

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: P520387

Luminaire Tested: **SQ4-F-150U-075D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520387
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-830-1D-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

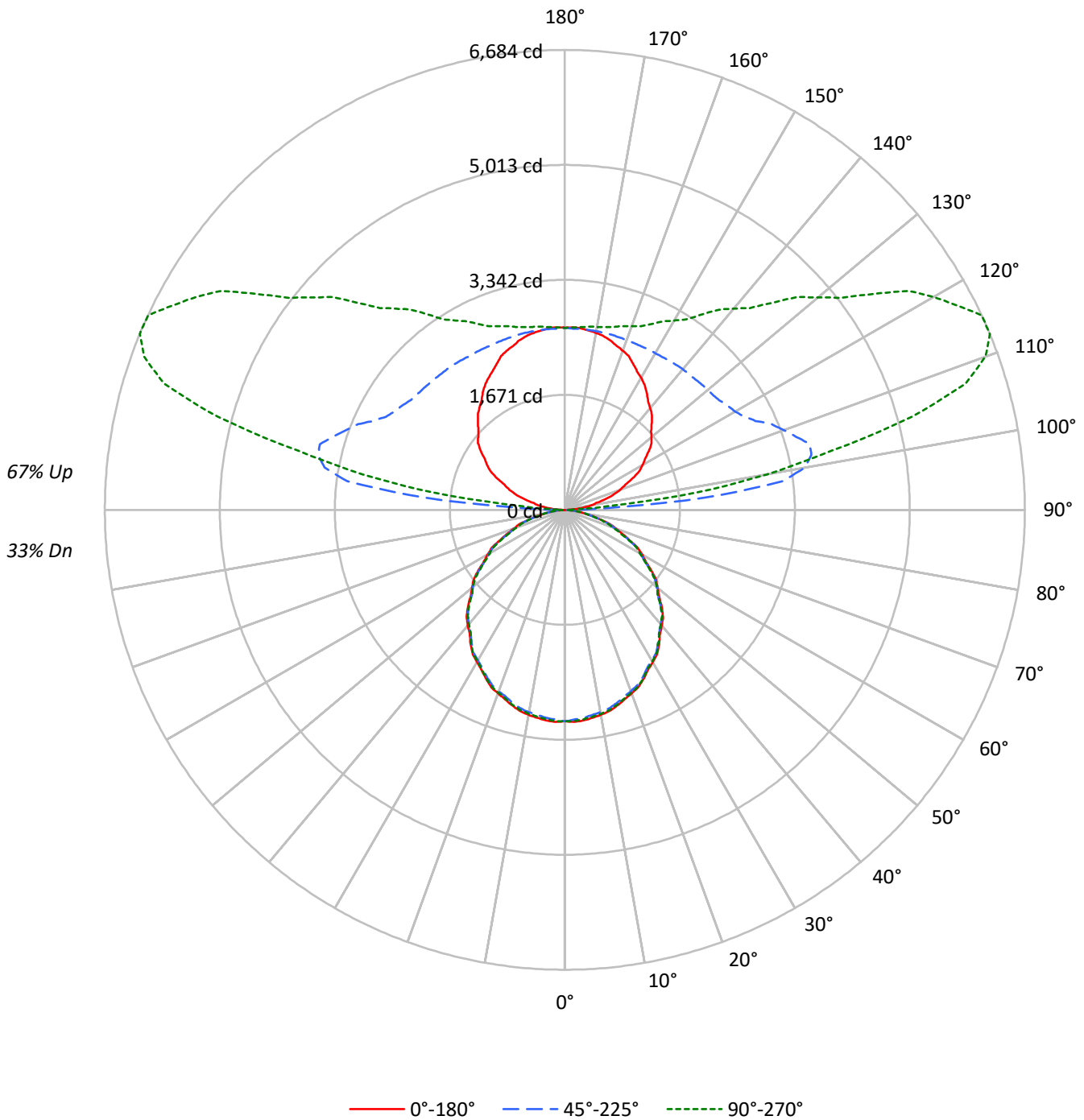
Lumens per Lamp: N/A
Luminaire Lumens: 25453.9 lumens
Efficiency: N/A
Efficacy: 126.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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°	9452	9452	9452
5°	9488	9368	9437
10°	9450	9329	9398
15°	9378	9263	9342
20°	9293	9184	9257
25°	9191	9096	9163
30°	9074	8975	9025
35°	8955	8861	8903
40°	8804	8715	8703
45°	8653	8544	8569
50°	8413	8346	8346
55°	8217	8113	8038
60°	7953	7815	7747
65°	7524	7381	7280
70°	7066	6890	6715
75°	6357	6125	5992
80°	5085	4984	4936
85°	3049	3440	3539



