

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: P937905

Luminaire Tested: SQ4-FB-125U-050D-B50-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937905
REPORT IS A COMBINATION OF REPORTS P933589 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-B50-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

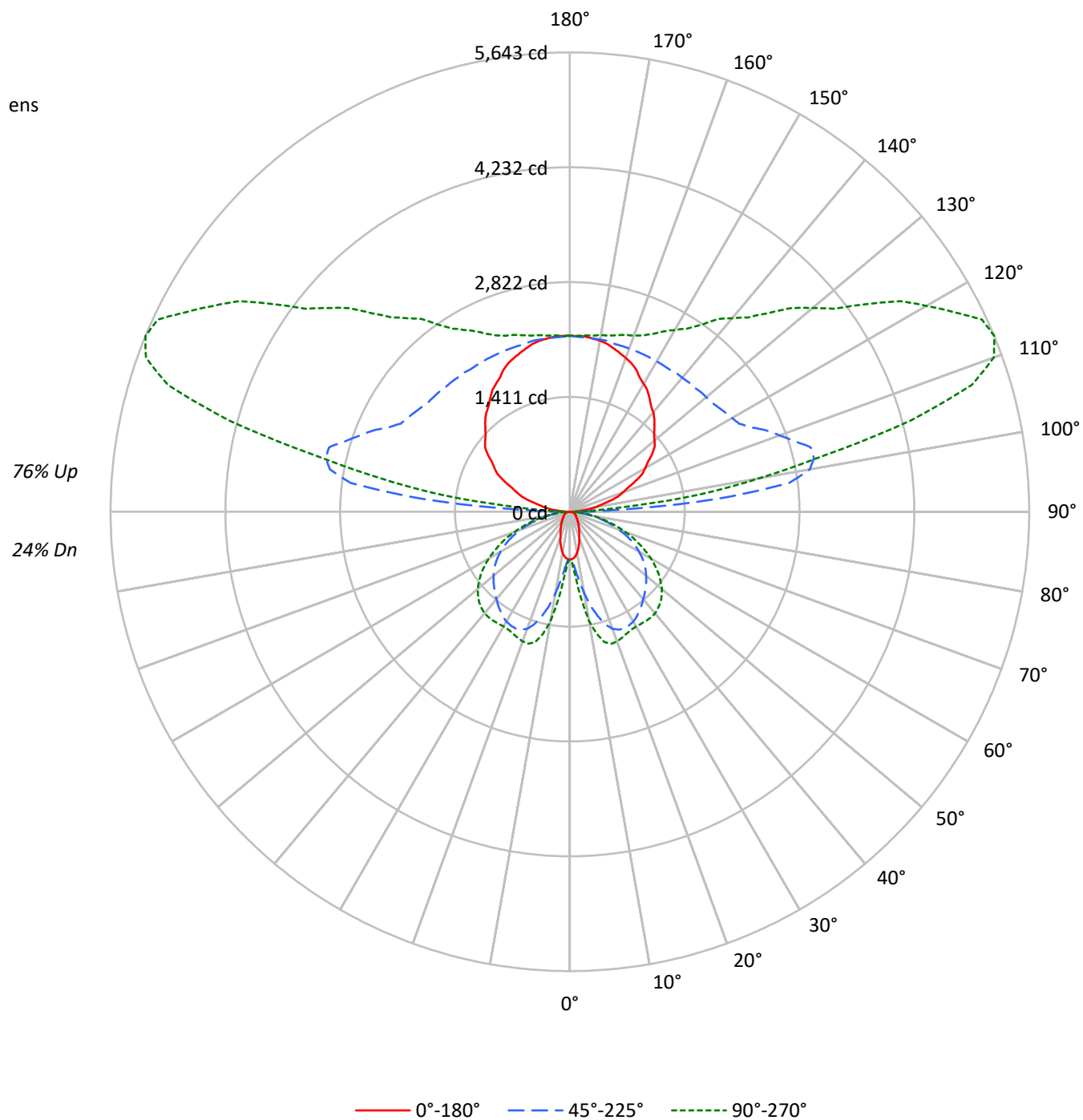
Lumens per Lamp: N/A
Luminaire Lumens: 18542.7 lumens
Efficiency: N/A
Efficacy: 129.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 142.8
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

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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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	22	20	19
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1808	1808	1808
5°	1767	2090	2430
10°	1603	3047	4029
15°	1363	3982	4864
20°	1110	4616	4958
25°	926	4831	4857
30°	782	4863	4848
35°	691	4784	4973
40°	603	4680	5103
45°	546	4605	5123
50°	502	4537	5038
55°	481	4437	4814
60°	493	4244	4462
65°	514	3950	3977
70°	548	3448	3360
75°	610	2813	2622
80°	672	1954	1767
85°	609	1038	904

