

Report No.:

Test Time: 31/07/2018 16:22

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-DW01-01 + LLD-01-FM

Lamp Description: F52-400-60822

Number of Lamps: 1

Lumens per Lamp: 1579 lm

Voltage: 24.0 V

Current: 0.595 A

Power: 14.28 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 1091.3 lm

Downward Ratio: 66.97%

Total Rated Lamp Lumens: 1579.0 lm

Efficiency: 69.11%

Upward Ratio: 2.14%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.9, 160.0, 163.0, 163.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.8, 112.3, 113.3, 113.3

Luminaire Efficacy Rating (LER): 76.47

Central Intensity: 366.31 cd

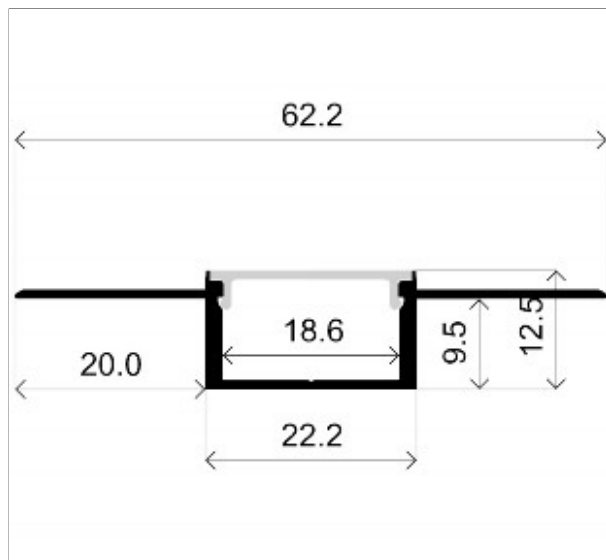
Max. Intensity: 366.46 cd

Pos of Max. Intensity: H170 V1

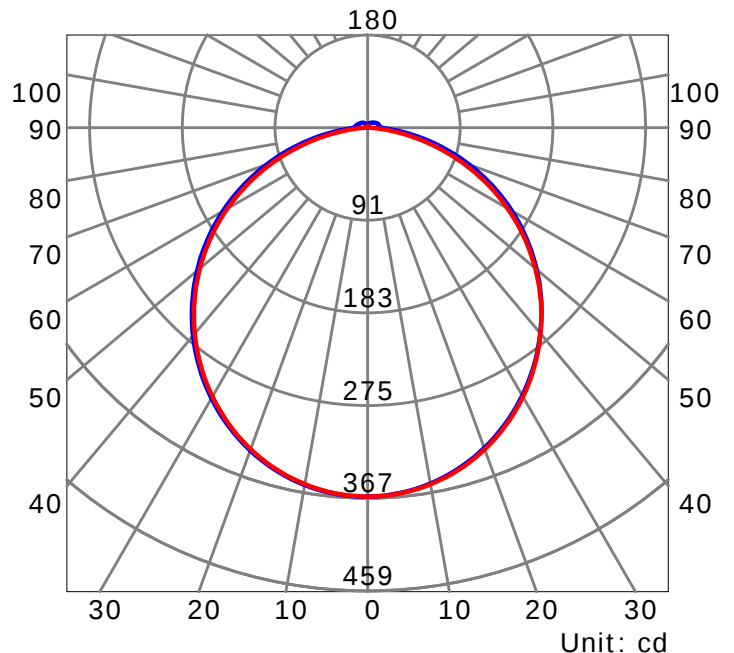
S/MH(C0/C180): 1.25

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

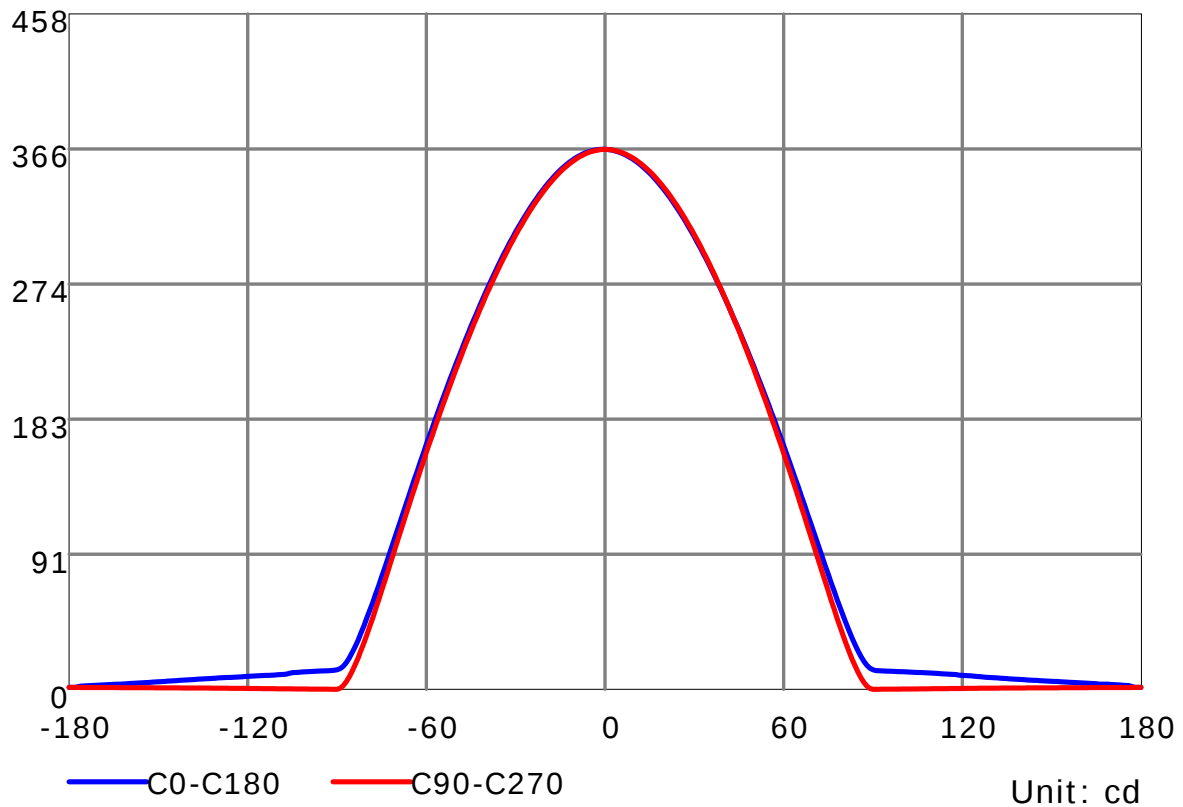
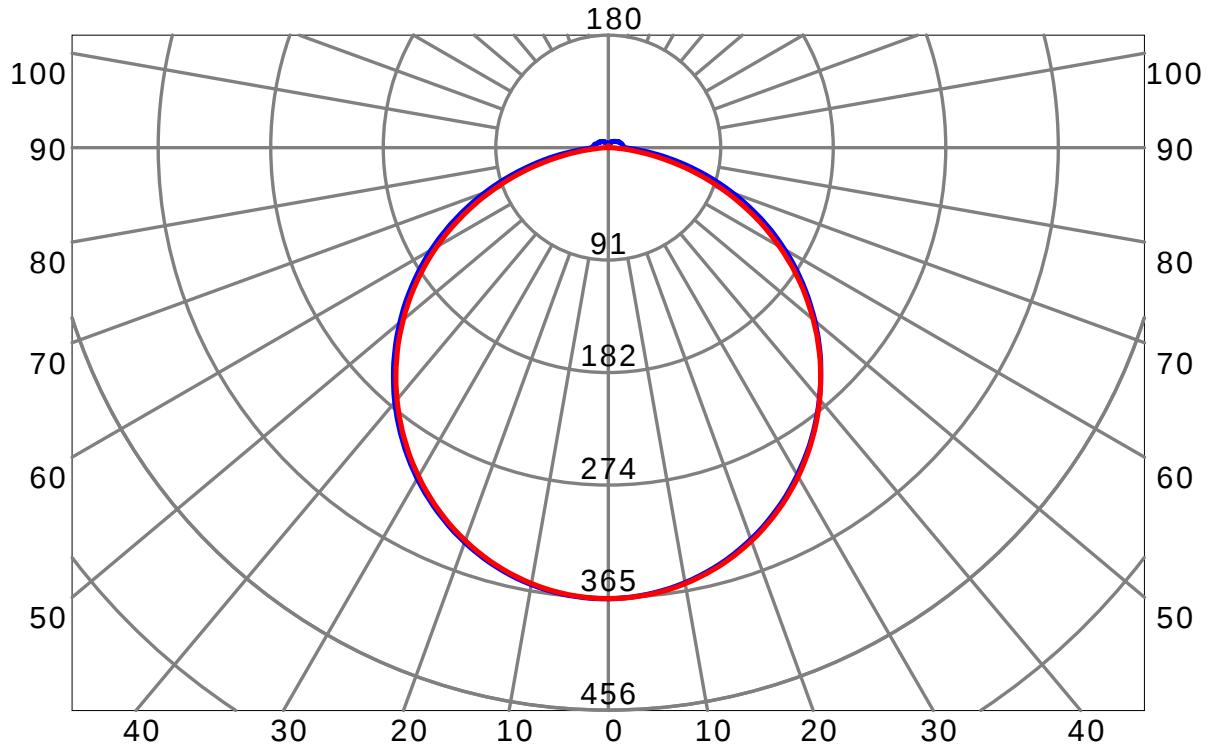
Test Device: GPM-2000

