

Report No.:

Test Time: 2023/5/9 16:23

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Luminaire Description: MGC01100W27V50KWCD-V2

Lamp Catalog: L128-ETSC3-YH00F-KS(1C36B\*4)

Lamp Description: MSPI-DIM100A12S-2600 Number of Lamps:

Lumens per Lamp:

Luminous Length (mm):

Luminous Width (mm):

Luminous Height (mm):

Voltage: 120.2 V

Current: 0.701 A

Power: 83.14 W

Power Factor: 0.984

## Photometric Results

IES Classification: Type II

Total Rated Lamp Lumens: 12479.2 lm

Efficiency: 100%

Upward Ratio: 0%

C0r0 Intensity: 4661.93 cd

Pos of Max. Intensity: H240 V1

Longitudinal Classification: Very Short

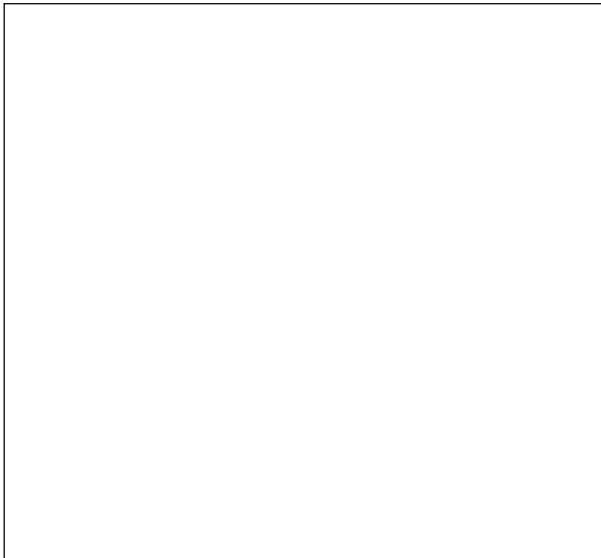
Measurement Flux: 12479.2 lm

Downward Ratio: 100%

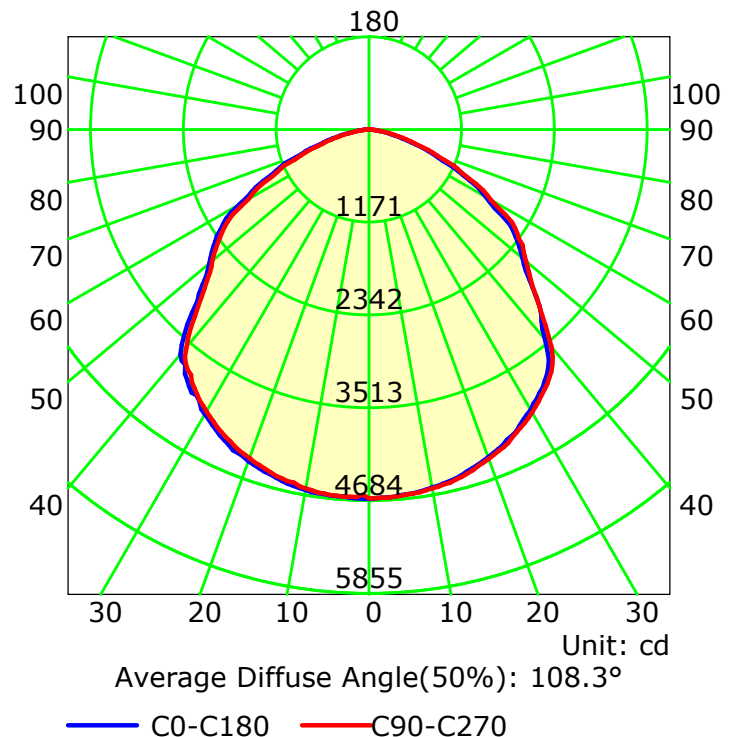
Luminaire Efficacy Rating (LER): 150.15

Max. Intensity: 4665.5 cd

Picture Of Luminaire



Luminous Intensity Distribution Curve



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

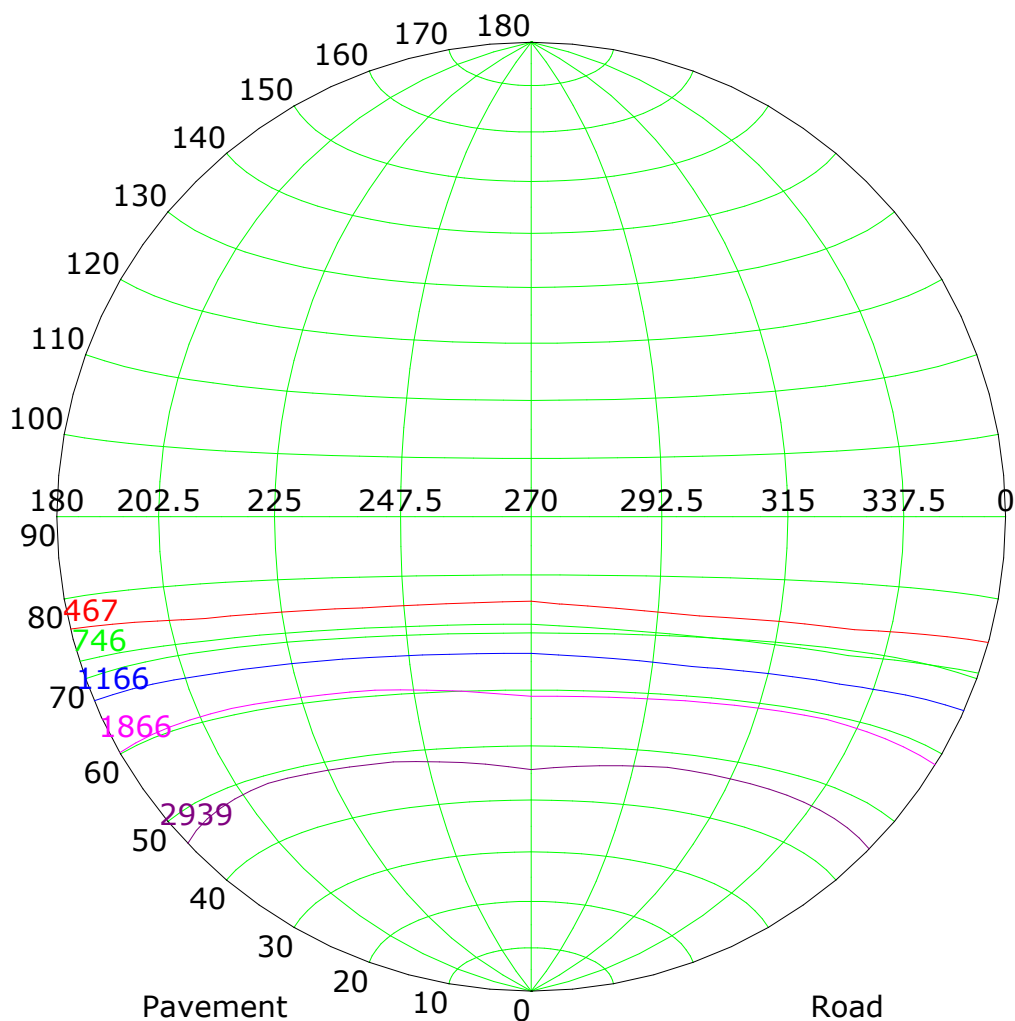
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

