

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: P937498

Luminaire Tested: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937498
REPORT IS A COMBINATION OF REPORTS P933565 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

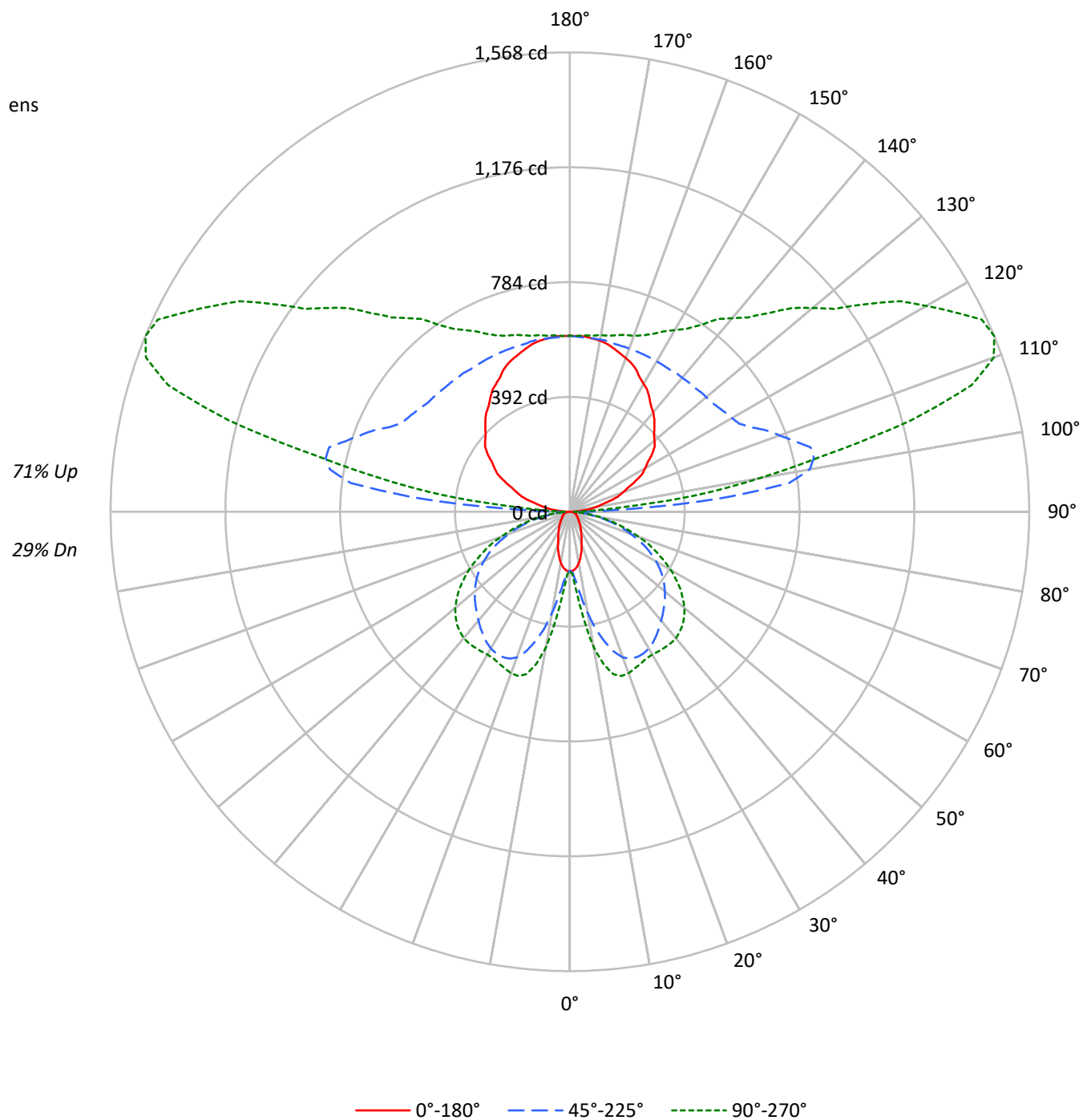
Lumens per Lamp: N/A
Luminaire Lumens: 5459.3 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 41.2
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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1875	1875	1875
5°	1831	2166	2522
10°	1659	3156	4180
15°	1408	4120	5048
20°	1146	4772	5144
25°	954	4989	5040
30°	804	5017	5031
35°	709	4929	5160
40°	617	4818	5295
45°	557	4733	5316
50°	510	4658	5228
55°	487	4548	4996
60°	496	4343	4630
65°	515	4032	4126
70°	543	3510	3487
75°	597	2854	2720
80°	641	1973	1835
85°	538	1044	937

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5316 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	26.2	0.5
10°-20°	115.9	2.1
20°-30°	202.7	3.7
30°-40°	261.0	4.8
40°-50°	291.5	5.3
50°-60°	279.2	5.1
60°-70°	221.2	4.1
70°-80°	130.1	2.4
80°-90°	38.4	0.7
90°-100°	292.7	5.4
100°-110°	769.6	14.1
110°-120°	798.0	14.6
120°-130°	640.1	11.7
130°-140°	502.2	9.2
140°-150°	385.5	7.1
150°-160°	277.6	5.1
160°-170°	169.9	3.1
170°-180°	57.4	1.1
0°-30°	344.8	6.3
0°-40°	605.8	11.1
0°-60°	1176.5	21.5
0°-90°	1566.3	28.7
90°-120°	1860.4	34.1
90°-150°	3388.2	62.1
90°-180°	3893.0	71.3
0°-180°	5459.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	202	202	202	202	202	
5°	197	211	238	269	279	18
15°	148	272	459	556	574	41
25°	94	309	547	571	571	43
35°	64	295	515	544	566	40
45°	44	235	455	521	545	34
55°	31	150	386	449	461	28
65°	25	79	287	322	327	24
75°	18	49	157	173	174	19
85°	6	15	39	43	44	7
90°	4	11	31	15	15	4
95°	39	152	504	260	177	43
105°	139	210	851	1292	1205	147
115°	246	299	682	1360	1552	243
125°	343	384	620	1048	1236	304
135°	408	449	601	846	959	316
145°	474	504	593	721	778	297
155°	535	550	593	651	670	246
165°	578	585	593	616	624	163
175°	601	601	597	605	605	57
180°	601	601	601	601	601	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1	202.1
2.5°	202.1	202.1	203.5	204.1	205.4	206.1	207.4	208.6	212.6	213.2	214.5
5°	197.0	199.6	208.0	211.2	220.4	232.8	237.9	246.4	264.0	269.1	272.4
7.5°	189.1	195.1	215.8	221.0	243.8	276.3	289.9	308.1	336.0	349.7	360.8
10°	176.8	189.1	226.3	238.6	275.6	325.0	350.4	375.8	418.0	436.8	444.0
12.5°	163.2	183.3	237.3	254.2	307.5	379.7	410.2	438.2	486.2	511.6	515.5
15°	147.6	174.9	247.7	272.4	341.3	425.1	458.9	493.4	538.3	556.4	561.0
17.5°	133.9	168.4	257.5	283.4	367.3	466.1	500.6	529.2	565.5	577.9	581.1
20°	117.1	157.9	264.0	297.8	394.6	496.0	529.2	551.3	576.0	583.7	585.1
22.5°	104.7	146.9	267.8	302.9	412.8	514.2	542.2	559.7	576.6	579.2	579.8
25°	94.3	134.6	267.2	308.8	428.4	525.2	546.7	559.7	569.5	570.7	570.7
27.5°	84.5	120.9	264.5	310.1	440.1	527.8	544.8	553.9	558.4	561.0	561.0
30°	76.1	107.9	258.0	307.5	445.3	525.2	538.9	543.4	548.0	551.9	553.9
32.5°	69.6	95.5	248.4	302.2	445.9	518.7	528.5	531.1	537.6	546.7	549.9
35°	63.7	83.2	237.3	295.2	442.1	508.3	514.8	517.4	530.4	544.1	548.6
37.5°	57.8	74.1	223.0	282.8	436.1	496.0	500.6	505.1	525.2	541.5	546.7
40°	52.0	66.3	206.1	269.1	427.1	481.0	485.0	492.1	518.7	537.6	542.8
42.5°	47.5	59.8	187.9	254.8	415.4	464.2	470.0	480.4	511.0	531.1	536.9
45°	43.5	53.3	168.4	235.3	400.4	446.6	455.0	469.4	501.8	521.3	526.6
47.5°	39.6	48.7	148.3	215.2	384.2	429.1	440.1	456.3	489.5	508.3	512.9
50°	36.4	44.2	128.1	193.7	366.7	410.2	423.2	440.1	473.9	491.5	497.3
52.5°	33.8	40.3	109.2	172.3	346.5	390.7	405.6	423.2	455.0	471.9	475.9
55°	31.2	37.0	92.9	149.5	325.7	369.9	386.1	403.0	434.2	448.6	451.2
57.5°	29.9	34.5	79.3	128.1	303.6	346.5	364.6	380.2	409.5	420.5	423.2
60°	27.9	32.5	68.9	109.9	279.6	324.4	340.0	355.6	380.2	389.3	391.4
62.5°	26.0	31.2	61.1	92.3	254.8	298.4	314.0	328.3	349.0	355.6	358.1
65°	24.7	29.9	55.2	79.3	229.5	271.0	286.6	299.0	315.9	322.4	323.7
67.5°	23.4	28.6	50.7	68.2	204.1	243.8	255.4	267.2	280.1	286.6	287.3
70°	21.4	27.3	46.8	60.5	178.1	212.6	222.3	234.7	245.1	248.4	250.3
72.5°	20.2	25.4	44.2	54.7	151.5	182.7	191.8	198.9	208.0	211.2	211.2
75°	18.2	22.8	41.6	48.7	124.1	149.5	157.3	164.4	171.6	172.9	170.9
77.5°	16.3	20.2	35.8	41.0	96.9	118.3	124.8	128.7	134.6	135.9	136.5
80°	13.7	17.5	27.9	31.9	70.3	87.1	91.7	94.9	100.1	100.1	101.5
82.5°	10.4	13.7	20.2	22.8	47.5	59.8	63.7	65.7	68.9	68.9	68.9
85°	6.5	8.4	13.0	14.9	28.6	36.4	39.1	39.6	42.2	42.9	42.9
87.5°	3.3	4.6	8.4	9.1	14.9	18.9	18.9	20.2	20.2	19.5	18.9
90°	4.1	7.3	10.5	11.2	17.7	26.4	30.6	27.2	20.4	15.3	15.3
92.5°	16.1	43.5	70.9	77.8	109.4	151.5	172.5	151.2	108.5	76.6	73.5
95°	38.7	88.9	139.1	151.6	269.1	425.8	504.2	449.9	341.4	260.0	250.8
97.5°	66.9	111.1	155.4	166.5	362.5	623.8	754.5	720.2	651.6	600.1	582.6
100°	88.7	128.8	168.9	179.0	396.5	686.5	831.5	834.0	839.0	842.7	821.8
102.5°	107.2	144.7	182.1	191.5	412.1	706.2	853.3	897.0	984.4	1049.9	1032.0
105°	138.7	170.4	202.0	210.0	423.6	708.4	850.9	948.8	1144.8	1291.8	1282.2
107.5°	170.9	200.5	230.0	237.4	425.8	676.8	802.4	939.2	1212.5	1417.6	1419.9
110°	192.6	219.4	246.0	252.7	422.5	648.9	762.1	914.9	1220.6	1449.7	1459.8

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	214.1	239.4	264.8	271.2	422.7	624.5	725.5	881.9	1194.6	1429.2	1444.6
115°	246.2	269.7	293.1	299.0	426.6	596.6	681.6	832.3	1133.5	1359.5	1380.8
117.5°	278.1	299.4	320.7	326.1	434.5	579.1	651.4	787.3	1059.2	1263.2	1286.8
120°	296.6	316.7	336.7	341.8	440.9	573.2	639.2	763.5	1011.9	1198.3	1221.3
122.5°	314.8	335.1	355.3	360.4	450.2	570.1	629.9	741.8	965.5	1133.3	1156.0
125°	342.6	361.0	379.5	384.1	462.7	567.4	619.9	714.9	904.9	1047.5	1068.4
127.5°	365.1	383.7	402.4	407.1	475.2	566.0	611.4	693.0	856.2	978.6	996.2
130°	377.2	397.3	417.3	422.4	484.3	567.0	608.2	680.9	826.2	935.1	951.4
132.5°	389.7	409.8	429.8	434.9	491.7	567.4	605.3	670.4	800.4	898.0	912.6
135°	408.3	426.6	444.9	449.4	499.8	567.0	600.6	655.0	763.9	845.5	858.1
137.5°	427.2	445.4	463.4	467.9	511.8	570.5	599.7	645.7	737.8	806.9	817.2
140°	442.9	459.6	476.3	480.4	519.3	571.0	596.9	636.6	716.2	775.9	785.5
142.5°	455.0	470.4	485.9	489.7	525.5	573.1	596.9	631.8	701.7	754.1	762.4
145°	473.6	487.0	500.4	503.8	533.5	573.2	592.9	621.5	678.6	721.4	727.7
147.5°	492.2	505.2	518.2	521.5	545.4	577.0	592.9	615.4	660.4	694.1	699.3
150°	504.2	516.0	527.8	530.8	551.6	579.2	592.9	611.9	649.8	678.3	682.5
152.5°	516.7	525.6	534.6	536.8	555.5	580.4	592.9	609.1	641.5	665.8	669.0
155°	535.3	541.9	548.6	550.2	564.4	583.4	592.9	605.8	631.6	650.9	653.0
157.5°	548.9	555.4	561.8	563.5	573.3	586.3	592.9	602.9	623.0	638.0	639.4
160°	558.2	563.3	568.2	569.5	577.3	587.7	592.9	601.6	618.7	631.6	632.5
162.5°	567.4	571.2	575.0	576.0	581.6	589.2	592.9	600.2	614.6	625.5	626.3
165°	577.5	580.9	584.3	585.2	587.8	591.2	592.9	598.2	608.5	616.3	617.2
167.5°	586.8	588.5	590.1	590.5	592.6	595.5	596.9	600.3	607.1	612.2	612.6
170°	592.9	594.5	596.1	596.5	596.6	596.8	596.9	600.3	607.1	612.2	612.2
172.5°	596.1	596.5	596.8	596.9	596.9	596.9	596.9	599.6	604.9	609.0	608.7
175°	600.6	600.6	600.6	600.6	599.3	597.7	596.9	598.6	602.0	604.6	604.6
177.5°	600.6	600.6	600.6	600.6	599.6	598.4	597.7	599.0	601.7	603.8	603.4
180°	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	202.1	202.1
2.5°	215.8	214.5
5°	277.6	278.9
7.5°	373.7	373.2
10°	464.8	470.6
12.5°	531.1	532.4
15°	571.4	574.0
17.5°	587.0	587.7
20°	587.7	586.3
22.5°	580.5	579.2
25°	572.1	571.4
27.5°	564.2	564.9
30°	561.0	563.0
32.5°	561.0	564.2
35°	562.3	565.5
37.5°	561.6	565.5
40°	559.0	563.6
42.5°	551.9	555.1
45°	540.8	544.8
47.5°	526.6	529.2
50°	508.3	511.0
52.5°	485.6	486.2
55°	458.3	460.9
57.5°	429.1	429.7
60°	396.5	398.5
62.5°	362.1	362.1
65°	325.7	326.9
67.5°	288.0	291.2
70°	249.6	250.3
72.5°	211.9	211.9
75°	172.9	173.5
77.5°	135.9	135.9
80°	100.8	101.5
82.5°	69.6	70.8
85°	43.5	43.5
87.5°	20.2	18.2
90°	15.3	15.3
92.5°	61.3	49.1
95°	213.9	176.9
97.5°	512.3	442.2
100°	738.2	654.6
102.5°	960.4	888.8
105°	1243.6	1205.1
107.5°	1429.2	1438.5
110°	1499.9	1540.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1506.2	1567.8
115°	1466.3	1551.8
117.5°	1381.6	1476.4
120°	1313.4	1405.4
122.5°	1246.9	1337.7
125°	1152.0	1235.8
127.5°	1066.9	1137.4
130°	1016.6	1081.8
132.5°	970.9	1029.4
135°	908.4	958.8
137.5°	858.4	899.6
140°	824.0	862.5
142.5°	795.5	828.7
145°	752.8	777.9
147.5°	720.1	740.8
150°	699.3	716.2
152.5°	681.7	694.5
155°	661.4	669.9
157.5°	645.5	651.4
160°	635.9	639.2
162.5°	629.6	632.8
165°	620.5	623.9
167.5°	614.0	615.4
170°	612.2	612.2
172.5°	607.5	606.2
175°	604.6	604.6
177.5°	602.0	600.6
180°	600.6	600.6

(END OF REPORT)