

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: P1311344

Luminaire Tested: LDSQA3D09R409040DE010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1311344  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LDSQA3D09R409040DE010 3LSQCA45R 1MMS  
Description: 3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 90CRI , 3LSQCA45R 1MMS TRII  
Light Source: -  
Ballast/Driver: -

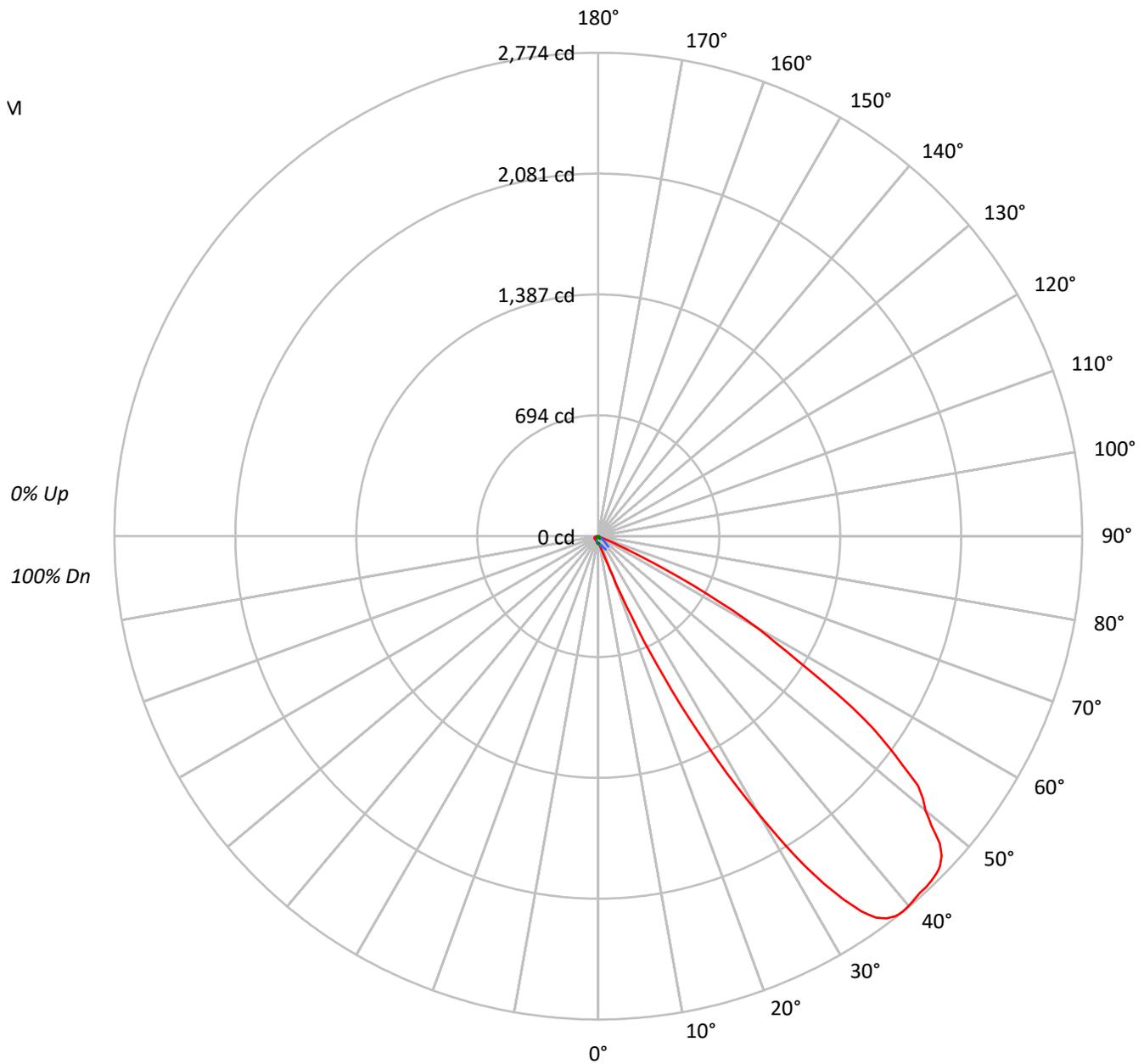
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 857.0 lumens  
Efficiency: N/A  
Efficacy: 77.2 lumens/watt  
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54  
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')  
CIE Type: Direct

