

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: P1310226

Luminaire Tested: LDSQA3D09R409035DE010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1310226  
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: LDSQA3D09R409035DE010 3LSQCA45R 1MMS  
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 90CRI , 3LSQCA45R 1MMS TRII  
Light Source: -  
Ballast/Driver: -

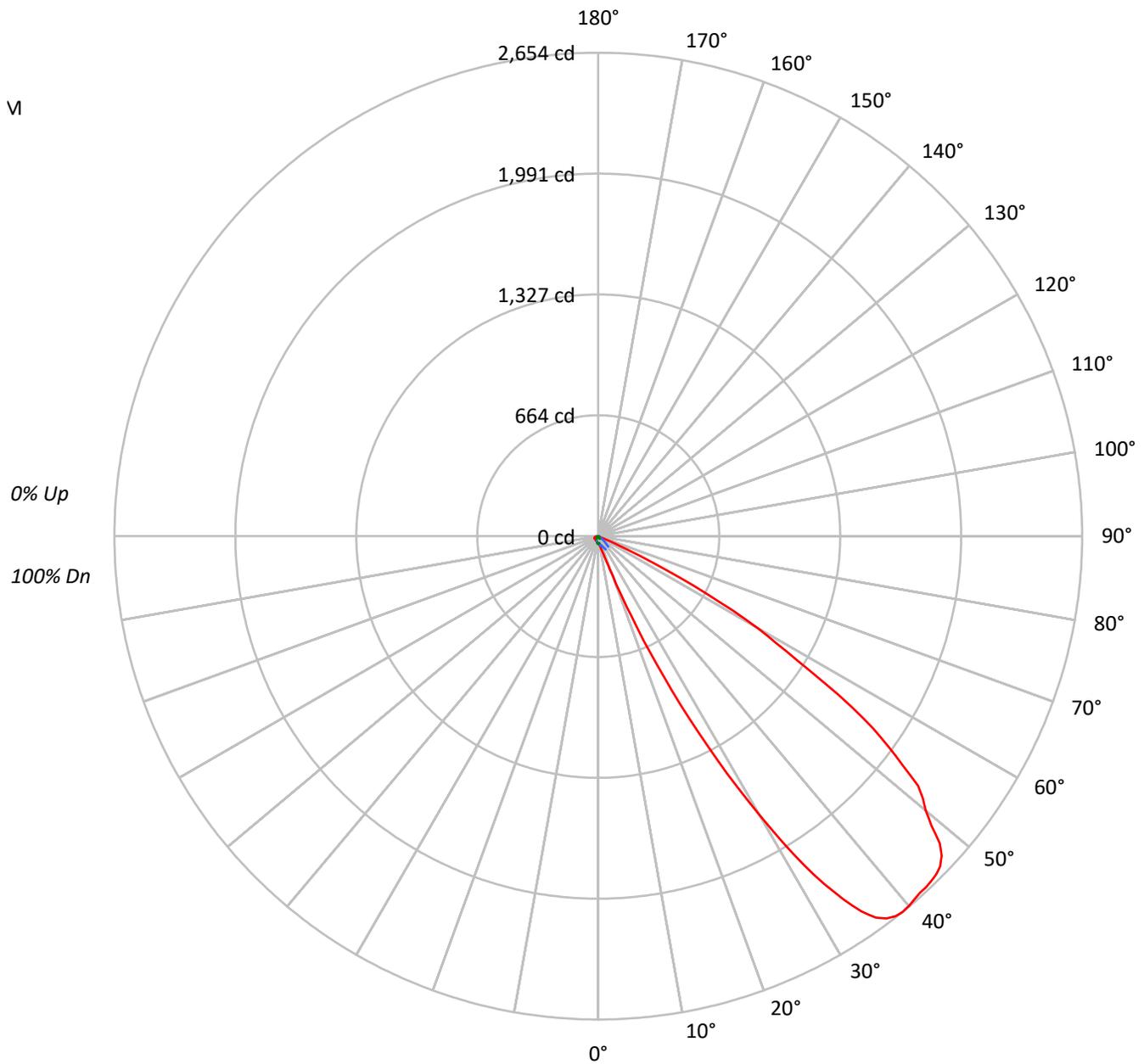
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 820.0 lumens  
Efficiency: N/A  
Efficacy: 73.9 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°	7268	7268	7268	7268	7268
5°	8074	7814	7157	6518	6379
10°	9741	8289	6593	5928	5789
15°	15976	9004	5634	5242	5367
20°	42227	10630	4692	4692	5113
25°	162853	13169	3725	4295	5017
30°	351336	17520	3003	4196	4952
35°	528808	20751	2523	4121	5067
40°	595775	20818	2203	4227	5418
45°	638832	16148	2022	4408	5870
50°	627896	10101	1822	4635	6457
55°	552390	4984	1802	5195	7236
60°	349646	1033	2067	5718	8026
65°	71519	326	2160	6153	8884
70°	1511	403	2266	6848	10222
75°	1530	998	2529	7519	11512
80°	1488	793	2975	8232	13488
85°	1581	1581	5928	8892	14820

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 47°  
 Luminance: 650382 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	3.9	0.5
10°-20°	13.0	1.6
20°-30°	63.7	7.8
30°-40°	207.2	25.3
40°-50°	285.6	34.8
50°-60°	198.9	24.3
60°-70°	37.7	4.6
70°-80°	6.8	0.8
80°-90°	3.2	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
<b>0°-30°</b>	<b>80.6</b>	<b>9.8</b>
<b>0°-40°</b>	<b>287.8</b>	<b>35.1</b>
<b>0°-60°</b>	<b>772.3</b>	<b>94.2</b>
<b>0°-90°</b>	<b>820.0</b>	<b>100.0</b>
90°-120°	0.0	0.0
90°-150°	0.0	0.0
<b>90°-180°</b>	<b>0.0</b>	<b>0.0</b>
<b>0°-180°</b>	<b>820.0</b>	<b>100.0</b>

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	42	42	42	42	42	
5°	47	45	41	38	37	5
15°	90	50	32	29	30	33
25°	857	69	20	23	26	441
35°	2515	99	12	20	24	1520
45°	2623	66	8	18	24	1995
55°	1840	17	6	17	24	1572
65°	176	1	5	15	22	310
75°	2	2	4	11	17	2
85°	1	1	3	4	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°	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2	42.2
2.5°	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	43.7	42.9	42.2
5°	46.7	46.7	46.7	46.7	45.9	45.9	45.9	45.2	45.2	43.7	41.4
7.5°	49.7	49.7	49.7	49.7	48.9	48.2	47.4	47.4	46.7	42.9	39.9
10°	55.7	55.7	55.0	54.2	53.5	52.0	51.2	49.7	47.4	42.2	37.7
12.5°	67.8	66.3	65.5	64.0	61.8	58.7	55.7	53.5	48.2	40.7	35.4
15°	89.6	88.1	85.1	80.6	76.1	70.0	64.8	59.5	50.5	38.4	31.6
17.5°	128.0	123.5	119.0	111.5	100.2	89.6	78.3	68.5	53.5	36.1	28.6
20°	230.4	227.4	200.3	179.2	145.3	121.2	98.7	82.1	58.0	33.9	25.6
22.5°	475.2	443.6	399.1	326.8	254.5	187.5	136.3	103.2	62.5	30.9	22.6
25°	857.0	807.3	711.6	572.3	422.5	299.0	197.3	134.8	69.3	27.9	19.6
27.5°	1297.5	1247.1	1098.7	906.7	661.9	451.1	281.6	178.5	78.3	24.9	17.3
30°	1766.7	1723.7	1535.5	1269.7	933.0	631.8	377.3	222.9	88.1	21.8	15.1
31°	1955.7	1900.7	1697.4	1414.2	1060.3	706.4	415.7	241.7	91.9	21.1	14.3
32°	2129.6	2067.1	1856.3	1552.8	1163.5	786.9	457.9	258.3	94.9	19.6	13.6
33°	2279.5	2206.5	2003.1	1683.8	1277.2	862.2	501.5	274.1	97.1	18.1	12.8
34°	2406.8	2343.5	2125.1	1815.6	1378.1	934.5	544.5	289.9	98.7	17.3	12.0
35°	2515.2	2458.0	2241.8	1915.8	1476.7	1004.6	583.6	305.0	98.7	15.8	12.0
36°	2588.3	2538.6	2342.8	2018.2	1559.6	1064.1	616.8	318.5	98.7	14.3	11.3
37°	2628.2	2580.0	2409.0	2102.5	1640.9	1122.8	646.9	329.1	97.9	13.6	10.5
38°	2648.5	2606.3	2458.0	2171.1	1697.4	1165.0	673.2	337.4	97.1	12.0	10.5
39°	2653.8	2618.4	2488.9	2220.8	1752.4	1207.1	692.1	341.9	94.9	11.3	9.8
40°	2650.0	2619.1	2505.4	2265.2	1794.5	1240.3	705.6	343.4	92.6	9.8	9.8
41°	2642.5	2618.4	2517.5	2296.1	1828.4	1261.4	710.9	340.4	89.6	8.3	9.0
42°	2635.7	2609.3	2522.7	2317.2	1851.8	1271.9	710.1	334.4	85.1	7.5	9.0
43°	2635.7	2605.6	2523.5	2330.7	1863.1	1272.7	701.1	323.1	79.1	6.8	8.3
44°	2631.2	2603.3	2527.3	2339.7	1866.1	1265.9	686.8	311.0	72.3	6.0	8.3
45°	2622.9	2593.5	2526.5	2340.5	1860.8	1249.3	663.4	295.2	66.3	4.5	8.3
46°	2607.1	2580.7	2519.7	2335.2	1845.0	1225.2	635.6	279.4	59.5	3.8	7.5
47°	2575.5	2555.1	2501.7	2317.2	1820.9	1189.8	602.4	261.3	54.2	3.0	7.5
48°	2521.2	2506.9	2470.8	2277.2	1775.0	1146.2	567.1	241.7	48.9	3.0	7.5
49°	2421.8	2410.5	2389.4	2213.2	1716.2	1092.7	528.6	219.9	43.7	2.3	7.5
50°	2343.5	2331.5	2288.5	2105.5	1631.9	1024.9	486.5	198.1	37.7	1.5	6.8
51°	2291.5	2272.0	2204.2	1980.5	1509.1	934.5	440.5	176.2	31.6	1.5	6.8
52°	2226.0	2196.7	2112.3	1868.3	1396.9	844.2	390.8	154.4	27.9	1.5	6.8
53°	2089.0	2078.4	1994.8	1747.8	1284.7	757.6	339.6	136.3	24.1	1.5	6.8
54°	1969.2	1953.4	1839.7	1580.7	1162.7	661.2	286.9	120.5	20.3	1.5	6.8
55°	1839.7	1808.8	1707.9	1439.8	1019.6	572.3	236.5	103.9	16.6	1.5	6.0
56°	1676.3	1649.2	1540.8	1289.2	887.9	482.0	198.1	85.1	12.8	1.5	6.0
57°	1477.5	1452.6	1369.1	1104.0	750.8	393.8	161.2	68.5	9.8	1.5	6.0
58°	1285.5	1257.6	1162.0	926.3	606.2	312.5	134.8	55.7	7.5	1.5	6.0
59°	1137.9	1100.2	976.7	777.9	474.4	237.2	106.9	44.4	5.3	1.5	6.0
60°	1015.1	984.2	856.2	647.6	372.0	174.7	79.1	33.9	3.0	1.5	6.0
62.5°	588.1	579.9	464.6	333.6	175.5	81.3	39.2	15.8	1.5	2.3	6.0
65°	175.5	152.9	119.0	70.8	45.2	27.1	14.3	5.3	0.8	2.3	5.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	5.3	5.3	5.3	5.3	5.3	5.3	3.0	1.5	0.8	2.3	5.3
70°	3.0	2.3	2.3	2.3	2.3	1.5	1.5	0.8	0.8	2.3	4.5
72.5°	2.3	2.3	2.3	2.3	1.5	1.5	1.5	0.8	1.5	2.3	3.8
75°	2.3	1.5	1.5	1.5	1.5	0.8	0.8	0.8	1.5	2.3	3.8
77.5°	1.5	1.5	1.5	1.5	0.8	0.8	0.8	0.8	1.5	2.3	3.8
80°	1.5	1.5	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.3	3.0
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.3	3.0
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	2.3	3.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.8	2.3	2.3
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°	42.2	42.2	42.2	42.2
2.5°	40.7	39.9	39.2	39.2
5°	39.2	37.7	37.7	36.9
7.5°	36.9	35.4	35.4	35.4
10°	34.6	33.9	33.9	33.1
12.5°	31.6	31.6	31.6	31.6
15°	29.4	29.4	30.1	30.1
17.5°	26.4	27.1	28.6	29.4
20°	24.1	25.6	27.1	27.9
22.5°	22.6	24.1	26.4	27.1
25°	20.3	22.6	25.6	26.4
27.5°	18.8	21.8	24.1	25.6
30°	17.3	21.1	23.3	24.9
31°	17.3	20.3	23.3	24.9
32°	16.6	19.6	23.3	24.1
33°	16.6	19.6	23.3	24.1
34°	15.8	19.6	22.6	24.1
35°	15.8	19.6	22.6	24.1
36°	15.1	18.8	22.6	24.1
37°	15.1	18.8	22.6	24.1
38°	14.3	18.8	22.6	24.1
39°	14.3	18.8	22.6	24.1
40°	14.3	18.8	22.6	24.1
41°	13.6	18.8	22.6	24.1
42°	13.6	18.8	22.6	24.1
43°	13.6	18.1	22.6	24.1
44°	13.6	18.1	22.6	24.1
45°	12.8	18.1	22.6	24.1
46°	12.8	18.1	22.6	24.1
47°	12.8	18.1	22.6	24.1
48°	12.8	18.1	22.6	24.1
49°	12.8	18.1	22.6	24.1
50°	12.0	17.3	22.6	24.1
51°	12.0	17.3	22.6	24.1
52°	12.0	17.3	22.6	24.1
53°	12.0	17.3	22.6	24.1
54°	11.3	17.3	22.6	24.1
55°	11.3	17.3	22.6	24.1
56°	11.3	17.3	22.6	23.3
57°	11.3	17.3	21.8	23.3
58°	11.3	16.6	21.8	23.3
59°	11.3	16.6	21.8	23.3
60°	11.3	16.6	21.8	23.3
62.5°	10.5	16.6	21.1	22.6
65°	9.8	15.1	21.1	21.8



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**CANDELA DISTRIBUTION (continued):**

	112.5°	135°	157.5°	180°
67.5°	9.8	14.3	19.6	21.1
70°	9.0	13.6	18.8	20.3
72.5°	7.5	12.8	17.3	18.8
75°	6.8	11.3	15.8	17.3
77.5°	6.0	9.8	14.3	15.1
80°	5.3	8.3	12.0	13.6
82.5°	3.8	6.0	9.8	10.5
85°	3.0	4.5	6.8	7.5
87.5°	2.3	2.3	3.8	3.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)