

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: P519962

Luminaire Tested: **SQ4-F-050U-125D-835-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519962  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-125D-835-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

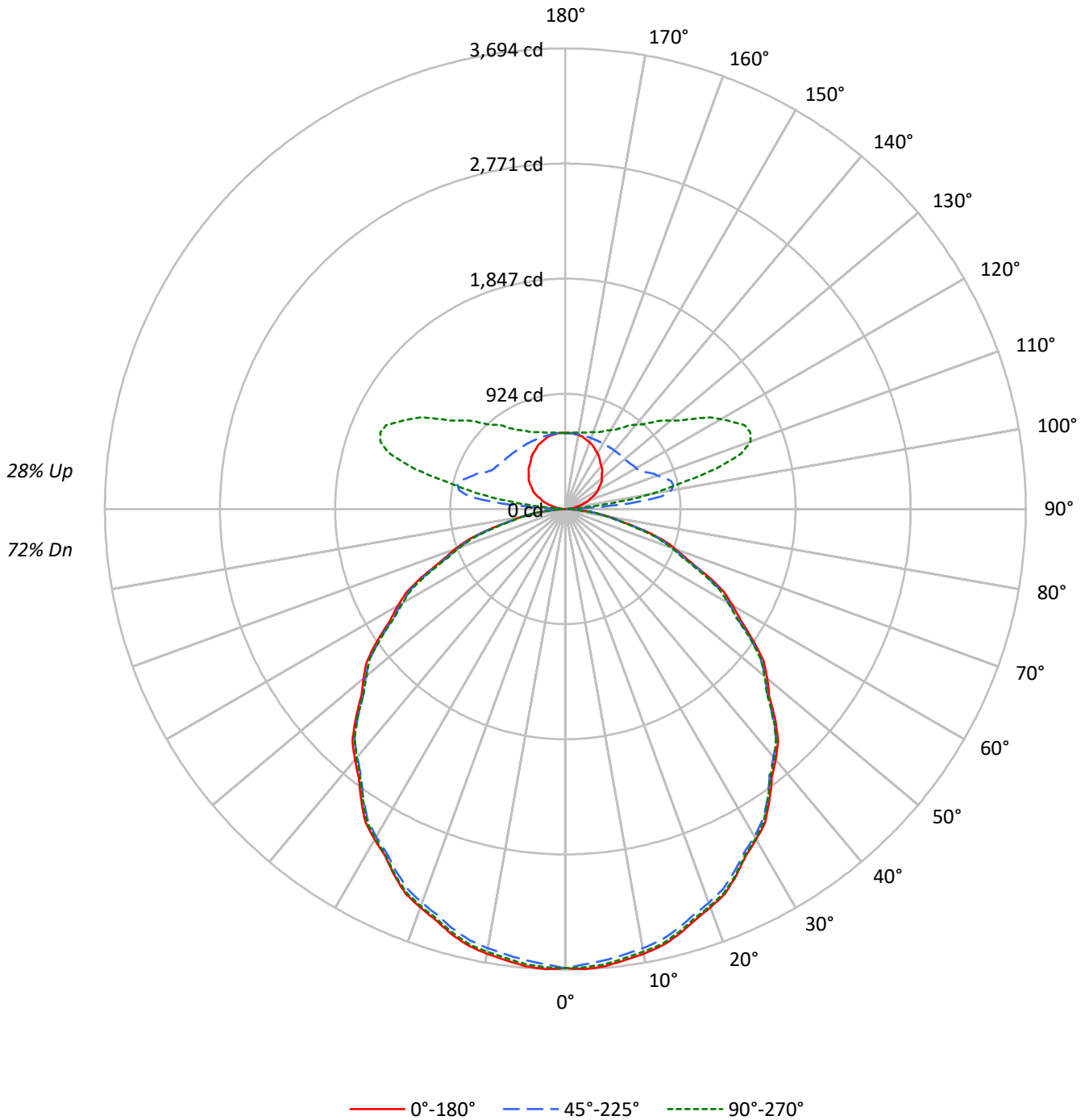
Lumens per Lamp: N/A  
Luminaire Lumens: 14034.9 lumens  
Efficiency: N/A  
Efficacy: 126.0 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 111.4  
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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	72
1	103	98	94	90	97	93	90	86	84	81	78	75	73	71	67	66	64	60
2	93	86	79	74	88	81	76	71	73	69	65	66	62	59	59	56	54	50
3	85	75	68	61	80	72	65	59	65	59	54	58	54	50	52	49	46	42
4	78	67	58	52	73	63	56	50	57	51	46	52	47	43	47	43	39	36
5	72	59	51	45	67	57	49	43	51	45	40	46	41	37	42	38	34	31
6	66	53	45	39	62	51	43	37	46	40	35	42	37	32	38	34	30	28
7	61	48	40	34	58	46	38	33	42	36	31	38	33	29	35	30	27	24
8	57	44	36	30	54	42	34	29	38	32	27	35	30	26	32	27	24	22
9	53	40	32	27	50	38	31	26	35	29	25	32	27	23	29	25	22	20
10	49	37	29	24	47	35	28	24	33	26	22	30	25	21	27	23	20	18

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

	0°	45°	90°
0°	16991	16991	16991
5°	17046	16830	16971
10°	16968	16759	16892
15°	16854	16651	16787
20°	16698	16509	16638
25°	16508	16333	16467
30°	16304	16164	16250
35°	16073	15936	15947
40°	15808	15637	15685
45°	15512	15340	15366
50°	15173	14999	14955
55°	14786	14575	14542
60°	14307	13989	13914
65°	13564	13275	13099
70°	12631	12304	12139
75°	11236	10983	10659
80°	9155	8886	8830
85°	5473	6224	6224



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	347.5	2.5
10°-20°	989.7	7.1
20°-30°	1487.0	10.6
30°-40°	1774.2	12.6
40°-50°	1818.6	13.0
50°-60°	1621.0	11.5
60°-70°	1206.7	8.6
70°-80°	653.8	4.7
80°-90°	152.5	1.1
90°-100°	292.9	2.1
100°-110°	795.7	5.7
110°-120°	818.1	5.8
120°-130°	654.1	4.7
130°-140°	514.0	3.7
140°-150°	394.1	2.8
150°-160°	283.4	2.0
160°-170°	173.3	1.2
170°-180°	58.4	0.4
0°-30°	2824.2	20.1
0°-40°	4598.5	32.8
0°-60°	8038.1	57.3
0°-90°	10051.0	71.6
90°-120°	1906.7	13.6
90°-150°	3468.8	24.7
90°-180°	3984.0	28.4
0°-180°	14034.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3683	3683	3683	3683	3683	
5°	3681	3675	3634	3667	3665	349
15°	3529	3521	3486	3517	3515	995
25°	3243	3237	3209	3227	3235	1494
35°	2854	2852	2830	2830	2832	1785
45°	2378	2372	2351	2348	2355	1832
55°	1838	1832	1812	1798	1808	1642
65°	1243	1235	1216	1208	1200	1230
75°	630	630	616	604	598	669
85°	103	117	118	120	118	143
90°	2	8	14	18	18	5
95°	43	160	510	222	149	46
105°	141	220	875	1332	1254	150
115°	251	305	700	1393	1587	248
125°	345	393	634	1068	1260	308
135°	416	462	616	870	981	322
145°	481	515	608	739	794	302
155°	543	563	604	664	683	251
165°	589	596	606	632	634	166
175°	610	612	608	616	614	58
180°	610	610	610	610	610	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3683.1	3683.1	3683.1	3683.1	3683.1
2.5°	3694.5	3688.1	3655.6	3683.0	3678.3
5°	3681.1	3675.1	3634.5	3666.9	3664.9
7.5°	3649.9	3642.4	3605.3	3635.6	3632.0
10°	3622.3	3616.3	3577.7	3608.1	3606.1
12.5°	3588.3	3582.3	3543.7	3574.1	3573.7
15°	3529.1	3521.2	3486.5	3516.9	3514.9
17.5°	3458.1	3449.0	3414.7	3438.8	3442.7
20°	3401.4	3395.4	3362.9	3385.3	3389.2
22.5°	3343.0	3335.5	3301.2	3326.9	3330.8
25°	3243.3	3237.3	3208.8	3227.2	3235.1
27.5°	3133.8	3133.8	3107.4	3120.5	3125.3
30°	3060.8	3060.8	3034.5	3042.8	3050.7
32.5°	2983.0	2976.6	2951.8	2958.5	2966.4
35°	2854.1	2852.0	2829.7	2829.7	2831.8
37.5°	2720.7	2715.1	2690.7	2692.5	2702.0
40°	2625.0	2621.1	2596.6	2596.8	2604.7
42.5°	2527.7	2523.8	2502.6	2499.4	2502.6
45°	2377.7	2371.7	2351.4	2347.5	2355.4
47.5°	2218.0	2219.6	2195.3	2189.7	2194.1
50°	2114.2	2114.2	2089.9	2077.8	2083.8
52.5°	2005.5	2002.4	1978.0	1964.5	1978.4
55°	1838.5	1832.5	1812.2	1798.2	1808.1
57.5°	1667.4	1658.3	1637.8	1622.5	1628.1
60°	1550.7	1536.8	1516.2	1504.2	1508.1
62.5°	1429.1	1421.6	1399.5	1381.0	1389.7
65°	1242.6	1234.7	1216.2	1207.9	1200.0
67.5°	1059.7	1054.6	1033.8	1025.2	1020.0
70°	936.5	926.6	912.2	902.0	900.0
72.5°	816.5	805.0	790.5	781.9	776.8
75°	630.4	630.4	616.2	604.0	598.0
77.5°	453.2	454.9	443.1	439.0	436.2
80°	344.6	344.6	334.5	330.4	332.4
82.5°	240.8	245.6	242.0	236.3	233.5
85°	103.4	117.3	117.6	119.6	117.6
87.5°	18.2	30.5	33.6	31.1	28.0
90°	2.0	7.8	13.7	17.7	17.7
92.5°	17.7	80.2	139.3	59.9	50.6
95°	43.2	160.1	510.1	222.0	149.1
97.5°	71.4	176.9	782.0	608.4	427.3
100°	90.3	188.1	865.2	877.1	708.3
102.5°	109.1	199.2	887.2	1084.7	935.9
105°	141.3	219.9	875.0	1332.3	1253.7
107.5°	174.6	244.0	824.4	1460.2	1482.0
110°	198.1	261.4	786.7	1485.4	1579.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	218.5	278.8	749.0	1464.5	1606.0
115°	251.1	304.8	700.4	1393.4	1587.1
117.5°	281.7	333.1	669.4	1292.7	1511.1
120°	302.1	352.0	655.3	1225.2	1442.0
122.5°	319.4	369.3	645.9	1157.5	1366.6
125°	345.3	393.3	633.7	1067.7	1259.6
127.5°	368.5	416.1	627.0	999.6	1164.2
130°	382.6	428.6	623.9	956.9	1104.5
132.5°	396.7	442.8	620.8	920.3	1051.2
135°	416.0	462.0	616.1	869.7	981.0
137.5°	436.7	478.6	613.7	825.0	918.6
140°	449.2	489.6	612.1	796.5	880.9
142.5°	461.8	499.1	610.6	774.2	844.8
145°	480.6	515.2	608.2	738.9	794.5
147.5°	501.8	531.4	606.2	711.2	754.9
150°	516.0	540.9	606.2	695.3	729.8
152.5°	527.0	548.8	604.7	681.0	709.4
155°	543.4	562.7	604.3	663.5	682.8
157.5°	559.5	574.5	604.3	651.7	666.3
160°	568.9	582.4	604.3	643.7	655.3
162.5°	578.4	588.8	605.8	637.4	645.9
165°	588.6	596.2	606.2	631.8	633.7
167.5°	599.2	603.0	608.2	625.1	626.6
170°	602.3	606.1	608.2	621.9	621.9
172.5°	605.5	607.7	608.2	618.8	618.8
175°	610.2	612.0	608.2	616.0	614.1
177.5°	611.7	611.7	607.0	613.2	610.2
180°	610.2	610.2	610.2	610.2	610.2

(END OF REPORT)