

Report No.:

Test Time: 2014-08-14 20:28

## Luminaire Property

Luminaire Category:

Luminaire Description: MR16-2700K-40度

Voltage: 12.1 V

Current: 0.564 A

Power: 4.40 W

Power Factor: 0.644

## Photometric Results

CIE Class: Direct

Total Rated Lamp Lumens: 245.4 lm

Measurement Flux: 245.4 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

Horizontal Diffuse Angle(15%,30%,50%,75%): H68,H52.8,H39.9,H25.6

Vertical Diffuse Angle(15%,30%,50%,75%): V68.4,V53.2,V40.4,V26

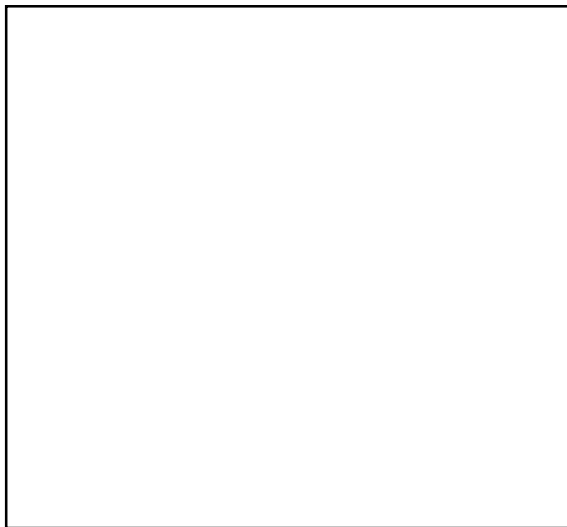
Luminaire Efficacy Rating (LER): 56

Central Intensity: 409.76 cd

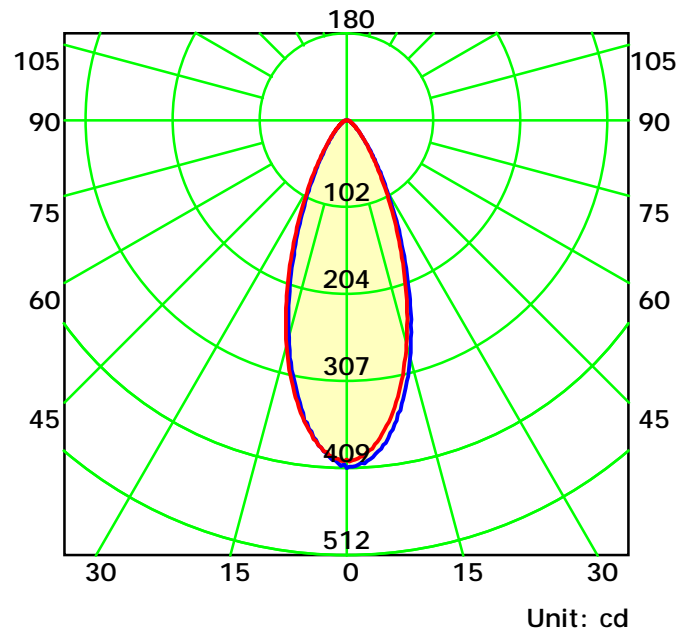
Max. Intensity: 409.77 cd

Pos of Max. Intensity: H0 V0

Picture Of Luminaire



Luminous Intensity Distribution Curve



— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-90.0:0.5

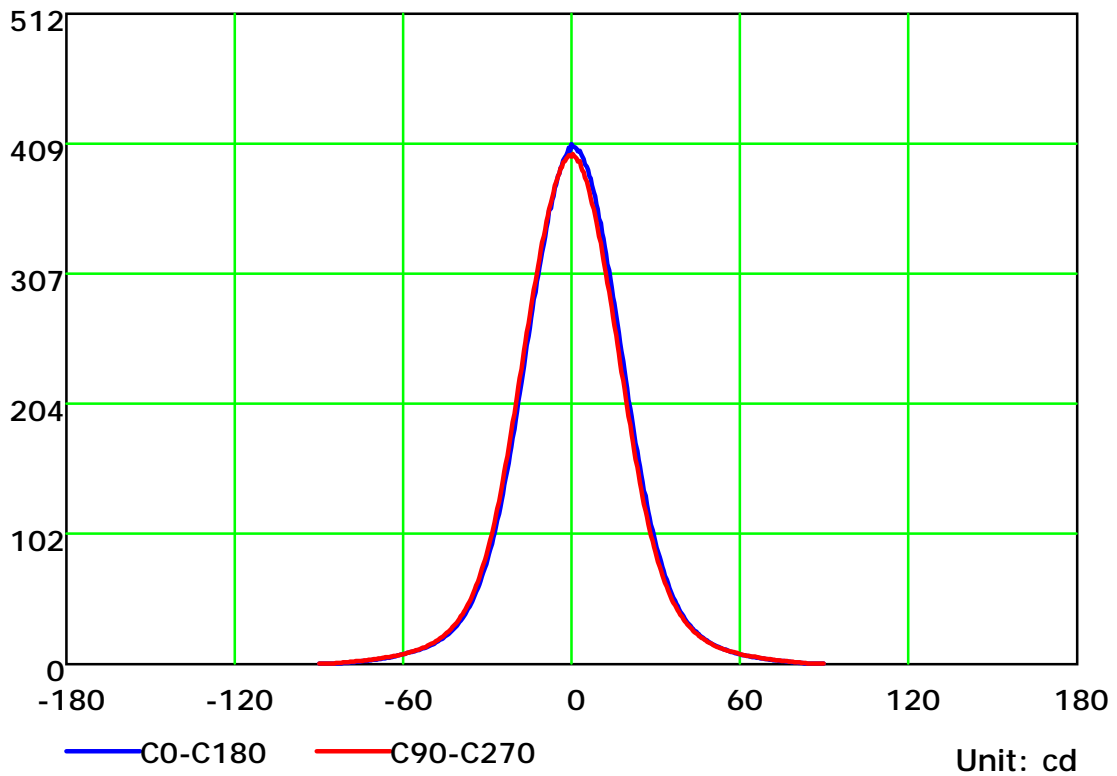
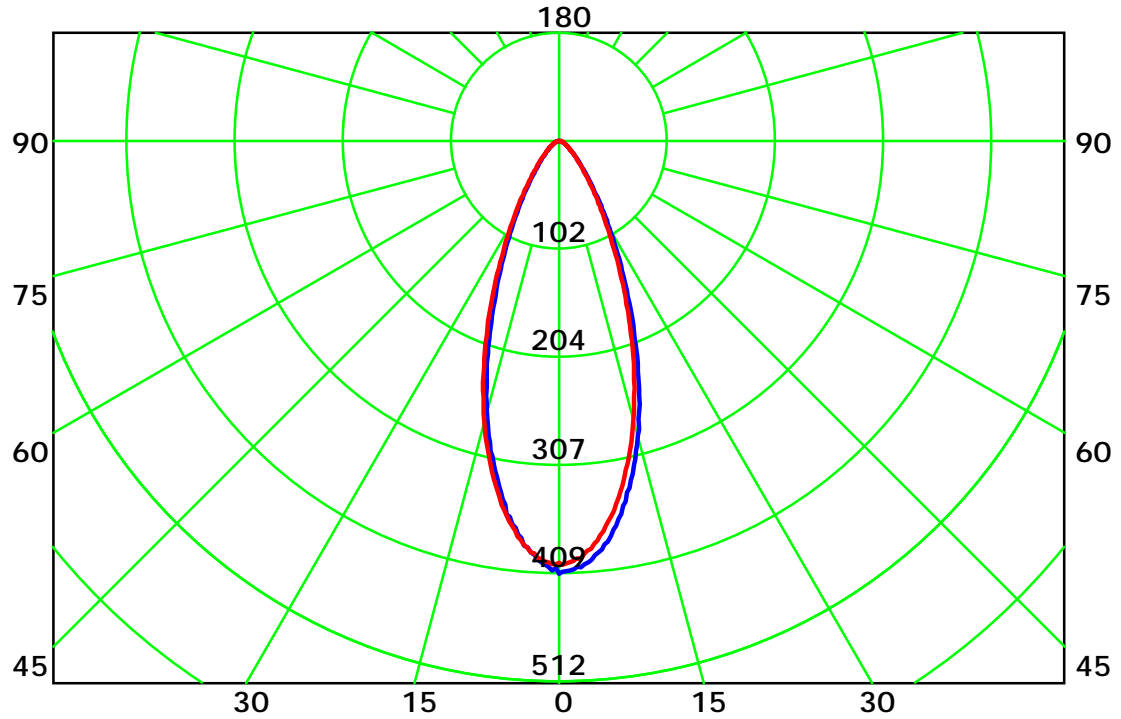
Test Device: GPM-1200A

