

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: P520235

Luminaire Tested: **SQ4-F-100U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520235  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-19)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-100U-100D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

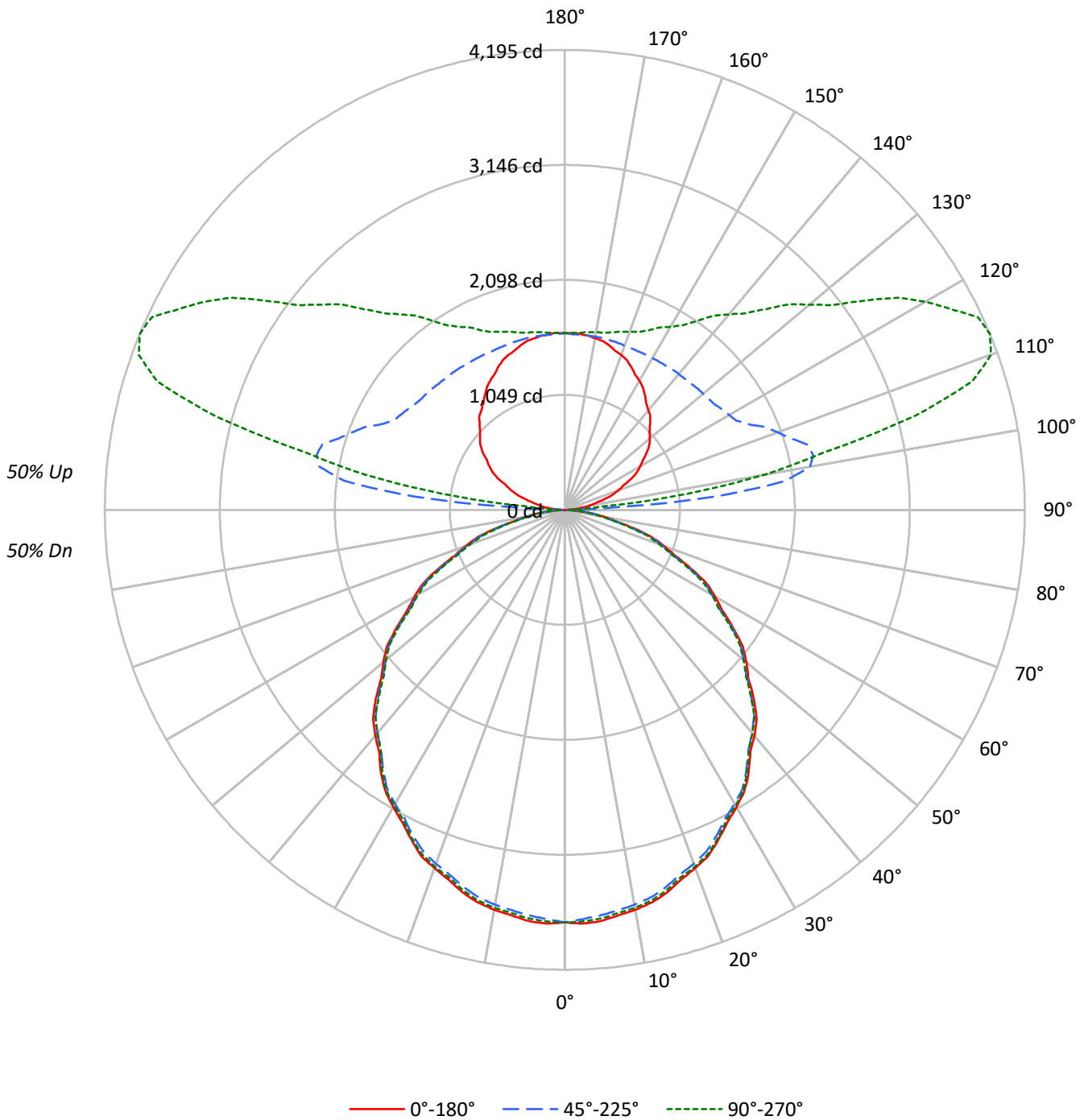
Lumens per Lamp: N/A  
Luminaire Lumens: 20736.1 lumens  
Efficiency: N/A  
Efficacy: 112.9 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 183.6  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	70	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	39	35
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	36	33	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	44	39	35	37	33	30	31	27	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	19	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	19	17	20	17	14	12

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

	0°	45°	90°
0°	11573	11573	11573
5°	11625	11466	11553
10°	11566	11421	11510
15°	11496	11340	11430
20°	11377	11242	11335
25°	11253	11122	11209
30°	11116	10997	11052
35°	10977	10841	10899
40°	10794	10670	10680
45°	10604	10458	10424
50°	10331	10207	10182
55°	10026	9916	9846
60°	9723	9547	9516
65°	9247	9040	8965
70°	8593	8384	8221
75°	7672	7427	7273
80°	6312	6084	5809
85°	3737	4100	4192



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	355.2	1.7
10°-20°	1011.4	4.9
20°-30°	1518.9	7.3
30°-40°	1812.6	8.7
40°-50°	1857.9	9.0
50°-60°	1654.5	8.0
60°-70°	1233.3	5.9
70°-80°	667.7	3.2
80°-90°	155.3	0.7
90°-100°	754.6	3.6
100°-110°	2083.1	10.0
110°-120°	2148.4	10.4
120°-130°	1726.4	8.3
130°-140°	1356.8	6.5
140°-150°	1040.6	5.0
150°-160°	747.9	3.6
160°-170°	457.4	2.2
170°-180°	154.2	0.7
0°-30°	2885.4	13.9
0°-40°	4698.1	22.7
0°-60°	8210.5	39.6
0°-90°	10266.9	49.5
90°-120°	4986.1	24.0
90°-150°	9109.8	43.9
90°-180°	10469.0	50.5
0°-180°	20736.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3763	3763	3763	3763	3763	
5°	3766	3758	3714	3748	3742	357
15°	3611	3598	3562	3590	3590	1017
25°	3316	3309	3278	3296	3303	1528
35°	2924	2911	2888	2893	2903	1825
45°	2438	2426	2404	2392	2397	1876
55°	1870	1872	1849	1831	1836	1674
65°	1271	1266	1242	1229	1232	1257
75°	646	638	625	612	612	688
85°	106	116	116	119	119	148
90°	5	10	21	23	26	10
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3763.0	3763.0	3763.0	3763.0	3763.0
2.5°	3777.5	3769.5	3736.2	3762.9	3759.0
5°	3765.6	3758.1	3714.0	3747.5	3742.4
7.5°	3730.5	3722.9	3684.1	3714.9	3710.4
10°	3703.7	3696.1	3657.2	3688.1	3685.6
12.5°	3668.5	3661.0	3622.1	3653.0	3650.5
15°	3610.7	3598.1	3561.6	3590.0	3590.0
17.5°	3534.3	3524.7	3490.9	3514.6	3515.1
20°	3476.4	3468.8	3435.1	3460.9	3463.5
22.5°	3418.5	3411.0	3373.1	3396.9	3401.5
25°	3316.3	3308.7	3277.5	3295.8	3303.3
27.5°	3210.9	3199.8	3169.0	3185.2	3190.7
30°	3130.3	3125.3	3096.7	3104.6	3112.2
32.5°	3045.6	3040.5	3016.2	3020.0	3033.7
35°	2923.7	2911.0	2887.6	2892.9	2903.0
37.5°	2779.6	2773.5	2750.6	2747.7	2757.4
40°	2688.7	2678.6	2657.7	2652.6	2660.3
42.5°	2589.5	2579.4	2554.3	2549.4	2559.0
45°	2438.1	2425.5	2404.5	2391.7	2396.8
47.5°	2268.7	2268.7	2247.0	2232.2	2239.8
50°	2159.2	2159.2	2133.3	2120.7	2128.2
52.5°	2045.6	2047.5	2019.7	2013.0	2010.4
55°	1869.9	1872.5	1849.3	1831.3	1836.3
57.5°	1700.4	1694.9	1668.0	1656.2	1658.6
60°	1580.7	1573.0	1552.2	1534.5	1547.1
62.5°	1458.8	1455.2	1434.4	1414.3	1412.8
65°	1270.7	1265.7	1242.3	1229.4	1232.0
67.5°	1083.8	1077.6	1056.3	1037.9	1044.4
70°	955.6	955.6	932.4	921.9	914.3
72.5°	837.8	827.7	810.5	795.9	790.3
75°	645.7	638.1	625.0	612.1	612.1
77.5°	470.0	463.5	455.1	446.3	443.7
80°	356.4	353.9	343.5	340.6	328.0
82.5°	251.1	250.6	244.3	237.6	237.1
85°	105.9	116.0	116.2	118.8	118.8
87.5°	19.6	32.8	33.1	29.4	29.9
90°	5.1	10.2	20.6	23.2	25.8
92.5°	46.4	192.6	344.4	125.7	97.9
95°	110.9	408.3	1369.0	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.8
100°	237.2	486.7	2271.2	2287.3	1858.7
102.5°	288.8	520.1	2318.7	2826.1	2419.7
105°	371.3	572.9	2291.9	3499.0	3294.8
107.5°	458.9	638.3	2164.0	3823.4	3898.0
110°	520.7	682.1	2065.0	3893.2	4135.2



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	576.4	731.7	1972.2	3838.1	4195.0
115°	665.2	803.7	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.8	3220.1	3794.8
122.5°	843.5	973.6	1703.0	3056.5	3601.1
125°	912.7	1038.7	1673.2	2831.5	3323.1
127.5°	971.4	1097.4	1655.7	2641.3	3065.3
130°	1010.6	1136.6	1647.3	2525.0	2910.6
132.5°	1047.7	1167.7	1639.1	2427.1	2776.5
135°	1098.2	1216.7	1626.8	2293.4	2585.8
137.5°	1155.0	1262.8	1620.5	2181.0	2430.6
140°	1185.9	1291.8	1616.5	2106.0	2325.4
142.5°	1221.0	1318.7	1612.3	2039.5	2232.6
145°	1273.5	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.3	1598.4	1835.1	1928.4
152.5°	1390.0	1449.1	1596.3	1797.6	1874.8
155°	1435.9	1483.8	1593.2	1751.7	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1683.0	1704.6
165°	1554.6	1574.7	1601.0	1663.2	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.8	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.2	1613.8	1603.5	1626.7	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.2	1611.2	1611.2	1611.2	1611.2

(END OF REPORT)