

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: P937603

Luminaire Tested: SQ4-FB-100U-075D-B40-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937603
REPORT IS A COMBINATION OF REPORTS P933574 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-075D-B40-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

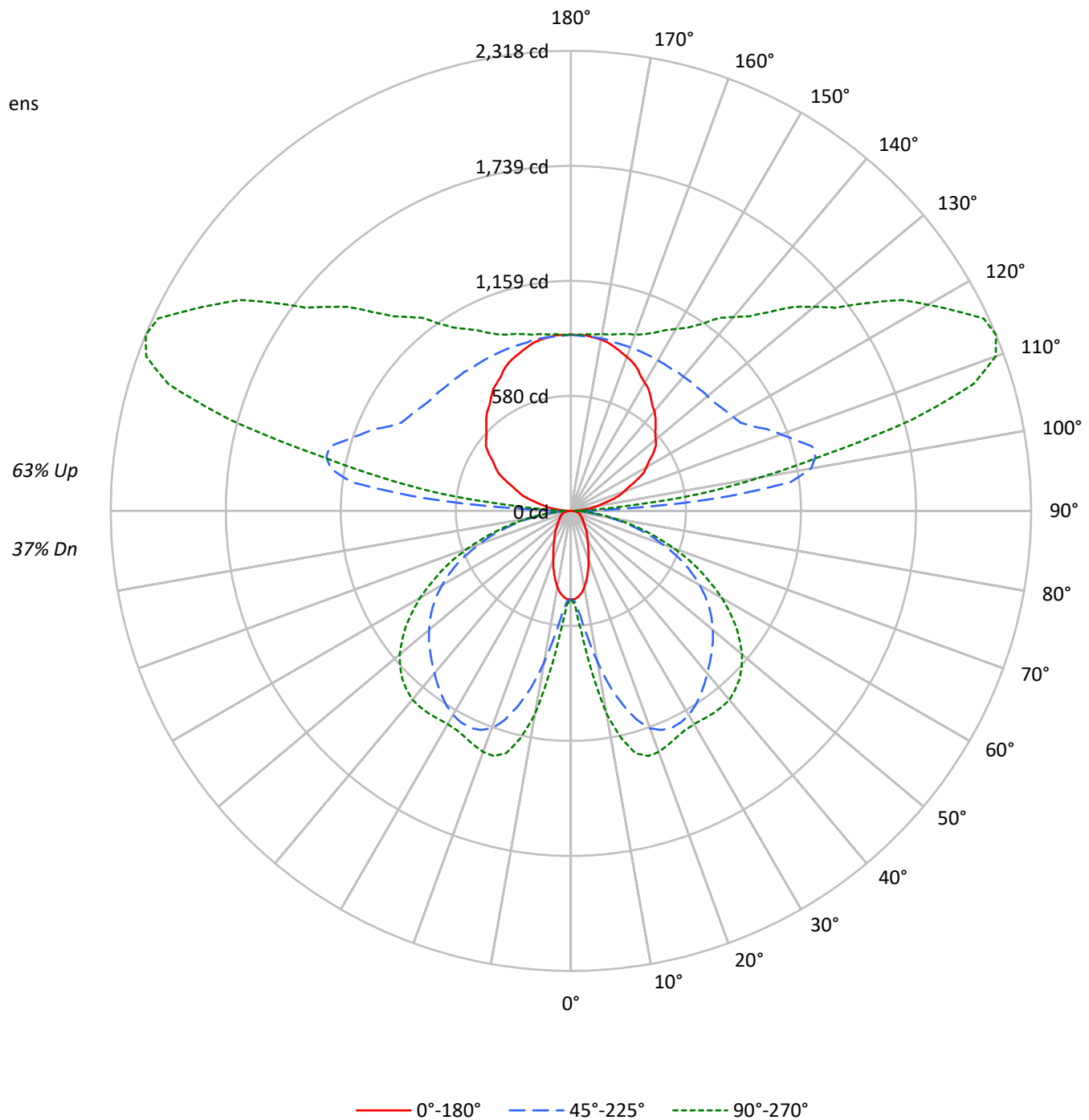
Lumens per Lamp: N/A
Luminaire Lumens: 9205.2 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 73.8
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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2756	2756	2756
5°	2691	3185	3704
10°	2440	4641	6141
15°	2073	6062	7416
20°	1687	7024	7558
25°	1407	7348	7405
30°	1186	7392	7390
35°	1048	7268	7582
40°	913	7105	7780
45°	826	6987	7810
50°	757	6880	7680
55°	725	6723	7339
60°	741	6425	6802
65°	769	5973	6063
70°	818	5205	5122
75°	902	4241	3998
80°	980	2938	2694
85°	853	1557	1379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7810 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	57.6	0.6
10°-20°	255.4	2.8
20°-30°	446.8	4.9
30°-40°	575.1	6.2
40°-50°	642.4	7.0
50°-60°	615.2	6.7
60°-70°	487.6	5.3
70°-80°	286.7	3.1
80°-90°	83.0	0.9
90°-100°	432.8	4.7
100°-110°	1137.7	12.4
110°-120°	1179.7	12.8
120°-130°	946.3	10.3
130°-140°	742.5	8.1
140°-150°	569.9	6.2
150°-160°	410.4	4.5
160°-170°	251.1	2.7
170°-180°	84.8	0.9
0°-30°	759.8	8.3
0°-40°	1335.0	14.5
0°-60°	2592.6	28.2
0°-90°	3449.9	37.5
90°-120°	2750.2	29.9
90°-150°	5008.9	54.4
90°-180°	5755.0	62.5
0°-180°	9205.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	446	446	446	446	446	
5°	434	466	524	593	614	40
15°	325	600	1011	1226	1265	90
25°	208	680	1205	1258	1259	96
35°	140	650	1135	1199	1246	88
45°	96	519	1003	1149	1200	74
55°	69	330	851	988	1016	63
65°	54	175	632	710	720	54
75°	40	107	347	381	382	42
85°	14	33	86	94	96	15
90°	6	17	45	23	23	6
95°	57	224	745	384	262	64
105°	205	310	1258	1910	1782	217
115°	364	442	1008	2010	2294	360
125°	506	568	916	1549	1827	450
135°	604	664	888	1250	1418	467
145°	700	745	876	1066	1150	439
155°	791	813	876	962	990	364
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°	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5	445.5
2.5°	445.5	445.5	448.4	449.8	452.7	454.1	457.0	459.8	468.4	469.9	472.7
5°	434.0	439.8	458.4	465.6	485.6	512.8	524.3	542.9	581.6	593.1	600.2
7.5°	416.9	429.8	475.6	487.0	537.2	608.8	638.9	679.0	740.6	770.7	795.0
10°	389.6	416.9	498.5	525.7	607.4	716.2	772.1	828.0	921.1	962.6	978.4
12.5°	359.6	404.0	522.9	560.1	677.6	836.6	903.9	965.5	1071.5	1127.5	1136.1
15°	325.2	385.3	545.8	600.2	752.1	936.9	1011.3	1087.4	1186.2	1226.3	1236.3
17.5°	295.1	371.0	567.3	624.6	809.4	1027.1	1103.1	1166.2	1246.4	1273.6	1280.8
20°	257.8	348.1	581.6	656.1	869.5	1093.1	1166.2	1214.9	1269.3	1286.5	1289.3
22.5°	230.6	323.7	590.2	667.5	909.6	1133.2	1194.8	1233.5	1270.7	1276.5	1277.9
25°	207.7	296.5	588.8	680.4	944.0	1157.6	1204.8	1233.5	1255.0	1257.8	1257.8
27.5°	186.2	266.4	583.0	683.3	969.8	1163.3	1200.5	1220.6	1230.6	1236.3	1236.3
30°	167.6	237.8	568.7	677.6	981.3	1157.6	1187.6	1197.7	1207.7	1216.3	1220.6
32.5°	153.3	210.6	547.2	666.1	982.7	1143.2	1164.7	1170.4	1184.8	1204.8	1212.0
35°	140.4	183.4	522.9	650.4	974.1	1120.3	1134.6	1140.4	1169.0	1199.1	1209.1
37.5°	127.5	163.3	491.3	623.1	961.2	1093.1	1103.1	1113.1	1157.6	1193.4	1204.8
40°	114.6	146.1	454.1	593.1	941.2	1060.0	1068.6	1084.4	1143.2	1184.8	1196.2
42.5°	104.6	131.8	414.0	561.5	915.4	1022.8	1035.7	1058.6	1126.0	1170.4	1183.3
45°	96.0	117.5	371.0	518.6	882.4	984.1	1002.8	1034.3	1106.0	1149.0	1160.4
47.5°	87.4	107.4	326.6	474.2	846.6	945.4	969.8	1005.6	1078.7	1120.3	1130.3
50°	80.2	97.4	282.2	426.9	807.9	903.9	932.6	969.8	1044.3	1083.0	1096.0
52.5°	74.5	88.8	240.7	379.6	763.5	860.9	893.9	932.6	1002.8	1040.0	1048.6
55°	68.8	81.7	204.8	329.5	717.7	815.1	850.9	888.2	956.9	988.4	994.2
57.5°	65.9	75.9	174.8	282.2	669.0	763.5	803.6	838.0	902.5	926.8	932.6
60°	61.6	71.6	151.8	242.1	616.0	714.8	749.2	783.6	838.0	858.1	862.4
62.5°	57.3	68.8	134.7	203.4	561.5	657.5	691.9	723.4	769.3	783.6	789.3
65°	54.4	65.9	121.8	174.8	505.7	597.4	631.7	658.9	696.2	710.5	713.4
67.5°	51.6	63.0	111.7	150.4	449.8	537.2	563.0	588.8	617.4	631.7	633.2
70°	47.3	60.2	103.1	133.2	392.5	468.4	489.9	517.1	540.1	547.2	551.5
72.5°	44.4	55.9	97.4	120.3	333.8	402.5	422.6	438.3	458.4	465.6	465.6
75°	40.1	50.1	91.7	107.4	273.6	329.5	346.7	362.4	378.2	381.0	376.7
77.5°	35.8	44.4	78.8	90.2	213.4	260.7	275.0	283.6	296.5	299.4	300.8