## Isocandela (sphere)



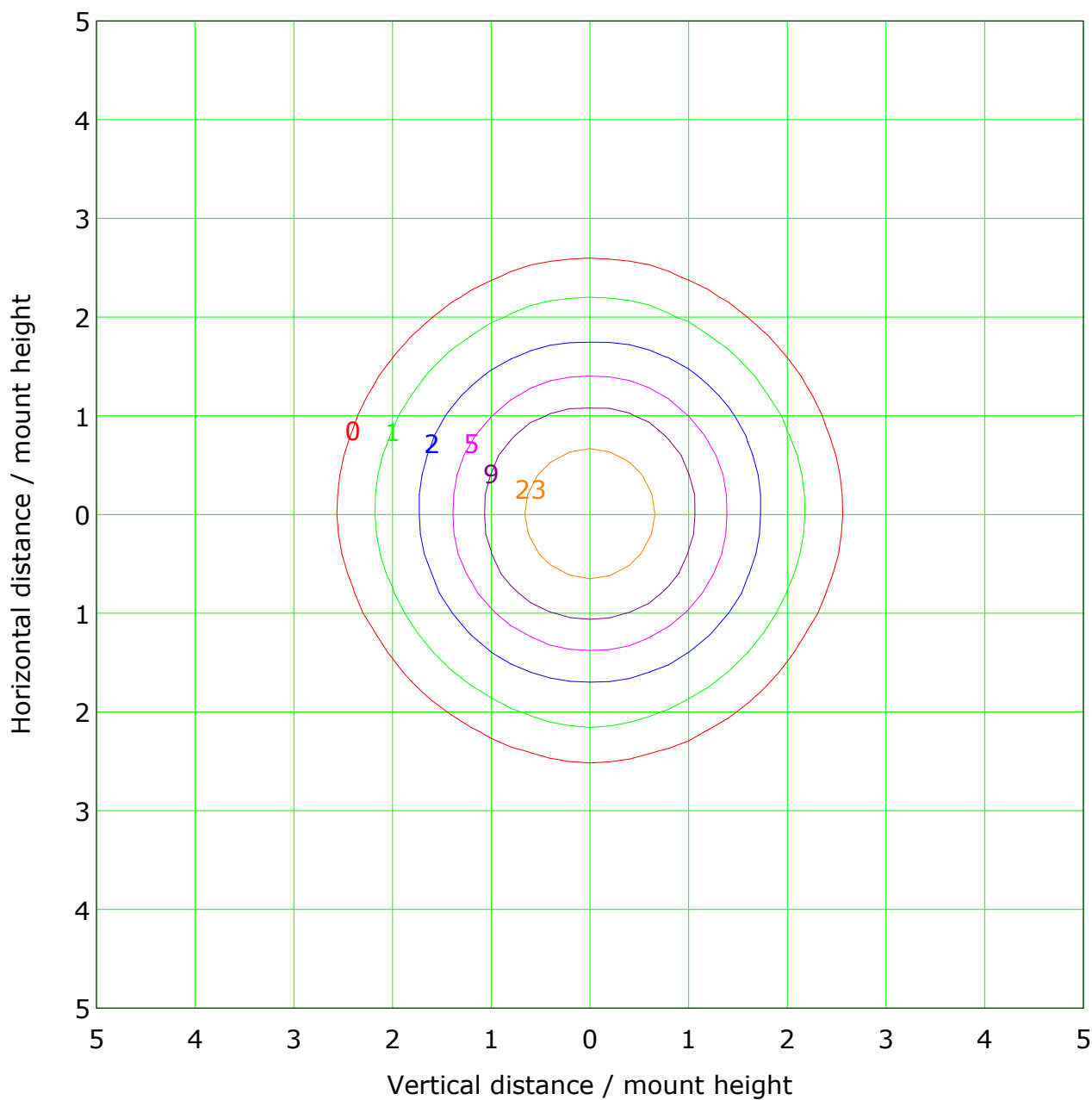
Imax (100%): 4665 cd

( 10%): 467 cd	( 16%): 746 cd
( 25%): 1166 cd	( 40%): 1866 cd
( 63%): 2939 cd	(100%): 4665 cd

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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 11.655 m [K=1.0000]  
Humidity:  
Inspector:

## IsoLux Plot



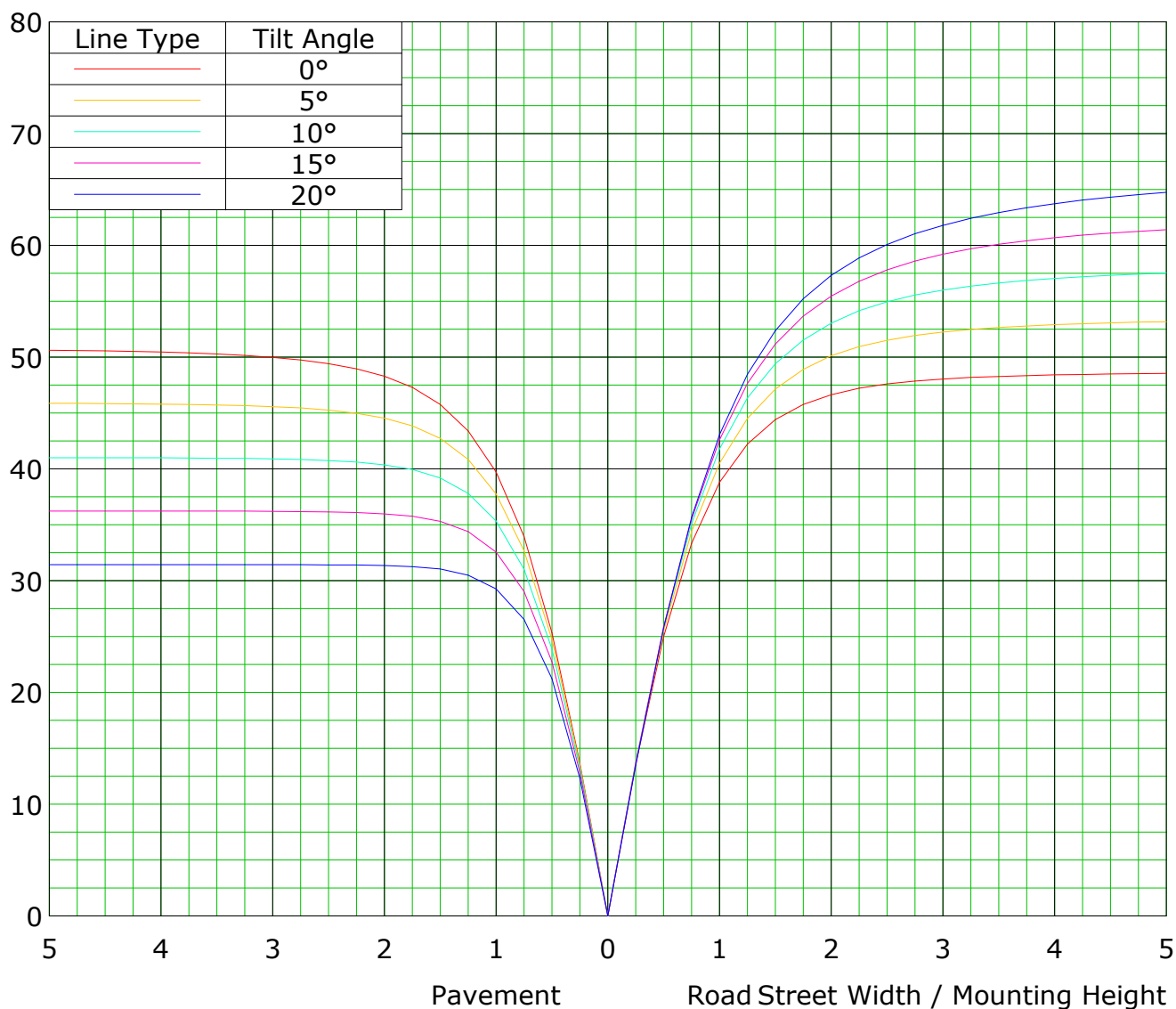
Mounting Height: 10.0m		Max Lux(100%): 46.6 lx	
( 1%):	0.5 lx	( 2%):	0.9 lx
( 5%):	2.3 lx	( 10%):	4.7 lx
( 20%):	9.3 lx	( 50%):	23.3 lx
(100%):	46.6 lx		

