

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521558

Luminaire Tested: **SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521558  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (4000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

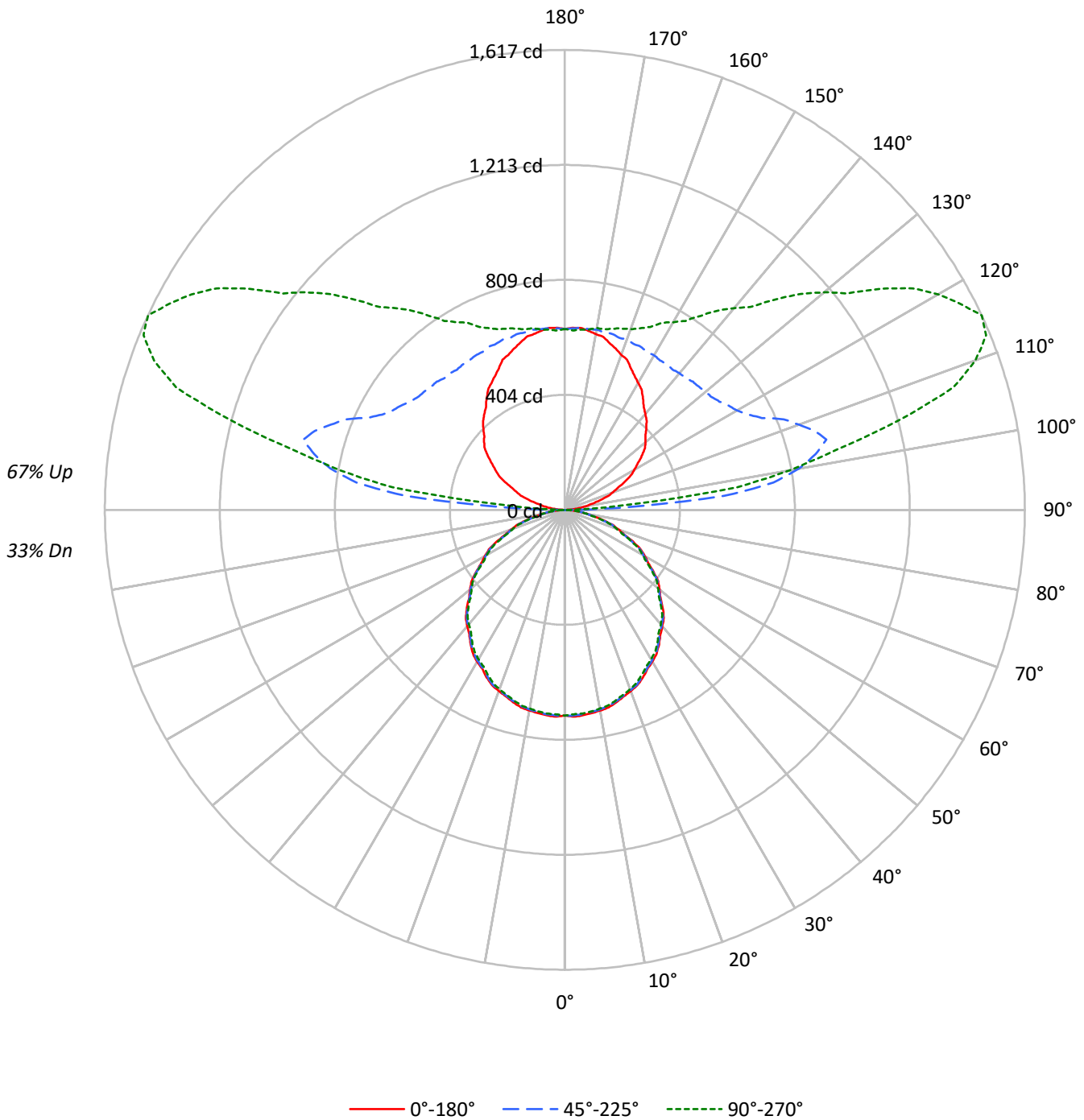
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6175.3 lumens  
Efficiency: N/A  
Efficacy: 116.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.25 / 1.37  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 53.2  
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	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41	33
1	94	90	86	82	85	81	78	75	65	63	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	44	41	39	31	30	29	23
3	78	69	61	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	35	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	34	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	35	30	50	39	32	28	32	27	23	25	21	18	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	12	10
9	47	36	28	23	43	32	26	22	26	21	18	21	17	15	15	13	11	9
10	44	32	25	21	40	30	23	19	24	19	16	19	16	13	14	12	10	8

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

	0°	45°	90°
0°	6676	6676	6676
5°	6720	6683	6655
10°	6713	6675	6647
15°	6690	6651	6622
20°	6658	6628	6589
25°	6615	6574	6512
30°	6568	6524	6460
35°	6500	6465	6397
40°	6427	6378	6317
45°	6356	6290	6237
50°	6238	6194	6136
55°	6129	6064	5998
60°	5986	5894	5818
65°	5759	5604	5539
70°	5398	5263	5206
75°	4898	4755	4684
80°	4081	4134	4027
85°	2890	3419	3419



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.5	1.1
10°-20°	196.1	3.2
20°-30°	296.4	4.8
30°-40°	357.0	5.8
40°-50°	370.7	6.0
50°-60°	336.3	5.4
60°-70°	255.0	4.1
70°-80°	142.2	2.3
80°-90°	37.6	0.6
90°-100°	327.6	5.3
100°-110°	791.9	12.8
110°-120°	844.6	13.7
120°-130°	684.0	11.1
130°-140°	529.6	8.6
140°-150°	404.0	6.5
150°-160°	292.5	4.7
160°-170°	180.1	2.9
170°-180°	61.0	1.0
0°-30°	561.0	9.1
0°-40°	918.0	14.9
0°-60°	1625.1	26.3
0°-90°	2059.9	33.4
90°-120°	1964.1	31.8
90°-150°	3581.8	58.0
90°-180°	4115.0	66.6
0°-180°	6175.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	724	724	724	724	724	
5°	726	720	722	720	719	69
15°	700	692	696	694	693	198
25°	650	643	646	640	640	299
35°	577	571	574	567	568	361
45°	487	482	482	477	478	375
55°	381	380	377	373	373	340
65°	264	261	257	254	254	260
75°	137	136	133	131	131	145
85°	27	30	32	32	32	34
90°	0	0	0	0	0	3
95°	32	164	561	365	256	36
105°	126	219	952	1231	1216	134
115°	232	296	765	1450	1617	229
125°	330	380	664	1153	1354	294
135°	405	453	637	909	1046	313
145°	479	515	625	773	833	300
155°	549	573	633	684	709	254
165°	607	616	641	650	660	171
175°	642	640	642	637	635	61
180°	635	635	635	635	635	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	723.6	723.6	723.6	723.6	723.6
2.5°	727.7	722.1	723.6	722.7	719.6
5°	725.6	719.7	721.6	719.6	718.6
7.5°	720.6	714.5	716.5	714.5	715.1
10°	716.5	709.6	712.5	710.5	709.5
12.5°	711.7	704.0	706.8	704.0	704.6
15°	700.4	692.5	696.3	694.3	693.3
17.5°	687.8	680.9	684.8	681.6	681.6
20°	678.1	671.2	675.1	671.1	671.1
22.5°	667.6	659.9	663.8	658.9	658.9
25°	649.8	642.9	645.8	639.7	639.7
27.5°	629.4	622.3	626.2	620.1	620.1
30°	616.5	608.6	612.4	606.4	606.4
32.5°	600.3	594.8	597.1	591.0	591.0
35°	577.1	571.1	574.0	567.0	568.0
37.5°	551.4	547.3	547.4	541.1	542.3
40°	533.6	528.7	529.6	522.5	524.5
42.5°	515.0	510.9	511.0	505.5	506.7
45°	487.1	482.2	482.1	477.0	478.0
47.5°	455.6	453.0	452.6	446.7	447.7
50°	434.6	433.6	431.5	426.5	427.5
52.5°	413.6	412.6	410.5	405.5	406.5
55°	381.0	380.0	377.0	372.9	372.9
57.5°	347.1	346.1	342.8	338.8	338.8
60°	324.4	323.4	319.4	315.3	315.3
62.5°	301.0	299.2	295.1	291.9	291.9
65°	263.8	260.8	256.7	253.7	253.7
67.5°	225.2	223.2	220.1	217.3	217.3
70°	200.1	198.1	195.1	193.0	193.0
72.5°	175.0	173.1	170.0	168.0	168.0
75°	137.4	135.5	133.4	131.4	131.4
77.5°	100.3	99.7	99.6	97.6	97.6
80°	76.8	77.8	77.8	75.8	75.8
82.5°	55.0	56.8	57.6	57.2	57.2
85°	27.3	30.3	32.3	32.3	32.3
87.5°	8.1	10.5	12.9	12.9	12.9
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.8	88.7	208.9	101.6	68.9
95°	32.3	163.9	561.4	365.0	255.8
97.5°	57.3	181.6	739.3	712.3	611.4
100°	76.7	192.6	837.3	883.9	801.0
102.5°	95.0	202.4	902.0	1026.8	977.6
105°	126.5	218.7	951.8	1231.4	1215.6
107.5°	157.5	237.8	922.4	1395.5	1432.6
110°	179.0	254.1	875.0	1466.2	1536.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	200.6	270.3	833.0	1483.5	1602.8
115°	231.5	296.0	764.6	1449.6	1616.8
117.5°	262.2	323.1	724.5	1371.6	1567.5
120°	282.7	339.3	698.7	1310.5	1515.8
122.5°	304.2	356.6	682.5	1247.9	1450.1
125°	329.8	379.8	663.7	1152.9	1354.3
127.5°	355.1	402.2	650.5	1072.4	1249.3
130°	370.2	416.3	646.2	1016.3	1190.0
132.5°	384.2	432.4	639.7	975.8	1123.3
135°	405.2	452.6	636.8	909.1	1046.0
137.5°	425.1	472.8	627.3	863.9	967.1
140°	440.2	483.6	627.3	831.4	926.2
142.5°	455.3	498.7	621.9	803.1	883.1
145°	479.2	514.8	624.6	772.7	833.3
147.5°	501.6	536.1	623.0	737.8	787.8
150°	515.6	545.9	627.3	722.5	761.9
152.5°	530.7	559.9	626.2	706.2	741.5
155°	549.2	572.9	632.7	684.4	709.4
157.5°	571.6	591.9	631.4	676.1	690.9
160°	580.2	597.3	636.8	665.3	675.8
162.5°	594.2	609.2	634.6	661.9	668.3
165°	607.1	616.3	640.8	650.4	659.6
167.5°	623.0	629.1	639.2	649.7	649.9
170°	627.3	631.3	643.5	642.3	648.9
172.5°	634.9	637.8	640.3	643.1	639.2
175°	642.1	639.5	642.1	636.7	635.4
177.5°	640.8	640.8	638.6	636.4	631.1
180°	635.4	635.4	635.4	635.4	635.4

(END OF REPORT)