

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: CORELITE

Report Number: P938308

Luminaire Tested: SQ4-FB-150U-050D-B50-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938308
REPORT IS A COMBINATION OF REPORTS P933645 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-050D-B50-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

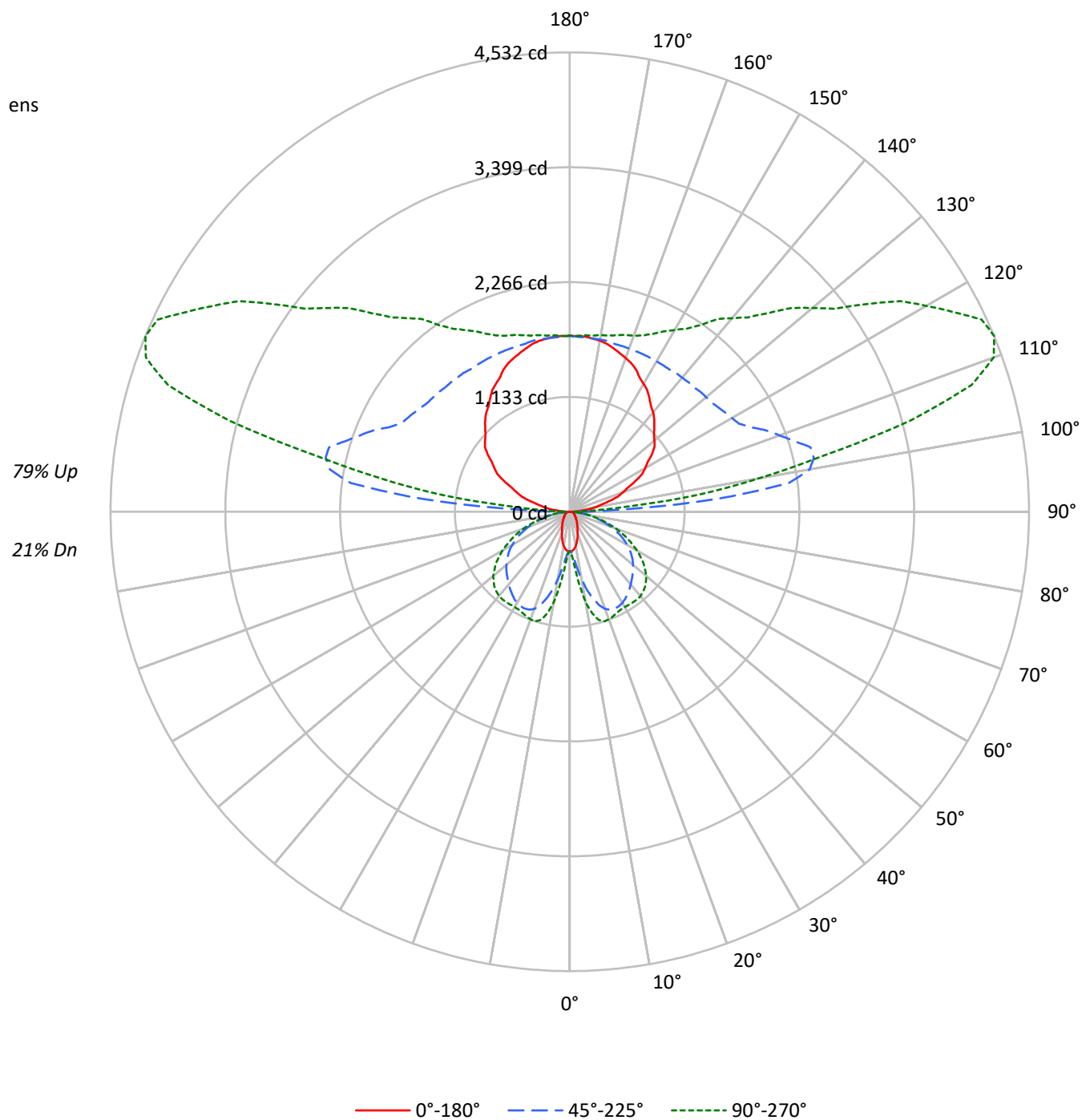
Lumens per Lamp: N/A
Luminaire Lumens: 14274.4 lumens
Efficiency: N/A
Efficacy: 128.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 111.2
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

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Luminous Intensity Polar Plot



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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
RCR																	
0	100	100	100	100	89	89	89	89	67	67	67	48	48	48	30	30	30
1	91	87	83	80	80	77	74	71	58	56	54	41	40	39	26	25	24
2	83	75	70	65	73	67	62	58	51	48	45	36	34	32	22	21	20
3	75	66	59	53	66	59	53	48	45	40	37	32	29	27	20	18	17
4	69	58	50	45	60	52	45	40	39	35	31	28	25	23	17	16	14
5	63	51	44	38	55	46	39	34	35	30	27	25	22	19	15	14	12
6	57	46	38	32	51	41	34	29	31	26	23	22	19	17	14	12	11
7	53	41	33	28	47	37	30	25	28	23	20	20	17	14	12	11	9
8	49	37	30	24	43	33	27	22	25	21	17	18	15	13	11	9	8
9	45	34	26	21	40	30	24	19	23	18	15	16	13	11	10	9	7
10	42	31	24	19	37	27	21	17	21	17	14	15	12	10	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1808	1808	1808
5°	1766	2089	2430
10°	1602	3046	4028
15°	1361	3979	4864
20°	1108	4611	4957
25°	925	4825	4856
30°	779	4855	4847
35°	689	4775	4973
40°	601	4670	5102
45°	544	4593	5122
50°	499	4525	5037
55°	478	4423	4814
60°	490	4229	4461
65°	509	3934	3977
70°	543	3430	3360
75°	601	2797	2622
80°	656	1939	1766
85°	582	1030	905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5122 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.4	0.4
10°-20°	223.4	1.6
20°-30°	390.7	2.7
30°-40°	502.9	3.5
40°-50°	561.8	3.9
50°-60°	538.1	3.8
60°-70°	426.4	3.0
70°-80°	250.7	1.8
80°-90°	76.3	0.5
90°-100°	846.2	5.9
100°-110°	2224.7	15.6
110°-120°	2306.8	16.2
120°-130°	1850.3	13.0
130°-140°	1451.9	10.2
140°-150°	1114.3	7.8
150°-160°	802.5	5.6
160°-170°	491.0	3.4
170°-180°	165.9	1.2
0°-30°	664.5	4.7
0°-40°	1167.4	8.2
0°-60°	2267.2	15.9
0°-90°	3020.7	21.2
90°-120°	5377.7	37.7
90°-150°	9794.2	68.6
90°-180°	11254.0	78.8
0°-180°	14274.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	390	390	390	390	390	
5°	380	407	458	519	537	35
15°	284	525	884	1072	1106	79
25°	182	595	1054	1100	1101	84
35°	123	569	992	1049	1090	77
45°	84	454	877	1005	1050	65
55°	60	288	744	864	888	55
65°	48	153	552	621	630	47
75°	35	94	303	333	334	37
85°	12	29	75	83	84	13
90°	12	33	88	44	44	10
95°	112	438	1458	752	512	124
105°	401	607	2460	3734	3484	425
115°	712	864	1970	3930	4486	703
125°	990	1110	1792	3028	3572	879
135°	1180	1299	1736	2444	2772	913
145°	1369	1456	1714	2086	2249	858
155°	1547	1590	1714	1882	1936	711
165°	1670	1692	1714	1781	1804	471
175°	1736	1736	1726	1748	1748	165
180°	1736	1736	1736	1736	1736	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	389.6	389.6	389.6	389.6	389.6	389.6	389.6	389.6	389.6	389.6	389.6
2.5°	389.6	389.6	392.1	393.4	395.8	397.1	399.7	402.2	409.7	410.9	413.4
5°	379.6	384.6	400.9	407.1	424.7	448.5	458.5	474.8	508.7	518.7	524.9
7.5°	364.5	375.8	415.9	425.9	469.8	532.4	558.7	593.8	647.6	674.0	695.3
10°	340.7	364.5	436.0	459.8	531.2	626.3	675.3	724.1	805.5	841.8	855.6
12.5°	314.5	353.2	457.3	489.8	592.5	731.6	790.5	844.3	937.1	985.9	993.4
15°	284.4	337.0	477.3	524.9	657.7	819.3	884.5	950.8	1037.3	1072.3	1081.1
17.5°	258.1	324.5	496.1	546.2	707.8	898.2	964.6	1019.7	1089.9	1113.7	1120.0
20°	225.5	304.4	508.7	573.8	760.5	955.9	1019.7	1062.3	1110.0	1125.0	1127.5
22.5°	201.7	283.1	516.1	583.8	795.5	991.0	1044.8	1078.7	1111.2	1116.2	1117.4
25°	181.7	259.3	514.9	595.1	825.6	1012.3	1053.6	1078.7	1097.4	1100.0	1100.0
27.5°	162.9	233.0	509.9	597.6	848.2	1017.2	1049.8	1067.4	1076.2	1081.1	1081.1
30°	146.5	208.0	497.4	592.5	858.2	1012.3	1038.5	1047.3	1056.1	1063.6	1067.4
32.5°	134.0	184.2	478.6	582.5	859.4	999.7	1018.5	1023.5	1036.0	1053.6	1059.8
35°	122.7	160.4	457.3	568.7	851.9	979.7	992.2	997.2	1022.3	1048.6	1057.3
37.5°	111.5	142.8	429.7	545.0	840.6	955.9	964.6	973.4	1012.3	1043.6	1053.6
40°	100.2	127.8	397.1	518.7	823.0	927.1	934.6	948.4	999.7	1036.0	1046.1
42.5°	91.4	115.3	362.0	491.1	800.5	894.5	905.8	925.8	984.7	1023.5	1034.8
45°	84.0	102.7	324.5	453.5	771.7	860.7	876.9	904.5	967.2	1004.7	1014.7
47.5°	76.4	94.0	285.6	414.7	740.4	826.9	848.2	879.5	943.3	979.7	988.5
50°	70.1	85.2	246.8	373.3	706.6	790.5	815.6	848.2	913.3	947.1	958.4
52.5°	65.1	77.7	210.4	331.9	667.7	752.9	781.8	815.6	876.9	909.5	917.0
55°	60.1	71.5	179.1	288.1	627.6	712.8	744.1	776.7	836.9	864.4	869.5
57.5°	57.6	66.4	152.8	246.8	585.1	667.7	702.8	732.9	789.2	810.5	815.6
60°	53.9	62.7	132.8	211.7	538.7	625.1	655.2	685.3	732.9	750.4	754.2
62.5°	50.2	60.1	117.8	177.9	491.1	575.1	605.0	632.7	672.8	685.3	690.3
65°	47.6	57.6	106.5	152.8	442.2	522.4	552.5	576.3	608.9	621.4	623.9
67.5°	45.1	55.1	97.7	131.5	393.4	469.8	492.3	514.9	539.9	552.5	553.7
70°	41.4	52.6	90.2	116.5	343.2	409.7	428.4	452.2	472.3	478.6	482.3
72.5°	38.9	48.8	85.2	105.3	291.9	352.0	369.6	383.3	400.9	407.1	407.1
75°	35.1	43.8	80.1	94.0	239.3	288.1	303.2	316.9	330.7	333.3	329.5
77.5°	31.3	38.9	68.9	78.9	186.7	228.0	240.5	248.1	259.3	261.8	263.1
80°	26.3	33.8	53.9	61.4	135.3	167.8	176.6	182.9	193.0	193.0	195.4
82.5°	20.1	26.3	38.9	43.8	91.4	115.3	122.7	126.6	132.8	132.8	132.8
85°	12.5	16.3	25.0	28.8	55.1	70.1	75.2	76.4	81.4	82.7	82.7
87.5°	6.3	8.8	16.3	17.6	28.8	36.3	36.3	38.9	38.9	37.5	36.3
90°	11.7	21.0	30.3	32.6	51.3	76.1	88.5	78.7	59.0	44.3	44.3
92.5°	46.6	125.8	205.1	224.9	316.2	437.9	498.7	437.0	313.8	221.4	212.6
95°	111.9	256.8	401.8	438.0	777.8	1230.9	1457.5	1300.6	986.9	751.5	724.8
97.5°	193.4	321.3	449.3	481.2	1047.9	1803.4	2181.1	2081.9	1883.6	1734.8	1684.1
100°	256.3	372.3	488.3	517.3	1146.1	1984.4	2403.6	2410.8	2425.3	2436.2	2375.7
102.5°	309.9	418.2	526.3	553.4	1191.1	2041.4	2466.5	2592.9	2845.5	3035.0	2983.3
105°	400.8	492.4	584.1	607.0	1224.5	2047.8	2459.5	2742.8	3309.3	3734.1	3706.3
107.5°	494.0	579.5	664.8	686.2	1230.7	1956.7	2319.7	2714.8	3505.0	4097.6	4104.4
110°	556.9	634.1	711.2	730.5	1221.4	1875.9	2203.2	2644.9	3528.3	4190.9	4219.8

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	618.7	692.2	765.7	784.1	1221.8	1805.3	2097.1	2549.2	3453.3	4131.4	4175.9
115°	711.9	779.7	847.5	864.5	1233.1	1724.4	1970.2	2405.6	3276.6	3929.8	3991.5
117.5°	803.9	865.5	927.2	942.6	1255.9	1673.8	1882.8	2275.8	3061.8	3651.4	3719.8
120°	857.5	915.5	973.5	988.0	1274.6	1656.7	1847.8	2206.9	2925.2	3463.8	3530.3
122.5°	909.9	968.5	1026.9	1041.6	1301.4	1647.9	1821.0	2144.4	2791.2	3276.2	3341.9
125°	990.3	1043.7	1097.0	1110.3	1337.5	1640.4	1791.9	2066.6	2615.9	3028.0	3088.5
127.5°	1055.6	1109.4	1163.3	1176.7	1373.6	1636.2	1767.4	2003.2	2475.0	2828.8	2879.8
130°	1090.5	1148.5	1206.5	1221.0	1400.1	1638.7	1758.1	1968.0	2388.1	2703.0	2750.2
132.5°	1126.7	1184.7	1242.7	1257.2	1421.5	1640.5	1749.9	1937.9	2313.8	2595.8	2638.0
135°	1180.2	1233.1	1285.9	1299.1	1444.7	1638.9	1735.9	1893.4	2208.3	2444.4	2480.7
137.5°	1235.0	1287.3	1339.5	1352.6	1479.6	1649.0	1733.7	1866.8	2132.9	2332.5	2362.3
140°	1280.4	1328.6	1376.7	1388.8	1501.0	1650.7	1725.5	1840.4	2070.4	2242.8	2270.6
142.5°	1315.4	1359.9	1404.5	1415.6	1518.9	1656.6	1725.5	1826.4	2028.4	2179.9	2203.8
145°	1369.0	1407.8	1446.7	1456.4	1542.2	1656.6	1713.8	1796.4	1961.6	2085.5	2103.6
147.5°	1422.6	1460.4	1498.2	1507.7	1576.4	1668.0	1713.8	1778.8	1908.7	2006.2	2021.3
150°	1457.5	1491.7	1525.9	1534.4	1594.2	1673.9	1713.8	1768.7	1878.5	1960.8	1973.0
152.5°	1493.7	1519.5	1545.5	1551.9	1605.9	1677.8	1713.8	1760.7	1854.4	1924.7	1933.8
155°	1547.3	1566.4	1585.6	1590.3	1631.5	1686.3	1713.8	1751.1	1825.7	1881.6	1887.7
157.5°	1586.9	1605.5	1624.1	1628.8	1657.1	1694.9	1713.8	1742.8	1800.8	1844.4	1848.7
160°	1613.7	1628.1	1642.6	1646.3	1668.8	1698.8	1713.8	1738.6	1788.4	1825.7	1828.1
162.5°	1640.5	1651.3	1662.2	1664.9	1681.2	1703.0	1713.8	1734.8	1776.7	1808.2	1810.6
165°	1669.5	1679.3	1689.2	1691.7	1699.0	1708.8	1713.8	1728.8	1758.9	1781.4	1783.8
167.5°	1696.3	1701.0	1705.7	1706.9	1713.0	1721.4	1725.5	1735.3	1755.0	1769.7	1770.8
170°	1713.8	1718.5	1723.1	1724.4	1724.7	1725.2	1725.5	1735.3	1755.0	1769.7	1769.7
172.5°	1723.1	1724.2	1725.2	1725.5	1725.5	1725.5	1725.5	1733.2	1748.7	1760.4	1759.5
175°	1735.9	1735.9	1735.9	1735.9	1732.5	1727.8	1725.5	1730.4	1740.2	1747.6	1747.6
177.5°	1735.9	1735.9	1735.9	1735.9	1733.2	1729.6	1727.8	1731.7	1739.5	1745.3	1744.2
180°	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9	1735.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	389.6	389.6
2.5°	415.9	413.4
5°	534.9	537.4
7.5°	720.3	719.1
10°	895.7	907.0
12.5°	1023.5	1026.0
15°	1101.2	1106.2
17.5°	1131.3	1132.5
20°	1132.5	1130.0
22.5°	1118.7	1116.2
25°	1102.4	1101.2
27.5°	1087.4	1088.7
30°	1081.1	1084.9
32.5°	1081.1	1087.4
35°	1083.6	1089.9
37.5°	1082.4	1089.9
40°	1077.4	1086.1
42.5°	1063.6	1069.9
45°	1042.3	1049.8
47.5°	1014.7	1019.7
50°	979.7	984.7
52.5°	935.8	937.1
55°	883.2	888.2
57.5°	826.9	828.1
60°	764.2	767.9
62.5°	697.8	697.8
65°	627.6	630.2
67.5°	555.0	561.2
70°	481.1	482.3
72.5°	408.4	408.4
75°	333.3	334.5
77.5°	261.8	261.8
80°	194.2	195.4
82.5°	134.0	136.6
85°	84.0	84.0
87.5°	38.9	35.1
90°	44.3	44.3
92.5°	177.4	142.2
95°	618.1	511.5
97.5°	1481.0	1278.1
100°	2133.9	1892.1
102.5°	2776.1	2569.1
105°	3595.0	3483.6
107.5°	4131.3	4158.2
110°	4335.8	4451.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4354.0	4532.1
115°	4238.6	4485.5
117.5°	3993.8	4267.7
120°	3796.5	4062.6
122.5°	3604.4	3866.9
125°	3330.4	3572.2
127.5°	3083.9	3287.9
130°	2938.6	3127.1
132.5°	2806.8	2975.6
135°	2626.2	2771.7
137.5°	2481.4	2600.4
140°	2382.0	2493.3
142.5°	2299.6	2395.4
145°	2176.1	2248.6
147.5°	2081.3	2141.4
150°	2021.7	2070.4
152.5°	1970.6	2007.4
155°	1912.1	1936.4
157.5°	1865.7	1882.8
160°	1838.0	1847.8
162.5°	1819.8	1829.1
165°	1793.7	1803.6
167.5°	1775.0	1779.1
170°	1769.7	1769.7
172.5°	1755.9	1752.3
175°	1747.6	1747.6
177.5°	1740.0	1735.9
180°	1735.9	1735.9

(END OF REPORT)