

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: P937004

Luminaire Tested: SQ4-FB-050U-125D-B40-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937004
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-B40-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

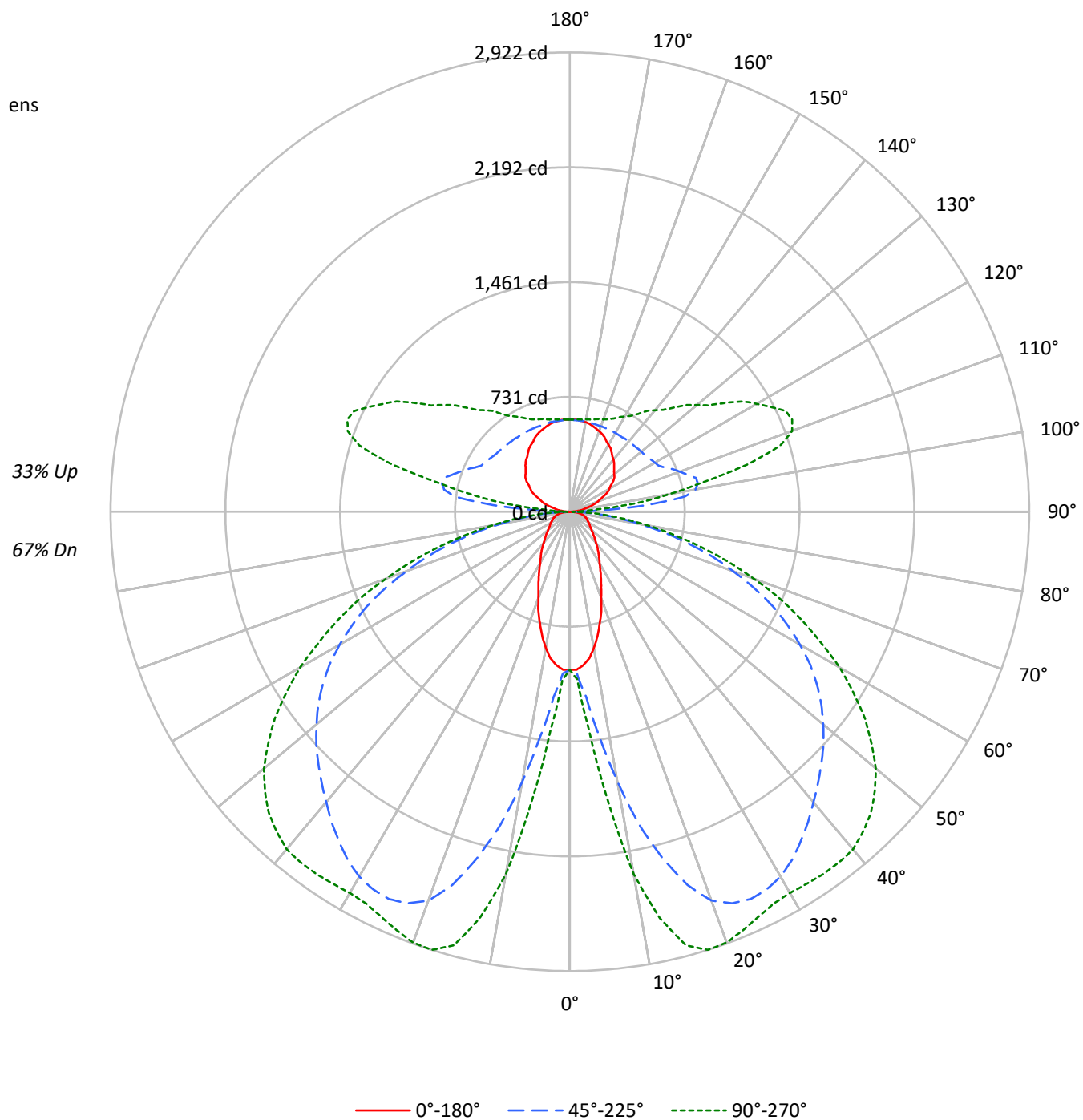
Lumens per Lamp: N/A
Luminaire Lumens: 11581.3 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

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°	4664	4664	4664
5°	4556	5391	6269
10°	4133	7858	10393
15°	3512	10266	12550
20°	2860	11897	12790
25°	2385	12449	12530
30°	2012	12528	12506
35°	1779	12320	12830
40°	1550	12050	13164
45°	1404	11851	13216
50°	1287	11673	12997
55°	1233	11413	12421
60°	1262	10911	11511
65°	1313	10149	10261
70°	1399	8851	8669
75°	1550	7217	6765
80°	1694	5004	4558
85°	1504	2656	2333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13216 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	130.0	1.1
10°-20°	576.3	5.0
20°-30°	1008.1	8.7
30°-40°	1297.7	11.2
40°-50°	1449.4	12.5
50°-60°	1388.2	12.0
60°-70°	1100.2	9.5
70°-80°	646.9	5.6
80°-90°	182.0	1.6
90°-100°	285.9	2.5
100°-110°	751.7	6.5
110°-120°	779.4	6.7
120°-130°	625.2	5.4
130°-140°	490.6	4.2
140°-150°	376.5	3.3
150°-160°	271.2	2.3
160°-170°	165.9	1.4
170°-180°	56.1	0.5
0°-30°	1714.4	14.8
0°-40°	3012.1	26.0
0°-60°	5849.7	50.5
0°-90°	7778.8	67.2
90°-120°	1817.1	15.7
90°-150°	3309.4	28.6
90°-180°	3802.0	32.8
0°-180°	11581.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1005	1005	1005	1005	1005	
5°	979	1050	1183	1338	1387	90
15°	734	1354	2282	2767	2854	204
25°	469	1535	2718	2838	2841	216
35°	317	1468	2560	2705	2812	198
45°	217	1170	2263	2592	2709	168
55°	155	744	1920	2230	2292	141
65°	123	394	1425	1603	1626	122
75°	90	242	782	860	863	95
85°	32	74	194	213	217	34
90°	4	11	30	15	15	5
95°	38	148	492	254	173	42
105°	135	205	831	1262	1177	144
115°	241	292	666	1328	1516	238
125°	335	375	606	1023	1207	297
135°	399	439	587	826	937	309
145°	463	492	579	705	760	290
155°	523	537	579	636	654	240
165°	564	572	579	602	609	159
175°	587	587	583	590	590	56
180°	587	587	587	587	587	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2	1005.2
2.5°	1005.2	1005.2	1011.7	1015.0	1021.4	1024.6	1031.1	1037.6	1057.0	1060.2	1066.6
5°	979.4	992.3	1034.4	1050.5	1095.8	1157.2	1183.1	1225.1	1312.3	1338.1	1354.3
7.5°	940.6	969.7	1073.1	1099.0	1212.1	1373.8	1441.6	1532.1	1671.1	1739.0	1794.0
10°	879.2	940.6	1124.8	1186.2	1370.5	1616.1	1742.2	1868.3	2078.4	2172.1	2207.7
12.5°	811.3	911.5	1179.8	1263.8	1528.9	1887.7	2039.6	2178.5	2417.8	2543.8	2563.2
15°	733.7	869.5	1231.5	1354.3	1696.9	2113.9	2282.0	2453.3	2676.4	2766.8	2789.5
17.5°	665.8	837.2	1280.0	1409.3	1826.2	2317.6	2488.8	2631.1	2812.1	2873.5	2889.6
20°	581.8	785.5	1312.3	1480.3	1962.0	2466.3	2631.1	2740.9	2863.9	2902.6	2909.0
22.5°	520.4	730.5	1331.7	1506.2	2052.5	2556.7	2695.8	2783.0	2867.0	2880.0	2883.2
25°	468.7	669.1	1328.5	1535.4	2130.1	2611.7	2718.4	2783.0	2831.5	2838.0	2838.0
27.5°	420.2	601.2	1315.5	1541.8	2188.3	2624.6	2708.7	2753.9	2776.6	2789.5	2789.5
30°	378.2	536.5	1283.2	1528.9	2214.2	2611.7	2679.5	2702.2	2724.8	2744.2	2753.9
32.5°	345.9	475.1	1234.7	1503.0	2217.3	2579.4	2627.9	2640.8	2673.1	2718.4	2734.5
35°	316.8	413.7	1179.8	1467.5	2197.9	2527.7	2560.0	2572.9	2637.5	2705.4	2728.1
37.5°	287.6	368.4	1108.7	1406.0	2168.9	2466.3	2488.8	2511.5	2611.7	2692.5	2718.4
40°	258.6	329.7	1024.6	1338.1	2123.6	2391.9	2411.3	2446.8	2579.4	2673.1	2698.9
42.5°	236.0	297.4	934.2	1267.1	2065.5	2307.9	2337.0	2388.6	2540.6	2640.8	2669.9
45°	216.6	265.0	837.2	1170.1	1991.1	2220.6	2262.6	2333.7	2495.3	2592.3	2618.1
47.5°	197.2	242.4	737.0	1069.9	1910.3	2133.3	2188.3	2269.1	2433.9	2527.7	2550.3
50°	181.0	219.8	636.8	963.2	1823.0	2039.6	2104.2	2188.3	2356.4	2443.7	2472.7
52.5°	168.1	200.4	543.0	856.5	1722.8	1942.6	2017.0	2104.2	2262.6	2346.6	2366.0
55°	155.2	184.2	462.2	743.5	1619.4	1839.1	1920.0	2004.1	2159.2	2230.3	2243.2
57.5°	148.7	171.3	394.3	636.8	1509.5	1722.8	1813.4	1890.9	2036.3	2091.3	2104.2
60°	139.0	161.6	342.7	546.3	1389.9	1612.9	1690.4	1768.1	1890.9	1936.2	1945.8
62.5°	129.3	155.2	303.9	459.0	1267.1	1483.6	1561.2	1632.3	1735.7	1768.1	1781.0
65°	122.8	148.7	274.8	394.3	1141.0	1347.9	1425.4	1486.8	1570.9	1603.3	1609.7
67.5°	116.3	142.2	252.1	339.4	1015.0	1212.1	1270.2	1328.5	1393.2	1425.4	1428.7
70°	106.7	135.8	232.7	300.6	885.7	1057.0	1105.4	1166.8	1218.6	1234.7	1244.5
72.5°	100.2	126.1	219.8	271.5	753.1	908.3	953.6	989.1	1034.4	1050.5	1050.5
75°	90.5	113.2	206.9	242.4	617.4	743.5	782.2	817.8	853.3	859.8	850.1
77.5°	80.8	100.2	177.8	203.6	481.6	588.3	620.6	640.0	669.1	675.6	678.8
80°	67.9	87.3	139.0	158.3	349.1	433.1	455.7	472.0	497.7	497.7	504.2
82.5°	51.8	67.9	100.2	113.2	236.0	297.4	316.8	326.4	342.7	342.7	342.7
85°	32.3	42.0	64.7	74.3	142.2	181.0	194.0	197.2	210.1	213.3	213.3
87.5°	16.1	22.6	42.0	45.3	74.3	93.8	93.8	100.2	100.2	96.9	93.8
90°	3.9	7.1	10.2	11.0	17.3	25.7	29.9	26.5	20.0	15.0	15.0
92.5°	15.8	42.5	69.3	76.0	106.9	147.9	168.5	147.6	106.0	74.8	71.8
95°	37.8	86.8	135.8	148.0	262.8	415.9	492.5	439.5	333.5	253.9	245.0
97.5°	65.3	108.5	151.7	162.5	354.0	609.3	737.0	703.5	636.4	586.2	569.0
100°	86.6	125.8	164.9	174.8	387.3	670.5	812.1	814.6	819.5	823.1	802.7
102.5°	104.8	141.3	177.8	187.0	402.4	689.8	833.4	876.1	961.5	1025.5	1008.0
105°	135.4	166.4	197.4	205.1	413.8	692.0	831.0	926.7	1118.2	1261.7	1252.3
107.5°	166.9	195.8	224.6	231.9	415.8	661.1	783.8	917.3	1184.3	1384.6	1386.9
110°	188.1	214.2	240.4	246.9	412.8	633.8	744.4	893.7	1192.1	1416.0	1425.8

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	209.0	233.9	258.7	264.9	412.8	610.1	708.6	861.3	1166.8	1395.9	1411.0
115°	240.6	263.5	286.4	292.1	416.7	582.7	665.7	812.9	1107.1	1327.8	1348.7
117.5°	271.6	292.4	313.2	318.5	424.4	565.6	636.1	769.0	1034.6	1233.8	1256.9
120°	289.7	309.3	329.0	333.9	430.7	559.8	624.4	745.7	988.3	1170.4	1192.8
122.5°	307.4	327.2	347.0	351.9	439.7	556.8	615.3	724.6	943.2	1107.0	1129.2
125°	334.6	352.6	370.6	375.1	451.9	554.3	605.5	698.3	883.9	1023.2	1043.6
127.5°	356.7	374.8	393.0	397.6	464.1	552.8	597.2	676.9	836.3	955.9	973.0
130°	368.4	388.0	407.7	412.6	473.0	553.7	594.0	665.0	806.9	913.3	929.2
132.5°	380.7	400.2	419.9	424.8	480.3	554.3	591.3	654.8	781.9	877.1	891.3
135°	398.8	416.7	434.4	438.9	488.1	553.7	586.6	639.8	746.1	825.9	838.2
137.5°	417.3	435.0	452.7	457.1	499.9	557.1	585.8	630.8	720.7	788.2	798.2
140°	432.6	448.9	465.2	469.3	507.2	557.7	583.0	621.9	699.5	757.8	767.2
142.5°	444.5	459.5	474.5	478.3	513.2	559.7	583.0	617.1	685.4	736.6	744.7
145°	462.6	475.7	488.9	492.1	521.1	559.8	579.1	607.0	662.9	704.7	710.8
147.5°	480.7	493.4	506.2	509.4	532.6	563.6	579.1	601.1	644.9	677.9	682.9
150°	492.5	504.0	515.6	518.5	538.7	565.6	579.1	597.6	634.8	662.6	666.7
152.5°	504.7	513.5	522.2	524.4	542.6	567.0	579.1	595.0	626.6	650.4	653.5
155°	522.8	529.3	535.8	537.4	551.3	569.8	579.1	591.7	616.8	635.7	637.8
157.5°	536.1	542.4	548.7	550.4	559.9	572.7	579.1	588.9	608.4	623.1	624.6
160°	545.2	550.2	555.0	556.3	563.9	574.1	579.1	587.5	604.2	616.8	617.7
162.5°	554.3	558.0	561.6	562.6	568.1	575.5	579.1	586.2	600.4	611.0	611.8
165°	564.1	567.5	570.7	571.6	574.1	577.4	579.1	584.2	594.3	601.9	602.8
167.5°	573.2	574.7	576.3	576.7	578.8	581.6	583.0	586.4	593.1	598.0	598.4
170°	579.1	580.6	582.3	582.6	582.7	582.9	583.0	586.4	593.1	598.0	598.0
172.5°	582.3	582.6	582.9	583.0	583.0	583.0	583.0	585.7	591.0	594.9	594.6
175°	586.6	586.6	586.6	586.6	585.4	583.8	583.0	584.7	588.0	590.5	590.5
177.5°	586.6	586.6	586.6	586.6	585.6	584.4	583.8	585.1	587.7	589.7	589.3
180°	586.6	586.6	586.6	586.6	586.6	586.6	586.6	586.6	586.6	586.6	586.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1005.2	1005.2
2.5°	1073.1	1066.6
5°	1380.2	1386.7
7.5°	1858.5	1855.4
10°	2311.1	2340.2
12.5°	2640.8	2647.3
15°	2841.2	2854.1
17.5°	2918.8	2922.0
20°	2922.0	2915.5
22.5°	2886.5	2880.0
25°	2844.5	2841.2
27.5°	2805.6	2808.8
30°	2789.5	2799.2
32.5°	2789.5	2805.6
35°	2796.0	2812.1
37.5°	2792.7	2812.1
40°	2779.8	2802.4
42.5°	2744.2	2760.4
45°	2689.3	2708.7
47.5°	2618.1	2631.1
50°	2527.7	2540.6
52.5°	2414.5	2417.8
55°	2278.7	2291.7
57.5°	2133.3	2136.5
60°	1971.7	1981.4
62.5°	1800.4	1800.4
65°	1619.4	1625.9
67.5°	1431.9	1448.1
70°	1241.2	1244.5
72.5°	1053.7	1053.7
75°	859.8	863.0
77.5°	675.6	675.6
80°	501.0	504.2
82.5°	345.9	352.3
85°	216.6	216.6
87.5°	100.2	90.5
90°	15.0	15.0
92.5°	59.9	48.0
95°	208.9	172.9
97.5°	500.4	431.9
100°	721.0	639.3
102.5°	938.0	868.0
105°	1214.7	1177.0
107.5°	1395.9	1405.0
110°	1465.0	1504.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1471.2	1531.3
115°	1432.1	1515.6
117.5°	1349.5	1442.0
120°	1282.8	1372.7
122.5°	1217.9	1306.6
125°	1125.3	1207.0
127.5°	1042.0	1111.0
130°	992.9	1056.6
132.5°	948.4	1005.4
135°	887.4	936.6
137.5°	838.5	878.7
140°	804.8	842.4
142.5°	777.0	809.4
145°	735.4	759.8
147.5°	703.3	723.6
150°	683.1	699.5
152.5°	665.9	678.3
155°	646.1	654.3
157.5°	630.4	636.1
160°	621.0	624.4
162.5°	614.9	618.1
165°	606.0	609.4
167.5°	599.7	601.2
170°	598.0	598.0
172.5°	593.3	592.1
175°	590.5	590.5
177.5°	588.0	586.6
180°	586.6	586.6

(END OF REPORT)