

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: P937499

Luminaire Tested: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937499
REPORT IS A COMBINATION OF REPORTS P933573 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-6
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

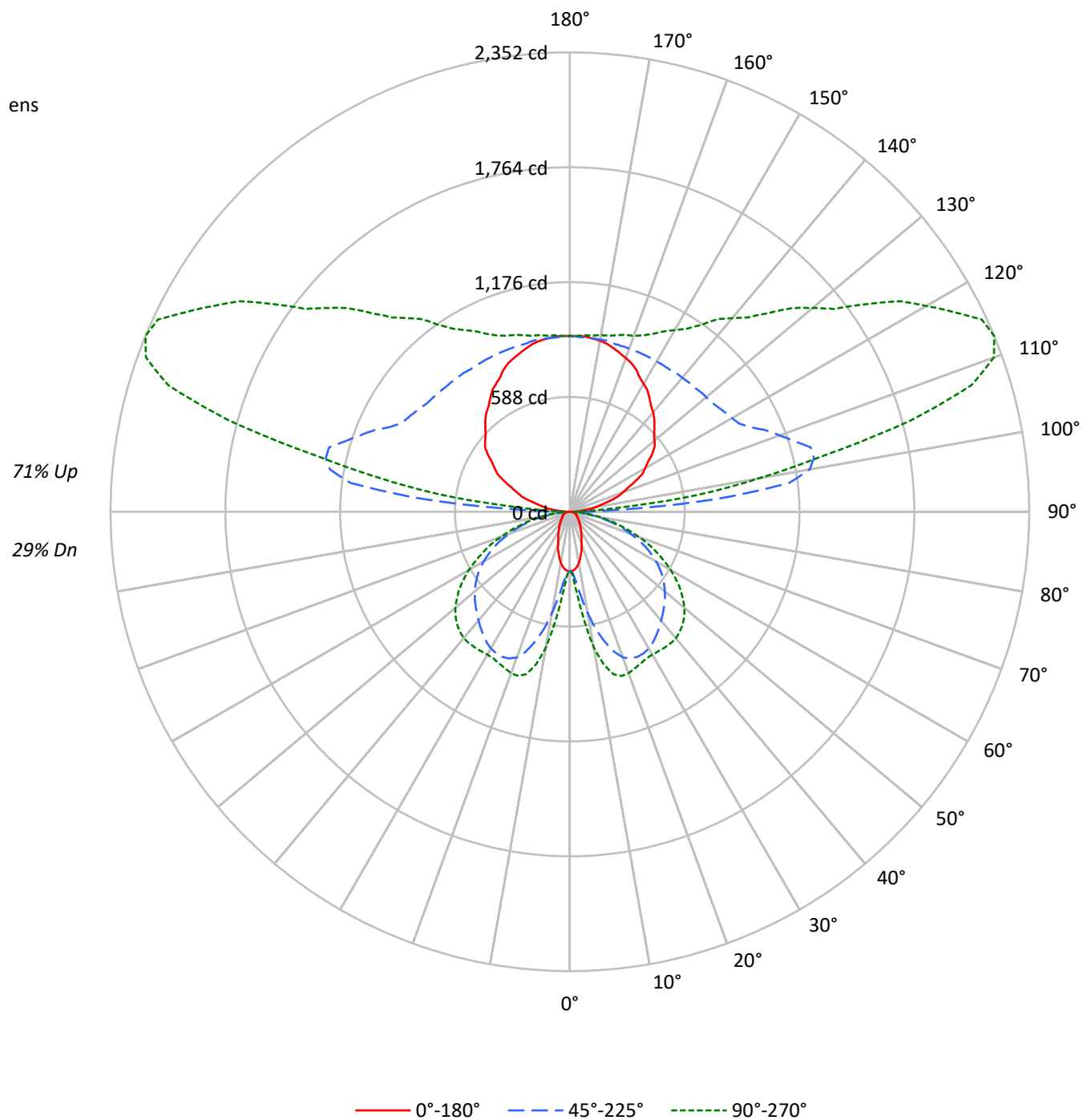
Lumens per Lamp: N/A
Luminaire Lumens: 8188.0 lumens
Efficiency: N/A
Efficacy: 132.5 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 61.8
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

TEST NUMBER: P937499

CATALOG NUMBER: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-6

Luminous Intensity Polar Plot



TEST NUMBER: P937499

CATALOG NUMBER: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-6

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	28	26	25
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	18
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	11	9
10	43	31	24	19	38	28	22	18	22	18	14	17	14	11	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	1875	1875	1875
5°	1832	2167	2520
10°	1660	3158	4178
15°	1410	4124	5046
20°	1148	4779	5143
25°	958	4999	5038
30°	807	5029	5028
35°	713	4944	5158
40°	621	4835	5293
45°	562	4754	5314
50°	515	4681	5225
55°	493	4575	4994
60°	505	4372	4628
65°	523	4064	4125
70°	557	3541	3486
75°	614	2886	2721
80°	664	1998	1832
85°	584	1059	938

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 5314 cd/sqm

TEST NUMBER: P937499

CATALOG NUMBER: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.2	0.5
10°-20°	173.8	2.1
20°-30°	304.0	3.7
30°-40°	391.3	4.8
40°-50°	437.1	5.3
50°-60°	418.6	5.1
60°-70°	331.7	4.1
70°-80°	195.1	2.4
80°-90°	57.6	0.7
90°-100°	439.1	5.4
100°-110°	1154.4	14.1
110°-120°	1197.0	14.6
120°-130°	960.2	11.7
130°-140°	753.4	9.2
140°-150°	578.2	7.1
150°-160°	416.4	5.1
160°-170°	254.8	3.1
170°-180°	86.1	1.1
0°-30°	517.0	6.3
0°-40°	908.3	11.1
0°-60°	1764.0	21.5
0°-90°	2348.4	28.7
90°-120°	2790.5	34.1
90°-150°	5082.3	62.1
90°-180°	5840.0	71.3
0°-180°	8188.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	303	303	303	303	303	
5°	295	317	357	404	418	27
15°	221	408	688	834	861	62
25°	141	463	820	856	857	65
35°	96	442	772	816	848	60
45°	65	353	682	782	817	51
55°	47	224	579	672	691	43
65°	37	119	430	483	490	37
75°	27	73	236	259	260	29
85°	10	22	58	64	65	10
90°	6	17	46	23	23	6
95°	58	227	756	390	265	64
105°	208	315	1276	1938	1808	220
115°	369	449	1022	2039	2328	365
125°	514	576	930	1571	1854	456
135°	612	674	901	1268	1438	474
145°	710	756	889	1082	1167	445
155°	803	825	889	976	1005	369
165°	866	878	889	924	936	244
175°	901	901	895	907	907	86
180°	901	901	901	901	901	

TEST NUMBER: P937499

CATALOG NUMBER: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1	303.1
2.5°	303.1	303.1	305.0	306.0	308.0	309.0	311.0	312.9	318.7	319.7	321.6
5°	295.4	299.2	311.9	316.8	330.4	348.9	356.7	369.4	395.7	403.5	408.4
7.5°	283.6	292.4	323.5	331.4	365.5	414.2	434.7	462.0	503.9	524.4	541.0
10°	265.1	283.6	339.2	357.8	413.3	487.3	525.4	563.4	626.7	654.9	665.7
12.5°	244.7	274.9	355.7	381.1	461.1	569.2	615.0	657.0	729.1	767.1	772.9
15°	221.2	262.2	371.3	408.4	511.7	637.4	688.1	739.8	807.1	834.3	841.2
17.5°	200.8	252.4	386.0	425.0	550.7	698.8	750.5	793.4	848.0	866.5	871.3
20°	175.5	236.8	395.7	446.4	591.7	743.7	793.4	826.6	863.6	875.3	877.2
22.5°	156.9	220.3	401.6	454.2	618.9	770.9	812.9	839.2	864.5	868.4	869.4
25°	141.4	201.7	400.6	463.0	642.4	787.5	819.7	839.2	853.8	855.7	855.7
27.5°	126.7	181.3	396.7	464.9	659.9	791.5	816.8	830.4	837.2	841.2	841.2
30°	114.1	161.8	386.9	461.1	667.6	787.5	808.0	814.8	821.6	827.5	830.4
32.5°	104.3	143.3	372.3	453.2	668.6	777.8	792.4	796.3	806.0	819.7	824.6
35°	95.5	124.8	355.7	442.5	662.8	762.2	771.9	775.9	795.4	815.8	822.6
37.5°	86.7	111.1	334.3	424.0	654.0	743.7	750.5	757.4	787.5	811.9	819.7
40°	78.0	99.4	309.0	403.5	640.4	721.2	727.1	737.8	777.8	806.0	813.9
42.5°	71.1	89.6	281.7	382.1	622.8	695.9	704.7	720.3	766.1	796.3	805.0
45°	65.3	79.9	252.4	352.8	600.4	669.6	682.3	703.7	752.4	781.7	789.4
47.5°	59.5	73.1	222.2	322.6	576.1	643.3	659.9	684.2	733.9	762.2	769.0
50°	54.6	66.3	192.1	290.4	549.7	615.0	634.5	659.9	710.6	736.8	745.6
52.5°	50.7	60.5	163.8	258.3	519.5	585.8	608.2	634.5	682.3	707.7	713.5
55°	46.8	55.5	139.3	224.1	488.3	554.6	579.0	604.3	651.1	672.5	676.5
57.5°	44.9	51.6	118.9	192.1	455.1	519.5	546.8	570.2	614.1	630.6	634.5
60°	42.0	48.7	103.3	164.7	419.1	486.3	509.8	533.1	570.2	583.8	586.7
62.5°	39.0	46.8	91.7	138.4	382.1	447.4	470.7	492.3	523.4	533.1	537.0
65°	37.0	44.9	82.8	118.9	344.1	406.4	429.8	448.4	473.6	483.4	485.4
67.5°	35.1	42.9	76.1	102.3	306.0	365.5	383.0	400.6	420.1	429.8	430.8
70°	32.2	40.9	70.2	90.6	267.1	318.7	333.3	351.8	367.4	372.3	375.3
72.5°	30.2	38.0	66.3	81.9	227.1	273.8	287.5	298.3	311.9	316.8	316.8
75°	27.3	34.1	62.4	73.1	186.1	224.1	235.9	246.6	257.3	259.3	256.3
77.5°	24.3	30.2	53.6	61.4	145.3	177.4	187.1	193.0	201.7	203.7	204.7
80°	20.4	26.4	42.0	47.8	105.2	130.6	137.4	142.3	150.1	150.1	152.0
82.5°	15.6	20.4	30.2	34.1	71.1	89.6	95.5	98.5	103.3	103.3	103.3
85°	9.8	12.7	19.5	22.4	42.9	54.6	58.5	59.5	63.4	64.3	64.3
87.5°	4.8	6.8	12.7	13.7	22.4	28.3	28.3	30.2	30.2	29.3	28.3
90°	6.0	10.9	15.7	17.0	26.6	39.5	45.9	40.8	30.6	23.0	23.0
92.5°	24.2	65.3	106.4	116.7	164.1	227.1	258.7	226.7	162.8	114.8	110.3
95°	58.0	133.2	208.5	227.3	403.7	638.8	756.3	674.9	512.0	389.9	376.1
97.5°	100.4	166.8	233.1	249.7	543.7	935.8	1131.8	1080.3	977.4	900.2	873.8
100°	133.0	193.2	253.4	268.4	594.7	1029.7	1247.2	1251.0	1258.5	1264.2	1232.8
102.5°	160.9	217.1	273.2	287.2	618.1	1059.3	1279.9	1345.5	1476.6	1574.9	1548.1
105°	207.9	255.5	303.1	315.0	635.5	1062.7	1276.3	1423.3	1717.2	1937.6	1923.2
107.5°	256.3	300.7	345.1	356.1	638.7	1015.3	1203.7	1408.7	1818.7	2126.3	2129.8
110°	289.0	329.0	369.1	379.1	633.8	973.5	1143.2	1372.4	1830.8	2174.6	2189.6

TEST NUMBER: P937499

CATALOG NUMBER: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	321.0	359.2	397.4	406.9	634.0	936.8	1088.2	1322.8	1792.0	2143.8	2166.9
115°	369.4	404.6	439.7	448.6	639.8	894.8	1022.3	1248.3	1700.3	2039.3	2071.3
117.5°	417.2	449.1	481.1	489.1	651.7	868.5	976.9	1180.9	1588.8	1894.7	1930.2
120°	445.0	475.1	505.1	512.7	661.4	859.7	958.8	1145.2	1517.8	1797.4	1831.9
122.5°	472.2	502.5	532.9	540.5	675.3	855.0	945.0	1112.8	1448.4	1700.0	1734.1
125°	513.9	541.6	569.3	576.2	694.1	851.3	929.9	1072.4	1357.5	1571.3	1602.7
127.5°	547.8	575.7	603.7	610.7	712.8	849.0	917.2	1039.5	1284.3	1467.9	1494.4
130°	565.9	596.0	626.1	633.6	726.6	850.4	912.3	1021.2	1239.2	1402.6	1427.0
132.5°	584.6	614.7	644.8	652.3	737.6	851.3	908.0	1005.6	1200.7	1347.0	1368.9
135°	612.4	639.8	667.3	674.1	749.7	850.4	900.8	982.5	1145.8	1268.4	1287.3
137.5°	640.8	667.9	695.2	701.9	767.8	855.7	899.6	968.7	1106.8	1210.4	1225.8
140°	664.4	689.4	714.4	720.6	778.9	856.5	895.4	955.0	1074.3	1163.8	1178.2
142.5°	682.6	705.7	728.8	734.6	788.2	859.6	895.4	947.8	1052.5	1131.1	1143.5
145°	710.4	730.5	750.7	755.7	800.3	859.7	889.3	932.2	1017.9	1082.2	1091.6
147.5°	738.2	757.8	777.3	782.3	817.9	865.5	889.3	923.1	990.5	1041.1	1048.8
150°	756.3	774.0	791.8	796.2	827.2	868.6	889.3	917.8	974.7	1017.4	1023.7
152.5°	775.1	788.6	801.9	805.3	833.3	870.6	889.3	913.7	962.3	998.7	1003.5
155°	802.9	812.8	822.7	825.2	846.6	875.1	889.3	908.7	947.4	976.4	979.6
157.5°	823.5	833.1	842.7	845.2	859.9	879.6	889.3	904.4	934.5	957.1	959.3
160°	837.3	844.9	852.4	854.3	866.0	881.6	889.3	902.2	928.0	947.4	948.7
162.5°	851.3	856.9	862.5	864.0	872.4	883.7	889.3	900.2	922.0	938.3	939.4
165°	866.4	871.4	876.6	877.8	881.7	886.8	889.3	897.1	912.7	924.4	925.7
167.5°	880.2	882.7	885.1	885.7	888.9	893.2	895.4	900.5	910.7	918.3	918.9
170°	889.3	891.8	894.2	894.8	895.0	895.3	895.4	900.5	910.7	918.3	918.3
172.5°	894.2	894.7	895.3	895.4	895.4	895.4	895.4	899.4	907.5	913.5	913.0
175°	900.8	900.8	900.8	900.8	898.9	896.5	895.4	897.9	903.0	906.9	906.9
177.5°	900.8	900.8	900.8	900.8	899.4	897.6	896.6	898.7	902.6	905.6	905.0
180°	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8	900.8

TEST NUMBER: P937499

CATALOG NUMBER: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	303.1	303.1
2.5°	323.5	321.6
5°	416.2	418.1
7.5°	560.5	559.5
10°	696.9	705.6
12.5°	796.3	798.3
15°	856.8	860.7
17.5°	880.1	881.1
20°	881.1	879.2
22.5°	870.4	868.4
25°	857.8	856.8
27.5°	846.0	847.0
30°	841.2	844.1
32.5°	841.2	846.0
35°	843.1	848.0
37.5°	842.2	848.0
40°	838.2	845.1
42.5°	827.5	832.4
45°	811.0	816.8
47.5°	789.4	793.4
50°	762.2	766.1
52.5°	728.1	729.1
55°	687.1	691.1
57.5°	643.3	644.3
60°	594.6	597.5
62.5°	542.9	542.9
65°	488.3	490.2
67.5°	431.8	436.6
70°	374.3	375.3
72.5°	317.7	317.7
75°	259.3	260.3
77.5°	203.7	203.7
80°	151.1	152.0
82.5°	104.3	106.2
85°	65.3	65.3
87.5°	30.2	27.3
90°	23.0	23.0
92.5°	92.0	73.7
95°	320.7	265.4
97.5°	768.5	663.2
100°	1107.3	981.8
102.5°	1440.5	1333.1
105°	1865.4	1807.7
107.5°	2143.8	2157.8
110°	2249.9	2310.1



TEST NUMBER: P937499

CATALOG NUMBER: SQ4-FB-100U-050D-B35-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2259.3	2351.8
115°	2199.4	2327.6
117.5°	2072.4	2214.6
120°	1970.1	2108.2
122.5°	1870.4	2006.6
125°	1728.1	1853.6
127.5°	1600.3	1706.1
130°	1524.9	1622.7
132.5°	1456.5	1544.1
135°	1362.8	1438.3
137.5°	1287.6	1349.4
140°	1236.1	1293.8
142.5°	1193.3	1243.0
145°	1129.3	1166.9
147.5°	1080.0	1111.2
150°	1049.0	1074.3
152.5°	1022.6	1041.7
155°	992.2	1004.8
157.5°	968.1	976.9
160°	953.8	958.8
162.5°	944.3	949.1
165°	930.8	935.9
167.5°	921.0	923.2
170°	918.3	918.3
172.5°	911.2	909.3
175°	906.9	906.9
177.5°	902.9	900.8
180°	900.8	900.8

(END OF REPORT)