

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: P520403

Luminaire Tested: **SQ4-F-150U-075D-935-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520403
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-075D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

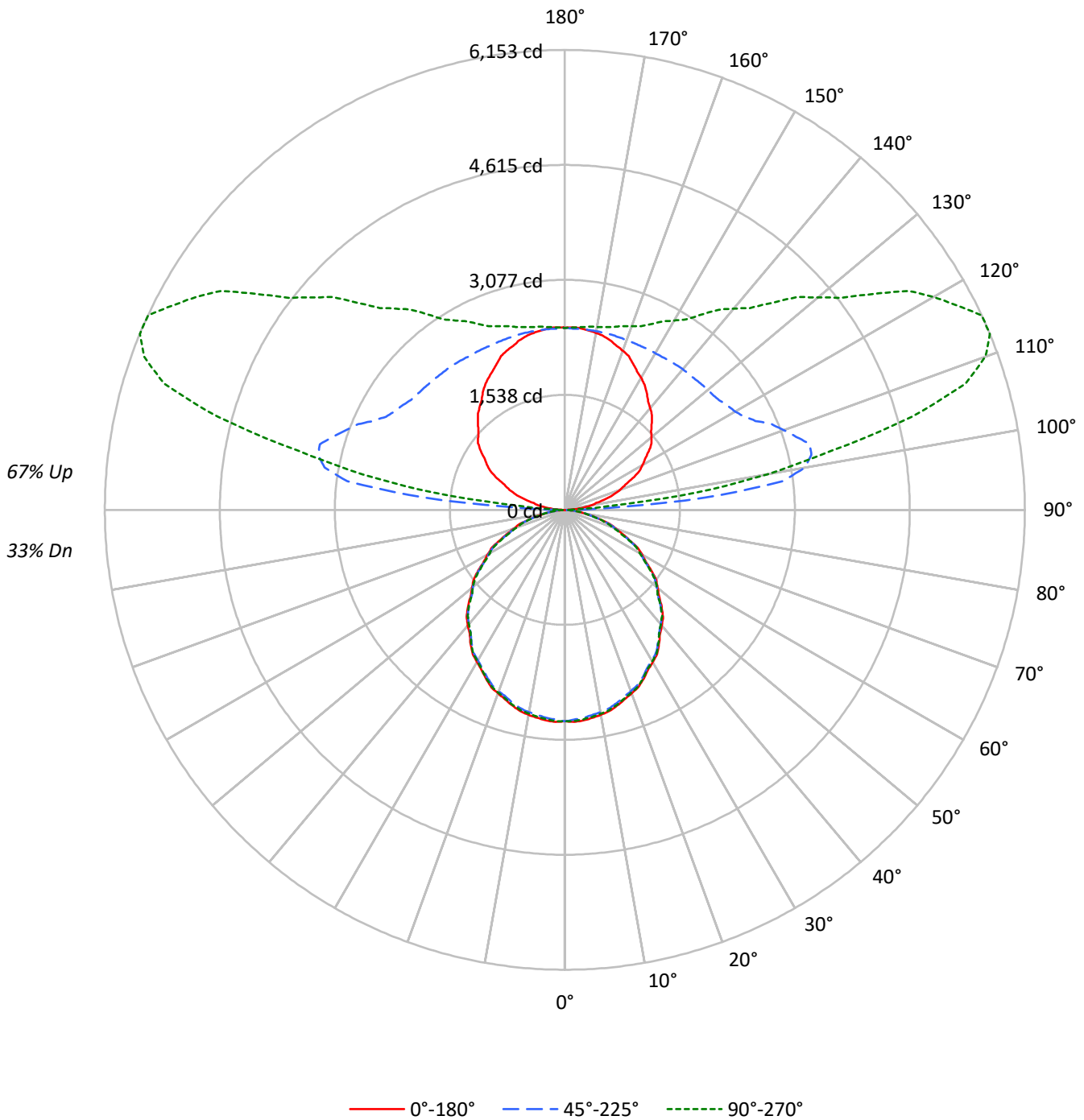
Lumens per Lamp: N/A
Luminaire Lumens: 23431.3 lumens
Efficiency: N/A
Efficacy: 116.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 200.7
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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	85	78	72	67	77	71	66	61	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	20	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	18	16	13
7	55	43	36	30	50	39	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	26	46	36	29	24	29	24	20	23	19	16	17	14	13	10
9	48	36	28	23	43	33	26	22	26	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8702	8702	8702
5°	8735	8624	8687
10°	8700	8588	8651
15°	8633	8526	8600
20°	8555	8454	8521
25°	8461	8373	8434
30°	8353	8262	8308
35°	8243	8157	8195
40°	8105	8022	8012
45°	7966	7865	7887
50°	7744	7683	7683
55°	7564	7468	7399
60°	7321	7195	7131
65°	6926	6795	6701
70°	6505	6343	6182
75°	5852	5638	5517
80°	4679	4589	4543
85°	2805	3165	3257



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.1	1.1
10°-20°	760.3	3.2
20°-30°	1142.3	4.9
30°-40°	1363.0	5.8
40°-50°	1397.8	6.0
50°-60°	1245.5	5.3
60°-70°	928.7	4.0
70°-80°	503.6	2.1
80°-90°	120.7	0.5
90°-100°	1131.9	4.8
100°-110°	3060.3	13.1
110°-120°	3217.5	13.7
120°-130°	2613.5	11.2
130°-140°	2050.0	8.7
140°-150°	1573.4	6.7
150°-160°	1131.6	4.8
160°-170°	691.3	3.0
170°-180°	233.1	1.0
0°-30°	2169.6	9.3
0°-40°	3532.6	15.1
0°-60°	6175.9	26.4
0°-90°	7728.9	33.0
90°-120°	7409.6	31.6
90°-150°	13646.6	58.2
90°-180°	15702.0	67.0
0°-180°	23431.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2829	2829	2829	2829	2829	
5°	2829	2824	2794	2816	2814	268
15°	2711	2706	2678	2699	2701	765
25°	2493	2491	2468	2481	2486	1148
35°	2196	2191	2173	2173	2183	1372
45°	1832	1824	1808	1808	1814	1410
55°	1411	1408	1393	1380	1380	1260
65°	952	952	934	923	921	947
75°	492	482	474	467	464	517
85°	80	84	90	90	92	110
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°	2829.4	2829.4	2829.4	2829.4	2829.4
2.5°	2839.6	2833.6	2808.8	2829.3	2827.3
5°	2829.4	2824.4	2793.5	2816.5	2813.9
7.5°	2806.2	2800.7	2770.3	2793.5	2793.0
10°	2785.8	2778.2	2749.9	2772.9	2770.3
12.5°	2759.0	2751.5	2723.2	2746.2	2743.7
15°	2711.4	2706.4	2678.0	2698.6	2701.1
17.5°	2657.0	2647.4	2622.0	2642.1	2644.7
20°	2613.9	2606.4	2583.1	2601.1	2603.6
22.5°	2568.7	2561.2	2538.0	2556.0	2558.5
25°	2493.3	2490.8	2467.6	2480.6	2485.6
27.5°	2411.7	2404.8	2386.1	2396.0	2401.0
30°	2352.2	2347.2	2326.6	2334.4	2339.4
32.5°	2290.7	2287.6	2269.1	2272.9	2279.9
35°	2195.7	2190.7	2172.7	2172.9	2182.9
37.5°	2090.5	2085.0	2070.1	2067.6	2071.6
40°	2018.8	2011.2	1998.2	1995.7	1995.7
42.5°	1944.9	1939.4	1922.3	1917.8	1923.8
45°	1831.5	1824.0	1808.4	1808.5	1813.5
47.5°	1708.9	1705.9	1687.9	1679.7	1681.7
50°	1618.6	1623.6	1605.8	1595.8	1605.8
52.5°	1540.6	1537.6	1521.7	1511.4	1515.5
55°	1410.8	1408.3	1392.8	1380.0	1380.0
57.5°	1280.6	1274.0	1257.9	1248.4	1255.9
60°	1190.2	1187.8	1169.7	1151.9	1159.4
62.5°	1099.9	1095.5	1077.4	1065.6	1071.2
65°	951.7	951.7	933.7	923.3	920.9
67.5°	821.9	809.8	799.8	787.4	783.9
70°	723.4	713.3	705.4	694.9	687.5
72.5°	626.9	620.9	608.9	598.7	597.1
75°	492.5	482.5	474.5	466.8	464.3
77.5°	350.4	348.4	341.2	337.1	338.6
80°	264.2	264.2	259.1	259.0	256.5
82.5°	186.2	188.3	187.3	183.1	182.6
85°	79.5	84.5	89.7	89.8	92.3
87.5°	15.4	27.5	29.2	29.7	29.2
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)