

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-025U-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 (G3-1910-536-32)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-025U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

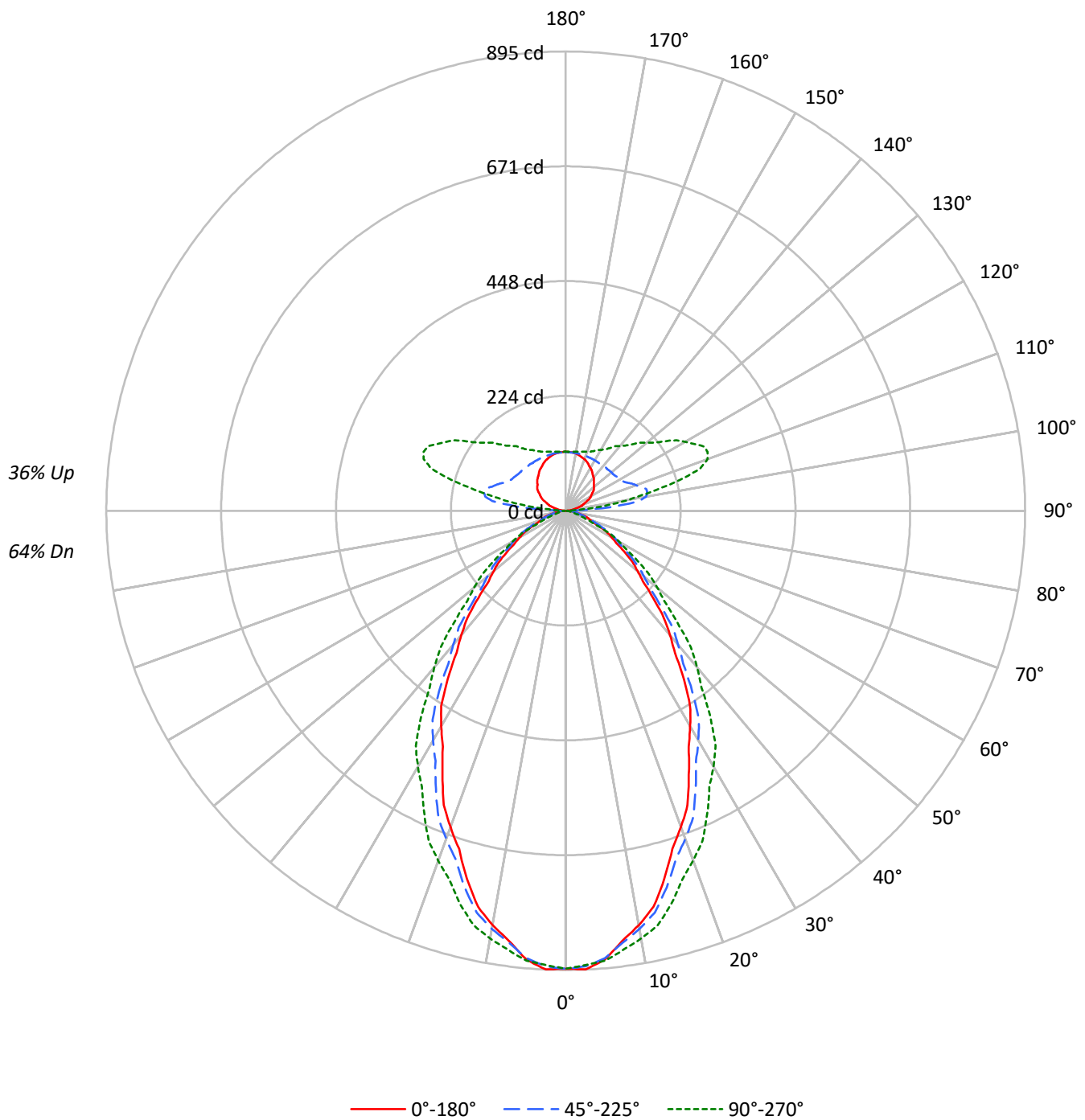
Lumens per Lamp: N/A
Luminaire Lumens: 2044.9 lumens
Efficiency: N/A
Efficacy: 92.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 22.1
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	110	110	110	110	104	104	104	104	91	91	91	79	79	79	69	69	69
1	102	98	95	92	96	93	90	87	82	80	78	72	70	69	63	62	61
2	94	88	82	78	89	83	78	74	74	70	67	65	62	60	57	55	54
3	87	79	72	67	82	74	68	64	66	62	58	59	56	53	52	50	47
4	81	71	63	58	76	67	61	56	60	55	51	54	50	47	48	45	42
5	75	64	56	51	70	61	54	49	55	49	45	49	45	42	44	41	38
6	69	58	51	45	65	55	48	44	50	44	40	45	41	37	40	37	34
7	65	53	46	40	61	51	44	39	46	40	36	42	37	34	37	34	31
8	60	49	41	36	57	47	40	35	42	37	33	38	34	31	35	31	28
9	57	45	38	33	53	43	37	32	39	34	30	36	31	28	32	29	26
10	53	42	35	30	50	40	34	29	37	31	28	33	29	26	30	27	24

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	4.0
10°-20°	212.9	10.4
20°-30°	275.8	13.5
30°-40°	270.1	13.2
40°-50°	206.7	10.1
50°-60°	137.7	6.7
60°-70°	75.2	3.7
70°-80°	31.3	1.5
80°-90°	9.5	0.5
90°-100°	55.9	2.7
100°-110°	147.0	7.2
110°-120°	152.5	7.5
120°-130°	122.3	6.0
130°-140°	95.9	4.7
140°-150°	73.6	3.6
150°-160°	53.0	2.6
160°-170°	32.5	1.6
170°-180°	11.0	0.5
0°-30°	570.6	27.9
0°-40°	840.7	41.1
0°-60°	1185.2	58.0
0°-90°	1301.2	63.6
90°-120°	355.4	17.4
90°-150°	647.3	31.7
90°-180°	744.0	36.4
0°-180°	2044.9	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	2	6	3	3	1
95°	7	29	96	50	34	8
105°	26	40	163	247	230	28
115°	47	57	130	260	296	46
125°	66	73	118	200	236	58
135°	78	86	115	162	183	60
145°	90	96	113	138	149	57
155°	102	105	113	124	128	47
165°	110	112	113	118	119	31
175°	115	115	114	116	116	11
180°	115	115	115	115	115	

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	3.9	4.3	2.5	2.2
90°	0.7	2.2	5.9	2.9	2.9
92.5°	3.1	14.9	33.0	14.6	9.4
95°	7.4	28.9	96.4	49.7	33.8
97.5°	12.8	31.8	144.2	114.7	84.4
100°	16.9	34.2	158.9	161.0	125.0
102.5°	20.4	36.6	163.0	200.6	169.8
105°	26.5	40.1	162.6	246.8	230.2
107.5°	32.7	45.3	153.3	270.8	274.8
110°	36.8	48.3	145.6	277.0	294.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	40.9	51.8	138.6	273.1	299.5
115°	47.1	57.1	130.2	259.8	296.4
117.5°	53.1	62.3	124.5	241.3	282.0
120°	56.6	65.3	122.1	228.9	268.5
122.5°	60.2	68.8	120.3	216.6	255.5
125°	65.5	73.4	118.4	200.2	236.1
127.5°	69.7	77.8	116.8	186.9	217.3
130°	72.1	80.7	116.2	178.6	206.7
132.5°	74.4	83.1	115.6	171.5	196.7
135°	78.0	85.9	114.7	161.6	183.2
137.5°	81.6	89.4	114.6	154.1	171.8
140°	84.6	91.8	114.0	148.2	164.8
142.5°	86.9	93.6	114.0	144.1	158.3
145°	90.5	96.2	113.3	137.8	148.6
147.5°	94.0	99.6	113.3	132.6	141.5
150°	96.4	101.4	113.3	129.6	136.8
152.5°	98.7	102.6	113.3	127.2	132.7
155°	102.2	105.1	113.3	124.4	128.0
157.5°	104.9	107.6	113.3	121.9	124.5
160°	106.7	108.8	113.3	120.7	122.1
162.5°	108.4	110.0	113.3	119.5	120.9
165°	110.3	111.8	113.3	117.7	119.2
167.5°	112.1	112.8	114.0	117.0	117.5
170°	113.3	114.0	114.0	117.0	117.0
172.5°	113.9	114.0	114.0	116.4	115.8
175°	114.7	114.7	114.0	115.5	115.5
177.5°	114.7	114.7	114.2	115.3	114.7
180°	114.7	114.7	114.7	114.7	114.7

(END OF REPORT)