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

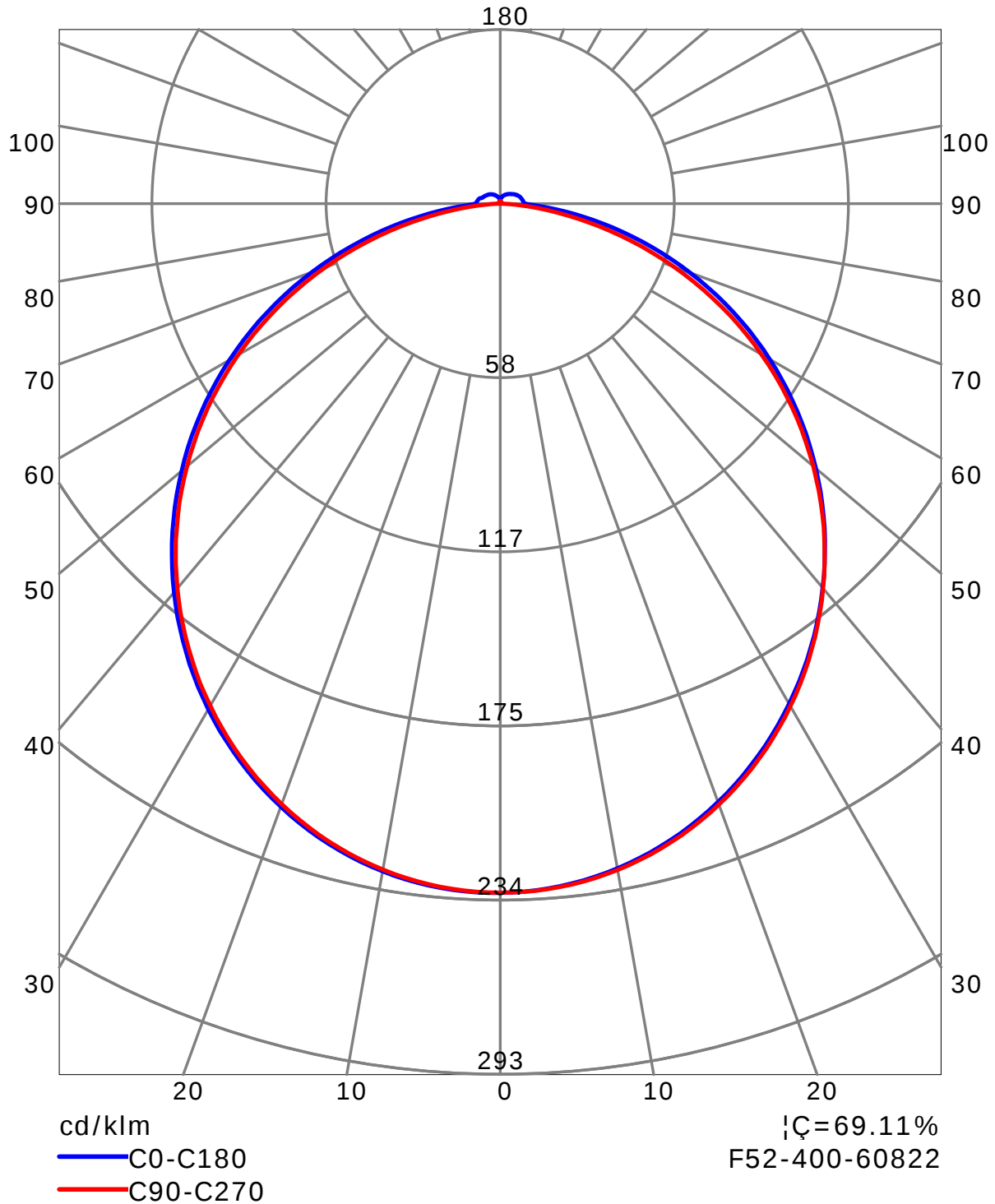
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

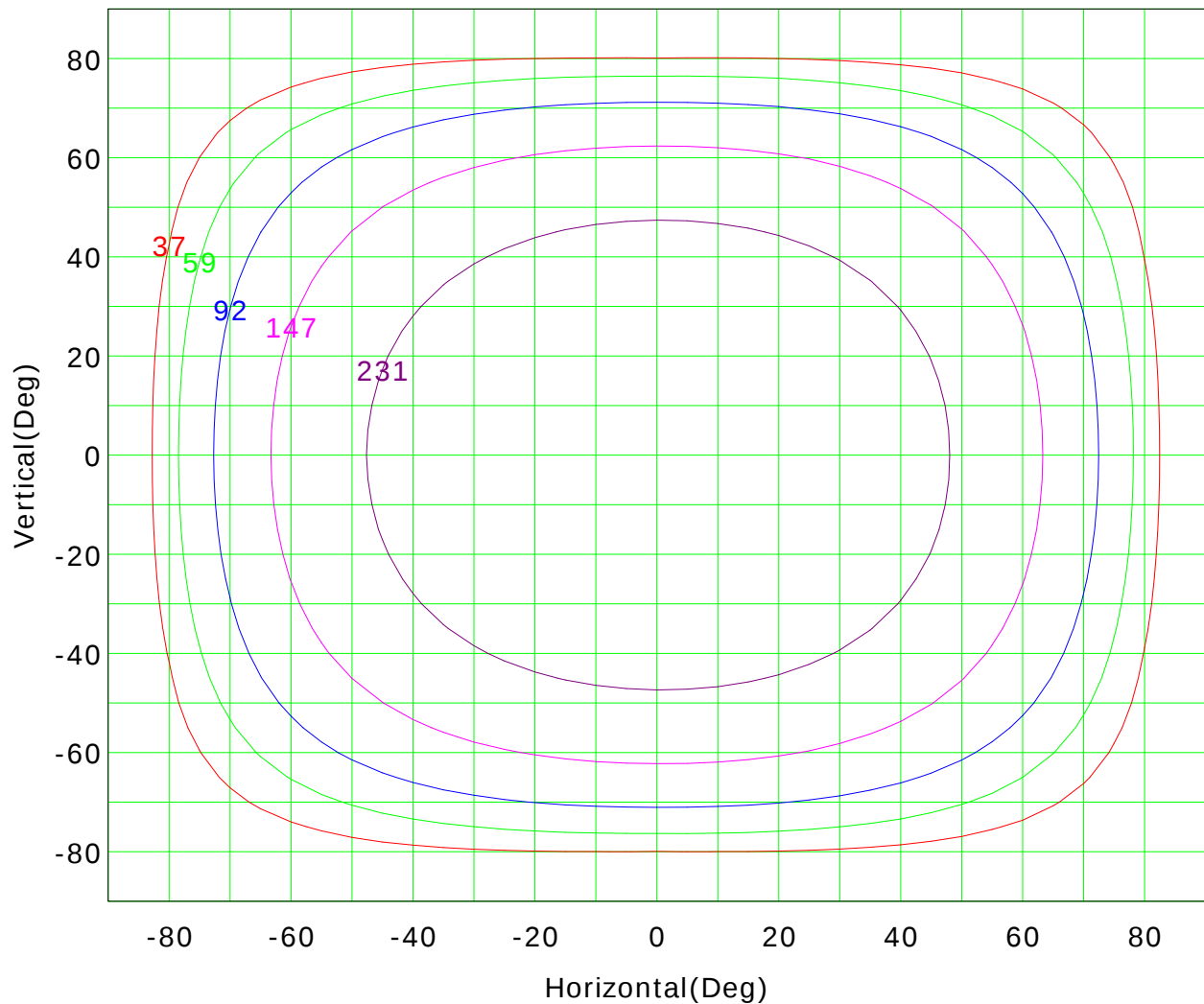
Luminous Intensity Distribution Curve(cd / klm)



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%): 366 cd

(10%):	37 cd	(16%):	59 cd
(25%):	92 cd	(40%):	147 cd
(63%):	231 cd	(100%):	366 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

