

Report No.:

Test Time: 21/09/2022 10:44

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-FL02-21 + LLD-21-FM

Lamp Description: F52-400-60822

Number of Lamps: 1

Lumens per Lamp: 1579 lm

Voltage: 24.0 V

Current: 0.592 A

Power: 14.20 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 388.8 lm

Downward Ratio: 24.15%

Total Rated Lamp Lumens: 1579.0 lm

Efficiency: 24.62%

Upward Ratio: 0.48%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.1, 165.0, 163.1, 163.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.1, 115.3, 114.5, 114.6

Luminaire Efficacy Rating (LER): 27.43

Central Intensity: 130.58 cd

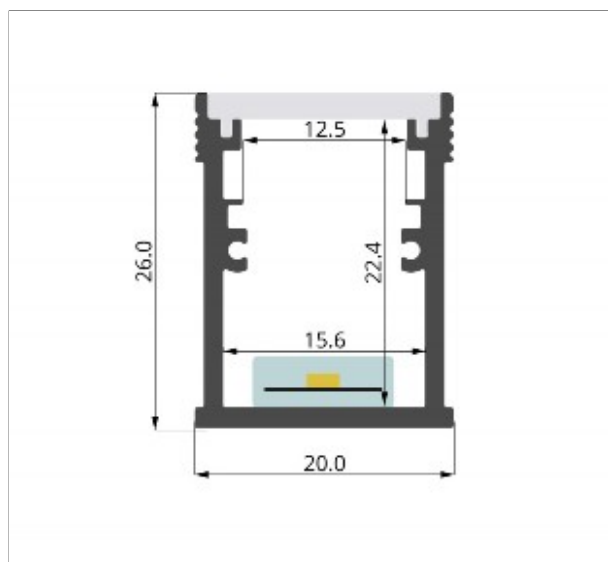
Max. Intensity: 130.59 cd

Pos of Max. Intensity: H0 V0

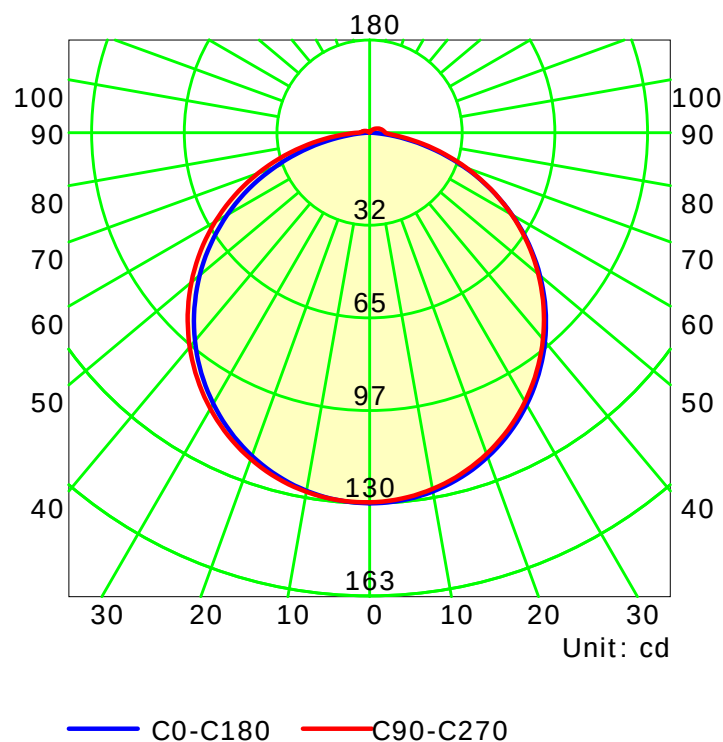
S/MH(C0/C180): 1.26

S/MH(C90/C270): 1.27

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

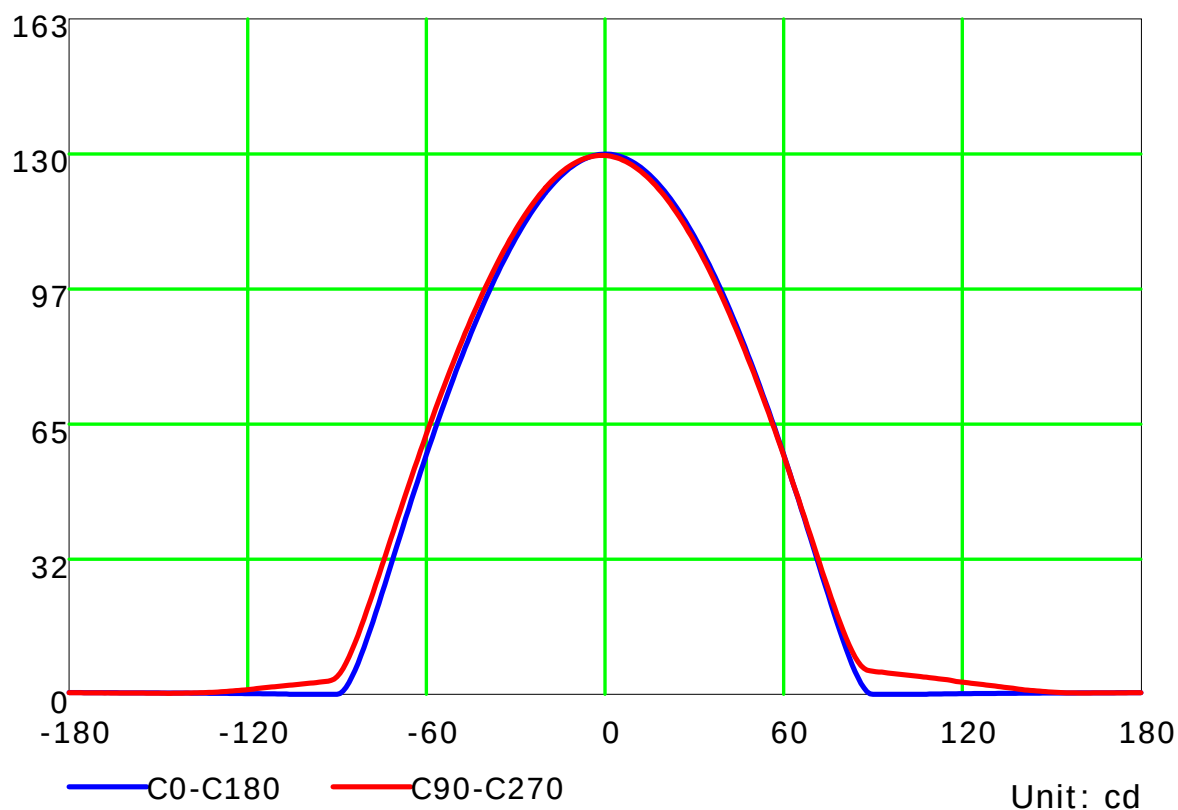
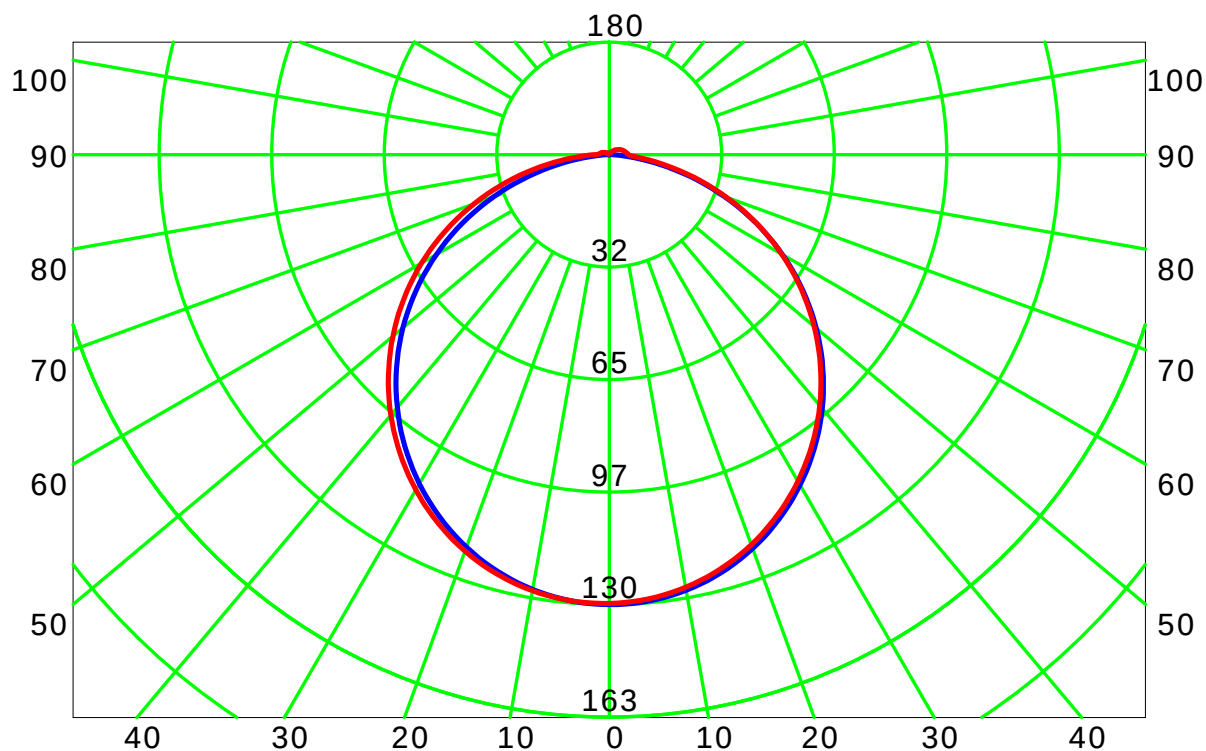
Test Device: GPM-1800B

