

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: P937000

Luminaire Tested: SQ4-FB-050U-125D-B35-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937000
REPORT IS A COMBINATION OF REPORTS P933488 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-B35-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

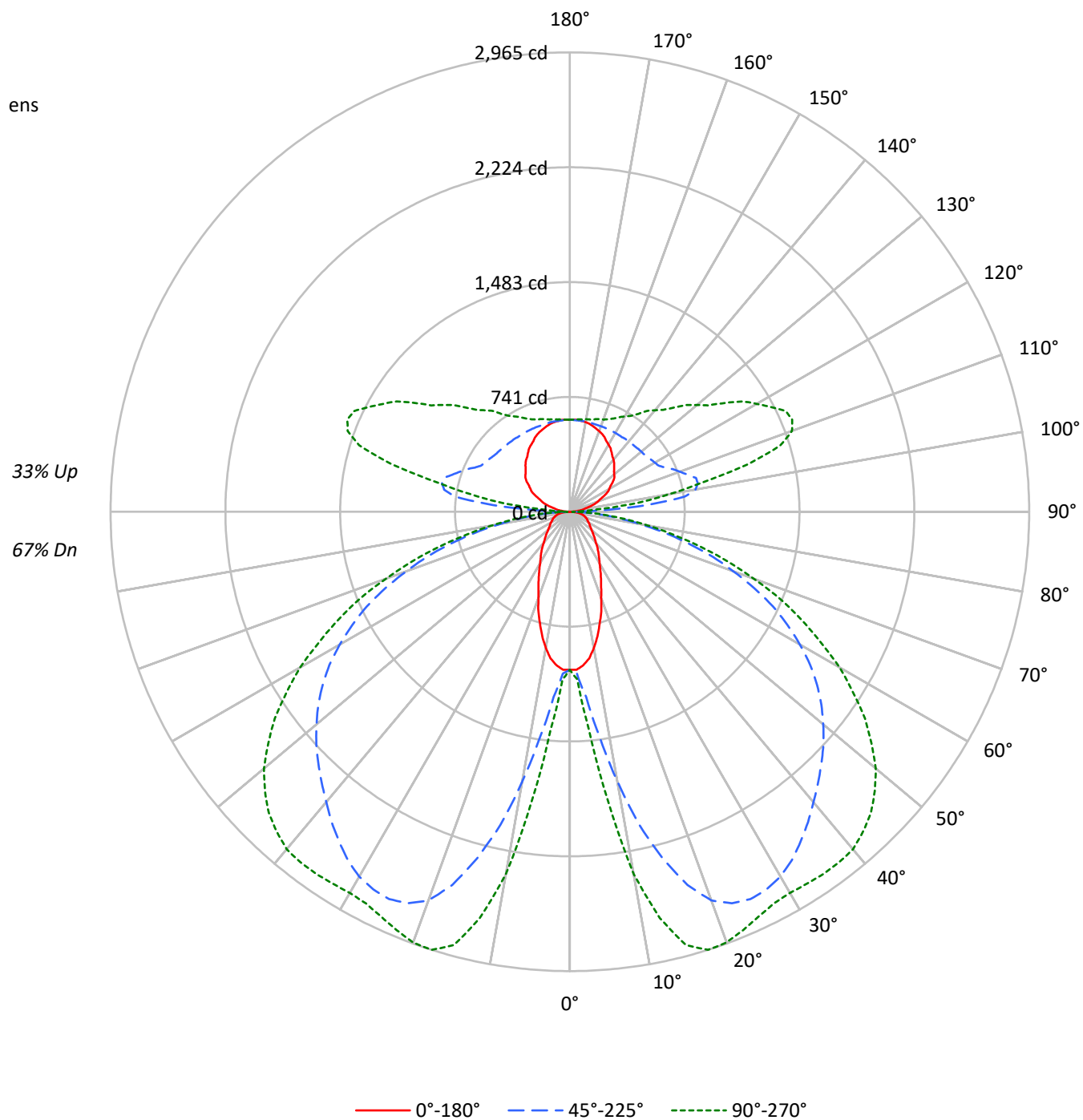
Lumens per Lamp: N/A
Luminaire Lumens: 11751.1 lumens
Efficiency: N/A
Efficacy: 104.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 112
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	30	10
RCR																	
0	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4732	4732	4732
5°	4623	5470	6361
10°	4194	7973	10546
15°	3564	10416	12734
20°	2901	12071	12977
25°	2421	12632	12714
30°	2041	12711	12690
35°	1805	12500	13018
40°	1573	12226	13357
45°	1424	12025	13409
50°	1306	11844	13187
55°	1252	11580	12603
60°	1281	11071	11680
65°	1332	10298	10412
70°	1419	8981	8796
75°	1574	7323	6864
80°	1719	5078	4625
85°	1528	2695	2368

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13409 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	131.9	1.1
10°-20°	584.8	5.0
20°-30°	1022.8	8.7
30°-40°	1316.7	11.2
40°-50°	1470.7	12.5
50°-60°	1408.6	12.0
60°-70°	1116.3	9.5
70°-80°	656.4	5.6
80°-90°	184.6	1.6
90°-100°	290.1	2.5
100°-110°	762.7	6.5
110°-120°	790.9	6.7
120°-130°	634.4	5.4
130°-140°	497.8	4.2
140°-150°	382.1	3.3
150°-160°	275.1	2.3
160°-170°	168.3	1.4
170°-180°	56.9	0.5
0°-30°	1739.5	14.8
0°-40°	3056.2	26.0
0°-60°	5935.5	50.5
0°-90°	7892.9	67.2
90°-120°	1843.7	15.7
90°-150°	3357.9	28.6
90°-180°	3858.0	32.8
0°-180°	11751.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1020	1020	1020	1020	1020	
5°	994	1066	1200	1358	1407	92
15°	744	1374	2315	2807	2896	207
25°	476	1558	2758	2880	2883	219
35°	321	1489	2598	2745	2853	201
45°	220	1187	2296	2630	2748	170
55°	158	754	1948	2263	2325	143
65°	125	400	1446	1627	1650	123
75°	92	246	794	872	876	96
85°	33	75	197	216	220	35
90°	4	11	30	15	15	6
95°	38	150	500	258	175	43
105°	137	208	843	1280	1194	146
115°	244	296	676	1347	1538	241
125°	340	381	614	1038	1225	301
135°	405	445	595	838	950	313
145°	469	499	588	715	771	294
155°	530	545	588	645	664	244
165°	572	580	588	611	618	162
175°	595	595	592	599	599	56
180°	595	595	595	595	595	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0	1020.0
2.5°	1020.0	1020.0	1026.6	1029.9	1036.3	1039.6	1046.2	1052.8	1072.5	1075.8	1082.3
5°	993.7	1006.9	1049.5	1065.9	1111.8	1174.1	1200.4	1243.0	1331.5	1357.8	1374.1
7.5°	954.4	983.9	1088.9	1115.1	1229.9	1393.9	1462.7	1554.6	1695.6	1764.5	1820.3
10°	892.1	954.4	1141.3	1203.6	1390.6	1639.8	1767.7	1895.7	2108.8	2204.0	2240.0
12.5°	823.2	924.9	1197.1	1282.4	1551.3	1915.3	2069.5	2210.5	2453.2	2581.1	2600.8
15°	744.5	882.3	1249.5	1374.1	1721.8	2144.9	2315.4	2489.3	2715.6	2807.4	2830.4
17.5°	675.6	849.4	1298.8	1430.0	1853.0	2351.6	2525.3	2669.7	2853.3	2915.6	2932.0
20°	590.3	797.0	1331.5	1502.0	1990.8	2502.4	2669.7	2781.1	2905.8	2945.2	2951.7
22.5°	528.0	741.2	1351.3	1528.3	2082.6	2594.2	2735.3	2823.8	2909.0	2922.2	2925.5
25°	475.6	678.9	1348.0	1557.9	2161.4	2650.0	2758.3	2823.8	2873.0	2879.6	2879.6
27.5°	426.4	610.0	1334.8	1564.5	2220.4	2663.1	2748.4	2794.3	2817.3	2830.4	2830.4
30°	383.7	544.4	1302.0	1551.3	2246.6	2650.0	2718.8	2741.8	2764.8	2784.4	2794.3
32.5°	351.0	482.1	1252.8	1525.0	2249.8	2617.2	2666.4	2679.5	2712.3	2758.3	2774.6
35°	321.4	419.8	1197.1	1489.0	2230.2	2564.7	2597.5	2610.6	2676.2	2745.1	2768.0
37.5°	291.9	373.8	1124.9	1426.7	2200.7	2502.4	2525.3	2548.3	2650.0	2732.0	2758.3
40°	262.4	334.5	1039.6	1357.8	2154.8	2427.0	2446.6	2482.7	2617.2	2712.3	2738.5
42.5°	239.4	301.7	947.9	1285.7	2095.8	2341.7	2371.2	2423.7	2577.8	2679.5	2709.0
45°	219.8	268.9	849.4	1187.2	2020.3	2253.1	2295.8	2367.9	2531.9	2630.4	2656.5
47.5°	200.1	245.9	747.8	1085.6	1938.3	2164.6	2220.4	2302.3	2469.6	2564.7	2587.7
50°	183.6	223.1	646.1	977.3	1849.7	2069.5	2135.1	2220.4	2390.9	2479.5	2508.9
52.5°	170.5	203.3	551.0	869.1	1748.1	1971.0	2046.5	2135.1	2295.8	2381.0	2400.7
55°	157.5	186.9	469.0	754.4	1643.1	1866.1	1948.2	2033.4	2190.8	2263.0	2276.1
57.5°	150.9	173.8	400.1	646.1	1531.6	1748.1	1839.9	1918.6	2066.2	2121.9	2135.1
60°	141.0	164.0	347.7	554.3	1410.3	1636.5	1715.2	1794.0	1918.6	1964.6	1974.3
62.5°	131.2	157.5	308.3	465.7	1285.7	1505.3	1584.1	1656.2	1761.2	1794.0	1807.1
65°	124.6	150.9	278.8	400.1	1157.8	1367.6	1446.3	1508.6	1593.9	1626.8	1633.2
67.5°	118.0	144.3	255.8	344.4	1029.9	1229.9	1288.9	1348.0	1413.6	1446.3	1449.6
70°	108.2	137.8	236.1	305.0	898.7	1072.5	1121.6	1183.9	1236.4	1252.8	1262.7
72.5°	101.6	127.9	223.1	275.5	764.2	921.6	967.5	1003.6	1049.5	1065.9	1065.9
75°	91.9	114.8	209.9	245.9	626.5	754.4	793.7	829.8	865.8	872.4	862.6
77.5°	82.0	101.6	180.4	206.6	488.7	596.9	629.7	649.4	678.9	685.5	688.8
80°	68.9	88.6	141.0	160.7	354.2	439.4	462.4	478.9	505.0	505.0	511.6
82.5°	52.5	68.9	101.6	114.8	239.4	301.7	321.4	331.2	347.7	347.7	347.7
85°	32.8	42.6	65.6	75.4	144.3	183.6	196.8	200.1	213.2	216.5	216.5
87.5°	16.4	23.0	42.6	45.9	75.4	95.2	95.2	101.6	101.6	98.4	95.2
90°	4.0	7.2	10.4	11.1	17.5	26.1	30.3	26.9	20.3	15.2	15.2
92.5°	16.0	43.1	70.3	77.1	108.4	150.1	170.9	149.8	107.6	75.9	72.9
95°	38.4	88.1	137.8	150.2	266.7	422.0	499.7	445.9	338.4	257.7	248.5
97.5°	66.3	110.1	154.0	164.9	359.2	618.2	747.8	713.8	645.7	594.8	577.3
100°	87.9	127.6	167.3	177.3	392.9	680.3	824.0	826.6	831.5	835.2	814.4
102.5°	106.3	143.4	180.4	189.7	408.3	699.9	845.6	889.0	975.6	1040.5	1022.8
105°	137.4	168.8	200.3	208.1	419.9	702.1	843.2	940.3	1134.6	1280.2	1270.6
107.5°	169.4	198.6	227.9	235.3	421.9	670.8	795.3	930.7	1201.7	1404.9	1407.2
110°	190.9	217.3	243.9	250.5	418.8	643.1	755.3	906.8	1209.6	1436.7	1446.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	212.1	237.3	262.5	268.8	418.9	619.0	719.0	873.9	1183.9	1416.4	1431.7
115°	244.1	267.3	290.6	296.4	422.8	591.3	675.5	824.8	1123.4	1347.3	1368.4
117.5°	275.6	296.7	317.8	323.2	430.6	573.8	645.5	780.2	1049.7	1251.9	1275.3
120°	294.0	313.9	333.8	338.8	437.0	568.0	633.5	756.6	1002.8	1187.5	1210.3
122.5°	311.9	332.0	352.0	357.1	446.1	564.9	624.3	735.2	957.0	1123.3	1145.7
125°	339.5	357.8	376.1	380.6	458.5	562.4	614.3	708.5	896.9	1038.2	1058.9
127.5°	361.9	380.3	398.7	403.4	470.9	561.0	605.9	686.8	848.6	969.9	987.3
130°	373.8	393.7	413.7	418.6	479.9	561.8	602.7	674.7	818.7	926.7	942.8
132.5°	386.2	406.1	426.1	431.0	487.3	562.4	600.0	664.4	793.3	889.9	904.4
135°	404.7	422.8	440.8	445.4	495.3	561.8	595.2	649.1	757.1	838.0	850.5
137.5°	423.5	441.4	459.3	463.8	507.3	565.3	594.4	640.0	731.3	799.7	809.9
140°	439.0	455.5	472.0	476.2	514.6	565.9	591.6	631.0	709.8	768.9	778.4
142.5°	451.0	466.2	481.5	485.3	520.7	567.9	591.6	626.2	695.5	747.4	755.6
145°	469.4	482.7	496.0	499.3	528.8	568.0	587.6	615.9	672.6	715.0	721.2
147.5°	487.7	500.7	513.7	516.9	540.4	571.9	587.6	609.9	654.4	687.8	692.9
150°	499.7	511.4	523.2	526.1	546.6	573.9	587.6	606.4	644.1	672.3	676.5
152.5°	512.1	521.0	529.8	532.1	550.6	575.3	587.6	603.7	635.8	659.9	663.1
155°	530.4	537.0	543.6	545.3	559.4	578.2	587.6	600.4	625.9	645.1	647.2
157.5°	544.0	550.4	556.8	558.4	568.1	581.1	587.6	597.5	617.3	632.3	633.7
160°	553.2	558.2	563.2	564.4	572.2	582.5	587.6	596.1	613.1	625.9	626.7
162.5°	562.4	566.2	569.9	570.8	576.5	583.9	587.6	594.8	609.2	620.0	620.7
165°	572.4	575.8	579.1	579.9	582.5	585.9	587.6	592.7	603.0	610.8	611.6
167.5°	581.6	583.1	584.8	585.2	587.3	590.1	591.6	595.0	601.7	606.8	607.2
170°	587.6	589.2	590.8	591.2	591.3	591.5	591.6	595.0	601.7	606.8	606.8
172.5°	590.8	591.2	591.5	591.6	591.6	591.6	591.6	594.3	599.6	603.6	603.3
175°	595.2	595.2	595.2	595.2	594.0	592.3	591.6	593.2	596.6	599.1	599.1
177.5°	595.2	595.2	595.2	595.2	594.2	592.9	592.3	593.7	596.3	598.4	598.0
180°	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2	595.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1020.0	1020.0
2.5°	1088.9	1082.3
5°	1400.4	1407.0
7.5°	1885.8	1882.6
10°	2345.0	2374.5
12.5°	2679.5	2686.1
15°	2882.9	2896.0
17.5°	2961.6	2964.8
20°	2964.8	2958.3
22.5°	2928.8	2922.2
25°	2886.2	2882.9
27.5°	2846.7	2850.0
30°	2830.4	2840.2
32.5°	2830.4	2846.7
35°	2836.9	2853.3
37.5°	2833.6	2853.3
40°	2820.6	2843.5
42.5°	2784.4	2800.9
45°	2728.7	2748.4
47.5°	2656.5	2669.7
50°	2564.7	2577.8
52.5°	2449.9	2453.2
55°	2312.1	2325.3
57.5°	2164.6	2167.8
60°	2000.6	2010.5
62.5°	1826.8	1826.8
65°	1643.1	1649.7
67.5°	1452.9	1469.3
70°	1259.4	1262.7
72.5°	1069.2	1069.2
75°	872.4	875.7
77.5°	685.5	685.5
80°	508.3	511.6
82.5°	351.0	357.5
85°	219.8	219.8
87.5°	101.6	91.9
90°	15.2	15.2
92.5°	60.8	48.7
95°	211.9	175.4
97.5°	507.8	438.2
100°	731.6	648.6
102.5°	951.8	880.7
105°	1232.5	1194.3
107.5°	1416.4	1425.6
110°	1486.4	1526.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1492.7	1553.8
115°	1453.1	1537.8
117.5°	1369.3	1463.2
120°	1301.6	1392.8
122.5°	1235.8	1325.8
125°	1141.8	1224.7
127.5°	1057.3	1127.2
130°	1007.5	1072.1
132.5°	962.3	1020.2
135°	900.4	950.3
137.5°	850.8	891.6
140°	816.6	854.8
142.5°	788.4	821.2
145°	746.1	770.9
147.5°	713.6	734.2
150°	693.1	709.8
152.5°	675.7	688.3
155°	655.5	663.9
157.5°	639.6	645.5
160°	630.1	633.5
162.5°	623.9	627.1
165°	614.9	618.3
167.5°	608.5	610.0
170°	606.8	606.8
172.5°	602.0	600.8
175°	599.1	599.1
177.5°	596.6	595.2
180°	595.2	595.2

(END OF REPORT)