

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: P938207

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

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938207
REPORT IS A COMBINATION OF REPORTS P933608 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-125D-B50-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

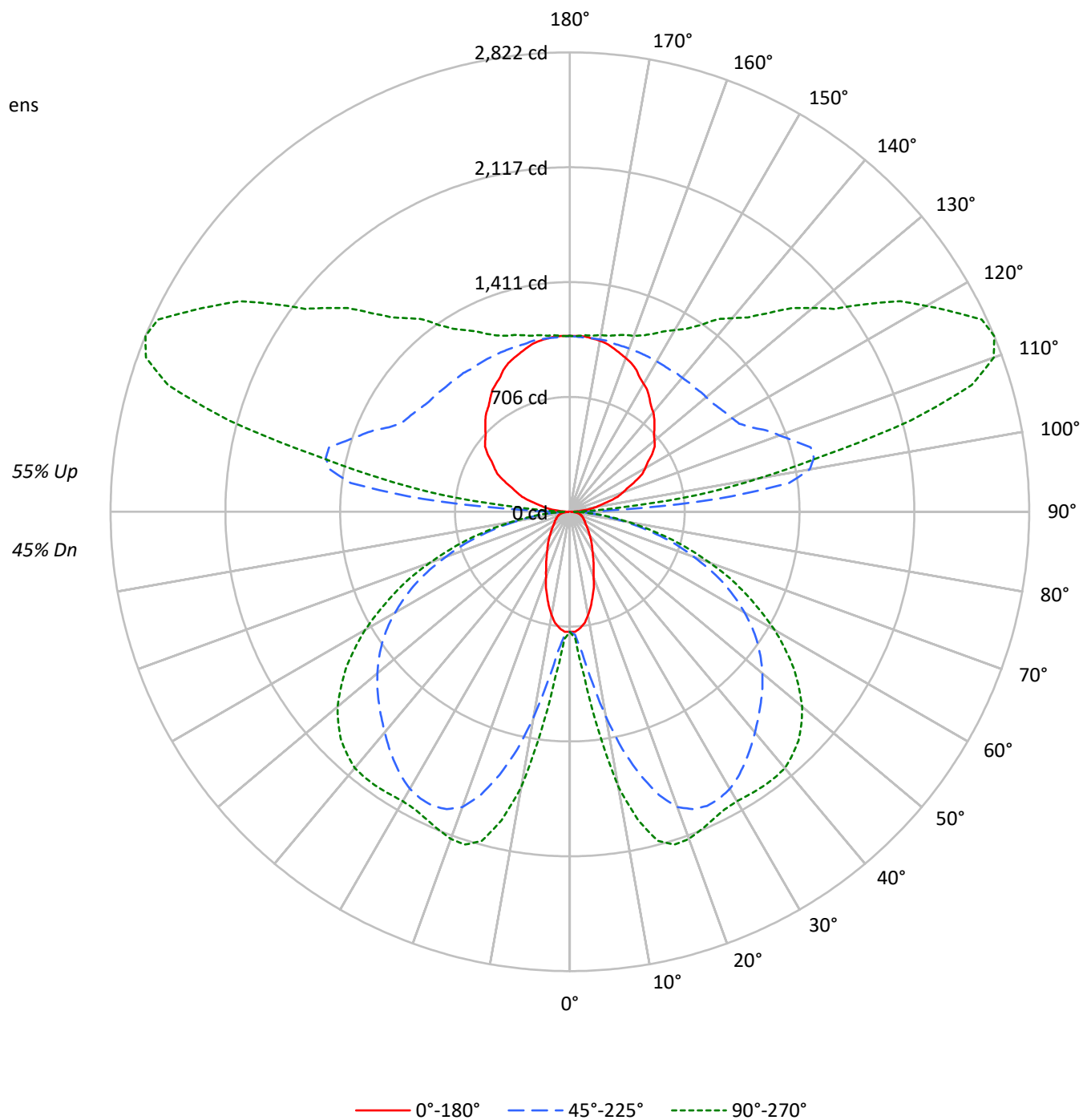
Lumens per Lamp: N/A
Luminaire Lumens: 12714.5 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 112.8
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	81	77	70	67	65	57	55	53	45	44	42
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	25
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	27	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	23	24	21	18
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	22	18	16
8	52	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4561	4561	4561
5°	4454	5270	6131
10°	4039	7681	10164
15°	3432	10033	12274
20°	2792	11623	12508
25°	2329	12160	12254
30°	1963	12234	12231
35°	1735	12027	12547
40°	1511	11760	12874
45°	1367	11563	12924
50°	1252	11385	12710
55°	1199	11127	12147
60°	1225	10634	11257
65°	1273	9885	10035
70°	1354	8615	8478
75°	1494	7019	6616
80°	1621	4862	4458
85°	1413	2574	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	95.4	0.8
10°-20°	422.7	3.3
20°-30°	739.4	5.8
30°-40°	951.8	7.5
40°-50°	1063.1	8.4
50°-60°	1018.2	8.0
60°-70°	807.0	6.3
70°-80°	474.5	3.7
80°-90°	135.9	1.1
90°-100°	526.8	4.1
100°-110°	1385.1	10.9
110°-120°	1436.2	11.3
120°-130°	1152.0	9.1
130°-140°	903.9	7.1
140°-150°	693.8	5.5
150°-160°	499.6	3.9
160°-170°	305.7	2.4
170°-180°	103.3	0.8
0°-30°	1257.5	9.9
0°-40°	2209.3	17.4
0°-60°	4290.6	33.7
0°-90°	5708.0	44.9
90°-120°	3348.1	26.3
90°-150°	6097.8	48.0
90°-180°	7006.0	55.1
0°-180°	12714.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	718	771	868	982	1017	66
15°	538	993	1674	2029	2094	150
