

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: P938106

Luminaire Tested: SQ4-FB-125U-100D-B50-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938106
REPORT IS A COMBINATION OF REPORTS P933599 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-125U-100D-B50-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

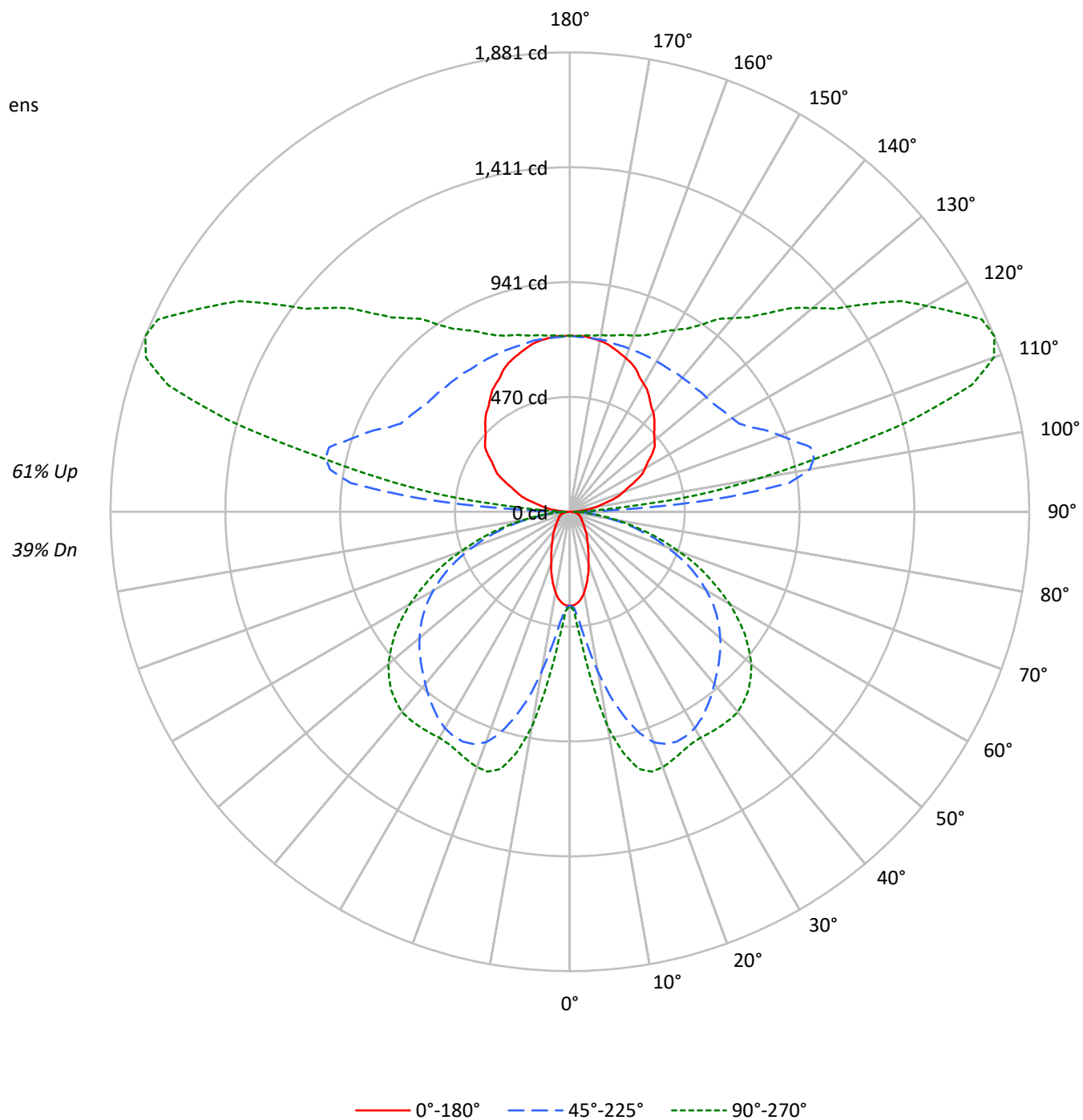
Lumens per Lamp: N/A
Luminaire Lumens: 7643.0 lumens
Efficiency: N/A
Efficacy: 118.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 64.4
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	50	30	10
RCR																				
0	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46			39
1	95	90	86	83	86	82	79	76	67	65	62	53	51	50	40	39	38			32
2	86	78	72	67	78	71	66	61	58	54	51	46	43	41	35	33	31			26
3	78	68	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26			21
4	71	60	52	46	64	55	48	42	45	40	35	35	32	29	27	24	22			18
5	65	53	45	39	59	49	41	36	40	34	30	31	27	24	24	21	19			15
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16			13
7	55	43	35	29	50	39	32	27	32	26	23	25	21	18	19	16	14			11
8	51	38	31	25	46	35	28	23	29	24	20	23	19	16	18	15	13			10
9	47	35	27	22	43	32	25	21	26	21	17	21	17	14	16	13	11			9
10	44	32	25	20	40	29	23	18	24	19	16	19	15	13	15	12	10			8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3561	3561	3561
5°	3476	4113	4788
10°	3149	5991	7936
15°	2673	7822	9583
20°	2173	9058	9766
25°	1812	9472	9568
30°	1525	9524	9551
35°	1347	9358	9797
40°	1171	9145	10052
45°	1059	8987	10092
50°	969	8842	9925
55°	925	8635	9485
60°	945	8245	8790
65°	977	7656	7835
70°	1033	6664	6619
75°	1135	5420	5166
80°	1212	3745	3480
85°	1019	1978	1782

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10092 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	49.6	0.6
10°-20°	220.0	2.9
20°-30°	384.9	5.0
30°-40°	495.5	6.5
40°-50°	553.4	7.2
50°-60°	530.0	6.9
60°-70°	420.1	5.5
70°-80°	247.0	3.2
80°-90°	71.4	0.9
90°-100°	351.2	4.6
100°-110°	923.4	12.1
110°-120°	957.5	12.5
120°-130°	768.0	10.0
130°-140°	602.6	7.9
140°-150°	462.5	6.1
150°-160°	333.1	4.4
160°-170°	203.8	2.7
170°-180°	68.9	0.9
0°-30°	654.6	8.6
0°-40°	1150.0	15.0
0°-60°	2233.5	29.2
0°-90°	2972.0	38.9
90°-120°	2232.1	29.2
90°-150°	4065.2	53.2
90°-180°	4671.0	61.1
0°-180°	7643.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	374	401	452	511	530	35
15°	280	517	871	1056	1090	78
25°	179	586	1038	1084	1085	82
35°	121	560	977	1033	1074	76
45°	83	447	864	990	1034	64
55°	59	284	733	852	875	54
65°	47	151	544	612	621	47
75°	35	93	299	328	330	36
85°	12	28	74	81	83	13
90°	5	14	37	18	18	5
95°	46	182	605	312	212	52
105°	166	252	1021	1550	1446	176
115°	295	359	818	1631	1862	292
125°	411	461	744	1257	1483	365
135°	490	539	721	1015	1150	379
145°	568	604	711	866	933	356
155°	642	660	711	781	804	295
165°	693	702	711	739	749	196
175°	721	721	716	725	725	68
180°	721	721	721	721	721	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8	383.8
2.5°	383.8	383.8	386.3	387.5	389.9	391.3	393.7	396.1	403.6	404.8	407.2
5°	374.0	378.9	394.9	401.1	418.3	441.8	451.7	467.7	501.1	510.9	517.1
7.5°	359.1	370.2	409.7	419.6	462.8	524.5	550.4	585.0	638.0	664.0	684.9
10°	335.7	359.1	429.5	452.9	523.2	617.1	665.2	713.3	793.5	829.3	842.9
12.5°	309.8	348.0	450.5	482.5	583.8	720.8	778.8	831.8	923.2	971.3	978.6
15°	280.1	331.9	470.2	517.1	647.9	807.2	871.3	936.7	1021.9	1056.4	1065.0
17.5°	254.2	319.6	488.7	538.1	697.3	884.9	950.3	1004.6	1073.7	1097.2	1103.3
20°	222.1	299.9	501.1	565.3	749.2	941.7	1004.6	1046.5	1093.4	1108.3	1110.7
22.5°	198.7	278.9	508.5	575.1	783.6	976.2	1029.3	1062.6	1094.6	1099.6	1100.8
25°	179.0	255.4	507.3	586.2	813.3	997.1	1037.9	1062.6	1081.1	1083.5	1083.5
27.5°	160.5	229.6	502.3	588.7	835.5	1002.1	1034.2	1051.5	1060.1	1065.0	1065.0
30°	144.4	204.8	490.0	583.8	845.4	997.1	1023.1	1031.7	1040.4	1047.8	1051.5
32.5°	132.1	181.4	471.5	573.8	846.6	984.8	1003.3	1008.3	1020.6	1037.9	1044.1
35°	121.0	157.9	450.5	560.3	839.2	965.1	977.4	982.4	1007.0	1033.0	1041.6
37.5°	109.8	140.7	423.3	536.9	828.1	941.7	950.3	958.9	997.1	1028.1	1037.9
40°	98.7	125.9	391.3	510.9	810.8	913.3	920.6	934.3	984.8	1020.6	1030.5
42.5°	90.1	113.6	356.7	483.8	788.6	881.1	892.3	912.1	970.1	1008.3	1019.4
45°	82.7	101.2	319.6	446.7	760.2	847.9	863.9	891.0	952.8	989.8	999.7
47.5°	75.3	92.6	281.4	408.5	729.4	814.5	835.5	866.4	929.3	965.1	973.7
50°	69.1	84.0	243.1	367.8	696.0	778.8	803.4	835.5	899.7	933.0	944.1
52.5°	64.2	76.5	207.3	327.1	657.8	741.7	770.1	803.4	863.9	896.0	903.4
55°	59.2	70.3	176.5	283.8	618.3	702.2	733.1	765.1	824.4	851.5	856.5
57.5°	56.8	65.4	150.6	243.1	576.4	657.8	692.4	722.0	777.5	798.5	803.4
60°	53.1	61.7	130.9	208.6	530.7	615.8	645.5	675.1	722.0	739.3	742.9
62.5°	49.4	59.2	116.0	175.2	483.8	566.5	596.1	623.3	662.8	675.1	680.0
65°	46.9	56.8	104.9	150.6	435.6	514.6	544.2	567.7	599.8	612.1	614.6
