

Report No.:

Test Time: 22/06/2020 10:52

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-AN06-20 + LLD-20-UK

Lamp Description: F52-400-1208C2-W5

Number of Lamps: 1

Lumens per Lamp: 1012

Voltage: 24.0 V

Current: 0.378 A

Power: 9.07 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 969.8 lm

Downward Ratio: 93.19%

Total Rated Lamp Lumens: 1012.0 lm

Efficiency: 95.83%

Upward Ratio: 2.64%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 155.9, 131.5, 143.2, 144.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 114.4, 107.4, 110.0, 110.1

Luminaire Efficacy Rating (LER): 106.97

Central Intensity: 361 cd

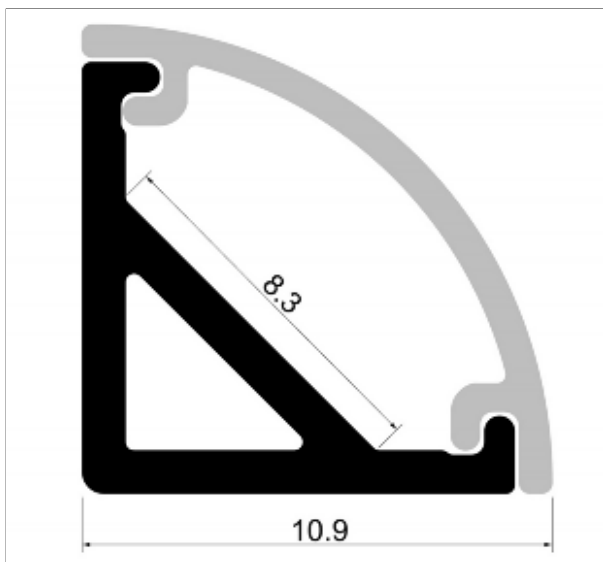
Max. Intensity: 361.64 cd

Pos of Max. Intensity: H80 V2

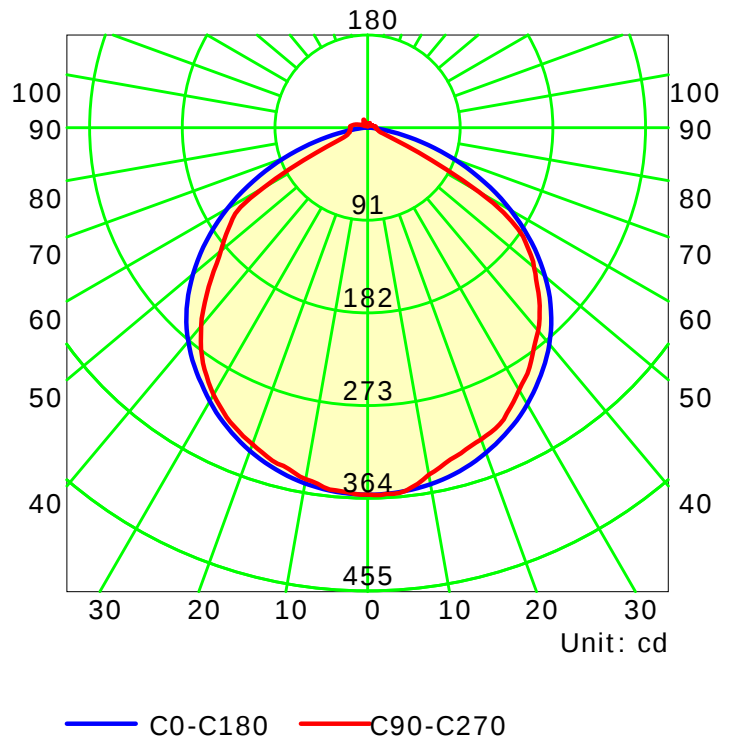
S/MH(C0/C180): 1.29

S/MH(C90/C270): 1.24

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

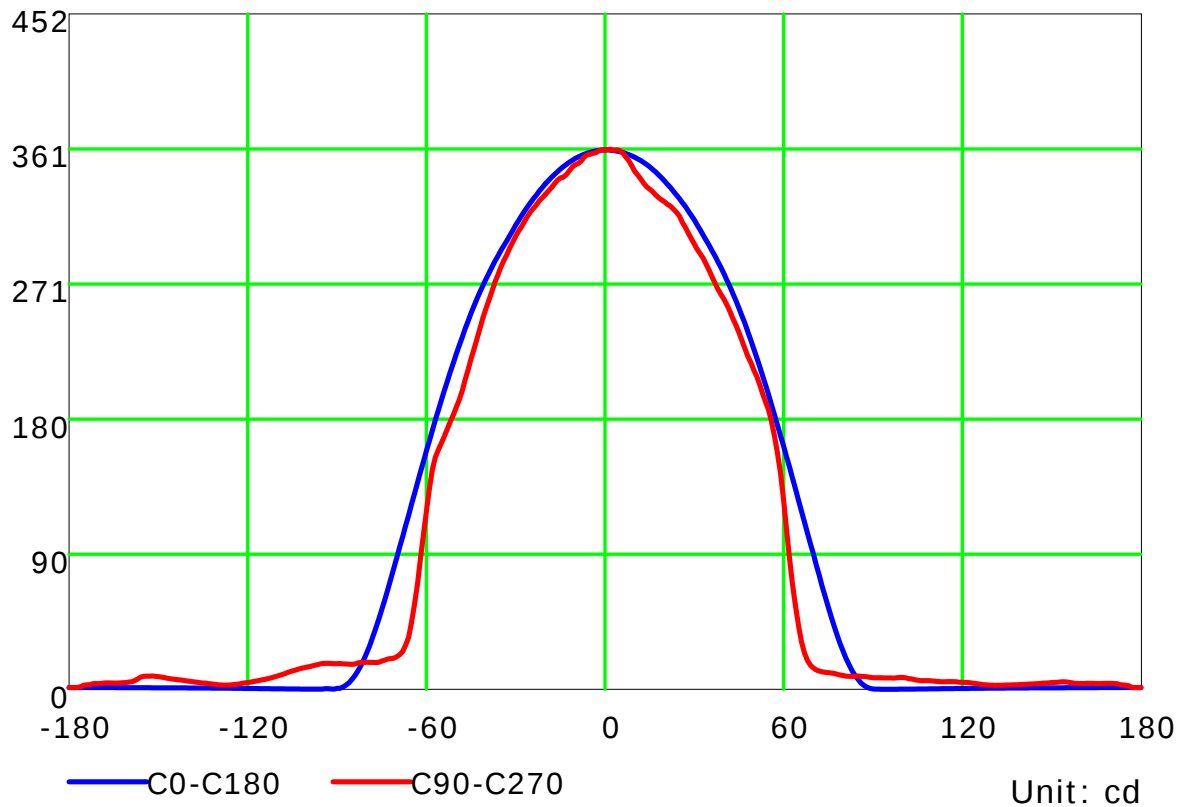
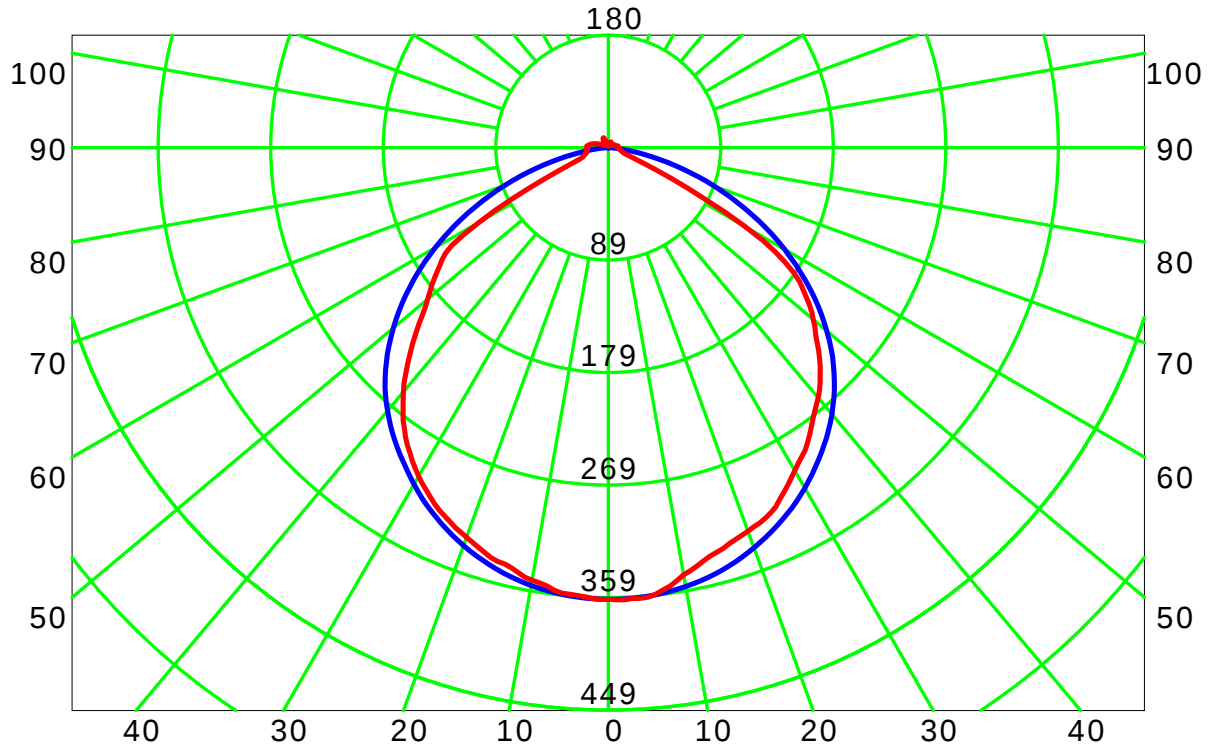
Test Device: GPM-2000

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

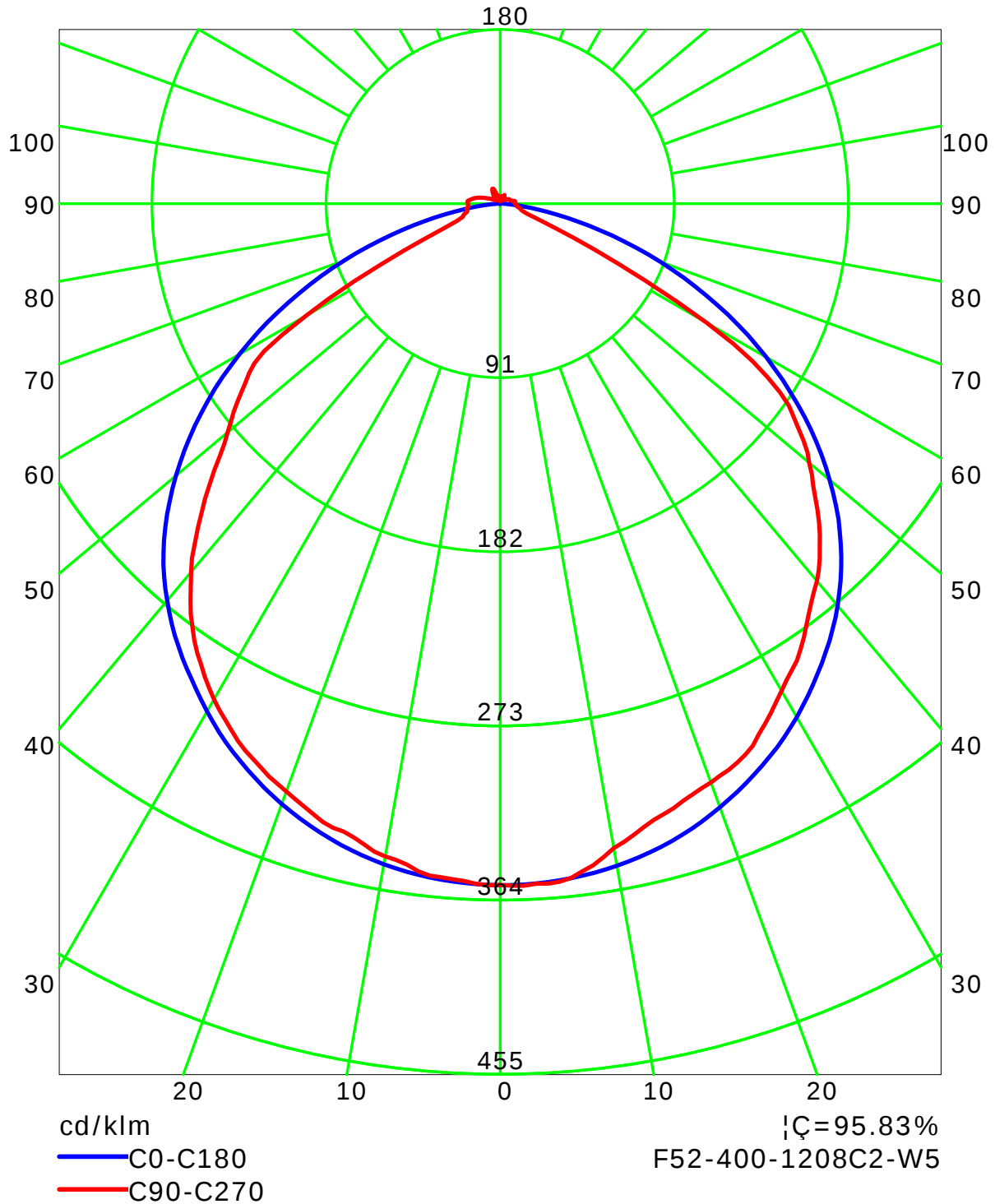
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

