

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: P936501

Luminaire Tested: SQ4-FB-025U-100D-B40-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936501
REPORT IS A COMBINATION OF REPORTS P933431 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-B40-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

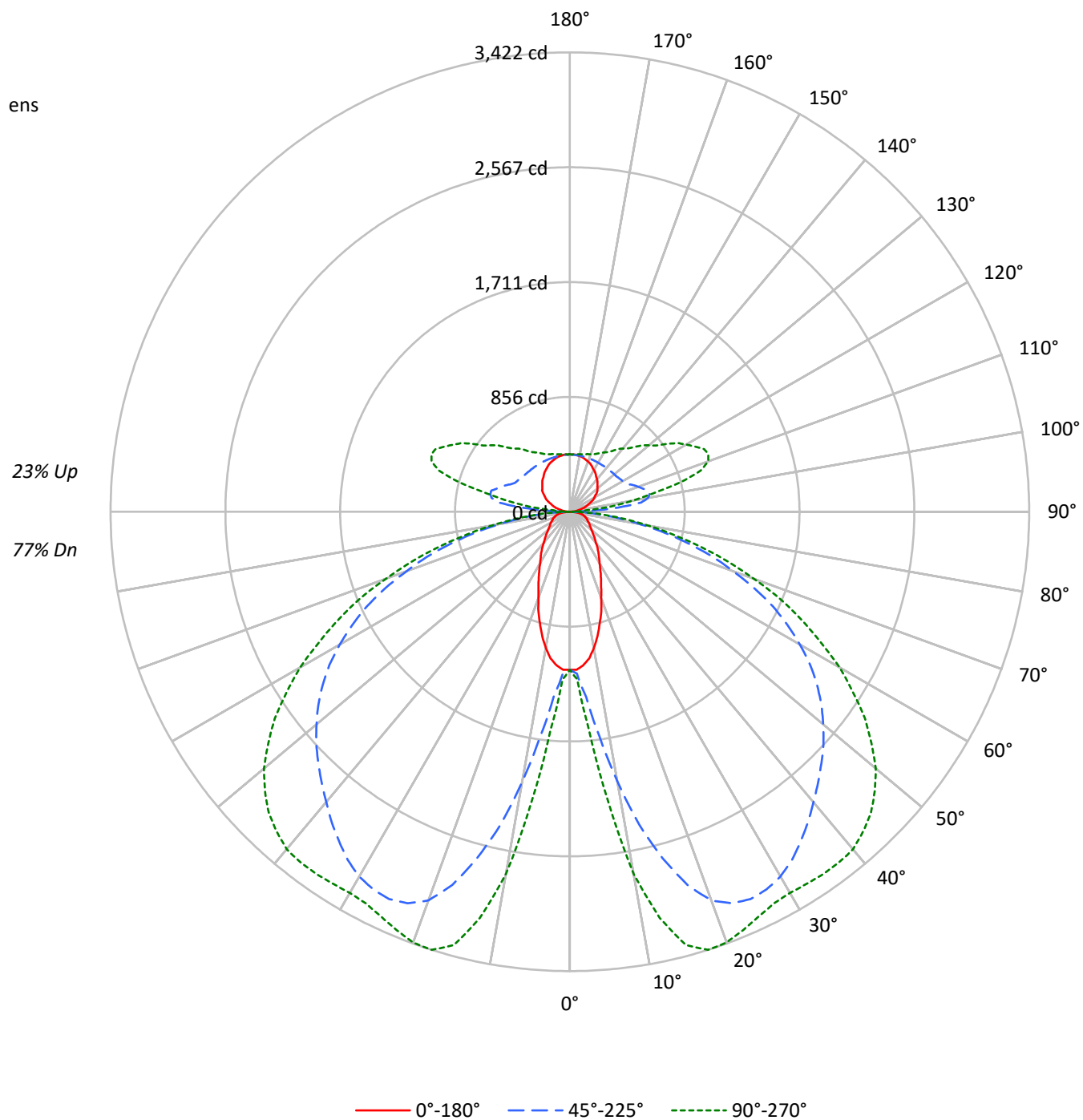
Lumens per Lamp: N/A
Luminaire Lumens: 11880.2 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 116.4
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

TEST NUMBER: P936501

CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-UNV-W2A-W-12

Luminous Intensity Polar Plot



TEST NUMBER: P936501

CATALOG NUMBER: SQ4-FB-025U-100D-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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	19
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3641	3641	3641
5°	3559	4210	4894
10°	3229	6138	8114
15°	2745	8021	9798
20°	2236	9297	9985
25°	1866	9731	9782
30°	1574	9795	9764
35°	1392	9635	10016
40°	1214	9426	10277
45°	1100	9274	10317
50°	1010	9138	10147
55°	968	8938	9697
60°	992	8549	8987
65°	1034	7956	8011
70°	1104	6944	6768
75°	1229	5666	5282
80°	1352	3934	3559
85°	1225	2091	1821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10317 cd/sqm

TEST NUMBER: P936501

CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-UNV-W2A-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	152.3	1.3
10°-20°	674.9	5.7
20°-30°	1180.5	9.9
30°-40°	1519.6	12.8
40°-50°	1697.4	14.3
50°-60°	1625.7	13.7
60°-70°	1288.4	10.8
70°-80°	757.6	6.4
80°-90°	212.1	1.8
90°-100°	208.4	1.8
100°-110°	547.9	4.6
110°-120°	568.1	4.8
120°-130°	455.7	3.8
130°-140°	357.6	3.0
140°-150°	274.5	2.3
150°-160°	197.7	1.7
160°-170°	120.9	1.0
170°-180°	40.9	0.3
0°-30°	2007.7	16.9
0°-40°	3527.3	29.7
0°-60°	6850.4	57.7
0°-90°	9108.5	76.7
90°-120°	1324.5	11.1
90°-150°	2412.2	20.3
90°-180°	2772.0	23.3
0°-180°	11880.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1177	1177	1177	1177	1177	
5°	1147	1230	1385	1567	1624	106
15°	859	1586	2672	3240	3342	239
25°	549	1798	3183	3323	3327	253
35°	371	1718	2998	3168	3293	232
45°	254	1370	2650	3036	3172	196
55°	182	871	2248	2612	2684	166
65°	144	462	1669	1877	1904	143
75°	106	284	916	1007	1011	111
85°	38	87	227	250	254	40
90°	3	8	22	11	11	5
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: P936501

CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2	1177.2
2.5°	1177.2	1177.2	1184.8	1188.6	1196.1	1200.0	1207.5	1215.0	1237.8	1241.6	1249.1
5°	1147.0	1162.0	1211.3	1230.2	1283.2	1355.1	1385.4	1434.6	1536.8	1567.1	1586.0
7.5°	1101.5	1135.6	1256.7	1287.0	1419.4	1608.7	1688.2	1794.2	1957.0	2036.4	2100.8
10°	1029.6	1101.5	1317.2	1389.1	1605.0	1892.6	2040.3	2187.9	2433.9	2543.6	2585.3
12.5°	950.1	1067.4	1381.6	1480.1	1790.4	2210.5	2388.5	2551.3	2831.4	2979.0	3001.7
15°	859.2	1018.2	1442.1	1586.0	1987.3	2475.6	2672.4	2873.0	3134.2	3240.1	3266.7
17.5°	779.8	980.4	1499.0	1650.3	2138.6	2714.0	2914.7	3081.2	3293.1	3365.0	3384.0
20°	681.3	919.9	1536.8	1733.6	2297.6	2888.1	3081.2	3209.9	3353.7	3399.1	3406.7
22.5°	609.4	855.5	1559.5	1763.9	2403.6	2994.1	3156.8	3259.1	3357.5	3372.7	3376.4
25°	548.8	783.6	1555.7	1798.0	2494.5	3058.5	3183.4	3259.1	3315.9	3323.4	3323.4
27.5°	492.1	704.0	1540.6	1805.5	2562.6	3073.6	3172.0	3225.0	3251.5	3266.7	3266.7
30°	442.8	628.4	1502.7	1790.4	2592.9	3058.5	3137.9	3164.5	3190.9	3213.7	3225.0
32.5°	405.0	556.4	1446.0	1760.2	2596.6	3020.7	3077.4	3092.6	3130.4	3183.4	3202.3
35°	370.9	484.5	1381.6	1718.5	2573.9	2960.0	2997.9	3013.0	3088.8	3168.2	3194.8
37.5°	336.9	431.6	1298.3	1646.6	2539.9	2888.1	2914.7	2941.1	3058.5	3153.1	3183.4
40°	302.8	386.1	1200.0	1567.1	2486.9	2801.1	2823.7	2865.4	3020.7	3130.4	3160.7
42.5°	276.3	348.3	1094.0	1483.8	2418.7	2702.6	2736.7	2797.3	2975.2	3092.6	3126.6
45°	253.6	310.4	980.4	1370.2	2331.7	2600.5	2649.6	2732.9	2922.2	3035.8	3066.0
47.5°	230.9	283.9	863.0	1253.0	2237.1	2498.3	2562.6	2657.2	2850.3	2960.0	2986.6
50°	212.0	257.4	745.7	1128.0	2134.9	2388.5	2464.2	2562.6	2759.5	2861.7	2895.8
52.5°	196.8	234.6	635.9	1003.1	2017.5	2274.9	2362.0	2464.2	2649.6	2748.1	2770.8
55°	181.7	215.7	541.3	870.6	1896.4	2153.8	2248.5	2346.8	2528.6	2611.8	2626.9
57.5°	174.1	200.6	461.8	745.7	1767.7	2017.5	2123.5	2214.4	2384.7	2449.0	2464.2
60°	162.7	189.3	401.2	639.7	1627.6	1888.8	1979.7	2070.5	2214.4	2267.4	2278.7
62.5°	151.4	181.7	355.8	537.5	1483.8	1737.4	1828.3	1911.5	2032.7	2070.5	2085.6
65°	143.8	174.1	321.7	461.8	1336.2	1578.4	1669.2	1741.3	1839.6	1877.4	1885.1
67.5°	136.3	166.6	295.3	397.5	1188.6	1419.4	1487.6	1555.7	1631.4	1669.2	1673.1
70°	124.9	159.0	272.6	352.0	1037.1	1237.8	1294.6	1366.5	1427.1	1446.0	1457.3
72.5°	117.4	147.6	257.4	317.9	881.9	1063.7	1116.7	1158.3	1211.3	1230.2	1230.2
75°	106.0	132.5	242.3	283.9	722.9	870.6	916.0	957.7	999.3	1006.9	995.5
77.5°	94.6	117.4	208.2	238.5	564.0	688.9	726.8	749.5	783.6	791.1	794.9
80°	79.5	102.2	162.7	185.5	408.8	507.2	533.7	552.7	582.9	582.9	590.5
82.5°	60.5	79.5	117.4	132.5	276.3	348.3	370.9	382.3	401.2	401.2	401.2
85°	37.8	49.2	75.7	87.1	166.6	212.0	227.1	230.9	246.0	249.8	249.8
87.5°	18.9	26.5	49.2	53.0	87.1	109.7	109.7	117.4	117.4	113.5	109.7
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: P936501

CATALOG NUMBER: SQ4-FB-025U-100D-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: P936501

CATALOG NUMBER: SQ4-FB-025U-100D-B40-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1177.2	1177.2
2.5°	1256.7	1249.1
5°	1616.3	1623.9
7.5°	2176.5	2172.7
10°	2706.5	2740.5
12.5°	3092.6	3100.1
15°	3327.2	3342.4
17.5°	3418.0	3421.9
20°	3421.9	3414.3
22.5°	3380.2	3372.7
25°	3331.0	3327.2
27.5°	3285.6	3289.4
30°	3266.7	3278.0
32.5°	3266.7	3285.6
35°	3274.2	3293.1
37.5°	3270.4	3293.1
40°	3255.3	3281.8
42.5°	3213.7	3232.6
45°	3149.3	3172.0
47.5°	3066.0	3081.2
50°	2960.0	2975.2
52.5°	2827.6	2831.4
55°	2668.6	2683.7
57.5°	2498.3	2502.0
60°	2309.0	2320.4
62.5°	2108.4	2108.4
65°	1896.4	1904.0
67.5°	1676.9	1695.8
70°	1453.5	1457.3
72.5°	1234.0	1234.0
75°	1006.9	1010.7
77.5°	791.1	791.1
80°	586.8	590.5
82.5°	405.0	412.6
85°	253.6	253.6
87.5°	117.4	106.0
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

TEST NUMBER: P936501

CATALOG NUMBER: SQ4-FB-025U-100D-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)