80°	30.1	38.7	61.6	70.2	154.7	192.0	202.0	209.1	220.6	220.6	223.5
82.5°	22.9	30.1	44.4	50.1	104.6	131.8	140.4	144.7	151.8	151.8	151.8
85°	14.3	18.6	28.6	32.9	63.0	80.2	86.0	87.4	93.1	94.5	94.5
87.5°	7.2	10.0	18.6	20.1	32.9	41.5	41.5	44.4	44.4	43.0	41.5
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°	23.9	64.4	104.9	115.0	161.7	223.9	255.0	223.5	160.4	113.2	108.7
95°	57.2	131.3	205.5	224.0	397.9	629.5	745.4	665.2	504.6	384.3	370.6
97.5°	98.9	164.4	229.8	246.1	535.9	922.2	1115.4	1064.7	963.3	887.2	861.2
100°	131.1	190.4	249.7	264.5	586.1	1014.8	1229.2	1232.9	1240.4	1245.9	1215.0
102.5°	158.5	213.9	269.2	283.1	609.2	1044.0	1261.4	1326.0	1455.2	1552.2	1525.7
105°	204.9	251.8	298.7	310.5	626.3	1047.3	1257.8	1402.7	1692.4	1909.6	1895.4
107.5°	252.6	296.3	340.1	351.0	629.4	1000.6	1186.3	1388.4	1792.4	2095.6	2099.0
110°	284.8	324.2	363.8	373.6	624.7	959.4	1126.7	1352.6	1804.4	2143.2	2158.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.4	354.0	391.6	401.0	624.9	923.3	1072.5	1303.7	1766.1	2112.8	2135.6
115°	364.0	398.7	433.4	442.1	630.6	881.8	1007.5	1230.2	1675.7	2009.8	2041.4
117.5°	411.1	442.6	474.2	482.0	642.2	856.0	962.8	1163.9	1565.8	1867.3	1902.4
120°	438.5	468.2	497.8	505.3	651.9	847.3	945.0	1128.6	1495.9	1771.4	1805.4
122.5°	465.4	495.3	525.2	532.7	665.5	842.7	931.3	1096.7	1427.4	1675.5	1709.1
125°	506.4	533.7	561.1	567.8	684.1	839.0	916.4	1056.9	1337.9	1548.6	1579.6
127.5°	539.9	567.4	595.0	601.8	702.5	836.8	903.9	1024.5	1265.8	1446.7	1472.8
130°	557.7	587.4	617.0	624.5	716.1	838.1	899.1	1006.5	1221.3	1382.4	1406.4
132.5°	576.2	605.9	635.5	642.9	726.9	839.0	894.9	991.1	1183.3	1327.5	1349.1
135°	603.6	630.6	657.6	664.4	738.9	838.1	887.8	968.3	1129.3	1250.1	1268.7
137.5°	631.5	658.3	685.1	691.8	756.7	843.4	886.6	954.7	1090.8	1192.9	1208.1
140°	654.8	679.5	704.1	710.2	767.6	844.1	882.4	941.2	1058.8	1147.0	1161.2
142.5°	672.7	695.5	718.3	724.0	776.8	847.2	882.4	934.1	1037.3	1114.8	1127.0
145°	700.1	720.0	739.8	744.8	788.7	847.3	876.5	918.7	1003.2	1066.5	1075.8
147.5°	727.5	746.8	766.1	771.0	806.1	853.0	876.5	909.7	976.2	1026.1	1033.7
150°	745.4	762.9	780.3	784.7	815.3	856.1	876.5	904.6	960.6	1002.8	1009.0
152.5°	763.9	777.2	790.4	793.7	821.3	858.1	876.5	900.5	948.4	984.3	989.0
155°	791.3	801.1	810.8	813.3	834.4	862.5	876.5	895.6	933.7	962.3	965.4
157.5°	811.6	821.1	830.6	833.0	847.5	866.9	876.5	891.3	921.0	943.3	945.4
160°	825.2	832.7	840.1	841.9	853.5	868.9	876.5	889.2	914.6	933.7	934.9
162.5°	839.0	844.5	850.0	851.5	859.8	871.0	876.5	887.2	908.7	924.7	925.9
165°	853.9	858.8	863.9	865.1	869.0	874.0	876.5	884.1	899.5	911.1	912.3
167.5°	867.5	869.9	872.3	872.9	876.0	880.3	882.4	887.5	897.5	905.1	905.6
170°	876.5	878.9	881.3	881.8	882.0	882.3	882.4	887.5	897.5	905.1	905.1
172.5°	881.3	881.8	882.3	882.4	882.4	882.4	882.4	886.4	894.4	900.3	899.8
175°	887.8	887.8	887.8	887.8	886.0	883.6	882.4	884.9	890.0	893.8	893.8
177.5°	887.8	887.8	887.8	887.8	886.4	884.6	883.7	885.7	889.6	892.5	892.0
180°	887.8	887.8	887.8	887.8	887.8	887.8	887.8	887.8	887.8	887.8	887.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	445.5	445.5
2.5°	475.6	472.7
5°	611.7	614.5
7.5°	823.7	822.3
10°	1024.2	1037.1
12.5°	1170.4	1173.3
15°	1259.3	1265.0
17.5°	1293.6	1295.1
20°	1295.1	1292.2
22.5°	1279.3	1276.5
25°	1260.7	1259.3
27.5°	1243.5	1244.9
30°	1236.3	1240.6
32.5°	1236.3	1243.5
35°	1239.2	1246.4
37.5°	1237.8	1246.4
40°	1232.0	1242.1
42.5°	1216.3	1223.5
45°	1191.9	1200.5
47.5°	1160.4	1166.2
50°	1120.3	1126.0
52.5°	1070.1	1071.5
55°	1009.9	1015.6
57.5°	945.4	946.9
60°	873.8	878.1
62.5°	797.9	797.9
65°	717.7	720.5
67.5°	634.6	641.8
70°	550.1	551.5
72.5°	467.0	467.0
75°	381.0	382.5
77.5°	299.4	299.4
80°	222.0	223.5
82.5°	153.3	156.1
85°	96.0	96.0
87.5°	44.4	40.1
90°	22.6	22.6
92.5°	90.6	72.7
95°	316.1	261.6
97.5°	757.4	653.6
100°	1091.3	967.6
102.5°	1419.7	1313.8
105°	1838.5	1781.6
107.5°	2112.8	2126.6
110°	2217.4	2276.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2226.7	2317.8
115°	2167.7	2294.0
117.5°	2042.5	2182.6
120°	1941.6	2077.7
122.5°	1843.3	1977.6
125°	1703.1	1826.8
127.5°	1577.2	1681.5
130°	1502.9	1599.2
132.5°	1435.5	1521.8
135°	1343.1	1417.5
137.5°	1269.0	1329.9
140°	1218.2	1275.1
142.5°	1176.1	1225.1
145°	1113.0	1150.0
147.5°	1064.4	1095.2
150°	1033.9	1058.8
152.5°	1007.8	1026.6
155°	977.8	990.2
157.5°	954.1	962.8
160°	940.0	945.0
162.5°	930.6	935.4
165°	917.4	922.3
167.5°	907.7	909.8
170°	905.1	905.1
172.5°	898.0	896.2
175°	893.8	893.8
177.5°	889.9	887.8
180°	887.8	887.8

(END OF REPORT)