

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: P1320283

Luminaire Tested: LDSQA3D17R409840DE010 3LSQCA45R 1MB

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1320283  
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: LDSQA3D17R409840DE010 3LSQCA45R 1MB  
Description: 3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 98CRI , 3LSQCA45R 1MB TRIM  
Light Source: -  
Ballast/Driver: -

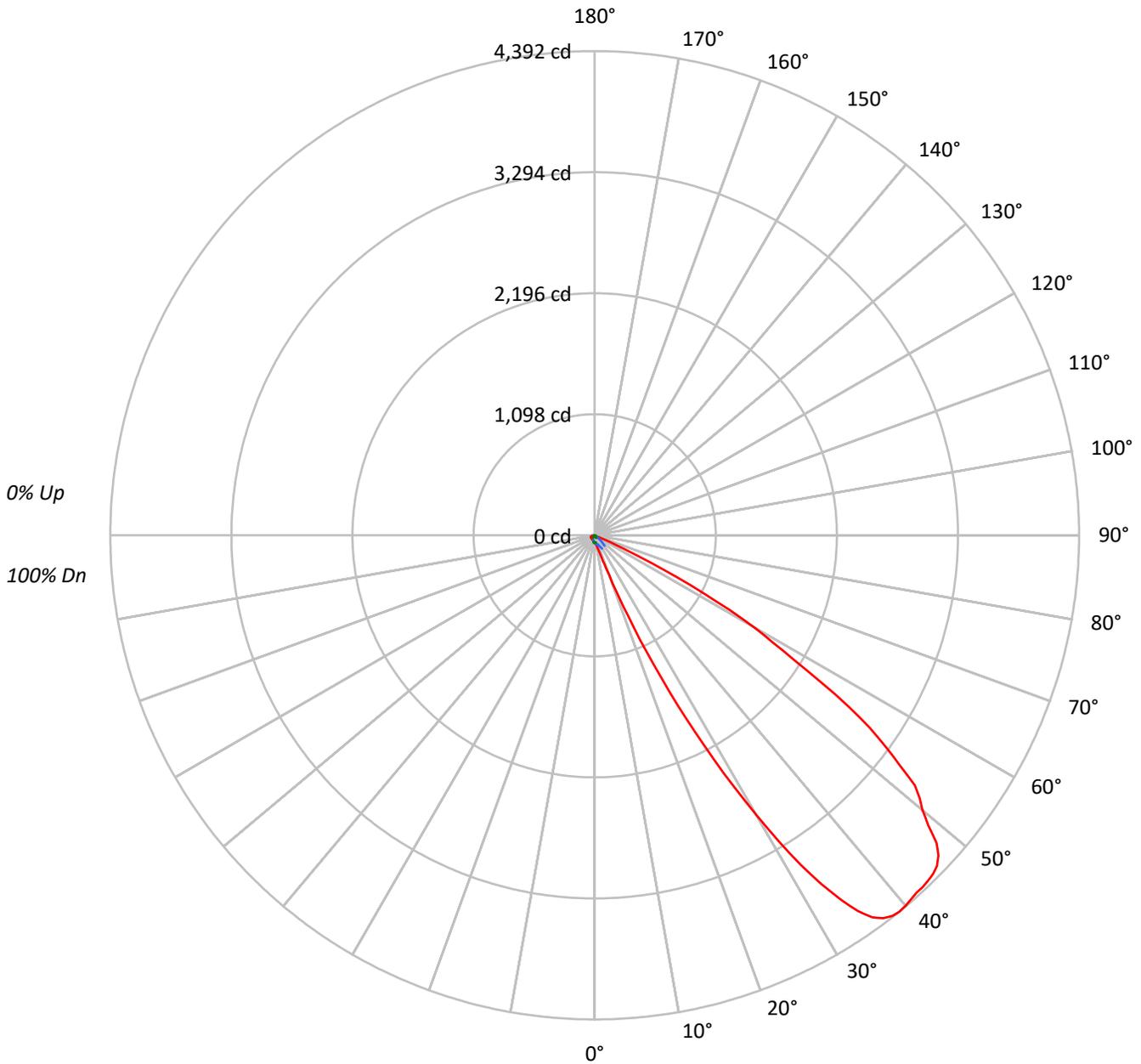
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1357.0 lumens  
Efficiency: N/A  
Efficacy: 66.5 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): 20.4  
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	100	100	100	100
1	110	106	102	99	107	104	100	97	99	97	94	96	93	91	92	90	88	86	86	86	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72	72	72	72
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60	60	60	60
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50	50	50	50
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42	42	42	42
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35	35	35	35
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29	29	29	29
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24	24	24	24
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21	21	21	21
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19	18	18	18	18

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°	135°	180°
0°	12021	12021	12021	12021	12021
5°	13364	12931	11842	10770	10563
10°	16124	13728	10895	9811	9583
15°	26442	14888	9325	8665	8879
20°	69883	17594	7771	7771	8449
25°	269496	21796	6157	7107	8285
30°	581403	28995	4952	6940	8173
35°	875124	34333	4184	6812	8389
40°	985929	34465	3642	7014	8970
45°	1057195	26718	3337	7282	9718
50°	1039089	16692	3001	7690	10690
55°	914145	8227	3003	8617	11980
60°	578634	1722	3444	9438	13296
65°	118342	489	3545	10147	14711
70°	2518	604	3777	11279	16919
75°	2462	1664	4126	12443	19097
80°	2479	1190	4959	13588	22216
85°	2371	2371	9880	14820	24700

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 47°  
 Luminance: 1076293 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	6.5	0.5
10°-20°	21.5	1.6
20°-30°	105.4	7.8
30°-40°	342.8	25.3
40°-50°	472.6	34.8
50°-60°	329.2	24.3
60°-70°	62.4	4.6
70°-80°	11.3	0.8
80°-90°	5.2	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
0°-30°	133.4	9.8
0°-40°	476.3	35.1
0°-60°	1278.1	94.2
0°-90°	1357.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1357.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	70	70	70	70	70	
5°	77	75	68	62	61	8
15°	148	84	52	49	50	54
25°	1418	115	32	37	44	730
35°	4162	163	20	32	40	2515
45°	4341	110	14	30	40	3301
55°	3044	27	10	29	40	2602
65°	290	1	9	25	36	513
75°	4	2	6	19	29	4
85°	1	1	5	8	12	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°	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
2.5°	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	71.0	69.8
5°	77.3	77.3	77.3	77.3	76.0	76.0	76.0	74.8	74.8	72.3	68.5
7.5°	82.3	82.3	82.3	82.3	81.0	79.8	78.5	78.5	77.3	71.0	66.0
10°	92.2	92.2	91.0	89.7	88.5	86.0	84.7	82.3	78.5	69.8	62.3
12.5°	112.2	109.7	108.4	105.9	102.2	97.2	92.2	88.5	79.8	67.3	58.6
15°	148.3	145.8	140.8	133.3	125.9	115.9	107.2	98.5	83.5	63.6	52.3
17.5°	211.9	204.4	196.9	184.4	165.7	148.3	129.6	113.4	88.5	59.8	47.4
20°	381.3	376.4	331.5	296.6	240.5	200.6	163.3	135.8	96.0	56.1	42.4
22.5°	786.4	734.0	660.5	540.9	421.2	310.3	225.6	170.7	103.4	51.1	37.4
25°	1418.2	1335.9	1177.7	947.1	699.1	494.7	326.5	223.1	114.7	46.1	32.4
27.5°	2147.2	2063.7	1818.2	1500.4	1095.4	746.5	466.1	295.4	129.6	41.1	28.7
30°	2923.6	2852.6	2541.0	2101.1	1544.1	1045.6	624.4	368.9	145.8	36.1	24.9
31°	3236.4	3145.4	2809.0	2340.4	1754.7	1169.0	687.9	400.0	152.0	34.9	23.7
32°	3524.3	3420.9	3071.9	2569.7	1925.4	1302.3	757.7	427.5	157.0	32.4	22.4
33°	3772.3	3651.4	3314.9	2786.5	2113.6	1426.9	830.0	453.6	160.8	29.9	21.2
34°	3982.9	3878.2	3516.8	3004.6	2280.6	1546.6	901.0	479.8	163.3	28.7	19.9
35°	4162.4	4067.6	3710.0	3170.4	2443.8	1662.5	965.8	504.7	163.3	26.2	19.9
36°	4283.2	4201.0	3877.0	3339.9	2580.9	1760.9	1020.7	527.1	163.3	23.7	18.7
37°	4349.3	4269.5	3986.6	3479.4	2715.5	1858.1	1070.5	544.6	162.0	22.4	17.4
38°	4382.9	4313.2	4067.6	3592.8	2809.0	1927.9	1114.1	558.3	160.8	19.9	17.4
39°	4391.7	4333.1	4118.7	3675.1	2899.9	1997.7	1145.3	565.8	157.0	18.7	16.2
40°	4385.4	4334.3	4146.2	3748.6	2969.7	2052.5	1167.7	568.3	153.3	16.2	16.2
41°	4373.0	4333.1	4166.1	3799.7	3025.8	2087.4	1176.4	563.3	148.3	13.7	15.0
42°	4361.8	4318.1	4174.8	3834.6	3064.4	2104.9	1175.2	553.3	140.8	12.5	15.0
43°	4361.8	4311.9	4176.1	3857.0	3083.1	2106.1	1160.2	534.6	130.9	11.2	13.7
44°	4354.3	4308.2	4182.3	3872.0	3088.1	2094.9	1136.5	514.7	119.6	10.0	13.7
45°	4340.6	4292.0	4181.1	3873.2	3079.4	2067.5	1097.9	488.5	109.7	7.5	13.7
46°	4314.4	4270.8	4169.8	3864.5	3053.2	2027.6	1051.8	462.3	98.5	6.2	12.5
47°	4262.1	4228.4	4139.9	3834.6	3013.4	1969.0	997.0	432.4	89.7	5.0	12.5
48°	4172.3	4148.7	4088.8	3768.6	2937.3	1896.7	938.4	400.0	81.0	5.0	12.5
49°	4007.8	3989.1	3954.2	3662.6	2840.1	1808.3	874.8	363.9	72.3	3.7	12.5
50°	3878.2	3858.3	3787.3	3484.4	2700.5	1696.1	805.1	327.8	62.3	2.5	11.2
51°	3792.2	3759.8	3647.7	3277.5	2497.4	1546.6	729.0	291.6	52.3	2.5	11.2
52°	3683.8	3635.2	3495.6	3091.9	2311.7	1397.0	646.8	255.5	46.1	2.5	11.2
53°	3457.0	3439.6	3301.2	2892.5	2126.0	1253.7	562.0	225.6	39.9	2.5	11.2
54°	3258.9	3232.7	3044.5	2615.8	1924.2	1094.2	474.8	199.4	33.6	2.5	11.2
55°	3044.5	2993.4	2826.4	2382.8	1687.4	947.1	391.3	172.0	27.4	2.5	10.0
56°	2774.1	2729.2	2549.8	2133.5	1469.3	797.6	327.8	140.8	21.2	2.5	10.0
57°	2445.1	2404.0	2265.6	1827.0	1242.5	651.8	266.7	113.4	16.2	2.5	10.0
58°	2127.3	2081.2	1922.9	1532.8	1003.2	517.2	223.1	92.2	12.5	2.5	10.0
59°	1883.0	1820.7	1616.3	1287.3	785.1	392.6	177.0	73.5	8.7	2.5	10.0
60°	1679.9	1628.8	1416.9	1071.7	615.6	289.1	130.9	56.1	5.0	2.5	10.0
62.5°	973.3	959.6	768.9	552.1	290.4	134.6	64.8	26.2	2.5	3.7	10.0
65°	290.4	253.0	196.9	117.1	74.8	44.9	23.7	8.7	1.2	3.7	8.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	8.7	8.7	8.7	8.7	8.7	8.7	5.0	2.5	1.2	3.7	8.7
70°	5.0	3.7	3.7	3.7	3.7	2.5	2.5	1.2	1.2	3.7	7.5
72.5°	3.7	3.7	3.7	3.7	2.5	2.5	2.5	1.2	2.5	3.7	6.2
75°	3.7	2.5	2.5	2.5	2.5	1.2	1.2	1.2	2.5	3.7	6.2
77.5°	2.5	2.5	2.5	2.5	1.2	1.2	1.2	1.2	2.5	3.7	6.2
80°	2.5	2.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3.7	5.0
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3.7	5.0
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3.7	5.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	3.7	3.7
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°	69.8	69.8	69.8	69.8
2.5°	67.3	66.0	64.8	64.8
5°	64.8	62.3	62.3	61.1
7.5°	61.1	58.6	58.6	58.6
10°	57.3	56.1	56.1	54.8
12.5°	52.3	52.3	52.3	52.3
15°	48.6	48.6	49.8	49.8
17.5°	43.6	44.9	47.4	48.6
20°	39.9	42.4	44.9	46.1
22.5°	37.4	39.9	43.6	44.9
25°	33.6	37.4	42.4	43.6
27.5°	31.2	36.1	39.9	42.4
30°	28.7	34.9	38.6	41.1
31°	28.7	33.6	38.6	41.1
32°	27.4	32.4	38.6	39.9
33°	27.4	32.4	38.6	39.9
34°	26.2	32.4	37.4	39.9
35°	26.2	32.4	37.4	39.9
36°	24.9	31.2	37.4	39.9
37°	24.9	31.2	37.4	39.9
38°	23.7	31.2	37.4	39.9
39°	23.7	31.2	37.4	39.9
40°	23.7	31.2	37.4	39.9
41°	22.4	31.2	37.4	39.9
42°	22.4	31.2	37.4	39.9
43°	22.4	29.9	37.4	39.9
44°	22.4	29.9	37.4	39.9
45°	21.2	29.9	37.4	39.9
46°	21.2	29.9	37.4	39.9
47°	21.2	29.9	37.4	39.9
48°	21.2	29.9	37.4	39.9
49°	21.2	29.9	37.4	39.9
50°	19.9	28.7	37.4	39.9
51°	19.9	28.7	37.4	39.9
52°	19.9	28.7	37.4	39.9
53°	19.9	28.7	37.4	39.9
54°	18.7	28.7	37.4	39.9
55°	18.7	28.7	37.4	39.9
56°	18.7	28.7	37.4	38.6
57°	18.7	28.7	36.1	38.6
58°	18.7	27.4	36.1	38.6
59°	18.7	27.4	36.1	38.6
60°	18.7	27.4	36.1	38.6
62.5°	17.4	27.4	34.9	37.4
65°	16.2	24.9	34.9	36.1



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**CANDELA DISTRIBUTION (continued):**

	112.5°	135°	157.5°	180°
67.5°	16.2	23.7	32.4	34.9
70°	15.0	22.4	31.2	33.6
72.5°	12.5	21.2	28.7	31.2
75°	11.2	18.7	26.2	28.7
77.5°	10.0	16.2	23.7	24.9
80°	8.7	13.7	19.9	22.4
82.5°	6.2	10.0	16.2	17.4
85°	5.0	7.5	11.2	12.5
87.5°	3.7	3.7	6.2	6.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)