

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: P937704

Luminaire Tested: SQ4-FB-100U-100D-B40-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937704
REPORT IS A COMBINATION OF REPORTS P933583 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-100D-B40-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

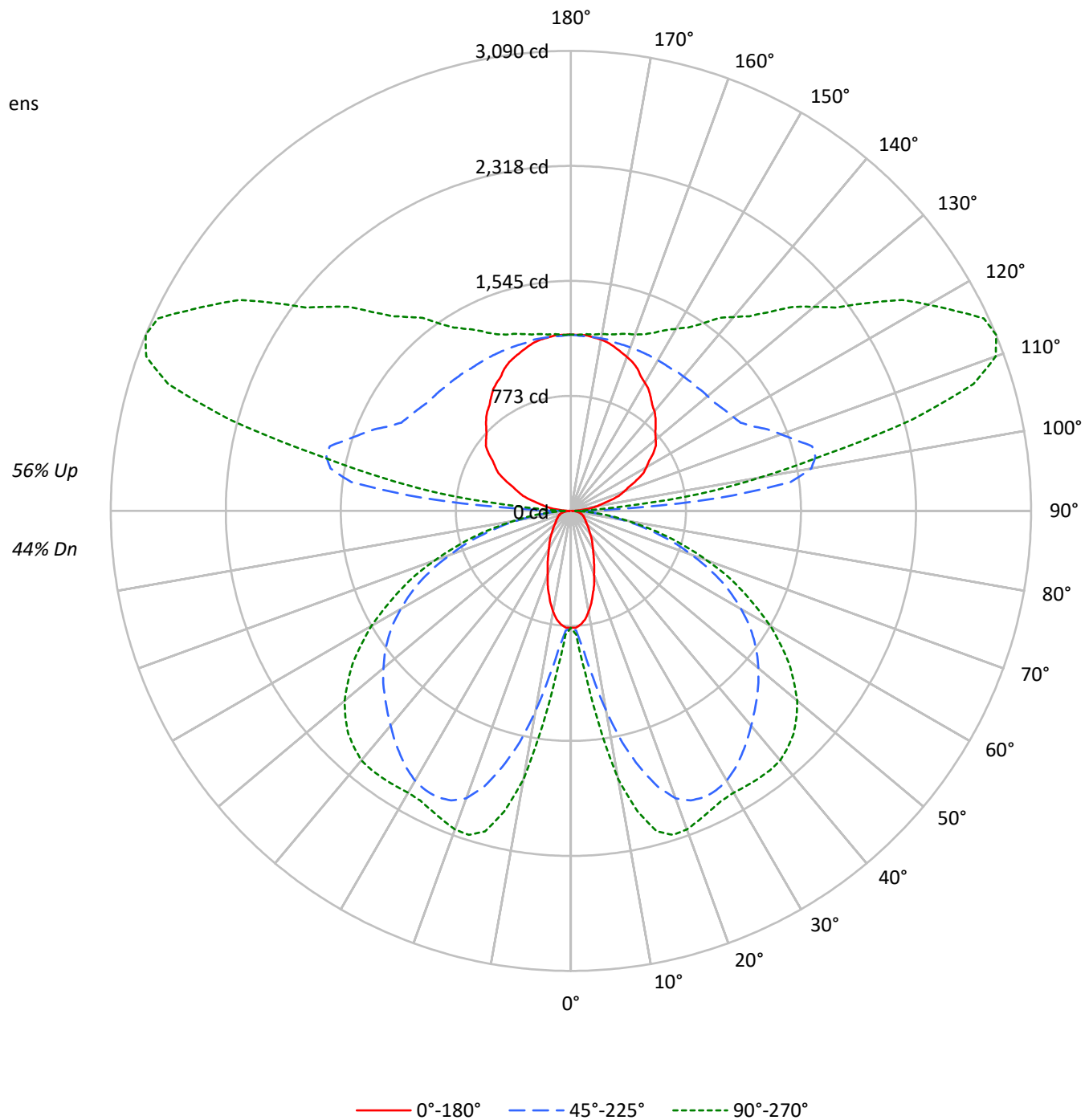
Lumens per Lamp: N/A
Luminaire Lumens: 13750.1 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 116
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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	91	87	84	88	84	80	77	69	67	65	56	55	53	44	43	42
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34
3	79	69	62	56	72	63	57	52	53	48	44	43	39	36	33	31	29
4	72	61	53	46	65	56	49	43	46	41	37	38	34	30	29	27	24
5	66	54	46	39	60	49	42	37	41	36	31	33	29	26	26	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	20	18
7	56	43	35	29	51	40	32	27	33	27	23	27	23	19	21	18	16
8	51	39	31	26	47	36	29	24	30	24	20	25	20	17	19	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	16	14	16	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3642	3642	3642
5°	3558	4209	4895
10°	3227	6135	8115
15°	2743	8015	9799
20°	2233	9289	9986
25°	1863	9720	9783
30°	1571	9782	9765
35°	1389	9619	10017
40°	1210	9408	10278
45°	1096	9254	10319
50°	1005	9115	10147
55°	962	8911	9698
60°	985	8519	8988
65°	1025	7925	8012
70°	1092	6911	6768
75°	1211	5634	5282
80°	1322	3907	3559
85°	1174	2074	1822

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10319 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	101.5	0.7
10°-20°	450.0	3.3
20°-30°	787.1	5.7
30°-40°	1013.2	7.4
40°-50°	1131.7	8.2
50°-60°	1083.9	7.9
60°-70°	859.0	6.2
70°-80°	505.1	3.7
80°-90°	144.9	1.1
90°-100°	577.0	4.2
100°-110°	1517.0	11.0
110°-120°	1573.0	11.4
120°-130°	1261.7	9.2
130°-140°	990.0	7.2
140°-150°	759.9	5.5
150°-160°	547.2	4.0
160°-170°	334.8	2.4
170°-180°	113.1	0.8
0°-30°	1338.6	9.7
0°-40°	2351.8	17.1
0°-60°	4567.4	33.2
0°-90°	6076.4	44.2
90°-120°	3667.0	26.7
90°-150°	6678.5	48.6
90°-180°	7674.0	55.8
0°-180°	13750.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	785	785	785	785	785	
5°	765	820	924	1045	1083	71
15°	573	1058	1782	2160	2228	159
25°	366	1199	2122	2216	2218	169
35°	247	1146	1999	2112	2196	154
45°	169	914	1767	2024	2115	131
55°	121	580	1499	1741	1789	110
65°	96	308	1113	1252	1270	95
75°	71	189	611	671	674	74
85°	25	58	152	167	169	27
90°	8	22	60	30	30	8
95°	76	299	994	512	349	85
105°	273	414	1677	2546	2375	290
115°	485	590	1343	2680	3059	479
125°	675	757	1222	2065	2436	600
135°	805	886	1184	1667	1890	623
145°	934	993	1169	1422	1533	585
155°	1055	1084	1169	1283	1320	485
165°	1138	1154	1169	1215	1230	321
175°	1184	1184	1177	1192	1192	112
180°	1184	1184	1184	1184	1184	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9
2.5°	784.9	784.9	790.0	792.5	797.5	800.0	805.1	810.1	825.3	827.8	832.9
5°	764.7	774.8	807.6	820.2	855.6	903.5	923.7	956.5	1024.6	1044.9	1057.5
7.5°	734.4	757.1	837.9	858.1	946.4	1072.6	1125.6	1196.2	1304.8	1357.8	1400.7
10°	686.5	734.4	878.3	926.3	1070.1	1261.8	1360.3	1458.8	1622.7	1696.0	1723.7
12.5°	633.5	711.7	921.2	986.8	1193.8	1473.9	1592.5	1701.0	1887.7	1986.2	2001.3
15°	572.9	678.9	961.6	1057.5	1325.0	1650.5	1781.7	1915.5	2089.6	2160.3	2178.0
17.5°	519.9	653.7	999.4	1100.4	1425.9	1809.5	1943.3	2054.3	2195.6	2243.6	2256.3
20°	454.3	613.3	1024.6	1155.8	1531.9	1925.7	2054.3	2140.2	2236.0	2266.3	2271.4
22.5°	406.4	570.3	1039.8	1176.1	1602.6	1996.3	2104.8	2172.9	2238.6	2248.6	2251.2
25°	366.0	522.4	1037.2	1198.8	1663.1	2039.2	2122.5	2172.9	2210.8	2215.9	2215.9
27.5°	328.0	469.4	1027.2	1203.9	1708.6	2049.3	2114.9	2150.3	2167.9	2178.0	2178.0
30°	295.3	419.0	1001.9	1193.8	1728.7	2039.2	2092.2	2109.9	2127.5	2142.6	2150.3
32.5°	270.1	371.0	964.1	1173.5	1731.3	2014.0	2051.8	2061.9	2087.2	2122.5	2135.1
35°	247.3	323.1	921.2	1145.8	1716.1	1973.6	1998.8	2008.9	2059.4	2112.4	2130.0
37.5°	224.6	287.7	865.6	1097.9	1693.4	1925.7	1943.3	1961.0	2039.2	2102.2	2122.5
40°	201.9	257.5	800.0	1044.9	1658.1	1867.6	1882.7	1910.5	2014.0	2087.2	2107.3
42.5°	184.2	232.2	729.3	989.3	1612.7	1802.0	1824.7	1865.0	1983.6	2061.9	2084.7
45°	169.1	206.9	653.7	913.6	1554.6	1733.8	1766.7	1822.1	1948.3	2024.0	2044.3
47.5°	153.9	189.3	575.4	835.3	1491.5	1665.7	1708.6	1771.7	1900.4	1973.6	1991.3
50°	141.3	171.6	497.2	752.1	1423.4	1592.5	1643.0	1708.6	1839.8	1908.0	1930.6
52.5°	131.2	156.4	424.0	668.8	1345.1	1516.7	1574.8	1643.0	1766.7	1832.3	1847.4
55°	121.1	143.8	360.9	580.4	1264.4	1436.0	1499.1	1564.8	1685.9	1741.3	1751.5
57.5°	116.1	133.8	307.9	497.2	1178.6	1345.1	1415.8	1476.4	1590.0	1632.9	1643.0
60°	108.5	126.2	267.5	426.5	1085.3	1259.4	1319.9	1380.5	1476.4	1511.8	1519.3
62.5°	100.9	121.1	237.2	358.4	989.3	1158.4	1219.0	1274.5	1355.2	1380.5	1390.6
65°	95.9	116.1	214.5	307.9	890.9	1052.4	1113.0	1160.9	1226.5	1251.8	1256.9
67.5°	90.8	111.1	196.8	265.0	792.5	946.4	991.9	1037.2	1087.7	1113.0	1115.5
70°	83.3	106.0	181.7	234.7	691.5	825.3	863.1	911.1	951.5	964.1	971.6
72.5°	78.2	98.5	171.6	212.0	588.0	709.2	744.5	772.3	807.6	820.2	820.2
75°	70.7	88.3	161.5	189.3	482.1	580.4	610.7	638.5	666.3	671.4	663.7
77.5°	63.1	78.2	138.8	159.0	376.1	459.4	484.6	499.7	522.4	527.4	530.0
80°	53.0	68.2	108.5	123.7	272.6	338.2	355.8	368.4	388.7	388.7	393.7
82.5°	40.4	53.0	78.2	88.3	184.2	232.2	247.3	254.9	267.5	267.5	267.5
85°	25.2	32.9	50.5	58.1	111.1	141.3	151.5	153.9	164.1	166.6	166.6
87.5°	12.6	17.7	32.9	35.3	58.1	73.2	73.2	78.2	78.2	75.7	73.2
90°	7.9	14.3	20.6	22.3	35.0	51.9	60.4	53.7	40.2	30.2	30.2
92.5°	31.8	85.9	139.9	153.4	215.5	298.5	340.0	298.0	214.0	151.0	145.0
95°	76.3	175.1	274.0	298.7	530.4	839.3	993.9	886.9	672.9	512.5	494.3
97.5°	131.9	219.1	306.4	328.1	714.5	1229.7	1487.2	1419.6	1284.4	1183.0	1148.4
100°	174.8	253.8	333.0	352.8	781.5	1353.1	1639.0	1643.9	1653.8	1661.2	1620.0
102.5°	211.3	285.1	358.9	377.3	812.1	1391.9	1681.9	1768.0	1940.4	2069.6	2034.2
105°	273.3	335.8	398.2	413.9	835.0	1396.4	1677.1	1870.2	2256.5	2546.2	2527.2
107.5°	336.8	395.1	453.3	468.0	839.3	1334.2	1581.8	1851.2	2390.0	2794.0	2798.6
110°	379.7	432.3	484.9	498.1	832.9	1279.1	1502.3	1803.5	2405.8	2857.6	2877.4

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	421.8	472.0	522.2	534.7	833.1	1231.1	1430.0	1738.3	2354.7	2817.2	2847.5
115°	485.4	531.6	578.0	589.5	840.8	1175.9	1343.4	1640.4	2234.3	2679.7	2721.8
117.5°	548.2	590.2	632.2	642.7	856.4	1141.3	1283.8	1551.8	2087.8	2489.8	2536.5
120°	584.7	624.3	663.8	673.7	869.1	1129.8	1260.0	1504.9	1994.6	2361.9	2407.3
122.5°	620.5	660.4	700.3	710.2	887.4	1123.6	1241.7	1462.2	1903.2	2234.0	2278.8
125°	675.3	711.7	748.1	757.1	912.0	1118.6	1221.8	1409.2	1783.8	2064.8	2106.1
127.5°	719.8	756.5	793.2	802.4	936.7	1115.7	1205.2	1366.0	1687.7	1928.9	1963.7
130°	743.6	783.1	822.6	832.6	954.6	1117.4	1198.8	1342.0	1628.4	1843.2	1875.2
132.5°	768.2	807.7	847.3	857.2	969.2	1118.6	1193.3	1321.4	1577.8	1770.0	1798.7
135°	804.8	840.8	876.9	885.9	985.2	1117.5	1183.7	1291.1	1505.7	1666.8	1691.6
137.5°	842.1	877.7	913.5	922.3	1009.0	1124.4	1182.1	1272.8	1454.4	1590.5	1610.8
140°	873.1	905.9	938.8	947.0	1023.5	1125.6	1176.6	1255.0	1411.8	1529.3	1548.3
142.5°	896.9	927.3	957.7	965.2	1035.7	1129.6	1176.6	1245.4	1383.1	1486.5	1502.8
145°	933.5	960.0	986.5	993.1	1051.6	1129.7	1168.6	1225.0	1337.6	1422.1	1434.4
147.5°	970.0	995.8	1021.6	1028.1	1074.9	1137.4	1168.6	1212.9	1301.6	1368.0	1378.3
150°	993.9	1017.2	1040.5	1046.3	1087.1	1141.4	1168.6	1206.1	1280.9	1337.1	1345.4
152.5°	1018.5	1036.2	1053.8	1058.2	1095.0	1144.1	1168.6	1200.6	1264.5	1312.5	1318.8
155°	1055.0	1068.1	1081.2	1084.4	1112.5	1149.9	1168.6	1194.0	1244.9	1283.0	1287.1
157.5°	1082.0	1094.7	1107.5	1110.7	1130.0	1155.7	1168.6	1188.4	1227.9	1257.6	1260.5
160°	1100.4	1110.3	1120.1	1122.6	1138.0	1158.4	1168.6	1185.6	1219.5	1244.9	1246.7
162.5°	1118.6	1126.0	1133.5	1135.3	1146.4	1161.2	1168.6	1183.0	1211.5	1233.0	1234.6
165°	1138.5	1145.1	1151.8	1153.5	1158.6	1165.3	1168.6	1178.9	1199.4	1214.8	1216.5
167.5°	1156.7	1159.8	1163.1	1163.9	1168.1	1173.7	1176.6	1183.2	1196.7	1206.7	1207.4
170°	1168.6	1171.8	1175.0	1175.8	1176.1	1176.4	1176.6	1183.2	1196.7	1206.7	1206.7
172.5°	1175.0	1175.7	1176.4	1176.6	1176.6	1176.6	1176.6	1181.9	1192.5	1200.4	1199.9
175°	1183.7	1183.7	1183.7	1183.7	1181.3	1178.2	1176.6	1179.9	1186.6	1191.6	1191.6
177.5°	1183.7	1183.7	1183.7	1183.7	1181.9	1179.4	1178.2	1180.9	1186.1	1190.1	1189.5
180°	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7	1183.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	784.9	784.9
2.5°	837.9	832.9
5°	1077.6	1082.7
7.5°	1451.1	1448.6
10°	1804.5	1827.2
12.5°	2061.9	2067.0
15°	2218.4	2228.5
17.5°	2278.9	2281.5
20°	2281.5	2276.4
22.5°	2253.7	2248.6
25°	2220.9	2218.4
27.5°	2190.6	2193.2
30°	2178.0	2185.6
32.5°	2178.0	2190.6
35°	2183.0	2195.6
37.5°	2180.6	2195.6
40°	2170.4	2188.1
42.5°	2142.6	2155.2
45°	2099.8	2114.9
47.5°	2044.3	2054.3
50°	1973.6	1983.6
52.5°	1885.3	1887.7
55°	1779.3	1789.4
57.5°	1665.7	1668.2
60°	1539.5	1547.1
62.5°	1405.8	1405.8
65°	1264.4	1269.5
67.5°	1118.0	1130.6
70°	969.1	971.6
72.5°	822.7	822.7
75°	671.4	673.8
77.5°	527.4	527.4
80°	391.2	393.7
82.5°	270.1	275.1
85°	169.1	169.1
87.5°	78.2	70.7
90°	30.2	30.2
92.5°	121.0	96.9
95°	421.5	348.8
97.5°	1009.9	871.5
100°	1455.1	1290.2
102.5°	1893.0	1751.8
105°	2451.3	2375.4
107.5°	2817.1	2835.4
110°	2956.5	3035.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2968.9	3090.4
115°	2890.2	3058.7
117.5°	2723.3	2910.1
120°	2588.8	2770.3
122.5°	2457.8	2636.8
125°	2270.9	2435.8
127.5°	2102.8	2242.0
130°	2003.8	2132.3
132.5°	1913.9	2029.0
135°	1790.8	1890.0
137.5°	1692.0	1773.2
140°	1624.2	1700.1
142.5°	1568.1	1633.4
145°	1483.9	1533.3
147.5°	1419.2	1460.2
150°	1378.5	1411.8
152.5°	1343.8	1368.8
155°	1303.8	1320.4
157.5°	1272.2	1283.8
160°	1253.3	1260.0
162.5°	1240.9	1247.3
165°	1223.2	1229.8
167.5°	1210.3	1213.1
170°	1206.7	1206.7
172.5°	1197.4	1194.9
175°	1191.6	1191.6
177.5°	1186.6	1183.7
180°	1183.7	1183.7

(END OF REPORT)