

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: P1319181

Luminaire Tested: LDSQA3D13R159835DE010 3LSQCA45R 1MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1319181
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LDSQA3D13R159835DE010 3LSQCA45R 1MW
Description: 3in Adjustable LED luminaire with, R15 optic, 3500K CCT AND, 98CRI , 3LSQCA45R 1MW TRIM
Light Source: -
Ballast/Driver: -

Summary

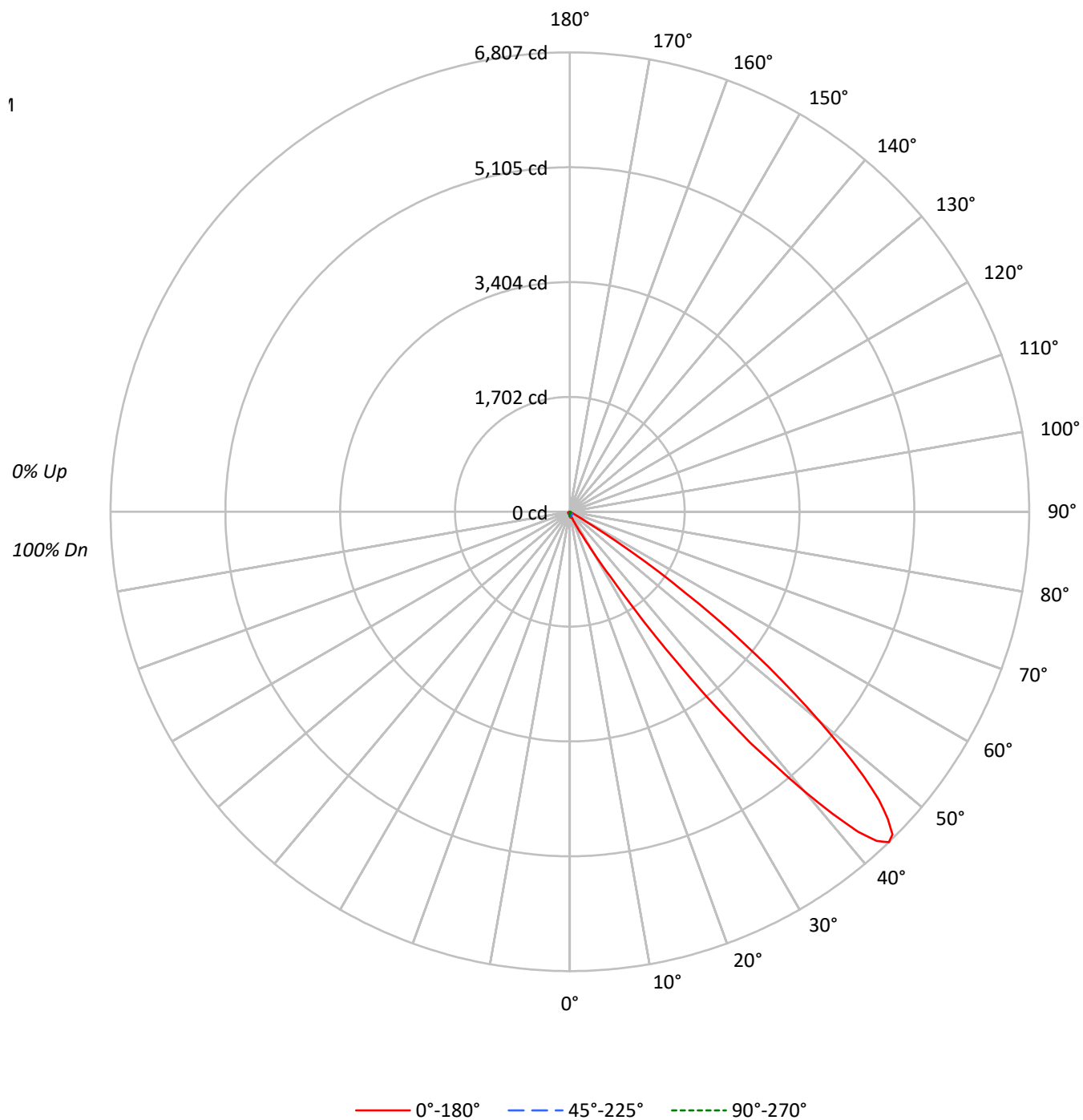
Lumens per Lamp: N/A
Luminaire Lumens: 760.0 lumens
Efficiency: N/A
Efficacy: 52.4 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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

TEST NUMBER: P1319181

CATALOG NUMBER: LDSQA3D13R159835DE010 3LSQCA45R 1MW

Luminous Intensity Polar Plot



TEST NUMBER: P1319181

CATALOG NUMBER: LDSQA3D13R159835DE010 3LSQCA45R 1MW

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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100
1	110	106	102	99	107	104	100	97	100	97	94	96	93	91	92	90	89	87	87	87
2	101	93	87	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73	73	73
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61	61	61
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	53	50	50	50
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	49	44	42	42	42
6	68	54	45	38	66	53	44	38	51	43	37	49	42	37	48	42	37	35	35	35
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29	29	29
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24	24	24
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	20	20	20
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	17	17	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	11608	11608	11608	11608	11608
5°	14418	12845	10477	9163	9042
10°	14183	11000	8079	7153	7292
15°	11750	7845	5813	5937	6347
20°	20417	6250	4435	5132	5828
25°	45511	7487	3592	4751	5473
30°	136084	9188	3162	4673	5727
35°	523847	10365	2859	4773	6055
40°	1215920	9038	2720	4946	6475
45°	1646901	6820	2411	5358	7015
50°	1291320	4073	2438	5680	7716
55°	619799	1832	2282	6155	8407
60°	56627	276	2101	6510	9403
65°	6194	0	1834	6805	10188
70°	1511	0	2266	7251	11078
75°	1530	532	2994	8052	12576
80°	1488	1488	3769	8232	13488
85°	1581	1581	5928	7509	15018

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1646901 cd/sqm

TEST NUMBER: P1319181

CATALOG NUMBER: LDSQA3D13R159835DE010 3LSQCA45R 1MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5.8	0.8
10°-20°	12.0	1.6
20°-30°	28.7	3.8
30°-40°	157.2	20.7
40°-50°	380.7	50.1
50°-60°	151.9	20.0
60°-70°	13.1	1.7
70°-80°	7.4	1.0
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°	46.5	6.1
0°-40°	203.7	26.8
0°-60°	736.2	96.9
0°-90°	760.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	760.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	67	67	67	67	67	
5°	83	74	61	53	52	8
15°	66	44	33	33	36	23
25°	240	39	19	25	29	144
35°	2492	49	14	23	29	1761
45°	6762	28	10	22	29	4770
55°	2064	6	8	20	28	1923
65°	15	0	4	17	25	39
75°	2	1	4	12	19	2
85°	1	1	3	4	8	1
90°	0	0	0	0	0	

TEST NUMBER: P1319181

CATALOG NUMBER: LDSQA3D13R159835DE010 3LSQCA45R 1MW

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4	67.4
2.5°	75.8	75.8	76.5	75.8	75.8	75.8	75.8	75.0	75.0	75.0	72.7
5°	83.4	83.4	83.4	83.4	82.6	82.6	82.6	81.8	81.8	81.1	74.3
7.5°	86.4	86.4	85.6	85.6	84.9	84.9	84.1	83.4	82.6	81.8	71.2
10°	81.1	81.1	81.1	80.3	80.3	79.6	78.8	78.1	77.3	75.8	62.9
12.5°	72.0	72.0	72.7	72.0	71.2	70.5	69.0	68.2	67.4	65.9	52.3
15°	65.9	65.9	65.9	65.2	64.4	62.9	62.1	60.6	59.9	57.6	44.0
17.5°	84.1	84.1	83.4	81.8	78.8	76.5	72.7	69.7	65.9	61.4	37.9
20°	111.4	111.4	109.9	108.4	104.6	100.8	94.7	89.4	83.4	78.1	34.1
22.5°	161.4	163.7	159.1	153.8	148.5	139.4	131.1	122.8	112.2	103.1	34.9
25°	239.5	241.7	239.5	227.3	217.5	205.4	189.4	172.8	154.6	137.9	39.4
27.5°	388.0	389.5	385.7	356.2	340.2	308.4	280.4	253.1	222.8	192.5	43.2
30°	684.3	685.0	660.8	601.7	549.4	479.7	420.6	363.7	316.0	267.5	46.2
31°	901.0	879.8	828.3	757.0	673.7	579.7	498.6	425.1	353.9	301.6	47.0
32°	1144.3	1141.2	1055.6	932.1	820.7	703.2	581.2	487.3	405.4	334.2	47.7
33°	1466.3	1467.8	1333.0	1187.5	1004.8	847.2	687.3	558.5	460.0	372.8	49.3
34°	1969.5	1851.3	1692.9	1495.9	1247.3	1010.1	802.5	641.1	509.2	410.0	49.3
35°	2491.6	2372.6	2198.4	1899.8	1558.8	1226.9	939.7	729.8	568.3	450.1	49.3
36°	3076.6	2975.8	2712.1	2331.0	1896.0	1431.5	1085.2	832.1	626.7	486.5	48.5
37°	3708.6	3560.9	3268.4	2852.3	2270.3	1719.4	1262.5	933.6	685.0	525.9	47.0
38°	4350.5	4217.1	3848.1	3344.1	2717.4	2023.3	1439.8	1031.4	738.8	555.5	44.7
39°	4837.0	4764.2	4398.2	3835.2	3074.4	2311.3	1622.4	1135.9	795.7	585.0	42.4
40°	5408.4	5290.9	4943.8	4247.4	3496.5	2604.5	1801.3	1228.4	842.7	608.5	40.2
41°	5929.7	5781.2	5343.2	4670.3	3834.4	2868.2	1971.0	1323.9	880.6	622.1	38.6
42°	6376.8	6204.0	5746.3	5032.5	4117.1	3078.9	2106.7	1392.1	916.2	633.5	36.4
43°	6666.3	6517.0	6066.9	5304.5	4358.8	3272.1	2233.2	1463.3	938.1	641.1	33.3
44°	6807.2	6656.4	6220.7	5475.0	4507.3	3388.1	2315.1	1512.6	962.4	650.9	31.1
45°	6761.8	6608.7	6187.4	5478.1	4553.6	3429.8	2349.9	1534.5	975.3	660.0	28.0
46°	6553.4	6445.8	6021.4	5335.6	4465.7	3385.1	2330.2	1517.9	970.7	660.0	25.0
47°	6260.9	6138.1	5734.2	5090.8	4252.7	3269.9	2250.6	1467.1	942.7	644.9	22.0
48°	5862.3	5757.7	5333.3	4702.1	3926.1	3019.0	2071.0	1384.5	898.7	615.3	18.9
49°	5362.1	5216.6	4821.8	4205.0	3500.2	2662.9	1835.4	1245.1	828.3	573.6	16.7
50°	4819.6	4640.0	4335.3	3707.1	3060.0	2283.2	1525.4	1052.6	729.0	519.1	15.2
51°	4288.3	4105.7	3815.5	3281.2	2590.1	1894.5	1230.7	840.4	600.2	444.1	12.9
52°	3737.4	3584.4	3259.3	2839.4	2217.3	1535.3	1025.3	710.8	498.6	372.8	10.6
53°	3188.8	3084.2	2775.0	2349.9	1781.6	1254.1	837.4	608.5	435.0	319.0	8.3
54°	2639.4	2525.0	2290.0	1911.2	1436.0	989.7	710.1	509.2	377.4	278.1	7.6
55°	2064.2	2005.1	1788.4	1457.2	1088.2	789.6	575.9	438.0	316.0	232.6	6.1
56°	1589.8	1523.2	1325.4	1057.1	808.6	618.4	466.0	357.7	267.5	194.8	4.5
57°	1041.2	973.0	841.9	738.1	588.8	450.9	356.2	281.9	217.5	161.4	3.8
58°	615.3	553.2	532.7	454.7	392.5	306.1	263.0	209.9	160.7	127.3	2.3
59°	282.7	287.2	255.4	239.5	217.5	194.8	159.9	140.2	109.9	91.7	1.5
60°	164.4	155.3	151.6	135.6	120.5	106.8	96.2	84.9	69.0	59.1	0.8
62.5°	56.1	53.8	55.3	50.0	47.0	45.5	41.7	35.6	29.6	24.2	0.0
65°	15.2	15.2	14.4	13.6	12.9	12.1	11.4	9.9	9.1	7.6	0.0



TEST NUMBER: P1319181

CATALOG NUMBER: LDSQA3D13R159835DE010 3LSQCA45R 1MW

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	5.3	5.3	4.5	4.5	3.8	3.8	3.0	3.0	2.3	2.3	0.0
70°	3.0	3.0	3.0	2.3	2.3	2.3	1.5	1.5	1.5	0.8	0.0
72.5°	2.3	2.3	2.3	2.3	2.3	2.3	1.5	1.5	1.5	0.8	0.8
75°	2.3	2.3	2.3	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8
77.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
80°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.8	1.5
82.5°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	1.5
85°	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1319181

CATALOG NUMBER: LDSQA3D13R159835DE010 3LSQCA45R 1MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	67.4	67.4	67.4	67.4	67.4	67.4
2.5°	69.7	66.7	62.9	60.6	59.9	59.1
5°	66.7	60.6	56.1	53.0	52.3	52.3
7.5°	59.9	53.0	48.5	47.0	46.2	46.2
10°	52.3	46.2	42.4	40.9	41.7	41.7
12.5°	44.0	38.6	37.1	37.1	37.9	38.6
15°	35.6	32.6	32.6	33.3	34.9	35.6
17.5°	29.6	28.0	28.8	30.3	31.8	33.3
20°	24.2	24.2	25.8	28.0	30.3	31.8
22.5°	20.5	21.2	23.5	25.8	28.8	30.3
25°	17.4	18.9	21.2	25.0	28.0	28.8
27.5°	15.2	17.4	20.5	24.2	27.3	28.8
30°	12.9	15.9	19.7	23.5	27.3	28.8
31°	12.1	15.2	18.9	23.5	27.3	28.8
32°	11.4	15.2	18.9	23.5	27.3	28.8
33°	10.6	14.4	18.9	22.7	27.3	28.8
34°	9.9	14.4	18.9	23.5	27.3	28.8
35°	9.1	13.6	18.2	22.7	26.5	28.8
36°	8.3	13.6	18.2	22.7	27.3	28.8
37°	7.6	13.6	18.2	22.7	26.5	28.8
38°	7.6	12.9	17.4	22.7	26.5	28.8
39°	6.8	12.1	17.4	22.7	26.5	28.8
40°	6.1	12.1	16.7	22.0	26.5	28.8
41°	5.3	11.4	16.7	22.0	26.5	28.8
42°	4.5	11.4	16.7	22.0	26.5	28.8
43°	3.8	10.6	15.9	22.0	26.5	28.8
44°	3.8	10.6	15.9	22.0	26.5	28.8
45°	3.0	9.9	15.2	22.0	26.5	28.8
46°	3.0	9.9	15.2	21.2	26.5	28.8
47°	2.3	9.9	15.2	21.2	26.5	28.8
48°	2.3	9.1	15.2	21.2	26.5	28.8
49°	1.5	9.1	15.2	21.2	26.5	28.8
50°	1.5	9.1	14.4	21.2	26.5	28.8
51°	1.5	9.1	14.4	21.2	26.5	28.8
52°	1.5	8.3	14.4	21.2	26.5	28.8
53°	1.5	8.3	14.4	21.2	26.5	28.8
54°	1.5	8.3	13.6	21.2	26.5	28.8
55°	1.5	7.6	13.6	20.5	26.5	28.0
56°	1.5	7.6	13.6	20.5	26.5	28.0
57°	1.5	7.6	12.9	20.5	26.5	28.0
58°	1.5	6.8	12.9	19.7	25.8	28.0
59°	1.5	6.8	12.1	19.7	25.8	27.3
60°	1.5	6.1	12.1	18.9	25.0	27.3
62.5°	1.5	5.3	10.6	18.2	24.2	25.8
65°	1.5	4.5	9.9	16.7	23.5	25.0



TEST NUMBER: P1319181

CATALOG NUMBER: LDSQA3D13R159835DE010 3LSQCA45R 1MW

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.5	4.5	9.1	15.9	22.0	24.2
70°	1.5	4.5	8.3	14.4	21.2	22.0
72.5°	2.3	4.5	7.6	13.6	19.7	20.5
75°	3.0	4.5	6.8	12.1	18.2	18.9
77.5°	3.0	4.5	6.1	10.6	15.9	16.7
80°	3.0	3.8	5.3	8.3	12.9	13.6
82.5°	3.0	3.8	3.8	6.8	9.9	10.6
85°	2.3	3.0	3.0	3.8	6.8	7.6
87.5°	2.3	3.0	1.5	2.3	3.0	3.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)