

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: P748308

Luminaire Tested: LD4D45BD010-EU4DR3040509024-4LBDP1B

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P748308  
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-EU4DR3040509024-4LBDP1B  
Description: 4 INCH ROUND DEEP 45° CUTOFF SPECULAR BLACK TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2776.1 lumens  
Efficiency: N/A  
Efficacy: 71.7 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

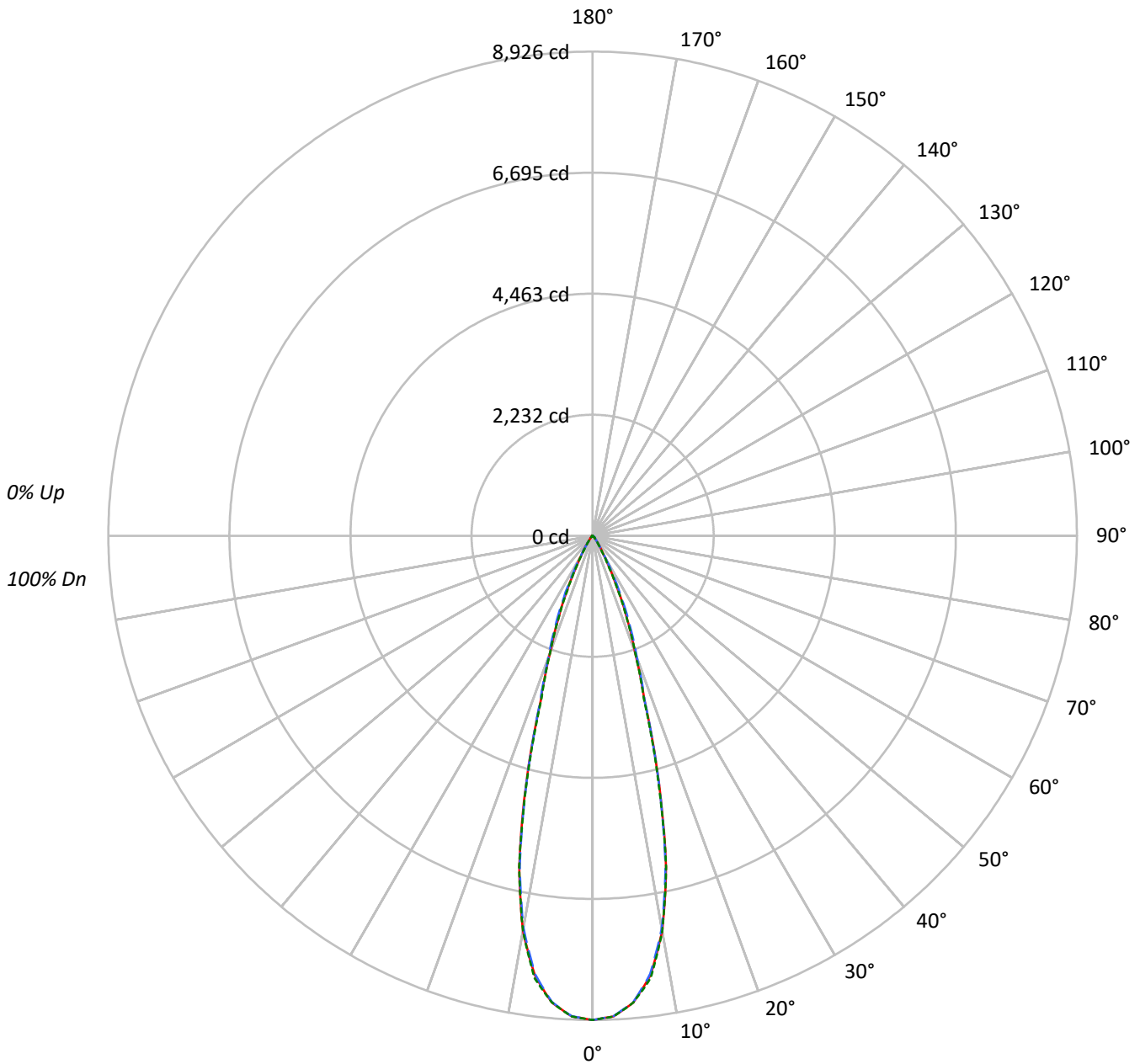


Downlight

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

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

	0°	45°	90°
0°	683265	683265	683265
5°	663654	662878	663684
10°	574825	570768	574685
15°	375044	373031	371153
20°	186493	193490	186240
25°	93941	105934	92015
30°	37617	40984	32773
35°	17446	16707	14007
40°	7534	8363	7094
45°	5315	6592	5358
50°	1822	4799	1929
55°	1054	1988	1108
60°	735	873	735
65°	471	471	471
70°	291	201	291
75°	0	118	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 6592 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	785.0	28.3
10°-20°	1264.2	45.5
20°-30°	546.3	19.7
30°-40°	124.5	4.5
40°-50°	42.7	1.5
50°-60°	10.4	0.4
60°-70°	2.7	0.1
70°-80°	0.3	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°	2595.4	93.5
0°-40°	2719.9	98.0
0°-60°	2773.1	99.9
0°-90°	2776.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2776.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8926	8926	8926	8926	8926	
5°	8637	8629	8627	8645	8638	786
15°	4733	4676	4707	4692	4684	1267
25°	1112	1154	1254	1125	1090	532
35°	187	191	179	178	150	127
45°	49	61	61	61	50	35
55°	8	8	15	9	8	8
65°	3	3	3	3	3	3
75°	0	0	0	0	0	0
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°	8926.5	8926.5	8926.5	8926.5	8926.5
2.5°	8867.4	8861.2	8864.7	8869.1	8870.9
5°	8637.3	8629.0	8627.2	8645.2	8637.7
7.5°	8173.2	8161.3	8143.4	8184.1	8222.3
10°	7395.7	7382.5	7343.5	7362.8	7393.9
12.5°	6247.9	6205.4	6204.5	6265.8	6257.5
15°	4732.8	4675.8	4707.4	4692.0	4683.7
17.5°	3182.7	3160.8	3202.8	3190.1	3135.3
20°	2289.5	2295.2	2375.4	2335.1	2286.4
22.5°	1670.7	1691.3	1786.4	1682.5	1644.4
25°	1112.3	1154.4	1254.3	1125.0	1089.5
27.5°	684.1	703.4	804.7	675.4	656.1
30°	425.6	415.9	463.7	397.9	370.8
32.5°	279.2	266.9	282.2	253.3	231.4
35°	186.7	190.6	178.8	177.5	149.9
37.5°	116.6	134.1	118.3	126.2	96.4
40°	75.4	97.3	83.7	92.5	71.0
42.5°	61.8	74.9	68.8	73.2	63.1
45°	49.1	60.9	60.9	60.9	49.5
47.5°	27.2	40.8	52.2	41.6	28.9
50°	15.3	20.6	40.3	21.5	16.2
52.5°	10.5	11.8	27.6	12.3	11.0
55°	7.9	8.3	14.9	8.8	8.3
57.5°	6.1	6.6	7.9	6.6	6.1
60°	4.8	4.8	5.7	5.3	4.8
62.5°	3.5	3.5	3.9	3.5	3.5
65°	2.6	2.6	2.6	2.6	2.6
67.5°	1.3	1.8	1.8	1.8	1.8
70°	1.3	0.9	0.9	0.9	1.3
72.5°	0.9	0.4	0.4	0.4	0.4
75°	0.0	0.0	0.4	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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