

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: P519809

Luminaire Tested: **SQ4-F-025U-050D-940-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519809  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-050D-940-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

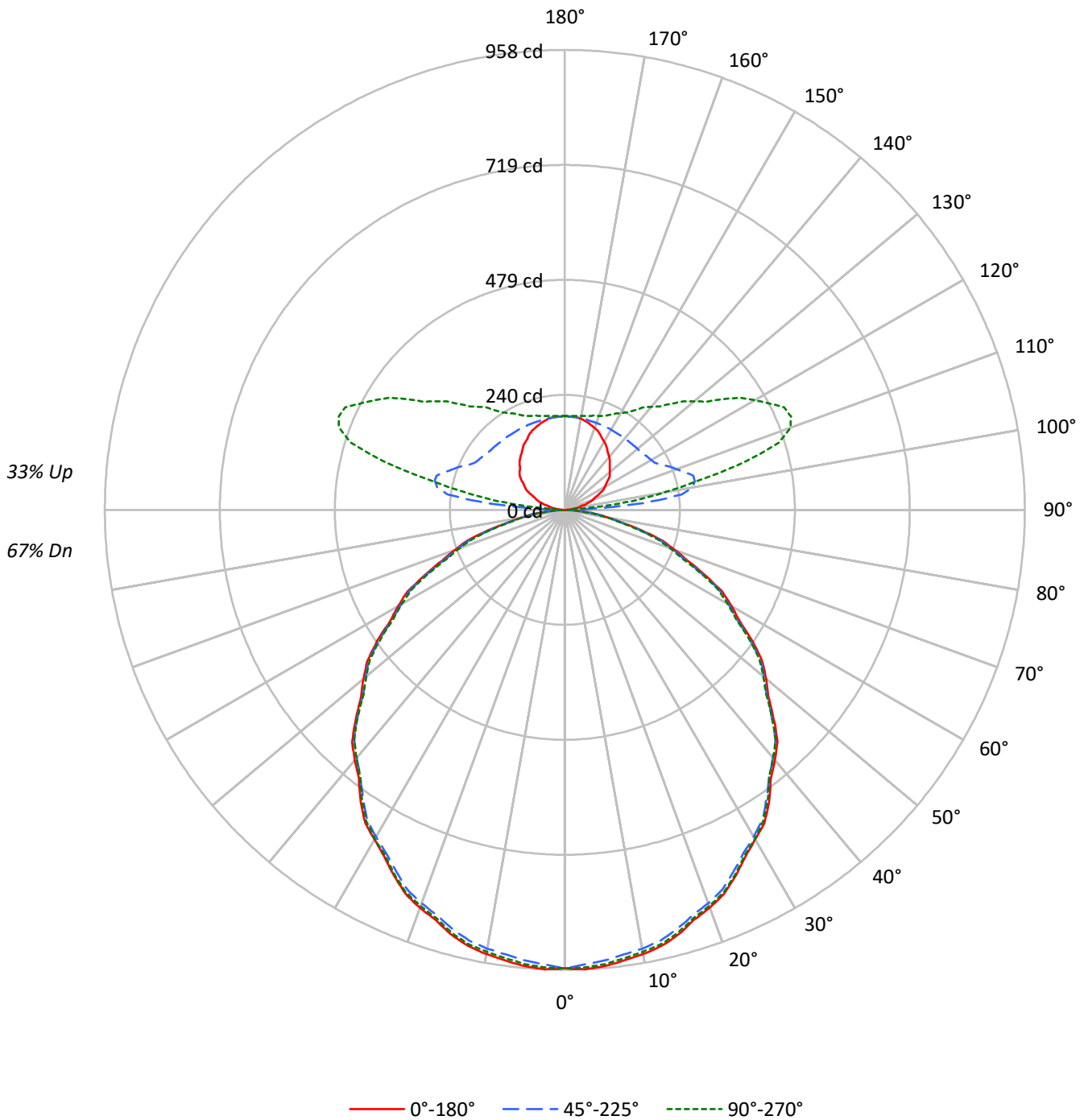
Lumens per Lamp: N/A  
Luminaire Lumens: 3873.1 lumens  
Efficiency: N/A  
Efficacy: 114.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 33.8  
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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	102	97	93	90	96	92	88	85	82	79	76	72	70	68	64	62	61	57
2	92	85	78	73	87	80	74	70	71	67	63	63	60	57	56	53	51	47
3	84	74	67	61	79	70	64	58	63	57	53	56	52	48	49	46	43	40
4	77	66	58	51	72	62	55	49	56	50	45	50	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	45	40	36	40	36	32	30
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	32	28	26
7	60	48	39	34	57	45	38	32	41	35	30	37	31	28	33	29	25	23
8	56	43	35	30	53	41	34	29	37	31	27	34	28	25	30	26	23	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	28	24	20	18
10	49	36	29	24	46	35	28	23	32	26	22	29	24	20	26	22	19	17

