

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: P564913

Luminaire Tested: **SQ4-PW1-100U-050D-840-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564913
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-050D-840-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18016.4 lumens
Efficiency: N/A
Efficacy: 141.4 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

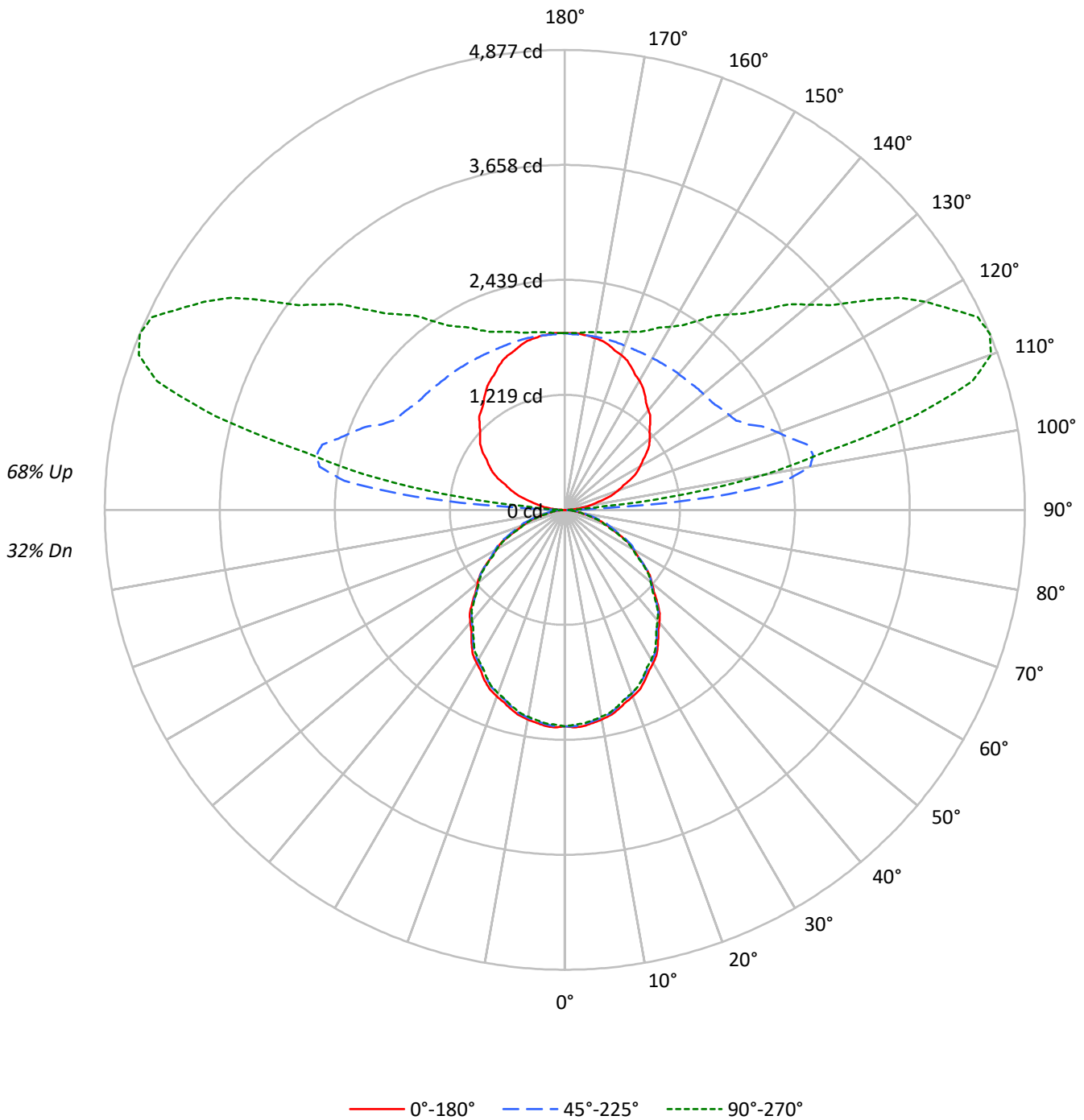
Input Watts (W): 127.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	32
1	94	90	86	83	84	81	78	75	64	62	60	49	48	47	35	35	34	27
2	86	78	72	67	77	71	66	62	57	53	50	43	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	35	33	28	26	24	20
4	71	61	53	47	64	55	49	43	44	40	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	35	31	31	27	24	22	20	18	15
6	60	48	41	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	44	36	31	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	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	17	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7062	7062	7062
5°	7108	7051	7020
10°	7051	6994	6956
15°	6976	6899	6873
20°	6893	6787	6774
25°	6796	6673	6652
30°	6653	6552	6509
35°	6464	6373	6335
40°	6262	6165	6140
45°	6019	5939	5913
50°	5769	5721	5682
55°	5500	5500	5413
60°	5164	5264	5077
65°	4726	4961	4608
70°	4166	4566	4057
75°	3558	4086	3461
80°	2759	3439	2795
85°	1785	2643	2357



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	216.2	1.2
10°-20°	610.5	3.4
20°-30°	905.5	5.0
30°-40°	1059.6	5.9
40°-50°	1054.8	5.9
50°-60°	910.9	5.1
60°-70°	655.7	3.6
70°-80°	343.8	1.9
80°-90°	89.1	0.5
90°-100°	877.2	4.9
100°-110°	2421.6	13.4
110°-120°	2497.4	13.9
120°-130°	2006.9	11.1
130°-140°	1577.2	8.8
140°-150°	1209.7	6.7
150°-160°	869.4	4.8
160°-170°	531.7	3.0
170°-180°	179.2	1.0
0°-30°	1732.2	9.6
0°-40°	2791.8	15.5
0°-60°	4757.6	26.4
0°-90°	5846.2	32.4
90°-120°	5796.2	32.2
90°-150°	10589.9	58.8
90°-180°	12170.0	67.5
0°-180°	18016.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2296	2296	2296	2296	2296	
5°	2302	2277	2284	2278	2274	218
15°	2191	2163	2167	2163	2159	618
25°	2003	1969	1966	1954	1960	921
35°	1722	1698	1697	1681	1687	1076
45°	1384	1372	1366	1362	1360	1068
55°	1026	1024	1026	1012	1010	915
65°	649	669	682	655	633	644
75°	299	327	344	321	291	321
85°	51	66	75	71	67	67
90°	6	12	24	27	30	11
95°	129	475	1591	654	426	138
105°	432	666	2664	4067	3830	459
115°	773	934	2146	4248	4831	760
125°	1061	1207	1945	3292	3863	944
135°	1277	1414	1891	2666	3006	988
145°	1480	1583	1867	2270	2442	927
155°	1669	1725	1852	2036	2101	769
165°	1807	1831	1861	1933	1948	509
175°	1873	1876	1864	1891	1885	178
180°	1873	1873	1873	1873	1873	

TEST NUMBER: P564913

CATALOG NUMBER: SQ4-PW1-100U-050D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2296.3	2296.3	2296.3	2296.3	2296.3
2.5°	2309.2	2290.2	2296.3	2291.2	2280.1
5°	2302.4	2276.6	2284.1	2278.0	2274.0
7.5°	2278.9	2255.1	2260.7	2254.1	2251.8
10°	2257.8	2234.1	2239.6	2231.4	2227.5
12.5°	2233.6	2208.2	2213.7	2205.6	2203.2
15°	2191.1	2163.4	2166.8	2162.7	2158.7
17.5°	2141.7	2113.6	2114.2	2107.7	2106.9
20°	2106.1	2076.4	2073.7	2065.7	2069.7
22.5°	2067.3	2036.0	2033.3	2022.1	2027.6
25°	2002.9	1969.3	1966.5	1954.5	1960.4
27.5°	1928.5	1895.2	1895.3	1878.4	1884.8
30°	1873.4	1841.8	1845.1	1825.1	1833.0
32.5°	1815.2	1786.7	1788.5	1768.4	1776.3
35°	1721.7	1698.0	1697.4	1681.4	1687.3
37.5°	1626.2	1605.2	1601.9	1592.7	1594.2
40°	1559.9	1542.0	1535.6	1529.5	1529.5
42.5°	1490.3	1474.0	1467.6	1463.1	1461.5
45°	1383.8	1372.0	1365.6	1361.5	1359.6
47.5°	1278.6	1267.6	1262.0	1259.2	1257.2
50°	1205.8	1197.9	1195.7	1189.6	1187.6
52.5°	1133.0	1128.2	1126.1	1118.4	1116.4
55°	1025.7	1023.8	1025.7	1011.5	1009.6
57.5°	914.1	917.2	923.8	904.6	899.9
60°	839.6	847.5	855.8	833.4	825.4
62.5°	763.5	776.2	787.8	762.1	751.0
65°	649.4	669.2	681.8	655.0	633.2
67.5°	539.4	563.9	579.0	550.1	525.6
70°	463.3	491.0	507.8	478.9	451.2
72.5°	396.9	427.8	441.5	414.1	386.4
75°	299.4	327.1	343.9	321.0	291.3
77.5°	212.4	238.5	252.5	232.5	208.0
80°	155.8	183.5	194.2	177.6	157.8
82.5°	110.5	133.4	140.8	130.8	117.3
85°	50.6	66.4	74.9	70.7	66.8
87.5°	14.1	26.4	35.5	36.2	38.4
90°	6.0	11.9	24.0	27.0	30.0
92.5°	53.9	223.9	400.4	146.1	113.9
95°	128.9	474.6	1591.4	654.1	425.6
97.5°	213.4	531.6	2357.4	1814.9	1314.4
100°	275.7	565.8	2640.3	2658.9	2160.8
102.5°	335.7	604.7	2695.4	3285.3	2812.9
105°	431.6	666.0	2664.2	4067.4	3830.0
107.5°	533.4	742.1	2515.6	4444.6	4531.3
110°	605.4	792.9	2400.5	4525.7	4807.0

TEST NUMBER: P564913

CATALOG NUMBER: SQ4-PW1-100U-050D-840-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	670.1	850.6	2292.6	4461.6	4876.6
115°	773.2	934.4	2145.8	4247.9	4831.0
117.5°	863.1	1023.7	2049.3	3947.0	4610.4
120°	923.0	1081.3	2010.9	3743.3	4411.4
122.5°	980.6	1131.8	1979.8	3553.1	4186.1
125°	1060.9	1207.4	1945.0	3291.6	3863.0
127.5°	1129.2	1275.7	1924.6	3070.4	3563.3
130°	1174.8	1321.3	1915.0	2935.2	3383.5
132.5°	1217.9	1357.4	1905.4	2821.5	3227.7
135°	1276.7	1414.4	1891.0	2666.0	3005.9
137.5°	1342.6	1468.0	1883.9	2535.4	2825.5
140°	1378.6	1501.6	1879.1	2448.3	2703.2
142.5°	1419.3	1533.0	1874.3	2370.9	2595.3
145°	1480.5	1583.0	1867.1	2269.6	2442.5
147.5°	1539.2	1628.9	1860.5	2184.2	2318.4
150°	1582.4	1655.6	1858.1	2133.3	2241.7
152.5°	1615.9	1684.5	1855.7	2089.7	2179.3
155°	1669.3	1725.0	1852.1	2036.4	2100.8
157.5°	1718.4	1761.2	1852.7	1997.5	2041.5
160°	1747.2	1785.3	1855.1	1975.7	2007.9
162.5°	1771.2	1804.6	1857.5	1956.4	1981.6
165°	1807.1	1830.6	1861.1	1933.3	1948.0
167.5°	1834.7	1848.8	1864.1	1919.3	1924.0
170°	1849.1	1860.8	1864.1	1912.0	1912.0
172.5°	1861.1	1868.1	1864.1	1902.4	1900.0
175°	1873.1	1876.0	1864.1	1890.9	1885.1
177.5°	1877.9	1875.5	1863.5	1880.2	1875.5
180°	1873.1	1873.1	1873.1	1873.1	1873.1

(END OF REPORT)