

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: P937201

Luminaire Tested: SQ4-FB-075U-075D-B40-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937201
REPORT IS A COMBINATION OF REPORTS P933494 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-075D-B40-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

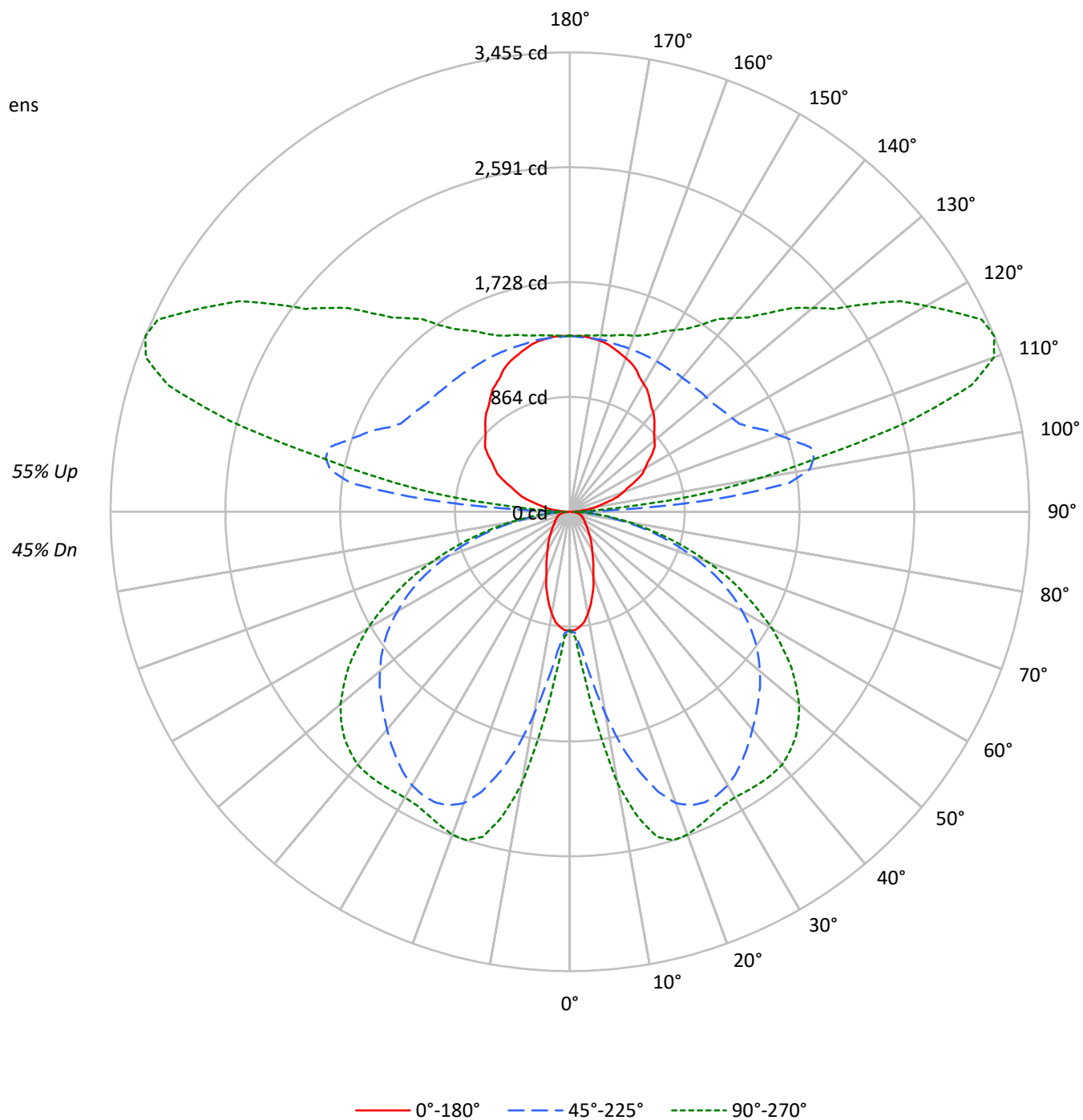
Lumens per Lamp: N/A
Luminaire Lumens: 15476.7 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	92	88	84	88	84	80	77	70	67	65	57	55	53	44	43	42
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29
4	72	61	53	47	65	56	49	43	46	41	37	38	34	31	30	27	24
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16
8	51	39	31	26	47	36	29	24	30	24	21	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	27	22	18	22	18	15	18	15	12
10	44	32	25	20	41	30	23	19	25	20	16	21	17	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2756	2756	2756
5°	2693	3186	3705
10°	2444	4646	6142
15°	2078	6071	7416
20°	1692	7037	7558
25°	1412	7366	7404
30°	1191	7414	7390
35°	1054	7293	7581
40°	919	7135	7779
45°	833	7020	7810
50°	764	6917	7680
55°	733	6765	7340
60°	751	6471	6802
65°	783	6023	6064
70°	835	5255	5123
75°	930	4289	3998
80°	1024	2978	2693
85°	927	1583	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°	115.3	0.7
10°-20°	510.8	3.3
20°-30°	893.5	5.8
30°-40°	1150.3	7.4
40°-50°	1284.8	8.3
50°-60°	1230.5	8.0
60°-70°	975.2	6.3
70°-80°	573.4	3.7
80°-90°	164.4	1.1
90°-100°	645.1	4.2
100°-110°	1695.9	11.0
110°-120°	1758.4	11.4
120°-130°	1410.5	9.1
130°-140°	1106.7	7.2
140°-150°	849.4	5.5
150°-160°	611.7	4.0
160°-170°	374.3	2.4
170°-180°	126.5	0.8
0°-30°	1519.6	9.8
0°-40°	2669.9	17.3
0°-60°	5185.2	33.5
0°-90°	6898.2	44.6
90°-120°	4099.3	26.5
90°-150°	7466.0	48.2
90°-180°	8578.0	55.4
0°-180°	15476.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	868	931	1049	1186	1229	80
15°	650	1200	2023	2452	2530	181
25°	415	1361	2410	2516	2518	191
35°	281	1301	2269	2398	2493	175
45°	192	1037	2006	2298	2401	148
55°	138	659	1702	1977	2031	125
65°	109	350	1264	1421	1441	108
75°	80	215	693	762	765	84
85°	29	66	172	189	192	30
90°	9	25	68	34	34	9
95°	85	334	1111	573	390	95
105°	306	463	1875	2846	2656	324
115°	543	659	1502	2996	3419	536
125°	755	846	1366	2308	2723	670
135°	900	990	1323	1863	2113	696
145°	1044	1110	1306	1590	1714	654
155°	1179	1212	1306	1434	1476	542
165°	1273	1290	1306	1358	1375	359
175°	1323	1323	1315	1332	1332	126
180°	1323	1323	1323	1323	1323	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0
2.5°	891.0	891.0	896.7	899.6	905.3	908.2	913.9	919.7	936.9	939.7	945.4
5°	868.1	879.6	916.8	931.1	971.2	1025.7	1048.6	1085.9	1163.3	1186.2	1200.5
7.5°	833.7	859.5	951.2	974.1	1074.4	1217.7	1277.9	1358.1	1481.3	1541.5	1590.2
10°	779.3	833.7	997.0	1051.5	1214.9	1432.6	1544.3	1656.1	1842.3	1925.4	1956.9
12.5°	719.1	807.9	1045.7	1120.3	1355.2	1673.3	1807.9	1931.1	2143.1	2254.9	2272.0
15°	650.4	770.7	1091.7	1200.5	1504.2	1873.8	2022.8	2174.6	2372.3	2452.5	2472.6
17.5°	590.2	742.0	1134.6	1249.2	1618.8	2054.3	2206.1	2332.2	2492.6	2547.1	2561.4
20°	515.7	696.2	1163.3	1312.3	1739.2	2186.1	2332.2	2429.6	2538.5	2572.9	2578.6
22.5°	461.3	647.5	1180.5	1335.2	1819.4	2266.3	2389.5	2466.9	2541.4	2552.8	2555.7
25°	415.4	593.1	1177.6	1361.0	1888.1	2315.0	2409.6	2466.9	2509.8	2515.6	2515.6
27.5°	372.4	532.9	1166.2	1366.7	1939.7	2326.5	2401.0	2441.1	2461.1	2472.6	2472.6
30°	335.2	475.6	1137.5	1355.2	1962.6	2315.0	2375.2	2395.2	2415.3	2432.5	2441.1
32.5°	306.6	421.2	1094.5	1332.3	1965.5	2286.4	2329.3	2340.8	2369.5	2409.6	2423.9
35°	280.8	366.7	1045.7	1300.8	1948.3	2240.5	2269.2	2280.6	2337.9	2398.1	2418.2
37.5°	255.0	326.6	982.7	1246.4	1922.5	2186.1	2206.1	2226.2	2315.0	2386.6	2409.6
40°	229.2	292.2	908.2	1186.2	1882.4	2120.2	2137.4	2168.9	2286.4	2369.5	2392.4
42.5°	209.1	263.6	828.0	1123.2	1830.8	2045.7	2071.5	2117.3	2252.0	2340.8	2366.6
45°	192.0	234.9	742.0	1037.1	1764.9	1968.4	2005.6	2068.6	2211.9	2297.8	2320.7
47.5°	174.8	214.9	653.2	948.3	1693.3	1891.0	1939.7	2011.3	2157.4	2240.5	2260.6
50°	160.4	194.8	564.4	853.8	1616.0	1807.9	1865.2	1939.7	2088.7	2166.0	2191.8
52.5°	149.0	177.6	481.3	759.2	1527.1	1722.0	1787.9	1865.2	2005.6	2080.1	2097.3
55°	137.5	163.3	409.7	658.9	1435.5	1630.3	1701.9	1776.4	1913.9	1976.9	1988.4
57.5°	131.8	151.8	349.5	564.4	1338.1	1527.1	1607.4	1676.1	1805.0	1853.8	1865.2
60°	123.2	143.2	303.7	484.2	1232.0	1429.7	1498.5	1567.3	1676.1	1716.2	1724.8
62.5°	114.6	137.5	269.3	406.8	1123.2	1315.1	1383.9	1446.9	1538.6	1567.3	1578.7
65°	108.9	131.8	243.5	349.5	1011.3	1194.8	1263.6	1318.0	1392.5	1421.1	1426.9
67.5°	103.1	126.1	223.5	300.8	899.6	1074.4	1126.0	1177.6	1234.9	1263.6	1266.4
70°	94.5	120.3	206.3	266.4	785.0	936.9	979.8	1034.3	1080.1	1094.5	1103.1
72.5°	88.8	111.7	194.8	240.7	667.5	805.1	845.2	876.7	916.8	931.1	931.1
75°	80.2	100.3	183.4	214.9	547.2	658.9	693.3	724.8	756.4	762.1	753.5
