

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: P937808

Luminaire Tested: SQ4-FB-100U-125D-B50-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937808
REPORT IS A COMBINATION OF REPORTS P933584 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-B50-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

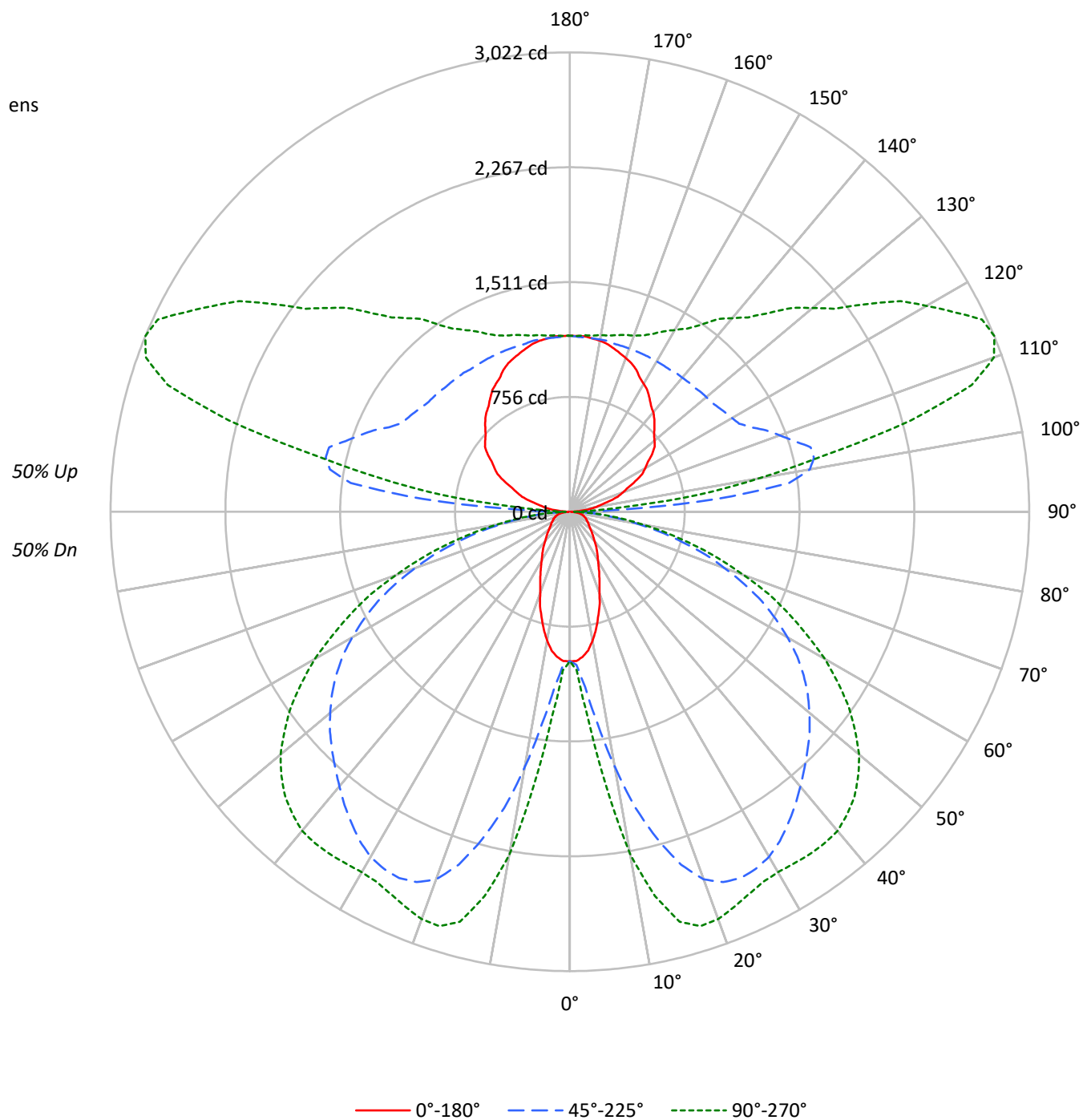
Lumens per Lamp: N/A
Luminaire Lumens: 15115.0 lumens
Efficiency: N/A
Efficacy: 109.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 137.6
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4561	4561	4561
5°	4456	5272	6131
10°	4042	7685	10165
15°	3435	10040	12274
20°	2797	11635	12509
25°	2333	12176	12254
30°	1967	12252	12231
35°	1739	12049	12548
40°	1516	11785	12875
45°	1373	11591	12925
50°	1259	11417	12711
55°	1206	11162	12147
60°	1234	10671	11258
65°	1284	9926	10035
70°	1368	8656	8478
75°	1516	7058	6617
80°	1657	4895	4458
85°	1472	2597	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12925 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	0.8
10°-20°	563.6	3.7
20°-30°	985.9	6.5
30°-40°	1269.1	8.4
40°-50°	1417.6	9.4
50°-60°	1357.7	9.0
60°-70°	1076.0	7.1
70°-80°	632.7	4.2
80°-90°	180.2	1.2
90°-100°	564.3	3.7
100°-110°	1483.6	9.8
110°-120°	1538.4	10.2
120°-130°	1234.0	8.2
130°-140°	968.2	6.4
140°-150°	743.1	4.9
150°-160°	535.2	3.5
160°-170°	327.5	2.2
170°-180°	110.6	0.7
0°-30°	1676.7	11.1
0°-40°	2945.8	19.5
0°-60°	5721.1	37.9
0°-90°	7610.0	50.3
90°-120°	3586.3	23.7
90°-150°	6531.7	43.2
90°-180°	7505.0	49.7
0°-180°	15115.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	958	1027	1157	1309	1356	88
15°	718	1324	2232	2706	2791	200
25°	458	1502	2659	2776	2779	211
35°	310	1435	2504	2646	2750	193
45°	212	1144	2213	2535	2649	164
55°	152	727	1878	2181	2241	138
65°	120	386	1394	1568	1590	119
75°	88	237	765	841	844	93
85°	32	73	190	209	212	34
90°	8	22	59	30	30	9
95°	75	292	972	501	341	83
105°	267	405	1640	2490	2323	283
115°	475	577	1314	2621	2991	469
125°	660	740	1195	2019	2382	586
135°	787	866	1158	1630	1848	609
145°	913	971	1143	1391	1500	572
155°	1032	1061	1143	1255	1291	474
165°	1113	1128	1143	1188	1203	314
175°	1158	1158	1151	1165	1165	110
180°	1158	1158	1158	1158	1158	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1
2.5°	983.1	983.1	989.5	992.7	998.9	1002.1	1008.4	1014.8	1033.8	1036.9	1043.2
5°	957.8	970.5	1011.6	1027.4	1071.7	1131.7	1157.0	1198.1	1283.4	1308.7	1324.5
7.5°	919.9	948.4	1049.5	1074.8	1185.4	1343.6	1409.9	1498.4	1634.3	1700.7	1754.5
10°	859.8	919.9	1100.1	1160.1	1340.4	1580.6	1703.9	1827.2	2032.7	2124.4	2159.1
12.5°	793.4	891.5	1153.9	1236.1	1495.2	1846.1	1994.7	2130.6	2364.6	2487.9	2506.9
15°	717.6	850.4	1204.4	1324.5	1659.6	2067.4	2231.8	2399.4	2617.5	2706.0	2728.1
17.5°	651.2	818.7	1251.8	1378.3	1786.1	2266.6	2434.1	2573.3	2750.3	2810.3	2826.1
20°	569.0	768.2	1283.4	1447.8	1918.9	2412.1	2573.3	2680.7	2800.9	2838.8	2845.1
22.5°	508.9	714.4	1302.5	1473.1	2007.4	2500.5	2636.5	2721.8	2804.0	2816.7	2819.8
25°	458.4	654.4	1299.3	1501.6	2083.3	2554.3	2658.6	2721.8	2769.2	2775.6	2775.6
27.5°	411.0	588.0	1286.6	1507.9	2140.2	2566.9	2649.1	2693.4	2715.5	2728.1	2728.1
30°	369.9	524.7	1255.0	1495.2	2165.5	2554.3	2620.6	2642.8	2664.9	2683.8	2693.4
32.5°	338.3	464.7	1207.6	1469.9	2168.6	2522.6	2570.1	2582.7	2614.4	2658.6	2674.4
35°	309.8	404.6	1153.9	1435.2	2149.6	2472.1	2503.7	2516.3	2579.5	2645.9	2668.1
37.5°	281.3	360.3	1084.3	1375.1	2121.2	2412.1	2434.1	2456.2	2554.3	2633.3	2658.6
40°	252.9	322.4	1002.1	1308.7	2076.9	2339.3	2358.3	2393.0	2522.6	2614.4	2639.6
42.5°	230.8	290.8	913.6	1239.2	2020.1	2257.1	2285.6	2336.1	2484.7	2582.7	2611.2
45°	211.8	259.2	818.7	1144.3	1947.3	2171.7	2212.8	2282.4	2440.4	2535.3	2560.6
47.5°	192.9	237.0	720.8	1046.4	1868.3	2086.4	2140.2	2219.2	2380.4	2472.1	2494.2
50°	177.0	215.0	622.8	942.0	1782.9	1994.7	2058.0	2140.2	2304.6	2389.9	2418.3
52.5°	164.4	196.0	531.1	837.7	1684.9	1899.8	1972.6	2058.0	2212.8	2295.0	2314.0
55°	151.8	180.2	452.1	727.1	1583.8	1798.7	1877.8	1960.0	2111.7	2181.3	2193.9
57.5°	145.4	167.6	385.6	622.8	1476.3	1684.9	1773.5	1849.3	1991.6	2045.3	2058.0
60°	135.9	158.0	335.1	534.2	1359.3	1577.4	1653.3	1729.2	1849.3	1893.6	1903.0
62.5°	126.5	151.8	297.2	448.9	1239.2	1451.0	1526.9	1596.4	1697.5	1729.2	1741.8
65°	120.1	145.4	268.7	385.6	1115.9	1318.2	1394.1	1454.1	1536.3	1568.0	1574.3
67.5°	113.8	139.1	246.6	331.9	992.7	1185.4	1242.3	1299.3	1362.5	1394.1	1397.3
70°	104.3	132.8	227.6	294.0	866.2	1033.8	1081.1	1141.2	1191.8	1207.6	1217.1
72.5°	98.0	123.3	215.0	265.5	736.6	888.3	932.6	967.3	1011.6	1027.4	1027.4
75°	88.5	110.7	202.3	237.0	603.8	727.1	765.0	799.8	834.5	840.9	831.4
77.5°	79.0	98.0	173.9	199.1	471.0	575.3	606.9	626.0	654.4	660.7	663.9
80°	66.4	85.4	135.9	154.9	341.4	423.6	445.7	461.6	486.8	486.8	493.2
82.5°	50.6	66.4	98.0	110.7	230.8	290.8	309.8	319.2	335.1	335.1	335.1
85°	31.6	41.1	63.2	72.7	139.1	177.0	189.7	192.9	205.5	208.7	208.7
87.5°	15.8	22.1	41.1	44.3	72.7	91.7	91.7	98.0	98.0	94.8	91.7
90°	7.8	14.0	20.2	21.8	34.2	50.7	59.0	52.5	39.3	29.5	29.5
92.5°	31.1	84.0	136.8	150.0	210.8	292.0	332.5	291.4	209.3	147.7	141.8
95°	74.6	171.3	268.0	292.2	518.7	820.9	972.0	867.4	658.1	501.2	483.4
97.5°	129.0	214.3	299.6	320.9	698.8	1202.6	1454.5	1388.4	1256.1	1156.9	1123.1
100°	170.9	248.3	325.7	345.0	764.3	1323.4	1602.9	1607.8	1617.4	1624.7	1584.3
102.5°	206.7	278.8	351.0	369.0	794.3	1361.3	1644.9	1729.1	1897.7	2024.1	1989.5
105°	267.3	328.4	389.5	404.8	816.6	1365.7	1640.2	1829.1	2206.9	2490.2	2471.6
107.5°	329.4	386.4	443.4	457.7	820.8	1304.9	1547.0	1810.5	2337.4	2732.6	2737.1
110°	371.4	422.8	474.3	487.2	814.5	1251.0	1469.3	1763.9	2352.9	2794.8	2814.1

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	412.5	461.6	510.7	522.9	814.8	1204.0	1398.6	1700.1	2303.0	2755.2	2784.9
115°	474.8	520.0	565.3	576.6	822.3	1150.0	1313.9	1604.3	2185.2	2620.8	2662.0
117.5°	536.1	577.2	618.3	628.6	837.6	1116.2	1255.6	1517.7	2041.9	2435.0	2480.7
120°	571.9	610.6	649.2	658.8	850.0	1104.9	1232.3	1471.8	1950.8	2310.0	2354.3
122.5°	606.8	645.9	684.9	694.6	867.9	1098.9	1214.4	1430.0	1861.4	2184.9	2228.7
125°	660.4	696.0	731.6	740.5	892.0	1094.0	1195.0	1378.2	1744.6	2019.4	2059.8
127.5°	704.0	739.8	775.8	784.7	916.1	1091.2	1178.7	1336.0	1650.6	1886.5	1920.5
130°	727.2	765.9	804.5	814.3	933.6	1092.9	1172.5	1312.5	1592.6	1802.6	1834.0
132.5°	751.3	790.0	828.6	838.4	947.9	1094.0	1167.0	1292.4	1543.1	1731.1	1759.2
135°	787.1	822.3	857.6	866.4	963.5	1093.0	1157.7	1262.7	1472.6	1630.1	1654.4
137.5°	823.6	858.4	893.4	902.1	986.8	1099.7	1156.1	1244.8	1422.4	1555.5	1575.4
140°	853.9	886.0	918.1	926.2	1001.0	1100.8	1150.7	1227.4	1380.7	1495.7	1514.3
142.5°	877.2	906.9	936.6	944.0	1012.9	1104.7	1150.7	1218.0	1352.7	1453.8	1469.7
145°	913.0	938.9	964.8	971.3	1028.5	1104.8	1142.9	1198.0	1308.2	1390.8	1402.9
147.5°	948.7	973.9	999.1	1005.5	1051.3	1112.4	1142.9	1186.3	1272.9	1338.0	1347.9
150°	972.0	994.8	1017.6	1023.3	1063.2	1116.3	1142.9	1179.5	1252.8	1307.7	1315.8
152.5°	996.1	1013.4	1030.7	1035.0	1070.9	1118.9	1142.9	1174.2	1236.7	1283.6	1289.8
155°	1031.8	1044.6	1057.4	1060.6	1088.0	1124.6	1142.9	1167.8	1217.6	1254.8	1258.8
157.5°	1058.2	1070.6	1083.2	1086.2	1105.1	1130.3	1142.9	1162.3	1200.9	1230.0	1232.8
160°	1076.2	1085.9	1095.5	1097.9	1113.0	1132.9	1142.9	1159.6	1192.7	1217.6	1219.2
162.5°	1094.0	1101.3	1108.6	1110.3	1121.2	1135.7	1142.9	1156.9	1184.9	1205.9	1207.5
165°	1113.4	1120.0	1126.5	1128.2	1133.1	1139.7	1142.9	1152.9	1173.0	1188.0	1189.7
167.5°	1131.3	1134.3	1137.5	1138.3	1142.4	1147.9	1150.7	1157.2	1170.4	1180.2	1180.9
170°	1142.9	1146.0	1149.2	1149.9	1150.2	1150.5	1150.7	1157.2	1170.4	1180.2	1180.2
172.5°	1149.2	1149.8	1150.5	1150.7	1150.7	1150.7	1150.7	1155.9	1166.3	1174.0	1173.5
175°	1157.7	1157.7	1157.7	1157.7	1155.4	1152.3	1150.7	1154.0	1160.5	1165.4	1165.4
177.5°	1157.7	1157.7	1157.7	1157.7	1155.9	1153.5	1152.3	1154.9	1160.0	1164.0	1163.3
180°	1157.7	1157.7	1157.7	1157.7	1157.7	1157.7	1157.7	1157.7	1157.7	1157.7	1157.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	983.1	983.1
2.5°	1049.5	1043.2
5°	1349.8	1356.2
7.5°	1817.7	1814.6
10°	2260.3	2288.8
12.5°	2582.7	2589.0
15°	2778.7	2791.4
17.5°	2854.6	2857.8
20°	2857.8	2851.4
22.5°	2823.0	2816.7
25°	2781.9	2778.7
27.5°	2743.9	2747.1
30°	2728.1	2737.6
32.5°	2728.1	2743.9
35°	2734.5	2750.3
37.5°	2731.3	2750.3
40°	2718.7	2740.8
42.5°	2683.8	2699.7
45°	2630.1	2649.1
47.5°	2560.6	2573.3
50°	2472.1	2484.7
52.5°	2361.4	2364.6
55°	2228.6	2241.3
57.5°	2086.4	2089.5
60°	1928.3	1937.9
62.5°	1760.8	1760.8
65°	1583.8	1590.1
67.5°	1400.4	1416.2
70°	1213.9	1217.1
72.5°	1030.6	1030.6
75°	840.9	844.1
77.5°	660.7	660.7
80°	490.0	493.2
82.5°	338.3	344.6
85°	211.8	211.8
87.5°	98.0	88.5
90°	29.5	29.5
92.5°	118.3	94.8
95°	412.3	341.1
97.5°	987.7	852.4
100°	1423.1	1261.8
102.5°	1851.4	1713.2
105°	2397.4	2323.1
107.5°	2755.1	2773.0
110°	2891.5	2968.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2903.6	3022.4
115°	2826.7	2991.4
117.5°	2663.4	2846.1
120°	2531.9	2709.3
122.5°	2403.7	2578.8
125°	2221.0	2382.3
127.5°	2056.6	2192.7
130°	1959.7	2085.4
132.5°	1871.8	1984.4
135°	1751.4	1848.5
137.5°	1654.8	1734.3
140°	1588.5	1662.7
142.5°	1533.6	1597.5
145°	1451.2	1499.5
147.5°	1388.0	1428.1
150°	1348.2	1380.7
152.5°	1314.2	1338.7
155°	1275.1	1291.3
157.5°	1244.2	1255.6
160°	1225.8	1232.3
162.5°	1213.6	1219.9
165°	1196.3	1202.8
167.5°	1183.7	1186.5
170°	1180.2	1180.2
172.5°	1171.0	1168.6
175°	1165.4	1165.4
177.5°	1160.5	1157.7
180°	1157.7	1157.7

(END OF REPORT)