

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: P937798

Luminaire Tested: SQ4-FB-100U-125D-B35-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937798
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-B35-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

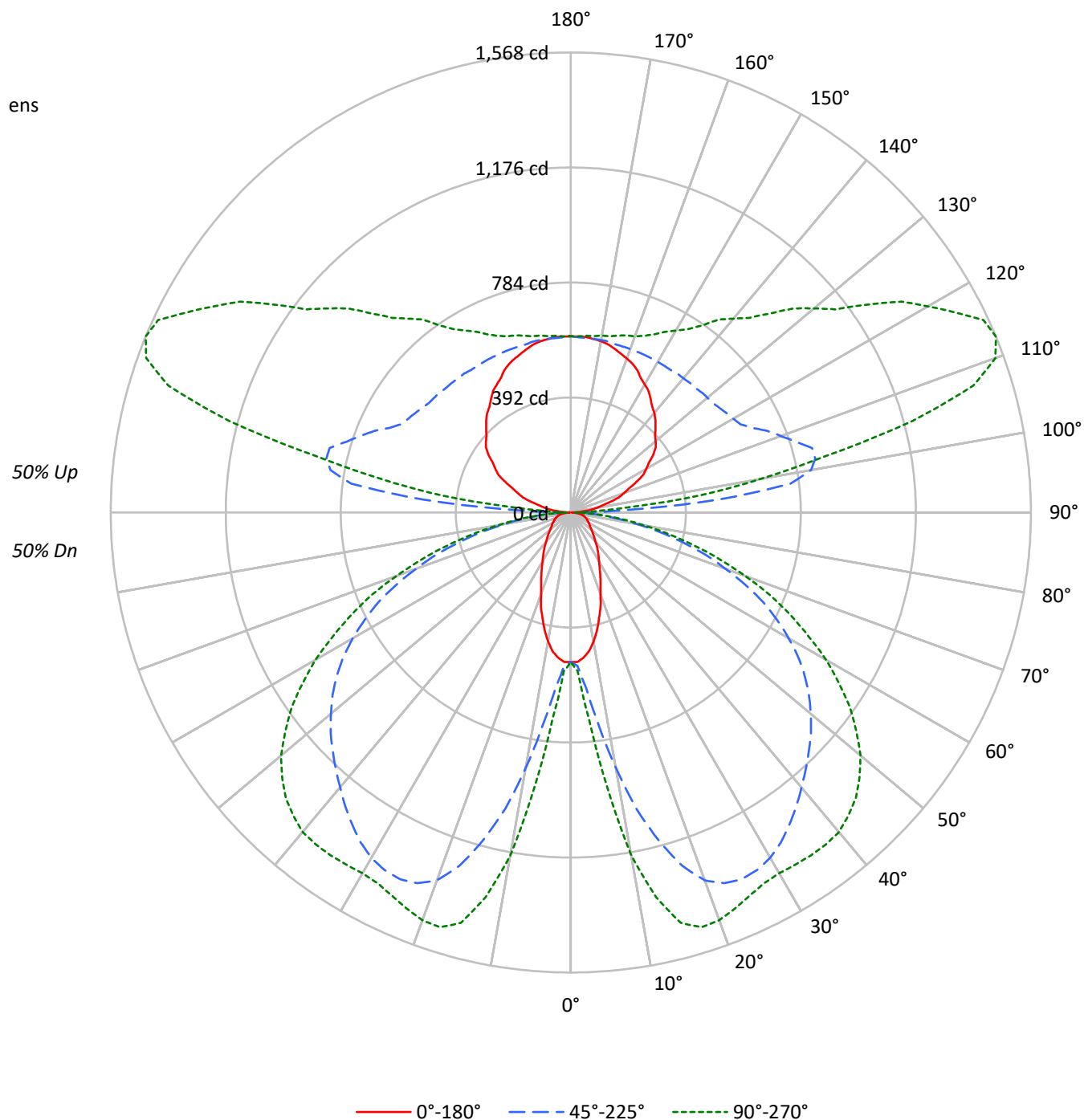
Lumens per Lamp: N/A
Luminaire Lumens: 7840.2 lumens
Efficiency: N/A
Efficacy: 114.0 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

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°	4731	4731	4731
5°	4617	5465	6360
10°	4183	7960	10544
15°	3552	10392	12732
20°	2889	12034	12976
25°	2407	12584	12713
30°	2027	12653	12689
35°	1789	12434	13016
40°	1557	12151	13355
45°	1407	11940	13407
50°	1288	11749	13186
55°	1229	11471	12601
60°	1254	10954	11678
65°	1298	10172	10410
70°	1373	8854	8795
75°	1505	7200	6863
80°	1610	4976	4625
85°	1358	2626	2368

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 13407 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	66.0	0.8
10°-20°	292.3	3.7
20°-30°	511.4	6.5
30°-40°	658.3	8.4
40°-50°	735.3	9.4
50°-60°	704.2	9.0
60°-70°	558.1	7.1
70°-80°	328.2	4.2
80°-90°	93.5	1.2
90°-100°	292.7	3.7
100°-110°	769.6	9.8
110°-120°	798.0	10.2
120°-130°	640.1	8.2
130°-140°	502.2	6.4
140°-150°	385.5	4.9
150°-160°	277.6	3.5
160°-170°	169.9	2.2
170°-180°	57.4	0.7
0°-30°	869.7	11.1
0°-40°	1527.9	19.5
0°-60°	2967.4	37.8
0°-90°	3947.1	50.3
90°-120°	1860.4	23.7
90°-150°	3388.2	43.2
90°-180°	3893.0	49.7
0°-180°	7840.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	510	510	510	510	510	
5°	497	533	600	679	703	46
15°	372	687	1158	1404	1448	104
25°	238	779	1379	1440	1441	110
35°	161	744	1299	1372	1426	100
45°	110	594	1148	1315	1374	85
55°	79	377	974	1131	1162	72
65°	62	200	723	813	825	62
75°	46	123	397	436	438	48
85°	16	38	98	108	110	17
90°	4	11	31	15	15	4
95°	39	152	504	260	177	43
105°	139	210	851	1292	1205	147
115°	246	299	682	1360	1552	243
125°	343	384	620	1048	1236	304
135°	408	449	601	846	959	316
145°	474	504	593	721	778	297
155°	535	550	593	651	670	246
165°	578	585	593	616	624	163
175°	601	601	597	605	605	57
180°	601	601	601	601	601	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9	509.9
2.5°	509.9	509.9	513.2	514.8	518.1	519.8	523.1	526.4	536.1	537.8	541.1
5°	496.8	503.4	524.7	532.9	555.8	587.0	600.1	621.4	665.7	678.8	687.0
7.5°	477.1	491.9	544.4	557.5	614.8	696.8	731.3	777.2	847.7	882.1	910.0
10°	445.9	477.1	570.5	601.7	695.2	819.8	883.7	947.7	1054.3	1101.8	1119.9
12.5°	411.5	462.4	598.5	641.1	775.6	957.6	1034.6	1105.1	1226.5	1290.4	1300.2
15°	372.2	441.1	624.7	687.0	860.8	1072.3	1157.6	1244.5	1357.7	1403.5	1415.0
17.5°	337.8	424.7	649.3	714.9	926.4	1175.6	1262.5	1334.7	1426.5	1457.7	1465.8
20°	295.2	398.5	665.7	751.0	995.3	1251.1	1334.7	1390.4	1452.7	1472.4	1475.7
22.5°	264.0	370.5	675.5	764.1	1041.2	1296.9	1367.5	1411.7	1454.4	1461.0	1462.5
25°	237.8	339.4	673.9	778.8	1080.5	1324.8	1379.0	1411.7	1436.3	1439.6	1439.6
27.5°	213.2	304.9	667.4	782.1	1110.0	1331.4	1374.0	1397.0	1408.4	1415.0	1415.0
30°	191.9	272.2	651.0	775.6	1123.2	1324.8	1359.2	1370.7	1382.2	1392.1	1397.0
32.5°	175.5	241.0	626.4	762.4	1124.8	1308.4	1333.1	1339.5	1356.0	1379.0	1387.1
35°	160.7	209.9	598.5	744.4	1114.9	1282.2	1298.6	1305.1	1337.9	1372.4	1383.8
37.5°	145.9	186.9	562.4	713.3	1100.2	1251.1	1262.5	1274.0	1324.8	1365.8	1379.0
40°	131.2	167.2	519.8	678.8	1077.2	1213.3	1223.2	1241.2	1308.4	1356.0	1369.1
42.5°	119.7	150.9	473.8	642.7	1047.7	1170.7	1185.5	1211.7	1288.8	1339.5	1354.4
45°	109.9	134.5	424.7	593.5	1010.0	1126.5	1147.8	1183.8	1265.8	1315.0	1328.1
47.5°	100.0	123.0	373.8	542.7	969.0	1082.2	1110.0	1151.1	1234.6	1282.2	1293.7
50°	91.9	111.5	323.0	488.6	924.7	1034.6	1067.5	1110.0	1195.3	1239.5	1254.4
52.5°	85.3	101.6	275.5	434.5	873.9	985.4	1023.2	1067.5	1147.8	1190.4	1200.2
55°	78.7	93.4	234.5	377.1	821.4	933.0	973.9	1016.6	1095.3	1131.3	1137.9
57.5°	75.4	86.9	200.0	323.0	765.7	873.9	919.9	959.2	1033.0	1060.9	1067.5
60°	70.5	82.0	173.8	277.1	705.0	818.2	857.6	896.9	959.2	982.2	987.0
62.5°	65.6	78.7	154.2	232.9	642.7	752.6	792.0	828.0	880.5	896.9	903.4
65°	62.3	75.4	139.3	200.0	578.8	683.7	723.1	754.3	796.9	813.3	816.6
67.5°	59.0	72.2	127.9	172.2	514.8	614.8	644.4	673.9	706.7	723.1	724.7
70°	54.1	68.9	118.0	152.5	449.2	536.1	560.8	591.9	618.1	626.4	631.3
72.5°	50.9	64.0	111.5	137.7	382.1	460.8	483.7	501.7	524.7	532.9	532.9
75°	45.9	57.4	104.9	123.0	313.2	377.1	396.8	414.8	432.9	436.1	431.2
77.5°	41.0	50.9	90.2	103.3	244.3	298.5	314.8	324.6	339.4	342.6	344.3
80°	34.4	44.3	70.5	80.3	177.0	219.7	231.2	239.3	252.5	252.5	255.8
82.5°	26.3	34.4	50.9	57.4	119.7	150.9	160.7	165.6	173.8	173.8	173.8
85°	16.4	21.3	32.8	37.7	72.2	91.9	98.4	100.0	106.6	108.2	108.2
87.5°	8.2	11.4	21.3	23.0	37.7	47.6	47.6	50.9	50.9	49.2	47.6
90°	4.1	7.3	10.5	11.2	17.7	26.4	30.6	27.2	20.4	15.3	15.3
92.5°	16.1	43.5	70.9	77.8	109.4	151.5	172.5	151.2	108.5	76.6	73.5
95°	38.7	88.9	139.1	151.6	269.1	425.8	504.2	449.9	341.4	260.0	250.8
97.5°	66.9	111.1	155.4	166.5	362.5	623.8	754.5	720.2	651.6	600.1	582.6
100°	88.7	128.8	168.9	179.0	396.5	686.5	831.5	834.0	839.0	842.7	821.8
102.5°	107.2	144.7	182.1	191.5	412.1	706.2	853.3	897.0	984.4	1049.9	1032.0
105°	138.7	170.4	202.0	210.0	423.6	708.4	850.9	948.8	1144.8	1291.8	1282.2
107.5°	170.9	200.5	230.0	237.4	425.8	676.8	802.4	939.2	1212.5	1417.6	1419.9
110°	192.6	219.4	246.0	252.7	422.5	648.9	762.1	914.9	1220.6	1449.7	1459.8

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	214.1	239.4	264.8	271.2	422.7	624.5	725.5	881.9	1194.6	1429.2	1444.6
115°	246.2	269.7	293.1	299.0	426.6	596.6	681.6	832.3	1133.5	1359.5	1380.8
117.5°	278.1	299.4	320.7	326.1	434.5	579.1	651.4	787.3	1059.2	1263.2	1286.8
120°	296.6	316.7	336.7	341.8	440.9	573.2	639.2	763.5	1011.9	1198.3	1221.3
122.5°	314.8	335.1	355.3	360.4	450.2	570.1	629.9	741.8	965.5	1133.3	1156.0
125°	342.6	361.0	379.5	384.1	462.7	567.4	619.9	714.9	904.9	1047.5	1068.4
127.5°	365.1	383.7	402.4	407.1	475.2	566.0	611.4	693.0	856.2	978.6	996.2
130°	377.2	397.3	417.3	422.4	484.3	567.0	608.2	680.9	826.2	935.1	951.4
132.5°	389.7	409.8	429.8	434.9	491.7	567.4	605.3	670.4	800.4	898.0	912.6
135°	408.3	426.6	444.9	449.4	499.8	567.0	600.6	655.0	763.9	845.5	858.1
137.5°	427.2	445.4	463.4	467.9	511.8	570.5	599.7	645.7	737.8	806.9	817.2
140°	442.9	459.6	476.3	480.4	519.3	571.0	596.9	636.6	716.2	775.9	785.5
142.5°	455.0	470.4	485.9	489.7	525.5	573.1	596.9	631.8	701.7	754.1	762.4
145°	473.6	487.0	500.4	503.8	533.5	573.2	592.9	621.5	678.6	721.4	727.7
147.5°	492.2	505.2	518.2	521.5	545.4	577.0	592.9	615.4	660.4	694.1	699.3
150°	504.2	516.0	527.8	530.8	551.6	579.2	592.9	611.9	649.8	678.3	682.5
152.5°	516.7	525.6	534.6	536.8	555.5	580.4	592.9	609.1	641.5	665.8	669.0
155°	535.3	541.9	548.6	550.2	564.4	583.4	592.9	605.8	631.6	650.9	653.0
157.5°	548.9	555.4	561.8	563.5	573.3	586.3	592.9	602.9	623.0	638.0	639.4
160°	558.2	563.3	568.2	569.5	577.3	587.7	592.9	601.6	618.7	631.6	632.5
162.5°	567.4	571.2	575.0	576.0	581.6	589.2	592.9	600.2	614.6	625.5	626.3
165°	577.5	580.9	584.3	585.2	587.8	591.2	592.9	598.2	608.5	616.3	617.2
167.5°	586.8	588.5	590.1	590.5	592.6	595.5	596.9	600.3	607.1	612.2	612.6
170°	592.9	594.5	596.1	596.5	596.6	596.8	596.9	600.3	607.1	612.2	612.2
172.5°	596.1	596.5	596.8	596.9	596.9	596.9	596.9	599.6	604.9	609.0	608.7
175°	600.6	600.6	600.6	600.6	599.3	597.7	596.9	598.6	602.0	604.6	604.6
177.5°	600.6	600.6	600.6	600.6	599.6	598.4	597.7	599.0	601.7	603.8	603.4
180°	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6	600.6

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	509.9	509.9
2.5°	544.4	541.1
5°	700.1	703.4
7.5°	942.8	941.2
10°	1172.3	1187.1
12.5°	1339.5	1342.8
15°	1441.3	1447.8
17.5°	1480.6	1482.3
20°	1482.3	1479.0
22.5°	1464.2	1461.0
25°	1442.8	1441.3
27.5°	1423.2	1424.8
30°	1415.0	1420.0
32.5°	1415.0	1423.2
35°	1418.3	1426.5
37.5°	1416.7	1426.5
40°	1410.1	1421.5
42.5°	1392.1	1400.2
45°	1364.2	1374.0
47.5°	1328.1	1334.7
50°	1282.2	1288.8
52.5°	1224.8	1226.5
55°	1155.9	1162.5
57.5°	1082.2	1083.8
60°	1000.2	1005.1
62.5°	913.3	913.3
65°	821.4	824.7
67.5°	726.4	734.6
70°	629.7	631.3
72.5°	534.5	534.5
75°	436.1	437.8
77.5°	342.6	342.6
80°	254.2	255.8
82.5°	175.5	178.7
85°	109.9	109.9
87.5°	50.9	45.9
90°	15.3	15.3
92.5°	61.3	49.1
95°	213.9	176.9
97.5°	512.3	442.2
100°	738.2	654.6
102.5°	960.4	888.8
105°	1243.6	1205.1
107.5°	1429.2	1438.5
110°	1499.9	1540.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1506.2	1567.8
115°	1466.3	1551.8
117.5°	1381.6	1476.4
120°	1313.4	1405.4
122.5°	1246.9	1337.7
125°	1152.0	1235.8
127.5°	1066.9	1137.4
130°	1016.6	1081.8
132.5°	970.9	1029.4
135°	908.4	958.8
137.5°	858.4	899.6
140°	824.0	862.5
142.5°	795.5	828.7
145°	752.8	777.9
147.5°	720.1	740.8
150°	699.3	716.2
152.5°	681.7	694.5
155°	661.4	669.9
157.5°	645.5	651.4
160°	635.9	639.2
162.5°	629.6	632.8
165°	620.5	623.9
167.5°	614.0	615.4
170°	612.2	612.2
172.5°	607.5	606.2
175°	604.6	604.6
177.5°	602.0	600.6
180°	600.6	600.6

(END OF REPORT)