

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: P565145

Luminaire Tested: **SQ4-PW1-150U-100D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565145  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G2-2106-289-3)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PW1-150U-100D-830-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1500 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

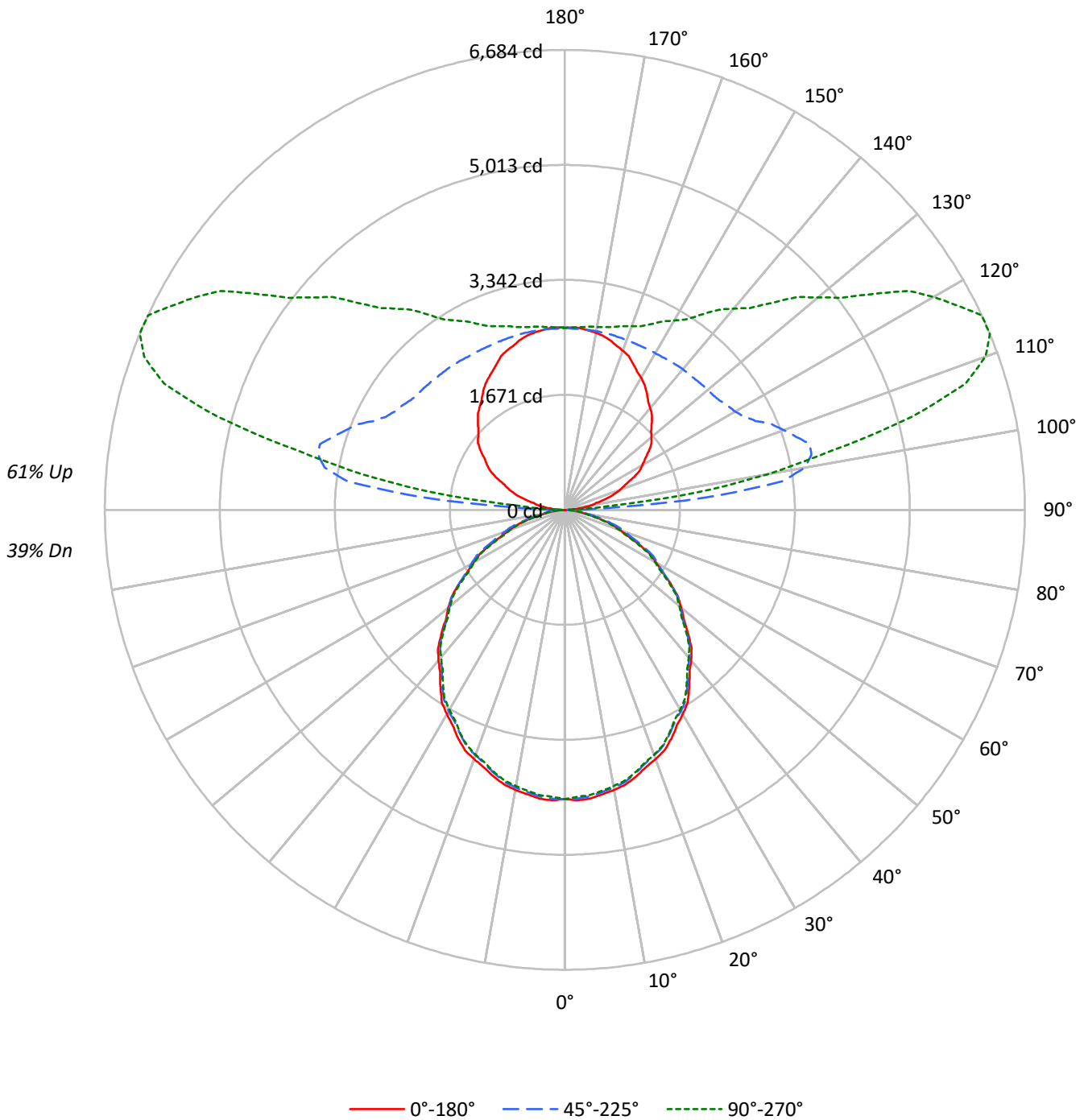
Lumens per Lamp: N/A  
Luminaire Lumens: 27755.3 lumens  
Efficiency: N/A  
Efficacy: 124.1 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 223.7  
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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39
1	95	91	87	84	86	83	80	77	68	65	63	53	52	51	40	39	39	33
2	87	80	74	69	79	73	67	63	59	56	52	47	44	42	36	34	33	27
3	79	70	63	57	72	64	58	53	52	48	44	42	38	36	32	30	28	23
4	72	62	54	48	66	57	50	45	46	41	38	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	27	25	23	21	17
6	61	49	41	36	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	37	31	51	41	34	29	34	29	25	27	23	20	21	18	16	14
8	52	40	33	27	47	37	30	26	31	26	22	25	21	18	19	17	15	12
9	49	37	29	24	44	34	27	23	28	23	20	23	19	16	18	15	13	11
10	45	34	27	22	41	31	25	20	26	21	18	21	17	15	17	14	12	10

