

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: P936805

Luminaire Tested: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936805
REPORT IS A COMBINATION OF REPORTS P933462 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

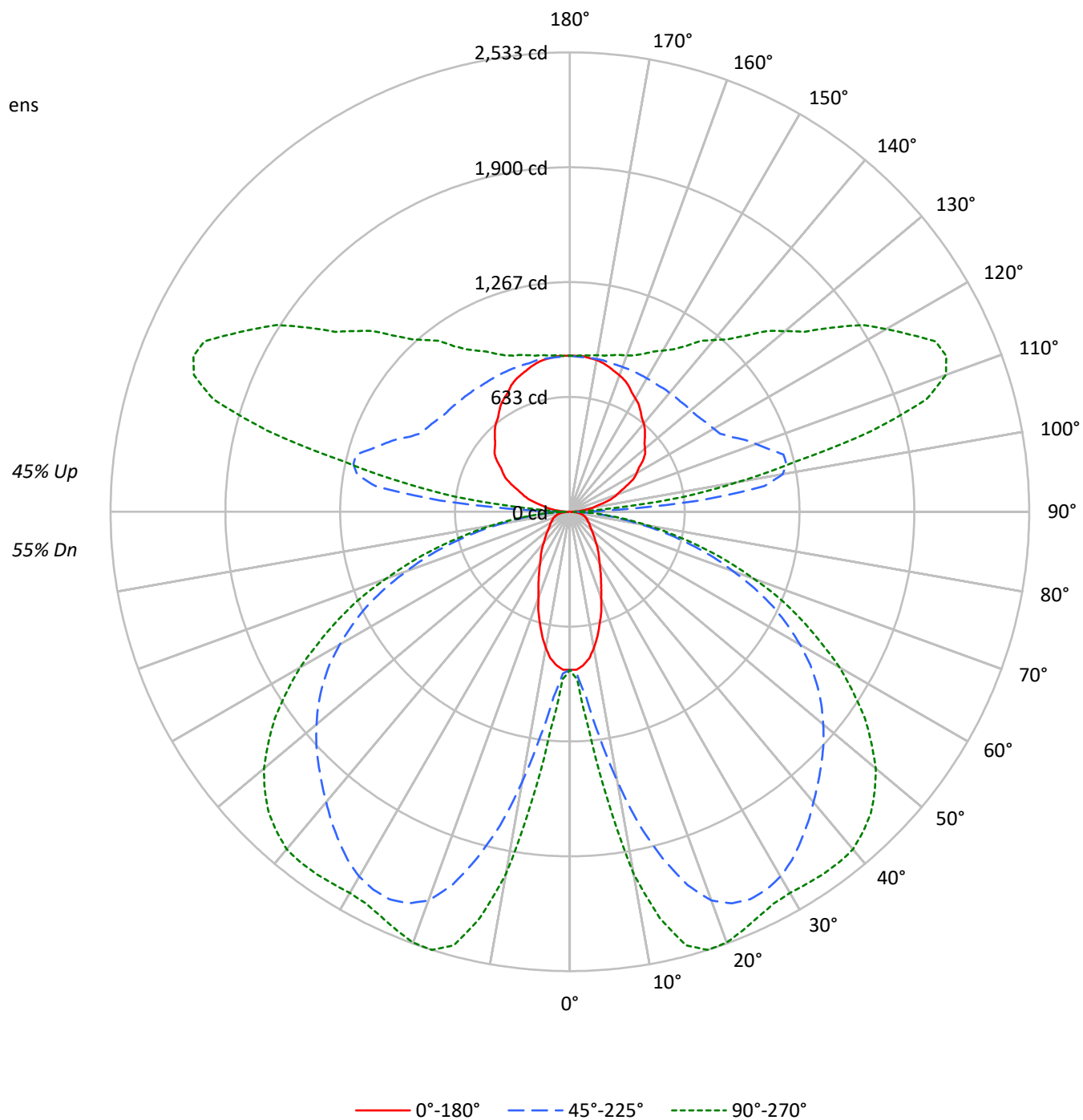
Lumens per Lamp: N/A
Luminaire Lumens: 12323.2 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 109.2
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: P936805

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-12

Luminous Intensity Polar Plot



TEST NUMBER: P936805

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-12

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2695	2695	2695
5°	2634	3116	3623
10°	2390	4544	6007
15°	2032	5938	7253
20°	1655	6882	7392
25°	1381	7204	7242
30°	1165	7251	7228
35°	1031	7133	7415
40°	899	6978	7608
45°	814	6866	7638
50°	748	6765	7512
55°	717	6616	7178
60°	735	6329	6653
65°	766	5890	5930
70°	818	5140	5010
75°	910	4195	3909
80°	1000	2913	2634
85°	907	1548	1348