Distance: 7.979 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

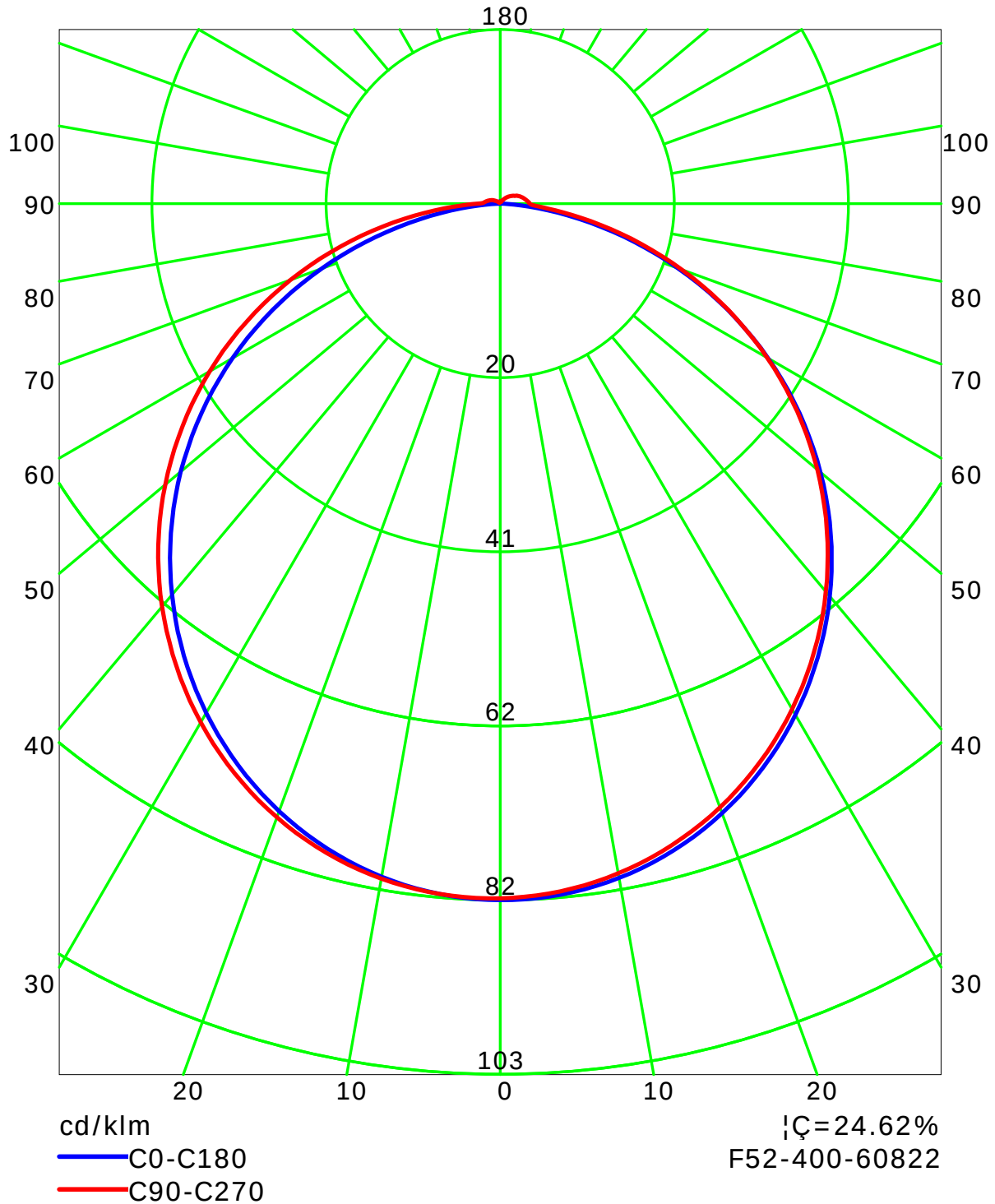
Test Device: GPM-1800B

Distance: 7.979 m

Humidity:

Inspector:

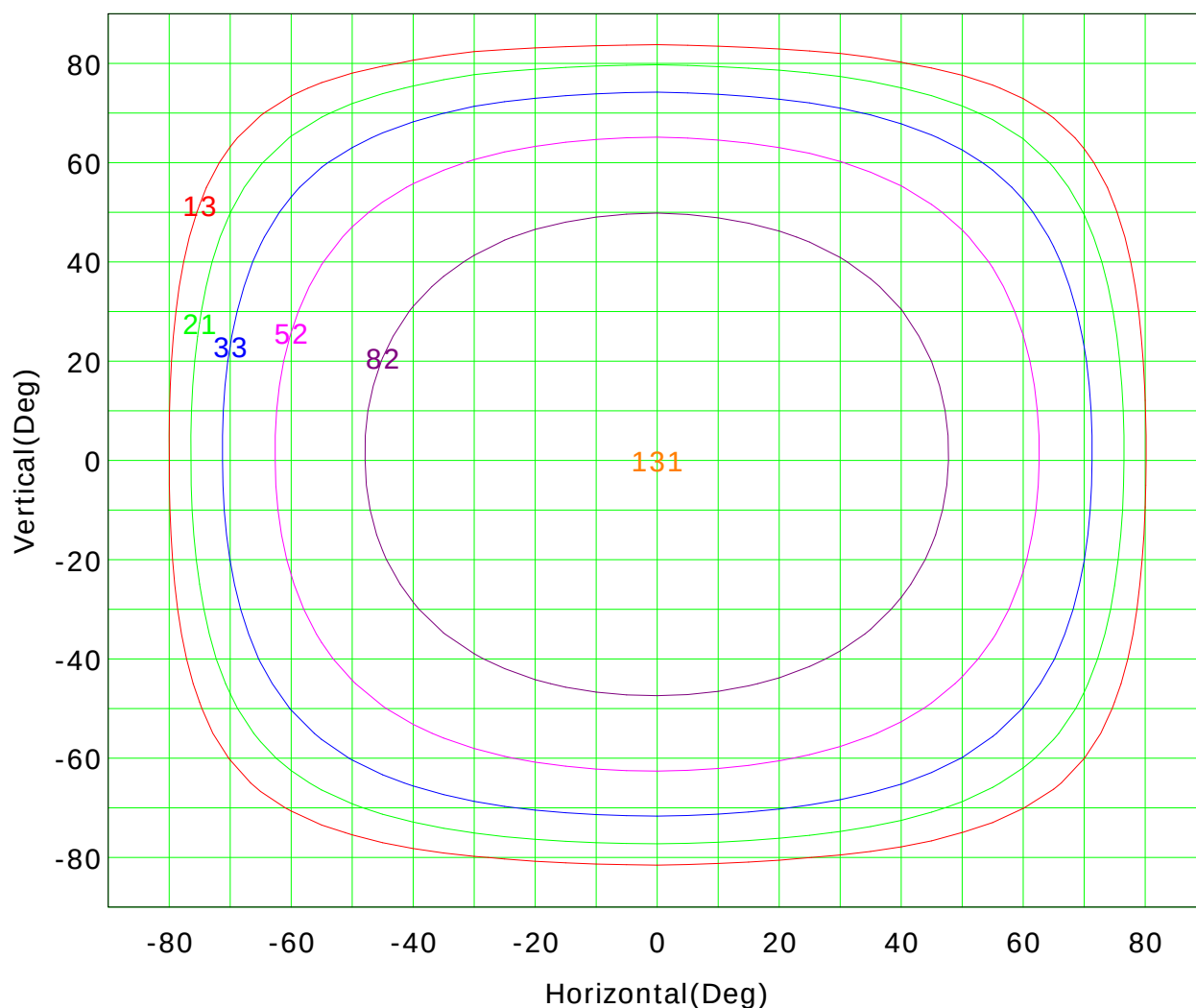
Luminous Intensity Distribution Curve(cd / klm)



C Plane (°):0.0-360.0: 30.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.979 m
Humidity:
Inspector:

Isocandela (rectangle)



Imax (100%): 131 cd

(10%):	13 cd	(16%):	21 cd
(25%):	33 cd	(40%):	52 cd
(63%):	82 cd	(100%):	131 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