Distance: 1.000 m

Humidity:

Inspector:

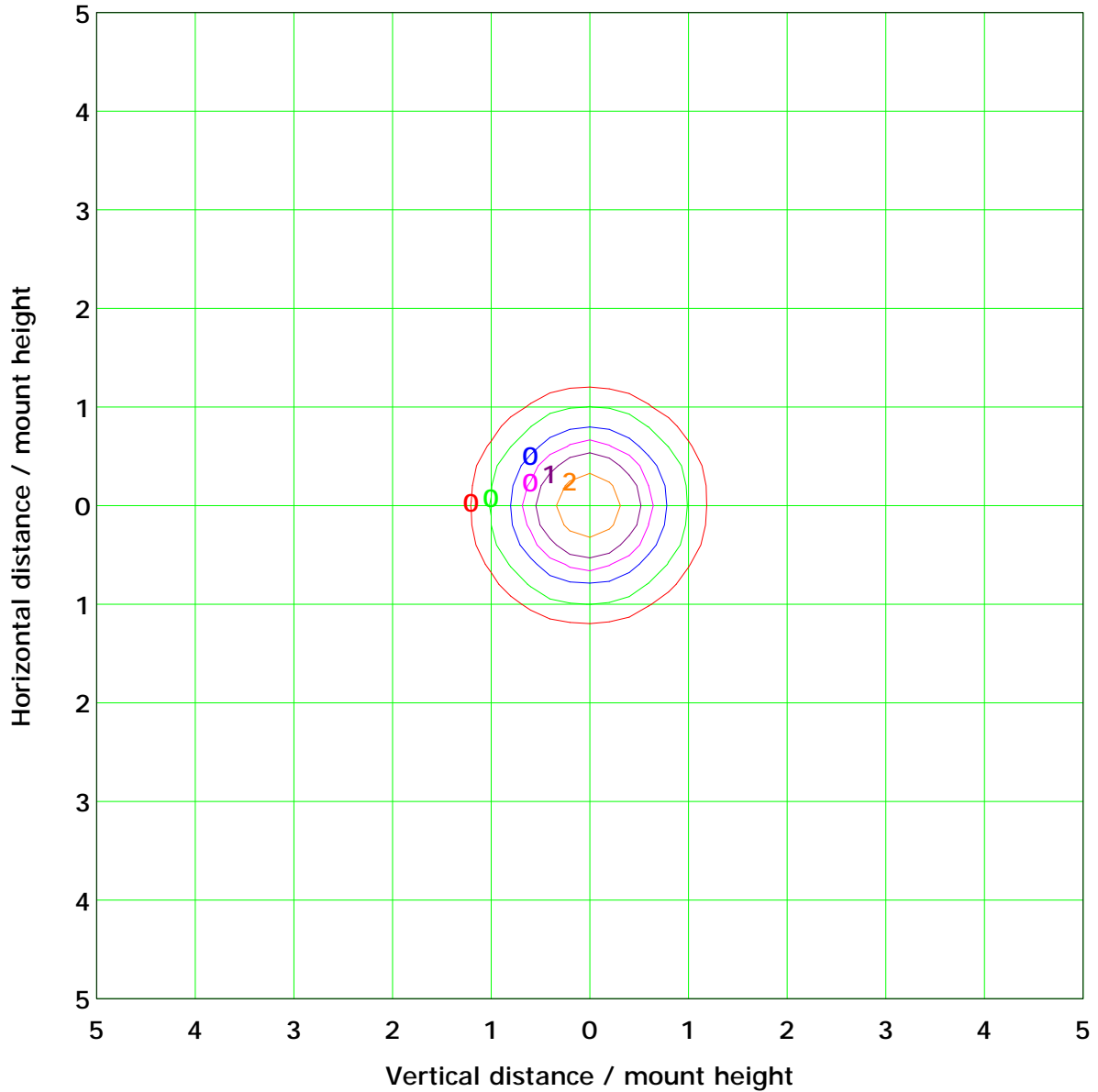
## Luminous Intensity Distribution Curve



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

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1200A  
 Distance: 1.000 m  
 Humidity:  
 Inspector:

