

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: P1307289

Luminaire Tested: P3SQAS24R159027D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307289
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: P3SQAS24R159027D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R15 optic, 2700K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

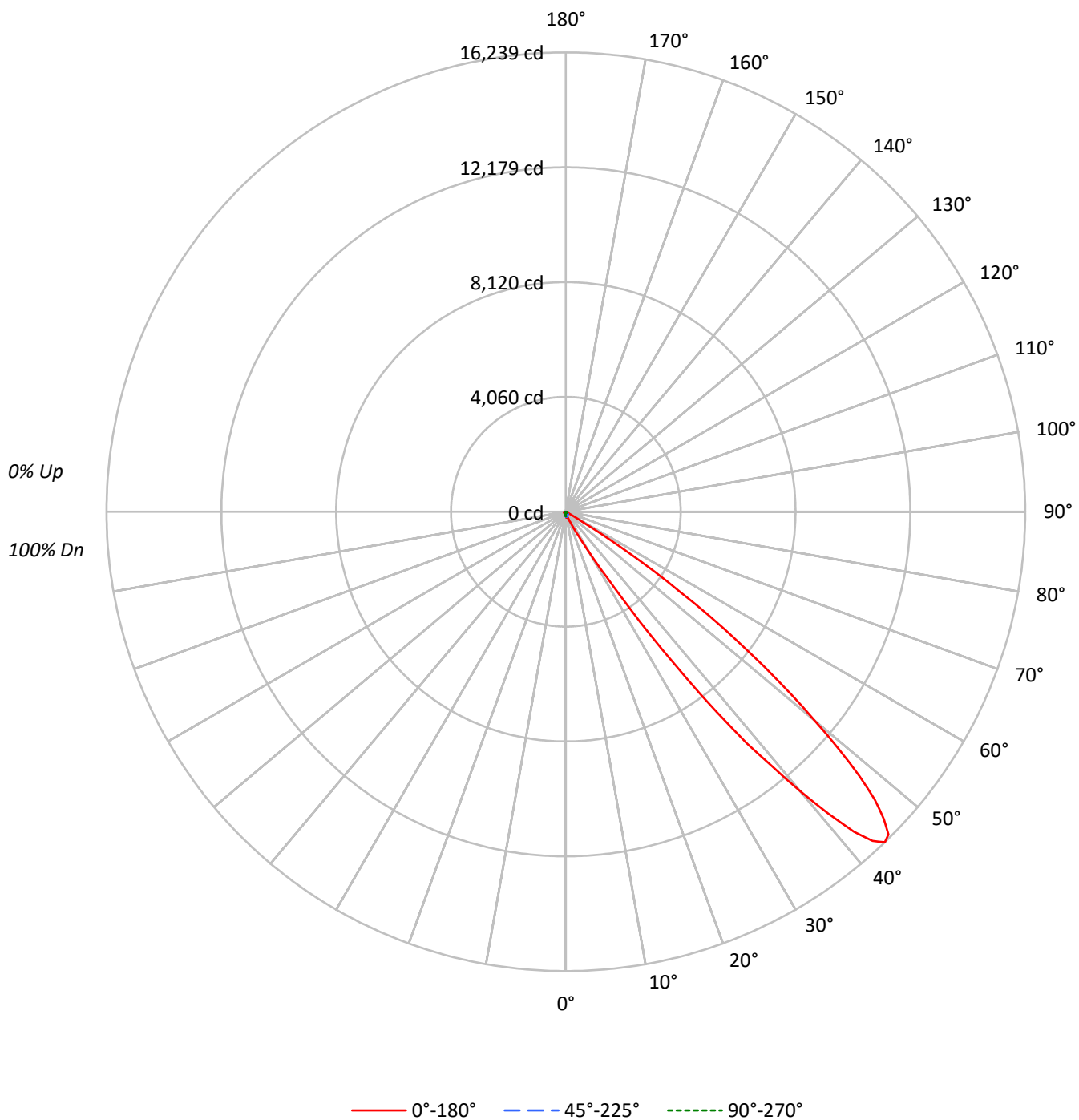
Lumens per Lamp: N/A
Luminaire Lumens: 1813.0 lumens
Efficiency: N/A
Efficacy: 63.0 lumens/watt
Spacing Criteria (0/90/45): 3.26 / 0.47 / 1.08
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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
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	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°	27711	27711	27711	27711	27711
5°	34386	30634	24999	21869	21558
10°	33822	26232	19289	17068	17383
15°	28046	18686	13854	14175	15155
20°	48696	14900	10593	12261	13911
25°	108543	17863	8589	11345	13055
30°	324628	21935	7557	11136	13662
35°	1249654	24704	6833	11395	14444
40°	2900592	21538	6497	11781	15445
45°	3928714	16294	5724	12763	16733
50°	3080455	9699	5814	13557	18407
55°	1478575	4354	5435	14653	20087
60°	135126	620	4994	15569	22423
65°	14752	0	4401	16219	24329
70°	3626	0	5438	17272	26386
75°	3593	1198	7187	19231	30077
80°	3570	3570	8926	19737	32233
85°	3557	3557	14227	17784	35766

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 3928714 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.7	0.8
10°-20°	28.6	1.6
20°-30°	68.5	3.8
30°-40°	375.0	20.7
40°-50°	908.1	50.1
50°-60°	362.3	20.0
60°-70°	31.3	1.7
70°-80°	17.7	1.0
80°-90°	7.8	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°	110.8	6.1
0°-40°	485.8	26.8
0°-60°	1756.2	96.9
0°-90°	1813.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1813.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	161	161	161	161	161	
5°	199	177	145	126	125	19
15°	157	105	78	80	85	55
25°	571	94	45	60	69	344
35°	5944	118	32	54	69	4200
45°	16130	67	24	52	69	11379
55°	4924	14	18	49	67	4587
65°	36	0	11	40	60	93
75°	5	2	11	29	45	5
85°	2	2	7	9	18	1
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°	160.9	160.9	160.9	160.9	160.9	160.9	160.9	160.9	160.9	160.9	160.9
2.5°	180.8	180.8	182.6	180.8	180.8	180.8	180.8	179.0	179.0	179.0	173.5
5°	198.9	198.9	198.9	198.9	197.0	197.0	197.0	195.2	195.2	193.4	177.2
7.5°	206.1	206.1	204.3	204.3	202.5	202.5	200.7	198.9	197.0	195.2	169.9
10°	193.4	193.4	193.4	191.6	191.6	189.8	188.0	186.2	184.4	180.8	150.0
12.5°	171.7	171.7	173.5	171.7	169.9	168.1	164.5	162.7	160.9	157.3	124.7
15°	157.3	157.3	157.3	155.5	153.7	150.0	148.2	144.6	142.8	137.4	104.8
17.5°	200.7	200.7	198.9	195.2	188.0	182.6	173.5	166.3	157.3	146.4	90.4
20°	265.7	265.7	262.1	258.5	249.5	240.4	226.0	213.3	198.9	186.2	81.3
22.5°	385.0	390.5	379.6	367.0	354.3	332.6	312.7	292.9	267.5	245.9	83.2
25°	571.2	576.7	571.2	542.3	518.8	489.9	451.9	412.2	368.8	329.0	94.0
27.5°	925.6	929.2	920.1	849.6	811.7	735.7	668.9	603.8	531.5	459.2	103.0
30°	1632.4	1634.2	1576.3	1435.3	1310.6	1144.3	1003.3	867.7	753.8	638.1	110.3
31°	2149.4	2098.8	1975.9	1805.9	1607.1	1382.9	1189.5	1014.1	844.2	719.5	112.1
32°	2729.7	2722.4	2518.2	2223.5	1957.8	1677.6	1386.5	1162.4	967.1	797.2	113.9
33°	3498.0	3501.6	3179.8	2832.7	2397.1	2021.0	1639.6	1332.3	1097.3	889.4	117.5
34°	4698.3	4416.3	4038.5	3568.5	2975.5	2409.7	1914.4	1529.3	1214.8	978.0	117.5
35°	5943.8	5660.0	5244.2	4532.0	3718.5	2926.7	2241.6	1740.8	1355.8	1073.8	117.5
36°	7339.4	7099.0	6469.9	5560.6	4522.9	3414.8	2588.7	1984.9	1495.0	1160.6	115.7
37°	8847.0	8494.5	7796.7	6804.3	5416.0	4101.7	3011.7	2227.1	1634.2	1254.6	112.1
38°	10378.2	10060.0	9179.7	7977.5	6482.5	4826.6	3434.7	2460.3	1762.5	1325.1	106.7
39°	11538.8	11365.2	10492.1	9148.9	7334.0	5513.6	3870.4	2709.8	1898.1	1395.6	101.2
40°	12901.8	12621.6	11793.6	10132.3	8340.9	6213.2	4297.0	2930.3	2010.2	1451.6	95.8
41°	14145.5	13791.2	12746.3	11141.0	9147.1	6842.3	4701.9	3158.1	2100.6	1484.1	92.2
42°	15212.1	14799.9	13708.0	12005.1	9821.4	7344.8	5025.5	3320.8	2185.5	1511.3	86.8
43°	15902.6	15546.5	14472.7	12654.1	10398.1	7805.8	5327.4	3490.7	2238.0	1529.3	79.5
44°	16238.9	15879.1	14839.7	13060.9	10752.4	8082.4	5522.6	3608.2	2295.8	1552.8	74.1
45°	16130.4	15765.2	14760.1	13068.1	10862.7	8181.8	5605.8	3660.7	2326.6	1574.5	66.9
46°	15633.3	15376.6	14364.2	12728.2	10653.0	8075.1	5558.8	3620.9	2315.7	1574.5	59.7
47°	14935.5	14642.6	13679.1	12144.3	10145.0	7800.4	5369.0	3499.8	2248.8	1538.4	52.4
48°	13984.6	13735.1	12722.8	11217.0	9365.9	7202.0	4940.5	3302.7	2144.0	1467.9	45.2
49°	12791.5	12444.4	11502.6	10031.1	8349.9	6352.4	4378.3	2970.1	1975.9	1368.5	39.8
50°	11497.2	11068.7	10342.0	8843.4	7299.6	5446.7	3639.0	2510.9	1739.0	1238.3	36.2
51°	10230.0	9794.3	9101.9	7827.5	6178.8	4519.3	2935.8	2004.8	1431.7	1059.3	30.7
52°	8915.7	8550.6	7775.1	6773.6	5289.4	3662.5	2445.9	1695.7	1189.5	889.4	25.3
53°	7606.9	7357.5	6619.9	5605.8	4250.0	2991.8	1997.5	1451.6	1037.6	761.1	19.9
54°	6296.3	6023.4	5463.0	4559.1	3425.7	2360.9	1693.8	1214.8	900.3	663.4	18.1
55°	4924.3	4783.3	4266.2	3476.3	2595.9	1883.7	1373.9	1044.9	753.8	555.0	14.5
56°	3792.6	3633.5	3161.7	2521.8	1928.8	1475.1	1111.8	853.2	638.1	464.6	10.8
57°	2483.8	2321.1	2008.4	1760.7	1404.6	1075.6	849.6	672.5	518.8	385.0	9.0
58°	1467.9	1319.6	1270.8	1084.6	936.4	730.3	627.3	500.7	383.2	303.7	5.4
59°	674.3	685.1	609.2	571.2	518.8	464.6	381.4	334.4	262.1	218.7	3.6
60°	392.3	370.6	361.5	323.6	287.4	254.9	229.6	202.5	164.5	141.0	1.8
62.5°	133.8	128.3	132.0	119.3	112.1	108.5	99.4	85.0	70.5	57.8	0.0
65°	36.2	36.2	34.3	32.5	30.7	28.9	27.1	23.5	21.7	18.1	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°	12.7	12.7	10.8	10.8	9.0	9.0	7.2	7.2	5.4	5.4	0.0
70°	7.2	7.2	7.2	5.4	5.4	5.4	3.6	3.6	3.6	1.8	0.0
72.5°	5.4	5.4	5.4	5.4	5.4	5.4	3.6	3.6	3.6	1.8	1.8
75°	5.4	5.4	5.4	3.6	3.6	3.6	3.6	3.6	3.6	3.6	1.8
77.5°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6
80°	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	3.6	1.8	3.6
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.6
85°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8
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°	160.9	160.9	160.9	160.9	160.9	160.9
2.5°	166.3	159.1	150.0	144.6	142.8	141.0
5°	159.1	144.6	133.8	126.5	124.7	124.7
7.5°	142.8	126.5	115.7	112.1	110.3	110.3
10°	124.7	110.3	101.2	97.6	99.4	99.4
12.5°	104.8	92.2	88.6	88.6	90.4	92.2
15°	85.0	77.7	77.7	79.5	83.2	85.0
17.5°	70.5	66.9	68.7	72.3	75.9	79.5
20°	57.8	57.8	61.5	66.9	72.3	75.9
22.5°	48.8	50.6	56.0	61.5	68.7	72.3
25°	41.6	45.2	50.6	59.7	66.9	68.7
27.5°	36.2	41.6	48.8	57.8	65.1	68.7
30°	30.7	38.0	47.0	56.0	65.1	68.7
31°	28.9	36.2	45.2	56.0	65.1	68.7
32°	27.1	36.2	45.2	56.0	65.1	68.7
33°	25.3	34.3	45.2	54.2	65.1	68.7
34°	23.5	34.3	45.2	56.0	65.1	68.7
35°	21.7	32.5	43.4	54.2	63.3	68.7
36°	19.9	32.5	43.4	54.2	65.1	68.7
37°	18.1	32.5	43.4	54.2	63.3	68.7
38°	18.1	30.7	41.6	54.2	63.3	68.7
39°	16.3	28.9	41.6	54.2	63.3	68.7
40°	14.5	28.9	39.8	52.4	63.3	68.7
41°	12.7	27.1	39.8	52.4	63.3	68.7
42°	10.8	27.1	39.8	52.4	63.3	68.7
43°	9.0	25.3	38.0	52.4	63.3	68.7
44°	9.0	25.3	38.0	52.4	63.3	68.7
45°	7.2	23.5	36.2	52.4	63.3	68.7
46°	7.2	23.5	36.2	50.6	63.3	68.7
47°	5.4	23.5	36.2	50.6	63.3	68.7
48°	5.4	21.7	36.2	50.6	63.3	68.7
49°	3.6	21.7	36.2	50.6	63.3	68.7
50°	3.6	21.7	34.3	50.6	63.3	68.7
51°	3.6	21.7	34.3	50.6	63.3	68.7
52°	3.6	19.9	34.3	50.6	63.3	68.7
53°	3.6	19.9	34.3	50.6	63.3	68.7
54°	3.6	19.9	32.5	50.6	63.3	68.7
55°	3.6	18.1	32.5	48.8	63.3	66.9
56°	3.6	18.1	32.5	48.8	63.3	66.9
57°	3.6	18.1	30.7	48.8	63.3	66.9
58°	3.6	16.3	30.7	47.0	61.5	66.9
59°	3.6	16.3	28.9	47.0	61.5	65.1
60°	3.6	14.5	28.9	45.2	59.7	65.1
62.5°	3.6	12.7	25.3	43.4	57.8	61.5
65°	3.6	10.8	23.5	39.8	56.0	59.7



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CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.6	10.8	21.7	38.0	52.4	57.8
70°	3.6	10.8	19.9	34.3	50.6	52.4
72.5°	5.4	10.8	18.1	32.5	47.0	48.8
75°	7.2	10.8	16.3	28.9	43.4	45.2
77.5°	7.2	10.8	14.5	25.3	38.0	39.8
80°	7.2	9.0	12.7	19.9	30.7	32.5
82.5°	7.2	9.0	9.0	16.3	23.5	25.3
85°	5.4	7.2	7.2	9.0	16.3	18.1
87.5°	5.4	7.2	3.6	5.4	7.2	7.2
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)