

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: P520326

Luminaire Tested: **SQ4-F-125U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520326  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-100D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

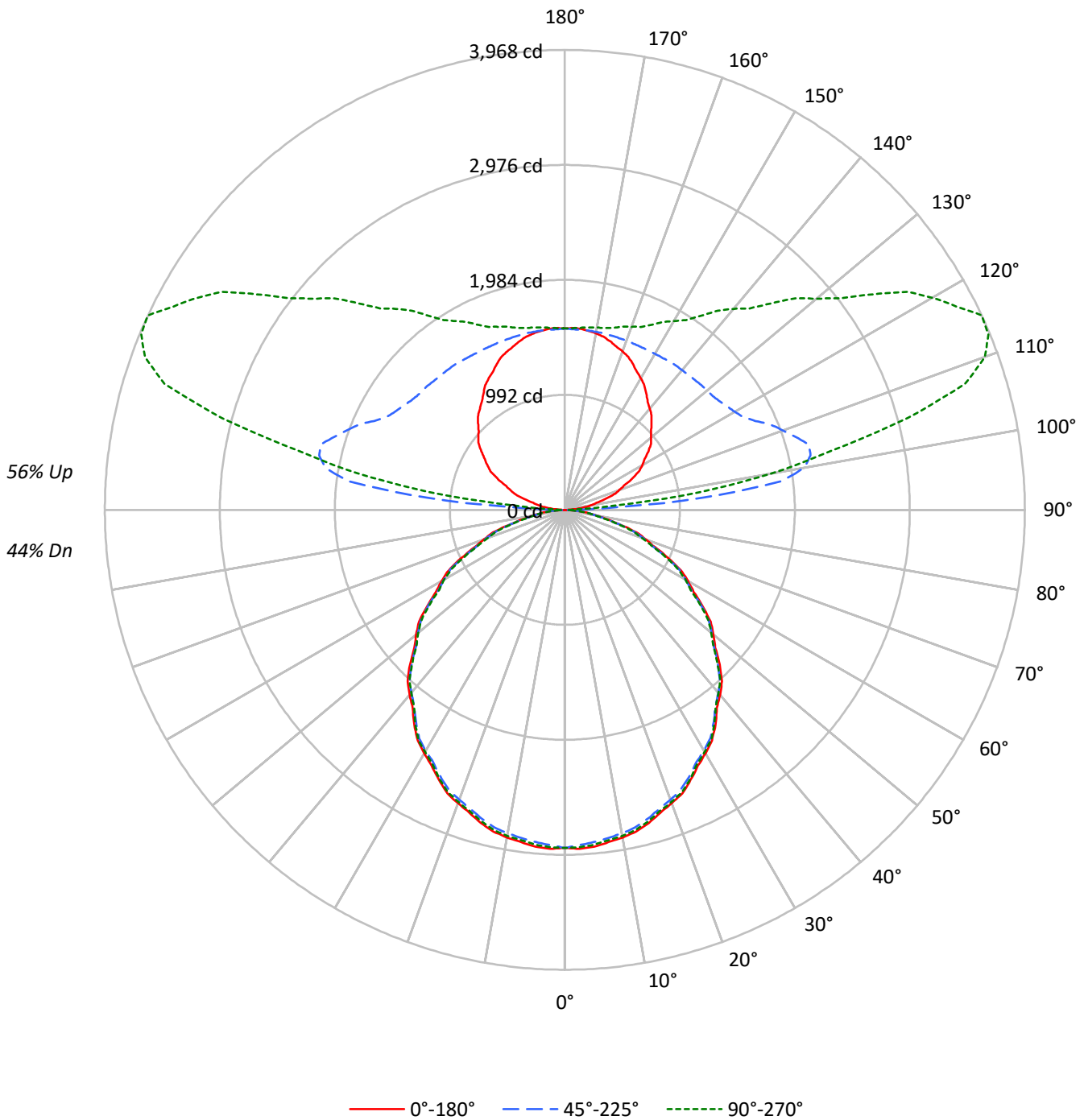
Lumens per Lamp: N/A  
Luminaire Lumens: 18057.0 lumens  
Efficiency: N/A  
Efficacy: 146.6 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 123.2  
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	80	80	80	65	65	65	51	51	51	44
1	96	92	88	85	88	84	81	78	70	68	66	57	55	54	45	44	43	37
2	88	80	74	69	80	74	69	64	61	58	54	50	47	45	39	38	36	31
3	80	71	63	57	73	65	59	53	54	49	45	44	41	38	35	32	30	26
4	73	62	54	48	67	57	50	45	48	43	39	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	33	38	33	29	32	28	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	41	33	28	48	38	31	26	32	26	22	26	22	19	21	18	16	13
9	49	37	30	24	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	15	18	15	13	11

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

	0°	45°	90°
0°	13453	13453	13453
5°	13514	13328	13430
10°	13445	13276	13379
15°	13364	13182	13287
20°	13226	13069	13177
25°	13081	12929	13030
30°	12922	12784	12848
35°	12760	12602	12670
40°	12548	12403	12415
45°	12327	12157	12118
50°	12009	11865	11837
55°	11655	11526	11446
60°	11302	11099	11062
65°	10750	10509	10422
70°	9988	9746	9556
75°	8919	8634	8456
80°	7337	7072	6753
85°	4340	4769	4870



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.2	1.5
10°-20°	783.8	4.3
20°-30°	1177.1	6.5
30°-40°	1404.7	7.8
40°-50°	1439.9	8.0
50°-60°	1282.2	7.1
60°-70°	955.8	5.3
70°-80°	517.5	2.9
80°-90°	121.4	0.7
90°-100°	731.8	4.1
100°-110°	1971.4	10.9
110°-120°	2068.9	11.5
120°-130°	1678.9	9.3
130°-140°	1316.7	7.3
140°-150°	1010.9	5.6
150°-160°	726.8	4.0
160°-170°	444.1	2.5
170°-180°	149.7	0.8
0°-30°	2236.2	12.4
0°-40°	3640.9	20.2
0°-60°	6363.0	35.2
0°-90°	7957.7	44.1
90°-120°	4772.2	26.4
90°-150°	8778.6	48.6
90°-180°	10099.0	55.9
0°-180°	18057.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2916	2916	2916	2916	2916	
5°	2918	2912	2878	2904	2900	277
15°	2798	2788	2760	2782	2782	788
25°	2570	2564	2540	2554	2560	1184
35°	2266	2256	2238	2242	2250	1414
45°	1890	1880	1863	1854	1858	1454
55°	1449	1451	1433	1419	1423	1297
65°	985	981	963	953	955	974
75°	500	494	484	474	474	533
85°	82	90	90	92	92	115
90°	4	12	24	26	26	10
95°	112	398	1200	614	424	117
105°	365	567	2180	3262	3061	383
115°	644	788	1816	3508	3968	633
125°	879	1009	1630	2755	3242	785
135°	1058	1181	1584	2223	2517	817
145°	1224	1319	1564	1900	2041	767
155°	1389	1440	1550	1705	1760	639
165°	1507	1524	1556	1618	1626	425
175°	1566	1564	1558	1580	1576	149
180°	1564	1564	1564	1564	1564	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2916.3	2916.3	2916.3	2916.3	2916.3
2.5°	2927.5	2921.2	2895.5	2916.3	2913.1
5°	2918.3	2912.4	2878.2	2904.2	2900.3
7.5°	2891.1	2885.2	2855.1	2879.0	2875.5
10°	2870.3	2864.4	2834.2	2858.2	2856.2
12.5°	2843.1	2837.2	2807.0	2831.0	2829.0
15°	2798.2	2788.5	2760.2	2782.2	2782.2
17.5°	2738.9	2731.5	2705.3	2723.8	2724.2
20°	2694.1	2688.3	2662.1	2682.2	2684.1
22.5°	2649.3	2643.4	2614.1	2632.6	2636.1
25°	2570.0	2564.1	2540.0	2554.1	2560.0
27.5°	2488.4	2479.7	2456.0	2468.4	2472.8
30°	2425.9	2422.0	2399.9	2406.0	2412.0
32.5°	2360.2	2356.4	2337.4	2340.5	2351.0
35°	2265.8	2256.0	2237.8	2241.9	2249.8
37.5°	2154.1	2149.4	2131.7	2129.5	2136.9
40°	2083.7	2075.9	2059.6	2055.8	2061.6
42.5°	2006.8	1999.0	1979.6	1975.7	1983.1
45°	1889.5	1879.7	1863.4	1853.5	1857.5
47.5°	1758.2	1758.2	1741.4	1729.9	1735.8
50°	1673.3	1673.3	1653.3	1643.5	1649.3
52.5°	1585.2	1586.8	1565.2	1560.0	1558.1
55°	1449.2	1451.1	1433.1	1419.3	1423.1
57.5°	1317.9	1313.5	1292.6	1283.4	1285.4
60°	1225.0	1219.1	1203.0	1189.2	1199.0
62.5°	1130.5	1127.8	1111.7	1096.0	1094.9
65°	984.8	980.9	962.8	952.8	954.8
67.5°	839.8	835.2	818.6	804.3	809.4
70°	740.5	740.5	722.6	714.5	708.5
72.5°	649.3	641.5	628.1	616.8	612.5
75°	500.4	494.5	484.4	474.4	474.4
77.5°	364.3	359.2	352.6	345.8	343.9
80°	276.2	274.3	266.2	264.0	254.2
82.5°	194.6	194.2	189.3	184.1	183.7
85°	82.0	89.9	90.1	92.0	92.0
87.5°	15.3	26.2	27.2	24.4	24.4
90°	3.9	11.7	23.9	26.0	26.0
92.5°	48.6	171.8	339.6	163.5	113.6
95°	111.6	398.0	1199.7	613.5	424.5
97.5°	178.2	455.7	1881.7	1571.9	1185.3
100°	229.2	478.6	2098.5	2195.6	1821.5
102.5°	278.6	510.9	2170.3	2662.7	2355.6
105°	364.7	567.4	2180.2	3261.8	3061.1
107.5°	446.0	626.9	2087.4	3569.6	3621.4
110°	500.3	671.7	2002.8	3665.3	3854.2

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	557.6	716.7	1921.5	3644.1	3954.7
115°	643.7	787.9	1815.6	3508.0	3967.9
117.5°	722.2	857.5	1733.5	3290.7	3802.8
120°	773.3	903.8	1691.9	3134.8	3660.9
122.5°	817.9	946.9	1661.6	2975.3	3499.9
125°	878.9	1009.4	1630.2	2755.3	3242.4
127.5°	937.5	1066.0	1610.2	2561.2	2996.2
130°	972.5	1101.2	1602.3	2450.0	2831.9
132.5°	1007.6	1134.6	1594.3	2352.0	2702.7
135°	1058.3	1181.0	1584.4	2222.8	2517.0
137.5°	1106.5	1224.1	1579.1	2113.2	2354.8
140°	1140.0	1252.9	1574.4	2045.7	2263.9
142.5°	1175.0	1280.3	1571.2	1982.7	2166.6
145°	1223.6	1319.1	1564.4	1900.4	2040.7
147.5°	1276.2	1359.3	1557.6	1831.1	1941.5
150°	1311.3	1383.4	1554.5	1787.7	1879.3
152.5°	1343.2	1406.0	1552.9	1752.2	1826.7
155°	1389.0	1439.7	1550.4	1705.1	1759.7
157.5°	1429.3	1468.6	1550.8	1672.1	1708.7
160°	1454.8	1488.0	1552.5	1652.7	1680.0
162.5°	1477.1	1504.1	1554.1	1636.6	1656.1
165°	1506.6	1524.2	1556.4	1618.4	1626.2
167.5°	1530.5	1540.7	1558.4	1604.3	1607.5
170°	1546.5	1550.4	1558.4	1596.3	1596.3
172.5°	1556.1	1556.8	1560.0	1588.3	1588.3
175°	1566.4	1564.4	1558.4	1580.3	1576.4
177.5°	1570.8	1567.7	1559.6	1572.3	1569.2
180°	1564.4	1564.4	1564.4	1564.4	1564.4

(END OF REPORT)