

Report No.:

Test Time: 04/10/2018 10:00

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-ST01-02 + LLD-02-FM

Lamp Description: F52-400-1208C2-W5

Lumens per Lamp: 1000 lm

Current: 0.373 A

Power Factor: 1.000

Number of Lamps: 1

Voltage: 24.0 V

Power: 8.94 W

Photometric Results

CIE Class: Direct

Measurement Flux: 324.9 lm

Downward Ratio: 32.17%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.8, 152.7, 155.0, 155.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.4, 107.0, 108.1, 108.3

Luminaire Efficacy Rating (LER): 36.40

Max. Intensity: 120.21 cd

S/MH(C0/C180): 1.24

Total Rated Lamp Lumens: 1000.0 lm

Efficiency: 32.49%

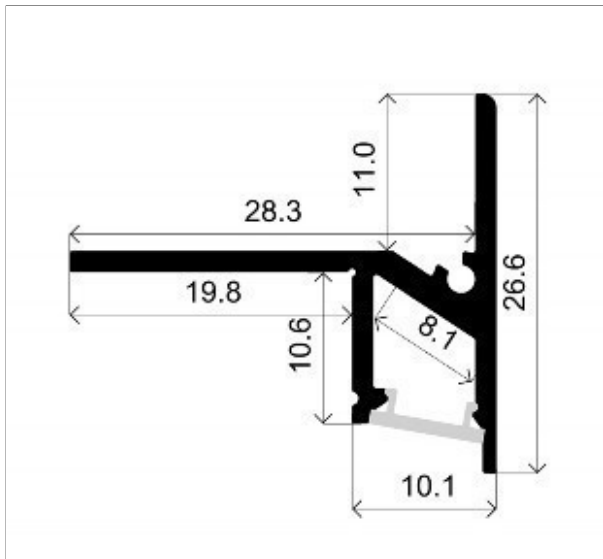
Upward Ratio: 0.32%

Central Intensity: 117.2 cd

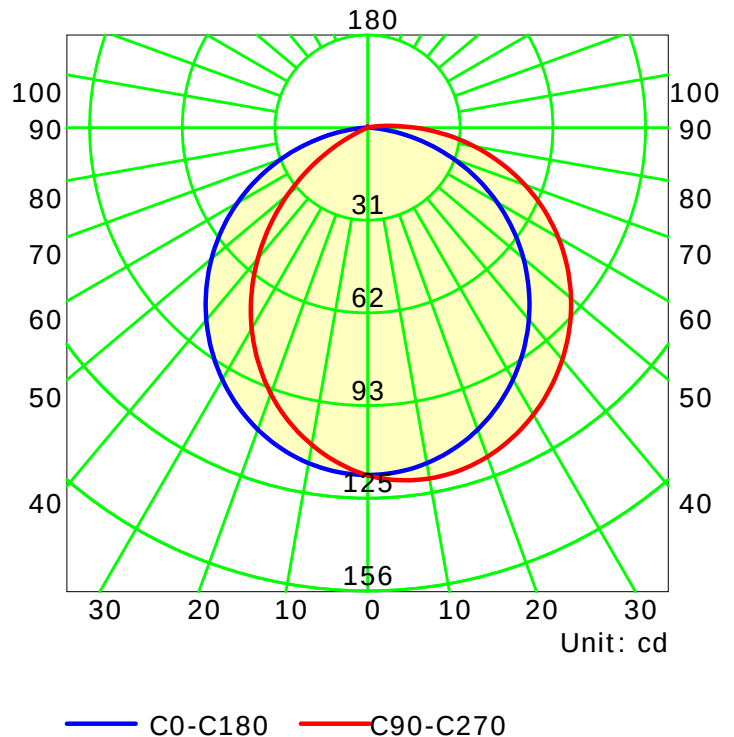
Pos of Max. Intensity: H90 V10

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

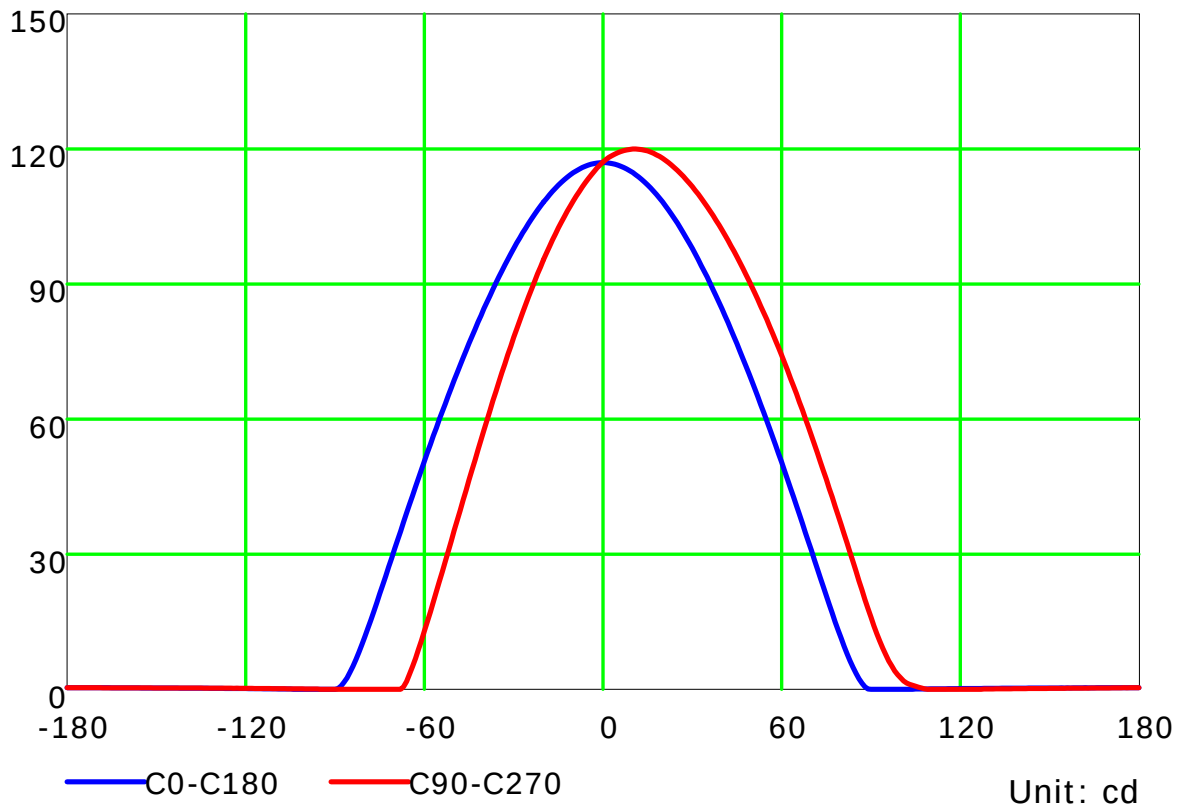
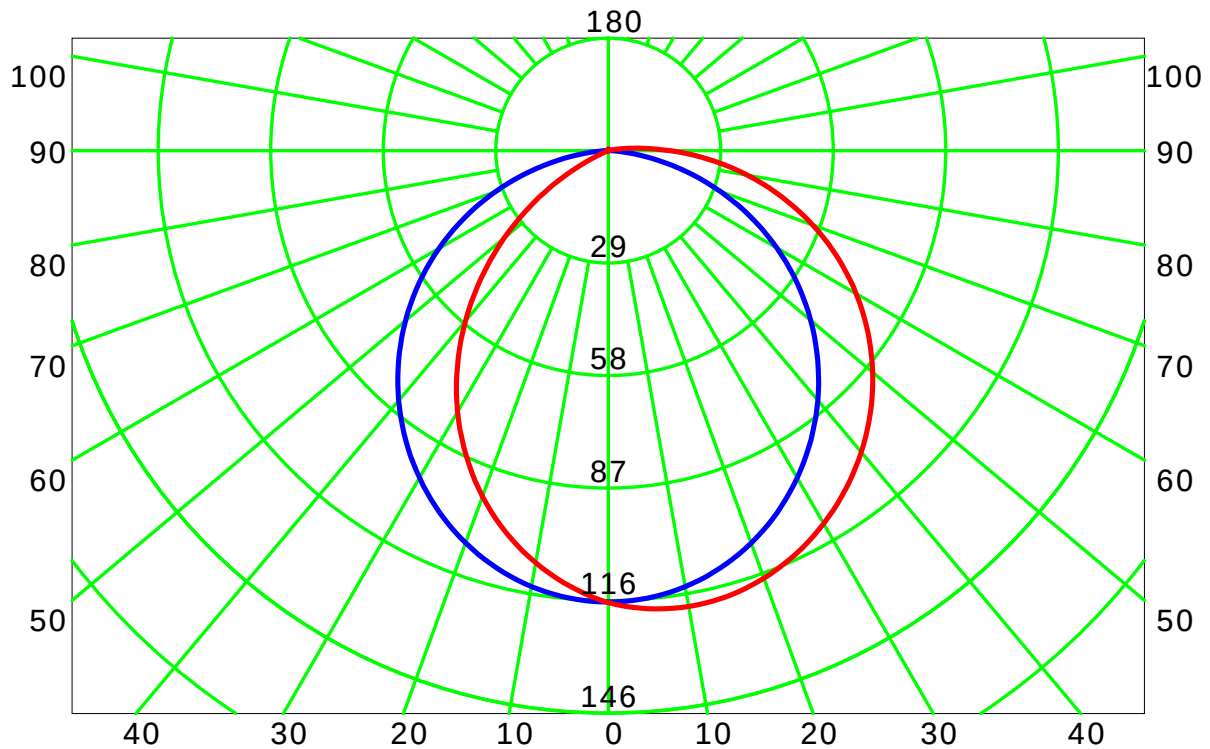
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

