

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: P565109

Luminaire Tested: **SQ4-PW1-150U-050D-930-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565109
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-050D-930-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18988.2 lumens
Efficiency: N/A
Efficacy: 112.4 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

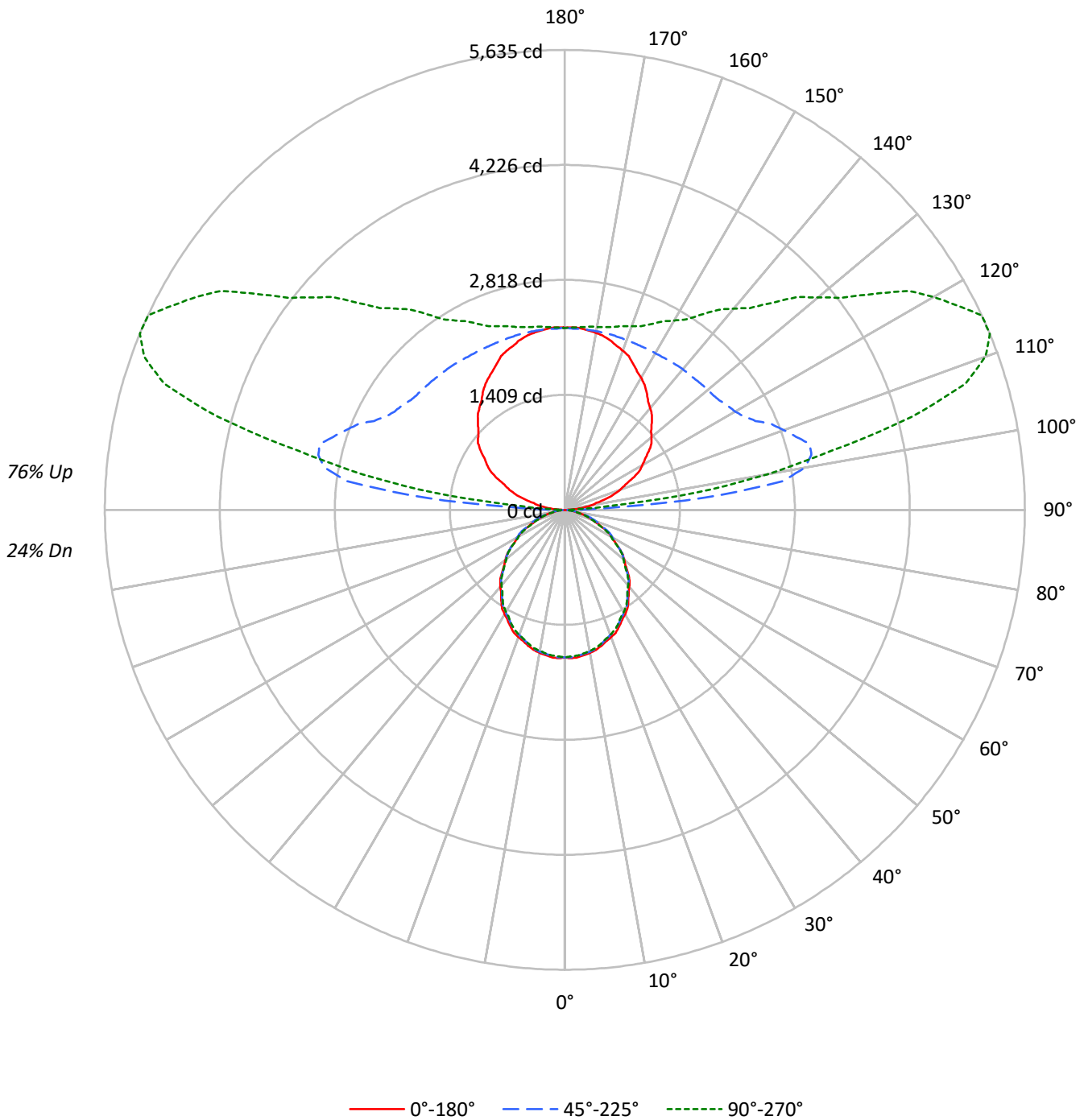
Input Watts (W): 168.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	57	44	43	42	29	28	27	21
2	84	77	71	66	74	68	64	59	53	50	47	39	37	35	25	24	23	17
3	76	67	60	55	68	60	54	50	47	43	39	34	32	29	22	21	20	15
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	11	9
8	50	38	31	26	45	35	28	24	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5564	5564	5564
5°	5600	5555	5531
10°	5555	5510	5480
15°	5496	5435	5415
20°	5430	5347	5337
25°	5355	5257	5241
30°	5241	5162	5128
35°	5092	5021	4991
40°	4934	4857	4838
45°	4742	4679	4659
50°	4545	4507	4476
55°	4333	4333	4265
60°	4069	4147	4000
65°	3723	3908	3631
70°	3282	3598	3196
75°	2803	3220	2727
80°	2173	2710	2201
85°	1404	2082	1856



