

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: P521663

Luminaire Tested: **SQ4-F-150U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521663  
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 (4500K)  
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 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

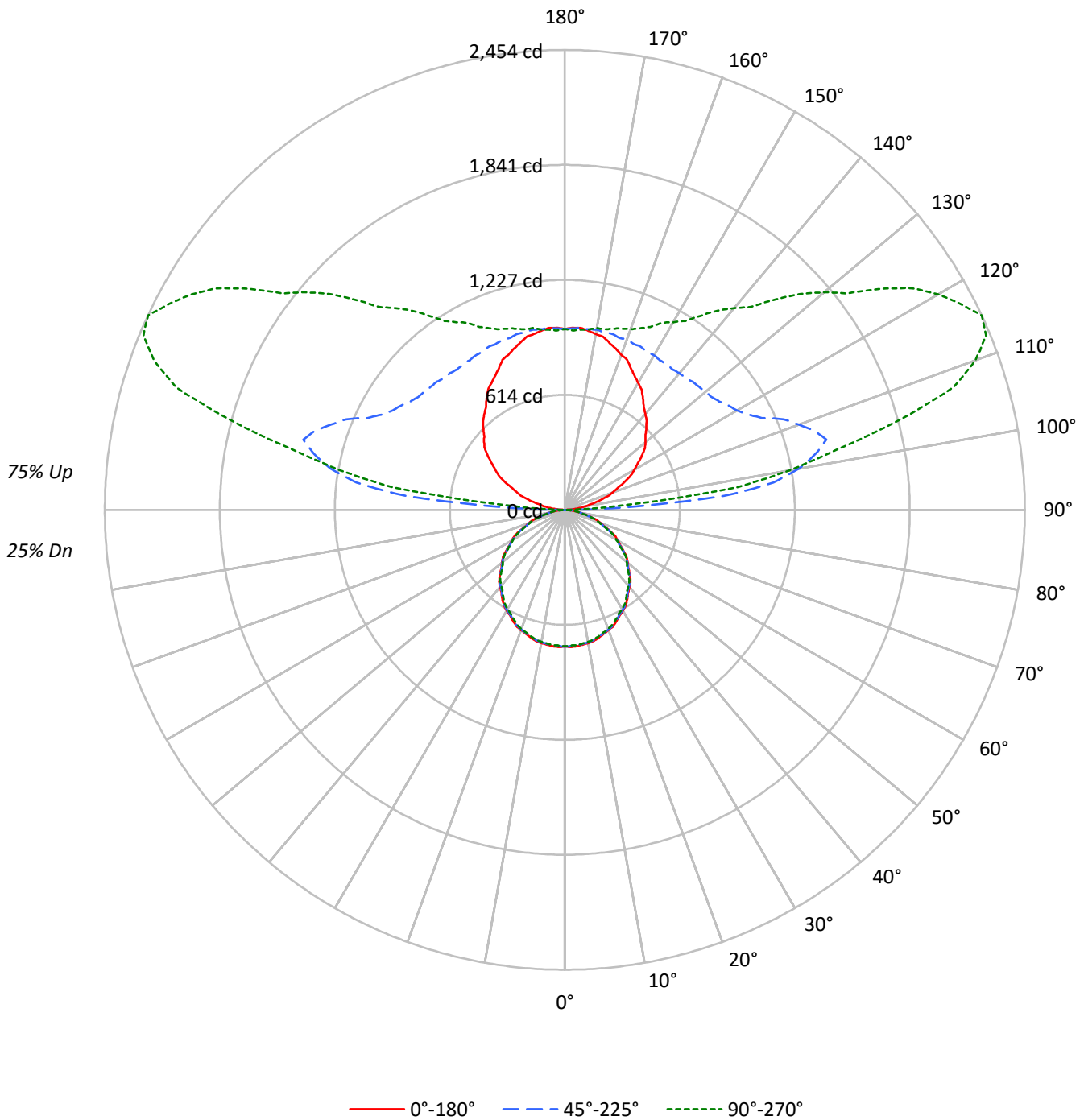
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 8319.9 lumens  
Efficiency: N/A  
Efficacy: 115.9 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): 71.8  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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	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°	6723	6723	6723
5°	6768	6730	6702
10°	6760	6722	6694
15°	6737	6699	6669
20°	6705	6675	6635
25°	6662	6621	6559
30°	6614	6571	6506
35°	6546	6511	6443
40°	6472	6423	6362
45°	6401	6335	6281
50°	6281	6238	6179
55°	6172	6106	6042
60°	6028	5934	5859
65°	5798	5643	5578
70°	5436	5298	5244
75°	4934	4787	4716
80°	4112	4166	4054
85°	2911	3451	3451



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	68.9	0.8
10°-20°	197.5	2.4
20°-30°	298.5	3.6
30°-40°	359.5	4.3
40°-50°	373.4	4.5
50°-60°	338.7	4.1
60°-70°	256.8	3.1
70°-80°	143.2	1.7
80°-90°	37.9	0.5
90°-100°	497.2	6.0
100°-110°	1201.7	14.4
110°-120°	1281.7	15.4
120°-130°	1038.1	12.5
130°-140°	803.7	9.7
140°-150°	613.1	7.4
150°-160°	443.8	5.3
160°-170°	273.4	3.3
170°-180°	92.6	1.1
0°-30°	565.0	6.8
0°-40°	924.5	11.1
0°-60°	1636.5	19.7
0°-90°	2074.5	24.9
90°-120°	2980.7	35.8
90°-150°	5435.7	65.3
90°-180°	6245.0	75.1
0°-180°	8319.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	729	729	729	729	729	
5°	731	725	727	725	724	69
15°	705	697	701	699	698	199
25°	654	648	650	644	644	301
35°	581	575	578	571	572	363
45°	491	486	486	480	481	377
55°	384	383	380	376	376	343
65°	266	263	258	256	256	262
75°	138	136	134	132	132	146
85°	28	30	33	33	33	34
90°	0	0	0	0	0	3
95°	49	249	852	554	388	55
105°	192	332	1444	1869	1845	203
115°	351	449	1160	2200	2454	347
125°	500	576	1007	1750	2055	447
135°	615	687	966	1380	1587	475
145°	727	781	948	1173	1265	455
155°	834	870	960	1039	1077	385
165°	921	935	972	987	1001	260
175°	974	970	974	966	964	92
180°	964	964	964	964	964	

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CATALOG NUMBER: SQ4-F-150U-050D-93050-1D-UNV-STD-W-4 (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	728.7	728.7	728.7	728.7	728.7
2.5°	732.8	727.2	728.7	727.8	724.7
5°	730.8	724.8	726.7	724.6	723.6
7.5°	725.7	719.5	721.6	719.6	720.2
10°	721.6	714.6	717.5	715.5	714.5
12.5°	716.7	709.0	711.8	709.0	709.6
15°	705.3	697.4	701.3	699.2	698.2
17.5°	692.7	685.7	689.6	686.4	686.4
20°	682.9	676.0	679.9	675.8	675.8
22.5°	672.3	664.6	668.5	663.6	663.6
25°	654.4	647.5	650.4	644.3	644.3
27.5°	633.9	626.7	630.6	624.5	624.5
30°	620.8	612.9	616.8	610.7	610.7
32.5°	604.6	599.0	601.3	595.2	595.2
35°	581.2	575.2	578.1	571.0	572.0
37.5°	555.3	551.1	551.2	544.9	546.1
40°	537.4	532.4	533.3	526.2	528.2
42.5°	518.7	514.5	514.6	509.1	510.3
45°	490.6	485.6	485.5	480.4	481.4
47.5°	458.8	456.2	455.8	449.9	450.9
50°	437.6	436.7	434.6	429.5	430.5
52.5°	416.5	415.5	413.4	408.4	409.4
55°	383.7	382.7	379.6	375.6	375.6
57.5°	349.5	348.5	345.2	341.2	341.2
60°	326.7	325.7	321.6	317.5	317.5
62.5°	303.1	301.3	297.2	293.9	293.9
65°	265.6	262.7	258.5	255.5	255.5
67.5°	226.8	224.8	221.7	218.8	218.8
70°	201.5	199.5	196.4	194.4	194.4
72.5°	176.3	174.3	171.2	169.2	169.2
75°	138.4	136.4	134.3	132.3	132.3
77.5°	101.0	100.4	100.4	98.3	98.3
80°	77.4	78.3	78.4	76.3	76.3
82.5°	55.4	57.2	58.0	57.6	57.6
85°	27.5	30.5	32.6	32.6	32.6
87.5°	8.1	10.5	13.0	13.0	13.0
90°	0.0	0.0	0.0	0.0	0.0
92.5°	16.3	134.6	317.1	154.1	104.6
95°	49.0	248.8	851.9	554.0	388.2
97.5°	87.0	275.6	1122.0	1080.9	927.9
100°	116.4	292.2	1270.7	1341.4	1215.6
102.5°	144.2	307.2	1368.8	1558.3	1483.6
105°	192.0	331.9	1444.4	1868.8	1844.8
107.5°	239.0	360.9	1399.8	2117.8	2174.1
110°	271.7	385.6	1327.9	2225.2	2331.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	304.4	410.3	1264.2	2251.4	2432.4
115°	351.4	449.3	1160.4	2199.9	2453.6
117.5°	398.0	490.3	1099.5	2081.6	2378.8
120°	429.0	514.9	1060.3	1988.8	2300.4
122.5°	461.7	541.2	1035.8	1893.9	2200.7
125°	500.5	576.4	1007.2	1749.6	2055.2
127.5°	538.9	610.4	987.2	1627.4	1895.9
130°	561.8	631.7	980.6	1542.3	1806.0
132.5°	583.1	656.2	970.8	1480.9	1704.7
135°	614.9	686.8	966.3	1379.6	1587.4
137.5°	645.2	717.5	952.0	1311.1	1467.7
140°	668.1	734.0	952.0	1261.7	1405.6
142.5°	690.9	756.9	943.9	1218.7	1340.2
145°	727.3	781.2	947.9	1172.7	1264.6
147.5°	761.2	813.5	945.5	1119.6	1195.5
150°	782.5	828.4	952.0	1096.4	1156.3
152.5°	805.3	849.7	950.4	1071.7	1125.3
155°	833.5	869.5	960.2	1038.7	1076.6
157.5°	867.4	898.2	958.2	1026.1	1048.5
160°	880.5	906.5	966.3	1009.6	1025.6
162.5°	901.8	924.5	963.1	1004.5	1014.1
165°	921.4	935.4	972.5	987.1	1001.1
167.5°	945.5	954.7	970.0	985.9	986.3
170°	952.0	958.0	976.5	974.7	984.7
172.5°	963.5	967.9	971.6	976.0	970.0
175°	974.5	970.5	974.5	966.3	964.3
177.5°	972.5	972.5	969.2	965.7	957.7
180°	964.3	964.3	964.3	964.3	964.3

(END OF REPORT)