

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: P1307714

Luminaire Tested: P3SQAS05R409030DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307714
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: P3SQAS05R409030DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R40 optic, 3000K CCT AND, 90CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

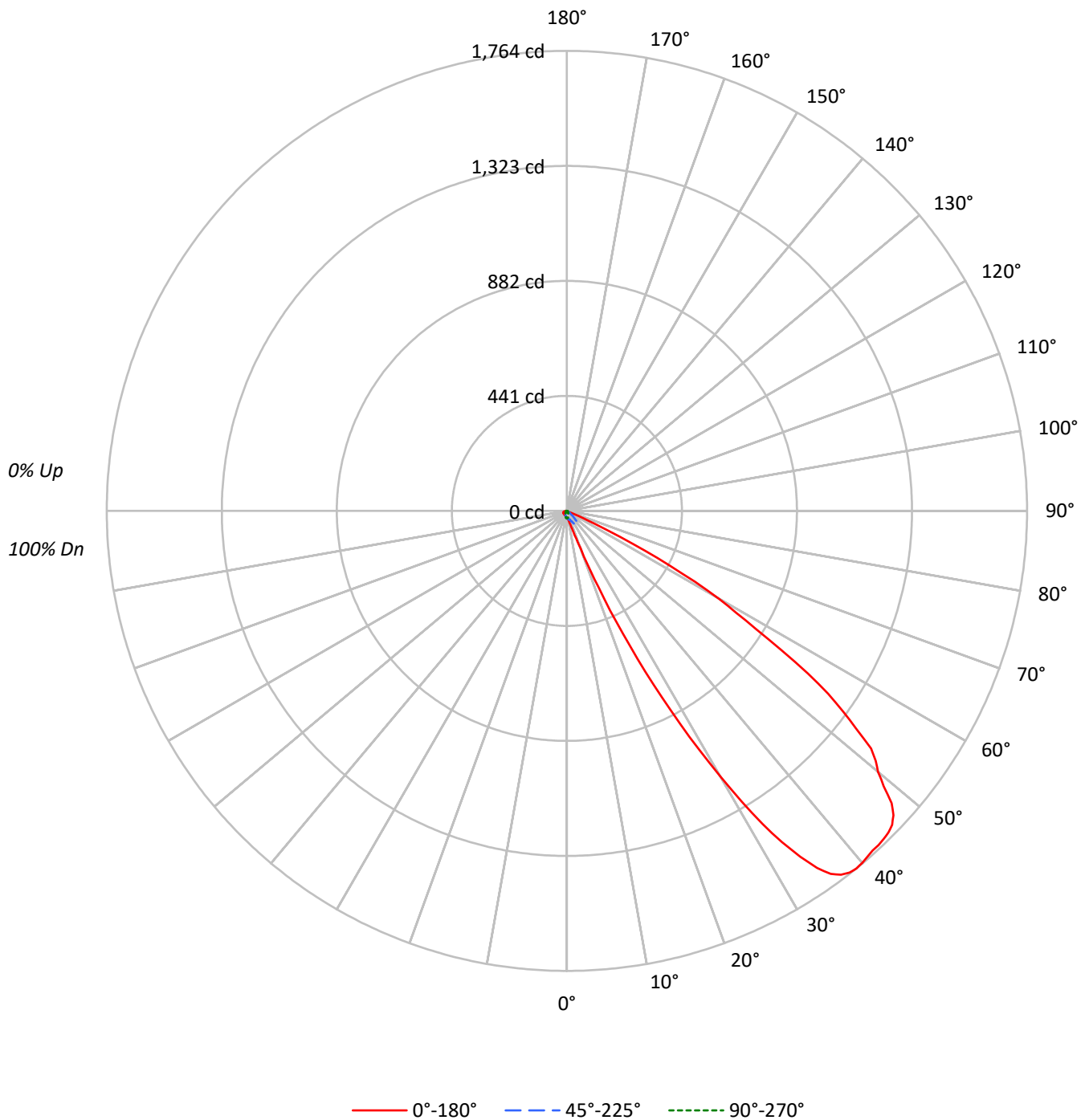
Lumens per Lamp: N/A
Luminaire Lumens: 545.0 lumens
Efficiency: N/A
Efficacy: 75.7 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1307714

CATALOG NUMBER: P3SQAS05R409030DE010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1307714

CATALOG NUMBER: P3SQAS05R409030DE010 E3SQCA451MB

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	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	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	72
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°	4822	4822	4822	4822	4822
5°	5359	5186	4754	4322	4236
10°	6471	5509	4372	3935	3847
15°	10627	5973	3744	3477	3566
20°	28078	7056	3116	3116	3391
25°	108239	8741	2470	2850	3325
30°	233508	11654	1989	2784	3281
35°	351467	13792	1682	2733	3364
40°	395977	13849	1461	2810	3597
45°	424597	10717	1340	2923	3897
50°	417329	6698	1206	3081	4287
55°	367129	3303	1201	3453	4804
60°	232397	689	1378	3789	5339
65°	47516	204	1426	4075	5909
70°	1007	252	1511	4532	6798
75°	998	665	1664	4991	7652
80°	992	496	1984	5455	8926
85°	988	988	3952	5928	9880

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 432250 cd/sqm

TEST NUMBER: P1307714

CATALOG NUMBER: P3SQAS05R409030DE010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.6	0.5
10°-20°	8.6	1.6
20°-30°	42.3	7.8
30°-40°	137.7	25.3
40°-50°	189.8	34.8
50°-60°	132.2	24.3
60°-70°	25.1	4.6
70°-80°	4.5	0.8
80°-90°	2.1	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°	53.6	9.8
0°-40°	191.3	35.1
0°-60°	513.3	94.2
0°-90°	545.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	545.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	28	28	28	28	28	
5°	31	30	28	25	24	3
15°	60	34	21	20	20	22
25°	570	46	13	15	18	293
35°	1672	66	8	13	16	1010
45°	1743	44	6	12	16	1326
55°	1223	11	4	12	16	1045
65°	117	0	4	10	14	206
75°	2	1	2	8	12	1
85°	0	0	2	3	5	0
90°	0	0	0	0	0	

TEST NUMBER: P1307714

CATALOG NUMBER: P3SQAS05R409030DE010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0	28.0
2.5°	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	29.0	28.5	28.0
5°	31.0	31.0	31.0	31.0	30.5	30.5	30.5	30.0	30.0	29.0	27.5
7.5°	33.0	33.0	33.0	33.0	32.5	32.0	31.5	31.5	31.0	28.5	26.5
10°	37.0	37.0	36.5	36.0	35.5	34.5	34.0	33.0	31.5	28.0	25.0
12.5°	45.0	44.0	43.5	42.5	41.0	39.0	37.0	35.5	32.0	27.0	23.5
15°	59.6	58.6	56.6	53.6	50.6	46.5	43.0	39.5	33.5	25.5	21.0
17.5°	85.1	82.1	79.1	74.1	66.6	59.6	52.1	45.5	35.5	24.0	19.0
20°	153.2	151.2	133.1	119.1	96.6	80.6	65.6	54.6	38.5	22.5	17.0
22.5°	315.8	294.8	265.3	217.2	169.2	124.6	90.6	68.6	41.5	20.5	15.0
25°	569.6	536.5	473.0	380.4	280.8	198.7	131.1	89.6	46.0	18.5	13.0
27.5°	862.4	828.8	730.2	602.6	439.9	299.8	187.2	118.6	52.1	16.5	11.5
30°	1174.2	1145.7	1020.5	843.9	620.1	419.9	250.8	148.1	58.6	14.5	10.0
31°	1299.8	1263.3	1128.1	940.0	704.7	469.5	276.3	160.7	61.1	14.0	9.5
32°	1415.4	1373.9	1233.7	1032.0	773.3	523.0	304.3	171.7	63.1	13.0	9.0
33°	1515.0	1466.5	1331.3	1119.1	848.9	573.1	333.3	182.2	64.6	12.0	8.5
34°	1599.6	1557.6	1412.4	1206.7	915.9	621.1	361.9	192.7	65.6	11.5	8.0
35°	1671.7	1633.7	1490.0	1273.3	981.5	667.7	387.9	202.7	65.6	10.5	8.0
36°	1720.2	1687.2	1557.1	1341.4	1036.5	707.2	409.9	211.7	65.6	9.5	7.5
37°	1746.8	1714.7	1601.1	1397.4	1090.6	746.3	429.9	218.7	65.1	9.0	7.0
38°	1760.3	1732.3	1633.7	1443.0	1128.1	774.3	447.5	224.2	64.6	8.0	7.0
39°	1763.8	1740.3	1654.2	1476.0	1164.7	802.3	460.0	227.2	63.1	7.5	6.5
40°	1761.3	1740.8	1665.2	1505.5	1192.7	824.3	469.0	228.2	61.6	6.5	6.5
41°	1756.3	1740.3	1673.2	1526.0	1215.2	838.3	472.5	226.2	59.6	5.5	6.0
42°	1751.8	1734.3	1676.7	1540.1	1230.7	845.4	472.0	222.2	56.6	5.0	6.0
43°	1751.8	1731.8	1677.2	1549.1	1238.3	845.9	466.0	214.7	52.6	4.5	5.5
44°	1748.8	1730.3	1679.7	1555.1	1240.3	841.4	456.5	206.7	48.0	4.0	5.5
45°	1743.3	1723.7	1679.2	1555.6	1236.8	830.3	440.9	196.2	44.0	3.0	5.5
46°	1732.8	1715.2	1674.7	1552.1	1226.2	814.3	422.4	185.7	39.5	2.5	5.0
47°	1711.7	1698.2	1662.7	1540.1	1210.2	790.8	400.4	173.7	36.0	2.0	5.0
48°	1675.7	1666.2	1642.2	1513.5	1179.7	761.8	376.9	160.7	32.5	2.0	5.0
49°	1609.6	1602.1	1588.1	1471.0	1140.7	726.2	351.4	146.1	29.0	1.5	5.0
50°	1557.6	1549.6	1521.0	1399.4	1084.6	681.2	323.3	131.6	25.0	1.0	4.5
51°	1523.0	1510.0	1465.0	1316.3	1003.0	621.1	292.8	117.1	21.0	1.0	4.5
52°	1479.5	1460.0	1403.9	1241.8	928.4	561.1	259.8	102.6	18.5	1.0	4.5
53°	1388.4	1381.4	1325.8	1161.7	853.9	503.5	225.7	90.6	16.0	1.0	4.5
54°	1308.8	1298.3	1222.7	1050.6	772.8	439.4	190.7	80.1	13.5	1.0	4.5
55°	1222.7	1202.2	1135.1	957.0	677.7	380.4	157.2	69.1	11.0	1.0	4.0
56°	1114.1	1096.1	1024.0	856.9	590.1	320.3	131.6	56.6	8.5	1.0	4.0
57°	982.0	965.5	909.9	733.7	499.0	261.8	107.1	45.5	6.5	1.0	4.0
58°	854.4	835.8	772.3	615.6	402.9	207.7	89.6	37.0	5.0	1.0	4.0
59°	756.3	731.2	649.2	517.0	315.3	157.7	71.1	29.5	3.5	1.0	4.0
60°	674.7	654.2	569.1	430.4	247.3	116.1	52.6	22.5	2.0	1.0	4.0
62.5°	390.9	385.4	308.8	221.7	116.6	54.1	26.0	10.5	1.0	1.5	4.0
65°	116.6	101.6	79.1	47.0	30.0	18.0	9.5	3.5	0.5	1.5	3.5



TEST NUMBER: P1307714

CATALOG NUMBER: P3SQAS05R409030DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	3.5	3.5	3.5	3.5	3.5	3.5	2.0	1.0	0.5	1.5	3.5
70°	2.0	1.5	1.5	1.5	1.5	1.0	1.0	0.5	0.5	1.5	3.0
72.5°	1.5	1.5	1.5	1.5	1.0	1.0	1.0	0.5	1.0	1.5	2.5
75°	1.5	1.0	1.0	1.0	1.0	0.5	0.5	0.5	1.0	1.5	2.5
77.5°	1.0	1.0	1.0	1.0	0.5	0.5	0.5	0.5	1.0	1.5	2.5
80°	1.0	1.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0
82.5°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0
85°	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	1.5	2.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	1.5	1.5
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: P1307714

CATALOG NUMBER: P3SQAS05R409030DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	28.0	28.0	28.0	28.0
2.5°	27.0	26.5	26.0	26.0
5°	26.0	25.0	25.0	24.5
7.5°	24.5	23.5	23.5	23.5
10°	23.0	22.5	22.5	22.0
12.5°	21.0	21.0	21.0	21.0
15°	19.5	19.5	20.0	20.0
17.5°	17.5	18.0	19.0	19.5
20°	16.0	17.0	18.0	18.5
22.5°	15.0	16.0	17.5	18.0
25°	13.5	15.0	17.0	17.5
27.5°	12.5	14.5	16.0	17.0
30°	11.5	14.0	15.5	16.5
31°	11.5	13.5	15.5	16.5
32°	11.0	13.0	15.5	16.0
33°	11.0	13.0	15.5	16.0
34°	10.5	13.0	15.0	16.0
35°	10.5	13.0	15.0	16.0
36°	10.0	12.5	15.0	16.0
37°	10.0	12.5	15.0	16.0
38°	9.5	12.5	15.0	16.0
39°	9.5	12.5	15.0	16.0
40°	9.5	12.5	15.0	16.0
41°	9.0	12.5	15.0	16.0
42°	9.0	12.5	15.0	16.0
43°	9.0	12.0	15.0	16.0
44°	9.0	12.0	15.0	16.0
45°	8.5	12.0	15.0	16.0
46°	8.5	12.0	15.0	16.0
47°	8.5	12.0	15.0	16.0
48°	8.5	12.0	15.0	16.0
49°	8.5	12.0	15.0	16.0
50°	8.0	11.5	15.0	16.0
51°	8.0	11.5	15.0	16.0
52°	8.0	11.5	15.0	16.0
53°	8.0	11.5	15.0	16.0
54°	7.5	11.5	15.0	16.0
55°	7.5	11.5	15.0	16.0
56°	7.5	11.5	15.0	15.5
57°	7.5	11.5	14.5	15.5
58°	7.5	11.0	14.5	15.5
59°	7.5	11.0	14.5	15.5
60°	7.5	11.0	14.5	15.5
62.5°	7.0	11.0	14.0	15.0
65°	6.5	10.0	14.0	14.5



TEST NUMBER: P1307714

CATALOG NUMBER: P3SQAS05R409030DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	6.5	9.5	13.0	14.0
70°	6.0	9.0	12.5	13.5
72.5°	5.0	8.5	11.5	12.5
75°	4.5	7.5	10.5	11.5
77.5°	4.0	6.5	9.5	10.0
80°	3.5	5.5	8.0	9.0
82.5°	2.5	4.0	6.5	7.0
85°	2.0	3.0	4.5	5.0
87.5°	1.5	1.5	2.5	2.5
90°	0.0	0.0	0.0	0.0

(END OF REPORT)