

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: P520368

Luminaire Tested: **SQ4-F-150U-050D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520368  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-835-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

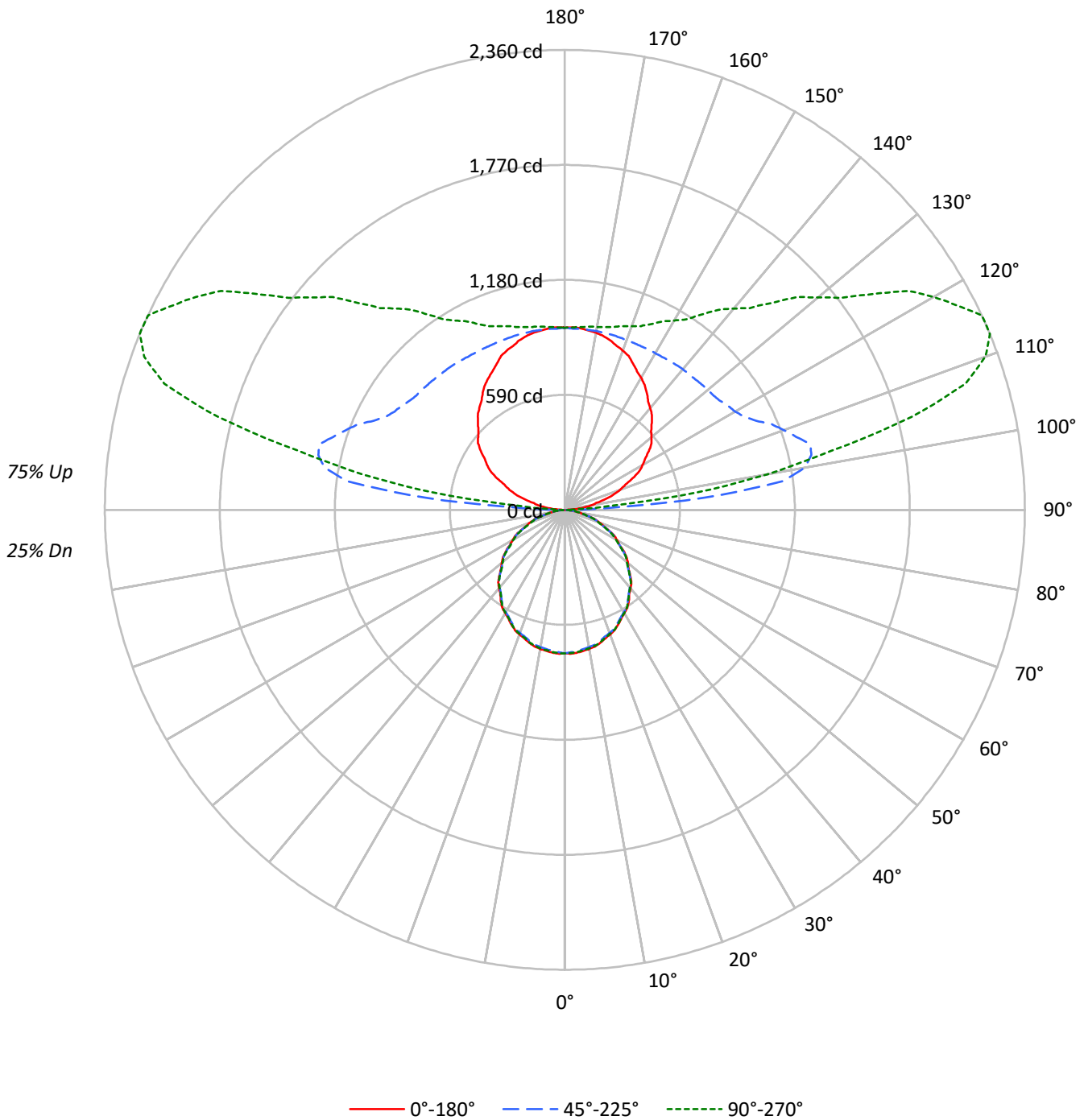
Lumens per Lamp: N/A  
Luminaire Lumens: 8036.2 lumens  
Efficiency: N/A  
Efficacy: 144.3 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 55.7  
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	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33	25
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8	6

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

	0°	45°	90°
0°	6796	6796	6796
5°	6813	6730	6785
10°	6790	6707	6753
15°	6743	6658	6716
20°	6680	6603	6651
25°	6605	6524	6585
30°	6514	6460	6503
35°	6441	6364	6397
40°	6318	6259	6270
45°	6189	6136	6136
50°	6057	6001	5972
55°	5916	5837	5805
60°	5694	5604	5567
65°	5425	5318	5253
70°	5055	4947	4842
75°	4534	4395	4288
80°	3666	3613	3512
85°	2191	2509	2615



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	69.5	0.9
10°-20°	197.9	2.5
20°-30°	297.3	3.7
30°-40°	354.8	4.4
40°-50°	363.6	4.5
50°-60°	324.3	4.0
60°-70°	241.5	3.0
70°-80°	131.1	1.6
80°-90°	32.3	0.4
90°-100°	434.2	5.4
100°-110°	1174.0	14.6
110°-120°	1234.3	15.4
120°-130°	1002.6	12.5
130°-140°	786.5	9.8
140°-150°	603.6	7.5
150°-160°	434.1	5.4
160°-170°	265.2	3.3
170°-180°	89.4	1.1
0°-30°	564.7	7.0
0°-40°	919.5	11.4
0°-60°	1607.4	20.0
0°-90°	2012.3	25.0
90°-120°	2842.5	35.4
90°-150°	5235.2	65.1
90°-180°	6024.0	75.0
0°-180°	8036.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	737	737	737	737	737	
5°	736	735	727	734	733	70
15°	706	704	697	703	703	199
25°	649	647	641	645	647	299
35°	572	570	565	565	568	357
45°	474	475	470	469	470	366
55°	368	368	363	360	361	328
65°	248	248	244	241	241	246
75°	127	126	123	121	120	134
85°	21	23	24	25	25	29
90°	2	6	13	14	13	5
95°	67	236	722	374	222	71
105°	218	337	1302	1921	1842	230
115°	384	470	1080	2091	2360	379
125°	526	603	974	1643	1930	469
135°	631	705	947	1326	1502	487
145°	733	788	934	1136	1222	459
155°	828	860	926	1019	1052	382
165°	901	910	930	967	972	254
175°	935	934	931	943	941	89
180°	934	934	934	934	934	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	736.6	736.6	736.6	736.6	736.6
2.5°	739.0	737.4	731.1	736.6	735.8
5°	735.6	734.6	726.7	733.6	732.6
7.5°	730.3	728.3	720.6	727.3	726.3
10°	724.8	722.8	715.9	721.8	720.8
12.5°	717.7	716.5	708.8	714.7	714.5
15°	706.0	704.0	697.1	703.1	703.1
17.5°	690.6	689.5	682.7	688.5	687.7
20°	680.4	678.4	672.5	677.4	677.4
22.5°	667.8	666.6	660.7	664.8	665.6
25°	648.8	646.9	640.9	644.9	646.9
27.5°	627.9	626.3	621.4	624.0	625.4
30°	611.4	611.4	606.4	607.5	610.4
32.5°	596.4	596.4	590.6	591.6	593.0
35°	571.9	569.9	565.0	565.1	568.0
37.5°	543.5	542.5	539.4	538.8	539.6
40°	524.6	523.6	519.7	520.6	520.6
42.5°	505.6	504.7	500.7	499.3	500.9
45°	474.3	475.3	470.3	469.4	470.3
47.5°	443.3	443.3	439.4	436.6	438.2
50°	422.0	422.0	418.1	416.1	416.1
52.5°	399.9	400.7	396.0	393.2	394.0
55°	367.8	367.8	362.9	359.9	360.9
57.5°	332.3	332.3	327.4	324.4	326.2
60°	308.6	308.6	303.7	300.7	301.7
62.5°	285.0	285.0	280.0	277.1	277.3
65°	248.5	247.5	243.6	240.6	240.6
67.5°	213.4	210.9	207.9	203.9	203.9
70°	187.4	186.4	183.4	179.5	179.5
72.5°	163.7	161.9	159.0	155.8	155.8
75°	127.2	126.2	123.3	121.3	120.3
77.5°	91.1	90.3	90.1	87.4	88.2
80°	69.0	69.0	68.0	66.1	66.1
82.5°	49.3	50.1	48.3	47.9	47.1
85°	20.7	22.7	23.7	24.7	24.7
87.5°	4.3	7.4	8.1	9.1	8.9
90°	2.0	5.9	13.1	14.1	13.1
92.5°	28.6	104.1	205.3	89.1	64.6
95°	67.4	236.5	722.1	373.7	222.2
97.5°	108.2	271.2	1125.6	931.5	684.1
100°	138.8	285.3	1251.1	1304.8	1055.0
102.5°	167.0	304.8	1295.4	1587.8	1401.0
105°	218.2	337.2	1302.5	1921.1	1842.5
107.5°	265.7	374.3	1245.5	2129.2	2155.3
110°	302.7	401.1	1194.8	2185.0	2296.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	335.7	427.7	1148.1	2173.8	2360.4
115°	384.2	469.7	1080.1	2091.0	2360.4
117.5°	431.7	511.9	1035.3	1964.5	2269.9
120°	460.6	539.3	1008.7	1873.7	2185.5
122.5°	488.0	565.1	992.7	1776.5	2090.5
125°	526.0	602.7	973.6	1642.9	1930.0
127.5°	561.0	636.3	962.3	1533.8	1786.4
130°	580.4	658.0	957.5	1466.5	1694.7
132.5°	600.5	677.3	952.7	1405.8	1615.8
135°	630.6	705.3	947.4	1326.5	1501.5
137.5°	660.9	731.6	943.0	1262.2	1404.8
140°	681.9	747.7	941.4	1220.9	1347.7
142.5°	702.0	763.9	938.2	1183.4	1294.6
145°	733.2	788.3	934.4	1135.5	1222.0
147.5°	761.5	810.3	929.9	1091.9	1158.4
150°	782.5	825.7	928.3	1068.3	1121.4
152.5°	801.8	839.5	927.5	1046.3	1090.0
155°	827.7	860.2	926.3	1018.6	1052.0
157.5°	854.7	877.3	926.5	999.1	1021.2
160°	870.0	888.7	927.3	987.0	1002.8
162.5°	882.0	897.5	928.1	977.2	989.1
165°	901.2	910.0	930.3	966.7	971.6
167.5°	914.2	920.3	930.5	957.5	959.9
170°	922.3	925.2	931.3	953.5	953.5
172.5°	928.7	929.3	931.3	948.5	947.8
175°	935.4	934.4	931.3	943.3	941.4
177.5°	937.6	935.2	931.1	939.1	936.8
180°	934.4	934.4	934.4	934.4	934.4

(END OF REPORT)