

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: P1320202

Luminaire Tested: LDSQA3D17R159840DE010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1320202
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: LDSQA3D17R159840DE010 3LSQCA45R 1MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 4000K CCT AND, 98CRI , 3LSQCA45R 1MMS TRII
Light Source: -
Ballast/Driver: -

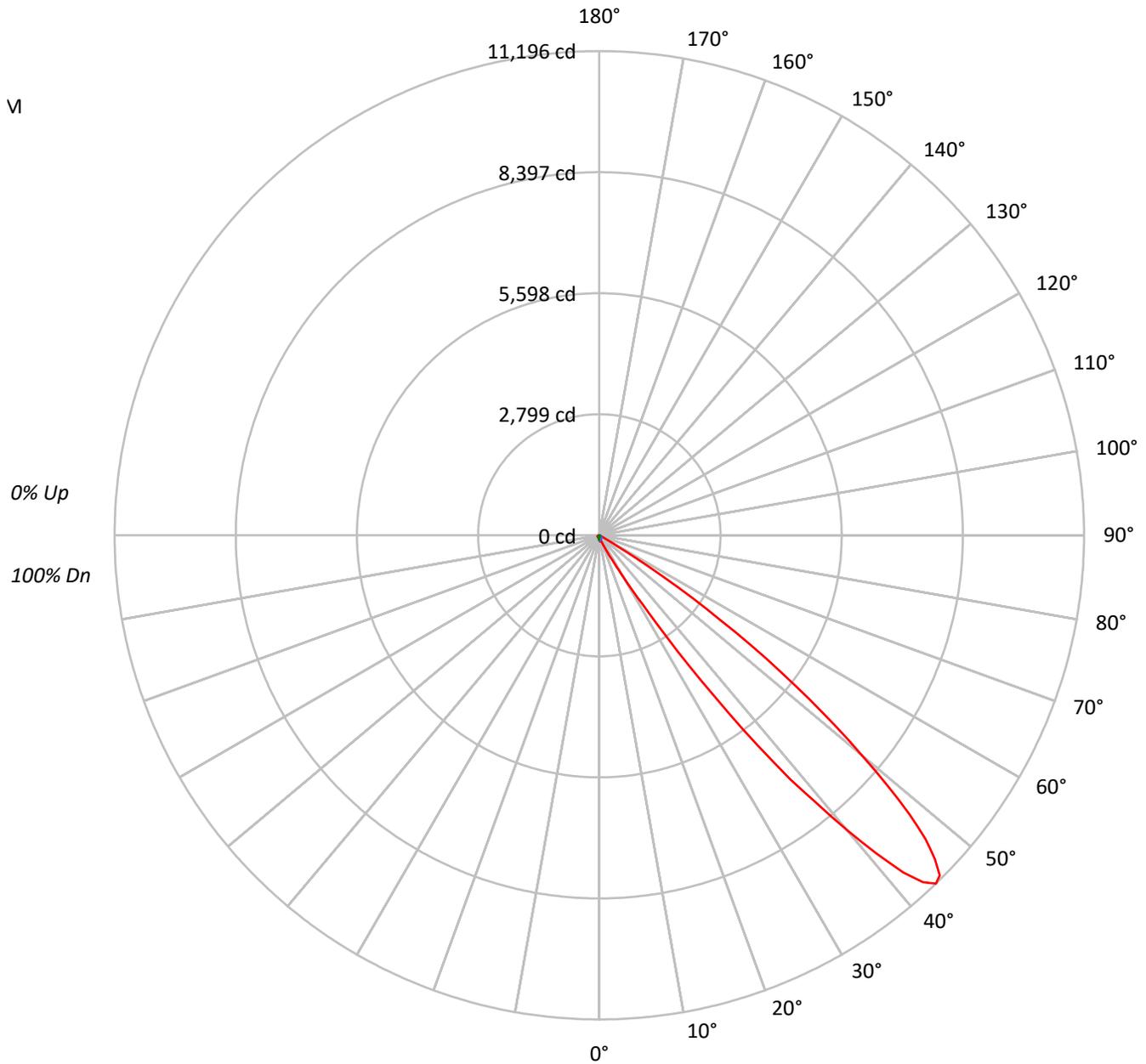
Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1250.0 lumens
Efficiency: N/A
Efficacy: 61.3 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): 20.4
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: P1320202
CATALOG NUMBER: LDSQA3D17R159840DE010 3LSQCA45R 1MMS

Luminous Intensity Polar Plot



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



TEST NUMBER: P1320202

CATALOG NUMBER: LDSQA3D17R159840DE010 3LSQCA45R 1MMS

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	19099	19099	19099	19099	19099
5°	23702	21109	17236	15075	14868
10°	23329	18083	13291	11769	11997
15°	19328	12891	9557	9771	10448
20°	33576	10282	7313	8449	9585
25°	74852	12314	5929	7810	9007
30°	223823	15114	5210	7676	9426
35°	861605	17030	4709	7863	9966
40°	1999847	14861	4474	8116	10657
45°	2708699	11228	3946	8793	11545
50°	2123861	6671	4019	9351	12700
55°	1019416	3003	3753	10119	13842
60°	93172	413	3444	10747	15466
65°	10147	0	3056	11166	16749
70°	2518	0	3777	11934	18178
75°	2462	799	4991	13242	20761
80°	2479	2479	6149	13588	22216
85°	2371	2371	9880	12251	24700

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
 Vertical Angle: 45°
 Luminance: 2708699 cd/sqm



TEST NUMBER: P1320202

CATALOG NUMBER: LDSQA3D17R159840DE010 3LSQCA45R 1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.5	0.8
10°-20°	19.7	1.6
20°-30°	47.2	3.8
30°-40°	258.6	20.7
40°-50°	626.1	50.1
50°-60°	249.8	20.0
60°-70°	21.6	1.7
70°-80°	12.2	1.0
80°-90°	5.4	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°	76.4	6.1
0°-40°	335.0	26.8
0°-60°	1210.9	96.9
0°-90°	1250.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1250.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	111	111	111	111	111	
5°	137	122	100	87	86	13
15°	108	72	54	55	59	38
25°	394	65	31	41	47	238
35°	4098	81	22	37	47	2896
45°	11121	46	16	36	47	7845
55°	3395	10	12	34	46	3163
65°	25	0	8	27	41	64
75°	4	1	8	20	31	4
85°	1	1	5	6	12	1
90°	0	0	0	0	0	



TEST NUMBER: P1320202
 CATALOG NUMBER: LDSQA3D17R159840DE010 3LSQCA45R 1MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9	110.9
2.5°	124.6	124.6	125.9	124.6	124.6	124.6	124.6	123.4	123.4	123.4	119.7
5°	137.1	137.1	137.1	137.1	135.9	135.9	135.9	134.6	134.6	133.4	122.1
7.5°	142.1	142.1	140.8	140.8	139.6	139.6	138.3	137.1	135.9	134.6	117.2
10°	133.4	133.4	133.4	132.1	132.1	130.9	129.6	128.4	127.1	124.6	103.4
12.5°	118.4	118.4	119.7	118.4	117.2	115.9	113.4	112.2	110.9	108.4	86.0
15°	108.4	108.4	108.4	107.2	105.9	103.4	102.2	99.7	98.5	94.7	72.3
17.5°	138.3	138.3	137.1	134.6	129.6	125.9	119.7	114.7	108.4	101.0	62.3
20°	183.2	183.2	180.7	178.2	172.0	165.8	155.8	147.1	137.1	128.4	56.1
22.5°	265.5	269.2	261.7	253.0	244.3	229.3	215.6	201.9	184.5	169.5	57.3
25°	393.9	397.6	393.9	373.9	357.7	337.8	311.6	284.2	254.3	226.8	64.8
27.5°	638.1	640.6	634.4	585.8	559.6	507.3	461.2	416.3	366.4	316.6	71.0
30°	1125.5	1126.7	1086.8	989.6	903.6	789.0	691.7	598.3	519.7	440.0	76.0
31°	1481.9	1447.0	1362.3	1245.1	1108.0	953.5	820.1	699.2	582.1	496.1	77.3
32°	1882.0	1877.0	1736.2	1533.0	1349.8	1156.6	956.0	801.4	666.8	549.6	78.5
33°	2411.7	2414.2	2192.4	1953.1	1652.7	1393.4	1130.5	918.6	756.5	613.2	81.0
34°	3239.3	3044.9	2784.4	2460.3	2051.5	1661.4	1319.9	1054.4	837.6	674.3	81.0
35°	4098.1	3902.4	3615.7	3124.6	2563.8	2017.9	1545.5	1200.3	934.8	740.3	81.0
36°	5060.3	4894.5	4460.7	3833.8	3118.4	2354.4	1784.8	1368.5	1030.7	800.2	79.8
37°	6099.7	5856.7	5375.6	4691.3	3734.1	2828.0	2076.4	1535.5	1126.7	865.0	77.3
38°	7155.4	6936.0	6329.1	5500.2	4469.5	3327.8	2368.1	1696.3	1215.2	913.6	73.5
39°	7955.6	7835.9	7233.9	6307.9	5056.5	3801.4	2668.5	1868.3	1308.7	962.2	69.8
40°	8895.3	8702.1	8131.3	6985.9	5750.7	4283.8	2962.6	2020.4	1386.0	1000.8	66.1
41°	9752.8	9508.5	8788.1	7681.4	6306.6	4717.5	3241.8	2177.4	1448.3	1023.3	63.6
42°	10488.2	10204.0	9451.2	8277.1	6771.5	5064.0	3464.9	2289.6	1506.9	1042.0	59.8
43°	10964.3	10718.8	9978.4	8724.6	7169.1	5381.8	3673.0	2406.7	1543.0	1054.4	54.8
44°	11196.1	10948.1	10231.4	9005.0	7413.4	5572.5	3807.7	2487.7	1582.9	1070.6	51.1
45°	11121.3	10869.6	10176.6	9010.0	7489.4	5641.1	3865.0	2523.9	1604.1	1085.6	46.1
46°	10778.6	10601.6	9903.6	8775.7	7344.8	5567.5	3832.6	2496.5	1596.6	1085.6	41.1
47°	10297.5	10095.6	9431.3	8373.1	6994.6	5378.1	3701.7	2413.0	1550.5	1060.7	36.1
48°	9641.9	9469.9	8771.9	7733.7	6457.4	4965.5	3406.3	2277.1	1478.2	1012.1	31.2
49°	8819.3	8580.0	7930.6	6916.1	5757.0	4379.7	3018.7	2047.8	1362.3	943.5	27.4
50°	7926.9	7631.5	7130.5	6097.2	5032.8	3755.3	2508.9	1731.2	1199.0	853.8	24.9
51°	7053.2	6752.8	6275.5	5396.8	4260.1	3115.9	2024.1	1382.2	987.1	730.4	21.2
52°	6147.1	5895.3	5360.6	4670.1	3646.9	2525.1	1686.3	1169.1	820.1	613.2	17.4
53°	5244.7	5072.7	4564.2	3865.0	2930.2	2062.7	1377.2	1000.8	715.4	524.7	13.7
54°	4341.1	4152.9	3766.5	3143.3	2361.9	1627.8	1167.8	837.6	620.7	457.4	12.5
55°	3395.1	3297.9	2941.4	2396.8	1789.8	1298.7	947.2	720.4	519.7	382.6	10.0
56°	2614.9	2505.2	2179.9	1738.7	1329.9	1017.0	766.5	588.3	440.0	320.3	7.5
57°	1712.5	1600.3	1384.7	1214.0	968.4	741.6	585.8	463.6	357.7	265.5	6.2
58°	1012.1	909.8	876.2	747.8	645.6	503.5	432.5	345.2	264.2	209.4	3.7
59°	464.9	472.4	420.0	393.9	357.7	320.3	263.0	230.6	180.7	150.8	2.5
60°	270.5	255.5	249.3	223.1	198.2	175.7	158.3	139.6	113.4	97.2	1.2
62.5°	92.2	88.5	91.0	82.3	77.3	74.8	68.6	58.6	48.6	39.9	0.0
65°	24.9	24.9	23.7	22.4	21.2	19.9	18.7	16.2	15.0	12.5	0.0



TEST NUMBER: P1320202
CATALOG NUMBER: LDSQA3D17R159840DE010 3LSQCA45R 1MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	8.7	8.7	7.5	7.5	6.2	6.2	5.0	5.0	3.7	3.7	0.0
70°	5.0	5.0	5.0	3.7	3.7	3.7	2.5	2.5	2.5	1.2	0.0
72.5°	3.7	3.7	3.7	3.7	3.7	3.7	2.5	2.5	2.5	1.2	1.2
75°	3.7	3.7	3.7	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.2
77.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
80°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	1.2	2.5
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.5
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2
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: P1320202

CATALOG NUMBER: LDSQA3D17R159840DE010 3LSQCA45R 1MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	110.9	110.9	110.9	110.9	110.9	110.9
2.5°	114.7	109.7	103.4	99.7	98.5	97.2
5°	109.7	99.7	92.2	87.2	86.0	86.0
7.5°	98.5	87.2	79.8	77.3	76.0	76.0
10°	86.0	76.0	69.8	67.3	68.6	68.6
12.5°	72.3	63.6	61.1	61.1	62.3	63.6
15°	58.6	53.6	53.6	54.8	57.3	58.6
17.5°	48.6	46.1	47.4	49.9	52.3	54.8
20°	39.9	39.9	42.4	46.1	49.9	52.3
22.5°	33.7	34.9	38.6	42.4	47.4	49.9
25°	28.7	31.2	34.9	41.1	46.1	47.4
27.5°	24.9	28.7	33.7	39.9	44.9	47.4
30°	21.2	26.2	32.4	38.6	44.9	47.4
31°	19.9	24.9	31.2	38.6	44.9	47.4
32°	18.7	24.9	31.2	38.6	44.9	47.4
33°	17.4	23.7	31.2	37.4	44.9	47.4
34°	16.2	23.7	31.2	38.6	44.9	47.4
35°	15.0	22.4	29.9	37.4	43.6	47.4
36°	13.7	22.4	29.9	37.4	44.9	47.4
37°	12.5	22.4	29.9	37.4	43.6	47.4
38°	12.5	21.2	28.7	37.4	43.6	47.4
39°	11.2	19.9	28.7	37.4	43.6	47.4
40°	10.0	19.9	27.4	36.1	43.6	47.4
41°	8.7	18.7	27.4	36.1	43.6	47.4
42°	7.5	18.7	27.4	36.1	43.6	47.4
43°	6.2	17.4	26.2	36.1	43.6	47.4
44°	6.2	17.4	26.2	36.1	43.6	47.4
45°	5.0	16.2	24.9	36.1	43.6	47.4
46°	5.0	16.2	24.9	34.9	43.6	47.4
47°	3.7	16.2	24.9	34.9	43.6	47.4
48°	3.7	15.0	24.9	34.9	43.6	47.4
49°	2.5	15.0	24.9	34.9	43.6	47.4
50°	2.5	15.0	23.7	34.9	43.6	47.4
51°	2.5	15.0	23.7	34.9	43.6	47.4
52°	2.5	13.7	23.7	34.9	43.6	47.4
53°	2.5	13.7	23.7	34.9	43.6	47.4
54°	2.5	13.7	22.4	34.9	43.6	47.4
55°	2.5	12.5	22.4	33.7	43.6	46.1
56°	2.5	12.5	22.4	33.7	43.6	46.1
57°	2.5	12.5	21.2	33.7	43.6	46.1
58°	2.5	11.2	21.2	32.4	42.4	46.1
59°	2.5	11.2	19.9	32.4	42.4	44.9
60°	2.5	10.0	19.9	31.2	41.1	44.9
62.5°	2.5	8.7	17.4	29.9	39.9	42.4
65°	2.5	7.5	16.2	27.4	38.6	41.1



TEST NUMBER: P1320202

CATALOG NUMBER: LDSQA3D17R159840DE010 3LSQCA45R 1MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	2.5	7.5	15.0	26.2	36.1	39.9
70°	2.5	7.5	13.7	23.7	34.9	36.1
72.5°	3.7	7.5	12.5	22.4	32.4	33.7
75°	5.0	7.5	11.2	19.9	29.9	31.2
77.5°	5.0	7.5	10.0	17.4	26.2	27.4
80°	5.0	6.2	8.7	13.7	21.2	22.4
82.5°	5.0	6.2	6.2	11.2	16.2	17.4
85°	3.7	5.0	5.0	6.2	11.2	12.5
87.5°	3.7	5.0	2.5	3.7	5.0	5.0
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)