

Report No.:

Test Time: 03/09/2018 16:00

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-RE05-01 + LLD-01-FM

Lamp Description: F52-400-60822

Number of Lamps: 1

Lumens per Lamp: 1579 lm

Voltage: 24.0 V

Current: 0.592 A

Power: 14.19 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 1018.3 lm

Downward Ratio: 64.03%

Total Rated Lamp Lumens: 1579.0 lm

Efficiency: 64.49%

Upward Ratio: 0.46%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 160.0, 162.8, 161.7, 161.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 112.3, 113.0, 112.8, 112.8

Luminaire Efficacy Rating (LER): 71.81

Central Intensity: 356.09 cd

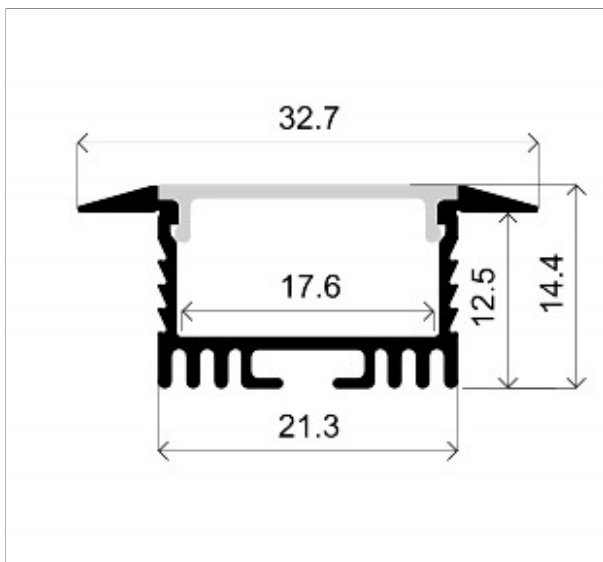
Max. Intensity: 356.09 cd

Pos of Max. Intensity: H0 V0

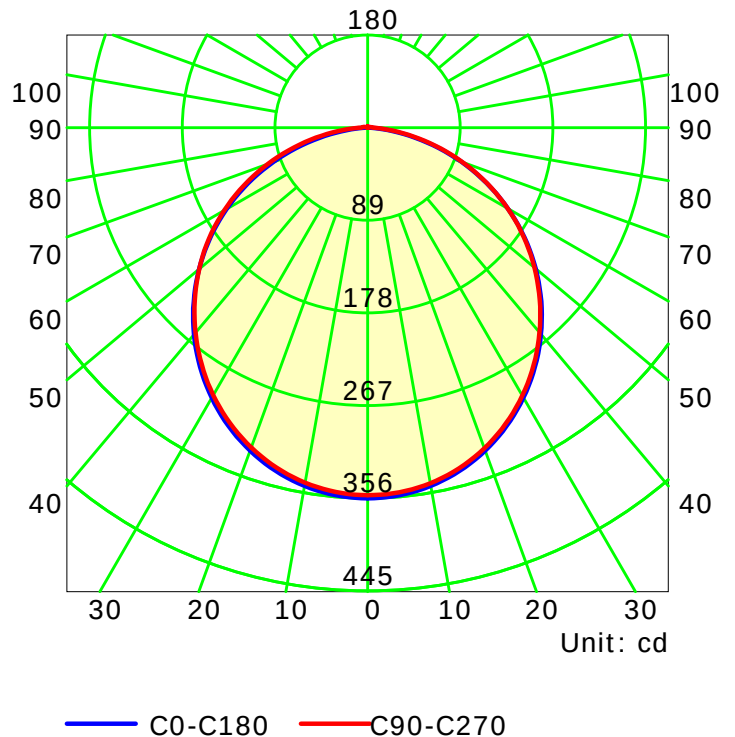
S/MH(C0/C180): 1.25

S/MH(C90/C270): 1.25

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

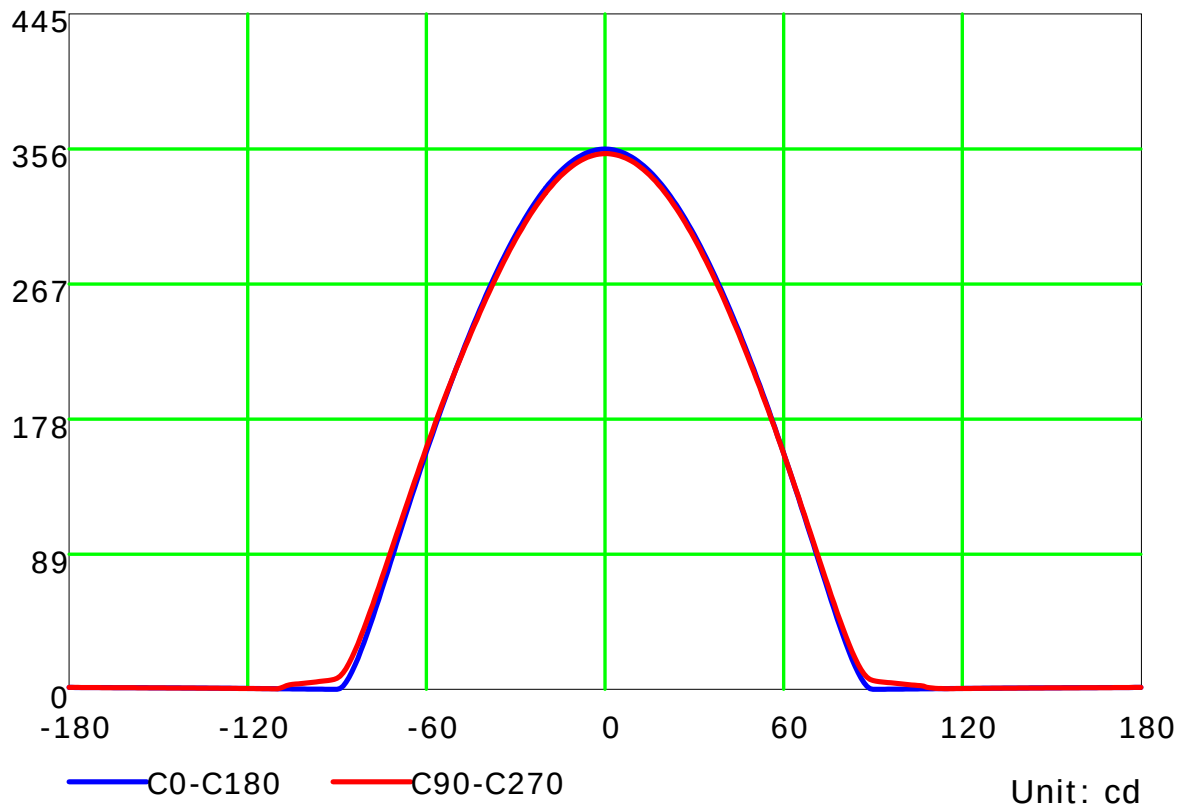
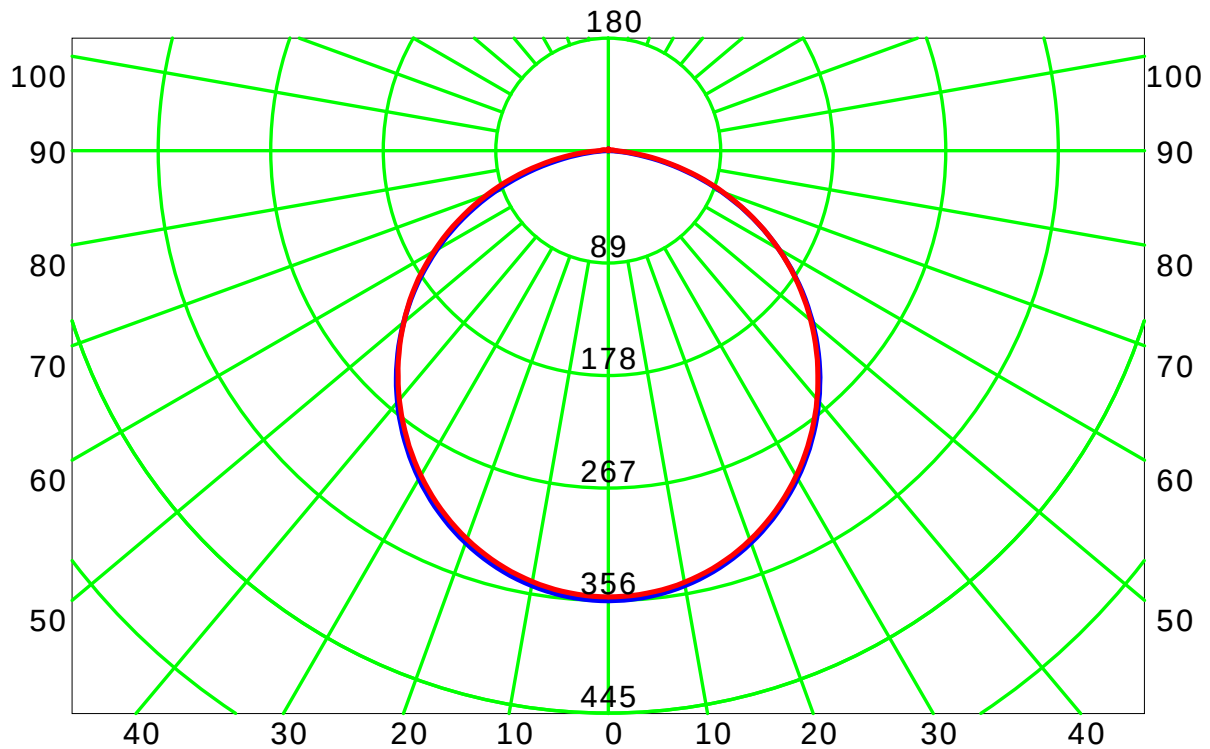
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

