

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: P1310587

Luminaire Tested: P3SQAS20R459040D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1310587
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-84)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R459040D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R45 optic, 4000K CCT AND, 90CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

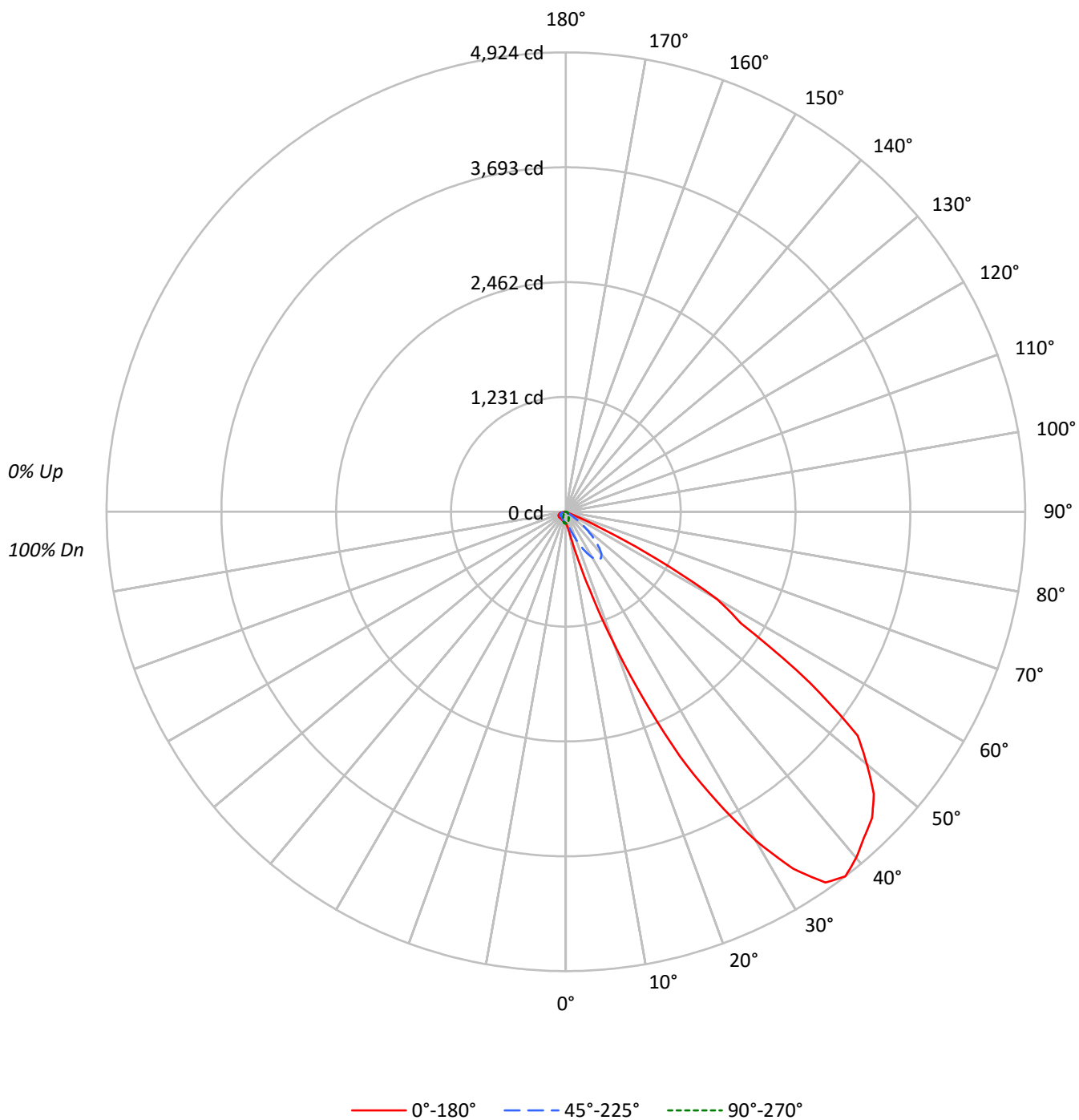
Lumens per Lamp: N/A
Luminaire Lumens: 2200.0 lumens
Efficiency: N/A
Efficacy: 76.4 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 28.8
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	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	83	78		84	80	77		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	62	56	81	70	62	55	67	60	55		65	59	54		63	58	53	51
5	76	63	53	47	73	61	53	46	59	52	46		57	51	45		55	50	45	43
6	69	55	46	39	67	54	46	39	52	45	39		51	44	39		49	43	38	36
7	63	49	40	34	61	48	40	33	47	39	33		45	38	33		44	37	33	31
8	58	44	35	29	56	43	35	29	42	34	29		40	33	28		39	33	28	26
9	53	39	31	25	52	39	30	25	38	30	25		36	29	25		35	29	24	22
10	49	36	27	22	48	35	27	22	34	27	21		33	26	21		32	26	21	19

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	21907	21907	21907	21907	21907
5°	26088	24203	21679	20106	20106
10°	41639	28295	20338	19079	19079
15°	103716	37924	18472	17830	18472
20°	273190	56632	16000	16990	17998
25°	548550	83935	13815	15886	17615
30°	808667	112419	11216	15551	18077
35°	1020046	131845	9545	15285	18733
40°	1088312	133229	8588	15940	20032
45°	1130774	111136	7964	17268	21701
50°	1128980	77432	7797	18514	24355
55°	959544	34380	8197	20748	26753
60°	644905	6889	8129	23181	30690
65°	171115	2975	8150	25184	34802
70°	4582	3676	8258	27443	39377
75°	3660	3660	8451	29012	44783
80°	3570	5455	9025	30646	50482
85°	3557	7114	14425	32407	50191

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 1159894 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.6	0.6
10°-20°	62.1	2.8
20°-30°	255.9	11.6
30°-40°	539.4	24.5
40°-50°	665.5	30.2
50°-60°	498.8	22.7
60°-70°	128.4	5.8
70°-80°	26.6	1.2
80°-90°	10.8	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°	330.6	15.0
0°-40°	870.0	39.5
0°-60°	2034.2	92.5
0°-90°	2200.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2200.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	127	127	127	127	127	
5°	151	140	125	116	116	17
15°	582	213	104	100	104	213
25°	2887	442	73	84	93	1345
35°	4852	627	45	73	89	2957
45°	4643	456	33	71	89	3553
55°	3196	114	27	69	89	2759
65°	420	7	20	62	85	605
75°	6	6	13	44	67	7
85°	2	4	7	16	25	2
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	127.2	127.2	127.2	127.2	127.2	127.2	127.2	127.2	127.2	127.2	127.2
2.5°	134.5	134.5	134.5	134.5	134.5	134.5	134.5	132.7	130.9	127.2	123.6
5°	150.9	149.1	149.1	149.1	147.2	145.4	145.4	140.0	132.7	125.4	120.0
7.5°	178.1	178.1	176.3	172.7	170.9	167.2	163.6	149.1	132.7	121.8	114.5
10°	238.1	234.5	229.0	225.4	216.3	203.6	194.5	161.8	130.9	116.3	110.9
12.5°	356.3	363.6	345.4	327.2	301.8	278.1	249.0	183.6	130.9	110.9	105.4
15°	581.7	594.4	559.9	523.5	461.7	403.6	349.0	212.7	127.2	103.6	98.2
17.5°	950.7	967.1	908.9	823.5	727.1	610.8	510.8	252.7	123.6	96.3	92.7
20°	1490.6	1488.8	1376.1	1268.8	1083.4	912.5	725.3	309.0	118.2	87.3	87.3
22.5°	2154.1	2161.4	2023.2	1830.5	1566.9	1292.5	994.3	374.5	110.9	80.0	81.8
25°	2886.7	2824.9	2661.3	2426.8	2090.5	1710.6	1317.9	441.7	103.6	72.7	76.3
27.5°	3497.5	3437.5	3250.2	2972.1	2610.4	2159.6	1646.9	509.0	94.5	65.4	70.9
30°	4066.4	3990.1	3764.7	3450.2	3019.4	2532.2	1956.0	565.3	83.6	56.4	65.4
32.5°	4535.4	4466.4	4210.0	3844.7	3375.7	2852.1	2217.7	609.0	72.7	50.9	61.8
35°	4851.7	4780.8	4544.5	4142.8	3632.0	3084.8	2430.4	627.1	63.6	45.4	60.0
37.5°	4924.4	4886.3	4717.2	4340.9	3808.3	3233.9	2566.7	621.7	52.7	41.8	56.4
40°	4840.8	4849.9	4769.9	4457.3	3902.8	3297.5	2623.1	592.6	43.6	38.2	54.5
42.5°	4733.6	4757.2	4751.7	4504.5	3942.8	3301.1	2599.5	534.4	34.5	34.5	52.7
45°	4642.7	4666.3	4699.0	4484.5	3915.6	3253.9	2524.9	456.3	25.4	32.7	52.7
47.5°	4477.3	4502.7	4550.0	4324.6	3777.4	3132.1	2390.4	370.8	18.2	30.9	50.9
50°	4213.7	4226.4	4213.7	3961.0	3512.0	2935.8	2172.3	289.0	12.7	29.1	50.9
52.5°	3942.8	3917.4	3811.9	3492.0	3090.3	2624.9	1897.8	205.4	9.1	27.3	49.1
55°	3195.7	3155.7	3077.5	2881.2	2652.2	2243.2	1534.2	114.5	9.1	27.3	47.3
57.5°	2226.8	2248.6	2275.9	2235.9	2130.5	1766.9	1165.2	50.9	9.1	25.4	47.3
60°	1872.3	1854.2	1856.0	1830.5	1656.0	1288.8	801.7	20.0	9.1	23.6	45.4
62.5°	1118.0	1130.7	1154.3	1159.8	987.1	719.9	419.9	9.1	9.1	21.8	43.6
65°	419.9	439.9	385.4	334.5	265.4	194.5	98.2	7.3	10.9	20.0	40.0
67.5°	12.7	14.5	18.2	16.4	16.4	14.5	10.9	7.3	10.9	18.2	38.2
70°	9.1	9.1	9.1	9.1	9.1	7.3	7.3	7.3	9.1	16.4	34.5
72.5°	7.3	7.3	7.3	7.3	7.3	7.3	7.3	7.3	9.1	14.5	30.9
75°	5.5	7.3	5.5	5.5	5.5	5.5	5.5	5.5	9.1	12.7	25.4
77.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	5.5	7.3	10.9	21.8
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	5.5	7.3	9.1	18.2
82.5°	3.6	3.6	3.6	1.8	3.6	3.6	3.6	3.6	7.3	7.3	14.5
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6	5.5	7.3	9.1
87.5°	0.0	0.0	0.0	0.0	1.8	1.8	1.8	3.6	5.5	5.5	5.5
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):

	135°	157.5°	180°
0°	127.2	127.2	127.2
2.5°	120.0	120.0	120.0
5°	116.3	116.3	116.3
7.5°	112.7	112.7	112.7
10°	109.1	109.1	109.1
12.5°	105.4	105.4	107.3
15°	100.0	103.6	103.6
17.5°	96.3	100.0	101.8
20°	92.7	96.3	98.2
22.5°	87.3	92.7	96.3
25°	83.6	90.9	92.7
27.5°	80.0	89.1	92.7
30°	78.2	87.3	90.9
32.5°	74.5	85.4	89.1
35°	72.7	85.4	89.1
37.5°	72.7	83.6	89.1
40°	70.9	83.6	89.1
42.5°	70.9	83.6	89.1
45°	70.9	83.6	89.1
47.5°	69.1	83.6	90.9
50°	69.1	85.4	90.9
52.5°	69.1	85.4	90.9
55°	69.1	85.4	89.1
57.5°	67.3	83.6	89.1
60°	67.3	83.6	89.1
62.5°	63.6	81.8	87.3
65°	61.8	80.0	85.4
67.5°	58.2	78.2	81.8
70°	54.5	72.7	78.2
72.5°	49.1	69.1	74.5
75°	43.6	63.6	67.3
77.5°	38.2	56.4	60.0
80°	30.9	47.3	50.9
82.5°	23.6	36.4	38.2
85°	16.4	23.6	25.4
87.5°	7.3	10.9	12.7
90°	0.0	0.0	0.0

(END OF REPORT)