

Report No.:

Test Time: 04/10/2018 12:40

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-BB02-02 + LLD-02-FM

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: 353 lm

Downward Ratio: 35.12%

Total Rated Lamp Lumens: 1000.0 lm

Efficiency: 35.30%

Upward Ratio: 0.18%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.0, 163.7, 162.1, 162.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.7, 112.4, 112.2, 112.3

Luminaire Efficacy Rating (LER): 39.62

Central Intensity: 123.09 cd

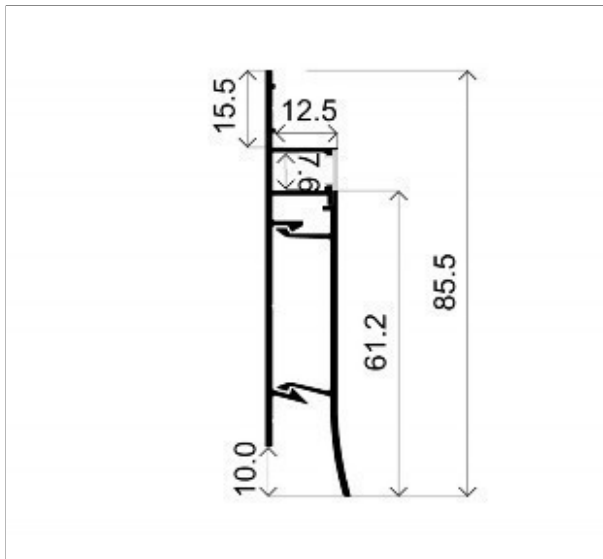
Max. Intensity: 123.17 cd

Pos of Max. Intensity: H260 V1

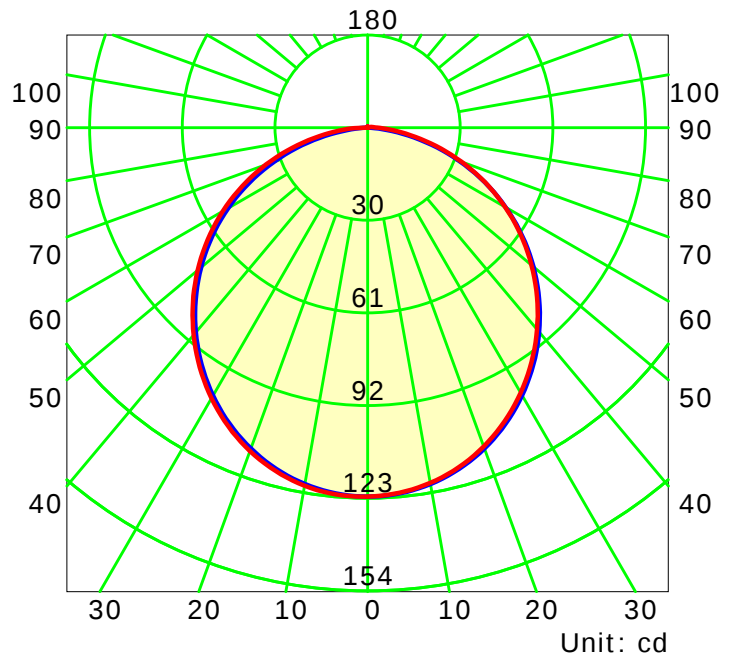
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.25

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

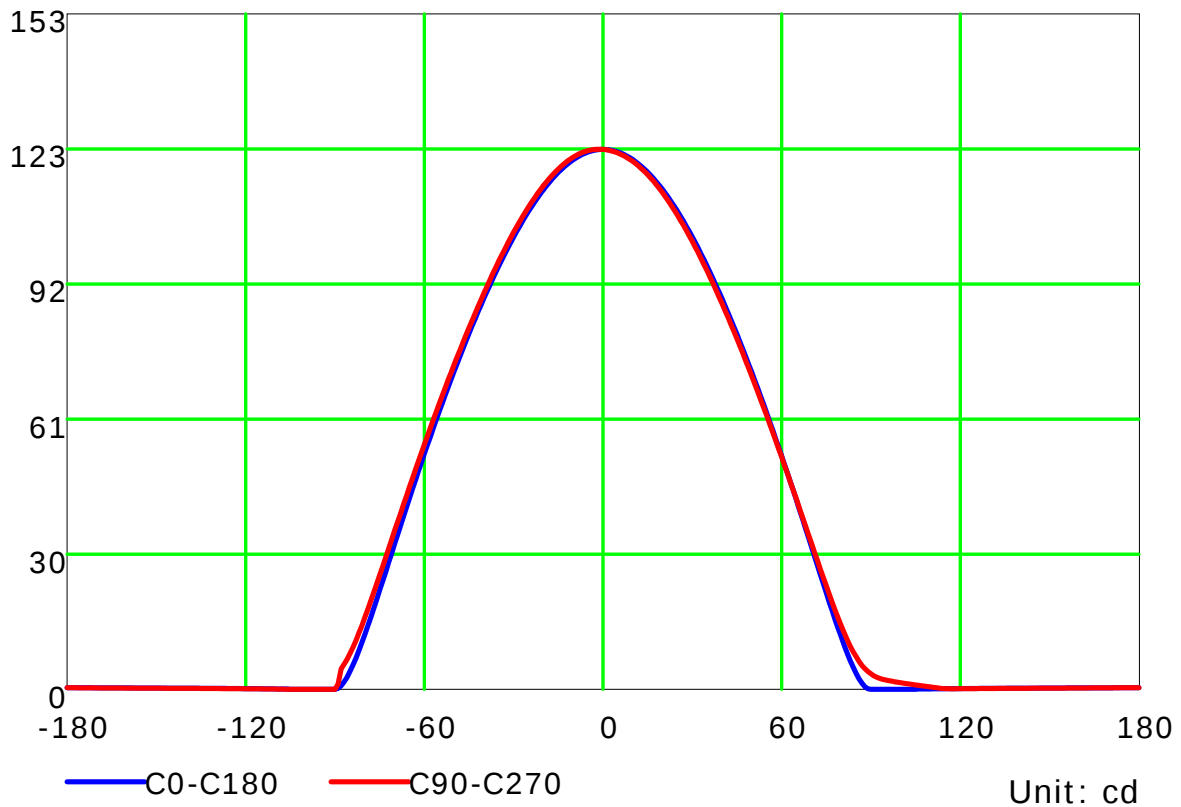
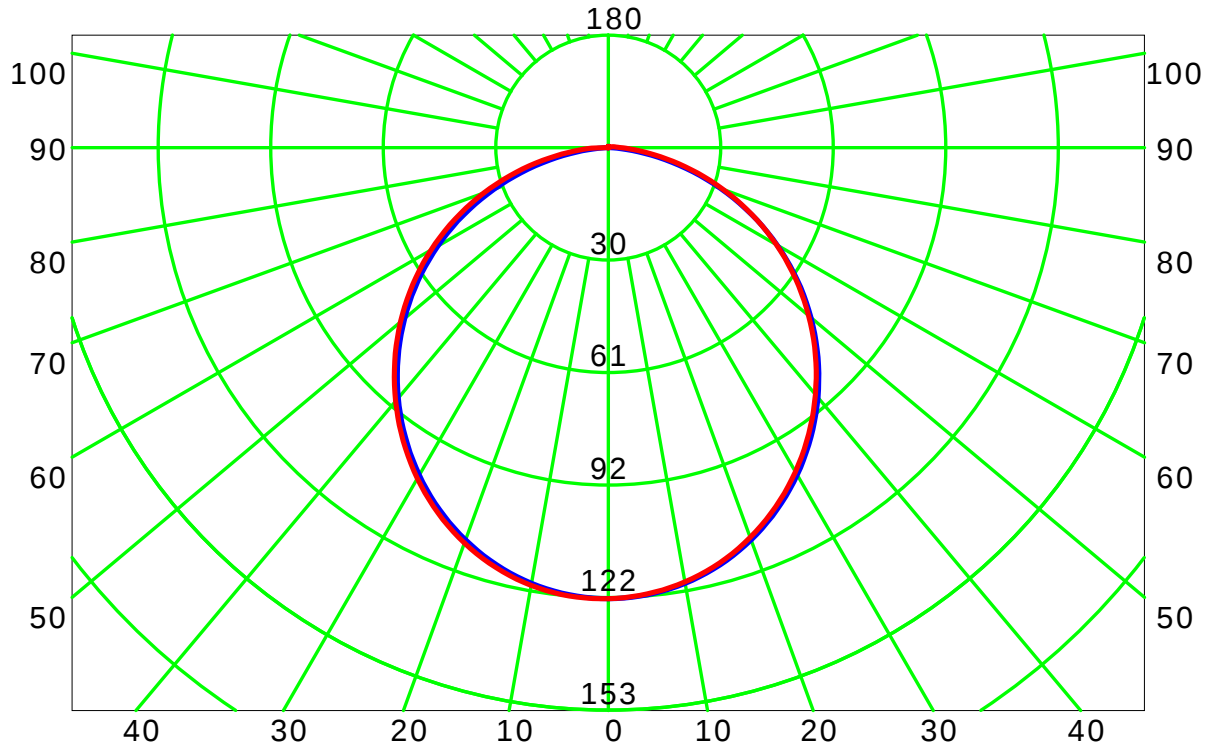
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

