

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: P564969

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

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564969  
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-100D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1000 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: 20314.9 lumens  
Efficiency: N/A  
Efficacy: 111.5 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

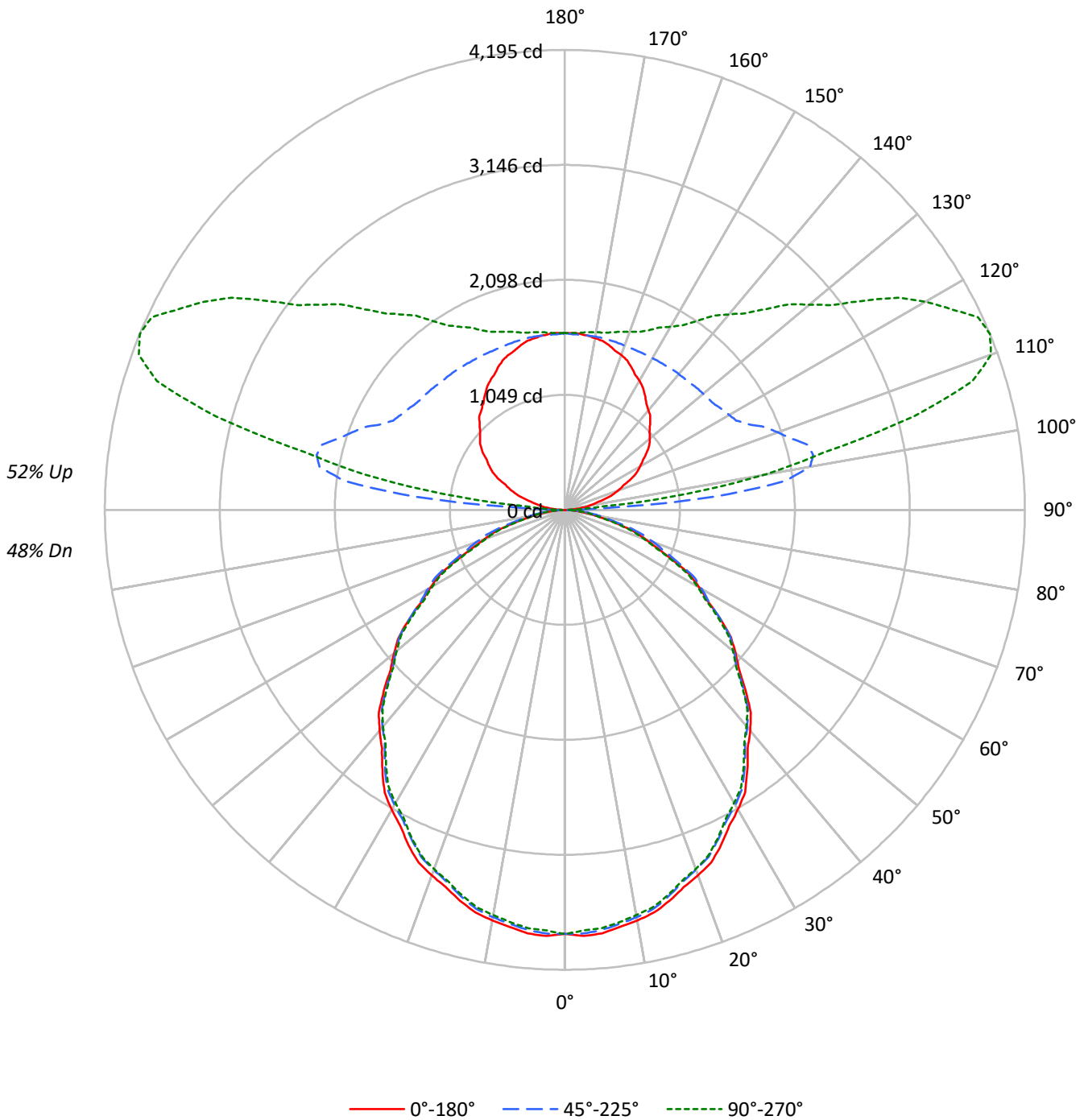
Input Watts (W): 182.2  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39	35
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33	29
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29	25
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20	17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18	15
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16	14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14	12

