

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: P938403

Luminaire Tested: SQ4-FB-150U-075D-B40-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938403
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-B40-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

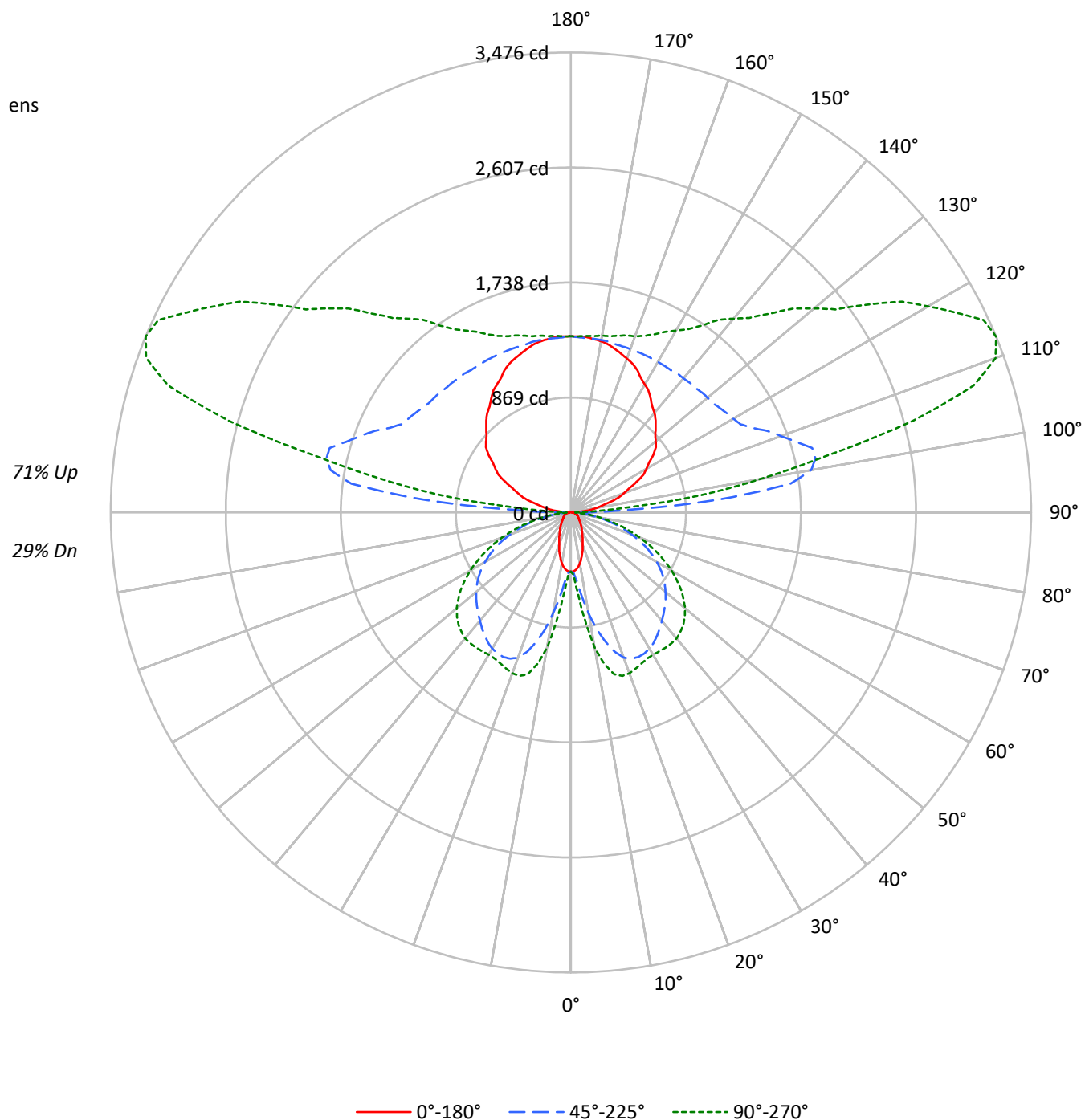
Lumens per Lamp: N/A
Luminaire Lumens: 12081.7 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

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	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36			29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30			23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25			19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21			16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17			13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15			11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13			10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11			8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10			7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9			6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8			6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2756	2756	2756
5°	2691	3185	3704
10°	2440	4641	6141
15°	2073	6062	7416
20°	1687	7024	7558
25°	1407	7348	7405
30°	1186	7392	7390
35°	1048	7268	7582
40°	913	7105	7780
45°	826	6987	7810
50°	757	6880	7680
55°	725	6723	7339
60°	741	6425	6802
65°	769	5973	6063
70°	818	5205	5122
75°	902	4241	3998
80°	980	2938	2694
85°	853	1557	1379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7810 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.6	0.5
10°-20°	255.4	2.1
20°-30°	446.8	3.7
30°-40°	575.1	4.8
40°-50°	642.4	5.3
50°-60°	615.2	5.1
60°-70°	487.6	4.0
70°-80°	286.7	2.4
80°-90°	84.7	0.7
90°-100°	648.9	5.4
100°-110°	1706.1	14.1
110°-120°	1769.0	14.6
120°-130°	1418.9	11.7
130°-140°	1113.4	9.2
140°-150°	854.6	7.1
150°-160°	615.4	5.1
160°-170°	376.6	3.1
170°-180°	127.2	1.1
0°-30°	759.8	6.3
0°-40°	1335.0	11.0
0°-60°	2592.6	21.5
0°-90°	3451.6	28.6
90°-120°	4124.0	34.1
90°-150°	7510.9	62.2
90°-180°	8630.0	71.4
0°-180°	12081.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	434	466	524	593	614	40
15°	325	600	1011	1226	1265	90
25°	208	680	1205	1258	1259	96
35°	140	650	1135	1199	1246	88
45°	96	519	1003	1149	1200	74
55°	69	330	851	988	1016	63
65°	54	175	632	710	720	54
75°	40	107	347	381	382	42
85°	14	33	86	94	96	15
90°	9	25	68	34	34	8
95°	86	336	1118	576	392	95
105°	307	466	1886	2864	2671	326
115°	546	663	1511	3014	3440	539
125°	759	852	1374	2322	2739	674
135°	905	996	1331	1874	2126	700
145°	1050	1117	1314	1599	1724	658
155°	1186	1220	1314	1443	1485	545
165°	1280	1297	1314	1366	1383	361
175°	1331	1331	1323	1340	1340	126
180°	1331	1331	1331	1331	1331	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5
2.5°	445.5	445.5	448.4	449.8	452.7	454.1	457.0	459.8	468.4	469.9	472.7
5°	434.0	439.8	458.4	465.6	485.6	512.8	524.3	542.9	581.6	593.1	600.2
7.5°	416.9	429.8	475.6	487.0	537.2	608.8	638.9	679.0	740.6	770.7	795.0
10°	389.6	416.9	498.5	525.7	607.4	716.2	772.1	828.0	921.1	962.6	978.4
12.5°	359.6	404.0	522.9	560.1	677.6	836.6	903.9	965.5	1071.5	1127.5	1136.1
15°	325.2	385.3	545.8	600.2	752.1	936.9	1011.3	1087.4	1186.2	1226.3	1236.3
17.5°	295.1	371.0	567.3	624.6	809.4	1027.1	1103.1	1166.2	1246.4	1273.6	1280.8
20°	257.8	348.1	581.6	656.1	869.5	1093.1	1166.2	1214.9	1269.3	1286.5	1289.3
22.5°	230.6	323.7	590.2	667.5	909.6	1133.2	1194.8	1233.5	1270.7	1276.5	1277.9
25°	207.7	296.5	588.8	680.4	944.0	1157.6	1204.8	1233.5	1255.0	1257.8	1257.8
27.5°	186.2	266.4	583.0	683.3	969.8	1163.3	1200.5	1220.6	1230.6	1236.3	1236.3
30°	167.6	237.8	568.7	677.6	981.3	1157.6	1187.6	1197.7	1207.7	1216.3	1220.6
32.5°	153.3	210.6	547.2	666.1	982.7	1143.2	1164.7	1170.4	1184.8	1204.8	1212.0
35°	140.4	183.4	522.9	650.4	974.1	1120.3	1134.6	1140.4	1169.0	1199.1	1209.1
37.5°	127.5	163.3	491.3	623.1	961.2	1093.1	1103.1	1113.1	1157.6	1193.4	1204.8
40°	114.6	146.1	454.1	593.1	941.2	1060.0	1068.6	1084.4	1143.2	1184.8	1196.2
42.5°	104.6	131.8	414.0	561.5	915.4	1022.8	1035.7	1058.6	1126.0	1170.4	1183.3
45°	96.0	117.5	371.0	518.6	882.4	984.1	1002.8	1034.3	1106.0	1149.0	1160.4
47.5°	87.4	107.4	326.6	474.2	846.6	945.4	969.8	1005.6	1078.7	1120.3	1130.3
50°	80.2	97.4	282.2	426.9	807.9	903.9	932.6	969.8	1044.3	1083.0	1096.0
52.5°	74.5	88.8	240.7	379.6	763.5	860.9	893.9	932.6	1002.8	1040.0	1048.6
55°	68.8	81.7	204.8	329.5	717.7	815.1	850.9	888.2	956.9	988.4	994.2
57.5°	65.9	75.9	174.8	282.2	669.0	763.5	803.6	838.0	902.5	926.8	932.6
60°	61.6	71.6	151.8	242.1	616.0	714.8	749.2	783.6	838.0	858.1	862.4
62.5°	57.3	68.8	134.7	203.4	561.5	657.5	691.9	723.4	769.3	783.6	789.3
65°	54.4	65.9	121.8	174.8	505.7	597.4	631.7	658.9	696.2	710.5	713.4
67.5°	51.6	63.0	111.7	150.4	449.8	537.2	563.0	588.8	617.4	631.7	633.2
70°	47.3	60.2	103.1	133.2	392.5	468.4	489.9	517.1	540.1	547.2	551.5
72.5°	44.4	55.9	97.4	120.3	333.8	402.5	422.6	438.3	458.4	465.6	465.6
75°	40.1	50.1	91.7	107.4	273.6	329.5	346.7	362.4	378.2	381.0	376.7
77.5°	35.8	44.4	78.8	90.2	213.4	260.7	275.0	283.6	296.5	299.4	300.8
80°	30.1	38.7	61.6	70.2	154.7	192.0	202.0	209.1	220.6	220.6	223.5
82.5°	22.9	30.1	44.4	50.1	104.6	131.8	140.4	144.7	151.8	151.8	151.8
85°	14.3	18.6	28.6	32.9	63.0	80.2	86.0	87.4	93.1	94.5	94.5
87.5°	7.2	10.0	18.6	20.1	32.9	41.5	41.5	44.4	44.4	43.0	41.5
90°	9.0	16.1	23.2	25.0	39.3	58.4	67.9	60.4	45.3	34.0	34.0
92.5°	35.7	96.5	157.3	172.5	242.5	335.8	382.4	335.1	240.7	169.8	163.0
95°	85.8	196.9	308.2	336.0	596.6	944.0	1117.7	997.4	756.7	576.2	555.8
97.5°	148.3	246.4	344.5	369.0	803.5	1382.9	1672.6	1596.6	1444.4	1330.4	1291.4
100°	196.5	285.5	374.5	396.7	878.9	1521.8	1843.2	1848.8	1860.0	1868.3	1821.9
102.5°	237.7	320.7	403.7	424.4	913.5	1565.4	1891.5	1988.3	2182.1	2327.4	2287.7
105°	307.3	377.6	447.9	465.5	939.1	1570.4	1886.1	2103.3	2537.7	2863.6	2842.2
107.5°	378.8	444.4	509.9	526.2	943.7	1500.5	1778.9	2081.9	2687.8	3142.3	3147.5
110°	427.1	486.3	545.4	560.2	936.7	1438.5	1689.5	2028.2	2705.7	3213.8	3236.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	474.4	530.8	587.1	601.3	937.0	1384.5	1608.2	1954.9	2648.2	3168.2	3202.4
115°	545.9	597.9	650.0	663.0	945.5	1322.4	1510.8	1844.8	2512.7	3013.6	3061.0
117.5°	616.5	663.7	711.0	722.8	963.2	1283.6	1443.9	1745.3	2348.0	2800.1	2852.6
120°	657.6	702.1	746.6	757.7	977.4	1270.5	1417.0	1692.5	2243.2	2656.2	2707.2
122.5°	697.8	742.7	787.6	798.8	998.0	1263.7	1396.5	1644.5	2140.4	2512.4	2562.7
125°	759.4	800.3	841.3	851.5	1025.7	1258.0	1374.1	1584.8	2006.1	2322.1	2368.4
127.5°	809.5	850.7	892.1	902.4	1053.4	1254.7	1355.3	1536.2	1898.0	2169.3	2208.4
130°	836.3	880.8	925.3	936.4	1073.7	1256.8	1348.3	1509.3	1831.3	2072.8	2108.9
132.5°	864.0	908.5	953.0	964.1	1090.0	1258.0	1342.0	1486.1	1774.4	1990.6	2023.0
135°	905.1	945.5	986.1	996.3	1107.9	1256.8	1331.3	1452.0	1693.4	1874.5	1902.4
137.5°	947.1	987.2	1027.3	1037.3	1134.7	1264.5	1329.5	1431.5	1635.6	1788.7	1811.5
140°	981.9	1018.9	1055.8	1065.0	1151.1	1265.9	1323.2	1411.4	1587.7	1720.0	1741.3
142.5°	1008.7	1042.9	1077.0	1085.5	1164.8	1270.4	1323.2	1400.7	1555.5	1671.6	1690.0
145°	1049.8	1079.6	1109.4	1116.9	1182.7	1270.4	1314.3	1377.6	1504.3	1599.3	1613.2
147.5°	1090.9	1119.9	1148.9	1156.1	1208.8	1279.1	1314.3	1364.1	1463.7	1538.5	1550.1
150°	1117.7	1143.9	1170.1	1176.7	1222.5	1283.7	1314.3	1356.4	1440.5	1503.6	1513.0
152.5°	1145.4	1165.3	1185.2	1190.1	1231.5	1286.7	1314.3	1350.2	1422.1	1476.0	1483.0
155°	1186.5	1201.2	1215.9	1219.5	1251.1	1293.3	1314.3	1342.8	1400.0	1442.9	1447.6
157.5°	1216.9	1231.2	1245.5	1249.0	1270.8	1299.8	1314.3	1336.5	1381.0	1414.4	1417.6
160°	1237.5	1248.6	1259.6	1262.4	1279.7	1302.7	1314.3	1333.4	1371.5	1400.0	1401.9
162.5°	1258.0	1266.3	1274.6	1276.7	1289.2	1306.0	1314.3	1330.3	1362.5	1386.7	1388.5
165°	1280.4	1287.9	1295.4	1297.3	1302.9	1310.5	1314.3	1325.8	1348.8	1366.1	1368.0
167.5°	1300.9	1304.4	1308.1	1308.9	1313.7	1320.1	1323.2	1330.8	1345.9	1357.2	1357.9
170°	1314.3	1317.8	1321.4	1322.3	1322.6	1323.1	1323.2	1330.8	1345.9	1357.2	1357.2
172.5°	1321.4	1322.2	1323.1	1323.2	1323.2	1323.2	1323.2	1329.2	1341.1	1350.0	1349.3
175°	1331.3	1331.3	1331.3	1331.3	1328.6	1325.1	1323.2	1327.0	1334.5	1340.2	1340.2
177.5°	1331.3	1331.3	1331.3	1331.3	1329.2	1326.4	1325.0	1327.9	1333.9	1338.4	1337.7
180°	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3	1331.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	445.5	445.5
2.5°	475.6	472.7
5°	611.7	614.5
7.5°	823.7	822.3
10°	1024.2	1037.1
12.5°	1170.4	1173.3
15°	1259.3	1265.0
17.5°	1293.6	1295.1
20°	1295.1	1292.2
22.5°	1279.3	1276.5
25°	1260.7	1259.3
27.5°	1243.5	1244.9
30°	1236.3	1240.6
32.5°	1236.3	1243.5
35°	1239.2	1246.4
37.5°	1237.8	1246.4
40°	1232.0	1242.1
42.5°	1216.3	1223.5
45°	1191.9	1200.5
47.5°	1160.4	1166.2
50°	1120.3	1126.0
52.5°	1070.1	1071.5
55°	1009.9	1015.6
57.5°	945.4	946.9
60°	873.8	878.1
62.5°	797.9	797.9
65°	717.7	720.5
67.5°	634.6	641.8
70°	550.1	551.5
72.5°	467.0	467.0
75°	381.0	382.5
77.5°	299.4	299.4
80°	222.0	223.5
82.5°	153.3	156.1
85°	96.0	96.0
87.5°	44.4	40.1
90°	34.0	34.0
92.5°	136.0	109.0
95°	474.0	392.2
97.5°	1135.8	980.1
100°	1636.5	1451.0
102.5°	2128.9	1970.1
105°	2756.8	2671.4
107.5°	3168.1	3188.7
110°	3324.9	3413.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3339.0	3475.5
115°	3250.3	3439.8
117.5°	3062.7	3272.8
120°	2911.4	3115.5
122.5°	2764.1	2965.4
125°	2553.9	2739.3
127.5°	2364.9	2521.4
130°	2253.5	2398.0
132.5°	2152.4	2281.9
135°	2014.0	2125.5
137.5°	1902.9	1994.2
140°	1826.6	1912.0
142.5°	1763.5	1836.9
145°	1668.8	1724.3
147.5°	1596.1	1642.2
150°	1550.3	1587.7
152.5°	1511.2	1539.5
155°	1466.2	1484.9
157.5°	1430.8	1443.9
160°	1409.5	1417.0
162.5°	1395.5	1402.7
165°	1375.5	1383.0
167.5°	1361.2	1364.3
170°	1357.2	1357.2
172.5°	1346.6	1343.8
175°	1340.2	1340.2
177.5°	1334.4	1331.3
180°	1331.3	1331.3

(END OF REPORT)