

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: P936401

Luminaire Tested: SQ4-FB-025U-075D-B40-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936401
REPORT IS A COMBINATION OF REPORTS P933430 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-075D-B40-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

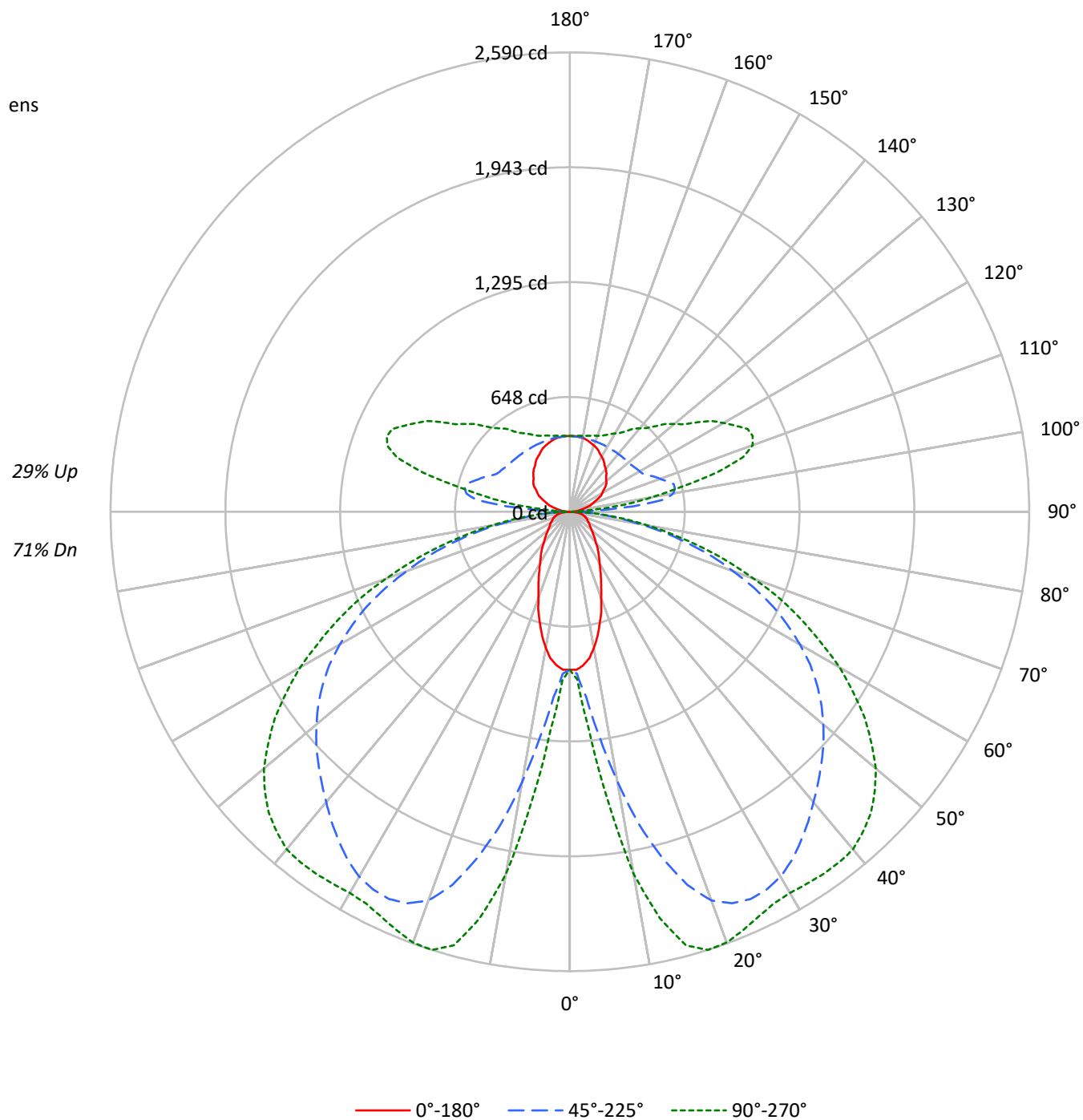
Lumens per Lamp: N/A
Luminaire Lumens: 9666.5 lumens
Efficiency: N/A
Efficacy: 107.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 90
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: P936401

CATALOG NUMBER: SQ4-FB-025U-075D-B40-1D-UNV-W2A-W-12

Luminous Intensity Polar Plot



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CATALOG NUMBER: SQ4-FB-025U-075D-B40-1D-UNV-W2A-W-12

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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2756	2756	2756
5°	2693	3186	3705
10°	2444	4646	6142
15°	2078	6071	7416
20°	1692	7037	7558
25°	1412	7366	7404
30°	1191	7414	7390
35°	1054	7293	7581
40°	919	7135	7779
45°	833	7020	7810
50°	764	6917	7680
55°	733	6765	7340
60°	751	6471	6802
65°	783	6023	6064
70°	835	5255	5123
75°	930	4289	3998
80°	1024	2978	2693
85°	927	1583	1379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7810 cd/sqm

TEST NUMBER: P936401

CATALOG NUMBER: SQ4-FB-025U-075D-B40-1D-UNV-W2A-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	115.3	1.2
10°-20°	510.8	5.3
20°-30°	893.5	9.2
30°-40°	1150.3	11.9
40°-50°	1284.8	13.3
50°-60°	1230.5	12.7
60°-70°	975.2	10.1
70°-80°	573.4	5.9
80°-90°	160.9	1.7
90°-100°	208.4	2.2
100°-110°	547.9	5.7
110°-120°	568.1	5.9
120°-130°	455.7	4.7
130°-140°	357.6	3.7
140°-150°	274.5	2.8
150°-160°	197.7	2.0
160°-170°	120.9	1.3
170°-180°	40.9	0.4
0°-30°	1519.6	15.7
0°-40°	2669.9	27.6
0°-60°	5185.2	53.6
0°-90°	6894.8	71.3
90°-120°	1324.5	13.7
90°-150°	2412.2	25.0
90°-180°	2772.0	28.7
0°-180°	9666.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	891	891	891	891	891	
5°	868	931	1049	1186	1229	80
15°	650	1200	2023	2452	2530	181
25°	415	1361	2410	2516	2518	191
35°	281	1301	2269	2398	2493	175
45°	192	1037	2006	2298	2401	148
55°	138	659	1702	1977	2031	125
65°	109	350	1264	1421	1441	108
75°	80	215	693	762	765	84
85°	29	66	172	189	192	30
90°	3	8	22	11	11	4
95°	28	108	359	185	126	31
105°	99	150	606	920	858	105
115°	175	213	485	968	1105	173
125°	244	274	441	746	880	217
135°	291	320	428	602	683	225
145°	337	359	422	514	554	211
155°	381	392	422	464	477	175
165°	411	417	422	439	444	116
175°	428	428	425	430	430	41
180°	428	428	428	428	428	

TEST NUMBER: P936401

CATALOG NUMBER: SQ4-FB-025U-075D-B40-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0	891.0
2.5°	891.0	891.0	896.7	899.6	905.3	908.2	913.9	919.7	936.9	939.7	945.4
5°	868.1	879.6	916.8	931.1	971.2	1025.7	1048.6	1085.9	1163.3	1186.2	1200.5
7.5°	833.7	859.5	951.2	974.1	1074.4	1217.7	1277.9	1358.1	1481.3	1541.5	1590.2
10°	779.3	833.7	997.0	1051.5	1214.9	1432.6	1544.3	1656.1	1842.3	1925.4	1956.9
12.5°	719.1	807.9	1045.7	1120.3	1355.2	1673.3	1807.9	1931.1	2143.1	2254.9	2272.0
15°	650.4	770.7	1091.7	1200.5	1504.2	1873.8	2022.8	2174.6	2372.3	2452.5	2472.6
17.5°	590.2	742.0	1134.6	1249.2	1618.8	2054.3	2206.1	2332.2	2492.6	2547.1	2561.4
20°	515.7	696.2	1163.3	1312.3	1739.2	2186.1	2332.2	2429.6	2538.5	2572.9	2578.6
22.5°	461.3	647.5	1180.5	1335.2	1819.4	2266.3	2389.5	2466.9	2541.4	2552.8	2555.7
25°	415.4	593.1	1177.6	1361.0	1888.1	2315.0	2409.6	2466.9	2509.8	2515.6	2515.6
27.5°	372.4	532.9	1166.2	1366.7	1939.7	2326.5	2401.0	2441.1	2461.1	2472.6	2472.6
30°	335.2	475.6	1137.5	1355.2	1962.6	2315.0	2375.2	2395.2	2415.3	2432.5	2441.1
32.5°	306.6	421.2	1094.5	1332.3	1965.5	2286.4	2329.3	2340.8	2369.5	2409.6	2423.9
35°	280.8	366.7	1045.7	1300.8	1948.3	2240.5	2269.2	2280.6	2337.9	2398.1	2418.2
37.5°	255.0	326.6	982.7	1246.4	1922.5	2186.1	2206.1	2226.2	2315.0	2386.6	2409.6
40°	229.2	292.2	908.2	1186.2	1882.4	2120.2	2137.4	2168.9	2286.4	2369.5	2392.4
42.5°	209.1	263.6	828.0	1123.2	1830.8	2045.7	2071.5	2117.3	2252.0	2340.8	2366.6
45°	192.0	234.9	742.0	1037.1	1764.9	1968.4	2005.6	2068.6	2211.9	2297.8	2320.7
47.5°	174.8	214.9	653.2	948.3	1693.3	1891.0	1939.7	2011.3	2157.4	2240.5	2260.6
50°	160.4	194.8	564.4	853.8	1616.0	1807.9	1865.2	1939.7	2088.7	2166.0	2191.8
52.5°	149.0	177.6	481.3	759.2	1527.1	1722.0	1787.9	1865.2	2005.6	2080.1	2097.3
55°	137.5	163.3	409.7	658.9	1435.5	1630.3	1701.9	1776.4	1913.9	1976.9	1988.4
57.5°	131.8	151.8	349.5	564.4	1338.1	1527.1	1607.4	1676.1	1805.0	1853.8	1865.2
60°	123.2	143.2	303.7	484.2	1232.0	1429.7	1498.5	1567.3	1676.1	1716.2	1724.8
62.5°	114.6	137.5	269.3	406.8	1123.2	1315.1	1383.9	1446.9	1538.6	1567.3	1578.7
65°	108.9	131.8	243.5	349.5	1011.3	1194.8	1263.6	1318.0	1392.5	1421.1	1426.9
67.5°	103.1	126.1	223.5	300.8	899.6	1074.4	1126.0	1177.6	1234.9	1263.6	1266.4
70°	94.5	120.3	206.3	266.4	785.0	936.9	979.8	1034.3	1080.1	1094.5	1103.1
72.5°	88.8	111.7	194.8	240.7	667.5	805.1	845.2	876.7	916.8	931.1	931.1
75°	80.2	100.3	183.4	214.9	547.2	658.9	693.3	724.8	756.4	762.1	753.5
77.5°	71.6	88.8	157.6	180.5	426.9	521.4	550.1	567.3	593.1	598.8	601.6
80°	60.2	77.4	123.2	140.4	309.4	383.9	404.0	418.3	441.2	441.2	446.9
82.5°	45.8	60.2	88.8	100.3	209.1	263.6	280.8	289.4	303.7	303.7	303.7
85°	28.6	37.2	57.3	65.9	126.1	160.4	171.9	174.8	186.2	189.1	189.1
87.5°	14.3	20.1	37.2	40.1	65.9	83.1	83.1	88.8	88.8	86.0	83.1
90°	2.9	5.2	7.4	8.0	12.6	18.7	21.8	19.4	14.5	10.9	10.9
92.5°	11.5	30.9	50.5	55.4	77.8	107.8	122.8	107.6	77.3	54.5	52.3
95°	27.5	63.2	98.9	107.9	191.6	303.2	359.0	320.3	243.0	185.1	178.5
97.5°	47.7	79.2	110.7	118.5	258.0	444.2	537.2	512.7	463.9	427.3	414.8
100°	63.1	91.7	120.2	127.4	282.3	488.8	592.0	593.8	597.4	600.0	585.1
102.5°	76.3	102.9	129.6	136.3	293.4	502.8	607.5	638.6	700.8	747.5	734.7
105°	98.7	121.3	143.8	149.5	301.6	504.3	605.8	675.5	815.0	919.7	912.8
107.5°	121.7	142.7	163.8	169.0	303.1	481.9	571.3	668.6	863.2	1009.2	1010.9
110°	137.1	156.1	175.1	179.9	300.8	462.0	542.6	651.4	869.0	1032.2	1039.3

TEST NUMBER: P936401

CATALOG NUMBER: SQ4-FB-025U-075D-B40-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	152.4	170.5	188.6	193.1	300.9	444.6	516.6	627.9	850.5	1017.6	1028.5
115°	175.3	192.1	208.8	213.0	303.7	424.7	485.2	592.5	807.0	967.9	983.1
117.5°	198.0	213.2	228.3	232.2	309.3	412.3	463.7	560.6	754.2	899.3	916.2
120°	211.2	225.5	239.8	243.3	313.9	408.0	455.1	543.5	720.5	853.1	869.5
122.5°	224.1	238.6	252.9	256.5	320.5	405.8	448.5	528.1	687.4	806.9	823.0
125°	243.9	257.1	270.3	273.5	329.5	404.1	441.3	508.9	644.2	745.8	760.7
127.5°	260.0	273.2	286.5	289.8	338.4	403.0	435.3	493.4	609.6	696.7	709.3
130°	268.5	282.9	297.2	300.7	344.9	403.6	433.0	484.8	588.2	665.7	677.4
132.5°	277.5	291.8	306.1	309.6	350.1	404.1	431.0	477.3	569.9	639.4	649.8
135°	290.7	303.7	316.7	319.9	355.8	403.7	427.6	466.3	543.9	602.0	611.0
137.5°	304.2	317.1	329.9	333.1	364.4	406.2	427.0	459.7	525.2	574.4	581.8
140°	315.3	327.2	339.1	342.1	369.7	406.5	425.0	453.2	509.9	552.4	559.2
142.5°	323.9	334.9	345.9	348.7	374.1	408.0	425.0	449.8	499.6	536.9	542.8
145°	337.2	346.8	356.3	358.7	379.8	408.0	422.1	442.5	483.1	513.6	518.1
147.5°	350.4	359.7	369.0	371.3	388.2	410.8	422.1	438.2	470.1	494.1	497.8
150°	359.0	367.4	375.8	377.9	392.6	412.3	422.1	435.7	462.7	482.9	485.9
152.5°	367.9	374.3	380.6	382.2	395.5	413.2	422.1	433.7	456.8	474.1	476.4
155°	381.0	385.7	390.5	391.6	401.8	415.3	422.1	431.3	449.7	463.5	465.0
157.5°	390.8	395.4	400.0	401.2	408.2	417.4	422.1	429.3	443.5	454.2	455.2
160°	397.5	401.0	404.6	405.5	411.0	418.4	422.1	428.2	440.4	449.6	450.2
162.5°	404.1	406.7	409.4	410.1	414.1	419.4	422.1	427.3	437.6	445.3	445.9
165°	411.2	413.6	416.1	416.7	418.5	420.9	422.1	425.8	433.2	438.7	439.3
167.5°	417.8	419.0	420.1	420.4	421.9	423.9	425.0	427.4	432.2	435.9	436.1
170°	422.1	423.3	424.4	424.7	424.8	424.9	425.0	427.4	432.2	435.9	435.9
172.5°	424.4	424.7	424.9	425.0	425.0	425.0	425.0	426.9	430.7	433.6	433.4
175°	427.6	427.6	427.6	427.6	426.7	425.5	425.0	426.2	428.6	430.4	430.4
177.5°	427.6	427.6	427.6	427.6	426.9	426.0	425.5	426.5	428.4	429.8	429.6
180°	427.6	427.6	427.6	427.6	427.6	427.6	427.6	427.6	427.6	427.6	427.6

TEST NUMBER: P936401

CATALOG NUMBER: SQ4-FB-025U-075D-B40-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	891.0	891.0
2.5°	951.2	945.4
5°	1223.5	1229.2
7.5°	1647.5	1644.6
10°	2048.6	2074.4
12.5°	2340.8	2346.5
15°	2518.4	2529.9
17.5°	2587.2	2590.1
20°	2590.1	2584.3
22.5°	2558.5	2552.8
25°	2521.3	2518.4
27.5°	2486.9	2489.8
30°	2472.6	2481.2
32.5°	2472.6	2486.9
35°	2478.3	2492.6
37.5°	2475.5	2492.6
40°	2464.0	2484.1
42.5°	2432.5	2446.8
45°	2383.8	2401.0
47.5°	2320.7	2332.2
50°	2240.5	2252.0
52.5°	2140.3	2143.1
55°	2019.9	2031.4
57.5°	1891.0	1893.9
60°	1747.7	1756.3
62.5°	1595.9	1595.9
65°	1435.5	1441.2
67.5°	1269.3	1283.6
70°	1100.3	1103.1
72.5°	934.0	934.0
75°	762.1	765.0
77.5°	598.8	598.8
80°	444.1	446.9
82.5°	306.6	312.3
85°	192.0	192.0
87.5°	88.8	80.2
90°	10.9	10.9
92.5°	43.7	35.0
95°	152.2	126.0
97.5°	364.8	314.8
100°	525.6	466.0
102.5°	683.7	632.7
105°	885.4	858.0
107.5°	1017.6	1024.1
110°	1067.9	1096.4

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CATALOG NUMBER: SQ4-FB-025U-075D-B40-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1072.4	1116.2
115°	1043.9	1104.7
117.5°	983.6	1051.1
120°	935.0	1000.6
122.5°	887.8	952.4
125°	820.2	879.7
127.5°	759.5	809.7
130°	723.8	770.2
132.5°	691.3	732.9
135°	646.8	682.6
137.5°	611.1	640.5
140°	586.7	614.1
142.5°	566.4	590.0
145°	535.9	553.8
147.5°	512.6	527.4
150°	497.9	509.9
152.5°	485.3	494.4
155°	470.9	476.9
157.5°	459.5	463.7
160°	452.7	455.1
162.5°	448.2	450.5
165°	441.8	444.2
167.5°	437.1	438.2
170°	435.9	435.9
172.5°	432.4	431.6
175°	430.4	430.4
177.5°	428.6	427.6
180°	427.6	427.6

(END OF REPORT)