

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: P564979

Luminaire Tested: **SQ4-PW1-100U-125D-830-1D-UNV-STD-W-6**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564979
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-125D-830-1D-UNV-STD-W-6
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

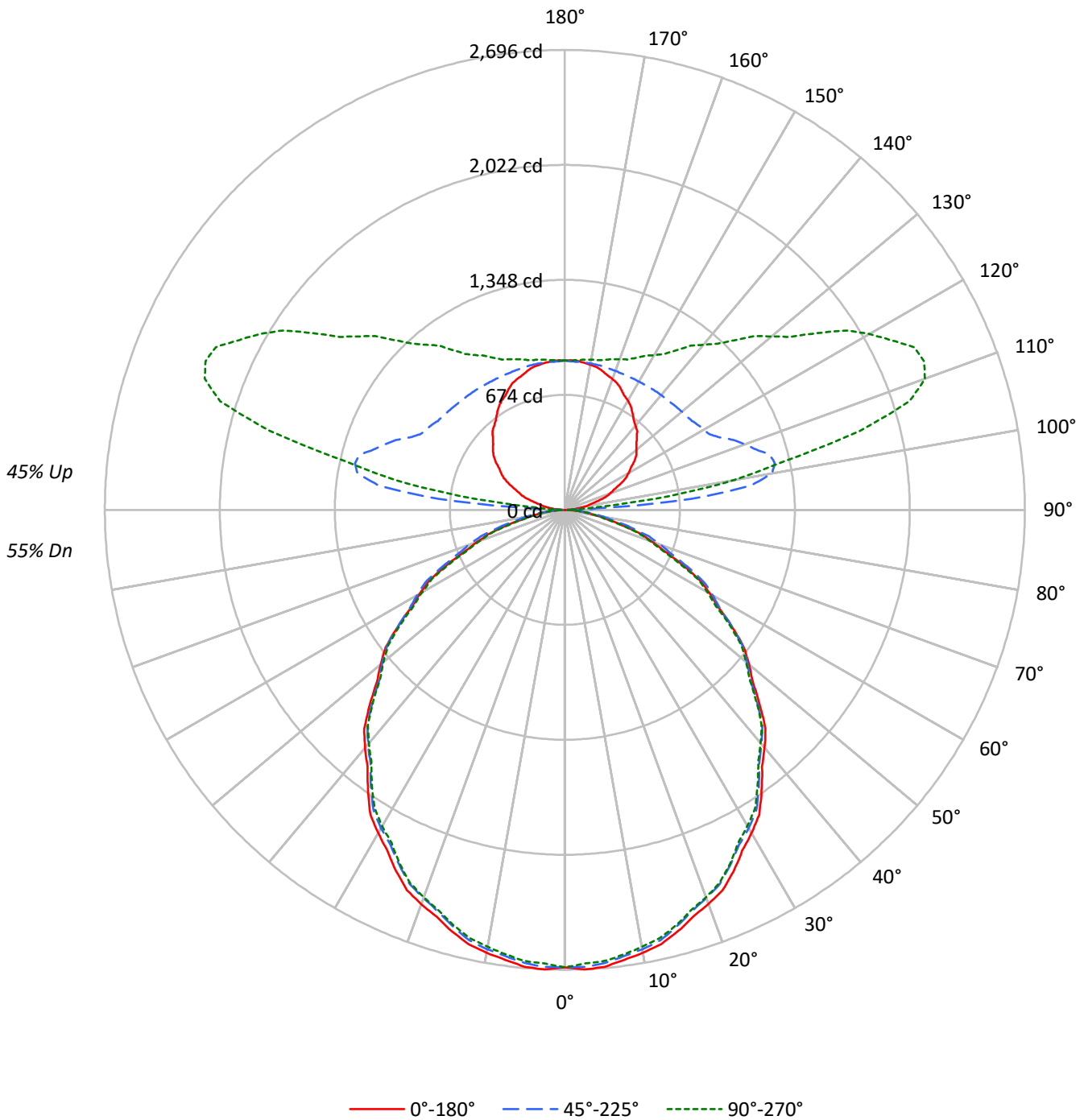
Lumens per Lamp: N/A
Luminaire Lumens: 12510.4 lumens
Efficiency: N/A
Efficacy: 116.6 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 107.3
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	99	95	91	87	92	88	85	82	76	73	71	64	62	61	53	52	51	46
2	90	83	77	71	83	77	72	67	66	62	59	56	53	51	47	45	43	39
3	82	73	65	60	76	68	61	56	59	54	49	50	46	43	42	39	37	33
4	75	64	57	50	70	60	53	48	52	47	42	44	40	37	37	34	32	28
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28	25
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	24	22
7	59	47	39	33	55	44	36	31	38	32	28	33	28	25	28	24	22	19
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	19	17
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18	15
10	48	36	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16493	16493	16493
5°	16600	16468	16395
10°	16467	16334	16245
15°	16292	16112	16051
20°	16097	15850	15819
25°	15873	15584	15536
30°	15537	15302	15202
35°	15096	14883	14794
40°	14625	14397	14340
45°	14056	13871	13810
50°	13473	13360	13270
55°	12845	12845	12642
60°	12060	12293	11858
65°	11036	11586	10761
70°	9729	10664	9474
75°	8308	9544	8085
80°	6443	8033	6528
85°	4171	6168	5505



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	252.5	2.0
10°-20°	712.9	5.7
20°-30°	1057.4	8.5
30°-40°	1237.3	9.9
40°-50°	1231.7	9.8
50°-60°	1063.7	8.5
60°-70°	765.6	6.1
70°-80°	401.5	3.2
80°-90°	101.4	0.8
90°-100°	409.9	3.3
100°-110°	1131.5	9.0
110°-120°	1166.9	9.3
120°-130°	937.7	7.5
130°-140°	736.9	5.9
140°-150°	565.2	4.5
150°-160°	406.2	3.2
160°-170°	248.4	2.0
170°-180°	83.8	0.7
0°-30°	2022.8	16.2
0°-40°	3260.0	26.1
0°-60°	5555.4	44.4
0°-90°	6823.9	54.5
90°-120°	2708.2	21.6
90°-150°	4948.1	39.6
90°-180°	5686.0	45.5
0°-180°	12510.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2681	2681	2681	2681	2681	
5°	2688	2658	2667	2660	2655	255
15°	2558	2526	2530	2525	2521	721
25°	2339	2300	2296	2282	2289	1075
35°	2010	1983	1982	1963	1970	1257
45°	1616	1602	1595	1590	1588	1247
55°	1198	1195	1198	1181	1179	1069
65°	758	781	796	765	739	751
75°	350	382	402	375	340	375
85°	59	78	87	83	78	78
90°	3	6	11	13	14	6
95°	60	222	744	306	199	64
105°	202	311	1245	1900	1790	215
115°	361	437	1003	1985	2257	355
125°	496	564	909	1538	1805	441
135°	596	661	884	1246	1404	462
145°	692	740	872	1060	1141	433
155°	780	806	865	952	982	359
165°	844	855	870	903	910	238
175°	875	876	871	884	881	83
180°	875	875	875	875	875	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2681.4	2681.4	2681.4	2681.4	2681.4
2.5°	2696.5	2674.3	2681.4	2675.4	2662.5
5°	2688.5	2658.4	2667.2	2660.0	2655.4
7.5°	2661.1	2633.3	2639.8	2632.2	2629.4
10°	2636.5	2608.8	2615.2	2605.7	2601.0
12.5°	2608.1	2578.6	2585.0	2575.5	2572.7
15°	2558.5	2526.2	2530.2	2525.3	2520.7
17.5°	2500.9	2468.1	2468.7	2461.2	2460.2
20°	2459.3	2424.6	2421.5	2412.2	2416.8
22.5°	2413.9	2377.4	2374.3	2361.2	2367.6
25°	2338.8	2299.5	2296.3	2282.3	2289.2
27.5°	2251.9	2213.1	2213.1	2193.5	2200.8
30°	2187.6	2150.7	2154.5	2131.1	2140.4
32.5°	2119.6	2086.3	2088.4	2065.0	2074.2
35°	2010.4	1982.7	1982.1	1963.3	1970.3
37.5°	1898.9	1874.4	1870.6	1859.8	1861.6
40°	1821.4	1800.7	1793.1	1786.0	1786.0
42.5°	1740.2	1721.2	1713.7	1708.5	1706.6
45°	1615.9	1602.0	1594.6	1589.9	1587.6
47.5°	1493.1	1480.1	1473.7	1470.3	1468.0
50°	1408.0	1398.8	1396.2	1389.1	1386.8
52.5°	1323.0	1317.4	1314.9	1305.9	1303.6
55°	1197.8	1195.4	1197.8	1181.2	1178.9
57.5°	1067.3	1071.0	1078.7	1056.4	1050.8
60°	980.4	989.7	999.3	973.1	963.9
62.5°	891.6	906.4	919.9	889.9	876.9
65°	758.3	781.4	796.1	764.9	739.4
67.5°	629.8	658.5	676.1	642.4	613.8
70°	541.0	573.3	593.0	559.2	526.8
72.5°	463.5	499.5	515.5	483.6	451.2
75°	349.6	382.0	401.6	374.8	340.2
77.5°	248.1	278.5	294.8	271.5	242.9
80°	181.9	214.2	226.8	207.4	184.3
82.5°	129.0	155.8	164.4	152.7	137.0
85°	59.1	77.5	87.4	82.6	78.0
87.5°	15.7	29.2	38.1	38.5	40.6
90°	2.8	5.5	11.2	12.6	14.0
92.5°	25.2	104.6	187.1	68.3	53.2
95°	60.2	221.8	743.6	305.6	198.8
97.5°	99.7	248.4	1101.5	848.0	614.2
100°	128.8	264.4	1233.7	1242.4	1009.6
102.5°	156.8	282.5	1259.4	1535.0	1314.3
105°	201.6	311.2	1244.9	1900.5	1789.6
107.5°	249.3	346.7	1175.4	2076.7	2117.2
110°	282.9	370.5	1121.6	2114.6	2246.1

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	313.1	397.4	1071.2	2084.7	2278.5
115°	361.3	436.6	1002.6	1984.8	2257.3
117.5°	403.3	478.3	957.5	1844.2	2154.2
120°	431.3	505.2	939.6	1749.1	2061.2
122.5°	458.2	528.8	925.0	1660.2	1955.9
125°	495.7	564.2	908.8	1538.0	1805.0
127.5°	527.6	596.1	899.3	1434.6	1664.9
130°	548.9	617.4	894.8	1371.4	1580.9
132.5°	569.1	634.2	890.3	1318.3	1508.1
135°	596.5	660.9	883.6	1245.7	1404.5
137.5°	627.3	685.9	880.2	1184.6	1320.2
140°	644.1	701.6	878.0	1143.9	1263.1
142.5°	663.2	716.3	875.7	1107.8	1212.6
145°	691.7	739.7	872.4	1060.5	1141.2
147.5°	719.2	761.1	869.3	1020.6	1083.3
150°	739.4	773.6	868.2	996.8	1047.4
152.5°	755.0	787.1	867.1	976.4	1018.3
155°	780.0	806.0	865.4	951.5	981.6
157.5°	802.9	822.9	865.7	933.3	953.9
160°	816.4	834.2	866.8	923.1	938.2
162.5°	827.6	843.2	867.9	914.1	925.9
165°	844.4	855.3	869.6	903.3	910.2
167.5°	857.3	863.8	871.0	896.8	899.0
170°	864.0	869.5	871.0	893.4	893.4
172.5°	869.6	872.9	871.0	888.9	887.8
175°	875.2	876.5	871.0	883.5	880.8
177.5°	877.4	876.3	870.7	878.5	876.3
180°	875.2	875.2	875.2	875.2	875.2

(END OF REPORT)