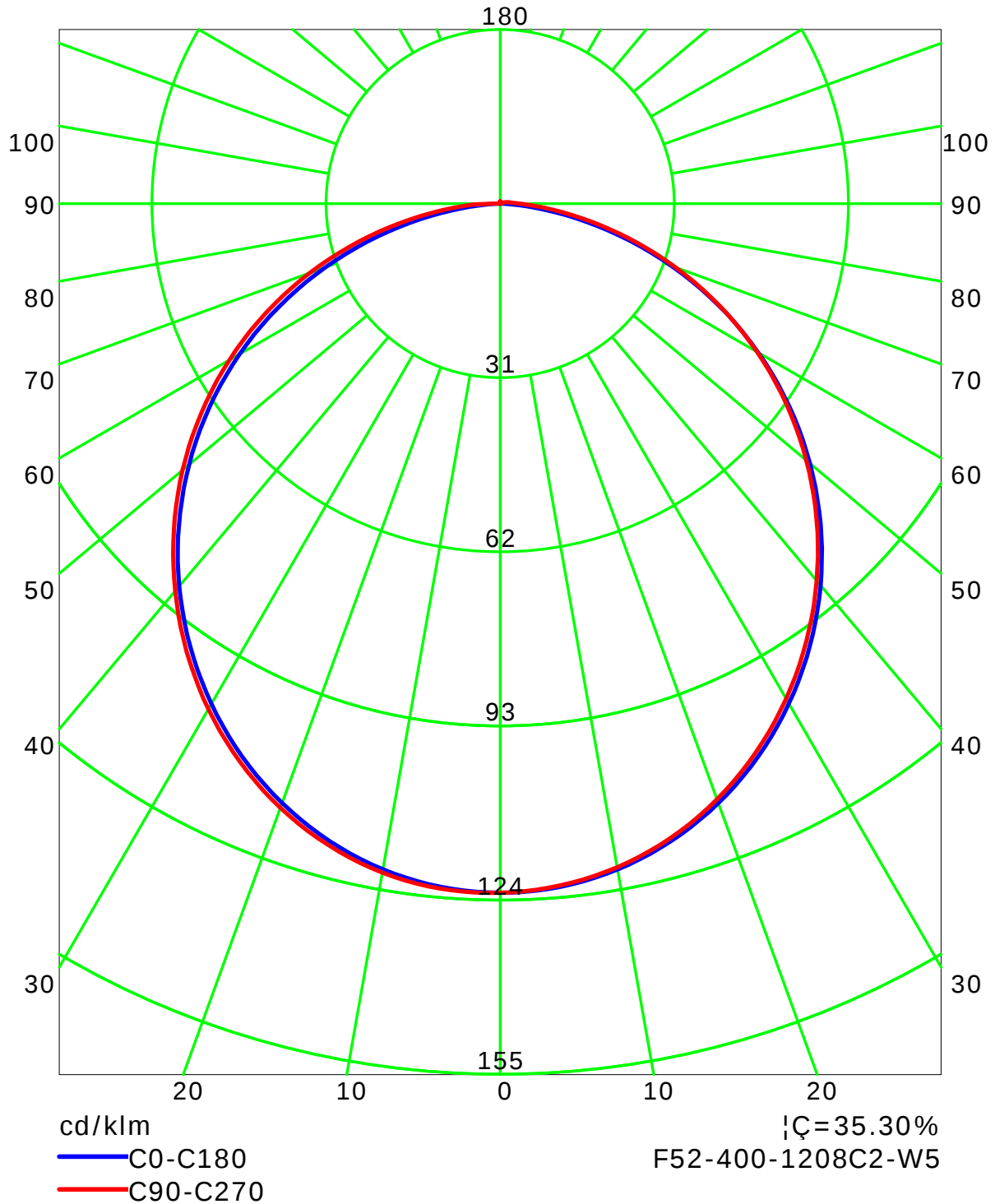
Luminous Intensity Distribution Curve



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:

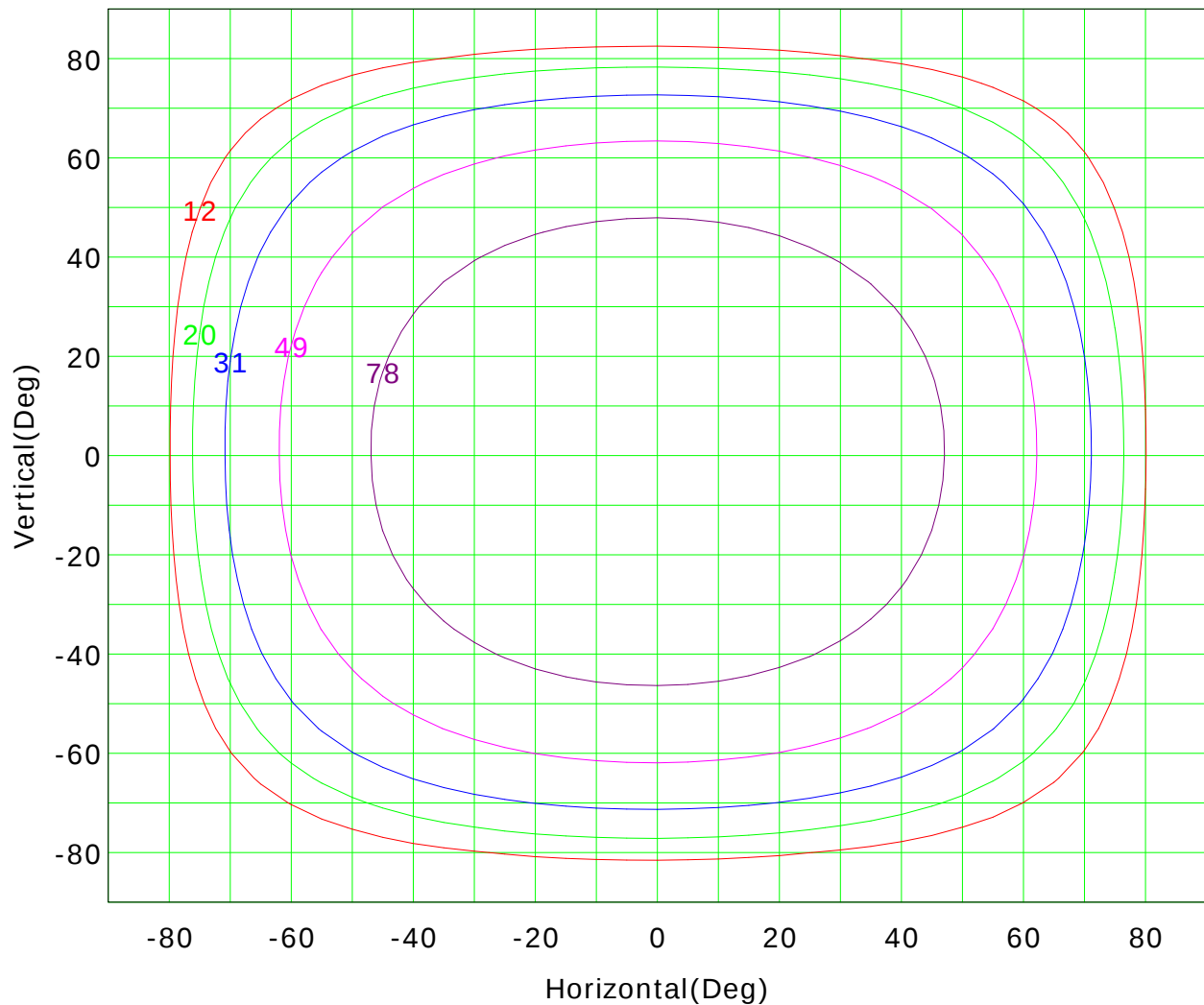
Luminous Intensity Distribution Curve(cd / klm)



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%): 123 cd

(10%):	12 cd	(16%):	20 cd
(25%):	31 cd	(40%):	49 cd
(63%):	78 cd	(100%):	123 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

