

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

(formerly Eaton)

Brand: CORELITE

Report Number: P519835

Luminaire Tested: **SQ4-F-025U-100D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519835  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-025U-100D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

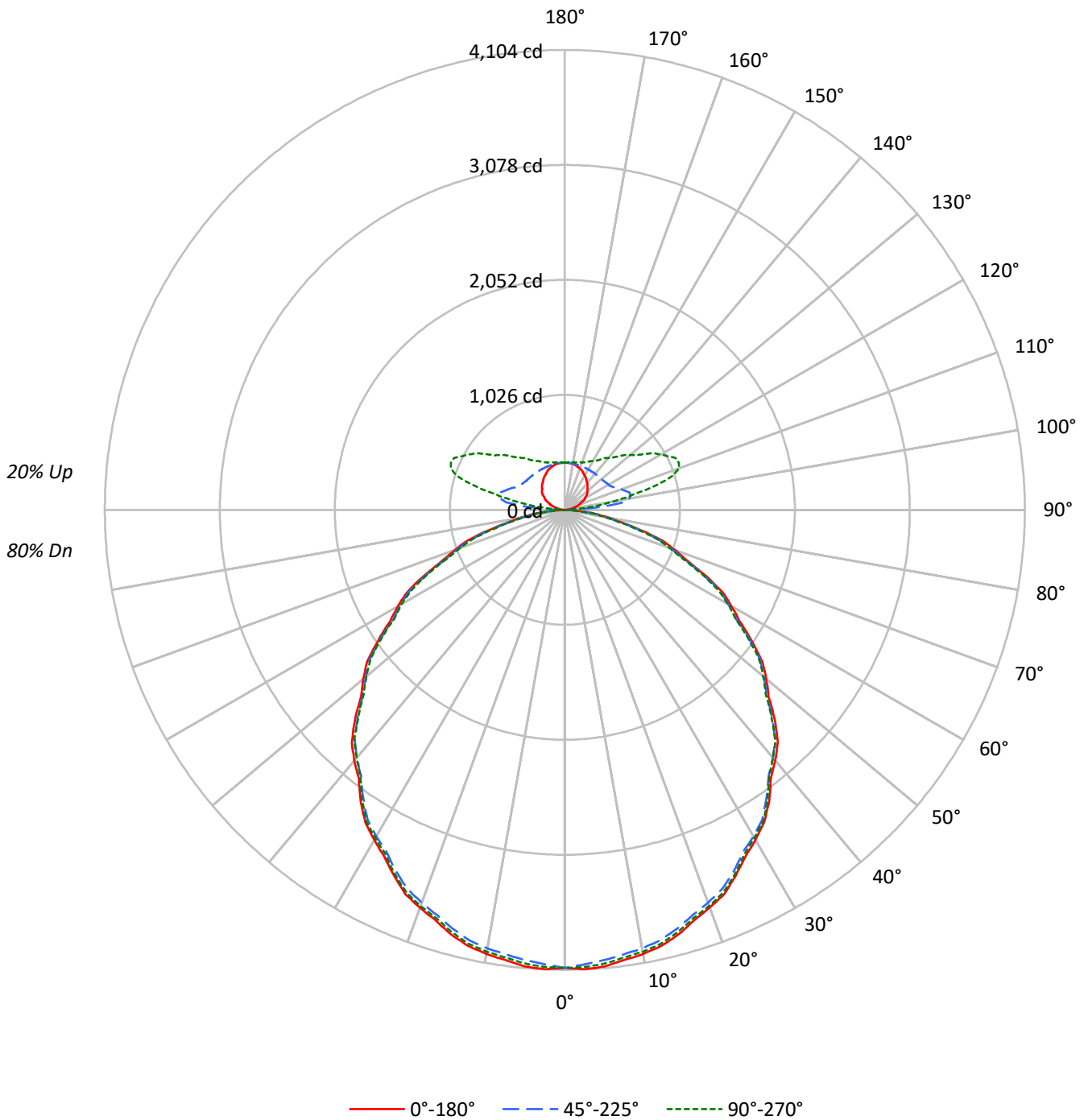
Lumens per Lamp: N/A  
Luminaire Lumens: 13886.9 lumens  
Efficiency: N/A  
Efficacy: 113.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 122  
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	114	114	114	114	109	109	109	109	100	100	100	92	92	92	84	84	84	80
1	105	100	96	92	100	96	92	89	88	85	83	81	79	77	74	73	71	68
2	95	87	81	75	91	84	78	73	77	72	68	71	67	64	65	62	60	56
3	87	77	69	63	83	74	67	61	68	62	57	63	58	54	58	54	51	48
4	79	68	59	53	76	65	58	52	60	54	49	56	50	46	51	47	43	41
5	73	61	52	46	70	58	50	44	54	47	42	50	44	40	46	42	38	35
6	67	54	46	40	64	52	45	39	49	42	37	45	39	35	42	37	33	31
7	62	49	41	35	59	48	40	34	44	38	33	41	35	31	38	33	30	27
8	58	45	37	31	55	43	36	30	40	34	29	38	32	28	35	30	26	24
9	54	41	33	28	52	40	32	27	37	31	26	35	29	25	32	28	24	22
10	51	38	30	25	48	37	29	25	34	28	24	32	27	23	30	25	22	20

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12572	12572	12572
5°	12629	12455	12550
10°	12564	12407	12503
15°	12488	12319	12417
20°	12359	12212	12314
25°	12224	12082	12177
30°	12076	11946	12006
35°	11924	11776	11840
40°	11726	11591	11602
45°	11519	11361	11324
50°	11222	11088	11061
55°	10891	10771	10696
60°	10562	10371	10337
65°	10045	9820	9739
70°	9334	9107	8931
75°	8334	8068	7901
80°	6858	6608	6310
85°	4058	4453	4555



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	385.8	2.8
10°-20°	1098.7	7.9
20°-30°	1650.0	11.9
30°-40°	1969.1	14.2
40°-50°	2018.3	14.5
50°-60°	1797.3	12.9
60°-70°	1339.8	9.6
70°-80°	725.4	5.2
80°-90°	167.4	1.2
90°-100°	205.7	1.5
100°-110°	540.7	3.9
110°-120°	560.7	4.0
120°-130°	449.7	3.2
130°-140°	352.9	2.5
140°-150°	270.8	2.0
150°-160°	195.1	1.4
160°-170°	119.3	0.9
170°-180°	40.3	0.3
0°-30°	3134.5	22.6
0°-40°	5103.6	36.8
0°-60°	8919.2	64.2
0°-90°	11151.8	80.3
90°-120°	1307.1	9.4
90°-150°	2380.5	17.1
90°-180°	2735.0	19.7
0°-180°	13886.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4088	4088	4088	4088	4088	
5°	4091	4082	4035	4071	4065	388
15°	3922	3909	3869	3900	3900	1105
25°	3602	3594	3560	3580	3588	1660
35°	3176	3162	3137	3143	3154	1983
45°	2649	2635	2612	2598	2604	2038
55°	2031	2034	2009	1989	1995	1818
65°	1380	1375	1350	1336	1338	1365
75°	701	693	679	665	665	747
85°	115	126	126	129	129	161
90°	3	8	22	11	11	5
95°	27	106	354	183	124	30
105°	97	148	598	908	847	103
115°	173	210	479	955	1090	171
125°	241	270	436	736	868	214
135°	287	316	422	594	674	222
145°	333	354	417	507	546	208
155°	376	386	417	458	471	173
165°	406	411	417	433	438	115
175°	422	422	419	425	425	40
180°	422	422	422	422	422	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4087.9	4087.9	4087.9	4087.9	4087.9
2.5°	4103.6	4094.9	4058.7	4087.8	4083.4
5°	4090.7	4082.5	4034.6	4070.9	4065.4
7.5°	4052.6	4044.3	4002.0	4035.6	4030.7
10°	4023.3	4015.1	3972.9	4006.5	4003.7
12.5°	3985.2	3977.0	3934.7	3968.3	3965.6
15°	3922.4	3908.6	3869.1	3899.9	3899.9
17.5°	3839.3	3828.8	3792.2	3818.0	3818.5
20°	3776.4	3768.2	3731.5	3759.7	3762.5
22.5°	3713.6	3705.4	3664.3	3690.1	3695.1
25°	3602.5	3594.3	3560.4	3580.2	3588.5
27.5°	3488.0	3476.0	3442.6	3460.2	3466.2
30°	3400.5	3395.1	3364.0	3372.7	3380.9
32.5°	3308.5	3303.0	3276.5	3280.7	3295.6
35°	3176.1	3162.3	3136.7	3142.6	3153.6
37.5°	3019.5	3012.9	2988.0	2985.0	2995.4
40°	2920.7	2909.7	2887.1	2881.6	2889.8
42.5°	2812.9	2802.0	2774.8	2769.4	2779.9
45°	2648.6	2634.9	2612.1	2598.2	2603.7
47.5°	2464.5	2464.5	2441.0	2424.8	2433.1
50°	2345.6	2345.6	2317.5	2303.7	2311.9
52.5°	2222.1	2224.3	2194.1	2186.6	2184.0
55°	2031.3	2034.1	2008.9	1989.4	1994.8
57.5°	1847.3	1841.2	1811.9	1799.0	1801.8
60°	1717.1	1708.9	1686.2	1666.9	1680.6
62.5°	1584.6	1580.9	1558.3	1536.4	1534.7
65°	1380.4	1374.9	1349.5	1335.5	1338.3
67.5°	1177.3	1170.7	1147.6	1127.5	1134.6
70°	1038.1	1038.1	1012.8	1001.4	993.2
72.5°	910.2	899.2	880.4	864.6	858.5
75°	701.4	693.2	679.0	664.9	664.9
77.5°	510.7	503.5	494.3	484.8	482.0
80°	387.2	384.4	373.1	370.1	356.3
82.5°	272.7	272.2	265.4	258.1	257.5
85°	115.0	126.0	126.2	129.1	129.1
87.5°	20.8	35.1	35.9	29.1	29.1
90°	2.7	8.0	21.6	10.8	10.8
92.5°	11.4	54.8	121.2	53.6	34.6
95°	27.1	106.4	354.3	182.7	124.5
97.5°	47.0	116.9	530.2	421.6	310.6
100°	62.2	125.7	584.3	592.2	459.9
102.5°	75.2	134.5	599.4	737.5	624.4
105°	97.4	147.7	597.8	907.5	846.7
107.5°	120.2	166.7	563.8	995.8	1010.6
110°	135.3	177.6	535.6	1018.6	1082.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	150.4	190.6	509.7	1004.1	1101.5
115°	173.1	210.2	478.8	955.3	1090.2
117.5°	195.3	229.1	457.7	887.4	1037.1
120°	208.3	240.0	449.1	841.9	987.3
122.5°	221.3	253.0	442.6	796.4	939.7
125°	240.8	269.8	435.5	736.1	868.3
127.5°	256.5	286.1	429.6	687.5	799.1
130°	265.1	296.8	427.4	657.0	760.1
132.5°	273.8	305.5	425.3	630.8	723.3
135°	286.8	315.8	422.0	594.3	673.6
137.5°	300.2	328.8	421.4	566.8	631.9
140°	311.0	337.5	419.2	545.1	605.9
142.5°	319.7	344.1	419.2	529.7	582.1
145°	332.7	353.9	416.6	506.7	546.5
147.5°	345.7	366.4	416.6	487.7	520.5
150°	354.3	372.9	416.6	476.7	503.2
152.5°	363.0	377.3	416.6	467.9	488.0
155°	376.0	386.5	416.6	457.5	470.7
157.5°	385.8	395.8	416.6	448.2	457.7
160°	392.2	400.1	416.6	443.7	449.1
162.5°	398.7	404.5	416.6	439.4	444.7
165°	405.8	411.0	416.6	432.9	438.3
167.5°	412.3	414.9	419.2	430.1	432.2
170°	416.6	419.2	419.2	430.1	430.1
172.5°	418.8	419.2	419.2	427.9	425.7
175°	422.0	422.0	419.2	424.7	424.7
177.5°	422.0	422.0	419.8	424.1	422.0
180°	422.0	422.0	422.0	422.0	422.0

(END OF REPORT)