



Report No.:

Test Time: 02/08/2018 12:55

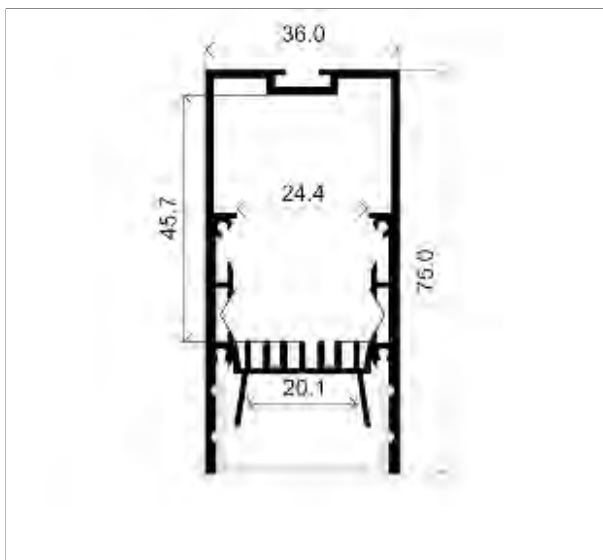
Luminaire Property

Luminaire Manufacturer: Lighting Line
 Luminaire Description: LLP-CL01-06 + LLD-06-CM
 Lamp Description: Strip 14,4W/m 60led/m Number of Lamps: 1
 Lumens per Lamp: 1579 lm Voltage: 24.0 V
 Current: 0.592 A Power: 14.19 W
 Power Factor: 1.000

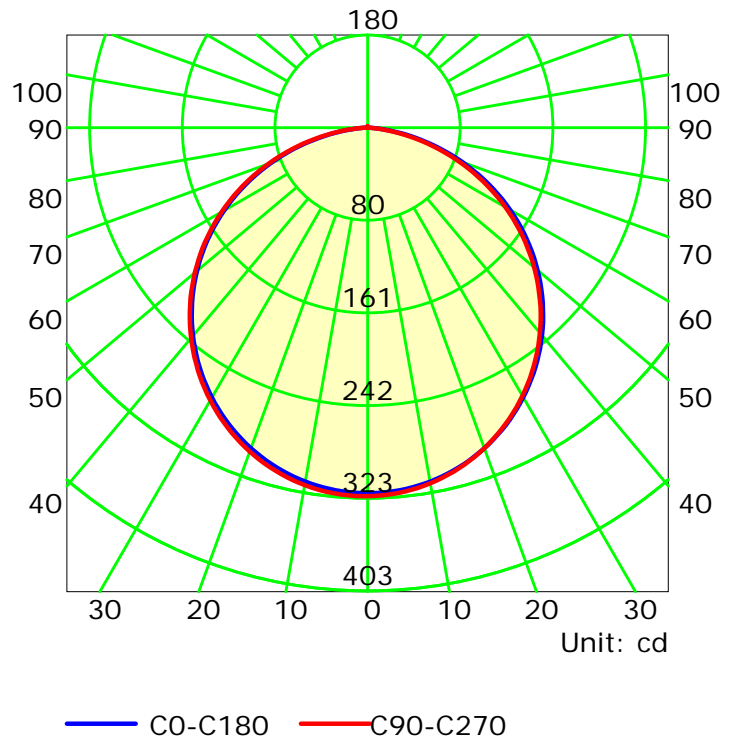
Photometric Results

CIE Class: Direct	Total Rated Lamp Lumens: 1579.0 lm
Measurement Flux: 922.7 lm	Efficiency: 58.44%
Downward Ratio: 58.23%	Upward Ratio: 0.20%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.4, 159.9, 160.1, 160.2	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 114.1, 113.2, 113.7, 113.7	
Luminaire Efficacy Rating (LER): 65.08	Central Intensity: 318.74 cd
Max. Intensity: 321.84 cd	Pos of Max. Intensity: H300 V1
S/MH(C0/C180): 1.27	S/MH(C90/C270): 1.26

Picture Of Luminaire



Luminous Intensity Distribution Curve

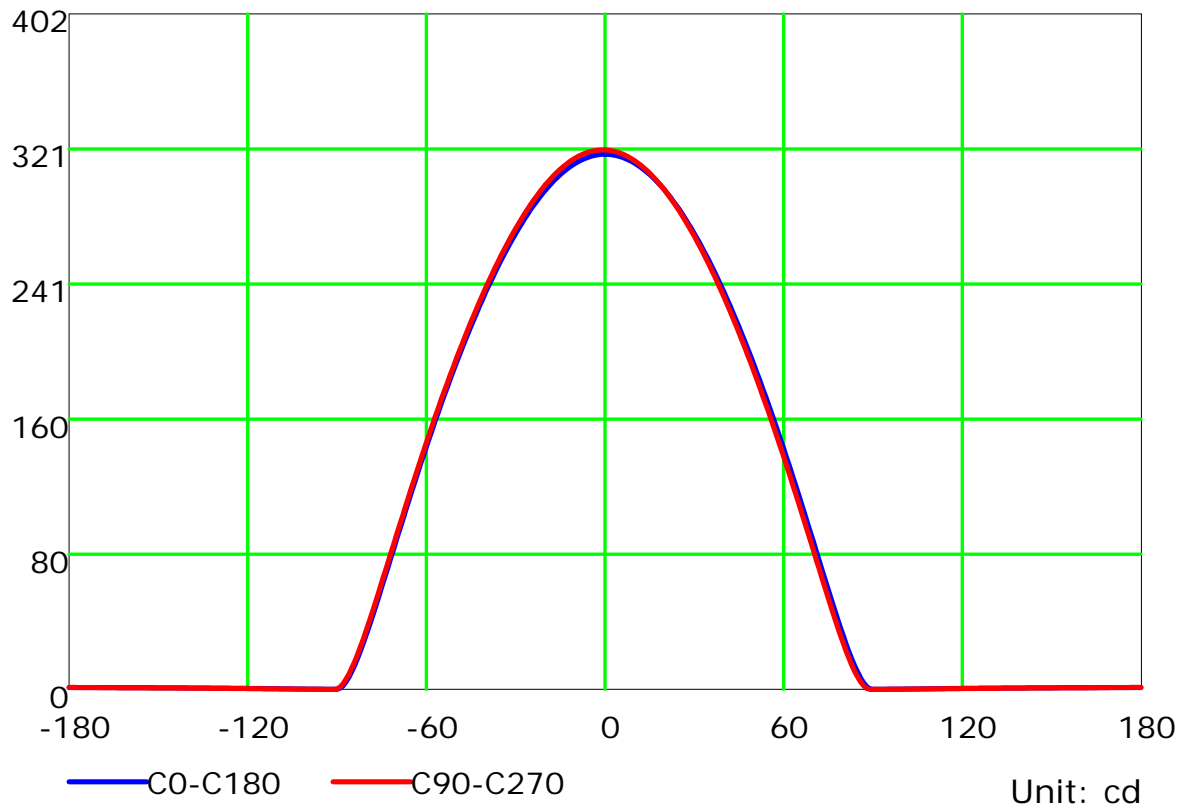
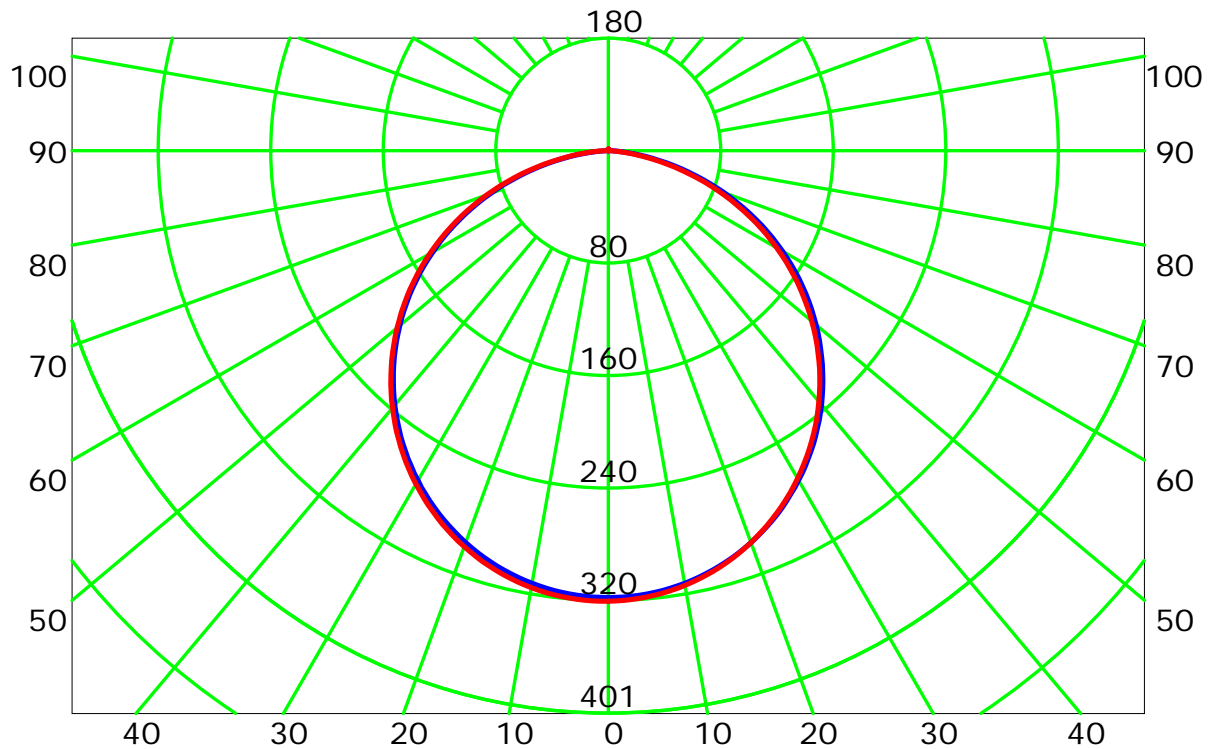


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



Luminous Intensity Distribution Curve

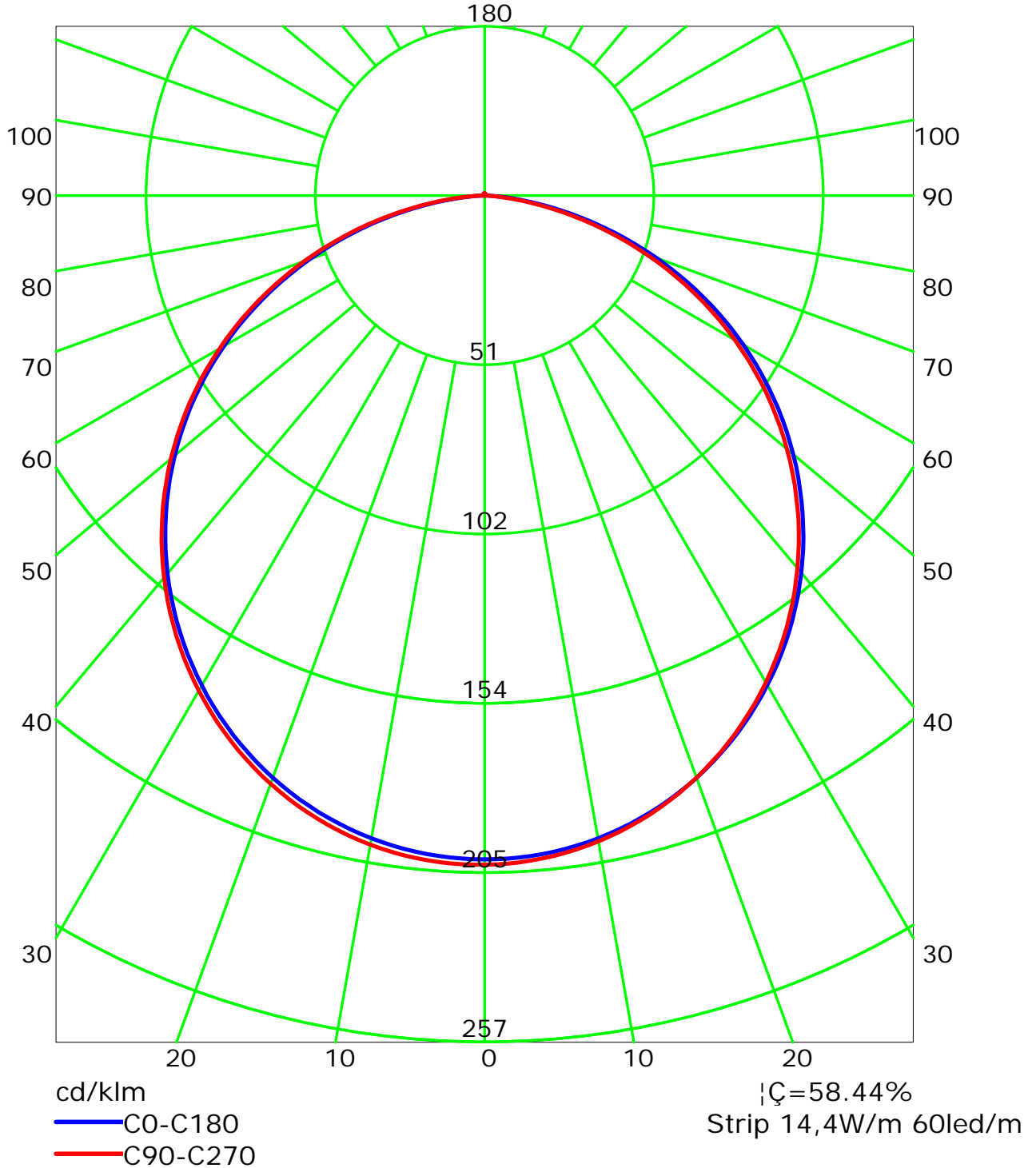


C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



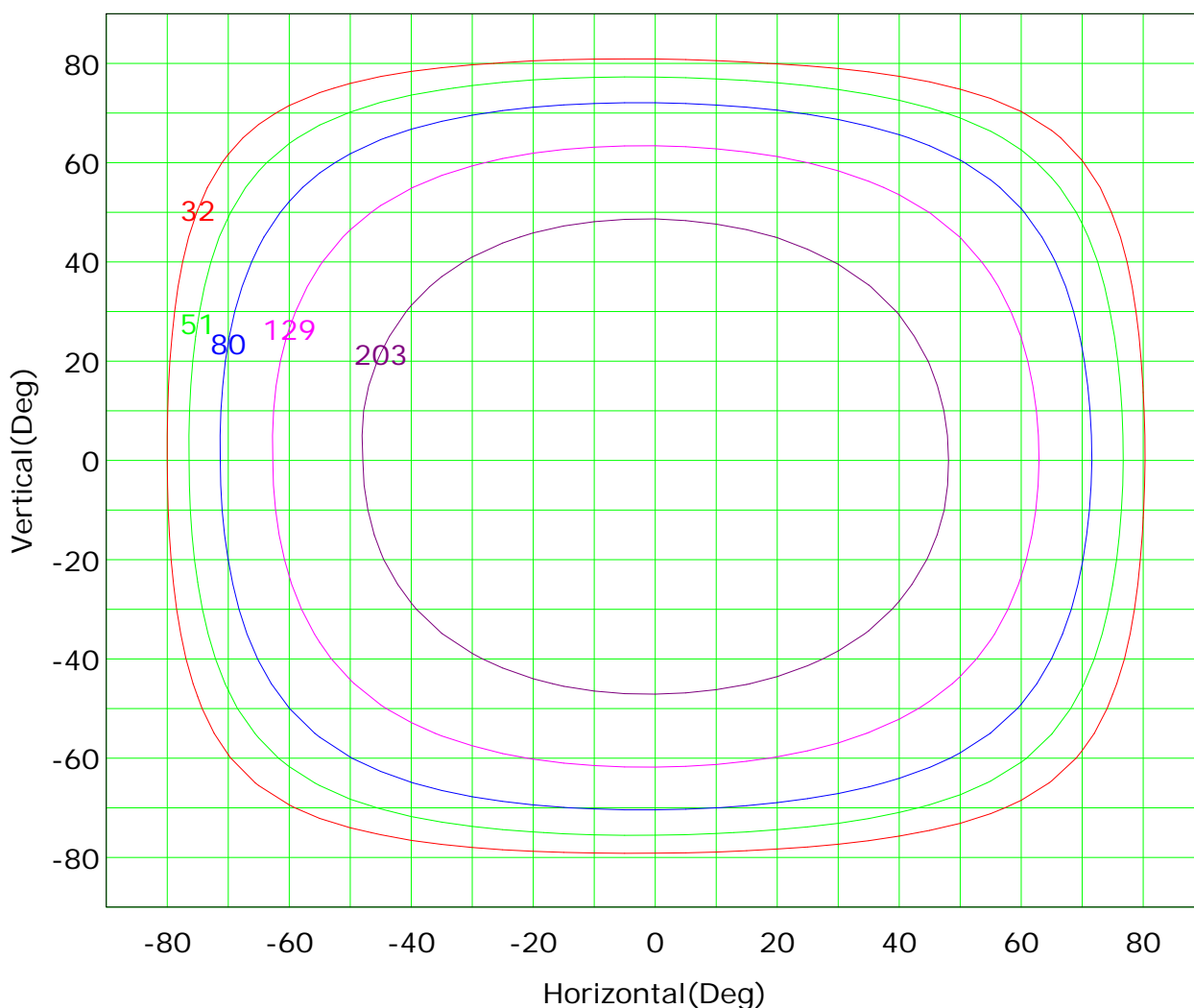
Luminous Intensity Distribution Curve(cd/klm)