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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 11.655 m [K=1.0000]  
Humidity:  
Inspector:

## Roadway CU Curve

Efficiency(%)



C Plane (°):0.0-360.0: 30.0

Test Lab:

Test Type: TYPE C

Temperature:

Operator:

Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

**FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM**

	ZONE	LUMENS	% LAMP LUMENS
	FORWARD LIGHT	6102	48.9
	FL ( 0°-30°)	1841	14.8
	FM (30°-60°)	3406	27.3
	FH (60°-80°)	824	6.6
	FVH (80°-90°)	30	0.2
	BACK LIGHT	6377	51.1
	BL ( 0°-30°)	1859	14.9
	BM (30°-60°)	3533	28.3
	BH (60°-80°)	943	7.6
	BVH (80°-90°)	42	0.3
	UP LIGHT	0	0.0
	UL (90°-100°)	0	0.0
	UH (100°-180°)	0	0.0
	TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B3 U1 G2
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B3 U1 G1

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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 11.655 m [K=1.0000]  
Humidity:  
Inspector:

## Zonal Lumen

Gamma [°]	I <sub>mean</sub> [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	4647.4	4.4	4.4	0.04	0.04
1.0-2.0	4650.4	13.3	17.8	0.11	0.14
2.0-3.0	4650.4	22.2	40.0	0.18	0.32
3.0-4.0	4646.6	31.1	71.1	0.25	0.57
4.0-5.0	4641.6	39.9	111.1	0.32	0.89
5.0-6.0	4637.7	48.7	159.8	0.39	1.28
6.0-7.0	4632.4	57.5	217.3	0.46	1.74
7.0-8.0	4624.9	66.2	283.5	0.53	2.27
8.0-9.0	4616.3	74.8	358.4	0.60	2.87
9.0-10.0	4607.6	83.4	441.8	0.67	3.54
10.0-11.0	4597.7	91.9	533.6	0.74	4.28
11.0-12.0	4586.3	100.3	633.9	0.80	5.08
12.0-13.0	4574.2	108.6	742.5	0.87	5.95
13.0-14.0	4556.9	116.7	859.1	0.93	6.88
14.0-15.0	4536.6	124.6	983.7	1.00	7.88
15.0-16.0	4517.8	132.4	1116.1	1.06	8.94
16.0-17.0	4500.4	140.2	1256.3	1.12	10.07
17.0-18.0	4483.6	147.8	1404.1	1.18	11.25
18.0-19.0	4461.8	155.3	1559.4	1.24	12.50
19.0-20.0	4436.7	162.4	1721.8	1.30	13.80
20.0-21.0	4410.8	169.4	1891.2	1.36	15.15
21.0-22.0	4385.6	176.3	2067.4	1.41	16.57
22.0-23.0	4362.3	183.1	2250.5	1.47	18.03
23.0-24.0	4335.5	189.6	2440.1	1.52	19.55
24.0-25.0	4305.1	195.8	2635.8	1.57	21.12
25.0-26.0	4274.3	201.8	2837.6	1.62	22.74
26.0-27.0	4243.3	207.6	3045.3	1.66	24.40
27.0-28.0	4209.3	213.1	3258.4	1.71	26.11
28.0-29.0	4172.3	218.3	3476.7	1.75	27.86
29.0-30.0	4135.2	223.3	3700.0	1.79	29.65
30.0-31.0	4098.7	228.1	3928.1	1.83	31.48
31.0-32.0	4058.8	232.6	4160.7	1.86	33.34
32.0-33.0	4018.2	236.8	4397.4	1.90	35.24
33.0-34.0	3979.8	240.9	4638.3	1.93	37.17
34.0-35.0	3936.4	244.5	4882.8	1.96	39.13
35.0-36.0	3888.6	247.6	5130.5	1.98	41.11