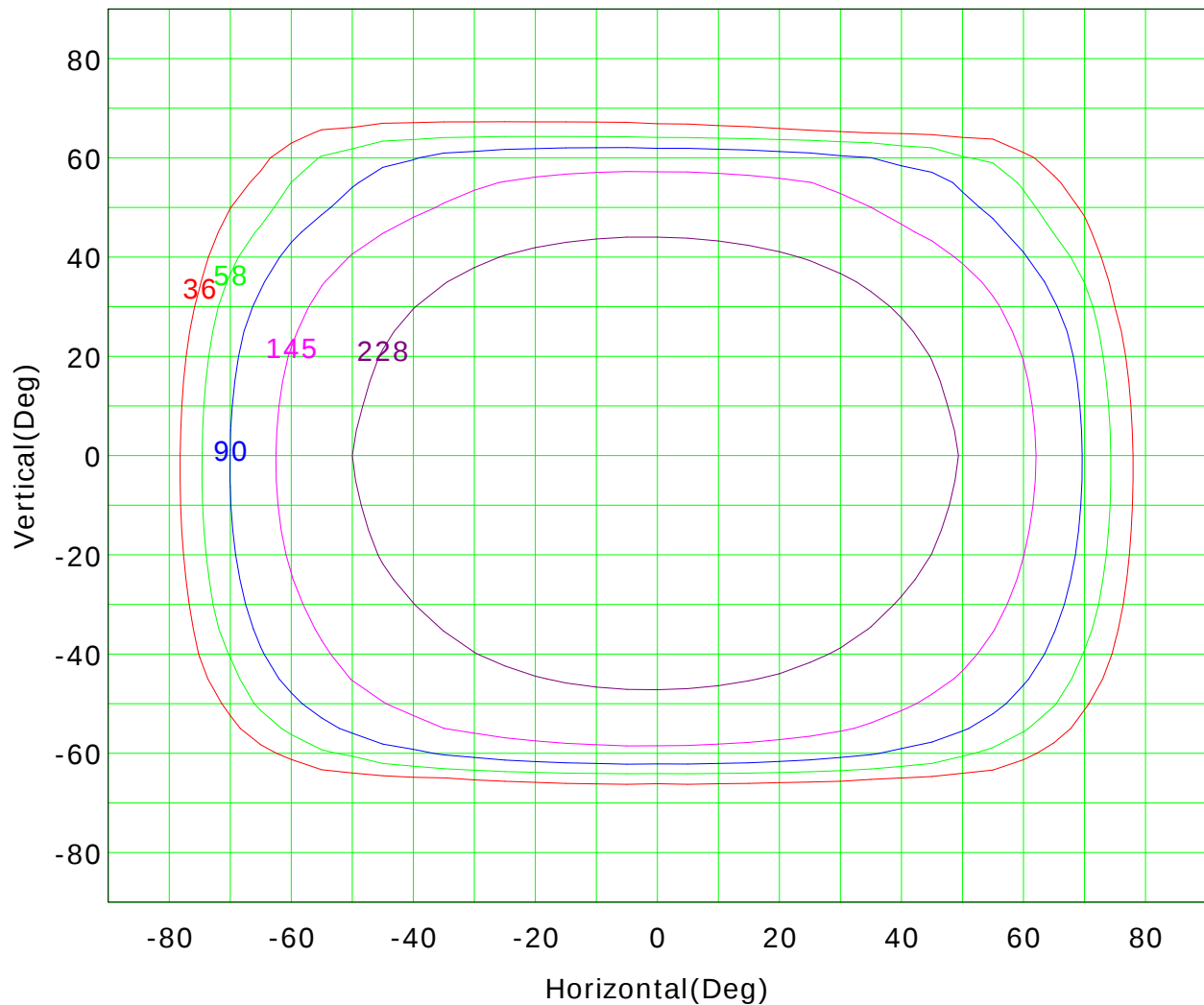
Luminous Intensity Distribution Curve(cd / klm)



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%): 362 cd

(10%):	36 cd	(16%):	58 cd
(25%):	90 cd	(40%):	145 cd
(63%):	228 cd	(100%):	362 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

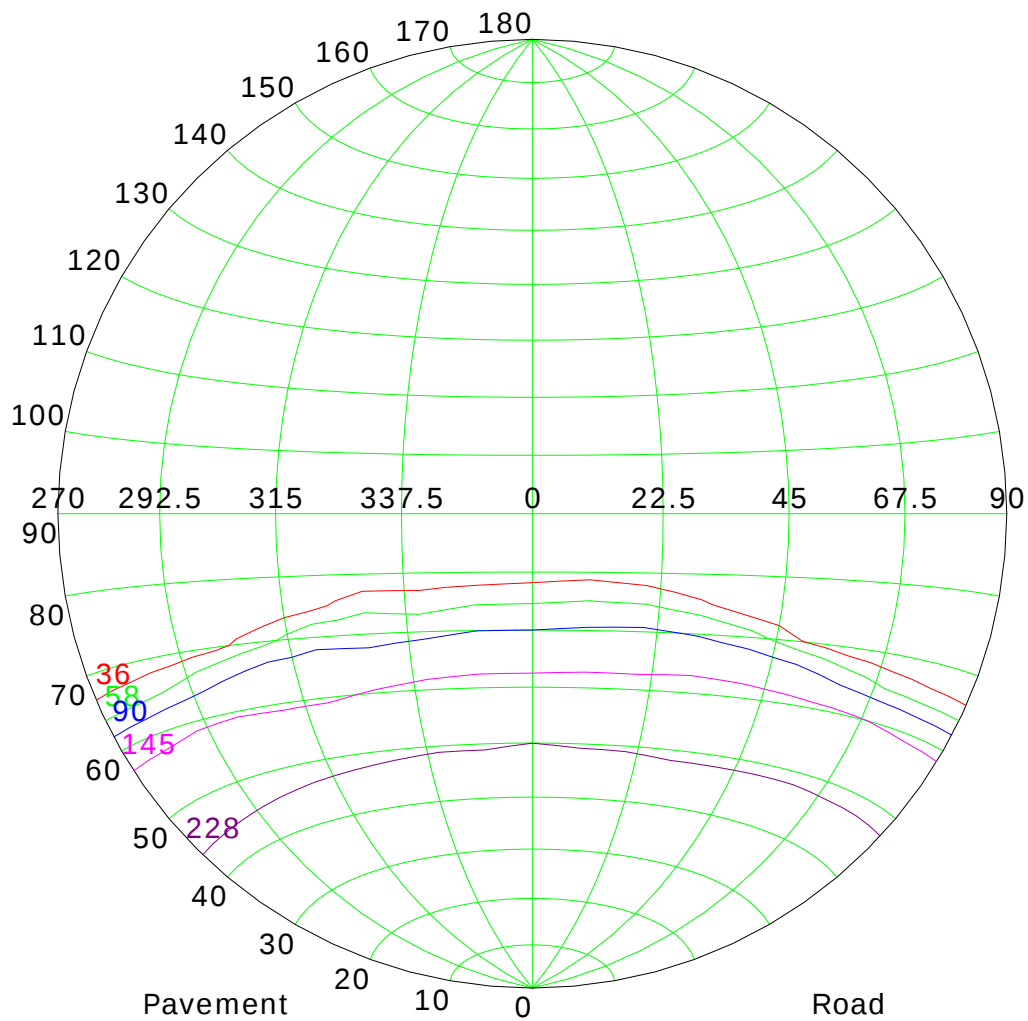
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 362 cd

(10%):	36 cd	(16%):	58 cd
(25%):	90 cd	(40%):	145 cd
(63%):	228 cd	(100%):	362 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

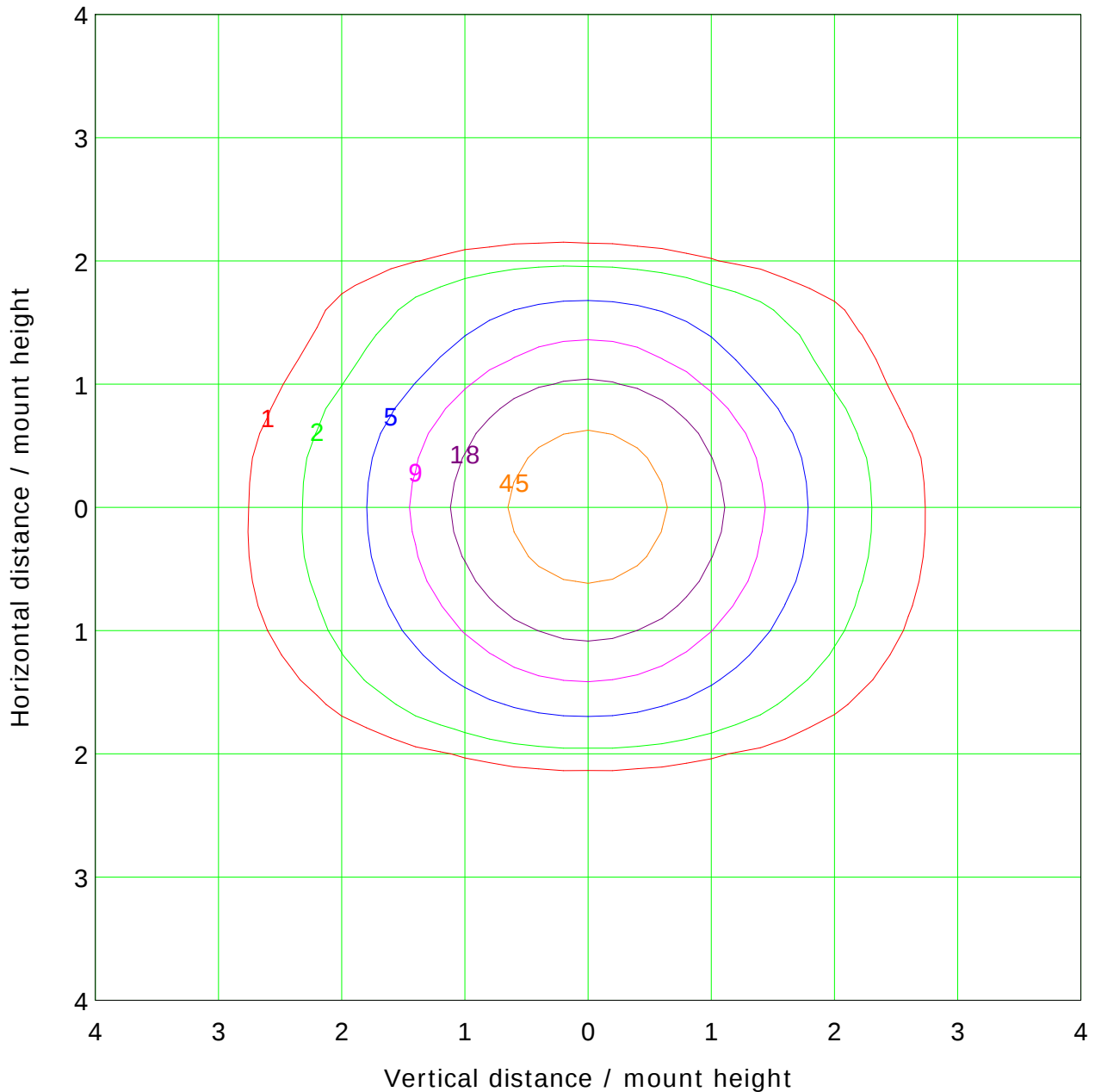
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 2.0m		Max Lux(100%): 90.3 lx	
— (1%):	0.9 lx	— (2%):	1.8 lx
— (5%):	4.5 lx	— (10%):	9.0 lx
— (20%):	18.1 lx	— (50%):	45.2 lx
— (100%):	90.3 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

