

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: P1313663

Luminaire Tested: P3SQAS20R159730D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1313663
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: IRiS
Catalog Number: P3SQAS20R159730D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 97CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

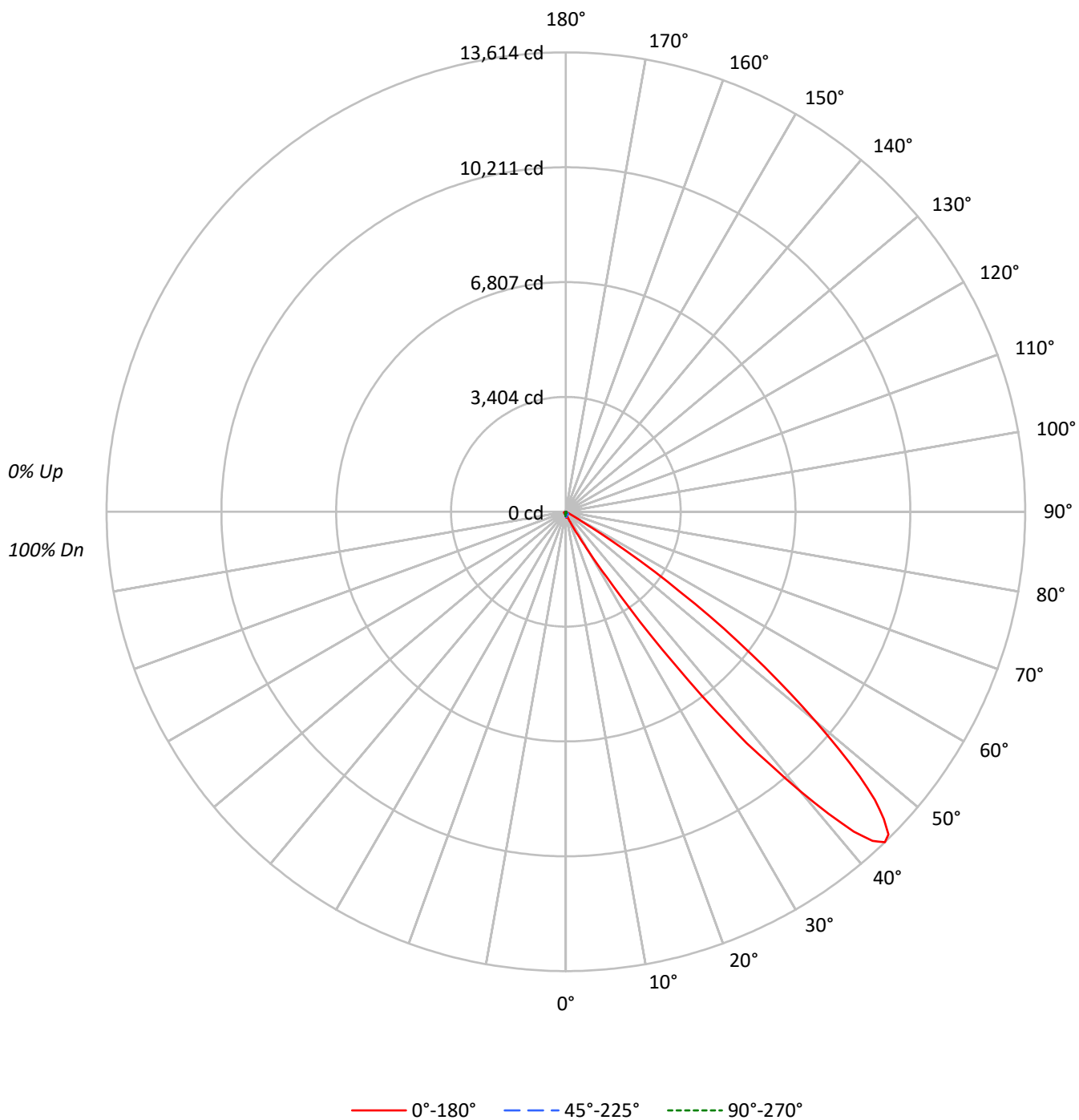
Lumens per Lamp: N/A
Luminaire Lumens: 1520.0 lumens
Efficiency: N/A
Efficacy: 52.8 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1313663

CATALOG NUMBER: P3SQAS20R159730D010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1313663

CATALOG NUMBER: P3SQAS20R159730D010 E3SQCA451MB

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	107	104	100	97	100	97	94	96	93	91	92	90	89	87		
2	101	93	87	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	53	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	37	49	42	37	48	42	37	35		
7	62	47	38	32	60	47	38	32	45	37	31	44	36	31	42	36	31	29		
8	56	42	33	27	55	41	33	27	40	32	26	39	31	26	37	31	26	24		
9	52	37	28	22	50	37	28	22	35	28	22	34	27	22	33	27	22	20		
10	48	33	25	19	46	33	25	19	32	24	19	31	24	19	30	23	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	23233	23233	23233	23233	23233
5°	28819	25673	20953	18343	18083
10°	28365	22000	16176	14305	14585
15°	23518	15672	11625	11892	12695
20°	40834	12499	8889	10282	11675
25°	91004	14974	7202	9501	10946
30°	272167	18395	6324	9347	11455
35°	1047693	20709	5740	9566	12110
40°	2431818	18053	5441	9892	12950
45°	3293778	13664	4798	10717	14029
50°	2582612	8118	4876	11360	15433
55°	1239598	3633	4564	12281	16845
60°	113288	517	4168	13054	18807
65°	12348	0	3708	13570	20376
70°	3072	0	4582	14502	22156
75°	2994	998	6055	16103	25219
80°	2975	2975	7538	16563	27076
85°	2964	2964	12054	15018	30036

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3293778 cd/sqm

TEST NUMBER: P1313663

CATALOG NUMBER: P3SQAS20R159730D010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.5	0.8
10°-20°	24.0	1.6
20°-30°	57.4	3.8
30°-40°	314.4	20.7
40°-50°	761.3	50.1
50°-60°	303.7	20.0
60°-70°	26.2	1.7
70°-80°	14.8	1.0
80°-90°	6.5	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°	92.9	6.1
0°-40°	407.3	26.8
0°-60°	1472.4	96.9
0°-90°	1520.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1520.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	135	135	135	135	135	
5°	167	148	121	106	105	16
15°	132	88	65	67	71	46
25°	479	79	38	50	58	289
35°	4983	98	27	46	58	3521
45°	13524	56	20	44	58	9540
55°	4128	12	15	41	56	3846
65°	30	0	9	33	50	78
75°	4	2	9	24	38	4
85°	2	2	6	8	15	1
90°	0	0	0	0	0	

TEST NUMBER: P1313663

CATALOG NUMBER: P3SQAS20R159730D010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	134.9	134.9	134.9	134.9	134.9	134.9	134.9	134.9	134.9	134.9	134.9
2.5°	151.6	151.6	153.1	151.6	151.6	151.6	151.6	150.0	150.0	150.0	145.5
5°	166.7	166.7	166.7	166.7	165.2	165.2	165.2	163.7	163.7	162.2	148.5
7.5°	172.8	172.8	171.3	171.3	169.7	169.7	168.2	166.7	165.2	163.7	142.5
10°	162.2	162.2	162.2	160.7	160.7	159.1	157.6	156.1	154.6	151.6	125.8
12.5°	144.0	144.0	145.5	144.0	142.5	140.9	137.9	136.4	134.9	131.9	104.6
15°	131.9	131.9	131.9	130.3	128.8	125.8	124.3	121.2	119.7	115.2	87.9
17.5°	168.2	168.2	166.7	163.7	157.6	153.1	145.5	139.4	131.9	122.8	75.8
20°	222.8	222.8	219.8	216.7	209.2	201.6	189.4	178.8	166.7	156.1	68.2
22.5°	322.8	327.4	318.3	307.7	297.1	278.9	262.2	245.5	224.3	206.1	69.7
25°	478.9	483.5	478.9	454.7	435.0	410.7	378.9	345.6	309.2	275.8	78.8
27.5°	776.0	779.0	771.4	712.3	680.5	616.8	560.8	506.2	445.6	385.0	86.4
30°	1368.6	1370.1	1321.6	1203.4	1098.8	959.4	841.1	727.5	632.0	535.0	92.5
31°	1802.0	1759.6	1656.5	1514.1	1347.4	1159.4	997.3	850.2	707.8	603.2	94.0
32°	2288.5	2282.5	2111.2	1864.2	1641.4	1406.5	1162.5	974.5	810.8	668.4	95.5
33°	2932.7	2935.7	2665.9	2374.9	2009.7	1694.4	1374.6	1117.0	920.0	745.7	98.5
34°	3939.0	3702.6	3385.8	2991.8	2494.6	2020.3	1605.0	1282.2	1018.5	819.9	98.5
35°	4983.2	4745.3	4396.7	3799.6	3117.6	2453.7	1879.3	1459.5	1136.7	900.3	98.5
36°	6153.3	5951.7	5424.3	4661.9	3792.0	2862.9	2170.3	1664.1	1253.4	973.0	97.0
37°	7417.3	7121.7	6536.7	5704.7	4540.7	3438.9	2525.0	1867.2	1370.1	1051.8	94.0
38°	8701.0	8434.2	7696.1	6688.3	5434.9	4046.6	2879.6	2062.7	1477.7	1110.9	89.4
39°	9674.0	9528.5	8796.4	7670.4	6148.7	4622.5	3244.9	2271.9	1591.4	1170.0	84.9
40°	10816.7	10581.8	9887.7	8494.8	6992.9	5209.1	3602.5	2456.8	1685.3	1217.0	80.3
41°	11859.4	11562.4	10686.4	9340.5	7668.9	5736.5	3942.0	2647.7	1761.1	1244.3	77.3
42°	12753.6	12408.1	11492.7	10065.0	8234.2	6157.8	4213.3	2784.1	1832.3	1267.0	72.7
43°	13332.6	13034.0	12133.8	10609.1	8717.6	6544.3	4466.4	2926.6	1876.3	1282.2	66.7
44°	13614.5	13312.9	12441.4	10950.1	9014.7	6776.2	4630.1	3025.1	1924.8	1301.9	62.1
45°	13523.5	13217.4	12374.7	10956.1	9107.1	6859.5	4699.8	3069.1	1950.6	1320.1	56.1
46°	13106.8	12891.5	12042.8	10671.2	8931.3	6770.1	4660.4	3035.7	1941.5	1320.1	50.0
47°	12521.7	12276.2	11468.4	10181.7	8505.5	6539.7	4501.3	2934.2	1885.4	1289.8	44.0
48°	11724.6	11515.4	10666.7	9404.2	7852.2	6038.1	4142.1	2769.0	1797.5	1230.7	37.9
49°	10724.3	10433.3	9643.7	8410.0	7000.5	5325.8	3670.7	2490.1	1656.5	1147.3	33.3
50°	9639.1	9279.9	8670.7	7414.2	6119.9	4566.5	3050.9	2105.1	1458.0	1038.2	30.3
51°	8576.7	8211.4	7631.0	6562.5	5180.3	3789.0	2461.3	1680.8	1200.3	888.1	25.8
52°	7474.9	7168.7	6518.5	5678.9	4434.6	3070.6	2050.6	1421.6	997.3	745.7	21.2
53°	6377.6	6168.4	5550.1	4699.8	3563.1	2508.3	1674.7	1217.0	869.9	638.1	16.7
54°	5278.8	5049.9	4580.1	3822.3	2872.0	1979.4	1420.1	1018.5	754.8	556.2	15.2
55°	4128.4	4010.2	3576.8	2914.5	2176.4	1579.2	1151.8	876.0	632.0	465.3	12.1
56°	3179.7	3046.3	2650.8	2114.2	1617.1	1236.7	932.1	715.4	535.0	389.5	9.1
57°	2082.4	1946.0	1683.8	1476.2	1177.6	901.8	712.3	563.8	435.0	322.8	7.6
58°	1230.7	1106.4	1065.5	909.3	785.1	612.3	525.9	419.8	321.3	254.6	4.5
59°	565.3	574.4	510.8	478.9	435.0	389.5	319.8	280.4	219.8	183.4	3.0
60°	328.9	310.7	303.1	271.3	241.0	213.7	192.5	169.7	137.9	118.2	1.5
62.5°	112.2	107.6	110.6	100.0	94.0	90.9	83.4	71.2	59.1	48.5	0.0
65°	30.3	30.3	28.8	27.3	25.8	24.2	22.7	19.7	18.2	15.2	0.0



TEST NUMBER: P1313663

CATALOG NUMBER: P3SQAS20R159730D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	10.6	10.6	9.1	9.1	7.6	7.6	6.1	6.1	4.5	4.5	0.0
70°	6.1	6.1	6.1	4.5	4.5	4.5	3.0	3.0	3.0	1.5	0.0
72.5°	4.5	4.5	4.5	4.5	4.5	4.5	3.0	3.0	3.0	1.5	1.5
75°	4.5	4.5	4.5	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.5
77.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
80°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	1.5	3.0
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0
85°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5
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: P1313663

CATALOG NUMBER: P3SQAS20R159730D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	134.9	134.9	134.9	134.9	134.9	134.9
2.5°	139.4	133.4	125.8	121.2	119.7	118.2
5°	133.4	121.2	112.2	106.1	104.6	104.6
7.5°	119.7	106.1	97.0	94.0	92.5	92.5
10°	104.6	92.5	84.9	81.8	83.4	83.4
12.5°	87.9	77.3	74.3	74.3	75.8	77.3
15°	71.2	65.2	65.2	66.7	69.7	71.2
17.5°	59.1	56.1	57.6	60.6	63.7	66.7
20°	48.5	48.5	51.5	56.1	60.6	63.7
22.5°	40.9	42.4	47.0	51.5	57.6	60.6
25°	34.9	37.9	42.4	50.0	56.1	57.6
27.5°	30.3	34.9	40.9	48.5	54.6	57.6
30°	25.8	31.8	39.4	47.0	54.6	57.6
31°	24.2	30.3	37.9	47.0	54.6	57.6
32°	22.7	30.3	37.9	47.0	54.6	57.6
33°	21.2	28.8	37.9	45.5	54.6	57.6
34°	19.7	28.8	37.9	47.0	54.6	57.6
35°	18.2	27.3	36.4	45.5	53.0	57.6
36°	16.7	27.3	36.4	45.5	54.6	57.6
37°	15.2	27.3	36.4	45.5	53.0	57.6
38°	15.2	25.8	34.9	45.5	53.0	57.6
39°	13.6	24.2	34.9	45.5	53.0	57.6
40°	12.1	24.2	33.3	44.0	53.0	57.6
41°	10.6	22.7	33.3	44.0	53.0	57.6
42°	9.1	22.7	33.3	44.0	53.0	57.6
43°	7.6	21.2	31.8	44.0	53.0	57.6
44°	7.6	21.2	31.8	44.0	53.0	57.6
45°	6.1	19.7	30.3	44.0	53.0	57.6
46°	6.1	19.7	30.3	42.4	53.0	57.6
47°	4.5	19.7	30.3	42.4	53.0	57.6
48°	4.5	18.2	30.3	42.4	53.0	57.6
49°	3.0	18.2	30.3	42.4	53.0	57.6
50°	3.0	18.2	28.8	42.4	53.0	57.6
51°	3.0	18.2	28.8	42.4	53.0	57.6
52°	3.0	16.7	28.8	42.4	53.0	57.6
53°	3.0	16.7	28.8	42.4	53.0	57.6
54°	3.0	16.7	27.3	42.4	53.0	57.6
55°	3.0	15.2	27.3	40.9	53.0	56.1
56°	3.0	15.2	27.3	40.9	53.0	56.1
57°	3.0	15.2	25.8	40.9	53.0	56.1
58°	3.0	13.6	25.8	39.4	51.5	56.1
59°	3.0	13.6	24.2	39.4	51.5	54.6
60°	3.0	12.1	24.2	37.9	50.0	54.6
62.5°	3.0	10.6	21.2	36.4	48.5	51.5
65°	3.0	9.1	19.7	33.3	47.0	50.0



TEST NUMBER: P1313663

CATALOG NUMBER: P3SQAS20R159730D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.0	9.1	18.2	31.8	44.0	48.5
70°	3.0	9.1	16.7	28.8	42.4	44.0
72.5°	4.5	9.1	15.2	27.3	39.4	40.9
75°	6.1	9.1	13.6	24.2	36.4	37.9
77.5°	6.1	9.1	12.1	21.2	31.8	33.3
80°	6.1	7.6	10.6	16.7	25.8	27.3
82.5°	6.1	7.6	7.6	13.6	19.7	21.2
85°	4.5	6.1	6.1	7.6	13.6	15.2
87.5°	4.5	6.1	3.0	4.5	6.1	6.1
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)