25°	344	1126	1994	2082	2084	158
35°	232	1076	1878	1984	2063	145
45°	159	858	1660	1901	1987	123
55°	114	545	1408	1636	1681	104
65°	90	289	1046	1176	1192	89
75°	66	178	574	631	633	70
85°	24	54	142	156	159	25
90°	7	20	55	28	28	8
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	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3	737.3
2.5°	737.3	737.3	742.1	744.4	749.2	751.6	756.3	761.0	775.2	777.6	782.4
5°	718.3	727.9	758.7	770.6	803.7	848.7	867.7	898.5	962.6	981.5	993.4
7.5°	689.9	711.2	787.1	806.0	889.1	1007.6	1057.4	1123.8	1225.7	1275.5	1315.8
10°	644.8	689.9	825.0	870.1	1005.3	1185.4	1277.9	1370.4	1524.5	1593.2	1619.3
12.5°	595.1	668.6	865.4	927.0	1121.4	1384.6	1496.0	1597.9	1773.4	1865.9	1880.0
15°	538.2	637.7	903.3	993.4	1244.6	1550.5	1673.8	1799.4	1963.1	2029.4	2046.0
17.5°	488.4	614.0	938.9	1033.7	1339.5	1699.9	1825.5	1929.8	2062.6	2107.7	2119.5
20°	426.7	576.1	962.6	1085.9	1439.1	1809.0	1929.8	2010.4	2100.6	2129.0	2133.7
22.5°	381.7	535.8	976.8	1104.8	1505.5	1875.3	1977.3	2041.3	2102.9	2112.4	2114.8
25°	343.8	490.7	974.4	1126.1	1562.4	1915.6	1993.9	2041.3	2076.8	2081.6	2081.6
27.5°	308.2	440.9	964.9	1130.9	1605.1	1925.1	1986.7	2020.0	2036.5	2046.0	2046.0
30°	277.4	393.6	941.2	1121.4	1624.0	1915.6	1965.4	1982.0	1998.6	2012.9	2020.0
32.5°	253.7	348.5	905.6	1102.4	1626.4	1891.9	1927.5	1936.9	1960.7	1993.9	2005.7
35°	232.4	303.5	865.4	1076.3	1612.2	1854.0	1877.7	1887.1	1934.6	1984.4	2001.0
37.5°	211.0	270.3	813.2	1031.3	1590.8	1809.0	1825.5	1842.1	1915.6	1974.8	1993.9
40°	189.7	241.8	751.6	981.5	1557.6	1754.4	1768.6	1794.7	1891.9	1960.7	1979.6
42.5°	173.1	218.1	685.2	929.3	1514.9	1692.8	1714.1	1752.0	1863.4	1936.9	1958.3
45°	158.9	194.4	614.0	858.3	1460.4	1628.7	1659.5	1711.7	1830.3	1901.4	1920.4
47.5°	144.6	177.8	540.5	784.7	1401.2	1564.7	1605.1	1664.3	1785.2	1854.0	1870.6
50°	132.7	161.2	467.1	706.5	1337.1	1496.0	1543.4	1605.1	1728.4	1792.3	1813.6
52.5°	123.3	147.0	398.3	628.3	1263.6	1424.8	1479.4	1543.4	1659.5	1721.2	1735.5
55°	113.8	135.1	339.0	545.3	1187.8	1349.0	1408.3	1469.9	1583.7	1635.9	1645.3
57.5°	109.1	125.6	289.3	467.1	1107.2	1263.6	1330.0	1386.9	1493.7	1533.9	1543.4
60°	101.9	118.5	251.3	400.7	1019.5	1183.0	1240.0	1296.9	1386.9	1420.1	1427.2
62.5°	94.8	113.8	222.9	336.6	929.3	1088.2	1145.1	1197.3	1273.1	1296.9	1306.3
65°	90.1	109.1	201.6	289.3	836.9	988.6	1045.5	1090.5	1152.2	1175.9	1180.7
67.5°	85.4	104.3	184.9	248.9	744.4	889.1	931.8	974.4	1021.8	1045.5	1047.9
70°	78.3	99.6	170.7	220.5	649.6	775.2	810.8	855.8	893.8	905.6	912.8
72.5°	73.5	92.5	161.2	199.1	552.4	666.2	699.4	725.4	758.7	770.6	770.6
75°	66.4	82.9	151.8	177.8	452.8	545.3	573.8	599.8	625.9	630.6	623.5
77.5°	59.3	73.5	130.4	149.3	353.2	431.5	455.2	469.4	490.7	495.5	497.9
80°	49.8	64.0	101.9	116.2	256.0	317.7	334.3	346.1	365.1	365.1	369.9
82.5°	37.9	49.8	73.5	82.9	173.1	218.1	232.4	239.5	251.3	251.3	251.3
85°	23.7	30.8	47.4	54.5	104.3	132.7	142.2	144.6	154.1	156.4	156.4
87.5°	11.9	16.6	30.8	33.2	54.5	68.7	68.7	73.5	73.5	71.2	68.7
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°	737.3	737.3
2.5°	787.1	782.4
5°	1012.4	1017.1
7.5°	1363.3	1360.8
10°	1695.1	1716.5
12.5°	1936.9	1941.7
15°	2083.9	2093.5
17.5°	2140.8	2143.2
20°	2143.2	2138.5
22.5°	2117.1	2112.4
25°	2086.3	2083.9
27.5°	2057.9	2060.2
30°	2046.0	2053.1
32.5°	2046.0	2057.9
35°	2050.8	2062.6
37.5°	2048.4	2062.6
40°	2038.9	2055.5
42.5°	2012.9	2024.7
45°	1972.5	1986.7
47.5°	1920.4	1929.8
50°	1854.0	1863.4
52.5°	1771.0	1773.4
55°	1671.4	1680.9
57.5°	1564.7	1567.1
60°	1446.2	1453.3
62.5°	1320.6	1320.6
65°	1187.8	1192.5
67.5°	1050.3	1062.1
70°	910.4	912.8
72.5°	772.9	772.9
75°	630.6	633.0
77.5°	495.5	495.5
80°	367.4	369.9
82.5°	253.7	258.4
85°	158.9	158.9
87.5°	73.5	66.4
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)