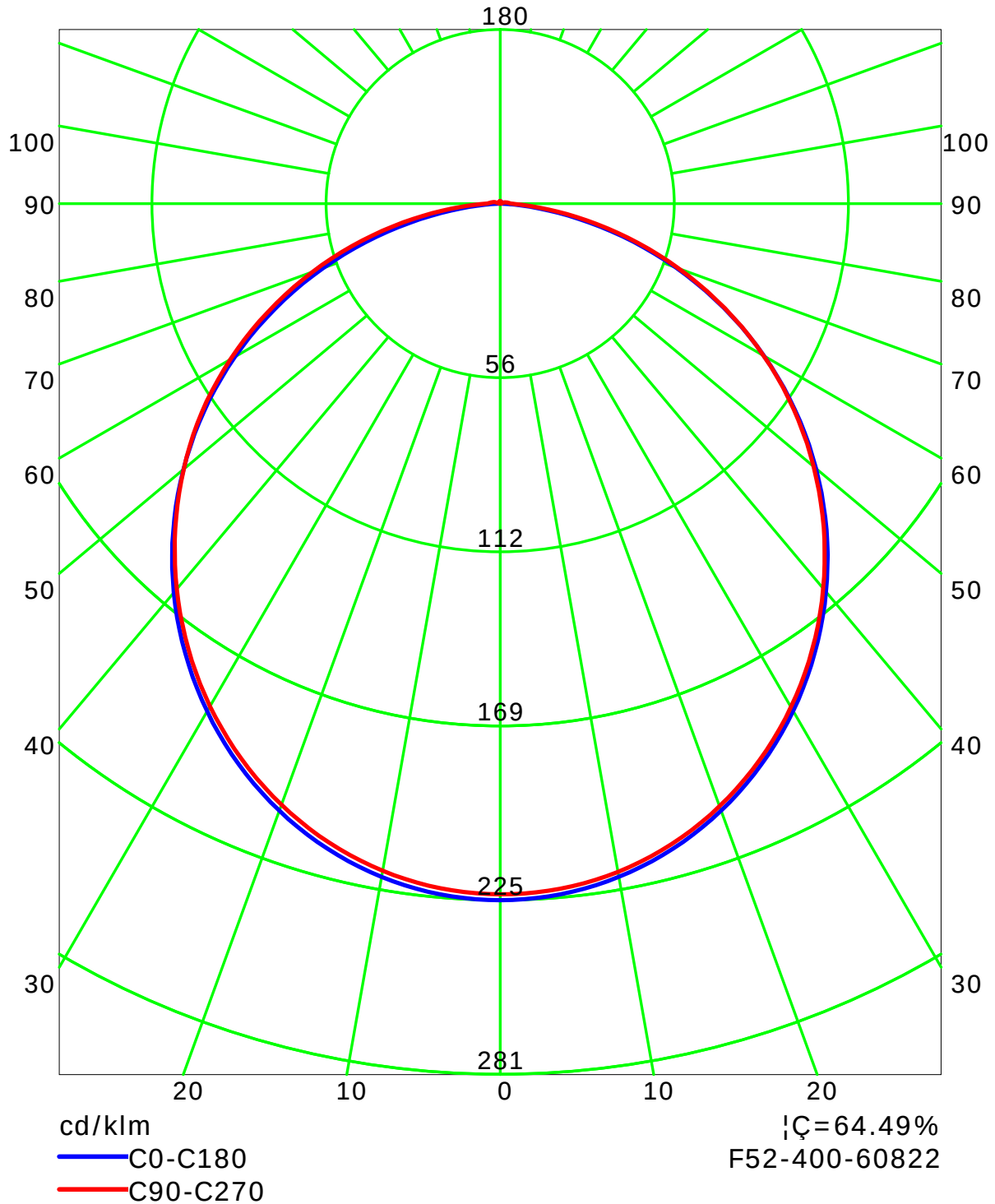
Luminous Intensity Distribution Curve



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:

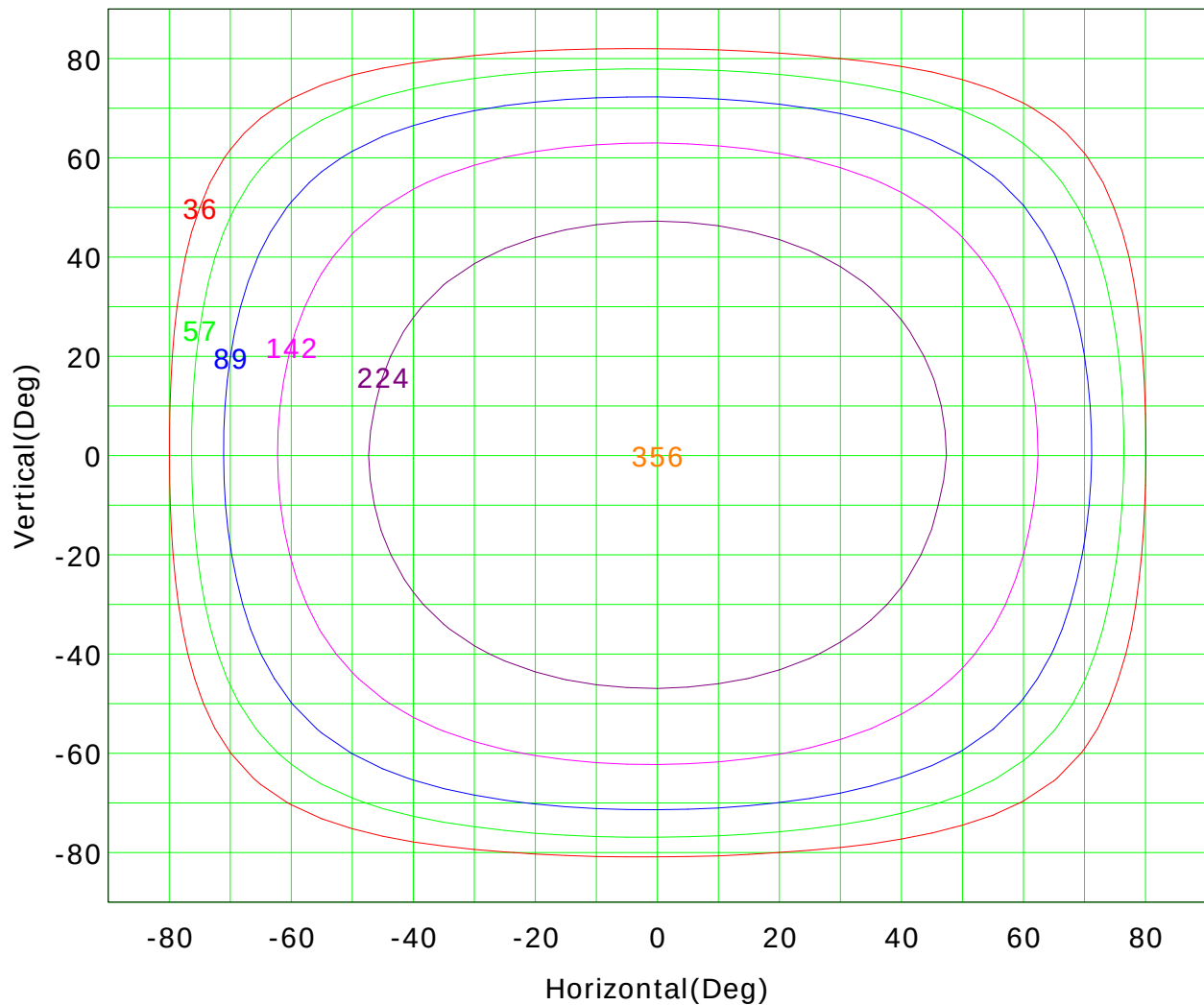
Luminous Intensity Distribution Curve(cd / klm)



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%): 356 cd

(10%):	36 cd	(16%):	57 cd
(25%):	89 cd	(40%):	142 cd
(63%):	224 cd	(100%):	356 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

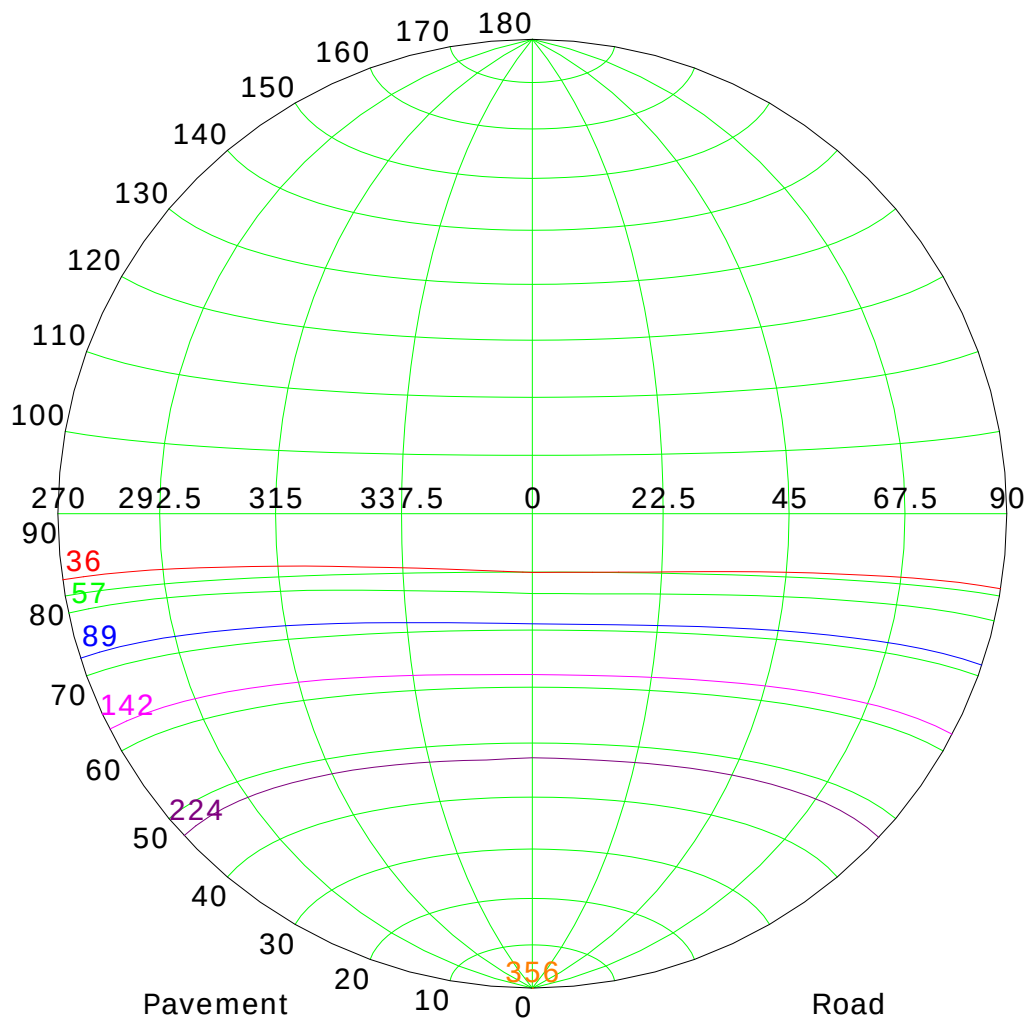
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 356 cd

(10%):	36 cd	(16%):	57 cd
(25%):	89 cd	(40%):	142 cd
(63%):	224 cd	(100%):	356 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

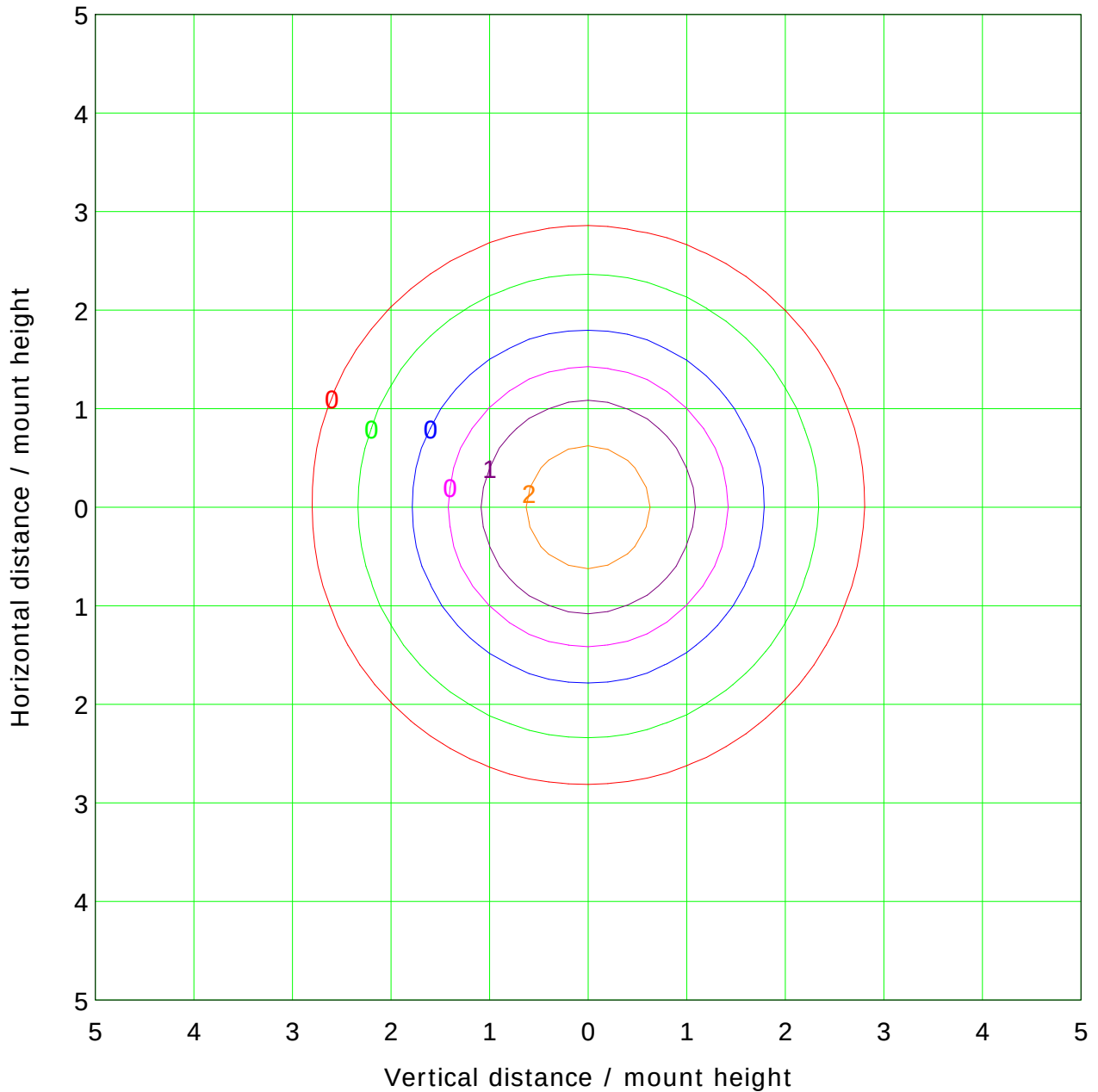
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 3.6 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%): 3.6 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

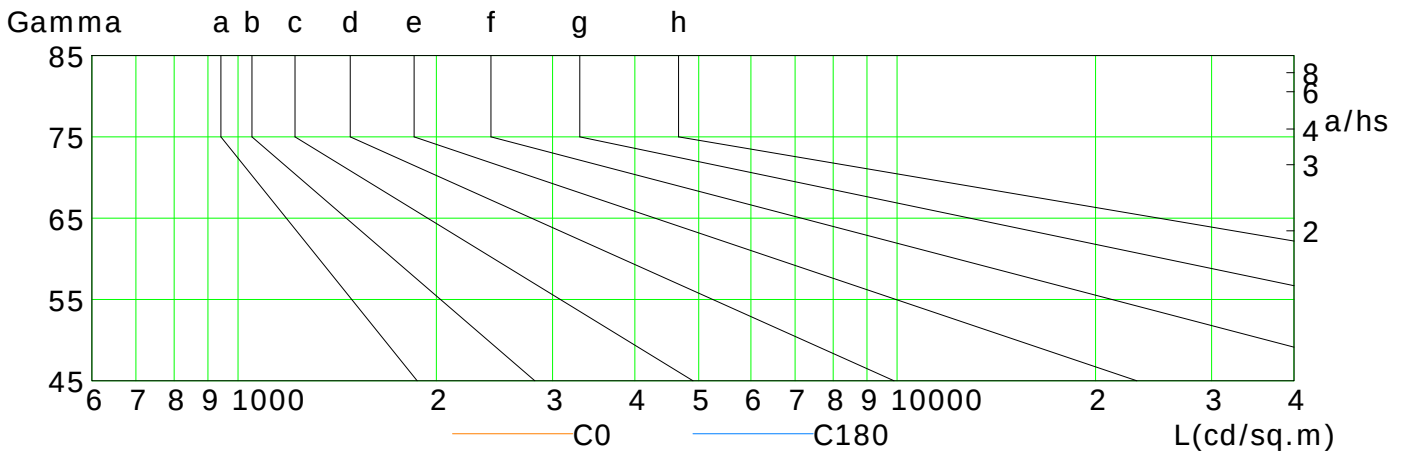
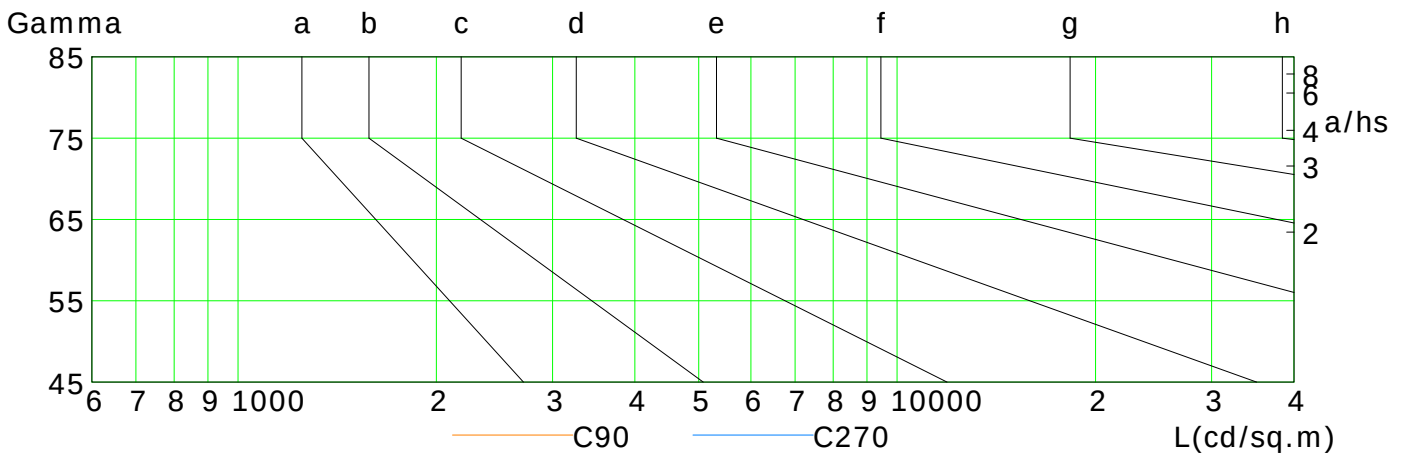
Humidity:

