

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: P937904

Luminaire Tested: SQ4-FB-125U-050D-B40-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937904
REPORT IS A COMBINATION OF REPORTS P933613 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-050D-B40-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

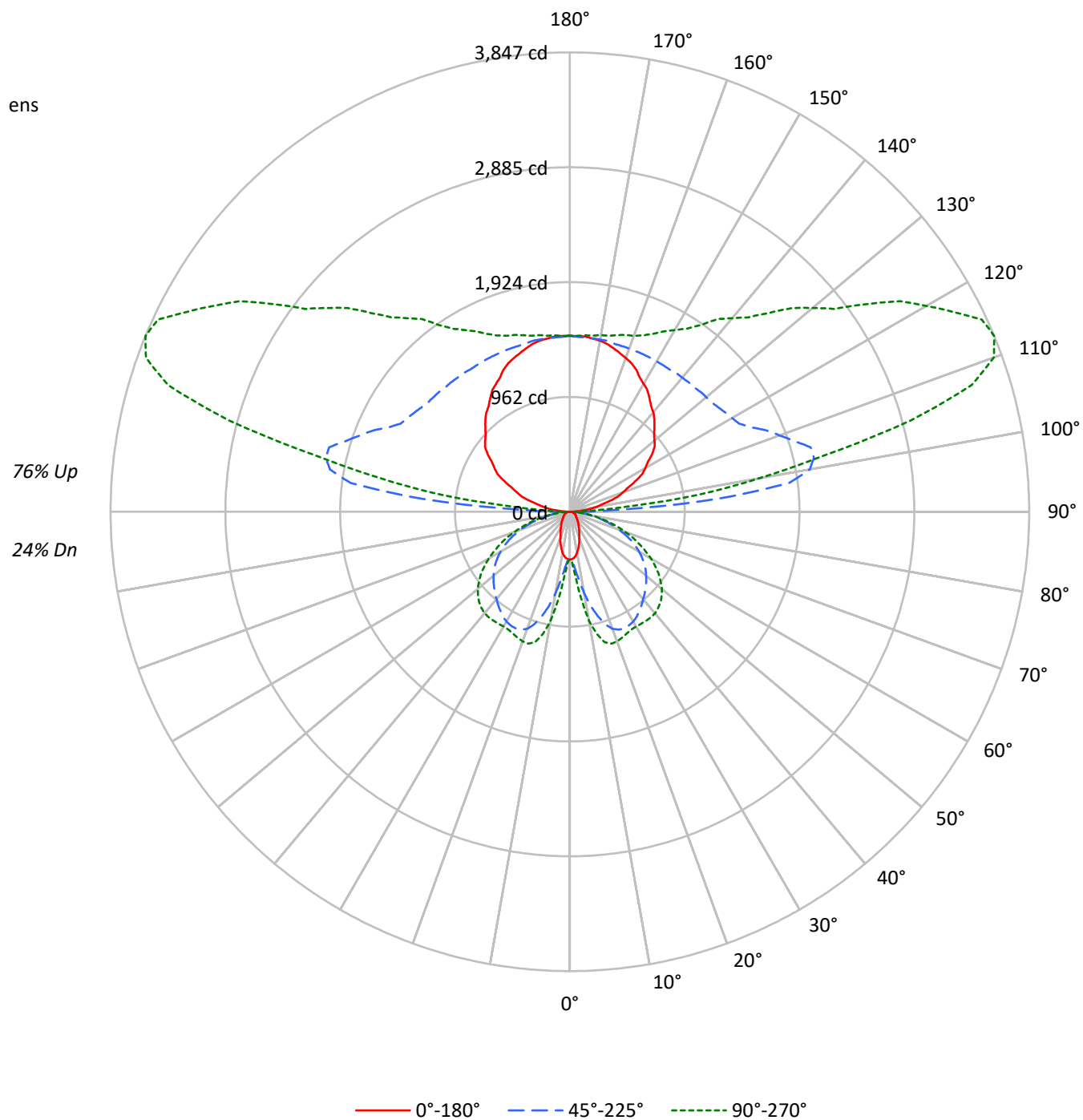
Lumens per Lamp: N/A
Luminaire Lumens: 12639.5 lumens
Efficiency: N/A
Efficacy: 132.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 95.2
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33
1	92	88	84	80	81	78	75	72	60	58	56	44	42	41	28	28	27
2	83	76	70	65	74	68	63	58	52	49	46	38	36	34	25	23	22
3	76	66	59	54	67	59	53	48	46	42	38	33	30	28	21	20	19
4	69	58	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16
5	63	52	44	38	56	46	39	34	36	31	27	26	23	20	17	15	13
6	58	46	38	33	51	41	34	29	32	27	23	23	20	17	15	13	12
7	53	41	34	28	47	37	30	26	29	24	20	21	18	15	14	12	10
8	49	37	30	25	44	33	27	22	26	21	18	19	16	13	12	10	9
9	46	34	27	22	40	30	24	20	24	19	16	17	14	12	11	9	8
10	42	31	24	19	38	28	21	17	22	17	14	16	13	10	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1848	1848	1848
5°	1806	2136	2484
10°	1638	3114	4119
15°	1392	4069	4973
20°	1133	4715	5069
25°	945	4933	4965
30°	797	4965	4956
35°	705	4882	5084
40°	614	4775	5217
45°	557	4696	5237
50°	510	4626	5151
55°	489	4522	4922
60°	500	4324	4562
65°	521	4022	4066
70°	555	3508	3436
75°	615	2860	2681
80°	671	1983	1806
85°	596	1053	925

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5237 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	0.4
10°-20°	228.4	1.8
20°-30°	399.5	3.2
30°-40°	514.2	4.1
40°-50°	574.4	4.5
50°-60°	550.2	4.4
60°-70°	436.0	3.4
70°-80°	256.4	2.0
80°-90°	76.8	0.6
90°-100°	718.3	5.7
100°-110°	1888.3	14.9
110°-120°	1958.0	15.5
120°-130°	1570.5	12.4
130°-140°	1232.3	9.7
140°-150°	945.9	7.5
150°-160°	681.2	5.4
160°-170°	416.8	3.3
170°-180°	140.8	1.1
0°-30°	679.4	5.4