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%): 322 cd

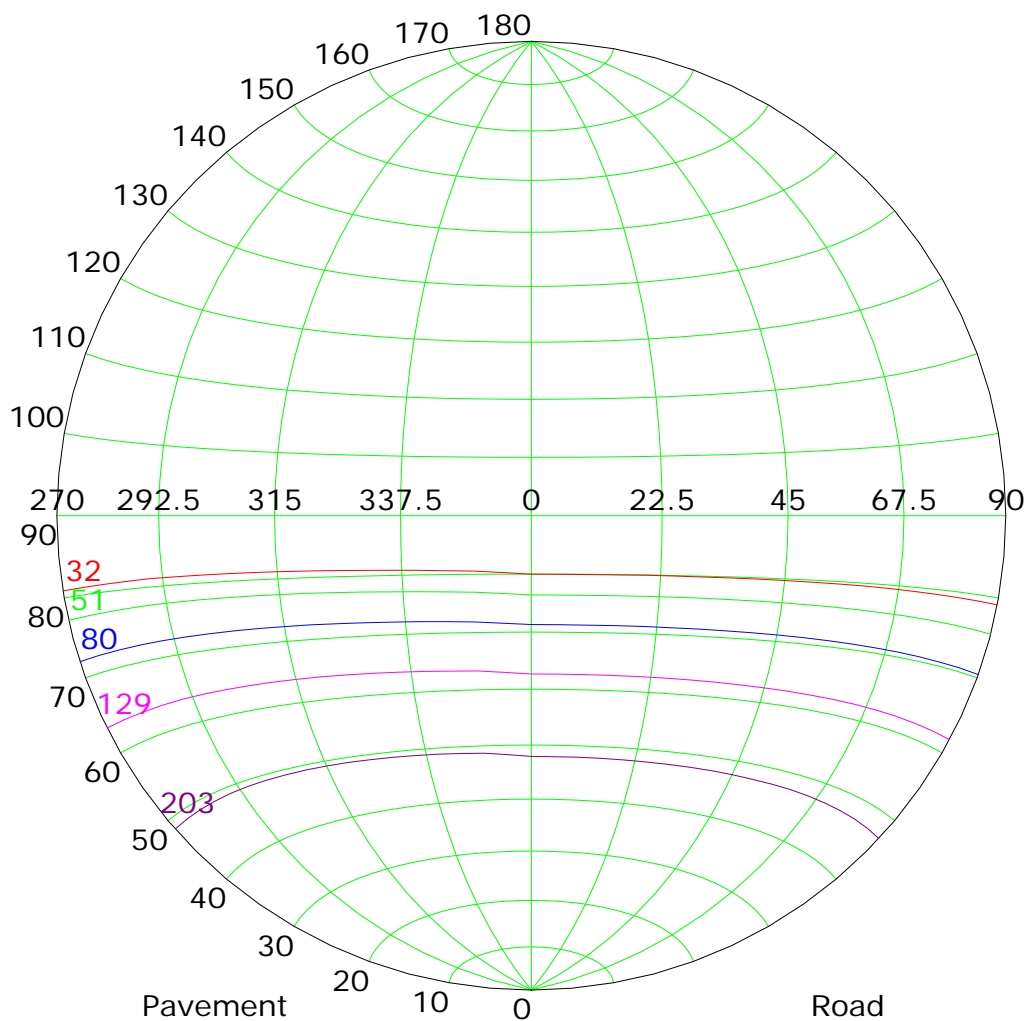
- | | | | |
|-----------|--------|-----------|--------|
| — (10%): | 32 cd | — (16%): | 51 cd |
| — (25%): | 80 cd | — (40%): | 129 cd |
| — (63%): | 203 cd | — (100%): | 322 cd |

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-2000
 Distance: 7.970 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

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

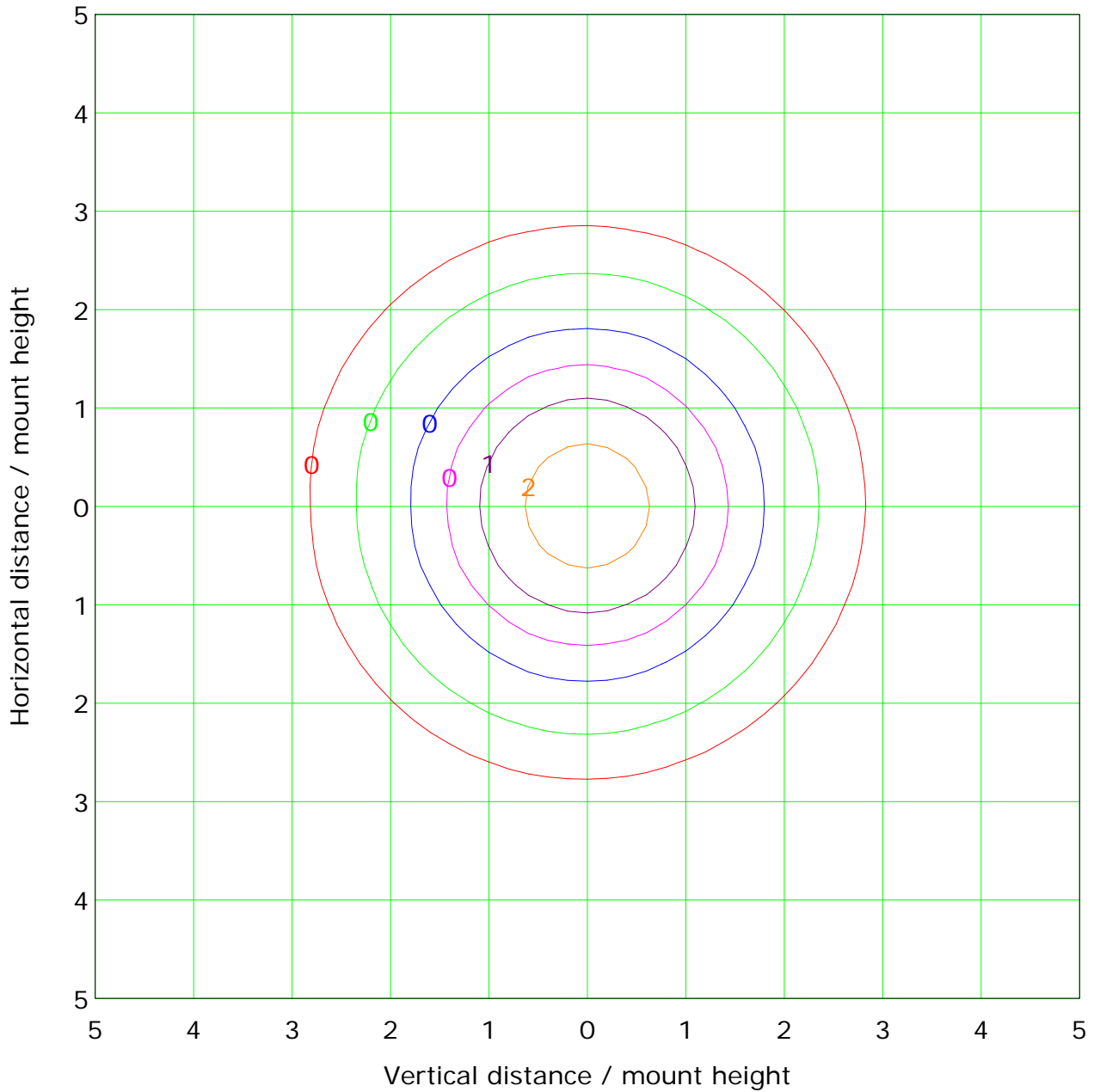
Distance: 7.970 m

Humidity:

Inspector:



IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 3.2 lx	
— (1%):	0.0 lx	— (2%):	0.1 lx
— (5%):	0.2 lx	— (10%):	0.3 lx
— (20%):	0.6 lx	— (50%):	1.6 lx
— (100%):	3.2 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	216	193	169	143	116	88	59	32	10
C90	212	189	165	139	111	83	54	28	7
C180	216	194	170	145	118	90	61	34	11
C270	219	197	173	147	120	92	64	36	13

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

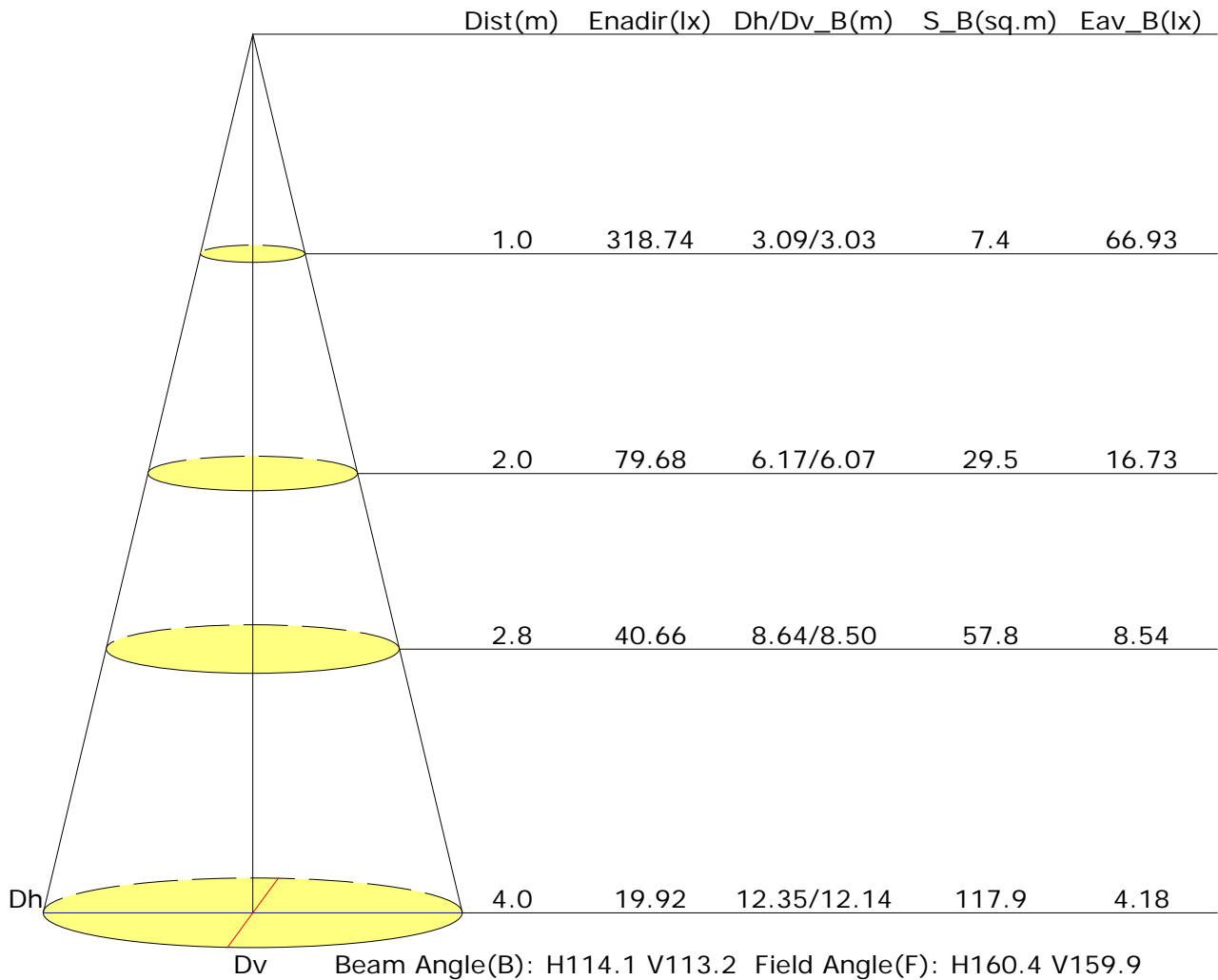
Distance: 7.970 m

Humidity:

Inspector:

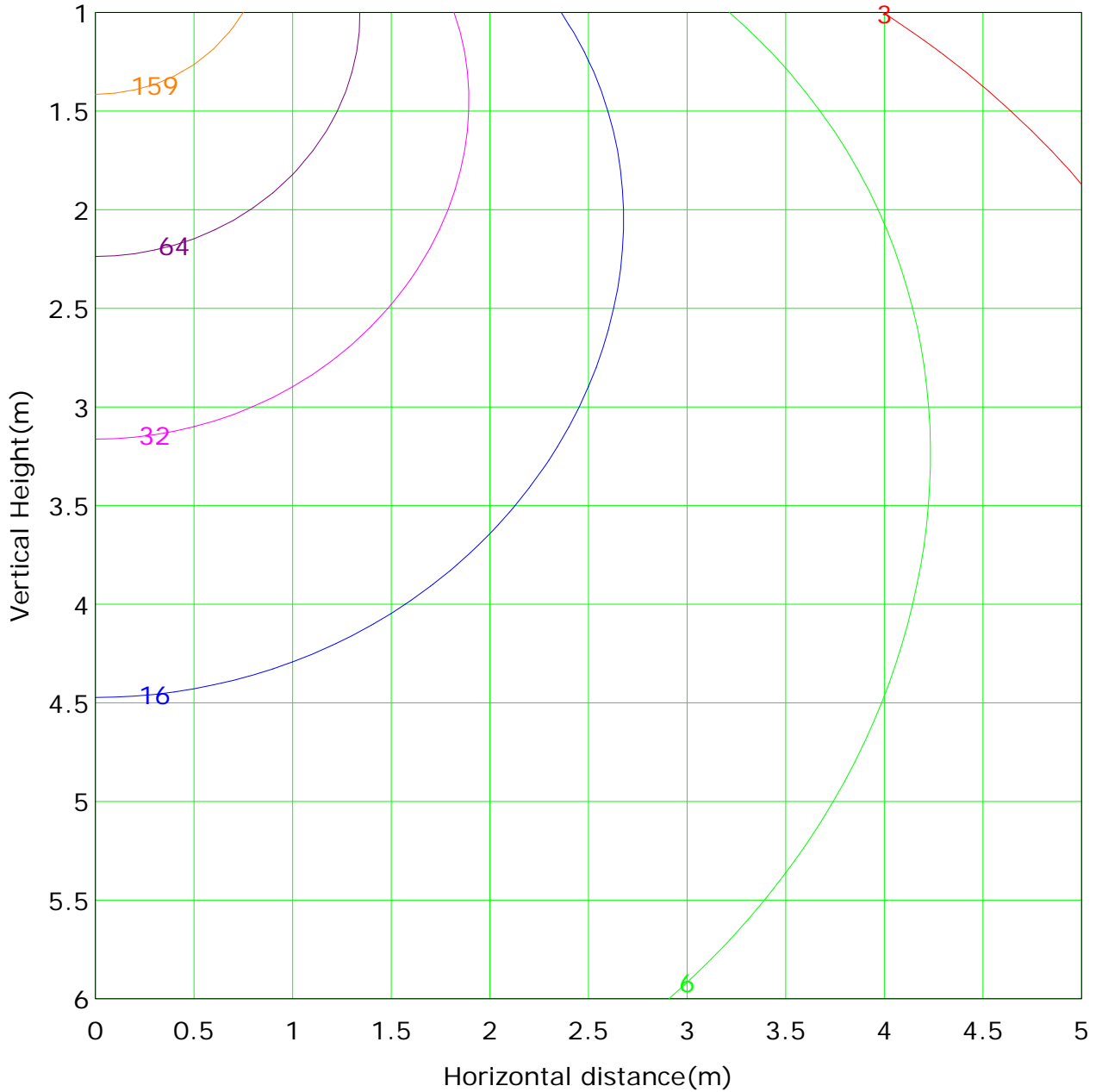


Illuminance at a Distance





Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 318.7 lx
(1%): 3.2 lx	(2%): 6.4 lx	(10%): 31.9 lx
(5%): 15.9 lx	(20%): 63.7 lx	(50%): 159.4 lx
(100%): 318.7 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:



Report No.:

Test Time: 02/08/2018 16:42

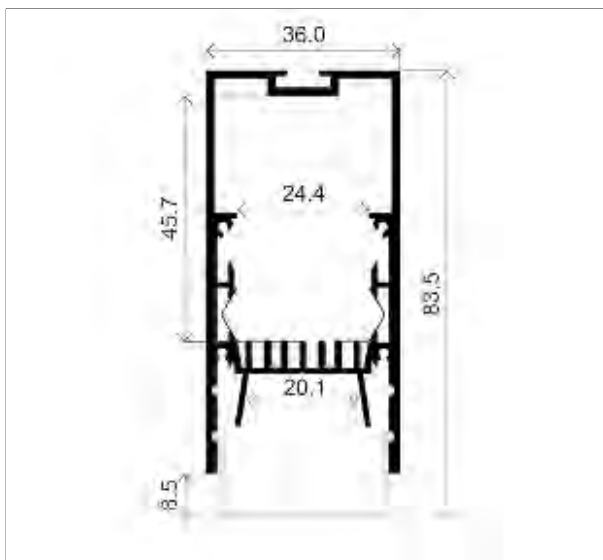
Luminaire Property

Luminaire Manufacturer: Lighting Line
 Luminaire Description: LLP-CL01-06 + LLD-06-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

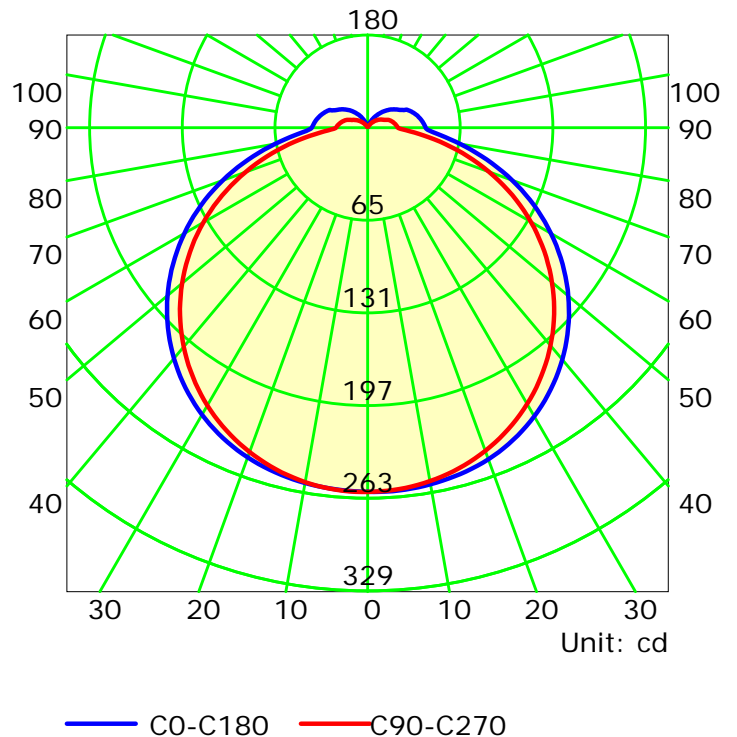
Photometric Results

CIE Class: Semi-Direct	Total Rated Lamp Lumens: 1579.0 lm
Measurement Flux: 985.2 lm	Efficiency: 62.39%
Downward Ratio: 55.71%	Upward Ratio: 6.68%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 238.4, 173.7, 164.9, 253.4	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 130.5, 122.5, 117.0, 132.8	
Luminaire Efficacy Rating (LER): 68.99	Central Intensity: 259.03 cd
Max. Intensity: 259.45 cd	Pos of Max. Intensity: H330 V4
S/MH(C0/C180): 1.36	S/MH(C90/C270): 1.31