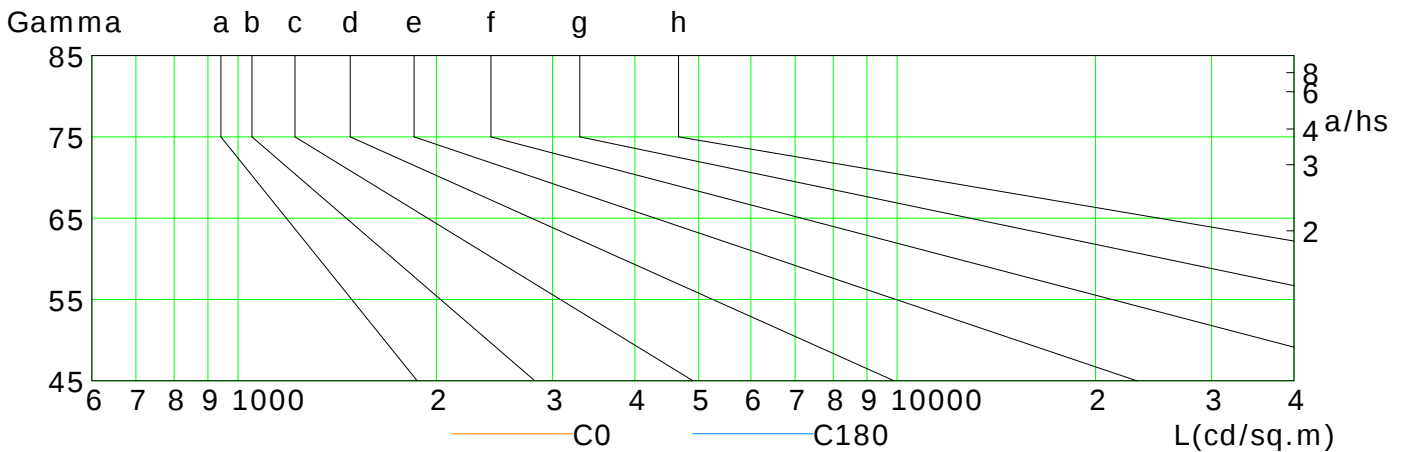
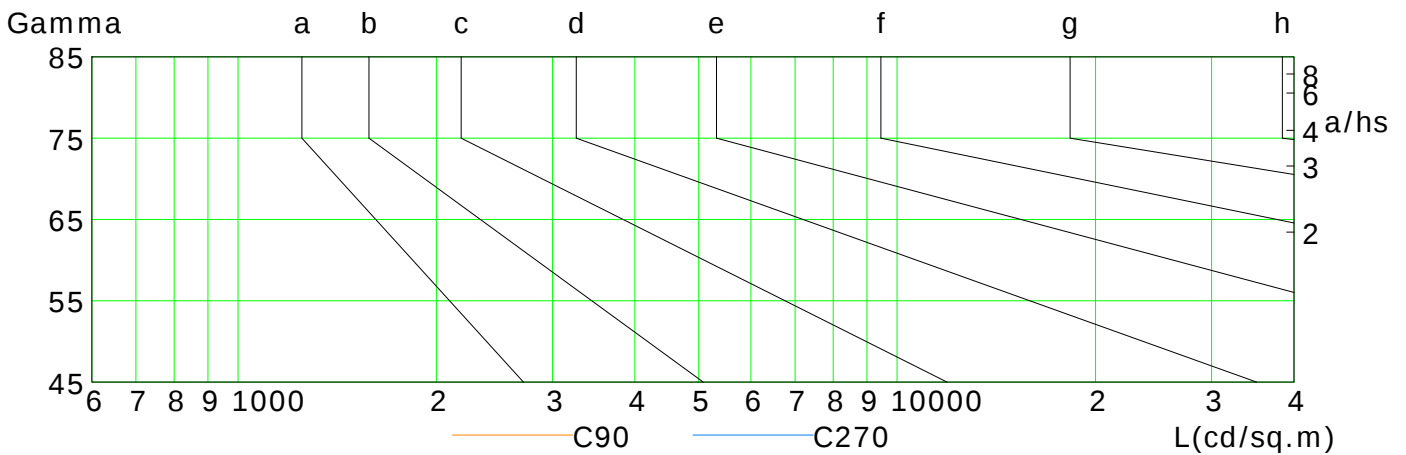
Humidity:

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	255	228	197	163	127	91	55	25	7
C90	239	214	187	127	43	14	11	9	9
C180	252	224	193	160	124	88	53	25	7
C270	221	189	165	119	45	22	19	18	17

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

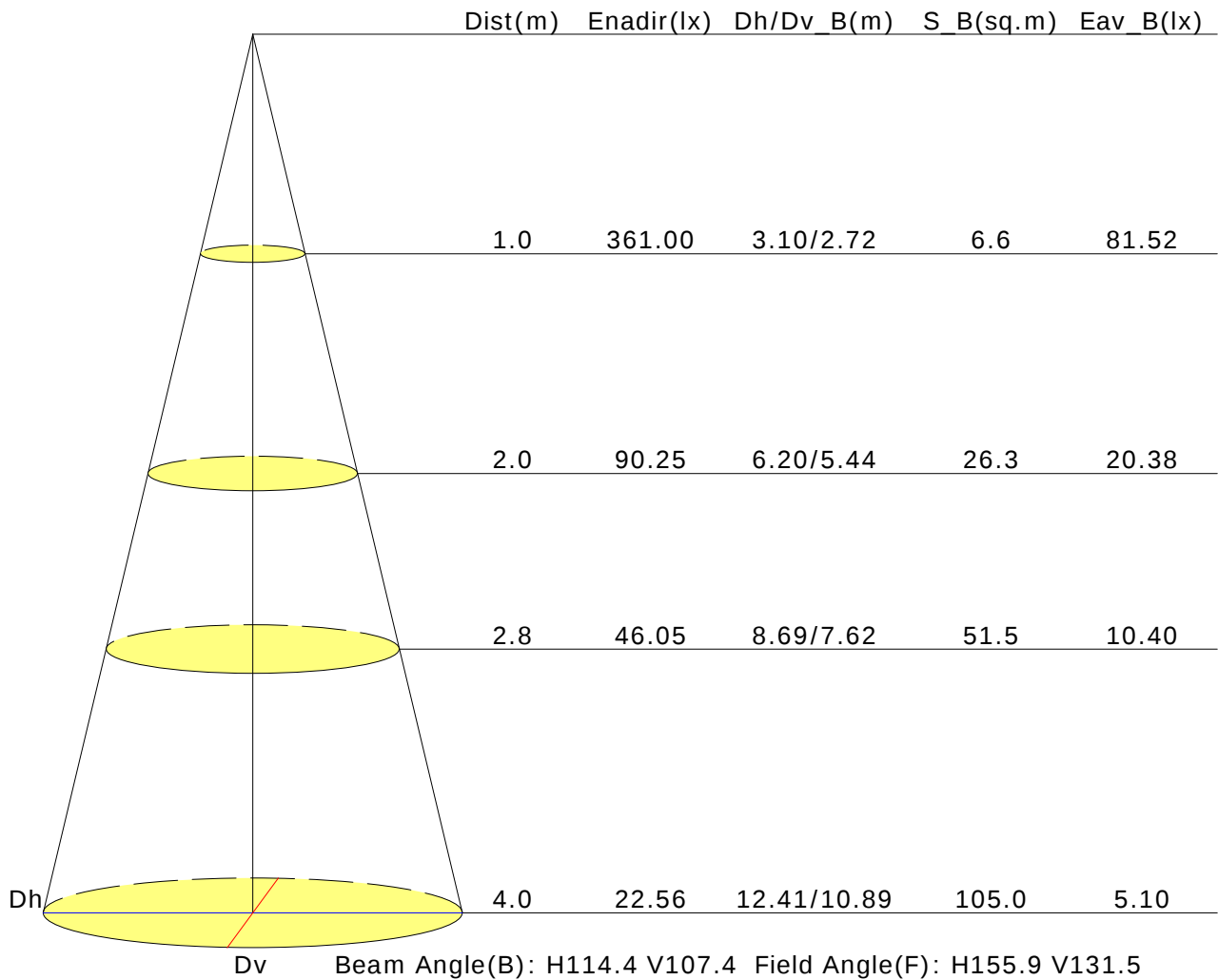
Test Device: GPM-2000

Distance: 7.970 m

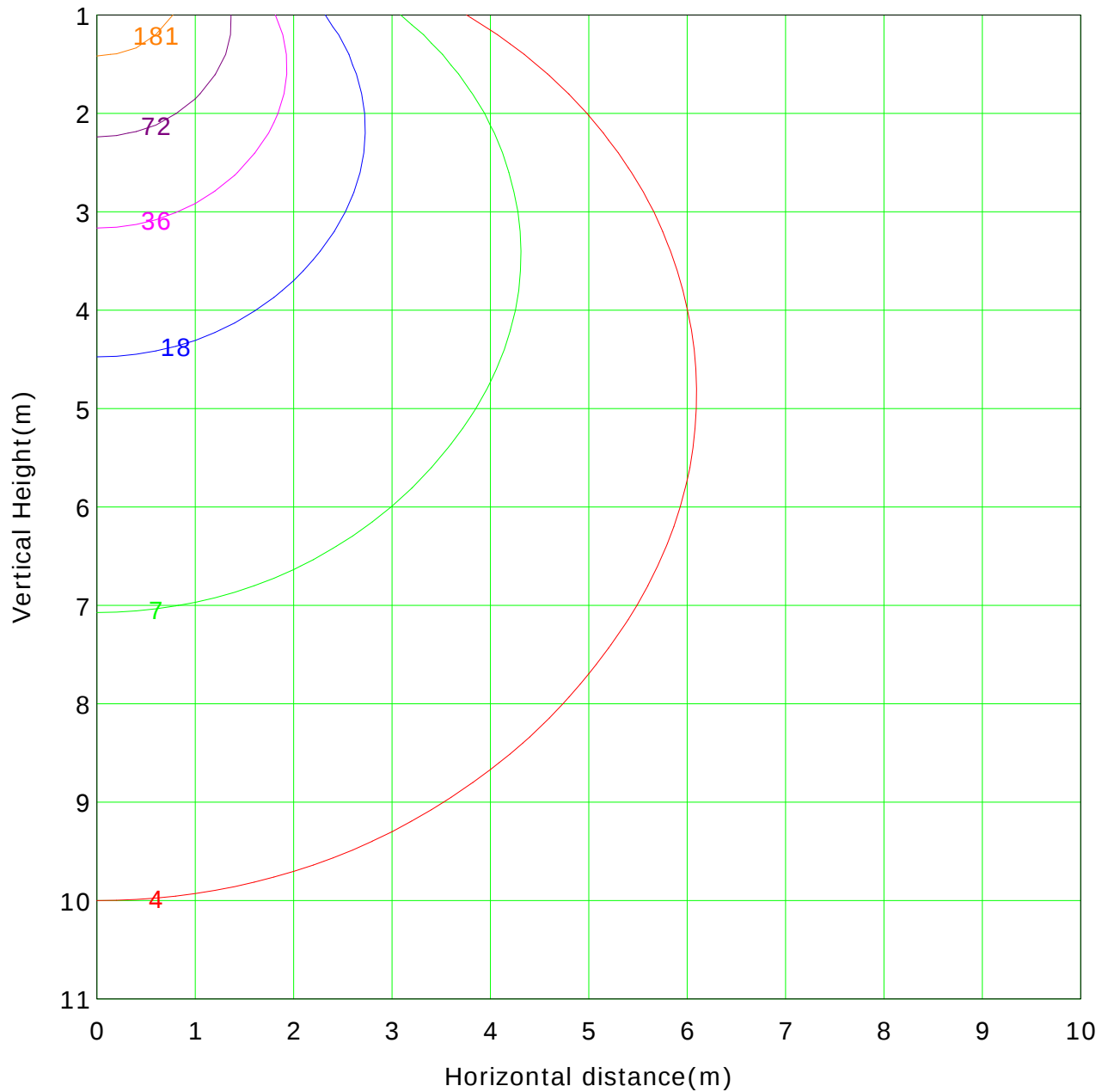
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 361.0 lx

(1%): 3.6 lx	(2%): 7.2 lx
(5%): 18.1 lx	(10%): 36.1 lx
(20%): 72.2 lx	(50%): 180.5 lx
(100%): 361.0 lx	

Report No.:

Test Time: 19/06/2020 16:56

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-AN06-20 + LLD-20-UM

Number of Lamps: F52-400-1208C2-W5

Lumens per Lamp: 1

Luminous Length (mm): 1012

Voltage: 24.0 V

Current: 0.376 A

Power: 9.02 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 869.7 lm

Downward Ratio: 94%

Total Rated Lamp Lumens: 869.7 lm

Efficiency: 100%

Upward Ratio: 6%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 158.4, 200.3, 180.9, 180.3