0°-40°	1193.6	9.4
0°-60°	2318.2	18.3
0°-90°	3087.4	24.4
90°-120°	4564.6	36.1
90°-150°	8313.3	65.8
90°-180°	9552.0	75.6
0°-180°	12639.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	388	416	469	530	550	36
15°	291	537	904	1096	1131	81
25°	186	608	1077	1125	1126	86
35°	126	582	1014	1072	1114	78
45°	86	464	897	1027	1073	66
55°	62	295	761	884	908	56
65°	49	156	565	635	644	48
75°	36	96	310	341	342	38
85°	13	29	77	84	86	14
90°	10	28	75	38	38	9
95°	95	372	1237	638	434	105
105°	340	515	2088	3170	2957	361
115°	604	734	1672	3336	3807	597
125°	841	942	1521	2570	3032	746
135°	1002	1103	1474	2075	2353	775
145°	1162	1236	1455	1770	1909	728
155°	1313	1350	1455	1597	1644	603
165°	1417	1436	1455	1512	1531	400
175°	1474	1474	1465	1483	1483	140
180°	1474	1474	1474	1474	1474	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3	398.3
2.5°	398.3	398.3	400.9	402.2	404.7	406.1	408.6	411.2	418.9	420.1	422.7
5°	388.1	393.3	409.9	416.3	434.2	458.6	468.8	485.4	520.1	530.3	536.7
7.5°	372.7	384.3	425.3	435.5	480.4	544.4	571.3	607.2	662.2	689.1	710.9
10°	348.4	372.7	445.8	470.1	543.1	640.4	690.5	740.4	823.6	860.7	874.9
12.5°	321.5	361.2	467.6	500.8	605.9	748.1	808.3	863.3	958.2	1008.1	1015.7
15°	290.8	344.6	488.0	536.7	672.5	837.7	904.4	972.2	1060.6	1096.4	1105.4
17.5°	263.9	331.8	507.3	558.5	723.7	918.4	986.3	1042.7	1114.4	1138.7	1145.1
20°	230.5	311.2	520.1	586.7	777.6	977.3	1042.7	1086.2	1134.9	1150.3	1152.9
22.5°	206.2	289.5	527.7	596.9	813.4	1013.3	1068.3	1102.9	1136.2	1141.3	1142.6
25°	185.7	265.1	526.5	608.4	844.1	1035.0	1077.2	1102.9	1122.1	1124.7	1124.7
27.5°	166.6	238.3	521.3	611.0	867.2	1040.1	1073.4	1091.4	1100.4	1105.4	1105.4
30°	149.8	212.7	508.5	605.9	877.5	1035.0	1061.9	1070.8	1079.8	1087.6	1091.4
32.5°	137.0	188.3	489.3	595.6	878.7	1022.1	1041.4	1046.5	1059.3	1077.2	1083.6
35°	125.5	164.0	467.6	581.5	871.1	1001.7	1014.5	1019.7	1045.2	1072.2	1081.1
37.5°	114.0	146.0	439.4	557.2	859.5	977.3	986.3	995.3	1035.0	1067.0	1077.2
