

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: P749154

Luminaire Tested: LD4D50D010-EU4DR3040509050-4LBDP1H

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P749154  
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-EU4DR3040509050-4LBDP1H  
Description: 4 INCH ROUND DEEP 45° CUTOFF SEMI-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: 5034.7 lumens  
Efficiency: N/A  
Efficacy: 107.1 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

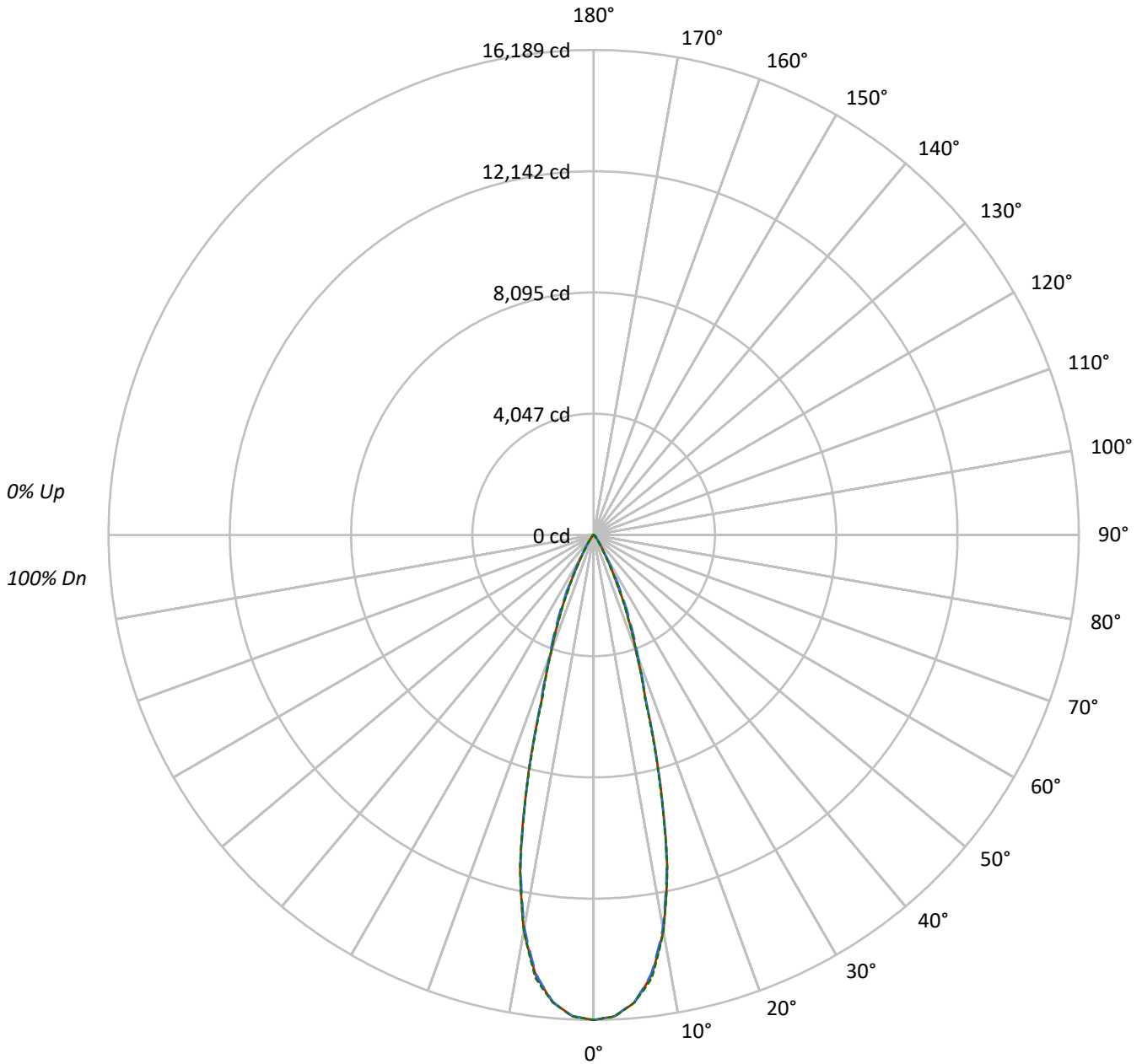
Input Watts (W): 47  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



Downlight

TEST NUMBER: P749154  
CATALOG NUMBER: LD4D50D010-EU4DR3040509050-4LBDP1H

### Luminous Intensity Polar Plot





TEST NUMBER: P749154

CATALOG NUMBER: LD4D50D010-EU4DR3040509050-4LBDP1H

**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°	1239153	1239153	1239153
5°	1203579	1202173	1203640
10°	1042484	1035131	1042235
15°	680171	676518	673111
20°	338213	350903	337765
25°	170374	192121	166877
30°	68215	74323	59430
35°	31640	30303	25398
40°	13659	15168	12870
45°	9634	11961	9721
50°	3310	8705	3501
55°	1908	3603	2015
60°	1332	1577	1332
65°	869	869	869
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: 11961 cd/sqm



TEST NUMBER: P749154

CATALOG NUMBER: LD4D50D010-EU4DR3040509050-4LBDP1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1423.6	28.3
10°-20°	2292.7	45.5
20°-30°	990.7	19.7
30°-40°	225.8	4.5
40°-50°	77.5	1.5
50°-60°	18.9	0.4
60°-70°	4.9	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°	4707.0	93.5
0°-40°	4932.8	98.0
0°-60°	5029.2	99.9
0°-90°	5034.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	5034.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	16189	16189	16189	16189	16189	
5°	15664	15649	15646	15679	15665	1425
15°	8583	8480	8537	8509	8494	2298
25°	2017	2094	2275	2040	1976	966
35°	339	346	324	322	272	230
45°	89	110	110	110	90	63
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



TEST NUMBER: P749154

CATALOG NUMBER: LD4D50D010-EU4DR3040509050-4LBDP1H

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	16188.9	16188.9	16188.9	16188.9	16188.9
2.5°	16081.6	16070.5	16076.8	16084.8	16087.9
5°	15664.3	15649.2	15646.0	15678.6	15665.1
7.5°	14822.6	14801.1	14768.5	14842.5	14911.6
10°	13412.6	13388.7	13318.0	13353.0	13409.4
12.5°	11331.0	11253.9	11252.3	11363.5	11348.4
15°	8583.3	8479.9	8537.2	8509.3	8494.2
17.5°	5772.0	5732.2	5808.5	5785.5	5686.1
20°	4152.1	4162.5	4307.9	4234.8	4146.6
22.5°	3029.9	3067.2	3239.7	3051.3	2982.2
25°	2017.3	2093.6	2274.8	2040.3	1975.9
27.5°	1240.7	1275.7	1459.3	1224.8	1189.8
30°	771.8	754.3	840.9	721.7	672.4
32.5°	506.3	484.0	511.9	459.4	419.7
35°	338.6	345.7	324.3	321.9	271.8
37.5°	211.4	243.2	214.6	228.9	174.9
40°	136.7	176.5	151.8	167.7	128.8
42.5°	112.1	135.9	124.8	132.7	114.5
45°	89.0	110.5	110.5	110.5	89.8
47.5°	49.3	73.9	94.6	75.5	52.5
50°	27.8	37.4	73.1	38.9	29.4
52.5°	19.1	21.5	50.1	22.3	19.9
55°	14.3	15.1	27.0	15.9	15.1
57.5°	11.1	11.9	14.3	11.9	11.1
60°	8.7	8.7	10.3	9.5	8.7
62.5°	6.4	6.4	7.2	6.4	6.4
65°	4.8	4.8	4.8	4.8	4.8
67.5°	2.4	3.2	3.2	3.2	3.2
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



Report Generated By 670245859 / DESKTOP-T8S5UU9

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report







— 0°-180°    - - 45°-225°    - - - 90°-270°

Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



Signify Classified - Internal  
Cooper Lighting Solutions Photometric Lab  
1121 Highway 74 South  
Peachtree City, GA 30269

Scaled Data Report



(END OF REPORT)