

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: P521660

Luminaire Tested: **SQ4-F-150U-050D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521660  
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-150U-050D-93050-1D-UNV-STD-W-4 (3000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

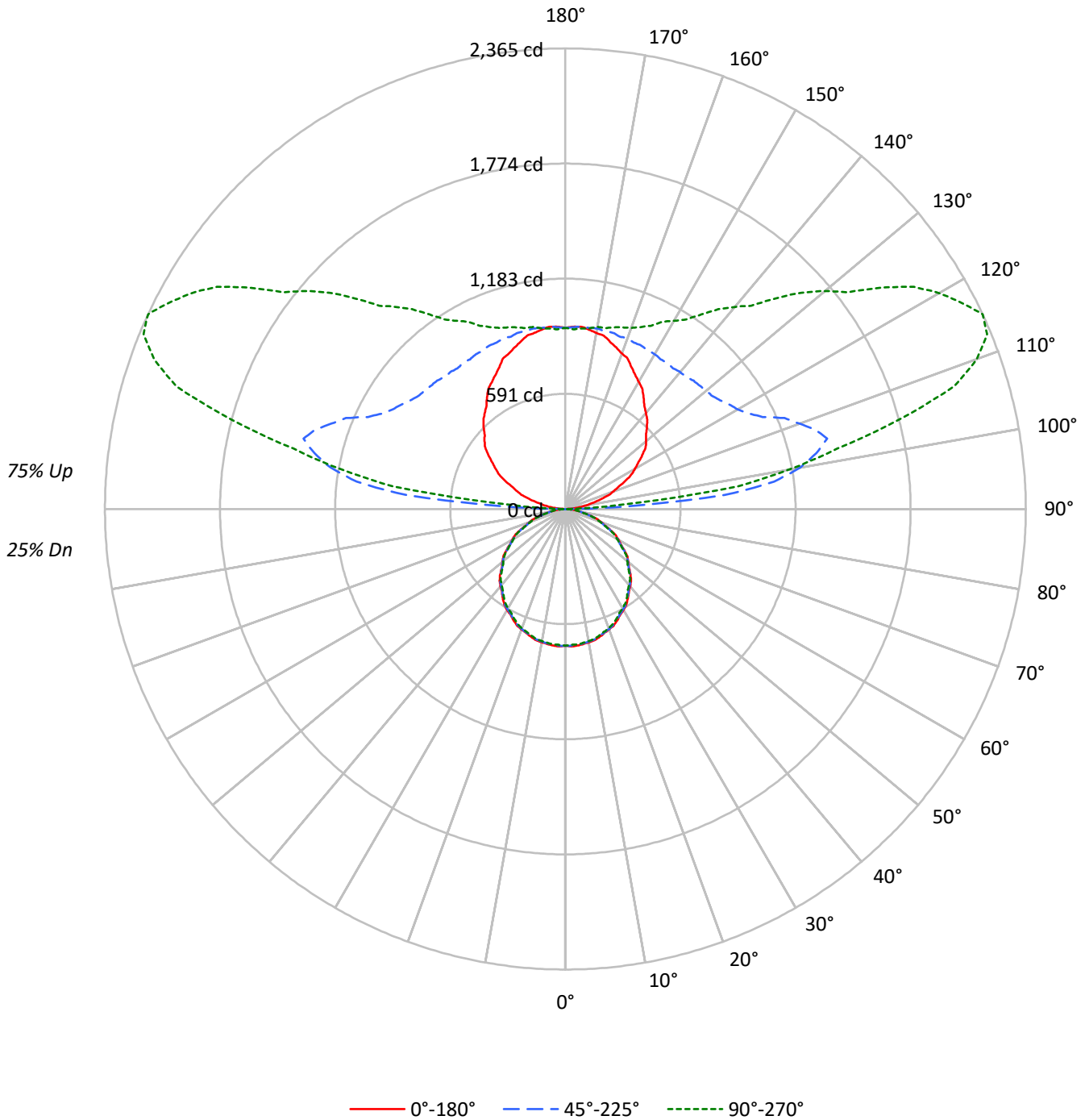
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8021.0 lumens  
Efficiency: N/A  
Efficacy: 111.6 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): 71.9  
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				
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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	33	33	33	25		
1	92	88	84	81	82	78	75	72	61	58	57	44	43	42	29	28	28	21		
2	84	77	71	66	74	68	63	59	53	50	47	39	37	35	25	24	23	17		
3	76	67	60	55	68	60	54	49	47	42	39	34	31	29	22	21	20	15		
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	12		
5	64	53	45	39	56	47	40	35	37	32	28	27	24	21	18	16	15	11		
6	59	47	39	34	52	42	35	31	33	28	24	24	21	19	16	14	13	9		
7	54	42	35	29	48	38	31	27	30	25	21	22	19	16	15	13	11	8		
8	50	38	31	26	44	34	28	23	27	22	19	20	17	14	13	11	10	7		
9	46	35	27	23	41	31	25	21	25	20	17	18	15	13	12	10	9	7		
10	43	32	25	20	38	28	22	18	22	18	15	17	14	11	11	10	8	6		

**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	0.8
10°-20°	190.4	2.4
20°-30°	287.8	3.6
30°-40°	346.6	4.3
40°-50°	359.9	4.5
50°-60°	326.5	4.1
60°-70°	247.6	3.1
70°-80°	138.1	1.7
80°-90°	36.5	0.5
90°-100°	479.4	6.0
100°-110°	1158.6	14.4
110°-120°	1235.7	15.4
120°-130°	1000.8	12.5
130°-140°	774.9	9.7
140°-150°	591.1	7.4
150°-160°	427.9	5.3
160°-170°	263.5	3.3
170°-180°	89.2	1.1
0°-30°	544.7	6.8
0°-40°	891.3	11.1
0°-60°	1577.7	19.7
0°-90°	2000.0	24.9
90°-120°	2873.6	35.8
90°-150°	5240.4	65.3
90°-180°	6021.0	75.1
0°-180°	8021.0	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°	47	240	821	534	374	53
105°	185	320	1392	1802	1778	196
115°	339	433	1119	2121	2365	335
125°	482	556	971	1687	1981	431
135°	593	662	932	1330	1530	458
145°	701	753	914	1131	1219	438
155°	804	838	926	1001	1038	371
165°	888	902	938	952	965	251
175°	940	936	940	932	930	89
180°	930	930	930	930	930	

TEST NUMBER: P521660

CATALOG NUMBER: SQ4-F-150U-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°	15.8	129.8	305.7	148.6	100.8
95°	47.3	239.8	821.3	534.1	374.2
97.5°	83.9	265.7	1081.7	1042.1	894.6
100°	112.3	281.7	1225.1	1293.2	1171.9
102.5°	139.1	296.2	1319.6	1502.3	1430.3
105°	185.1	319.9	1392.5	1801.6	1778.5
107.5°	230.4	347.9	1349.5	2041.7	2096.0
110°	262.0	371.7	1280.2	2145.2	2247.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	293.5	395.5	1218.8	2170.5	2345.0
115°	338.8	433.1	1118.7	2120.9	2365.4
117.5°	383.7	472.6	1060.0	2006.8	2293.4
120°	413.6	496.4	1022.2	1917.3	2217.7
122.5°	445.1	521.8	998.6	1825.8	2121.6
125°	482.5	555.7	971.0	1686.7	1981.4
127.5°	519.6	588.5	951.7	1568.9	1827.7
130°	541.6	609.0	945.4	1486.9	1741.1
132.5°	562.1	632.6	935.9	1427.7	1643.4
135°	592.8	662.2	931.6	1330.1	1530.3
137.5°	622.0	691.7	917.8	1263.9	1414.9
140°	644.0	707.6	917.8	1216.4	1355.1
142.5°	666.1	729.7	909.9	1174.9	1292.0
145°	701.2	753.2	913.9	1130.6	1219.2
147.5°	733.9	784.3	911.5	1079.4	1152.6
150°	754.3	798.6	917.8	1057.0	1114.8
152.5°	776.4	819.2	916.2	1033.2	1084.8
155°	803.6	838.2	925.7	1001.4	1038.0
157.5°	836.3	865.9	923.7	989.2	1010.8
160°	848.9	873.9	931.6	973.3	988.7
162.5°	869.4	891.3	928.4	968.4	977.7
165°	888.3	901.8	937.5	951.6	965.1
167.5°	911.5	920.4	935.1	950.5	950.9
170°	917.8	923.6	941.4	939.7	949.3
172.5°	928.8	933.1	936.7	940.9	935.1
175°	939.5	935.6	939.5	931.6	929.6
177.5°	937.5	937.5	934.4	931.0	923.3
180°	929.6	929.6	929.6	929.6	929.6

(END OF REPORT)