

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: P755368

Luminaire Tested: LD4D90BD010-EU4DR3070959035-4LBDP1H

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P755368  
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-EU4DR3070959035-4LBDP1H  
Description: 4 INCH ROUND DEEP 45° CUTOFF SEMI-SPECULAR CLEAR TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8481.7 lumens  
Efficiency: N/A  
Efficacy: 85.8 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

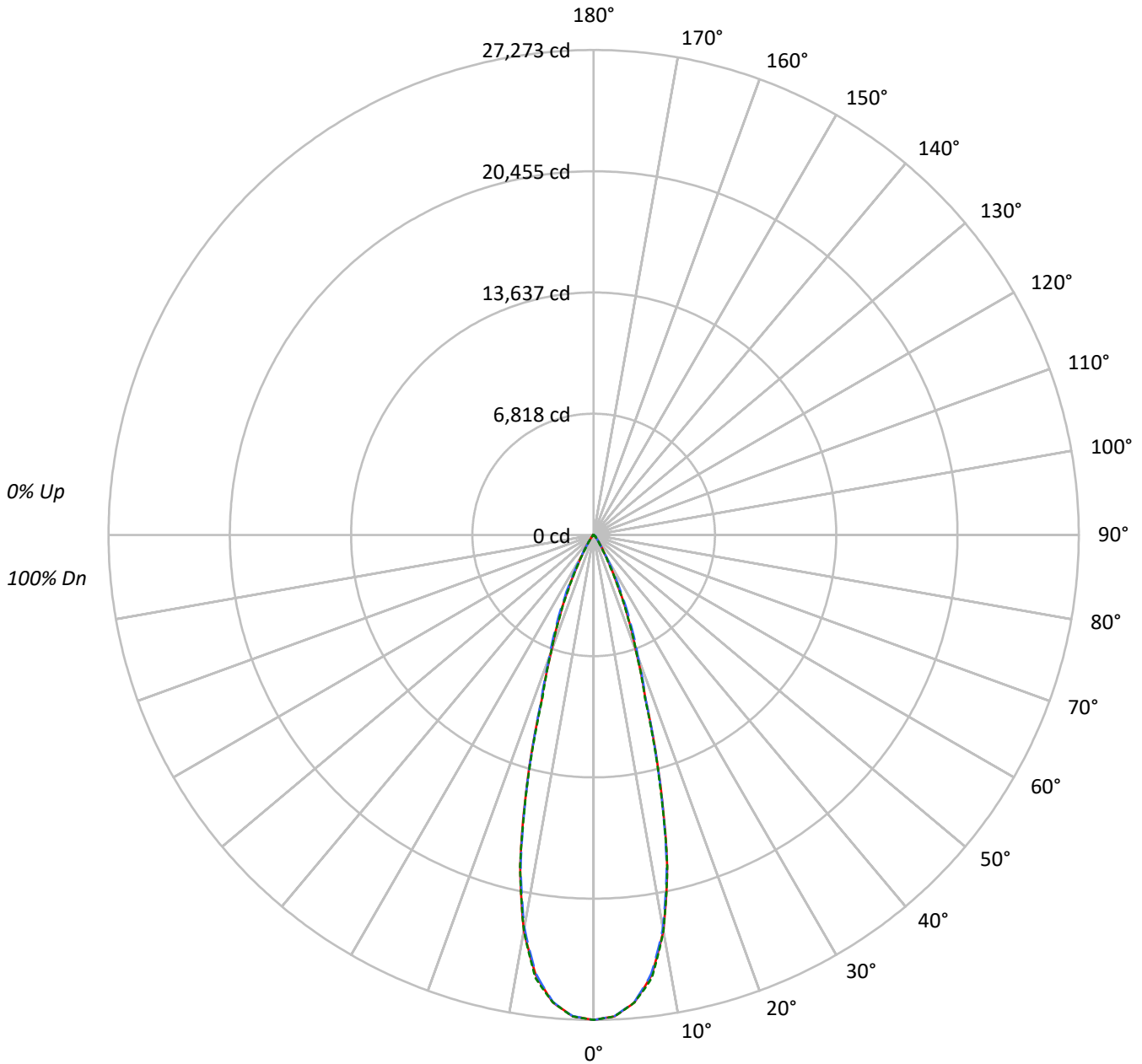
Input Watts (W): 98.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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°	2087553	2087553	2087553
5°	2027627	2025261	2027727
10°	1756233	1743851	1755813
15°	1145854	1139697	1133967
20°	569783	591157	569018
25°	287016	323653	281138
30°	114918	125215	100122
35°	53299	51047	42787
40°	23012	25550	21673
45°	16237	20145	16378
50°	5585	14671	5894
55°	3216	6072	3390
60°	2250	2664	2250
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: 20145 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2398.2	28.3
10°-20°	3862.4	45.5
20°-30°	1669.0	19.7
30°-40°	380.4	4.5
40°-50°	130.6	1.5
50°-60°	31.9	0.4
60°-70°	8.3	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°	7929.6	93.5
0°-40°	8310.0	98.0
0°-60°	8472.6	99.9
0°-90°	8481.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8481.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	27273	27273	27273	27273	27273	
5°	26389	26364	26358	26413	26390	2400
15°	14460	14286	14382	14335	14310	3872
25°	3398	3527	3832	3437	3329	1627
35°	570	582	546	542	458	387
45°	150	186	186	186	151	106
55°	24	25	46	27	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°	27272.8	27272.8	27272.8	27272.8	27272.8
2.5°	27092.1	27073.3	27084.0	27097.4	27102.8
5°	26389.1	26363.7	26358.3	26413.2	26390.4
7.5°	24971.1	24934.9	24880.0	25004.6	25121.1
10°	22595.7	22555.5	22436.4	22495.3	22590.3
12.5°	19088.8	18959.0	18956.3	19143.7	19118.3
15°	14459.9	14285.8	14382.2	14335.4	14309.9
17.5°	9723.9	9656.9	9785.4	9746.6	9579.2
20°	6995.0	7012.4	7257.4	7134.2	6985.6
22.5°	5104.3	5167.2	5457.8	5140.4	5023.9
25°	3398.4	3526.9	3832.2	3437.2	3328.8
27.5°	2090.2	2149.1	2458.4	2063.4	2004.5
30°	1300.2	1270.7	1416.7	1215.8	1132.8
32.5°	852.9	815.5	862.3	773.9	707.0
35°	570.4	582.5	546.3	542.3	457.9
37.5°	356.2	409.7	361.5	385.6	294.6
40°	230.3	297.3	255.7	282.5	216.9
42.5°	188.8	229.0	210.2	223.6	192.8
45°	150.0	186.1	186.1	186.1	151.3
47.5°	83.0	124.5	159.3	127.2	88.4
50°	46.9	62.9	123.2	65.6	49.5
52.5°	32.1	36.2	84.4	37.5	33.5
55°	24.1	25.4	45.5	26.8	25.4
57.5°	18.7	20.1	24.1	20.1	18.7
60°	14.7	14.7	17.4	16.1	14.7
62.5°	10.7	10.7	12.1	10.7	10.7
65°	8.0	8.0	8.0	8.0	8.0
67.5°	4.0	5.4	5.4	5.4	5.4
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)