

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: P938502

Luminaire Tested: SQ4-FB-150U-100D-B40-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938502
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-B40-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

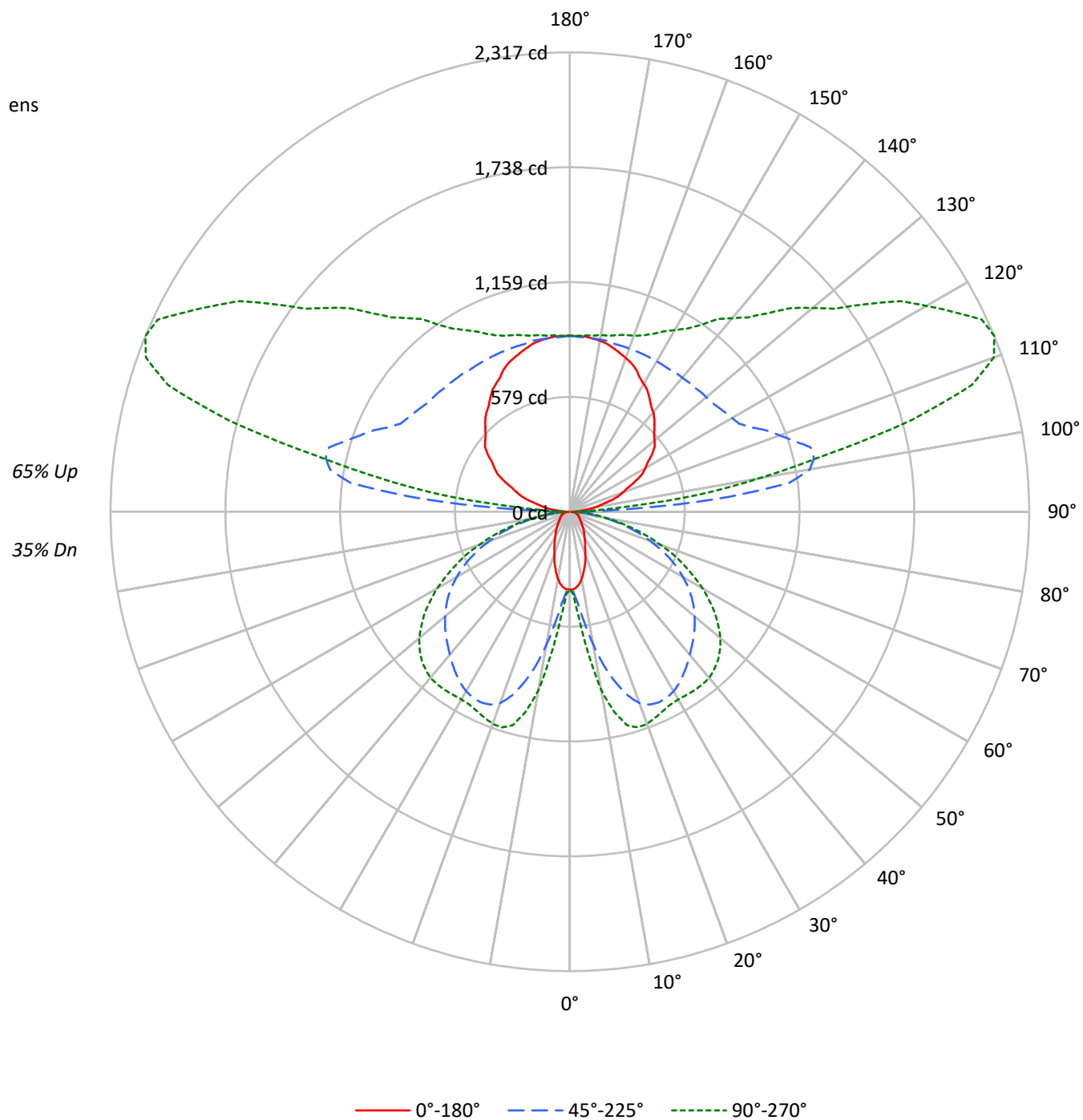
Lumens per Lamp: N/A
Luminaire Lumens: 8792.7 lumens
Efficiency: N/A
Efficacy: 121.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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: P938502

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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°	3641	3641	3641
5°	3554	4205	4895
10°	3220	6127	8115
15°	2733	7998	9798
20°	2222	9262	9986
25°	1852	9684	9783
30°	1559	9738	9765
35°	1377	9569	10018
40°	1197	9350	10278
45°	1082	9189	10319
50°	991	9041	10148
55°	945	8829	9697
60°	964	8430	8988
65°	998	7829	8011
70°	1056	6814	6768
75°	1158	5541	5282
80°	1240	3828	3558
85°	1043	2020	1821

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10319 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	50.8	0.6
10°-20°	225.0	2.6
20°-30°	393.5	4.5
30°-40°	506.6	5.8
40°-50°	565.9	6.4
50°-60°	542.0	6.2
60°-70°	429.5	4.9
70°-80°	252.6	2.9
80°-90°	73.6	0.8
90°-100°	432.6	4.9
100°-110°	1137.4	12.9
110°-120°	1179.3	13.4
120°-130°	946.0	10.8
130°-140°	742.2	8.4
140°-150°	569.7	6.5
150°-160°	410.3	4.7
160°-170°	251.0	2.9
170°-180°	84.8	1.0
0°-30°	669.3	7.6
0°-40°	1175.9	13.4
0°-60°	2283.7	26.0
0°-90°	3039.3	34.6
90°-120°	2749.3	31.3
90°-150°	5007.2	56.9
90°-180°	5753.0	65.4
0°-180°	8792.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	392	392	392	392	392	
5°	382	410	462	522	541	35
15°	286	529	891	1080	1114	80
25°	183	599	1061	1108	1109	84
35°	124	573	999	1056	1098	77
45°	84	457	883	1012	1058	65
55°	60	290	750	871	895	55
65°	48	154	556	626	635	48
75°	35	95	305	336	337	37
85°	13	29	76	83	84	13
90°	6	17	45	23	23	6
95°	57	224	745	384	262	63
105°	205	310	1257	1909	1781	217
115°	364	442	1007	2009	2293	359
125°	506	568	916	1548	1826	449
135°	603	664	888	1250	1417	467
145°	700	744	876	1066	1150	438
155°	791	813	876	962	990	363
165°	854	865	876	911	922	241
175°	888	888	882	894	894	84
180°	888	888	888	888	888	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4	392.4
2.5°	392.4	392.4	395.0	396.2	398.7	400.0	402.5	405.0	412.7	413.9	416.4
5°	382.4	387.4	403.8	410.1	427.7	451.7	461.8	478.3	512.4	522.4	528.7
7.5°	367.2	378.6	419.0	429.1	473.2	536.3	562.8	598.1	652.4	678.9	700.3
10°	343.2	367.2	439.1	463.1	535.0	631.0	680.2	729.3	811.4	847.9	861.9
12.5°	316.8	355.8	460.6	493.4	596.9	737.0	796.3	850.5	943.9	993.1	1000.6
15°	286.4	339.4	480.7	528.7	662.5	825.3	890.9	957.8	1044.9	1080.2	1089.0
17.5°	260.0	326.8	499.7	550.2	713.0	904.8	971.6	1027.2	1097.9	1121.8	1128.1
20°	227.1	306.7	512.4	578.0	766.0	962.8	1027.2	1070.1	1118.0	1133.2	1135.7
22.5°	203.1	285.2	519.9	588.0	801.2	998.2	1052.4	1086.5	1119.3	1124.3	1125.6
25°	183.0	261.2	518.7	599.4	831.6	1019.6	1061.2	1086.5	1105.4	1107.9	1107.9