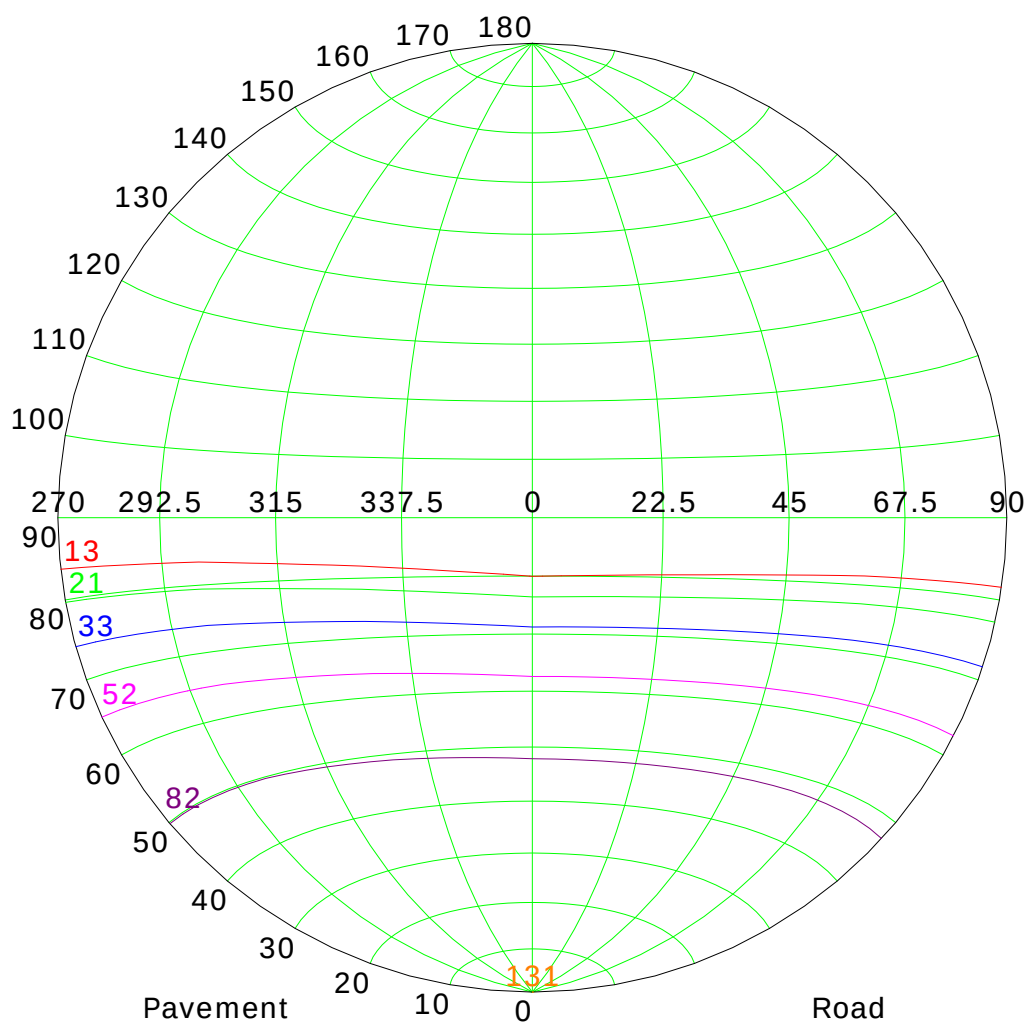
Test Device: GPM-1800B

Distance: 7.979 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 131 cd

(10%):	13 cd	(16%):	21 cd
(25%):	33 cd	(40%):	52 cd
(63%):	82 cd	(100%):	131 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

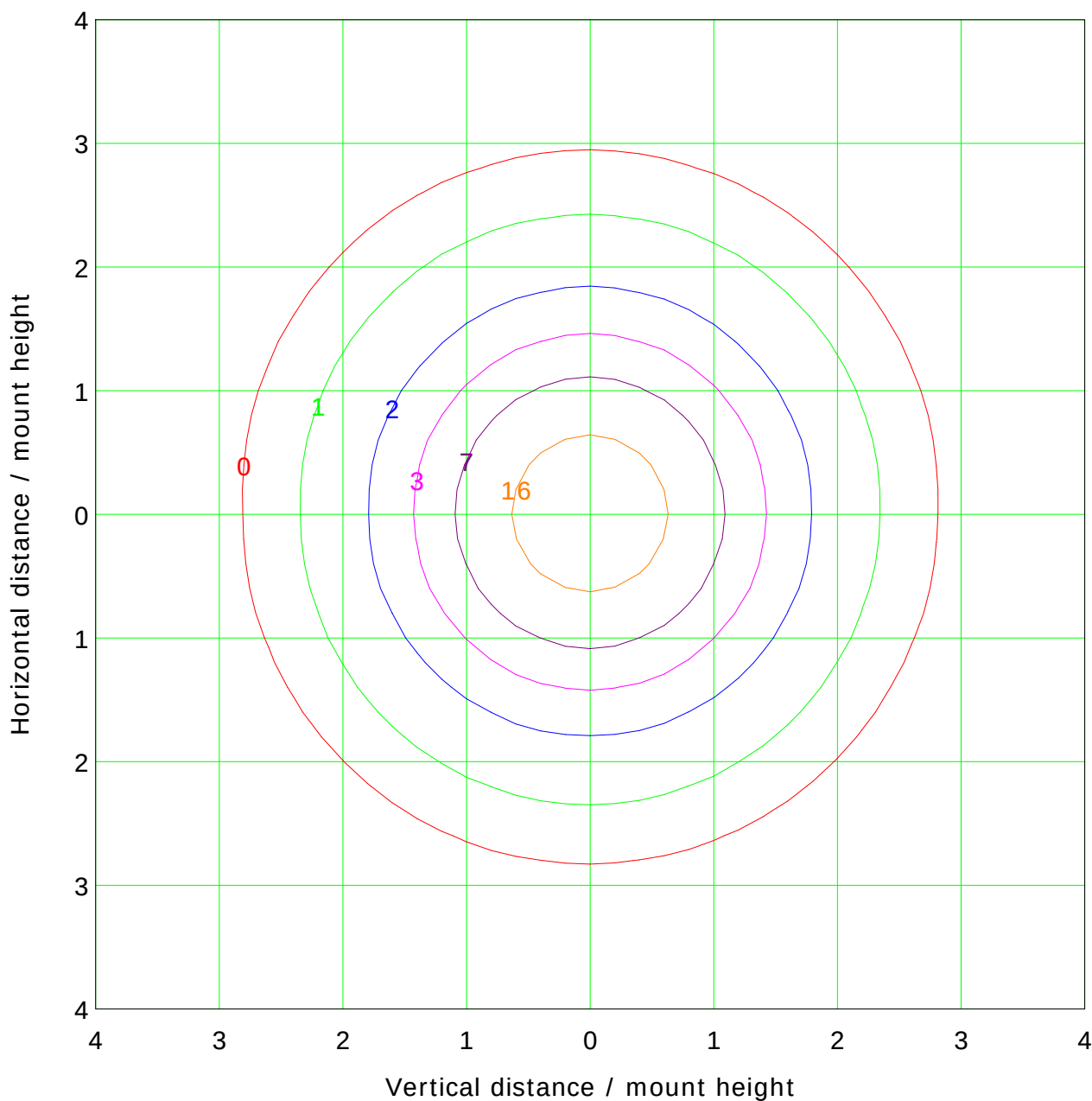
Test Device: GPM-1800B

Distance: 7.979 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 2.0m		Max Lux(100%): 32.6 lx	
— (1%):	0.3 lx	— (2%):	0.7 lx
— (5%):	1.6 lx	— (10%):	3.3 lx
— (20%):	6.5 lx	— (50%):	16.3 lx
— (100%):	32.6 lx		

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 7.979 m

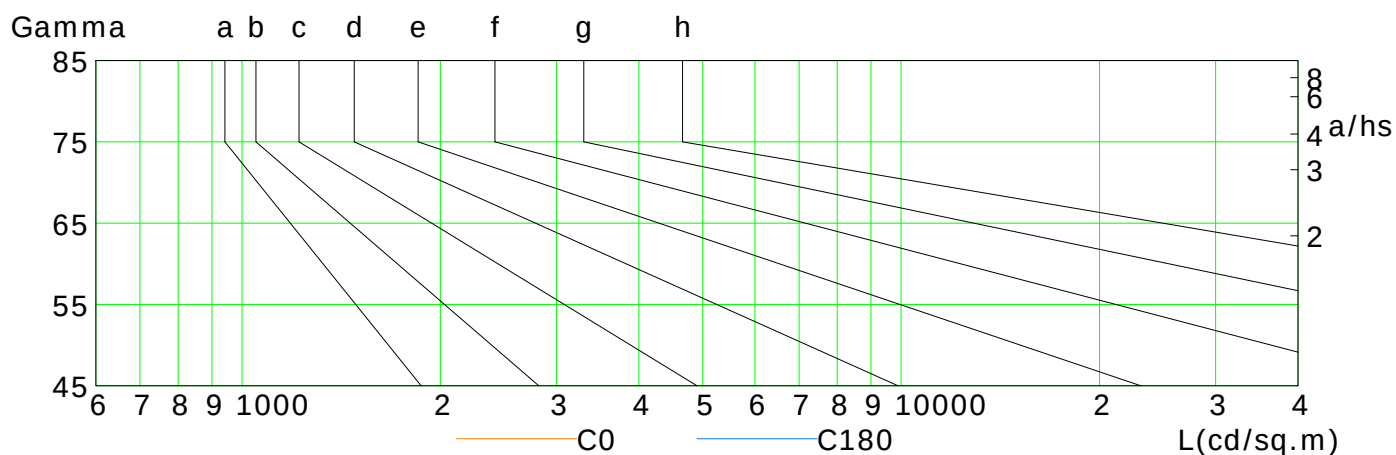
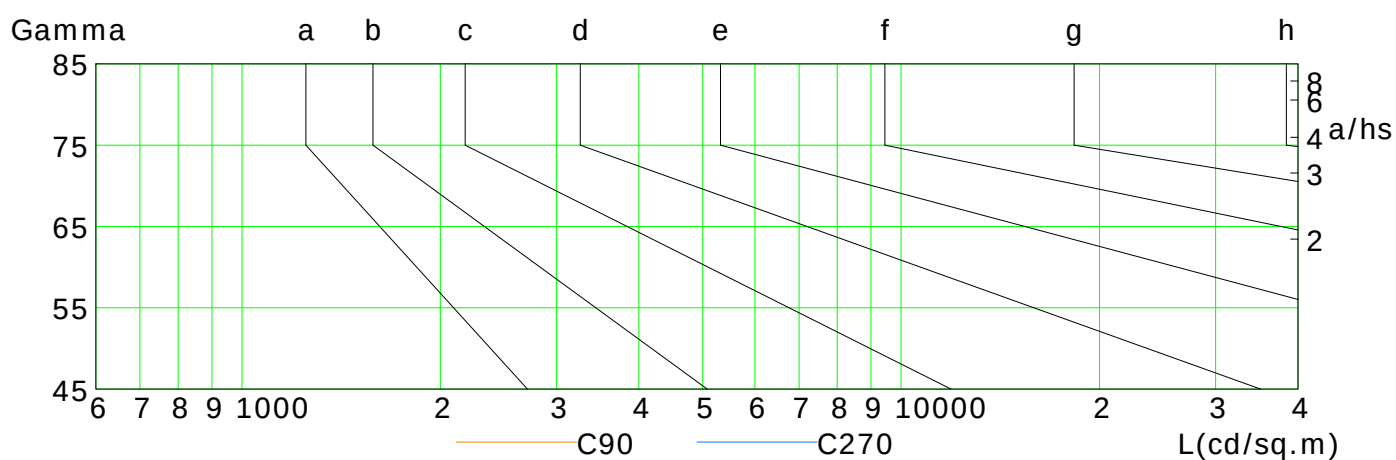
Humidity:

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	88	78	69	58	47	36	24	13	4
C90	87	78	68	58	47	36	25	15	8
C180	87	78	68	58	47	36	24	13	4
C270	91	82	73	63	53	42	31	20	11

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

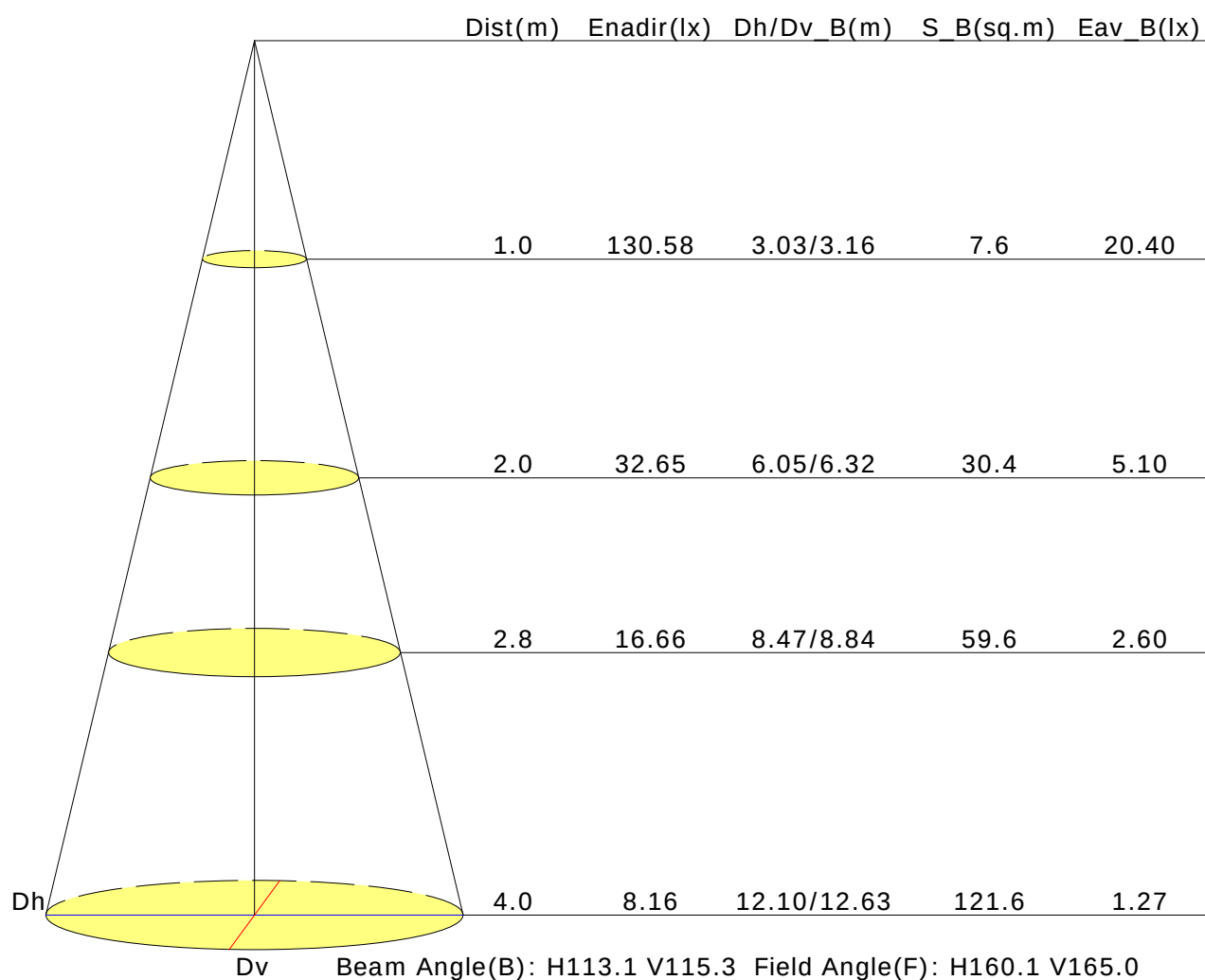
Test Device: GPM-1800B

Distance: 7.979 m

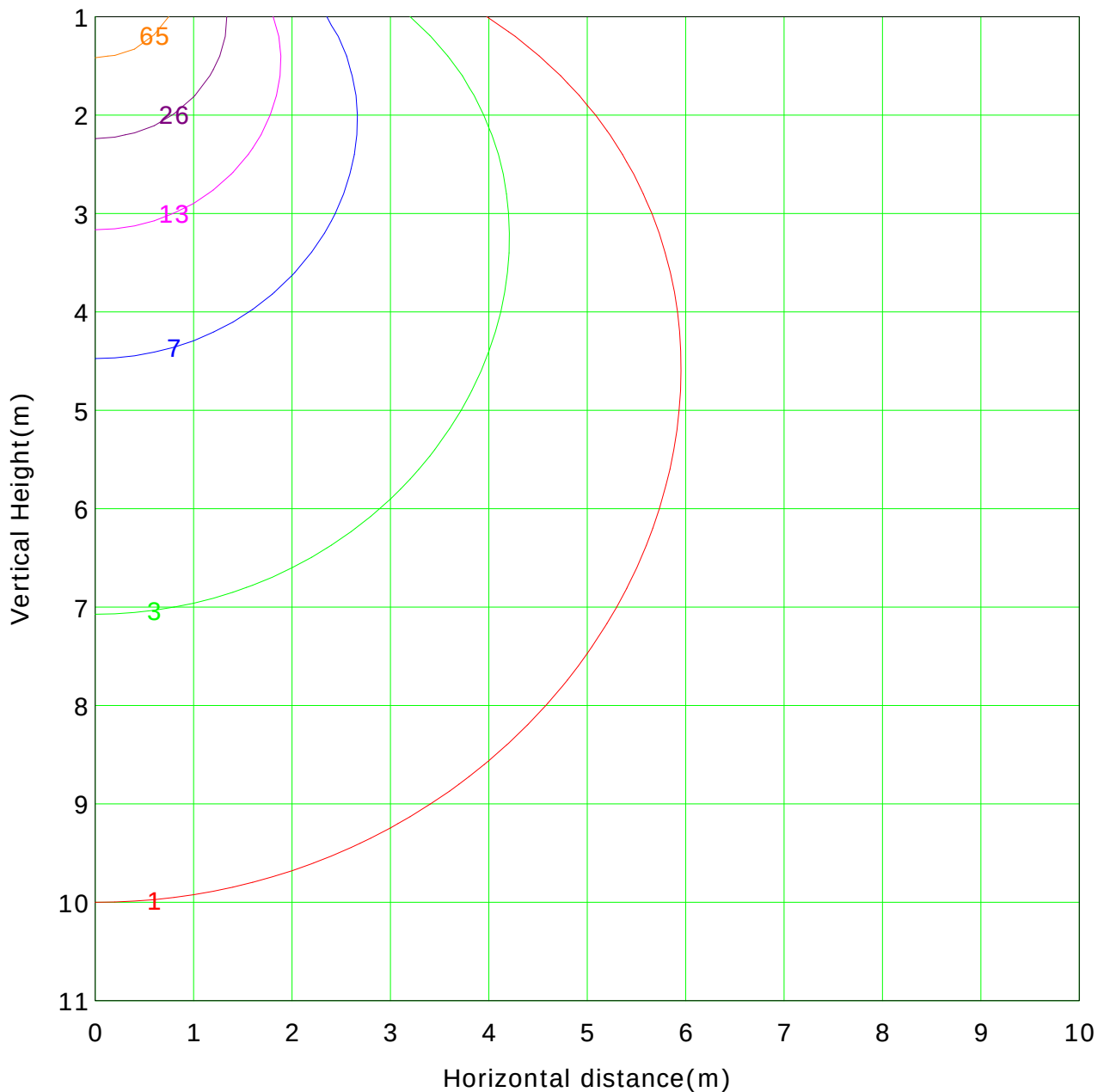
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 130.6 lx

— (1%): 1.3 lx	— (2%): 2.6 lx
— (5%): 6.5 lx	— (10%): 13.1 lx
— (20%): 26.1 lx	— (50%): 65.3 lx
— (100%): 130.6 lx	

