

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: P519118

Luminaire Tested: **SQ4-WB-050U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519118  
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-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

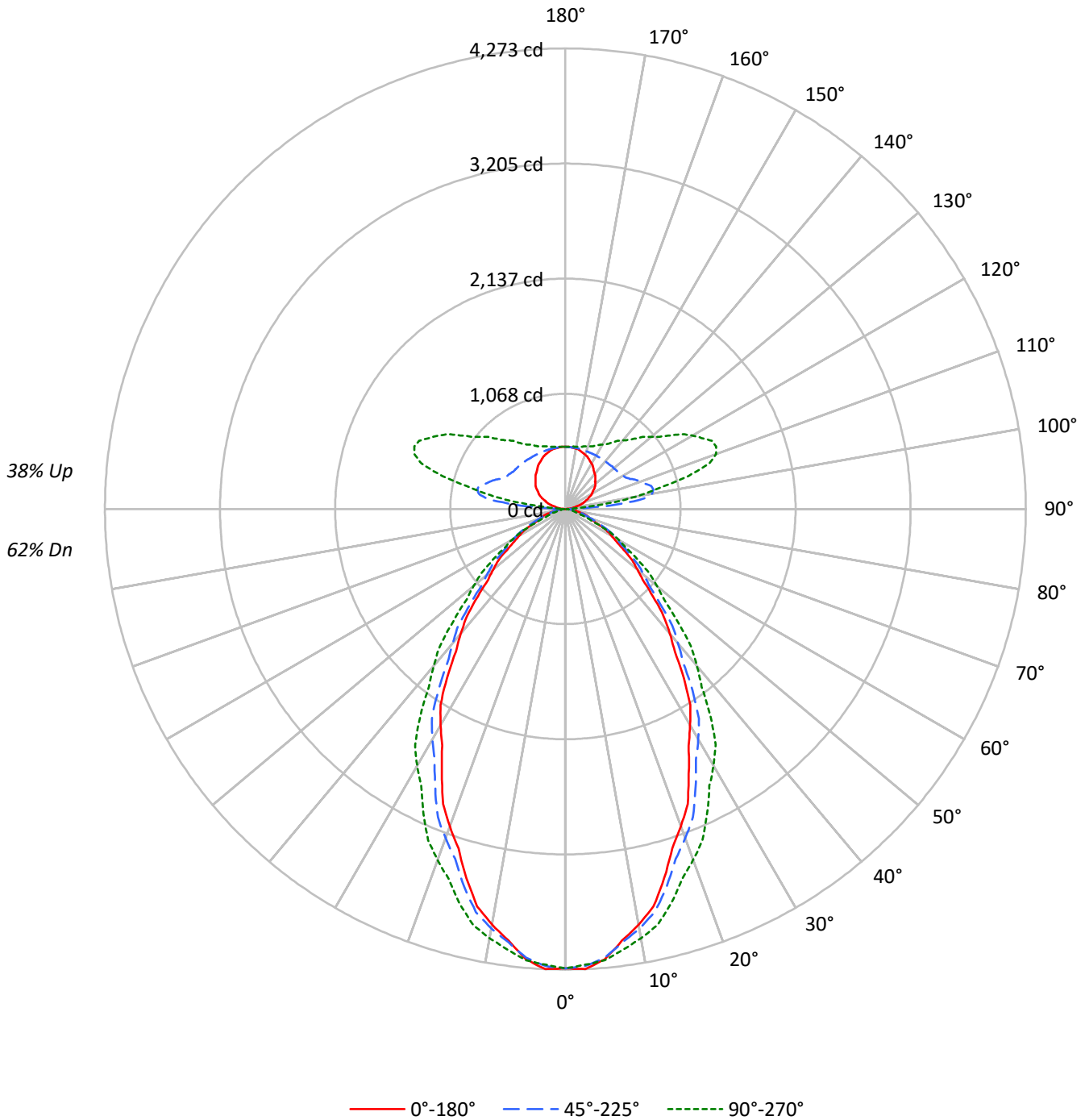
Lumens per Lamp: N/A  
Luminaire Lumens: 9974.1 lumens  
Efficiency: N/A  
Efficacy: 104.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 95.4  
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°	19664	19664	19664
5°	19419	19349	19462
10°	18347	18513	18943
15°	16937	17330	18107
20°	15380	15959	17015
25°	13795	14547	15852
30°	12335	13142	14646
35°	10786	11566	13220
40°	9079	9800	11444
45°	7492	8139	9554
50°	6255	6819	7960
55°	5311	5852	6574
60°	4538	5073	5246
65°	3614	4267	3389
70°	3203	3330	2069
75°	2968	2700	1267
80°	2734	2484	1092
85°	2477	2276	889



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	391.0	3.9
10°-20°	1017.0	10.2
20°-30°	1317.3	13.2
30°-40°	1290.0	12.9
40°-50°	987.4	9.9
50°-60°	657.9	6.6
60°-70°	359.0	3.6
70°-80°	149.6	1.5
80°-90°	44.6	0.4
90°-100°	276.5	2.8
100°-110°	751.0	7.5
110°-120°	772.2	7.7
120°-130°	617.4	6.2
130°-140°	485.1	4.9
140°-150°	372.0	3.7
150°-160°	267.5	2.7
160°-170°	163.6	1.6
170°-180°	55.1	0.6
0°-30°	2725.3	27.3
0°-40°	4015.2	40.3
0°-60°	5660.5	56.8
0°-90°	6213.8	62.3
90°-120°	1799.7	18.0
90°-150°	3274.1	32.8
90°-180°	3760.0	37.7
0°-180°	9974.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4263	4263	4263	4263	4263	
5°	4194	4151	4178	4188	4203	390
15°	3546	3534	3629	3727	3791	990
25°	2710	2718	2858	2983	3114	1246
35°	1915	1924	2054	2192	2347	1191
45°	1148	1170	1248	1342	1464	896
55°	660	688	728	755	817	599
65°	331	358	391	342	310	344
75°	166	166	152	104	71	178
85°	47	47	43	28	17	51
90°	2	7	13	17	17	5
95°	41	151	482	210	141	43
105°	133	208	826	1258	1183	142
115°	237	288	661	1315	1498	234
125°	326	371	598	1008	1189	291
135°	393	436	582	821	926	304
145°	454	486	574	698	750	285
155°	513	531	570	626	644	237
165°	556	563	572	596	598	157
175°	576	578	574	581	580	55
180°	576	576	576	576	576	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4262.7	4262.7	4262.7	4262.7	4262.7
2.5°	4273.2	4235.1	4244.8	4244.5	4232.8
5°	4193.5	4151.4	4178.5	4188.2	4202.9
7.5°	4037.9	4006.1	4055.5	4092.1	4121.7
10°	3916.7	3889.2	3952.2	4005.5	4043.9
12.5°	3776.0	3753.0	3831.0	3902.5	3952.6
15°	3546.3	3533.5	3628.6	3727.4	3791.4
17.5°	3300.6	3294.3	3403.4	3518.6	3600.6
20°	3133.0	3131.1	3250.8	3370.8	3465.9
22.5°	2963.9	2967.9	3093.7	3218.5	3326.7
25°	2710.3	2717.6	2858.0	2982.6	3114.3
27.5°	2475.7	2479.0	2624.2	2755.7	2896.2
30°	2315.6	2324.7	2467.1	2603.2	2749.5
32.5°	2155.5	2166.1	2305.5	2446.2	2595.4
35°	1915.3	1924.5	2053.7	2191.9	2347.4
37.5°	1667.7	1680.1	1794.9	1925.5	2078.4
40°	1507.6	1525.9	1627.3	1750.4	1900.4
42.5°	1353.4	1376.1	1470.2	1587.0	1722.3
45°	1148.4	1170.4	1247.6	1342.0	1464.5
47.5°	971.9	997.1	1056.4	1137.7	1242.3
50°	871.6	895.4	950.2	1010.4	1109.2
52.5°	783.3	807.1	855.9	902.3	986.5
55°	660.3	687.7	727.6	755.2	817.4
57.5°	559.3	585.6	617.2	629.7	667.4
60°	491.9	521.2	549.9	548.5	568.6
62.5°	430.6	455.4	484.1	464.3	465.4
65°	331.1	358.5	390.9	341.6	310.5
67.5°	267.5	273.3	306.8	238.2	201.3
70°	237.5	237.5	246.9	184.5	153.4
72.5°	209.1	209.1	200.5	150.0	117.5
75°	166.5	166.5	151.5	104.0	71.1
77.5°	128.3	126.8	116.0	77.6	51.6
80°	102.9	102.9	93.5	61.3	41.1
82.5°	80.4	80.4	72.6	47.9	30.7
85°	46.8	46.8	43.0	27.8	16.8
87.5°	16.8	17.9	17.6	12.3	10.8
90°	1.9	7.3	13.0	16.7	16.7
92.5°	16.7	75.7	131.5	56.5	47.8
95°	40.7	151.2	481.5	209.5	140.7
97.5°	67.4	167.0	738.1	574.3	403.3
100°	85.2	177.5	816.7	827.8	668.5
102.5°	103.0	188.1	837.4	1023.8	883.3
105°	133.3	207.6	825.9	1257.5	1183.3
107.5°	164.8	230.4	778.1	1378.2	1398.9
110°	187.0	246.8	742.6	1402.0	1490.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	206.3	263.1	707.0	1382.3	1515.9
115°	237.0	287.7	661.1	1315.2	1498.1
117.5°	265.9	314.4	631.8	1220.2	1426.3
120°	285.2	332.3	618.5	1156.5	1361.1
122.5°	301.5	348.6	609.6	1092.6	1290.0
125°	325.9	371.2	598.1	1007.8	1188.9
127.5°	347.8	392.7	591.8	943.5	1098.9
130°	361.1	404.6	588.9	903.2	1042.6
132.5°	374.4	417.9	585.9	868.7	992.2
135°	392.6	436.0	581.5	820.9	925.9
137.5°	412.2	451.7	579.2	778.7	867.0
140°	424.1	462.1	577.8	751.8	831.5
142.5°	435.9	471.0	576.3	730.8	797.4
145°	453.7	486.3	574.1	697.5	750.0
147.5°	473.7	501.6	572.2	671.3	712.6
150°	487.0	510.6	572.2	656.3	688.9
152.5°	497.4	518.0	570.7	642.8	669.6
155°	513.0	531.1	570.4	626.3	644.4
157.5°	528.1	542.3	570.4	615.1	628.9
160°	537.0	549.7	570.4	607.6	618.5
162.5°	545.9	555.7	571.8	601.7	609.6
165°	555.5	562.8	572.2	596.3	598.1
167.5°	565.5	569.2	574.1	590.0	591.5
170°	568.5	572.1	574.1	587.0	587.0
172.5°	571.5	573.6	574.1	584.1	584.1
175°	575.9	577.7	574.1	581.4	579.6
177.5°	577.4	577.4	573.0	578.8	575.9
180°	575.9	575.9	575.9	575.9	575.9

(END OF REPORT)