

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: P755385

Luminaire Tested: LD4D90BD010-EU4DR3070959040-4LBS1H

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P755385  
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-EU4DR3070959040-4LBS1H  
Description: 4 INCH ROUND SHALLOW SEMI-SPECULAR CLEAR TRIM, WITH 30° OPTIC  
Light Source: (1) HIGH LUMEN LED 90CRI / 4000K CCT  
Ballast/Driver: -

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9345.6 lumens  
Efficiency: N/A  
Efficacy: 94.5 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

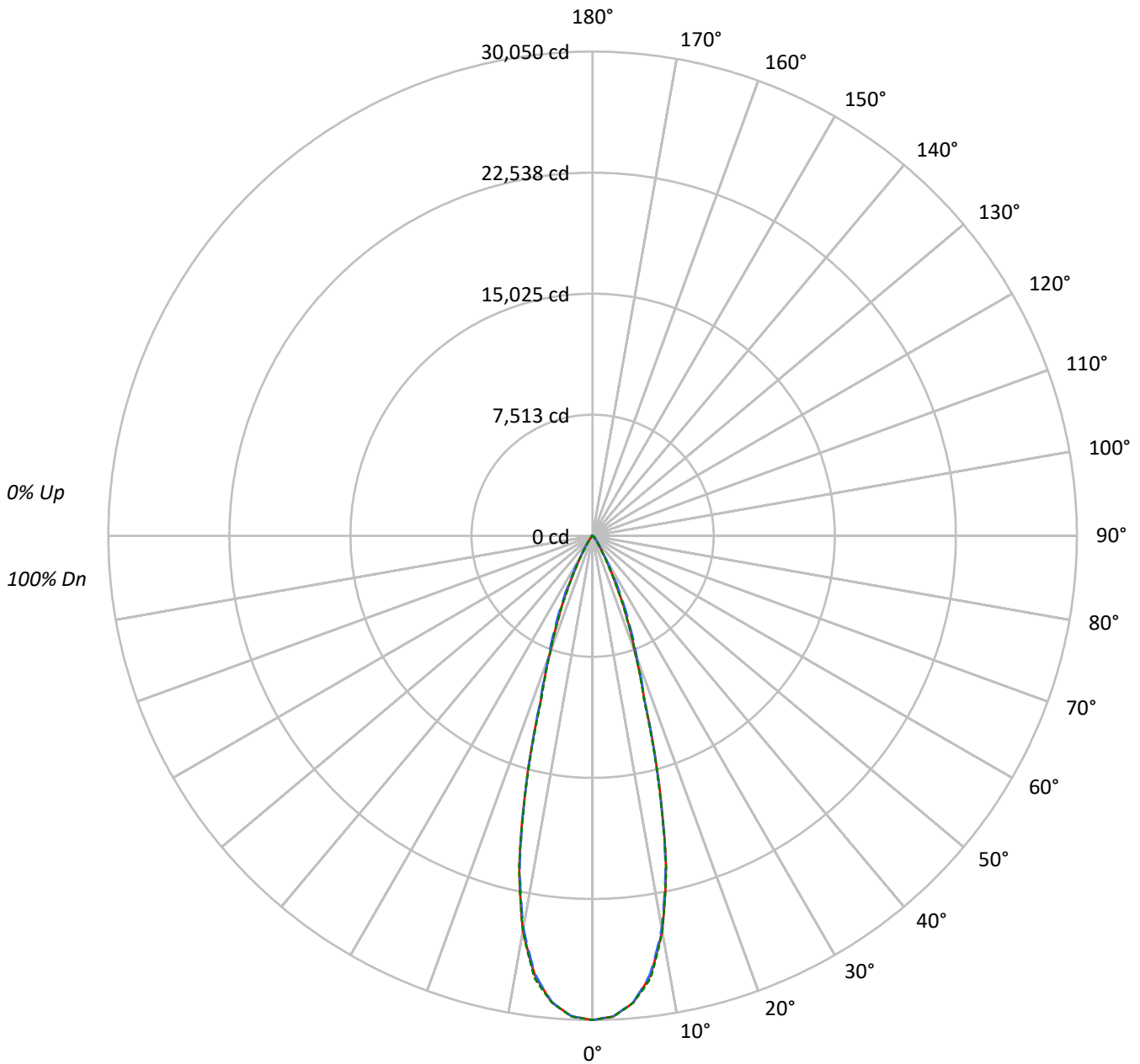


Downlight

TEST NUMBER: P755385

CATALOG NUMBER: LD4D90BD010-EU4DR3070959040-4LBS1H

### Luminous Intensity Polar Plot





TEST NUMBER: P755385

CATALOG NUMBER: LD4D90BD010-EU4DR3070959040-4LBS1H

**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°	2300160	2300160	2300160
5°	2234131	2231518	2234246
10°	1935092	1921451	1934633
15°	1262556	1255773	1249457
20°	627812	651361	626965
25°	316247	356617	309769
30°	126620	137960	110322
35°	58728	56252	47151
40°	25360	28158	23881
45°	17883	22202	18045
50°	6145	16159	6502
55°	3550	6699	3737
60°	2480	2939	2480
65°	1612	1612	1612
70°	985	671	985
75°	0	444	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 22202 cd/sqm



TEST NUMBER: P755385

CATALOG NUMBER: LD4D90BD010-EU4DR3070959040-4LBS1H

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2642.5	28.3
10°-20°	4255.7	45.5
20°-30°	1839.0	19.7
30°-40°	419.2	4.5
40°-50°	143.9	1.5
50°-60°	35.1	0.4
60°-70°	9.1	0.1
70°-80°	1.0	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°	8737.2	93.5
0°-40°	9156.4	98.0
0°-60°	9335.5	99.9
0°-90°	9345.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9345.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	30050	30050	30050	30050	30050	
5°	29077	29049	29043	29103	29078	2645
15°	15933	15741	15847	15795	15767	4266
25°	3744	3886	4222	3787	3668	1792
35°	628	642	602	598	505	426
45°	165	205	205	205	167	117
55°	27	28	50	30	28	26
65°	9	9	9	9	9	9
75°	0	0	2	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P755385

CATALOG NUMBER: LD4D90BD010-EU4DR3070959040-4LBS1H

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	30050.4	30050.4	30050.4	30050.4	30050.4
2.5°	29851.3	29830.6	29842.4	29857.2	29863.1
5°	29076.7	29048.6	29042.7	29103.2	29078.2
7.5°	27514.3	27474.4	27413.9	27551.1	27679.5
10°	24896.9	24852.7	24721.4	24786.3	24891.0
12.5°	21032.9	20889.8	20886.9	21093.4	21065.4
15°	15932.6	15740.8	15847.0	15795.4	15767.3
17.5°	10714.2	10640.4	10782.0	10739.3	10554.8
20°	7707.4	7726.5	7996.5	7860.8	7697.0
22.5°	5624.1	5693.5	6013.6	5664.0	5535.6
25°	3744.5	3886.1	4222.5	3787.3	3667.8
27.5°	2303.1	2368.0	2708.8	2273.6	2208.6
30°	1432.6	1400.1	1560.9	1339.6	1248.2
32.5°	939.8	898.5	950.1	852.8	779.0
35°	628.5	641.8	602.0	597.5	504.6
37.5°	392.4	451.5	398.4	424.9	324.6
40°	253.8	327.5	281.8	311.3	239.0
42.5°	208.0	252.3	231.6	246.4	212.5
45°	165.2	205.1	205.1	205.1	166.7
47.5°	91.5	137.2	175.6	140.2	97.4
50°	51.6	69.3	135.7	72.3	54.6
52.5°	35.4	39.8	92.9	41.3	36.9
55°	26.6	28.0	50.2	29.5	28.0
57.5°	20.7	22.1	26.6	22.1	20.7
60°	16.2	16.2	19.2	17.7	16.2
62.5°	11.8	11.8	13.3	11.8	11.8
65°	8.9	8.9	8.9	8.9	8.9
67.5°	4.4	5.9	5.9	5.9	5.9
70°	4.4	3.0	3.0	3.0	4.4
72.5°	3.0	1.5	1.5	1.5	1.5
75°	0.0	0.0	1.5	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)