

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: P1316583

Luminaire Tested: P3SQAS20R509827D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1316583
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: P3SQAS20R509827D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R50 optic, 2700K CCT AND, 98CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

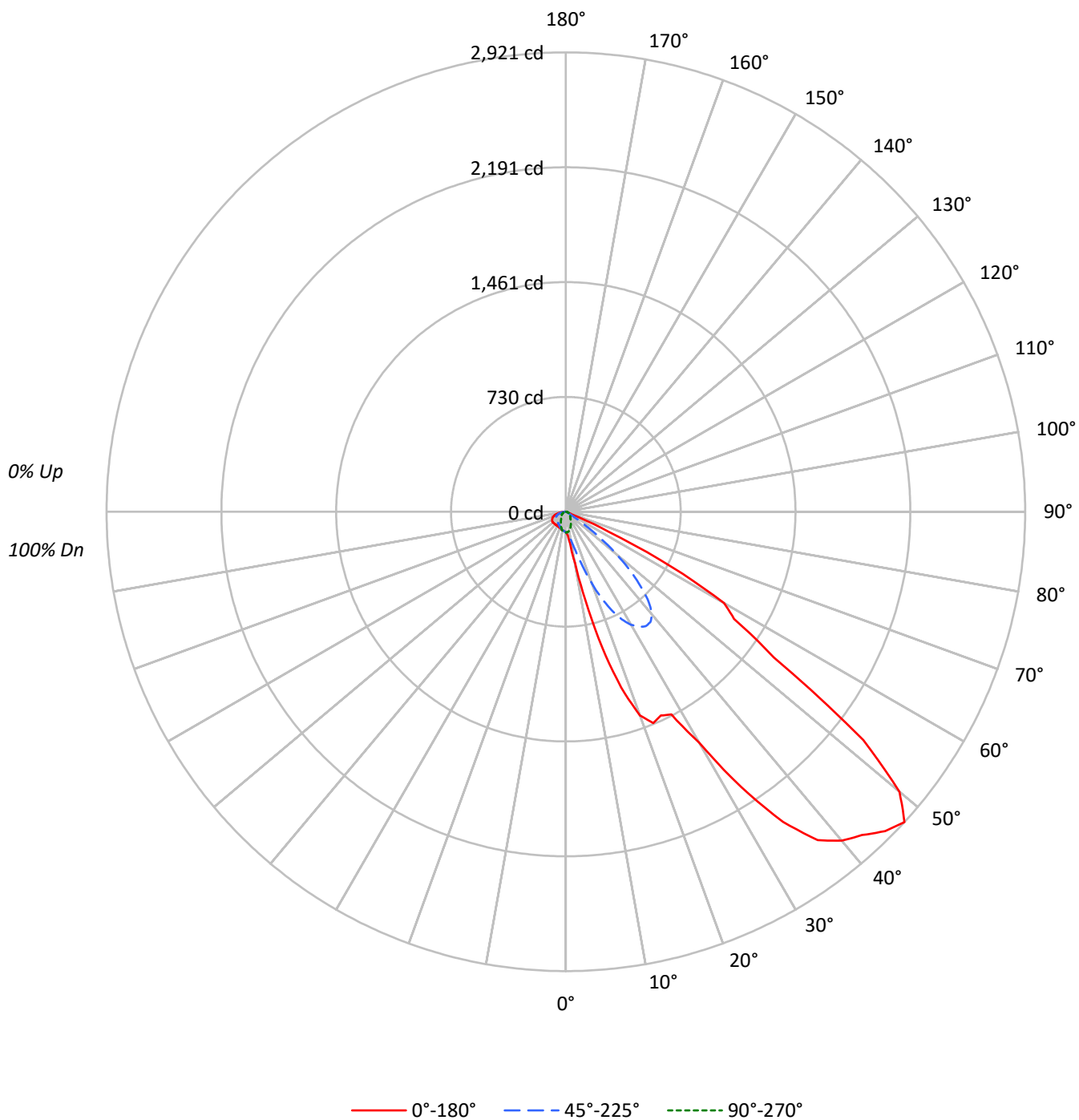
Lumens per Lamp: N/A
Luminaire Lumens: 1647.0 lumens
Efficiency: N/A
Efficacy: 60.1 lumens/watt
Spacing Criteria (0/90/45): 3.58 / 0.82 / 1.91
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

Input Watts (W): 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: P1316583

CATALOG NUMBER: P3SQAS20R509827D010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1316583

CATALOG NUMBER: P3SQAS20R509827D010 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	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°	22544	22544	22544	22544	22544
5°	26814	25085	22388	21403	21143
10°	57710	31094	21388	20653	20898
15°	159791	50975	19274	19791	20540
20°	252645	89420	16678	19024	20069
25°	271681	131384	14328	18376	20276
30°	337216	164939	12449	18097	20941
35°	506060	186635	10765	18249	22139
40°	613738	191884	9600	18862	23336
45°	699211	164573	9353	20094	25647
50°	742115	113576	9538	21729	28588
55°	484801	45700	9398	23480	31617
60°	399832	7853	9300	25489	34789
65°	120583	4075	8680	27263	38266
70°	5035	4280	8611	27947	41542
75°	4724	4724	8517	28413	45448
80°	4265	4265	8430	28266	46515
85°	2766	5533	11263	28060	45054

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 47.5°

Luminance: 744524 cd/sqm

TEST NUMBER: P1316583

CATALOG NUMBER: P3SQAS20R509827D010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	13.6	0.8
10°-20°	78.0	4.7
20°-30°	200.5	12.2
30°-40°	360.1	21.9
40°-50°	481.0	29.2
50°-60°	366.4	22.2
60°-70°	111.2	6.8
70°-80°	26.6	1.6
80°-90°	9.6	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°	292.1	17.7
0°-40°	652.2	39.6
0°-60°	1499.6	91.1
0°-90°	1647.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1647.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	131	131	131	131	131	
5°	155	145	130	124	122	20
15°	896	286	108	111	115	264
25°	1430	691	75	97	107	682
35°	2407	888	51	87	105	1478
45°	2871	676	38	82	105	2195
55°	1615	152	31	78	105	1606
65°	296	10	21	67	94	409
75°	7	7	13	43	68	8
85°	1	3	6	14	23	2
90°	0	0	0	0	0	

TEST NUMBER: P1316583

CATALOG NUMBER: P3SQAS20R509827D010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	45°	67.5°	90°
0°	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9	130.9
2.5°	139.4	139.4	139.4	139.4	139.4	139.4	138.0	138.0	138.0	135.1	132.3
5°	155.1	156.5	155.1	155.1	152.2	152.2	149.4	149.4	145.1	136.6	129.5
7.5°	203.4	202.0	200.6	194.9	190.6	180.7	176.4	169.3	156.5	136.6	126.6
10°	330.0	321.5	315.8	303.0	276.0	258.9	236.1	213.4	177.8	136.6	122.3
12.5°	573.3	571.9	554.8	512.1	473.7	421.1	365.6	310.1	219.1	133.7	116.7
15°	896.2	883.4	859.2	809.4	741.2	658.7	559.1	460.9	285.9	129.5	108.1
17.5°	1172.2	1156.6	1138.1	1088.3	1010.0	906.2	786.7	651.5	377.0	123.8	99.6
20°	1378.5	1368.5	1352.9	1313.0	1239.1	1145.2	1011.5	847.9	487.9	116.7	91.0
22.5°	1453.9	1452.5	1455.3	1441.1	1404.1	1330.1	1202.1	1031.4	597.5	108.1	82.5
25°	1429.7	1428.3	1446.8	1465.3	1473.8	1443.9	1345.8	1179.3	691.4	101.0	75.4
27.5°	1452.5	1448.2	1439.6	1442.5	1466.7	1483.7	1438.2	1293.1	772.5	91.0	68.3
30°	1695.7	1671.5	1633.1	1567.7	1519.3	1515.0	1495.1	1382.7	829.4	81.1	62.6
32.5°	2075.5	2045.7	1976.0	1855.0	1739.8	1651.6	1589.0	1458.1	869.2	71.1	55.5
35°	2407.0	2385.7	2304.6	2185.1	2020.1	1855.0	1741.2	1569.1	887.7	62.6	51.2
37.5°	2631.8	2623.2	2543.6	2415.5	2247.7	2052.8	1902.0	1682.9	883.4	52.6	46.9
40°	2729.9	2704.3	2637.5	2529.3	2360.1	2185.1	2025.8	1755.5	853.5	42.7	42.7
42.5°	2788.3	2759.8	2687.3	2584.8	2418.4	2232.0	2040.0	1724.2	782.4	34.1	41.3
45°	2870.8	2840.9	2745.6	2636.0	2468.2	2251.9	1984.5	1613.2	675.7	25.6	38.4
47.5°	2920.6	2900.6	2829.5	2720.0	2516.5	2223.5	1856.5	1509.4	557.7	19.9	37.0
50°	2769.8	2749.8	2697.2	2621.8	2485.2	2128.2	1744.1	1341.5	423.9	15.6	35.6
52.5°	2384.2	2401.3	2411.3	2432.6	2333.0	1914.8	1576.2	1207.8	285.9	12.8	32.7
55°	1614.6	1640.2	1668.7	1754.0	1870.7	1704.2	1399.8	1044.2	152.2	12.8	31.3
57.5°	1268.9	1260.4	1251.9	1246.2	1337.2	1405.5	1230.5	835.1	65.4	12.8	28.5
60°	1160.8	1135.2	1118.1	1122.4	1167.9	1140.9	974.5	544.8	22.8	12.8	27.0
62.5°	761.1	781.0	819.4	884.8	853.5	732.6	566.2	216.2	11.4	12.8	24.2
65°	295.9	285.9	295.9	314.4	271.7	202.0	126.6	38.4	10.0	11.4	21.3
67.5°	39.8	35.6	27.0	17.1	15.6	14.2	11.4	10.0	10.0	11.4	19.9
70°	10.0	10.0	10.0	10.0	10.0	10.0	10.0	8.5	8.5	10.0	17.1
72.5°	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	10.0	14.2
75°	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	7.1	8.5	12.8
77.5°	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	7.1	10.0
80°	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	4.3	5.7	8.5
82.5°	2.8	2.8	2.8	2.8	2.8	2.8	2.8	4.3	4.3	5.7	7.1
85°	1.4	2.8	1.4	2.8	2.8	2.8	2.8	2.8	2.8	4.3	5.7
87.5°	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	2.8	4.3	4.3
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: P1316583

CATALOG NUMBER: P3SQAS20R509827D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	112.5°	135°	157.5°	180°
0°	130.9	130.9	130.9	130.9
2.5°	129.5	126.6	126.6	126.6
5°	126.6	123.8	123.8	122.3
7.5°	122.3	120.9	120.9	120.9
10°	119.5	118.1	119.5	119.5
12.5°	113.8	115.2	116.7	116.7
15°	108.1	111.0	113.8	115.2
17.5°	102.4	108.1	111.0	112.4
20°	96.7	103.8	108.1	109.5
22.5°	92.5	99.6	105.3	108.1
25°	86.8	96.7	103.8	106.7
27.5°	81.1	92.5	101.0	105.3
30°	76.8	91.0	101.0	105.3
32.5°	72.6	88.2	99.6	103.8
35°	69.7	86.8	99.6	105.3
37.5°	66.9	85.4	99.6	103.8
40°	65.4	83.9	99.6	103.8
42.5°	64.0	83.9	99.6	105.3
45°	61.2	82.5	99.6	105.3
47.5°	59.7	82.5	99.6	105.3
50°	58.3	81.1	99.6	106.7
52.5°	56.9	79.7	99.6	106.7
55°	54.1	78.2	98.2	105.3
57.5°	52.6	76.8	96.7	102.4
60°	49.8	74.0	93.9	101.0
62.5°	46.9	71.1	91.0	96.7
65°	42.7	66.9	86.8	93.9
67.5°	38.4	61.2	82.5	89.6
70°	34.1	55.5	76.8	82.5
72.5°	29.9	49.8	71.1	75.4
75°	25.6	42.7	62.6	68.3
77.5°	21.3	37.0	52.6	56.9
80°	15.6	28.5	42.7	46.9
82.5°	12.8	21.3	31.3	34.1
85°	8.5	14.2	19.9	22.8
87.5°	4.3	7.1	10.0	11.4
90°	0.0	0.0	0.0	0.0

(END OF REPORT)