

Report No.:

Test Time: 01/08/2019 14:46

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-RE10-02 + LLD-02-FM

Lamp Description: F52-400-1208C2-W5

Number of Lamps: 1

Lumens per Lamp: 1000 lm

Voltage: 24.0 V

Current: 0.382 A

Power: 9.17 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 544.1 lm

Downward Ratio: 54.21%

Total Rated Lamp Lumens: 1000.0 lm

Efficiency: 54.41%

Upward Ratio: 0.20%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 161.3, 139.2, 144.4, 145.0

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.1, 81.4, 90.3, 91.1

Luminaire Efficacy Rating (LER): 59.38

Central Intensity: 157.06 cd

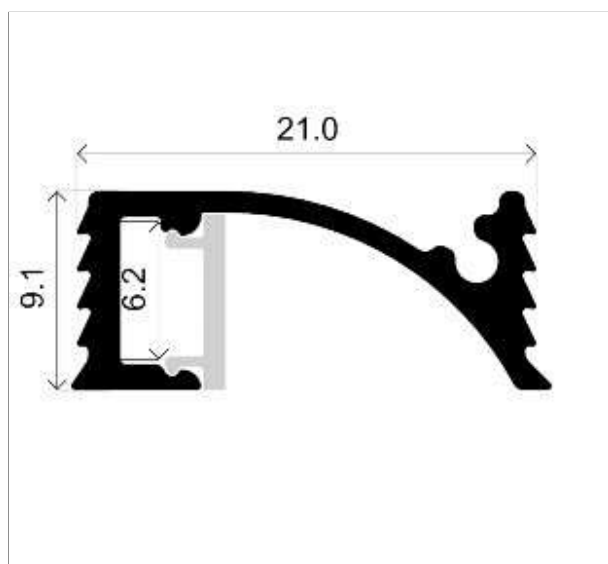
Max. Intensity: 244.84 cd

Pos of Max. Intensity: H90 V31

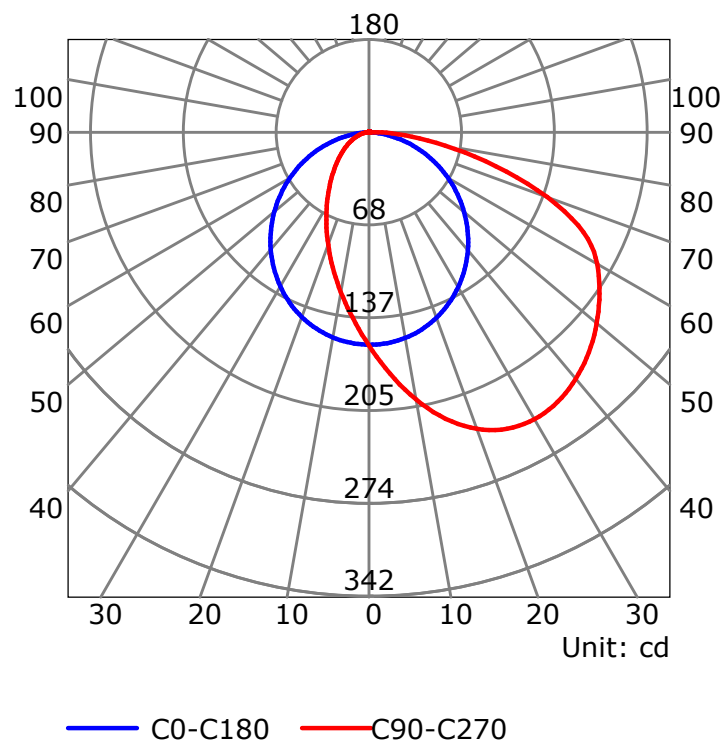
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.43

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

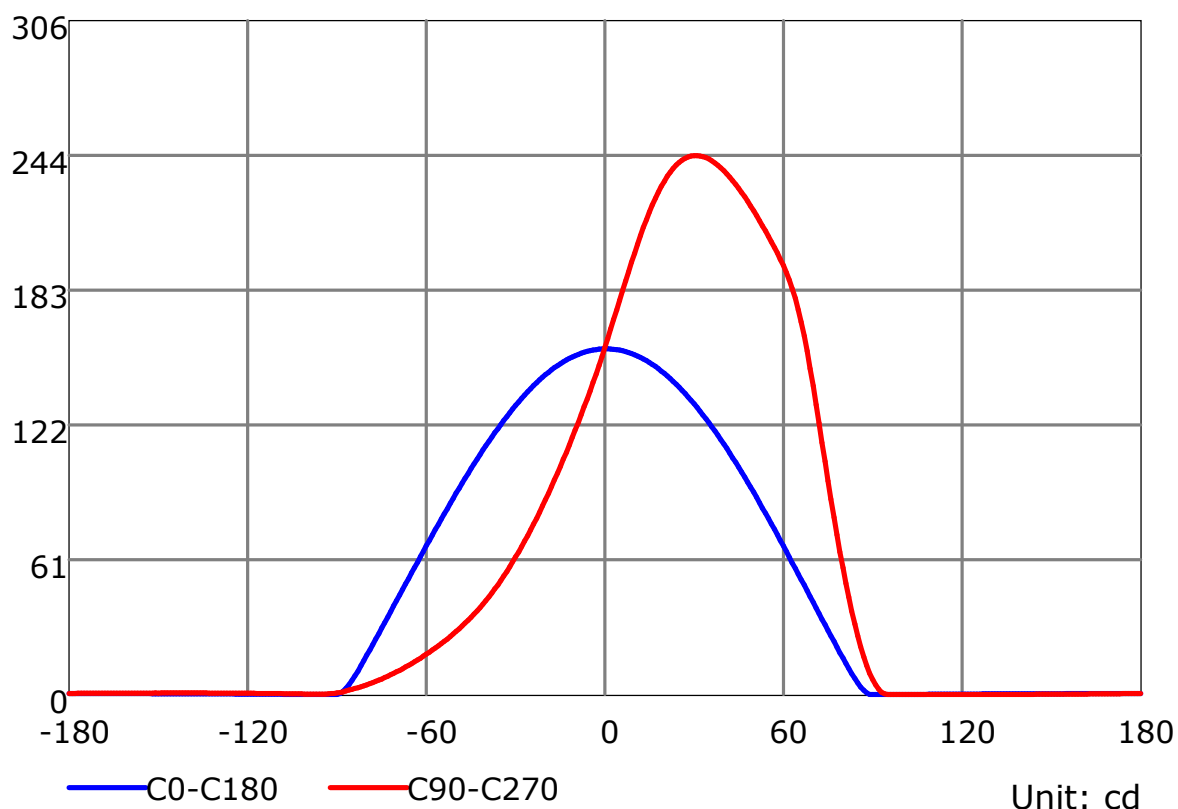
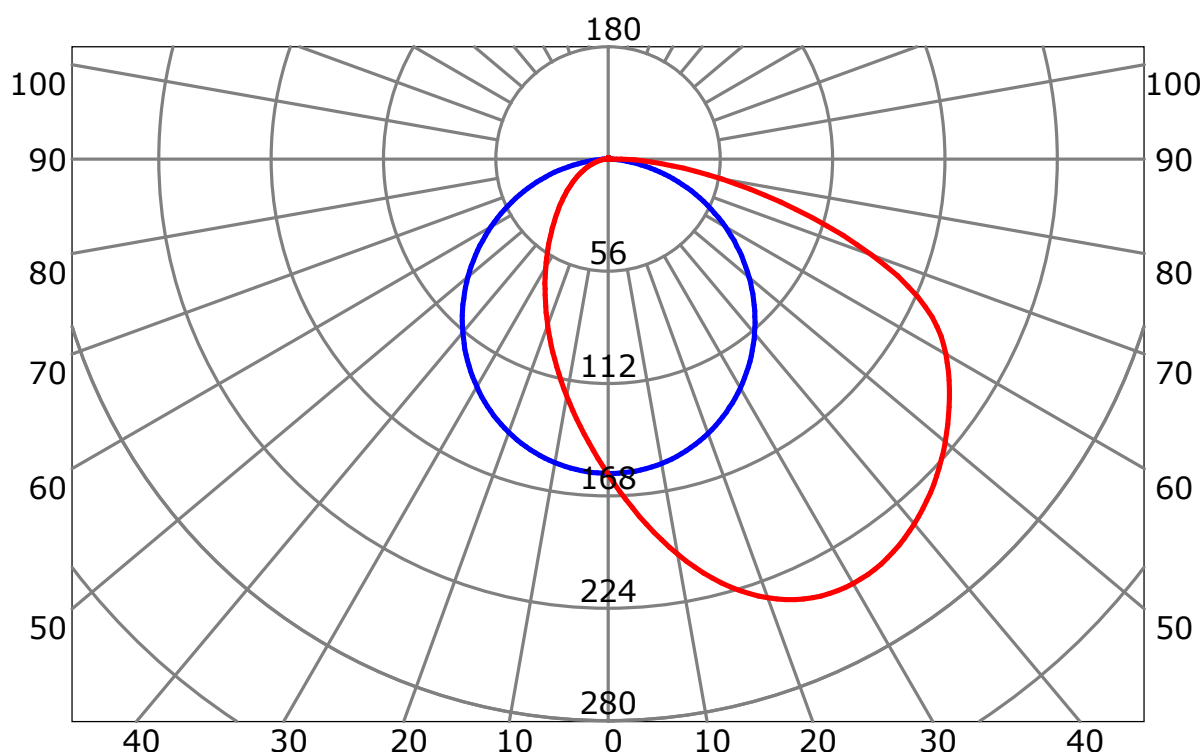
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve

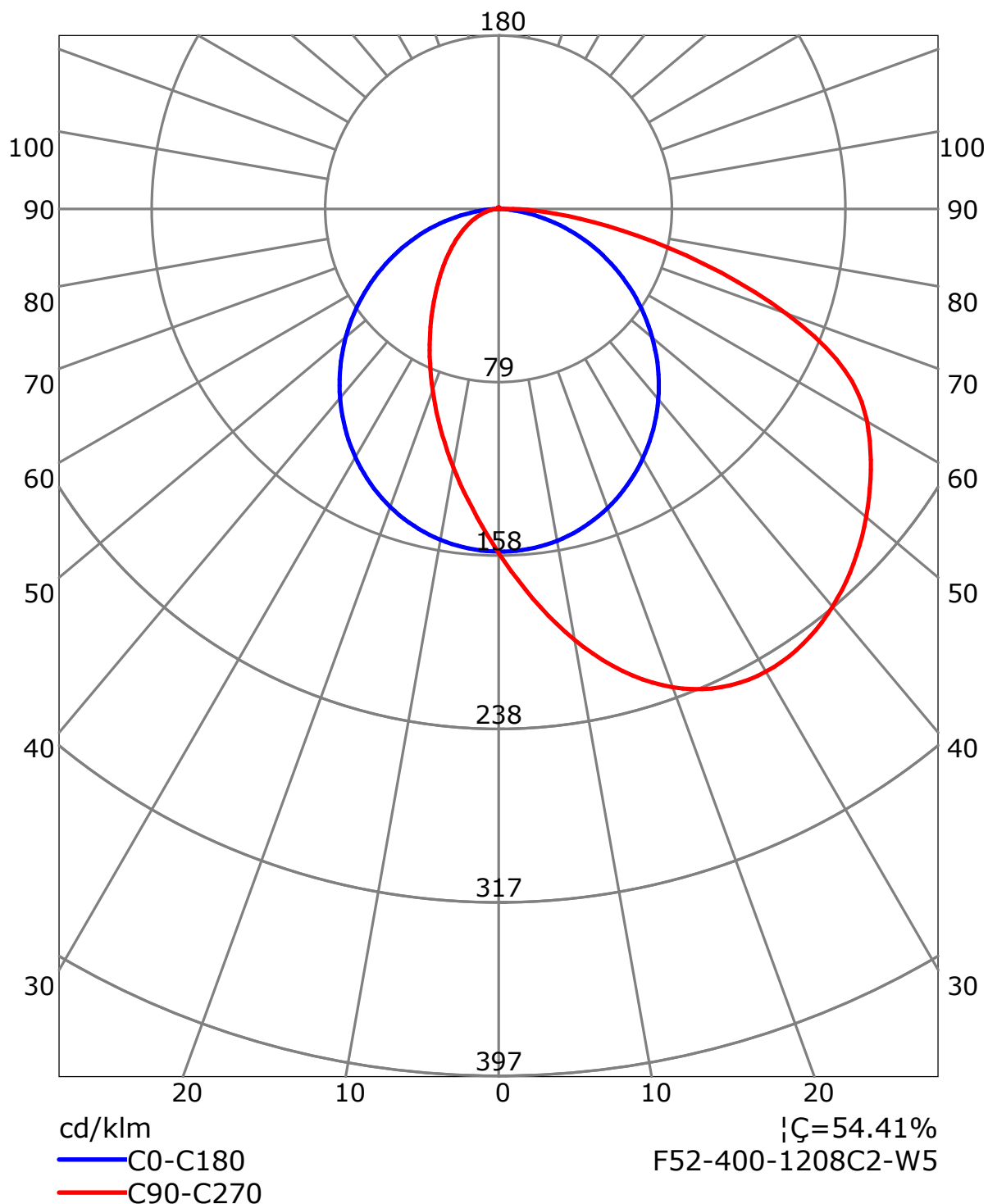


Unit: cd

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:

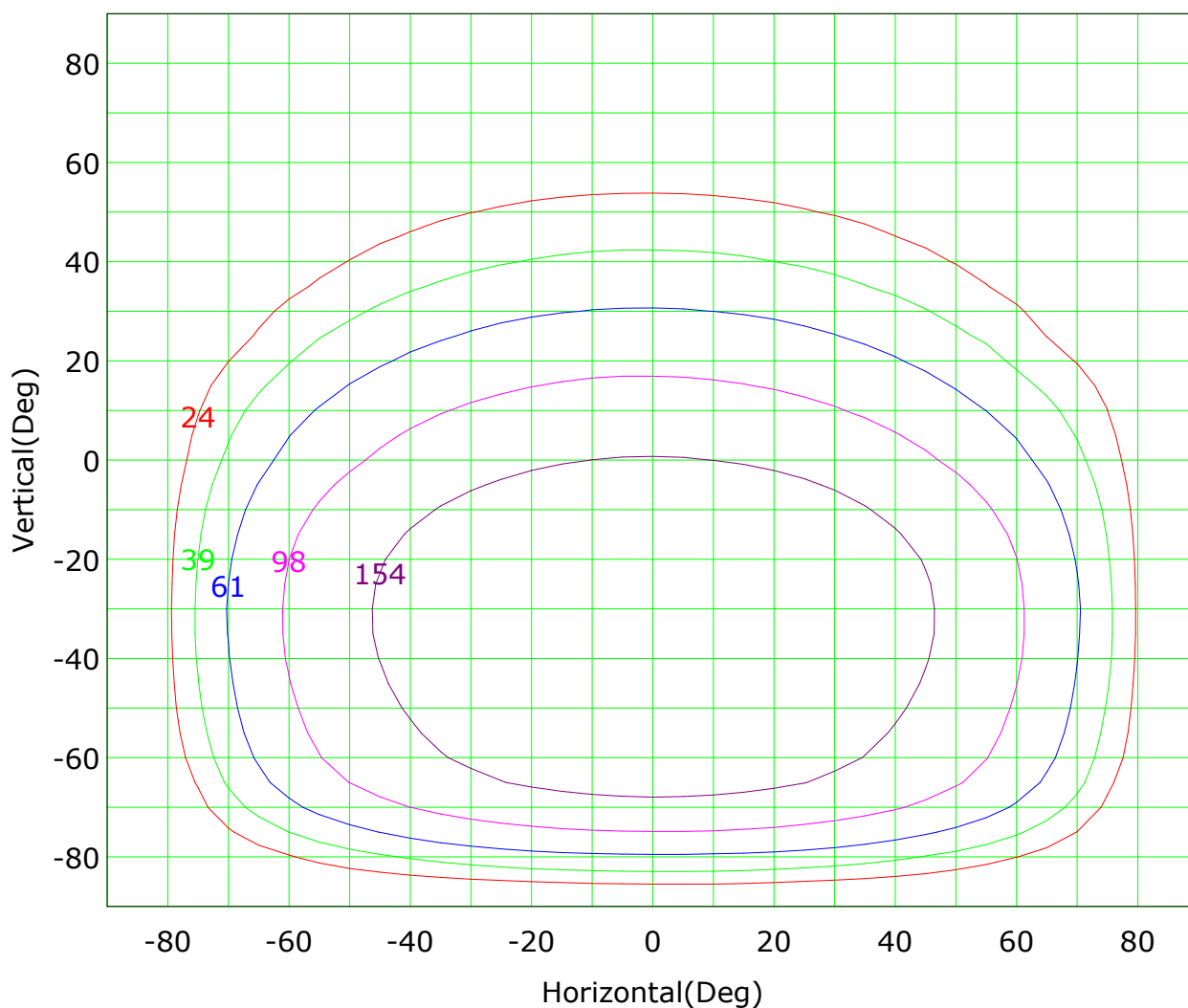
Luminous Intensity Distribution Curve(cd/klm)



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)



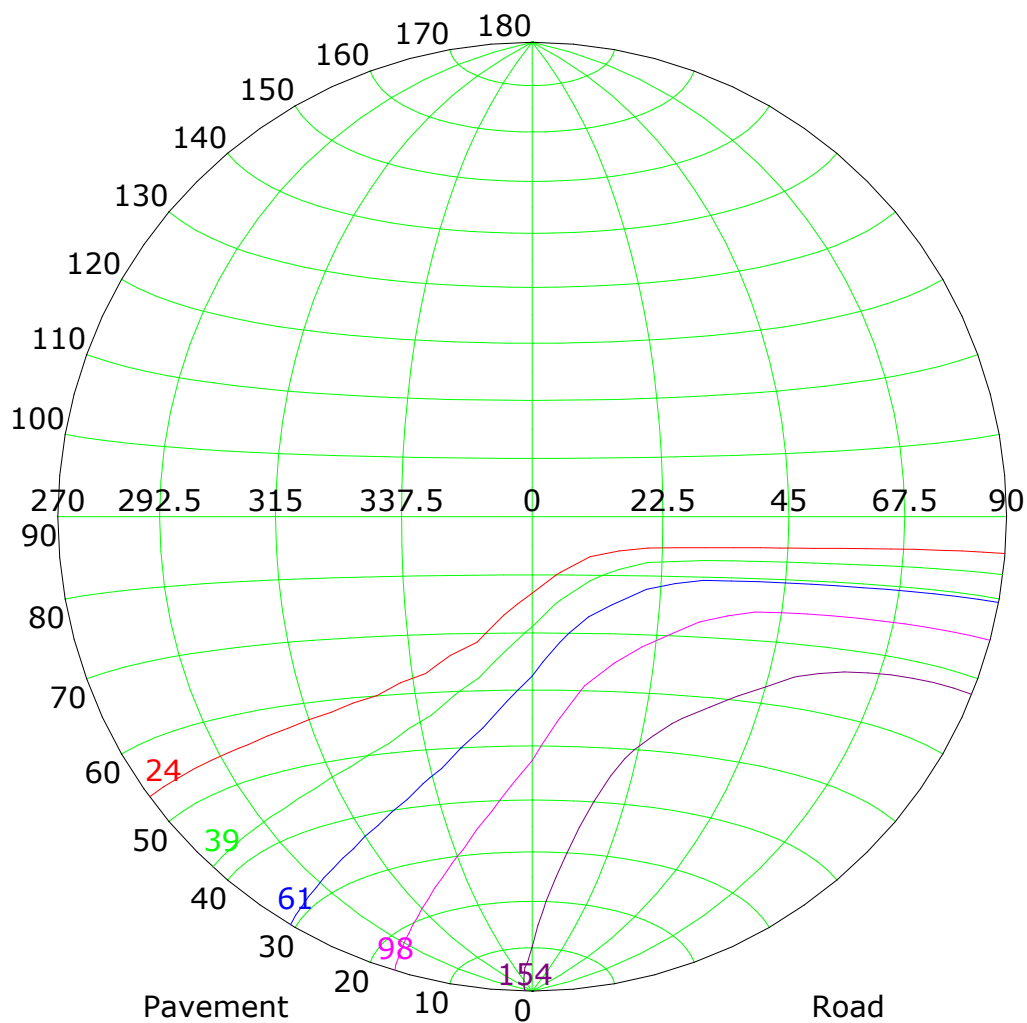
Imax (100%): 245 cd

(10%):	24 cd	(16%):	39 cd
(25%):	61 cd	(40%):	98 cd
(63%):	154 cd	(100%):	245 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:

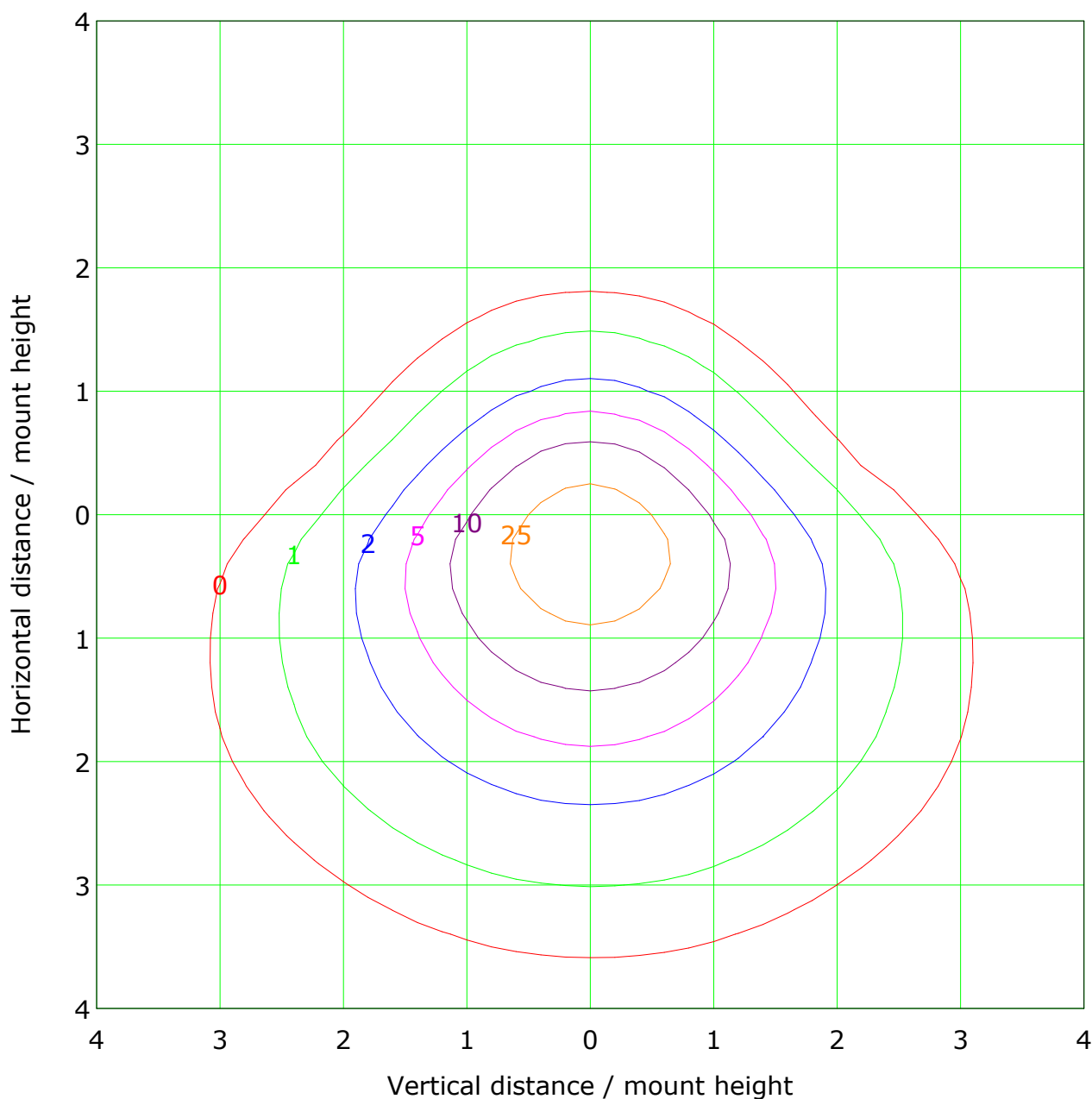
Isocandela (sphere)



Imax (100%): 245 cd

(10%):	24 cd	(16%):	39 cd
(25%):	61 cd	(40%):	98 cd
(63%):	154 cd	(100%):	245 cd

IsoLux Plot



Mounting Height: 2.0m Max Lux(100%): 49.4 lx

(1%): 0.5 lx	(2%): 1.0 lx
(5%): 2.5 lx	(10%): 4.9 lx
(20%): 9.9 lx	(50%): 24.7 lx
(100%): 49.4 lx	

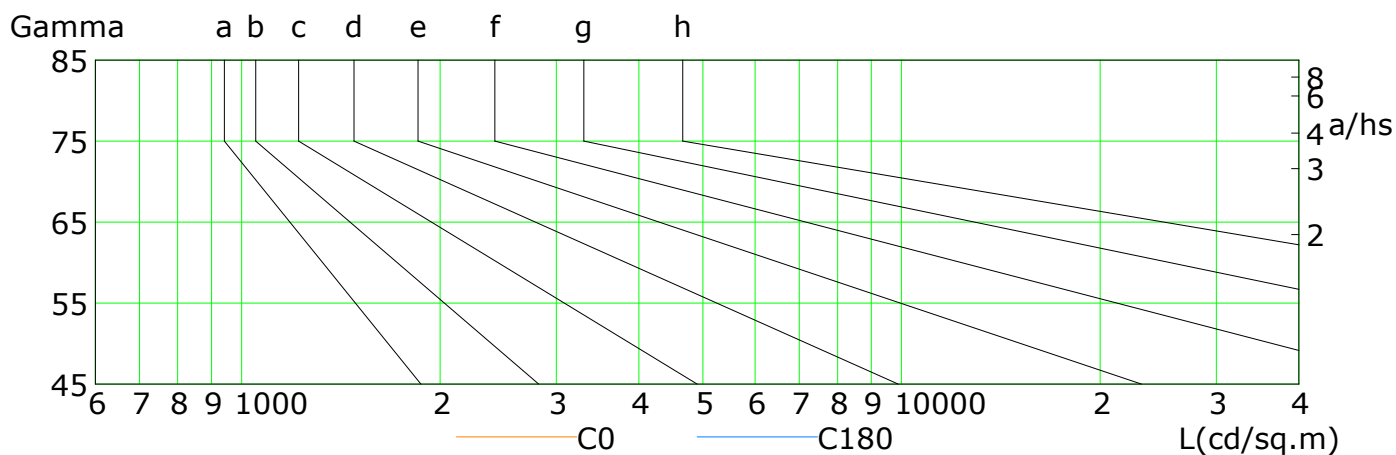
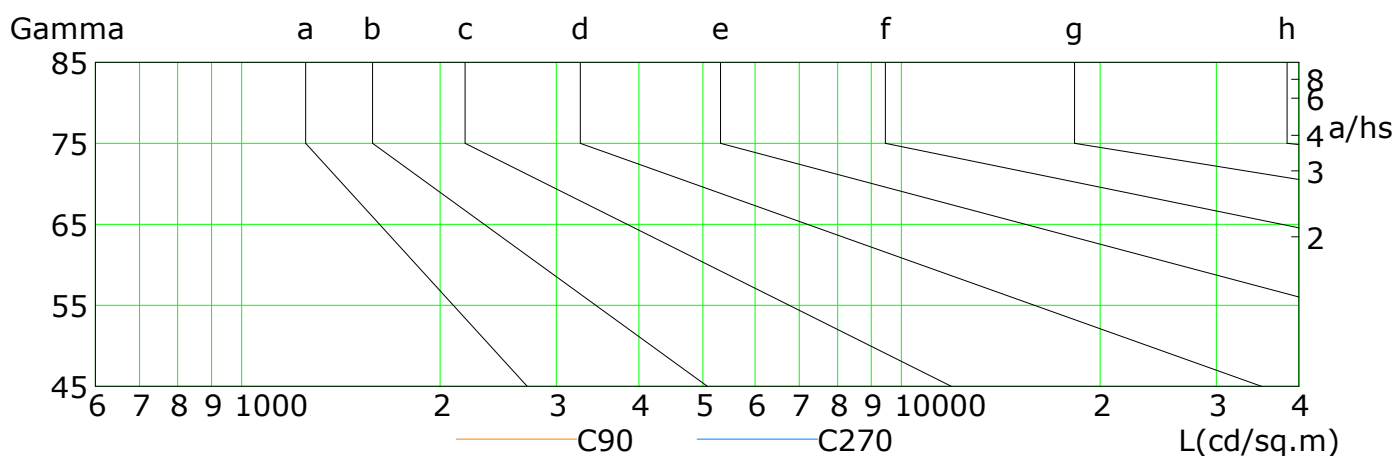
C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-2000
Distance: 7.970 m
Humidity:
Inspector:

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

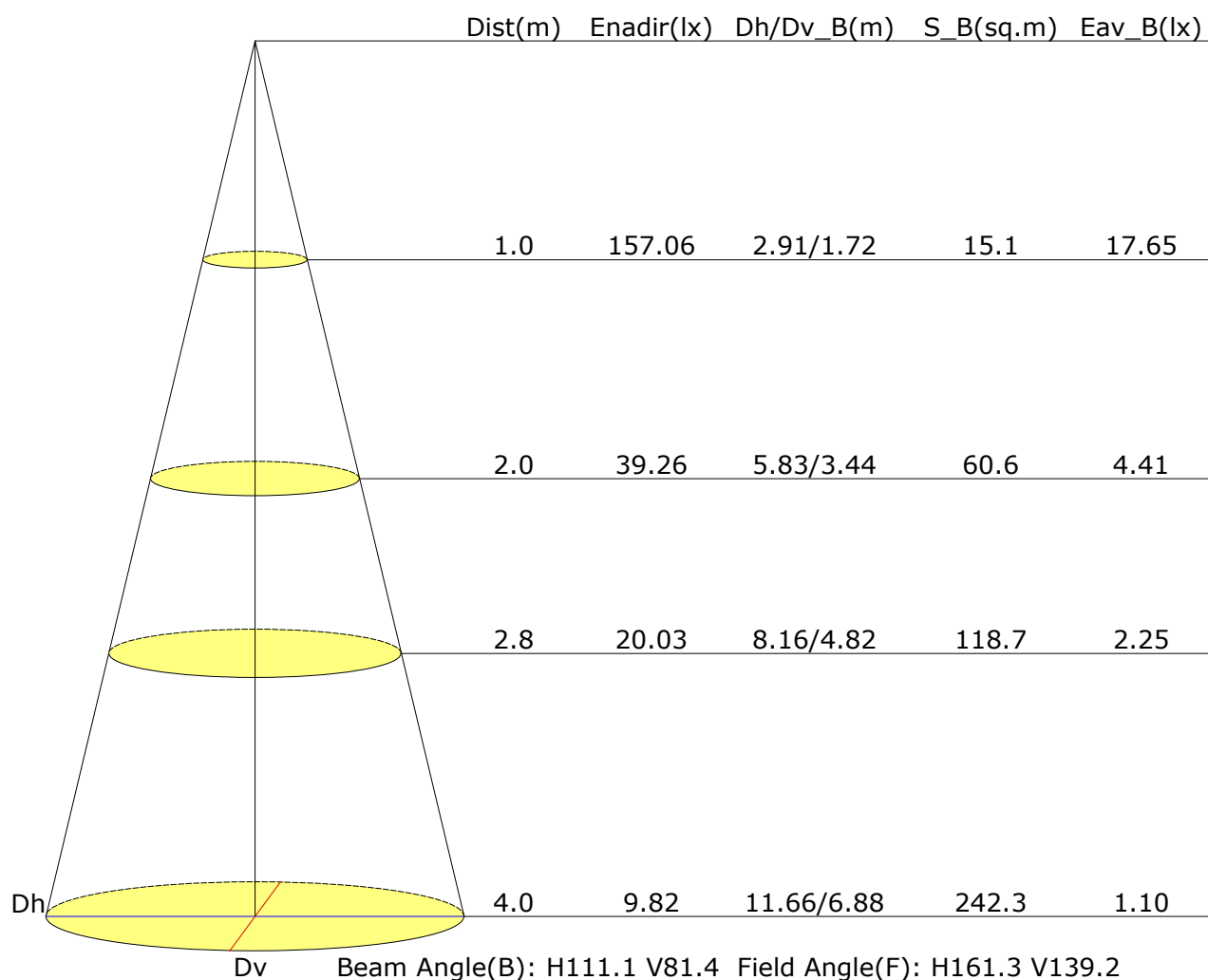


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	103	92	80	68	55	42	29	17	5
C90	230	220	208	195	175	140	97	58	27
C180	103	91	80	68	55	43	30	18	7
C270	35	29	23	18	14	10	7	4	2

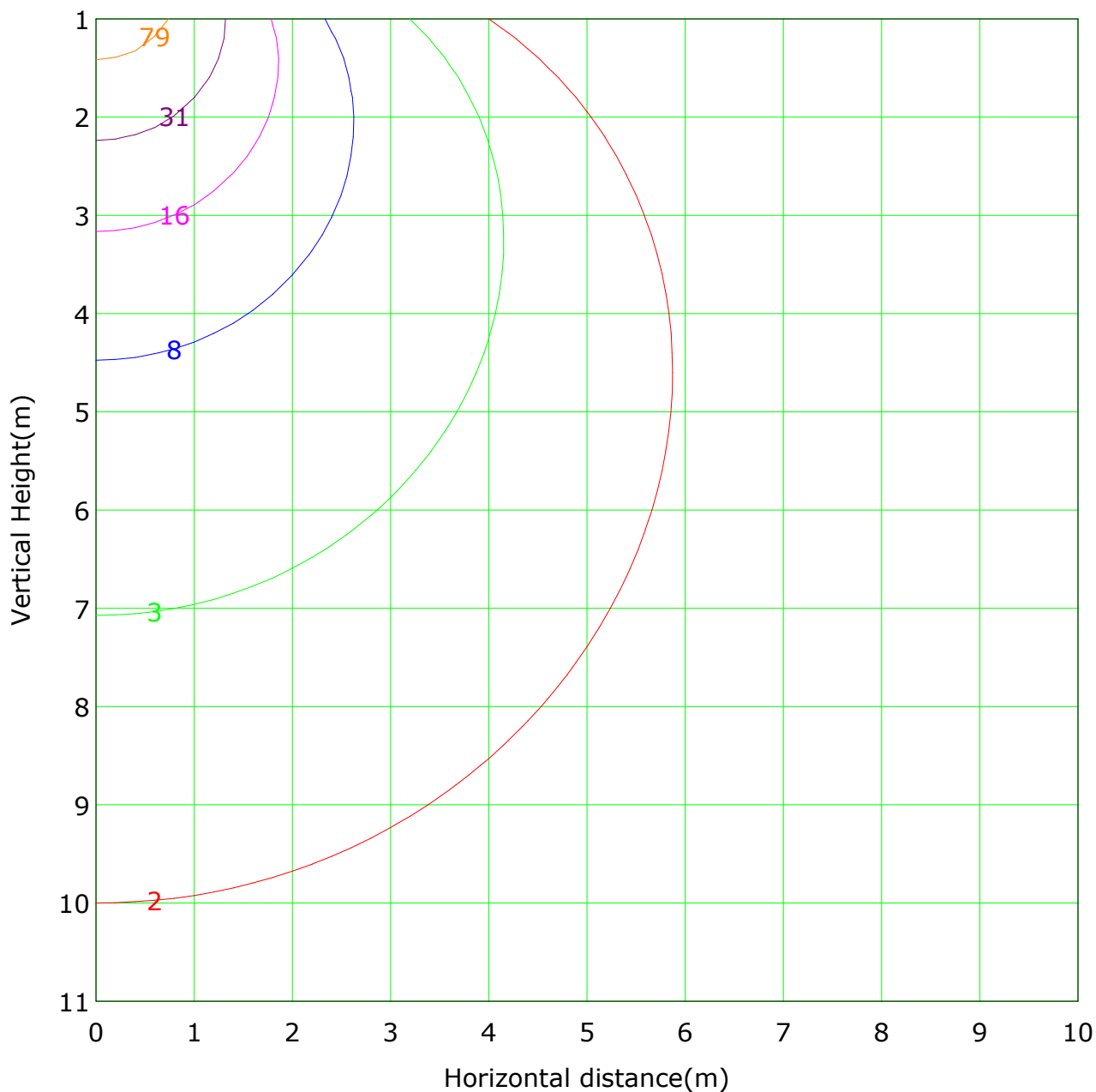
C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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: 157.1 lx

— (1%): 1.6 lx	— (2%): 3.1 lx
— (5%): 7.9 lx	— (10%): 15.7 lx
— (20%): 31.4 lx	— (50%): 78.5 lx
— (100%): 157.1 lx	

Report No.:

Test Time: 01/08/2019 15:50

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-RE10-02 + LLD-02-FS

Lamp Description: F52-400-1208C2-W5

Number of Lamps: 1

Lumens per Lamp: 1000 lm

Voltage: 24.0 V

Current: 0.379 A

Power: 9.08 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 503.4 lm

Downward Ratio: 50.15%

Total Rated Lamp Lumens: 1000.0 lm

Efficiency: 50.34%

Upward Ratio: 0.19%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 165.0, 140.0, 144.8, 145.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.5, 81.3, 89.7, 90.9

Luminaire Efficacy Rating (LER): 55.49

Central Intensity: 145.89 cd

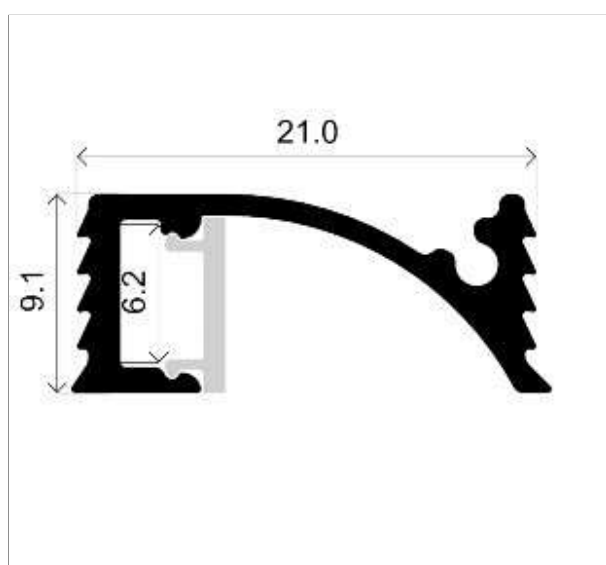
Max. Intensity: 224.67 cd

Pos of Max. Intensity: H270 V31

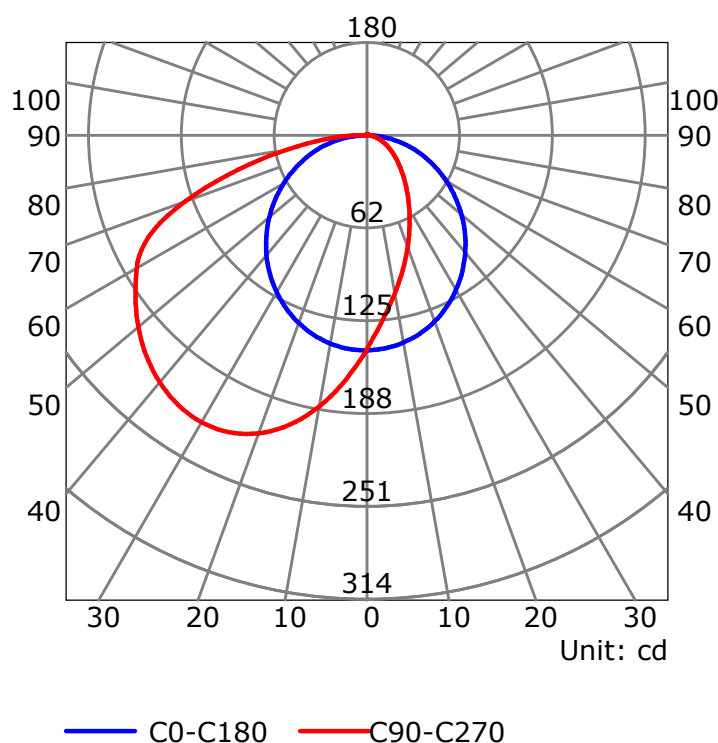
S/MH(C0/C180): 1.24

S/MH(C90/C270): 1.43

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

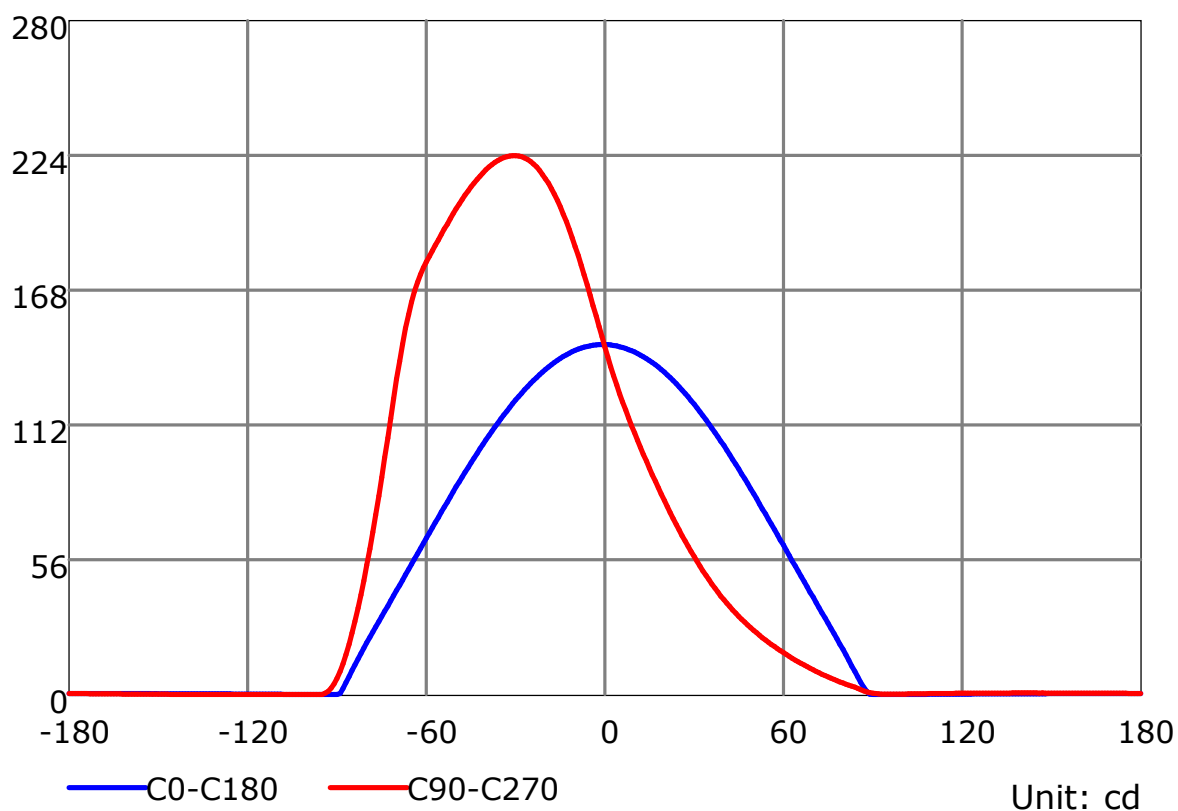
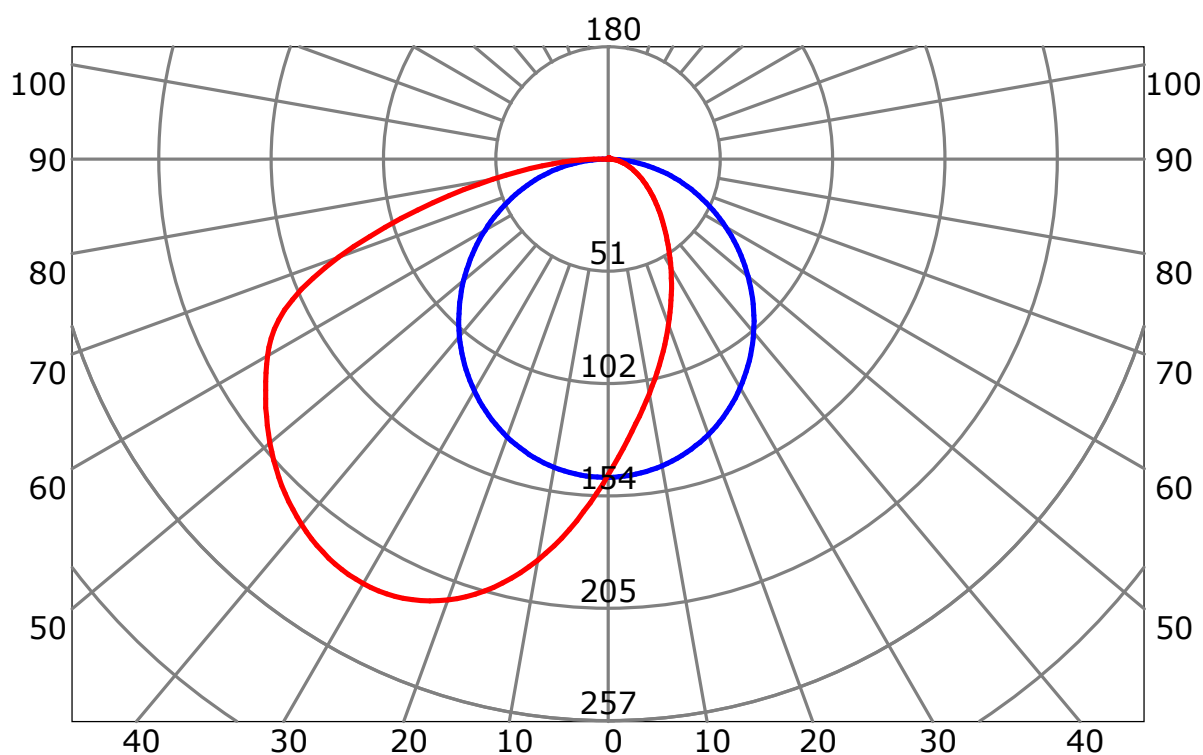
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Luminous Intensity Distribution Curve

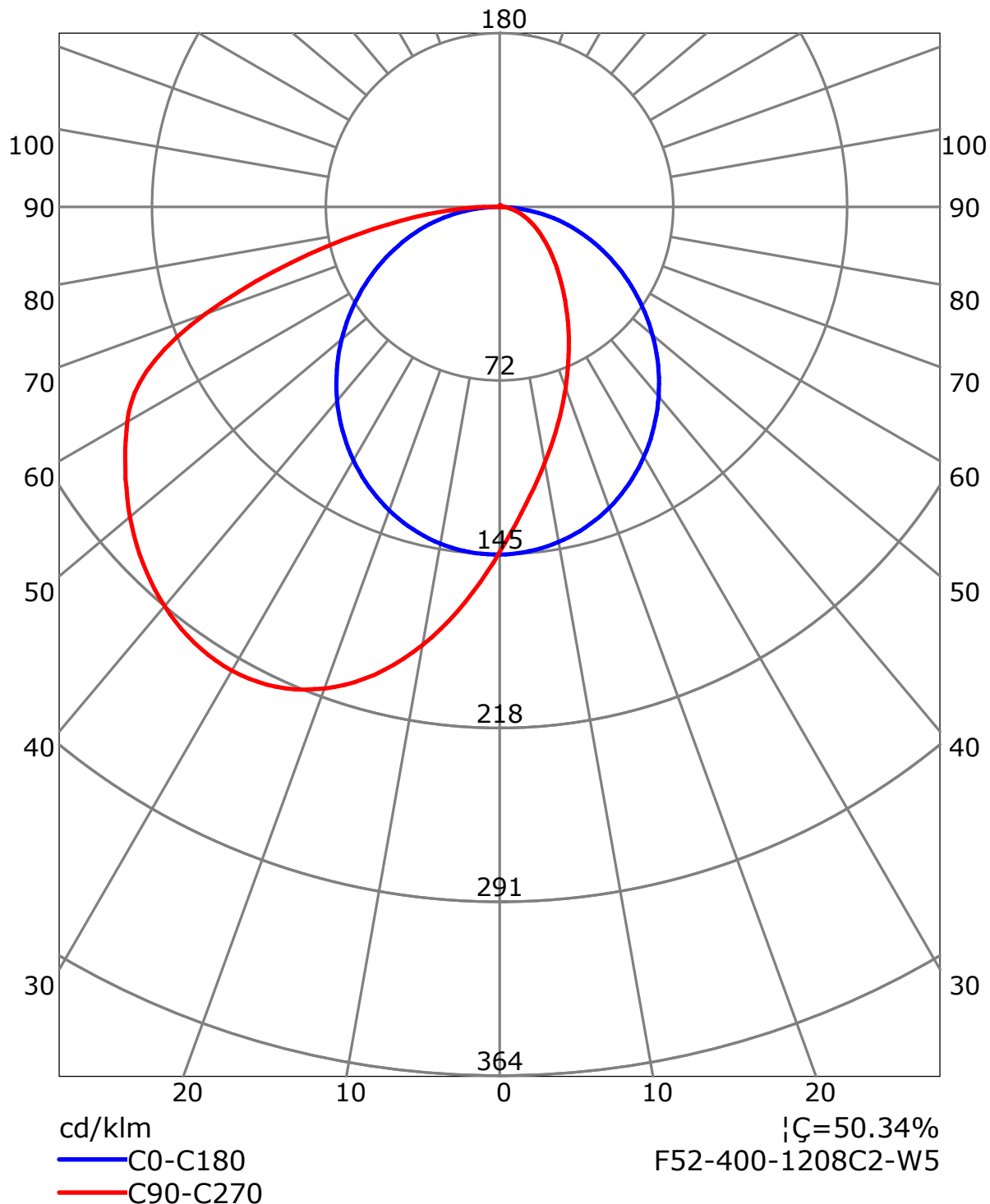


Unit: cd

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:

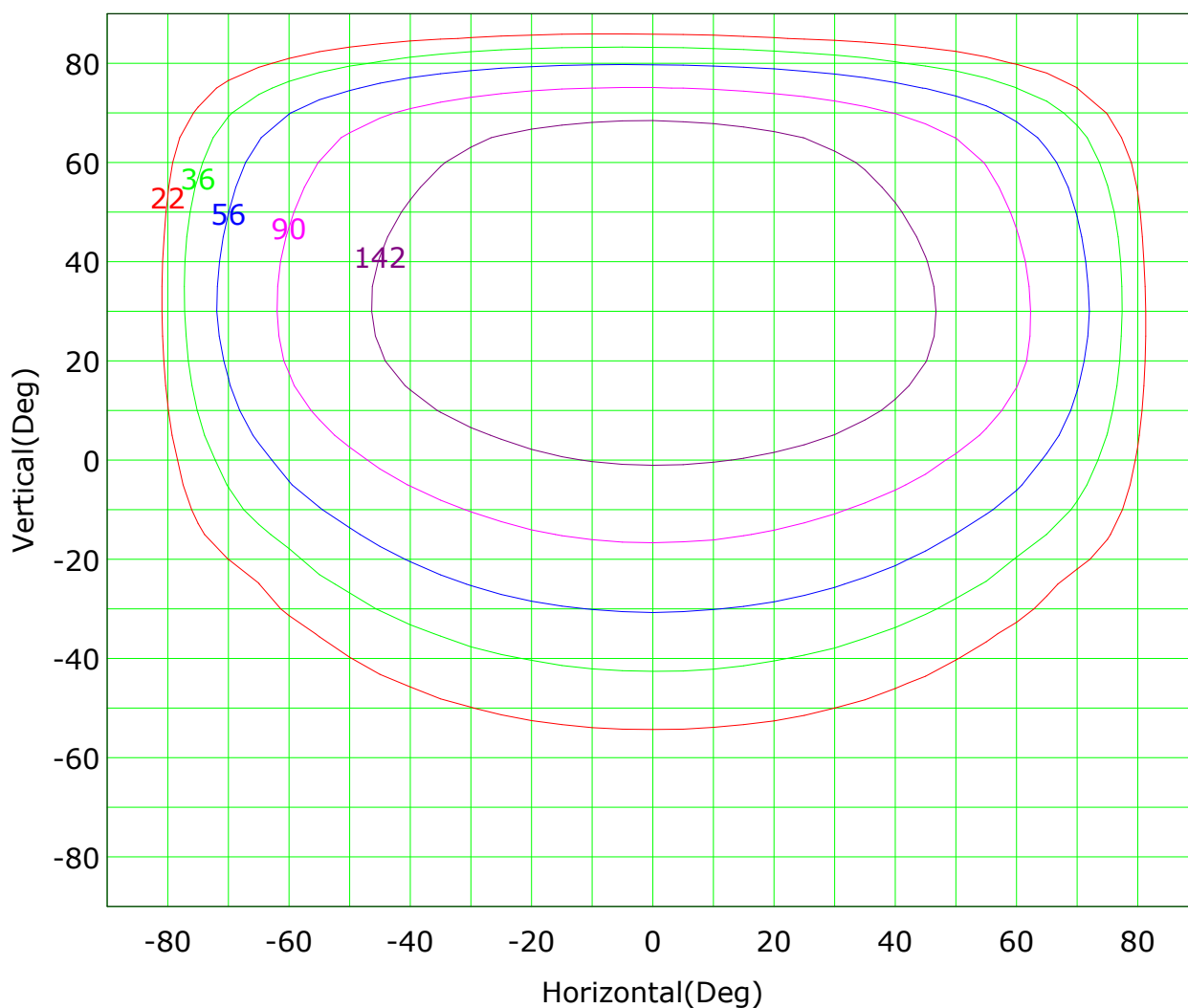
Luminous Intensity Distribution Curve(cd/klm)



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)



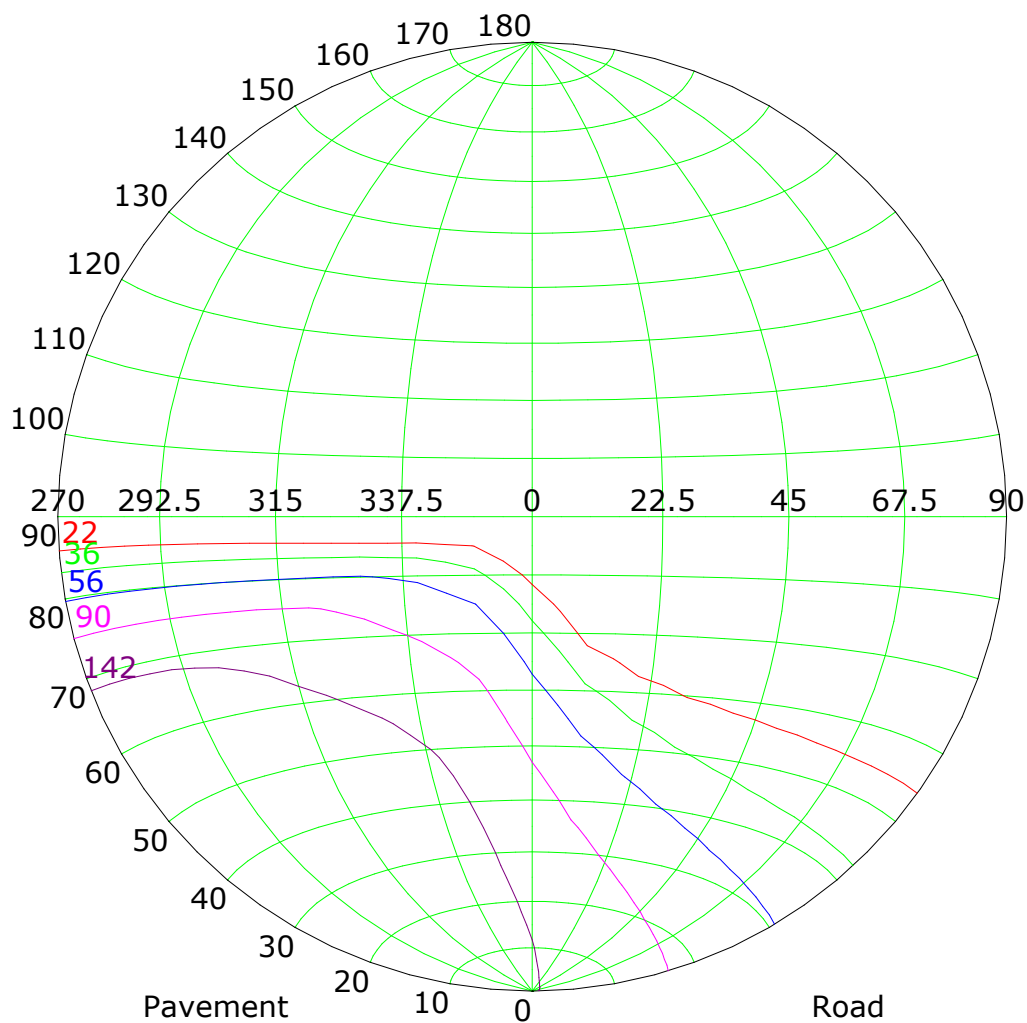
Imax (100%): 225 cd

(10%):	22 cd	(16%):	36 cd
(25%):	56 cd	(40%):	90 cd
(63%):	142 cd	(100%):	225 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:

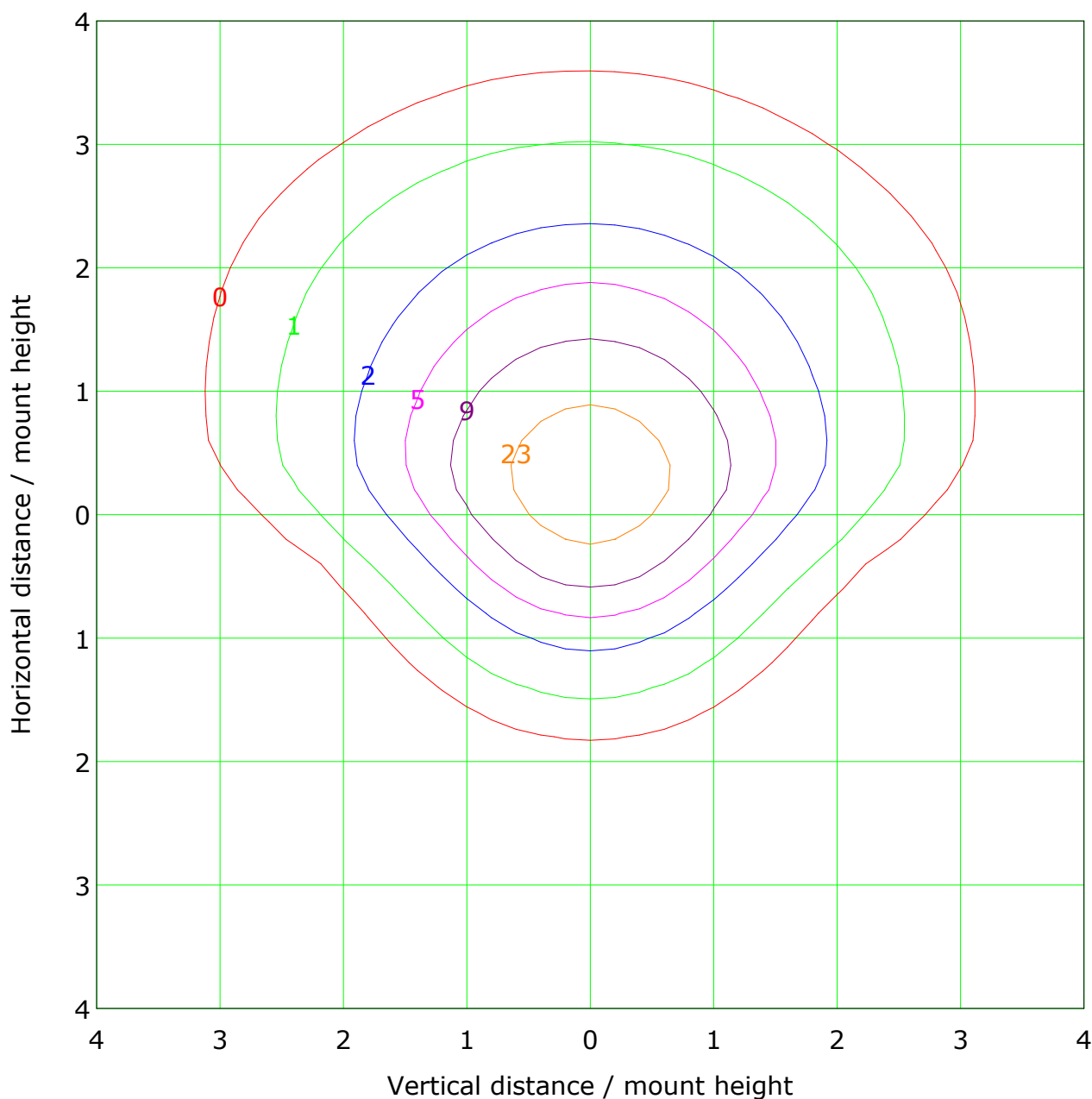
Isocandela (sphere)



Imax (100%): 225 cd

(10%):	22 cd	(16%):	36 cd
(25%):	56 cd	(40%):	90 cd
(63%):	142 cd	(100%):	225 cd

IsoLux Plot



Mounting Height: 2.0m		Max Lux(100%): 45.8 lx	
— (1%):	0.5 lx	— (2%):	0.9 lx
— (5%):	2.3 lx	— (10%):	4.6 lx
— (20%):	9.2 lx	— (50%):	22.9 lx
— (100%):	45.8 lx		

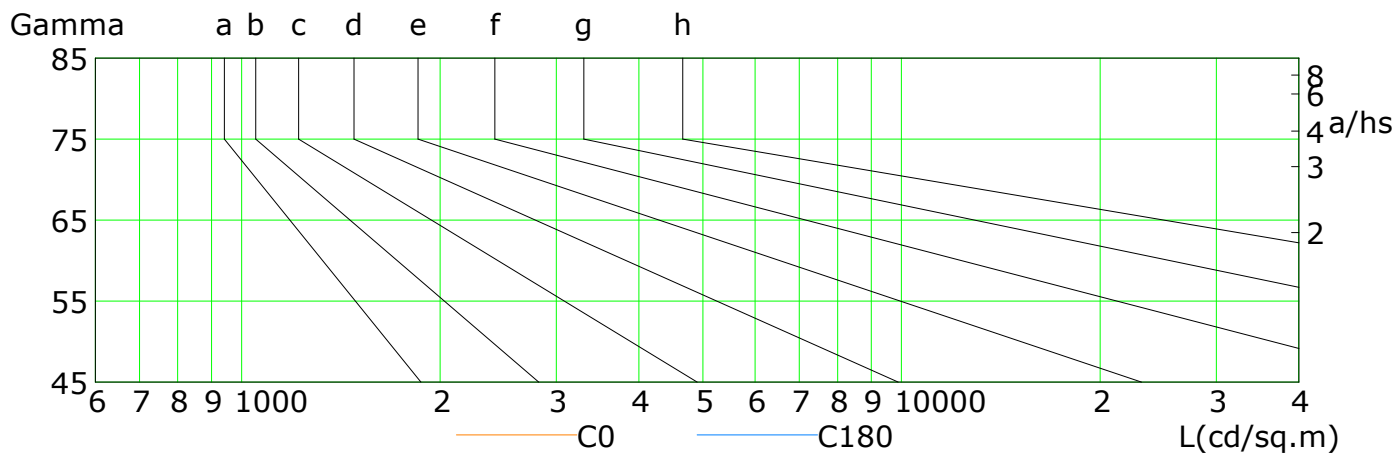
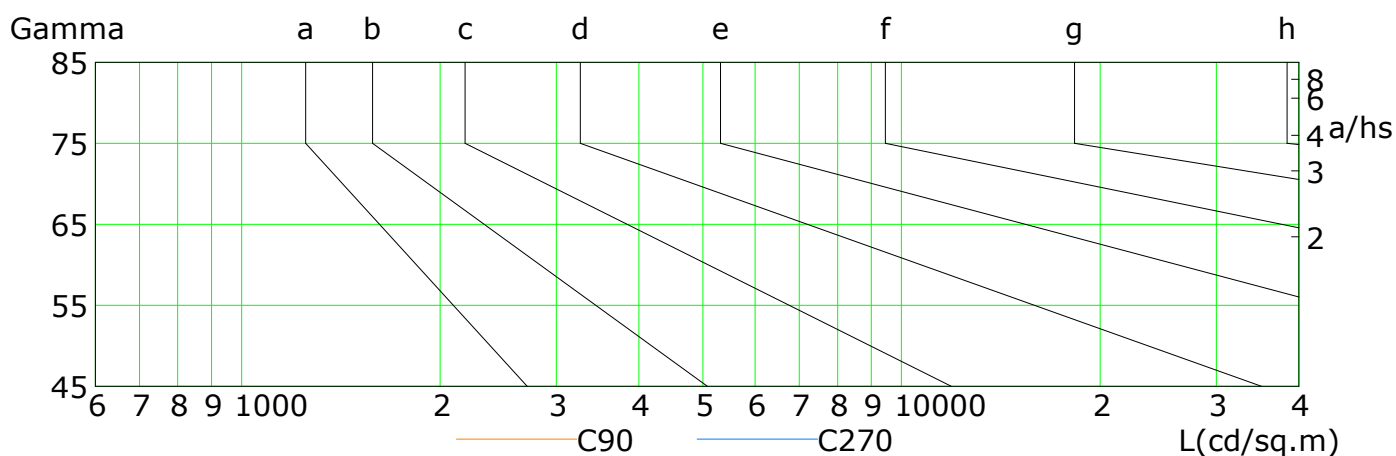
C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

Gamma Plane (°):0.0-180.0:1.0
Test Device: GPM-2000
Distance: 7.970 m
Humidity:
Inspector:

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

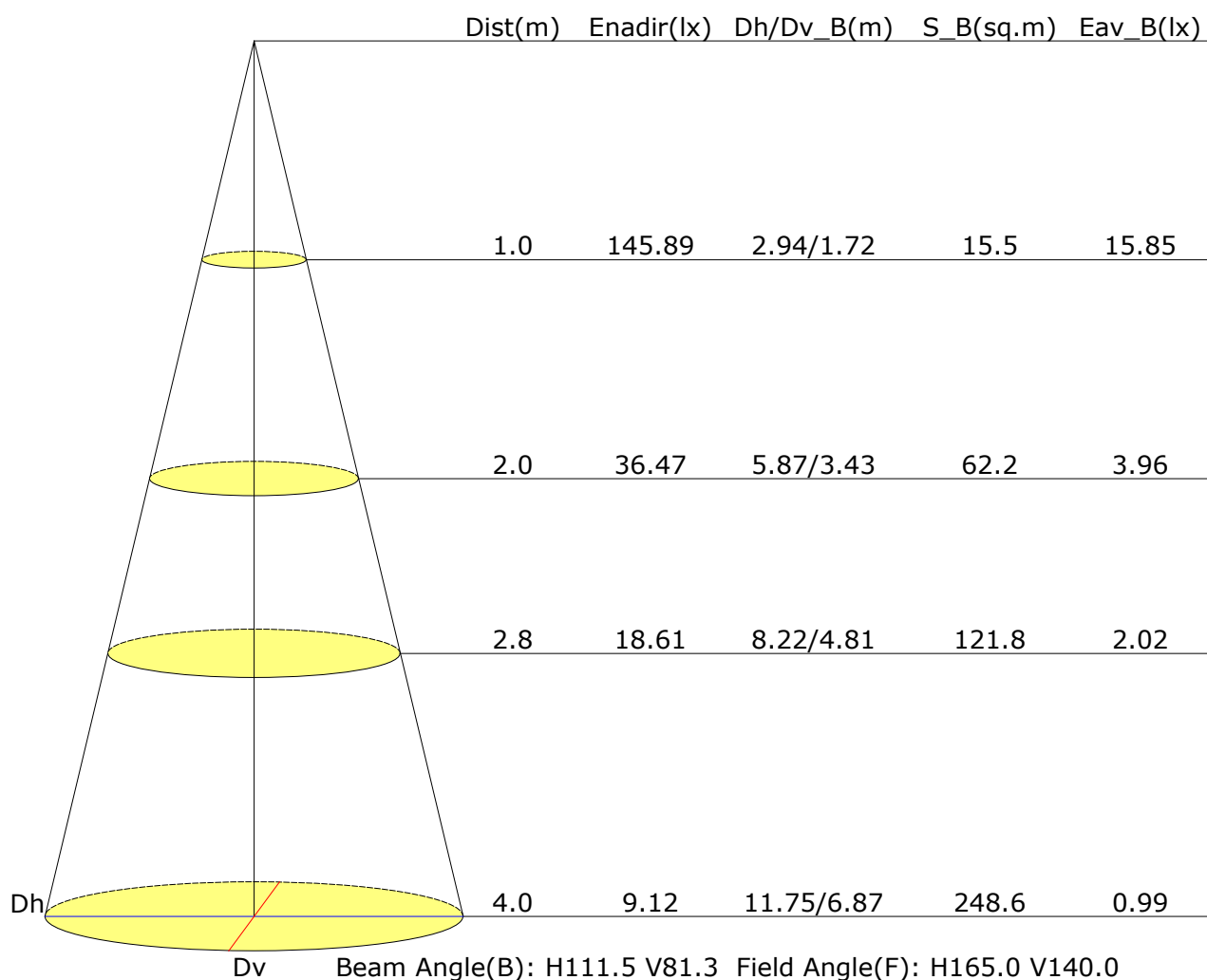


L(cd/sq.m)	G45	G50	G55	G60	G65	G70	G75	G80	G85
C0	94	84	73	62	51	41	30	19	7
C90	33	27	22	18	14	10	7	5	3
C180	97	87	76	65	54	43	33	22	10
C270	212	202	192	180	164	131	90	54	26

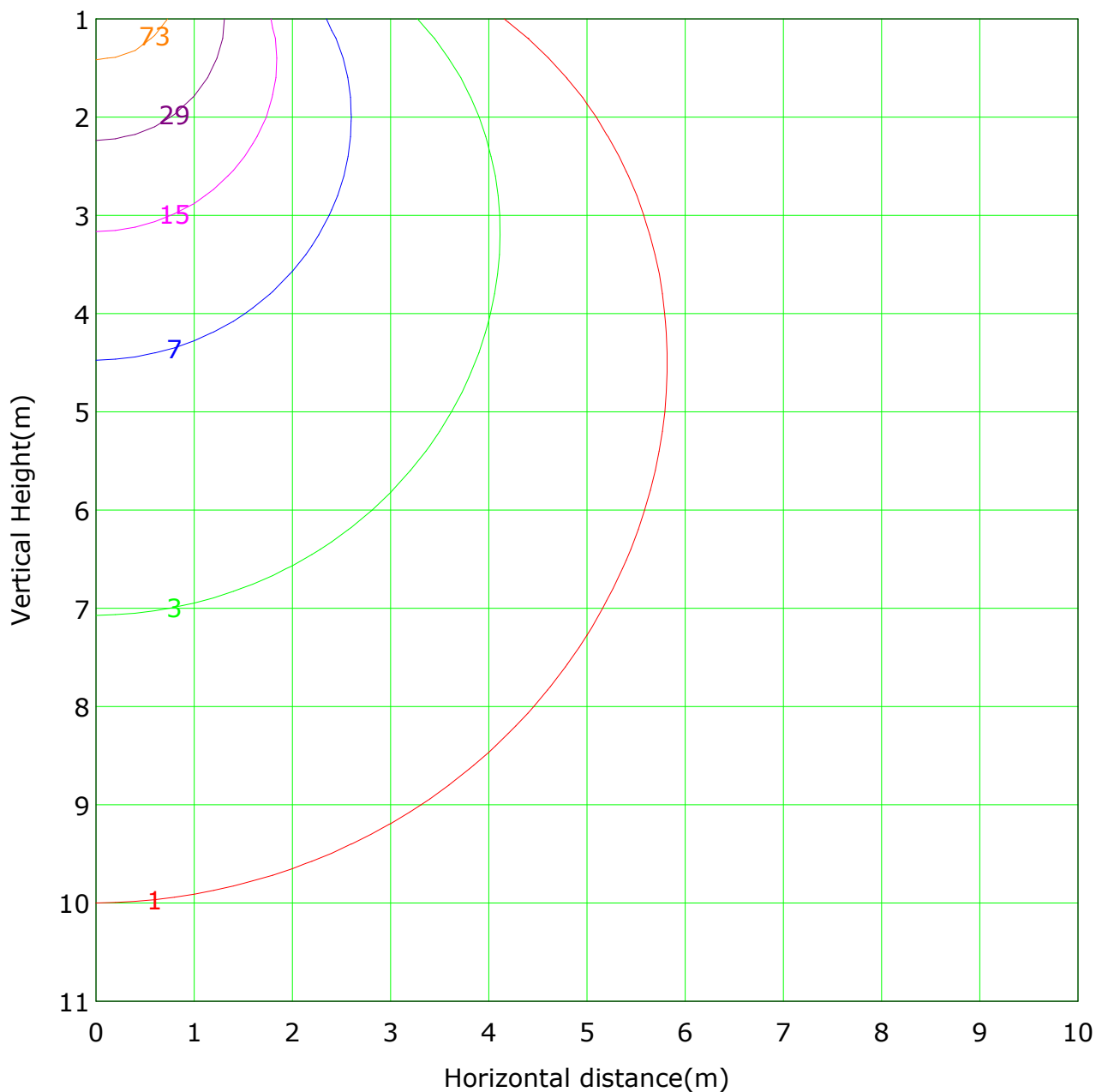
C Plane (°):0.0-360.0: 10.0
Test Lab:
Test Type: TYPE C
Temperature:
Operator:

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: 145.9 lx

(1%): 1.5 lx	(2%): 2.9 lx
(5%): 7.3 lx	(10%): 14.6 lx
(20%): 29.2 lx	(50%): 72.9 lx
(100%): 145.9 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: