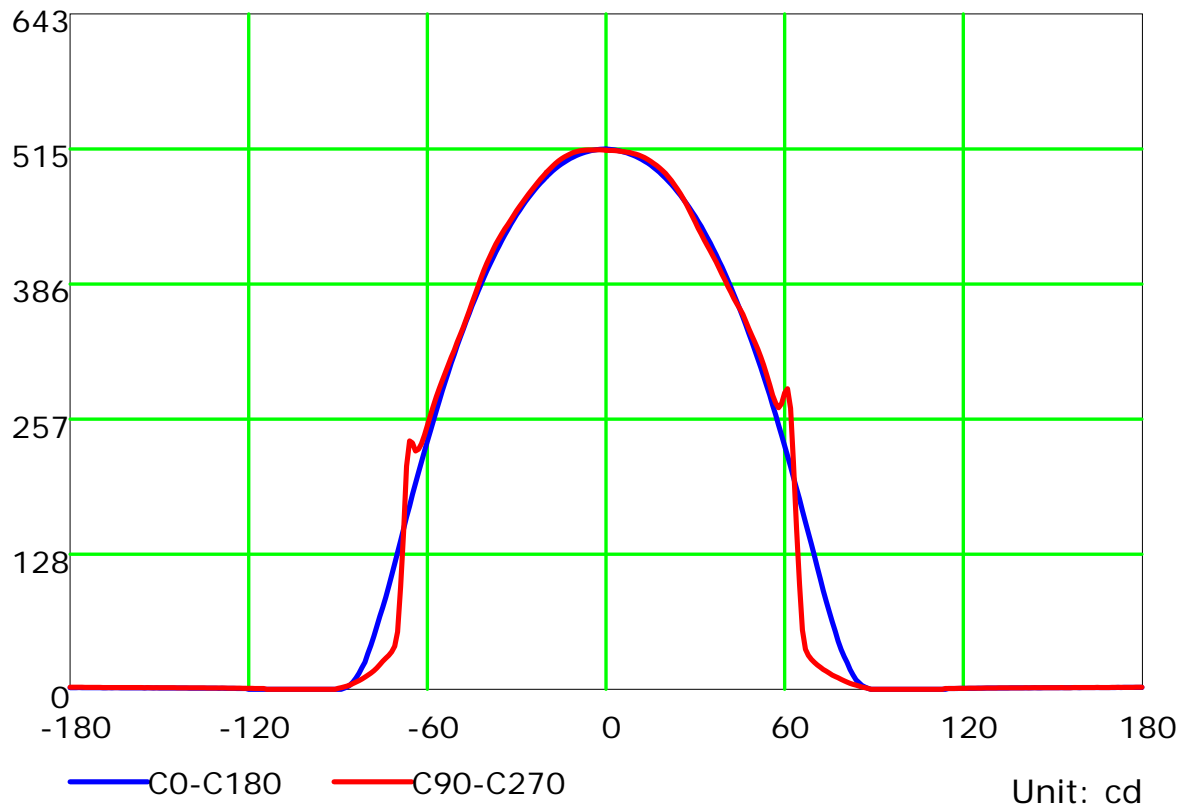
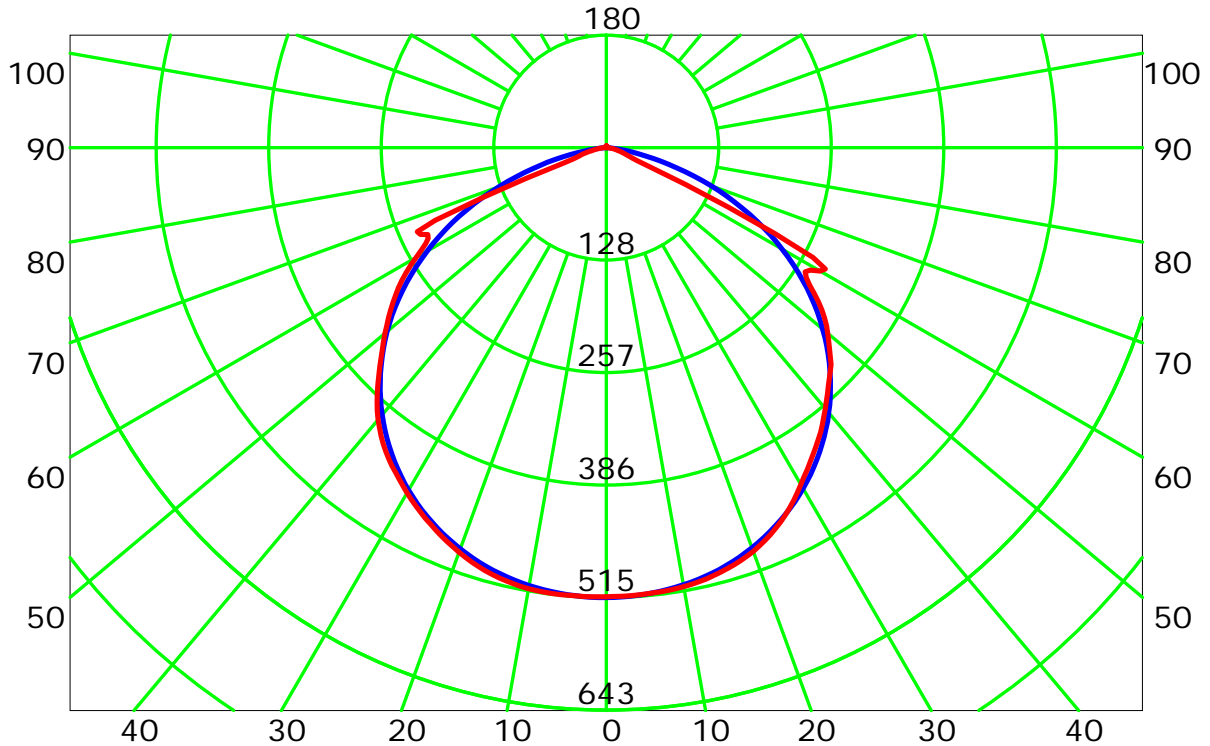


C Plane (°):0.0-360.0: 10.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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



## Luminous Intensity Distribution Curve

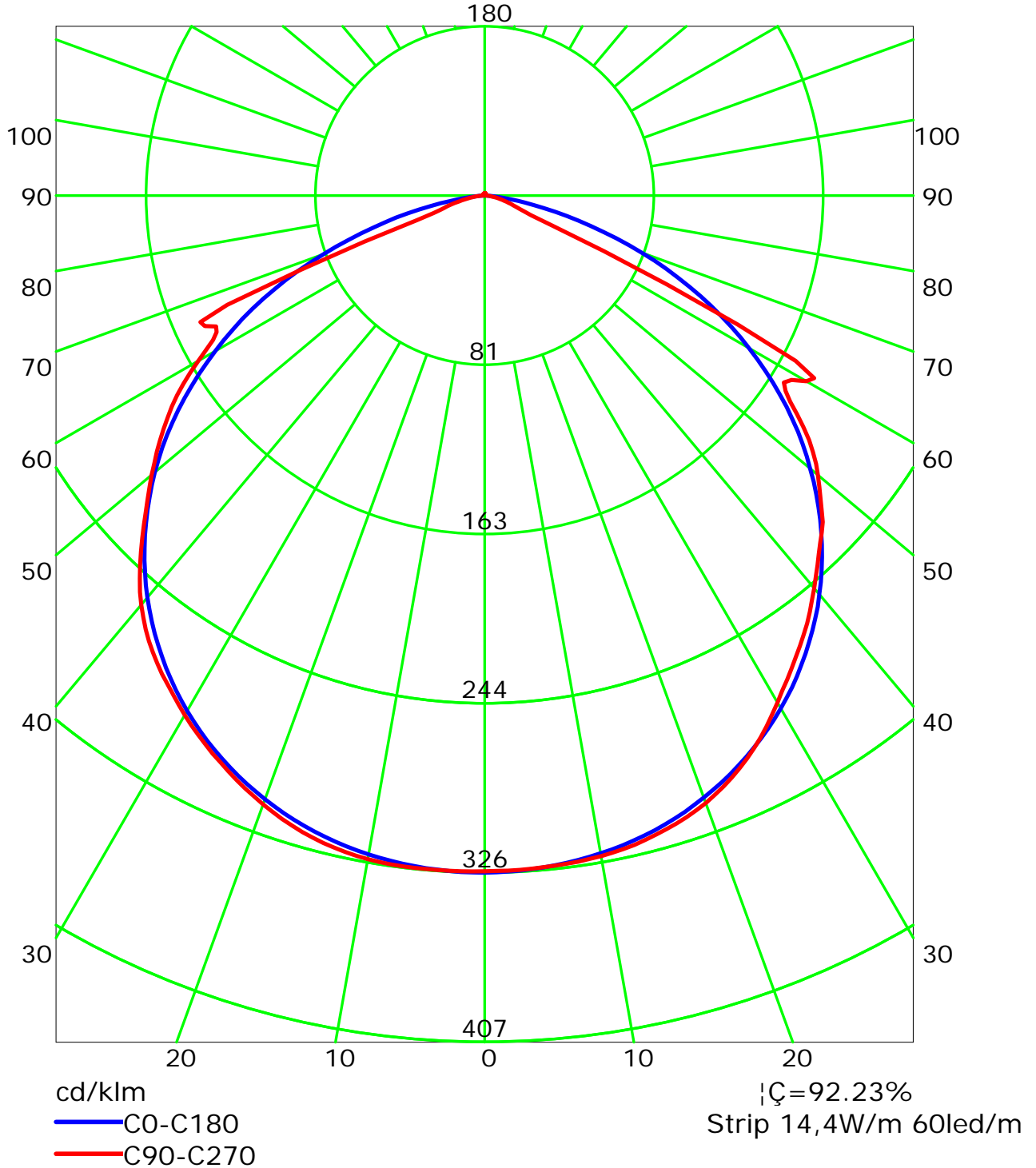


C Plane (°):0.0-360.0: 10.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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



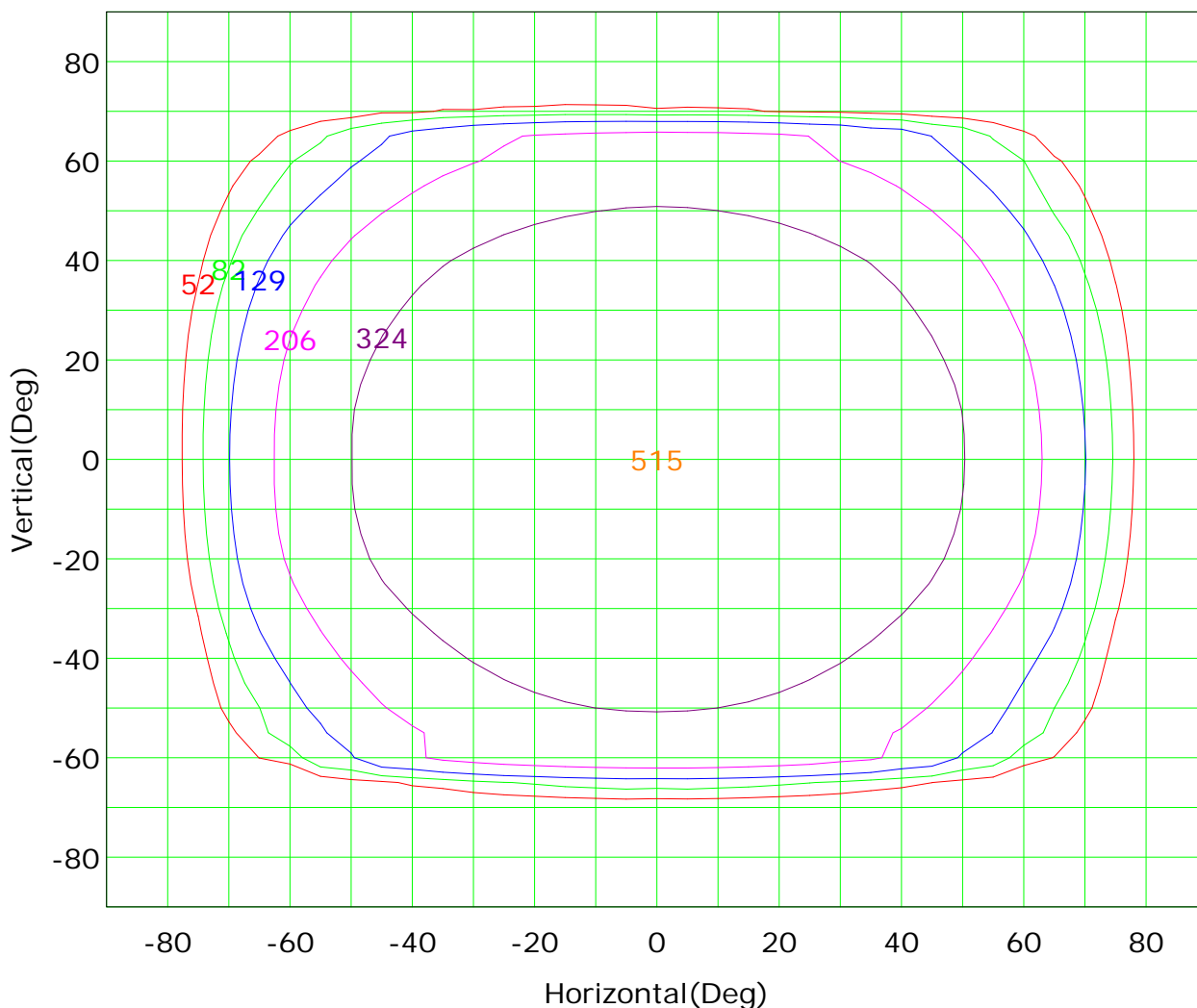
## Luminous Intensity Distribution Curve(cd/klm)



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%): 515 cd

— ( 10%):	52 cd	— ( 16%):	82 cd
— ( 25%):	129 cd	— ( 40%):	206 cd
— ( 63%):	324 cd	— (100%):	515 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

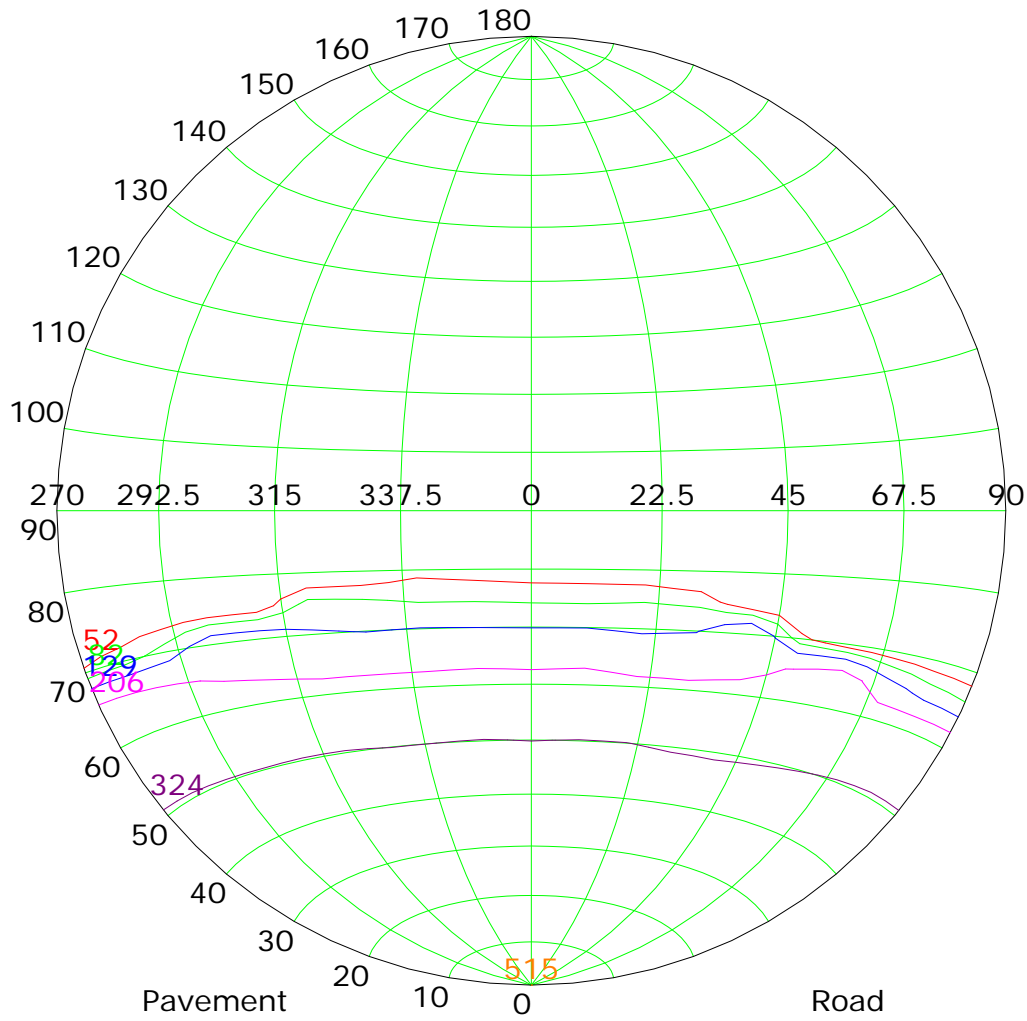
Distance: 7.970 m

Humidity:

Inspector:



## Isocandela (sphere)



Imax (100%): 515 cd

— ( 10%):	52 cd	— ( 16%):	82 cd
— ( 25%):	129 cd	— ( 40%):	206 cd
— ( 63%):	324 cd	— (100%):	515 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

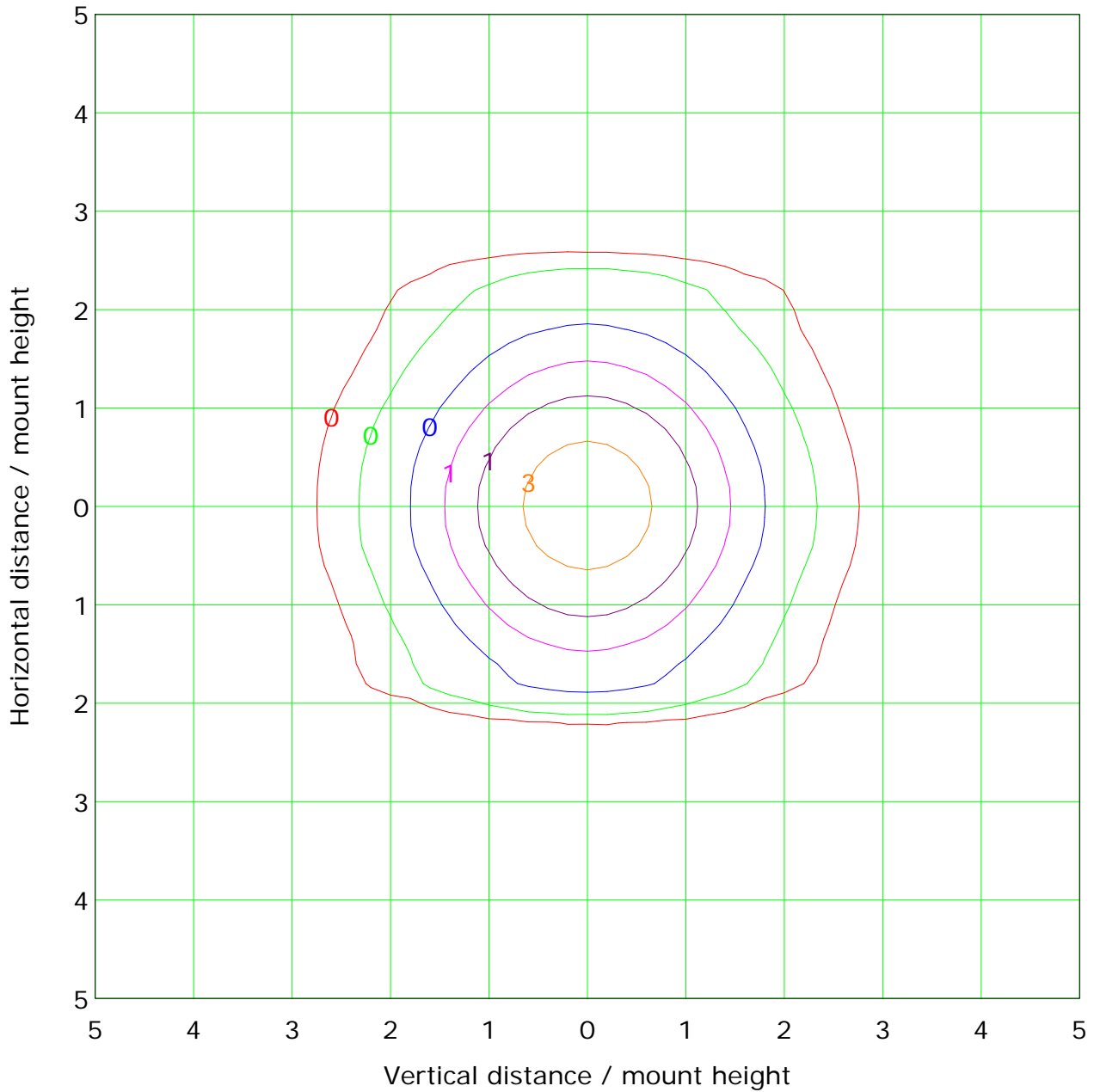
Distance: 7.970 m

Humidity:

Inspector:



## IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 5.2 lx	
— ( 1%):	0.1 lx	— ( 2%):	0.1 lx
— ( 5%):	0.3 lx	— (10%):	0.5 lx
— (20%):	1.0 lx	— (50%):	2.6 lx
— (100%):	5.2 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	362	323	280	232	181	127	74	31	6
C90	363	331	290	283	100	26	15	8	3
C180	366	328	285	237	186	130	78	34	7
C270	368	331	294	251	235	55	27	14	6

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

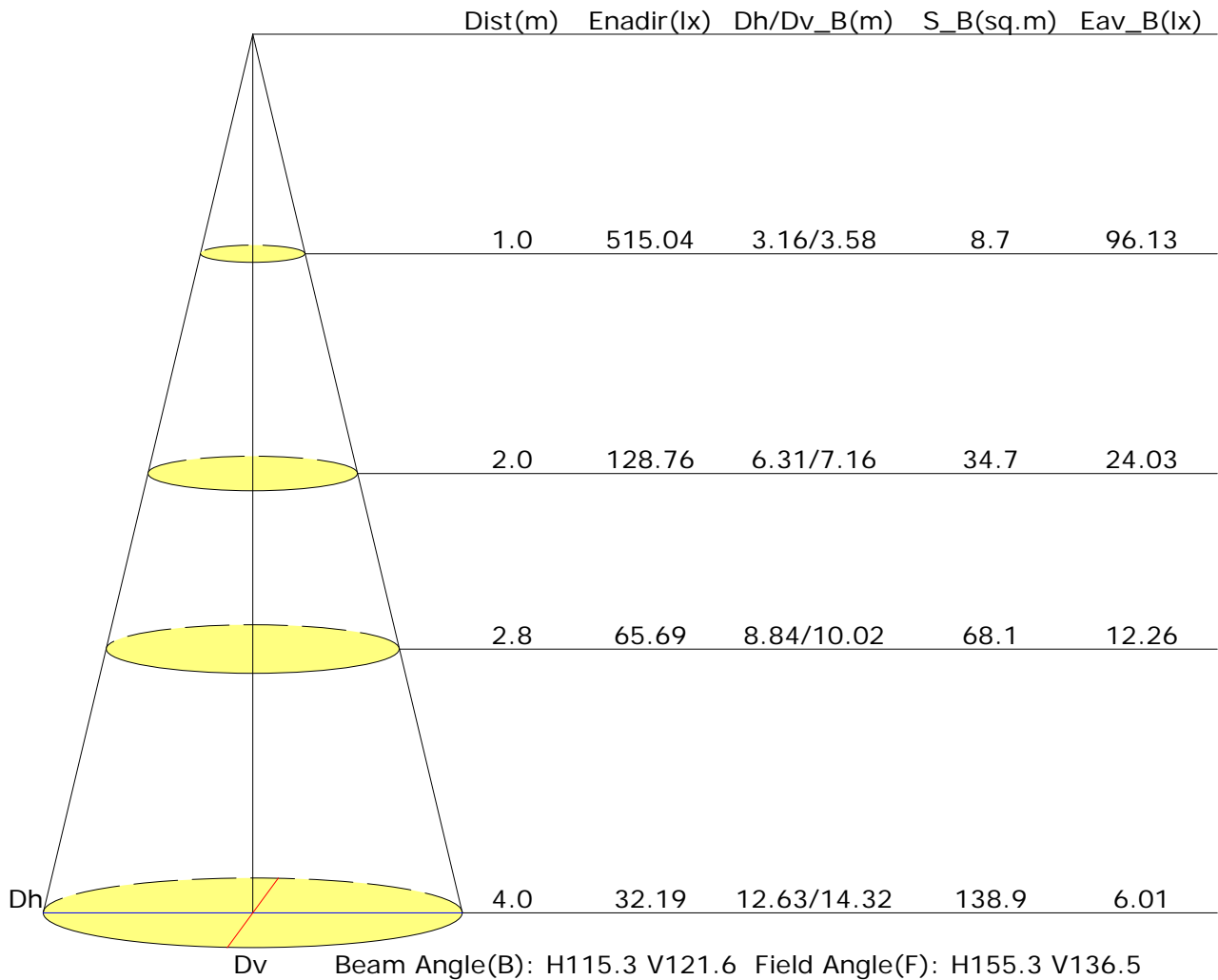
Distance: 7.970 m

Humidity:

Inspector:



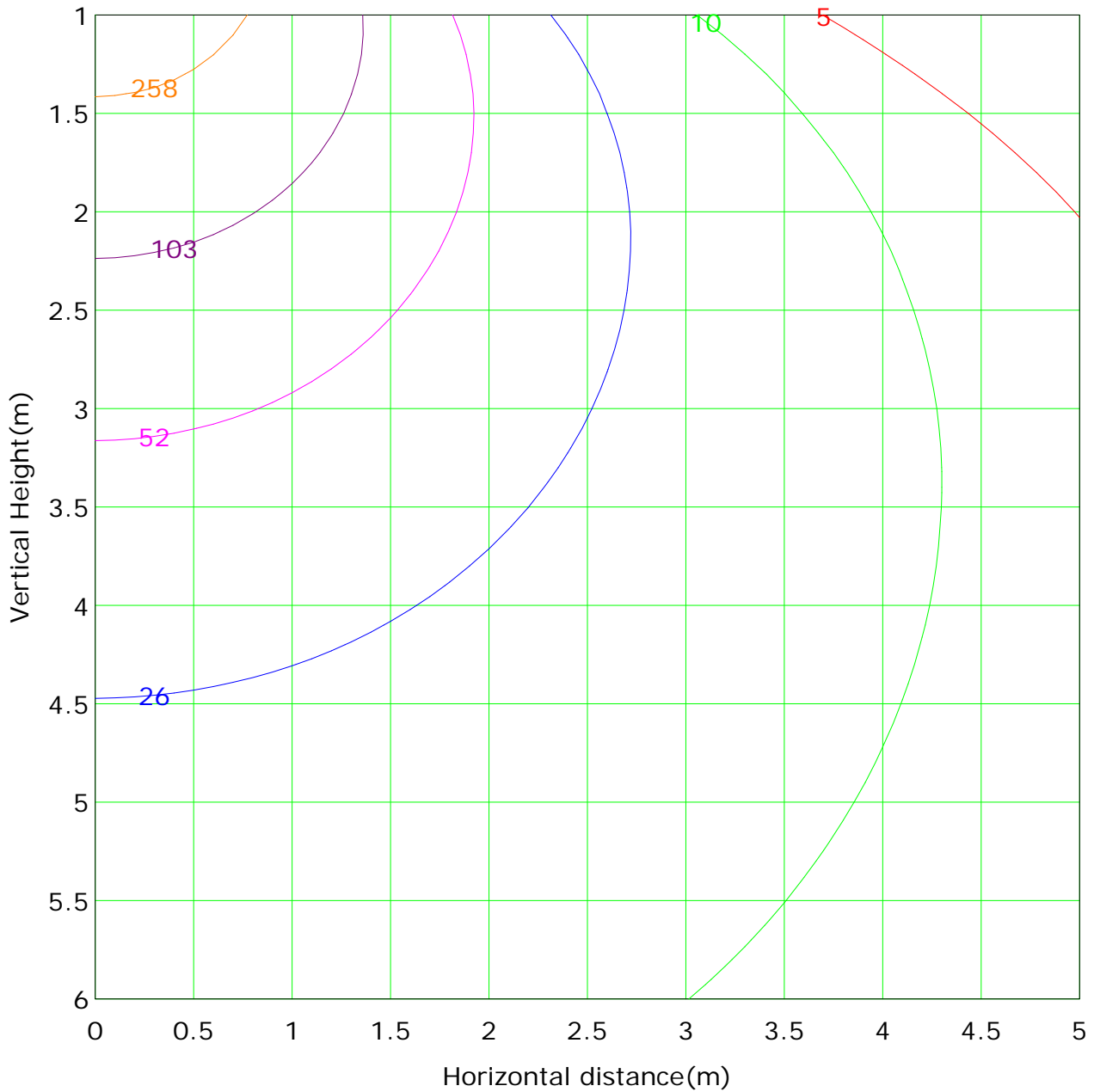
## Illuminance at a Distance







## Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 515.0 lx
— ( 1%): 5.2 lx	— ( 2%): 10.3 lx	
— ( 5%): 25.8 lx	— (10%): 51.5 lx	
— (20%): 103.0 lx	— (50%): 257.5 lx	
— (100%): 515.0 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:



Report No.:

Test Time: 29/08/2018 16:15

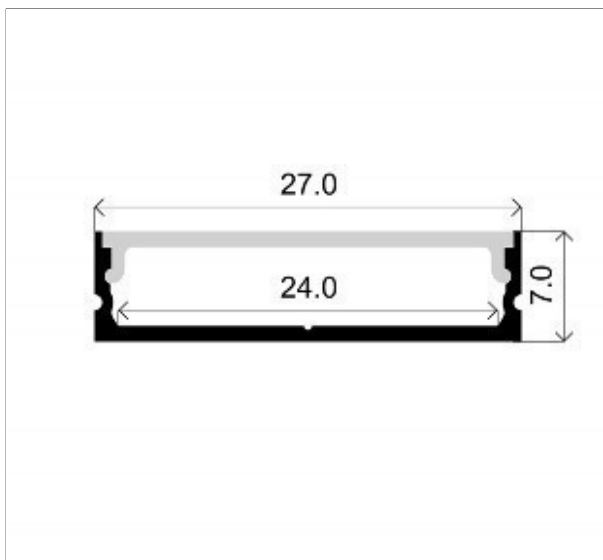
## Luminaire Property

Luminaire Manufacturer: Lighting Line  
 Luminaire Description: LLP-SL07-05 + LLD-05-FM  
 Lamp Description: Strip 14,4W/m 60led/m      Number of Lamps: 1  
 Lumens per Lamp: 1579 lm      Voltage: 24.0 V  
 Current: 0.590 A      Power: 14.15 W  
 Power Factor: 1.000

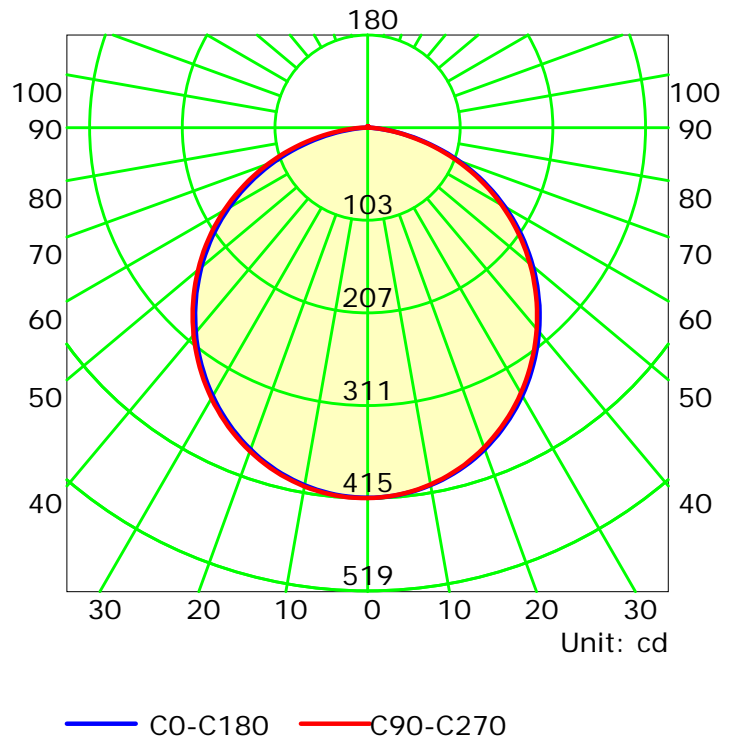
## Photometric Results

CIE Class: Direct	Total Rated Lamp Lumens: 1579.0 lm
Measurement Flux: 1171.1 lm	Efficiency: 74.17%
Downward Ratio: 73.84%	Upward Ratio: 0.33%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.8, 160.8, 160.4, 160.3	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.3, 111.4, 111.4, 111.4	
Luminaire Efficacy Rating (LER): 82.82	Central Intensity: 415.1 cd
Max. Intensity: 415.65 cd	Pos of Max. Intensity: H170 V0
S/MH(C0/C180): 1.24	S/MH(C90/C270): 1.24

Picture Of Luminaire



Luminous Intensity Distribution Curve

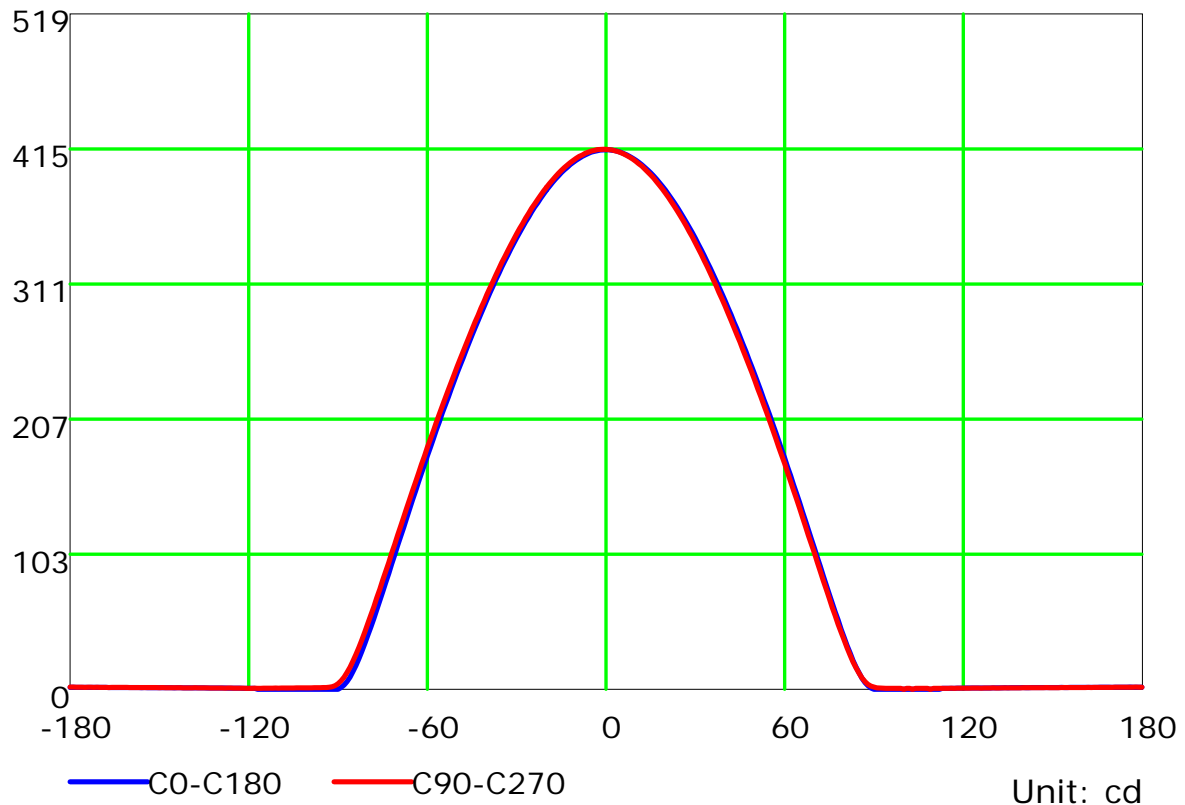
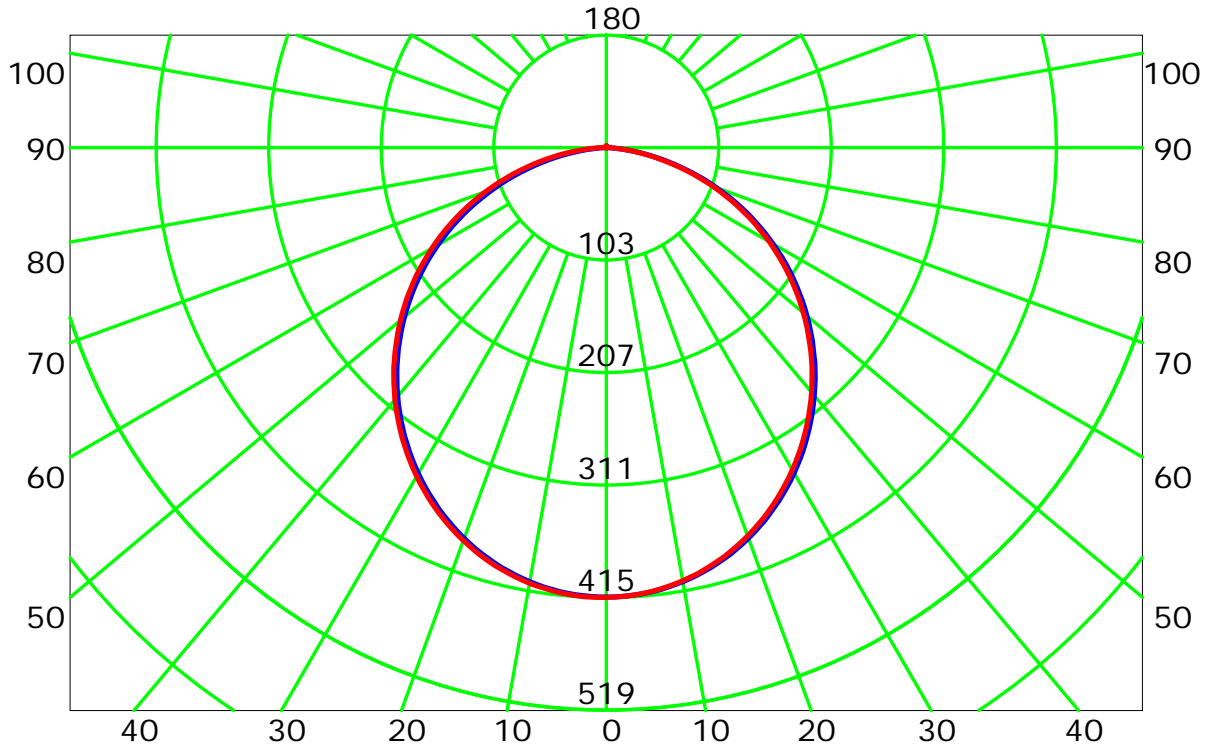


C Plane (°):0.0-360.0: 10.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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



