

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: P749159

Luminaire Tested: LD4D50D010-EU4DR3040509050-4LBS1LI

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P749159  
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-EU4DR3040509050-4LBS1LI  
Description: 4 INCH ROUND SHALLOW 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: 5564.6 lumens  
Efficiency: N/A  
Efficacy: 118.4 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

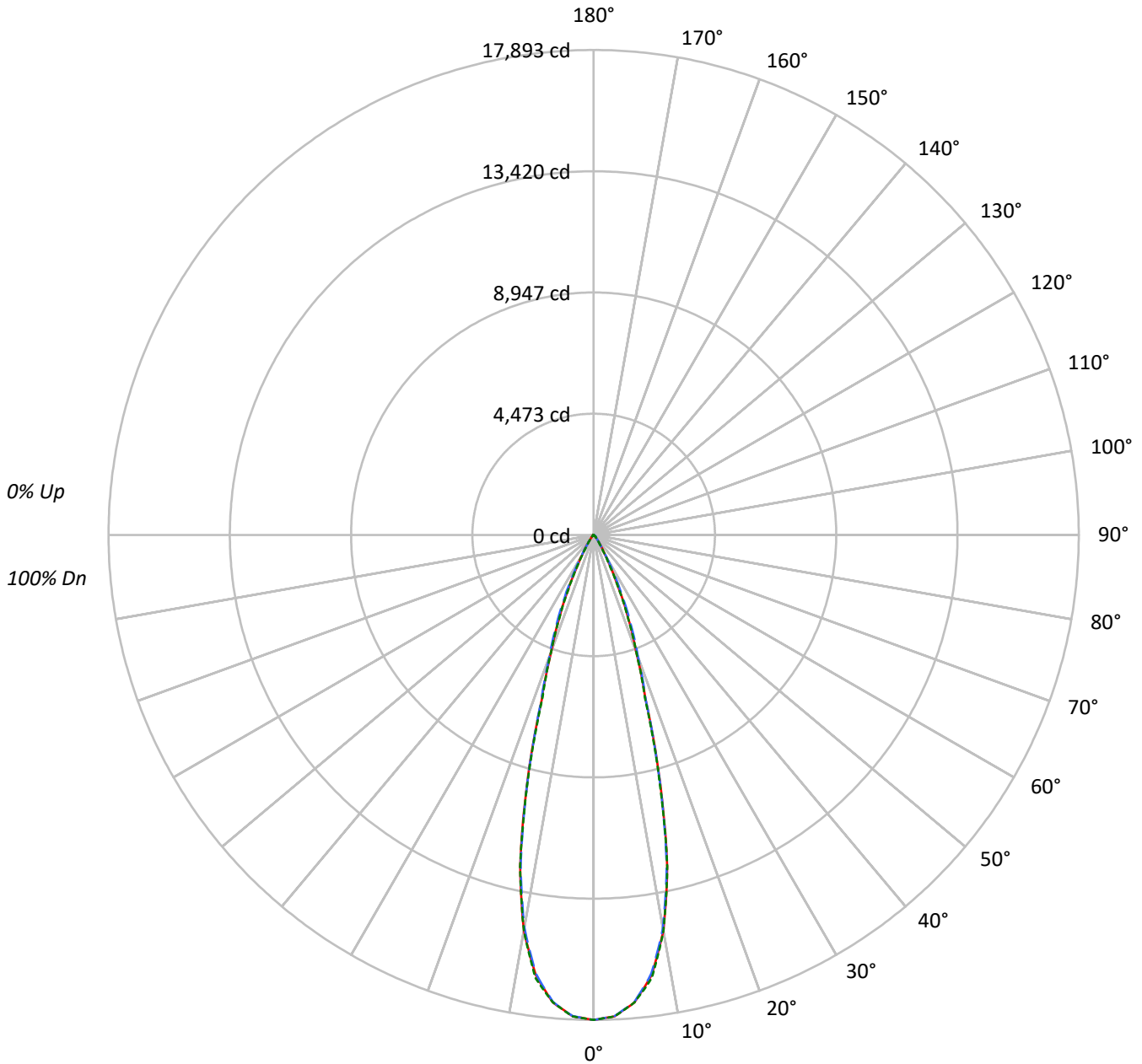
Input Watts (W): 47  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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°	1369591	1369591	1369591
5°	1330273	1328721	1330342
10°	1152215	1144092	1151943
15°	751768	747726	743970
20°	373817	387844	373320
25°	188304	212340	184444
30°	75392	82145	65688
35°	34966	33490	28070
40°	15098	16767	14219
45°	10652	13217	10749
50°	3656	9622	3870
55°	2108	3990	2229
60°	1485	1745	1485
65°	960	960	960
70°	582	403	582
75°	0	266	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 13217 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1573.4	28.3
10°-20°	2534.0	45.5
20°-30°	1095.0	19.7
30°-40°	249.6	4.5
40°-50°	85.7	1.5
50°-60°	20.9	0.4
60°-70°	5.4	0.1
70°-80°	0.6	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°	5202.4	93.5
0°-40°	5452.0	98.0
0°-60°	5558.6	99.9
0°-90°	5564.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5564.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	17893	17893	17893	17893	17893	
5°	17313	17296	17293	17329	17314	1575
15°	9487	9373	9436	9405	9388	2540
25°	2230	2314	2514	2255	2184	1067
35°	374	382	358	356	300	254
45°	98	122	122	122	99	70
55°	16	17	30	18	17	15
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°	17893.0	17893.0	17893.0	17893.0	17893.0
2.5°	17774.4	17762.1	17769.1	17777.9	17781.4
5°	17313.2	17296.5	17293.0	17329.0	17314.1
7.5°	16382.9	16359.1	16323.1	16404.8	16481.3
10°	14824.4	14798.1	14719.9	14758.5	14820.9
12.5°	12523.7	12438.5	12436.7	12559.7	12543.0
15°	9486.8	9372.6	9435.8	9405.1	9388.4
17.5°	6379.6	6335.6	6420.0	6394.5	6284.7
20°	4589.2	4600.6	4761.4	4680.6	4583.1
22.5°	3348.8	3390.1	3580.7	3372.5	3296.1
25°	2229.6	2313.9	2514.2	2255.1	2183.9
27.5°	1371.3	1410.0	1612.9	1353.7	1315.1
30°	853.0	833.7	929.4	797.7	743.2
32.5°	559.6	535.0	565.7	507.8	463.8
35°	374.2	382.1	358.4	355.8	300.4
37.5°	233.7	268.8	237.2	253.0	193.3
40°	151.1	195.0	167.8	185.4	142.3
42.5°	123.9	150.2	137.9	146.7	126.5
45°	98.4	122.1	122.1	122.1	99.3
47.5°	54.5	81.7	104.5	83.5	58.0
50°	30.7	41.3	80.8	43.0	32.5
52.5°	21.1	23.7	55.3	24.6	22.0
55°	15.8	16.7	29.9	17.6	16.7
57.5°	12.3	13.2	15.8	13.2	12.3
60°	9.7	9.7	11.4	10.5	9.7
62.5°	7.0	7.0	7.9	7.0	7.0
65°	5.3	5.3	5.3	5.3	5.3
67.5°	2.6	3.5	3.5	3.5	3.5
70°	2.6	1.8	1.8	1.8	2.6
72.5°	1.8	0.9	0.9	0.9	0.9
75°	0.0	0.0	0.9	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)