

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: P1311798

Luminaire Tested: LDSQA3D20R359040D010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1311798  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-77)  
Test Lab: INNOVATION CENTER  
Issue Date: 1/29/2026  
Manufacturer: COOPER LIGHTING SOLUTIONS  
Product Line: PORTFOLIO  
Catalog Number: LDSQA3D20R359040D010 3LSQCA45R 1MMS  
Description: 3in Adjustable LED luminaire with, R35 optic, 4000K CCT AND, 90CRI , 3LSQCA45R 1MMS TRII  
Light Source: -  
Ballast/Driver: -

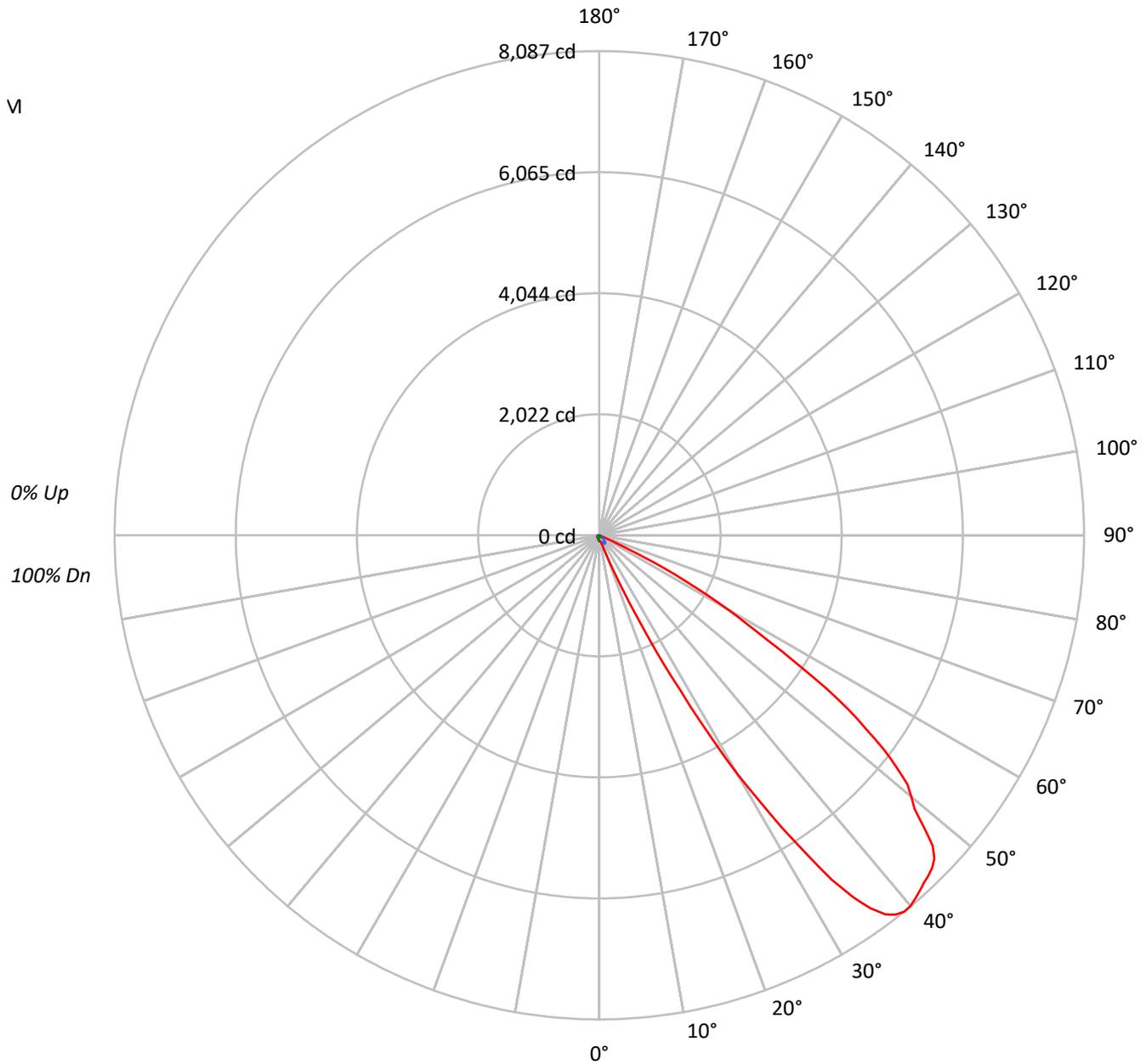
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2014.0 lumens  
Efficiency: N/A  
Efficacy: 69.9 lumens/watt  
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41  
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

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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	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	100	93	86	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	52	52	52	52	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	38	50	43	37	48	42	37	37	37	37	35
7	62	48	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	31	31	31	29
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	26	26	26	24
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	22	22	22	20
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	19	19	19	17

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

	0°	45°	90°	135°	180°
0°	15965	15965	15965	15965	15965
5°	17288	16977	15715	14142	13830
10°	18118	16526	13990	12084	12084
15°	25925	16207	11340	10377	10698
20°	64971	17320	8999	8999	9989
25°	301610	22119	6917	8285	9330
30°	916890	30009	5429	7597	9406
35°	1549590	34775	4583	7253	9167
40°	1816439	34330	3687	7352	9802
45°	1912917	24356	3093	7964	10619
50°	1820831	14602	2920	8279	11682
55°	1525776	6005	3273	9278	13662
60°	854155	1240	3754	10643	15018
65°	147438	734	3708	11859	17034
70°	2769	906	4582	12840	19235
75°	2396	1198	6055	14506	21759
80°	1785	1785	7240	16265	25291
85°	0	3557	14425	17982	28652

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 46°  
 Luminance: 1926470 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	8.4	0.4
10°-20°	23.7	1.2
20°-30°	123.6	6.1
30°-40°	533.7	26.5
40°-50°	761.3	37.8
50°-60°	471.5	23.4
60°-70°	71.8	3.6
70°-80°	13.4	0.7
80°-90°	6.7	0.3
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°	155.7	7.7
0°-40°	689.4	34.2
0°-60°	1922.1	95.4
0°-90°	2014.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2014.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	93	93	93	93	93	
5°	100	98	91	82	80	10
15°	145	91	64	58	60	52
25°	1587	116	36	44	49	950
35°	7370	165	22	34	44	4425
45°	7854	100	13	33	44	5934
55°	5082	20	11	31	46	4328
65°	362	2	9	29	42	739
75°	4	2	9	22	33	4
85°	0	2	7	9	14	1
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7	92.7
2.5°	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	96.4	92.7	90.9
5°	100.0	100.0	98.2	98.2	98.2	98.2	98.2	98.2	94.5	90.9	85.4
7.5°	101.8	101.8	100.0	100.0	100.0	100.0	98.2	96.4	92.7	85.4	80.0
10°	103.6	103.6	103.6	103.6	101.8	100.0	98.2	94.5	89.1	80.0	74.5
12.5°	116.4	116.4	114.5	110.9	107.3	103.6	100.0	92.7	81.8	72.7	67.3
15°	145.4	143.6	140.0	134.5	127.3	118.2	110.9	90.9	74.5	63.6	60.0
17.5°	203.6	200.0	194.5	176.4	160.0	143.6	129.1	90.9	67.3	56.4	52.7
20°	354.5	356.3	318.2	274.5	238.2	198.2	161.8	94.5	60.0	49.1	47.3
22.5°	740.0	710.9	620.0	514.5	392.7	303.6	229.1	103.6	52.7	41.8	41.8
25°	1587.2	1476.3	1256.3	949.0	669.0	474.5	332.7	116.4	47.3	36.4	38.2
27.5°	2898.0	2798.0	2356.2	1774.4	1178.1	716.3	450.9	132.7	41.8	30.9	34.5
30°	4610.6	4334.3	3757.9	2908.9	1969.0	1096.3	605.4	150.9	34.5	27.3	32.7
31°	5145.1	5017.9	4316.1	3365.2	2307.1	1301.7	670.9	156.4	32.7	27.3	30.9
32°	5779.6	5554.2	4925.1	3865.2	2650.7	1485.4	749.0	161.8	30.9	23.6	30.9
33°	6346.9	6128.7	5363.3	4305.2	2998.0	1694.4	832.7	163.6	27.3	23.6	29.1
34°	6943.2	6645.0	5886.9	4765.2	3354.3	1919.9	909.0	165.4	25.5	21.8	29.1
35°	7370.4	7072.3	6337.8	5128.8	3661.6	2119.9	996.3	165.4	23.6	21.8	27.3
36°	7701.3	7439.5	6726.8	5503.3	3967.0	2299.9	1065.4	165.4	20.0	20.0	27.3
37°	7928.6	7679.5	6988.6	5825.1	4199.7	2459.8	1127.2	165.4	18.2	20.0	27.3
38°	8039.5	7832.2	7241.4	6059.6	4425.2	2585.3	1176.3	161.8	16.4	18.2	25.5
39°	8086.8	7917.7	7395.9	6257.8	4594.3	2694.4	1212.7	158.2	14.5	18.2	25.5
40°	8079.5	7932.2	7483.2	6394.1	4730.6	2768.9	1232.6	152.7	12.7	16.4	25.5
41°	8037.7	7910.4	7528.6	6510.5	4812.4	2819.8	1238.1	147.3	10.9	16.4	23.6
42°	7990.4	7874.0	7543.2	6572.3	4865.1	2836.2	1223.6	140.0	10.9	14.5	23.6
43°	7941.3	7834.0	7543.2	6592.3	4877.9	2825.3	1199.9	127.3	9.1	14.5	23.6
44°	7901.3	7799.5	7519.5	6586.9	4850.6	2783.5	1156.3	112.7	7.3	14.5	23.6
45°	7854.0	7754.1	7488.6	6552.3	4797.9	2712.6	1101.7	100.0	5.5	12.7	23.6
46°	7770.4	7692.2	7434.1	6481.4	4714.2	2614.4	1032.7	90.9	3.6	12.7	21.8
47°	7608.6	7541.3	7328.6	6376.0	4603.3	2498.0	961.8	81.8	3.6	12.7	21.8
48°	7283.2	7281.4	7117.7	6179.6	4427.0	2352.6	887.2	72.7	3.6	12.7	21.8
49°	6968.6	6935.9	6732.3	5834.2	4174.3	2178.0	809.0	65.5	1.8	12.7	21.8
50°	6795.9	6725.0	6390.5	5426.9	3850.7	1936.2	725.4	54.5	1.8	10.9	21.8
51°	6615.9	6514.1	6119.6	5059.7	3465.2	1703.5	634.5	43.6	1.8	10.9	20.0
52°	6290.5	6194.2	5752.4	4708.8	3090.7	1465.4	547.2	36.4	1.8	10.9	21.8
53°	5939.6	5801.4	5321.5	4323.4	2761.6	1254.5	458.2	30.9	1.8	10.9	20.0
54°	5497.8	5436.0	4885.1	3850.7	2376.2	1050.8	376.3	25.5	1.8	10.9	20.0
55°	5081.5	4990.6	4417.9	3367.1	2027.1	861.8	314.5	20.0	1.8	10.9	20.0
56°	4550.6	4414.3	3877.9	2923.5	1672.6	694.5	265.4	16.4	1.8	10.9	20.0
57°	3917.9	3772.5	3348.9	2430.8	1312.6	529.1	221.8	12.7	1.8	10.9	20.0
58°	3314.3	3188.9	2734.4	1876.2	989.0	367.2	183.6	9.1	1.8	9.1	20.0
59°	2863.5	2725.3	2274.4	1443.5	687.2	270.9	138.2	7.3	1.8	10.9	20.0
60°	2479.8	2301.7	1830.8	1118.1	490.9	194.5	101.8	3.6	3.6	10.9	20.0
62.5°	1429.0	1261.7	874.5	454.5	201.8	100.0	49.1	1.8	3.6	10.9	20.0
65°	361.8	321.8	209.1	98.2	56.4	34.5	18.2	1.8	3.6	9.1	18.2



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	12.7	12.7	12.7	10.9	9.1	7.3	3.6	1.8	3.6	9.1	18.2
70°	5.5	5.5	5.5	3.6	3.6	1.8	1.8	1.8	3.6	9.1	16.4
72.5°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	5.5	9.1	14.5
75°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	5.5	9.1	14.5
77.5°	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8	5.5	7.3	12.7
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	5.5	7.3	10.9
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	5.5	7.3	9.1
85°	0.0	0.0	0.0	0.0	0.0	1.8	0.0	1.8	5.5	7.3	7.3
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	5.5	7.3	5.5
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):**

	135°	157.5°	180°
0°	92.7	92.7	92.7
2.5°	87.3	87.3	87.3
5°	81.8	81.8	80.0
7.5°	76.4	74.5	74.5
10°	69.1	69.1	69.1
12.5°	63.6	63.6	63.6
15°	58.2	60.0	60.0
17.5°	52.7	56.4	56.4
20°	49.1	52.7	54.5
22.5°	45.5	49.1	50.9
25°	43.6	47.3	49.1
27.5°	40.0	45.5	49.1
30°	38.2	43.6	47.3
31°	38.2	43.6	45.5
32°	36.4	43.6	45.5
33°	36.4	43.6	45.5
34°	36.4	41.8	45.5
35°	34.5	41.8	43.6
36°	34.5	41.8	43.6
37°	34.5	41.8	45.5
38°	34.5	41.8	43.6
39°	32.7	41.8	43.6
40°	32.7	41.8	43.6
41°	32.7	41.8	43.6
42°	32.7	41.8	43.6
43°	32.7	41.8	43.6
44°	32.7	40.0	43.6
45°	32.7	40.0	43.6
46°	32.7	41.8	43.6
47°	32.7	41.8	45.5
48°	32.7	40.0	43.6
49°	30.9	40.0	43.6
50°	30.9	40.0	43.6
51°	30.9	41.8	45.5
52°	30.9	41.8	45.5
53°	30.9	41.8	45.5
54°	30.9	41.8	43.6
55°	30.9	41.8	45.5
56°	30.9	41.8	43.6
57°	30.9	41.8	43.6
58°	30.9	40.0	43.6
59°	30.9	40.0	43.6
60°	30.9	40.0	43.6
62.5°	29.1	40.0	43.6
65°	29.1	38.2	41.8



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**CANDELA DISTRIBUTION (continued):**

	135°	157.5°	180°
67.5°	27.3	38.2	40.0
70°	25.5	36.4	38.2
72.5°	23.6	34.5	36.4
75°	21.8	30.9	32.7
77.5°	18.2	27.3	30.9
80°	16.4	23.6	25.5
82.5°	12.7	20.0	21.8
85°	9.1	14.5	14.5
87.5°	3.6	7.3	7.3
90°	0.0	0.0	0.0

(END OF REPORT)