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

	0°	45°	90°
0°	11897	11897	11897
5°	11974	11879	11827
10°	11878	11782	11718
15°	11752	11622	11579
20°	11612	11433	11411
25°	11450	11242	11207
30°	11208	11038	10966
35°	10890	10736	10672
40°	10550	10385	10345
45°	10139	10006	9962
50°	9719	9637	9572
55°	9265	9265	9119
60°	8700	8868	8553
65°	7962	8358	7763
70°	7018	7693	6835
75°	5994	6885	5832
80°	4647	5795	4707
85°	3006	4450	3970



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	364.3	1.8
10°-20°	1028.4	5.1
20°-30°	1525.5	7.5
30°-40°	1785.0	8.8
40°-50°	1777.0	8.7
50°-60°	1534.5	7.6
60°-70°	1104.6	5.4
70°-80°	579.3	2.9
80°-90°	146.9	0.7
90°-100°	754.6	3.7
100°-110°	2083.1	10.3
110°-120°	2148.4	10.6
120°-130°	1726.4	8.5
130°-140°	1356.8	6.7
140°-150°	1040.6	5.1
150°-160°	747.9	3.7
160°-170°	457.3	2.3
170°-180°	154.2	0.8
0°-30°	2918.2	14.4
0°-40°	4703.2	23.2
0°-60°	8014.8	39.5
0°-90°	9845.6	48.5
90°-120°	4986.1	24.5
90°-150°	9109.9	44.8
90°-180°	10469.0	51.5
0°-180°	20314.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3868	3868	3868	3868	3868	
5°	3879	3835	3848	3838	3831	367
15°	3691	3644	3650	3643	3637	1040
25°	3374	3318	3313	3293	3303	1552
35°	2900	2860	2860	2832	2842	1813
45°	2331	2311	2301	2294	2290	1799
55°	1728	1725	1728	1704	1701	1542
65°	1094	1127	1149	1104	1067	1084
75°	504	551	579	541	491	541
85°	85	112	126	119	112	112
90°	5	10	21	23	26	11
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°	3868.4	3868.4	3868.4	3868.4	3868.4
2.5°	3890.2	3858.2	3868.4	3859.8	3841.2
5°	3878.6	3835.3	3848.0	3837.6	3830.9
7.5°	3839.1	3799.1	3808.4	3797.4	3793.4
10°	3803.7	3763.7	3773.0	3759.2	3752.5
12.5°	3762.8	3720.1	3729.4	3715.6	3711.6
15°	3691.2	3644.5	3650.3	3643.3	3636.7
17.5°	3608.0	3560.7	3561.7	3550.7	3549.4
20°	3548.0	3498.1	3493.5	3480.0	3486.7
22.5°	3482.6	3429.9	3425.3	3406.5	3415.8
25°	3374.2	3317.6	3312.9	3292.6	3302.6
27.5°	3248.8	3192.8	3192.9	3164.5	3175.2
30°	3156.1	3102.8	3108.4	3074.6	3087.9
32.5°	3057.9	3009.9	3012.9	2979.2	2992.5
35°	2900.5	2860.5	2859.6	2832.5	2842.5
37.5°	2739.6	2704.3	2698.7	2683.1	2685.7
40°	2627.8	2597.8	2586.9	2576.7	2576.7
42.5°	2510.6	2483.2	2472.4	2464.8	2462.2
45°	2331.3	2311.3	2300.6	2293.7	2290.4
47.5°	2154.0	2135.4	2126.1	2121.3	2117.9
50°	2031.3	2018.0	2014.3	2004.0	2000.7
52.5°	1908.6	1900.7	1897.1	1884.0	1880.7
55°	1728.0	1724.7	1728.0	1704.1	1700.7
57.5°	1539.9	1545.2	1556.2	1524.0	1516.0
60°	1414.4	1427.8	1441.7	1403.9	1390.6
62.5°	1286.3	1307.6	1327.2	1283.8	1265.2
65°	1094.1	1127.4	1148.6	1103.5	1066.8
67.5°	908.7	950.0	975.5	926.8	885.5
70°	780.5	827.2	855.5	806.7	760.1
72.5°	668.7	720.7	743.7	697.6	651.0
75°	504.4	551.1	579.4	540.8	490.8
77.5°	357.9	401.9	425.4	391.7	350.4
80°	262.4	309.1	327.2	299.2	265.8
82.5°	186.1	224.8	237.2	220.3	197.7
85°	85.2	111.9	126.1	119.1	112.5
87.5°	22.8	42.5	55.9	56.5	59.7
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)