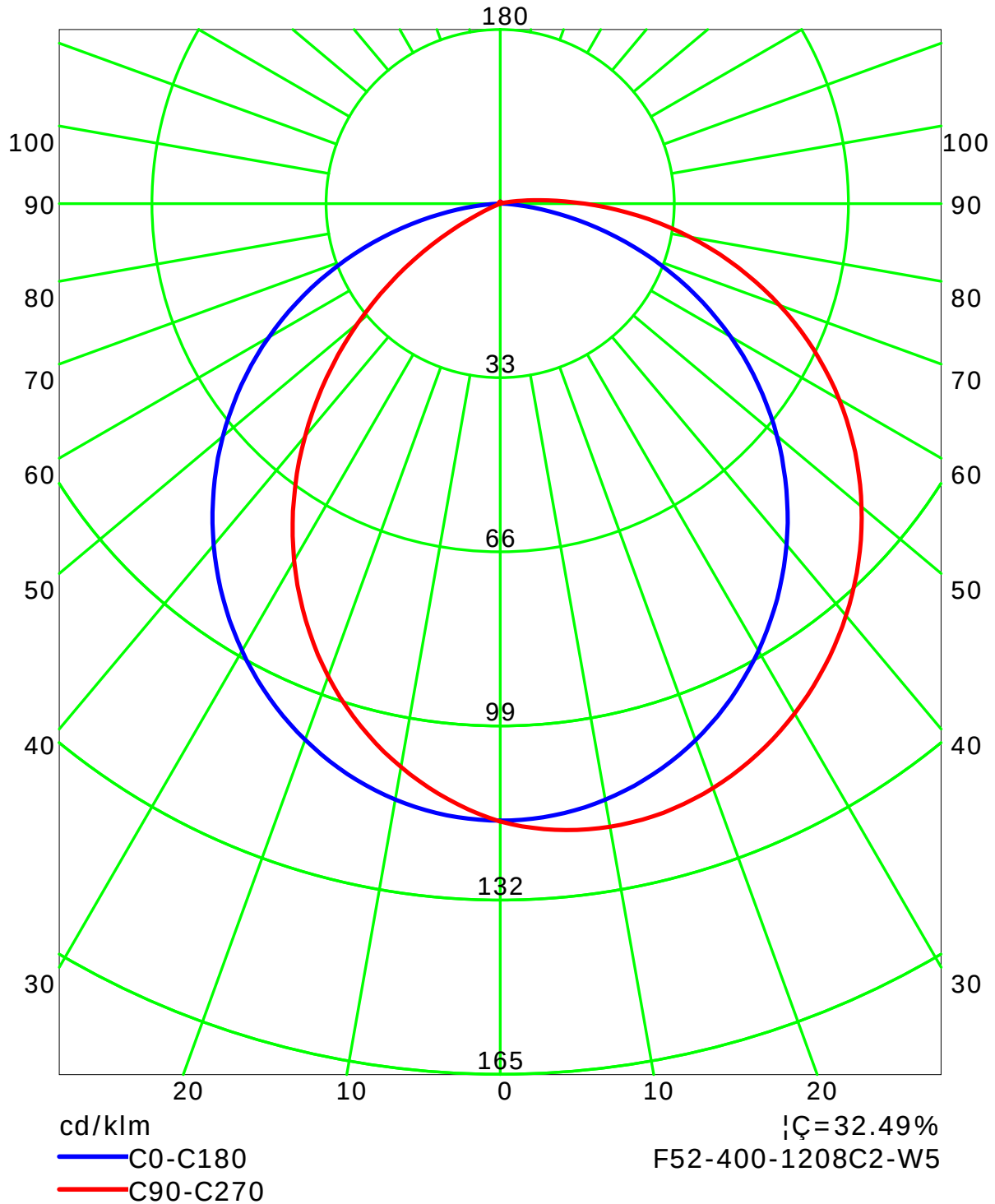
Luminous Intensity Distribution Curve



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:

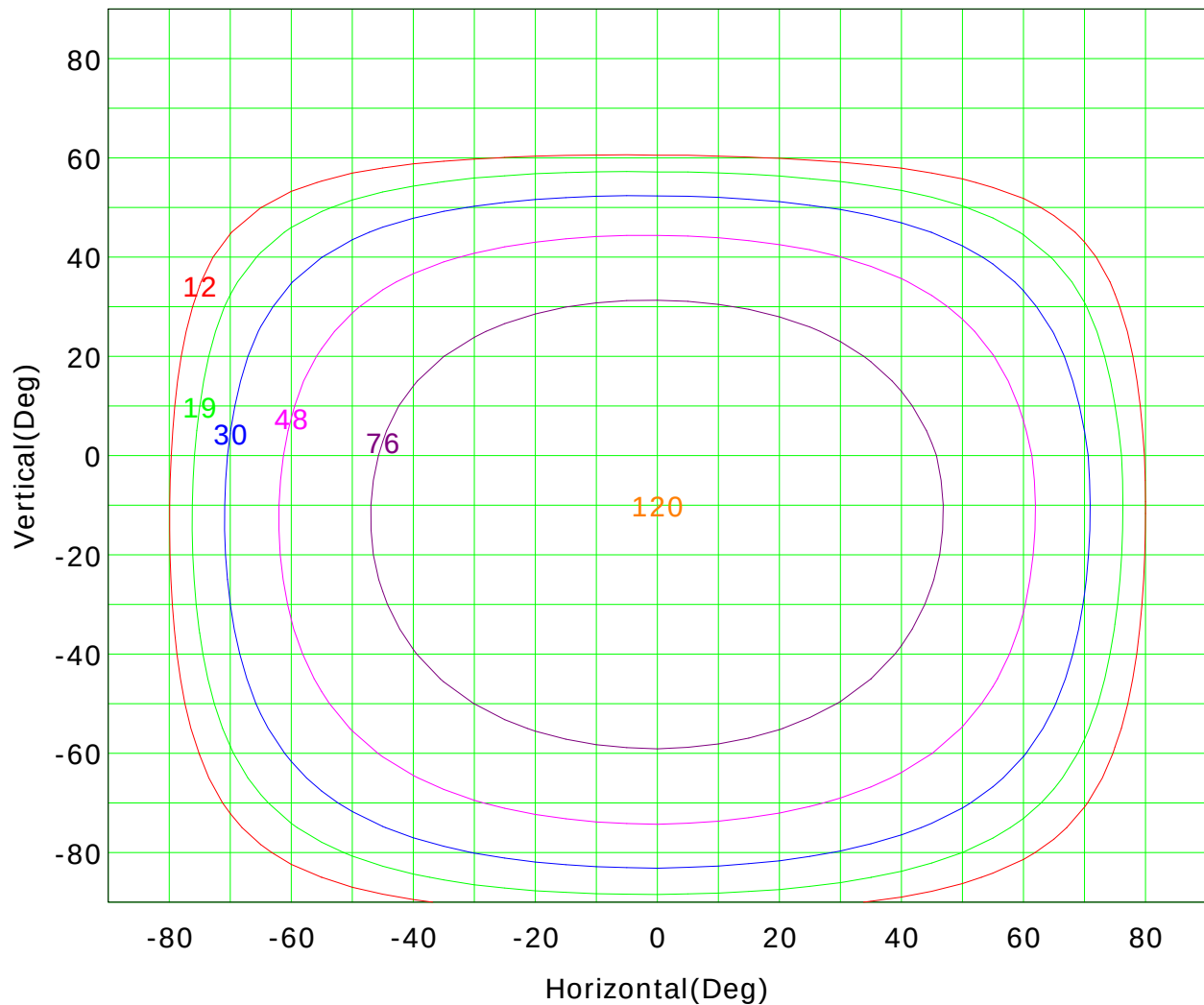
Luminous Intensity Distribution Curve(cd / klm)



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)



I_{max} (100%): 120 cd

(10%):	12 cd	(16%):	19 cd
(25%):	30 cd	(40%):	48 cd
(63%):	76 cd	(100%):	120 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

