

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: P938099

Luminaire Tested: SQ4-FB-125U-100D-B35-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938099
REPORT IS A COMBINATION OF REPORTS P933607 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-B35-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

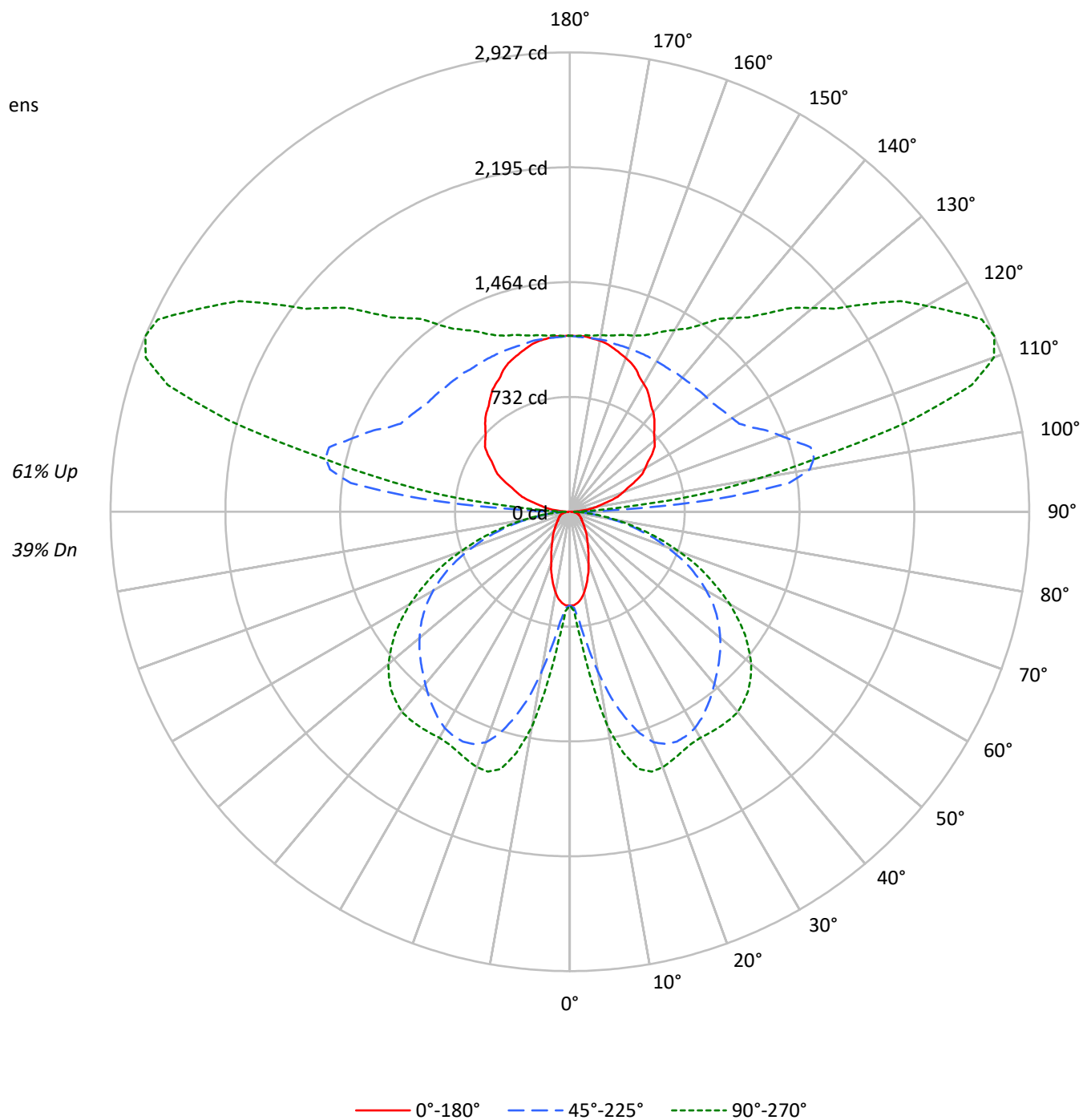
Lumens per Lamp: N/A
Luminaire Lumens: 11893.5 lumens
Efficiency: N/A
Efficacy: 123.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 96.6
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3694	3694	3694
5°	3608	4269	4966
10°	3271	6222	8233
15°	2780	8126	9941
20°	2261	9415	10132
25°	1886	9849	9926
30°	1590	9909	9907
35°	1405	9742	10163
40°	1223	9526	10428
45°	1107	9366	10468
50°	1015	9222	10295
55°	971	9013	9839
60°	993	8613	9118
65°	1032	8007	8128
70°	1097	6979	6866
75°	1211	5684	5358
80°	1312	3937	3611
85°	1145	2085	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10468 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	77.3	0.6
10°-20°	342.4	2.9
20°-30°	598.9	5.0
30°-40°	771.0	6.5
40°-50°	861.1	7.2
50°-60°	824.8	6.9
60°-70°	653.6	5.5
70°-80°	384.4	3.2
80°-90°	111.1	0.9
90°-100°	546.6	4.6
100°-110°	1437.0	12.1
110°-120°	1490.0	12.5
120°-130°	1195.2	10.0
130°-140°	937.8	7.9
140°-150°	719.8	6.1
150°-160°	518.4	4.4
160°-170°	317.2	2.7
170°-180°	107.2	0.9
0°-30°	1018.6	8.6
0°-40°	1789.5	15.0
0°-60°	3475.4	29.2
0°-90°	4624.5	38.9
90°-120°	3473.6	29.2
90°-150°	6326.3	53.2
90°-180°	7269.0	61.1
0°-180°	11893.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	582	624	703	795	824	54
15°	436	805	1356	1644	1696	121
25°	278	912	1615	1686	1688	128
35°	188	872	1521	1607	1671	118
45°	129	695	1344	1540	1609	100
55°	92	442	1141	1325	1362	84
65°	73	234	847	952	966	72
75°	54	144	465	511	513	56
85°	19	44	115	127	129	20
90°	8	21	57	29	29	8
95°	72	283	942	485	330	80
105°	259	392	1589	2412	2250	274
115°	460	558	1273	2538	2897	454
125°	640	717	1158	1956	2307	568
135°	762	839	1121	1579	1790	590
145°	884	941	1107	1347	1452	554
155°	999	1027	1107	1215	1251	459
165°	1078	1093	1107	1151	1165	304
175°	1121	1121	1114	1129	1129	106
180°	1121	1121	1121	1121	1121	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2	597.2
2.5°	597.2	597.2	601.1	603.0	606.8	608.7	612.6	616.5	627.9	629.8	633.7
