

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: P748351

Luminaire Tested: LD4D45BD010-EU4DR3040509035-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P748351
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-EU4DR3040509035-4LBS1B
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 3500K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4013.3 lumens
Efficiency: N/A
Efficacy: 103.7 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_{in}): 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

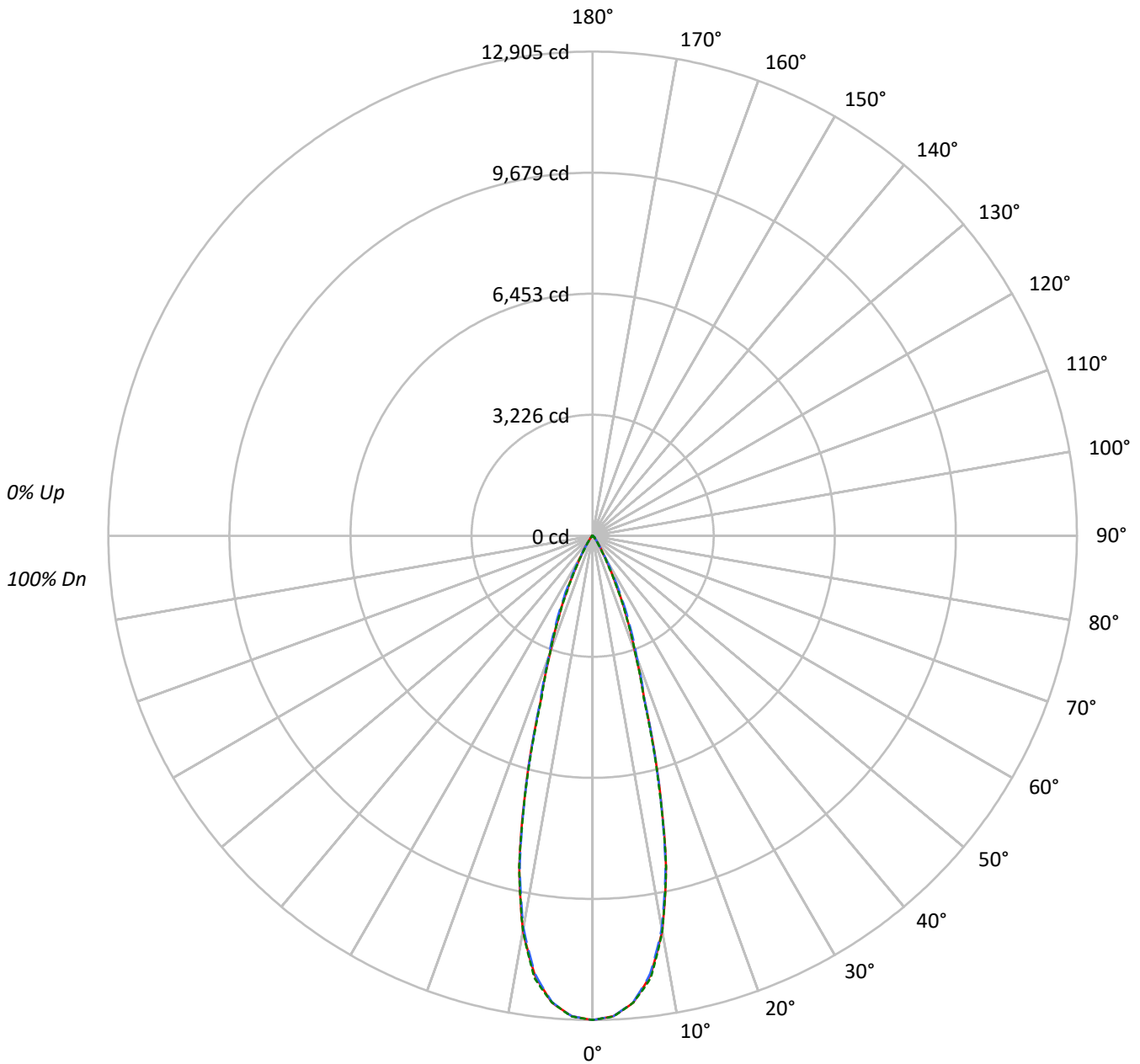


Downlight

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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°	987770	987770	987770
5°	959410	958296	959464
10°	830996	825136	830802
15°	542184	539268	536558
20°	269602	279719	269244
25°	135806	153145	133027
30°	54374	59244	47374
35°	25220	24155	20249
40°	10891	12090	10252
45°	7686	9537	7751
50°	2644	6942	2786
55°	1521	2869	1601
60°	1072	1255	1072
65°	688	688	688
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: 9537 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1134.8	28.3
10°-20°	1827.6	45.5
20°-30°	789.7	19.7
30°-40°	180.0	4.5
40°-50°	61.8	1.5
50°-60°	15.1	0.4
60°-70°	3.9	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°	3752.1	93.5
0°-40°	3932.1	98.0
0°-60°	4009.0	99.9
0°-90°	4013.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4013.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12905	12905	12905	12905	12905	
5°	12486	12474	12472	12498	12487	1136
15°	6842	6760	6805	6783	6771	1832
25°	1608	1669	1813	1626	1575	770
35°	270	276	258	257	217	183
45°	71	88	88	88	72	50
55°	11	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°	12904.7	12904.7	12904.7	12904.7	12904.7
2.5°	12819.2	12810.3	12815.4	12821.7	12824.2
5°	12486.5	12474.5	12472.0	12497.9	12487.2
7.5°	11815.6	11798.5	11772.5	11831.4	11886.5
10°	10691.6	10672.6	10616.2	10644.1	10689.1
12.5°	9032.3	8970.8	8969.5	9058.2	9046.2
15°	6842.0	6759.6	6805.2	6783.1	6771.0
17.5°	4601.0	4569.4	4630.2	4611.8	4532.6
20°	3309.8	3318.0	3434.0	3375.7	3305.4
22.5°	2415.2	2445.0	2582.5	2432.3	2377.2
25°	1608.0	1668.8	1813.3	1626.4	1575.1
27.5°	989.0	1016.9	1163.2	976.3	948.5
30°	615.2	601.3	670.3	575.3	536.0
32.5°	403.6	385.8	408.0	366.2	334.5
35°	269.9	275.6	258.5	256.6	216.7
37.5°	168.5	193.9	171.1	182.5	139.4
40°	109.0	140.7	121.0	133.7	102.6
42.5°	89.3	108.3	99.5	105.8	91.2
45°	71.0	88.1	88.1	88.1	71.6
47.5°	39.3	58.9	75.4	60.2	41.8
50°	22.2	29.8	58.3	31.0	23.4
52.5°	15.2	17.1	39.9	17.7	15.8
55°	11.4	12.0	21.5	12.7	12.0
57.5°	8.9	9.5	11.4	9.5	8.9
60°	7.0	7.0	8.2	7.6	7.0
62.5°	5.1	5.1	5.7	5.1	5.1
65°	3.8	3.8	3.8	3.8	3.8
67.5°	1.9	2.5	2.5	2.5	2.5
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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