

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: P744166

Luminaire Tested: LD4D20D010-EU4DR3020359050-4LBS1H

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P744166
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: LD4D20D010-EU4DR3020359050-4LBS1H
Description: 4 INCH ROUND SHALLOW SEMI-SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2032.1 lumens
Efficiency: N/A
Efficacy: 88.0 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): 23.1
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

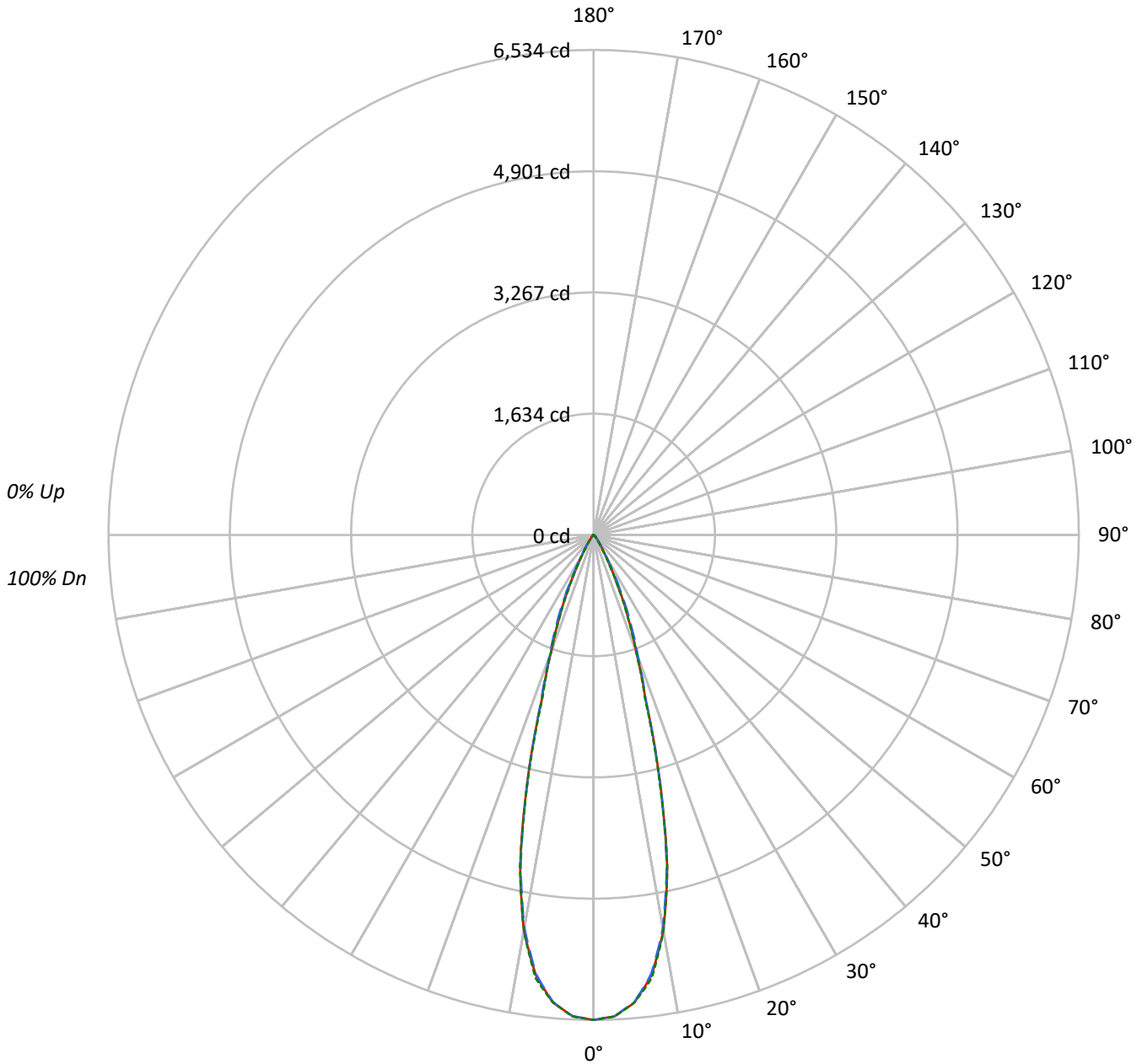


Downlight



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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					70					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								
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°	500142	500142	500142
5°	485779	485210	485810
10°	420760	417799	420659
15°	274523	273050	271679
20°	136512	141627	136324
25°	68764	77548	67354
30°	27532	29998	23988
35°	12764	12232	10251
40°	5516	6115	5196
45°	3886	4828	3929
50°	1334	3513	1417
55°	774	1455	814
60°	551	643	551
65°	344	344	344
70°	224	134	224
75°	0	89	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 4828 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	574.6	28.3
10°-20°	925.4	45.5
20°-30°	399.9	19.7
30°-40°	91.1	4.5
40°-50°	31.3	1.5
50°-60°	7.6	0.4
60°-70°	2.0	0.1
70°-80°	0.2	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°	1899.8	93.5
0°-40°	1990.9	98.0
0°-60°	2029.9	99.9
0°-90°	2032.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2032.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6534	6534	6534	6534	6534	
5°	6322	6316	6315	6328	6323	575
15°	3464	3423	3446	3434	3428	928
25°	814	845	918	824	798	390
35°	137	140	131	130	110	93
45°	36	45	45	45	36	25
55°	6	6	11	6	6	6
65°	2	2	2	2	2	2
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°	6534.1	6534.1	6534.1	6534.1	6534.1
2.5°	6490.8	6486.3	6488.8	6492.0	6493.3
5°	6322.3	6316.3	6314.9	6328.1	6322.7
7.5°	5982.6	5974.0	5960.8	5990.7	6018.6
10°	5413.5	5403.9	5375.4	5389.5	5412.2
12.5°	4573.4	4542.2	4541.6	4586.5	4580.4
15°	3464.3	3422.6	3445.7	3434.5	3428.4
17.5°	2329.7	2313.6	2344.4	2335.1	2295.0
20°	1675.9	1680.1	1738.7	1709.2	1673.6
22.5°	1222.9	1238.0	1307.6	1231.6	1203.7
25°	814.2	845.0	918.2	823.5	797.5
27.5°	500.8	514.9	589.0	494.3	480.2
30°	311.5	304.5	339.4	291.3	271.4
32.5°	204.4	195.4	206.6	185.4	169.4
35°	136.6	139.6	130.9	129.9	109.7
37.5°	85.3	98.1	86.6	92.4	70.6
40°	55.2	71.2	61.2	67.7	52.0
42.5°	45.2	54.8	50.4	53.6	46.2
45°	35.9	44.6	44.6	44.6	36.3
47.5°	19.9	29.9	38.2	30.5	21.2
50°	11.2	15.1	29.5	15.7	11.9
52.5°	7.7	8.7	20.2	9.0	8.0
55°	5.8	6.1	10.9	6.4	6.1
57.5°	4.5	4.8	5.8	4.8	4.5
60°	3.6	3.6	4.2	3.8	3.6
62.5°	2.6	2.6	2.9	2.6	2.6
65°	1.9	1.9	1.9	1.9	1.9
67.5°	1.0	1.3	1.3	1.3	1.3
70°	1.0	0.6	0.6	0.6	1.0
72.5°	0.6	0.3	0.3	0.3	0.3
75°	0.0	0.0	0.3	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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