## IsoLux Plot

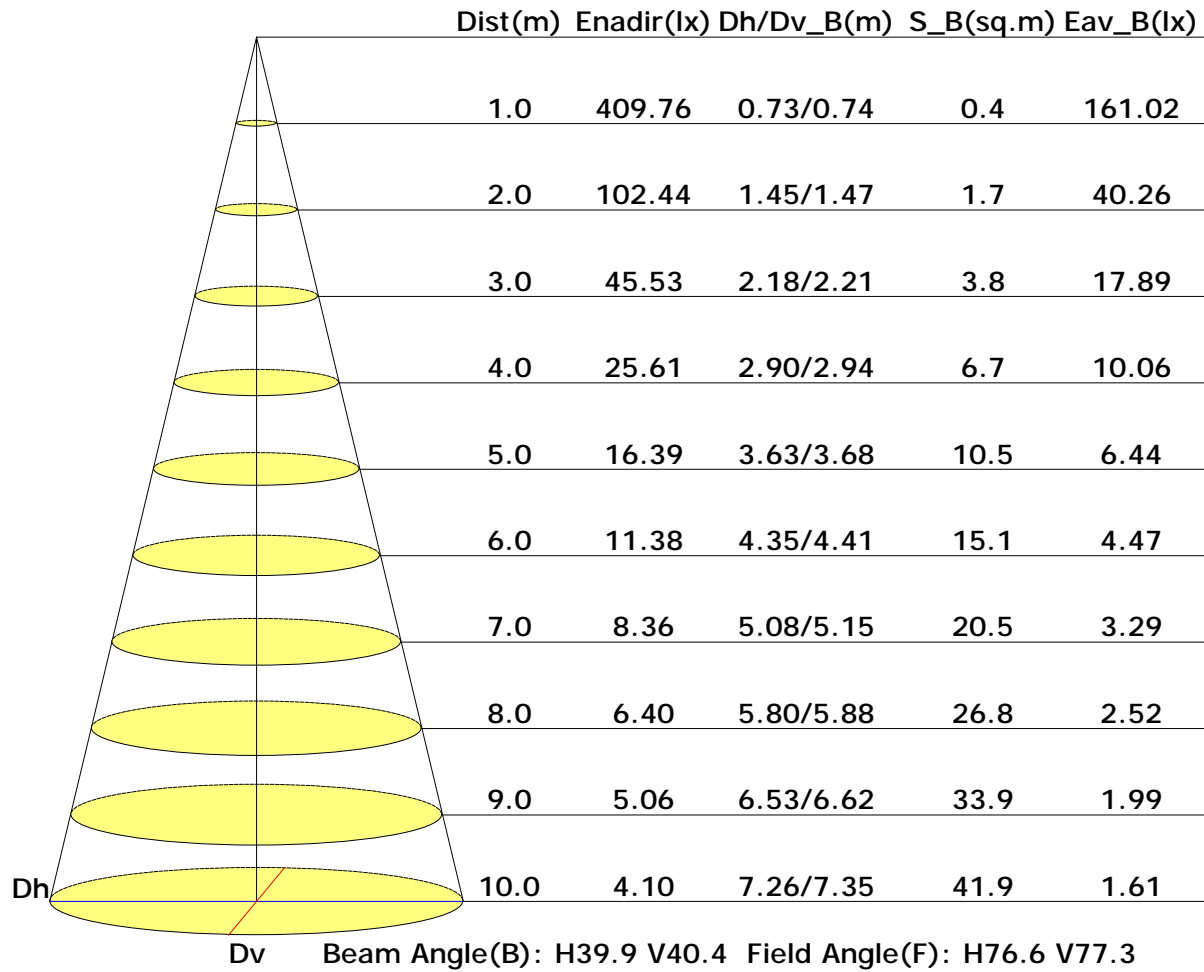


<b>Mounting Height: 10.0m    Max Lux(100%): 4.1 lx</b>	
— ( 1%): 0.0 lx	— ( 2%): 0.1 lx
— ( 5%): 0.2 lx	— ( 10%): 0.4 lx
— ( 20%): 0.8 lx	— ( 50%): 2.0 lx
— (100%): 4.1 lx	— (200%): 8.2 lx
— (300%): 12.3 lx	— (500%): 20.5 lx

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

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1200A  
 Distance: 1.000 m  
 Humidity:  
 Inspector:

