

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: P564297

Luminaire Tested: **SQ4-PR1-100U-100D-935-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564297  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-4)  
Test Lab: INNOVATION CENTER  
Issue Date: 7/30/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-PR1-100U-100D-935-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

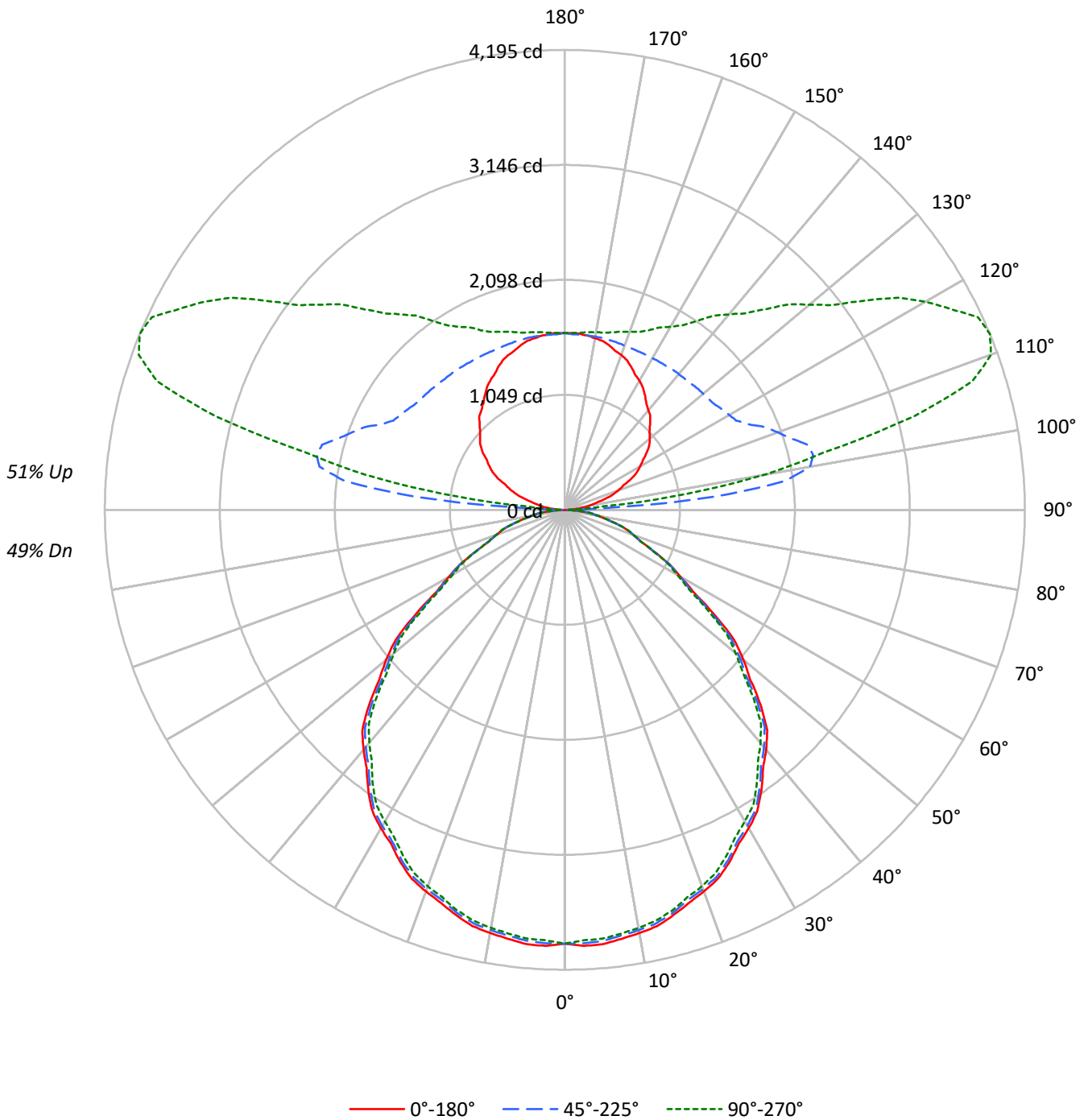
Lumens per Lamp: N/A  
Luminaire Lumens: 20364.7 lumens  
Efficiency: N/A  
Efficacy: 111.8 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35  
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')  
CIE Type: General Diffuse

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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				49
1	98	94	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47				41	
2	89	82	76	71	82	76	71	66	64	60	57	53	51	48	43	42	40				35	
3	82	72	65	59	75	67	61	56	57	52	48	47	44	41	39	36	34				30	
4	75	64	56	50	69	59	53	47	51	45	41	42	39	35	35	32	30				26	
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	31	28	26				23	
6	63	51	43	38	58	48	41	36	41	35	31	34	30	27	28	25	23				20	
7	59	46	39	33	54	43	36	31	37	32	28	31	27	24	26	23	20				18	
8	54	42	34	29	50	39	32	28	34	28	25	29	24	21	24	21	18				16	
9	51	38	31	26	47	36	29	25	31	26	22	26	22	19	22	19	17				14	
10	47	35	28	23	44	33	27	22	29	23	20	24	20	17	20	17	15				13	

