

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: P519375

Luminaire Tested: **SQ4-WB-100U-050D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519375  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-050D-940-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

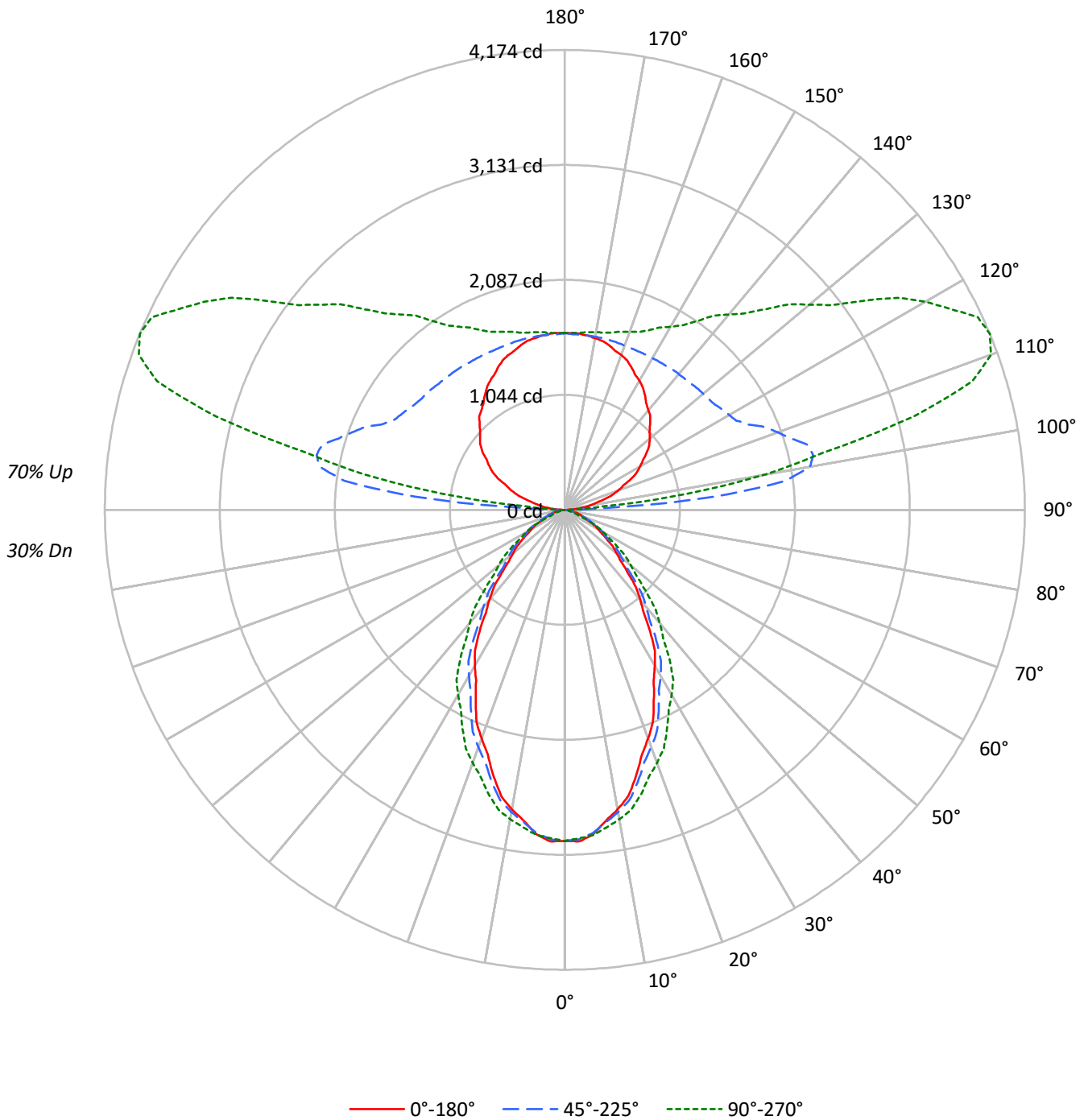
Lumens per Lamp: N/A  
Luminaire Lumens: 14797.9 lumens  
Efficiency: N/A  
Efficacy: 116.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: Semi-Indirect

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



TEST NUMBER: P519375  
CATALOG NUMBER: SQ4-WB-100U-050D-940-1D-UNV-STD-W-12

### Luminous Intensity Polar Plot





TEST NUMBER: P519375

CATALOG NUMBER: SQ4-WB-100U-050D-940-1D-UNV-STD-W-12

**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	92	92	92	92	72	72	72	54	54	54	37	37	37	30
1	94	90	86	83	84	81	78	75	64	62	60	48	47	46	34	33	33	26
2	86	79	74	69	77	72	67	63	57	54	51	43	41	40	31	30	29	23
3	79	70	64	58	71	64	58	53	51	47	44	39	36	34	28	27	25	20
4	72	63	55	50	65	57	51	46	46	41	38	35	32	30	25	24	22	18
5	67	56	49	43	60	51	44	40	41	36	33	32	29	26	23	21	20	16
6	62	50	43	38	55	46	39	35	37	33	29	29	26	23	21	19	18	15
7	57	46	38	33	51	42	35	31	34	29	26	27	23	21	20	18	16	13
8	53	42	34	29	48	38	32	27	31	26	23	24	21	19	18	16	15	12
9	49	38	31	26	44	35	29	24	28	24	21	23	19	17	17	15	14	11
10	46	35	28	24	42	32	26	22	26	22	19	21	18	16	16	14	12	10

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

	0°	45°	90°
0°	9241	9241	9241
5°	9126	9093	9146
10°	8622	8700	8902
15°	7959	8144	8509
20°	7228	7500	7996
25°	6483	6836	7449
30°	5797	6176	6883
35°	5069	5435	6212
40°	4266	4605	5378
45°	3521	3825	4490
50°	2940	3205	3741
55°	2495	2750	3089
60°	2133	2384	2465
65°	1698	2006	1593
70°	1505	1565	972
75°	1394	1269	595
80°	1284	1167	514
85°	1164	1069	420



TEST NUMBER: P519375

CATALOG NUMBER: SQ4-WB-100U-050D-940-1D-UNV-STD-W-12

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	275.6	1.9
10°-20°	716.9	4.8
20°-30°	928.6	6.3
30°-40°	909.3	6.1
40°-50°	696.0	4.7
50°-60°	463.8	3.1
60°-70°	253.1	1.7
70°-80°	105.4	0.7
80°-90°	33.2	0.2
90°-100°	750.7	5.1
100°-110°	2072.5	14.0
110°-120°	2137.5	14.4
120°-130°	1717.6	11.6
130°-140°	1349.9	9.1
140°-150°	1035.3	7.0
150°-160°	744.1	5.0
160°-170°	455.0	3.1
170°-180°	153.4	1.0
0°-30°	1921.0	13.0
0°-40°	2830.3	19.1
0°-60°	3990.1	27.0
0°-90°	4381.8	29.6
90°-120°	4960.7	33.5
90°-150°	9063.6	61.2
90°-180°	10416.0	70.4
0°-180°	14797.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3005	3005	3005	3005	3005	
5°	2956	2926	2945	2952	2963	275
15°	2500	2491	2558	2627	2672	698
25°	1910	1916	2015	2102	2195	879
35°	1350	1357	1448	1545	1655	839
45°	810	825	879	946	1032	631
55°	465	485	513	532	576	422
65°	233	253	276	241	219	243
75°	117	117	107	73	50	125
85°	33	33	30	20	12	36
90°	5	10	20	23	26	9
95°	110	406	1362	560	364	118
105°	369	570	2280	3481	3278	393
115°	662	800	1836	3636	4135	650
125°	908	1033	1665	2817	3306	808
135°	1093	1210	1618	2282	2573	845
145°	1267	1355	1598	1942	2090	793
155°	1429	1476	1585	1743	1798	658
165°	1547	1567	1593	1655	1667	436
175°	1603	1606	1595	1618	1613	152
180°	1603	1603	1603	1603	1603	

TEST NUMBER: P519375

CATALOG NUMBER: SQ4-WB-100U-050D-940-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3004.8	3004.8	3004.8	3004.8	3004.8
2.5°	3012.2	2985.3	2992.1	2991.9	2983.7
5°	2956.0	2926.3	2945.4	2952.3	2962.6
7.5°	2846.3	2823.9	2858.7	2884.5	2905.4
10°	2760.9	2741.5	2785.9	2823.4	2850.5
12.5°	2661.7	2645.5	2700.5	2750.9	2786.2
15°	2499.8	2490.8	2557.8	2627.4	2672.5
17.5°	2326.6	2322.2	2399.1	2480.3	2538.0
20°	2208.4	2207.1	2291.5	2376.1	2443.1
22.5°	2089.2	2092.1	2180.7	2268.7	2345.0
25°	1910.5	1915.6	2014.6	2102.4	2195.2
27.5°	1745.1	1747.4	1849.8	1942.5	2041.5
30°	1632.3	1638.7	1739.1	1835.0	1938.1
32.5°	1519.4	1526.9	1625.1	1724.3	1829.5
35°	1350.1	1356.6	1447.7	1545.1	1654.7
37.5°	1175.5	1184.3	1265.2	1357.3	1465.1
40°	1062.7	1075.6	1147.1	1233.8	1339.6
42.5°	954.0	970.0	1036.3	1118.6	1214.0
45°	809.5	825.0	879.4	946.0	1032.4
47.5°	685.1	702.9	744.7	802.0	875.7
50°	614.4	631.2	669.8	712.2	781.8
52.5°	552.2	568.9	603.3	636.1	695.4
55°	465.4	484.8	512.9	532.3	576.2
57.5°	394.2	412.8	435.1	443.9	470.4
60°	346.8	367.4	387.6	386.6	400.8
62.5°	303.5	321.0	341.2	327.3	328.0
65°	233.4	252.7	275.6	240.8	218.9
67.5°	188.5	192.7	216.2	167.9	141.9
70°	167.4	167.4	174.0	130.0	108.1
72.5°	147.4	147.4	141.3	105.7	82.8
75°	117.3	117.3	106.8	73.3	50.1
77.5°	90.4	89.4	81.7	54.7	36.4
80°	72.5	72.5	65.9	43.2	29.0
82.5°	56.7	56.7	51.2	33.7	21.6
85°	33.0	33.0	30.3	19.6	11.9
87.5°	12.6	13.6	14.7	10.9	10.4
90°	5.1	10.1	20.5	23.1	25.6
92.5°	46.2	191.6	342.7	125.1	97.5
95°	110.3	406.2	1362.0	559.8	364.2
97.5°	182.6	455.0	2017.6	1553.3	1125.0
100°	236.0	484.3	2259.7	2275.7	1849.3
102.5°	287.3	517.5	2306.9	2811.8	2407.5
105°	369.4	570.0	2280.2	3481.2	3278.0
107.5°	456.6	635.1	2153.0	3804.0	3878.2
110°	518.1	678.6	2054.5	3873.4	4114.2



TEST NUMBER: P519375

CATALOG NUMBER: SQ4-WB-100U-050D-940-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	573.5	728.0	1962.2	3818.6	4173.7
115°	661.8	799.7	1836.5	3635.6	4134.7
117.5°	738.7	876.1	1753.9	3378.1	3945.9
120°	790.0	925.4	1721.1	3203.8	3775.6
122.5°	839.3	968.7	1694.4	3041.0	3582.7
125°	908.0	1033.4	1664.7	2817.2	3306.2
127.5°	966.5	1091.9	1647.2	2627.9	3049.7
130°	1005.5	1130.9	1639.0	2512.1	2895.8
132.5°	1042.4	1161.8	1630.8	2414.9	2762.5
135°	1092.7	1210.5	1618.5	2281.7	2572.7
137.5°	1149.1	1256.4	1612.3	2170.0	2418.2
140°	1179.9	1285.2	1608.2	2095.4	2313.6
142.5°	1214.8	1312.1	1604.1	2029.1	2221.3
145°	1267.1	1354.9	1598.0	1942.5	2090.4
147.5°	1317.4	1394.1	1592.3	1869.4	1984.2
150°	1354.3	1417.0	1590.3	1825.8	1918.6
152.5°	1383.0	1441.7	1588.2	1788.5	1865.2
155°	1428.7	1476.3	1585.1	1742.9	1798.0
157.5°	1470.7	1507.4	1585.7	1709.6	1747.2
160°	1495.4	1528.0	1587.7	1690.9	1718.5
162.5°	1515.9	1544.5	1589.8	1674.4	1695.9
165°	1546.7	1566.7	1592.8	1654.7	1667.2
167.5°	1570.3	1582.3	1595.4	1642.7	1646.7
170°	1582.6	1592.6	1595.4	1636.4	1636.4
172.5°	1592.8	1598.9	1595.4	1628.2	1626.2
175°	1603.1	1605.6	1595.4	1618.4	1613.4
177.5°	1607.2	1605.2	1594.9	1609.2	1605.1
180°	1603.1	1603.1	1603.1	1603.1	1603.1

(END OF REPORT)