

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-050U-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 (G3-1910-536-21, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-050U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 500 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

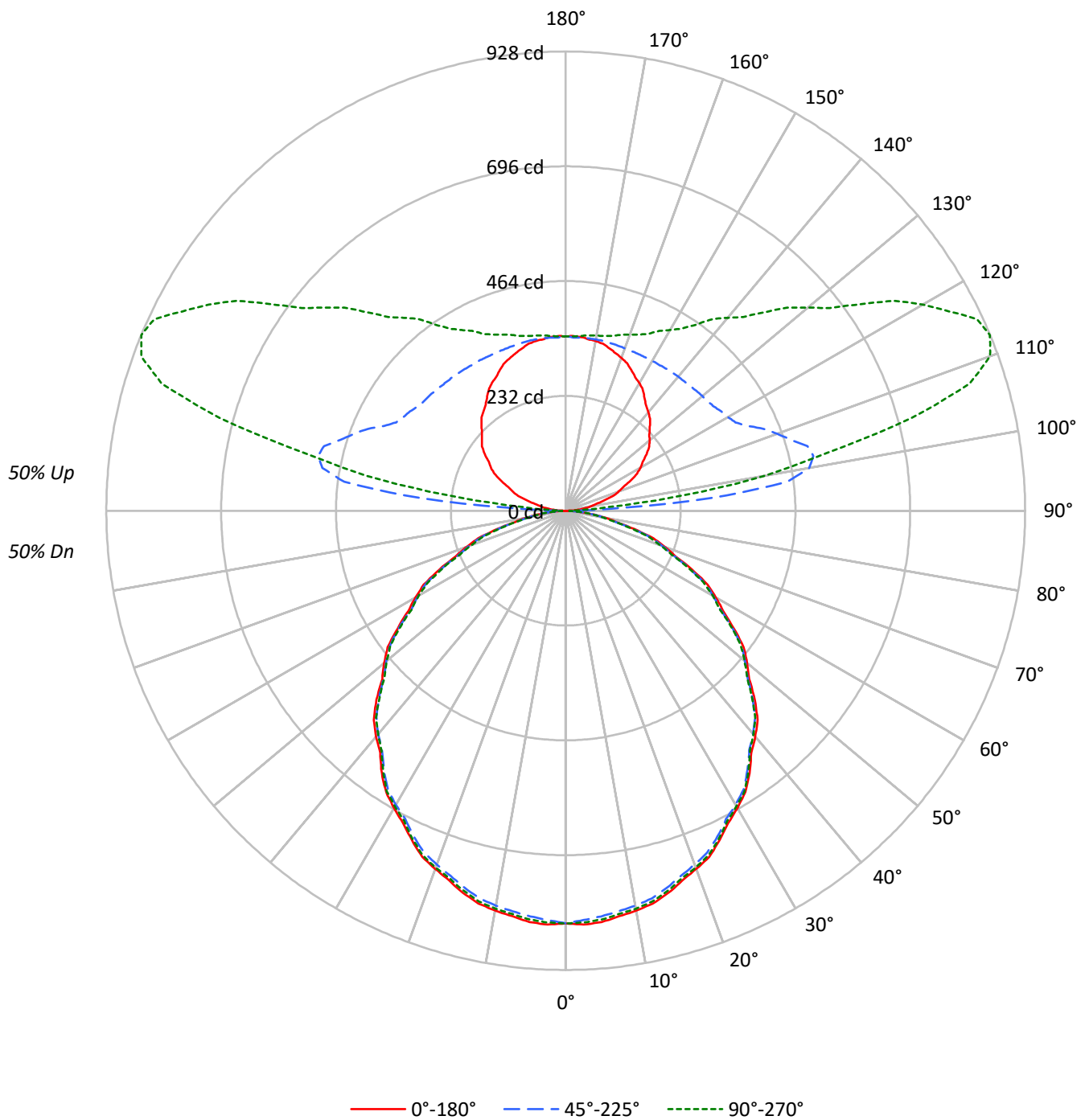
Lumens per Lamp: N/A
Luminaire Lumens: 4576.2 lumens
Efficiency: N/A
Efficacy: 62.3 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 73.4
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	20
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14

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	1.7
10°-20°	224.1	4.9
20°-30°	336.5	7.4
30°-40°	401.6	8.8
40°-50°	411.7	9.0
50°-60°	366.6	8.0
60°-70°	273.3	6.0
70°-80°	148.0	3.2
80°-90°	35.0	0.8
90°-100°	169.1	3.7
100°-110°	459.5	10.0
110°-120°	472.4	10.3
120°-130°	377.7	8.3
130°-140°	296.8	6.5
140°-150°	227.6	5.0
150°-160°	163.7	3.6
160°-170°	100.1	2.2
170°-180°	33.7	0.7
0°-30°	639.3	14.0
0°-40°	1041.0	22.7
0°-60°	1819.3	39.8
0°-90°	2275.5	49.7
90°-120°	1101.1	24.1
90°-150°	2003.2	43.8
90°-180°	2301.0	50.3
0°-180°	4576.2	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	4	8	10	10	2
95°	25	92	295	128	86	26
105°	82	127	505	769	724	87
115°	145	176	404	805	917	143
125°	199	227	366	617	727	178
135°	240	267	356	502	566	186
145°	278	298	351	427	459	174
155°	314	325	349	383	394	145
165°	340	344	350	365	366	96
175°	352	354	351	356	355	33
180°	352	352	352	352	352	

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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	7.7	8.0	7.5	7.5
90°	1.1	4.5	7.9	10.2	10.2
92.5°	10.2	46.3	80.4	34.5	29.2
95°	24.9	92.5	294.6	128.2	86.1
97.5°	41.2	102.2	451.6	351.3	246.8
100°	52.1	108.6	499.6	506.5	409.0
102.5°	63.0	115.1	512.3	626.4	540.4
105°	81.6	127.0	505.3	769.4	724.0
107.5°	100.8	140.9	476.1	843.2	855.9
110°	114.4	151.0	454.3	857.8	912.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	126.2	161.0	432.6	845.7	927.5
115°	145.0	176.0	404.5	804.7	916.6
117.5°	162.7	192.4	386.6	746.6	872.6
120°	174.5	203.3	378.4	707.6	832.7
122.5°	184.5	213.3	373.0	668.5	789.2
125°	199.4	227.1	366.0	616.6	727.4
127.5°	212.8	240.2	362.1	577.3	672.3
130°	220.9	247.5	360.3	552.6	637.9
132.5°	229.1	255.7	358.5	531.5	607.1
135°	240.2	266.8	355.8	502.2	566.5
137.5°	252.2	276.4	354.4	476.4	530.5
140°	259.5	282.7	353.5	460.0	508.7
142.5°	266.7	288.2	352.6	447.1	487.9
145°	277.6	297.5	351.2	426.7	458.9
147.5°	289.8	306.9	350.1	410.7	436.0
150°	298.0	312.4	350.1	401.5	421.5
152.5°	304.3	317.0	349.2	393.3	409.7
155°	313.8	324.9	349.0	383.2	394.3
157.5°	323.1	331.8	349.0	376.3	384.8
160°	328.6	336.3	349.0	371.8	378.4
162.5°	334.0	340.0	349.9	368.1	373.0
165°	339.9	344.3	350.1	364.8	366.0
167.5°	346.0	348.2	351.2	361.0	361.9
170°	347.8	350.0	351.2	359.2	359.2
172.5°	349.6	351.0	351.2	357.3	357.3
175°	352.4	353.5	351.2	355.7	354.6
177.5°	353.3	353.3	350.5	354.1	352.4
180°	352.4	352.4	352.4	352.4	352.4

(END OF REPORT)