

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: P1315532

Luminaire Tested: P3SQAS17R409740DE010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315532
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-78)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS17R409740DE010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R40 optic, 4000K CCT AND, 97CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

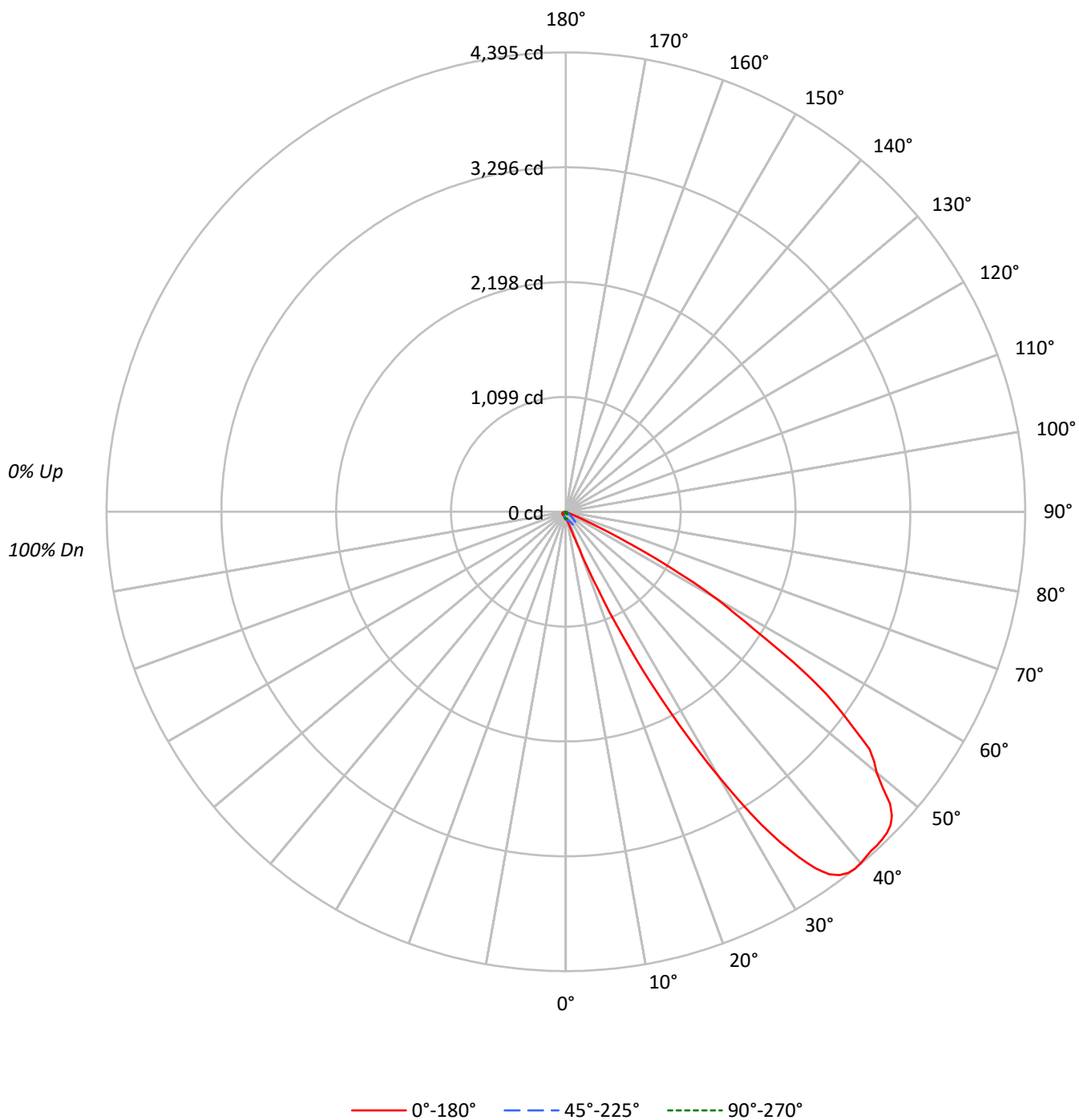
Lumens per Lamp: N/A
Luminaire Lumens: 1357.9 lumens
Efficiency: N/A
Efficacy: 64.1 lumens/watt
Spacing Criteria (0/90/45): 3.99 / 0.73 / 1.54
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 21.2
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: P1315532

CATALOG NUMBER: P3SQAS17R409740DE010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1315532

CATALOG NUMBER: P3SQAS17R409740DE010 E3SQCA451MB

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	82	78	84	80	76	81	78	75	72		
3	91	81	73	66	89	79	72	66	76	70	65	73	68	64	71	66	62	60		
4	82	70	62	55	80	69	61	54	67	59	54	64	58	53	62	57	52	50		
5	75	62	52	46	73	60	52	45	58	51	45	56	50	44	54	49	44	42		
6	68	54	45	38	66	53	44	38	51	43	38	50	43	37	48	42	37	35		
7	62	48	39	32	60	47	38	32	45	37	32	44	37	31	42	36	31	29		
8	57	42	33	27	55	42	33	27	40	32	27	39	32	27	38	31	26	24		
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	20	30	24	19	18		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	12021	12021	12021	12021	12021
5°	13364	12931	11860	10788	10563
10°	16141	13746	10912	9811	9601
15°	26459	14906	9343	8665	8897
20°	69938	17594	7771	7771	8449
25°	269686	21796	6157	7107	8285
30°	581841	29014	4952	6940	8193
35°	875755	34354	4205	6812	8389
40°	986671	34487	3642	7014	8970
45°	1057974	26718	3337	7282	9718
50°	1039866	16719	3001	7690	10690
55°	914805	8227	3003	8617	11980
60°	579047	1722	3444	9438	13330
65°	118423	489	3545	10147	14752
70°	2518	604	3777	11279	16969
75°	2462	1664	4126	12443	19097
80°	2479	1190	4959	13588	22216
85°	2371	2371	9880	14820	24700

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47°

Luminance: 1077076 cd/sqm

TEST NUMBER: P1315532

CATALOG NUMBER: P3SQAS17R409740DE010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	6.5	0.5
10°-20°	21.5	1.6
20°-30°	105.5	7.8
30°-40°	343.1	25.3
40°-50°	473.0	34.8
50°-60°	329.5	24.3
60°-70°	62.4	4.6
70°-80°	11.3	0.8
80°-90°	5.2	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°	133.5	9.8
0°-40°	476.6	35.1
0°-60°	1279.0	94.2
0°-90°	1357.9	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1357.9	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	70	70	70	70	70	
5°	77	75	69	62	61	8
15°	148	84	52	49	50	54
25°	1419	115	32	37	44	731
35°	4165	163	20	32	40	2517
45°	4344	110	14	30	40	3303
55°	3047	27	10	29	40	2604
65°	291	1	9	25	36	514
75°	4	2	6	19	29	4
85°	1	1	5	8	12	1
90°	0	0	0	0	0	