5°	581.9	589.5	614.5	624.1	651.0	687.5	702.8	727.8	779.7	795.1	804.7
7.5°	558.8	576.1	637.6	652.9	720.2	816.2	856.5	910.3	992.8	1033.1	1065.8
10°	522.3	558.8	668.3	704.8	814.3	960.2	1035.1	1110.0	1234.8	1290.5	1311.6
12.5°	482.0	541.6	701.0	750.9	908.3	1121.5	1211.7	1294.3	1436.4	1511.3	1522.9
15°	436.0	516.6	731.7	804.7	1008.1	1255.9	1355.8	1457.6	1590.0	1643.8	1657.3
17.5°	395.6	497.4	760.5	837.3	1085.0	1376.9	1478.7	1563.2	1670.7	1707.2	1716.8
20°	345.6	466.7	779.7	879.6	1165.7	1465.2	1563.2	1628.5	1701.5	1724.5	1728.3
22.5°	309.2	434.0	791.2	894.9	1219.4	1519.0	1601.6	1653.4	1703.4	1711.1	1713.0
25°	278.5	397.5	789.3	912.2	1265.5	1551.7	1615.0	1653.4	1682.3	1686.1	1686.1
27.5°	249.6	357.2	781.6	916.0	1300.1	1559.3	1609.2	1636.2	1649.6	1657.3	1657.3
30°	224.7	318.8	762.4	908.3	1315.4	1551.7	1592.0	1605.4	1618.9	1630.3	1636.2
32.5°	205.5	282.3	733.5	892.9	1317.4	1532.5	1561.3	1568.9	1588.1	1615.0	1624.6
35°	188.2	245.8	701.0	871.8	1305.8	1501.8	1520.9	1528.6	1567.0	1607.4	1620.7
37.5°	170.9	218.9	658.7	835.4	1288.6	1465.2	1478.7	1492.2	1551.7	1599.6	1615.0
40°	153.6	195.8	608.7	795.1	1261.6	1421.0	1432.6	1453.7	1532.5	1588.1	1603.5
42.5°	140.2	176.6	554.9	752.8	1227.1	1371.1	1388.4	1419.1	1509.4	1568.9	1586.3
45°	128.7	157.5	497.4	695.2	1183.0	1319.3	1344.3	1386.5	1482.5	1540.1	1555.5
47.5°	117.2	144.0	437.9	635.7	1134.9	1267.5	1300.1	1348.1	1446.0	1501.8	1515.1
50°	107.6	130.6	378.3	572.3	1083.1	1211.7	1250.2	1300.1	1399.9	1451.8	1469.1
52.5°	99.9	119.1	322.6	508.9	1023.6	1154.2	1198.3	1250.2	1344.3	1394.2	1405.7
55°	92.2	109.5	274.6	441.7	962.1	1092.6	1140.7	1190.6	1282.8	1325.0	1332.8
57.5°	88.4	101.7	234.3	378.3	896.8	1023.6	1077.3	1123.5	1209.8	1242.5	1250.2
60°	82.6	96.0	203.6	324.5	825.8	958.2	1004.4	1050.4	1123.5	1150.3	1156.0
62.5°	76.8	92.2	180.5	272.7	752.8	881.4	927.5	969.8	1031.2	1050.4	1058.1
65°	73.0	88.4	163.3	234.3	677.9	800.8	846.9	883.3	933.3	952.5	956.3
67.5°	69.1	84.5	149.8	201.6	603.0	720.2	754.7	789.3	827.7	846.9	848.8
70°	63.4	80.6	138.3	178.6	526.2	627.9	656.8	693.2	723.9	733.5	739.3
72.5°	59.5	74.9	130.6	161.3	447.5	539.6	566.5	587.6	614.5	624.1	624.1
75°	53.8	67.2	122.9	144.0	366.8	441.7	464.7	485.9	507.0	510.9	505.0
77.5°	48.0	59.5	105.6	121.0	286.1	349.5	368.7	380.2	397.5	401.4	403.3
80°	40.3	51.8	82.6	94.1	207.4	257.4	270.7	280.3	295.7	295.7	299.6
82.5°	30.7	40.3	59.5	67.2	140.2	176.6	188.2	194.0	203.6	203.6	203.6
85°	19.2	25.0	38.4	44.2	84.5	107.6	115.2	117.2	124.8	126.7	126.7
87.5°	9.6	13.5	25.0	26.8	44.2	55.7	55.7	59.5	59.5	57.7	55.7
90°	7.6	13.6	19.6	21.0	33.0	49.1	57.2	50.8	38.1	28.6	28.6
92.5°	30.1	81.3	132.5	145.3	204.2	282.8	322.1	282.3	202.7	143.0	137.3
95°	72.3	165.9	259.5	282.9	502.4	795.2	941.5	840.1	637.4	485.4	468.1
97.5°	124.9	207.5	290.1	310.8	676.7	1164.8	1408.8	1344.8	1216.7	1120.6	1087.8
100°	165.6	240.5	315.4	334.1	740.2	1281.8	1552.5	1557.2	1566.6	1573.6	1534.5
102.5°	200.2	270.1	340.0	357.5	769.4	1318.5	1593.1	1674.7	1838.0	1960.4	1927.0
105°	258.9	318.1	377.2	392.1	790.9	1322.8	1588.7	1771.6	2137.5	2411.9	2393.9
107.5°	319.1	374.2	429.5	443.2	795.0	1263.9	1498.4	1753.6	2264.0	2646.7	2651.1
110°	359.7	409.5	459.3	471.8	788.9	1211.6	1423.1	1708.3	2279.0	2707.0	2725.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	399.6	447.1	494.6	506.5	789.2	1166.1	1354.6	1646.5	2230.5	2668.5	2697.3
115°	459.8	503.6	547.5	558.4	796.5	1113.9	1272.6	1553.9	2116.5	2538.4	2578.3
117.5°	519.3	559.1	598.8	608.8	811.2	1081.1	1216.1	1470.0	1977.7	2358.5	2402.7
120°	553.9	591.4	628.8	638.2	823.3	1070.1	1193.5	1425.5	1889.4	2237.3	2280.3
122.5°	587.8	625.6	663.4	672.8	840.6	1064.3	1176.3	1385.2	1802.9	2116.2	2158.5
125°	639.6	674.1	708.5	717.2	864.0	1059.6	1157.5	1334.9	1689.7	1955.9	1995.0
127.5°	681.8	716.6	751.4	760.1	887.3	1056.9	1141.7	1294.0	1598.8	1827.2	1860.2
130°	704.4	741.9	779.3	788.7	904.3	1058.4	1135.6	1271.2	1542.5	1745.9	1776.4
132.5°	727.7	765.2	802.6	812.0	918.1	1059.6	1130.3	1251.8	1494.6	1676.7	1703.9
135°	762.3	796.4	830.5	839.1	933.1	1058.6	1121.3	1223.0	1426.4	1578.9	1602.3
137.5°	797.7	831.5	865.3	873.7	955.7	1065.1	1119.8	1205.7	1377.6	1506.6	1525.8
140°	827.0	858.1	889.3	897.0	969.5	1066.2	1114.5	1188.8	1337.3	1448.7	1466.7
142.5°	849.6	878.4	907.2	914.3	981.1	1070.1	1114.5	1179.8	1310.2	1408.1	1423.6
145°	884.2	909.3	934.4	940.7	996.1	1070.1	1107.0	1160.4	1267.1	1347.1	1358.8
147.5°	918.9	943.3	967.7	973.8	1018.2	1077.4	1107.0	1148.9	1233.0	1295.9	1305.6
150°	941.5	963.6	985.6	991.1	1029.8	1081.2	1107.0	1142.5	1213.4	1266.6	1274.4
152.5°	964.7	981.5	998.3	1002.4	1037.3	1083.7	1107.0	1137.2	1197.8	1243.2	1249.1
155°	999.4	1011.8	1024.1	1027.2	1053.8	1089.3	1107.0	1131.1	1179.3	1215.4	1219.4
157.5°	1025.0	1037.0	1049.0	1052.0	1070.4	1094.8	1107.0	1125.7	1163.2	1191.3	1194.0
160°	1042.3	1051.7	1061.1	1063.4	1077.9	1097.3	1107.0	1123.1	1155.1	1179.3	1180.8
162.5°	1059.6	1066.6	1073.7	1075.4	1086.0	1100.0	1107.0	1120.6	1147.6	1167.9	1169.5
165°	1078.4	1084.8	1091.2	1092.7	1097.5	1103.8	1107.0	1116.7	1136.2	1150.7	1152.2
167.5°	1095.7	1098.7	1101.8	1102.5	1106.5	1111.8	1114.5	1120.9	1133.6	1143.1	1143.8
170°	1107.0	1110.0	1113.0	1113.8	1114.1	1114.4	1114.5	1120.9	1133.6	1143.1	1143.1
172.5°	1113.0	1113.7	1114.4	1114.5	1114.5	1114.5	1114.5	1119.6	1129.6	1137.1	1136.5
175°	1121.3	1121.3	1121.3	1121.3	1119.1	1116.1	1114.5	1117.7	1124.1	1128.9	1128.9
177.5°	1121.3	1121.3	1121.3	1121.3	1119.6	1117.2	1116.0	1118.5	1123.6	1127.3	1126.7
180°	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3	1121.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	597.2	597.2
2.5°	637.6	633.7
5°	820.0	823.8
7.5°	1104.2	1102.3
10°	1373.1	1390.3
12.5°	1568.9	1572.8
15°	1688.0	1695.7
17.5°	1734.1	1736.0
20°	1736.0	1732.2
22.5°	1714.8	1711.1
25°	1689.9	1688.0
27.5°	1666.9	1668.8
30°	1657.3	1663.0
32.5°	1657.3	1666.9
35°	1661.2	1670.7
37.5°	1659.2	1670.7
40°	1651.5	1664.9
42.5°	1630.3	1640.0
45°	1597.8	1609.2
47.5°	1555.5	1563.2
50°	1501.8	1509.4
52.5°	1434.5	1436.4
55°	1353.9	1361.5
57.5°	1267.5	1269.4
60°	1171.4	1177.1
62.5°	1069.7	1069.7
65°	962.1	965.9
67.5°	850.7	860.3
70°	737.4	739.3
72.5°	626.1	626.1
75°	510.9	512.7
77.5°	401.4	401.4
80°	297.7	299.6
82.5°	205.5	209.3
85°	128.7	128.7
87.5°	59.5	53.8
90°	28.6	28.6
92.5°	114.5	91.8
95°	399.2	330.3
97.5°	956.7	825.6
100°	1378.4	1222.2
102.5°	1793.1	1659.4
105°	2322.0	2250.1
107.5°	2668.4	2685.9
110°	2800.6	2875.5

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2812.3	2927.4
115°	2737.8	2897.3
117.5°	2579.7	2756.6
120°	2452.2	2624.1
122.5°	2328.1	2497.7
125°	2151.2	2307.4
127.5°	1992.0	2123.8
130°	1898.2	2019.9
132.5°	1813.0	1922.0
135°	1696.3	1790.3
137.5°	1602.7	1679.7
140°	1538.6	1610.5
142.5°	1485.4	1547.3
145°	1405.6	1452.4
147.5°	1344.5	1383.2
150°	1305.9	1337.3
152.5°	1272.9	1296.6
155°	1235.1	1250.8
157.5°	1205.0	1216.1
160°	1187.2	1193.5
162.5°	1175.5	1181.5
165°	1158.6	1164.9
167.5°	1146.4	1149.1
170°	1143.1	1143.1
172.5°	1134.2	1131.9
175°	1128.9	1128.9
177.5°	1124.0	1121.3
180°	1121.3	1121.3

(END OF REPORT)