

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: P1307234

Luminaire Tested: P3SQAS20R459027D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1307234
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: P3SQAS20R459027D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 2700K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

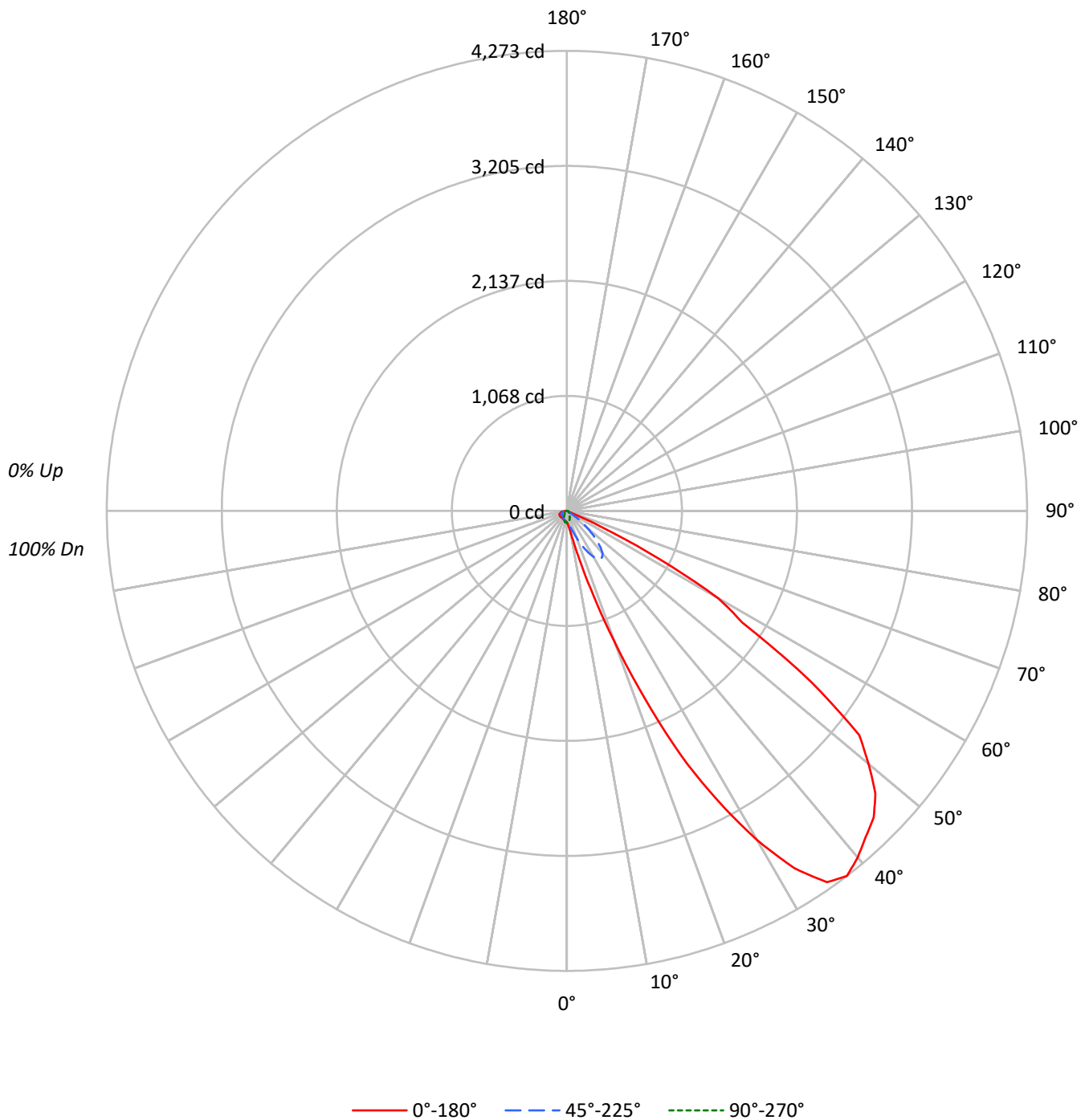
Lumens per Lamp: N/A
Luminaire Lumens: 1909.0 lumens
Efficiency: N/A
Efficacy: 66.3 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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
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°	19013	19013	19013	19013	19013
5°	22630	21005	18809	17461	17461
10°	36130	24553	17663	16544	16544
15°	90005	32914	16029	15476	16029
20°	237049	49154	13874	14735	15615
25°	475979	72837	11991	13796	15278
30°	701717	97563	9725	13483	15690
35°	885132	114415	8284	13266	16252
40°	944359	115603	7442	13826	17379
45°	981204	96425	6917	14979	18827
50°	979636	67197	6752	16049	21140
55°	832624	29846	7116	17986	23210
60°	559620	5993	7061	20116	26626
65°	148498	2567	7091	21843	30197
70°	3978	3172	7150	23818	34140
75°	3127	3127	7320	25219	38860
80°	3174	4661	7835	26580	43837
85°	3162	6323	12449	28060	43670

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 1006457 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.0	0.6
10°-20°	53.9	2.8
20°-30°	222.1	11.6
30°-40°	468.0	24.5
40°-50°	577.4	30.2
50°-60°	432.8	22.7
60°-70°	111.4	5.8
70°-80°	23.1	1.2
80°-90°	9.4	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°	286.9	15.0
0°-40°	754.9	39.5
0°-60°	1765.2	92.5
0°-90°	1909.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1909.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	110	110	110	110	110	
5°	131	122	109	101	101	15
15°	505	185	90	87	90	185
25°	2505	383	63	73	80	1167
35°	4210	544	39	63	77	2566
45°	4029	396	28	62	77	3083
55°	2773	99	24	60	77	2394
65°	364	6	17	54	74	525
75°	5	5	11	38	58	6
85°	2	3	6	14	22	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°	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4	110.4
2.5°	116.7	116.7	116.7	116.7	116.7	116.7	116.7	115.1	113.6	110.4	107.3
5°	130.9	129.3	129.3	129.3	127.8	126.2	126.2	121.5	115.1	108.8	104.1
7.5°	154.6	154.6	153.0	149.8	148.3	145.1	142.0	129.3	115.1	105.7	99.4
10°	206.6	203.5	198.7	195.6	187.7	176.7	168.8	140.4	113.6	101.0	96.2
12.5°	309.2	315.5	299.7	283.9	261.8	241.3	216.1	159.3	113.6	96.2	91.5
15°	504.8	515.8	485.8	454.3	400.6	350.2	302.9	184.6	110.4	89.9	85.2
17.5°	825.0	839.2	788.7	714.5	630.9	530.0	443.2	219.3	107.3	83.6	80.4
20°	1293.4	1291.9	1194.1	1101.0	940.1	791.8	629.4	268.2	102.5	75.7	75.7
22.5°	1869.2	1875.5	1755.6	1588.4	1359.7	1121.5	862.8	324.9	96.2	69.4	71.0
25°	2504.8	2451.2	2309.3	2105.8	1814.0	1484.3	1143.6	383.3	89.9	63.1	66.2
27.5°	3034.8	2982.8	2820.3	2579.0	2265.1	1873.9	1429.1	441.7	82.0	56.8	61.5
30°	3528.6	3462.3	3266.7	2993.8	2620.0	2197.3	1697.2	490.6	72.6	48.9	56.8
32.5°	3935.5	3875.6	3653.2	3336.1	2929.2	2474.9	1924.4	528.4	63.1	44.2	53.6
35°	4210.0	4148.5	3943.4	3594.8	3151.6	2676.8	2108.9	544.2	55.2	39.4	52.1
37.5°	4273.1	4239.9	4093.3	3766.7	3304.6	2806.1	2227.2	539.5	45.7	36.3	48.9
40°	4200.5	4208.4	4139.0	3867.7	3386.6	2861.3	2276.1	514.2	37.9	33.1	47.3
42.5°	4107.4	4128.0	4123.2	3908.7	3421.3	2864.5	2255.6	463.7	30.0	30.0	45.7
45°	4028.6	4049.1	4077.5	3891.3	3397.6	2823.5	2191.0	395.9	22.1	28.4	45.7
47.5°	3885.0	3907.1	3948.1	3752.5	3277.8	2717.8	2074.2	321.8	15.8	26.8	44.2
50°	3656.3	3667.4	3656.3	3437.1	3047.5	2547.4	1884.9	250.8	11.0	25.2	44.2
52.5°	3421.3	3399.2	3307.7	3030.1	2681.5	2277.7	1646.8	178.2	7.9	23.7	42.6
55°	2773.0	2738.3	2670.5	2500.1	2301.4	1946.5	1331.3	99.4	7.9	23.7	41.0
57.5°	1932.3	1951.2	1974.9	1940.2	1848.7	1533.2	1011.1	44.2	7.9	22.1	41.0
60°	1624.7	1608.9	1610.5	1588.4	1437.0	1118.3	695.6	17.4	7.9	20.5	39.4
62.5°	970.1	981.1	1001.6	1006.4	856.5	624.6	364.4	7.9	7.9	18.9	37.9
65°	364.4	381.7	334.4	290.2	230.3	168.8	85.2	6.3	9.5	17.4	34.7
67.5°	11.0	12.6	15.8	14.2	14.2	12.6	9.5	6.3	9.5	15.8	33.1
70°	7.9	7.9	7.9	7.9	7.9	6.3	6.3	6.3	7.9	14.2	30.0
72.5°	6.3	6.3	6.3	6.3	6.3	6.3	6.3	6.3	7.9	12.6	26.8
75°	4.7	6.3	4.7	4.7	4.7	4.7	4.7	4.7	7.9	11.0	22.1
77.5°	4.7	4.7	4.7	4.7	4.7	4.7	4.7	4.7	6.3	9.5	18.9
80°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	4.7	6.3	7.9	15.8
82.5°	3.2	3.2	3.2	1.6	3.2	3.2	3.2	3.2	6.3	6.3	12.6
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2	4.7	6.3	7.9
87.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	3.2	4.7	4.7	4.7
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°	110.4	110.4	110.4
2.5°	104.1	104.1	104.1
5°	101.0	101.0	101.0
7.5°	97.8	97.8	97.8
10°	94.6	94.6	94.6
12.5°	91.5	91.5	93.1
15°	86.8	89.9	89.9
17.5°	83.6	86.8	88.3
20°	80.4	83.6	85.2
22.5°	75.7	80.4	83.6
25°	72.6	78.9	80.4
27.5°	69.4	77.3	80.4
30°	67.8	75.7	78.9
32.5°	64.7	74.1	77.3
35°	63.1	74.1	77.3
37.5°	63.1	72.6	77.3
40°	61.5	72.6	77.3
42.5°	61.5	72.6	77.3
45°	61.5	72.6	77.3
47.5°	59.9	72.6	78.9
50°	59.9	74.1	78.9
52.5°	59.9	74.1	78.9
55°	59.9	74.1	77.3
57.5°	58.4	72.6	77.3
60°	58.4	72.6	77.3
62.5°	55.2	71.0	75.7
65°	53.6	69.4	74.1
67.5°	50.5	67.8	71.0
70°	47.3	63.1	67.8
72.5°	42.6	59.9	64.7
75°	37.9	55.2	58.4
77.5°	33.1	48.9	52.1
80°	26.8	41.0	44.2
82.5°	20.5	31.5	33.1
85°	14.2	20.5	22.1
87.5°	6.3	9.5	11.0
90°	0.0	0.0	0.0

(END OF REPORT)