

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: P1313118

Luminaire Tested: P3SQAS05R409730DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1313118
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS05R409730DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 97CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

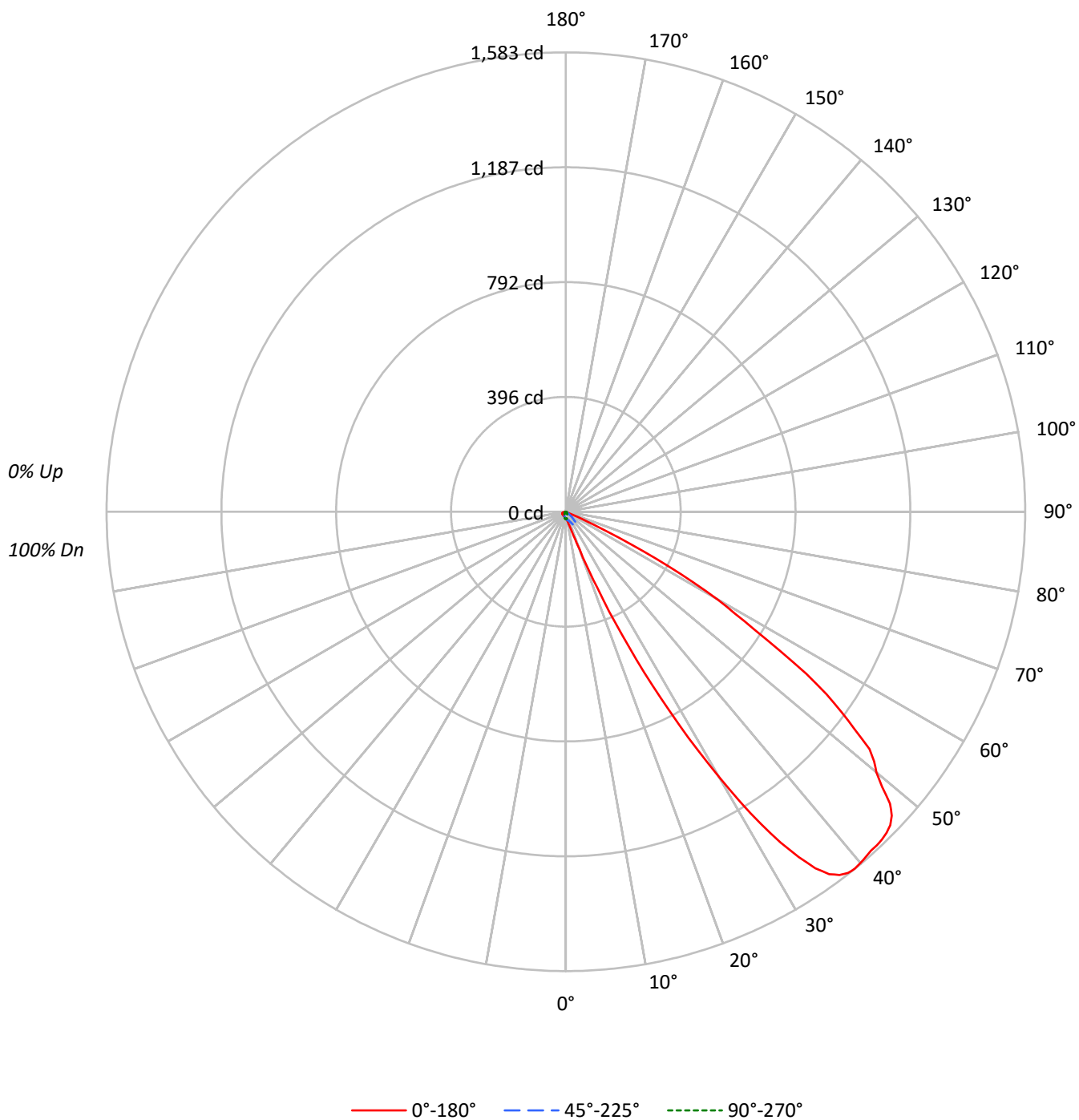
Lumens per Lamp: N/A
Luminaire Lumens: 488.9 lumens
Efficiency: N/A
Efficacy: 67.9 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 7.2
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: P1313118

CATALOG NUMBER: P3SQAS05R409730DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1313118

CATALOG NUMBER: P3SQAS05R409730DE010 E3SQCA451MMS

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	99	97	94	96	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73		
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60		
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	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	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29		
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	20	30	24	19	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	4323	4323	4323	4323	4323
5°	4806	4650	4270	3890	3803
10°	5806	4949	3935	3533	3463
15°	9521	5367	3370	3120	3209
20°	25182	6341	2804	2804	3042
25°	97123	7848	2223	2565	2983
30°	209505	10440	1790	2506	2943
35°	315347	12362	1514	2460	3028
40°	355284	12410	1304	2518	3237
45°	380952	9621	1193	2630	3507
50°	374433	6028	1072	2760	3858
55°	329416	2973	1081	3093	4324
60°	208527	620	1240	3410	4788
65°	42626	163	1263	3668	5298
70°	906	201	1360	4079	6093
75°	865	599	1464	4458	6854
80°	893	397	1785	4860	8034
85°	790	790	3557	5335	8892

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 387830 cd/sqm

TEST NUMBER: P1313118

CATALOG NUMBER: P3SQAS05R409730DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.3	0.5
10°-20°	7.8	1.6
20°-30°	38.0	7.8
30°-40°	123.5	25.3
40°-50°	170.3	34.8
50°-60°	118.6	24.3
60°-70°	22.5	4.6
70°-80°	4.0	0.8
80°-90°	1.9	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°	48.1	9.8
0°-40°	171.6	35.1
0°-60°	460.6	94.2
0°-90°	488.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	488.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	25	25	25	25	25	
5°	28	27	25	22	22	3
15°	53	30	19	18	18	19
25°	511	41	12	14	16	263
35°	1500	59	7	12	14	906
45°	1564	40	5	11	14	1189
55°	1097	10	4	10	14	938
65°	105	0	3	9	13	185
75°	1	1	2	7	10	1
85°	0	0	2	3	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1313118

CATALOG NUMBER: P3SQAS05R409730DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1	25.1
2.5°	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	26.0	25.6	25.1
5°	27.8	27.8	27.8	27.8	27.4	27.4	27.4	26.9	26.9	26.0	24.7
7.5°	29.6	29.6	29.6	29.6	29.2	28.7	28.3	28.3	27.8	25.6	23.8
10°	33.2	33.2	32.8	32.3	31.9	31.0	30.5	29.6	28.3	25.1	22.5
12.5°	40.4	39.5	39.1	38.2	36.8	35.0	33.2	31.9	28.7	24.3	21.1
15°	53.4	52.5	50.7	48.1	45.4	41.8	38.6	35.5	30.1	22.9	18.9
17.5°	76.3	73.6	71.0	66.5	59.7	53.4	46.7	40.9	31.9	21.6	17.1
20°	137.4	135.6	119.5	106.9	86.7	72.3	58.8	48.9	34.6	20.2	15.3
22.5°	283.4	264.5	238.0	194.9	151.8	111.8	81.3	61.5	37.3	18.4	13.5
25°	511.1	481.4	424.4	341.3	251.9	178.3	117.7	80.4	41.3	16.6	11.7
27.5°	773.8	743.7	655.2	540.7	394.7	269.0	168.0	106.4	46.7	14.8	10.3
30°	1053.5	1027.9	915.7	757.1	556.4	376.8	225.0	132.9	52.5	13.0	9.0
31°	1166.3	1133.5	1012.2	843.4	632.3	421.2	247.9	144.2	54.8	12.6	8.5
32°	1270.0	1232.7	1107.0	926.0	693.8	469.3	273.0	154.0	56.6	11.7	8.1
33°	1359.4	1315.8	1194.5	1004.1	761.6	514.2	299.1	163.5	57.9	10.8	7.6
34°	1435.3	1397.5	1267.3	1082.7	821.8	557.3	324.7	172.9	58.8	10.3	7.2
35°	1499.9	1465.8	1336.9	1142.5	880.6	599.1	348.0	181.9	58.8	9.4	7.2
36°	1543.5	1513.8	1397.1	1203.5	930.0	634.5	367.8	190.0	58.8	8.5	6.7
37°	1567.3	1538.5	1436.6	1253.8	978.5	669.6	385.8	196.2	58.4	8.1	6.3
38°	1579.4	1554.3	1465.8	1294.7	1012.2	694.7	401.5	201.2	57.9	7.2	6.3
39°	1582.6	1561.4	1484.2	1324.3	1045.0	719.9	412.7	203.9	56.6	6.7	5.8
40°	1580.3	1561.9	1494.1	1350.8	1070.2	739.6	420.8	204.8	55.2	5.8	5.8
41°	1575.8	1561.4	1501.3	1369.2	1090.4	752.2	423.9	203.0	53.4	4.9	5.4
42°	1571.8	1556.1	1504.4	1381.8	1104.3	758.5	423.5	199.4	50.7	4.5	5.4
43°	1571.8	1553.8	1504.9	1389.9	1111.0	758.9	418.1	192.7	47.2	4.0	4.9
44°	1569.1	1552.5	1507.1	1395.3	1112.8	754.9	409.6	185.5	43.1	3.6	4.9
45°	1564.1	1546.6	1506.7	1395.7	1109.7	745.0	395.6	176.0	39.5	2.7	4.9
46°	1554.7	1539.0	1502.6	1392.6	1100.2	730.7	379.0	166.6	35.5	2.2	4.5
47°	1535.8	1523.7	1491.8	1381.8	1085.9	709.5	359.3	155.8	32.3	1.8	4.5
48°	1503.5	1495.0	1473.4	1358.0	1058.5	683.5	338.2	144.2	29.2	1.8	4.5
49°	1444.2	1437.5	1424.9	1319.8	1023.4	651.6	315.3	131.1	26.0	1.3	4.5
50°	1397.5	1390.3	1364.7	1255.6	973.2	611.2	290.1	118.1	22.5	0.9	4.0
51°	1366.5	1354.9	1314.5	1181.1	900.0	557.3	262.7	105.1	18.9	0.9	4.0
52°	1327.5	1310.0	1259.7	1114.2	833.0	503.4	233.1	92.1	16.6	0.9	4.0
53°	1245.7	1239.5	1189.6	1042.3	766.1	451.8	202.5	81.3	14.4	0.9	4.0
54°	1174.3	1164.9	1097.1	942.6	693.4	394.3	171.1	71.9	12.1	0.9	4.0
55°	1097.1	1078.7	1018.5	858.6	608.1	341.3	141.0	62.0	9.9	0.9	3.6
56°	999.6	983.5	918.8	768.8	529.5	287.4	118.1	50.7	7.6	0.9	3.6
57°	881.1	866.3	816.4	658.3	447.7	234.9	96.1	40.9	5.8	0.9	3.6
58°	766.6	750.0	692.9	552.4	361.5	186.4	80.4	33.2	4.5	0.9	3.6
59°	678.6	656.1	582.5	463.9	282.9	141.5	63.8	26.5	3.1	0.9	3.6
60°	605.4	586.9	510.6	386.2	221.8	104.2	47.2	20.2	1.8	0.9	3.6
62.5°	350.7	345.8	277.1	198.9	104.6	48.5	23.4	9.4	0.9	1.3	3.6
65°	104.6	91.2	71.0	42.2	26.9	16.2	8.5	3.1	0.4	1.3	3.1



TEST NUMBER: P1313118

CATALOG NUMBER: P3SQAS05R409730DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	3.1	3.1	3.1	3.1	3.1	3.1	1.8	0.9	0.4	1.3	3.1
70°	1.8	1.3	1.3	1.3	1.3	0.9	0.9	0.4	0.4	1.3	2.7
72.5°	1.3	1.3	1.3	1.3	0.9	0.9	0.9	0.4	0.9	1.3	2.2
75°	1.3	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.9	1.3	2.2
77.5°	0.9	0.9	0.9	0.9	0.4	0.4	0.4	0.4	0.9	1.3	2.2
80°	0.9	0.9	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.3	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	1.3	1.3
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: P1313118

CATALOG NUMBER: P3SQAS05R409730DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	25.1	25.1	25.1	25.1
2.5°	24.3	23.8	23.4	23.4
5°	23.4	22.5	22.5	22.0
7.5°	22.0	21.1	21.1	21.1
10°	20.7	20.2	20.2	19.8
12.5°	18.9	18.9	18.9	18.9
15°	17.5	17.5	18.0	18.0
17.5°	15.7	16.2	17.1	17.5
20°	14.4	15.3	16.2	16.6
22.5°	13.5	14.4	15.7	16.2
25°	12.1	13.5	15.3	15.7
27.5°	11.2	13.0	14.4	15.3
30°	10.3	12.6	13.9	14.8
31°	10.3	12.1	13.9	14.8
32°	9.9	11.7	13.9	14.4
33°	9.9	11.7	13.9	14.4
34°	9.4	11.7	13.5	14.4
35°	9.4	11.7	13.5	14.4
36°	9.0	11.2	13.5	14.4
37°	9.0	11.2	13.5	14.4
38°	8.5	11.2	13.5	14.4
39°	8.5	11.2	13.5	14.4
40°	8.5	11.2	13.5	14.4
41°	8.1	11.2	13.5	14.4
42°	8.1	11.2	13.5	14.4
43°	8.1	10.8	13.5	14.4
44°	8.1	10.8	13.5	14.4
45°	7.6	10.8	13.5	14.4
46°	7.6	10.8	13.5	14.4
47°	7.6	10.8	13.5	14.4
48°	7.6	10.8	13.5	14.4
49°	7.6	10.8	13.5	14.4
50°	7.2	10.3	13.5	14.4
51°	7.2	10.3	13.5	14.4
52°	7.2	10.3	13.5	14.4
53°	7.2	10.3	13.5	14.4
54°	6.7	10.3	13.5	14.4
55°	6.7	10.3	13.5	14.4
56°	6.7	10.3	13.5	13.9
57°	6.7	10.3	13.0	13.9
58°	6.7	9.9	13.0	13.9
59°	6.7	9.9	13.0	13.9
60°	6.7	9.9	13.0	13.9
62.5°	6.3	9.9	12.6	13.5
65°	5.8	9.0	12.6	13.0



TEST NUMBER: P1313118

CATALOG NUMBER: P3SQAS05R409730DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	5.8	8.5	11.7	12.6
70°	5.4	8.1	11.2	12.1
72.5°	4.5	7.6	10.3	11.2
75°	4.0	6.7	9.4	10.3
77.5°	3.6	5.8	8.5	9.0
80°	3.1	4.9	7.2	8.1
82.5°	2.2	3.6	5.8	6.3
85°	1.8	2.7	4.0	4.5
87.5°	1.3	1.3	2.2	2.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)