

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: P937003

Luminaire Tested: SQ4-FB-050U-125D-B40-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937003
REPORT IS A COMBINATION OF REPORTS P933480 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-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

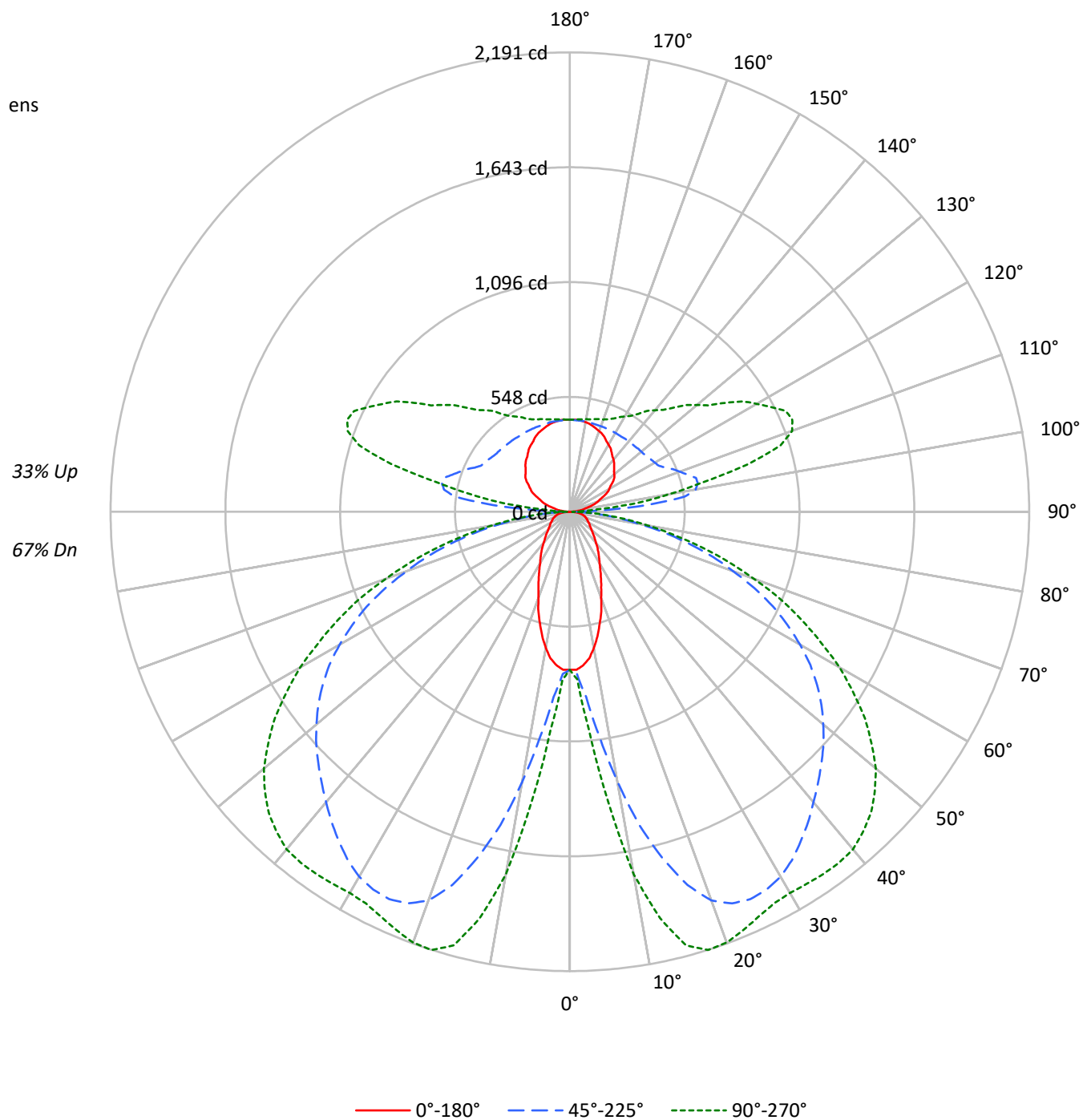
Lumens per Lamp: N/A
Luminaire Lumens: 8685.7 lumens
Efficiency: N/A
Efficacy: 103.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 84
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°	4554	5389	6269
10°	4129	7854	10393
15°	3509	10258	12549
20°	2855	11884	12790
25°	2381	12433	12529
30°	2006	12509	12506
35°	1774	12298	12829
40°	1545	12025	13163
45°	1397	11823	13215
50°	1281	11641	12996
55°	1225	11377	12420
60°	1253	10873	11511
65°	1303	10107	10260
70°	1384	8808	8668
75°	1528	7177	6764
80°	1657	4971	4559
85°	1449	2632	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°	97.5	1.1
10°-20°	432.2	5.0
20°-30°	756.0	8.7
30°-40°	973.2	11.2
40°-50°	1087.0	12.5
50°-60°	1041.1	12.0
60°-70°	825.1	9.5
70°-80°	485.2	5.6
80°-90°	136.5	1.6
90°-100°	214.4	2.5
100°-110°	563.8	6.5
110°-120°	584.6	6.7
120°-130°	468.9	5.4
130°-140°	367.9	4.2
140°-150°	282.4	3.3
150°-160°	203.4	2.3
160°-170°	124.4	1.4
170°-180°	42.0	0.5
0°-30°	1285.7	14.8
0°-40°	2259.0	26.0
0°-60°	4387.1	50.5
0°-90°	5833.9	67.2
90°-120°	1362.8	15.7
90°-150°	2482.0	28.6
90°-180°	2852.0	32.8
0°-180°	8685.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	754	754	754	754	754	
5°	734	788	887	1004	1040	68
15°	550	1016	1712	2075	2140	153
25°	352	1151	2039	2128	2131	162
35°	238	1100	1920	2029	2109	148
45°	162	878	1697	1944	2031	126
55°	116	558	1440	1673	1719	106
65°	92	296	1069	1202	1219	91
75°	68	182	587	645	647	71
85°	24	56	145	160	162	26
90°	3	8	22	11	11	4
95°	28	111	369	190	130	31
105°	102	154	623	946	883	108
115°	180	219	499	996	1137	178
125°	251	281	454	767	905	223
135°	299	329	440	619	702	231
145°	347	369	434	528	570	217
155°	392	403	434	477	491	180
165°	423	429	434	451	457	119
175°	440	440	437	443	443	42
180°	440	440	440	440	440	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	753.9	753.9	753.9	753.9	753.9	753.9	753.9	753.9	753.9	753.9	753.9
2.5°	753.9	753.9	758.7	761.1	766.0	768.5	773.3	778.1	792.6	795.1	800.0
5°	734.5	744.2	775.7	787.9	821.8	867.8	887.2	918.7	984.2	1003.6	1015.7
7.5°	705.5	727.2	804.8	824.2	909.1	1030.3	1081.2	1149.1	1253.2	1304.1	1345.4
10°	659.3	705.5	843.6	889.7	1027.9	1212.1	1306.6	1401.2	1558.8	1629.0	1655.7
12.5°	608.4	683.6	884.8	947.8	1146.6	1415.7	1529.6	1633.8	1813.3	1907.8	1922.3
15°	550.3	652.1	923.6	1015.7	1272.6	1585.4	1711.5	1839.9	2007.2	2075.0	2092.0
17.5°	499.4	627.8	960.0	1056.9	1369.7	1738.1	1866.5	1973.2	2109.0	2155.1	2167.2
20°	436.3	589.0	984.2	1110.3	1471.5	1849.6	1973.2	2055.6	2147.8	2176.8	2181.7
22.5°	390.3	547.9	998.7	1129.7	1539.4	1917.4	2021.7	2087.2	2150.2	2159.9	2162.3
25°	351.5	501.8	996.4	1151.4	1597.5	1958.7	2038.7	2087.2	2123.5	2128.4	2128.4
27.5°	315.2	450.9	986.6	1156.3	1641.2	1968.4	2031.4	2065.4	2082.3	2092.0	2092.0
30°	283.6	402.4	962.4	1146.6	1660.6	1958.7	2009.6	2026.6	2043.5	2058.1	2065.4
32.5°	259.4	356.3	926.0	1127.2	1662.9	1934.4	1970.8	1980.5	2004.7	2038.7	2050.8
35°	237.6	310.3	884.8	1100.5	1648.4	1895.7	1919.9	1929.6	1978.1	2029.0	2046.0
37.5°	215.7	276.4	831.5	1054.5	1626.6	1849.6	1866.5	1883.5	1958.7	2019.3	2038.7
40°	194.0	247.2	768.5	1003.6	1592.7	1793.9	1808.4	1835.0	1934.4	2004.7	2024.1
42.5°	177.0	223.0	700.6	950.2	1549.0	1730.8	1752.6	1791.4	1905.3	1980.5	2002.3
45°	162.4	198.7	627.8	877.5	1493.2	1665.3	1696.8	1750.2	1871.4	1944.2	1963.6
47.5°	147.8	181.8	552.7	802.4	1432.7	1599.9	1641.2	1701.7	1825.4	1895.7	1912.7
50°	135.7	164.8	477.6	722.4	1367.2	1529.6	1578.1	1641.2	1767.2	1832.6	1854.4
52.5°	126.1	150.3	407.2	642.4	1292.0	1456.9	1512.6	1578.1	1696.8	1759.9	1774.5
55°	116.3	138.2	346.7	557.5	1214.5	1379.3	1439.9	1503.0	1619.3	1672.7	1682.3
57.5°	111.5	128.4	295.8	477.6	1132.1	1292.0	1359.9	1418.1	1527.2	1568.4	1578.1
60°	104.2	121.2	257.0	409.7	1042.4	1209.6	1267.9	1326.0	1418.1	1452.1	1459.3
62.5°	96.9	116.3	227.9	344.2	950.2	1112.7	1170.8	1224.2	1301.8	1326.0	1335.7
65°	92.2	111.5	206.1	295.8	855.7	1010.9	1069.0	1115.1	1178.1	1202.3	1207.2
67.5°	87.3	106.7	189.1	254.5	761.1	909.1	952.7	996.4	1044.8	1069.0	1071.5
70°	80.0	101.8	174.6	225.5	664.2	792.6	829.0	875.1	913.9	926.0	933.3
72.5°	75.2	94.5	164.8	203.6	564.8	681.2	715.1	741.7	775.7	787.9	787.9
75°	67.9	84.8	155.2	181.8	463.0	557.5	586.7	613.3	639.9	644.8	637.6