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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 11.655 m [K=1.0000]  
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 [%]
36.0-37.0	3842.1	250.6	5381.1	2.01	43.12
37.0-38.0	3790.1	253.0	5634.1	2.03	45.15
38.0-39.0	3732.7	254.8	5888.9	2.04	47.19
39.0-40.0	3673.0	256.2	6145.1	2.05	49.24
40.0-41.0	3602.8	256.6	6401.7	2.06	51.30
41.0-42.0	3525.4	256.2	6657.9	2.05	53.35
42.0-43.0	3443.1	255.1	6912.9	2.04	55.40
43.0-44.0	3349.6	252.8	7165.8	2.03	57.42
44.0-45.0	3244.3	249.4	7415.2	2.00	59.42
45.0-46.0	3134.5	245.2	7660.3	1.96	61.38
46.0-47.0	3024.5	240.6	7900.9	1.93	63.31
47.0-48.0	2913.3	235.5	8136.4	1.89	65.20
48.0-49.0	2807.8	230.6	8367.1	1.85	67.05
49.0-50.0	2711.9	226.1	8593.2	1.81	68.86
50.0-51.0	2623.3	222.0	8815.2	1.78	70.64
51.0-52.0	2543.1	218.3	9033.4	1.75	72.39
52.0-53.0	2469.2	214.8	9248.2	1.72	74.11
53.0-54.0	2399.1	211.5	9459.7	1.69	75.80
54.0-55.0	2332.6	208.2	9668.0	1.67	77.47
55.0-56.0	2265.5	204.7	9872.7	1.64	79.11
56.0-57.0	2192.9	200.5	10073.2	1.61	80.72
57.0-58.0	2114.2	195.5	10268.8	1.57	82.29
58.0-59.0	2023.3	189.2	10458.0	1.52	83.80
59.0-60.0	1921.2	181.5	10639.5	1.45	85.26
60.0-61.0	1814.5	173.2	10812.7	1.39	86.65
61.0-62.0	1699.1	163.7	10976.4	1.31	87.96
62.0-63.0	1567.6	152.5	11128.9	1.22	89.18
63.0-64.0	1428.6	140.2	11269.1	1.12	90.30
64.0-65.0	1308.7	129.5	11398.6	1.04	91.34
65.0-66.0	1214.0	121.1	11519.8	0.97	92.31
66.0-67.0	1122.6	112.9	11632.7	0.90	93.22
67.0-68.0	1026.6	104.0	11736.7	0.83	94.05
68.0-69.0	938.1	95.7	11832.4	0.77	94.82
69.0-70.0	859.0	88.2	11920.6	0.71	95.52
70.0-71.0	783.7	81.0	12001.6	0.65	96.17
71.0-72.0	702.5	73.1	12074.7	0.59	96.76

