

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: P565141

Luminaire Tested: **SQ4-PW1-150U-075D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565141
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-075D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22997.7 lumens
Efficiency: N/A
Efficacy: 118.0 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

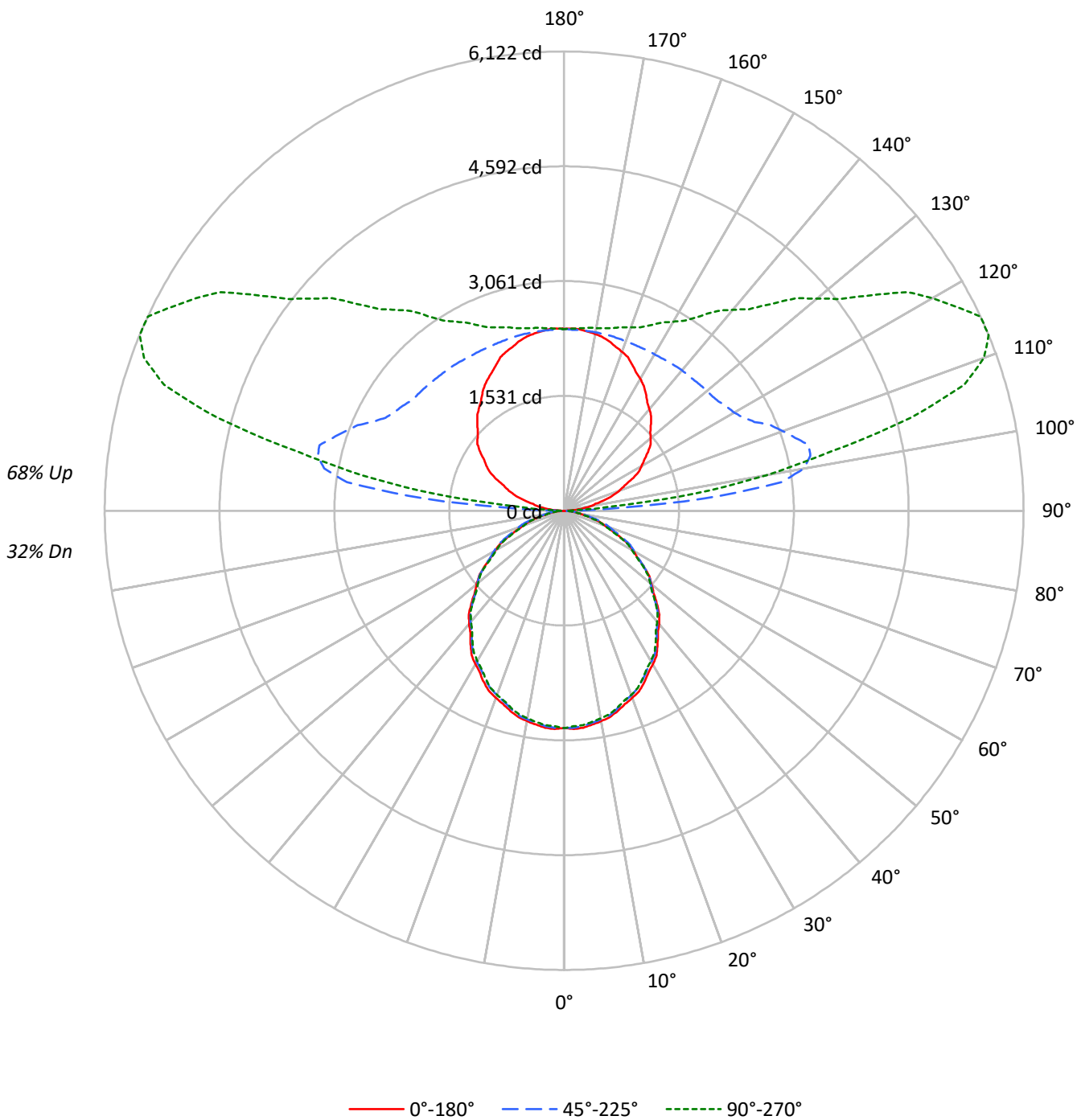
Input Watts (W): 194.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	73	73	73	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	46	35	34	34	27
2	85	78	72	67	77	71	66	61	56	53	50	43	41	39	31	30	28	23
3	78	69	62	56	70	62	56	51	50	45	42	38	35	33	27	26	24	19
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	22	21	17
5	65	54	46	40	59	49	42	37	39	34	31	30	27	24	22	20	18	14
6	60	48	41	35	54	44	37	32	35	30	27	27	24	21	20	18	16	13
7	55	44	36	30	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	14	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	20	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8908	8908	8908
5°	8966	8895	8856
10°	8894	8823	8775
15°	8800	8703	8670
20°	8695	8561	8545
25°	8574	8418	8392
30°	8392	8265	8211
35°	8154	8039	7991
40°	7900	7777	7746
45°	7592	7492	7459
50°	7278	7216	7168
55°	6938	6938	6828
60°	6514	6640	6405
65°	5961	6259	5813
70°	5255	5760	5117
75°	4488	5156	4367
80°	3480	4339	3526
85°	2251	3331	2971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	272.8	1.2
10°-20°	770.1	3.3
20°-30°	1142.3	5.0
30°-40°	1336.6	5.8
40°-50°	1330.6	5.8
50°-60°	1149.0	5.0
60°-70°	827.1	3.6
70°-80°	433.7	1.9
80°-90°	112.6	0.5
90°-100°	1126.1	4.9
100°-110°	3044.8	13.2
110°-120°	3201.2	13.9
120°-130°	2600.2	11.3
130°-140°	2039.6	8.9
140°-150°	1565.4	6.8
150°-160°	1125.8	4.9
160°-170°	687.8	3.0
170°-180°	231.9	1.0
0°-30°	2185.1	9.5
0°-40°	3521.8	15.3
0°-60°	6001.4	26.1
0°-90°	7374.9	32.1
90°-120°	7372.0	32.1
90°-150°	13577.3	59.0
90°-180°	15623.0	67.9
0°-180°	22997.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2897	2897	2897	2897	2897	
5°	2904	2872	2881	2874	2869	275
15°	2764	2729	2733	2728	2723	779
25°	2527	2484	2481	2466	2473	1162
35°	2172	2142	2141	2121	2128	1358
45°	1746	1731	1723	1718	1715	1347
55°	1294	1291	1294	1276	1274	1154