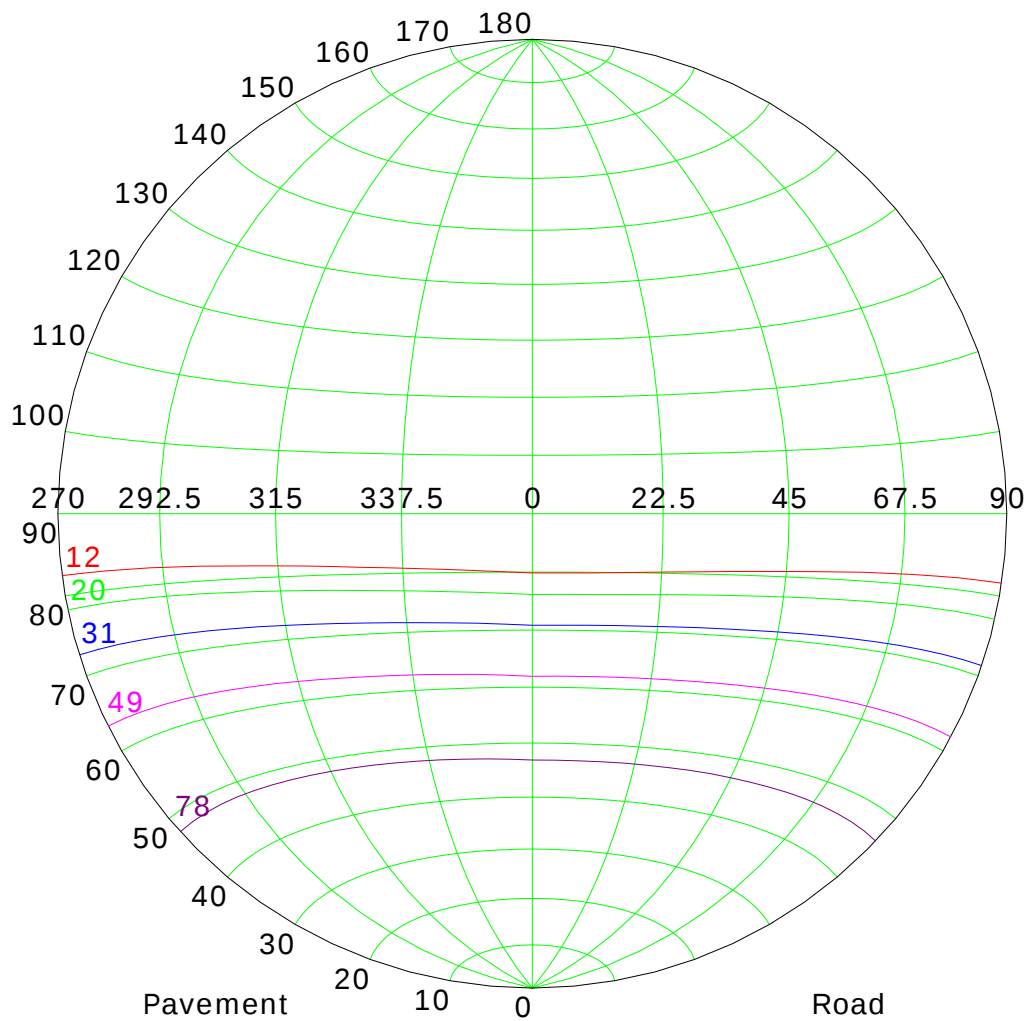
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 123 cd

(10%):	12 cd	(16%):	20 cd
(25%):	31 cd	(40%):	49 cd
(63%):	78 cd	(100%):	123 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

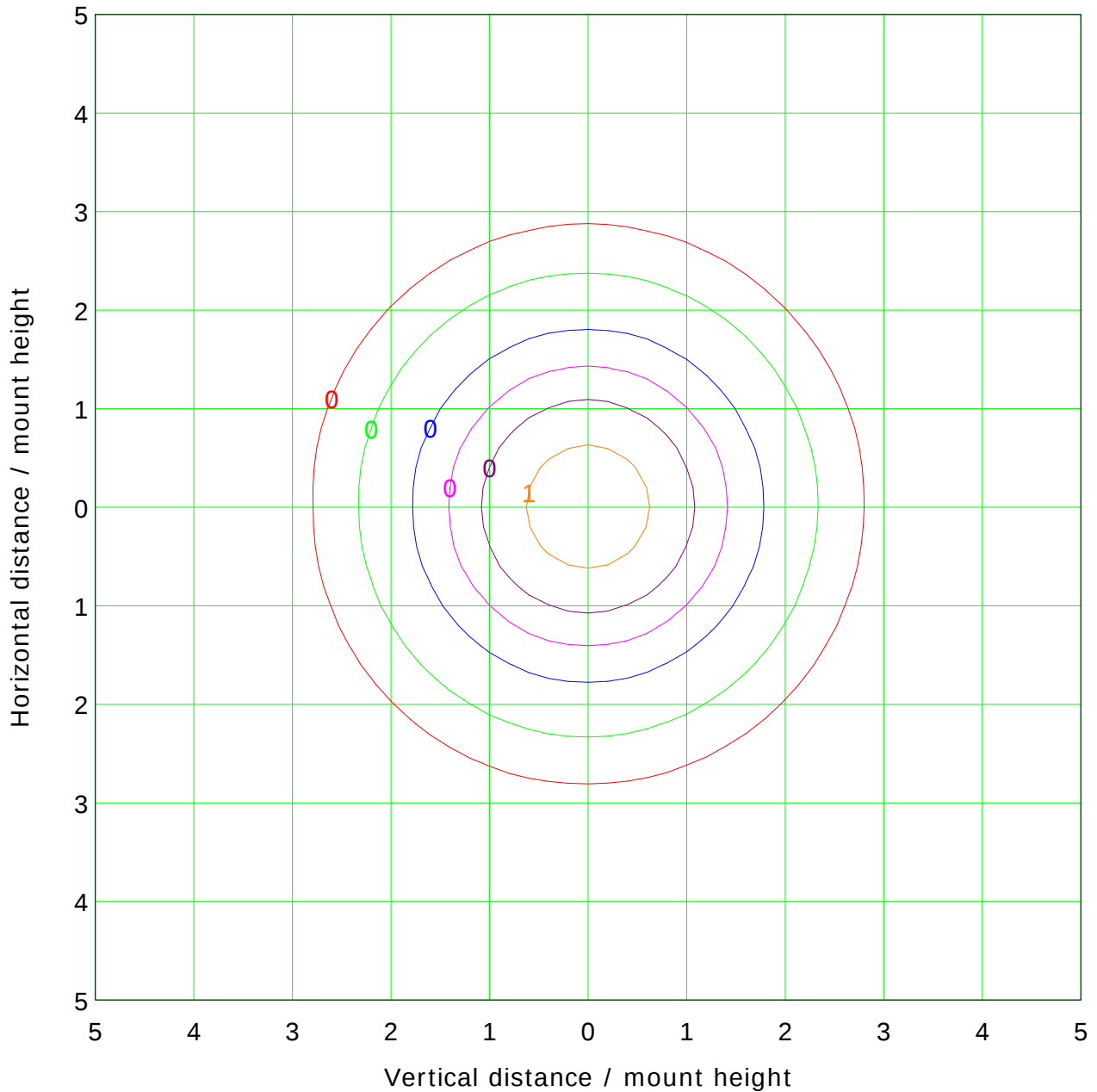
Test Device: GPM-2000

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

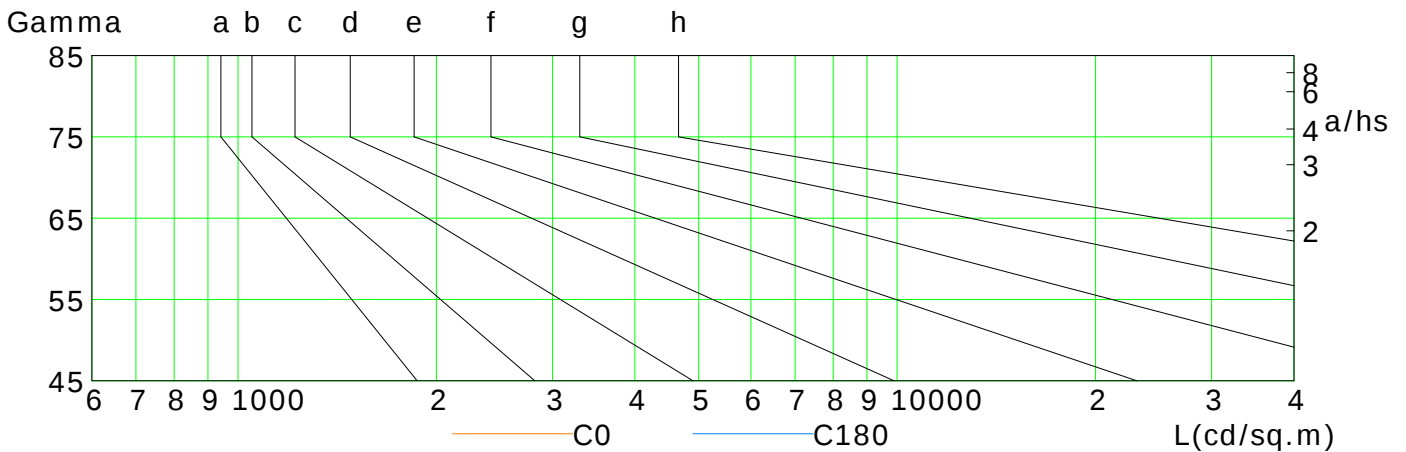
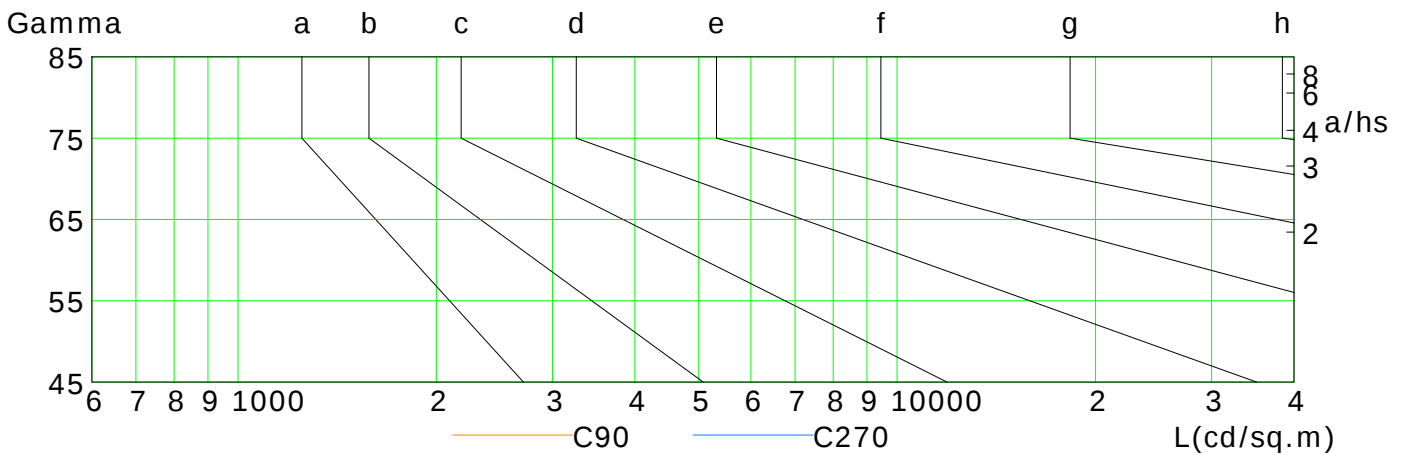
Humidity:

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	81	72	63	53	43	33	22	12	4
C90	80	71	62	53	43	33	24	15	7
C180	81	73	63	54	44	33	23	13	4
C270	82	74	65	56	46	36	26	16	8

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

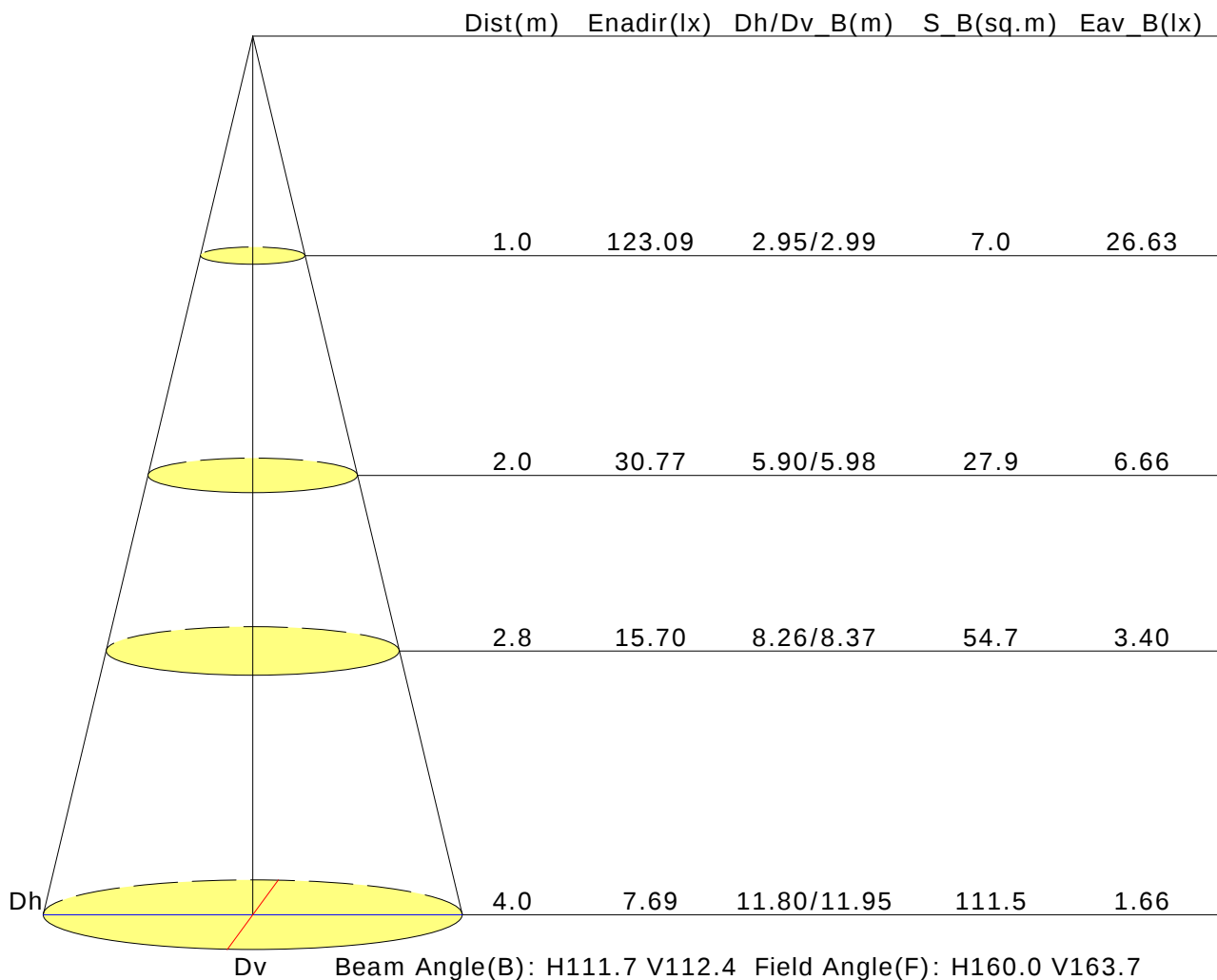
Test Device: GPM-2000

Distance: 7.970 m

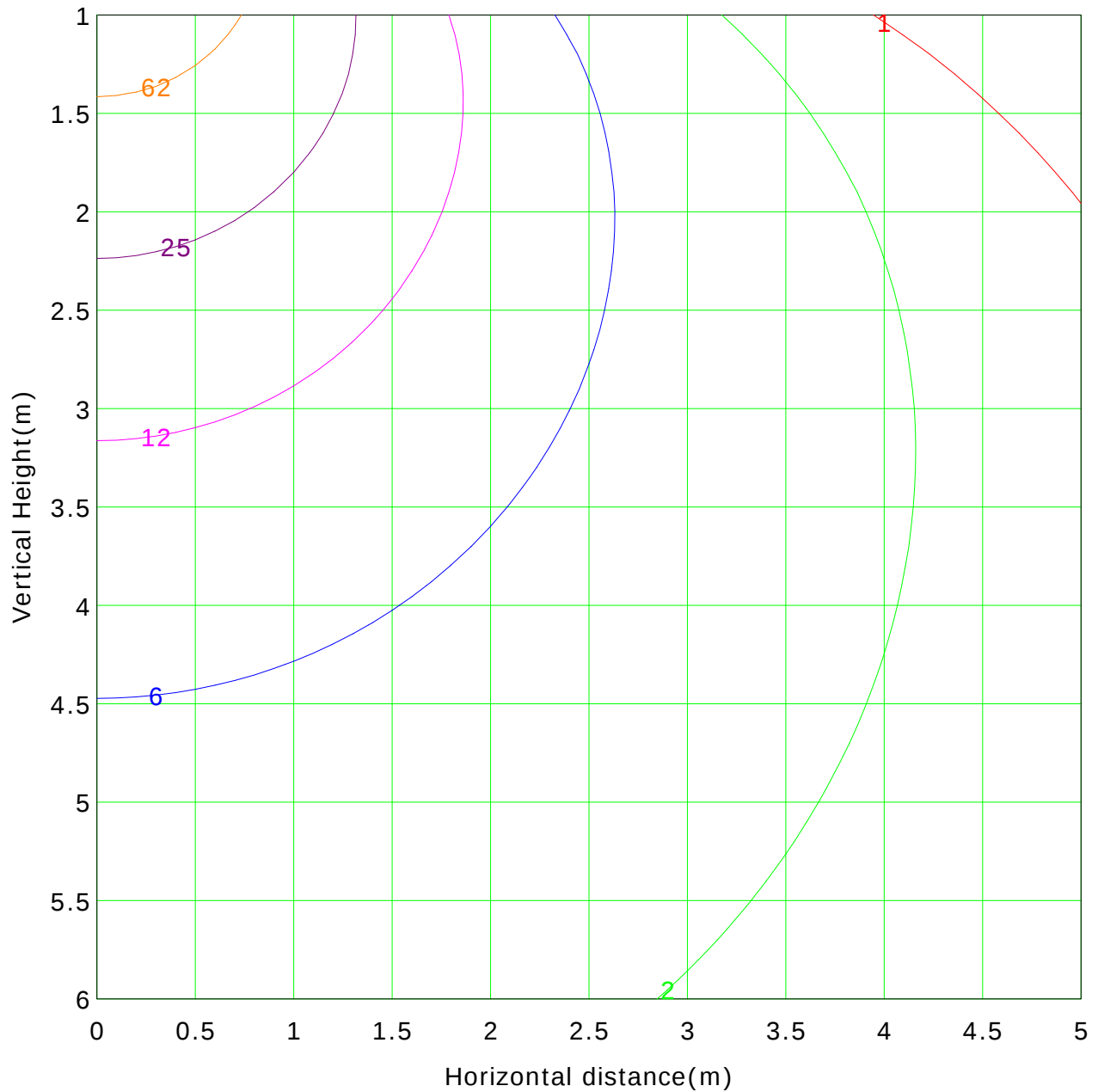
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 123.1 lx
(1%): 1.2 lx	(2%): 2.5 lx	
(5%): 6.2 lx	(10%): 12.3 lx	
(20%): 24.6 lx	(50%): 61.5 lx	
(100%): 123.1 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: 04/10/2018 14:30

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-BB02-02 + 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: 334.8 lm

