

Report No.:

Test Time: 17/09/2018 10:37

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-TI01-11 + LLD-11-WM

Lamp Description: F52-400-60822

Number of Lamps: 1

Lumens per Lamp: 1579 lm

Voltage: 24.0 V

Current: 0.594 A

Power: 14.25 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 923 lm

Downward Ratio: 58.24%

Total Rated Lamp Lumens: 1579.0 lm

Efficiency: 58.46%

Upward Ratio: 0.21%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.3, 161.3, 160.8, 160.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.3, 112.6, 112.9, 113.0

Luminaire Efficacy Rating (LER): 64.82

Central Intensity: 321.79 cd

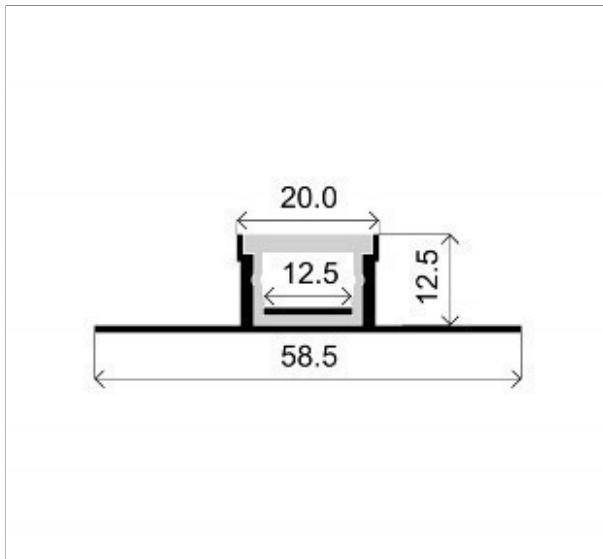
Max. Intensity: 321.93 cd

Pos of Max. Intensity: H10 V0

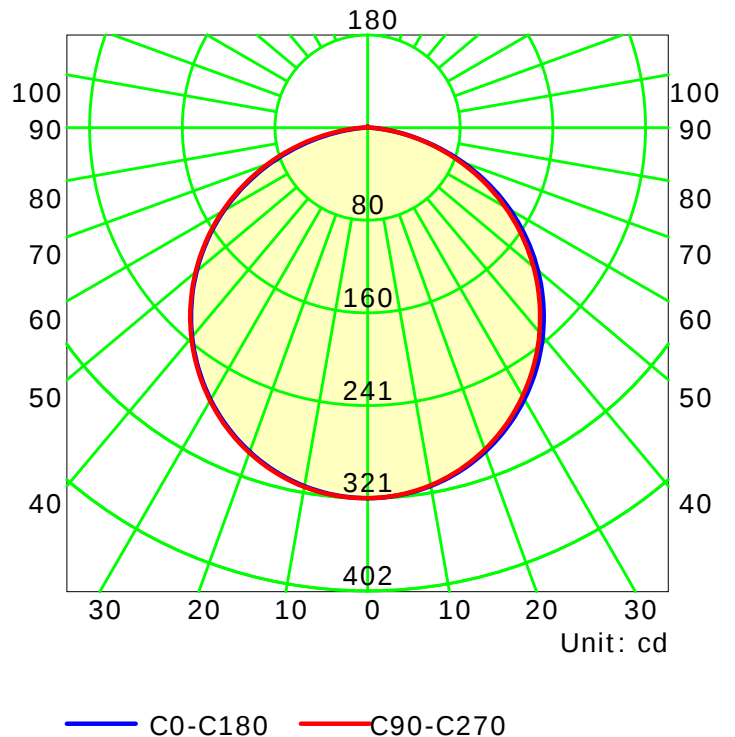
S/MH(C0/C180): 1.26

S/MH(C90/C270): 1.25

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

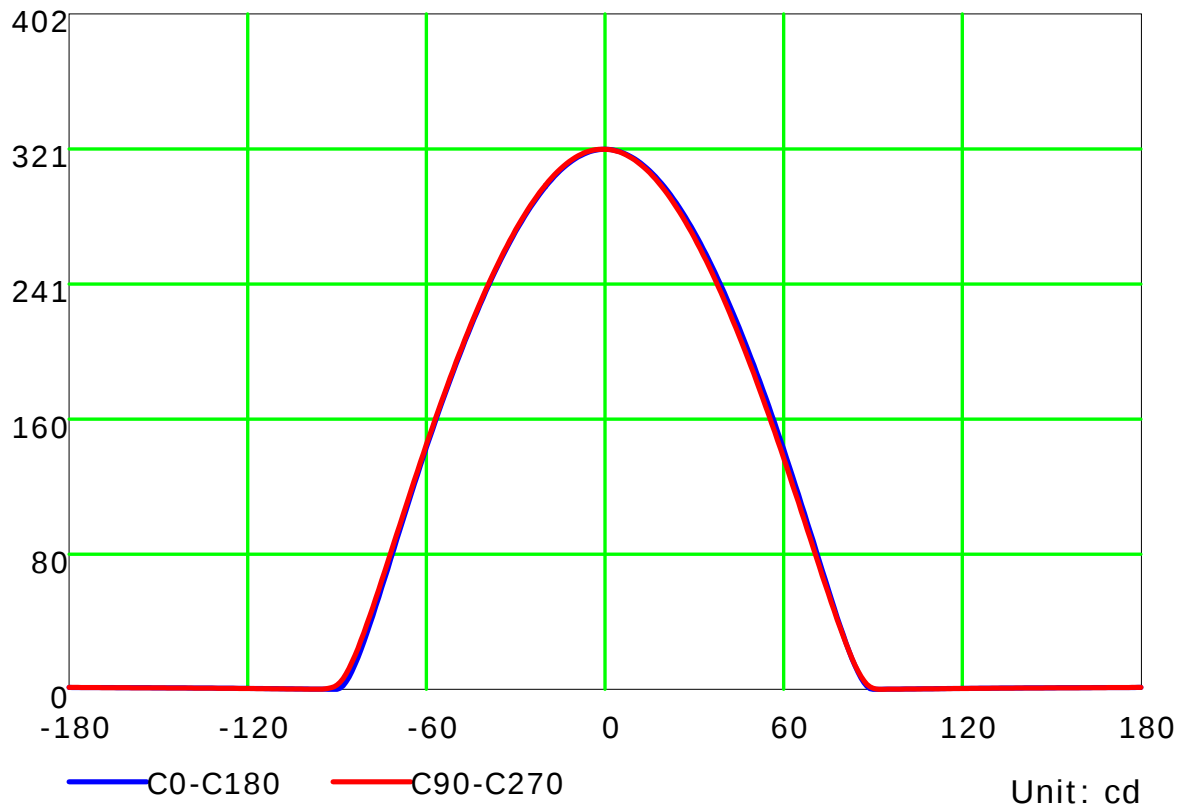
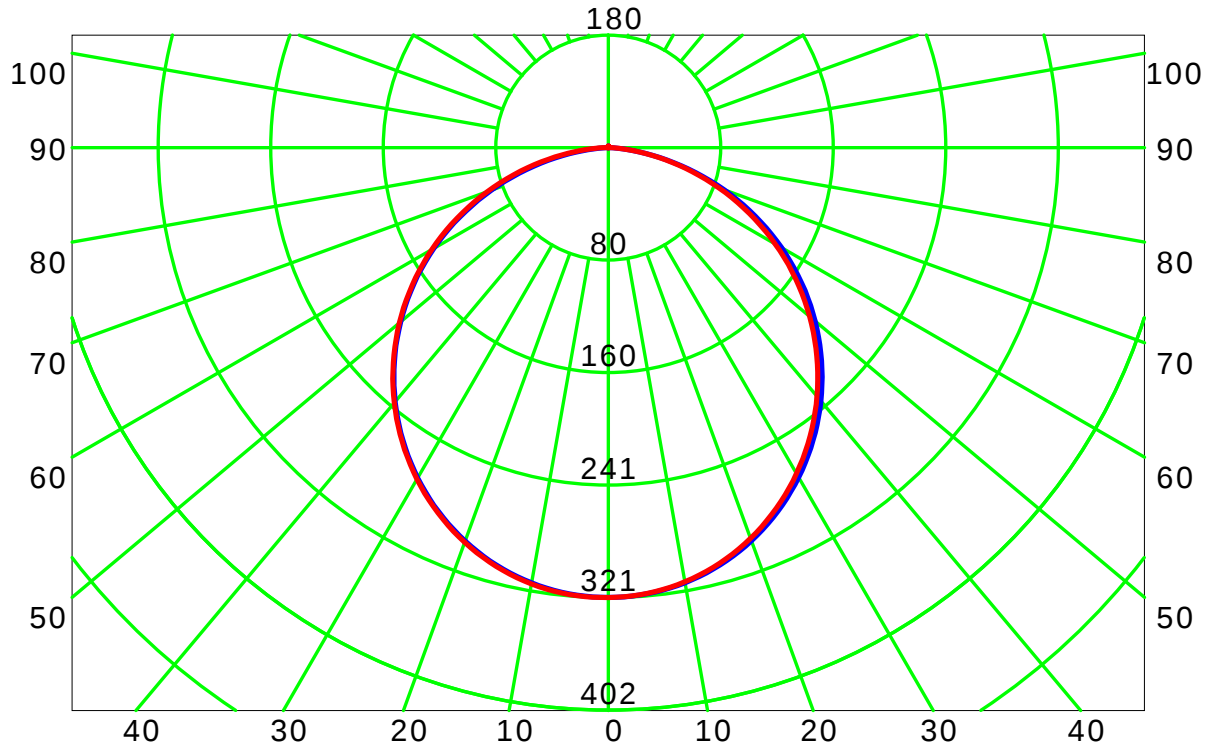
Test Device: GPM-2000

