

Report No.:

Test Time: 16/09/2019 15:18

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-DW06-02 + LLD-02-FM

Lamp Description: F52-400-1208C2-W5

Number of Lamps: 1

Lumens per Lamp: 460 lm

Voltage: 24.0 V

Current: 0.378 A

Power: 9.07 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 460 lm

Downward Ratio: 99.53%

Total Rated Lamp Lumens: 460.0 lm

Efficiency: 99.99%

Upward Ratio: 0.46%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 159.9, 163.1, 161.7, 161.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 111.8, 112.1, 112.2, 112.2

Luminaire Efficacy Rating (LER): 50.76

Central Intensity: 161.04 cd

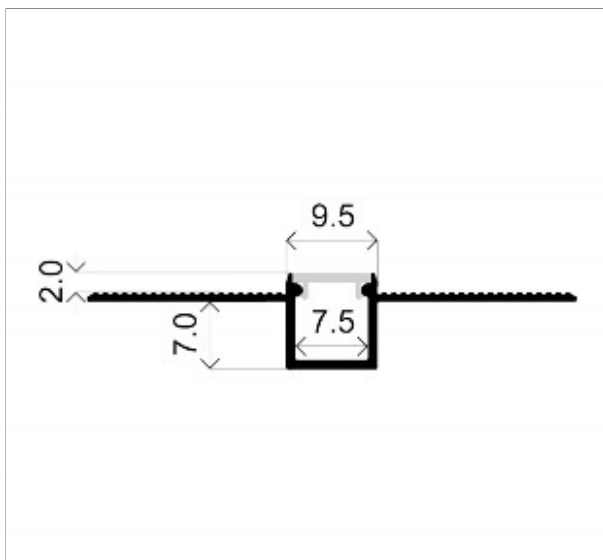
Max. Intensity: 161.04 cd

Pos of Max. Intensity: H0 V0

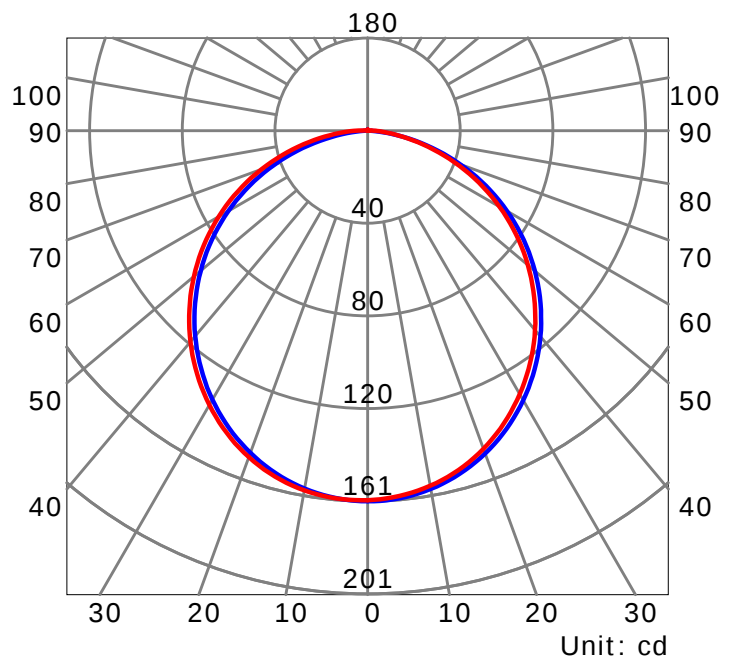
S/MH(C0/C180): 1.25

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

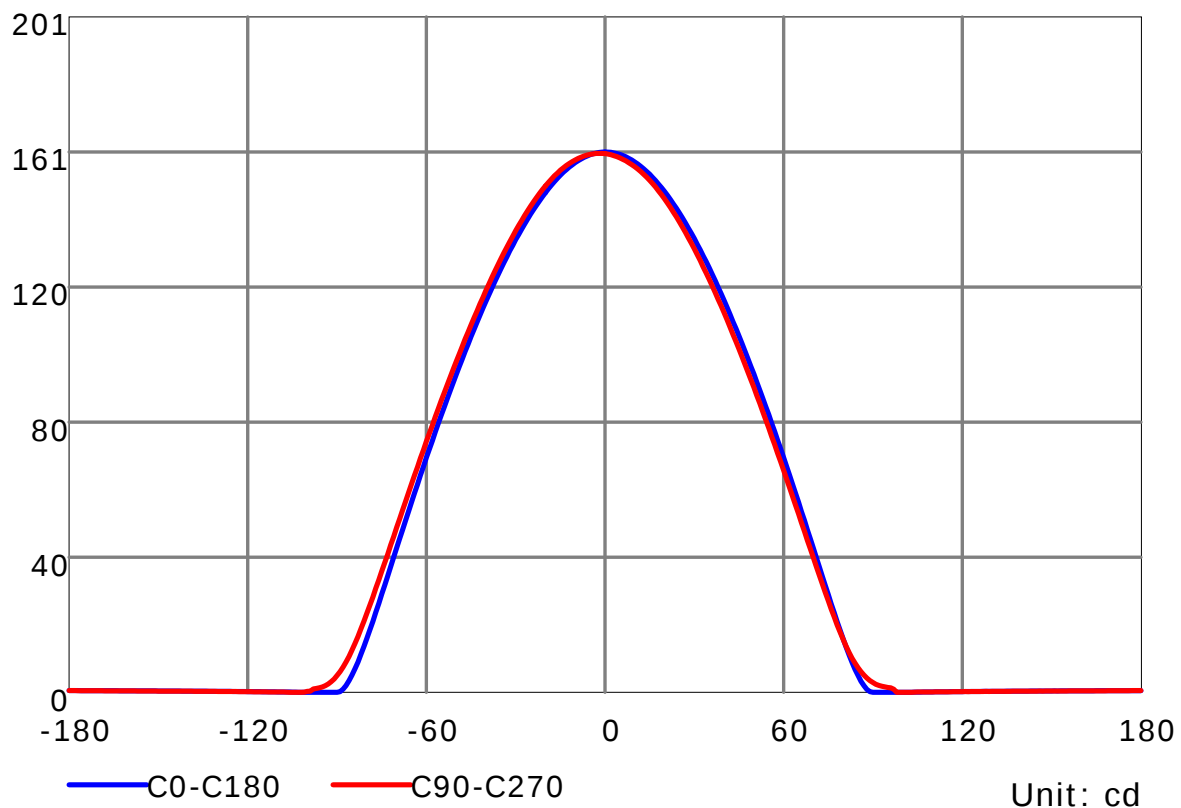
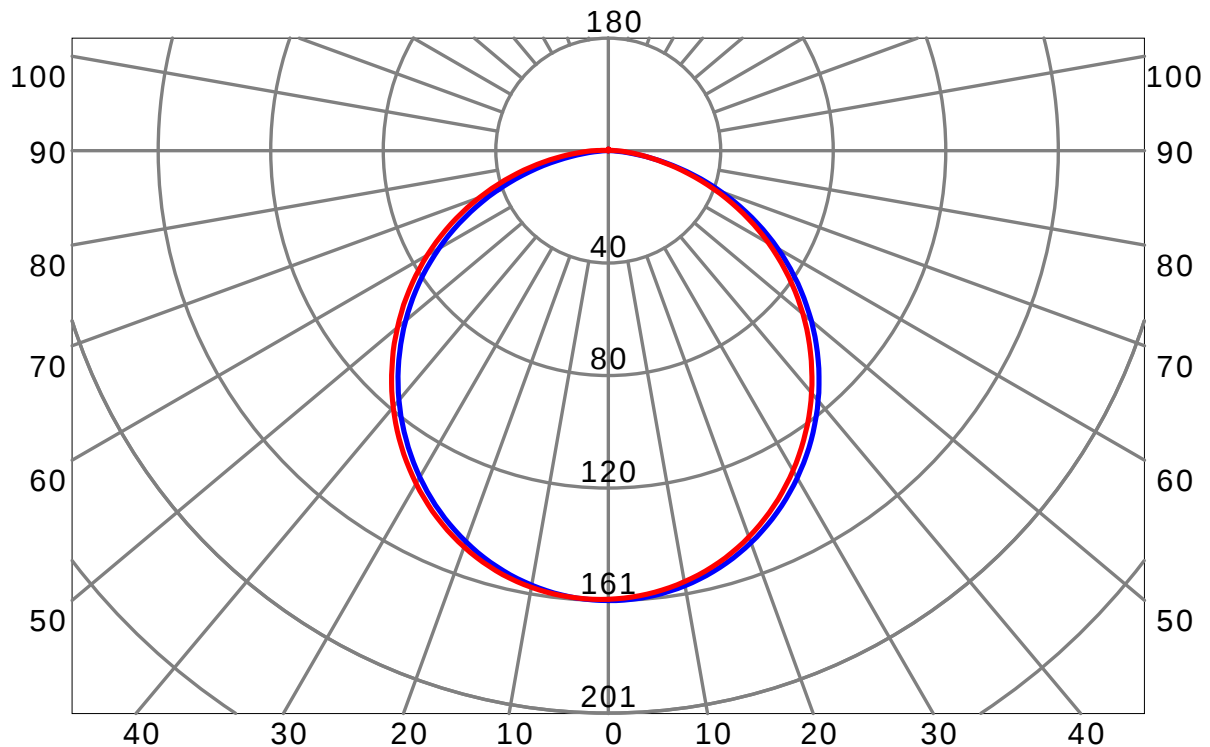
Test Device: GPM-2000