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 107.3, 118.1, 112.4, 112.2

Luminaire Efficacy Rating (LER): 96.47

Central Intensity: 272.24 cd

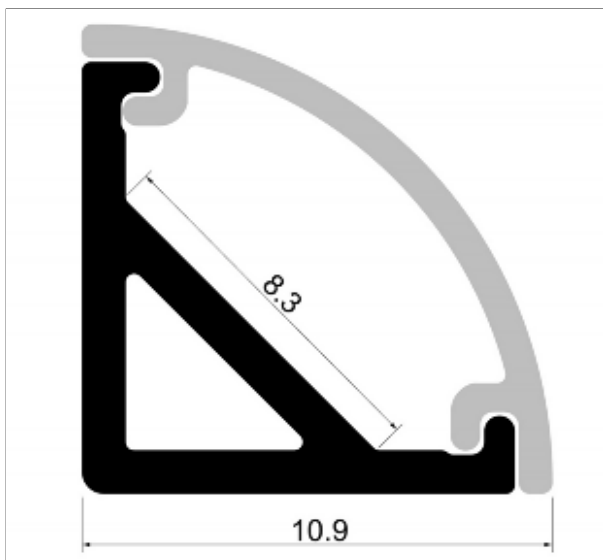
Max. Intensity: 272.24 cd

Pos of Max. Intensity: H0 V0

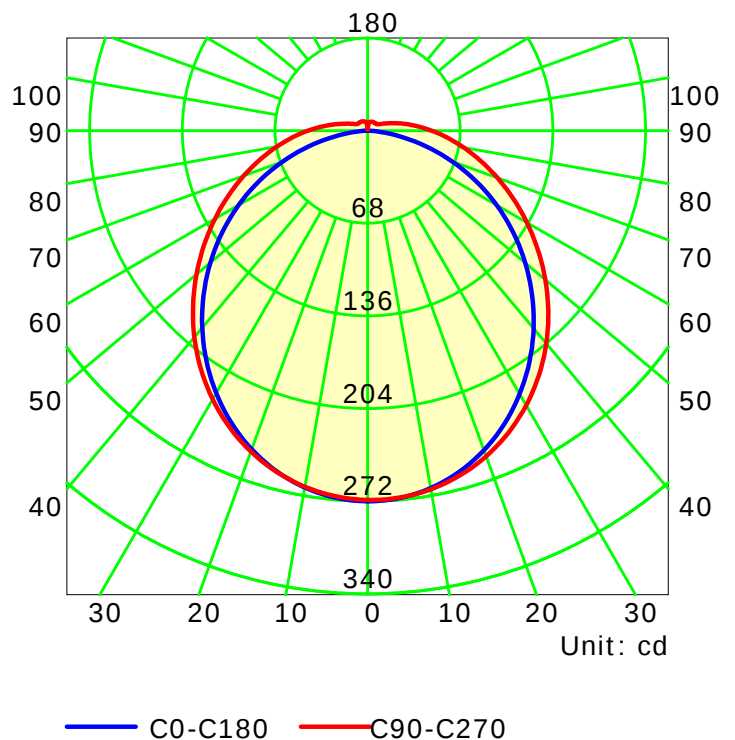
S/MH(C0/C180): 1.22

S/MH(C90/C270): 1.26

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

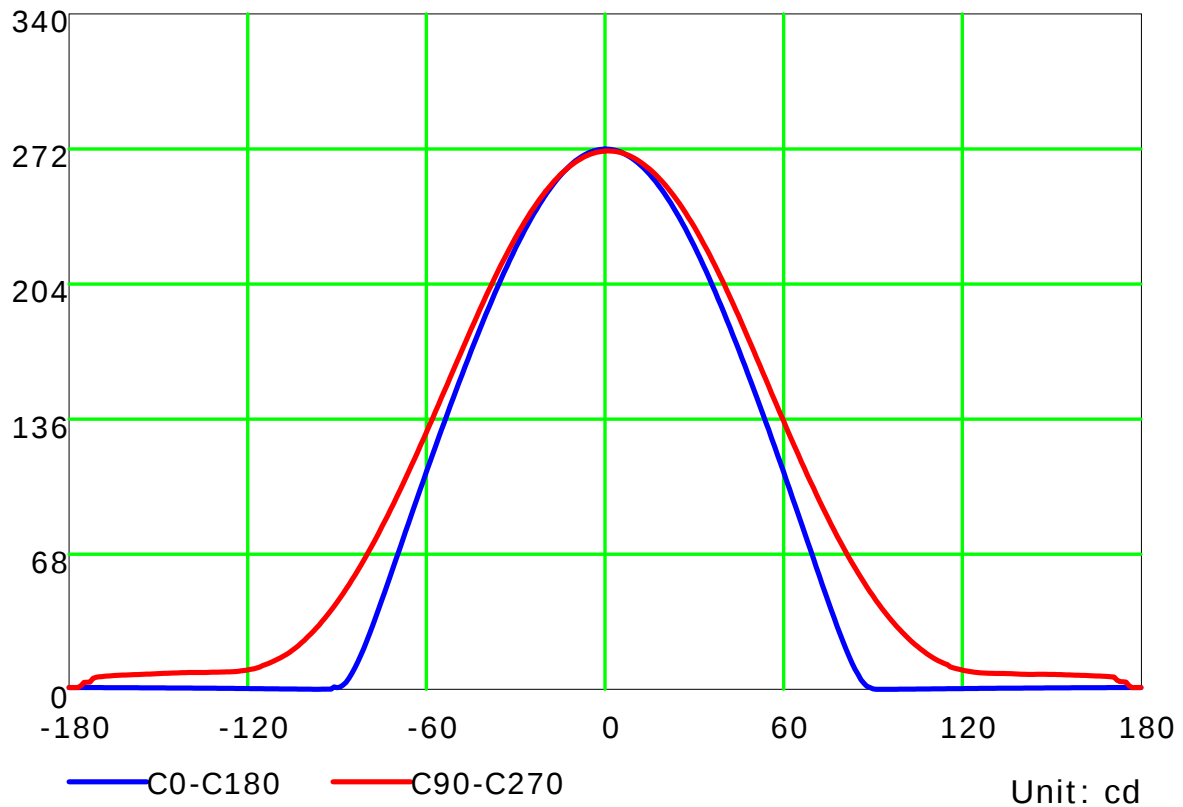
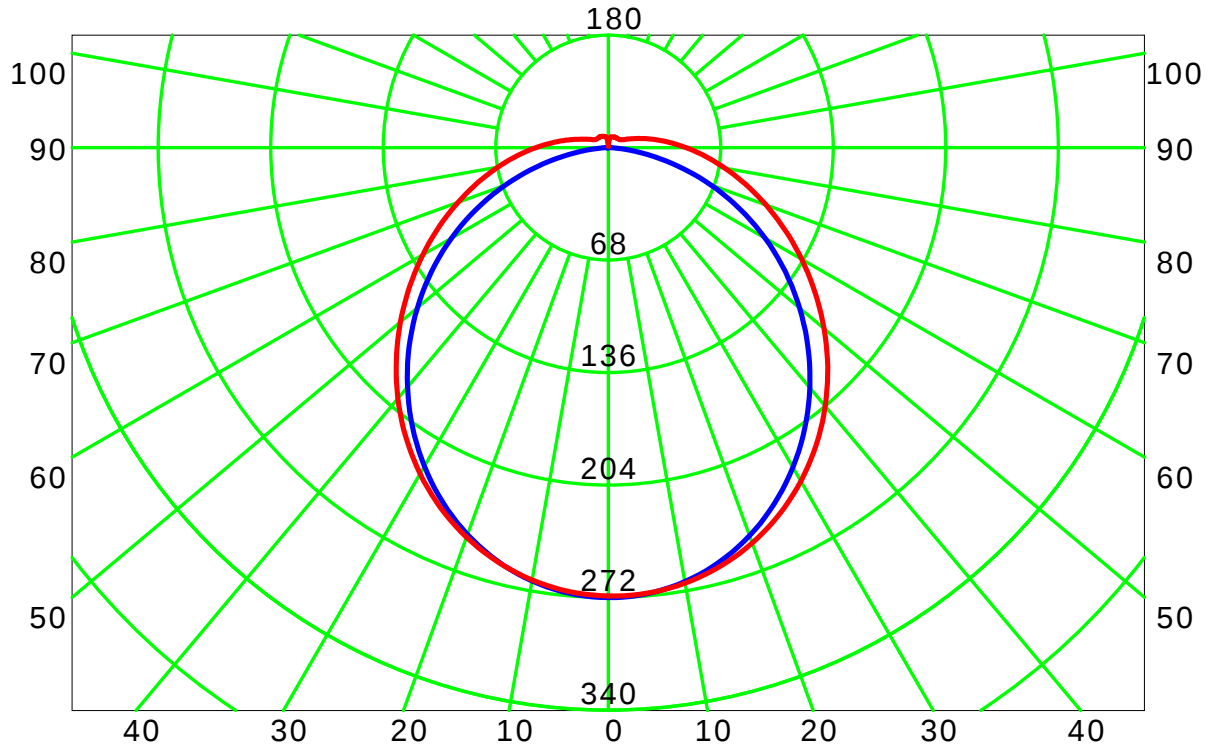
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

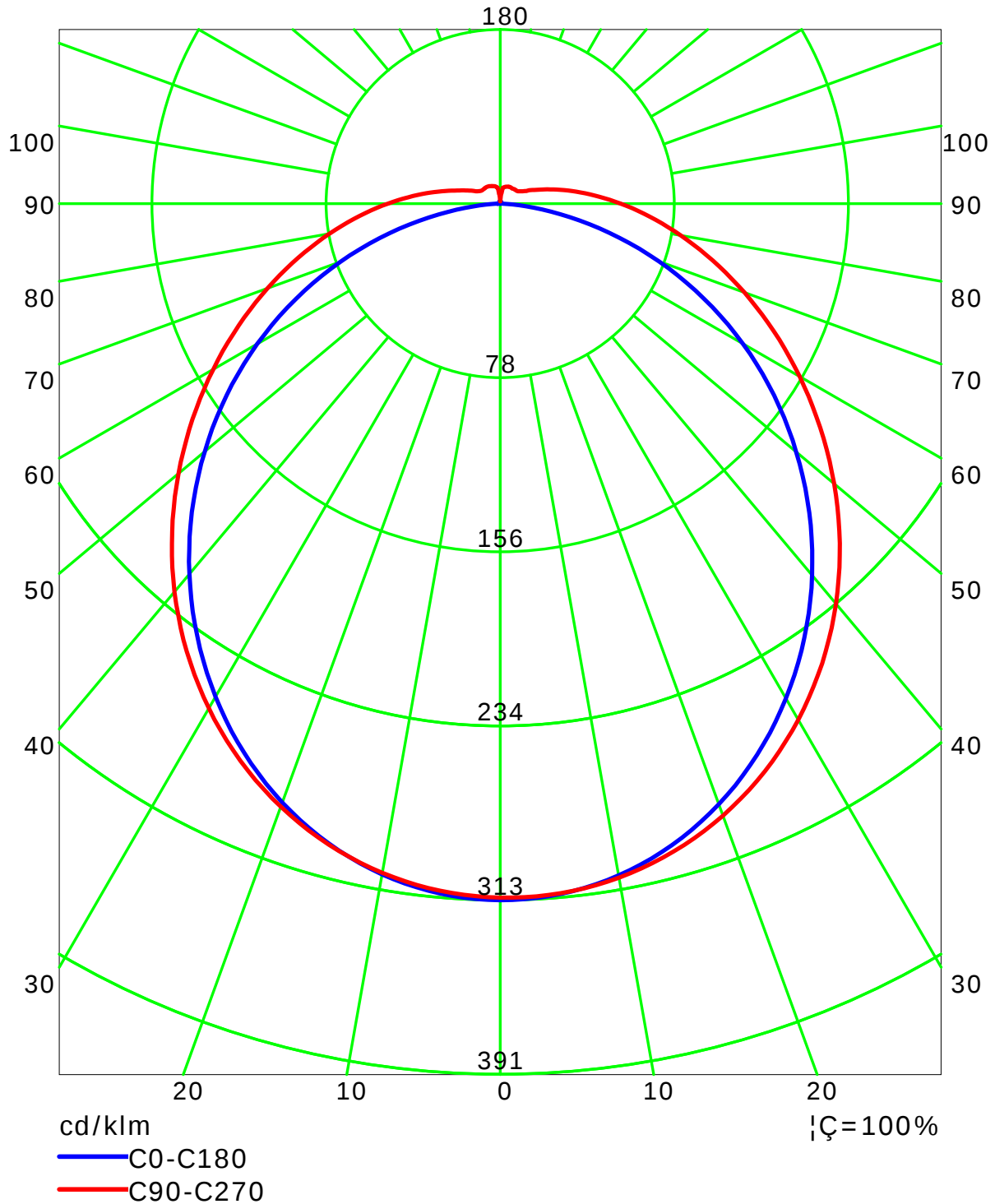
Luminous Intensity Distribution Curve



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:

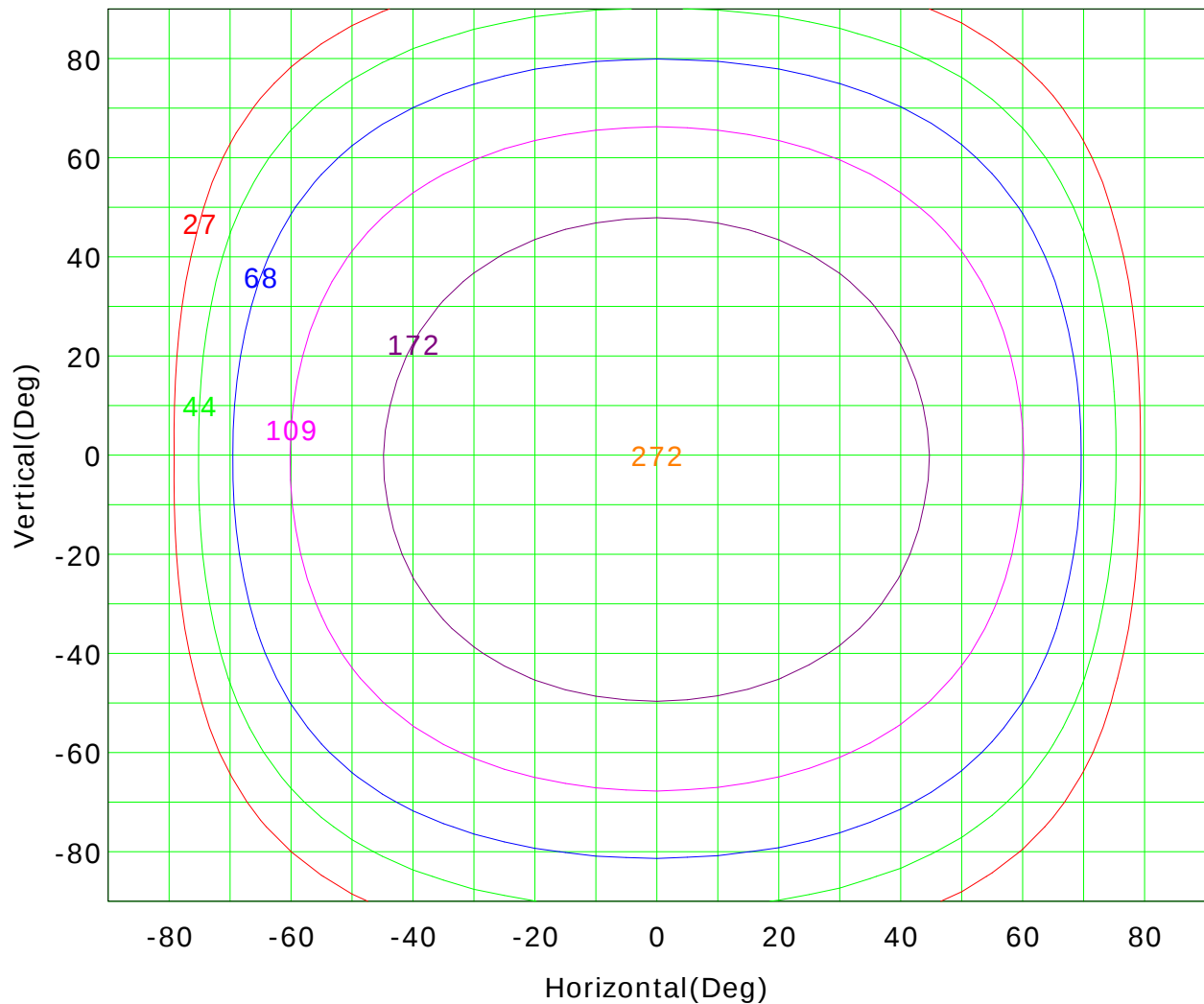
Luminous Intensity Distribution Curve(cd / klm)