## Luminous Intensity Distribution Curve

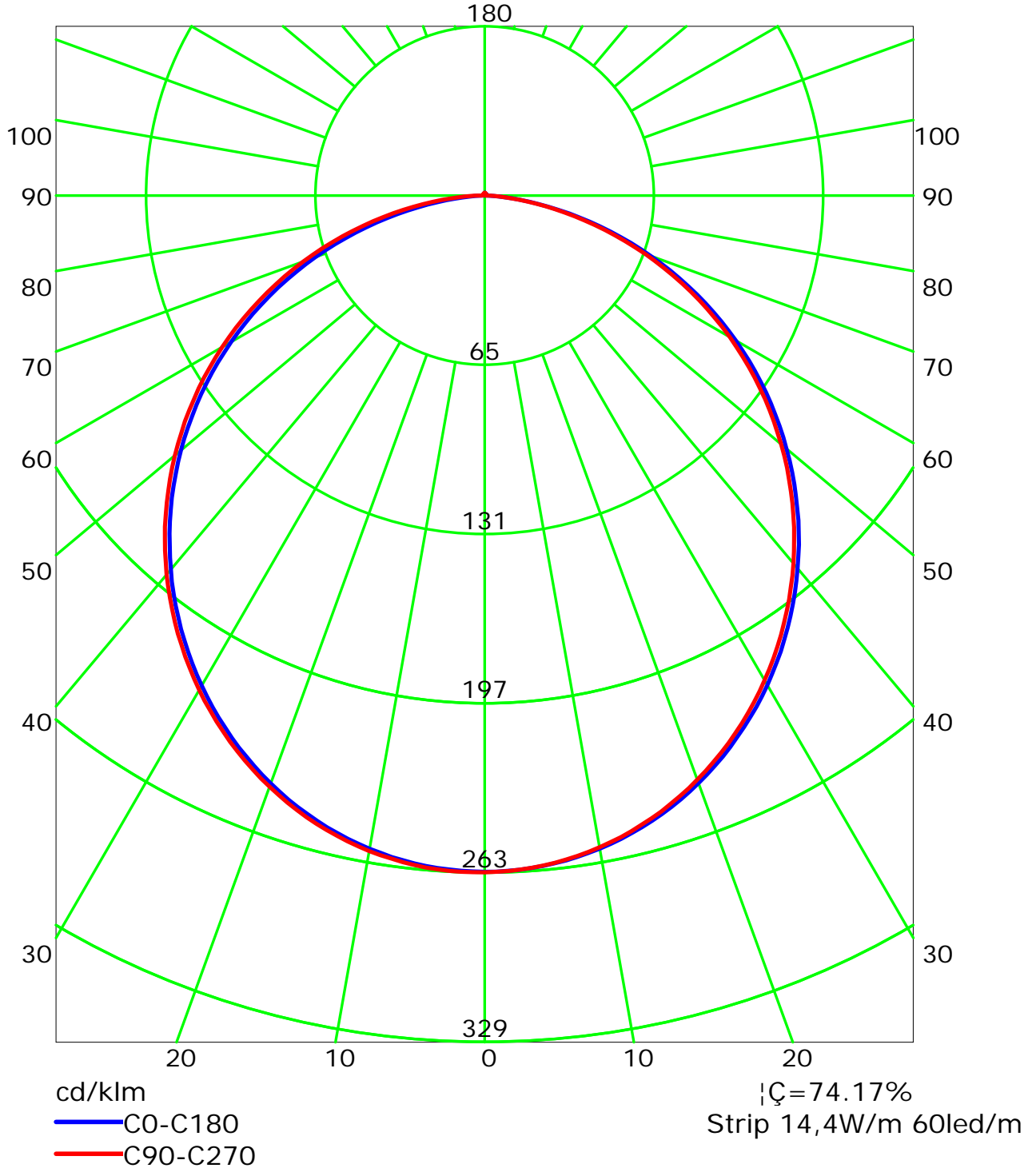


C Plane (°):0.0-360.0: 10.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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



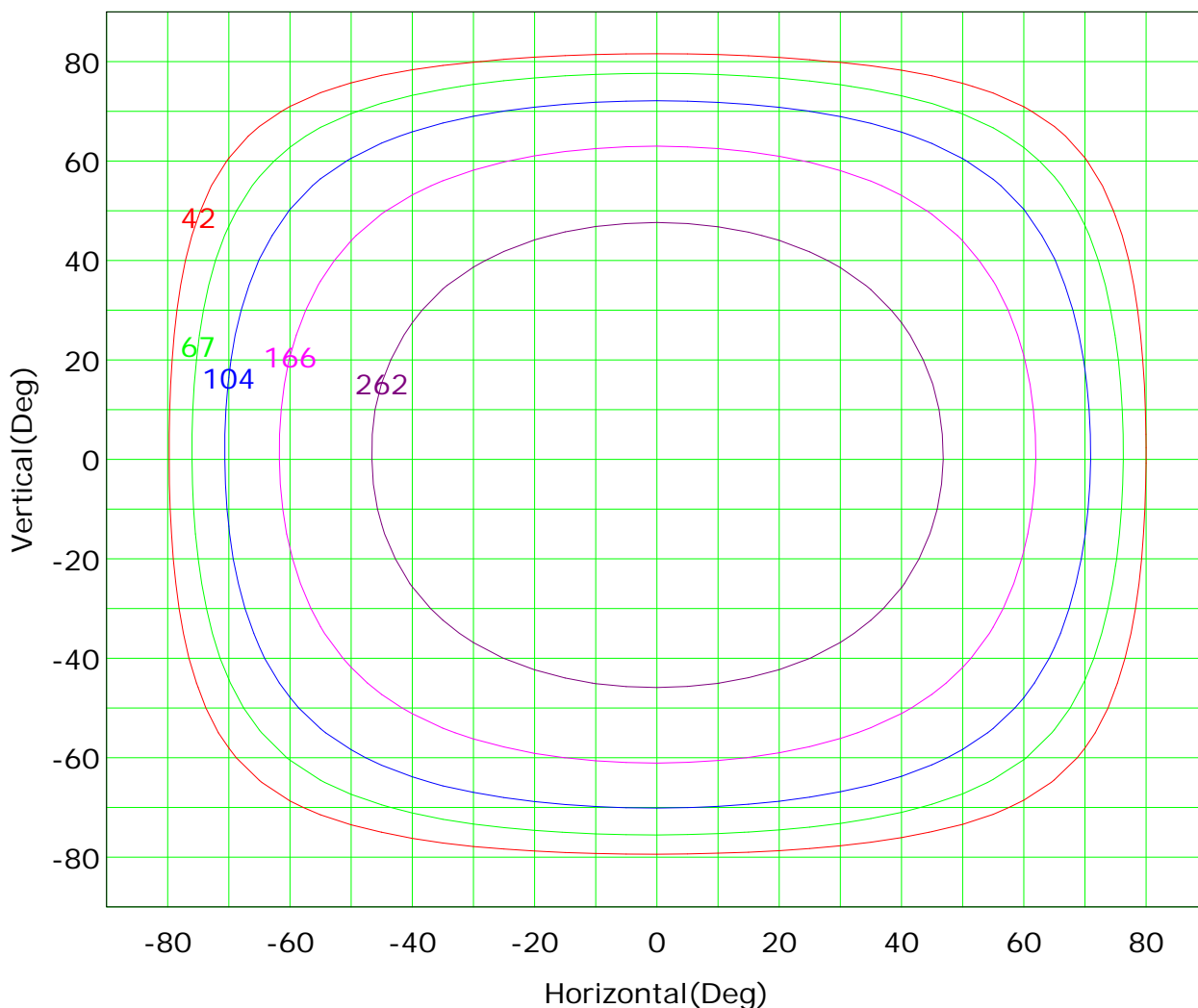
## Luminous Intensity Distribution Curve(cd/klm)



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%): 416 cd

- |           |        |           |        |
|-----------|--------|-----------|--------|
| — ( 10%): | 42 cd  | — ( 16%): | 67 cd  |
| — ( 25%): | 104 cd | — ( 40%): | 166 cd |
| — ( 63%): | 262 cd | — (100%): | 416 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

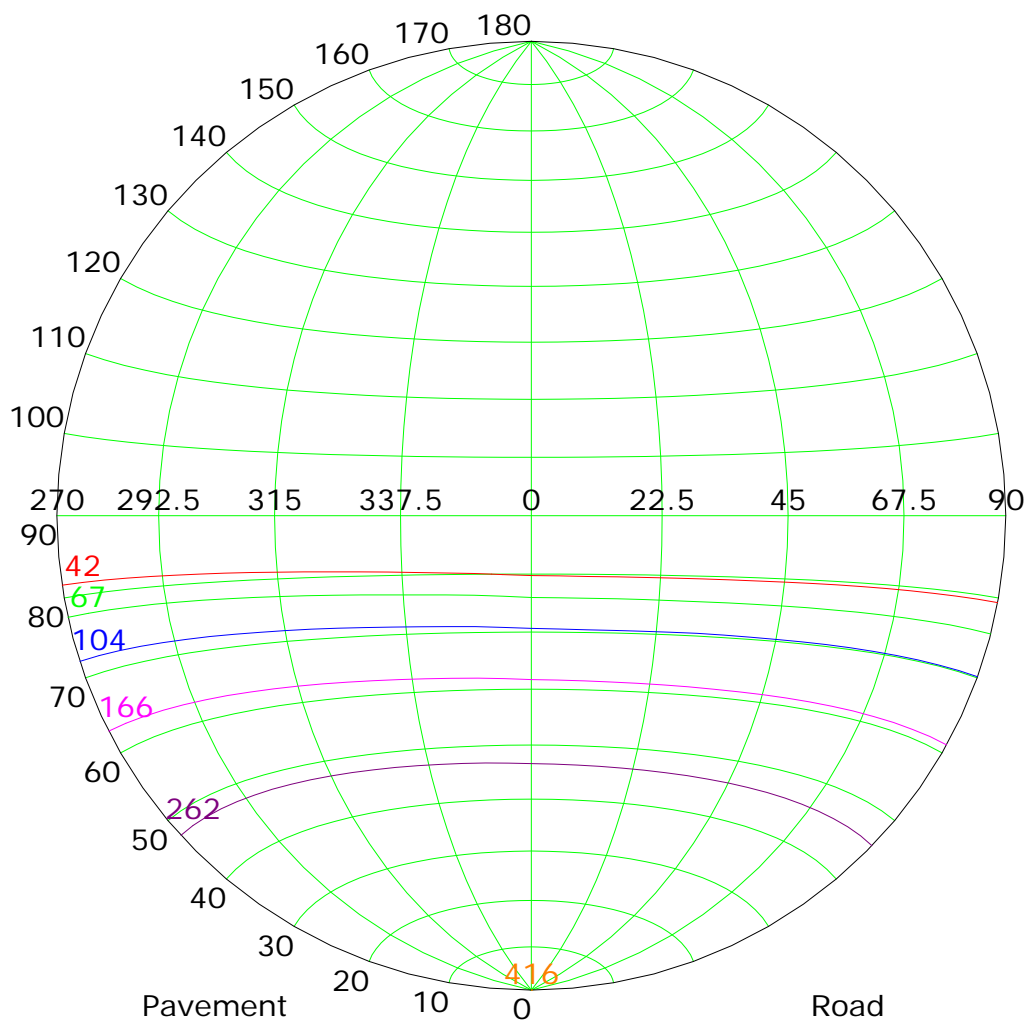
Distance: 7.970 m

Humidity:

Inspector:



## Isocandela (sphere)



Imax (100%): 416 cd

- |           |        |           |        |
|-----------|--------|-----------|--------|
| — ( 10%): | 42 cd  | — ( 16%): | 67 cd  |
| — ( 25%): | 104 cd | — ( 40%): | 166 cd |
| — ( 63%): | 262 cd | — (100%): | 416 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

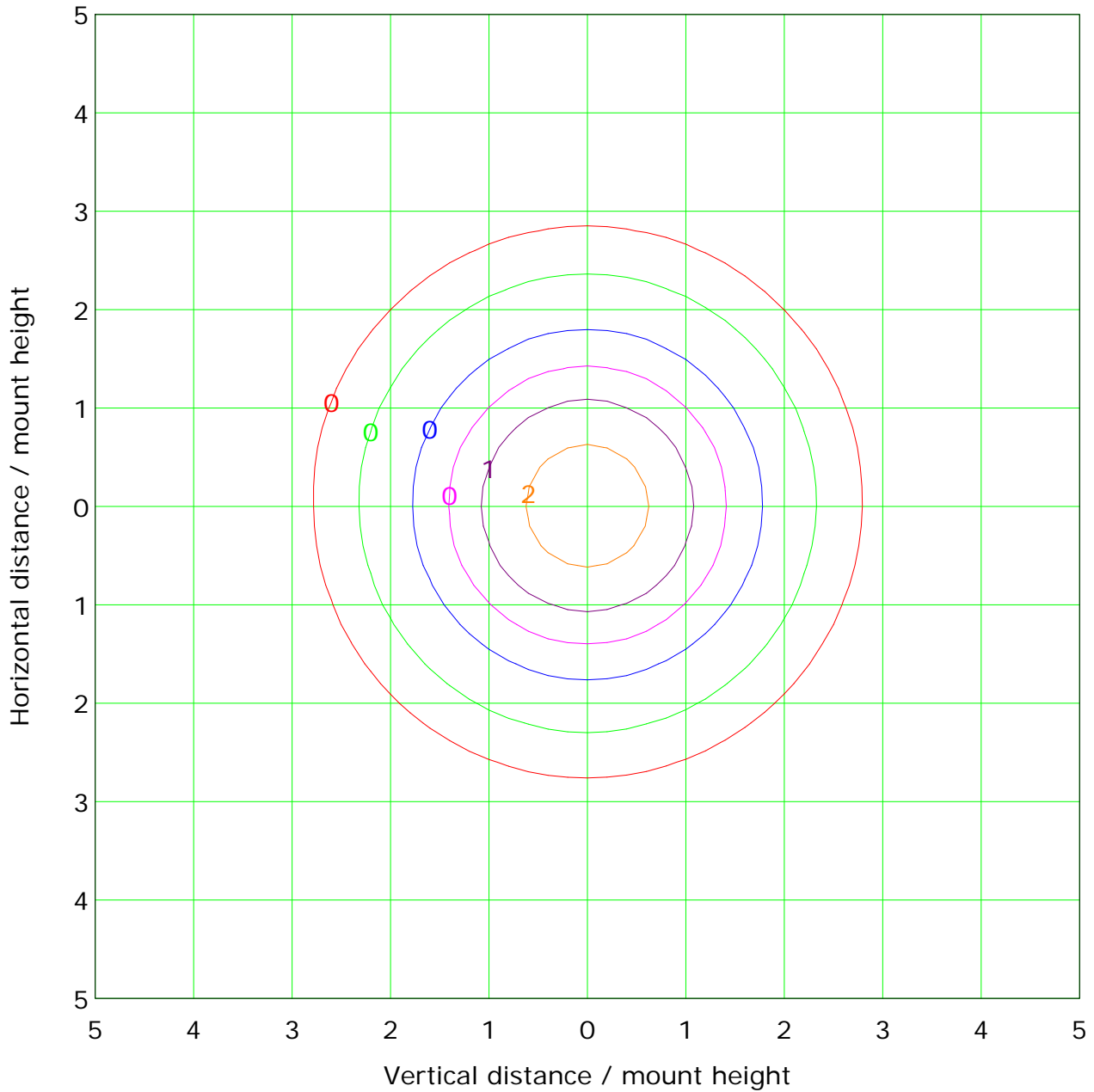
Distance: 7.970 m

Humidity:

Inspector:



## IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 4.2 lx	
— ( 1%):	0.0 lx	— ( 2%):	0.1 lx
— ( 5%):	0.2 lx	— (10%):	0.4 lx
— (20%):	0.8 lx	— (50%):	2.1 lx
— (100%):	4.2 lx		

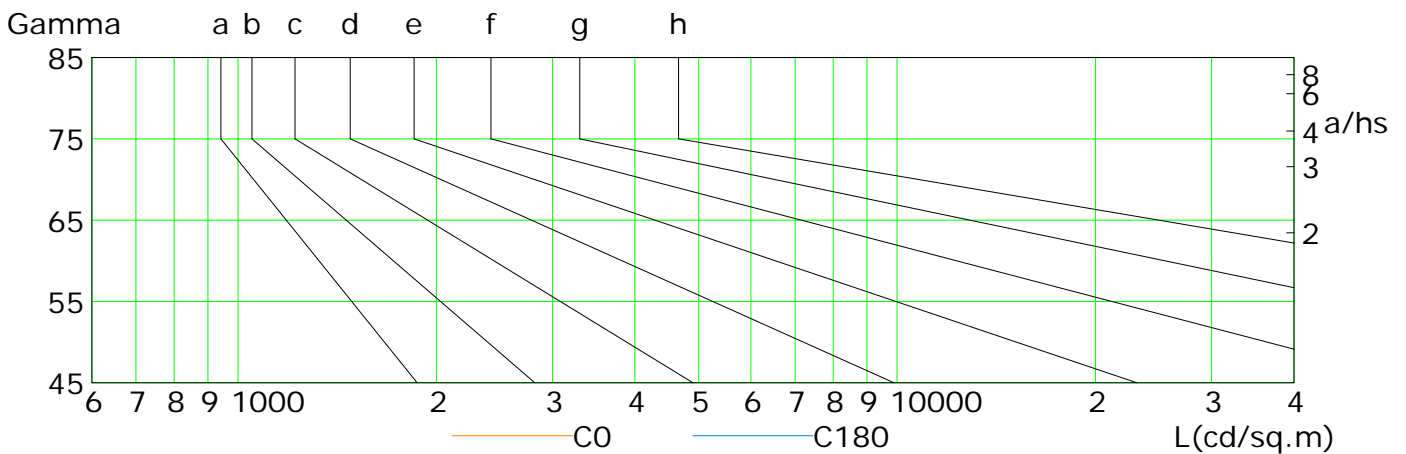
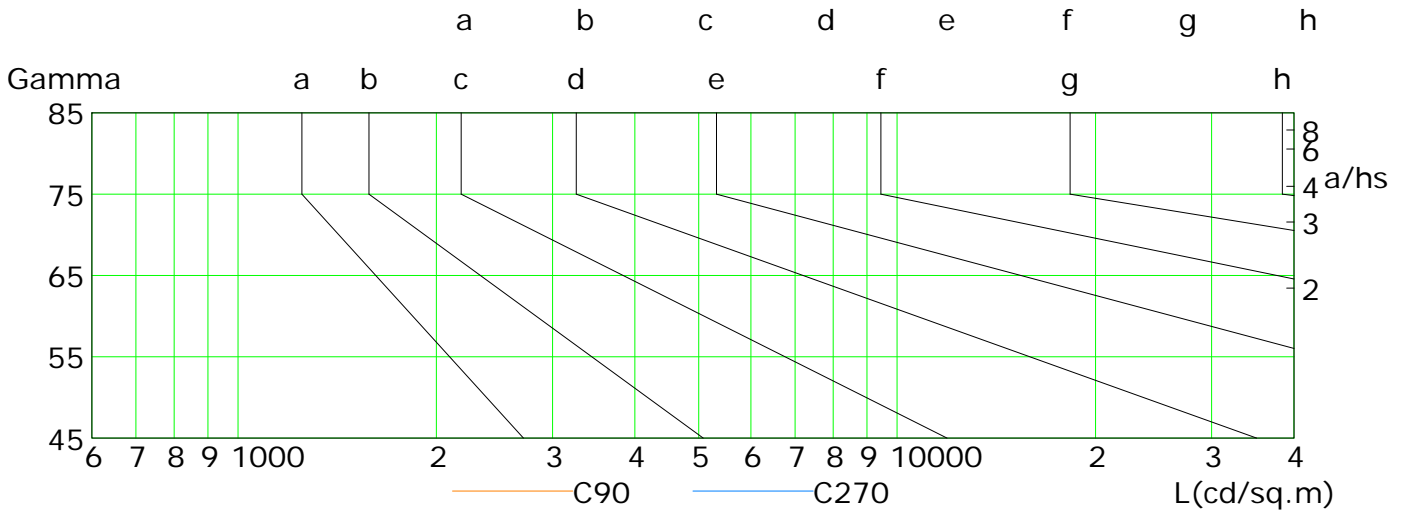
C Plane (°):0.0-360.0: 10.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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	271	242	211	178	144	108	73	40	13
C90	267	238	206	174	140	105	70	38	12
C180	273	243	213	180	146	111	75	42	14
C270	277	248	218	186	153	118	84	51	22

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

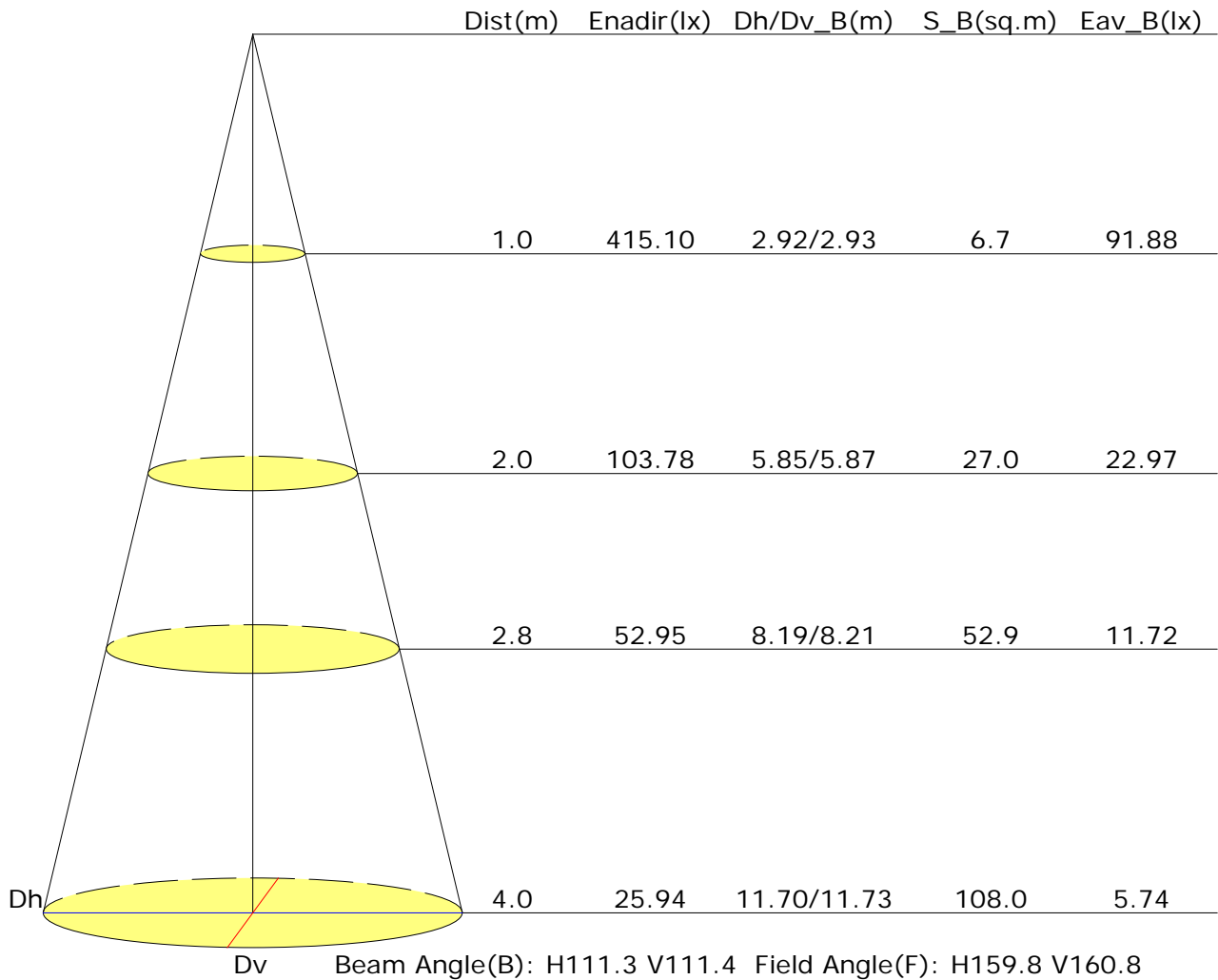
Humidity:

Inspector:



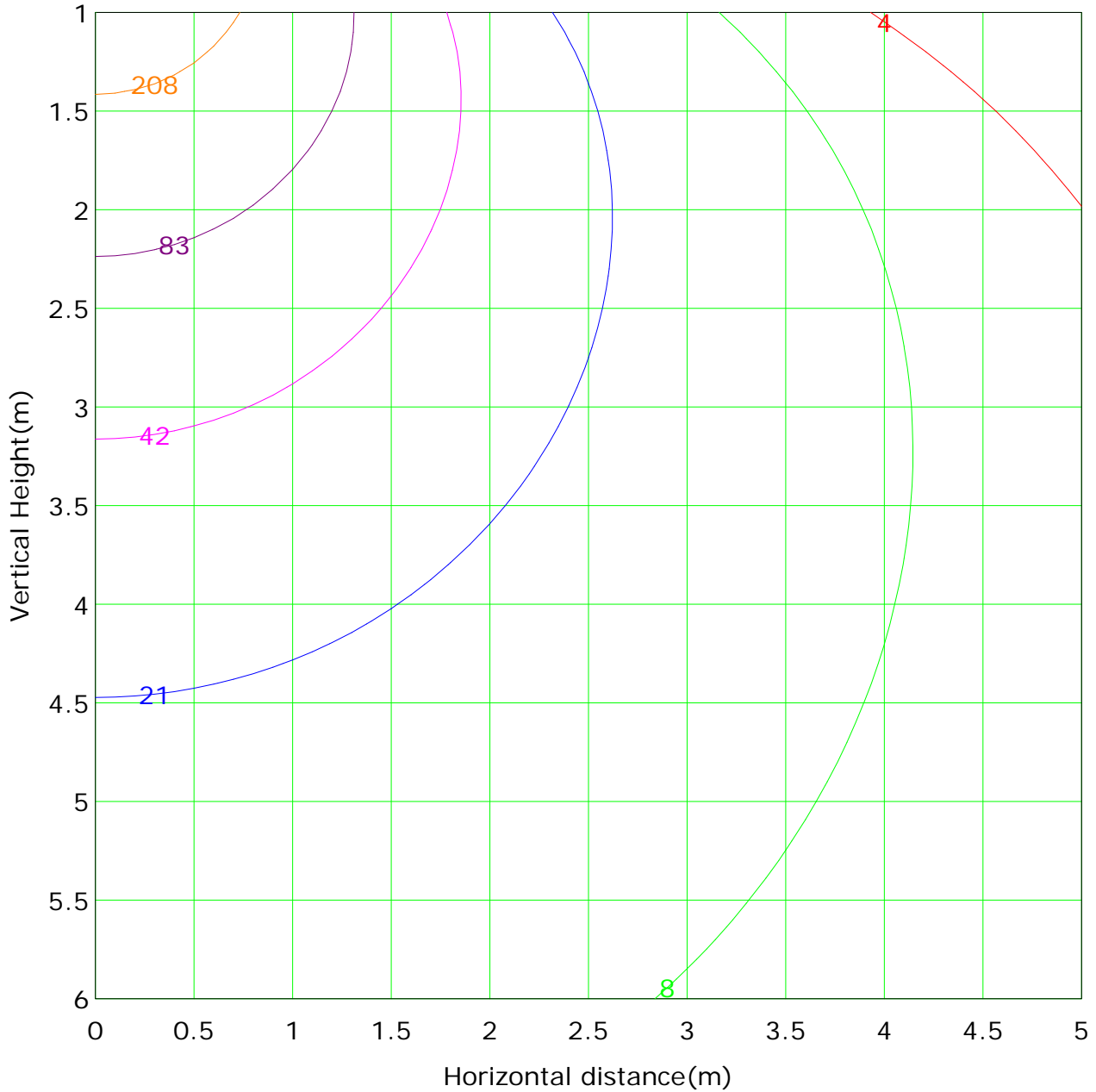


## Illuminance at a Distance





## Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 415.1 lx
— ( 1%): 4.2 lx	— ( 2%): 8.3 lx	— ( 10%): 41.5 lx
— ( 5%): 20.8 lx	— ( 20%): 83.0 lx	— ( 50%): 207.6 lx
— (100%): 415.1 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: 27/09/2018 10:14

