

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: IRiS

Report Number: P1307370

Luminaire Tested: P3SQAS24R409027D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307370
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: IRiS
Catalog Number: P3SQAS24R409027D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R40 optic, 2700K CCT AND, 90CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

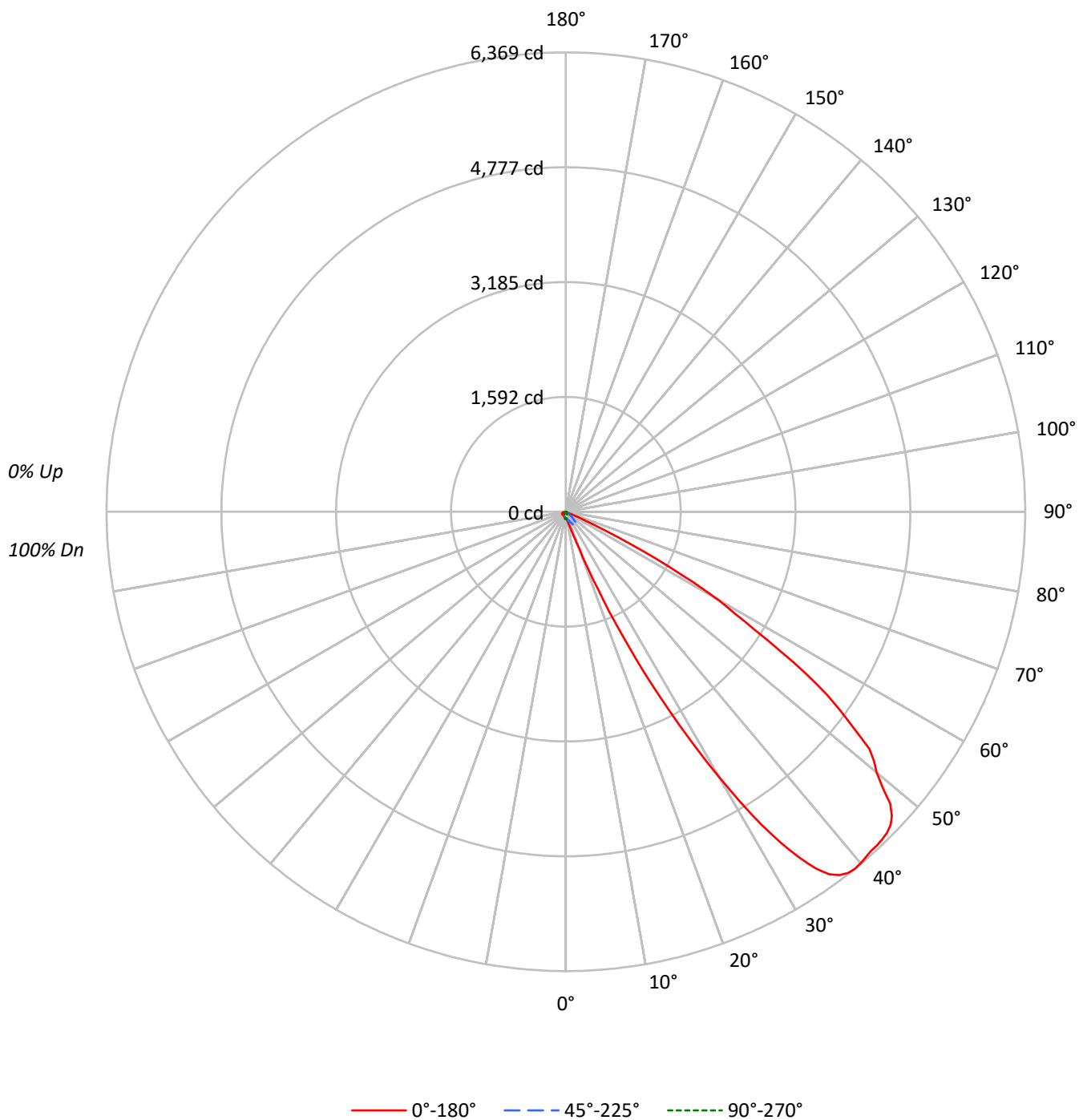
Lumens per Lamp: N/A
Luminaire Lumens: 1968.0 lumens
Efficiency: N/A
Efficacy: 68.3 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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

TEST NUMBER: P1307370

CATALOG NUMBER: P3SQAS24R409027D010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1307370

CATALOG NUMBER: P3SQAS24R409027D010 E3SQCA451MB

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
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	107	104	100	97	99	97	94	96	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	72		
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60		
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35		
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29		
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24		
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	20	31	24	20	30	24	19	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	17429	17429	17429	17429	17429
5°	19380	18740	17184	15628	15317
10°	23381	19919	15809	14218	13903
15°	38352	21592	13533	12570	12891
20°	101351	25512	11253	11253	12261
25°	390828	31601	8931	10299	12029
30°	843190	42060	7179	10063	11852
35°	1269144	49786	6076	9882	12152
40°	1429860	49978	5283	10162	12995
45°	1533183	38726	4847	10570	14078
50°	1506950	24221	4367	11146	15486
55°	1325742	11950	4354	12491	17355
60°	839172	2480	4994	13709	19289
65°	171604	734	5175	14711	21354
70°	3626	906	5438	16365	24573
75°	3593	2396	5989	18033	27681
80°	3570	1785	7141	19737	32233
85°	3557	3557	14227	21341	35766

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1560891 cd/sqm

TEST NUMBER: P1307370

CATALOG NUMBER: P3SQAS24R409027D010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.5	0.5
10°-20°	31.2	1.6
20°-30°	152.9	7.8
30°-40°	497.2	25.3
40°-50°	685.4	34.8
50°-60°	477.4	24.3
60°-70°	90.5	4.6
70°-80°	16.4	0.8
80°-90°	7.6	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°	193.5	9.8
0°-40°	690.7	35.1
0°-60°	1853.5	94.2
0°-90°	1968.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1968.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	101	101	101	101	101	
5°	112	108	99	90	89	11
15°	215	121	76	70	72	78
25°	2057	166	47	54	63	1059
35°	6036	237	29	47	58	3648
45°	6295	159	20	43	58	4787
55°	4415	40	14	42	58	3774
65°	421	2	13	36	52	745
75°	5	4	9	27	42	5
85°	2	2	7	11	18	1
90°	0	0	0	0	0	

TEST NUMBER: P1307370

CATALOG NUMBER: P3SQAS24R409027D010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	101.2	101.2	101.2	101.2	101.2	101.2	101.2	101.2	101.2	101.2	101.2
2.5°	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	104.8	103.0	101.2
5°	112.1	112.1	112.1	112.1	110.2	110.2	110.2	108.4	108.4	104.8	99.4
7.5°	119.3	119.3	119.3	119.3	117.5	115.7	113.9	113.9	112.1	103.0	95.8
10°	133.7	133.7	131.9	130.1	128.3	124.7	122.9	119.3	113.9	101.2	90.4
12.5°	162.7	159.0	157.2	153.6	148.2	141.0	133.7	128.3	115.7	97.6	84.9
15°	215.1	211.5	204.2	193.4	182.5	168.1	155.4	142.8	121.1	92.2	75.9
17.5°	307.2	296.4	285.6	267.5	240.4	215.1	188.0	164.5	128.3	86.8	68.7
20°	553.0	545.8	480.8	430.1	348.8	291.0	236.8	197.0	139.2	81.3	61.4
22.5°	1140.4	1064.5	957.9	784.4	610.9	450.0	327.1	247.6	150.0	74.1	54.2
25°	2056.7	1937.5	1707.9	1373.6	1013.9	717.5	473.5	323.5	166.3	66.9	47.0
27.5°	3114.0	2992.9	2636.9	2176.0	1588.6	1082.6	675.9	428.3	188.0	59.6	41.6
30°	4240.0	4137.0	3685.2	3047.2	2239.3	1516.4	905.5	535.0	211.5	52.4	36.1
31°	4693.6	4561.7	4073.7	3394.2	2544.7	1695.3	997.6	580.2	220.5	50.6	34.3
32°	5111.1	4961.1	4455.1	3726.7	2792.3	1888.7	1098.9	619.9	227.7	47.0	32.5
33°	5470.8	5295.5	4807.5	4041.2	3065.2	2069.4	1203.7	657.9	233.1	43.4	30.7
34°	5776.2	5624.4	5100.3	4357.5	3307.4	2242.9	1306.7	695.8	236.8	41.6	28.9
35°	6036.5	5899.1	5380.4	4597.9	3544.2	2411.0	1400.7	732.0	236.8	38.0	28.9
36°	6211.8	6092.5	5622.6	4843.7	3743.0	2553.8	1480.2	764.5	236.8	34.3	27.1
37°	6307.6	6191.9	5781.7	5046.1	3938.2	2694.7	1552.5	789.8	235.0	32.5	25.3
38°	6356.4	6255.2	5899.1	5210.5	4073.7	2795.9	1615.8	809.7	233.1	28.9	25.3
39°	6369.0	6284.1	5973.2	5329.8	4205.7	2897.2	1660.9	820.5	227.7	27.1	23.5
40°	6360.0	6285.9	6013.0	5436.5	4306.9	2976.7	1693.5	824.1	222.3	23.5	23.5
41°	6341.9	6284.1	6041.9	5510.6	4388.2	3027.3	1706.1	816.9	215.1	19.9	21.7
42°	6325.7	6262.4	6054.6	5561.2	4444.2	3052.6	1704.3	802.5	204.2	18.1	21.7
43°	6325.7	6253.4	6056.4	5593.7	4471.3	3054.4	1682.6	775.3	189.8	16.3	19.9
44°	6314.8	6248.0	6065.4	5615.4	4478.6	3038.1	1648.3	746.4	173.5	14.5	19.9
45°	6294.9	6224.5	6063.6	5617.2	4465.9	2998.4	1592.3	708.5	159.0	10.8	19.9
46°	6257.0	6193.7	6047.3	5604.5	4428.0	2940.5	1525.4	670.5	142.8	9.0	18.1
47°	6181.1	6132.3	6004.0	5561.2	4370.1	2855.6	1445.9	627.1	130.1	7.2	18.1
48°	6051.0	6016.6	5929.9	5465.4	4259.9	2750.8	1360.9	580.2	117.5	7.2	18.1
49°	5812.4	5785.3	5734.7	5311.8	4118.9	2622.4	1268.7	527.7	104.8	5.4	18.1
50°	5624.4	5595.5	5492.5	5053.3	3916.5	2459.8	1167.5	475.3	90.4	3.6	16.3
51°	5499.7	5452.7	5290.1	4753.3	3621.9	2242.9	1057.3	422.9	75.9	3.6	16.3
52°	5342.5	5272.0	5069.6	4484.0	3352.6	2026.0	938.0	370.5	66.9	3.6	16.3
53°	5013.5	4988.2	4787.6	4194.8	3083.3	1818.2	815.1	327.1	57.8	3.6	16.3
54°	4726.2	4688.2	4415.3	3793.6	2790.5	1586.8	688.6	289.2	48.8	3.6	16.3
55°	4415.3	4341.2	4099.0	3455.6	2447.1	1373.6	567.5	249.4	39.8	3.6	14.5
56°	4023.1	3958.1	3697.8	3094.2	2130.8	1156.7	475.3	204.2	30.7	3.6	14.5
57°	3546.0	3486.3	3285.7	2649.6	1801.9	945.2	386.8	164.5	23.5	3.6	14.5
58°	3085.1	3018.2	2788.7	2223.0	1454.9	750.0	323.5	133.7	18.1	3.6	14.5
59°	2730.9	2640.5	2344.1	1867.0	1138.6	569.3	256.6	106.6	12.7	3.6	14.5
60°	2436.3	2362.2	2054.9	1554.3	892.8	419.3	189.8	81.3	7.2	3.6	14.5
62.5°	1411.5	1391.6	1115.1	800.6	421.1	195.2	94.0	38.0	3.6	5.4	14.5
65°	421.1	366.9	285.6	169.9	108.4	65.1	34.3	12.7	1.8	5.4	12.7



TEST NUMBER: P1307370

CATALOG NUMBER: P3SQAS24R409027D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	12.7	12.7	12.7	12.7	12.7	12.7	7.2	3.6	1.8	5.4	12.7
70°	7.2	5.4	5.4	5.4	5.4	3.6	3.6	1.8	1.8	5.4	10.8
72.5°	5.4	5.4	5.4	5.4	3.6	3.6	3.6	1.8	3.6	5.4	9.0
75°	5.4	3.6	3.6	3.6	3.6	1.8	1.8	1.8	3.6	5.4	9.0
77.5°	3.6	3.6	3.6	3.6	1.8	1.8	1.8	1.8	3.6	5.4	9.0
80°	3.6	3.6	1.8	1.8	1.8	1.8	1.8	1.8	1.8	5.4	7.2
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	5.4	7.2
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	5.4	7.2
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	1.8	5.4	5.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1307370

CATALOG NUMBER: P3SQAS24R409027D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	101.2	101.2	101.2	101.2
2.5°	97.6	95.8	94.0	94.0
5°	94.0	90.4	90.4	88.6
7.5°	88.6	84.9	84.9	84.9
10°	83.1	81.3	81.3	79.5
12.5°	75.9	75.9	75.9	75.9
15°	70.5	70.5	72.3	72.3
17.5°	63.3	65.1	68.7	70.5
20°	57.8	61.4	65.1	66.9
22.5°	54.2	57.8	63.3	65.1
25°	48.8	54.2	61.4	63.3
27.5°	45.2	52.4	57.8	61.4
30°	41.6	50.6	56.0	59.6
31°	41.6	48.8	56.0	59.6
32°	39.8	47.0	56.0	57.8
33°	39.8	47.0	56.0	57.8
34°	38.0	47.0	54.2	57.8
35°	38.0	47.0	54.2	57.8
36°	36.1	45.2	54.2	57.8
37°	36.1	45.2	54.2	57.8
38°	34.3	45.2	54.2	57.8
39°	34.3	45.2	54.2	57.8
40°	34.3	45.2	54.2	57.8
41°	32.5	45.2	54.2	57.8
42°	32.5	45.2	54.2	57.8
43°	32.5	43.4	54.2	57.8
44°	32.5	43.4	54.2	57.8
45°	30.7	43.4	54.2	57.8
46°	30.7	43.4	54.2	57.8
47°	30.7	43.4	54.2	57.8
48°	30.7	43.4	54.2	57.8
49°	30.7	43.4	54.2	57.8
50°	28.9	41.6	54.2	57.8
51°	28.9	41.6	54.2	57.8
52°	28.9	41.6	54.2	57.8
53°	28.9	41.6	54.2	57.8
54°	27.1	41.6	54.2	57.8
55°	27.1	41.6	54.2	57.8
56°	27.1	41.6	54.2	56.0
57°	27.1	41.6	52.4	56.0
58°	27.1	39.8	52.4	56.0
59°	27.1	39.8	52.4	56.0
60°	27.1	39.8	52.4	56.0
62.5°	25.3	39.8	50.6	54.2
65°	23.5	36.1	50.6	52.4



TEST NUMBER: P1307370

CATALOG NUMBER: P3SQAS24R409027D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	23.5	34.3	47.0	50.6
70°	21.7	32.5	45.2	48.8
72.5°	18.1	30.7	41.6	45.2
75°	16.3	27.1	38.0	41.6
77.5°	14.5	23.5	34.3	36.1
80°	12.7	19.9	28.9	32.5
82.5°	9.0	14.5	23.5	25.3
85°	7.2	10.8	16.3	18.1
87.5°	5.4	5.4	9.0	9.0
90°	0.0	0.0	0.0	0.0

(END OF REPORT)