

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-025U-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 (G3-1910-536-32, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-025U-050D-927-1D-UNV-STD-W-4
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

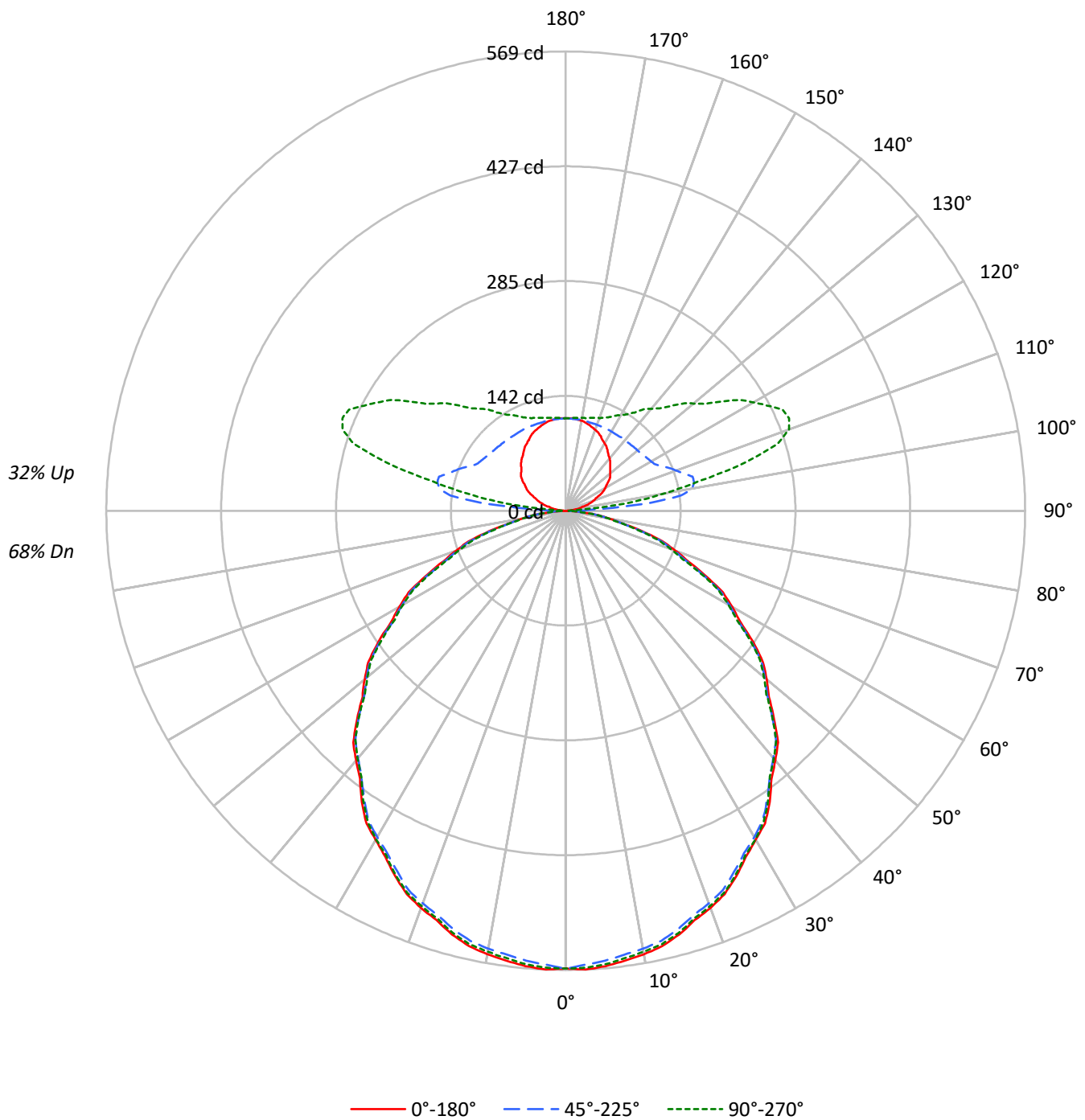
Lumens per Lamp: N/A
Luminaire Lumens: 2292.4 lumens
Efficiency: N/A
Efficacy: 103.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 22.1
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

TEST NUMBER:

CATALOG NUMBER: SQ4-F-025U-050D-927-1D-UNV-STD-W-4

Luminous Intensity Polar Plot



TEST NUMBER:

CATALOG NUMBER: SQ4-F-025U-050D-927-1D-UNV-STD-W-4

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72
1	102	97	93	90	96	92	88	85	82	79	77	72	70	69	64	62	61
2	93	85	78	73	87	80	75	70	72	67	63	63	60	57	56	54	51
3	84	75	67	61	79	71	64	58	63	58	53	56	52	48	50	46	43
4	77	66	58	51	72	62	55	49	56	50	45	50	45	41	44	40	37
5	71	59	50	44	67	56	48	42	50	44	39	45	40	36	40	36	32
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	32	29
7	60	48	39	34	57	45	38	32	41	35	30	37	32	28	33	29	25
8	56	43	35	30	53	41	34	29	37	31	27	34	28	25	30	26	23
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	20
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19

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

TEST NUMBER:

CATALOG NUMBER: SQ4-F-025U-050D-927-1D-UNV-STD-W-4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	53.5	2.3
10°-20°	152.4	6.6
20°-30°	228.9	10.0
30°-40°	273.2	11.9
40°-50°	280.0	12.2
50°-60°	249.7	10.9
60°-70°	186.0	8.1
70°-80°	101.0	4.4
80°-90°	24.0	1.0
90°-100°	55.9	2.4
100°-110°	147.0	6.4
110°-120°	152.5	6.7
120°-130°	122.3	5.3
130°-140°	95.9	4.2
140°-150°	73.6	3.2
150°-160°	53.0	2.3
160°-170°	32.5	1.4
170°-180°	11.0	0.5
0°-30°	434.8	19.0
0°-40°	708.0	30.9
0°-60°	1237.7	54.0
0°-90°	1548.6	67.6
90°-120°	355.4	15.5
90°-150°	647.3	28.2
90°-180°	744.0	32.5
0°-180°	2292.4	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°	1	2	6	3	3	1
95°	7	29	96	50	34	8
105°	26	40	163	247	230	28
115°	47	57	130	260	296	46
125°	66	73	118	200	236	58
135°	78	86	115	162	183	60
145°	90	96	113	138	149	57
155°	102	105	113	124	128	47
165°	110	112	113	118	119	31
175°	115	115	114	116	116	11
180°	115	115	115	115	115	

TEST NUMBER:

CATALOG NUMBER: SQ4-F-025U-050D-927-1D-UNV-STD-W-4

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°	3.2	5.3	5.4	5.4	5.4
90°	0.7	2.2	5.9	2.9	2.9
92.5°	3.1	14.9	33.0	14.6	9.4
95°	7.4	28.9	96.4	49.7	33.8
97.5°	12.8	31.8	144.2	114.7	84.4
100°	16.9	34.2	158.9	161.0	125.0
102.5°	20.4	36.6	163.0	200.6	169.8
105°	26.5	40.1	162.6	246.8	230.2
107.5°	32.7	45.3	153.3	270.8	274.8
110°	36.8	48.3	145.6	277.0	294.2

TEST NUMBER:

CATALOG NUMBER: SQ4-F-025U-050D-927-1D-UNV-STD-W-4

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	40.9	51.8	138.6	273.1	299.5
115°	47.1	57.1	130.2	259.8	296.4
117.5°	53.1	62.3	124.5	241.3	282.0
120°	56.6	65.3	122.1	228.9	268.5
122.5°	60.2	68.8	120.3	216.6	255.5
125°	65.5	73.4	118.4	200.2	236.1
127.5°	69.7	77.8	116.8	186.9	217.3
130°	72.1	80.7	116.2	178.6	206.7
132.5°	74.4	83.1	115.6	171.5	196.7
135°	78.0	85.9	114.7	161.6	183.2
137.5°	81.6	89.4	114.6	154.1	171.8
140°	84.6	91.8	114.0	148.2	164.8
142.5°	86.9	93.6	114.0	144.1	158.3
145°	90.5	96.2	113.3	137.8	148.6
147.5°	94.0	99.6	113.3	132.6	141.5
150°	96.4	101.4	113.3	129.6	136.8
152.5°	98.7	102.6	113.3	127.2	132.7
155°	102.2	105.1	113.3	124.4	128.0
157.5°	104.9	107.6	113.3	121.9	124.5
160°	106.7	108.8	113.3	120.7	122.1
162.5°	108.4	110.0	113.3	119.5	120.9
165°	110.3	111.8	113.3	117.7	119.2
167.5°	112.1	112.8	114.0	117.0	117.5
170°	113.3	114.0	114.0	117.0	117.0
172.5°	113.9	114.0	114.0	116.4	115.8
175°	114.7	114.7	114.0	115.5	115.5
177.5°	114.7	114.7	114.2	115.3	114.7
180°	114.7	114.7	114.7	114.7	114.7

(END OF REPORT)