

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: P938402

Luminaire Tested: SQ4-FB-150U-075D-B40-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P938402
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-B40-1D-UNV-W2A-W-4
Description: CORELITE SQ4 SUSPENDED INDIRECT LED LUMINAIRE WITH Batwing Frosted Continuous Roll L
Light Source: -
Ballast/Driver: -

Summary

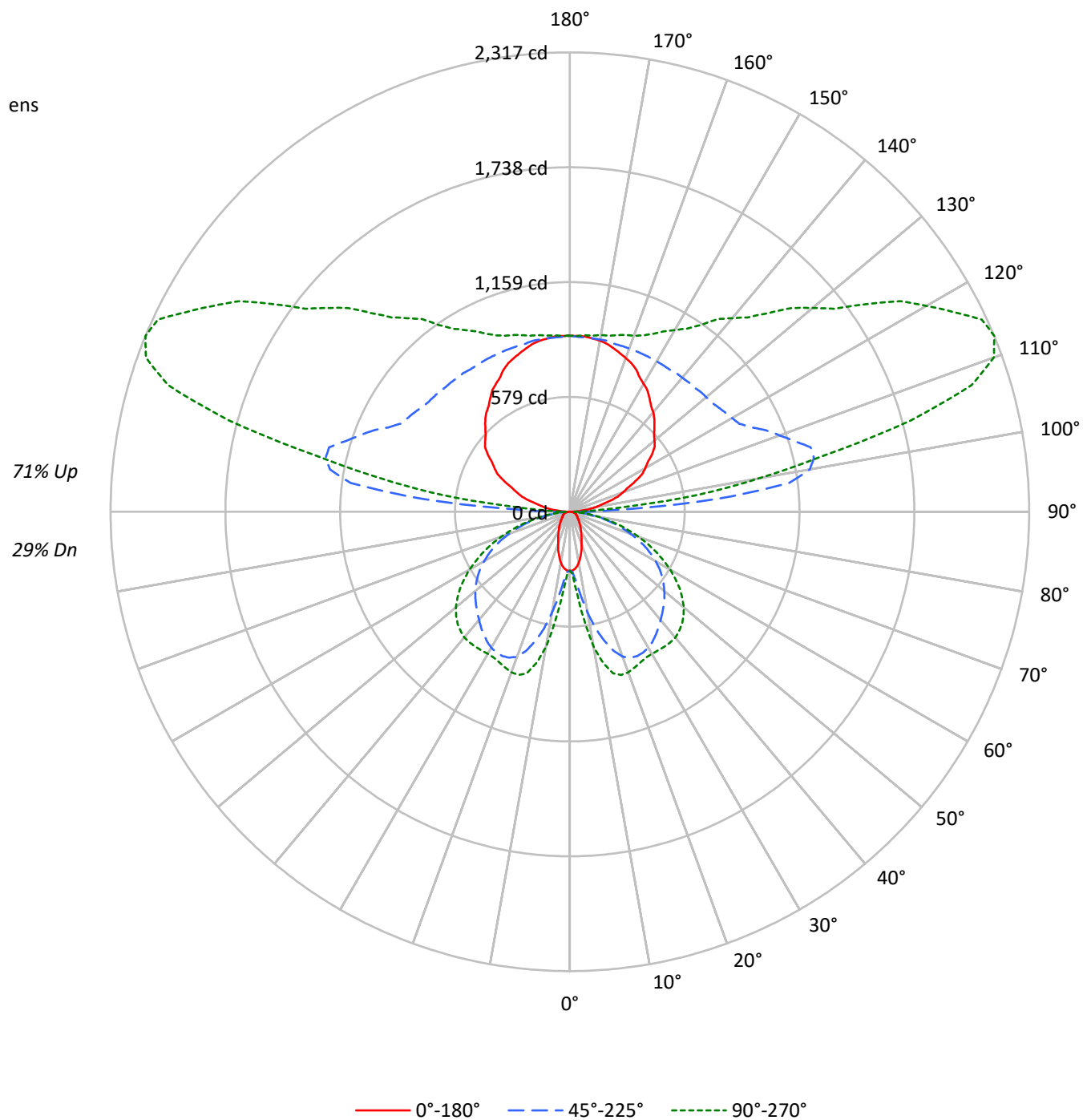
Lumens per Lamp: N/A
Luminaire Lumens: 8054.4 lumens
Efficiency: N/A
Efficacy: 126.6 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2756	2756	2756
5°	2690	3183	3704
10°	2437	4636	6141
15°	2069	6053	7416
20°	1682	7009	7558
25°	1402	7330	7404
30°	1180	7370	7390
35°	1042	7242	7581
40°	906	7077	7779
45°	819	6954	7809
50°	750	6842	7680
55°	715	6682	7340
60°	731	6380	6802
65°	756	5925	6064
70°	800	5156	5123
75°	876	4193	3998
80°	941	2899	2694
85°	787	1529	1379

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7809 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	38.4	0.5
10°-20°	170.3	2.1
20°-30°	297.8	3.7
30°-40°	383.4	4.8
40°-50°	428.2	5.3
50°-60°	410.2	5.1
60°-70°	325.1	4.0
70°-80°	191.1	2.4
80°-90°	56.5	0.7
90°-100°	432.6	5.4
100°-110°	1137.4	14.1
110°-120°	1179.3	14.6
120°-130°	946.0	11.7
130°-140°	742.2	9.2
140°-150°	569.7	7.1
150°-160°	410.3	5.1
160°-170°	251.0	3.1
170°-180°	84.8	1.1
0°-30°	506.5	6.3
0°-40°	889.9	11.0
0°-60°	1728.3	21.5
0°-90°	2301.0	28.6
90°-120°	2749.3	34.1
90°-150°	5007.2	62.2
90°-180°	5753.0	71.4
0°-180°	8054.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	297	297	297	297	297	
5°	289	310	350	395	410	27
15°	217	400	674	818	843	60
25°	138	454	803	838	839	64
35°	94	434	756	799	831	58
45°	64	346	668	766	800	50
55°	46	220	567	659	677	42
65°	36	116	421	474	480	36
75°	27	72	231	254	255	28
85°	10	22	57	63	64	10
90°	6	17	45	23	23	6
95°	57	224	745	384	262	63
105°	205	310	1257	1909	1781	217
115°	364	442	1007	2009	2293	359
125°	506	568	916	1548	1826	449
135°	603	664	888	1250	1417	467
145°	700	744	876	1066	1150	438
155°	791	813	876	962	990	363
165°	854	865	876	911	922	241
175°	888	888	882	894	894	84
180°	888	888	888	888	888	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
0°	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0	297.0
2.5°	297.0	297.0	298.9	299.9	301.8	302.7	304.6	306.6	312.3	313.2	315.2
5°	289.4	293.2	305.6	310.4	323.7	341.9	349.5	361.9	387.7	395.4	400.1
7.5°	277.9	286.5	317.1	324.7	358.1	405.9	425.9	452.7	493.7	513.8	530.0
10°	259.8	277.9	332.3	350.5	404.9	477.5	514.7	552.0	614.1	641.8	652.3
12.5°	239.7	269.3	348.6	373.4	451.7	557.7	602.6	643.7	714.3	751.6	757.3
15°	216.8	256.9	363.9	400.1	501.4	624.6	674.2	724.8	790.7	817.5	824.2
17.5°	196.7	247.3	378.2	416.4	539.6	684.7	735.4	777.4	830.8	849.0	853.8
20°	171.9	232.1	387.7	437.4	579.7	728.7	777.4	809.8	846.1	857.6	859.5
22.5°	153.8	215.8	393.5	445.0	606.4	755.4	796.5	822.3	847.1	850.9	851.9
25°	138.5	197.7	392.5	453.6	629.3	771.6	803.2	822.3	836.6	838.5	838.5
27.5°	124.2	177.6	388.7	455.5	646.5	775.5	800.3	813.7	820.3	824.2	824.2
30°	111.7	158.5	379.1	451.7	654.2	771.6	791.7	798.4	805.1	810.8	813.7
32.5°	102.2	140.4	364.8	444.1	655.1	762.1	776.4	780.2	789.8	803.2	807.9
35°	93.6	122.2	348.6	433.6	649.4	746.8	756.4	760.2	779.3	799.3	806.0
37.5°	85.0	108.9	327.6	415.4	640.8	728.7	735.4	742.0	771.6	795.5	803.2
40°	76.4	97.4	302.7	395.4	627.4	706.7	712.4	722.9	762.1	789.8	797.4
42.5°	69.7	87.9	276.0	374.4	610.2	681.9	690.5	705.7	750.6	780.2	788.8
45°	64.0	78.3	247.3	345.7	588.3	656.1	668.5	689.5	737.3	765.9	773.6
47.5°	58.3	71.6	217.7	316.1	564.4	630.3	646.5	670.4	719.1	746.8	753.5
50°	53.5	64.9	188.1	284.6	538.6	602.6	621.7	646.5	696.2	722.0	730.6
52.5°	49.7	59.2	160.4	253.1	509.0	574.0	595.9	621.7	668.5	693.3	699.1
55°	45.8	54.4	136.6	219.6	478.5	543.4	567.3	592.1	637.9	658.9	662.8
57.5°	43.9	50.6	116.5	188.1	446.0	509.0	535.8	558.7	601.6	617.9	621.7
60°	41.1	47.8	101.2	161.4	410.6	476.5	499.5	522.4	558.7	572.0	574.9
62.5°	38.2	45.8	89.8	135.6	374.4	438.3	461.3	482.3	512.8	522.4	526.2
65°	36.3	43.9	81.2	116.5	337.1	398.2	421.2	439.3	464.1	473.7	475.6
67.5°	34.4	42.0	74.5	100.3	299.9	358.1	375.3	392.5	411.6	421.2	422.1
70°	31.5	40.1	68.8	88.8	261.7	312.3	326.6	344.8	360.0	364.8	367.7
72.5°	29.6	37.2	64.9	80.2	222.5	268.4	281.7	292.2	305.6	310.4	310.4
75°	26.7	33.4	61.1	71.6	182.4	219.6	231.1	241.6	252.1	254.0	251.2
77.5°	23.9	29.6	52.5	60.2	142.3	173.8	183.4	189.1	197.7	199.6	200.5
80°	20.1	25.8	41.1	46.8	103.1	128.0	134.7	139.4	147.1	147.1	149.0
82.5°	15.3	20.1	29.6	33.4	69.7	87.9	93.6	96.5	101.2	101.2	101.2
85°	9.5	12.4	19.1	22.0	42.0	53.5	57.3	58.3	62.1	63.0	63.0
87.5°	4.8	6.7	12.4	13.4	22.0	27.7	27.7	29.6	29.6	28.6	27.7
90°	5.9	10.7	15.5	16.7	26.3	39.0	45.3	40.2	30.2	22.6	22.6
92.5°	23.8	64.3	104.9	115.0	161.6	223.8	254.9	223.4	160.4	113.2	108.7
95°	57.2	131.3	205.4	223.9	397.7	629.3	745.2	665.0	504.5	384.2	370.5
97.5°	98.8	164.3	229.7	246.0	535.7	922.0	1115.1	1064.3	962.9	886.9	860.9
100°	131.0	190.3	249.6	264.4	585.9	1014.5	1228.8	1232.5	1240.0	1245.5	1214.6
102.5°	158.4	213.8	269.1	283.0	609.0	1043.6	1261.0	1325.5	1454.8	1551.7	1525.2
105°	204.9	251.8	298.6	310.4	626.0	1046.9	1257.4	1402.1	1691.8	1909.0	1894.8
107.5°	252.6	296.2	340.0	350.9	629.2	1000.4	1185.9	1387.9	1791.9	2094.9	2098.3
110°	284.7	324.1	363.7	373.5	624.5	959.0	1126.3	1352.2	1803.8	2142.5	2157.3

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	316.3	353.9	391.6	400.9	624.7	923.0	1072.2	1303.3	1765.5	2112.2	2134.9
115°	364.0	398.6	433.3	442.0	630.4	881.7	1007.2	1229.8	1675.2	2009.1	2040.7
117.5°	411.0	442.5	474.1	481.9	642.1	855.8	962.5	1163.5	1565.3	1866.7	1901.8
120°	438.3	468.0	497.7	505.1	651.6	847.0	944.7	1128.2	1495.4	1770.9	1804.9
122.5°	465.2	495.1	525.1	532.5	665.3	842.5	931.0	1096.3	1427.0	1675.0	1708.5
125°	506.3	533.6	560.9	567.7	683.8	838.7	916.1	1056.5	1337.4	1548.1	1579.0
127.5°	539.7	567.2	594.7	601.6	702.2	836.5	903.6	1024.2	1265.4	1446.3	1472.3
130°	557.5	587.1	616.7	624.2	715.8	837.8	898.8	1006.2	1220.9	1381.9	1406.0
132.5°	576.0	605.7	635.3	642.7	726.7	838.7	894.6	990.7	1183.0	1327.1	1348.7
135°	603.4	630.4	657.3	664.1	738.6	837.8	887.5	968.0	1128.9	1249.6	1268.2
137.5°	631.4	658.1	684.8	691.5	756.5	843.1	886.3	954.3	1090.4	1192.5	1207.7
140°	654.7	679.3	703.9	710.0	767.4	843.9	882.1	940.9	1058.4	1146.6	1160.8
142.5°	672.5	695.2	718.0	723.7	776.5	846.9	882.1	933.8	1037.0	1114.5	1126.7
145°	699.9	719.8	739.6	744.5	788.4	847.0	876.2	918.4	1002.8	1066.2	1075.4
147.5°	727.2	746.6	765.9	770.8	805.9	852.8	876.2	909.4	975.8	1025.7	1033.3
150°	745.2	762.7	780.0	784.4	815.0	855.8	876.2	904.3	960.3	1002.5	1008.7
152.5°	763.6	776.9	790.1	793.4	821.0	857.8	876.2	900.2	948.1	984.0	988.7
155°	791.0	800.9	810.6	813.1	834.1	862.2	876.2	895.3	933.4	962.0	965.1
157.5°	811.3	820.8	830.3	832.7	847.2	866.6	876.2	891.0	920.6	942.9	945.1
160°	824.9	832.4	839.8	841.6	853.2	868.6	876.2	888.9	914.3	933.3	934.6
162.5°	838.7	844.2	849.8	851.2	859.5	870.7	876.2	886.9	908.4	924.4	925.6
165°	853.6	858.5	863.6	864.8	868.7	873.7	876.2	883.9	899.2	910.7	911.9
167.5°	867.2	869.6	872.0	872.6	875.7	880.0	882.1	887.2	897.2	904.8	905.3
170°	876.2	878.6	881.0	881.6	881.8	882.0	882.1	887.2	897.2	904.8	904.8
172.5°	881.0	881.5	882.0	882.1	882.1	882.1	882.1	886.1	894.1	900.0	899.5
175°	887.5	887.5	887.5	887.5	885.7	883.3	882.1	884.6	889.7	893.5	893.5
177.5°	887.5	887.5	887.5	887.5	886.1	884.3	883.4	885.4	889.3	892.3	891.7
180°	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5	887.5

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CANDELA DISTRIBUTION (continued):

	80°	90°
0°	297.0	297.0
2.5°	317.1	315.2
5°	407.8	409.7
7.5°	549.1	548.2
10°	682.8	691.4
12.5°	780.2	782.1
15°	839.4	843.3
17.5°	862.4	863.3
20°	863.3	861.4
22.5°	852.8	850.9
25°	840.4	839.4
27.5°	828.9	829.9
30°	824.2	827.0
32.5°	824.2	828.9
35°	826.1	830.8
37.5°	825.1	830.8
40°	821.3	828.0
42.5°	810.8	815.6
45°	794.6	800.3
47.5°	773.6	777.4
50°	746.8	750.6
52.5°	713.4	714.3
55°	673.3	677.1
57.5°	630.3	631.3
60°	582.6	585.4
62.5°	531.9	531.9
65°	478.5	480.4
67.5°	423.1	427.8
70°	366.7	367.7
72.5°	311.3	311.3
75°	254.0	255.0
77.5°	199.6	199.6
80°	148.0	149.0
82.5°	102.2	104.1
85°	64.0	64.0
87.5°	29.6	26.7
90°	22.6	22.6
92.5°	90.6	72.7
95°	316.0	261.5
97.5°	757.2	653.4
100°	1091.0	967.3
102.5°	1419.3	1313.4
105°	1837.9	1781.0
107.5°	2112.1	2125.8
110°	2216.7	2276.0

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	2226.0	2317.0
115°	2167.0	2293.2
117.5°	2041.8	2181.8
120°	1940.9	2077.0
122.5°	1842.8	1976.9
125°	1702.6	1826.2
127.5°	1576.6	1680.9
130°	1502.3	1598.7
132.5°	1434.9	1521.2
135°	1342.6	1417.0
137.5°	1268.6	1329.5
140°	1217.7	1274.6
142.5°	1175.7	1224.6
145°	1112.6	1149.6
147.5°	1064.1	1094.8
150°	1033.6	1058.4
152.5°	1007.5	1026.2
155°	977.5	990.0
157.5°	953.8	962.5
160°	939.6	944.7
162.5°	930.4	935.1
165°	917.0	922.1
167.5°	907.4	909.5
170°	904.8	904.8
172.5°	897.7	895.9
175°	893.5	893.5
177.5°	889.6	887.5
180°	887.5	887.5

(END OF REPORT)