

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: P744145

Luminaire Tested: LD4D20D010-EU4DR3020359040-4LBCSSQMB

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P744145  
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-EU4DR3020359040-4LBCSSQMB  
Description: 4 INCH SQAURE SHALLOW CAST MATTE BLACK TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1783.9 lumens  
Efficiency: N/A  
Efficacy: 77.2 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 (Ain): 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

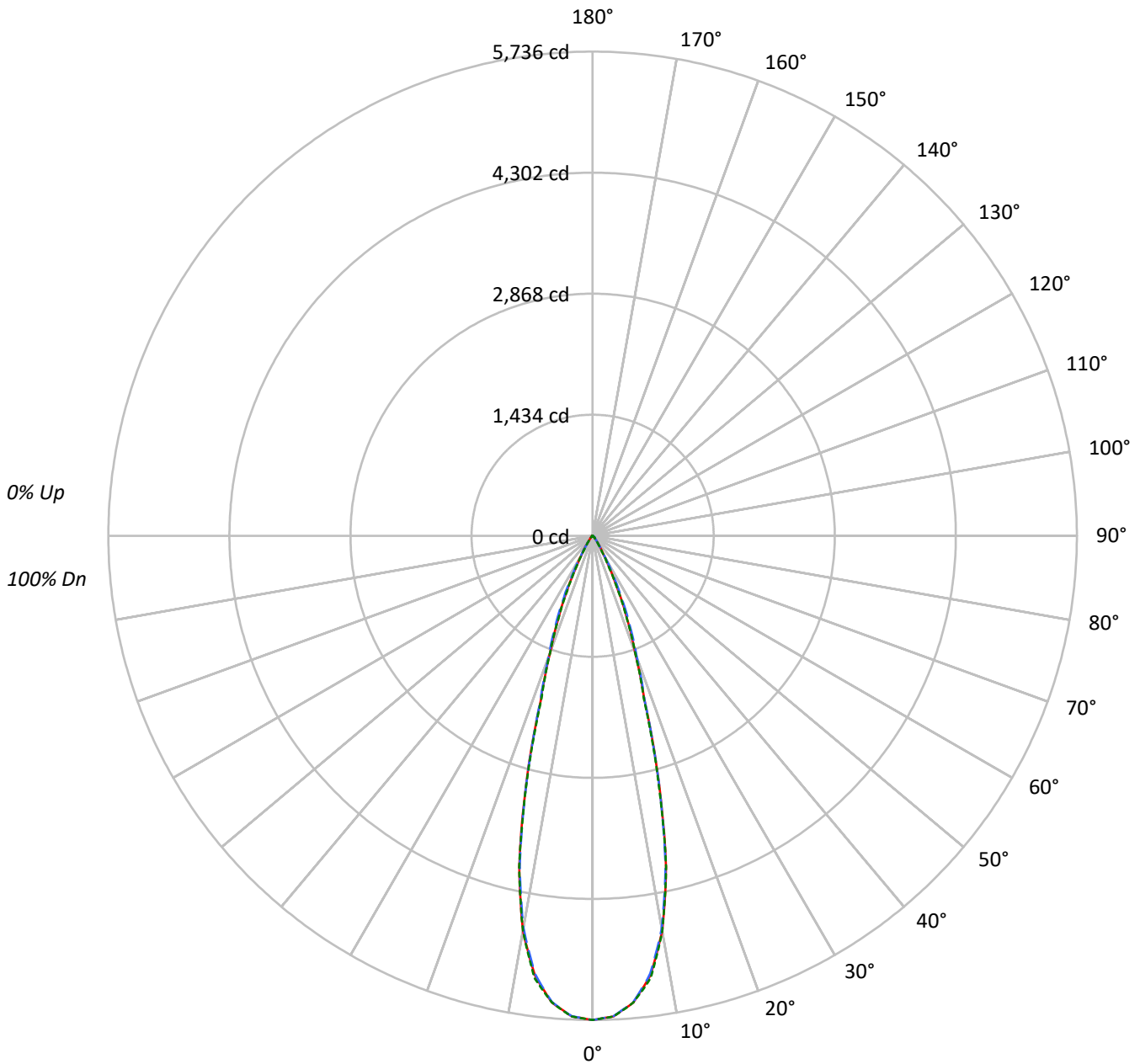


Downlight



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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°	439068	439068	439068
5°	426454	425962	426477
10°	369376	366773	369291
15°	241003	239712	238499
20°	119838	124334	119675
25°	60369	68072	59128
30°	24173	26330	21053
35°	11213	10737	8998
40°	4836	5376	4556
45°	3421	4233	3442
50°	1179	3084	1238
55°	667	1281	707
60°	475	566	475
65°	308	308	308
70°	201	134	201
75°	0	89	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 4233 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	504.4	28.3
10°-20°	812.4	45.5
20°-30°	351.0	19.7
30°-40°	80.0	4.5
40°-50°	27.5	1.5
50°-60°	6.7	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°	1667.8	93.5
0°-40°	1747.8	98.0
0°-60°	1782.0	99.9
0°-90°	1783.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1783.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5736	5736	5736	5736	5736	
5°	5550	5545	5544	5555	5550	505
15°	3041	3005	3025	3015	3010	814
25°	715	742	806	723	700	342
35°	120	122	115	114	96	81
45°	32	39	39	39	32	22
55°	5	5	10	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°	5736.2	5736.2	5736.2	5736.2	5736.2
2.5°	5698.1	5694.2	5696.4	5699.3	5700.3
5°	5550.2	5544.9	5543.8	5555.3	5550.5
7.5°	5252.0	5244.4	5232.9	5259.1	5283.6
10°	4752.4	4744.0	4718.9	4731.3	4751.3
12.5°	4014.8	3987.5	3986.9	4026.4	4021.0
15°	3041.3	3004.7	3025.0	3015.1	3009.7
17.5°	2045.1	2031.1	2058.1	2050.0	2014.7
20°	1471.2	1474.9	1526.4	1500.5	1469.2
22.5°	1073.5	1086.8	1147.9	1081.2	1056.6
25°	714.8	741.8	806.0	722.9	700.1
27.5°	439.6	452.0	517.1	434.0	421.6
30°	273.5	267.3	297.9	255.7	238.2
32.5°	179.4	171.5	181.3	162.8	148.7
35°	120.0	122.5	114.9	114.1	96.3
37.5°	74.9	86.2	76.0	81.1	61.9
40°	48.4	62.5	53.8	59.4	45.6
42.5°	39.7	48.2	44.2	47.0	40.6
45°	31.6	39.1	39.1	39.1	31.8
47.5°	17.5	26.2	33.5	26.8	18.6
50°	9.9	13.2	25.9	13.8	10.4
52.5°	6.8	7.6	17.8	7.9	7.0
55°	5.0	5.3	9.6	5.6	5.3
57.5°	4.0	4.2	5.0	4.2	4.0
60°	3.1	3.1	3.7	3.4	3.1
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°	0.9	1.1	1.1	1.1	1.1
70°	0.9	0.6	0.6	0.6	0.9
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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