

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-050U-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 (G3-1910-536-21)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-WB-050U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

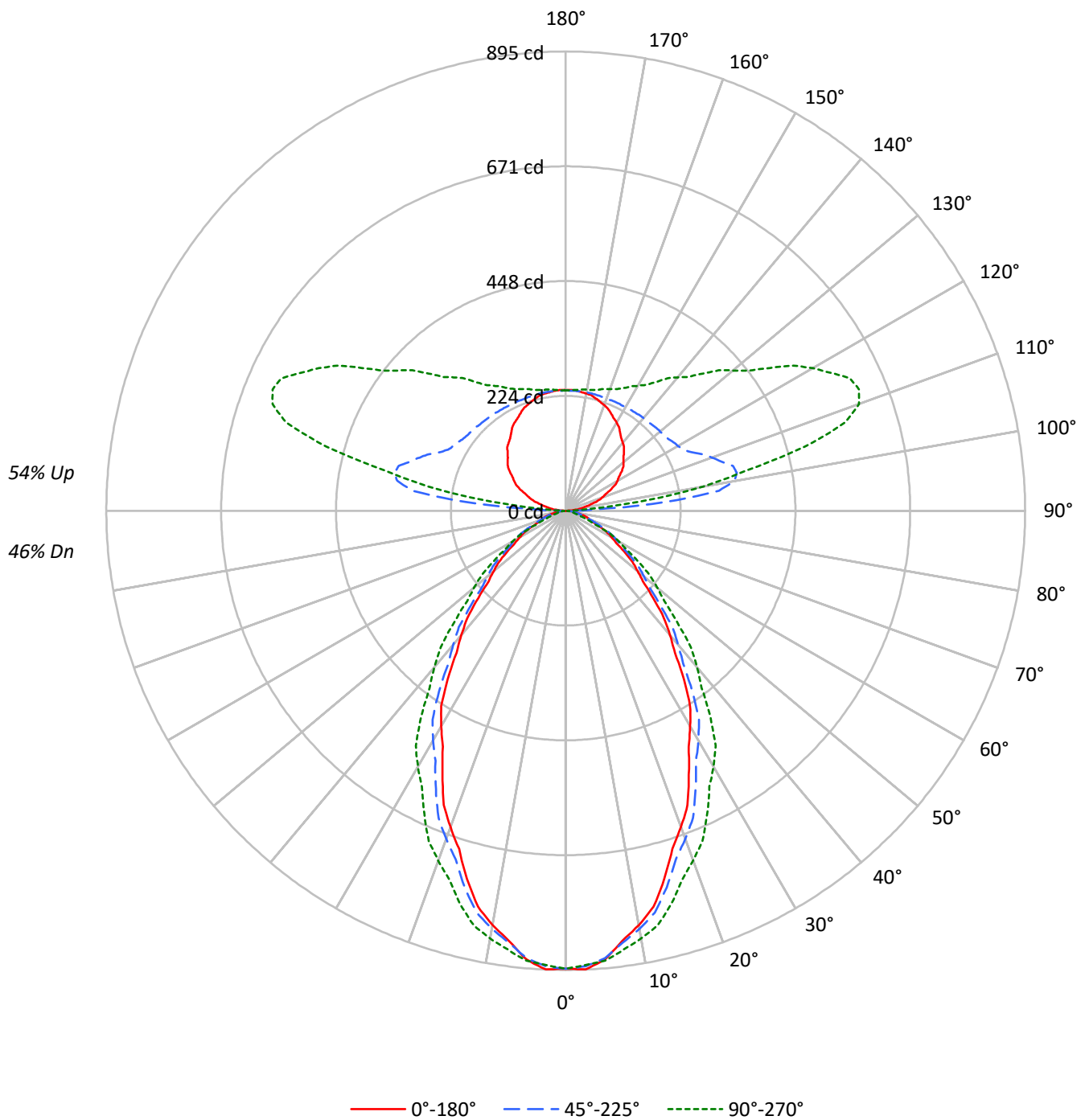
Lumens per Lamp: N/A
Luminaire Lumens: 2835.3 lumens
Efficiency: N/A
Efficacy: 99.5 lumens/watt
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 28.5
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18

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	2.9
10°-20°	212.9	7.5
20°-30°	275.8	9.7
30°-40°	270.1	9.5
40°-50°	206.7	7.3
50°-60°	137.7	4.9
60°-70°	75.2	2.7
70°-80°	31.3	1.1
80°-90°	9.8	0.3
90°-100°	112.8	4.0
100°-110°	306.3	10.8
110°-120°	315.0	11.1
120°-130°	251.8	8.9
130°-140°	197.9	7.0
140°-150°	151.7	5.4
150°-160°	109.1	3.8
160°-170°	66.7	2.4
170°-180°	22.5	0.8
0°-30°	570.6	20.1
0°-40°	840.7	29.7
0°-60°	1185.2	41.8
0°-90°	1301.5	45.9
90°-120°	734.1	25.9
90°-150°	1335.5	47.1
90°-180°	1534.0	54.1
0°-180°	2835.3	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°	17	62	196	86	57	18
105°	54	85	337	513	483	58
115°	97	117	270	536	611	95
125°	133	151	244	411	485	118
135°	160	178	237	335	378	124
145°	185	198	234	284	306	116
155°	209	217	233	256	263	96
165°	227	230	233	243	244	64
175°	235	236	234	237	236	22
180°	235	235	235	235	235	

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°	6.8	30.9	53.6	23.0	19.5
95°	16.6	61.7	196.4	85.5	57.4
97.5°	27.5	68.1	301.1	234.2	164.5
100°	34.7	72.4	333.1	337.7	272.7
102.5°	42.0	76.7	341.6	417.6	360.3
105°	54.4	84.7	336.9	512.9	482.7
107.5°	67.2	94.0	317.4	562.2	570.6
110°	76.3	100.7	302.9	571.8	608.0

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	84.1	107.3	288.4	563.8	618.3
115°	96.7	117.4	269.7	536.5	611.1
117.5°	108.5	128.3	257.7	497.7	581.8
120°	116.3	135.5	252.3	471.7	555.2
122.5°	123.0	142.2	248.7	445.7	526.2
125°	132.9	151.4	244.0	411.1	484.9
127.5°	141.9	160.2	241.4	384.8	448.2
130°	147.3	165.0	240.2	368.4	425.2
132.5°	152.7	170.5	239.0	354.3	404.7
135°	160.1	177.9	237.2	334.8	377.7
137.5°	168.1	184.2	236.3	317.6	353.6
140°	173.0	188.5	235.7	306.6	339.1
142.5°	177.8	192.1	235.1	298.1	325.2
145°	185.1	198.3	234.2	284.5	305.9
147.5°	193.2	204.6	233.4	273.8	290.6
150°	198.7	208.3	233.4	267.7	281.0
152.5°	202.9	211.3	232.8	262.2	273.1
155°	209.2	216.6	232.6	255.5	262.9
157.5°	215.4	221.2	232.6	250.9	256.5
160°	219.0	224.2	232.6	247.8	252.3
162.5°	222.7	226.7	233.2	245.4	248.7
165°	226.6	229.6	233.4	243.2	244.0
167.5°	230.7	232.2	234.2	240.7	241.3
170°	231.9	233.4	234.2	239.4	239.4
172.5°	233.1	234.0	234.2	238.2	238.2
175°	234.9	235.6	234.2	237.2	236.4
177.5°	235.5	235.5	233.7	236.1	234.9
180°	234.9	234.9	234.9	234.9	234.9

(END OF REPORT)