

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: P1313728

Luminaire Tested: P3SQAS20R359730D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1313728
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: P3SQAS20R359730D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R35 optic, 3000K CCT AND, 97CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

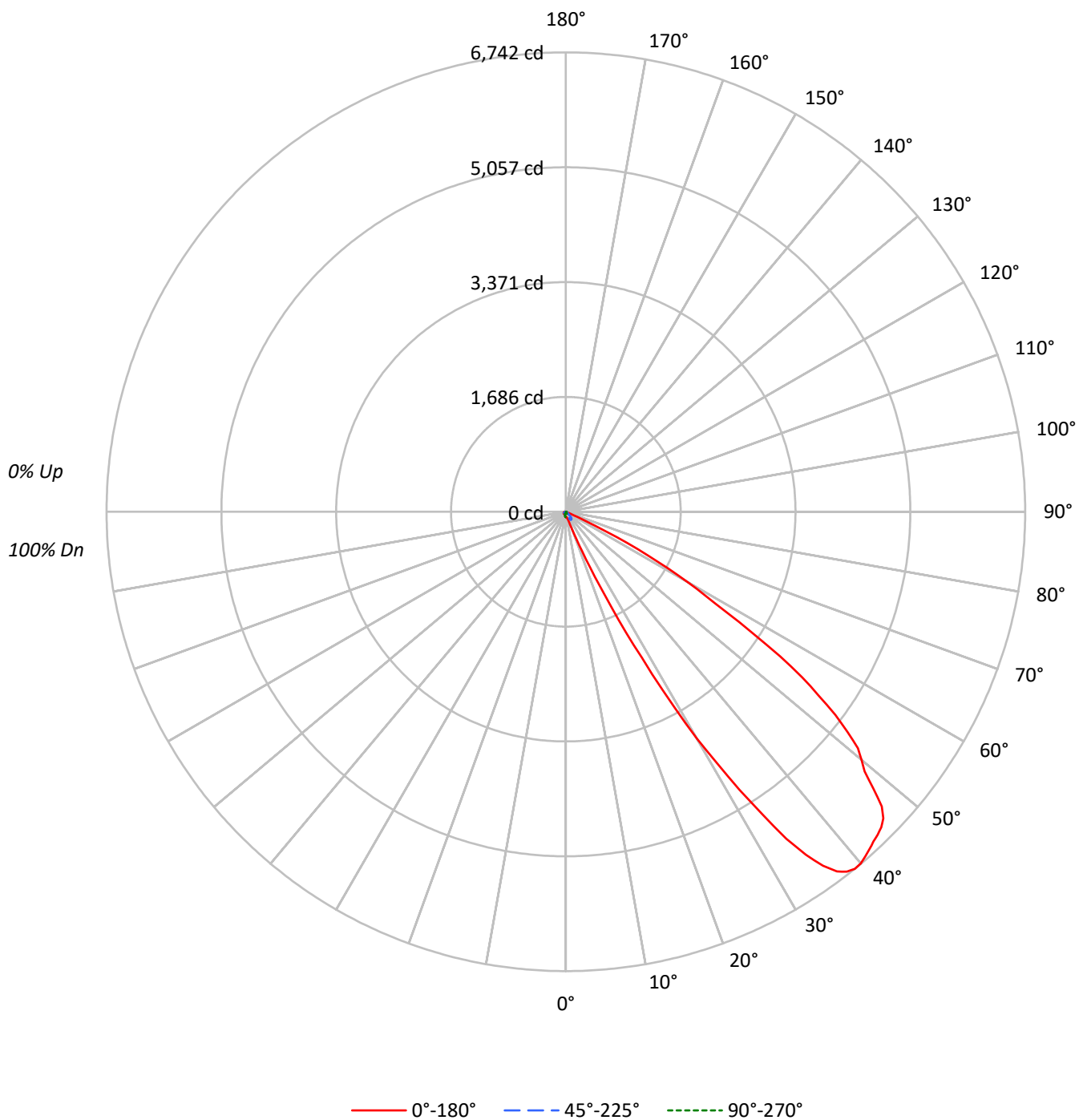
Lumens per Lamp: N/A
Luminaire Lumens: 1679.0 lumens
Efficiency: N/A
Efficacy: 58.3 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1313728

CATALOG NUMBER: P3SQAS20R359730D010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1313728

CATALOG NUMBER: P3SQAS20R359730D010 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	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°	13313	13313	13313	13313	13313
5°	14418	14142	13104	11790	11531
10°	15110	13781	11664	10073	10073
15°	21628	13515	9450	8647	8915
20°	54176	14442	7496	7496	8339
25°	251443	18433	5758	6917	7772
30°	764380	25017	4514	6324	7835
35°	1291851	28993	3826	6055	7653
40°	1514302	28620	3058	6138	8183
45°	1594731	20313	2582	6649	8866
50°	1517962	12191	2438	6913	9753
55°	1271996	5014	2732	7747	11380
60°	712106	1033	3134	8887	12538
65°	122906	611	3097	9903	14222
70°	2266	755	3827	10675	16013
75°	1996	998	5057	12111	18166
80°	1488	1488	6050	13488	21026
85°	0	2964	12054	15018	23910

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1606028 cd/sqm

TEST NUMBER: P1313728

CATALOG NUMBER: P3SQAS20R359730D010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.0	0.4
10°-20°	19.8	1.2
20°-30°	103.0	6.1
30°-40°	444.9	26.5
40°-50°	634.6	37.8
50°-60°	393.1	23.4
60°-70°	59.8	3.6
70°-80°	11.2	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°	129.8	7.7
0°-40°	574.7	34.2
0°-60°	1602.4	95.4
0°-90°	1679.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1679.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	77	77	77	77	77	
5°	83	82	76	68	67	8
15°	121	76	53	48	50	44
25°	1323	97	30	36	41	792
35°	6144	138	18	29	36	3689
45°	6548	83	11	27	36	4947
55°	4236	17	9	26	38	3608
65°	302	2	8	24	35	616
75°	3	2	8	18	27	3
85°	0	2	6	8	12	1
90°	0	0	0	0	0	

TEST NUMBER: P1313728

CATALOG NUMBER: P3SQAS20R359730D010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3	77.3
2.5°	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	80.3	77.3	75.8
5°	83.4	83.4	81.8	81.8	81.8	81.8	81.8	81.8	78.8	75.8	71.2
7.5°	84.9	84.9	83.4	83.4	83.4	83.4	81.8	80.3	77.3	71.2	66.7
10°	86.4	86.4	86.4	86.4	84.9	83.4	81.8	78.8	74.3	66.7	62.1
12.5°	97.0	97.0	95.5	92.5	89.4	86.4	83.4	77.3	68.2	60.6	56.1
15°	121.3	119.7	116.7	112.2	106.1	98.5	92.5	75.8	62.1	53.0	50.0
17.5°	169.8	166.7	162.2	147.0	133.4	119.7	107.6	75.8	56.1	47.0	44.0
20°	295.6	297.1	265.2	228.9	198.6	165.2	134.9	78.8	50.0	40.9	39.4
22.5°	616.9	592.6	516.8	428.9	327.4	253.1	191.0	86.4	44.0	34.9	34.9
25°	1323.2	1230.7	1047.3	791.2	557.8	395.6	277.4	97.0	39.4	30.3	31.8
27.5°	2416.0	2332.6	1964.3	1479.3	982.1	597.2	375.9	110.6	34.9	25.8	28.8
30°	3843.7	3613.3	3132.9	2425.1	1641.5	913.9	504.7	125.8	28.8	22.7	27.3
31°	4289.3	4183.2	3598.2	2805.5	1923.4	1085.2	559.3	130.3	27.3	22.7	25.8
32°	4818.3	4630.3	4105.9	3222.3	2209.8	1238.3	624.5	134.9	25.8	19.7	25.8
33°	5291.2	5109.3	4471.2	3589.1	2499.3	1412.6	694.2	136.4	22.7	19.7	24.3
34°	5788.3	5539.7	4907.7	3972.5	2796.4	1600.5	757.8	137.9	21.2	18.2	24.3
35°	6144.5	5895.9	5283.6	4275.7	3052.5	1767.3	830.6	137.9	19.7	18.2	22.7
36°	6420.3	6202.1	5607.9	4587.9	3307.2	1917.3	888.2	137.9	16.7	16.7	22.7
37°	6609.8	6402.1	5826.2	4856.2	3501.2	2050.7	939.7	137.9	15.2	16.7	22.7
38°	6702.2	6529.5	6036.9	5051.7	3689.1	2155.3	980.6	134.9	13.6	15.2	21.2
39°	6741.6	6600.7	6165.7	5216.9	3830.1	2246.2	1010.9	131.9	12.1	15.2	21.2
40°	6735.6	6612.8	6238.4	5330.6	3943.7	2308.3	1027.6	127.3	10.6	13.6	21.2
41°	6700.7	6594.6	6276.3	5427.6	4011.9	2350.8	1032.2	122.8	9.1	13.6	19.7
42°	6661.3	6564.3	6288.5	5479.1	4055.9	2364.4	1020.0	116.7	9.1	12.1	19.7
43°	6620.4	6531.0	6288.5	5495.8	4066.5	2355.3	1000.3	106.1	7.6	12.1	19.7
44°	6587.0	6502.2	6268.8	5491.2	4043.8	2320.5	964.0	94.0	6.1	12.1	19.7
45°	6547.6	6464.3	6243.0	5462.4	3999.8	2261.4	918.5	83.4	4.5	10.6	19.7
46°	6477.9	6412.7	6197.5	5403.3	3930.1	2179.5	860.9	75.8	3.0	10.6	18.2
47°	6343.0	6286.9	6109.6	5315.4	3837.6	2082.5	801.8	68.2	3.0	10.6	18.2
48°	6071.7	6070.2	5933.8	5151.7	3690.6	1961.3	739.6	60.6	3.0	10.6	18.2
49°	5809.5	5782.2	5612.5	4863.7	3479.9	1815.8	674.5	54.6	1.5	10.6	18.2
50°	5665.5	5606.4	5327.5	4524.2	3210.2	1614.2	604.7	45.5	1.5	9.1	18.2
51°	5515.5	5430.6	5101.7	4218.1	2888.8	1420.2	529.0	36.4	1.5	9.1	16.7
52°	5244.2	5163.8	4795.5	3925.6	2576.6	1221.6	456.2	30.3	1.5	9.1	18.2
53°	4951.7	4836.5	4436.3	3604.2	2302.3	1045.8	381.9	25.8	1.5	9.1	16.7
54°	4583.3	4531.8	4072.6	3210.2	1981.0	876.0	313.7	21.2	1.5	9.1	16.7
55°	4236.3	4160.5	3683.0	2807.0	1690.0	718.4	262.2	16.7	1.5	9.1	16.7
56°	3793.7	3680.0	3232.9	2437.2	1394.4	579.0	221.3	13.6	1.5	9.1	16.7
57°	3266.2	3145.0	2791.8	2026.4	1094.3	441.1	184.9	10.6	1.5	9.1	16.7
58°	2763.0	2658.5	2279.5	1564.2	824.5	306.2	153.1	7.6	1.5	7.6	16.7
59°	2387.2	2272.0	1896.1	1203.4	572.9	225.8	115.2	6.1	1.5	9.1	16.7
60°	2067.4	1918.8	1526.3	932.1	409.2	162.2	84.9	3.0	3.0	9.1	16.7
62.5°	1191.3	1051.9	729.0	378.9	168.2	83.4	40.9	1.5	3.0	9.1	16.7
65°	301.6	268.3	174.3	81.8	47.0	28.8	15.2	1.5	3.0	7.6	15.2



TEST NUMBER: P1313728

CATALOG NUMBER: P3SQAS20R359730D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	10.6	10.6	10.6	9.1	7.6	6.1	3.0	1.5	3.0	7.6	15.2
70°	4.5	4.5	4.5	3.0	3.0	1.5	1.5	1.5	3.0	7.6	13.6
72.5°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	4.5	7.6	12.1
75°	3.0	3.0	3.0	3.0	1.5	1.5	1.5	1.5	4.5	7.6	12.1
77.5°	3.0	3.0	1.5	1.5	1.5	1.5	1.5	1.5	4.5	6.1	10.6
80°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	4.5	6.1	9.1
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	4.5	6.1	7.6
85°	0.0	0.0	0.0	0.0	0.0	1.5	0.0	1.5	4.5	6.1	6.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	4.5	6.1	4.5
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: P1313728

CATALOG NUMBER: P3SQAS20R359730D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	77.3	77.3	77.3
2.5°	72.8	72.8	72.8
5°	68.2	68.2	66.7
7.5°	63.7	62.1	62.1
10°	57.6	57.6	57.6
12.5°	53.0	53.0	53.0
15°	48.5	50.0	50.0
17.5°	44.0	47.0	47.0
20°	40.9	44.0	45.5
22.5°	37.9	40.9	42.4
25°	36.4	39.4	40.9
27.5°	33.3	37.9	40.9
30°	31.8	36.4	39.4
31°	31.8	36.4	37.9
32°	30.3	36.4	37.9
33°	30.3	36.4	37.9
34°	30.3	34.9	37.9
35°	28.8	34.9	36.4
36°	28.8	34.9	36.4
37°	28.8	34.9	37.9
38°	28.8	34.9	36.4
39°	27.3	34.9	36.4
40°	27.3	34.9	36.4
41°	27.3	34.9	36.4
42°	27.3	34.9	36.4
43°	27.3	34.9	36.4
44°	27.3	33.3	36.4
45°	27.3	33.3	36.4
46°	27.3	34.9	36.4
47°	27.3	34.9	37.9
48°	27.3	33.3	36.4
49°	25.8	33.3	36.4
50°	25.8	33.3	36.4
51°	25.8	34.9	37.9
52°	25.8	34.9	37.9
53°	25.8	34.9	37.9
54°	25.8	34.9	36.4
55°	25.8	34.9	37.9
56°	25.8	34.9	36.4
57°	25.8	34.9	36.4
58°	25.8	33.3	36.4
59°	25.8	33.3	36.4
60°	25.8	33.3	36.4
62.5°	24.3	33.3	36.4
65°	24.3	31.8	34.9



TEST NUMBER: P1313728

CATALOG NUMBER: P3SQAS20R359730D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	22.7	31.8	33.3
70°	21.2	30.3	31.8
72.5°	19.7	28.8	30.3
75°	18.2	25.8	27.3
77.5°	15.2	22.7	25.8
80°	13.6	19.7	21.2
82.5°	10.6	16.7	18.2
85°	7.6	12.1	12.1
87.5°	3.0	6.1	6.1
90°	0.0	0.0	0.0

(END OF REPORT)