

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-WB-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-WB-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

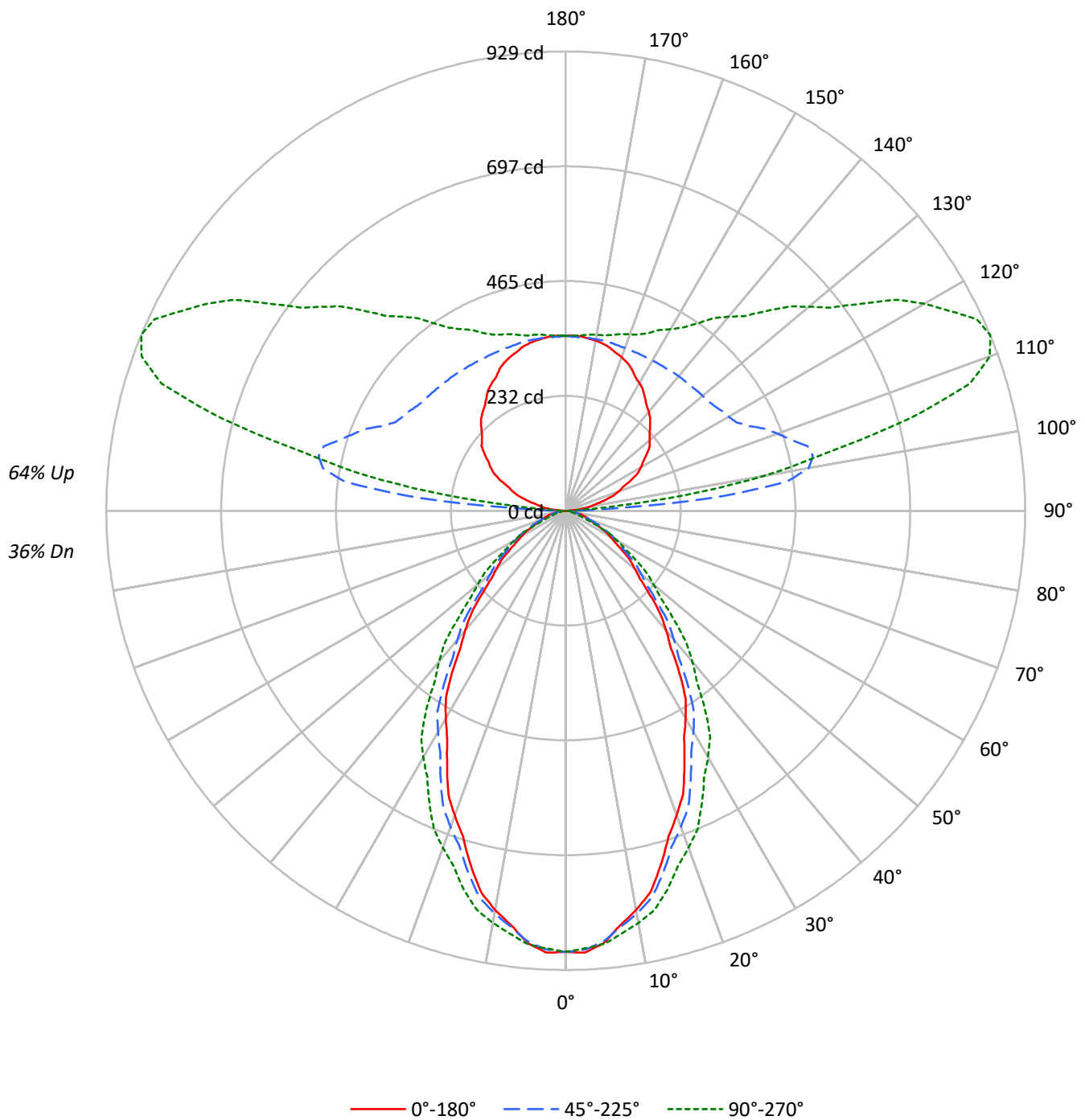
Lumens per Lamp: N/A
Luminaire Lumens: 3606.7 lumens
Efficiency: N/A
Efficacy: 103.9 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	43	43	43
1	95	92	88	85	86	83	80	78	67	65	64	53	52	50	40	39	38
2	88	81	75	71	79	74	69	65	60	57	54	47	45	43	36	35	33
3	80	72	65	60	73	66	60	55	54	50	46	43	40	38	33	31	29
4	74	64	57	51	67	59	52	48	48	44	40	39	36	33	30	28	26
5	68	58	50	45	62	53	46	41	44	39	35	35	32	29	27	25	23
6	63	52	44	39	57	48	41	36	40	35	31	32	29	26	25	23	21
7	58	47	40	35	53	43	37	32	36	31	28	29	26	23	23	21	19
8	54	43	36	31	49	40	33	29	33	28	25	27	24	21	21	19	17
9	51	39	32	28	46	36	30	26	31	26	23	25	22	19	20	18	16
10	47	36	29	25	43	33	27	23	28	24	20	23	20	18	19	16	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8234	8234	8234
5°	8132	8103	8150
10°	7683	7752	7932
15°	7092	7257	7582
20°	6441	6683	7125
25°	5777	6092	6638
30°	5165	5504	6133
35°	4517	4843	5536
40°	3802	4103	4792
45°	3138	3408	4000
50°	2619	2855	3333
55°	2223	2450	2752
60°	1901	2124	2198
65°	1513	1788	1419
70°	1341	1395	866
75°	1244	1130	531
80°	1142	1041	457
85°	1037	953	371

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 4000 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.9	2.3
10°-20°	212.9	5.9
20°-30°	275.8	7.6
30°-40°	270.1	7.5
40°-50°	206.7	5.7
50°-60°	137.7	3.8
60°-70°	75.2	2.1
70°-80°	31.3	0.9
80°-90°	9.8	0.3
90°-100°	166.9	4.6
100°-110°	459.2	12.7
110°-120°	473.9	13.1
120°-130°	379.7	10.5
130°-140°	298.2	8.3
140°-150°	228.6	6.3
150°-160°	164.3	4.6
160°-170°	100.5	2.8
170°-180°	33.9	0.9
0°-30°	570.6	15.8
0°-40°	840.7	23.3
0°-60°	1185.2	32.9
0°-90°	1301.5	36.1
90°-120°	1100.0	30.5
90°-150°	2006.5	55.6
90°-180°	2305.0	63.9
0°-180°	3606.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	892	892	892	892	892	
5°	878	869	875	877	880	82
15°	742	740	760	780	794	207
25°	568	569	598	624	652	261
35°	401	403	430	459	492	249
45°	240	245	261	281	307	188
55°	138	144	152	158	171	125
65°	69	75	82	72	65	72
75°	35	35	32	22	15	37
85°	10	10	9	6	4	11
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°	892.5	892.5	892.5	892.5	892.5
2.5°	894.7	886.8	888.8	888.7	886.3
5°	878.0	869.2	874.9	876.9	880.0
7.5°	845.4	838.8	849.1	856.8	863.0
10°	820.1	814.3	827.5	838.7	846.7
12.5°	790.6	785.8	802.1	817.1	827.6
15°	742.5	739.8	759.8	780.4	793.8
17.5°	691.1	689.8	712.6	736.7	753.9
20°	656.0	655.6	680.7	705.8	725.7
22.5°	620.6	621.4	647.8	673.9	696.6
25°	567.5	569.0	598.4	624.5	652.1
27.5°	518.4	519.0	549.5	577.0	606.4
30°	484.8	486.8	516.6	545.1	575.7
32.5°	451.3	453.5	482.7	512.2	543.4
35°	401.0	402.9	430.0	458.9	491.5
37.5°	349.2	351.8	375.8	403.2	435.2
40°	315.7	319.5	340.7	366.5	397.9
42.5°	283.4	288.1	307.8	332.3	360.6
45°	240.5	245.1	261.2	281.0	306.6
47.5°	203.5	208.8	221.2	238.2	260.1
50°	182.5	187.5	198.9	211.6	232.2
52.5°	164.0	169.0	179.2	188.9	206.5
55°	138.2	144.0	152.3	158.1	171.1
57.5°	117.1	122.6	129.2	131.8	139.7
60°	103.0	109.1	115.1	114.8	119.1
62.5°	90.2	95.4	101.4	97.2	97.4
65°	69.3	75.1	81.9	71.5	65.0
67.5°	56.0	57.2	64.2	49.9	42.1
70°	49.7	49.7	51.7	38.6	32.1
72.5°	43.8	43.8	42.0	31.4	24.6
75°	34.9	34.9	31.7	21.8	14.9
77.5°	26.9	26.6	24.3	16.2	10.8
80°	21.5	21.5	19.6	12.8	8.6
82.5°	16.8	16.8	15.2	10.0	6.4
85°	9.8	9.8	9.0	5.8	3.5
87.5°	3.6	4.0	4.2	3.2	2.9
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)