

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: P521556

Luminaire Tested: **SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521556  
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 (3000K)  
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 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

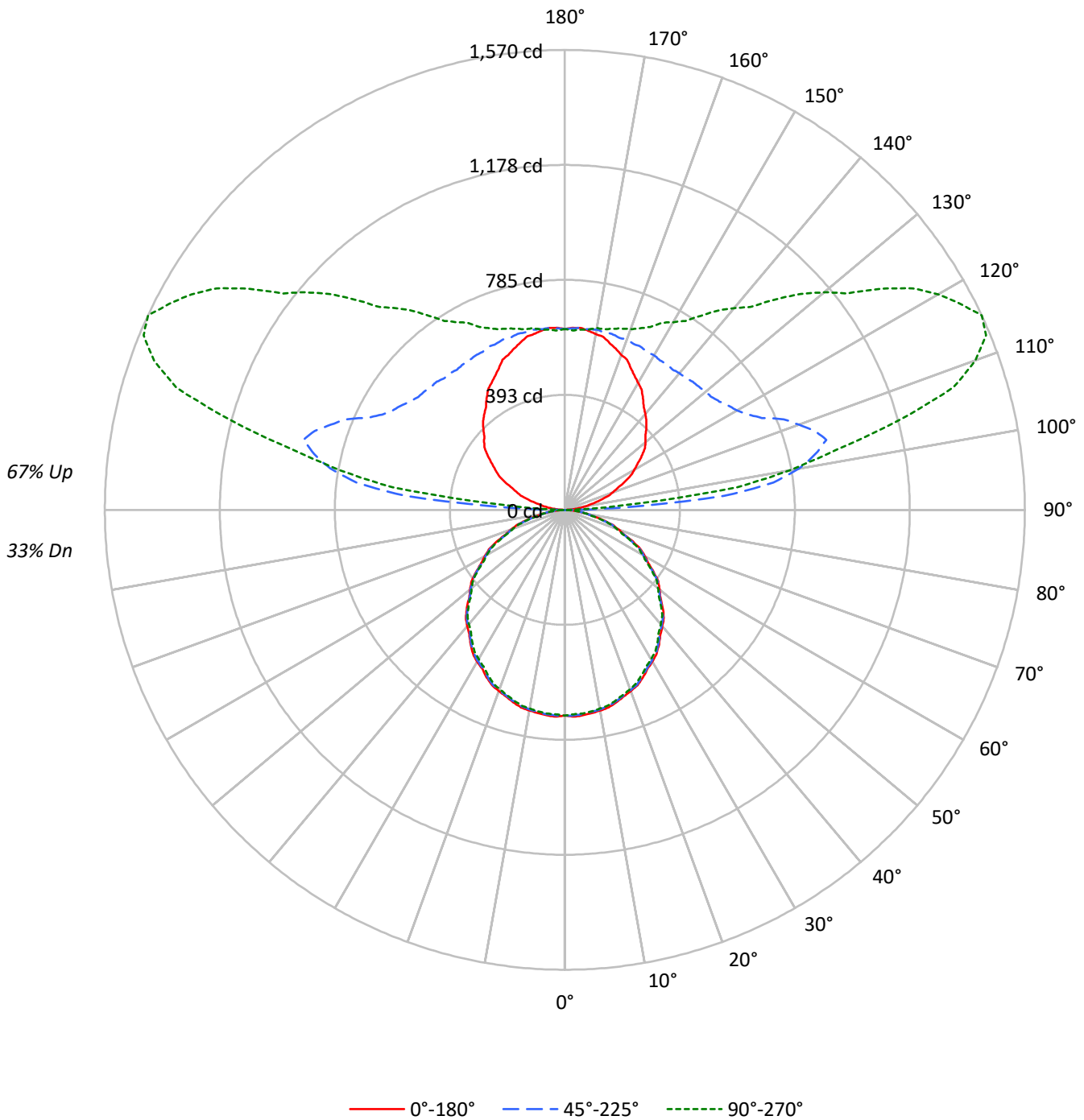
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5995.5 lumens  
Efficiency: N/A  
Efficacy: 112.7 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				
RC	80					70					50					30				
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°	6481	6481	6481
5°	6525	6489	6461
10°	6518	6481	6453
15°	6495	6458	6429
20°	6464	6435	6397
25°	6423	6383	6323
30°	6376	6335	6272
35°	6311	6277	6210
40°	6240	6193	6133
45°	6170	6106	6055
50°	6056	6014	5958
55°	5950	5887	5825
60°	5813	5722	5648
65°	5591	5440	5377
70°	5241	5109	5055
75°	4755	4616	4549
80°	3964	4017	3910
85°	2805	3324	3324



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	66.5	1.1
10°-20°	190.4	3.2
20°-30°	287.8	4.8
30°-40°	346.6	5.8
40°-50°	359.9	6.0
50°-60°	326.5	5.4
60°-70°	247.6	4.1
70°-80°	138.1	2.3
80°-90°	36.5	0.6
90°-100°	318.1	5.3
100°-110°	768.8	12.8
110°-120°	820.0	13.7
120°-130°	664.1	11.1
130°-140°	514.2	8.6
140°-150°	392.3	6.5
150°-160°	283.9	4.7
160°-170°	174.9	2.9
170°-180°	59.2	1.0
0°-30°	544.7	9.1
0°-40°	891.3	14.9
0°-60°	1577.7	26.3
0°-90°	2000.0	33.4
90°-120°	1906.9	31.8
90°-150°	3477.5	58.0
90°-180°	3996.0	66.6
0°-180°	5995.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	702	702	702	702	702	
5°	704	699	701	699	698	67
15°	680	672	676	674	673	192
25°	631	624	627	621	621	291
35°	560	554	557	550	551	350
45°	473	468	468	463	464	364
55°	370	369	366	362	362	330
65°	256	253	249	246	246	253
75°	133	132	130	128	128	141
85°	26	29	31	31	31	33
90°	0	0	0	0	0	3
95°	31	159	545	354	248	35
105°	123	212	924	1196	1180	130
115°	225	287	742	1407	1570	222
125°	320	369	644	1119	1315	286
135°	393	439	618	883	1016	304
145°	465	500	606	750	809	291
155°	533	556	614	664	689	246
165°	590	598	622	632	640	166
175°	623	621	623	618	617	59
180°	617	617	617	617	617	



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CATALOG NUMBER: SQ4-F-100U-050D-93050-1D-UNV-STD-W-4 (3000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	702.5	702.5	702.5	702.5	702.5
2.5°	706.5	701.1	702.5	701.7	698.6
5°	704.5	698.8	700.6	698.6	697.6
7.5°	699.6	693.7	695.7	693.7	694.3
10°	695.7	689.0	691.8	689.8	688.8
12.5°	691.0	683.5	686.3	683.5	684.1
15°	680.0	672.3	676.1	674.1	673.1
17.5°	667.8	661.1	664.9	661.7	661.7
20°	658.4	651.7	655.4	651.5	651.5
22.5°	648.2	640.7	644.5	639.7	639.7
25°	630.9	624.2	627.0	621.1	621.1
27.5°	611.1	604.2	608.0	602.1	602.1
30°	598.5	590.9	594.6	588.7	588.7
32.5°	582.8	577.5	579.7	573.8	573.8
35°	560.3	554.5	557.3	550.5	551.4
37.5°	535.3	531.3	531.4	525.4	526.5
40°	518.1	513.3	514.2	507.3	509.2
42.5°	500.0	496.0	496.1	490.8	492.0
45°	472.9	468.1	468.0	463.2	464.1
47.5°	442.3	439.8	439.4	433.7	434.7
50°	421.9	421.0	419.0	414.1	415.1
52.5°	401.5	400.6	398.6	393.7	394.6
55°	369.9	369.0	366.0	362.1	362.1
57.5°	336.9	336.0	332.8	328.9	328.9
60°	315.0	314.0	310.1	306.1	306.1
62.5°	292.2	290.5	286.5	283.4	283.4
65°	256.1	253.2	249.2	246.3	246.3
67.5°	218.6	216.7	213.7	211.0	211.0
70°	194.3	192.4	189.4	187.4	187.4
72.5°	169.9	168.0	165.0	163.1	163.1
75°	133.4	131.5	129.5	127.6	127.6
77.5°	97.3	96.8	96.7	94.8	94.8
80°	74.6	75.5	75.6	73.6	73.6
82.5°	53.4	55.1	55.9	55.5	55.5
85°	26.5	29.4	31.4	31.4	31.4
87.5°	7.8	10.2	12.6	12.6	12.6
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.5	86.1	202.8	98.6	66.9
95°	31.4	159.2	545.0	354.4	248.3
97.5°	55.7	176.3	717.8	691.5	593.6
100°	74.5	187.0	812.9	858.2	777.7
102.5°	92.3	196.6	875.7	996.9	949.1
105°	122.9	212.3	924.0	1195.6	1180.2
107.5°	152.9	230.9	895.6	1354.9	1390.9
110°	173.8	246.7	849.5	1423.5	1491.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	194.7	262.5	808.8	1440.3	1556.1
115°	224.8	287.4	742.4	1407.4	1569.7
117.5°	254.6	313.6	703.4	1331.7	1521.9
120°	274.5	329.4	678.3	1272.3	1471.7
122.5°	295.4	346.2	662.6	1211.6	1407.9
125°	320.2	368.8	644.3	1119.3	1314.8
127.5°	344.8	390.5	631.5	1041.1	1212.9
130°	359.4	404.2	627.4	986.7	1155.4
132.5°	373.0	419.8	621.1	947.4	1090.6
135°	393.4	439.4	618.2	882.6	1015.5
137.5°	412.7	459.0	609.1	838.8	938.9
140°	427.4	469.6	609.1	807.2	899.2
142.5°	442.0	484.2	603.8	779.7	857.4
145°	465.3	499.8	606.4	750.2	809.0
147.5°	487.0	520.5	604.9	716.3	764.9
150°	500.6	530.0	609.1	701.4	739.8
152.5°	515.2	543.6	608.0	685.6	719.9
155°	533.3	556.3	614.3	664.5	688.8
157.5°	554.9	574.6	613.0	656.4	670.7
160°	563.3	579.9	618.2	645.9	656.1
162.5°	576.9	591.5	616.1	642.7	648.8
165°	589.5	598.4	622.1	631.5	640.4
167.5°	604.9	610.8	620.6	630.8	631.0
170°	609.1	612.9	624.7	623.6	630.0
172.5°	616.4	619.2	621.6	624.4	620.6
175°	623.4	620.9	623.4	618.2	616.9
177.5°	622.1	622.1	620.0	617.8	612.7
180°	616.9	616.9	616.9	616.9	616.9

(END OF REPORT)