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

	0°	45°	90°
0°	12169	12169	12169
5°	12279	12184	12121
10°	12240	12155	12091
15°	12186	12111	12045
20°	12125	12047	11958
25°	12040	11959	11820
30°	11910	11825	11656
35°	11734	11631	11465
40°	11466	11343	11138
45°	10999	10806	10584
50°	10176	9931	9735
55°	8881	8680	8498
60°	7484	7421	7275
65°	6474	6498	6449
70°	5945	5976	5976
75°	5711	5711	5751
80°	5372	5432	5372
85°	4330	4810	4810



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	374.2	1.8
10°-20°	1070.6	5.3
20°-30°	1614.8	7.9
30°-40°	1924.1	9.4
40°-50°	1897.0	9.3
50°-60°	1449.7	7.1
60°-70°	897.2	4.4
70°-80°	509.6	2.5
80°-90°	158.3	0.8
90°-100°	754.6	3.7
100°-110°	2083.1	10.2
110°-120°	2148.4	10.5
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	2.2
170°-180°	154.2	0.8
0°-30°	3059.6	15.0
0°-40°	4983.7	24.5
0°-60°	8330.4	40.9
0°-90°	9895.4	48.6
90°-120°	4986.1	24.5
90°-150°	9109.9	44.7
90°-180°	10469.0	51.4
0°-180°	20364.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3957	3957	3957	3957	3957	
5°	3978	3934	3947	3933	3926	377
15°	3828	3788	3804	3790	3783	1080
25°	3548	3505	3524	3487	3483	1633
35°	3125	3089	3098	3057	3054	1951
45°	2529	2496	2485	2440	2434	1937
55°	1656	1630	1619	1592	1585	1484
65°	890	883	893	886	886	901
75°	481	481	481	484	484	508
85°	123	129	136	136	136	143
90°	5	10	21	23	26	13
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	

TEST NUMBER: P564297

CATALOG NUMBER: SQ4-PR1-100U-100D-935-1D-UNV-STD-W-12

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3957.0	3957.0	3957.0	3957.0	3957.0
2.5°	3981.6	3946.9	3957.0	3948.4	3929.8
5°	3977.5	3934.2	3946.8	3933.0	3926.4
7.5°	3946.8	3904.1	3916.8	3903.1	3899.1
10°	3919.5	3879.5	3892.3	3878.5	3871.8
12.5°	3889.5	3846.9	3862.3	3845.8	3839.1
15°	3827.5	3787.5	3803.7	3789.9	3783.2
17.5°	3759.3	3716.7	3732.8	3716.9	3708.2
20°	3704.8	3664.8	3681.0	3657.0	3653.7
22.5°	3644.8	3604.8	3621.0	3588.9	3588.2
25°	3548.0	3504.7	3524.2	3486.6	3483.3
27.5°	3432.8	3392.8	3409.0	3370.7	3366.7
30°	3353.8	3313.8	3329.9	3288.9	3282.2
32.5°	3263.8	3226.5	3239.9	3198.9	3194.9
35°	3125.4	3088.7	3098.1	3057.2	3053.8
37.5°	2967.9	2934.6	2940.0	2894.9	2891.6
40°	2856.1	2822.8	2825.5	2777.7	2774.3
42.5°	2733.5	2700.1	2697.3	2649.5	2646.2
45°	2529.0	2495.6	2484.6	2440.2	2433.5
47.5°	2295.8	2262.5	2242.0	2205.7	2201.1
50°	2126.8	2093.4	2075.6	2044.7	2034.8
52.5°	1944.1	1910.8	1895.7	1867.5	1857.5
55°	1656.4	1629.8	1618.9	1591.5	1584.9
57.5°	1383.1	1365.1	1362.0	1335.3	1332.6
60°	1216.8	1206.8	1206.5	1182.7	1182.7
62.5°	1075.0	1067.6	1072.9	1057.2	1054.5
65°	889.6	882.9	893.0	886.2	886.2
67.5°	743.0	743.0	749.1	746.4	746.4
70°	661.2	661.2	664.6	664.6	664.6
72.5°	587.6	584.9	593.7	593.7	591.0
75°	480.6	480.6	480.6	484.0	484.0
77.5°	374.2	374.9	377.6	376.9	374.2
80°	303.3	306.7	306.7	303.3	303.3
82.5°	232.4	235.8	235.9	235.1	232.4
85°	122.7	129.4	136.3	136.3	136.3
87.5°	36.5	48.1	58.7	59.1	57.0
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

TEST NUMBER: P564297

CATALOG NUMBER: SQ4-PR1-100U-100D-935-1D-UNV-STD-W-12

**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)