

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-F-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, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-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

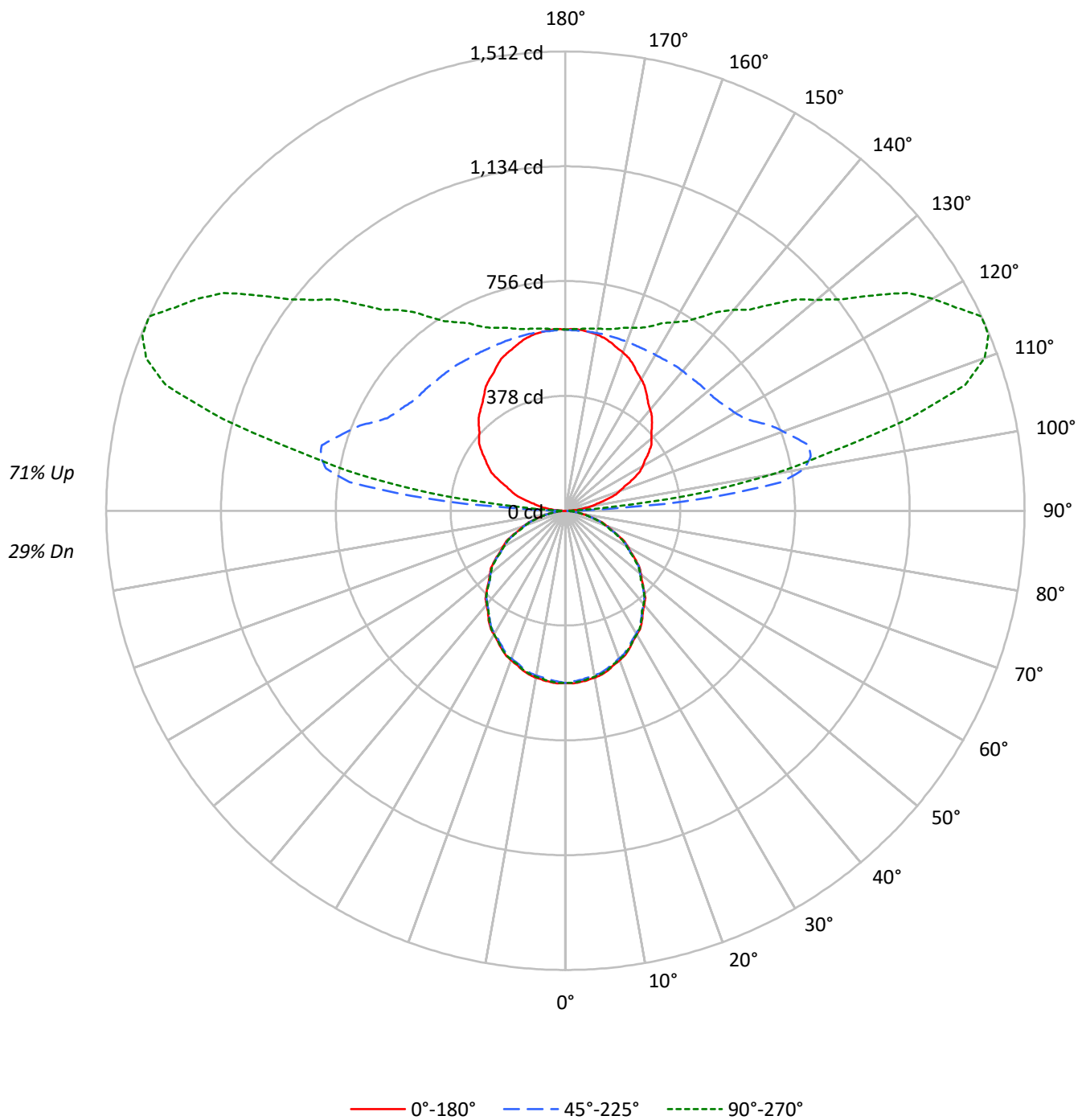
Lumens per Lamp: N/A
Luminaire Lumens: 5398.8 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Indirect

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
RCR																	
0	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37
1	93	89	85	82	83	80	77	74	63	60	58	47	45	44	32	31	31
2	85	77	72	67	76	70	65	60	55	51	48	41	39	37	28	27	26
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22
4	70	60	52	47	63	54	47	42	43	38	34	32	29	26	22	20	19
5	64	53	45	40	57	48	41	36	38	33	29	29	25	23	20	18	16
6	59	48	40	34	53	43	36	31	34	29	25	26	22	20	18	16	14
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11
9	47	35	28	23	42	32	26	21	26	21	17	20	16	14	14	12	10
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5233	5233	5233
5°	5246	5183	5224
10°	5229	5164	5200
15°	5192	5127	5171
20°	5144	5084	5121
25°	5086	5024	5071
30°	5015	4975	5007
35°	4960	4901	4925
40°	4865	4819	4828
45°	4765	4726	4726
50°	4665	4620	4599
55°	4555	4494	4470
60°	4386	4316	4286
65°	4176	4093	4045
70°	3893	3809	3728
75°	3490	3383	3301
80°	2821	2784	2704
85°	1683	1927	2011

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 22.5°

Vertical Angle: 45°

Luminance: 4776 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.5	1.0
10°-20°	152.4	2.8
20°-30°	228.9	4.2
30°-40°	273.2	5.1
40°-50°	280.0	5.2
50°-60°	249.7	4.6
60°-70°	186.0	3.4
70°-80°	101.0	1.9
80°-90°	24.8	0.5
90°-100°	278.9	5.2
100°-110°	751.4	13.9
110°-120°	788.6	14.6
120°-130°	639.9	11.9
130°-140°	501.9	9.3
140°-150°	385.3	7.1
150°-160°	277.0	5.1
160°-170°	169.3	3.1
170°-180°	57.1	1.1
0°-30°	434.8	8.1
0°-40°	708.0	13.1
0°-60°	1237.7	22.9
0°-90°	1549.4	28.7
90°-120°	1819.0	33.7
90°-150°	3346.1	62.0
90°-180°	3849.0	71.3
0°-180°	5398.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	567	567	567	567	567	
5°	566	566	560	565	564	54
15°	544	542	537	541	541	153
25°	500	498	494	497	498	230
35°	440	439	435	435	437	275
45°	365	366	362	361	362	282
55°	283	283	279	277	278	252
65°	191	191	188	185	185	189
75°	98	97	95	93	93	104
85°	16	17	18	19	19	22
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°	567.2	567.2	567.2	567.2	567.2
2.5°	569.0	567.8	562.9	567.2	566.6
5°	566.4	565.7	559.6	564.9	564.1
7.5°	562.3	560.8	554.9	560.0	559.3
10°	558.1	556.6	551.2	555.8	555.0
12.5°	552.6	551.7	545.8	550.3	550.2
15°	543.6	542.2	536.8	541.4	541.4
17.5°	531.8	530.9	525.7	530.1	529.5
20°	523.9	522.4	517.8	521.6	521.6
22.5°	514.2	513.3	508.7	511.9	512.5
25°	499.6	498.1	493.5	496.6	498.1
27.5°	483.5	482.3	478.5	480.5	481.5
30°	470.7	470.7	467.0	467.8	470.0
32.5°	459.2	459.2	454.8	455.6	456.6
35°	440.4	438.9	435.1	435.1	437.3
37.5°	418.5	417.8	415.3	414.9	415.5
40°	403.9	403.2	400.1	400.9	400.9
42.5°	389.4	388.6	385.6	384.5	385.7
45°	365.2	366.0	362.2	361.4	362.2
47.5°	341.4	341.4	338.3	336.2	337.4
50°	325.0	325.0	321.9	320.4	320.4
52.5°	308.0	308.6	304.9	302.8	303.4
55°	283.2	283.2	279.4	277.2	277.9
57.5°	255.9	255.9	252.1	249.8	251.2
60°	237.7	237.7	233.9	231.6	232.3
62.5°	219.4	219.4	215.6	213.4	213.5
65°	191.3	190.6	187.5	185.3	185.3
67.5°	164.3	162.4	160.1	157.0	157.0
70°	144.3	143.5	141.2	138.2	138.2
72.5°	126.0	124.7	122.4	120.0	120.0
75°	97.9	97.2	94.9	93.4	92.6
77.5°	70.2	69.6	69.4	67.3	67.9
80°	53.1	53.1	52.4	50.9	50.9
82.5°	38.0	38.6	37.2	36.9	36.3
85°	15.9	17.4	18.2	19.0	19.0
87.5°	3.3	5.7	6.1	6.8	6.8
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)