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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 11.655 m [K=1.0000]  
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 [%]
72.0-73.0	619.9	64.8	12139.5	0.52	97.28
73.0-74.0	545.0	57.3	12196.8	0.46	97.74
74.0-75.0	472.4	49.9	12246.7	0.40	98.14
75.0-76.0	402.1	42.7	12289.4	0.34	98.48
76.0-77.0	342.8	36.6	12326.0	0.29	98.77
77.0-78.0	294.9	31.6	12357.5	0.25	99.03
78.0-79.0	248.7	26.7	12384.3	0.21	99.24
79.0-80.0	205.2	22.1	12406.4	0.18	99.42
80.0-81.0	164.8	17.8	12424.2	0.14	99.56
81.0-82.0	129.2	14.0	12438.2	0.11	99.67
82.0-83.0	101.0	11.0	12449.2	0.09	99.76
83.0-84.0	78.6	8.6	12457.8	0.07	99.83
84.0-85.0	60.2	6.6	12464.3	0.05	99.88
85.0-86.0	45.6	5.0	12469.3	0.04	99.92
86.0-87.0	34.8	3.8	12473.1	0.03	99.95
87.0-88.0	26.7	2.9	12476.1	0.02	99.98
88.0-89.0	17.9	2.0	12478.0	0.02	99.99
89.0-90.0	8.3	0.9	12478.9	0.01	100.00
90.0-91.0	1.9	0.2	12479.1	0.00	100.00
91.0-92.0	0.0	0.0	12479.1	0.00	100.00
92.0-93.0	0.0	0.0	12479.1	0.00	100.00
93.0-94.0	0.0	0.0	12479.1	0.00	100.00
94.0-95.0	0.0	0.0	12479.1	0.00	100.00
95.0-96.0	0.0	0.0	12479.1	0.00	100.00
96.0-97.0	0.0	0.0	12479.1	0.00	100.00
97.0-98.0	0.0	0.0	12479.1	0.00	100.00
98.0-99.0	0.0	0.0	12479.1	0.00	100.00
99.0-100.0	0.0	0.0	12479.1	0.00	100.00
100.0-101.0	0.0	0.0	12479.1	0.00	100.00
101.0-102.0	0.0	0.0	12479.1	0.00	100.00
102.0-103.0	0.0	0.0	12479.1	0.00	100.00
103.0-104.0	0.0	0.0	12479.1	0.00	100.00
104.0-105.0	0.0	0.0	12479.1	0.00	100.00
105.0-106.0	0.0	0.0	12479.1	0.00	100.00
106.0-107.0	0.0	0.0	12479.1	0.00	100.00
107.0-108.0	0.0	0.0	12479.1	0.00	100.00

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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 11.655 m [K=1.0000]  
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 [%]
108.0-109.0	0.0	0.0	12479.1	0.00	100.00
109.0-110.0	0.0	0.0	12479.1	0.00	100.00
110.0-111.0	0.0	0.0	12479.1	0.00	100.00
111.0-112.0	0.0	0.0	12479.1	0.00	100.00
112.0-113.0	0.0	0.0	12479.1	0.00	100.00
113.0-114.0	0.0	0.0	12479.1	0.00	100.00
114.0-115.0	0.0	0.0	12479.1	0.00	100.00
115.0-116.0	0.0	0.0	12479.1	0.00	100.00
116.0-117.0	0.0	0.0	12479.1	0.00	100.00
117.0-118.0	0.0	0.0	12479.1	0.00	100.00
118.0-119.0	0.0	0.0	12479.1	0.00	100.00
119.0-120.0	0.0	0.0	12479.1	0.00	100.00
120.0-121.0	0.0	0.0	12479.1	0.00	100.00
121.0-122.0	0.0	0.0	12479.1	0.00	100.00
122.0-123.0	0.0	0.0	12479.1	0.00	100.00
123.0-124.0	0.0	0.0	12479.1	0.00	100.00
124.0-125.0	0.0	0.0	12479.1	0.00	100.00
125.0-126.0	0.0	0.0	12479.1	0.00	100.00
126.0-127.0	0.0	0.0	12479.1	0.00	100.00
127.0-128.0	0.0	0.0	12479.1	0.00	100.00
128.0-129.0	0.0	0.0	12479.1	0.00	100.00
129.0-130.0	0.0	0.0	12479.1	0.00	100.00
130.0-131.0	0.0	0.0	12479.1	0.00	100.00
131.0-132.0	0.0	0.0	12479.1	0.00	100.00
132.0-133.0	0.0	0.0	12479.1	0.00	100.00
133.0-134.0	0.0	0.0	12479.1	0.00	100.00
134.0-135.0	0.0	0.0	12479.1	0.00	100.00
135.0-136.0	0.0	0.0	12479.1	0.00	100.00
136.0-137.0	0.0	0.0	12479.1	0.00	100.00
137.0-138.0	0.0	0.0	12479.1	0.00	100.00
138.0-139.0	0.0	0.0	12479.1	0.00	100.00
139.0-140.0	0.0	0.0	12479.1	0.00	100.00
140.0-141.0	0.0	0.0	12479.1	0.00	100.00
141.0-142.0	0.0	0.0	12479.1	0.00	100.00
142.0-143.0	0.0	0.0	12479.1	0.00	100.00
143.0-144.0	0.0	0.0	12479.1	0.00	100.00