Report No.:

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Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-FL01-21 + LLD-21-FM

Lamp Description: F52-400-60822

Number of Lamps: 1

Lumens per Lamp: 1579 lm

Voltage: 24.0 V

Current: 0.594 A

Power: 14.24 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 800.4 lm

Downward Ratio: 50.41%

Total Rated Lamp Lumens: 1579.0 lm

Efficiency: 50.69%

Upward Ratio: 0.28%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.2, 161.8, 161.3, 161.2

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 113.4, 113.5, 113.6, 113.5

Luminaire Efficacy Rating (LER): 56.26

Central Intensity: 277.46 cd

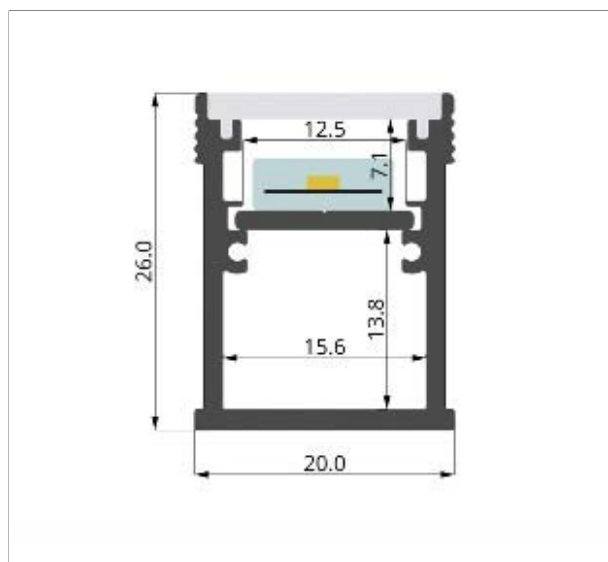
Max. Intensity: 277.46 cd

Pos of Max. Intensity: H0 V0

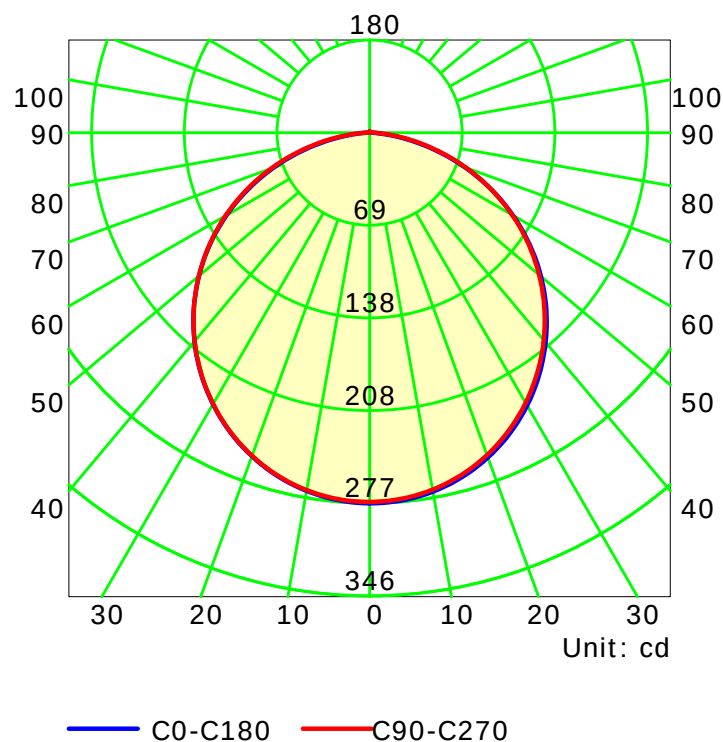
S/MH(C0/C180): 1.26

S/MH(C90/C270): 1.26

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

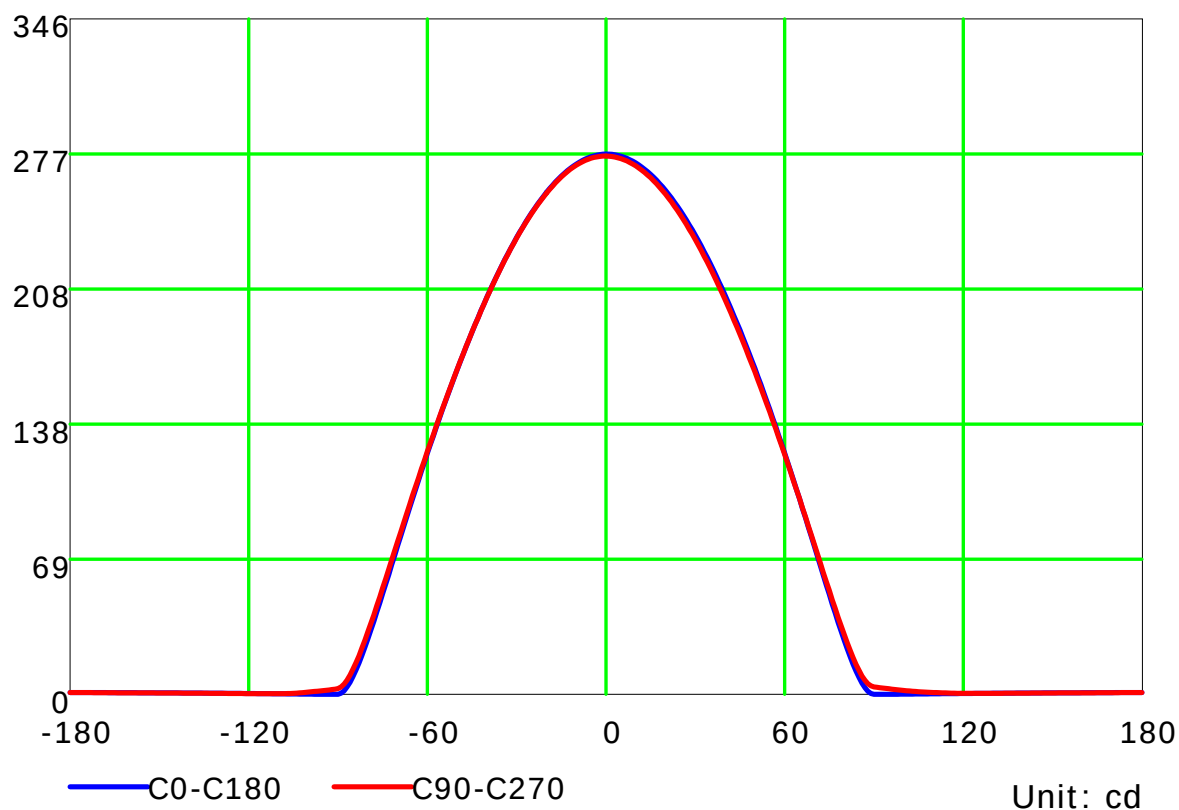
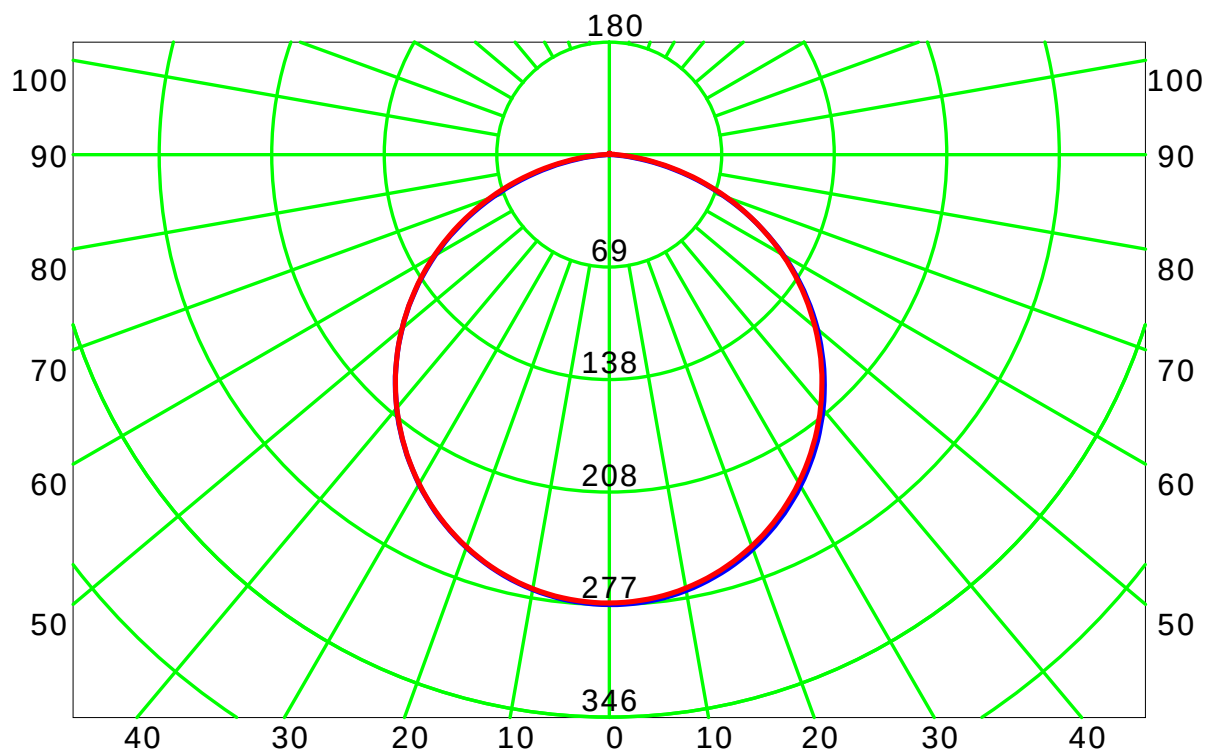
Test Device: GPM-1800B