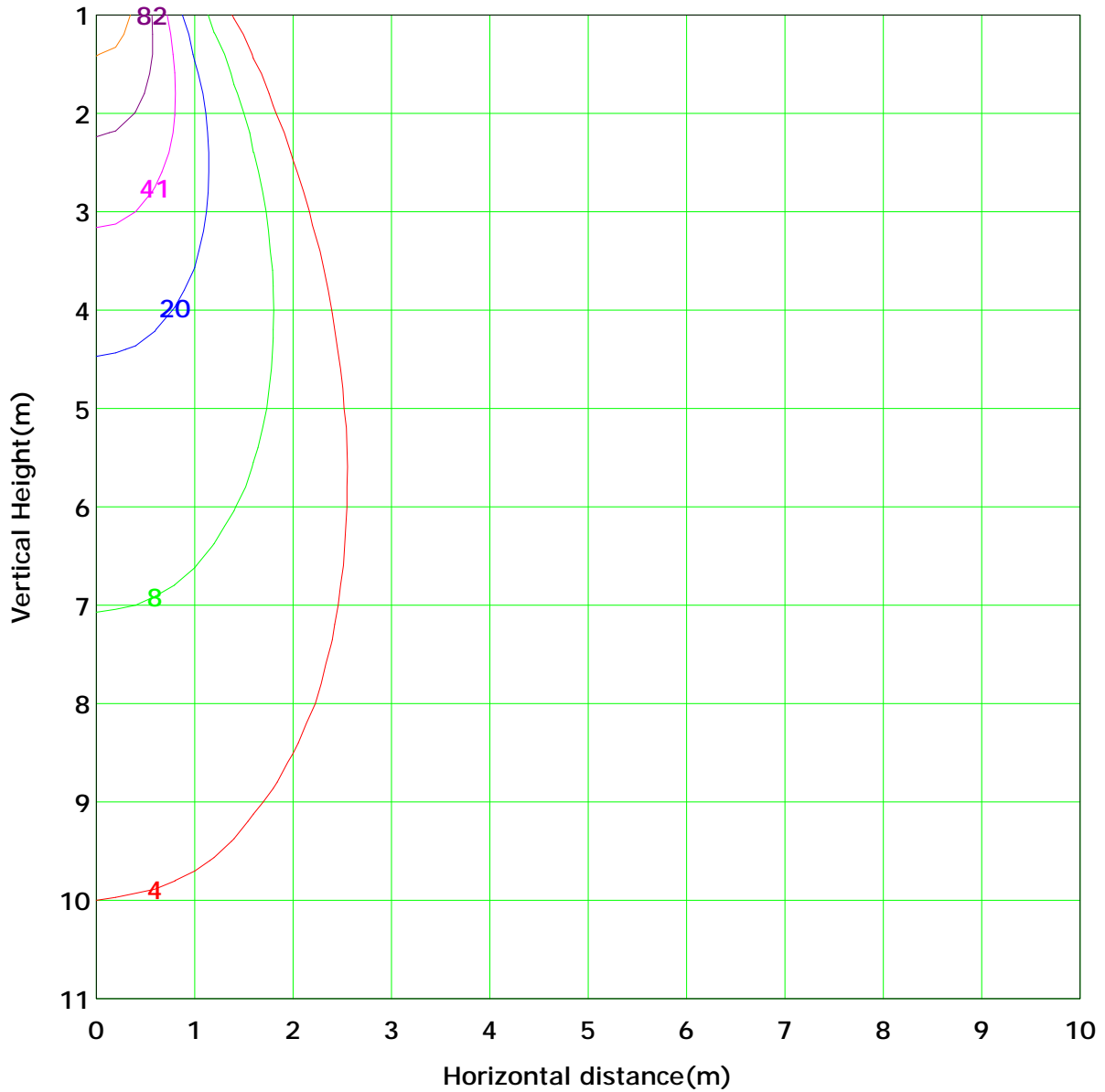
## Illuminance at a Distance



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

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1200A  
 Distance: 1.000 m  
 Humidity:  
 Inspector:

## Vertical IsoLux Plot



Lowest(m): 1.0m	Highest(m): 11.0m	Max Lux: 409.8 lx
( 1%): 4.1 lx	( 2%): 8.2 lx	
( 5%): 20.5 lx	( 10%): 41.0 lx	
( 20%): 82.0 lx	( 50%): 204.9 lx	
(100%): 409.8 lx	(200%): 819.5 lx	
(300%): 1229.3 lx	(500%): 2048.8 lx	

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

Gamma Plane (°): 0.0-90.0: 0.5  
 Test Device: GPM-1200A  
 Distance: 1.000 m  
 Humidity:  
 Inspector:

## Zonal Lumen

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-0.5	402.5	0.1	0.1	0.04	0.04
0.5-1.0	402.1	0.3	0.4	0.12	0.16
1.0-1.5	401.4	0.5	0.9	0.20	0.35
1.5-2.0	400.1	0.7	1.5	0.27	0.63
2.0-2.5	398.5	0.9	2.4	0.35	0.98
2.5-3.0	396.8	1.0	3.4	0.43	1.40
3.0-3.5	394.7	1.2	4.7	0.50	1.90
3.5-4.0	392.2	1.4	6.1	0.57	2.47
4.0-4.5	389.5	1.6	7.7	0.65	3.12
4.5-5.0	386.3	1.8	9.4	0.71	3.83
5.0-5.5	382.6	1.9	11.3	0.78	4.62
5.5-6.0	379.0	2.1	13.4	0.85	5.46
6.0-6.5	375.4	2.2	15.6	0.91	6.38
6.5-7.0	371.0	2.4	18.0	0.97	7.35
7.0-7.5	366.5	2.5	20.6	1.03	8.39
7.5-8.0	362.0	2.7	23.3	1.09	9.48
8.0-8.5	357.1	2.8	26.1	1.15	10.62
8.5-9.0	351.7	2.9	29.0	1.20	11.82
9.0-9.5	346.3	3.1	32.0	1.24	13.06
9.5-10.0	340.6	3.2	35.2	1.29	14.35
10.0-10.5	335.0	3.3	38.5	1.33	15.68
10.5-11.0	329.0	3.4	41.8	1.37	17.05
11.0-11.5	323.0	3.5	45.3	1.41	18.46
11.5-12.0	317.1	3.5	48.8	1.44	19.90
12.0-12.5	310.9	3.6	52.5	1.47	21.38
12.5-13.0	304.5	3.7	56.1	1.50	22.88
13.0-13.5	297.9	3.7	59.9	1.53	24.41
13.5-14.0	291.4	3.8	63.7	1.55	25.95
14.0-14.5	284.6	3.8	67.5	1.57	27.52
14.5-15.0	277.5	3.9	71.4	1.58	29.10
15.0-15.5	270.5	3.9	75.3	1.59	30.69
15.5-16.0	263.5	3.9	79.2	1.60	32.29
16.0-16.5	256.2	3.9	83.2	1.60	33.89
16.5-17.0	249.0	3.9	87.1	1.60	35.49
17.0-17.5	241.7	3.9	91.0	1.60	37.10
17.5-18.0	234.6	3.9	94.9	1.60	38.69

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

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1200A  
 Distance: 1.000 m  
 Humidity:  
 Inspector:

## Zonal Lumen (Continue 1)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
18.0-18.5	227.4	3.9	98.8	1.59	40.28
18.5-19.0	220.2	3.9	102.7	1.58	41.87
19.0-19.5	213.1	3.9	106.6	1.57	43.44
19.5-20.0	205.9	3.8	110.4	1.55	44.99
20.0-20.5	198.8	3.8	114.2	1.54	46.53
20.5-21.0	191.7	3.7	117.9	1.52	48.05
21.0-21.5	184.9	3.7	121.6	1.50	49.54
21.5-22.0	178.1	3.6	125.2	1.47	51.02
22.0-22.5	171.5	3.6	128.7	1.45	52.47
22.5-23.0	164.9	3.5	132.2	1.43	53.89
23.0-23.5	158.6	3.4	135.7	1.40	55.29
23.5-24.0	152.4	3.4	139.0	1.37	56.67
24.0-24.5	146.3	3.3	142.3	1.34	58.01
24.5-25.0	140.4	3.2	145.5	1.31	59.32
25.0-25.5	134.6	3.1	148.7	1.28	60.60
25.5-26.0	129.0	3.1	151.8	1.25	61.86
26.0-26.5	123.5	3.0	154.8	1.22	63.08
26.5-27.0	118.2	2.9	157.7	1.19	64.27
27.0-27.5	113.1	2.8	160.5	1.16	65.42
27.5-28.0	108.2	2.8	163.3	1.13	66.55
28.0-28.5	103.5	2.7	166.0	1.09	67.64
28.5-29.0	98.9	2.6	168.6	1.06	68.71
29.0-29.5	94.5	2.5	171.1	1.03	69.74
29.5-30.0	90.3	2.5	173.6	1.00	70.74
30.0-30.5	86.3	2.4	176.0	0.97	71.71
30.5-31.0	82.5	2.3	178.3	0.94	72.65
31.0-31.5	78.8	2.2	180.5	0.91	73.57
31.5-32.0	75.2	2.2	182.7	0.88	74.45
32.0-32.5	71.8	2.1	184.8	0.86	75.31
32.5-33.0	68.5	2.0	186.8	0.83	76.14
33.0-33.5	65.3	2.0	188.8	0.80	76.94
33.5-34.0	62.3	1.9	190.7	0.77	77.71
34.0-34.5	59.4	1.8	192.5	0.75	78.46
34.5-35.0	56.7	1.8	194.3	0.72	79.18
35.0-35.5	54.1	1.7	196.0	0.70	79.88
35.5-36.0	51.7	1.7	197.6	0.67	80.55

