

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: P938404

Luminaire Tested: SQ4-FB-150U-075D-B40-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938404
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-B40-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

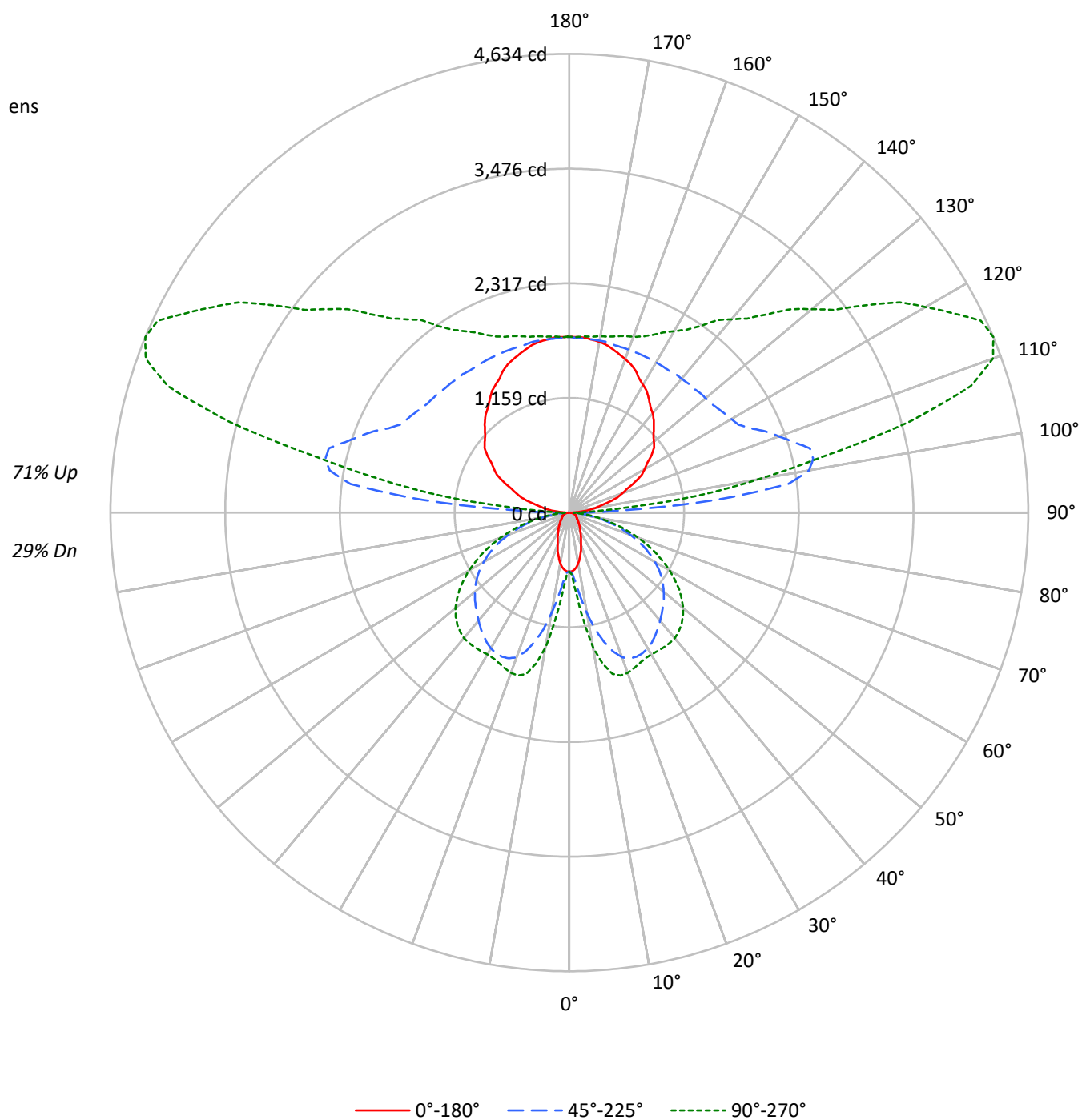
Lumens per Lamp: N/A
Luminaire Lumens: 16108.9 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

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

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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°	2756	2756	2756
5°	2692	3186	3704
10°	2442	4643	6142
15°	2076	6067	7416
20°	1690	7030	7558
25°	1410	7357	7405
30°	1189	7403	7391
35°	1051	7280	7582
40°	916	7121	7779
45°	829	7004	7810
50°	761	6898	7681
55°	729	6744	7340
60°	746	6447	6802
65°	776	5997	6063
70°	826	5230	5123
75°	916	4264	3998
80°	1000	2957	2694
85°	890	1569	1379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7810 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	76.8	0.5
10°-20°	340.6	2.1
20°-30°	595.7	3.7
30°-40°	766.8	4.8
40°-50°	856.5	5.3
50°-60°	820.4	5.1
60°-70°	650.1	4.0
70°-80°	382.3	2.4
80°-90°	113.0	0.7
90°-100°	865.2	5.4
100°-110°	2274.7	14.1
110°-120°	2358.7	14.6
120°-130°	1891.9	11.7
130°-140°	1484.5	9.2
140°-150°	1139.4	7.1
150°-160°	820.6	5.1
160°-170°	502.1	3.1
170°-180°	169.6	1.1
0°-30°	1013.1	6.3
0°-40°	1780.0	11.0
0°-60°	3456.9	21.5
0°-90°	4602.2	28.6
90°-120°	5498.6	34.1
90°-150°	10014.5	62.2
90°-180°	11507.0	71.4
0°-180°	16108.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	594	594	594	594	594	
5°	579	621	699	791	819	53
15°	434	800	1349	1635	1687	121
25°	277	907	1606	1677	1679	128
35°	187	867	1513	1599	1662	117
45°	128	691	1337	1532	1601	99
55°	92	439	1135	1318	1354	84
65°	73	233	842	947	961	72
75°	54	143	462	508	510	56
85°	19	44	115	126	128	20
90°	12	33	90	45	45	11
95°	114	448	1490	768	523	127
105°	410	621	2515	3818	3562	434
115°	728	884	2014	4018	4586	719
125°	1013	1135	1832	3096	3652	899
135°	1207	1328	1775	2499	2834	934
145°	1400	1489	1752	2132	2299	877
155°	1582	1626	1752	1924	1980	727
165°	1707	1730	1752	1822	1844	482
175°	1775	1775	1764	1787	1787	168
180°	1775	1775	1775	1775	1775	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0	594.0
2.5°	594.0	594.0	597.8	599.7	603.6	605.5	609.3	613.1	624.6	626.5	630.3
