

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: P937001

Luminaire Tested: SQ4-FB-050U-125D-B40-1D-UNV-W2A-W-12

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937001
REPORT IS A COMBINATION OF REPORTS P933464 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-B40-1D-UNV-W2A-W-12
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

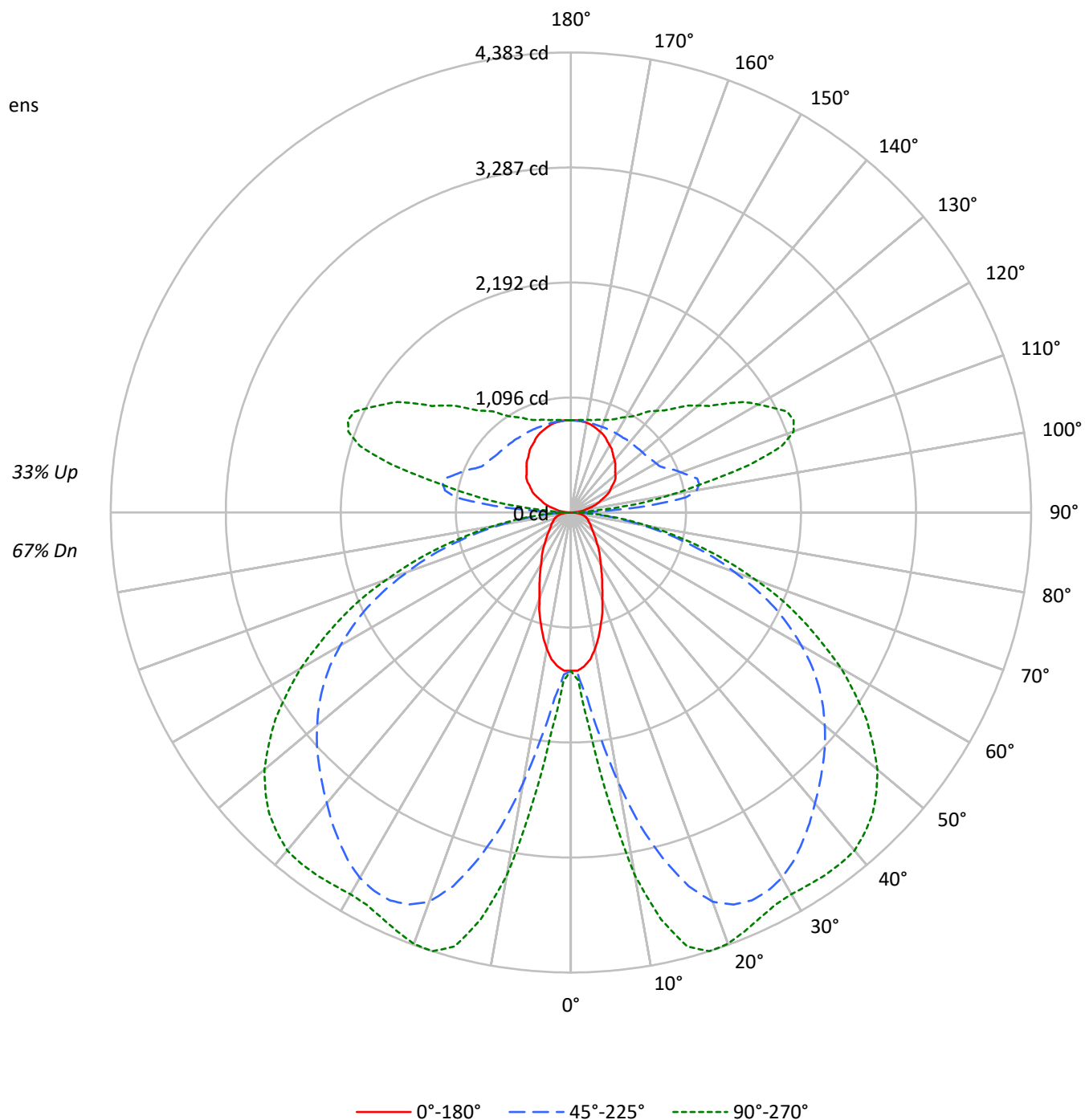
Lumens per Lamp: N/A
Luminaire Lumens: 17371.4 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 12' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 168
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	101	96	92	88	95	91	87	83	80	78	75	71	69	67	62	61	59
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49
3	83	72	64	58	77	68	61	55	61	55	50	54	49	45	47	44	41
4	75	64	55	48	70	60	52	46	53	47	42	47	42	38	42	38	34
5	69	56	47	41	64	53	45	39	47	41	36	42	37	32	37	33	29
6	63	50	41	35	59	47	39	34	42	36	31	38	32	28	33	29	25
7	58	45	36	30	55	43	35	29	38	32	27	34	29	24	30	26	22
8	54	41	32	27	51	39	31	26	35	28	24	31	26	22	27	23	20
9	50	37	29	24	47	35	28	23	32	25	21	28	23	19	25	21	17
10	47	34	26	21	44	32	25	20	29	23	19	26	21	17	23	19	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4664	4664	4664
5°	4558	5392	6269
10°	4136	7861	10393
15°	3516	10273	12549
20°	2864	11908	12789
25°	2390	12464	12529
30°	2016	12546	12506
35°	1784	12341	12829
40°	1555	12074	13163
45°	1409	11879	13215
50°	1294	11704	12996
55°	1240	11448	12420
60°	1271	10950	11511
65°	1324	10191	10261
70°	1415	8893	8668
75°	1573	7258	6765
80°	1731	5039	4559
85°	1572	2678	2333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13215 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	195.0	1.1
10°-20°	864.4	5.0
20°-30°	1512.0	8.7
30°-40°	1946.4	11.2
40°-50°	2174.1	12.5
50°-60°	2082.3	12.0
60°-70°	1650.2	9.5
70°-80°	970.4	5.6
80°-90°	272.9	1.6
90°-100°	428.9	2.5
100°-110°	1127.5	6.5
110°-120°	1169.1	6.7
120°-130°	937.8	5.4
130°-140°	735.9	4.2
140°-150°	564.8	3.3
150°-160°	406.7	2.3
160°-170°	248.9	1.4
170°-180°	84.1	0.5
0°-30°	2571.5	14.8
0°-40°	4517.9	26.0
0°-60°	8774.2	50.5
0°-90°	11667.7	67.2
90°-120°	2725.5	15.7
90°-150°	4964.0	28.6
90°-180°	5704.0	32.8
0°-180°	17371.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1508	1508	1508	1508	1508	
5°	1469	1576	1774	2007	2080	136
15°	1100	2031	3423	4150	4281	306
25°	703	2303	4077	4257	4262	324
35°	475	2201	3840	4058	4218	297
45°	325	1755	3394	3888	4063	251
55°	233	1115	2880	3345	3437	212
65°	184	592	2138	2405	2439	183
75°	136	364	1173	1290	1294	142
85°	48	112	291	320	325	51
90°	6	16	45	22	22	8
95°	57	222	739	381	259	63
105°	203	308	1247	1892	1766	215
115°	361	438	998	1992	2274	356
125°	502	563	908	1535	1810	446
135°	598	658	880	1239	1405	463
145°	694	738	869	1057	1140	435
155°	784	806	869	954	982	360
165°	846	857	869	903	914	239
175°	880	880	874	886	886	84
180°	880	880	880	880	880	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8	1507.8
2.5°	1507.8	1507.8	1517.5	1522.4	1532.0	1536.9	1546.6	1556.3	1585.4	1590.3	1599.9
5°	1469.0	1488.4	1551.4	1575.7	1643.6	1735.7	1774.5	1837.5	1968.4	2007.2	2031.4
7.5°	1410.8	1454.5	1609.7	1648.4	1818.1	2060.5	2162.3	2298.1	2506.6	2608.4	2690.8
10°	1318.8	1410.8	1687.2	1779.3	2055.6	2424.1	2613.2	2802.3	3117.4	3258.0	3311.4
12.5°	1217.0	1367.2	1769.6	1895.7	2293.2	2831.4	3059.2	3267.7	3626.5	3815.6	3844.6
15°	1100.5	1304.1	1847.2	2031.4	2545.4	3170.8	3422.8	3679.8	4014.3	4150.1	4184.0
17.5°	998.7	1255.7	1919.9	2113.8	2739.2	3476.2	3733.2	3946.4	4217.9	4310.1	4334.4
20°	872.7	1178.1	1968.4	2220.5	2942.9	3699.2	3946.4	4111.3	4295.6	4353.7	4363.4
22.5°	780.5	1095.7	1997.5	2259.2	3078.6	3835.0	4043.5	4174.3	4300.4	4319.8	4324.6
25°	703.0	1003.6	1992.6	2302.9	3195.0	3917.4	4077.4	4174.3	4247.1	4256.7	4256.7
27.5°	630.3	901.8	1973.2	2312.6	3282.2	3936.8	4062.9	4130.7	4164.7	4184.0	4184.0
30°	567.3	804.8	1924.7	2293.2	3321.0	3917.4	4019.2	4053.1	4087.1	4116.1	4130.7
32.5°	518.8	712.7	1852.0	2254.5	3325.9	3868.9	3941.7	3961.1	4009.5	4077.4	4101.6
