

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: P520423

Luminaire Tested: **SQ4-F-150U-100D-930-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520423
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-100D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

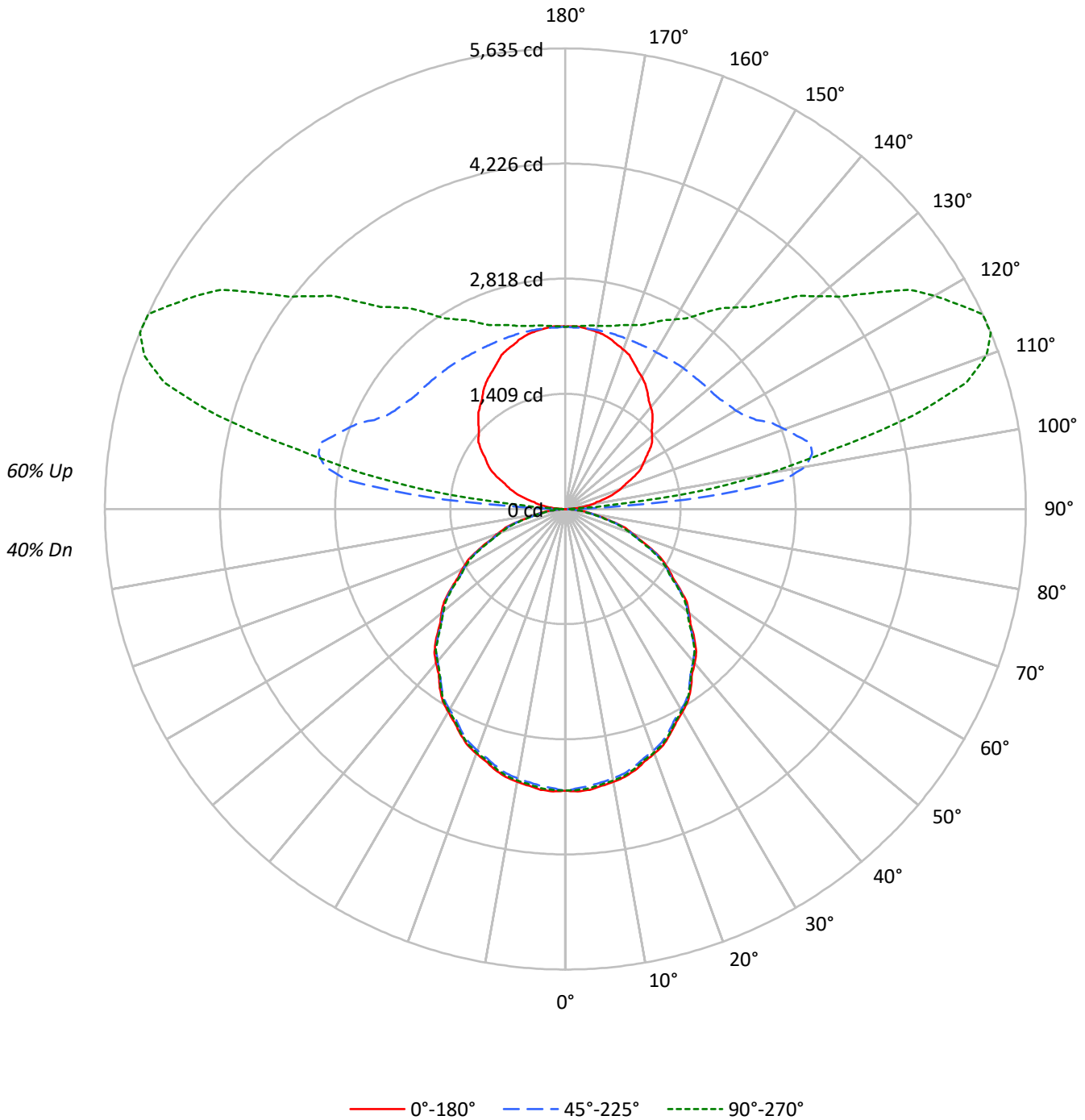
Lumens per Lamp: N/A
Luminaire Lumens: 23785.1 lumens
Efficiency: N/A
Efficacy: 104.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 228.3
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	105	105	105	105	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10599	10599	10599
5°	10647	10501	10581
10°	10592	10460	10541
15°	10528	10385	10468
20°	10420	10296	10381
25°	10306	10185	10266
30°	10180	10071	10122
35°	10053	9928	9982
40°	9885	9772	9781
45°	9711	9578	9547
50°	9461	9348	9325
55°	9182	9081	9017
60°	8904	8743	8715
65°	8468	8280	8210
70°	7870	7678	7529
75°	7026	6802	6661
80°	5781	5572	5320
85°	3423	3754	3839



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	325.3	1.4
10°-20°	926.3	3.9
20°-30°	1391.0	5.8
30°-40°	1660.1	7.0
40°-50°	1701.6	7.2
50°-60°	1515.2	6.4
60°-70°	1129.5	4.7
70°-80°	611.5	2.6
80°-90°	143.8	0.6
90°-100°	1036.6	4.4
100°-110°	2802.7	11.8
110°-120°	2946.7	12.4
120°-130°	2393.5	10.1
130°-140°	1877.5	7.9
140°-150°	1441.0	6.1
150°-160°	1036.3	4.4
160°-170°	633.1	2.7
170°-180°	213.4	0.9
0°-30°	2642.6	11.1
0°-40°	4302.6	18.1
0°-60°	7519.4	31.6
0°-90°	9404.3	39.5
90°-120°	6786.0	28.5
90°-150°	12497.9	52.5
90°-180°	14381.0	60.5
0°-180°	23785.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3446	3446	3446	3446	3446	
5°	3449	3442	3401	3432	3427	327
15°	3307	3295	3262	3288	3288	932
25°	3037	3030	3002	3018	3025	1399
35°	2678	2666	2644	2650	2659	1671
45°	2233	2221	2202	2190	2195	1718
55°	1712	1715	1694	1677	1682	1533
65°	1164	1159	1138	1126	1128	1151
75°	591	584	572	561	561	630
85°	97	106	106	109	109	136
90°	5	14	31	34	31	13
95°	161	565	1724	892	531	168
105°	521	805	3109	4586	4399	549
115°	917	1121	2579	4992	5635	906
125°	1256	1439	2324	3922	4607	1119
135°	1505	1684	2262	3167	3585	1163
145°	1750	1882	2230	2710	2917	1095
155°	1976	2053	2211	2432	2511	911
165°	2151	2172	2221	2308	2319	606
175°	2233	2231	2223	2252	2247	212
180°	2230	2230	2230	2230	2230	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3446.3	3446.3	3446.3	3446.3	3446.3
2.5°	3459.6	3452.1	3421.7	3446.3	3442.5
5°	3448.7	3441.7	3401.4	3432.0	3427.4
7.5°	3416.6	3409.6	3373.9	3402.2	3398.0
10°	3391.9	3384.9	3349.4	3377.7	3375.3
12.5°	3359.8	3352.8	3317.2	3345.5	3343.2
15°	3306.8	3295.2	3261.8	3287.8	3287.8
17.5°	3236.7	3228.0	3197.0	3218.8	3219.3
20°	3183.8	3176.9	3146.0	3169.6	3171.9
22.5°	3130.8	3123.9	3089.2	3111.0	3115.1
25°	3037.1	3030.1	3001.6	3018.3	3025.3
27.5°	2940.6	2930.5	2902.3	2917.1	2922.1
30°	2866.8	2862.2	2836.0	2843.4	2850.3
32.5°	2789.3	2784.6	2762.2	2765.9	2778.4
35°	2677.6	2666.0	2644.5	2649.5	2658.7
37.5°	2545.6	2540.1	2519.1	2516.5	2525.2
40°	2462.3	2453.1	2434.0	2429.4	2436.3
42.5°	2371.5	2362.2	2339.3	2334.8	2343.6
45°	2232.9	2221.3	2202.1	2190.4	2195.1
47.5°	2077.8	2077.8	2057.8	2044.3	2051.2