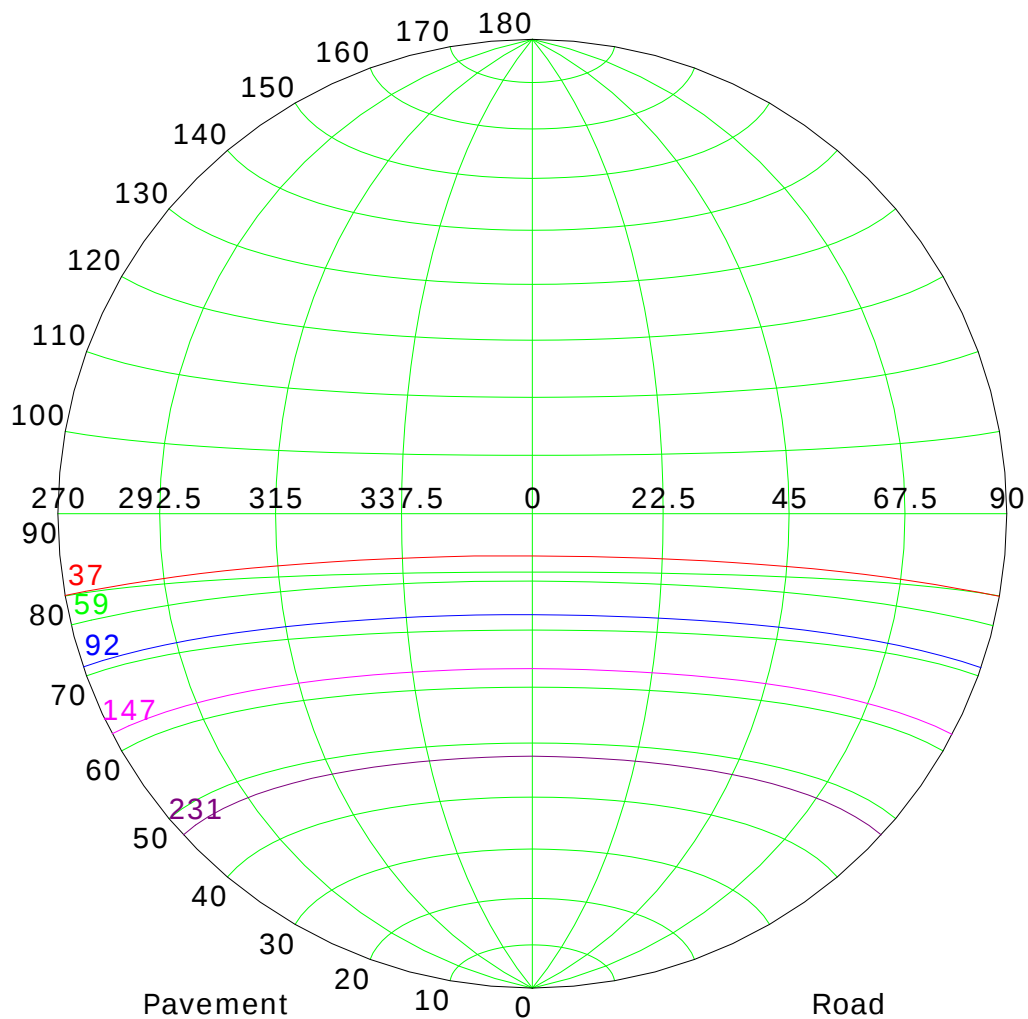
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 366 cd

(10%):	37 cd	(16%):	59 cd
(25%):	92 cd	(40%):	147 cd
(63%):	231 cd	(100%):	366 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

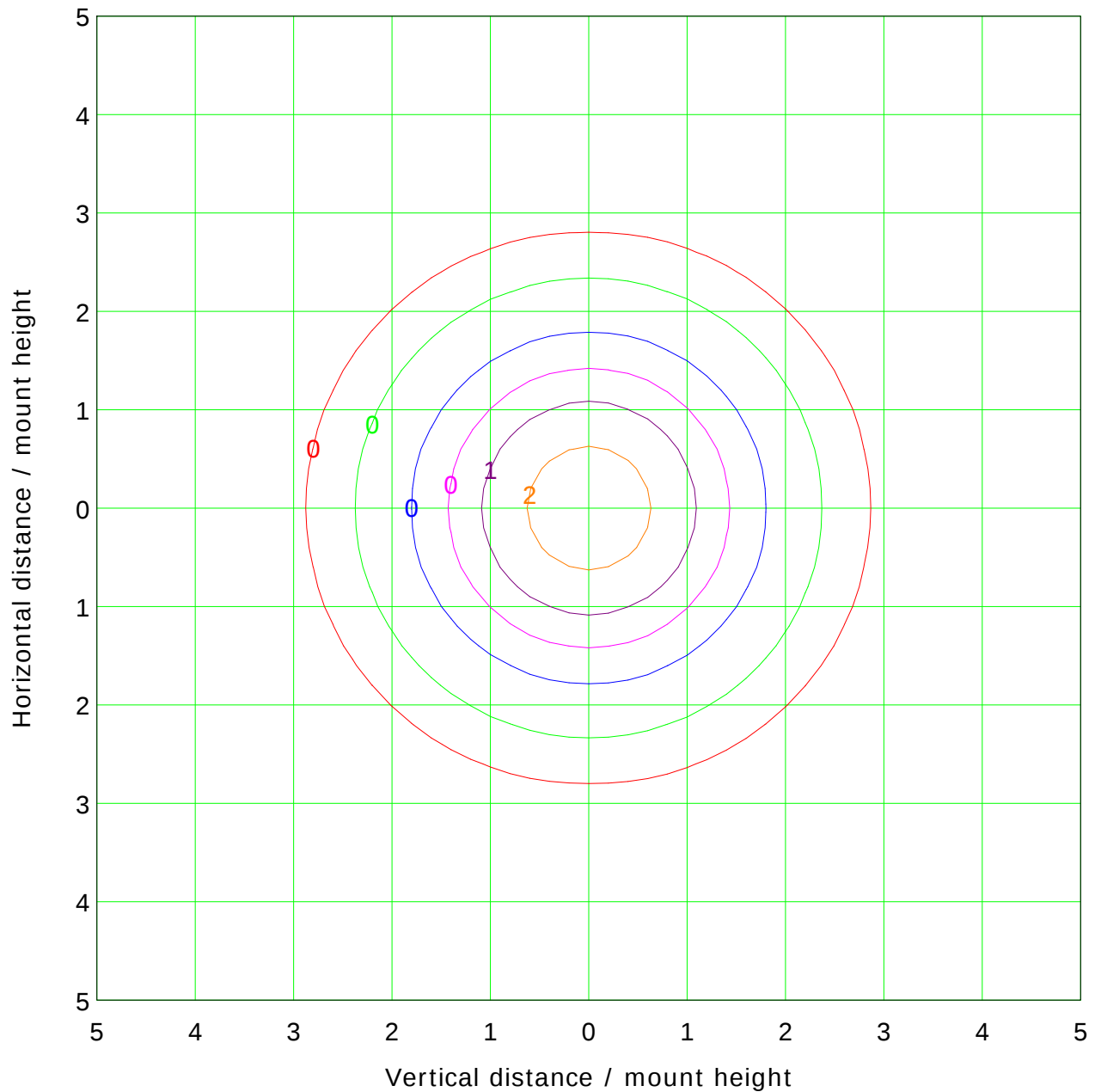
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 3.7 lx	
— (1%):	0.0 lx	— (2%):	0.1 lx
— (5%):	0.2 lx	— (10%):	0.4 lx
— (20%):	0.7 lx	— (50%):	1.8 lx
— (100%):	3.7 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

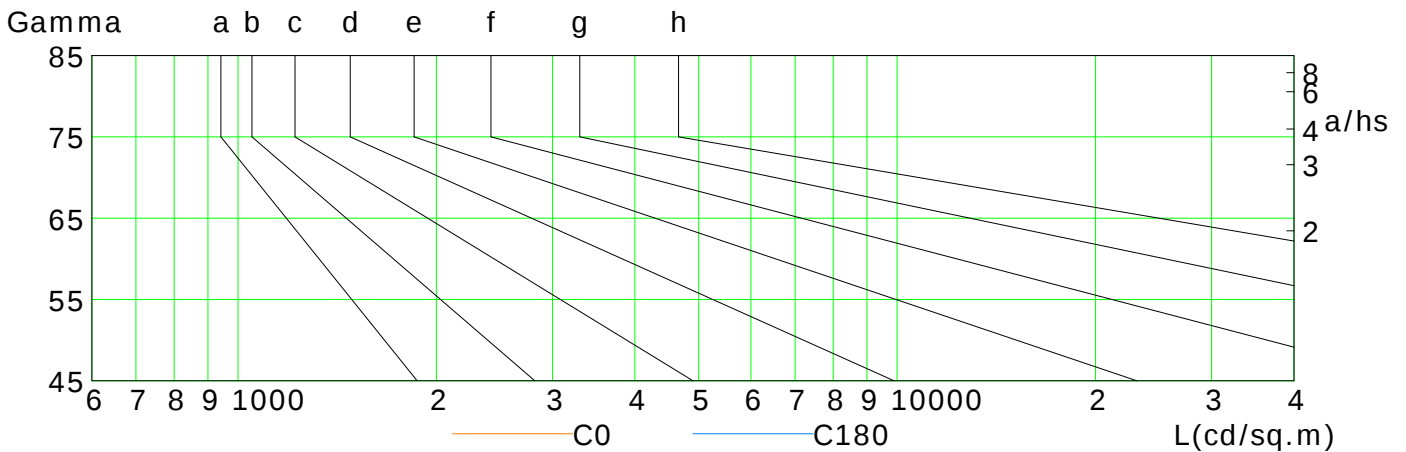
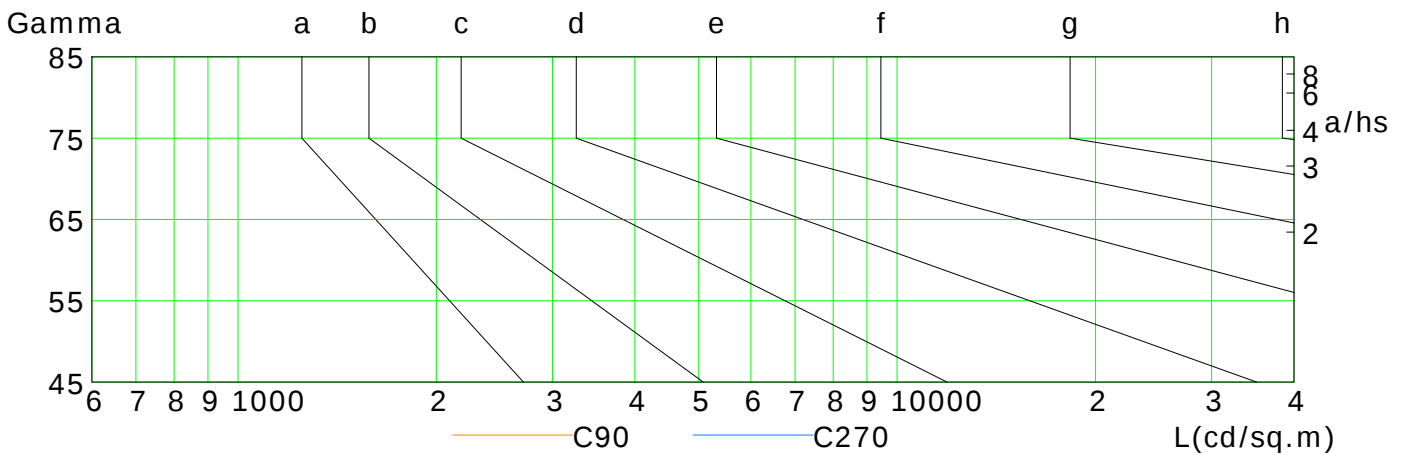
Humidity:

Inspector:

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	244	219	193	165	137	107	78	50	26
C90	243	217	190	160	130	98	67	36	12
C180	246	221	194	166	137	106	76	48	25
C270	243	217	190	161	130	99	67	37	12

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

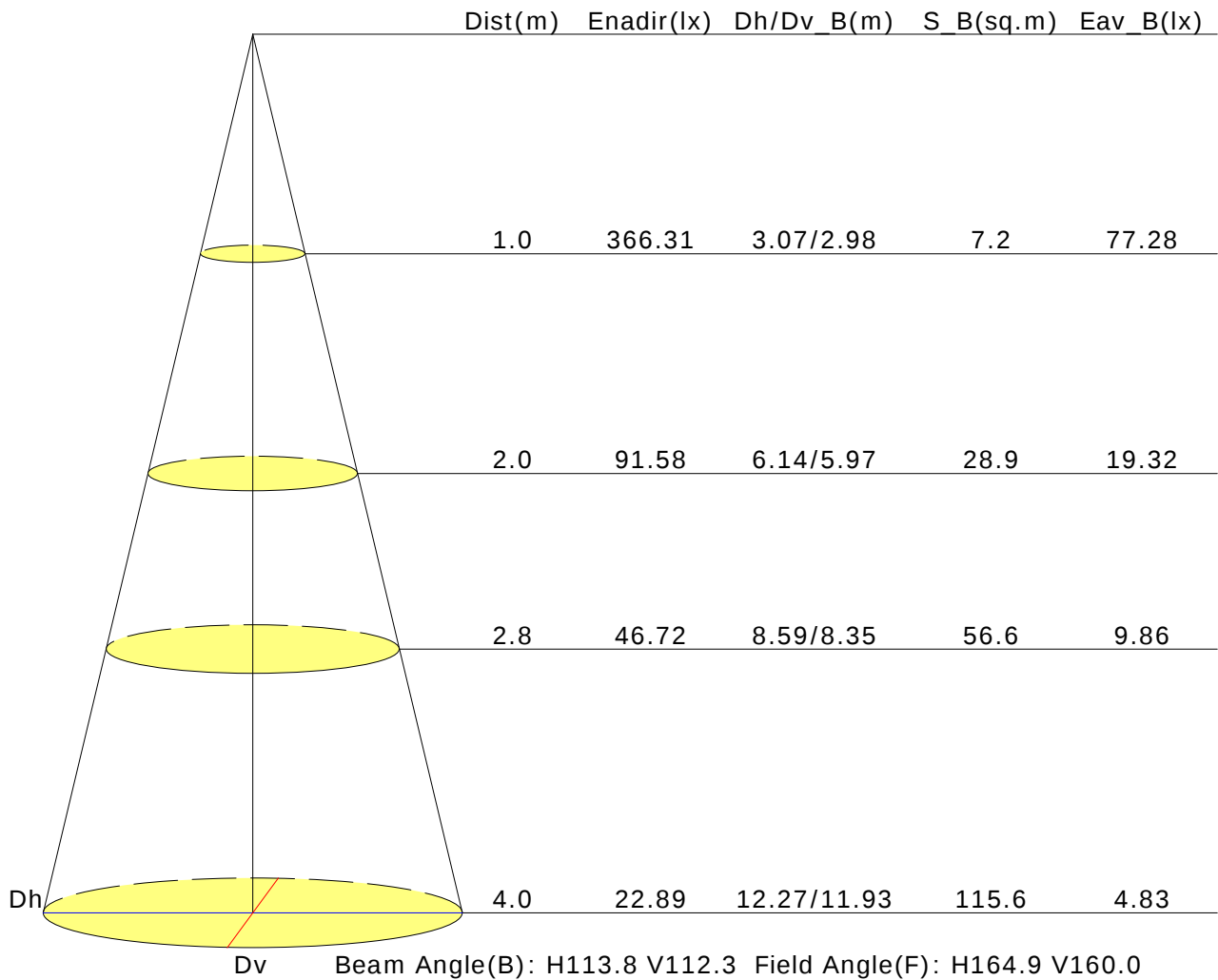
Test Device: GPM-2000

Distance: 7.970 m

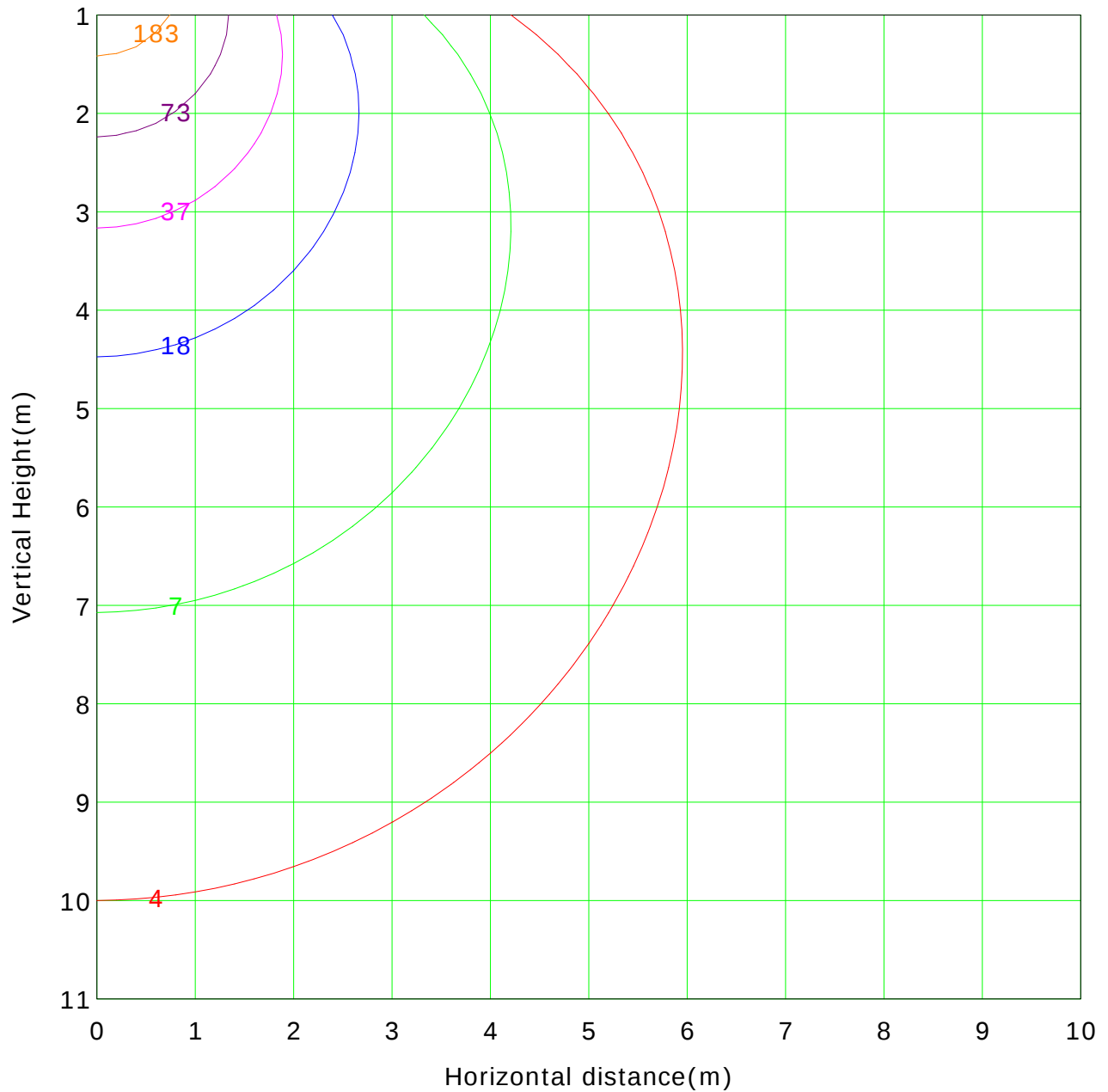
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Report No.:

Test Time: 01/08/2018 11:22

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-DW07-01 + LLD-01-CM

Lamp Description: F52-400-60822

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

Measurement Flux: 1189.8 lm

Downward Ratio: 62.49%

Total Rated Lamp Lumens: 1579.0 lm

Efficiency: 75.35%

Upward Ratio: 12.86%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.2, 304.3, 278.9, 278.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.3, 149.2, 135.1, 134.9

Luminaire Efficacy Rating (LER): 83.31

Central Intensity: 267.42 cd

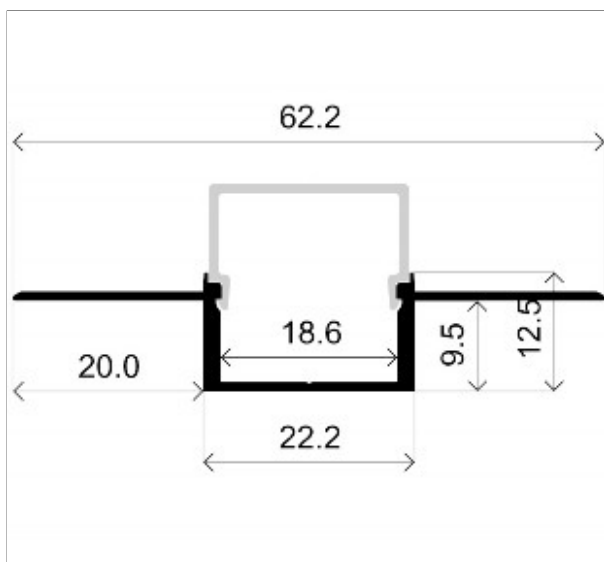
Max. Intensity: 271.05 cd

Pos of Max. Intensity: H270 V17

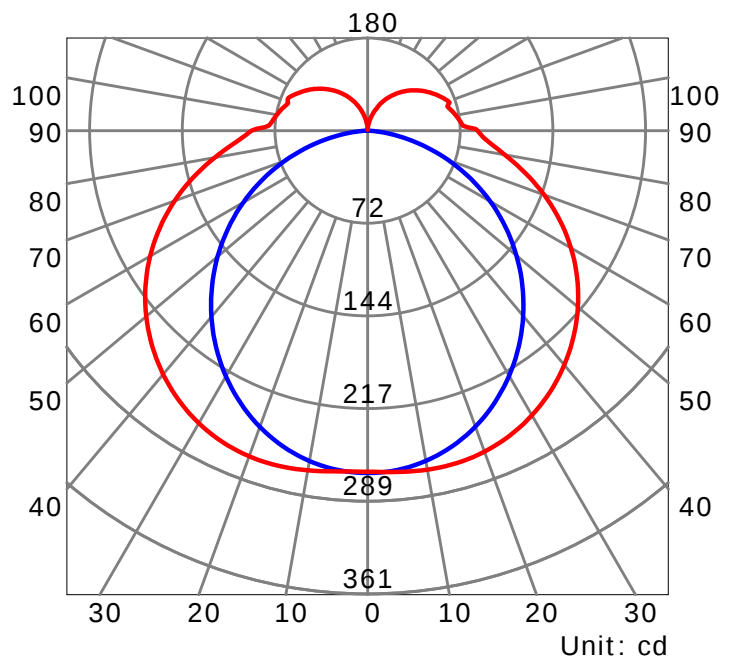
S/MH(C0/C180): 1.23

S/MH(C90/C270): 1.45

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

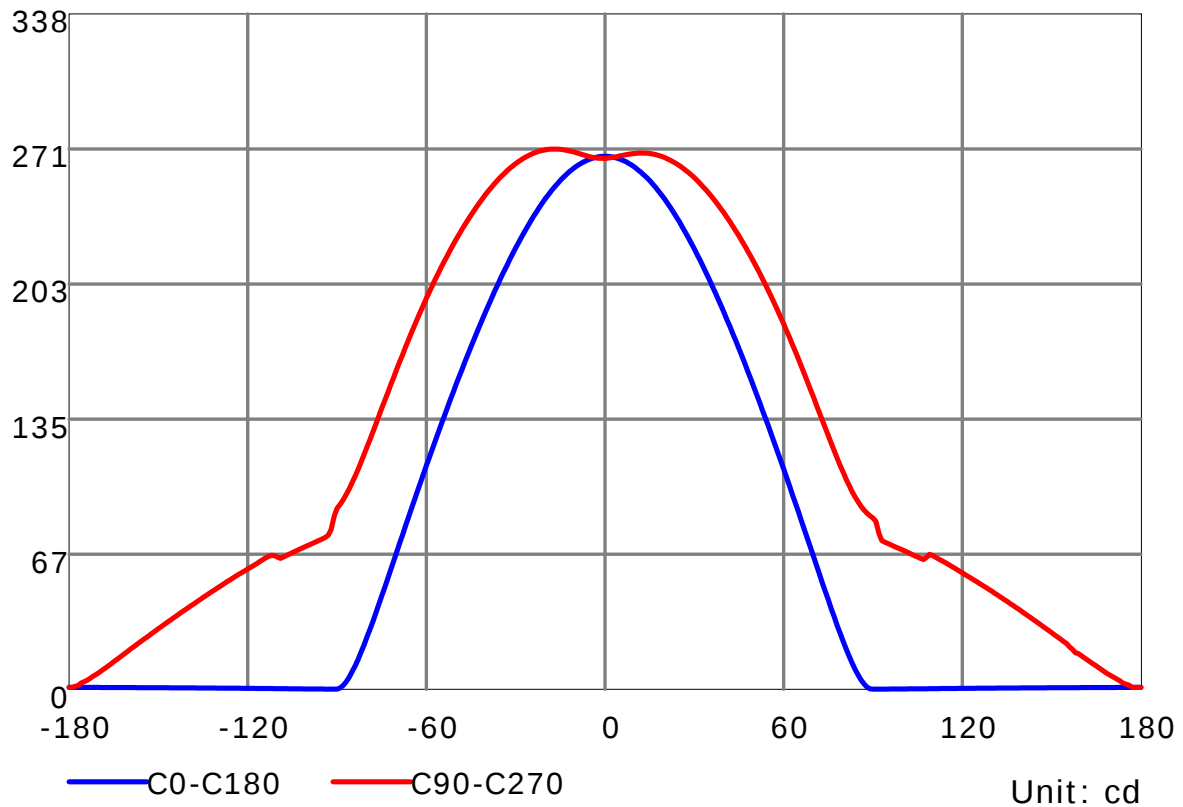
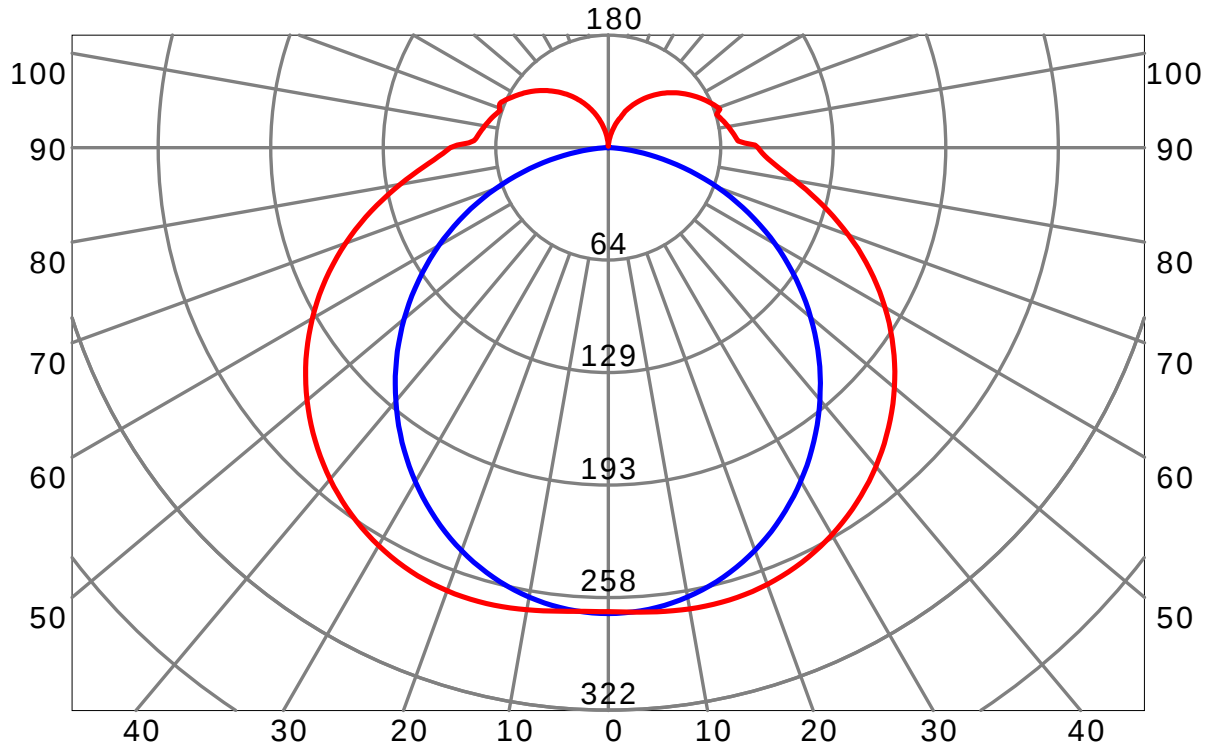
Test Device: GPM-2000

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

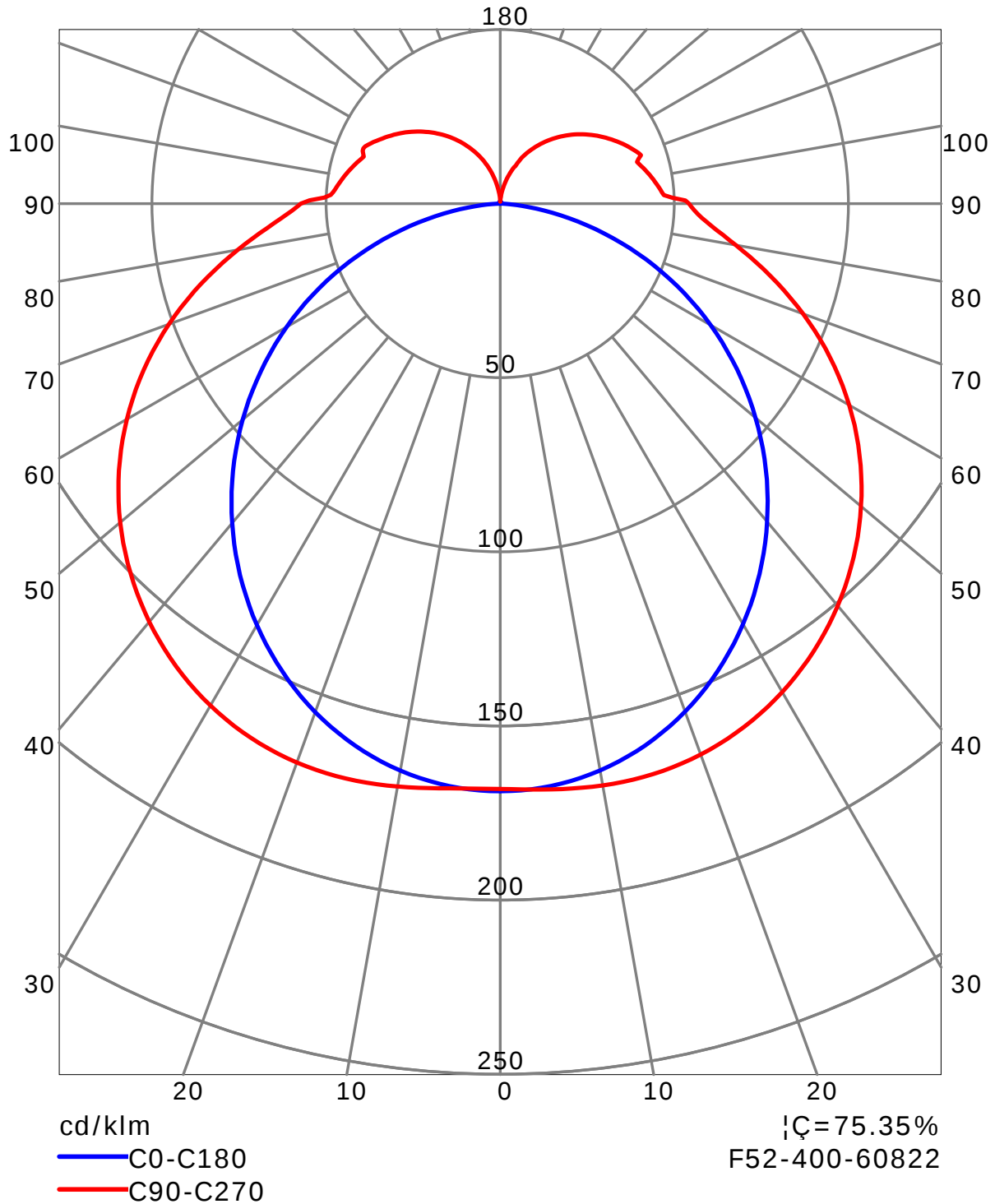
Test Device: GPM-2000

Distance: 7.970 m

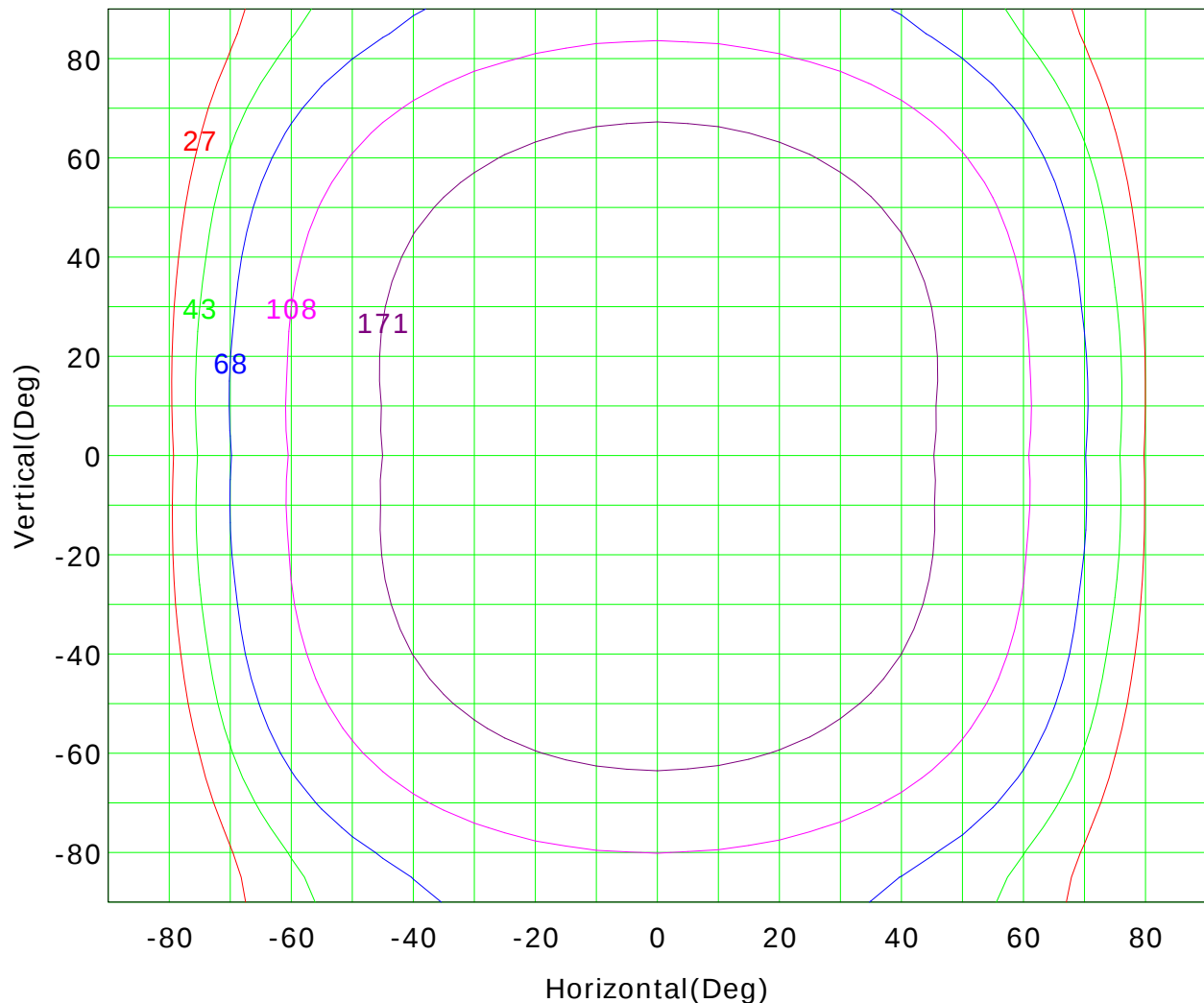
Humidity:

Inspector:

Luminous Intensity Distribution Curve(cd / klm)



Isocandela (rectangle)



I_{max} (100%): 271 cd

(10%):	27 cd	(16%):	43 cd
(25%):	68 cd	(40%):	108 cd
(63%):	171 cd	(100%):	271 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

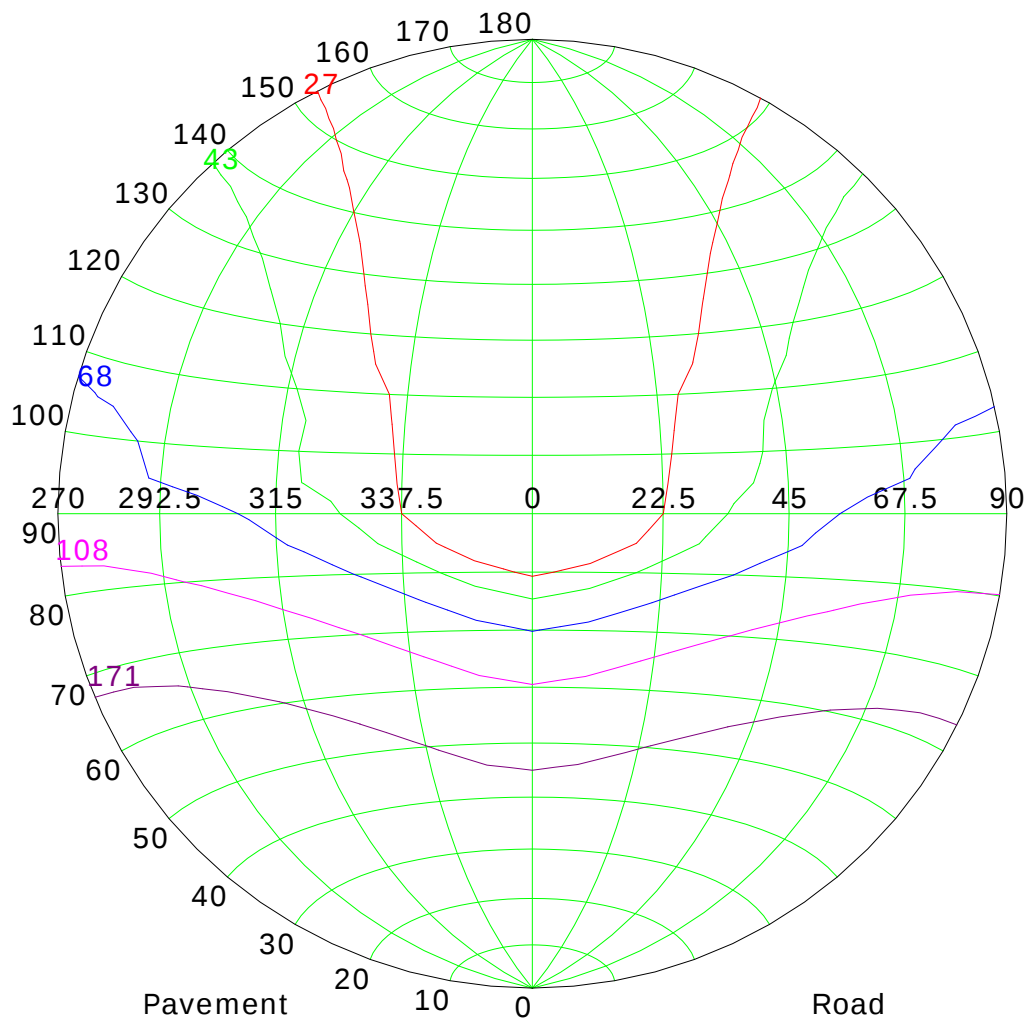
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



Imax (100%): 271 cd

(10%):	27 cd	(16%):	43 cd
(25%):	68 cd	(40%):	108 cd
(63%):	171 cd	(100%):	271 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

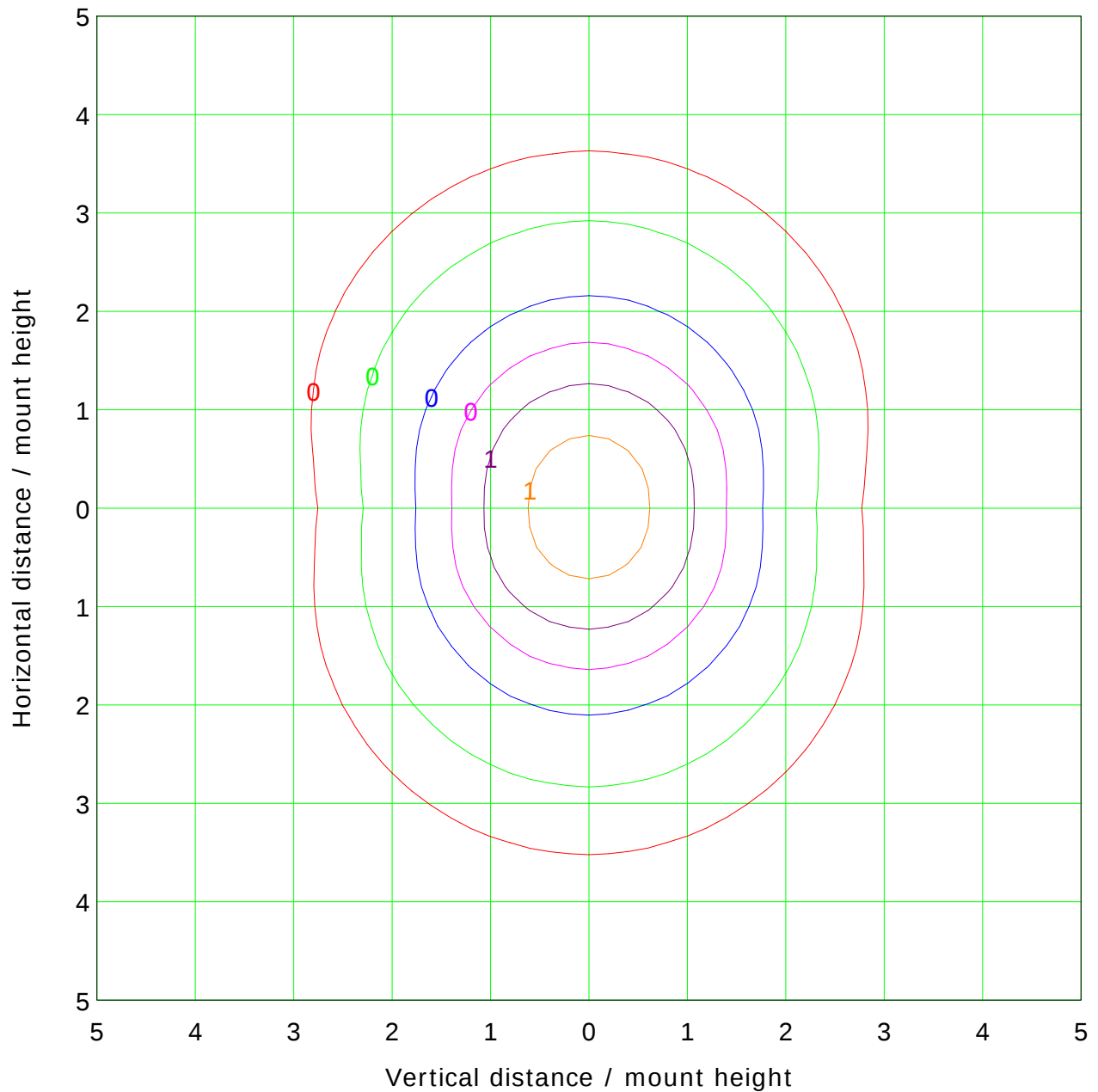
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m		Max Lux(100%): 2.7 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%):	2.7 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

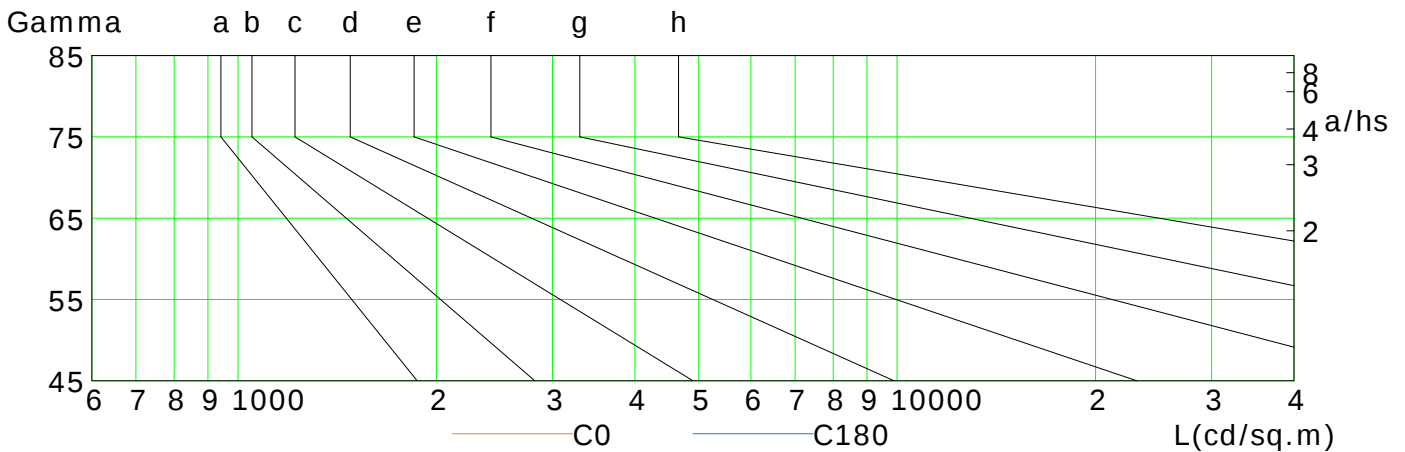
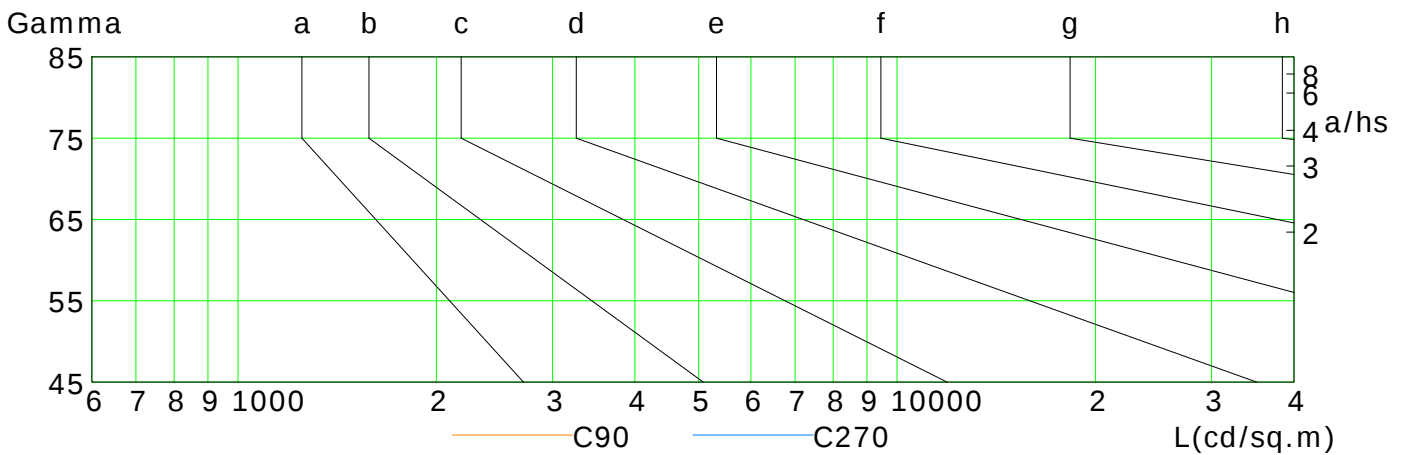
Humidity:

Inspector:

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	171	152	132	111	89	67	45	24	7
C90	227	214	200	183	166	147	127	109	94
C180	172	153	133	112	91	69	47	26	9
C270	238	226	212	196	179	160	141	121	103

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

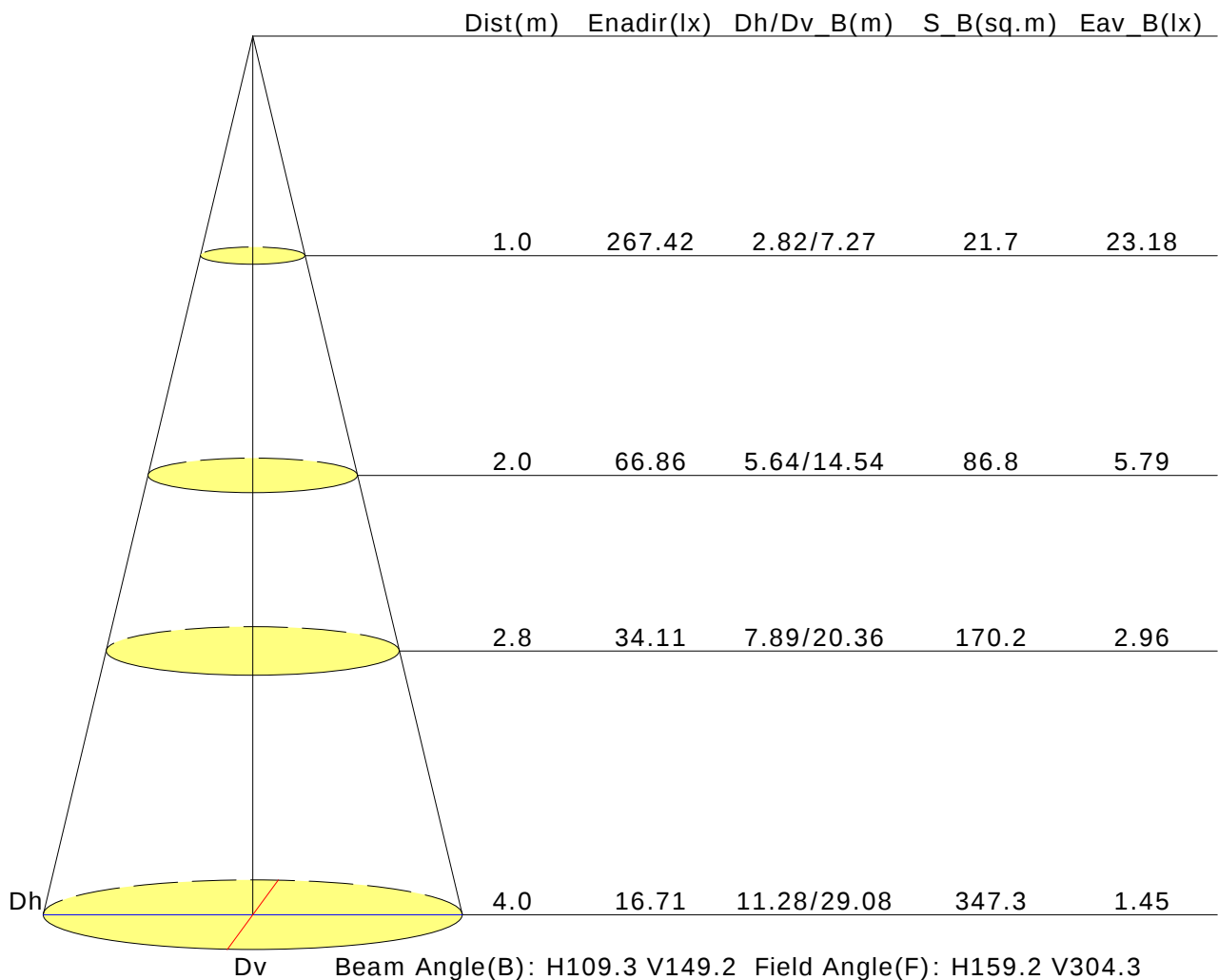
Test Device: GPM-2000

Distance: 7.970 m

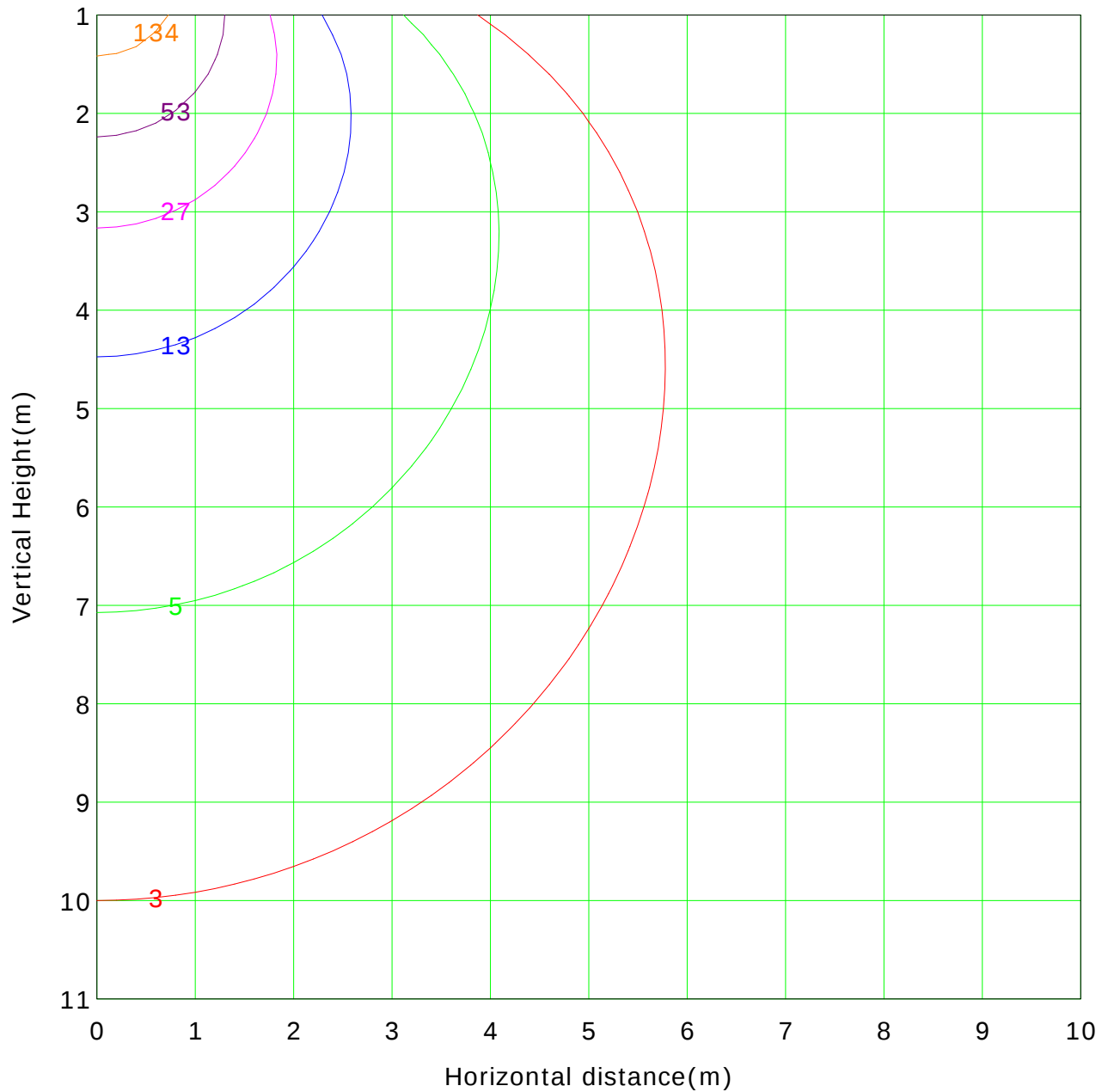
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 267.4 lx

— (1%): 2.7 lx	— (2%): 5.3 lx
— (5%): 13.4 lx	— (10%): 26.7 lx
— (20%): 53.5 lx	— (50%): 133.7 lx
— (100%): 267.4 lx	