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

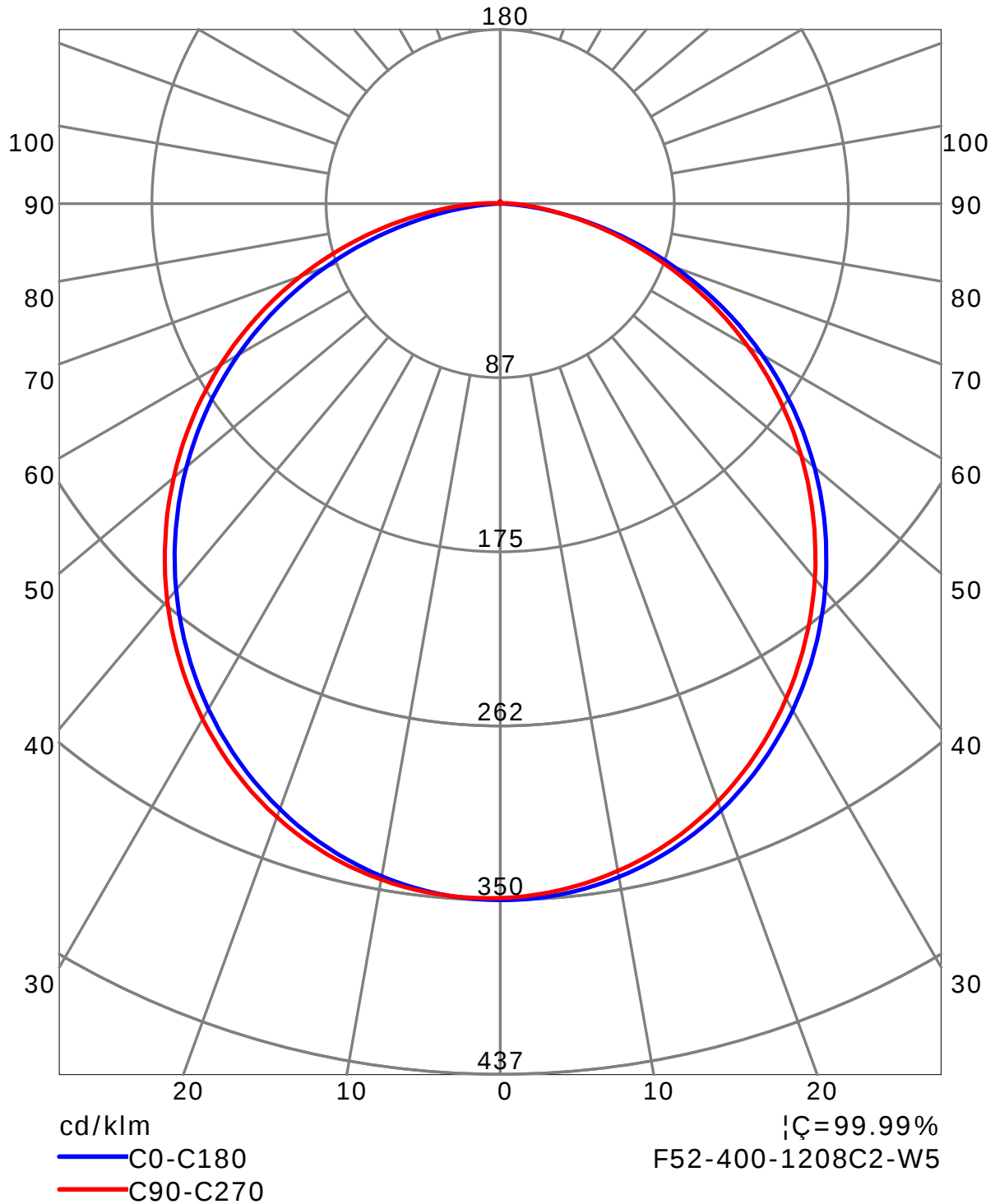
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

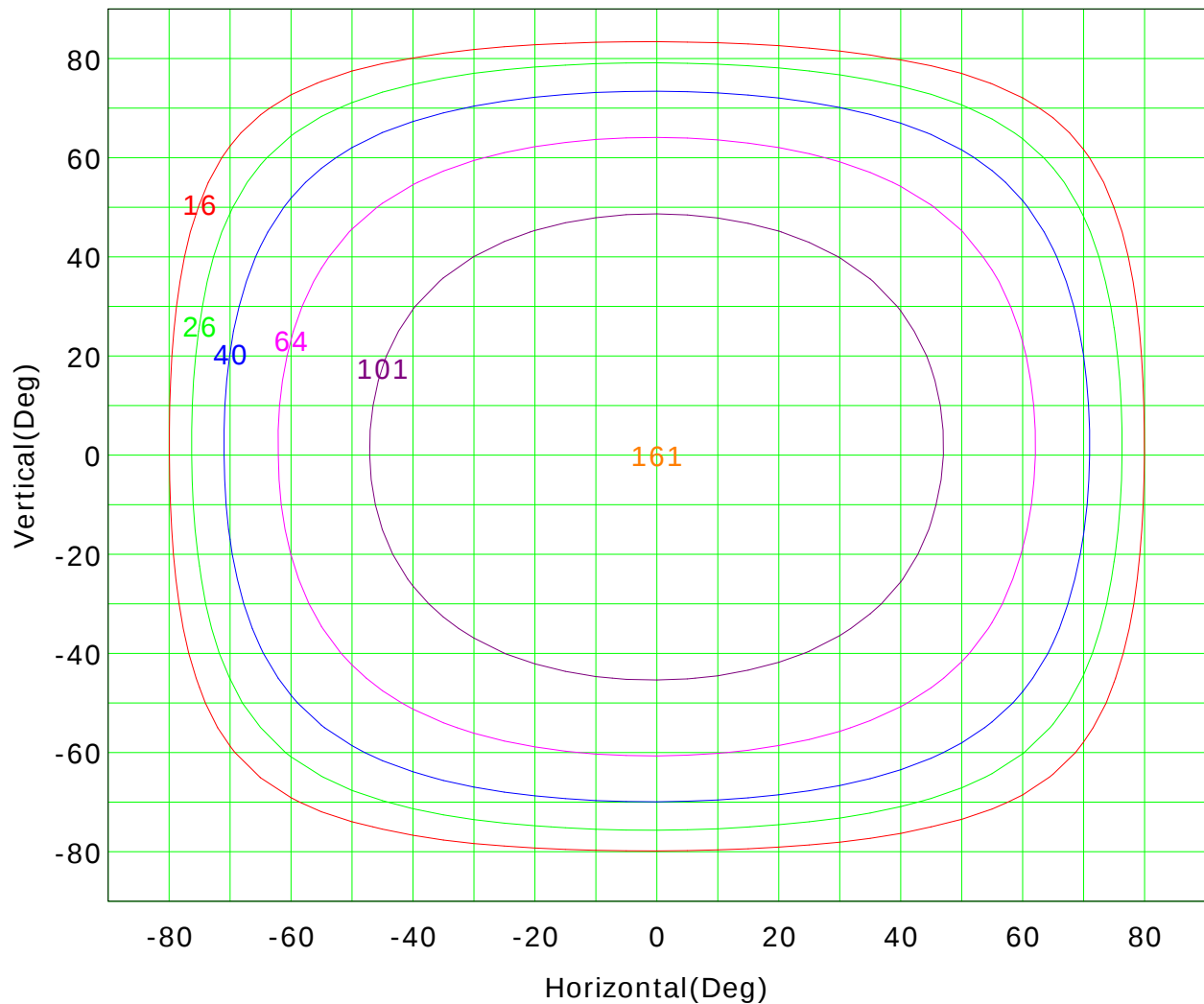
Luminous Intensity Distribution Curve(cd / klm)



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%): 161 cd

(10%):	16 cd	(16%):	26 cd
(25%):	40 cd	(40%):	64 cd
(63%):	101 cd	(100%):	161 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

