

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: P937408

Luminaire Tested: SQ4-FB-075U-125D-B50-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937408
REPORT IS A COMBINATION OF REPORTS P933520 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-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

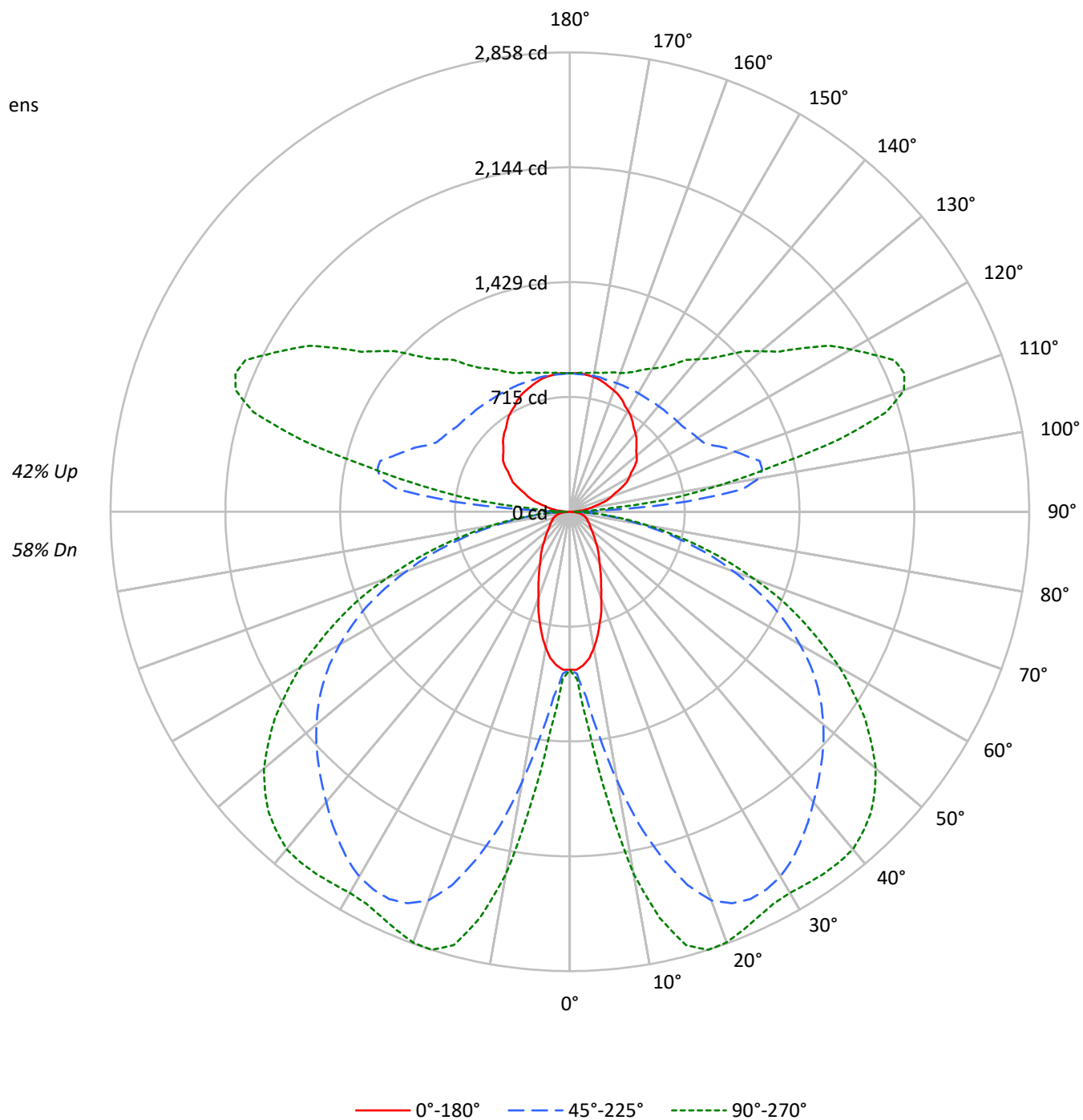
Lumens per Lamp: N/A
Luminaire Lumens: 13202.1 lumens
Efficiency: N/A
Efficacy: 106.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 124
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: P937408

CATALOG NUMBER: SQ4-FB-075U-125D-B50-1D-UNV-W2A-W-8

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	109	109	109	109	102	102	102	102	88	88	88	75	75	75	63	63	63
1	99	94	90	86	92	88	84	81	76	73	71	65	63	61	55	53	52
2	89	82	75	69	83	76	70	65	66	61	57	56	53	50	47	45	43
3	81	71	63	57	75	66	59	54	57	52	47	49	45	41	41	38	36
4	74	62	54	48	68	58	51	45	50	45	40	43	39	35	36	33	30
5	68	55	47	40	63	52	44	38	45	39	34	38	34	30	33	29	26
6	62	49	41	35	57	46	38	33	40	34	29	34	29	26	29	25	22
7	57	44	36	30	53	41	34	28	36	30	25	31	26	22	26	22	19
8	53	40	32	26	49	37	30	25	33	27	22	28	23	20	24	20	17
9	49	36	28	23	46	34	27	22	30	24	20	26	21	18	22	18	15
10	46	33	26	21	43	31	24	20	27	22	18	24	19	16	20	16	14

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

TEST NUMBER: P937408

CATALOG NUMBER: SQ4-FB-075U-125D-B50-1D-UNV-W2A-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	1.0
10°-20°	563.6	4.3
20°-30°	985.9	7.5
30°-40°	1269.1	9.6
40°-50°	1417.6	10.7
50°-60°	1357.7	10.3
60°-70°	1076.0	8.2
70°-80°	632.7	4.8
80°-90°	179.1	1.4
90°-100°	420.6	3.2
100°-110°	1105.7	8.4
110°-120°	1146.5	8.7
120°-130°	919.6	7.0
130°-140°	721.6	5.5
140°-150°	553.9	4.2
150°-160°	398.9	3.0
160°-170°	244.0	1.8
170°-180°	82.5	0.6
0°-30°	1676.7	12.7
0°-40°	2945.8	22.3
0°-60°	5721.1	43.3
0°-90°	7608.9	57.6
90°-120°	2672.8	20.2
90°-150°	4867.9	36.9
90°-180°	5593.0	42.4
0°-180°	13202.1	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°	6	16	44	22	22	7
95°	56	218	724	374	254	62
105°	199	302	1222	1856	1731	211
115°	354	430	979	1953	2229	349
125°	492	552	891	1505	1775	437
135°	587	646	863	1215	1378	454
145°	680	724	852	1037	1118	426
155°	769	790	852	935	962	353
165°	830	841	852	885	896	234
175°	863	863	858	869	869	82
180°	863	863	863	863	863	

TEST NUMBER: P937408

CATALOG NUMBER: SQ4-FB-075U-125D-B50-1D-UNV-W2A-W-8

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°	5.8	10.5	15.1	16.3	25.5	37.8	44.0	39.1	29.3	22.0	22.0
92.5°	23.2	62.6	102.0	111.8	157.2	217.6	247.9	217.2	156.0	110.0	105.6
95°	55.6	127.7	199.7	217.7	386.6	611.8	724.4	646.4	490.4	373.5	360.2
97.5°	96.1	159.7	223.3	239.2	520.8	896.3	1084.0	1034.7	936.1	862.3	837.1
100°	127.4	185.0	242.7	257.1	569.6	986.3	1194.6	1198.2	1205.4	1210.8	1180.8
102.5°	154.0	207.8	261.6	275.1	592.0	1014.6	1225.9	1288.6	1414.3	1508.5	1482.7
105°	199.2	244.8	290.3	301.7	608.6	1017.8	1222.4	1363.2	1644.7	1855.9	1842.0
107.5°	245.5	288.0	330.4	341.1	611.7	972.5	1152.9	1349.3	1742.0	2036.6	2039.9
110°	276.8	315.1	353.4	363.0	607.0	932.3	1095.0	1314.5	1753.6	2082.9	2097.3

TEST NUMBER: P937408

CATALOG NUMBER: SQ4-FB-075U-125D-B50-1D-UNV-W2A-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	307.5	344.0	380.5	389.7	607.2	897.3	1042.3	1267.1	1716.4	2053.4	2075.5
115°	353.8	387.5	421.2	429.6	612.8	857.0	979.2	1195.6	1628.5	1953.2	1983.9
117.5°	399.6	430.2	460.8	468.5	624.3	831.9	935.8	1131.1	1521.8	1814.8	1848.8
120°	426.2	455.0	483.8	491.0	633.4	823.4	918.4	1096.9	1453.9	1721.5	1754.6
122.5°	452.2	481.4	510.4	517.7	646.8	818.9	905.0	1065.8	1387.3	1628.3	1660.9
125°	492.2	518.7	545.2	551.8	664.7	815.3	890.6	1027.1	1300.1	1505.0	1535.0
127.5°	524.6	551.4	578.1	584.9	682.8	813.2	878.4	995.6	1230.1	1406.0	1431.3
130°	542.0	570.8	599.6	606.8	695.8	814.5	873.9	978.2	1186.9	1343.5	1366.9
132.5°	559.9	588.8	617.7	624.8	706.5	815.3	869.7	963.1	1150.0	1290.1	1311.1
135°	586.6	612.8	639.1	645.7	718.1	814.5	862.8	941.1	1097.5	1214.9	1233.0
137.5°	613.8	639.8	665.8	672.3	735.4	819.6	861.6	927.7	1060.1	1159.3	1174.0
140°	636.4	660.3	684.2	690.2	746.0	820.4	857.6	914.8	1029.0	1114.7	1128.6
142.5°	653.8	675.9	698.1	703.6	755.0	823.4	857.6	907.8	1008.2	1083.4	1095.3
145°	680.4	699.8	719.0	723.8	766.5	823.4	851.8	892.9	975.0	1036.6	1045.5
147.5°	707.0	725.8	744.7	749.3	783.5	829.0	851.8	884.1	948.7	997.1	1004.6
150°	724.4	741.4	758.4	762.6	792.3	832.0	851.8	879.1	933.6	974.5	980.6
152.5°	742.3	755.2	768.1	771.3	798.1	833.9	851.8	875.1	921.7	956.6	961.2
155°	769.0	778.5	788.0	790.4	810.9	838.2	851.8	870.3	907.4	935.2	938.2
157.5°	788.7	797.9	807.2	809.5	823.6	842.4	851.8	866.2	895.1	916.6	918.8
160°	802.0	809.2	816.4	818.2	829.4	844.3	851.8	864.1	888.9	907.4	908.6
162.5°	815.3	820.7	826.1	827.5	835.6	846.4	851.8	862.3	883.1	898.7	899.8
165°	829.8	834.6	839.6	840.8	844.4	849.4	851.8	859.3	874.2	885.4	886.6
167.5°	843.1	845.5	847.8	848.4	851.4	855.5	857.6	862.5	872.3	879.6	880.1
170°	851.8	854.1	856.5	857.0	857.2	857.5	857.6	862.5	872.3	879.6	879.6
172.5°	856.5	856.9	857.5	857.6	857.6	857.6	857.6	861.4	869.2	875.0	874.5
175°	862.8	862.8	862.8	862.8	861.1	858.7	857.6	860.0	865.0	868.6	868.6
177.5°	862.8	862.8	862.8	862.8	861.4	859.7	858.7	860.7	864.5	867.4	866.9
180°	862.8	862.8	862.8	862.8	862.8	862.8	862.8	862.8	862.8	862.8	862.8

TEST NUMBER: P937408

CATALOG NUMBER: SQ4-FB-075U-125D-B50-1D-UNV-W2A-W-8

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°	22.0	22.0
92.5°	88.2	70.6
95°	307.3	254.2
97.5°	736.1	635.2
100°	1060.7	940.4
102.5°	1379.8	1276.9
105°	1786.6	1731.4
107.5°	2053.3	2066.7
110°	2155.0	2212.6

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CATALOG NUMBER: SQ4-FB-075U-125D-B50-1D-UNV-W2A-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2164.0	2252.5
115°	2106.6	2229.4
117.5°	1984.9	2121.1
120°	1887.0	2019.2
122.5°	1791.4	1921.9
125°	1655.2	1775.4
127.5°	1532.7	1634.1
130°	1460.5	1554.2
132.5°	1395.0	1478.9
135°	1305.3	1377.6
137.5°	1233.3	1292.5
140°	1183.9	1239.2
142.5°	1142.9	1190.6
145°	1081.6	1117.6
147.5°	1034.4	1064.3
150°	1004.8	1029.0
152.5°	979.4	997.7
155°	950.3	962.4
157.5°	927.3	935.8
160°	913.5	918.4
162.5°	904.5	909.2
165°	891.5	896.4
167.5°	882.2	884.2
170°	879.6	879.6
172.5°	872.7	871.0
175°	868.6	868.6
177.5°	864.9	862.8
180°	862.8	862.8

(END OF REPORT)