27.5°	164.1	234.7	513.6	601.9	854.2	1024.6	1057.5	1075.1	1083.9	1089.0	1089.0
30°	147.6	209.4	501.0	596.9	864.4	1019.6	1046.1	1054.9	1063.8	1071.3	1075.1
32.5°	135.0	185.5	482.1	586.8	865.6	1007.0	1025.9	1030.9	1043.5	1061.2	1067.6
35°	123.7	161.5	460.6	572.9	858.1	986.8	999.4	1004.5	1029.7	1056.2	1065.0
37.5°	112.3	143.8	432.8	548.9	846.7	962.8	971.6	980.5	1019.6	1051.2	1061.2
40°	100.9	128.7	400.0	522.4	829.0	933.8	941.3	955.3	1007.0	1043.5	1053.7
42.5°	92.2	116.1	364.7	494.7	806.3	900.9	912.3	932.6	991.9	1030.9	1042.3
45°	84.5	103.4	326.8	456.8	777.3	866.9	883.3	911.1	974.2	1012.0	1022.1
47.5°	77.0	94.6	287.7	417.7	745.8	832.9	854.2	885.9	950.2	986.8	995.6
50°	70.7	85.9	248.6	376.1	711.7	796.3	821.5	854.2	920.0	953.9	965.3
52.5°	65.6	78.2	212.0	334.4	672.6	758.4	787.4	821.5	883.3	916.1	923.7
55°	60.5	71.9	180.5	290.2	632.2	718.0	749.6	782.3	843.0	870.7	875.7
57.5°	58.1	66.8	153.9	248.6	589.3	672.6	707.9	738.2	794.9	816.4	821.5
60°	54.2	63.1	133.8	213.3	542.6	629.6	660.0	690.3	738.2	755.9	759.6
62.5°	50.5	60.5	118.6	179.2	494.7	579.2	609.5	637.3	677.7	690.3	695.3
65°	47.9	58.1	107.2	153.9	445.4	526.2	556.5	580.4	613.3	625.9	628.4
67.5°	45.5	55.5	98.5	132.5	396.2	473.2	495.9	518.7	543.9	556.5	557.7
70°	41.6	53.0	90.8	117.4	345.7	412.7	431.6	455.5	475.7	482.1	485.8
72.5°	39.2	49.2	85.9	106.0	294.0	354.6	372.3	386.1	403.8	410.1	410.1
75°	35.3	44.1	80.8	94.6	241.0	290.2	305.4	319.3	333.1	335.7	331.9
77.5°	31.5	39.2	69.4	79.5	188.0	229.7	242.3	249.8	261.2	263.8	265.0
80°	26.5	34.1	54.2	61.8	136.3	169.1	177.9	184.2	194.3	194.3	196.8
82.5°	20.2	26.5	39.2	44.1	92.2	116.1	123.7	127.5	133.8	133.8	133.8
85°	12.6	16.4	25.2	29.0	55.5	70.7	75.7	77.0	82.0	83.3	83.3
87.5°	6.3	8.8	16.4	17.7	29.0	36.6	36.6	39.2	39.2	37.8	36.6
90°	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.2	30.2	22.6	22.6
92.5°	23.8	64.3	104.9	115.0	161.6	223.8	254.9	223.4	160.4	113.2	108.7
95°	57.2	131.3	205.4	223.9	397.7	629.3	745.2	665.0	504.5	384.2	370.5
97.5°	98.8	164.3	229.7	246.0	535.7	922.0	1115.1	1064.3	962.9	886.9	860.9
100°	131.0	190.3	249.6	264.4	585.9	1014.5	1228.8	1232.5	1240.0	1245.5	1214.6
102.5°	158.4	213.8	269.1	283.0	609.0	1043.6	1261.0	1325.5	1454.8	1551.7	1525.2
105°	204.9	251.8	298.6	310.4	626.0	1046.9	1257.4	1402.1	1691.8	1909.0	1894.8
107.5°	252.6	296.2	340.0	350.9	629.2	1000.4	1185.9	1387.9	1791.9	2094.9	2098.3
110°	284.7	324.1	363.7	373.5	624.5	959.0	1126.3	1352.2	1803.8	2142.5	2157.3

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.3	353.9	391.6	400.9	624.7	923.0	1072.2	1303.3	1765.5	2112.2	2134.9
115°	364.0	398.6	433.3	442.0	630.4	881.7	1007.2	1229.8	1675.2	2009.1	2040.7
117.5°	411.0	442.5	474.1	481.9	642.1	855.8	962.5	1163.5	1565.3	1866.7	1901.8
120°	438.3	468.0	497.7	505.1	651.6	847.0	944.7	1128.2	1495.4	1770.9	1804.9
122.5°	465.2	495.1	525.1	532.5	665.3	842.5	931.0	1096.3	1427.0	1675.0	1708.5
125°	506.3	533.6	560.9	567.7	683.8	838.7	916.1	1056.5	1337.4	1548.1	1579.0
127.5°	539.7	567.2	594.7	601.6	702.2	836.5	903.6	1024.2	1265.4	1446.3	1472.3
130°	557.5	587.1	616.7	624.2	715.8	837.8	898.8	1006.2	1220.9	1381.9	1406.0
132.5°	576.0	605.7	635.3	642.7	726.7	838.7	894.6	990.7	1183.0	1327.1	1348.7
135°	603.4	630.4	657.3	664.1	738.6	837.8	887.5	968.0	1128.9	1249.6	1268.2
137.5°	631.4	658.1	684.8	691.5	756.5	843.1	886.3	954.3	1090.4	1192.5	1207.7
140°	654.7	679.3	703.9	710.0	767.4	843.9	882.1	940.9	1058.4	1146.6	1160.8
142.5°	672.5	695.2	718.0	723.7	776.5	846.9	882.1	933.8	1037.0	1114.5	1126.7
145°	699.9	719.8	739.6	744.5	788.4	847.0	876.2	918.4	1002.8	1066.2	1075.4
147.5°	727.2	746.6	765.9	770.8	805.9	852.8	876.2	909.4	975.8	1025.7	1033.3
150°	745.2	762.7	780.0	784.4	815.0	855.8	876.2	904.3	960.3	1002.5	1008.7
152.5°	763.6	776.9	790.1	793.4	821.0	857.8	876.2	900.2	948.1	984.0	988.7
155°	791.0	800.9	810.6	813.1	834.1	862.2	876.2	895.3	933.4	962.0	965.1
157.5°	811.3	820.8	830.3	832.7	847.2	866.6	876.2	891.0	920.6	942.9	945.1
160°	824.9	832.4	839.8	841.6	853.2	868.6	876.2	888.9	914.3	933.3	934.6
162.5°	838.7	844.2	849.8	851.2	859.5	870.7	876.2	886.9	908.4	924.4	925.6
165°	853.6	858.5	863.6	864.8	868.7	873.7	876.2	883.9	899.2	910.7	911.9
167.5°	867.2	869.6	872.0	872.6	875.7	880.0	882.1	887.2	897.2	904.8	905.3
170°	876.2	878.6	881.0	881.6	881.8	882.0	882.1	887.2	897.2	904.8	904.8
172.5°	881.0	881.5	882.0	882.1	882.1	882.1	882.1	886.1	894.1	900.0	899.5
175°	887.5	887.5	887.5	887.5	885.7	883.3	882.1	884.6	889.7	893.5	893.5
177.5°	887.5	887.5	887.5	887.5	886.1	884.3	883.4	885.4	889.3	892.3	891.7
180°	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	392.4	392.4
2.5°	419.0	416.4
5°	538.8	541.4
7.5°	725.6	724.3
10°	902.3	913.6
12.5°	1030.9	1033.5
15°	1109.2	1114.2
17.5°	1139.5	1140.7
20°	1140.7	1138.2
22.5°	1126.9	1124.3
25°	1110.5	1109.2
27.5°	1095.3	1096.5
30°	1089.0	1092.8
32.5°	1089.0	1095.3
35°	1091.6	1097.9
37.5°	1090.2	1097.9
40°	1085.3	1094.0
42.5°	1071.3	1077.6
45°	1049.9	1057.5
47.5°	1022.1	1027.2
50°	986.8	991.9
52.5°	942.6	943.9
55°	889.6	894.6
57.5°	832.9	834.1
60°	769.7	773.6
62.5°	702.9	702.9
65°	632.2	634.7
67.5°	559.1	565.4
70°	484.6	485.8
72.5°	411.4	411.4
75°	335.7	336.9
77.5°	263.8	263.8
80°	195.6	196.8
82.5°	135.0	137.5
85°	84.5	84.5
87.5°	39.2	35.3
90°	22.6	22.6
92.5°	90.6	72.7
95°	316.0	261.5
97.5°	757.2	653.4
100°	1091.0	967.3
102.5°	1419.3	1313.4
105°	1837.9	1781.0
107.5°	2112.1	2125.8
110°	2216.7	2276.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2226.0	2317.0
115°	2167.0	2293.2
117.5°	2041.8	2181.8
120°	1940.9	2077.0
122.5°	1842.8	1976.9
125°	1702.6	1826.2
127.5°	1576.6	1680.9
130°	1502.3	1598.7
132.5°	1434.9	1521.2
135°	1342.6	1417.0
137.5°	1268.6	1329.5
140°	1217.7	1274.6
142.5°	1175.7	1224.6
145°	1112.6	1149.6
147.5°	1064.1	1094.8
150°	1033.6	1058.4
152.5°	1007.5	1026.2
155°	977.5	990.0
157.5°	953.8	962.5
160°	939.6	944.7
162.5°	930.4	935.1
165°	917.0	922.1
167.5°	907.4	909.5
170°	904.8	904.8
172.5°	897.7	895.9
175°	893.5	893.5
177.5°	889.6	887.5
180°	887.5	887.5

(END OF REPORT)