

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: P1315954

Luminaire Tested: LDSQA3D20R409735D010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315954
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: LDSQA3D20R409735D010 3LSQCA45R 1MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 97CRI , 3LSQCA45R 1MMS TRII
Light Source: -
Ballast/Driver: -

Summary

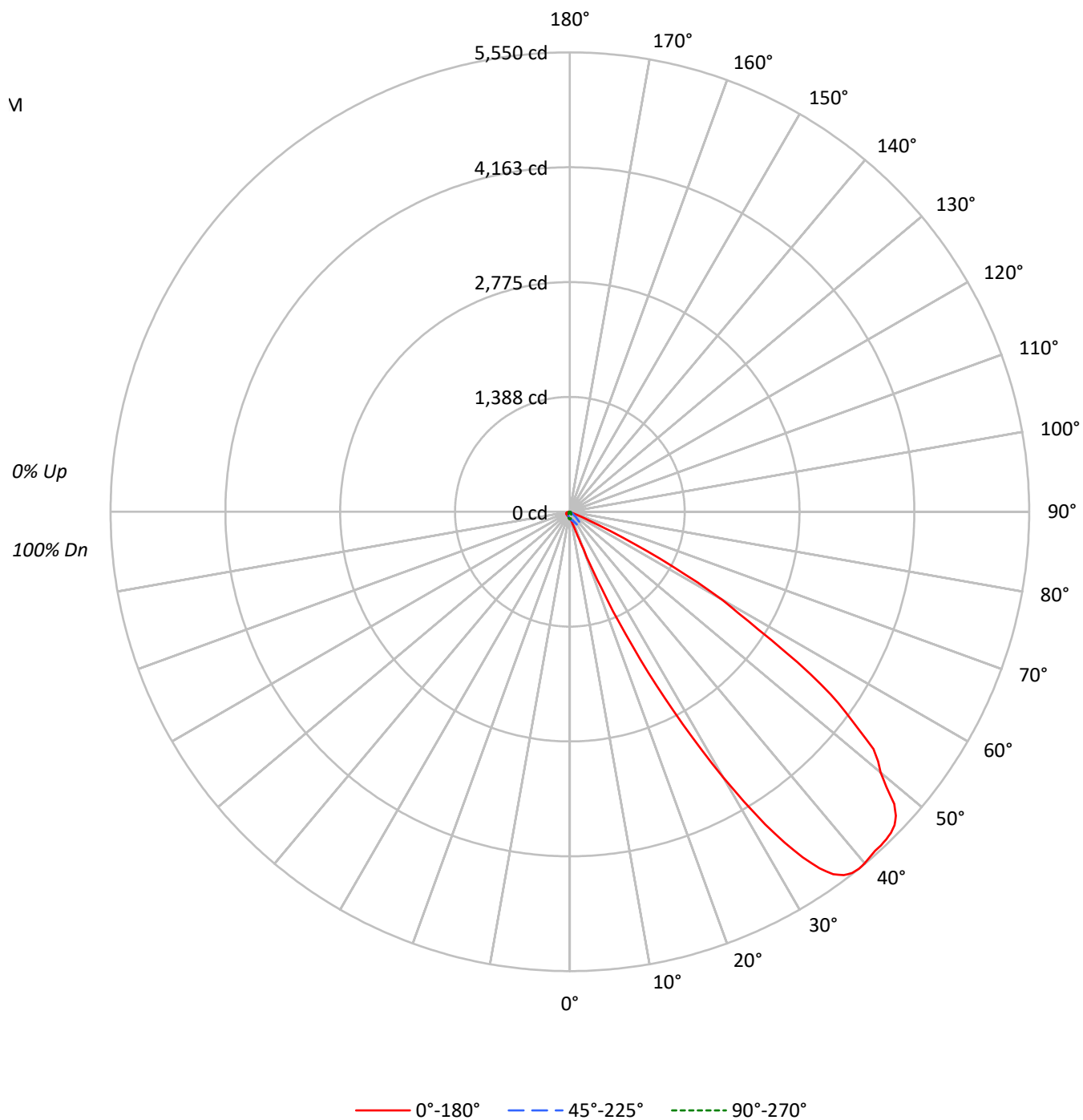
Lumens per Lamp: N/A
Luminaire Lumens: 1714.9 lumens
Efficiency: N/A
Efficacy: 59.5 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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: P1315954

CATALOG NUMBER: LDSQA3D20R409735D010 3LSQCA45R 1MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1315954

CATALOG NUMBER: LDSQA3D20R409735D010 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
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72		
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60		
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35		
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29		
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	15190	15190	15190	15190	15190
5°	16873	16337	14971	13606	13346
10°	20373	17348	13763	12399	12119
15°	33413	18810	11785	10947	11233
20°	88320	22231	9805	9805	10685
25°	340585	27535	7772	8969	10470
30°	734788	36651	6264	8770	10341
35°	1105994	43374	5298	8599	10596
40°	1246046	43548	4609	8858	11331
45°	1336095	33757	4214	9207	12275
50°	1313236	21086	3805	9699	13504
55°	1155314	10389	3783	10869	15133
60°	731292	2170	4340	11918	16809
65°	149557	652	4483	12837	18623
70°	3172	806	4733	14250	21401
75°	3127	2063	5257	15704	24088
80°	3075	1587	6248	17158	28068
85°	3162	3162	12449	18575	31024

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1360234 cd/sqm

TEST NUMBER: P1315954

CATALOG NUMBER: LDSQA3D20R409735D010 3LSQCA45R 1MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.2	0.5
10°-20°	27.2	1.6
20°-30°	133.2	7.8
30°-40°	433.3	25.3
40°-50°	597.3	34.8
50°-60°	416.0	24.3
60°-70°	78.9	4.6
70°-80°	14.3	0.8
80°-90°	6.6	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°	168.6	9.8
0°-40°	601.9	35.1
0°-60°	1615.2	94.2
0°-90°	1714.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1714.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	88	88	88	88	88	
5°	98	94	87	79	77	10
15°	187	106	66	61	63	68
25°	1792	145	41	47	55	923
35°	5260	206	25	41	50	3179
45°	5486	139	17	38	50	4172
55°	3848	35	13	36	50	3289
65°	367	2	11	32	46	649
75°	5	3	8	24	36	5
85°	2	2	6	9	16	1
90°	0	0	0	0	0	

TEST NUMBER: P1315954

CATALOG NUMBER: LDSQA3D20R409735D010 3LSQCA45R 1MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2	88.2
2.5°	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	91.3	89.8	88.2
5°	97.6	97.6	97.6	97.6	96.1	96.1	96.1	94.5	94.5	91.3	86.6
7.5°	103.9	103.9	103.9	103.9	102.4	100.8	99.2	99.2	97.6	89.8	83.5
10°	116.5	116.5	115.0	113.4	111.8	108.7	107.1	103.9	99.2	88.2	78.7
12.5°	141.7	138.6	137.0	133.9	129.1	122.8	116.5	111.8	100.8	85.0	74.0
15°	187.4	184.3	178.0	168.5	159.1	146.5	135.4	124.4	105.5	80.3	66.1
17.5°	267.7	258.3	248.8	233.1	209.5	187.4	163.8	143.3	111.8	75.6	59.8
20°	481.9	475.6	418.9	374.8	304.0	253.6	206.3	171.7	121.3	70.9	53.5
22.5°	993.8	927.7	834.7	683.5	532.3	392.2	285.1	215.8	130.7	64.6	47.2
25°	1792.3	1688.4	1488.4	1197.0	883.6	625.3	412.6	281.9	144.9	58.3	40.9
27.5°	2713.7	2608.2	2297.9	1896.3	1384.4	943.4	589.0	373.3	163.8	52.0	36.2
30°	3694.9	3605.2	3211.4	2655.4	1951.4	1321.4	789.1	466.2	184.3	45.7	31.5
31°	4090.2	3975.3	3550.0	2957.8	2217.6	1477.3	869.4	505.6	192.1	44.1	29.9
32°	4454.1	4323.3	3882.3	3247.6	2433.4	1645.9	957.6	540.2	198.4	40.9	28.3
33°	4767.5	4614.7	4189.5	3521.7	2671.2	1803.4	1048.9	573.3	203.2	37.8	26.8
34°	5033.7	4901.4	4444.6	3797.3	2882.2	1954.6	1138.7	606.4	206.3	36.2	25.2
35°	5260.5	5140.8	4688.7	4006.8	3088.6	2101.0	1220.6	637.9	206.3	33.1	25.2
36°	5413.2	5309.3	4899.8	4221.0	3261.8	2225.5	1289.9	666.2	206.3	29.9	23.6
37°	5496.7	5395.9	5038.4	4397.4	3431.9	2348.3	1352.9	688.3	204.7	28.3	22.0
38°	5539.2	5451.0	5140.8	4540.7	3550.0	2436.5	1408.0	705.6	203.2	25.2	22.0
39°	5550.3	5476.2	5205.3	4644.6	3665.0	2524.7	1447.4	715.0	198.4	23.6	20.5
40°	5542.4	5477.8	5240.0	4737.6	3753.2	2594.0	1475.8	718.2	193.7	20.5	20.5
41°	5526.6	5476.2	5265.2	4802.1	3824.1	2638.1	1486.8	711.9	187.4	17.3	18.9
42°	5512.5	5457.3	5276.2	4846.2	3872.9	2660.2	1485.2	699.3	178.0	15.7	18.9
43°	5512.5	5449.5	5277.8	4874.6	3896.5	2661.7	1466.3	675.7	165.4	14.2	17.3
44°	5503.0	5444.7	5285.7	4893.5	3902.8	2647.6	1436.4	650.5	151.2	12.6	17.3
45°	5485.7	5424.3	5284.1	4895.1	3891.8	2612.9	1387.6	617.4	138.6	9.4	17.3
46°	5452.6	5397.5	5269.9	4884.0	3858.7	2562.5	1329.3	584.3	124.4	7.9	15.7
47°	5386.5	5343.9	5232.1	4846.2	3808.3	2488.5	1260.0	546.5	113.4	6.3	15.7
48°	5273.1	5243.1	5167.5	4762.8	3712.2	2397.1	1186.0	505.6	102.4	6.3	15.7
49°	5065.2	5041.5	4997.4	4628.9	3589.4	2285.3	1105.6	459.9	91.3	4.7	15.7
50°	4901.4	4876.2	4786.4	4403.7	3413.0	2143.6	1017.4	414.2	78.7	3.1	14.2
51°	4792.7	4751.7	4610.0	4142.2	3156.3	1954.6	921.4	368.5	66.1	3.1	14.2
52°	4655.7	4594.2	4417.8	3907.5	2921.6	1765.6	817.4	322.9	58.3	3.1	14.2
53°	4369.0	4347.0	4172.1	3655.5	2686.9	1584.4	710.3	285.1	50.4	3.1	14.2
54°	4118.6	4085.5	3847.7	3305.9	2431.8	1382.8	600.1	252.0	42.5	3.1	14.2
55°	3847.7	3783.1	3572.1	3011.4	2132.5	1197.0	494.5	217.3	34.6	3.1	12.6
56°	3505.9	3449.2	3222.4	2696.4	1856.9	1008.0	414.2	178.0	26.8	3.1	12.6
57°	3090.1	3038.2	2863.3	2308.9	1570.3	823.7	337.0	143.3	20.5	3.1	12.6
58°	2688.5	2630.2	2430.2	1937.2	1267.9	653.6	281.9	116.5	15.7	3.1	12.6
59°	2379.8	2301.1	2042.8	1627.0	992.2	496.1	223.6	92.9	11.0	3.1	12.6
60°	2123.1	2058.5	1790.8	1354.5	778.0	365.4	165.4	70.9	6.3	3.1	12.6
62.5°	1230.1	1212.7	971.8	697.7	367.0	170.1	81.9	33.1	3.1	4.7	12.6
65°	367.0	319.7	248.8	148.0	94.5	56.7	29.9	11.0	1.6	4.7	11.0



TEST NUMBER: P1315954

CATALOG NUMBER: LDSQA3D20R409735D010 3LSQCA45R 1MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	11.0	11.0	11.0	11.0	11.0	11.0	6.3	3.1	1.6	4.7	11.0
70°	6.3	4.7	4.7	4.7	4.7	3.1	3.1	1.6	1.6	4.7	9.4
72.5°	4.7	4.7	4.7	4.7	3.1	3.1	3.1	1.6	3.1	4.7	7.9
75°	4.7	3.1	3.1	3.1	3.1	1.6	1.6	1.6	3.1	4.7	7.9
77.5°	3.1	3.1	3.1	3.1	1.6	1.6	1.6	1.6	3.1	4.7	7.9
80°	3.1	3.1	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.7	6.3
82.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.7	6.3
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	1.6	4.7	6.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	4.7	4.7
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: P1315954

CATALOG NUMBER: LDSQA3D20R409735D010 3LSQCA45R 1MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	88.2	88.2	88.2	88.2
2.5°	85.0	83.5	81.9	81.9
5°	81.9	78.7	78.7	77.2
7.5°	77.2	74.0	74.0	74.0
10°	72.4	70.9	70.9	69.3
12.5°	66.1	66.1	66.1	66.1
15°	61.4	61.4	63.0	63.0
17.5°	55.1	56.7	59.8	61.4
20°	50.4	53.5	56.7	58.3
22.5°	47.2	50.4	55.1	56.7
25°	42.5	47.2	53.5	55.1
27.5°	39.4	45.7	50.4	53.5
30°	36.2	44.1	48.8	52.0
31°	36.2	42.5	48.8	52.0
32°	34.6	40.9	48.8	50.4
33°	34.6	40.9	48.8	50.4
34°	33.1	40.9	47.2	50.4
35°	33.1	40.9	47.2	50.4
36°	31.5	39.4	47.2	50.4
37°	31.5	39.4	47.2	50.4
38°	29.9	39.4	47.2	50.4
39°	29.9	39.4	47.2	50.4
40°	29.9	39.4	47.2	50.4
41°	28.3	39.4	47.2	50.4
42°	28.3	39.4	47.2	50.4
43°	28.3	37.8	47.2	50.4
44°	28.3	37.8	47.2	50.4
45°	26.8	37.8	47.2	50.4
46°	26.8	37.8	47.2	50.4
47°	26.8	37.8	47.2	50.4
48°	26.8	37.8	47.2	50.4
49°	26.8	37.8	47.2	50.4
50°	25.2	36.2	47.2	50.4
51°	25.2	36.2	47.2	50.4
52°	25.2	36.2	47.2	50.4
53°	25.2	36.2	47.2	50.4
54°	23.6	36.2	47.2	50.4
55°	23.6	36.2	47.2	50.4
56°	23.6	36.2	47.2	48.8
57°	23.6	36.2	45.7	48.8
58°	23.6	34.6	45.7	48.8
59°	23.6	34.6	45.7	48.8
60°	23.6	34.6	45.7	48.8
62.5°	22.0	34.6	44.1	47.2
65°	20.5	31.5	44.1	45.7



TEST NUMBER: P1315954

CATALOG NUMBER: LDSQA3D20R409735D010 3LSQCA45R 1MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	20.5	29.9	40.9	44.1
70°	18.9	28.3	39.4	42.5
72.5°	15.7	26.8	36.2	39.4
75°	14.2	23.6	33.1	36.2
77.5°	12.6	20.5	29.9	31.5
80°	11.0	17.3	25.2	28.3
82.5°	7.9	12.6	20.5	22.0
85°	6.3	9.4	14.2	15.7
87.5°	4.7	4.7	7.9	7.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)