

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: P519944

Luminaire Tested: **SQ4-F-050U-100D-930-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519944  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-050U-100D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

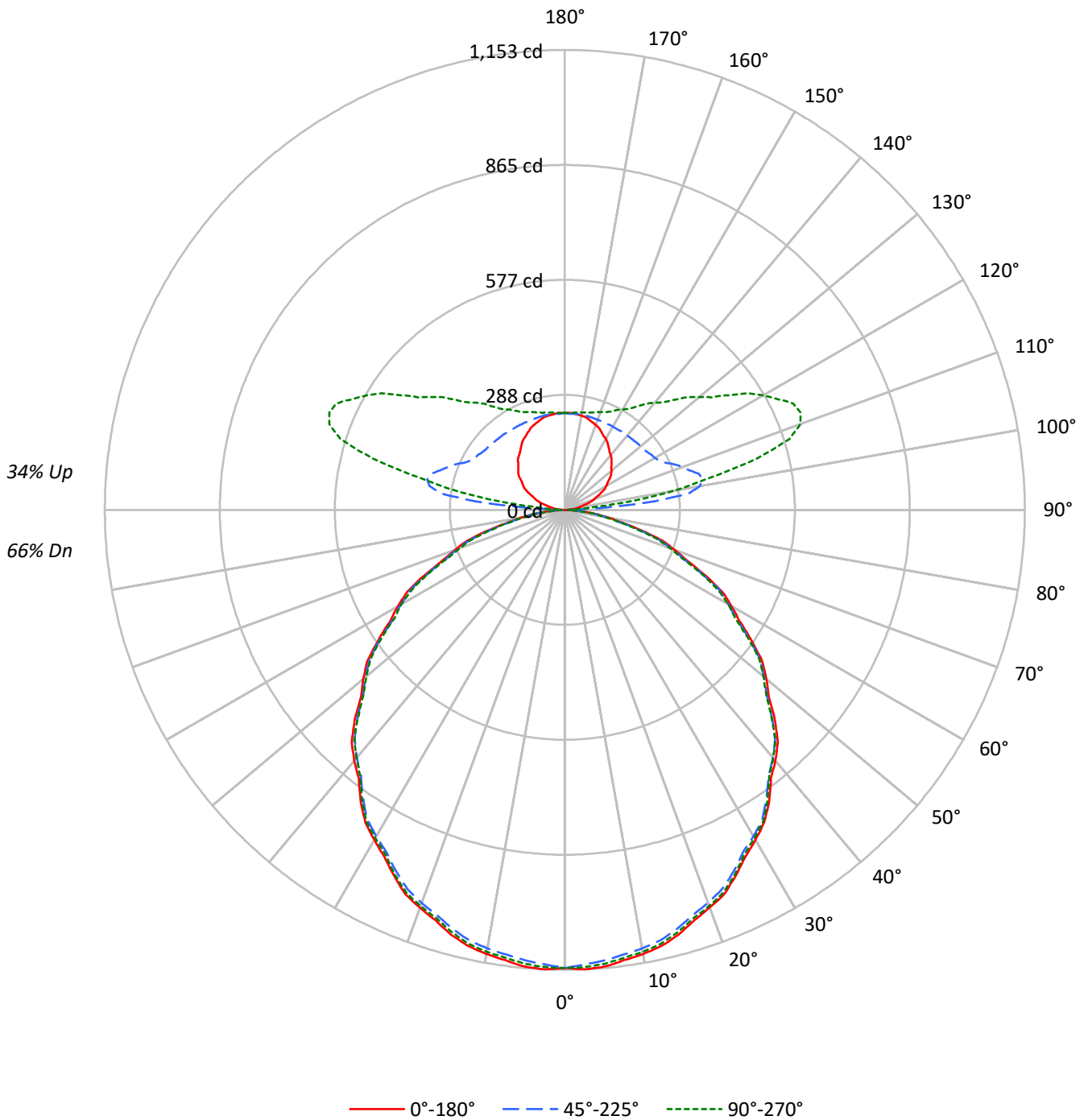
Lumens per Lamp: N/A  
Luminaire Lumens: 4719.2 lumens  
Efficiency: N/A  
Efficacy: 104.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 45.1  
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	92	92	92	81	81	81	71	71	71	66
1	101	97	93	89	95	91	88	85	81	79	76	72	70	68	63	61	60	56
2	92	85	78	73	87	80	74	69	71	67	63	63	59	57	55	53	51	47
3	84	74	67	61	79	70	63	58	63	57	53	55	51	48	49	46	43	39
4	77	66	58	51	72	62	55	49	56	50	45	49	45	41	44	40	37	34
5	71	59	50	44	66	56	48	42	50	44	39	44	39	35	39	35	32	29
6	65	53	44	38	61	50	42	37	45	39	34	40	35	31	36	31	28	26
7	60	48	39	34	57	45	38	32	41	34	30	36	31	27	32	28	25	23
8	56	43	35	30	53	41	34	29	37	31	27	33	28	24	30	26	22	20
9	52	40	32	27	49	38	31	26	34	28	24	31	26	22	27	23	20	18
10	49	36	29	24	46	35	28	23	31	26	21	28	23	20	25	21	18	16

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

	0°	45°	90°
0°	10599	10599	10599
5°	10647	10501	10580
10°	10592	10460	10541
15°	10529	10385	10468
20°	10420	10296	10381
25°	10305	10185	10267
30°	10180	10071	10122
35°	10052	9928	9981
40°	9886	9771	9781
45°	9711	9577	9547
50°	9462	9348	9325
55°	9182	9082	9017
60°	8903	8743	8715
65°	8468	8281	8211
70°	7869	7680	7529
75°	7026	6802	6662
80°	5781	5568	5324
85°	3419	3758	3843



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	108.4	2.3
10°-20°	308.8	6.5
20°-30°	463.7	9.8
30°-40°	553.3	11.7
40°-50°	567.2	12.0
50°-60°	505.1	10.7
60°-70°	376.5	8.0
70°-80°	203.8	4.3
80°-90°	47.3	1.0
90°-100°	116.5	2.5
100°-110°	316.6	6.7
110°-120°	325.5	6.9
120°-130°	260.2	5.5
130°-140°	204.5	4.3
140°-150°	156.8	3.3
150°-160°	112.7	2.4
160°-170°	69.0	1.5
170°-180°	23.2	0.5
0°-30°	880.9	18.7
0°-40°	1434.2	30.4
0°-60°	2506.5	53.1
0°-90°	3134.2	66.4
90°-120°	758.6	16.1
90°-150°	1380.1	29.2
90°-180°	1585.0	33.6
0°-180°	4719.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1149	1149	1149	1149	1149	
5°	1150	1147	1134	1144	1142	109
15°	1102	1098	1087	1096	1096	311
25°	1012	1010	1000	1006	1008	466
35°	892	889	882	883	886	557
45°	744	740	734	730	732	573
55°	571	572	565	559	561	511
65°	388	386	379	375	376	384
75°	197	195	191	187	187	210
85°	32	35	36	36	36	45
90°	1	3	6	7	7	2
95°	17	64	203	88	59	18
105°	56	88	348	530	499	60
115°	100	121	279	554	632	99
125°	137	156	252	425	501	122
135°	165	184	245	346	390	128
145°	191	205	242	294	316	120
155°	216	224	240	264	272	100
165°	234	237	241	251	252	66
175°	243	244	242	245	244	23
180°	243	243	243	243	243	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1148.8	1148.8	1148.8	1148.8	1148.8
2.5°	1153.2	1150.7	1140.5	1148.8	1147.5
5°	1149.6	1147.3	1133.8	1144.0	1142.4
7.5°	1138.9	1136.6	1124.7	1134.1	1132.7
10°	1130.6	1128.3	1116.5	1125.9	1125.1
12.5°	1119.9	1117.6	1105.8	1115.2	1114.4
15°	1102.3	1098.4	1087.2	1095.9	1095.9
17.5°	1078.9	1076.0	1065.6	1073.0	1073.1
20°	1061.3	1059.0	1048.7	1056.5	1057.3
22.5°	1043.6	1041.3	1029.8	1037.0	1038.4
25°	1012.3	1010.0	1000.5	1006.1	1008.5
27.5°	980.2	976.9	967.4	972.4	974.1
30°	955.6	954.1	945.3	947.8	950.1
32.5°	929.8	928.2	920.8	922.0	926.1
35°	892.5	888.7	881.5	883.1	886.2
37.5°	848.5	846.7	839.7	838.8	841.7
40°	820.8	817.7	811.3	809.8	812.1
42.5°	790.5	787.4	779.8	778.3	781.2
45°	744.3	740.4	734.0	730.1	731.7
47.5°	692.6	692.6	685.9	681.4	683.8
50°	659.2	659.2	651.3	647.4	649.7
52.5°	624.4	625.1	616.6	614.5	613.7
55°	570.8	571.6	564.6	559.0	560.6
57.5°	519.1	517.4	509.2	505.6	506.3
60°	482.5	480.3	473.8	468.5	472.3
62.5°	445.3	444.3	437.9	431.7	431.3
65°	387.9	386.4	379.3	375.3	376.1
67.5°	330.8	329.0	322.5	316.9	318.8
70°	291.7	291.7	284.7	281.4	279.1
72.5°	255.7	252.7	247.4	242.9	241.3
75°	197.1	194.8	190.8	186.9	186.9
77.5°	143.5	141.5	138.9	136.2	135.4
80°	108.8	108.0	104.8	104.0	100.2
82.5°	76.6	76.5	74.6	72.5	72.4
85°	32.3	35.4	35.5	36.3	36.3
87.5°	5.8	10.0	9.9	9.0	9.0
90°	0.8	3.0	5.5	7.1	7.1
92.5°	7.1	31.9	55.4	23.8	20.1
95°	17.2	63.7	202.9	88.3	59.4
97.5°	28.5	70.4	311.2	242.1	170.1
100°	35.9	74.9	344.2	348.9	281.8
102.5°	43.4	79.3	353.0	431.6	372.3
105°	56.2	87.5	348.2	530.1	498.8
107.5°	69.5	97.1	328.0	580.9	589.7
110°	78.8	104.0	313.0	590.9	628.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	86.9	110.9	298.0	582.7	639.0
115°	99.9	121.3	278.7	554.4	631.5
117.5°	112.1	132.6	266.3	514.4	601.2
120°	120.2	140.0	260.7	487.5	573.8
122.5°	127.1	146.9	257.0	460.6	543.7
125°	137.4	156.4	252.1	424.8	501.1
127.5°	146.6	165.5	249.4	397.7	463.2
130°	152.2	170.5	248.3	380.7	439.5
132.5°	157.8	176.1	247.0	366.2	418.2
135°	165.4	183.8	245.1	346.0	390.3
137.5°	173.8	190.4	244.1	328.2	365.4
140°	178.8	194.8	243.6	316.9	350.5
142.5°	183.8	198.5	243.0	308.0	336.1
145°	191.3	205.0	242.0	294.0	316.2
147.5°	199.7	211.5	241.2	283.0	300.4
150°	205.3	215.2	241.2	276.6	290.4
152.5°	209.7	218.3	240.6	270.9	282.2
155°	216.2	223.8	240.4	264.0	271.6
157.5°	222.7	228.5	240.4	259.3	265.0
160°	226.4	231.7	240.4	256.1	260.7
162.5°	230.1	234.2	241.0	253.6	257.0
165°	234.1	237.3	241.2	251.4	252.1
167.5°	238.4	239.9	242.0	248.8	249.3
170°	239.6	241.2	242.0	247.5	247.5
172.5°	240.9	241.8	242.0	246.2	246.2
175°	242.8	243.6	242.0	245.1	244.3
177.5°	243.4	243.4	241.5	243.9	242.8
180°	242.8	242.8	242.8	242.8	242.8

(END OF REPORT)