

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: P520372

Luminaire Tested: **SQ4-F-150U-050D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520372  
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-840-1D-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**

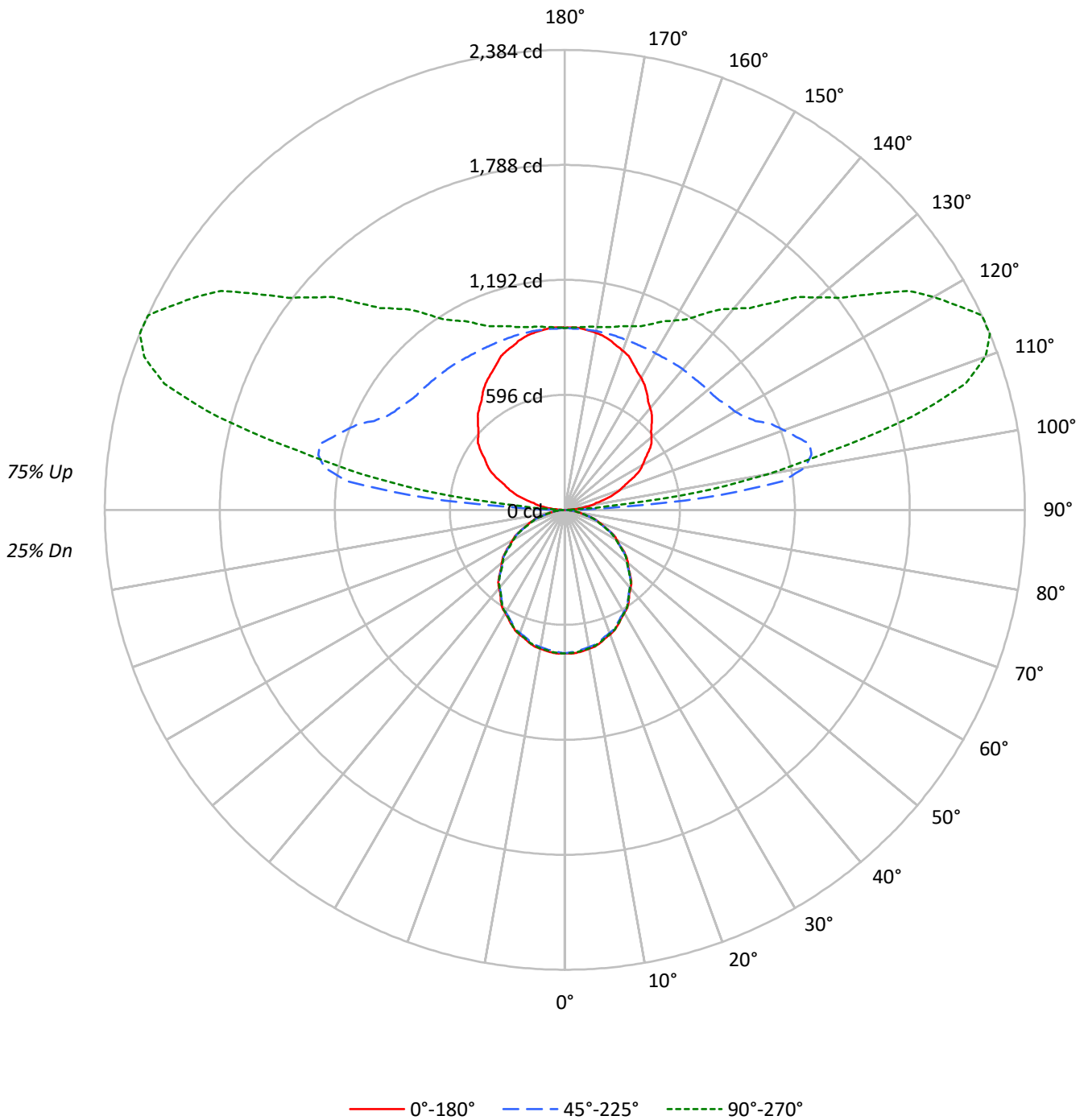
Lumens per Lamp: N/A  
Luminaire Lumens: 8117.1 lumens  
Efficiency: N/A  
Efficacy: 145.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Indirect

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°	6864	6864	6864
5°	6881	6798	6853
10°	6858	6774	6821
15°	6811	6725	6784
20°	6747	6670	6718
25°	6671	6590	6652
30°	6579	6525	6568
35°	6506	6428	6462
40°	6382	6322	6334
45°	6250	6199	6199
50°	6119	6061	6033
55°	5976	5895	5863
60°	5752	5661	5624
65°	5480	5370	5307
70°	5104	4999	4888
75°	4581	4438	4331
80°	3703	3650	3549
85°	2212	2530	2636