Distance: 7.979 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

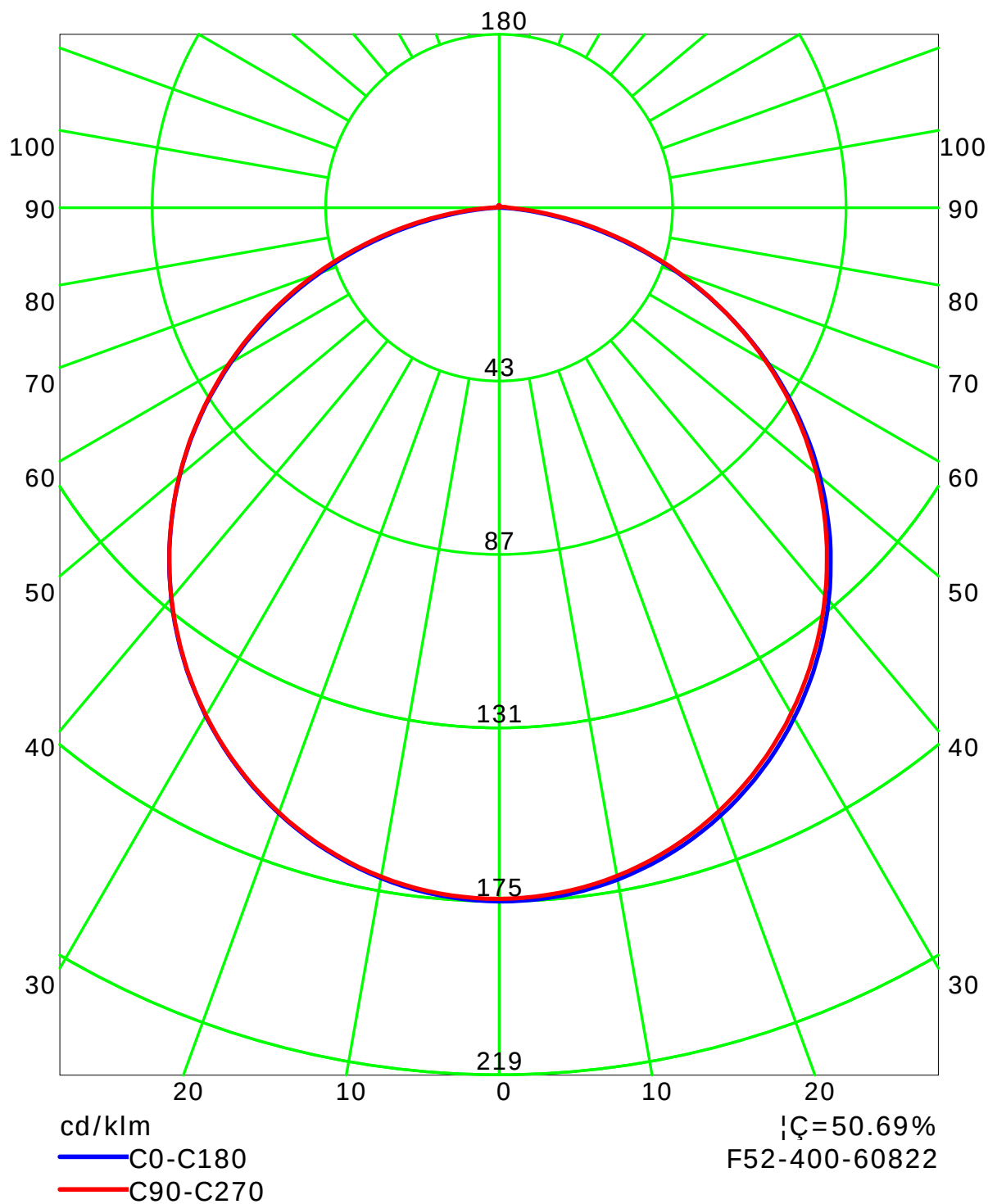
Test Device: GPM-1800B

Distance: 7.979 m

Humidity:

Inspector:

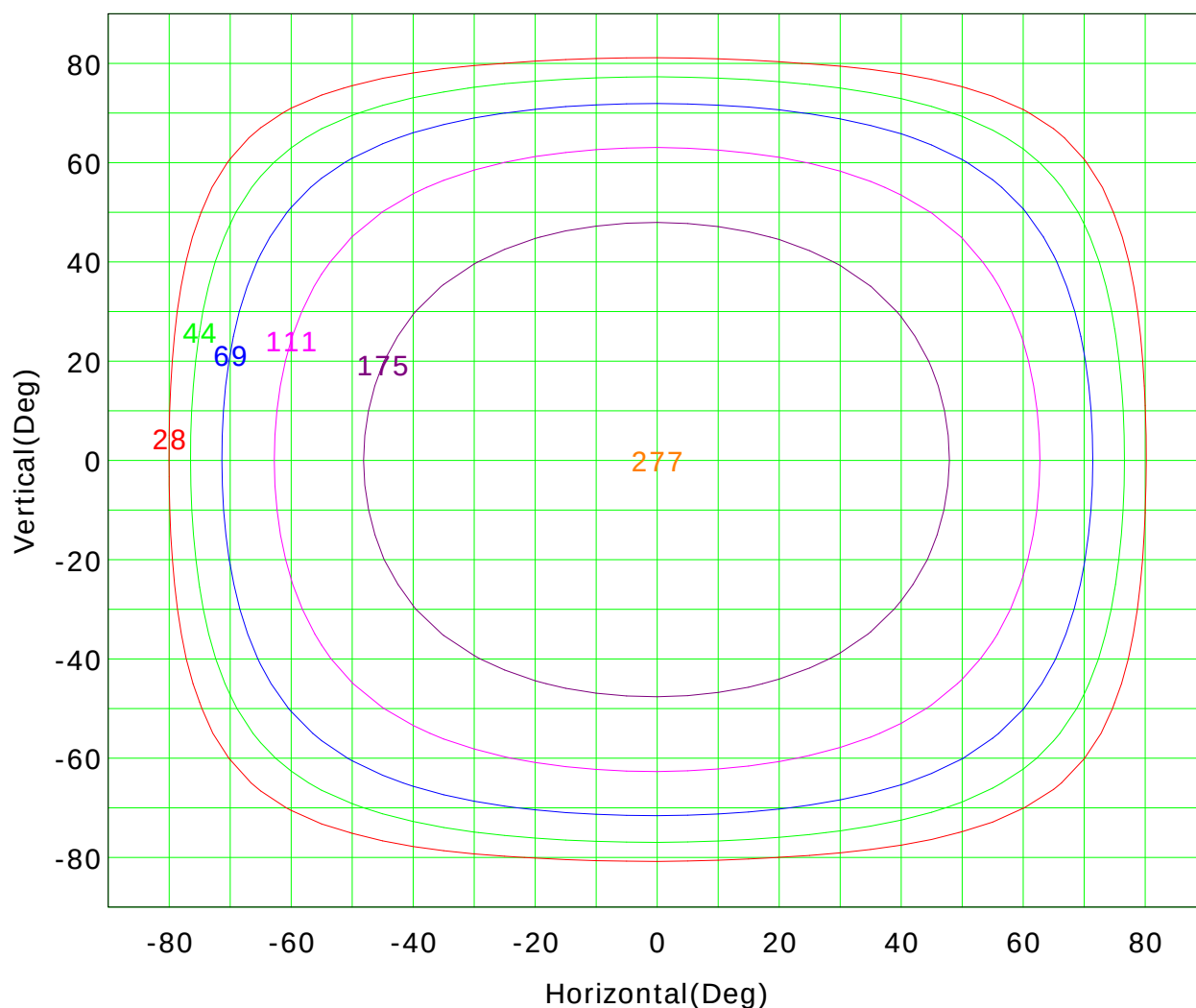
Luminous Intensity Distribution Curve(cd / klm)



C Plane (°):0.0-360.0: 30.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-1800B
Distance: 7.979 m
Humidity:
Inspector:

Isocandela (rectangle)



I_{max} (100%): 277 cd

(10%):	28 cd	(16%):	44 cd
(25%):	69 cd	(40%):	111 cd
(63%):	175 cd	(100%):	277 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

