

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: P936797

Luminaire Tested: SQ4-FB-050U-075D-B35-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936797
REPORT IS A COMBINATION OF REPORTS P933462 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-B35-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

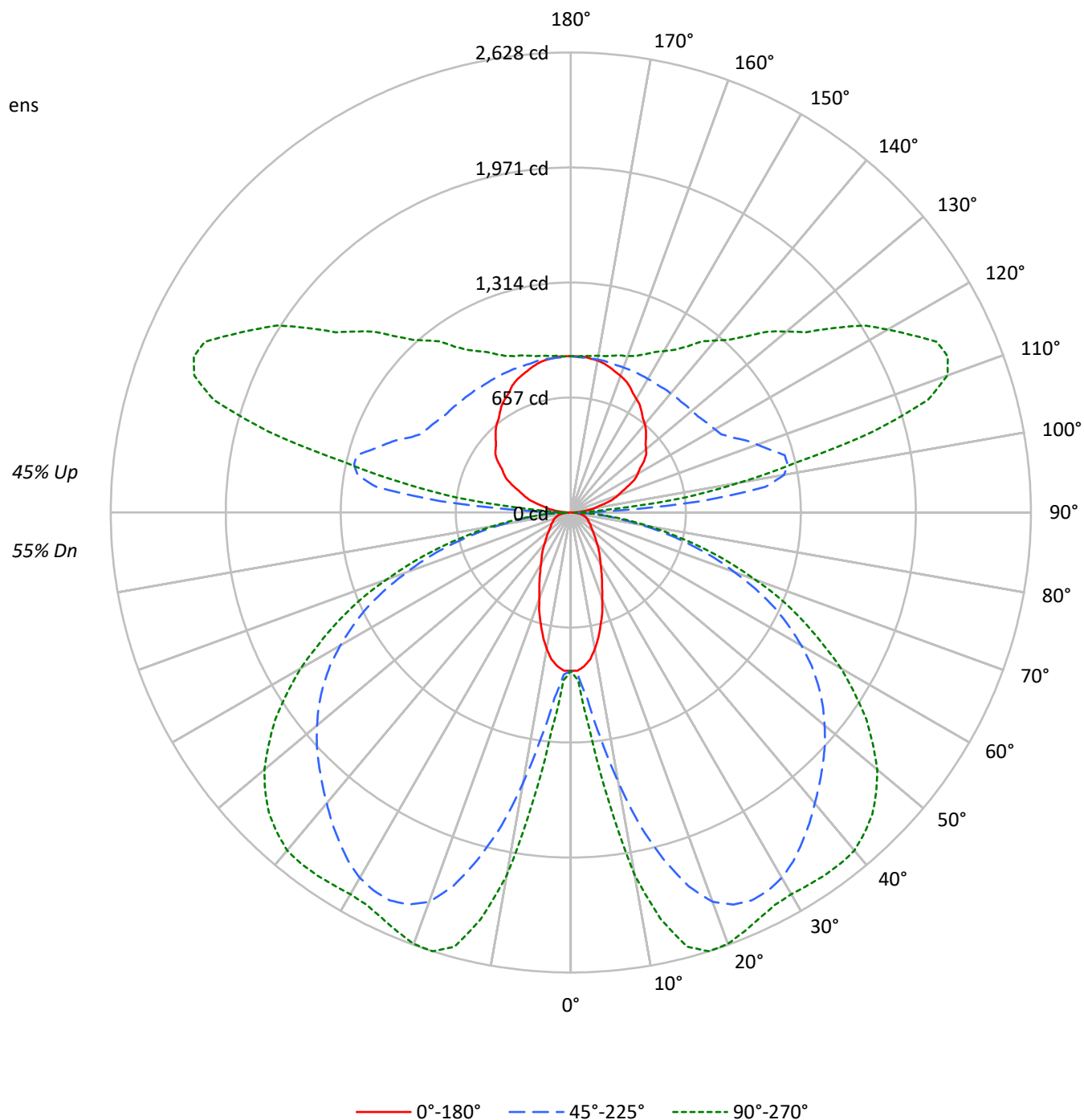
Lumens per Lamp: N/A
Luminaire Lumens: 12784.9 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 109.2
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2796	2796	2796
5°	2733	3233	3759
10°	2480	4714	6232
15°	2108	6160	7525
20°	1717	7140	7669
25°	1433	7474	7513
30°	1209	7523	7499
35°	1070	7400	7693
40°	933	7240	7893
45°	845	7123	7924
50°	776	7018	7793
55°	743	6864	7448
60°	762	6566	6902
65°	795	6111	6153
70°	848	5332	5198
75°	943	4352	4056
80°	1038	3022	2733
85°	943	1606	1399

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7924 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	117.0	0.9
10°-20°	518.3	4.1
20°-30°	906.6	7.1
30°-40°	1167.1	9.1
40°-50°	1303.6	10.2
50°-60°	1248.6	9.8
60°-70°	989.5	7.7
70°-80°	581.8	4.6
80°-90°	165.0	1.3
90°-100°	435.1	3.4
100°-110°	1144.1	8.9
110°-120°	1186.3	9.3
120°-130°	951.5	7.4
130°-140°	746.6	5.8
140°-150°	573.1	4.5
150°-160°	412.7	3.2
160°-170°	252.5	2.0
170°-180°	85.3	0.7
0°-30°	1541.9	12.1
0°-40°	2709.0	21.2
0°-60°	5261.2	41.2
0°-90°	6997.6	54.7
90°-120°	2765.5	21.6
90°-150°	5036.8	39.4
90°-180°	5787.0	45.3
0°-180°	12784.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	904	904	904	904	904	
5°	881	945	1064	1204	1247	81
15°	660	1218	2052	2488	2567	184
25°	422	1381	2445	2552	2555	194
35°	285	1320	2302	2433	2529	178
45°	195	1052	2035	2332	2436	151
55°	140	669	1727	2006	2061	127
65°	110	355	1282	1442	1462	110
75°	81	218	704	773	776	85
85°	29	67	174	192	195	31
90°	6	17	46	23	23	7
95°	58	225	750	386	263	64
105°	206	312	1265	1920	1792	219
115°	366	445	1013	2021	2307	362
125°	509	571	922	1557	1837	452
135°	607	668	893	1257	1425	470
145°	704	749	881	1072	1156	441
155°	796	818	881	968	996	366
165°	859	870	881	916	928	242
175°	893	893	887	899	899	85
180°	893	893	893	893	893	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1	904.1
2.5°	904.1	904.1	909.9	912.8	918.6	921.5	927.3	933.1	950.6	953.5	959.3
5°	880.8	892.4	930.2	944.8	985.5	1040.7	1064.0	1101.8	1180.3	1203.6	1218.1
7.5°	845.9	872.1	965.1	988.4	1090.1	1235.6	1296.6	1378.0	1503.0	1564.1	1613.5
10°	790.7	845.9	1011.6	1066.9	1232.7	1453.6	1567.0	1680.3	1869.3	1953.6	1985.6
12.5°	729.7	819.8	1061.1	1136.7	1375.1	1697.8	1834.4	1959.4	2174.5	2287.9	2305.3
15°	659.9	782.0	1107.7	1218.1	1526.3	1901.3	2052.4	2206.5	2407.1	2488.5	2508.8
17.5°	598.8	752.9	1151.3	1267.5	1642.6	2084.4	2238.5	2366.4	2529.2	2584.4	2599.0
20°	523.3	706.4	1180.3	1331.5	1764.6	2218.1	2366.4	2465.2	2575.7	2610.6	2616.4
22.5°	468.0	657.0	1197.8	1354.8	1846.0	2299.5	2424.5	2503.0	2578.6	2590.2	2593.1
25°	421.5	601.7	1194.9	1380.9	1915.8	2349.0	2444.9	2503.0	2546.6	2552.4	2552.4
27.5°	377.9	540.7	1183.2	1386.7	1968.1	2360.6	2436.2	2476.9	2497.2	2508.8	2508.8
30°	340.1	482.6	1154.2	1375.1	1991.4	2349.0	2410.0	2430.3	2450.7	2468.1	2476.9
32.5°	311.0	427.3	1110.6	1351.9	1994.3	2319.9	2363.5	2375.1	2404.2	2444.9	2459.4
35°	284.9	372.1	1061.1	1319.9	1976.9	2273.4	2302.4	2314.1	2372.2	2433.3	2453.6
37.5°	258.7	331.4	997.1	1264.6	1950.7	2218.1	2238.5	2258.8	2349.0	2421.6	2444.9
40°	232.6	296.5	921.5	1203.6	1910.0	2151.3	2168.7	2200.7	2319.9	2404.2	2427.4
42.5°	212.2	267.4	840.1	1139.6	1857.7	2075.7	2101.9	2148.4	2285.0	2375.1	2401.3
45°	194.8	238.4	752.9	1052.3	1790.8	1997.2	2035.0	2099.0	2244.3	2331.5	2354.8
47.5°	177.3	218.0	662.8	962.2	1718.1	1918.7	1968.1	2040.8	2189.1	2273.4	2293.7
50°	162.8	197.7	572.7	866.3	1639.6	1834.4	1892.6	1968.1	2119.3	2197.8	2224.0
52.5°	151.2	180.2	488.4	770.4	1549.5	1747.2	1814.1	1892.6	2035.0	2110.6	2128.0
55°	139.5	165.7	415.7	668.6	1456.5	1654.2	1726.9	1802.4	1942.0	2005.9	2017.6
57.5°	133.7	154.1	354.7	572.7	1357.7	1549.5	1630.9	1700.7	1831.5	1880.9	1892.6
60°	125.0	145.4	308.1	491.3	1250.1	1450.7	1520.5	1590.2	1700.7	1741.4	1750.1
62.5°	116.3	139.5	273.3	412.8	1139.6	1334.4	1404.2	1468.1	1561.2	1590.2	1601.9
65°	110.5	133.7	247.1	354.7	1026.2	1212.3	1282.1	1337.3	1412.9	1442.0	1447.8
67.5°	104.7	127.9	226.7	305.2	912.8	1090.1	1142.5	1194.9	1253.0	1282.1	1285.0
70°	95.9	122.1	209.3	270.4	796.5	950.6	994.2	1049.4	1095.9	1110.6	1119.3
72.5°	90.1	113.4	197.7	244.2	677.3	816.9	857.6	889.5	930.2	944.8	944.8
75°	81.4	101.7	186.0	218.0	555.2	668.6	703.5	735.5	767.4	773.3	764.5
77.5°	72.7	90.1	159.9	183.1	433.1	529.1	558.1	575.6	601.7	607.6	610.5
80°	61.0	78.5	125.0	142.4	314.0	389.5	409.9	424.4	447.7	447.7	453.5
82.5°	46.5	61.0	90.1	101.7	212.2	267.4	284.9	293.6	308.1	308.1	308.1
85°	29.1	37.8	58.1	66.9	127.9	162.8	174.4	177.3	189.0	191.9	191.9
87.5°	14.5	20.3	37.8	40.7	66.9	84.3	84.3	90.1	90.1	87.2	84.3
90°	6.0	10.8	15.6	16.8	26.4	39.1	45.5	40.5	30.3	22.8	22.8
92.5°	23.9	64.6	105.4	115.6	162.5	225.1	256.4	224.7	161.3	113.9	109.3
95°	57.6	132.1	206.7	225.3	400.0	633.0	749.5	668.8	507.5	386.4	372.7
97.5°	99.4	165.2	231.0	247.5	538.9	927.3	1121.6	1070.6	968.6	892.2	866.1
100°	131.8	191.5	251.1	266.0	589.3	1020.5	1236.1	1239.7	1247.2	1252.8	1221.7
102.5°	159.4	215.0	270.6	284.6	612.5	1049.8	1268.4	1333.3	1463.3	1560.8	1534.1
105°	206.1	253.2	300.3	312.1	629.7	1053.1	1264.8	1410.5	1701.8	1920.3	1905.9
107.5°	254.1	298.0	342.0	352.9	633.0	1006.3	1192.9	1396.1	1802.5	2107.3	2110.8
110°	286.4	326.1	365.8	375.7	628.1	964.7	1133.1	1360.2	1814.5	2155.2	2170.1



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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	318.1	355.9	393.7	403.2	628.3	928.4	1078.5	1311.0	1775.9	2124.6	2147.5
115°	366.1	401.0	435.9	444.6	634.1	886.8	1013.2	1237.1	1685.0	2020.9	2052.7
117.5°	413.4	445.1	476.7	484.7	645.8	860.8	968.2	1170.4	1574.5	1877.7	1912.9
120°	441.0	470.8	500.6	508.0	655.4	852.0	950.3	1135.0	1504.3	1781.3	1815.5
122.5°	467.9	498.1	528.1	535.7	669.3	847.4	936.4	1102.7	1435.4	1684.8	1718.5
125°	509.3	536.7	564.2	571.0	687.9	843.6	921.5	1062.8	1345.3	1557.2	1588.3
127.5°	542.8	570.5	598.3	605.1	706.4	841.4	908.9	1030.2	1272.8	1454.8	1481.0
130°	560.9	590.7	620.5	627.9	720.0	842.7	904.2	1012.1	1228.1	1390.0	1414.3
132.5°	579.4	609.2	639.1	646.5	731.0	843.6	899.9	996.6	1189.9	1334.9	1356.6
135°	607.0	634.1	661.2	668.0	742.9	842.8	892.7	973.7	1135.7	1257.1	1275.8
137.5°	635.1	662.0	689.0	695.6	761.0	848.1	891.6	960.0	1096.9	1199.5	1214.8
140°	658.4	683.2	708.0	714.2	771.9	848.8	887.3	946.4	1064.7	1153.4	1167.7
142.5°	676.5	699.3	722.3	728.0	781.1	851.9	887.3	939.3	1043.1	1121.0	1133.3
145°	704.0	723.9	743.9	748.9	793.1	851.9	881.4	923.8	1008.8	1072.5	1081.8
147.5°	731.6	751.0	770.5	775.3	810.7	857.9	881.4	914.8	981.7	1031.8	1039.5
150°	749.5	767.1	784.7	789.1	819.9	860.9	881.4	909.6	966.0	1008.3	1014.6
152.5°	768.1	781.4	794.8	798.1	825.9	862.9	881.4	905.5	953.7	989.8	994.6
155°	795.6	805.5	815.4	817.8	839.1	867.3	881.4	900.6	938.9	967.6	970.7
157.5°	816.1	825.7	835.2	837.6	852.2	871.7	881.4	896.3	926.1	948.5	950.7
160°	829.9	837.3	844.8	846.6	858.2	873.7	881.4	894.2	919.7	938.9	940.1
162.5°	843.6	849.2	854.9	856.2	864.6	875.8	881.4	892.2	913.7	929.9	931.0
165°	858.6	863.7	868.7	870.0	873.7	878.9	881.4	889.2	904.6	916.1	917.4
167.5°	872.4	874.7	877.1	877.7	880.9	885.2	887.3	892.4	902.5	910.1	910.7
170°	881.4	883.7	886.2	886.7	886.9	887.2	887.3	892.4	902.5	910.1	910.1
172.5°	886.2	886.6	887.2	887.3	887.3	887.3	887.3	891.3	899.3	905.3	904.9
175°	892.7	892.7	892.7	892.7	890.9	888.5	887.3	889.8	895.0	898.7	898.7
177.5°	892.7	892.7	892.7	892.7	891.4	889.5	888.6	890.6	894.6	897.6	897.0
180°	892.7	892.7	892.7	892.7	892.7	892.7	892.7	892.7	892.7	892.7	892.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	904.1	904.1
2.5°	965.1	959.3
5°	1241.4	1247.2
7.5°	1671.6	1668.7
10°	2078.6	2104.8
12.5°	2375.1	2380.9
15°	2555.3	2567.0
17.5°	2625.1	2628.0
20°	2628.0	2622.2
22.5°	2596.0	2590.2
25°	2558.3	2555.3
27.5°	2523.4	2526.3
30°	2508.8	2517.6
32.5°	2508.8	2523.4
35°	2514.7	2529.2
37.5°	2511.7	2529.2
40°	2500.1	2520.5
42.5°	2468.1	2482.7
45°	2418.7	2436.2
47.5°	2354.8	2366.4
50°	2273.4	2285.0
52.5°	2171.6	2174.5
55°	2049.5	2061.2
57.5°	1918.7	1921.6
60°	1773.4	1782.1
62.5°	1619.3	1619.3
65°	1456.5	1462.3
67.5°	1287.9	1302.4
70°	1116.4	1119.3
72.5°	947.7	947.7
75°	773.3	776.2
77.5°	607.6	607.6
80°	450.6	453.5
82.5°	311.0	316.9
85°	194.8	194.8
87.5°	90.1	81.4
90°	22.8	22.8
92.5°	91.2	73.1
95°	317.8	263.0
97.5°	761.6	657.3
100°	1097.4	973.1
102.5°	1427.6	1321.1
105°	1848.8	1791.5
107.5°	2124.5	2138.4
110°	2229.7	2289.4

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2239.2	2330.7
115°	2179.8	2306.8
117.5°	2053.8	2194.7
120°	1952.4	2089.3
122.5°	1853.6	1988.6
125°	1712.6	1837.0
127.5°	1585.9	1690.8
130°	1511.3	1608.2
132.5°	1443.4	1530.2
135°	1350.6	1425.4
137.5°	1276.1	1337.3
140°	1224.9	1282.2
142.5°	1182.7	1231.9
145°	1119.1	1156.4
147.5°	1070.4	1101.3
150°	1039.6	1064.7
152.5°	1013.5	1032.4
155°	983.3	995.8
157.5°	959.4	968.2
160°	945.3	950.3
162.5°	935.9	940.7
165°	922.5	927.5
167.5°	912.8	914.9
170°	910.1	910.1
172.5°	903.0	901.2
175°	898.7	898.7
177.5°	894.9	892.7
180°	892.7	892.7

(END OF REPORT)