

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: P1306270

Luminaire Tested: P3SQAS20R509024D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1306270
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-79)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R509024D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R50 optic, 2400K CCT AND, 90CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

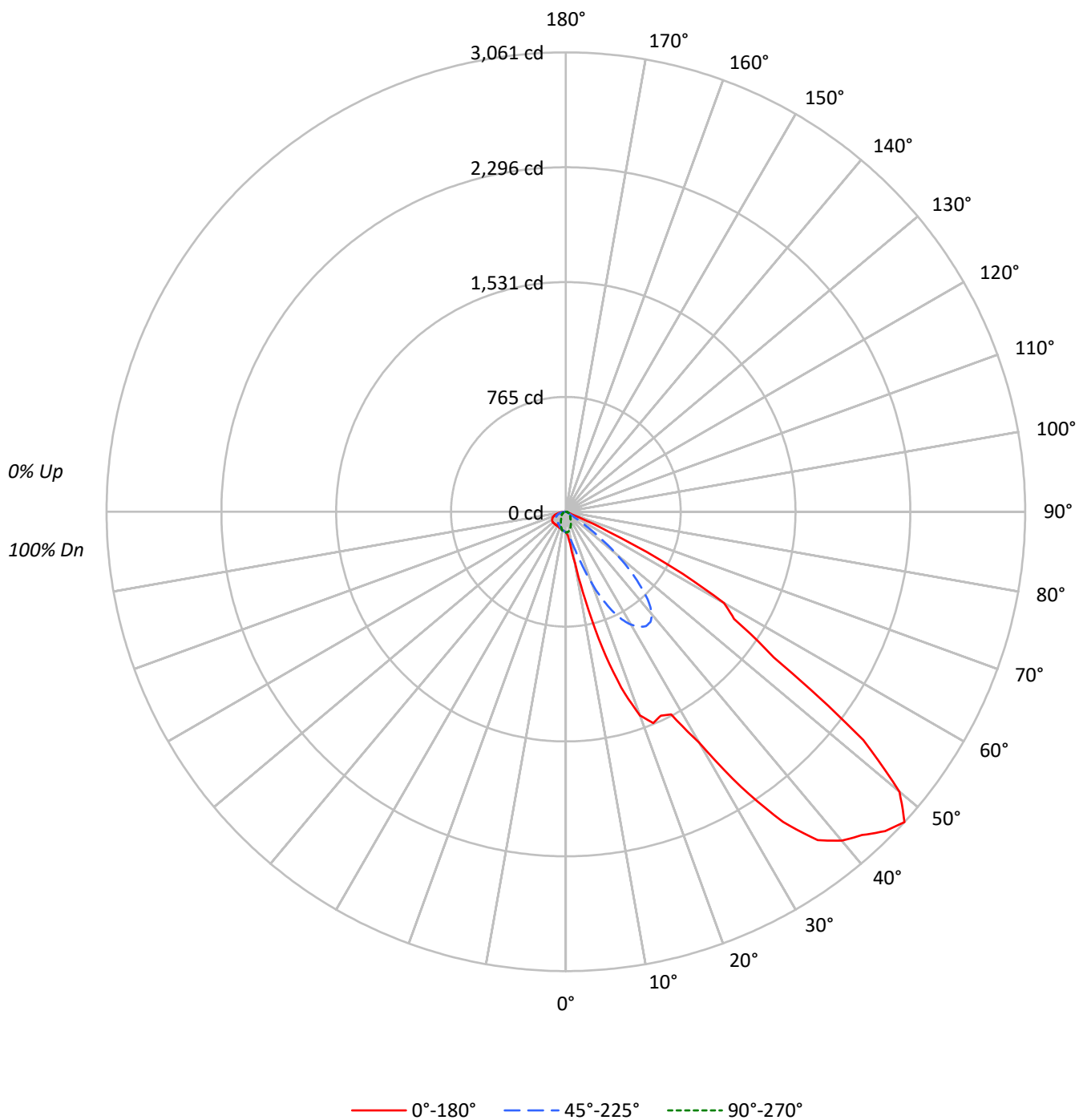
Lumens per Lamp: N/A
Luminaire Lumens: 1726.0 lumens
Efficiency: N/A
Efficacy: 59.9 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1306270

CATALOG NUMBER: P3SQAS20R509024D010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1306270

CATALOG NUMBER: P3SQAS20R509024D010 E3SQCA451MB

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	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86		
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	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	63	56	81	70	62	56	67	60	55	65	59	54	63	58	53	51		
5	76	63	54	47	74	62	53	47	60	52	46	58	51	46	56	50	45	43		
6	69	56	47	40	67	55	46	40	53	45	39	51	44	39	50	43	39	37		
7	63	50	41	34	62	49	40	34	47	39	34	46	39	34	44	38	33	31		
8	58	44	36	30	57	44	35	29	42	35	29	41	34	29	40	34	29	27		
9	54	40	31	26	53	39	31	26	38	31	25	37	30	25	36	30	25	23		
10	50	36	28	23	49	36	28	22	35	27	22	34	27	22	33	27	22	20		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	23629	23629	23629	23629	23629
5°	28093	26295	23460	22423	22163
10°	60491	32598	22420	21633	21895
15°	167457	53436	20201	20736	21538
20°	264760	93709	17484	19940	21040
25°	284717	137674	15012	19269	21245
30°	353404	172834	13046	18972	21935
35°	530343	195591	11290	19111	23190
40°	643190	201102	10049	19784	24460
45°	732749	172465	9815	21068	26865
50°	777696	119042	9994	22774	29955
55°	508072	47892	9849	24621	33119
60°	419018	8232	9748	26695	36442
65°	126370	4238	9128	28567	40099
70°	5237	4482	9013	29256	43557
75°	4991	4991	8917	29744	47644
80°	4463	4463	8827	29555	48796
85°	2964	5928	11856	29443	47227

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 780214 cd/sqm

TEST NUMBER: P1306270

CATALOG NUMBER: P3SQAS20R509024D010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	14.3	0.8
10°-20°	81.7	4.7
20°-30°	210.1	12.2
30°-40°	377.4	21.9
40°-50°	504.1	29.2
50°-60°	384.0	22.2
60°-70°	116.5	6.8
70°-80°	27.8	1.6
80°-90°	10.1	0.6
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°	306.1	17.7
0°-40°	683.5	39.6
0°-60°	1571.6	91.1
0°-90°	1726.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1726.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	137	137	137	137	137	
5°	162	152	136	130	128	21
15°	939	300	113	116	121	276
25°	1498	724	79	101	112	715
35°	2522	930	54	91	110	1549
45°	3008	708	40	86	110	2300
55°	1692	160	33	82	110	1683
65°	310	10	22	70	98	429
75°	8	8	13	45	72	8
85°	2	3	6	15	24	2
90°	0	0	0	0	0	

TEST NUMBER: P1306270

CATALOG NUMBER: P3SQAS20R509024D010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	137.2	137.2	137.2	137.2	137.2	137.2	137.2	137.2	137.2	137.2	137.2
2.5°	146.1	146.1	146.1	146.1	146.1	146.1	144.6	144.6	144.6	141.6	138.6
5°	162.5	164.0	162.5	162.5	159.5	159.5	156.5	156.5	152.1	143.1	135.7
7.5°	213.2	211.7	210.2	204.2	199.8	189.3	184.9	177.4	164.0	143.1	132.7
10°	345.9	336.9	331.0	317.5	289.2	271.3	247.5	223.6	186.4	143.1	128.2
12.5°	600.8	599.3	581.4	536.7	496.4	441.3	383.1	325.0	229.6	140.1	122.2
15°	939.2	925.8	900.5	848.3	776.7	690.2	585.9	483.0	299.7	135.7	113.3
17.5°	1228.4	1212.0	1192.7	1140.5	1058.5	949.6	824.4	682.8	395.1	129.7	104.4
20°	1444.6	1434.2	1417.8	1376.0	1298.5	1200.1	1060.0	888.5	511.3	122.2	95.4
22.5°	1523.6	1522.1	1525.1	1510.2	1471.4	1393.9	1259.7	1080.8	626.1	113.3	86.5
25°	1498.3	1496.8	1516.2	1535.5	1544.5	1513.2	1410.3	1235.9	724.5	105.8	79.0
27.5°	1522.1	1517.6	1508.7	1511.7	1537.0	1554.9	1507.2	1355.1	809.5	95.4	71.6
30°	1777.1	1751.7	1711.5	1642.9	1592.2	1587.7	1566.8	1449.1	869.1	85.0	65.6
32.5°	2175.1	2143.8	2070.7	1944.0	1823.3	1730.8	1665.2	1528.1	910.9	74.5	58.1
35°	2522.5	2500.1	2415.1	2289.9	2117.0	1944.0	1824.8	1644.4	930.3	65.6	53.7
37.5°	2758.0	2749.1	2665.6	2531.4	2355.5	2151.2	1993.2	1763.6	925.8	55.2	49.2
40°	2860.9	2834.0	2764.0	2650.7	2473.3	2289.9	2122.9	1839.7	894.5	44.7	44.7
42.5°	2922.0	2892.2	2816.1	2708.8	2534.4	2339.1	2137.8	1806.9	819.9	35.8	43.2
45°	3008.5	2977.2	2877.3	2762.5	2586.6	2360.0	2079.7	1690.6	708.1	26.8	40.3
47.5°	3060.6	3039.8	2965.2	2850.4	2637.2	2330.1	1945.5	1581.8	584.4	20.9	38.8
50°	2902.6	2881.7	2826.6	2747.6	2604.5	2230.3	1827.7	1405.8	444.3	16.4	37.3
52.5°	2498.6	2516.5	2526.9	2549.3	2444.9	2006.6	1651.8	1265.7	299.7	13.4	34.3
55°	1692.1	1718.9	1748.7	1838.2	1960.4	1786.0	1467.0	1094.3	159.5	13.4	32.8
57.5°	1329.8	1320.9	1311.9	1306.0	1401.4	1472.9	1289.6	875.1	68.6	13.4	29.8
60°	1216.5	1189.7	1171.8	1176.3	1224.0	1195.6	1021.2	571.0	23.9	13.4	28.3
62.5°	797.6	818.5	858.7	927.3	894.5	767.8	593.3	226.6	11.9	13.4	25.3
65°	310.1	299.7	310.1	329.5	284.7	211.7	132.7	40.3	10.4	11.9	22.4
67.5°	41.7	37.3	28.3	17.9	16.4	14.9	11.9	10.4	10.4	11.9	20.9
70°	10.4	10.4	10.4	10.4	10.4	10.4	10.4	8.9	8.9	10.4	17.9
72.5°	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	10.4	14.9
75°	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	8.9	13.4
77.5°	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	7.5	10.4
80°	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	6.0	8.9
82.5°	3.0	3.0	3.0	3.0	3.0	3.0	3.0	4.5	4.5	6.0	7.5
85°	1.5	3.0	1.5	3.0	3.0	3.0	3.0	3.0	3.0	4.5	6.0
87.5°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	3.0	4.5	4.5
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: P1306270

CATALOG NUMBER: P3SQAS20R509024D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	137.2	137.2	137.2	137.2
2.5°	135.7	132.7	132.7	132.7
5°	132.7	129.7	129.7	128.2
7.5°	128.2	126.7	126.7	126.7
10°	125.2	123.7	125.2	125.2
12.5°	119.3	120.8	122.2	122.2
15°	113.3	116.3	119.3	120.8
17.5°	107.3	113.3	116.3	117.8
20°	101.4	108.8	113.3	114.8
22.5°	96.9	104.4	110.3	113.3
25°	90.9	101.4	108.8	111.8
27.5°	85.0	96.9	105.8	110.3
30°	80.5	95.4	105.8	110.3
32.5°	76.0	92.4	104.4	108.8
35°	73.0	90.9	104.4	110.3
37.5°	70.1	89.4	104.4	108.8
40°	68.6	88.0	104.4	108.8
42.5°	67.1	88.0	104.4	110.3
45°	64.1	86.5	104.4	110.3
47.5°	62.6	86.5	104.4	110.3
50°	61.1	85.0	104.4	111.8
52.5°	59.6	83.5	104.4	111.8
55°	56.7	82.0	102.9	110.3
57.5°	55.2	80.5	101.4	107.3
60°	52.2	77.5	98.4	105.8
62.5°	49.2	74.5	95.4	101.4
65°	44.7	70.1	90.9	98.4
67.5°	40.3	64.1	86.5	93.9
70°	35.8	58.1	80.5	86.5
72.5°	31.3	52.2	74.5	79.0
75°	26.8	44.7	65.6	71.6
77.5°	22.4	38.8	55.2	59.6
80°	16.4	29.8	44.7	49.2
82.5°	13.4	22.4	32.8	35.8
85°	8.9	14.9	20.9	23.9
87.5°	4.5	7.5	10.4	11.9
90°	0.0	0.0	0.0	0.0

(END OF REPORT)