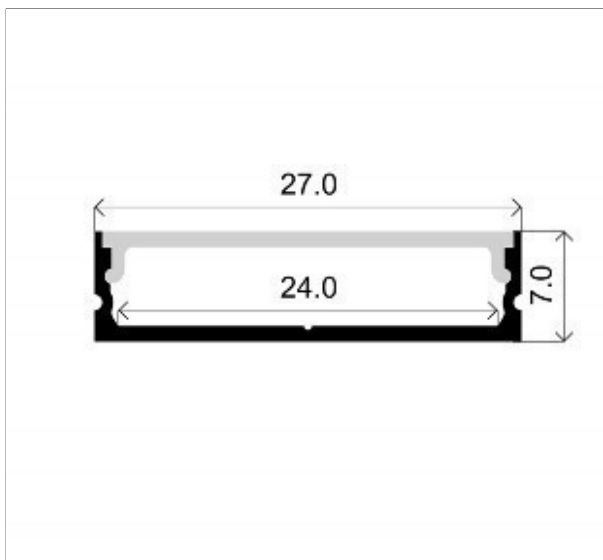
## Luminaire Property

Luminaire Manufacturer: Lighting Line  
 Luminaire Description: LLP-SL07-05 + LLD-05-FS  
 Lamp Description: Strip 14,4W/m 60led/m      Number of Lamps: 1  
 Lumens per Lamp: 1579 lm      Voltage: 24.0 V  
 Current: 0.584 A      Power: 14.02 W  
 Power Factor: 1.000

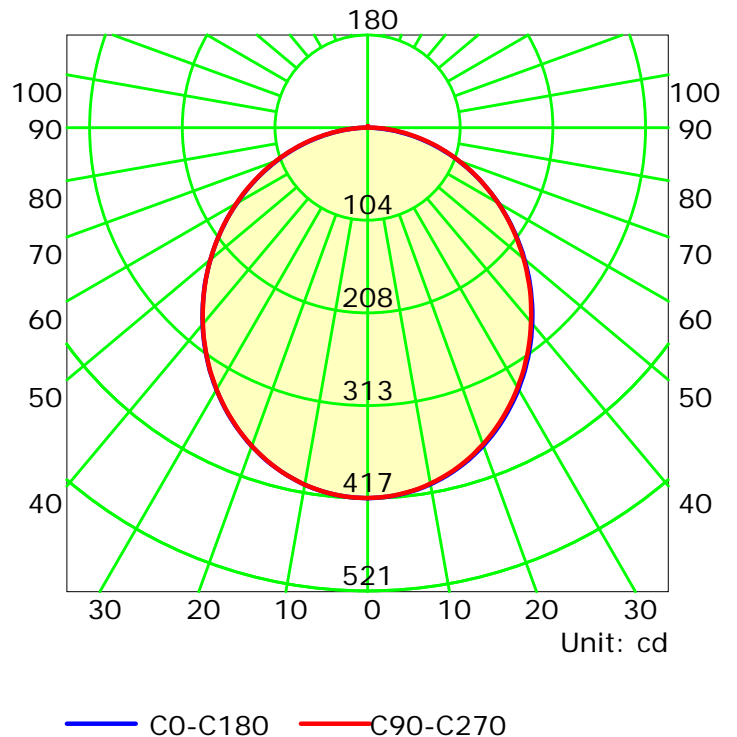
## Photometric Results

CIE Class: Direct	Total Rated Lamp Lumens: 1579.0 lm
Measurement Flux: 1148.9 lm	Efficiency: 72.76%
Downward Ratio: 72.46%	Upward Ratio: 0.29%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 162.7, 163.6, 163.3, 163.2	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 107.4, 107.3, 107.5, 107.4	
Luminaire Efficacy Rating (LER): 81.99	Central Intensity: 417.36 cd
Max. Intensity: 417.48 cd	Pos of Max. Intensity: H10 V0
S/MH(C0/C180): 1.22	S/MH(C90/C270): 1.21

Picture Of Luminaire



Luminous Intensity Distribution Curve

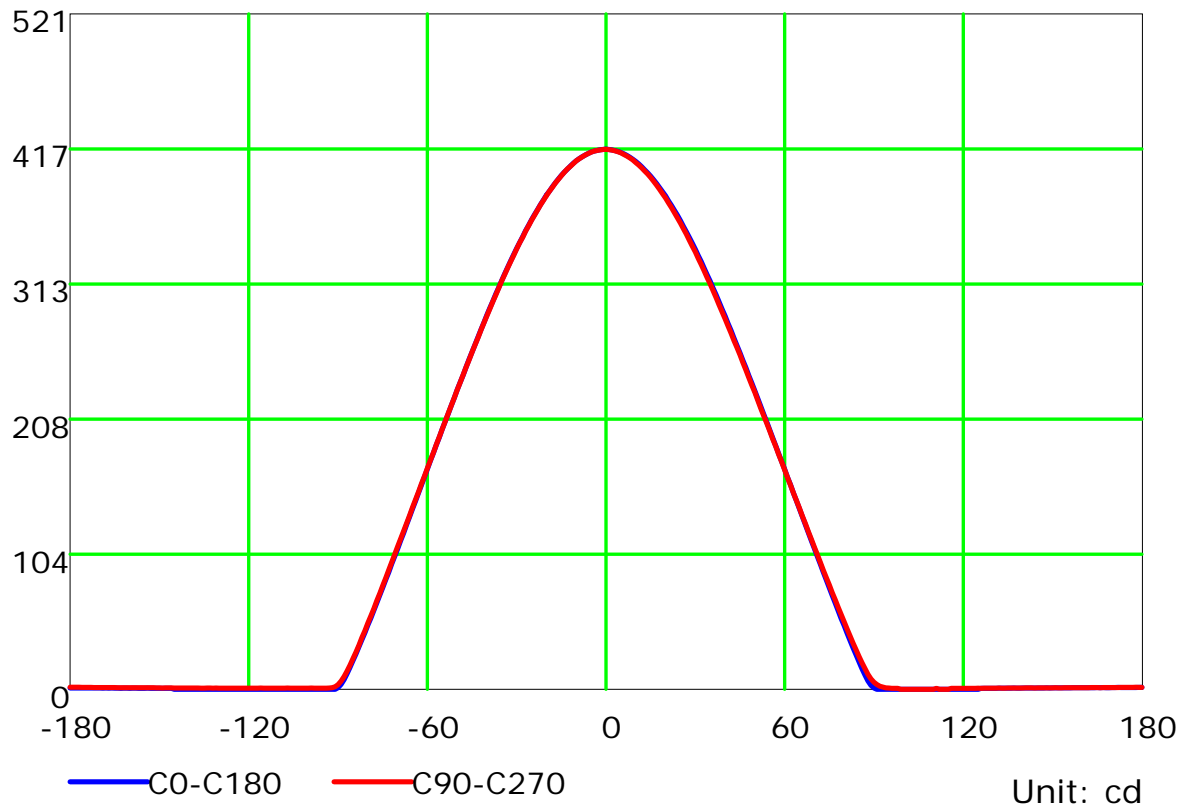
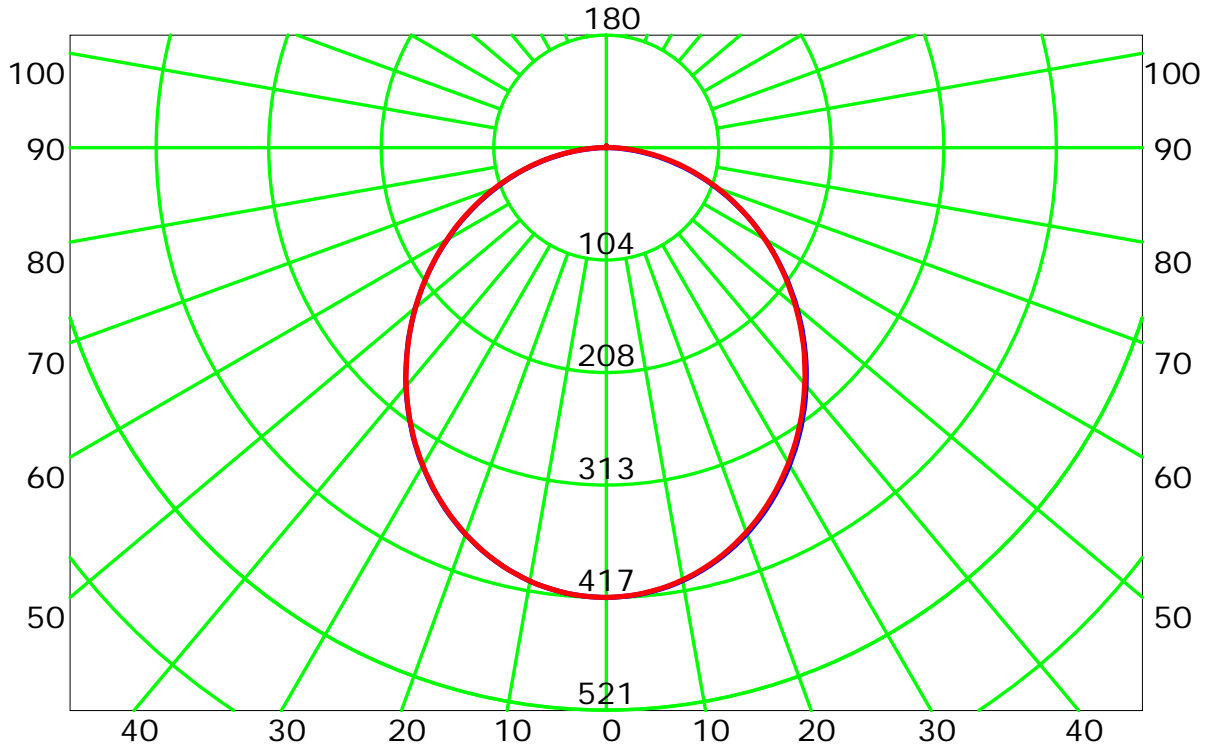


C Plane (°):0.0-360.0: 10.0  
 Test Lab:  
 Test Type: TYPE C  
 Temperature:  
 Operator:

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



## Luminous Intensity Distribution Curve

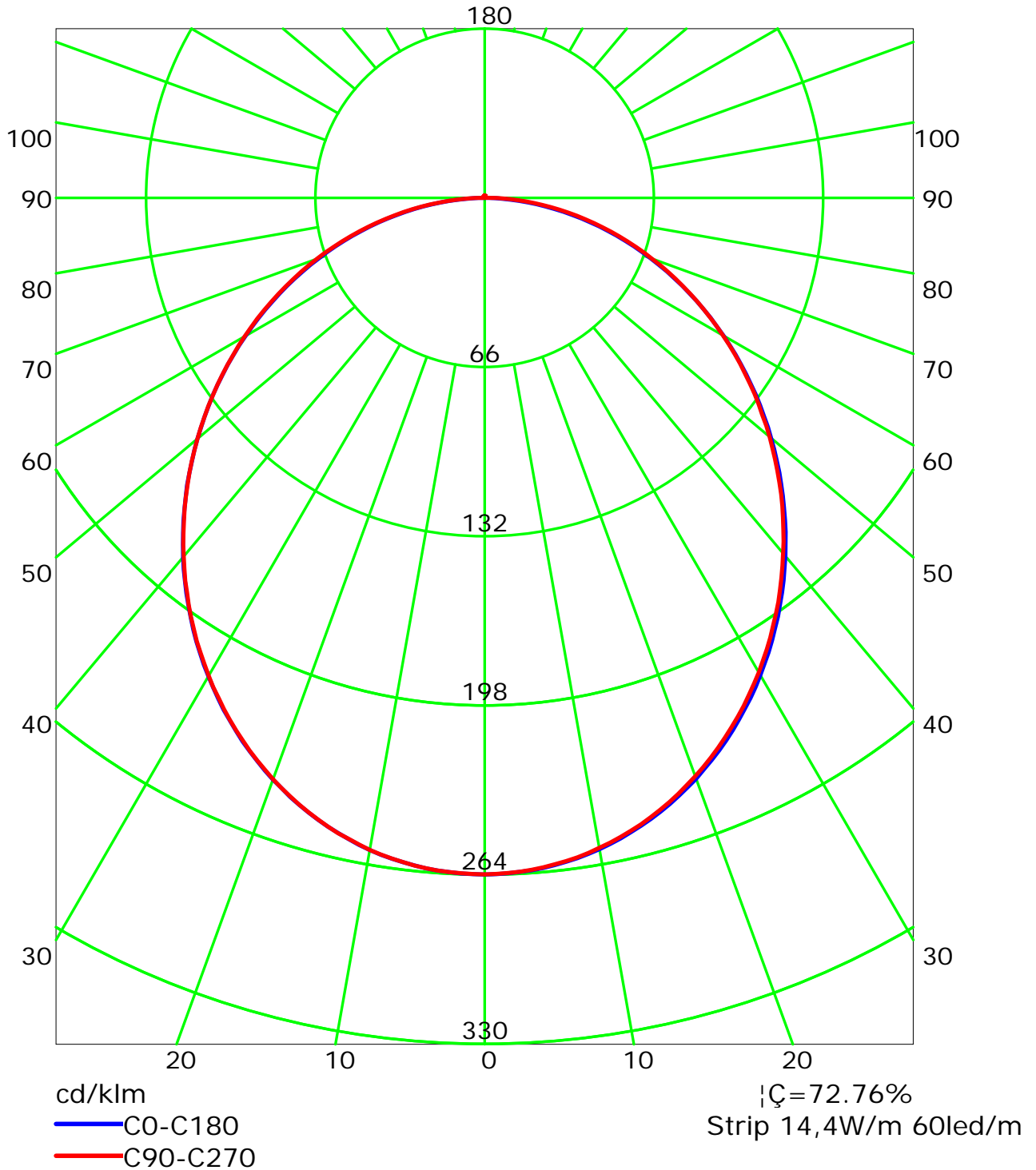


C Plane (°):0.0-360.0: 10.0  
Test Lab:  
Test Type: TYPE C  
Temperature:  
Operator:

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



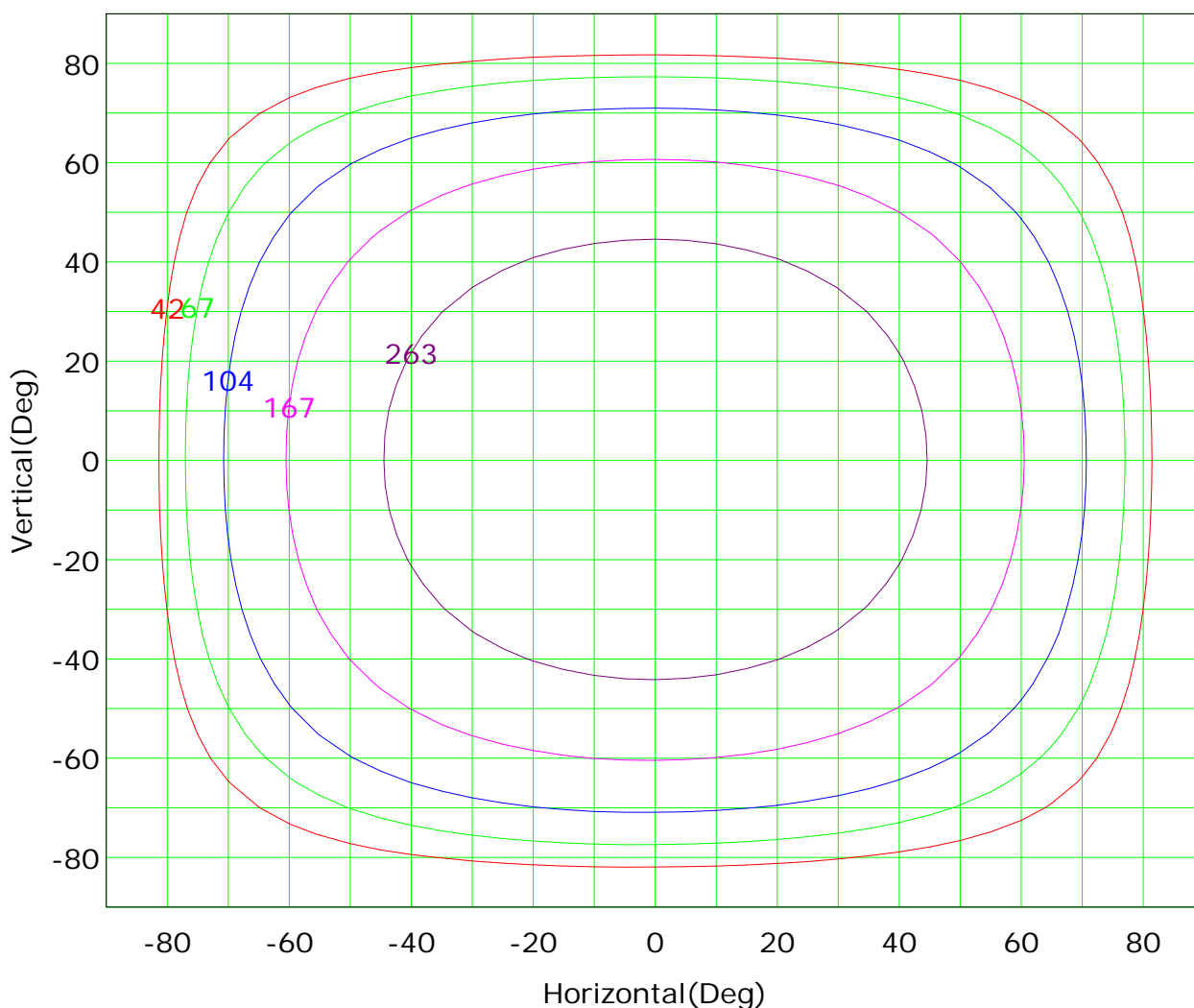
## Luminous Intensity Distribution Curve(cd/klm)



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%): 417 cd

— ( 10%):	42 cd	— ( 16%):	67 cd
— ( 25%):	104 cd	— ( 40%):	167 cd
— ( 63%):	263 cd	— (100%):	417 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

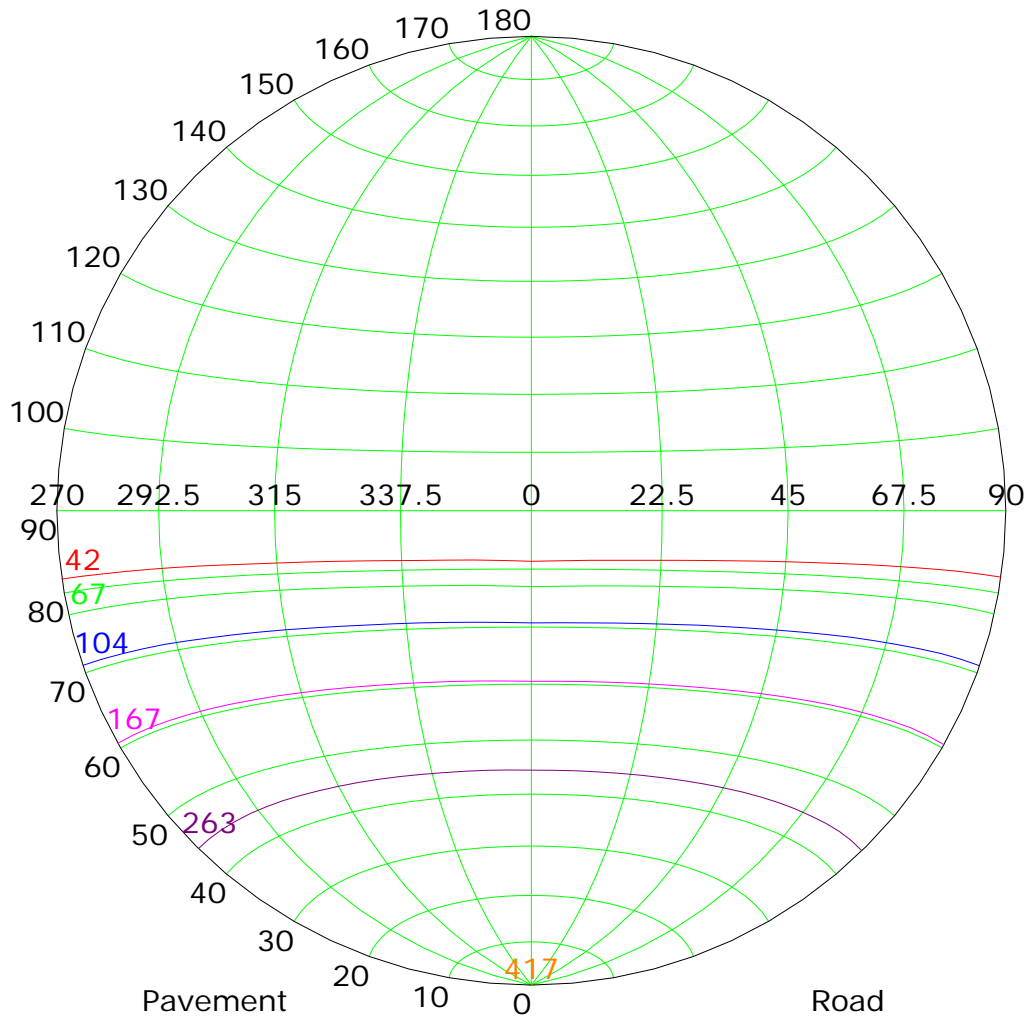
Distance: 7.970 m

Humidity:

Inspector:



## Isocandela (sphere)



Imax (100%): 417 cd

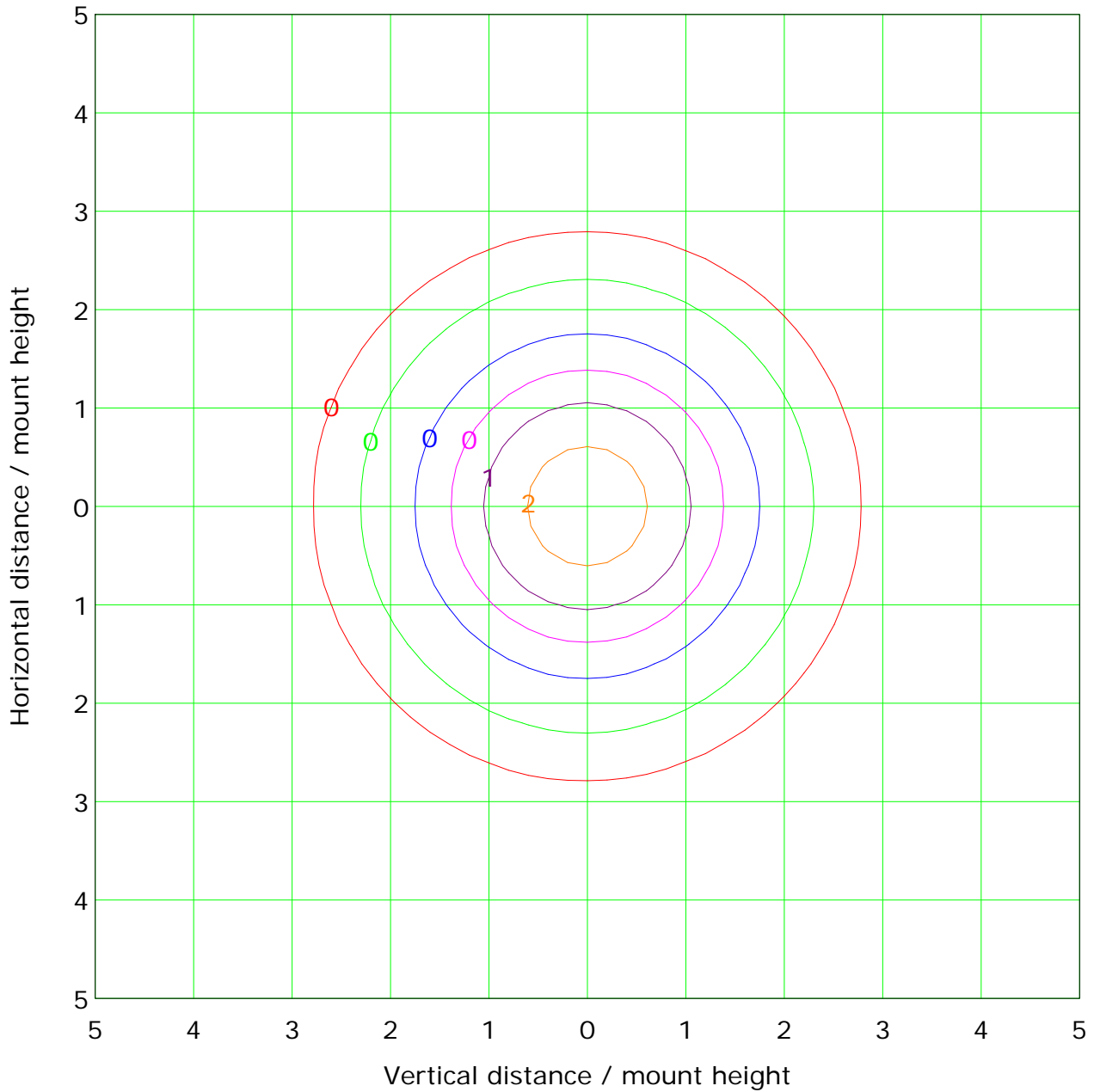
— ( 10%):	42 cd	— ( 16%):	67 cd
— ( 25%):	104 cd	— ( 40%):	167 cd
— ( 63%):	263 cd	— (100%):	417 cd