Downward Ratio: 33.35%

Total Rated Lamp Lumens: 1000.0 lm

Efficiency: 33.48%

Upward Ratio: 0.13%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 163.4, 166.5, 165.2, 165.1

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 110.0, 110.3, 110.4, 110.5

Luminaire Efficacy Rating (LER): 37.58

Central Intensity: 117.39 cd

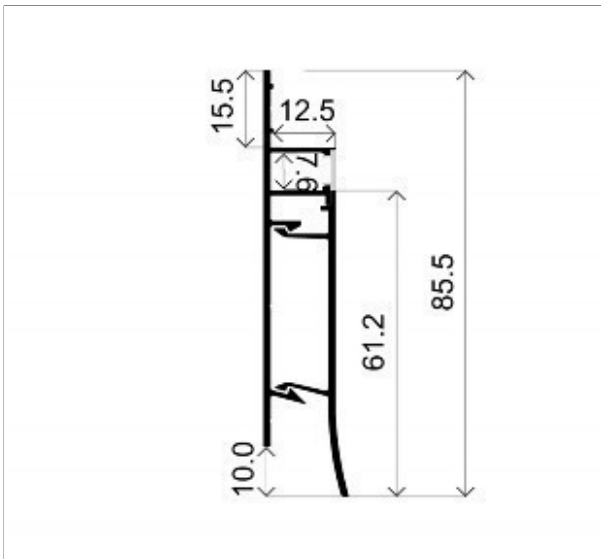
Max. Intensity: 117.42 cd

Pos of Max. Intensity: H280 V1

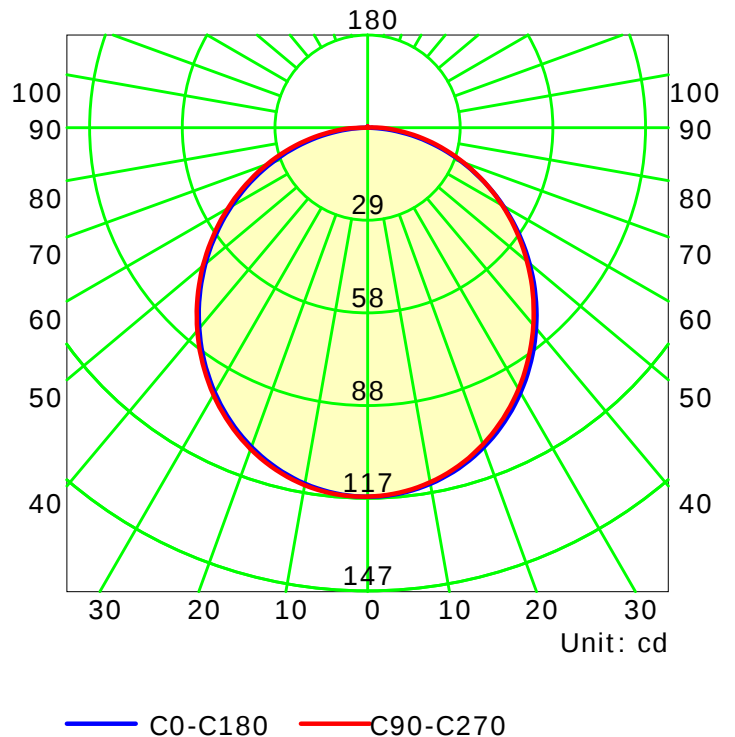
S/MH(C0/C180): 1.23

S/MH(C90/C270): 1.23

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

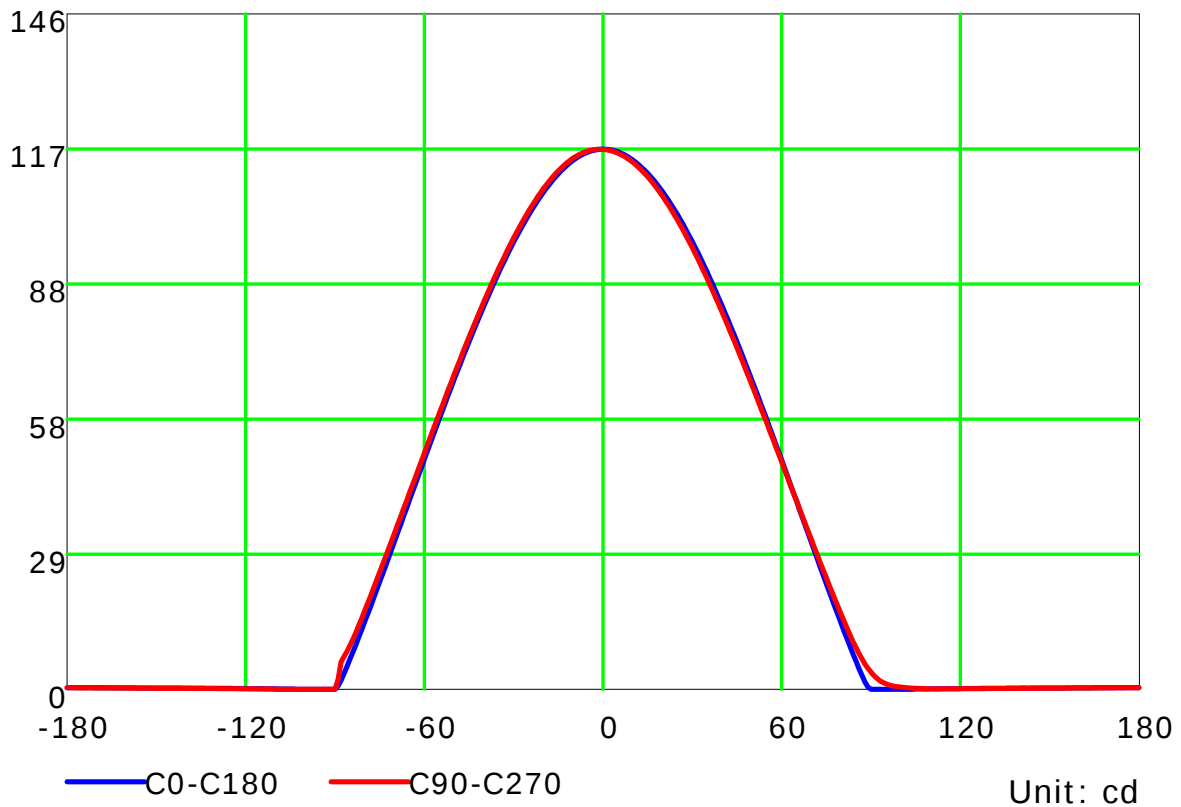
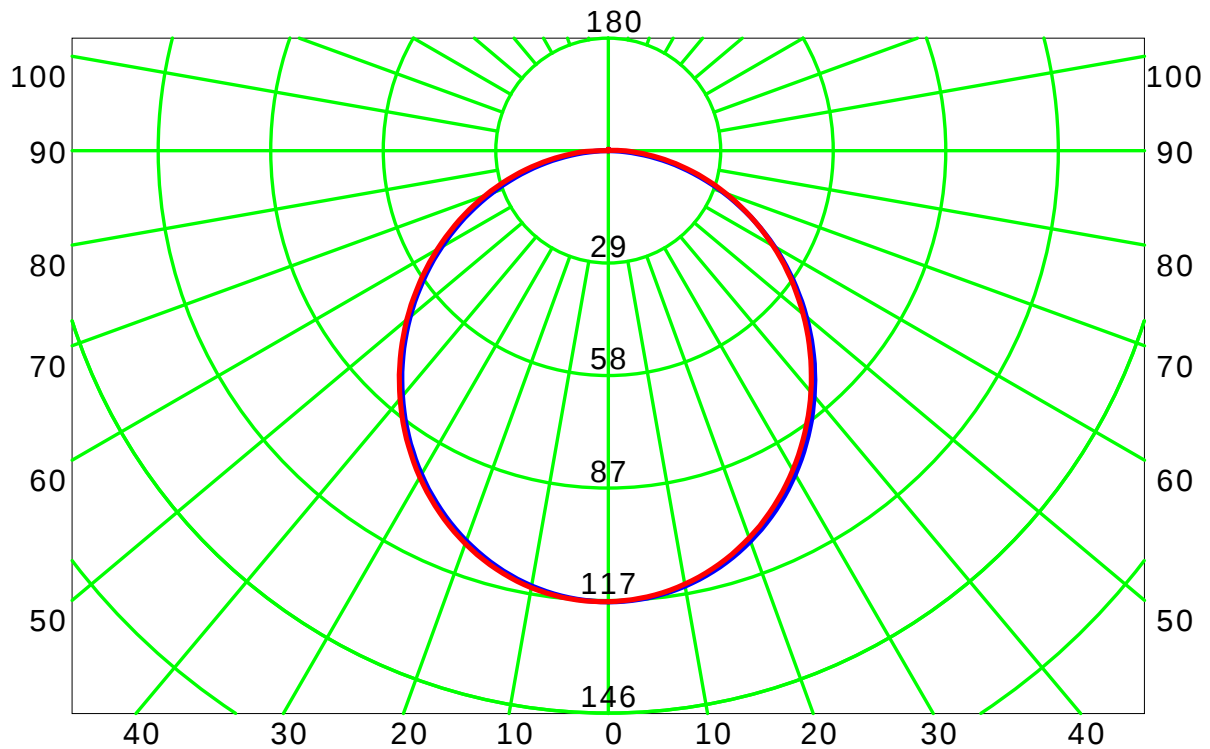
Test Device: GPM-2000