Input Watts (W): 11.1  
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

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### Luminous Intensity Polar Plot



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



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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20				20				20				20				20				
RC	80				70				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	102	102	102	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	88	88	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	75	75	75	72
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	62	62	62	60
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	52	52	52	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	44	44	44	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	37	37	37	35
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	31	31	31	29
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	26	26	26	24
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	23	23	23	21
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19	19	19	19	18

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°	135°	180°
0°	7595	7595	7595	7595	7595
5°	8437	8160	7486	6811	6673
10°	10178	8674	6890	6191	6051
15°	16707	9396	5902	5474	5616
20°	44133	11106	4912	4912	5333
25°	170188	13758	3896	4485	5226
30°	367185	18316	3122	4375	5171
35°	552671	21676	2649	4310	5298
40°	622663	21763	2293	4429	5665
45°	667646	16879	2119	4603	6138
50°	656243	10556	1902	4850	6752
55°	577312	5195	1892	5435	7567
60°	365422	1068	2170	5959	8404
65°	74738	326	2241	6398	9291
70°	1561	403	2367	7150	10675
75°	1597	1065	2595	7852	12044
80°	1587	793	3075	8629	14083
85°	1581	1581	6126	9287	15611

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 47°  
 Luminance: 679726 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	4.1	0.5
10°-20°	13.6	1.6
20°-30°	66.6	7.8
30°-40°	216.5	25.3
40°-50°	298.5	34.8
50°-60°	207.9	24.3
60°-70°	39.4	4.6
70°-80°	7.1	0.8
80°-90°	3.3	0.4
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°	84.3	9.8
0°-40°	300.8	35.1
0°-60°	807.2	94.2
0°-90°	857.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	857.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	44	44	44	44	44	
5°	49	47	43	39	39	5
15°	94	53	33	31	32	34
25°	896	72	20	24	28	461
35°	2629	103	13	20	25	1588
45°	2741	69	9	19	25	2085
55°	1923	17	6	18	25	1643
65°	183	1	6	16	23	324
75°	2	2	4	12	18	2
85°	1	1	3	5	8	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1	44.1
2.5°	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	45.6	44.9	44.1
5°	48.8	48.8	48.8	48.8	48.0	48.0	48.0	47.2	47.2	45.6	43.3
7.5°	51.9	51.9	51.9	51.9	51.2	50.4	49.6	49.6	48.8	44.9	41.7
10°	58.2	58.2	57.5	56.7	55.9	54.3	53.5	51.9	49.6	44.1	39.4
12.5°	70.8	69.3	68.5	66.9	64.5	61.4	58.2	55.9	50.4	42.5	37.0
15°	93.7	92.1	88.9	84.2	79.5	73.2	67.7	62.2	52.7	40.1	33.1
17.5°	133.8	129.1	124.4	116.5	104.7	93.7	81.9	71.6	55.9	37.8	29.9
20°	240.8	237.7	209.4	187.3	151.9	126.7	103.1	85.8	60.6	35.4	26.8
22.5°	496.6	463.6	417.1	341.6	266.0	196.0	142.5	107.8	65.3	32.3	23.6
25°	895.6	843.7	743.7	598.1	441.5	312.5	206.2	140.9	72.4	29.1	20.5
27.5°	1356.1	1303.3	1148.3	947.6	691.8	471.4	294.4	186.5	81.9	26.0	18.1
30°	1846.4	1801.5	1604.8	1326.9	975.1	660.3	394.3	233.0	92.1	22.8	15.7
31°	2043.9	1986.5	1774.0	1478.1	1108.1	738.2	434.4	252.6	96.0	22.0	15.0
32°	2225.7	2160.4	1940.0	1622.9	1216.0	822.5	478.5	270.0	99.2	20.5	14.2
33°	2382.4	2306.0	2093.5	1759.8	1334.8	901.2	524.2	286.5	101.5	18.9	13.4
34°	2515.4	2449.3	2221.0	1897.5	1440.3	976.7	569.0	303.0	103.1	18.1	12.6
35°	2628.7	2568.9	2343.0	2002.2	1543.4	1049.9	610.0	318.7	103.1	16.5	12.6
36°	2705.0	2653.1	2448.5	2109.3	1630.0	1112.1	644.6	332.9	103.1	15.0	11.8
37°	2746.8	2696.4	2517.7	2197.4	1715.0	1173.5	676.1	343.9	102.3	14.2	11.0
38°	2768.0	2723.9	2568.9	2269.0	1774.0	1217.5	703.6	352.6	101.5	12.6	11.0
39°	2773.5	2736.5	2601.2	2321.0	1831.4	1261.6	723.3	357.3	99.2	11.8	10.2
40°	2769.6	2737.3	2618.5	2367.4	1875.5	1296.2	737.5	358.9	96.8	10.2	10.2
41°	2761.7	2736.5	2631.1	2399.7	1910.9	1318.3	743.0	355.7	93.7	8.7	9.4
42°	2754.6	2727.1	2636.6	2421.7	1935.3	1329.3	742.2	349.4	88.9	7.9	9.4
43°	2754.6	2723.1	2637.4	2435.9	1947.1	1330.1	732.7	337.6	82.6	7.1	8.7
44°	2749.9	2720.8	2641.3	2445.3	1950.3	1323.0	717.8	325.0	75.6	6.3	8.7
45°	2741.2	2710.5	2640.5	2446.1	1944.8	1305.7	693.4	308.5	69.3	4.7	8.7
46°	2724.7	2697.2	2633.4	2440.6	1928.2	1280.5	664.3	292.0	62.2	3.9	7.9
47°	2691.7	2670.4	2614.5	2421.7	1903.1	1243.5	629.6	273.1	56.7	3.1	7.9
48°	2635.0	2620.0	2582.3	2380.0	1855.0	1197.9	592.6	252.6	51.2	3.1	7.9
49°	2531.1	2519.3	2497.3	2313.1	1793.7	1142.0	552.5	229.8	45.6	2.4	7.9
50°	2449.3	2436.7	2391.8	2200.6	1705.5	1071.2	508.4	207.0	39.4	1.6	7.1
51°	2394.9	2374.5	2303.7	2069.9	1577.2	976.7	460.4	184.2	33.1	1.6	7.1
52°	2326.5	2295.8	2207.6	1952.6	1460.0	882.3	408.5	161.3	29.1	1.6	7.1
53°	2183.2	2172.2	2084.9	1826.7	1342.7	791.8	355.0	142.5	25.2	1.6	7.1
54°	2058.1	2041.6	1922.7	1652.0	1215.2	691.0	299.9	125.9	21.2	1.6	7.1
55°	1922.7	1890.5	1785.0	1504.8	1065.6	598.1	247.1	108.6	17.3	1.6	6.3
56°	1751.9	1723.6	1610.3	1347.4	927.9	503.7	207.0	88.9	13.4	1.6	6.3
57°	1544.2	1518.2	1430.8	1153.8	784.7	411.6	168.4	71.6	10.2	1.6	6.3
58°	1343.5	1314.3	1214.4	968.1	633.6	326.6	140.9	58.2	7.9	1.6	6.3
59°	1189.2	1149.9	1020.8	813.0	495.8	247.9	111.8	46.4	5.5	1.6	6.3
60°	1060.9	1028.7	894.9	676.9	388.8	182.6	82.6	35.4	3.1	1.6	6.3
62.5°	614.7	606.0	485.6	348.7	183.4	85.0	40.9	16.5	1.6	2.4	6.3
65°	183.4	159.8	124.4	74.0	47.2	28.3	15.0	5.5	0.8	2.4	5.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	5.5	5.5	5.5	5.5	5.5	5.5	3.1	1.6	0.8	2.4	5.5
70°	3.1	2.4	2.4	2.4	2.4	1.6	1.6	0.8	0.8	2.4	4.7
72.5°	2.4	2.4	2.4	2.4	1.6	1.6	1.6	0.8	1.6	2.4	3.9
75°	2.4	1.6	1.6	1.6	1.6	0.8	0.8	0.8	1.6	2.4	3.9
77.5°	1.6	1.6	1.6	1.6	0.8	0.8	0.8	0.8	1.6	2.4	3.9
80°	1.6	1.6	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.4	3.1
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.4	3.1
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.4	3.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	112.5°	135°	157.5°	180°
0°	44.1	44.1	44.1	44.1
2.5°	42.5	41.7	40.9	40.9
5°	40.9	39.4	39.4	38.6
7.5°	38.6	37.0	37.0	37.0
10°	36.2	35.4	35.4	34.6
12.5°	33.1	33.1	33.1	33.1
15°	30.7	30.7	31.5	31.5
17.5°	27.5	28.3	29.9	30.7
20°	25.2	26.8	28.3	29.1
22.5°	23.6	25.2	27.5	28.3
25°	21.2	23.6	26.8	27.5
27.5°	19.7	22.8	25.2	26.8
30°	18.1	22.0	24.4	26.0
31°	18.1	21.2	24.4	26.0
32°	17.3	20.5	24.4	25.2
33°	17.3	20.5	24.4	25.2
34°	16.5	20.5	23.6	25.2
35°	16.5	20.5	23.6	25.2
36°	15.7	19.7	23.6	25.2
37°	15.7	19.7	23.6	25.2
38°	15.0	19.7	23.6	25.2
39°	15.0	19.7	23.6	25.2
40°	15.0	19.7	23.6	25.2
41°	14.2	19.7	23.6	25.2
42°	14.2	19.7	23.6	25.2
43°	14.2	18.9	23.6	25.2
44°	14.2	18.9	23.6	25.2
45°	13.4	18.9	23.6	25.2
46°	13.4	18.9	23.6	25.2
47°	13.4	18.9	23.6	25.2
48°	13.4	18.9	23.6	25.2
49°	13.4	18.9	23.6	25.2
50°	12.6	18.1	23.6	25.2
51°	12.6	18.1	23.6	25.2
52°	12.6	18.1	23.6	25.2
53°	12.6	18.1	23.6	25.2
54°	11.8	18.1	23.6	25.2
55°	11.8	18.1	23.6	25.2
56°	11.8	18.1	23.6	24.4
57°	11.8	18.1	22.8	24.4
58°	11.8	17.3	22.8	24.4
59°	11.8	17.3	22.8	24.4
60°	11.8	17.3	22.8	24.4
62.5°	11.0	17.3	22.0	23.6
65°	10.2	15.7	22.0	22.8



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**CANDELA DISTRIBUTION (continued):**

	112.5°	135°	157.5°	180°
67.5°	10.2	15.0	20.5	22.0
70°	9.4	14.2	19.7	21.2
72.5°	7.9	13.4	18.1	19.7
75°	7.1	11.8	16.5	18.1
77.5°	6.3	10.2	15.0	15.7
80°	5.5	8.7	12.6	14.2
82.5°	3.9	6.3	10.2	11.0
85°	3.1	4.7	7.1	7.9
87.5°	2.4	2.4	3.9	3.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)