

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: P937897

Luminaire Tested: SQ4-FB-125U-050D-B35-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937897
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-B35-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

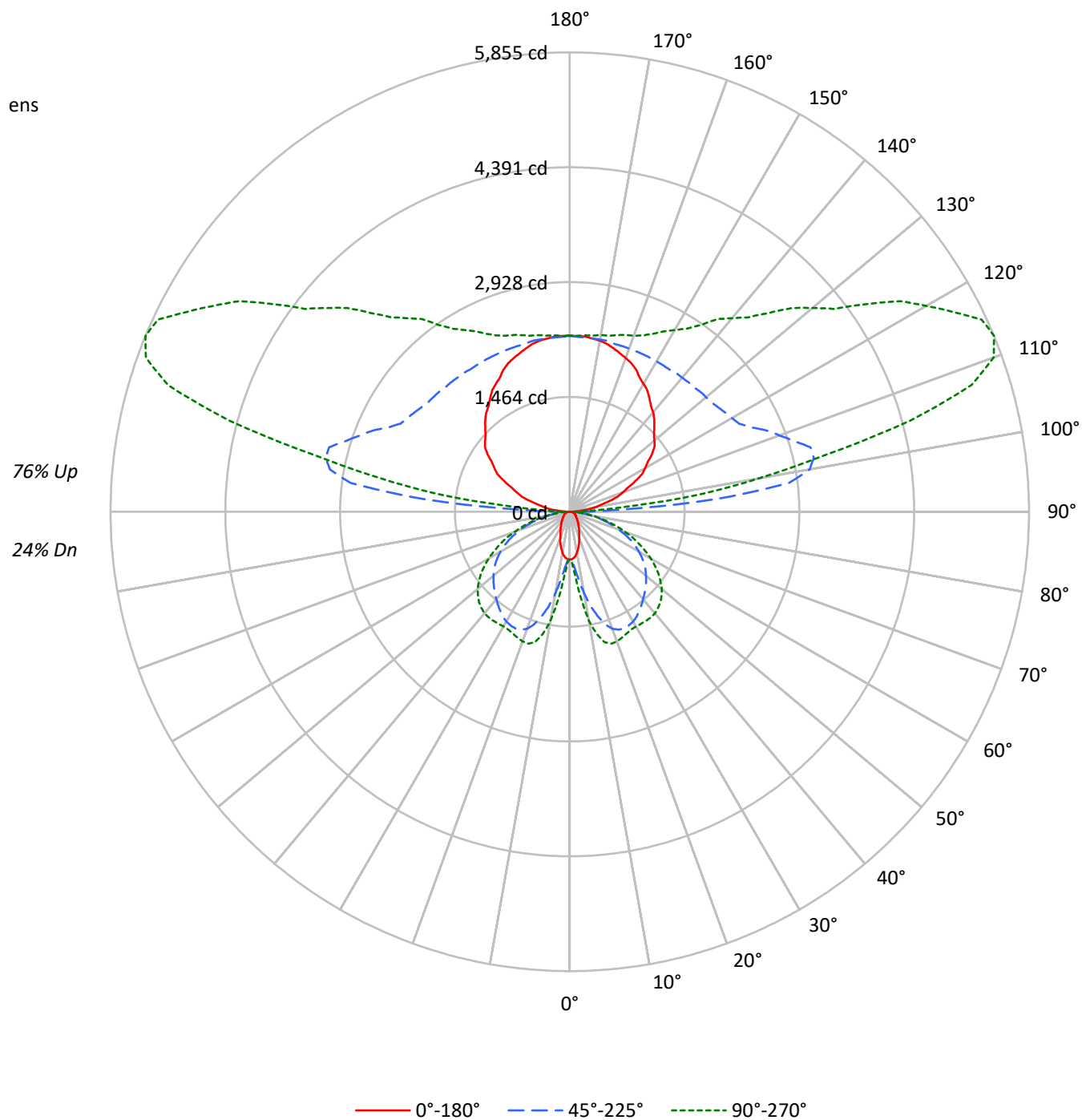
Lumens per Lamp: N/A
Luminaire Lumens: 19237.6 lumens
Efficiency: N/A
Efficacy: 134.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Indirect

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°	1876	1876	1876
5°	1833	2168	2521
10°	1663	3161	4179
15°	1414	4132	5047
20°	1152	4789	5143
25°	961	5012	5039
30°	811	5046	5029
35°	717	4963	5159
40°	626	4856	5294
45°	567	4777	5315
50°	520	4707	5227
55°	499	4603	4995
60°	511	4404	4629
65°	533	4099	4126
70°	568	3577	3486
75°	633	2918	2720
80°	697	2027	1833
85°	632	1077	938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 90°

Luminance: 5568 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.4	0.4
10°-20°	347.6	1.8
20°-30°	608.1	3.2
30°-40°	782.8	4.1
40°-50°	874.3	4.5
50°-60°	837.4	4.4
60°-70°	663.6	3.4
70°-80°	390.2	2.0
80°-90°	117.0	0.6
90°-100°	1093.2	5.7
100°-110°	2874.0	14.9
110°-120°	2980.0	15.5
120°-130°	2390.3	12.4
130°-140°	1875.6	9.7
140°-150°	1439.6	7.5
150°-160°	1036.7	5.4
160°-170°	634.3	3.3
170°-180°	214.3	1.1
0°-30°	1034.2	5.4
0°-40°	1816.9	9.4
0°-60°	3528.6	18.3
0°-90°	4699.5	24.4
90°-120°	6947.2	36.1
90°-150°	12652.7	65.8
90°-180°	14538.0	75.6
0°-180°	19237.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	606	606	606	606	606	
5°	591	634	714	807	836	55
15°	443	817	1377	1669	1722	123
25°	283	926	1640	1712	1714	130
35°	191	885	1544	1632	1696	119
45°	131	706	1365	1564	1634	101
55°	94	448	1158	1345	1382	85
65°	74	238	860	967	981	73
75°	55	146	472	519	520	57
85°	20	45	117	129	131	21
90°	15	42	114	57	57	14
95°	144	566	1883	971	661	160
105°	518	784	3177	4824	4500	549
115°	920	1117	2545	5077	5795	908
125°	1279	1434	2315	3912	4615	1136
135°	1525	1678	2243	3158	3581	1180
145°	1768	1881	2214	2694	2905	1108
155°	1999	2054	2214	2431	2502	918
165°	2157	2185	2214	2301	2330	609
175°	2243	2243	2229	2258	2258	213
180°	2243	2243	2243	2243	2243	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4	606.4
2.5°	606.4	606.4	610.3	612.2	616.1	618.0	622.0	625.9	637.6	639.5	643.4
5°	590.8	598.6	623.9	633.6	661.0	698.0	713.6	739.0	791.6	807.2	817.0
7.5°	567.3	584.9	647.3	662.9	731.2	828.7	869.6	924.2	1008.1	1048.9	1082.1
10°	530.3	567.3	678.5	715.6	826.7	974.9	1050.9	1126.9	1253.7	1310.3	1331.7
12.5°	489.3	549.8	711.6	762.3	922.2	1138.7	1230.3	1314.2	1458.4	1534.5	1546.1
15°	442.6	524.5	742.8	817.0	1023.7	1275.1	1376.6	1479.9	1614.5	1669.0	1682.7
17.5°	401.7	504.9	772.1	850.1	1101.7	1398.0	1501.3	1587.1	1696.3	1733.3	1743.1
20°	351.0	473.8	791.6	893.0	1183.5	1487.7	1587.1	1653.4	1727.5	1750.9	1754.8
22.5°	314.0	440.6	803.3	908.6	1238.1	1542.3	1626.1	1678.8	1729.5	1737.2	1739.2
25°	282.8	403.6	801.4	926.2	1284.9	1575.4	1639.7	1678.8	1708.0	1711.9	1711.9
27.5°	253.5	362.7	793.5	930.0	1320.0	1583.2	1633.9	1661.2	1674.8	1682.7	1682.7
30°	228.1	323.6	774.0	922.2	1335.6	1575.4	1616.4	1630.1	1643.6	1655.3	1661.2
32.5°	208.6	286.6	744.8	906.6	1337.5	1555.9	1585.2	1592.9	1612.4	1639.7	1649.5
35°	191.1	249.6	711.6	885.2	1325.9	1524.7	1544.2	1552.0	1591.0	1632.0	1645.6
37.5°	173.5	222.3	668.8	848.2	1308.2	1487.7	1501.3	1514.9	1575.4	1624.1	1639.7
40°	156.0	198.8	618.0	807.2	1281.0	1442.8	1454.6	1476.0	1555.9	1612.4	1628.0
42.5°	142.3	179.4	563.5	764.3	1245.9	1392.2	1409.7	1440.9	1532.5	1592.9	1610.5
45°	130.6	159.9	504.9	705.8	1201.1	1339.4	1364.8	1407.8	1505.2	1563.7	1579.3
47.5°	118.9	146.2	444.6	645.4	1152.3	1286.8	1320.0	1368.7	1468.1	1524.7	1538.4
50°	109.2	132.6	384.1	581.0	1099.6	1230.3	1269.3	1320.0	1421.4	1474.0	1491.6
52.5°	101.4	120.9	327.5	516.7	1039.3	1171.8	1216.7	1269.3	1364.8	1415.5	1427.2
55°	93.6	111.1	278.8	448.5	976.8	1109.4	1158.1	1208.8	1302.4	1345.4	1353.1
57.5°	89.7	103.3	237.9	384.1	910.6	1039.3	1093.8	1140.6	1228.3	1261.5	1269.3
60°	83.8	97.5	206.7	329.6	838.4	973.0	1019.8	1066.5	1140.6	1167.9	1173.7
62.5°	78.0	93.6	183.2	276.8	764.3	895.0	941.8	984.6	1047.0	1066.5	1074.3
65°	74.1	89.7	165.7	237.9	688.3	813.1	859.9	896.9	947.6	967.1	970.9
67.5°	70.2	85.8	152.0	204.7	612.2	731.2	766.3	801.4	840.3	859.9	861.8
70°	64.3	81.9	140.4	181.3	534.2	637.6	666.9	703.9	735.1	744.8	750.7
72.5°	60.5	76.1	132.6	163.8	454.3	547.9	575.2	596.6	623.9	633.6	633.6
75°	54.6	68.2	124.8	146.2	372.4	448.5	471.8	493.3	514.7	518.6	512.8
77.5°	48.7	60.5	107.3	122.9	290.5	354.8	374.3	386.0	403.6	407.5	409.4
80°	41.0	52.6	83.8	95.5	210.6	261.2	274.9	284.7	300.3	300.3	304.2
82.5°	31.2	41.0	60.5	68.2	142.3	179.4	191.1	196.9	206.7	206.7	206.7
85°	19.5	25.4	39.0	44.9	85.8	109.2	117.0	118.9	126.7	128.7	128.7
87.5°	9.8	13.7	25.4	27.3	44.9	56.6	56.6	60.5	60.5	58.5	56.6
90°	15.0	27.0	39.1	42.2	66.2	98.3	114.3	101.6	76.3	57.2	57.2
92.5°	60.2	162.5	264.9	290.5	408.4	565.6	644.2	564.5	405.3	286.0	274.6
95°	144.5	331.8	519.1	565.9	1004.9	1590.2	1882.9	1680.1	1274.8	970.8	936.3
97.5°	249.8	415.0	580.3	621.6	1353.6	2329.6	2817.6	2689.5	2433.3	2241.1	2175.5
100°	331.1	481.0	630.8	668.3	1480.5	2563.6	3105.1	3114.5	3133.2	3147.2	3069.1
102.5°	400.4	540.2	679.9	714.9	1538.8	2637.1	3186.4	3349.5	3676.0	3920.9	3854.0
105°	517.7	636.1	754.6	784.2	1581.9	2645.5	3177.3	3543.1	4275.0	4823.9	4787.9
107.5°	638.2	748.6	858.9	886.5	1589.9	2527.8	2996.7	3507.1	4527.8	5293.5	5302.2
110°	719.5	819.1	918.8	943.7	1577.8	2423.4	2846.1	3416.8	4558.0	5413.9	5451.4

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	799.2	894.2	989.2	1012.9	1578.3	2332.3	2709.2	3293.2	4461.2	5337.2	5394.7
115°	919.6	1007.2	1094.9	1116.8	1592.9	2227.7	2545.2	3107.8	4232.9	5076.8	5156.5
117.5°	1038.6	1118.1	1197.8	1217.6	1622.5	2162.3	2432.3	2940.0	3955.5	4717.0	4805.5
120°	1107.8	1182.7	1257.7	1276.4	1646.6	2140.3	2387.1	2851.1	3778.9	4474.7	4560.7
122.5°	1175.5	1251.1	1326.7	1345.6	1681.2	2128.8	2352.5	2770.3	3605.7	4232.4	4317.2
125°	1279.4	1348.3	1417.2	1434.4	1727.9	2119.2	2314.8	2669.7	3379.5	3911.8	3989.9
127.5°	1363.7	1433.2	1502.8	1520.2	1774.5	2113.7	2283.3	2587.9	3197.3	3654.4	3720.3
130°	1408.8	1483.7	1558.6	1577.3	1808.6	2117.1	2271.2	2542.5	3085.0	3491.9	3552.7
132.5°	1455.4	1530.3	1605.3	1624.0	1836.3	2119.2	2260.7	2503.5	2989.2	3353.4	3408.0
135°	1524.7	1592.9	1661.2	1678.2	1866.4	2117.3	2242.7	2446.0	2852.7	3157.8	3204.8
137.5°	1595.5	1663.0	1730.5	1747.4	1911.4	2130.2	2239.6	2411.6	2755.4	3013.2	3051.7
140°	1654.1	1716.3	1778.5	1794.1	1939.1	2132.4	2229.1	2377.5	2674.5	2897.3	2933.3
142.5°	1699.2	1756.8	1814.4	1828.7	1962.1	2140.1	2229.1	2359.5	2620.5	2816.1	2847.0
145°	1768.5	1818.7	1868.9	1881.4	1992.3	2140.1	2214.1	2320.8	2534.1	2694.1	2717.6
147.5°	1837.7	1886.5	1935.4	1947.6	2036.5	2154.9	2214.1	2298.0	2465.9	2591.8	2611.2
150°	1882.9	1927.1	1971.2	1982.3	2059.5	2162.5	2214.1	2285.0	2426.8	2533.1	2548.8
152.5°	1929.6	1963.0	1996.5	2004.9	2074.6	2167.6	2214.1	2274.6	2395.7	2486.5	2498.4
155°	1998.8	2023.6	2048.3	2054.5	2107.7	2178.6	2214.1	2262.2	2358.5	2430.7	2438.6
157.5°	2050.0	2074.0	2098.2	2104.2	2140.8	2189.6	2214.1	2251.5	2326.4	2382.6	2388.1
160°	2084.6	2103.3	2122.1	2126.8	2155.8	2194.7	2214.1	2246.1	2310.4	2358.5	2361.7
162.5°	2119.2	2133.3	2147.3	2150.8	2171.9	2200.0	2214.1	2241.2	2295.4	2336.0	2339.0
165°	2156.8	2169.5	2182.2	2185.4	2195.0	2207.7	2214.1	2233.4	2272.2	2301.3	2304.5
167.5°	2191.5	2197.5	2203.5	2205.0	2213.0	2223.8	2229.1	2241.8	2267.2	2286.3	2287.6
170°	2214.1	2220.1	2226.1	2227.5	2228.0	2228.7	2229.1	2241.8	2267.2	2286.3	2286.3
172.5°	2226.1	2227.4	2228.8	2229.1	2229.1	2229.1	2229.1	2239.2	2259.2	2274.2	2273.1
175°	2242.7	2242.7	2242.7	2242.7	2238.1	2232.1	2229.1	2235.5	2248.2	2257.7	2257.7
177.5°	2242.7	2242.7	2242.7	2242.7	2239.2	2234.4	2232.1	2237.1	2247.1	2254.7	2253.3
180°	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7	2242.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	606.4	606.4
2.5°	647.3	643.4
5°	832.6	836.4
7.5°	1121.1	1119.2
10°	1394.1	1411.6
12.5°	1592.9	1596.8
15°	1713.9	1721.6
17.5°	1760.7	1762.6
20°	1762.6	1758.7
22.5°	1741.1	1737.2
25°	1715.8	1713.9
27.5°	1692.4	1694.4
30°	1682.7	1688.5
32.5°	1682.7	1692.4
35°	1686.5	1696.3
37.5°	1684.6	1696.3
40°	1676.8	1690.4
42.5°	1655.3	1665.1
45°	1622.2	1633.9
47.5°	1579.3	1587.1
50°	1524.7	1532.5
52.5°	1456.5	1458.4
55°	1374.6	1382.4
57.5°	1286.8	1288.8
60°	1189.4	1195.2
62.5°	1086.1	1086.1
65°	976.8	980.7
67.5°	863.8	873.5
70°	748.7	750.7
72.5°	635.7	635.7
75°	518.6	520.5
77.5°	407.5	407.5
80°	302.2	304.2
82.5°	208.6	212.5
85°	130.6	130.6
87.5°	60.5	54.6
90°	57.2	57.2
92.5°	229.1	183.6
95°	798.6	660.8
97.5°	1913.3	1651.1
100°	2756.7	2444.3
102.5°	3586.4	3318.8
105°	4644.1	4500.3
107.5°	5337.0	5371.7
110°	5601.2	5751.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	5624.8	5854.9
115°	5475.6	5794.7
117.5°	5159.3	5513.2
120°	4904.5	5248.3
122.5°	4656.3	4995.5
125°	4302.3	4614.7
127.5°	3983.8	4247.4
130°	3796.3	4039.8
132.5°	3626.0	3844.0
135°	3392.7	3580.6
137.5°	3205.5	3359.4
140°	3077.2	3221.0
142.5°	2970.8	3094.5
145°	2811.2	2904.9
147.5°	2688.8	2766.4
150°	2611.7	2674.6
152.5°	2545.9	2593.3
155°	2470.1	2501.5
157.5°	2410.2	2432.3
160°	2374.4	2387.1
162.5°	2351.0	2363.0
165°	2317.2	2330.0
167.5°	2292.9	2298.3
170°	2286.3	2286.3
172.5°	2268.3	2263.7
175°	2257.7	2257.7
177.5°	2248.0	2242.7
180°	2242.7	2242.7

(END OF REPORT)