

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: P938007

Luminaire Tested: SQ4-FB-125U-075D-B50-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938007
REPORT IS A COMBINATION OF REPORTS P933606 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-075D-B50-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

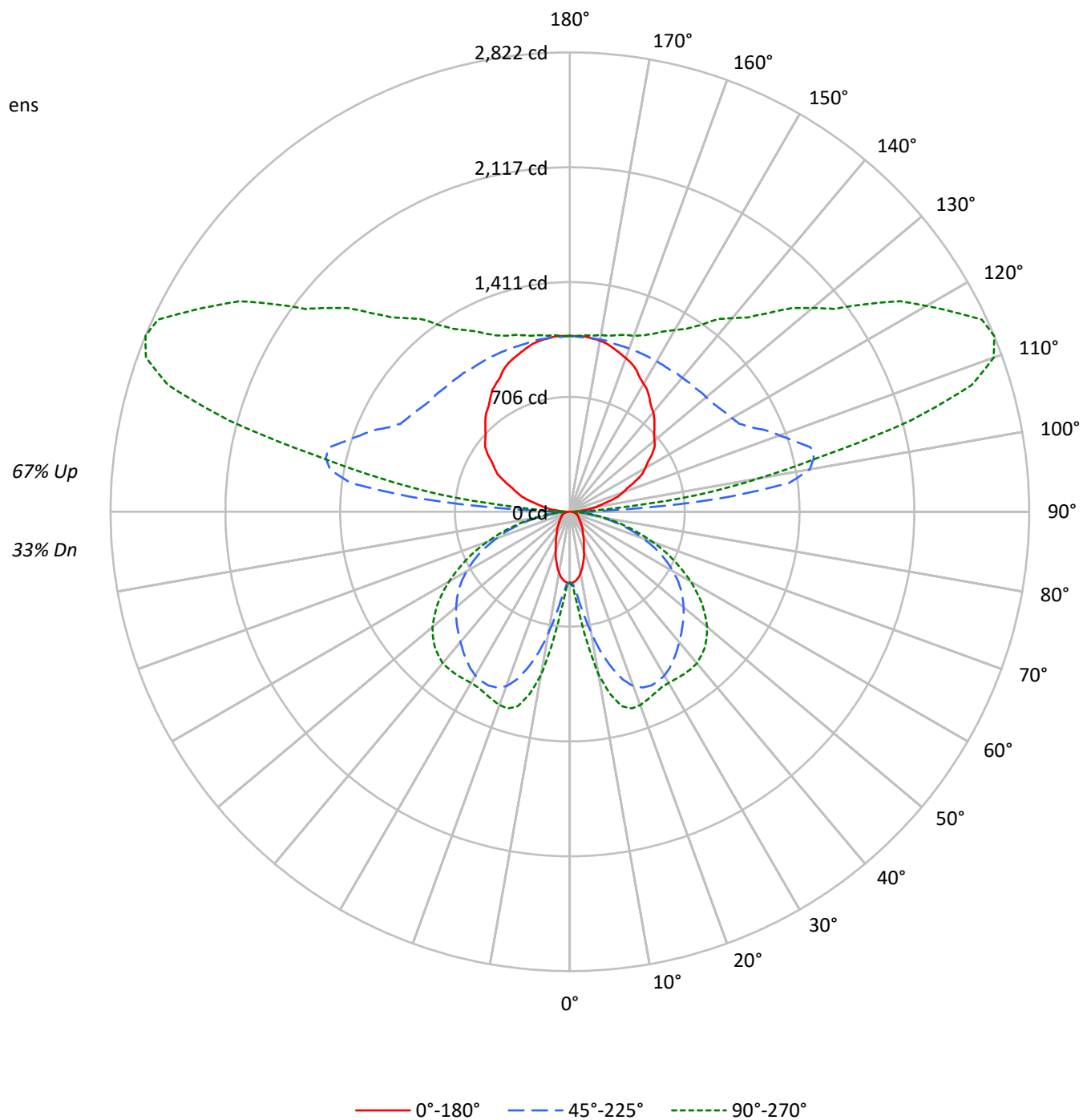
Lumens per Lamp: N/A
Luminaire Lumens: 10381.3 lumens
Efficiency: N/A
Efficacy: 124.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 83.4
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: P938007

CATALOG NUMBER: SQ4-FB-125U-075D-B50-1D-UNV-W2A-W-6

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	50	30	10
RCR																				
0	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33		
1	94	89	85	82	84	80	77	74	64	62	60	49	47	46	35	34	33	27		
2	85	77	71	66	76	70	65	60	55	52	49	42	40	38	30	29	27	22		
3	77	68	60	54	69	61	55	50	49	44	40	37	34	31	26	24	23	18		
4	70	59	52	46	63	54	47	42	43	38	34	33	29	26	23	21	19	15		
5	64	53	45	39	57	48	41	35	38	33	29	29	25	23	21	18	16	13		
6	59	47	39	33	53	42	35	30	34	29	25	26	22	19	19	16	14	11		
7	54	42	34	29	49	38	31	26	31	25	22	23	20	17	17	14	12	10		
8	50	38	30	25	45	34	28	23	28	23	19	21	18	15	15	13	11	8		
9	47	34	27	22	42	31	25	20	25	20	17	19	16	13	14	12	10	7		
10	43	31	24	19	39	28	22	18	23	18	15	18	14	12	13	10	9	7		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2695	2695	2695
5°	2632	3115	3623
10°	2387	4539	6006
15°	2028	5929	7253
20°	1650	6869	7392
25°	1376	7186	7242
30°	1160	7230	7228
35°	1025	7108	7415
40°	893	6949	7609
45°	808	6833	7638
50°	741	6728	7512
55°	708	6575	7178
60°	724	6283	6652
65°	752	5841	5930
70°	799	5090	5010
75°	882	4147	3910
80°	957	2872	2635
85°	835	1522	1349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7638 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	0.5
10°-20°	249.8	2.4
20°-30°	437.0	4.2
30°-40°	562.5	5.4
40°-50°	628.3	6.1
50°-60°	601.7	5.8
60°-70°	476.9	4.6
70°-80°	280.4	2.7
80°-90°	82.0	0.8
90°-100°	526.8	5.1
100°-110°	1385.1	13.3
110°-120°	1436.2	13.8
120°-130°	1152.0	11.1
130°-140°	903.9	8.7
140°-150°	693.8	6.7
150°-160°	499.6	4.8
160°-170°	305.7	2.9
170°-180°	103.3	1.0
0°-30°	743.1	7.2
0°-40°	1305.6	12.6
0°-60°	2535.6	24.4
0°-90°	3374.9	32.5
90°-120°	3348.1	32.3
90°-150°	6097.8	58.7
90°-180°	7006.0	67.5
0°-180°	10381.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	436	436	436	436	436	
5°	424	455	513	580	601	39
15°	318	587	989	1199	1237	89
25°	203	666	1178	1230	1232	94
35°	137	636	1110	1173	1219	86
45°	94	507	981	1124	1174	73
55°	67	322	832	967	993	61
65°	53	171	618	695	705	53
75°	39	105	339	373	374	41
85°	14	32	84	92	94	15
90°	7	20	55	28	28	7
95°	70	273	908	468	318	77
105°	250	378	1531	2325	2169	265
115°	443	538	1227	2447	2793	438
125°	616	691	1116	1885	2224	547
135°	735	809	1081	1522	1726	569
145°	852	907	1067	1298	1400	534
155°	963	990	1067	1172	1206	443
165°	1039	1053	1067	1109	1123	293
175°	1081	1081	1074	1088	1088	103
180°	1081	1081	1081	1081	1081	

TEST NUMBER: P938007

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7
2.5°	435.7	435.7	438.5	439.9	442.7	444.1	446.9	449.7	458.1	459.5	462.3
5°	424.5	430.1	448.3	455.3	474.9	501.6	512.8	531.0	568.8	580.0	587.0
7.5°	407.7	420.3	465.1	476.3	525.4	595.4	624.8	664.1	724.3	753.7	777.6
10°	381.1	407.7	487.5	514.2	594.0	700.5	755.1	809.8	900.8	941.5	956.9
12.5°	351.7	395.1	511.4	547.8	662.7	818.2	884.0	944.3	1047.9	1102.7	1111.1
15°	318.0	376.9	533.8	587.0	735.5	916.3	989.1	1063.5	1160.1	1199.3	1209.2
17.5°	288.6	362.9	554.8	610.8	791.6	1004.5	1078.9	1140.5	1219.0	1245.6	1252.6
20°	252.2	340.4	568.8	641.7	850.4	1069.1	1140.5	1188.1	1241.4	1258.2	1261.0
22.5°	225.6	316.6	577.2	652.9	889.6	1108.3	1168.5	1206.4	1242.8	1248.4	1249.8
25°	203.1	290.0	575.8	665.5	923.3	1132.1	1178.3	1206.4	1227.4	1230.2	1230.2
27.5°	182.1	260.6	570.2	668.3	948.5	1137.7	1174.1	1193.7	1203.6	1209.2	1209.2
30°	163.9	232.6	556.2	662.7	959.7	1132.1	1161.5	1171.3	1181.1	1189.5	1193.7
32.5°	149.9	205.9	535.2	651.5	961.1	1118.1	1139.1	1144.7	1158.7	1178.3	1185.3
35°	137.3	179.3	511.4	636.1	952.7	1095.7	1109.7	1115.3	1143.3	1172.7	1182.5
37.5°	124.7	159.7	480.5	609.4	940.1	1069.1	1078.9	1088.7	1132.1	1167.1	1178.3
40°	112.1	142.9	444.1	580.0	920.5	1036.7	1045.1	1060.6	1118.1	1158.7	1169.9
42.5°	102.3	128.9	404.9	549.2	895.2	1000.3	1012.9	1035.3	1101.3	1144.7	1157.3
45°	93.9	114.9	362.9	507.2	863.0	962.5	980.7	1011.5	1081.7	1123.7	1134.9
47.5°	85.5	105.1	319.4	463.7	828.0	924.7	948.5	983.5	1055.0	1095.7	1105.5
50°	78.5	95.3	276.0	417.5	790.2	884.0	912.1	948.5	1021.3	1059.2	1071.9
52.5°	72.9	86.9	235.4	371.3	746.7	842.0	874.2	912.1	980.7	1017.1	1025.5
55°	67.2	79.9	200.3	322.2	701.9	797.2	832.2	868.6	935.9	966.7	972.3
57.5°	64.4	74.3	170.9	276.0	654.3	746.7	786.0	819.6	882.6	906.4	912.1
60°	60.2	70.0	148.5	236.8	602.4	699.1	732.7	766.3	819.6	839.2	843.4
62.5°	56.0	67.2	131.7	198.9	549.2	643.1	676.7	707.5	752.3	766.3	772.0
65°	53.2	64.4	119.1	170.9	494.6	584.2	617.8	644.5	680.9	694.9	697.7
67.5°	50.4	61.6	109.3	147.1	439.9	525.4	550.6	575.8	603.8	617.8	619.2
70°	46.2	58.8	100.9	130.3	383.9	458.1	479.1	505.8	528.2	535.2	539.4
72.5°	43.4	54.6	95.3	117.7	326.4	393.7	413.3	428.7	448.3	455.3	455.3
75°	39.2	49.0	89.7	105.1	267.6	322.2	339.0	354.5	369.9	372.7	368.5
77.5°	35.0	43.4	77.1	88.3	208.7	255.0	269.0	277.4	290.0	292.8	294.2
80°	29.4	37.8	60.2	68.6	151.3	187.7	197.5	204.5	215.8	215.8	218.6
82.5°	22.4	29.4	43.4	49.0	102.3	128.9	137.3	141.5	148.5	148.5	148.5
85°	14.0	18.2	28.0	32.2	61.6	78.5	84.1	85.5	91.1	92.5	92.5
87.5°	7.0	9.8	18.2	19.6	32.2	40.6	40.6	43.4	43.4	42.0	40.6
90°	7.3	13.1	18.9	20.3	31.8	47.4	55.1	48.9	36.7	27.6	27.6
92.5°	29.0	78.4	127.7	140.0	196.8	272.5	310.5	272.1	195.4	137.9	132.3
95°	69.7	159.9	250.1	272.7	484.3	766.4	907.5	809.8	614.4	467.8	451.2
97.5°	120.4	200.0	279.6	299.5	652.3	1122.8	1357.9	1296.2	1172.7	1080.1	1048.5
100°	159.6	231.8	304.0	322.0	713.5	1235.5	1496.5	1500.9	1510.0	1516.7	1479.1
102.5°	193.0	260.3	327.7	344.6	741.6	1270.9	1535.6	1614.2	1771.6	1889.6	1857.4
105°	249.6	306.6	363.6	377.9	762.3	1275.0	1531.3	1707.6	2060.3	2324.8	2307.4
107.5°	307.6	360.7	413.9	427.2	766.3	1218.2	1444.2	1690.3	2182.2	2551.1	2555.3
110°	346.7	394.7	442.7	454.8	760.4	1167.9	1371.7	1646.6	2196.7	2609.2	2627.2

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	385.2	430.9	476.7	488.2	760.6	1124.0	1305.6	1587.1	2150.0	2572.1	2599.9
115°	443.2	485.4	527.7	538.3	767.7	1073.6	1226.6	1497.8	2040.0	2446.7	2485.2
117.5°	500.5	538.9	577.2	586.8	781.9	1042.1	1172.2	1416.9	1906.3	2273.4	2315.9
120°	533.9	570.0	606.1	615.1	793.5	1031.4	1150.4	1374.0	1821.1	2156.5	2198.0
122.5°	566.6	603.0	639.4	648.5	810.2	1025.9	1133.8	1335.2	1737.8	2039.8	2080.6
125°	616.5	649.8	682.9	691.3	832.8	1021.3	1115.7	1286.7	1628.7	1885.3	1922.9
127.5°	657.2	690.7	724.2	732.6	855.3	1018.7	1100.4	1247.3	1541.0	1761.2	1793.0
130°	678.9	715.1	751.1	760.2	871.6	1020.2	1094.6	1225.3	1486.7	1682.9	1712.2
132.5°	701.4	737.6	773.6	782.7	885.0	1021.3	1089.5	1206.5	1440.6	1616.1	1642.3
135°	734.8	767.7	800.5	808.8	899.4	1020.4	1080.8	1178.8	1374.8	1521.9	1544.5
137.5°	768.9	801.5	834.1	842.2	921.2	1026.7	1079.3	1162.2	1327.9	1452.2	1470.7
140°	797.2	827.2	857.1	864.6	934.5	1027.7	1074.3	1145.8	1289.0	1396.3	1413.7
142.5°	818.9	846.7	874.4	881.3	945.7	1031.4	1074.3	1137.1	1262.9	1357.2	1372.1
145°	852.3	876.5	900.7	906.7	960.2	1031.4	1067.0	1118.5	1221.3	1298.4	1309.7
147.5°	885.7	909.2	932.8	938.7	981.4	1038.5	1067.0	1107.4	1188.4	1249.1	1258.5
150°	907.5	928.8	950.0	955.3	992.6	1042.2	1067.0	1101.2	1169.6	1220.8	1228.4
152.5°	929.9	946.0	962.2	966.2	999.8	1044.6	1067.0	1096.1	1154.5	1198.3	1204.0
155°	963.3	975.3	987.1	990.1	1015.7	1049.9	1067.0	1090.3	1136.7	1171.5	1175.3
157.5°	988.0	999.6	1011.1	1014.0	1031.7	1055.2	1067.0	1085.0	1121.2	1148.3	1150.9
160°	1004.6	1013.7	1022.7	1025.0	1039.0	1057.7	1067.0	1082.5	1113.4	1136.7	1138.2
162.5°	1021.3	1028.1	1034.9	1036.6	1046.7	1060.3	1067.0	1080.1	1106.1	1125.8	1127.2
165°	1039.4	1045.6	1051.8	1053.3	1057.8	1063.9	1067.0	1076.3	1095.1	1109.1	1110.6
167.5°	1056.2	1059.1	1062.0	1062.7	1066.5	1071.7	1074.3	1080.5	1092.7	1101.8	1102.5
170°	1067.0	1069.9	1072.8	1073.5	1073.8	1074.1	1074.3	1080.5	1092.7	1101.8	1101.8
172.5°	1072.8	1073.4	1074.1	1074.3	1074.3	1074.3	1074.3	1079.1	1088.8	1096.0	1095.5
175°	1080.8	1080.8	1080.8	1080.8	1078.7	1075.8	1074.3	1077.4	1083.5	1088.1	1088.1
177.5°	1080.8	1080.8	1080.8	1080.8	1079.1	1076.8	1075.7	1078.1	1083.0	1086.6	1086.0
180°	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	435.7	435.7
2.5°	465.1	462.3
5°	598.2	601.0
7.5°	805.6	804.2
10°	1001.7	1014.3
12.5°	1144.7	1147.5
15°	1231.6	1237.2
17.5°	1265.2	1266.6
20°	1266.6	1263.8
22.5°	1251.2	1248.4
25°	1233.0	1231.6
27.5°	1216.2	1217.6
30°	1209.2	1213.4
32.5°	1209.2	1216.2
35°	1212.0	1219.0
37.5°	1210.6	1219.0
40°	1205.0	1214.8
42.5°	1189.5	1196.5
45°	1165.7	1174.1
47.5°	1134.9	1140.5
50°	1095.7	1101.3
52.5°	1046.5	1047.9
55°	987.7	993.3
57.5°	924.7	926.1
60°	854.6	858.8
62.5°	780.4	780.4
65°	701.9	704.7
67.5°	620.6	627.6
70°	538.0	539.4
72.5°	456.7	456.7
75°	372.7	374.1
77.5°	292.8	292.8
80°	217.2	218.6
82.5°	149.9	152.7
85°	93.9	93.9
87.5°	43.4	39.2
90°	27.6	27.6
92.5°	110.4	88.4
95°	384.8	318.4
97.5°	922.1	795.8
100°	1328.6	1178.1
102.5°	1728.4	1599.5
105°	2238.1	2168.8
107.5°	2572.0	2588.9
110°	2699.4	2771.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2710.7	2821.7
115°	2638.9	2792.7
117.5°	2486.5	2657.0
120°	2363.7	2529.4
122.5°	2244.0	2407.5
125°	2073.5	2224.0
127.5°	1920.0	2047.0
130°	1829.6	1946.9
132.5°	1747.5	1852.6
135°	1635.1	1725.7
137.5°	1544.8	1619.0
140°	1483.0	1552.3
142.5°	1431.7	1491.4
145°	1354.9	1400.0
147.5°	1295.9	1333.3
150°	1258.8	1289.0
152.5°	1226.9	1249.8
155°	1190.5	1205.6
157.5°	1161.5	1172.2
160°	1144.3	1150.4
162.5°	1133.0	1138.8
165°	1116.8	1122.9
167.5°	1105.0	1107.6
170°	1101.8	1101.8
172.5°	1093.2	1091.0
175°	1088.1	1088.1
177.5°	1083.4	1080.8
180°	1080.8	1080.8

(END OF REPORT)