

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: P520427

Luminaire Tested: **SQ4-F-150U-100D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520427
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-935-1D-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

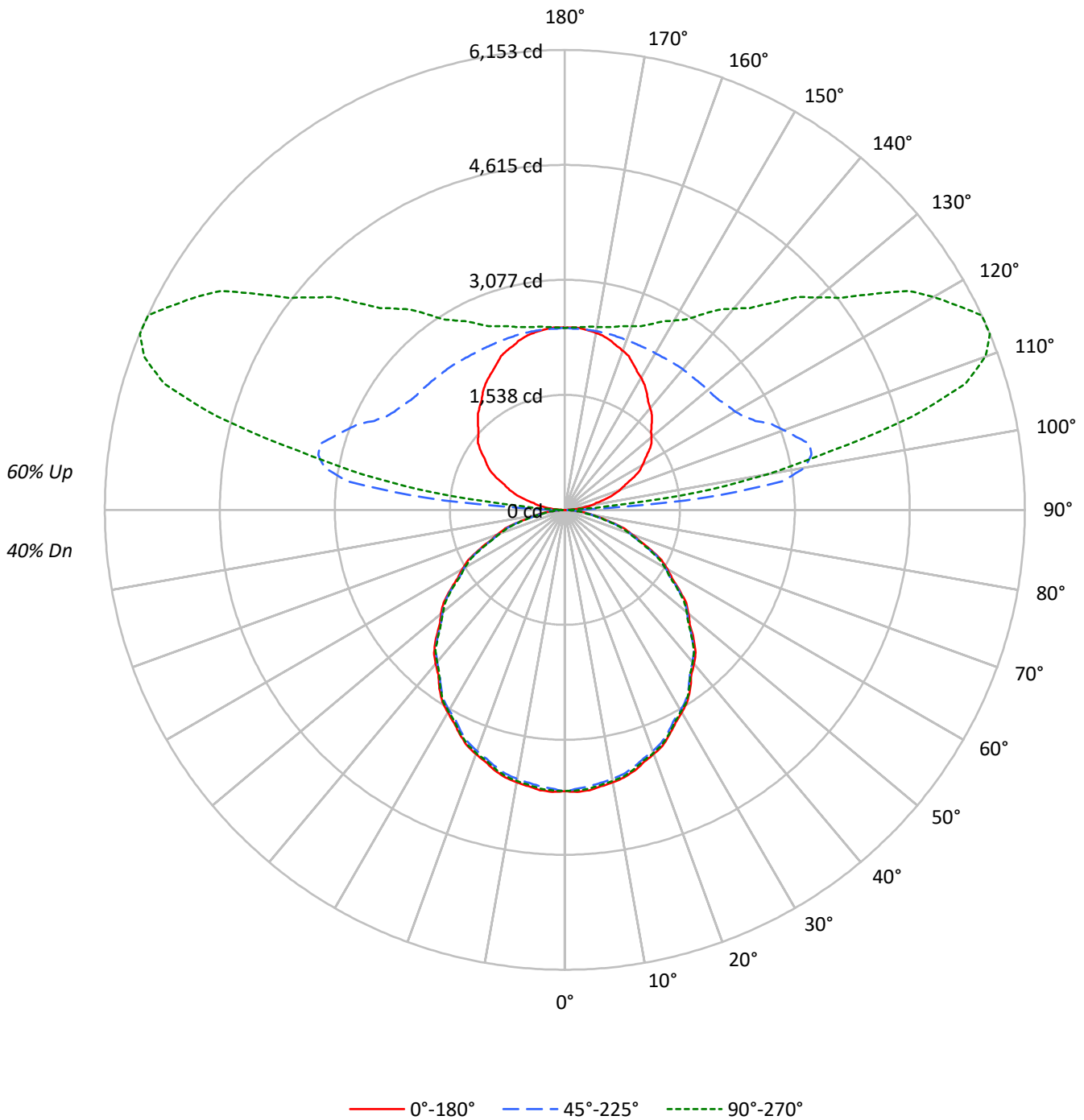
Lumens per Lamp: N/A
Luminaire Lumens: 25971.1 lumens
Efficiency: N/A
Efficacy: 113.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	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	1.4
10°-20°	1011.4	3.9
20°-30°	1518.9	5.8
30°-40°	1812.6	7.0
40°-50°	1857.9	7.2
50°-60°	1654.5	6.4
60°-70°	1233.3	4.7
70°-80°	667.7	2.6
80°-90°	157.0	0.6
90°-100°	1131.9	4.4
100°-110°	3060.3	11.8
110°-120°	3217.5	12.4
120°-130°	2613.5	10.1
130°-140°	2050.0	7.9
140°-150°	1573.4	6.1
150°-160°	1131.6	4.4
160°-170°	691.3	2.7
170°-180°	233.1	0.9
0°-30°	2885.4	11.1
0°-40°	4698.1	18.1
0°-60°	8210.5	31.6
0°-90°	10268.6	39.5
90°-120°	7409.6	28.5
90°-150°	13646.6	52.5
90°-180°	15702.0	60.5
0°-180°	25971.1	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	16	34	37	34	14
95°	176	617	1882	974	579	184
105°	569	879	3395	5008	4803	599
115°	1002	1224	2816	5451	6153	989
125°	1371	1571	2538	4282	5031	1222
135°	1644	1838	2470	3458	3914	1270
145°	1911	2055	2436	2960	3185	1196
155°	2158	2242	2414	2655	2742	995
165°	2349	2372	2425	2520	2532	662
175°	2438	2436	2428	2459	2454	231
180°	2436	2436	2436	2436	2436	

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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	33.8	35.7	32.0	31.5
90°	5.2	15.5	34.1	36.6	34.1
92.5°	74.4	271.3	535.4	232.4	168.3
95°	175.6	616.6	1882.3	974.1	579.3
97.5°	282.1	707.1	2934.2	2428.1	1783.2
100°	361.8	743.7	3261.3	3401.1	2750.1
102.5°	435.2	794.5	3376.7	4138.9	3651.9
105°	568.9	879.0	3395.0	5007.9	4802.8
107.5°	692.6	975.6	3246.6	5549.9	5618.1
110°	789.1	1045.4	3114.5	5695.5	5985.2



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	875.1	1115.0	2992.8	5666.4	6152.9
115°	1001.5	1224.5	2815.7	5450.6	6152.9
117.5°	1125.2	1334.3	2698.7	5120.9	5917.0
120°	1200.7	1405.8	2629.4	4884.2	5696.8
122.5°	1272.0	1473.0	2587.5	4630.6	5449.3
125°	1371.2	1571.0	2537.7	4282.4	5030.9
127.5°	1462.3	1658.7	2508.3	3998.3	4656.5
130°	1512.7	1715.2	2495.8	3822.7	4417.5
132.5°	1565.1	1765.6	2483.2	3664.4	4211.9
135°	1643.8	1838.5	2469.6	3457.8	3914.1
137.5°	1723.0	1906.9	2458.0	3290.2	3661.9
140°	1777.5	1949.2	2453.8	3182.3	3513.0
142.5°	1829.9	1991.3	2445.5	3084.9	3374.6
145°	1911.2	2054.7	2435.5	2959.7	3185.3
147.5°	1985.1	2112.3	2423.9	2846.3	3019.6
150°	2039.6	2152.4	2419.8	2784.7	2923.1
152.5°	2089.9	2188.4	2417.7	2727.5	2841.3
155°	2157.6	2242.1	2414.5	2655.1	2742.2
157.5°	2227.9	2286.8	2415.1	2604.6	2662.0
160°	2267.7	2316.4	2417.2	2572.7	2613.8
162.5°	2299.2	2339.6	2419.2	2547.4	2578.1
165°	2349.0	2372.0	2425.0	2519.7	2532.5
167.5°	2383.1	2399.0	2425.5	2496.0	2502.1
170°	2404.0	2411.8	2427.6	2485.3	2485.3
172.5°	2420.8	2422.3	2427.6	2472.7	2470.6
175°	2438.1	2435.6	2427.6	2458.9	2453.8
177.5°	2443.8	2437.7	2427.1	2448.0	2441.8
180°	2435.5	2435.5	2435.5	2435.5	2435.5

(END OF REPORT)