

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: P520435

Luminaire Tested: **SQ4-F-150U-125D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520435
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, 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-150U-125D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

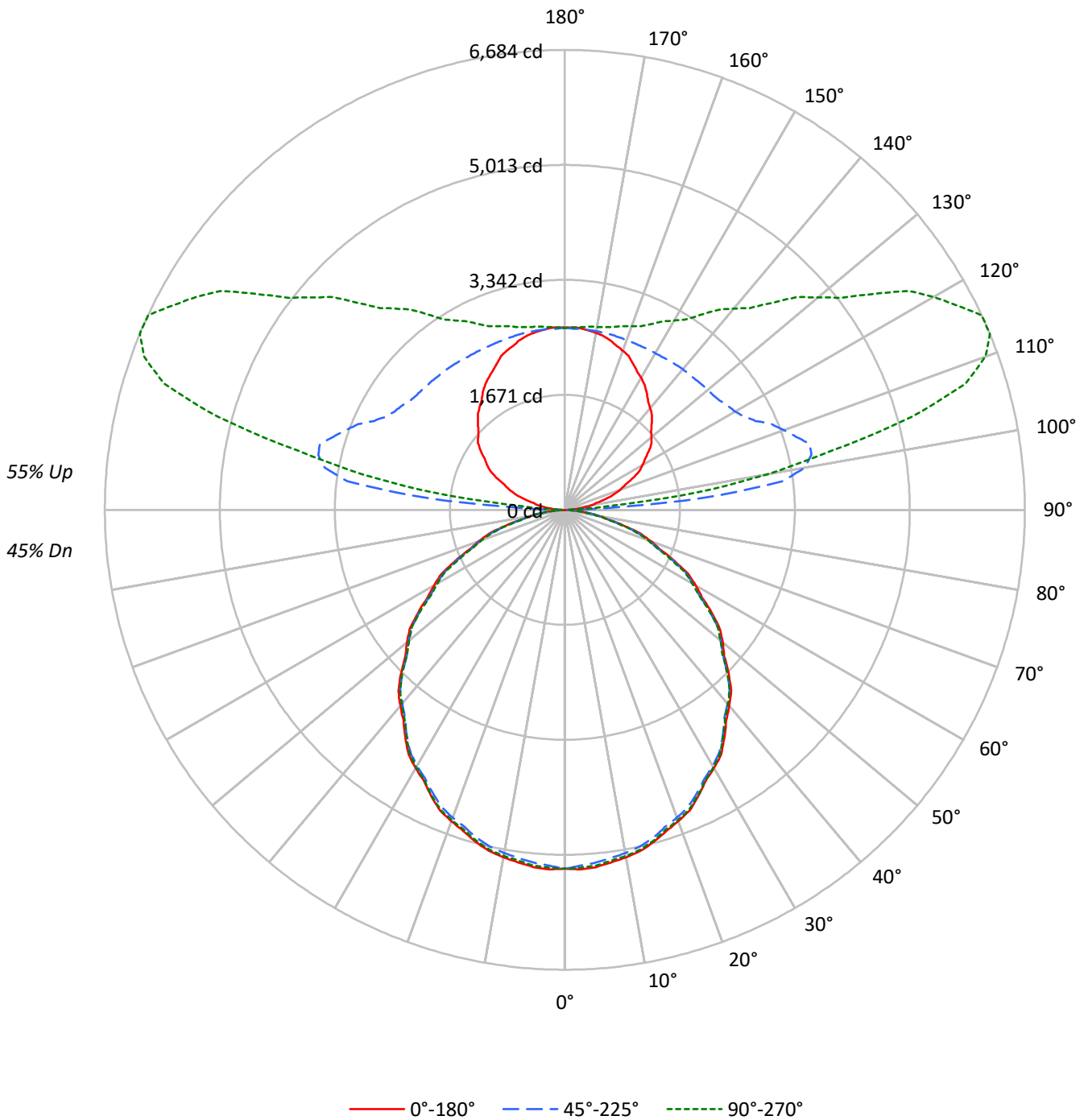
Lumens per Lamp: N/A
Luminaire Lumens: 31290.6 lumens
Efficiency: N/A
Efficacy: 120.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 260.3
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16038	16038	16038
5°	16090	15886	16019
10°	16016	15819	15944
15°	15908	15717	15845
20°	15761	15582	15705
25°	15582	15416	15543
30°	15389	15257	15339
35°	15171	15042	15052
40°	14921	14759	14806
45°	14642	14479	14504
50°	14321	14157	14116
55°	13957	13757	13726
60°	13504	13204	13134
65°	12802	12531	12364
70°	11922	11613	11458
75°	10606	10366	10060
80°	8641	8386	8336
85°	5166	5872	5872



