

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: P937107

Luminaire Tested: SQ4-FB-075U-050D-B50-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937107
REPORT IS A COMBINATION OF REPORTS P933509 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-075U-050D-B50-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

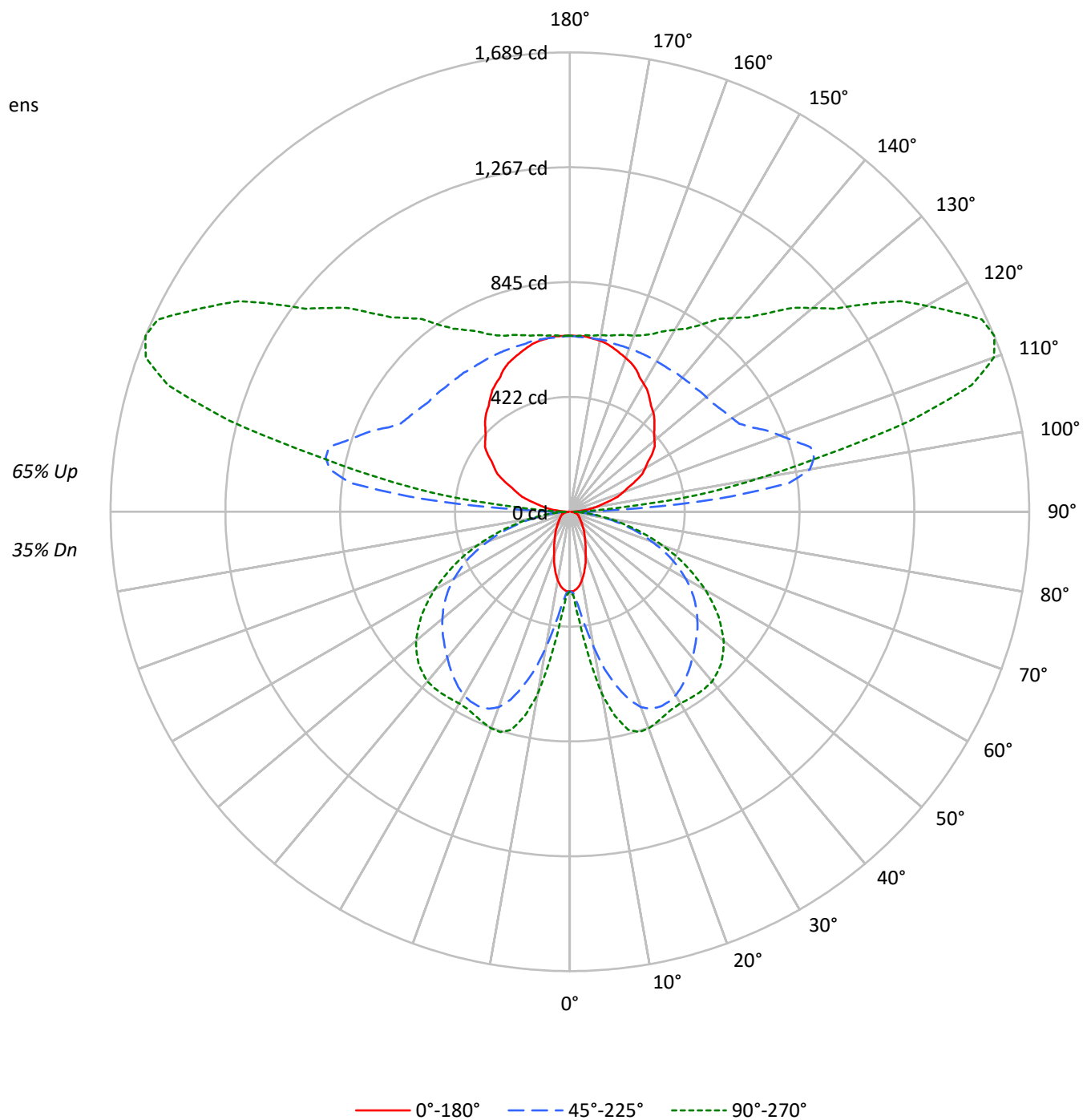
Lumens per Lamp: N/A
Luminaire Lumens: 6457.7 lumens
Efficiency: N/A
Efficacy: 125.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 51.6
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	50	30	10
RCR																				
0	104	104	104	104	94	94	94	94	75	75	75	58	58	58	42	42	42	35		
1	94	90	86	82	85	81	78	75	65	63	61	50	49	47	37	36	35	29		
2	85	78	72	66	77	70	65	61	57	53	50	44	41	39	32	30	29	23		
3	77	68	61	55	70	62	55	50	49	45	41	38	35	32	28	26	24	19		
4	71	60	52	46	63	54	47	42	44	39	35	34	30	27	25	22	20	16		
5	65	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14		
6	59	47	39	33	53	43	36	31	35	29	25	27	23	20	20	17	15	12		
7	55	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10		
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	14	12	9		
9	47	35	27	22	42	32	25	20	26	21	17	20	16	14	15	12	10	8		
10	44	32	24	20	39	29	22	18	23	18	15	18	15	12	14	11	9	7		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1808	1808	1808
5°	1765	2088	2429
10°	1600	3044	4027
15°	1359	3975	4864
20°	1107	4606	4957
25°	923	4819	4856
30°	778	4848	4847
35°	688	4766	4972
40°	599	4660	5101
45°	542	4582	5122
50°	496	4512	5037
55°	475	4410	4814
60°	486	4214	4461
65°	505	3917	3976
70°	536	3414	3359
75°	592	2780	2622
80°	641	1925	1766
85°	560	1021	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°	37.8	0.6
10°-20°	167.5	2.6
20°-30°	293.0	4.5
30°-40°	377.2	5.8
40°-50°	421.3	6.5
50°-60°	403.5	6.2
60°-70°	319.8	5.0
70°-80°	188.0	2.9
80°-90°	54.7	0.8
90°-100°	315.4	4.9
100°-110°	829.3	12.8
110°-120°	859.9	13.3
120°-130°	689.7	10.7
130°-140°	541.2	8.4
140°-150°	415.4	6.4
150°-160°	299.2	4.6
160°-170°	183.0	2.8
170°-180°	61.8	1.0
0°-30°	498.3	7.7
0°-40°	875.5	13.6
0°-60°	1700.2	26.3
0°-90°	2262.7	35.0
90°-120°	2004.6	31.0
90°-150°	3650.9	56.5
90°-180°	4195.0	65.0
0°-180°	6457.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	292	292	292	292	292	
5°	285	305	344	389	403	26
15°	213	394	663	804	830	59
25°	136	446	790	825	826	63
35°	92	427	744	786	817	57
45°	63	340	658	754	787	49
55°	45	216	558	648	666	41
65°	36	115	414	466	472	35
75°	26	70	227	250	251	28
85°	9	22	56	62	63	10
90°	4	12	33	16	16	4
95°	42	163	543	280	191	46
105°	149	226	917	1392	1298	158
115°	265	322	734	1465	1672	262
125°	369	414	668	1129	1332	328
135°	440	484	647	911	1033	340
145°	510	543	639	777	838	320
155°	577	593	639	701	722	265
165°	622	631	639	664	672	176
175°	647	647	643	652	652	61
180°	647	647	647	647	647	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2	292.2
2.5°	292.2	292.2	294.0	295.0	296.9	297.9	299.7	301.6	307.2	308.1	310.0
5°	284.7	288.4	300.7	305.3	318.5	336.3	343.8	356.0	381.4	388.9	393.7
7.5°	273.4	281.9	311.9	319.4	352.3	399.3	419.0	445.3	485.7	505.5	521.5
10°	255.5	273.4	326.9	344.8	398.4	469.7	506.4	543.0	604.1	631.3	641.7
12.5°	235.8	265.0	342.9	367.3	444.4	548.6	592.8	633.3	702.7	739.4	745.0
15°	213.2	252.7	357.9	393.7	493.2	614.4	663.2	713.1	777.9	804.2	810.8
17.5°	193.5	243.3	372.0	409.7	530.8	673.6	723.4	764.8	817.3	835.2	839.9
20°	169.1	228.3	381.4	430.3	570.3	716.8	764.8	796.7	832.4	843.7	845.6
22.5°	151.2	212.3	387.0	437.8	596.5	743.1	783.5	808.8	833.3	837.1	838.0
25°	136.3	194.5	386.1	446.3	619.1	759.1	790.1	808.8	822.9	824.8	824.8
27.5°	122.2	174.8	382.4	448.1	636.1	762.9	787.3	800.4	807.0	810.8	810.8
30°	109.9	156.0	372.9	444.4	643.5	759.1	778.9	785.4	791.9	797.6	800.4
32.5°	100.5	138.1	358.8	436.8	644.5	749.7	763.8	767.6	776.9	790.1	794.8
35°	92.1	120.3	342.9	426.6	638.9	734.7	744.0	747.9	766.6	786.3	792.9
37.5°	83.6	107.1	322.2	408.7	630.4	716.8	723.4	730.0	759.1	782.6	790.1
40°	75.2	95.8	297.9	388.9	617.3	695.2	700.9	711.1	749.7	776.9	784.5
42.5°	68.6	86.4	271.5	368.3	600.3	670.8	679.2	694.2	738.4	767.6	776.0
45°	63.0	77.1	243.3	340.1	578.7	645.4	657.6	678.3	725.3	753.5	760.9
47.5°	57.3	70.4	214.2	310.9	555.3	620.1	636.1	659.5	707.4	734.7	741.2
50°	52.6	63.9	185.1	279.9	529.9	592.8	611.6	636.1	684.9	710.2	718.7
52.5°	48.8	58.3	157.8	249.0	500.7	564.6	586.3	611.6	657.6	682.1	687.7
55°	45.1	53.5	134.3	216.0	470.6	534.5	558.1	582.4	627.6	648.2	652.0
57.5°	43.2	49.8	114.6	185.1	438.7	500.7	527.1	549.6	591.9	607.8	611.6
60°	40.4	47.0	99.6	158.8	404.0	468.8	491.4	513.9	549.6	562.7	565.5
62.5°	37.5	45.1	88.4	133.4	368.3	431.2	453.7	474.5	504.5	513.9	517.6
65°	35.7	43.2	79.9	114.6	331.7	391.7	414.3	432.2	456.5	466.0	467.8
67.5°	33.8	41.4	73.3	98.6	295.0	352.3	369.2	386.1	404.9	414.3	415.3
70°	31.0	39.4	67.6	87.3	257.4	307.2	321.3	339.1	354.2	358.8	361.7
72.5°	29.1	36.6	63.9	78.9	218.9	263.9	277.1	287.5	300.7	305.3	305.3
75°	26.3	32.9	60.1	70.4	179.4	216.0	227.3	237.7	248.0	249.9	247.0
77.5°	23.4	29.1	51.7	59.2	140.0	171.0	180.4	186.1	194.5	196.3	197.3
80°	19.7	25.4	40.4	46.0	101.4	125.9	132.4	137.2	144.7	144.7	146.5
82.5°	15.0	19.7	29.1	32.9	68.6	86.4	92.1	94.9	99.6	99.6	99.6
85°	9.4	12.2	18.8	21.6	41.4	52.6	56.4	57.3	61.1	62.0	62.0
87.5°	4.7	6.5	12.2	13.2	21.6	27.3	27.3	29.1	29.1	28.2	27.3
90°	4.3	7.8	11.3	12.1	19.1	28.3	33.0	29.3	22.0	16.5	16.5
92.5°	17.4	46.9	76.4	83.8	117.8	163.2	185.9	162.9	116.9	82.5	79.2
95°	41.7	95.7	149.7	163.3	289.9	458.9	543.3	484.8	367.8	280.1	270.2
97.5°	72.1	119.7	167.4	179.3	390.6	672.2	813.0	776.1	702.2	646.7	627.7
100°	95.5	138.8	182.0	192.9	427.2	739.7	896.0	898.7	904.1	908.1	885.6
102.5°	115.5	155.9	196.2	206.3	444.0	760.9	919.4	966.5	1060.7	1131.4	1112.0
105°	149.4	183.6	217.8	226.3	456.4	763.4	916.8	1022.4	1233.5	1391.9	1381.6
107.5°	184.2	216.0	247.9	255.8	458.8	729.4	864.7	1012.0	1306.6	1527.5	1530.0
110°	207.6	236.4	265.1	272.3	455.2	699.3	821.3	985.9	1315.3	1562.2	1573.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	230.6	258.0	285.4	292.2	455.4	672.9	781.8	950.3	1287.2	1540.0	1556.6
115°	265.3	290.7	315.9	322.2	459.6	642.8	734.4	896.7	1221.4	1464.9	1487.9
117.5°	299.6	322.6	345.6	351.4	468.2	623.9	701.8	848.4	1141.3	1361.1	1386.6
120°	319.6	341.3	362.9	368.3	475.1	617.6	688.8	822.7	1090.4	1291.2	1316.0
122.5°	339.2	361.0	382.8	388.3	485.1	614.3	678.8	799.3	1040.4	1221.2	1245.7
125°	369.1	389.0	408.9	413.9	498.6	611.5	668.0	770.4	975.2	1128.7	1151.2
127.5°	393.5	413.6	433.6	438.6	512.0	609.9	658.8	746.7	922.6	1054.5	1073.5
130°	406.5	428.1	449.7	455.1	521.9	610.9	655.4	733.7	890.2	1007.6	1025.2
132.5°	419.9	441.6	463.2	468.6	529.9	611.5	652.3	722.4	862.5	967.6	983.3
135°	439.9	459.6	479.3	484.3	538.5	610.9	647.1	705.7	823.1	911.1	924.7
137.5°	460.4	479.8	499.3	504.2	551.5	614.7	646.2	695.8	795.0	869.5	880.6
140°	477.3	495.2	513.2	517.7	559.6	615.3	643.2	686.0	771.8	836.0	846.4
142.5°	490.4	507.0	523.6	527.7	566.2	617.5	643.2	680.8	756.1	812.6	821.5
145°	510.3	524.8	539.2	542.8	574.9	617.6	638.9	669.7	731.2	777.4	784.1
147.5°	530.2	544.3	558.4	562.0	587.6	621.8	638.9	663.0	711.5	747.9	753.5
150°	543.3	556.0	568.8	572.0	594.3	624.0	638.9	659.3	700.2	730.9	735.5
152.5°	556.8	566.5	576.1	578.5	598.6	625.4	638.9	656.3	691.3	717.5	721.0
155°	576.7	583.8	591.0	592.8	608.1	628.6	638.9	652.8	680.6	701.4	703.7
157.5°	591.5	598.5	605.4	607.2	617.7	631.9	638.9	649.7	671.3	687.5	689.1
160°	601.5	606.9	612.3	613.6	622.0	633.3	638.9	648.1	666.6	680.5	681.4
162.5°	611.5	615.6	619.6	620.6	626.7	634.8	638.9	646.7	662.3	674.1	674.9
165°	622.3	626.1	629.7	630.6	633.3	637.0	638.9	644.5	655.7	664.1	665.0
167.5°	632.3	634.1	635.8	636.2	638.6	641.7	643.2	646.8	654.2	659.7	660.1
170°	638.9	640.6	642.3	642.8	642.9	643.1	643.2	646.8	654.2	659.7	659.7
172.5°	642.3	642.7	643.1	643.2	643.2	643.2	643.2	646.0	651.8	656.2	655.9
175°	647.1	647.1	647.1	647.1	645.8	644.0	643.2	645.0	648.7	651.5	651.5
177.5°	647.1	647.1	647.1	647.1	646.0	644.7	644.1	645.6	648.5	650.6	650.3
180°	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1	647.1



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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	292.2	292.2
2.5°	311.9	310.0
5°	401.2	403.0
7.5°	540.2	539.3
10°	671.7	680.1
12.5°	767.6	769.4
15°	825.8	829.6
17.5°	848.4	849.3
20°	849.3	847.4
22.5°	838.9	837.1
25°	826.8	825.8
27.5°	815.5	816.4
30°	810.8	813.6
32.5°	810.8	815.5
35°	812.7	817.3
37.5°	811.7	817.3
40°	807.9	814.5
42.5°	797.6	802.3
45°	781.7	787.3
47.5°	760.9	764.8
50°	734.7	738.4
52.5°	701.8	702.7
55°	662.3	666.1
57.5°	620.1	621.0
60°	573.1	575.9
62.5°	523.3	523.3
65°	470.6	472.5
67.5°	416.2	420.9
70°	360.8	361.7
72.5°	306.3	306.3
75°	249.9	250.9
77.5°	196.3	196.3
80°	145.6	146.5
82.5°	100.5	102.4
85°	63.0	63.0
87.5°	29.1	26.3
90°	16.5	16.5
92.5°	66.0	53.0
95°	230.4	190.6
97.5°	552.1	476.4
100°	795.4	705.3
102.5°	1034.9	957.6
105°	1340.0	1298.5
107.5°	1540.0	1550.0
110°	1616.2	1659.4

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1623.0	1689.4
115°	1580.0	1672.0
117.5°	1488.7	1590.8
120°	1415.2	1514.4
122.5°	1343.6	1441.4
125°	1241.5	1331.6
127.5°	1149.6	1225.6
130°	1095.4	1165.6
132.5°	1046.3	1109.2
135°	978.9	1033.2
137.5°	924.9	969.4
140°	888.0	929.4
142.5°	857.2	892.9
145°	811.2	838.2
147.5°	775.8	798.2
150°	753.6	771.8
152.5°	734.6	748.3
155°	712.7	721.8
157.5°	695.5	701.8
160°	685.1	688.8
162.5°	678.4	681.8
165°	668.7	672.3
167.5°	661.6	663.1
170°	659.7	659.7
172.5°	654.5	653.1
175°	651.5	651.5
177.5°	648.7	647.1
180°	647.1	647.1

(END OF REPORT)