

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: P744102

Luminaire Tested: LD4D20D010-EU4DR3020359024-4LBS1LI

Issue Date: 1/30/2024

Test Information

Test Method: LM-79-2019
Report Number: P744102
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-EU4DR3020359024-4LBS1LI
Description: 4 INCH ROUND SHALLOW SPECULAR CLEAR TRIM, WITH 30° OPTIC
Light Source: (1) HIGH LUMEN LED 90CRI / 2400K CCT
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1736.4 lumens
Efficiency: N/A
Efficacy: 75.2 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

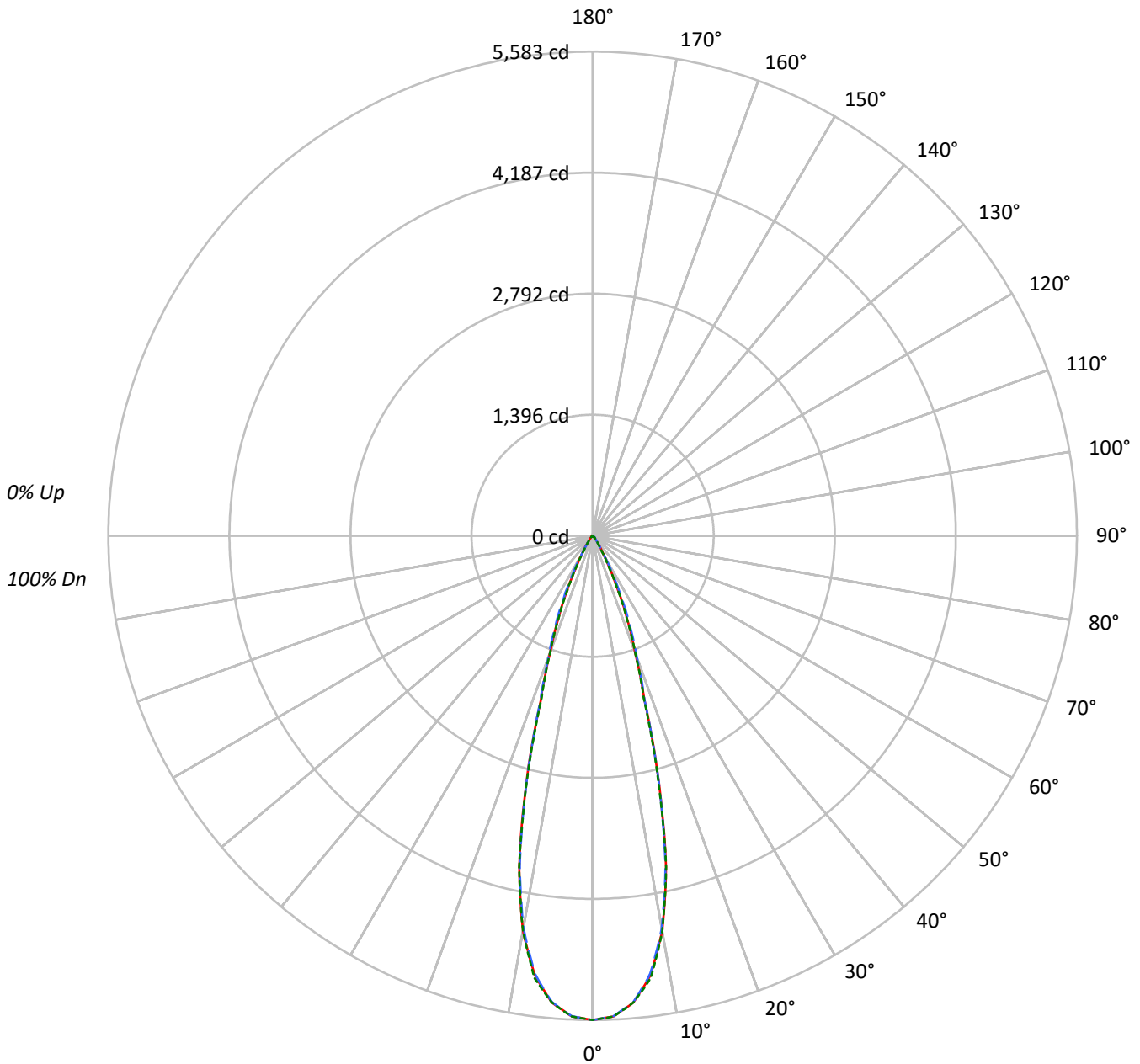


Downlight



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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									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°	427357	427357	427357
5°	415082	414598	415105
10°	359529	356995	359443
15°	234577	233317	232136
20°	116645	121019	116490
25°	58756	66256	57557
30°	23528	25632	20496
35°	10914	10447	8756
40°	4716	5236	4436
45°	3323	4124	3356
50°	1143	3001	1203
55°	654	1241	694
60°	459	551	459
65°	308	308	308
70°	179	134	179
75°	0	89	0
80°	0	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°
 Vertical Angle: 45°
 Luminance: 4124 cd/sqm



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	491.0	28.3
10°-20°	790.7	45.5
20°-30°	341.7	19.7
30°-40°	77.9	4.5
40°-50°	26.7	1.5
50°-60°	6.5	0.4
60°-70°	1.7	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°	1623.3	93.5
0°-40°	1701.2	98.0
0°-60°	1734.5	99.9
0°-90°	1736.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1736.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5583	5583	5583	5583	5583	
5°	5402	5397	5396	5407	5402	491
15°	2960	2924	2944	2935	2929	793
25°	696	722	784	704	682	333
35°	117	119	112	111	94	79
45°	31	38	38	38	31	22
55°	5	5	9	6	5	5
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	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5583.2	5583.2	5583.2	5583.2	5583.2
2.5°	5546.2	5542.3	5544.5	5547.3	5548.3
5°	5402.2	5397.0	5395.9	5407.2	5402.5
7.5°	5112.0	5104.6	5093.4	5118.8	5142.7
10°	4625.7	4617.5	4593.1	4605.1	4624.6
12.5°	3907.8	3881.2	3880.7	3919.0	3913.8
15°	2960.2	2924.5	2944.3	2934.7	2929.4
17.5°	1990.6	1976.9	2003.2	1995.3	1961.0
20°	1432.0	1435.5	1485.7	1460.5	1430.1
22.5°	1044.9	1057.8	1117.3	1052.3	1028.5
25°	695.7	722.0	784.5	703.6	681.5
27.5°	427.9	440.0	503.3	422.4	410.3
30°	266.2	260.1	290.0	248.9	231.9
32.5°	174.6	167.0	176.5	158.4	144.7
35°	116.8	119.2	111.8	111.0	93.7
37.5°	72.9	83.9	74.0	79.0	60.3
40°	47.2	60.8	52.4	57.8	44.4
42.5°	38.7	46.9	43.0	45.8	39.5
45°	30.7	38.1	38.1	38.1	31.0
47.5°	17.0	25.5	32.6	26.1	18.1
50°	9.6	12.9	25.2	13.4	10.1
52.5°	6.6	7.4	17.2	7.7	6.9
55°	4.9	5.2	9.3	5.5	5.2
57.5°	3.8	4.1	4.9	4.1	3.8
60°	3.0	3.0	3.6	3.3	3.0
62.5°	2.2	2.2	2.5	2.2	2.2
65°	1.7	1.7	1.7	1.7	1.7
67.5°	0.8	1.1	1.1	1.1	1.1
70°	0.8	0.6	0.6	0.6	0.8
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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