

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-025U-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 (G3-1910-536-32)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-025U-125D-927-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

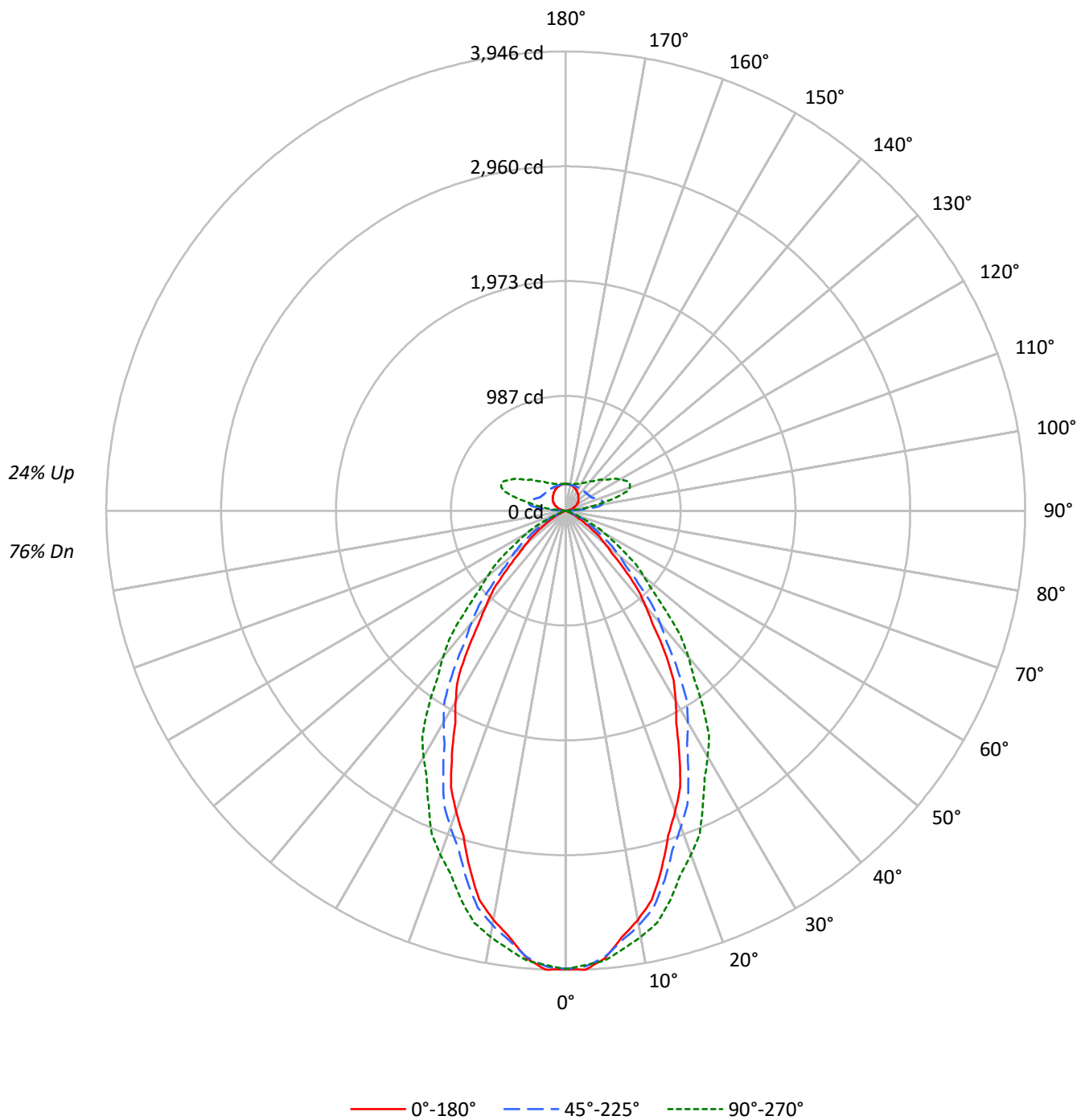
Lumens per Lamp: N/A
Luminaire Lumens: 6185.7 lumens
Efficiency: N/A
Efficacy: 60.9 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 101.6
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	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80
1	106	103	100	97	101	98	96	93	90	88	86	82	81	79	75	74	73
2	99	93	88	84	95	89	85	81	82	79	76	75	73	71	69	67	66
3	92	85	78	74	88	81	76	71	75	71	67	69	66	63	64	62	59
4	86	77	70	65	82	74	68	63	69	64	60	64	60	57	59	56	54
5	80	70	63	58	77	68	62	57	63	58	54	59	55	51	55	52	49
6	75	65	57	52	72	62	56	51	58	53	49	55	50	47	51	47	45
7	70	59	52	47	67	58	51	46	54	49	45	51	46	43	48	44	41
8	66	55	48	43	63	53	47	42	50	45	41	47	43	39	44	41	38
9	62	51	44	40	60	50	43	39	47	41	38	44	40	36	42	38	35
10	59	48	41	37	56	46	40	36	44	38	35	41	37	34	39	35	32

