

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: P519892

Luminaire Tested: **SQ4-F-050U-050D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519892  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-17)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-050D-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

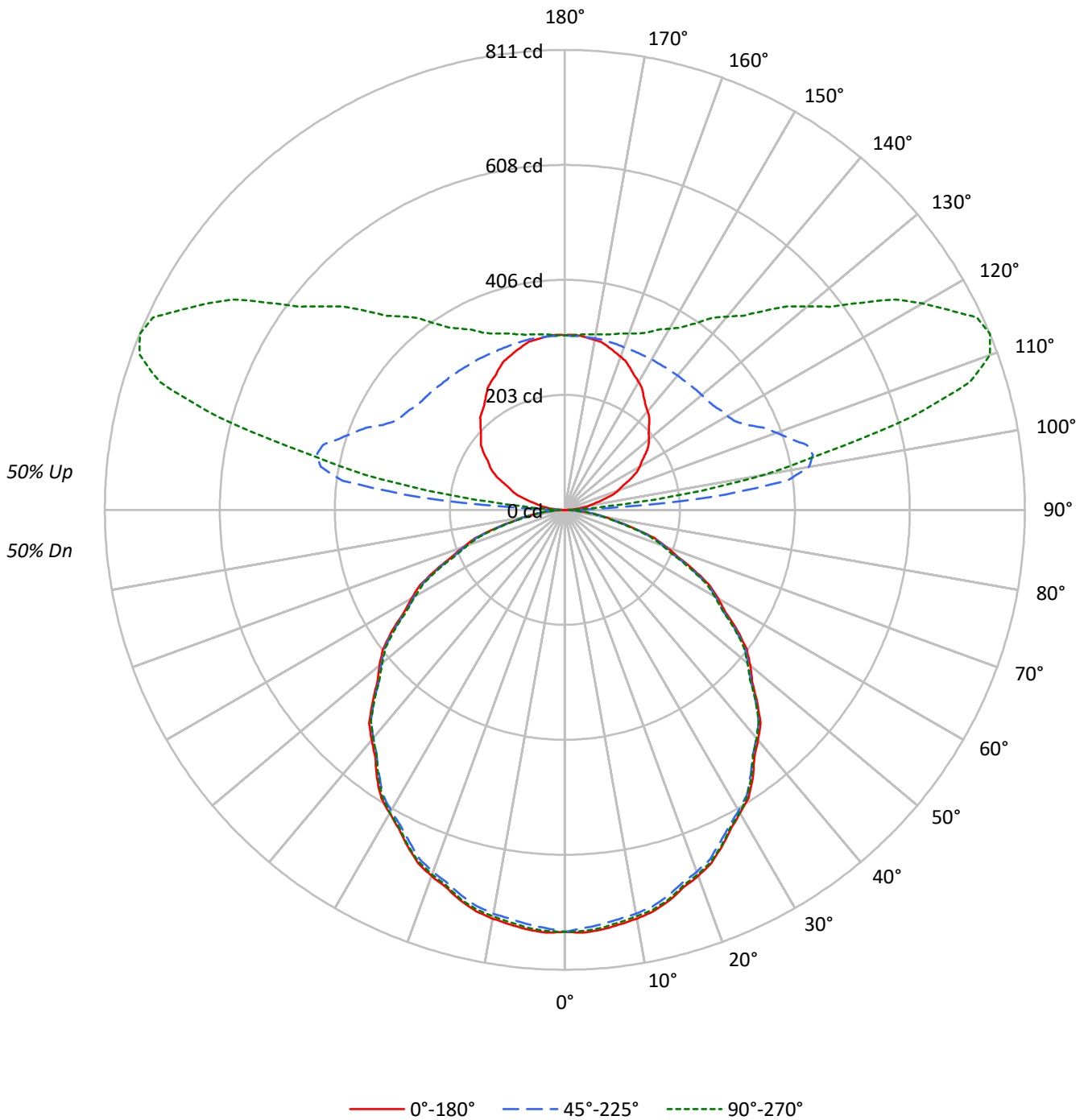
Lumens per Lamp: N/A  
Luminaire Lumens: 4043.8 lumens  
Efficiency: N/A  
Efficacy: 141.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 28.5  
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	0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
0	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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

	0°	45°	90°
0°	6864	6864	6864
5°	6881	6798	6853
10°	6858	6774	6821
15°	6811	6725	6784
20°	6747	6670	6718
25°	6671	6590	6652
30°	6579	6525	6568
35°	6506	6428	6462
40°	6382	6322	6334
45°	6250	6199	6199
50°	6119	6061	6033
55°	5976	5895	5863
60°	5752	5661	5624
65°	5480	5370	5307
70°	5104	4999	4888
75°	4581	4438	4331
80°	3703	3650	3549
85°	2212	2530	2636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.2	1.7
10°-20°	199.9	4.9
20°-30°	300.2	7.4
30°-40°	358.4	8.9
40°-50°	367.3	9.1
50°-60°	327.5	8.1
60°-70°	243.9	6.0
70°-80°	132.4	3.3
80°-90°	31.9	0.8
90°-100°	147.9	3.7
100°-110°	401.8	9.9
110°-120°	413.2	10.2
120°-130°	330.3	8.2
130°-140°	259.6	6.4
140°-150°	199.0	4.9
150°-160°	143.1	3.5
160°-170°	87.5	2.2
170°-180°	29.5	0.7
0°-30°	570.3	14.1
0°-40°	928.8	23.0
0°-60°	1623.6	40.1
0°-90°	2031.8	50.2
90°-120°	963.0	23.8
90°-150°	1751.9	43.3
90°-180°	2012.0	49.8
0°-180°	4043.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	743	742	734	741	740	71
15°	713	711	704	710	710	201
25°	655	653	647	651	653	302
35°	578	576	571	571	574	360
45°	479	480	475	474	475	370
55°	372	372	366	364	364	331
65°	251	250	246	243	243	249
75°	128	128	124	122	122	136
85°	21	23	24	25	25	29
90°	1	4	7	9	9	2
95°	22	81	258	112	75	23
105°	71	111	442	673	633	76
115°	127	154	354	704	802	125
125°	174	199	320	539	636	155
135°	210	233	311	439	496	162
145°	243	260	307	373	401	152
155°	274	284	305	335	345	127
165°	297	301	306	319	320	84
175°	308	309	307	311	310	29
180°	308	308	308	308	308	



TEST NUMBER: P519892

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	744.0	744.0	744.0	744.0	744.0
2.5°	746.3	744.9	738.5	744.0	743.2
5°	743.0	742.0	734.0	741.0	740.0
7.5°	737.7	735.7	727.9	734.6	733.6
10°	732.0	730.1	723.1	729.0	728.1
12.5°	724.9	723.7	715.9	721.9	721.7
15°	713.1	711.1	704.1	710.2	710.2
17.5°	697.5	696.5	689.6	695.4	694.6
20°	687.2	685.3	679.3	684.2	684.2
22.5°	674.5	673.3	667.3	671.5	672.3
25°	655.3	653.4	647.3	651.4	653.4
27.5°	634.2	632.7	627.6	630.3	631.7
30°	617.5	617.5	612.5	613.6	616.5
32.5°	602.4	602.4	596.6	597.6	599.0
35°	577.6	575.8	570.7	570.7	573.7
37.5°	548.9	548.1	544.8	544.2	545.0
40°	529.9	528.9	524.9	525.9	525.9
42.5°	510.8	509.8	505.7	504.4	505.9
45°	479.0	480.0	475.1	474.1	475.1
47.5°	447.8	447.8	443.8	441.1	442.6
50°	426.3	426.3	422.3	420.3	420.3
52.5°	404.0	404.8	399.9	397.2	398.0
55°	371.5	371.5	366.5	363.6	364.5
57.5°	335.7	335.7	330.6	327.8	329.4
60°	311.7	311.7	306.8	303.8	304.8
62.5°	287.8	287.8	282.9	279.8	280.0
65°	251.0	250.0	246.0	243.1	243.1
67.5°	215.6	213.0	209.9	206.0	206.0
70°	189.2	188.2	185.3	181.2	181.2
72.5°	165.4	163.6	160.5	157.4	157.4
75°	128.5	127.5	124.5	122.5	121.5
77.5°	92.0	91.2	91.0	88.3	89.0
80°	69.7	69.7	68.7	66.8	66.8
82.5°	49.8	50.6	48.8	48.4	47.6
85°	20.9	22.9	23.9	24.9	24.9
87.5°	4.1	7.1	7.0	8.2	8.2
90°	1.0	3.9	7.0	8.9	8.9
92.5°	8.9	40.5	70.4	30.2	25.6
95°	21.8	80.9	257.6	112.2	75.3
97.5°	36.1	89.4	395.0	307.2	215.8
100°	45.5	95.0	437.0	443.0	357.7
102.5°	55.1	100.6	448.1	547.8	472.6
105°	71.3	111.1	441.9	672.9	633.1
107.5°	88.2	123.2	416.4	737.4	748.4
110°	100.1	132.1	397.3	750.1	797.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	110.4	140.8	378.3	739.6	811.1
115°	126.8	154.0	353.8	703.7	801.6
117.5°	142.3	168.3	338.1	652.8	763.1
120°	152.6	177.8	330.9	618.8	728.2
122.5°	161.3	186.5	326.2	584.7	690.2
125°	174.4	198.6	320.0	539.2	636.1
127.5°	186.1	210.1	316.7	504.9	588.0
130°	193.2	216.5	315.1	483.2	557.9
132.5°	200.4	223.6	313.5	464.8	530.9
135°	210.1	233.3	311.2	439.2	495.5
137.5°	220.6	241.7	309.9	416.7	463.9
140°	226.9	247.3	309.1	402.2	444.9
142.5°	233.3	252.0	308.3	391.0	426.7
145°	242.8	260.2	307.1	373.2	401.2
147.5°	253.5	268.4	306.2	359.2	381.2
150°	260.6	273.2	306.2	351.1	368.6
152.5°	266.1	277.2	305.4	343.9	358.3
155°	274.5	284.2	305.2	335.1	344.8
157.5°	282.6	290.2	305.2	329.1	336.5
160°	287.3	294.1	305.2	325.1	330.9
162.5°	292.1	297.3	306.0	322.0	326.2
165°	297.2	301.2	306.2	319.1	320.0
167.5°	302.6	304.5	307.1	315.7	316.5
170°	304.2	306.2	307.1	314.1	314.1
172.5°	305.8	306.9	307.1	312.5	312.5
175°	308.1	309.1	307.1	311.1	310.1
177.5°	308.9	308.9	306.6	309.7	308.1
180°	308.1	308.1	308.1	308.1	308.1

(END OF REPORT)