

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-100D-927-1D-UNV-STD-W-6

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, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-025U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 250 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

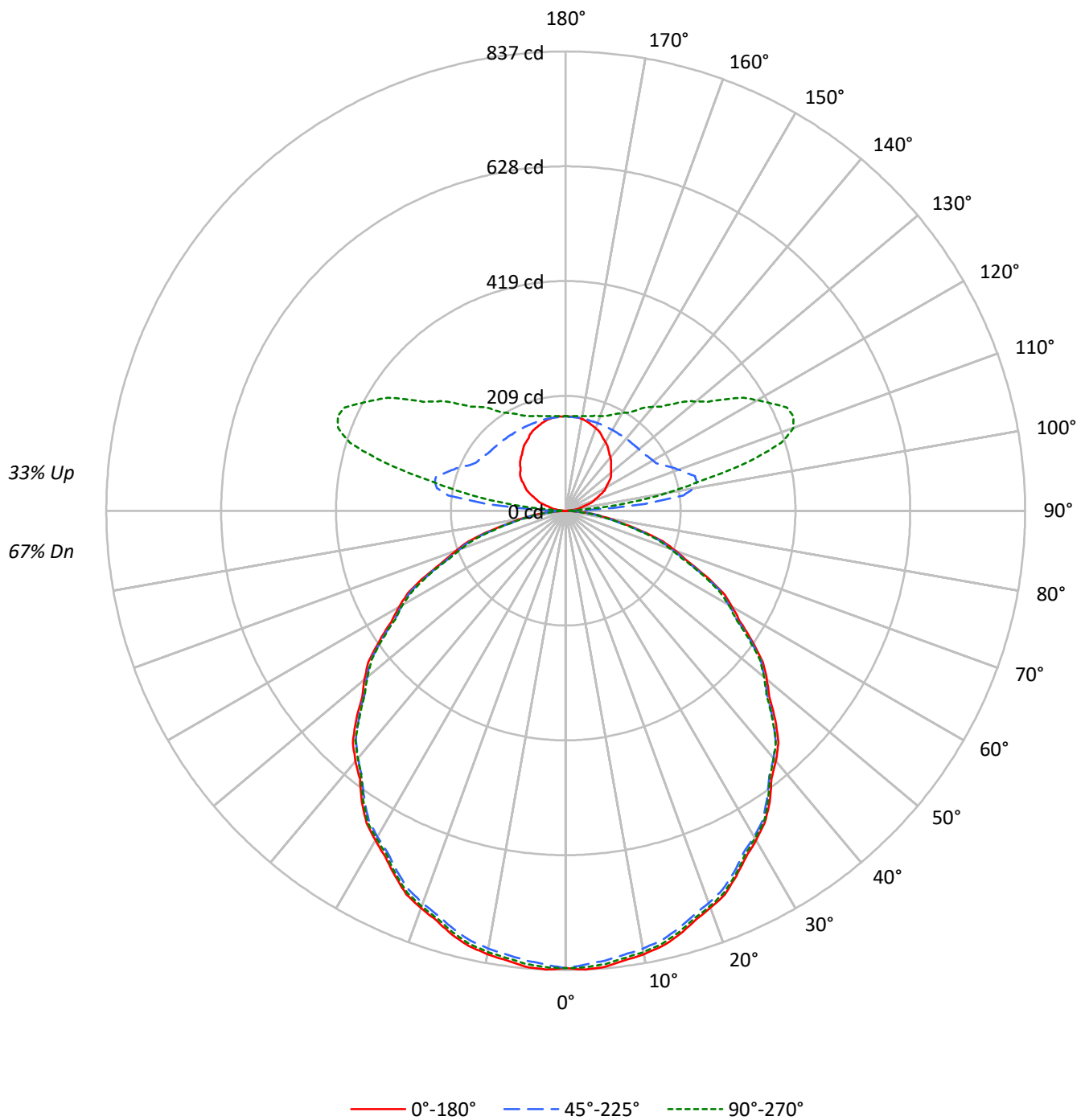
Lumens per Lamp: N/A
Luminaire Lumens: 3390.7 lumens
Efficiency: N/A
Efficacy: 53.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Direct

Input Watts (W): 63.5
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	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	81	79	76	72	70	68	63	62	61
2	92	85	78	73	87	80	74	70	71	67	63	63	60	57	56	53	51
3	84	74	67	61	79	70	64	58	63	57	53	56	52	48	49	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	66	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	28
7	60	48	39	34	57	45	38	32	41	35	30	37	31	28	33	28	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	23	20
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	18

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5129	5129	5129
5°	5152	5081	5120
10°	5125	5061	5100
15°	5094	5025	5066
20°	5042	4982	5023
25°	4987	4928	4967
30°	4926	4874	4898
35°	4864	4804	4830
40°	4783	4728	4732
45°	4699	4635	4620
50°	4578	4523	4513
55°	4443	4393	4363
60°	4308	4231	4217
65°	4098	4007	3973
70°	3807	3715	3644
75°	3401	3291	3223
80°	2798	2696	2575
85°	1658	1821	1856

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°

Vertical Angle: 45°

Luminance: 4699 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	78.7	2.3
10°-20°	224.1	6.6
20°-30°	336.5	9.9
30°-40°	401.6	11.8
40°-50°	411.7	12.1
50°-60°	366.6	10.8
60°-70°	273.3	8.1
70°-80°	148.0	4.4
80°-90°	34.6	1.0
90°-100°	83.9	2.5
100°-110°	220.5	6.5
110°-120°	228.7	6.7
120°-130°	183.4	5.4
130°-140°	143.9	4.2
140°-150°	110.5	3.3
150°-160°	79.6	2.3
160°-170°	48.7	1.4
170°-180°	16.4	0.5
0°-30°	639.3	18.9
0°-40°	1041.0	30.7
0°-60°	1819.3	53.7
0°-90°	2275.1	67.1
90°-120°	533.1	15.7
90°-150°	970.9	28.6
90°-180°	1116.0	32.9
0°-180°	3390.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	834	834	834	834	834	
5°	834	833	823	830	829	79
15°	800	797	789	796	796	225
25°	735	733	726	730	732	339
35°	648	645	640	641	643	404
45°	540	537	533	530	531	416
55°	414	415	410	406	407	371
65°	282	280	275	272	273	278
75°	143	141	138	136	136	152
85°	24	26	26	26	26	33
90°	1	3	9	4	4	2
95°	11	43	144	74	51	12
105°	40	60	244	370	345	42
115°	71	86	195	390	445	70
125°	98	110	178	300	354	87
135°	117	129	172	242	275	91
145°	136	144	170	207	223	85
155°	153	158	170	187	192	70
165°	166	168	170	177	179	47
175°	172	172	171	173	173	16
180°	172	172	172	172	172	

TEST NUMBER:

CATALOG NUMBER: SQ4-F-025U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	833.8	833.8	833.8	833.8	833.8
2.5°	837.0	835.2	827.8	833.8	832.9
5°	834.4	832.7	822.9	830.3	829.2
7.5°	826.6	824.9	816.3	823.1	822.1
10°	820.6	819.0	810.3	817.2	816.6
12.5°	812.9	811.2	802.6	809.4	808.9
15°	800.0	797.2	789.2	795.5	795.5
17.5°	783.1	781.0	773.5	778.8	778.9
20°	770.3	768.6	761.1	766.9	767.4
22.5°	757.5	755.8	747.4	752.7	753.7
25°	734.8	733.1	726.2	730.3	731.9
27.5°	711.4	709.0	702.2	705.8	707.0
30°	693.6	692.5	686.2	687.9	689.6
32.5°	674.8	673.7	668.3	669.2	672.2
35°	647.8	645.0	639.8	641.0	643.2
37.5°	615.9	614.5	609.5	608.8	611.0
40°	595.7	593.5	588.9	587.8	589.4
42.5°	573.8	571.5	566.0	564.9	567.0
45°	540.2	537.4	532.8	529.9	531.1
47.5°	502.7	502.7	497.9	494.6	496.3
50°	478.4	478.4	472.7	469.9	471.6
52.5°	453.2	453.7	447.5	446.0	445.5
55°	414.3	414.9	409.7	405.8	406.9
57.5°	376.8	375.6	369.6	367.0	367.5
60°	350.2	348.6	343.9	340.0	342.8
62.5°	323.2	322.4	317.8	313.4	313.0
65°	281.6	280.4	275.3	272.4	273.0
67.5°	240.1	238.8	234.1	230.0	231.4
70°	211.7	211.7	206.6	204.3	202.6
72.5°	185.6	183.4	179.6	176.3	175.1
75°	143.1	141.4	138.5	135.6	135.6
77.5°	104.2	102.7	100.8	98.9	98.3
80°	79.0	78.4	76.1	75.5	72.7
82.5°	55.6	55.5	54.1	52.6	52.5
85°	23.5	25.7	25.8	26.3	26.3
87.5°	4.3	7.5	8.2	6.4	6.4
90°	1.1	3.3	8.8	4.4	4.4
92.5°	4.6	22.3	49.4	21.9	14.1
95°	11.0	43.4	144.5	74.5	50.8
97.5°	19.2	47.7	216.3	172.0	126.7
100°	25.4	51.3	238.3	241.5	187.6
102.5°	30.7	54.8	244.5	300.8	254.7
105°	39.7	60.2	243.8	370.2	345.3
107.5°	49.0	68.0	229.9	406.2	412.2
110°	55.2	72.4	218.5	415.4	441.3

TEST NUMBER:

CATALOG NUMBER: SQ4-F-025U-100D-927-1D-UNV-STD-W-6

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	61.3	77.7	207.9	409.6	449.3
115°	70.6	85.7	195.3	389.6	444.7
117.5°	79.7	93.5	186.7	362.0	423.0
120°	85.0	97.9	183.2	343.4	402.7
122.5°	90.3	103.2	180.5	324.8	383.3
125°	98.2	110.1	177.6	300.2	354.2
127.5°	104.6	116.7	175.2	280.4	325.9
130°	108.1	121.1	174.3	268.0	310.0
132.5°	111.7	124.6	173.4	257.3	295.0
135°	117.0	128.8	172.1	242.4	274.7
137.5°	122.5	134.1	171.9	231.2	257.7
140°	126.9	137.7	171.0	222.3	247.2
142.5°	130.4	140.3	171.0	216.1	237.4
145°	135.7	144.3	169.9	206.7	222.9
147.5°	141.0	149.4	169.9	198.9	212.3
150°	144.5	152.1	169.9	194.4	205.2
152.5°	148.1	153.9	169.9	190.8	199.0
155°	153.4	157.7	169.9	186.6	192.0
157.5°	157.3	161.4	169.9	182.8	186.7
160°	160.0	163.2	169.9	181.0	183.2
162.5°	162.6	165.0	169.9	179.2	181.4
165°	165.5	167.7	169.9	176.6	178.7
167.5°	168.2	169.2	171.0	175.5	176.3
170°	169.9	171.0	171.0	175.4	175.4
172.5°	170.8	171.0	171.0	174.5	173.7
175°	172.1	172.1	171.0	173.2	173.2
177.5°	172.1	172.1	171.2	173.0	172.1
180°	172.1	172.1	172.1	172.1	172.1

(END OF REPORT)