77.5°	71.6	88.8	157.6	180.5	426.9	521.4	550.1	567.3	593.1	598.8	601.6
80°	60.2	77.4	123.2	140.4	309.4	383.9	404.0	418.3	441.2	441.2	446.9
82.5°	45.8	60.2	88.8	100.3	209.1	263.6	280.8	289.4	303.7	303.7	303.7
85°	28.6	37.2	57.3	65.9	126.1	160.4	171.9	174.8	186.2	189.1	189.1
87.5°	14.3	20.1	37.2	40.1	65.9	83.1	83.1	88.8	88.8	86.0	83.1
90°	8.9	15.9	23.0	24.8	39.1	58.1	67.5	60.0	45.0	33.7	33.7
92.5°	35.5	95.9	156.3	171.4	240.9	333.7	380.1	333.1	239.2	168.7	162.1
95°	85.3	195.8	306.4	334.0	593.0	938.4	1111.0	991.5	752.3	572.8	552.5
97.5°	147.5	245.0	342.5	366.8	798.8	1374.6	1662.6	1586.9	1435.7	1322.4	1283.7
100°	195.4	283.8	372.3	394.3	873.6	1512.6	1832.2	1837.7	1848.8	1857.1	1811.0
102.5°	236.3	318.8	401.2	421.8	907.9	1556.1	1880.2	1976.5	2169.1	2313.6	2274.1
105°	305.5	375.4	445.2	462.7	933.4	1561.0	1874.9	2090.8	2522.6	2846.5	2825.3
107.5°	376.6	441.7	506.8	523.1	938.2	1491.6	1768.3	2069.5	2671.8	3123.5	3128.7
110°	424.5	483.3	542.2	556.9	931.0	1430.0	1679.5	2016.2	2689.6	3194.6	3216.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	471.6	527.6	583.7	597.7	931.4	1376.3	1598.7	1943.2	2632.5	3149.3	3183.2
115°	542.6	594.3	646.1	658.9	939.9	1314.6	1501.8	1833.8	2497.7	2995.6	3042.7
117.5°	612.8	659.8	706.7	718.4	957.4	1275.9	1435.2	1734.8	2333.9	2783.3	2835.6
120°	653.7	697.9	742.0	753.1	971.6	1262.9	1408.5	1682.2	2229.7	2640.4	2691.1
122.5°	693.6	738.2	782.8	794.0	992.1	1256.1	1388.1	1634.6	2127.6	2497.4	2547.5
125°	754.9	795.6	836.3	846.4	1019.6	1250.5	1365.9	1575.4	1994.1	2308.2	2354.4
127.5°	804.7	845.7	886.8	897.0	1047.2	1247.2	1347.3	1527.1	1886.7	2156.4	2195.3
130°	831.3	875.5	919.7	930.7	1067.2	1249.1	1340.2	1500.2	1820.3	2060.4	2096.3
132.5°	858.8	903.0	947.2	958.2	1083.4	1250.5	1333.9	1477.2	1763.8	1978.8	2010.9
135°	899.7	939.9	980.2	990.2	1101.3	1249.3	1323.3	1443.3	1683.3	1863.3	1891.0
137.5°	941.4	981.3	1021.2	1031.1	1128.0	1257.0	1321.5	1423.0	1625.9	1778.0	1800.7
140°	976.0	1012.7	1049.4	1058.6	1144.2	1258.3	1315.3	1403.0	1578.2	1709.6	1730.8
142.5°	1002.7	1036.7	1070.6	1079.1	1157.8	1262.8	1315.3	1392.3	1546.2	1661.7	1679.9
145°	1043.5	1073.1	1102.7	1110.2	1175.6	1262.8	1306.4	1369.4	1495.3	1589.8	1603.6
147.5°	1084.4	1113.2	1142.1	1149.2	1201.7	1271.5	1306.4	1356.0	1455.0	1529.3	1540.8
150°	1111.0	1137.1	1163.2	1169.7	1215.2	1276.1	1306.4	1348.3	1431.9	1494.7	1503.9
152.5°	1138.6	1158.3	1178.0	1183.0	1224.1	1279.0	1306.4	1342.2	1413.6	1467.2	1474.1
155°	1179.4	1194.0	1208.6	1212.3	1243.7	1285.5	1306.4	1334.9	1391.7	1434.3	1439.0
157.5°	1209.6	1223.8	1238.1	1241.6	1263.2	1292.0	1306.4	1328.5	1372.7	1405.9	1409.1
160°	1230.0	1241.1	1252.2	1255.0	1272.2	1295.0	1306.4	1325.3	1363.3	1391.7	1393.6
162.5°	1250.5	1258.8	1267.0	1269.1	1281.5	1298.1	1306.4	1322.4	1354.4	1378.4	1380.2
165°	1272.7	1280.2	1287.6	1289.5	1295.2	1302.7	1306.4	1317.9	1340.7	1357.9	1359.8
167.5°	1293.1	1296.6	1300.2	1301.1	1305.9	1312.2	1315.3	1322.8	1337.8	1349.0	1349.8
170°	1306.4	1310.0	1313.6	1314.5	1314.7	1315.1	1315.3	1322.8	1337.8	1349.0	1349.0
172.5°	1313.5	1314.3	1315.1	1315.3	1315.3	1315.3	1315.3	1321.2	1333.1	1342.0	1341.3
175°	1323.3	1323.3	1323.3	1323.3	1320.7	1317.1	1315.3	1319.0	1326.6	1332.2	1332.2
177.5°	1323.3	1323.3	1323.3	1323.3	1321.2	1318.5	1317.1	1320.1	1326.0	1330.4	1329.6
180°	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3	1323.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	891.0	891.0
2.5°	951.2	945.4
5°	1223.5	1229.2
7.5°	1647.5	1644.6
10°	2048.6	2074.4
12.5°	2340.8	2346.5
15°	2518.4	2529.9
17.5°	2587.2	2590.1
20°	2590.1	2584.3
22.5°	2558.5	2552.8
25°	2521.3	2518.4
27.5°	2486.9	2489.8
30°	2472.6	2481.2
32.5°	2472.6	2486.9
35°	2478.3	2492.6
37.5°	2475.5	2492.6
40°	2464.0	2484.1
42.5°	2432.5	2446.8
45°	2383.8	2401.0
47.5°	2320.7	2332.2
50°	2240.5	2252.0
52.5°	2140.3	2143.1
55°	2019.9	2031.4
57.5°	1891.0	1893.9
60°	1747.7	1756.3
62.5°	1595.9	1595.9
65°	1435.5	1441.2
67.5°	1269.3	1283.6
70°	1100.3	1103.1
72.5°	934.0	934.0
75°	762.1	765.0
77.5°	598.8	598.8
80°	444.1	446.9
82.5°	306.6	312.3
85°	192.0	192.0
87.5°	88.8	80.2
90°	33.7	33.7
92.5°	135.2	108.4
95°	471.2	389.9
97.5°	1129.0	974.3
100°	1626.7	1442.3
102.5°	2116.2	1958.3
105°	2740.4	2655.5
107.5°	3149.2	3169.7
110°	3305.1	3393.5

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3319.0	3454.8
115°	3231.0	3419.3
117.5°	3044.3	3253.2
120°	2894.0	3096.9
122.5°	2747.5	2947.7
125°	2538.7	2723.0
127.5°	2350.8	2506.3
130°	2240.0	2383.8
132.5°	2139.6	2268.3
135°	2002.0	2112.8
137.5°	1891.5	1982.3
140°	1815.7	1900.5
142.5°	1753.0	1826.0
145°	1658.8	1714.0
147.5°	1586.5	1632.4
150°	1541.1	1578.2
152.5°	1502.2	1530.2
155°	1457.5	1476.0
157.5°	1422.2	1435.2
160°	1401.1	1408.5
162.5°	1387.2	1394.4
165°	1367.3	1374.8
167.5°	1353.0	1356.2
170°	1349.0	1349.0
172.5°	1338.5	1335.8
175°	1332.2	1332.2
177.5°	1326.5	1323.3
180°	1323.3	1323.3

(END OF REPORT)