Picture Of Luminaire



Luminous Intensity Distribution Curve

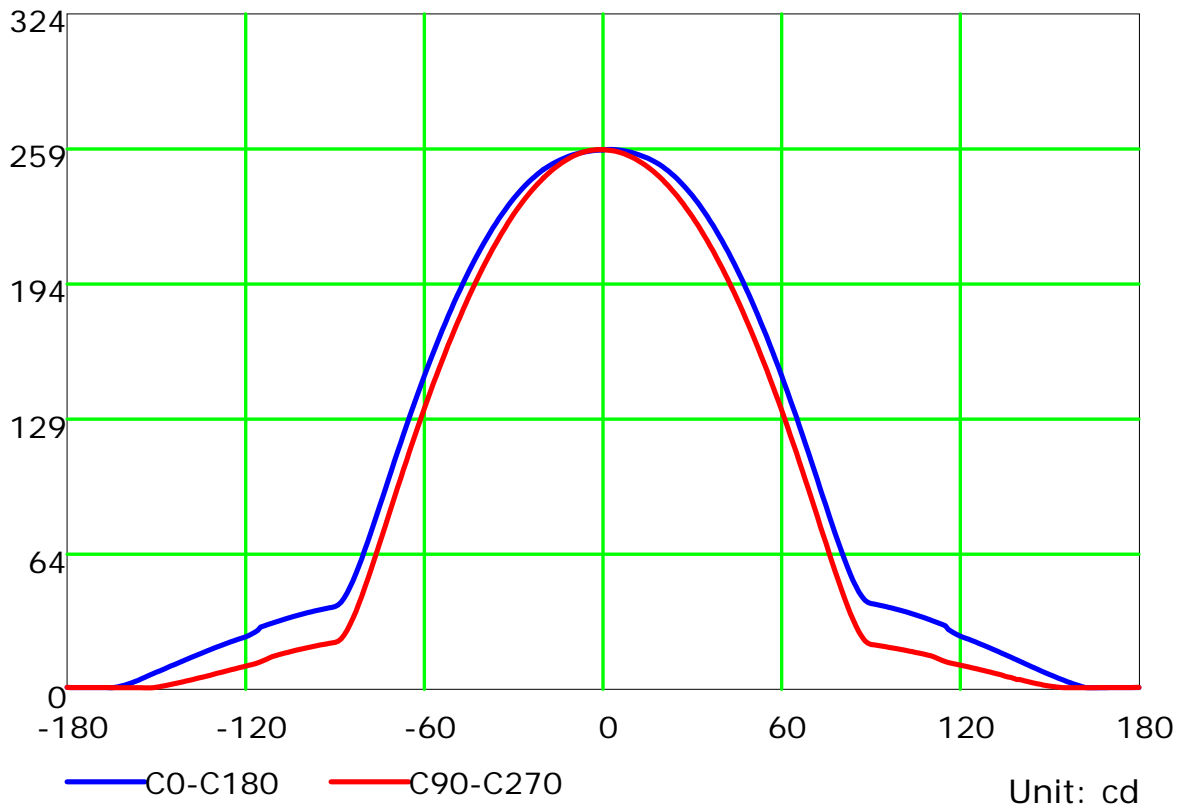
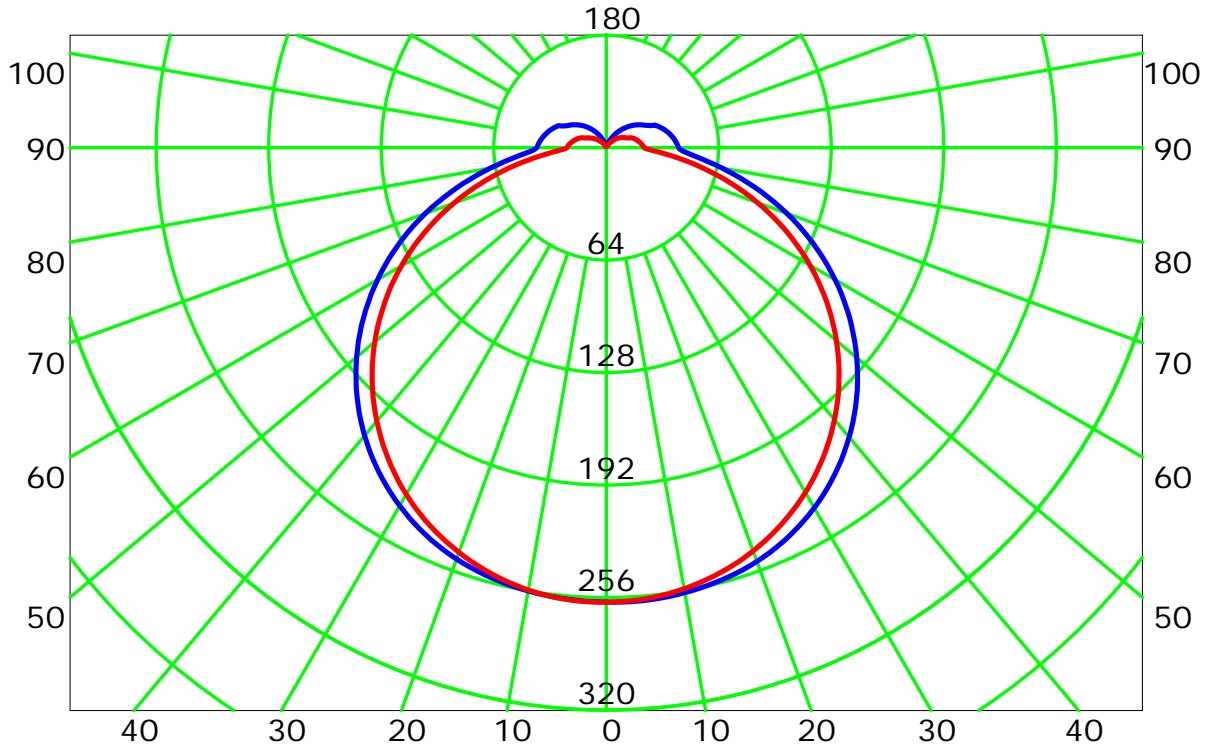


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



Luminous Intensity Distribution Curve

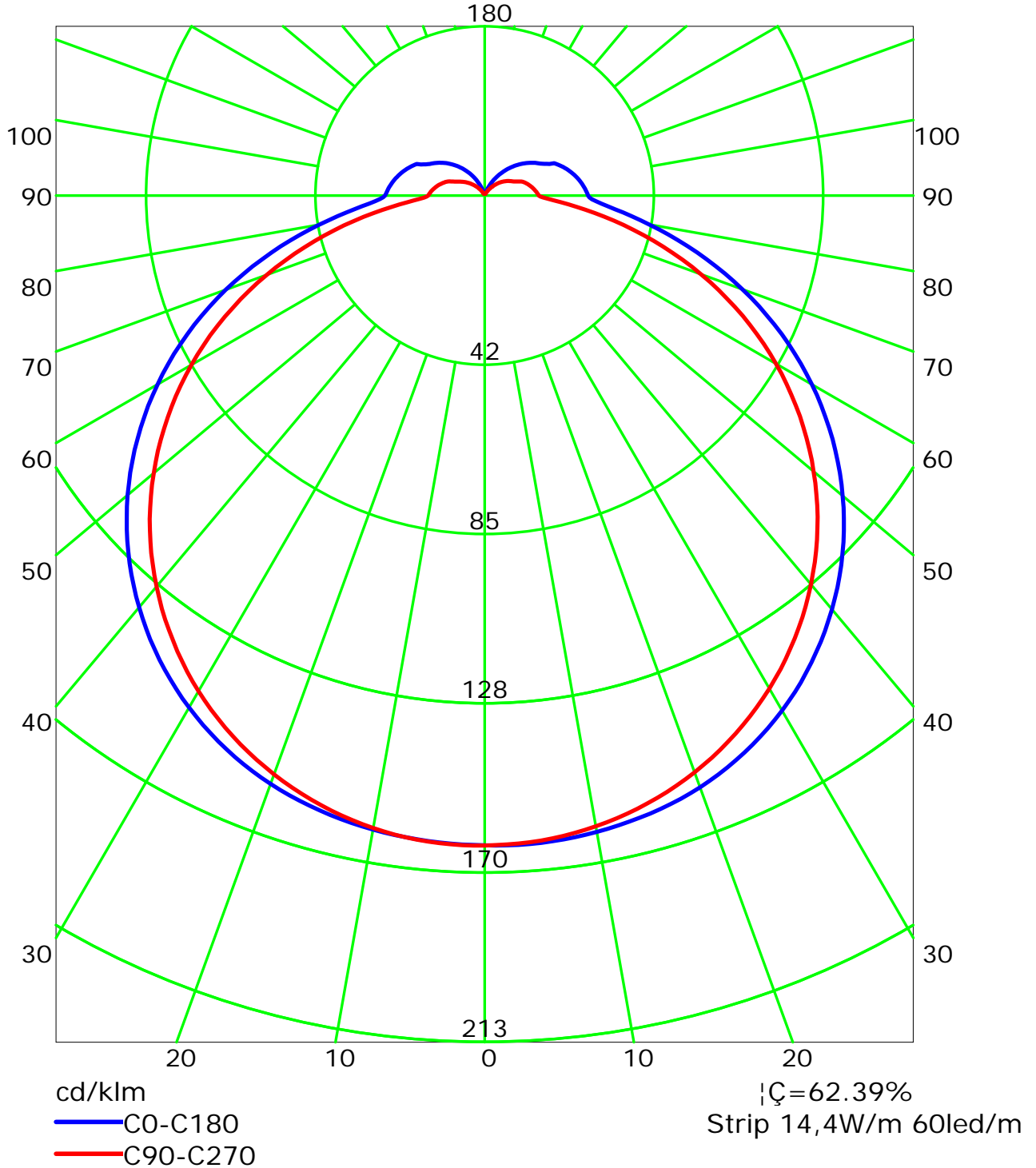


C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



Luminous Intensity Distribution Curve(cd/klm)

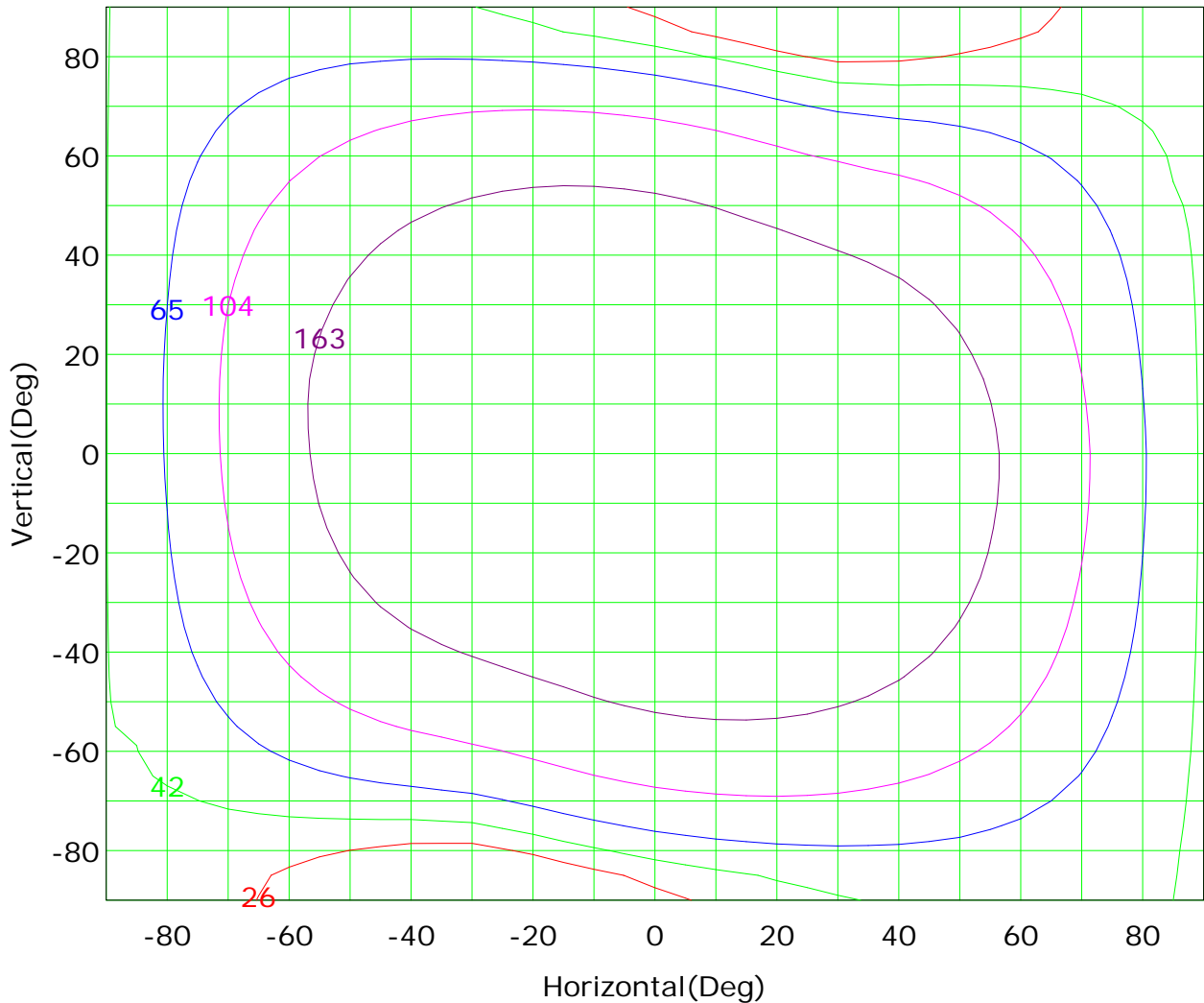


C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



Isocandela (rectangle)



Imax (100%): 259 cd

— (10%):	26 cd	— (16%):	42 cd
— (25%):	65 cd	— (40%):	104 cd
— (63%):	163 cd	— (100%):	259 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

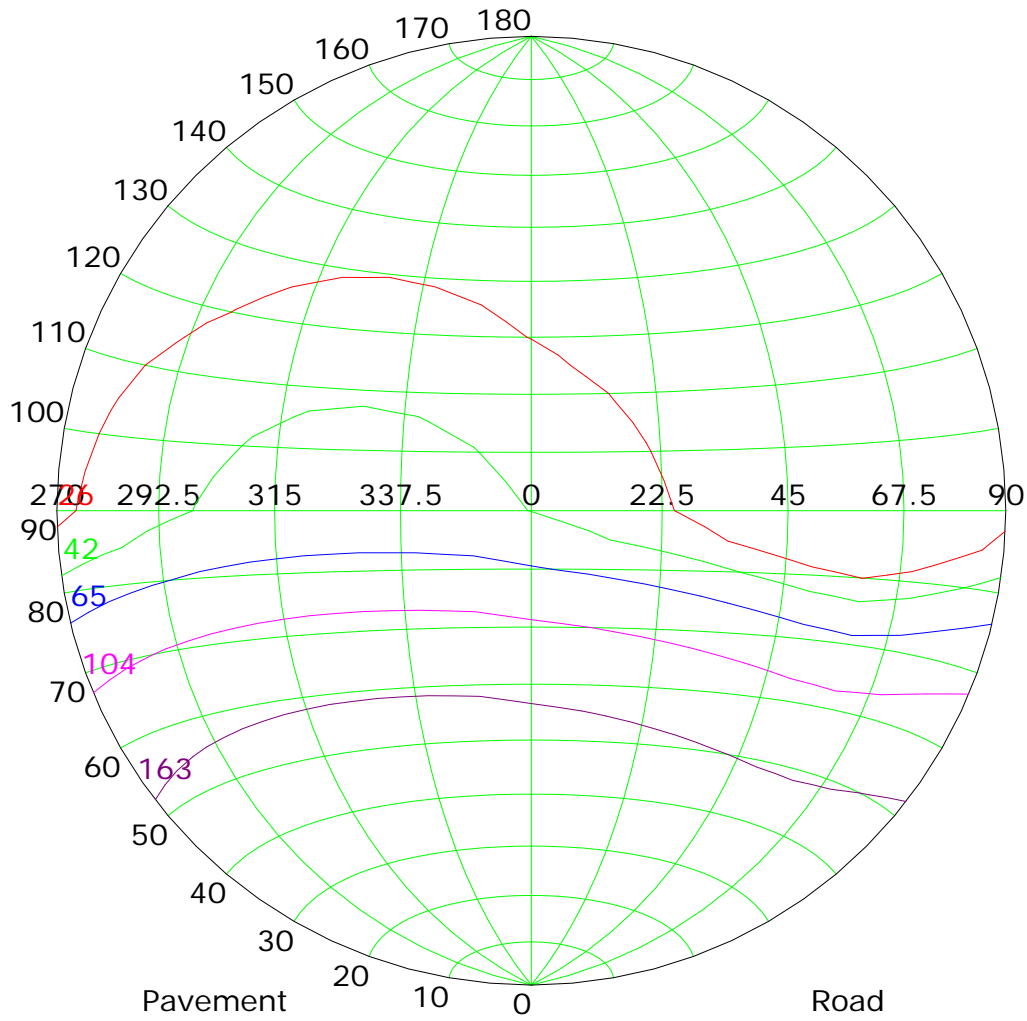
Distance: 7.970 m

Humidity:

Inspector:



Isocandela (sphere)



