

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: P937607

Luminaire Tested: SQ4-FB-100U-075D-B50-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937607
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-B50-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

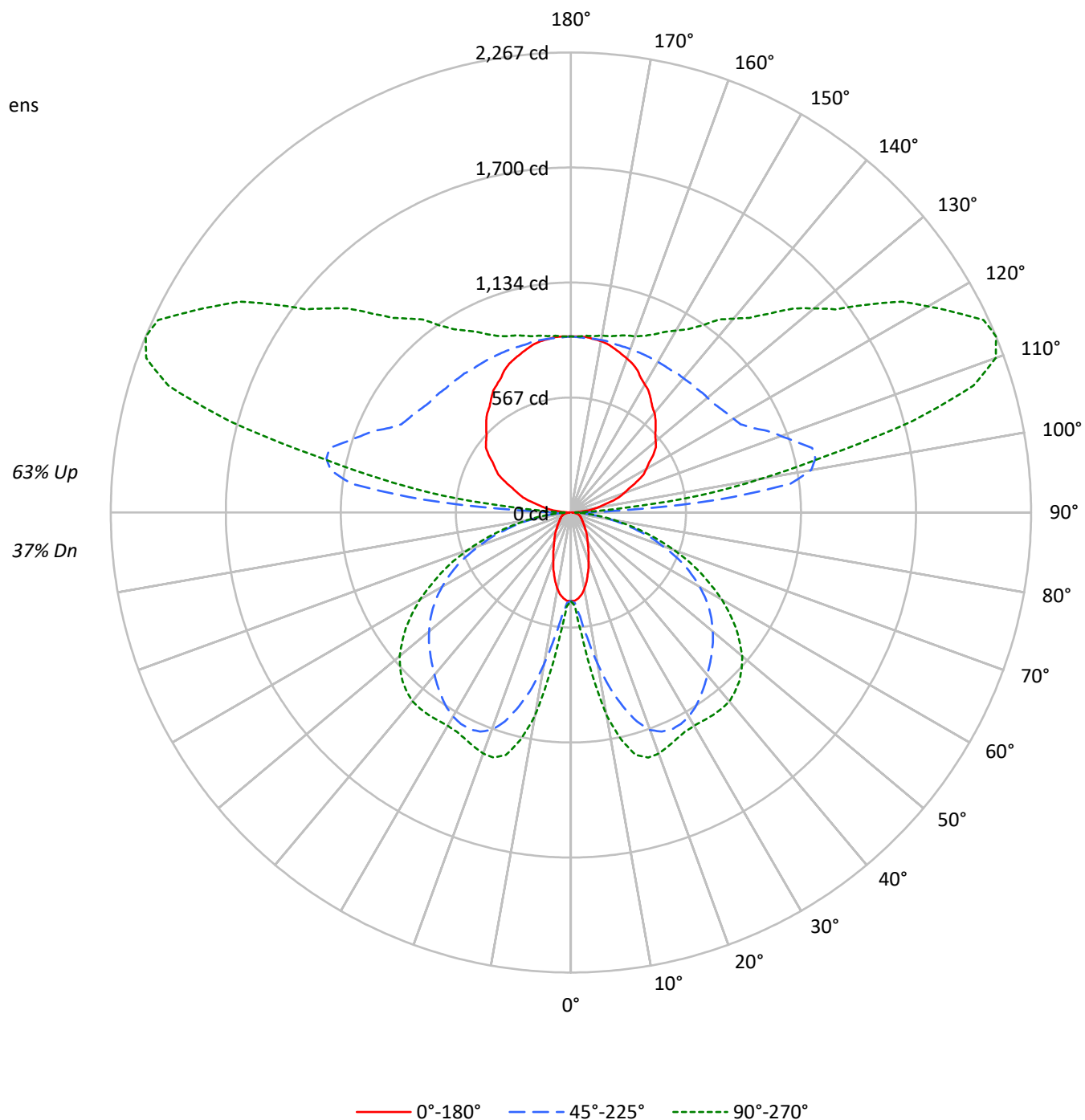
Lumens per Lamp: N/A
Luminaire Lumens: 9002.8 lumens
Efficiency: N/A
Efficacy: 122.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

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					0
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	94	94	94	94	76	76	76	60	60	60	45	45	45	37		
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31		
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25		
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21		
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17		
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15		
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13		
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11		
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10		
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9		
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	8		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2695	2695	2695
5°	2632	3115	3623
10°	2387	4539	6006
15°	2028	5929	7253
20°	1650	6869	7392
25°	1376	7186	7242
30°	1160	7230	7228
35°	1025	7108	7415
40°	893	6949	7609
45°	808	6833	7638
50°	741	6728	7512
55°	708	6575	7178
60°	724	6283	6652
65°	752	5841	5930
70°	799	5090	5010
75°	882	4147	3910
80°	957	2872	2635
85°	835	1522	1349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7638 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	0.6
10°-20°	249.8	2.8
20°-30°	437.0	4.9
30°-40°	562.5	6.2
40°-50°	628.3	7.0
50°-60°	601.7	6.7
60°-70°	476.9	5.3
70°-80°	280.4	3.1
80°-90°	81.2	0.9
90°-100°	423.2	4.7
100°-110°	1112.7	12.4
110°-120°	1153.8	12.8
120°-130°	925.5	10.3
130°-140°	726.2	8.1
140°-150°	557.4	6.2
150°-160°	401.4	4.5
160°-170°	245.6	2.7
170°-180°	83.0	0.9
0°-30°	743.1	8.3
0°-40°	1305.6	14.5
0°-60°	2535.6	28.2
0°-90°	3374.1	37.5
90°-120°	2689.7	29.9
90°-150°	4898.7	54.4
90°-180°	5629.0	62.5
0°-180°	9002.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	436	436	436	436	436	
5°	424	455	513	580	601	39
15°	318	587	989	1199	1237	89
25°	203	666	1178	1230	1232	94
35°	137	636	1110	1173	1219	86
45°	94	507	981	1124	1174	73
55°	67	322	832	967	993	61
65°	53	171	618	695	705	53
75°	39	105	339	373	374	41
85°	14	32	84	92	94	15
90°	6	16	44	22	22	6
95°	56	219	729	376	256	62
105°	200	304	1230	1868	1742	212
115°	356	432	985	1966	2244	352
125°	495	555	896	1515	1787	440
135°	590	650	868	1223	1386	457
145°	685	728	857	1043	1125	429
155°	774	795	857	941	968	356
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°	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7	435.7
2.5°	435.7	435.7	438.5	439.9	442.7	444.1	446.9	449.7	458.1	459.5	462.3
5°	424.5	430.1	448.3	455.3	474.9	501.6	512.8	531.0	568.8	580.0	587.0
7.5°	407.7	420.3	465.1	476.3	525.4	595.4	624.8	664.1	724.3	753.7	777.6
10°	381.1	407.7	487.5	514.2	594.0	700.5	755.1	809.8	900.8	941.5	956.9
12.5°	351.7	395.1	511.4	547.8	662.7	818.2	884.0	944.3	1047.9	1102.7	1111.1
15°	318.0	376.9	533.8	587.0	735.5	916.3	989.1	1063.5	1160.1	1199.3	1209.2
17.5°	288.6	362.9	554.8	610.8	791.6	1004.5	1078.9	1140.5	1219.0	1245.6	1252.6
20°	252.2	340.4	568.8	641.7	850.4	1069.1	1140.5	1188.1	1241.4	1258.2	1261.0
22.5°	225.6	316.6	577.2	652.9	889.6	1108.3	1168.5	1206.4	1242.8	1248.4	1249.8
25°	203.1	290.0	575.8	665.5	923.3	1132.1	1178.3	1206.4	1227.4	1230.2	1230.2
27.5°	182.1	260.6	570.2	668.3	948.5	1137.7	1174.1	1193.7	1203.6	1209.2	1209.2
30°	163.9	232.6	556.2	662.7	959.7	1132.1	1161.5	1171.3	1181.1	1189.5	1193.7
32.5°	149.9	205.9	535.2	651.5	961.1	1118.1	1139.1	1144.7	1158.7	1178.3	1185.3
35°	137.3	179.3	511.4	636.1	952.7	1095.7	1109.7	1115.3	1143.3	1172.7	1182.5
37.5°	124.7	159.7	480.5	609.4	940.1	1069.1	1078.9	1088.7	1132.1	1167.1	1178.3
40°	112.1	142.9	444.1	580.0	920.5	1036.7	1045.1	1060.6	1118.1	1158.7	1169.9
42.5°	102.3	128.9	404.9	549.2	895.2	1000.3	1012.9	1035.3	1101.3	1144.7	1157.3
45°	93.9	114.9	362.9	507.2	863.0	962.5	980.7	1011.5	1081.7	1123.7	1134.9
47.5°	85.5	105.1	319.4	463.7	828.0	924.7	948.5	983.5	1055.0	1095.7	1105.5
50°	78.5	95.3	276.0	417.5	790.2	884.0	912.1	948.5	1021.3	1059.2	1071.9
52.5°	72.9	86.9	235.4	371.3	746.7	842.0	874.2	912.1	980.7	1017.1	1025.5
55°	67.2	79.9	200.3	322.2	701.9	797.2	832.2	868.6	935.9	966.7	972.3
57.5°	64.4	74.3	170.9	276.0	654.3	746.7	786.0	819.6	882.6	906.4	912.1
60°	60.2	70.0	148.5	236.8	602.4	699.1	732.7	766.3	819.6	839.2	843.4
62.5°	56.0	67.2	131.7	198.9	549.2	643.1	676.7	707.5	752.3	766.3	772.0
65°	53.2	64.4	119.1	170.9	494.6	584.2	617.8	644.5	680.9	694.9	697.7
67.5°	50.4	61.6	109.3	147.1	439.9	525.4	550.6	575.8	603.8	617.8	619.2
70°	46.2	58.8	100.9	130.3	383.9	458.1	479.1	505.8	528.2	535.2	539.4
72.5°	43.4	54.6	95.3	117.7	326.4	393.7	413.3	428.7	448.3	455.3	455.3
75°	39.2	49.0	89.7	105.1	267.6	322.2	339.0	354.5	369.9	372.7	368.5
77.5°	35.0	43.4	77.1	88.3	208.7	255.0	269.0	277.4	290.0	292.8	294.2
80°	29.4	37.8	60.2	68.6	151.3	187.7	197.5	204.5	215.8	215.8	218.6
82.5°	22.4	29.4	43.4	49.0	102.3	128.9	137.3	141.5	148.5	148.5	148.5
85°	14.0	18.2	28.0	32.2	61.6	78.5	84.1	85.5	91.1	92.5	92.5
87.5°	7.0	9.8	18.2	19.6	32.2	40.6	40.6	43.4	43.4	42.0	40.6
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°	23.4	63.0	102.6	112.5	158.1	218.9	249.4	218.6	156.9	110.7	106.3
95°	55.9	128.4	201.0	219.1	389.1	615.7	729.0	650.5	493.5	375.8	362.5
97.5°	96.8	160.7	224.7	240.7	524.1	902.0	1090.9	1041.3	942.1	867.7	842.3
100°	128.2	186.2	244.2	258.7	573.2	992.5	1202.2	1205.8	1213.1	1218.5	1188.2
102.5°	155.0	209.2	263.3	276.8	595.8	1021.0	1233.6	1296.9	1423.2	1518.0	1492.2
105°	200.4	246.3	292.2	303.6	612.5	1024.3	1230.2	1371.9	1655.1	1867.6	1853.7
107.5°	247.0	289.8	332.6	343.2	615.6	978.6	1160.2	1357.8	1753.0	2049.5	2052.8
110°	278.5	317.1	355.8	365.4	610.9	938.3	1101.9	1322.8	1764.7	2096.1	2110.6

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.4	346.2	383.0	392.2	611.1	903.0	1048.9	1275.0	1727.2	2066.4	2088.6
115°	356.0	389.9	423.8	432.3	616.7	862.5	985.4	1203.2	1638.9	1965.6	1996.5
117.5°	402.1	432.9	463.7	471.4	628.1	837.1	941.7	1138.3	1531.4	1826.3	1860.5
120°	428.9	457.9	486.9	494.2	637.5	828.6	924.2	1103.8	1463.0	1732.5	1765.7
122.5°	455.1	484.4	513.7	521.0	650.9	824.2	910.8	1072.6	1396.0	1638.6	1671.5
125°	495.3	522.0	548.7	555.4	669.0	820.5	896.3	1033.7	1308.4	1514.6	1544.8
127.5°	528.0	554.9	581.9	588.6	687.1	818.4	884.0	1002.0	1237.9	1414.9	1440.4
130°	545.5	574.5	603.5	610.7	700.3	819.7	879.4	984.3	1194.4	1352.0	1375.5
132.5°	563.5	592.5	621.5	628.8	711.0	820.5	875.3	969.3	1157.3	1298.4	1319.5
135°	590.3	616.7	643.2	649.8	722.6	819.7	868.2	947.0	1104.5	1222.6	1240.8
137.5°	617.7	643.8	670.1	676.6	740.1	824.8	867.1	933.7	1066.8	1166.7	1181.5
140°	640.4	664.5	688.6	694.6	750.7	825.6	863.0	920.6	1035.5	1121.7	1135.7
142.5°	657.9	680.2	702.5	708.1	759.7	828.6	863.0	913.5	1014.5	1090.3	1102.2
145°	684.7	704.1	723.6	728.4	771.4	828.6	857.2	898.5	981.2	1043.1	1052.2
147.5°	711.5	730.4	749.3	754.0	788.4	834.2	857.2	889.7	954.7	1003.5	1011.0
150°	729.0	746.1	763.2	767.5	797.4	837.2	857.2	884.7	939.5	980.7	986.8
152.5°	747.1	760.1	773.0	776.2	803.2	839.2	857.2	880.7	927.6	962.7	967.3
155°	773.9	783.4	793.0	795.4	816.0	843.5	857.2	875.9	913.2	941.1	944.2
157.5°	793.7	803.1	812.3	814.6	828.8	847.8	857.2	871.7	900.7	922.5	924.7
160°	807.1	814.4	821.6	823.4	834.7	849.8	857.2	869.6	894.5	913.2	914.4
162.5°	820.5	825.9	831.4	832.8	840.9	851.8	857.2	867.7	888.7	904.4	905.5
165°	835.1	839.9	844.9	846.1	849.8	854.8	857.2	864.7	879.7	891.0	892.3
167.5°	848.4	850.8	853.1	853.7	856.8	861.0	863.0	868.0	877.8	885.2	885.7
170°	857.2	859.6	861.9	862.5	862.6	862.9	863.0	868.0	877.8	885.2	885.2
172.5°	861.9	862.4	862.9	863.0	863.0	863.0	863.0	866.9	874.7	880.5	880.0
175°	868.2	868.2	868.2	868.2	866.5	864.1	863.0	865.4	870.4	874.1	874.1
177.5°	868.2	868.2	868.2	868.2	866.9	865.2	864.2	866.2	870.0	872.9	872.4
180°	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2	868.2

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	435.7	435.7
2.5°	465.1	462.3
5°	598.2	601.0
7.5°	805.6	804.2
10°	1001.7	1014.3
12.5°	1144.7	1147.5
15°	1231.6	1237.2
17.5°	1265.2	1266.6
20°	1266.6	1263.8
22.5°	1251.2	1248.4
25°	1233.0	1231.6
27.5°	1216.2	1217.6
30°	1209.2	1213.4
32.5°	1209.2	1216.2
35°	1212.0	1219.0
37.5°	1210.6	1219.0
40°	1205.0	1214.8
42.5°	1189.5	1196.5
45°	1165.7	1174.1
47.5°	1134.9	1140.5
50°	1095.7	1101.3
52.5°	1046.5	1047.9
55°	987.7	993.3
57.5°	924.7	926.1
60°	854.6	858.8
62.5°	780.4	780.4
65°	701.9	704.7
67.5°	620.6	627.6
70°	538.0	539.4
72.5°	456.7	456.7
75°	372.7	374.1
77.5°	292.8	292.8
80°	217.2	218.6
82.5°	149.9	152.7
85°	93.9	93.9
87.5°	43.4	39.2
90°	22.1	22.1
92.5°	88.6	71.1
95°	309.2	255.8
97.5°	740.8	639.2
100°	1067.3	946.3
102.5°	1388.5	1284.9
105°	1798.0	1742.4
107.5°	2066.4	2079.8
110°	2168.7	2226.7

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2177.7	2266.8
115°	2120.0	2243.6
117.5°	1997.5	2134.6
120°	1898.9	2032.0
122.5°	1802.8	1934.1
125°	1665.7	1786.6
127.5°	1542.5	1644.5
130°	1469.8	1564.1
132.5°	1403.9	1488.3
135°	1313.6	1386.3
137.5°	1241.1	1300.7
140°	1191.4	1247.1
142.5°	1150.2	1198.1
145°	1088.5	1124.7
147.5°	1041.0	1071.1
150°	1011.1	1035.5
152.5°	985.7	1004.0
155°	956.3	968.5
157.5°	933.2	941.7
160°	919.3	924.2
162.5°	910.2	914.9
165°	897.2	902.1
167.5°	887.8	889.8
170°	885.2	885.2
172.5°	878.2	876.5
175°	874.1	874.1
177.5°	870.3	868.2
180°	868.2	868.2

(END OF REPORT)