

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: P938399

Luminaire Tested: SQ4-FB-150U-075D-B35-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938399
REPORT IS A COMBINATION OF REPORTS P933638 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-B35-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

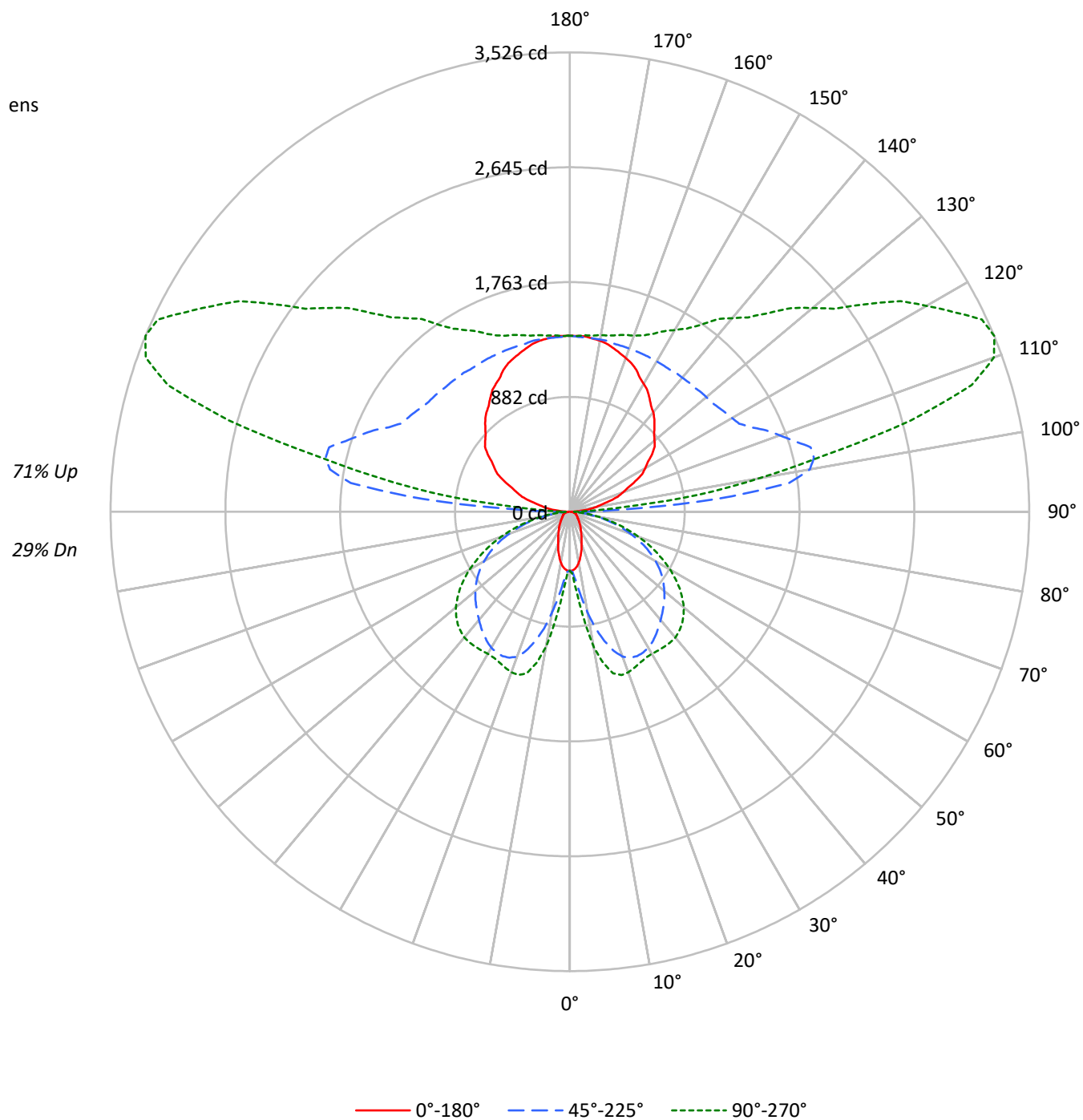
Lumens per Lamp: N/A
Luminaire Lumens: 12258.8 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 95.4
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

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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2796	2796	2796
5°	2731	3231	3759
10°	2476	4709	6231
15°	2103	6151	7525
20°	1712	7126	7669
25°	1428	7456	7513
30°	1203	7501	7499
35°	1063	7375	7693
40°	926	7210	7894
45°	838	7089	7924
50°	768	6980	7793
55°	735	6822	7447
60°	752	6519	6902
65°	780	6061	6152
70°	830	5282	5197
75°	916	4302	4056
80°	993	2980	2732
85°	864	1578	1399

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	58.5	0.5
10°-20°	259.2	2.1
20°-30°	453.3	3.7
30°-40°	583.6	4.8
40°-50°	651.8	5.3
50°-60°	624.3	5.1
60°-70°	494.7	4.0
70°-80°	290.9	2.4
80°-90°	86.0	0.7
90°-100°	658.4	5.4
100°-110°	1731.1	14.1
110°-120°	1794.9	14.6
120°-130°	1439.7	11.7
130°-140°	1129.7	9.2
140°-150°	867.1	7.1
150°-160°	624.4	5.1
160°-170°	382.1	3.1
170°-180°	129.1	1.1
0°-30°	771.0	6.3
0°-40°	1354.5	11.0
0°-60°	2630.6	21.5
0°-90°	3502.2	28.6
90°-120°	4184.4	34.1
90°-150°	7621.0	62.2
90°-180°	8757.0	71.4
0°-180°	12258.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	452	452	452	452	452	
5°	440	472	532	602	624	41
15°	330	609	1026	1244	1284	92
25°	211	690	1222	1276	1278	97
35°	142	660	1151	1217	1265	89
45°	97	526	1017	1166	1218	75
55°	70	334	863	1003	1030	64
65°	55	177	641	721	731	55
75°	41	109	352	387	388	43
85°	14	33	87	96	97	15
90°	9	25	69	34	34	8
95°	87	341	1134	585	398	97
105°	312	472	1914	2906	2711	331
115°	554	673	1533	3058	3490	547
125°	770	864	1394	2356	2780	684
135°	918	1011	1351	1902	2157	711
145°	1065	1133	1334	1623	1750	667
155°	1204	1237	1334	1464	1507	553
165°	1299	1316	1334	1386	1403	367
175°	1351	1351	1343	1360	1360	128
180°	1351	1351	1351	1351	1351	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	452.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0	452.0
2.5°	452.0	452.0	454.9	456.4	459.3	460.8	463.7	466.6	475.3	476.7	479.7
5°	440.4	446.2	465.1	472.4	492.7	520.4	532.0	550.9	590.1	601.7	609.0
7.5°	423.0	436.0	482.6	494.2	545.1	617.7	648.3	689.0	751.5	782.0	806.7
10°	395.4	423.0	505.8	533.4	616.3	726.8	783.4	840.1	934.6	976.8	992.7
12.5°	364.8	409.9	530.5	568.3	687.5	848.8	917.2	979.7	1087.2	1144.0	1152.7
15°	329.9	391.0	553.8	609.0	763.1	950.6	1026.2	1103.3	1203.6	1244.3	1254.5
17.5°	299.4	376.5	575.6	633.7	821.2	1042.2	1119.3	1183.2	1264.6	1292.3	1299.5
20°	261.6	353.2	590.1	665.7	882.3	1109.1	1183.2	1232.7	1287.9	1305.3	1308.2
22.5°	234.0	328.5	598.8	677.3	923.0	1149.8	1212.3	1251.6	1289.4	1295.2	1296.6
25°	210.8	300.9	597.4	690.4	957.9	1174.5	1222.5	1251.6	1273.4	1276.3	1276.3
27.5°	189.0	270.4	591.6	693.3	984.0	1180.3	1218.1	1238.5	1248.7	1254.5	1254.5
30°	170.1	241.3	577.0	687.5	995.6	1174.5	1205.0	1215.2	1225.4	1234.1	1238.5