Imax (100%): 259 cd

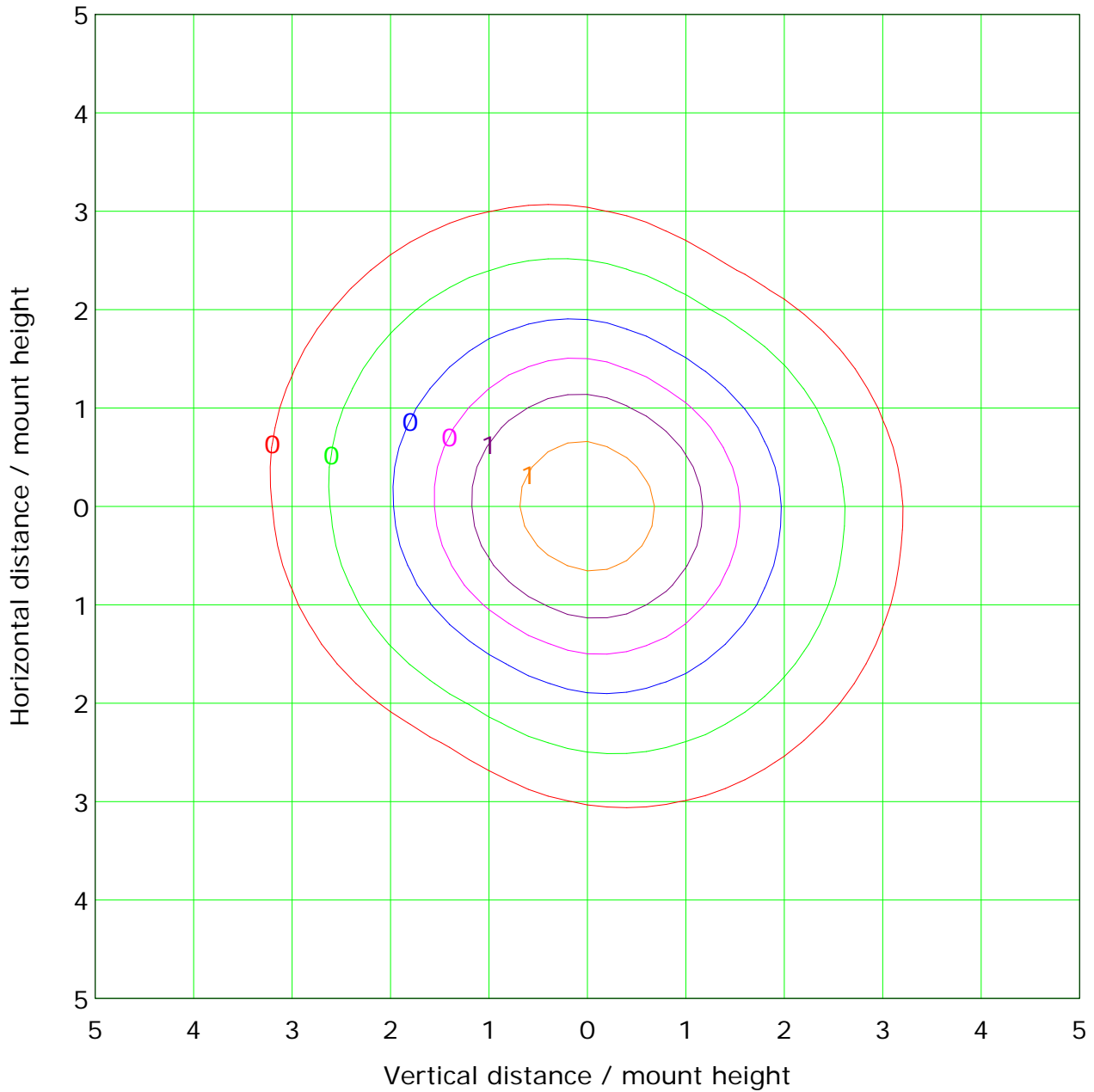
— (10%):	26 cd	— (16%):	42 cd
— (25%):	65 cd	— (40%):	104 cd
— (63%):	163 cd	— (100%):	259 cd

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%): 2.6 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%):	2.6 lx		

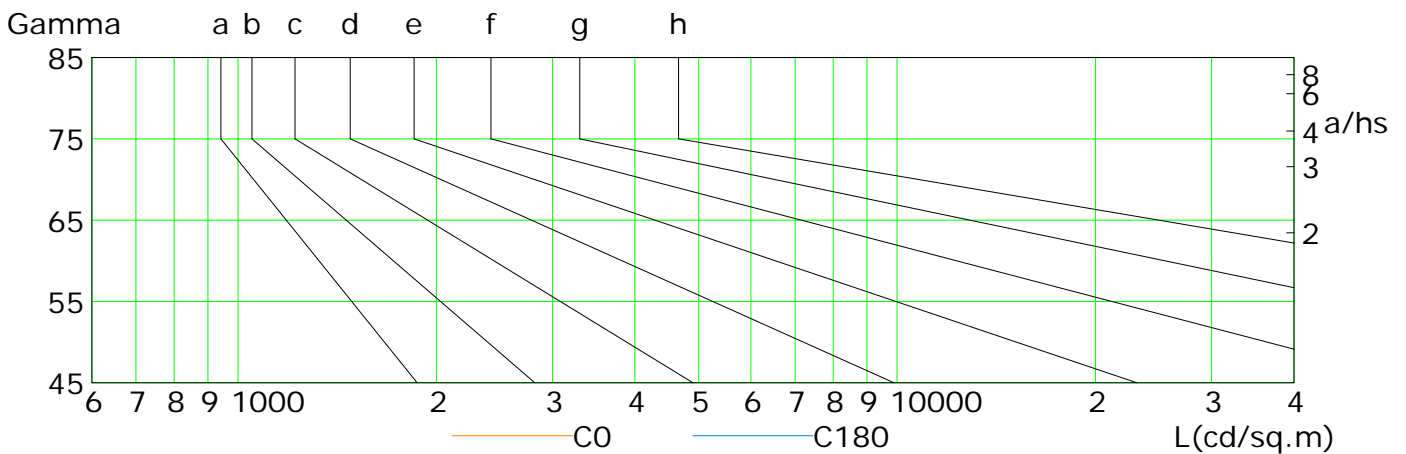
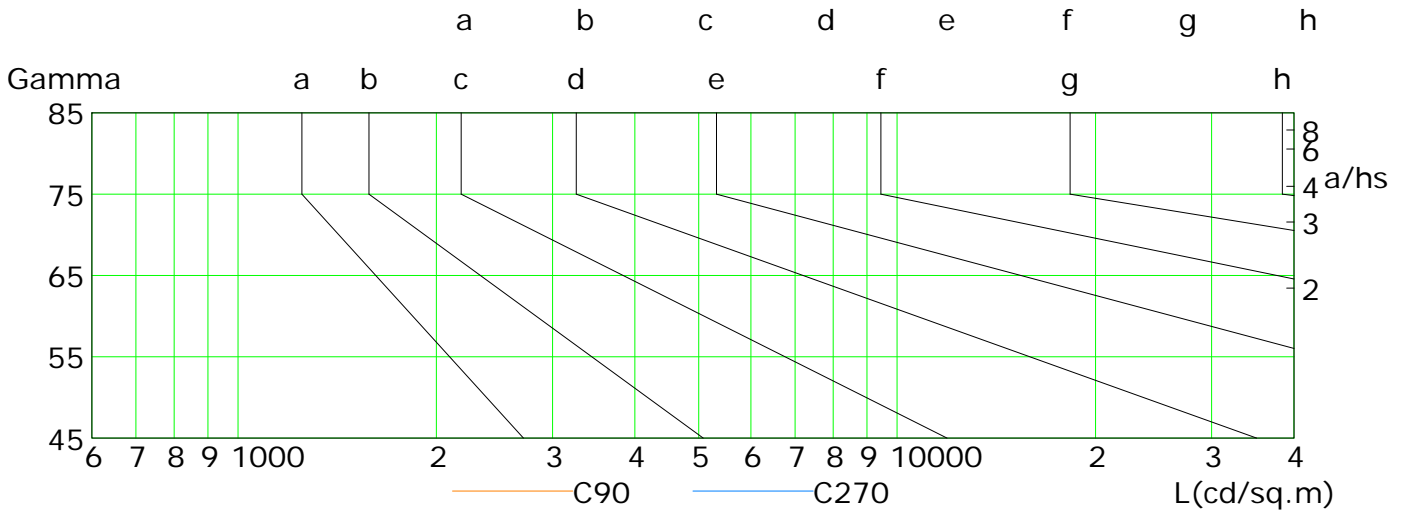
C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



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	202	186	169	151	131	109	88	67	49
C90	188	171	153	134	114	92	70	48	30
C180	201	186	169	151	131	110	88	67	49
C270	189	172	154	135	114	92	70	49	31

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

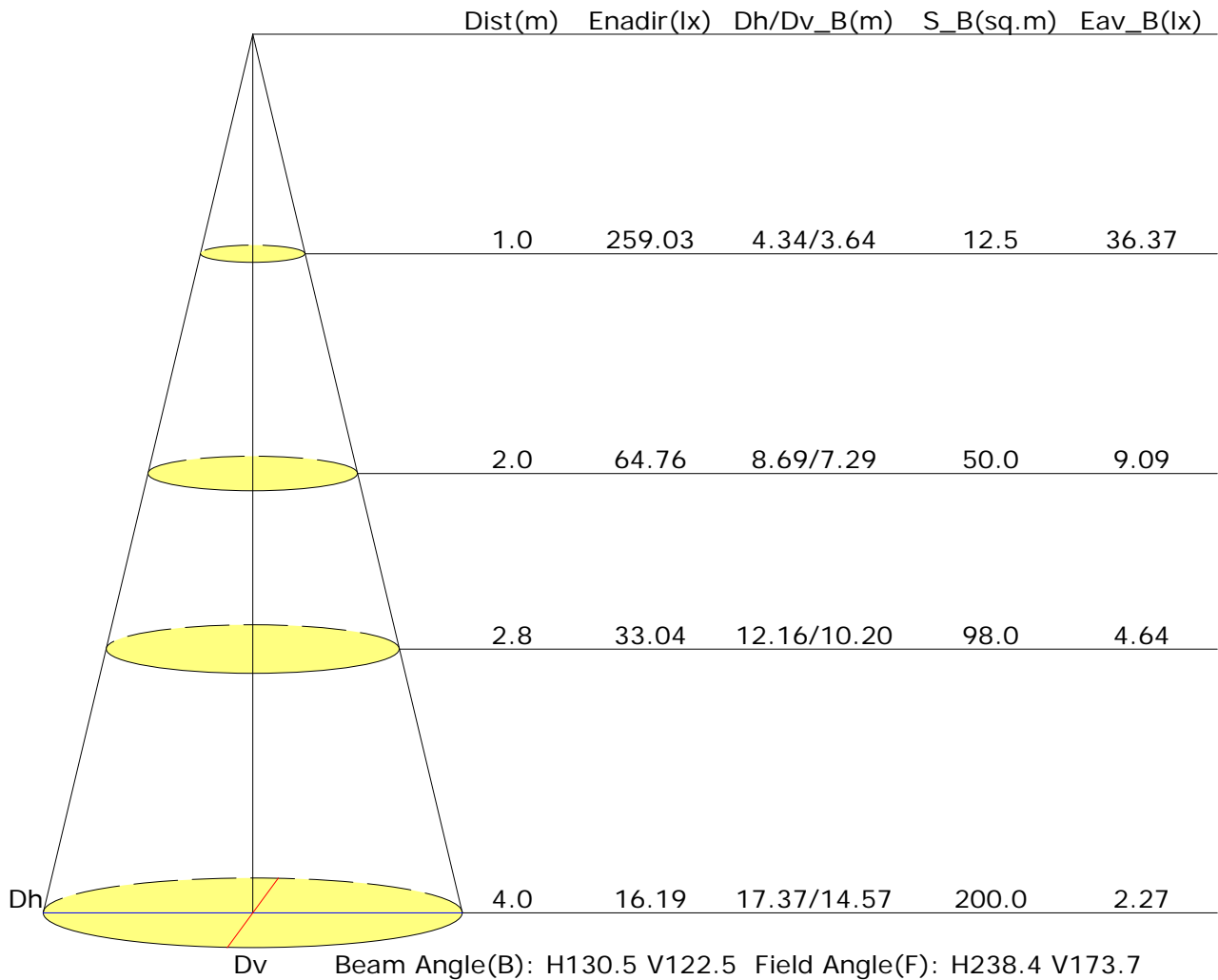
Distance: 7.970 m

Humidity:

Inspector:

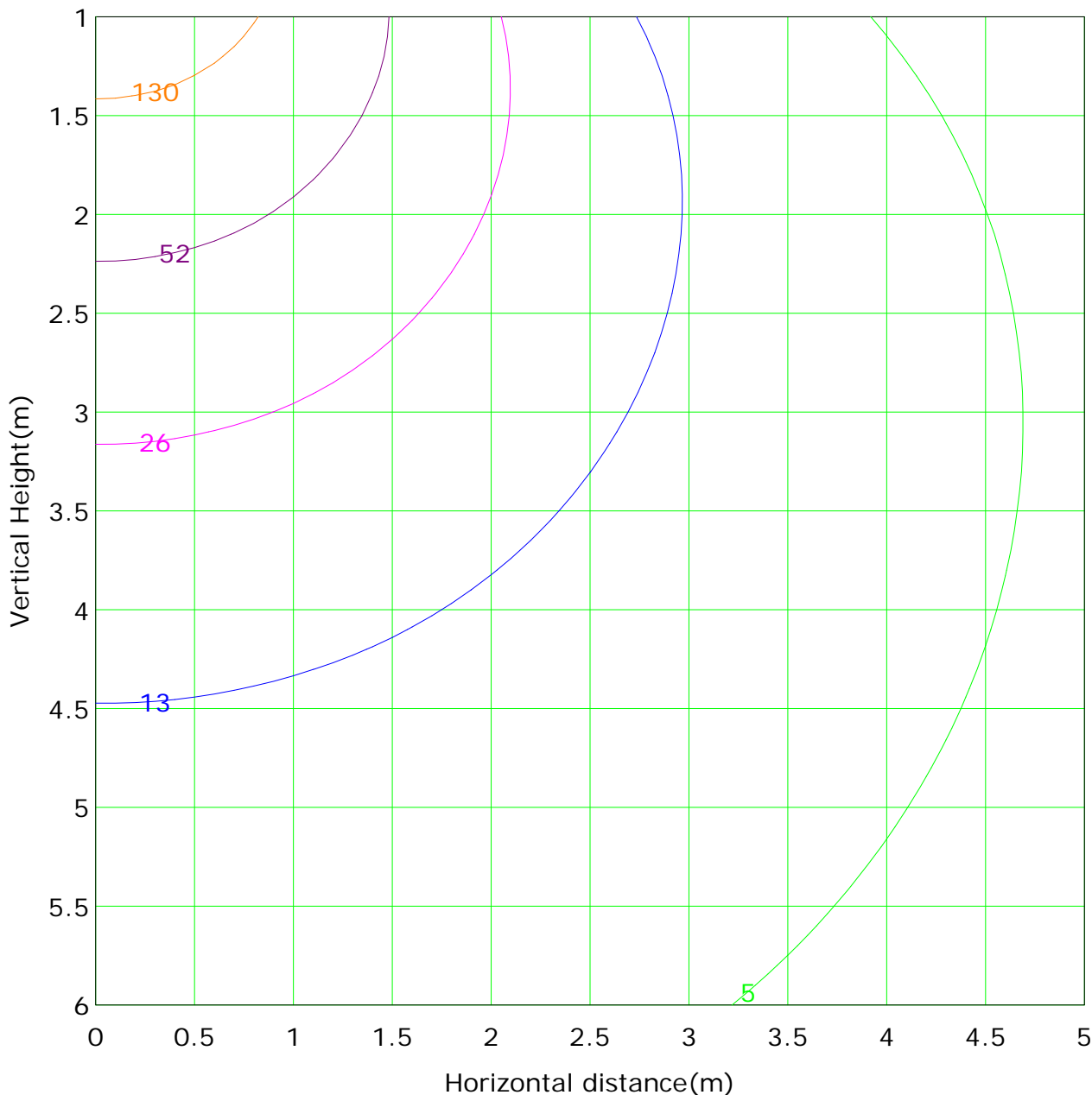


Illuminance at a Distance





Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 259.0 lx
(1%): 2.6 lx	(2%): 5.2 lx	(10%): 25.9 lx
(5%): 13.0 lx	(20%): 51.8 lx	(50%): 129.5 lx
(100%): 259.0 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: 03/08/2018 10:04

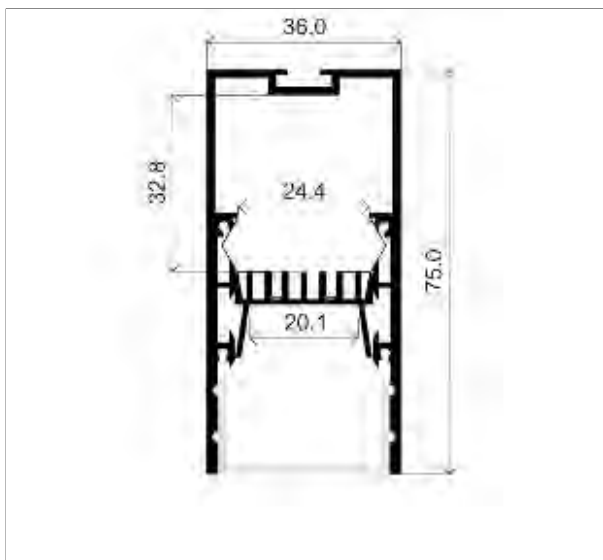
Luminaire Property

Luminaire Manufacturer: Lighting Line
 Luminaire Description: LLP-CL01-06 + LLD-06-CM
 Lamp Description: Strip 14,4W/m 60led/m Number of Lamps: 1
 Lumens per Lamp: 1579 lm Voltage: 24.0 V
 Current: 0.593 A Power: 14.23 W
 Power Factor: 1.000