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

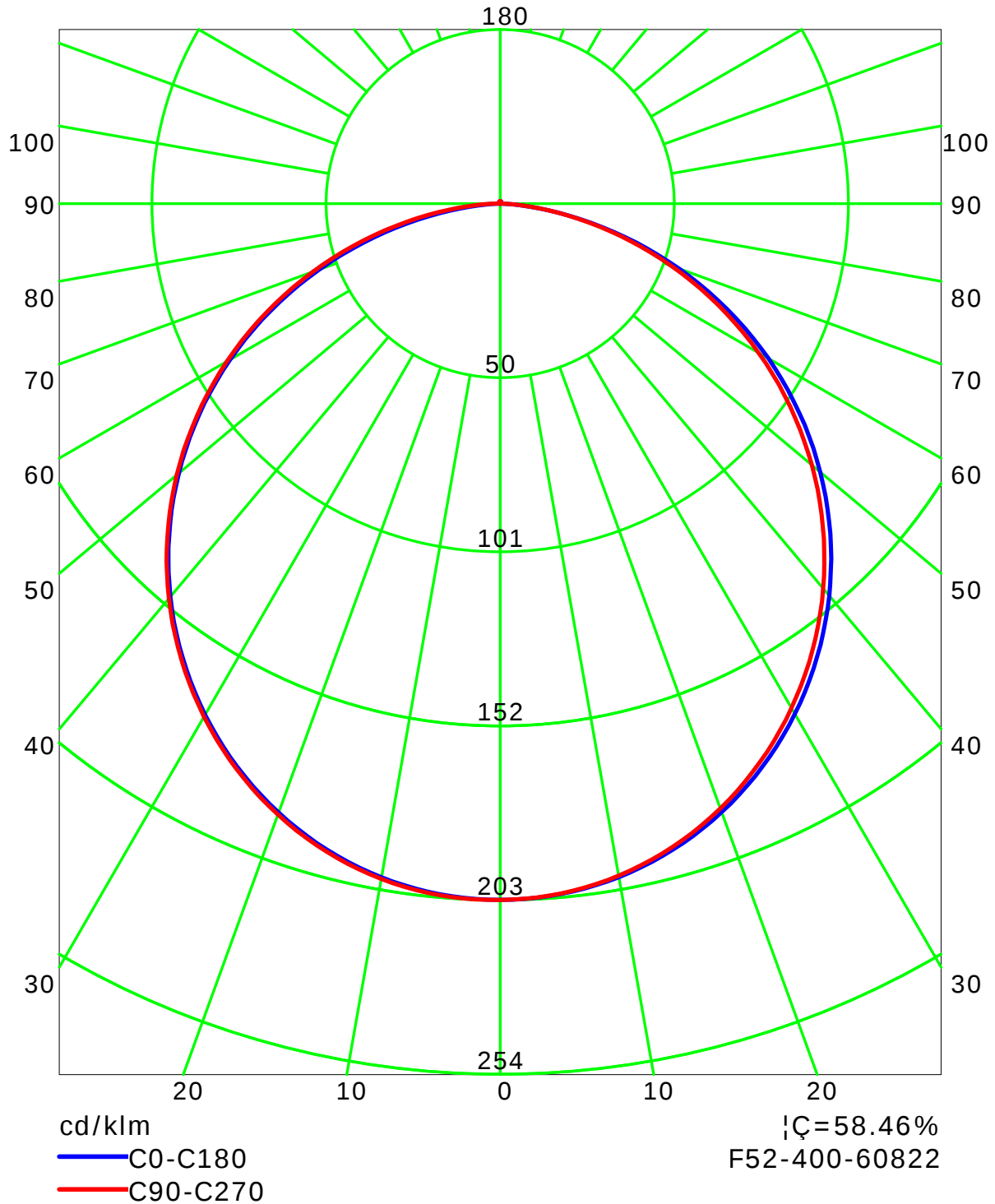
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

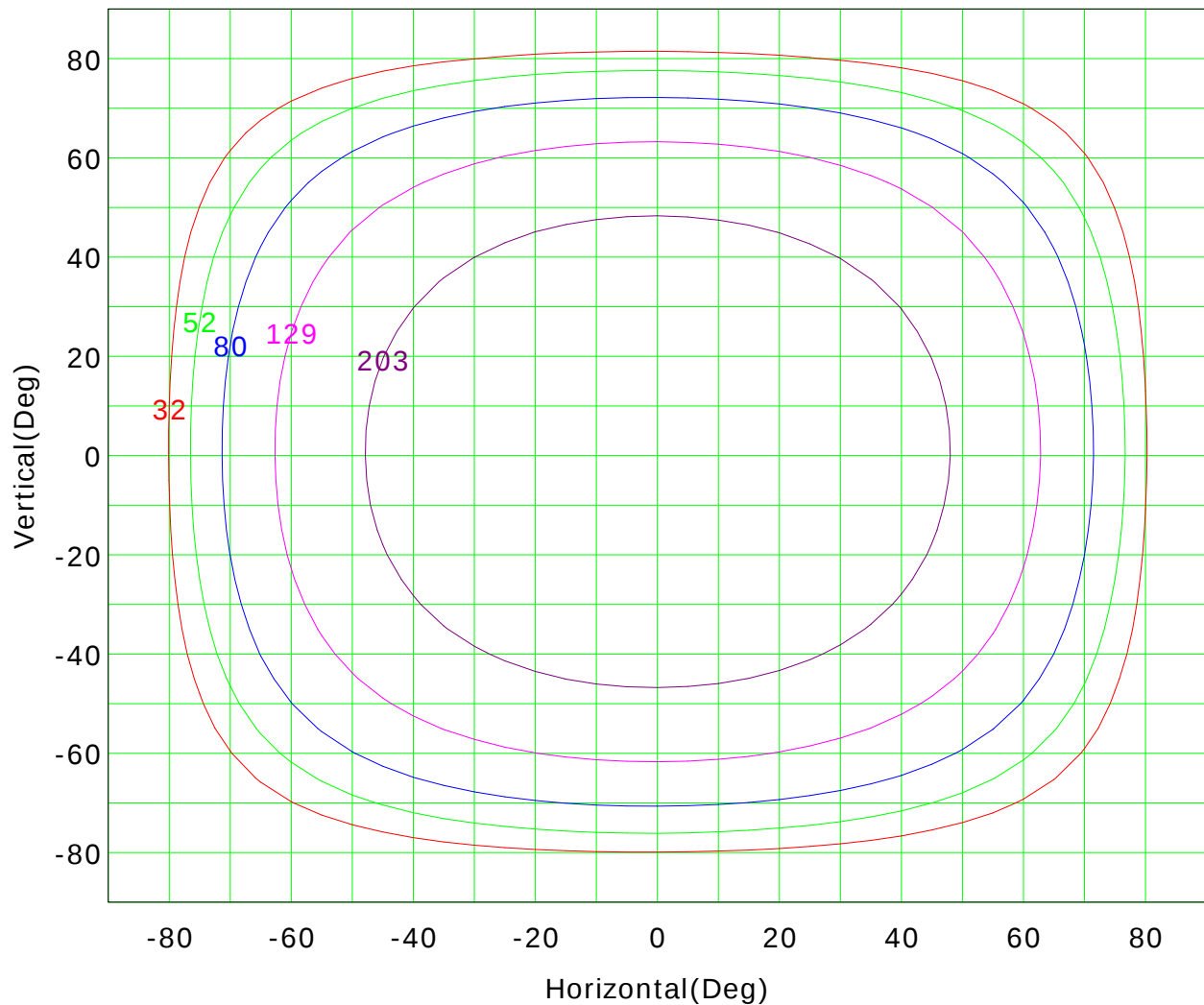
Luminous Intensity Distribution Curve(cd / klm)



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%): 322 cd

(10%):	32 cd	(16%):	52 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

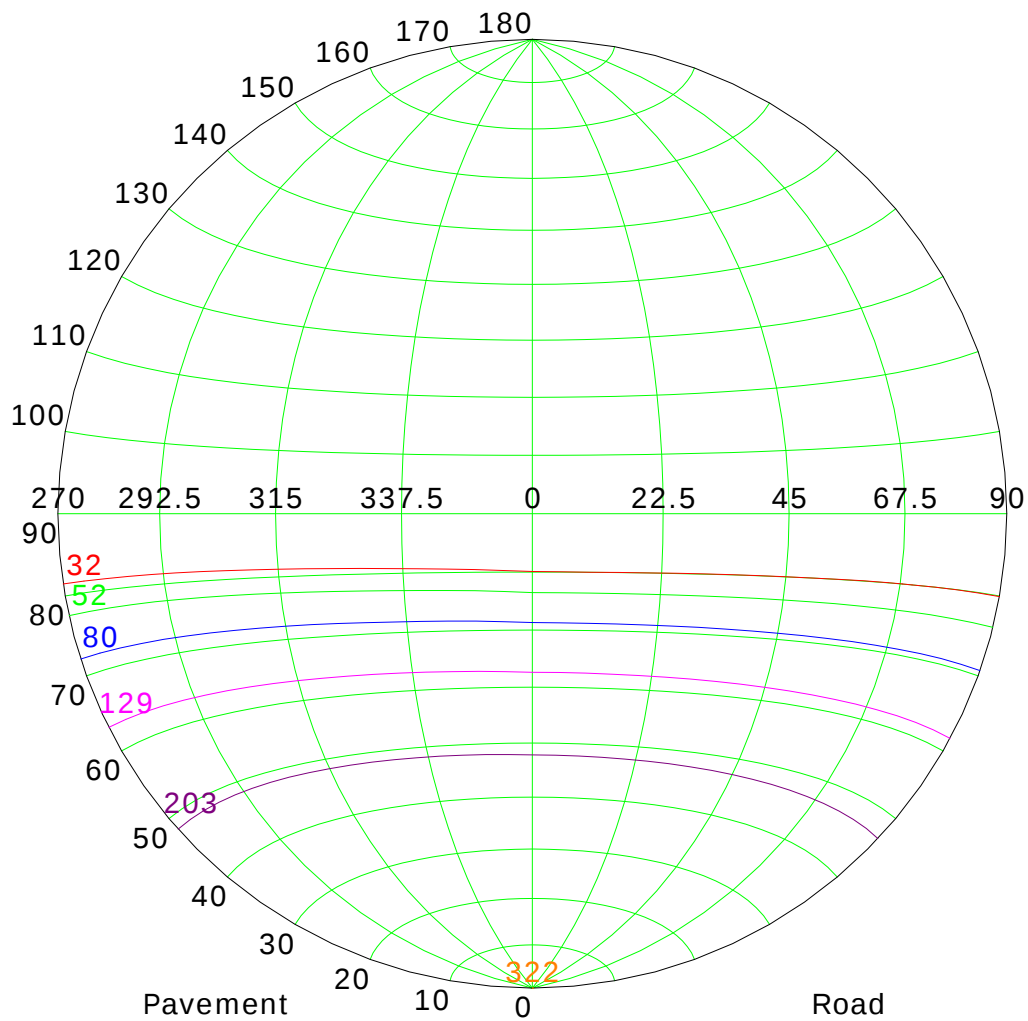
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 322 cd

(10%):	32 cd	(16%):	52 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

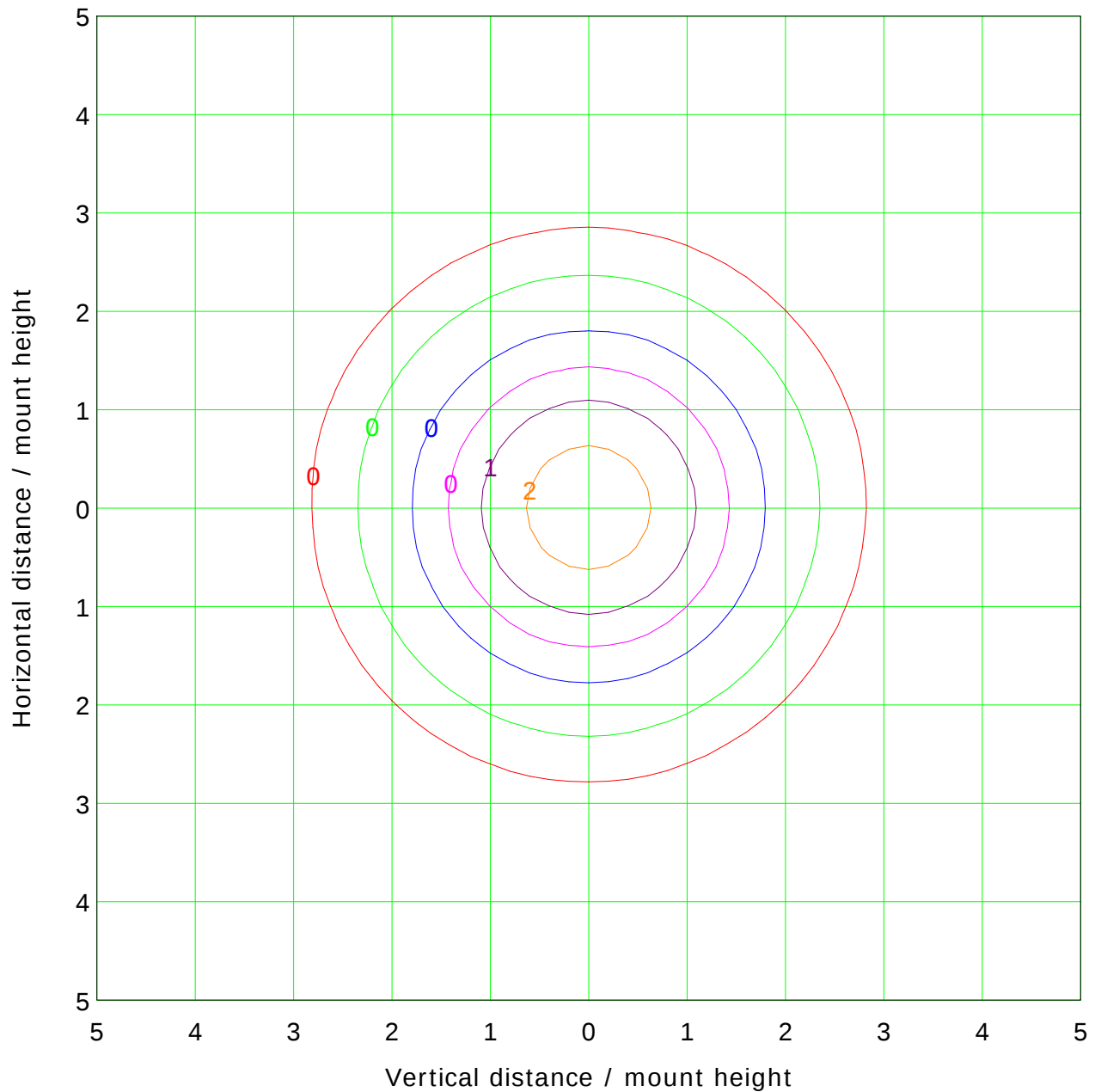
Test Device: GPM-2000

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

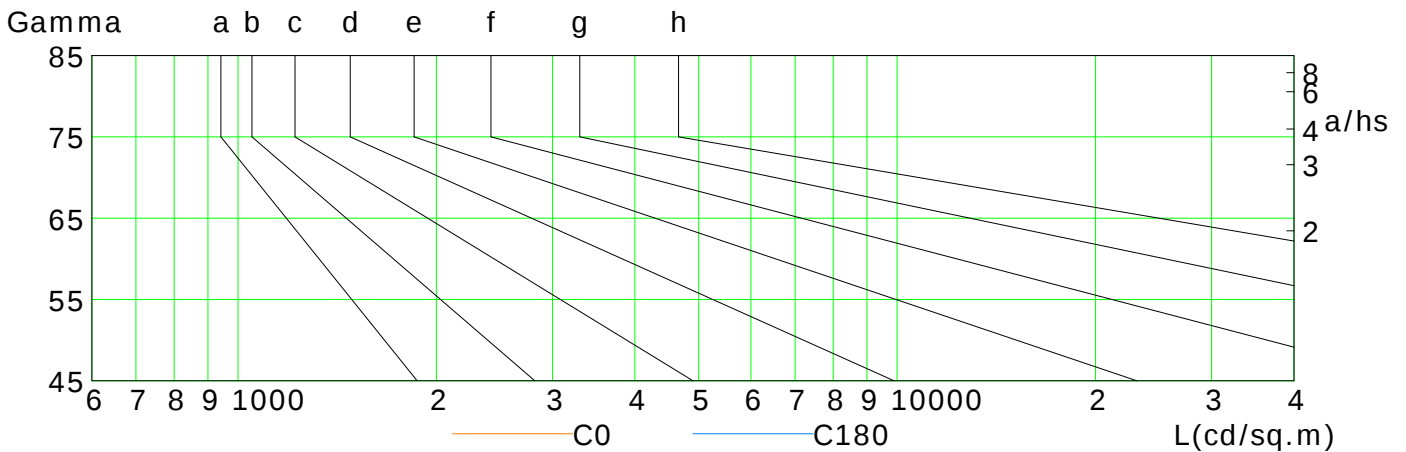
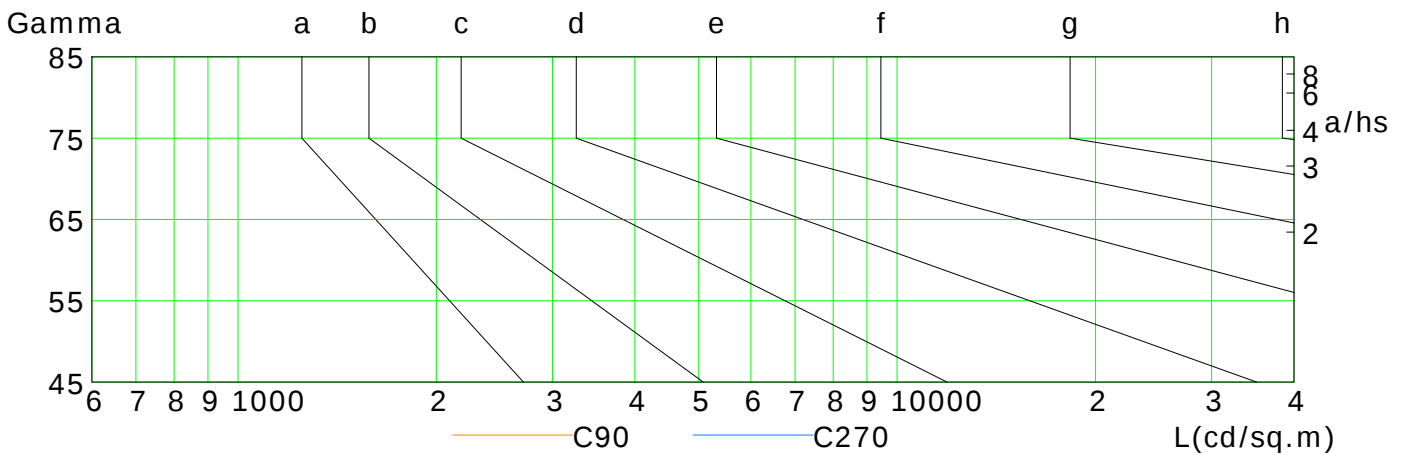
Humidity:

Inspector:

Lum Limit Curve

Dazzle	Quality	Illuminance (lx)							
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	216	193	169	143	116	88	60	33	10
C90	211	188	164	138	111	84	57	32	11
C180	216	194	170	144	117	89	61	33	11
C270	218	195	171	146	119	92	65	39	16

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

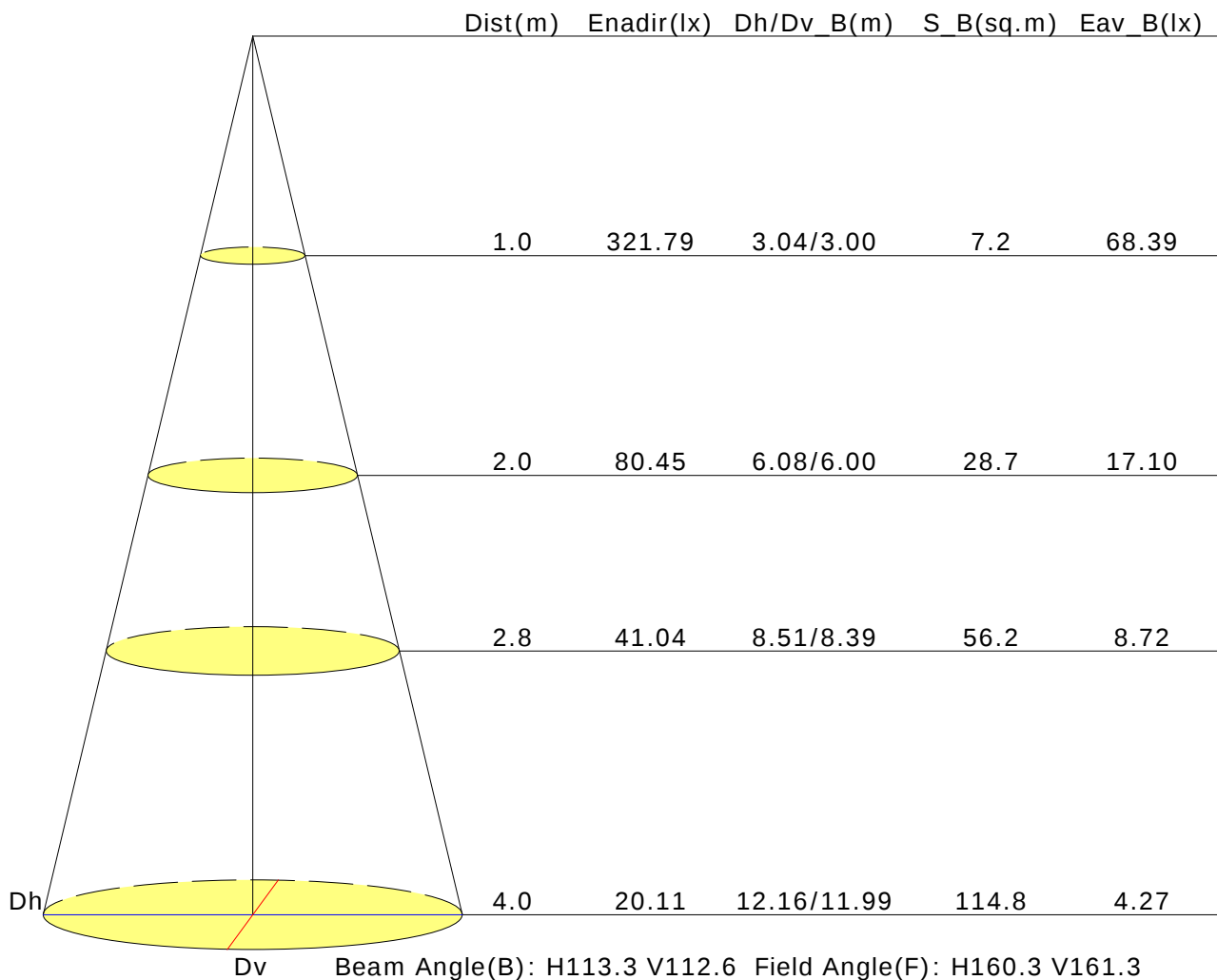
Test Device: GPM-2000

Distance: 7.970 m

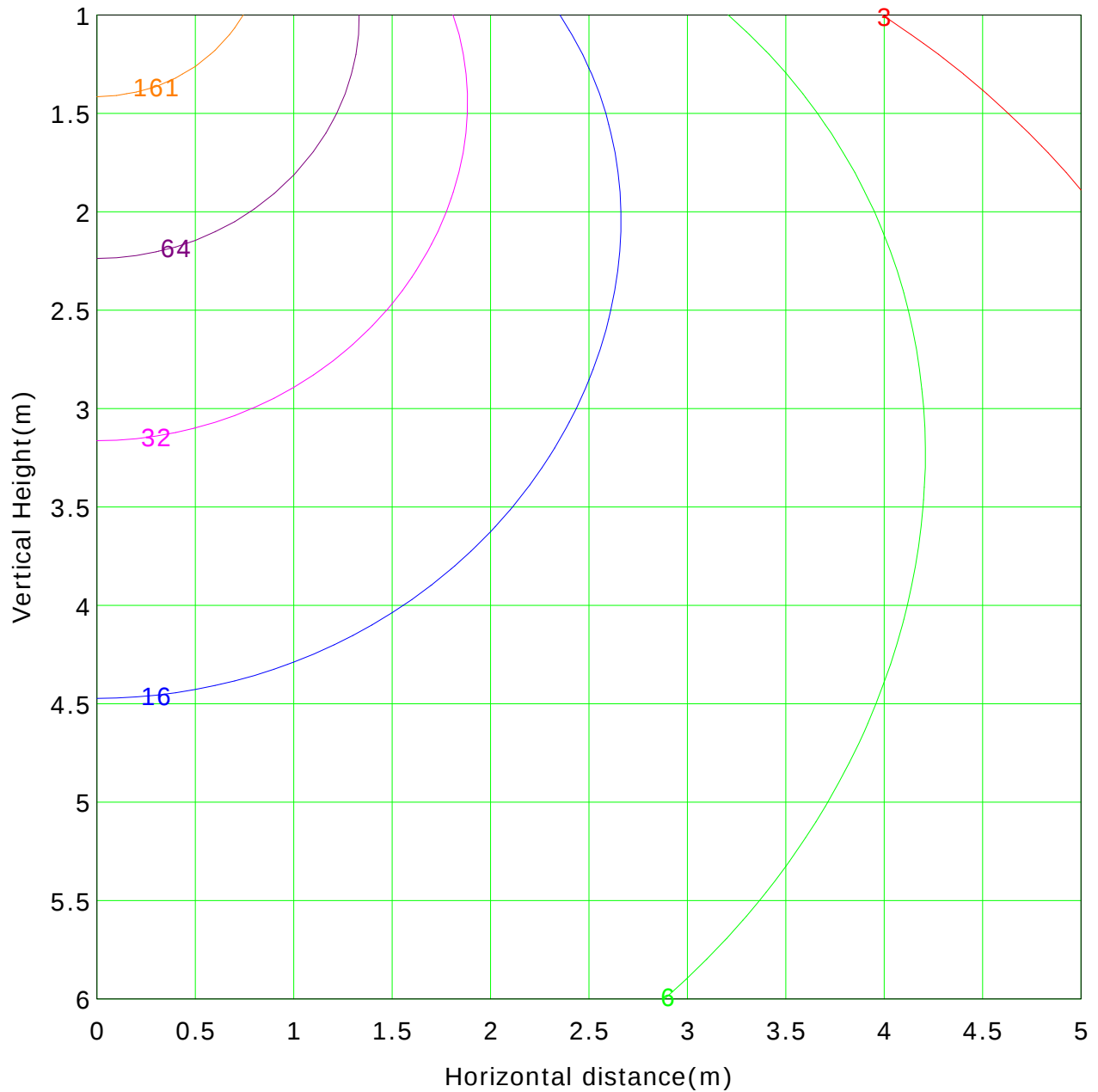
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 321.8 lx
(1%): 3.2 lx	(2%): 6.4 lx	
(5%): 16.1 lx	(10%): 32.2 lx	
(20%): 64.4 lx	(50%): 160.9 lx	
(100%): 321.8 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: 17/09/2018 14:29

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-TI01-11 + LLD-11-WS

Lamp Description: F52-400-60822

Number of Lamps: 1

Lumens per Lamp: 1579 lm

Voltage: 24.0 V

Current: 0.593 A

Power: 14.22 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 894.3 lm

Downward Ratio: 56.43%

Total Rated Lamp Lumens: 1579.0 lm

Efficiency: 56.64%

Upward Ratio: 0.21%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 164.3, 164.7, 164.4, 164.5

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.2, 112.7, 113.0, 113.0

Luminaire Efficacy Rating (LER): 62.94

Central Intensity: 307.12 cd

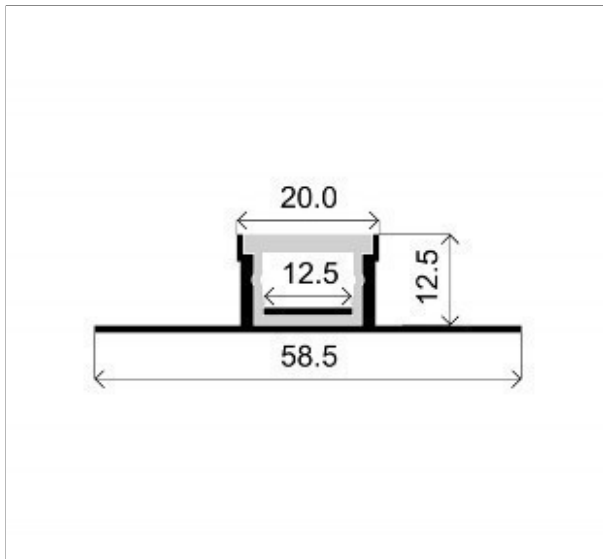
Max. Intensity: 307.12 cd

Pos of Max. Intensity: H0 V0

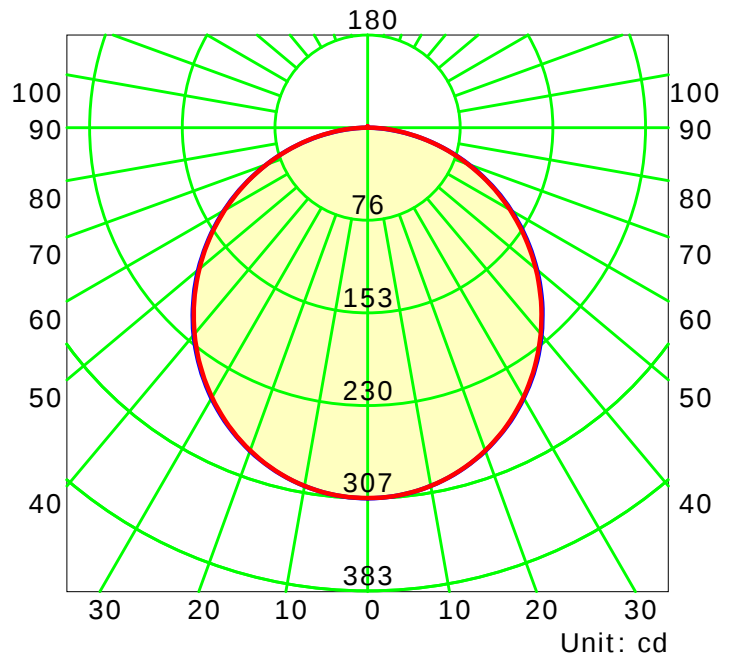
S/MH(C0/C180): 1.25

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

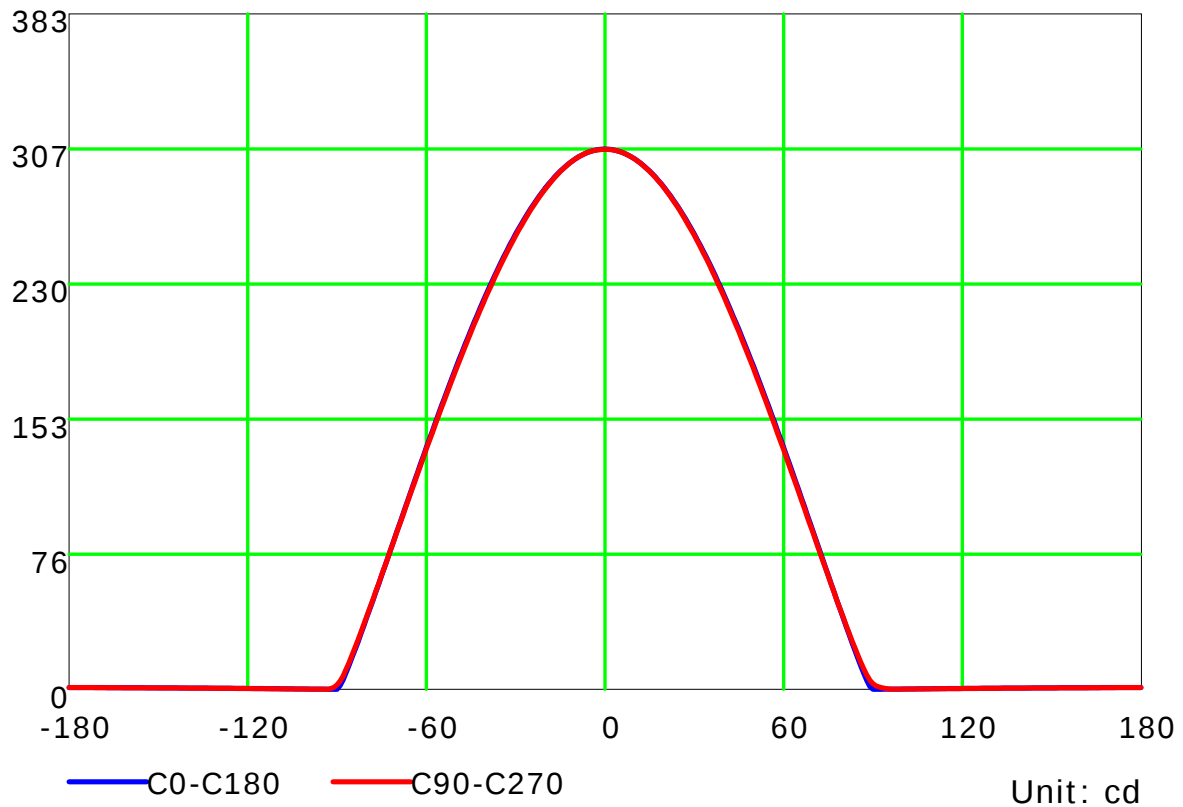
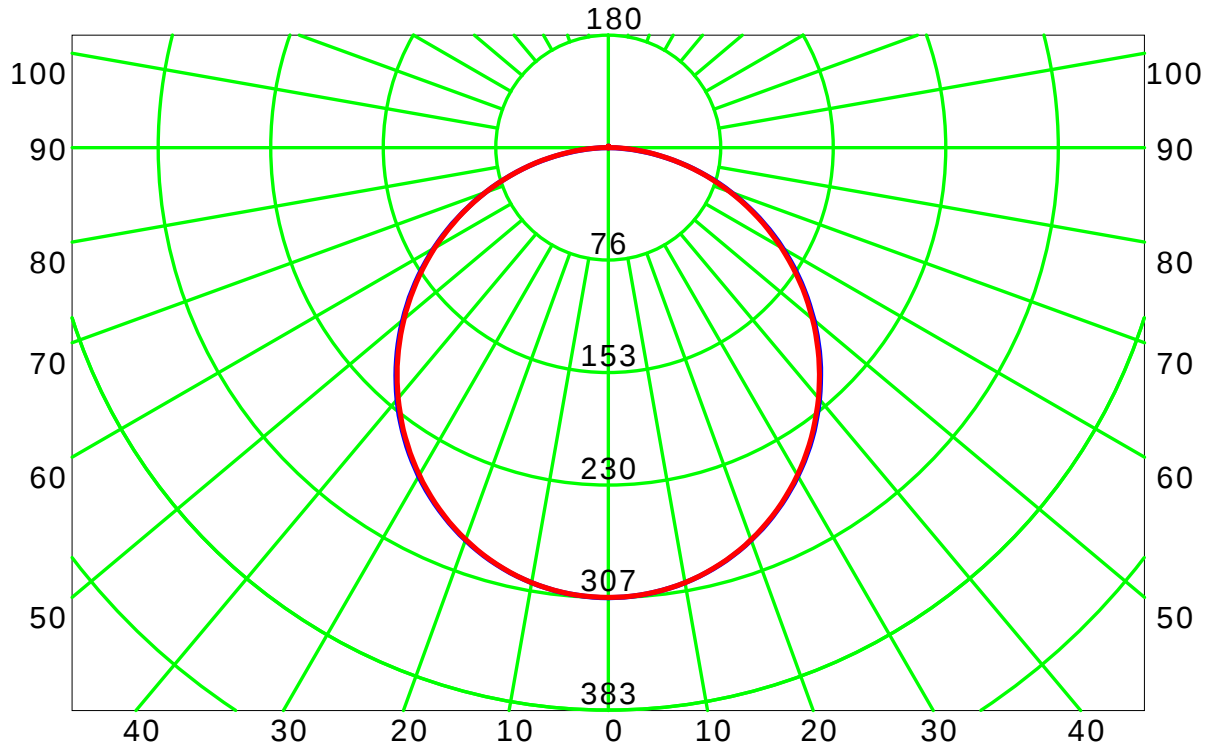
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

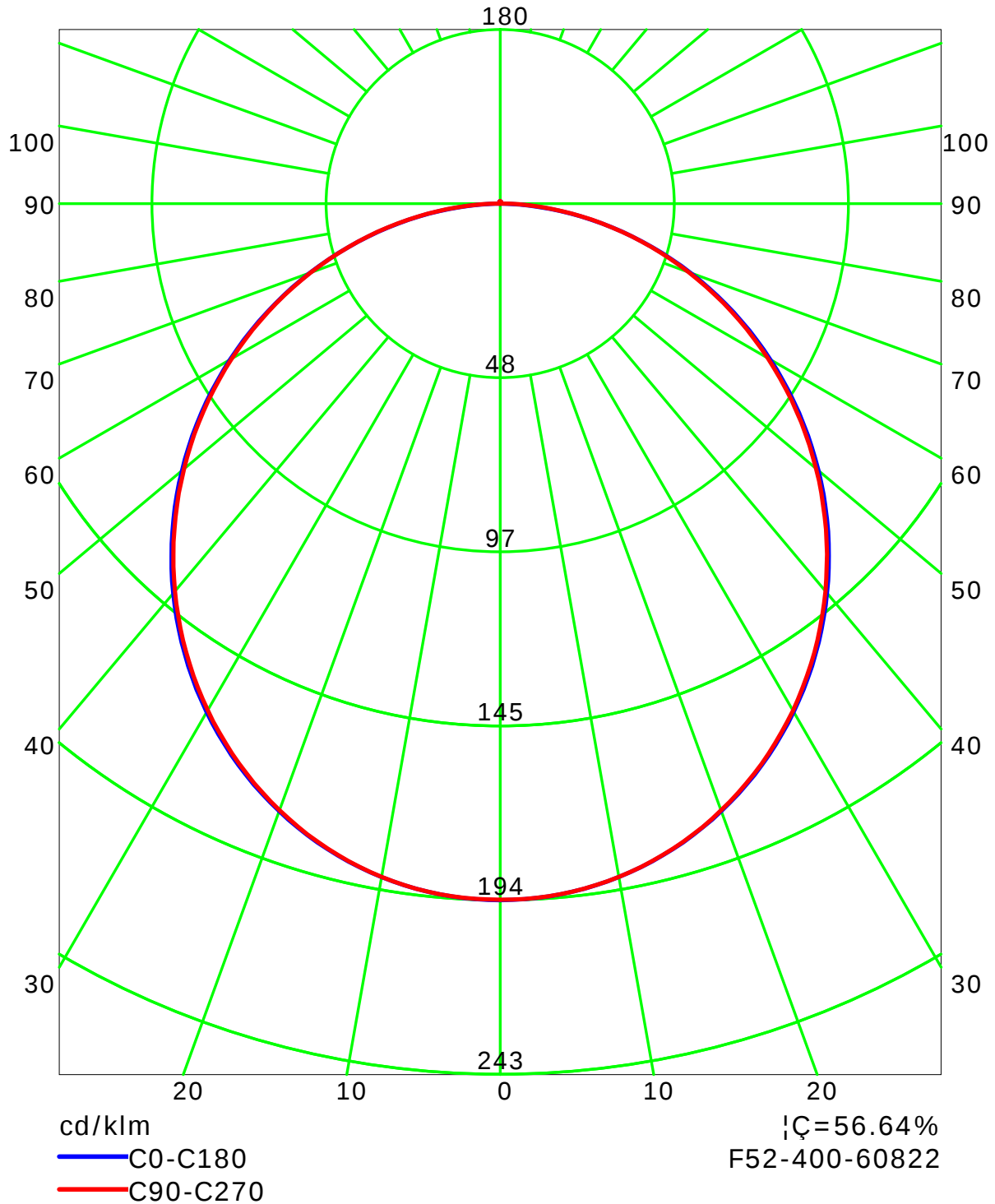
Luminous Intensity Distribution Curve



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:

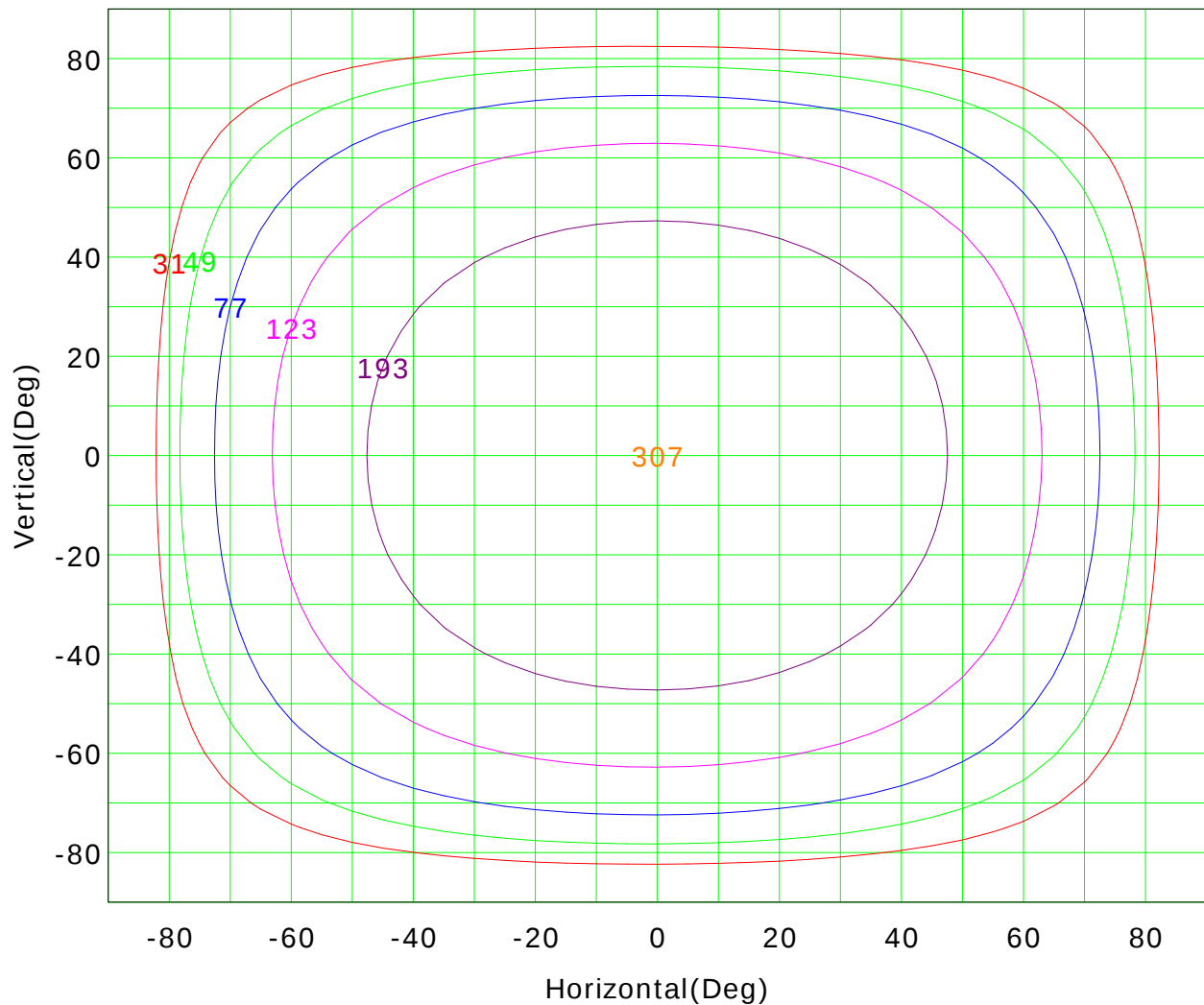
Luminous Intensity Distribution Curve(cd / klm)



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%): 307 cd

(10%):	31 cd	(16%):	49 cd
(25%):	77 cd	(40%):	123 cd
(63%):	193 cd	(100%):	307 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

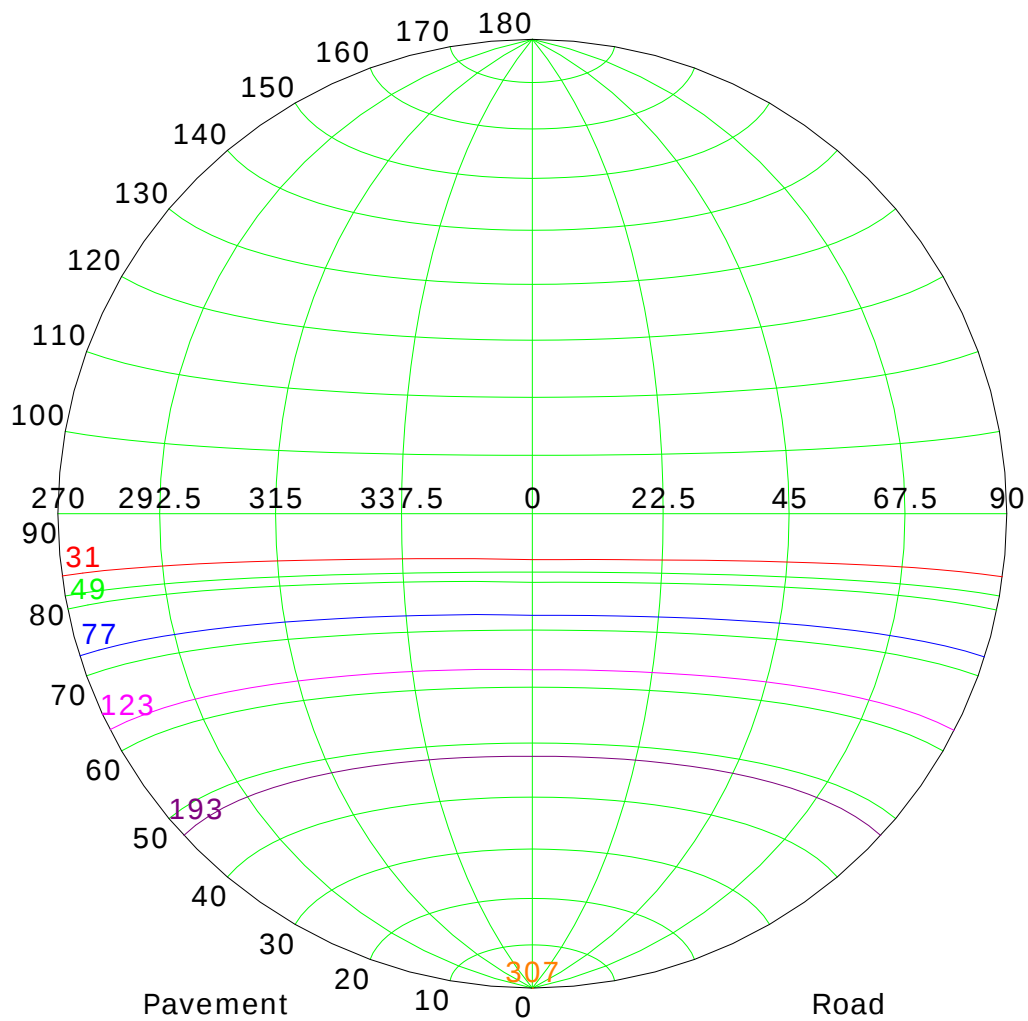
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 307 cd

(10%):	31 cd	(16%):	49 cd
(25%):	77 cd	(40%):	123 cd
(63%):	193 cd	(100%):	307 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

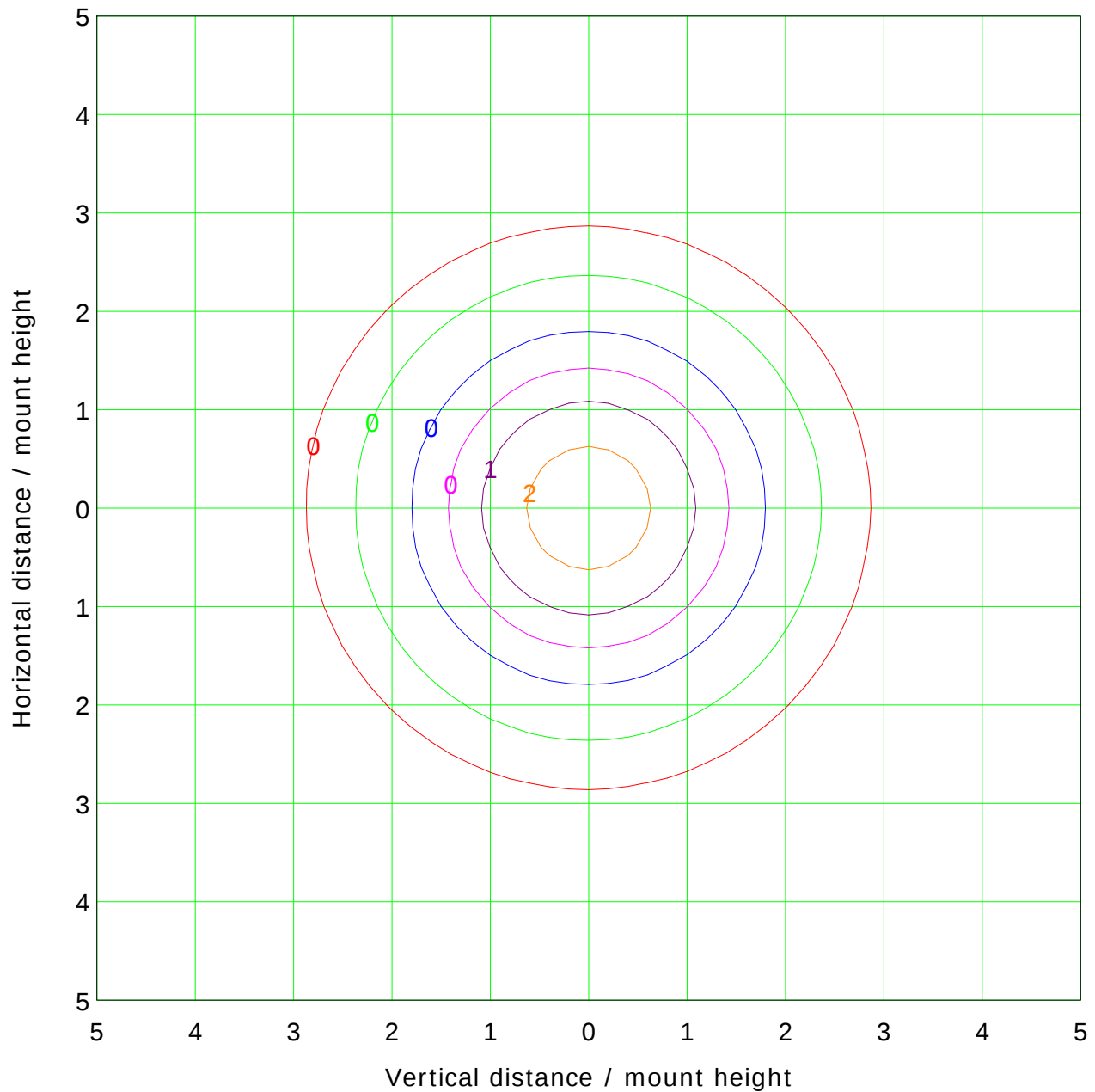
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 3.1 lx

(1%): 0.0 lx	(2%): 0.1 lx
(5%): 0.2 lx	(10%): 0.3 lx
(20%): 0.6 lx	(50%): 1.5 lx
(100%): 3.1 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

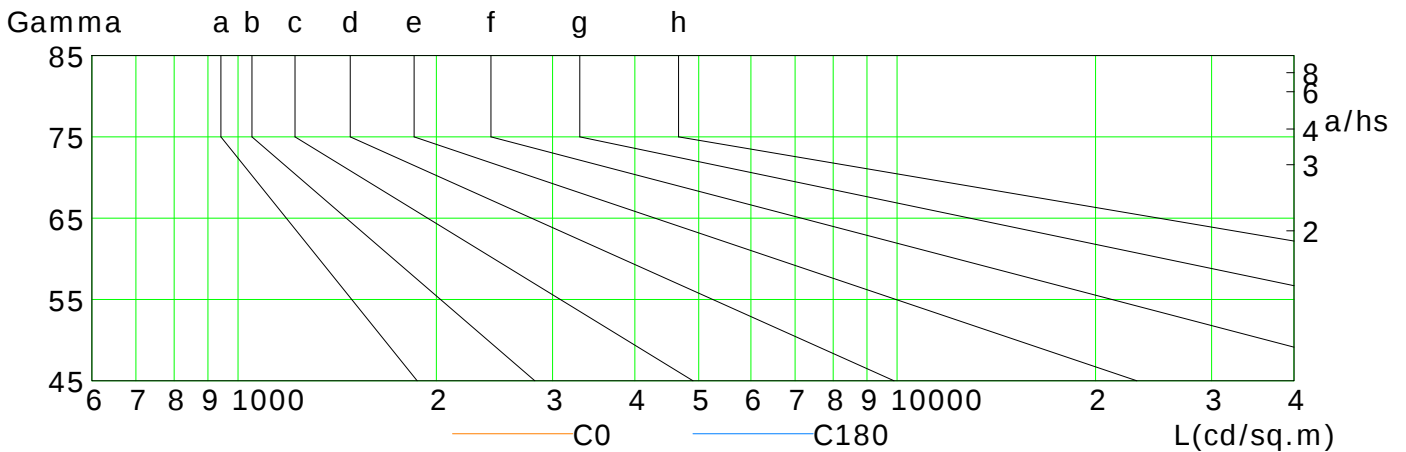
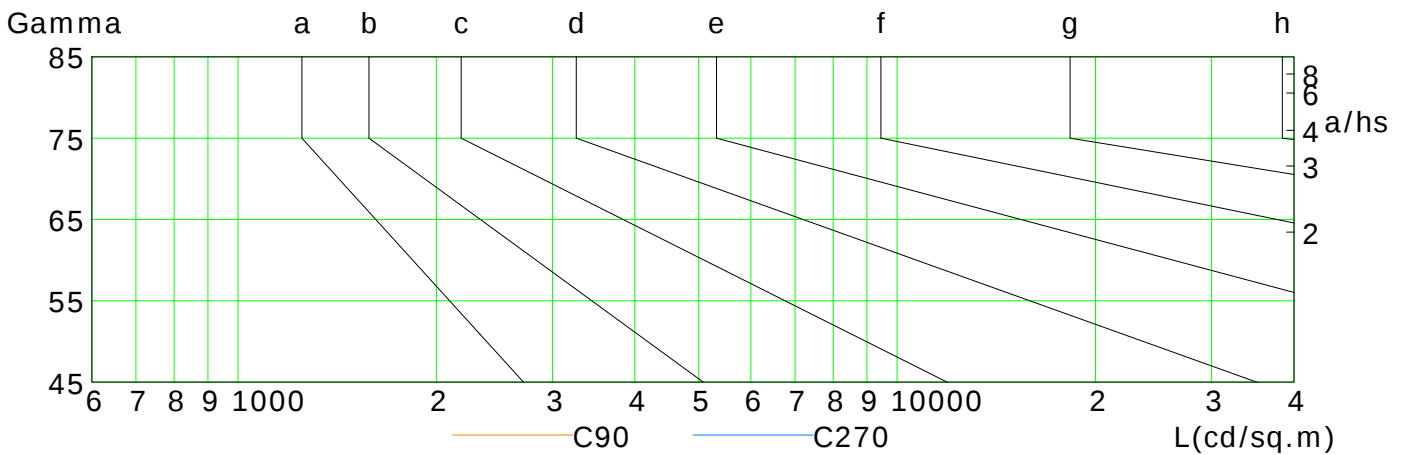
Humidity:

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	204	183	161	137	114	89	65	41	17
C90	203	182	159	136	112	88	64	41	19
C180	204	183	161	138	113	89	65	41	18
C270	203	182	160	137	113	89	65	42	19

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

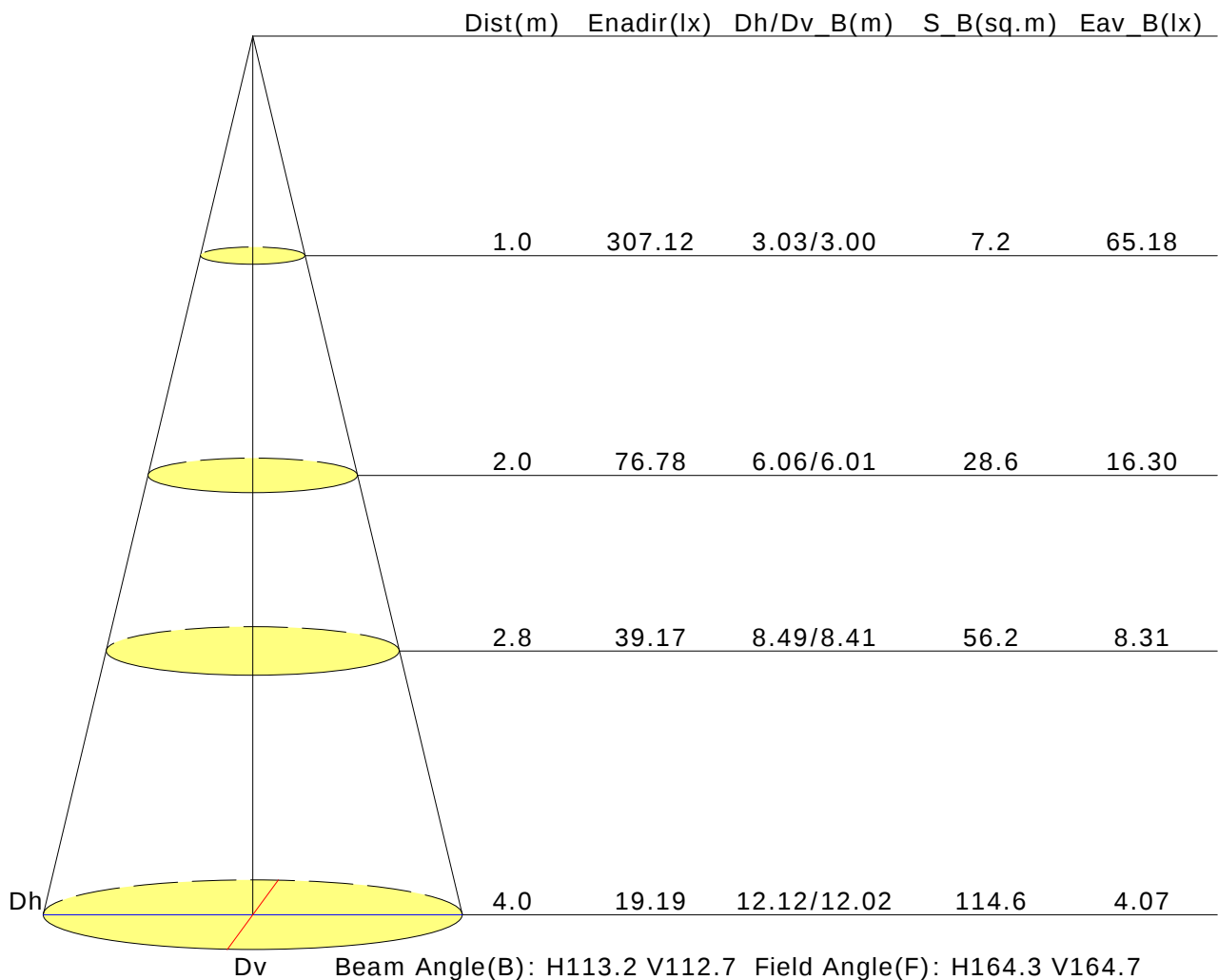
Test Device: GPM-2000

Distance: 7.970 m

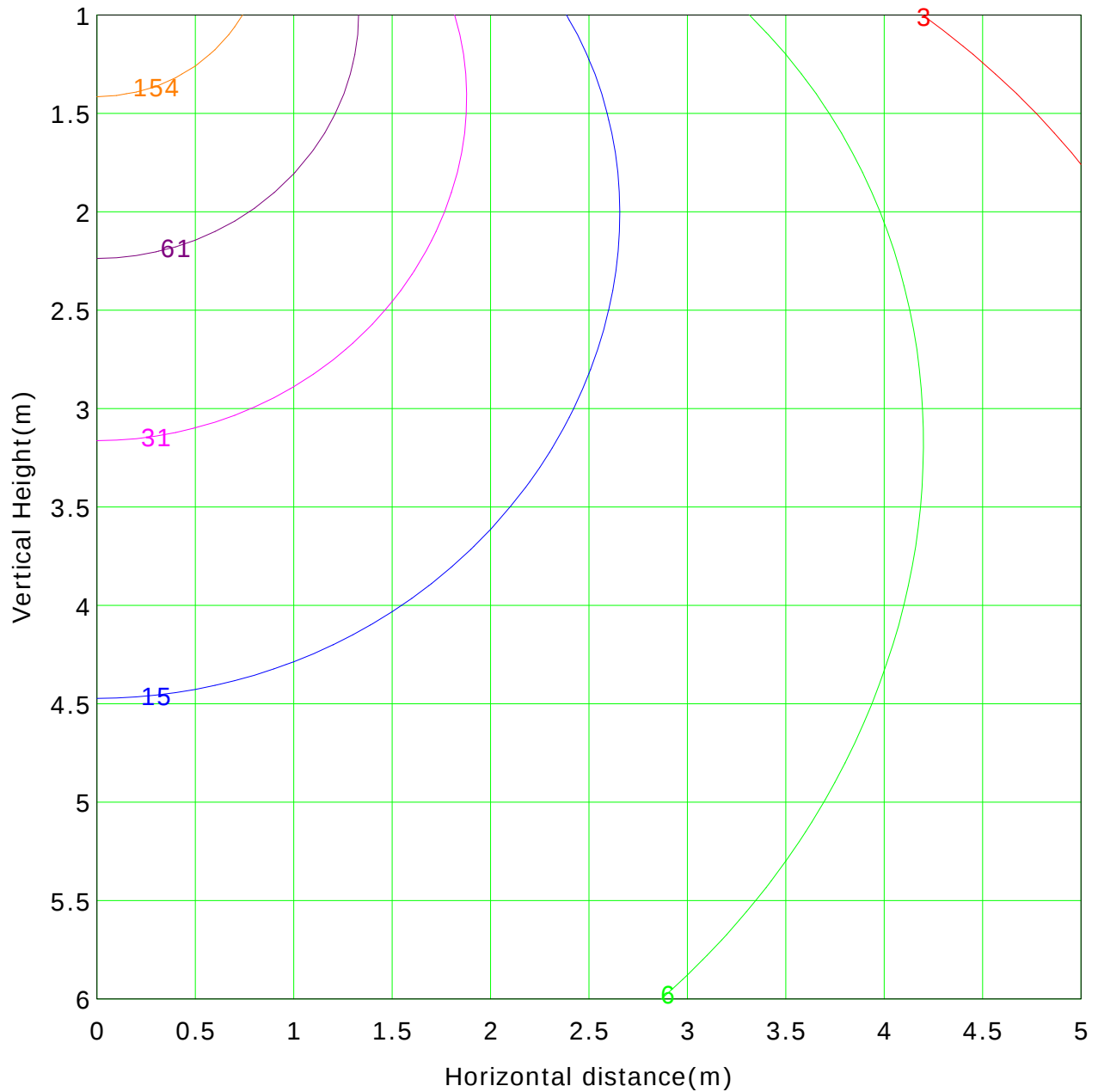
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 307.1 lx
(1%): 3.1 lx	(2%): 6.1 lx	
(5%): 15.4 lx	(10%): 30.7 lx	
(20%): 61.4 lx	(50%): 153.6 lx	
(100%): 307.1 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: