

Report No.:

Test Time: 2023/5/15 11:21

## Luminaire Property

Luminaire Manufacturer:

Luminaire Category:

Luminaire Description: MGC01150W27V50KWCD-V3

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

Lamp Description: NISG150W43D\_1200

Lumens per Lamp:

Luminous Width (mm):

Voltage: 120.5 V

Power: 95.5 W

Number of Lamps:

Luminous Length (mm):

Luminous Height (mm):

Current: 0.979 A

Power Factor: 0.993

## Photometric Results

IES Classification: Type II

Total Rated Lamp Lumens: 15156.3 lm

Efficiency: 100%

Upward Ratio: 0%

C0r0 Intensity: 5707.61 cd

Pos of Max. Intensity: H300 V5

Longitudinal Classification: Very Short

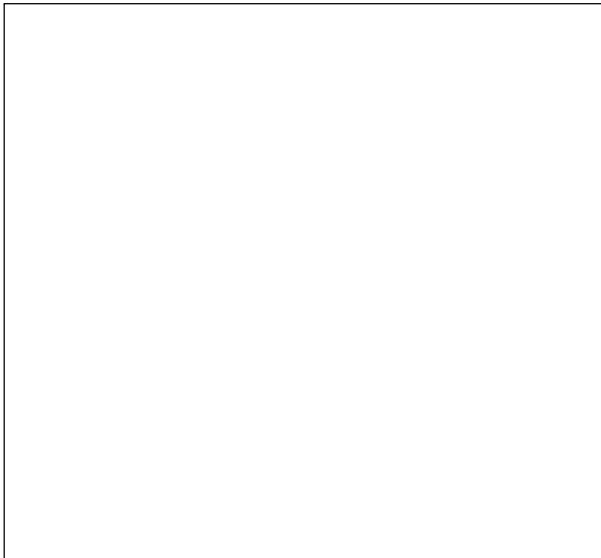
Measurement Flux: 15156.3 lm

Downward Ratio: 100%

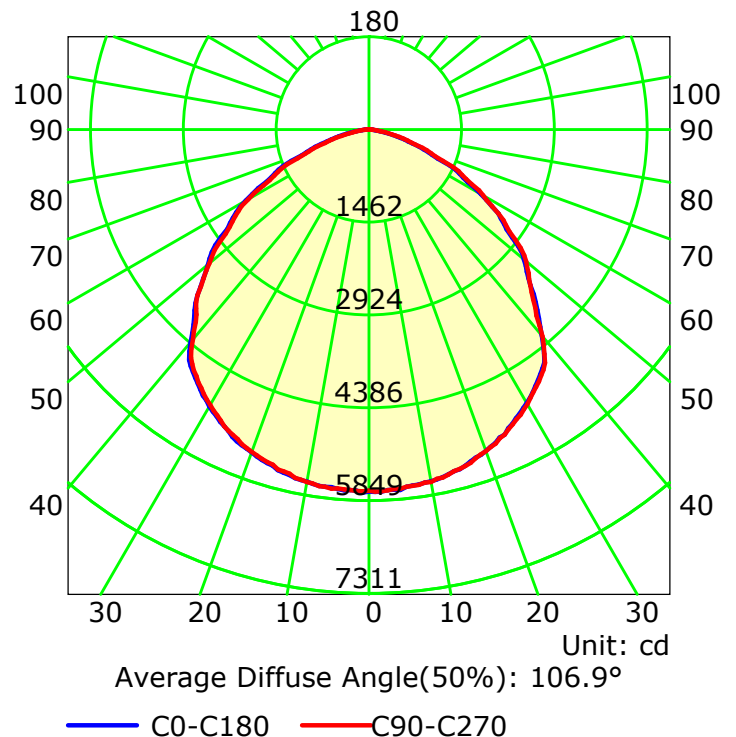
Luminaire Efficacy Rating (LER): 158.75

Max. Intensity: 5732.12 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

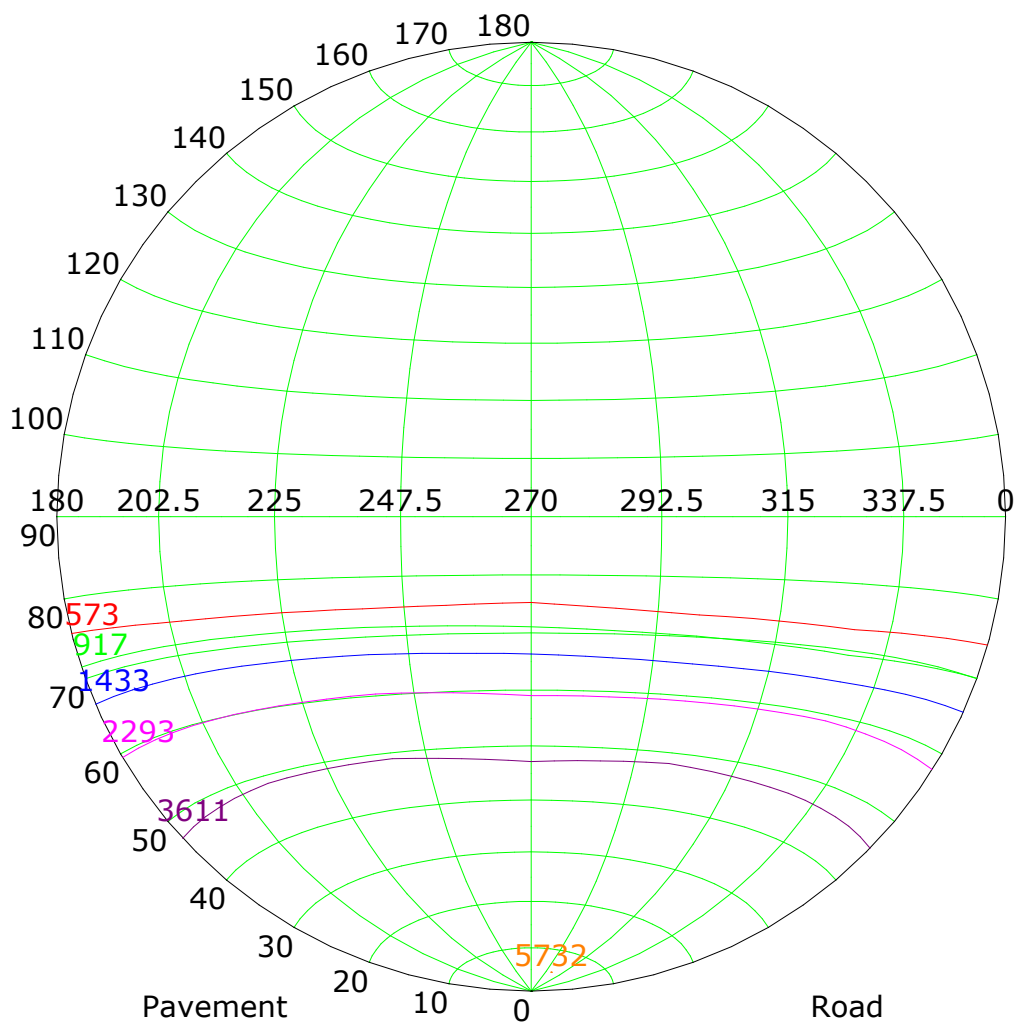
Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity:

Inspector:

