

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: P519423

Luminaire Tested: **SQ4-WB-100U-100D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519423  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

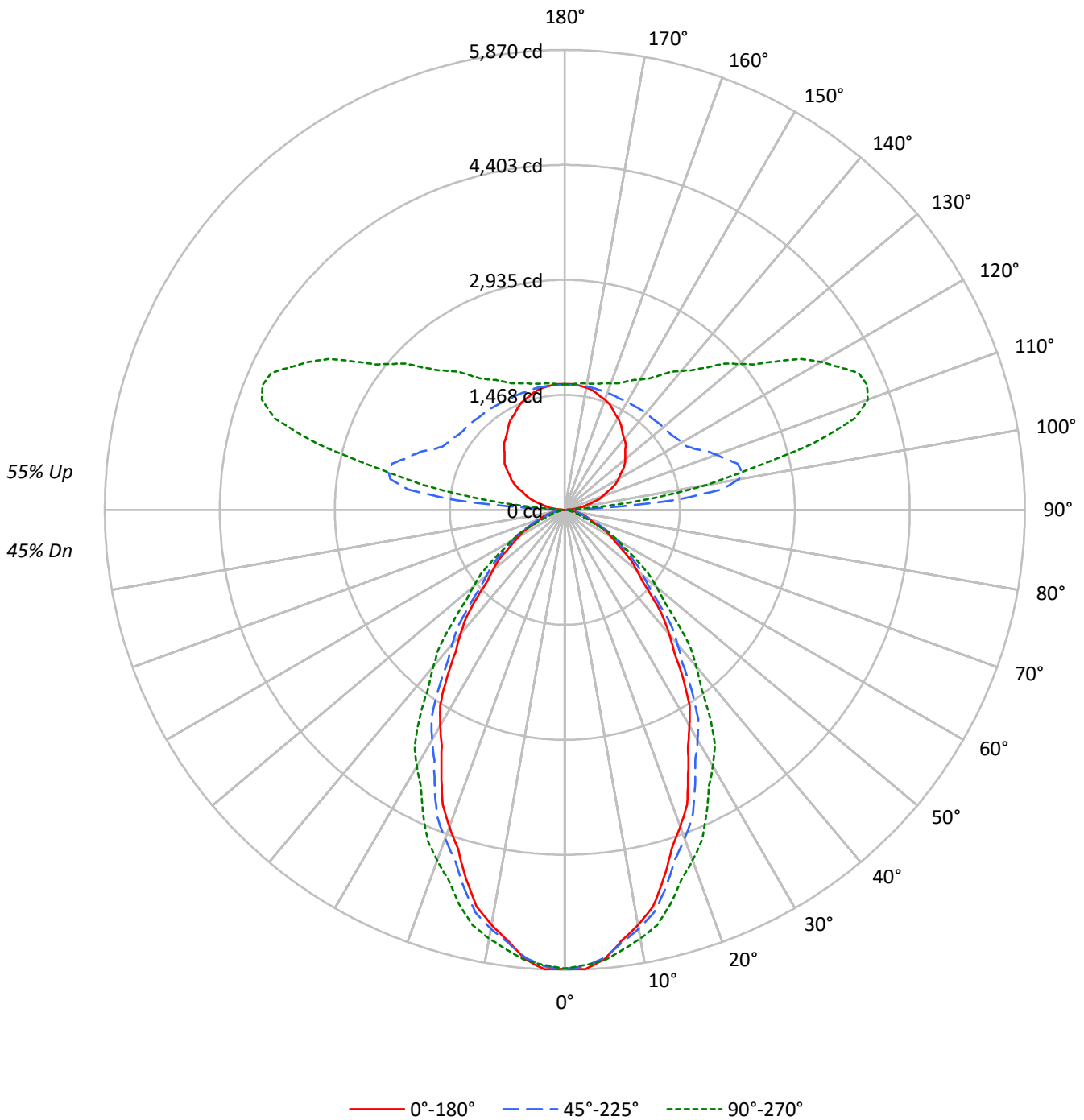
Lumens per Lamp: N/A  
Luminaire Lumens: 18952.8 lumens  
Efficiency: N/A  
Efficacy: 104.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 182.2  
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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45				
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	46	40				
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35				
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31				
4	76	66	59	54	70	61	55	50	52	47	44	44	40	37	36	33	31	28				
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25				
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22				
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20				
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19				
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19	17				
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16				

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

	0°	45°	90°
0°	18010	18010	18010
5°	17785	17722	17825
10°	16803	16956	17349
15°	15512	15872	16584
20°	14086	14616	15583
25°	12635	13323	14518
30°	11297	12036	13414
35°	9879	10593	12107
40°	8315	8975	10481
45°	6862	7454	8751
50°	5729	6246	7291
55°	4864	5360	6021
60°	4157	4647	4805
65°	3310	3908	3104
70°	2934	3050	1895
75°	2718	2473	1160
80°	2502	2276	1001
85°	2265	2085	815



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	537.1	2.8
10°-20°	1397.1	7.4
20°-30°	1809.7	9.5
30°-40°	1772.1	9.4
40°-50°	1356.5	7.2
50°-60°	903.9	4.8
60°-70°	493.2	2.6
70°-80°	205.5	1.1
80°-90°	61.5	0.3
90°-100°	750.7	4.0
100°-110°	2072.5	10.9
110°-120°	2137.5	11.3
120°-130°	1717.6	9.1
130°-140°	1349.9	7.1
140°-150°	1035.3	5.5
150°-160°	744.1	3.9
160°-170°	455.0	2.4
170°-180°	153.4	0.8
0°-30°	3744.0	19.8
0°-40°	5516.1	29.1
0°-60°	7776.5	41.0
0°-90°	8536.7	45.0
90°-120°	4960.7	26.2
90°-150°	9063.6	47.8
90°-180°	10416.0	55.0
0°-180°	18952.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5856	5856	5856	5856	5856	
5°	5761	5703	5740	5754	5774	536
15°	4872	4854	4985	5121	5209	1361
25°	3723	3733	3926	4098	4278	1712
35°	2631	2644	2821	3011	3225	1636
45°	1578	1608	1714	1844	2012	1230
55°	907	945	1000	1038	1123	822
65°	455	492	537	469	427	473
75°	229	229	208	143	98	244
85°	64	64	59	38	23	70
90°	5	10	20	23	26	11
95°	110	406	1362	560	364	118
105°	369	570	2280	3481	3278	393
115°	662	800	1836	3636	4135	650
125°	908	1033	1665	2817	3306	808
135°	1093	1210	1618	2282	2573	845
145°	1267	1355	1598	1942	2090	793
155°	1429	1476	1585	1743	1798	658
165°	1547	1567	1593	1655	1667	436
175°	1603	1606	1595	1618	1613	152
180°	1603	1603	1603	1603	1603	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5856.1	5856.1	5856.1	5856.1	5856.1
2.5°	5870.5	5818.2	5831.4	5831.1	5815.0
5°	5761.0	5703.3	5740.5	5753.8	5773.9
7.5°	5547.3	5503.5	5571.4	5621.7	5662.4
10°	5380.7	5343.1	5429.6	5502.7	5555.5
12.5°	5187.5	5155.9	5263.1	5361.2	5430.1
15°	4872.0	4854.4	4985.0	5120.6	5208.6
17.5°	4534.3	4525.8	4675.6	4833.9	4946.5
20°	4304.1	4301.6	4466.0	4630.8	4761.5
22.5°	4071.8	4077.3	4250.1	4421.6	4570.3
25°	3723.4	3733.4	3926.3	4097.5	4278.4
27.5°	3401.1	3405.6	3605.1	3785.8	3978.8
30°	3181.2	3193.7	3389.3	3576.3	3777.3
32.5°	2961.2	2975.8	3167.3	3360.6	3565.6
35°	2631.3	2643.8	2821.4	3011.3	3224.8
37.5°	2291.1	2308.1	2465.8	2645.3	2855.3
40°	2071.1	2096.2	2235.6	2404.7	2610.7
42.5°	1859.4	1890.5	2019.7	2180.2	2366.1
45°	1577.7	1607.9	1713.9	1843.7	2012.0
47.5°	1335.2	1369.8	1451.3	1563.0	1706.7
50°	1197.4	1230.1	1305.4	1388.1	1523.8
52.5°	1076.1	1108.8	1175.8	1239.6	1355.2
55°	907.1	944.8	999.6	1037.5	1122.9
57.5°	768.3	804.5	848.0	865.1	916.8
60°	675.8	716.0	755.5	753.5	781.2
62.5°	591.5	625.7	665.0	637.8	639.3
65°	454.8	492.5	537.0	469.3	426.6
67.5°	367.5	375.5	421.4	327.2	276.5
70°	326.3	326.3	339.2	253.4	210.7
72.5°	287.3	287.3	275.5	206.1	161.4
75°	228.7	228.7	208.1	142.9	97.6
77.5°	176.3	174.3	159.3	106.6	70.9
80°	141.3	141.3	128.5	84.2	56.5
82.5°	110.5	110.5	99.7	65.8	42.1
85°	64.2	64.2	59.1	38.2	23.1
87.5°	23.6	24.6	24.7	16.9	15.4
90°	5.1	10.1	20.5	23.1	25.6
92.5°	46.2	191.6	342.7	125.1	97.5
95°	110.3	406.2	1362.0	559.8	364.2
97.5°	182.6	455.0	2017.6	1553.3	1125.0
100°	236.0	484.3	2259.7	2275.7	1849.3
102.5°	287.3	517.5	2306.9	2811.8	2407.5
105°	369.4	570.0	2280.2	3481.2	3278.0
107.5°	456.6	635.1	2153.0	3804.0	3878.2
110°	518.1	678.6	2054.5	3873.4	4114.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	573.5	728.0	1962.2	3818.6	4173.7
115°	661.8	799.7	1836.5	3635.6	4134.7
117.5°	738.7	876.1	1753.9	3378.1	3945.9
120°	790.0	925.4	1721.1	3203.8	3775.6
122.5°	839.3	968.7	1694.4	3041.0	3582.7
125°	908.0	1033.4	1664.7	2817.2	3306.2
127.5°	966.5	1091.9	1647.2	2627.9	3049.7
130°	1005.5	1130.9	1639.0	2512.1	2895.8
132.5°	1042.4	1161.8	1630.8	2414.9	2762.5
135°	1092.7	1210.5	1618.5	2281.7	2572.7
137.5°	1149.1	1256.4	1612.3	2170.0	2418.2
140°	1179.9	1285.2	1608.2	2095.4	2313.6
142.5°	1214.8	1312.1	1604.1	2029.1	2221.3
145°	1267.1	1354.9	1598.0	1942.5	2090.4
147.5°	1317.4	1394.1	1592.3	1869.4	1984.2
150°	1354.3	1417.0	1590.3	1825.8	1918.6
152.5°	1383.0	1441.7	1588.2	1788.5	1865.2
155°	1428.7	1476.3	1585.1	1742.9	1798.0
157.5°	1470.7	1507.4	1585.7	1709.6	1747.2
160°	1495.4	1528.0	1587.7	1690.9	1718.5
162.5°	1515.9	1544.5	1589.8	1674.4	1695.9
165°	1546.7	1566.7	1592.8	1654.7	1667.2
167.5°	1570.3	1582.3	1595.4	1642.7	1646.7
170°	1582.6	1592.6	1595.4	1636.4	1636.4
172.5°	1592.8	1598.9	1595.4	1628.2	1626.2
175°	1603.1	1605.6	1595.4	1618.4	1613.4
177.5°	1607.2	1605.2	1594.9	1609.2	1605.1
180°	1603.1	1603.1	1603.1	1603.1	1603.1

(END OF REPORT)