

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: P1308049

Luminaire Tested: P3SQAS13R459030DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1308049
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: P3SQAS13R459030DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 3000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

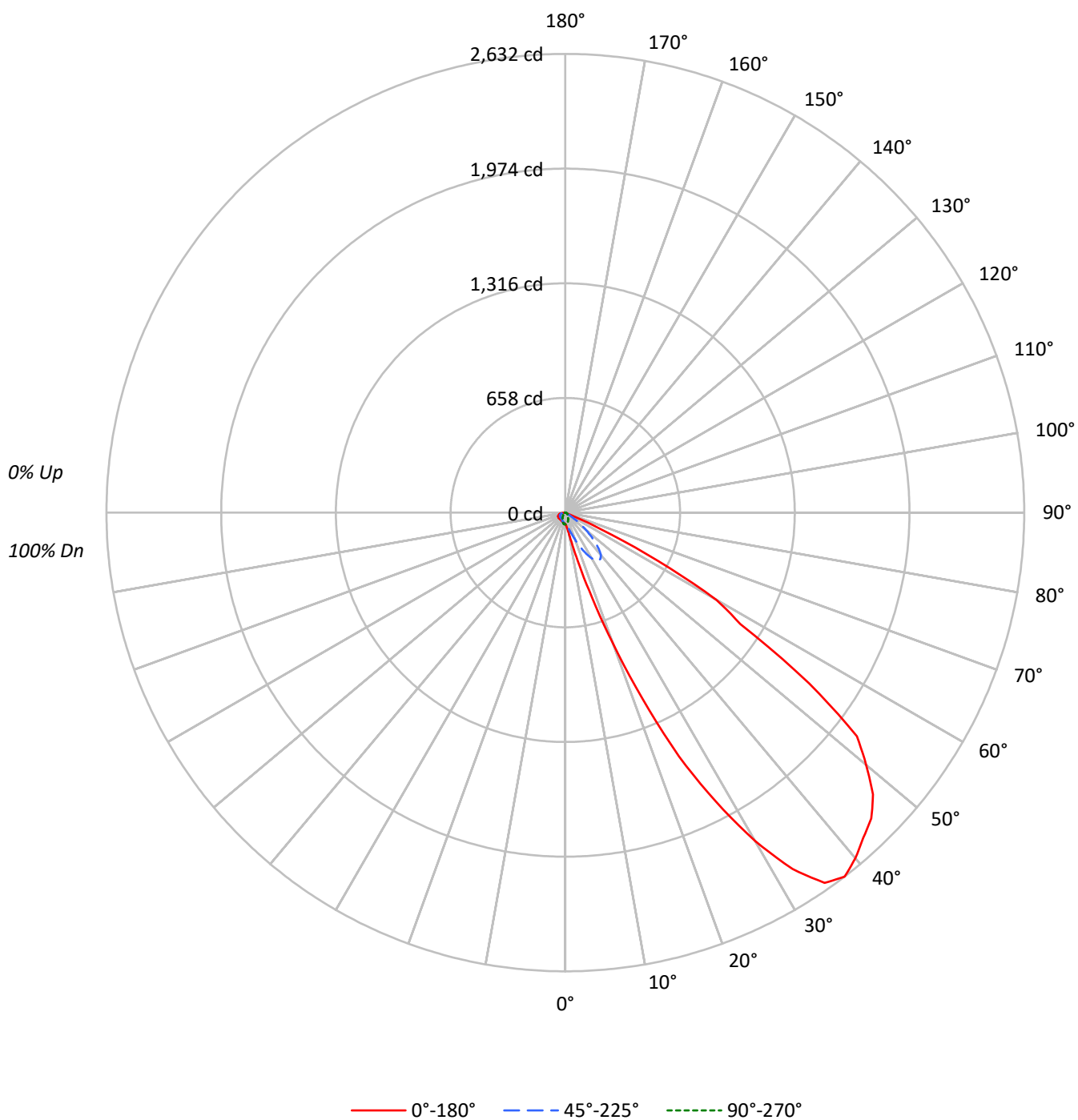
Lumens per Lamp: N/A
Luminaire Lumens: 1176.0 lumens
Efficiency: N/A
Efficacy: 80.5 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 14.6
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	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°	11711	11711	11711	11711	11711
5°	13951	12931	11583	10753	10753
10°	22262	15127	10878	10195	10195
15°	55433	20272	9878	9521	9878
20°	146034	30277	8541	9090	9622
25°	293230	44865	7392	8494	9425
30°	432274	60097	5986	8313	9665
35°	545270	70474	5109	8179	10008
40°	581746	71223	4586	8521	10701
45°	604442	59404	4262	9231	11593
50°	603487	41395	4153	9887	13021
55°	512906	18376	4384	11080	14292
60°	344755	3686	4340	12400	16396
65°	91487	1589	4360	13448	18623
70°	2467	1964	4381	14704	21048
75°	1930	1930	4525	15504	23955
80°	1884	2876	4860	16365	26977
85°	1976	3754	7707	17191	26874

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 620021 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.8	0.6
10°-20°	33.2	2.8
20°-30°	136.8	11.6
30°-40°	288.3	24.5
40°-50°	355.7	30.2
50°-60°	266.6	22.7
60°-70°	68.6	5.8
70°-80°	14.2	1.2
80°-90°	5.8	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°	176.7	15.0
0°-40°	465.1	39.5
0°-60°	1087.4	92.5
0°-90°	1176.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1176.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	68	68	68	68	68	
5°	81	75	67	62	62	9
15°	311	114	55	53	55	114
25°	1543	236	39	45	50	719
35°	2594	335	24	39	48	1580
45°	2482	244	18	38	48	1899
55°	1708	61	15	37	48	1475
65°	224	4	11	33	46	324
75°	3	3	7	23	36	3
85°	1	2	4	9	14	1
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°	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
2.5°	71.9	71.9	71.9	71.9	71.9	71.9	71.9	70.9	70.0	68.0	66.1
5°	80.7	79.7	79.7	79.7	78.7	77.7	77.7	74.8	70.9	67.0	64.1
7.5°	95.2	95.2	94.3	92.3	91.3	89.4	87.5	79.7	70.9	65.1	61.2
10°	127.3	125.3	122.4	120.5	115.6	108.8	104.0	86.5	70.0	62.2	59.3
12.5°	190.5	194.3	184.6	174.9	161.3	148.7	133.1	98.1	70.0	59.3	56.4
15°	310.9	317.7	299.3	279.8	246.8	215.7	186.6	113.7	68.0	55.4	52.5
17.5°	508.2	516.9	485.9	440.2	388.7	326.5	273.0	135.1	66.1	51.5	49.6
20°	796.8	795.8	735.6	678.2	579.1	487.8	387.7	165.2	63.2	46.6	46.6
22.5°	1151.5	1155.4	1081.5	978.5	837.6	690.9	531.5	200.2	59.3	42.8	43.7
25°	1543.1	1510.0	1422.6	1297.2	1117.5	914.4	704.5	236.1	55.4	38.9	40.8
27.5°	1869.6	1837.5	1737.4	1588.7	1395.4	1154.4	880.4	272.1	50.5	35.0	37.9
30°	2173.7	2132.9	2012.4	1844.3	1614.0	1353.6	1045.5	302.2	44.7	30.1	35.0
32.5°	2424.4	2387.5	2250.5	2055.1	1804.4	1524.6	1185.5	325.5	38.9	27.2	33.0
35°	2593.5	2555.6	2429.3	2214.5	1941.5	1649.0	1299.2	335.2	34.0	24.3	32.1
37.5°	2632.3	2611.9	2521.6	2320.4	2035.7	1728.7	1372.0	332.3	28.2	22.3	30.1
40°	2587.6	2592.5	2549.7	2382.6	2086.2	1762.7	1402.2	316.8	23.3	20.4	29.2
42.5°	2530.3	2542.9	2540.0	2407.9	2107.6	1764.6	1389.5	285.7	18.5	18.5	28.2
45°	2481.7	2494.4	2511.8	2397.2	2093.0	1739.3	1349.7	243.9	13.6	17.5	28.2
47.5°	2393.3	2406.9	2432.2	2311.7	2019.2	1674.2	1277.8	198.2	9.7	16.5	27.2
50°	2252.4	2259.2	2252.4	2117.3	1877.3	1569.3	1161.2	154.5	6.8	15.5	27.2
52.5°	2107.6	2094.0	2037.7	1866.6	1651.9	1403.1	1014.5	109.8	4.9	14.6	26.2
55°	1708.2	1686.9	1645.1	1540.1	1417.7	1199.1	820.1	61.2	4.9	14.6	25.3
57.5°	1190.3	1202.0	1216.6	1195.2	1138.8	944.5	622.9	27.2	4.9	13.6	25.3
60°	1000.9	991.1	992.1	978.5	885.2	688.9	428.5	10.7	4.9	12.6	24.3
62.5°	597.6	604.4	617.0	619.9	527.6	384.8	224.5	4.9	4.9	11.7	23.3
65°	224.5	235.2	206.0	178.8	141.9	104.0	52.5	3.9	5.8	10.7	21.4
67.5°	6.8	7.8	9.7	8.7	8.7	7.8	5.8	3.9	5.8	9.7	20.4
70°	4.9	4.9	4.9	4.9	4.9	3.9	3.9	3.9	4.9	8.7	18.5
72.5°	3.9	3.9	3.9	3.9	3.9	3.9	3.9	3.9	4.9	7.8	16.5
75°	2.9	3.9	2.9	2.9	2.9	2.9	2.9	2.9	4.9	6.8	13.6
77.5°	2.9	2.9	2.9	2.9	2.9	2.9	2.9	2.9	3.9	5.8	11.7
80°	1.9	1.9	1.9	1.9	1.9	1.9	1.9	2.9	3.9	4.9	9.7
82.5°	1.9	1.9	1.9	1.0	1.9	1.9	1.9	1.9	3.9	3.9	7.8
85°	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.9	2.9	3.9	4.9
87.5°	0.0	0.0	0.0	0.0	1.0	1.0	1.0	1.9	2.9	2.9	2.9
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°	68.0	68.0	68.0
2.5°	64.1	64.1	64.1
5°	62.2	62.2	62.2
7.5°	60.2	60.2	60.2
10°	58.3	58.3	58.3
12.5°	56.4	56.4	57.3
15°	53.4	55.4	55.4
17.5°	51.5	53.4	54.4
20°	49.6	51.5	52.5
22.5°	46.6	49.6	51.5
25°	44.7	48.6	49.6
27.5°	42.8	47.6	49.6
30°	41.8	46.6	48.6
32.5°	39.8	45.7	47.6
35°	38.9	45.7	47.6
37.5°	38.9	44.7	47.6
40°	37.9	44.7	47.6
42.5°	37.9	44.7	47.6
45°	37.9	44.7	47.6
47.5°	36.9	44.7	48.6
50°	36.9	45.7	48.6
52.5°	36.9	45.7	48.6
55°	36.9	45.7	47.6
57.5°	36.0	44.7	47.6
60°	36.0	44.7	47.6
62.5°	34.0	43.7	46.6
65°	33.0	42.8	45.7
67.5°	31.1	41.8	43.7
70°	29.2	38.9	41.8
72.5°	26.2	36.9	39.8
75°	23.3	34.0	36.0
77.5°	20.4	30.1	32.1
80°	16.5	25.3	27.2
82.5°	12.6	19.4	20.4
85°	8.7	12.6	13.6
87.5°	3.9	5.8	6.8
90°	0.0	0.0	0.0

(END OF REPORT)