

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: P748366

Luminaire Tested: LD4D45BD010-EU4DR3040509040-4LBS1LI

Issue Date: 1/30/2024

**Test Information**

Test Method: LM-79-2019  
Report Number: P748366  
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: LD4D45BD010-EU4DR3040509040-4LBS1LI  
Description: 4 INCH ROUND SHALLOW 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: 4704.6 lumens  
Efficiency: N/A  
Efficacy: 121.6 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

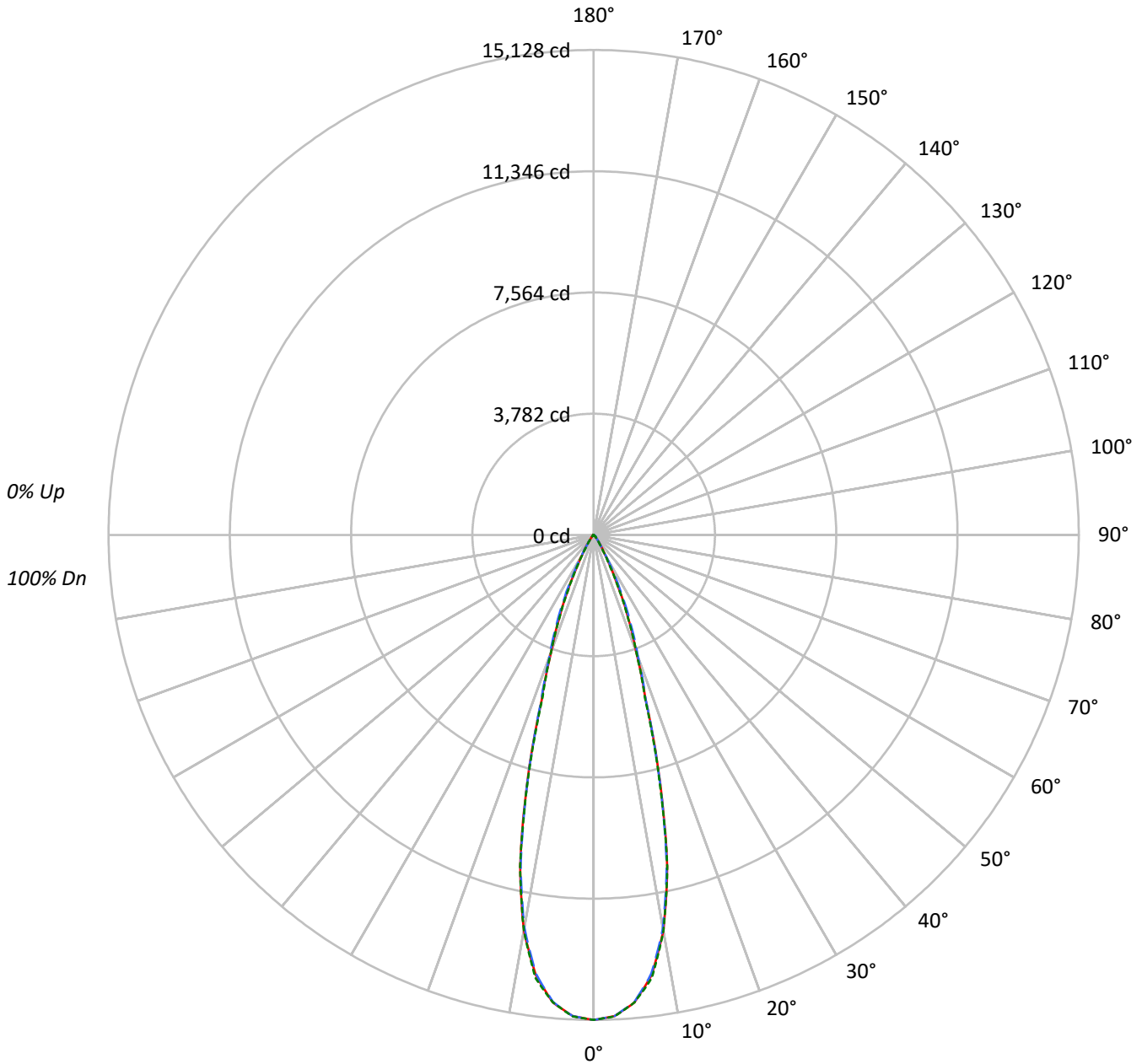
Input Watts (W): 38.7  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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																			
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°	1157926	1157926	1157926
5°	1124684	1123370	1124738
10°	974149	967278	973915
15°	635581	632165	628988
20°	316048	327900	315625
25°	159200	179529	155940
30°	63743	69453	55532
35°	29565	28313	23734
40°	12760	14179	12020
45°	9006	11171	9082
50°	3096	8133	3275
55°	1788	3376	1882
60°	1255	1485	1255
65°	815	815	815
70°	492	336	492
75°	0	207	0
80°	0	0	0
85°	0	0	0

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 22.5°  
 Vertical Angle: 45°  
 Luminance: 11171 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1330.3	28.3
10°-20°	2142.4	45.5
20°-30°	925.8	19.7
30°-40°	211.0	4.5
40°-50°	72.4	1.5
50°-60°	17.7	0.4
60°-70°	4.6	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°	4398.4	93.5
0°-40°	4609.4	98.0
0°-60°	4699.6	99.9
0°-90°	4704.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4704.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15128	15128	15128	15128	15128	
5°	14638	14623	14620	14651	14638	1331
15°	8021	7924	7978	7952	7937	2148
25°	1885	1956	2126	1907	1846	902
35°	316	323	303	301	254	215
45°	83	103	103	103	84	59
55°	13	14	25	15	14	13
65°	4	4	4	4	4	4
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°	15127.7	15127.7	15127.7	15127.7	15127.7
2.5°	15027.4	15017.0	15023.0	15030.4	15033.4
5°	14637.5	14623.4	14620.4	14650.9	14638.2
7.5°	13851.0	13830.9	13800.5	13869.5	13934.2
10°	12533.4	12511.1	12445.0	12477.7	12530.4
12.5°	10588.2	10516.2	10514.7	10618.7	10604.5
15°	8020.6	7924.1	7977.5	7951.5	7937.4
17.5°	5393.6	5356.5	5427.8	5406.3	5313.4
20°	3880.0	3889.6	4025.5	3957.2	3874.8
22.5°	2831.2	2866.2	3027.3	2851.3	2786.7
25°	1885.0	1956.3	2125.7	1906.6	1846.4
27.5°	1159.4	1192.1	1363.6	1144.5	1111.9
30°	721.2	704.8	785.8	674.4	628.3
32.5°	473.1	452.3	478.3	429.3	392.2
35°	316.4	323.1	303.0	300.8	254.0
37.5°	197.6	227.3	200.5	213.9	163.4
40°	127.7	164.9	141.9	156.7	120.3
42.5°	104.7	127.0	116.6	124.0	107.0
45°	83.2	103.2	103.2	103.2	83.9
47.5°	46.0	69.1	88.4	70.6	49.0
50°	26.0	34.9	68.3	36.4	27.5
52.5°	17.8	20.1	46.8	20.8	18.6
55°	13.4	14.1	25.3	14.9	14.1
57.5°	10.4	11.1	13.4	11.1	10.4
60°	8.2	8.2	9.7	8.9	8.2
62.5°	5.9	5.9	6.7	5.9	5.9
65°	4.5	4.5	4.5	4.5	4.5
67.5°	2.2	3.0	3.0	3.0	3.0
70°	2.2	1.5	1.5	1.5	2.2
72.5°	1.5	0.7	0.7	0.7	0.7
75°	0.0	0.0	0.7	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)