65°	819	844	860	826	799	812
75°	378	413	434	405	368	405
85°	64	84	94	89	84	84
90°	5	15	34	36	34	14
95°	175	613	1873	969	576	183
105°	566	875	3378	4982	4778	596
115°	996	1218	2801	5423	6122	984
125°	1364	1563	2525	4261	5005	1216
135°	1635	1829	2457	3440	3894	1264
145°	1902	2044	2423	2945	3169	1190
155°	2147	2231	2402	2642	2728	990
165°	2337	2360	2413	2507	2520	658
175°	2426	2423	2415	2446	2441	230
180°	2423	2423	2423	2423	2423	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2896.6	2896.6	2896.6	2896.6	2896.6
2.5°	2913.0	2889.0	2896.6	2890.2	2876.2
5°	2904.3	2871.9	2881.3	2873.6	2868.6
7.5°	2874.7	2844.8	2851.7	2843.5	2840.5
10°	2848.2	2818.2	2825.2	2814.9	2809.9
12.5°	2817.5	2785.6	2792.5	2782.2	2779.2
15°	2763.9	2729.0	2733.3	2728.1	2723.1
17.5°	2701.7	2666.2	2667.0	2658.8	2657.8
20°	2656.7	2619.3	2615.9	2605.8	2610.8
22.5°	2607.7	2568.3	2564.9	2550.7	2557.7
25°	2526.6	2484.2	2480.7	2465.5	2473.0
27.5°	2432.7	2390.7	2390.8	2369.6	2377.5
30°	2363.3	2323.3	2327.5	2302.2	2312.2
32.5°	2289.8	2253.8	2256.1	2230.8	2240.8
35°	2171.8	2141.9	2141.2	2121.0	2128.5
37.5°	2051.4	2024.9	2020.8	2009.1	2011.1
40°	1967.7	1945.2	1937.1	1929.4	1929.4
42.5°	1879.9	1859.4	1851.3	1845.6	1843.6
45°	1745.6	1730.7	1722.7	1717.5	1715.0
47.5°	1612.9	1599.0	1592.0	1588.4	1585.9
50°	1521.1	1511.1	1508.3	1500.6	1498.1
52.5°	1429.2	1423.2	1420.5	1410.7	1408.3
55°	1293.9	1291.4	1293.9	1276.0	1273.5
57.5°	1153.0	1157.0	1165.3	1141.2	1135.2
60°	1059.1	1069.1	1079.5	1051.2	1041.3
62.5°	963.2	979.1	993.8	961.3	947.3
65°	819.2	844.2	860.1	826.3	798.8
67.5°	680.4	711.3	730.4	694.0	663.0
70°	584.4	619.4	640.6	604.1	569.1
72.5°	500.7	539.7	556.9	522.4	487.5
75°	377.7	412.6	433.9	404.9	367.5
77.5°	268.0	300.9	318.5	293.3	262.4
80°	196.5	231.4	245.0	224.0	199.1
82.5°	139.3	168.3	177.6	165.0	148.0
85°	63.8	83.8	94.4	89.2	84.2
87.5°	17.4	33.4	45.6	46.1	47.6
90°	5.2	15.4	33.9	36.5	33.9
92.5°	74.1	269.9	532.6	231.2	167.5
95°	174.8	613.4	1872.8	969.2	576.4
97.5°	280.7	703.5	2919.2	2415.8	1774.2
100°	359.9	739.9	3244.7	3383.9	2736.1
102.5°	433.0	790.5	3359.5	4117.9	3633.4
105°	566.0	874.6	3377.8	4982.5	4778.4
107.5°	689.1	970.7	3230.1	5521.8	5589.6
110°	785.1	1040.1	3098.7	5666.6	5954.8