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%): 272 cd

(10%):	27 cd	(16%):	44 cd
(25%):	68 cd	(40%):	109 cd
(63%):	172 cd	(100%):	272 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

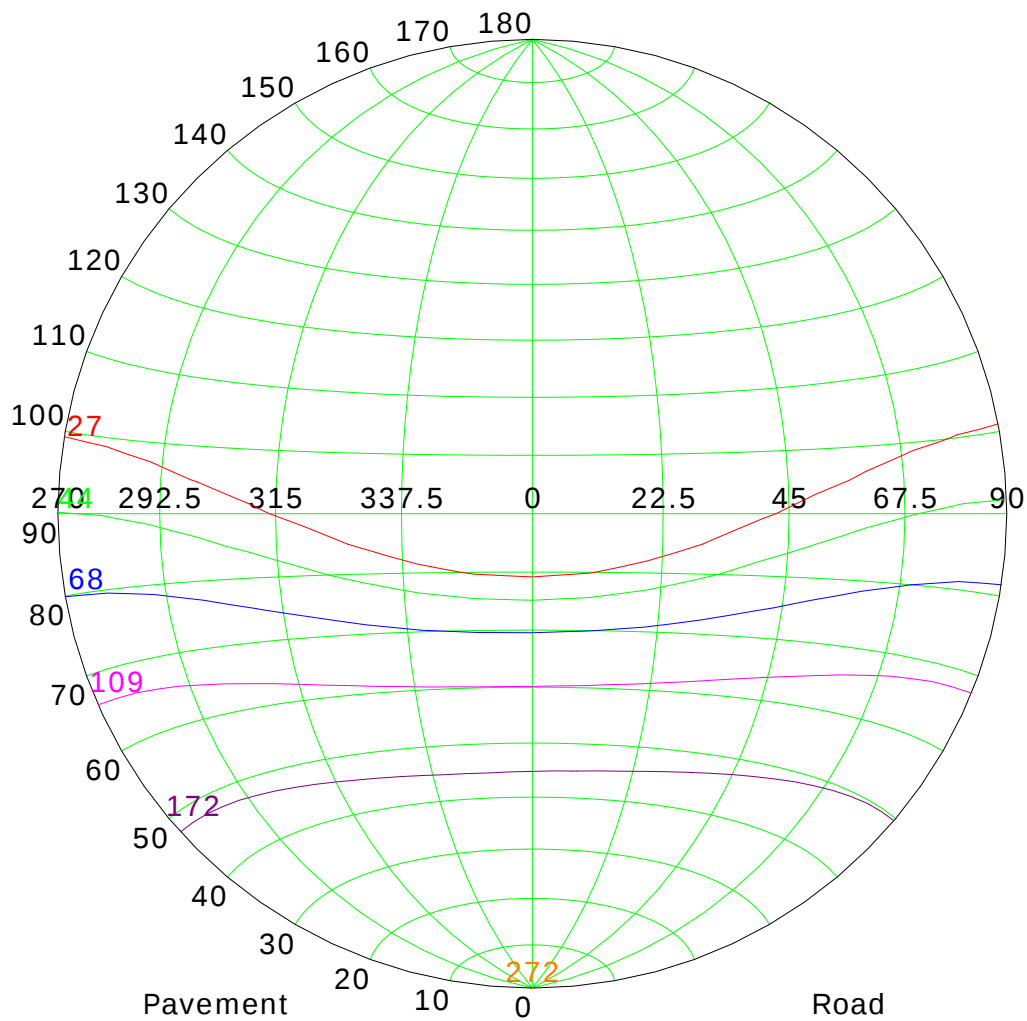
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



Imax (100%): 272 cd

(10%):	27 cd	(16%):	44 cd
(25%):	68 cd	(40%):	109 cd
(63%):	172 cd	(100%):	272 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

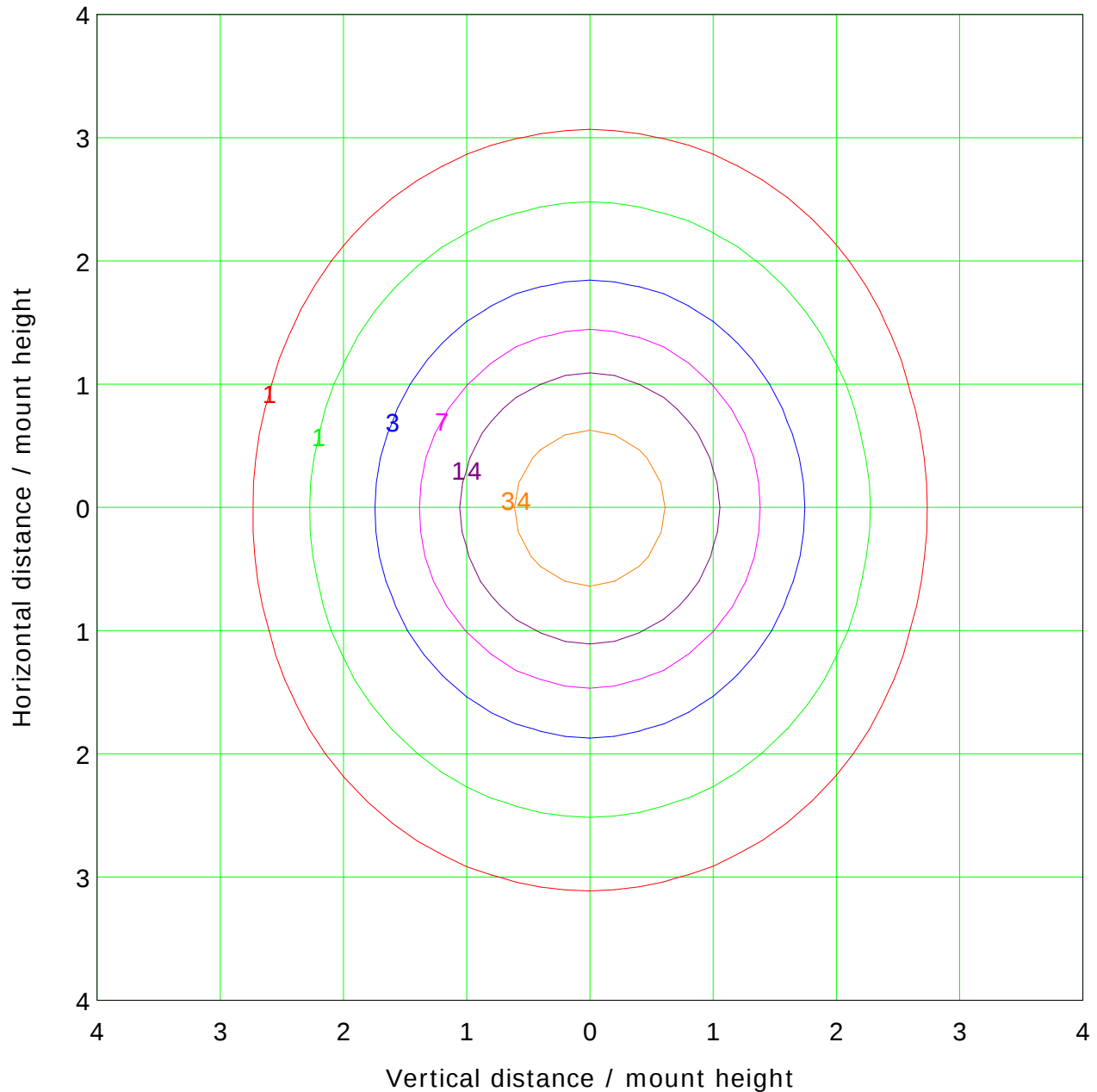
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 2.0m		Max Lux(100%): 68.1 lx	
— (1%):	0.7 lx	— (2%):	1.4 lx
— (5%):	3.4 lx	— (10%):	6.8 lx
— (20%):	13.6 lx	— (50%):	34.0 lx
— (100%):	68.1 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

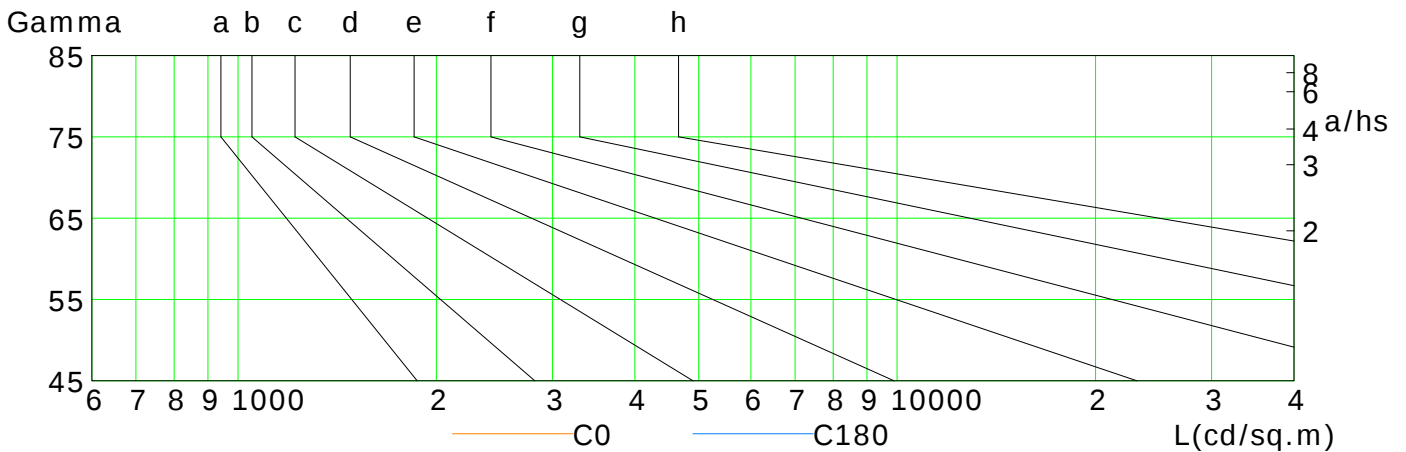
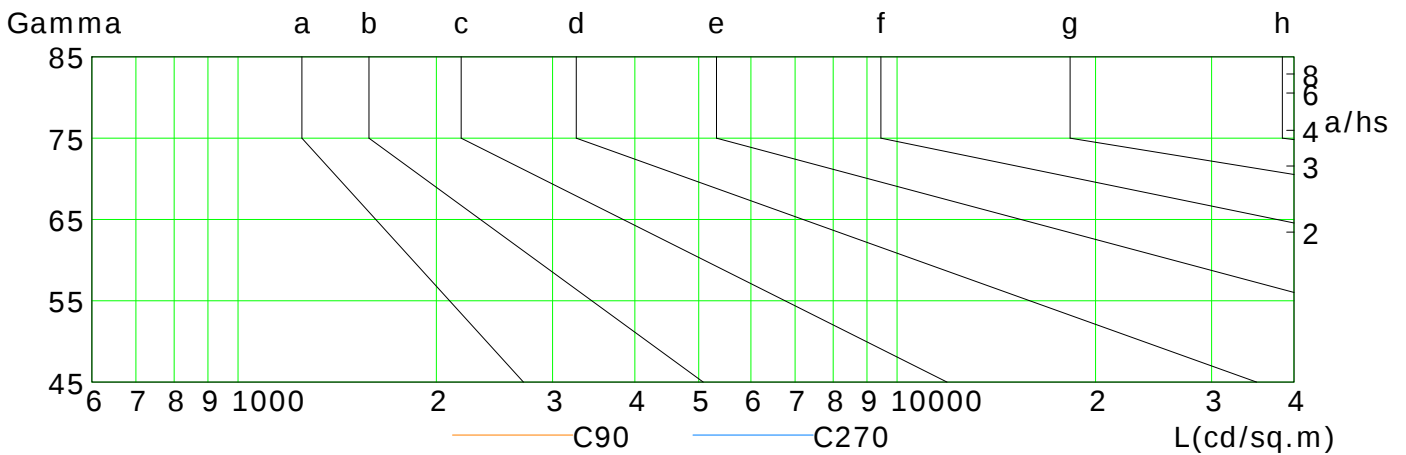
Humidity:

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	171	151	131	110	88	66	44	24	8
C90	188	170	153	135	118	102	86	72	59
C180	170	151	131	110	88	66	45	24	8
C270	181	164	147	129	113	97	82	68	55

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

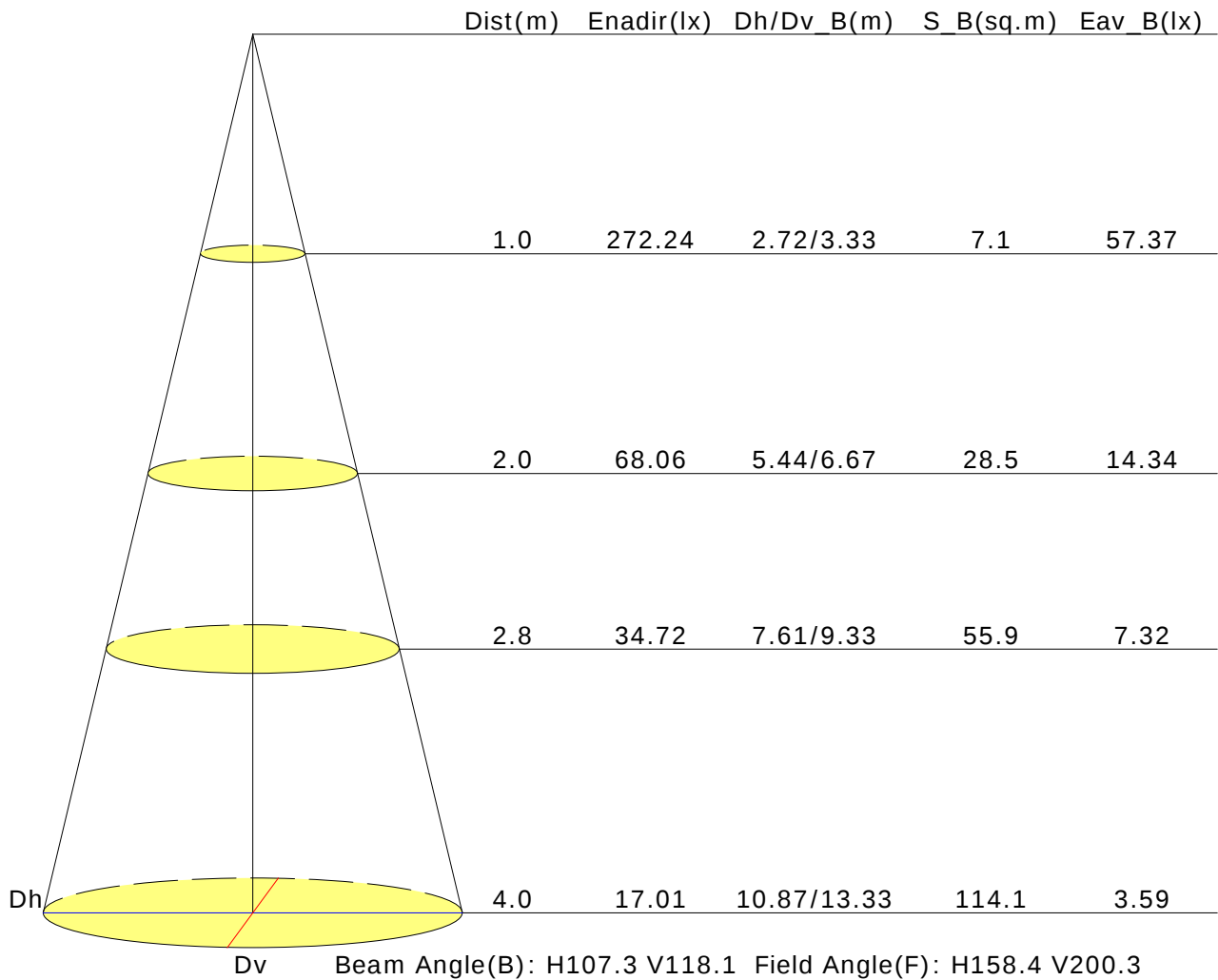
Test Device: GPM-2000

Distance: 7.970 m

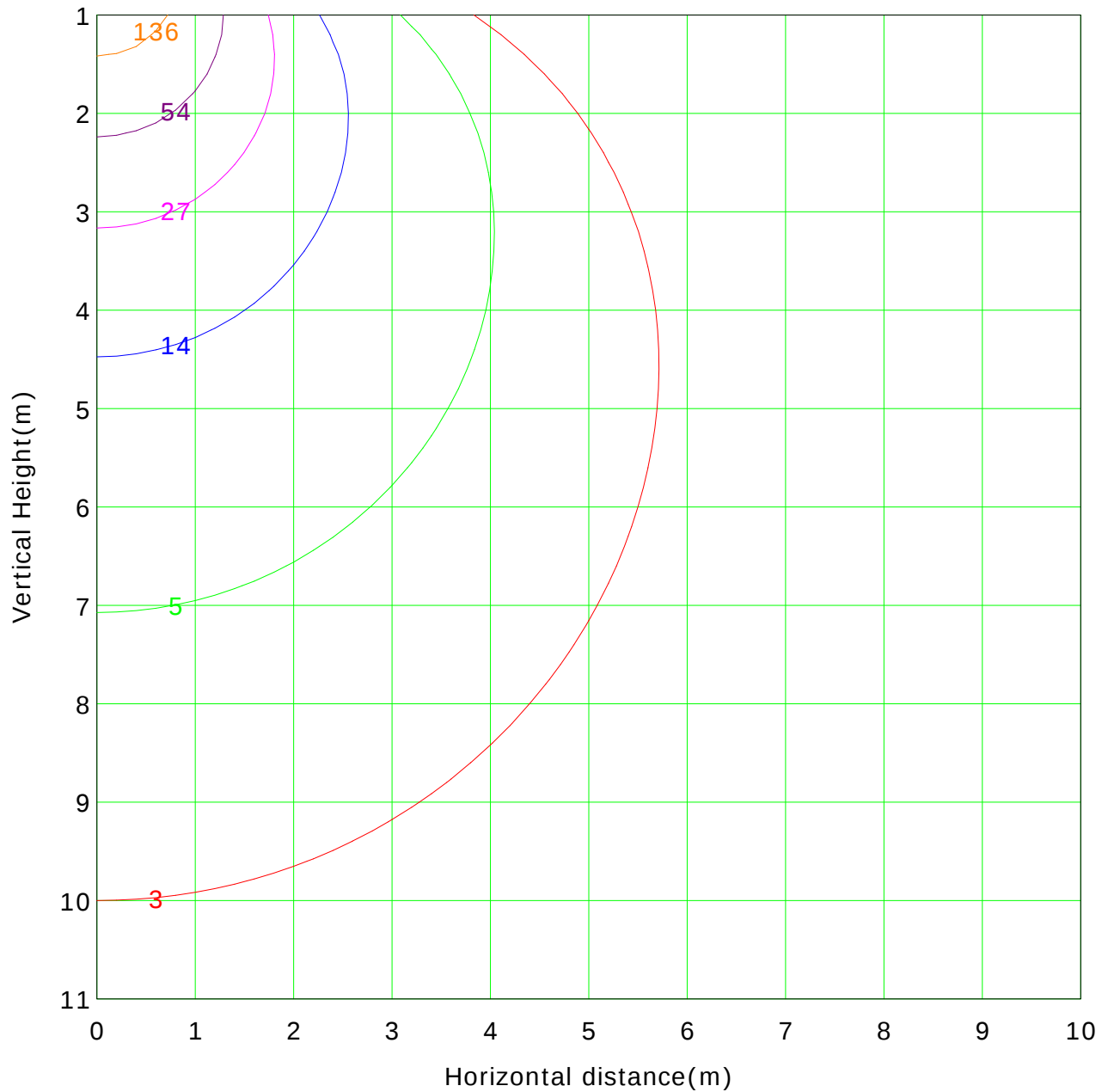
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 272.2 lx

(1%): 2.7 lx	(2%): 5.4 lx
(5%): 13.6 lx	(10%): 27.2 lx
(20%): 54.4 lx	(50%): 136.1 lx
(100%): 272.2 lx	

Report No.:

Test Time: 22/06/2020 09:49

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-AN06-20 + LLD-20-US

Lamp Description: F52-400-1208C2

Lumens per Lamp: 1012

Current: 0.375 A

Power Factor: 1.000

Number of Lamps: 1

Voltage: 24.0 V

Power: 8.99 W

Photometric Results

CIE Class: Direct

Measurement Flux: 822 lm

Downward Ratio: 75.84%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 163.3, 203.1, 184.6, 183.6

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.1, 120.3, 114.3, 114.1

Luminaire Efficacy Rating (LER): 91.48

Max. Intensity: 249.92 cd

S/MH(C0/C180): 1.22

Total Rated Lamp Lumens: 1012.0 lm

Efficiency: 81.22%

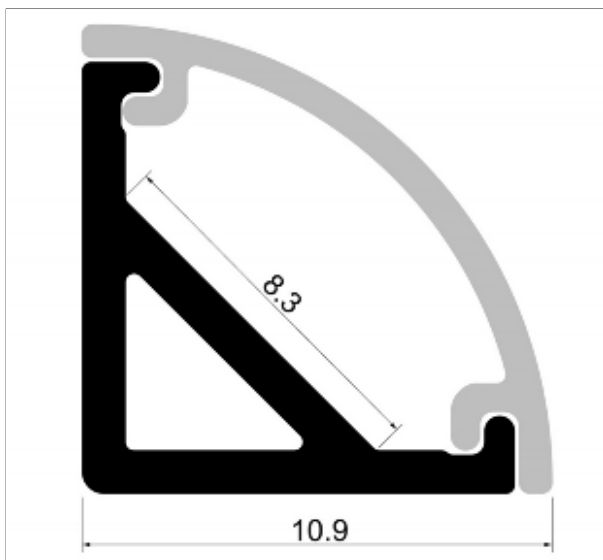
Upward Ratio: 5.38%

Central Intensity: 249.09 cd

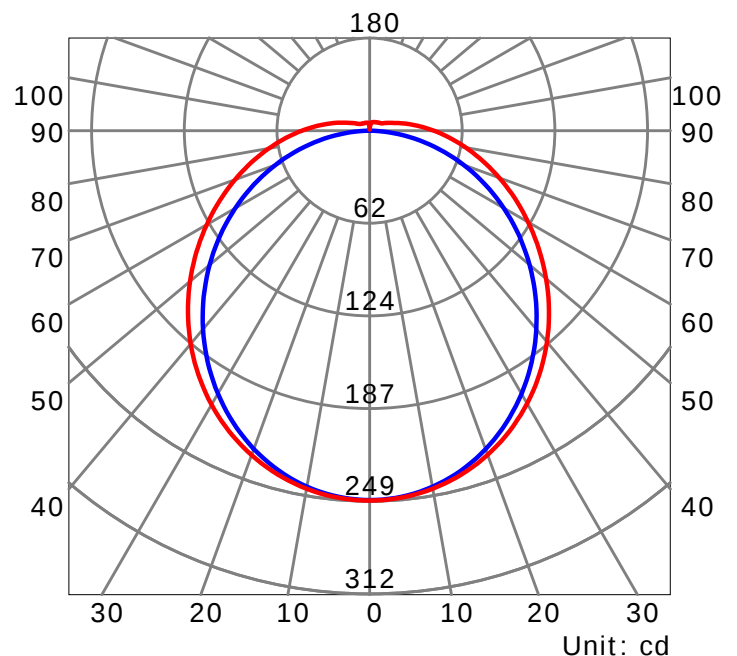
Pos of Max. Intensity: H10 V0

S/MH(C90/C270): 1.27

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

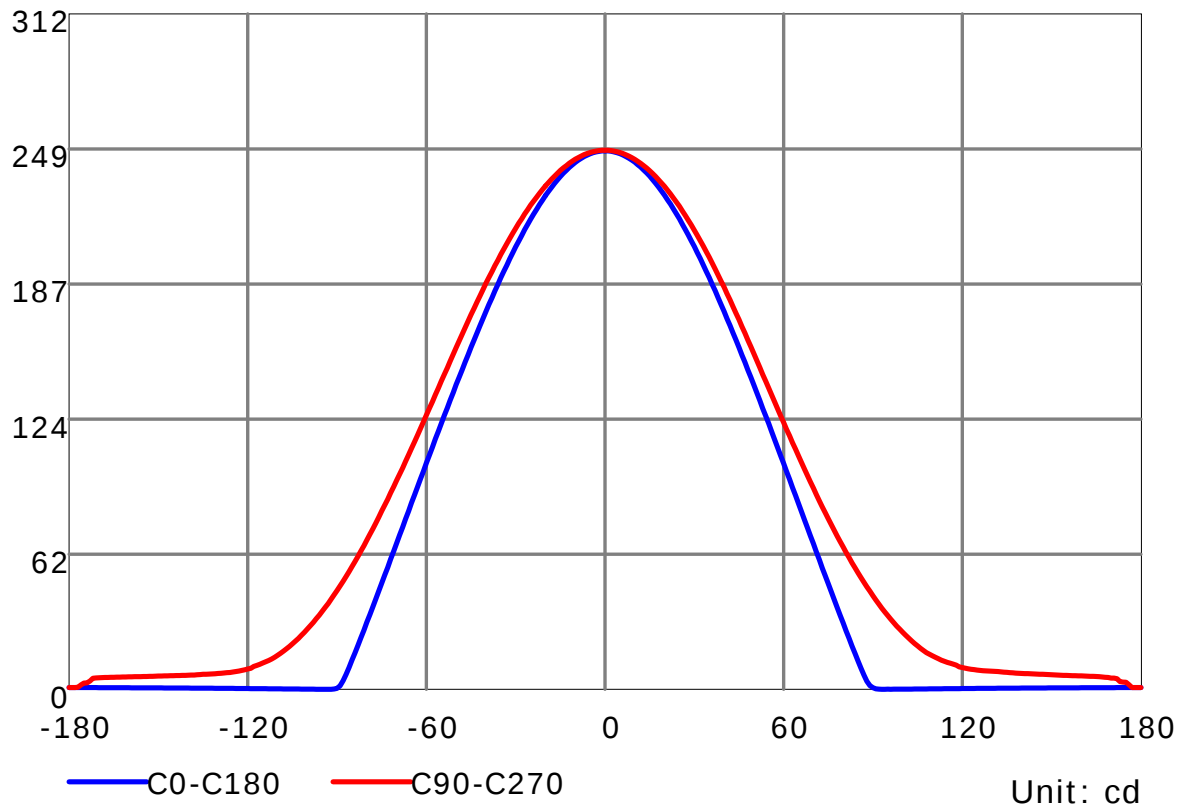
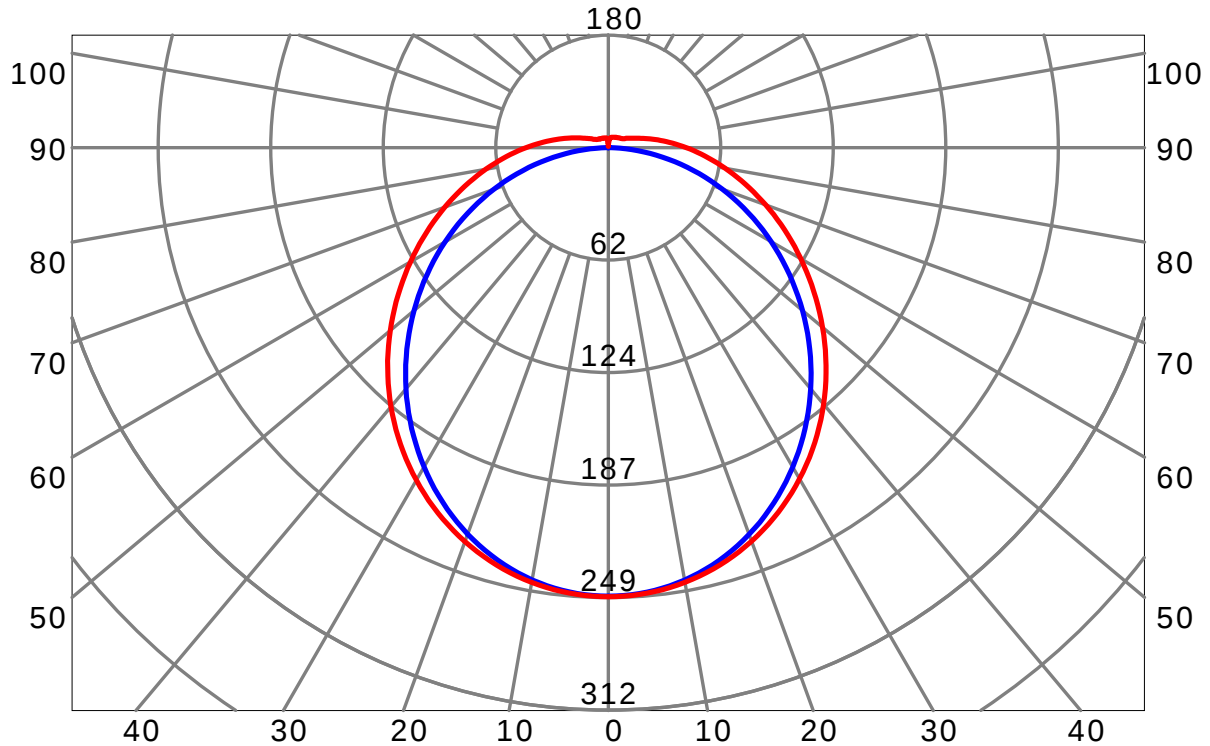
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

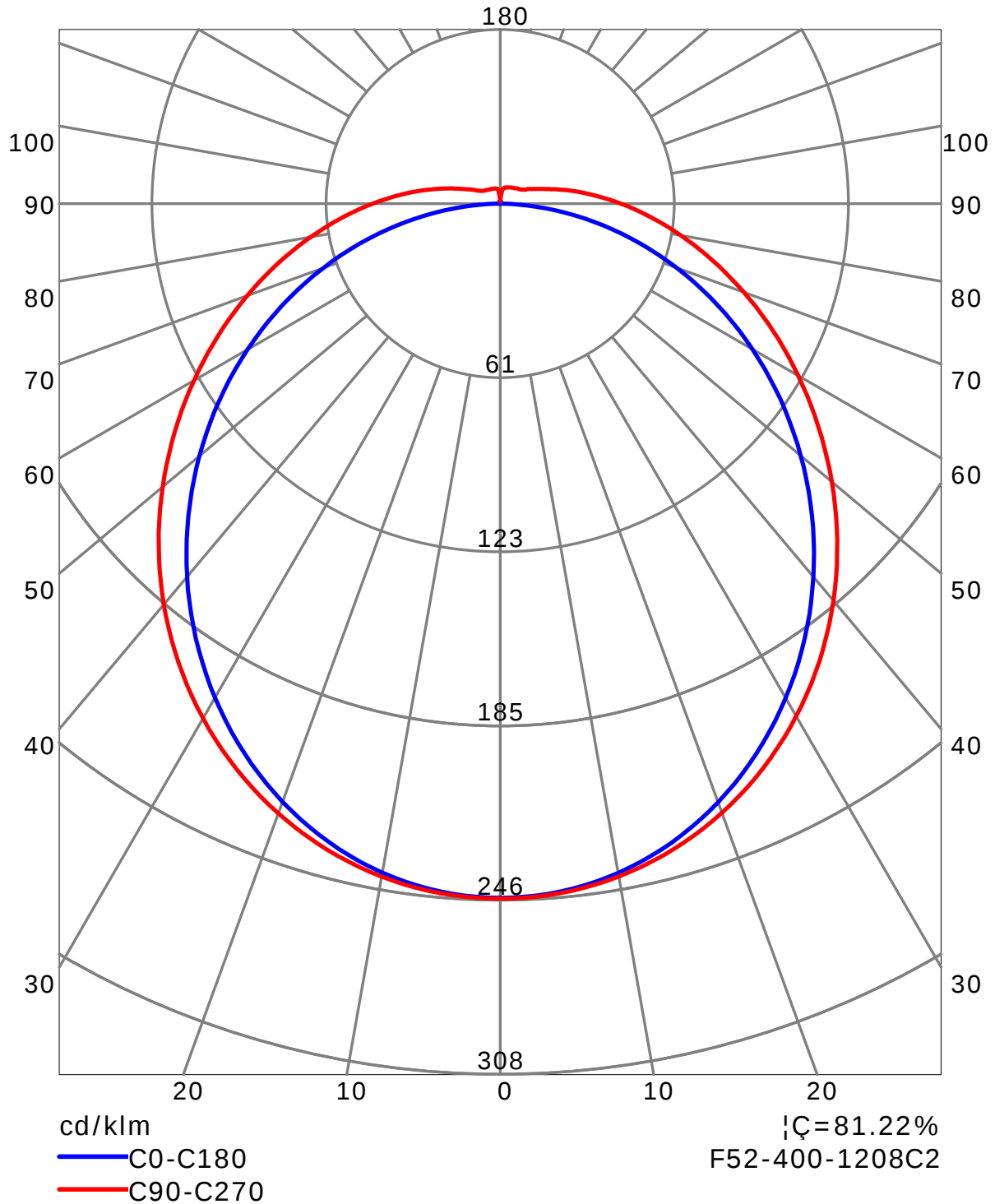
Luminous Intensity Distribution Curve



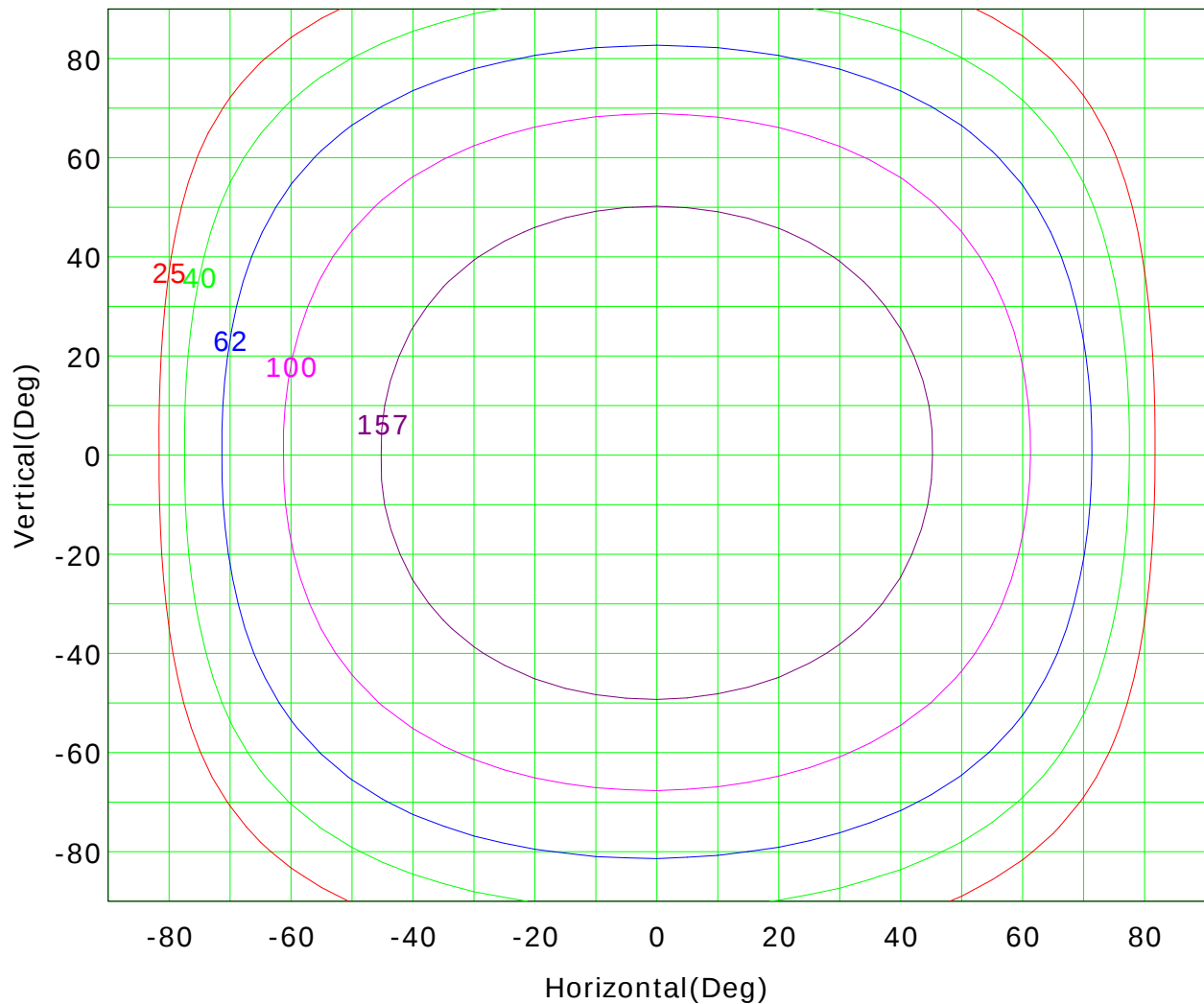
C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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%): 250 cd

— (10%):	25 cd	— (16%):	40 cd
— (25%):	62 cd	— (40%):	100 cd
— (63%):	157 cd	— (100%):	250 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

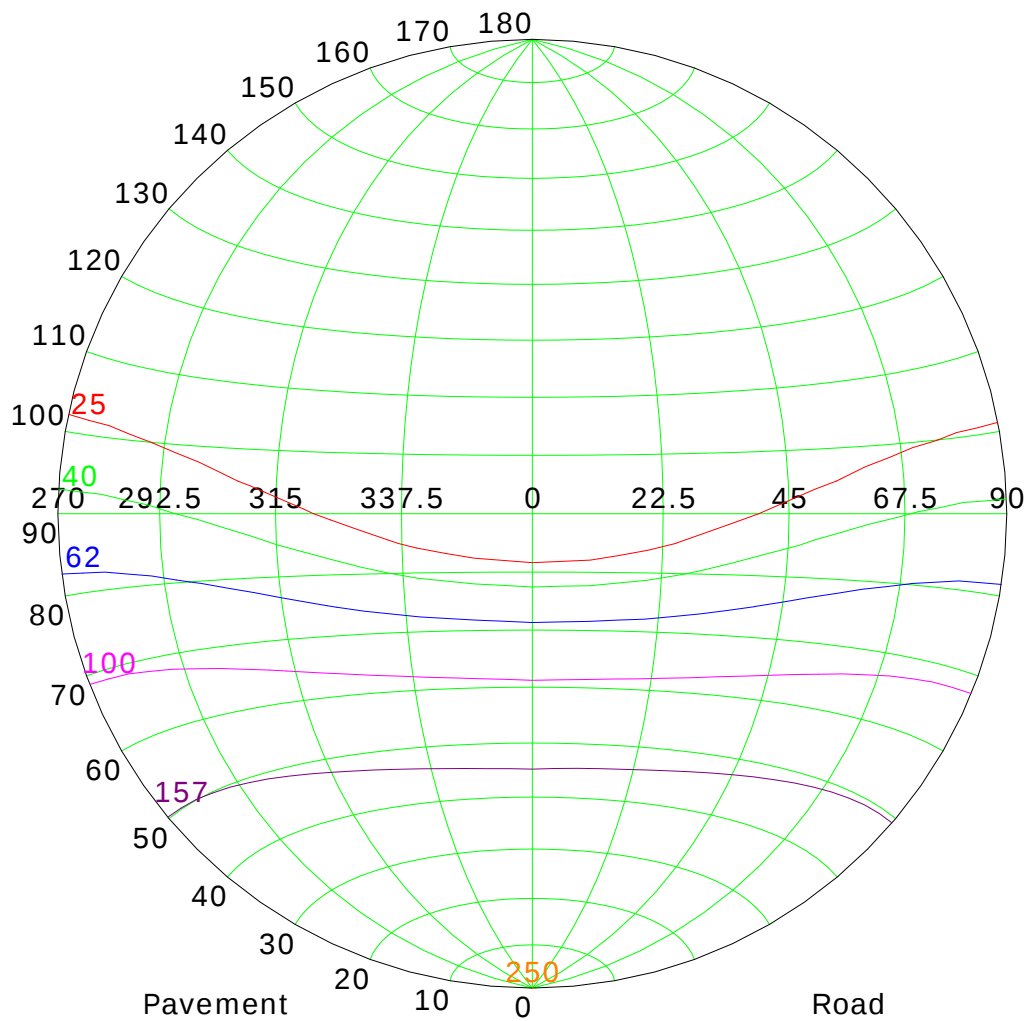
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 250 cd

