

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: P1325946

Luminaire Tested: LDSQA3D09R20W2N902750DE010 3LSQCA45R 1MMS_5000K

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1325946
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: LDSQA3D09R20W2N902750DE010 3LSQCA45R 1MMS_5000K
Description: 3in Adjustable Tunable White LED luminaire with, R20 optic, 5000K CCT AND, 90CRI ,
3LSQCA45R 1MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

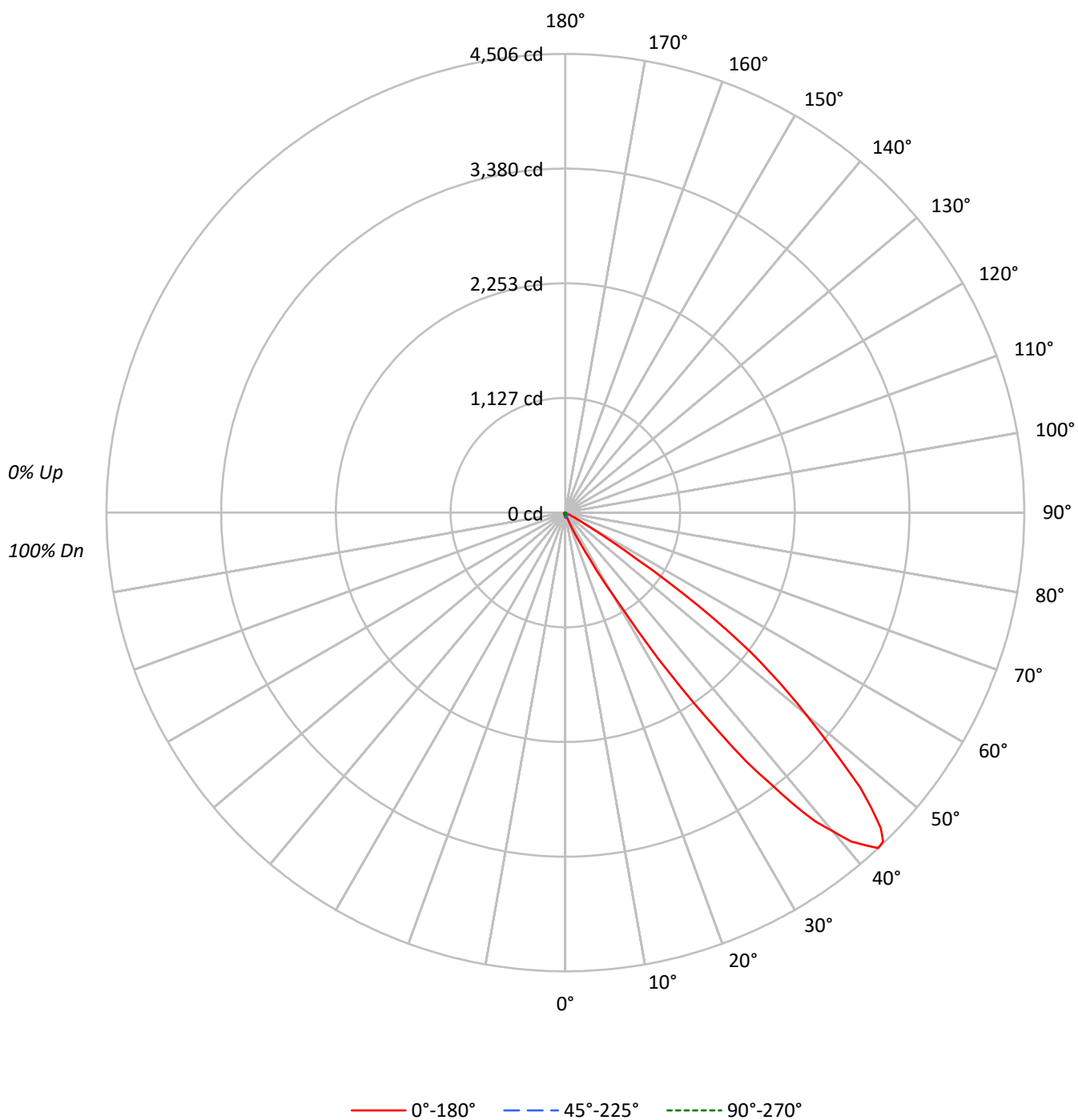
Lumens per Lamp: N/A
Luminaire Lumens: 626.0 lumens
Efficiency: N/A
Efficacy: 69.6 lumens/watt
Spacing Criteria (0/90/45): 3.39 / 0.51 / 1.13
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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
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°	7492	7492	7492	7492	7492
5°	8748	8143	7019	6103	5895
10°	8639	7415	5561	4739	4634
15°	7560	5670	4083	3780	3994
20°	11216	4747	3024	3226	3556
25°	48286	4922	2356	2907	3458
30°	182618	5966	1989	2804	3401
35°	553617	7169	1850	2838	3595
40°	918010	7149	1596	3035	3844
45°	1067035	4871	1437	3142	4165
50°	828308	2679	1420	3322	4716
55°	479397	1772	1411	3723	5134
60°	81048	413	1206	3858	5683
65°	6235	0	1426	4320	6479
70°	906	0	1762	4733	7402
75°	799	399	1930	5456	8584
80°	595	595	2876	5852	9918
85°	1186	1186	4742	5730	10473

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 1067035 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3.7	0.6
10°-20°	7.8	1.3
20°-30°	25.0	4.0
30°-40°	159.6	25.5
40°-50°	292.2	46.7
50°-60°	120.1	19.2
60°-70°	10.1	1.6
70°-80°	5.0	0.8
80°-90°	2.4	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°	36.6	5.8
0°-40°	196.2	31.3
0°-60°	608.5	97.2
0°-90°	626.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	626.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	44	44	44	44	44	
5°	51	47	41	35	34	5
15°	42	32	23	21	22	13
25°	254	26	12	15	18	167
35°	2633	34	9	14	17	1667
45°	4381	20	6	13	17	3146
55°	1597	6	5	12	17	1396
65°	15	0	4	11	16	50
75°	1	1	3	8	13	1
85°	1	1	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°	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5	43.5
2.5°	47.7	47.7	47.7	47.1	47.1	47.7	47.1	47.1	47.1	47.1	46.5
5°	50.6	50.6	50.6	50.6	50.6	50.6	50.6	50.0	50.0	49.4	47.1
7.5°	51.8	51.8	51.8	51.8	51.2	51.2	51.2	51.2	50.6	50.0	45.9
10°	49.4	49.4	49.4	48.8	48.8	48.8	48.2	48.2	47.7	47.1	42.4
12.5°	44.7	44.7	44.7	44.7	44.1	44.1	43.5	43.5	42.9	42.4	37.1
15°	42.4	42.4	42.4	41.8	41.8	41.2	40.6	40.0	39.4	38.2	31.8
17.5°	45.9	45.9	45.3	45.3	44.1	42.9	42.4	40.6	39.4	37.7	28.2
20°	61.2	61.8	59.4	57.7	56.5	52.9	51.2	48.2	45.9	42.9	25.9
22.5°	123.5	121.2	117.1	110.6	103.0	96.5	84.7	75.3	68.8	60.0	25.3
25°	254.1	251.8	240.6	231.2	207.7	189.4	164.1	143.5	122.4	101.8	25.9
27.5°	483.0	467.1	464.2	421.2	388.3	341.2	292.4	251.2	213.6	171.8	27.6
30°	918.3	900.1	836.0	771.3	682.4	581.8	485.9	396.5	321.8	254.1	30.0
31°	1165.4	1183.1	1107.8	977.7	846.6	717.7	586.5	473.0	376.5	292.4	31.2
32°	1531.9	1454.8	1375.4	1241.9	1051.3	886.6	721.8	558.3	431.2	333.6	32.4
33°	1878.4	1833.1	1711.9	1545.4	1316.6	1085.4	871.9	658.9	498.3	383.6	32.9
34°	2247.9	2197.9	2099.6	1860.8	1609.6	1306.6	1021.9	774.8	578.3	432.4	33.5
35°	2633.2	2612.0	2422.6	2215.5	1906.7	1541.3	1202.5	901.9	656.5	477.1	34.1
36°	3020.9	2952.6	2804.4	2502.0	2179.6	1758.4	1391.9	1020.1	736.0	530.1	34.1
37°	3312.7	3297.4	3100.9	2806.2	2427.3	1990.2	1555.4	1151.3	816.0	575.4	34.1
38°	3634.5	3573.9	3374.4	3074.4	2660.3	2202.6	1726.6	1265.4	891.9	616.5	33.5
39°	3905.7	3815.7	3614.5	3318.0	2863.8	2363.8	1862.5	1376.0	958.9	650.7	32.9
40°	4083.3	4021.0	3811.0	3477.4	3048.5	2516.1	2000.2	1467.2	1008.9	676.5	31.8
41°	4279.2	4175.7	3968.0	3632.7	3182.7	2650.3	2086.7	1527.2	1047.7	693.6	30.6
42°	4396.3	4311.6	4065.1	3736.8	3278.6	2726.7	2157.3	1573.1	1071.3	702.4	28.2
43°	4505.7	4390.4	4150.4	3797.4	3342.1	2780.9	2189.6	1594.3	1076.6	702.4	25.3
44°	4491.0	4381.6	4132.8	3805.7	3356.2	2796.7	2203.2	1594.9	1068.3	693.6	22.4
45°	4381.0	4272.2	4048.0	3733.9	3305.6	2765.6	2176.1	1571.3	1045.4	678.3	20.0
46°	4179.2	4071.0	3899.2	3613.9	3211.5	2695.0	2113.1	1520.1	1007.2	653.6	17.6
47°	3959.8	3854.5	3678.6	3420.3	3050.9	2569.1	2022.0	1448.4	953.6	617.7	15.9
48°	3641.5	3575.6	3399.2	3178.5	2827.9	2372.0	1861.9	1331.3	881.9	571.2	13.5
49°	3360.3	3290.9	3136.2	2899.1	2537.3	2142.6	1670.8	1188.9	788.3	519.5	11.8
50°	3091.5	3030.9	2887.9	2620.3	2274.9	1865.5	1412.5	1009.5	670.7	455.3	10.0
51°	2828.5	2783.2	2637.3	2391.4	2040.8	1652.5	1223.6	840.7	554.2	377.7	9.4
52°	2564.4	2559.1	2400.8	2152.0	1813.1	1440.1	1040.1	709.5	470.0	317.1	8.8
53°	2280.2	2246.1	2107.9	1884.3	1559.0	1218.9	881.9	598.3	404.7	270.0	7.6
54°	1956.7	1918.4	1770.2	1568.4	1273.7	998.3	710.7	483.6	337.1	228.3	7.1
55°	1596.6	1531.3	1423.7	1216.6	994.8	761.8	548.9	383.0	269.4	190.0	5.9
56°	1211.3	1146.0	1085.4	933.0	730.1	568.3	408.9	293.6	210.6	150.0	5.3
57°	842.4	838.9	739.5	622.4	488.3	387.1	280.0	207.1	148.8	116.5	4.1
58°	546.5	528.3	464.8	397.1	319.4	241.8	180.0	140.6	101.2	79.4	3.5
59°	383.0	346.5	312.4	264.7	201.2	152.4	115.9	90.0	70.0	55.3	2.4
60°	235.3	227.7	204.7	161.2	130.6	107.7	86.5	66.5	51.2	39.4	1.2
62.5°	67.1	68.2	61.8	54.7	47.1	40.6	36.5	31.2	25.9	20.6	0.0
65°	15.3	14.7	15.9	14.7	13.5	13.5	11.8	10.6	9.4	8.8	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°	4.7	4.7	4.1	4.1	4.1	3.5	3.5	2.9	2.9	2.4	0.0
70°	1.8	1.8	1.8	1.8	1.8	1.2	1.2	1.2	0.6	0.6	0.0
72.5°	1.8	1.8	1.8	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6
75°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	0.6	0.6	0.6	0.6
77.5°	1.2	1.2	1.2	1.2	1.2	0.6	1.2	0.6	0.6	0.6	0.6
80°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
82.5°	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
85°	0.6	0.6	0.6	0.6	0.0	0.0	0.6	0.6	0.6	0.0	0.6
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6
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°	43.5	43.5	43.5	43.5	43.5	43.5
2.5°	45.3	42.9	41.2	39.4	38.8	38.8
5°	44.1	40.6	37.1	35.3	34.1	34.1
7.5°	40.6	36.5	32.9	31.2	30.6	30.6
10°	36.5	31.8	28.2	27.1	27.1	26.5
12.5°	31.8	27.1	24.7	24.1	24.1	24.1
15°	26.5	22.9	21.2	21.2	21.8	22.4
17.5°	22.4	18.8	18.2	19.4	20.6	20.6
20°	18.8	16.5	16.5	17.6	18.8	19.4
22.5°	15.9	14.1	14.7	16.5	18.2	18.8
25°	14.1	12.4	13.5	15.3	17.1	18.2
27.5°	11.8	11.2	12.4	14.7	17.1	17.6
30°	10.0	10.0	11.8	14.1	16.5	17.1
31°	9.4	9.4	11.8	14.1	16.5	17.1
32°	8.8	9.4	11.2	14.1	16.5	17.1
33°	8.2	8.8	11.2	13.5	16.5	17.1
34°	7.6	8.8	11.2	13.5	16.5	17.1
35°	7.1	8.8	11.2	13.5	16.5	17.1
36°	6.5	8.2	10.6	13.5	16.5	17.1
37°	5.9	8.2	10.6	13.5	16.5	17.1
38°	5.3	7.6	10.6	13.5	16.5	17.1
39°	5.3	7.6	10.0	13.5	15.9	17.1
40°	4.7	7.1	10.0	13.5	15.9	17.1
41°	4.1	7.1	10.0	12.9	15.9	17.1
42°	3.5	6.5	9.4	12.9	15.9	17.1
43°	2.9	6.5	9.4	12.9	15.9	17.1
44°	2.9	5.9	9.4	12.9	15.9	17.1
45°	2.4	5.9	9.4	12.9	15.9	17.1
46°	1.8	5.9	9.4	12.9	15.9	17.1
47°	1.8	5.3	8.8	12.9	15.9	17.1
48°	1.2	5.3	8.8	12.9	15.9	17.1
49°	1.2	5.3	8.8	12.9	15.9	17.6
50°	1.2	5.3	8.8	12.4	15.9	17.6
51°	0.6	5.3	8.8	12.4	15.9	17.6
52°	0.6	5.3	8.2	12.4	16.5	17.6
53°	0.6	4.7	8.2	12.4	16.5	17.6
54°	0.6	4.7	8.2	12.4	16.5	17.1
55°	0.6	4.7	8.2	12.4	15.9	17.1
56°	0.6	4.1	8.2	12.4	15.9	17.1
57°	0.6	4.1	7.6	11.8	15.9	16.5
58°	0.6	4.1	7.6	11.8	15.9	16.5
59°	0.6	4.1	7.6	11.8	15.3	16.5
60°	1.2	3.5	7.1	11.2	15.3	16.5
62.5°	1.2	3.5	7.1	11.2	14.7	15.9
65°	1.2	3.5	6.5	10.6	14.7	15.9



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	1.2	2.9	5.9	10.0	14.1	15.3
70°	1.2	3.5	5.9	9.4	13.5	14.7
72.5°	1.8	2.9	5.3	8.8	12.9	14.1
75°	1.8	2.9	5.3	8.2	12.4	12.9
77.5°	2.4	2.9	4.7	7.1	11.2	11.8
80°	2.4	2.9	4.1	5.9	9.4	10.0
82.5°	2.4	2.9	2.9	4.7	7.1	7.6
85°	1.8	2.4	2.4	2.9	4.7	5.3
87.5°	1.8	2.4	1.8	1.2	2.4	2.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)