

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: P1317199

Luminaire Tested: P3SQAS13R709830DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1317199
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-83)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS13R709830DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R70 optic, 3000K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

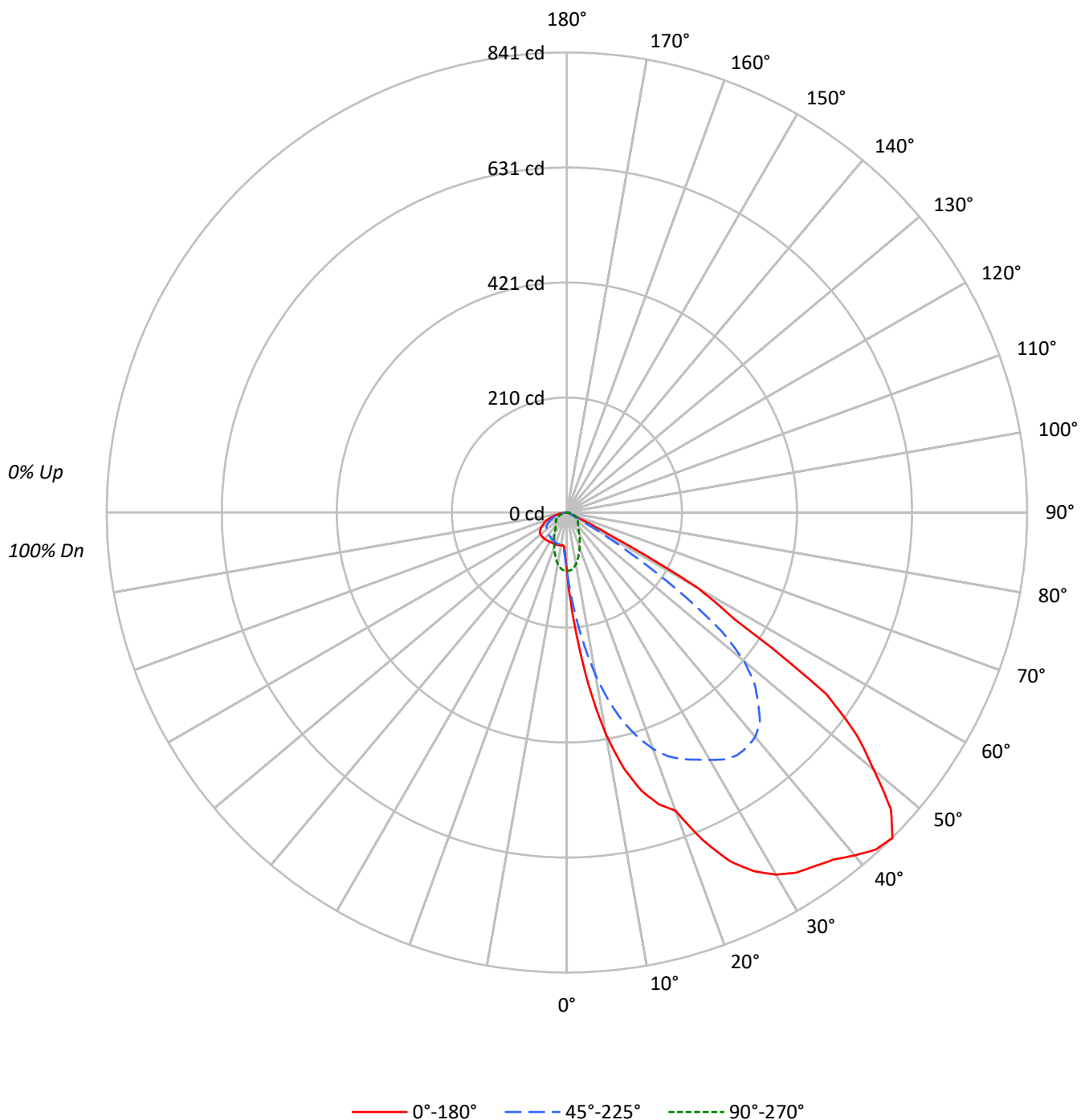
Lumens per Lamp: N/A
Luminaire Lumens: 727.0 lumens
Efficiency: N/A
Efficacy: 50.1 lumens/watt
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1317199

CATALOG NUMBER: P3SQAS13R709830DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1317199