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

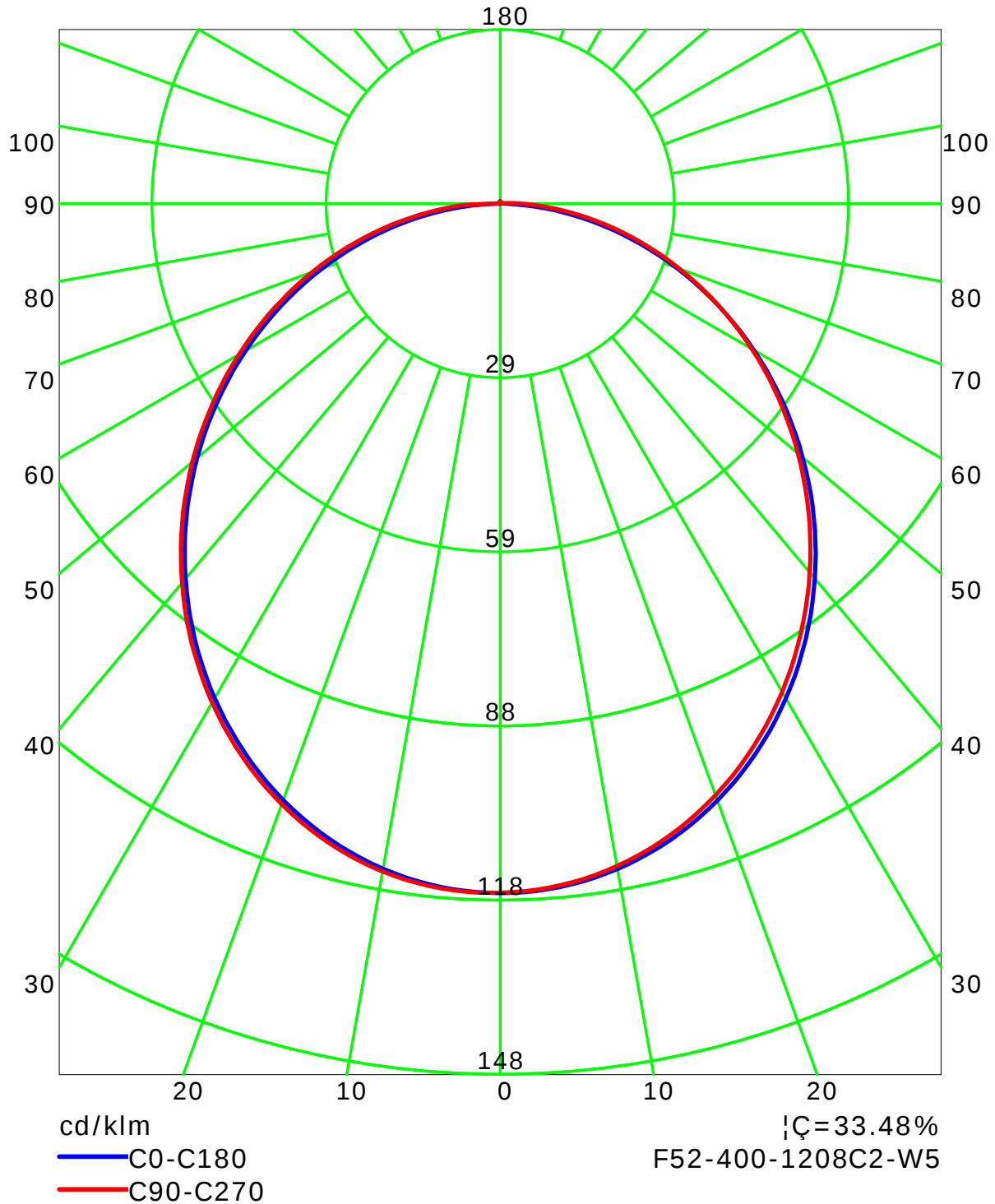
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

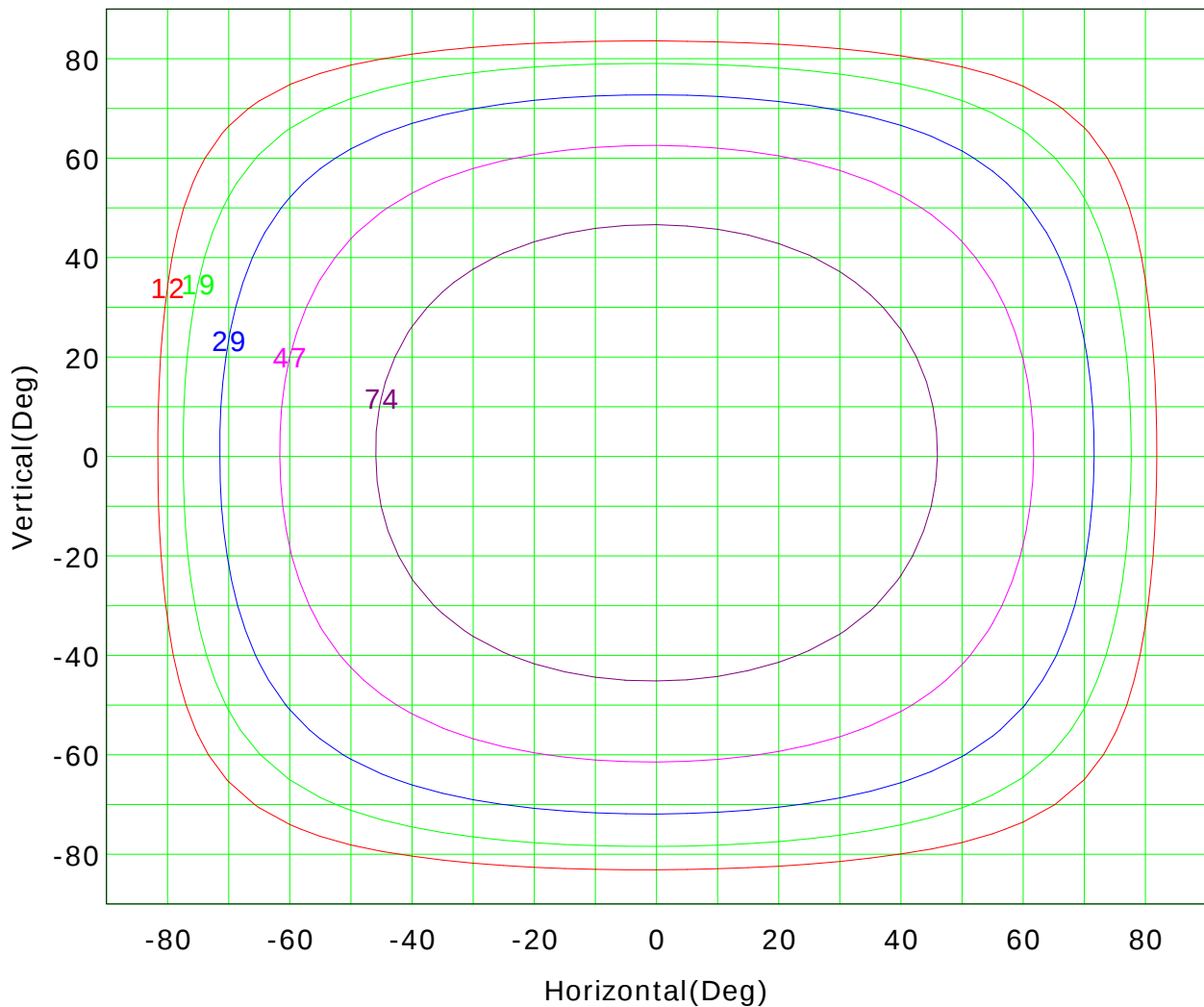
Luminous Intensity Distribution Curve(cd / klm)



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%): 117 cd

(10%):	12 cd	(16%):	19 cd
(25%):	29 cd	(40%):	47 cd
(63%):	74 cd	(100%):	117 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