67.5°	44.5	54.3	96.3	129.5	387.5	462.8	485.0	507.3	531.9	544.2	545.5
70°	40.7	51.8	88.8	114.8	338.1	403.6	422.1	445.5	465.2	471.5	475.1
72.5°	38.3	48.1	84.0	103.7	287.6	346.8	364.1	377.6	394.9	401.1	401.1
75°	34.6	43.2	79.0	92.6	235.7	283.8	298.7	312.2	325.8	328.3	324.6
77.5°	30.8	38.3	67.9	77.7	183.9	224.6	237.0	244.3	255.4	258.0	259.2
80°	25.9	33.3	53.1	60.4	133.3	165.4	174.0	180.2	190.1	190.1	192.5
82.5°	19.7	25.9	38.3	43.2	90.1	113.6	121.0	124.7	130.9	130.9	130.9
85°	12.3	16.1	24.7	28.4	54.3	69.1	74.1	75.3	80.2	81.4	81.4
87.5°	6.2	8.6	16.1	17.3	28.4	35.8	35.8	38.3	38.3	37.0	35.8
90°	4.9	8.7	12.6	13.5	21.3	31.6	36.7	32.6	24.5	18.4	18.4
92.5°	19.3	52.2	85.1	93.3	131.2	181.8	207.0	181.4	130.3	91.9	88.3
95°	46.4	106.6	166.8	181.8	322.9	510.9	605.0	539.9	409.7	312.0	300.8
97.5°	80.2	133.3	186.4	199.7	434.9	748.4	905.2	864.0	781.8	720.0	699.0
100°	106.4	154.6	202.7	214.7	475.7	823.6	997.6	1000.6	1006.7	1011.1	986.0
102.5°	128.6	173.5	218.5	229.7	494.4	847.3	1023.8	1076.2	1181.1	1259.8	1238.3
105°	166.3	204.5	242.5	252.0	508.3	850.0	1020.9	1138.5	1373.5	1549.9	1538.3
107.5°	205.0	240.5	276.0	284.9	510.9	812.2	962.9	1126.9	1454.8	1700.7	1703.5
110°	231.2	263.2	295.1	303.2	507.0	778.7	914.5	1097.8	1464.5	1739.5	1751.5

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	256.8	287.3	317.7	325.4	507.1	749.3	870.5	1058.1	1433.4	1714.8	1733.3
115°	295.4	323.6	351.8	358.8	511.8	715.7	817.7	998.4	1360.0	1631.1	1656.7
117.5°	333.7	359.3	384.9	391.3	521.4	694.8	781.5	944.6	1270.8	1515.5	1543.9
120°	355.9	380.0	404.1	410.1	529.1	687.7	767.0	916.1	1214.1	1437.7	1465.4
122.5°	377.7	402.0	426.3	432.3	540.2	684.0	755.9	890.1	1158.5	1359.8	1387.1
125°	411.1	433.2	455.3	460.8	555.2	680.9	743.7	857.8	1085.8	1256.8	1281.9
127.5°	438.1	460.5	482.8	488.4	570.1	679.1	733.6	831.4	1027.3	1174.1	1195.3
130°	452.6	476.7	500.8	506.8	581.1	680.2	729.7	816.9	991.2	1121.9	1141.4
132.5°	467.7	491.8	515.8	521.8	590.0	680.9	726.4	804.4	960.4	1077.5	1094.9
135°	489.9	511.8	533.7	539.2	599.6	680.2	720.6	786.0	916.6	1014.6	1029.7
137.5°	512.6	534.2	556.0	561.4	614.1	684.4	719.6	774.8	885.2	968.1	980.4
140°	531.4	551.4	571.4	576.5	623.1	685.2	716.2	763.9	859.4	930.9	942.5
142.5°	545.9	564.4	582.9	587.6	630.4	687.6	716.2	758.1	841.9	904.8	914.7
145°	568.2	584.3	600.5	604.5	640.1	687.6	711.3	745.6	814.2	865.6	873.2
147.5°	590.5	606.2	621.9	625.8	654.3	692.3	711.3	738.3	792.3	832.8	839.0
150°	605.0	619.1	633.3	636.9	661.7	694.8	711.3	734.1	779.7	813.9	818.9
152.5°	620.0	630.7	641.5	644.2	666.6	696.4	711.3	730.8	769.7	798.9	802.7
155°	642.2	650.2	658.1	660.1	677.2	699.9	711.3	726.8	757.8	781.0	783.5
157.5°	658.7	666.4	674.1	676.0	687.8	703.5	711.3	723.4	747.5	765.5	767.3
160°	669.8	675.7	681.8	683.3	692.7	705.1	711.3	721.6	742.2	757.8	758.8
162.5°	680.9	685.4	689.9	691.1	697.8	706.9	711.3	720.0	737.5	750.6	751.5
165°	692.9	697.0	701.2	702.2	705.3	709.3	711.3	717.6	730.0	739.4	740.4
167.5°	704.1	706.0	708.0	708.4	711.1	714.5	716.2	720.3	728.4	734.6	735.1
170°	711.3	713.3	715.3	715.7	715.9	716.1	716.2	720.3	728.4	734.6	734.6
172.5°	715.3	715.6	716.1	716.2	716.2	716.2	716.2	719.4	725.8	730.7	730.3
175°	720.6	720.6	720.6	720.6	719.1	717.1	716.2	718.2	722.3	725.3	725.3
177.5°	720.6	720.6	720.6	720.6	719.5	717.9	717.1	718.7	722.0	724.4	723.9
180°	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6	720.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	383.8	383.8
2.5°	409.7	407.2
5°	527.0	529.5
7.5°	709.7	708.3
10°	882.4	893.5
12.5°	1008.3	1010.8
15°	1084.8	1089.7
17.5°	1114.4	1115.7
20°	1115.7	1113.1
22.5°	1102.1	1099.6
25°	1086.1	1084.8
27.5°	1071.2	1072.4
30°	1065.0	1068.8
32.5°	1065.0	1071.2
35°	1067.6	1073.7
37.5°	1066.3	1073.7
40°	1061.4	1070.0
42.5°	1047.8	1053.9
45°	1026.8	1034.2
47.5°	999.7	1004.6
50°	965.1	970.1
52.5°	921.9	923.2
55°	870.0	875.0
57.5°	814.5	815.8
60°	752.8	756.5
62.5°	687.4	687.4
65°	618.3	620.7
67.5°	546.8	552.9
70°	473.9	475.1
72.5°	402.4	402.4
75°	328.3	329.5
77.5°	258.0	258.0
80°	191.3	192.5
82.5°	132.1	134.5
85°	82.7	82.7
87.5°	38.3	34.6
90°	18.4	18.4
92.5°	73.6	59.0
95°	256.6	212.3
97.5°	614.8	530.5
100°	885.7	785.3
102.5°	1152.3	1066.3
105°	1492.2	1445.9
107.5°	1714.7	1725.9
110°	1799.6	1847.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1807.2	1881.2
115°	1759.3	1861.8
117.5°	1657.7	1771.3
120°	1575.8	1686.2
122.5°	1496.0	1605.0
125°	1382.2	1482.6
127.5°	1280.0	1364.7
130°	1219.7	1298.0
132.5°	1165.0	1235.0
135°	1090.1	1150.4
137.5°	1029.9	1079.3
140°	988.6	1034.9
142.5°	954.5	994.2
145°	903.3	933.3
147.5°	863.9	888.8
150°	839.2	859.4
152.5°	817.9	833.2
155°	793.6	803.7
157.5°	774.4	781.5
160°	762.9	767.0
162.5°	755.4	759.2
165°	744.5	748.6
167.5°	736.7	738.4
170°	734.6	734.6
172.5°	728.8	727.3
175°	725.3	725.3
177.5°	722.3	720.6
180°	720.6	720.6

(END OF REPORT)