

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: P938606

Luminaire Tested: SQ4-FB-150U-125D-B50-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938606
REPORT IS A COMBINATION OF REPORTS P933632 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-125D-B50-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

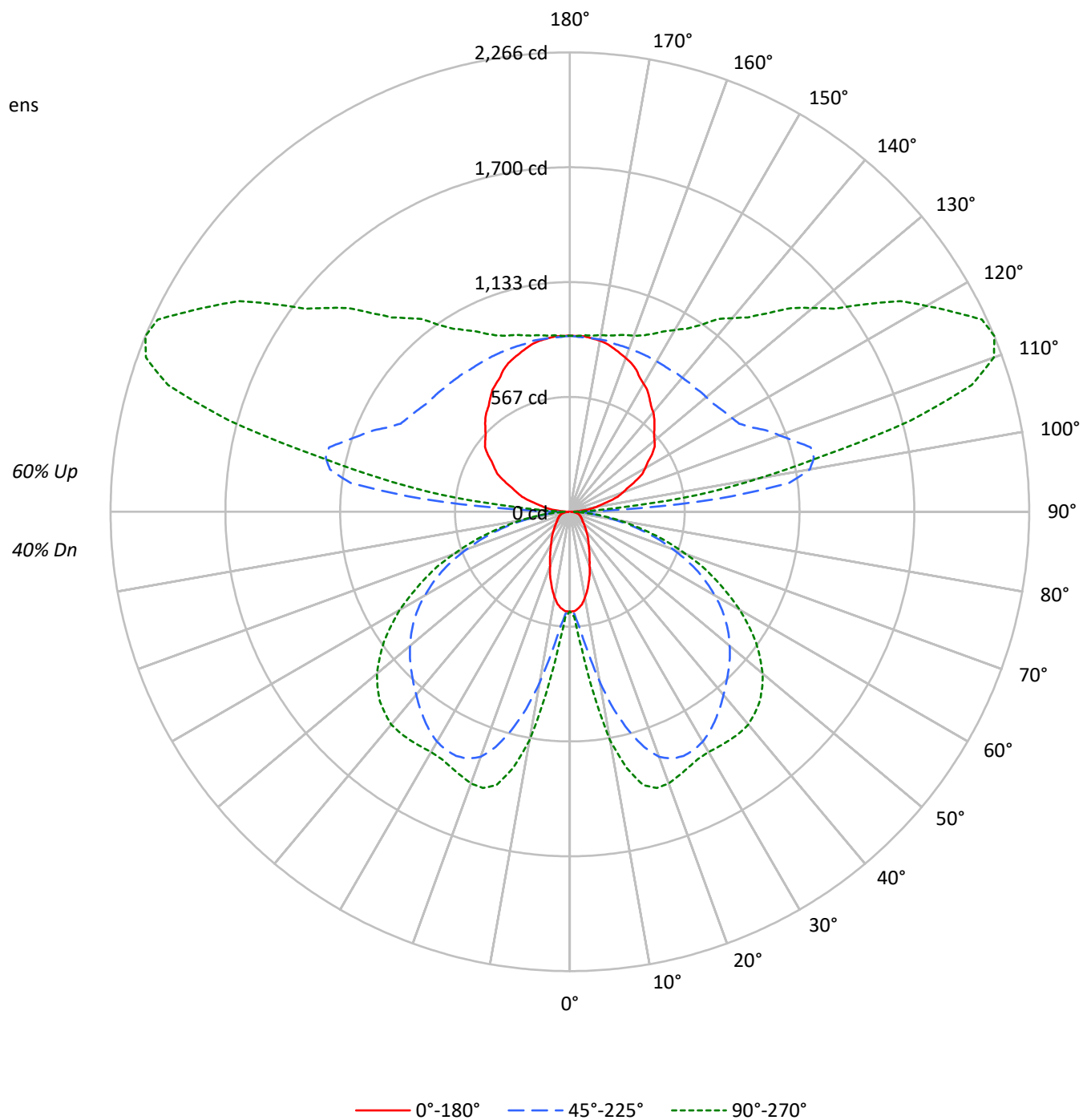
Lumens per Lamp: N/A
Luminaire Lumens: 9432.5 lumens
Efficiency: N/A
Efficacy: 113.4 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: General Diffuse

Input Watts (W): 83.2
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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47
1	95	91	87	83	86	83	79	76	68	65	63	54	52	51	41	40	39
2	86	79	72	67	78	72	66	62	59	55	51	47	44	42	36	34	32
3	78	69	61	55	71	63	56	51	51	47	43	41	37	35	31	29	27
4	71	60	52	46	65	55	48	43	45	40	36	36	32	29	27	25	23
5	65	53	45	39	59	49	42	36	40	35	30	32	28	25	24	22	19
6	60	48	39	34	54	44	36	31	36	30	26	29	25	21	22	19	17
7	55	43	35	29	50	39	32	27	32	27	23	26	22	19	20	17	15
8	51	39	31	25	46	35	28	24	29	24	20	23	19	16	18	15	13
9	47	35	27	22	43	32	25	21	27	21	18	21	17	15	17	14	11
10	44	32	25	20	40	29	23	18	24	19	16	20	16	13	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4561	4561	4561
5°	4451	5267	6130
10°	4032	7672	10163
15°	3423	10017	12272
20°	2784	11600	12508
25°	2320	12130	12253
30°	1953	12196	12230
35°	1724	11985	12546
40°	1501	11712	12873
45°	1356	11508	12923
50°	1241	11324	12709
55°	1184	11058	12146
60°	1210	10558	11256
65°	1252	9805	10034
70°	1323	8533	8477
75°	1453	6940	6616
80°	1554	4797	4458
85°	1308	2530	2282

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 12923 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	63.6	0.7
10°-20°	281.8	3.0
20°-30°	492.9	5.2
30°-40°	634.5	6.7
40°-50°	708.7	7.5
50°-60°	678.8	7.2
60°-70°	537.9	5.7
70°-80°	316.3	3.4
80°-90°	91.2	1.0
90°-100°	423.1	4.5
100°-110°	1112.4	11.8
110°-120°	1153.4	12.2
120°-130°	925.2	9.8
130°-140°	725.9	7.7
140°-150°	557.2	5.9
150°-160°	401.3	4.3
160°-170°	245.5	2.6
170°-180°	82.9	0.9
0°-30°	838.2	8.9
0°-40°	1472.7	15.6
0°-60°	2860.2	30.3
0°-90°	3805.7	40.3
90°-120°	2688.9	28.5
90°-150°	4897.1	51.9
90°-180°	5627.0	59.7
0°-180°	9432.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	492	492	492	492	492	
5°	479	514	578	654	678	44
15°	359	662	1116	1353	1396	100
25°	229	751	1329	1388	1389	106
35°	155	718	1252	1323	1375	97
45°	106	572	1106	1268	1324	82
55°	76	364	939	1090	1120	69
65°	60	193	697	784	795	60
75°	44	118	382	420	422	46
85°	16	36	95	104	106	17
90°	6	16	44	22	22	6
95°	56	219	729	376	256	62
105°	200	304	1230	1867	1742	212
115°	356	432	985	1965	2243	352
125°	495	555	896	1514	1786	440
135°	590	650	868	1222	1386	457
145°	684	728	857	1043	1124	429
155°	774	795	857	941	968	355
165°	835	846	857	891	902	236
175°	868	868	863	874	874	82
180°	868	868	868	868	868	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5	491.5
2.5°	491.5	491.5	494.6	496.2	499.4	501.0	504.2	507.3	516.8	518.4	521.5
5°	478.9	485.2	505.8	513.6	535.7	565.8	578.4	599.0	641.7	654.3	662.2
7.5°	459.9	474.1	524.7	537.3	592.6	671.6	704.9	749.2	817.1	850.2	877.1
10°	429.8	459.9	549.9	580.0	670.1	790.2	851.8	913.5	1016.2	1062.1	1079.4
12.5°	396.7	445.7	576.8	617.9	747.6	923.0	997.2	1065.2	1182.2	1243.8	1253.2
15°	358.7	425.2	602.1	662.2	829.7	1033.6	1115.8	1199.5	1308.6	1352.8	1363.9
17.5°	325.6	409.4	625.9	689.1	892.9	1133.1	1216.9	1286.5	1374.9	1405.0	1412.9
20°	284.5	384.1	641.7	723.8	959.3	1205.9	1286.5	1340.2	1400.3	1419.2	1422.4
22.5°	254.4	357.2	651.1	736.5	1003.6	1250.1	1318.1	1360.7	1401.8	1408.2	1409.7
25°	229.2	327.2	649.6	750.7	1041.5	1277.0	1329.2	1360.7	1384.5	1387.6	1387.6
27.5°	205.5	293.9	643.2	753.8	1069.9	1283.3	1324.4	1346.5	1357.6	1363.9	1363.9
30°	184.9	262.4	627.5	747.6	1082.6	1277.0	1310.1	1321.2	1332.3	1341.8	1346.5
32.5°	169.1	232.3	603.7	734.9	1084.2	1261.2	1284.9	1291.2	1307.0	1329.2	1337.0
35°	154.9	202.3	576.8	717.5	1074.7	1235.9	1251.7	1258.0	1289.6	1322.8	1333.8
37.5°	140.7	180.2	542.1	687.5	1060.5	1205.9	1216.9	1228.0	1277.0	1316.5	1329.2
40°	126.5	161.2	501.0	654.3	1038.3	1169.5	1179.0	1196.4	1261.2	1307.0	1319.6
42.5°	115.3	145.4	456.7	619.5	1009.8	1128.5	1142.7	1168.0	1242.2	1291.2	1305.5
45°	105.9	129.6	409.4	572.1	973.5	1085.8	1106.3	1141.1	1220.1	1267.5	1280.1
47.5°	96.4	118.5	360.3	523.1	934.0	1043.1	1069.9	1109.5	1190.0	1235.9	1247.0
50°	88.5	107.5	311.3	470.9	891.3	997.2	1028.9	1069.9	1152.1	1194.8	1209.1
52.5°	82.2	98.0	265.5	418.8	842.4	949.8	986.2	1028.9	1106.3	1147.4	1156.9
55°	75.8	90.0	226.0	363.5	791.8	899.3	938.8	979.9	1055.7	1090.4	1096.8
57.5°	72.7	83.8	192.8	311.3	738.0	842.4	886.6	924.6	995.6	1022.5	1028.9
60°	68.0	79.0	167.6	267.1	679.6	788.7	826.6	864.5	924.6	946.7	951.4
62.5°	63.2	75.8	148.6	224.4	619.5	725.4	763.4	798.1	848.7	864.5	870.8
65°	60.1	72.7	134.3	192.8	557.9	659.0	697.0	727.0	768.1	783.9	787.1
67.5°	56.9	69.6	123.3	166.0	496.2	592.6	621.1	649.6	681.2	697.0	698.5
70°	52.1	66.4	113.8	147.0	433.0	516.8	540.5	570.5	595.8	603.7	608.5
72.5°	49.0	61.6	107.5	132.7	368.3	444.1	466.3	483.6	505.8	513.6	513.6
75°	44.3	55.3	101.2	118.5	301.9	363.5	382.5	399.8	417.2	420.4	415.6
77.5°	39.5	49.0	87.0	99.6	235.5	287.7	303.5	312.9	327.2	330.3	331.9
80°	33.2	42.7	68.0	77.4	170.6	211.7	222.9	230.7	243.4	243.4	246.6
82.5°	25.3	33.2	49.0	55.3	115.3	145.4	154.9	159.6	167.6	167.6	167.6
85°	15.8	20.5	31.6	36.3	69.6	88.5	94.8	96.4	102.7	104.3	104.3
87.5°	7.9	11.0	20.5	22.1	36.3	45.9	45.9	49.0	49.0	47.4	45.9
90°	5.8	10.5	15.1	16.3	25.7	38.1	44.3	39.3	29.5	22.1	22.1
92.5°	23.3	62.9	102.6	112.5	158.0	218.8	249.3	218.5	156.9	110.7	106.3
95°	55.9	128.4	200.9	219.0	388.9	615.5	728.8	650.3	493.4	375.7	362.4
97.5°	96.7	160.6	224.6	240.6	523.9	901.7	1090.5	1040.9	941.8	867.4	842.0
100°	128.1	186.1	244.1	258.6	573.0	992.2	1201.8	1205.4	1212.7	1218.1	1187.9
102.5°	155.0	209.1	263.2	276.7	595.6	1020.7	1233.3	1296.4	1422.8	1517.6	1491.7
105°	200.4	246.3	292.1	303.6	612.2	1023.9	1229.7	1371.3	1654.6	1867.1	1853.1
107.5°	247.0	289.7	332.5	343.2	615.4	978.4	1159.8	1357.4	1752.5	2048.8	2052.2
110°	278.4	317.0	355.7	365.3	610.7	937.9	1101.6	1322.5	1764.1	2095.4	2109.9

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	309.3	346.1	382.9	392.1	610.9	902.7	1048.6	1274.6	1726.7	2065.7	2088.0
115°	355.9	389.9	423.8	432.3	616.5	862.3	985.1	1202.8	1638.3	1964.9	1995.9
117.5°	402.0	432.8	463.6	471.3	628.0	837.0	941.4	1137.9	1530.9	1825.7	1860.0
120°	428.7	457.8	486.7	494.0	637.3	828.4	923.9	1103.4	1462.6	1731.9	1765.2
122.5°	455.0	484.2	513.5	520.8	650.7	824.0	910.6	1072.2	1395.6	1638.1	1670.9
125°	495.2	521.8	548.5	555.2	668.7	820.2	896.0	1033.3	1308.0	1514.0	1544.3
127.5°	527.8	554.7	581.6	588.3	686.8	818.1	883.8	1001.7	1237.6	1414.4	1439.9
130°	545.3	574.2	603.2	610.5	700.0	819.4	879.1	984.1	1194.0	1351.5	1375.0
132.5°	563.3	592.3	621.3	628.6	710.7	820.2	875.0	968.9	1156.9	1297.9	1319.0
135°	590.1	616.5	642.9	649.5	722.4	819.4	868.0	946.7	1104.1	1222.1	1240.4
137.5°	617.5	643.6	669.8	676.3	739.8	824.5	866.8	933.3	1066.4	1166.3	1181.1
140°	640.3	664.4	688.5	694.4	750.6	825.4	862.7	920.2	1035.2	1121.4	1135.3
142.5°	657.7	680.0	702.2	707.8	759.4	828.3	862.7	913.3	1014.2	1090.0	1101.9
145°	684.5	704.0	723.3	728.1	771.1	828.4	856.9	898.2	980.8	1042.7	1051.8
147.5°	711.2	730.2	749.1	753.8	788.2	834.1	856.9	889.4	954.4	1003.1	1010.6
150°	728.8	745.9	762.9	767.2	797.1	837.0	856.9	884.4	939.2	980.4	986.5
152.5°	746.8	759.8	772.7	776.0	803.0	838.9	856.9	880.4	927.3	962.4	967.0
155°	773.6	783.3	792.8	795.2	815.8	843.2	856.9	875.6	912.9	940.8	943.9
157.5°	793.4	802.8	812.0	814.4	828.6	847.5	856.9	871.4	900.4	922.1	924.3
160°	806.8	814.1	821.4	823.1	834.4	849.5	856.9	869.4	894.2	912.8	914.0
162.5°	820.2	825.7	831.1	832.5	840.6	851.5	856.9	867.4	888.4	904.1	905.2
165°	834.8	839.7	844.6	845.8	849.6	854.5	856.9	864.4	879.5	890.7	891.9
167.5°	848.2	850.5	852.8	853.4	856.5	860.7	862.7	867.7	877.5	884.9	885.4
170°	856.9	859.3	861.6	862.2	862.4	862.6	862.7	867.7	877.5	884.9	884.9
172.5°	861.6	862.1	862.6	862.7	862.7	862.7	862.7	866.7	874.4	880.2	879.7
175°	868.0	868.0	868.0	868.0	866.2	863.9	862.7	865.2	870.1	873.9	873.9
177.5°	868.0	868.0	868.0	868.0	866.7	864.9	864.0	865.9	869.7	872.6	872.1
180°	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0	868.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	491.5	491.5
2.5°	524.7	521.5
5°	674.8	678.0
7.5°	908.8	907.2
10°	1130.0	1144.2
12.5°	1291.2	1294.3
15°	1389.2	1395.5
17.5°	1427.2	1428.7
20°	1428.7	1425.6
22.5°	1411.3	1408.2
25°	1390.7	1389.2
27.5°	1371.8	1373.4
30°	1363.9	1368.7
32.5°	1363.9	1371.8
35°	1367.1	1374.9
37.5°	1365.5	1374.9
40°	1359.2	1370.2
42.5°	1341.8	1349.6
45°	1314.9	1324.4
47.5°	1280.1	1286.5
50°	1235.9	1242.2
52.5°	1180.6	1182.2
55°	1114.2	1120.5
57.5°	1043.1	1044.7
60°	964.1	968.8
62.5°	880.3	880.3
65°	791.8	794.9
67.5°	700.1	708.1
70°	606.9	608.5
72.5°	515.2	515.2
75°	420.4	422.0
77.5°	330.3	330.3
80°	245.0	246.6
82.5°	169.1	172.2
85°	105.9	105.9
87.5°	49.0	44.3
90°	22.1	22.1
92.5°	88.6	71.1
95°	309.1	255.7
97.5°	740.6	639.0
100°	1067.0	946.0
102.5°	1388.1	1284.5
105°	1797.5	1741.8
107.5°	2065.6	2079.1
110°	2167.9	2225.9

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2177.1	2266.1
115°	2119.3	2242.8
117.5°	1996.9	2133.8
120°	1898.3	2031.4
122.5°	1802.2	1933.5
125°	1665.1	1786.1
127.5°	1541.9	1643.9
130°	1469.3	1563.5
132.5°	1403.3	1487.8
135°	1313.1	1385.9
137.5°	1240.7	1300.2
140°	1190.9	1246.6
142.5°	1149.8	1197.7
145°	1088.1	1124.3
147.5°	1040.7	1070.7
150°	1010.9	1035.2
152.5°	985.4	1003.7
155°	956.0	968.2
157.5°	932.8	941.4
160°	919.0	923.9
162.5°	909.9	914.6
165°	896.8	901.8
167.5°	887.5	889.5
170°	884.9	884.9
172.5°	878.0	876.2
175°	873.9	873.9
177.5°	870.0	868.0
180°	868.0	868.0

(END OF REPORT)