

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: P1308261

Luminaire Tested: P3SQAS20R159030D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1308261
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: P3SQAS20R159030D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 3000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

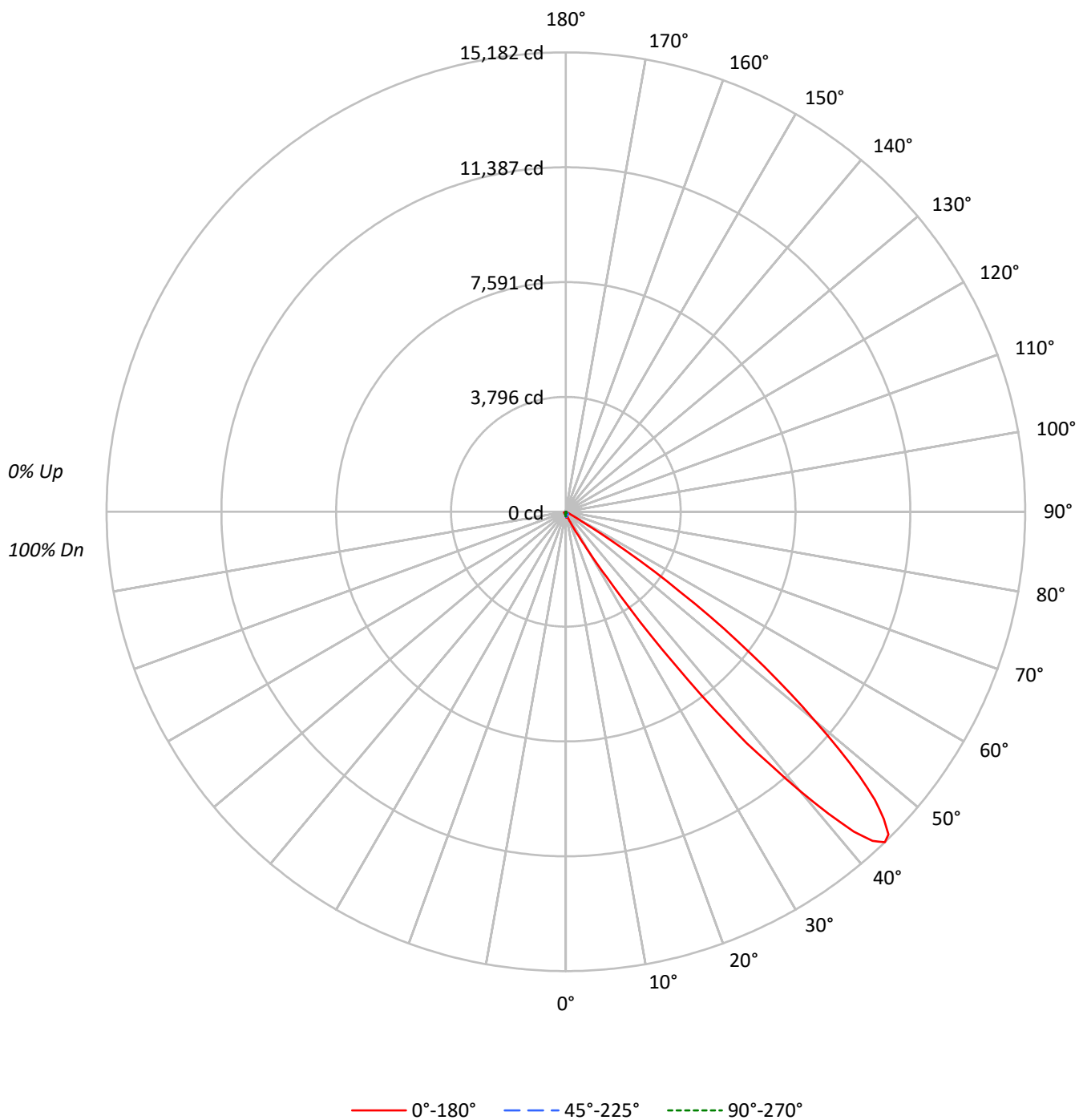
Lumens per Lamp: N/A
Luminaire Lumens: 1695.0 lumens
Efficiency: N/A
Efficacy: 58.9 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1308261

CATALOG NUMBER: P3SQAS20R159030D010 E3SQCA451MMS

Luminous Intensity Polar Plot





TEST NUMBER: P1308261

CATALOG NUMBER: P3SQAS20R159030D010 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	0			
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°	25902	25902	25902	25902	25902
5°	32138	28629	23373	20452	20158
10°	31618	24536	18030	15966	16264
15°	26210	17473	12962	13265	14157
20°	45526	13947	9915	11455	13013
25°	101493	16703	8038	10603	12200
30°	303489	20503	7060	10421	12767
35°	1168332	23106	6391	10659	13498
40°	2711810	20144	6070	11016	14433
45°	3673000	15222	5358	11934	15637
50°	2879962	9056	5439	12673	17201
55°	1382342	4054	5074	13692	18766
60°	126308	586	4650	14570	20942
65°	13774	0	4116	15160	22739
70°	3424	0	5086	16164	24674
75°	3394	1131	6721	17966	28147
80°	3372	3372	8430	18447	30150
85°	3359	3359	13437	16796	33395

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3673000 cd/sqm

TEST NUMBER: P1308261

CATALOG NUMBER: P3SQAS20R159030D010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.8	0.8
10°-20°	26.7	1.6
20°-30°	64.0	3.8
30°-40°	350.6	20.7
40°-50°	849.0	50.1
50°-60°	338.7	20.0
60°-70°	29.3	1.7
70°-80°	16.5	1.0
80°-90°	7.3	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°	103.6	6.1
0°-40°	454.2	26.8
0°-60°	1641.9	96.9
0°-90°	1695.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1695.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	150	150	150	150	150	
5°	186	166	135	118	117	18
15°	147	98	73	74	79	51
25°	534	88	42	56	64	322
35°	5557	110	30	51	64	3927
45°	15080	62	22	49	64	10638
55°	4604	14	17	46	62	4289
65°	34	0	10	37	56	87
75°	5	2	10	27	42	5
85°	2	2	7	8	17	1
90°	0	0	0	0	0	

TEST NUMBER: P1308261

CATALOG NUMBER: P3SQAS20R159030D010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	150.4	150.4	150.4	150.4	150.4	150.4	150.4	150.4	150.4	150.4	150.4
2.5°	169.0	169.0	170.7	169.0	169.0	169.0	169.0	167.3	167.3	167.3	162.2
5°	185.9	185.9	185.9	185.9	184.2	184.2	184.2	182.5	182.5	180.8	165.6
7.5°	192.7	192.7	191.0	191.0	189.3	189.3	187.6	185.9	184.2	182.5	158.9
10°	180.8	180.8	180.8	179.1	179.1	177.5	175.8	174.1	172.4	169.0	140.3
12.5°	160.6	160.6	162.2	160.6	158.9	157.2	153.8	152.1	150.4	147.0	116.6
15°	147.0	147.0	147.0	145.3	143.7	140.3	138.6	135.2	133.5	128.4	98.0
17.5°	187.6	187.6	185.9	182.5	175.8	170.7	162.2	155.5	147.0	136.9	84.5
20°	248.4	248.4	245.1	241.7	233.2	224.8	211.3	199.4	185.9	174.1	76.1
22.5°	360.0	365.1	354.9	343.1	331.3	311.0	292.4	273.8	250.1	229.9	77.7
25°	534.1	539.1	534.1	507.0	485.1	458.0	422.5	385.3	344.8	307.6	87.9
27.5°	865.3	868.7	860.2	794.3	758.8	687.9	625.3	564.5	496.9	429.3	96.3
30°	1526.1	1527.8	1473.7	1341.9	1225.3	1069.8	938.0	811.2	704.8	596.6	103.1
31°	2009.5	1962.2	1847.3	1688.4	1502.5	1292.9	1112.1	948.1	789.3	672.6	104.8
32°	2552.0	2545.3	2354.3	2078.8	1830.4	1568.4	1296.3	1086.7	904.2	745.3	106.5
33°	3270.3	3273.7	2972.8	2648.3	2241.0	1889.5	1532.9	1245.6	1025.9	831.5	109.9
34°	4392.5	4128.9	3775.6	3336.2	2781.9	2252.9	1789.8	1429.8	1135.7	914.3	109.9
35°	5557.0	5291.6	4902.9	4237.0	3476.5	2736.2	2095.7	1627.5	1267.6	1003.9	109.9
36°	6861.7	6636.9	6048.8	5198.7	4228.6	3192.6	2420.2	1855.7	1397.7	1085.0	108.2
37°	8271.2	7941.7	7289.3	6361.4	5063.5	3834.8	2815.7	2082.2	1527.8	1172.9	104.8
38°	9702.7	9405.3	8582.2	7458.3	6060.6	4512.5	3211.1	2300.2	1647.8	1238.8	99.7
39°	10787.7	10625.5	9809.2	8553.5	6856.6	5154.7	3618.4	2533.4	1774.6	1304.7	94.6
40°	12062.1	11800.1	11026.0	9472.9	7798.0	5808.8	4017.3	2739.6	1879.4	1357.1	89.6
41°	13224.8	12893.6	11916.7	10415.9	8551.8	6396.9	4395.9	2952.6	1963.9	1387.6	86.2
42°	14222.0	13836.6	12815.8	11223.8	9182.2	6866.8	4698.4	3104.7	2043.3	1412.9	81.1
43°	14867.6	14534.6	13530.7	11830.5	9721.3	7297.7	4980.6	3263.5	2092.3	1429.8	74.4
44°	15181.9	14845.6	13873.8	12210.8	10052.6	7556.3	5163.2	3373.4	2146.4	1451.8	69.3
45°	15080.5	14739.1	13799.5	12217.5	10155.7	7649.3	5240.9	3422.4	2175.1	1472.1	62.5
46°	14615.8	14375.8	13429.3	11899.8	9959.6	7549.6	5197.0	3385.2	2165.0	1472.1	55.8
47°	13963.4	13689.6	12788.8	11353.9	9484.7	7292.7	5019.5	3272.0	2102.5	1438.3	49.0
48°	13074.4	12841.2	11894.7	10486.9	8756.3	6733.3	4619.0	3087.8	2004.4	1372.3	42.3
49°	11959.0	11634.5	10753.9	9378.2	7806.5	5938.9	4093.4	2776.8	1847.3	1279.4	37.2
50°	10748.9	10348.3	9668.9	8267.8	6824.5	5092.2	3402.1	2347.5	1625.9	1157.7	33.8
51°	9564.1	9156.8	8509.5	7318.0	5776.7	4225.2	2744.7	1874.3	1338.5	990.4	28.7
52°	8335.4	7994.1	7269.0	6332.7	4945.2	3424.1	2286.7	1585.3	1112.1	831.5	23.7
53°	7111.8	6878.6	6189.1	5240.9	3973.4	2797.1	1867.5	1357.1	970.1	711.5	18.6
54°	5886.5	5631.3	5107.4	4262.4	3202.7	2207.2	1583.6	1135.7	841.7	620.3	16.9
55°	4603.8	4471.9	3988.6	3250.0	2426.9	1761.1	1284.5	976.9	704.8	518.9	13.5
56°	3545.8	3397.0	2955.9	2357.7	1803.3	1379.1	1039.4	797.7	596.6	434.3	10.1
57°	2322.2	2170.1	1877.7	1646.1	1313.2	1005.6	794.3	628.7	485.1	360.0	8.5
58°	1372.3	1233.8	1188.1	1014.0	875.5	682.8	586.5	468.2	358.3	283.9	5.1
59°	630.4	640.5	569.6	534.1	485.1	434.3	356.6	312.7	245.1	204.5	3.4
60°	366.7	346.5	338.0	302.5	268.7	238.3	214.6	189.3	153.8	131.8	1.7
62.5°	125.1	120.0	123.4	111.5	104.8	101.4	93.0	79.4	65.9	54.1	0.0
65°	33.8	33.8	32.1	30.4	28.7	27.0	25.4	22.0	20.3	16.9	0.0



TEST NUMBER: P1308261

CATALOG NUMBER: P3SQAS20R159030D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	11.8	11.8	10.1	10.1	8.5	8.5	6.8	6.8	5.1	5.1	0.0
70°	6.8	6.8	6.8	5.1	5.1	5.1	3.4	3.4	3.4	1.7	0.0
72.5°	5.1	5.1	5.1	5.1	5.1	5.1	3.4	3.4	3.4	1.7	1.7
75°	5.1	5.1	5.1	3.4	3.4	3.4	3.4	3.4	3.4	3.4	1.7
77.5°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
80°	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	1.7	3.4
82.5°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	3.4
85°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7
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: P1308261

CATALOG NUMBER: P3SQAS20R159030D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	150.4	150.4	150.4	150.4	150.4	150.4
2.5°	155.5	148.7	140.3	135.2	133.5	131.8
5°	148.7	135.2	125.1	118.3	116.6	116.6
7.5°	133.5	118.3	108.2	104.8	103.1	103.1
10°	116.6	103.1	94.6	91.3	93.0	93.0
12.5°	98.0	86.2	82.8	82.8	84.5	86.2
15°	79.4	72.7	72.7	74.4	77.7	79.4
17.5°	65.9	62.5	64.2	67.6	71.0	74.4
20°	54.1	54.1	57.5	62.5	67.6	71.0
22.5°	45.6	47.3	52.4	57.5	64.2	67.6
25°	38.9	42.3	47.3	55.8	62.5	64.2
27.5°	33.8	38.9	45.6	54.1	60.8	64.2
30°	28.7	35.5	43.9	52.4	60.8	64.2
31°	27.0	33.8	42.3	52.4	60.8	64.2
32°	25.4	33.8	42.3	52.4	60.8	64.2
33°	23.7	32.1	42.3	50.7	60.8	64.2
34°	22.0	32.1	42.3	52.4	60.8	64.2
35°	20.3	30.4	40.6	50.7	59.2	64.2
36°	18.6	30.4	40.6	50.7	60.8	64.2
37°	16.9	30.4	40.6	50.7	59.2	64.2
38°	16.9	28.7	38.9	50.7	59.2	64.2
39°	15.2	27.0	38.9	50.7	59.2	64.2
40°	13.5	27.0	37.2	49.0	59.2	64.2
41°	11.8	25.4	37.2	49.0	59.2	64.2
42°	10.1	25.4	37.2	49.0	59.2	64.2
43°	8.5	23.7	35.5	49.0	59.2	64.2
44°	8.5	23.7	35.5	49.0	59.2	64.2
45°	6.8	22.0	33.8	49.0	59.2	64.2
46°	6.8	22.0	33.8	47.3	59.2	64.2
47°	5.1	22.0	33.8	47.3	59.2	64.2
48°	5.1	20.3	33.8	47.3	59.2	64.2
49°	3.4	20.3	33.8	47.3	59.2	64.2
50°	3.4	20.3	32.1	47.3	59.2	64.2
51°	3.4	20.3	32.1	47.3	59.2	64.2
52°	3.4	18.6	32.1	47.3	59.2	64.2
53°	3.4	18.6	32.1	47.3	59.2	64.2
54°	3.4	18.6	30.4	47.3	59.2	64.2
55°	3.4	16.9	30.4	45.6	59.2	62.5
56°	3.4	16.9	30.4	45.6	59.2	62.5
57°	3.4	16.9	28.7	45.6	59.2	62.5
58°	3.4	15.2	28.7	43.9	57.5	62.5
59°	3.4	15.2	27.0	43.9	57.5	60.8
60°	3.4	13.5	27.0	42.3	55.8	60.8
62.5°	3.4	11.8	23.7	40.6	54.1	57.5
65°	3.4	10.1	22.0	37.2	52.4	55.8



TEST NUMBER: P1308261

CATALOG NUMBER: P3SQAS20R159030D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.4	10.1	20.3	35.5	49.0	54.1
70°	3.4	10.1	18.6	32.1	47.3	49.0
72.5°	5.1	10.1	16.9	30.4	43.9	45.6
75°	6.8	10.1	15.2	27.0	40.6	42.3
77.5°	6.8	10.1	13.5	23.7	35.5	37.2
80°	6.8	8.5	11.8	18.6	28.7	30.4
82.5°	6.8	8.5	8.5	15.2	22.0	23.7
85°	5.1	6.8	6.8	8.5	15.2	16.9
87.5°	5.1	6.8	3.4	5.1	6.8	6.8
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)