— (10%):	25 cd	— (16%):	40 cd
— (25%):	62 cd	— (40%):	100 cd
— (63%):	157 cd	— (100%):	250 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

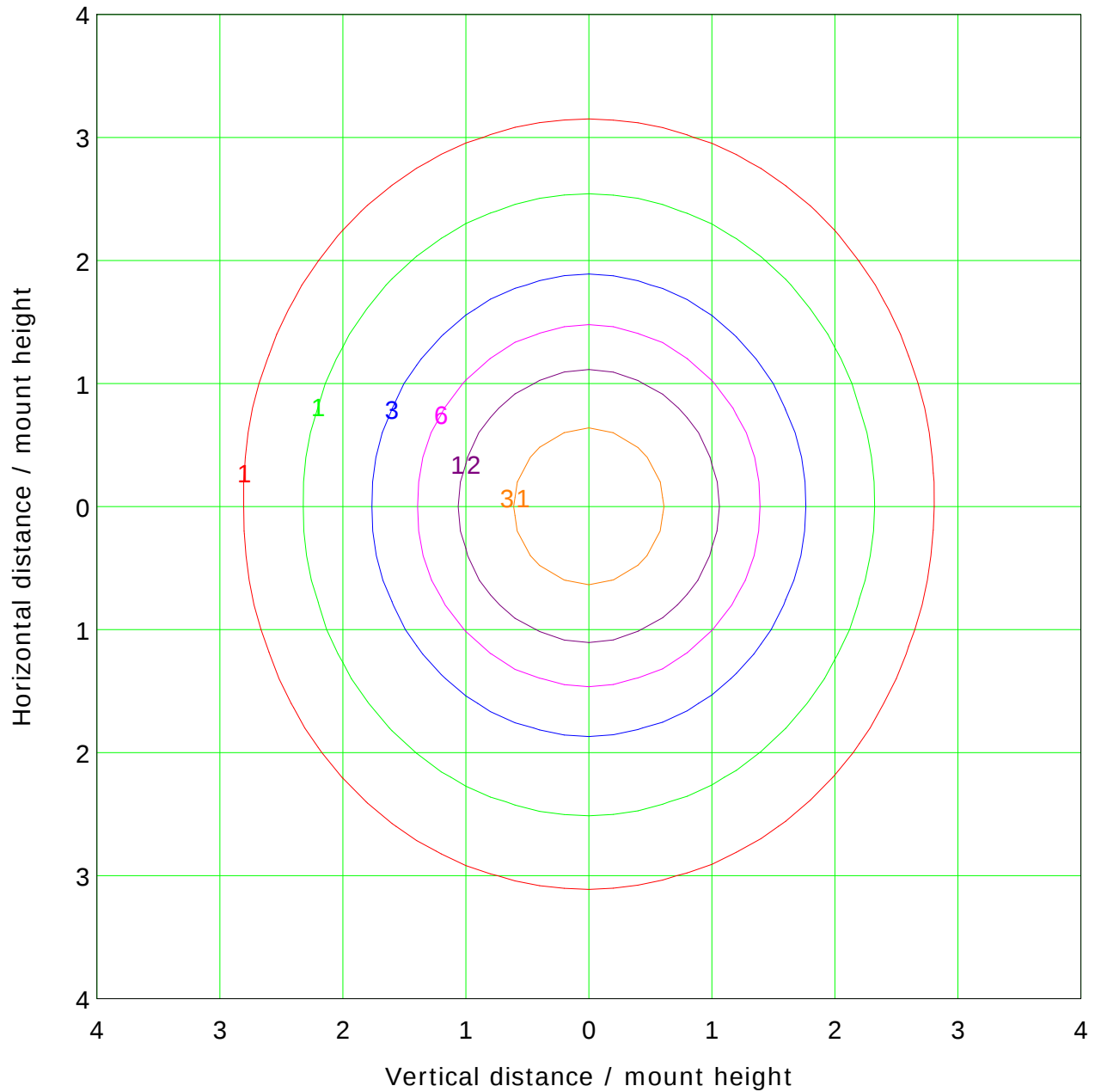
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 2.0m		Max Lux(100%): 62.5 lx	
— (1%):	0.6 lx	— (2%):	1.2 lx
— (5%):	3.1 lx	— (10%):	6.2 lx
— (20%):	12.5 lx	— (50%):	31.2 lx
— (100%):	62.5 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

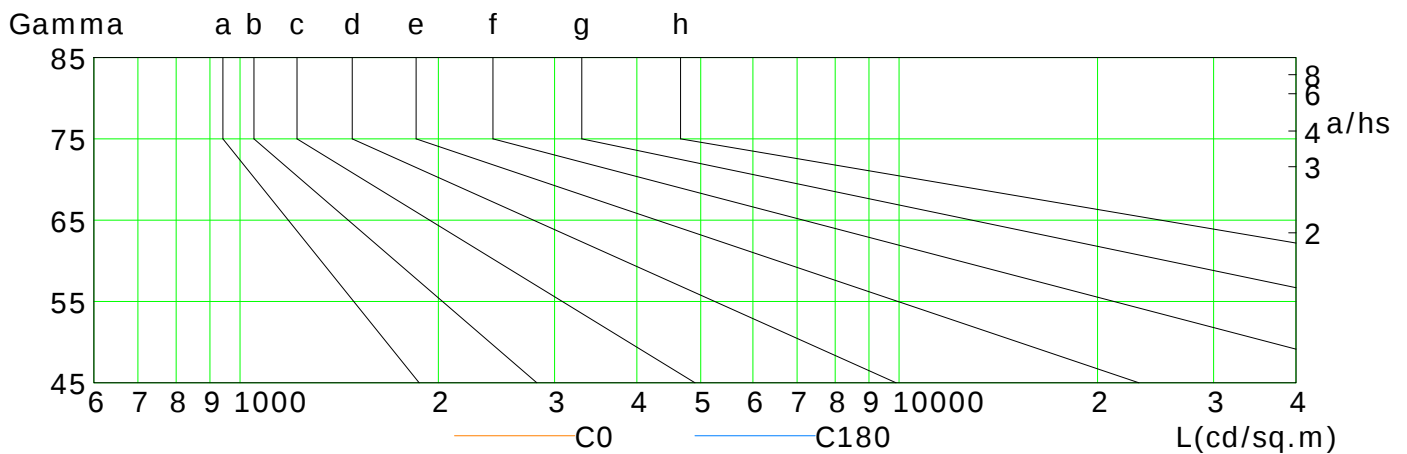
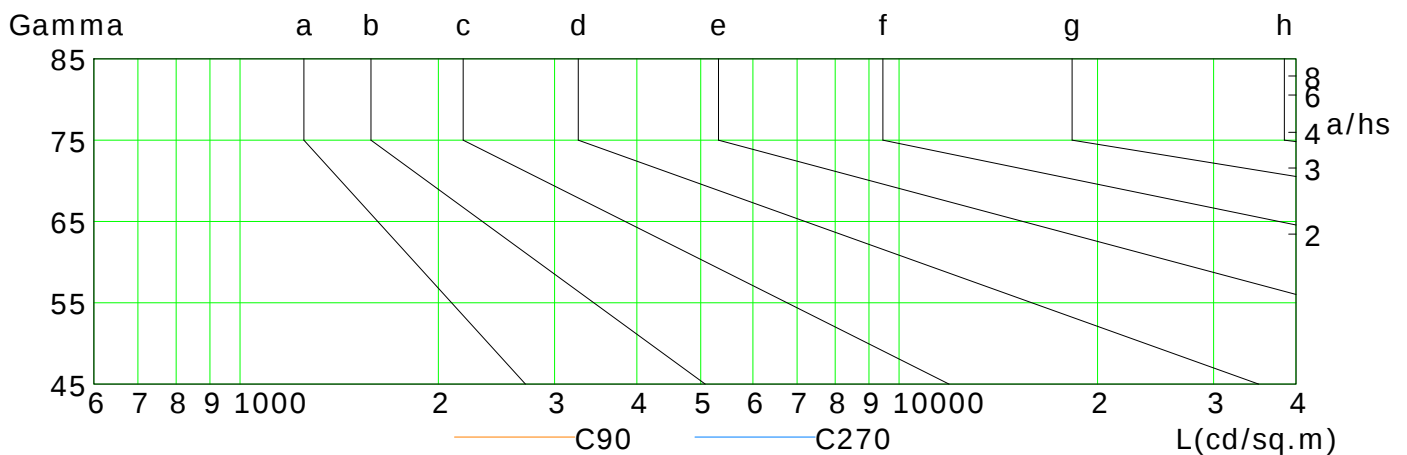
Humidity:

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	158	141	123	105	86	67	49	31	13
C90	171	155	139	123	108	93	79	66	54
C180	158	141	123	105	86	68	49	31	14
C270	173	158	143	127	111	97	82	69	57

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

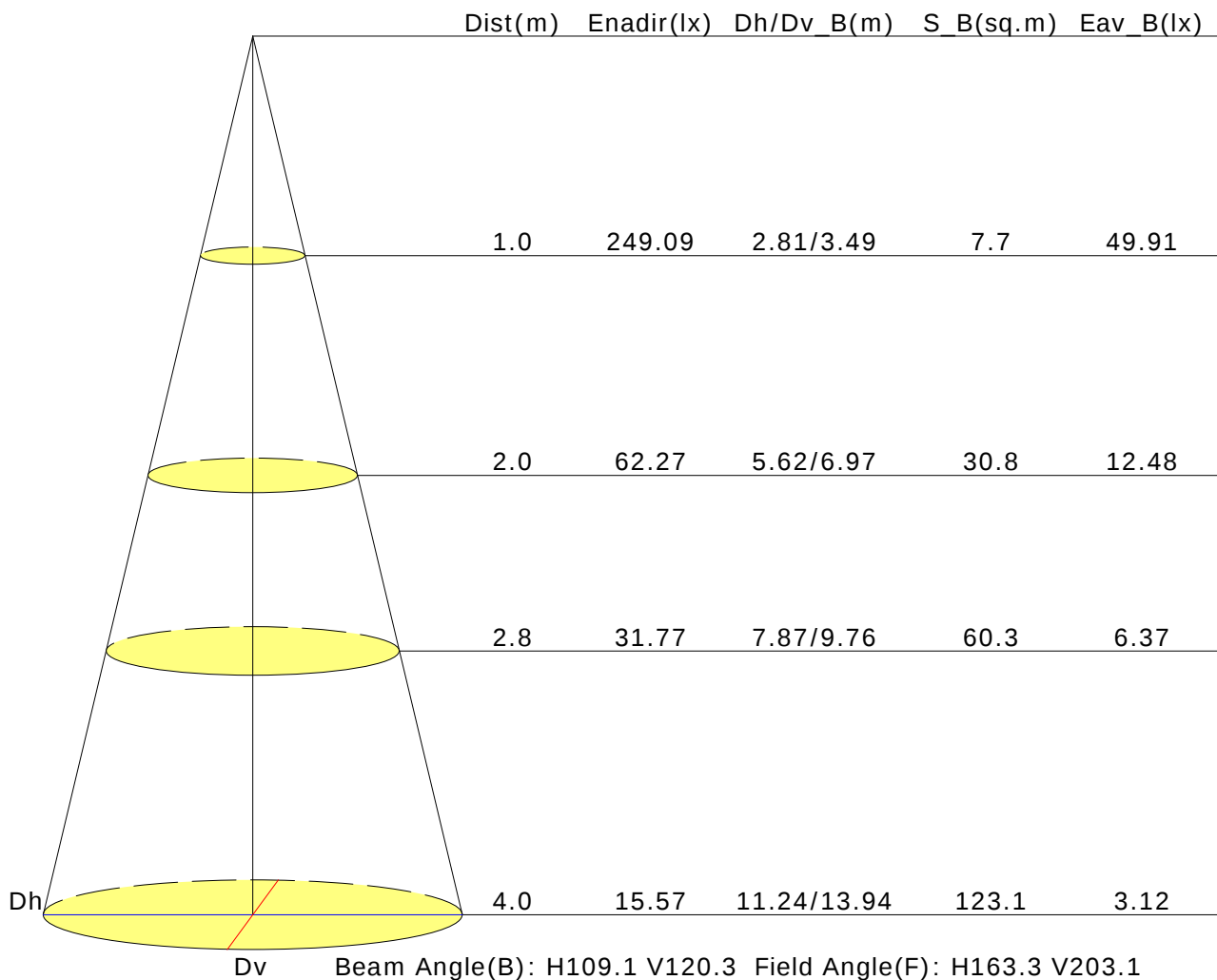
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot

