

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: P1317168

Luminaire Tested: P3SQAS13R509830DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1317168
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS13R509830DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 3000K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

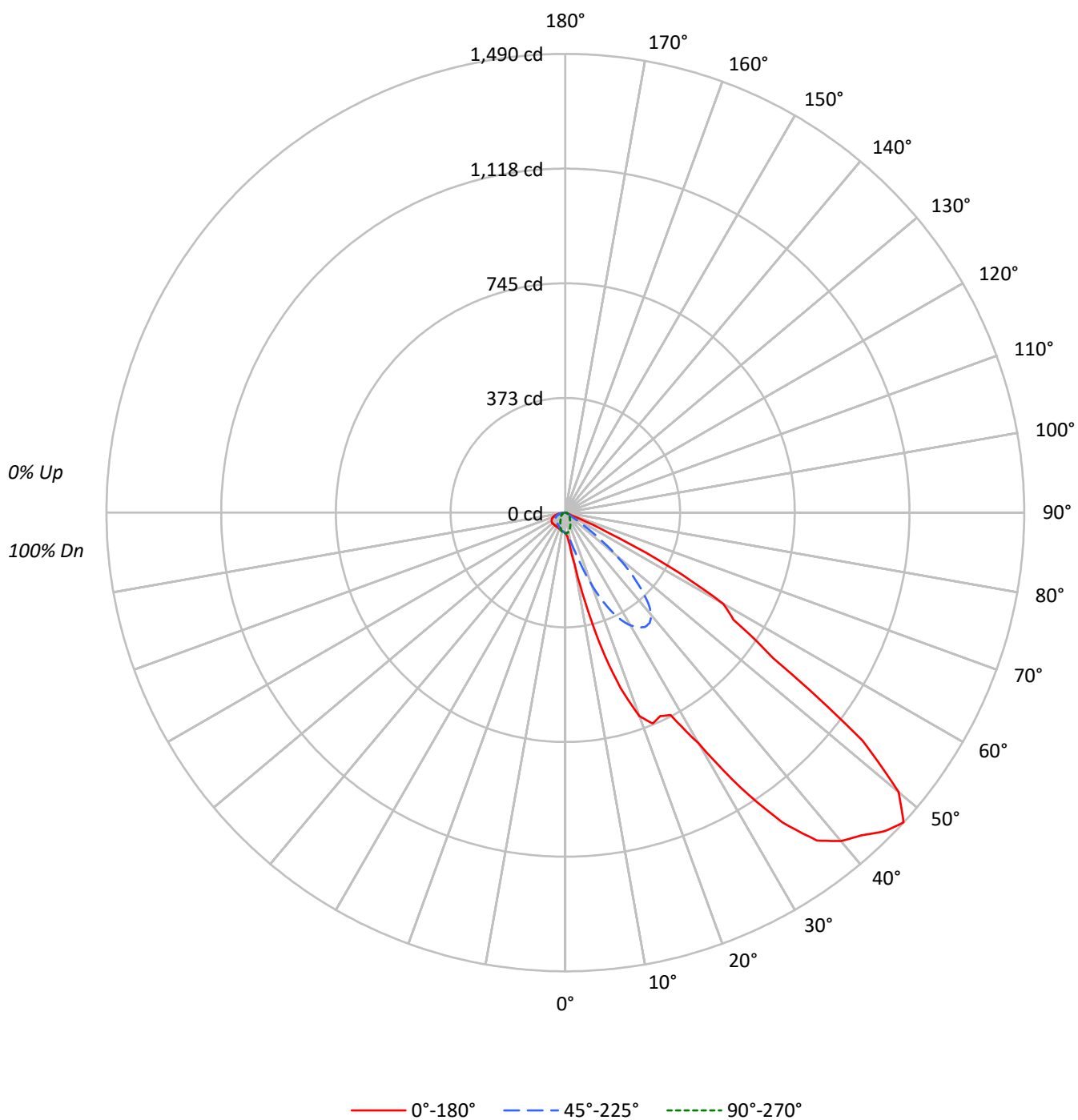
Lumens per Lamp: N/A
Luminaire Lumens: 840.0 lumens
Efficiency: N/A
Efficacy: 57.9 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.83 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.5
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

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Luminous Intensity Polar Plot



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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	98	107	103	100	97	99	96	94	95	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	67	89	80	72	66	77	70	65	74	69	64	71	67	63	61		
4	83	71	63	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43		
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37		
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31		
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27		
9	54	40	31	26	53	39	31	26	38	31	25	37	30	25	36	30	25	23		
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	11487	11487	11487	11487	11487
5°	13675	12793	11410	10909	10788
10°	29432	15862	10912	10528	10650
15°	81500	25996	9824	10092	10484
20°	128843	45617	8504	9714	10245
25°	138567	67003	7316	9368	10337
30°	171979	84120	6344	9227	10679
35°	258097	95178	5487	9314	11290
40°	313018	97864	4901	9622	11915
45°	356596	83931	4774	10254	13079
50°	378479	57927	4850	11092	14575
55°	247265	23300	4804	11980	16124
60°	203912	3996	4753	12986	17739
65°	61494	2078	4442	13896	19520
70°	2568	2216	4381	14250	21199
75°	2396	2396	4325	14506	23157
80°	2182	2182	4364	14381	23704
85°	1383	2964	5730	14425	22922

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 379706 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	7.0	0.8
10°-20°	39.8	4.7
20°-30°	102.3	12.2
30°-40°	183.7	21.9
40°-50°	245.3	29.2
50°-60°	186.9	22.2
60°-70°	56.7	6.8
70°-80°	13.6	1.6
80°-90°	4.9	0.6
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	17.7
0°-40°	332.6	39.6
0°-60°	764.8	91.0
0°-90°	840.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	840.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	67	67	67	67	67	
5°	79	74	66	63	62	10
15°	457	146	55	57	59	135
25°	729	353	38	49	54	348
35°	1228	453	26	44	54	754
45°	1464	345	20	42	54	1119
55°	824	78	16	40	54	819
65°	151	5	11	34	48	209
75°	4	4	6	22	35	4
85°	1	2	3	7	12	1
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7
2.5°	71.1	71.1	71.1	71.1	71.1	71.1	70.4	70.4	70.4	68.9	67.5
5°	79.1	79.8	79.1	79.1	77.6	77.6	76.2	76.2	74.0	69.7	66.0
7.5°	103.8	103.0	102.3	99.4	97.2	92.1	90.0	86.3	79.8	69.7	64.6
10°	168.3	164.0	161.1	154.5	140.8	132.0	120.4	108.8	90.7	69.7	62.4
12.5°	292.4	291.7	283.0	261.2	241.6	214.8	186.5	158.2	111.7	68.2	59.5
15°	457.1	450.6	438.2	412.8	378.0	335.9	285.1	235.1	145.8	66.0	55.1
17.5°	597.8	589.9	580.4	555.0	515.1	462.2	401.2	332.3	192.3	63.1	50.8
20°	703.0	698.0	690.0	669.7	631.9	584.1	515.9	432.4	248.9	59.5	46.4
22.5°	741.5	740.8	742.2	735.0	716.1	678.4	613.1	526.0	304.7	55.1	42.1
25°	729.2	728.4	737.9	747.3	751.7	736.4	686.4	601.5	352.6	51.5	38.5
27.5°	740.8	738.6	734.2	735.7	748.0	756.7	733.5	659.5	394.0	46.4	34.8
30°	864.8	852.5	832.9	799.5	774.9	772.7	762.5	705.2	423.0	41.4	31.9
32.5°	1058.6	1043.3	1007.8	946.1	887.3	842.4	810.4	743.7	443.3	36.3	28.3
35°	1227.6	1216.7	1175.4	1114.4	1030.3	946.1	888.1	800.3	452.7	31.9	26.1
37.5°	1342.3	1337.9	1297.3	1232.0	1146.4	1047.0	970.0	858.3	450.6	26.8	23.9
40°	1392.3	1379.3	1345.2	1290.0	1203.7	1114.4	1033.2	895.3	435.3	21.8	21.8
42.5°	1422.1	1407.5	1370.5	1318.3	1233.4	1138.4	1040.4	879.4	399.0	17.4	21.0
45°	1464.1	1448.9	1400.3	1344.4	1258.8	1148.5	1012.1	822.8	344.6	13.1	19.6
47.5°	1489.5	1479.4	1443.1	1387.2	1283.5	1134.0	946.8	769.8	284.4	10.2	18.9
50°	1412.6	1402.5	1375.6	1337.2	1267.5	1085.4	889.5	684.2	216.2	8.0	18.1
52.5°	1216.0	1224.7	1229.8	1240.7	1189.9	976.6	803.9	616.0	145.8	6.5	16.7
55°	823.5	836.5	851.1	894.6	954.1	869.2	713.9	532.5	77.6	6.5	16.0
57.5°	647.2	642.8	638.5	635.6	682.0	716.8	627.6	425.9	33.4	6.5	14.5
60°	592.0	579.0	570.3	572.5	595.7	581.9	497.0	277.9	11.6	6.5	13.8
62.5°	388.2	398.3	417.9	451.3	435.3	373.7	288.8	110.3	5.8	6.5	12.3
65°	150.9	145.8	150.9	160.3	138.6	103.0	64.6	19.6	5.1	5.8	10.9
67.5°	20.3	18.1	13.8	8.7	8.0	7.3	5.8	5.1	5.1	5.8	10.2
70°	5.1	5.1	5.1	5.1	5.1	5.1	5.1	4.4	4.4	5.1	8.7
72.5°	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	5.1	7.3
75°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	4.4	6.5
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.6	5.1
80°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.9	4.4
82.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.9	3.6
85°	0.7	1.5	0.7	1.5	1.5	1.5	1.5	1.5	1.5	2.2	2.9
87.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	2.2	2.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	66.7	66.7	66.7	66.7
2.5°	66.0	64.6	64.6	64.6
5°	64.6	63.1	63.1	62.4
7.5°	62.4	61.7	61.7	61.7
10°	60.9	60.2	60.9	60.9
12.5°	58.0	58.8	59.5	59.5
15°	55.1	56.6	58.0	58.8
17.5°	52.2	55.1	56.6	57.3
20°	49.3	53.0	55.1	55.9
22.5°	47.2	50.8	53.7	55.1
25°	44.3	49.3	53.0	54.4
27.5°	41.4	47.2	51.5	53.7
30°	39.2	46.4	51.5	53.7
32.5°	37.0	45.0	50.8	53.0
35°	35.6	44.3	50.8	53.7
37.5°	34.1	43.5	50.8	53.0
40°	33.4	42.8	50.8	53.0
42.5°	32.6	42.8	50.8	53.7
45°	31.2	42.1	50.8	53.7
47.5°	30.5	42.1	50.8	53.7
50°	29.7	41.4	50.8	54.4
52.5°	29.0	40.6	50.8	54.4
55°	27.6	39.9	50.1	53.7
57.5°	26.8	39.2	49.3	52.2
60°	25.4	37.7	47.9	51.5
62.5°	23.9	36.3	46.4	49.3
65°	21.8	34.1	44.3	47.9
67.5°	19.6	31.2	42.1	45.7
70°	17.4	28.3	39.2	42.1
72.5°	15.2	25.4	36.3	38.5
75°	13.1	21.8	31.9	34.8
77.5°	10.9	18.9	26.8	29.0
80°	8.0	14.5	21.8	23.9
82.5°	6.5	10.9	16.0	17.4
85°	4.4	7.3	10.2	11.6
87.5°	2.2	3.6	5.1	5.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)