

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: P748380

Luminaire Tested: LD4D45BD010-EU4DR3040509050-4LBS1MW

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P748380  
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-EU4DR3040509050-4LBS1MW  
Description: 4 INCH ROUND SHALLOW MATTE WHITE TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4289.5 lumens  
Efficiency: N/A  
Efficacy: 110.8 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): 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

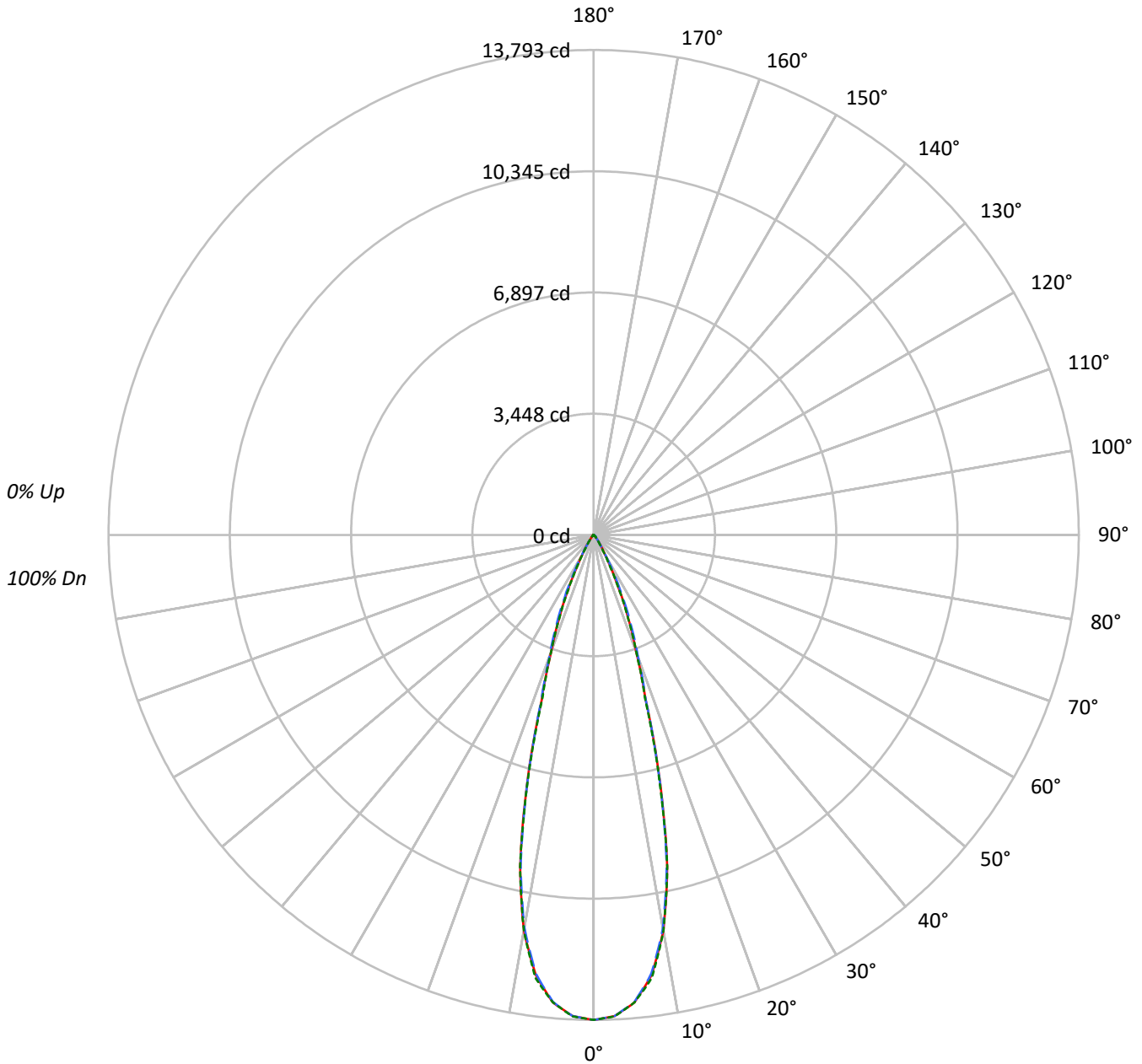


Downlight

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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°	1055740	1055740	1055740
5°	1025435	1024236	1025489
10°	888186	881921	887968
15°	579492	576386	573486
20°	288158	298967	287767
25°	145155	163685	142182
30°	58113	63328	50636
35°	26958	25818	21641
40°	11641	12920	10961
45°	8205	10186	8281
50°	2822	7419	2989
55°	1628	3069	1721
60°	1133	1347	1133
65°	743	743	743
70°	448	313	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: 10186 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1212.9	28.3
10°-20°	1953.3	45.5
20°-30°	844.1	19.7
30°-40°	192.4	4.5
40°-50°	66.1	1.5
50°-60°	16.1	0.4
60°-70°	4.2	0.1
70°-80°	0.5	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°	4010.3	93.5
0°-40°	4202.7	98.0
0°-60°	4284.9	99.9
0°-90°	4289.5	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4289.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13793	13793	13793	13793	13793	
5°	13346	13333	13330	13358	13346	1214
15°	7313	7225	7274	7250	7237	1958
25°	1719	1784	1938	1738	1684	823
35°	288	295	276	274	232	196
45°	76	94	94	94	76	54
55°	12	13	23	14	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°	13792.7	13792.7	13792.7	13792.7	13792.7
2.5°	13701.3	13691.8	13697.3	13704.0	13706.7
5°	13345.8	13332.9	13330.2	13358.0	13346.5
7.5°	12628.7	12610.4	12582.6	12645.6	12704.5
10°	11427.4	11407.0	11346.8	11376.6	11424.6
12.5°	9653.8	9588.1	9586.8	9681.6	9668.7
15°	7312.8	7224.8	7273.6	7249.9	7237.0
17.5°	4917.7	4883.8	4948.8	4929.2	4844.5
20°	3537.6	3546.4	3670.3	3608.0	3532.8
22.5°	2581.4	2613.2	2760.2	2599.7	2540.8
25°	1718.7	1783.7	1938.1	1738.3	1683.5
27.5°	1057.1	1086.9	1243.3	1043.5	1013.7
30°	657.5	642.6	716.5	614.9	572.9
32.5°	431.4	412.4	436.1	391.4	357.5
35°	288.5	294.6	276.3	274.3	231.6
37.5°	180.1	207.2	182.8	195.0	149.0
40°	116.5	150.3	129.3	142.9	109.7
42.5°	95.5	115.8	106.3	113.1	97.5
45°	75.8	94.1	94.1	94.1	76.5
47.5°	42.0	63.0	80.6	64.3	44.7
50°	23.7	31.8	62.3	33.2	25.1
52.5°	16.3	18.3	42.7	19.0	16.9
55°	12.2	12.9	23.0	13.5	12.9
57.5°	9.5	10.2	12.2	10.2	9.5
60°	7.4	7.4	8.8	8.1	7.4
62.5°	5.4	5.4	6.1	5.4	5.4
65°	4.1	4.1	4.1	4.1	4.1
67.5°	2.0	2.7	2.7	2.7	2.7
70°	2.0	1.4	1.4	1.4	2.0
72.5°	1.4	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)