

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: P1318190

Luminaire Tested: P3SQAS17R509835DE010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1318190
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: P3SQAS17R509835DE010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R50 optic, 3500K CCT AND, 98CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

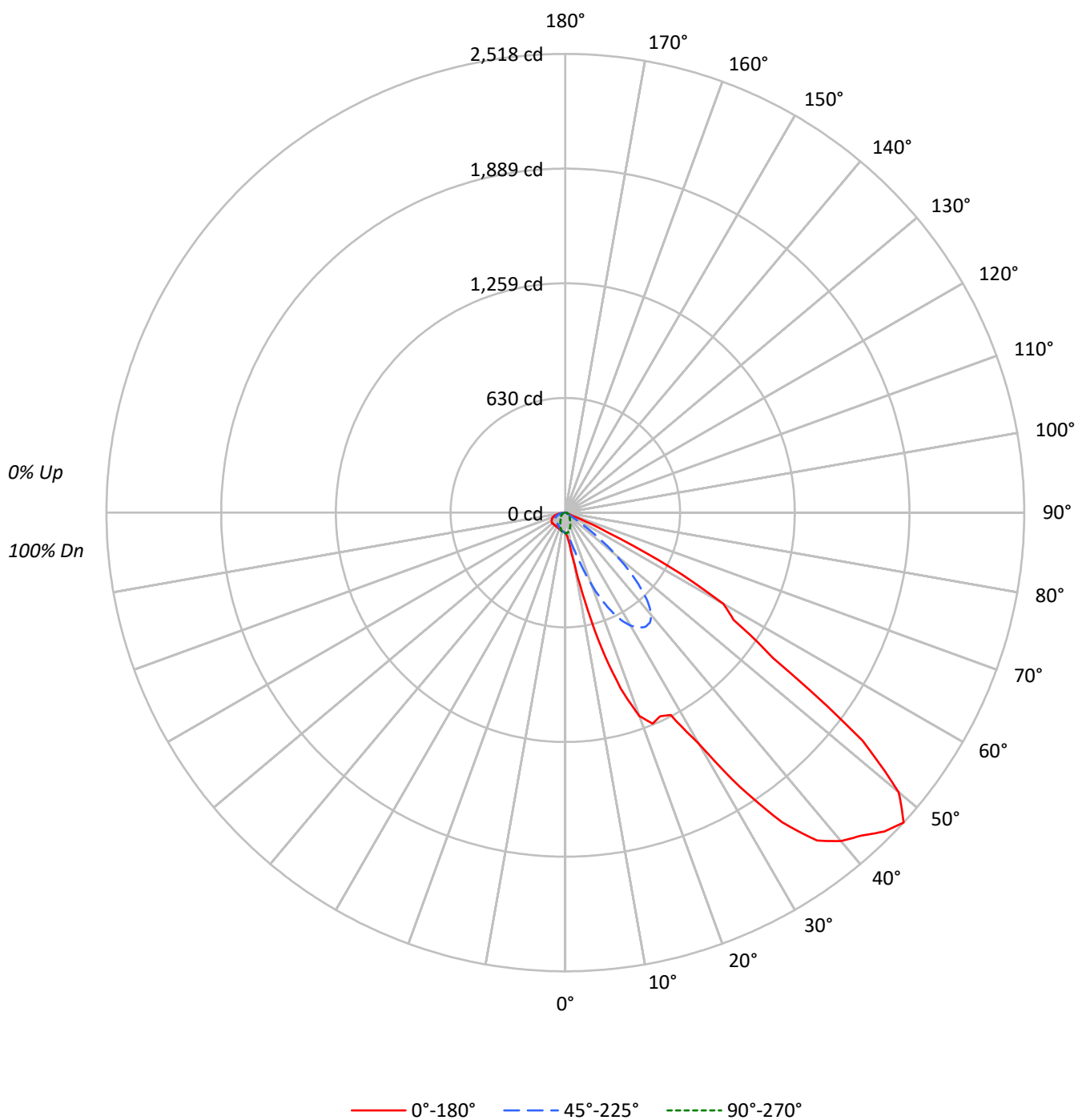
Lumens per Lamp: N/A
Luminaire Lumens: 1420.0 lumens
Efficiency: N/A
Efficacy: 69.6 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 20.4
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: P1318190

CATALOG NUMBER: P3SQAS17R509835DE010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1318190

CATALOG NUMBER: P3SQAS17R509835DE010 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	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°	19427	19427	19427	19427	19427
5°	23114	21627	19293	18446	18239
10°	49771	26809	18450	17803	18013
15°	137771	43950	16617	17063	17705
20°	217823	77104	14387	16403	17301
25°	234227	113275	12352	15848	17482
30°	290741	142209	10739	15611	18057
35°	436321	160901	9293	15726	19090
40°	529160	165446	8273	16277	20121
45°	602834	141898	8062	17317	22115
50°	639819	97929	8225	18728	24650
55°	417993	39394	8107	20268	27264
60°	344721	6751	8026	21976	30001
65°	103957	3505	7498	23473	32968
70°	4330	3726	7402	24069	35802
75°	4059	4059	7320	24487	39193
80°	3670	3670	7339	24299	40168
85°	2371	4940	9683	24305	38730

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 641893 cd/sqm

TEST NUMBER: P1318190

CATALOG NUMBER: P3SQAS17R509835DE010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.8	0.8
10°-20°	67.2	4.7
20°-30°	172.9	12.2
30°-40°	310.5	21.9
40°-50°	414.7	29.2
50°-60°	315.9	22.2
60°-70°	95.9	6.8
70°-80°	22.9	1.6
80°-90°	8.3	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°	251.8	17.7
0°-40°	562.3	39.6
0°-60°	1292.9	91.1
0°-90°	1420.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1420.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	113	113	113	113	113	
5°	134	125	112	107	106	17
15°	773	246	93	96	99	227
25°	1233	596	65	83	92	588
35°	2075	765	44	75	91	1274
45°	2475	583	33	71	91	1892
55°	1392	131	27	68	91	1385
65°	255	9	18	58	81	353
75°	6	6	11	37	59	6
85°	1	2	5	12	20	2
90°	0	0	0	0	0	

TEST NUMBER: P1318190

CATALOG NUMBER: P3SQAS17R509835DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8	112.8
2.5°	120.2	120.2	120.2	120.2	120.2	120.2	119.0	119.0	119.0	116.5	114.1
5°	133.7	134.9	133.7	133.7	131.2	131.2	128.8	128.8	125.1	117.7	111.6
7.5°	175.4	174.2	172.9	168.0	164.4	155.8	152.1	146.0	134.9	117.7	109.2
10°	284.6	277.2	272.3	261.2	237.9	223.2	203.6	184.0	153.3	117.7	105.5
12.5°	494.3	493.1	478.3	441.5	408.4	363.0	315.2	267.4	188.9	115.3	100.6
15°	772.7	761.7	740.8	697.9	639.0	567.9	482.0	397.4	246.5	111.6	93.2
17.5°	1010.6	997.2	981.2	938.3	870.8	781.3	678.3	561.7	325.0	106.7	85.9
20°	1188.5	1179.9	1166.4	1132.1	1068.3	987.3	872.0	731.0	420.7	100.6	78.5
22.5°	1253.5	1252.3	1254.7	1242.5	1210.6	1146.8	1036.4	889.2	515.1	93.2	71.1
25°	1232.6	1231.4	1247.4	1263.3	1270.7	1244.9	1160.3	1016.8	596.1	87.1	65.0
27.5°	1252.3	1248.6	1241.2	1243.7	1264.5	1279.2	1240.0	1114.9	666.0	78.5	58.9
30°	1462.0	1441.1	1408.0	1351.6	1309.9	1306.2	1289.1	1192.2	715.1	69.9	54.0
32.5°	1789.5	1763.7	1703.6	1599.4	1500.0	1424.0	1370.0	1257.2	749.4	61.3	47.8
35°	2075.3	2056.9	1986.9	1883.9	1741.6	1599.4	1501.2	1352.8	765.3	54.0	44.2
37.5°	2269.0	2261.7	2193.0	2082.6	1937.9	1769.9	1639.8	1451.0	761.7	45.4	40.5
40°	2353.7	2331.6	2273.9	2180.7	2034.8	1883.9	1746.5	1513.5	735.9	36.8	36.8
42.5°	2404.0	2379.4	2316.9	2228.6	2085.1	1924.4	1758.8	1486.5	674.6	29.4	35.6
45°	2475.1	2449.3	2367.2	2272.7	2128.0	1941.6	1711.0	1390.9	582.6	22.1	33.1
47.5°	2518.0	2500.9	2439.5	2345.1	2169.7	1917.0	1600.6	1301.3	480.8	17.2	31.9
50°	2388.0	2370.8	2325.5	2260.5	2142.7	1834.9	1503.7	1156.6	365.5	13.5	30.7
52.5°	2055.6	2070.3	2078.9	2097.3	2011.5	1650.9	1359.0	1041.3	246.5	11.0	28.2
55°	1392.1	1414.2	1438.7	1512.3	1612.9	1469.4	1206.9	900.3	131.2	11.0	27.0
57.5°	1094.0	1086.7	1079.3	1074.4	1152.9	1211.8	1060.9	720.0	56.4	11.0	24.5
60°	1000.8	978.8	964.0	967.7	1007.0	983.7	840.2	469.8	19.6	11.0	23.3
62.5°	656.2	673.4	706.5	762.9	735.9	631.7	488.2	186.4	9.8	11.0	20.9
65°	255.1	246.5	255.1	271.1	234.3	174.2	109.2	33.1	8.6	9.8	18.4
67.5°	34.3	30.7	23.3	14.7	13.5	12.3	9.8	8.6	8.6	9.8	17.2
70°	8.6	8.6	8.6	8.6	8.6	8.6	8.6	7.4	7.4	8.6	14.7
72.5°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	7.4	8.6	12.3
75°	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1	7.4	11.0
77.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	6.1	8.6
80°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	4.9	7.4
82.5°	2.5	2.5	2.5	2.5	2.5	2.5	2.5	3.7	3.7	4.9	6.1
85°	1.2	2.5	1.2	2.5	2.5	2.5	2.5	2.5	2.5	3.7	4.9
87.5°	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	2.5	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: P1318190

CATALOG NUMBER: P3SQAS17R509835DE010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	112.8	112.8	112.8	112.8
2.5°	111.6	109.2	109.2	109.2
5°	109.2	106.7	106.7	105.5
7.5°	105.5	104.3	104.3	104.3
10°	103.0	101.8	103.0	103.0
12.5°	98.1	99.3	100.6	100.6
15°	93.2	95.7	98.1	99.3
17.5°	88.3	93.2	95.7	96.9
20°	83.4	89.5	93.2	94.4
22.5°	79.7	85.9	90.8	93.2
25°	74.8	83.4	89.5	92.0
27.5°	69.9	79.7	87.1	90.8
30°	66.2	78.5	87.1	90.8
32.5°	62.6	76.0	85.9	89.5
35°	60.1	74.8	85.9	90.8
37.5°	57.6	73.6	85.9	89.5
40°	56.4	72.4	85.9	89.5
42.5°	55.2	72.4	85.9	90.8
45°	52.7	71.1	85.9	90.8
47.5°	51.5	71.1	85.9	90.8
50°	50.3	69.9	85.9	92.0
52.5°	49.1	68.7	85.9	92.0
55°	46.6	67.5	84.6	90.8
57.5°	45.4	66.2	83.4	88.3
60°	42.9	63.8	80.9	87.1
62.5°	40.5	61.3	78.5	83.4
65°	36.8	57.6	74.8	80.9
67.5°	33.1	52.7	71.1	77.3
70°	29.4	47.8	66.2	71.1
72.5°	25.8	42.9	61.3	65.0
75°	22.1	36.8	54.0	58.9
77.5°	18.4	31.9	45.4	49.1
80°	13.5	24.5	36.8	40.5
82.5°	11.0	18.4	27.0	29.4
85°	7.4	12.3	17.2	19.6
87.5°	3.7	6.1	8.6	9.8
90°	0.0	0.0	0.0	0.0

(END OF REPORT)