32.5°	155.5	213.7	555.2	675.9	997.1	1160.0	1181.8	1187.6	1202.1	1222.5	1229.8
35°	142.4	186.0	530.5	659.9	988.4	1136.7	1151.3	1157.1	1186.2	1216.7	1226.9
37.5°	129.4	165.7	498.6	632.3	975.3	1109.1	1119.3	1129.5	1174.5	1210.9	1222.5
40°	116.3	148.3	460.8	601.7	954.9	1075.6	1084.3	1100.3	1160.0	1202.1	1213.8
42.5°	106.1	133.7	420.1	569.8	928.8	1037.8	1050.9	1074.1	1142.5	1187.6	1200.7
45°	97.4	119.2	376.5	526.2	895.4	998.6	1017.4	1049.4	1122.2	1165.8	1177.4
47.5°	88.7	109.0	331.4	481.1	859.0	959.3	984.0	1020.4	1094.5	1136.7	1146.9
50°	81.4	98.8	286.3	433.1	819.8	917.2	946.2	984.0	1059.6	1098.8	1112.0
52.5°	75.6	90.1	244.2	385.2	774.7	873.6	907.0	946.2	1017.4	1055.2	1064.0
55°	69.8	82.8	207.9	334.3	728.2	827.0	863.4	901.2	970.9	1002.9	1008.7
57.5°	66.9	77.0	177.3	286.3	678.8	774.7	815.4	850.3	915.7	940.4	946.2
60°	62.5	72.7	154.1	245.6	625.0	725.3	760.2	795.1	850.3	870.6	875.0
62.5°	58.1	69.8	136.6	206.4	569.8	667.2	702.0	734.0	780.5	795.1	800.9
65°	55.2	66.9	123.5	177.3	513.1	606.1	641.0	668.6	706.4	720.9	723.8
67.5°	52.3	64.0	113.4	152.6	456.4	545.1	571.2	597.4	626.5	641.0	642.4
70°	48.0	61.0	104.7	135.2	398.3	475.3	497.1	524.7	548.0	555.2	559.6
72.5°	45.1	56.7	98.8	122.1	338.7	408.4	428.8	444.8	465.1	472.4	472.4
75°	40.7	50.9	93.0	109.0	277.6	334.3	351.7	367.7	383.7	386.6	382.3
77.5°	36.3	45.1	79.9	91.6	216.6	264.5	279.1	287.8	300.9	303.8	305.2
80°	30.5	39.2	62.5	71.2	157.0	194.8	204.9	212.2	223.8	223.8	226.7
82.5°	23.3	30.5	45.1	50.9	106.1	133.7	142.4	146.8	154.1	154.1	154.1
85°	14.5	18.9	29.1	33.4	64.0	81.4	87.2	88.7	94.5	95.9	95.9
87.5°	7.3	10.2	18.9	20.3	33.4	42.2	42.2	45.1	45.1	43.6	42.2
90°	9.1	16.4	23.5	25.4	39.9	59.2	68.9	61.2	45.9	34.5	34.5
92.5°	36.2	97.9	159.6	175.0	246.0	340.7	388.0	340.0	244.2	172.3	165.4
95°	87.0	199.8	312.7	340.9	605.3	957.9	1134.1	1012.0	767.8	584.7	564.0
97.5°	150.5	250.0	349.5	374.4	815.3	1403.2	1697.1	1620.0	1465.6	1349.9	1310.4
100°	199.4	289.7	379.9	402.5	891.8	1544.1	1870.3	1875.9	1887.2	1895.7	1848.7
102.5°	241.2	325.4	409.6	430.6	926.8	1588.4	1919.2	2017.5	2214.1	2361.5	2321.2
105°	311.8	383.1	454.5	472.3	952.8	1593.4	1913.8	2134.1	2574.9	2905.5	2883.8
107.5°	384.4	450.9	517.3	533.9	957.6	1522.5	1805.0	2112.4	2727.3	3188.4	3193.6
110°	433.3	493.4	553.4	568.4	950.4	1459.6	1714.3	2058.0	2745.4	3260.9	3283.5

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	481.4	538.6	595.7	610.1	950.7	1404.8	1631.8	1983.5	2687.0	3214.7	3249.3
115°	553.9	606.7	659.5	672.7	959.4	1341.8	1533.0	1871.8	2549.5	3057.8	3105.8
117.5°	625.5	673.5	721.4	733.4	977.3	1302.4	1465.0	1770.8	2382.4	2841.1	2894.4
120°	667.3	712.4	757.6	768.8	991.8	1289.2	1437.8	1717.3	2276.1	2695.2	2746.9
122.5°	708.0	753.6	799.1	810.5	1012.6	1282.2	1417.0	1668.6	2171.8	2549.2	2600.3
125°	770.5	812.0	853.6	864.0	1040.7	1276.5	1394.3	1608.1	2035.5	2356.1	2403.1
127.5°	821.3	863.2	905.1	915.6	1068.8	1273.1	1375.2	1558.7	1925.8	2201.1	2240.8
130°	848.6	893.7	938.9	950.1	1089.4	1275.2	1368.0	1531.4	1858.2	2103.2	2139.8
132.5°	876.7	921.8	967.0	978.2	1106.0	1276.5	1361.6	1507.9	1800.4	2019.8	2052.6
135°	918.3	959.4	1000.6	1010.9	1124.1	1275.2	1350.8	1473.3	1718.2	1902.0	1930.2
137.5°	961.0	1001.7	1042.4	1052.5	1151.4	1283.1	1348.9	1452.5	1659.6	1814.9	1838.1
140°	996.3	1033.8	1071.2	1080.6	1167.9	1284.4	1342.6	1432.1	1611.0	1745.2	1766.8
142.5°	1023.5	1058.1	1092.8	1101.5	1181.9	1289.1	1342.6	1421.2	1578.3	1696.1	1714.7
145°	1065.2	1095.5	1125.7	1133.2	1200.0	1289.1	1333.5	1397.8	1526.4	1622.8	1636.8
147.5°	1106.9	1136.3	1165.7	1173.1	1226.6	1297.9	1333.5	1384.1	1485.2	1561.1	1572.8
150°	1134.1	1160.7	1187.2	1193.9	1240.4	1302.5	1333.5	1376.3	1461.6	1525.7	1535.2
152.5°	1162.2	1182.4	1202.5	1207.6	1249.5	1305.5	1333.5	1370.0	1442.9	1497.6	1504.8
155°	1203.9	1218.8	1233.7	1237.4	1269.5	1312.2	1333.5	1362.5	1420.6	1464.1	1468.8
157.5°	1234.7	1249.2	1263.8	1267.4	1289.4	1318.8	1333.5	1356.1	1401.3	1435.1	1438.4
160°	1255.6	1266.9	1278.1	1280.9	1298.5	1321.8	1333.5	1352.9	1391.6	1420.6	1422.5
162.5°	1276.5	1284.9	1293.3	1295.5	1308.1	1325.1	1333.5	1349.8	1382.5	1407.0	1408.8
165°	1299.1	1306.8	1314.4	1316.3	1322.0	1329.7	1333.5	1345.3	1368.6	1386.2	1388.1
167.5°	1320.0	1323.6	1327.2	1328.1	1333.0	1339.4	1342.6	1350.3	1365.6	1377.0	1377.8
170°	1333.5	1337.1	1340.8	1341.7	1342.0	1342.5	1342.6	1350.3	1365.6	1377.0	1377.0
172.5°	1340.8	1341.6	1342.5	1342.6	1342.6	1342.6	1342.6	1348.7	1360.8	1369.8	1369.1
175°	1350.8	1350.8	1350.8	1350.8	1348.1	1344.5	1342.6	1346.4	1354.1	1359.8	1359.8
177.5°	1350.8	1350.8	1350.8	1350.8	1348.7	1345.8	1344.4	1347.4	1353.5	1358.1	1357.3
180°	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8	1350.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	452.0	452.0
2.5°	482.6	479.7
5°	620.6	623.6
7.5°	835.8	834.3
10°	1039.3	1052.3
12.5°	1187.6	1190.5
15°	1277.7	1283.5
17.5°	1312.6	1314.1
20°	1314.1	1311.2
22.5°	1298.1	1295.2
25°	1279.2	1277.7
27.5°	1261.7	1263.2
30°	1254.5	1258.8
32.5°	1254.5	1261.7
35°	1257.4	1264.6
37.5°	1255.9	1264.6
40°	1250.1	1260.3
42.5°	1234.1	1241.4
45°	1209.4	1218.1
47.5°	1177.4	1183.2
50°	1136.7	1142.5
52.5°	1085.8	1087.2
55°	1024.7	1030.5
57.5°	959.3	960.8
60°	886.6	891.0
62.5°	809.6	809.6
65°	728.2	731.1
67.5°	643.9	651.2
70°	558.1	559.6
72.5°	473.8	473.8
75°	386.6	388.1
77.5°	303.8	303.8
80°	225.3	226.7
82.5°	155.5	158.4
85°	97.4	97.4
87.5°	45.1	40.7
90°	34.5	34.5
92.5°	138.0	110.6
95°	480.9	398.0
97.5°	1152.4	994.5
100°	1660.5	1472.3
102.5°	2160.1	1999.0
105°	2797.2	2710.6
107.5°	3214.6	3235.5
110°	3373.7	3464.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3387.9	3526.5
115°	3298.0	3490.2
117.5°	3107.6	3320.8
120°	2954.1	3161.2
122.5°	2804.6	3008.8
125°	2591.3	2779.5
127.5°	2399.5	2558.4
130°	2286.5	2433.2
132.5°	2183.9	2315.3
135°	2043.5	2156.7
137.5°	1930.8	2023.5
140°	1853.4	1940.0
142.5°	1789.4	1863.9
145°	1693.2	1749.6
147.5°	1619.5	1666.3
150°	1573.1	1611.0
152.5°	1533.3	1562.0
155°	1487.7	1506.7
157.5°	1451.8	1465.0
160°	1430.1	1437.8
162.5°	1416.0	1423.3
165°	1395.7	1403.3
167.5°	1381.1	1384.3
170°	1377.0	1377.0
172.5°	1366.3	1363.5
175°	1359.8	1359.8
177.5°	1354.0	1350.8
180°	1350.8	1350.8

(END OF REPORT)