

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: PORTFOLIO

Report Number: P755355

Luminaire Tested: LD4D90BD010-EU4DR3070959030-4LBDP1H

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P755355  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2307-078-16)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/30/2024  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LD4D90BD010-EU4DR3070959030-4LBDP1H  
Description: 4 INCH ROUND DEEP 45° CUTOFF SEMI-SPECULAR CLEAR TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 3000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8393.4 lumens  
Efficiency: N/A  
Efficacy: 84.9 lumens/watt  
Spacing Criteria (0/90/45): 0.52 / 0.52 / 0.49  
Luminous Opening: Rectangular (W 0.38' x L: 0.38' x H: 0')  
CIE Type: Direct

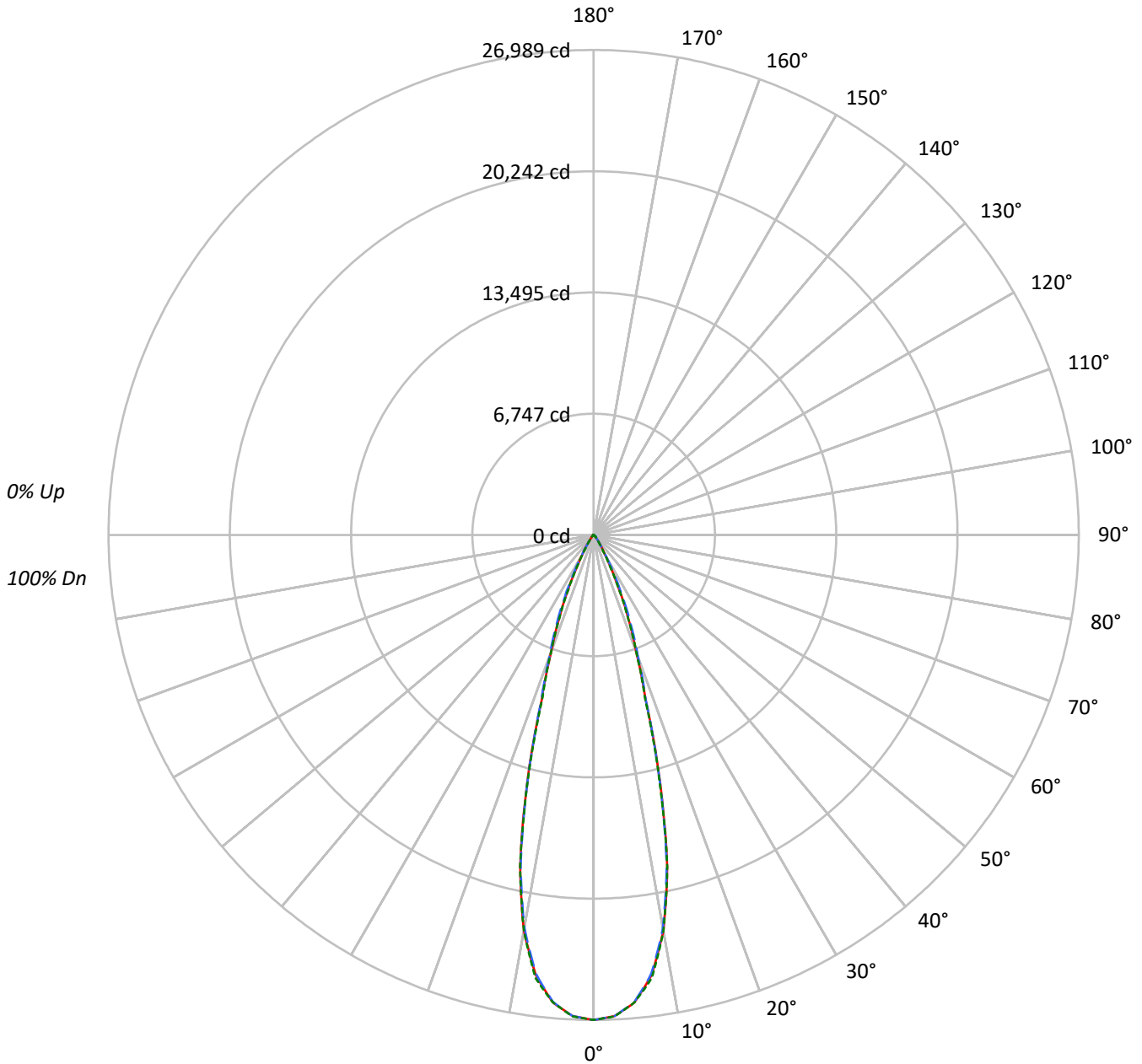
Input Watts (W): 98.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



Downlight

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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									50									30									10									0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0													
RCR																																					
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100																			
1	115	113	111	109	112	110	109	107	106	105	104	103	102	101	99	99	98	96																			
2	111	107	104	101	109	105	102	100	102	100	98	99	97	96	97	95	94	92																			
3	107	102	98	95	105	101	97	94	98	95	93	96	93	91	94	92	90	89																			
4	103	98	93	90	102	96	93	90	94	91	89	93	90	88	91	89	87	85																			
5	100	94	89	86	98	93	89	86	91	88	85	90	86	84	88	86	83	82																			
6	97	90	85	82	95	89	85	82	88	84	81	87	83	81	85	83	80	79																			
7	94	87	82	79	92	86	82	79	85	81	78	84	81	78	83	80	78	77																			
8	91	84	79	76	90	83	79	76	82	78	76	81	78	75	80	77	75	74																			
9	88	81	76	73	87	80	76	73	80	76	73	79	75	73	78	75	73	72																			
10	85	78	74	71	85	78	74	71	77	73	71	76	73	71	76	73	70	69																			

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2065799	2065799	2065799
5°	2006490	2004154	2006597
10°	1737929	1725672	1737517
15°	1133912	1127818	1122152
20°	563837	584999	563088
25°	284027	320284	278207
30°	113716	123907	99079
35°	52748	50515	42348
40°	22772	25290	21453
45°	16064	19939	16205
50°	5525	14516	5835
55°	3189	6019	3363
60°	2235	2633	2235
65°	1449	1449	1449
70°	895	604	895
75°	0	384	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 19939 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2373.2	28.3
10°-20°	3822.1	45.5
20°-30°	1651.6	19.7
30°-40°	376.4	4.5
40°-50°	129.3	1.5
50°-60°	31.6	0.4
60°-70°	8.2	0.1
70°-80°	0.9	0.0
80°-90°	0.0	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	7847.0	93.5
0°-40°	8223.4	98.0
0°-60°	8384.3	99.9
0°-90°	8393.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8393.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	26989	26989	26989	26989	26989	
5°	26114	26089	26084	26138	26115	2375
15°	14309	14137	14232	14186	14161	3831
25°	3363	3490	3792	3401	3294	1610
35°	564	576	541	537	453	383
45°	148	184	184	184	150	105
55°	24	25	45	26	25	23
65°	8	8	8	8	8	8
75°	0	0	1	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	26988.6	26988.6	26988.6	26988.6	26988.6
2.5°	26809.7	26791.1	26801.7	26815.0	26820.3
5°	26114.0	26088.9	26083.6	26137.9	26115.4
7.5°	24710.8	24675.0	24620.7	24743.9	24859.2
10°	22360.2	22320.4	22202.5	22260.8	22354.9
12.5°	18889.9	18761.3	18758.7	18944.2	18919.0
15°	14309.2	14136.9	14232.3	14186.0	14160.8
17.5°	9622.5	9556.2	9683.4	9645.0	9479.4
20°	6922.0	6939.3	7181.8	7059.9	6912.8
22.5°	5051.1	5113.4	5400.9	5086.9	4971.6
25°	3363.0	3490.2	3792.3	3401.4	3294.1
27.5°	2068.4	2126.7	2432.8	2041.9	1983.6
30°	1286.6	1257.5	1401.9	1203.1	1121.0
32.5°	844.1	807.0	853.3	765.9	699.6
35°	564.5	576.4	540.6	536.6	453.2
37.5°	352.5	405.5	357.8	381.6	291.5
40°	227.9	294.2	253.1	279.6	214.7
42.5°	186.8	226.6	208.0	221.3	190.8
45°	148.4	184.2	184.2	184.2	149.7
47.5°	82.2	123.2	157.7	125.9	87.5
50°	46.4	62.3	121.9	64.9	49.0
52.5°	31.8	35.8	83.5	37.1	33.1
55°	23.9	25.2	45.1	26.5	25.2
57.5°	18.6	19.9	23.9	19.9	18.6
60°	14.6	14.6	17.2	15.9	14.6
62.5°	10.6	10.6	11.9	10.6	10.6
65°	8.0	8.0	8.0	8.0	8.0
67.5°	4.0	5.3	5.3	5.3	5.3
70°	4.0	2.7	2.7	2.7	4.0
72.5°	2.7	1.3	1.3	1.3	1.3
75°	0.0	0.0	1.3	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



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Scaled Data Report







— 0°-180°    - - 45°-225°    - - - - 90°-270°

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(END OF REPORT)