

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: P1326670

Luminaire Tested: LDSQA3D09R40W2N902750DE010 3LSQCA45R 1MMS_3500K

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1326670
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: LDSQA3D09R40W2N902750DE010 3LSQCA45R 1MMS_3500K
Description: 3in Adjustable Tunable White LED luminaire with, R40 optic, 3500K CCT AND, 90CRI ,
3LSQCA45R 1MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

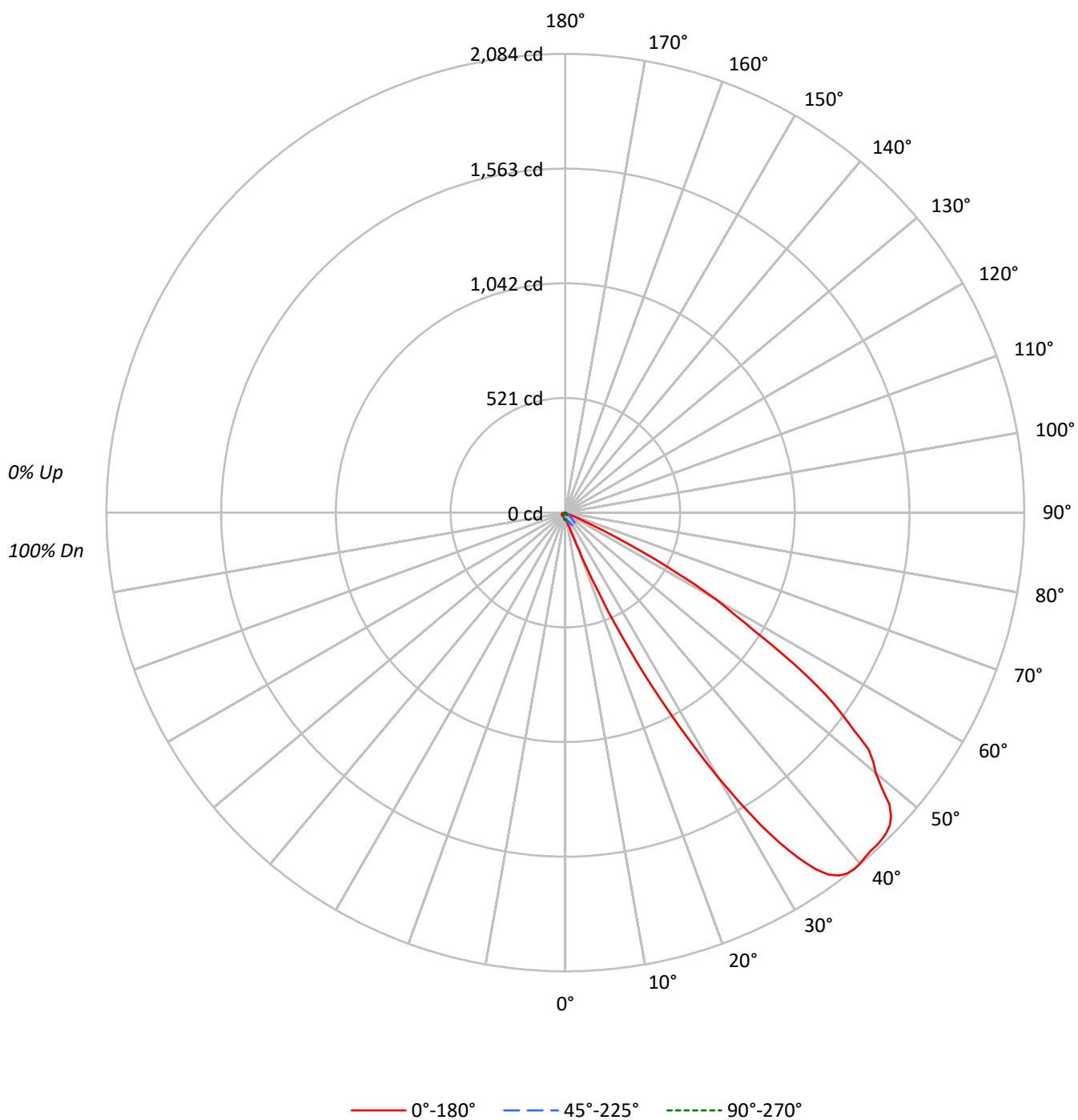
Lumens per Lamp: N/A
Luminaire Lumens: 644.0 lumens
Efficiency: N/A
Efficacy: 71.6 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 9
Input Voltage (V): NR
Input Current (Ain): 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



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	5701	5701	5701	5701	5701
5°	6345	6137	5619	5117	5014
10°	7660	6523	5176	4652	4547
15°	12552	7061	4422	4119	4226
20°	33173	8339	3684	3684	4014
25°	127888	10337	2926	3363	3934
30°	275926	13761	2347	3301	3878
35°	415318	16294	1997	3238	3974
40°	467897	16344	1731	3327	4249
45°	501708	12665	1583	3459	4603
50°	493127	7931	1420	3644	5064
55°	433847	3903	1411	4084	5675
60°	274592	827	1619	4478	6303
65°	56155	245	1671	4809	7009
70°	1209	302	1762	5338	8057
75°	1198	799	1996	5922	9050
80°	1190	595	2380	6447	10513
85°	1186	1186	4742	6916	11659

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 510785 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.1	0.5
10°-20°	10.2	1.6
20°-30°	50.0	7.8
30°-40°	162.7	25.3
40°-50°	224.3	34.8
50°-60°	156.2	24.3
60°-70°	29.6	4.6
70°-80°	5.4	0.8
80°-90°	2.5	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°	63.3	9.8
0°-40°	226.0	35.1
0°-60°	606.5	94.2
0°-90°	644.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	644.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	33	33	33	33	33	
5°	37	36	32	30	29	4
15°	70	40	25	23	24	26
25°	673	54	15	18	21	347
35°	1975	78	10	15	19	1194
45°	2060	52	6	14	19	1566
55°	1445	13	5	14	19	1235
65°	138	1	4	12	17	244
75°	2	1	3	9	14	2
85°	1	1	2	4	6	0
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°	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1	33.1
2.5°	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	34.3	33.7	33.1
5°	36.7	36.7	36.7	36.7	36.1	36.1	36.1	35.5	35.5	34.3	32.5
7.5°	39.0	39.0	39.0	39.0	38.4	37.9	37.3	37.3	36.7	33.7	31.3
10°	43.8	43.8	43.2	42.6	42.0	40.8	40.2	39.0	37.3	33.1	29.6
12.5°	53.2	52.0	51.5	50.3	48.5	46.1	43.8	42.0	37.9	31.9	27.8
15°	70.4	69.2	66.8	63.3	59.7	55.0	50.9	46.7	39.6	30.2	24.8
17.5°	100.5	97.0	93.4	87.5	78.7	70.4	61.5	53.8	42.0	28.4	22.5
20°	181.0	178.6	157.3	140.8	114.1	95.2	77.5	64.5	45.5	26.6	20.1
22.5°	373.2	348.3	313.5	256.7	199.9	147.3	107.0	81.0	49.1	24.2	17.7
25°	673.0	634.0	558.9	449.5	331.8	234.8	155.0	105.9	54.4	21.9	15.4
27.5°	1019.0	979.4	862.9	712.1	519.9	354.3	221.2	140.2	61.5	19.5	13.6
30°	1387.5	1353.8	1205.9	997.1	732.8	496.2	296.3	175.1	69.2	17.2	11.8
31°	1535.9	1492.8	1333.1	1110.7	832.7	554.8	326.5	189.8	72.2	16.6	11.2
32°	1672.5	1623.5	1457.9	1219.5	913.8	618.0	359.6	202.9	74.5	15.4	10.6
33°	1790.2	1732.9	1573.2	1322.4	1003.1	677.2	393.9	215.3	76.3	14.2	10.1
34°	1890.2	1840.5	1669.0	1425.9	1082.3	734.0	427.6	227.7	77.5	13.6	9.5
35°	1975.4	1930.4	1760.7	1504.6	1159.8	789.0	458.4	239.5	77.5	12.4	9.5
36°	2032.7	1993.7	1839.9	1585.0	1224.8	835.7	484.4	250.2	77.5	11.2	8.9
37°	2064.1	2026.2	1892.0	1651.3	1288.7	881.8	508.0	258.5	76.9	10.6	8.3
38°	2080.0	2046.9	1930.4	1705.1	1333.1	914.9	528.7	265.0	76.3	9.5	8.3
39°	2084.2	2056.4	1954.7	1744.1	1376.2	948.1	543.5	268.5	74.5	8.9	7.7
40°	2081.2	2057.0	1967.7	1779.0	1409.4	974.1	554.2	269.7	72.7	7.7	7.7
41°	2075.3	2056.4	1977.1	1803.3	1436.0	990.6	558.3	267.3	70.4	6.5	7.1
42°	2070.0	2049.3	1981.3	1819.8	1454.3	998.9	557.7	262.6	66.8	5.9	7.1
43°	2070.0	2046.3	1981.9	1830.5	1463.2	999.5	550.6	253.7	62.1	5.3	6.5
44°	2066.4	2044.6	1984.8	1837.6	1465.5	994.2	539.4	244.3	56.8	4.7	6.5
45°	2059.9	2036.9	1984.2	1838.1	1461.4	981.2	521.0	231.8	52.0	3.5	6.5
46°	2047.5	2026.8	1978.9	1834.0	1449.0	962.2	499.2	219.4	46.7	3.0	5.9
47°	2022.7	2006.7	1964.7	1819.8	1430.1	934.5	473.1	205.2	42.6	2.4	5.9
48°	1980.1	1968.9	1940.5	1788.5	1394.0	900.1	445.3	189.8	38.4	2.4	5.9
49°	1902.0	1893.1	1876.6	1738.2	1347.9	858.2	415.2	172.7	34.3	1.8	5.9
50°	1840.5	1831.1	1797.3	1653.6	1281.6	804.9	382.1	155.5	29.6	1.2	5.3
51°	1799.7	1784.3	1731.1	1555.4	1185.2	734.0	346.0	138.4	24.8	1.2	5.3
52°	1748.3	1725.2	1658.9	1467.3	1097.1	663.0	306.9	121.2	21.9	1.2	5.3
53°	1640.6	1632.3	1566.7	1372.7	1009.0	595.0	266.7	107.0	18.9	1.2	5.3
54°	1546.6	1534.2	1444.9	1241.4	913.2	519.3	225.3	94.6	16.0	1.2	5.3
55°	1444.9	1420.6	1341.4	1130.8	800.8	449.5	185.7	81.6	13.0	1.2	4.7
56°	1316.5	1295.2	1210.1	1012.5	697.3	378.5	155.5	66.8	10.1	1.2	4.7
57°	1160.4	1140.9	1075.2	867.0	589.7	309.3	126.6	53.8	7.7	1.2	4.7
58°	1009.6	987.7	912.6	727.5	476.1	245.4	105.9	43.8	5.9	1.2	4.7
59°	893.6	864.1	767.1	610.9	372.6	186.3	84.0	34.9	4.1	1.2	4.7
60°	797.2	773.0	672.4	508.6	292.2	137.2	62.1	26.6	2.4	1.2	4.7
62.5°	461.9	455.4	364.9	262.0	137.8	63.9	30.8	12.4	1.2	1.8	4.7
65°	137.8	120.1	93.4	55.6	35.5	21.3	11.2	4.1	0.6	1.8	4.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	4.1	4.1	4.1	4.1	4.1	4.1	2.4	1.2	0.6	1.8	4.1
70°	2.4	1.8	1.8	1.8	1.8	1.2	1.2	0.6	0.6	1.8	3.5
72.5°	1.8	1.8	1.8	1.8	1.2	1.2	1.2	0.6	1.2	1.8	3.0
75°	1.8	1.2	1.2	1.2	1.2	0.6	0.6	0.6	1.2	1.8	3.0
77.5°	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6	1.2	1.8	3.0
80°	1.2	1.2	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.8	2.4
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.8	2.4
85°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	1.8	2.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	1.8	1.8
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°	33.1	33.1	33.1	33.1
2.5°	31.9	31.3	30.8	30.8
5°	30.8	29.6	29.6	29.0
7.5°	29.0	27.8	27.8	27.8
10°	27.2	26.6	26.6	26.0
12.5°	24.8	24.8	24.8	24.8
15°	23.1	23.1	23.7	23.7
17.5°	20.7	21.3	22.5	23.1
20°	18.9	20.1	21.3	21.9
22.5°	17.7	18.9	20.7	21.3
25°	16.0	17.7	20.1	20.7
27.5°	14.8	17.2	18.9	20.1
30°	13.6	16.6	18.3	19.5
31°	13.6	16.0	18.3	19.5
32°	13.0	15.4	18.3	18.9
33°	13.0	15.4	18.3	18.9
34°	12.4	15.4	17.7	18.9
35°	12.4	15.4	17.7	18.9
36°	11.8	14.8	17.7	18.9
37°	11.8	14.8	17.7	18.9
38°	11.2	14.8	17.7	18.9
39°	11.2	14.8	17.7	18.9
40°	11.2	14.8	17.7	18.9
41°	10.6	14.8	17.7	18.9
42°	10.6	14.8	17.7	18.9
43°	10.6	14.2	17.7	18.9
44°	10.6	14.2	17.7	18.9
45°	10.1	14.2	17.7	18.9
46°	10.1	14.2	17.7	18.9
47°	10.1	14.2	17.7	18.9
48°	10.1	14.2	17.7	18.9
49°	10.1	14.2	17.7	18.9
50°	9.5	13.6	17.7	18.9
51°	9.5	13.6	17.7	18.9
52°	9.5	13.6	17.7	18.9
53°	9.5	13.6	17.7	18.9
54°	8.9	13.6	17.7	18.9
55°	8.9	13.6	17.7	18.9
56°	8.9	13.6	17.7	18.3
57°	8.9	13.6	17.2	18.3
58°	8.9	13.0	17.2	18.3
59°	8.9	13.0	17.2	18.3
60°	8.9	13.0	17.2	18.3
62.5°	8.3	13.0	16.6	17.7
65°	7.7	11.8	16.6	17.2



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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	7.7	11.2	15.4	16.6
70°	7.1	10.6	14.8	16.0
72.5°	5.9	10.1	13.6	14.8
75°	5.3	8.9	12.4	13.6
77.5°	4.7	7.7	11.2	11.8
80°	4.1	6.5	9.5	10.6
82.5°	3.0	4.7	7.7	8.3
85°	2.4	3.5	5.3	5.9
87.5°	1.8	1.8	3.0	3.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)