

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: P1315738

Luminaire Tested: P3SQAS20R709740D010 E3SQCA451MB

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1315738
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G1-2510-583-83)
Test Lab: INNOVATION CENTER
Issue Date: 1/29/2026
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: IRiS
Catalog Number: P3SQAS20R709740D010 E3SQCA451MB
Description: 3in Adjustable LED luminaire with, R70 optic, 4000K CCT AND, 97CRI , E3SQCA451MB TRIM
Light Source: -
Ballast/Driver: -

Summary

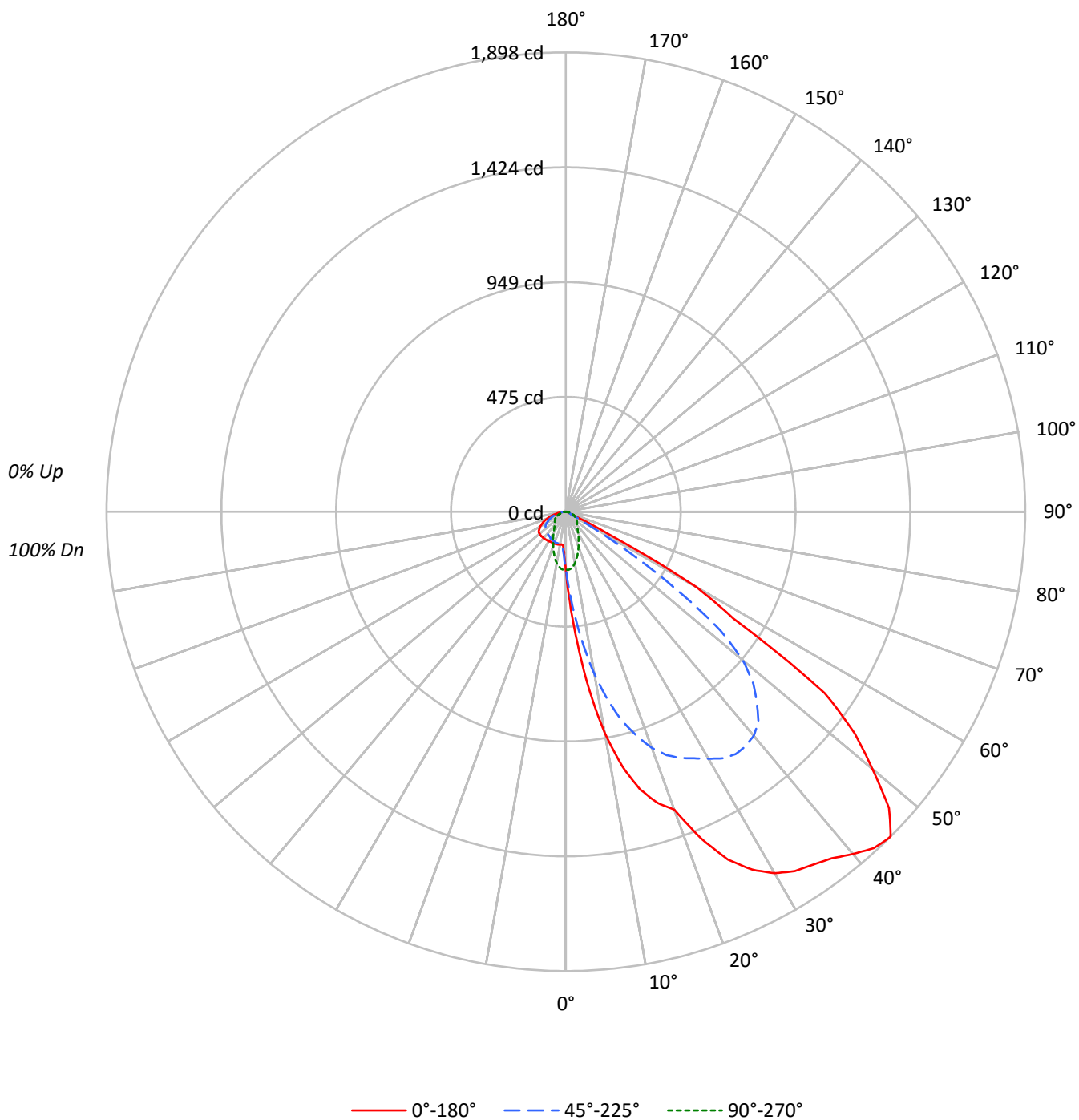
Lumens per Lamp: N/A
Luminaire Lumens: 1640.0 lumens
Efficiency: N/A
Efficacy: 56.9 lumens/watt
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1315738

CATALOG NUMBER: P3SQAS20R709740D010 E3SQCA451MB

Luminous Intensity Polar Plot



TEST NUMBER: P1315738

CATALOG NUMBER: P3SQAS20R709740D010 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	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	110	106	103	99	108	104	101	98	100	97	95		96	94	92		93	91	89	87
2	101	94	88	83	99	92	87	82	89	84	80		86	82	78		83	79	77	75
3	93	83	76	70	90	82	75	69	79	73	68		76	71	67		74	69	66	64
4	85	74	66	59	83	72	65	59	70	63	58		68	62	57		66	61	57	54
5	78	66	57	51	76	65	57	51	63	55	50		61	54	49		59	53	49	47
6	72	59	50	44	70	58	50	44	56	49	43		54	48	43		53	47	43	41
7	66	53	44	38	65	52	44	38	51	43	38		49	43	38		48	42	37	35
8	61	48	40	34	60	47	39	34	46	39	33		45	38	33		44	38	33	31
9	57	44	35	30	56	43	35	30	42	35	30		41	34	30		40	34	29	28
10	53	40	32	27	52	39	32	27	38	31	27		37	31	26		37	31	26	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°	135°	180°
0°	41144	41144	41144	41144	41144
5°	93632	74961	40731	25742	24048
10°	162236	119040	37774	23469	24028
15°	211800	158988	32967	23928	24801
20°	239908	190130	28188	24284	25787
25°	301287	213305	23639	24570	26433
30°	342964	234284	20165	25057	27980
35°	374278	256982	17534	25461	29581
40°	414952	271471	16187	26484	32014
45°	462276	271788	15929	27888	34683
50°	442783	255579	15781	29365	37698
55°	392051	165564	16214	30957	40775
60°	214727	35512	16361	31551	42263
65°	15323	8680	16015	31338	42667
70°	7402	8258	14855	29659	41190
75°	6521	8717	14173	28280	38128
80°	6447	8133	12992	25985	35704
85°	6521	9683	12844	22724	32407

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 462276 cd/sqm

TEST NUMBER: P1315738

CATALOG NUMBER: P3SQAS20R709740D010 E3SQCA451MB

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	31.2	1.9
10°-20°	133.3	8.1
20°-30°	255.7	15.6
30°-40°	361.6	22.0
40°-50°	409.1	24.9
50°-60°	324.0	19.8
60°-70°	87.4	5.3
70°-80°	29.0	1.8
80°-90°	8.9	0.5
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°	420.2	25.6
0°-40°	781.8	47.7
0°-60°	1514.8	92.4
0°-90°	1640.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1640.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	239	239	239	239	239	
5°	542	434	236	149	139	64
15°	1188	892	185	134	139	335
25°	1586	1122	124	129	139	727
35°	1780	1222	83	121	141	1121
45°	1898	1116	65	114	142	1420
55°	1306	551	54	103	136	1060
65°	38	21	39	77	105	136
75°	10	13	21	42	57	11
85°	3	5	6	12	16	4
90°	0	0	0	0	0	

TEST NUMBER: P1315738

CATALOG NUMBER: P3SQAS20R709740D010 E3SQCA451MB

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	238.9	238.9	238.9	238.9	238.9	238.9	238.9	238.9	238.9	238.9	238.9
2.5°	371.4	371.4	369.8	363.2	360.0	351.8	345.2	327.2	283.1	240.5	206.2
5°	541.6	549.8	538.3	536.7	526.9	512.1	502.3	433.6	327.2	235.6	176.7
7.5°	742.8	746.1	742.8	726.5	711.8	687.2	664.3	556.3	371.4	227.4	155.4
10°	927.7	922.8	913.0	901.6	880.3	854.1	814.8	680.7	414.0	216.0	142.4
12.5°	1078.3	1076.6	1065.2	1053.7	1027.6	993.2	953.9	793.6	450.0	201.3	135.8
15°	1187.9	1187.9	1176.4	1163.4	1138.8	1111.0	1066.8	891.7	479.4	184.9	129.3
17.5°	1261.5	1258.3	1250.1	1240.3	1220.6	1192.8	1158.5	970.3	499.1	168.5	127.6
20°	1309.0	1307.3	1300.8	1286.1	1269.7	1248.4	1217.4	1037.4	507.2	153.8	126.0
22.5°	1461.2	1448.1	1423.5	1392.4	1353.2	1302.4	1259.9	1088.1	504.0	137.4	122.7
25°	1585.5	1580.6	1554.4	1516.8	1464.4	1399.0	1328.6	1122.5	487.6	124.4	119.4
27.5°	1667.3	1659.1	1634.6	1593.7	1538.1	1474.2	1408.8	1148.6	464.7	112.9	114.5
30°	1724.6	1719.7	1695.1	1649.3	1592.1	1521.7	1454.6	1178.1	433.6	101.4	109.6
32.5°	1760.6	1755.7	1731.1	1690.2	1634.6	1561.0	1484.1	1207.5	396.0	91.6	104.7
35°	1780.2	1775.3	1747.5	1711.5	1659.1	1587.1	1505.3	1222.3	350.2	83.4	99.8
37.5°	1804.8	1794.9	1757.3	1713.1	1660.8	1593.7	1511.9	1220.6	304.3	76.9	96.5
40°	1845.7	1819.5	1765.5	1706.6	1652.6	1585.5	1507.0	1207.5	253.6	72.0	93.3
42.5°	1884.9	1847.3	1767.1	1696.8	1636.2	1570.8	1489.0	1178.1	198.0	68.7	91.6
45°	1898.0	1842.4	1744.2	1673.9	1616.6	1549.5	1464.4	1115.9	134.2	65.4	88.4
47.5°	1811.3	1770.4	1688.6	1636.2	1582.2	1516.8	1428.4	1050.5	76.9	62.2	85.1
50°	1652.6	1626.4	1580.6	1547.9	1518.4	1472.6	1385.9	953.9	45.8	58.9	81.8
52.5°	1505.3	1497.2	1464.4	1438.2	1421.9	1400.6	1322.1	805.0	37.6	57.3	78.5
55°	1305.7	1279.5	1271.4	1261.5	1295.9	1294.3	1187.9	551.4	36.0	54.0	75.3
57.5°	819.8	831.2	873.7	952.3	1045.6	1099.5	1096.3	294.5	34.4	50.7	70.4
60°	623.4	621.8	634.9	667.6	736.3	813.2	885.2	103.1	32.7	47.5	67.1
62.5°	186.5	191.4	230.7	338.7	405.8	500.7	456.5	24.5	31.1	42.5	60.5
65°	37.6	39.3	39.3	44.2	54.0	81.8	99.8	21.3	29.5	39.3	55.6
67.5°	16.4	16.4	16.4	18.0	18.0	21.3	18.0	19.6	26.2	34.4	49.1
70°	14.7	14.7	14.7	14.7	14.7	14.7	16.4	16.4	22.9	29.5	42.5
72.5°	11.5	11.5	11.5	13.1	13.1	13.1	13.1	14.7	19.6	24.5	36.0
75°	9.8	9.8	9.8	9.8	11.5	11.5	11.5	13.1	16.4	21.3	29.5
77.5°	8.2	8.2	8.2	8.2	8.2	9.8	9.8	9.8	13.1	16.4	24.5
80°	6.5	6.5	6.5	6.5	6.5	6.5	6.5	8.2	9.8	13.1	18.0
82.5°	4.9	4.9	4.9	4.9	4.9	4.9	4.9	6.5	8.2	9.8	13.1
85°	3.3	3.3	3.3	3.3	3.3	3.3	3.3	4.9	4.9	6.5	8.2
87.5°	1.6	1.6	1.6	1.6	1.6	1.6	1.6	3.3	3.3	3.3	4.9
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: P1315738

CATALOG NUMBER: P3SQAS20R709740D010 E3SQCA451MB

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	238.9	238.9	238.9
2.5°	181.6	171.8	166.9
5°	148.9	140.7	139.1
7.5°	137.4	135.8	135.8
10°	134.2	135.8	137.4
12.5°	134.2	137.4	139.1
15°	134.2	137.4	139.1
17.5°	134.2	137.4	139.1
20°	132.5	137.4	140.7
22.5°	130.9	137.4	139.1
25°	129.3	137.4	139.1
27.5°	127.6	135.8	139.1
30°	126.0	135.8	140.7
32.5°	122.7	135.8	140.7
35°	121.1	135.8	140.7
37.5°	119.4	135.8	142.4
40°	117.8	135.8	142.4
42.5°	116.2	135.8	142.4
45°	114.5	134.2	142.4
47.5°	111.3	134.2	142.4
50°	109.6	132.5	140.7
52.5°	106.4	130.9	140.7
55°	103.1	127.6	135.8
57.5°	98.2	122.7	129.3
60°	91.6	116.2	122.7
62.5°	83.4	108.0	112.9
65°	76.9	98.2	104.7
67.5°	67.1	86.7	93.3
70°	58.9	75.3	81.8
72.5°	50.7	63.8	70.4
75°	42.5	52.4	57.3
77.5°	32.7	42.5	45.8
80°	26.2	32.7	36.0
82.5°	18.0	22.9	24.5
85°	11.5	14.7	16.4
87.5°	4.9	6.5	6.5
90°	0.0	0.0	0.0

(END OF REPORT)