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 5382 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.6	0.4
10°-20°	335.1	1.8
20°-30°	586.1	3.2
30°-40°	754.5	4.1
40°-50°	842.7	4.5
50°-60°	807.2	4.4
60°-70°	639.7	3.4
70°-80°	376.1	2.0
80°-90°	112.7	0.6
90°-100°	1053.7	5.7
100°-110°	2770.2	14.9
110°-120°	2872.4	15.5
120°-130°	2304.0	12.4
130°-140°	1807.8	9.7
140°-150°	1387.6	7.5
150°-160°	999.3	5.4
160°-170°	611.4	3.3
170°-180°	206.6	1.1
0°-30°	996.8	5.4
0°-40°	1751.3	9.4
0°-60°	3401.2	18.3
0°-90°	4529.7	24.4
90°-120°	6696.3	36.1
90°-150°	12195.7	65.8
90°-180°	14013.0	75.6
0°-180°	18542.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	584	584	584	584	584	
5°	570	611	688	778	806	53
15°	427	788	1327	1609	1659	119
25°	272	893	1580	1650	1652	126
35°	184	853	1488	1573	1635	115
45°	126	680	1316	1507	1575	97
55°	90	432	1116	1297	1332	82
65°	72	229	829	932	945	71
75°	53	141	455	500	502	55
85°	19	43	113	124	126	20
90°	14	41	110	55	55	13
95°	139	546	1815	936	637	155
105°	499	756	3062	4650	4338	529
115°	886	1076	2453	4893	5585	876
125°	1233	1383	2231	3770	4448	1095
135°	1470	1618	2162	3044	3451	1137
145°	1705	1814	2134	2597	2800	1068
155°	1927	1980	2134	2343	2411	885
165°	2079	2106	2134	2218	2246	587
175°	2162	2162	2149	2176	2176	205
180°	2162	2162	2162	2162	2162	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5	584.5
2.5°	584.5	584.5	588.2	590.1	593.8	595.7	599.5	603.3	614.6	616.4	620.2
5°	569.5	576.9	601.4	610.7	637.1	672.8	687.8	712.3	763.0	778.0	787.5
7.5°	546.9	563.8	623.9	638.9	704.8	798.8	838.2	890.8	971.6	1011.1	1043.0
10°	511.2	546.9	654.0	689.8	796.8	939.7	1012.9	1086.2	1208.4	1263.0	1283.6
12.5°	471.7	530.0	685.9	734.8	888.9	1097.5	1185.9	1266.7	1405.8	1479.1	1490.3
15°	426.7	505.6	716.0	787.5	986.7	1229.1	1326.8	1426.4	1556.1	1608.7	1621.9
17.5°	387.1	486.7	744.2	819.4	1061.9	1347.5	1447.0	1529.8	1635.1	1670.7	1680.2
20°	338.3	456.7	763.0	860.8	1140.8	1434.0	1529.8	1593.7	1665.1	1687.6	1691.4
22.5°	302.6	424.7	774.3	875.8	1193.4	1486.6	1567.3	1618.2	1667.0	1674.5	1676.3
25°	272.5	389.0	772.4	892.7	1238.5	1518.5	1580.5	1618.2	1646.3	1650.1	1650.1
27.5°	244.3	349.6	764.9	896.5	1272.3	1526.1	1574.9	1601.2	1614.3	1621.9	1621.9
30°	219.9	312.0	746.1	888.9	1287.3	1518.5	1558.0	1571.2	1584.3	1595.6	1601.2
32.5°	201.1	276.3	717.9	873.9	1289.2	1499.7	1527.9	1535.4	1554.2	1580.5	1589.9
35°	184.2	240.6	685.9	853.2	1278.0	1469.6	1488.4	1496.0	1533.5	1573.0	1586.1
37.5°	167.3	214.3	644.6	817.5	1261.0	1434.0	1447.0	1460.2	1518.5	1565.5	1580.5
40°	150.4	191.7	595.7	778.0	1234.7	1390.7	1402.0	1422.7	1499.7	1554.2	1569.2
42.5°	137.2	172.9	543.1	736.7	1200.9	1341.9	1358.8	1388.9	1477.1	1535.4	1552.3
45°	125.9	154.1	486.7	680.3	1157.7	1291.1	1315.5	1356.9	1450.9	1507.2	1522.2
47.5°	114.6	140.9	428.5	622.0	1110.7	1240.4	1272.3	1319.3	1415.1	1469.6	1482.8
50°	105.3	127.8	370.2	560.0	1059.9	1185.9	1223.4	1272.3	1370.1	1420.8	1437.7
52.5°	97.7	116.6	315.7	498.0	1001.7	1129.5	1172.7	1223.4	1315.5	1364.4	1375.7
55°	90.2	107.1	268.7	432.3	941.6	1069.3	1116.3	1165.2	1255.4	1296.8	1304.2
57.5°	86.5	99.6	229.3	370.2	877.7	1001.7	1054.3	1099.4	1183.9	1216.0	1223.4
60°	80.8	94.0	199.2	317.7	808.1	937.8	982.9	1028.0	1099.4	1125.8	1131.4
62.5°	75.2	90.2	176.6	266.8	736.7	862.6	907.8	949.0	1009.2	1028.0	1035.5
65°	71.5	86.5	159.7	229.3	663.4	783.7	828.8	864.5	913.4	932.1	935.9
67.5°	67.6	82.7	146.5	197.4	590.1	704.8	738.6	772.4	810.0	828.8	830.7
70°	62.0	78.9	135.3	174.8	514.9	614.6	642.8	678.5	708.5	717.9	723.6
72.5°	58.3	73.3	127.8	157.8	437.9	528.1	554.4	575.1	601.4	610.7	610.7
75°	52.6	65.8	120.3	140.9	358.9	432.3	454.8	475.5	496.1	499.9	494.3
77.5°	47.0	58.3	103.4	118.4	280.0	342.0	360.8	372.1	389.0	392.7	394.6
80°	39.5	50.7	80.8	92.1	203.0	251.8	265.0	274.4	289.4	289.4	293.2
82.5°	30.1	39.5	58.3	65.8	137.2	172.9	184.2	189.8	199.2	199.2	199.2
85°	18.8	24.5	37.5	43.2	82.7	105.3	112.7	114.6	122.2	124.0	124.0
87.5°	9.4	13.2	24.5	26.3	43.2	54.5	54.5	58.3	58.3	56.4	54.5
90°	14.5	26.1	37.7	40.6	63.8	94.7	110.2	98.0	73.5	55.1	55.1
92.5°	58.0	156.6	255.4	280.0	393.7	545.2	620.9	544.1	390.7	275.6	264.7
95°	139.3	319.8	500.3	545.5	968.6	1532.8	1814.9	1619.5	1228.8	935.8	902.5
97.5°	240.8	400.0	559.4	599.2	1304.7	2245.4	2715.8	2592.3	2345.4	2160.2	2096.9
100°	319.1	463.6	608.0	644.2	1427.1	2471.0	2992.9	3002.0	3020.0	3033.5	2958.3
102.5°	385.9	520.7	655.4	689.1	1483.2	2541.9	3071.3	3228.6	3543.2	3779.2	3714.8
105°	499.0	613.2	727.3	755.9	1524.8	2549.9	3062.5	3415.2	4120.6	4649.6	4615.0
107.5°	615.1	721.5	827.9	854.5	1532.5	2436.5	2888.5	3380.4	4364.3	5102.3	5110.7
110°	693.5	789.5	885.6	909.6	1520.8	2335.8	2743.3	3293.4	4393.3	5218.4	5254.5

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	770.4	861.9	953.4	976.3	1521.3	2248.0	2611.4	3174.3	4300.0	5144.4	5199.9
115°	886.4	970.8	1055.3	1076.4	1535.4	2147.3	2453.2	2995.5	4080.0	4893.4	4970.3
117.5°	1001.1	1077.7	1154.5	1173.7	1563.9	2084.2	2344.4	2833.8	3812.6	4546.6	4631.9
120°	1067.7	1139.9	1212.2	1230.3	1587.1	2063.0	2300.9	2748.1	3642.4	4313.1	4396.0
122.5°	1133.0	1205.9	1278.7	1297.0	1620.5	2051.9	2267.6	2670.2	3475.5	4079.5	4161.3
125°	1233.2	1299.6	1366.0	1382.6	1665.5	2042.7	2231.2	2573.3	3257.4	3770.5	3845.7
127.5°	1314.4	1381.5	1448.5	1465.3	1710.4	2037.3	2200.8	2494.4	3081.8	3522.4	3585.9
130°	1357.9	1430.1	1502.3	1520.4	1743.3	2040.6	2189.2	2450.6	2973.6	3365.8	3424.4
132.5°	1402.9	1475.1	1547.4	1565.4	1769.9	2042.7	2179.0	2413.1	2881.2	3232.3	3284.9
135°	1469.6	1535.4	1601.2	1617.6	1799.0	2040.8	2161.6	2357.7	2749.7	3043.7	3089.0
137.5°	1537.8	1602.9	1668.0	1684.3	1842.4	2053.3	2158.8	2324.4	2655.8	2904.4	2941.4
140°	1594.3	1654.3	1714.3	1729.3	1869.0	2055.4	2148.6	2291.7	2577.9	2792.7	2827.3
142.5°	1637.9	1693.3	1748.8	1762.6	1891.3	2062.8	2148.6	2274.3	2525.8	2714.4	2744.2
145°	1704.6	1753.0	1801.4	1813.5	1920.3	2062.8	2134.1	2236.9	2442.6	2596.8	2619.4
147.5°	1771.3	1818.4	1865.5	1877.2	1962.9	2077.0	2134.1	2215.0	2376.8	2498.2	2516.8
150°	1814.9	1857.4	1900.0	1910.7	1985.1	2084.4	2134.1	2202.5	2339.1	2441.6	2456.7
152.5°	1859.9	1892.1	1924.4	1932.4	1999.7	2089.3	2134.1	2192.5	2309.1	2396.6	2408.1
155°	1926.6	1950.5	1974.3	1980.3	2031.5	2099.9	2134.1	2180.5	2273.4	2342.9	2350.5
157.5°	1976.0	1999.1	2022.4	2028.2	2063.5	2110.6	2134.1	2170.1	2242.3	2296.5	2301.8
160°	2009.3	2027.3	2045.5	2049.9	2078.0	2115.4	2134.1	2165.0	2226.9	2273.4	2276.4
162.5°	2042.7	2056.2	2069.7	2073.1	2093.5	2120.6	2134.1	2160.2	2212.5	2251.6	2254.5
165°	2078.9	2091.1	2103.4	2106.5	2115.7	2127.9	2134.1	2152.8	2190.1	2218.2	2221.2
167.5°	2112.3	2118.1	2123.9	2125.3	2133.1	2143.4	2148.6	2160.8	2185.3	2203.7	2205.0
170°	2134.1	2139.9	2145.7	2147.1	2147.5	2148.2	2148.6	2160.8	2185.3	2203.7	2203.7
172.5°	2145.7	2147.0	2148.3	2148.6	2148.6	2148.6	2148.6	2158.3	2177.6	2192.1	2191.0
175°	2161.6	2161.6	2161.6	2161.6	2157.3	2151.5	2148.6	2154.7	2167.0	2176.1	2176.1
177.5°	2161.6	2161.6	2161.6	2161.6	2158.3	2153.7	2151.5	2156.3	2165.9	2173.2	2171.9
180°	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6	2161.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	584.5	584.5
2.5°	623.9	620.2
5°	802.5	806.2
7.5°	1080.6	1078.8
10°	1343.7	1360.7
12.5°	1535.4	1539.1
15°	1652.0	1659.4
17.5°	1697.1	1698.9
20°	1698.9	1695.2
22.5°	1678.2	1674.5
25°	1653.8	1652.0
27.5°	1631.2	1633.2
30°	1621.9	1627.5
32.5°	1621.9	1631.2
35°	1625.6	1635.1
37.5°	1623.8	1635.1
40°	1616.2	1629.4
42.5°	1595.6	1605.0
45°	1563.6	1574.9
47.5°	1522.2	1529.8
50°	1469.6	1477.1
52.5°	1403.9	1405.8
55°	1325.0	1332.4
57.5°	1240.4	1242.2
60°	1146.4	1152.0
62.5°	1046.8	1046.8
65°	941.6	945.3
67.5°	832.6	841.9
70°	721.7	723.6
72.5°	612.7	612.7
75°	499.9	501.7
77.5°	392.7	392.7
80°	291.3	293.2
82.5°	201.1	204.8
85°	125.9	125.9
87.5°	58.3	52.6
90°	55.1	55.1
92.5°	220.8	177.0
95°	769.7	636.9
97.5°	1844.2	1591.4
100°	2657.1	2356.0
102.5°	3456.8	3199.0
105°	4476.4	4337.8
107.5°	5144.2	5177.7
110°	5398.9	5543.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5421.6	5643.4
115°	5277.8	5585.4
117.5°	4973.0	5314.1
120°	4727.3	5058.7
122.5°	4488.2	4815.1
125°	4146.9	4448.0
127.5°	3840.0	4094.0
130°	3659.1	3893.8
132.5°	3495.0	3705.2
135°	3270.1	3451.3
137.5°	3089.8	3238.1
140°	2966.0	3104.6
142.5°	2863.5	2982.7
145°	2709.6	2799.9
147.5°	2591.7	2666.5
150°	2517.4	2578.0
152.5°	2453.9	2499.7
155°	2380.9	2411.1
157.5°	2323.1	2344.4
160°	2288.7	2300.9
162.5°	2266.1	2277.7
165°	2233.5	2245.8
167.5°	2210.1	2215.3
170°	2203.7	2203.7
172.5°	2186.4	2181.9
175°	2176.1	2176.1
177.5°	2166.8	2161.6
180°	2161.6	2161.6

(END OF REPORT)