

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: P1311605

Luminaire Tested: P3SQAS20R259050D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311605
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-75)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R259050D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R25 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

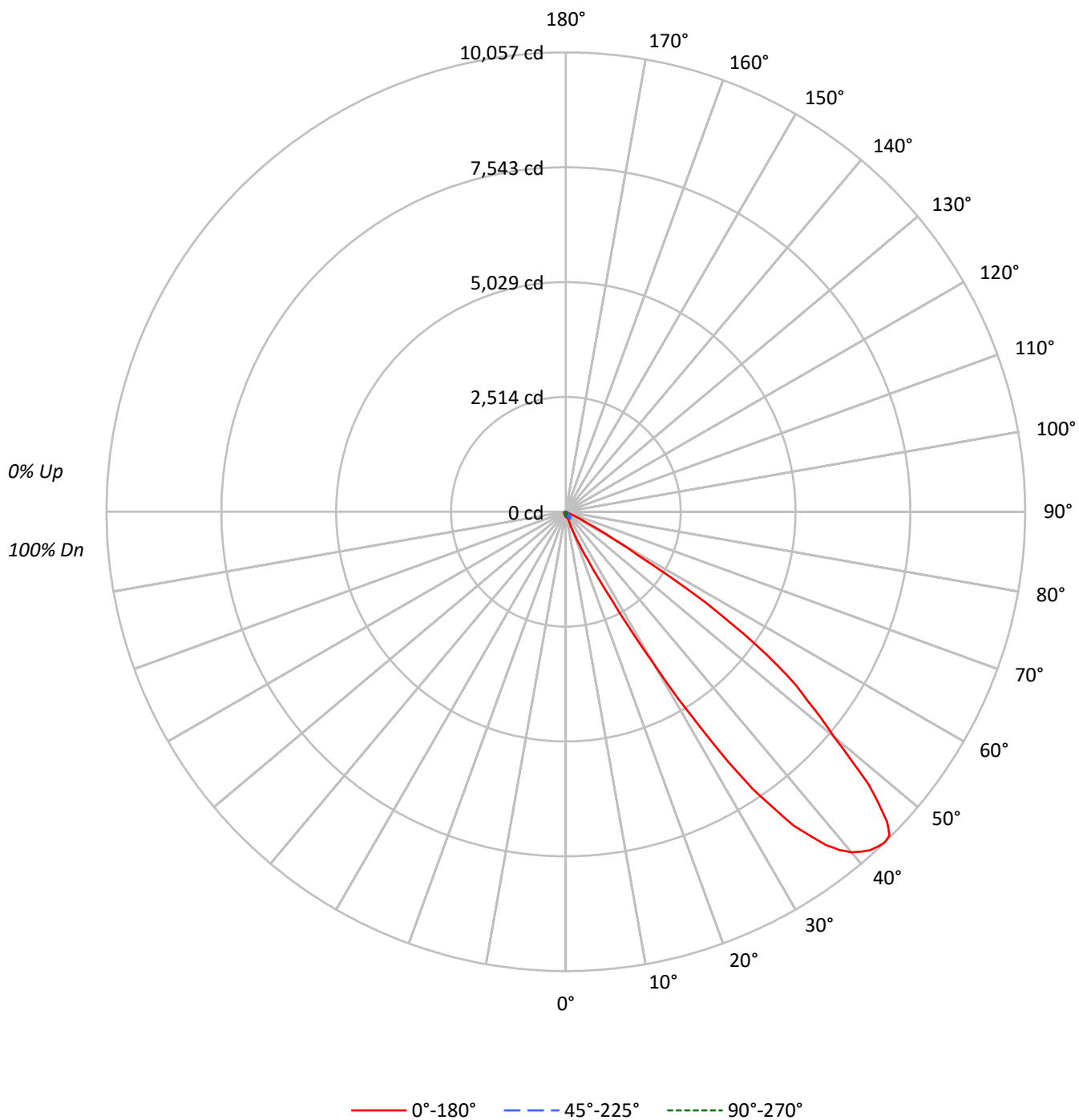
Lumens per Lamp: N/A
Luminaire Lumens: 2097.0 lumens
Efficiency: N/A
Efficacy: 72.8 lumens/watt
Spacing Criteria (0/90/45): 3.65 / 0.6 / 1.37
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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

TEST NUMBER: P1311605

CATALOG NUMBER: P3SQAS20R259050D010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1311605

CATALOG NUMBER: P3SQAS20R259050D010 E3SQCA451MMS

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	108	104	101	97	100	97	94	96	94	92	92	91	89	87		
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73		
3	92	81	74	67	89	80	73	67	77	71	66	74	69	64	72	67	63	61		
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	58	53	51		
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42		
6	68	55	45	39	66	54	45	39	52	44	38	50	43	38	48	42	37	35		
7	62	48	39	32	60	47	39	32	46	38	32	44	37	32	43	36	32	29		
8	57	43	34	27	55	42	33	27	40	33	27	39	32	27	38	32	27	25		
9	52	38	29	23	51	37	29	23	36	28	23	35	28	23	34	27	23	21		
10	48	34	25	20	47	33	25	20	32	25	20	31	24	19	30	24	19	17		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	18428	18428	18428	18428	18428
5°	21057	20106	17859	15957	15628
10°	20968	19044	15162	13238	13238
15°	23357	16457	11839	11179	11839
20°	82529	16238	9127	9475	10483
25°	237400	20694	7373	8760	10166
30°	757419	31918	5867	8432	10281
35°	1658938	37634	5046	8158	10470
40°	2188405	34015	4159	8296	11196
45°	2440467	23820	4043	8987	12129
50°	2054306	12352	3965	9404	13343
55°	1535895	4984	3873	10539	14953
60°	475438	1274	3823	11436	16533
65°	40588	0	4523	12022	18053
70°	2769	906	4633	13948	20444
75°	2462	1198	6122	14706	23356
80°	1785	1785	9124	16464	27473
85°	3557	3557	14623	18180	29245

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 2440467 cd/sqm

TEST NUMBER: P1311605

CATALOG NUMBER: P3SQAS20R259050D010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	9.6	0.5
10°-20°	24.7	1.2
20°-30°	116.0	5.5
30°-40°	558.6	26.6
40°-50°	875.5	41.8
50°-60°	448.8	21.4
60°-70°	42.3	2.0
70°-80°	14.2	0.7
80°-90°	7.1	0.3
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°	150.3	7.2
0°-40°	708.9	33.8
0°-60°	2033.3	97.0
0°-90°	2097.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2097.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	107	107	107	107	107	
5°	122	116	103	92	90	12
15°	131	92	66	63	66	55
25°	1249	109	39	46	54	775
35°	7890	179	24	39	50	4790
45°	10020	98	17	37	50	7332
55°	5115	17	13	35	50	4258
65°	100	0	11	30	44	312
75°	4	2	9	22	35	4
85°	2	2	7	9	15	1
90°	0	0	0	0	0	

TEST NUMBER: P1311605

CATALOG NUMBER: P3SQAS20R259050D010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
0°	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0	107.0
2.5°	116.3	116.3	116.3	116.3	116.3	116.3	114.4	114.4	116.3	114.4	114.4
5°	121.8	121.8	121.8	121.8	121.8	121.8	121.8	119.9	119.9	119.9	116.3
7.5°	123.6	121.8	121.8	121.8	121.8	121.8	121.8	121.8	119.9	119.9	114.4
10°	119.9	119.9	119.9	119.9	118.1	118.1	118.1	116.3	116.3	116.3	108.9
12.5°	119.9	119.9	119.9	119.9	118.1	118.1	116.3	116.3	114.4	112.6	99.6
15°	131.0	131.0	131.0	129.2	127.3	125.5	123.6	121.8	119.9	116.3	92.3
17.5°	191.9	186.4	184.5	177.1	167.9	158.7	151.3	143.9	136.6	131.0	88.6
20°	450.3	448.4	439.2	417.0	393.1	365.4	337.7	306.3	262.0	232.5	88.6
22.5°	780.6	769.5	752.9	736.3	693.8	644.0	592.3	533.3	476.1	415.2	94.1
25°	1249.3	1275.1	1219.8	1175.5	1101.7	1011.2	913.4	832.2	728.9	632.9	108.9
27.5°	2171.9	2188.5	2079.7	1935.7	1764.1	1574.1	1389.5	1251.1	1077.7	919.0	136.6
30°	3808.7	3825.3	3642.6	3336.3	2982.0	2670.2	2247.6	1876.7	1535.3	1271.4	160.5
31°	4753.5	4624.3	4412.1	4115.0	3666.6	3196.1	2688.6	2240.2	1808.4	1461.5	167.9
32°	5574.7	5563.6	5316.3	4866.1	4415.8	3834.6	3205.3	2620.3	2090.7	1653.4	173.5
33°	6543.5	6469.7	6120.9	5696.5	5100.4	4515.5	3703.5	3035.5	2380.5	1867.5	177.1
34°	7320.3	7121.1	6977.1	6491.8	5862.6	5117.0	4247.9	3474.7	2742.1	2074.1	179.0
35°	7890.5	7848.1	7567.6	7115.5	6475.2	5713.1	4834.7	3930.5	3044.8	2314.0	179.0
36°	8494.0	8362.9	8089.8	7680.2	7056.5	6268.5	5283.1	4325.4	3397.2	2529.9	177.1
37°	8872.3	8794.8	8523.5	8100.9	7490.1	6737.2	5785.0	4742.4	3677.7	2745.8	173.5
38°	9261.6	9104.8	8837.2	8433.1	7833.3	7126.6	6148.6	5063.5	3936.0	2935.9	167.9
39°	9531.0	9368.6	9095.5	8693.3	8106.4	7405.2	6436.4	5336.6	4161.2	3078.0	160.5
40°	9734.0	9577.2	9300.4	8887.0	8307.6	7624.8	6676.3	5578.4	4349.4	3201.6	151.3
41°	9859.5	9713.7	9438.8	9027.3	8446.0	7750.3	6833.2	5735.2	4476.7	3284.7	142.1
42°	9964.7	9815.2	9534.7	9114.0	8530.9	7857.3	6929.1	5834.9	4563.5	3327.1	134.7
43°	10023.7	9874.3	9601.2	9171.2	8582.5	7907.2	6980.8	5881.0	4593.0	3321.6	121.8
44°	10056.9	9901.9	9627.0	9197.0	8604.7	7920.1	6984.5	5871.8	4572.7	3277.3	110.7
45°	10020.0	9866.9	9601.2	9171.2	8565.9	7879.5	6947.6	5822.0	4495.2	3190.5	97.8
46°	9780.1	9662.0	9418.5	9023.6	8444.1	7776.1	6853.5	5726.0	4375.2	3083.5	83.0
47°	9357.6	9263.5	9027.3	8733.9	8209.8	7586.1	6680.0	5543.3	4207.3	2923.0	66.4
48°	8916.5	8778.1	8558.6	8257.8	7814.9	7244.7	6394.0	5275.7	3952.7	2712.6	59.0
49°	8265.1	8184.0	7990.2	7654.3	7287.1	6785.2	5989.9	4932.5	3640.8	2483.8	51.7
50°	7667.3	7611.9	7340.6	7093.4	6704.0	6235.3	5441.8	4480.4	3253.3	2199.6	46.1
51°	7200.4	7134.0	6938.4	6630.2	6215.0	5670.6	4923.3	3893.6	2808.6	1861.9	36.9
52°	6713.2	6676.3	6502.9	6185.5	5777.7	5235.1	4419.5	3395.4	2376.8	1574.1	29.5
53°	6314.7	6261.1	6048.9	5766.6	5325.6	4764.6	3873.3	2932.2	2013.2	1323.1	25.8
54°	5733.4	5711.2	5574.7	5279.4	4801.5	4190.7	3378.8	2469.0	1679.2	1121.9	22.1
55°	5115.2	5041.4	4903.0	4668.6	4229.5	3659.3	2806.7	2046.4	1358.1	944.8	16.6
56°	4362.3	4358.6	4111.4	3915.7	3526.4	2921.1	2242.1	1598.0	1103.5	787.9	14.8
57°	3642.6	3526.4	3288.3	3094.6	2675.7	2216.2	1664.5	1197.6	863.6	638.5	11.1
58°	2694.2	2633.3	2570.5	2286.3	1898.8	1570.4	1188.4	841.5	638.5	487.2	7.4
59°	1828.7	1826.9	1753.0	1537.1	1313.9	978.0	741.8	572.0	439.2	358.0	5.5
60°	1380.3	1347.1	1199.5	1057.4	826.7	618.2	439.2	337.7	273.1	230.7	3.7
62.5°	483.5	501.9	441.0	365.4	278.6	228.8	175.3	142.1	116.3	94.1	0.0
65°	99.6	108.9	94.1	88.6	70.1	60.9	53.5	46.1	38.8	33.2	0.0



TEST NUMBER: P1311605

CATALOG NUMBER: P3SQAS20R259050D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	17.5°	20°	22.5°	45°
67.5°	12.9	11.1	11.1	11.1	9.2	9.2	9.2	9.2	7.4	7.4	1.8
70°	5.5	5.5	5.5	5.5	5.5	5.5	3.7	3.7	3.7	3.7	1.8
72.5°	5.5	5.5	5.5	3.7	3.7	3.7	3.7	3.7	3.7	1.8	1.8
75°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	1.8	1.8	1.8	1.8
77.5°	3.7	3.7	3.7	3.7	3.7	3.7	1.8	1.8	1.8	1.8	1.8
80°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
82.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.7
85°	1.8	1.8	1.8	0.0	0.0	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

TEST NUMBER: P1311605

CATALOG NUMBER: P3SQAS20R259050D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
0°	107.0	107.0	107.0	107.0	107.0	107.0
2.5°	112.6	108.9	103.3	101.5	99.6	99.6
5°	110.7	103.3	97.8	92.3	90.4	90.4
7.5°	105.2	96.0	88.6	84.9	83.0	81.2
10°	99.6	86.7	79.3	75.7	75.7	75.7
12.5°	88.6	77.5	70.1	68.3	70.1	70.1
15°	79.3	66.4	62.7	62.7	64.6	66.4
17.5°	68.3	59.0	55.4	57.2	59.0	60.9
20°	60.9	49.8	49.8	51.7	57.2	57.2
22.5°	53.5	44.3	44.3	49.8	53.5	55.4
25°	48.0	38.8	40.6	46.1	51.7	53.5
27.5°	40.6	33.2	36.9	44.3	49.8	51.7
30°	35.1	29.5	35.1	42.4	48.0	51.7
31°	33.2	27.7	35.1	40.6	48.0	51.7
32°	29.5	27.7	33.2	40.6	48.0	49.8
33°	27.7	25.8	33.2	40.6	48.0	49.8
34°	25.8	24.0	31.4	40.6	48.0	49.8
35°	22.1	24.0	31.4	38.8	46.1	49.8
36°	20.3	22.1	31.4	38.8	46.1	49.8
37°	18.5	22.1	29.5	38.8	46.1	49.8
38°	16.6	20.3	29.5	38.8	46.1	49.8
39°	14.8	20.3	27.7	38.8	46.1	49.8
40°	12.9	18.5	27.7	36.9	46.1	49.8
41°	12.9	18.5	27.7	36.9	46.1	49.8
42°	11.1	18.5	27.7	36.9	46.1	49.8
43°	9.2	16.6	27.7	36.9	46.1	49.8
44°	7.4	16.6	25.8	36.9	46.1	49.8
45°	7.4	16.6	25.8	36.9	46.1	49.8
46°	5.5	14.8	25.8	36.9	46.1	49.8
47°	3.7	14.8	25.8	35.1	46.1	49.8
48°	3.7	14.8	25.8	35.1	46.1	49.8
49°	3.7	14.8	24.0	35.1	46.1	49.8
50°	3.7	14.8	24.0	35.1	46.1	49.8
51°	1.8	12.9	24.0	35.1	46.1	49.8
52°	1.8	12.9	24.0	35.1	46.1	51.7
53°	1.8	12.9	24.0	35.1	46.1	49.8
54°	1.8	12.9	22.1	35.1	46.1	49.8
55°	1.8	12.9	22.1	35.1	46.1	49.8
56°	1.8	11.1	22.1	33.2	46.1	49.8
57°	3.7	11.1	22.1	33.2	46.1	48.0
58°	3.7	11.1	22.1	33.2	44.3	48.0
59°	3.7	11.1	22.1	33.2	44.3	48.0
60°	3.7	11.1	20.3	33.2	44.3	48.0
62.5°	3.7	11.1	20.3	31.4	42.4	46.1
65°	3.7	11.1	18.5	29.5	42.4	44.3



TEST NUMBER: P1311605

CATALOG NUMBER: P3SQAS20R259050D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	67.5°	90°	112.5°	135°	157.5°	180°
67.5°	3.7	9.2	18.5	27.7	40.6	42.4
70°	5.5	9.2	16.6	27.7	38.8	40.6
72.5°	5.5	9.2	16.6	24.0	35.1	38.8
75°	5.5	9.2	14.8	22.1	33.2	35.1
77.5°	5.5	9.2	12.9	20.3	29.5	31.4
80°	7.4	9.2	11.1	16.6	25.8	27.7
82.5°	7.4	9.2	9.2	12.9	20.3	22.1
85°	5.5	7.4	7.4	9.2	12.9	14.8
87.5°	5.5	7.4	5.5	3.7	7.4	7.4
90°	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)