

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: P938498

Luminaire Tested: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938498
REPORT IS A COMBINATION OF REPORTS P933631 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-100D-B35-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

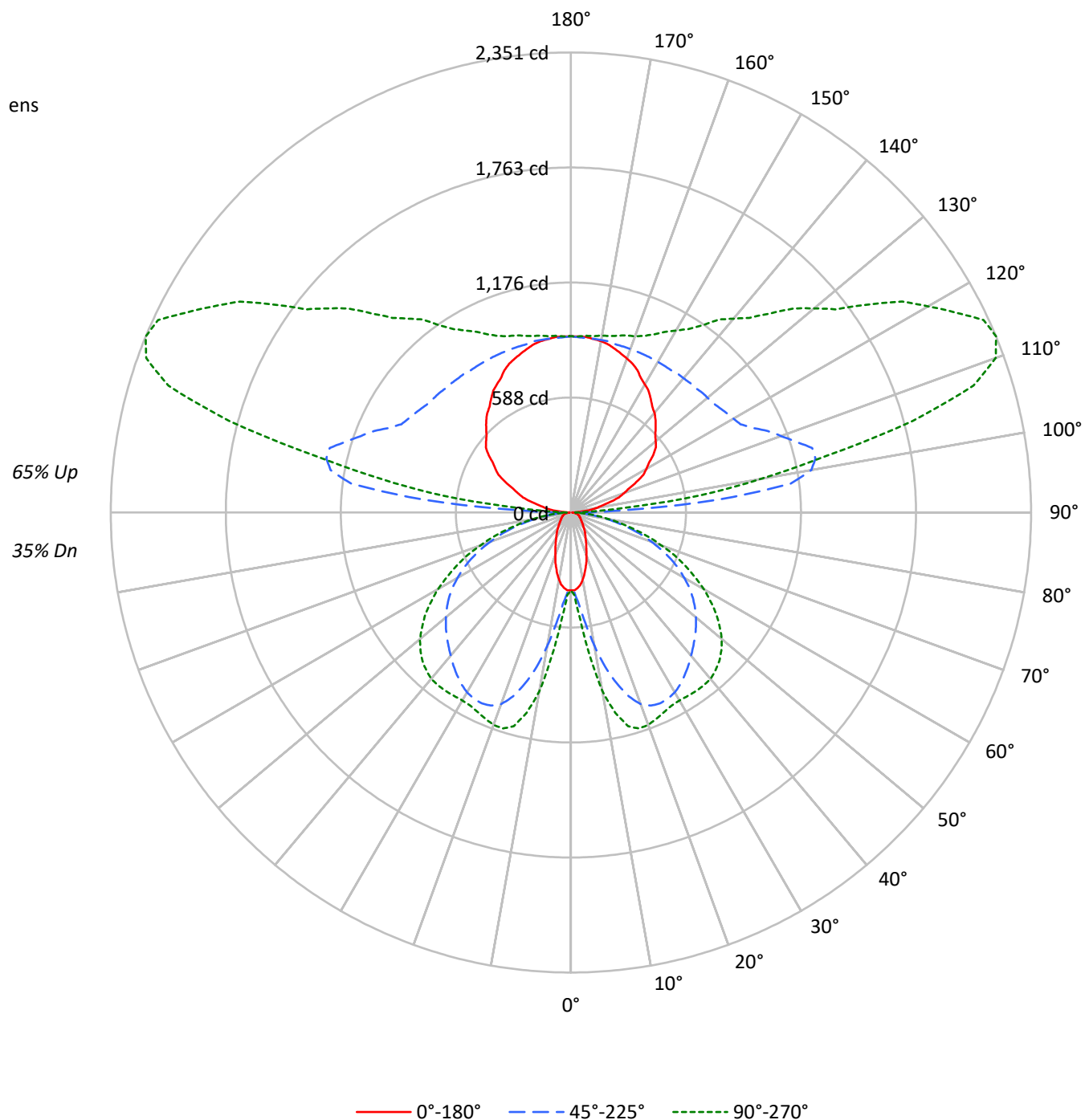
Lumens per Lamp: N/A
Luminaire Lumens: 8921.6 lumens
Efficiency: N/A
Efficacy: 123.2 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 72.4
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	0
RCR																		
0	103	103	103	103	93	93	93	93	75	75	75	58	58	58	42	42	42	35
1	94	90	86	82	85	81	78	75	65	63	60	50	49	47	36	35	35	28
2	85	78	72	66	77	70	65	61	56	53	49	43	41	39	32	30	29	23
3	77	68	61	55	69	61	55	50	49	45	41	38	35	32	28	26	24	19
4	71	60	52	46	63	54	47	42	43	38	34	34	30	27	24	22	20	16
5	64	53	45	39	58	48	41	36	39	33	29	30	26	23	22	19	17	14
6	59	47	39	33	53	43	36	30	34	29	25	27	23	20	19	17	15	12
7	54	42	34	29	49	38	31	26	31	26	22	24	20	17	18	15	13	10
8	50	38	30	25	45	35	28	23	28	23	19	22	18	15	16	13	11	9
9	47	35	27	22	42	31	25	20	26	20	17	20	16	14	15	12	10	8
10	43	31	24	20	39	29	22	18	23	18	15	18	15	12	13	11	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3695	3695	3695
5°	3606	4267	4967
10°	3267	6216	8233
15°	2773	8116	9942
20°	2255	9398	10133
25°	1879	9827	9927
30°	1582	9881	9908
35°	1397	9710	10165
40°	1215	9487	10429
45°	1098	9323	10470
50°	1005	9173	10297
55°	959	8959	9840
60°	978	8554	9120
65°	1013	7942	8129
70°	1071	6913	6867
75°	1177	5623	5360
80°	1254	3884	3611
85°	1060	2050	1849

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 10470 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	51.5	0.6
10°-20°	228.3	2.6
20°-30°	399.3	4.5
30°-40°	514.0	5.8
40°-50°	574.2	6.4
50°-60°	549.9	6.2
60°-70°	435.8	4.9
70°-80°	256.3	2.9
80°-90°	74.6	0.8
90°-100°	439.0	4.9
100°-110°	1154.1	12.9
110°-120°	1196.6	13.4
120°-130°	959.8	10.8
130°-140°	753.1	8.4
140°-150°	578.1	6.5
150°-160°	416.3	4.7
160°-170°	254.7	2.9
170°-180°	86.1	1.0
0°-30°	679.1	7.6
0°-40°	1193.1	13.4
0°-60°	2317.2	26.0
0°-90°	3083.9	34.6
90°-120°	2789.6	31.3
90°-150°	5080.6	56.9
90°-180°	5838.0	65.4
0°-180°	8921.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	398	398	398	398	398	
5°	388	416	469	530	549	36
15°	291	536	904	1096	1130	81
25°	186	608	1077	1124	1126	86
35°	126	581	1014	1072	1114	78
45°	86	464	896	1027	1073	66
55°	61	294	761	883	908	56
65°	49	156	565	635	644	48
75°	36	96	310	341	342	38
85°	13	30	77	84	86	14
90°	6	17	46	23	23	6
95°	58	227	756	390	265	64
105°	208	315	1276	1937	1807	220
115°	369	448	1022	2039	2327	365
125°	514	576	930	1571	1853	456
135°	612	674	900	1268	1438	474
145°	710	755	889	1082	1166	445
155°	803	825	889	976	1004	369
165°	866	878	889	924	936	244
175°	900	900	895	907	907	85
180°	900	900	900	900	900	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2	398.2
2.5°	398.2	398.2	400.8	402.0	404.6	405.9	408.4	411.0	418.7	420.0	422.5
5°	388.0	393.1	409.7	416.1	434.0	458.3	468.6	485.3	519.9	530.0	536.4
7.5°	372.6	384.1	425.1	435.4	480.1	544.2	571.0	606.9	661.9	688.9	710.6
10°	348.3	372.6	445.5	469.9	542.8	640.2	690.1	740.0	823.3	860.4	874.5
12.5°	321.4	361.0	467.3	500.6	605.6	747.8	808.0	863.0	957.8	1007.7	1015.3
15°	290.6	344.4	487.8	536.4	672.2	837.4	904.0	971.8	1060.2	1096.0	1105.0
17.5°	263.8	331.6	507.0	558.2	723.5	918.0	985.9	1042.3	1114.0	1138.3	1144.7
20°	230.4	311.1	519.9	586.4	777.2	976.9	1042.3	1085.8	1134.4	1149.8	1152.3
22.5°	206.1	289.3	527.5	596.6	813.0	1012.8	1067.8	1102.4	1135.7	1140.8	1142.1
25°	185.7	265.0	526.3	608.1	843.8	1034.5	1076.8	1102.4	1121.6	1124.1	1124.1
27.5°	166.5	238.2	521.1	610.8	866.8	1039.6	1073.0	1090.9	1099.8	1105.0	1105.0
30°	149.8	212.5	508.3	605.6	877.0	1034.5	1061.4	1070.4	1079.4	1087.0	1090.9
32.5°	137.0	188.2	489.2	595.4	878.3	1021.7	1040.9	1046.0	1058.8	1076.8	1083.2
35°	125.5	163.9	467.3	581.3	870.6	1001.3	1014.1	1019.2	1044.8	1071.7	1080.6
37.5°	114.0	145.9	439.2	557.0	859.1	976.9	985.9	994.9	1034.5	1066.6	1076.8
40°	102.4	130.6	405.9	530.0	841.2	947.5	955.1	969.3	1021.7	1058.8	1069.1
42.5°	93.5	117.8	370.1	501.9	818.1	914.2	925.7	946.2	1006.4	1046.0	1057.6
45°	85.8	104.9	331.6	463.5	788.7	879.7	896.2	924.4	988.5	1026.8	1037.1
47.5°	78.1	96.0	292.0	423.8	756.7	845.1	866.8	898.8	964.2	1001.3	1010.2
50°	71.7	87.1	252.2	381.6	722.1	808.0	833.5	866.8	933.4	967.9	979.5
52.5°	66.6	79.4	215.1	339.3	682.5	769.5	798.9	833.5	896.2	929.6	937.2
55°	61.4	73.0	183.1	294.5	641.5	728.5	760.6	793.8	855.3	883.4	888.6
57.5°	58.9	67.8	156.2	252.2	598.0	682.5	718.3	749.0	806.6	828.4	833.5
60°	55.0	64.1	135.8	216.4	550.6	638.9	669.7	700.4	749.0	767.0	770.7
62.5°	51.3	61.4	120.3	181.8	501.9	587.7	618.4	646.6	687.6	700.4	705.5
65°	48.6	58.9	108.8	156.2	451.9	533.9	564.6	589.0	622.3	635.1	637.6
67.5°	46.1	56.3	99.9	134.4	402.0	480.1	503.2	526.3	551.8	564.6	565.9
70°	42.2	53.8	92.2	119.1	350.8	418.7	437.9	462.2	482.7	489.2	492.9
72.5°	39.7	49.9	87.1	107.6	298.4	359.8	377.7	391.8	409.7	416.1	416.1
75°	35.9	44.8	82.0	96.0	244.6	294.5	309.9	323.9	338.0	340.6	336.7
77.5°	32.0	39.7	70.4	80.6	190.8	233.0	245.8	253.5	265.0	267.6	268.9
80°	26.8	34.6	55.0	62.7	138.3	171.6	180.5	186.9	197.2	197.2	199.7
82.5°	20.4	26.8	39.7	44.8	93.5	117.8	125.5	129.4	135.8	135.8	135.8
85°	12.8	16.7	25.6	29.5	56.3	71.7	76.8	78.1	83.2	84.5	84.5
87.5°	6.4	8.9	16.7	17.9	29.5	37.1	37.1	39.7	39.7	38.4	37.1
90°	6.0	10.9	15.7	17.0	26.6	39.5	45.9	40.8	30.6	23.0	23.0
92.5°	24.1	65.2	106.4	116.7	164.0	227.0	258.6	226.6	162.8	114.8	110.3
95°	58.0	133.2	208.4	227.2	403.5	638.6	756.1	674.7	511.9	389.8	376.0
97.5°	100.3	166.7	233.0	249.6	543.5	935.5	1131.4	1080.0	977.0	899.9	873.6
100°	132.9	193.1	253.3	268.3	594.5	1029.4	1246.8	1250.6	1258.1	1263.8	1232.4
102.5°	160.8	217.0	273.1	287.1	617.9	1058.9	1279.5	1345.0	1476.1	1574.4	1547.6
105°	207.9	255.5	303.0	314.9	635.2	1062.2	1275.8	1422.7	1716.6	1937.0	1922.6
107.5°	256.3	300.6	345.0	356.0	638.5	1015.0	1203.3	1408.2	1818.1	2125.6	2129.1
110°	288.9	328.9	369.0	379.0	633.6	973.1	1142.8	1372.0	1830.2	2174.0	2189.0

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	320.9	359.1	397.3	406.8	633.8	936.5	1087.9	1322.4	1791.4	2143.1	2166.2
115°	369.3	404.5	439.6	448.5	639.6	894.6	1022.0	1247.9	1699.7	2038.6	2070.7
117.5°	417.1	449.0	481.0	489.0	651.6	868.3	976.7	1180.5	1588.3	1894.1	1929.7
120°	444.8	474.9	504.9	512.5	661.1	859.4	958.5	1144.8	1517.4	1796.8	1831.3
122.5°	472.0	502.3	532.8	540.3	675.1	854.9	944.7	1112.4	1447.9	1699.5	1733.5
125°	513.8	541.4	569.1	576.0	693.8	851.0	929.6	1072.0	1357.0	1570.7	1602.1
127.5°	547.6	575.5	603.4	610.4	712.5	848.7	916.9	1039.3	1283.9	1467.5	1493.9
130°	565.7	595.7	625.8	633.3	726.3	850.1	912.0	1020.9	1238.8	1402.1	1426.6
132.5°	584.4	614.5	644.6	652.1	737.3	851.0	907.8	1005.2	1200.3	1346.5	1368.4
135°	612.2	639.6	667.0	673.8	749.4	850.1	900.5	982.2	1145.5	1267.9	1286.8
137.5°	640.6	667.7	694.9	701.7	767.5	855.4	899.3	968.3	1106.4	1210.0	1225.4
140°	664.2	689.2	714.2	720.5	778.7	856.3	895.1	954.7	1073.9	1163.4	1177.8
142.5°	682.4	705.4	728.5	734.3	787.9	859.3	895.1	947.5	1052.2	1130.8	1143.2
145°	710.2	730.3	750.4	755.4	800.0	859.4	889.1	931.9	1017.5	1081.8	1091.2
147.5°	737.9	757.6	777.1	782.1	817.7	865.3	889.1	922.8	990.1	1040.7	1048.5
150°	756.1	773.8	791.5	795.9	826.9	868.3	889.1	917.5	974.4	1017.2	1023.5
152.5°	774.8	788.3	801.7	805.0	833.0	870.4	889.1	913.4	962.0	998.5	1003.2
155°	802.6	812.6	822.5	825.0	846.3	874.8	889.1	908.4	947.1	976.1	979.3
157.5°	823.2	832.9	842.4	844.9	859.6	879.3	889.1	904.1	934.1	956.7	958.9
160°	837.0	844.6	852.1	854.0	865.7	881.3	889.1	901.9	927.7	947.0	948.3
162.5°	851.0	856.6	862.2	863.7	872.1	883.4	889.1	899.9	921.7	938.0	939.2
165°	866.1	871.1	876.3	877.5	881.4	886.5	889.1	896.8	912.4	924.0	925.3
167.5°	879.9	882.4	884.8	885.4	888.6	892.9	895.1	900.2	910.4	918.0	918.6
170°	889.1	891.5	893.9	894.5	894.7	895.0	895.1	900.2	910.4	918.0	918.0
172.5°	893.9	894.4	895.0	895.1	895.1	895.1	895.1	899.1	907.2	913.2	912.7
175°	900.5	900.5	900.5	900.5	898.7	896.2	895.1	897.6	902.7	906.6	906.6
177.5°	900.5	900.5	900.5	900.5	899.1	897.3	896.3	898.4	902.3	905.3	904.8
180°	900.5	900.5	900.5	900.5	900.5	900.5	900.5	900.5	900.5	900.5	900.5

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	398.2	398.2
2.5°	425.1	422.5
5°	546.7	549.3
7.5°	736.2	734.9
10°	915.5	926.9
12.5°	1046.0	1048.7
15°	1125.5	1130.5
17.5°	1156.2	1157.5
20°	1157.5	1154.9
22.5°	1143.4	1140.8
25°	1126.8	1125.5
27.5°	1111.3	1112.6
30°	1105.0	1108.8
32.5°	1105.0	1111.3
35°	1107.6	1114.0
37.5°	1106.2	1114.0
40°	1101.2	1110.1
42.5°	1087.0	1093.4
45°	1065.3	1073.0
47.5°	1037.1	1042.3
50°	1001.3	1006.4
52.5°	956.4	957.8
55°	902.6	907.8
57.5°	845.1	846.3
60°	781.0	784.9
62.5°	713.2	713.2
65°	641.5	644.0
67.5°	567.3	573.6
70°	491.7	492.9
72.5°	417.4	417.4
75°	340.6	341.9
77.5°	267.6	267.6
80°	198.5	199.7
82.5°	137.0	139.5
85°	85.8	85.8
87.5°	39.7	35.9
90°	23.0	23.0
92.5°	92.0	73.7
95°	320.6	265.3
97.5°	768.3	663.0
100°	1107.0	981.5
102.5°	1440.1	1332.7
105°	1864.8	1807.1
107.5°	2143.0	2157.0
110°	2249.1	2309.3

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2258.6	2351.0
115°	2198.8	2326.9
117.5°	2071.7	2213.8
120°	1969.4	2107.5
122.5°	1869.8	2005.9
125°	1727.5	1853.0
127.5°	1599.7	1705.5
130°	1524.3	1622.1
132.5°	1455.9	1543.5
135°	1362.3	1437.8
137.5°	1287.2	1348.9
140°	1235.6	1293.3
142.5°	1192.9	1242.5
145°	1128.9	1166.5
147.5°	1079.7	1110.9
150°	1048.7	1073.9
152.5°	1022.3	1041.3
155°	991.9	1004.5
157.5°	967.7	976.7
160°	953.4	958.5
162.5°	944.0	948.8
165°	930.4	935.6
167.5°	920.7	922.9
170°	918.0	918.0
172.5°	910.9	909.0
175°	906.6	906.6
177.5°	902.6	900.5
180°	900.5	900.5

(END OF REPORT)