

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: P937802

Luminaire Tested: SQ4-FB-100U-125D-B40-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937802
REPORT IS A COMBINATION OF REPORTS P933568 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-125D-B40-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

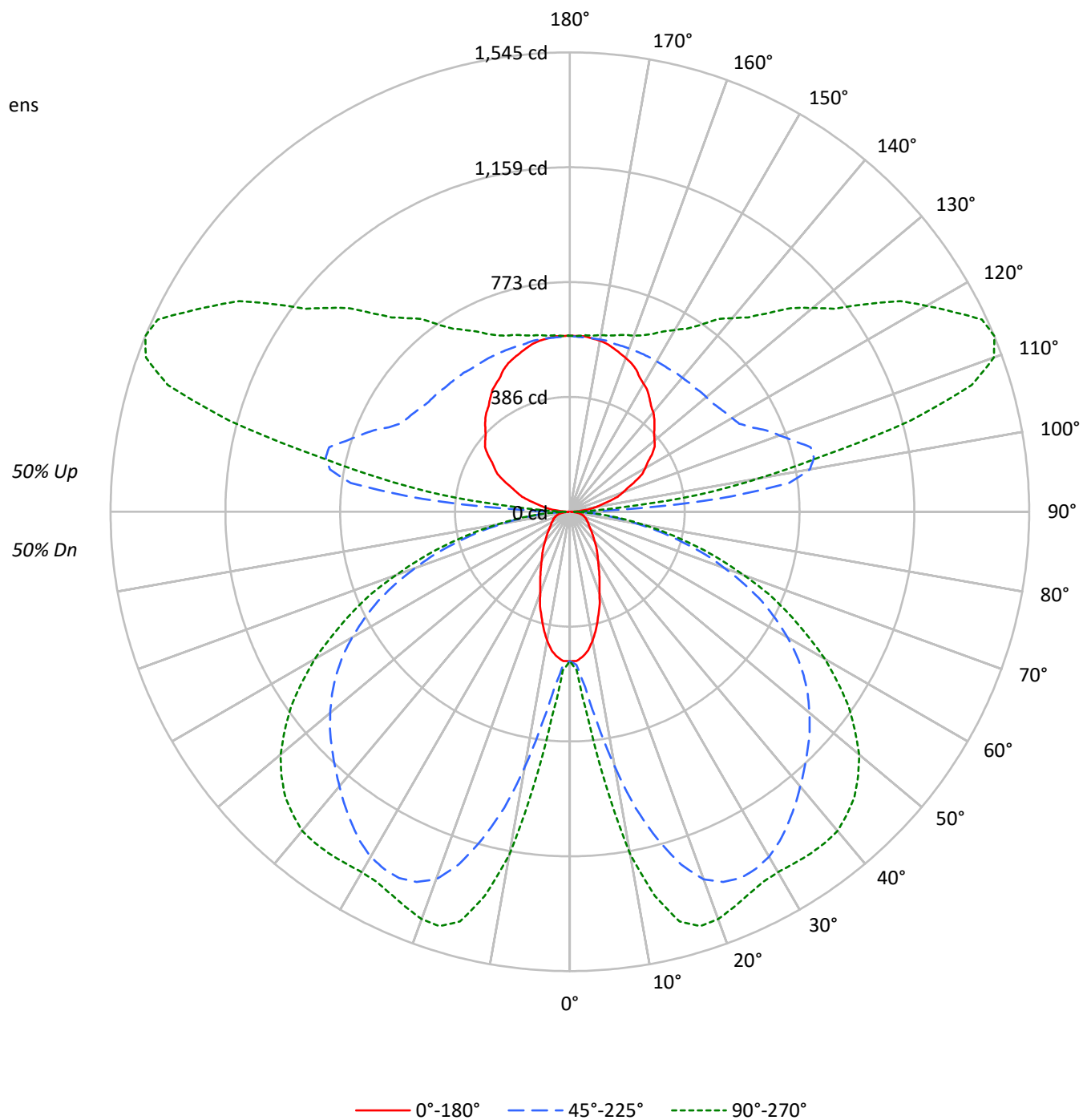
Lumens per Lamp: N/A
Luminaire Lumens: 7726.9 lumens
Efficiency: N/A
Efficacy: 112.3 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 68.8
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

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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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	56	56	56
1	97	93	89	85	90	86	82	79	72	70	67	60	58	57	49	48	47
2	88	80	74	68	81	74	69	64	63	59	55	52	49	46	42	40	38
3	80	70	62	56	73	65	58	53	55	50	45	46	42	39	37	34	32
4	73	62	53	47	67	57	50	44	48	43	38	40	36	32	33	30	27
5	67	54	46	40	61	50	43	37	43	37	32	36	31	28	29	26	23
6	61	49	40	34	56	45	37	32	38	32	28	32	27	24	26	23	20
7	56	44	35	30	52	40	33	28	34	29	24	29	24	21	24	20	17
8	52	39	31	26	48	37	29	24	31	25	21	26	22	18	22	18	15
9	48	36	28	23	44	33	26	21	28	23	19	24	19	16	20	16	14
10	45	33	25	20	41	30	24	19	26	21	17	22	18	15	18	15	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4663	4663	4663
5°	4551	5385	6268
10°	4123	7845	10392
15°	3500	10242	12548
20°	2847	11860	12788
25°	2372	12403	12529
30°	1997	12471	12506
35°	1762	12254	12828
40°	1534	11975	13162
45°	1387	11767	13214
50°	1269	11578	12995
55°	1211	11306	12419
60°	1236	10796	11510
65°	1280	10024	10260
70°	1353	8726	8668
75°	1486	7096	6765
80°	1587	4905	4558
85°	1333	2586	2333

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13214 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	65.0	0.8
10°-20°	288.1	3.7
20°-30°	504.0	6.5
30°-40°	648.8	8.4
40°-50°	724.6	9.4
50°-60°	694.0	9.0
60°-70°	550.0	7.1
70°-80°	323.4	4.2
80°-90°	92.1	1.2
90°-100°	288.5	3.7
100°-110°	758.5	9.8
110°-120°	786.5	10.2
120°-130°	630.8	8.2
130°-140°	495.0	6.4
140°-150°	379.9	4.9
150°-160°	273.6	3.5
160°-170°	167.4	2.2
170°-180°	56.6	0.7
0°-30°	857.1	11.1
0°-40°	1505.8	19.5
0°-60°	2924.5	37.8
0°-90°	3890.1	50.3
90°-120°	1833.5	23.7
90°-150°	3339.2	43.2
90°-180°	3837.0	49.7
0°-180°	7726.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	502	502	502	502	502	
5°	490	525	591	669	693	45
15°	367	677	1141	1383	1427	102
25°	234	768	1359	1419	1420	108
35°	158	734	1280	1353	1406	99
45°	108	585	1131	1296	1354	84
55°	78	372	960	1115	1146	71
65°	61	197	713	802	813	61
75°	45	121	391	430	432	47
85°	16	37	97	107	108	17
90°	4	11	30	15	15	4
95°	38	149	497	256	174	42
105°	137	207	839	1273	1188	145
115°	243	295	672	1340	1529	240
125°	338	379	611	1032	1218	300
135°	402	443	592	833	945	311
145°	467	496	584	711	767	292
155°	528	542	584	642	660	242
165°	569	577	584	607	615	161
175°	592	592	588	596	596	56
180°	592	592	592	592	592	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5	502.5
2.5°	502.5	502.5	505.8	507.4	510.6	512.3	515.5	518.8	528.4	530.0	533.3
5°	489.6	496.1	517.1	525.2	547.8	578.5	591.4	612.4	656.1	669.0	677.1
7.5°	470.2	484.8	536.5	549.4	605.9	686.7	720.7	766.0	835.4	869.3	896.8
10°	439.5	470.2	562.3	593.1	685.1	807.9	871.0	934.0	1039.0	1085.9	1103.7
12.5°	405.6	455.7	589.8	631.8	764.4	943.7	1019.7	1089.2	1208.7	1271.8	1281.4
15°	366.8	434.7	615.7	677.1	848.3	1056.8	1140.8	1226.5	1338.1	1383.2	1394.6
17.5°	332.9	418.6	639.9	704.6	913.0	1158.6	1244.3	1315.4	1405.9	1436.6	1444.6
20°	290.9	392.7	656.1	740.1	980.9	1233.0	1315.4	1370.3	1431.7	1451.1	1454.4
22.5°	260.1	365.2	665.7	753.0	1026.1	1278.2	1347.7	1391.3	1433.4	1439.9	1441.4
25°	234.4	334.5	664.2	767.5	1064.9	1305.7	1359.1	1391.3	1415.6	1418.8	1418.8
27.5°	210.1	300.5	657.7	770.8	1094.0	1312.2	1354.2	1376.8	1388.1	1394.6	1394.6
30°	189.1	268.3	641.6	764.4	1106.9	1305.7	1339.6	1350.9	1362.2	1372.0	1376.8
32.5°	173.0	237.5	617.3	751.4	1108.6	1289.5	1313.8	1320.2	1336.4	1359.1	1367.1
35°	158.3	206.9	589.8	733.6	1098.8	1263.7	1279.8	1286.3	1318.6	1352.6	1363.8
37.5°	143.8	184.2	554.3	703.0	1084.3	1233.0	1244.3	1255.6	1305.7	1346.1	1359.1
40°	129.3	164.8	512.3	669.0	1061.7	1195.8	1205.5	1223.3	1289.5	1336.4	1349.3
42.5°	117.9	148.7	467.0	633.5	1032.5	1153.8	1168.3	1194.2	1270.1	1320.2	1334.8
45°	108.3	132.6	418.6	584.9	995.4	1110.2	1131.2	1166.7	1247.5	1296.0	1308.9
47.5°	98.6	121.2	368.4	534.9	955.0	1066.5	1094.0	1134.4	1216.8	1263.7	1275.0
50°	90.5	109.9	318.3	481.5	911.4	1019.7	1052.0	1094.0	1178.0	1221.6	1236.2
52.5°	84.0	100.2	271.5	428.2	861.3	971.1	1008.4	1052.0	1131.2	1173.2	1182.9
55°	77.5	92.1	231.1	371.7	809.6	919.5	959.9	1001.9	1079.4	1115.0	1121.5
57.5°	74.3	85.7	197.1	318.3	754.6	861.3	906.6	945.4	1018.0	1045.5	1052.0
60°	69.5	80.8	171.3	273.1	694.9	806.4	845.2	883.9	945.4	968.0	972.8
62.5°	64.7	77.5	151.9	229.5	633.5	741.7	780.5	816.0	867.8	883.9	890.3
65°	61.4	74.3	137.3	197.1	570.4	673.8	712.6	743.4	785.4	801.5	804.8
67.5°	58.2	71.1	126.1	169.7	507.4	605.9	635.1	664.2	696.5	712.6	714.2
70°	53.3	67.9	116.3	150.3	442.7	528.4	552.7	583.3	609.2	617.3	622.2
72.5°	50.1	63.0	109.9	135.7	376.6	454.1	476.7	494.5	517.1	525.2	525.2
75°	45.3	56.5	103.4	121.2	308.7	371.7	391.1	408.8	426.6	429.8	425.0
77.5°	40.4	50.1	88.9	101.8	240.8	294.1	310.3	319.9	334.5	337.7	339.3
80°	33.9	43.6	69.5	79.2	174.5	216.5	227.9	235.9	248.9	248.9	252.1
82.5°	25.9	33.9	50.1	56.5	117.9	148.7	158.3	163.2	171.3	171.3	171.3
85°	16.1	21.0	32.3	37.1	71.1	90.5	96.9	98.6	105.0	106.7	106.7
87.5°	8.1	11.3	21.0	22.6	37.1	46.9	46.9	50.1	50.1	48.5	46.9
90°	4.0	7.2	10.3	11.1	17.5	26.0	30.2	26.8	20.2	15.1	15.1
92.5°	15.9	42.9	69.9	76.7	107.8	149.3	170.0	149.0	107.0	75.4	72.5
95°	38.1	87.6	137.0	149.4	265.2	419.6	496.9	443.4	336.4	256.2	247.2
97.5°	65.9	109.5	153.2	164.1	357.3	614.8	743.6	709.8	642.1	591.4	574.1
100°	87.4	126.9	166.5	176.4	390.8	676.6	819.5	822.0	826.8	830.6	809.9
102.5°	105.6	142.6	179.4	188.7	406.2	696.0	841.0	884.0	970.2	1034.7	1017.1
105°	136.7	167.9	199.1	206.9	417.5	698.2	838.6	935.1	1128.2	1273.1	1263.7
107.5°	168.5	197.6	226.7	234.0	419.6	667.1	790.8	925.6	1195.0	1397.1	1399.4
110°	189.9	216.2	242.5	249.1	416.4	639.6	751.1	901.7	1202.9	1428.8	1438.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	211.0	236.0	261.0	267.3	416.6	615.5	715.0	869.1	1177.3	1408.5	1423.7
115°	242.7	265.8	288.9	294.7	420.4	588.0	671.7	820.2	1117.2	1339.9	1360.9
117.5°	274.1	295.1	316.1	321.4	428.2	570.7	642.0	775.9	1043.9	1244.9	1268.2
120°	292.3	312.1	331.9	336.8	434.5	564.9	630.0	752.4	997.3	1181.0	1203.7
122.5°	310.3	330.2	350.2	355.2	443.7	561.8	620.8	731.1	951.6	1117.0	1139.3
125°	337.7	355.8	374.0	378.6	456.0	559.2	610.9	704.6	891.9	1032.4	1053.0
127.5°	359.8	378.2	396.6	401.2	468.3	557.8	602.6	683.0	843.8	964.5	981.8
130°	371.8	391.6	411.3	416.3	477.3	558.8	599.5	671.1	814.2	921.6	937.6
132.5°	384.1	403.9	423.6	428.6	484.6	559.2	596.6	660.7	788.8	885.0	899.4
135°	402.4	420.4	438.4	442.9	492.6	558.8	591.9	645.6	752.8	833.3	845.7
137.5°	421.1	438.9	456.7	461.2	504.4	562.2	591.0	636.4	727.1	795.2	805.4
140°	436.5	453.0	469.4	473.5	511.8	562.8	588.3	627.4	705.8	764.7	774.1
142.5°	448.5	463.7	478.8	482.7	517.9	564.8	588.3	622.7	691.5	743.2	751.4
145°	466.7	480.0	493.2	496.5	525.8	564.9	584.4	612.5	668.8	711.0	717.2
147.5°	485.0	497.9	510.7	514.0	537.5	568.7	584.4	606.5	650.8	684.1	689.2
150°	496.9	508.5	520.2	523.1	543.6	570.8	584.4	603.1	640.4	668.5	672.6
152.5°	509.2	518.0	526.9	529.1	547.5	572.0	584.4	600.3	632.2	656.2	659.3
155°	527.5	534.0	540.6	542.2	556.3	575.0	584.4	597.1	622.5	641.5	643.6
157.5°	541.0	547.4	553.7	555.3	565.0	577.9	584.4	594.2	614.0	628.8	630.2
160°	550.2	555.1	560.0	561.3	569.0	579.2	584.4	592.9	609.8	622.5	623.3
162.5°	559.2	563.0	566.7	567.7	573.2	580.6	584.4	591.5	605.8	616.5	617.2
165°	569.2	572.5	575.9	576.7	579.3	582.6	584.4	589.5	599.7	607.4	608.2
167.5°	578.3	580.0	581.6	582.0	584.1	586.8	588.3	591.6	598.3	603.4	603.8
170°	584.4	585.9	587.5	587.9	588.0	588.2	588.3	591.6	598.3	603.4	603.4
172.5°	587.5	587.9	588.2	588.3	588.3	588.3	588.3	591.0	596.2	600.2	599.9
175°	591.9	591.9	591.9	591.9	590.7	589.0	588.3	590.0	593.3	595.8	595.8
177.5°	591.9	591.9	591.9	591.9	591.0	589.7	589.0	590.4	593.1	595.1	594.7
180°	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	502.5	502.5
2.5°	536.5	533.3
5°	690.0	693.2
7.5°	929.2	927.6
10°	1155.4	1170.0
12.5°	1320.2	1323.4
15°	1420.5	1426.9
17.5°	1459.2	1460.9
20°	1460.9	1457.6
22.5°	1443.0	1439.9
25°	1422.0	1420.5
27.5°	1402.6	1404.2
30°	1394.6	1399.5
32.5°	1394.6	1402.6
35°	1397.8	1405.9
37.5°	1396.2	1405.9
40°	1389.7	1401.0
42.5°	1372.0	1380.0
45°	1344.4	1354.2
47.5°	1308.9	1315.4
50°	1263.7	1270.1
52.5°	1207.1	1208.7
55°	1139.2	1145.7
57.5°	1066.5	1068.2
60°	985.8	990.6
62.5°	900.1	900.1
65°	809.6	812.8
67.5°	715.9	724.0
70°	620.6	622.2
72.5°	526.8	526.8
75°	429.8	431.5
77.5°	337.7	337.7
80°	250.5	252.1
82.5°	173.0	176.1
85°	108.3	108.3
87.5°	50.1	45.3
90°	15.1	15.1
92.5°	60.5	48.4
95°	210.8	174.4
97.5°	504.9	435.8
100°	727.5	645.1
102.5°	946.5	875.9
105°	1225.6	1187.7
107.5°	1408.5	1417.7
110°	1478.2	1517.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1484.5	1545.2
115°	1445.1	1529.3
117.5°	1361.6	1455.0
120°	1294.4	1385.1
122.5°	1228.9	1318.4
125°	1135.4	1217.9
127.5°	1051.5	1121.0
130°	1001.9	1066.2
132.5°	956.9	1014.5
135°	895.3	945.0
137.5°	846.0	886.6
140°	812.1	850.0
142.5°	784.1	816.7
145°	741.9	766.7
147.5°	709.7	730.1
150°	689.2	705.8
152.5°	671.8	684.4
155°	651.9	660.2
157.5°	636.1	642.0
160°	626.7	630.0
162.5°	620.5	623.6
165°	611.6	614.9
167.5°	605.1	606.5
170°	603.4	603.4
172.5°	598.7	597.4
175°	595.8	595.8
177.5°	593.3	591.9
180°	591.9	591.9

(END OF REPORT)