

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: P519905

Luminaire Tested: **SQ4-F-050U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519905  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-050U-050D-940-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

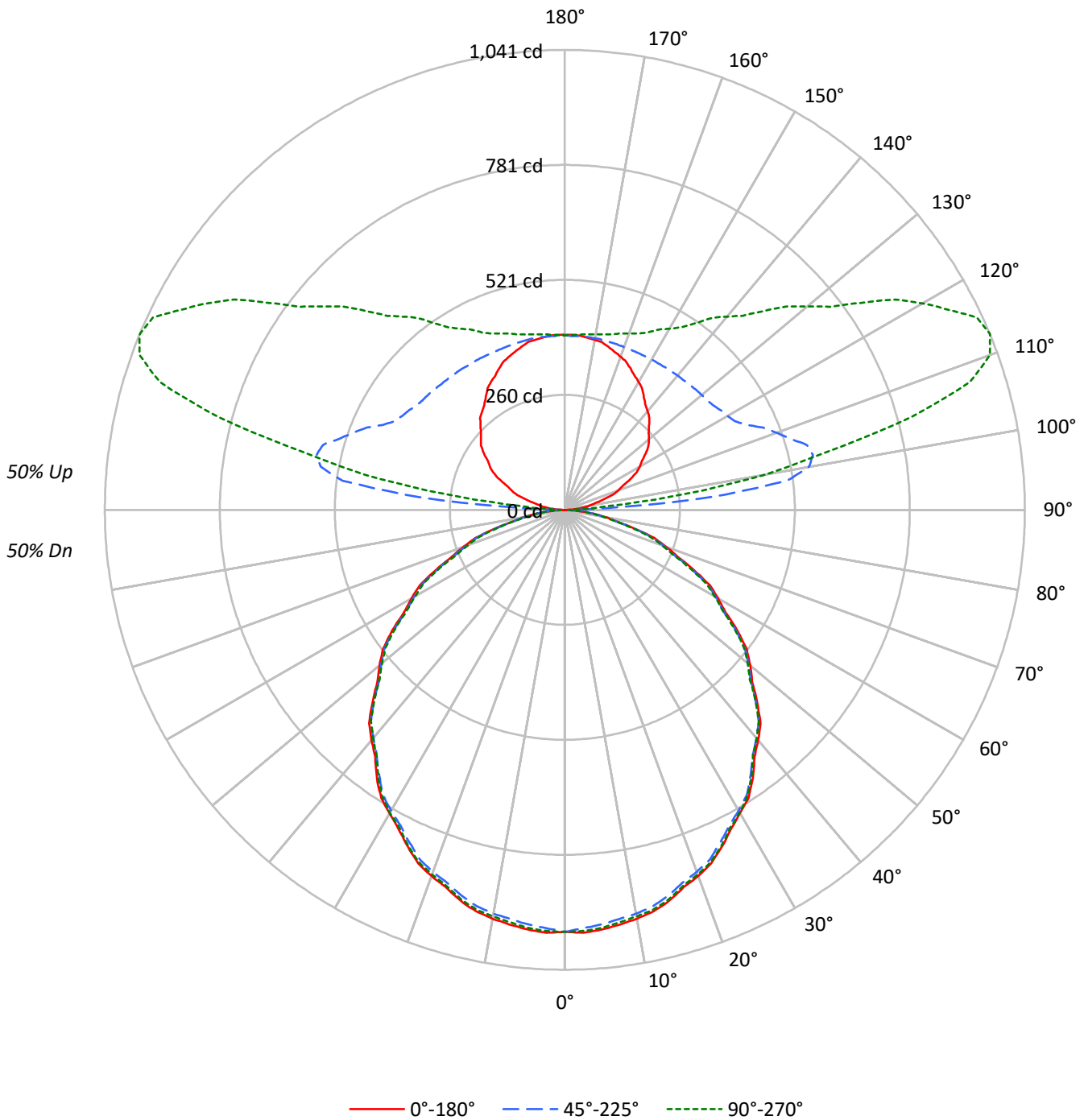
Lumens per Lamp: N/A  
Luminaire Lumens: 5191.4 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 43.8  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	32	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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

	0°	45°	90°
0°	5875	5875	5875
5°	5890	5819	5866
10°	5870	5798	5838
15°	5830	5756	5806
20°	5774	5708	5750
25°	5710	5640	5692
30°	5631	5585	5621
35°	5568	5501	5530
40°	5462	5411	5421
45°	5350	5305	5305
50°	5237	5187	5163
55°	5115	5045	5019
60°	4923	4844	4814
65°	4689	4596	4541
70°	4370	4277	4185
75°	3921	3798	3707
80°	3170	3128	3036
85°	1891	2167	2251



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	90.1	1.7
10°-20°	256.6	4.9
20°-30°	385.5	7.4
30°-40°	460.1	8.9
40°-50°	471.5	9.1
50°-60°	420.5	8.1
60°-70°	313.2	6.0
70°-80°	170.0	3.3
80°-90°	40.9	0.8
90°-100°	189.9	3.7
100°-110°	515.9	9.9
110°-120°	530.4	10.2
120°-130°	424.1	8.2
130°-140°	333.2	6.4
140°-150°	255.5	4.9
150°-160°	183.7	3.5
160°-170°	112.4	2.2
170°-180°	37.9	0.7
0°-30°	732.2	14.1
0°-40°	1192.4	23.0
0°-60°	2084.4	40.2
0°-90°	2608.4	50.2
90°-120°	1236.2	23.8
90°-150°	2249.0	43.3
90°-180°	2583.0	49.8
0°-180°	5191.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	955	955	955	955	955	
5°	954	953	942	951	950	91
15°	916	913	904	912	912	258
25°	841	839	831	836	839	387
35°	742	739	733	733	736	463
45°	615	616	610	609	610	475
55°	477	477	470	467	468	425
65°	322	321	316	312	312	319
75°	165	164	160	157	156	174
85°	27	29	31	32	32	38
90°	1	5	9	12	12	3
95°	28	104	331	144	97	30
105°	92	143	567	864	813	97
115°	163	198	454	904	1029	161
125°	224	255	411	692	817	200
135°	270	300	399	564	636	209
145°	312	334	394	479	515	196
155°	352	365	392	430	443	162
165°	382	387	393	410	411	108
175°	396	397	394	399	398	38
180°	396	396	396	396	396	



TEST NUMBER: P519905

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	955.1	955.1	955.1	955.1	955.1
2.5°	958.2	956.2	948.0	955.1	954.1
5°	953.9	952.6	942.4	951.2	950.1
7.5°	947.0	944.4	934.4	943.1	941.9
10°	939.8	937.3	928.3	936.0	934.7
12.5°	930.6	929.1	919.1	926.8	926.5
15°	915.6	913.0	904.0	911.7	911.7
17.5°	895.5	894.1	885.3	892.7	891.7
20°	882.2	879.8	872.1	878.4	878.4
22.5°	865.9	864.4	856.7	862.1	863.1
25°	841.3	838.8	831.1	836.3	838.7
27.5°	814.3	812.2	805.8	809.2	810.9
30°	792.8	792.8	786.4	787.8	791.5
32.5°	773.4	773.4	765.9	767.3	768.9
35°	741.6	739.1	732.6	732.7	736.5
37.5°	704.8	703.6	699.4	698.7	699.7
40°	680.3	679.0	673.9	675.2	675.2
42.5°	655.7	654.4	649.3	647.5	649.5
45°	615.0	616.3	609.9	608.7	609.9
47.5°	574.9	574.9	569.7	566.2	568.3
50°	547.3	547.3	542.1	539.6	539.6
52.5°	518.6	519.7	513.5	510.0	511.0
55°	477.0	477.0	470.5	466.7	468.0
57.5°	430.9	430.9	424.5	420.8	423.0
60°	400.2	400.2	393.8	390.0	391.3
62.5°	369.6	369.6	363.2	359.3	359.5
65°	322.2	321.0	315.8	312.0	312.0
67.5°	276.7	273.4	269.5	264.5	264.5
70°	243.0	241.7	237.8	232.7	232.7
72.5°	212.3	210.0	206.1	202.0	202.0
75°	165.0	163.7	159.8	157.3	156.0
77.5°	118.1	117.1	116.8	113.3	114.3
80°	89.5	89.5	88.3	85.7	85.7
82.5°	63.9	65.0	62.6	62.1	61.1
85°	26.8	29.4	30.7	31.9	31.9
87.5°	5.3	9.1	9.0	10.5	10.5
90°	1.3	5.0	8.9	11.5	11.5
92.5°	11.5	52.0	90.3	38.8	32.8
95°	28.0	103.8	330.7	144.0	96.7
97.5°	46.3	114.7	507.0	394.5	277.0
100°	58.5	122.0	561.0	568.7	459.2
102.5°	70.8	129.1	575.2	703.3	606.7
105°	91.6	142.6	567.3	863.8	812.8
107.5°	113.2	158.3	534.5	946.7	960.9
110°	128.5	169.5	510.1	963.0	1024.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	141.7	180.8	485.6	949.5	1041.2
115°	162.8	197.6	454.1	903.5	1029.1
117.5°	182.6	216.0	434.0	838.2	979.7
120°	195.9	228.2	424.9	794.4	935.0
122.5°	207.1	239.4	418.7	750.5	886.1
125°	223.8	254.9	410.9	692.3	816.6
127.5°	238.8	269.8	406.5	648.1	754.8
130°	248.1	277.9	404.5	620.4	716.1
132.5°	257.2	287.0	402.4	596.7	681.5
135°	269.7	299.5	399.4	563.8	636.0
137.5°	283.2	310.3	397.9	534.9	595.5
140°	291.2	317.4	396.8	516.5	571.1
142.5°	299.4	323.5	395.9	501.9	547.8
145°	311.7	334.0	394.3	479.1	515.2
147.5°	325.4	344.5	393.0	461.1	489.5
150°	334.5	350.7	393.0	450.8	473.2
152.5°	341.7	355.8	392.0	441.6	459.9
155°	352.4	364.7	391.8	430.2	442.7
157.5°	362.8	372.5	391.8	422.5	432.0
160°	368.9	377.6	391.8	417.4	424.9
162.5°	374.9	381.7	392.8	413.3	418.7
165°	381.6	386.6	393.0	409.6	410.9
167.5°	388.5	390.9	394.3	405.3	406.3
170°	390.6	393.0	394.3	403.2	403.2
172.5°	392.5	394.1	394.3	401.1	401.1
175°	395.6	396.8	394.3	399.4	398.1
177.5°	396.6	396.6	393.6	397.6	395.6
180°	395.6	395.6	395.6	395.6	395.6

(END OF REPORT)