

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: P936806

Luminaire Tested: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936806
REPORT IS A COMBINATION OF REPORTS P933470 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

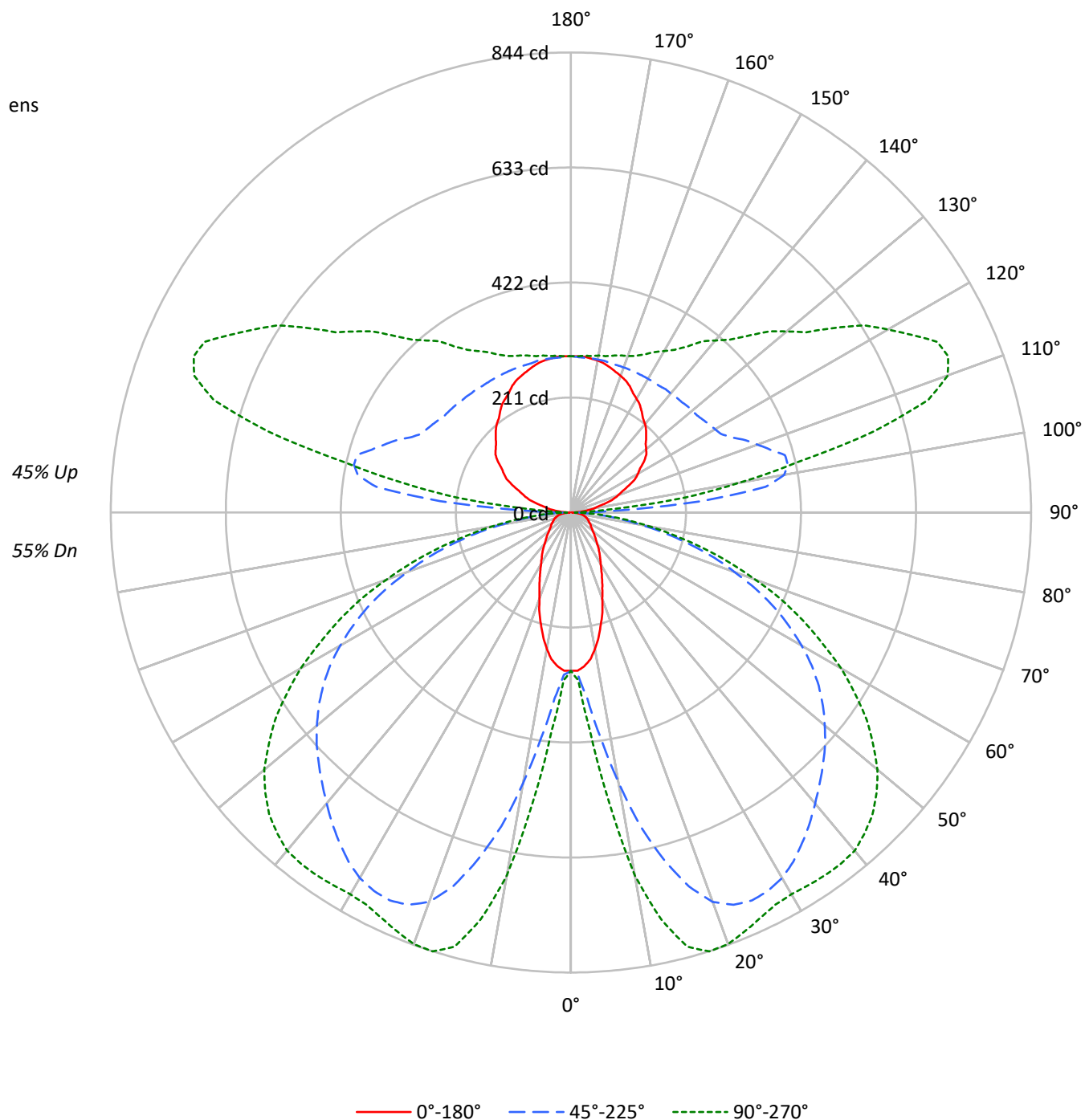
Lumens per Lamp: N/A
Luminaire Lumens: 4107.6 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 36.4
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2696	2696	2696
5°	2630	3113	3623
10°	2383	4534	6006
15°	2023	5920	7252
20°	1645	6855	7392
25°	1370	7168	7241
30°	1154	7208	7227
35°	1019	7082	7415
40°	886	6922	7608
45°	801	6801	7638
50°	733	6692	7511
55°	700	6535	7178
60°	715	6240	6652
65°	740	5794	5930
70°	782	5043	5010
75°	859	4101	3910
80°	917	2834	2634
85°	770	1495	1349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7638 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	0.9
10°-20°	166.5	4.1
20°-30°	291.3	7.1
30°-40°	375.0	9.1
40°-50°	418.8	10.2
50°-60°	401.1	9.8
60°-70°	317.9	7.7
70°-80°	186.9	4.6
80°-90°	53.0	1.3
90°-100°	139.8	3.4
100°-110°	367.6	8.9
110°-120°	381.1	9.3
120°-130°	305.7	7.4
130°-140°	239.9	5.8
140°-150°	184.1	4.5
150°-160°	132.6	3.2
160°-170°	81.1	2.0
170°-180°	27.4	0.7
0°-30°	495.4	12.1
0°-40°	870.4	21.2
0°-60°	1690.3	41.2
0°-90°	2248.2	54.7
90°-120°	888.5	21.6
90°-150°	1618.3	39.4
90°-180°	1859.0	45.3
0°-180°	4107.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	290	290	290	290	290	
5°	283	304	342	387	401	26
15°	212	391	659	800	825	59
25°	135	444	786	820	821	62
35°	92	424	740	782	813	57
45°	63	338	654	749	783	48
55°	45	215	555	644	662	41
65°	36	114	412	463	470	35
75°	26	70	226	248	249	27
85°	9	22	56	62	63	10
90°	2	5	15	7	7	2
95°	18	72	241	124	84	21
105°	66	100	406	617	576	70
115°	118	143	326	649	741	116
125°	164	183	296	500	590	145
135°	195	215	287	404	458	151
145°	226	241	283	345	372	142
155°	256	263	283	311	320	117
165°	276	280	283	294	298	78
175°	287	287	285	289	289	27
180°	287	287	287	287	287	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5
2.5°	290.5	290.5	292.3	293.3	295.1	296.1	297.9	299.8	305.4	306.4	308.2
5°	283.0	286.7	298.9	303.6	316.6	334.4	341.8	354.0	379.2	386.7	391.3
7.5°	271.8	280.2	310.1	317.6	350.2	397.0	416.6	442.7	482.9	502.5	518.4
10°	254.0	271.8	325.0	342.8	396.0	467.0	503.4	539.9	600.6	627.6	637.9
12.5°	234.4	263.4	340.9	365.2	441.8	545.5	589.4	629.5	698.6	735.1	740.7
15°	212.0	251.2	355.9	391.3	490.4	610.8	659.4	708.9	773.4	799.5	806.0
17.5°	192.4	241.9	369.9	407.2	527.7	669.7	719.2	760.3	812.6	830.3	835.0
20°	168.1	227.0	379.2	427.8	566.9	712.6	760.3	792.0	827.5	838.7	840.6
22.5°	150.4	211.1	384.8	435.2	593.1	738.8	779.0	804.2	828.5	832.2	833.1
25°	135.4	193.3	383.9	443.6	615.5	754.7	785.5	804.2	818.2	820.1	820.1
27.5°	121.4	173.7	380.1	445.5	632.3	758.4	782.7	795.8	802.3	806.0	806.0
30°	109.3	155.0	370.8	441.8	639.8	754.7	774.3	780.8	787.4	793.0	795.8
32.5°	99.9	137.3	356.8	434.3	640.7	745.3	759.3	763.1	772.4	785.5	790.2
35°	91.5	119.6	340.9	424.0	635.1	730.4	739.7	743.5	762.1	781.8	788.3
37.5°	83.1	106.5	320.4	406.3	626.7	712.6	719.2	725.7	754.7	778.0	785.5
40°	74.7	95.3	296.1	386.7	613.6	691.2	696.8	707.0	745.3	772.4	779.9
42.5°	68.2	85.9	269.9	366.1	596.8	666.9	675.3	690.2	734.1	763.1	771.5
45°	62.6	76.6	241.9	338.1	575.3	641.7	653.8	674.3	721.0	749.1	756.5
47.5°	57.0	70.0	213.0	309.2	552.0	616.4	632.3	655.7	703.3	730.4	736.9
50°	52.3	63.5	184.0	278.3	526.8	589.4	608.0	632.3	680.9	706.1	714.5
52.5°	48.6	57.9	156.9	247.5	497.8	561.3	582.8	608.0	653.8	678.1	683.7
55°	44.8	53.2	133.6	214.8	467.9	531.4	554.8	579.1	623.9	644.5	648.2
57.5°	43.0	49.5	113.9	184.0	436.2	497.8	524.0	546.4	588.4	604.3	608.0
60°	40.2	46.7	99.0	157.8	401.6	466.1	488.5	510.9	546.4	559.5	562.3
62.5°	37.4	44.8	87.8	132.6	366.1	428.7	451.1	471.7	501.6	510.9	514.6
65°	35.5	43.0	79.4	113.9	329.7	389.5	411.9	429.6	453.9	463.3	465.1
67.5°	33.6	41.1	72.9	98.1	293.3	350.2	367.1	383.9	402.6	411.9	412.8
70°	30.8	39.2	67.2	86.9	255.9	305.4	319.4	337.2	352.1	356.8	359.6
72.5°	29.0	36.4	63.5	78.5	217.6	262.5	275.5	285.8	298.9	303.6	303.6
75°	26.2	32.7	59.8	70.0	178.4	214.8	226.0	236.3	246.6	248.4	245.6
77.5°	23.4	29.0	51.4	58.8	139.2	170.0	179.3	184.9	193.3	195.2	196.1
80°	19.6	25.2	40.2	45.8	100.9	125.2	131.7	136.4	143.8	143.8	145.7
82.5°	14.9	19.6	29.0	32.7	68.2	85.9	91.5	94.3	99.0	99.0	99.0
85°	9.3	12.1	18.7	21.5	41.1	52.3	56.0	57.0	60.7	61.6	61.6
87.5°	4.7	6.5	12.1	13.1	21.5	27.1	27.1	29.0	29.0	28.0	27.1
90°	2.0	3.5	5.0	5.4	8.5	12.6	14.7	13.0	9.7	7.3	7.3
92.5°	7.7	20.7	33.9	37.2	52.2	72.3	82.4	72.2	51.8	36.6	35.1
95°	18.5	42.4	66.4	72.4	128.5	203.3	240.8	214.8	163.0	124.1	119.7
97.5°	31.9	53.1	74.2	79.5	173.1	297.9	360.3	344.0	311.2	286.6	278.2
100°	42.3	61.5	80.7	85.5	189.3	327.8	397.1	398.4	400.8	402.6	392.6
102.5°	51.2	69.1	87.0	91.4	196.8	337.3	407.5	428.4	470.2	501.5	492.9
105°	66.2	81.4	96.5	100.3	202.3	338.4	406.4	453.2	546.8	617.0	612.4
107.5°	81.6	95.7	109.8	113.4	203.3	323.4	383.3	448.6	579.2	677.1	678.2
110°	92.0	104.7	117.5	120.7	201.8	310.0	364.1	437.0	583.0	692.5	697.2

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	102.2	114.3	126.5	129.5	201.8	298.3	346.5	421.2	570.6	682.7	690.0
115°	117.6	128.8	140.0	142.8	203.7	284.9	325.5	397.4	541.3	649.3	659.5
117.5°	132.8	143.0	153.2	155.7	207.5	276.6	311.1	376.0	505.9	603.3	614.6
120°	141.7	151.3	160.8	163.3	210.6	273.8	305.3	364.6	483.3	572.4	583.4
122.5°	150.4	160.1	169.7	172.1	215.0	272.3	300.8	354.3	461.2	541.3	552.2
125°	163.6	172.4	181.2	183.4	221.0	271.0	296.1	341.5	432.3	500.3	510.3
127.5°	174.4	183.3	192.2	194.5	227.0	270.4	292.1	331.0	408.9	467.4	475.8
130°	180.2	189.8	199.3	201.7	231.4	270.8	290.5	325.2	394.6	446.6	454.4
132.5°	186.1	195.8	205.3	207.7	234.9	271.0	289.2	320.2	382.3	428.9	435.9
135°	195.0	203.7	212.5	214.6	238.7	270.8	286.8	312.8	364.8	403.9	409.8
137.5°	204.1	212.7	221.4	223.5	244.5	272.4	286.5	308.4	352.4	385.4	390.3
140°	211.6	219.5	227.5	229.5	248.0	272.7	285.1	304.1	342.1	370.6	375.2
142.5°	217.3	224.7	232.0	233.9	251.0	273.7	285.1	301.8	335.1	360.2	364.1
145°	226.2	232.6	239.0	240.6	254.8	273.8	283.2	296.8	324.1	344.6	347.5
147.5°	235.1	241.3	247.5	249.1	260.5	275.6	283.2	293.9	315.4	331.5	334.0
150°	240.8	246.4	252.1	253.5	263.4	276.6	283.2	292.2	310.4	324.0	326.1
152.5°	246.8	251.1	255.4	256.4	265.3	277.2	283.2	290.9	306.4	318.0	319.5
155°	255.6	258.8	262.0	262.7	269.6	278.6	283.2	289.4	301.7	310.9	312.0
157.5°	262.2	265.3	268.3	269.1	273.8	280.0	283.2	288.0	297.6	304.8	305.5
160°	266.7	269.0	271.4	272.0	275.7	280.7	283.2	287.3	295.5	301.7	302.1
162.5°	271.0	272.8	274.6	275.1	277.8	281.4	283.2	286.6	293.6	298.8	299.2
165°	275.9	277.5	279.2	279.5	280.8	282.3	283.2	285.6	290.6	294.3	294.7
167.5°	280.3	281.0	281.8	282.0	283.0	284.4	285.1	286.7	290.0	292.4	292.6
170°	283.2	283.9	284.7	284.9	285.0	285.1	285.1	286.7	290.0	292.4	292.4
172.5°	284.7	284.9	285.1	285.1	285.1	285.1	285.1	286.4	288.9	290.8	290.7
175°	286.8	286.8	286.8	286.8	286.3	285.4	285.1	285.9	287.6	288.8	288.8
177.5°	286.8	286.8	286.8	286.8	286.4	285.8	285.5	286.2	287.5	288.4	288.2
180°	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8	286.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	290.5	290.5
2.5°	310.1	308.2
5°	398.8	400.7
7.5°	537.1	536.1
10°	667.8	676.2
12.5°	763.1	764.9
15°	821.0	824.7
17.5°	843.4	844.3
20°	844.3	842.5
22.5°	834.1	832.2
25°	821.9	821.0
27.5°	810.7	811.6
30°	806.0	808.8
32.5°	806.0	810.7
35°	807.9	812.6
37.5°	807.0	812.6
40°	803.2	809.8
42.5°	793.0	797.6
45°	777.1	782.7
47.5°	756.5	760.3
50°	730.4	734.1
52.5°	697.7	698.6
55°	658.5	662.2
57.5°	616.4	617.4
60°	569.7	572.5
62.5°	520.2	520.2
65°	467.9	469.8
67.5°	413.8	418.4
70°	358.7	359.6
72.5°	304.5	304.5
75°	248.4	249.4
77.5°	195.2	195.2
80°	144.8	145.7
82.5°	99.9	101.8
85°	62.6	62.6
87.5°	29.0	26.2
90°	7.3	7.3
92.5°	29.3	23.4
95°	102.1	84.5
97.5°	244.7	211.2
100°	352.6	312.6
102.5°	458.7	424.5
105°	594.0	575.6
107.5°	682.6	687.1
110°	716.4	735.5

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	719.5	748.9
115°	700.3	741.1
117.5°	659.9	705.2
120°	627.3	671.3
122.5°	595.6	638.9
125°	550.2	590.2
127.5°	509.5	543.2
130°	485.6	516.7
132.5°	463.7	491.7
135°	433.9	457.9
137.5°	409.9	429.6
140°	393.6	412.0
142.5°	380.0	395.8
145°	359.6	371.5
147.5°	343.9	353.8
150°	334.1	342.1
152.5°	325.6	331.7
155°	316.0	320.0
157.5°	308.3	311.1
160°	303.7	305.3
162.5°	300.7	302.2
165°	296.4	298.0
167.5°	293.3	293.9
170°	292.4	292.4
172.5°	290.1	289.5
175°	288.8	288.8
177.5°	287.6	286.8
180°	286.8	286.8

(END OF REPORT)