5°	578.7	586.4	611.2	620.8	647.5	683.8	699.1	723.9	775.5	790.7	800.3
7.5°	555.8	573.0	634.1	649.4	716.2	811.8	851.9	905.3	987.5	1027.6	1060.0
10°	519.5	555.8	664.7	701.0	809.8	955.0	1029.5	1104.1	1228.2	1283.6	1304.6
12.5°	479.4	538.6	697.2	746.8	903.4	1115.5	1205.3	1287.4	1428.8	1503.3	1514.7
15°	433.6	513.8	727.7	800.3	1002.8	1249.2	1348.6	1449.8	1581.6	1635.1	1648.4
17.5°	393.5	494.7	756.4	832.8	1079.1	1369.6	1470.8	1554.8	1661.8	1698.1	1707.6
20°	343.8	464.1	775.5	874.8	1159.5	1457.4	1554.8	1619.8	1692.4	1715.3	1719.1
22.5°	307.5	431.7	786.9	890.1	1212.9	1510.9	1593.0	1644.6	1694.3	1701.9	1703.8
25°	277.0	395.4	785.0	907.2	1258.8	1543.4	1606.4	1644.6	1673.3	1677.1	1677.1
27.5°	248.3	355.3	777.4	911.1	1293.2	1551.0	1600.7	1627.4	1640.8	1648.4	1648.4
30°	223.5	317.1	758.3	903.4	1308.4	1543.4	1583.5	1596.9	1610.2	1621.7	1627.4
32.5°	204.4	280.8	729.6	888.2	1310.4	1524.3	1552.9	1560.6	1579.7	1606.4	1616.0
35°	187.2	244.5	697.2	867.1	1298.9	1493.7	1512.8	1520.5	1558.7	1598.8	1612.1
37.5°	170.0	217.7	655.1	830.8	1281.7	1457.4	1470.8	1484.2	1543.4	1591.1	1606.4
40°	152.8	194.8	605.5	790.7	1255.0	1413.5	1425.0	1446.0	1524.3	1579.7	1594.9
42.5°	139.4	175.7	552.0	748.7	1220.6	1363.8	1381.0	1411.6	1501.4	1560.6	1577.8
45°	128.0	156.6	494.7	691.4	1176.7	1312.3	1337.1	1379.1	1474.6	1531.9	1547.2
47.5°	116.5	143.2	435.5	632.2	1128.9	1260.7	1293.2	1340.9	1438.3	1493.7	1507.1
50°	107.0	129.9	376.3	569.2	1077.2	1205.3	1243.5	1293.2	1392.5	1444.1	1461.2
52.5°	99.3	118.4	320.9	506.2	1018.0	1148.0	1191.9	1243.5	1337.1	1386.8	1398.2
55°	91.7	108.9	273.1	439.3	956.9	1086.9	1134.6	1184.3	1276.0	1318.0	1325.6
57.5°	87.9	101.2	233.0	376.3	892.0	1018.0	1071.5	1117.4	1203.4	1235.9	1243.5
60°	82.1	95.5	202.5	322.8	821.3	953.1	998.9	1044.8	1117.4	1144.2	1149.9
62.5°	76.4	91.7	179.5	271.2	748.7	876.7	922.5	964.6	1025.7	1044.8	1052.4
65°	72.6	87.9	162.4	233.0	674.2	796.5	842.3	878.6	928.3	947.4	951.2
67.5°	68.8	84.0	149.0	200.5	599.7	716.2	750.6	785.0	823.2	842.3	844.2
70°	63.0	80.2	137.5	177.6	523.3	624.6	653.2	689.5	720.1	729.6	735.4
72.5°	59.2	74.5	129.9	160.4	445.0	536.7	563.4	584.5	611.2	620.8	620.8
75°	53.5	66.8	122.2	143.2	364.8	439.3	462.2	483.2	504.2	508.1	502.3
77.5°	47.8	59.2	105.0	120.3	284.6	347.6	366.7	378.2	395.4	399.2	401.1
80°	40.1	51.6	82.1	93.6	206.3	255.9	269.3	278.9	294.1	294.1	298.0
82.5°	30.6	40.1	59.2	66.8	139.4	175.7	187.2	192.9	202.5	202.5	202.5
85°	19.1	24.8	38.2	43.9	84.0	107.0	114.6	116.5	124.2	126.1	126.1
87.5°	9.5	13.4	24.8	26.7	43.9	55.4	55.4	59.2	59.2	57.3	55.4
90°	11.9	21.5	30.9	33.3	52.4	77.8	90.5	80.5	60.4	45.3	45.3
92.5°	47.7	128.6	209.7	230.0	323.3	447.7	509.9	446.8	320.9	226.3	217.4
95°	114.4	262.6	410.8	447.9	795.3	1258.6	1490.3	1329.8	1009.1	768.4	741.1
97.5°	197.8	328.5	459.4	492.0	1071.4	1843.9	2230.1	2128.7	1925.9	1773.8	1722.0
100°	262.1	380.7	499.3	529.0	1171.9	2029.0	2457.6	2465.0	2479.8	2490.9	2429.1
102.5°	316.9	427.6	538.1	565.8	1217.9	2087.2	2522.0	2651.2	2909.5	3103.3	3050.4
105°	409.8	503.5	597.3	620.7	1252.0	2093.8	2514.8	2804.5	3383.7	3818.1	3789.6
107.5°	505.1	592.5	679.8	701.6	1258.4	2000.7	2371.8	2775.8	3583.8	4189.8	4196.7
110°	569.5	648.3	727.2	746.9	1248.9	1918.1	2252.7	2704.4	3607.6	4285.1	4314.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	632.6	707.8	782.9	801.7	1249.2	1845.9	2144.3	2606.5	3530.9	4224.3	4269.8
115°	727.9	797.2	866.6	883.9	1260.8	1763.2	2014.5	2459.7	3350.2	4018.2	4081.3
117.5°	822.0	885.0	948.0	963.8	1284.2	1711.5	1925.1	2327.0	3130.7	3733.5	3803.5
120°	876.8	936.1	995.4	1010.2	1303.3	1694.0	1889.4	2256.6	2991.0	3541.7	3609.7
122.5°	930.4	990.2	1050.0	1065.0	1330.7	1684.9	1862.0	2192.6	2853.9	3349.9	3417.0
125°	1012.6	1067.1	1121.6	1135.3	1367.6	1677.3	1832.2	2113.0	2674.8	3096.1	3157.9
127.5°	1079.3	1134.3	1189.5	1203.2	1404.5	1673.0	1807.1	2048.3	2530.7	2892.4	2944.6
130°	1115.1	1174.4	1233.7	1248.5	1431.5	1675.5	1797.6	2012.3	2441.7	2763.8	2812.0
132.5°	1152.0	1211.3	1270.6	1285.4	1453.4	1677.4	1789.3	1981.4	2365.8	2654.1	2697.3
135°	1206.7	1260.8	1314.8	1328.3	1477.2	1675.7	1775.0	1936.0	2257.9	2499.3	2536.5
137.5°	1262.8	1316.3	1369.7	1383.0	1512.9	1686.1	1772.7	1908.8	2180.8	2384.9	2415.4
140°	1309.2	1358.5	1407.7	1420.0	1534.8	1687.8	1764.3	1881.8	2116.9	2293.2	2321.7
142.5°	1344.9	1390.5	1436.0	1447.4	1553.0	1693.9	1764.3	1867.5	2074.0	2228.9	2253.3
145°	1399.7	1439.5	1479.2	1489.1	1576.9	1693.9	1752.3	1836.8	2005.7	2132.4	2150.9
147.5°	1454.6	1493.2	1531.9	1541.6	1611.8	1705.5	1752.3	1818.8	1951.6	2051.3	2066.7
150°	1490.3	1525.2	1560.2	1568.9	1630.0	1711.6	1752.3	1808.5	1920.7	2004.9	2017.3
152.5°	1527.2	1553.7	1580.2	1586.8	1642.0	1715.6	1752.3	1800.3	1896.1	1968.0	1977.3
155°	1582.1	1601.6	1621.2	1626.1	1668.2	1724.3	1752.3	1790.4	1866.7	1923.9	1930.2
157.5°	1622.5	1641.6	1660.6	1665.4	1694.4	1733.0	1752.3	1782.0	1841.3	1885.8	1890.2
160°	1650.0	1664.8	1679.6	1683.3	1706.3	1737.0	1752.3	1777.7	1828.6	1866.7	1869.2
162.5°	1677.4	1688.4	1699.6	1702.4	1719.0	1741.3	1752.3	1773.8	1816.7	1848.9	1851.3
165°	1707.1	1717.1	1727.2	1729.7	1737.2	1747.3	1752.3	1767.7	1798.5	1821.5	1824.0
167.5°	1734.5	1739.2	1744.0	1745.3	1751.6	1760.1	1764.3	1774.3	1794.4	1809.5	1810.6
170°	1752.3	1757.1	1761.9	1763.1	1763.5	1764.0	1764.3	1774.3	1794.4	1809.5	1809.5
172.5°	1761.9	1762.9	1764.0	1764.3	1764.3	1764.3	1764.3	1772.2	1788.0	1800.0	1799.0
175°	1775.0	1775.0	1775.0	1775.0	1771.4	1766.7	1764.3	1769.3	1779.4	1786.9	1786.9
177.5°	1775.0	1775.0	1775.0	1775.0	1772.2	1768.5	1766.7	1770.7	1778.6	1784.5	1783.5
180°	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0	1775.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	594.0	594.0
2.5°	634.1	630.3
5°	815.6	819.4
7.5°	1098.3	1096.4
10°	1365.7	1382.9
12.5°	1560.6	1564.4
15°	1679.0	1686.6
17.5°	1724.8	1726.7
20°	1726.7	1722.9
22.5°	1705.7	1701.9
25°	1680.9	1679.0
27.5°	1658.0	1659.9
30°	1648.4	1654.2
32.5°	1648.4	1658.0
35°	1652.2	1661.8
37.5°	1650.3	1661.8
40°	1642.7	1656.1
42.5°	1621.7	1631.2
45°	1589.2	1600.7
47.5°	1547.2	1554.8
50°	1493.7	1501.4
52.5°	1426.9	1428.8
55°	1346.6	1354.3
57.5°	1260.7	1262.6
60°	1165.2	1170.9
62.5°	1063.9	1063.9
65°	956.9	960.7
67.5°	846.1	855.7
70°	733.4	735.4
72.5°	622.7	622.7
75°	508.1	510.0
77.5°	399.2	399.2
80°	296.0	298.0
82.5°	204.4	208.2
85°	128.0	128.0
87.5°	59.2	53.5
90°	45.3	45.3
92.5°	181.4	145.4
95°	632.0	523.0
97.5°	1514.3	1306.8
100°	2181.9	1934.6
102.5°	2838.5	2626.8
105°	3675.8	3562.0
107.5°	4224.2	4251.7
110°	4433.3	4551.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	4451.9	4634.0
115°	4333.9	4586.4
117.5°	4083.6	4363.7
120°	3881.9	4154.0
122.5°	3685.4	3953.9
125°	3405.2	3652.5
127.5°	3153.2	3361.8
130°	3004.7	3197.4
132.5°	2869.9	3042.5
135°	2685.3	2834.1
137.5°	2537.1	2658.9
140°	2435.5	2549.4
142.5°	2351.3	2449.3
145°	2225.1	2299.2
147.5°	2128.1	2189.5
150°	2067.2	2116.9
152.5°	2015.0	2052.6
155°	1955.1	1979.9
157.5°	1907.6	1925.1
160°	1879.3	1889.4
162.5°	1860.7	1870.3
165°	1834.1	1844.1
167.5°	1814.9	1819.1
170°	1809.5	1809.5
172.5°	1795.4	1791.7
175°	1786.9	1786.9
177.5°	1779.2	1775.0
180°	1775.0	1775.0

(END OF REPORT)