

Report No.:

Test Time: 2023/5/9 17:41

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Luminaire Description: MGC01100W27V50KWCD-V4

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: 0.334 A

Power: 39.70 W

Power Factor: 0.984

## Photometric Results

IES Classification: Type II

Total Rated Lamp Lumens: 6621.4 lm

Efficiency: 100%

Upward Ratio: 0%

C0r0 Intensity: 2473.61 cd

Pos of Max. Intensity: H240 V1

Longitudinal Classification: Very Short

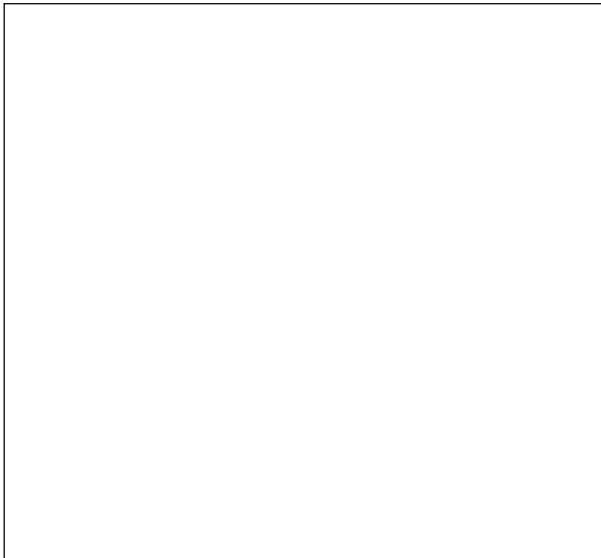
Measurement Flux: 6621.4 lm

Downward Ratio: 100%

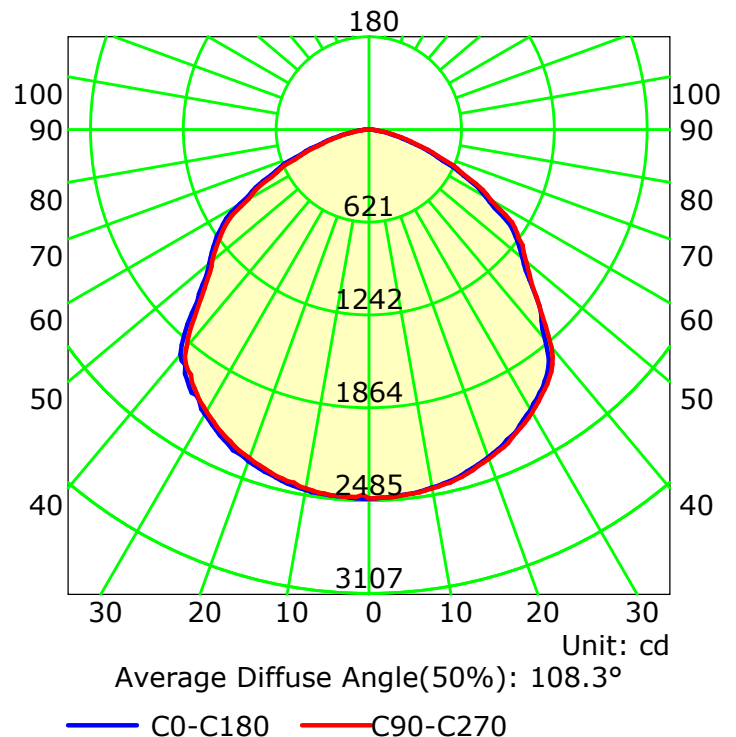
Luminaire Efficacy Rating (LER): 166.84

Max. Intensity: 2475.51 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

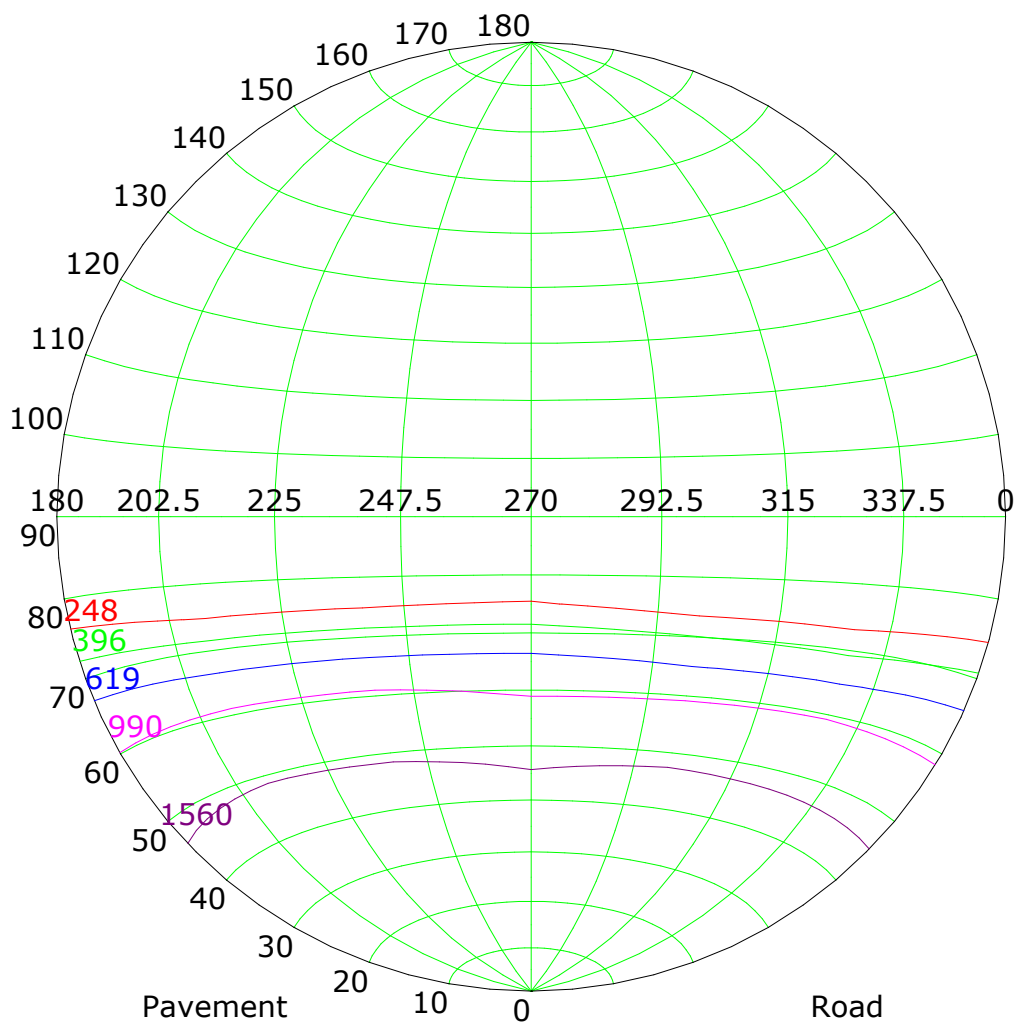
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 2476 cd

( 10%): 248 cd	( 16%): 396 cd
( 25%): 619 cd	( 40%): 990 cd
( 63%): 1560 cd	(100%): 2476 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

