

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: P936608

Luminaire Tested: SQ4-FB-025U-125D-B50-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936608
REPORT IS A COMBINATION OF REPORTS P933456 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-125D-B50-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

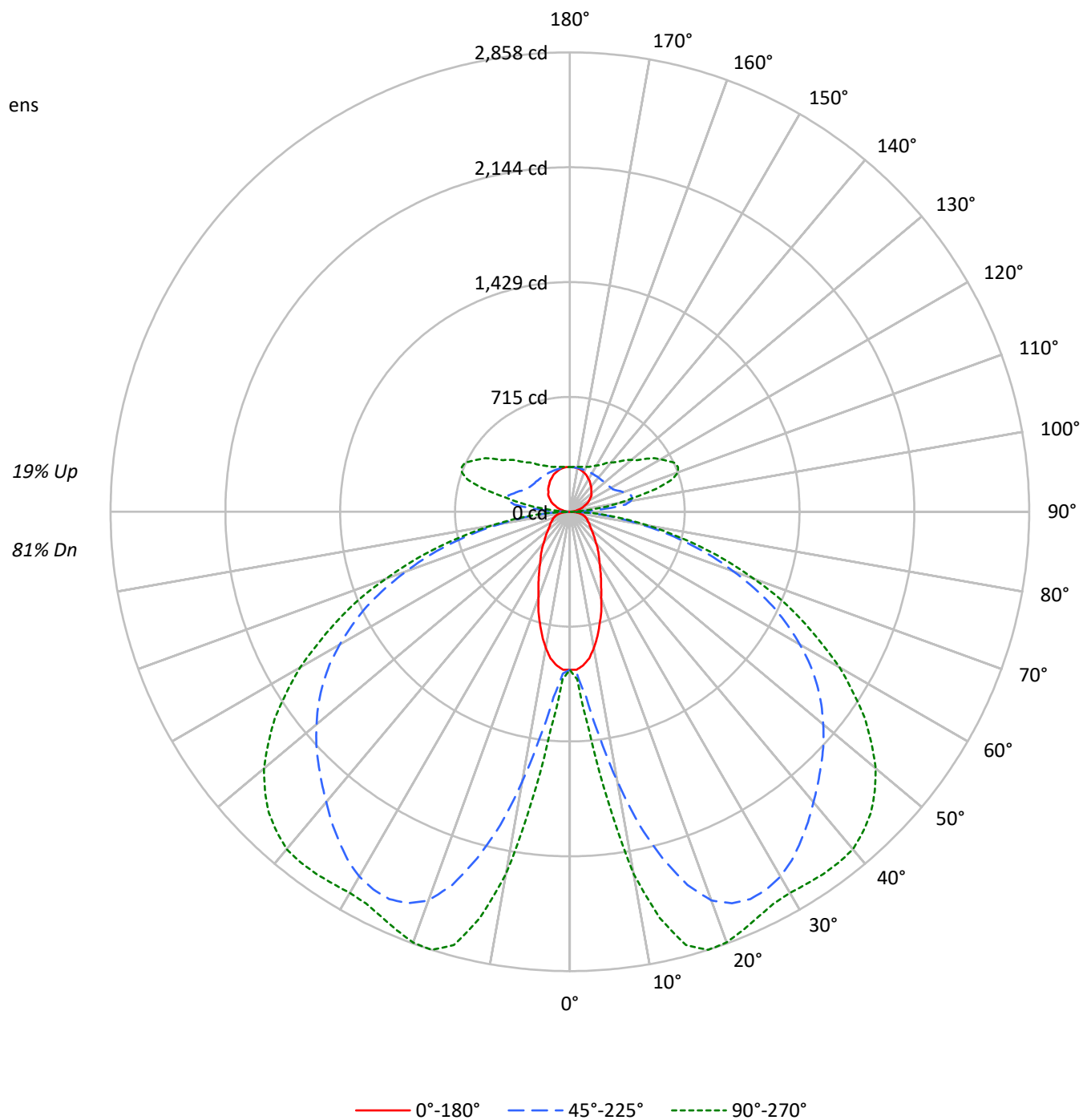
Lumens per Lamp: N/A
Luminaire Lumens: 9413.8 lumens
Efficiency: N/A
Efficacy: 94.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 99.2
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
RCR																	
0	114	114	114	114	110	110	110	110	100	100	100		92	92	92		84
1	104	99	94	90	99	95	91	87	87	84	81		80	77	75		73
2	94	85	78	72	89	82	75	70	75	70	66		69	65	61		63
3	85	74	66	59	81	71	64	58	65	59	54		60	55	51		55
4	77	65	56	49	74	63	54	48	58	51	45		53	47	43		49
5	71	58	49	42	67	55	47	41	51	44	39		47	41	36		43
6	65	51	42	36	62	49	41	35	46	39	33		42	36	31		39
7	60	46	37	31	57	45	36	30	41	34	29		38	32	27		35
8	55	42	33	27	53	40	32	27	37	30	25		35	29	24		32
9	52	38	30	24	49	37	29	24	34	27	23		32	26	22		29
10	48	35	27	22	46	34	26	21	31	25	20		29	23	19		27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4561	4561	4561
5°	4456	5272	6131
10°	4042	7685	10165
15°	3435	10040	12274
20°	2797	11635	12509
25°	2333	12176	12254
30°	1967	12252	12231
35°	1739	12049	12548
40°	1516	11785	12875
45°	1373	11591	12925
50°	1259	11417	12711
55°	1206	11162	12147
60°	1234	10671	11258
65°	1284	9926	10035
70°	1368	8656	8478
75°	1516	7058	6617
80°	1657	4895	4458
85°	1472	2597	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12925 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	1.4
10°-20°	563.6	6.0
20°-30°	985.9	10.5
30°-40°	1269.1	13.5
40°-50°	1417.6	15.1
50°-60°	1357.7	14.4
60°-70°	1076.0	11.4
70°-80°	632.7	6.7
80°-90°	176.8	1.9
90°-100°	135.9	1.4
100°-110°	357.3	3.8
110°-120°	370.4	3.9
120°-130°	297.1	3.2
130°-140°	233.1	2.5
140°-150°	179.0	1.9
150°-160°	128.9	1.4
160°-170°	78.9	0.8
170°-180°	26.6	0.3
0°-30°	1676.7	17.8
0°-40°	2945.8	31.3
0°-60°	5721.1	60.8
0°-90°	7606.6	80.8
90°-120°	863.6	9.2
90°-150°	1572.8	16.7
90°-180°	1807.0	19.2
0°-180°	9413.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	958	1027	1157	1309	1356	88
15°	718	1324	2232	2706	2791	200
25°	458	1502	2659	2776	2779	211
35°	310	1435	2504	2646	2750	193
45°	212	1144	2213	2535	2649	164
55°	152	727	1878	2181	2241	138
65°	120	386	1394	1568	1590	119
75°	88	237	765	841	844	93
85°	32	73	190	209	212	34
90°	2	5	14	7	7	4
95°	18	70	234	121	82	20
105°	64	98	395	600	559	68
115°	114	139	316	631	720	113
125°	159	178	288	486	574	141
135°	190	209	279	393	445	147
145°	220	234	275	335	361	138
155°	248	255	275	302	311	114
165°	268	272	275	286	290	76
175°	279	279	277	281	281	26
180°	279	279	279	279	279	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1
2.5°	983.1	983.1	989.5	992.7	998.9	1002.1	1008.4	1014.8	1033.8	1036.9	1043.2
5°	957.8	970.5	1011.6	1027.4	1071.7	1131.7	1157.0	1198.1	1283.4	1308.7	1324.5
7.5°	919.9	948.4	1049.5	1074.8	1185.4	1343.6	1409.9	1498.4	1634.3	1700.7	1754.5
10°	859.8	919.9	1100.1	1160.1	1340.4	1580.6	1703.9	1827.2	2032.7	2124.4	2159.1
12.5°	793.4	891.5	1153.9	1236.1	1495.2	1846.1	1994.7	2130.6	2364.6	2487.9	2506.9
15°	717.6	850.4	1204.4	1324.5	1659.6	2067.4	2231.8	2399.4	2617.5	2706.0	2728.1
17.5°	651.2	818.7	1251.8	1378.3	1786.1	2266.6	2434.1	2573.3	2750.3	2810.3	2826.1
20°	569.0	768.2	1283.4	1447.8	1918.9	2412.1	2573.3	2680.7	2800.9	2838.8	2845.1
22.5°	508.9	714.4	1302.5	1473.1	2007.4	2500.5	2636.5	2721.8	2804.0	2816.7	2819.8
25°	458.4	654.4	1299.3	1501.6	2083.3	2554.3	2658.6	2721.8	2769.2	2775.6	2775.6
27.5°	411.0	588.0	1286.6	1507.9	2140.2	2566.9	2649.1	2693.4	2715.5	2728.1	2728.1
30°	369.9	524.7	1255.0	1495.2	2165.5	2554.3	2620.6	2642.8	2664.9	2683.8	2693.4
32.5°	338.3	464.7	1207.6	1469.9	2168.6	2522.6	2570.1	2582.7	2614.4	2658.6	2674.4
35°	309.8	404.6	1153.9	1435.2	2149.6	2472.1	2503.7	2516.3	2579.5	2645.9	2668.1
37.5°	281.3	360.3	1084.3	1375.1	2121.2	2412.1	2434.1	2456.2	2554.3	2633.3	2658.6
40°	252.9	322.4	1002.1	1308.7	2076.9	2339.3	2358.3	2393.0	2522.6	2614.4	2639.6
42.5°	230.8	290.8	913.6	1239.2	2020.1	2257.1	2285.6	2336.1	2484.7	2582.7	2611.2
45°	211.8	259.2	818.7	1144.3	1947.3	2171.7	2212.8	2282.4	2440.4	2535.3	2560.6
47.5°	192.9	237.0	720.8	1046.4	1868.3	2086.4	2140.2	2219.2	2380.4	2472.1	2494.2
50°	177.0	215.0	622.8	942.0	1782.9	1994.7	2058.0	2140.2	2304.6	2389.9	2418.3
52.5°	164.4	196.0	531.1	837.7	1684.9	1899.8	1972.6	2058.0	2212.8	2295.0	2314.0
55°	151.8	180.2	452.1	727.1	1583.8	1798.7	1877.8	1960.0	2111.7	2181.3	2193.9
57.5°	145.4	167.6	385.6	622.8	1476.3	1684.9	1773.5	1849.3	1991.6	2045.3	2058.0
60°	135.9	158.0	335.1	534.2	1359.3	1577.4	1653.3	1729.2	1849.3	1893.6	1903.0
62.5°	126.5	151.8	297.2	448.9	1239.2	1451.0	1526.9	1596.4	1697.5	1729.2	1741.8
65°	120.1	145.4	268.7	385.6	1115.9	1318.2	1394.1	1454.1	1536.3	1568.0	1574.3
67.5°	113.8	139.1	246.6	331.9	992.7	1185.4	1242.3	1299.3	1362.5	1394.1	1397.3
70°	104.3	132.8	227.6	294.0	866.2	1033.8	1081.1	1141.2	1191.8	1207.6	1217.1
72.5°	98.0	123.3	215.0	265.5	736.6	888.3	932.6	967.3	1011.6	1027.4	1027.4
75°	88.5	110.7	202.3	237.0	603.8	727.1	765.0	799.8	834.5	840.9	831.4
77.5°	79.0	98.0	173.9	199.1	471.0	575.3	606.9	626.0	654.4	660.7	663.9
80°	66.4	85.4	135.9	154.9	341.4	423.6	445.7	461.6	486.8	486.8	493.2
82.5°	50.6	66.4	98.0	110.7	230.8	290.8	309.8	319.2	335.1	335.1	335.1
85°	31.6	41.1	63.2	72.7	139.1	177.0	189.7	192.9	205.5	208.7	208.7
87.5°	15.8	22.1	41.1	44.3	72.7	91.7	91.7	98.0	98.0	94.8	91.7
90°	1.9	3.4	4.9	5.2	8.2	12.2	14.2	12.6	9.4	7.1	7.1
92.5°	7.5	20.2	33.0	36.1	50.8	70.3	80.0	70.1	50.4	35.6	34.2
95°	17.9	41.2	64.5	70.3	124.9	197.6	234.1	208.8	158.5	120.7	116.4
97.5°	31.1	51.7	72.1	77.2	168.2	289.5	350.2	334.4	302.5	278.6	270.5
100°	41.2	59.8	78.4	83.0	184.0	318.6	385.9	387.1	389.5	391.3	381.5
102.5°	49.8	67.2	84.5	88.8	191.3	327.8	396.1	416.4	456.9	487.4	479.0
105°	64.4	79.1	93.9	97.5	196.7	328.9	395.0	440.5	531.4	599.6	595.1
107.5°	79.3	93.0	106.8	110.2	197.6	314.2	372.5	435.9	562.8	658.0	659.1
110°	89.5	101.8	114.2	117.3	196.1	301.2	353.8	424.7	566.6	672.9	677.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	99.4	111.1	122.9	125.9	196.2	289.9	336.8	409.4	554.5	663.4	670.6
115°	114.3	125.2	136.1	138.8	198.0	276.9	316.3	386.3	526.2	631.1	641.0
117.5°	129.1	139.0	148.9	151.4	201.7	268.8	302.3	365.5	491.7	586.4	597.4
120°	137.7	147.0	156.4	158.7	204.7	266.1	296.7	354.4	469.7	556.2	566.8
122.5°	146.1	155.5	164.9	167.3	209.0	264.6	292.4	344.4	448.2	526.1	536.7
125°	159.1	167.7	176.2	178.3	214.8	263.5	287.8	331.9	420.1	486.2	496.0
127.5°	169.5	178.1	186.8	188.9	220.6	262.7	283.8	321.8	397.5	454.3	462.5
130°	175.1	184.5	193.7	196.0	224.8	263.2	282.3	316.1	383.5	434.0	441.6
132.5°	180.9	190.3	199.5	201.8	228.3	263.5	281.0	311.2	371.5	416.8	423.7
135°	189.5	198.0	206.5	208.7	232.0	263.2	278.8	304.1	354.6	392.6	398.4
137.5°	198.3	206.7	215.1	217.2	237.6	264.8	278.4	299.8	342.5	374.5	379.3
140°	205.6	213.3	221.1	223.0	241.1	265.1	277.1	295.6	332.5	360.2	364.6
142.5°	211.3	218.4	225.6	227.3	244.0	266.1	277.1	293.4	325.8	350.1	353.9
145°	219.9	226.1	232.3	233.9	247.7	266.1	275.2	288.5	315.0	334.9	337.8
147.5°	228.5	234.5	240.6	242.1	253.1	267.9	275.2	285.7	306.5	322.1	324.6
150°	234.1	239.6	245.0	246.4	256.0	268.8	275.2	284.0	301.7	314.9	316.8
152.5°	239.9	244.0	248.2	249.2	257.9	269.5	275.2	282.7	297.8	309.1	310.6
155°	248.4	251.5	254.6	255.4	262.0	270.9	275.2	281.2	293.2	302.1	303.1
157.5°	254.8	257.8	260.8	261.5	266.1	272.2	275.2	279.9	289.2	296.2	296.8
160°	259.1	261.4	263.8	264.3	268.0	272.8	275.2	279.3	287.2	293.2	293.6
162.5°	263.4	265.2	266.8	267.3	269.9	273.5	275.2	278.6	285.3	290.4	290.8
165°	268.2	269.7	271.3	271.7	272.9	274.5	275.2	277.7	282.4	286.1	286.5
167.5°	272.4	273.2	273.9	274.1	275.2	276.5	277.1	278.7	281.9	284.2	284.4
170°	275.2	276.0	276.7	276.9	277.0	277.1	277.1	278.7	281.9	284.2	284.2
172.5°	276.7	276.9	277.1	277.1	277.1	277.1	277.1	278.3	280.9	282.7	282.5
175°	278.8	278.8	278.8	278.8	278.2	277.5	277.1	277.9	279.5	280.7	280.7
177.5°	278.8	278.8	278.8	278.8	278.3	277.8	277.5	278.1	279.4	280.3	280.1
180°	278.8	278.8	278.8	278.8	278.8	278.8	278.8	278.8	278.8	278.8	278.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	983.1	983.1
2.5°	1049.5	1043.2
5°	1349.8	1356.2
7.5°	1817.7	1814.6
10°	2260.3	2288.8
12.5°	2582.7	2589.0
15°	2778.7	2791.4
17.5°	2854.6	2857.8
20°	2857.8	2851.4
22.5°	2823.0	2816.7
25°	2781.9	2778.7
27.5°	2743.9	2747.1
30°	2728.1	2737.6
32.5°	2728.1	2743.9
35°	2734.5	2750.3
37.5°	2731.3	2750.3
40°	2718.7	2740.8
42.5°	2683.8	2699.7
45°	2630.1	2649.1
47.5°	2560.6	2573.3
50°	2472.1	2484.7
52.5°	2361.4	2364.6
55°	2228.6	2241.3
57.5°	2086.4	2089.5
60°	1928.3	1937.9
62.5°	1760.8	1760.8
65°	1583.8	1590.1
67.5°	1400.4	1416.2
70°	1213.9	1217.1
72.5°	1030.6	1030.6
75°	840.9	844.1
77.5°	660.7	660.7
80°	490.0	493.2
82.5°	338.3	344.6
85°	211.8	211.8
87.5°	98.0	88.5
90°	7.1	7.1
92.5°	28.5	22.8
95°	99.3	82.1
97.5°	237.8	205.2
100°	342.7	303.8
102.5°	445.8	412.5
105°	577.3	559.4
107.5°	663.4	667.7
110°	696.2	714.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	699.2	727.8
115°	680.7	720.3
117.5°	641.4	685.4
120°	609.6	652.4
122.5°	578.8	620.9
125°	534.8	573.7
127.5°	495.2	528.0
130°	471.9	502.1
132.5°	450.7	477.8
135°	421.7	445.1
137.5°	398.4	417.6
140°	382.5	400.4
142.5°	369.3	384.6
145°	349.5	361.1
147.5°	334.2	343.9
150°	324.7	332.5
152.5°	316.4	322.3
155°	307.0	310.9
157.5°	299.6	302.3
160°	295.1	296.7
162.5°	292.2	293.7
165°	288.0	289.6
167.5°	285.1	285.7
170°	284.2	284.2
172.5°	282.0	281.4
175°	280.7	280.7
177.5°	279.5	278.8
180°	278.8	278.8

(END OF REPORT)