

Report No.:

Test Time: 2024/8/18 18:25

Luminaire Property

Luminaire

Luminaire Category:

Luminaire Description: 490670 LED-MF-40W-4000K-12V

Lamp Catalog: L128-ETSC3-YJ00F-KS

Lamp Description: KHM-DDC40W12S_850

Number of Lamps: 1

Lumens per Lamp:

Luminous Length (mm):

Luminous Width (mm):

Luminous Height (mm):

Voltage: 12.3 V

Current: 3.559 A

Power: 38.88 W

Power Factor: 0.889

Photometric Results

IES Classification: Type II

Longitudinal Classification: Very Short

Total Rated Lamp Lumens: 4620.9 lm

Measurement Flux: 4620.9 lm

Efficiency: 100%

Downward Ratio: 100%

Upward Ratio: 0%

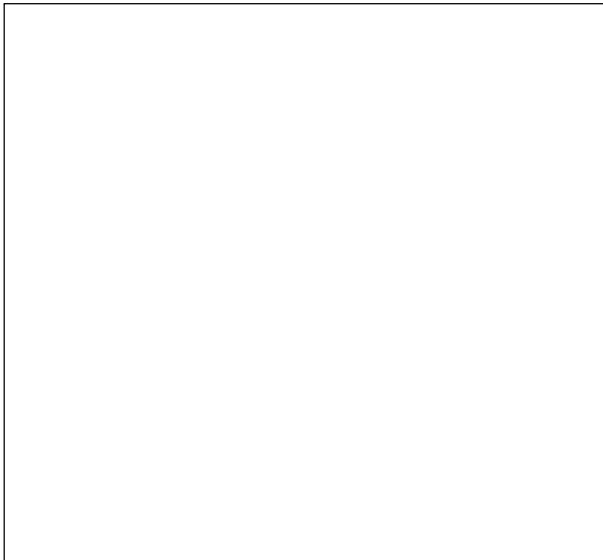
Luminaire Efficacy Rating (LER): 118.90

C0r0 Intensity: 2040.34 cd

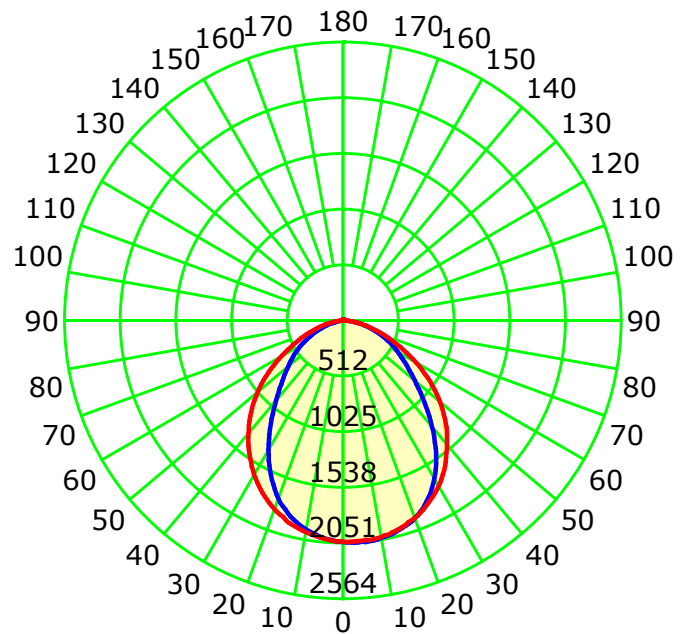
Max. Intensity: 2051.54 cd

Pos of Max. Intensity: H0 V6

Picture Of Luminaire



Luminous Intensity Distribution Curve



Unit: cd
Average Diffuse Angle(50%): 94.1°

— C0-C180 — C90-C270

C Plane (°):0.0-360.0: 30.0

Test Type: TYPE C

Temperature: 25.5°C

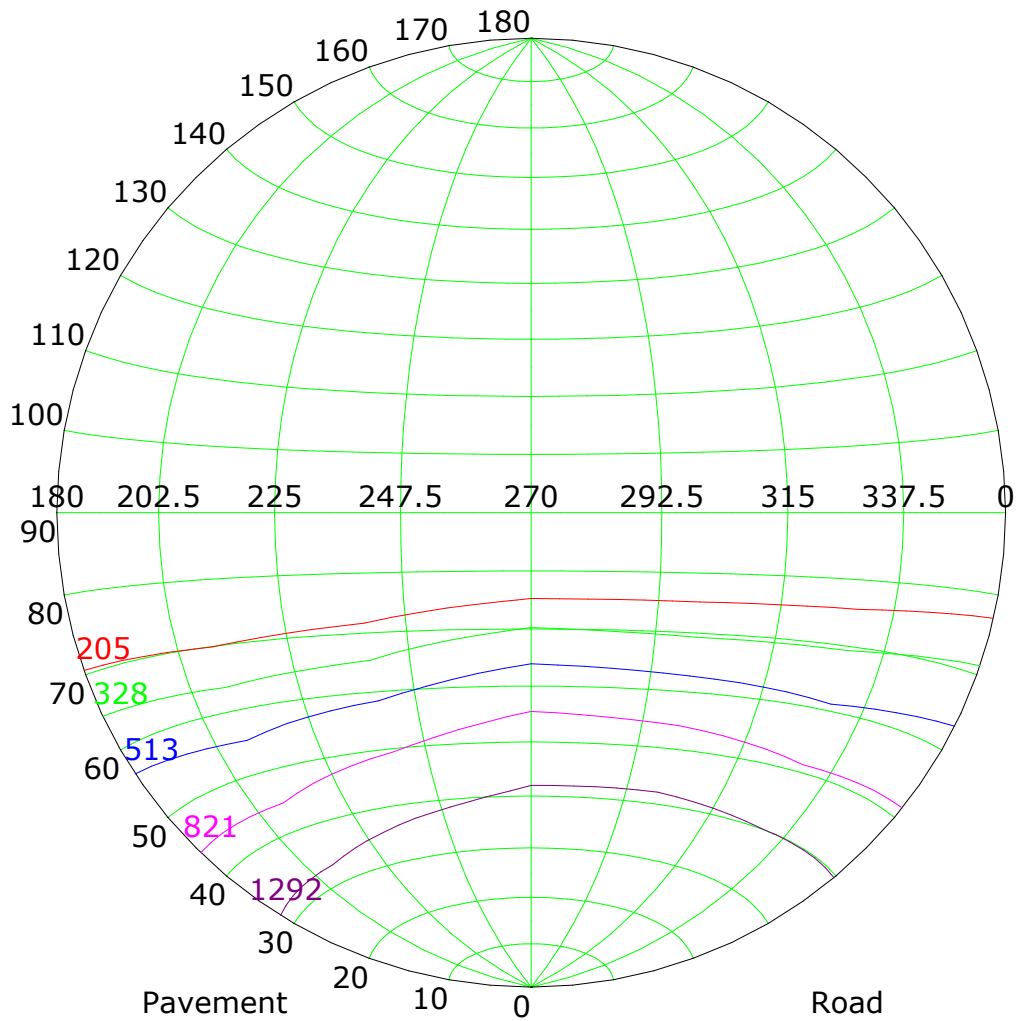
Gamma Plane (°):0.0-180.0:1.0

Test Device: GPM-1800B

Distance: 11.655 m [K=1.0000]

Humidity: 45% R.H

Isocandela (sphere)



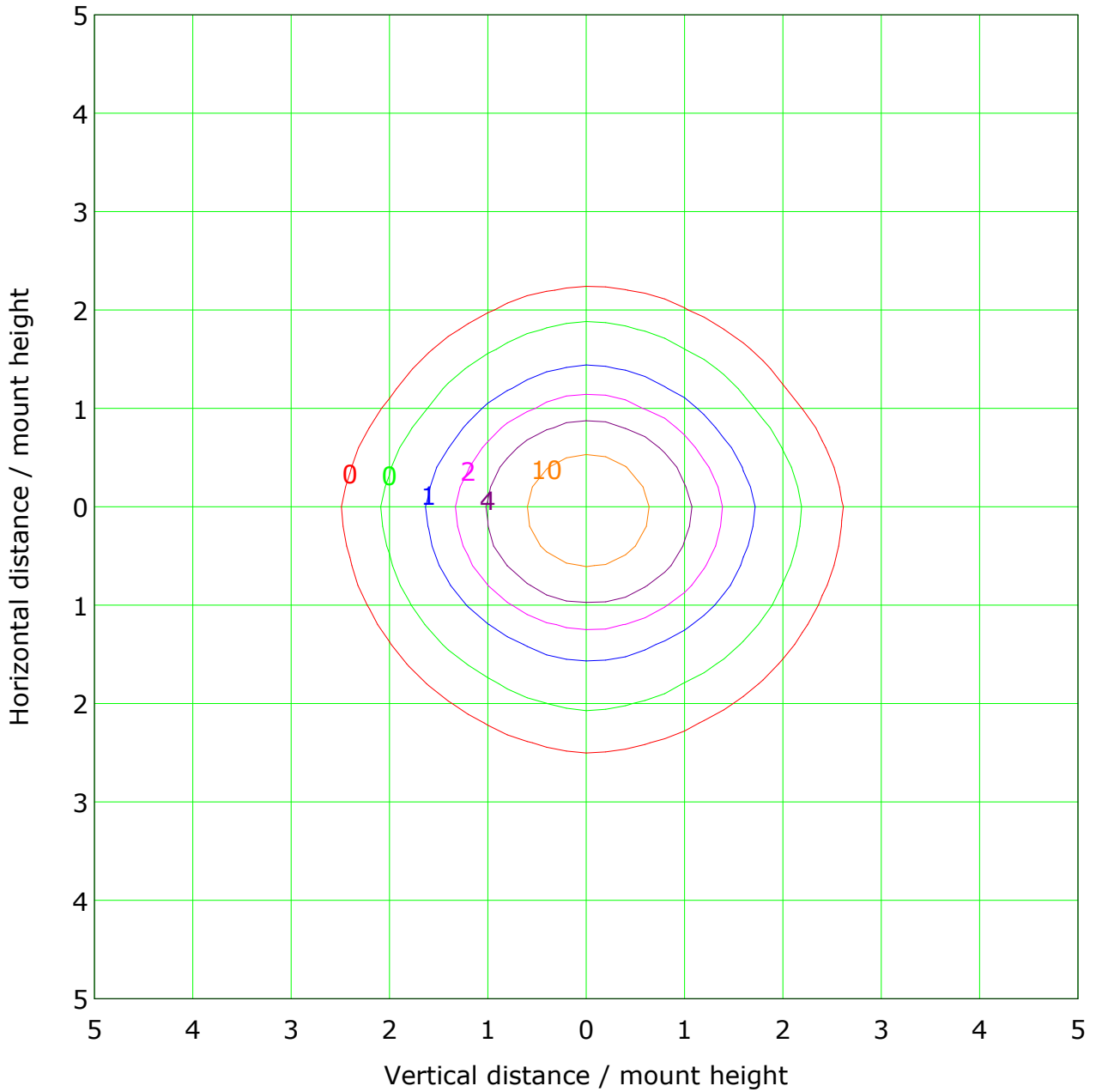
Imax (100%): 2052 cd

— (10%): 205 cd	— (16%): 328 cd
— (25%): 513 cd	— (40%): 821 cd
— (63%): 1292 cd	— (100%): 2052 cd

C Plane (°):0.0-360.0: 30.0
 Test Type: TYPE C
 Temperature: 25.5°C

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H

IsoLux Plot



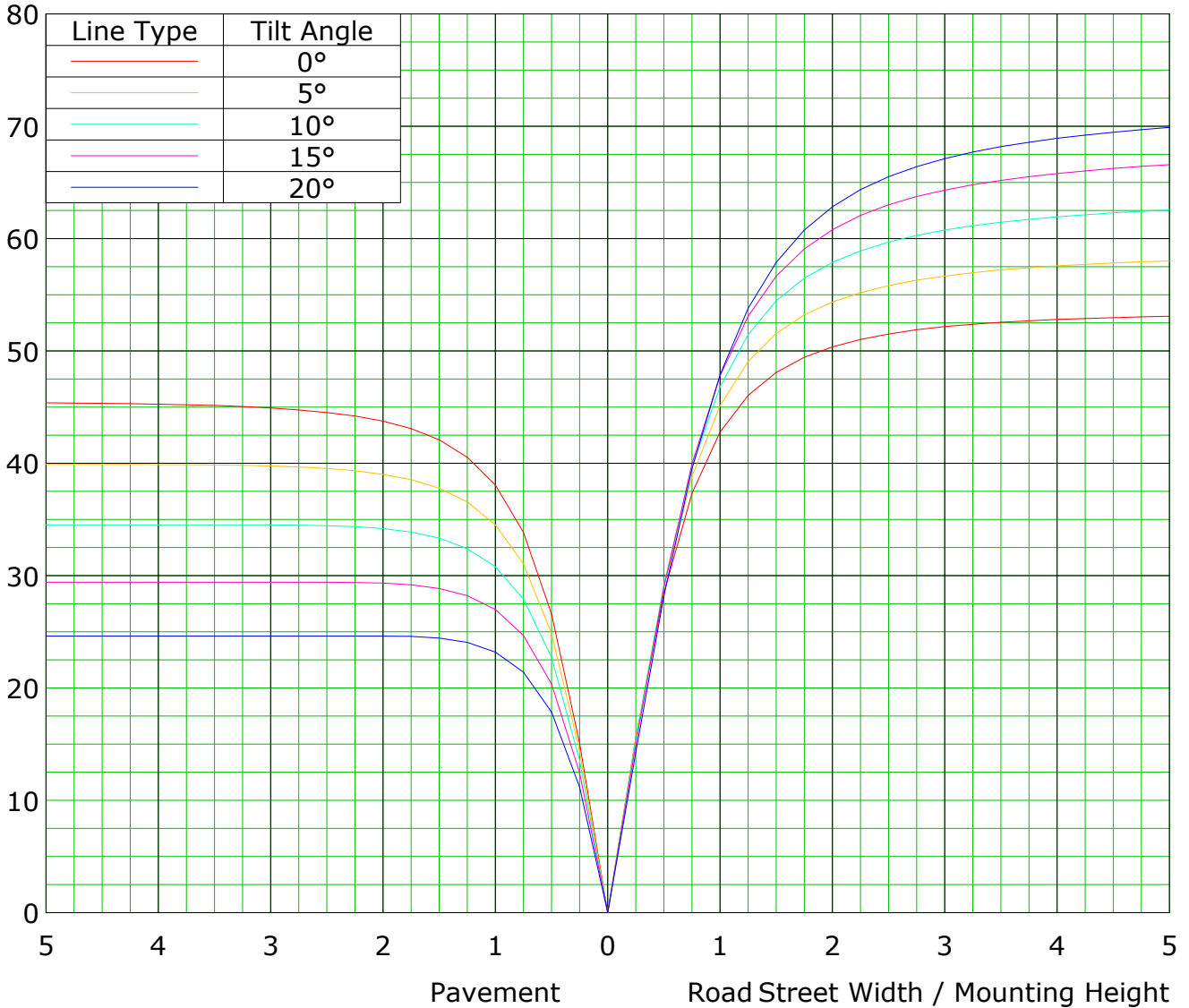
Mounting Height: 10.0m		Max Lux(100%): 20.4 lx	
— (1%):	0.2 lx	— (2%):	0.4 lx
— (5%):	1.0 lx	— (10%):	2.0 lx
— (20%):	4.1 lx	— (50%):	10.2 lx
— (100%):	20.4 lx		

C Plane (°):0.0-360.0: 30.0
 Test Type: TYPE C
 Temperature: 25.5°C

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H

Roadway CU Curve

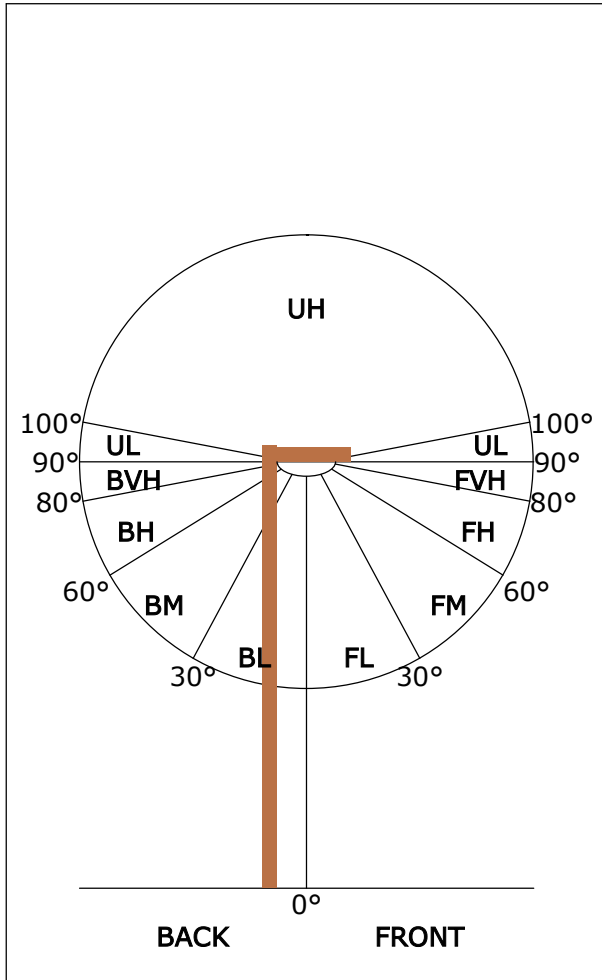
Efficiency(%)



C Plane (°):0.0-360.0: 30.0
 Test Type: TYPE C
 Temperature: 25.5°C

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H

FLUX DISTRIBUTION TABLE BASED ON THE IESNA LUMINAIRE CLASSIFICATION SYSTEM



ZONE	LUMENS	% LAMP LUMENS
FORWARD LIGHT	2488	53.8
FL (0°-30°)	799	17.3
FM (30°-60°)	1295	28.0
FH (60°-80°)	362	7.8
FVH (80°-90°)	32	0.7
BACK LIGHT	2111	45.7
BL (0°-30°)	751	16.3
BM (30°-60°)	1082	23.4
BH (60°-80°)	267	5.8
BVH (80°-90°)	11	0.2
UP LIGHT	23	0.5
UL (90°-100°)	0	0.0
UH (100°-180°)	23	0.5
TRAPPED LIGHT	NA	NA

BUG(Backlight,Uplight,Glare) Rating Base On TM-15-07	
Asymmetrical Luminaire Types (Type I,II,III,IV)	B2 U2 G1
Quadrilateral Symmetrical Luminaire Types (Type V,Area Light)	B2 U2 G1

C Plane (°):0.0-360.0: 30.0
 Test Type: TYPE C
 Temperature: 25.5°C

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H

Zonal Lumen

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
0.0-1.0	2038.9	2.0	2.0	0.04	0.04
1.0-2.0	2038.1	5.9	7.8	0.13	0.17
2.0-3.0	2036.2	9.7	17.5	0.21	0.38
3.0-4.0	2033.3	13.6	31.2	0.29	0.67
4.0-5.0	2030.0	17.5	48.6	0.38	1.05
5.0-6.0	2026.6	21.3	69.9	0.46	1.51
6.0-7.0	2022.1	25.1	95.0	0.54	2.06
7.0-8.0	2016.5	28.9	123.9	0.62	2.68
8.0-9.0	2009.9	32.6	156.5	0.71	3.39
9.0-10.0	2002.4	36.2	192.7	0.78	4.17
10.0-11.0	1994.2	39.9	232.6	0.86	5.03
11.0-12.0	1985.2	43.4	276.0	0.94	5.97
12.0-13.0	1975.8	46.9	322.9	1.01	6.99
13.0-14.0	1965.2	50.3	373.2	1.09	8.08
14.0-15.0	1953.5	53.6	426.8	1.16	9.24
15.0-16.0	1940.4	56.9	483.7	1.23	10.47
16.0-17.0	1925.2	60.0	543.6	1.30	11.76
17.0-18.0	1909.8	63.0	606.6	1.36	13.13
18.0-19.0	1894.5	65.9	672.5	1.43	14.55
19.0-20.0	1877.3	68.7	741.2	1.49	16.04
20.0-21.0	1858.7	71.4	812.6	1.54	17.59
21.0-22.0	1839.2	73.9	886.5	1.60	19.19
22.0-23.0	1818.2	76.3	962.8	1.65	20.84
23.0-24.0	1795.6	78.5	1041.4	1.70	22.54
24.0-25.0	1771.9	80.6	1121.9	1.74	24.28
25.0-26.0	1747.8	82.5	1204.5	1.79	26.07
26.0-27.0	1721.9	84.3	1288.7	1.82	27.89
27.0-28.0	1693.7	85.8	1374.5	1.86	29.74
28.0-29.0	1665.0	87.1	1461.6	1.89	31.63
29.0-30.0	1636.0	88.3	1549.9	1.91	33.54
30.0-31.0	1605.1	89.3	1639.3	1.93	35.48
31.0-32.0	1572.9	90.1	1729.4	1.95	37.43
32.0-33.0	1539.9	90.7	1820.1	1.96	39.39
33.0-34.0	1506.3	91.2	1911.3	1.97	41.36
34.0-35.0	1471.8	91.4	2002.7	1.98	43.34
35.0-36.0	1436.3	91.5	2094.2	1.98	45.32

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Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H

Zonal Lumen (Continue 1)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
36.0-37.0	1398.6	91.2	2185.4	1.97	47.29
37.0-38.0	1360.6	90.8	2276.2	1.97	49.26
38.0-39.0	1323.9	90.4	2366.6	1.96	51.22
39.0-40.0	1285.6	89.7	2456.3	1.94	53.16
40.0-41.0	1246.4	88.8	2545.0	1.92	55.08
41.0-42.0	1208.1	87.8	2632.8	1.90	56.98
42.0-43.0	1170.6	86.7	2719.6	1.88	58.85
43.0-44.0	1131.4	85.4	2805.0	1.85	60.70
44.0-45.0	1091.9	83.9	2888.9	1.82	62.52
45.0-46.0	1054.5	82.5	2971.4	1.78	64.30
46.0-47.0	1017.6	80.9	3052.3	1.75	66.05
47.0-48.0	980.0	79.2	3131.5	1.71	67.77
48.0-49.0	942.3	77.4	3208.9	1.67	69.44
49.0-50.0	905.8	75.5	3284.5	1.63	71.08
50.0-51.0	870.6	73.7	3358.1	1.59	72.67
51.0-52.0	836.2	71.8	3429.9	1.55	74.23
52.0-53.0	801.4	69.7	3499.6	1.51	75.73
53.0-54.0	766.5	67.6	3567.2	1.46	77.20
54.0-55.0	733.3	65.5	3632.7	1.42	78.61
55.0-56.0	701.1	63.4	3696.0	1.37	79.98
56.0-57.0	668.2	61.1	3757.1	1.32	81.31
57.0-58.0	636.2	58.8	3816.0	1.27	82.58
58.0-59.0	606.2	56.7	3872.6	1.23	83.81
59.0-60.0	576.0	54.4	3927.1	1.18	84.98
60.0-61.0	545.8	52.1	3979.2	1.13	86.11
61.0-62.0	516.9	49.8	4029.0	1.08	87.19
62.0-63.0	489.2	47.6	4076.6	1.03	88.22
63.0-64.0	462.1	45.3	4121.9	0.98	89.20
64.0-65.0	434.8	43.0	4165.0	0.93	90.13
65.0-66.0	408.7	40.8	4205.7	0.88	91.02
66.0-67.0	384.1	38.6	4244.4	0.84	91.85
67.0-68.0	359.7	36.4	4280.8	0.79	92.64
68.0-69.0	335.4	34.2	4315.0	0.74	93.38
69.0-70.0	312.3	32.1	4347.1	0.69	94.07
70.0-71.0	290.3	30.0	4377.1	0.65	94.72
71.0-72.0	268.4	27.9	4405.0	0.60	95.33

C Plane (°):0.0-360.0: 30.0
 Test Type: TYPE C
 Temperature: 25.5°C

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H

Zonal Lumen (Continue 2)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
72.0-73.0	246.7	25.8	4430.8	0.56	95.89
73.0-74.0	225.9	23.8	4454.6	0.51	96.40
74.0-75.0	206.4	21.8	4476.4	0.47	96.87
75.0-76.0	186.9	19.8	4496.2	0.43	97.30
76.0-77.0	167.2	17.8	4514.1	0.39	97.69
77.0-78.0	148.3	15.9	4529.9	0.34	98.03
78.0-79.0	130.3	14.0	4543.9	0.30	98.33
79.0-80.0	112.2	12.1	4556.0	0.26	98.60
80.0-81.0	94.6	10.2	4566.3	0.22	98.82
81.0-82.0	78.9	8.6	4574.8	0.19	99.00
82.0-83.0	64.7	7.0	4581.9	0.15	99.16
83.0-84.0	51.7	5.6	4587.5	0.12	99.28
84.0-85.0	38.7	4.2	4591.7	0.09	99.37
85.0-86.0	26.8	2.9	4594.7	0.06	99.43
86.0-87.0	17.2	1.9	4596.5	0.04	99.47
87.0-88.0	9.6	1.1	4597.6	0.02	99.50
88.0-89.0	4.4	0.5	4598.1	0.01	99.51
89.0-90.0	1.6	0.2	4598.2	0.00	99.51
90.0-91.0	0.4	0.0	4598.3	0.00	99.51
91.0-92.0	0.0	0.0	4598.3	0.00	99.51
92.0-93.0	0.0	0.0	4598.3	0.00	99.51
93.0-94.0	0.0	0.0	4598.3	0.00	99.51
94.0-95.0	0.0	0.0	4598.3	0.00	99.51
95.0-96.0	0.0	0.0	4598.3	0.00	99.51
96.0-97.0	0.0	0.0	4598.3	0.00	99.51
97.0-98.0	0.0	0.0	4598.3	0.00	99.51
98.0-99.0	0.0	0.0	4598.3	0.00	99.51
99.0-100.0	0.0	0.0	4598.3	0.00	99.51
100.0-101.0	0.0	0.0	4598.3	0.00	99.51
101.0-102.0	0.1	0.0	4598.3	0.00	99.51
102.0-103.0	0.3	0.0	4598.3	0.00	99.51
103.0-104.0	0.4	0.0	4598.4	0.00	99.51
104.0-105.0	0.4	0.0	4598.4	0.00	99.51
105.0-106.0	0.6	0.1	4598.5	0.00	99.51
106.0-107.0	0.7	0.1	4598.5	0.00	99.52
107.0-108.0	0.9	0.1	4598.6	0.00	99.52

C Plane (°):0.0-360.0: 30.0
 Test Type: TYPE C
 Temperature: 25.5°C

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H

Zonal Lumen (Continue 3)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
108.0-109.0	1.1	0.1	4598.8	0.00	99.52
109.0-110.0	1.3	0.1	4598.9	0.00	99.52
110.0-111.0	1.4	0.1	4599.0	0.00	99.53
111.0-112.0	1.6	0.2	4599.2	0.00	99.53
112.0-113.0	1.8	0.2	4599.4	0.00	99.53
113.0-114.0	2.1	0.2	4599.6	0.00	99.54
114.0-115.0	2.3	0.2	4599.8	0.00	99.54
115.0-116.0	2.6	0.3	4600.1	0.01	99.55
116.0-117.0	2.9	0.3	4600.3	0.01	99.56
117.0-118.0	3.1	0.3	4600.6	0.01	99.56
118.0-119.0	3.3	0.3	4601.0	0.01	99.57
119.0-120.0	3.5	0.3	4601.3	0.01	99.58
120.0-121.0	3.6	0.3	4601.6	0.01	99.58
121.0-122.0	3.8	0.4	4602.0	0.01	99.59
122.0-123.0	3.9	0.4	4602.4	0.01	99.60
123.0-124.0	4.0	0.4	4602.7	0.01	99.61
124.0-125.0	4.2	0.4	4603.1	0.01	99.61
125.0-126.0	4.3	0.4	4603.5	0.01	99.62
126.0-127.0	4.4	0.4	4603.9	0.01	99.63
127.0-128.0	4.6	0.4	4604.3	0.01	99.64
128.0-129.0	4.7	0.4	4604.7	0.01	99.65
129.0-130.0	4.9	0.4	4605.1	0.01	99.66
130.0-131.0	5.0	0.4	4605.5	0.01	99.67
131.0-132.0	5.1	0.4	4605.9	0.01	99.68
132.0-133.0	5.3	0.4	4606.3	0.01	99.68
133.0-134.0	5.4	0.4	4606.8	0.01	99.69
134.0-135.0	5.5	0.4	4607.2	0.01	99.70
135.0-136.0	5.7	0.4	4607.6	0.01	99.71
136.0-137.0	5.8	0.4	4608.1	0.01	99.72
137.0-138.0	5.9	0.4	4608.5	0.01	99.73
138.0-139.0	6.0	0.4	4609.0	0.01	99.74
139.0-140.0	6.1	0.4	4609.4	0.01	99.75
140.0-141.0	6.3	0.4	4609.8	0.01	99.76
141.0-142.0	6.4	0.4	4610.3	0.01	99.77
142.0-143.0	6.5	0.4	4610.7	0.01	99.78
143.0-144.0	6.6	0.4	4611.1	0.01	99.79

C Plane (°):0.0-360.0: 30.0
 Test Type: TYPE C
 Temperature: 25.5°C

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H

Zonal Lumen (Continue 4)

Gamma [°]	I _{mean} [cd]	Zonal Flux [lm]	Sum Zonal Flux [lm]	Rel Zonal Flux [%]	Sum Rel Zonal Flux [%]
144.0-145.0	6.8	0.4	4611.6	0.01	99.80
145.0-146.0	6.9	0.4	4612.0	0.01	99.81
146.0-147.0	7.0	0.4	4612.4	0.01	99.82
147.0-148.0	7.1	0.4	4612.8	0.01	99.83
148.0-149.0	7.3	0.4	4613.3	0.01	99.83
149.0-150.0	7.4	0.4	4613.7	0.01	99.84
150.0-151.0	7.5	0.4	4614.1	0.01	99.85
151.0-152.0	7.6	0.4	4614.5	0.01	99.86
152.0-153.0	7.8	0.4	4614.9	0.01	99.87
153.0-154.0	7.9	0.4	4615.3	0.01	99.88
154.0-155.0	8.0	0.4	4615.6	0.01	99.89
155.0-156.0	8.1	0.4	4616.0	0.01	99.89
156.0-157.0	8.2	0.4	4616.4	0.01	99.90
157.0-158.0	8.4	0.4	4616.7	0.01	99.91
158.0-159.0	8.5	0.3	4617.0	0.01	99.92
159.0-160.0	8.6	0.3	4617.4	0.01	99.92
160.0-161.0	8.7	0.3	4617.7	0.01	99.93
161.0-162.0	8.8	0.3	4618.0	0.01	99.94
162.0-163.0	8.9	0.3	4618.3	0.01	99.94
163.0-164.0	9.1	0.3	4618.6	0.01	99.95
164.0-165.0	9.2	0.3	4618.8	0.01	99.96
165.0-166.0	9.2	0.3	4619.1	0.01	99.96
166.0-167.0	9.3	0.2	4619.3	0.01	99.97
167.0-168.0	9.4	0.2	4619.6	0.00	99.97
168.0-169.0	9.5	0.2	4619.8	0.00	99.98
169.0-170.0	9.6	0.2	4620.0	0.00	99.98
170.0-171.0	9.7	0.2	4620.1	0.00	99.98
171.0-172.0	9.8	0.2	4620.3	0.00	99.99
172.0-173.0	9.9	0.1	4620.4	0.00	99.99
173.0-174.0	10.0	0.1	4620.6	0.00	99.99
174.0-175.0	10.0	0.1	4620.7	0.00	99.99
175.0-176.0	10.0	0.1	4620.8	0.00	100.00
176.0-177.0	10.1	0.1	4620.8	0.00	100.00
177.0-178.0	10.0	0.0	4620.9	0.00	100.00
178.0-179.0	10.0	0.0	4620.9	0.00	100.00
179.0-180.0	10.0	0.0	4620.9	0.00	100.00

C Plane (°):0.0-360.0: 30.0
 Test Type: TYPE C
 Temperature: 25.5°C

Gamma Plane (°):0.0-180.0:1.0
 Test Device: GPM-1800B
 Distance: 11.655 m [K=1.0000]
 Humidity: 45% R.H

Zonal Lumen (Continue 5)

cone flux(90°): 2888.89 lm

%lum = 62.5%

%lamp = 62.5%

cone flux(120°): 3927.07 lm

%lum = 85.0%

%lamp = 85.0%

LED Average Luminance Report

Avg.L	cd/m ²
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