

Report No.:

Test Time: 2023/5/15 10:12

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Luminaire Description: MGC01150W27V50KWCD

Lamp Catalog: L128-ETSC3-YH00F-KS(14C15B)

Lamp Description: NISG150W43D\_1200

Lumens per Lamp:

Luminous Width (mm):

Voltage: 120.5 V

Power: 154.97 W

Number of Lamps:

Luminous Length (mm):

Luminous Height (mm):

Current: 1.293 A

Power Factor: 0.993

## Photometric Results

IES Classification: Type II

Total Rated Lamp Lumens: 23177.4 lm

Efficiency: 100%

Upward Ratio: 0%

C0r0 Intensity: 8728.23 cd

Pos of Max. Intensity: H300 V5

Longitudinal Classification: Very Short

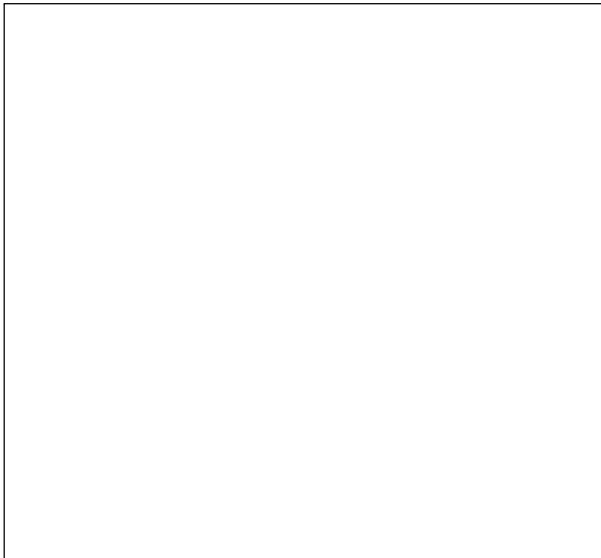
Measurement Flux: 23177.4 lm

Downward Ratio: 100%

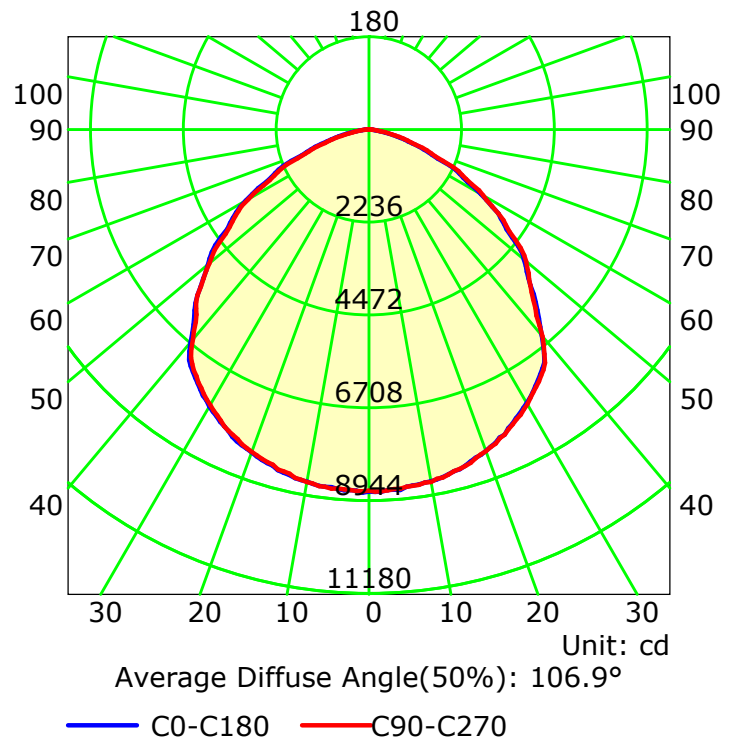
Luminaire Efficacy Rating (LER): 149.61

Max. Intensity: 8765.7 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

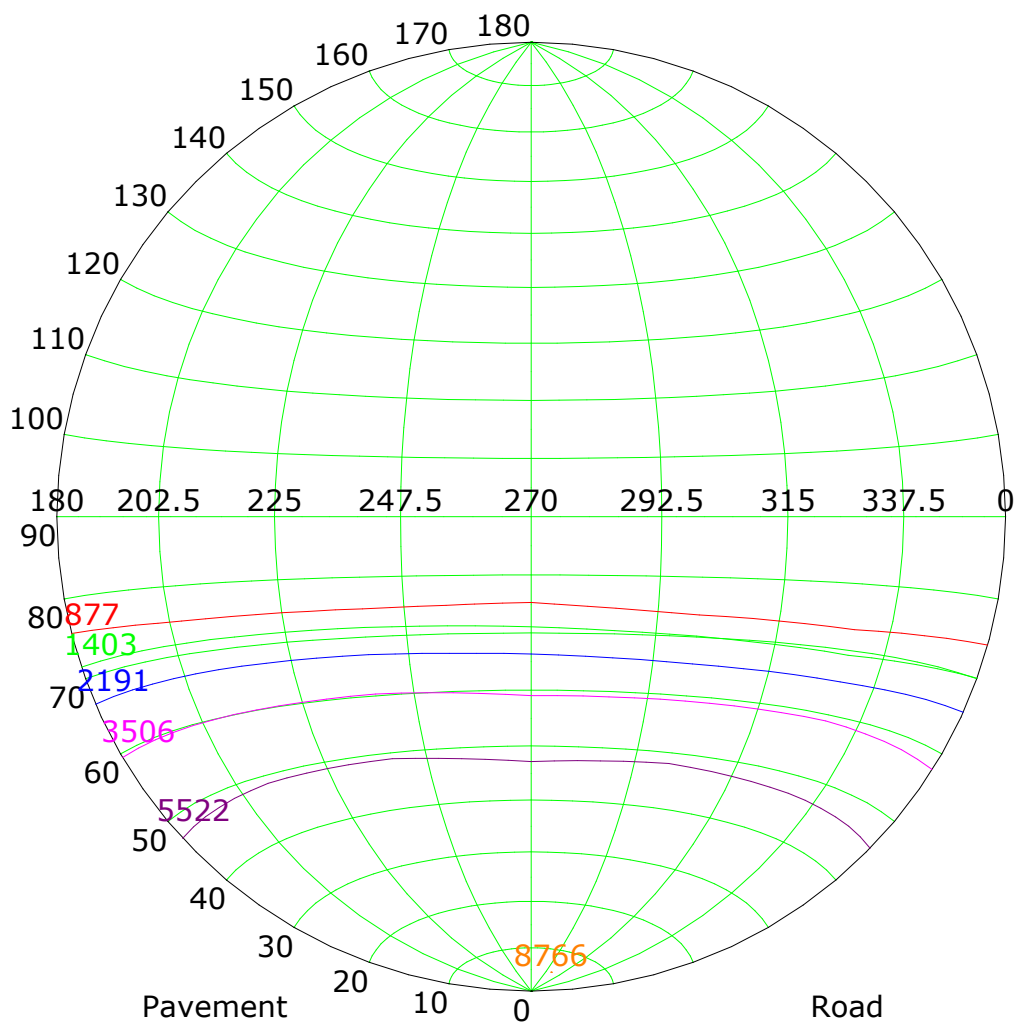
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

## Isocandela (sphere)



Imax (100%): 8766 cd

( 10%): 877 cd	( 16%): 1403 cd
( 25%): 2191 cd	( 40%): 3506 cd
( 63%): 5522 cd	(100%): 8766 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

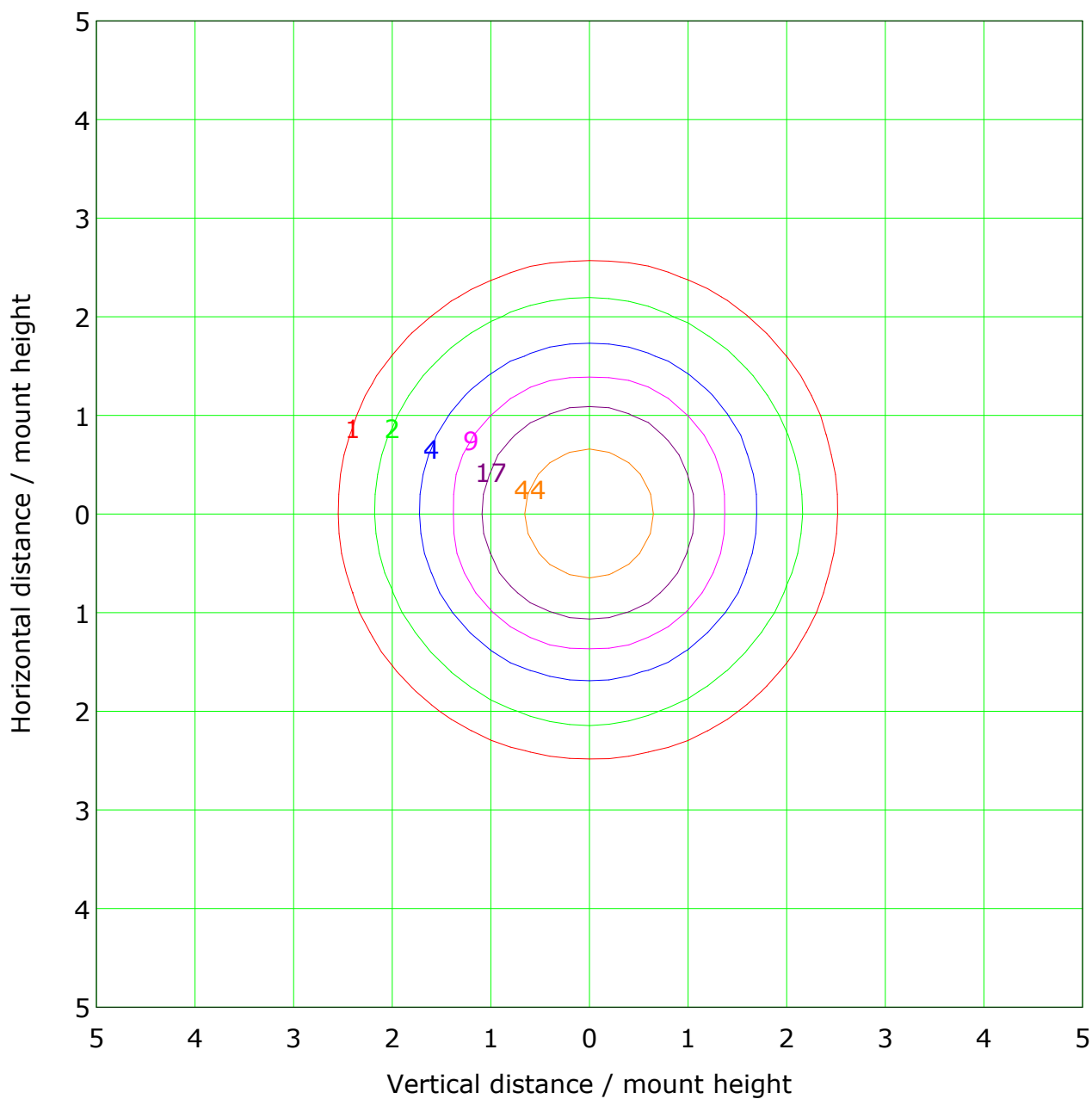
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 87.5 lx

( 1%): 0.9 lx	( 2%): 1.7 lx
( 5%): 4.4 lx	( 10%): 8.7 lx
( 20%): 17.5 lx	( 50%): 43.7 lx
(100%): 87.5 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

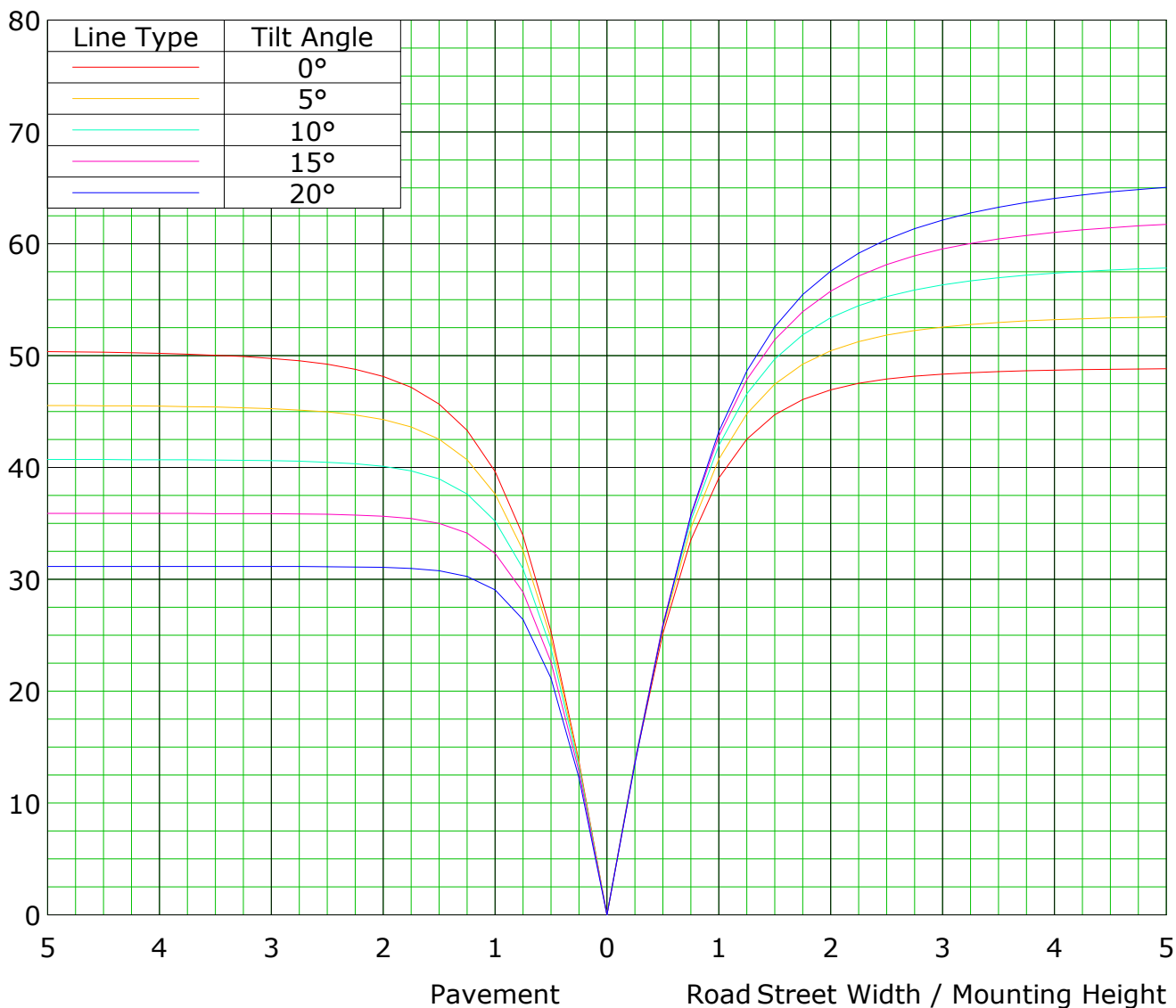
Distance: 11.655 m [K=1.0000]

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

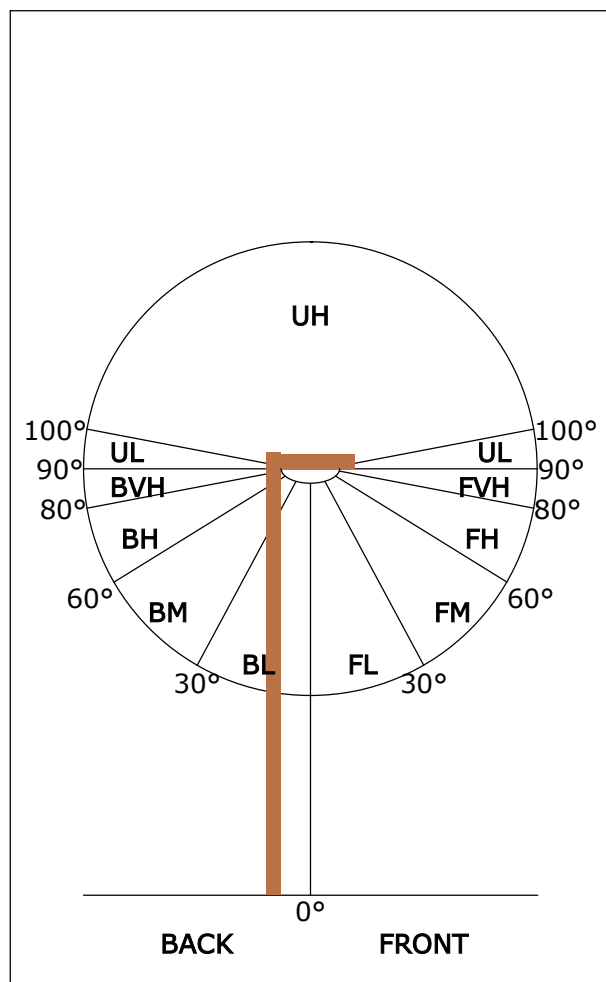
Test Device: GPM-1800B

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	11402	49.2
FL ( 0°-30°)	3446	14.9
FM (30°-60°)	6375	27.5
FH (60°-80°)	1522	6.6
FVH (80°-90°)	59	0.3
BACK LIGHT	11775	50.8
BL ( 0°-30°)	3463	14.9
BM (30°-60°)	6546	28.2
BH (60°-80°)	1689	7.3
BVH (80°-90°)	77	0.3
UP LIGHT	1	0.0
UL (90°-100°)	1	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)	B4 U2 G3
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B4 U2 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	8725.1	8.3	8.3	0.04	0.04
1.0-2.0	8723.8	25.0	33.4	0.11	0.14
2.0-3.0	8714.6	41.7	75.1	0.18	0.32
3.0-4.0	8704.0	58.3	133.3	0.25	0.58
4.0-5.0	8699.1	74.8	208.2	0.32	0.90
5.0-6.0	8690.5	91.3	299.5	0.39	1.29
6.0-7.0	8674.8	107.7	407.2	0.46	1.76
7.0-8.0	8664.8	124.0	531.2	0.54	2.29
8.0-9.0	8647.4	140.2	671.4	0.60	2.90
9.0-10.0	8626.6	156.1	827.5	0.67	3.57
10.0-11.0	8602.8	171.9	999.5	0.74	4.31
11.0-12.0	8578.0	187.5	1187.0	0.81	5.12
12.0-13.0	8551.4	203.0	1390.0	0.88	6.00
13.0-14.0	8517.7	218.1	1608.0	0.94	6.94
14.0-15.0	8488.9	233.1	1841.1	1.01	7.94
15.0-16.0	8456.3	247.8	2088.9	1.07	9.01
16.0-17.0	8415.1	262.1	2351.0	1.13	10.14
17.0-18.0	8373.2	276.1	2627.1	1.19	11.33
18.0-19.0	8333.9	290.0	2917.1	1.25	12.59
19.0-20.0	8288.9	303.4	3220.5	1.31	13.90
20.0-21.0	8241.2	316.5	3537.0	1.37	15.26
21.0-22.0	8196.6	329.4	3866.5	1.42	16.68
22.0-23.0	8141.0	341.6	4208.1	1.47	18.16
23.0-24.0	8085.6	353.6	4561.6	1.53	19.68
24.0-25.0	8030.1	365.2	4926.8	1.58	21.26
25.0-26.0	7965.5	376.1	5302.9	1.62	22.88
26.0-27.0	7903.1	386.7	5689.6	1.67	24.55
27.0-28.0	7840.3	397.0	6086.6	1.71	26.26
28.0-29.0	7772.5	406.7	6493.3	1.75	28.02
29.0-30.0	7701.3	415.9	6909.1	1.79	29.81
30.0-31.0	7628.7	424.6	7333.7	1.83	31.64
31.0-32.0	7553.1	432.8	7766.5	1.87	33.51
32.0-33.0	7472.7	440.3	8206.8	1.90	35.41
33.0-34.0	7388.8	447.2	8654.0	1.93	37.34
34.0-35.0	7304.3	453.7	9107.7	1.96	39.30
35.0-36.0	7221.9	459.9	9567.6	1.98	41.28

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	7136.4	465.5	10033.1	2.01	43.29
37.0-38.0	7034.8	469.6	10502.7	2.03	45.31
38.0-39.0	6917.1	472.2	10974.9	2.04	47.35
39.0-40.0	6791.4	473.7	11448.6	2.04	49.40
40.0-41.0	6658.0	474.2	11922.8	2.05	51.44
41.0-42.0	6514.5	473.4	12396.2	2.04	53.48
42.0-43.0	6359.6	471.2	12867.3	2.03	55.52
43.0-44.0	6189.9	467.2	13334.6	2.02	57.53
44.0-45.0	6009.1	461.9	13796.5	1.99	59.53
45.0-46.0	5824.3	455.6	14252.0	1.97	61.49
46.0-47.0	5640.8	448.7	14700.7	1.94	63.43
47.0-48.0	5476.3	442.8	15143.5	1.91	65.34
48.0-49.0	5332.4	438.0	15581.4	1.89	67.23
49.0-50.0	5182.4	432.1	16013.6	1.86	69.09
50.0-51.0	5027.1	425.4	16438.9	1.84	70.93
51.0-52.0	4870.3	418.0	16856.9	1.80	72.73
52.0-53.0	4698.1	408.7	17265.7	1.76	74.49
53.0-54.0	4525.5	398.9	17664.6	1.72	76.21
54.0-55.0	4370.2	390.2	18054.7	1.68	77.90
55.0-56.0	4221.0	381.5	18436.2	1.65	79.54
56.0-57.0	4052.7	370.6	18806.8	1.60	81.14
57.0-58.0	3852.8	356.3	19163.1	1.54	82.68
58.0-59.0	3645.7	340.9	19504.0	1.47	84.15
59.0-60.0	3451.3	326.1	19830.1	1.41	85.56
60.0-61.0	3255.4	310.7	20140.8	1.34	86.90
61.0-62.0	3039.2	292.9	20433.7	1.26	88.16
62.0-63.0	2824.4	274.7	20708.5	1.19	89.35
63.0-64.0	2635.8	258.7	20967.1	1.12	90.46
64.0-65.0	2457.2	243.2	21210.3	1.05	91.51
65.0-66.0	2267.0	226.2	21436.6	0.98	92.49
66.0-67.0	2075.3	208.7	21645.3	0.90	93.39
67.0-68.0	1906.9	193.2	21838.5	0.83	94.22
68.0-69.0	1755.6	179.1	22017.6	0.77	95.00
69.0-70.0	1586.7	163.0	22180.6	0.70	95.70
70.0-71.0	1396.1	144.3	22324.9	0.62	96.32
71.0-72.0	1218.6	126.7	22451.6	0.55	96.87

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	1077.6	112.7	22564.3	0.49	97.35
73.0-74.0	956.1	100.5	22664.8	0.43	97.79
74.0-75.0	836.6	88.4	22753.3	0.38	98.17
75.0-76.0	723.3	76.8	22830.0	0.33	98.50
76.0-77.0	623.4	66.5	22896.5	0.29	98.79
77.0-78.0	534.1	57.2	22953.7	0.25	99.03
78.0-79.0	445.1	47.8	23001.5	0.21	99.24
79.0-80.0	362.8	39.1	23040.6	0.17	99.41
80.0-81.0	293.3	31.7	23072.4	0.14	99.55
81.0-82.0	234.8	25.5	23097.8	0.11	99.66
82.0-83.0	184.6	20.1	23117.9	0.09	99.74
83.0-84.0	145.2	15.8	23133.7	0.07	99.81
84.0-85.0	115.1	12.6	23146.3	0.05	99.87
85.0-86.0	90.6	9.9	23156.2	0.04	99.91
86.0-87.0	71.8	7.9	23164.0	0.03	99.94
87.0-88.0	58.0	6.4	23170.4	0.03	99.97
88.0-89.0	40.5	4.4	23174.8	0.02	99.99
89.0-90.0	19.1	2.1	23176.9	0.01	100.00
90.0-91.0	4.6	0.5	23177.4	0.00	100.00
91.0-92.0	0.0	0.0	23177.4	0.00	100.00
92.0-93.0	0.0	0.0	23177.4	0.00	100.00
93.0-94.0	0.0	0.0	23177.4	0.00	100.00
94.0-95.0	0.0	0.0	23177.4	0.00	100.00
95.0-96.0	0.0	0.0	23177.4	0.00	100.00
96.0-97.0	0.0	0.0	23177.4	0.00	100.00
97.0-98.0	0.0	0.0	23177.4	0.00	100.00
98.0-99.0	0.0	0.0	23177.4	0.00	100.00
99.0-100.0	0.0	0.0	23177.4	0.00	100.00
100.0-101.0	0.0	0.0	23177.4	0.00	100.00
101.0-102.0	0.0	0.0	23177.4	0.00	100.00
102.0-103.0	0.0	0.0	23177.4	0.00	100.00
103.0-104.0	0.0	0.0	23177.4	0.00	100.00
104.0-105.0	0.0	0.0	23177.4	0.00	100.00
105.0-106.0	0.0	0.0	23177.4	0.00	100.00
106.0-107.0	0.0	0.0	23177.4	0.00	100.00
107.0-108.0	0.0	0.0	23177.4	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	23177.4	0.00	100.00
109.0-110.0	0.0	0.0	23177.4	0.00	100.00
110.0-111.0	0.0	0.0	23177.4	0.00	100.00
111.0-112.0	0.0	0.0	23177.4	0.00	100.00
112.0-113.0	0.0	0.0	23177.4	0.00	100.00
113.0-114.0	0.0	0.0	23177.4	0.00	100.00
114.0-115.0	0.0	0.0	23177.4	0.00	100.00
115.0-116.0	0.0	0.0	23177.4	0.00	100.00
116.0-117.0	0.0	0.0	23177.4	0.00	100.00
117.0-118.0	0.0	0.0	23177.4	0.00	100.00
118.0-119.0	0.0	0.0	23177.4	0.00	100.00
119.0-120.0	0.0	0.0	23177.4	0.00	100.00
120.0-121.0	0.0	0.0	23177.4	0.00	100.00
121.0-122.0	0.0	0.0	23177.4	0.00	100.00
122.0-123.0	0.0	0.0	23177.4	0.00	100.00
123.0-124.0	0.0	0.0	23177.4	0.00	100.00
124.0-125.0	0.0	0.0	23177.4	0.00	100.00
125.0-126.0	0.0	0.0	23177.4	0.00	100.00
126.0-127.0	0.0	0.0	23177.4	0.00	100.00
127.0-128.0	0.0	0.0	23177.4	0.00	100.00
128.0-129.0	0.0	0.0	23177.4	0.00	100.00
129.0-130.0	0.0	0.0	23177.4	0.00	100.00
130.0-131.0	0.0	0.0	23177.4	0.00	100.00
131.0-132.0	0.0	0.0	23177.4	0.00	100.00
132.0-133.0	0.0	0.0	23177.4	0.00	100.00
133.0-134.0	0.0	0.0	23177.4	0.00	100.00
134.0-135.0	0.0	0.0	23177.4	0.00	100.00
135.0-136.0	0.0	0.0	23177.4	0.00	100.00
136.0-137.0	0.0	0.0	23177.4	0.00	100.00
137.0-138.0	0.0	0.0	23177.4	0.00	100.00
138.0-139.0	0.0	0.0	23177.4	0.00	100.00
139.0-140.0	0.0	0.0	23177.4	0.00	100.00
140.0-141.0	0.0	0.0	23177.4	0.00	100.00
141.0-142.0	0.0	0.0	23177.4	0.00	100.00
142.0-143.0	0.0	0.0	23177.4	0.00	100.00
143.0-144.0	0.0	0.0	23177.4	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	23177.4	0.00	100.00
145.0-146.0	0.0	0.0	23177.4	0.00	100.00
146.0-147.0	0.0	0.0	23177.4	0.00	100.00
147.0-148.0	0.0	0.0	23177.4	0.00	100.00
148.0-149.0	0.0	0.0	23177.4	0.00	100.00
149.0-150.0	0.0	0.0	23177.4	0.00	100.00
150.0-151.0	0.0	0.0	23177.4	0.00	100.00
151.0-152.0	0.0	0.0	23177.4	0.00	100.00
152.0-153.0	0.0	0.0	23177.4	0.00	100.00
153.0-154.0	0.0	0.0	23177.4	0.00	100.00
154.0-155.0	0.0	0.0	23177.4	0.00	100.00
155.0-156.0	0.0	0.0	23177.4	0.00	100.00
156.0-157.0	0.0	0.0	23177.4	0.00	100.00
157.0-158.0	0.0	0.0	23177.4	0.00	100.00
158.0-159.0	0.0	0.0	23177.4	0.00	100.00
159.0-160.0	0.0	0.0	23177.4	0.00	100.00
160.0-161.0	0.0	0.0	23177.4	0.00	100.00
161.0-162.0	0.0	0.0	23177.4	0.00	100.00
162.0-163.0	0.0	0.0	23177.4	0.00	100.00
163.0-164.0	0.0	0.0	23177.4	0.00	100.00
164.0-165.0	0.0	0.0	23177.4	0.00	100.00
165.0-166.0	0.0	0.0	23177.4	0.00	100.00
166.0-167.0	0.0	0.0	23177.4	0.00	100.00
167.0-168.0	0.0	0.0	23177.4	0.00	100.00
168.0-169.0	0.0	0.0	23177.4	0.00	100.00
169.0-170.0	0.0	0.0	23177.4	0.00	100.00
170.0-171.0	0.0	0.0	23177.4	0.00	100.00
171.0-172.0	0.0	0.0	23177.4	0.00	100.00
172.0-173.0	0.0	0.0	23177.4	0.00	100.00
173.0-174.0	0.0	0.0	23177.4	0.00	100.00
174.0-175.0	0.0	0.0	23177.4	0.00	100.00
175.0-176.0	0.0	0.0	23177.4	0.00	100.00
176.0-177.0	0.0	0.0	23177.4	0.00	100.00
177.0-178.0	0.0	0.0	23177.4	0.00	100.00
178.0-179.0	0.0	0.0	23177.4	0.00	100.00
179.0-180.0	0.0	0.0	23177.4	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°): 13796.46 lm

%lum = 59.5%

%lamp = 59.5%

cone flux(120°): 19830.12 lm

%lum = 85.6%

%lamp = 85.6%

## 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