

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: P1311719

Luminaire Tested: P3SQAS24R159050D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311719
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-73)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS24R159050D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R15 optic, 5000K CCT AND, 90CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

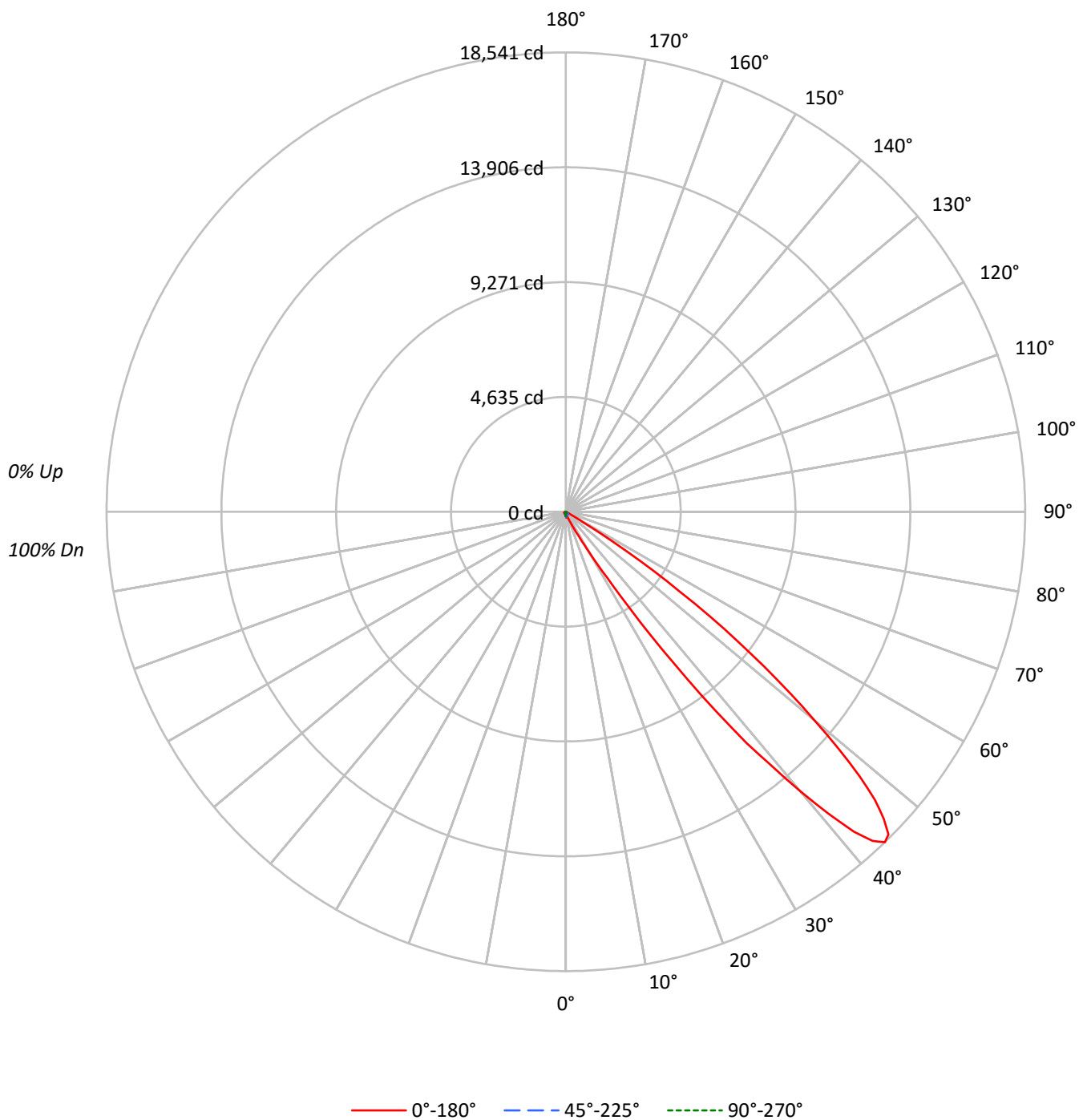
Lumens per Lamp: N/A
Luminaire Lumens: 2070.0 lumens
Efficiency: N/A
Efficacy: 71.9 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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	100	97	94		96	93	91		92	90	89	87
2	101	93	87	81	98	91	85	80	87	83	78		84	80	77		81	78	75	73
3	91	81	73	67	89	79	72	66	76	70	65		74	68	64		71	67	63	61
4	83	71	62	55	80	69	61	55	67	60	54		64	58	53		62	57	53	50
5	75	62	52	46	73	61	52	45	58	51	45		56	50	44		55	49	44	42
6	68	54	45	38	66	53	44	38	51	43	37		49	42	37		48	42	37	35
7	62	47	38	32	60	47	38	32	45	37	31		44	36	31		42	36	31	29
8	56	42	33	27	55	41	33	27	40	32	26		39	31	26		37	31	26	24
9	52	37	28	22	50	37	28	22	35	28	22		34	27	22		33	27	22	20
10	48	33	25	19	46	33	25	19	32	24	19		31	24	19		30	23	19	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	31637	31637	31637	31637	31637
5°	39244	34974	28543	24981	24618
10°	38613	29957	22017	19499	19849
15°	32022	21342	15833	16189	17295
20°	55606	17026	12096	14002	15890
25°	123935	20390	9805	12941	14898
30°	370646	25037	8611	12727	15591
35°	1426807	28215	7821	13014	16483
40°	3311766	24595	7419	13467	17626
45°	4485613	18608	6527	14589	19095
50°	3517102	11066	6645	15486	21006
55°	1688157	4954	6185	16725	22940
60°	154277	723	5683	17773	25592
65°	16830	0	5053	18501	27752
70°	4179	0	6244	19739	30162
75°	4126	1397	8251	21959	34336
80°	4066	4066	10215	22514	36895
85°	4150	4150	16401	20353	40706

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4485613 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	15.7	0.8
10°-20°	32.6	1.6
20°-30°	78.2	3.8
30°-40°	428.2	20.7
40°-50°	1036.8	50.1
50°-60°	413.6	20.0
60°-70°	35.7	1.7
70°-80°	20.2	1.0
80°-90°	8.9	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°	126.5	6.1