## Isocandela (sphere)

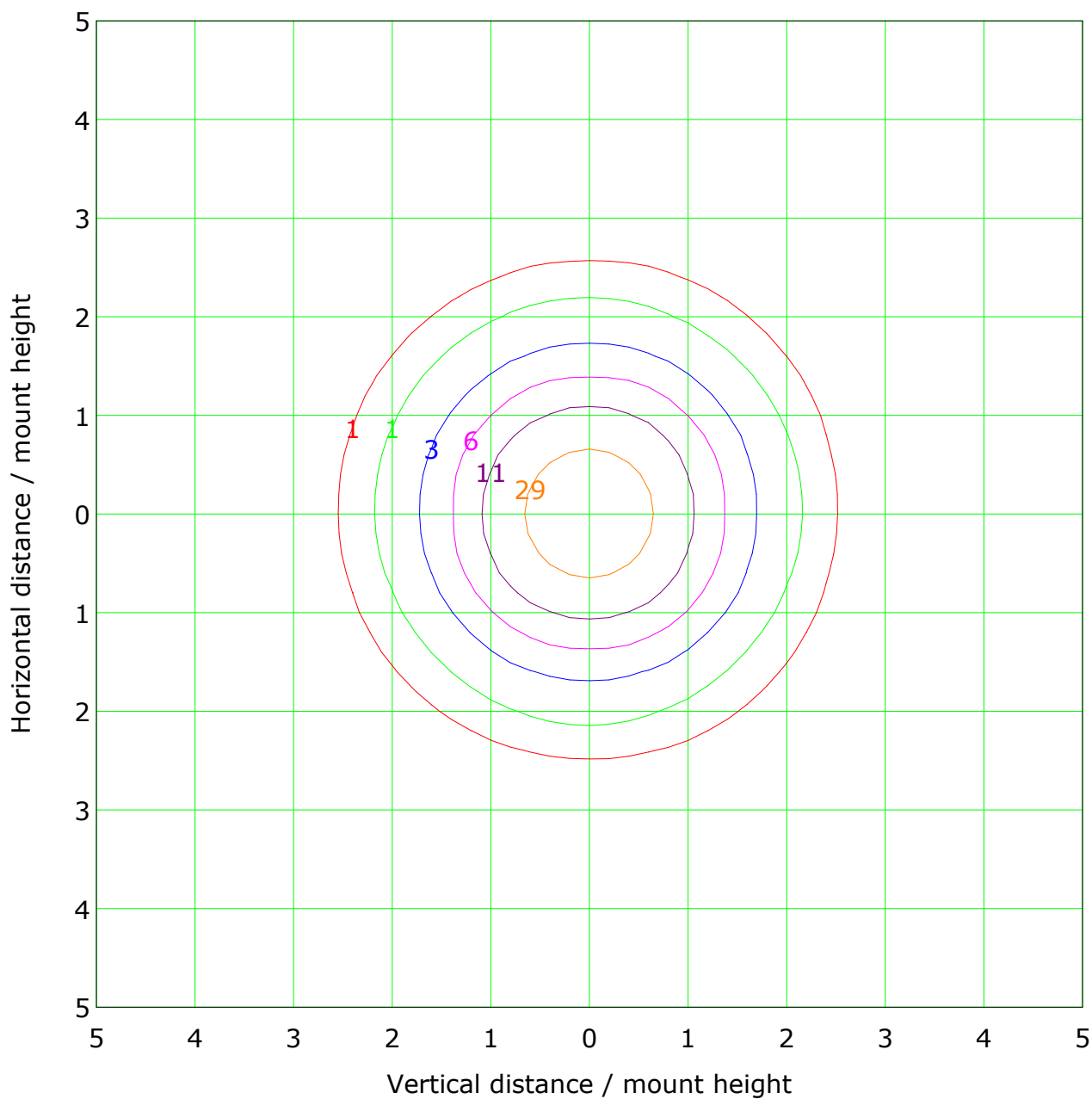


Imax (100%): 5732 cd

( 10%): 573 cd  
( 25%): 1433 cd  
( 63%): 3611 cd

( 16%): 917 cd  
( 40%): 2293 cd  
(100%): 5732 cd

## IsoLux Plot



Mounting Height: 10.0m    Max Lux(100%): 57.2 lx

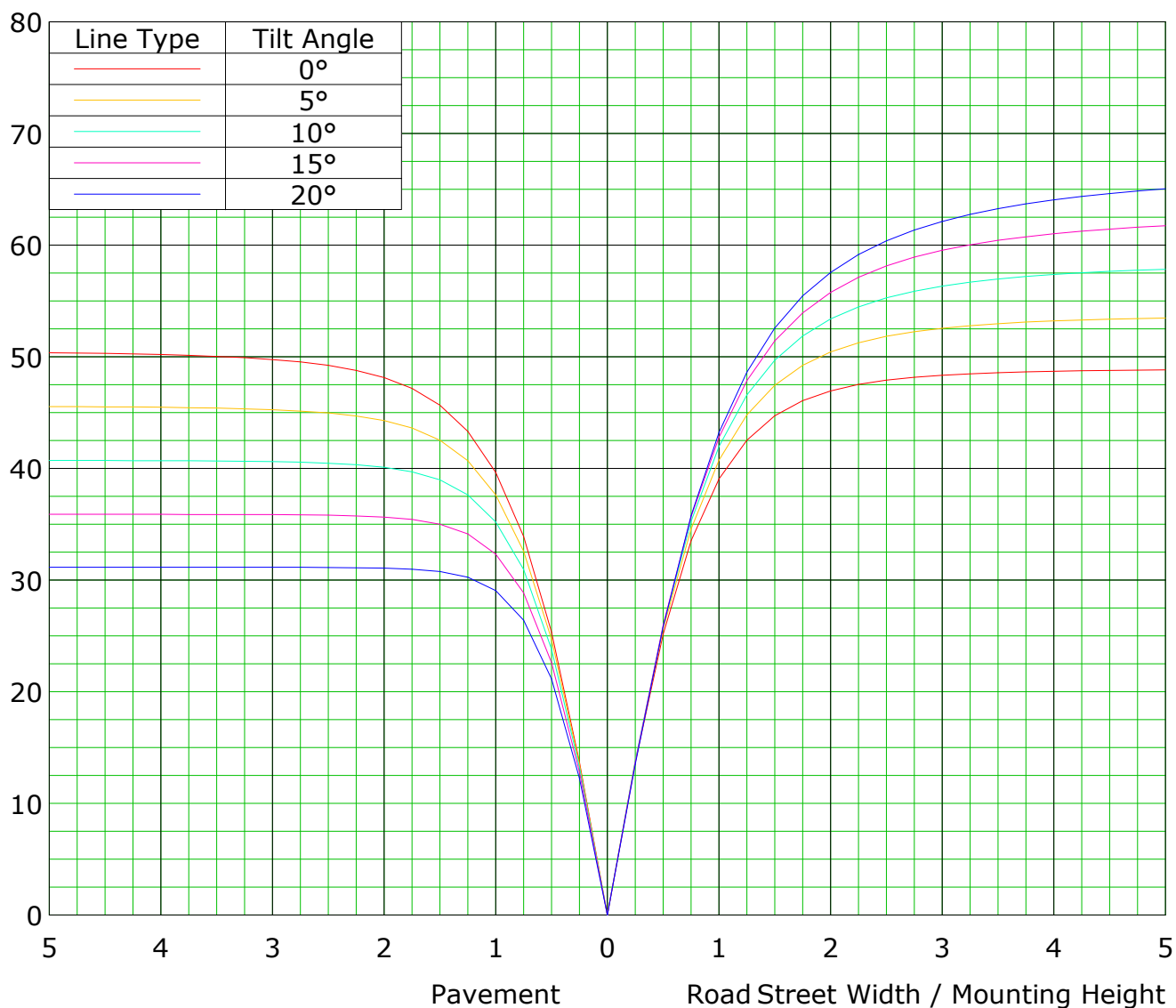
( 1%): 0.6 lx	( 2%): 1.1 lx
( 5%): 2.9 lx	( 10%): 5.7 lx
( 20%): 11.4 lx	( 50%): 28.6 lx
(100%): 57.2 lx	

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

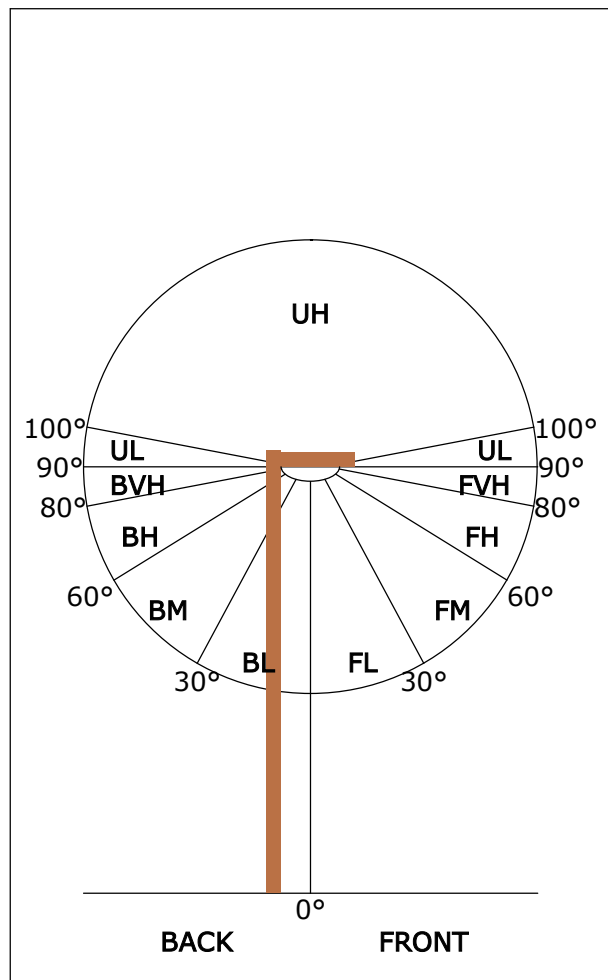
Test Device: GPM-1800B

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	7456	49.2
FL ( 0°-30°)	2254	14.9
FM (30°-60°)	4168	27.5
FH (60°-80°)	995	6.6
FVH (80°-90°)	39	0.3
BACK LIGHT	7700	50.8
BL ( 0°-30°)	2264	14.9
BM (30°-60°)	4281	28.2
BH (60°-80°)	1104	7.3
BVH (80°-90°)	50	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 G3
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	5705.6	5.5	5.5	0.04	0.04
1.0-2.0	5704.7	16.4	21.8	0.11	0.14
2.0-3.0	5698.7	27.3	49.1	0.18	0.32
3.0-4.0	5691.7	38.1	87.2	0.25	0.58
4.0-5.0	5688.6	48.9	136.1	0.32	0.90
5.0-6.0	5682.9	59.7	195.9	0.39	1.29
6.0-7.0	5672.7	70.4	266.3	0.46	1.76
7.0-8.0	5666.1	81.1	347.4	0.54	2.29
8.0-9.0	5654.7	91.7	439.1	0.60	2.90
9.0-10.0	5641.1	102.1	541.2	0.67	3.57
10.0-11.0	5625.6	112.4	653.6	0.74	4.31
11.0-12.0	5609.4	122.6	776.2	0.81	5.12
12.0-13.0	5592.0	132.7	908.9	0.88	6.00
13.0-14.0	5569.9	142.6	1051.5	0.94	6.94
14.0-15.0	5551.1	152.4	1203.9	1.01	7.94
15.0-16.0	5529.8	162.1	1366.0	1.07	9.01
16.0-17.0	5502.8	171.4	1537.4	1.13	10.14
17.0-18.0	5475.5	180.6	1717.9	1.19	11.33
18.0-19.0	5449.8	189.6	1907.6	1.25	12.59
19.0-20.0	5420.4	198.4	2106.0	1.31	13.90
20.0-21.0	5389.1	207.0	2312.9	1.37	15.26
21.0-22.0	5360.0	215.4	2528.4	1.42	16.68
22.0-23.0	5323.6	223.4	2751.8	1.47	18.16
23.0-24.0	5287.4	231.2	2983.0	1.53	19.68
24.0-25.0	5251.1	238.8	3221.8	1.58	21.26
25.0-26.0	5208.8	245.9	3467.7	1.62	22.88
26.0-27.0	5168.1	252.9	3720.6	1.67	24.55
27.0-28.0	5127.0	259.6	3980.2	1.71	26.26
28.0-29.0	5082.6	266.0	4246.1	1.75	28.02
29.0-30.0	5036.1	271.9	4518.1	1.79	29.81
30.0-31.0	4988.6	277.6	4795.7	1.83	31.64
31.0-32.0	4939.1	283.0	5078.7	1.87	33.51
32.0-33.0	4886.6	287.9	5366.6	1.90	35.41
33.0-34.0	4831.7	292.4	5659.1	1.93	37.34
34.0-35.0	4776.5	296.7	5955.8	1.96	39.30
35.0-36.0	4722.6	300.7	6256.5	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	4666.7	304.4	6560.9	2.01	43.29
37.0-38.0	4600.2	307.1	6868.0	2.03	45.31
38.0-39.0	4523.3	308.8	7176.8	2.04	47.35
39.0-40.0	4441.1	309.8	7486.6	2.04	49.40
40.0-41.0	4353.9	310.1	7796.6	2.05	51.44
41.0-42.0	4260.0	309.5	8106.2	2.04	53.48
42.0-43.0	4158.7	308.1	8414.3	2.03	55.52
43.0-44.0	4047.8	305.5	8719.8	2.02	57.53
44.0-45.0	3929.5	302.0	9021.9	1.99	59.53
45.0-46.0	3808.7	297.9	9319.8	1.97	61.49
46.0-47.0	3688.7	293.4	9613.2	1.94	63.43
47.0-48.0	3581.1	289.5	9902.7	1.91	65.34
48.0-49.0	3487.0	286.4	10189.1	1.89	67.23
49.0-50.0	3388.9	282.6	10471.7	1.86	69.09
50.0-51.0	3287.3	278.2	10749.9	1.84	70.93
51.0-52.0	3184.8	273.3	11023.2	1.80	72.73
52.0-53.0	3072.2	267.3	11290.5	1.76	74.49
53.0-54.0	2959.3	260.9	11551.3	1.72	76.21
54.0-55.0	2857.8	255.1	11806.5	1.68	77.90
55.0-56.0	2760.2	249.5	12055.9	1.65	79.54
56.0-57.0	2650.2	242.3	12298.3	1.60	81.14
57.0-58.0	2519.5	233.0	12531.3	1.54	82.68
58.0-59.0	2384.0	222.9	12754.2	1.47	84.15
59.0-60.0	2256.9	213.2	12967.4	1.41	85.56
60.0-61.0	2128.8	203.2	13170.6	1.34	86.90
61.0-62.0	1987.4	191.5	13362.1	1.26	88.16
62.0-63.0	1846.9	179.7	13541.8	1.19	89.35
63.0-64.0	1723.6	169.2	13711.0	1.12	90.46
64.0-65.0	1606.8	159.0	13870.0	1.05	91.51
65.0-66.0	1482.5	147.9	14017.9	0.98	92.49
66.0-67.0	1357.1	136.5	14154.4	0.90	93.39
67.0-68.0	1247.0	126.3	14280.7	0.83	94.22
68.0-69.0	1148.1	117.1	14397.9	0.77	95.00
69.0-70.0	1037.6	106.6	14504.4	0.70	95.70
70.0-71.0	913.0	94.4	14598.8	0.62	96.32
71.0-72.0	796.9	82.9	14681.7	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	704.7	73.7	14755.4	0.49	97.35
73.0-74.0	625.2	65.7	14821.1	0.43	97.79
74.0-75.0	547.1	57.8	14878.9	0.38	98.17
75.0-76.0	473.0	50.2	14929.2	0.33	98.50
76.0-77.0	407.6	43.5	14972.6	0.29	98.79
77.0-78.0	349.3	37.4	15010.0	0.25	99.03
78.0-79.0	291.1	31.3	15041.3	0.21	99.24
79.0-80.0	237.2	25.6	15066.9	0.17	99.41
80.0-81.0	191.8	20.7	15087.6	0.14	99.55
81.0-82.0	153.5	16.7	15104.3	0.11	99.66
82.0-83.0	120.7	13.1	15117.4	0.09	99.74
83.0-84.0	94.9	10.3	15127.7	0.07	99.81
84.0-85.0	75.2	8.2	15136.0	0.05	99.87
85.0-86.0	59.2	6.5	15142.4	0.04	99.91
86.0-87.0	46.9	5.1	15147.6	0.03	99.94
87.0-88.0	37.9	4.2	15151.7	0.03	99.97
88.0-89.0	26.5	2.9	15154.6	0.02	99.99
89.0-90.0	12.5	1.4	15156.0	0.01	100.00
90.0-91.0	3.0	0.3	15156.3	0.00	100.00
91.0-92.0	0.0	0.0	15156.3	0.00	100.00
92.0-93.0	0.0	0.0	15156.3	0.00	100.00
93.0-94.0	0.0	0.0	15156.3	0.00	100.00
94.0-95.0	0.0	0.0	15156.3	0.00	100.00
95.0-96.0	0.0	0.0	15156.3	0.00	100.00
96.0-97.0	0.0	0.0	15156.3	0.00	100.00
97.0-98.0	0.0	0.0	15156.3	0.00	100.00
98.0-99.0	0.0	0.0	15156.3	0.00	100.00
99.0-100.0	0.0	0.0	15156.3	0.00	100.00
100.0-101.0	0.0	0.0	15156.3	0.00	100.00
101.0-102.0	0.0	0.0	15156.3	0.00	100.00
102.0-103.0	0.0	0.0	15156.3	0.00	100.00
103.0-104.0	0.0	0.0	15156.3	0.00	100.00
104.0-105.0	0.0	0.0	15156.3	0.00	100.00
105.0-106.0	0.0	0.0	15156.3	0.00	100.00
106.0-107.0	0.0	0.0	15156.3	0.00	100.00
107.0-108.0	0.0	0.0	15156.3	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	15156.3	0.00	100.00
109.0-110.0	0.0	0.0	15156.3	0.00	100.00
110.0-111.0	0.0	0.0	15156.3	0.00	100.00
111.0-112.0	0.0	0.0	15156.3	0.00	100.00
112.0-113.0	0.0	0.0	15156.3	0.00	100.00
113.0-114.0	0.0	0.0	15156.3	0.00	100.00
114.0-115.0	0.0	0.0	15156.3	0.00	100.00
115.0-116.0	0.0	0.0	15156.3	0.00	100.00
116.0-117.0	0.0	0.0	15156.3	0.00	100.00
117.0-118.0	0.0	0.0	15156.3	0.00	100.00
118.0-119.0	0.0	0.0	15156.3	0.00	100.00
119.0-120.0	0.0	0.0	15156.3	0.00	100.00
120.0-121.0	0.0	0.0	15156.3	0.00	100.00
121.0-122.0	0.0	0.0	15156.3	0.00	100.00
122.0-123.0	0.0	0.0	15156.3	0.00	100.00
123.0-124.0	0.0	0.0	15156.3	0.00	100.00
124.0-125.0	0.0	0.0	15156.3	0.00	100.00
125.0-126.0	0.0	0.0	15156.3	0.00	100.00
126.0-127.0	0.0	0.0	15156.3	0.00	100.00
127.0-128.0	0.0	0.0	15156.3	0.00	100.00
128.0-129.0	0.0	0.0	15156.3	0.00	100.00
129.0-130.0	0.0	0.0	15156.3	0.00	100.00
130.0-131.0	0.0	0.0	15156.3	0.00	100.00
131.0-132.0	0.0	0.0	15156.3	0.00	100.00
132.0-133.0	0.0	0.0	15156.3	0.00	100.00
133.0-134.0	0.0	0.0	15156.3	0.00	100.00
134.0-135.0	0.0	0.0	15156.3	0.00	100.00
135.0-136.0	0.0	0.0	15156.3	0.00	100.00
136.0-137.0	0.0	0.0	15156.3	0.00	100.00
137.0-138.0	0.0	0.0	15156.3	0.00	100.00
138.0-139.0	0.0	0.0	15156.3	0.00	100.00
139.0-140.0	0.0	0.0	15156.3	0.00	100.00
140.0-141.0	0.0	0.0	15156.3	0.00	100.00
141.0-142.0	0.0	0.0	15156.3	0.00	100.00
142.0-143.0	0.0	0.0	15156.3	0.00	100.00
143.0-144.0	0.0	0.0	15156.3	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	15156.3	0.00	100.00
145.0-146.0	0.0	0.0	15156.3	0.00	100.00
146.0-147.0	0.0	0.0	15156.3	0.00	100.00
147.0-148.0	0.0	0.0	15156.3	0.00	100.00
148.0-149.0	0.0	0.0	15156.3	0.00	100.00
149.0-150.0	0.0	0.0	15156.3	0.00	100.00
150.0-151.0	0.0	0.0	15156.3	0.00	100.00
151.0-152.0	0.0	0.0	15156.3	0.00	100.00
152.0-153.0	0.0	0.0	15156.3	0.00	100.00
153.0-154.0	0.0	0.0	15156.3	0.00	100.00
154.0-155.0	0.0	0.0	15156.3	0.00	100.00
155.0-156.0	0.0	0.0	15156.3	0.00	100.00
156.0-157.0	0.0	0.0	15156.3	0.00	100.00
157.0-158.0	0.0	0.0	15156.3	0.00	100.00
158.0-159.0	0.0	0.0	15156.3	0.00	100.00
159.0-160.0	0.0	0.0	15156.3	0.00	100.00
160.0-161.0	0.0	0.0	15156.3	0.00	100.00
161.0-162.0	0.0	0.0	15156.3	0.00	100.00
162.0-163.0	0.0	0.0	15156.3	0.00	100.00
163.0-164.0	0.0	0.0	15156.3	0.00	100.00
164.0-165.0	0.0	0.0	15156.3	0.00	100.00
165.0-166.0	0.0	0.0	15156.3	0.00	100.00
166.0-167.0	0.0	0.0	15156.3	0.00	100.00
167.0-168.0	0.0	0.0	15156.3	0.00	100.00
168.0-169.0	0.0	0.0	15156.3	0.00	100.00
169.0-170.0	0.0	0.0	15156.3	0.00	100.00
170.0-171.0	0.0	0.0	15156.3	0.00	100.00
171.0-172.0	0.0	0.0	15156.3	0.00	100.00
172.0-173.0	0.0	0.0	15156.3	0.00	100.00
173.0-174.0	0.0	0.0	15156.3	0.00	100.00
174.0-175.0	0.0	0.0	15156.3	0.00	100.00
175.0-176.0	0.0	0.0	15156.3	0.00	100.00
176.0-177.0	0.0	0.0	15156.3	0.00	100.00
177.0-178.0	0.0	0.0	15156.3	0.00	100.00
178.0-179.0	0.0	0.0	15156.3	0.00	100.00
179.0-180.0	0.0	0.0	15156.3	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°): 9021.86 lm

%lum = 59.5%

%lamp = 59.5%

cone flux(120°): 12967.43 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