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

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1200A  
 Distance: 1.000 m  
 Humidity:  
 Inspector:

## Zonal Lumen (Continue 2)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-36.5	49.4	1.6	199.2	0.65	81.21
36.5-37.0	47.2	1.5	200.8	0.63	81.84
37.0-37.5	45.0	1.5	202.3	0.61	82.44
37.5-38.0	43.0	1.4	203.7	0.59	83.03
38.0-38.5	41.1	1.4	205.1	0.57	83.60
38.5-39.0	39.3	1.3	206.5	0.55	84.15
39.0-39.5	37.5	1.3	207.8	0.53	84.68
39.5-40.0	35.9	1.3	209.0	0.51	85.20
40.0-40.5	34.3	1.2	210.3	0.50	85.69
40.5-41.0	32.8	1.2	211.4	0.48	86.17
41.0-41.5	31.4	1.1	212.6	0.46	86.63
41.5-42.0	30.1	1.1	213.7	0.45	87.08
42.0-42.5	28.9	1.1	214.7	0.43	87.52
42.5-43.0	27.7	1.0	215.8	0.42	87.94
43.0-43.5	26.6	1.0	216.8	0.41	88.34
43.5-44.0	25.5	1.0	217.7	0.39	88.74
44.0-44.5	24.5	0.9	218.7	0.38	89.12
44.5-45.0	23.5	0.9	219.6	0.37	89.49
45.0-45.5	22.5	0.9	220.4	0.36	89.84
45.5-46.0	21.6	0.8	221.3	0.35	90.19
46.0-46.5	20.8	0.8	222.1	0.34	90.53
46.5-47.0	20.0	0.8	222.9	0.32	90.85
47.0-47.5	19.2	0.8	223.7	0.31	91.16
47.5-48.0	18.4	0.7	224.4	0.30	91.47
48.0-48.5	17.7	0.7	225.2	0.30	91.76
48.5-49.0	17.1	0.7	225.9	0.29	92.05
49.0-49.5	16.4	0.7	226.5	0.28	92.33
49.5-50.0	15.8	0.7	227.2	0.27	92.60
50.0-50.5	15.2	0.6	227.8	0.26	92.86
50.5-51.0	14.7	0.6	228.5	0.25	93.11
51.0-51.5	14.1	0.6	229.1	0.25	93.36
51.5-52.0	13.6	0.6	229.7	0.24	93.60
52.0-52.5	13.1	0.6	230.2	0.23	93.83
52.5-53.0	12.7	0.6	230.8	0.23	94.06
53.0-53.5	12.3	0.5	231.3	0.22	94.28
53.5-54.0	11.8	0.5	231.8	0.21	94.49

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

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1200A  
 Distance: 1.000 m  
 Humidity:  
 Inspector:



### Zonal Lumen (Continue 3)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
54.0-54.5	11.4	0.5	232.3	0.21	94.70
54.5-55.0	11.0	0.5	232.8	0.20	94.90
55.0-55.5	10.7	0.5	233.3	0.20	95.09
55.5-56.0	10.3	0.5	233.8	0.19	95.29
56.0-56.5	10.0	0.5	234.2	0.19	95.47
56.5-57.0	9.7	0.4	234.7	0.18	95.65
57.0-57.5	9.4	0.4	235.1	0.18	95.83
57.5-58.0	9.0	0.4	235.5	0.17	96.00
58.0-58.5	8.7	0.4	235.9	0.17	96.16
58.5-59.0	8.4	0.4	236.3	0.16	96.32
59.0-59.5	8.1	0.4	236.7	0.16	96.48
59.5-60.0	7.8	0.4	237.1	0.15	96.63
60.0-60.5	7.5	0.4	237.5	0.15	96.78
60.5-61.0	7.3	0.3	237.8	0.14	96.92
61.0-61.5	7.0	0.3	238.1	0.14	97.06
61.5-62.0	6.8	0.3	238.5	0.13	97.19
62.0-62.5	6.5	0.3	238.8	0.13	97.32
62.5-63.0	6.3	0.3	239.1	0.12	97.45
63.0-63.5	6.1	0.3	239.4	0.12	97.57
63.5-64.0	5.9	0.3	239.7	0.12	97.68
64.0-64.5	5.7	0.3	240.0	0.11	97.80
64.5-65.0	5.5	0.3	240.2	0.11	97.91
65.0-65.5	5.3	0.3	240.5	0.11	98.02
65.5-66.0	5.1	0.3	240.8	0.10	98.12
66.0-66.5	5.0	0.2	241.0	0.10	98.22
66.5-67.0	4.8	0.2	241.2	0.10	98.32
67.0-67.5	4.6	0.2	241.5	0.09	98.41
67.5-68.0	4.4	0.2	241.7	0.09	98.51
68.0-68.5	4.2	0.2	241.9	0.09	98.59
68.5-69.0	4.1	0.2	242.1	0.08	98.68
69.0-69.5	3.9	0.2	242.3	0.08	98.76
69.5-70.0	3.7	0.2	242.5	0.08	98.84
70.0-70.5	3.6	0.2	242.7	0.08	98.91
70.5-71.0	3.4	0.2	242.9	0.07	98.99
71.0-71.5	3.3	0.2	243.0	0.07	99.05
71.5-72.0	3.1	0.2	243.2	0.07	99.12

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

Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1200A  
 Distance: 1.000 m  
 Humidity:  
 Inspector:

### Zonal Lumen (Continue 4)

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-72.5	3.0	0.2	243.4	0.06	99.19
72.5-73.0	2.9	0.2	243.5	0.06	99.25
73.0-73.5	2.8	0.1	243.7	0.06	99.31
73.5-74.0	2.6	0.1	243.8	0.06	99.36
74.0-74.5	2.5	0.1	243.9	0.05	99.42
74.5-75.0	2.4	0.1	244.1	0.05	99.47
75.0-75.5	2.3	0.1	244.2	0.05	99.52
75.5-76.0	2.1	0.1	244.3	0.05	99.56
76.0-76.5	2.0	0.1	244.4	0.04	99.61
76.5-77.0	1.9	0.1	244.5	0.04	99.65
77.0-77.5	1.8	0.1	244.6	0.04	99.69
77.5-78.0	1.7	0.1	244.7	0.04	99.72
78.0-78.5	1.6	0.1	244.8	0.03	99.76
78.5-79.0	1.5	0.1	244.8	0.03	99.79
79.0-79.5	1.4	0.1	244.9	0.03	99.82
79.5-80.0	1.2	0.1	245.0	0.03	99.85
80.0-80.5	1.1	0.1	245.0	0.03	99.87
80.5-81.0	1.0	0.1	245.1	0.02	99.89
81.0-81.5	0.9	0.1	245.2	0.02	99.91
81.5-82.0	0.8	0.0	245.2	0.02	99.93
82.0-82.5	0.7	0.0	245.2	0.02	99.95
82.5-83.0	0.6	0.0	245.3	0.01	99.96
83.0-83.5	0.5	0.0	245.3	0.01	99.97
83.5-84.0	0.4	0.0	245.3	0.01	99.98
84.0-84.5	0.3	0.0	245.3	0.01	99.99
84.5-85.0	0.2	0.0	245.3	0.01	99.99
85.0-85.5	0.2	0.0	245.4	0.00	100.00
85.5-86.0	0.1	0.0	245.4	0.00	100.00
86.0-86.5	0.0	0.0	245.4	0.00	100.00
86.5-87.0	0.0	0.0	245.4	0.00	100.00
87.0-87.5	0.0	0.0	245.4	0.00	100.00
87.5-88.0	0.0	0.0	245.4	0.00	100.00
88.0-88.5	0.0	0.0	245.4	0.00	100.00
88.5-89.0	0.0	0.0	245.4	0.00	100.00
89.0-89.5	0.0	0.0	245.4	0.00	100.00
89.5-90.0	0.0	0.0	245.4	0.00	100.00

C Plane (°):0.0-360.0: 30.0  
 Test Lab:  
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Gamma Plane (°):0.0-90.0:0.5  
 Test Device: GPM-1200A  
 Distance: 1.000 m  
 Humidity:  
 Inspector: