

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521921

Luminaire Tested: **SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521921  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-050D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

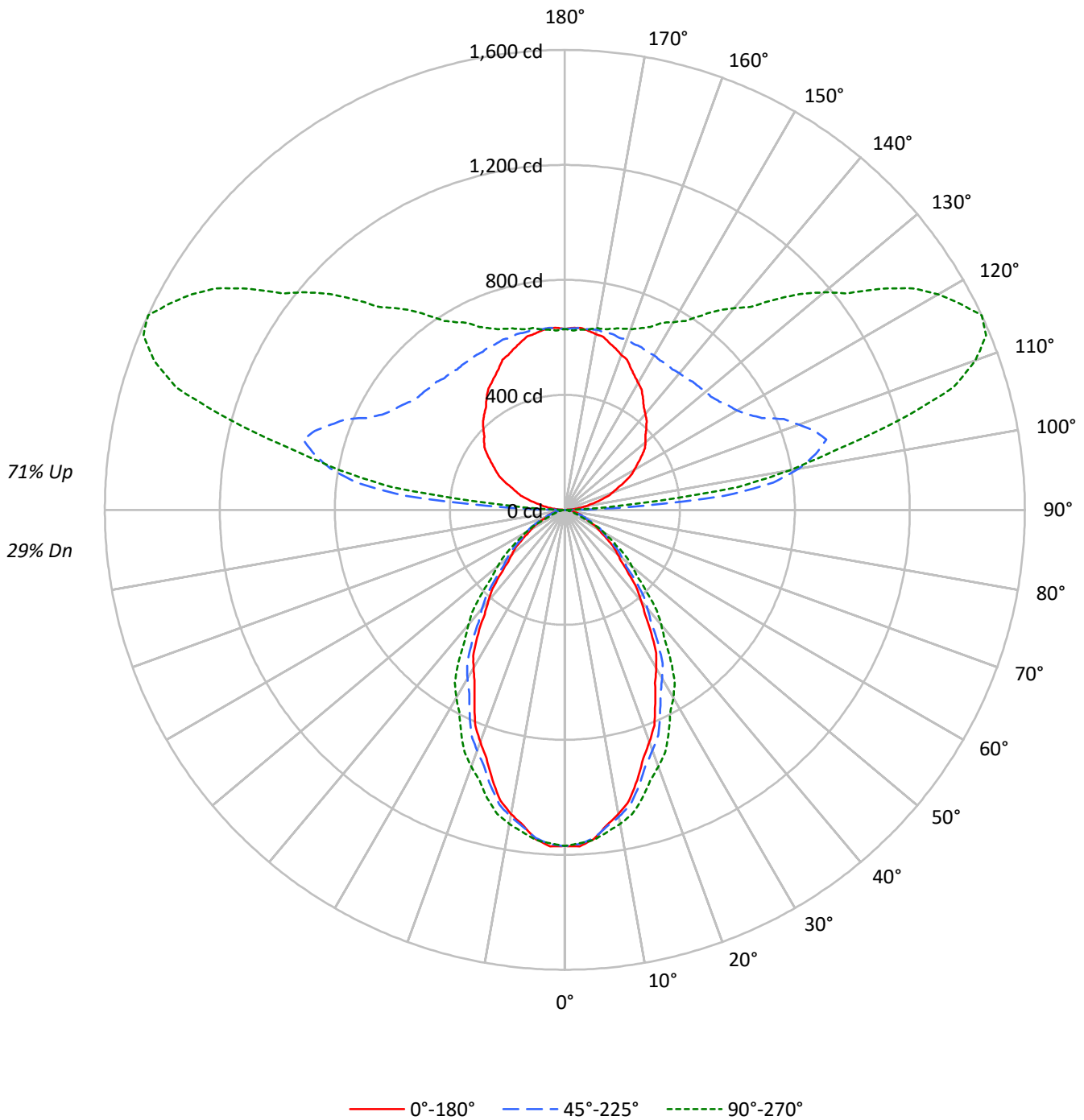
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 5775.8 lumens  
Efficiency: N/A  
Efficacy: 108.6 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-Indirect

Input Watts (W): 53.2  
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	50	30	10	0	
RCR																						
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29				
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26				
2	86	79	74	69	77	71	67	63	57	54	51	43	41	40	31	30	29	23				
3	79	70	64	58	71	63	58	53	51	47	44	39	36	34	28	26	25	20				
4	72	63	55	50	65	57	51	46	45	41	38	35	32	30	25	24	22	18				
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16				
6	62	50	43	38	55	46	39	35	37	32	29	29	26	23	21	19	18	15				
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13				
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12				
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	13	11				
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10				

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

	0°	45°	90°
0°	10787	10787	10787
5°	10653	10615	10677
10°	10065	10155	10392
15°	9291	9507	9933
20°	8437	8754	9333
25°	7568	7980	8696
30°	6766	7209	8034
35°	5917	6345	7251
40°	4980	5375	6277
45°	4110	4465	5241
50°	3432	3741	4366
55°	2913	3211	3606
60°	2489	2783	2879
65°	1982	2340	1860
70°	1759	1826	1136
75°	1629	1483	695
80°	1498	1365	600
85°	1355	1249	487



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	107.2	1.9
10°-20°	278.9	4.8
20°-30°	361.3	6.3
30°-40°	353.8	6.1
40°-50°	270.8	4.7
50°-60°	180.5	3.1
60°-70°	98.5	1.7
70°-80°	41.0	0.7
80°-90°	11.6	0.2
90°-100°	324.2	5.6
100°-110°	783.5	13.6
110°-120°	835.7	14.5
120°-130°	676.8	11.7
130°-140°	524.0	9.1
140°-150°	399.8	6.9
150°-160°	289.4	5.0
160°-170°	178.2	3.1
170°-180°	60.4	1.0
0°-30°	747.5	12.9
0°-40°	1101.3	19.1
0°-60°	1552.6	26.9
0°-90°	1703.7	29.5
90°-120°	1943.4	33.6
90°-150°	3544.1	61.4
90°-180°	4072.0	70.5
0°-180°	5775.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1169	1169	1169	1169	1169	
5°	1150	1139	1146	1149	1153	107
15°	973	969	995	1022	1040	272
25°	743	745	784	818	854	342
35°	525	528	563	601	644	327
45°	315	321	342	368	402	246
55°	181	189	200	207	224	164
65°	91	98	107	94	85	94
75°	46	46	42	28	20	49
85°	13	13	12	8	5	14
90°	0	0	0	0	0	2
95°	32	162	556	361	253	36
105°	125	216	942	1218	1203	132
115°	229	293	757	1434	1600	227
125°	326	376	657	1141	1340	291
135°	401	448	630	900	1035	310
145°	474	509	618	765	824	296
155°	544	567	626	677	702	251
165°	601	610	634	644	653	170
175°	635	633	635	630	629	60
180°	629	629	629	629	629	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1169.2	1169.2	1169.2	1169.2	1169.2
2.5°	1172.0	1161.6	1164.2	1164.2	1161.0
5°	1150.2	1138.7	1146.1	1148.7	1152.8
7.5°	1107.5	1098.8	1112.3	1122.4	1130.5
10°	1074.3	1066.7	1084.0	1098.6	1109.2
12.5°	1035.7	1029.4	1050.8	1070.4	1084.1
15°	972.7	969.2	995.3	1022.3	1039.9
17.5°	905.3	903.6	933.5	965.1	987.6
20°	859.3	858.8	891.6	924.5	950.6
22.5°	812.9	814.0	848.5	882.8	912.5
25°	743.4	745.4	783.9	818.1	854.2
27.5°	679.0	679.9	719.8	755.8	794.4
30°	635.1	637.6	676.7	714.0	754.1
32.5°	591.2	594.1	632.3	670.9	711.9
35°	525.3	527.8	563.3	601.2	643.8
37.5°	457.4	460.8	492.3	528.1	570.1
40°	413.5	418.5	446.3	480.1	521.2
42.5°	371.2	377.4	403.2	435.3	472.4
45°	315.0	321.0	342.2	368.1	401.7
47.5°	266.6	273.5	289.8	312.1	340.7
50°	239.1	245.6	260.6	277.1	304.2
52.5°	214.9	221.4	234.8	247.5	270.6
55°	181.1	188.6	199.6	207.1	224.2
57.5°	153.4	160.6	169.3	172.7	183.0
60°	134.9	143.0	150.8	150.4	156.0
62.5°	118.1	124.9	132.8	127.3	127.6
65°	90.8	98.3	107.2	93.7	85.2
67.5°	73.4	75.0	84.1	65.3	55.2
70°	65.2	65.2	67.7	50.6	42.1
72.5°	57.4	57.4	55.0	41.1	32.2
75°	45.7	45.7	41.6	28.5	19.5
77.5°	35.2	34.8	31.8	21.3	14.2
80°	28.2	28.2	25.7	16.8	11.3
82.5°	22.1	22.1	19.9	13.1	8.4
85°	12.8	12.8	11.8	7.6	4.6
87.5°	4.5	4.5	4.1	2.5	2.1
90°	0.0	0.0	0.0	0.0	0.0
92.5°	10.7	87.8	206.7	100.5	68.2
95°	32.0	162.2	555.5	361.2	253.1
97.5°	56.7	179.7	731.5	704.8	605.0
100°	75.9	190.5	828.5	874.6	792.6
102.5°	94.0	200.3	892.5	1016.0	967.3
105°	125.2	216.4	941.7	1218.4	1202.8
107.5°	155.8	235.3	912.7	1380.8	1417.5
110°	177.2	251.4	865.8	1450.8	1519.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	198.5	267.5	824.3	1467.9	1585.9
115°	229.1	292.9	756.6	1434.3	1599.8
117.5°	259.5	319.6	716.9	1357.2	1551.0
120°	279.7	335.7	691.3	1296.7	1499.9
122.5°	301.0	352.9	675.3	1234.8	1434.9
125°	326.3	375.8	656.7	1140.7	1340.0
127.5°	351.4	398.0	643.6	1061.1	1236.1
130°	366.3	411.9	639.4	1005.6	1177.5
132.5°	380.2	427.8	633.0	965.6	1111.4
135°	400.9	447.8	630.0	899.5	1035.0
137.5°	420.7	467.8	620.7	854.8	956.9
140°	435.6	478.6	620.7	822.7	916.4
142.5°	450.5	493.5	615.4	794.6	873.8
145°	474.2	509.4	618.1	764.6	824.5
147.5°	496.3	530.4	616.5	730.0	779.5
150°	510.2	540.1	620.7	714.9	753.9
152.5°	525.1	554.0	619.7	698.8	733.7
155°	543.5	566.9	626.0	677.2	702.0
157.5°	565.6	585.6	624.7	669.0	683.6
160°	574.1	591.0	630.0	658.3	668.7
162.5°	588.0	602.8	627.9	655.0	661.2
165°	600.7	609.9	634.0	643.6	652.7
167.5°	616.5	622.4	632.4	642.8	643.1
170°	620.7	624.6	636.7	635.5	642.0
172.5°	628.2	631.0	633.5	636.4	632.4
175°	635.4	632.8	635.4	630.0	628.7
177.5°	634.0	634.0	631.9	629.7	624.5
180°	628.7	628.7	628.7	628.7	628.7

(END OF REPORT)