

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: P936807

Luminaire Tested: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936807
REPORT IS A COMBINATION OF REPORTS P933478 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-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

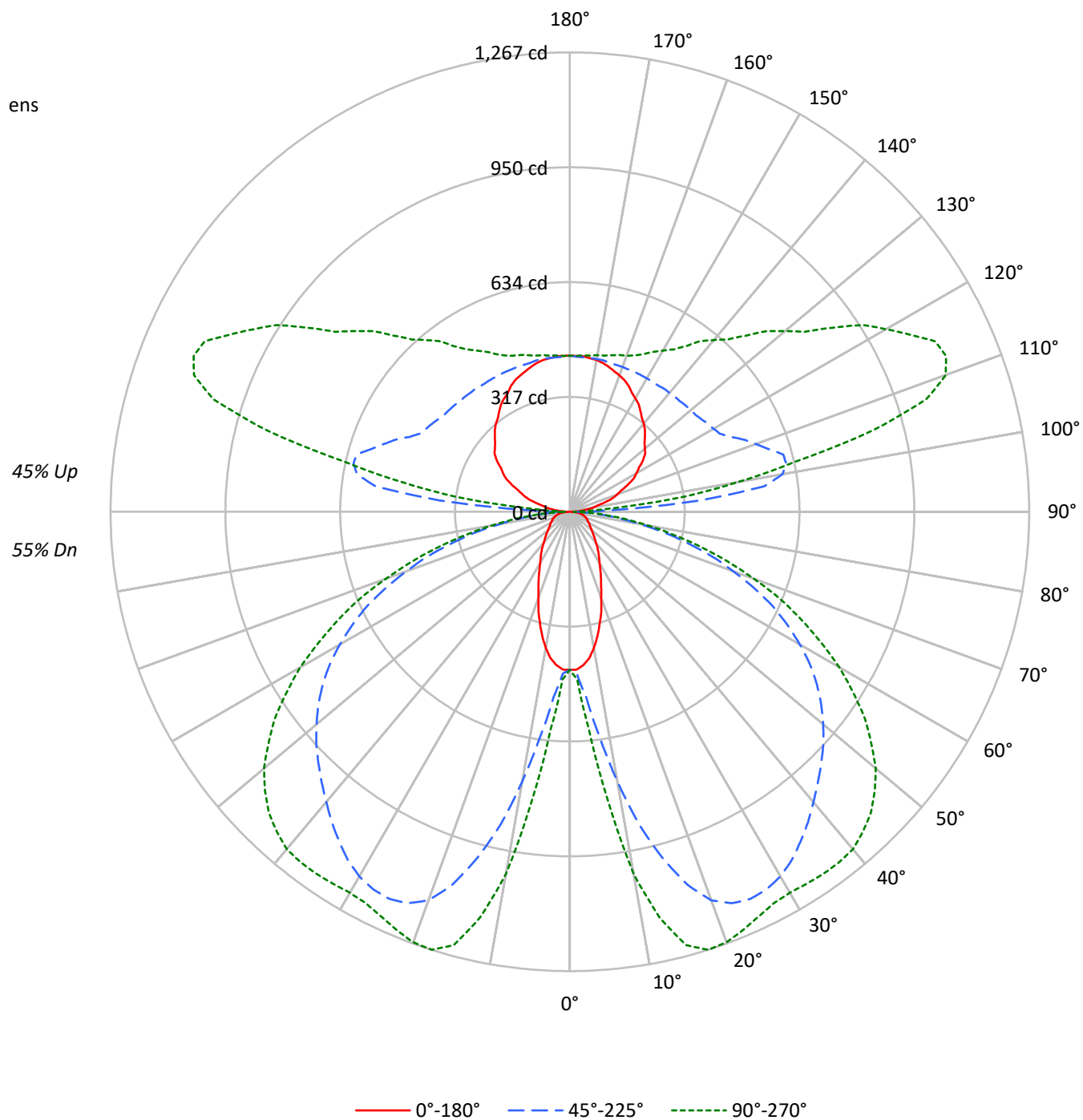
Lumens per Lamp: N/A
Luminaire Lumens: 6161.6 lumens
Efficiency: N/A
Efficacy: 112.8 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 54.6
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

TEST NUMBER: P936807

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-6

Luminous Intensity Polar Plot



TEST NUMBER: P936807

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60
1	98	94	89	86	91	87	83	80	75	72	69	63	61	59	53	51	50
2	89	81	74	69	82	75	70	65	65	60	56	55	51	49	45	43	41
3	81	71	63	57	74	66	59	53	56	51	47	48	44	40	40	37	34
4	73	62	54	47	68	58	50	45	50	44	39	42	38	34	35	32	29
5	67	55	46	40	62	51	44	38	44	38	33	37	33	29	31	28	25
6	62	49	40	34	57	46	38	32	39	33	29	33	29	25	28	24	21
7	57	44	36	30	52	41	34	28	35	29	25	30	25	22	25	22	19
8	53	40	32	26	49	37	30	25	32	26	22	27	23	19	23	19	16
9	49	36	28	23	45	34	27	22	29	23	19	25	20	17	21	17	15
10	46	33	25	20	42	31	24	19	27	21	17	23	18	15	19	16	13

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

TEST NUMBER: P936807

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	0.9
10°-20°	249.8	4.1
20°-30°	437.0	7.1
30°-40°	562.5	9.1
40°-50°	628.3	10.2
50°-60°	601.7	9.8
60°-70°	476.9	7.7
70°-80°	280.4	4.6
80°-90°	79.5	1.3
90°-100°	209.7	3.4
100°-110°	551.4	8.9
110°-120°	571.7	9.3
120°-130°	458.6	7.4
130°-140°	359.8	5.8
140°-150°	276.2	4.5
150°-160°	198.9	3.2
160°-170°	121.7	2.0
170°-180°	41.1	0.7
0°-30°	743.1	12.1
0°-40°	1305.6	21.2
0°-60°	2535.6	41.2
0°-90°	3372.4	54.7
90°-120°	1332.8	21.6
90°-150°	2427.4	39.4
90°-180°	2789.0	45.3
0°-180°	6161.6	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°	3	8	22	11	11	3
95°	28	108	361	186	127	31
105°	99	150	610	926	863	105
115°	176	214	488	974	1112	174
125°	246	275	444	750	885	218
135°	292	322	430	606	687	226
145°	339	361	425	517	557	213
155°	384	394	425	466	480	176
165°	414	419	425	442	447	117
175°	430	430	428	433	433	41
180°	430	430	430	430	430	

TEST NUMBER: P936807

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-6

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°	2.9	5.2	7.6	8.1	12.7	18.9	21.9	19.5	14.6	10.9	10.9
92.5°	11.6	31.2	50.8	55.8	78.4	108.5	123.6	108.3	77.7	54.8	52.7
95°	27.7	63.6	99.6	108.5	192.8	305.1	361.3	322.4	244.6	186.2	179.6
97.5°	47.9	79.7	111.3	119.3	259.7	447.0	540.6	516.0	466.8	429.9	417.3
100°	63.5	92.3	121.0	128.2	284.0	491.8	595.7	597.5	601.1	603.8	588.9
102.5°	76.8	103.7	130.5	137.2	295.2	505.9	611.3	642.6	705.3	752.2	739.4
105°	99.4	122.1	144.8	150.5	303.5	507.5	609.5	679.8	820.1	925.5	918.6
107.5°	122.4	143.6	164.8	170.1	305.0	484.9	574.9	672.8	868.6	1015.5	1017.2
110°	138.0	157.1	176.2	181.0	302.7	464.9	546.0	655.5	874.5	1038.7	1045.9

TEST NUMBER: P936807

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	153.4	171.6	189.8	194.4	302.8	447.5	519.8	631.9	855.9	1023.9	1035.0
115°	176.4	193.2	210.1	214.3	305.6	427.4	488.3	596.3	812.1	974.0	989.3
117.5°	199.2	214.5	229.8	233.6	311.3	414.9	466.6	564.0	758.9	905.0	922.0
120°	212.5	226.9	241.3	244.9	315.9	410.6	457.9	547.0	725.0	858.4	875.0
122.5°	225.6	240.0	254.5	258.2	322.5	408.3	451.3	531.4	691.8	812.0	828.3
125°	245.5	258.6	271.9	275.2	331.5	406.6	444.1	512.2	648.4	750.5	765.4
127.5°	261.6	275.0	288.3	291.7	340.4	405.5	438.0	496.5	613.4	701.1	713.7
130°	270.3	284.7	299.1	302.6	347.0	406.1	435.7	487.7	591.9	670.0	681.6
132.5°	279.3	293.6	308.0	311.6	352.3	406.6	433.7	480.4	573.5	643.3	653.8
135°	292.5	305.6	318.7	321.9	358.1	406.2	430.3	469.3	547.3	605.8	614.9
137.5°	306.1	319.1	331.9	335.2	366.7	408.6	429.6	462.6	528.6	578.1	585.4
140°	317.4	329.3	341.2	344.2	372.0	409.1	427.7	456.2	513.1	555.8	562.7
142.5°	326.0	337.0	348.0	350.8	376.4	410.6	427.7	452.7	502.7	540.2	546.2
145°	339.3	348.9	358.6	361.0	382.3	410.6	424.8	445.2	486.1	516.9	521.4
147.5°	352.6	361.9	371.4	373.7	390.7	413.4	424.8	440.8	473.1	497.3	501.0
150°	361.3	369.8	378.2	380.3	395.2	414.9	424.8	438.4	465.6	486.0	488.9
152.5°	370.1	376.6	383.0	384.6	398.0	415.8	424.8	436.4	459.6	477.0	479.2
155°	383.5	388.3	392.9	394.1	404.3	418.0	424.8	434.0	452.5	466.3	467.8
157.5°	393.3	397.9	402.6	403.7	410.7	420.1	424.8	432.0	446.4	457.1	458.1
160°	399.9	403.5	407.0	408.0	413.6	421.0	424.8	430.9	443.3	452.5	453.1
162.5°	406.6	409.3	412.0	412.6	416.7	422.1	424.8	430.0	440.4	448.1	448.7
165°	413.8	416.2	418.6	419.3	421.1	423.6	424.8	428.5	435.9	441.5	442.2
167.5°	420.4	421.5	422.7	423.0	424.6	426.7	427.7	430.1	435.0	438.6	438.9
170°	424.8	425.9	427.1	427.4	427.5	427.6	427.7	430.1	435.0	438.6	438.6
172.5°	427.1	427.4	427.6	427.7	427.7	427.7	427.7	429.5	433.4	436.3	436.1
175°	430.3	430.3	430.3	430.3	429.5	428.2	427.7	428.9	431.3	433.1	433.1
177.5°	430.3	430.3	430.3	430.3	429.6	428.7	428.2	429.2	431.1	432.5	432.3
180°	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3	430.3

TEST NUMBER: P936807

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-6

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°	10.9	10.9
92.5°	43.9	35.2
95°	153.2	126.7
97.5°	367.1	316.8
100°	528.9	469.0
102.5°	688.1	636.7
105°	891.0	863.4
107.5°	1023.9	1030.6
110°	1074.6	1103.3

TEST NUMBER: P936807

CATALOG NUMBER: SQ4-FB-050U-075D-B50-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1079.1	1123.2
115°	1050.5	1111.7
117.5°	989.9	1057.8
120°	940.9	1006.9
122.5°	893.4	958.4
125°	825.4	885.3
127.5°	764.3	814.9
130°	728.3	775.0
132.5°	695.6	737.5
135°	650.9	687.0
137.5°	615.0	644.6
140°	590.3	617.9
142.5°	569.9	593.7
145°	539.4	557.3
147.5°	515.8	530.7
150°	501.1	513.1
152.5°	488.4	497.5
155°	473.9	479.9
157.5°	462.4	466.6
160°	455.5	457.9
162.5°	451.0	453.4
165°	444.6	447.0
167.5°	439.9	440.9
170°	438.6	438.6
172.5°	435.2	434.3
175°	433.1	433.1
177.5°	431.3	430.3
180°	430.3	430.3

(END OF REPORT)