

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: P565153

Luminaire Tested: **SQ4-PW1-150U-100D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565153  
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-840-1D-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: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29701.0 lumens  
Efficiency: N/A  
Efficacy: 132.8 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

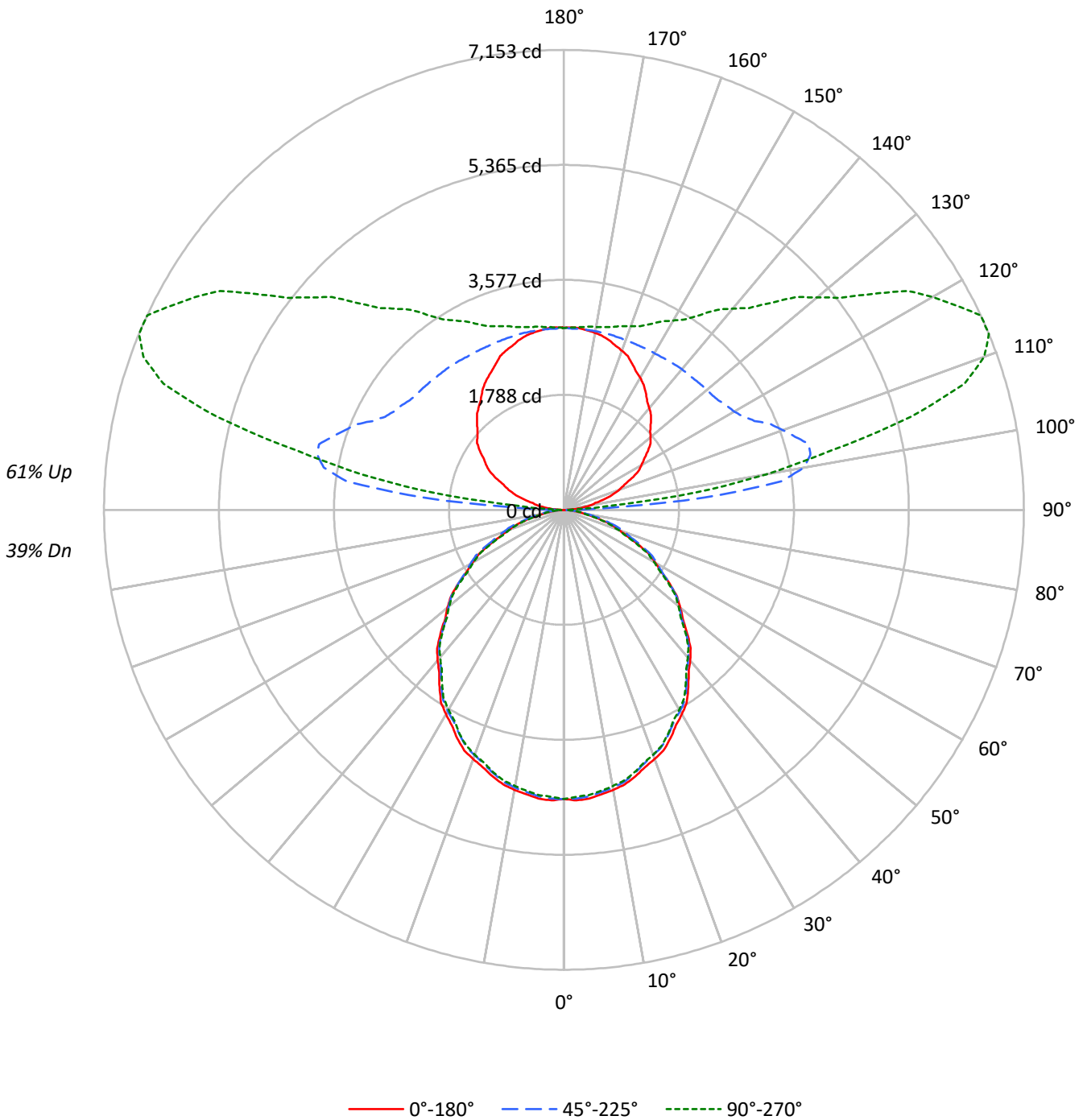
Input Watts (W): 223.7  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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°	13830	13830	13830
5°	13919	13809	13748
10°	13808	13697	13622
15°	13662	13511	13460
20°	13499	13291	13265
25°	13310	13068	13028
30°	13029	12832	12747
35°	12659	12480	12406
40°	12264	12073	12025
45°	11787	11632	11580
50°	11298	11203	11127
55°	10771	10771	10601
60°	10114	10308	9943
65°	9255	9716	9024
70°	8158	8942	7944
75°	6968	8003	6779
80°	5403	6737	5473
85°	3497	5173	4612



