

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:

Luminaire Tested: SQ4-PR1-075U-050D-927-1D-UNV-STD-W-4

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-PR1-075U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

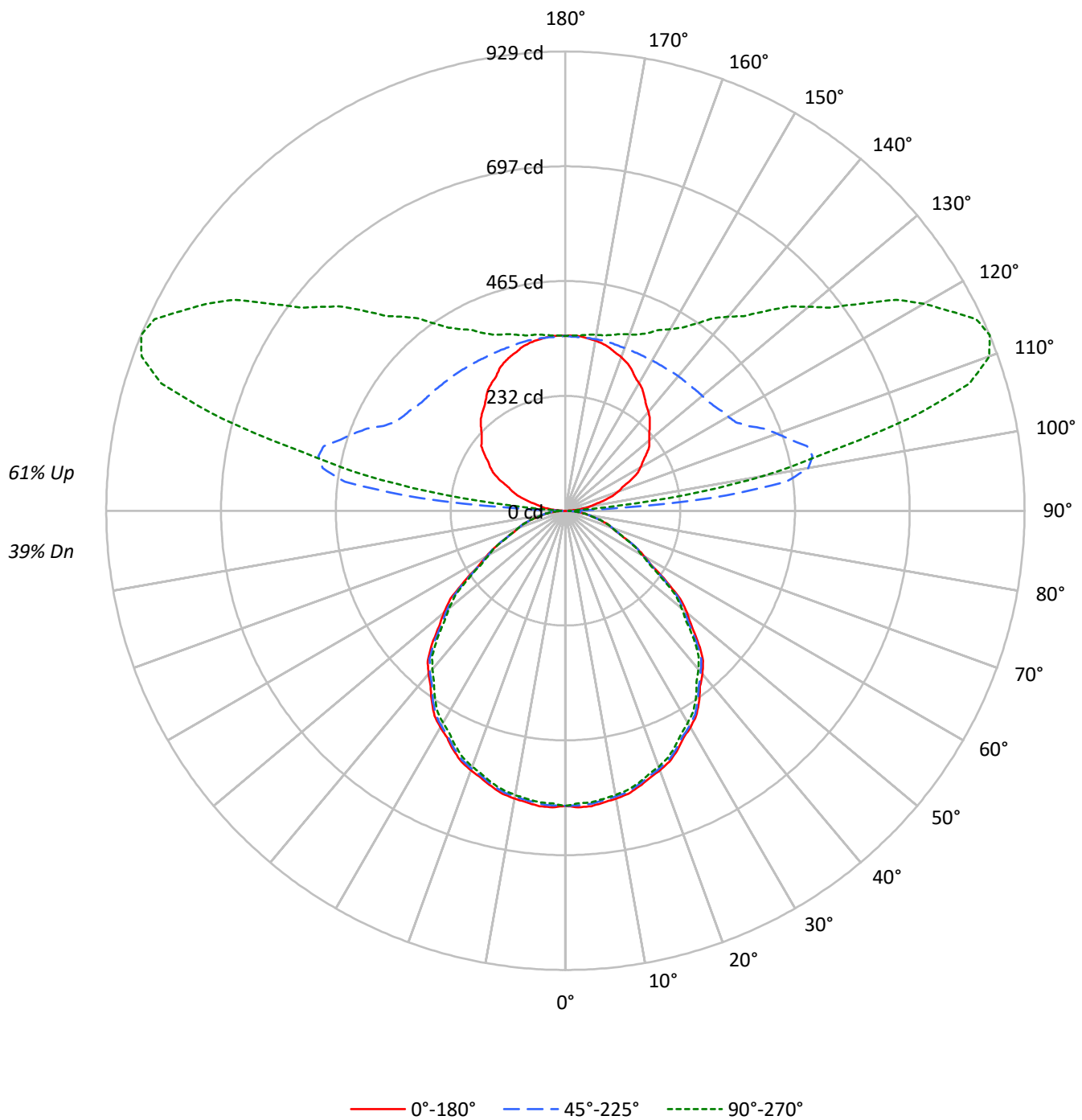
Lumens per Lamp: N/A
Luminaire Lumens: 3798.2 lumens
Efficiency: N/A
Efficacy: 109.5 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 34.7
Input Voltage (V): 120
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	77	77	77	61	61	61	46	46	46
1	96	91	88	84	87	83	80	77	68	66	64	54	53	51	41	40	39
2	87	80	74	69	79	73	68	64	60	56	53	48	45	43	37	35	34
3	80	71	63	58	72	64	58	53	53	49	45	42	39	37	33	31	29
4	73	63	55	49	66	57	51	45	47	42	38	38	34	32	29	27	25
5	67	56	48	42	61	51	44	39	42	37	33	34	30	27	26	24	22
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	21	19
7	57	45	37	32	52	41	35	30	34	29	25	28	24	21	22	19	17
8	53	41	33	28	48	38	31	26	31	26	23	26	22	19	20	17	15
9	49	37	30	25	45	34	28	23	29	24	20	23	20	17	19	16	14
10	46	34	27	22	42	31	25	21	26	22	18	22	18	15	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5507	5507	5507
5°	5556	5513	5485
10°	5539	5500	5471
15°	5514	5480	5450
20°	5486	5451	5411
25°	5448	5412	5349
30°	5390	5351	5275
35°	5309	5263	5188
40°	5189	5133	5040
45°	4978	4890	4790
50°	4605	4494	4405
55°	4018	3928	3846
60°	3386	3358	3292
65°	2930	2941	2919
70°	2689	2703	2703
75°	2584	2584	2602
80°	2433	2460	2433
85°	1958	2181	2181

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4978 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.4	1.5
10°-20°	161.5	4.3
20°-30°	243.6	6.4
30°-40°	290.2	7.6
40°-50°	286.1	7.5
50°-60°	218.7	5.8
60°-70°	135.3	3.6
70°-80°	76.9	2.0
80°-90°	24.3	0.6
90°-100°	166.9	4.4
100°-110°	459.2	12.1
110°-120°	473.9	12.5
120°-130°	379.7	10.0
130°-140°	298.2	7.9
140°-150°	228.6	6.0
150°-160°	164.3	4.3
160°-170°	100.5	2.6
170°-180°	33.9	0.9
0°-30°	461.5	12.2
0°-40°	751.7	19.8
0°-60°	1256.5	33.1
0°-90°	1493.0	39.3
90°-120°	1100.0	29.0
90°-150°	2006.5	52.8
90°-180°	2305.0	60.7
0°-180°	3798.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	597	597	597	597	597	
5°	600	593	595	593	592	57
15°	577	571	574	572	571	163
25°	535	529	532	526	525	246
35°	471	466	467	461	461	294
45°	382	376	375	368	367	292
55°	250	246	244	240	239	224
65°	134	133	135	134	134	136
75°	72	72	72	73	73	77
85°	18	20	21	21	21	22
90°	1	3	5	7	7	2
95°	25	91	295	126	81	26
105°	82	126	506	770	719	87
115°	145	177	406	808	917	143
125°	200	228	368	623	730	179
135°	242	268	358	504	570	186
145°	279	298	352	429	462	175
155°	316	326	350	386	397	145
165°	342	346	352	366	368	96
175°	354	355	352	357	356	34
180°	354	354	354	354	354	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	596.9	596.9	596.9	596.9	596.9
2.5°	600.6	595.3	596.9	595.6	592.7
5°	599.9	593.4	595.3	593.2	592.2
7.5°	595.3	588.9	590.8	588.7	588.1
10°	591.2	585.2	587.1	585.0	584.0
12.5°	586.7	580.2	582.6	580.1	579.1
15°	577.3	571.3	573.7	571.6	570.6
17.5°	567.0	560.6	563.0	560.6	559.3
20°	558.8	552.8	555.2	551.6	551.1
22.5°	549.8	543.7	546.2	541.3	541.2
25°	535.2	528.6	531.6	525.9	525.4
27.5°	517.8	511.8	514.2	508.4	507.8
30°	505.9	499.8	502.3	496.1	495.1
32.5°	492.3	486.7	488.7	482.5	481.9
35°	471.4	465.9	467.3	461.1	460.6
37.5°	447.7	442.6	443.5	436.7	436.2
40°	430.8	425.8	426.2	419.0	418.5
42.5°	412.3	407.3	406.8	399.6	399.1
45°	381.5	376.4	374.8	368.1	367.1
47.5°	346.3	341.3	338.2	332.7	332.0
50°	320.8	315.8	313.1	308.4	306.9
52.5°	293.2	288.2	285.9	281.7	280.2
55°	249.8	245.8	244.2	240.1	239.1
57.5°	208.6	205.9	205.4	201.4	201.0
60°	183.5	182.0	182.0	178.4	178.4
62.5°	162.1	161.0	161.8	159.5	159.1
65°	134.2	133.2	134.7	133.7	133.7
67.5°	112.1	112.1	113.0	112.6	112.6
70°	99.7	99.7	100.2	100.2	100.2
72.5°	88.6	88.2	89.6	89.5	89.1
75°	72.5	72.5	72.5	73.0	73.0
77.5°	56.4	56.5	57.0	56.8	56.4
80°	45.8	46.3	46.3	45.8	45.8
82.5°	35.1	35.6	35.6	35.5	35.1
85°	18.5	19.5	20.6	20.6	20.6
87.5°	5.5	7.5	9.3	9.6	9.2
90°	0.8	3.0	5.3	6.8	6.8
92.5°	10.4	44.4	76.9	29.5	24.2
95°	24.8	91.1	295.1	126.2	80.6
97.5°	40.5	101.0	450.4	347.0	244.8
100°	51.9	107.2	499.2	503.8	411.1
102.5°	62.8	114.5	511.8	625.1	540.0
105°	82.1	126.2	505.9	770.5	719.0
107.5°	100.4	140.8	477.2	841.8	857.1
110°	113.7	150.5	455.5	859.5	912.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	125.7	161.4	433.8	848.1	928.8
115°	145.3	177.0	405.8	808.1	917.0
117.5°	164.0	193.1	388.0	751.9	875.1
120°	175.4	203.4	380.2	709.8	837.2
122.5°	185.7	213.6	374.8	673.0	793.8
125°	200.3	228.2	368.2	622.8	729.5
127.5°	214.1	240.8	363.8	580.9	674.6
130°	221.3	248.6	361.4	556.1	641.5
132.5°	229.8	257.0	359.6	534.2	611.3
135°	241.7	268.2	357.6	503.7	569.9
137.5°	252.8	277.4	356.0	479.0	533.6
140°	261.2	284.1	355.4	462.6	512.0
142.5°	268.5	289.5	354.2	448.0	490.3
145°	279.3	298.5	352.3	429.1	462.3
147.5°	290.9	307.4	351.4	412.4	438.9
150°	298.1	312.9	350.8	403.3	423.9
152.5°	304.8	318.3	350.2	395.3	412.4
155°	316.2	326.5	350.1	385.7	396.8
157.5°	324.5	332.9	350.1	377.8	385.5
160°	330.5	337.1	350.1	373.6	379.5
162.5°	335.3	340.8	350.7	369.9	374.6
165°	341.8	346.2	351.6	365.9	368.2
167.5°	346.3	349.7	352.3	362.6	363.2
170°	349.3	351.5	352.3	361.4	361.4
172.5°	351.7	352.8	352.3	359.6	359.0
175°	353.9	354.6	352.3	356.8	356.1
177.5°	354.5	354.5	352.0	355.6	354.5
180°	353.9	353.9	353.9	353.9	353.9

(END OF REPORT)