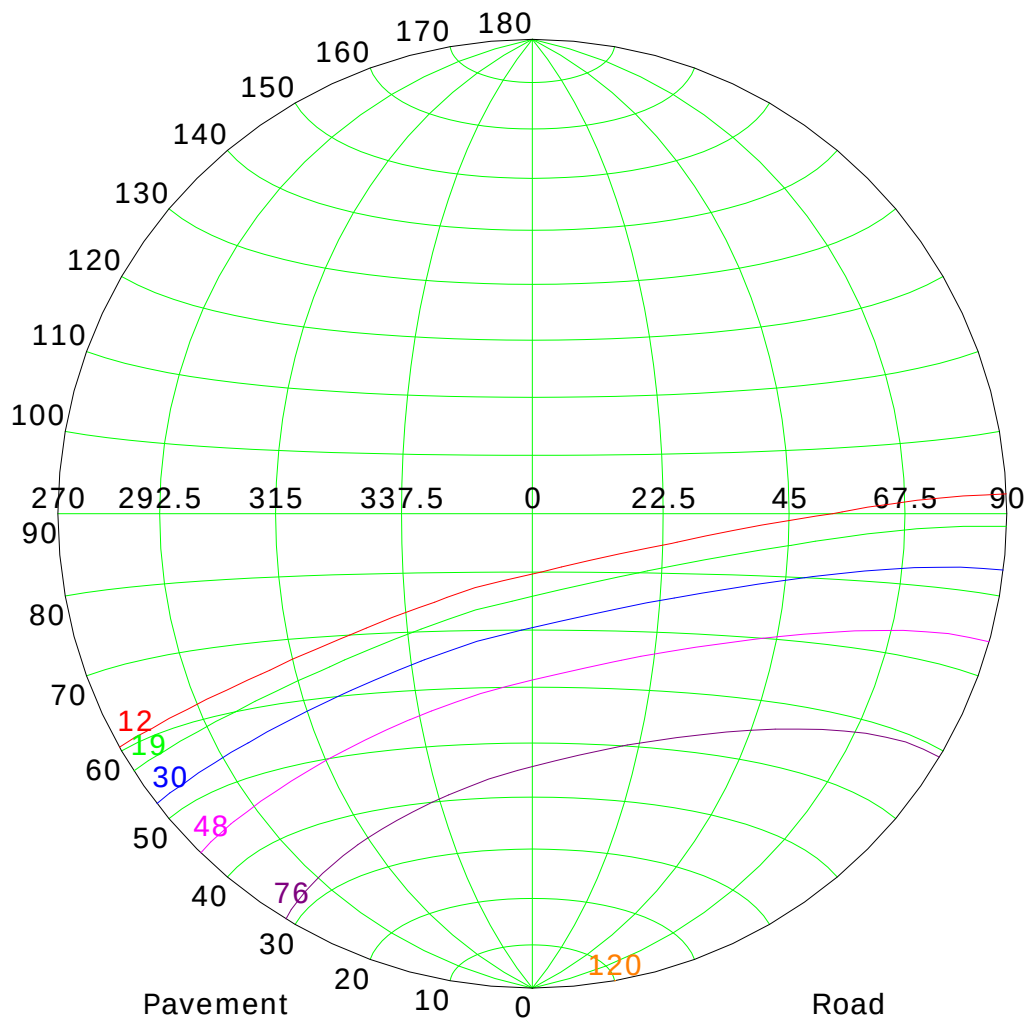
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 120 cd

(10%):	12 cd	(16%):	19 cd
(25%):	30 cd	(40%):	48 cd
(63%):	76 cd	(100%):	120 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

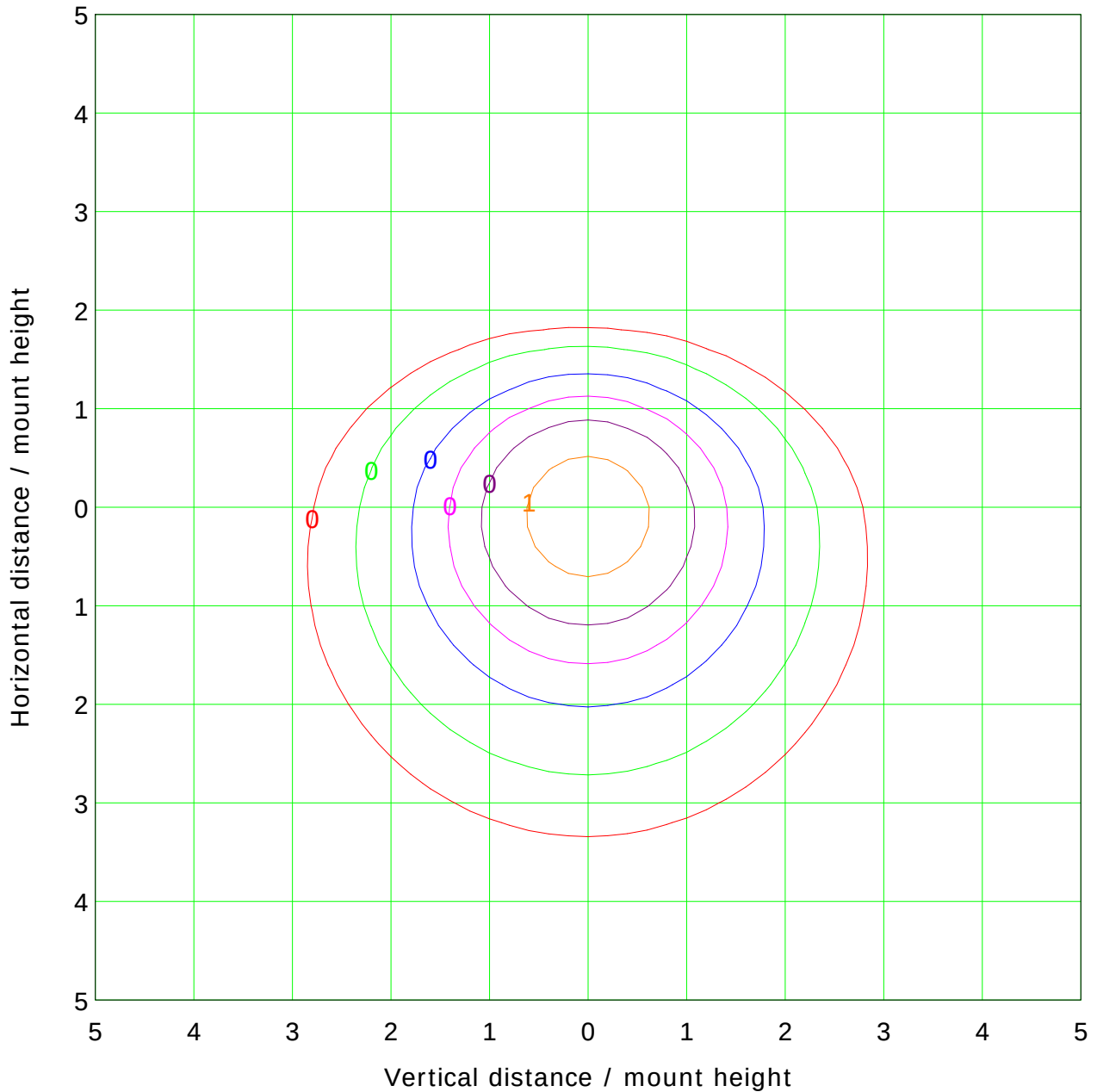
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 1.2 lx

(1%): 0.0 lx	(2%): 0.0 lx
(5%): 0.1 lx	(10%): 0.1 lx
(20%): 0.2 lx	(50%): 0.6 lx
(100%): 1.2 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

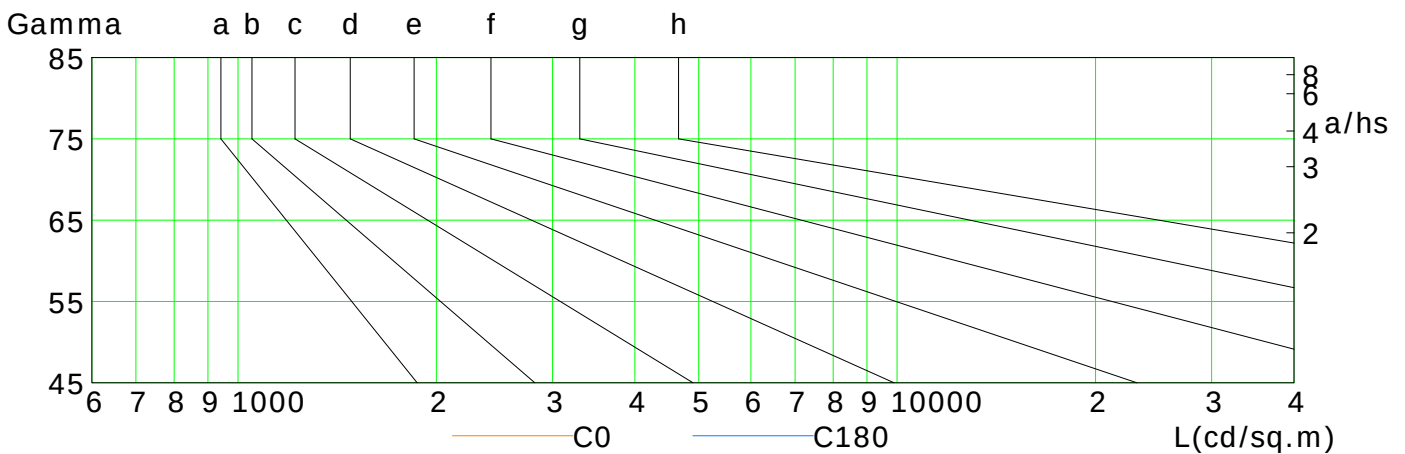
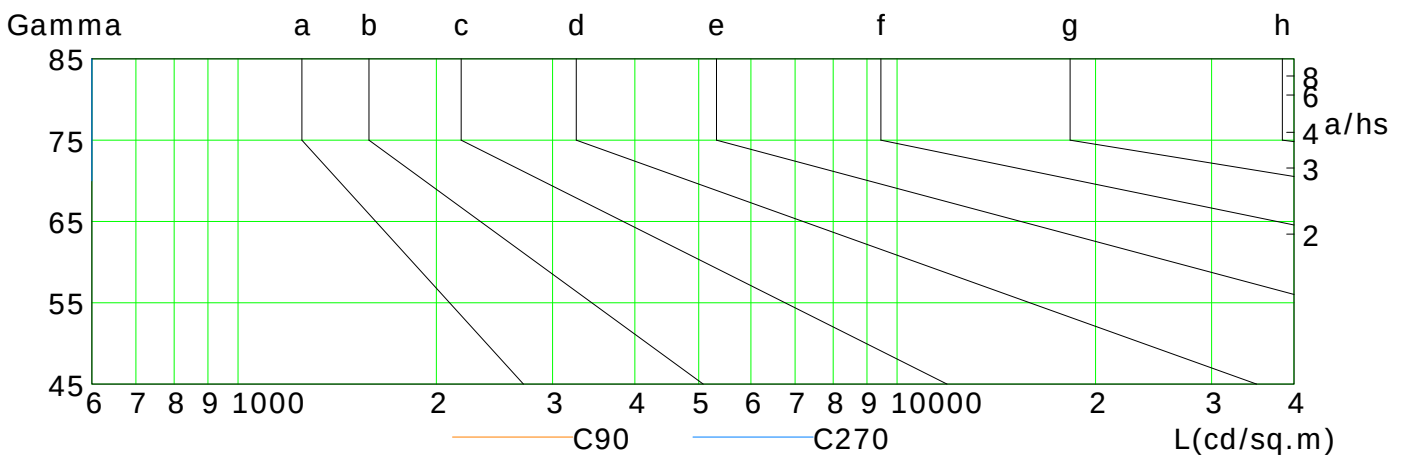
Humidity:

Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
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

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	77	69	60	51	41	31	21	11	4
C90	96	90	82	74	66	56	47	37	26
C180	77	69	60	51	41	31	21	12	4
C270	47	35	24	13	3	0	0	0	0

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

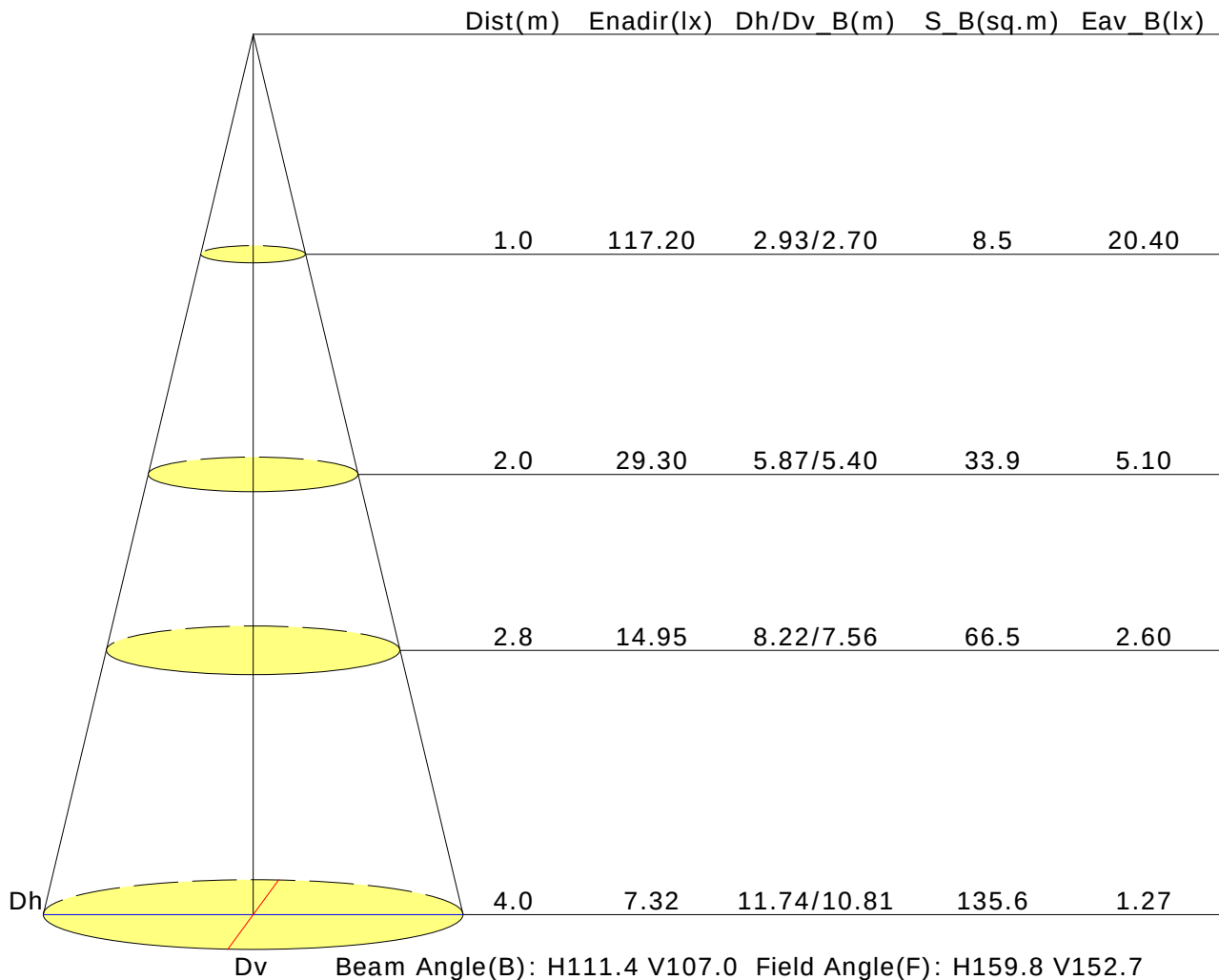
Test Device: GPM-2000

Distance: 7.970 m

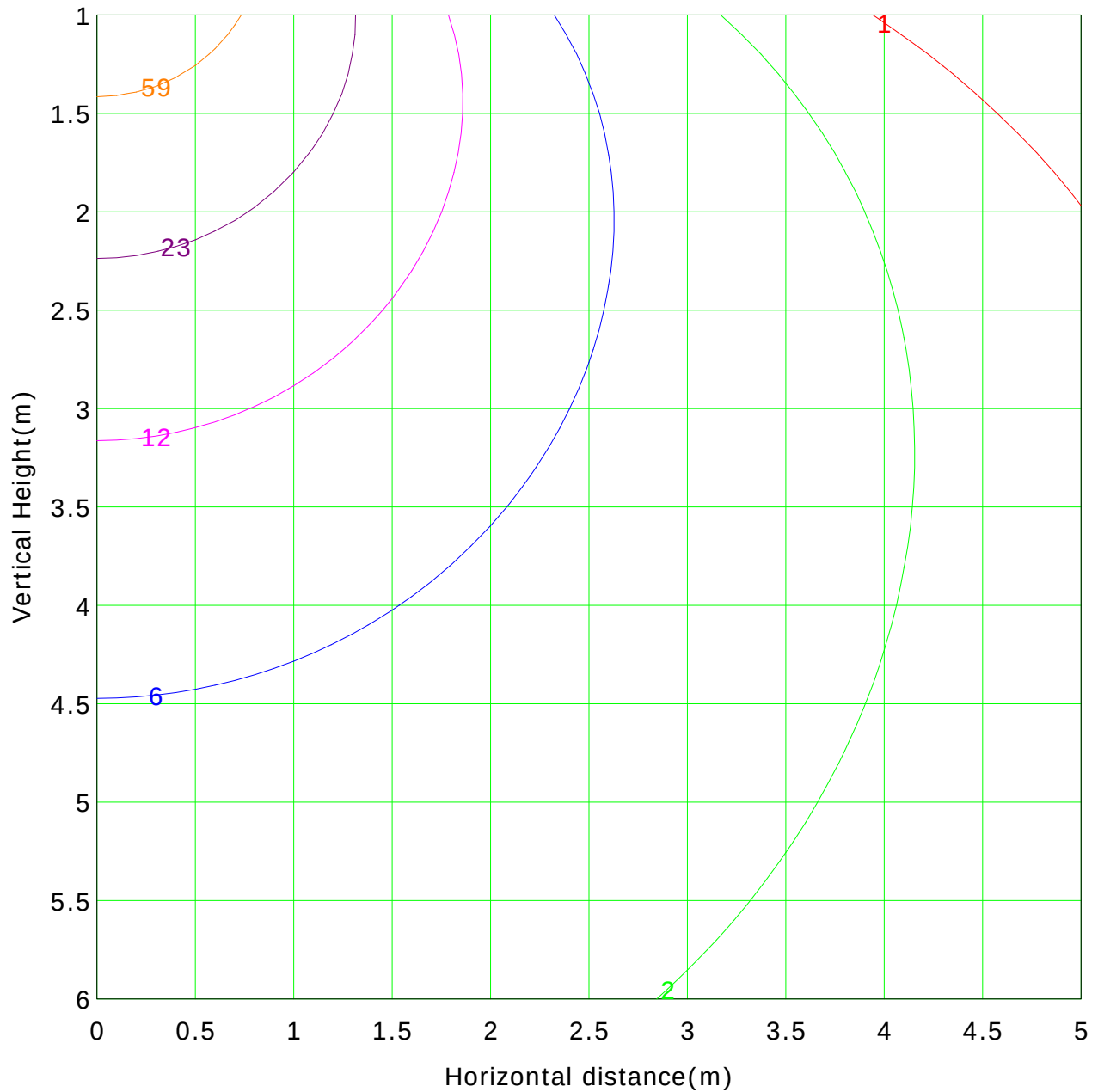
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 117.2 lx
(1%): 1.2 lx	(2%): 2.3 lx	
(5%): 5.9 lx	(10%): 11.7 lx	
(20%): 23.4 lx	(50%): 58.6 lx	
(100%): 117.2 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:

Report No.:

Test Time: 04/10/2018 11:01

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-ST01-02 + LLD-02-FS

Lamp Description: F52-400-1208C2-W5

Number of Lamps: 1

Lumens per Lamp: 1000 lm

Voltage: 24.0 V

Current: 0.372 A

Power: 8.92 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 307.3 lm

Downward Ratio: 30.34%

Total Rated Lamp Lumens: 1000.0 lm

Efficiency: 30.73%

Upward Ratio: 0.39%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 163.2, 155.1, 157.5, 157.8

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.8, 105.6, 106.5, 106.6

Luminaire Efficacy Rating (LER): 34.50

Central Intensity: 111.68 cd

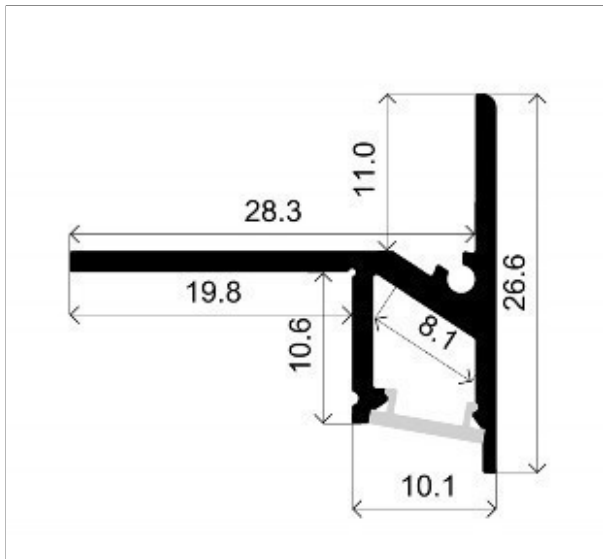
Max. Intensity: 113.74 cd

Pos of Max. Intensity: H270 V9

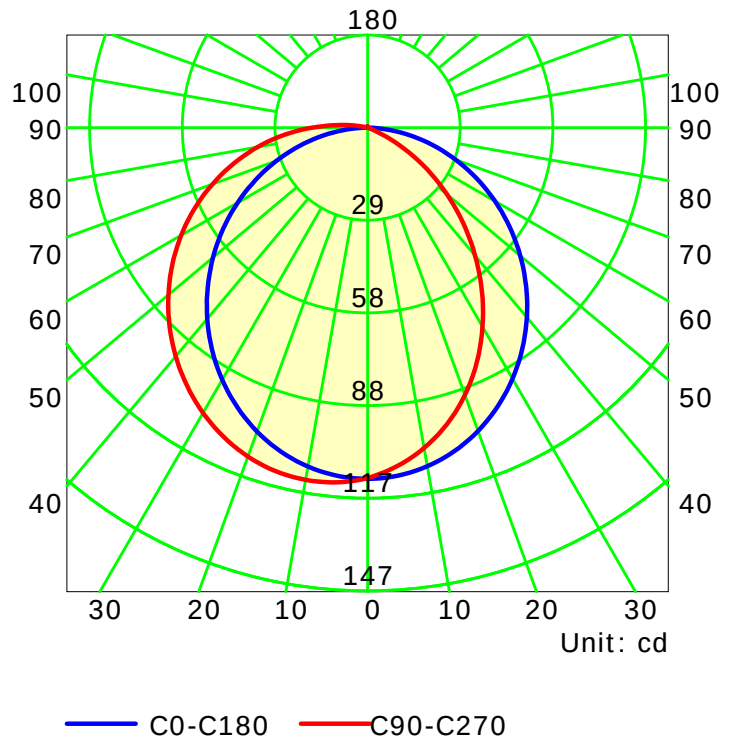
S/MH(C0/C180): 1.23

S/MH(C90/C270): 1.19

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

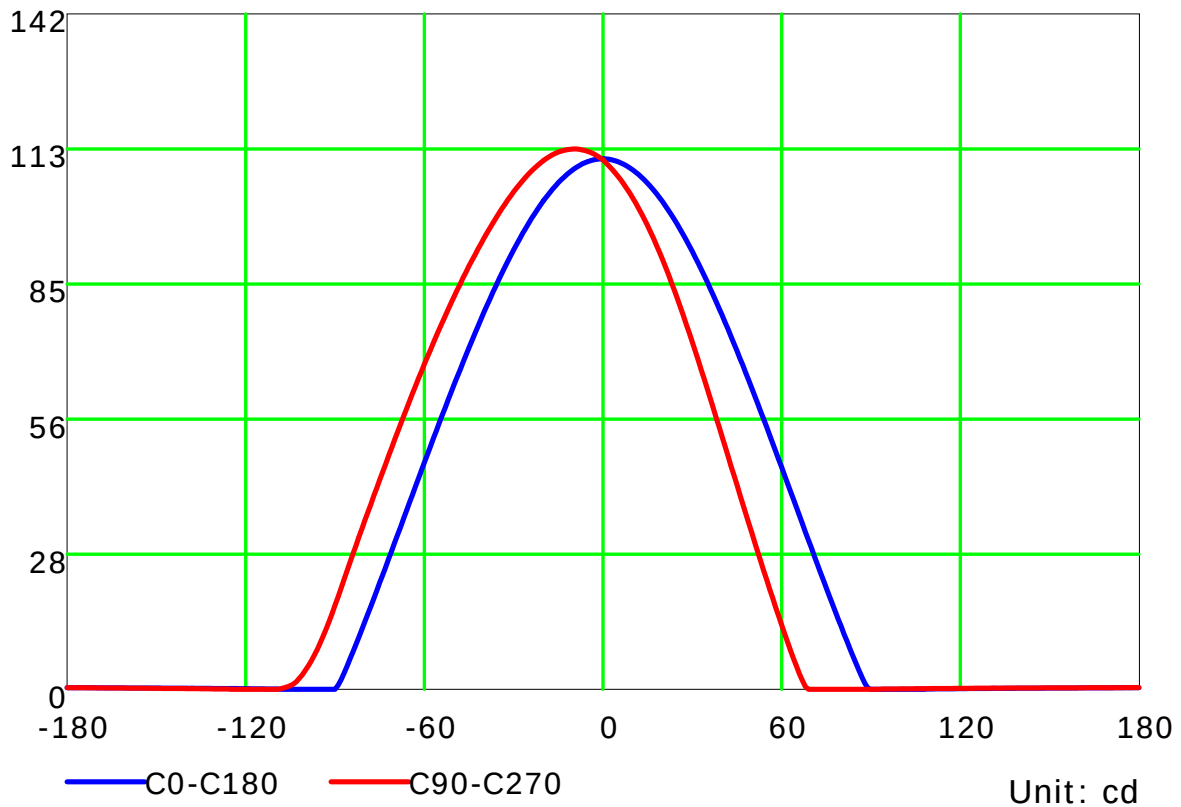
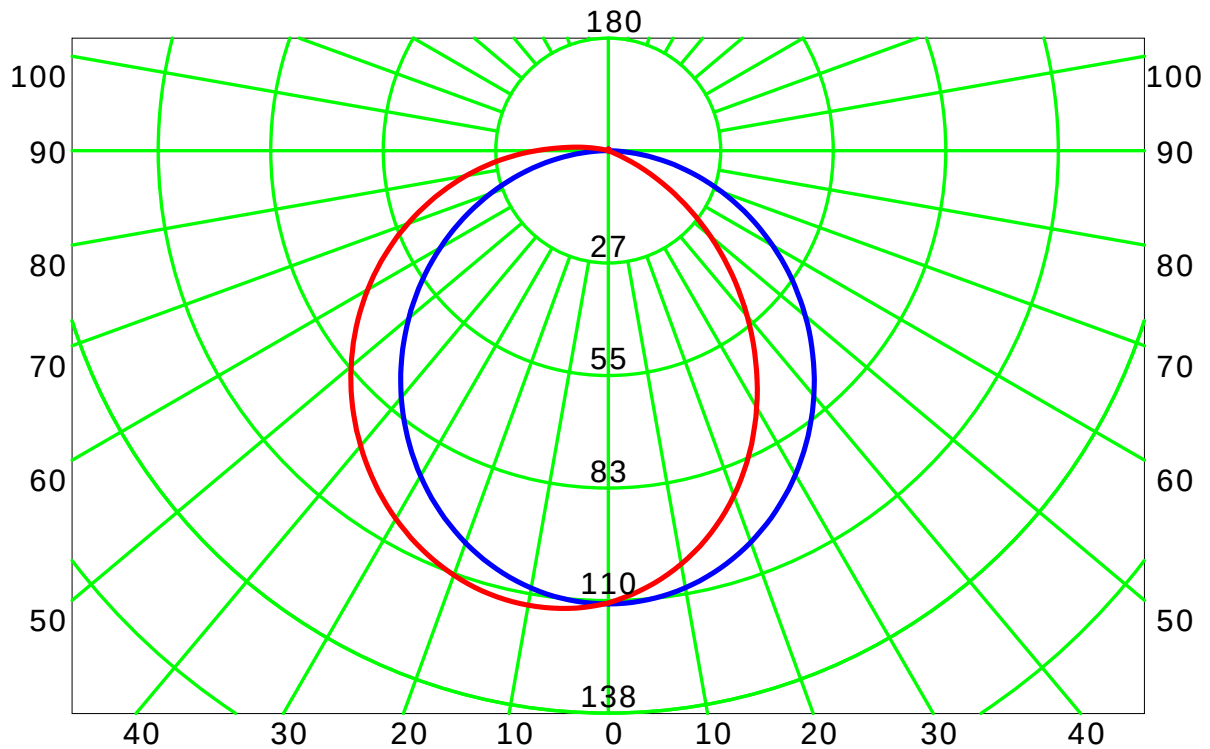
Test Device: GPM-2000

