

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: P1311705

Luminaire Tested: P3SQAS20R709050D010 E3SQCA451MMS

Issue Date: 1/29/2026

Test Information

Test Method: LM-79-2019
Report Number: P1311705
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: P3SQAS20R709050D010 E3SQCA451MMS
Description: 3in Adjustable LED luminaire with, R70 optic, 5000K CCT AND, 90CRI , E3SQCA451MMS TRIM
Light Source: -
Ballast/Driver: -

Summary

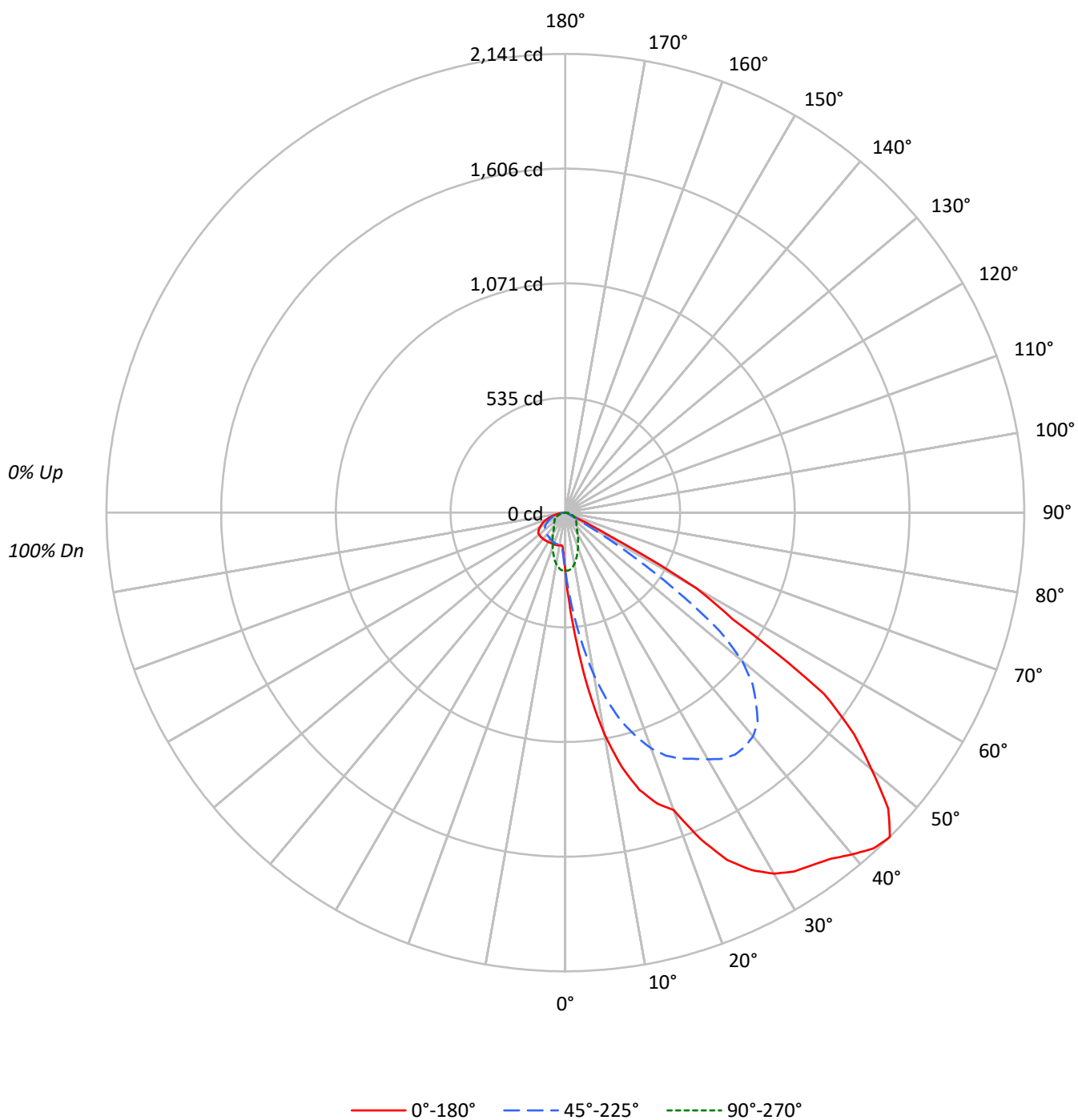
Lumens per Lamp: N/A
Luminaire Lumens: 1850.0 lumens
Efficiency: N/A
Efficacy: 64.2 lumens/watt
Spacing Criteria (0/90/45): 2.92 / 0.77 / 2.03
Luminous Opening: Rectangular (W 0.25' x L: 0.25' x H: 0')
CIE Type: Direct

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: P1311705

CATALOG NUMBER: P3SQAS20R709050D010 E3SQCA451MMS

Luminous Intensity Polar Plot



TEST NUMBER: P1311705

CATALOG NUMBER: P3SQAS20R709050D010 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	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°	46414	46414	46414	46414	46414
5°	105613	84556	45952	29044	27125
10°	183011	134272	42601	26477	27106
15°	238919	179350	37193	26994	27975
20°	270625	214469	31798	27400	29086
25°	339863	240612	26661	27706	29815
30°	386873	264272	22750	28259	31560
35°	422214	289886	19784	28719	33366
40°	468077	306251	18255	29879	36106
45°	521485	306593	17975	31468	39116
50°	499477	288320	17791	33143	42521
55°	442254	186762	18286	34920	46000
60°	242214	40059	18428	35616	47671
65°	17319	9780	18053	35372	48127
70°	8359	9316	16718	33435	46477
75°	7386	9848	15970	31940	42986
80°	7339	9124	14679	29258	40267
85°	7311	10868	14623	25491	36557

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 521485 cd/sqm

TEST NUMBER: P1311705

CATALOG NUMBER: P3SQAS20R709050D010 E3SQCA451MMS

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	35.2	1.9
10°-20°	150.3	8.1
20°-30°	288.5	15.6
30°-40°	407.9	22.0
40°-50°	461.4	24.9
50°-60°	365.5	19.8
60°-70°	98.5	5.3
70°-80°	32.7	1.8
80°-90°	10.0	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°	474.0	25.6
0°-40°	881.9	47.7
0°-60°	1708.7	92.4
0°-90°	1850.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1850.0	100.0

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	270	270	270	270	270	
5°	611	489	266	168	157	72
15°	1340	1006	209	151	157	378
25°	1788	1266	140	146	157	820
35°	2008	1379	94	137	159	1265
45°	2141	1259	74	129	161	1602
55°	1473	622	61	116	153	1195
65°	42	24	44	87	118	153
75°	11	15	24	48	65	12
85°	4	6	7	13	18	4
90°	0	0	0	0	0	

TEST NUMBER: P1311705

CATALOG NUMBER: P3SQAS20R709050D010 E3SQCA451MMS

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	45°	67.5°	90°	112.5°
0°	269.5	269.5	269.5	269.5	269.5	269.5	269.5	269.5	269.5	269.5	269.5
2.5°	419.0	419.0	417.1	409.8	406.1	396.8	389.5	369.1	319.3	271.3	232.6
5°	610.9	620.2	607.3	605.4	594.3	577.7	566.6	489.1	369.1	265.8	199.3
7.5°	838.0	841.7	838.0	819.5	802.9	775.2	749.4	627.6	419.0	256.6	175.3
10°	1046.5	1041.0	1029.9	1017.0	993.0	963.5	919.2	767.8	467.0	243.6	160.6
12.5°	1216.3	1214.5	1201.6	1188.7	1159.1	1120.4	1076.1	895.2	507.6	227.0	153.2
15°	1340.0	1340.0	1327.1	1312.3	1284.6	1253.3	1203.4	1005.9	540.8	208.6	145.8
17.5°	1423.1	1419.4	1410.2	1399.1	1376.9	1345.6	1306.8	1094.5	563.0	190.1	144.0
20°	1476.6	1474.8	1467.4	1450.8	1432.3	1408.3	1373.2	1170.2	572.2	173.5	142.1
22.5°	1648.3	1633.5	1605.8	1570.7	1526.4	1469.2	1421.2	1227.4	568.5	155.0	138.4
25°	1788.5	1783.0	1753.5	1711.0	1651.9	1578.1	1498.7	1266.2	550.0	140.3	134.7
27.5°	1880.8	1871.6	1843.9	1797.8	1735.0	1663.0	1589.2	1295.7	524.2	127.4	129.2
30°	1945.4	1939.9	1912.2	1860.5	1795.9	1716.5	1640.9	1328.9	489.1	114.4	123.7
32.5°	1986.0	1980.5	1952.8	1906.7	1843.9	1760.8	1674.1	1362.2	446.7	103.4	118.1
35°	2008.2	2002.6	1971.3	1930.7	1871.6	1790.4	1698.1	1378.8	395.0	94.1	112.6
37.5°	2035.9	2024.8	1982.3	1932.5	1873.4	1797.8	1705.5	1376.9	343.3	86.8	108.9
40°	2082.0	2052.5	1991.6	1925.1	1864.2	1788.5	1699.9	1362.2	286.1	81.2	105.2
42.5°	2126.3	2083.8	1993.4	1914.0	1845.7	1771.9	1679.6	1328.9	223.3	77.5	103.4
45°	2141.1	2078.3	1967.6	1888.2	1823.6	1747.9	1651.9	1258.8	151.4	73.8	99.7
47.5°	2043.2	1997.1	1904.8	1845.7	1784.8	1711.0	1611.3	1185.0	86.8	70.1	96.0
50°	1864.2	1834.7	1783.0	1746.1	1712.9	1661.2	1563.3	1076.1	51.7	66.4	92.3
52.5°	1698.1	1688.9	1651.9	1622.4	1604.0	1580.0	1491.4	908.1	42.5	64.6	88.6
55°	1472.9	1443.4	1434.1	1423.1	1461.8	1460.0	1340.0	622.0	40.6	60.9	84.9
57.5°	924.7	937.6	985.6	1074.2	1179.4	1240.3	1236.7	332.2	38.8	57.2	79.4
60°	703.2	701.4	716.2	753.1	830.6	917.3	998.5	116.3	36.9	53.5	75.7
62.5°	210.4	216.0	260.3	382.1	457.7	564.8	515.0	27.7	35.1	48.0	68.3
65°	42.5	44.3	44.3	49.8	60.9	92.3	112.6	24.0	33.2	44.3	62.8
67.5°	18.5	18.5	18.5	20.3	20.3	24.0	20.3	22.1	29.5	38.8	55.4
70°	16.6	16.6	16.6	16.6	16.6	16.6	18.5	18.5	25.8	33.2	48.0
72.5°	12.9	12.9	12.9	14.8	14.8	14.8	14.8	16.6	22.1	27.7	40.6
75°	11.1	11.1	11.1	11.1	12.9	12.9	12.9	14.8	18.5	24.0	33.2
77.5°	9.2	9.2	9.2	9.2	9.2	11.1	11.1	11.1	14.8	18.5	27.7
80°	7.4	7.4	7.4	7.4	7.4	7.4	7.4	9.2	11.1	14.8	20.3
82.5°	5.5	5.5	5.5	5.5	5.5	5.5	5.5	7.4	9.2	11.1	14.8
85°	3.7	3.7	3.7	3.7	3.7	3.7	3.7	5.5	5.5	7.4	9.2
87.5°	1.8	1.8	1.8	1.8	1.8	1.8	1.8	3.7	3.7	3.7	5.5
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: P1311705

CATALOG NUMBER: P3SQAS20R709050D010 E3SQCA451MMS

CANDELA DISTRIBUTION (continued):

	135°	157.5°	180°
0°	269.5	269.5	269.5
2.5°	204.9	193.8	188.3
5°	168.0	158.7	156.9
7.5°	155.0	153.2	153.2
10°	151.4	153.2	155.0
12.5°	151.4	155.0	156.9
15°	151.4	155.0	156.9
17.5°	151.4	155.0	156.9
20°	149.5	155.0	158.7
22.5°	147.7	155.0	156.9
25°	145.8	155.0	156.9
27.5°	144.0	153.2	156.9
30°	142.1	153.2	158.7
32.5°	138.4	153.2	158.7
35°	136.6	153.2	158.7
37.5°	134.7	153.2	160.6
40°	132.9	153.2	160.6
42.5°	131.0	153.2	160.6
45°	129.2	151.4	160.6
47.5°	125.5	151.4	160.6
50°	123.7	149.5	158.7
52.5°	120.0	147.7	158.7
55°	116.3	144.0	153.2
57.5°	110.7	138.4	145.8
60°	103.4	131.0	138.4
62.5°	94.1	121.8	127.4
65°	86.8	110.7	118.1
67.5°	75.7	97.8	105.2
70°	66.4	84.9	92.3
72.5°	57.2	72.0	79.4
75°	48.0	59.1	64.6
77.5°	36.9	48.0	51.7
80°	29.5	36.9	40.6
82.5°	20.3	25.8	27.7
85°	12.9	16.6	18.5
87.5°	5.5	7.4	7.4
90°	0.0	0.0	0.0

(END OF REPORT)