

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: P1309444

Luminaire Tested: P3SQAS20R359035D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1309444
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: P3SQAS20R359035D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R35 optic, 3500K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

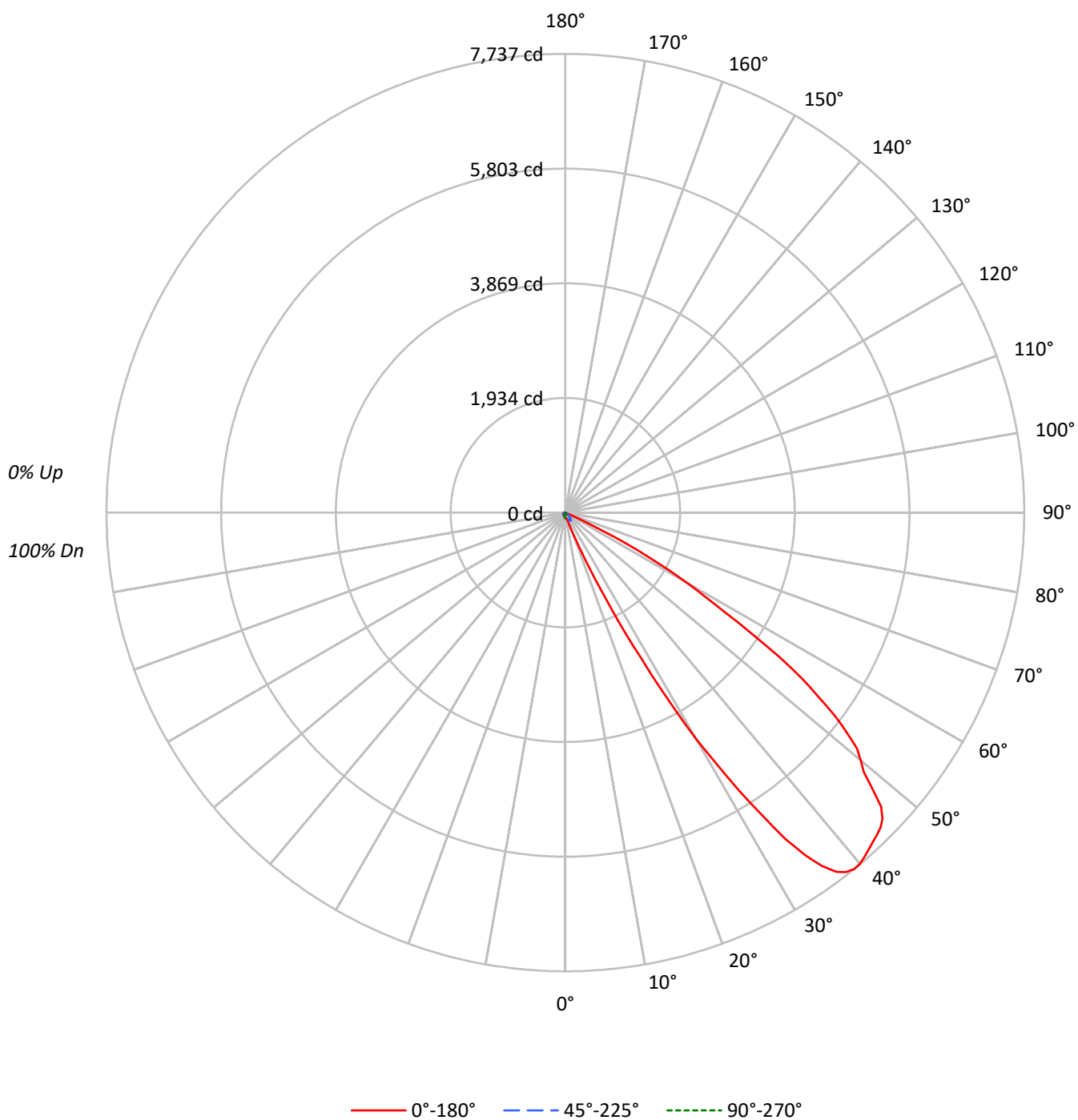
Lumens per Lamp: N/A
Luminaire Lumens: 1927.0 lumens
Efficiency: N/A
Efficacy: 66.9 lumens/watt
Spacing Criteria (0/90/45): 4.01 / 0.66 / 1.41
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1309444

CATALOG NUMBER: P3SQAS20R359035D010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1309444

CATALOG NUMBER: P3SQAS20R359035D010 E3SQCA451MMS

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°	15276	15276	15276	15276	15276
5°	16545	16233	15041	13537	13225
10°	17348	15827	13378	11560	11560
15°	24819	15512	10858	9931	10234
20°	62167	16586	8614	8614	9567
25°	288574	21150	6613	7924	8931
30°	877276	28716	5190	7259	8989
35°	1482669	33282	4394	6959	8767
40°	1737976	32846	3530	7037	9375
45°	1830302	23309	2971	7623	10156
50°	1742194	13986	2786	7931	11173
55°	1459869	5735	3123	8888	13061
60°	817265	1206	3582	10196	14363
65°	141081	693	3545	11329	16301
70°	2618	856	4381	12287	18379
75°	2329	1131	5789	13907	20828
80°	1686	1686	6943	15571	24200
85°	0	3359	13832	17191	27467

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 46°

Luminance: 1843267 cd/sqm

TEST NUMBER: P1309444

CATALOG NUMBER: P3SQAS20R359035D010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.0	0.4
10°-20°	22.7	1.2
20°-30°	118.2	6.1
30°-40°	510.6	26.5
40°-50°	728.4	37.8
50°-60°	451.1	23.4
60°-70°	68.6	3.6
70°-80°	12.8	0.7
80°-90°	6.4	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°	149.0	7.7
0°-40°	659.6	34.2
0°-60°	1839.1	95.4
0°-90°	1927.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1927.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	89	89	89	89	89	
5°	96	94	87	78	76	9
15°	139	87	61	56	57	50
25°	1519	111	35	42	47	909
35°	7052	158	21	33	42	4234
45°	7515	96	12	31	42	5677
55°	4862	19	10	30	44	4141
65°	346	2	9	28	40	707
75°	4	2	9	21	31	4
85°	0	2	7	9	14	1
90°	0	0	0	0	0	

TEST NUMBER: P1309444

CATALOG NUMBER: P3SQAS20R359035D010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7	88.7
2.5°	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	92.2	88.7	87.0
5°	95.7	95.7	93.9	93.9	93.9	93.9	93.9	93.9	90.5	87.0	81.8
7.5°	97.4	97.4	95.7	95.7	95.7	95.7	93.9	92.2	88.7	81.8	76.5
10°	99.2	99.2	99.2	99.2	97.4	95.7	93.9	90.5	85.2	76.5	71.3
12.5°	111.3	111.3	109.6	106.1	102.6	99.2	95.7	88.7	78.3	69.6	64.4
15°	139.2	137.4	133.9	128.7	121.8	113.1	106.1	87.0	71.3	60.9	57.4
17.5°	194.8	191.3	186.1	168.7	153.1	137.4	123.5	87.0	64.4	53.9	50.4
20°	339.2	340.9	304.4	262.7	227.9	189.6	154.8	90.5	57.4	47.0	45.2
22.5°	708.0	680.2	593.2	492.3	375.7	290.5	219.2	99.2	50.4	40.0	40.0
25°	1518.6	1412.5	1202.0	908.0	640.1	454.0	318.3	111.3	45.2	34.8	36.5
27.5°	2772.8	2677.1	2254.4	1697.8	1127.2	685.4	431.4	127.0	40.0	29.6	33.1
30°	4411.4	4147.0	3595.6	2783.2	1883.9	1048.9	579.3	144.4	33.1	26.1	31.3
31°	4922.9	4801.1	4129.6	3219.9	2207.5	1245.5	641.9	149.6	31.3	26.1	29.6
32°	5530.0	5314.3	4712.4	3698.2	2536.2	1421.2	716.7	154.8	29.6	22.6	29.6
33°	6072.7	5864.0	5131.6	4119.2	2868.5	1621.2	796.7	156.6	26.1	22.6	27.8
34°	6643.3	6358.0	5632.6	4559.3	3209.4	1836.9	869.8	158.3	24.4	20.9	27.8
35°	7052.1	6766.8	6064.0	4907.2	3503.4	2028.3	953.3	158.3	22.6	20.9	26.1
36°	7368.6	7118.2	6436.3	5265.6	3795.7	2200.5	1019.4	158.3	19.1	19.1	26.1
37°	7586.1	7347.8	6686.8	5573.5	4018.3	2353.6	1078.5	158.3	17.4	19.1	26.1
38°	7692.2	7493.9	6928.5	5797.9	4234.0	2473.6	1125.5	154.8	15.7	17.4	24.4
39°	7737.4	7575.7	7076.4	5987.5	4395.8	2578.0	1160.3	151.3	13.9	17.4	24.4
40°	7730.5	7589.6	7159.9	6117.9	4526.3	2649.3	1179.4	146.1	12.2	15.7	24.4
41°	7690.5	7568.7	7203.4	6229.3	4604.5	2698.0	1184.6	140.9	10.4	15.7	22.6
42°	7645.2	7533.9	7217.3	6288.4	4655.0	2713.7	1170.7	133.9	10.4	13.9	22.6
43°	7598.3	7495.6	7217.3	6307.5	4667.2	2703.2	1148.1	121.8	8.7	13.9	22.6
44°	7560.0	7462.6	7194.7	6302.3	4641.1	2663.2	1106.3	107.9	7.0	13.9	22.6
45°	7514.8	7419.1	7165.1	6269.3	4590.6	2595.4	1054.2	95.7	5.2	12.2	22.6
46°	7434.8	7360.0	7112.9	6201.4	4510.6	2501.4	988.1	87.0	3.5	12.2	20.9
47°	7279.9	7215.6	7012.0	6100.5	4404.5	2390.1	920.2	78.3	3.5	12.2	20.9
48°	6968.6	6966.8	6810.3	5912.7	4235.8	2251.0	848.9	69.6	3.5	12.2	20.9
49°	6667.6	6636.3	6441.5	5582.2	3994.0	2084.0	774.1	62.6	1.7	12.2	20.9
50°	6502.4	6434.5	6114.4	5192.5	3684.3	1852.6	694.1	52.2	1.7	10.4	20.9
51°	6330.1	6232.7	5855.3	4841.1	3315.5	1629.9	607.1	41.7	1.7	10.4	19.1
52°	6018.8	5926.6	5503.9	4505.4	2957.2	1402.1	523.6	34.8	1.7	10.4	20.9
53°	5683.0	5550.8	5091.6	4136.6	2642.3	1200.3	438.4	29.6	1.7	10.4	19.1
54°	5260.3	5201.2	4674.1	3684.3	2273.6	1005.4	360.1	24.4	1.7	10.4	19.1
55°	4862.0	4775.0	4227.1	3221.6	1939.6	824.5	300.9	19.1	1.7	10.4	19.1
56°	4354.0	4223.6	3710.4	2797.2	1600.4	664.5	254.0	15.7	1.7	10.4	19.1
57°	3748.7	3609.5	3204.2	2325.8	1255.9	506.2	212.2	12.2	1.7	10.4	19.1
58°	3171.2	3051.1	2616.3	1795.2	946.3	351.4	175.7	8.7	1.7	8.7	19.1
59°	2739.8	2607.6	2176.2	1381.2	657.5	259.2	132.2	7.0	1.7	10.4	19.1
60°	2372.7	2202.2	1751.7	1069.8	469.7	186.1	97.4	3.5	3.5	10.4	19.1
62.5°	1367.3	1207.2	836.7	434.9	193.1	95.7	47.0	1.7	3.5	10.4	19.1
65°	346.2	307.9	200.0	93.9	53.9	33.1	17.4	1.7	3.5	8.7	17.4



TEST NUMBER: P1309444

CATALOG NUMBER: P3SQAS20R359035D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
67.5°	12.2	12.2	12.2	10.4	8.7	7.0	3.5	1.7	3.5	8.7	17.4
70°	5.2	5.2	5.2	3.5	3.5	1.7	1.7	1.7	3.5	8.7	15.7
72.5°	3.5	3.5	3.5	3.5	1.7	1.7	1.7	1.7	5.2	8.7	13.9
75°	3.5	3.5	3.5	3.5	1.7	1.7	1.7	1.7	5.2	8.7	13.9
77.5°	3.5	3.5	1.7	1.7	1.7	1.7	1.7	1.7	5.2	7.0	12.2
80°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	5.2	7.0	10.4
82.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	5.2	7.0	8.7
85°	0.0	0.0	0.0	0.0	0.0	1.7	0.0	1.7	5.2	7.0	7.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	5.2	7.0	5.2
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: P1309444

CATALOG NUMBER: P3SQAS20R359035D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	88.7	88.7	88.7
2.5°	83.5	83.5	83.5
5°	78.3	78.3	76.5
7.5°	73.1	71.3	71.3
10°	66.1	66.1	66.1
12.5°	60.9	60.9	60.9
15°	55.7	57.4	57.4
17.5°	50.4	53.9	53.9
20°	47.0	50.4	52.2
22.5°	43.5	47.0	48.7
25°	41.7	45.2	47.0
27.5°	38.3	43.5	47.0
30°	36.5	41.7	45.2
31°	36.5	41.7	43.5
32°	34.8	41.7	43.5
33°	34.8	41.7	43.5
34°	34.8	40.0	43.5
35°	33.1	40.0	41.7
36°	33.1	40.0	41.7
37°	33.1	40.0	43.5
38°	33.1	40.0	41.7
39°	31.3	40.0	41.7
40°	31.3	40.0	41.7
41°	31.3	40.0	41.7
42°	31.3	40.0	41.7
43°	31.3	40.0	41.7
44°	31.3	38.3	41.7
45°	31.3	38.3	41.7
46°	31.3	40.0	41.7
47°	31.3	40.0	43.5
48°	31.3	38.3	41.7
49°	29.6	38.3	41.7
50°	29.6	38.3	41.7
51°	29.6	40.0	43.5
52°	29.6	40.0	43.5
53°	29.6	40.0	43.5
54°	29.6	40.0	41.7
55°	29.6	40.0	43.5
56°	29.6	40.0	41.7
57°	29.6	40.0	41.7
58°	29.6	38.3	41.7
59°	29.6	38.3	41.7
60°	29.6	38.3	41.7
62.5°	27.8	38.3	41.7
65°	27.8	36.5	40.0



TEST NUMBER: P1309444

CATALOG NUMBER: P3SQAS20R359035D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
67.5°	26.1	36.5	38.3
70°	24.4	34.8	36.5
72.5°	22.6	33.1	34.8
75°	20.9	29.6	31.3
77.5°	17.4	26.1	29.6
80°	15.7	22.6	24.4
82.5°	12.2	19.1	20.9
85°	8.7	13.9	13.9
87.5°	3.5	7.0	7.0
90°	0.0	0.0	0.0

(END OF REPORT)