

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: P755329

Luminaire Tested: LD4D90BD010-EU4DR3070959024-4LBDP1H

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P755329  
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-EU4DR3070959024-4LBDP1H  
Description: 4 INCH ROUND DEEP 45° CUTOFF SEMI-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: 7192.1 lumens  
Efficiency: N/A  
Efficacy: 72.7 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

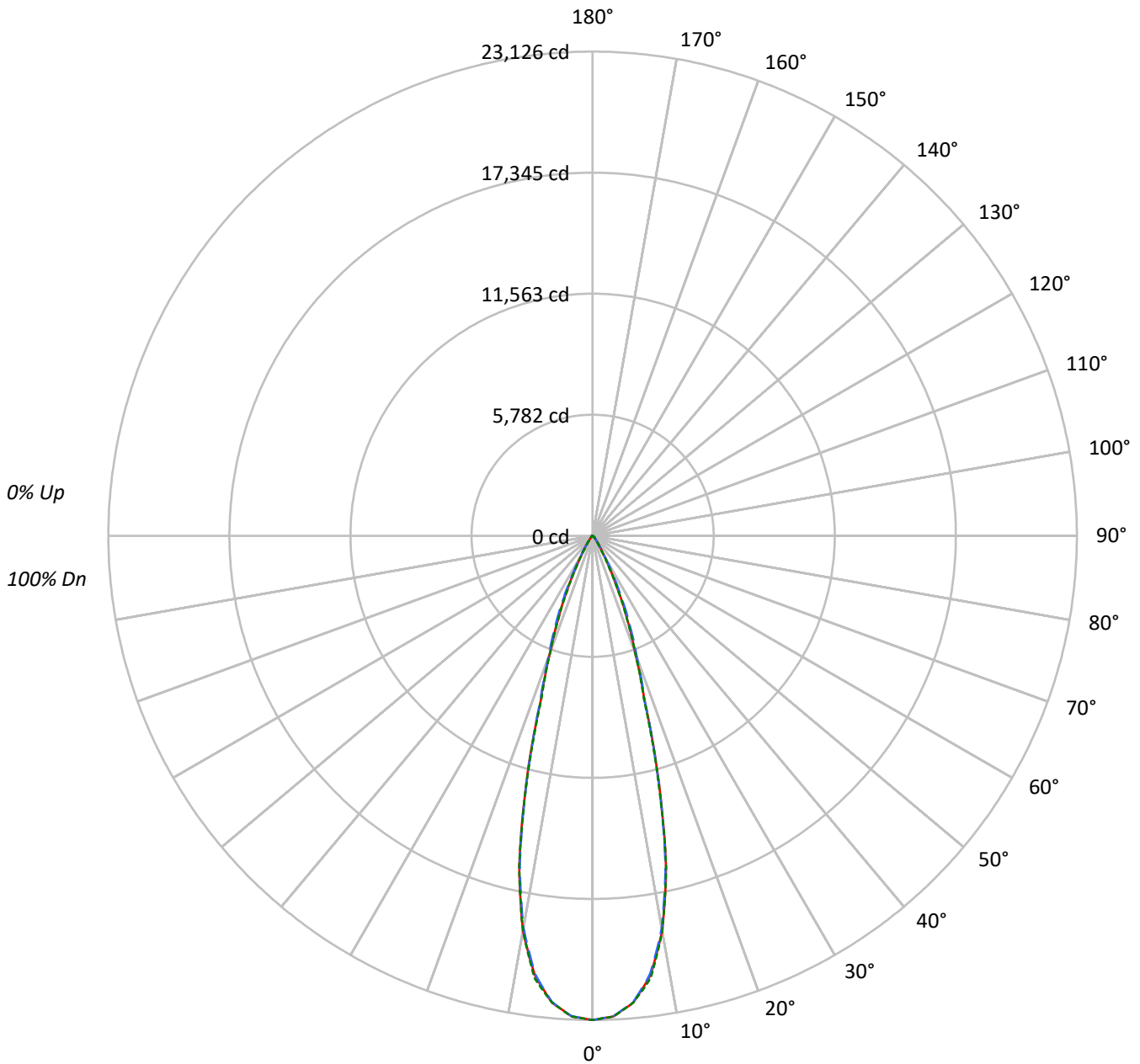
Input Watts (W): 98.9  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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°	1770158	1770158	1770158
5°	1719339	1717333	1719431
10°	1489211	1478711	1488854
15°	971637	966415	961557
20°	483147	501279	482503
25°	243378	274449	238395
30°	97444	106177	84902
35°	45198	43292	36284
40°	19514	21673	18375
45°	13769	17082	13888
50°	4727	12444	5001
55°	2722	5151	2883
60°	1914	2266	1914
65°	1232	1232	1232
70°	761	515	761
75°	0	325	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 17082 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2033.6	28.3
10°-20°	3275.1	45.5
20°-30°	1415.3	19.7
30°-40°	322.6	4.5
40°-50°	110.8	1.5
50°-60°	27.1	0.4
60°-70°	7.0	0.1
70°-80°	0.7	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°	6724.0	93.5
0°-40°	7046.6	98.0
0°-60°	7184.4	99.9
0°-90°	7192.1	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	7192.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	23126	23126	23126	23126	23126	
5°	22377	22355	22351	22397	22378	2035
15°	12261	12114	12196	12156	12134	3283
25°	2882	2991	3250	2915	2823	1379
35°	484	494	463	460	388	328
45°	127	158	158	158	128	90
55°	20	22	39	23	22	20
65°	7	7	7	7	7	7
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°	23126.2	23126.2	23126.2	23126.2	23126.2
2.5°	22972.9	22957.0	22966.1	22977.5	22982.0
5°	22376.8	22355.3	22350.7	22397.3	22378.0
7.5°	21174.4	21143.8	21097.2	21202.8	21301.6
10°	19160.2	19126.1	19025.1	19075.0	19155.6
12.5°	16186.5	16076.4	16074.1	16233.1	16211.5
15°	12261.4	12113.8	12195.5	12155.8	12134.2
17.5°	8245.4	8188.6	8297.6	8264.7	8122.8
20°	5931.4	5946.2	6154.0	6049.5	5923.5
22.5°	4328.2	4381.6	4628.0	4358.9	4260.1
25°	2881.7	2990.7	3249.6	2914.6	2822.7
27.5°	1772.4	1822.3	2084.6	1749.7	1699.7
30°	1102.5	1077.5	1201.3	1031.0	960.6
32.5°	723.3	691.5	731.2	656.3	599.5
35°	483.7	493.9	463.3	459.8	388.3
37.5°	302.0	347.4	306.6	327.0	249.8
40°	195.3	252.1	216.9	239.6	183.9
42.5°	160.1	194.2	178.3	189.6	163.5
45°	127.2	157.8	157.8	157.8	128.3
47.5°	70.4	105.6	135.1	107.9	74.9
50°	39.7	53.4	104.5	55.6	42.0
52.5°	27.3	30.7	71.5	31.8	28.4
55°	20.4	21.6	38.6	22.7	21.6
57.5°	15.9	17.0	20.4	17.0	15.9
60°	12.5	12.5	14.8	13.6	12.5
62.5°	9.1	9.1	10.2	9.1	9.1
65°	6.8	6.8	6.8	6.8	6.8
67.5°	3.4	4.5	4.5	4.5	4.5
70°	3.4	2.3	2.3	2.3	3.4
72.5°	2.3	1.1	1.1	1.1	1.1
75°	0.0	0.0	1.1	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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