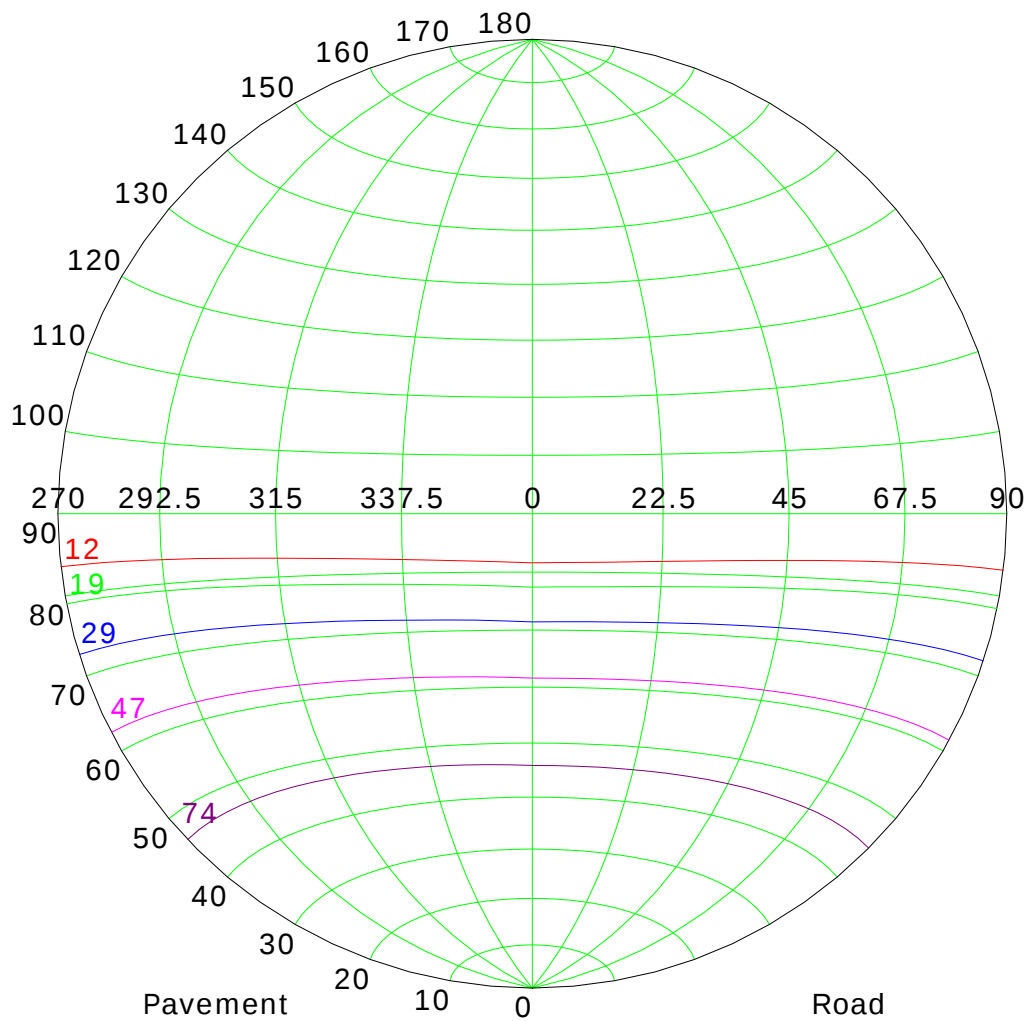
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 117 cd

(10%):	12 cd	(16%):	19 cd
(25%):	29 cd	(40%):	47 cd
(63%):	74 cd	(100%):	117 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

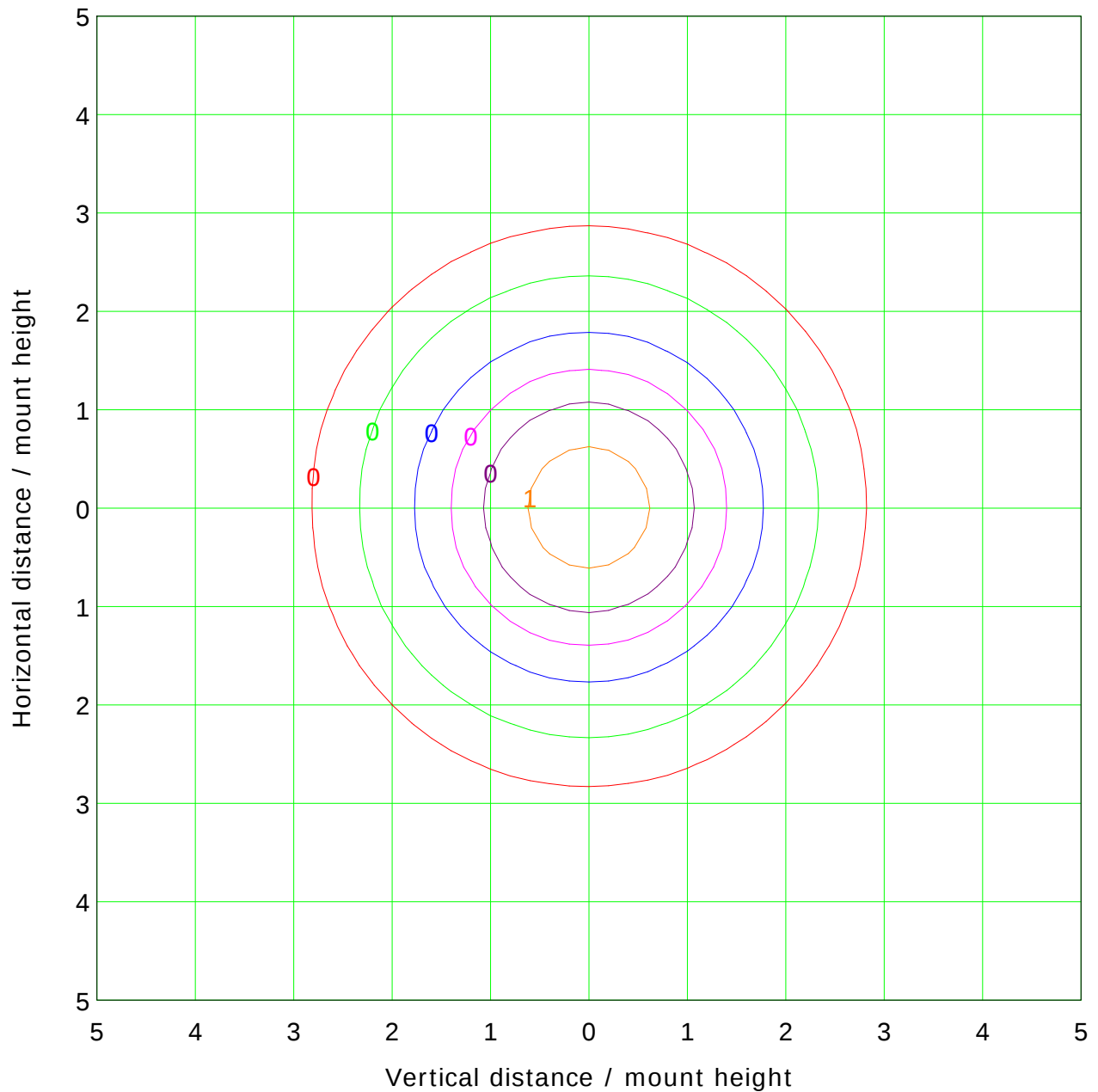
Test Device: GPM-2000

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

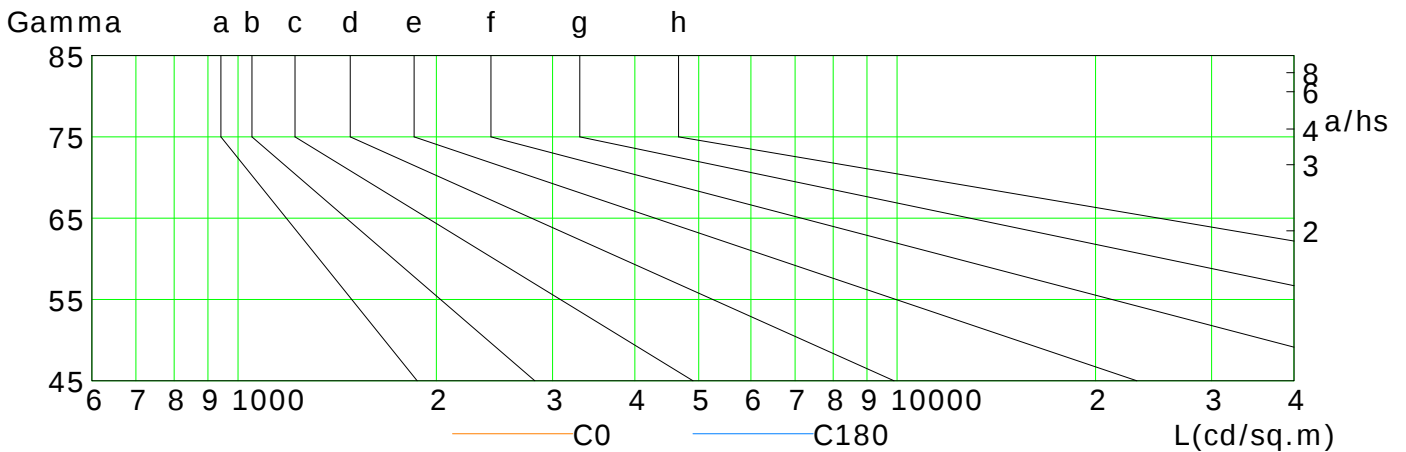
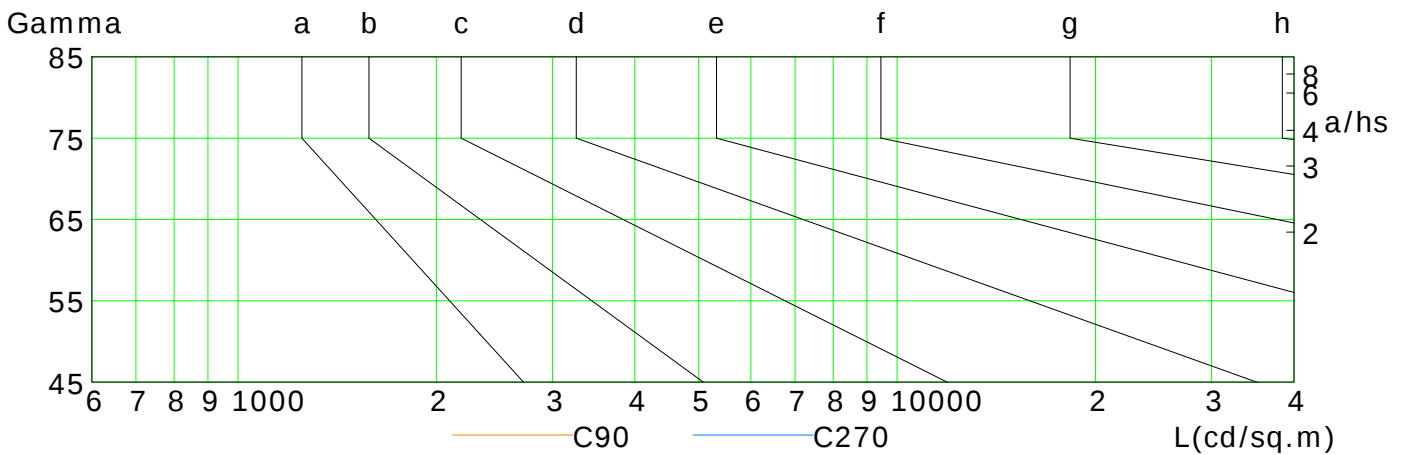
Humidity:

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	75	67	59	50	41	32	23	14	6
C90	74	66	58	49	41	33	24	16	9
C180	76	67	59	50	41	32	23	15	7
C270	77	68	60	51	43	34	25	17	10

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

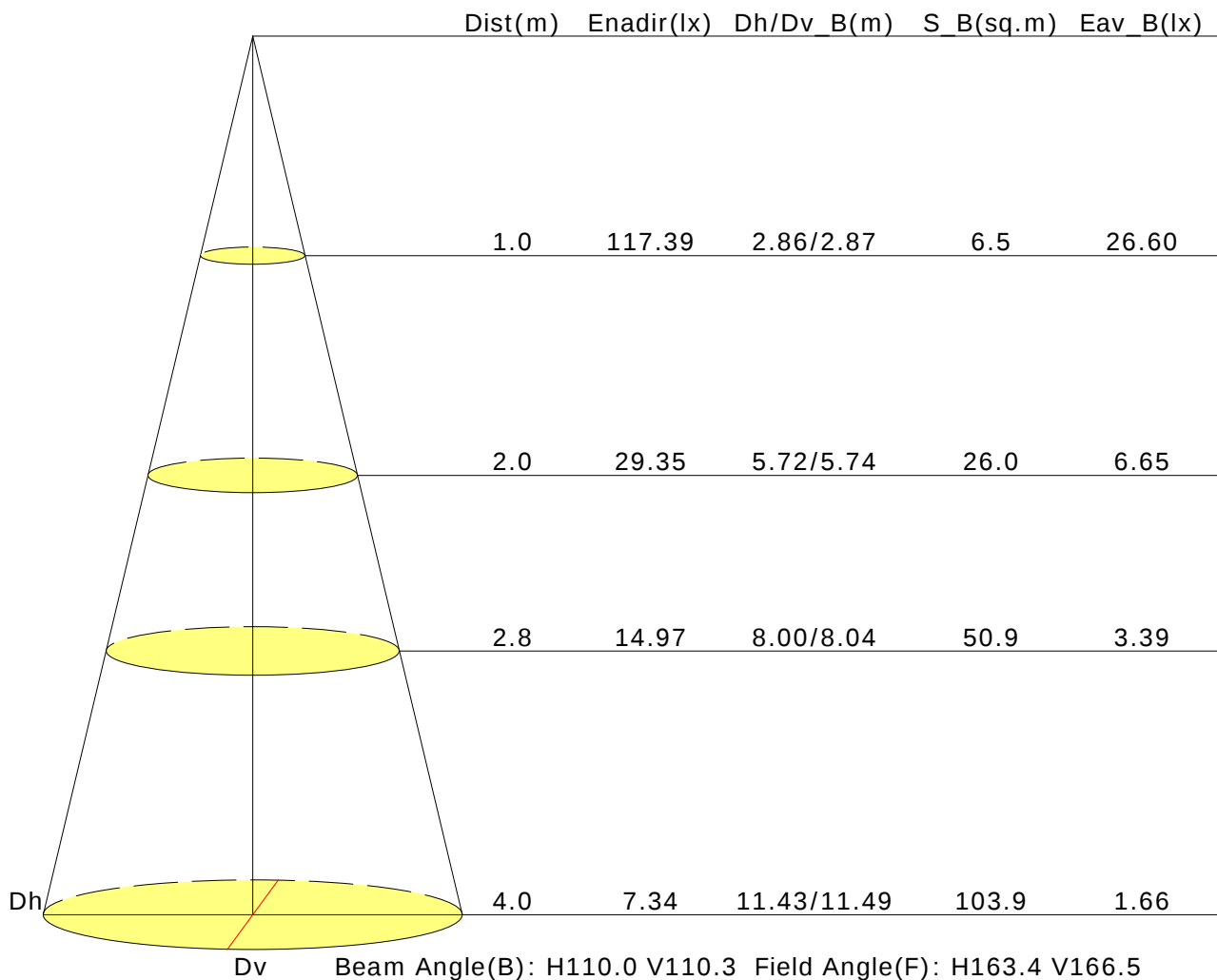
Test Device: GPM-2000

Distance: 7.970 m

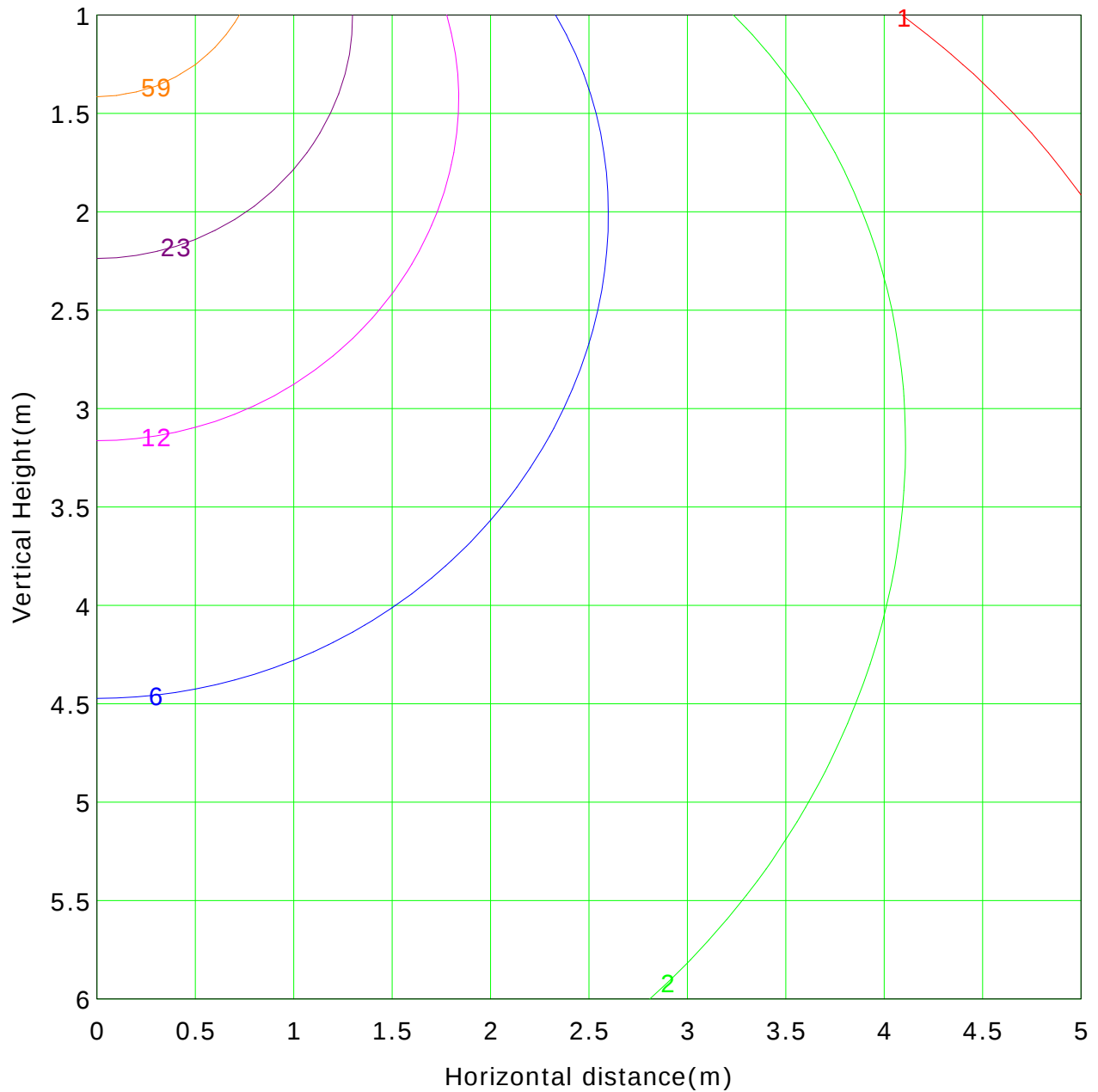
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 117.4 lx
(1%): 1.2 lx	(2%): 2.3 lx	
(5%): 5.9 lx	(10%): 11.7 lx	
(20%): 23.5 lx	(50%): 58.7 lx	
(100%): 117.4 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: