

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: P936405

Luminaire Tested: SQ4-FB-025U-075D-B50-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936405
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-B50-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

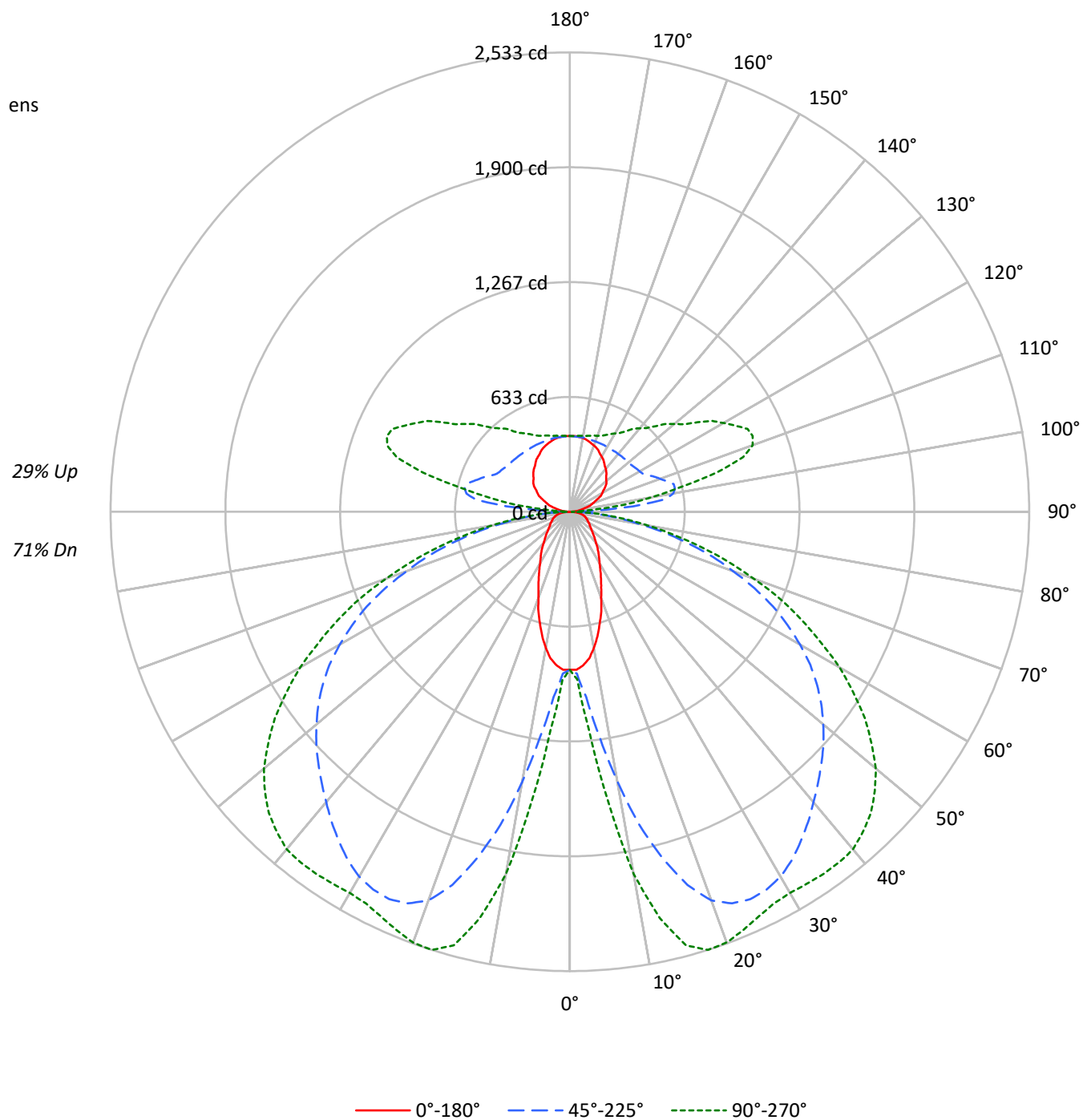
Lumens per Lamp: N/A
Luminaire Lumens: 9453.9 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

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: P936405

CATALOG NUMBER: SQ4-FB-025U-075D-B50-1D-UNV-W2A-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P936405

CATALOG NUMBER: SQ4-FB-025U-075D-B50-1D-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°	2695	2695	2695
5°	2634	3116	3623
10°	2390	4544	6007
15°	2032	5938	7253
20°	1655	6882	7392
25°	1381	7204	7242
30°	1165	7251	7228
35°	1031	7133	7415
40°	899	6978	7608
45°	814	6866	7638
50°	748	6765	7512
55°	717	6616	7178
60°	735	6329	6653
65°	766	5890	5930
70°	818	5140	5010
75°	910	4195	3909
80°	1000	2913	2634
85°	907	1548	1348

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7638 cd/sqm

TEST NUMBER: P936405

CATALOG NUMBER: SQ4-FB-025U-075D-B50-1D-UNV-W2A-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.7	1.2
10°-20°	499.6	5.3
20°-30°	873.9	9.2
30°-40°	1125.0	11.9
40°-50°	1256.5	13.3
50°-60°	1203.5	12.7
60°-70°	953.8	10.1
70°-80°	560.8	5.9
80°-90°	157.4	1.7
90°-100°	203.8	2.2
100°-110°	535.9	5.7
110°-120°	555.7	5.9
120°-130°	445.7	4.7
130°-140°	349.7	3.7
140°-150°	268.4	2.8
150°-160°	193.3	2.0
160°-170°	118.3	1.3
170°-180°	40.0	0.4
0°-30°	1486.2	15.7
0°-40°	2611.2	27.6
0°-60°	5071.2	53.6
0°-90°	6743.2	71.3
90°-120°	1295.4	13.7
90°-150°	2359.2	25.0
90°-180°	2711.0	28.7
0°-180°	9453.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	871	871	871	871	871	
5°	849	911	1026	1160	1202	78
15°	636	1174	1978	2399	2474	177
25°	406	1331	2357	2460	2463	187
35°	275	1272	2219	2345	2438	171
45°	188	1014	1962	2247	2348	145
55°	134	644	1664	1934	1987	123
65°	106	342	1236	1390	1410	106
75°	78	210	678	745	748	82
85°	28	64	168	185	188	30
90°	3	8	21	11	11	4
95°	27	106	351	181	123	30
105°	97	146	592	899	839	102
115°	172	208	475	947	1080	169
125°	238	268	432	729	860	212
135°	284	313	418	589	668	220
145°	330	351	413	502	542	207
155°	373	383	413	453	466	171
165°	402	408	413	429	434	114
175°	418	418	416	421	421	40
180°	418	418	418	418	418	

TEST NUMBER: P936405

CATALOG NUMBER: SQ4-FB-025U-075D-B50-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4	871.4
2.5°	871.4	871.4	877.0	879.8	885.4	888.2	893.8	899.4	916.3	919.1	924.7
5°	849.0	860.2	896.6	910.6	949.9	1003.1	1025.5	1062.1	1137.7	1160.1	1174.1
7.5°	815.4	840.6	930.3	952.7	1050.8	1190.9	1249.8	1328.2	1448.7	1507.6	1555.2
10°	762.1	815.4	975.1	1028.3	1188.1	1401.1	1510.4	1619.6	1801.8	1883.0	1913.9
12.5°	703.3	790.2	1022.7	1095.7	1325.4	1636.5	1768.2	1888.6	2096.0	2205.3	2222.1
15°	636.1	753.7	1067.7	1174.1	1471.1	1832.6	1978.3	2126.8	2320.1	2398.6	2418.2
17.5°	577.2	725.7	1109.7	1221.8	1583.2	2009.1	2157.6	2280.9	2437.8	2491.1	2505.1
20°	504.4	680.9	1137.7	1283.4	1700.9	2138.0	2280.9	2376.2	2482.7	2516.3	2521.9
22.5°	451.1	633.3	1154.5	1305.8	1779.4	2216.5	2337.0	2412.6	2485.5	2496.7	2499.5
25°	406.3	580.0	1151.7	1331.0	1846.6	2264.1	2356.6	2412.6	2454.6	2460.2	2460.2
27.5°	364.3	521.2	1140.5	1336.6	1897.0	2275.3	2348.2	2387.4	2407.0	2418.2	2418.2
30°	327.8	465.1	1112.5	1325.4	1919.5	2264.1	2323.0	2342.6	2362.2	2379.0	2387.4
32.5°	299.8	411.9	1070.5	1303.0	1922.3	2236.1	2278.1	2289.3	2317.3	2356.6	2370.6
35°	274.6	358.7	1022.7	1272.2	1905.5	2191.3	2219.3	2230.5	2286.5	2345.4	2365.0
37.5°	249.4	319.4	961.1	1219.0	1880.2	2138.0	2157.6	2177.2	2264.1	2334.2	2356.6
40°	224.2	285.8	888.2	1160.1	1841.0	2073.6	2090.4	2121.2	2236.1	2317.3	2339.8
42.5°	204.5	257.8	809.8	1098.5	1790.6	2000.7	2025.9	2070.8	2202.5	2289.3	2314.5
45°	187.7	229.8	725.7	1014.3	1726.1	1925.1	1961.5	2023.1	2163.2	2247.3	2269.7
47.5°	170.9	210.2	638.9	927.5	1656.1	1849.4	1897.0	1967.1	2110.0	2191.3	2210.9
50°	156.9	190.5	552.0	835.0	1580.4	1768.2	1824.2	1897.0	2042.8	2118.4	2143.6
52.5°	145.7	173.7	470.7	742.5	1493.6	1684.1	1748.5	1824.2	1961.5	2034.3	2051.2
55°	134.5	159.7	400.7	644.5	1403.9	1594.4	1664.5	1737.3	1871.8	1933.5	1944.7
57.5°	128.9	148.5	341.8	552.0	1308.6	1493.6	1572.0	1639.3	1765.4	1813.0	1824.2
60°	120.5	140.1	297.0	473.5	1205.0	1398.3	1465.5	1532.8	1639.3	1678.5	1686.9
62.5°	112.1	134.5	263.4	397.9	1098.5	1286.2	1353.5	1415.1	1504.8	1532.8	1544.0
65°	106.5	128.9	238.2	341.8	989.1	1168.5	1235.8	1289.0	1361.9	1389.9	1395.5
67.5°	100.9	123.3	218.6	294.2	879.8	1050.8	1101.3	1151.7	1207.8	1235.8	1238.6
70°	92.5	117.7	201.7	260.6	767.7	916.3	958.3	1011.5	1056.4	1070.5	1078.9
72.5°	86.9	109.3	190.5	235.4	652.9	787.4	826.6	857.4	896.6	910.6	910.6
75°	78.5	98.1	179.3	210.2	535.2	644.5	678.1	708.9	739.7	745.3	736.9
77.5°	70.0	86.9	154.1	176.5	417.5	510.0	538.0	554.8	580.0	585.6	588.4
80°	58.8	75.7	120.5	137.3	302.6	375.5	395.1	409.1	431.5	431.5	437.1
82.5°	44.8	58.8	86.9	98.1	204.5	257.8	274.6	283.0	297.0	297.0	297.0
85°	28.0	36.4	56.0	64.4	123.3	156.9	168.1	170.9	182.1	184.9	184.9
87.5°	14.0	19.6	36.4	39.2	64.4	81.3	81.3	86.9	86.9	84.1	81.3
90°	2.8	5.0	7.3	7.8	12.3	18.3	21.3	19.0	14.2	10.6	10.6
92.5°	11.2	30.3	49.4	54.2	76.1	105.4	120.1	105.3	75.6	53.3	51.2
95°	26.9	61.8	96.8	105.5	187.4	296.5	351.1	313.3	237.7	181.0	174.6
97.5°	46.6	77.4	108.3	115.9	252.4	434.4	525.4	501.5	453.7	417.9	405.6
100°	61.7	89.7	117.6	124.6	276.1	478.0	579.0	580.8	584.2	586.8	572.3
102.5°	74.6	100.7	126.7	133.3	286.9	491.8	594.1	624.6	685.4	731.0	718.5
105°	96.6	118.6	140.7	146.2	295.0	493.2	592.4	660.6	797.1	899.4	892.7
107.5°	119.0	139.5	160.2	165.3	296.5	471.3	558.7	653.9	844.2	987.1	988.6
110°	134.1	152.7	171.3	176.0	294.2	451.9	530.7	637.1	849.8	1009.5	1016.5

TEST NUMBER: P936405

CATALOG NUMBER: SQ4-FB-025U-075D-B50-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	149.1	166.7	184.5	188.9	294.3	434.9	505.2	614.1	831.8	995.2	1005.9
115°	171.5	187.8	204.2	208.3	297.0	415.3	474.6	579.5	789.2	946.6	961.5
117.5°	193.6	208.5	223.3	227.1	302.5	403.2	453.6	548.3	737.6	879.5	896.1
120°	206.5	220.5	234.5	238.0	307.0	399.0	445.1	531.5	704.6	834.3	850.4
122.5°	219.2	233.3	247.3	250.9	313.5	396.9	438.6	516.5	672.3	789.1	804.9
125°	238.5	251.4	264.3	267.5	322.2	395.2	431.6	497.7	630.1	729.4	743.9
127.5°	254.2	267.2	280.2	283.5	330.9	394.1	425.7	482.5	596.2	681.4	693.7
130°	262.6	276.7	290.7	294.1	337.3	394.7	423.5	474.1	575.3	651.1	662.5
132.5°	271.4	285.3	299.3	302.8	342.4	395.2	421.5	466.8	557.4	625.3	635.5
135°	284.3	297.0	309.7	312.9	348.0	394.8	418.2	456.1	531.9	588.8	597.6
137.5°	297.5	310.1	322.6	325.8	356.4	397.2	417.6	449.6	513.7	561.8	569.0
140°	308.4	320.0	331.7	334.6	361.6	397.6	415.6	443.3	498.7	540.2	547.0
142.5°	316.8	327.6	338.3	341.0	365.8	399.0	415.6	439.9	488.6	525.1	530.9
145°	329.8	339.1	348.5	350.8	371.5	399.0	412.8	432.7	472.5	502.3	506.7
147.5°	342.7	351.7	360.9	363.1	379.7	401.8	412.8	428.5	459.8	483.3	486.9
150°	351.1	359.3	367.5	369.6	384.0	403.2	412.8	426.1	452.5	472.3	475.2
152.5°	359.8	366.0	372.2	373.8	386.8	404.1	412.8	424.1	446.7	463.6	465.9
155°	372.7	377.2	381.9	383.0	392.9	406.2	412.8	421.8	439.8	453.3	454.8
157.5°	382.2	386.7	391.3	392.4	399.2	408.3	412.8	419.8	433.7	444.2	445.2
160°	388.7	392.2	395.7	396.6	402.0	409.2	412.8	418.8	430.8	439.7	440.3
162.5°	395.2	397.8	400.4	401.1	405.0	410.2	412.8	417.9	428.0	435.5	436.1
165°	402.2	404.5	406.9	407.5	409.3	411.6	412.8	416.5	423.7	429.1	429.6
167.5°	408.6	409.7	410.9	411.1	412.6	414.6	415.6	418.0	422.7	426.3	426.6
170°	412.8	413.9	415.1	415.3	415.4	415.5	415.6	418.0	422.7	426.3	426.3
172.5°	415.1	415.3	415.5	415.6	415.6	415.6	415.6	417.5	421.2	424.0	423.8
175°	418.2	418.2	418.2	418.2	417.3	416.2	415.6	416.8	419.2	421.0	421.0
177.5°	418.2	418.2	418.2	418.2	417.5	416.7	416.2	417.1	419.0	420.4	420.1
180°	418.2	418.2	418.2	418.2	418.2	418.2	418.2	418.2	418.2	418.2	418.2

TEST NUMBER: P936405

CATALOG NUMBER: SQ4-FB-025U-075D-B50-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	871.4	871.4
2.5°	930.3	924.7
5°	1196.5	1202.2
7.5°	1611.2	1608.4
10°	2003.5	2028.7
12.5°	2289.3	2294.9
15°	2463.1	2474.3
17.5°	2530.3	2533.1
20°	2533.1	2527.5
22.5°	2502.3	2496.7
25°	2465.9	2463.1
27.5°	2432.2	2435.0
30°	2418.2	2426.6
32.5°	2418.2	2432.2
35°	2423.8	2437.8
37.5°	2421.0	2437.8
40°	2409.8	2429.4
42.5°	2379.0	2393.0
45°	2331.4	2348.2
47.5°	2269.7	2280.9
50°	2191.3	2202.5
52.5°	2093.2	2096.0
55°	1975.5	1986.7
57.5°	1849.4	1852.2
60°	1709.3	1717.7
62.5°	1560.8	1560.8
65°	1403.9	1409.5
67.5°	1241.4	1255.4
70°	1076.1	1078.9
72.5°	913.5	913.5
75°	745.3	748.1
77.5°	585.6	585.6
80°	434.3	437.1
82.5°	299.8	305.4
85°	187.7	187.7
87.5°	86.9	78.5
90°	10.6	10.6
92.5°	42.8	34.3
95°	148.9	123.2
97.5°	356.8	307.8
100°	514.1	455.8
102.5°	668.7	618.8
105°	865.9	839.1
107.5°	995.2	1001.6
110°	1044.4	1072.3

TEST NUMBER: P936405

CATALOG NUMBER: SQ4-FB-025U-075D-B50-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1048.8	1091.7
115°	1021.0	1080.5
117.5°	962.0	1028.0
120°	914.5	978.6
122.5°	868.2	931.5
125°	802.1	860.4
127.5°	742.8	791.9
130°	707.9	753.3
132.5°	676.1	716.8
135°	632.6	667.6
137.5°	597.7	626.4
140°	573.8	600.6
142.5°	554.0	577.0
145°	524.2	541.6
147.5°	501.4	515.8
150°	487.0	498.7
152.5°	474.7	483.5
155°	460.6	466.4
157.5°	449.4	453.6
160°	442.7	445.1
162.5°	438.3	440.6
165°	432.1	434.4
167.5°	427.5	428.5
170°	426.3	426.3
172.5°	422.9	422.1
175°	421.0	421.0
177.5°	419.2	418.2
180°	418.2	418.2

(END OF REPORT)