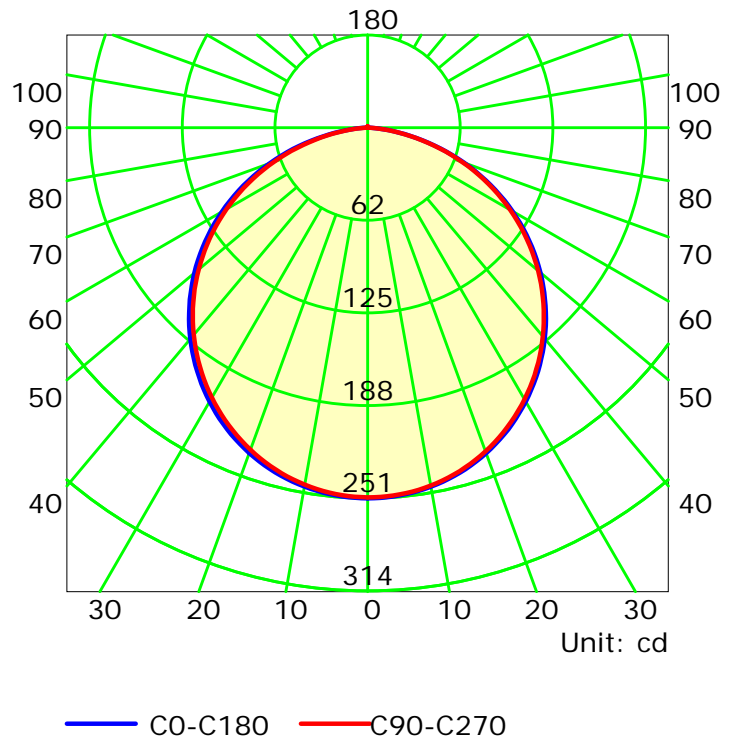
Photometric Results

CIE Class: Direct	Total Rated Lamp Lumens: 1579.0 lm
Measurement Flux: 723.1 lm	Efficiency: 45.80%
Downward Ratio: 45.64%	Upward Ratio: 0.16%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.5, 159.8, 160.1, 160.1	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 114.3, 113.0, 113.7, 113.7	
Luminaire Efficacy Rating (LER): 50.87	Central Intensity: 251.9 cd
Max. Intensity: 251.9 cd	Pos of Max. Intensity: H0 V0
S/MH(C0/C180): 1.27	S/MH(C90/C270): 1.26

Picture Of Luminaire



Luminous Intensity Distribution Curve

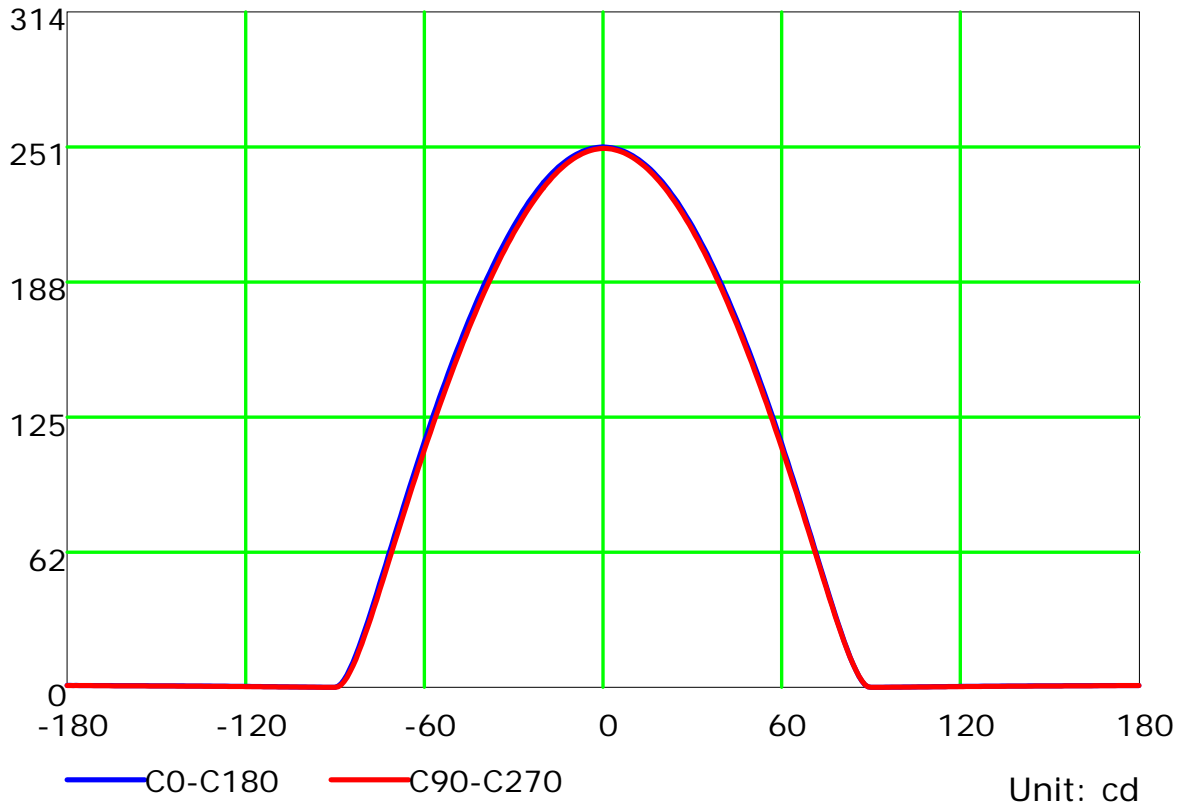
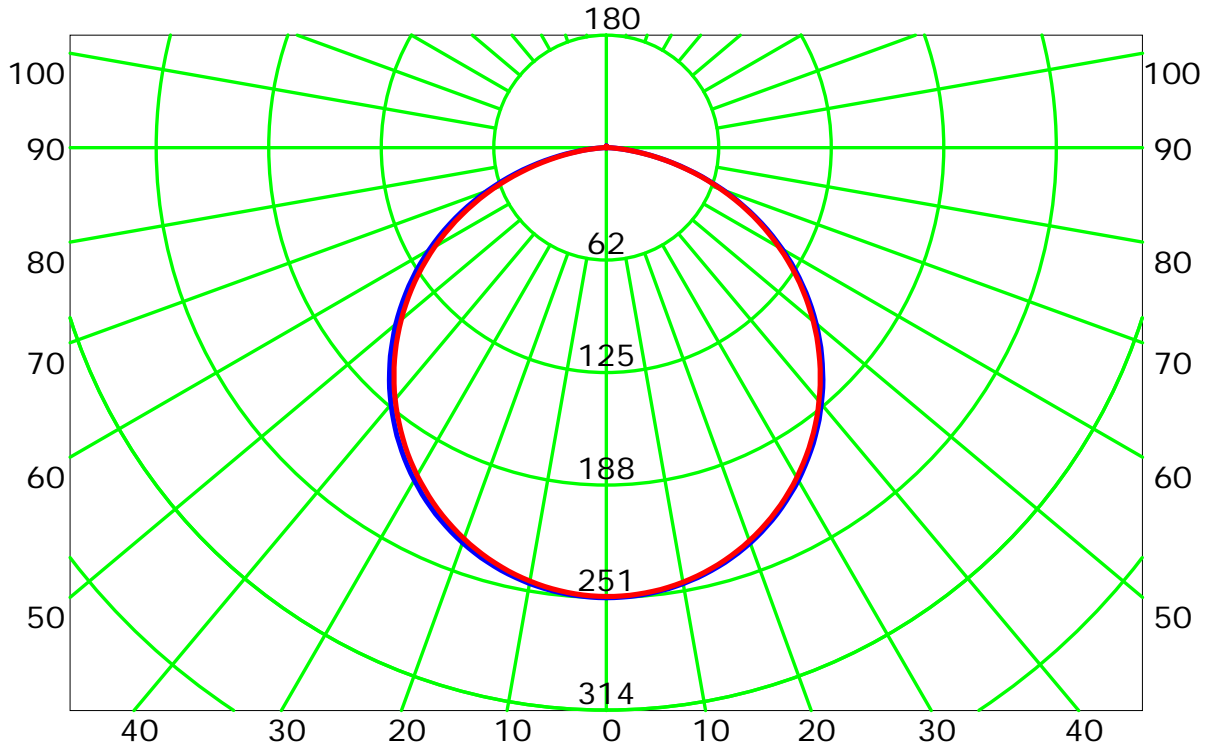


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



Luminous Intensity Distribution Curve

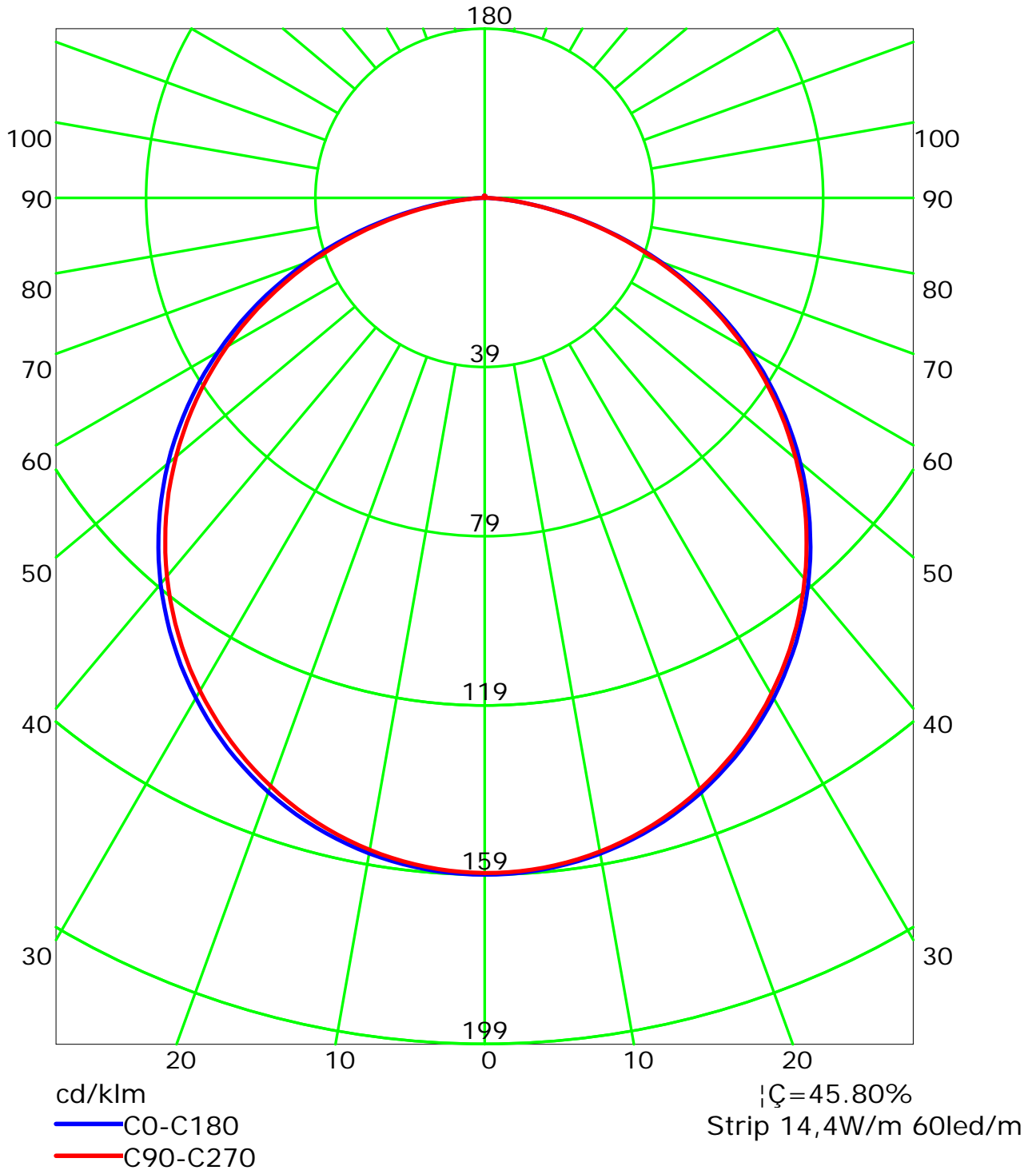


C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



Luminous Intensity Distribution Curve(cd/klm)

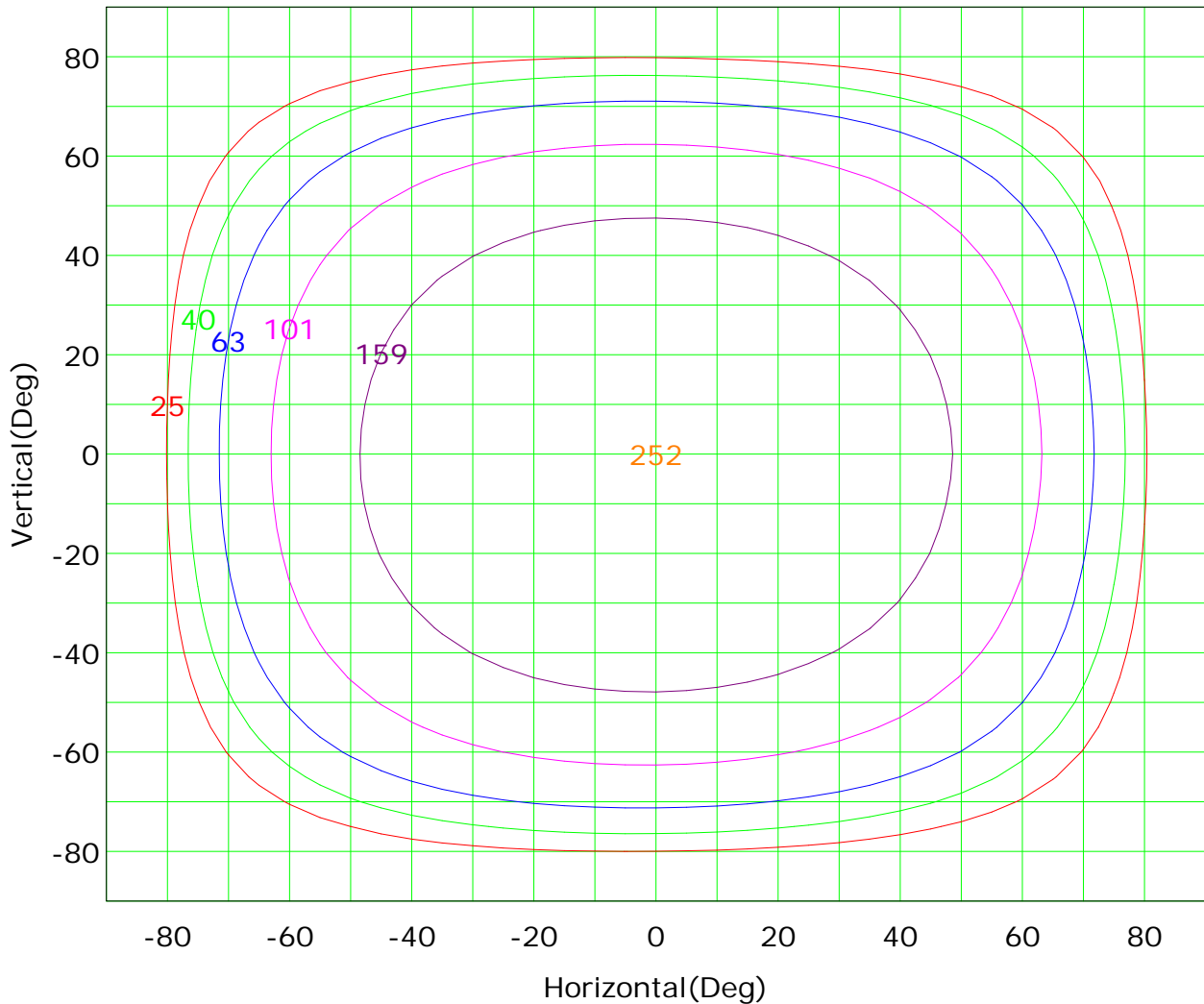


C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



Isocandela (rectangle)



Imax (100%): 252 cd

- | | | | |
|-----------|--------|-----------|--------|
| — (10%): | 25 cd | — (16%): | 40 cd |
| — (25%): | 63 cd | — (40%): | 101 cd |
| — (63%): | 159 cd | — (100%): | 252 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

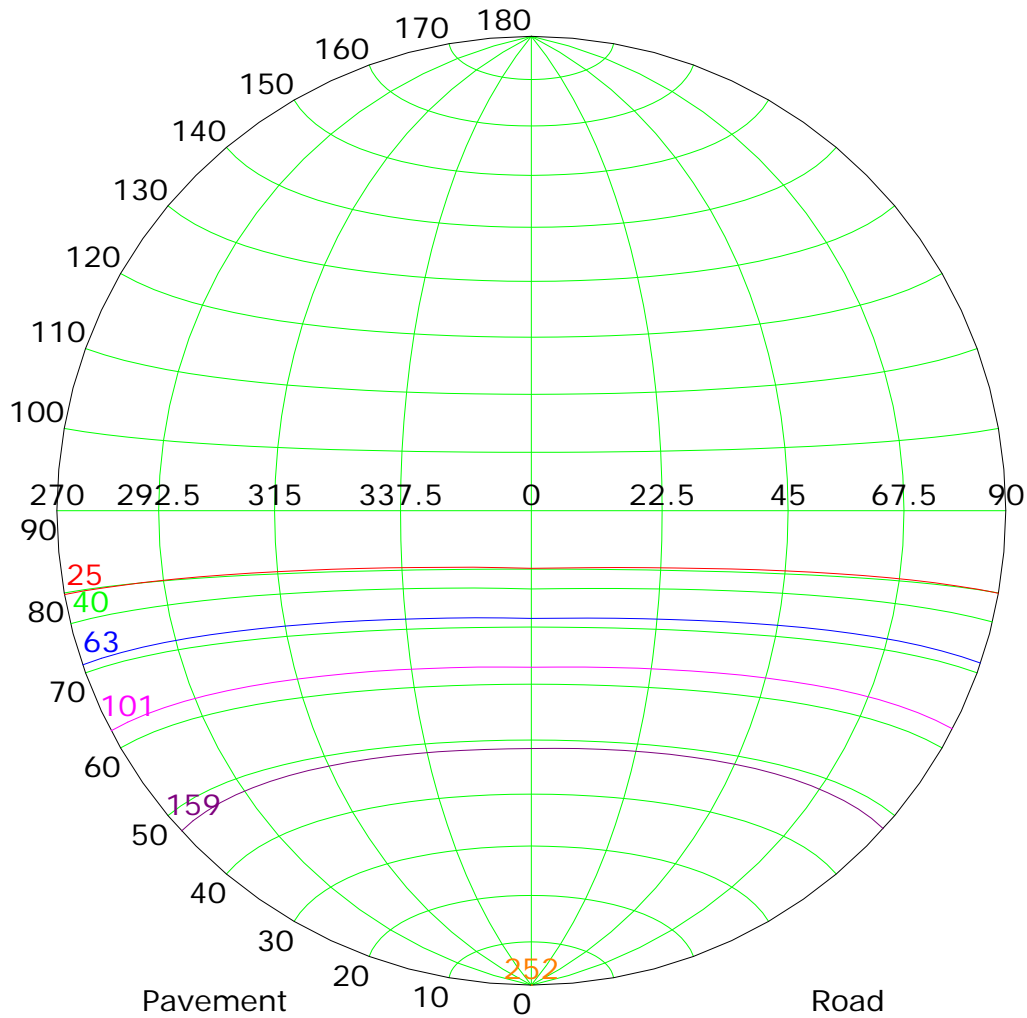
Distance: 7.970 m

Humidity:

Inspector:



Isocandela (sphere)



Imax (100%): 252 cd

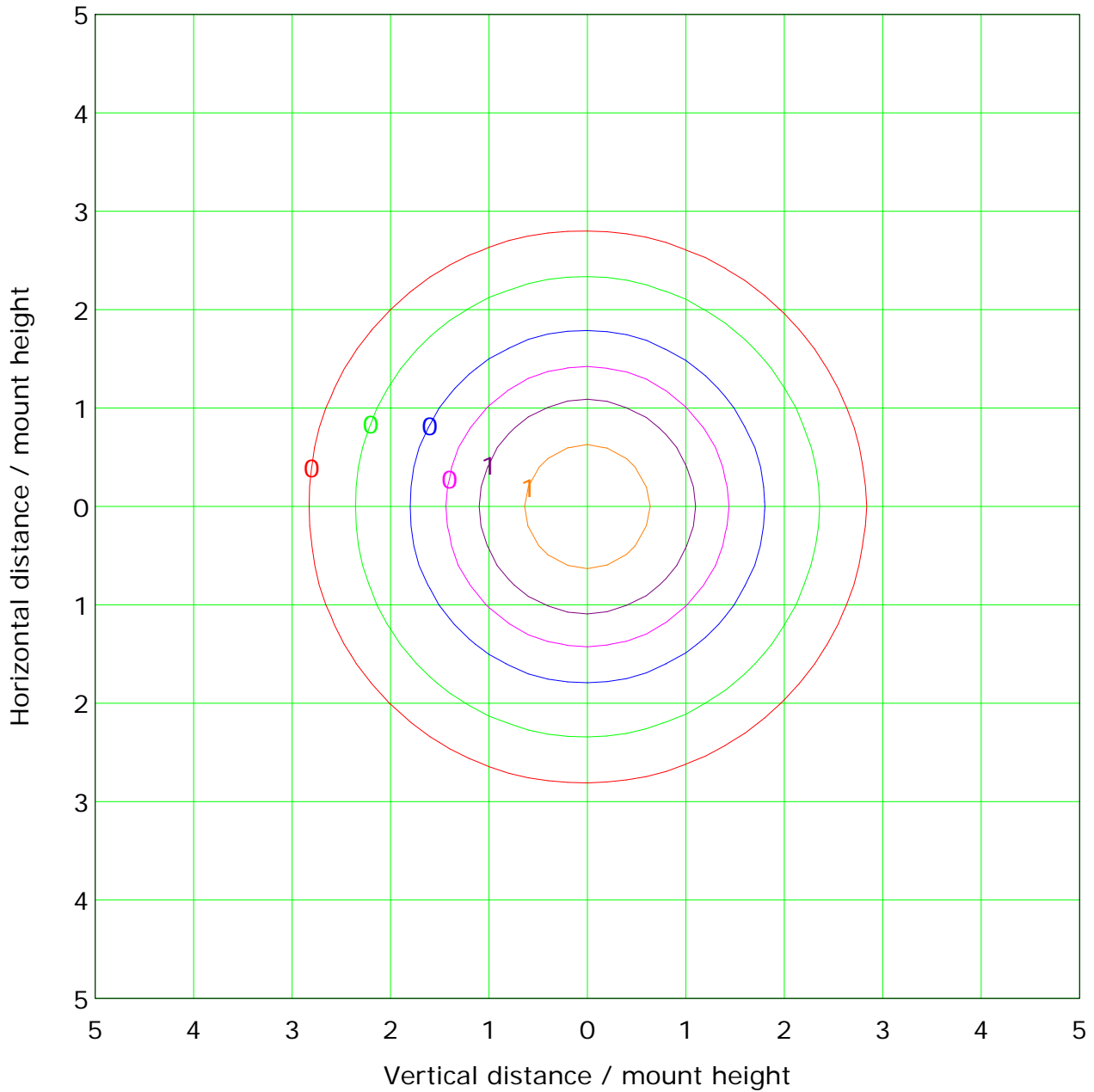
— (10%):	25 cd	— (16%):	40 cd
— (25%):	63 cd	— (40%):	101 cd
— (63%):	159 cd	— (100%):	252 cd

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%): 2.5 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%):	2.5 lx		

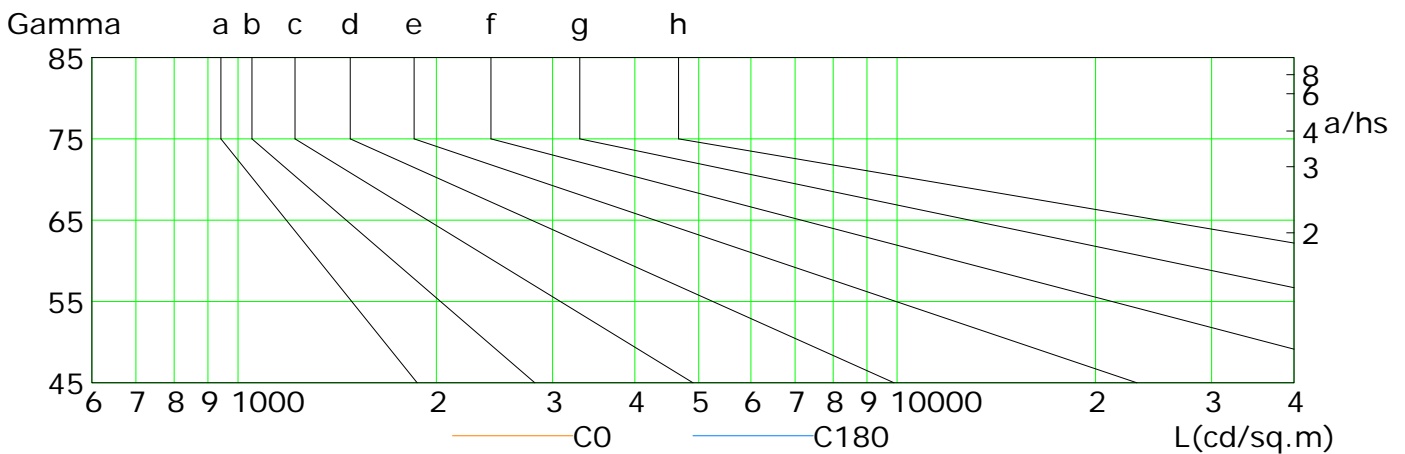
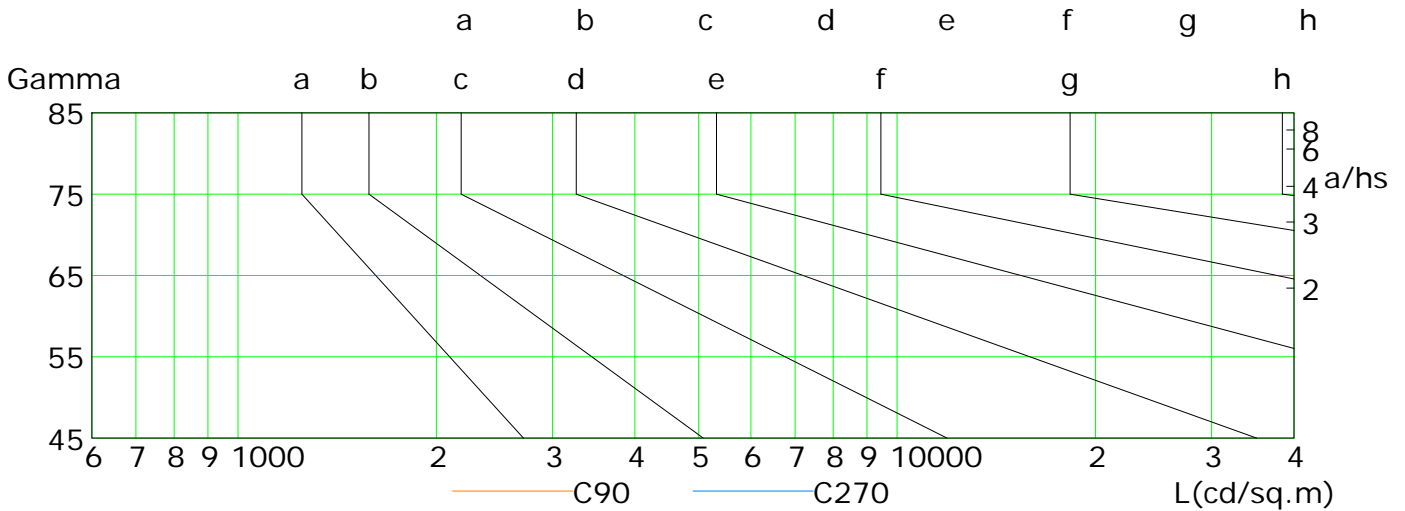
C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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	153	134	114	92	70	47	26	8
C90	169	151	132	112	91	69	46	25	8
C180	171	154	135	114	93	71	48	27	9
C270	168	150	131	111	89	68	45	24	7

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

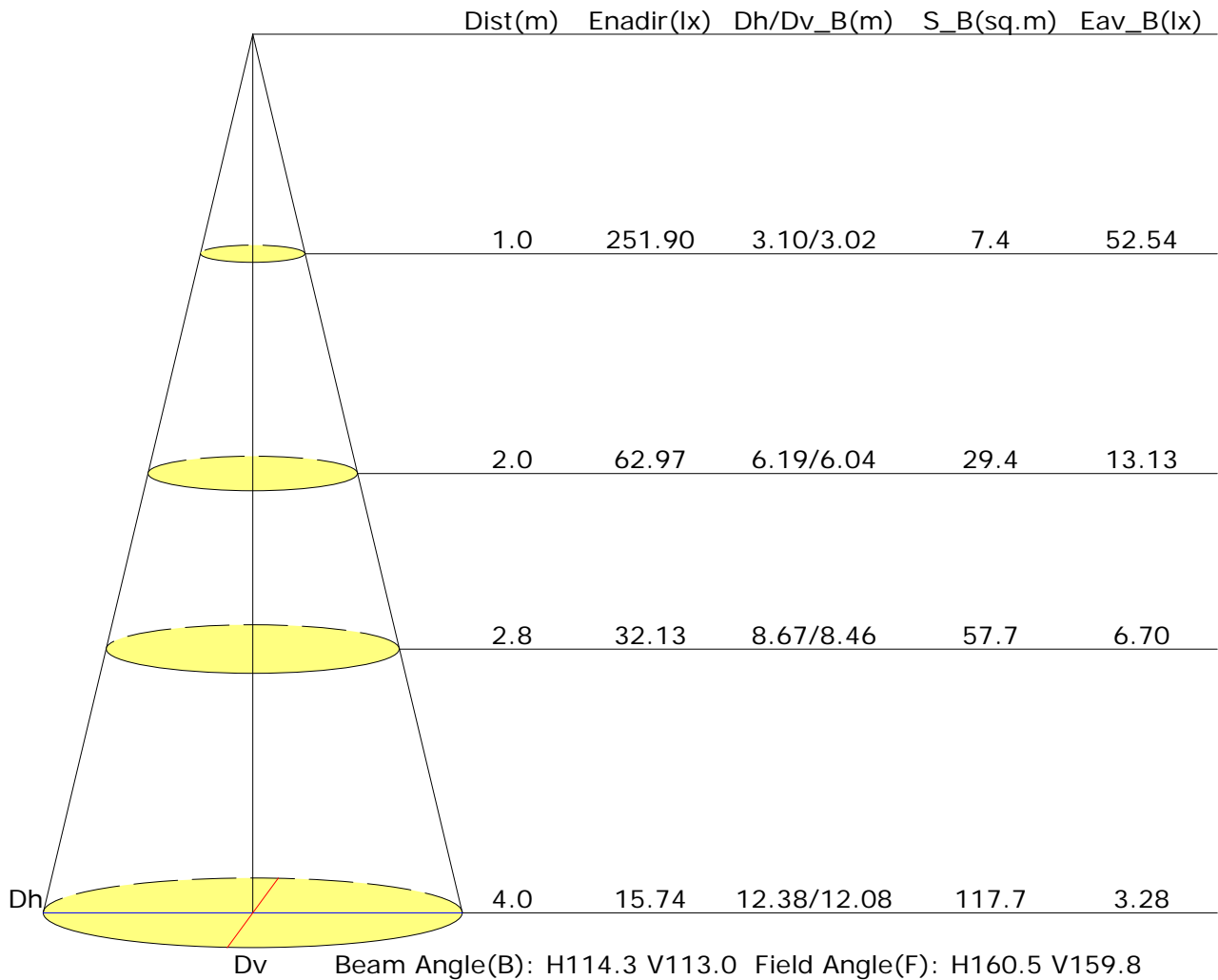
Distance: 7.970 m

Humidity:

Inspector:

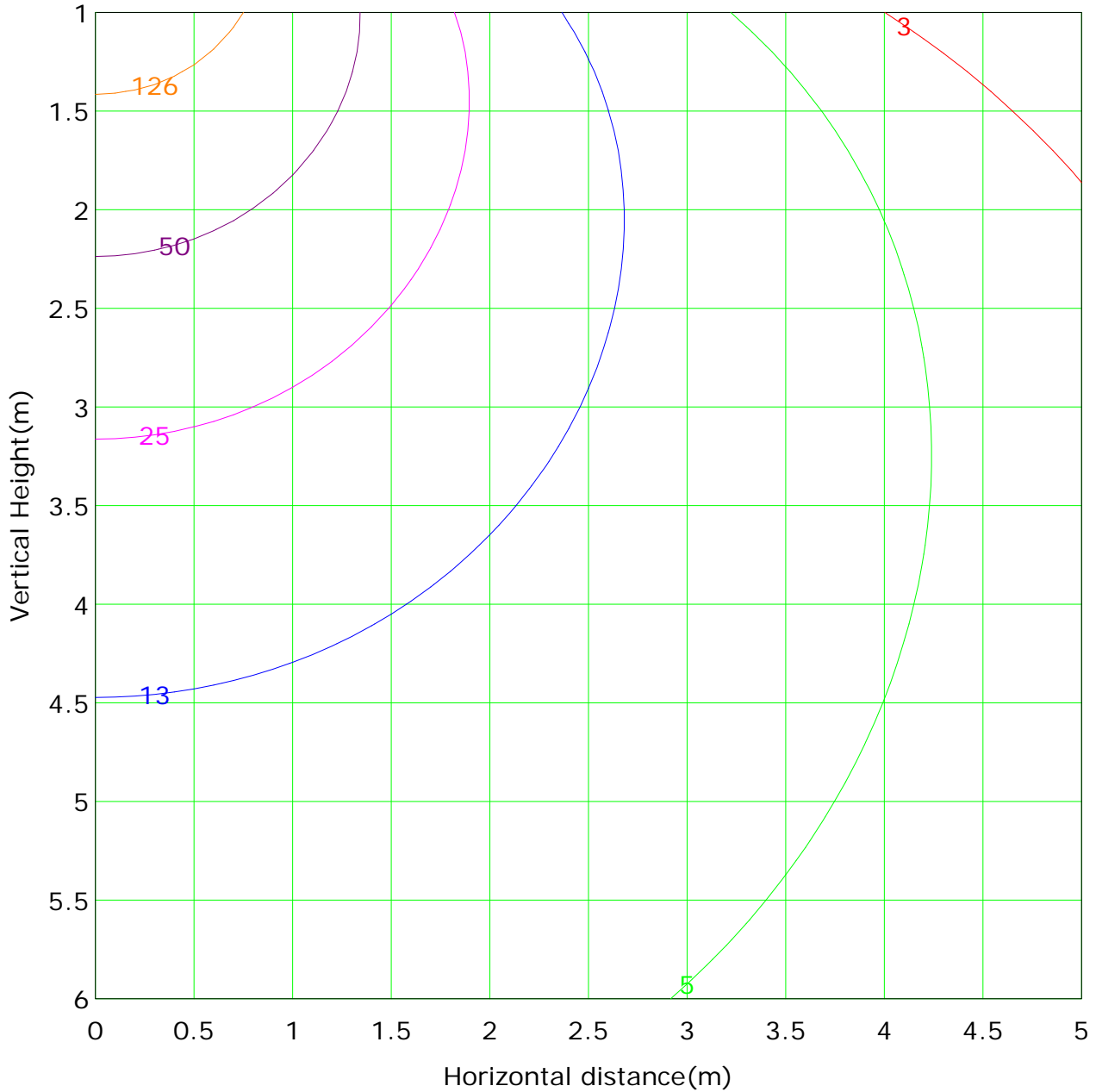


Illuminance at a Distance





Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 251.9 lx
(1%): 2.5 lx	(2%): 5.0 lx	(10%): 25.2 lx
(5%): 12.6 lx	(20%): 50.4 lx	(50%): 125.9 lx
(100%): 251.9 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:



Report No.:

Test Time: 03/08/2018 11:19

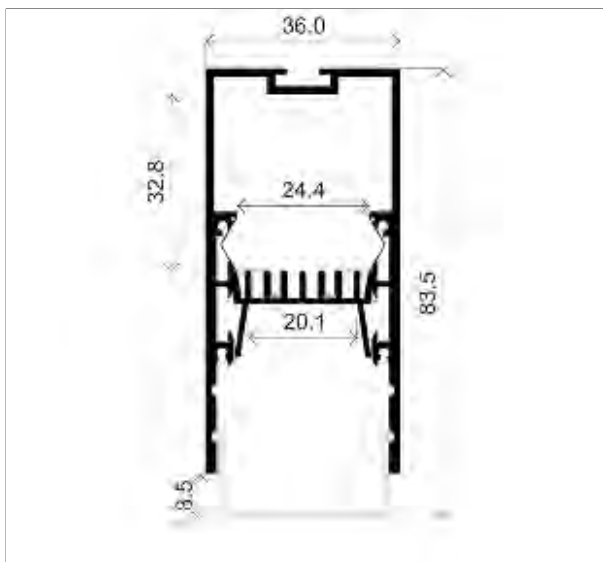
Luminaire Property

Luminaire Manufacturer: Lighting Line
 Luminaire Description: LLP-CL01-06 + LLD-06-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: 14.27 W
 Power Factor: 1.000

