

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: P520254

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

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520254  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-20)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-F-100U-125D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

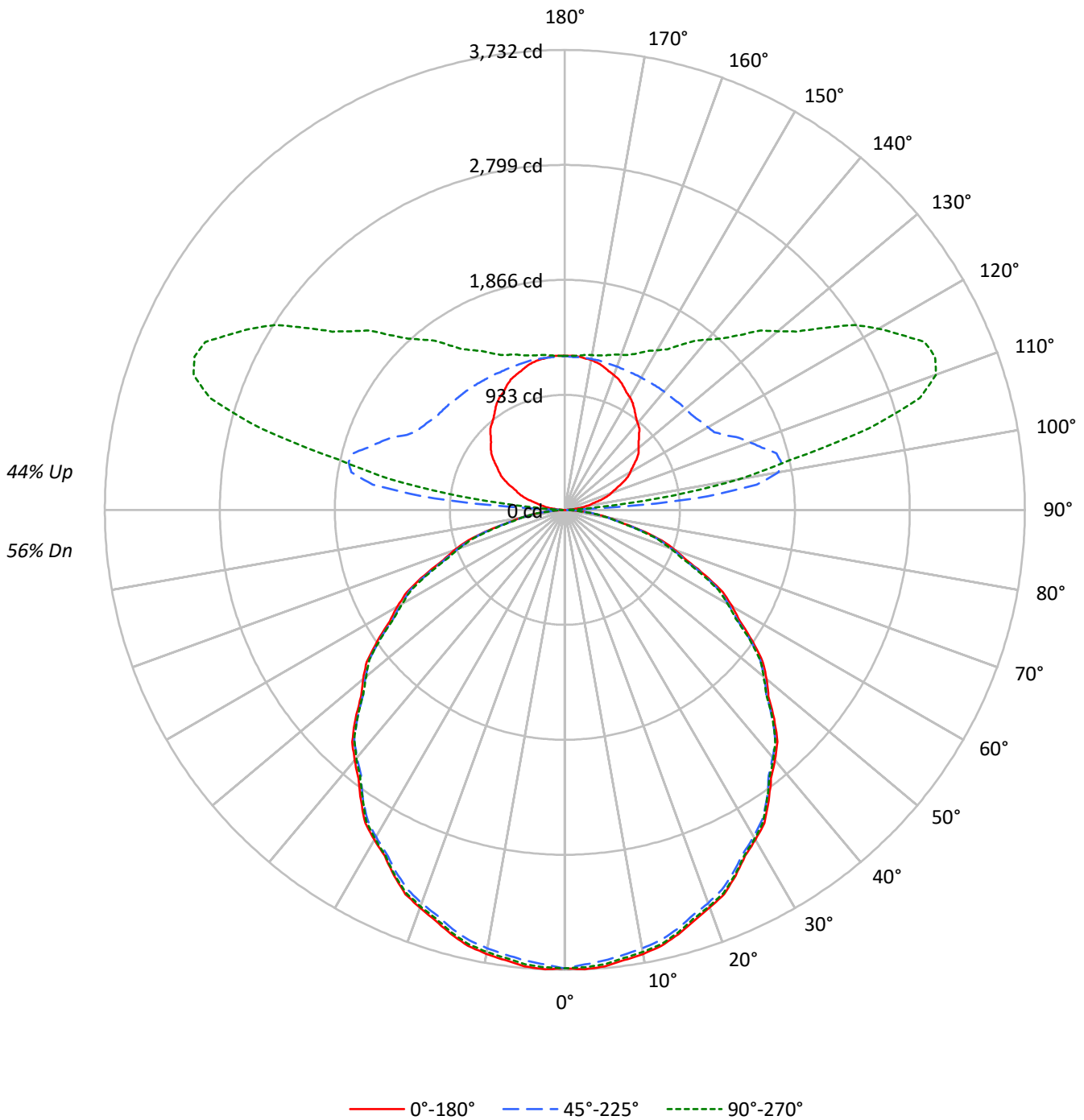
Lumens per Lamp: N/A  
Luminaire Lumens: 18265.8 lumens  
Efficiency: N/A  
Efficacy: 131.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 138.6  
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				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	56		
1	99	95	91	87	92	88	85	82	76	73	71	65	63	61	54	53	52	47		
2	90	83	76	71	83	77	71	67	66	62	59	57	54	51	48	45	43	39		
3	82	73	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33		
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28		
5	69	57	49	43	64	53	46	40	46	41	36	40	35	32	34	30	28	24		
6	63	51	43	37	59	48	41	35	42	36	31	36	31	28	31	27	24	21		
7	59	46	38	32	54	43	36	31	38	32	28	33	28	25	28	24	21	19		
8	54	42	34	29	50	39	32	27	34	29	25	30	25	22	26	22	19	17		
9	51	38	31	26	47	36	29	24	32	26	22	27	23	20	24	20	17	15		
10	47	35	28	23	44	33	26	22	29	24	20	25	21	18	22	18	16	14		

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

	0°	45°	90°
0°	17162	17162	17162
5°	17217	17000	17142
10°	17139	16928	17062
15°	17023	16819	16956
20°	16866	16675	16806
25°	16674	16497	16633
30°	16468	16326	16414
35°	16234	16096	16107
40°	15967	15794	15844
45°	15668	15494	15521
50°	15326	15149	15106
55°	14936	14721	14689
60°	14451	14130	14054
65°	13699	13410	13231
70°	12758	12428	12260
75°	11350	11093	10765
80°	9245	8974	8921
85°	5526	6288	6288



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	351.0	1.9
10°-20°	999.7	5.5
20°-30°	1501.9	8.2
30°-40°	1792.1	9.8
40°-50°	1836.9	10.1
50°-60°	1637.3	9.0
60°-70°	1218.9	6.7
70°-80°	660.3	3.6
80°-90°	154.2	0.8
90°-100°	584.8	3.2
100°-110°	1614.4	8.8
110°-120°	1664.9	9.1
120°-130°	1337.9	7.3
130°-140°	1051.5	5.8
140°-150°	806.4	4.4
150°-160°	579.6	3.2
160°-170°	354.4	1.9
170°-180°	119.5	0.7
0°-30°	2852.6	15.6
0°-40°	4644.7	25.4
0°-60°	8119.0	44.4
0°-90°	10152.4	55.6
90°-120°	3864.1	21.2
90°-150°	7059.9	38.7
90°-180°	8113.0	44.4
0°-180°	18265.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3720	3720	3720	3720	3720	
5°	3718	3712	3671	3704	3702	353
15°	3564	3556	3522	3552	3550	1005
25°	3276	3270	3241	3260	3268	1509
35°	2883	2881	2858	2858	2860	1803
45°	2402	2396	2375	2371	2379	1851
55°	1857	1851	1830	1816	1826	1659
65°	1255	1247	1228	1220	1212	1243
75°	637	637	622	610	604	676
85°	104	118	119	121	119	144
90°	4	8	16	18	20	9
95°	86	316	1061	436	284	92
105°	288	444	1776	2712	2553	306
115°	516	623	1430	2832	3221	507
125°	707	805	1297	2194	2575	629
135°	851	943	1261	1777	2004	659
145°	987	1055	1245	1513	1628	618
155°	1113	1150	1235	1358	1400	513
165°	1205	1220	1241	1289	1299	340
175°	1249	1251	1243	1261	1257	119
180°	1249	1249	1249	1249	1249	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3720.2	3720.2	3720.2	3720.2	3720.2
2.5°	3731.7	3725.3	3692.3	3720.1	3715.3
5°	3718.1	3712.1	3671.1	3703.8	3701.8
7.5°	3686.6	3679.0	3641.6	3672.2	3668.6
10°	3658.8	3652.7	3613.7	3644.4	3642.4
12.5°	3624.3	3618.4	3579.3	3610.0	3609.6
15°	3564.5	3556.5	3521.6	3552.3	3550.3
17.5°	3492.9	3483.7	3449.1	3473.3	3477.4
20°	3435.6	3429.5	3396.7	3419.3	3423.3
22.5°	3376.6	3369.0	3334.5	3360.3	3364.4
25°	3275.9	3269.9	3241.1	3259.7	3267.7
27.5°	3165.3	3165.3	3138.7	3151.9	3156.7
30°	3091.6	3091.6	3065.0	3073.4	3081.4
32.5°	3013.0	3006.6	2981.5	2988.2	2996.2
35°	2882.7	2880.8	2858.2	2858.2	2860.2
37.5°	2748.1	2742.5	2717.7	2719.6	2729.2
40°	2651.5	2647.4	2622.8	2623.0	2631.0
42.5°	2553.2	2549.1	2527.7	2524.6	2527.7
45°	2401.6	2395.7	2375.0	2371.1	2379.1
47.5°	2240.3	2241.9	2217.4	2211.7	2216.2
50°	2135.5	2135.5	2110.9	2098.8	2104.8
52.5°	2025.7	2022.6	1997.8	1984.3	1998.3
55°	1857.1	1851.0	1830.4	1816.3	1826.4
57.5°	1684.3	1675.0	1654.4	1638.9	1644.5
60°	1566.3	1552.3	1531.5	1519.3	1523.3
62.5°	1443.5	1435.9	1413.6	1394.9	1403.7
65°	1255.0	1247.0	1228.5	1220.1	1212.1
67.5°	1070.4	1065.2	1044.2	1035.5	1030.2
70°	945.9	935.9	921.4	911.1	909.0
72.5°	824.7	813.0	798.4	789.7	784.6
75°	636.8	636.8	622.4	610.0	604.0
77.5°	457.8	459.4	447.6	443.4	440.6
80°	348.0	348.0	337.8	333.8	335.8
82.5°	243.2	248.0	244.5	238.7	235.8
85°	104.4	118.5	118.8	120.7	118.8
87.5°	18.9	30.8	34.4	31.4	28.7
90°	4.0	7.9	16.0	18.0	20.0
92.5°	36.0	149.3	266.9	97.4	75.9
95°	85.9	316.5	1060.9	436.0	283.7
97.5°	142.2	354.4	1571.6	1209.9	876.2
100°	183.8	377.2	1760.2	1772.6	1440.5
102.5°	223.8	403.1	1796.9	2190.1	1875.3
105°	287.7	444.0	1776.1	2711.6	2553.4
107.5°	355.6	494.7	1677.0	2963.0	3020.9
110°	403.6	528.6	1600.4	3017.1	3204.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	446.7	567.1	1528.4	2974.4	3251.1
115°	515.5	622.9	1430.5	2831.9	3220.7
117.5°	575.4	682.5	1366.2	2631.3	3073.6
120°	615.4	720.8	1340.6	2495.6	2940.9
122.5°	653.7	754.6	1319.8	2368.8	2790.7
125°	707.3	804.9	1296.7	2194.4	2575.3
127.5°	752.8	850.5	1283.1	2047.0	2375.5
130°	783.2	880.9	1276.7	1956.8	2255.7
132.5°	812.0	904.9	1270.3	1881.0	2151.7
135°	851.1	942.9	1260.7	1777.3	2004.0
137.5°	895.0	978.7	1255.9	1690.3	1883.7
140°	919.1	1001.1	1252.7	1632.2	1802.2
142.5°	946.2	1022.1	1249.5	1580.6	1730.2
145°	986.9	1055.4	1244.7	1513.1	1628.4
147.5°	1026.1	1086.0	1240.3	1456.1	1545.6
150°	1054.9	1103.8	1238.7	1422.2	1494.4
152.5°	1077.3	1123.0	1237.1	1393.1	1452.9
155°	1112.9	1150.0	1234.7	1357.6	1400.5
157.5°	1145.6	1174.1	1235.1	1331.7	1361.0
160°	1164.8	1190.2	1236.7	1317.1	1338.6
162.5°	1180.7	1203.1	1238.3	1304.2	1321.0
165°	1204.8	1220.4	1240.7	1288.9	1298.6
167.5°	1223.2	1232.5	1242.8	1279.6	1282.7
170°	1232.8	1240.6	1242.8	1274.7	1274.7
172.5°	1240.7	1245.4	1242.8	1268.3	1266.7
175°	1248.7	1250.7	1242.8	1260.6	1256.7
177.5°	1252.0	1250.4	1242.4	1253.4	1250.3
180°	1248.7	1248.7	1248.7	1248.7	1248.7

(END OF REPORT)