

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: P936504

Luminaire Tested: SQ4-FB-025U-100D-B40-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936504
REPORT IS A COMBINATION OF REPORTS P933455 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-100D-B40-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

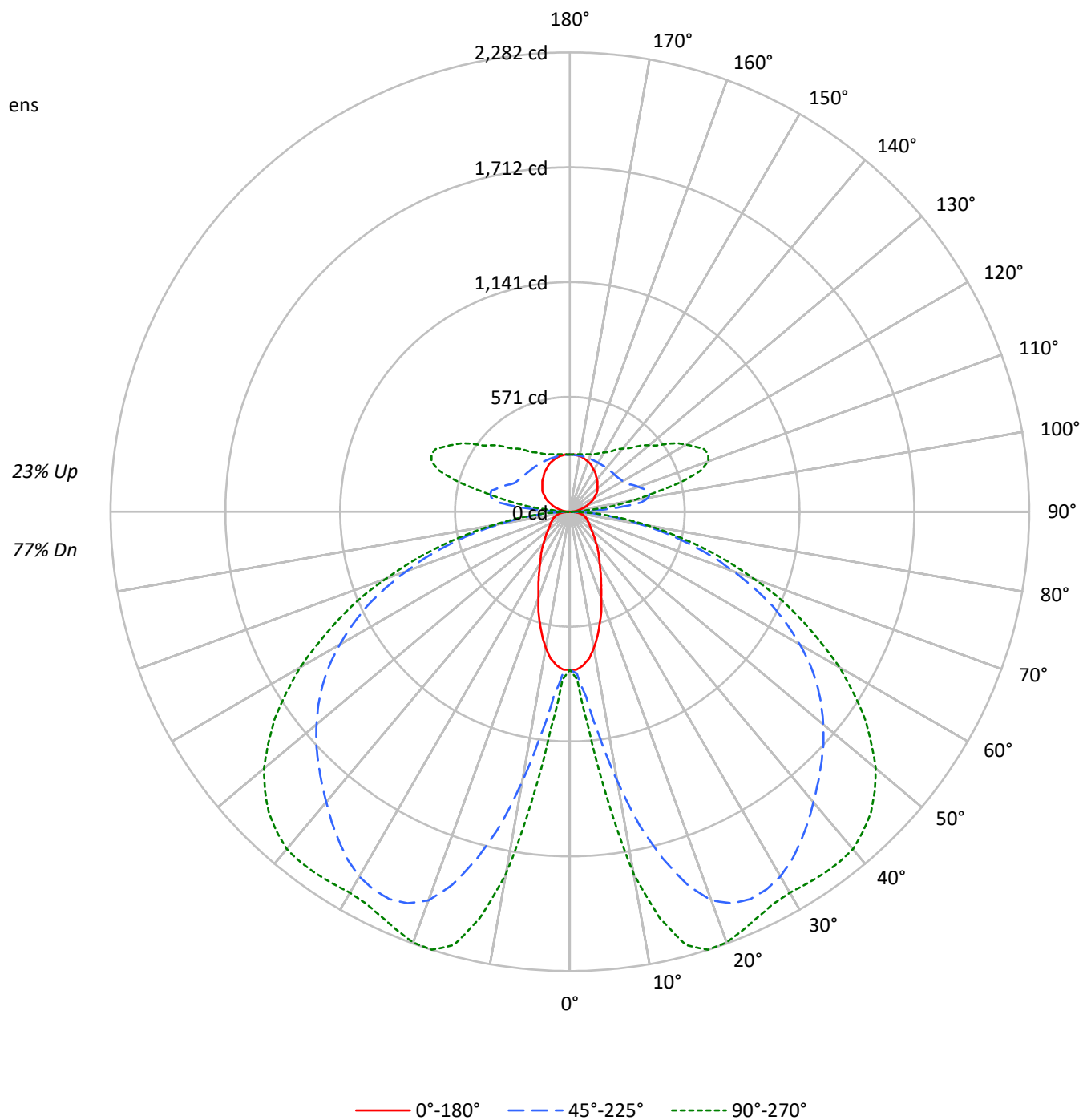
Lumens per Lamp: N/A
Luminaire Lumens: 7920.8 lumens
Efficiency: N/A
Efficacy: 102.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 77.6
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	113	113	113	113	108	108	108	108	98	98	98	89	89	89	81	81	81
1	103	98	94	90	98	94	90	86	85	82	79	77	75	73	70	68	66
2	93	85	78	72	88	81	75	69	73	68	64	67	63	59	61	57	55
3	84	74	65	59	80	70	63	57	64	58	53	58	53	49	53	49	45
4	77	65	56	49	73	62	54	47	56	50	44	51	46	41	47	42	38
5	70	57	48	42	66	55	46	40	50	43	38	46	40	35	41	37	33
6	64	51	42	36	61	49	41	35	45	38	32	41	35	30	37	32	28
7	59	46	37	31	56	44	36	30	40	33	28	37	31	27	34	29	25
8	55	42	33	27	52	40	32	26	37	30	25	34	28	23	31	26	22
9	51	38	30	24	49	36	29	23	33	27	22	31	25	21	28	23	20
10	48	35	27	21	45	33	26	21	31	24	20	28	23	19	26	21	17

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3642	3642	3642
5°	3558	4209	4895
10°	3227	6135	8115
15°	2743	8015	9799
20°	2233	9289	9986
25°	1863	9720	9783
30°	1571	9782	9765
35°	1389	9619	10017
40°	1210	9408	10278
45°	1096	9254	10319
50°	1005	9115	10147
55°	962	8911	9698
60°	985	8519	8988
65°	1025	7925	8012
70°	1092	6911	6768
75°	1211	5634	5282
80°	1322	3907	3559
85°	1174	2074	1822

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°	101.5	1.3
10°-20°	450.0	5.7
20°-30°	787.1	9.9
30°-40°	1013.2	12.8
40°-50°	1131.7	14.3
50°-60°	1083.9	13.7
60°-70°	859.0	10.8
70°-80°	505.1	6.4
80°-90°	141.4	1.8
90°-100°	138.9	1.8
100°-110°	365.3	4.6
110°-120°	378.8	4.8
120°-130°	303.8	3.8
130°-140°	238.4	3.0
140°-150°	183.0	2.3
150°-160°	131.8	1.7
160°-170°	80.6	1.0
170°-180°	27.2	0.3
0°-30°	1338.6	16.9
0°-40°	2351.8	29.7
0°-60°	4567.4	57.7
0°-90°	6073.0	76.7
90°-120°	883.0	11.1
90°-150°	1608.2	20.3
90°-180°	1848.0	23.3
0°-180°	7920.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	785	785	785	785	785	
5°	765	820	924	1045	1083	71
15°	573	1058	1782	2160	2228	159
25°	366	1199	2122	2216	2218	169
35°	247	1146	1999	2112	2196	154
45°	169	914	1767	2024	2115	131
55°	121	580	1499	1741	1789	110
65°	96	308	1113	1252	1270	95
75°	71	189	611	671	674	74
85°	25	58	152	167	169	27
90°	2	5	14	7	7	3
95°	18	72	239	123	84	20
105°	66	100	404	613	572	70
115°	117	142	324	645	736	115
125°	163	182	294	497	587	144
135°	194	213	285	401	455	150
145°	225	239	281	342	369	141
155°	254	261	281	309	318	117
165°	274	278	281	292	296	77
175°	285	285	283	287	287	27
180°	285	285	285	285	285	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9	784.9
2.5°	784.9	784.9	790.0	792.5	797.5	800.0	805.1	810.1	825.3	827.8	832.9
5°	764.7	774.8	807.6	820.2	855.6	903.5	923.7	956.5	1024.6	1044.9	1057.5
7.5°	734.4	757.1	837.9	858.1	946.4	1072.6	1125.6	1196.2	1304.8	1357.8	1400.7
10°	686.5	734.4	878.3	926.3	1070.1	1261.8	1360.3	1458.8	1622.7	1696.0	1723.7
12.5°	633.5	711.7	921.2	986.8	1193.8	1473.9	1592.5	1701.0	1887.7	1986.2	2001.3
15°	572.9	678.9	961.6	1057.5	1325.0	1650.5	1781.7	1915.5	2089.6	2160.3	2178.0
17.5°	519.9	653.7	999.4	1100.4	1425.9	1809.5	1943.3	2054.3	2195.6	2243.6	2256.3
20°	454.3	613.3	1024.6	1155.8	1531.9	1925.7	2054.3	2140.2	2236.0	2266.3	2271.4
22.5°	406.4	570.3	1039.8	1176.1	1602.6	1996.3	2104.8	2172.9	2238.6	2248.6	2251.2
25°	366.0	522.4	1037.2	1198.8	1663.1	2039.2	2122.5	2172.9	2210.8	2215.9	2215.9
27.5°	328.0	469.4	1027.2	1203.9	1708.6	2049.3	2114.9	2150.3	2167.9	2178.0	2178.0
30°	295.3	419.0	1001.9	1193.8	1728.7	2039.2	2092.2	2109.9	2127.5	2142.6	2150.3
32.5°	270.1	371.0	964.1	1173.5	1731.3	2014.0	2051.8	2061.9	2087.2	2122.5	2135.1
35°	247.3	323.1	921.2	1145.8	1716.1	1973.6	1998.8	2008.9	2059.4	2112.4	2130.0
37.5°	224.6	287.7	865.6	1097.9	1693.4	1925.7	1943.3	1961.0	2039.2	2102.2	2122.5
40°	201.9	257.5	800.0	1044.9	1658.1	1867.6	1882.7	1910.5	2014.0	2087.2	2107.3
42.5°	184.2	232.2	729.3	989.3	1612.7	1802.0	1824.7	1865.0	1983.6	2061.9	2084.7
45°	169.1	206.9	653.7	913.6	1554.6	1733.8	1766.7	1822.1	1948.3	2024.0	2044.3
47.5°	153.9	189.3	575.4	835.3	1491.5	1665.7	1708.6	1771.7	1900.4	1973.6	1991.3
50°	141.3	171.6	497.2	752.1	1423.4	1592.5	1643.0	1708.6	1839.8	1908.0	1930.6
52.5°	131.2	156.4	424.0	668.8	1345.1	1516.7	1574.8	1643.0	1766.7	1832.3	1847.4
55°	121.1	143.8	360.9	580.4	1264.4	1436.0	1499.1	1564.8	1685.9	1741.3	1751.5
57.5°	116.1	133.8	307.9	497.2	1178.6	1345.1	1415.8	1476.4	1590.0	1632.9	1643.0
60°	108.5	126.2	267.5	426.5	1085.3	1259.4	1319.9	1380.5	1476.4	1511.8	1519.3
62.5°	100.9	121.1	237.2	358.4	989.3	1158.4	1219.0	1274.5	1355.2	1380.5	1390.6
65°	95.9	116.1	214.5	307.9	890.9	1052.4	1113.0	1160.9	1226.5	1251.8	1256.9
67.5°	90.8	111.1	196.8	265.0	792.5	946.4	991.9	1037.2	1087.7	1113.0	1115.5
70°	83.3	106.0	181.7	234.7	691.5	825.3	863.1	911.1	951.5	964.1	971.6
72.5°	78.2	98.5	171.6	212.0	588.0	709.2	744.5	772.3	807.6	820.2	820.2
75°	70.7	88.3	161.5	189.3	482.1	580.4	610.7	638.5	666.3	671.4	663.7
77.5°	63.1	78.2	138.8	159.0	376.1	459.4	484.6	499.7	522.4	527.4	530.0
80°	53.0	68.2	108.5	123.7	272.6	338.2	355.8	368.4	388.7	388.7	393.7
82.5°	40.4	53.0	78.2	88.3	184.2	232.2	247.3	254.9	267.5	267.5	267.5
85°	25.2	32.9	50.5	58.1	111.1	141.3	151.5	153.9	164.1	166.6	166.6
87.5°	12.6	17.7	32.9	35.3	58.1	73.2	73.2	78.2	78.2	75.7	73.2
90°	1.9	3.4	5.0	5.3	8.4	12.5	14.5	12.9	9.6	7.3	7.3
92.5°	7.6	20.6	33.7	37.0	52.0	71.9	81.8	71.7	51.6	36.4	35.0
95°	18.3	42.1	66.0	71.9	127.7	202.1	239.3	213.5	162.1	123.4	119.0
97.5°	31.8	52.8	73.7	79.0	172.0	296.0	358.1	341.9	309.3	284.9	276.6
100°	42.1	61.1	80.1	84.9	188.1	325.8	394.6	395.8	398.2	400.0	390.1
102.5°	50.9	68.7	86.4	90.8	195.6	335.2	405.0	425.7	467.2	498.3	489.8
105°	65.8	80.9	96.0	99.7	201.1	336.3	403.9	450.4	543.4	613.1	608.5
107.5°	81.1	95.1	109.2	112.7	202.1	321.3	380.9	445.7	575.5	672.8	673.9
110°	91.5	104.1	116.8	119.9	200.5	308.0	361.8	434.2	579.3	688.1	692.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	101.6	113.6	125.7	128.7	200.6	296.4	344.4	418.6	567.0	678.3	685.7
115°	116.9	128.0	139.1	141.9	202.5	283.2	323.5	395.0	538.0	645.3	655.4
117.5°	132.0	142.1	152.2	154.8	206.3	274.8	309.1	373.7	502.7	599.5	610.8
120°	140.8	150.3	159.9	162.3	209.3	272.1	303.4	362.3	480.3	568.7	579.6
122.5°	149.4	159.0	168.7	171.0	213.7	270.6	299.0	352.1	458.3	538.0	548.7
125°	162.6	171.4	180.1	182.3	219.6	269.4	294.2	339.3	429.6	497.2	507.1
127.5°	173.3	182.1	191.0	193.2	225.6	268.6	290.2	329.0	406.4	464.5	472.9
130°	179.1	188.6	198.1	200.5	229.9	269.1	288.7	323.2	392.1	443.8	451.5
132.5°	185.0	194.5	204.0	206.4	233.4	269.4	287.4	318.2	379.9	426.2	433.2
135°	193.8	202.5	211.2	213.3	237.2	269.1	285.1	310.9	362.6	401.4	407.3
137.5°	202.7	211.3	219.9	222.1	243.0	270.7	284.7	306.6	350.2	383.0	387.8
140°	210.2	218.1	226.0	228.1	246.5	271.0	283.3	302.3	340.0	368.2	372.8
142.5°	216.0	223.3	230.6	232.4	249.4	272.1	283.3	300.0	333.1	357.9	361.8
145°	224.8	231.2	237.5	239.1	253.3	272.1	281.4	295.0	322.1	342.5	345.4
147.5°	233.6	239.8	246.0	247.5	258.8	273.9	281.4	292.1	313.4	329.4	331.9
150°	239.3	245.0	250.5	251.9	261.8	274.8	281.4	290.4	308.5	321.9	323.9
152.5°	245.2	249.4	253.7	254.8	263.7	275.5	281.4	289.1	304.5	316.0	317.5
155°	254.0	257.2	260.3	261.1	267.9	277.0	281.4	287.6	299.8	308.9	309.9
157.5°	260.5	263.6	266.6	267.4	272.1	278.3	281.4	286.2	295.7	302.8	303.5
160°	264.9	267.3	269.7	270.3	274.0	279.0	281.4	285.5	293.7	299.8	300.2
162.5°	269.3	271.1	272.8	273.3	276.0	279.6	281.4	284.9	291.8	296.9	297.3
165°	274.2	275.8	277.4	277.8	279.1	280.7	281.4	283.9	288.8	292.5	292.9
167.5°	278.6	279.3	280.1	280.3	281.3	282.7	283.3	285.0	288.2	290.6	290.8
170°	281.4	282.2	283.0	283.2	283.3	283.3	283.3	285.0	288.2	290.6	290.6
172.5°	283.0	283.2	283.3	283.3	283.3	283.3	283.3	284.6	287.2	289.1	288.9
175°	285.1	285.1	285.1	285.1	284.5	283.7	283.3	284.1	285.7	287.0	287.0
177.5°	285.1	285.1	285.1	285.1	284.6	284.0	283.7	284.4	285.6	286.6	286.4
180°	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1	285.1

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	784.9	784.9
2.5°	837.9	832.9
5°	1077.6	1082.7
7.5°	1451.1	1448.6
10°	1804.5	1827.2
12.5°	2061.9	2067.0
15°	2218.4	2228.5
17.5°	2278.9	2281.5
20°	2281.5	2276.4
22.5°	2253.7	2248.6
25°	2220.9	2218.4
27.5°	2190.6	2193.2
30°	2178.0	2185.6
32.5°	2178.0	2190.6
35°	2183.0	2195.6
37.5°	2180.6	2195.6
40°	2170.4	2188.1
42.5°	2142.6	2155.2
45°	2099.8	2114.9
47.5°	2044.3	2054.3
50°	1973.6	1983.6
52.5°	1885.3	1887.7
55°	1779.3	1789.4
57.5°	1665.7	1668.2
60°	1539.5	1547.1
62.5°	1405.8	1405.8
65°	1264.4	1269.5
67.5°	1118.0	1130.6
70°	969.1	971.6
72.5°	822.7	822.7
75°	671.4	673.8
77.5°	527.4	527.4
80°	391.2	393.7
82.5°	270.1	275.1
85°	169.1	169.1
87.5°	78.2	70.7
90°	7.3	7.3
92.5°	29.1	23.3
95°	101.5	83.9
97.5°	243.1	209.8
100°	350.4	310.7
102.5°	455.8	421.8
105°	590.3	571.9
107.5°	678.3	682.7
110°	711.9	731.0



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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	714.9	744.1
115°	696.0	736.5
117.5°	655.8	700.8
120°	623.3	667.1
122.5°	591.8	634.9
125°	546.8	586.6
127.5°	506.3	539.9
130°	482.5	513.4
132.5°	460.9	488.6
135°	431.2	455.1
137.5°	407.4	427.0
140°	391.1	409.4
142.5°	377.6	393.3
145°	357.4	369.2
147.5°	341.7	351.6
150°	332.0	340.0
152.5°	323.6	329.6
155°	313.9	317.9
157.5°	306.4	309.1
160°	301.8	303.4
162.5°	298.8	300.3
165°	294.5	296.1
167.5°	291.5	292.1
170°	290.6	290.6
172.5°	288.3	287.7
175°	287.0	287.0
177.5°	285.7	285.1
180°	285.1	285.1

(END OF REPORT)