

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-125U-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 (G3-1910-536-24)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-BB-125U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

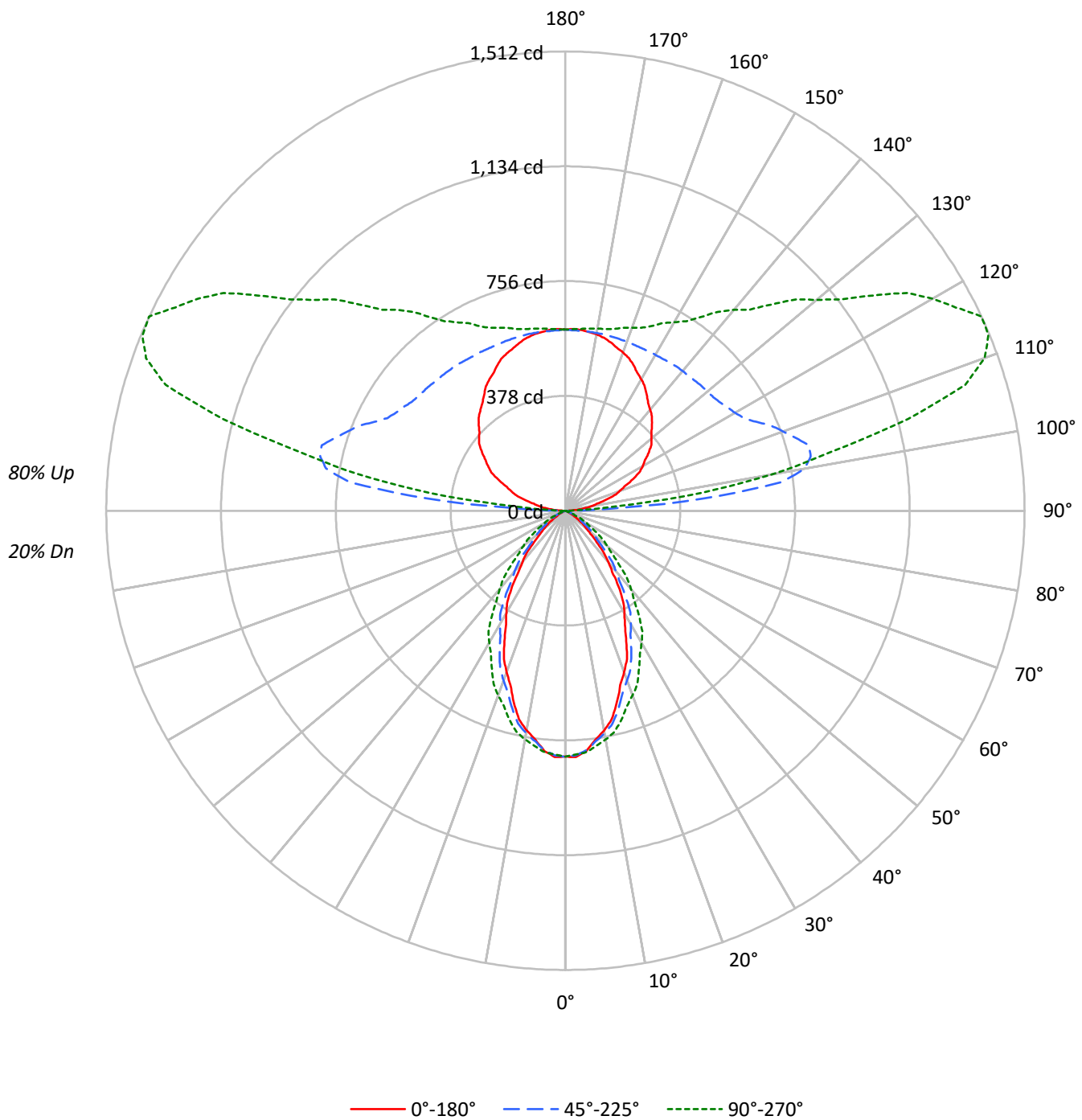
Lumens per Lamp: N/A
Luminaire Lumens: 4816.7 lumens
Efficiency: N/A
Efficacy: 100.6 lumens/watt
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 47.9
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	0
RCR																		
0	100	100	100	100	88	88	88	88	67	67	67	47	47	47	29	29	29	20
1	92	88	84	81	81	78	75	73	59	58	56	42	41	40	26	26	25	18
2	84	78	72	68	74	69	64	61	53	50	47	38	36	35	24	23	23	17
3	77	69	62	57	68	61	56	52	47	44	41	34	32	30	22	21	20	15
4	71	61	54	49	63	55	49	44	42	38	35	31	28	26	20	19	18	14
5	65	55	47	42	58	49	43	38	38	34	31	28	25	23	19	17	16	12
6	60	49	42	37	53	44	38	33	35	30	27	26	23	21	17	16	15	11
7	56	45	37	32	49	40	34	29	31	27	24	23	21	19	16	14	13	10
8	52	40	33	29	46	36	30	26	29	24	21	21	19	17	15	13	12	9
9	48	37	30	26	43	33	27	23	26	22	19	20	17	15	14	12	11	9
10	45	34	27	23	40	31	25	21	24	20	17	18	16	14	13	11	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7470	7470	7470
5°	7350	7332	7386
10°	6877	6969	7163
15°	6253	6450	6809
20°	5550	5838	6350
25°	4833	5216	5834
30°	4140	4595	5346
35°	3433	3900	4756
40°	2638	3118	4053
45°	1906	2362	3261
50°	1299	1760	2586
55°	844	1272	2011
60°	483	897	1452
65°	129	548	736
70°	65	170	210
75°	29	14	0
80°	21	0	0
85°	0	0	0

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 45°

Luminance: 3261 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.9	1.5
10°-20°	189.0	3.9
20°-30°	236.6	4.9
30°-40°	218.5	4.5
40°-50°	146.8	3.0
50°-60°	75.8	1.6
60°-70°	23.8	0.5
70°-80°	1.5	0.0
80°-90°	1.4	0.0
90°-100°	278.9	5.8
100°-110°	751.4	15.6
110°-120°	788.6	16.4
120°-130°	639.9	13.3
130°-140°	501.9	10.4
140°-150°	385.3	8.0
150°-160°	277.0	5.8
160°-170°	169.3	3.5
170°-180°	57.1	1.2
0°-30°	499.4	10.4
0°-40°	717.9	14.9
0°-60°	940.6	19.5
0°-90°	967.3	20.1
90°-120°	1819.0	37.8
90°-150°	3346.1	69.5
90°-180°	3849.0	79.9
0°-180°	4816.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	810	810	810	810	810	
5°	794	786	792	794	798	74
15°	655	652	675	698	713	182
25°	475	479	512	547	573	218
35°	305	312	346	387	422	189
45°	146	155	181	216	250	115
55°	52	61	79	102	125	49
65°	6	11	25	30	34	10
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	2	4	9	10	10	3
95°	42	152	457	234	162	44
105°	139	216	831	1243	1167	146
115°	245	300	692	1337	1512	241
125°	335	385	621	1050	1236	299
135°	403	450	604	847	959	311
145°	466	503	596	724	778	293
155°	530	549	591	650	671	244
165°	574	581	593	617	620	162
175°	597	596	594	602	601	57
180°	596	596	596	596	596	

TEST NUMBER:

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	809.7	809.7	809.7	809.7	809.7
2.5°	811.6	803.9	805.9	805.9	803.7
5°	793.6	785.6	791.7	794.5	797.5
7.5°	760.1	753.8	765.5	774.3	780.6
10°	734.1	728.7	743.9	755.8	764.6
12.5°	704.0	699.9	718.2	734.6	745.8
15°	654.6	652.3	675.3	698.0	712.9
17.5°	601.6	601.5	627.9	656.0	674.0
20°	565.3	566.4	594.6	625.7	646.7
22.5°	528.9	531.6	561.7	594.1	618.2
25°	474.8	478.6	512.4	547.4	573.1
27.5°	422.7	428.3	463.9	500.3	531.6
30°	388.6	395.1	431.3	469.6	501.8
32.5°	355.1	362.8	398.1	438.6	471.4
35°	304.8	312.4	346.3	387.0	422.3
37.5°	252.8	260.3	293.4	333.5	371.6
40°	219.0	227.4	258.9	297.8	336.5
42.5°	188.3	196.7	226.3	264.5	301.1
45°	146.1	154.9	181.0	216.2	249.9
47.5°	111.2	120.7	143.6	175.5	206.2
50°	90.5	100.1	122.6	150.7	180.2
52.5°	73.9	83.1	103.5	130.0	157.0
55°	52.5	61.3	79.1	101.6	125.0
57.5°	36.3	43.9	59.9	78.6	96.9
60°	26.2	33.5	48.6	63.8	78.7
62.5°	17.5	24.1	38.9	50.5	60.6
65°	5.9	11.2	25.1	30.2	33.7
67.5°	3.0	3.6	13.2	13.9	15.0
70°	2.4	2.4	6.3	6.7	7.8
72.5°	1.7	1.7	2.5	3.2	3.4
75°	0.8	0.8	0.4	0.0	0.0
77.5°	0.4	0.4	0.3	0.0	0.0
80°	0.4	0.4	0.0	0.0	0.0
82.5°	0.1	0.1	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.3	0.9	1.8	2.0	2.0
90°	1.5	4.5	9.1	9.9	9.9
92.5°	18.5	65.5	129.4	62.3	43.3
95°	42.5	151.7	457.3	233.8	161.8
97.5°	67.9	173.7	717.2	599.2	451.8
100°	87.4	182.4	799.9	836.9	694.3
102.5°	106.2	194.7	827.2	1014.9	897.9
105°	139.0	216.3	831.0	1243.3	1166.8
107.5°	170.0	238.9	795.6	1360.6	1380.4
110°	190.7	256.0	763.4	1397.1	1469.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	212.5	273.1	732.4	1389.0	1507.4
115°	245.4	300.3	692.0	1337.1	1512.4
117.5°	275.3	326.8	660.7	1254.3	1449.5
120°	294.7	344.5	644.9	1194.9	1395.4
122.5°	311.7	360.9	633.4	1134.1	1334.0
125°	335.0	384.8	621.4	1050.2	1235.9
127.5°	357.3	406.3	613.8	976.2	1142.0
130°	370.7	419.7	610.7	933.8	1079.4
132.5°	384.1	432.5	607.7	896.5	1030.2
135°	403.4	450.2	603.9	847.2	959.4
137.5°	421.7	466.6	601.9	805.5	897.6
140°	434.5	477.6	600.1	779.7	862.9
142.5°	447.9	488.0	598.9	755.7	825.9
145°	466.4	502.8	596.3	724.4	777.8
147.5°	486.5	518.1	593.7	698.0	740.0
150°	499.8	527.3	592.5	681.4	716.3
152.5°	512.0	535.9	591.9	667.9	696.3
155°	529.5	548.8	591.0	649.9	670.7
157.5°	544.8	559.8	591.1	637.3	651.3
160°	554.5	567.1	591.7	630.0	640.4
162.5°	563.0	573.3	592.4	623.8	631.2
165°	574.3	581.0	593.3	616.9	619.8
167.5°	583.4	587.2	594.0	611.5	612.7
170°	589.5	590.9	594.0	608.5	608.5
172.5°	593.1	593.4	594.6	605.4	605.4
175°	597.1	596.3	594.0	602.3	600.9
177.5°	598.7	597.5	594.5	599.3	598.1
180°	596.3	596.3	596.3	596.3	596.3

(END OF REPORT)