

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: P936497

Luminaire Tested: SQ4-FB-025U-100D-B35-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936497
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-B35-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

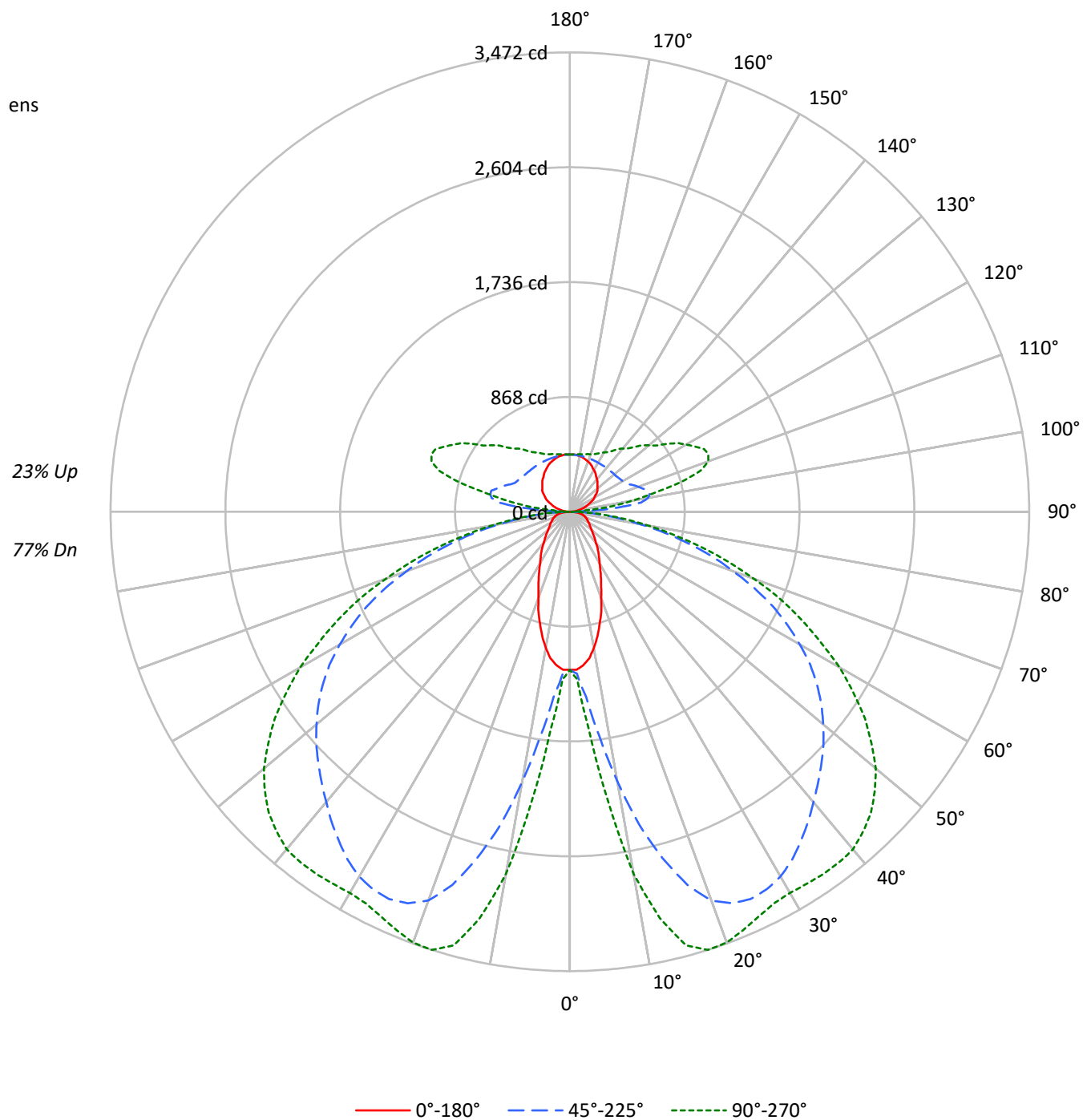
Lumens per Lamp: N/A
Luminaire Lumens: 12054.4 lumens
Efficiency: N/A
Efficacy: 103.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

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: P936497

CATALOG NUMBER: SQ4-FB-025U-100D-B35-1D-UNV-W2A-W-12

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	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°	3695	3695	3695
5°	3611	4271	4966
10°	3276	6228	8233
15°	2785	8138	9941
20°	2269	9433	10132
25°	1893	9874	9926
30°	1597	9939	9907
35°	1413	9777	10163
40°	1232	9564	10428
45°	1117	9410	10469
50°	1025	9272	10295
55°	983	9069	9839
60°	1007	8674	9119
65°	1049	8073	8128
70°	1120	7046	6867
75°	1247	5750	5359
80°	1371	3993	3611
85°	1244	2121	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10469 cd/sqm

TEST NUMBER: P936497

CATALOG NUMBER: SQ4-FB-025U-100D-B35-1D-UNV-W2A-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	154.5	1.3
10°-20°	684.8	5.7
20°-30°	1197.8	9.9
30°-40°	1541.9	12.8
40°-50°	1722.3	14.3
50°-60°	1649.5	13.7
60°-70°	1307.3	10.8
70°-80°	768.7	6.4
80°-90°	215.2	1.8
90°-100°	211.5	1.8
100°-110°	556.0	4.6
110°-120°	576.5	4.8
120°-130°	462.4	3.8
130°-140°	362.8	3.0
140°-150°	278.5	2.3
150°-160°	200.6	1.7
160°-170°	122.7	1.0
170°-180°	41.5	0.3
0°-30°	2037.1	16.9
0°-40°	3579.0	29.7
0°-60°	6950.9	57.7
0°-90°	9242.0	76.7
90°-120°	1343.9	11.1
90°-150°	2447.6	20.3
90°-180°	2812.0	23.3
0°-180°	12054.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1194	1194	1194	1194	1194	
5°	1164	1248	1406	1590	1648	107
15°	872	1609	2712	3288	3391	243
25°	557	1824	3230	3372	3376	257
35°	376	1744	3042	3215	3341	235
45°	257	1390	2688	3080	3218	199
55°	184	883	2281	2650	2723	168
65°	146	469	1694	1905	1932	145
75°	108	288	930	1022	1026	113
85°	38	88	230	254	257	41
90°	3	8	22	11	11	5
95°	28	110	364	188	128	31
105°	100	152	615	933	870	106
115°	178	216	492	982	1121	176
125°	248	278	448	757	893	220
135°	295	325	434	611	693	228
145°	342	364	428	521	562	214
155°	387	397	428	470	484	178
165°	417	423	428	445	451	118
175°	434	434	431	437	437	41
180°	434	434	434	434	434	

TEST NUMBER: P936497

CATALOG NUMBER: SQ4-FB-025U-100D-B35-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5	1194.5
2.5°	1194.5	1194.5	1202.1	1206.0	1213.7	1217.5	1225.2	1232.9	1255.9	1259.8	1267.5
5°	1163.8	1179.1	1229.1	1248.3	1302.0	1375.0	1405.7	1455.6	1559.3	1590.0	1609.2
7.5°	1117.6	1152.2	1275.1	1305.8	1440.2	1632.3	1713.0	1820.5	1985.7	2066.3	2131.6
10°	1044.7	1117.6	1336.5	1409.5	1628.5	1920.4	2070.2	2220.0	2469.6	2580.9	2623.2
12.5°	964.1	1083.1	1401.9	1501.8	1816.7	2242.9	2423.5	2588.7	2872.9	3022.7	3045.7
15°	871.8	1033.1	1463.3	1609.2	2016.4	2511.8	2711.6	2915.1	3180.2	3287.6	3314.6
17.5°	791.2	994.8	1520.9	1674.5	2170.0	2753.8	2957.4	3126.4	3341.4	3414.4	3433.7
20°	691.3	933.3	1559.3	1759.0	2331.3	2930.4	3126.4	3256.9	3402.8	3449.0	3456.6
22.5°	618.3	868.0	1582.4	1789.7	2438.9	3038.0	3203.1	3306.9	3406.7	3422.1	3425.9
25°	556.9	795.1	1578.5	1824.3	2531.0	3103.3	3230.1	3306.9	3364.5	3372.1	3372.1
27.5°	499.3	714.3	1563.2	1832.0	2600.2	3118.6	3218.5	3272.3	3299.2	3314.6	3314.6
30°	449.3	637.6	1524.7	1816.7	2630.9	3103.3	3183.9	3210.9	3237.7	3260.8	3272.3
32.5°	411.0	564.5	1467.2	1786.0	2634.7	3064.9	3122.5	3137.9	3176.3	3230.1	3249.3
35°	376.4	491.6	1401.9	1743.7	2611.6	3003.4	3041.9	3057.2	3134.0	3214.7	3241.6
37.5°	341.9	437.9	1317.4	1670.7	2577.2	2930.4	2957.4	2984.2	3103.3	3199.3	3230.1
40°	307.3	391.8	1217.5	1590.0	2523.4	2842.2	2865.1	2907.4	3064.9	3176.3	3207.0
42.5°	280.3	353.4	1110.0	1505.5	2454.2	2742.3	2776.9	2838.3	3018.8	3137.9	3172.4
45°	257.4	314.9	994.8	1390.3	2365.9	2638.6	2688.5	2773.0	2965.0	3080.3	3111.0
47.5°	234.3	288.1	875.7	1271.3	2269.9	2534.9	2600.2	2696.1	2892.1	3003.4	3030.4
50°	215.1	261.1	756.6	1144.6	2166.2	2423.5	2500.3	2600.2	2799.9	2903.6	2938.2
52.5°	199.7	238.1	645.3	1017.8	2047.1	2308.3	2396.6	2500.3	2688.5	2788.4	2811.5
55°	184.4	218.9	549.2	883.3	1924.2	2185.4	2281.4	2381.2	2565.6	2650.1	2665.4
57.5°	176.6	203.6	468.6	756.6	1793.6	2047.1	2154.7	2246.8	2419.7	2484.9	2500.3
60°	165.1	192.1	407.1	649.0	1651.5	1916.5	2008.7	2100.9	2246.8	2300.6	2312.1
62.5°	153.6	184.4	361.0	545.4	1505.5	1762.9	1855.1	1939.6	2062.5	2100.9	2116.2
65°	145.9	176.6	326.5	468.6	1355.8	1601.6	1693.7	1766.8	1866.6	1905.0	1912.7
67.5°	138.3	169.0	299.6	403.3	1206.0	1440.2	1509.4	1578.5	1655.3	1693.7	1697.6
70°	126.7	161.3	276.6	357.2	1052.3	1255.9	1313.6	1386.5	1448.0	1467.2	1478.7
72.5°	119.1	149.8	261.1	322.6	894.9	1079.3	1133.1	1175.3	1229.1	1248.3	1248.3
75°	107.6	134.4	245.8	288.1	733.5	883.3	929.5	971.7	1014.0	1021.6	1010.1
77.5°	96.0	119.1	211.2	242.0	572.3	699.0	737.4	760.5	795.1	802.7	806.6
80°	80.6	103.7	165.1	188.2	414.8	514.6	541.6	560.8	591.5	591.5	599.1
82.5°	61.4	80.6	119.1	134.4	280.3	353.4	376.4	387.9	407.1	407.1	407.1
85°	38.4	49.9	76.8	88.4	169.0	215.1	230.4	234.3	249.6	253.5	253.5
87.5°	19.2	26.8	49.9	53.8	88.4	111.3	111.3	119.1	119.1	115.2	111.3
90°	2.9	5.2	7.6	8.1	12.8	19.0	22.1	19.7	14.7	11.0	11.0
92.5°	11.6	31.4	51.3	56.2	79.0	109.4	124.6	109.2	78.4	55.3	53.1
95°	27.9	64.1	100.4	109.5	194.4	307.7	364.2	325.0	246.6	187.8	181.1
97.5°	48.4	80.3	112.3	120.3	261.8	450.7	545.1	520.3	470.7	433.5	420.8
100°	64.1	93.0	122.0	129.3	286.4	495.9	600.7	602.5	606.1	608.8	593.7
102.5°	77.4	104.5	131.5	138.3	297.7	510.2	616.4	648.0	711.1	758.4	745.5
105°	100.2	123.1	145.9	151.6	306.0	511.7	614.6	685.4	826.9	933.1	926.2
107.5°	123.5	144.8	166.2	171.5	307.6	489.0	579.7	678.4	875.9	1024.0	1025.7
110°	139.1	158.4	177.7	182.6	305.2	468.8	550.6	661.0	881.7	1047.3	1054.6

TEST NUMBER: P936497

CATALOG NUMBER: SQ4-FB-025U-100D-B35-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	154.7	173.0	191.4	195.9	305.3	451.2	524.1	637.1	863.0	1032.5	1043.6
115°	177.9	194.9	211.8	216.1	308.1	430.9	492.3	601.2	818.8	982.1	997.5
117.5°	200.9	216.3	231.7	235.6	313.9	418.3	470.5	568.8	765.2	912.5	929.7
120°	214.2	228.8	243.3	246.9	318.5	414.0	461.7	551.5	731.0	865.6	882.3
122.5°	227.4	242.1	256.6	260.3	325.2	411.7	455.0	535.9	697.5	818.7	835.1
125°	247.5	260.9	274.2	277.5	334.3	410.0	447.8	516.4	653.7	756.7	771.8
127.5°	263.8	277.2	290.7	294.1	343.3	408.9	441.7	500.6	618.5	706.9	719.7
130°	272.5	287.0	301.6	305.1	349.9	409.5	439.3	491.9	596.8	675.5	687.3
132.5°	281.6	296.0	310.6	314.1	355.2	410.0	437.3	484.3	578.3	648.7	659.3
135°	295.0	308.1	321.3	324.6	361.0	409.6	433.8	473.2	551.8	610.9	620.0
137.5°	308.6	321.7	334.7	338.0	369.8	412.1	433.2	466.5	532.9	582.9	590.3
140°	320.0	332.0	344.1	347.1	375.1	412.5	431.2	459.9	517.3	560.5	567.4
142.5°	328.7	339.8	351.0	353.8	379.6	414.0	431.2	456.4	506.9	544.8	550.8
145°	342.2	351.8	361.5	364.0	385.4	414.0	428.3	448.9	490.2	521.1	525.7
147.5°	355.5	364.9	374.4	376.7	393.9	416.9	428.3	444.6	477.0	501.4	505.1
150°	364.2	372.8	381.3	383.4	398.4	418.3	428.3	442.1	469.5	490.0	493.0
152.5°	373.3	379.8	386.1	387.8	401.3	419.3	428.3	440.0	463.5	481.0	483.3
155°	386.6	391.4	396.2	397.4	407.7	421.4	428.3	437.6	456.3	470.3	471.8
157.5°	396.5	401.2	405.9	407.1	414.2	423.5	428.3	435.6	450.0	460.9	461.9
160°	403.3	406.9	410.6	411.4	417.1	424.5	428.3	434.5	446.9	456.2	456.8
162.5°	410.0	412.7	415.4	416.1	420.2	425.6	428.3	433.5	444.0	451.8	452.4
165°	417.3	419.7	422.2	422.8	424.6	427.0	428.3	432.1	439.5	445.2	445.7
167.5°	423.9	425.1	426.3	426.6	428.1	430.1	431.2	433.6	438.6	442.3	442.5
170°	428.3	429.5	430.6	430.9	431.0	431.1	431.2	433.6	438.6	442.3	442.3
172.5°	430.6	430.9	431.1	431.2	431.2	431.2	431.2	433.1	437.0	439.9	439.7
175°	433.8	433.8	433.8	433.8	432.9	431.8	431.2	432.5	434.9	436.7	436.7
177.5°	433.8	433.8	433.8	433.8	433.1	432.3	431.8	432.8	434.7	436.1	435.9
180°	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8	433.8

TEST NUMBER: P936497

CATALOG NUMBER: SQ4-FB-025U-100D-B35-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1194.5	1194.5
2.5°	1275.1	1267.5
5°	1640.0	1647.7
7.5°	2208.4	2204.6
10°	2746.1	2780.6
12.5°	3137.9	3145.6
15°	3376.0	3391.4
17.5°	3468.1	3472.0
20°	3472.0	3464.4
22.5°	3429.8	3422.1
25°	3379.9	3376.0
27.5°	3333.7	3337.6
30°	3314.6	3326.1
32.5°	3314.6	3333.7
35°	3322.2	3341.4
37.5°	3318.3	3341.4
40°	3303.0	3329.9
42.5°	3260.8	3280.0
45°	3195.5	3218.5
47.5°	3111.0	3126.4
50°	3003.4	3018.8
52.5°	2869.0	2872.9
55°	2707.7	2723.1
57.5°	2534.9	2538.7
60°	2342.8	2354.4
62.5°	2139.3	2139.3
65°	1924.2	1931.9
67.5°	1701.5	1720.7
70°	1474.8	1478.7
72.5°	1252.0	1252.0
75°	1021.6	1025.5
77.5°	802.7	802.7
80°	595.4	599.1
82.5°	411.0	418.6
85°	257.4	257.4
87.5°	119.1	107.6
90°	11.0	11.0
92.5°	44.4	35.6
95°	154.5	127.8
97.5°	370.2	319.4
100°	533.3	472.9
102.5°	693.7	642.0
105°	898.4	870.5
107.5°	1032.5	1039.2
110°	1083.5	1112.5

TEST NUMBER: P936497

CATALOG NUMBER: SQ4-FB-025U-100D-B35-1D-UNV-W2A-W-12

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1088.1	1132.6
115°	1059.2	1120.9
117.5°	998.1	1066.5
120°	948.7	1015.2
122.5°	900.8	966.4
125°	832.2	892.6
127.5°	770.6	821.6
130°	734.4	781.5
132.5°	701.5	743.6
135°	656.3	692.6
137.5°	620.1	649.9
140°	595.3	623.1
142.5°	574.7	598.6
145°	543.8	561.9
147.5°	520.2	535.2
150°	505.2	517.3
152.5°	492.4	501.7
155°	477.8	483.9
157.5°	466.3	470.5
160°	459.3	461.7
162.5°	454.8	457.1
165°	448.3	450.7
167.5°	443.5	444.6
170°	442.3	442.3
172.5°	438.8	437.9
175°	436.7	436.7
177.5°	434.9	433.8
180°	433.8	433.8

(END OF REPORT)