

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: P937602

Luminaire Tested: SQ4-FB-100U-075D-B40-1D-UNV-W2A-W-4

Issue Date: 12/17/2024

Test Information

Test Method: LM-79-2019
Report Number: P937602
REPORT IS A COMBINATION OF REPORTS P933566 AND P933786
Test Lab: INNOVATION CENTER
Issue Date: 12/17/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-100U-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

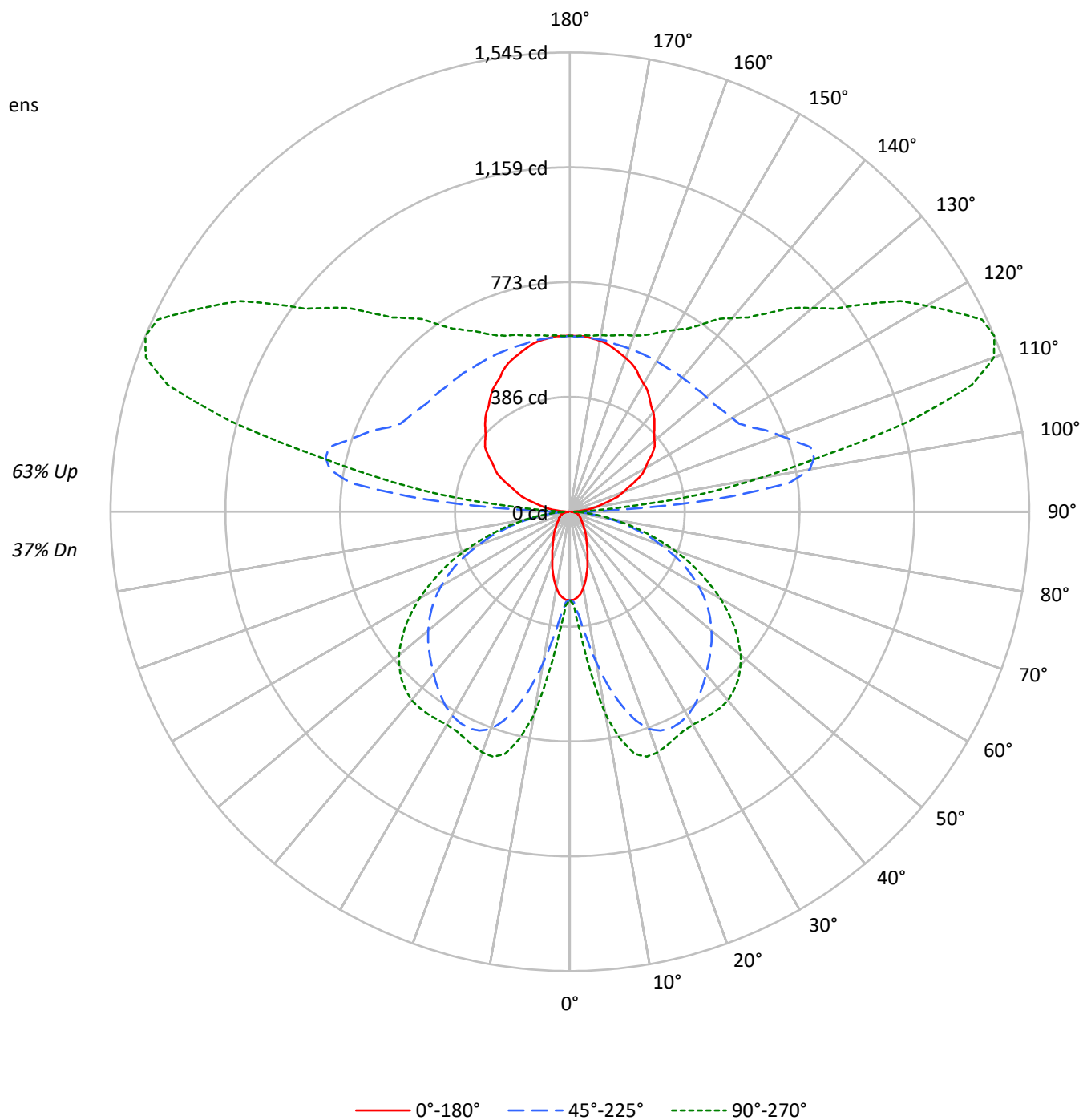
Lumens per Lamp: N/A
Luminaire Lumens: 6136.7 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 0.71 / 2.69 / 2.33
Luminous Opening: Rectangular w/ Sides (W: 0.29' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 49.2
Input Voltage (V): NR
Input Current (A_{in}): 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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37		
1	95	90	86	83	86	82	78	75	66	64	62	52	50	49	39	38	37	31		
2	86	78	72	67	77	71	66	61	58	54	50	45	42	40	34	32	30	25		
3	78	68	61	55	70	62	56	50	50	46	42	39	36	33	29	27	25	21		
4	71	60	52	46	64	55	48	42	44	39	35	35	31	28	26	23	21	17		
5	65	53	45	39	58	48	41	36	39	34	30	31	27	24	23	20	18	15		
6	60	47	39	33	54	43	36	31	35	30	26	28	24	21	21	18	16	13		
7	55	42	34	29	49	39	32	27	32	26	22	25	21	18	19	16	14	11		
8	51	38	31	25	46	35	28	23	29	23	20	23	19	16	17	14	12	10		
9	47	35	27	22	42	32	25	21	26	21	17	21	17	14	16	13	11	9		
10	44	32	24	20	40	29	23	18	24	19	15	19	15	12	14	12	10	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	0.6
10°-20°	170.3	2.8
20°-30°	297.8	4.9
30°-40°	383.4	6.2
40°-50°	428.2	7.0
50°-60°	410.2	6.7
60°-70°	325.1	5.3
70°-80°	191.1	3.1
80°-90°	55.4	0.9
90°-100°	288.5	4.7
100°-110°	758.5	12.4
110°-120°	786.5	12.8
120°-130°	630.8	10.3
130°-140°	495.0	8.1
140°-150°	379.9	6.2
150°-160°	273.6	4.5
160°-170°	167.4	2.7
170°-180°	56.6	0.9
0°-30°	506.5	8.3
0°-40°	889.9	14.5
0°-60°	1728.3	28.2
0°-90°	2299.9	37.5
90°-120°	1833.5	29.9
90°-150°	3339.2	54.4
90°-180°	3837.0	62.5
0°-180°	6136.7	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°	4	11	30	15	15	4
95°	38	149	497	256	174	42
105°	137	207	839	1273	1188	145
115°	243	295	672	1340	1529	240
125°	338	379	611	1032	1218	300
135°	402	443	592	833	945	311
145°	467	496	584	711	767	292
155°	528	542	584	642	660	242
165°	569	577	584	607	615	161
175°	592	592	588	596	596	56
180°	592	592	592	592	592	

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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°	4.0	7.2	10.3	11.1	17.5	26.0	30.2	26.8	20.2	15.1	15.1
92.5°	15.9	42.9	69.9	76.7	107.8	149.3	170.0	149.0	107.0	75.4	72.5
95°	38.1	87.6	137.0	149.4	265.2	419.6	496.9	443.4	336.4	256.2	247.2
97.5°	65.9	109.5	153.2	164.1	357.3	614.8	743.6	709.8	642.1	591.4	574.1
100°	87.4	126.9	166.5	176.4	390.8	676.6	819.5	822.0	826.8	830.6	809.9
102.5°	105.6	142.6	179.4	188.7	406.2	696.0	841.0	884.0	970.2	1034.7	1017.1
105°	136.7	167.9	199.1	206.9	417.5	698.2	838.6	935.1	1128.2	1273.1	1263.7
107.5°	168.5	197.6	226.7	234.0	419.6	667.1	790.8	925.6	1195.0	1397.1	1399.4
110°	189.9	216.2	242.5	249.1	416.4	639.6	751.1	901.7	1202.9	1428.8	1438.7

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CANDELA DISTRIBUTION (continued):

	0°	10°	20°	22.5°	30°	40°	45°	50°	60°	67.5°	70°
112.5°	211.0	236.0	261.0	267.3	416.6	615.5	715.0	869.1	1177.3	1408.5	1423.7
115°	242.7	265.8	288.9	294.7	420.4	588.0	671.7	820.2	1117.2	1339.9	1360.9
117.5°	274.1	295.1	316.1	321.4	428.2	570.7	642.0	775.9	1043.9	1244.9	1268.2
120°	292.3	312.1	331.9	336.8	434.5	564.9	630.0	752.4	997.3	1181.0	1203.7
122.5°	310.3	330.2	350.2	355.2	443.7	561.8	620.8	731.1	951.6	1117.0	1139.3
125°	337.7	355.8	374.0	378.6	456.0	559.2	610.9	704.6	891.9	1032.4	1053.0
127.5°	359.8	378.2	396.6	401.2	468.3	557.8	602.6	683.0	843.8	964.5	981.8
130°	371.8	391.6	411.3	416.3	477.3	558.8	599.5	671.1	814.2	921.6	937.6
132.5°	384.1	403.9	423.6	428.6	484.6	559.2	596.6	660.7	788.8	885.0	899.4
135°	402.4	420.4	438.4	442.9	492.6	558.8	591.9	645.6	752.8	833.3	845.7
137.5°	421.1	438.9	456.7	461.2	504.4	562.2	591.0	636.4	727.1	795.2	805.4
140°	436.5	453.0	469.4	473.5	511.8	562.8	588.3	627.4	705.8	764.7	774.1
142.5°	448.5	463.7	478.8	482.7	517.9	564.8	588.3	622.7	691.5	743.2	751.4
145°	466.7	480.0	493.2	496.5	525.8	564.9	584.4	612.5	668.8	711.0	717.2
147.5°	485.0	497.9	510.7	514.0	537.5	568.7	584.4	606.5	650.8	684.1	689.2
150°	496.9	508.5	520.2	523.1	543.6	570.8	584.4	603.1	640.4	668.5	672.6
152.5°	509.2	518.0	526.9	529.1	547.5	572.0	584.4	600.3	632.2	656.2	659.3
155°	527.5	534.0	540.6	542.2	556.3	575.0	584.4	597.1	622.5	641.5	643.6
157.5°	541.0	547.4	553.7	555.3	565.0	577.9	584.4	594.2	614.0	628.8	630.2
160°	550.2	555.1	560.0	561.3	569.0	579.2	584.4	592.9	609.8	622.5	623.3
162.5°	559.2	563.0	566.7	567.7	573.2	580.6	584.4	591.5	605.8	616.5	617.2
165°	569.2	572.5	575.9	576.7	579.3	582.6	584.4	589.5	599.7	607.4	608.2
167.5°	578.3	580.0	581.6	582.0	584.1	586.8	588.3	591.6	598.3	603.4	603.8
170°	584.4	585.9	587.5	587.9	588.0	588.2	588.3	591.6	598.3	603.4	603.4
172.5°	587.5	587.9	588.2	588.3	588.3	588.3	588.3	591.0	596.2	600.2	599.9
175°	591.9	591.9	591.9	591.9	590.7	589.0	588.3	590.0	593.3	595.8	595.8
177.5°	591.9	591.9	591.9	591.9	591.0	589.7	589.0	590.4	593.1	595.1	594.7
180°	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9	591.9

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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°	15.1	15.1
92.5°	60.5	48.4
95°	210.8	174.4
97.5°	504.9	435.8
100°	727.5	645.1
102.5°	946.5	875.9
105°	1225.6	1187.7
107.5°	1408.5	1417.7
110°	1478.2	1517.8

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CANDELA DISTRIBUTION (continued):

	80°	90°
112.5°	1484.5	1545.2
115°	1445.1	1529.3
117.5°	1361.6	1455.0
120°	1294.4	1385.1
122.5°	1228.9	1318.4
125°	1135.4	1217.9
127.5°	1051.5	1121.0
130°	1001.9	1066.2
132.5°	956.9	1014.5
135°	895.3	945.0
137.5°	846.0	886.6
140°	812.1	850.0
142.5°	784.1	816.7
145°	741.9	766.7
147.5°	709.7	730.1
150°	689.2	705.8
152.5°	671.8	684.4
155°	651.9	660.2
157.5°	636.1	642.0
160°	626.7	630.0
162.5°	620.5	623.6
165°	611.6	614.9
167.5°	605.1	606.5
170°	603.4	603.4
172.5°	598.7	597.4
175°	595.8	595.8
177.5°	593.3	591.9
180°	591.9	591.9

(END OF REPORT)