

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: P519595

Luminaire Tested: **SQ4-WB-150U-100D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519595  
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-100D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

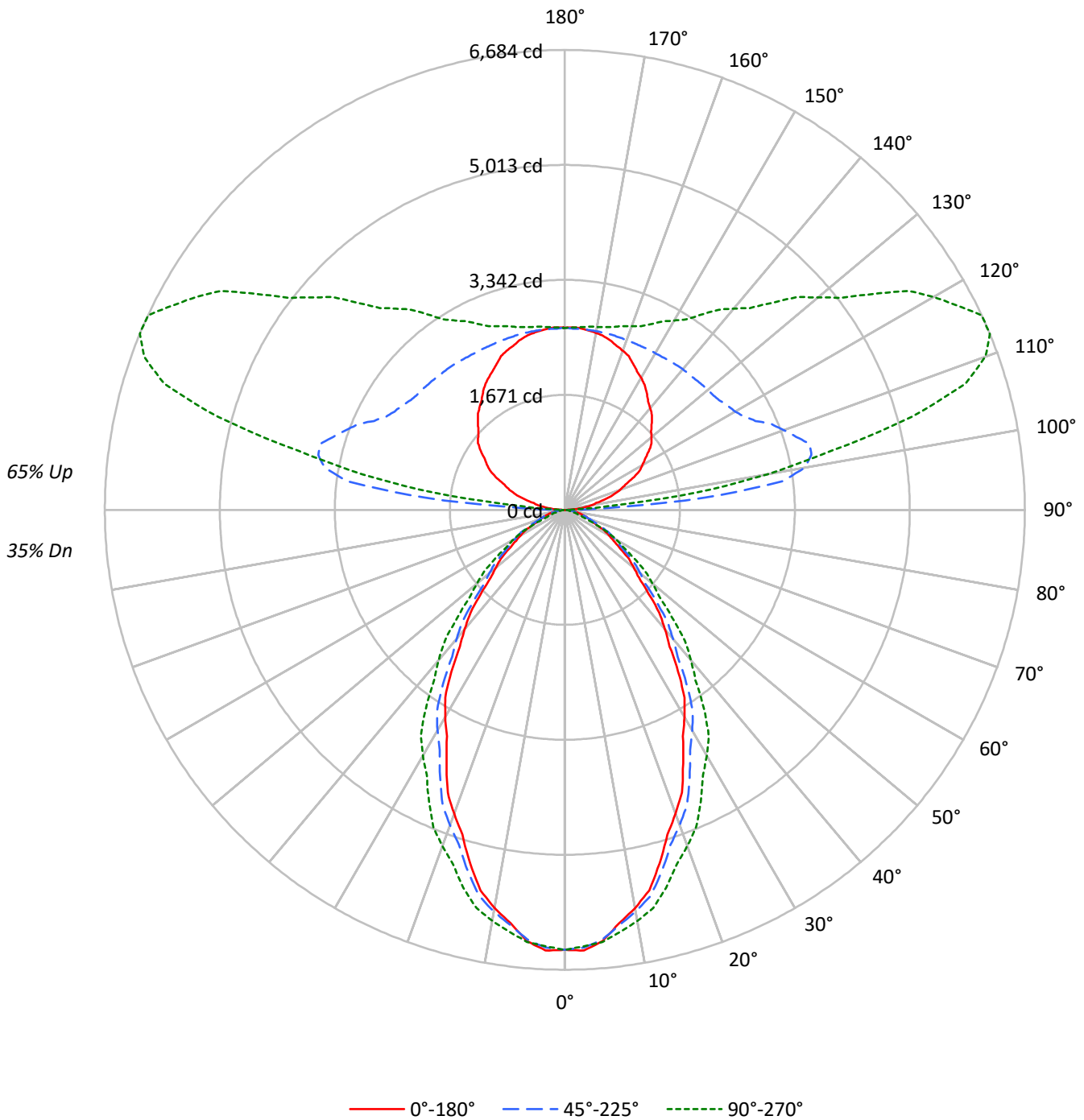
Lumens per Lamp: N/A  
Luminaire Lumens: 26380.7 lumens  
Efficiency: N/A  
Efficacy: 117.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 223.7  
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	104	104	104	104	94	94	94	94	75	75	75	58	58	58	43	43	43	35
1	95	91	88	85	86	83	80	77	67	65	63	52	51	50	39	38	38	31
2	87	81	75	71	79	73	69	65	60	56	54	47	45	43	35	34	33	28
3	80	72	65	60	73	65	60	55	53	49	46	42	40	37	32	30	29	24
4	74	64	57	51	67	58	52	47	48	44	40	38	35	33	29	27	26	22
5	68	57	50	44	62	53	46	41	43	39	35	35	31	29	27	25	23	20
6	63	52	44	39	57	47	41	36	39	35	31	32	28	26	25	22	21	18
7	58	47	40	34	53	43	37	32	36	31	28	29	26	23	23	20	19	16
8	54	43	36	31	49	39	33	29	33	28	25	27	23	21	21	19	17	15
9	51	39	32	27	46	36	30	26	30	26	22	25	21	19	20	17	16	13
10	47	36	29	25	43	33	27	23	28	23	20	23	20	17	18	16	14	12

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

	0°	45°	90°
0°	19664	19664	19664
5°	19419	19350	19462
10°	18347	18513	18943
15°	16937	17330	18107
20°	15380	15959	17015
25°	13795	14547	15852
30°	12335	13141	14646
35°	10786	11566	13220
40°	9078	9799	11444
45°	7492	8139	9554
50°	6255	6819	7960
55°	5310	5852	6574
60°	4539	5074	5246
65°	3614	4267	3389
70°	3204	3330	2069
75°	2967	2701	1267
80°	2733	2485	1093
85°	2474	2276	893



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	586.5	2.2
10°-20°	1525.5	5.8
20°-30°	1975.9	7.5
30°-40°	1934.9	7.3
40°-50°	1481.1	5.6
50°-60°	986.9	3.7
60°-70°	538.6	2.0
70°-80°	224.4	0.9
80°-90°	69.0	0.3
90°-100°	1229.6	4.7
100°-110°	3324.5	12.6
110°-120°	3495.2	13.2
120°-130°	2839.1	10.8
130°-140°	2227.0	8.4
140°-150°	1709.2	6.5
150°-160°	1229.3	4.7
160°-170°	750.9	2.8
170°-180°	253.2	1.0
0°-30°	4087.9	15.5
0°-40°	6022.8	22.8
0°-60°	8490.8	32.2
0°-90°	9322.8	35.3
90°-120°	8049.2	30.5
90°-150°	14824.5	56.2
90°-180°	17058.0	64.7
0°-180°	26380.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6394	6394	6394	6394	6394	
5°	6290	6227	6268	6282	6304	585
15°	5320	5300	5443	5591	5687	1485
25°	4065	4076	4287	4474	4671	1870
35°	2873	2887	3081	3288	3521	1786
45°	1723	1756	1871	2013	2197	1343
55°	990	1032	1091	1133	1226	898
65°	497	538	586	512	466	516
75°	250	250	227	156	107	267
85°	70	70	64	42	25	76
90°	6	17	37	40	37	16
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°	6394.1	6394.1	6394.1	6394.1	6394.1
2.5°	6409.8	6352.7	6367.1	6366.7	6349.2
5°	6290.3	6227.2	6267.8	6282.3	6304.3
7.5°	6056.8	6009.1	6083.2	6138.1	6182.5
10°	5875.0	5833.9	5928.3	6008.2	6065.8
12.5°	5664.0	5629.5	5746.5	5853.7	5928.9
15°	5319.5	5300.3	5442.9	5591.0	5687.0
17.5°	4950.8	4941.5	5105.2	5278.0	5400.9
20°	4699.5	4696.7	4876.2	5056.2	5198.9
22.5°	4445.8	4451.9	4640.5	4827.7	4990.1
25°	4065.4	4076.4	4287.0	4473.9	4671.4
27.5°	3713.6	3718.5	3936.3	4133.6	4344.3
30°	3473.4	3487.1	3700.6	3904.8	4124.3
32.5°	3233.2	3249.1	3458.2	3669.3	3893.1
35°	2873.0	2886.7	3080.6	3287.9	3521.1
37.5°	2501.5	2520.2	2692.3	2888.3	3117.6
40°	2261.3	2288.8	2440.9	2625.6	2850.5
42.5°	2030.2	2064.2	2205.2	2380.4	2583.4
45°	1722.7	1755.6	1871.4	2013.0	2196.8
47.5°	1457.8	1495.7	1584.6	1706.6	1863.5
50°	1307.4	1343.1	1425.3	1515.6	1663.7
52.5°	1175.0	1210.7	1283.9	1353.5	1479.7
55°	990.4	1031.5	1091.4	1132.8	1226.1
57.5°	838.9	878.4	925.9	944.5	1001.1
60°	737.9	781.8	824.9	822.7	852.9
62.5°	645.9	683.2	726.1	696.4	698.0
65°	496.6	537.7	586.4	512.4	465.7
67.5°	401.2	410.0	460.1	357.3	301.9
70°	356.3	356.3	370.3	276.7	230.1
72.5°	313.7	313.7	300.8	225.0	176.2
75°	249.7	249.7	227.3	156.0	106.6
77.5°	192.5	190.3	173.9	116.4	77.4
80°	154.3	154.3	140.3	91.9	61.7
82.5°	120.6	120.6	108.9	71.8	46.0
85°	70.1	70.1	64.5	41.7	25.3
87.5°	25.8	28.1	29.8	21.4	18.6
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)