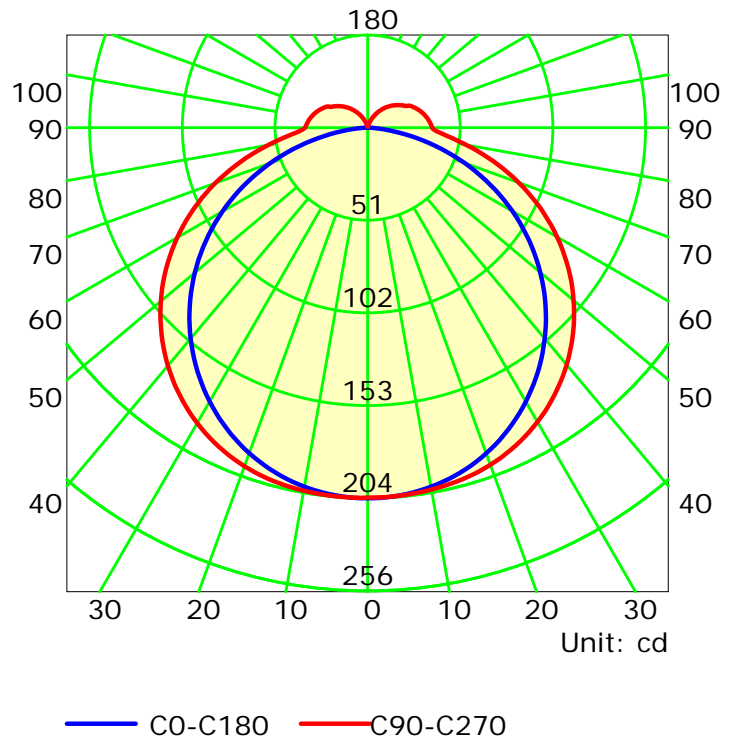
Photometric Results

CIE Class: Semi-Direct	Total Rated Lamp Lumens: 1579.0 lm
Measurement Flux: 767 lm	Efficiency: 48.58%
Downward Ratio: 43.59%	Upward Ratio: 4.98%
Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.4, 253.5, 212.0, 208.9	
Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 114.1, 132.0, 126.3, 126.1	
Luminaire Efficacy Rating (LER): 53.80	Central Intensity: 204.85 cd
Max. Intensity: 204.86 cd	Pos of Max. Intensity: H0 V0
S/MH(C0/C180): 1.27	S/MH(C90/C270): 1.37

Picture Of Luminaire



Luminous Intensity Distribution Curve

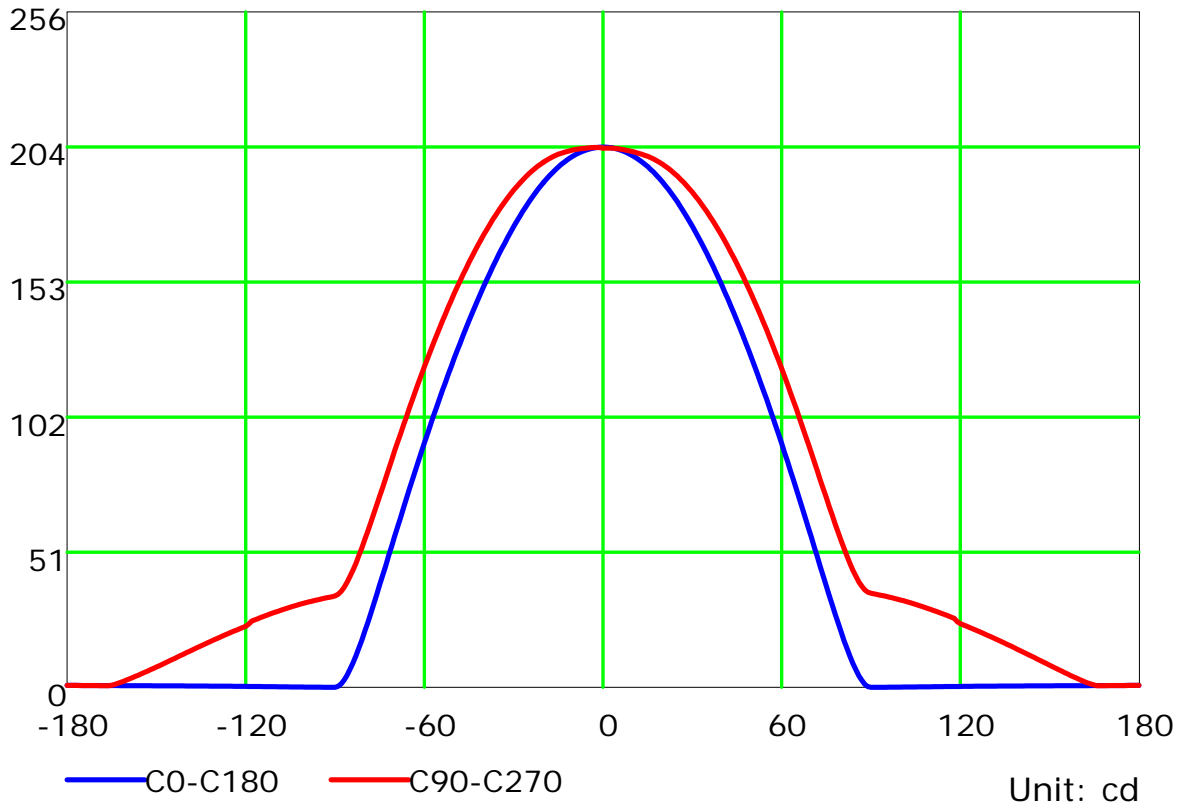
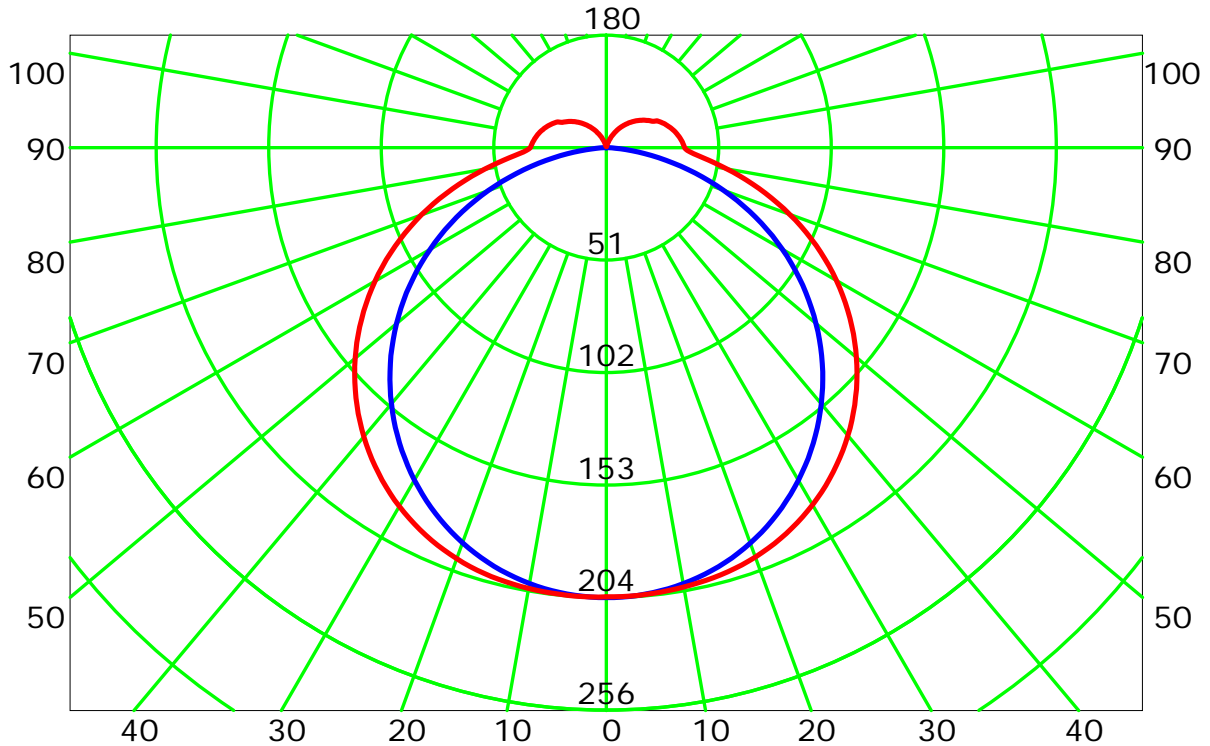


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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



Luminous Intensity Distribution Curve

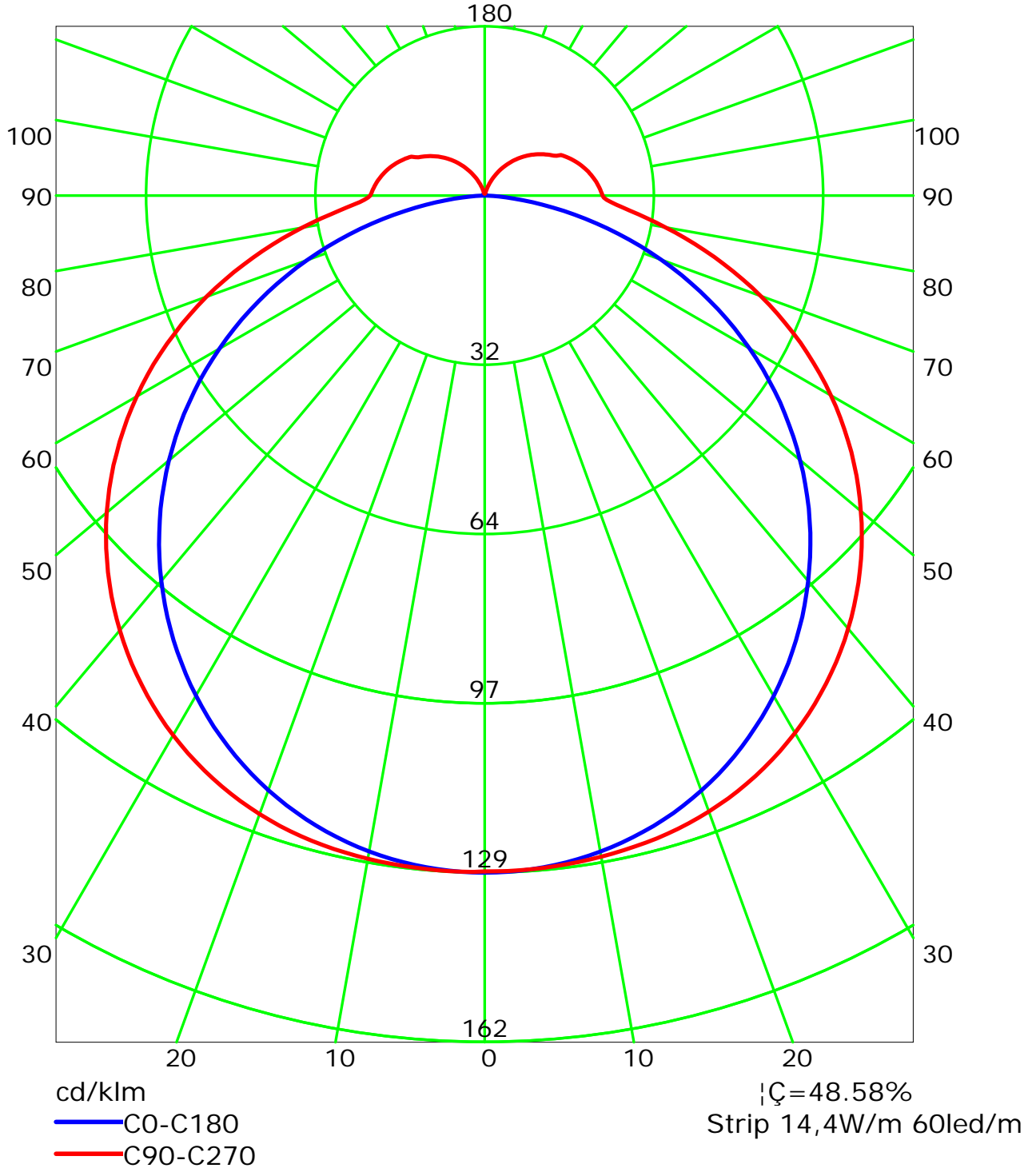


C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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



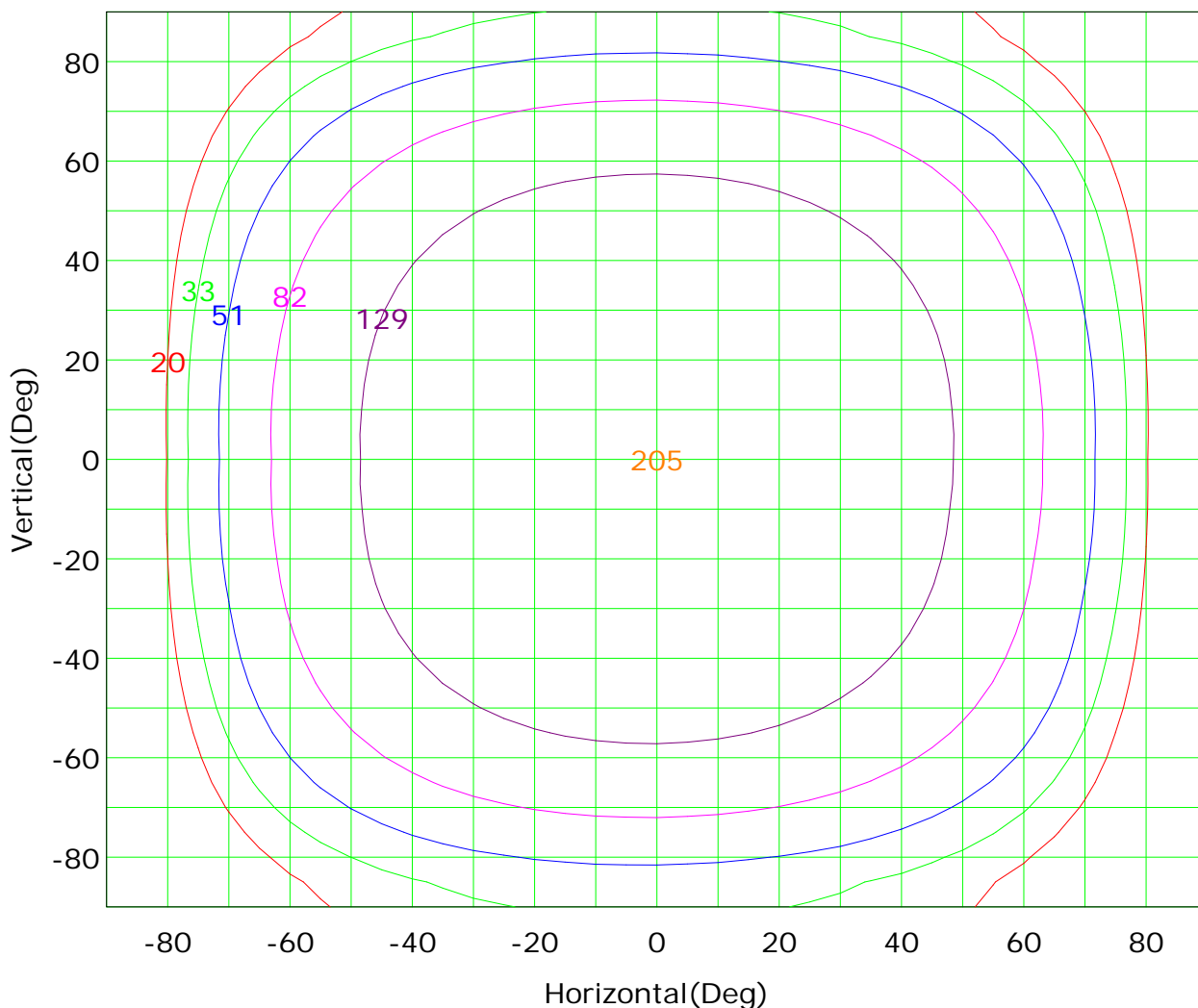
Luminous Intensity Distribution Curve(cd/klm)



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%): 205 cd

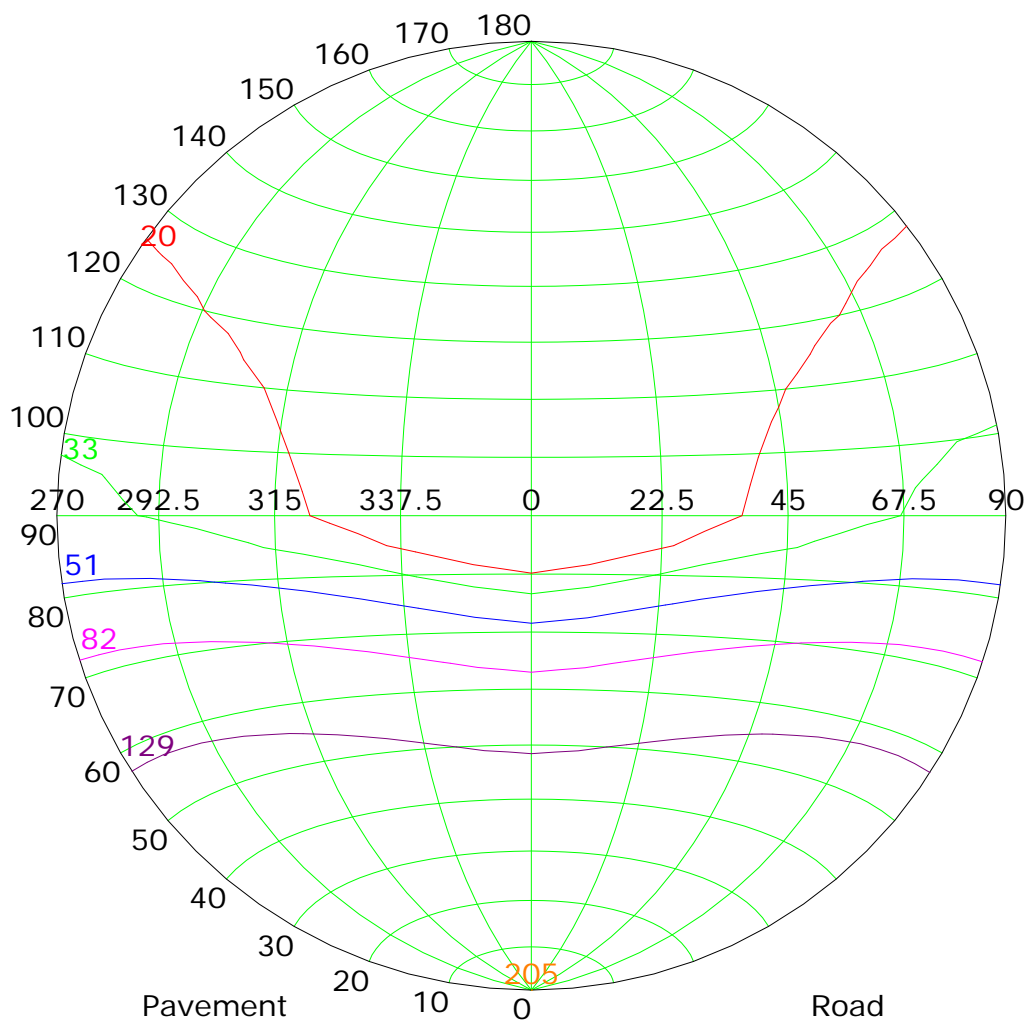
- | | | | |
|-----------|--------|-----------|--------|
| — (10%): | 20 cd | — (16%): | 33 cd |
| — (25%): | 51 cd | — (40%): | 82 cd |
| — (63%): | 129 cd | — (100%): | 205 cd |

