

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: P937700

Luminaire Tested: SQ4-FB-100U-100D-B35-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937700
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-B35-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

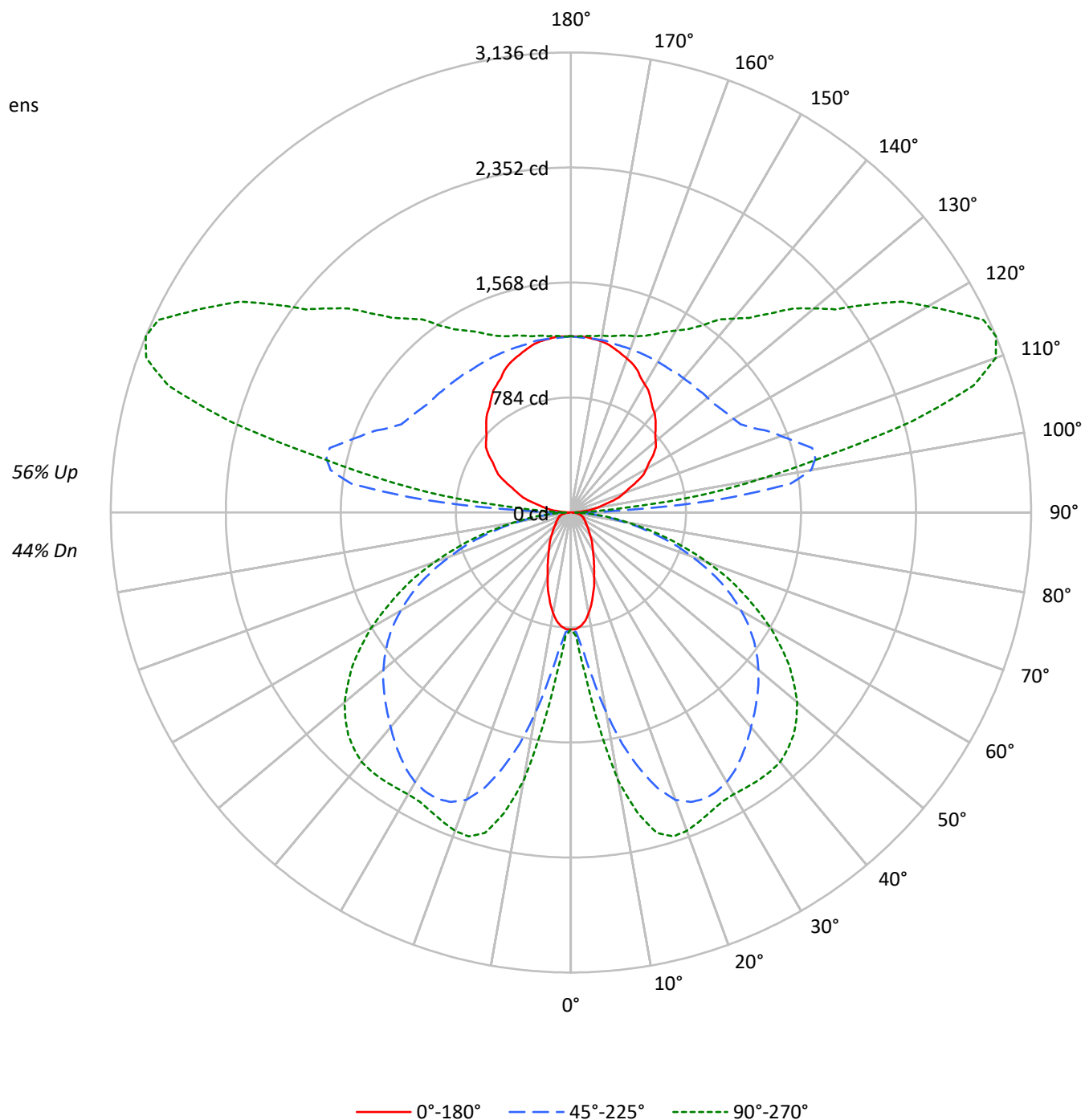
Lumens per Lamp: N/A
Luminaire Lumens: 13951.7 lumens
Efficiency: N/A
Efficacy: 120.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

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

TEST NUMBER: P937700

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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°	3695	3695	3695
5°	3610	4270	4967
10°	3274	6225	8234
15°	2783	8133	9943
20°	2266	9425	10133
25°	1890	9863	9927
30°	1594	9925	9908
35°	1409	9760	10164
40°	1228	9546	10429
45°	1112	9390	10470
50°	1020	9248	10296
55°	977	9041	9840
60°	1000	8645	9120
65°	1040	8041	8129
70°	1108	7012	6868
75°	1228	5717	5359
80°	1342	3964	3611
85°	1192	2104	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10470 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.0	0.7
10°-20°	456.6	3.3
20°-30°	798.6	5.7
30°-40°	1028.1	7.4
40°-50°	1148.3	8.2
50°-60°	1099.8	7.9
60°-70°	871.6	6.2
70°-80°	512.5	3.7
80°-90°	147.0	1.1
90°-100°	585.5	4.2
100°-110°	1539.2	11.0
110°-120°	1596.0	11.4
120°-130°	1280.2	9.2
130°-140°	1004.5	7.2
140°-150°	771.0	5.5
150°-160°	555.2	4.0
160°-170°	339.7	2.4
170°-180°	114.8	0.8
0°-30°	1358.2	9.7
0°-40°	2386.3	17.1
0°-60°	4634.4	33.2
0°-90°	6165.5	44.2
90°-120°	3720.7	26.7
90°-150°	6776.4	48.6
90°-180°	7786.0	55.8
0°-180°	13951.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	796	796	796	796	796	
5°	776	832	937	1060	1099	72
15°	581	1073	1808	2192	2261	162
25°	371	1216	2154	2248	2251	171
35°	251	1163	2028	2143	2228	157
45°	172	927	1793	2054	2146	133
55°	123	589	1521	1767	1816	112
65°	97	312	1129	1270	1288	96
75°	72	192	620	681	684	75
85°	26	59	154	169	172	27
90°	8	23	61	31	31	8
95°	77	303	1008	520	354	86
105°	277	420	1702	2584	2410	294
115°	492	598	1363	2719	3104	486
125°	685	768	1240	2095	2472	608
135°	817	899	1201	1691	1918	632
145°	947	1008	1186	1443	1556	593
155°	1070	1100	1186	1302	1340	492
165°	1155	1170	1186	1233	1248	326
175°	1201	1201	1194	1209	1209	114
180°	1201	1201	1201	1201	1201	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4	796.4
2.5°	796.4	796.4	801.6	804.1	809.2	811.7	816.9	822.0	837.4	839.9	845.1
5°	775.9	786.1	819.5	832.3	868.1	916.8	937.2	970.6	1039.6	1060.2	1073.0
7.5°	745.2	768.2	850.2	870.6	960.3	1088.3	1142.1	1213.8	1323.9	1377.7	1421.2
10°	696.5	745.2	891.2	939.8	1085.8	1280.3	1380.2	1480.1	1646.5	1720.8	1748.9
12.5°	642.7	722.1	934.7	1001.3	1211.2	1495.5	1615.8	1726.0	1915.4	2015.3	2030.6
15°	581.3	688.9	975.7	1073.0	1344.4	1674.7	1807.9	1943.6	2120.3	2192.0	2209.9
17.5°	527.5	663.3	1014.1	1116.5	1446.8	1836.1	1971.8	2084.4	2227.8	2276.5	2289.4
20°	461.0	622.3	1039.6	1172.8	1554.4	1953.9	2084.4	2171.5	2268.8	2299.5	2304.7
22.5°	412.3	578.7	1055.0	1193.3	1626.1	2025.6	2135.7	2204.8	2271.4	2281.6	2284.2
25°	371.3	530.0	1052.4	1216.4	1687.5	2069.1	2153.6	2204.8	2243.2	2248.4	2248.4
27.5°	332.9	476.3	1042.3	1221.5	1733.6	2079.4	2145.9	2181.8	2199.7	2209.9	2209.9
30°	299.6	425.1	1016.6	1211.2	1754.1	2069.1	2122.9	2140.8	2158.7	2174.0	2181.8
32.5°	274.0	376.5	978.2	1190.7	1756.7	2043.5	2081.9	2092.2	2117.7	2153.6	2166.4
35°	251.0	327.8	934.7	1162.6	1741.3	2002.5	2028.1	2038.4	2089.6	2143.3	2161.3
37.5°	227.9	292.0	878.3	1114.0	1718.2	1953.9	1971.8	1989.7	2069.1	2133.1	2153.6
40°	204.8	261.2	811.7	1060.2	1682.4	1895.0	1910.3	1938.5	2043.5	2117.7	2138.2
42.5°	186.9	235.6	740.0	1003.8	1636.4	1828.4	1851.5	1892.4	2012.7	2092.2	2115.2
45°	171.6	210.0	663.3	926.9	1577.4	1759.2	1792.6	1848.9	1976.9	2053.7	2074.2
47.5°	156.2	192.1	583.8	847.6	1513.4	1690.1	1733.6	1797.7	1928.2	2002.5	2020.5
50°	143.4	174.1	504.5	763.1	1444.3	1615.8	1667.1	1733.6	1866.8	1936.0	1958.9
52.5°	133.1	158.7	430.2	678.6	1364.8	1539.0	1597.9	1667.1	1792.6	1859.1	1874.4
55°	122.9	145.9	366.2	589.0	1283.0	1457.1	1521.0	1587.7	1710.6	1766.9	1777.1
57.5°	117.8	135.8	312.4	504.5	1195.8	1364.8	1436.5	1498.1	1613.3	1656.8	1667.1
60°	110.1	128.0	271.4	432.8	1101.2	1277.8	1339.3	1400.7	1498.1	1533.9	1541.6
62.5°	102.4	122.9	240.7	363.7	1003.8	1175.4	1236.8	1293.2	1375.1	1400.7	1411.0
65°	97.3	117.8	217.6	312.4	904.0	1067.8	1129.3	1177.9	1244.5	1270.2	1275.3
67.5°	92.2	112.7	199.7	268.9	804.1	960.3	1006.4	1052.4	1103.7	1129.3	1131.9
70°	84.5	107.6	184.4	238.2	701.7	837.4	875.8	924.4	965.4	978.2	985.9
72.5°	79.4	99.9	174.1	215.1	596.6	719.6	755.4	783.6	819.5	832.3	832.3
75°	71.7	89.6	163.9	192.1	489.2	589.0	619.7	647.9	676.1	681.2	673.5
77.5°	64.1	79.4	140.8	161.3	381.6	466.1	491.7	507.0	530.0	535.2	537.8
80°	53.8	69.2	110.1	125.5	276.6	343.1	361.0	373.8	394.4	394.4	399.5
82.5°	41.0	53.8	79.4	89.6	186.9	235.6	251.0	258.6	271.4	271.4	271.4
85°	25.6	33.3	51.3	58.9	112.7	143.4	153.7	156.2	166.5	169.0	169.0
87.5°	12.8	17.9	33.3	35.9	58.9	74.2	74.2	79.4	79.4	76.8	74.2
90°	8.0	14.5	20.9	22.6	35.5	52.6	61.2	54.5	40.8	30.6	30.6
92.5°	32.3	87.1	142.0	155.6	218.7	302.9	345.0	302.3	217.2	153.2	147.1
95°	77.4	177.7	278.0	303.1	538.2	851.7	1008.4	899.9	682.8	520.0	501.6
97.5°	133.8	222.3	310.9	332.9	725.0	1247.7	1509.0	1440.4	1303.2	1200.3	1165.2
100°	177.3	257.6	337.9	357.9	792.9	1373.0	1663.0	1668.0	1678.0	1685.6	1643.7
102.5°	214.4	289.2	364.2	382.9	824.0	1412.3	1706.5	1793.9	1968.8	2099.9	2064.1
105°	277.3	340.7	404.1	420.0	847.2	1416.9	1701.7	1897.6	2289.6	2583.5	2564.3
107.5°	341.8	400.9	460.0	474.8	851.6	1353.8	1605.0	1878.3	2425.0	2835.0	2839.7
110°	385.3	438.7	492.1	505.4	845.1	1297.9	1524.3	1830.0	2441.1	2899.5	2919.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	428.0	478.9	529.8	542.5	845.4	1249.1	1451.0	1763.8	2389.3	2858.5	2889.3
115°	492.5	539.4	586.4	598.2	853.1	1193.1	1363.1	1664.5	2267.1	2719.0	2761.7
117.5°	556.2	598.8	641.5	652.1	869.0	1158.1	1302.6	1574.5	2118.4	2526.3	2573.7
120°	593.3	633.4	673.6	683.5	881.9	1146.3	1278.5	1527.0	2023.9	2396.5	2442.6
122.5°	629.6	670.1	710.6	720.6	900.4	1140.0	1259.9	1483.6	1931.1	2266.8	2312.2
125°	685.2	722.1	759.0	768.2	925.4	1135.0	1239.7	1429.9	1810.0	2095.1	2136.9
127.5°	730.3	767.5	804.9	814.2	950.4	1132.1	1222.9	1386.1	1712.4	1957.2	1992.5
130°	754.5	794.6	834.7	844.8	968.6	1133.8	1216.4	1361.6	1652.2	1870.2	1902.7
132.5°	779.5	819.6	859.7	869.8	983.4	1135.0	1210.8	1340.8	1600.9	1795.9	1825.1
135°	816.6	853.1	889.7	898.8	999.6	1133.9	1201.1	1310.0	1527.8	1691.2	1716.4
137.5°	854.5	890.6	926.8	935.9	1023.7	1140.9	1199.4	1291.5	1475.7	1613.8	1634.4
140°	885.9	919.2	952.5	960.9	1038.5	1142.1	1193.8	1273.4	1432.5	1551.8	1571.0
142.5°	910.1	940.9	971.7	979.4	1050.9	1146.1	1193.8	1263.7	1403.4	1508.2	1524.8
145°	947.2	974.0	1001.0	1007.7	1067.1	1146.2	1185.8	1242.9	1357.2	1442.9	1455.4
147.5°	984.2	1010.4	1036.5	1043.1	1090.7	1154.1	1185.8	1230.7	1320.7	1388.1	1398.5
150°	1008.4	1032.1	1055.7	1061.6	1103.0	1158.1	1185.8	1223.8	1299.7	1356.7	1365.1
152.5°	1033.4	1051.4	1069.3	1073.7	1111.1	1160.9	1185.8	1218.2	1283.1	1331.7	1338.1
155°	1070.5	1083.7	1097.0	1100.3	1128.8	1166.8	1185.8	1211.5	1263.2	1301.9	1306.0
157.5°	1097.9	1110.8	1123.7	1126.9	1146.5	1172.7	1185.8	1205.8	1245.9	1276.1	1279.0
160°	1116.5	1126.6	1136.5	1139.1	1154.7	1175.4	1185.8	1203.0	1237.4	1263.2	1264.9
162.5°	1135.0	1142.5	1150.1	1151.9	1163.2	1178.2	1185.8	1200.3	1229.3	1251.1	1252.7
165°	1155.1	1161.9	1168.7	1170.5	1175.6	1182.4	1185.8	1196.1	1217.0	1232.6	1234.3
167.5°	1173.7	1176.9	1180.1	1180.9	1185.2	1190.9	1193.8	1200.6	1214.3	1224.4	1225.1
170°	1185.8	1189.0	1192.3	1193.0	1193.3	1193.6	1193.8	1200.6	1214.3	1224.4	1224.4
172.5°	1192.3	1192.9	1193.6	1193.8	1193.8	1193.8	1193.8	1199.2	1210.0	1218.0	1217.5
175°	1201.1	1201.1	1201.1	1201.1	1198.7	1195.5	1193.8	1197.2	1204.0	1209.1	1209.1
177.5°	1201.1	1201.1	1201.1	1201.1	1199.2	1196.7	1195.5	1198.2	1203.5	1207.6	1206.9
180°	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1	1201.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	796.4	796.4
2.5°	850.2	845.1
5°	1093.4	1098.6
7.5°	1472.4	1469.9
10°	1830.9	1854.0
12.5°	2092.2	2097.3
15°	2250.9	2261.2
17.5°	2312.3	2314.9
20°	2314.9	2309.8
22.5°	2286.7	2281.6
25°	2253.5	2250.9
27.5°	2222.7	2225.3
30°	2209.9	2217.7
32.5°	2209.9	2222.7
35°	2215.0	2227.8
37.5°	2212.5	2227.8
40°	2202.2	2220.2
42.5°	2174.0	2186.8
45°	2130.5	2145.9
47.5°	2074.2	2084.4
50°	2002.5	2012.7
52.5°	1912.9	1915.4
55°	1805.3	1815.6
57.5°	1690.1	1692.6
60°	1562.0	1569.8
62.5°	1426.4	1426.4
65°	1283.0	1288.1
67.5°	1134.4	1147.2
70°	983.3	985.9
72.5°	834.8	834.8
75°	681.2	683.7
77.5°	535.2	535.2
80°	396.9	399.5
82.5°	274.0	279.2
85°	171.6	171.6
87.5°	79.4	71.7
90°	30.6	30.6
92.5°	122.8	98.4
95°	427.7	353.9
97.5°	1024.7	884.3
100°	1476.5	1309.1
102.5°	1920.8	1777.4
105°	2487.2	2410.2
107.5°	2858.4	2877.0
110°	2999.8	3080.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	3012.4	3135.7
115°	2932.6	3103.5
117.5°	2763.2	2952.7
120°	2626.8	2810.9
122.5°	2493.8	2675.4
125°	2304.2	2471.5
127.5°	2133.6	2274.8
130°	2033.2	2163.6
132.5°	1942.0	2058.7
135°	1817.1	1917.7
137.5°	1716.8	1799.2
140°	1648.0	1725.0
142.5°	1591.1	1657.4
145°	1505.6	1555.7
147.5°	1440.0	1481.6
150°	1398.8	1432.5
152.5°	1363.5	1388.9
155°	1322.9	1339.7
157.5°	1290.8	1302.6
160°	1271.7	1278.5
162.5°	1259.1	1265.6
165°	1241.1	1247.9
167.5°	1228.0	1230.9
170°	1224.4	1224.4
172.5°	1214.9	1212.4
175°	1209.1	1209.1
177.5°	1204.0	1201.1
180°	1201.1	1201.1

(END OF REPORT)