CATALOG NUMBER: P3SQAS13R709830DE010 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	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95	96	94	92	93	91	89	87	87	87
2	101	94	88	83	99	92	87	82	89	84	80	86	82	78	83	79	77	75	75	75
3	93	83	76	70	90	82	75	69	79	73	68	76	71	67	74	69	66	64	64	64
4	85	74	66	59	83	72	65	59	70	63	58	68	62	57	66	61	57	54	54	54
5	78	66	57	51	76	65	57	51	63	55	50	61	54	49	59	53	49	47	47	47
6	72	59	50	44	70	58	50	44	56	49	43	54	48	43	53	47	43	41	41	41
7	66	53	44	38	65	52	44	38	51	43	38	49	43	38	48	42	37	35	35	35
8	61	48	40	34	60	47	39	34	46	39	33	45	38	33	44	38	33	31	31	31
9	57	44	35	30	56	43	35	30	42	35	30	41	34	30	40	34	29	28	28	28
10	53	40	32	27	52	39	32	27	38	31	27	37	31	26	37	31	26	25	25	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	18238	18238	18238	18238	18238
5°	41509	33228	18049	11410	10667
10°	71928	52761	16736	10405	10650
15°	93892	70481	14620	10609	11001
20°	106355	84288	12499	10777	11436
25°	133551	94557	10470	10889	11725
30°	152033	103848	8949	11117	12409
35°	165925	113911	7779	11290	13119
40°	183948	120347	7172	11736	14186
45°	204931	120489	7063	12373	15369
50°	196286	113308	6993	13021	16719
55°	173791	73384	7176	13722	18076
60°	95205	15741	7233	13984	18738
65°	6805	3831	7091	13896	18909
70°	3273	3676	6596	13143	18279
75°	2928	3859	6255	12576	16902
80°	2876	3570	5752	11505	15869
85°	2964	4347	5730	10078	14425

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 204931 cd/sqm

TEST NUMBER: P1317199

CATALOG NUMBER: P3SQAS13R709830DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.8	1.9
10°-20°	59.1	8.1
20°-30°	113.4	15.6
30°-40°	160.3	22.0
40°-50°	181.3	24.9
50°-60°	143.6	19.8
60°-70°	38.7	5.3
70°-80°	12.9	1.8
80°-90°	3.9	0.5
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°	186.3	25.6
0°-40°	346.5	47.7
0°-60°	671.5	92.4
0°-90°	727.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	727.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	106	106	106	106	106	
5°	240	192	104	66	62	28
15°	527	395	82	60	62	148
25°	703	498	55	57	62	322
35°	789	542	37	54	62	497
45°	841	495	29	51	63	629
55°	579	244	24	46	60	470
65°	17	9	17	34	46	60
75°	4	6	9	19	25	5
85°	2	2	3	5	7	2
90°	0	0	0	0	0	

TEST NUMBER: P1317199

CATALOG NUMBER: P3SQAS13R709830DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9	105.9
2.5°	164.6	164.6	163.9	161.0	159.6	155.9	153.0	145.1	125.5	106.6	91.4
5°	240.1	243.7	238.6	237.9	233.6	227.0	222.7	192.2	145.1	104.4	78.3
7.5°	329.3	330.8	329.3	322.0	315.5	304.6	294.5	246.6	164.6	100.8	68.9
10°	411.3	409.1	404.7	399.7	390.2	378.6	361.2	301.7	183.5	95.7	63.1
12.5°	478.0	477.3	472.2	467.1	455.5	440.3	422.9	351.8	199.5	89.2	60.2
15°	526.6	526.6	521.5	515.7	504.8	492.5	472.9	395.3	212.5	82.0	57.3
17.5°	559.2	557.8	554.2	549.8	541.1	528.8	513.5	430.1	221.2	74.7	56.6
20°	580.3	579.5	576.6	570.1	562.9	553.4	539.6	459.9	224.9	68.2	55.9
22.5°	647.7	641.9	631.0	617.3	599.8	577.4	558.5	482.3	223.4	60.9	54.4
25°	702.8	700.7	689.1	672.4	649.2	620.2	589.0	497.6	216.1	55.1	52.9
27.5°	739.1	735.5	724.6	706.5	681.8	653.5	624.5	509.2	206.0	50.0	50.8
30°	764.5	762.3	751.4	731.1	705.7	674.6	644.8	522.2	192.2	45.0	48.6
32.5°	780.5	778.3	767.4	749.3	724.6	692.0	657.9	535.3	175.5	40.6	46.4
35°	789.2	787.0	774.7	758.7	735.5	703.6	667.3	541.8	155.2	37.0	44.2
37.5°	800.0	795.7	779.0	759.4	736.2	706.5	670.2	541.1	134.9	34.1	42.8
40°	818.2	806.6	782.6	756.5	732.6	702.8	668.0	535.3	112.4	31.9	41.3
42.5°	835.6	818.9	783.4	752.2	725.3	696.3	660.0	522.2	87.8	30.5	40.6
45°	841.4	816.7	773.2	742.0	716.6	686.9	649.2	494.7	59.5	29.0	39.2
47.5°	802.9	784.8	748.5	725.3	701.4	672.4	633.2	465.7	34.1	27.6	37.7
50°	732.6	721.0	700.7	686.2	673.1	652.8	614.4	422.9	20.3	26.1	36.3
52.5°	667.3	663.7	649.2	637.6	630.3	620.9	586.1	356.9	16.7	25.4	34.8
55°	578.8	567.2	563.6	559.2	574.5	573.7	526.6	244.4	16.0	23.9	33.4
57.5°	363.4	368.5	387.3	422.1	463.5	487.4	486.0	130.6	15.2	22.5	31.2
60°	276.4	275.6	281.4	295.9	326.4	360.5	392.4	45.7	14.5	21.0	29.7
62.5°	82.7	84.9	102.3	150.1	179.9	222.0	202.4	10.9	13.8	18.9	26.8
65°	16.7	17.4	17.4	19.6	23.9	36.3	44.2	9.4	13.1	17.4	24.7
67.5°	7.3	7.3	7.3	8.0	8.0	9.4	8.0	8.7	11.6	15.2	21.8
70°	6.5	6.5	6.5	6.5	6.5	6.5	7.3	7.3	10.2	13.1	18.9
72.5°	5.1	5.1	5.1	5.8	5.8	5.8	5.8	6.5	8.7	10.9	16.0
75°	4.4	4.4	4.4	4.4	5.1	5.1	5.1	5.8	7.3	9.4	13.1
77.5°	3.6	3.6	3.6	3.6	3.6	4.4	4.4	4.4	5.8	7.3	10.9
80°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.6	4.4	5.8	8.0
82.5°	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.9	3.6	4.4	5.8
85°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	2.2	2.2	2.9	3.6
87.5°	0.7	0.7	0.7	0.7	0.7	0.7	0.7	1.5	1.5	1.5	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

TEST NUMBER: P1317199

CATALOG NUMBER: P3SQAS13R709830DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	105.9	105.9	105.9
2.5°	80.5	76.2	74.0
5°	66.0	62.4	61.7
7.5°	60.9	60.2	60.2
10°	59.5	60.2	60.9
12.5°	59.5	60.9	61.7
15°	59.5	60.9	61.7
17.5°	59.5	60.9	61.7
20°	58.8	60.9	62.4
22.5°	58.0	60.9	61.7
25°	57.3	60.9	61.7
27.5°	56.6	60.2	61.7
30°	55.9	60.2	62.4
32.5°	54.4	60.2	62.4
35°	53.7	60.2	62.4
37.5°	52.9	60.2	63.1
40°	52.2	60.2	63.1
42.5°	51.5	60.2	63.1
45°	50.8	59.5	63.1
47.5°	49.3	59.5	63.1
50°	48.6	58.8	62.4
52.5°	47.1	58.0	62.4
55°	45.7	56.6	60.2
57.5°	43.5	54.4	57.3
60°	40.6	51.5	54.4
62.5°	37.0	47.9	50.0
65°	34.1	43.5	46.4
67.5°	29.7	38.4	41.3
70°	26.1	33.4	36.3
72.5°	22.5	28.3	31.2
75°	18.9	23.2	25.4
77.5°	14.5	18.9	20.3
80°	11.6	14.5	16.0
82.5°	8.0	10.2	10.9
85°	5.1	6.5	7.3
87.5°	2.2	2.9	2.9
90°	0.0	0.0	0.0

(END OF REPORT)