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	170.4	0.9
10°-20°	481.0	2.5
20°-30°	713.4	3.8
30°-40°	834.8	4.4
40°-50°	831.0	4.4
50°-60°	717.6	3.8
60°-70°	516.6	2.7
70°-80°	270.9	1.4
80°-90°	71.8	0.4
90°-100°	1036.6	5.5
100°-110°	2802.7	14.8
110°-120°	2946.7	15.5
120°-130°	2393.5	12.6
130°-140°	1877.5	9.9
140°-150°	1441.0	7.6
150°-160°	1036.3	5.5
160°-170°	633.1	3.3
170°-180°	213.4	1.1
0°-30°	1364.7	7.2
0°-40°	2199.5	11.6
0°-60°	3748.1	19.7
0°-90°	4607.4	24.3
90°-120°	6786.0	35.7
90°-150°	12497.9	65.8
90°-180°	14381.0	75.7
0°-180°	18988.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1809	1809	1809	1809	1809	
5°	1814	1794	1800	1795	1792	172
15°	1726	1704	1707	1704	1701	487
25°	1578	1552	1549	1540	1544	726
35°	1356	1338	1337	1325	1329	848
45°	1090	1081	1076	1073	1071	841
55°	808	806	808	797	795	721
65°	512	527	537	516	499	507
75°	236	258	271	253	230	253
85°	40	52	59	56	53	53
90°	5	14	31	34	31	12
95°	161	565	1724	892	531	168
105°	521	805	3109	4586	4398	549
115°	917	1121	2579	4992	5635	906
125°	1256	1439	2324	3922	4607	1119
135°	1505	1684	2262	3167	3585	1163
145°	1750	1882	2230	2711	2917	1095
155°	1976	2054	2211	2432	2511	911
165°	2151	2172	2221	2308	2319	606
175°	2233	2230	2223	2252	2247	212
180°	2230	2230	2230	2230	2230	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1809.1	1809.1	1809.1	1809.1	1809.1
2.5°	1819.3	1804.3	1809.1	1805.0	1796.3
5°	1813.9	1793.6	1799.5	1794.7	1791.5
7.5°	1795.4	1776.7	1781.0	1775.9	1774.0
10°	1778.8	1760.1	1764.4	1758.0	1754.9
12.5°	1759.7	1739.7	1744.0	1737.6	1735.8
15°	1726.2	1704.4	1707.1	1703.8	1700.7
17.5°	1687.3	1665.2	1665.6	1660.5	1659.9
20°	1659.2	1635.9	1633.7	1627.4	1630.6
22.5°	1628.6	1604.0	1601.9	1593.0	1597.4
25°	1578.0	1551.5	1549.3	1539.8	1544.5
27.5°	1519.3	1493.1	1493.2	1479.9	1484.9
30°	1475.9	1451.0	1453.6	1437.8	1444.1
32.5°	1430.0	1407.6	1409.0	1393.2	1399.4
35°	1356.4	1337.7	1337.3	1324.6	1329.3
37.5°	1281.2	1264.7	1262.0	1254.7	1256.0
40°	1228.9	1214.9	1209.8	1205.0	1205.0
42.5°	1174.1	1161.3	1156.2	1152.7	1151.4
45°	1090.2	1080.9	1075.9	1072.7	1071.1
47.5°	1007.3	998.6	994.3	992.0	990.4
50°	950.0	943.7	942.0	937.2	935.6
52.5°	892.6	888.8	887.2	881.1	879.5
55°	808.1	806.5	808.1	796.9	795.4
57.5°	720.1	722.6	727.8	712.7	709.0
60°	661.5	667.7	674.2	656.5	650.3
62.5°	601.5	611.5	620.7	600.4	591.7
65°	511.6	527.2	537.1	516.0	498.9
67.5°	424.9	444.3	456.2	433.4	414.1
70°	365.0	386.8	400.1	377.3	355.4
72.5°	312.7	337.0	347.8	326.3	304.4
75°	235.9	257.7	271.0	252.9	229.5
77.5°	167.4	187.9	198.9	183.2	163.9
80°	122.7	144.5	153.0	139.9	124.3
82.5°	87.0	105.1	110.9	103.0	92.4
85°	39.8	52.3	59.0	55.7	52.6
87.5°	11.2	21.8	30.5	31.0	31.7
90°	4.8	14.2	31.2	33.6	31.2
92.5°	68.2	248.5	490.3	212.8	154.1
95°	160.9	564.7	1723.9	892.1	530.6
97.5°	258.3	647.6	2687.1	2223.8	1633.1
100°	331.3	681.1	2986.8	3114.9	2518.6
102.5°	398.6	727.7	3092.4	3790.6	3344.5
105°	521.0	805.1	3109.2	4586.4	4398.5
107.5°	634.3	893.5	2973.3	5082.8	5145.2
110°	722.7	957.4	2852.3	5216.1	5481.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	801.4	1021.2	2740.9	5189.5	5635.0
115°	917.2	1121.4	2578.6	4991.8	5635.0
117.5°	1030.5	1222.1	2471.5	4689.8	5419.0
120°	1099.6	1287.4	2408.2	4473.1	5217.3
122.5°	1164.9	1349.0	2369.7	4240.8	4990.6
125°	1255.7	1438.8	2324.1	3921.9	4607.4
127.5°	1339.3	1519.1	2297.2	3661.7	4264.6
130°	1385.4	1570.8	2285.7	3501.0	4045.6
132.5°	1433.4	1617.0	2274.2	3355.9	3857.4
135°	1505.4	1683.8	2261.7	3166.8	3584.6
137.5°	1577.9	1746.5	2251.1	3013.2	3353.7
140°	1627.8	1785.1	2247.3	2914.4	3217.3
142.5°	1675.9	1823.8	2239.6	2825.2	3090.5
145°	1750.3	1881.8	2230.5	2710.6	2917.2
147.5°	1818.0	1934.4	2219.9	2606.7	2765.4
150°	1867.9	1971.2	2216.1	2550.3	2677.1
152.5°	1914.0	2004.2	2214.2	2497.9	2602.2
155°	1976.0	2053.5	2211.3	2431.6	2511.4
157.5°	2040.3	2094.3	2211.8	2385.3	2437.9
160°	2076.8	2121.4	2213.7	2356.2	2393.8
162.5°	2105.6	2142.7	2215.6	2332.9	2361.1
165°	2151.3	2172.4	2220.9	2307.6	2319.3
167.5°	2182.5	2197.0	2221.4	2285.8	2291.5
170°	2201.7	2208.7	2223.3	2276.1	2276.1
172.5°	2217.0	2218.4	2223.3	2264.5	2262.7
175°	2232.9	2230.5	2223.3	2252.0	2247.3
177.5°	2238.2	2232.5	2222.8	2241.9	2236.2
180°	2230.5	2230.5	2230.5	2230.5	2230.5

(END OF REPORT)