

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: P937304

Luminaire Tested: SQ4-FB-075U-100D-B40-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937304
REPORT IS A COMBINATION OF REPORTS P933519 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-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

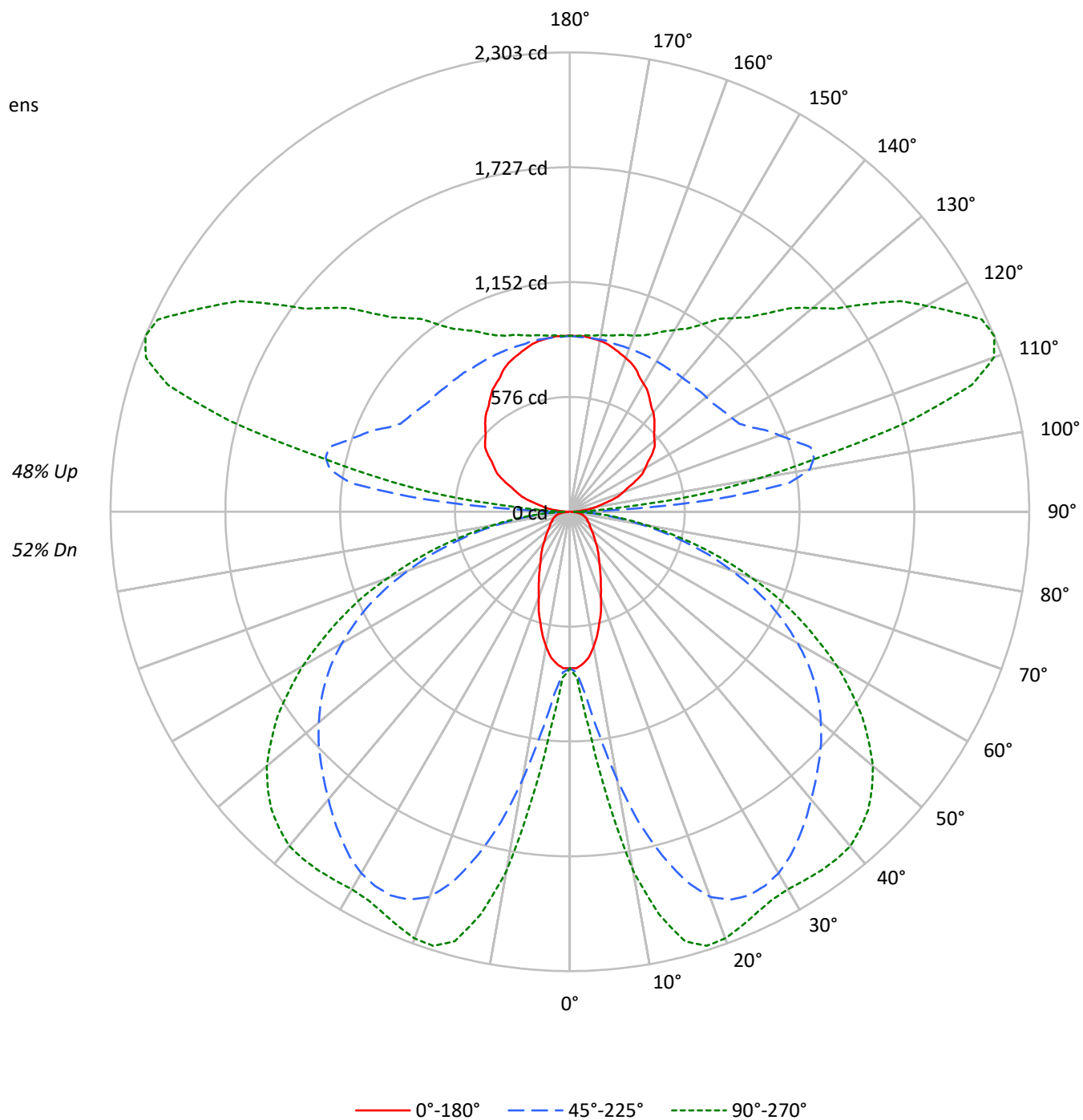
Lumens per Lamp: N/A
Luminaire Lumens: 11794.3 lumens
Efficiency: N/A
Efficacy: 115.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 102.4
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	108	108	108	108	99	99	99	99	84	84	84	70	70	70	58	58	58	58	58	58
1	98	93	89	85	90	86	82	79	73	70	68	61	59	57	50	49	47	47	47	42
2	88	80	74	69	81	74	69	64	63	59	55	53	50	47	43	41	39	39	39	34
3	80	70	62	56	74	65	58	53	55	50	46	46	42	39	38	35	32	32	32	28
4	73	62	53	47	67	57	50	44	49	43	38	41	36	33	33	30	27	27	27	24
5	67	55	46	40	61	51	43	37	43	37	33	36	32	28	30	26	23	23	23	20
6	61	49	40	34	56	45	38	32	39	33	28	32	28	24	27	23	20	20	20	17
7	56	44	35	30	52	41	33	28	35	29	24	29	25	21	24	20	18	18	18	15
8	52	39	31	26	48	37	29	24	31	26	21	27	22	19	22	18	16	16	16	13
9	49	36	28	23	45	33	26	22	29	23	19	24	20	16	20	17	14	14	14	12
10	45	33	25	20	42	31	24	19	26	21	17	22	18	15	19	15	12	12	12	10

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	0.9
10°-20°	450.0	3.8
20°-30°	787.1	6.7
30°-40°	1013.2	8.6
40°-50°	1131.7	9.6
50°-60°	1083.9	9.2
60°-70°	859.0	7.3
70°-80°	505.1	4.3
80°-90°	143.7	1.2
90°-100°	430.0	3.6
100°-110°	1130.6	9.6
110°-120°	1172.3	9.9
120°-130°	940.3	8.0
130°-140°	737.8	6.3
140°-150°	566.3	4.8
150°-160°	407.8	3.5
160°-170°	249.5	2.1
170°-180°	84.3	0.7
0°-30°	1338.6	11.3
0°-40°	2351.8	19.9
0°-60°	4567.4	38.7
0°-90°	6075.3	51.5
90°-120°	2732.9	23.2
90°-150°	4977.3	42.2
90°-180°	5719.0	48.5
0°-180°	11794.3	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°	6	17	45	22	22	7
95°	57	223	741	382	260	63
105°	204	308	1250	1898	1770	216
115°	362	439	1001	1997	2280	357
125°	503	564	911	1539	1815	447
135°	600	660	882	1242	1408	464
145°	696	740	871	1060	1143	436
155°	786	808	871	956	984	361
165°	848	860	871	905	916	239
175°	882	882	877	888	888	84
180°	882	882	882	882	882	

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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°	5.9	10.7	15.5	16.6	26.1	38.7	45.0	40.0	30.0	22.5	22.5
92.5°	23.7	64.0	104.3	114.3	160.7	222.5	253.5	222.1	159.5	112.5	108.0
95°	56.8	130.5	204.2	222.6	395.3	625.5	740.7	661.0	501.5	381.9	368.3
97.5°	98.3	163.3	228.3	244.6	532.5	916.4	1108.4	1057.9	957.2	881.7	855.9
100°	130.3	189.2	248.2	262.9	582.5	1008.5	1221.4	1225.2	1232.5	1238.1	1207.3
102.5°	157.5	212.5	267.5	281.2	605.3	1037.4	1253.4	1317.6	1446.1	1542.4	1516.1
105°	203.7	250.3	296.8	308.5	622.3	1040.7	1249.9	1393.8	1681.7	1897.6	1883.5
107.5°	251.1	294.5	337.9	348.8	625.4	994.3	1178.9	1379.6	1781.2	2082.4	2085.8
110°	283.1	322.2	361.4	371.2	620.7	953.3	1119.6	1344.1	1793.0	2129.7	2144.5

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	314.4	351.7	389.1	398.4	620.8	917.5	1065.8	1295.6	1755.0	2099.6	2122.2
115°	361.8	396.2	430.7	439.3	626.6	876.3	1001.2	1222.5	1665.1	1997.1	2028.5
117.5°	408.5	439.9	471.2	479.0	638.3	850.6	956.8	1156.5	1556.0	1855.6	1890.3
120°	435.8	465.2	494.7	502.0	647.7	841.9	939.1	1121.6	1486.6	1760.3	1794.1
122.5°	462.4	492.2	521.9	529.4	661.3	837.3	925.4	1089.8	1418.5	1664.9	1698.3
125°	503.3	530.4	557.4	564.2	679.7	833.6	910.6	1050.2	1329.4	1538.8	1569.5
127.5°	536.4	563.8	591.1	598.0	698.1	831.5	898.2	1018.0	1257.7	1437.6	1463.4
130°	554.2	583.6	613.1	620.5	711.5	832.9	893.5	1000.2	1213.6	1373.7	1397.6
132.5°	572.5	602.0	631.5	638.9	722.4	833.6	889.3	984.8	1175.9	1319.1	1340.6
135°	599.7	626.6	653.5	660.2	734.2	832.9	882.2	962.3	1122.2	1242.2	1260.7
137.5°	627.6	654.2	680.7	687.4	752.0	838.0	881.0	948.6	1083.9	1185.3	1200.4
140°	650.7	675.2	699.6	705.7	762.8	838.9	876.9	935.3	1052.1	1139.8	1153.9
142.5°	668.5	691.1	713.8	719.4	771.9	841.9	876.9	928.2	1030.8	1107.8	1119.9
145°	695.7	715.5	735.2	740.1	783.8	841.9	871.0	913.0	996.9	1059.9	1069.0
147.5°	722.9	742.1	761.4	766.2	801.1	847.7	871.0	904.0	970.0	1019.6	1027.2
150°	740.7	758.1	775.5	779.8	810.1	850.7	871.0	898.8	954.6	996.4	1002.7
152.5°	759.0	772.2	785.4	788.6	816.0	852.6	871.0	894.7	942.4	978.1	982.8
155°	786.3	796.0	805.7	808.2	829.1	857.0	871.0	889.9	927.8	956.2	959.3
157.5°	806.4	815.9	825.3	827.7	842.1	861.3	871.0	885.7	915.2	937.2	939.4
160°	820.1	827.4	834.8	836.6	848.0	863.3	871.0	883.6	908.9	927.8	929.0
162.5°	833.6	839.2	844.7	846.1	854.4	865.4	871.0	881.7	903.0	918.9	920.0
165°	848.4	853.4	858.4	859.7	863.4	868.5	871.0	878.6	893.9	905.3	906.6
167.5°	862.1	864.5	866.9	867.4	870.6	874.8	876.9	881.8	891.9	899.4	899.9
170°	871.0	873.3	875.7	876.3	876.5	876.8	876.9	881.8	891.9	899.4	899.4
172.5°	875.7	876.2	876.8	876.9	876.9	876.9	876.9	880.8	888.7	894.6	894.2
175°	882.2	882.2	882.2	882.2	880.4	878.0	876.9	879.4	884.4	888.2	888.2
177.5°	882.2	882.2	882.2	882.2	880.8	879.0	878.0	880.0	883.9	886.9	886.4
180°	882.2	882.2	882.2	882.2	882.2	882.2	882.2	882.2	882.2	882.2	882.2

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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°	22.5	22.5
92.5°	90.2	72.2
95°	314.2	260.0
97.5°	752.6	649.5
100°	1084.5	961.6
102.5°	1410.8	1305.6
105°	1826.8	1770.3
107.5°	2099.5	2113.1
110°	2203.5	2262.4

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2212.6	2303.2
115°	2154.0	2279.5
117.5°	2029.6	2168.8
120°	1929.4	2064.6
122.5°	1831.7	1965.1
125°	1692.5	1815.4
127.5°	1567.2	1670.9
130°	1493.3	1589.1
132.5°	1426.4	1512.1
135°	1334.6	1408.5
137.5°	1261.0	1321.5
140°	1210.6	1267.1
142.5°	1168.6	1217.3
145°	1105.9	1142.8
147.5°	1057.7	1088.2
150°	1027.4	1052.1
152.5°	1001.4	1020.1
155°	971.7	984.0
157.5°	948.1	956.8
160°	934.1	939.1
162.5°	924.8	929.6
165°	911.5	916.5
167.5°	902.0	904.1
170°	899.4	899.4
172.5°	892.4	890.5
175°	888.2	888.2
177.5°	884.3	882.2
180°	882.2	882.2

(END OF REPORT)