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	5.8
10°-20°	918.9	14.9
20°-30°	1150.4	18.6
30°-40°	1062.6	17.2
40°-50°	714.0	11.5
50°-60°	368.8	6.0
60°-70°	115.5	1.9
70°-80°	7.3	0.1
80°-90°	1.4	0.0
90°-100°	111.9	1.8
100°-110°	294.1	4.8
110°-120°	304.9	4.9
120°-130°	244.6	4.0
130°-140°	191.9	3.1
140°-150°	147.3	2.4
150°-160°	106.1	1.7
160°-170°	64.9	1.0
170°-180°	21.9	0.4
0°-30°	2428.6	39.3
0°-40°	3491.2	56.4
0°-60°	4574.0	73.9
0°-90°	4698.1	76.0
90°-120°	710.8	11.5
90°-150°	1294.6	20.9
90°-180°	1488.0	24.1
0°-180°	6185.7	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	4	12	6	6	1
95°	15	58	193	99	68	16
105°	53	80	325	494	460	56
115°	94	114	260	520	593	93
125°	131	147	237	400	472	116
135°	156	172	230	323	366	121
145°	181	192	227	276	297	113
155°	204	210	227	249	256	94
165°	221	224	227	235	238	62
175°	230	230	228	231	231	22
180°	230	230	230	230	230	

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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	0.9	2.4	1.2	1.2
90°	1.5	4.3	11.8	5.9	5.9
92.5°	6.2	29.8	65.9	29.2	18.8
95°	14.7	57.9	192.7	99.3	67.7
97.5°	25.6	63.6	288.3	229.3	168.9
100°	33.8	68.4	317.8	322.0	250.1
102.5°	40.9	73.1	326.0	401.1	339.5
105°	53.0	80.3	325.1	493.6	460.5
107.5°	65.3	90.6	306.6	541.6	549.6
110°	73.6	96.6	291.3	553.9	588.5

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	81.8	103.7	277.2	546.1	599.0
115°	94.2	114.3	260.4	519.5	592.9
117.5°	106.2	124.6	248.9	482.6	564.0
120°	113.3	130.5	244.2	457.9	537.0
122.5°	120.3	137.6	240.7	433.1	511.1
125°	130.9	146.8	236.9	400.3	472.2
127.5°	139.5	155.6	233.6	373.9	434.6
130°	144.2	161.4	232.4	357.3	413.4
132.5°	148.9	166.1	231.3	343.0	393.4
135°	155.9	171.8	229.5	323.2	366.3
137.5°	163.3	178.8	229.2	308.3	343.7
140°	169.2	183.6	228.0	296.5	329.5
142.5°	173.9	187.1	228.0	288.1	316.6
145°	181.0	192.5	226.6	275.6	297.2
147.5°	188.0	199.2	226.6	265.2	283.0
150°	192.7	202.8	226.6	259.2	273.6
152.5°	197.4	205.2	226.6	254.5	265.4
155°	204.5	210.2	226.6	248.8	256.0
157.5°	209.8	215.3	226.6	243.7	248.9
160°	213.3	217.6	226.6	241.3	244.2
162.5°	216.8	220.0	226.6	239.0	241.9
165°	220.7	223.5	226.6	235.4	238.3
167.5°	224.2	225.6	228.0	233.9	235.1
170°	226.6	228.0	228.0	233.9	233.9
172.5°	227.7	228.0	228.0	232.7	231.6
175°	229.5	229.5	228.0	231.0	231.0
177.5°	229.5	229.5	228.3	230.6	229.5
180°	229.5	229.5	229.5	229.5	229.5

(END OF REPORT)