

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: P936407

Luminaire Tested: SQ4-FB-025U-075D-B50-1D-UNV-W2A-W-6

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P936407
REPORT IS A COMBINATION OF REPORTS P933446 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-025U-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

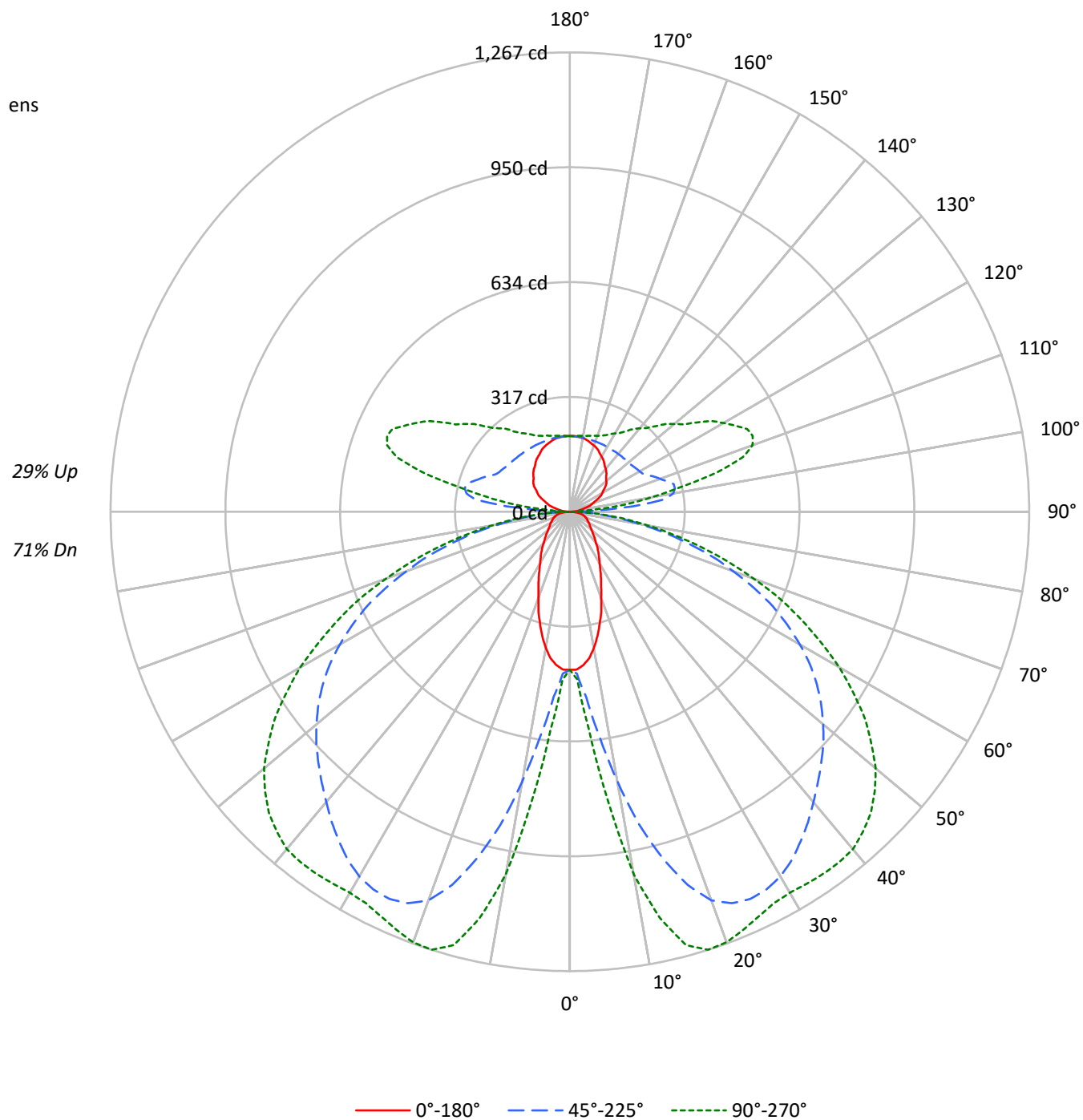
Lumens per Lamp: N/A
Luminaire Lumens: 4726.9 lumens
Efficiency: N/A
Efficacy: 105.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 6' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 45
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: P936407

CATALOG NUMBER: SQ4-FB-025U-075D-B50-1D-UNV-W2A-W-6

Luminous Intensity Polar Plot



TEST NUMBER: P936407

CATALOG NUMBER: SQ4-FB-025U-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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76
1	102	97	93	89	96	92	88	85	82	79	77	74	71	69	66	64	62
2	92	84	77	71	87	79	73	68	71	66	62	64	60	57	57	54	51
3	83	73	65	58	79	69	62	56	62	56	51	56	51	47	50	46	43
4	76	64	55	49	71	61	53	47	55	48	43	49	44	39	44	40	36
5	69	57	48	41	65	54	46	40	49	42	37	44	38	34	39	34	31
6	64	51	42	35	60	48	40	34	43	37	32	39	33	29	35	30	27
7	59	45	37	31	55	43	35	30	39	32	27	35	30	25	32	27	23
8	54	41	33	27	51	39	31	26	36	29	24	32	26	22	29	24	21
9	51	37	29	24	48	36	28	23	32	26	21	29	24	20	26	22	18
10	47	34	26	21	45	33	25	21	30	23	19	27	22	18	24	20	16

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: P936407

CATALOG NUMBER: SQ4-FB-025U-075D-B50-1D-UNV-W2A-W-6

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	1.2
10°-20°	249.8	5.3
20°-30°	437.0	9.2
30°-40°	562.5	11.9
40°-50°	628.3	13.3
50°-60°	601.7	12.7
60°-70°	476.9	10.1
70°-80°	280.4	5.9
80°-90°	78.7	1.7
90°-100°	101.9	2.2
100°-110°	267.9	5.7
110°-120°	277.8	5.9
120°-130°	222.9	4.7
130°-140°	174.9	3.7
140°-150°	134.2	2.8
150°-160°	96.7	2.0
160°-170°	59.1	1.3
170°-180°	20.0	0.4
0°-30°	743.1	15.7
0°-40°	1305.6	27.6
0°-60°	2535.6	53.6
0°-90°	3371.6	71.3
90°-120°	647.6	13.7
90°-150°	1179.6	25.0
90°-180°	1355.0	28.7
0°-180°	4726.9	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°	1	4	11	5	5	2
95°	13	53	176	90	62	15
105°	48	73	296	450	420	51
115°	86	104	237	473	540	85
125°	119	134	216	365	430	106
135°	142	156	209	294	334	110
145°	165	175	206	251	271	103
155°	186	192	206	227	233	86
165°	201	204	206	214	217	57
175°	209	209	208	210	210	20
180°	209	209	209	209	209	

TEST NUMBER: P936407

CATALOG NUMBER: SQ4-FB-025U-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°	1.4	2.5	3.6	3.9	6.2	9.2	10.6	9.4	7.1	5.3	5.3
92.5°	5.6	15.1	24.7	27.1	38.1	52.8	60.1	52.6	37.7	26.6	25.6
95°	13.4	30.9	48.4	52.8	93.7	148.2	175.5	156.6	118.8	90.5	87.3
97.5°	23.3	38.7	54.1	57.9	126.2	217.2	262.6	250.7	226.9	208.9	202.9
100°	30.9	44.8	58.8	62.3	138.0	239.0	289.4	290.3	292.1	293.4	286.1
102.5°	37.4	50.4	63.4	66.7	143.5	245.8	297.0	312.2	342.7	365.6	359.3
105°	48.3	59.3	70.3	73.1	147.5	246.6	296.2	330.3	398.5	449.7	446.4
107.5°	59.5	69.8	80.0	82.7	148.2	235.6	279.4	327.0	422.2	493.5	494.4
110°	67.1	76.4	85.6	88.0	147.1	225.9	265.3	318.6	425.0	504.7	508.2

TEST NUMBER: P936407

CATALOG NUMBER: SQ4-FB-025U-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°	74.5	83.4	92.2	94.4	147.1	217.4	252.6	307.0	415.9	497.5	502.9
115°	85.7	94.0	102.1	104.1	148.5	207.6	237.2	289.7	394.6	473.3	480.7
117.5°	96.9	104.2	111.6	113.5	151.2	201.6	226.8	274.1	368.7	439.7	447.9
120°	103.3	110.3	117.2	119.0	153.5	199.6	222.6	265.8	352.3	417.2	425.3
122.5°	109.6	116.7	123.7	125.4	156.7	198.5	219.3	258.3	336.1	394.6	402.6
125°	119.3	125.7	132.2	133.7	161.1	197.6	215.8	248.9	315.1	364.7	372.0
127.5°	127.1	133.6	140.1	141.7	165.4	197.1	212.9	241.3	298.1	340.7	346.9
130°	131.3	138.3	145.2	147.0	168.6	197.4	211.7	237.0	287.6	325.5	331.2
132.5°	135.7	142.7	149.6	151.4	171.2	197.6	210.8	233.4	278.7	312.6	317.7
135°	142.2	148.5	154.9	156.4	174.0	197.4	209.1	228.1	266.0	294.4	298.8
137.5°	148.8	155.0	161.3	162.9	178.2	198.7	208.8	224.9	256.9	280.9	284.5
140°	154.2	160.0	165.8	167.3	180.8	198.8	207.8	221.6	249.4	270.1	273.5
142.5°	158.4	163.7	169.1	170.5	182.9	199.5	207.8	220.0	244.3	262.5	265.4
145°	164.9	169.5	174.2	175.4	185.8	199.5	206.4	216.3	236.2	251.2	253.3
147.5°	171.3	175.9	180.4	181.6	189.9	200.9	206.4	214.3	229.9	241.6	243.4
150°	175.5	179.6	183.8	184.8	192.0	201.7	206.4	213.0	226.2	236.1	237.6
152.5°	179.9	183.0	186.1	186.9	193.4	202.1	206.4	212.0	223.3	231.8	232.9
155°	186.3	188.7	191.0	191.6	196.5	203.1	206.4	210.9	219.9	226.6	227.3
157.5°	191.1	193.3	195.6	196.1	199.6	204.2	206.4	209.9	216.9	222.1	222.7
160°	194.4	196.1	197.8	198.3	201.0	204.6	206.4	209.4	215.4	219.9	220.1
162.5°	197.5	198.8	200.2	200.5	202.5	205.1	206.4	208.9	214.0	217.8	218.1
165°	201.1	202.2	203.4	203.7	204.6	205.9	206.4	208.2	211.8	214.5	214.8
167.5°	204.3	204.8	205.4	205.6	206.3	207.3	207.8	209.0	211.4	213.1	213.2
170°	206.4	207.0	207.5	207.6	207.7	207.8	207.8	209.0	211.4	213.1	213.1
172.5°	207.5	207.6	207.8	207.8	207.8	207.8	207.8	208.7	210.6	212.0	211.9
175°	209.1	209.1	209.1	209.1	208.7	208.1	207.8	208.4	209.6	210.5	210.5
177.5°	209.1	209.1	209.1	209.1	208.7	208.3	208.1	208.6	209.5	210.2	210.2
180°	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1	209.1

TEST NUMBER: P936407

CATALOG NUMBER: SQ4-FB-025U-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°	5.3	5.3
92.5°	21.3	17.1
95°	74.4	61.6
97.5°	178.4	153.9
100°	257.0	227.9
102.5°	334.4	309.4
105°	433.0	419.6
107.5°	497.5	500.8
110°	522.2	536.2

TEST NUMBER: P936407

CATALOG NUMBER: SQ4-FB-025U-075D-B50-1D-UNV-W2A-W-6

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	524.3	545.8
115°	510.4	540.2
117.5°	481.0	514.0
120°	457.3	489.3
122.5°	434.1	465.7
125°	401.1	430.2
127.5°	371.5	396.0
130°	353.9	376.6
132.5°	338.0	358.4
135°	316.3	333.8
137.5°	298.9	313.2
140°	286.8	300.3
142.5°	276.9	288.5
145°	262.1	270.9
147.5°	250.7	257.9
150°	243.5	249.4
152.5°	237.3	241.8
155°	230.2	233.2
157.5°	224.7	226.8
160°	221.4	222.6
162.5°	219.2	220.3
165°	216.0	217.2
167.5°	213.8	214.3
170°	213.1	213.1
172.5°	211.5	211.1
175°	210.5	210.5
177.5°	209.6	209.1
180°	209.1	209.1

(END OF REPORT)