

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: P565097

Luminaire Tested: **SQ4-PW1-150U-050D-830-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P565097
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-830-1D-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, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22523.0 lumens
Efficiency: N/A
Efficacy: 133.4 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

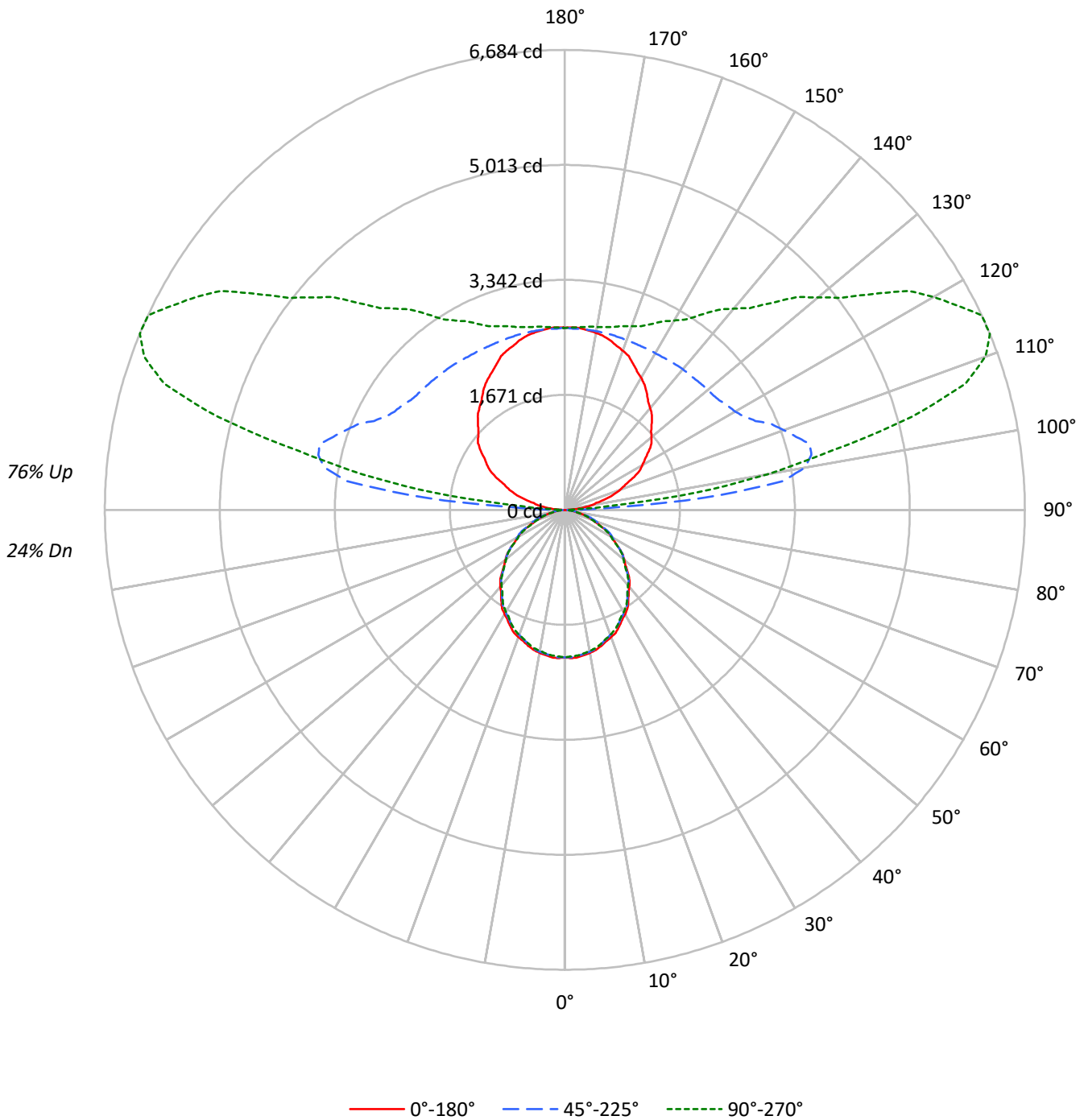
Input Watts (W): 168.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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°	6599	6599	6599
5°	6642	6590	6560
10°	6589	6536	6501
15°	6519	6447	6423
20°	6441	6342	6330
25°	6351	6236	6217
30°	6217	6123	6083
35°	6040	5955	5920
40°	5852	5761	5738
45°	5624	5551	5526
50°	5391	5346	5310
55°	5139	5139	5058
60°	4826	4919	4745
65°	4416	4636	4307
70°	3893	4267	3791
75°	3325	3819	3234
80°	2579	3214	2612
85°	1669	2470	2202



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	202.1	0.9
10°-20°	570.5	2.5
20°-30°	846.2	3.8
30°-40°	990.2	4.4
40°-50°	985.8	4.4
50°-60°	851.2	3.8
60°-70°	612.7	2.7
70°-80°	321.3	1.4
80°-90°	85.2	0.4
90°-100°	1229.6	5.5
100°-110°	3324.5	14.8
110°-120°	3495.2	15.5
120°-130°	2839.1	12.6
130°-140°	2227.0	9.9
140°-150°	1709.2	7.6
150°-160°	1229.3	5.5
160°-170°	750.9	3.3
170°-180°	253.2	1.1
0°-30°	1618.8	7.2
0°-40°	2608.9	11.6
0°-60°	4445.9	19.7
0°-90°	5465.1	24.3
90°-120°	8049.2	35.7
90°-150°	14824.5	65.8
90°-180°	17058.0	75.7
0°-180°	22523.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2146	2146	2146	2146	2146	
5°	2152	2128	2134	2129	2125	204
15°	2048	2022	2025	2021	2017	577
25°	1872	1840	1838	1826	1832	861
35°	1609	1587	1586	1571	1577	1006
45°	1293	1282	1276	1272	1270	998
55°	958	957	958	945	943	855
65°	607	625	637	612	592	601
75°	280	306	321	300	272	300
85°	47	62	70	66	62	62
90°	6	17	37	40	37	14
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	

TEST NUMBER: P565097

CATALOG NUMBER: SQ4-PW1-150U-050D-830-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2145.8	2145.8	2145.8	2145.8	2145.8
2.5°	2157.9	2140.2	2145.8	2141.1	2130.7
5°	2151.5	2127.5	2134.5	2128.7	2125.1
7.5°	2129.6	2107.4	2112.6	2106.5	2104.3
10°	2109.9	2087.7	2092.9	2085.3	2081.6
12.5°	2087.2	2063.6	2068.7	2061.1	2058.9
15°	2047.5	2021.7	2024.8	2021.0	2017.3
17.5°	2001.4	1975.2	1975.7	1969.6	1968.9
20°	1968.1	1940.4	1937.9	1930.4	1934.1
22.5°	1931.8	1902.6	1900.1	1889.6	1894.8
25°	1871.7	1840.3	1837.7	1826.5	1832.0
27.5°	1802.1	1771.1	1771.1	1755.4	1761.3
30°	1750.7	1721.1	1724.2	1705.5	1712.9
32.5°	1696.3	1669.6	1671.3	1652.6	1660.0
35°	1608.9	1586.7	1586.2	1571.2	1576.8
37.5°	1519.7	1500.1	1497.0	1488.3	1489.8
40°	1457.7	1441.0	1435.0	1429.3	1429.3
42.5°	1392.6	1377.5	1371.5	1367.3	1365.8
45°	1293.2	1282.1	1276.2	1272.3	1270.5
47.5°	1194.9	1184.5	1179.4	1176.7	1174.8
50°	1126.8	1119.4	1117.4	1111.6	1109.8
52.5°	1058.7	1054.3	1052.3	1045.1	1043.2
55°	958.5	956.7	958.5	945.3	943.4
57.5°	854.2	857.1	863.3	845.4	840.9
60°	784.6	792.0	799.7	778.8	771.4
62.5°	713.5	725.3	736.2	712.1	701.8
65°	606.9	625.4	637.1	612.1	591.8
67.5°	504.0	527.0	541.1	514.1	491.2
70°	433.0	458.8	474.5	447.5	421.6
72.5°	370.9	399.8	412.5	387.0	361.1
75°	279.8	305.7	321.4	300.0	272.2
77.5°	198.5	222.9	235.9	217.3	194.4
80°	145.6	171.5	181.5	166.0	147.5
82.5°	103.2	124.7	131.6	122.2	109.7
85°	47.3	62.1	70.0	66.1	62.4
87.5°	13.2	25.8	36.1	36.7	37.7
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

TEST NUMBER: P565097

CATALOG NUMBER: SQ4-PW1-150U-050D-830-1D-UNV-STD-W-12

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)