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	12924	12924	12924
5°	13007	12905	12847
10°	12904	12800	12730
15°	12767	12625	12578
20°	12614	12421	12396
25°	12438	12212	12174
30°	12175	11991	11912
35°	11829	11663	11593
40°	11460	11282	11237
45°	11015	10870	10821
50°	10558	10469	10399
55°	10065	10065	9906
60°	9451	9633	9291
65°	8649	9080	8433
70°	7624	8356	7425
75°	6512	7479	6336
80°	5049	6294	5115
85°	3268	4834	4312



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	395.7	1.4
10°-20°	1117.2	4.0
20°-30°	1657.2	6.0
30°-40°	1939.1	7.0
40°-50°	1930.4	7.0
50°-60°	1667.0	6.0
60°-70°	1199.9	4.3
70°-80°	629.3	2.3
80°-90°	161.5	0.6
90°-100°	1229.6	4.4
100°-110°	3324.5	12.0
110°-120°	3495.2	12.6
120°-130°	2839.1	10.2
130°-140°	2227.0	8.0
140°-150°	1709.2	6.2
150°-160°	1229.3	4.4
160°-170°	750.9	2.7
170°-180°	253.2	0.9
0°-30°	3170.1	11.4
0°-40°	5109.2	18.4
0°-60°	8706.7	31.4
0°-90°	10697.4	38.5
90°-120°	8049.2	29.0
90°-150°	14824.5	53.4
90°-180°	17058.0	61.5
0°-180°	27755.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4202	4202	4202	4202	4202	
5°	4213	4166	4180	4169	4162	399
15°	4010	3959	3965	3958	3951	1130
25°	3666	3604	3599	3577	3588	1685
35°	3151	3107	3106	3077	3088	1970
45°	2532	2511	2499	2492	2488	1954
55°	1877	1874	1877	1851	1848	1675
65°	1188	1225	1248	1199	1159	1178
75°	548	599	629	588	533	587
85°	93	122	137	129	122	122
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°	4202.3	4202.3	4202.3	4202.3	4202.3
2.5°	4226.0	4191.3	4202.3	4193.0	4172.7
5°	4213.4	4166.4	4180.1	4168.8	4161.6
7.5°	4170.5	4127.0	4137.2	4125.2	4120.9
10°	4132.0	4088.5	4098.7	4083.7	4076.4
12.5°	4087.6	4041.2	4051.3	4036.4	4032.0
15°	4009.8	3959.1	3965.4	3957.8	3950.6
17.5°	3919.5	3868.1	3869.1	3857.2	3855.8
20°	3854.3	3800.0	3795.1	3780.4	3787.7
22.5°	3783.2	3726.0	3721.0	3700.5	3710.6
25°	3665.5	3603.9	3598.8	3576.9	3587.7
27.5°	3529.2	3468.4	3468.5	3437.7	3449.2
30°	3428.5	3370.6	3376.7	3340.0	3354.5
32.5°	3321.9	3269.7	3273.0	3236.3	3250.8
35°	3150.8	3107.4	3106.4	3077.0	3087.9
37.5°	2976.1	2937.7	2931.6	2914.7	2917.6
40°	2854.6	2822.0	2810.2	2799.1	2799.1
42.5°	2727.3	2697.6	2685.8	2677.6	2674.7
45°	2532.5	2510.8	2499.2	2491.7	2488.1
47.5°	2340.0	2319.7	2309.6	2304.3	2300.7
50°	2206.7	2192.2	2188.2	2177.0	2173.4
52.5°	2073.4	2064.7	2060.8	2046.7	2043.0
55°	1877.2	1873.5	1877.2	1851.2	1847.5
57.5°	1672.8	1678.6	1690.6	1655.6	1646.9
60°	1536.5	1551.0	1566.2	1525.1	1510.6
62.5°	1397.3	1420.5	1441.8	1394.6	1374.4
65°	1188.5	1224.7	1247.7	1198.7	1158.9
67.5°	987.1	1032.0	1059.7	1006.8	961.9
70°	847.9	898.6	929.3	876.3	825.7
72.5°	726.4	782.9	807.9	757.9	707.2
75°	548.0	598.7	629.4	587.5	533.2
77.5°	388.8	436.5	462.1	425.5	380.6
80°	285.1	335.8	355.4	325.0	288.8
82.5°	202.2	244.2	257.7	239.4	214.7
85°	92.6	121.5	137.0	129.4	122.2
87.5°	24.8	47.3	63.7	64.3	66.6
90°	5.7	16.8	37.0	39.8	37.0
92.5°	80.9	294.7	581.5	252.5	182.8
95°	190.8	669.8	2044.8	1058.2	629.4
97.5°	306.4	768.1	3187.4	2637.8	1937.2
100°	393.0	807.9	3542.8	3694.8	2987.5
102.5°	472.8	863.2	3668.1	4496.2	3967.1
105°	618.0	954.9	3688.0	5440.1	5217.4
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°	950.6	1211.3	3251.2	6155.5	6684.1
115°	1087.9	1330.2	3058.7	5921.1	6684.1
117.5°	1222.3	1449.6	2931.6	5562.8	6427.7
120°	1304.3	1527.1	2856.5	5305.8	6188.5
122.5°	1381.8	1600.1	2810.9	5030.3	5919.7
125°	1489.5	1706.7	2756.8	4652.0	5465.1
127.5°	1588.6	1801.9	2724.9	4343.4	5058.5
130°	1643.2	1863.2	2711.2	4152.7	4798.7
132.5°	1700.2	1918.0	2697.5	3980.7	4575.5
135°	1785.6	1997.3	2682.7	3756.3	4251.9
137.5°	1871.6	2071.6	2670.2	3574.2	3978.0
140°	1930.9	2117.5	2665.6	3457.0	3816.2
142.5°	1987.8	2163.3	2656.5	3351.2	3665.8
145°	2076.1	2232.1	2645.7	3215.2	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°	2270.4	2377.3	2626.3	2962.9	3086.6
155°	2343.8	2435.7	2622.9	2884.2	2978.9
157.5°	2420.2	2484.2	2623.5	2829.4	2891.8
160°	2463.4	2516.4	2625.8	2794.8	2839.4
162.5°	2497.6	2541.6	2628.1	2767.2	2800.6
165°	2551.7	2576.8	2634.3	2737.2	2751.1
167.5°	2588.8	2606.0	2634.9	2711.4	2718.0
170°	2611.5	2619.9	2637.2	2699.8	2699.8
172.5°	2629.8	2631.4	2637.2	2686.1	2683.9
175°	2648.6	2645.8	2637.2	2671.2	2665.6
177.5°	2654.8	2648.1	2636.6	2659.2	2652.5
180°	2645.7	2645.7	2645.7	2645.7	2645.7

(END OF REPORT)