

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: P938506

Luminaire Tested: SQ4-FB-150U-100D-B50-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938506
REPORT IS A COMBINATION OF REPORTS P933631 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-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

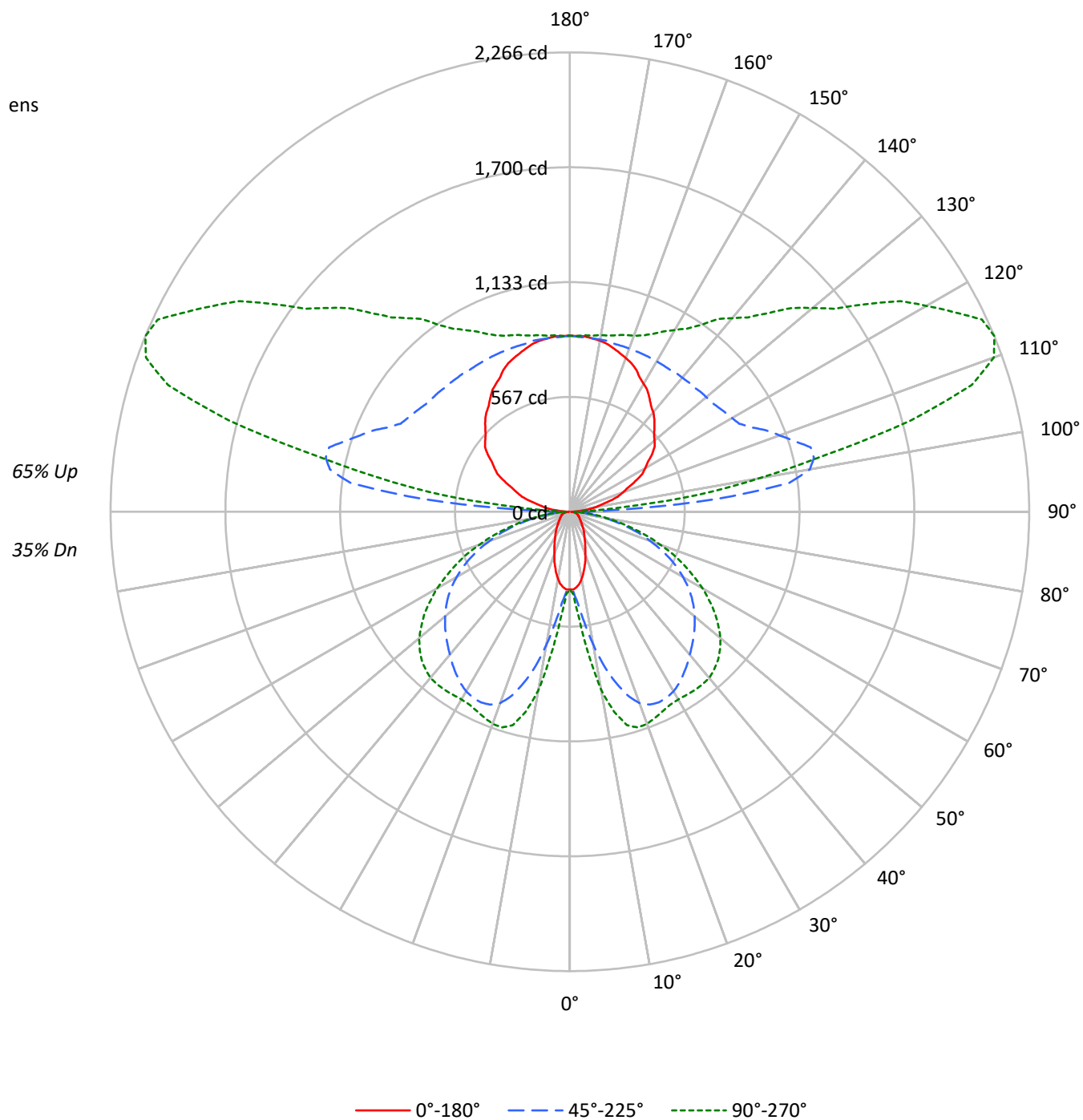
Lumens per Lamp: N/A
Luminaire Lumens: 8599.4 lumens
Efficiency: N/A
Efficacy: 118.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 72.4
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



TEST NUMBER: P938506

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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	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42
1	94	90	86	82	85	81	78	75	65	63	60	50	49	47	36	35	35
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	29
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	28	26	24
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20
5	64	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17
6	59	47	39	33	53	43	36	30	34	29	25	27	23	20	19	17	15
7	54	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	13	11
9	47	35	27	22	42	31	25	20	26	20	17	20	16	14	15	12	10
10	43	31	24	20	39	29	22	18	23	18	15	18	15	12	13	11	9

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	2.6
20°-30°	384.9	4.5
30°-40°	495.5	5.8
40°-50°	553.4	6.4
50°-60°	530.0	6.2
60°-70°	420.1	4.9
70°-80°	247.0	2.9
80°-90°	71.9	0.8
90°-100°	423.1	4.9
100°-110°	1112.4	12.9
110°-120°	1153.4	13.4
120°-130°	925.2	10.8
130°-140°	725.9	8.4
140°-150°	557.2	6.5
150°-160°	401.3	4.7
160°-170°	245.5	2.9
170°-180°	82.9	1.0
0°-30°	654.6	7.6
0°-40°	1150.0	13.4
0°-60°	2233.5	26.0
0°-90°	2972.5	34.6
90°-120°	2688.9	31.3
90°-150°	4897.1	56.9
90°-180°	5627.0	65.4
0°-180°	8599.4	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°	6	16	44	22	22	6
95°	56	219	729	376	256	62
105°	200	304	1230	1867	1742	212
115°	356	432	985	1965	2243	352
125°	495	555	896	1514	1786	440
135°	590	650	868	1222	1386	457
145°	684	728	857	1043	1124	429
155°	774	795	857	941	968	355
165°	835	846	857	891	902	236
175°	868	868	863	874	874	82
180°	868	868	868	868	868	

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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°	5.8	10.5	15.1	16.3	25.7	38.1	44.3	39.3	29.5	22.1	22.1
92.5°	23.3	62.9	102.6	112.5	158.0	218.8	249.3	218.5	156.9	110.7	106.3
95°	55.9	128.4	200.9	219.0	388.9	615.5	728.8	650.3	493.4	375.7	362.4
97.5°	96.7	160.6	224.6	240.6	523.9	901.7	1090.5	1040.9	941.8	867.4	842.0
100°	128.1	186.1	244.1	258.6	573.0	992.2	1201.8	1205.4	1212.7	1218.1	1187.9
102.5°	155.0	209.1	263.2	276.7	595.6	1020.7	1233.3	1296.4	1422.8	1517.6	1491.7
105°	200.4	246.3	292.1	303.6	612.2	1023.9	1229.7	1371.3	1654.6	1867.1	1853.1
107.5°	247.0	289.7	332.5	343.2	615.4	978.4	1159.8	1357.4	1752.5	2048.8	2052.2
110°	278.4	317.0	355.7	365.3	610.7	937.9	1101.6	1322.5	1764.1	2095.4	2109.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.3	346.1	382.9	392.1	610.9	902.7	1048.6	1274.6	1726.7	2065.7	2088.0
115°	355.9	389.9	423.8	432.3	616.5	862.3	985.1	1202.8	1638.3	1964.9	1995.9
117.5°	402.0	432.8	463.6	471.3	628.0	837.0	941.4	1137.9	1530.9	1825.7	1860.0
120°	428.7	457.8	486.7	494.0	637.3	828.4	923.9	1103.4	1462.6	1731.9	1765.2
122.5°	455.0	484.2	513.5	520.8	650.7	824.0	910.6	1072.2	1395.6	1638.1	1670.9
125°	495.2	521.8	548.5	555.2	668.7	820.2	896.0	1033.3	1308.0	1514.0	1544.3
127.5°	527.8	554.7	581.6	588.3	686.8	818.1	883.8	1001.7	1237.6	1414.4	1439.9
130°	545.3	574.2	603.2	610.5	700.0	819.4	879.1	984.1	1194.0	1351.5	1375.0
132.5°	563.3	592.3	621.3	628.6	710.7	820.2	875.0	968.9	1156.9	1297.9	1319.0
135°	590.1	616.5	642.9	649.5	722.4	819.4	868.0	946.7	1104.1	1222.1	1240.4
137.5°	617.5	643.6	669.8	676.3	739.8	824.5	866.8	933.3	1066.4	1166.3	1181.1
140°	640.3	664.4	688.5	694.4	750.6	825.4	862.7	920.2	1035.2	1121.4	1135.3
142.5°	657.7	680.0	702.2	707.8	759.4	828.3	862.7	913.3	1014.2	1090.0	1101.9
145°	684.5	704.0	723.3	728.1	771.1	828.4	856.9	898.2	980.8	1042.7	1051.8
147.5°	711.2	730.2	749.1	753.8	788.2	834.1	856.9	889.4	954.4	1003.1	1010.6
150°	728.8	745.9	762.9	767.2	797.1	837.0	856.9	884.4	939.2	980.4	986.5
152.5°	746.8	759.8	772.7	776.0	803.0	838.9	856.9	880.4	927.3	962.4	967.0
155°	773.6	783.3	792.8	795.2	815.8	843.2	856.9	875.6	912.9	940.8	943.9
157.5°	793.4	802.8	812.0	814.4	828.6	847.5	856.9	871.4	900.4	922.1	924.3
160°	806.8	814.1	821.4	823.1	834.4	849.5	856.9	869.4	894.2	912.8	914.0
162.5°	820.2	825.7	831.1	832.5	840.6	851.5	856.9	867.4	888.4	904.1	905.2
165°	834.8	839.7	844.6	845.8	849.6	854.5	856.9	864.4	879.5	890.7	891.9
167.5°	848.2	850.5	852.8	853.4	856.5	860.7	862.7	867.7	877.5	884.9	885.4
170°	856.9	859.3	861.6	862.2	862.4	862.6	862.7	867.7	877.5	884.9	884.9
172.5°	861.6	862.1	862.6	862.7	862.7	862.7	862.7	866.7	874.4	880.2	879.7
175°	868.0	868.0	868.0	868.0	866.2	863.9	862.7	865.2	870.1	873.9	873.9
177.5°	868.0	868.0	868.0	868.0	866.7	864.9	864.0	865.9	869.7	872.6	872.1
180°	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0

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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°	22.1	22.1
92.5°	88.6	71.1
95°	309.1	255.7
97.5°	740.6	639.0
100°	1067.0	946.0
102.5°	1388.1	1284.5
105°	1797.5	1741.8
107.5°	2065.6	2079.1
110°	2167.9	2225.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2177.1	2266.1
115°	2119.3	2242.8
117.5°	1996.9	2133.8
120°	1898.3	2031.4
122.5°	1802.2	1933.5
125°	1665.1	1786.1
127.5°	1541.9	1643.9
130°	1469.3	1563.5
132.5°	1403.3	1487.8
135°	1313.1	1385.9
137.5°	1240.7	1300.2
140°	1190.9	1246.6
142.5°	1149.8	1197.7
145°	1088.1	1124.3
147.5°	1040.7	1070.7
150°	1010.9	1035.2
152.5°	985.4	1003.7
155°	956.0	968.2
157.5°	932.8	941.4
160°	919.0	923.9
162.5°	909.9	914.6
165°	896.8	901.8
167.5°	887.5	889.5
170°	884.9	884.9
172.5°	878.0	876.2
175°	873.9	873.9
177.5°	870.0	868.0
180°	868.0	868.0

(END OF REPORT)