

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: P937208

Luminaire Tested: SQ4-FB-075U-075D-B50-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937208
REPORT IS A COMBINATION OF REPORTS P933518 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-075D-B50-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

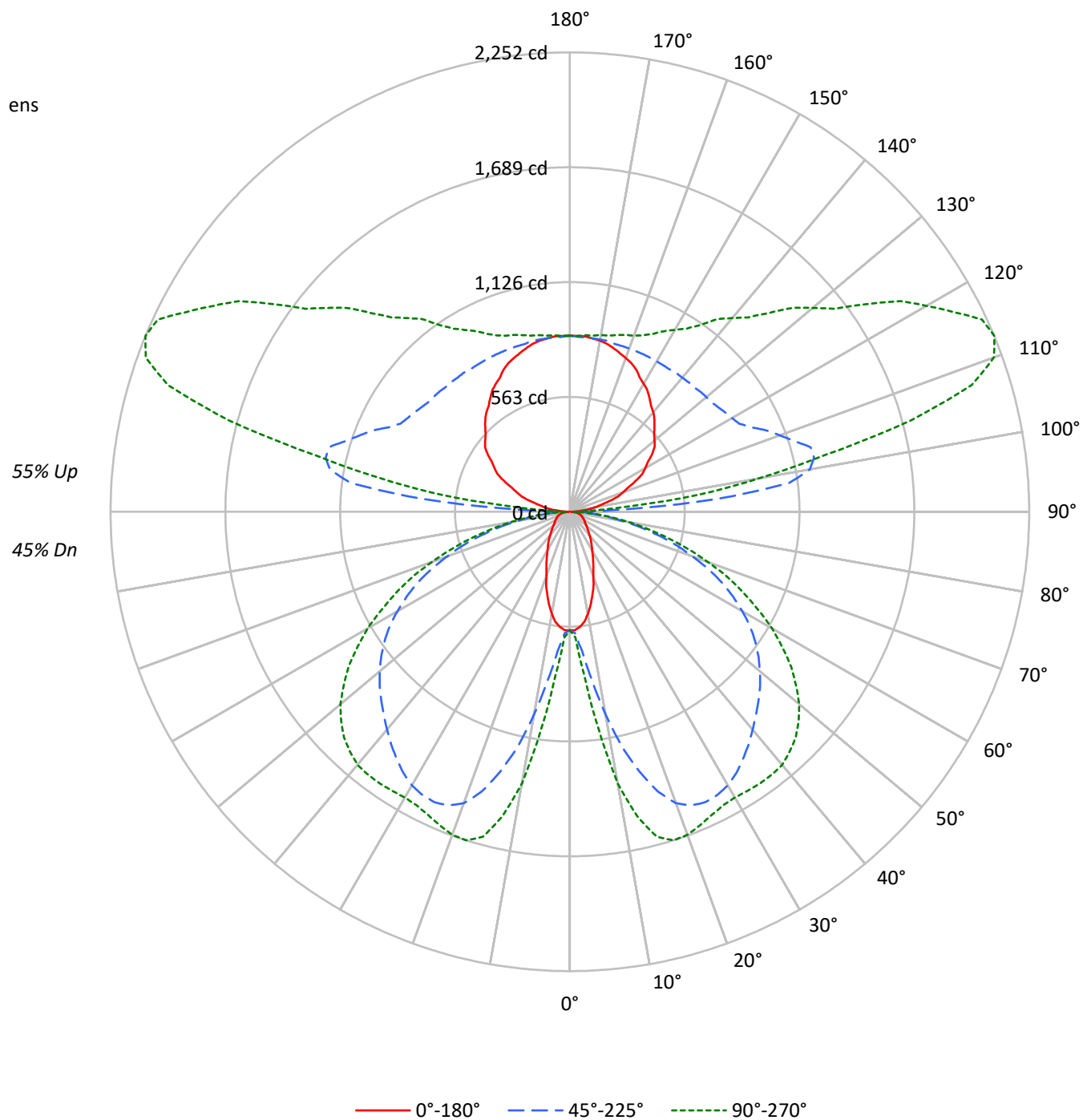
Lumens per Lamp: N/A
Luminaire Lumens: 10090.9 lumens
Efficiency: N/A
Efficacy: 119.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 84.8
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					0
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	80	77		70	67	65		57	55	53		44	43	42
2	87	79	73	68	79	73	67	63		60	56	53		49	46	44		38	36	35
3	79	69	62	56	72	64	57	52		53	48	44		43	39	36		34	31	29
4	72	61	53	47	65	56	49	43		46	41	37		38	34	31		30	27	24
5	66	54	46	39	60	50	42	37		41	36	31		34	29	26		26	23	21
6	60	48	40	34	55	44	37	31		37	31	27		30	26	22		24	21	18
7	56	43	35	29	51	40	32	27		33	28	23		27	23	20		21	18	16
8	51	39	31	26	47	36	29	24		30	24	21		25	20	17		20	16	14
9	48	35	28	23	44	33	26	21		27	22	18		22	18	15		18	15	12
10	44	32	25	20	41	30	23	19		25	20	16		21	17	14		16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2695	2695	2695
5°	2633	3115	3623
10°	2388	4541	6007
15°	2030	5933	7253
20°	1652	6875	7392
25°	1379	7195	7242
30°	1163	7241	7228
35°	1028	7120	7415
40°	895	6964	7608
45°	811	6850	7638
50°	744	6747	7511
55°	713	6596	7179
60°	729	6306	6653
65°	759	5866	5930
70°	808	5116	5010
75°	896	4171	3910
80°	978	2893	2634
85°	871	1535	1349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7638 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	75.1	0.7
10°-20°	333.1	3.3
20°-30°	582.6	5.8
30°-40°	750.0	7.4
40°-50°	837.7	8.3
50°-60°	802.3	8.0
60°-70°	635.8	6.3
70°-80°	373.9	3.7
80°-90°	107.2	1.1
90°-100°	420.6	4.2
100°-110°	1105.7	11.0
110°-120°	1146.5	11.4
120°-130°	919.6	9.1
130°-140°	721.6	7.2
140°-150°	553.9	5.5
150°-160°	398.9	4.0
160°-170°	244.0	2.4
170°-180°	82.5	0.8
0°-30°	990.8	9.8
0°-40°	1740.8	17.3
0°-60°	3380.8	33.5
0°-90°	4497.7	44.6
90°-120°	2672.8	26.5
90°-150°	4867.9	48.2
90°-180°	5593.0	55.4
0°-180°	10090.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	581	581	581	581	581	
5°	566	607	684	773	801	52
15°	424	783	1319	1599	1650	118
25°	271	887	1571	1640	1642	125
35°	183	848	1480	1564	1625	114
45°	125	676	1308	1498	1566	97
55°	90	430	1110	1289	1324	82
65°	71	228	824	926	940	70
75°	52	140	452	497	499	55
85°	19	43	112	123	125	20
90°	6	16	44	22	22	6
95°	56	218	724	374	254	62
105°	199	302	1222	1856	1731	211
115°	354	430	979	1953	2229	349
125°	492	552	891	1505	1775	437
135°	587	646	863	1215	1378	454
145°	680	724	852	1037	1118	426
155°	769	790	852	935	962	353
165°	830	841	852	885	896	234
175°	863	863	858	869	869	82
180°	863	863	863	863	863	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9	580.9
2.5°	580.9	580.9	584.7	586.6	590.3	592.2	595.9	599.6	610.8	612.7	616.4
5°	566.0	573.5	597.8	607.1	633.3	668.7	683.7	708.0	758.4	773.4	782.7
7.5°	543.6	560.4	620.2	635.1	700.5	793.9	833.1	885.4	965.8	1005.0	1036.7
10°	508.1	543.6	650.1	685.6	792.0	934.0	1006.9	1079.8	1201.2	1255.4	1275.9
12.5°	468.9	526.8	681.8	730.4	883.6	1091.0	1178.8	1259.1	1397.4	1470.2	1481.4
15°	424.0	502.5	711.7	782.7	980.7	1221.8	1318.9	1417.9	1546.8	1599.1	1612.2
17.5°	384.8	483.8	739.7	814.4	1055.4	1339.4	1438.5	1520.6	1625.3	1660.7	1670.1
20°	336.2	453.9	758.4	855.5	1134.0	1425.4	1520.6	1584.2	1655.1	1677.6	1681.3
22.5°	300.7	422.2	769.6	870.5	1186.3	1477.7	1558.0	1608.4	1657.0	1664.5	1666.3
25°	270.9	386.7	767.7	887.3	1231.1	1509.4	1571.1	1608.4	1636.5	1640.2	1640.2
27.5°	242.8	347.4	760.3	891.0	1264.7	1516.9	1565.5	1591.6	1604.7	1612.2	1612.2
30°	218.6	310.1	741.6	883.6	1279.7	1509.4	1548.7	1561.7	1574.8	1586.0	1591.6
32.5°	199.9	274.6	713.6	868.6	1281.5	1490.8	1518.8	1526.2	1544.9	1571.1	1580.4
35°	183.1	239.1	681.8	848.1	1270.3	1460.9	1479.5	1487.0	1524.4	1563.6	1576.7
37.5°	166.3	213.0	640.7	812.6	1253.5	1425.4	1438.5	1451.5	1509.4	1556.1	1571.1
40°	149.4	190.5	592.2	773.4	1227.4	1382.4	1393.6	1414.2	1490.8	1544.9	1559.9
42.5°	136.4	171.9	539.9	732.3	1193.7	1333.8	1350.7	1380.5	1468.3	1526.2	1543.1
45°	125.2	153.2	483.8	676.2	1150.8	1283.4	1307.7	1348.8	1442.2	1498.2	1513.2
47.5°	113.9	140.1	425.9	618.3	1104.1	1233.0	1264.7	1311.4	1406.7	1460.9	1473.9
50°	104.6	127.0	368.0	556.7	1053.6	1178.8	1216.2	1264.7	1361.9	1412.3	1429.1
52.5°	97.1	115.8	313.8	495.0	995.6	1122.8	1165.7	1216.2	1307.7	1356.3	1367.5
55°	89.7	106.5	267.1	429.6	935.9	1063.0	1109.7	1158.3	1247.9	1289.0	1296.5
57.5°	85.9	99.0	227.9	368.0	872.4	995.6	1047.9	1092.9	1176.9	1208.7	1216.2
60°	80.3	93.4	198.0	315.7	803.2	932.1	977.0	1021.8	1092.9	1119.0	1124.6
62.5°	74.7	89.7	175.6	265.3	732.3	857.4	902.2	943.3	1003.1	1021.8	1029.3
65°	71.0	85.9	158.8	227.9	659.4	779.0	823.8	859.3	907.8	926.5	930.3
67.5°	67.2	82.2	145.7	196.1	586.6	700.5	734.1	767.7	805.1	823.8	825.7
70°	61.6	78.5	134.5	173.7	511.8	610.8	638.9	674.3	704.2	713.6	719.2
72.5°	57.9	72.9	127.0	156.9	435.2	524.9	551.1	571.6	597.8	607.1	607.1
75°	52.3	65.4	119.6	140.1	356.8	429.6	452.1	472.6	493.2	496.9	491.3
77.5°	46.7	57.9	102.7	117.7	278.3	340.0	358.7	369.9	386.7	390.4	392.3
80°	39.2	50.4	80.3	91.5	201.7	250.3	263.4	272.7	287.7	287.7	291.4
82.5°	29.9	39.2	57.9	65.4	136.4	171.9	183.1	188.7	198.0	198.0	198.0
85°	18.7	24.3	37.4	43.0	82.2	104.6	112.1	113.9	121.4	123.3	123.3
87.5°	9.3	13.1	24.3	26.2	43.0	54.2	54.2	57.9	57.9	56.0	54.2
90°	5.8	10.5	15.1	16.3	25.5	37.8	44.0	39.1	29.3	22.0	22.0
92.5°	23.2	62.6	102.0	111.8	157.2	217.6	247.9	217.2	156.0	110.0	105.6
95°	55.6	127.7	199.7	217.7	386.6	611.8	724.4	646.4	490.4	373.5	360.2
97.5°	96.1	159.7	223.3	239.2	520.8	896.3	1084.0	1034.7	936.1	862.3	837.1
100°	127.4	185.0	242.7	257.1	569.6	986.3	1194.6	1198.2	1205.4	1210.8	1180.8
102.5°	154.0	207.8	261.6	275.1	592.0	1014.6	1225.9	1288.6	1414.3	1508.5	1482.7
105°	199.2	244.8	290.3	301.7	608.6	1017.8	1222.4	1363.2	1644.7	1855.9	1842.0
107.5°	245.5	288.0	330.4	341.1	611.7	972.5	1152.9	1349.3	1742.0	2036.6	2039.9
110°	276.8	315.1	353.4	363.0	607.0	932.3	1095.0	1314.5	1753.6	2082.9	2097.3

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	307.5	344.0	380.5	389.7	607.2	897.3	1042.3	1267.1	1716.4	2053.4	2075.5
115°	353.8	387.5	421.2	429.6	612.8	857.0	979.2	1195.6	1628.5	1953.2	1983.9
117.5°	399.6	430.2	460.8	468.5	624.3	831.9	935.8	1131.1	1521.8	1814.8	1848.8
120°	426.2	455.0	483.8	491.0	633.4	823.4	918.4	1096.9	1453.9	1721.5	1754.6
122.5°	452.2	481.4	510.4	517.7	646.8	818.9	905.0	1065.8	1387.3	1628.3	1660.9
125°	492.2	518.7	545.2	551.8	664.7	815.3	890.6	1027.1	1300.1	1505.0	1535.0
127.5°	524.6	551.4	578.1	584.9	682.8	813.2	878.4	995.6	1230.1	1406.0	1431.3
130°	542.0	570.8	599.6	606.8	695.8	814.5	873.9	978.2	1186.9	1343.5	1366.9
132.5°	559.9	588.8	617.7	624.8	706.5	815.3	869.7	963.1	1150.0	1290.1	1311.1
135°	586.6	612.8	639.1	645.7	718.1	814.5	862.8	941.1	1097.5	1214.9	1233.0
137.5°	613.8	639.8	665.8	672.3	735.4	819.6	861.6	927.7	1060.1	1159.3	1174.0
140°	636.4	660.3	684.2	690.2	746.0	820.4	857.6	914.8	1029.0	1114.7	1128.6
142.5°	653.8	675.9	698.1	703.6	755.0	823.4	857.6	907.8	1008.2	1083.4	1095.3
145°	680.4	699.8	719.0	723.8	766.5	823.4	851.8	892.9	975.0	1036.6	1045.5
147.5°	707.0	725.8	744.7	749.3	783.5	829.0	851.8	884.1	948.7	997.1	1004.6
150°	724.4	741.4	758.4	762.6	792.3	832.0	851.8	879.1	933.6	974.5	980.6
152.5°	742.3	755.2	768.1	771.3	798.1	833.9	851.8	875.1	921.7	956.6	961.2
155°	769.0	778.5	788.0	790.4	810.9	838.2	851.8	870.3	907.4	935.2	938.2
157.5°	788.7	797.9	807.2	809.5	823.6	842.4	851.8	866.2	895.1	916.6	918.8
160°	802.0	809.2	816.4	818.2	829.4	844.3	851.8	864.1	888.9	907.4	908.6
162.5°	815.3	820.7	826.1	827.5	835.6	846.4	851.8	862.3	883.1	898.7	899.8
165°	829.8	834.6	839.6	840.8	844.4	849.4	851.8	859.3	874.2	885.4	886.6
167.5°	843.1	845.5	847.8	848.4	851.4	855.5	857.6	862.5	872.3	879.6	880.1
170°	851.8	854.1	856.5	857.0	857.2	857.5	857.6	862.5	872.3	879.6	879.6
172.5°	856.5	856.9	857.5	857.6	857.6	857.6	857.6	861.4	869.2	875.0	874.5
175°	862.8	862.8	862.8	862.8	861.1	858.7	857.6	860.0	865.0	868.6	868.6
177.5°	862.8	862.8	862.8	862.8	861.4	859.7	858.7	860.7	864.5	867.4	866.9
180°	862.8	862.8	862.8	862.8	862.8	862.8	862.8	862.8	862.8	862.8	862.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	580.9	580.9
2.5°	620.2	616.4
5°	797.6	801.4
7.5°	1074.2	1072.3
10°	1335.7	1352.5
12.5°	1526.2	1530.0
15°	1642.1	1649.5
17.5°	1686.9	1688.8
20°	1688.8	1685.0
22.5°	1668.2	1664.5
25°	1643.9	1642.1
27.5°	1621.5	1623.4
30°	1612.2	1617.8
32.5°	1612.2	1621.5
35°	1615.9	1625.3
37.5°	1614.0	1625.3
40°	1606.6	1619.6
42.5°	1586.0	1595.4
45°	1554.3	1565.5
47.5°	1513.2	1520.6
50°	1460.9	1468.3
52.5°	1395.5	1397.4
55°	1317.0	1324.5
57.5°	1233.0	1234.8
60°	1139.6	1145.2
62.5°	1040.5	1040.5
65°	935.9	939.6
67.5°	827.5	836.9
70°	717.3	719.2
72.5°	609.0	609.0
75°	496.9	498.8
77.5°	390.4	390.4
80°	289.5	291.4
82.5°	199.9	203.6
85°	125.2	125.2
87.5°	57.9	52.3
90°	22.0	22.0
92.5°	88.2	70.6
95°	307.3	254.2
97.5°	736.1	635.2
100°	1060.7	940.4
102.5°	1379.8	1276.9
105°	1786.6	1731.4
107.5°	2053.3	2066.7
110°	2155.0	2212.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2164.0	2252.5
115°	2106.6	2229.4
117.5°	1984.9	2121.1
120°	1887.0	2019.2
122.5°	1791.4	1921.9
125°	1655.2	1775.4
127.5°	1532.7	1634.1
130°	1460.5	1554.2
132.5°	1395.0	1478.9
135°	1305.3	1377.6
137.5°	1233.3	1292.5
140°	1183.9	1239.2
142.5°	1142.9	1190.6
145°	1081.6	1117.6
147.5°	1034.4	1064.3
150°	1004.8	1029.0
152.5°	979.4	997.7
155°	950.3	962.4
157.5°	927.3	935.8
160°	913.5	918.4
162.5°	904.5	909.2
165°	891.5	896.4
167.5°	882.2	884.2
170°	879.6	879.6
172.5°	872.7	871.0
175°	868.6	868.6
177.5°	864.9	862.8
180°	862.8	862.8

(END OF REPORT)