

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: P565021

Luminaire Tested: **SQ4-PW1-125U-050D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P565021  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-PW1-125U-050D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1250 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17970.4 lumens  
Efficiency: N/A  
Efficacy: 122.7 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

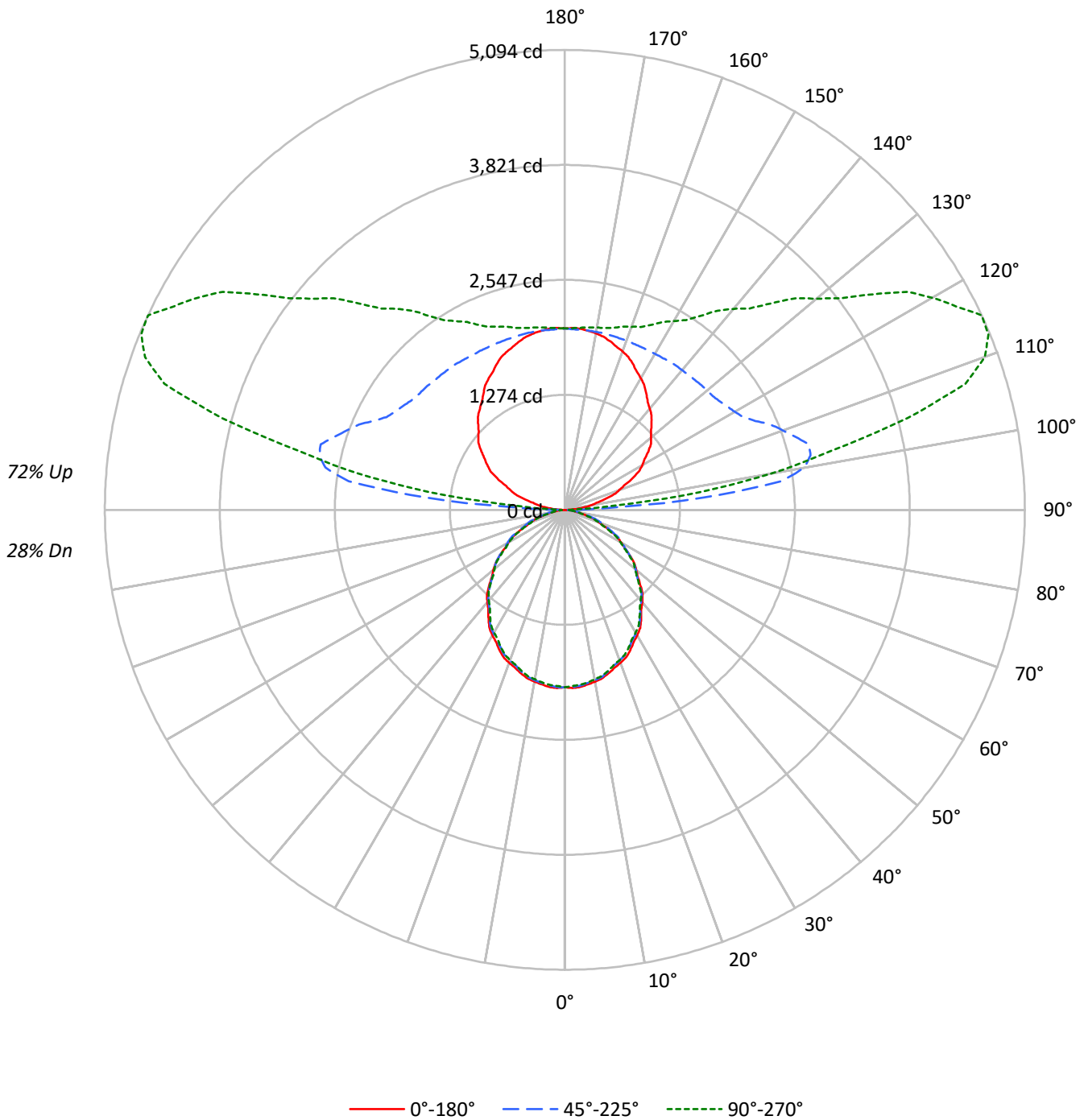
Input Watts (W): 146.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	36	36	36	28
1	93	89	85	82	83	79	76	74	62	60	58	46	45	44	32	31	30	24
2	85	77	72	67	75	69	65	60	55	51	48	41	39	37	28	27	26	20
3	77	68	61	55	69	61	55	50	48	44	41	36	33	31	25	23	22	17
4	70	60	53	47	63	54	48	43	43	38	34	32	29	26	22	20	19	14
5	65	53	46	40	58	48	41	36	38	33	30	29	25	23	20	18	16	13
6	59	48	40	34	53	43	36	31	34	29	26	26	22	20	18	16	14	11
7	55	43	35	30	49	39	32	27	31	26	22	23	20	18	16	14	13	10
8	51	39	31	26	45	35	29	24	28	23	20	21	18	16	15	13	11	9
9	47	35	28	23	42	32	26	21	26	21	18	20	16	14	14	12	10	8
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	6044	6044	6044
5°	6083	6035	6009
10°	6035	5986	5953
15°	5971	5905	5883
20°	5899	5809	5797
25°	5817	5711	5694
30°	5694	5608	5571
35°	5532	5454	5422
40°	5360	5276	5256
45°	5151	5083	5061
50°	4938	4896	4863
55°	4707	4707	4633
60°	4420	4505	4346
65°	4045	4246	3944
70°	3565	3908	3472
75°	3045	3498	2962
80°	2361	2943	2393
85°	1528	2262	2015



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.1	1.0
10°-20°	522.5	2.9
20°-30°	775.0	4.3
30°-40°	906.9	5.0
40°-50°	902.8	5.0
50°-60°	779.6	4.3
60°-70°	561.2	3.1
70°-80°	294.3	1.6
80°-90°	77.7	0.4
90°-100°	939.5	5.2
100°-110°	2530.9	14.1
110°-120°	2656.1	14.8
120°-130°	2155.4	12.0
130°-140°	1690.4	9.4
140°-150°	1297.8	7.2
150°-160°	933.1	5.2
160°-170°	570.1	3.2
170°-180°	192.2	1.1
0°-30°	1482.6	8.3
0°-40°	2389.4	13.3
0°-60°	4071.9	22.7
0°-90°	5005.0	27.9
90°-120°	6126.5	34.1
90°-150°	11270.0	62.7
90°-180°	12965.0	72.1
0°-180°	17970.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1965	1965	1965	1965	1965	
5°	1970	1948	1955	1950	1946	187
15°	1875	1852	1854	1851	1848	529
25°	1714	1686	1683	1673	1678	788
35°	1474	1453	1453	1439	1444	921
45°	1184	1174	1169	1165	1164	914
55°	878	876	878	866	864	783
65°	556	573	584	561	542	551
75°	256	280	294	275	249	275
85°	43	57	64	60	57	57
90°	5	15	31	33	33	12
95°	143	511	1540	788	545	150
105°	468	728	2799	4188	3930	492
115°	826	1012	2331	4504	5094	813
125°	1128	1296	2093	3537	4163	1007
135°	1359	1516	2034	2854	3231	1049
145°	1571	1694	2008	2440	2620	985
155°	1783	1848	1990	2189	2259	821
165°	1934	1957	1998	2078	2088	545
175°	2011	2008	2001	2029	2024	191
180°	2008	2008	2008	2008	2008	

TEST NUMBER: P565021

CATALOG NUMBER: SQ4-PW1-125U-050D-940-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1965.3	1965.3	1965.3	1965.3	1965.3
2.5°	1976.4	1960.1	1965.3	1960.9	1951.5
5°	1970.5	1948.5	1954.9	1949.7	1946.3
7.5°	1950.4	1930.1	1934.8	1929.3	1927.2
10°	1932.4	1912.1	1916.8	1909.8	1906.4
12.5°	1911.6	1890.0	1894.7	1887.7	1885.7
15°	1875.3	1851.6	1854.5	1851.0	1847.6
17.5°	1833.0	1809.0	1809.5	1803.9	1803.2
20°	1802.5	1777.2	1774.8	1768.0	1771.4
22.5°	1769.3	1742.6	1740.2	1730.6	1735.4
25°	1714.2	1685.5	1683.1	1672.8	1677.9
27.5°	1650.5	1622.1	1622.1	1607.7	1613.1
30°	1603.4	1576.3	1579.2	1562.0	1568.8
32.5°	1553.6	1529.2	1530.7	1513.5	1520.3
35°	1473.6	1453.2	1452.8	1439.0	1444.1
37.5°	1391.8	1373.9	1371.0	1363.1	1364.5
40°	1335.0	1319.8	1314.2	1309.1	1309.1
42.5°	1275.5	1261.6	1256.1	1252.2	1250.9
45°	1184.4	1174.2	1168.8	1165.3	1163.6
47.5°	1094.3	1084.9	1080.1	1077.7	1076.0
50°	1032.0	1025.2	1023.3	1018.1	1016.4
52.5°	969.7	965.6	963.8	957.2	955.5
55°	877.9	876.2	877.9	865.7	864.0
57.5°	782.3	785.0	790.6	774.3	770.2
60°	718.6	725.4	732.4	713.2	706.5
62.5°	653.5	664.3	674.3	652.2	642.8
65°	555.8	572.8	583.5	560.6	542.0
67.5°	461.6	482.6	495.6	470.9	449.9
70°	396.5	420.2	434.6	409.8	386.1
72.5°	339.7	366.1	377.8	354.4	330.7
75°	256.3	280.0	294.4	274.7	249.3
77.5°	181.8	204.2	216.1	199.0	178.0
80°	133.3	157.0	166.2	152.0	135.1
82.5°	94.5	114.2	120.5	111.9	100.4
85°	43.3	56.8	64.1	60.5	57.1
87.5°	12.1	23.6	32.5	33.0	34.4
90°	5.1	15.1	30.7	33.3	33.3
92.5°	62.4	220.5	436.0	209.9	145.8
95°	143.3	511.0	1540.2	787.6	545.0
97.5°	228.7	585.0	2415.7	2018.1	1521.8
100°	294.2	614.4	2694.1	2818.8	2338.5
102.5°	357.7	655.9	2786.2	3418.4	3024.1
105°	468.2	728.4	2799.0	4187.5	3929.8
107.5°	572.6	804.7	2679.8	4582.7	4649.3
110°	642.2	862.3	2571.3	4705.4	4948.1



TEST NUMBER: P565021

CATALOG NUMBER: SQ4-PW1-125U-050D-940-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	715.9	920.0	2466.9	4678.3	5077.1
115°	826.4	1011.5	2330.8	4503.6	5093.9
117.5°	927.2	1100.8	2225.4	4224.7	4882.1
120°	992.7	1160.3	2172.2	4024.5	4699.9
122.5°	1050.0	1215.6	2133.3	3819.8	4493.2
125°	1128.3	1295.9	2092.8	3537.2	4162.7
127.5°	1203.5	1368.6	2067.3	3288.1	3846.4
130°	1248.5	1413.6	2057.0	3145.3	3635.6
132.5°	1293.6	1456.7	2046.8	3019.5	3469.8
135°	1358.6	1516.2	2034.0	2853.6	3231.4
137.5°	1420.5	1571.6	2027.3	2712.9	3023.1
140°	1463.5	1608.5	2021.2	2626.3	2906.4
142.5°	1508.5	1643.6	2017.1	2545.4	2781.6
145°	1570.9	1693.5	2008.4	2439.8	2619.9
147.5°	1638.5	1745.0	1999.7	2350.9	2492.5
150°	1683.5	1776.0	1995.6	2295.1	2412.6
152.5°	1724.4	1805.0	1993.6	2249.5	2345.1
155°	1783.3	1848.3	1990.5	2189.1	2259.1
157.5°	1834.9	1885.5	1991.0	2146.6	2193.6
160°	1867.7	1910.2	1993.1	2121.8	2156.8
162.5°	1896.3	1930.9	1995.1	2101.1	2126.1
165°	1934.2	1956.7	1998.2	2077.7	2087.7
167.5°	1964.9	1977.9	2000.7	2059.7	2063.7
170°	1985.4	1990.4	2000.7	2049.3	2049.3
172.5°	1997.7	1998.7	2002.8	2039.1	2039.1
175°	2011.0	2008.5	2000.7	2028.8	2023.8
177.5°	2016.6	2012.6	2002.3	2018.6	2014.5
180°	2008.4	2008.4	2008.4	2008.4	2008.4

(END OF REPORT)