

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: P1317733

Luminaire Tested: P3SQAS05R409835DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1317733
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: P3SQAS05R409835DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R40 optic, 3500K CCT AND, 98CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

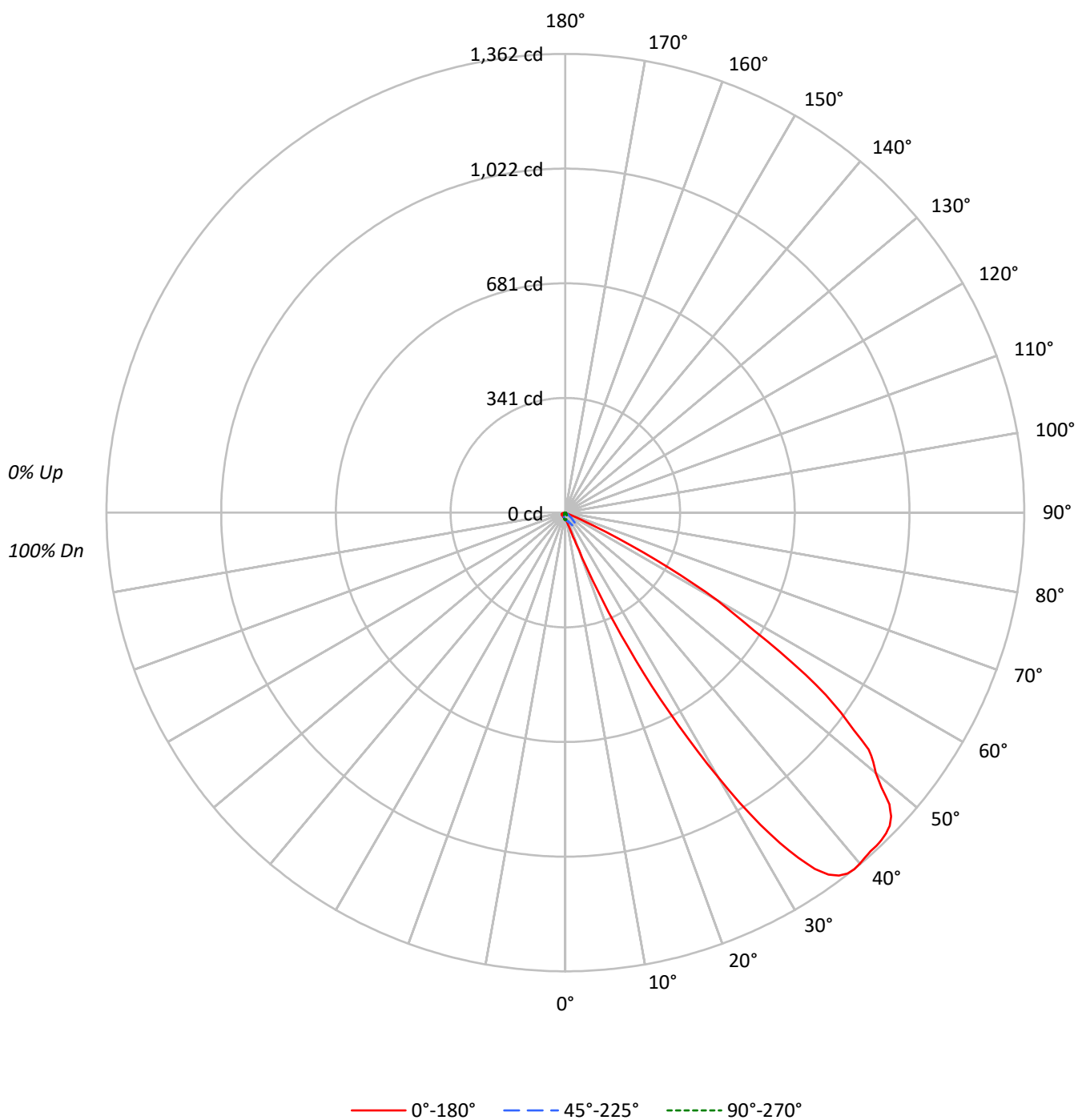
Lumens per Lamp: N/A
Luminaire Lumens: 421.0 lumens
Efficiency: N/A
Efficacy: 58.5 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1317733

CATALOG NUMBER: P3SQAS05R409835DE010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1317733

CATALOG NUMBER: P3SQAS05R409835DE010 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°	3737	3737	3737	3737	3737
5°	4149	4011	3682	3337	3267
10°	5002	4267	3375	3043	2973
15°	8202	4618	2888	2692	2764
20°	21681	5462	2401	2401	2621
25°	83612	6765	1919	2204	2565
30°	180371	8989	1531	2148	2545
35°	271489	10638	1304	2123	2607
40°	305891	10701	1124	2181	2788
45°	327977	8281	1047	2265	3020
50°	322374	5171	938	2385	3322
55°	283597	2552	931	2672	3723
60°	179525	517	1068	2928	4133
65°	36717	163	1100	3138	4564
70°	755	201	1158	3525	5237
75°	799	532	1264	3859	5922
80°	793	397	1488	4265	6943
85°	790	790	2964	4545	7707

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 333916 cd/sqm

TEST NUMBER: P1317733

CATALOG NUMBER: P3SQAS05R409835DE010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2.0	0.5
10°-20°	6.7	1.6
20°-30°	32.7	7.8
30°-40°	106.4	25.3
40°-50°	146.6	34.8
50°-60°	102.1	24.3
60°-70°	19.4	4.6
70°-80°	3.5	0.8
80°-90°	1.6	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°	41.4	9.8
0°-40°	147.8	35.1
0°-60°	396.5	94.2
0°-90°	421.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	421.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	22	22	22	22	22	
5°	24	23	21	19	19	2
15°	46	26	16	15	16	17
25°	440	36	10	12	14	227
35°	1291	51	6	10	12	780
45°	1347	34	4	9	12	1024
55°	944	8	3	9	12	807
65°	90	0	3	8	11	159
75°	1	1	2	6	9	1
85°	0	0	2	2	4	0
90°	0	0	0	0	0	

TEST NUMBER: P1317733

CATALOG NUMBER: P3SQAS05R409835DE010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7	21.7
2.5°	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.4	22.0	21.7
5°	24.0	24.0	24.0	24.0	23.6	23.6	23.6	23.2	23.2	22.4	21.3
7.5°	25.5	25.5	25.5	25.5	25.1	24.7	24.4	24.4	24.0	22.0	20.5
10°	28.6	28.6	28.2	27.8	27.5	26.7	26.3	25.5	24.4	21.7	19.3
12.5°	34.8	34.0	33.6	32.9	31.7	30.2	28.6	27.5	24.7	20.9	18.2
15°	46.0	45.2	43.7	41.4	39.0	36.0	33.3	30.5	25.9	19.7	16.2
17.5°	65.7	63.4	61.1	57.2	51.4	46.0	40.2	35.2	27.5	18.6	14.7
20°	118.3	116.8	102.8	92.0	74.6	62.2	50.6	42.1	29.8	17.4	13.1
22.5°	244.0	227.7	204.9	167.8	130.7	96.3	70.0	53.0	32.1	15.9	11.6
25°	440.0	414.5	365.4	293.8	216.9	153.5	101.3	69.2	35.6	14.3	10.1
27.5°	666.2	640.3	564.1	465.5	339.8	231.6	144.6	91.6	40.2	12.8	8.9
30°	907.0	885.0	788.3	651.9	479.0	324.4	193.7	114.4	45.2	11.2	7.7
31°	1004.1	975.9	871.5	726.1	544.4	362.7	213.4	124.1	47.2	10.8	7.3
32°	1093.4	1061.3	953.0	797.2	597.3	404.0	235.1	132.6	48.7	10.1	7.0
33°	1170.3	1132.8	1028.4	864.5	655.7	442.7	257.5	140.7	49.9	9.3	6.6
34°	1235.7	1203.2	1091.1	932.2	707.5	479.8	279.5	148.9	50.6	8.9	6.2
35°	1291.3	1262.0	1151.0	983.6	758.2	515.8	299.6	156.6	50.6	8.1	6.2
36°	1328.8	1303.3	1202.8	1036.2	800.7	546.3	316.6	163.5	50.6	7.3	5.8
37°	1349.3	1324.6	1236.8	1079.5	842.5	576.5	332.1	169.0	50.3	7.0	5.4
38°	1359.8	1338.1	1262.0	1114.7	871.5	598.1	345.6	173.2	49.9	6.2	5.4
39°	1362.5	1344.3	1277.8	1140.2	899.7	619.8	355.3	175.5	48.7	5.8	5.0
40°	1360.6	1344.7	1286.3	1163.0	921.3	636.8	362.3	176.3	47.6	5.0	5.0
41°	1356.7	1344.3	1292.5	1178.8	938.7	647.6	365.0	174.8	46.0	4.3	4.6
42°	1353.2	1339.7	1295.2	1189.7	950.7	653.0	364.6	171.7	43.7	3.9	4.6
43°	1353.2	1337.7	1295.6	1196.6	956.5	653.4	360.0	165.9	40.6	3.5	4.3
44°	1350.9	1336.6	1297.5	1201.3	958.1	649.9	352.6	159.7	37.1	3.1	4.3
45°	1346.6	1331.6	1297.1	1201.6	955.4	641.4	340.6	151.6	34.0	2.3	4.3
46°	1338.5	1325.0	1293.7	1198.9	947.2	629.0	326.3	143.4	30.5	1.9	3.9
47°	1322.3	1311.8	1284.4	1189.7	934.9	610.9	309.3	134.2	27.8	1.5	3.9
48°	1294.4	1287.1	1268.5	1169.2	911.3	588.5	291.1	124.1	25.1	1.5	3.9
49°	1243.4	1237.6	1226.8	1136.3	881.1	561.0	271.4	112.9	22.4	1.2	3.9
50°	1203.2	1197.0	1175.0	1081.0	837.8	526.2	249.8	101.7	19.3	0.8	3.5
51°	1176.5	1166.5	1131.7	1016.8	774.8	479.8	226.2	90.5	16.2	0.8	3.5
52°	1142.9	1127.8	1084.5	959.2	717.2	433.4	200.7	79.3	14.3	0.8	3.5
53°	1072.5	1067.1	1024.2	897.4	659.6	388.9	174.4	70.0	12.4	0.8	3.5
54°	1011.0	1002.9	944.5	811.5	597.0	339.5	147.3	61.9	10.4	0.8	3.5
55°	944.5	928.7	876.9	739.2	523.5	293.8	121.4	53.4	8.5	0.8	3.1
56°	860.6	846.7	791.0	661.9	455.8	247.4	101.7	43.7	6.6	0.8	3.1
57°	758.6	745.8	702.9	566.8	385.5	202.2	82.7	35.2	5.0	0.8	3.1
58°	660.0	645.7	596.6	475.6	311.2	160.5	69.2	28.6	3.9	0.8	3.1
59°	584.2	564.9	501.5	399.4	243.6	121.8	54.9	22.8	2.7	0.8	3.1
60°	521.2	505.3	439.6	332.5	191.0	89.7	40.6	17.4	1.5	0.8	3.1
62.5°	302.0	297.7	238.6	171.3	90.1	41.8	20.1	8.1	0.8	1.2	3.1
65°	90.1	78.5	61.1	36.3	23.2	13.9	7.3	2.7	0.4	1.2	2.7



TEST NUMBER: P1317733

CATALOG NUMBER: P3SQAS05R409835DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	2.7	2.7	2.7	2.7	2.7	2.7	1.5	0.8	0.4	1.2	2.7
70°	1.5	1.2	1.2	1.2	1.2	0.8	0.8	0.4	0.4	1.2	2.3
72.5°	1.2	1.2	1.2	1.2	0.8	0.8	0.8	0.4	0.8	1.2	1.9
75°	1.2	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.8	1.2	1.9
77.5°	0.8	0.8	0.8	0.8	0.4	0.4	0.4	0.4	0.8	1.2	1.9
80°	0.8	0.8	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.2	1.5
82.5°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.2	1.5
85°	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	1.2	1.5
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.4	1.2	1.2
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: P1317733

CATALOG NUMBER: P3SQAS05R409835DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	21.7	21.7	21.7	21.7
2.5°	20.9	20.5	20.1	20.1
5°	20.1	19.3	19.3	18.9
7.5°	18.9	18.2	18.2	18.2
10°	17.8	17.4	17.4	17.0
12.5°	16.2	16.2	16.2	16.2
15°	15.1	15.1	15.5	15.5
17.5°	13.5	13.9	14.7	15.1
20°	12.4	13.1	13.9	14.3
22.5°	11.6	12.4	13.5	13.9
25°	10.4	11.6	13.1	13.5
27.5°	9.7	11.2	12.4	13.1
30°	8.9	10.8	12.0	12.8
31°	8.9	10.4	12.0	12.8
32°	8.5	10.1	12.0	12.4
33°	8.5	10.1	12.0	12.4
34°	8.1	10.1	11.6	12.4
35°	8.1	10.1	11.6	12.4
36°	7.7	9.7	11.6	12.4
37°	7.7	9.7	11.6	12.4
38°	7.3	9.7	11.6	12.4
39°	7.3	9.7	11.6	12.4
40°	7.3	9.7	11.6	12.4
41°	7.0	9.7	11.6	12.4
42°	7.0	9.7	11.6	12.4
43°	7.0	9.3	11.6	12.4
44°	7.0	9.3	11.6	12.4
45°	6.6	9.3	11.6	12.4
46°	6.6	9.3	11.6	12.4
47°	6.6	9.3	11.6	12.4
48°	6.6	9.3	11.6	12.4
49°	6.6	9.3	11.6	12.4
50°	6.2	8.9	11.6	12.4
51°	6.2	8.9	11.6	12.4
52°	6.2	8.9	11.6	12.4
53°	6.2	8.9	11.6	12.4
54°	5.8	8.9	11.6	12.4
55°	5.8	8.9	11.6	12.4
56°	5.8	8.9	11.6	12.0
57°	5.8	8.9	11.2	12.0
58°	5.8	8.5	11.2	12.0
59°	5.8	8.5	11.2	12.0
60°	5.8	8.5	11.2	12.0
62.5°	5.4	8.5	10.8	11.6
65°	5.0	7.7	10.8	11.2



TEST NUMBER: P1317733

CATALOG NUMBER: P3SQAS05R409835DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	5.0	7.3	10.1	10.8
70°	4.6	7.0	9.7	10.4
72.5°	3.9	6.6	8.9	9.7
75°	3.5	5.8	8.1	8.9
77.5°	3.1	5.0	7.3	7.7
80°	2.7	4.3	6.2	7.0
82.5°	1.9	3.1	5.0	5.4
85°	1.5	2.3	3.5	3.9
87.5°	1.2	1.2	1.9	1.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)