

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: P519547

Luminaire Tested: **SQ4-WB-150U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519547  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-050D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

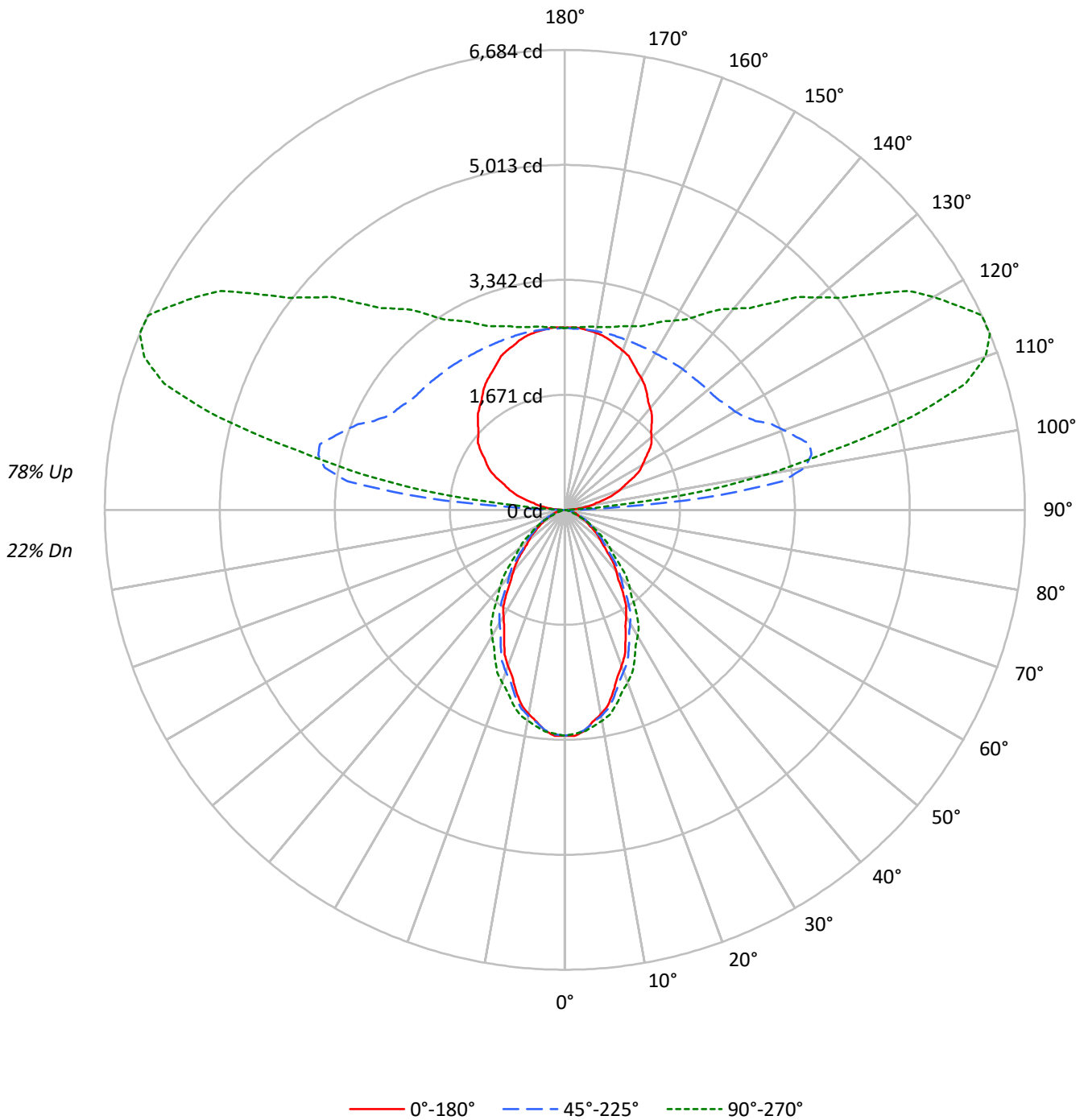
Lumens per Lamp: N/A  
Luminaire Lumens: 21844.1 lumens  
Efficiency: N/A  
Efficacy: 129.3 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 168.9  
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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22				
1	92	88	84	81	81	78	75	73	60	58	56	43	42	41	27	27	26	19				
2	84	77	72	67	74	69	64	60	53	50	47	38	37	35	25	24	23	17				
3	77	68	62	56	68	61	56	51	47	43	40	34	32	30	22	21	20	15				
4	71	61	54	48	63	54	48	44	42	38	35	31	28	26	20	19	18	13				
5	65	54	47	41	57	49	42	38	38	34	30	28	25	23	19	17	16	12				
6	60	49	41	36	53	44	37	33	34	30	26	25	23	20	17	16	14	11				
7	55	44	37	32	49	40	33	29	31	27	23	23	20	18	16	14	13	10				
8	51	40	33	28	46	36	30	25	28	24	21	21	18	16	15	13	12	9				
9	48	36	29	25	42	33	27	23	26	22	19	20	17	15	14	12	11	8				
10	45	33	27	22	40	30	24	20	24	20	17	18	15	13	13	11	10	8				

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

	0°	45°	90°
0°	10090	10090	10090
5°	9964	9928	9986
10°	9414	9499	9720
15°	8690	8892	9291
20°	7892	8188	8730
25°	7078	7464	8133
30°	6329	6743	7515
35°	5534	5935	6783
40°	4658	5028	5872
45°	3844	4176	4903
50°	3209	3499	4085
55°	2725	3003	3373
60°	2329	2603	2692
65°	1854	2190	1739
70°	1644	1708	1061
75°	1522	1385	650
80°	1403	1275	561
85°	1270	1168	459



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	300.9	1.4
10°-20°	782.7	3.6
20°-30°	1013.9	4.6
30°-40°	992.8	4.5
40°-50°	759.9	3.5
50°-60°	506.4	2.3
60°-70°	276.3	1.3
70°-80°	115.1	0.5
80°-90°	38.1	0.2
90°-100°	1229.6	5.6
100°-110°	3324.5	15.2
110°-120°	3495.2	16.0
120°-130°	2839.1	13.0
130°-140°	2227.0	10.2
140°-150°	1709.2	7.8
150°-160°	1229.3	5.6
160°-170°	750.9	3.4
170°-180°	253.2	1.2
0°-30°	2097.5	9.6
0°-40°	3090.3	14.1
0°-60°	4356.6	19.9
0°-90°	4786.2	21.9
90°-120°	8049.2	36.8
90°-150°	14824.5	67.9
90°-180°	17058.0	78.1
0°-180°	21844.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3281	3281	3281	3281	3281	
5°	3228	3195	3216	3224	3235	300
15°	2729	2720	2793	2869	2918	762
25°	2086	2092	2200	2296	2397	959
35°	1474	1481	1581	1687	1807	916
45°	884	901	960	1033	1127	689
55°	508	529	560	581	629	461
65°	255	276	301	263	239	265
75°	128	128	117	80	55	137
85°	36	36	33	21	13	39
90°	6	17	37	40	37	15
95°	191	670	2045	1058	629	200
105°	618	955	3688	5440	5217	651
115°	1088	1330	3059	5921	6684	1074
125°	1490	1707	2757	4652	5465	1328
135°	1786	1997	2683	3756	4252	1380
145°	2076	2232	2646	3215	3460	1299
155°	2344	2436	2623	2884	2979	1081
165°	2552	2577	2634	2737	2751	719
175°	2649	2646	2637	2671	2666	251
180°	2646	2646	2646	2646	2646	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3280.8	3280.8	3280.8	3280.8	3280.8
2.5°	3288.9	3259.6	3267.0	3266.8	3257.8
5°	3227.5	3195.2	3216.0	3223.5	3234.7
7.5°	3107.8	3083.3	3121.3	3149.5	3172.3
10°	3014.5	2993.4	3041.8	3082.8	3112.4
12.5°	2906.2	2888.5	2948.5	3003.5	3042.1
15°	2729.4	2719.6	2792.8	2868.8	2918.0
17.5°	2540.3	2535.5	2619.5	2708.1	2771.2
20°	2411.3	2409.9	2502.0	2594.3	2667.5
22.5°	2281.2	2284.3	2381.1	2477.1	2560.4
25°	2085.9	2091.6	2199.7	2295.6	2396.9
27.5°	1905.4	1908.0	2019.7	2120.9	2229.0
30°	1782.2	1789.2	1898.8	2003.6	2116.2
32.5°	1659.0	1667.1	1774.4	1882.7	1997.6
35°	1474.1	1481.2	1580.7	1687.0	1806.7
37.5°	1283.5	1293.1	1381.4	1482.0	1599.7
40°	1160.3	1174.4	1252.4	1347.2	1462.6
42.5°	1041.7	1059.1	1131.5	1221.4	1325.6
45°	883.9	900.8	960.2	1032.9	1127.2
47.5°	748.0	767.4	813.1	875.7	956.2
50°	670.8	689.1	731.3	777.7	853.7
52.5°	602.9	621.2	658.8	694.5	759.2
55°	508.2	529.3	560.0	581.2	629.1
57.5°	430.4	450.7	475.1	484.6	513.6
60°	378.6	401.1	423.2	422.1	437.6
62.5°	331.4	350.5	372.6	357.3	358.2
65°	254.8	275.9	300.9	262.9	239.0
67.5°	205.9	210.4	236.1	183.3	154.9
70°	182.8	182.8	190.0	142.0	118.0
72.5°	160.9	160.9	154.3	115.5	90.4
75°	128.1	128.1	116.6	80.0	54.7
77.5°	98.8	97.6	89.3	59.7	39.7
80°	79.2	79.2	72.0	47.2	31.7
82.5°	61.9	61.9	55.9	36.8	23.6
85°	36.0	36.0	33.1	21.4	13.0
87.5°	13.8	16.0	18.9	14.8	13.2
90°	5.7	16.8	37.0	39.8	37.0
92.5°	80.9	294.7	581.5	252.5	182.8
95°	190.8	669.8	2044.8	1058.2	629.4
97.5°	306.4	768.1	3187.4	2637.8	1937.2
100°	393.0	807.9	3542.8	3694.8	2987.5
102.5°	472.8	863.2	3668.1	4496.2	3967.1
105°	618.0	954.9	3688.0	5440.1	5217.4
107.5°	752.4	1059.8	3526.9	6029.0	6103.1
110°	857.2	1135.7	3383.3	6187.1	6501.8



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	950.6	1211.3	3251.2	6155.5	6684.1
115°	1087.9	1330.2	3058.7	5921.1	6684.1
117.5°	1222.3	1449.6	2931.6	5562.8	6427.7
120°	1304.3	1527.1	2856.5	5305.8	6188.5
122.5°	1381.8	1600.1	2810.9	5030.3	5919.7
125°	1489.5	1706.7	2756.8	4652.0	5465.1
127.5°	1588.6	1801.9	2724.9	4343.4	5058.5
130°	1643.2	1863.2	2711.2	4152.7	4798.7
132.5°	1700.2	1918.0	2697.5	3980.7	4575.5
135°	1785.6	1997.3	2682.7	3756.3	4251.9
137.5°	1871.6	2071.6	2670.2	3574.2	3978.0
140°	1930.9	2117.5	2665.6	3457.0	3816.2
142.5°	1987.8	2163.3	2656.5	3351.2	3665.8
145°	2076.1	2232.1	2645.7	3215.2	3460.2
147.5°	2156.4	2294.6	2633.2	3092.0	3280.2
150°	2215.7	2338.2	2628.6	3025.1	3175.4
152.5°	2270.4	2377.3	2626.3	2962.9	3086.6
155°	2343.8	2435.7	2622.9	2884.2	2978.9
157.5°	2420.2	2484.2	2623.5	2829.4	2891.8
160°	2463.4	2516.4	2625.8	2794.8	2839.4
162.5°	2497.6	2541.6	2628.1	2767.2	2800.6
165°	2551.7	2576.8	2634.3	2737.2	2751.1
167.5°	2588.8	2606.0	2634.9	2711.4	2718.0
170°	2611.5	2619.9	2637.2	2699.8	2699.8
172.5°	2629.8	2631.4	2637.2	2686.1	2683.9
175°	2648.6	2645.8	2637.2	2671.2	2665.6
177.5°	2654.8	2648.1	2636.6	2659.2	2652.5
180°	2645.7	2645.7	2645.7	2645.7	2645.7

(END OF REPORT)