

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: P938400

Luminaire Tested: SQ4-FB-150U-075D-B35-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938400
REPORT IS A COMBINATION OF REPORTS P933646 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-B35-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

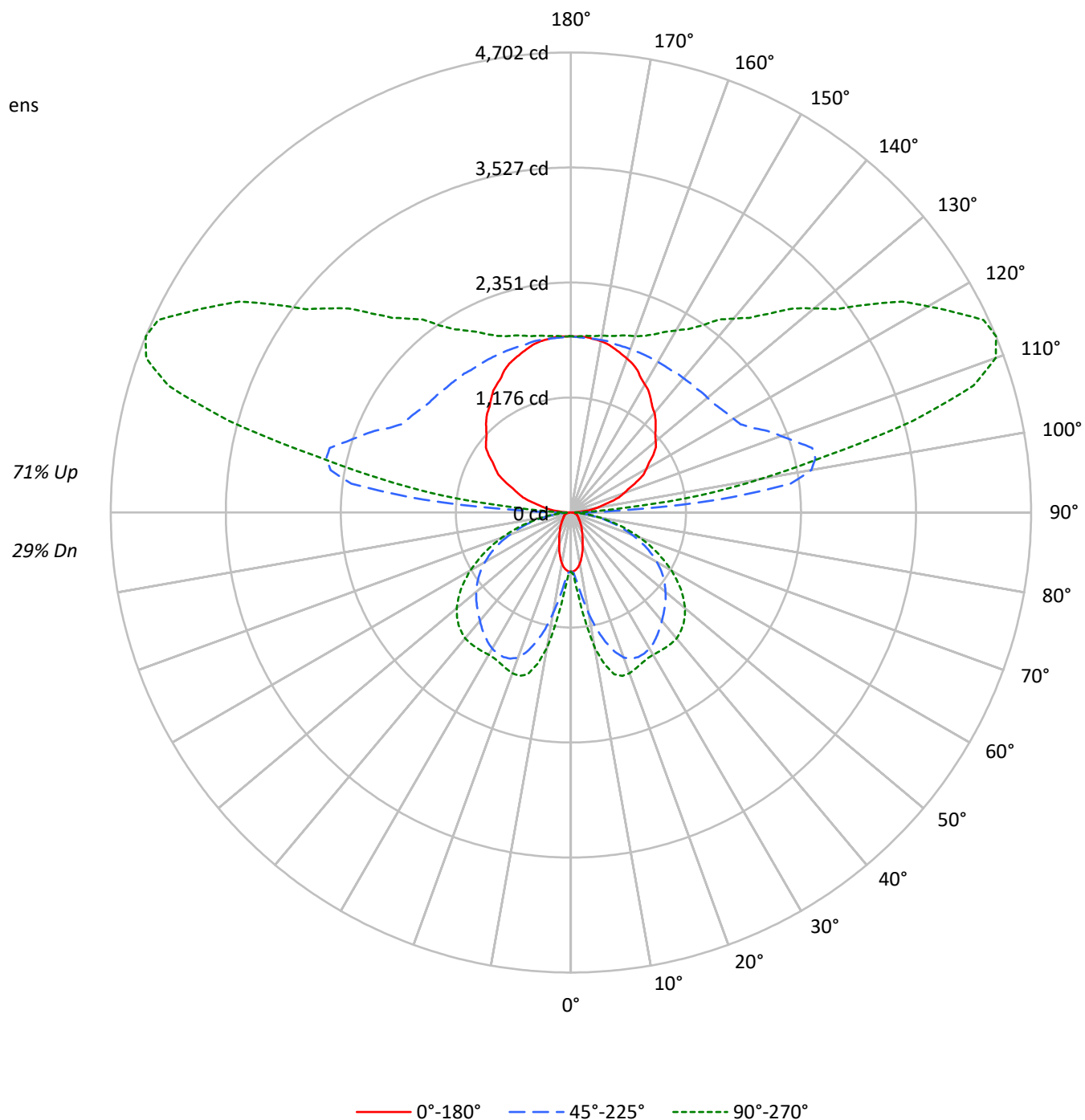
Lumens per Lamp: N/A
Luminaire Lumens: 16345.1 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 127.2
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

TEST NUMBER: P938400

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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2796	2796	2796
5°	2732	3232	3759
10°	2478	4711	6232
15°	2106	6156	7525
20°	1714	7133	7669
25°	1430	7465	7513
30°	1206	7512	7499
35°	1066	7387	7693
40°	929	7225	7893
45°	841	7106	7924
50°	772	6999	7793
55°	739	6843	7447
60°	757	6542	6902
65°	787	6086	6152
70°	839	5307	5197
75°	930	4327	4056
80°	1015	3001	2733
85°	904	1592	1398

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.0	0.5
10°-20°	345.6	2.1
20°-30°	604.4	3.7
30°-40°	778.1	4.8
40°-50°	869.1	5.3
50°-60°	832.4	5.1
60°-70°	659.6	4.0
70°-80°	387.9	2.4
80°-90°	114.6	0.7
90°-100°	877.9	5.4
100°-110°	2308.1	14.1
110°-120°	2393.2	14.6
120°-130°	1919.7	11.7
130°-140°	1506.3	9.2
140°-150°	1156.1	7.1
150°-160°	832.6	5.1
160°-170°	509.4	3.1
170°-180°	172.1	1.1
0°-30°	1028.0	6.3
0°-40°	1806.0	11.0
0°-60°	3507.5	21.5
0°-90°	4669.7	28.6
90°-120°	5579.2	34.1
90°-150°	10161.3	62.2
90°-180°	11675.0	71.4
0°-180°	16345.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	603	603	603	603	603	
5°	587	630	709	802	831	54
15°	440	812	1368	1659	1711	122
25°	281	921	1630	1702	1704	129
35°	190	880	1535	1622	1686	119
45°	130	702	1357	1554	1624	100
55°	93	446	1151	1337	1374	85
65°	74	236	855	961	975	73
75°	54	145	469	516	517	57
85°	19	45	116	128	130	21
90°	12	34	92	46	46	11
95°	116	454	1512	780	531	129
105°	416	630	2552	3874	3614	441
115°	739	897	2044	4077	4654	729
125°	1027	1152	1859	3142	3706	912
135°	1224	1348	1801	2536	2876	947
145°	1420	1511	1778	2164	2333	890
155°	1605	1650	1778	1952	2009	738
165°	1732	1755	1778	1848	1871	489
175°	1801	1801	1790	1813	1813	171
180°	1801	1801	1801	1801	1801	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7	602.7
2.5°	602.7	602.7	606.6	608.5	612.4	614.3	618.2	622.1	633.7	635.7	639.5
5°	587.2	595.0	620.2	629.8	657.0	693.8	709.3	734.5	786.8	802.3	812.0
7.5°	564.0	581.4	643.4	658.9	726.8	823.6	864.3	918.6	1001.9	1042.6	1075.6
10°	527.1	564.0	674.4	711.2	821.7	969.0	1044.6	1120.3	1246.2	1302.4	1323.8
12.5°	486.4	546.5	707.4	757.8	916.7	1131.9	1223.0	1306.3	1449.7	1525.3	1536.9
15°	439.9	521.3	738.4	812.0	1017.4	1267.5	1368.3	1471.0	1604.8	1659.0	1672.6
17.5°	399.2	501.9	767.4	845.0	1095.0	1389.6	1492.4	1577.6	1686.2	1723.0	1732.7
20°	348.8	470.9	786.8	887.6	1176.5	1478.8	1577.6	1643.5	1717.2	1740.4	1744.3
22.5°	312.0	438.0	798.5	903.1	1230.7	1533.1	1616.4	1668.7	1719.1	1726.9	1728.8
25°	281.0	401.2	796.5	920.6	1277.2	1566.0	1630.0	1668.7	1697.8	1701.7	1701.7
27.5°	251.9	360.5	788.8	924.4	1312.1	1573.8	1624.1	1651.3	1664.8	1672.6	1672.6
30°	226.7	321.7	769.4	916.7	1327.6	1566.0	1606.7	1620.3	1633.8	1645.5	1651.3
32.5°	207.4	284.9	740.3	901.2	1329.6	1546.6	1575.7	1583.4	1602.8	1630.0	1639.6
35°	189.9	248.1	707.4	879.9	1317.9	1515.6	1535.0	1542.7	1581.5	1622.2	1635.8
37.5°	172.5	220.9	664.7	843.0	1300.5	1478.8	1492.4	1505.9	1566.0	1614.5	1630.0
40°	155.0	197.7	614.3	802.3	1273.4	1434.2	1445.8	1467.2	1546.6	1602.8	1618.3
42.5°	141.5	178.3	560.1	759.7	1238.5	1383.8	1401.3	1432.3	1523.4	1583.4	1600.9
45°	129.8	158.9	501.9	701.6	1193.9	1331.5	1356.7	1399.3	1496.2	1554.4	1569.9
47.5°	118.2	145.4	441.9	641.5	1145.5	1279.2	1312.1	1360.6	1459.4	1515.6	1529.2
50°	108.5	131.8	381.8	577.5	1093.0	1223.0	1261.7	1312.1	1412.9	1465.2	1482.7
52.5°	100.8	120.2	325.6	513.6	1033.0	1164.8	1209.4	1261.7	1356.7	1407.1	1418.7
55°	93.0	110.5	277.1	445.7	970.9	1102.8	1151.3	1201.7	1294.7	1337.3	1345.1
57.5°	89.1	102.7	236.4	381.8	905.0	1033.0	1087.2	1133.8	1221.0	1254.0	1261.7
60°	83.3	96.9	205.4	327.5	833.3	967.1	1013.6	1060.1	1133.8	1161.0	1166.8
62.5°	77.5	93.0	182.2	275.2	759.7	889.5	936.1	978.7	1040.7	1060.1	1067.8
65°	73.6	89.1	164.7	236.4	684.1	808.1	854.7	891.5	941.9	961.2	965.1
67.5°	69.8	85.3	151.2	203.5	608.5	726.8	761.6	796.5	835.3	854.7	856.6
70°	64.0	81.4	139.5	180.2	531.0	633.7	662.8	699.6	730.6	740.3	746.1
72.5°	60.1	75.6	131.8	162.8	451.6	544.6	571.7	593.0	620.2	629.8	629.8
75°	54.3	67.8	124.0	145.4	370.2	445.7	469.0	490.3	511.6	515.5	509.7
77.5°	48.4	60.1	106.6	122.1	288.8	352.7	372.1	383.7	401.2	405.0	407.0
80°	40.7	52.3	83.3	95.0	209.3	259.7	273.3	282.9	298.5	298.5	302.3
82.5°	31.0	40.7	60.1	67.8	141.5	178.3	189.9	195.7	205.4	205.4	205.4
85°	19.4	25.2	38.8	44.6	85.3	108.5	116.3	118.2	126.0	127.9	127.9
87.5°	9.7	13.6	25.2	27.1	44.6	56.2	56.2	60.1	60.1	58.1	56.2
90°	12.1	21.8	31.4	33.8	53.2	79.0	91.9	81.7	61.2	45.9	45.9
92.5°	48.4	130.5	212.8	233.3	328.0	454.3	517.3	453.4	325.6	229.7	220.5
95°	116.1	266.5	416.9	454.5	807.0	1277.0	1512.1	1349.3	1023.8	779.7	751.9
97.5°	200.7	333.3	466.1	499.2	1087.1	1870.9	2262.8	2159.9	1954.2	1799.8	1747.2
100°	265.9	386.2	506.6	536.7	1189.1	2058.7	2493.6	2501.2	2516.2	2527.4	2464.7
102.5°	321.5	433.8	546.0	574.1	1235.8	2117.8	2558.9	2690.0	2952.2	3148.8	3095.1
105°	415.8	510.9	606.0	629.8	1270.4	2124.5	2551.7	2845.6	3433.3	3874.1	3845.2
107.5°	512.5	601.2	689.7	711.9	1276.9	2030.1	2406.6	2816.5	3636.4	4251.2	4258.2
110°	577.8	657.9	737.9	757.9	1267.2	1946.2	2285.8	2744.0	3660.5	4347.9	4377.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	641.9	718.1	794.4	813.5	1267.5	1873.0	2175.7	2644.7	3582.7	4286.2	4332.4
115°	738.6	808.9	879.3	896.9	1279.3	1789.1	2044.0	2495.8	3399.3	4077.1	4141.1
117.5°	834.0	898.0	961.9	977.9	1303.0	1736.5	1953.3	2361.1	3176.6	3788.2	3859.2
120°	889.6	949.8	1010.0	1025.0	1322.4	1718.8	1917.1	2289.7	3034.8	3593.6	3662.6
122.5°	944.0	1004.8	1065.4	1080.6	1350.2	1709.6	1889.3	2224.7	2895.8	3399.0	3467.1
125°	1027.4	1082.8	1138.1	1151.9	1387.6	1701.9	1859.0	2144.0	2714.0	3141.5	3204.2
127.5°	1095.2	1151.0	1206.9	1220.8	1425.1	1697.5	1833.6	2078.3	2567.8	2934.8	2987.7
130°	1131.4	1191.6	1251.8	1266.8	1452.5	1700.1	1823.9	2041.8	2477.5	2804.3	2853.2
132.5°	1168.9	1229.1	1289.3	1304.3	1474.7	1702.0	1815.5	2010.5	2400.5	2693.0	2736.8
135°	1224.4	1279.3	1334.1	1347.8	1498.8	1700.3	1801.0	1964.4	2291.0	2536.0	2573.7
137.5°	1281.3	1335.6	1389.7	1403.3	1535.1	1710.8	1798.7	1936.7	2212.8	2419.9	2450.8
140°	1328.4	1378.4	1428.3	1440.8	1557.3	1712.5	1790.1	1909.4	2148.0	2326.9	2355.7
142.5°	1364.6	1410.9	1457.1	1468.6	1575.8	1718.7	1790.1	1894.9	2104.4	2261.5	2286.4
145°	1420.3	1460.6	1500.9	1511.0	1600.0	1718.7	1778.0	1863.7	2035.1	2163.7	2182.5
147.5°	1475.9	1515.1	1554.4	1564.2	1635.5	1730.5	1778.0	1845.5	1980.2	2081.4	2097.0
150°	1512.1	1547.6	1583.1	1591.9	1653.9	1736.6	1778.0	1835.0	1948.9	2034.3	2046.9
152.5°	1549.6	1576.5	1603.4	1610.1	1666.1	1740.7	1778.0	1826.7	1923.9	1996.8	2006.3
155°	1605.2	1625.1	1645.0	1649.9	1692.6	1749.5	1778.0	1816.7	1894.1	1952.1	1958.4
157.5°	1646.3	1665.7	1685.0	1689.8	1719.2	1758.4	1778.0	1808.2	1868.3	1913.5	1917.9
160°	1674.1	1689.2	1704.2	1708.0	1731.3	1762.4	1778.0	1803.8	1855.4	1894.1	1896.6
162.5°	1702.0	1713.2	1724.5	1727.3	1744.2	1766.8	1778.0	1799.8	1843.3	1876.0	1878.4
165°	1732.1	1742.3	1752.5	1755.1	1762.7	1772.9	1778.0	1793.6	1824.8	1848.2	1850.7
167.5°	1759.9	1764.7	1769.6	1770.8	1777.2	1785.9	1790.1	1800.3	1820.8	1836.1	1837.1
170°	1778.0	1782.9	1787.7	1789.0	1789.4	1789.8	1790.1	1800.3	1820.8	1836.1	1836.1
172.5°	1787.7	1788.8	1789.8	1790.1	1790.1	1790.1	1790.1	1798.2	1814.3	1826.4	1825.4
175°	1801.0	1801.0	1801.0	1801.0	1797.4	1792.6	1790.1	1795.3	1805.4	1813.1	1813.1
177.5°	1801.0	1801.0	1801.0	1801.0	1798.2	1794.4	1792.6	1796.6	1804.7	1810.7	1809.6
180°	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0	1801.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	602.7	602.7
2.5°	643.4	639.5
5°	827.5	831.4
7.5°	1114.4	1112.5
10°	1385.8	1403.2
12.5°	1583.4	1587.3
15°	1703.6	1711.4
17.5°	1750.1	1752.0
20°	1752.0	1748.2
22.5°	1730.7	1726.9
25°	1705.5	1703.6
27.5°	1682.3	1684.2
30°	1672.6	1678.4
32.5°	1672.6	1682.3
35°	1676.5	1686.2
37.5°	1674.5	1686.2
40°	1666.8	1680.3
42.5°	1645.5	1655.1
45°	1612.5	1624.1
47.5°	1569.9	1577.6
50°	1515.6	1523.4
52.5°	1447.8	1449.7
55°	1366.4	1374.1
57.5°	1279.2	1281.1
60°	1182.3	1188.1
62.5°	1079.5	1079.5
65°	970.9	974.8
67.5°	858.5	868.2
70°	744.2	746.1
72.5°	631.8	631.8
75°	515.5	517.4
77.5°	405.0	405.0
80°	300.4	302.3
82.5°	207.4	211.2
85°	129.8	129.8
87.5°	60.1	54.3
90°	45.9	45.9
92.5°	184.0	147.5
95°	641.3	530.6
97.5°	1536.5	1326.0
100°	2213.9	1963.0
102.5°	2880.2	2665.3
105°	3729.7	3614.2
107.5°	4286.1	4314.0
110°	4498.3	4618.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4517.2	4702.0
115°	4397.4	4653.6
117.5°	4143.4	4427.7
120°	3938.8	4214.9
122.5°	3739.5	4011.9
125°	3455.2	3706.0
127.5°	3199.4	3411.1
130°	3048.8	3244.3
132.5°	2911.9	3087.1
135°	2724.6	2875.6
137.5°	2574.3	2697.9
140°	2471.2	2586.7
142.5°	2385.8	2485.2
145°	2257.7	2332.9
147.5°	2159.3	2221.6
150°	2097.5	2148.0
152.5°	2044.5	2082.7
155°	1983.7	2008.9
157.5°	1935.6	1953.3
160°	1906.9	1917.1
162.5°	1888.0	1897.7
165°	1861.0	1871.1
167.5°	1841.5	1845.8
170°	1836.1	1836.1
172.5°	1821.7	1817.9
175°	1813.1	1813.1
177.5°	1805.2	1801.0
180°	1801.0	1801.0

(END OF REPORT)