40°	102.5	130.6	406.1	530.3	841.5	947.9	955.6	969.7	1022.1	1059.3	1069.6
42.5°	93.5	117.8	370.2	502.1	818.5	914.6	926.2	946.6	1006.9	1046.5	1058.0
45°	85.9	105.0	331.8	463.7	789.0	880.0	896.6	924.8	988.9	1027.3	1037.5
47.5°	78.1	96.1	292.0	424.0	757.0	845.5	867.2	899.2	964.6	1001.7	1010.7
50°	71.7	87.1	252.3	381.7	722.5	808.3	833.9	867.2	933.8	968.4	979.9
52.5°	66.6	79.5	215.2	339.4	682.7	769.8	799.3	833.9	896.6	930.0	937.6
55°	61.5	73.1	183.2	294.6	641.8	728.9	760.8	794.2	855.7	883.9	889.0
57.5°	58.9	67.9	156.2	252.3	598.2	682.7	718.6	749.4	807.0	828.7	833.9
60°	55.1	64.1	135.8	216.5	550.8	639.2	669.9	700.7	749.4	767.2	771.2
62.5°	51.3	61.5	120.4	181.9	502.1	588.0	618.6	646.9	687.9	700.7	705.8
65°	48.7	58.9	108.9	156.2	452.2	534.1	564.9	589.2	622.6	635.4	637.9
67.5°	46.1	56.3	99.9	134.5	402.2	480.4	503.4	526.5	552.1	564.9	566.1
70°	42.3	53.8	92.3	119.1	351.0	418.9	438.1	462.4	482.9	489.3	493.2
72.5°	39.7	49.9	87.1	107.6	298.4	359.9	377.9	391.9	409.9	416.3	416.3
75°	35.9	44.8	81.9	96.1	244.7	294.6	310.0	324.0	338.2	340.7	336.9
77.5°	32.0	39.7	70.5	80.7	190.9	233.1	245.9	253.6	265.1	267.7	269.0
80°	26.9	34.6	55.1	62.7	138.4	171.6	180.6	187.0	197.3	197.3	199.8
82.5°	20.5	26.9	39.7	44.8	93.5	117.8	125.5	129.4	135.8	135.8	135.8
85°	12.8	16.6	25.6	29.4	56.3	71.7	76.9	78.1	83.3	84.5	84.5
87.5°	6.4	9.0	16.6	18.0	29.4	37.1	37.1	39.7	39.7	38.4	37.1
90°	9.9	17.9	25.7	27.7	43.5	64.7	75.2	66.8	50.0	37.5	37.5
92.5°	39.5	106.8	174.1	190.9	268.4	371.6	423.3	370.9	266.3	187.8	180.4
95°	94.9	218.0	341.1	371.9	660.3	1044.9	1237.1	1104.0	837.6	637.8	615.2
97.5°	164.2	272.7	381.3	408.5	889.4	1530.7	1851.3	1767.1	1598.8	1472.5	1429.4
100°	217.5	316.0	414.5	439.1	972.8	1684.3	2040.2	2046.3	2058.6	2067.9	2016.6
102.5°	263.0	354.9	446.7	469.8	1011.1	1732.8	2093.6	2200.8	2415.3	2576.1	2532.2
105°	340.2	418.0	495.7	515.2	1039.3	1738.2	2087.6	2328.0	2808.8	3169.5	3145.9
107.5°	419.3	491.8	564.3	582.5	1044.6	1660.8	1968.9	2304.3	2975.0	3478.0	3483.7
110°	472.7	538.2	603.8	620.1	1036.7	1592.3	1870.1	2245.0	2994.8	3557.1	3581.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	525.2	587.5	650.0	665.5	1037.0	1532.4	1780.0	2163.7	2931.1	3506.7	3544.5
115°	604.2	661.8	719.3	733.7	1046.6	1463.7	1672.3	2041.9	2781.2	3335.6	3388.1
117.5°	682.3	734.7	786.9	800.0	1066.1	1420.8	1598.1	1931.7	2598.8	3099.3	3157.4
120°	727.8	777.1	826.3	838.6	1081.8	1406.2	1568.4	1873.2	2482.8	2940.1	2996.5
122.5°	772.3	822.0	871.6	884.0	1104.6	1398.6	1545.7	1820.1	2369.2	2780.9	2836.5
125°	840.6	885.9	931.1	942.4	1135.2	1392.4	1520.9	1754.1	2220.5	2570.2	2621.5
127.5°	896.0	941.7	987.4	998.8	1166.0	1388.8	1500.2	1700.4	2100.8	2401.1	2444.3
130°	925.6	974.9	1024.0	1036.4	1188.3	1391.0	1492.3	1670.5	2027.0	2294.3	2334.3
132.5°	956.2	1005.5	1054.7	1067.0	1206.5	1392.4	1485.3	1644.9	1964.0	2203.3	2239.1
135°	1001.8	1046.6	1091.5	1102.6	1226.2	1391.1	1473.5	1607.1	1874.3	2074.7	2105.6
137.5°	1048.2	1092.6	1137.0	1148.1	1255.9	1399.6	1471.5	1584.4	1810.4	1979.8	2005.1
140°	1086.8	1127.7	1168.5	1178.8	1274.1	1401.1	1464.6	1562.2	1757.3	1903.7	1927.3
142.5°	1116.5	1154.3	1192.0	1201.5	1289.2	1406.1	1464.6	1550.3	1721.7	1850.2	1870.6
145°	1161.9	1194.9	1227.9	1236.2	1309.0	1406.1	1454.7	1524.8	1665.0	1770.2	1785.6
147.5°	1207.5	1239.6	1271.7	1279.7	1338.1	1415.8	1454.7	1509.9	1620.2	1703.0	1715.7
150°	1237.1	1266.1	1295.2	1302.4	1353.1	1420.8	1454.7	1501.3	1594.5	1664.4	1674.7
152.5°	1267.8	1289.7	1311.7	1317.2	1363.1	1424.1	1454.7	1494.5	1574.0	1633.7	1641.5
155°	1313.3	1329.6	1345.8	1349.9	1384.8	1431.4	1454.7	1486.4	1549.7	1597.1	1602.3
157.5°	1346.9	1362.7	1378.5	1382.5	1406.5	1438.6	1454.7	1479.3	1528.5	1565.4	1569.1
160°	1369.7	1382.0	1394.3	1397.4	1416.5	1442.0	1454.7	1475.8	1518.0	1549.6	1551.7
162.5°	1392.4	1401.6	1410.8	1413.1	1427.0	1445.4	1454.7	1472.4	1508.0	1534.8	1536.8
165°	1417.1	1425.5	1433.8	1435.9	1442.1	1450.5	1454.7	1467.5	1493.0	1512.1	1514.2
167.5°	1439.9	1443.8	1447.8	1448.7	1454.0	1461.1	1464.6	1472.9	1489.6	1502.1	1503.0
170°	1454.7	1458.7	1462.7	1463.6	1463.9	1464.4	1464.6	1472.9	1489.6	1502.1	1502.1
172.5°	1462.6	1463.4	1464.4	1464.6	1464.6	1464.6	1464.6	1471.2	1484.4	1494.3	1493.5
175°	1473.5	1473.5	1473.5	1473.5	1470.5	1466.6	1464.6	1468.8	1477.1	1483.4	1483.4
177.5°	1473.5	1473.5	1473.5	1473.5	1471.2	1468.1	1466.6	1469.8	1476.4	1481.4	1480.5
180°	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5	1473.5

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	398.3	398.3
2.5°	425.3	422.7
5°	546.9	549.5
7.5°	736.5	735.3
10°	915.8	927.4
12.5°	1046.5	1049.1
15°	1125.9	1131.1
17.5°	1156.7	1157.9
20°	1157.9	1155.4
22.5°	1143.9	1141.3
25°	1127.2	1125.9
27.5°	1111.8	1113.1
30°	1105.4	1109.3
32.5°	1105.4	1111.8
35°	1108.0	1114.4
37.5°	1106.7	1114.4
40°	1101.6	1110.6
42.5°	1087.6	1094.0
45°	1065.8	1073.4
47.5°	1037.5	1042.7
50°	1001.7	1006.9
52.5°	956.8	958.2
55°	903.0	908.2
57.5°	845.5	846.7
60°	781.4	785.2
62.5°	713.5	713.5
65°	641.8	644.3
67.5°	567.5	573.9
70°	491.9	493.2
72.5°	417.6	417.6
75°	340.7	342.0
77.5°	267.7	267.7
80°	198.5	199.8
82.5°	137.0	139.6
85°	85.9	85.9
87.5°	39.7	35.9
90°	37.5	37.5
92.5°	150.5	120.6
95°	524.7	434.1
97.5°	1257.2	1084.9
100°	1811.3	1606.0
102.5°	2356.4	2180.6
105°	3051.3	2956.9
107.5°	3506.6	3529.4
110°	3680.2	3778.6



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3695.7	3846.8
115°	3597.7	3807.3
117.5°	3389.9	3622.4
120°	3222.5	3448.3
122.5°	3059.4	3282.2
125°	2826.8	3032.0
127.5°	2617.6	2790.7
130°	2494.3	2654.2
132.5°	2382.4	2525.7
135°	2229.2	2352.6
137.5°	2106.2	2207.3
140°	2021.8	2116.3
142.5°	1951.8	2033.2
145°	1847.1	1908.6
147.5°	1766.7	1817.7
150°	1716.0	1757.3
152.5°	1672.7	1703.9
155°	1622.9	1643.6
157.5°	1583.6	1598.1
160°	1560.0	1568.4
162.5°	1544.7	1552.6
165°	1522.5	1530.9
167.5°	1506.5	1510.0
170°	1502.1	1502.1
172.5°	1490.4	1487.3
175°	1483.4	1483.4
177.5°	1477.0	1473.5
180°	1473.5	1473.5

(END OF REPORT)