

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: P519068

Luminaire Tested: **SQ4-WB-050U-050D-830-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519068  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-050U-050D-830-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

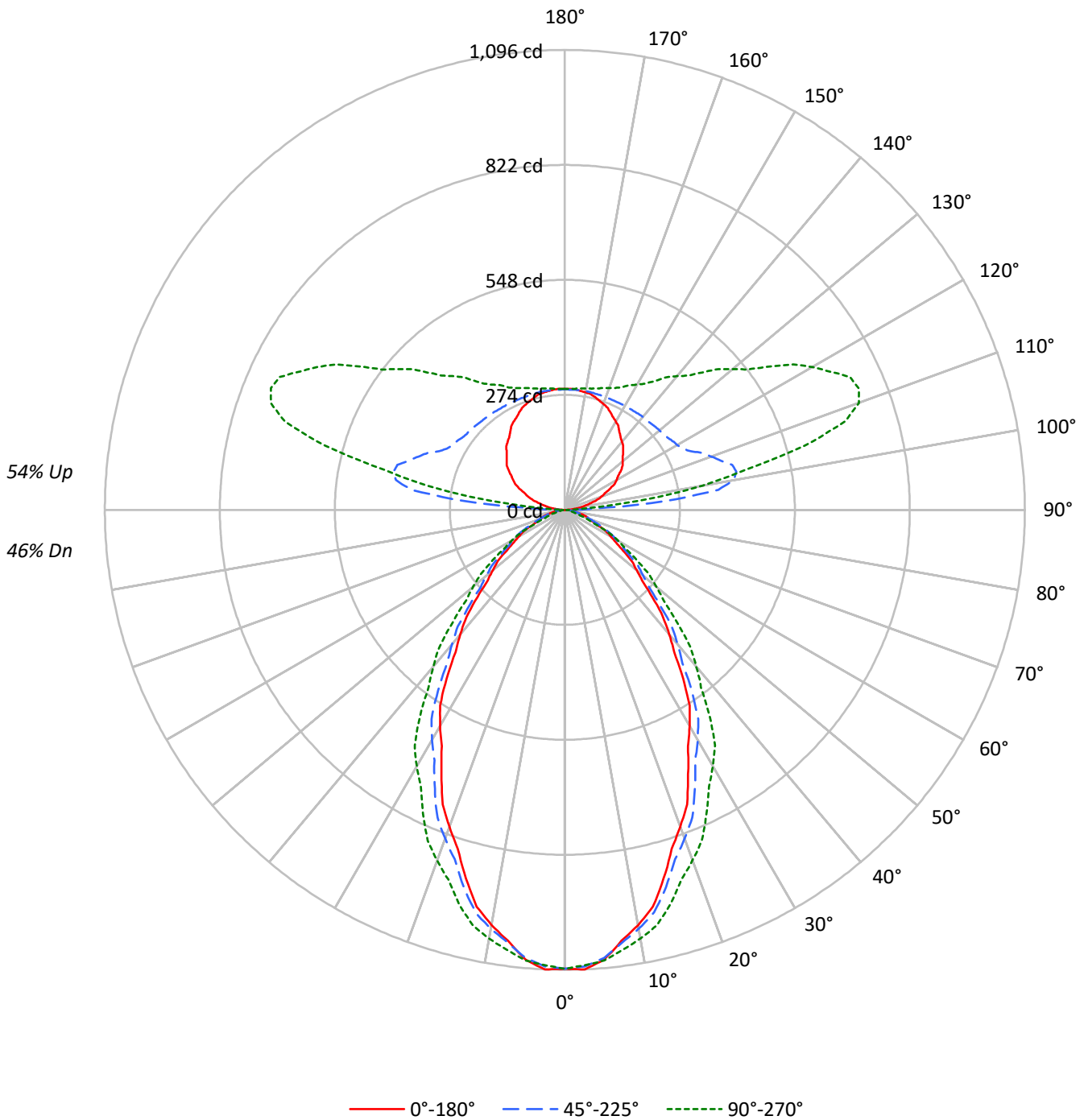
Lumens per Lamp: N/A  
Luminaire Lumens: 3474.8 lumens  
Efficiency: N/A  
Efficacy: 121.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 28.5  
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



TEST NUMBER: P519068  
CATALOG NUMBER: SQ4-WB-050U-050D-830-1D-UNV-STD-W-4

### Luminous Intensity Polar Plot





TEST NUMBER: P519068

CATALOG NUMBER: SQ4-WB-050U-050D-830-1D-UNV-STD-W-4

**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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	46
1	98	94	91	87	90	87	84	81	73	70	69	60	58	57	48	47	46	41
2	90	83	78	73	83	77	72	68	65	61	59	54	51	49	43	42	41	36
3	83	74	68	62	76	69	63	58	58	54	51	49	46	43	40	38	36	32
4	76	66	59	54	70	62	55	50	52	48	44	44	41	38	36	34	32	28
5	71	60	52	47	65	56	49	44	48	43	39	40	36	34	33	31	29	25
6	65	54	47	41	60	50	44	39	43	38	34	37	33	30	30	28	26	23
7	61	49	42	37	56	46	39	35	40	35	31	34	30	27	28	25	23	21
8	57	45	38	33	52	42	36	31	36	31	28	31	27	25	26	23	21	19
9	53	41	34	30	49	39	32	28	34	29	25	29	25	22	24	22	20	17
10	50	38	31	27	46	36	30	26	31	26	23	27	23	21	23	20	18	16

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

	0°	45°	90°
0°	10090	10090	10090
5°	9963	9928	9986
10°	9414	9499	9720
15°	8690	8892	9291
20°	7892	8188	8730
25°	7078	7464	8134
30°	6329	6743	7515
35°	5535	5935	6783
40°	4659	5028	5871
45°	3844	4177	4902
50°	3209	3499	4085
55°	2725	3003	3373
60°	2329	2604	2692
65°	1853	2190	1740
70°	1643	1708	1060
75°	1522	1387	649
80°	1403	1275	563
85°	1270	1164	455



TEST NUMBER: P519068

CATALOG NUMBER: SQ4-WB-050U-050D-830-1D-UNV-STD-W-4

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	100.3	2.9
10°-20°	260.9	7.5
20°-30°	338.0	9.7
30°-40°	330.9	9.5
40°-50°	253.3	7.3
50°-60°	168.8	4.9
60°-70°	92.1	2.7
70°-80°	38.4	1.1
80°-90°	12.0	0.3
90°-100°	138.2	4.0
100°-110°	375.5	10.8
110°-120°	386.1	11.1
120°-130°	308.7	8.9
130°-140°	242.5	7.0
140°-150°	186.0	5.4
150°-160°	133.7	3.8
160°-170°	81.8	2.4
170°-180°	27.6	0.8
0°-30°	699.2	20.1
0°-40°	1030.1	29.6
0°-60°	1452.2	41.8
0°-90°	1594.7	45.9
90°-120°	899.8	25.9
90°-150°	1637.0	47.1
90°-180°	1880.0	54.1
0°-180°	3474.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1094	1094	1094	1094	1094	
5°	1076	1065	1072	1074	1078	100
15°	910	906	931	956	973	254
25°	695	697	733	765	799	320
35°	491	494	527	562	602	305
45°	295	300	320	344	376	230
55°	169	176	187	194	210	154
65°	85	92	100	88	80	88
75°	43	43	39	27	18	46
85°	12	12	11	7	4	13
90°	1	4	6	8	8	2
95°	20	76	241	105	70	22
105°	67	104	413	629	592	71
115°	118	144	330	658	749	117
125°	163	186	299	504	594	145
135°	196	218	291	410	463	152
145°	227	243	287	349	375	142
155°	256	266	285	313	322	118
165°	278	281	286	298	299	78
175°	288	289	287	291	290	27
180°	288	288	288	288	288	

