

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: P1311640

Luminaire Tested: P3SQAS20R359050D010 E3SQCA451MW

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311640
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: P3SQAS20R359050D010 E3SQCA451MW
Description: 3in Adjustable LED luminaire with, R35 optic, 5000K CCT AND, 90CRI , E3SQCA451MW TRIM
Light Source: -
Ballast/Driver: -

Summary

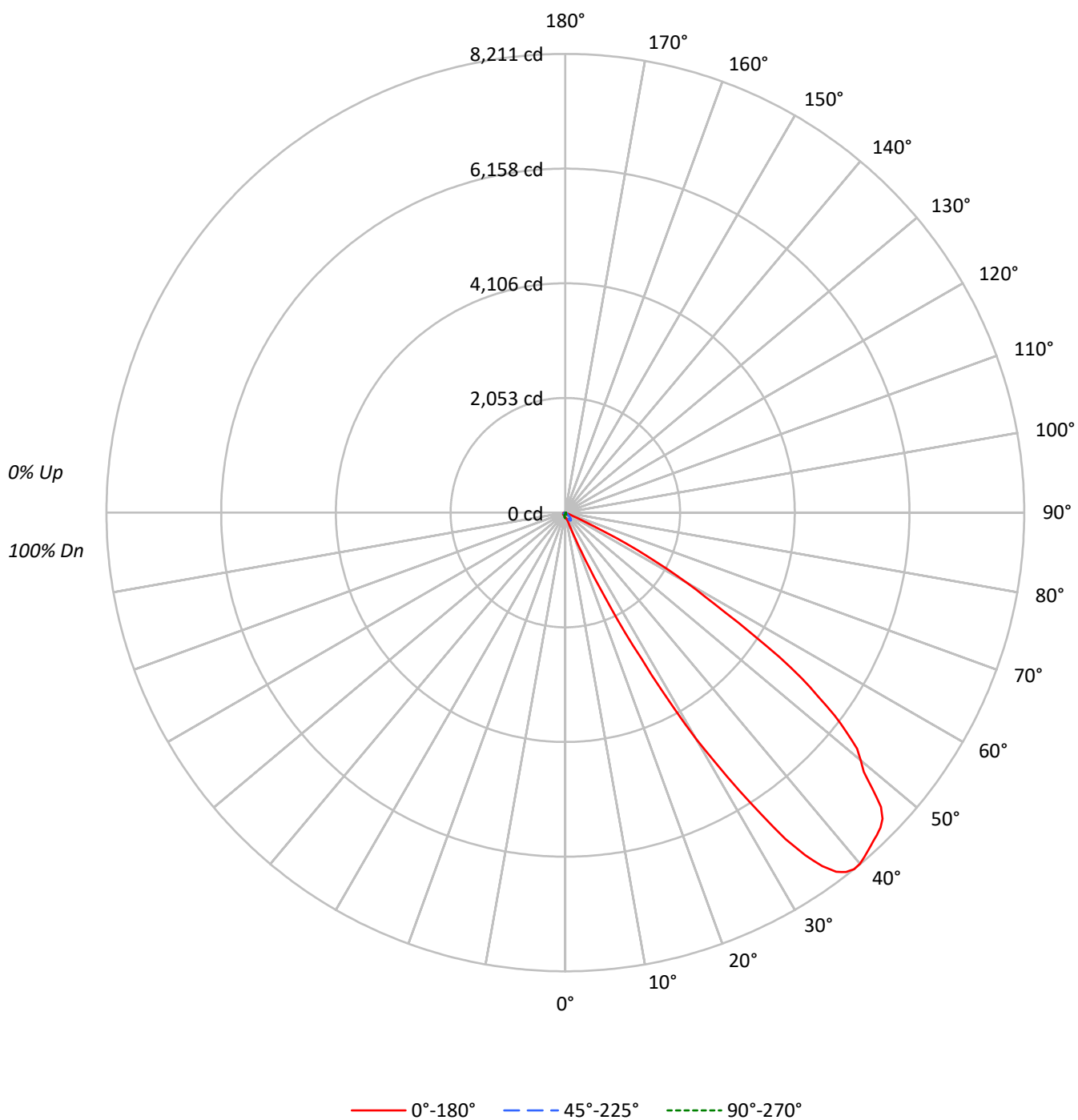
Lumens per Lamp: N/A
Luminaire Lumens: 2045.0 lumens
Efficiency: N/A
Efficacy: 71.0 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1311640

CATALOG NUMBER: P3SQAS20R359050D010 E3SQCA451MW

Luminous Intensity Polar Plot



TEST NUMBER: P1311640

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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	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°	16206	16206	16206	16206	16206
5°	17547	17236	15957	14366	14038
10°	18397	16788	14200	12259	12259
15°	26335	16457	11518	10537	10858
20°	65979	17594	9127	9127	10153
25°	306247	22442	7012	8418	9463
30°	931009	30466	5509	7716	9546
35°	1573453	35321	4667	7380	9314
40°	1844384	34870	3732	7464	9960
45°	1942363	24721	3142	8086	10790
50°	1848857	14843	2974	8413	11869
55°	1549257	6095	3333	9428	13872
60°	867313	1274	3823	10816	15259
65°	149720	734	3749	12022	17319
70°	2769	906	4633	12991	19538
75°	2462	1198	6122	14772	22092
80°	1785	1785	7339	16464	25588
85°	0	3557	14623	18180	29245

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1956122 cd/sqm

TEST NUMBER: P1311640

CATALOG NUMBER: P3SQAS20R359050D010 E3SQCA451MW

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.5	0.4
10°-20°	24.1	1.2
20°-30°	125.5	6.1
30°-40°	541.9	26.5
40°-50°	773.0	37.8
50°-60°	478.7	23.4
60°-70°	72.9	3.6
70°-80°	13.6	0.7
80°-90°	6.8	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°	158.1	7.7
0°-40°	700.0	34.2
0°-60°	1951.7	95.4
0°-90°	2045.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2045.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	94	94	94	94	94	
5°	102	100	92	83	81	10
15°	148	92	65	59	61	53
25°	1612	118	37	44	50	964
35°	7484	168	22	35	44	4493
45°	7975	102	13	33	44	6025
55°	5160	20	11	31	46	4394
65°	367	2	9	30	42	751
75°	4	2	9	22	33	4
85°	0	2	7	9	15	1
90°	0	0	0	0	0	

TEST NUMBER: P1311640

CATALOG NUMBER: P3SQAS20R359050D010 E3SQCA451MW

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1	94.1
2.5°	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	97.8	94.1	92.3
5°	101.5	101.5	99.7	99.7	99.7	99.7	99.7	99.7	96.0	92.3	86.8
7.5°	103.4	103.4	101.5	101.5	101.5	101.5	99.7	97.8	94.1	86.8	81.2
10°	105.2	105.2	105.2	105.2	103.4	101.5	99.7	96.0	90.5	81.2	75.7
12.5°	118.1	118.1	116.3	112.6	108.9	105.2	101.5	94.1	83.1	73.8	68.3
15°	147.7	145.8	142.1	136.6	129.2	120.0	112.6	92.3	75.7	64.6	60.9
17.5°	206.8	203.1	197.5	179.1	162.5	145.8	131.1	92.3	68.3	57.2	53.5
20°	360.0	361.8	323.1	278.8	241.8	201.2	164.3	96.0	60.9	49.8	48.0
22.5°	751.3	721.8	629.5	522.4	398.7	308.3	232.6	105.2	53.5	42.5	42.5
25°	1611.6	1499.0	1275.6	963.6	679.3	481.8	337.8	118.1	48.0	36.9	38.8
27.5°	2942.6	2841.1	2392.5	1801.7	1196.2	727.3	457.8	134.8	42.5	31.4	35.1
30°	4681.6	4401.0	3815.8	2953.7	1999.3	1113.2	614.7	153.2	35.1	27.7	33.2
31°	5224.3	5095.1	4382.5	3417.0	2342.6	1321.8	681.2	158.8	33.2	27.7	31.4
32°	5868.6	5639.7	5001.0	3924.7	2691.5	1508.2	760.6	164.3	31.4	24.0	31.4
33°	6444.6	6223.0	5445.8	4371.4	3044.1	1720.5	845.5	166.1	27.7	24.0	29.5
34°	7050.1	6747.3	5977.5	4838.5	3406.0	1949.4	923.0	168.0	25.8	22.2	29.5
35°	7483.9	7181.1	6435.3	5207.7	3717.9	2152.5	1011.6	168.0	24.0	22.2	27.7
36°	7819.9	7554.0	6830.4	5588.0	4028.1	2335.3	1081.8	168.0	20.3	20.3	27.7
37°	8050.6	7797.7	7096.2	5914.7	4264.4	2497.7	1144.6	168.0	18.5	20.3	27.7
38°	8163.2	7952.8	7352.8	6152.9	4493.3	2625.1	1194.4	164.3	16.6	18.5	25.8
39°	8211.2	8039.5	7509.7	6354.1	4665.0	2735.8	1231.3	160.6	14.8	18.5	25.8
40°	8203.8	8054.3	7598.3	6492.6	4803.4	2811.5	1251.6	155.1	12.9	16.6	25.8
41°	8161.4	8032.2	7644.5	6610.7	4886.5	2863.2	1257.2	149.5	11.1	16.6	24.0
42°	8113.4	7995.2	7659.3	6673.5	4940.0	2879.8	1242.4	142.1	11.1	14.8	24.0
43°	8063.5	7954.6	7659.3	6693.8	4953.0	2868.8	1218.4	129.2	9.2	14.8	24.0
44°	8022.9	7919.6	7635.3	6688.2	4925.3	2826.3	1174.1	114.5	7.4	14.8	24.0
45°	7974.9	7873.4	7603.9	6653.2	4871.7	2754.3	1118.7	101.5	5.5	12.9	24.0
46°	7890.0	7810.6	7548.5	6581.2	4786.8	2654.6	1048.6	92.3	3.7	12.9	22.2
47°	7725.7	7657.4	7441.4	6474.1	4674.2	2536.5	976.6	83.1	3.7	12.9	22.2
48°	7395.3	7393.4	7227.3	6274.7	4495.1	2388.8	900.9	73.8	3.7	12.9	22.2
49°	7075.9	7042.7	6835.9	5924.0	4238.5	2211.6	821.5	66.5	1.8	12.9	22.2
50°	6900.5	6828.5	6488.9	5510.5	3909.9	1966.0	736.6	55.4	1.8	11.1	22.2
51°	6717.8	6614.4	6213.8	5137.6	3518.6	1729.7	644.3	44.3	1.8	11.1	20.3
52°	6387.3	6289.5	5840.9	4781.3	3138.3	1487.9	555.7	36.9	1.8	11.1	22.2
53°	6031.0	5890.7	5403.4	4389.9	2804.2	1273.8	465.2	31.4	1.8	11.1	20.3
54°	5582.5	5519.7	4960.3	3909.9	2412.8	1067.0	382.1	25.8	1.8	11.1	20.3
55°	5159.7	5067.4	4485.9	3418.9	2058.3	875.0	319.4	20.3	1.8	11.1	20.3
56°	4620.7	4482.2	3937.6	2968.4	1698.4	705.2	269.5	16.6	1.8	11.1	20.3
57°	3978.2	3830.6	3400.4	2468.2	1332.8	537.2	225.2	12.9	1.8	11.1	20.3
58°	3365.3	3238.0	2776.5	1905.1	1004.3	372.9	186.5	9.2	1.8	9.2	20.3
59°	2907.5	2767.2	2309.4	1465.8	697.8	275.1	140.3	7.4	1.8	11.1	20.3
60°	2518.0	2337.1	1859.0	1135.3	498.4	197.5	103.4	3.7	3.7	11.1	20.3
62.5°	1451.0	1281.2	888.0	461.5	204.9	101.5	49.8	1.8	3.7	11.1	20.3
65°	367.4	326.8	212.3	99.7	57.2	35.1	18.5	1.8	3.7	9.2	18.5



TEST NUMBER: P1311640

CATALOG NUMBER: P3SQAS20R359050D010 E3SQCA451MW

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	12.9	12.9	12.9	11.1	9.2	7.4	3.7	1.8	3.7	9.2	18.5
70°	5.5	5.5	5.5	3.7	3.7	1.8	1.8	1.8	3.7	9.2	16.6
72.5°	3.7	3.7	3.7	3.7	1.8	1.8	1.8	1.8	5.5	9.2	14.8
75°	3.7	3.7	3.7	3.7	1.8	1.8	1.8	1.8	5.5	9.2	14.8
77.5°	3.7	3.7	1.8	1.8	1.8	1.8	1.8	1.8	5.5	7.4	12.9
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	5.5	7.4	11.1
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	5.5	7.4	9.2
85°	0.0	0.0	0.0	0.0	0.0	1.8	0.0	1.8	5.5	7.4	7.4
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	5.5	7.4	5.5
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: P1311640

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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	94.1	94.1	94.1
2.5°	88.6	88.6	88.6
5°	83.1	83.1	81.2
7.5°	77.5	75.7	75.7
10°	70.1	70.1	70.1
12.5°	64.6	64.6	64.6
15°	59.1	60.9	60.9
17.5°	53.5	57.2	57.2
20°	49.8	53.5	55.4
22.5°	46.2	49.8	51.7
25°	44.3	48.0	49.8
27.5°	40.6	46.2	49.8
30°	38.8	44.3	48.0
31°	38.8	44.3	46.2
32°	36.9	44.3	46.2
33°	36.9	44.3	46.2
34°	36.9	42.5	46.2
35°	35.1	42.5	44.3
36°	35.1	42.5	44.3
37°	35.1	42.5	46.2
38°	35.1	42.5	44.3
39°	33.2	42.5	44.3
40°	33.2	42.5	44.3
41°	33.2	42.5	44.3
42°	33.2	42.5	44.3
43°	33.2	42.5	44.3
44°	33.2	40.6	44.3
45°	33.2	40.6	44.3
46°	33.2	42.5	44.3
47°	33.2	42.5	46.2
48°	33.2	40.6	44.3
49°	31.4	40.6	44.3
50°	31.4	40.6	44.3
51°	31.4	42.5	46.2
52°	31.4	42.5	46.2
53°	31.4	42.5	46.2
54°	31.4	42.5	44.3
55°	31.4	42.5	46.2
56°	31.4	42.5	44.3
57°	31.4	42.5	44.3
58°	31.4	40.6	44.3
59°	31.4	40.6	44.3
60°	31.4	40.6	44.3
62.5°	29.5	40.6	44.3
65°	29.5	38.8	42.5



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CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	27.7	38.8	40.6
70°	25.8	36.9	38.8
72.5°	24.0	35.1	36.9
75°	22.2	31.4	33.2
77.5°	18.5	27.7	31.4
80°	16.6	24.0	25.8
82.5°	12.9	20.3	22.2
85°	9.2	14.8	14.8
87.5°	3.7	7.4	7.4
90°	0.0	0.0	0.0

(END OF REPORT)