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	423.5	1.4
10°-20°	1195.5	4.0
20°-30°	1773.4	6.0
30°-40°	2075.0	7.0
40°-50°	2065.8	7.0
50°-60°	1783.9	6.0
60°-70°	1284.1	4.3
70°-80°	673.4	2.3
80°-90°	172.8	0.6
90°-100°	1315.8	4.4
100°-110°	3557.5	12.0
110°-120°	3740.2	12.6
120°-130°	3038.1	10.2
130°-140°	2383.1	8.0
140°-150°	1829.1	6.2
150°-160°	1315.4	4.4
160°-170°	803.6	2.7
170°-180°	270.9	0.9
0°-30°	3392.4	11.4
0°-40°	5467.4	18.4
0°-60°	9317.0	31.4
0°-90°	11447.3	38.5
90°-120°	8613.5	29.0
90°-150°	15863.8	53.4
90°-180°	18254.0	61.5
0°-180°	29701.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4497	4497	4497	4497	4497	
5°	4509	4458	4473	4461	4453	427
15°	4291	4237	4243	4235	4228	1209
25°	3922	3857	3851	3828	3839	1804
35°	3372	3325	3324	3293	3304	2108
45°	2710	2687	2674	2666	2662	2091
55°	2009	2005	2009	1981	1977	1792
65°	1272	1311	1335	1283	1240	1260
75°	586	641	674	629	570	629
85°	99	130	147	138	131	131
90°	6	18	40	43	40	17
95°	204	717	2188	1132	674	214
105°	661	1022	3947	5822	5583	696
115°	1164	1423	3273	6336	7153	1150
125°	1594	1826	2950	4978	5848	1421
135°	1911	2137	2871	4020	4550	1477
145°	2222	2388	2831	3441	3703	1390
155°	2508	2606	2807	3086	3188	1157
165°	2731	2757	2819	2929	2944	769
175°	2834	2831	2822	2858	2852	269
180°	2831	2831	2831	2831	2831	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4496.9	4496.9	4496.9	4496.9	4496.9
2.5°	4522.3	4485.1	4496.9	4486.9	4465.2
5°	4508.8	4458.5	4473.2	4461.1	4453.3
7.5°	4462.9	4416.4	4427.2	4414.4	4409.8
10°	4421.7	4375.2	4386.0	4370.0	4362.2
12.5°	4374.1	4324.5	4335.3	4319.3	4314.7
15°	4290.9	4236.7	4243.4	4235.3	4227.5
17.5°	4194.2	4139.2	4140.3	4127.6	4126.1
20°	4124.5	4066.4	4061.1	4045.4	4053.2
22.5°	4048.4	3987.2	3981.9	3959.9	3970.8
25°	3922.4	3856.6	3851.1	3827.6	3839.2
27.5°	3776.6	3711.5	3711.7	3678.7	3691.0
30°	3668.9	3606.9	3613.4	3574.1	3589.6
32.5°	3554.8	3499.0	3502.5	3463.2	3478.7
35°	3371.7	3325.2	3324.2	3292.7	3304.4
37.5°	3184.7	3143.6	3137.2	3119.0	3122.1
40°	3054.7	3019.9	3007.2	2995.3	2995.3
42.5°	2918.4	2886.7	2874.1	2865.3	2862.2
45°	2710.0	2686.8	2674.4	2666.4	2662.5
47.5°	2504.0	2482.3	2471.5	2465.9	2462.0
50°	2361.4	2345.9	2341.6	2329.6	2325.7
52.5°	2218.7	2209.5	2205.3	2190.1	2186.3
55°	2008.8	2004.9	2008.8	1980.9	1977.1
57.5°	1790.1	1796.3	1809.1	1771.6	1762.3
60°	1644.3	1659.7	1675.9	1632.0	1616.5
62.5°	1495.3	1520.1	1542.8	1492.4	1470.7
65°	1271.8	1310.6	1335.2	1282.7	1240.1
67.5°	1056.3	1104.3	1133.9	1077.4	1029.3
70°	907.3	961.5	994.5	937.8	883.5
72.5°	777.4	837.8	864.5	811.0	756.8
75°	586.4	640.6	673.5	628.6	570.5
77.5°	416.0	467.2	494.5	455.3	407.3
80°	305.1	359.3	380.4	347.8	309.0
82.5°	216.3	261.3	275.8	256.1	229.8
85°	99.1	130.0	146.6	138.5	130.7
87.5°	26.6	50.7	68.1	68.8	71.3
90°	6.1	18.0	39.6	42.6	39.6
92.5°	86.6	315.4	622.3	270.1	195.7
95°	204.2	716.7	2188.2	1132.4	673.5
97.5°	327.9	822.0	3410.8	2822.7	2073.0
100°	420.6	864.6	3791.2	3953.8	3196.9
102.5°	505.9	923.7	3925.3	4811.4	4245.3
105°	661.3	1021.9	3946.6	5821.5	5583.1
107.5°	805.2	1134.1	3774.1	6451.7	6530.9
110°	917.3	1215.3	3620.5	6620.9	6957.6



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1017.3	1296.2	3479.1	6587.1	7152.6
115°	1164.2	1423.4	3273.1	6336.2	7152.6
117.5°	1308.0	1551.2	3137.2	5952.8	6878.3
120°	1395.8	1634.2	3056.7	5677.7	6622.4
122.5°	1478.7	1712.3	3007.9	5382.9	6334.7
125°	1593.9	1826.3	2950.0	4978.2	5848.3
127.5°	1699.9	1928.2	2915.9	4647.9	5413.1
130°	1758.4	1993.9	2901.3	4443.8	5135.1
132.5°	1819.4	2052.4	2886.7	4259.7	4896.2
135°	1910.8	2137.3	2870.8	4019.6	4550.0
137.5°	2002.9	2216.8	2857.4	3824.8	4256.8
140°	2066.2	2265.9	2852.5	3699.3	4083.7
142.5°	2127.2	2314.9	2842.8	3586.1	3922.8
145°	2221.7	2388.5	2831.2	3440.6	3702.8
147.5°	2307.6	2455.4	2817.8	3308.7	3510.2
150°	2371.0	2502.1	2812.9	3237.1	3398.0
152.5°	2429.5	2543.9	2810.5	3170.6	3302.9
155°	2508.1	2606.5	2806.8	3086.4	3187.8
157.5°	2589.8	2658.4	2807.4	3027.7	3094.5
160°	2636.1	2692.8	2809.9	2990.7	3038.4
162.5°	2672.7	2719.8	2812.3	2961.2	2997.0
165°	2730.6	2757.4	2819.0	2929.0	2943.9
167.5°	2770.2	2788.7	2819.6	2901.4	2908.6
170°	2794.6	2803.6	2822.0	2889.1	2889.1
172.5°	2814.1	2815.9	2822.0	2874.4	2872.0
175°	2834.2	2831.3	2822.0	2858.5	2852.5
177.5°	2840.9	2833.8	2821.4	2845.7	2838.5
180°	2831.2	2831.2	2831.2	2831.2	2831.2

(END OF REPORT)