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%): 4.2 lx	
— ( 1%):	0.0 lx	— ( 2%):	0.1 lx
— ( 5%):	0.2 lx	— ( 10%):	0.4 lx
— ( 20%):	0.8 lx	— ( 50%):	2.1 lx
— (100%):	4.2 lx		

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

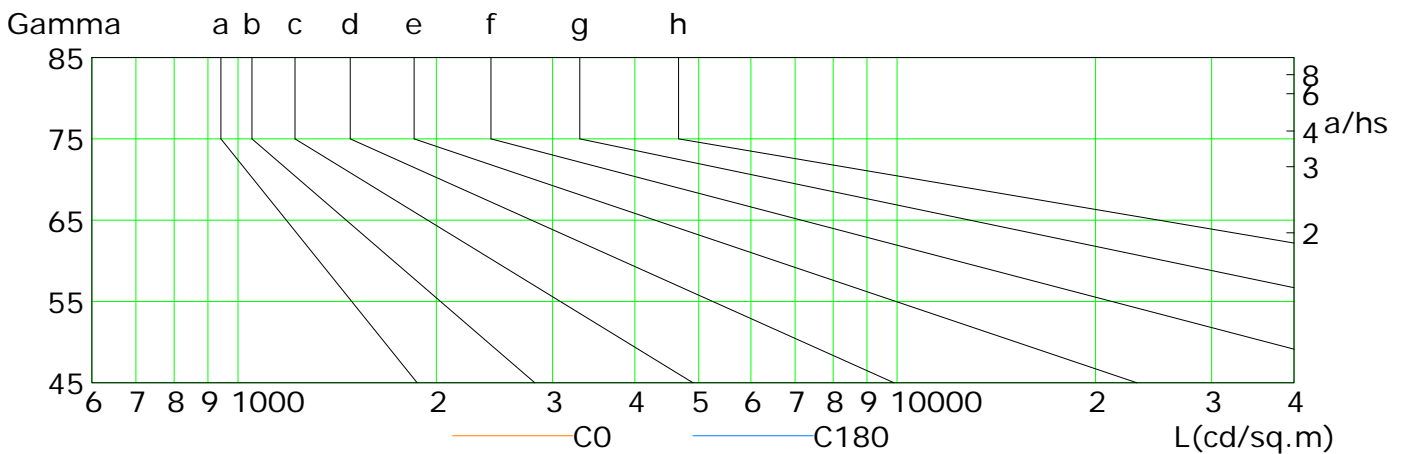
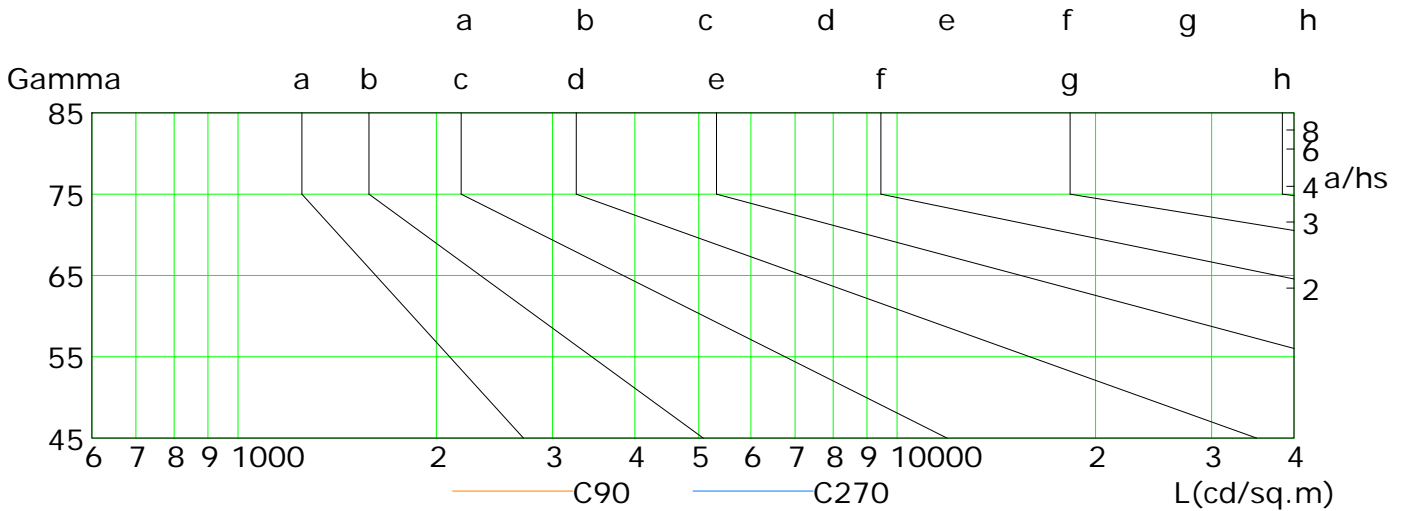
Gamma Plane (°):0.0-180.0:1.0  
 Test Device: GPM-2000  
 Distance: 7.970 m  
 Humidity:  
 Inspector:





## 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	260	231	200	170	139	109	79	49	21
C90	259	229	200	170	140	110	81	52	25
C180	261	231	201	170	139	109	79	50	22
C270	261	231	201	171	141	110	80	51	24

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

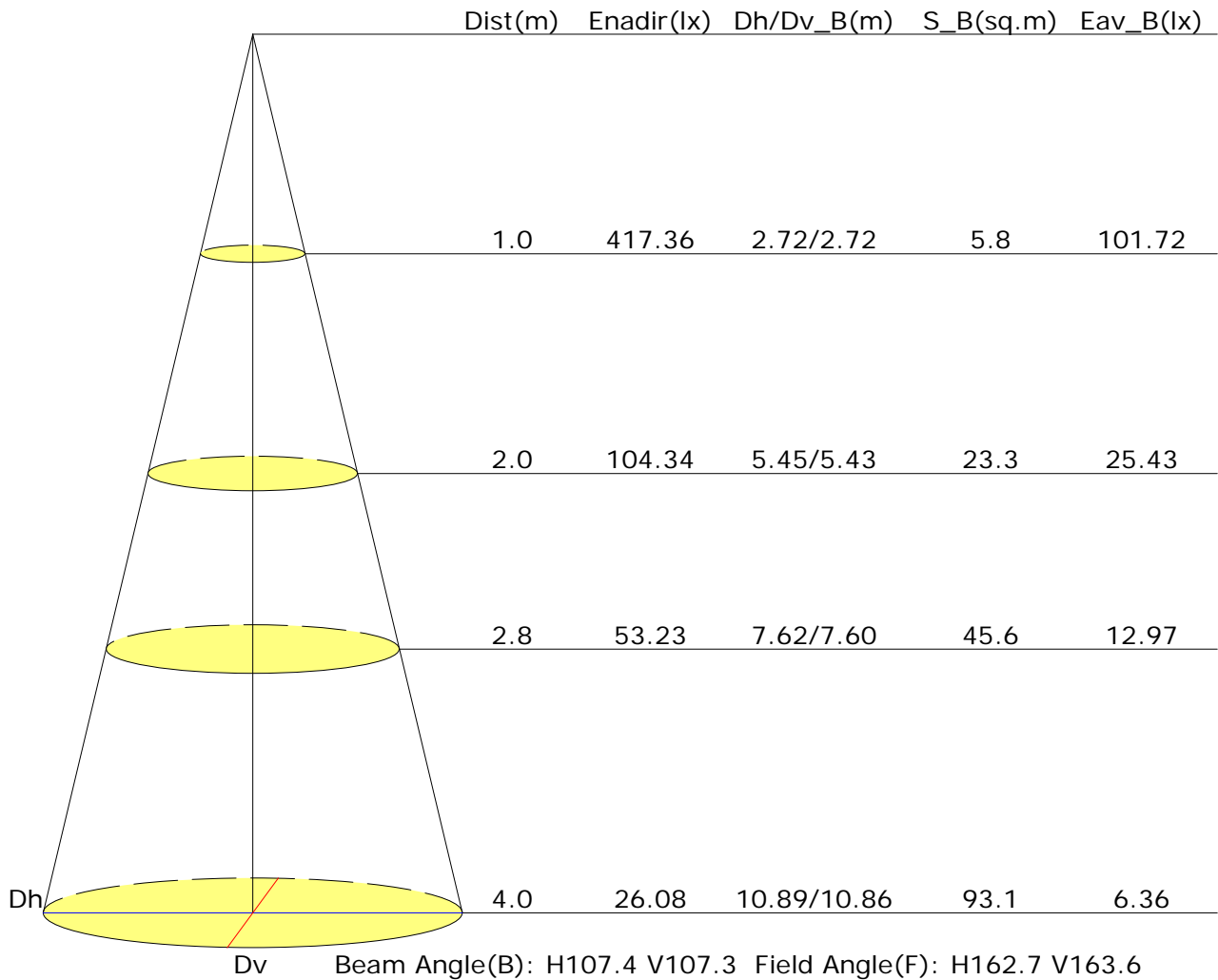
Distance: 7.970 m

Humidity:

Inspector:

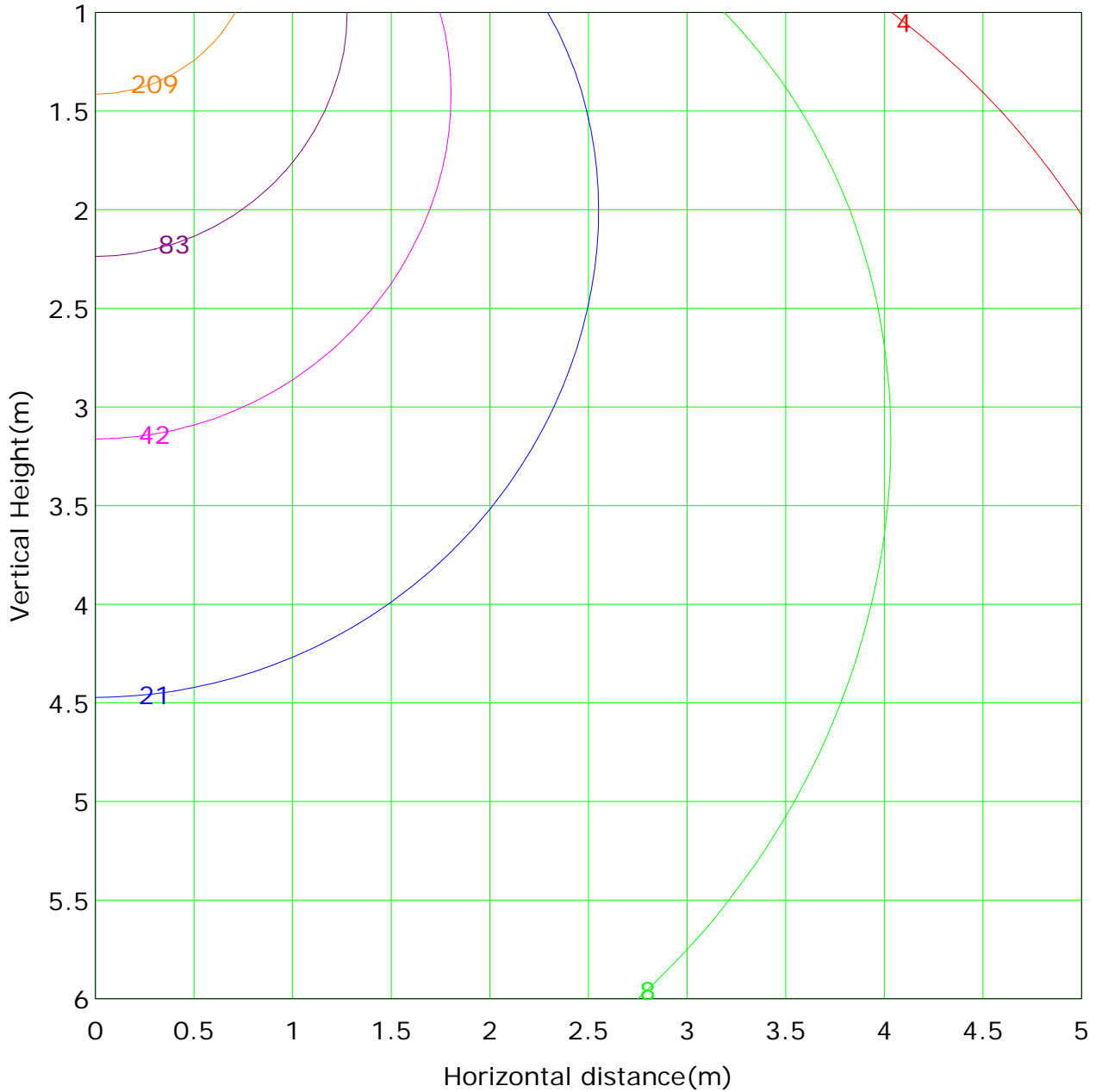


## Illuminance at a Distance





## Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 417.4 lx
( 1%): 4.2 lx	( 2%): 8.3 lx	( 10%): 41.7 lx
( 5%): 20.9 lx	( 20%): 83.5 lx	( 50%): 208.7 lx
(100%): 417.4 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: