

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: P936708

Luminaire Tested: SQ4-FB-050U-050D-B50-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936708
REPORT IS A COMBINATION OF REPORTS P933485 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-050D-B50-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

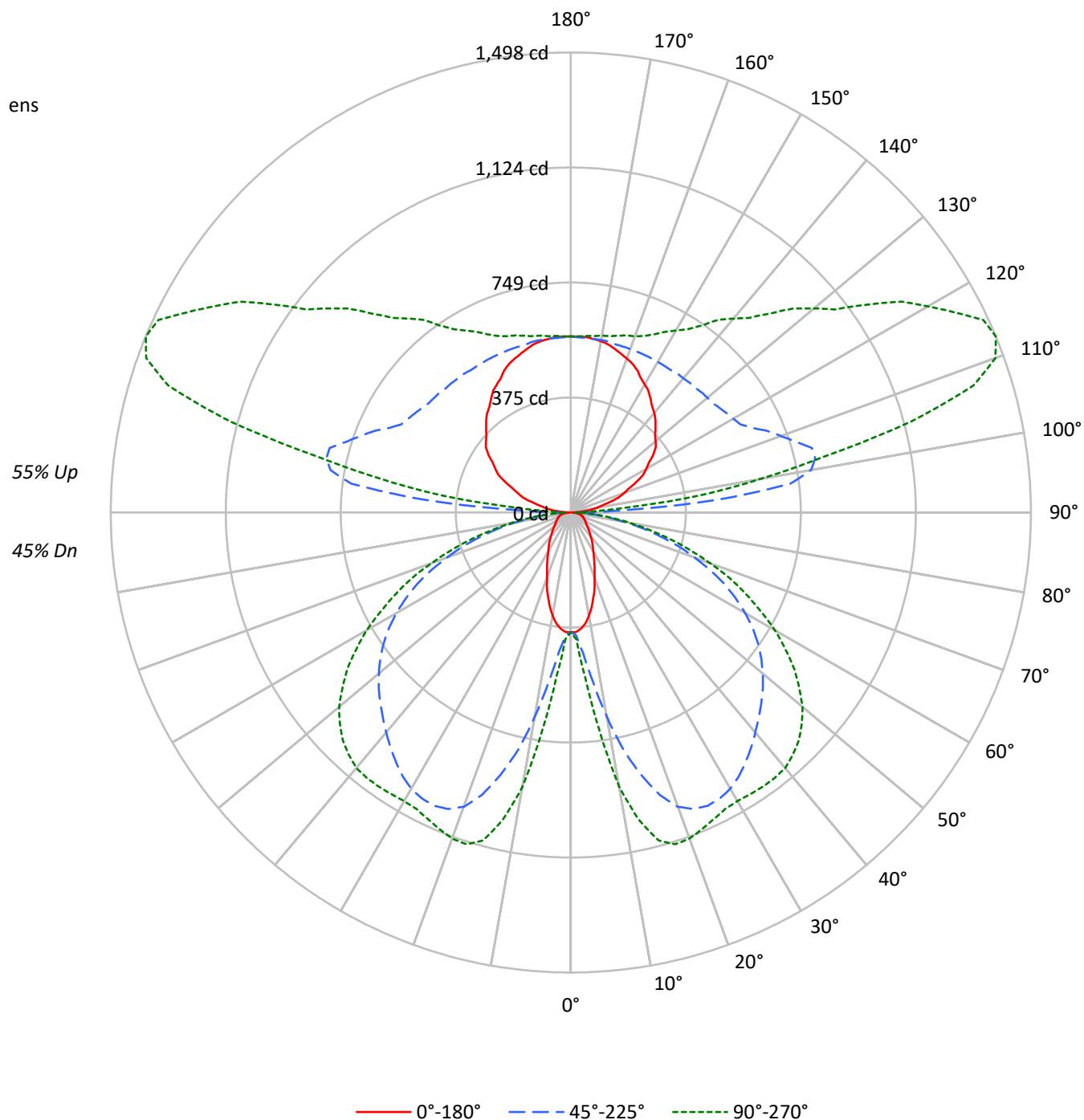
Lumens per Lamp: N/A
Luminaire Lumens: 6735.1 lumens
Efficiency: N/A
Efficacy: 118.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 56.8
Input Voltage (V): NR
Input Current (A_{in}): 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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51
1	96	92	88	84	88	84	81	77	70	67	65	57	55	53	45	43	42
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	39	37	35
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29
4	72	61	53	47	66	56	49	43	47	41	37	38	34	31	30	27	24
5	66	54	46	39	60	50	42	37	41	36	31	34	29	26	26	23	21
6	60	48	40	34	55	44	37	31	37	31	27	30	26	22	24	21	18
7	56	43	35	29	51	40	32	27	33	28	23	27	23	20	21	18	16
8	51	39	31	26	47	36	29	24	30	25	21	25	20	17	20	16	14
9	48	35	28	23	44	33	26	21	27	22	18	23	18	15	18	15	12
10	45	32	25	20	41	30	23	19	25	20	16	21	17	14	17	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1808	1808	1808
5°	1766	2089	2430
10°	1602	3046	4028
15°	1361	3979	4864
20°	1108	4611	4957
25°	925	4825	4856
30°	779	4855	4847
35°	689	4775	4973
40°	601	4670	5102
45°	544	4593	5122
50°	499	4525	5037
55°	478	4423	4814
60°	490	4229	4461
65°	509	3934	3977
70°	543	3430	3360
75°	601	2797	2622
80°	656	1939	1766
85°	582	1030	905

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5122 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.4	0.7
10°-20°	223.4	3.3
20°-30°	390.7	5.8
30°-40°	502.9	7.5
40°-50°	561.8	8.3
50°-60°	538.1	8.0
60°-70°	426.4	6.3
70°-80°	250.7	3.7
80°-90°	71.9	1.1
90°-100°	279.6	4.2
100°-110°	735.2	10.9
110°-120°	762.3	11.3
120°-130°	611.4	9.1
130°-140°	479.8	7.1
140°-150°	368.3	5.5
150°-160°	265.2	3.9
160°-170°	162.3	2.4
170°-180°	54.8	0.8
0°-30°	664.5	9.9
0°-40°	1167.4	17.3
0°-60°	2267.2	33.7
0°-90°	3016.2	44.8
90°-120°	1777.1	26.4
90°-150°	3236.6	48.1
90°-180°	3719.0	55.2
0°-180°	6735.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	390	390	390	390	390	
5°	380	407	458	519	537	35
15°	284	525	884	1072	1106	79
25°	182	595	1054	1100	1101	84
35°	123	569	992	1049	1090	77
45°	84	454	877	1005	1050	65
55°	60	288	744	864	888	55
65°	48	153	552	621	630	47
75°	35	94	303	333	334	37
85°	12	29	75	83	84	13
90°	4	11	29	15	15	4
95°	37	145	482	248	169	41
105°	132	201	813	1234	1151	140
115°	235	286	651	1299	1482	232
125°	327	367	592	1001	1180	291
135°	390	429	574	808	916	302
145°	452	481	566	689	743	283
155°	511	526	566	622	640	235
165°	552	559	566	589	596	156
175°	574	574	570	578	578	54
180°	574	574	574	574	574	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	389.6	389.6	389.6	389.6	389.6	389.6	389.6	389.6	389.6	389.6	389.6
2.5°	389.6	389.6	392.1	393.4	395.8	397.1	399.7	402.2	409.7	410.9	413.4
5°	379.6	384.6	400.9	407.1	424.7	448.5	458.5	474.8	508.7	518.7	524.9
7.5°	364.5	375.8	415.9	425.9	469.8	532.4	558.7	593.8	647.6	674.0	695.3
10°	340.7	364.5	436.0	459.8	531.2	626.3	675.3	724.1	805.5	841.8	855.6
12.5°	314.5	353.2	457.3	489.8	592.5	731.6	790.5	844.3	937.1	985.9	993.4
15°	284.4	337.0	477.3	524.9	657.7	819.3	884.5	950.8	1037.3	1072.3	1081.1
17.5°	258.1	324.5	496.1	546.2	707.8	898.2	964.6	1019.7	1089.9	1113.7	1120.0
20°	225.5	304.4	508.7	573.8	760.5	955.9	1019.7	1062.3	1110.0	1125.0	1127.5
22.5°	201.7	283.1	516.1	583.8	795.5	991.0	1044.8	1078.7	1111.2	1116.2	1117.4
25°	181.7	259.3	514.9	595.1	825.6	1012.3	1053.6	1078.7	1097.4	1100.0	1100.0
27.5°	162.9	233.0	509.9	597.6	848.2	1017.2	1049.8	1067.4	1076.2	1081.1	1081.1
30°	146.5	208.0	497.4	592.5	858.2	1012.3	1038.5	1047.3	1056.1	1063.6	1067.4
32.5°	134.0	184.2	478.6	582.5	859.4	999.7	1018.5	1023.5	1036.0	1053.6	1059.8
35°	122.7	160.4	457.3	568.7	851.9	979.7	992.2	997.2	1022.3	1048.6	1057.3
37.5°	111.5	142.8	429.7	545.0	840.6	955.9	964.6	973.4	1012.3	1043.6	1053.6
40°	100.2	127.8	397.1	518.7	823.0	927.1	934.6	948.4	999.7	1036.0	1046.1
42.5°	91.4	115.3	362.0	491.1	800.5	894.5	905.8	925.8	984.7	1023.5	1034.8
45°	84.0	102.7	324.5	453.5	771.7	860.7	876.9	904.5	967.2	1004.7	1014.7
47.5°	76.4	94.0	285.6	414.7	740.4	826.9	848.2	879.5	943.3	979.7	988.5
50°	70.1	85.2	246.8	373.3	706.6	790.5	815.6	848.2	913.3	947.1	958.4
52.5°	65.1	77.7	210.4	331.9	667.7	752.9	781.8	815.6	876.9	909.5	917.0
55°	60.1	71.5	179.1	288.1	627.6	712.8	744.1	776.7	836.9	864.4	869.5
57.5°	57.6	66.4	152.8	246.8	585.1	667.7	702.8	732.9	789.2	810.5	815.6
60°	53.9	62.7	132.8	211.7	538.7	625.1	655.2	685.3	732.9	750.4	754.2
62.5°	50.2	60.1	117.8	177.9	491.1	575.1	605.0	632.7	672.8	685.3	690.3
65°	47.6	57.6	106.5	152.8	442.2	522.4	552.5	576.3	608.9	621.4	623.9
67.5°	45.1	55.1	97.7	131.5	393.4	469.8	492.3	514.9	539.9	552.5	553.7
70°	41.4	52.6	90.2	116.5	343.2	409.7	428.4	452.2	472.3	478.6	482.3
72.5°	38.9	48.8	85.2	105.3	291.9	352.0	369.6	383.3	400.9	407.1	407.1
75°	35.1	43.8	80.1	94.0	239.3	288.1	303.2	316.9	330.7	333.3	329.5
77.5°	31.3	38.9	68.9	78.9	186.7	228.0	240.5	248.1	259.3	261.8	263.1
80°	26.3	33.8	53.9	61.4	135.3	167.8	176.6	182.9	193.0	193.0	195.4
82.5°	20.1	26.3	38.9	43.8	91.4	115.3	122.7	126.6	132.8	132.8	132.8
85°	12.5	16.3	25.0	28.8	55.1	70.1	75.2	76.4	81.4	82.7	82.7
87.5°	6.3	8.8	16.3	17.6	28.8	36.3	36.3	38.9	38.9	37.5	36.3
90°	3.8	6.9	10.0	10.7	16.9	25.1	29.2	26.0	19.5	14.7	14.7
92.5°	15.4	41.6	67.8	74.3	104.5	144.7	164.8	144.4	103.7	73.1	70.2
95°	37.0	84.9	132.8	144.8	257.0	406.8	481.7	429.8	326.2	248.4	239.6
97.5°	63.9	106.1	148.4	159.0	346.2	595.9	720.8	688.0	622.4	573.3	556.5
100°	84.7	123.0	161.3	170.9	378.7	655.8	794.3	796.7	801.5	805.0	785.0
102.5°	102.5	138.2	173.9	182.9	393.6	674.6	815.1	856.9	940.4	1002.9	985.8
105°	132.4	162.7	193.1	200.6	404.7	676.8	812.8	906.4	1093.6	1234.0	1224.8
107.5°	163.3	191.5	219.7	226.8	406.7	646.6	766.5	897.1	1158.3	1354.1	1356.4
110°	184.0	209.5	235.1	241.4	403.7	619.9	728.1	874.0	1165.9	1384.8	1394.5

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	204.5	228.7	253.0	259.1	403.8	596.6	693.0	842.4	1141.2	1365.2	1380.0
115°	235.3	257.7	280.1	285.7	407.5	569.9	651.1	795.0	1082.8	1298.6	1319.0
117.5°	265.6	286.0	306.4	311.5	415.1	553.1	622.1	752.1	1011.8	1206.6	1229.2
120°	283.4	302.5	321.8	326.5	421.2	547.5	610.6	729.3	966.6	1144.6	1166.6
122.5°	300.7	320.0	339.3	344.2	430.0	544.5	601.8	708.6	922.4	1082.7	1104.4
125°	327.3	344.8	362.5	366.9	442.0	542.1	592.2	682.9	864.5	1000.7	1020.7
127.5°	348.8	366.6	384.3	388.8	453.9	540.7	584.0	662.0	817.9	934.8	951.7
130°	360.3	379.5	398.7	403.5	462.6	541.5	580.9	650.3	789.1	893.2	908.8
132.5°	372.3	391.4	410.7	415.4	469.7	542.1	578.3	640.4	764.7	857.8	871.7
135°	390.0	407.5	424.9	429.3	477.4	541.5	573.7	625.7	729.7	807.7	819.8
137.5°	408.2	425.4	442.7	447.0	488.9	544.9	572.9	616.9	704.9	770.8	780.6
140°	423.1	439.1	455.0	459.0	496.0	545.5	570.2	608.2	684.2	741.1	750.3
142.5°	434.7	449.3	464.1	467.7	501.9	547.4	570.2	603.6	670.3	720.4	728.3
145°	452.4	465.2	478.1	481.3	509.7	547.5	566.4	593.7	648.3	689.2	695.2
147.5°	470.1	482.6	495.1	498.2	520.9	551.2	566.4	587.9	630.7	663.0	667.9
150°	481.7	493.0	504.3	507.1	526.9	553.2	566.4	584.5	620.8	648.0	652.0
152.5°	493.6	502.2	510.7	512.9	530.7	554.5	566.4	581.9	612.8	636.1	639.1
155°	511.3	517.6	524.0	525.6	539.2	557.3	566.4	578.7	603.3	621.8	623.8
157.5°	524.3	530.5	536.7	538.3	547.6	560.1	566.4	575.9	595.1	609.4	610.8
160°	533.2	538.1	542.8	544.1	551.5	561.4	566.4	574.6	590.9	603.3	604.1
162.5°	542.1	545.7	549.3	550.2	555.6	562.8	566.4	573.3	587.2	597.6	598.3
165°	551.7	555.0	558.2	559.0	561.4	564.7	566.4	571.3	581.2	588.7	589.5
167.5°	560.6	562.1	563.7	564.0	566.1	568.8	570.2	573.5	580.0	584.9	585.2
170°	566.4	567.9	569.5	569.8	569.9	570.1	570.2	573.5	580.0	584.9	584.9
172.5°	569.5	569.8	570.1	570.2	570.2	570.2	570.2	572.8	578.0	581.8	581.5
175°	573.7	573.7	573.7	573.7	572.5	571.0	570.2	571.8	575.1	577.5	577.5
177.5°	573.7	573.7	573.7	573.7	572.7	571.5	571.0	572.3	574.8	576.7	576.4
180°	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	389.6	389.6
2.5°	415.9	413.4
5°	534.9	537.4
7.5°	720.3	719.1
10°	895.7	907.0
12.5°	1023.5	1026.0
15°	1101.2	1106.2
17.5°	1131.3	1132.5
20°	1132.5	1130.0
22.5°	1118.7	1116.2
25°	1102.4	1101.2
27.5°	1087.4	1088.7
30°	1081.1	1084.9
32.5°	1081.1	1087.4
35°	1083.6	1089.9
37.5°	1082.4	1089.9
40°	1077.4	1086.1
42.5°	1063.6	1069.9
45°	1042.3	1049.8
47.5°	1014.7	1019.7
50°	979.7	984.7
52.5°	935.8	937.1
55°	883.2	888.2
57.5°	826.9	828.1
60°	764.2	767.9
62.5°	697.8	697.8
65°	627.6	630.2
67.5°	555.0	561.2
70°	481.1	482.3
72.5°	408.4	408.4
75°	333.3	334.5
77.5°	261.8	261.8
80°	194.2	195.4
82.5°	134.0	136.6
85°	84.0	84.0
87.5°	38.9	35.1
90°	14.7	14.7
92.5°	58.6	47.0
95°	204.3	169.1
97.5°	489.4	422.4
100°	705.2	625.2
102.5°	917.4	848.9
105°	1188.0	1151.2
107.5°	1365.2	1374.1
110°	1432.8	1471.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1438.8	1497.7
115°	1400.6	1482.3
117.5°	1319.8	1410.3
120°	1254.5	1342.5
122.5°	1191.1	1277.9
125°	1100.5	1180.5
127.5°	1019.1	1086.5
130°	971.1	1033.4
132.5°	927.6	983.3
135°	867.9	916.0
137.5°	820.1	859.4
140°	787.1	823.9
142.5°	759.9	791.6
145°	719.2	743.1
147.5°	687.8	707.7
150°	668.1	684.2
152.5°	651.3	663.4
155°	631.9	639.9
157.5°	616.5	622.1
160°	607.4	610.6
162.5°	601.4	604.5
165°	592.7	596.0
167.5°	586.6	588.0
170°	584.9	584.9
172.5°	580.3	579.1
175°	577.5	577.5
177.5°	575.1	573.7
180°	573.7	573.7

(END OF REPORT)