

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: P1309643

Luminaire Tested: LDSQA3D24R159030D010 3LSQCA45R 1MMS

Issue Date: 1/29/2026

**Test Information**

Test Method: LM-79-2019  
Report Number: P1309643  
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: LDSQA3D24R159030D010 3LSQCA45R 1MMS  
Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 90CRI , 3LSQCA45R 1MMS TRII  
Light Source: -  
Ballast/Driver: -

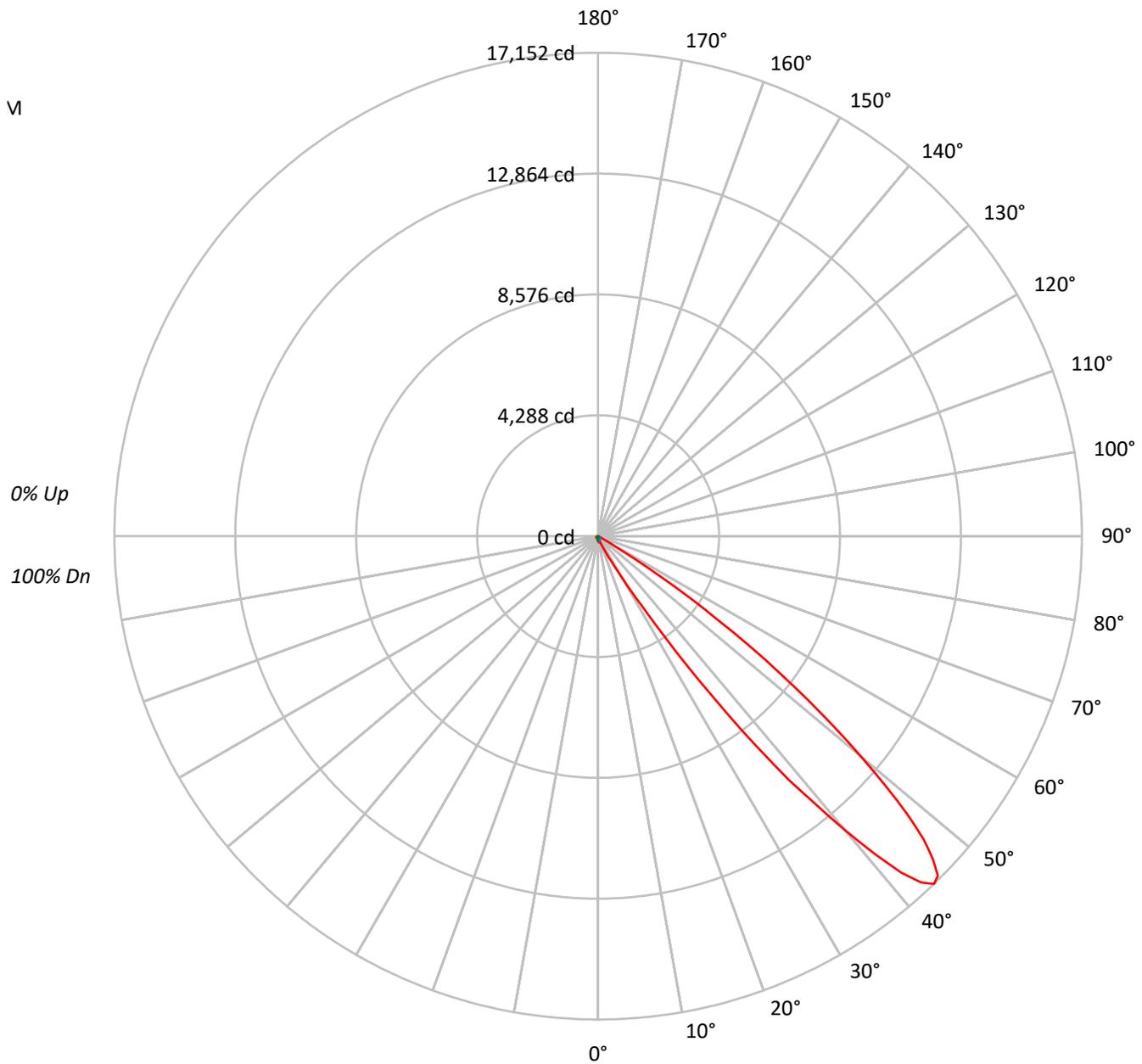
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1915.0 lumens  
Efficiency: N/A  
Efficacy: 66.5 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): 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	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°	29261	29261	29261	29261	29261
5°	36305	32346	26416	23114	22786
10°	35728	27718	20373	18030	18362
15°	29615	19738	14638	14977	15993
20°	51445	15743	11198	12939	14699
25°	114662	18870	9064	11972	13796
30°	342884	23168	7975	11773	14438
35°	1319960	26091	7232	12047	15264
40°	3063766	22752	6880	12455	16322
45°	4149744	17195	6040	13493	17682
50°	3253752	10235	6136	14334	19452
55°	1561748	4594	5735	15493	21198
60°	142704	654	5270	16430	23663
65°	15567	0	4686	17116	25673
70°	3827	0	5791	18279	27896
75°	3793	1264	7652	20362	31740
80°	3769	3769	9422	20828	34118
85°	3754	3754	15018	18772	37742

**MAXIMUM LUMINANCE 45°-90°:**

Horizontal Angle: 0°  
 Vertical Angle: 45°  
 Luminance: 4149744 cd/sqm



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	14.5	0.8
10°-20°	30.2	1.6
20°-30°	72.4	3.8
30°-40°	396.1	20.7
40°-50°	959.2	50.1
50°-60°	382.7	20.0
60°-70°	33.1	1.7
70°-80°	18.7	1.0
80°-90°	8.2	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°	117.1	6.1
0°-40°	513.2	26.8
0°-60°	1855.0	96.9
0°-90°	1915.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1915.0	100.0

**CANDELA DISTRIBUTION:**

	0°	45°	90°	135°	180°	Flux
0°	170	170	170	170	170	
5°	210	187	153	134	132	20
15°	166	111	82	84	90	58
25°	603	99	48	63	73	364
35°	6278	124	34	57	73	4436
45°	17038	71	25	55	73	12019
55°	5201	15	19	52	71	4845
65°	38	0	12	42	63	98
75°	6	2	12	31	48	6
85°	2	2	8	10	19	2
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	169.9	169.9	169.9	169.9	169.9	169.9	169.9	169.9	169.9	169.9	169.9
2.5°	190.9	190.9	192.9	190.9	190.9	190.9	190.9	189.0	189.0	189.0	183.3
5°	210.0	210.0	210.0	210.0	208.1	208.1	208.1	206.2	206.2	204.3	187.1
7.5°	217.7	217.7	215.8	215.8	213.9	213.9	211.9	210.0	208.1	206.2	179.5
10°	204.3	204.3	204.3	202.4	202.4	200.5	198.6	196.7	194.8	190.9	158.5
12.5°	181.4	181.4	183.3	181.4	179.5	177.6	173.8	171.8	169.9	166.1	131.8
15°	166.1	166.1	166.1	164.2	162.3	158.5	156.6	152.8	150.8	145.1	110.7
17.5°	211.9	211.9	210.0	206.2	198.6	192.9	183.3	175.7	166.1	154.7	95.5
20°	280.7	280.7	276.9	273.0	263.5	254.0	238.7	225.3	210.0	196.7	85.9
22.5°	406.7	412.4	401.0	387.6	374.2	351.3	330.3	309.3	282.6	259.7	87.8
25°	603.4	609.1	603.4	572.8	548.0	517.5	477.4	435.4	389.5	347.5	99.3
27.5°	977.6	981.4	971.9	897.4	857.3	777.1	706.5	637.8	561.4	485.0	108.8
30°	1724.2	1726.1	1665.0	1516.1	1384.3	1208.7	1059.7	916.5	796.2	674.0	116.5
31°	2270.3	2216.9	2087.0	1907.5	1697.5	1460.7	1256.4	1071.2	891.7	760.0	118.4
32°	2883.2	2875.6	2659.8	2348.6	2067.9	1772.0	1464.5	1227.8	1021.5	842.1	120.3
33°	3694.8	3698.6	3358.7	2992.1	2531.9	2134.7	1731.9	1407.3	1159.0	939.4	124.1
34°	4962.6	4664.8	4265.7	3769.2	3142.9	2545.3	2022.1	1615.4	1283.1	1033.0	124.1
35°	6278.2	5978.4	5539.3	4787.0	3927.7	3091.4	2367.7	1838.8	1432.1	1134.2	124.1
36°	7752.3	7498.4	6833.9	5873.4	4777.4	3606.9	2734.3	2096.6	1579.1	1225.9	122.2
37°	9344.8	8972.4	8235.4	7187.1	5720.7	4332.5	3181.1	2352.4	1726.1	1325.1	118.4
38°	10962.1	10626.0	9696.1	8426.3	6847.2	5098.2	3627.9	2598.7	1861.7	1399.6	112.7
39°	12187.9	12004.6	11082.4	9663.7	7746.6	5823.8	4088.1	2862.2	2004.9	1474.1	106.9
40°	13627.6	13331.7	12457.2	10702.4	8810.1	6562.7	4538.7	3095.2	2123.3	1533.3	101.2
41°	14941.3	14567.1	13463.4	11767.8	9661.7	7227.2	4966.4	3335.8	2218.8	1567.6	97.4
42°	16067.9	15632.5	14479.2	12680.6	10374.0	7758.0	5308.2	3507.6	2308.5	1596.3	91.7
43°	16797.3	16421.1	15286.9	13366.0	10983.1	8244.9	5627.1	3687.1	2363.9	1615.4	84.0
44°	17152.5	16772.5	15674.6	13795.7	11357.3	8537.1	5833.3	3811.2	2425.0	1640.2	78.3
45°	17037.9	16652.2	15590.5	13803.3	11473.8	8642.1	5921.2	3866.6	2457.4	1663.1	70.6
46°	16512.8	16241.7	15172.4	13444.3	11252.3	8529.4	5871.5	3824.6	2446.0	1663.1	63.0
47°	15775.8	15466.4	14448.7	12827.6	10715.8	8239.2	5671.0	3696.7	2375.3	1624.9	55.4
48°	14771.4	14507.9	13438.6	11848.0	9892.8	7607.2	5218.5	3488.5	2264.6	1550.5	47.7
49°	13511.2	13144.6	12149.7	10595.5	8819.7	6709.8	4624.7	3137.2	2087.0	1445.4	42.0
50°	12144.0	11691.5	10923.9	9341.0	7710.3	5753.1	3843.7	2652.2	1836.9	1308.0	38.2
51°	10805.5	10345.3	9614.0	8267.9	6526.4	4773.6	3100.9	2117.6	1512.3	1118.9	32.5
52°	9417.3	9031.6	8212.5	7154.7	5587.0	3868.5	2583.5	1791.1	1256.4	939.4	26.7
53°	8034.9	7771.4	6992.4	5921.2	4489.1	3160.1	2109.9	1533.3	1096.0	803.9	21.0
54°	6650.6	6362.2	5770.3	4815.6	3618.4	2493.7	1789.1	1283.1	950.9	700.8	19.1
55°	5201.3	5052.4	4506.3	3671.8	2741.9	1989.6	1451.2	1103.7	796.2	586.2	15.3
56°	4006.0	3838.0	3339.6	2663.7	2037.4	1558.1	1174.3	901.3	674.0	490.7	11.5
57°	2623.6	2451.7	2121.4	1859.8	1483.6	1136.1	897.4	710.3	548.0	406.7	9.5
58°	1550.5	1393.9	1342.3	1145.7	989.1	771.4	662.6	528.9	404.8	320.8	5.7
59°	712.2	723.7	643.5	603.4	548.0	490.7	402.9	353.2	276.9	231.0	3.8
60°	414.3	391.4	381.9	341.8	303.6	269.2	242.5	213.9	173.8	148.9	1.9
62.5°	141.3	135.6	139.4	126.0	118.4	114.6	105.0	89.7	74.5	61.1	0.0
65°	38.2	38.2	36.3	34.4	32.5	30.6	28.6	24.8	22.9	19.1	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	13.4	13.4	11.5	11.5	9.5	9.5	7.6	7.6	5.7	5.7	0.0
70°	7.6	7.6	7.6	5.7	5.7	5.7	3.8	3.8	3.8	1.9	0.0
72.5°	5.7	5.7	5.7	5.7	5.7	5.7	3.8	3.8	3.8	1.9	1.9
75°	5.7	5.7	5.7	3.8	3.8	3.8	3.8	3.8	3.8	3.8	1.9
77.5°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8
80°	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	3.8	1.9	3.8
82.5°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	3.8
85°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9	1.9
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9
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):**

	67.5°	90°	112.5°	135°	157.5°	180°
0°	169.9	169.9	169.9	169.9	169.9	169.9
2.5°	175.7	168.0	158.5	152.8	150.8	148.9
5°	168.0	152.8	141.3	133.7	131.8	131.8
7.5°	150.8	133.7	122.2	118.4	116.5	116.5
10°	131.8	116.5	106.9	103.1	105.0	105.0
12.5°	110.7	97.4	93.6	93.6	95.5	97.4
15°	89.7	82.1	82.1	84.0	87.8	89.7
17.5°	74.5	70.6	72.6	76.4	80.2	84.0
20°	61.1	61.1	64.9	70.6	76.4	80.2
22.5°	51.6	53.5	59.2	64.9	72.6	76.4
25°	43.9	47.7	53.5	63.0	70.6	72.6
27.5°	38.2	43.9	51.6	61.1	68.7	72.6
30°	32.5	40.1	49.6	59.2	68.7	72.6
31°	30.6	38.2	47.7	59.2	68.7	72.6
32°	28.6	38.2	47.7	59.2	68.7	72.6
33°	26.7	36.3	47.7	57.3	68.7	72.6
34°	24.8	36.3	47.7	59.2	68.7	72.6
35°	22.9	34.4	45.8	57.3	66.8	72.6
36°	21.0	34.4	45.8	57.3	68.7	72.6
37°	19.1	34.4	45.8	57.3	66.8	72.6
38°	19.1	32.5	43.9	57.3	66.8	72.6
39°	17.2	30.6	43.9	57.3	66.8	72.6
40°	15.3	30.6	42.0	55.4	66.8	72.6
41°	13.4	28.6	42.0	55.4	66.8	72.6
42°	11.5	28.6	42.0	55.4	66.8	72.6
43°	9.5	26.7	40.1	55.4	66.8	72.6
44°	9.5	26.7	40.1	55.4	66.8	72.6
45°	7.6	24.8	38.2	55.4	66.8	72.6
46°	7.6	24.8	38.2	53.5	66.8	72.6
47°	5.7	24.8	38.2	53.5	66.8	72.6
48°	5.7	22.9	38.2	53.5	66.8	72.6
49°	3.8	22.9	38.2	53.5	66.8	72.6
50°	3.8	22.9	36.3	53.5	66.8	72.6
51°	3.8	22.9	36.3	53.5	66.8	72.6
52°	3.8	21.0	36.3	53.5	66.8	72.6
53°	3.8	21.0	36.3	53.5	66.8	72.6
54°	3.8	21.0	34.4	53.5	66.8	72.6
55°	3.8	19.1	34.4	51.6	66.8	70.6
56°	3.8	19.1	34.4	51.6	66.8	70.6
57°	3.8	19.1	32.5	51.6	66.8	70.6
58°	3.8	17.2	32.5	49.6	64.9	70.6
59°	3.8	17.2	30.6	49.6	64.9	68.7
60°	3.8	15.3	30.6	47.7	63.0	68.7
62.5°	3.8	13.4	26.7	45.8	61.1	64.9
65°	3.8	11.5	24.8	42.0	59.2	63.0



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**CANDELA DISTRIBUTION (continued):**

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.8	11.5	22.9	40.1	55.4	61.1
70°	3.8	11.5	21.0	36.3	53.5	55.4
72.5°	5.7	11.5	19.1	34.4	49.6	51.6
75°	7.6	11.5	17.2	30.6	45.8	47.7
77.5°	7.6	11.5	15.3	26.7	40.1	42.0
80°	7.6	9.5	13.4	21.0	32.5	34.4
82.5°	7.6	9.5	9.5	17.2	24.8	26.7
85°	5.7	7.6	7.6	9.5	17.2	19.1
87.5°	5.7	7.6	3.8	5.7	7.6	7.6
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)