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%): 205 cd

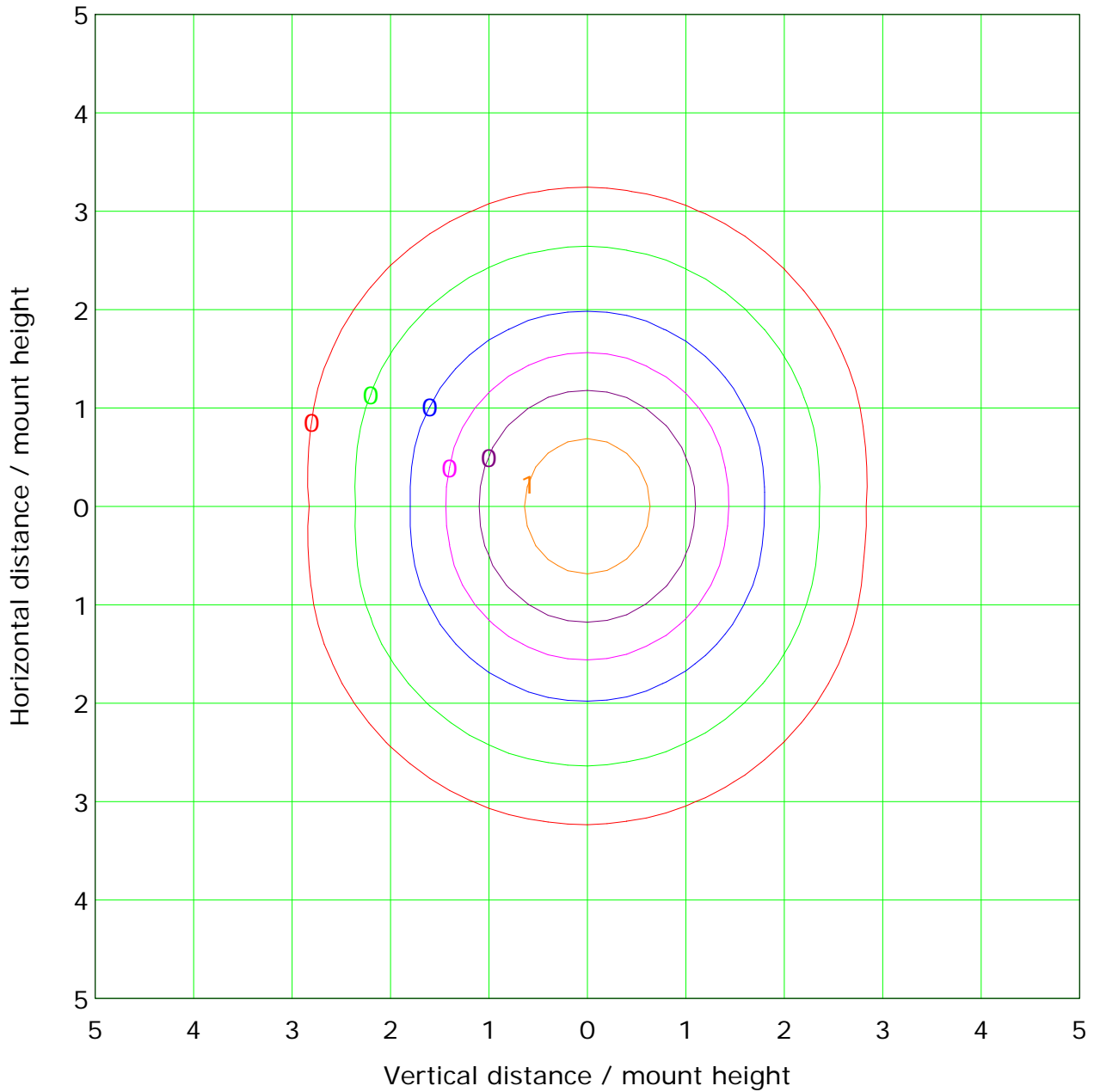
— (10%):	20 cd	— (16%):	33 cd
— (25%):	51 cd	— (40%):	82 cd
— (63%):	129 cd	— (100%):	205 cd

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		

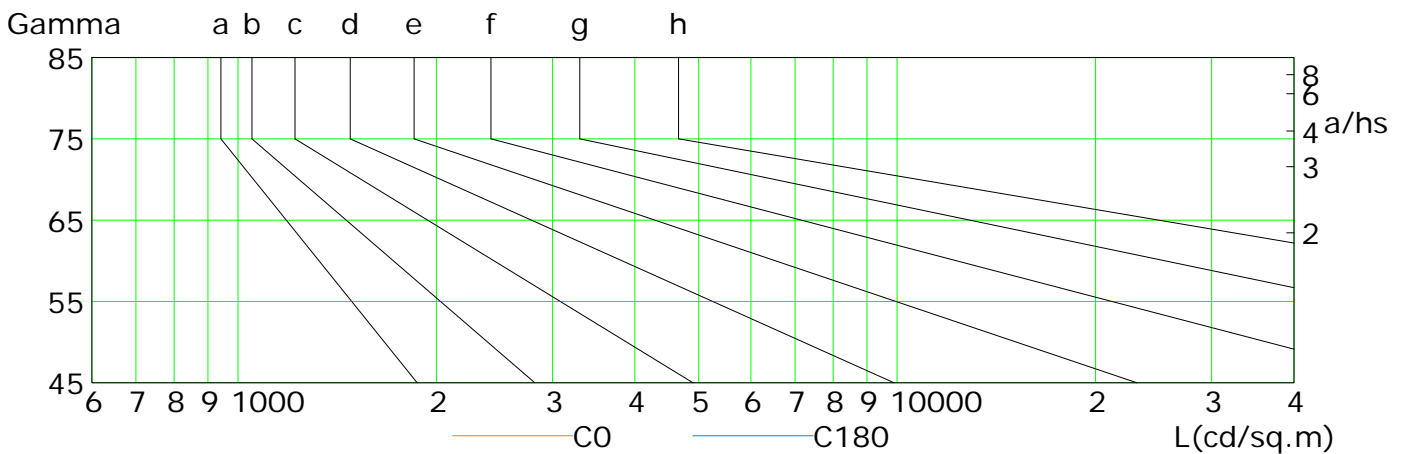
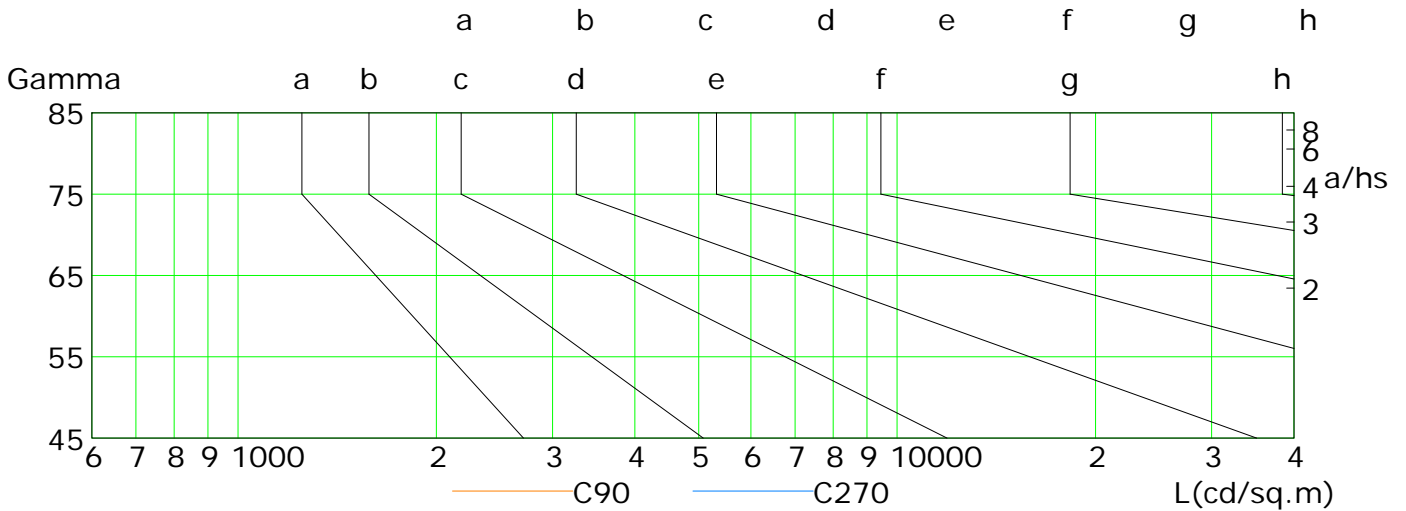
C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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	139	125	109	92	75	57	38	21	7
C90	161	149	135	121	105	89	72	56	42
C180	139	125	109	93	75	57	39	21	7
C270	161	149	136	122	106	90	73	56	42

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

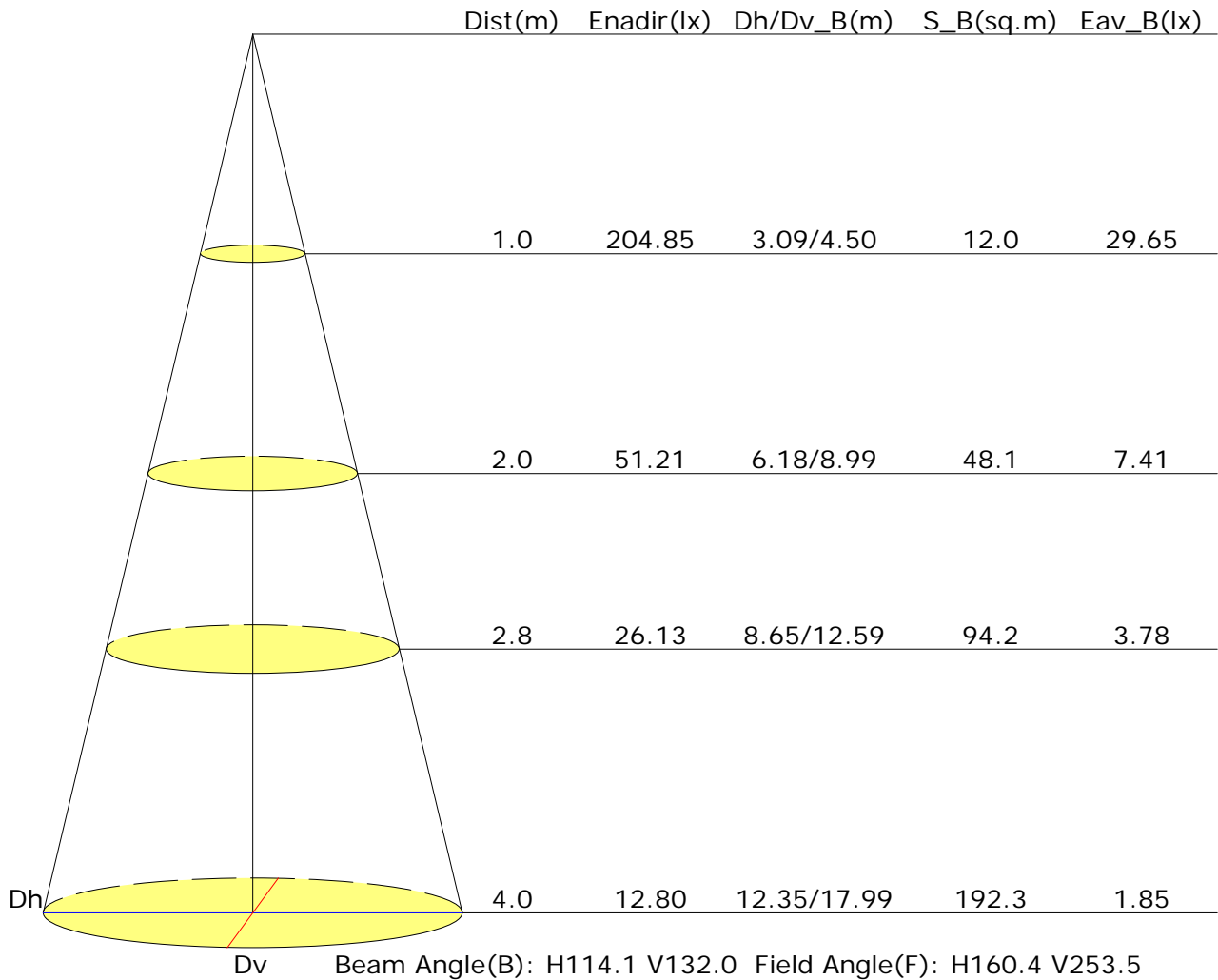
Distance: 7.970 m

Humidity:

Inspector:



Illuminance at a Distance

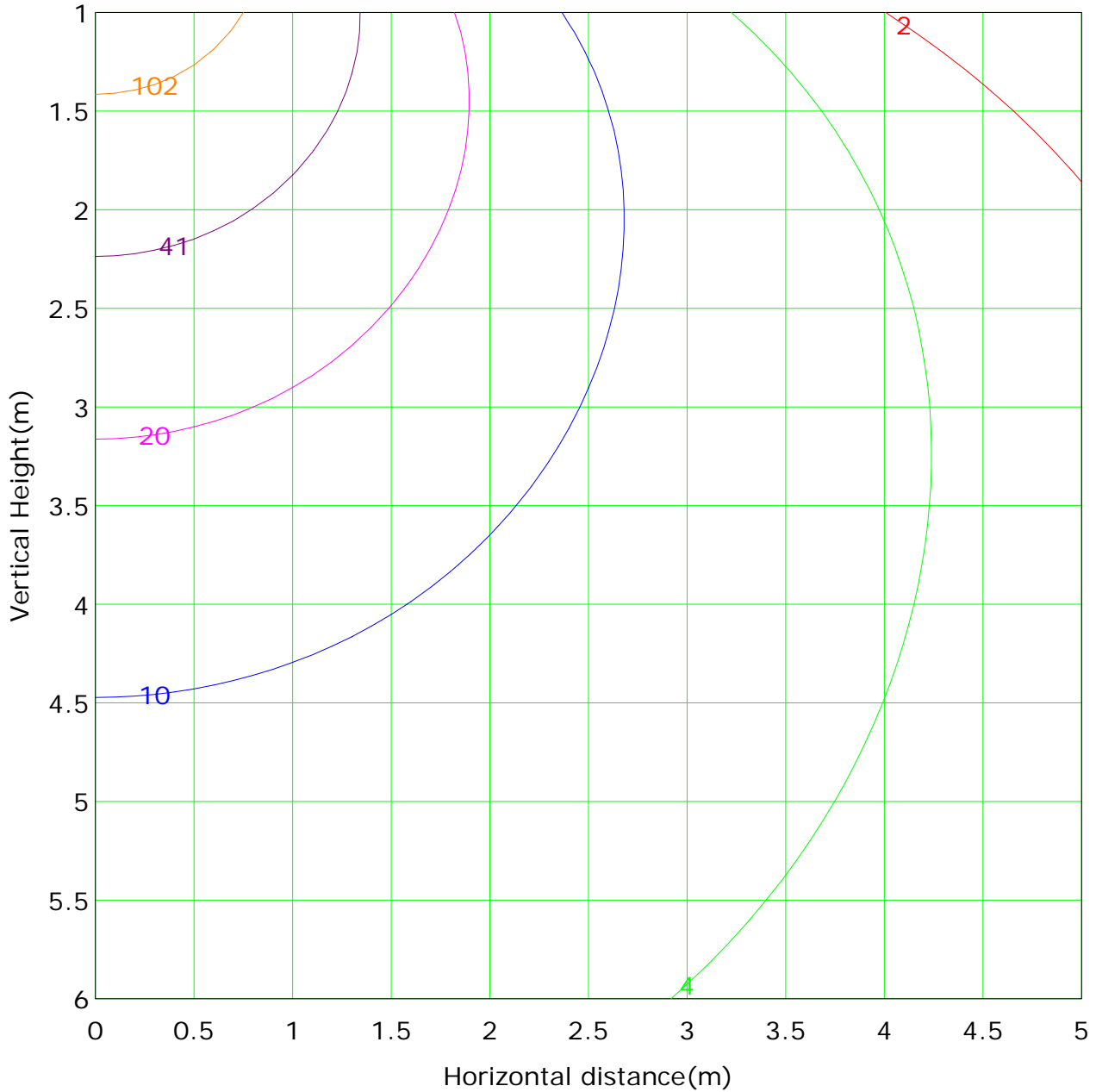


C Plane (°):0.0-360.0: 10.0
 Test Lab:
 Test Type: TYPE C
 Temperature:
 Operator:

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: 204.9 lx
(1%): 2.0 lx	(2%): 4.1 lx	(10%): 20.5 lx
(5%): 10.2 lx	(20%): 41.0 lx	(50%): 102.4 lx
(100%): 204.9 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: