

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-100U-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 (G3-1910-536-23)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-100U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

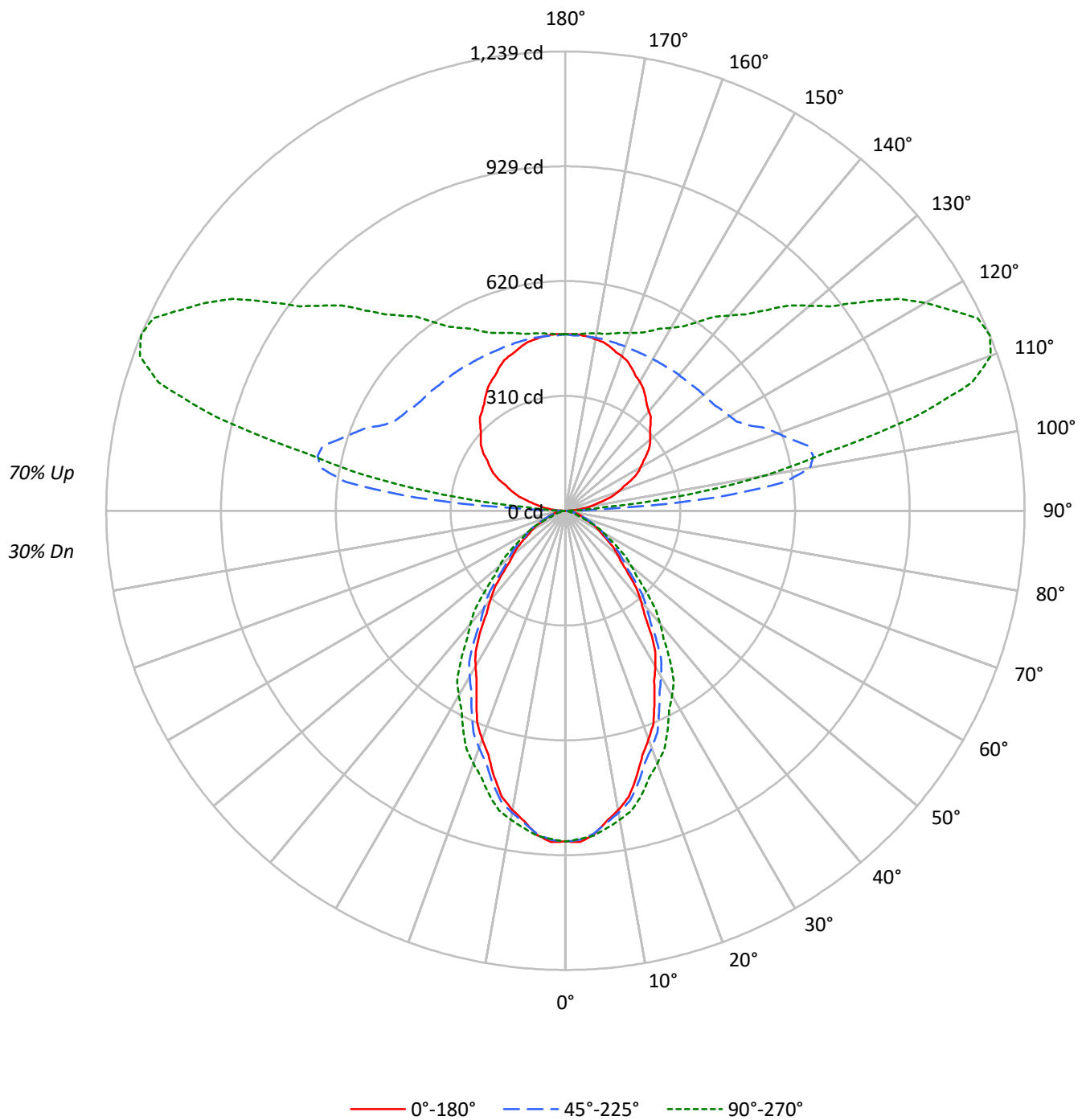
Lumens per Lamp: N/A
Luminaire Lumens: 4394.1 lumens
Efficiency: N/A
Efficacy: 106.4 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 41.3
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				0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12

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	1.9
10°-20°	212.9	4.8
20°-30°	275.8	6.3
30°-40°	270.1	6.1
40°-50°	206.7	4.7
50°-60°	137.7	3.1
60°-70°	75.2	1.7
70°-80°	31.3	0.7
80°-90°	9.8	0.2
90°-100°	222.9	5.1
100°-110°	615.3	14.0
110°-120°	634.6	14.4
120°-130°	510.0	11.6
130°-140°	400.8	9.1
140°-150°	307.4	7.0
150°-160°	220.9	5.0
160°-170°	135.1	3.1
170°-180°	45.5	1.0
0°-30°	570.6	13.0
0°-40°	840.7	19.1
0°-60°	1185.2	27.0
0°-90°	1301.5	29.6
90°-120°	1472.8	33.5
90°-150°	2691.0	61.2
90°-180°	3093.0	70.4
0°-180°	4394.1	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°	2	3	6	7	8	3
95°	33	121	404	166	108	35
105°	110	169	677	1034	973	117
115°	196	237	545	1079	1228	193
125°	270	307	494	836	982	240
135°	324	359	480	677	764	251
145°	376	402	474	577	621	236
155°	424	438	471	518	534	195
165°	459	465	473	491	495	129
175°	476	477	474	480	479	45
180°	476	476	476	476	476	

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°	3.8	4.0	4.4	3.2	3.1
90°	1.5	3.0	6.1	6.9	7.6
92.5°	13.7	56.9	101.7	37.1	28.9
95°	32.7	120.6	404.4	166.2	108.1
97.5°	54.2	135.1	599.0	461.2	334.0
100°	70.1	143.8	670.9	675.7	549.1
102.5°	85.3	153.6	684.9	834.8	714.8
105°	109.7	169.2	677.0	1033.6	973.2
107.5°	135.6	188.6	639.2	1129.4	1151.4
110°	153.8	201.5	610.0	1150.0	1221.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	170.3	216.1	582.6	1133.7	1239.2
115°	196.5	237.4	545.3	1079.4	1227.6
117.5°	219.3	260.1	520.7	1003.0	1171.6
120°	234.6	274.8	511.0	951.2	1121.0
122.5°	249.2	287.6	503.1	902.9	1063.7
125°	269.6	306.8	494.2	836.4	981.6
127.5°	286.9	324.2	489.1	780.2	905.5
130°	298.5	335.8	486.6	745.9	859.8
132.5°	309.5	344.9	484.2	717.0	820.2
135°	324.4	359.4	480.5	677.4	763.8
137.5°	341.2	373.0	478.7	644.3	718.0
140°	350.3	381.6	477.5	622.1	686.9
142.5°	360.7	389.6	476.3	602.5	659.5
145°	376.2	402.3	474.4	576.7	620.7
147.5°	391.1	413.9	472.8	555.0	589.1
150°	402.1	420.7	472.2	542.1	569.6
152.5°	410.6	428.0	471.5	531.0	553.8
155°	424.2	438.3	470.6	517.5	533.8
157.5°	436.7	447.5	470.8	507.6	518.8
160°	444.0	453.7	471.4	502.0	510.2
162.5°	450.1	458.6	472.0	497.1	503.5
165°	459.2	465.2	472.9	491.3	495.0
167.5°	466.2	469.8	473.7	487.7	488.9
170°	469.9	472.8	473.7	485.9	485.9
172.5°	472.9	474.7	473.7	483.4	482.8
175°	476.0	476.7	473.7	480.5	479.0
177.5°	477.2	476.6	473.5	477.8	476.6
180°	476.0	476.0	476.0	476.0	476.0

(END OF REPORT)