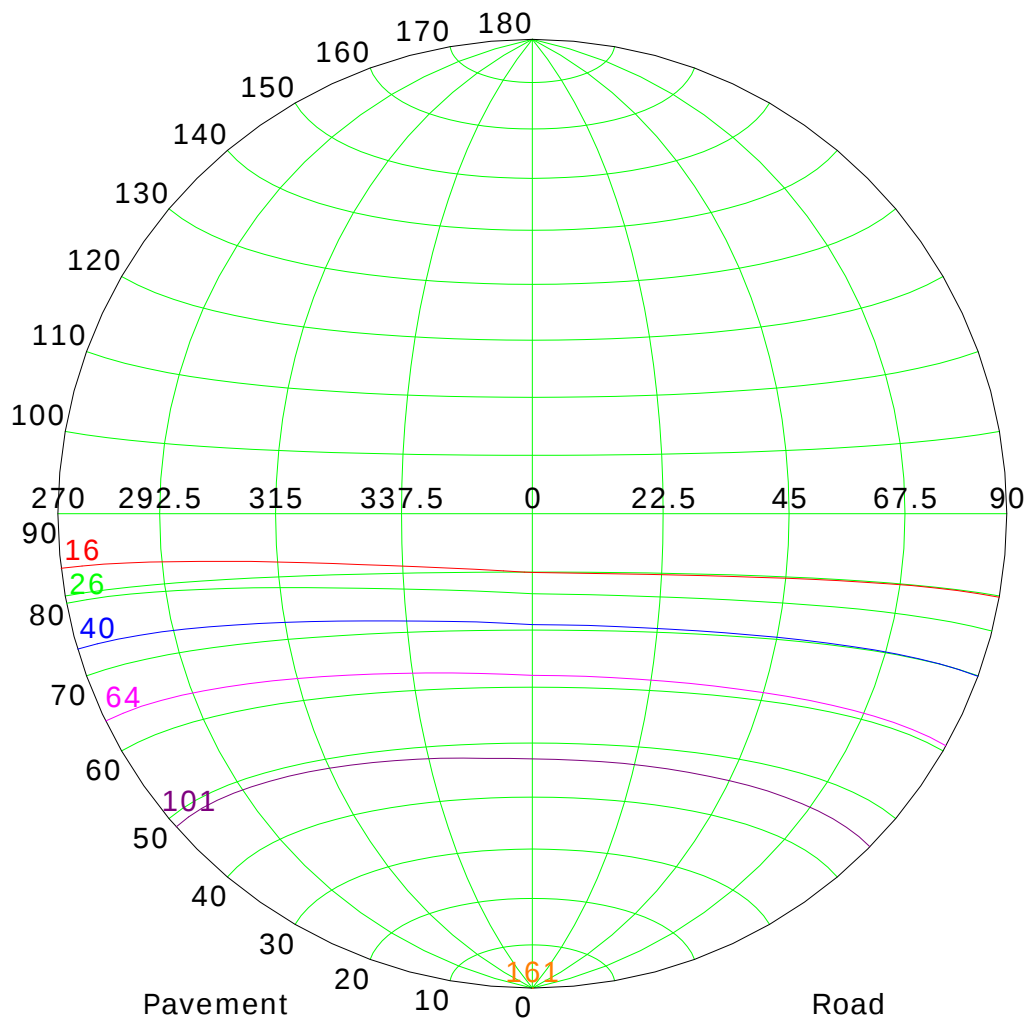
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 161 cd

(10%):	16 cd	(16%):	26 cd
(25%):	40 cd	(40%):	64 cd
(63%):	101 cd	(100%):	161 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

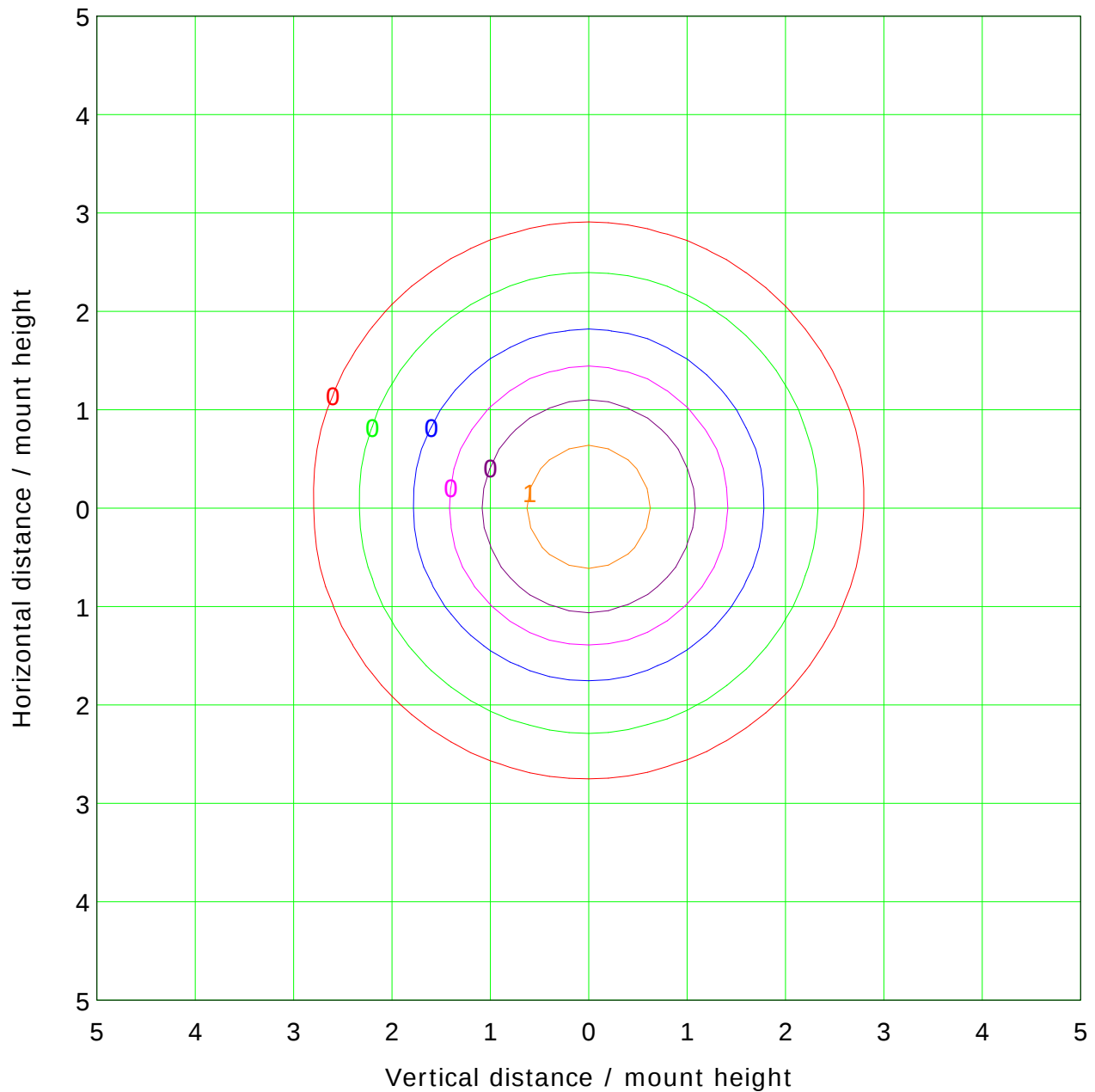
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 1.6 lx

— (1%): 0.0 lx	— (2%): 0.0 lx
— (5%): 0.1 lx	— (10%): 0.2 lx
— (20%): 0.3 lx	— (50%): 0.8 lx
— (100%): 1.6 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

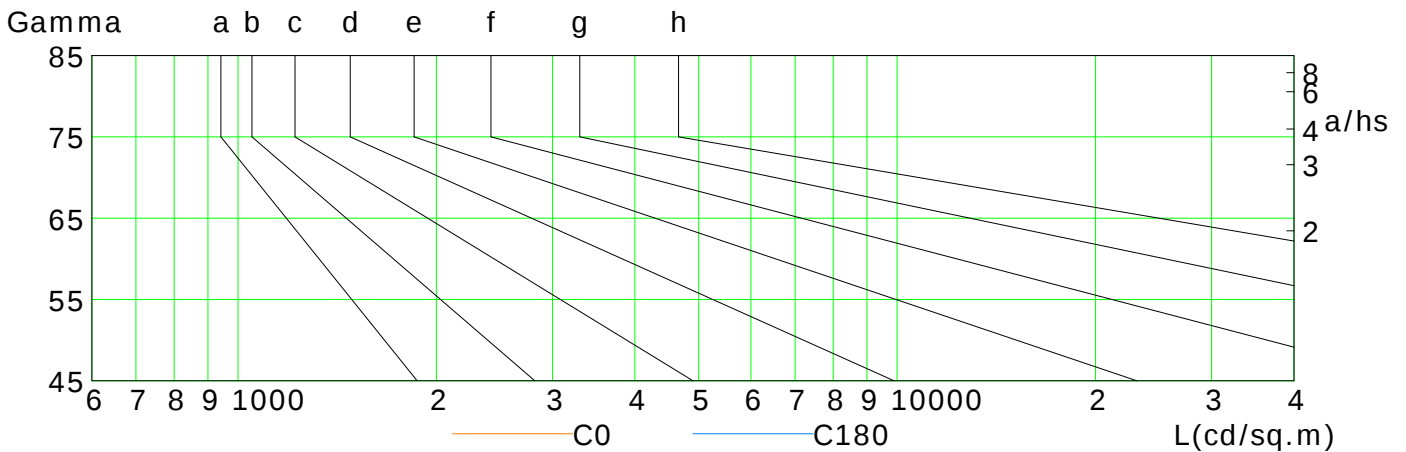
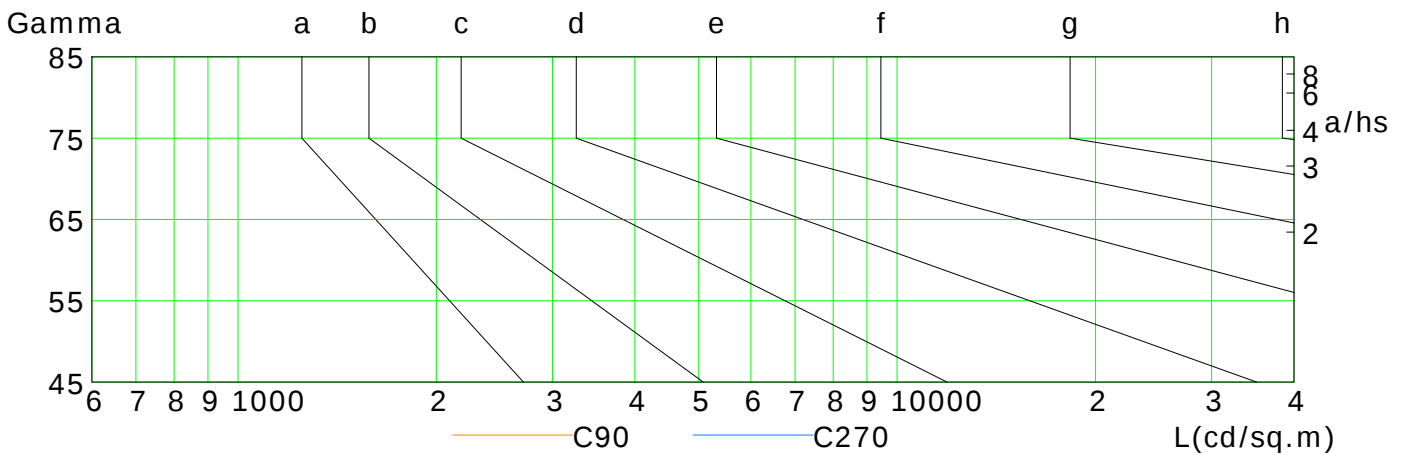
Humidity:

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	106	95	83	70	57	43	29	16	5
C90	102	91	79	66	53	40	27	16	7
C180	106	95	83	70	57	43	29	16	5
C270	109	99	87	75	62	49	36	24	13

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

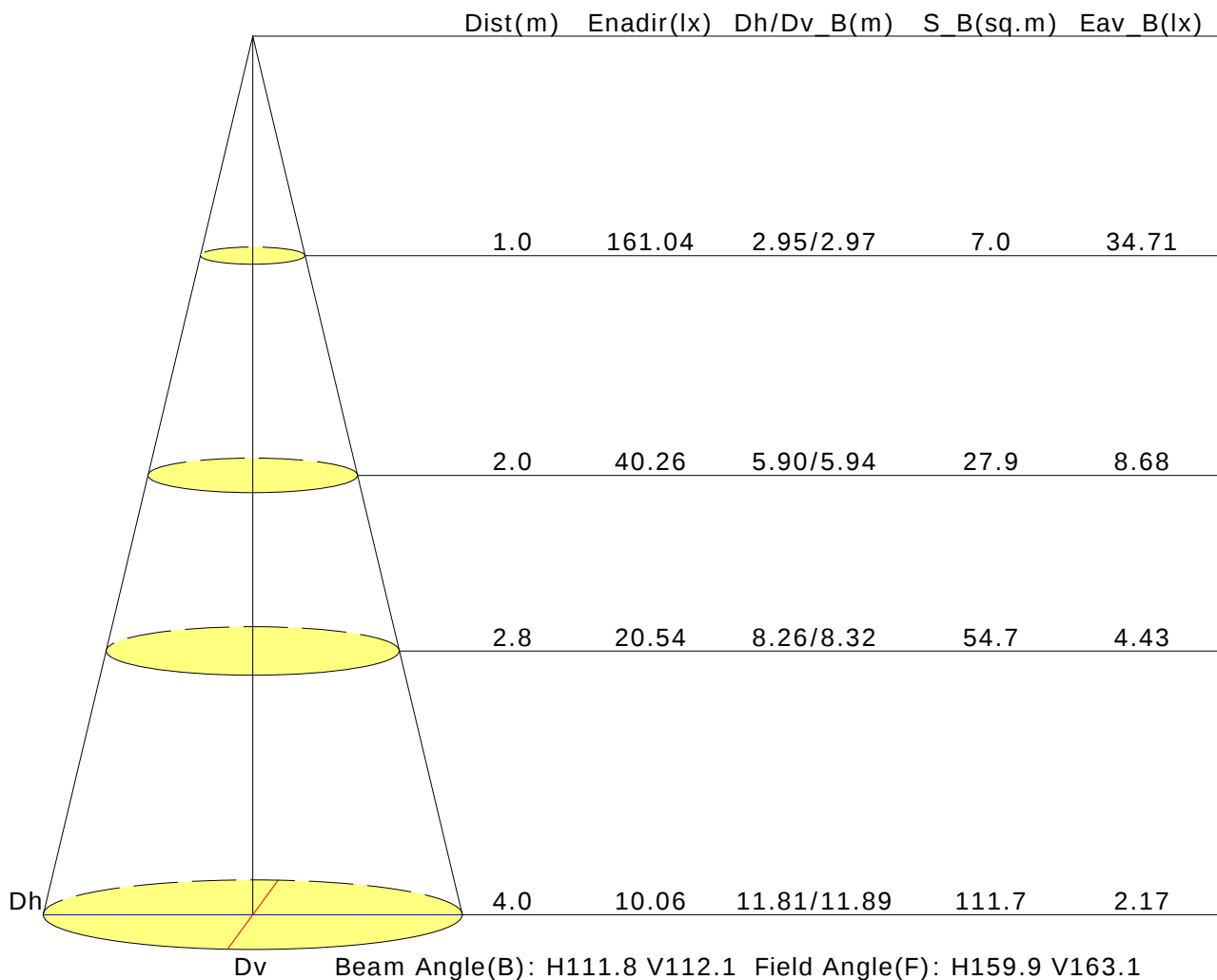
Test Device: GPM-2000

Distance: 7.970 m

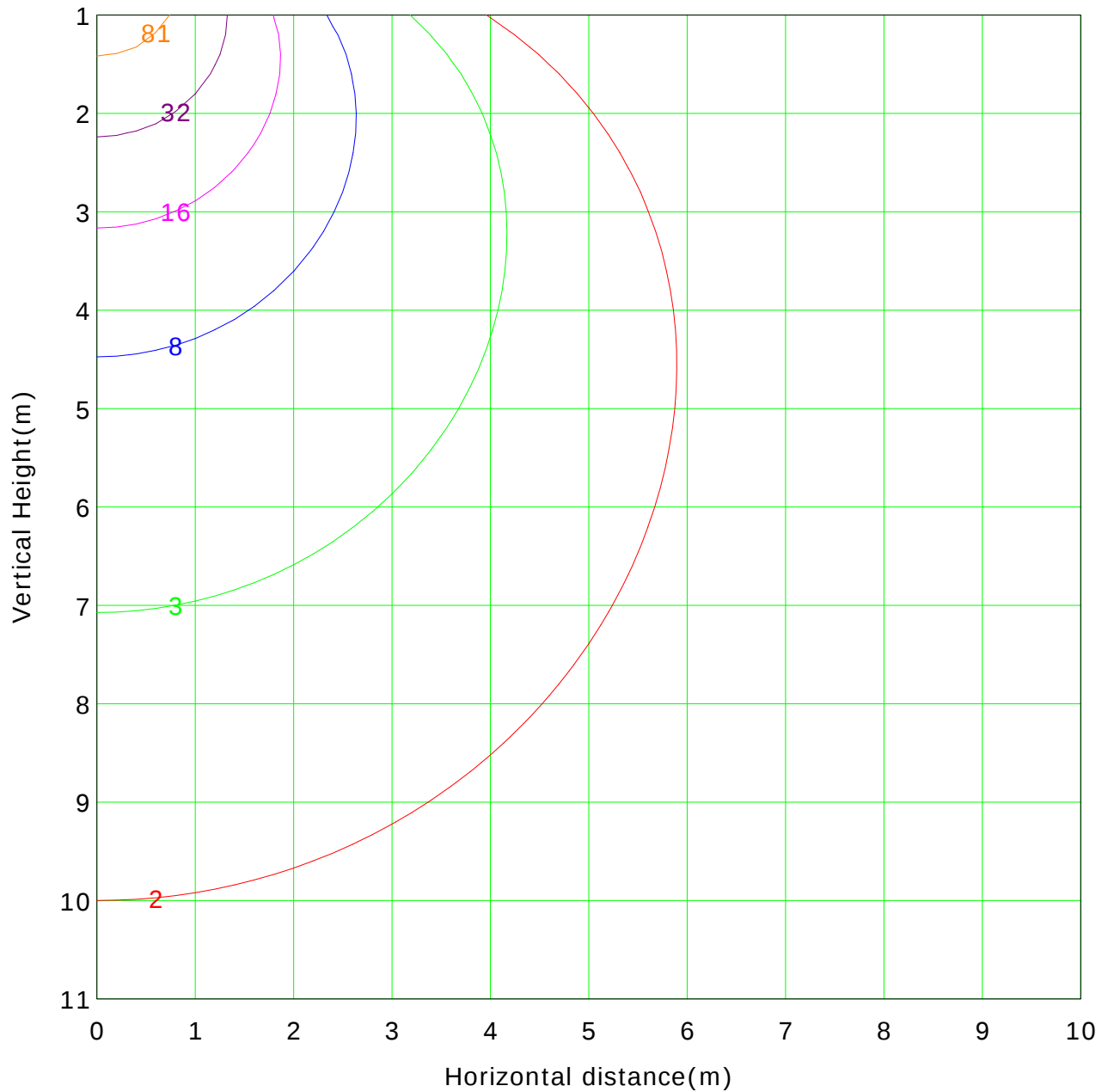
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 161.0 lx

(1%): 1.6 lx	(2%): 3.2 lx
(5%): 8.1 lx	(10%): 16.1 lx
(20%): 32.2 lx	(50%): 80.5 lx
(100%): 161.0 lx	

Report No.:

Test Time: 16/09/2019 16:35

Luminaire Property

Luminaire Manufacturer: Lighting Line

Luminaire Description: LLP-DW06-02 + LLD-02-FS

Lamp Description: F52-400-1208C2-W5

Number of Lamps: 1

Lumens per Lamp: 419 lm

Voltage: 24.0 V

Current: 0.379 A

Power: 9.10 W

Power Factor: 1.000

Photometric Results

CIE Class: Direct

Measurement Flux: 418.6 lm

Downward Ratio: 99.30%

Total Rated Lamp Lumens: 419.0 lm

Efficiency: 99.90%

Upward Ratio: 0.60%

Field Angle(C0/C180,C90/C270,C45/C225,C135/315): 162.5, 166.5, 163.6, 166.7

Beam Angle(C0/C180,C90/C270,C45/C225,C135/315): 109.5, 110.0, 109.7, 111.5

Luminaire Efficacy Rating (LER): 46.05

Central Intensity: 147.56 cd

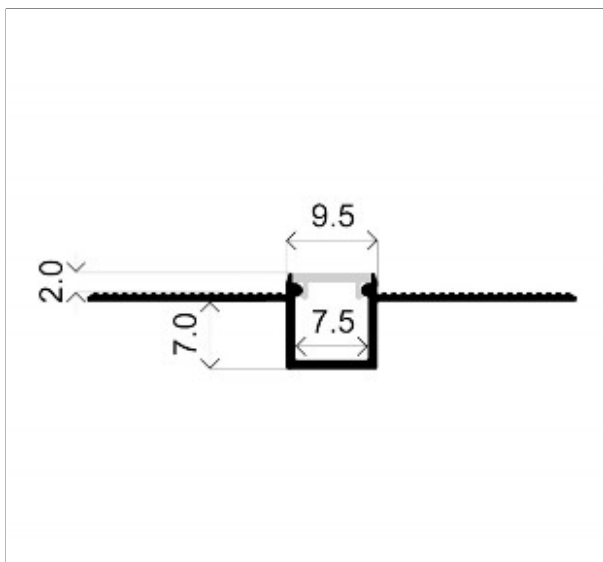
Max. Intensity: 147.56 cd

Pos of Max. Intensity: H0 V0

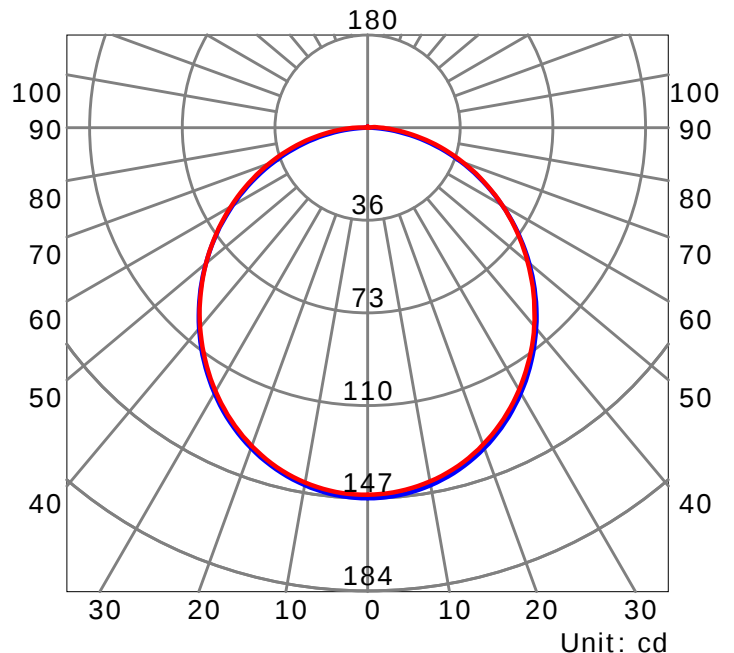
S/MH(C0/C180): 1.23

S/MH(C90/C270): 1.23

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

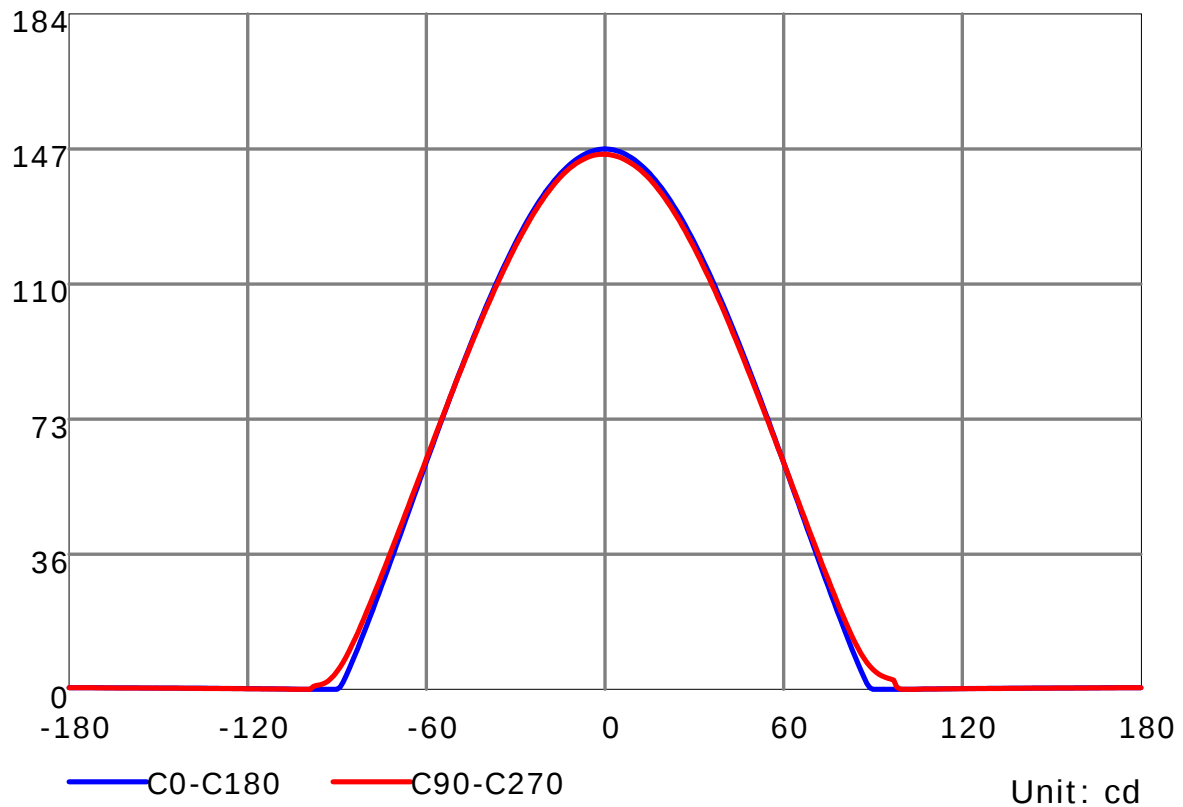
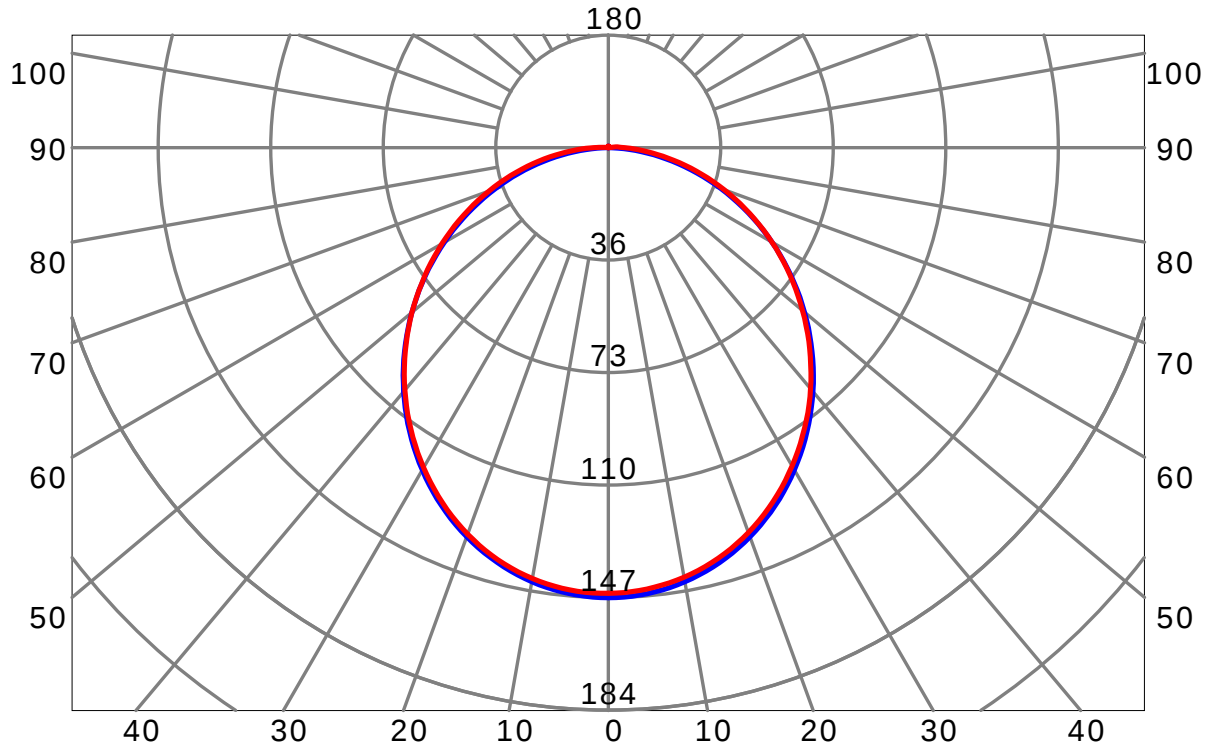
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