77.5°	60.6	75.2	133.3	152.7	361.2	441.2	465.5	480.0	501.8	506.6	509.1
80°	50.9	65.4	104.2	118.8	261.8	324.8	341.8	353.9	373.3	373.3	378.2
82.5°	38.8	50.9	75.2	84.8	177.0	223.0	237.6	244.9	257.0	257.0	257.0
85°	24.3	31.5	48.5	55.8	106.7	135.7	145.4	147.8	157.6	160.0	160.0
87.5°	12.1	17.0	31.5	33.9	55.8	70.3	70.3	75.2	75.2	72.8	70.3
90°	3.0	5.3	7.7	8.3	13.0	19.3	22.4	20.0	14.9	11.2	11.2
92.5°	11.8	31.9	52.0	57.0	80.1	111.0	126.3	110.7	79.5	56.1	53.9
95°	28.4	65.0	101.8	111.0	197.1	312.0	369.4	329.7	250.1	190.4	183.6
97.5°	49.0	81.5	113.8	122.0	265.6	457.1	552.8	527.6	477.3	439.6	426.7
100°	64.9	94.4	123.8	131.1	290.4	502.9	609.1	610.9	614.6	617.4	602.1
102.5°	78.5	106.0	133.4	140.3	301.9	517.3	625.0	657.0	721.1	769.2	756.1
105°	101.6	124.8	148.0	153.9	310.3	518.9	623.2	695.0	838.6	946.3	939.2
107.5°	125.2	146.9	168.5	173.9	311.9	495.8	587.8	687.9	888.2	1038.4	1040.1
110°	141.1	160.6	180.2	185.1	309.5	475.4	558.3	670.2	894.2	1062.1	1069.4

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	156.8	175.4	194.1	198.7	309.6	457.5	531.5	646.1	875.2	1047.0	1058.2
115°	180.4	197.6	214.8	219.1	312.5	437.0	499.3	609.7	830.4	995.9	1011.5
117.5°	203.7	219.4	234.9	238.8	318.3	424.2	477.1	576.7	775.9	925.3	942.7
120°	217.3	232.0	246.7	250.4	323.0	419.8	468.2	559.2	741.3	877.7	894.6
122.5°	230.6	245.4	260.2	264.0	329.8	417.5	461.5	543.4	707.4	830.3	846.9
125°	251.0	264.4	278.0	281.3	338.9	415.7	454.1	523.7	663.0	767.3	782.6
127.5°	267.5	281.2	294.8	298.2	348.1	414.7	447.9	507.7	627.1	716.8	729.7
130°	276.4	291.1	305.8	309.4	354.8	415.2	445.5	498.7	605.2	685.0	697.0
132.5°	285.5	300.3	315.0	318.6	360.2	415.7	443.5	491.2	586.4	657.8	668.5
135°	299.1	312.5	325.8	329.2	366.1	415.3	440.0	479.9	559.6	619.4	628.7
137.5°	313.0	326.2	339.4	342.7	374.9	417.8	439.3	473.0	540.4	591.0	598.6
140°	324.5	336.7	348.9	351.9	380.4	418.3	437.3	466.4	524.7	568.3	575.4
142.5°	333.3	344.6	355.8	358.7	384.9	419.8	437.3	462.9	514.0	552.4	558.5
145°	347.0	356.8	366.6	369.1	390.9	419.8	434.3	455.2	497.1	528.5	533.1
147.5°	360.5	370.1	379.7	382.1	399.5	422.7	434.3	450.8	483.7	508.4	512.3
150°	369.4	378.1	386.7	388.9	404.1	424.2	434.3	448.3	476.1	496.9	499.9
152.5°	378.5	385.1	391.6	393.3	406.9	425.2	434.3	446.2	470.0	487.7	490.0
155°	392.1	397.0	401.8	403.0	413.4	427.4	434.3	443.8	462.7	476.8	478.4
157.5°	402.2	406.8	411.6	412.8	419.9	429.6	434.3	441.7	456.4	467.4	468.4
160°	408.9	412.6	416.2	417.1	422.9	430.5	434.3	440.6	453.2	462.7	463.3
162.5°	415.7	418.5	421.3	421.9	426.0	431.6	434.3	439.7	450.3	458.2	458.8
165°	423.1	425.5	428.0	428.7	430.6	433.1	434.3	438.2	445.7	451.4	452.1
167.5°	429.8	431.0	432.2	432.5	434.1	436.2	437.3	439.8	444.7	448.5	448.8
170°	434.3	435.5	436.7	437.0	437.1	437.2	437.3	439.8	444.7	448.5	448.5
172.5°	436.7	437.0	437.2	437.3	437.3	437.3	437.3	439.2	443.1	446.1	445.9
175°	440.0	440.0	440.0	440.0	439.1	437.9	437.3	438.5	441.0	442.8	442.8
177.5°	440.0	440.0	440.0	440.0	439.3	438.3	437.9	438.8	440.8	442.3	442.0
180°	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0	440.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	753.9	753.9
2.5°	804.8	800.0
5°	1035.1	1040.0
7.5°	1393.9	1391.4
10°	1733.2	1755.1
12.5°	1980.5	1985.3
15°	2130.8	2140.5
17.5°	2189.0	2191.4
20°	2191.4	2186.6
22.5°	2164.7	2159.9
25°	2133.2	2130.8
27.5°	2104.2	2106.5
30°	2092.0	2099.3
32.5°	2092.0	2104.2
35°	2096.9	2109.0
37.5°	2094.4	2109.0
40°	2084.8	2101.7
42.5°	2058.1	2070.2
45°	2016.9	2031.4
47.5°	1963.6	1973.2
50°	1895.7	1905.3
52.5°	1810.8	1813.3
55°	1709.0	1718.7
57.5°	1599.9	1602.3
60°	1478.7	1486.0
62.5°	1350.3	1350.3
65°	1214.5	1219.3
67.5°	1073.9	1086.0
70°	930.8	933.3
72.5°	790.3	790.3
75°	644.8	647.2
77.5°	506.6	506.6
80°	375.7	378.2
82.5°	259.4	264.2
85°	162.4	162.4
87.5°	75.2	67.9
90°	11.2	11.2
92.5°	44.9	36.0
95°	156.6	129.6
97.5°	375.3	323.9
100°	540.8	479.5
102.5°	703.5	651.0
105°	911.1	882.8
107.5°	1046.9	1053.7
110°	1098.7	1128.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1103.4	1148.5
115°	1074.1	1136.7
117.5°	1012.1	1081.5
120°	962.1	1029.6
122.5°	913.5	979.9
125°	843.9	905.2
127.5°	781.5	833.2
130°	744.7	792.5
132.5°	711.3	754.1
135°	665.5	702.4
137.5°	628.9	659.0
140°	603.6	631.8
142.5°	582.7	607.0
145°	551.5	569.8
147.5°	527.4	542.6
150°	512.4	524.7
152.5°	499.4	508.7
155°	484.6	490.7
157.5°	472.8	477.1
160°	465.8	468.2
162.5°	461.2	463.6
165°	454.6	457.1
167.5°	449.8	450.9
170°	448.5	448.5
172.5°	444.9	444.1
175°	442.8	442.8
177.5°	441.0	440.0
180°	440.0	440.0

(END OF REPORT)