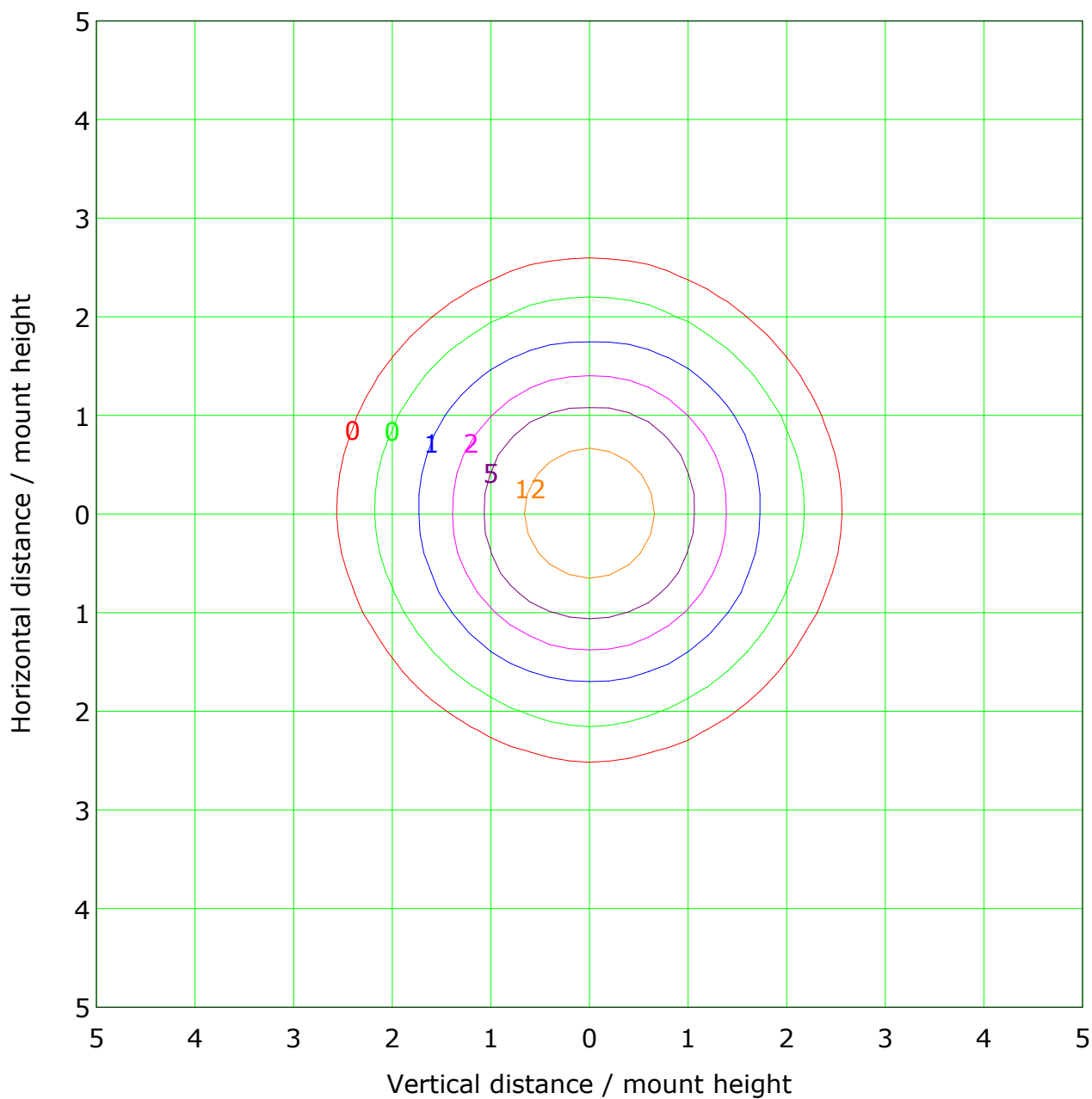
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 24.7 lx

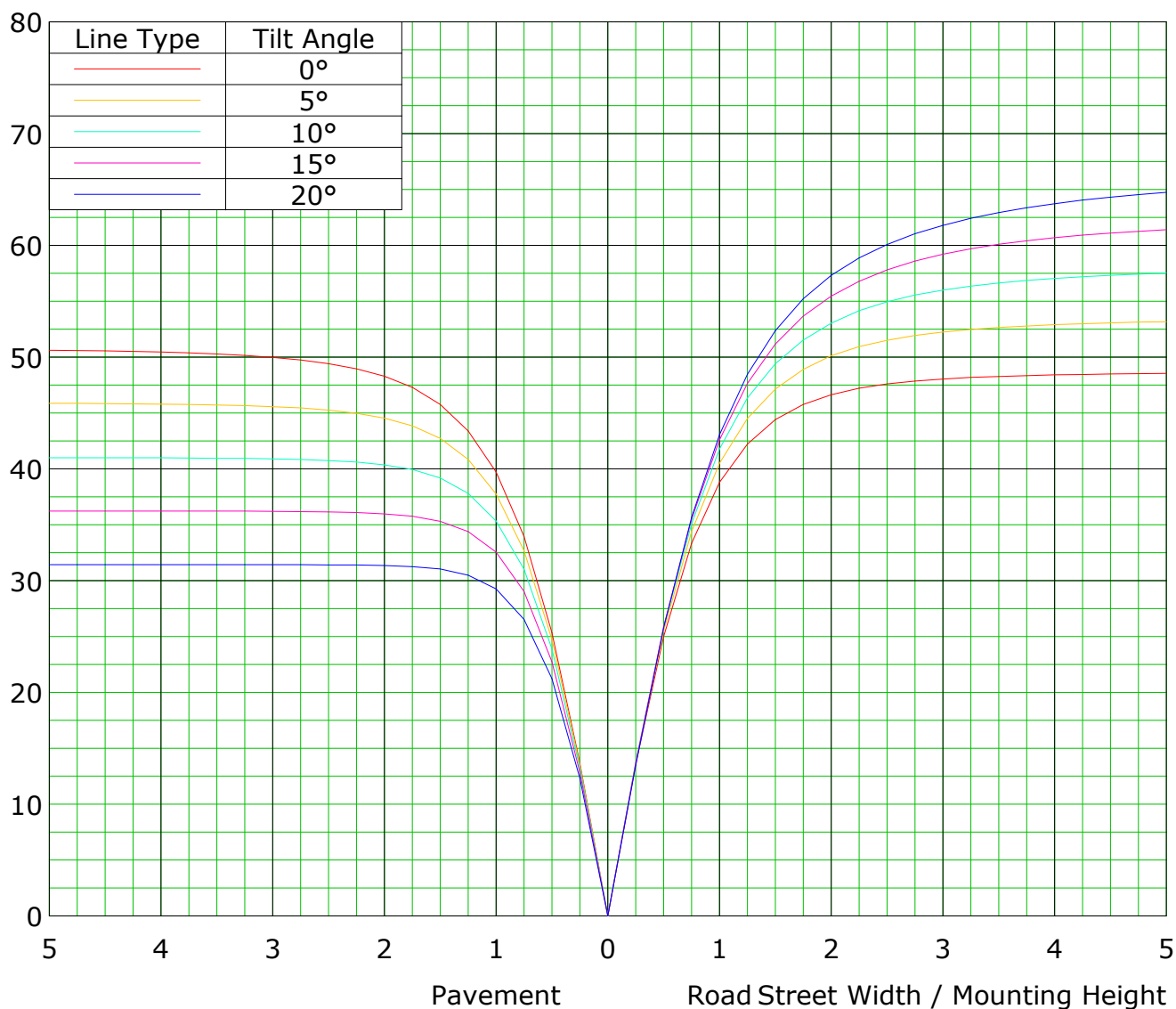
( 1%): 0.2 lx	( 2%): 0.5 lx
( 5%): 1.2 lx	( 10%): 2.5 lx
( 20%): 4.9 lx	( 50%): 12.4 lx
(100%): 24.7 lx	

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

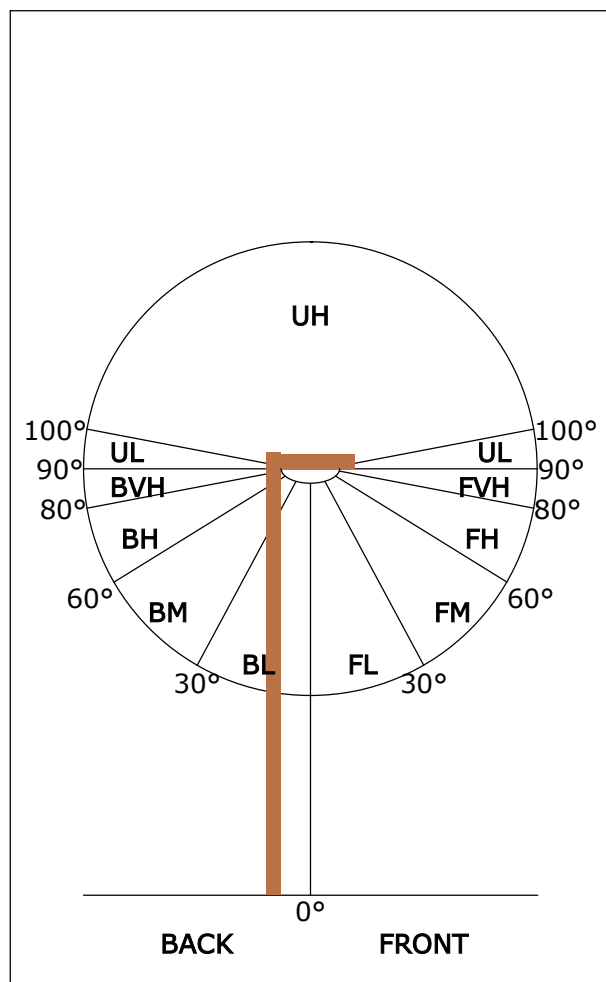
Test Device: GPM-1800B

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	3238	48.9
FL ( 0°-30°)	977	14.8
FM (30°-60°)	1807	27.3
FH (60°-80°)	437	6.6
FVH (80°-90°)	16	0.2
BACK LIGHT	3384	51.1
BL ( 0°-30°)	986	14.9
BM (30°-60°)	1875	28.3
BH (60°-80°)	500	7.6
BVH (80°-90°)	23	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)	B2 U1 G2
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B2 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	2465.9	2.4	2.4	0.04	0.04
1.0-2.0	2467.5	7.1	9.4	0.11	0.14
2.0-3.0	2467.5	11.8	21.2	0.18	0.32
3.0-4.0	2465.5	16.5	37.8	0.25	0.57
4.0-5.0	2462.8	21.2	58.9	0.32	0.89
5.0-6.0	2460.7	25.9	84.8	0.39	1.28
6.0-7.0	2457.9	30.5	115.3	0.46	1.74
7.0-8.0	2453.9	35.1	150.4	0.53	2.27
8.0-9.0	2449.4	39.7	190.1	0.60	2.87
9.0-10.0	2444.8	44.2	234.4	0.67	3.54
10.0-11.0	2439.5	48.8	283.1	0.74	4.28
11.0-12.0	2433.5	53.2	336.3	0.80	5.08
12.0-13.0	2427.1	57.6	394.0	0.87	5.95
13.0-14.0	2417.9	61.9	455.9	0.93	6.88
14.0-15.0	2407.1	66.1	521.9	1.00	7.88
15.0-16.0	2397.1	70.2	592.2	1.06	8.94
16.0-17.0	2387.9	74.4	666.6	1.12	10.07
17.0-18.0	2379.0	78.4	745.0	1.18	11.25
18.0-19.0	2367.4	82.4	827.4	1.24	12.50
19.0-20.0	2354.1	86.2	913.6	1.30	13.80
20.0-21.0	2340.4	89.9	1003.4	1.36	15.15
21.0-22.0	2327.0	93.5	1097.0	1.41	16.57
22.0-23.0	2314.6	97.1	1194.1	1.47	18.03
23.0-24.0	2300.4	100.6	1294.7	1.52	19.55
24.0-25.0	2284.3	103.9	1398.6	1.57	21.12
25.0-26.0	2267.9	107.1	1505.6	1.62	22.74
26.0-27.0	2251.5	110.2	1615.8	1.66	24.40
27.0-28.0	2233.5	113.1	1728.9	1.71	26.11
28.0-29.0	2213.8	115.8	1844.7	1.75	27.86
29.0-30.0	2194.1	118.5	1963.2	1.79	29.65
30.0-31.0	2174.7	121.0	2084.3	1.83	31.48
31.0-32.0	2153.6	123.4	2207.7	1.86	33.34
32.0-33.0	2132.0	125.6	2333.3	1.90	35.24
33.0-34.0	2111.6	127.8	2461.1	1.93	37.17
34.0-35.0	2088.6	129.7	2590.8	1.96	39.13
35.0-36.0	2063.3	131.4	2722.2	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	2038.6	133.0	2855.2	2.01	43.12
37.0-38.0	2011.0	134.3	2989.4	2.03	45.15
38.0-39.0	1980.6	135.2	3124.6	2.04	47.19
39.0-40.0	1948.9	135.9	3260.6	2.05	49.24
40.0-41.0	1911.6	136.1	3396.7	2.06	51.30
41.0-42.0	1870.6	135.9	3532.6	2.05	53.35
42.0-43.0	1826.9	135.3	3668.0	2.04	55.40
43.0-44.0	1777.3	134.2	3802.1	2.03	57.42
44.0-45.0	1721.4	132.3	3934.5	2.00	59.42
45.0-46.0	1663.1	130.1	4064.5	1.96	61.38
46.0-47.0	1604.8	127.7	4192.2	1.93	63.31
47.0-48.0	1545.8	125.0	4317.2	1.89	65.20
48.0-49.0	1489.8	122.4	4439.5	1.85	67.05
49.0-50.0	1438.9	120.0	4559.5	1.81	68.86
50.0-51.0	1391.9	117.8	4677.3	1.78	70.64
51.0-52.0	1349.4	115.8	4793.1	1.75	72.39
52.0-53.0	1310.1	114.0	4907.1	1.72	74.11
53.0-54.0	1273.0	112.2	5019.3	1.69	75.80
54.0-55.0	1237.7	110.5	5129.8	1.67	77.47
55.0-56.0	1202.1	108.6	5238.4	1.64	79.11
56.0-57.0	1163.6	106.4	5344.8	1.61	80.72
57.0-58.0	1121.8	103.8	5448.6	1.57	82.29
58.0-59.0	1073.5	100.4	5549.0	1.52	83.80
59.0-60.0	1019.4	96.3	5645.3	1.45	85.26
60.0-61.0	962.8	91.9	5737.2	1.39	86.65
61.0-62.0	901.5	86.9	5824.1	1.31	87.96
62.0-63.0	831.8	80.9	5905.0	1.22	89.18
63.0-64.0	758.0	74.4	5979.3	1.12	90.30
64.0-65.0	694.4	68.7	6048.1	1.04	91.34
65.0-66.0	644.2	64.3	6112.4	0.97	92.31
66.0-67.0	595.6	59.9	6172.3	0.90	93.22
67.0-68.0	544.7	55.2	6227.4	0.83	94.05
68.0-69.0	497.7	50.8	6278.2	0.77	94.82
69.0-70.0	455.8	46.8	6325.0	0.71	95.52
70.0-71.0	415.8	43.0	6368.0	0.65	96.17
71.0-72.0	372.8	38.8	6406.8	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	328.9	34.4	6441.2	0.52	97.28
73.0-74.0	289.2	30.4	6471.6	0.46	97.74
74.0-75.0	250.6	26.5	6498.1	0.40	98.14
75.0-76.0	213.3	22.6	6520.7	0.34	98.48
76.0-77.0	181.9	19.4	6540.1	0.29	98.77
77.0-78.0	156.5	16.8	6556.9	0.25	99.03
78.0-79.0	132.0	14.2	6571.1	0.21	99.24
79.0-80.0	108.9	11.7	6582.8	0.18	99.42
80.0-81.0	87.5	9.5	6592.3	0.14	99.56
81.0-82.0	68.5	7.4	6599.7	0.11	99.67
82.0-83.0	53.6	5.8	6605.5	0.09	99.76
83.0-84.0	41.7	4.5	6610.1	0.07	99.83
84.0-85.0	31.9	3.5	6613.5	0.05	99.88
85.0-86.0	24.2	2.6	6616.2	0.04	99.92
86.0-87.0	18.5	2.0	6618.2	0.03	99.95
87.0-88.0	14.2	1.6	6619.8	0.02	99.98
88.0-89.0	9.5	1.0	6620.8	0.02	99.99
89.0-90.0	4.4	0.5	6621.3	0.01	100.00
90.0-91.0	1.0	0.1	6621.4	0.00	100.00
91.0-92.0	0.0	0.0	6621.4	0.00	100.00
92.0-93.0	0.0	0.0	6621.4	0.00	100.00
93.0-94.0	0.0	0.0	6621.4	0.00	100.00
94.0-95.0	0.0	0.0	6621.4	0.00	100.00
95.0-96.0	0.0	0.0	6621.4	0.00	100.00
96.0-97.0	0.0	0.0	6621.4	0.00	100.00
97.0-98.0	0.0	0.0	6621.4	0.00	100.00
98.0-99.0	0.0	0.0	6621.4	0.00	100.00
99.0-100.0	0.0	0.0	6621.4	0.00	100.00
100.0-101.0	0.0	0.0	6621.4	0.00	100.00
101.0-102.0	0.0	0.0	6621.4	0.00	100.00
102.0-103.0	0.0	0.0	6621.4	0.00	100.00
103.0-104.0	0.0	0.0	6621.4	0.00	100.00
104.0-105.0	0.0	0.0	6621.4	0.00	100.00
105.0-106.0	0.0	0.0	6621.4	0.00	100.00
106.0-107.0	0.0	0.0	6621.4	0.00	100.00
107.0-108.0	0.0	0.0	6621.4	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	6621.4	0.00	100.00
109.0-110.0	0.0	0.0	6621.4	0.00	100.00
110.0-111.0	0.0	0.0	6621.4	0.00	100.00
111.0-112.0	0.0	0.0	6621.4	0.00	100.00
112.0-113.0	0.0	0.0	6621.4	0.00	100.00
113.0-114.0	0.0	0.0	6621.4	0.00	100.00
114.0-115.0	0.0	0.0	6621.4	0.00	100.00
115.0-116.0	0.0	0.0	6621.4	0.00	100.00
116.0-117.0	0.0	0.0	6621.4	0.00	100.00
117.0-118.0	0.0	0.0	6621.4	0.00	100.00
118.0-119.0	0.0	0.0	6621.4	0.00	100.00
119.0-120.0	0.0	0.0	6621.4	0.00	100.00
120.0-121.0	0.0	0.0	6621.4	0.00	100.00
121.0-122.0	0.0	0.0	6621.4	0.00	100.00
122.0-123.0	0.0	0.0	6621.4	0.00	100.00
123.0-124.0	0.0	0.0	6621.4	0.00	100.00
124.0-125.0	0.0	0.0	6621.4	0.00	100.00
125.0-126.0	0.0	0.0	6621.4	0.00	100.00
126.0-127.0	0.0	0.0	6621.4	0.00	100.00
127.0-128.0	0.0	0.0	6621.4	0.00	100.00
128.0-129.0	0.0	0.0	6621.4	0.00	100.00
129.0-130.0	0.0	0.0	6621.4	0.00	100.00
130.0-131.0	0.0	0.0	6621.4	0.00	100.00
131.0-132.0	0.0	0.0	6621.4	0.00	100.00
132.0-133.0	0.0	0.0	6621.4	0.00	100.00
133.0-134.0	0.0	0.0	6621.4	0.00	100.00
134.0-135.0	0.0	0.0	6621.4	0.00	100.00
135.0-136.0	0.0	0.0	6621.4	0.00	100.00
136.0-137.0	0.0	0.0	6621.4	0.00	100.00
137.0-138.0	0.0	0.0	6621.4	0.00	100.00
138.0-139.0	0.0	0.0	6621.4	0.00	100.00
139.0-140.0	0.0	0.0	6621.4	0.00	100.00
140.0-141.0	0.0	0.0	6621.4	0.00	100.00
141.0-142.0	0.0	0.0	6621.4	0.00	100.00
142.0-143.0	0.0	0.0	6621.4	0.00	100.00
143.0-144.0	0.0	0.0	6621.4	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	6621.4	0.00	100.00
145.0-146.0	0.0	0.0	6621.4	0.00	100.00
146.0-147.0	0.0	0.0	6621.4	0.00	100.00
147.0-148.0	0.0	0.0	6621.4	0.00	100.00
148.0-149.0	0.0	0.0	6621.4	0.00	100.00
149.0-150.0	0.0	0.0	6621.4	0.00	100.00
150.0-151.0	0.0	0.0	6621.4	0.00	100.00
151.0-152.0	0.0	0.0	6621.4	0.00	100.00
152.0-153.0	0.0	0.0	6621.4	0.00	100.00
153.0-154.0	0.0	0.0	6621.4	0.00	100.00
154.0-155.0	0.0	0.0	6621.4	0.00	100.00
155.0-156.0	0.0	0.0	6621.4	0.00	100.00
156.0-157.0	0.0	0.0	6621.4	0.00	100.00
157.0-158.0	0.0	0.0	6621.4	0.00	100.00
158.0-159.0	0.0	0.0	6621.4	0.00	100.00
159.0-160.0	0.0	0.0	6621.4	0.00	100.00
160.0-161.0	0.0	0.0	6621.4	0.00	100.00
161.0-162.0	0.0	0.0	6621.4	0.00	100.00
162.0-163.0	0.0	0.0	6621.4	0.00	100.00
163.0-164.0	0.0	0.0	6621.4	0.00	100.00
164.0-165.0	0.0	0.0	6621.4	0.00	100.00
165.0-166.0	0.0	0.0	6621.4	0.00	100.00
166.0-167.0	0.0	0.0	6621.4	0.00	100.00
167.0-168.0	0.0	0.0	6621.4	0.00	100.00
168.0-169.0	0.0	0.0	6621.4	0.00	100.00
169.0-170.0	0.0	0.0	6621.4	0.00	100.00
170.0-171.0	0.0	0.0	6621.4	0.00	100.00
171.0-172.0	0.0	0.0	6621.4	0.00	100.00
172.0-173.0	0.0	0.0	6621.4	0.00	100.00
173.0-174.0	0.0	0.0	6621.4	0.00	100.00
174.0-175.0	0.0	0.0	6621.4	0.00	100.00
175.0-176.0	0.0	0.0	6621.4	0.00	100.00
176.0-177.0	0.0	0.0	6621.4	0.00	100.00
177.0-178.0	0.0	0.0	6621.4	0.00	100.00
178.0-179.0	0.0	0.0	6621.4	0.00	100.00
179.0-180.0	0.0	0.0	6621.4	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°): 3934.46 lm

%lum = 59.4%

%lamp = 59.4%

cone flux(120°): 5645.28 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