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	492.0	1.6
10°-20°	1401.3	4.5
20°-30°	2105.3	6.7
30°-40°	2512.0	8.0
40°-50°	2574.9	8.2
50°-60°	2295.1	7.3
60°-70°	1708.5	5.5
70°-80°	925.6	3.0
80°-90°	218.0	0.7
90°-100°	1229.6	3.9
100°-110°	3324.5	10.6
110°-120°	3495.2	11.2
120°-130°	2839.1	9.1
130°-140°	2227.0	7.1
140°-150°	1709.2	5.5
150°-160°	1229.3	3.9
160°-170°	750.9	2.4
170°-180°	253.2	0.8
0°-30°	3998.6	12.8
0°-40°	6510.7	20.8
0°-60°	11380.6	36.4
0°-90°	14232.7	45.5
90°-120°	8049.2	25.7
90°-150°	14824.5	47.4
90°-180°	17058.0	54.5
0°-180°	31290.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5215	5215	5215	5215	5215	
5°	5212	5203	5146	5192	5189	494
15°	4996	4985	4936	4979	4976	1409
25°	4592	4584	4543	4569	4580	2115
35°	4041	4038	4006	4006	4009	2527
45°	3366	3358	3329	3324	3335	2594
55°	2603	2595	2566	2546	2560	2325
65°	1759	1748	1722	1710	1699	1742
75°	893	893	872	855	847	948
85°	146	166	166	169	166	202
90°	6	17	37	40	37	16
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5214.8	5214.8	5214.8	5214.8	5214.8
2.5°	5230.8	5221.8	5175.6	5214.5	5207.9
5°	5211.8	5203.4	5145.8	5191.6	5188.9
7.5°	5167.6	5157.0	5104.5	5147.5	5142.4
10°	5128.6	5120.2	5065.5	5108.4	5105.6
12.5°	5080.4	5071.9	5017.2	5060.3	5059.7
15°	4996.5	4985.4	4936.3	4979.3	4976.5
17.5°	4896.1	4883.2	4834.7	4868.7	4874.3
20°	4815.8	4807.3	4761.2	4792.9	4798.6
22.5°	4733.1	4722.5	4674.0	4710.3	4715.9
25°	4591.9	4583.5	4543.1	4569.2	4580.5
27.5°	4437.0	4437.0	4399.7	4418.1	4424.9
30°	4333.6	4333.6	4296.3	4308.1	4319.3
32.5°	4223.4	4214.4	4179.2	4188.7	4199.9
35°	4040.9	4038.1	4006.4	4006.5	4009.3
37.5°	3852.1	3844.2	3809.6	3812.1	3825.6
40°	3716.6	3711.0	3676.4	3676.6	3687.9
42.5°	3578.8	3573.3	3543.3	3538.8	3543.3
45°	3366.5	3358.0	3329.1	3323.6	3334.9
47.5°	3140.3	3142.5	3108.2	3100.2	3106.4
50°	2993.3	2993.3	2959.0	2941.9	2950.4
52.5°	2839.6	2835.0	2800.5	2781.4	2801.1
55°	2603.0	2594.6	2565.7	2546.0	2560.0
57.5°	2360.8	2347.9	2318.9	2297.2	2305.1
60°	2195.5	2175.8	2146.7	2129.6	2135.3
62.5°	2023.3	2012.6	1981.4	1955.3	1967.6
65°	1759.3	1748.0	1722.0	1710.2	1699.1
67.5°	1500.4	1493.1	1463.7	1451.5	1444.2
70°	1325.9	1311.9	1291.5	1277.0	1274.3
72.5°	1156.0	1139.7	1119.3	1107.1	1099.8
75°	892.6	892.6	872.4	855.1	846.6
77.5°	641.8	644.0	627.4	621.6	617.6
80°	487.9	487.9	473.5	467.8	470.7
82.5°	340.9	347.6	342.7	334.6	330.6
85°	146.4	166.0	166.4	169.3	166.4
87.5°	26.5	44.4	51.1	46.9	41.9
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

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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)