

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: P749157

Luminaire Tested: LD4D50D010-EU4DR3040509050-4LBS1B

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P749157  
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: LD4D50D010-EU4DR3040509050-4LBS1B  
Description: 4 INCH ROUND SHALLOW SPECULAR BLACK TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 5000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4968.8 lumens  
Efficiency: N/A  
Efficacy: 105.7 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

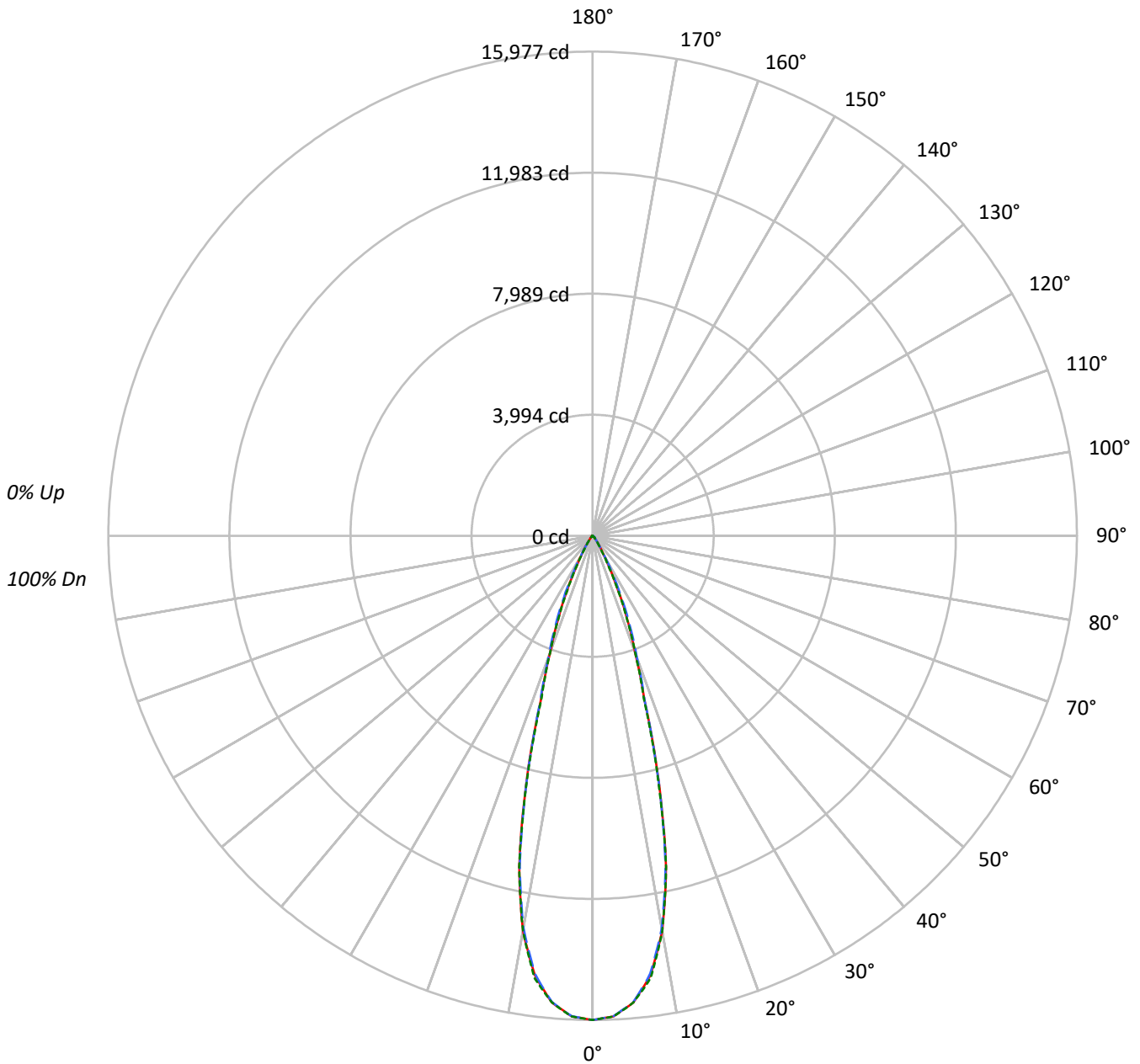
Input Watts (W): 47  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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	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°	1222949	1222949	1222949
5°	1187843	1186460	1187904
10°	1028851	1021599	1028610
15°	671272	667667	664315
20°	333798	346317	333350
25°	168144	189604	164698
30°	67323	73350	58652
35°	31228	29902	25071
40°	13479	14968	12700
45°	9515	11799	9591
50°	3275	8598	3453
55°	1882	3563	1988
60°	1317	1561	1317
65°	851	851	851
70°	537	358	537
75°	0	237	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 11799 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1405.0	28.3
10°-20°	2262.7	45.5
20°-30°	977.8	19.7
30°-40°	222.9	4.5
40°-50°	76.5	1.5
50°-60°	18.7	0.4
60°-70°	4.8	0.1
70°-80°	0.5	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°	4645.4	93.5
0°-40°	4868.3	98.0
0°-60°	4963.5	99.9
0°-90°	4968.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4968.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15977	15977	15977	15977	15977	
5°	15460	15445	15442	15474	15460	1406
15°	8471	8369	8426	8398	8383	2268
25°	1991	2066	2245	2014	1950	953
35°	334	341	320	318	268	227
45°	88	109	109	109	89	62
55°	14	15	27	16	15	14
65°	5	5	5	5	5	5
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°	15977.2	15977.2	15977.2	15977.2	15977.2
2.5°	15871.3	15860.3	15866.6	15874.5	15877.6
5°	15459.5	15444.6	15441.5	15473.6	15460.3
7.5°	14628.8	14607.6	14575.5	14648.4	14716.6
10°	13237.2	13213.7	13143.9	13178.4	13234.1
12.5°	11182.8	11106.7	11105.1	11215.0	11200.1
15°	8471.0	8369.1	8425.5	8398.1	8383.2
17.5°	5696.5	5657.3	5732.6	5709.8	5611.8
20°	4097.9	4108.0	4251.6	4179.4	4092.4
22.5°	2990.2	3027.1	3197.3	3011.4	2943.2
25°	1990.9	2066.2	2245.0	2013.6	1950.1
27.5°	1224.5	1259.0	1440.2	1208.8	1174.3
30°	761.7	744.4	829.9	712.3	663.6
32.5°	499.7	477.7	505.2	453.4	414.2
35°	334.2	341.2	320.0	317.7	268.3
37.5°	208.7	240.0	211.8	225.9	172.6
40°	134.9	174.1	149.8	165.5	127.1
42.5°	110.6	134.1	123.2	131.0	113.0
45°	87.9	109.0	109.0	109.0	88.6
47.5°	48.6	73.0	93.3	74.5	51.8
50°	27.5	36.9	72.2	38.4	29.0
52.5°	18.8	21.2	49.4	22.0	19.6
55°	14.1	14.9	26.7	15.7	14.9
57.5°	11.0	11.8	14.1	11.8	11.0
60°	8.6	8.6	10.2	9.4	8.6
62.5°	6.3	6.3	7.1	6.3	6.3
65°	4.7	4.7	4.7	4.7	4.7
67.5°	2.4	3.1	3.1	3.1	3.1
70°	2.4	1.6	1.6	1.6	2.4
72.5°	1.6	0.8	0.8	0.8	0.8
75°	0.0	0.0	0.8	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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(END OF REPORT)