

Report No.:

Test Time: 2023/5/15 11:53

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Luminaire Description: MGC01150W27V50KWCD-V4

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

Lamp Description: NISG150W43D\_1200

Lumens per Lamp:

Luminous Width (mm):

Voltage: 120.5 V

Power: 59.62 W

Number of Lamps:

Luminous Length (mm):

Luminous Height (mm):

Current: 0.497 A

Power Factor: 0.993

## Photometric Results

IES Classification: Type II

Total Rated Lamp Lumens: 9688.7 lm

Efficiency: 100%

Upward Ratio: 0%

C0r0 Intensity: 3648.61 cd

Pos of Max. Intensity: H300 V5

Longitudinal Classification: Very Short

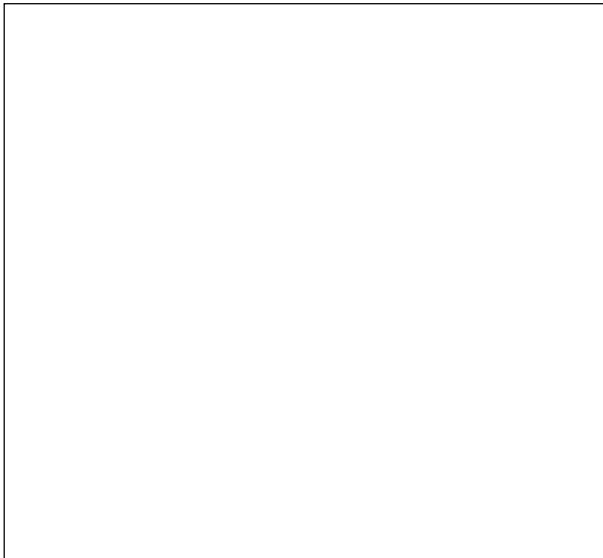
Measurement Flux: 9688.7 lm

Downward Ratio: 100%

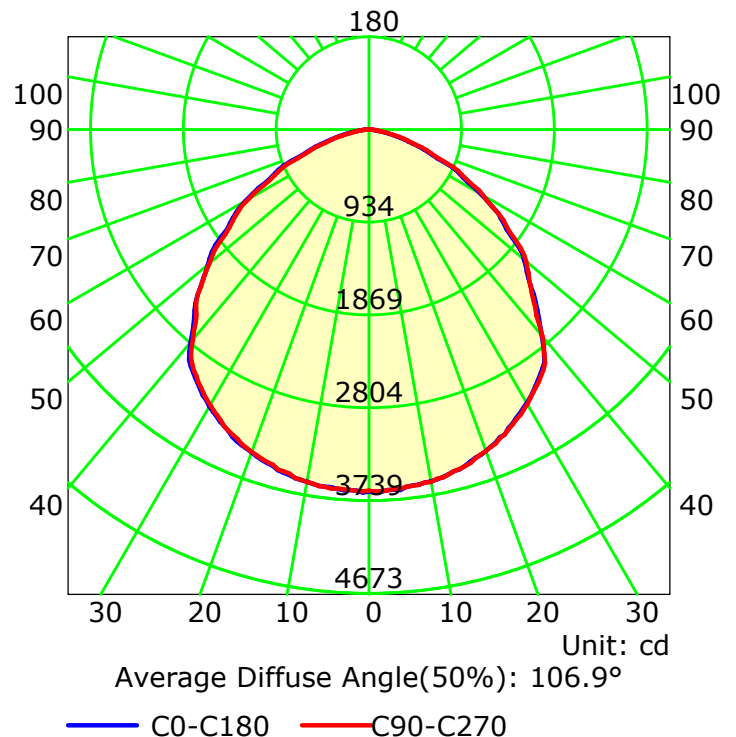
Luminaire Efficacy Rating (LER): 162.56

Max. Intensity: 3664.27 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

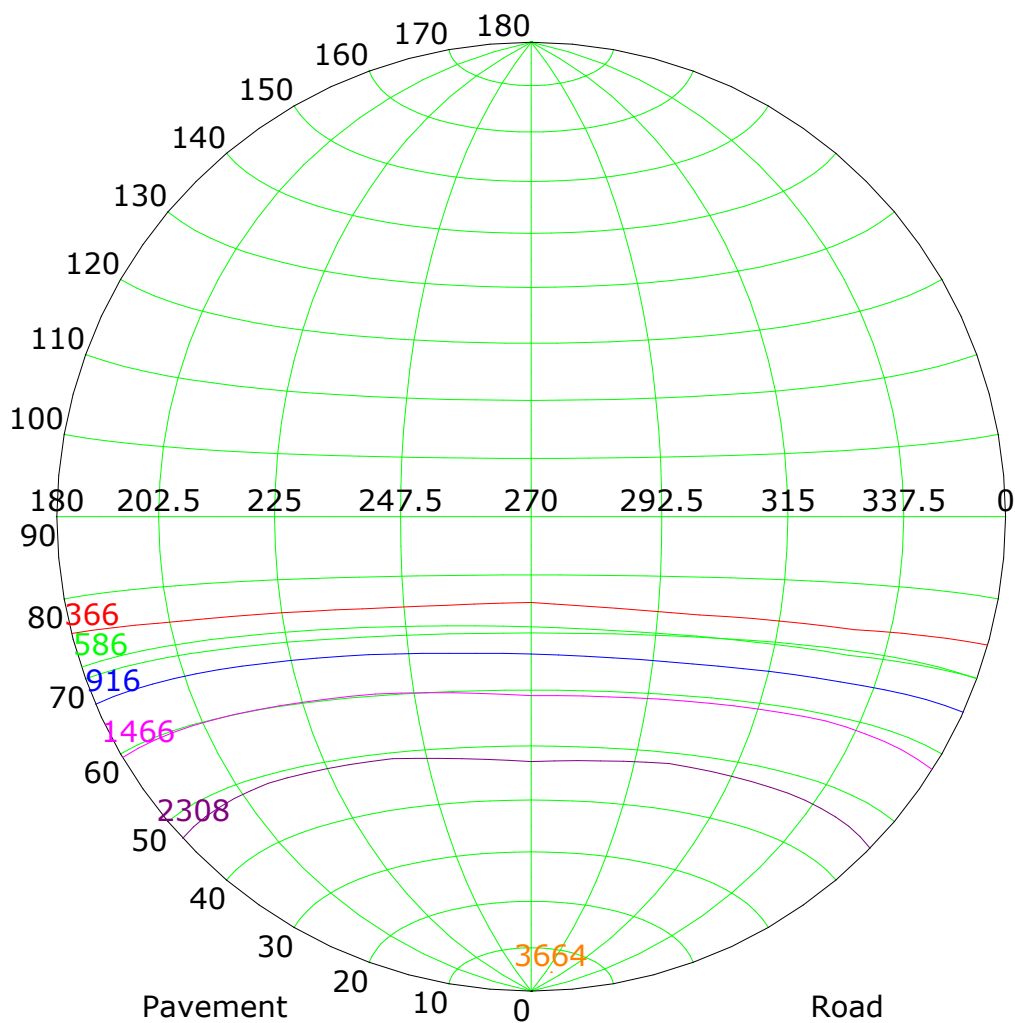
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

## Isocandela (sphere)

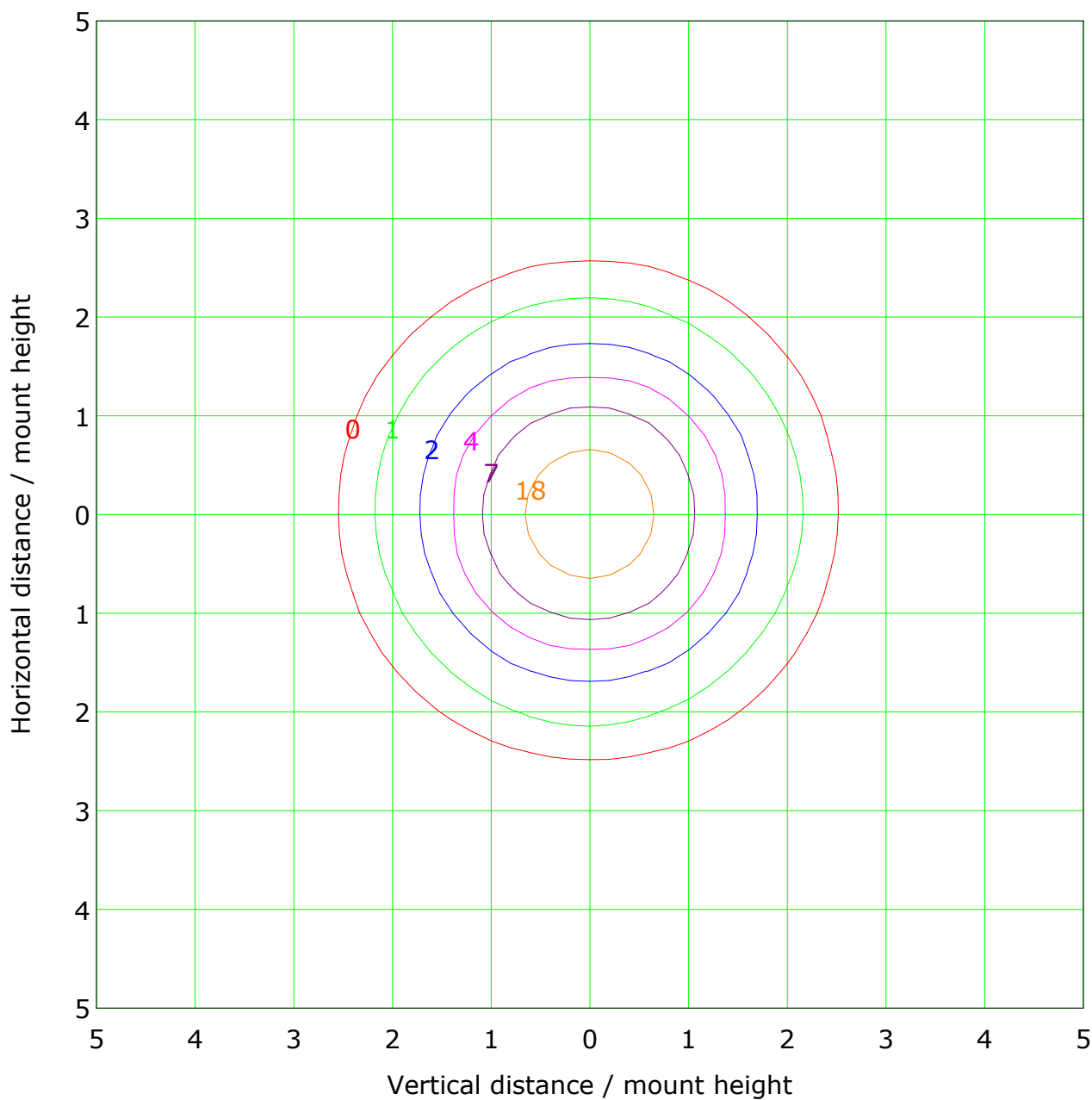


Imax (100%): 3664 cd

— ( 10%): 366 cd  
— ( 25%): 916 cd  
— ( 63%): 2308 cd

— ( 16%): 586 cd  
— ( 40%): 1466 cd  
— (100%): 3664 cd

## IsoLux Plot



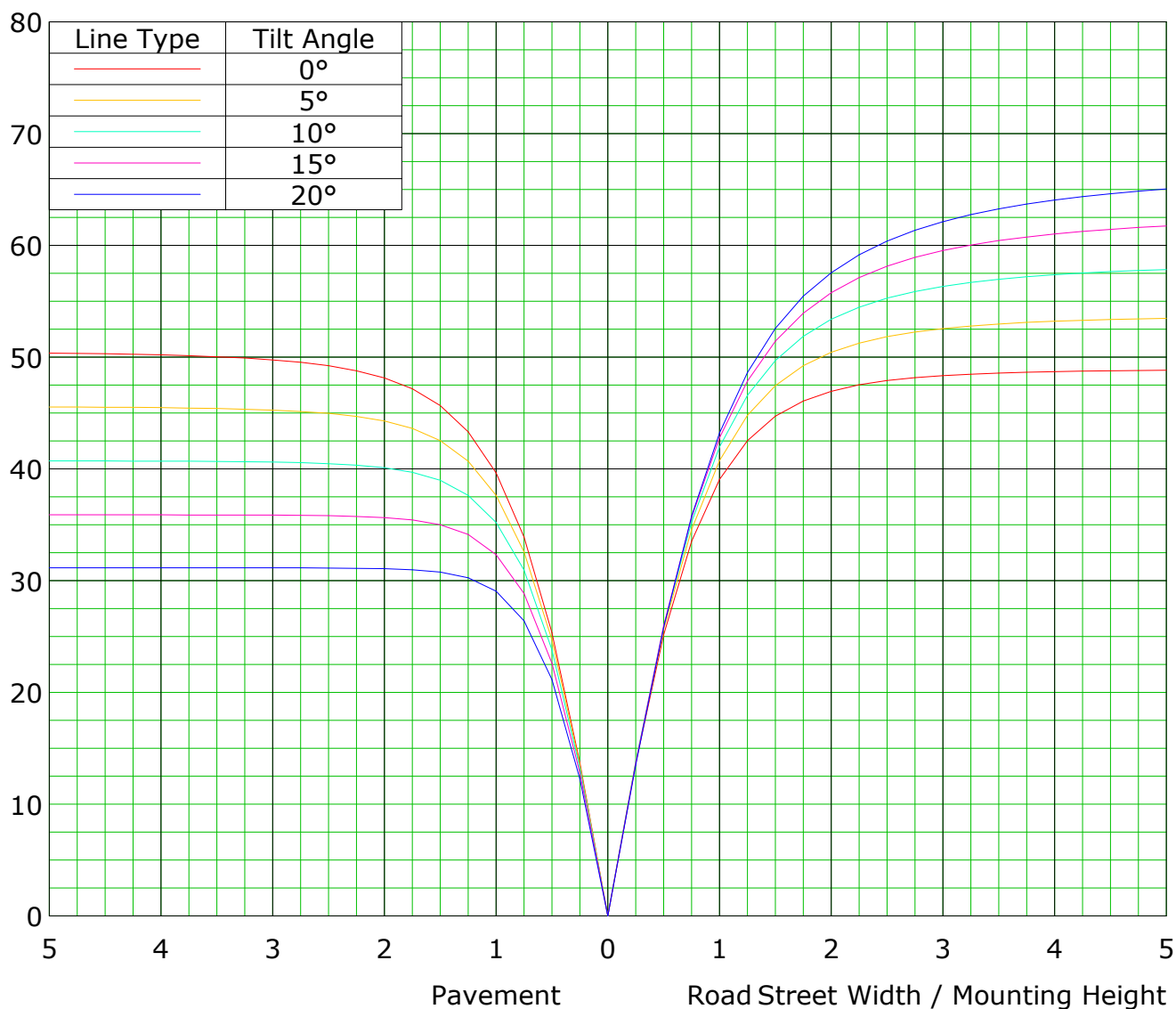
Mounting Height: 10.0m		Max Lux(100%): 36.6 lx	
( 1%):	0.4 lx	( 2%):	0.7 lx
( 5%):	1.8 lx	( 10%):	3.7 lx
( 20%):	7.3 lx	( 50%):	18.3 lx
(100%):	36.6 lx		

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	4766	49.2
	FL ( 0°-30°)	1441	14.9
	FM (30°-60°)	2665	27.5
	FH (60°-80°)	636	6.6
	FVH (80°-90°)	25	0.3
	BACK LIGHT	4922	50.8
	BL ( 0°-30°)	1448	14.9
	BM (30°-60°)	2737	28.2
	BH (60°-80°)	706	7.3
	BVH (80°-90°)	32	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	3647.3	3.5	3.5	0.04	0.04
1.0-2.0	3646.8	10.5	14.0	0.11	0.14
2.0-3.0	3642.9	17.4	31.4	0.18	0.32
3.0-4.0	3638.5	24.4	55.7	0.25	0.58
4.0-5.0	3636.4	31.3	87.0	0.32	0.90
5.0-6.0	3632.8	38.2	125.2	0.39	1.29
6.0-7.0	3626.3	45.0	170.2	0.46	1.76
7.0-8.0	3622.1	51.8	222.1	0.54	2.29
8.0-9.0	3614.8	58.6	280.7	0.60	2.90
9.0-10.0	3606.1	65.3	345.9	0.67	3.57
10.0-11.0	3596.2	71.9	417.8	0.74	4.31
11.0-12.0	3585.8	78.4	496.2	0.81	5.12
12.0-13.0	3574.7	84.8	581.0	0.88	6.00
13.0-14.0	3560.6	91.2	672.2	0.94	6.94
14.0-15.0	3548.6	97.4	769.6	1.01	7.94
15.0-16.0	3534.9	103.6	873.2	1.07	9.01
16.0-17.0	3517.7	109.6	982.8	1.13	10.14
17.0-18.0	3500.2	115.4	1098.2	1.19	11.33
18.0-19.0	3483.8	121.2	1219.4	1.25	12.59
19.0-20.0	3465.0	126.8	1346.3	1.31	13.90
20.0-21.0	3445.0	132.3	1478.6	1.37	15.26
21.0-22.0	3426.4	137.7	1616.3	1.42	16.68
22.0-23.0	3403.1	142.8	1759.1	1.47	18.16
23.0-24.0	3380.0	147.8	1906.9	1.53	19.68
24.0-25.0	3356.8	152.7	2059.5	1.58	21.26
25.0-26.0	3329.8	157.2	2216.7	1.62	22.88
26.0-27.0	3303.7	161.7	2378.4	1.67	24.55
27.0-28.0	3277.4	166.0	2544.3	1.71	26.26
28.0-29.0	3249.1	170.0	2714.3	1.75	28.02
29.0-30.0	3219.3	173.8	2888.2	1.79	29.81
30.0-31.0	3189.0	177.5	3065.7	1.83	31.64
31.0-32.0	3157.4	180.9	3246.6	1.87	33.51
32.0-33.0	3123.8	184.1	3430.6	1.90	35.41
33.0-34.0	3088.7	186.9	3617.6	1.93	37.34
34.0-35.0	3053.4	189.7	3807.2	1.96	39.30
35.0-36.0	3018.9	192.2	3999.5	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	2983.2	194.6	4194.1	2.01	43.29
37.0-38.0	2940.7	196.3	4390.4	2.03	45.31
38.0-39.0	2891.5	197.4	4587.8	2.04	47.35
39.0-40.0	2839.0	198.0	4785.8	2.04	49.40
40.0-41.0	2783.2	198.2	4984.0	2.05	51.44
41.0-42.0	2723.2	197.9	5181.9	2.04	53.48
42.0-43.0	2658.5	197.0	5378.9	2.03	55.52
43.0-44.0	2587.5	195.3	5574.2	2.02	57.53
44.0-45.0	2511.9	193.1	5767.2	1.99	59.53
45.0-46.0	2434.7	190.4	5957.7	1.97	61.49
46.0-47.0	2358.0	187.6	6145.2	1.94	63.43
47.0-48.0	2289.2	185.1	6330.3	1.91	65.34
48.0-49.0	2229.1	183.1	6513.4	1.89	67.23
49.0-50.0	2166.4	180.6	6694.0	1.86	69.09
50.0-51.0	2101.4	177.8	6871.9	1.84	70.93
51.0-52.0	2035.9	174.7	7046.6	1.80	72.73
52.0-53.0	1963.9	170.9	7217.5	1.76	74.49
53.0-54.0	1891.7	166.8	7384.2	1.72	76.21
54.0-55.0	1826.9	163.1	7547.3	1.68	77.90
55.0-56.0	1764.5	159.5	7706.8	1.65	79.54
56.0-57.0	1694.1	154.9	7861.7	1.60	81.14
57.0-58.0	1610.6	149.0	8010.6	1.54	82.68
58.0-59.0	1524.0	142.5	8153.1	1.47	84.15
59.0-60.0	1442.7	136.3	8289.5	1.41	85.56
60.0-61.0	1360.8	129.9	8419.3	1.34	86.90
61.0-62.0	1270.5	122.4	8541.8	1.26	88.16
62.0-63.0	1180.7	114.8	8656.6	1.19	89.35
63.0-64.0	1101.8	108.1	8764.8	1.12	90.46
64.0-65.0	1027.2	101.7	8866.4	1.05	91.51
65.0-66.0	947.7	94.6	8961.0	0.98	92.49
66.0-67.0	867.5	87.2	9048.2	0.90	93.39
67.0-68.0	797.1	80.8	9129.0	0.83	94.22
68.0-69.0	733.9	74.9	9203.9	0.77	95.00
69.0-70.0	663.3	68.1	9272.0	0.70	95.70
70.0-71.0	583.6	60.3	9332.3	0.62	96.32
71.0-72.0	509.4	53.0	9385.3	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	450.5	47.1	9432.4	0.49	97.35
73.0-74.0	399.7	42.0	9474.4	0.43	97.79
74.0-75.0	349.7	37.0	9511.4	0.38	98.17
75.0-76.0	302.4	32.1	9543.5	0.33	98.50
76.0-77.0	260.6	27.8	9571.3	0.29	98.79
77.0-78.0	223.3	23.9	9595.2	0.25	99.03
78.0-79.0	186.1	20.0	9615.2	0.21	99.24
79.0-80.0	151.7	16.4	9631.5	0.17	99.41
80.0-81.0	122.6	13.3	9644.8	0.14	99.55
81.0-82.0	98.1	10.6	9655.4	0.11	99.66
82.0-83.0	77.2	8.4	9663.8	0.09	99.74
83.0-84.0	60.7	6.6	9670.4	0.07	99.81
84.0-85.0	48.1	5.3	9675.7	0.05	99.87
85.0-86.0	37.9	4.1	9679.8	0.04	99.91
86.0-87.0	30.0	3.3	9683.1	0.03	99.94
87.0-88.0	24.3	2.7	9685.8	0.03	99.97
88.0-89.0	16.9	1.9	9687.6	0.02	99.99
89.0-90.0	8.0	0.9	9688.5	0.01	100.00
90.0-91.0	1.9	0.2	9688.7	0.00	100.00
91.0-92.0	0.0	0.0	9688.7	0.00	100.00
92.0-93.0	0.0	0.0	9688.7	0.00	100.00
93.0-94.0	0.0	0.0	9688.7	0.00	100.00
94.0-95.0	0.0	0.0	9688.7	0.00	100.00
95.0-96.0	0.0	0.0	9688.7	0.00	100.00
96.0-97.0	0.0	0.0	9688.7	0.00	100.00
97.0-98.0	0.0	0.0	9688.7	0.00	100.00
98.0-99.0	0.0	0.0	9688.7	0.00	100.00
99.0-100.0	0.0	0.0	9688.7	0.00	100.00
100.0-101.0	0.0	0.0	9688.7	0.00	100.00
101.0-102.0	0.0	0.0	9688.7	0.00	100.00
102.0-103.0	0.0	0.0	9688.7	0.00	100.00
103.0-104.0	0.0	0.0	9688.7	0.00	100.00
104.0-105.0	0.0	0.0	9688.7	0.00	100.00
105.0-106.0	0.0	0.0	9688.7	0.00	100.00
106.0-107.0	0.0	0.0	9688.7	0.00	100.00
107.0-108.0	0.0	0.0	9688.7	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	9688.7	0.00	100.00
109.0-110.0	0.0	0.0	9688.7	0.00	100.00
110.0-111.0	0.0	0.0	9688.7	0.00	100.00
111.0-112.0	0.0	0.0	9688.7	0.00	100.00
112.0-113.0	0.0	0.0	9688.7	0.00	100.00
113.0-114.0	0.0	0.0	9688.7	0.00	100.00
114.0-115.0	0.0	0.0	9688.7	0.00	100.00
115.0-116.0	0.0	0.0	9688.7	0.00	100.00
116.0-117.0	0.0	0.0	9688.7	0.00	100.00
117.0-118.0	0.0	0.0	9688.7	0.00	100.00
118.0-119.0	0.0	0.0	9688.7	0.00	100.00
119.0-120.0	0.0	0.0	9688.7	0.00	100.00
120.0-121.0	0.0	0.0	9688.7	0.00	100.00
121.0-122.0	0.0	0.0	9688.7	0.00	100.00
122.0-123.0	0.0	0.0	9688.7	0.00	100.00
123.0-124.0	0.0	0.0	9688.7	0.00	100.00
124.0-125.0	0.0	0.0	9688.7	0.00	100.00
125.0-126.0	0.0	0.0	9688.7	0.00	100.00
126.0-127.0	0.0	0.0	9688.7	0.00	100.00
127.0-128.0	0.0	0.0	9688.7	0.00	100.00
128.0-129.0	0.0	0.0	9688.7	0.00	100.00
129.0-130.0	0.0	0.0	9688.7	0.00	100.00
130.0-131.0	0.0	0.0	9688.7	0.00	100.00
131.0-132.0	0.0	0.0	9688.7	0.00	100.00
132.0-133.0	0.0	0.0	9688.7	0.00	100.00
133.0-134.0	0.0	0.0	9688.7	0.00	100.00
134.0-135.0	0.0	0.0	9688.7	0.00	100.00
135.0-136.0	0.0	0.0	9688.7	0.00	100.00
136.0-137.0	0.0	0.0	9688.7	0.00	100.00
137.0-138.0	0.0	0.0	9688.7	0.00	100.00
138.0-139.0	0.0	0.0	9688.7	0.00	100.00
139.0-140.0	0.0	0.0	9688.7	0.00	100.00
140.0-141.0	0.0	0.0	9688.7	0.00	100.00
141.0-142.0	0.0	0.0	9688.7	0.00	100.00
142.0-143.0	0.0	0.0	9688.7	0.00	100.00
143.0-144.0	0.0	0.0	9688.7	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	9688.7	0.00	100.00
145.0-146.0	0.0	0.0	9688.7	0.00	100.00
146.0-147.0	0.0	0.0	9688.7	0.00	100.00
147.0-148.0	0.0	0.0	9688.7	0.00	100.00
148.0-149.0	0.0	0.0	9688.7	0.00	100.00
149.0-150.0	0.0	0.0	9688.7	0.00	100.00
150.0-151.0	0.0	0.0	9688.7	0.00	100.00
151.0-152.0	0.0	0.0	9688.7	0.00	100.00
152.0-153.0	0.0	0.0	9688.7	0.00	100.00
153.0-154.0	0.0	0.0	9688.7	0.00	100.00
154.0-155.0	0.0	0.0	9688.7	0.00	100.00
155.0-156.0	0.0	0.0	9688.7	0.00	100.00
156.0-157.0	0.0	0.0	9688.7	0.00	100.00
157.0-158.0	0.0	0.0	9688.7	0.00	100.00
158.0-159.0	0.0	0.0	9688.7	0.00	100.00
159.0-160.0	0.0	0.0	9688.7	0.00	100.00
160.0-161.0	0.0	0.0	9688.7	0.00	100.00
161.0-162.0	0.0	0.0	9688.7	0.00	100.00
162.0-163.0	0.0	0.0	9688.7	0.00	100.00
163.0-164.0	0.0	0.0	9688.7	0.00	100.00
164.0-165.0	0.0	0.0	9688.7	0.00	100.00
165.0-166.0	0.0	0.0	9688.7	0.00	100.00
166.0-167.0	0.0	0.0	9688.7	0.00	100.00
167.0-168.0	0.0	0.0	9688.7	0.00	100.00
168.0-169.0	0.0	0.0	9688.7	0.00	100.00
169.0-170.0	0.0	0.0	9688.7	0.00	100.00
170.0-171.0	0.0	0.0	9688.7	0.00	100.00
171.0-172.0	0.0	0.0	9688.7	0.00	100.00
172.0-173.0	0.0	0.0	9688.7	0.00	100.00
173.0-174.0	0.0	0.0	9688.7	0.00	100.00
174.0-175.0	0.0	0.0	9688.7	0.00	100.00
175.0-176.0	0.0	0.0	9688.7	0.00	100.00
176.0-177.0	0.0	0.0	9688.7	0.00	100.00
177.0-178.0	0.0	0.0	9688.7	0.00	100.00
178.0-179.0	0.0	0.0	9688.7	0.00	100.00
179.0-180.0	0.0	0.0	9688.7	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°): 5767.24 lm

%lum = 59.5%

%lamp = 59.5%

cone flux(120°): 8289.46 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