

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: P1318327

Luminaire Tested: P3SQAS20R459835D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1318327
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: P3SQAS20R459835D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R45 optic, 3500K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

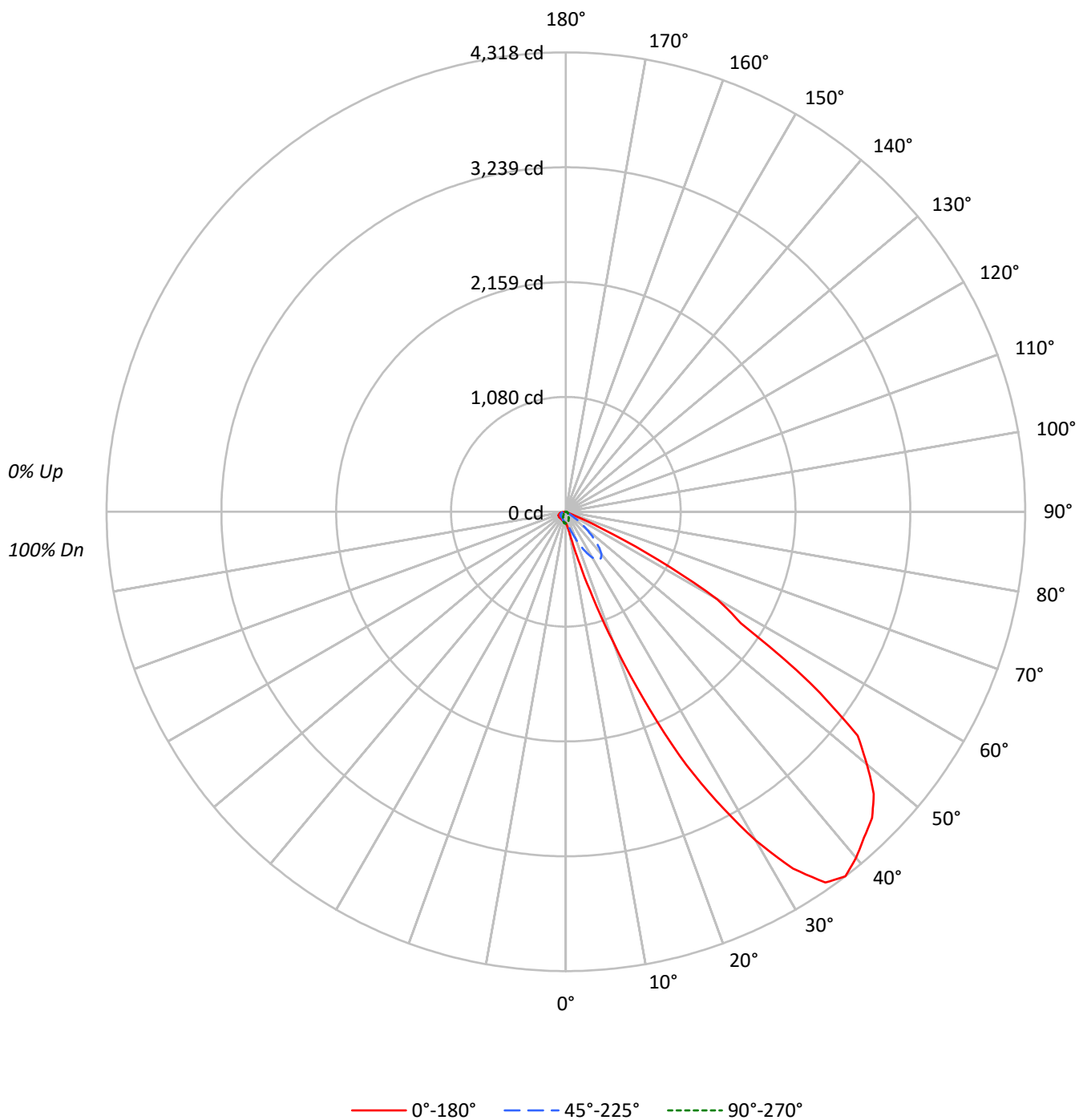
Lumens per Lamp: N/A
Luminaire Lumens: 1929.0 lumens
Efficiency: N/A
Efficacy: 70.4 lumens/watt
Spacing Criteria (0/90/45): 3.81 / 0.82 / 1.83
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 27.4
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

TEST NUMBER: P1318327

CATALOG NUMBER: P3SQAS20R459835D010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1318327

CATALOG NUMBER: P3SQAS20R459835D010 E3SQCA451MMS

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°	19220	19220	19220	19220	19220
5°	22872	21212	19017	17634	17634
10°	36515	24815	17838	16718	16718
15°	90932	33253	16207	15637	16207
20°	239541	49668	14021	14900	15780
25°	480976	73597	12124	13929	15449
30°	709055	98578	9824	13622	15850
35°	894403	115614	8368	13414	16420
40°	954251	116817	7531	13984	17558
45°	991482	97448	6990	15149	19022
50°	989897	67894	6832	16237	21354
55°	841361	30146	7176	18196	23450
60°	565476	6028	7130	20322	26901
65°	150046	2608	7131	22087	30523
70°	4028	3223	7201	24069	34493
75°	3194	3194	7453	25485	39260
80°	3174	4761	7934	26878	44234
85°	3162	6323	12647	28257	44066

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 10°

Vertical Angle: 47.5°

Luminance: 1017010 cd/sqm

TEST NUMBER: P1318327

CATALOG NUMBER: P3SQAS20R459835D010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.1	0.6
10°-20°	54.4	2.8
20°-30°	224.4	11.6
30°-40°	472.9	24.5
40°-50°	583.5	30.2
50°-60°	437.3	22.7
60°-70°	112.5	5.8
70°-80°	23.3	1.2
80°-90°	9.5	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°	289.9	15.0
0°-40°	762.8	39.5
0°-60°	1783.7	92.5
0°-90°	1929.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1929.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	112	112	112	112	112	
5°	132	123	110	102	102	15
15°	510	186	91	88	91	187
25°	2531	387	64	73	81	1179
35°	4254	550	40	64	78	2592
45°	4071	400	29	62	78	3115
55°	2802	100	24	61	78	2419
65°	368	6	18	54	75	531
75°	5	5	11	38	59	6
85°	2	3	6	14	22	2
90°	0	0	0	0	0	

TEST NUMBER: P1318327

CATALOG NUMBER: P3SQAS20R459835D010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.6	111.6
2.5°	117.9	117.9	117.9	117.9	117.9	117.9	117.9	116.4	114.8	111.6	108.4
5°	132.3	130.7	130.7	130.7	129.1	127.5	127.5	122.7	116.4	110.0	105.2
7.5°	156.2	156.2	154.6	151.4	149.8	146.6	143.4	130.7	116.4	106.8	100.4
10°	208.8	205.6	200.8	197.6	189.7	178.5	170.5	141.9	114.8	102.0	97.2
12.5°	312.4	318.8	302.8	286.9	264.6	243.9	218.4	161.0	114.8	97.2	92.4
15°	510.0	521.2	490.9	459.0	404.8	353.8	306.0	186.5	111.6	90.9	86.1
17.5°	833.6	847.9	796.9	722.0	637.6	535.5	447.9	221.6	108.4	84.5	81.3
20°	1307.0	1305.4	1206.6	1112.5	950.0	800.1	636.0	271.0	103.6	76.5	76.5
22.5°	1888.8	1895.1	1774.0	1605.0	1373.9	1133.3	871.9	328.3	97.2	70.1	71.7
25°	2531.1	2476.9	2333.4	2127.8	1833.0	1499.8	1155.6	387.3	90.9	63.8	66.9
27.5°	3066.6	3014.0	2849.9	2606.0	2288.8	1893.5	1444.1	446.3	82.9	57.4	62.2
30°	3565.5	3498.6	3300.9	3025.2	2647.4	2220.3	1715.0	495.7	73.3	49.4	57.4
32.5°	3976.7	3916.2	3691.4	3371.1	2959.8	2500.8	1944.5	534.0	63.8	44.6	54.2
35°	4254.1	4191.9	3984.7	3632.5	3184.6	2704.8	2131.0	549.9	55.8	39.8	52.6
37.5°	4317.8	4284.4	4136.1	3806.2	3339.2	2835.5	2250.6	545.1	46.2	36.7	49.4
40°	4244.5	4252.5	4182.4	3908.2	3422.1	2891.3	2300.0	519.6	38.3	33.5	47.8
42.5°	4150.5	4171.2	4166.4	3949.6	3457.1	2894.5	2279.3	468.6	30.3	30.3	46.2
45°	4070.8	4091.5	4120.2	3932.1	3433.2	2853.1	2213.9	400.1	22.3	28.7	46.2
47.5°	3925.7	3948.1	3989.5	3791.9	3312.1	2746.3	2096.0	325.2	15.9	27.1	44.6
50°	3694.6	3705.8	3694.6	3473.1	3079.4	2574.1	1904.7	253.4	11.2	25.5	44.6
52.5°	3457.1	3434.8	3342.4	3061.9	2709.6	2301.6	1664.0	180.1	8.0	23.9	43.0
55°	2802.1	2767.0	2698.4	2526.3	2325.5	1966.9	1345.2	100.4	8.0	23.9	41.4
57.5°	1952.5	1971.6	1995.5	1960.5	1868.0	1549.3	1021.7	44.6	8.0	22.3	41.4
60°	1641.7	1625.8	1627.4	1605.0	1452.0	1130.1	702.9	17.5	8.0	20.7	39.8
62.5°	980.2	991.4	1012.1	1016.9	865.5	631.2	368.2	8.0	8.0	19.1	38.3
65°	368.2	385.7	337.9	293.3	232.7	170.5	86.1	6.4	9.6	17.5	35.1
67.5°	11.2	12.8	15.9	14.3	14.3	12.8	9.6	6.4	9.6	15.9	33.5
70°	8.0	8.0	8.0	8.0	8.0	6.4	6.4	6.4	8.0	14.3	30.3
72.5°	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	8.0	12.8	27.1
75°	4.8	6.4	4.8	4.8	4.8	4.8	4.8	4.8	8.0	11.2	22.3
77.5°	4.8	4.8	4.8	4.8	4.8	4.8	4.8	4.8	6.4	9.6	19.1
80°	3.2	3.2	3.2	3.2	3.2	3.2	3.2	4.8	6.4	8.0	15.9
82.5°	3.2	3.2	3.2	1.6	3.2	3.2	3.2	3.2	6.4	6.4	12.8
85°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.2	4.8	6.4	8.0
87.5°	0.0	0.0	0.0	0.0	1.6	1.6	1.6	3.2	4.8	4.8	4.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

TEST NUMBER: P1318327

CATALOG NUMBER: P3SQAS20R459835D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	111.6	111.6	111.6
2.5°	105.2	105.2	105.2
5°	102.0	102.0	102.0
7.5°	98.8	98.8	98.8
10°	95.6	95.6	95.6
12.5°	92.4	92.4	94.0
15°	87.7	90.9	90.9
17.5°	84.5	87.7	89.3
20°	81.3	84.5	86.1
22.5°	76.5	81.3	84.5
25°	73.3	79.7	81.3
27.5°	70.1	78.1	81.3
30°	68.5	76.5	79.7
32.5°	65.3	74.9	78.1
35°	63.8	74.9	78.1
37.5°	63.8	73.3	78.1
40°	62.2	73.3	78.1
42.5°	62.2	73.3	78.1
45°	62.2	73.3	78.1
47.5°	60.6	73.3	79.7
50°	60.6	74.9	79.7
52.5°	60.6	74.9	79.7
55°	60.6	74.9	78.1
57.5°	59.0	73.3	78.1
60°	59.0	73.3	78.1
62.5°	55.8	71.7	76.5
65°	54.2	70.1	74.9
67.5°	51.0	68.5	71.7
70°	47.8	63.8	68.5
72.5°	43.0	60.6	65.3
75°	38.3	55.8	59.0
77.5°	33.5	49.4	52.6
80°	27.1	41.4	44.6
82.5°	20.7	31.9	33.5
85°	14.3	20.7	22.3
87.5°	6.4	9.6	11.2
90°	0.0	0.0	0.0

(END OF REPORT)