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	870.7	1109.4	2977.7	5637.7	6121.7
115°	996.4	1218.3	2801.3	5422.9	6121.7
117.5°	1119.5	1327.6	2685.0	5094.8	5887.0
120°	1194.6	1398.6	2616.1	4859.4	5667.9
122.5°	1265.6	1465.5	2574.4	4607.1	5421.6
125°	1364.1	1563.1	2524.8	4260.7	5005.4
127.5°	1454.9	1650.3	2495.6	3978.0	4632.9
130°	1505.0	1706.5	2483.1	3803.3	4395.0
132.5°	1557.2	1756.6	2470.6	3645.8	4190.5
135°	1635.4	1829.2	2457.0	3440.2	3894.2
137.5°	1714.2	1897.3	2445.6	3273.5	3643.3
140°	1768.4	1939.3	2441.4	3166.1	3495.1
142.5°	1820.6	1981.3	2433.0	3069.2	3357.4
145°	1901.5	2044.3	2423.1	2944.7	3169.1
147.5°	1975.0	2101.5	2411.6	2831.9	3004.3
150°	2029.3	2141.5	2407.5	2770.6	2908.3
152.5°	2079.3	2177.3	2405.4	2713.7	2826.9
155°	2146.6	2230.8	2402.3	2641.6	2728.3
157.5°	2216.5	2275.2	2402.8	2591.4	2648.5
160°	2256.2	2304.6	2404.9	2559.7	2600.5
162.5°	2287.5	2327.8	2407.0	2534.4	2565.0
165°	2337.0	2360.0	2412.7	2506.9	2519.6
167.5°	2371.0	2386.8	2413.2	2483.3	2489.4
170°	2391.8	2399.5	2415.3	2472.7	2472.7
172.5°	2408.5	2410.0	2415.3	2460.1	2458.1
175°	2425.7	2423.2	2415.3	2446.5	2441.4
177.5°	2431.5	2425.3	2414.8	2435.5	2429.4
180°	2423.1	2423.1	2423.1	2423.1	2423.1

(END OF REPORT)