

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: P937008

Luminaire Tested: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-8

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937008
REPORT IS A COMBINATION OF REPORTS P933488 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-8
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

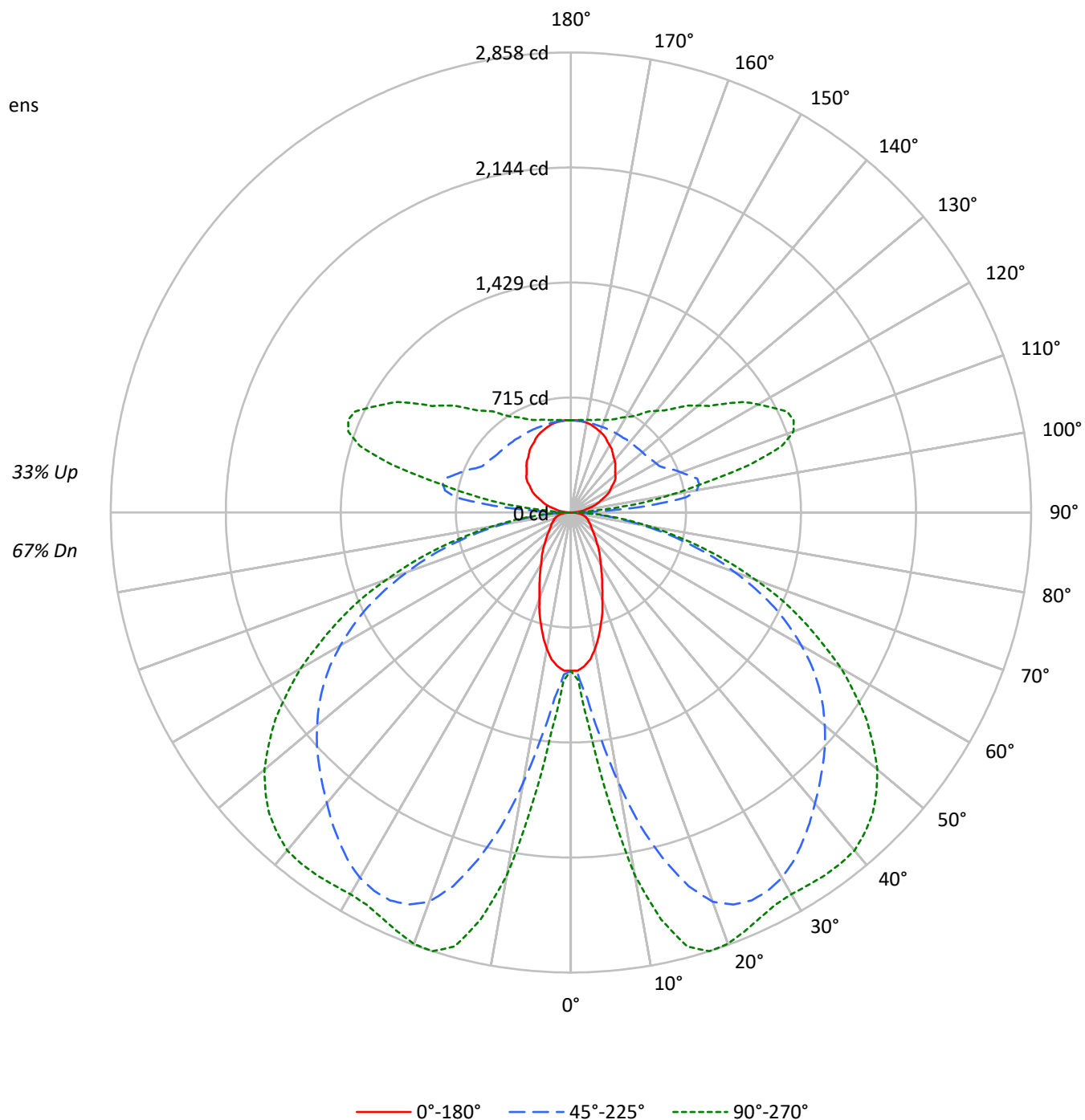
Lumens per Lamp: N/A
Luminaire Lumens: 11326.7 lumens
Efficiency: N/A
Efficacy: 101.1 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 8' x H: 0.1')
CIE Type: Semi-Direct

Input Watts (W): 112
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: P937008

CATALOG NUMBER: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-8

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°	4561	4561	4561
5°	4456	5272	6131
10°	4042	7685	10165
15°	3435	10040	12274
20°	2797	11635	12509
25°	2333	12176	12254
30°	1967	12252	12231
35°	1739	12049	12548
40°	1516	11785	12875
45°	1373	11591	12925
50°	1259	11417	12711
55°	1206	11162	12147
60°	1234	10671	11258
65°	1284	9926	10035
70°	1368	8656	8478
75°	1516	7058	6617
80°	1657	4895	4458
85°	1472	2597	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12925 cd/sqm

TEST NUMBER: P937008

CATALOG NUMBER: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-8

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	127.2	1.1
10°-20°	563.6	5.0
20°-30°	985.9	8.7
30°-40°	1269.1	11.2
40°-50°	1417.6	12.5
50°-60°	1357.7	12.0
60°-70°	1076.0	9.5
70°-80°	632.7	5.6
80°-90°	178.0	1.6
90°-100°	279.6	2.5
100°-110°	735.2	6.5
110°-120°	762.3	6.7
120°-130°	611.4	5.4
130°-140°	479.8	4.2
140°-150°	368.3	3.3
150°-160°	265.2	2.3
160°-170°	162.3	1.4
170°-180°	54.8	0.5
0°-30°	1676.7	14.8
0°-40°	2945.8	26.0
0°-60°	5721.1	50.5
0°-90°	7607.8	67.2
90°-120°	1777.1	15.7
90°-150°	3236.6	28.6
90°-180°	3719.0	32.8
0°-180°	11326.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	983	983	983	983	983	
5°	958	1027	1157	1309	1356	88
15°	718	1324	2232	2706	2791	200
25°	458	1502	2659	2776	2779	211
35°	310	1435	2504	2646	2750	193
45°	212	1144	2213	2535	2649	164
55°	152	727	1878	2181	2241	138
65°	120	386	1394	1568	1590	119
75°	88	237	765	841	844	93
85°	32	73	190	209	212	34
90°	4	11	29	15	15	5
95°	37	145	482	248	169	41
105°	132	201	813	1234	1151	140
115°	235	286	651	1299	1482	232
125°	327	367	592	1001	1180	291
135°	390	429	574	808	916	302
145°	452	481	566	689	743	283
155°	511	526	566	622	640	235
165°	552	559	566	589	596	156
175°	574	574	570	578	578	54
180°	574	574	574	574	574	

TEST NUMBER: P937008

CATALOG NUMBER: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-8

CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1	983.1
2.5°	983.1	983.1	989.5	992.7	998.9	1002.1	1008.4	1014.8	1033.8	1036.9	1043.2
5°	957.8	970.5	1011.6	1027.4	1071.7	1131.7	1157.0	1198.1	1283.4	1308.7	1324.5
7.5°	919.9	948.4	1049.5	1074.8	1185.4	1343.6	1409.9	1498.4	1634.3	1700.7	1754.5
10°	859.8	919.9	1100.1	1160.1	1340.4	1580.6	1703.9	1827.2	2032.7	2124.4	2159.1
12.5°	793.4	891.5	1153.9	1236.1	1495.2	1846.1	1994.7	2130.6	2364.6	2487.9	2506.9
15°	717.6	850.4	1204.4	1324.5	1659.6	2067.4	2231.8	2399.4	2617.5	2706.0	2728.1
17.5°	651.2	818.7	1251.8	1378.3	1786.1	2266.6	2434.1	2573.3	2750.3	2810.3	2826.1
20°	569.0	768.2	1283.4	1447.8	1918.9	2412.1	2573.3	2680.7	2800.9	2838.8	2845.1
22.5°	508.9	714.4	1302.5	1473.1	2007.4	2500.5	2636.5	2721.8	2804.0	2816.7	2819.8
25°	458.4	654.4	1299.3	1501.6	2083.3	2554.3	2658.6	2721.8	2769.2	2775.6	2775.6
27.5°	411.0	588.0	1286.6	1507.9	2140.2	2566.9	2649.1	2693.4	2715.5	2728.1	2728.1
30°	369.9	524.7	1255.0	1495.2	2165.5	2554.3	2620.6	2642.8	2664.9	2683.8	2693.4
32.5°	338.3	464.7	1207.6	1469.9	2168.6	2522.6	2570.1	2582.7	2614.4	2658.6	2674.4
35°	309.8	404.6	1153.9	1435.2	2149.6	2472.1	2503.7	2516.3	2579.5	2645.9	2668.1
37.5°	281.3	360.3	1084.3	1375.1	2121.2	2412.1	2434.1	2456.2	2554.3	2633.3	2658.6
40°	252.9	322.4	1002.1	1308.7	2076.9	2339.3	2358.3	2393.0	2522.6	2614.4	2639.6
42.5°	230.8	290.8	913.6	1239.2	2020.1	2257.1	2285.6	2336.1	2484.7	2582.7	2611.2
45°	211.8	259.2	818.7	1144.3	1947.3	2171.7	2212.8	2282.4	2440.4	2535.3	2560.6
47.5°	192.9	237.0	720.8	1046.4	1868.3	2086.4	2140.2	2219.2	2380.4	2472.1	2494.2
50°	177.0	215.0	622.8	942.0	1782.9	1994.7	2058.0	2140.2	2304.6	2389.9	2418.3
52.5°	164.4	196.0	531.1	837.7	1684.9	1899.8	1972.6	2058.0	2212.8	2295.0	2314.0
55°	151.8	180.2	452.1	727.1	1583.8	1798.7	1877.8	1960.0	2111.7	2181.3	2193.9
57.5°	145.4	167.6	385.6	622.8	1476.3	1684.9	1773.5	1849.3	1991.6	2045.3	2058.0
60°	135.9	158.0	335.1	534.2	1359.3	1577.4	1653.3	1729.2	1849.3	1893.6	1903.0
62.5°	126.5	151.8	297.2	448.9	1239.2	1451.0	1526.9	1596.4	1697.5	1729.2	1741.8
65°	120.1	145.4	268.7	385.6	1115.9	1318.2	1394.1	1454.1	1536.3	1568.0	1574.3
67.5°	113.8	139.1	246.6	331.9	992.7	1185.4	1242.3	1299.3	1362.5	1394.1	1397.3
70°	104.3	132.8	227.6	294.0	866.2	1033.8	1081.1	1141.2	1191.8	1207.6	1217.1
72.5°	98.0	123.3	215.0	265.5	736.6	888.3	932.6	967.3	1011.6	1027.4	1027.4
75°	88.5	110.7	202.3	237.0	603.8	727.1	765.0	799.8	834.5	840.9	831.4
77.5°	79.0	98.0	173.9	199.1	471.0	575.3	606.9	626.0	654.4	660.7	663.9
80°	66.4	85.4	135.9	154.9	341.4	423.6	445.7	461.6	486.8	486.8	493.2
82.5°	50.6	66.4	98.0	110.7	230.8	290.8	309.8	319.2	335.1	335.1	335.1
85°	31.6	41.1	63.2	72.7	139.1	177.0	189.7	192.9	205.5	208.7	208.7
87.5°	15.8	22.1	41.1	44.3	72.7	91.7	91.7	98.0	98.0	94.8	91.7
90°	3.8	6.9	10.0	10.7	16.9	25.1	29.2	26.0	19.5	14.7	14.7
92.5°	15.4	41.6	67.8	74.3	104.5	144.7	164.8	144.4	103.7	73.1	70.2
95°	37.0	84.9	132.8	144.8	257.0	406.8	481.7	429.8	326.2	248.4	239.6
97.5°	63.9	106.1	148.4	159.0	346.2	595.9	720.8	688.0	622.4	573.3	556.5
100°	84.7	123.0	161.3	170.9	378.7	655.8	794.3	796.7	801.5	805.0	785.0
102.5°	102.5	138.2	173.9	182.9	393.6	674.6	815.1	856.9	940.4	1002.9	985.8
105°	132.4	162.7	193.1	200.6	404.7	676.8	812.8	906.4	1093.6	1234.0	1224.8
107.5°	163.3	191.5	219.7	226.8	406.7	646.6	766.5	897.1	1158.3	1354.1	1356.4
110°	184.0	209.5	235.1	241.4	403.7	619.9	728.1	874.0	1165.9	1384.8	1394.5

TEST NUMBER: P937008

CATALOG NUMBER: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-8

CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	204.5	228.7	253.0	259.1	403.8	596.6	693.0	842.4	1141.2	1365.2	1380.0
115°	235.3	257.7	280.1	285.7	407.5	569.9	651.1	795.0	1082.8	1298.6	1319.0
117.5°	265.6	286.0	306.4	311.5	415.1	553.1	622.1	752.1	1011.8	1206.6	1229.2
120°	283.4	302.5	321.8	326.5	421.2	547.5	610.6	729.3	966.6	1144.6	1166.6
122.5°	300.7	320.0	339.3	344.2	430.0	544.5	601.8	708.6	922.4	1082.7	1104.4
125°	327.3	344.8	362.5	366.9	442.0	542.1	592.2	682.9	864.5	1000.7	1020.7
127.5°	348.8	366.6	384.3	388.8	453.9	540.7	584.0	662.0	817.9	934.8	951.7
130°	360.3	379.5	398.7	403.5	462.6	541.5	580.9	650.3	789.1	893.2	908.8
132.5°	372.3	391.4	410.7	415.4	469.7	542.1	578.3	640.4	764.7	857.8	871.7
135°	390.0	407.5	424.9	429.3	477.4	541.5	573.7	625.7	729.7	807.7	819.8
137.5°	408.2	425.4	442.7	447.0	488.9	544.9	572.9	616.9	704.9	770.8	780.6
140°	423.1	439.1	455.0	459.0	496.0	545.5	570.2	608.2	684.2	741.1	750.3
142.5°	434.7	449.3	464.1	467.7	501.9	547.4	570.2	603.6	670.3	720.4	728.3
145°	452.4	465.2	478.1	481.3	509.7	547.5	566.4	593.7	648.3	689.2	695.2
147.5°	470.1	482.6	495.1	498.2	520.9	551.2	566.4	587.9	630.7	663.0	667.9
150°	481.7	493.0	504.3	507.1	526.9	553.2	566.4	584.5	620.8	648.0	652.0
152.5°	493.6	502.2	510.7	512.9	530.7	554.5	566.4	581.9	612.8	636.1	639.1
155°	511.3	517.6	524.0	525.6	539.2	557.3	566.4	578.7	603.3	621.8	623.8
157.5°	524.3	530.5	536.7	538.3	547.6	560.1	566.4	575.9	595.1	609.4	610.8
160°	533.2	538.1	542.8	544.1	551.5	561.4	566.4	574.6	590.9	603.3	604.1
162.5°	542.1	545.7	549.3	550.2	555.6	562.8	566.4	573.3	587.2	597.6	598.3
165°	551.7	555.0	558.2	559.0	561.4	564.7	566.4	571.3	581.2	588.7	589.5
167.5°	560.6	562.1	563.7	564.0	566.1	568.8	570.2	573.5	580.0	584.9	585.2
170°	566.4	567.9	569.5	569.8	569.9	570.1	570.2	573.5	580.0	584.9	584.9
172.5°	569.5	569.8	570.1	570.2	570.2	570.2	570.2	572.8	578.0	581.8	581.5
175°	573.7	573.7	573.7	573.7	572.5	571.0	570.2	571.8	575.1	577.5	577.5
177.5°	573.7	573.7	573.7	573.7	572.7	571.5	571.0	572.3	574.8	576.7	576.4
180°	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7	573.7

TEST NUMBER: P937008

CATALOG NUMBER: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
0°	983.1	983.1
2.5°	1049.5	1043.2
5°	1349.8	1356.2
7.5°	1817.7	1814.6
10°	2260.3	2288.8
12.5°	2582.7	2589.0
15°	2778.7	2791.4
17.5°	2854.6	2857.8
20°	2857.8	2851.4
22.5°	2823.0	2816.7
25°	2781.9	2778.7
27.5°	2743.9	2747.1
30°	2728.1	2737.6
32.5°	2728.1	2743.9
35°	2734.5	2750.3
37.5°	2731.3	2750.3
40°	2718.7	2740.8
42.5°	2683.8	2699.7
45°	2630.1	2649.1
47.5°	2560.6	2573.3
50°	2472.1	2484.7
52.5°	2361.4	2364.6
55°	2228.6	2241.3
57.5°	2086.4	2089.5
60°	1928.3	1937.9
62.5°	1760.8	1760.8
65°	1583.8	1590.1
67.5°	1400.4	1416.2
70°	1213.9	1217.1
72.5°	1030.6	1030.6
75°	840.9	844.1
77.5°	660.7	660.7
80°	490.0	493.2
82.5°	338.3	344.6
85°	211.8	211.8
87.5°	98.0	88.5
90°	14.7	14.7
92.5°	58.6	47.0
95°	204.3	169.1
97.5°	489.4	422.4
100°	705.2	625.2
102.5°	917.4	848.9
105°	1188.0	1151.2
107.5°	1365.2	1374.1
110°	1432.8	1471.1

TEST NUMBER: P937008

CATALOG NUMBER: SQ4-FB-050U-125D-B50-1D-UNV-W2A-W-8

CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1438.8	1497.7
115°	1400.6	1482.3
117.5°	1319.8	1410.3
120°	1254.5	1342.5
122.5°	1191.1	1277.9
125°	1100.5	1180.5
127.5°	1019.1	1086.5
130°	971.1	1033.4
132.5°	927.6	983.3
135°	867.9	916.0
137.5°	820.1	859.4
140°	787.1	823.9
142.5°	759.9	791.6
145°	719.2	743.1
147.5°	687.8	707.7
150°	668.1	684.2
152.5°	651.3	663.4
155°	631.9	639.9
157.5°	616.5	622.1
160°	607.4	610.6
162.5°	601.4	604.5
165°	592.7	596.0
167.5°	586.6	588.0
170°	584.9	584.9
172.5°	580.3	579.1
175°	577.5	577.5
177.5°	575.1	573.7
180°	573.7	573.7

(END OF REPORT)