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.1	1.1
10°-20°	825.9	3.2
20°-30°	1240.9	4.9
30°-40°	1480.6	5.8
40°-50°	1518.4	6.0
50°-60°	1353.0	5.3
60°-70°	1008.8	4.0
70°-80°	547.1	2.1
80°-90°	131.2	0.5
90°-100°	1229.6	4.8
100°-110°	3324.5	13.1
110°-120°	3495.2	13.7
120°-130°	2839.1	11.2
130°-140°	2227.0	8.7
140°-150°	1709.2	6.7
150°-160°	1229.3	4.8
160°-170°	750.9	3.0
170°-180°	253.2	1.0
0°-30°	2356.9	9.3
0°-40°	3837.5	15.1
0°-60°	6708.9	26.4
0°-90°	8396.0	33.0
90°-120°	8049.2	31.6
90°-150°	14824.5	58.2
90°-180°	17058.0	67.0
0°-180°	25453.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3074	3074	3074	3074	3074	
5°	3074	3068	3034	3060	3057	292
15°	2945	2940	2909	2932	2934	831
25°	2708	2706	2681	2695	2700	1247
35°	2385	2380	2360	2360	2371	1490
45°	1990	1981	1964	1965	1970	1531
55°	1533	1530	1513	1499	1499	1369
65°	1034	1034	1014	1003	1000	1029
75°	535	524	516	507	504	562
85°	86	92	98	98	100	120
90°	6	17	37	40	37	15
95°	191	670	2045	1058	629	200
105°	618	955	3688	5440	5217	651
115°	1088	1330	3059	5921	6684	1074
125°	1490	1707	2757	4652	5465	1328
135°	1786	1997	2683	3756	4252	1380
145°	2076	2232	2646	3215	3460	1299
155°	2344	2436	2623	2884	2979	1081
165°	2552	2577	2634	2737	2751	719
175°	2649	2646	2637	2671	2666	251
180°	2646	2646	2646	2646	2646	



TEST NUMBER: P520387

CATALOG NUMBER: SQ4-F-150U-075D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3073.5	3073.5	3073.5	3073.5	3073.5
2.5°	3084.7	3078.1	3051.3	3073.5	3071.4
5°	3073.5	3068.1	3034.5	3059.5	3056.9
7.5°	3048.5	3042.5	3009.5	3034.5	3034.0
10°	3026.2	3018.0	2987.2	3012.2	3009.5
12.5°	2997.3	2989.0	2958.2	2983.2	2980.5
15°	2945.4	2939.9	2909.2	2931.5	2934.3
17.5°	2886.3	2875.9	2848.4	2870.2	2873.0
20°	2839.5	2831.3	2806.1	2825.6	2828.4
22.5°	2790.4	2782.2	2757.0	2776.5	2779.3
25°	2708.5	2705.8	2680.7	2694.8	2700.2
27.5°	2619.9	2612.3	2592.0	2602.7	2608.3
30°	2555.3	2549.8	2527.4	2535.9	2541.3
32.5°	2488.4	2485.1	2465.0	2469.0	2476.7
35°	2385.3	2379.9	2360.2	2360.5	2371.4
37.5°	2271.0	2265.0	2248.8	2246.0	2250.4
40°	2193.0	2184.8	2170.7	2167.9	2167.9
42.5°	2112.8	2106.8	2088.3	2083.4	2089.9
45°	1989.6	1981.4	1964.5	1964.7	1970.1
47.5°	1856.4	1853.1	1833.5	1824.6	1826.8
50°	1758.3	1763.7	1744.3	1733.5	1744.3
52.5°	1673.6	1670.3	1653.0	1641.9	1646.3
55°	1532.6	1529.9	1513.1	1499.1	1499.1
57.5°	1391.1	1384.0	1366.6	1356.1	1364.3
60°	1293.0	1290.2	1270.6	1251.3	1259.5
62.5°	1194.8	1189.9	1170.3	1157.6	1163.7
65°	1033.9	1033.9	1014.3	1003.1	1000.4
67.5°	892.8	879.8	868.8	855.3	851.6
70°	785.8	774.9	766.3	755.0	746.8
72.5°	681.1	674.5	661.5	650.4	648.7
75°	535.0	524.1	515.5	507.1	504.3
77.5°	380.6	378.5	370.6	366.2	367.8
80°	287.1	287.1	281.4	281.3	278.7
82.5°	202.3	204.5	203.4	199.0	198.4
85°	86.4	91.8	97.5	97.6	100.3
87.5°	16.7	29.8	31.8	32.3	31.8
90°	5.7	16.8	37.0	39.8	37.0
92.5°	80.9	294.8	581.6	252.4	182.8
95°	190.8	669.8	2044.8	1058.2	629.3
97.5°	306.4	768.2	3187.4	2637.8	1937.1
100°	393.0	807.9	3542.8	3694.8	2987.5
102.5°	472.7	863.1	3668.1	4496.3	3967.1
105°	618.0	955.0	3688.0	5440.2	5217.3
107.5°	752.4	1059.8	3526.9	6029.0	6103.1
110°	857.2	1135.7	3383.3	6187.1	6501.8

TEST NUMBER: P520387

CATALOG NUMBER: SQ4-F-150U-075D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	950.7	1211.3	3251.1	6155.5	6684.1
115°	1087.9	1330.2	3058.7	5921.0	6684.1
117.5°	1222.4	1449.5	2931.6	5562.8	6427.7
120°	1304.4	1527.1	2856.5	5305.8	6188.5
122.5°	1381.8	1600.1	2810.9	5030.2	5919.6
125°	1489.5	1706.7	2756.8	4652.1	5465.1
127.5°	1588.6	1801.8	2724.9	4343.3	5058.5
130°	1643.3	1863.2	2711.2	4152.7	4798.8
132.5°	1700.2	1917.9	2697.6	3980.7	4575.4
135°	1785.6	1997.3	2682.8	3756.3	4251.9
137.5°	1871.6	2071.6	2670.2	3574.2	3978.0
140°	1930.9	2117.5	2665.7	3457.0	3816.2
142.5°	1987.8	2163.3	2656.5	3351.1	3665.8
145°	2076.2	2232.1	2645.7	3215.1	3460.2
147.5°	2156.4	2294.6	2633.2	3092.0	3280.2
150°	2215.7	2338.2	2628.6	3025.1	3175.4
152.5°	2270.3	2377.2	2626.3	2962.9	3086.6
155°	2343.8	2435.7	2622.9	2884.3	2978.9
157.5°	2420.2	2484.2	2623.5	2829.4	2891.8
160°	2463.5	2516.4	2625.8	2794.8	2839.4
162.5°	2497.7	2541.6	2628.0	2767.3	2800.7
165°	2551.7	2576.8	2634.3	2737.2	2751.1
167.5°	2588.7	2606.0	2634.9	2711.3	2718.1
170°	2611.5	2619.9	2637.2	2699.9	2699.9
172.5°	2629.7	2631.5	2637.2	2686.1	2683.9
175°	2648.6	2645.7	2637.2	2671.2	2665.7
177.5°	2654.8	2648.2	2636.6	2659.2	2652.6
180°	2645.7	2645.7	2645.7	2645.7	2645.7

(END OF REPORT)