

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: P519128

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519128  
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-100D-930-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

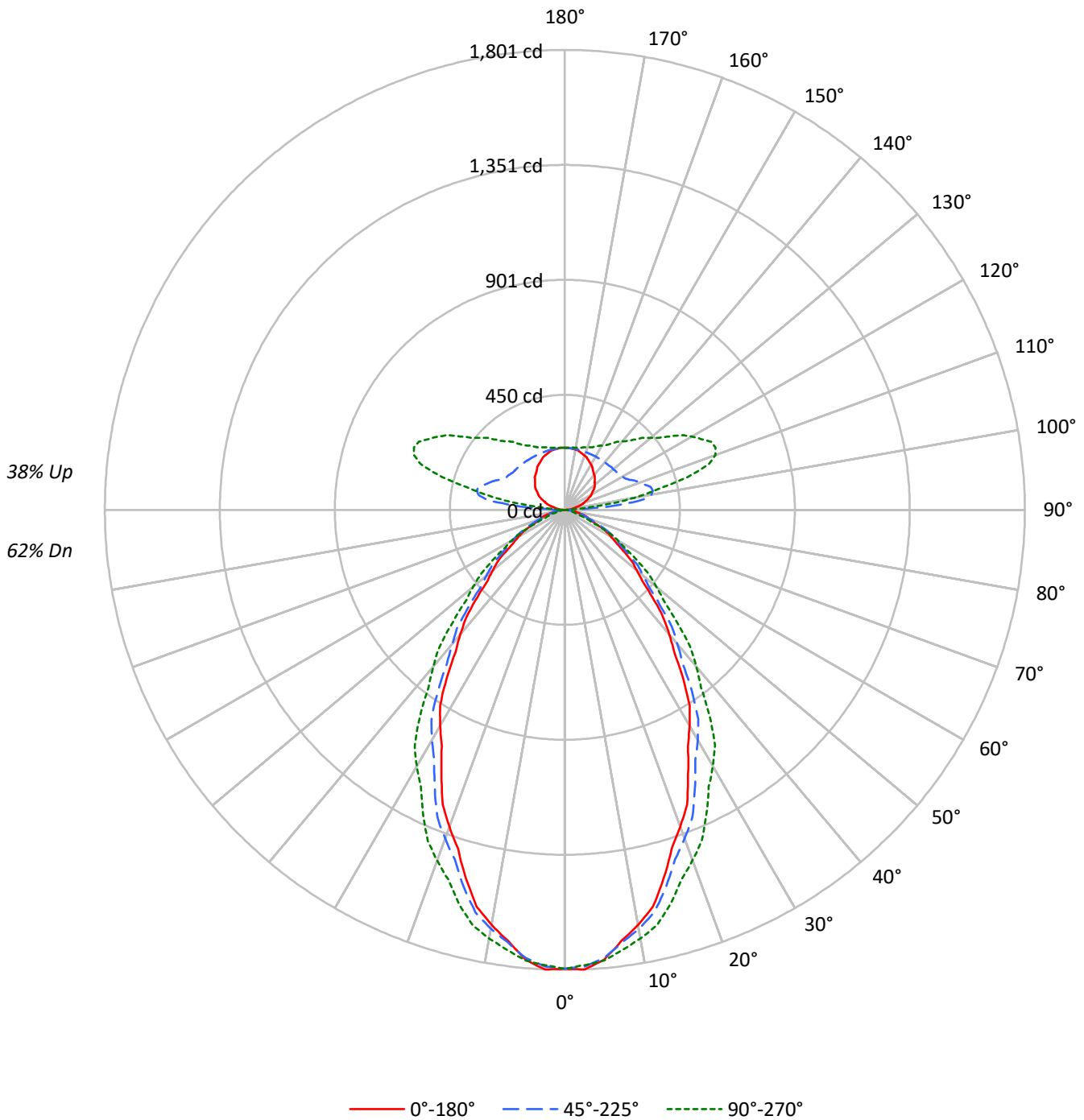
Lumens per Lamp: N/A  
Luminaire Lumens: 4204.3 lumens  
Efficiency: N/A  
Efficacy: 93.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	102	98	95	92	95	92	89	87	81	79	77	71	70	68	62	61	60	55
2	94	87	82	77	88	82	78	73	73	69	66	64	62	59	56	54	53	49
3	87	78	72	66	81	74	68	63	66	61	57	58	55	52	51	49	47	43
4	80	70	63	58	75	67	60	55	60	54	50	53	49	46	47	44	41	38
5	74	64	56	51	70	60	54	49	54	49	45	48	44	41	43	40	37	34
6	69	58	50	45	65	55	48	43	50	44	40	44	40	37	40	36	34	31
7	64	53	45	40	61	50	44	39	45	40	36	41	37	33	37	33	31	28
8	60	49	41	36	57	46	40	35	42	36	33	38	33	30	34	31	28	26
9	56	45	38	33	53	43	36	32	39	33	30	35	31	28	32	28	26	24
10	53	41	35	30	50	40	33	29	36	31	27	33	29	25	30	26	24	22

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

	0°	45°	90°
0°	16579	16579	16579
5°	16371	16313	16408
10°	15467	15608	15970
15°	14279	14610	15265
20°	12966	13454	14345
25°	11630	12264	13364
30°	10399	11080	12347
35°	9094	9750	11145
40°	7654	8261	9648
45°	6316	6862	8054
50°	5273	5749	6710
55°	4477	4933	5541
60°	3827	4277	4423
65°	3048	3598	2858
70°	2700	2808	1745
75°	2502	2278	1069
80°	2306	2093	919
85°	2085	1916	752



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	164.8	3.9
10°-20°	428.7	10.2
20°-30°	555.3	13.2
30°-40°	543.8	12.9
40°-50°	416.2	9.9
50°-60°	277.3	6.6
60°-70°	151.3	3.6
70°-80°	63.1	1.5
80°-90°	18.8	0.4
90°-100°	116.5	2.8
100°-110°	316.6	7.5
110°-120°	325.5	7.7
120°-130°	260.2	6.2
130°-140°	204.5	4.9
140°-150°	156.8	3.7
150°-160°	112.8	2.7
160°-170°	69.0	1.6
170°-180°	23.2	0.6
0°-30°	1148.8	27.3
0°-40°	1692.5	40.3
0°-60°	2386.1	56.8
0°-90°	2619.3	62.3
90°-120°	758.6	18.0
90°-150°	1380.1	32.8
90°-180°	1585.0	37.7
0°-180°	4204.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1797	1797	1797	1797	1797	
5°	1768	1750	1761	1766	1772	164
15°	1495	1490	1530	1571	1598	417
25°	1142	1146	1205	1257	1313	525
35°	807	811	866	924	990	502
45°	484	493	526	566	617	378
55°	278	290	307	318	344	252
65°	140	151	165	144	131	145
75°	70	70	64	44	30	75
85°	20	20	18	12	7	21
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°	166	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°	1796.9	1796.9	1796.9	1796.9	1796.9
2.5°	1801.3	1785.2	1789.3	1789.2	1784.2
5°	1767.7	1749.9	1761.4	1765.5	1771.6
7.5°	1702.1	1688.7	1709.5	1724.9	1737.4
10°	1651.0	1639.4	1666.0	1688.4	1704.6
12.5°	1591.7	1582.0	1614.9	1645.0	1666.1
15°	1494.9	1489.5	1529.6	1571.2	1598.2
17.5°	1391.3	1388.7	1434.6	1483.2	1517.7
20°	1320.6	1319.9	1370.3	1420.9	1461.0
22.5°	1249.4	1251.1	1304.1	1356.7	1402.3
25°	1142.4	1145.5	1204.7	1257.2	1312.8
27.5°	1043.6	1045.0	1106.2	1161.6	1220.8
30°	976.1	979.9	1040.0	1097.3	1159.0
32.5°	908.6	913.1	971.8	1031.1	1094.0
35°	807.4	811.2	865.7	924.0	989.5
37.5°	703.0	708.2	756.6	811.7	876.1
40°	635.5	643.2	685.9	737.8	801.1
42.5°	570.5	580.1	619.7	668.9	726.0
45°	484.1	493.4	525.9	565.7	617.3
47.5°	409.7	420.3	445.3	479.6	523.7
50°	367.4	377.4	400.5	425.9	467.5
52.5°	330.2	340.2	360.8	380.4	415.8
55°	278.3	289.9	306.7	318.3	344.5
57.5°	235.7	246.8	260.2	265.4	281.3
60°	207.4	219.7	231.8	231.2	239.7
62.5°	181.5	192.0	204.0	195.7	196.2
65°	139.6	151.1	164.8	144.0	130.9
67.5°	112.7	115.2	129.3	100.4	84.8
70°	100.1	100.1	104.1	77.8	64.7
72.5°	88.1	88.1	84.5	63.2	49.5
75°	70.2	70.2	63.9	43.8	30.0
77.5°	54.1	53.5	48.9	32.7	21.8
80°	43.4	43.4	39.4	25.8	17.3
82.5°	33.9	33.9	30.6	20.2	12.9
85°	19.7	19.7	18.1	11.7	7.1
87.5°	7.1	7.6	7.4	5.2	4.6
90°	0.8	3.1	5.5	7.0	7.0
92.5°	7.0	31.9	55.4	23.8	20.1
95°	17.2	63.7	203.0	88.3	59.3
97.5°	28.4	70.4	311.1	242.1	170.0
100°	35.9	74.8	344.2	349.0	281.8
102.5°	43.4	79.3	353.0	431.6	372.3
105°	56.2	87.5	348.1	530.1	498.8
107.5°	69.5	97.1	328.0	581.0	589.7
110°	78.8	104.0	313.0	591.0	628.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	87.0	110.9	298.0	582.7	639.0
115°	99.9	121.3	278.7	554.4	631.5
117.5°	112.1	132.5	266.3	514.4	601.2
120°	120.2	140.1	260.7	487.5	573.7
122.5°	127.1	146.9	257.0	460.6	543.8
125°	137.4	156.5	252.1	424.8	501.1
127.5°	146.6	165.5	249.5	397.7	463.2
130°	152.2	170.5	248.2	380.7	439.5
132.5°	157.8	176.2	247.0	366.2	418.2
135°	165.5	183.8	245.1	346.0	390.3
137.5°	173.8	190.4	244.2	328.2	365.5
140°	178.8	194.8	243.5	316.9	350.5
142.5°	183.8	198.6	242.9	308.0	336.1
145°	191.2	205.0	242.0	294.0	316.1
147.5°	199.7	211.4	241.2	283.0	300.4
150°	205.3	215.2	241.2	276.6	290.4
152.5°	209.7	218.4	240.6	271.0	282.3
155°	216.2	223.9	240.4	264.0	271.6
157.5°	222.6	228.6	240.4	259.3	265.1
160°	226.4	231.7	240.4	256.1	260.7
162.5°	230.1	234.2	241.0	253.6	257.0
165°	234.2	237.2	241.2	251.4	252.1
167.5°	238.4	239.9	242.0	248.7	249.3
170°	239.6	241.2	242.0	247.4	247.4
172.5°	240.9	241.8	242.0	246.2	246.2
175°	242.8	243.5	242.0	245.1	244.3
177.5°	243.4	243.4	241.5	244.0	242.8
180°	242.8	242.8	242.8	242.8	242.8

(END OF REPORT)