

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: P755371

Luminaire Tested: LD4D90BD010-EU4DR3070959035-4LBS1B

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P755371
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: LD4D90BD010-EU4DR3070959035-4LBS1B
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: 8370.8 lumens
Efficiency: N/A
Efficacy: 84.6 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): 98.9
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

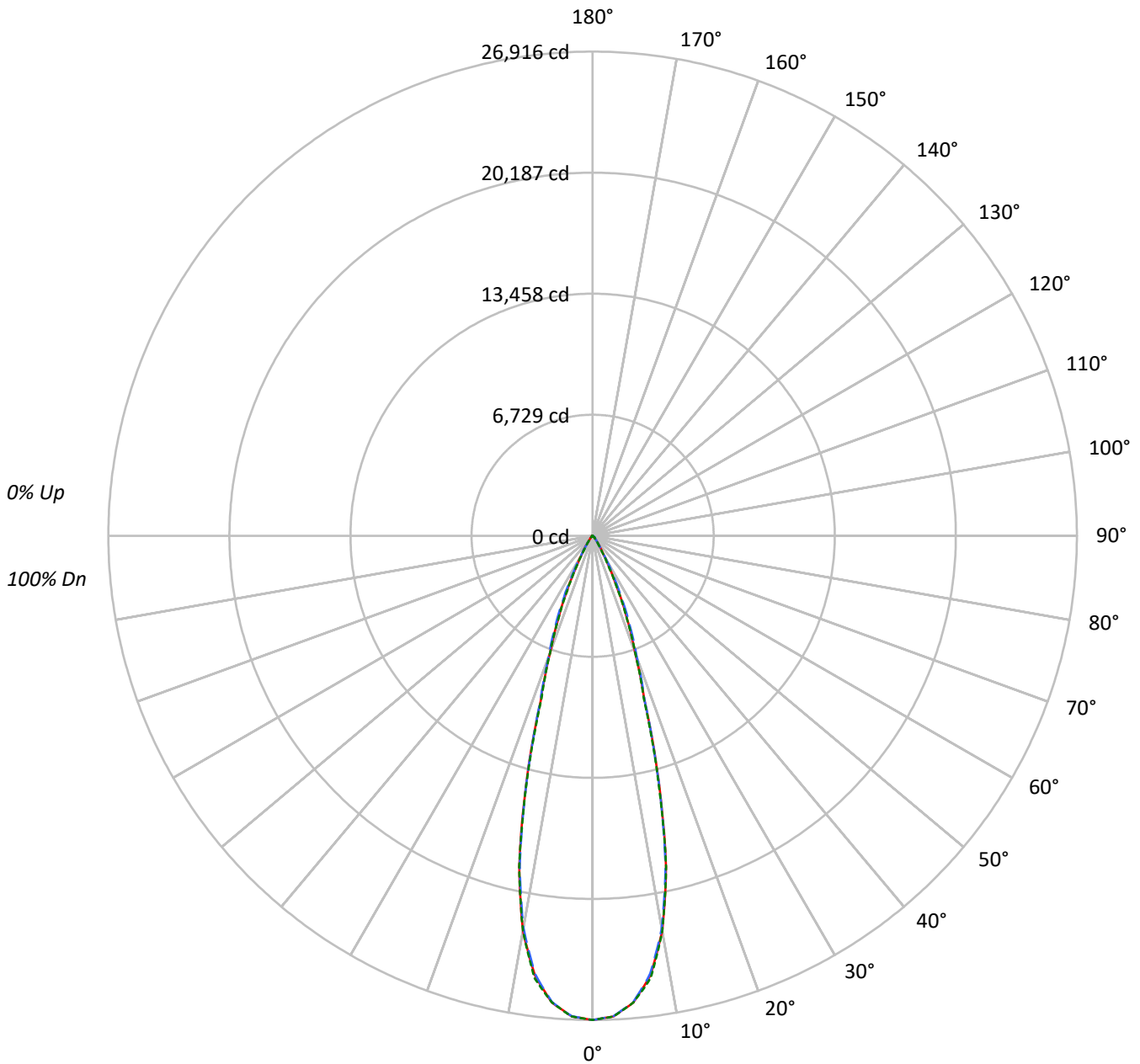


Downlight

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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°	2060265	2060265	2060265
5°	2001119	1998783	2001219
10°	1733273	1721047	1732861
15°	1130869	1124799	1119141
20°	562330	583427	561581
25°	283266	319422	277456
30°	113415	123571	98814
35°	52608	50384	42236
40°	22712	25220	21393
45°	16021	19885	16162
50°	5513	14480	5823
55°	3176	5992	3350
60°	2220	2633	2220
65°	1431	1431	1431
70°	895	582	895
75°	0	384	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 19885 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2366.9	28.3
10°-20°	3811.9	45.5
20°-30°	1647.2	19.7
30°-40°	375.4	4.5
40°-50°	128.9	1.5
50°-60°	31.5	0.4
60°-70°	8.2	0.1
70°-80°	0.9	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°	7826.0	93.5
0°-40°	8201.4	98.0
0°-60°	8361.8	99.9
0°-90°	8370.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	8370.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	26916	26916	26916	26916	26916	
5°	26044	26019	26014	26068	26045	2369
15°	14271	14099	14194	14148	14123	3821
25°	3354	3481	3782	3392	3285	1605
35°	563	575	539	535	452	382
45°	148	184	184	184	149	105
55°	24	25	45	26	25	23
65°	8	8	8	8	8	8
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°	26916.3	26916.3	26916.3	26916.3	26916.3
2.5°	26737.9	26719.4	26729.9	26743.1	26748.4
5°	26044.1	26019.0	26013.7	26067.9	26045.4
7.5°	24644.6	24608.9	24554.7	24677.6	24792.6
10°	22300.3	22260.6	22143.0	22201.2	22295.0
12.5°	18839.3	18711.1	18708.4	18893.4	18868.3
15°	14270.8	14099.1	14194.2	14147.9	14122.8
17.5°	9596.7	9530.6	9657.5	9619.2	9454.0
20°	6903.5	6920.7	7162.5	7040.9	6894.3
22.5°	5037.5	5099.7	5386.4	5073.2	4958.3
25°	3354.0	3480.8	3782.1	3392.3	3285.2
27.5°	2062.9	2121.0	2426.3	2036.4	1978.3
30°	1283.2	1254.1	1398.1	1199.9	1118.0
32.5°	841.8	804.8	851.0	763.8	697.8
35°	563.0	574.9	539.2	535.2	452.0
37.5°	351.5	404.4	356.8	380.6	290.7
40°	227.3	293.4	252.4	278.8	214.1
42.5°	186.3	226.0	207.5	220.7	190.3
45°	148.0	183.7	183.7	183.7	149.3
47.5°	81.9	122.9	157.3	125.5	87.2
50°	46.3	62.1	121.6	64.8	48.9
52.5°	31.7	35.7	83.3	37.0	33.0
55°	23.8	25.1	44.9	26.4	25.1
57.5°	18.5	19.8	23.8	19.8	18.5
60°	14.5	14.5	17.2	15.9	14.5
62.5°	10.6	10.6	11.9	10.6	10.6
65°	7.9	7.9	7.9	7.9	7.9
67.5°	4.0	5.3	5.3	5.3	5.3
70°	4.0	2.6	2.6	2.6	4.0
72.5°	2.6	1.3	1.3	1.3	1.3
75°	0.0	0.0	1.3	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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