TEST NUMBER: P1315532

CATALOG NUMBER: P3SQAS17R409740DE010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8
2.5°	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	72.3	71.1	69.8
5°	77.3	77.3	77.3	77.3	76.1	76.1	76.1	74.8	74.8	72.3	68.6
7.5°	82.3	82.3	82.3	82.3	81.1	79.8	78.6	78.6	77.3	71.1	66.1
10°	92.3	92.3	91.0	89.8	88.5	86.1	84.8	82.3	78.6	69.8	62.4
12.5°	112.2	109.7	108.5	106.0	102.3	97.3	92.3	88.5	79.8	67.3	58.6
15°	148.4	145.9	140.9	133.4	126.0	116.0	107.3	98.5	83.6	63.6	52.4
17.5°	212.0	204.5	197.0	184.6	165.9	148.4	129.7	113.5	88.5	59.9	47.4
20°	381.6	376.6	331.7	296.8	240.7	200.8	163.4	135.9	96.0	56.1	42.4
22.5°	786.9	734.6	661.0	541.3	421.5	310.5	225.7	170.9	103.5	51.1	37.4
25°	1419.2	1336.9	1178.5	947.8	699.6	495.1	326.7	223.2	114.7	46.1	32.4
27.5°	2148.8	2065.3	1819.6	1501.5	1096.2	747.0	466.4	295.6	129.7	41.2	28.7
30°	2925.8	2854.7	2542.9	2102.7	1545.2	1046.3	624.8	369.2	145.9	36.2	24.9
31°	3238.8	3147.8	2811.0	2342.1	1756.0	1169.8	688.4	400.3	152.2	34.9	23.7
32°	3526.9	3423.4	3074.2	2571.6	1926.8	1303.3	758.3	427.8	157.1	32.4	22.4
33°	3775.1	3654.1	3317.4	2788.6	2115.1	1428.0	830.6	454.0	160.9	29.9	21.2
34°	3985.8	3881.1	3519.4	3006.8	2282.3	1547.7	901.7	480.1	163.4	28.7	20.0
35°	4165.4	4070.6	3712.7	3172.7	2445.6	1663.7	966.5	505.1	163.4	26.2	20.0
36°	4286.4	4204.1	3879.8	3342.3	2582.8	1762.2	1021.4	527.5	163.4	23.7	18.7
37°	4352.5	4272.7	3989.6	3482.0	2717.5	1859.5	1071.3	545.0	162.1	22.4	17.5
38°	4386.2	4316.3	4070.6	3595.5	2811.0	1929.3	1114.9	558.7	160.9	20.0	17.5
39°	4394.9	4336.3	4121.8	3677.8	2902.1	1999.2	1146.1	566.2	157.1	18.7	16.2
40°	4388.7	4337.5	4149.2	3751.4	2971.9	2054.0	1168.6	568.7	153.4	16.2	16.2
41°	4376.2	4336.3	4169.2	3802.5	3028.0	2088.9	1177.3	563.7	148.4	13.7	15.0
42°	4365.0	4321.3	4177.9	3837.4	3066.7	2106.4	1176.0	553.7	140.9	12.5	15.0
43°	4365.0	4315.1	4179.1	3859.9	3085.4	2107.7	1161.1	535.0	130.9	11.2	13.7
44°	4357.5	4311.3	4185.4	3874.8	3090.4	2096.4	1137.4	515.1	119.7	10.0	13.7
45°	4343.8	4295.1	4184.1	3876.1	3081.7	2069.0	1098.7	488.9	109.7	7.5	13.7
46°	4317.6	4273.9	4172.9	3867.4	3055.5	2029.1	1052.6	462.7	98.5	6.2	12.5
47°	4265.2	4231.5	4143.0	3837.4	3015.6	1970.5	997.7	432.8	89.8	5.0	12.5
48°	4175.4	4151.7	4091.8	3771.3	2939.5	1898.1	939.1	400.3	81.1	5.0	12.5
49°	4010.8	3992.1	3957.2	3665.3	2842.2	1809.6	875.5	364.2	72.3	3.7	12.5
50°	3881.1	3861.1	3790.0	3487.0	2702.5	1697.3	805.6	328.0	62.4	2.5	11.2
51°	3795.0	3762.6	3650.4	3280.0	2499.3	1547.7	729.6	291.8	52.4	2.5	11.2
52°	3686.5	3637.9	3498.2	3094.1	2313.4	1398.0	647.3	255.7	46.1	2.5	11.2
53°	3459.6	3442.1	3303.7	2894.6	2127.6	1254.6	562.5	225.7	39.9	2.5	11.2
54°	3261.3	3235.1	3046.7	2617.7	1925.6	1095.0	475.2	199.5	33.7	2.5	11.2
55°	3046.7	2995.6	2828.5	2384.5	1688.6	947.8	391.6	172.1	27.4	2.5	10.0
56°	2776.1	2731.2	2551.6	2135.1	1470.4	798.2	328.0	140.9	21.2	2.5	10.0
57°	2446.9	2405.7	2267.3	1828.3	1243.4	652.3	266.9	113.5	16.2	2.5	10.0
58°	2128.9	2082.7	1924.3	1534.0	1003.9	517.6	223.2	92.3	12.5	2.5	10.0
59°	1884.4	1822.1	1617.5	1288.3	785.7	392.8	177.1	73.6	8.7	2.5	10.0
60°	1681.1	1630.0	1418.0	1072.5	616.1	289.3	130.9	56.1	5.0	2.5	10.0
62.5°	974.0	960.3	769.5	552.5	290.6	134.7	64.9	26.2	2.5	3.7	10.0
65°	290.6	253.2	197.0	117.2	74.8	44.9	23.7	8.7	1.2	3.7	8.7



TEST NUMBER: P1315532

CATALOG NUMBER: P3SQAS17R409740DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
67.5°	8.7	8.7	8.7	8.7	8.7	8.7	5.0	2.5	1.2	3.7	8.7
70°	5.0	3.7	3.7	3.7	3.7	2.5	2.5	1.2	1.2	3.7	7.5
72.5°	3.7	3.7	3.7	3.7	2.5	2.5	2.5	1.2	2.5	3.7	6.2
75°	3.7	2.5	2.5	2.5	2.5	1.2	1.2	1.2	2.5	3.7	6.2
77.5°	2.5	2.5	2.5	2.5	1.2	1.2	1.2	1.2	2.5	3.7	6.2
80°	2.5	2.5	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3.7	5.0
82.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3.7	5.0
85°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	3.7	5.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	1.2	3.7	3.7
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: P1315532

CATALOG NUMBER: P3SQAS17R409740DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	69.8	69.8	69.8	69.8
2.5°	67.3	66.1	64.9	64.9
5°	64.9	62.4	62.4	61.1
7.5°	61.1	58.6	58.6	58.6
10°	57.4	56.1	56.1	54.9
12.5°	52.4	52.4	52.4	52.4
15°	48.6	48.6	49.9	49.9
17.5°	43.6	44.9	47.4	48.6
20°	39.9	42.4	44.9	46.1
22.5°	37.4	39.9	43.6	44.9
25°	33.7	37.4	42.4	43.6
27.5°	31.2	36.2	39.9	42.4
30°	28.7	34.9	38.7	41.2
31°	28.7	33.7	38.7	41.2
32°	27.4	32.4	38.7	39.9
33°	27.4	32.4	38.7	39.9
34°	26.2	32.4	37.4	39.9
35°	26.2	32.4	37.4	39.9
36°	24.9	31.2	37.4	39.9
37°	24.9	31.2	37.4	39.9
38°	23.7	31.2	37.4	39.9
39°	23.7	31.2	37.4	39.9
40°	23.7	31.2	37.4	39.9
41°	22.4	31.2	37.4	39.9
42°	22.4	31.2	37.4	39.9
43°	22.4	29.9	37.4	39.9
44°	22.4	29.9	37.4	39.9
45°	21.2	29.9	37.4	39.9
46°	21.2	29.9	37.4	39.9
47°	21.2	29.9	37.4	39.9
48°	21.2	29.9	37.4	39.9
49°	21.2	29.9	37.4	39.9
50°	20.0	28.7	37.4	39.9
51°	20.0	28.7	37.4	39.9
52°	20.0	28.7	37.4	39.9
53°	20.0	28.7	37.4	39.9
54°	18.7	28.7	37.4	39.9
55°	18.7	28.7	37.4	39.9
56°	18.7	28.7	37.4	38.7
57°	18.7	28.7	36.2	38.7
58°	18.7	27.4	36.2	38.7
59°	18.7	27.4	36.2	38.7
60°	18.7	27.4	36.2	38.7
62.5°	17.5	27.4	34.9	37.4
65°	16.2	24.9	34.9	36.2



TEST NUMBER: P1315532

CATALOG NUMBER: P3SQAS17R409740DE010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
67.5°	16.2	23.7	32.4	34.9
70°	15.0	22.4	31.2	33.7
72.5°	12.5	21.2	28.7	31.2
75°	11.2	18.7	26.2	28.7
77.5°	10.0	16.2	23.7	24.9
80°	8.7	13.7	20.0	22.4
82.5°	6.2	10.0	16.2	17.5
85°	5.0	7.5	11.2	12.5
87.5°	3.7	3.7	6.2	6.2
90°	0.0	0.0	0.0	0.0

(END OF REPORT)