**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	2.3
10°-20°	256.6	6.6
20°-30°	385.5	10.0
30°-40°	460.1	11.9
40°-50°	471.5	12.2
50°-60°	420.5	10.9
60°-70°	313.2	8.1
70°-80°	170.0	4.4
80°-90°	40.4	1.0
90°-100°	95.1	2.5
100°-110°	250.1	6.5
110°-120°	259.3	6.7
120°-130°	208.0	5.4
130°-140°	163.2	4.2
140°-150°	125.3	3.2
150°-160°	90.2	2.3
160°-170°	55.2	1.4
170°-180°	18.6	0.5
0°-30°	732.2	18.9
0°-40°	1192.4	30.8
0°-60°	2084.4	53.8
0°-90°	2608.0	67.3
90°-120°	604.5	15.6
90°-150°	1101.0	28.4
90°-180°	1265.0	32.7
0°-180°	3873.1	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	4	10	5	5	2
95°	12	49	164	84	58	14
105°	45	68	276	420	392	48
115°	80	97	222	442	504	79
125°	111	125	201	340	402	99
135°	133	146	195	275	312	103
145°	154	164	193	234	253	96
155°	174	179	193	212	218	80
165°	188	190	193	200	203	53
175°	195	195	194	196	196	19
180°	195	195	195	195	195	

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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	8.9	9.3	9.2	9.2
90°	1.2	3.7	10.0	5.0	5.0
92.5°	5.3	25.3	56.0	24.9	16.1
95°	12.5	49.2	163.9	84.5	57.5
97.5°	21.8	54.1	245.3	195.0	143.7
100°	28.8	58.1	270.2	273.9	212.7
102.5°	34.8	62.2	277.3	341.1	288.8
105°	45.0	68.2	276.5	419.8	391.6
107.5°	55.5	77.0	260.8	460.6	467.4
110°	62.5	82.1	247.8	471.1	500.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	69.6	88.1	235.7	464.5	509.5
115°	80.1	97.2	221.5	441.8	504.2
117.5°	90.3	106.0	211.7	410.4	479.7
120°	96.4	111.1	207.7	389.4	456.7
122.5°	102.4	117.0	204.6	368.4	434.6
125°	111.4	124.8	201.4	340.5	401.7
127.5°	118.6	132.3	198.7	318.0	369.6
130°	122.6	137.3	197.7	303.9	351.6
132.5°	126.7	141.3	196.7	291.7	334.6
135°	132.7	146.1	195.2	274.8	311.5
137.5°	138.9	152.1	194.9	262.2	292.3
140°	143.9	156.1	193.9	252.2	280.3
142.5°	147.9	159.2	193.9	245.1	269.3
145°	153.9	163.6	192.7	234.4	252.7
147.5°	159.9	169.5	192.7	225.6	240.7
150°	163.9	172.4	192.7	220.5	232.8
152.5°	167.9	174.5	192.7	216.4	225.7
155°	173.9	178.8	192.7	211.6	217.7
157.5°	178.5	183.0	192.7	207.3	211.7
160°	181.4	185.1	192.7	205.2	207.7
162.5°	184.4	187.2	192.7	203.2	205.7
165°	187.6	190.1	192.7	200.3	202.7
167.5°	190.7	191.9	193.9	199.0	200.0
170°	192.7	193.9	193.9	198.9	198.9
172.5°	193.7	193.9	193.9	198.0	196.9
175°	195.2	195.2	193.9	196.4	196.4
177.5°	195.2	195.2	194.2	196.1	195.2
180°	195.2	195.2	195.2	195.2	195.2

(END OF REPORT)