

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: P519598

Luminaire Tested: **SQ4-WB-150U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519598  
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-8  
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**

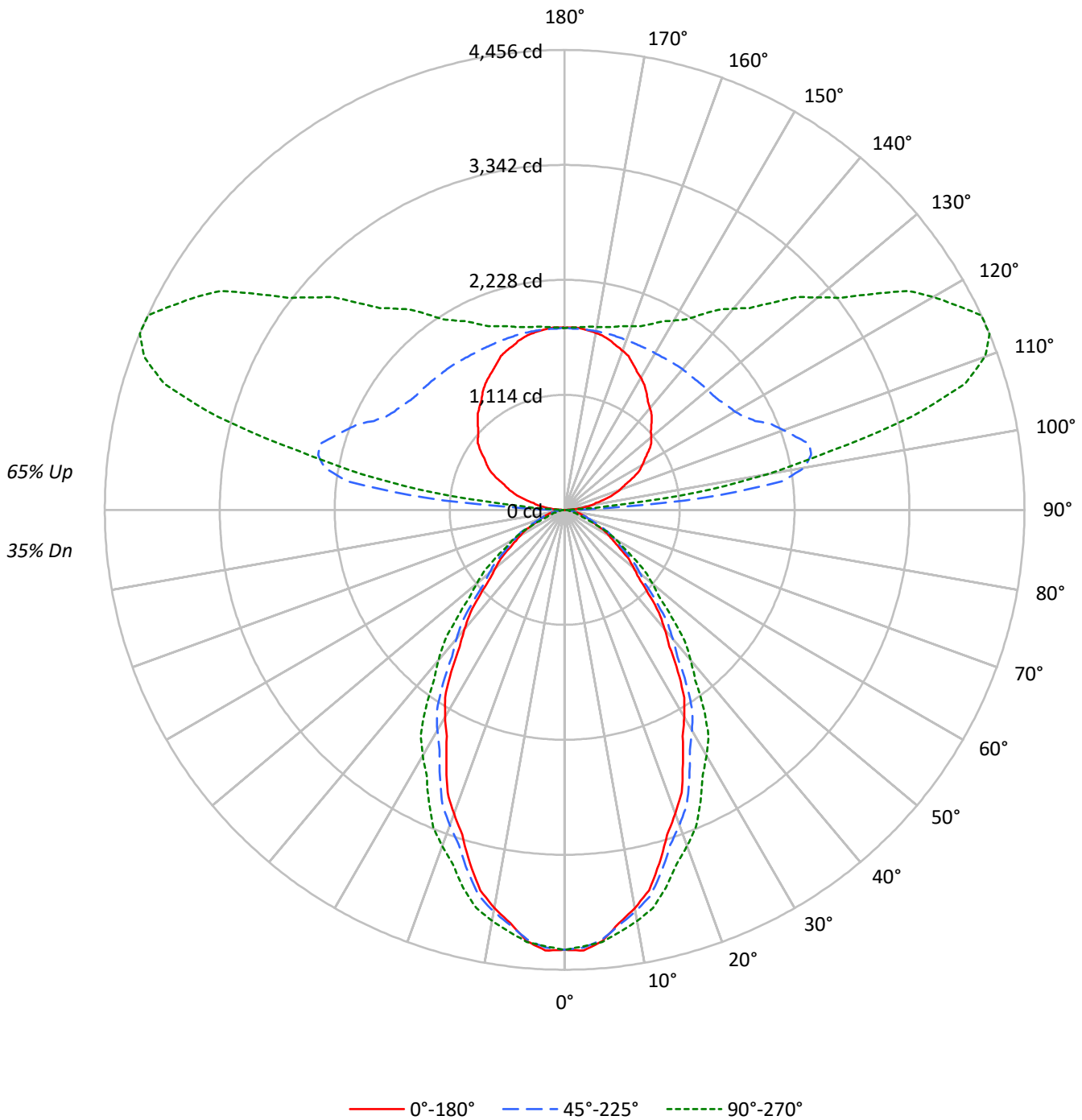
Lumens per Lamp: N/A  
Luminaire Lumens: 17587.2 lumens  
Efficiency: N/A  
Efficacy: 118.5 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 148.4  
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	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	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	2.2
10°-20°	1017.0	5.8
20°-30°	1317.3	7.5
30°-40°	1290.0	7.3
40°-50°	987.4	5.6
50°-60°	657.9	3.7
60°-70°	359.0	2.0
70°-80°	149.6	0.9
80°-90°	46.0	0.3
90°-100°	819.7	4.7
100°-110°	2216.3	12.6
110°-120°	2330.1	13.2
120°-130°	1892.7	10.8
130°-140°	1484.7	8.4
140°-150°	1139.5	6.5
150°-160°	819.5	4.7
160°-170°	500.6	2.8
170°-180°	168.8	1.0
0°-30°	2725.3	15.5
0°-40°	4015.2	22.8
0°-60°	5660.5	32.2
0°-90°	6215.2	35.3
90°-120°	5366.2	30.5
90°-150°	9883.0	56.2
90°-180°	11372.0	64.7
0°-180°	17587.2	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°	4	11	25	26	25	11
95°	127	446	1363	706	420	133
105°	412	637	2459	3627	3478	434
115°	725	887	2039	3947	4456	716
125°	993	1138	1838	3101	3643	885
135°	1190	1332	1788	2504	2835	920
145°	1384	1488	1764	2143	2307	866
155°	1563	1624	1749	1923	1986	721
165°	1701	1718	1756	1825	1834	479
175°	1766	1764	1758	1781	1777	168
180°	1764	1764	1764	1764	1764	

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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°	17.2	18.7	19.9	14.3	12.4
90°	3.8	11.2	24.7	26.5	24.7
92.5°	53.9	196.5	387.7	168.3	121.9
95°	127.2	446.5	1363.2	705.5	419.6
97.5°	204.3	512.1	2124.9	1758.5	1291.4
100°	262.0	538.6	2361.9	2463.2	1991.6
102.5°	315.2	575.4	2445.4	2997.5	2644.8
105°	412.0	636.6	2458.7	3626.8	3478.3
107.5°	501.6	706.6	2351.2	4019.3	4068.7
110°	571.5	757.1	2255.5	4124.7	4334.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	633.8	807.5	2167.5	4103.7	4456.0
115°	725.3	886.8	2039.1	3947.4	4456.0
117.5°	814.9	966.4	1954.4	3708.6	4285.2
120°	869.6	1018.1	1904.3	3537.2	4125.7
122.5°	921.2	1066.7	1873.9	3353.5	3946.4
125°	993.0	1137.8	1837.9	3101.4	3643.4
127.5°	1059.0	1201.2	1816.6	2895.6	3372.3
130°	1095.5	1242.2	1807.5	2768.5	3199.2
132.5°	1133.5	1278.6	1798.4	2653.8	3050.3
135°	1190.4	1331.5	1788.5	2504.2	2834.6
137.5°	1247.8	1381.1	1780.1	2382.8	2652.0
140°	1287.3	1411.6	1777.1	2304.7	2544.1
142.5°	1325.2	1442.2	1771.0	2234.1	2443.9
145°	1384.1	1488.0	1763.8	2143.4	2306.8
147.5°	1437.6	1529.7	1755.5	2061.3	2186.8
150°	1477.1	1558.8	1752.4	2016.7	2116.9
152.5°	1513.6	1584.9	1750.9	1975.3	2057.7
155°	1562.6	1623.8	1748.6	1922.8	1985.9
157.5°	1613.4	1656.1	1749.0	1886.3	1927.8
160°	1642.3	1677.6	1750.5	1863.2	1892.9
162.5°	1665.1	1694.4	1752.0	1844.8	1867.1
165°	1701.2	1717.9	1756.2	1824.8	1834.1
167.5°	1725.8	1737.3	1756.6	1807.6	1812.0
170°	1741.0	1746.6	1758.1	1799.9	1799.9
172.5°	1753.2	1754.3	1758.1	1790.7	1789.2
175°	1765.7	1763.9	1758.1	1780.8	1777.1
177.5°	1769.9	1765.4	1757.7	1772.8	1768.4
180°	1763.8	1763.8	1763.8	1763.8	1763.8

(END OF REPORT)