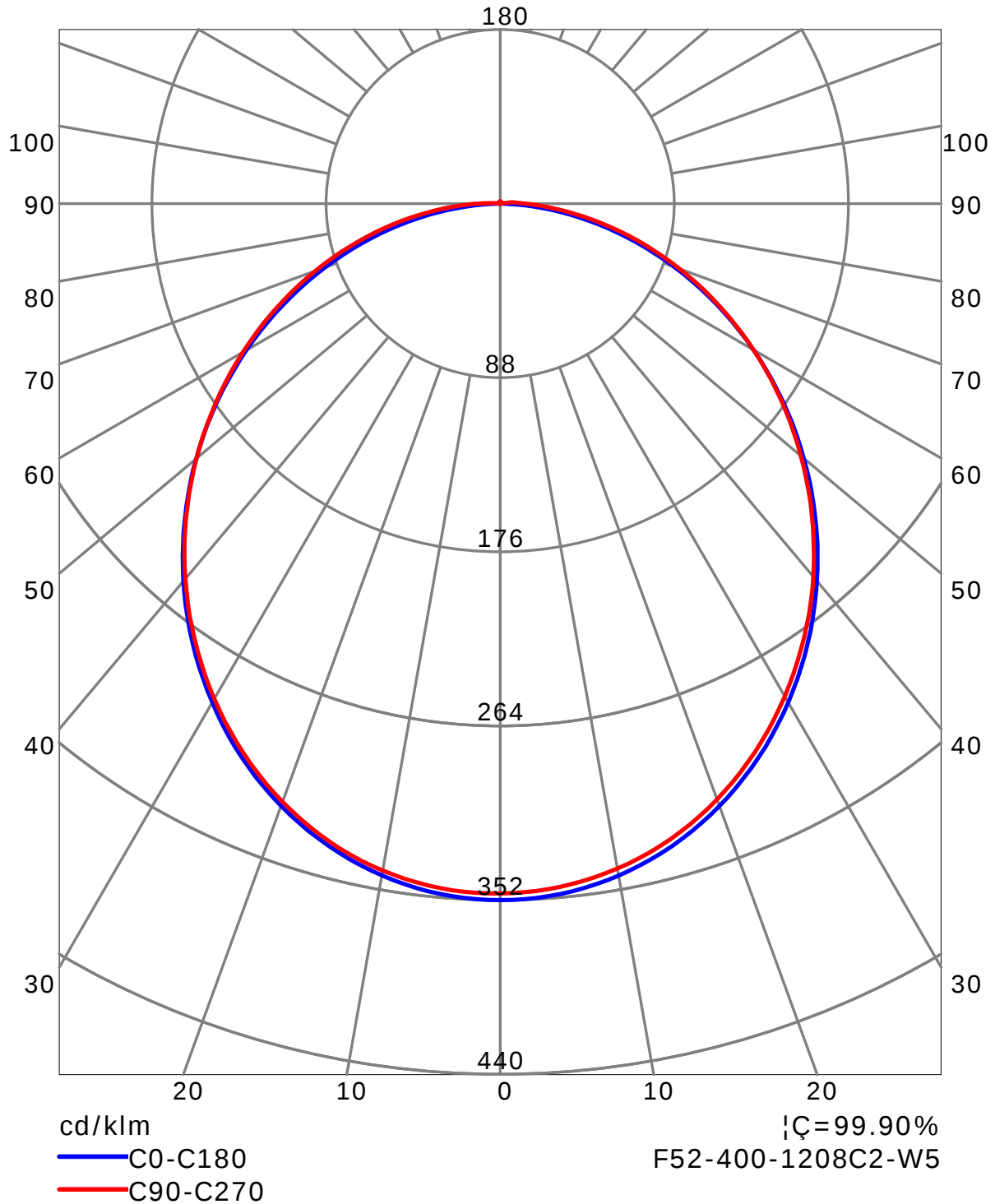
Luminous Intensity Distribution Curve



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:

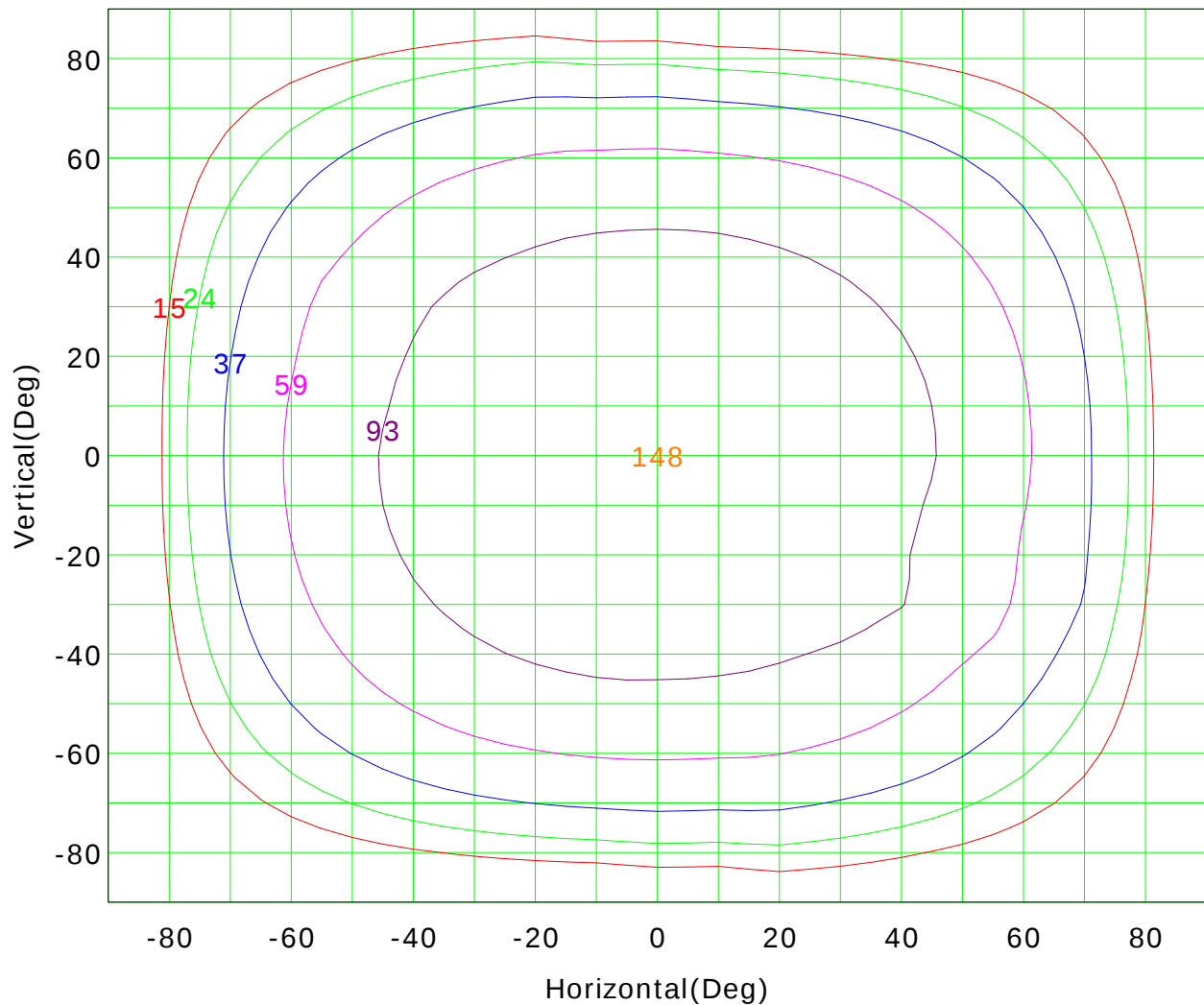
Luminous Intensity Distribution Curve(cd / klm)



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%): 148 cd

(10%):	15 cd	(16%):	24 cd
(25%):	37 cd	(40%):	59 cd
(63%):	93 cd	(100%):	148 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

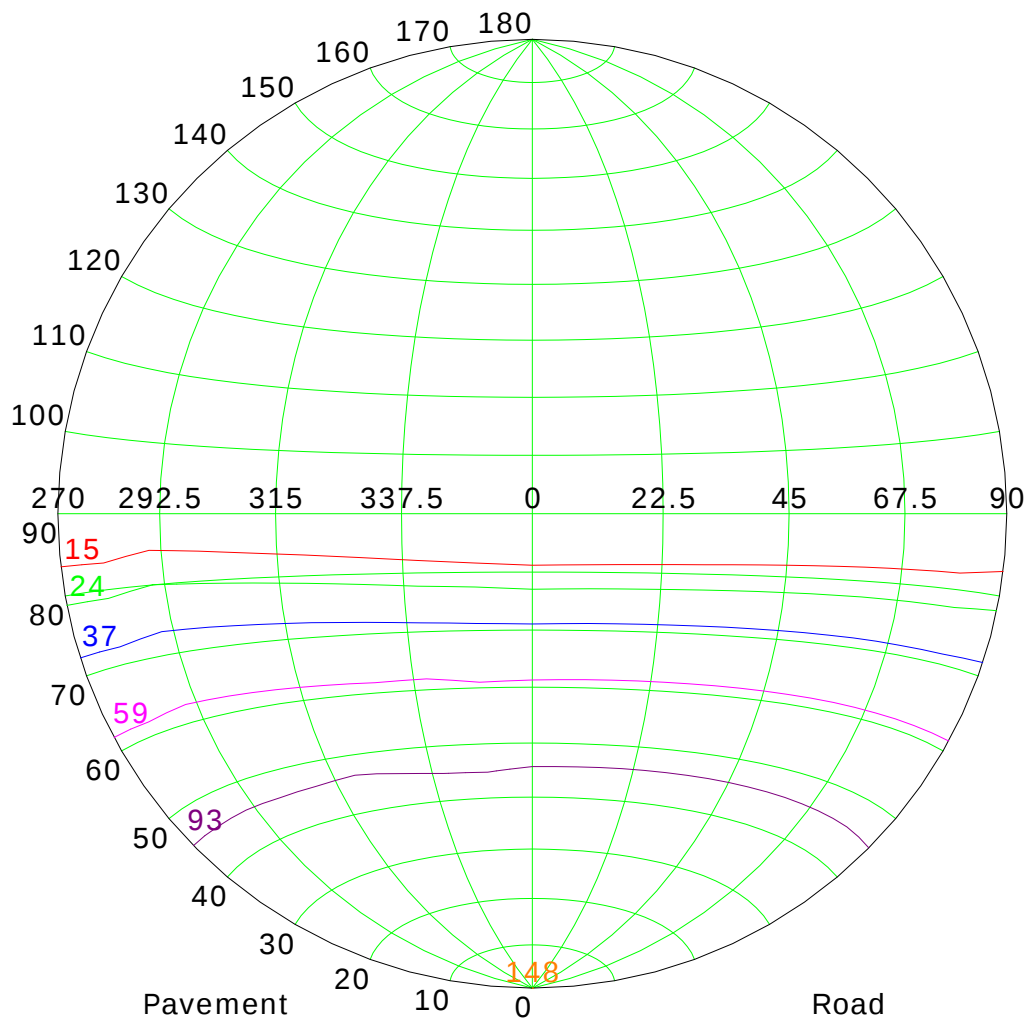
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

Isocandela (sphere)



I_{max} (100%): 148 cd

(10%):	15 cd	(16%):	24 cd
(25%):	37 cd	(40%):	59 cd
(63%):	93 cd	(100%):	148 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

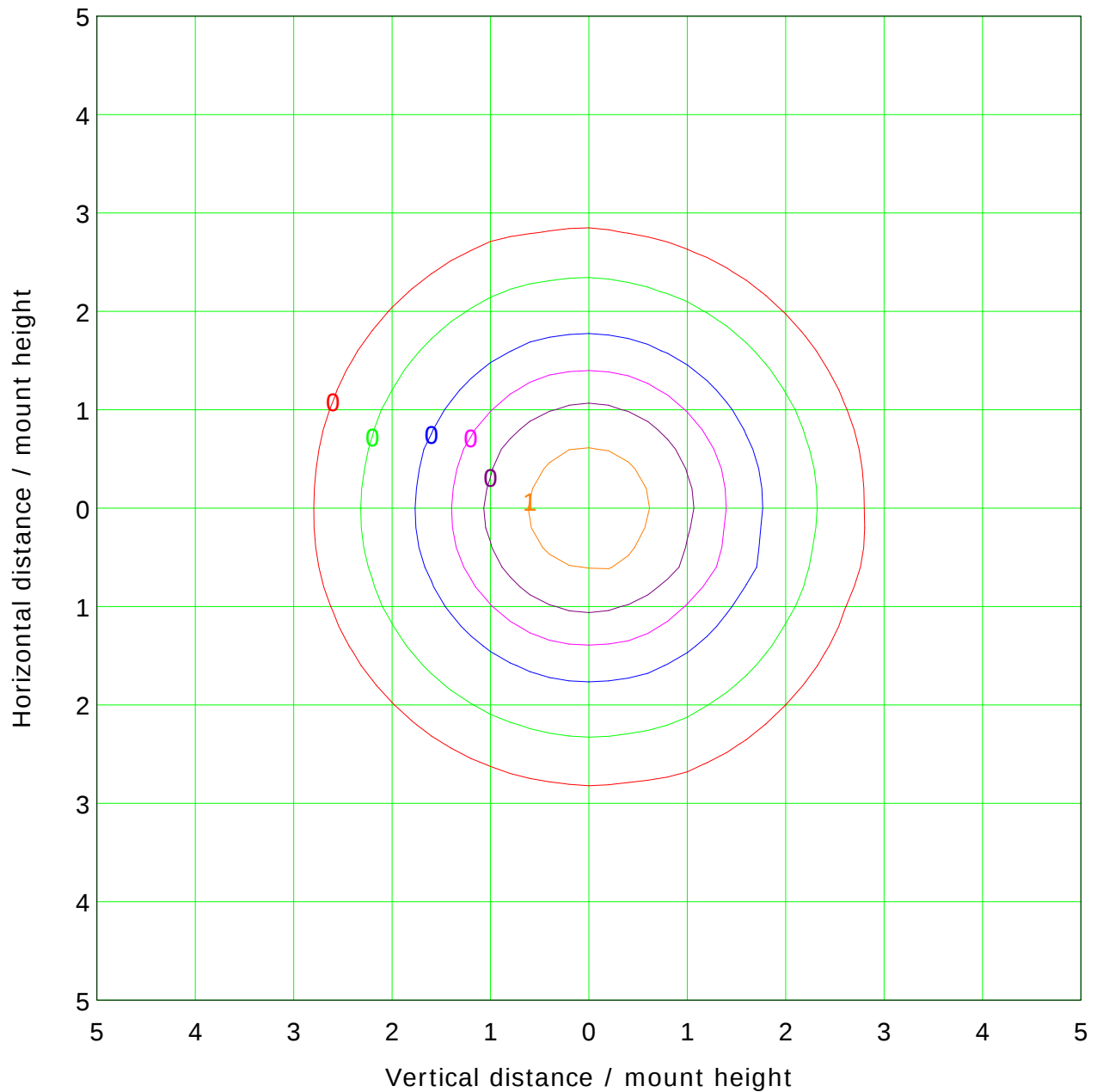
Test Device: GPM-2000

Distance: 7.970 m

Humidity:

Inspector:

IsoLux Plot



Mounting Height: 10.0m Max Lux(100%): 1.5 lx

— (1%): 0.0 lx	— (2%): 0.0 lx
— (5%): 0.1 lx	— (10%): 0.1 lx
— (20%): 0.3 lx	— (50%): 0.7 lx
— (100%): 1.5 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

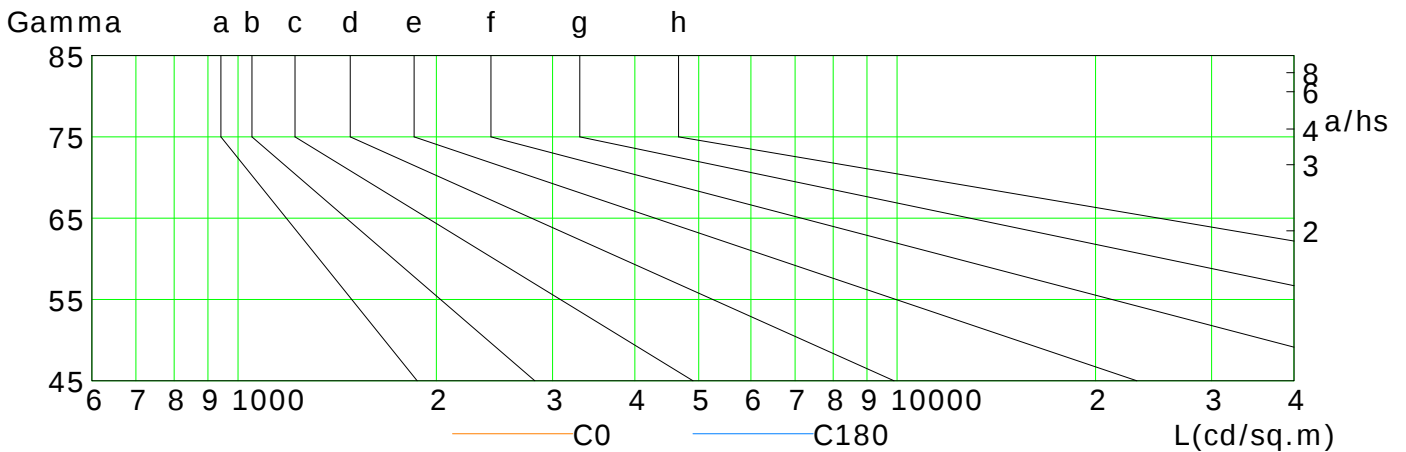
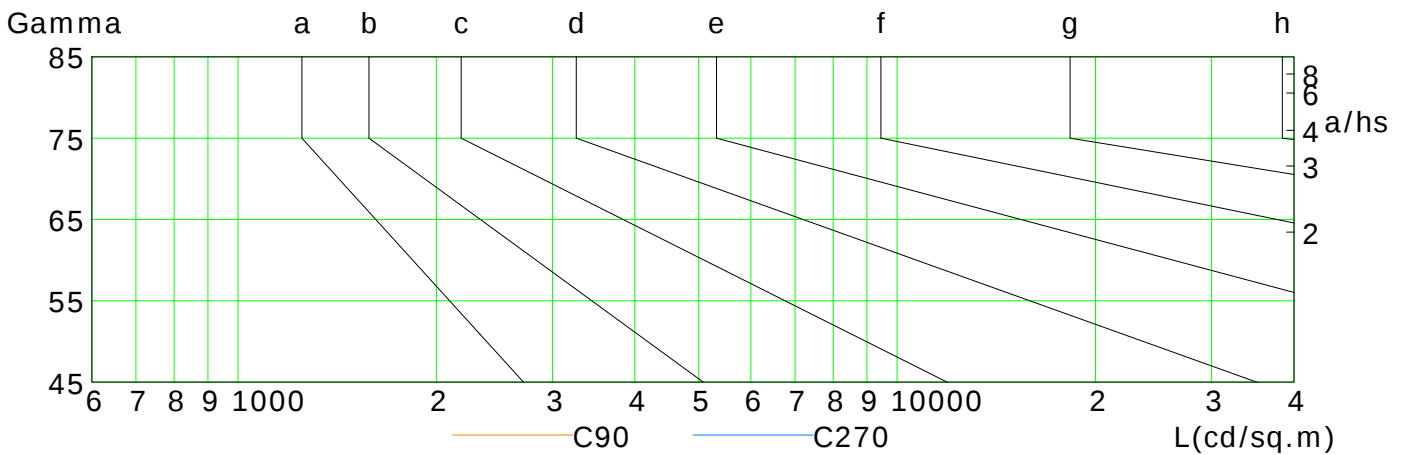
Humidity:

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	94	84	73	62	51	39	28	17	7
C90	93	83	73	62	51	40	30	20	11
C180	94	84	73	62	51	40	28	18	7
C270	94	84	74	63	52	42	31	21	12

C Plane (°):0.0-360.0: 10.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

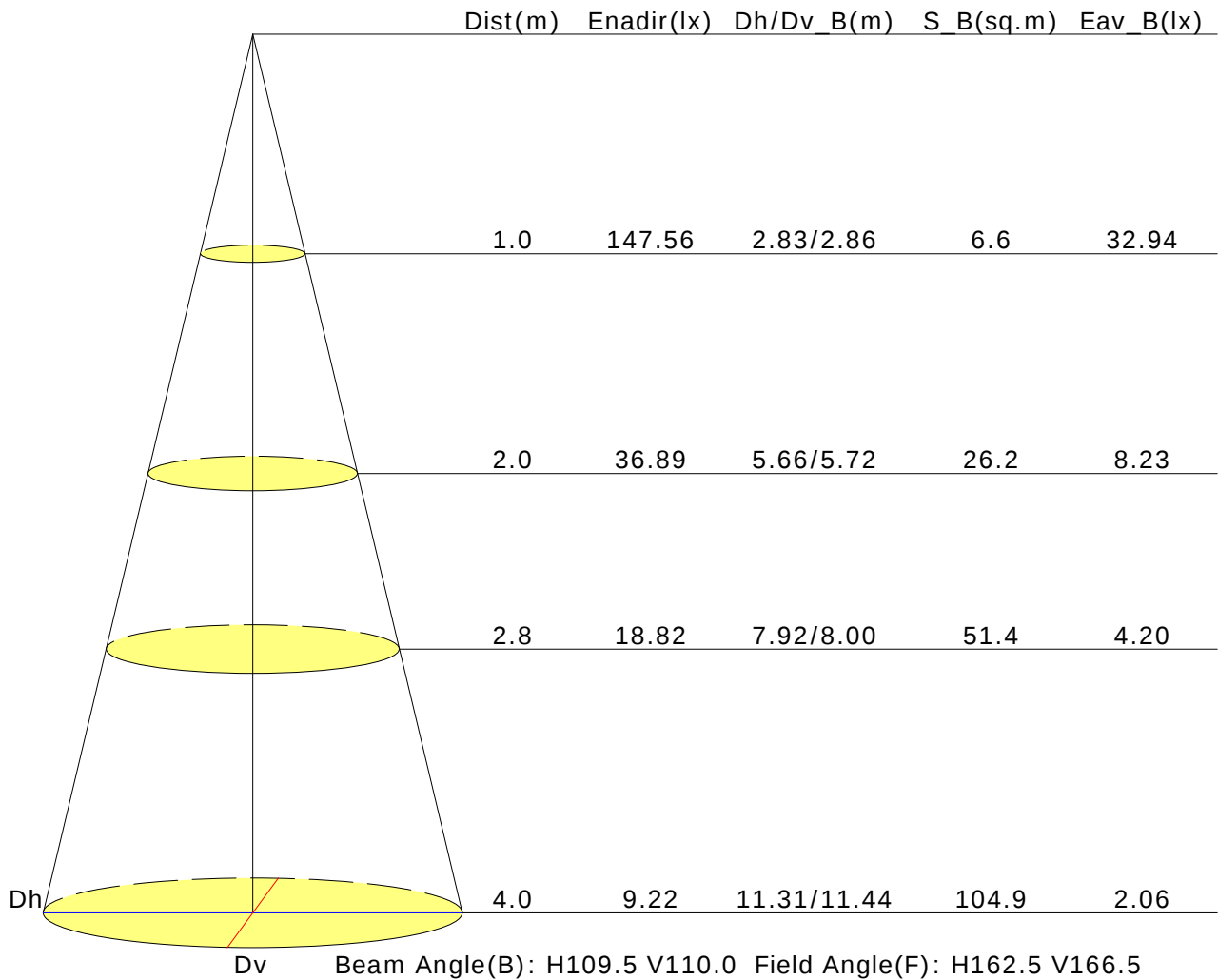
Test Device: GPM-2000

Distance: 7.970 m

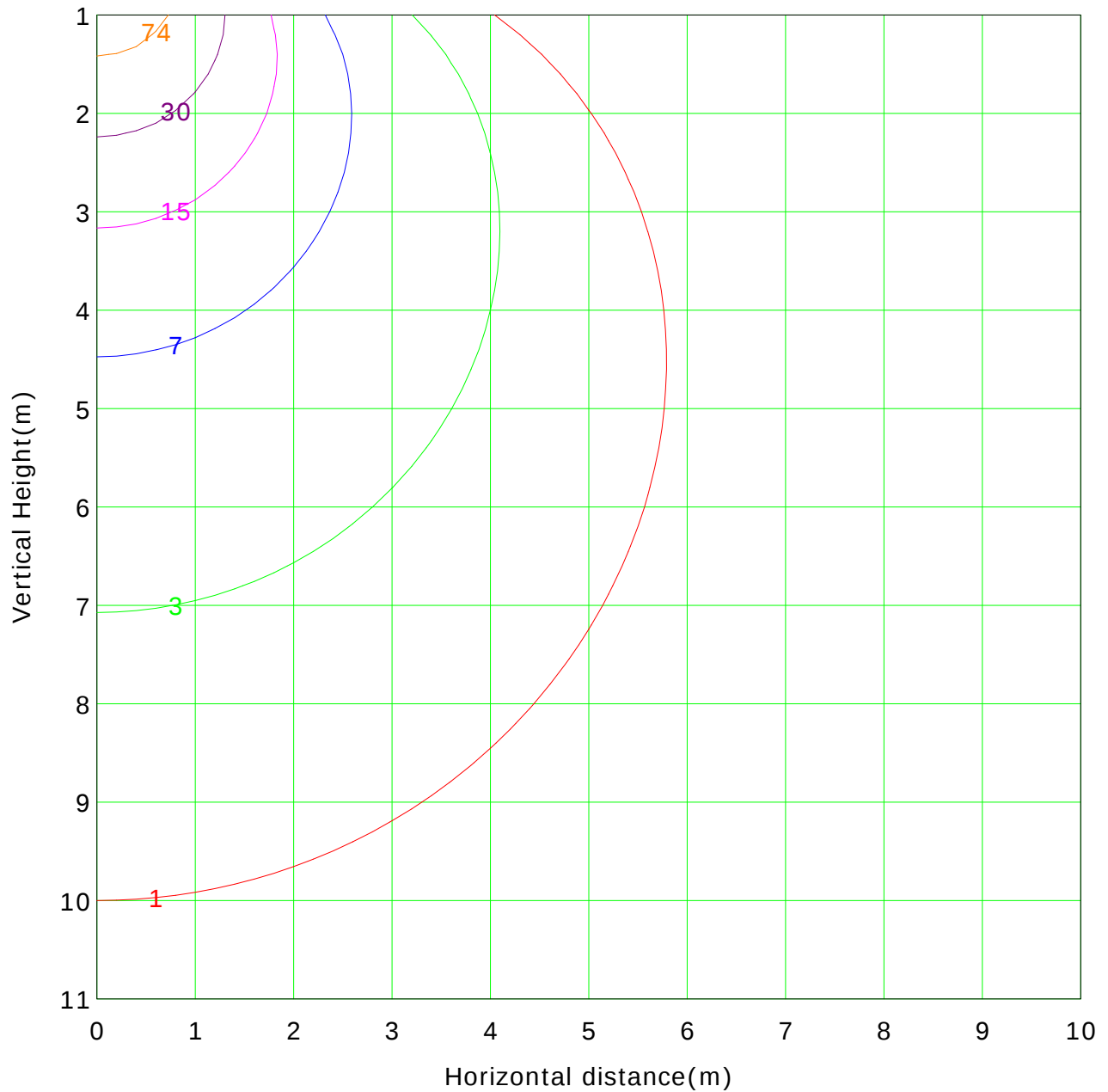
Humidity:

Inspector:

Illuminance at a Distance



Vertical IsoLux Plot



Lowest(m): 1.0m Highest(m): 11.0m Max Lux: 147.6 lx

(1%): 1.5 lx	(2%): 3.0 lx
(5%): 7.4 lx	(10%): 14.8 lx
(20%): 29.5 lx	(50%): 73.8 lx
(100%): 147.6 lx	