50°	1977.5	1977.5	1953.8	1942.1	1949.0
52.5°	1873.3	1875.2	1849.7	1843.5	1841.1
55°	1712.5	1714.8	1693.6	1677.2	1681.7
57.5°	1557.4	1552.2	1527.6	1516.8	1519.0
60°	1447.6	1440.7	1421.5	1405.3	1416.9
62.5°	1335.9	1332.8	1313.7	1295.2	1293.8
65°	1163.7	1159.2	1137.8	1126.0	1128.2
67.5°	992.5	987.0	967.4	950.5	956.5
70°	875.2	875.2	853.9	844.3	837.3
72.5°	767.3	758.1	742.2	728.8	723.8
75°	591.3	584.4	572.4	560.6	560.6
77.5°	430.5	424.5	416.7	408.7	406.3
80°	326.4	324.1	314.6	312.0	300.4
82.5°	229.9	229.5	223.7	217.6	217.2
85°	97.0	106.2	106.4	108.8	108.8
87.5°	17.9	30.9	32.6	29.3	28.8
90°	4.8	14.2	31.2	33.6	31.2
92.5°	68.2	248.5	490.3	212.9	154.1
95°	160.9	564.7	1723.9	892.1	530.7
97.5°	258.3	647.6	2687.2	2223.8	1633.1
100°	331.4	681.2	2986.8	3114.9	2518.6
102.5°	398.6	727.7	3092.4	3790.6	3344.5
105°	521.0	805.1	3109.2	4586.4	4398.6
107.5°	634.4	893.5	2973.3	5082.8	5145.2
110°	722.7	957.4	2852.4	5216.1	5481.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	801.5	1021.2	2740.9	5189.5	5635.0
115°	917.2	1121.4	2578.6	4991.8	5635.0
117.5°	1030.5	1222.1	2471.5	4689.8	5418.9
120°	1099.6	1287.5	2408.1	4473.1	5217.2
122.5°	1164.9	1349.0	2369.7	4240.8	4990.6
125°	1255.7	1438.8	2324.1	3921.9	4607.4
127.5°	1339.3	1519.0	2297.3	3661.7	4264.6
130°	1385.3	1570.8	2285.7	3500.9	4045.6
132.5°	1433.3	1616.9	2274.2	3356.0	3857.4
135°	1505.4	1683.8	2261.7	3166.7	3584.6
137.5°	1577.9	1746.5	2251.1	3013.2	3353.7
140°	1627.9	1785.1	2247.3	2914.4	3217.2
142.5°	1675.9	1823.8	2239.6	2825.2	3090.5
145°	1750.3	1881.8	2230.5	2710.5	2917.2
147.5°	1818.0	1934.4	2219.9	2606.7	2765.5
150°	1867.9	1971.2	2216.1	2550.3	2677.0
152.5°	1914.1	2004.2	2214.2	2498.0	2602.2
155°	1976.0	2053.4	2211.3	2431.6	2511.4
157.5°	2040.3	2094.4	2211.8	2385.3	2437.9
160°	2076.9	2121.4	2213.7	2356.2	2393.7
162.5°	2105.6	2142.8	2215.6	2332.9	2361.0
165°	2151.3	2172.4	2220.9	2307.6	2319.3
167.5°	2182.5	2197.0	2221.3	2285.8	2291.4
170°	2201.7	2208.7	2223.3	2276.1	2276.1
172.5°	2217.0	2218.4	2223.3	2264.6	2262.7
175°	2232.9	2230.6	2223.3	2252.0	2247.3
177.5°	2238.2	2232.5	2222.8	2241.8	2236.2
180°	2230.5	2230.5	2230.5	2230.5	2230.5

(END OF REPORT)