35°	475.1	620.6	1769.6	2201.1	3296.9	3791.4	3839.8	3859.3	3956.2	4058.0	4091.9
37.5°	431.5	552.7	1662.9	2109.0	3253.2	3699.2	3733.2	3767.1	3917.4	4038.6	4077.4
40°	387.8	494.5	1536.9	2007.2	3185.3	3587.7	3616.8	3670.2	3868.9	4009.5	4048.2
42.5°	353.9	446.1	1401.2	1900.5	3098.0	3461.7	3505.3	3582.9	3810.7	3961.1	4004.7
45°	324.8	397.6	1255.7	1755.1	2986.5	3330.8	3393.8	3500.5	3742.8	3888.3	3927.1
47.5°	295.8	363.7	1105.4	1604.8	2865.3	3199.8	3282.2	3403.4	3650.8	3791.4	3825.3
50°	271.5	329.7	955.1	1444.8	2734.5	3059.2	3156.2	3282.2	3534.4	3665.3	3708.9
52.5°	252.1	300.6	814.5	1284.8	2584.1	2913.8	3025.3	3156.2	3393.8	3519.8	3548.9
55°	232.7	276.4	693.3	1115.1	2428.9	2758.6	2879.9	3006.0	3238.6	3345.3	3364.7
57.5°	223.0	257.0	591.5	955.1	2264.1	2584.1	2719.8	2836.3	3054.4	3136.8	3156.2
60°	208.5	242.4	513.9	819.4	2084.8	2419.3	2535.6	2652.0	2836.3	2904.1	2918.7
62.5°	194.0	232.7	455.7	688.5	1900.5	2225.3	2341.7	2448.3	2603.5	2652.0	2671.4
65°	184.2	223.0	412.1	591.5	1711.5	2021.7	2138.1	2230.2	2356.3	2404.7	2414.4
67.5°	174.6	213.3	378.2	509.1	1522.4	1818.1	1905.3	1992.6	2089.6	2138.1	2142.9
70°	160.0	203.6	349.1	450.9	1328.4	1585.4	1658.1	1750.2	1827.8	1852.0	1866.5
72.5°	150.3	189.1	329.7	407.2	1129.7	1362.4	1430.2	1483.6	1551.4	1575.7	1575.7
75°	135.7	169.7	310.3	363.7	926.0	1115.1	1173.3	1226.6	1279.9	1289.6	1275.1
77.5°	121.2	150.3	266.6	305.4	722.4	882.4	930.8	960.0	1003.6	1013.3	1018.1
80°	101.8	130.9	208.5	237.6	523.6	649.7	683.6	707.8	746.6	746.6	756.4
82.5°	77.5	101.8	150.3	169.7	353.9	446.1	475.1	489.6	513.9	513.9	513.9
85°	48.5	63.0	96.9	111.5	213.3	271.5	290.9	295.8	315.2	320.0	320.0
87.5°	24.3	33.9	63.0	67.9	111.5	140.6	140.6	150.3	150.3	145.4	140.6
90°	5.9	10.6	15.4	16.5	26.0	38.6	44.9	39.9	29.9	22.4	22.4
92.5°	23.6	63.7	103.9	113.9	160.2	221.8	252.7	221.5	159.0	112.2	107.7
95°	56.7	130.2	203.7	222.0	394.2	623.9	738.7	659.1	500.1	380.9	367.3
97.5°	98.0	162.8	227.7	243.9	531.1	913.9	1105.4	1055.2	954.6	879.3	853.6
100°	129.9	188.7	247.4	262.1	580.8	1005.7	1218.2	1221.8	1229.2	1234.7	1204.1
102.5°	157.1	211.9	266.7	280.5	603.7	1034.6	1250.1	1314.1	1442.1	1538.2	1512.0
105°	203.1	249.5	296.0	307.6	620.6	1037.9	1246.6	1390.1	1677.2	1892.5	1878.4
107.5°	250.4	293.7	337.0	347.8	623.8	991.8	1175.7	1376.0	1776.5	2076.8	2080.3
110°	282.3	321.4	360.5	370.3	619.0	950.8	1116.7	1340.5	1788.2	2124.0	2138.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	313.5	350.8	388.0	397.4	619.2	915.0	1062.9	1292.0	1750.2	2093.9	2116.5
115°	360.8	395.2	429.6	438.2	625.0	874.0	998.5	1219.2	1660.6	1991.7	2023.1
117.5°	407.4	438.6	469.9	477.7	636.5	848.3	954.2	1153.4	1551.8	1850.6	1885.3
120°	434.6	464.0	493.4	500.7	646.0	839.7	936.6	1118.6	1482.5	1755.6	1789.3
122.5°	461.2	490.9	520.5	527.9	659.6	835.1	922.9	1086.8	1414.6	1660.5	1693.7
125°	501.9	529.0	556.0	562.8	678.0	831.4	908.2	1047.4	1325.8	1534.7	1565.3
127.5°	535.0	562.3	589.6	596.4	696.2	829.2	895.8	1015.4	1254.4	1433.7	1459.6
130°	552.8	582.2	611.5	618.8	709.6	830.6	891.1	997.5	1210.4	1369.9	1393.8
132.5°	571.0	600.4	629.8	637.2	720.5	831.4	886.9	982.2	1172.7	1315.6	1337.0
135°	598.2	625.0	651.7	658.4	732.2	830.7	879.8	959.7	1119.3	1238.9	1257.4
137.5°	625.9	652.5	679.0	685.6	750.0	835.8	878.7	946.1	1081.1	1182.2	1197.3
140°	648.9	673.4	697.7	703.8	760.8	836.6	874.5	932.7	1049.4	1136.7	1150.9
142.5°	666.7	689.2	711.9	717.5	769.8	839.6	874.5	925.7	1028.1	1104.8	1117.0
145°	693.8	713.5	733.2	738.1	781.7	839.6	868.7	910.5	994.3	1057.0	1066.2
147.5°	721.0	740.1	759.3	764.1	799.0	845.5	868.7	901.6	967.5	1016.9	1024.5
150°	738.7	756.0	773.4	777.7	808.0	848.4	868.7	896.5	952.0	993.8	1000.0
152.5°	757.0	770.1	783.3	786.5	813.9	850.4	868.7	892.4	939.9	975.5	980.2
155°	784.2	793.9	803.6	806.0	826.9	854.7	868.7	887.6	925.3	953.7	956.7
157.5°	804.3	813.8	823.1	825.5	839.9	859.1	868.7	883.4	912.7	934.8	937.0
160°	817.9	825.2	832.6	834.4	845.8	861.0	868.7	881.3	906.4	925.3	926.5
162.5°	831.4	837.0	842.5	843.8	852.1	863.1	868.7	879.3	900.5	916.4	917.6
165°	846.2	851.2	856.2	857.4	861.1	866.2	868.7	876.3	891.5	902.9	904.1
167.5°	859.8	862.1	864.5	865.0	868.2	872.4	874.5	879.5	889.5	896.9	897.5
170°	868.7	871.0	873.3	873.9	874.1	874.4	874.5	879.5	889.5	896.9	896.9
172.5°	873.3	873.8	874.4	874.5	874.5	874.5	874.5	878.4	886.3	892.3	891.8
175°	879.8	879.8	879.8	879.8	878.0	875.6	874.5	877.0	882.0	885.8	885.8
177.5°	879.8	879.8	879.8	879.8	878.5	876.7	875.7	877.7	881.7	884.6	884.0
180°	879.8	879.8	879.8	879.8	879.8	879.8	879.8	879.8	879.8	879.8	879.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	1507.8	1507.8
2.5°	1609.7	1599.9
5°	2070.2	2079.9
7.5°	2787.7	2782.9
10°	3466.5	3510.1
12.5°	3961.1	3970.7
15°	4261.6	4281.0
17.5°	4378.0	4382.8
20°	4382.8	4373.1
22.5°	4329.5	4319.8
25°	4266.5	4261.6
27.5°	4208.3	4213.2
30°	4184.0	4198.6
32.5°	4184.0	4208.3
35°	4193.7	4217.9
37.5°	4188.9	4217.9
40°	4169.5	4203.4
42.5°	4116.1	4140.4
45°	4033.7	4062.9
47.5°	3927.1	3946.4
50°	3791.4	3810.7
52.5°	3621.6	3626.5
55°	3418.0	3437.4
57.5°	3199.8	3204.7
60°	2957.4	2972.0
62.5°	2700.5	2700.5
65°	2428.9	2438.7
67.5°	2147.8	2172.1
70°	1861.8	1866.5
72.5°	1580.5	1580.5
75°	1289.6	1294.5
77.5°	1013.3	1013.3
80°	751.5	756.4
82.5°	518.8	528.5
85°	324.8	324.8
87.5°	150.3	135.7
90°	22.4	22.4
92.5°	89.9	72.0
95°	313.2	259.2
97.5°	750.6	647.8
100°	1081.5	959.0
102.5°	1407.0	1302.0
105°	1822.0	1765.6
107.5°	2093.8	2107.5
110°	2197.5	2256.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2206.8	2297.1
115°	2148.3	2273.5
117.5°	2024.1	2163.0
120°	1924.2	2059.1
122.5°	1826.8	1959.9
125°	1687.9	1810.5
127.5°	1563.0	1666.4
130°	1489.4	1584.9
132.5°	1422.6	1508.1
135°	1331.1	1404.8
137.5°	1257.6	1318.0
140°	1207.2	1263.7
142.5°	1165.6	1214.1
145°	1102.9	1139.7
147.5°	1054.9	1085.4
150°	1024.6	1049.4
152.5°	998.8	1017.5
155°	969.1	981.5
157.5°	945.5	954.2
160°	931.6	936.6
162.5°	922.3	927.1
165°	909.2	914.1
167.5°	899.6	901.7
170°	896.9	896.9
172.5°	890.0	888.2
175°	885.8	885.8
177.5°	881.9	879.8
180°	879.8	879.8

(END OF REPORT)