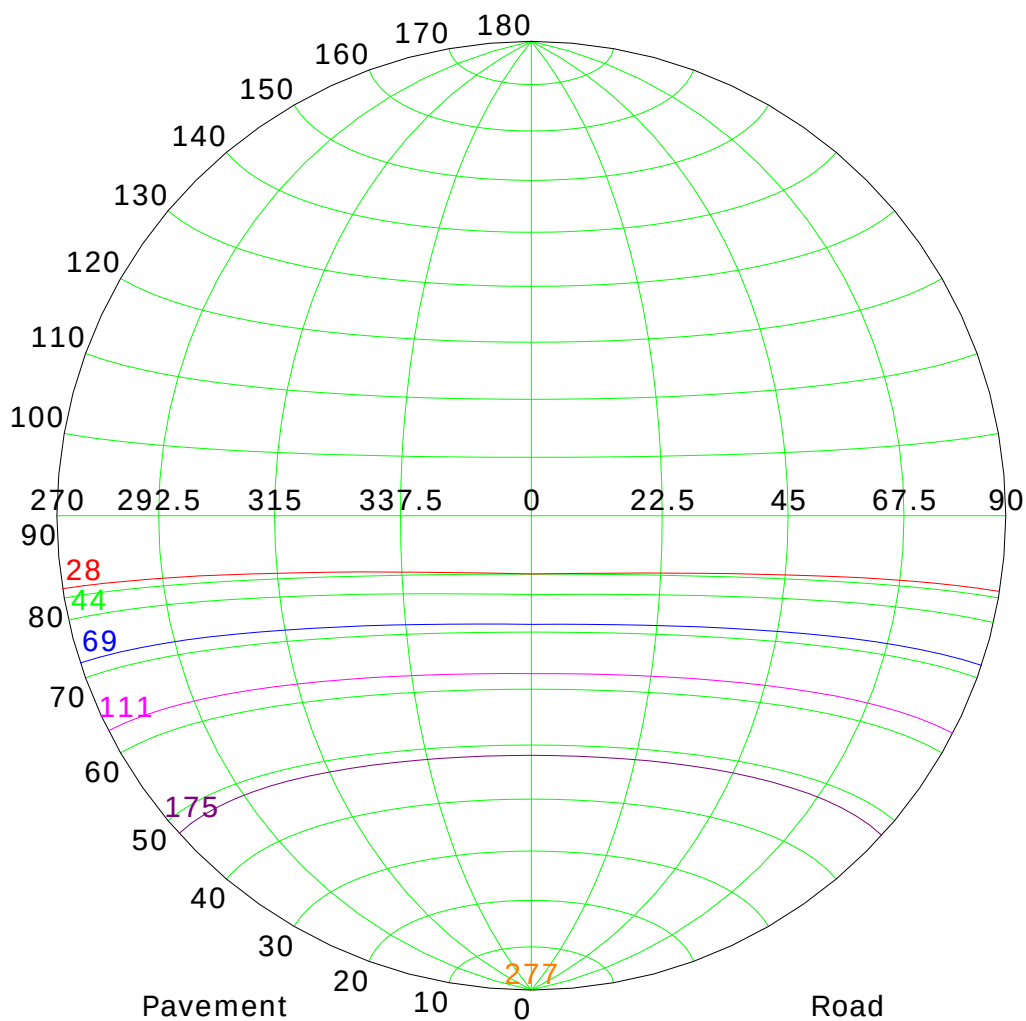
Test Device: GPM-1800B

Distance: 7.979 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 277 cd

(10%):	28 cd	(16%):	44 cd
(25%):	69 cd	(40%):	111 cd
(63%):	175 cd	(100%):	277 cd

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

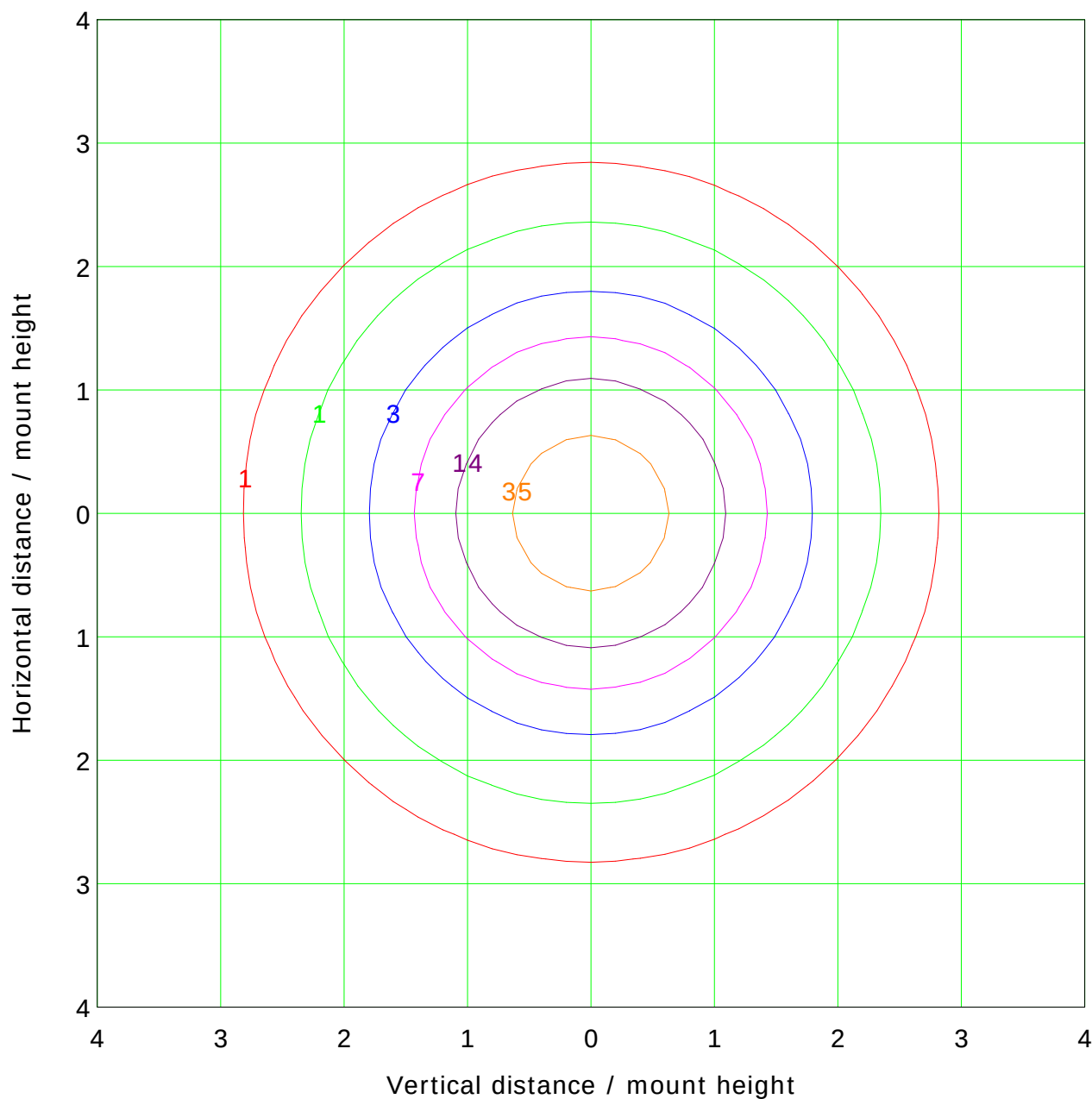
Test Device: GPM-1800B

Distance: 7.979 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 2.0m		Max Lux(100%): 69.4 lx	
— (1%):	0.7 lx	— (2%):	1.4 lx
— (5%):	3.5 lx	— (10%):	6.9 lx
— (20%):	13.9 lx	— (50%):	34.7 lx
— (100%):	69.4 lx		

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 7.979 m

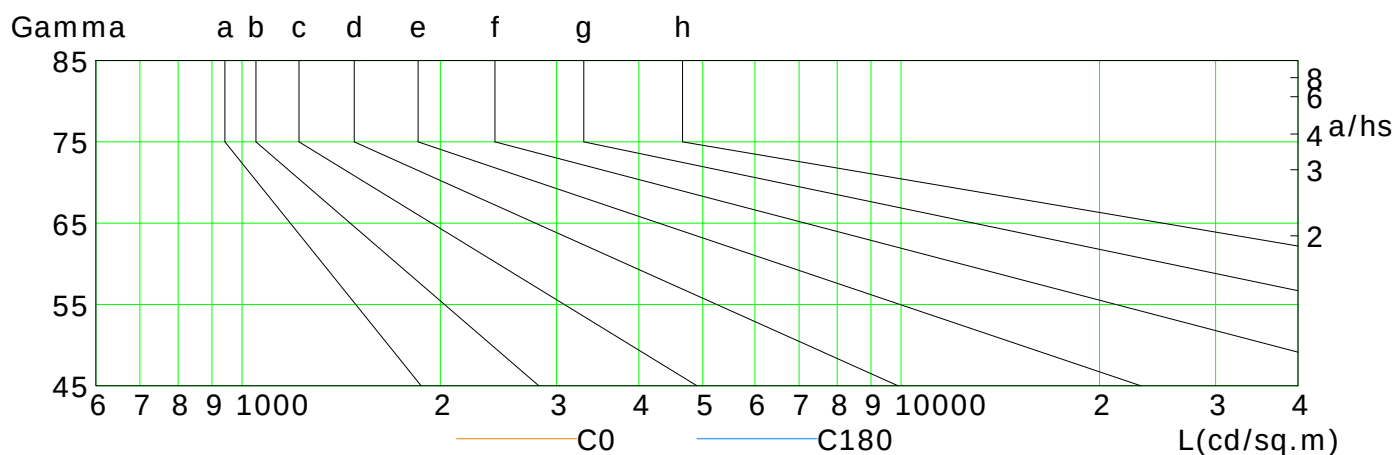
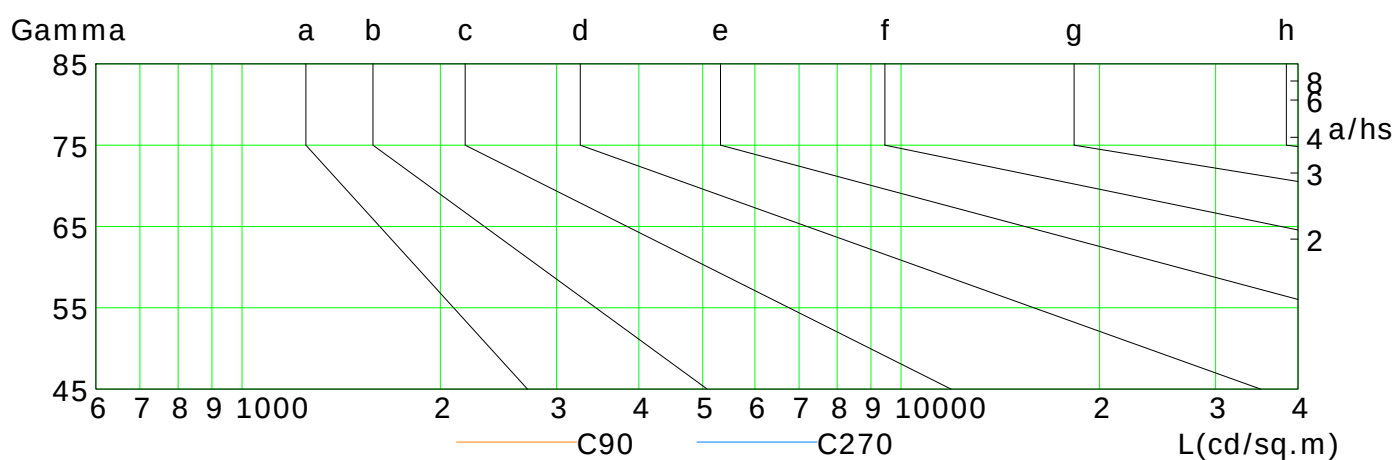
Humidity:

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	187	167	146	124	100	76	51	28	9
C90	185	166	145	123	101	77	53	31	12
C180	186	167	146	124	100	76	52	28	9
C270	186	167	146	125	102	78	55	32	13

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

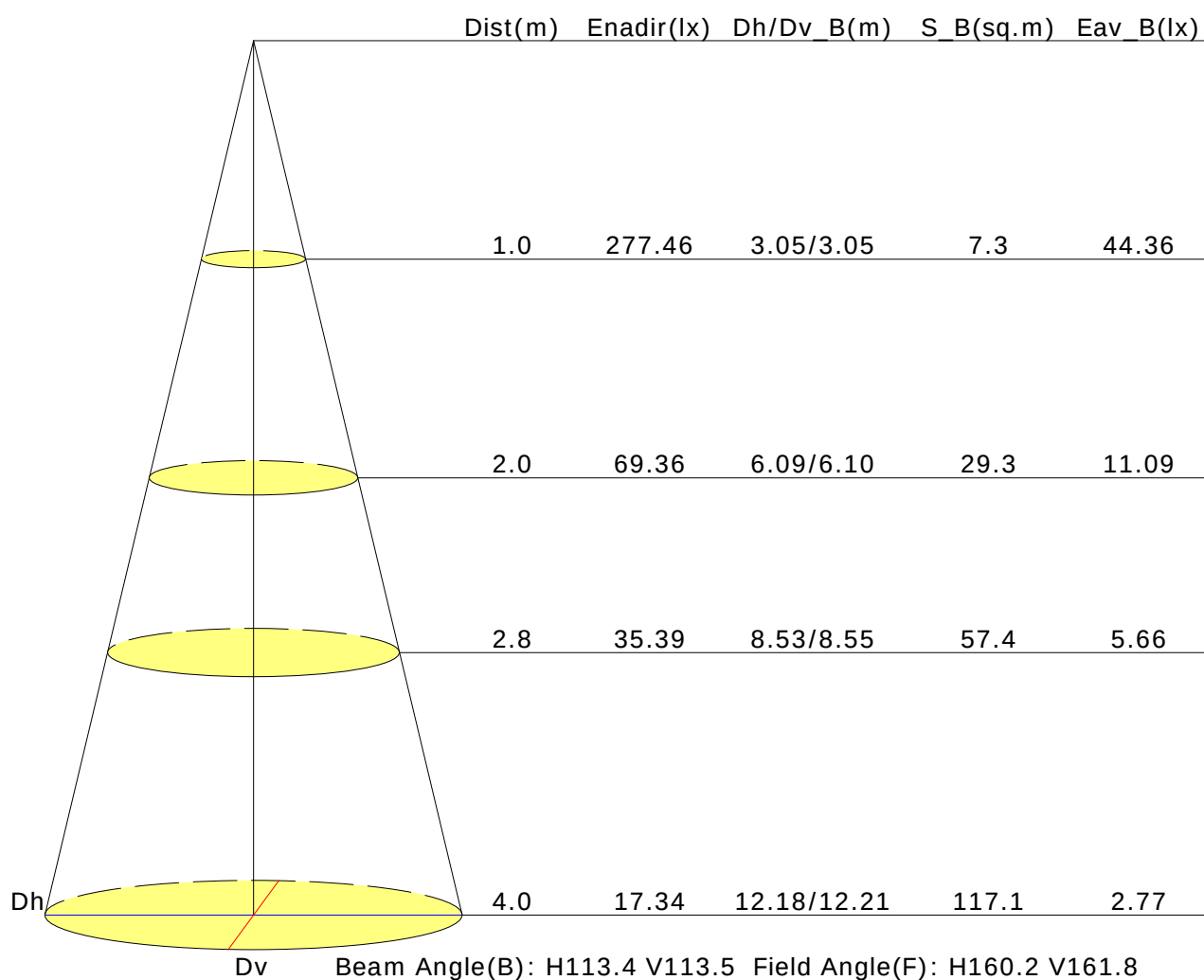
Test Device: GPM-1800B

Distance: 7.979 m

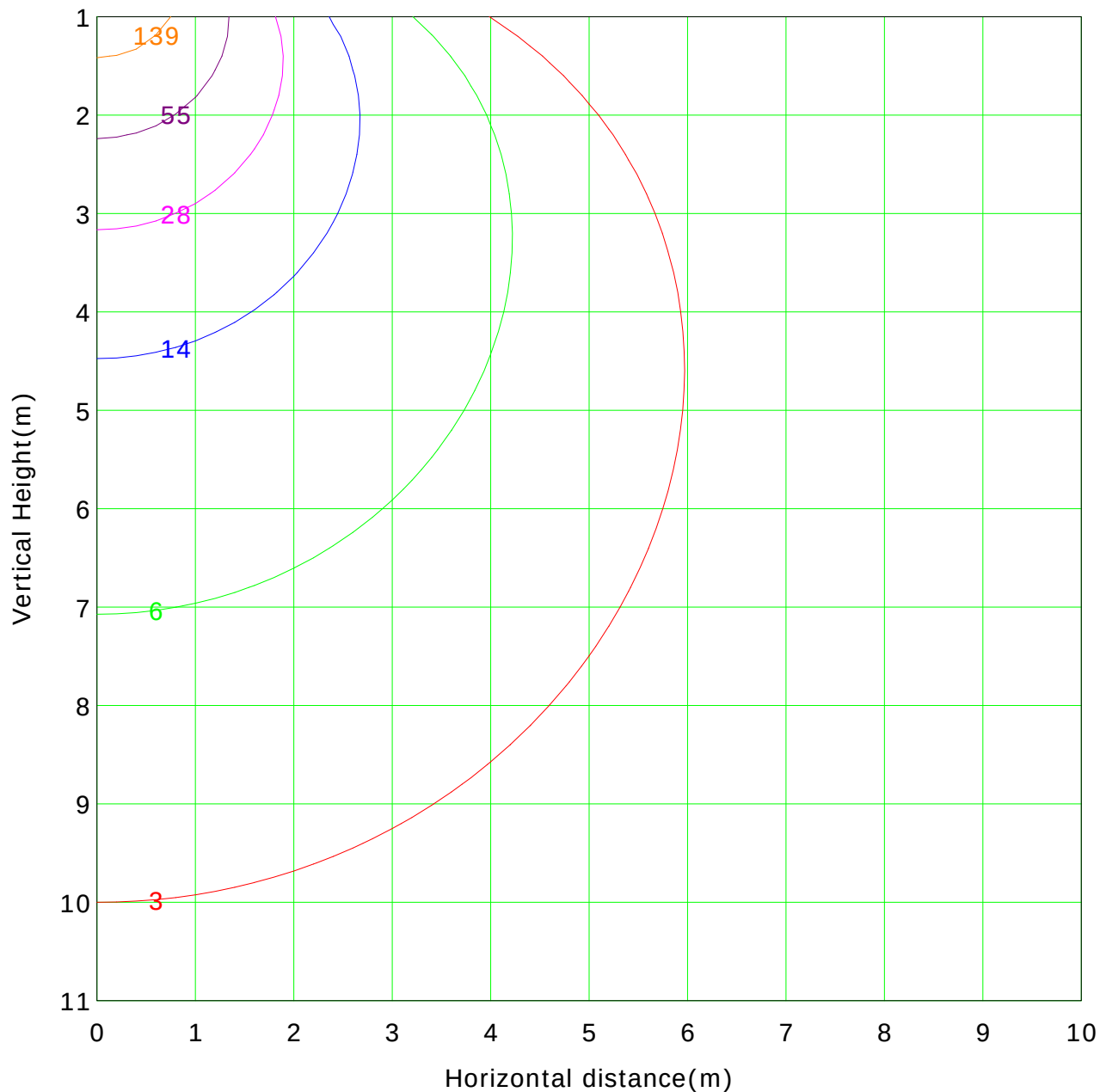
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 277.5 lx

(1%): 2.8 lx	(2%): 5.5 lx
(5%): 13.9 lx	(10%): 27.7 lx
(20%): 55.5 lx	(50%): 138.7 lx
(100%): 277.5 lx	

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 7.979 m

Humidity:

Inspector: