

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: P564945

Luminaire Tested: **SQ4-PW1-100U-075D-935-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564945
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-PW1-100U-075D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

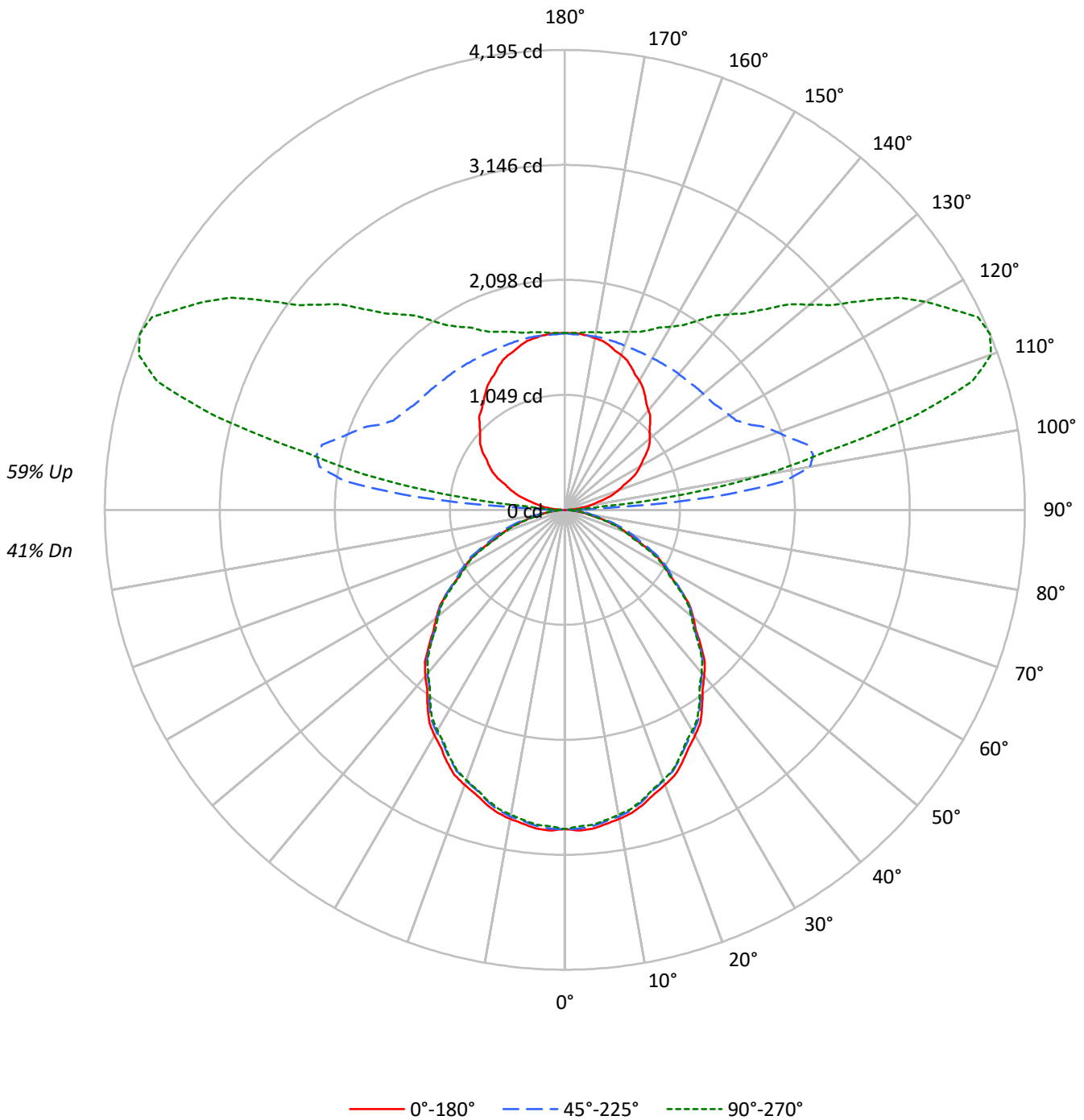
Lumens per Lamp: N/A
Luminaire Lumens: 17880.0 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 153.4
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	105	105	105	105	96	96	96	96	79	79	79	63	63	63	48	48	48	41
1	96	92	88	85	87	84	81	78	69	67	65	55	54	52	43	42	41	35
2	87	80	74	69	79	73	68	64	60	57	54	49	46	44	38	36	35	30
3	80	70	63	58	72	65	58	53	53	49	45	43	40	37	33	31	29	25
4	73	62	55	49	66	57	50	45	47	42	38	38	35	32	30	27	25	22
5	67	55	48	42	61	51	44	39	42	37	33	34	31	28	27	24	22	19
6	62	50	42	36	56	46	39	34	38	33	29	31	27	24	24	22	19	16
7	57	45	37	32	52	41	34	29	35	29	25	28	24	21	22	19	17	15
8	53	41	33	28	48	37	31	26	31	26	22	26	22	19	20	18	15	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	26	21	18	22	18	15	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8954	8954	8954
5°	9012	8940	8901
10°	8940	8868	8820
15°	8845	8747	8714
20°	8739	8605	8588
25°	8617	8461	8434
30°	8435	8308	8253
35°	8195	8080	8032
40°	7940	7816	7785
45°	7631	7531	7497
50°	7315	7253	7204
55°	6973	6973	6863
60°	6548	6674	6437
65°	5992	6291	5843
70°	5282	5789	5143
75°	4511	5182	4389
80°	3498	4362	3544
85°	2262	3349	2985



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	274.2	1.5
10°-20°	774.0	4.3
20°-30°	1148.1	6.4
30°-40°	1343.4	7.5
40°-50°	1337.4	7.5
50°-60°	1154.9	6.5
60°-70°	831.3	4.6
70°-80°	435.9	2.4
80°-90°	111.4	0.6
90°-100°	754.6	4.2
100°-110°	2083.1	11.7
110°-120°	2148.4	12.0
120°-130°	1726.4	9.7
130°-140°	1356.8	7.6
140°-150°	1040.6	5.8
150°-160°	747.9	4.2
160°-170°	457.3	2.6
170°-180°	154.2	0.9
0°-30°	2196.3	12.3
0°-40°	3539.7	19.8
0°-60°	6032.1	33.7
0°-90°	7410.8	41.4
90°-120°	4986.1	27.9
90°-150°	9109.9	50.9
90°-180°	10469.0	58.6
0°-180°	17880.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2911	2911	2911	2911	2911	
5°	2919	2886	2896	2888	2883	276
15°	2778	2743	2747	2742	2737	783
25°	2540	2497	2493	2478	2486	1168
35°	2183	2153	2152	2132	2139	1365
45°	1755	1740	1732	1726	1724	1354
55°	1300	1298	1300	1282	1280	1160
65°	823	848	864	830	803	816
75°	380	415	436	407	369	407
85°	64	84	95	90	85	85
90°	5	10	21	23	26	10
95°	111	408	1369	563	366	119
105°	371	573	2292	3499	3295	395
115°	665	804	1846	3654	4156	654
125°	913	1039	1673	2832	3323	812
135°	1098	1217	1627	2293	2586	850
145°	1274	1362	1606	1952	2101	797
155°	1436	1484	1593	1752	1807	662
165°	1555	1575	1601	1663	1676	438
175°	1611	1614	1604	1627	1622	153
180°	1611	1611	1611	1611	1611	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2911.4	2911.4	2911.4	2911.4	2911.4
2.5°	2927.8	2903.8	2911.4	2905.0	2890.9
5°	2919.1	2886.5	2896.0	2888.2	2883.2
7.5°	2889.4	2859.3	2866.3	2858.0	2855.0
10°	2862.7	2832.6	2839.6	2829.2	2824.2
12.5°	2831.9	2799.8	2806.8	2796.4	2793.4
15°	2778.0	2742.9	2747.3	2742.0	2737.0
17.5°	2715.5	2679.8	2680.6	2672.3	2671.3
20°	2670.3	2632.7	2629.3	2619.1	2624.1
22.5°	2621.1	2581.4	2578.0	2563.8	2570.8
25°	2539.5	2496.8	2493.3	2478.1	2485.6
27.5°	2445.1	2403.0	2403.0	2381.7	2389.7
30°	2375.3	2335.2	2339.4	2314.0	2324.0
32.5°	2301.4	2265.3	2267.6	2242.2	2252.2
35°	2182.9	2152.8	2152.1	2131.8	2139.3
37.5°	2061.9	2035.3	2031.1	2019.3	2021.3
40°	1977.7	1955.1	1946.9	1939.2	1939.2
42.5°	1889.5	1868.9	1860.7	1855.1	1853.1
45°	1754.6	1739.5	1731.5	1726.3	1723.8
47.5°	1621.2	1607.1	1600.1	1596.5	1594.0
50°	1528.8	1518.8	1516.0	1508.2	1505.7
52.5°	1436.5	1430.5	1427.8	1417.9	1415.4
55°	1300.5	1298.0	1300.5	1282.5	1280.0
57.5°	1158.9	1162.9	1171.2	1147.0	1141.0
60°	1064.5	1074.6	1085.1	1056.6	1046.6
62.5°	968.1	984.1	998.9	966.2	952.2
65°	823.4	848.5	864.5	830.5	802.9
67.5°	683.9	715.0	734.1	697.5	666.4
70°	587.4	622.5	643.8	607.1	572.0
72.5°	503.3	542.4	559.7	525.1	489.9
75°	379.6	414.8	436.1	407.0	369.4
77.5°	269.3	302.4	320.1	294.8	263.7
80°	197.5	232.6	246.3	225.2	200.1
82.5°	140.1	169.2	178.5	165.8	148.8
85°	64.1	84.2	94.9	89.7	84.6
87.5°	17.4	32.5	43.1	43.7	46.2
90°	5.2	10.2	20.6	23.3	25.8
92.5°	46.4	192.6	344.4	125.7	98.0
95°	110.9	408.3	1368.9	562.7	366.1
97.5°	183.6	457.3	2027.9	1561.3	1130.7
100°	237.2	486.7	2271.3	2287.3	1858.8
102.5°	288.7	520.1	2318.7	2826.1	2419.8
105°	371.2	572.9	2291.9	3498.9	3294.7
107.5°	458.9	638.4	2164.0	3823.4	3898.0
110°	520.8	682.1	2065.0	3893.2	4135.2

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	576.5	731.7	1972.2	3838.1	4195.0
115°	665.1	803.8	1845.9	3654.2	4155.8
117.5°	742.5	880.6	1762.9	3395.4	3966.1
120°	794.0	930.2	1729.9	3220.2	3794.9
122.5°	843.5	973.6	1703.1	3056.5	3601.0
125°	912.6	1038.7	1673.2	2831.6	3323.1
127.5°	971.4	1097.4	1655.6	2641.3	3065.3
130°	1010.6	1136.6	1647.4	2524.9	2910.6
132.5°	1047.7	1167.7	1639.1	2427.2	2776.6
135°	1098.2	1216.7	1626.7	2293.4	2585.8
137.5°	1155.0	1262.9	1620.6	2181.0	2430.6
140°	1185.9	1291.8	1616.4	2106.1	2325.4
142.5°	1221.0	1318.8	1612.3	2039.5	2232.6
145°	1273.6	1361.8	1606.1	1952.4	2101.1
147.5°	1324.1	1401.2	1600.5	1878.9	1994.4
150°	1361.2	1424.2	1598.4	1835.1	1928.4
152.5°	1390.1	1449.1	1596.3	1797.6	1874.8
155°	1436.0	1483.9	1593.2	1751.8	1807.2
157.5°	1478.3	1515.1	1593.7	1718.4	1756.2
160°	1503.0	1535.8	1595.8	1699.6	1727.3
162.5°	1523.6	1552.4	1597.9	1682.9	1704.6
165°	1554.6	1574.7	1601.0	1663.1	1675.7
167.5°	1578.3	1590.4	1603.5	1651.1	1655.1
170°	1590.7	1600.7	1603.5	1644.8	1644.8
172.5°	1601.0	1607.0	1603.5	1636.5	1634.5
175°	1611.3	1613.8	1603.5	1626.6	1621.6
177.5°	1615.4	1613.4	1603.0	1617.4	1613.3
180°	1611.3	1611.3	1611.3	1611.3	1611.3

(END OF REPORT)