

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: P520343

Luminaire Tested: **SQ4-F-125U-125D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P520343  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-125D-835-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

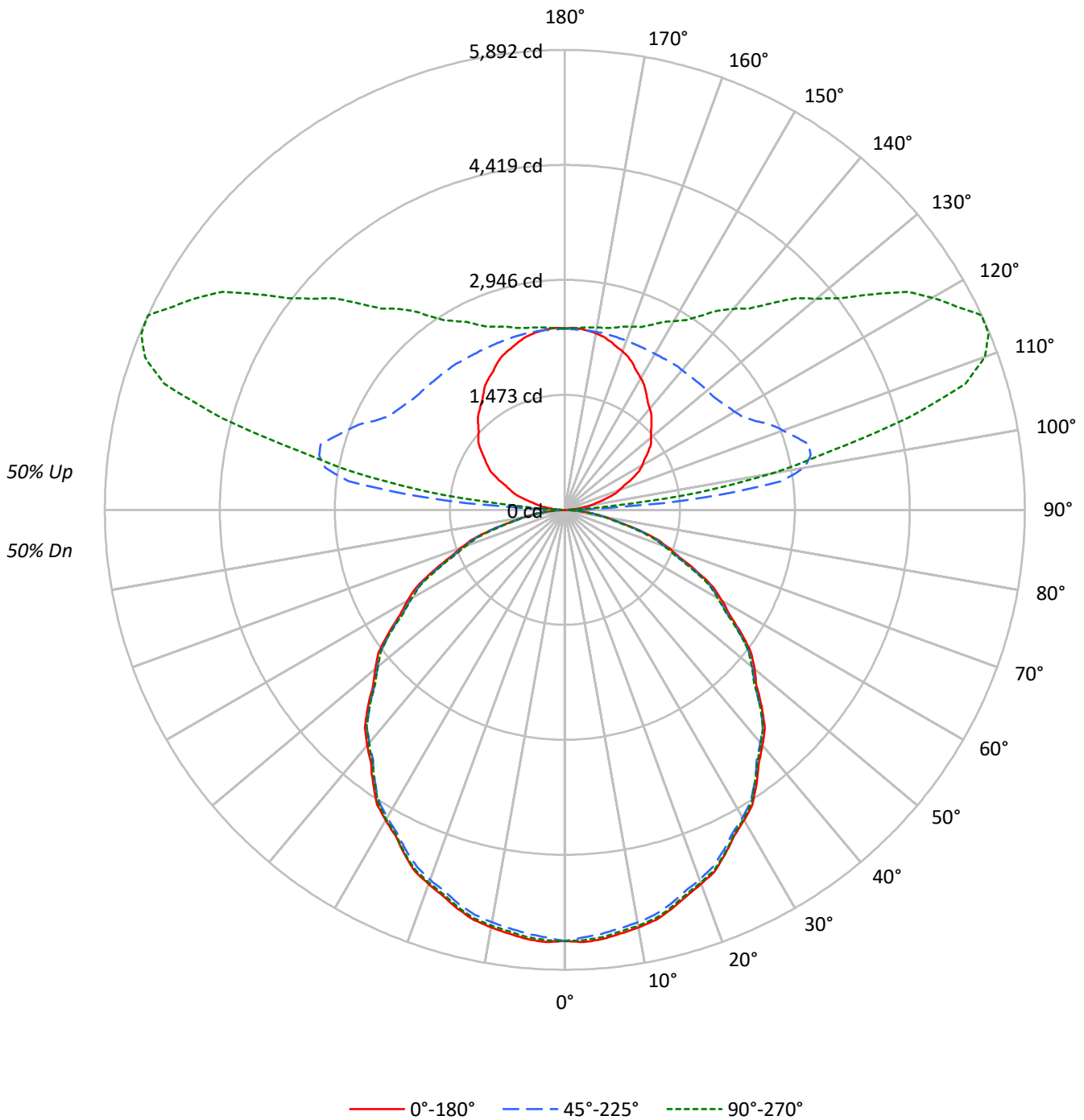
Lumens per Lamp: N/A  
Luminaire Lumens: 30076.4 lumens  
Efficiency: N/A  
Efficacy: 126.8 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 237.2  
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	90	86	90	86	83	80	73	71	68	61	59	58	50	49	47	42
2	89	82	75	70	82	75	70	66	64	60	57	53	51	48	44	42	40	35
3	81	72	64	58	75	66	60	55	56	51	47	47	44	41	39	36	34	30
4	74	63	55	49	68	59	52	46	50	45	40	42	38	35	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	38	33	30	31	28	25	22
6	63	50	42	36	58	47	40	34	40	34	30	34	30	26	28	25	22	19
7	58	46	38	32	53	42	35	30	36	31	27	31	26	23	26	22	20	17
8	54	41	33	28	49	38	31	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	28	24	30	25	21	26	22	18	22	18	16	14
10	47	35	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

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

	0°	45°	90°
0°	16991	16991	16991
5°	17046	16830	16971
10°	16968	16759	16892
15°	16854	16651	16786
20°	16698	16509	16638
25°	16508	16333	16467
30°	16304	16164	16250
35°	16073	15936	15947
40°	15808	15637	15686
45°	15512	15340	15366
50°	15173	14998	14955
55°	14787	14575	14542
60°	14307	13989	13914
65°	13564	13275	13099
70°	12631	12303	12139
75°	11236	10983	10659
80°	9155	8885	8832
85°	5473	6224	6224



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	521.3	1.7
10°-20°	1484.6	4.9
20°-30°	2230.4	7.4
30°-40°	2661.4	8.8
40°-50°	2728.0	9.1
50°-60°	2431.5	8.1
60°-70°	1810.1	6.0
70°-80°	980.6	3.3
80°-90°	230.6	0.8
90°-100°	1086.8	3.6
100°-110°	2927.6	9.7
110°-120°	3072.5	10.2
120°-130°	2493.2	8.3
130°-140°	1955.3	6.5
140°-150°	1501.2	5.0
150°-160°	1079.4	3.6
160°-170°	659.4	2.2
170°-180°	222.4	0.7
0°-30°	4236.3	14.1
0°-40°	6897.7	22.9
0°-60°	12057.2	40.1
0°-90°	15078.4	50.1
90°-120°	7086.9	23.6
90°-150°	13036.7	43.3
90°-180°	14998.0	49.9
0°-180°	30076.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5525	5525	5525	5525	5525	
5°	5522	5513	5452	5500	5497	524
15°	5294	5282	5230	5275	5272	1492
25°	4865	4856	4813	4841	4853	2240
35°	4281	4278	4245	4245	4248	2677
45°	3567	3558	3527	3521	3533	2748
55°	2758	2749	2718	2697	2712	2463
65°	1864	1852	1824	1812	1800	1846
75°	946	946	924	906	897	1004
85°	155	176	176	179	176	214
90°	6	18	36	38	38	15
95°	166	591	1782	911	630	173
105°	542	843	3238	4844	4546	569
115°	956	1170	2696	5210	5892	941
125°	1305	1499	2421	4092	4815	1165
135°	1572	1754	2353	3301	3738	1213
145°	1817	1959	2323	2822	3031	1140
155°	2063	2138	2302	2532	2613	950
165°	2237	2263	2311	2403	2415	631
175°	2326	2323	2314	2347	2341	221
180°	2323	2323	2323	2323	2323	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5524.7	5524.7	5524.7	5524.7	5524.7
2.5°	5541.7	5532.2	5483.3	5524.5	5517.4
5°	5521.6	5512.7	5451.7	5500.3	5497.3
7.5°	5474.8	5463.5	5407.9	5453.4	5448.1
10°	5433.5	5424.5	5366.6	5412.1	5409.1
12.5°	5382.4	5373.5	5315.5	5361.1	5360.5
15°	5293.6	5281.7	5229.8	5275.3	5272.3
17.5°	5187.2	5173.5	5122.1	5158.1	5164.1
20°	5102.0	5093.1	5044.3	5077.8	5083.8
22.5°	5014.5	5003.1	4951.8	4990.3	4996.2
25°	4864.9	4856.0	4813.2	4840.9	4852.7
27.5°	4700.7	4700.7	4661.2	4680.8	4687.9
30°	4591.2	4591.2	4551.7	4564.2	4576.0
32.5°	4474.5	4465.0	4427.7	4437.7	4449.5
35°	4281.1	4278.2	4244.6	4244.7	4247.7
37.5°	4081.0	4072.7	4036.0	4038.8	4053.1
40°	3937.5	3931.5	3894.9	3895.3	3907.1
42.5°	3791.6	3785.6	3753.9	3749.1	3753.9
45°	3566.6	3557.6	3527.0	3521.3	3533.1
47.5°	3327.0	3329.3	3292.9	3284.5	3291.1
50°	3171.3	3171.3	3134.8	3116.8	3125.7
52.5°	3008.3	3003.6	2967.0	2946.8	2967.6
55°	2757.8	2748.9	2718.3	2697.3	2712.2
57.5°	2501.2	2487.5	2456.8	2433.9	2442.2
60°	2326.0	2305.2	2274.3	2256.2	2262.2
62.5°	2143.6	2132.3	2099.2	2071.5	2084.6
65°	1863.9	1852.0	1824.3	1811.9	1800.0
67.5°	1589.6	1581.9	1550.7	1537.7	1530.0
70°	1404.7	1389.8	1368.2	1352.9	1350.0
72.5°	1224.7	1207.5	1185.8	1172.8	1165.1
75°	945.6	945.6	924.3	905.9	897.0
77.5°	679.9	682.2	664.7	658.5	654.3
80°	516.9	516.9	501.7	495.7	498.7
82.5°	361.2	368.3	363.0	354.4	350.3
85°	155.1	175.8	176.4	179.3	176.4
87.5°	28.0	47.0	53.5	49.2	44.4
90°	5.9	17.5	35.5	38.5	38.5
92.5°	72.2	255.1	504.3	242.7	168.7
95°	165.8	591.1	1781.6	911.0	630.4
97.5°	264.5	676.7	2794.4	2334.5	1760.3
100°	340.3	710.7	3116.4	3260.6	2705.1
102.5°	413.7	758.7	3223.0	3954.3	3498.2
105°	541.6	842.6	3237.7	4844.0	4545.9
107.5°	662.4	930.9	3099.9	5301.1	5378.1
110°	742.9	997.5	2974.4	5443.1	5723.7

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	828.1	1064.2	2853.6	5411.6	5872.9
115°	955.9	1170.0	2696.2	5209.6	5892.5
117.5°	1072.6	1273.4	2574.2	4886.9	5647.5
120°	1148.3	1342.2	2512.7	4655.4	5436.7
122.5°	1214.6	1406.2	2467.7	4418.6	5197.6
125°	1305.1	1499.0	2420.9	4091.7	4815.2
127.5°	1392.2	1583.2	2391.3	3803.5	4449.4
130°	1444.3	1635.3	2379.5	3638.3	4205.6
132.5°	1496.4	1685.0	2367.6	3492.9	4013.8
135°	1571.5	1753.8	2352.8	3301.0	3737.9
137.5°	1643.2	1817.9	2345.1	3138.2	3497.0
140°	1692.9	1860.7	2338.0	3038.0	3362.0
142.5°	1744.9	1901.2	2333.3	2944.5	3217.7
145°	1817.1	1958.9	2323.2	2822.2	3030.6
147.5°	1895.3	2018.6	2313.2	2719.4	2883.2
150°	1947.4	2054.4	2308.4	2654.9	2790.8
152.5°	1994.7	2087.9	2306.1	2602.2	2712.8
155°	2062.8	2138.0	2302.5	2532.3	2613.3
157.5°	2122.6	2181.0	2303.1	2483.2	2537.5
160°	2160.5	2209.7	2305.5	2454.4	2494.9
162.5°	2193.7	2233.5	2307.8	2430.5	2459.4
165°	2237.4	2263.4	2311.4	2403.4	2415.0
167.5°	2272.9	2288.0	2314.3	2382.5	2387.2
170°	2296.6	2302.4	2314.3	2370.6	2370.6
172.5°	2310.8	2312.0	2316.7	2358.7	2358.7
175°	2326.2	2323.3	2314.3	2346.8	2341.0
177.5°	2332.7	2328.1	2316.1	2335.0	2330.3
180°	2323.2	2323.2	2323.2	2323.2	2323.2

(END OF REPORT)