

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: P1317424

Luminaire Tested: P3SQAS20R359830D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1317424
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: IRiS
Catalog Number: P3SQAS20R359830D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 98CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

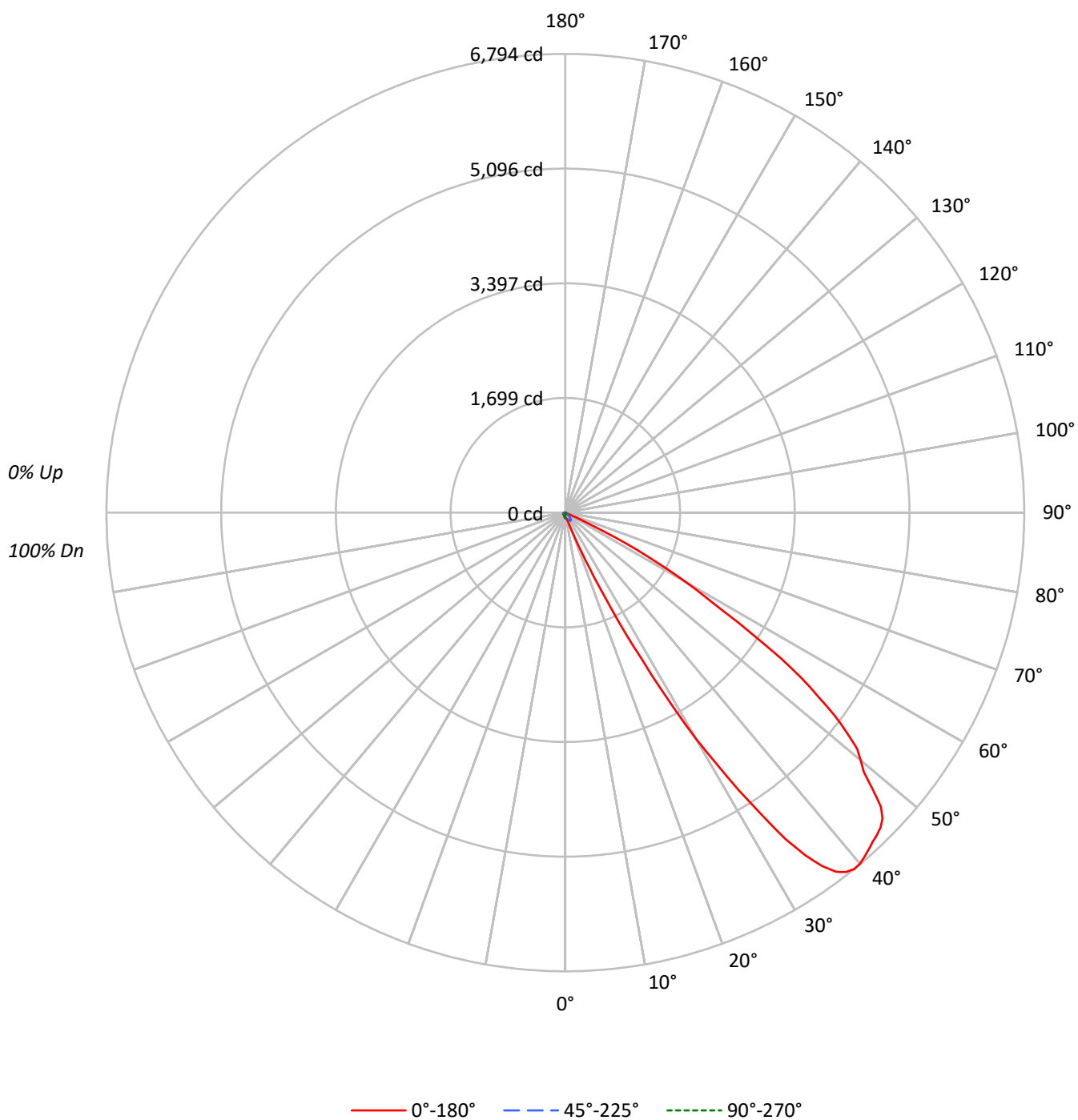
Lumens per Lamp: N/A
Luminaire Lumens: 1692.0 lumens
Efficiency: N/A
Efficacy: 61.8 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 27.4
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: P1317424

CATALOG NUMBER: P3SQAS20R359830D010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1317424

CATALOG NUMBER: P3SQAS20R359830D010 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	100	97	94	96	93	91	92	90	89	87		
2	100	93	86	81	98	91	85	80	87	83	78	84	80	77	81	78	75	73		
3	91	81	73	67	89	79	72	66	76	70	65	74	68	64	71	67	63	61		
4	83	71	62	55	80	69	61	55	67	60	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	61	52	45	58	51	45	56	50	44	55	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	38	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29		
8	57	42	33	27	55	41	33	27	40	32	27	39	32	26	38	31	26	24		
9	52	38	29	23	50	37	29	23	36	28	23	35	28	22	34	27	22	20		
10	48	34	25	19	46	33	25	19	32	25	19	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	13416	13416	13416	13416	13416
5°	14522	14263	13208	11877	11618
10°	15232	13885	11752	10143	10143
15°	21788	13622	9539	8719	8986
20°	54579	14552	7551	7551	8394
25°	253382	18585	5796	6974	7829
30°	770306	25216	4554	6384	7895
35°	1301837	29224	3847	6097	7716
40°	1526015	28844	3080	6183	8251
45°	1607079	20459	2606	6698	8939
50°	1529724	12271	2465	6966	9833
55°	1281844	5044	2762	7807	11470
60°	717617	1068	3169	8956	12641
65°	123884	611	3097	9943	14304
70°	2316	755	3827	10776	16164
75°	2063	998	5057	12177	18299
80°	1488	1488	6050	13588	21224
85°	0	2964	12054	15018	24108

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1618474 cd/sqm

TEST NUMBER: P1317424

CATALOG NUMBER: P3SQAS20R359830D010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.0	0.4
10°-20°	19.9	1.2
20°-30°	103.8	6.1
30°-40°	448.4	26.5
40°-50°	639.6	37.8
50°-60°	396.1	23.4
60°-70°	60.3	3.6
70°-80°	11.3	0.7
80°-90°	5.6	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°	130.8	7.7
0°-40°	579.1	34.2
0°-60°	1614.8	95.4
0°-90°	1692.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1692.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	78	78	78	78	78	
5°	84	82	76	69	67	8
15°	122	76	54	49	50	44
25°	1333	98	30	37	41	798
35°	6192	139	18	29	37	3718
45°	6598	84	11	28	37	4985
55°	4269	17	9	26	38	3636
65°	304	2	8	24	35	621
75°	3	2	8	18	28	3
85°	0	2	6	8	12	1
90°	0	0	0	0	0	

TEST NUMBER: P1317424

CATALOG NUMBER: P3SQAS20R359830D010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9	77.9
2.5°	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	81.0	77.9	76.4
5°	84.0	84.0	82.5	82.5	82.5	82.5	82.5	82.5	79.4	76.4	71.8
7.5°	85.5	85.5	84.0	84.0	84.0	84.0	82.5	81.0	77.9	71.8	67.2
10°	87.1	87.1	87.1	87.1	85.5	84.0	82.5	79.4	74.8	67.2	62.6
12.5°	97.8	97.8	96.2	93.2	90.1	87.1	84.0	77.9	68.7	61.1	56.5
15°	122.2	120.7	117.6	113.0	106.9	99.3	93.2	76.4	62.6	53.5	50.4
17.5°	171.1	168.0	163.4	148.2	134.4	120.7	108.4	76.4	56.5	47.3	44.3
20°	297.8	299.4	267.3	230.6	200.1	166.5	135.9	79.4	50.4	41.2	39.7
22.5°	621.6	597.2	520.8	432.3	329.9	255.1	192.5	87.1	44.3	35.1	35.1
25°	1333.4	1240.2	1055.4	797.3	562.1	398.6	279.5	97.8	39.7	30.5	32.1
27.5°	2434.7	2350.7	1979.5	1490.7	989.8	601.8	378.8	111.5	35.1	26.0	29.0
30°	3873.5	3641.3	3157.1	2443.8	1654.2	921.0	508.6	126.8	29.0	22.9	27.5
31°	4322.5	4215.6	3626.0	2827.2	1938.3	1093.6	563.6	131.4	27.5	22.9	26.0
32°	4855.6	4666.2	4137.7	3247.2	2226.9	1247.9	629.3	135.9	26.0	19.9	26.0
33°	5332.1	5148.8	4505.8	3616.9	2518.7	1423.5	699.5	137.5	22.9	19.9	24.4
34°	5833.1	5582.6	4945.7	4003.3	2818.0	1612.9	763.7	139.0	21.4	18.3	24.4
35°	6192.0	5941.6	5324.5	4308.8	3076.2	1780.9	837.0	139.0	19.9	18.3	22.9
36°	6470.0	6250.1	5651.4	4623.4	3332.8	1932.2	895.1	139.0	16.8	16.8	22.9
37°	6661.0	6451.7	5871.3	4893.8	3528.3	2066.6	947.0	139.0	15.3	16.8	22.9
38°	6754.1	6580.0	6083.6	5090.8	3717.7	2172.0	988.2	135.9	13.7	15.3	21.4
39°	6793.8	6651.8	6213.4	5257.3	3859.7	2263.6	1018.8	132.9	12.2	15.3	21.4
40°	6787.7	6664.0	6286.7	5371.8	3974.3	2326.2	1035.6	128.3	10.7	13.7	21.4
41°	6752.6	6645.7	6324.9	5469.6	4043.0	2369.0	1040.2	123.7	9.2	13.7	19.9
42°	6712.9	6615.1	6337.2	5521.5	4087.3	2382.7	1027.9	117.6	9.2	12.2	19.9
43°	6671.6	6581.5	6337.2	5538.3	4098.0	2373.6	1008.1	106.9	7.6	12.2	19.9
44°	6638.0	6552.5	6317.3	5533.7	4075.1	2338.4	971.4	94.7	6.1	12.2	19.9
45°	6598.3	6514.3	6291.3	5504.7	4030.8	2278.9	925.6	84.0	4.6	10.7	19.9
46°	6528.1	6462.4	6245.5	5445.2	3960.5	2196.4	867.6	76.4	3.1	10.7	18.3
47°	6392.1	6335.6	6156.9	5356.6	3867.4	2098.6	808.0	68.7	3.1	10.7	18.3
48°	6118.7	6117.2	5979.7	5191.6	3719.2	1976.4	745.4	61.1	3.1	10.7	18.3
49°	5854.5	5827.0	5655.9	4901.4	3506.9	1829.8	679.7	55.0	1.5	10.7	18.3
50°	5709.4	5649.8	5368.8	4559.3	3235.0	1626.7	609.4	45.8	1.5	9.2	18.3
51°	5558.2	5472.6	5141.2	4250.7	2911.2	1431.2	533.1	36.7	1.5	9.2	16.8
52°	5284.8	5203.8	4832.7	3955.9	2596.6	1231.1	459.7	30.5	1.5	9.2	18.3
53°	4990.0	4873.9	4470.7	3632.1	2320.1	1053.9	384.9	26.0	1.5	9.2	16.8
54°	4618.8	4566.9	4104.1	3235.0	1996.3	882.8	316.2	21.4	1.5	9.2	16.8
55°	4269.1	4192.7	3711.6	2828.7	1703.0	724.0	264.2	16.8	1.5	9.2	16.8
56°	3823.1	3708.5	3257.9	2456.0	1405.2	583.5	223.0	13.7	1.5	9.2	16.8
57°	3291.5	3169.3	2813.5	2042.1	1102.8	444.5	186.3	10.7	1.5	9.2	16.8
58°	2784.4	2679.0	2297.2	1576.3	830.9	308.5	154.3	7.6	1.5	7.6	16.8
59°	2405.6	2289.6	1910.8	1212.7	577.4	227.6	116.1	6.1	1.5	9.2	16.8
60°	2083.4	1933.7	1538.1	939.3	412.4	163.4	85.5	3.1	3.1	9.2	16.8
62.5°	1200.5	1060.0	734.7	381.8	169.5	84.0	41.2	1.5	3.1	9.2	16.8
65°	304.0	270.3	175.7	82.5	47.3	29.0	15.3	1.5	3.1	7.6	15.3



TEST NUMBER: P1317424

CATALOG NUMBER: P3SQAS20R359830D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	10.7	10.7	10.7	9.2	7.6	6.1	3.1	1.5	3.1	7.6	15.3
70°	4.6	4.6	4.6	3.1	3.1	1.5	1.5	1.5	3.1	7.6	13.7
72.5°	3.1	3.1	3.1	3.1	1.5	1.5	1.5	1.5	4.6	7.6	12.2
75°	3.1	3.1	3.1	3.1	1.5	1.5	1.5	1.5	4.6	7.6	12.2
77.5°	3.1	3.1	1.5	1.5	1.5	1.5	1.5	1.5	4.6	6.1	10.7
80°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	4.6	6.1	9.2
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	4.6	6.1	7.6
85°	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.5	4.6	6.1	6.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	4.6	6.1	4.6
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: P1317424

CATALOG NUMBER: P3SQAS20R359830D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	77.9	77.9	77.9
2.5°	73.3	73.3	73.3
5°	68.7	68.7	67.2
7.5°	64.2	62.6	62.6
10°	58.0	58.0	58.0
12.5°	53.5	53.5	53.5
15°	48.9	50.4	50.4
17.5°	44.3	47.3	47.3
20°	41.2	44.3	45.8
22.5°	38.2	41.2	42.8
25°	36.7	39.7	41.2
27.5°	33.6	38.2	41.2
30°	32.1	36.7	39.7
31°	32.1	36.7	38.2
32°	30.5	36.7	38.2
33°	30.5	36.7	38.2
34°	30.5	35.1	38.2
35°	29.0	35.1	36.7
36°	29.0	35.1	36.7
37°	29.0	35.1	38.2
38°	29.0	35.1	36.7
39°	27.5	35.1	36.7
40°	27.5	35.1	36.7
41°	27.5	35.1	36.7
42°	27.5	35.1	36.7
43°	27.5	35.1	36.7
44°	27.5	33.6	36.7
45°	27.5	33.6	36.7
46°	27.5	35.1	36.7
47°	27.5	35.1	38.2
48°	27.5	33.6	36.7
49°	26.0	33.6	36.7
50°	26.0	33.6	36.7
51°	26.0	35.1	38.2
52°	26.0	35.1	38.2
53°	26.0	35.1	38.2
54°	26.0	35.1	36.7
55°	26.0	35.1	38.2
56°	26.0	35.1	36.7
57°	26.0	35.1	36.7
58°	26.0	33.6	36.7
59°	26.0	33.6	36.7
60°	26.0	33.6	36.7
62.5°	24.4	33.6	36.7
65°	24.4	32.1	35.1



TEST NUMBER: P1317424

CATALOG NUMBER: P3SQAS20R359830D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	22.9	32.1	33.6
70°	21.4	30.5	32.1
72.5°	19.9	29.0	30.5
75°	18.3	26.0	27.5
77.5°	15.3	22.9	26.0
80°	13.7	19.9	21.4
82.5°	10.7	16.8	18.3
85°	7.6	12.2	12.2
87.5°	3.1	6.1	6.1
90°	0.0	0.0	0.0

(END OF REPORT)