0°-40°	554.7	26.8
0°-60°	2005.2	96.9
0°-90°	2070.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2070.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	184	184	184	184	184	
5°	227	202	165	144	142	21
15°	180	120	89	91	97	63
25°	652	107	52	68	78	393
35°	6786	134	37	62	78	4795
45°	18417	76	27	60	78	12992
55°	5622	16	21	56	76	5238
65°	41	0	12	45	68	106
75°	6	2	12	33	52	6
85°	2	2	8	10	21	2
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7	183.7
2.5°	206.4	206.4	208.5	206.4	206.4	206.4	206.4	204.3	204.3	204.3	198.1
5°	227.0	227.0	227.0	227.0	225.0	225.0	225.0	222.9	222.9	220.8	202.3
7.5°	235.3	235.3	233.2	233.2	231.2	231.2	229.1	227.0	225.0	222.9	194.0
10°	220.8	220.8	220.8	218.8	218.8	216.7	214.7	212.6	210.5	206.4	171.3
12.5°	196.1	196.1	198.1	196.1	194.0	192.0	187.8	185.8	183.7	179.6	142.4
15°	179.6	179.6	179.6	177.5	175.4	171.3	169.2	165.1	163.1	156.9	119.7
17.5°	229.1	229.1	227.0	222.9	214.7	208.5	198.1	189.9	179.6	167.2	103.2
20°	303.4	303.4	299.3	295.1	284.8	274.5	258.0	243.6	227.0	212.6	92.9
22.5°	439.6	445.8	433.4	419.0	404.5	379.8	357.1	334.4	305.5	280.7	94.9
25°	652.2	658.4	652.2	619.2	592.4	559.3	516.0	470.6	421.1	375.6	107.3
27.5°	1056.8	1060.9	1050.6	970.1	926.7	840.0	763.7	689.4	606.8	524.3	117.6
30°	1863.8	1865.8	1799.8	1638.8	1496.4	1306.5	1145.5	990.7	860.7	728.6	125.9
31°	2454.1	2396.3	2255.9	2061.9	1834.9	1578.9	1358.1	1157.9	963.9	821.5	128.0
32°	3116.6	3108.4	2875.1	2538.7	2235.3	1915.4	1583.1	1327.1	1104.2	910.2	130.0
33°	3993.8	3997.9	3630.5	3234.3	2736.8	2307.5	1872.0	1521.2	1252.8	1015.5	134.2
34°	5364.3	5042.3	4610.9	4074.3	3397.3	2751.3	2185.8	1746.1	1387.0	1116.6	134.2
35°	6786.4	6462.3	5987.6	5174.4	4245.6	3341.6	2559.3	1987.6	1548.0	1226.0	134.2
36°	8379.8	8105.3	7387.0	6348.8	5164.1	3898.9	2955.6	2266.3	1706.9	1325.1	132.1
37°	10101.1	9698.7	8902.0	7768.8	6183.7	4683.2	3438.6	2542.8	1865.8	1432.4	128.0
38°	11849.3	11486.1	10480.9	9108.4	7401.4	5510.8	3921.6	2809.1	2012.4	1512.9	121.8
39°	13174.4	12976.3	11979.4	10445.8	8373.6	6295.2	4419.0	3093.9	2167.2	1593.4	115.6
40°	14730.7	14410.7	13465.4	11568.6	9523.2	7093.9	4906.1	3345.7	2295.2	1657.4	109.4
41°	16150.7	15746.1	14553.2	12720.3	10443.8	7812.2	5368.4	3605.8	2398.4	1694.5	105.3
42°	17368.4	16897.8	15651.2	13706.9	11213.6	8386.0	5737.9	3791.5	2495.4	1725.5	99.1
43°	18156.9	17750.3	16524.3	14447.9	11872.0	8912.3	6082.6	3985.6	2555.2	1746.1	90.8
44°	18540.8	18130.0	16943.3	14912.3	12276.6	9228.1	6305.5	4119.7	2621.3	1773.0	84.6
45°	18416.9	18000.0	16852.4	14920.5	12402.5	9341.6	6400.4	4179.6	2656.3	1797.7	76.4
46°	17849.3	17556.3	16400.4	14532.5	12163.1	9219.8	6346.8	4134.2	2644.0	1797.7	68.1
47°	17052.6	16718.3	15618.2	13865.8	11583.1	8906.1	6130.0	3995.9	2567.6	1756.5	59.9
48°	15967.0	15682.2	14526.3	12807.0	10693.5	8222.9	5640.9	3770.9	2447.9	1676.0	51.6
49°	14604.8	14208.5	13133.1	11453.1	9533.5	7252.8	4999.0	3391.1	2255.9	1562.4	45.4
50°	13126.9	12637.8	11808.1	10097.0	8334.4	6218.8	4154.8	2866.9	1985.6	1413.8	41.3
51°	11680.1	11182.7	10392.2	8937.1	7054.7	5160.0	3351.9	2289.0	1634.7	1209.5	35.1
52°	10179.6	9762.6	8877.2	7733.8	6039.2	4181.6	2792.6	1936.0	1358.1	1015.5	28.9
53°	8685.2	8400.4	7558.3	6400.4	4852.4	3415.9	2280.7	1657.4	1184.7	868.9	22.7
54°	7188.9	6877.2	6237.4	5205.4	3911.3	2695.6	1934.0	1387.0	1027.9	757.5	20.6
55°	5622.3	5461.3	4871.0	3969.0	2963.9	2150.7	1568.6	1193.0	860.7	633.6	16.5
56°	4330.2	4148.6	3609.9	2879.3	2202.3	1684.2	1269.4	974.2	728.6	530.4	12.4
57°	2835.9	2650.2	2293.1	2010.3	1603.7	1228.1	970.1	767.8	592.4	439.6	10.3
58°	1676.0	1506.7	1451.0	1238.4	1069.1	833.8	716.2	571.7	437.6	346.7	6.2
59°	769.9	782.3	695.6	652.2	592.4	530.4	435.5	381.8	299.3	249.7	4.1
60°	447.9	423.1	412.8	369.5	328.2	291.0	262.1	231.2	187.8	161.0	2.1
62.5°	152.7	146.5	150.7	136.2	128.0	123.8	113.5	97.0	80.5	66.0	0.0
65°	41.3	41.3	39.2	37.2	35.1	33.0	31.0	26.8	24.8	20.6	0.0



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CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	14.4	14.4	12.4	12.4	10.3	10.3	8.3	8.3	6.2	6.2	0.0
70°	8.3	8.3	8.3	6.2	6.2	6.2	4.1	4.1	4.1	2.1	0.0
72.5°	6.2	6.2	6.2	6.2	6.2	6.2	4.1	4.1	4.1	2.1	2.1
75°	6.2	6.2	6.2	4.1	4.1	4.1	4.1	4.1	4.1	4.1	2.1
77.5°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
80°	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	2.1	4.1
82.5°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	4.1
85°	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1
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):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	183.7	183.7	183.7	183.7	183.7	183.7
2.5°	189.9	181.6	171.3	165.1	163.1	161.0
5°	181.6	165.1	152.7	144.5	142.4	142.4
7.5°	163.1	144.5	132.1	128.0	125.9	125.9
10°	142.4	125.9	115.6	111.5	113.5	113.5
12.5°	119.7	105.3	101.1	101.1	103.2	105.3
15°	97.0	88.8	88.8	90.8	94.9	97.0
17.5°	80.5	76.4	78.4	82.6	86.7	90.8
20°	66.0	66.0	70.2	76.4	82.6	86.7
22.5°	55.7	57.8	64.0	70.2	78.4	82.6
25°	47.5	51.6	57.8	68.1	76.4	78.4
27.5°	41.3	47.5	55.7	66.0	74.3	78.4
30°	35.1	43.3	53.7	64.0	74.3	78.4
31°	33.0	41.3	51.6	64.0	74.3	78.4
32°	31.0	41.3	51.6	64.0	74.3	78.4
33°	28.9	39.2	51.6	61.9	74.3	78.4
34°	26.8	39.2	51.6	64.0	74.3	78.4
35°	24.8	37.2	49.5	61.9	72.2	78.4
36°	22.7	37.2	49.5	61.9	74.3	78.4
37°	20.6	37.2	49.5	61.9	72.2	78.4
38°	20.6	35.1	47.5	61.9	72.2	78.4
39°	18.6	33.0	47.5	61.9	72.2	78.4
40°	16.5	33.0	45.4	59.9	72.2	78.4
41°	14.4	31.0	45.4	59.9	72.2	78.4
42°	12.4	31.0	45.4	59.9	72.2	78.4
43°	10.3	28.9	43.3	59.9	72.2	78.4
44°	10.3	28.9	43.3	59.9	72.2	78.4
45°	8.3	26.8	41.3	59.9	72.2	78.4
46°	8.3	26.8	41.3	57.8	72.2	78.4
47°	6.2	26.8	41.3	57.8	72.2	78.4
48°	6.2	24.8	41.3	57.8	72.2	78.4
49°	4.1	24.8	41.3	57.8	72.2	78.4
50°	4.1	24.8	39.2	57.8	72.2	78.4
51°	4.1	24.8	39.2	57.8	72.2	78.4
52°	4.1	22.7	39.2	57.8	72.2	78.4
53°	4.1	22.7	39.2	57.8	72.2	78.4
54°	4.1	22.7	37.2	57.8	72.2	78.4
55°	4.1	20.6	37.2	55.7	72.2	76.4
56°	4.1	20.6	37.2	55.7	72.2	76.4
57°	4.1	20.6	35.1	55.7	72.2	76.4
58°	4.1	18.6	35.1	53.7	70.2	76.4
59°	4.1	18.6	33.0	53.7	70.2	74.3
60°	4.1	16.5	33.0	51.6	68.1	74.3
62.5°	4.1	14.4	28.9	49.5	66.0	70.2
65°	4.1	12.4	26.8	45.4	64.0	68.1



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	4.1	12.4	24.8	43.3	59.9	66.0
70°	4.1	12.4	22.7	39.2	57.8	59.9
72.5°	6.2	12.4	20.6	37.2	53.7	55.7
75°	8.3	12.4	18.6	33.0	49.5	51.6
77.5°	8.3	12.4	16.5	28.9	43.3	45.4
80°	8.3	10.3	14.4	22.7	35.1	37.2
82.5°	8.3	10.3	10.3	18.6	26.8	28.9
85°	6.2	8.3	8.3	10.3	18.6	20.6
87.5°	6.2	8.3	4.1	6.2	8.3	8.3
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)