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

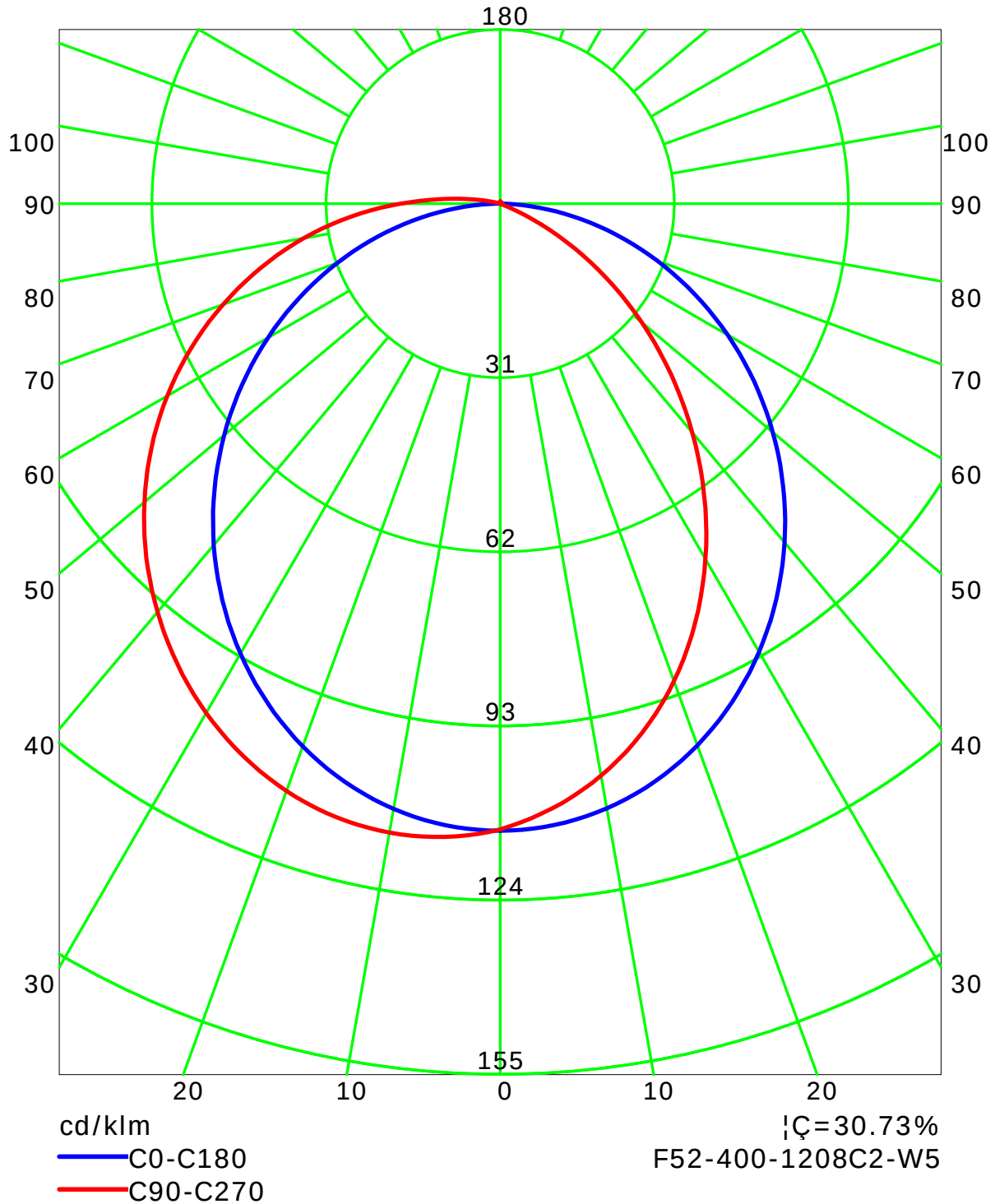
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

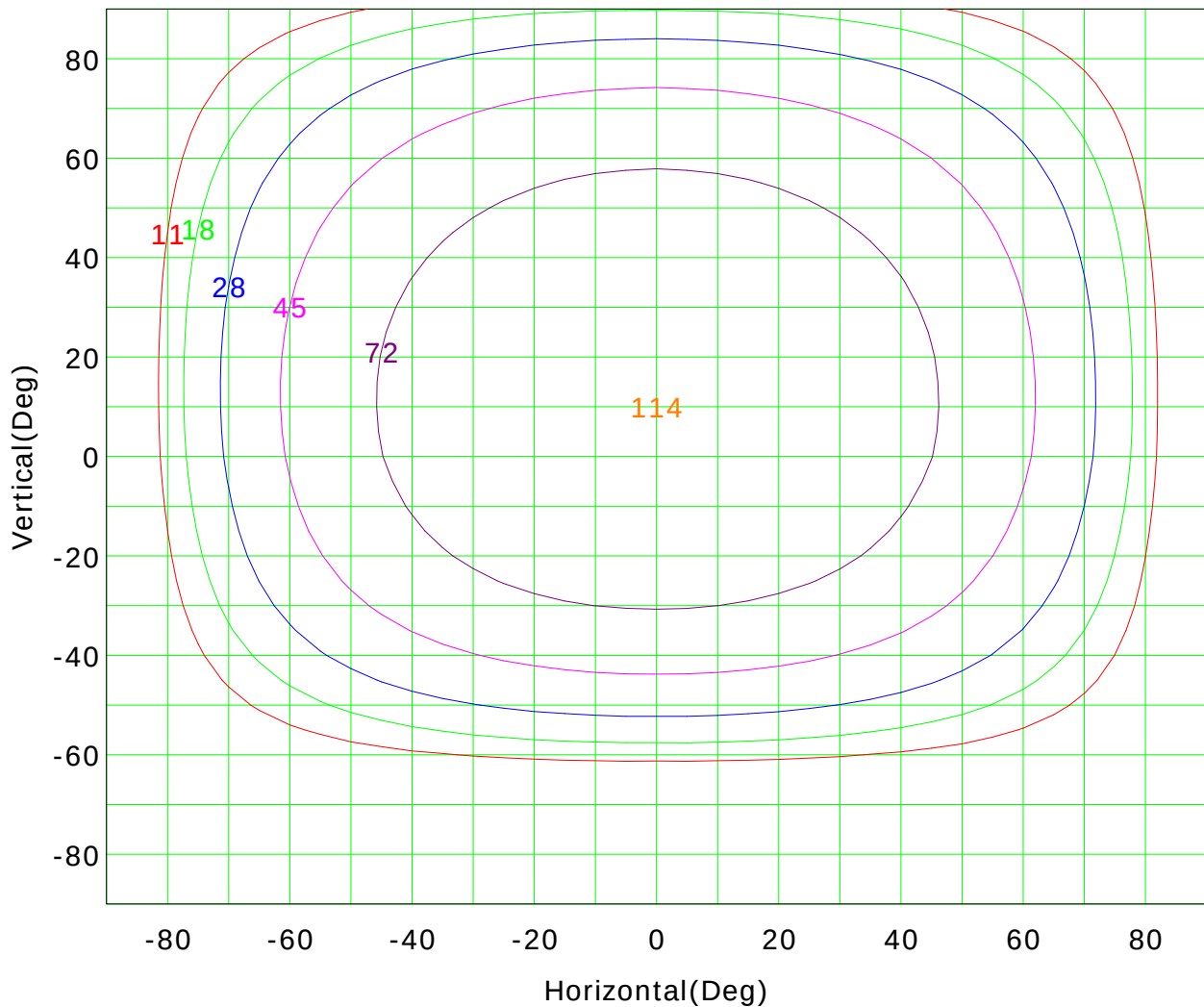
Luminous Intensity Distribution Curve(cd / klm)



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)



I_{max} (100%): 114 cd

(10%):	11 cd	(16%):	18 cd
(25%):	28 cd	(40%):	45 cd
(63%):	72 cd	(100%):	114 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

