

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: P519403

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519403  
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-830-1D-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: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

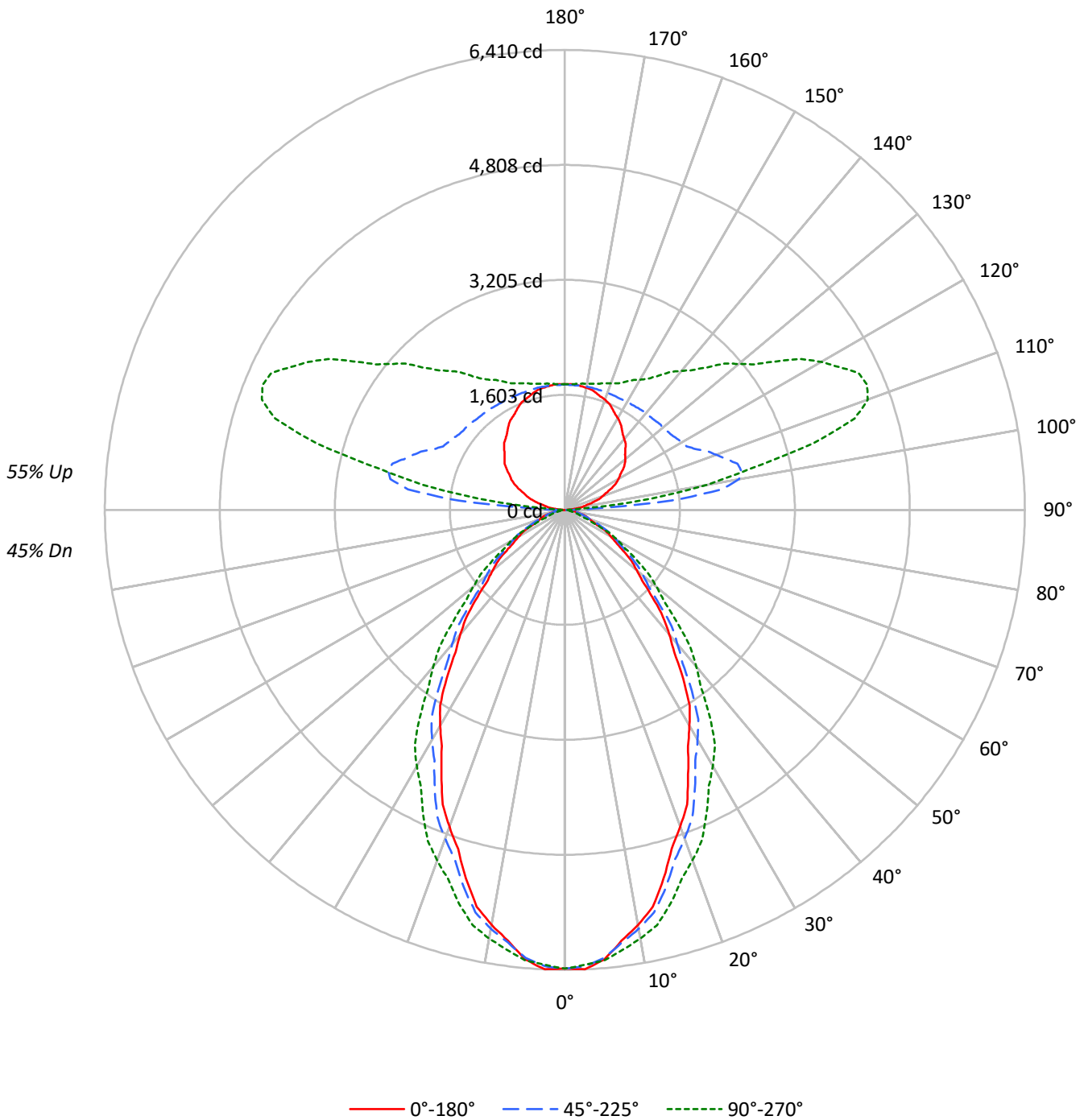
Lumens per Lamp: N/A  
Luminaire Lumens: 20693.8 lumens  
Efficiency: N/A  
Efficacy: 113.6 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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	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°	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	2.8
10°-20°	1525.5	7.4
20°-30°	1975.9	9.5
30°-40°	1934.9	9.4
40°-50°	1481.1	7.2
50°-60°	986.9	4.8
60°-70°	538.6	2.6
70°-80°	224.4	1.1
80°-90°	67.2	0.3
90°-100°	819.7	4.0
100°-110°	2262.9	10.9
110°-120°	2333.8	11.3
120°-130°	1875.4	9.1
130°-140°	1473.9	7.1
140°-150°	1130.4	5.5
150°-160°	812.4	3.9
160°-170°	496.8	2.4
170°-180°	167.5	0.8
0°-30°	4087.9	19.8
0°-40°	6022.8	29.1
0°-60°	8490.8	41.0
0°-90°	9320.9	45.0
90°-120°	5416.4	26.2
90°-150°	9896.1	47.8
90°-180°	11373.0	55.0
0°-180°	20693.8	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	11	22	25	28	12
95°	120	444	1487	611	398	129
105°	403	622	2490	3801	3579	429
115°	722	873	2005	3970	4514	710
125°	991	1128	1818	3076	3610	882
135°	1193	1322	1767	2491	2809	923
145°	1384	1479	1745	2121	2282	866
155°	1560	1612	1731	1903	1963	719
165°	1689	1711	1739	1807	1820	476
175°	1750	1753	1742	1767	1762	166
180°	1750	1750	1750	1750	1750	



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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	26.9	26.9	18.5	16.8
90°	5.6	11.1	22.4	25.3	28.0
92.5°	50.4	209.2	374.2	136.5	106.4
95°	120.4	443.5	1487.1	611.3	397.7
97.5°	199.4	496.8	2202.9	1696.0	1228.3
100°	257.7	528.7	2467.3	2484.7	2019.2
102.5°	313.7	565.0	2518.8	3070.0	2628.6
105°	403.3	622.3	2489.7	3800.9	3579.1
107.5°	498.5	693.5	2350.8	4153.4	4234.5
110°	565.7	741.0	2243.3	4229.2	4492.1

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	626.2	794.9	2142.4	4169.3	4557.1
115°	722.5	873.2	2005.2	3969.6	4514.5
117.5°	806.6	956.6	1915.0	3688.4	4308.4
120°	862.6	1010.4	1879.2	3498.1	4122.4
122.5°	916.3	1057.6	1850.1	3320.4	3911.8
125°	991.4	1128.3	1817.6	3076.0	3609.9
127.5°	1055.3	1192.2	1798.5	2869.3	3329.9
130°	1097.8	1234.7	1789.6	2742.9	3161.8
132.5°	1138.2	1268.5	1780.6	2636.7	3016.2
135°	1193.0	1321.7	1767.2	2491.3	2809.0
137.5°	1254.7	1371.9	1760.4	2369.3	2640.4
140°	1288.3	1403.3	1756.0	2287.9	2526.1
142.5°	1326.4	1432.6	1751.5	2215.5	2425.3
145°	1383.5	1479.3	1744.8	2120.9	2282.5
147.5°	1438.4	1522.2	1738.6	2041.1	2166.5
150°	1478.7	1547.2	1736.4	1993.5	2094.8
152.5°	1510.1	1574.1	1734.1	1952.8	2036.6
155°	1559.9	1611.9	1730.8	1903.0	1963.2
157.5°	1605.8	1645.8	1731.3	1866.7	1907.8
160°	1632.7	1668.3	1733.6	1846.3	1876.4
162.5°	1655.1	1686.4	1735.8	1828.2	1851.7
165°	1688.7	1710.7	1739.2	1806.7	1820.4
167.5°	1714.5	1727.7	1742.0	1793.6	1798.0
170°	1728.0	1738.9	1742.0	1786.8	1786.8
172.5°	1739.2	1745.7	1742.0	1777.8	1775.6
175°	1750.4	1753.1	1742.0	1767.0	1761.6
177.5°	1754.8	1752.6	1741.4	1757.0	1752.6
180°	1750.4	1750.4	1750.4	1750.4	1750.4

(END OF REPORT)