TEST NUMBER: P519068

CATALOG NUMBER: SQ4-WB-050U-050D-830-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1093.6	1093.6	1093.6	1093.6	1093.6
2.5°	1096.3	1086.5	1089.0	1088.9	1085.9
5°	1075.8	1065.1	1072.0	1074.5	1078.2
7.5°	1035.9	1027.8	1040.4	1049.8	1057.4
10°	1004.8	997.8	1013.9	1027.6	1037.5
12.5°	968.7	962.8	982.8	1001.2	1014.0
15°	909.8	906.5	930.9	956.3	972.7
17.5°	846.8	845.2	873.2	902.7	923.7
20°	803.8	803.3	834.0	864.8	889.2
22.5°	760.4	761.4	793.7	825.7	853.5
25°	695.3	697.2	733.2	765.2	799.0
27.5°	635.1	636.0	673.2	707.0	743.0
30°	594.1	596.4	632.9	667.9	705.4
32.5°	553.0	555.7	591.5	627.6	665.9
35°	491.4	493.7	526.9	562.3	602.2
37.5°	427.8	431.0	460.5	494.0	533.2
40°	386.8	391.5	417.5	449.1	487.5
42.5°	347.2	353.0	377.2	407.1	441.9
45°	294.6	300.3	320.1	344.3	375.7
47.5°	249.3	255.8	271.0	291.9	318.7
50°	223.6	229.7	243.8	259.2	284.6
52.5°	201.0	207.1	219.6	231.5	253.1
55°	169.4	176.4	186.7	193.7	209.7
57.5°	143.5	150.2	158.4	161.5	171.2
60°	126.2	133.7	141.1	140.7	145.9
62.5°	110.5	116.8	124.2	119.1	119.4
65°	84.9	92.0	100.3	87.6	79.7
67.5°	68.6	70.1	78.7	61.1	51.6
70°	60.9	60.9	63.3	47.3	39.3
72.5°	53.6	53.6	51.4	38.5	30.1
75°	42.7	42.7	38.9	26.7	18.2
77.5°	32.9	32.5	29.8	19.9	13.2
80°	26.4	26.4	24.0	15.7	10.6
82.5°	20.6	20.6	18.6	12.3	7.9
85°	12.0	12.0	11.0	7.1	4.3
87.5°	4.4	5.0	5.1	4.0	3.6
90°	0.9	3.6	6.5	8.3	8.3
92.5°	8.3	37.8	65.7	28.2	23.9
95°	20.4	75.6	240.7	104.8	70.4
97.5°	33.7	83.5	369.1	287.1	201.7
100°	42.6	88.8	408.3	413.9	334.3
102.5°	51.5	94.0	418.7	511.9	441.7
105°	66.7	103.8	413.0	628.8	591.7
107.5°	82.4	115.2	389.1	689.1	699.4
110°	93.5	123.4	371.3	701.0	745.4

TEST NUMBER: P519068

CATALOG NUMBER: SQ4-WB-050U-050D-830-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	103.1	131.6	353.5	691.1	757.9
115°	118.5	143.9	330.5	657.6	749.1
117.5°	133.0	157.2	315.9	610.1	713.1
120°	142.6	166.1	309.3	578.2	680.5
122.5°	150.7	174.3	304.8	546.3	645.0
125°	163.0	185.6	299.1	503.9	594.4
127.5°	173.9	196.3	295.9	471.8	549.4
130°	180.6	202.3	294.4	451.6	521.3
132.5°	187.2	208.9	293.0	434.4	496.1
135°	196.3	218.0	290.7	410.4	463.0
137.5°	206.1	225.8	289.6	389.3	433.5
140°	212.0	231.0	288.9	375.9	415.7
142.5°	218.0	235.5	288.1	365.4	398.7
145°	226.8	243.1	287.0	348.7	375.0
147.5°	236.8	250.8	286.1	335.6	356.3
150°	243.5	255.3	286.1	328.1	344.4
152.5°	248.7	259.0	285.4	321.4	334.8
155°	256.5	265.5	285.2	313.2	322.2
157.5°	264.1	271.1	285.2	307.6	314.4
160°	268.5	274.9	285.2	303.8	309.3
162.5°	273.0	277.8	285.9	300.8	304.8
165°	277.8	281.4	286.1	298.2	299.1
167.5°	282.8	284.6	287.0	295.0	295.7
170°	284.3	286.1	287.0	293.5	293.5
172.5°	285.7	286.8	287.0	292.0	292.0
175°	288.0	288.9	287.0	290.7	289.8
177.5°	288.7	288.7	286.5	289.4	288.0
180°	288.0	288.0	288.0	288.0	288.0

(END OF REPORT)