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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 11.655 m [K=1.0000]  
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 [%]
144.0-145.0	0.0	0.0	12479.1	0.00	100.00
145.0-146.0	0.0	0.0	12479.1	0.00	100.00
146.0-147.0	0.0	0.0	12479.1	0.00	100.00
147.0-148.0	0.0	0.0	12479.1	0.00	100.00
148.0-149.0	0.0	0.0	12479.1	0.00	100.00
149.0-150.0	0.0	0.0	12479.1	0.00	100.00
150.0-151.0	0.0	0.0	12479.1	0.00	100.00
151.0-152.0	0.0	0.0	12479.1	0.00	100.00
152.0-153.0	0.0	0.0	12479.1	0.00	100.00
153.0-154.0	0.0	0.0	12479.1	0.00	100.00
154.0-155.0	0.0	0.0	12479.1	0.00	100.00
155.0-156.0	0.0	0.0	12479.1	0.00	100.00
156.0-157.0	0.0	0.0	12479.1	0.00	100.00
157.0-158.0	0.0	0.0	12479.1	0.00	100.00
158.0-159.0	0.0	0.0	12479.1	0.00	100.00
159.0-160.0	0.0	0.0	12479.1	0.00	100.00
160.0-161.0	0.0	0.0	12479.1	0.00	100.00
161.0-162.0	0.0	0.0	12479.1	0.00	100.00
162.0-163.0	0.0	0.0	12479.1	0.00	100.00
163.0-164.0	0.0	0.0	12479.1	0.00	100.00
164.0-165.0	0.0	0.0	12479.1	0.00	100.00
165.0-166.0	0.0	0.0	12479.1	0.00	100.00
166.0-167.0	0.0	0.0	12479.1	0.00	100.00
167.0-168.0	0.0	0.0	12479.1	0.00	100.00
168.0-169.0	0.0	0.0	12479.1	0.00	100.00
169.0-170.0	0.0	0.0	12479.1	0.00	100.00
170.0-171.0	0.0	0.0	12479.1	0.00	100.00
171.0-172.0	0.0	0.0	12479.1	0.00	100.00
172.0-173.0	0.0	0.0	12479.1	0.00	100.00
173.0-174.0	0.0	0.0	12479.1	0.00	100.00
174.0-175.0	0.0	0.0	12479.1	0.00	100.00
175.0-176.0	0.0	0.0	12479.1	0.00	100.00
176.0-177.0	0.0	0.0	12479.1	0.00	100.00
177.0-178.0	0.0	0.0	12479.1	0.00	100.00
178.0-179.0	0.0	0.0	12479.1	0.00	100.00
179.0-180.0	0.0	0.0	12479.1	0.00	100.00

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

Gamma Plane (°):0.0-180.0:1.0  
Test Device: GPM-1800B  
Distance: 11.655 m [K=1.0000]  
Humidity:  
Inspector:

## Zonal Lumen (Continue 5)

cone flux(90°): 7415.15 lm

%lum = 59.4%

%lamp = 59.4%

cone flux(120°): 10639.48 lm

%lum = 85.3%

%lamp = 85.3%

## LED Average Luminance Report

Avg.L	cd/m <sup>2</sup>
L 0-180(65) av	1.#J
L 0-180(75) av	1.#J
L 0-180(85) av	1.#J
L 90-270(65) av	1.#J
L 90-270(75) av	1.#J
L 90-270(85) av	1.#J
L 45(65) av	1.#J
L 45(75) av	1.#J
L 45(85) av	1.#J

Standard: GB/T 29293-2012