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	236	211	184	156	126	96	65	35	11
C90	234	209	183	155	127	97	68	40	17
C180	236	211	185	157	127	96	66	36	12
C270	235	211	186	159	131	102	73	45	21

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

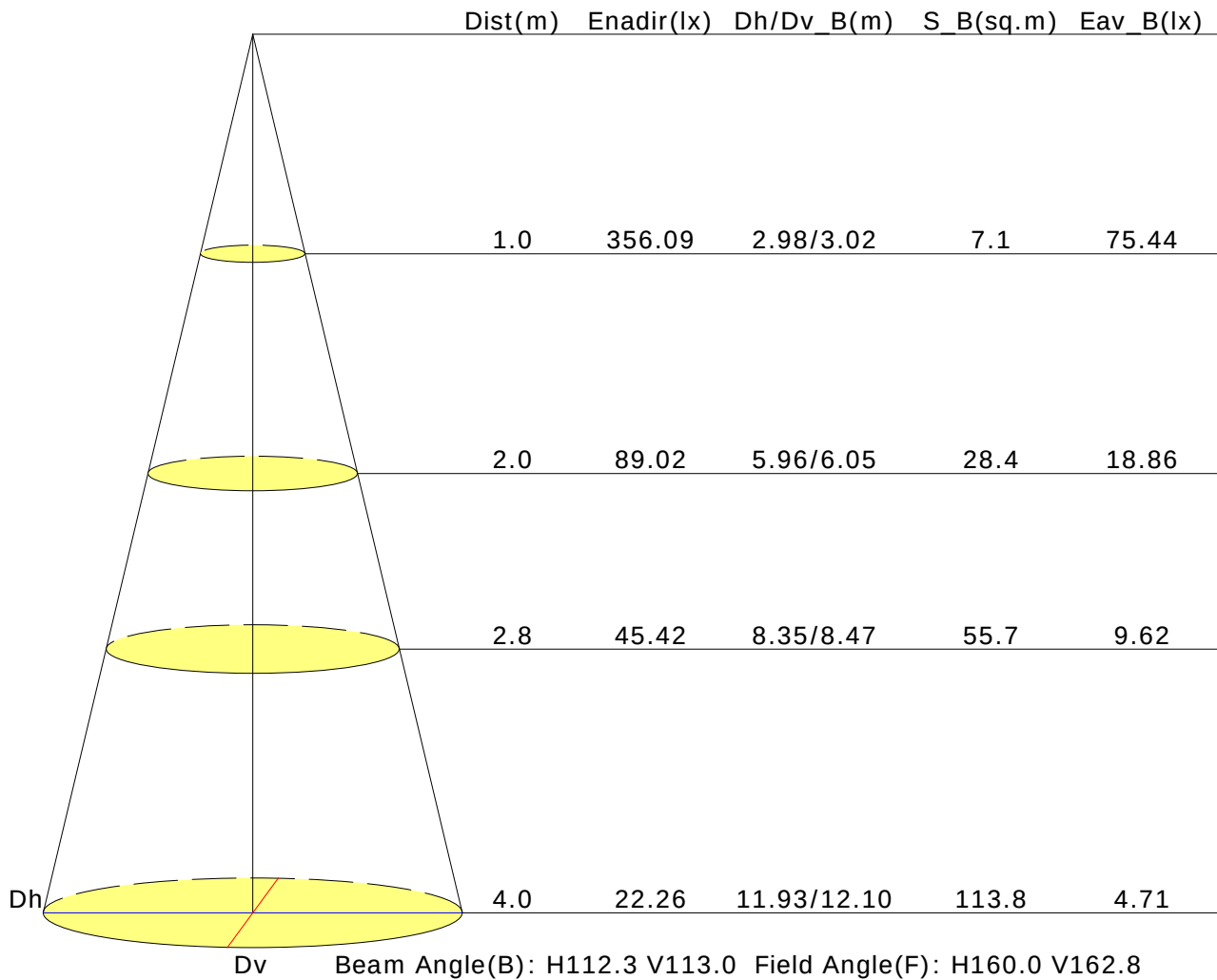
Test Device: GPM-2000

Distance: 7.970 m

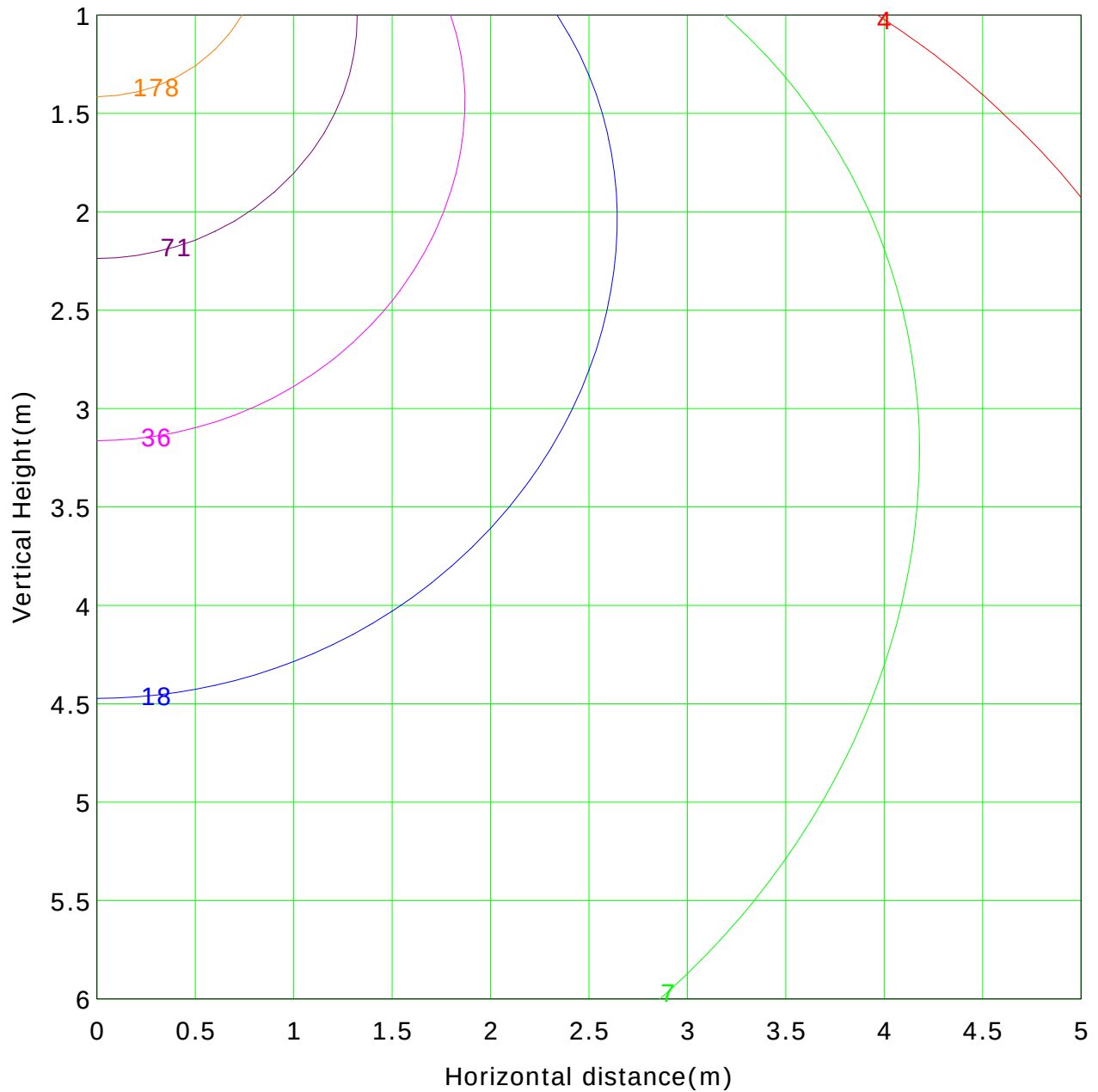
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 6.0m	Max Lux: 356.1 lx
(1%): 3.6 lx	(2%): 7.1 lx	
(5%): 17.8 lx	(10%): 35.6 lx	
(20%): 71.2 lx	(50%): 178.0 lx	
(100%): 356.1 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:

Report No.:

Test Time: 03/09/2018 17:02

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-RE05-01 + LLD-01-CM

Lamp Description: F52-400-60822

Number of Lamps: 1

Lumens per Lamp: 1579 lm

Voltage: 24.0 V

Current: 0.593 A

Power: 14.23 W

Power Factor: 1.000

Photometric Results

CIE Class: Semi-Direct

Measurement Flux: 1115.7 lm

Downward Ratio: 61.91%

Total Rated Lamp Lumens: 1579.0 lm

Efficiency: 70.66%

Upward Ratio: 8.75%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.3, 261.2, 230.9, 230.9

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.6, 148.1, 134.9, 134.8

Luminaire Efficacy Rating (LER): 78.46

Central Intensity: 265.71 cd

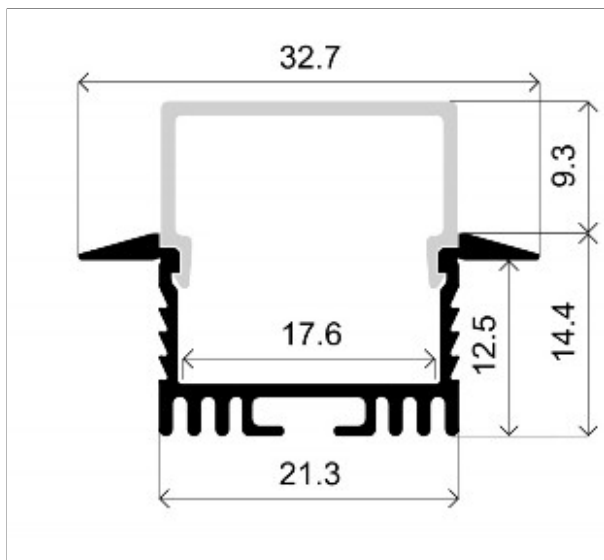
Max. Intensity: 268.33 cd

Pos of Max. Intensity: H270 V16

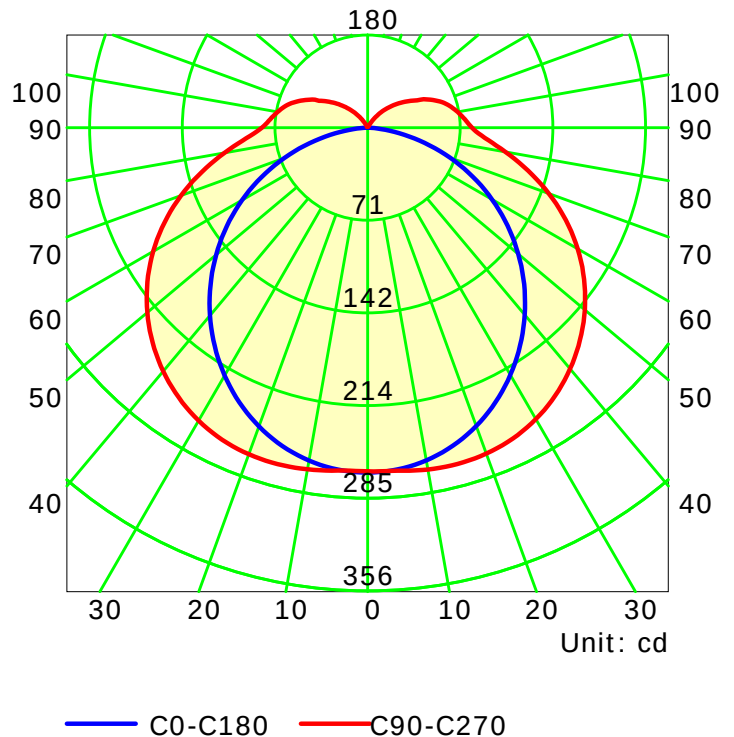
S/MH(C0/C180): 1.23

S/MH(C90/C270): 1.46

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

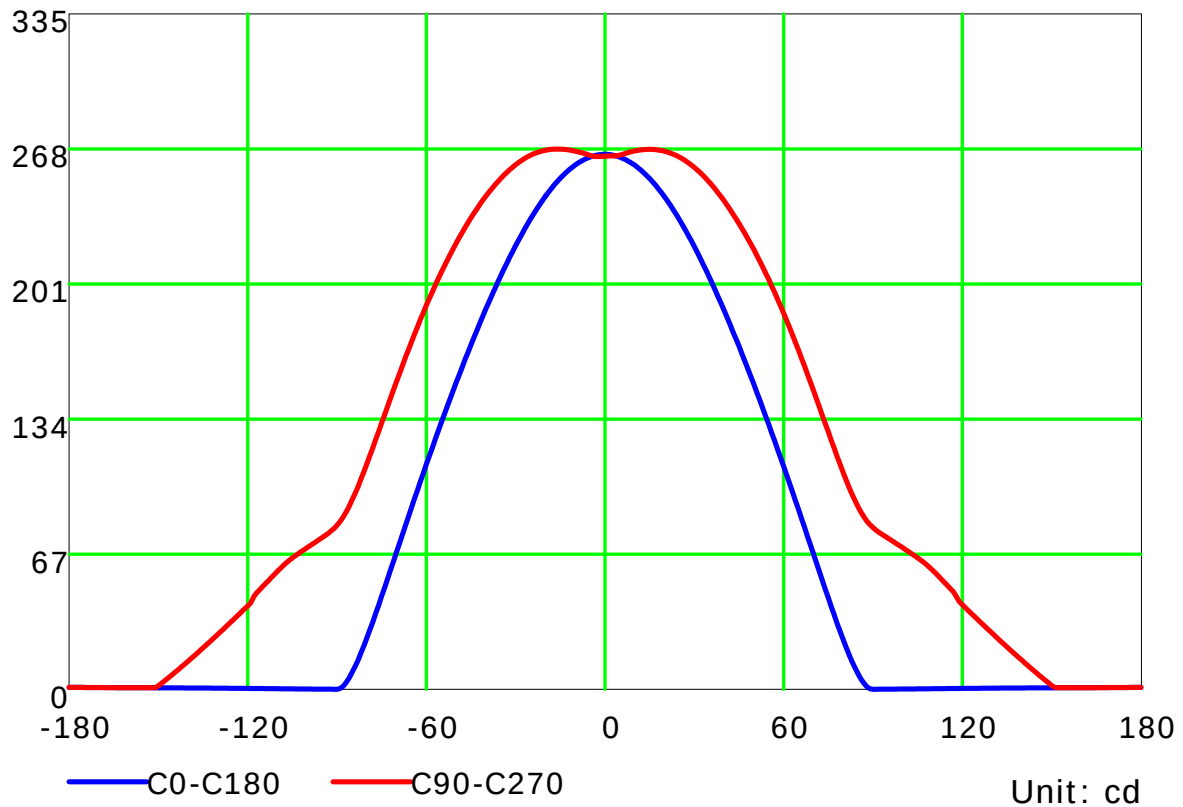
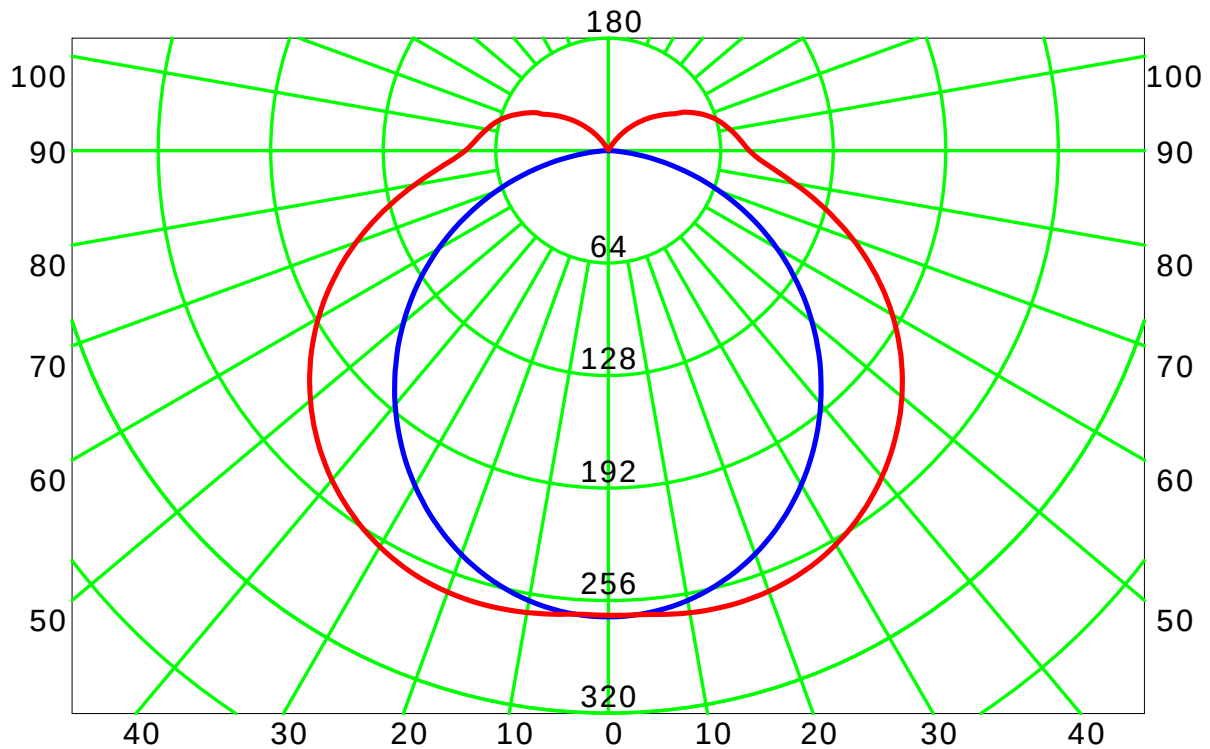
Test Device: GPM-2000

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

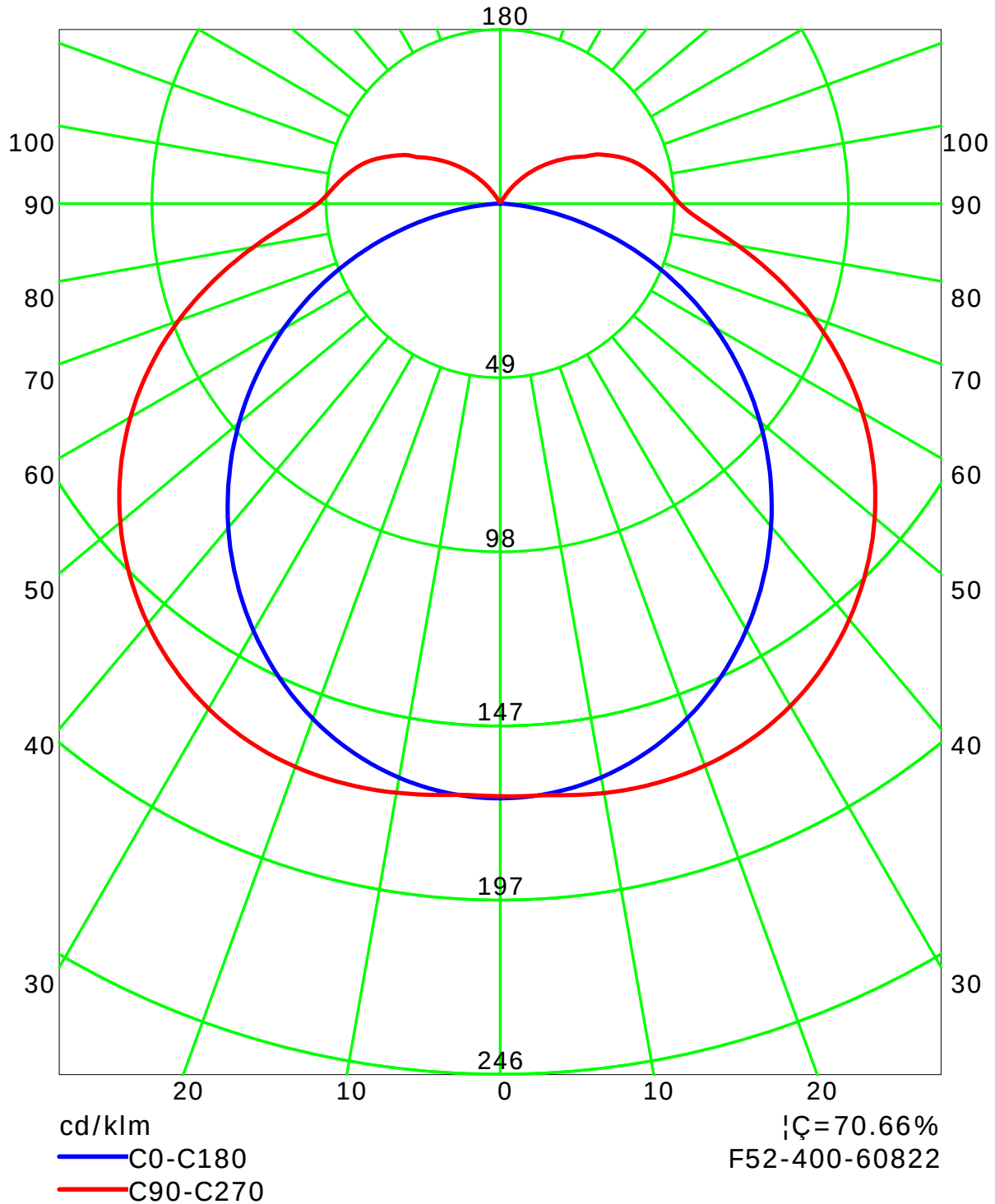
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

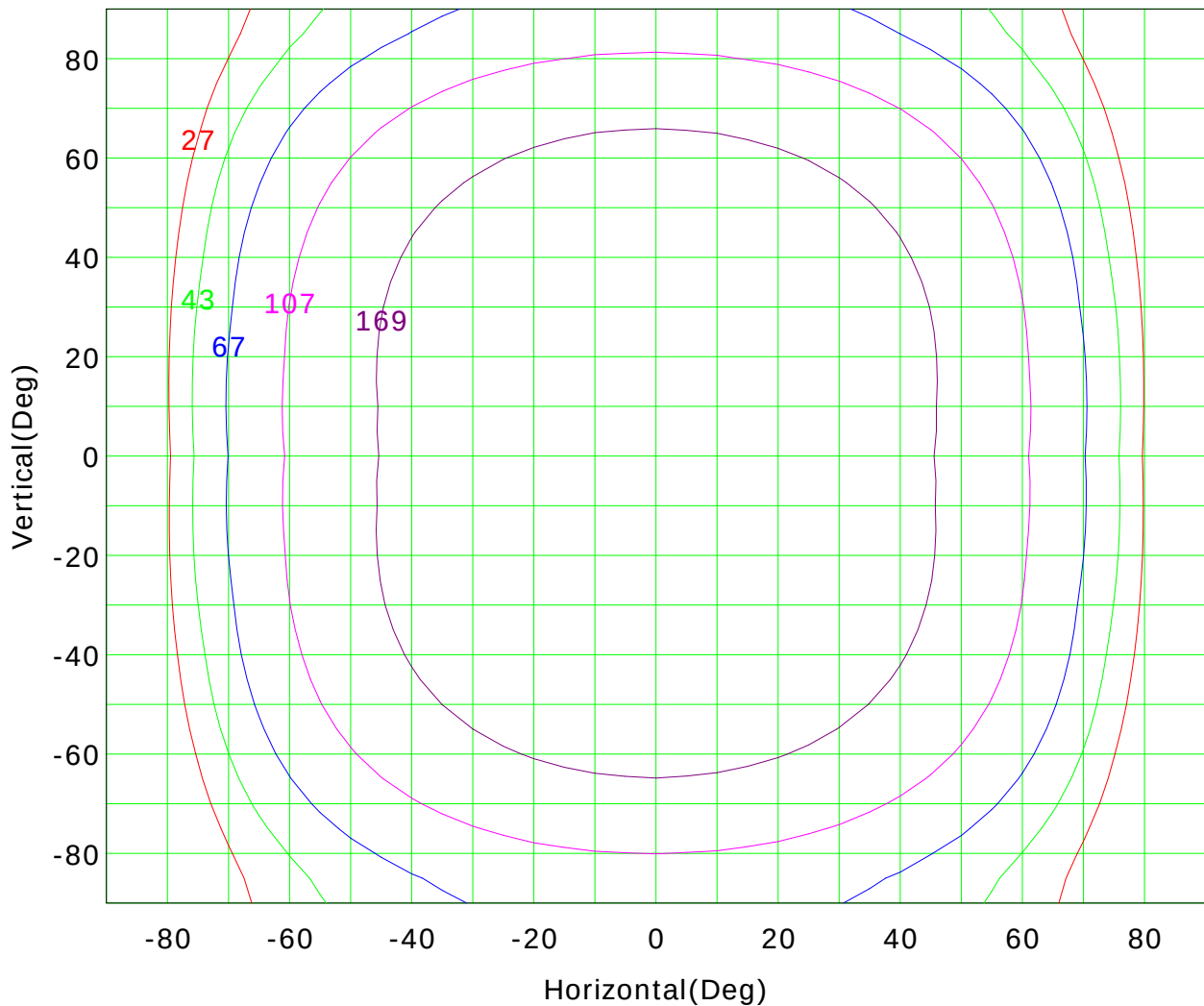
Luminous Intensity Distribution Curve(cd / klm)



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%): 268 cd

(10%):	27 cd	(16%):	43 cd
(25%):	67 cd	(40%):	107 cd
(63%):	169 cd	(100%):	268 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