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7638 cd/sqm

TEST NUMBER: P936805

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.7	0.9
10°-20°	499.6	4.1
20°-30°	873.9	7.1
30°-40°	1125.0	9.1
40°-50°	1256.5	10.2
50°-60°	1203.5	9.8
60°-70°	953.8	7.7
70°-80°	560.8	4.6
80°-90°	159.1	1.3
90°-100°	419.4	3.4
100°-110°	1102.8	8.9
110°-120°	1143.4	9.3
120°-130°	917.2	7.4
130°-140°	719.7	5.8
140°-150°	552.4	4.5
150°-160°	397.8	3.2
160°-170°	243.4	2.0
170°-180°	82.2	0.7
0°-30°	1486.2	12.1
0°-40°	2611.2	21.2
0°-60°	5071.2	41.2
0°-90°	6744.9	54.7
90°-120°	2665.6	21.6
90°-150°	4854.8	39.4
90°-180°	5578.0	45.3
0°-180°	12323.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	849	911	1026	1160	1202	78
15°	636	1174	1978	2399	2474	177
25°	406	1331	2357	2460	2463	187
35°	275	1272	2219	2345	2438	171
45°	188	1014	1962	2247	2348	145
55°	134	644	1664	1934	1987	123
65°	106	342	1236	1390	1410	106
75°	78	210	678	745	748	82
85°	28	64	168	185	188	30
90°	6	16	44	22	22	7
95°	56	217	722	372	254	62
105°	199	301	1219	1851	1727	211
115°	353	428	977	1948	2224	348
125°	491	550	888	1501	1771	436
135°	585	644	860	1212	1374	453
145°	679	722	850	1034	1115	425
155°	767	788	850	933	960	352
165°	828	838	850	883	894	234
175°	860	860	855	866	866	82
180°	860	860	860	860	860	

TEST NUMBER: P936805

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4
2.5°	871.4	871.4	877.0	879.8	885.4	888.2	893.8	899.4	916.3	919.1	924.7
5°	849.0	860.2	896.6	910.6	949.9	1003.1	1025.5	1062.1	1137.7	1160.1	1174.1
7.5°	815.4	840.6	930.3	952.7	1050.8	1190.9	1249.8	1328.2	1448.7	1507.6	1555.2
10°	762.1	815.4	975.1	1028.3	1188.1	1401.1	1510.4	1619.6	1801.8	1883.0	1913.9
12.5°	703.3	790.2	1022.7	1095.7	1325.4	1636.5	1768.2	1888.6	2096.0	2205.3	2222.1
15°	636.1	753.7	1067.7	1174.1	1471.1	1832.6	1978.3	2126.8	2320.1	2398.6	2418.2
17.5°	577.2	725.7	1109.7	1221.8	1583.2	2009.1	2157.6	2280.9	2437.8	2491.1	2505.1
20°	504.4	680.9	1137.7	1283.4	1700.9	2138.0	2280.9	2376.2	2482.7	2516.3	2521.9
22.5°	451.1	633.3	1154.5	1305.8	1779.4	2216.5	2337.0	2412.6	2485.5	2496.7	2499.5
25°	406.3	580.0	1151.7	1331.0	1846.6	2264.1	2356.6	2412.6	2454.6	2460.2	2460.2
27.5°	364.3	521.2	1140.5	1336.6	1897.0	2275.3	2348.2	2387.4	2407.0	2418.2	2418.2
30°	327.8	465.1	1112.5	1325.4	1919.5	2264.1	2323.0	2342.6	2362.2	2379.0	2387.4
32.5°	299.8	411.9	1070.5	1303.0	1922.3	2236.1	2278.1	2289.3	2317.3	2356.6	2370.6
35°	274.6	358.7	1022.7	1272.2	1905.5	2191.3	2219.3	2230.5	2286.5	2345.4	2365.0
37.5°	249.4	319.4	961.1	1219.0	1880.2	2138.0	2157.6	2177.2	2264.1	2334.2	2356.6
40°	224.2	285.8	888.2	1160.1	1841.0	2073.6	2090.4	2121.2	2236.1	2317.3	2339.8
42.5°	204.5	257.8	809.8	1098.5	1790.6	2000.7	2025.9	2070.8	2202.5	2289.3	2314.5
45°	187.7	229.8	725.7	1014.3	1726.1	1925.1	1961.5	2023.1	2163.2	2247.3	2269.7
47.5°	170.9	210.2	638.9	927.5	1656.1	1849.4	1897.0	1967.1	2110.0	2191.3	2210.9
50°	156.9	190.5	552.0	835.0	1580.4	1768.2	1824.2	1897.0	2042.8	2118.4	2143.6
52.5°	145.7	173.7	470.7	742.5	1493.6	1684.1	1748.5	1824.2	1961.5	2034.3	2051.2
55°	134.5	159.7	400.7	644.5	1403.9	1594.4	1664.5	1737.3	1871.8	1933.5	1944.7
57.5°	128.9	148.5	341.8	552.0	1308.6	1493.6	1572.0	1639.3	1765.4	1813.0	1824.2
60°	120.5	140.1	297.0	473.5	1205.0	1398.3	1465.5	1532.8	1639.3	1678.5	1686.9
62.5°	112.1	134.5	263.4	397.9	1098.5	1286.2	1353.5	1415.1	1504.8	1532.8	1544.0
65°	106.5	128.9	238.2	341.8	989.1	1168.5	1235.8	1289.0	1361.9	1389.9	1395.5
67.5°	100.9	123.3	218.6	294.2	879.8	1050.8	1101.3	1151.7	1207.8	1235.8	1238.6
70°	92.5	117.7	201.7	260.6	767.7	916.3	958.3	1011.5	1056.4	1070.5	1078.9
72.5°	86.9	109.3	190.5	235.4	652.9	787.4	826.6	857.4	896.6	910.6	910.6
75°	78.5	98.1	179.3	210.2	535.2	644.5	678.1	708.9	739.7	745.3	736.9
77.5°	70.0	86.9	154.1	176.5	417.5	510.0	538.0	554.8	580.0	585.6	588.4
80°	58.8	75.7	120.5	137.3	302.6	375.5	395.1	409.1	431.5	431.5	437.1
82.5°	44.8	58.8	86.9	98.1	204.5	257.8	274.6	283.0	297.0	297.0	297.0
85°	28.0	36.4	56.0	64.4	123.3	156.9	168.1	170.9	182.1	184.9	184.9
87.5°	14.0	19.6	36.4	39.2	64.4	81.3	81.3	86.9	86.9	84.1	81.3
90°	5.8	10.4	15.0	16.2	25.4	37.7	43.9	39.0	29.2	21.9	21.9
92.5°	23.1	62.3	101.6	111.4	156.6	217.0	247.1	216.6	155.5	109.7	105.4
95°	55.5	127.3	199.2	217.2	385.6	610.2	722.4	644.6	489.1	372.5	359.2
97.5°	95.8	159.2	222.7	238.5	519.4	893.8	1081.1	1032.0	933.6	859.9	834.8
100°	127.0	184.6	242.0	256.4	568.1	983.6	1191.4	1195.0	1202.2	1207.6	1177.6
102.5°	153.6	207.3	260.9	274.3	590.4	1011.9	1222.6	1285.2	1410.4	1504.4	1478.7
105°	198.7	244.1	289.4	300.8	606.9	1015.1	1219.2	1359.5	1640.3	1850.9	1837.1
107.5°	244.9	287.2	329.6	340.2	610.1	970.0	1149.8	1345.7	1737.4	2031.2	2034.5
110°	276.1	314.3	352.6	362.1	605.4	929.9	1092.1	1311.1	1748.9	2077.3	2091.7

TEST NUMBER: P936805

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	306.6	343.1	379.5	388.6	605.6	894.9	1039.5	1263.6	1711.7	2047.9	2069.9
115°	352.9	386.5	420.1	428.5	611.2	854.8	976.6	1192.4	1624.1	1948.0	1978.6
117.5°	398.4	429.0	459.5	467.2	622.5	829.7	933.3	1128.1	1517.7	1809.9	1843.8
120°	425.1	453.8	482.5	489.7	631.8	821.3	916.0	1094.0	1449.9	1717.0	1749.9
122.5°	451.0	480.1	509.0	516.3	645.1	816.8	902.6	1062.9	1383.5	1623.9	1656.4
125°	490.9	517.3	543.8	550.4	663.0	813.1	888.2	1024.4	1296.7	1500.9	1530.9
127.5°	523.2	549.9	576.7	583.3	680.9	811.0	876.1	993.0	1226.8	1402.2	1427.5
130°	540.6	569.4	598.0	605.2	694.0	812.3	871.5	975.6	1183.8	1339.8	1363.2
132.5°	558.4	587.2	616.0	623.2	704.6	813.1	867.4	960.6	1147.0	1286.7	1307.6
135°	585.1	611.2	637.4	643.9	716.1	812.4	860.5	938.6	1094.6	1211.7	1229.7
137.5°	612.1	638.1	664.1	670.5	733.5	817.4	859.4	925.3	1057.3	1156.2	1171.0
140°	634.7	658.6	682.4	688.4	744.0	818.2	855.3	912.2	1026.3	1111.7	1125.6
142.5°	652.0	674.1	696.2	701.7	752.9	821.2	855.3	905.3	1005.5	1080.5	1092.4
145°	678.6	697.8	717.0	721.9	764.5	821.2	849.6	890.5	972.4	1033.8	1042.7
147.5°	705.2	723.8	742.6	747.3	781.4	826.9	849.6	881.8	946.2	994.5	1002.0
150°	722.4	739.4	756.4	760.6	790.3	829.8	849.6	876.7	931.1	971.9	978.0
152.5°	740.4	753.2	766.1	769.2	796.0	831.7	849.6	872.8	919.2	954.1	958.7
155°	766.9	776.4	786.0	788.3	808.8	835.9	849.6	868.1	905.0	932.7	935.7
157.5°	786.6	795.9	805.0	807.3	821.5	840.2	849.6	864.0	892.6	914.2	916.3
160°	799.9	807.1	814.3	816.0	827.2	842.1	849.6	861.9	886.5	905.0	906.2
162.5°	813.1	818.6	824.0	825.3	833.4	844.1	849.6	859.9	880.7	896.3	897.4
165°	827.6	832.5	837.3	838.5	842.2	847.1	849.6	857.0	871.9	883.0	884.2
167.5°	840.9	843.1	845.5	846.0	849.1	853.2	855.3	860.1	869.9	877.2	877.8
170°	849.6	851.8	854.1	854.7	854.9	855.2	855.3	860.1	869.9	877.2	877.2
172.5°	854.1	854.6	855.2	855.3	855.3	855.3	855.3	859.1	866.8	872.6	872.2
175°	860.5	860.5	860.5	860.5	858.7	856.4	855.3	857.7	862.6	866.3	866.3
177.5°	860.5	860.5	860.5	860.5	859.2	857.4	856.5	858.4	862.3	865.2	864.6
180°	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5	860.5

TEST NUMBER: P936805

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	871.4	871.4
2.5°	930.3	924.7
5°	1196.5	1202.2
7.5°	1611.2	1608.4
10°	2003.5	2028.7
12.5°	2289.3	2294.9
15°	2463.1	2474.3
17.5°	2530.3	2533.1
20°	2533.1	2527.5
22.5°	2502.3	2496.7
25°	2465.9	2463.1
27.5°	2432.2	2435.0
30°	2418.2	2426.6
32.5°	2418.2	2432.2
35°	2423.8	2437.8
37.5°	2421.0	2437.8
40°	2409.8	2429.4
42.5°	2379.0	2393.0
45°	2331.4	2348.2
47.5°	2269.7	2280.9
50°	2191.3	2202.5
52.5°	2093.2	2096.0
55°	1975.5	1986.7
57.5°	1849.4	1852.2
60°	1709.3	1717.7
62.5°	1560.8	1560.8
65°	1403.9	1409.5
67.5°	1241.4	1255.4
70°	1076.1	1078.9
72.5°	913.5	913.5
75°	745.3	748.1
77.5°	585.6	585.6
80°	434.3	437.1
82.5°	299.8	305.4
85°	187.7	187.7
87.5°	86.9	78.5
90°	21.9	21.9
92.5°	87.9	70.4
95°	306.4	253.5
97.5°	734.1	633.5
100°	1057.8	937.9
102.5°	1376.1	1273.4
105°	1782.0	1726.8
107.5°	2047.8	2061.2
110°	2149.1	2206.7

TEST NUMBER: P936805

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2158.3	2246.6
115°	2101.0	2223.5
117.5°	1979.6	2115.4
120°	1881.9	2013.8
122.5°	1786.6	1916.8
125°	1650.8	1770.7
127.5°	1528.6	1629.7
130°	1456.7	1550.1
132.5°	1391.3	1475.0
135°	1301.8	1373.9
137.5°	1230.0	1289.0
140°	1180.7	1235.9
142.5°	1139.9	1187.4
145°	1078.7	1114.6
147.5°	1031.7	1061.5
150°	1002.1	1026.3
152.5°	976.9	995.1
155°	947.8	959.9
157.5°	924.8	933.3
160°	911.1	916.0
162.5°	902.1	906.7
165°	889.2	894.0
167.5°	879.8	881.9
170°	877.2	877.2
172.5°	870.4	868.6
175°	866.3	866.3
177.5°	862.5	860.5
180°	860.5	860.5

(END OF REPORT)