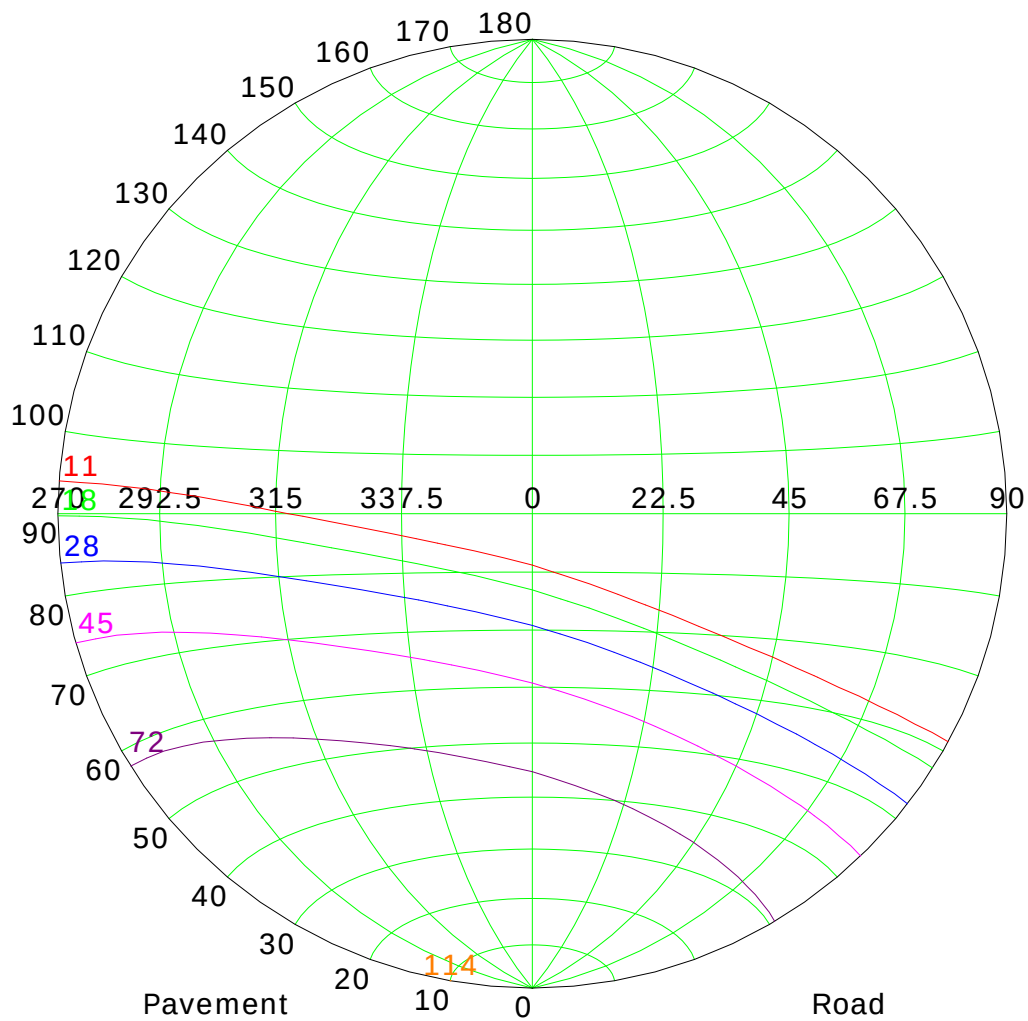
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 114 cd

(10%):	11 cd	(16%):	18 cd
(25%):	28 cd	(40%):	45 cd
(63%):	72 cd	(100%):	114 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

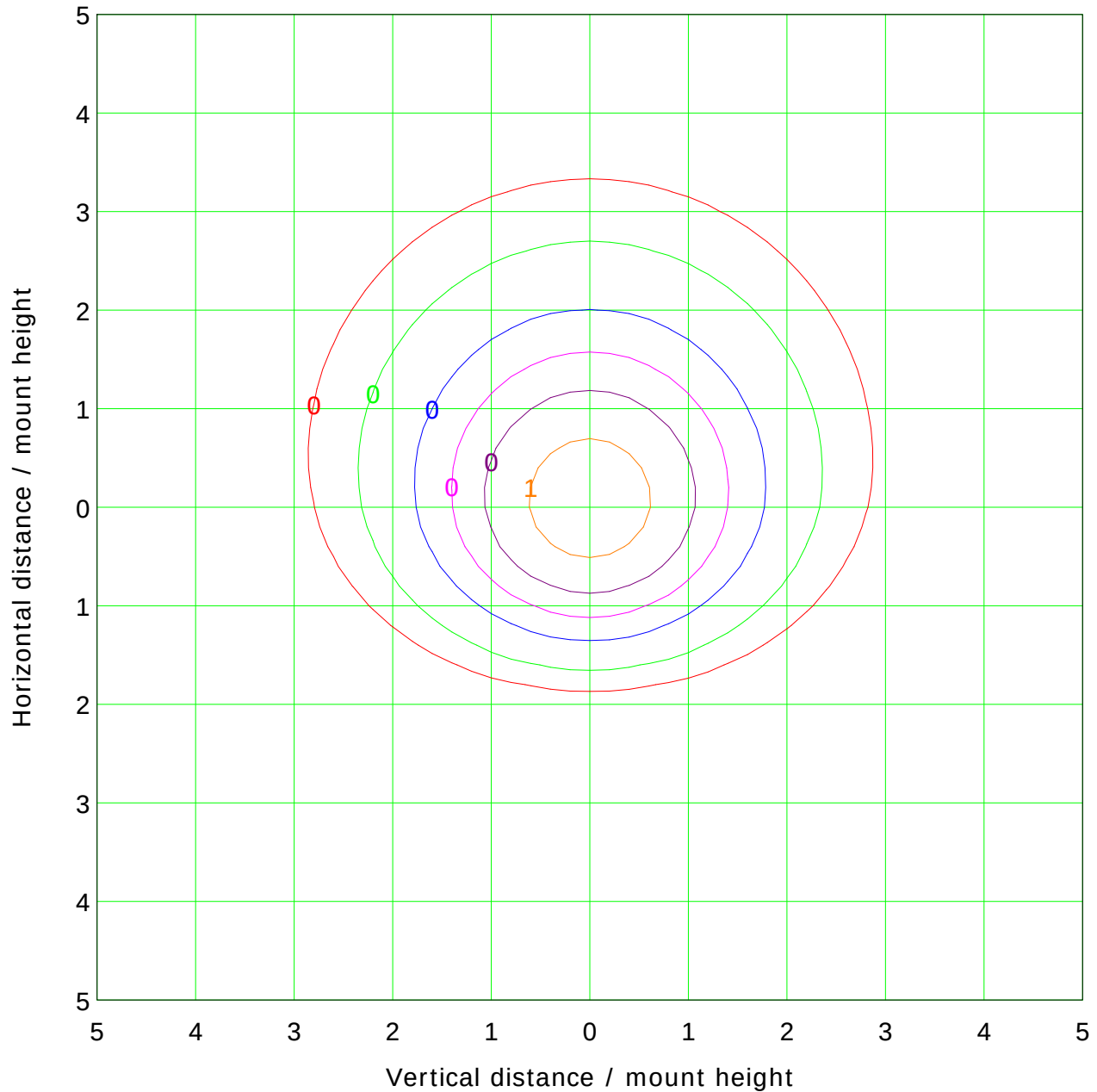
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 1.1 lx

— (1%): 0.0 lx	— (2%): 0.0 lx
— (5%): 0.1 lx	— (10%): 0.1 lx
— (20%): 0.2 lx	— (50%): 0.6 lx
— (100%): 1.1 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

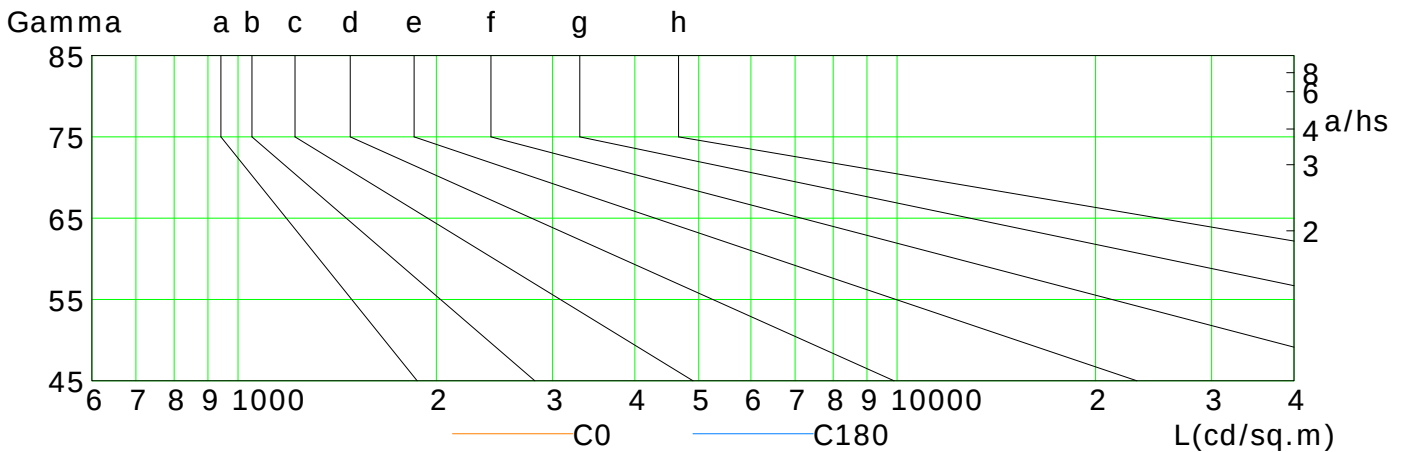
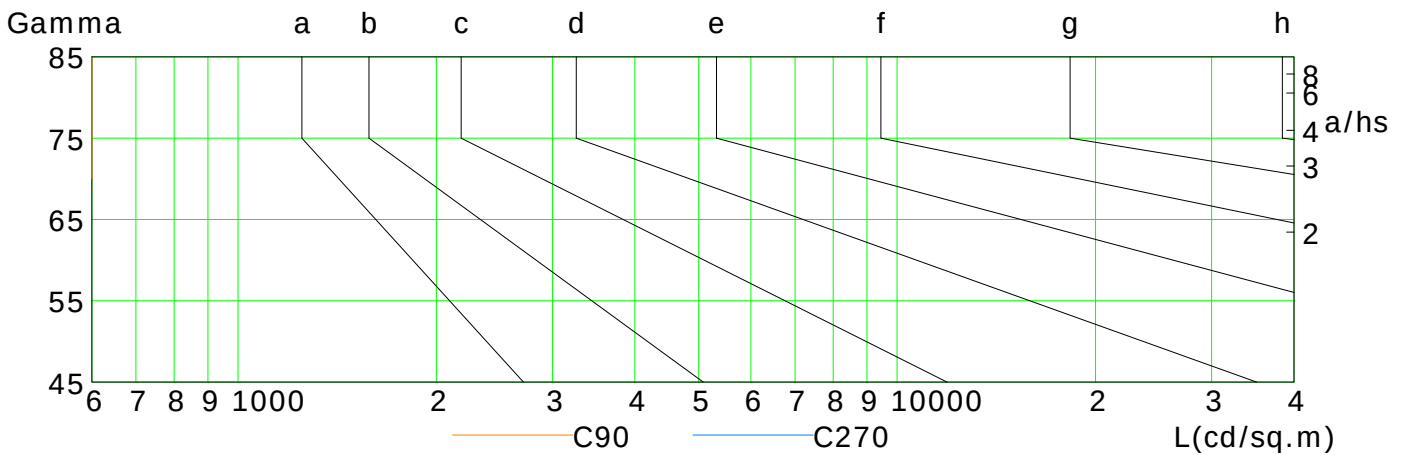
Humidity:

Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
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

a b c d e f g h



L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	71	63	55	47	38	30	21	13	5
C90	43	33	23	14	5	0	0	0	0
C180	72	64	56	48	39	31	22	14	6
C270	89	83	76	68	61	53	44	36	27

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

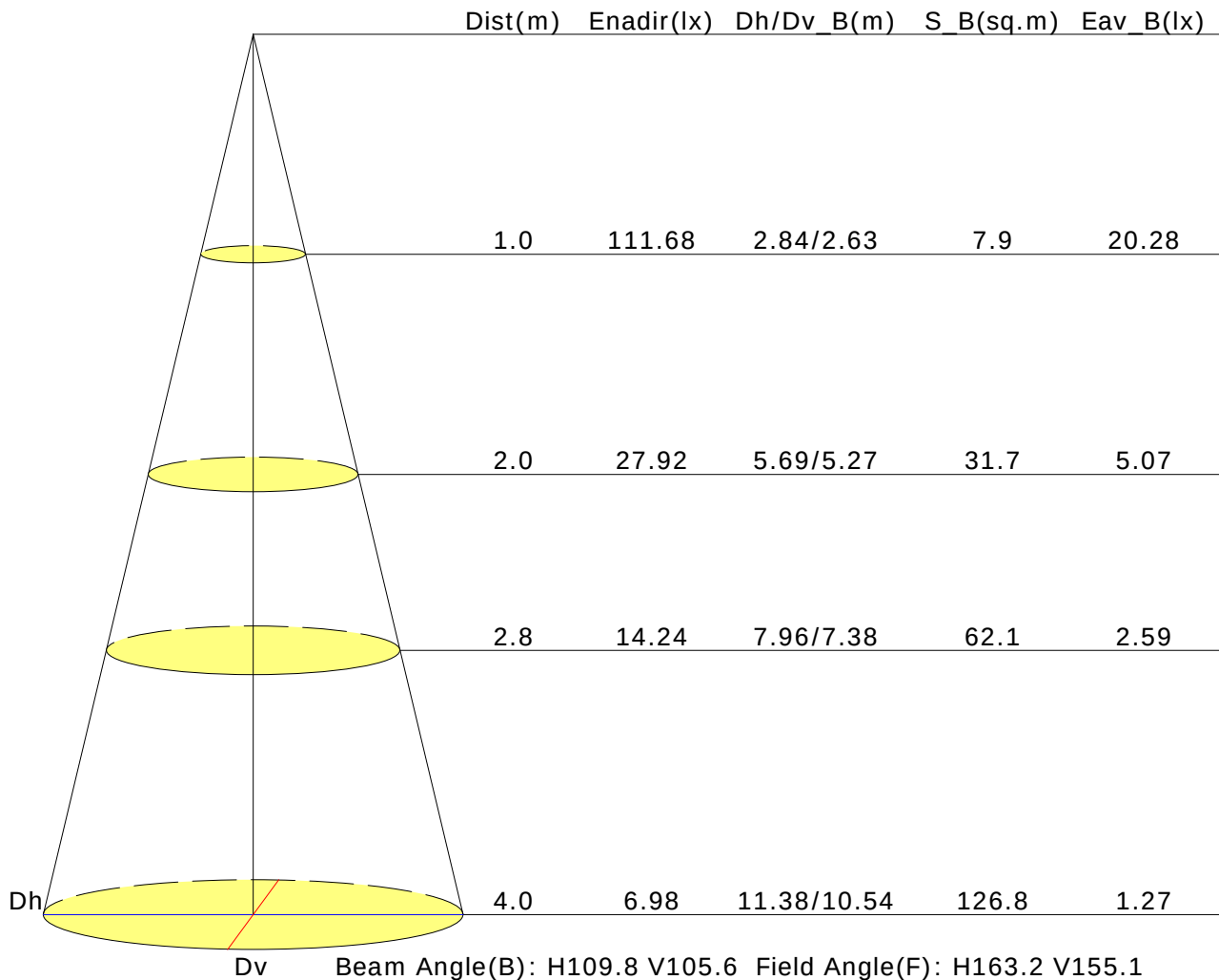
Test Device: GPM-2000

Distance: 7.970 m

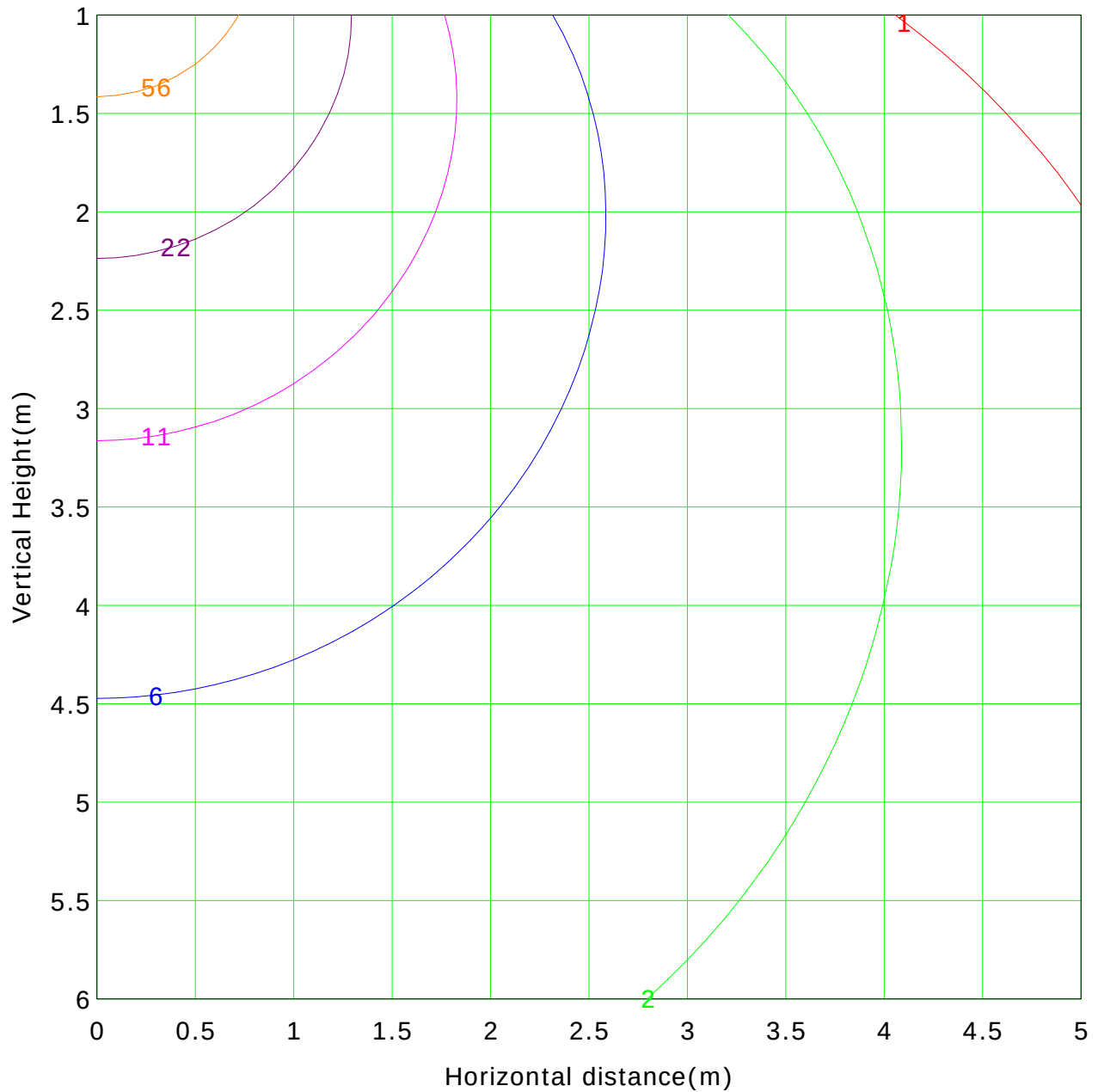
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 111.7 lx
(1%): 1.1 lx	(2%): 2.2 lx	
(5%): 5.6 lx	(10%): 11.2 lx	
(20%): 22.3 lx	(50%): 55.8 lx	
(100%): 111.7 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: