

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: P938406

Luminaire Tested: SQ4-FB-150U-075D-B50-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938406
REPORT IS A COMBINATION OF REPORTS P933630 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-150U-075D-B50-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

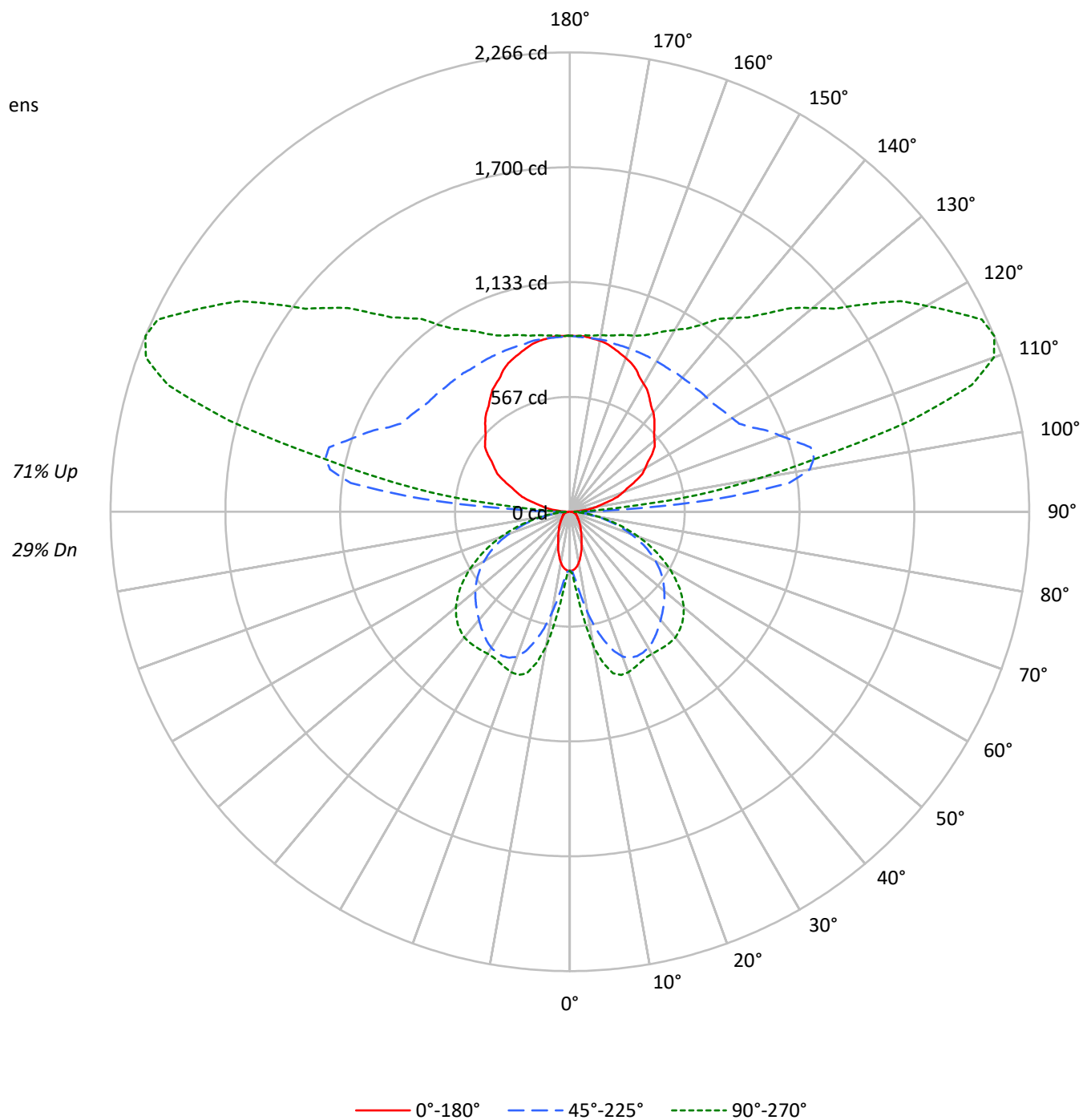
Lumens per Lamp: N/A
Luminaire Lumens: 7877.3 lumens
Efficiency: N/A
Efficacy: 123.9 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 63.6
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					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	36	36	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	43	32	31	30	30	30	23
2	84	77	71	66	75	69	64	59	54	50	47	40	38	36	27	26	25	25	25	19
3	76	67	60	54	68	60	54	49	47	43	39	35	32	30	24	22	21	21	21	16
4	70	59	51	45	62	53	46	41	42	37	33	31	28	25	21	19	17	17	17	13
5	64	52	44	38	57	47	40	35	37	32	28	28	24	21	19	17	15	15	15	11
6	58	47	39	33	52	42	35	30	33	28	24	25	21	18	17	15	13	13	13	10
7	54	42	34	28	48	38	31	26	30	25	21	22	19	16	15	13	11	11	11	8
8	50	38	30	25	44	34	27	23	27	22	18	20	17	14	14	12	10	10	10	7
9	46	34	27	22	41	31	24	20	24	20	16	18	15	12	13	10	9	9	9	6
10	43	31	24	19	38	28	22	18	22	18	14	17	13	11	12	9	8	8	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2696	2696	2696
5°	2630	3113	3623
10°	2383	4534	6006
15°	2023	5920	7252
20°	1645	6855	7392
25°	1370	7168	7241
30°	1154	7208	7227
35°	1019	7082	7415
40°	886	6922	7608
45°	801	6801	7638
50°	733	6692	7511
55°	700	6535	7178
60°	715	6240	6652
65°	740	5794	5930
70°	782	5043	5010
75°	859	4101	3910
80°	917	2834	2634
85°	770	1495	1349

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7638 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	37.6	0.5
10°-20°	166.5	2.1
20°-30°	291.3	3.7
30°-40°	375.0	4.8
40°-50°	418.8	5.3
50°-60°	401.1	5.1
60°-70°	317.9	4.0
70°-80°	186.9	2.4
80°-90°	55.2	0.7
90°-100°	423.1	5.4
100°-110°	1112.4	14.1
110°-120°	1153.4	14.6
120°-130°	925.2	11.7
130°-140°	725.9	9.2
140°-150°	557.2	7.1
150°-160°	401.3	5.1
160°-170°	245.5	3.1
170°-180°	82.9	1.1
0°-30°	495.4	6.3
0°-40°	870.4	11.0
0°-60°	1690.3	21.5
0°-90°	2250.4	28.6
90°-120°	2688.9	34.1
90°-150°	4897.1	62.2
90°-180°	5627.0	71.4
0°-180°	7877.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	290	290	290	290	290	
5°	283	304	342	387	401	26
15°	212	391	659	800	825	59
25°	135	444	786	820	821	62
35°	92	424	740	782	813	57
45°	63	338	654	749	783	48
55°	45	215	555	644	662	41
65°	36	114	412	463	470	35
75°	26	70	226	248	249	27
85°	9	22	56	62	63	10
90°	6	16	44	22	22	5
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°	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5	290.5
2.5°	290.5	290.5	292.3	293.3	295.1	296.1	297.9	299.8	305.4	306.4	308.2
5°	283.0	286.7	298.9	303.6	316.6	334.4	341.8	354.0	379.2	386.7	391.3
7.5°	271.8	280.2	310.1	317.6	350.2	397.0	416.6	442.7	482.9	502.5	518.4
10°	254.0	271.8	325.0	342.8	396.0	467.0	503.4	539.9	600.6	627.6	637.9
12.5°	234.4	263.4	340.9	365.2	441.8	545.5	589.4	629.5	698.6	735.1	740.7
15°	212.0	251.2	355.9	391.3	490.4	610.8	659.4	708.9	773.4	799.5	806.0
17.5°	192.4	241.9	369.9	407.2	527.7	669.7	719.2	760.3	812.6	830.3	835.0
20°	168.1	227.0	379.2	427.8	566.9	712.6	760.3	792.0	827.5	838.7	840.6
22.5°	150.4	211.1	384.8	435.2	593.1	738.8	779.0	804.2	828.5	832.2	833.1
25°	135.4	193.3	383.9	443.6	615.5	754.7	785.5	804.2	818.2	820.1	820.1
27.5°	121.4	173.7	380.1	445.5	632.3	758.4	782.7	795.8	802.3	806.0	806.0
30°	109.3	155.0	370.8	441.8	639.8	754.7	774.3	780.8	787.4	793.0	795.8
32.5°	99.9	137.3	356.8	434.3	640.7	745.3	759.3	763.1	772.4	785.5	790.2
35°	91.5	119.6	340.9	424.0	635.1	730.4	739.7	743.5	762.1	781.8	788.3
37.5°	83.1	106.5	320.4	406.3	626.7	712.6	719.2	725.7	754.7	778.0	785.5
40°	74.7	95.3	296.1	386.7	613.6	691.2	696.8	707.0	745.3	772.4	779.9
42.5°	68.2	85.9	269.9	366.1	596.8	666.9	675.3	690.2	734.1	763.1	771.5
45°	62.6	76.6	241.9	338.1	575.3	641.7	653.8	674.3	721.0	749.1	756.5
47.5°	57.0	70.0	213.0	309.2	552.0	616.4	632.3	655.7	703.3	730.4	736.9
50°	52.3	63.5	184.0	278.3	526.8	589.4	608.0	632.3	680.9	706.1	714.5
52.5°	48.6	57.9	156.9	247.5	497.8	561.3	582.8	608.0	653.8	678.1	683.7
55°	44.8	53.2	133.6	214.8	467.9	531.4	554.8	579.1	623.9	644.5	648.2
57.5°	43.0	49.5	113.9	184.0	436.2	497.8	524.0	546.4	588.4	604.3	608.0
60°	40.2	46.7	99.0	157.8	401.6	466.1	488.5	510.9	546.4	559.5	562.3
62.5°	37.4	44.8	87.8	132.6	366.1	428.7	451.1	471.7	501.6	510.9	514.6
65°	35.5	43.0	79.4	113.9	329.7	389.5	411.9	429.6	453.9	463.3	465.1
67.5°	33.6	41.1	72.9	98.1	293.3	350.2	367.1	383.9	402.6	411.9	412.8
70°	30.8	39.2	67.2	86.9	255.9	305.4	319.4	337.2	352.1	356.8	359.6
72.5°	29.0	36.4	63.5	78.5	217.6	262.5	275.5	285.8	298.9	303.6	303.6
75°	26.2	32.7	59.8	70.0	178.4	214.8	226.0	236.3	246.6	248.4	245.6
77.5°	23.4	29.0	51.4	58.8	139.2	170.0	179.3	184.9	193.3	195.2	196.1
80°	19.6	25.2	40.2	45.8	100.9	125.2	131.7	136.4	143.8	143.8	145.7
82.5°	14.9	19.6	29.0	32.7	68.2	85.9	91.5	94.3	99.0	99.0	99.0
85°	9.3	12.1	18.7	21.5	41.1	52.3	56.0	57.0	60.7	61.6	61.6
87.5°	4.7	6.5	12.1	13.1	21.5	27.1	27.1	29.0	29.0	28.0	27.1
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°	290.5	290.5
2.5°	310.1	308.2
5°	398.8	400.7
7.5°	537.1	536.1
10°	667.8	676.2
12.5°	763.1	764.9
15°	821.0	824.7
17.5°	843.4	844.3
20°	844.3	842.5
22.5°	834.1	832.2
25°	821.9	821.0
27.5°	810.7	811.6
30°	806.0	808.8
32.5°	806.0	810.7
35°	807.9	812.6
37.5°	807.0	812.6
40°	803.2	809.8
42.5°	793.0	797.6
45°	777.1	782.7
47.5°	756.5	760.3
50°	730.4	734.1
52.5°	697.7	698.6
55°	658.5	662.2
57.5°	616.4	617.4
60°	569.7	572.5
62.5°	520.2	520.2
65°	467.9	469.8
67.5°	413.8	418.4
70°	358.7	359.6
72.5°	304.5	304.5
75°	248.4	249.4
77.5°	195.2	195.2
80°	144.8	145.7
82.5°	99.9	101.8
85°	62.6	62.6
87.5°	29.0	26.2
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)