

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: P748348

Luminaire Tested: LD4D45BD010-EU4DR3040509035-4LBDP1H

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P748348  
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: LD4D45BD010-EU4DR3040509035-4LBDP1H  
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: 4066.5 lumens  
Efficiency: N/A  
Efficacy: 105.1 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

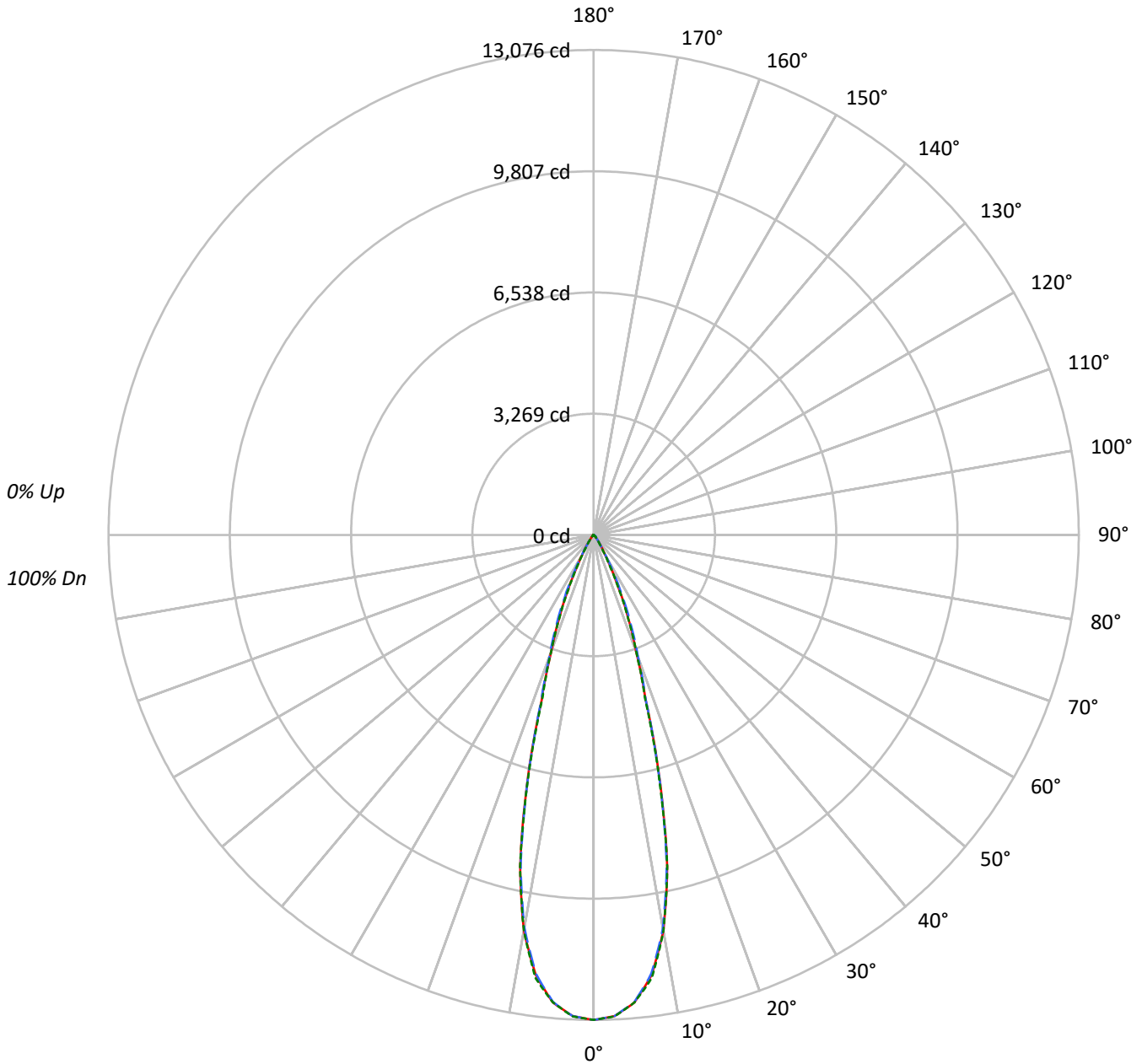
Input Watts (W): 38.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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	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°	1000858	1000858	1000858
5°	972126	970989	972172
10°	842010	836071	841808
15°	549364	546416	543666
20°	273178	283425	272812
25°	137605	155172	134784
30°	55099	60031	48002
35°	25556	24473	20520
40°	11031	12250	10392
45°	7783	9656	7848
50°	2679	7038	2834
55°	1548	2909	1628
60°	1087	1271	1087
65°	706	706	706
70°	425	291	425
75°	0	177	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 9656 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1149.8	28.3
10°-20°	1851.8	45.5
20°-30°	800.2	19.7
30°-40°	182.4	4.5
40°-50°	62.6	1.5
50°-60°	15.3	0.4
60°-70°	4.0	0.1
70°-80°	0.4	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°	3801.8	93.5
0°-40°	3984.2	98.0
0°-60°	4062.1	99.9
0°-90°	4066.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4066.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13076	13076	13076	13076	13076	
5°	12652	12640	12637	12664	12653	1151
15°	6933	6849	6895	6873	6861	1856
25°	1629	1691	1837	1648	1596	780
35°	274	279	262	260	220	186
45°	72	89	89	89	72	51
55°	12	12	22	13	12	11
65°	4	4	4	4	4	4
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°	13075.7	13075.7	13075.7	13075.7	13075.7
2.5°	12989.0	12980.0	12985.1	12991.6	12994.1
5°	12652.0	12639.8	12637.2	12663.5	12652.6
7.5°	11972.1	11954.8	11928.5	11988.2	12044.0
10°	10833.3	10814.0	10756.9	10785.1	10830.7
12.5°	9151.9	9089.7	9088.4	9178.3	9166.1
15°	6932.6	6849.2	6895.4	6872.9	6860.7
17.5°	4662.0	4629.9	4691.5	4672.9	4592.7
20°	3353.7	3362.0	3479.5	3420.4	3349.2
22.5°	2447.2	2477.4	2616.7	2464.5	2408.7
25°	1629.3	1691.0	1837.3	1647.9	1595.9
27.5°	1002.1	1030.4	1178.7	989.3	961.0
30°	623.4	609.2	679.2	582.9	543.1
32.5°	408.9	391.0	413.4	371.1	339.0
35°	273.5	279.3	261.9	260.0	219.6
37.5°	170.8	196.4	173.3	184.9	141.2
40°	110.4	142.5	122.6	135.5	104.0
42.5°	90.5	109.8	100.8	107.2	92.4
45°	71.9	89.2	89.2	89.2	72.5
47.5°	39.8	59.7	76.4	61.0	42.4
50°	22.5	30.2	59.1	31.5	23.8
52.5°	15.4	17.3	40.4	18.0	16.0
55°	11.6	12.2	21.8	12.8	12.2
57.5°	9.0	9.6	11.6	9.6	9.0
60°	7.1	7.1	8.3	7.7	7.1
62.5°	5.1	5.1	5.8	5.1	5.1
65°	3.9	3.9	3.9	3.9	3.9
67.5°	1.9	2.6	2.6	2.6	2.6
70°	1.9	1.3	1.3	1.3	1.9
72.5°	1.3	0.6	0.6	0.6	0.6
75°	0.0	0.0	0.6	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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