

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-075U-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 (G3-1910-536-22, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-F-075U-100D-927-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

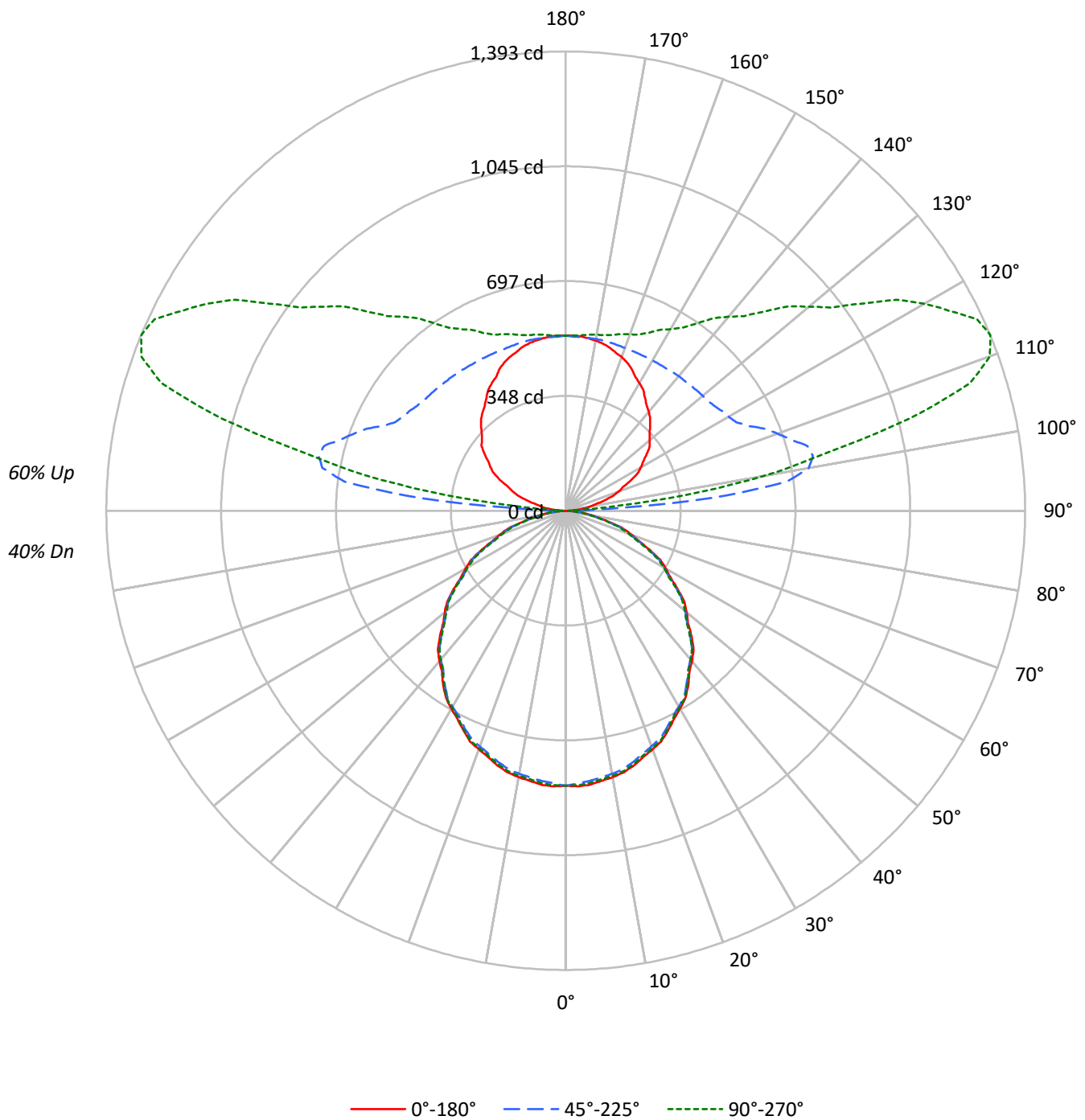
Lumens per Lamp: N/A
Luminaire Lumens: 5733.3 lumens
Efficiency: N/A
Efficacy: 69.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 82.9
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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47
1	95	91	87	84	87	83	80	77	68	66	64	54	53	51	41	40	39
2	87	80	73	68	79	73	67	63	59	56	53	47	45	43	36	35	33
3	79	70	63	57	72	64	58	53	52	48	44	42	39	36	32	30	28
4	72	62	54	48	66	56	50	44	46	41	37	37	34	31	29	26	24
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	15
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13
10	45	33	26	22	41	31	24	20	26	21	17	21	17	15	17	14	12

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	1.4
10°-20°	224.1	3.9
20°-30°	336.5	5.9
30°-40°	401.6	7.0
40°-50°	411.7	7.2
50°-60°	366.6	6.4
60°-70°	273.3	4.8
70°-80°	148.0	2.6
80°-90°	35.0	0.6
90°-100°	250.3	4.4
100°-110°	688.7	12.0
110°-120°	710.9	12.4
120°-130°	569.6	9.9
130°-140°	447.4	7.8
140°-150°	342.8	6.0
150°-160°	246.5	4.3
160°-170°	150.7	2.6
170°-180°	50.8	0.9
0°-30°	639.3	11.2
0°-40°	1041.0	18.2
0°-60°	1819.3	31.7
0°-90°	2275.5	39.7
90°-120°	1650.0	28.8
90°-150°	3009.8	52.5
90°-180°	3458.0	60.3
0°-180°	5733.3	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	3
95°	37	137	443	189	121	39
105°	123	189	759	1156	1078	130
115°	218	265	609	1212	1376	215
125°	300	342	552	934	1094	268
135°	362	402	536	756	855	280
145°	419	448	528	644	693	263
155°	474	490	525	579	595	218
165°	513	519	527	549	552	144
175°	531	532	528	535	534	50
180°	531	531	531	531	531	

TEST NUMBER:

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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	4.4	7.9	10.2	10.2
92.5°	15.6	66.6	115.4	44.3	36.4
95°	37.3	136.6	442.7	189.3	120.8
97.5°	60.8	151.5	675.6	520.5	367.3
100°	77.9	160.7	748.7	755.7	616.6
102.5°	94.2	171.7	767.7	937.6	809.9
105°	123.1	189.3	758.9	1155.8	1078.5
107.5°	150.7	211.2	715.8	1262.6	1285.6
110°	170.5	225.7	683.2	1289.2	1368.7

TEST NUMBER:

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	188.6	242.0	650.7	1272.1	1393.1
115°	218.0	265.4	608.7	1212.1	1375.5
117.5°	246.0	289.7	582.0	1127.9	1312.7
120°	263.1	305.1	570.3	1064.8	1255.8
122.5°	278.5	320.4	562.2	1009.4	1190.8
125°	300.4	342.4	552.2	934.2	1094.3
127.5°	321.2	361.2	545.7	871.4	1011.9
130°	332.0	372.9	542.1	834.1	962.2
132.5°	344.7	385.5	539.4	801.3	917.0
135°	362.5	402.3	536.4	755.5	854.9
137.5°	379.2	416.1	533.9	718.5	800.5
140°	391.9	426.1	533.0	694.0	767.9
142.5°	402.7	434.3	531.2	672.0	735.4
145°	419.0	447.7	528.5	643.7	693.4
147.5°	436.4	461.1	527.2	618.6	658.4
150°	447.2	469.3	526.3	604.9	635.8
152.5°	457.1	477.5	525.4	593.0	618.6
155°	474.3	489.8	525.1	578.6	595.1
157.5°	486.7	499.3	525.1	566.7	578.2
160°	495.8	505.7	525.1	560.3	569.2
162.5°	503.0	511.2	526.0	554.9	561.9
165°	512.7	519.3	527.4	548.9	552.2
167.5°	519.5	524.6	528.5	543.9	544.8
170°	524.0	527.3	528.5	542.1	542.1
172.5°	527.6	529.2	528.5	539.3	538.5
175°	530.8	531.9	528.5	535.3	534.2
177.5°	531.7	531.7	528.1	533.4	531.7
180°	530.8	530.8	530.8	530.8	530.8

(END OF REPORT)