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	70.2	0.9
10°-20°	199.9	2.5
20°-30°	300.2	3.7
30°-40°	358.4	4.4
40°-50°	367.3	4.5
50°-60°	327.5	4.0
60°-70°	243.9	3.0
70°-80°	132.4	1.6
80°-90°	32.6	0.4
90°-100°	438.6	5.4
100°-110°	1185.8	14.6
110°-120°	1246.7	15.4
120°-130°	1012.7	12.5
130°-140°	794.4	9.8
140°-150°	609.7	7.5
150°-160°	438.5	5.4
160°-170°	267.9	3.3
170°-180°	90.3	1.1
0°-30°	570.3	7.0
0°-40°	928.8	11.4
0°-60°	1623.6	20.0
0°-90°	2032.6	25.0
90°-120°	2871.2	35.4
90°-150°	5287.9	65.1
90°-180°	6085.0	75.0
0°-180°	8117.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	744	744	744	744	744	
5°	743	742	734	741	740	71
15°	713	711	704	710	710	201
25°	655	653	647	651	653	302
35°	578	576	571	571	574	360
45°	479	480	475	474	475	370
55°	372	372	366	364	364	331
65°	251	250	246	243	243	249
75°	128	128	124	122	122	136
85°	21	23	24	25	25	29
90°	2	6	13	14	13	5
95°	68	239	729	377	224	71
105°	220	341	1316	1940	1861	232
115°	388	474	1091	2112	2384	383
125°	531	609	983	1659	1949	474
135°	637	712	957	1340	1517	492
145°	741	796	944	1147	1234	463
155°	836	869	936	1029	1063	386
165°	910	919	940	976	981	256
175°	945	944	941	953	951	90
180°	944	944	944	944	944	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	744.0	744.0	744.0	744.0	744.0
2.5°	746.3	744.9	738.5	744.0	743.2
5°	743.0	742.0	734.0	741.0	740.0
7.5°	737.7	735.7	727.9	734.6	733.6
10°	732.0	730.1	723.1	729.0	728.1
12.5°	724.9	723.7	715.9	721.9	721.7
15°	713.1	711.1	704.1	710.2	710.2
17.5°	697.5	696.5	689.6	695.4	694.6
20°	687.2	685.3	679.3	684.2	684.2
22.5°	674.5	673.3	667.3	671.5	672.3
25°	655.3	653.4	647.3	651.4	653.4
27.5°	634.2	632.7	627.6	630.3	631.7
30°	617.5	617.5	612.5	613.6	616.5
32.5°	602.4	602.4	596.6	597.6	599.0
35°	577.6	575.8	570.7	570.7	573.7
37.5°	548.9	548.1	544.8	544.2	545.0
40°	529.9	528.9	524.9	525.9	525.9
42.5°	510.8	509.8	505.7	504.4	505.9
45°	479.0	480.0	475.1	474.1	475.1
47.5°	447.8	447.8	443.8	441.1	442.6
50°	426.3	426.3	422.3	420.3	420.3
52.5°	404.0	404.8	399.9	397.2	398.0
55°	371.5	371.5	366.5	363.6	364.5
57.5°	335.7	335.7	330.6	327.8	329.4
60°	311.7	311.7	306.8	303.8	304.8
62.5°	287.8	287.8	282.9	279.8	280.0
65°	251.0	250.0	246.0	243.1	243.1
67.5°	215.6	213.0	209.9	206.0	206.0
70°	189.2	188.2	185.3	181.2	181.2
72.5°	165.4	163.6	160.5	157.4	157.4
75°	128.5	127.5	124.5	122.5	121.5
77.5°	92.0	91.2	91.0	88.3	89.0
80°	69.7	69.7	68.7	66.8	66.8
82.5°	49.8	50.6	48.8	48.4	47.6
85°	20.9	22.9	23.9	24.9	24.9
87.5°	4.3	7.5	8.2	9.2	9.0
90°	2.0	6.0	13.2	14.2	13.2
92.5°	28.9	105.1	207.4	90.0	65.2
95°	68.1	238.9	729.3	377.4	224.5
97.5°	109.4	274.0	1137.0	940.9	691.0
100°	140.2	288.2	1263.7	1317.9	1065.6
102.5°	168.6	307.9	1308.4	1603.8	1415.1
105°	220.4	340.6	1315.5	1940.5	1861.1
107.5°	268.4	378.0	1258.0	2150.6	2177.0
110°	305.8	405.1	1206.9	2206.9	2319.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	339.1	432.1	1159.7	2195.7	2384.2
115°	388.0	474.4	1091.0	2112.1	2384.2
117.5°	436.0	517.1	1045.7	1984.3	2292.7
120°	465.3	544.7	1018.9	1892.6	2207.4
122.5°	492.9	570.8	1002.7	1794.3	2111.6
125°	531.3	608.7	983.4	1659.4	1949.4
127.5°	566.7	642.7	972.0	1549.3	1804.3
130°	586.2	664.7	967.1	1481.3	1711.7
132.5°	606.5	684.2	962.2	1419.9	1632.1
135°	637.0	712.4	956.9	1339.9	1516.6
137.5°	667.6	738.9	952.5	1274.9	1418.9
140°	688.8	755.3	950.9	1233.1	1361.2
142.5°	709.0	771.7	947.6	1195.4	1307.6
145°	740.6	796.1	943.7	1146.8	1234.2
147.5°	769.2	818.5	939.3	1103.0	1170.1
150°	790.3	834.1	937.7	1079.0	1132.6
152.5°	809.8	847.9	936.8	1056.9	1101.0
155°	836.1	868.9	935.6	1028.8	1062.6
157.5°	863.2	886.1	935.8	1009.2	1031.5
160°	878.7	897.5	936.6	996.9	1012.8
162.5°	890.9	906.6	937.5	987.1	998.9
165°	910.2	919.2	939.7	976.3	981.3
167.5°	923.4	929.5	939.9	967.2	969.6
170°	931.5	934.6	940.7	963.0	963.0
172.5°	938.1	938.7	940.7	958.1	957.3
175°	944.7	943.7	940.7	952.9	950.9
177.5°	946.9	944.6	940.5	948.5	946.1
180°	943.7	943.7	943.7	943.7	943.7

(END OF REPORT)