

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: P748361

Luminaire Tested: LD4D45BD010-EU4DR3040509040-4LBDP1H

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P748361  
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-EU4DR3040509040-4LBDP1H  
Description: 4 INCH ROUND DEEP 45° CUTOFF SEMI-SPECULAR CLEAR TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4256.6 lumens  
Efficiency: N/A  
Efficacy: 110.0 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

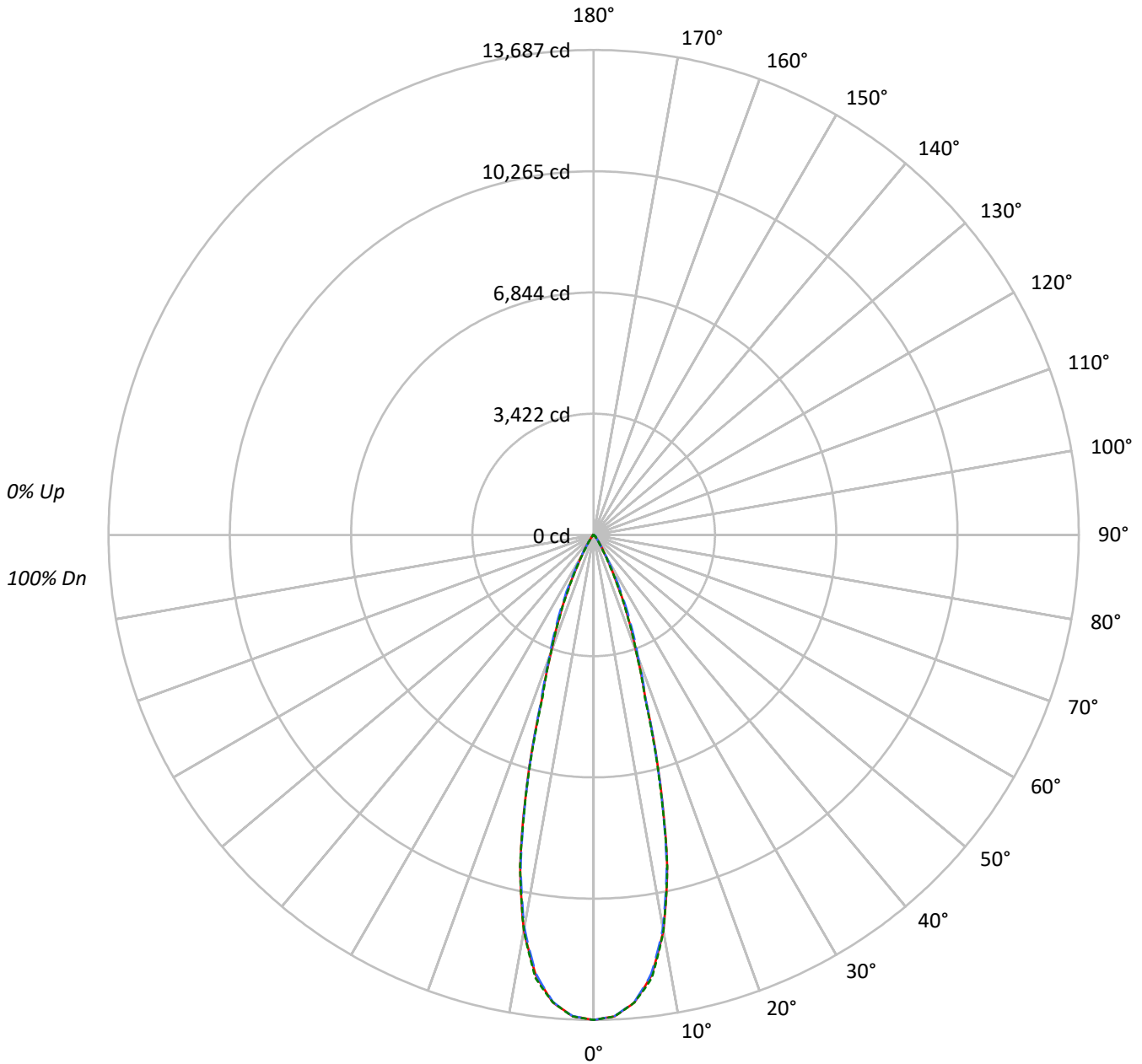
Input Watts (W): 38.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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°	1047649	1047649	1047649
5°	1017575	1016384	1017621
10°	881369	875159	881159
15°	575055	571964	569088
20°	285942	296678	285560
25°	144040	162426	141093
30°	57671	62842	50247
35°	26753	25622	21473
40°	11551	12820	10881
45°	8151	10110	8216
50°	2798	7359	2965
55°	1615	3043	1708
60°	1133	1332	1133
65°	724	724	724
70°	448	291	448
75°	0	207	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 10110 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1203.6	28.3
10°-20°	1938.4	45.5
20°-30°	837.6	19.7
30°-40°	190.9	4.5
40°-50°	65.5	1.5
50°-60°	16.0	0.4
60°-70°	4.1	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°	3979.5	93.5
0°-40°	4170.4	98.0
0°-60°	4252.0	99.9
0°-90°	4256.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4256.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13687	13687	13687	13687	13687	
5°	13244	13231	13228	13256	13244	1205
15°	7257	7169	7218	7194	7182	1943
25°	1706	1770	1923	1725	1671	816
35°	286	292	274	272	230	194
45°	75	93	93	93	76	53
55°	12	13	23	13	13	12
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°	13687.0	13687.0	13687.0	13687.0	13687.0
2.5°	13596.2	13586.8	13592.2	13598.9	13601.6
5°	13243.5	13230.7	13228.0	13255.6	13244.1
7.5°	12531.8	12513.7	12486.1	12548.6	12607.1
10°	11339.7	11319.6	11259.8	11289.3	11337.0
12.5°	9579.8	9514.6	9513.3	9607.4	9594.6
15°	7256.8	7169.4	7217.8	7194.3	7181.5
17.5°	4879.9	4846.3	4910.9	4891.4	4807.4
20°	3510.4	3519.2	3642.2	3580.3	3505.7
22.5°	2561.6	2593.2	2739.0	2579.7	2521.3
25°	1705.5	1770.0	1923.2	1725.0	1670.6
27.5°	1049.0	1078.5	1233.8	1035.5	1006.0
30°	652.5	637.7	711.0	610.2	568.5
32.5°	428.1	409.2	432.8	388.4	354.8
35°	286.3	292.3	274.2	272.2	229.8
37.5°	178.7	205.6	181.4	193.5	147.8
40°	115.6	149.2	128.3	141.8	108.9
42.5°	94.7	114.9	105.5	112.2	96.8
45°	75.3	93.4	93.4	93.4	75.9
47.5°	41.7	62.5	80.0	63.8	44.4
50°	23.5	31.6	61.8	32.9	24.9
52.5°	16.1	18.1	42.3	18.8	16.8
55°	12.1	12.8	22.8	13.4	12.8
57.5°	9.4	10.1	12.1	10.1	9.4
60°	7.4	7.4	8.7	8.1	7.4
62.5°	5.4	5.4	6.0	5.4	5.4
65°	4.0	4.0	4.0	4.0	4.0
67.5°	2.0	2.7	2.7	2.7	2.7
70°	2.0	1.3	1.3	1.3	2.0
72.5°	1.3	0.7	0.7	0.7	0.7
75°	0.0	0.0	0.7	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)