

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-BB-050U-125D-927-1D-UNV-STD-W-8

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-BB-050U-125D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

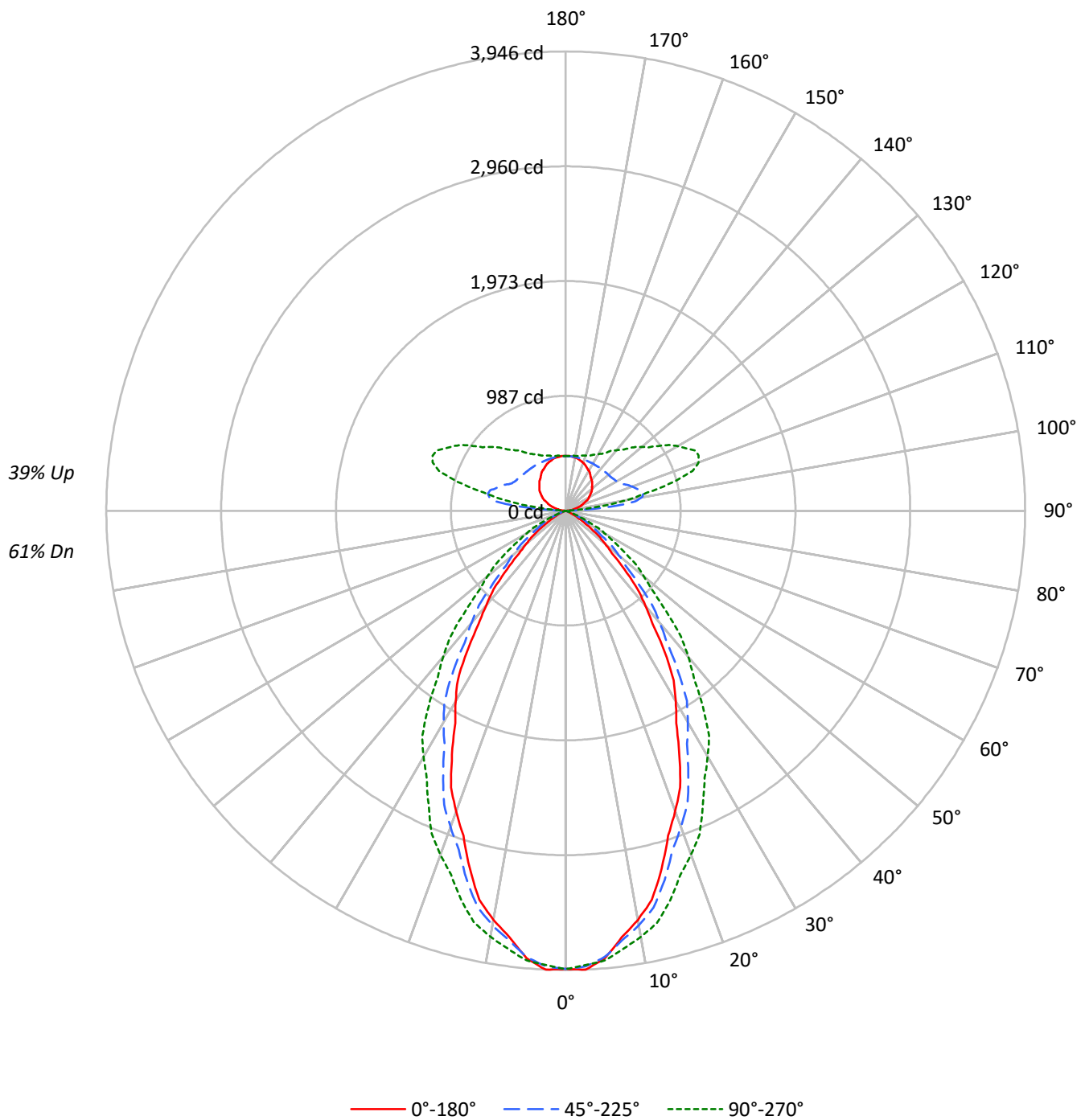
Lumens per Lamp: N/A
Luminaire Lumens: 7766.2 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 114.8
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	103	103	103	103	89	89	89	77	77	77	66	66	66
1	102	99	96	93	96	93	90	88	81	79	78	71	70	68	61	61	60
2	95	89	84	79	89	84	79	76	74	71	68	65	63	61	57	55	54
3	88	80	74	69	83	76	70	66	67	63	60	60	57	54	52	50	48
4	82	73	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44
5	76	66	59	54	72	63	56	52	56	51	48	50	47	44	45	42	40
6	71	60	53	48	67	57	51	46	52	47	43	47	43	40	42	39	36
7	66	55	48	43	62	53	46	42	48	43	39	43	39	36	39	36	33
8	62	51	44	39	59	49	42	38	44	39	35	40	36	33	36	33	31
9	58	47	40	36	55	45	39	35	41	36	33	37	33	30	34	31	28
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	29	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	18163	18163	18163
5°	17871	17827	17959
10°	16721	16944	17418
15°	15201	15684	16557
20°	13494	14195	15439
25°	11751	12682	14185
30°	10065	11171	12998
35°	8346	9483	11564
40°	6412	7582	9854
45°	4635	5741	7929
50°	3158	4279	6288
55°	2053	3095	4887
60°	1177	2179	3533
65°	312	1331	1788
70°	154	411	514
75°	68	34	0
80°	50	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 7929 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	359.3	4.6
10°-20°	918.9	11.8
20°-30°	1150.4	14.8
30°-40°	1062.6	13.7
40°-50°	714.0	9.2
50°-60°	368.8	4.7
60°-70°	115.5	1.5
70°-80°	7.3	0.1
80°-90°	1.9	0.0
90°-100°	225.5	2.9
100°-110°	612.7	7.9
110°-120°	629.9	8.1
120°-130°	503.6	6.5
130°-140°	395.7	5.1
140°-150°	303.4	3.9
150°-160°	218.2	2.8
160°-170°	133.5	1.7
170°-180°	45.0	0.6
0°-30°	2428.6	31.3
0°-40°	3491.2	45.0
0°-60°	4574.0	58.9
0°-90°	4698.7	60.5
90°-120°	1468.1	18.9
90°-150°	2670.9	34.4
90°-180°	3068.0	39.5
0°-180°	7766.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3937	3937	3937	3937	3937	
5°	3859	3820	3850	3863	3878	358
15°	3183	3172	3284	3394	3467	887
25°	2309	2327	2492	2662	2787	1058
35°	1482	1519	1684	1882	2053	918
45°	710	753	880	1051	1215	558
55°	255	298	385	494	608	238
65°	29	55	122	147	164	48
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	2	6	11	14	14	2
95°	33	123	393	171	115	35
105°	109	169	674	1026	965	116
115°	193	235	539	1073	1222	191
125°	266	303	488	822	970	237
135°	320	356	474	670	755	248
145°	370	397	468	569	612	232
155°	418	433	465	511	526	193
165°	453	459	467	486	488	128
175°	470	471	468	474	473	45
180°	470	470	470	470	470	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3937.3	3937.3	3937.3	3937.3	3937.3
2.5°	3946.5	3909.2	3919.0	3918.8	3908.4
5°	3859.2	3820.1	3849.7	3863.4	3878.3
7.5°	3696.2	3665.6	3722.5	3765.1	3796.0
10°	3569.7	3543.6	3617.3	3675.4	3718.3
12.5°	3423.4	3403.3	3492.4	3572.1	3626.8
15°	3183.0	3171.8	3284.0	3394.2	3466.8
17.5°	2925.5	2925.1	3053.1	3190.0	3277.5
20°	2748.7	2754.3	2891.6	3042.5	3144.9
22.5°	2571.9	2585.0	2731.6	2888.9	3006.2
25°	2308.7	2327.3	2491.5	2662.0	2786.8
27.5°	2055.7	2082.9	2255.7	2432.9	2584.9
30°	1889.6	1921.3	2097.2	2283.7	2440.1
32.5°	1726.6	1764.2	1935.7	2132.9	2292.3
35°	1482.0	1519.2	1683.9	1882.1	2053.4
37.5°	1229.4	1265.9	1426.7	1621.8	1806.9
40°	1064.8	1105.8	1259.1	1448.2	1636.3
42.5°	915.5	956.4	1100.6	1286.4	1464.1
45°	710.5	753.3	880.0	1051.4	1215.3
47.5°	540.6	587.2	698.3	853.3	1002.7
50°	440.0	486.6	596.2	732.8	876.2
52.5°	359.3	404.3	503.3	632.0	763.5
55°	255.3	298.1	384.8	494.0	607.6
57.5°	176.4	213.3	291.1	382.2	471.3
60°	127.6	163.0	236.2	310.2	382.9
62.5°	85.0	117.4	189.0	245.7	294.5
65°	28.6	54.6	121.9	147.1	163.8
67.5°	14.5	17.5	64.0	67.6	73.1
70°	11.4	11.4	30.5	32.5	38.1
72.5°	8.4	8.4	12.2	15.6	16.8
75°	3.8	3.8	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	1.2	2.1	2.7	2.7
90°	1.5	5.9	10.6	13.6	13.6
92.5°	13.6	61.7	107.3	46.1	39.0
95°	33.2	123.3	392.8	170.9	114.8
97.5°	55.0	136.2	602.1	468.5	329.0
100°	69.5	144.8	666.2	675.3	545.3
102.5°	84.0	153.4	683.1	835.2	720.6
105°	108.8	169.3	673.8	1025.9	965.3
107.5°	134.4	187.9	634.8	1124.3	1141.1
110°	152.6	201.3	605.8	1143.7	1216.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	168.3	214.7	576.8	1127.6	1236.6
115°	193.4	234.7	539.3	1072.9	1222.1
117.5°	216.9	256.5	515.4	995.4	1163.5
120°	232.6	271.0	504.6	943.4	1110.3
122.5°	245.9	284.3	497.3	891.3	1052.3
125°	265.9	302.8	487.9	822.1	969.8
127.5°	283.7	320.3	482.8	769.7	896.4
130°	294.6	330.0	480.4	736.8	850.5
132.5°	305.5	340.9	478.0	708.7	809.4
135°	320.3	355.7	474.3	669.7	755.3
137.5°	336.3	368.5	472.5	635.2	707.3
140°	345.9	377.0	471.3	613.3	678.3
142.5°	355.6	384.3	470.1	596.1	650.5
145°	370.1	396.7	468.3	569.0	611.8
147.5°	386.4	409.2	466.8	547.6	581.3
150°	397.3	416.5	466.8	535.4	562.0
152.5°	405.8	422.6	465.6	524.4	546.3
155°	418.5	433.2	465.3	510.9	525.7
157.5°	430.8	442.4	465.3	501.8	513.0
160°	438.1	448.4	465.3	495.7	504.6
162.5°	445.3	453.3	466.5	490.8	497.3
165°	453.2	459.1	466.8	486.5	487.9
167.5°	461.4	464.3	468.3	481.3	482.5
170°	463.8	466.7	468.3	478.9	478.9
172.5°	466.2	468.0	468.3	476.5	476.5
175°	469.8	471.3	468.3	474.3	472.8
177.5°	471.0	471.0	467.4	472.2	469.8
180°	469.8	469.8	469.8	469.8	469.8

(END OF REPORT)