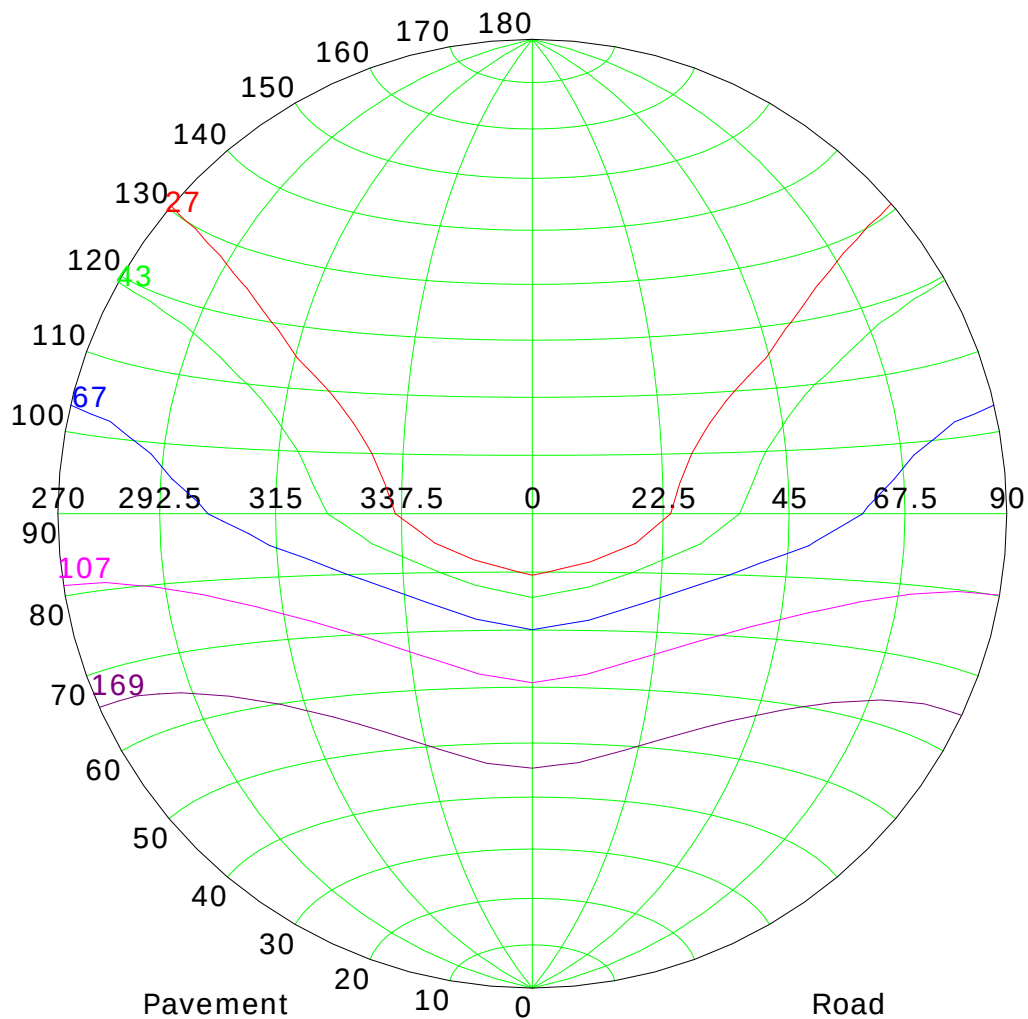
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 268 cd

(10%):	27 cd	(16%):	43 cd
(25%):	67 cd	(40%):	107 cd
(63%):	169 cd	(100%):	268 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

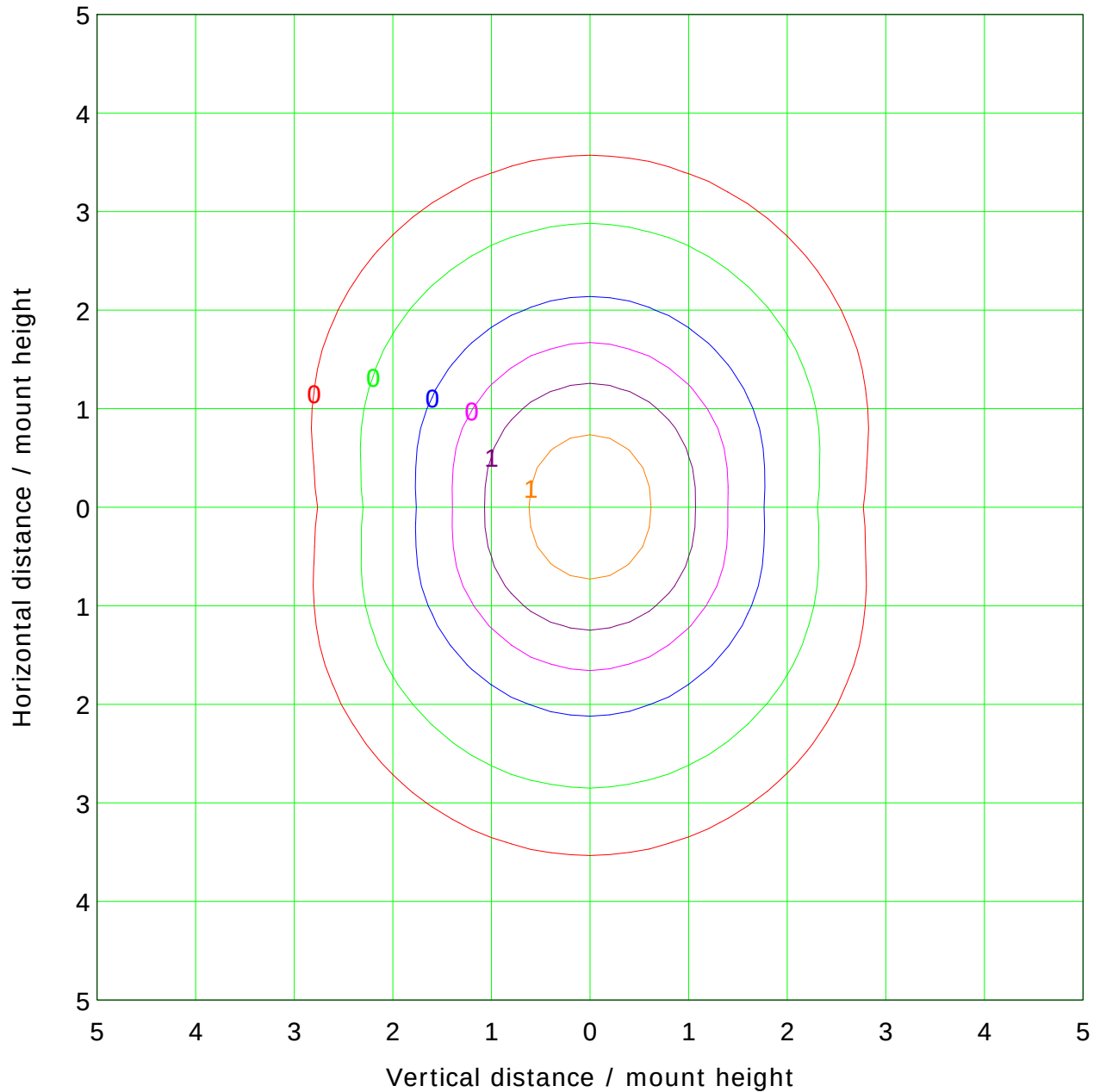
Test Device: GPM-2000

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

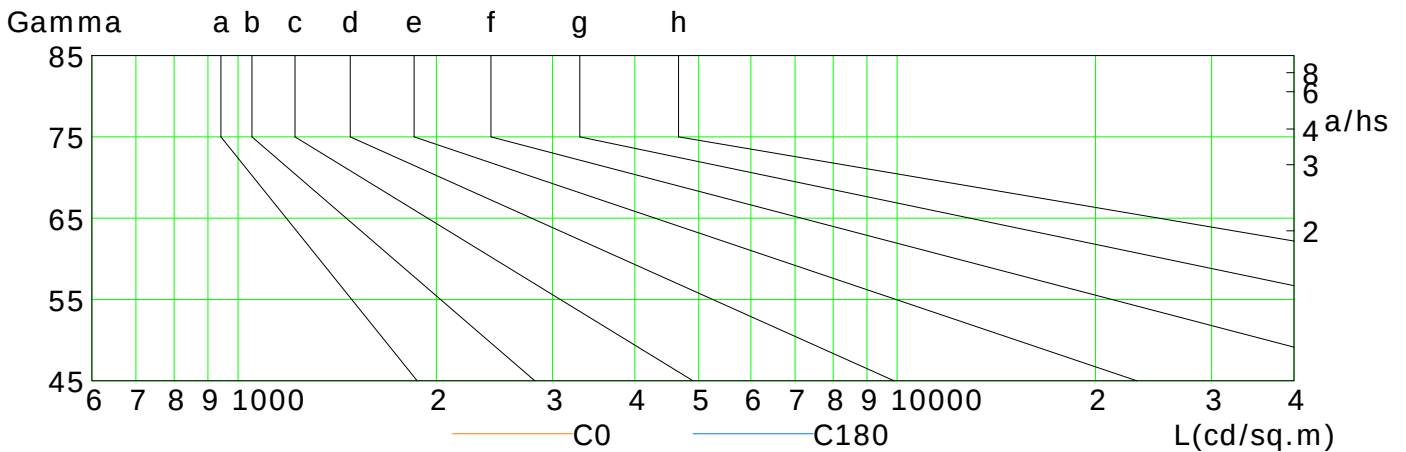
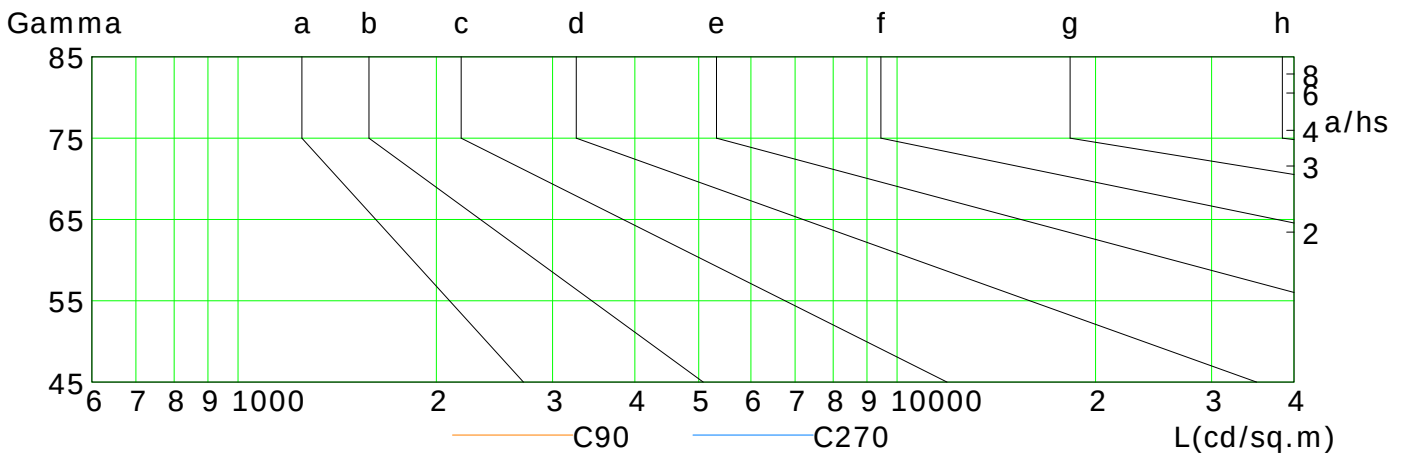
Humidity:

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	46	25	8
C90	231	218	204	187	168	148	128	108	91
C180	171	152	133	112	90	68	46	25	8
C270	234	222	207	191	173	153	132	112	94

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

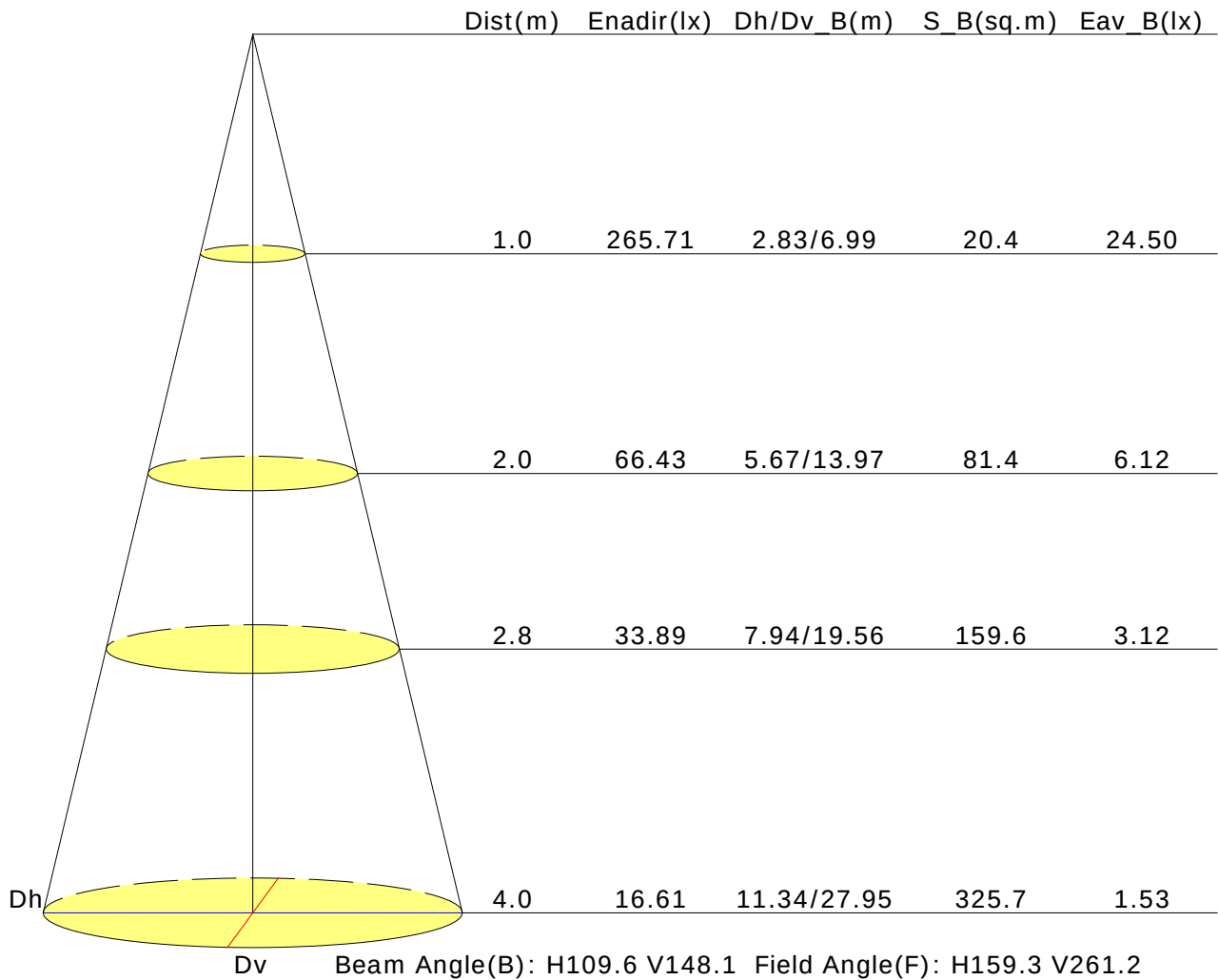
Test Device: GPM-2000

Distance: 7.970 m

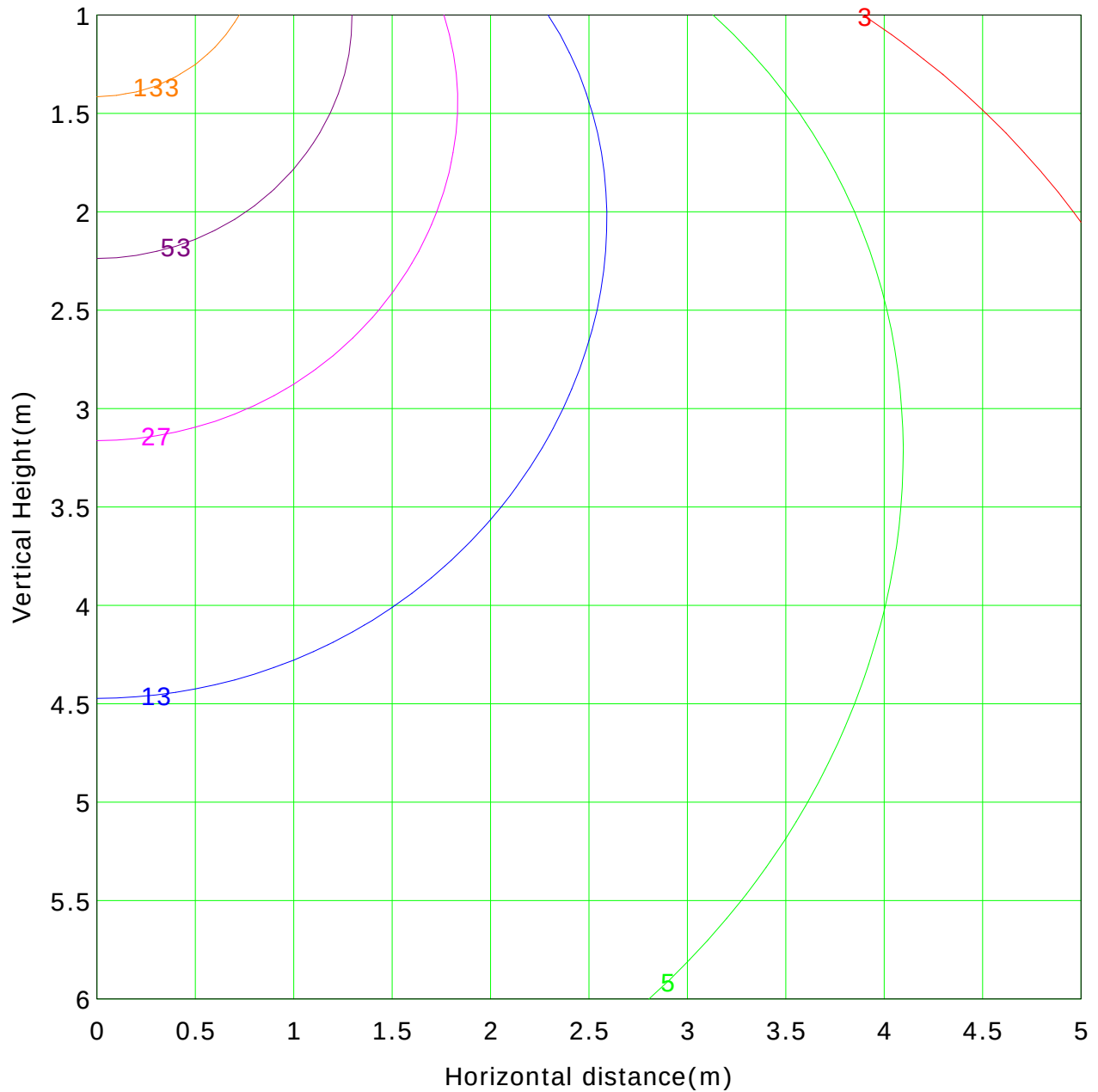
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 6.0m Max Lux: 265.7 lx

— (1%): 2.7 lx	— (2%): 5.3 lx
— (5%): 13.3 lx	— (10%): 26.6 lx
— (20%): 53.1 lx	— (50%): 132.9 lx
— (100%): 265.7 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: