

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: P1326021

Luminaire Tested: LDSQA3D09R20W2N902765DE010 3LSQCA45R 1MMS_2700K

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1326021
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-74)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: PORTFOLIO
Catalog Number: LDSQA3D09R20W2N902765DE010 3LSQCA45R 1MMS_2700K
Description: 3in Adjustable Tunable White LED luminaire with, R20 optic, 2700K CCT AND, 90CRI ,
3LSQCA45R 1MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

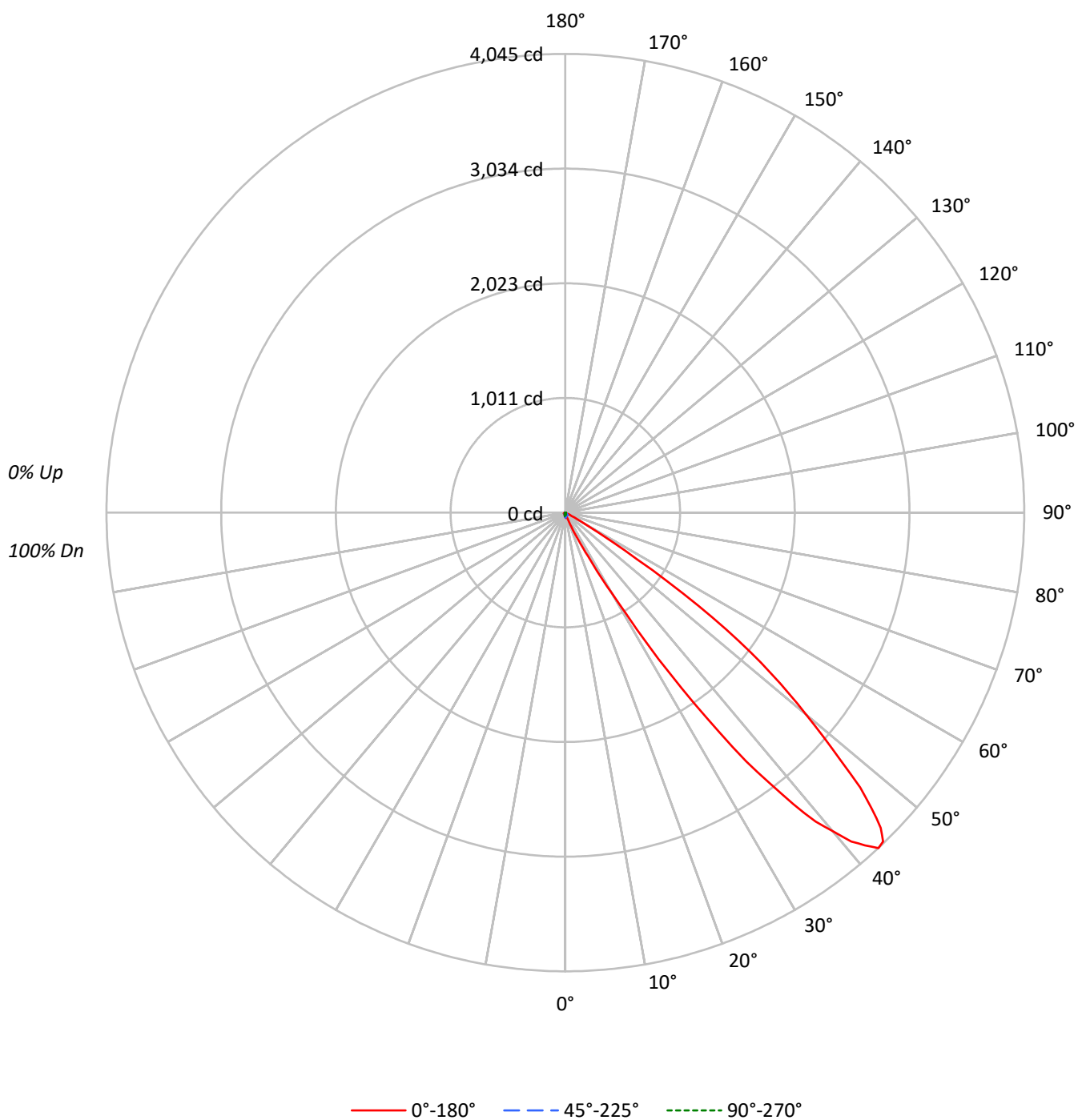
Lumens per Lamp: N/A
Luminaire Lumens: 562.0 lumens
Efficiency: N/A
Efficacy: 62.4 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 9
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



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
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	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	65	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	38	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	38	32	46	38	32	44	37	32	43	36	31	29		
8	57	42	33	27	55	42	33	27	40	33	27	39	32	27	38	31	27	25		
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	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	6734	6734	6734	6734	6734
5°	7849	7313	6293	5480	5290
10°	7765	6645	4984	4250	4162
15°	6775	5081	3673	3388	3584
20°	10062	4252	2712	2896	3189
25°	43364	4409	2109	2603	3116
30°	163945	5349	1790	2526	3043
35°	497019	6433	1661	2544	3217
40°	824170	6407	1416	2720	3440
45°	957944	4384	1291	2825	3726
50°	743615	2411	1286	2974	4233
55°	430394	1591	1261	3333	4594
60°	72781	379	1102	3444	5098
65°	5583	0	1304	3871	5827
70°	806	0	1611	4280	6647
75°	732	333	1730	4924	7719
80°	496	496	2579	5256	8926
85°	988	988	4150	5138	9485

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 957944 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.4	0.6
10°-20°	7.0	1.3
20°-30°	22.4	4.0
30°-40°	143.3	25.5
40°-50°	262.3	46.7
50°-60°	107.8	19.2
60°-70°	9.1	1.6
70°-80°	4.5	0.8
80°-90°	2.1	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°	32.8	5.8
0°-40°	176.1	31.3
0°-60°	546.3	97.2
0°-90°	562.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	562.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	39	39	39	39	39	
5°	45	42	36	32	31	4
15°	38	28	21	19	20	12
25°	228	23	11	14	16	150
35°	2364	31	8	12	15	1496
45°	3933	18	5	12	15	2824
55°	1433	5	4	11	15	1253
65°	14	0	3	10	14	45
75°	1	0	3	7	12	1
85°	0	0	2	3	5	0
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°	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1	39.1
2.5°	42.8	42.8	42.8	42.3	42.3	42.8	42.3	42.3	42.3	42.3	41.7
5°	45.4	45.4	45.4	45.4	45.4	45.4	45.4	44.9	44.9	44.4	42.3
7.5°	46.5	46.5	46.5	46.5	45.9	45.9	45.9	45.9	45.4	44.9	41.2
10°	44.4	44.4	44.4	43.8	43.8	43.8	43.3	43.3	42.8	42.3	38.0
12.5°	40.1	40.1	40.1	40.1	39.6	39.6	39.1	39.1	38.6	38.0	33.3
15°	38.0	38.0	38.0	37.5	37.5	37.0	36.4	35.9	35.4	34.3	28.5
17.5°	41.2	41.2	40.7	40.7	39.6	38.6	38.0	36.4	35.4	33.8	25.4
20°	54.9	55.5	53.3	51.8	50.7	47.5	45.9	43.3	41.2	38.6	23.2
22.5°	110.9	108.8	105.1	99.3	92.4	86.6	76.1	67.6	61.8	53.9	22.7
25°	228.2	226.0	216.0	207.6	186.4	170.1	147.4	128.9	109.9	91.4	23.2
27.5°	433.6	419.3	416.7	378.2	348.6	306.3	262.5	225.5	191.7	154.2	24.8
30°	824.4	808.1	750.5	692.4	612.7	522.3	436.3	356.0	288.9	228.2	26.9
31°	1046.3	1062.1	994.5	877.8	760.0	644.3	526.6	424.6	338.0	262.5	28.0
32°	1375.3	1306.1	1234.8	1114.9	943.8	795.9	648.0	501.2	387.1	299.5	29.0
33°	1686.4	1645.7	1536.9	1387.4	1182.0	974.4	782.7	591.5	447.3	344.4	29.6
34°	2018.1	1973.2	1885.0	1670.5	1445.0	1173.0	917.4	695.6	519.2	388.2	30.1
35°	2364.0	2345.0	2174.9	1989.0	1711.7	1383.7	1079.5	809.7	589.4	428.3	30.6
36°	2712.0	2650.8	2517.7	2246.2	1956.8	1578.6	1249.6	915.8	660.7	475.9	30.6
37°	2974.0	2960.3	2783.9	2519.3	2179.1	1786.7	1396.4	1033.6	732.5	516.5	30.6
38°	3262.9	3208.5	3029.5	2760.1	2388.3	1977.4	1550.1	1136.0	800.7	553.5	30.1
39°	3506.4	3425.6	3244.9	2978.8	2571.0	2122.1	1672.1	1235.3	860.9	584.1	29.6
40°	3665.9	3609.9	3421.3	3121.9	2736.9	2258.9	1795.7	1317.2	905.8	607.4	28.5
41°	3841.7	3748.8	3562.4	3261.3	2857.3	2379.3	1873.3	1371.1	940.6	622.7	27.5
42°	3946.9	3870.8	3649.5	3354.8	2943.4	2448.0	1936.7	1412.3	961.8	630.6	25.4
43°	4045.1	3941.6	3726.1	3409.2	3000.4	2496.6	1965.8	1431.3	966.5	630.6	22.7
44°	4031.9	3933.6	3710.2	3416.6	3013.1	2510.8	1977.9	1431.8	959.1	622.7	20.1
45°	3933.1	3835.4	3634.2	3352.2	2967.7	2482.8	1953.6	1410.7	938.5	609.0	18.0
46°	3752.0	3654.8	3500.6	3244.4	2883.2	2419.4	1897.1	1364.7	904.2	586.8	15.8
47°	3555.0	3460.4	3302.5	3070.7	2739.0	2306.4	1815.2	1300.3	856.1	554.6	14.3
48°	3269.2	3210.1	3051.6	2853.6	2538.8	2129.5	1671.6	1195.2	791.7	512.8	12.1
49°	3016.8	2954.5	2815.6	2602.7	2277.9	1923.5	1499.9	1067.4	707.7	466.4	10.6
50°	2775.4	2721.0	2592.7	2352.4	2042.3	1674.8	1268.1	906.3	602.1	408.8	9.0
51°	2539.3	2498.7	2367.7	2146.9	1832.1	1483.6	1098.5	754.7	497.5	339.1	8.5
52°	2302.2	2297.4	2155.4	1932.0	1627.8	1292.9	933.8	636.9	422.0	284.7	7.9
53°	2047.1	2016.5	1892.4	1691.7	1399.6	1094.3	791.7	537.1	363.4	242.4	6.9
54°	1756.6	1722.3	1589.2	1408.0	1143.4	896.3	638.0	434.1	302.6	204.9	6.3
55°	1433.4	1374.8	1278.1	1092.2	893.1	684.0	492.8	343.8	241.9	170.6	5.3
56°	1087.5	1028.8	974.4	837.6	655.4	510.2	367.1	263.5	189.1	134.7	4.8
57°	756.3	753.1	663.9	558.8	438.4	347.5	251.4	185.9	133.6	104.6	3.7
58°	490.6	474.3	417.2	356.5	286.8	217.1	161.6	126.2	90.8	71.3	3.2
59°	343.8	311.1	280.4	237.7	180.6	136.8	104.0	80.8	62.8	49.6	2.1
60°	211.3	204.4	183.8	144.7	117.2	96.7	77.6	59.7	45.9	35.4	1.1
62.5°	60.2	61.3	55.5	49.1	42.3	36.4	32.7	28.0	23.2	18.5	0.0
65°	13.7	13.2	14.3	13.2	12.1	12.1	10.6	9.5	8.5	7.9	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°	4.2	4.2	3.7	3.7	3.7	3.2	3.2	2.6	2.6	2.1	0.0
70°	1.6	1.6	1.6	1.6	1.6	1.1	1.1	1.1	0.5	0.5	0.0
72.5°	1.6	1.6	1.6	1.1	1.1	1.1	1.1	1.1	0.5	0.5	0.5
75°	1.1	1.1	1.1	1.1	1.1	1.1	1.1	0.5	0.5	0.5	0.5
77.5°	1.1	1.1	1.1	1.1	1.1	0.5	1.1	0.5	0.5	0.5	0.5
80°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
85°	0.5	0.5	0.5	0.5	0.0	0.0	0.5	0.5	0.5	0.0	0.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	39.1	39.1	39.1	39.1	39.1	39.1
2.5°	40.7	38.6	37.0	35.4	34.9	34.9
5°	39.6	36.4	33.3	31.7	30.6	30.6
7.5°	36.4	32.7	29.6	28.0	27.5	27.5
10°	32.7	28.5	25.4	24.3	24.3	23.8
12.5°	28.5	24.3	22.2	21.7	21.7	21.7
15°	23.8	20.6	19.0	19.0	19.5	20.1
17.5°	20.1	16.9	16.4	17.4	18.5	18.5
20°	16.9	14.8	14.8	15.8	16.9	17.4
22.5°	14.3	12.7	13.2	14.8	16.4	16.9
25°	12.7	11.1	12.1	13.7	15.3	16.4
27.5°	10.6	10.0	11.1	13.2	15.3	15.8
30°	9.0	9.0	10.6	12.7	14.8	15.3
31°	8.5	8.5	10.6	12.7	14.8	15.3
32°	7.9	8.5	10.0	12.7	14.8	15.3
33°	7.4	7.9	10.0	12.1	14.8	15.3
34°	6.9	7.9	10.0	12.1	14.8	15.3
35°	6.3	7.9	10.0	12.1	14.8	15.3
36°	5.8	7.4	9.5	12.1	14.8	15.3
37°	5.3	7.4	9.5	12.1	14.8	15.3
38°	4.8	6.9	9.5	12.1	14.8	15.3
39°	4.8	6.9	9.0	12.1	14.3	15.3
40°	4.2	6.3	9.0	12.1	14.3	15.3
41°	3.7	6.3	9.0	11.6	14.3	15.3
42°	3.2	5.8	8.5	11.6	14.3	15.3
43°	2.6	5.8	8.5	11.6	14.3	15.3
44°	2.6	5.3	8.5	11.6	14.3	15.3
45°	2.1	5.3	8.5	11.6	14.3	15.3
46°	1.6	5.3	8.5	11.6	14.3	15.3
47°	1.6	4.8	7.9	11.6	14.3	15.3
48°	1.1	4.8	7.9	11.6	14.3	15.3
49°	1.1	4.8	7.9	11.6	14.3	15.8
50°	1.1	4.8	7.9	11.1	14.3	15.8
51°	0.5	4.8	7.9	11.1	14.3	15.8
52°	0.5	4.8	7.4	11.1	14.8	15.8
53°	0.5	4.2	7.4	11.1	14.8	15.8
54°	0.5	4.2	7.4	11.1	14.8	15.3
55°	0.5	4.2	7.4	11.1	14.3	15.3
56°	0.5	3.7	7.4	11.1	14.3	15.3
57°	0.5	3.7	6.9	10.6	14.3	14.8
58°	0.5	3.7	6.9	10.6	14.3	14.8
59°	0.5	3.7	6.9	10.6	13.7	14.8
60°	1.1	3.2	6.3	10.0	13.7	14.8
62.5°	1.1	3.2	6.3	10.0	13.2	14.3
65°	1.1	3.2	5.8	9.5	13.2	14.3



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.1	2.6	5.3	9.0	12.7	13.7
70°	1.1	3.2	5.3	8.5	12.1	13.2
72.5°	1.6	2.6	4.8	7.9	11.6	12.7
75°	1.6	2.6	4.8	7.4	11.1	11.6
77.5°	2.1	2.6	4.2	6.3	10.0	10.6
80°	2.1	2.6	3.7	5.3	8.5	9.0
82.5°	2.1	2.6	2.6	4.2	6.3	6.9
85°	1.6	2.1	2.1	2.6	4.2	4.8
87.5°	1.6	2.1	1.6	1.1	2.1	2.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)