

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: P564629

Luminaire Tested: **SQ4-PW1-050U-050D-930-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564629  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, 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-PW1-050U-050D-930-1D-UNV-STD-W-12  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9360.8 lumens  
Efficiency: N/A  
Efficacy: 117.6 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

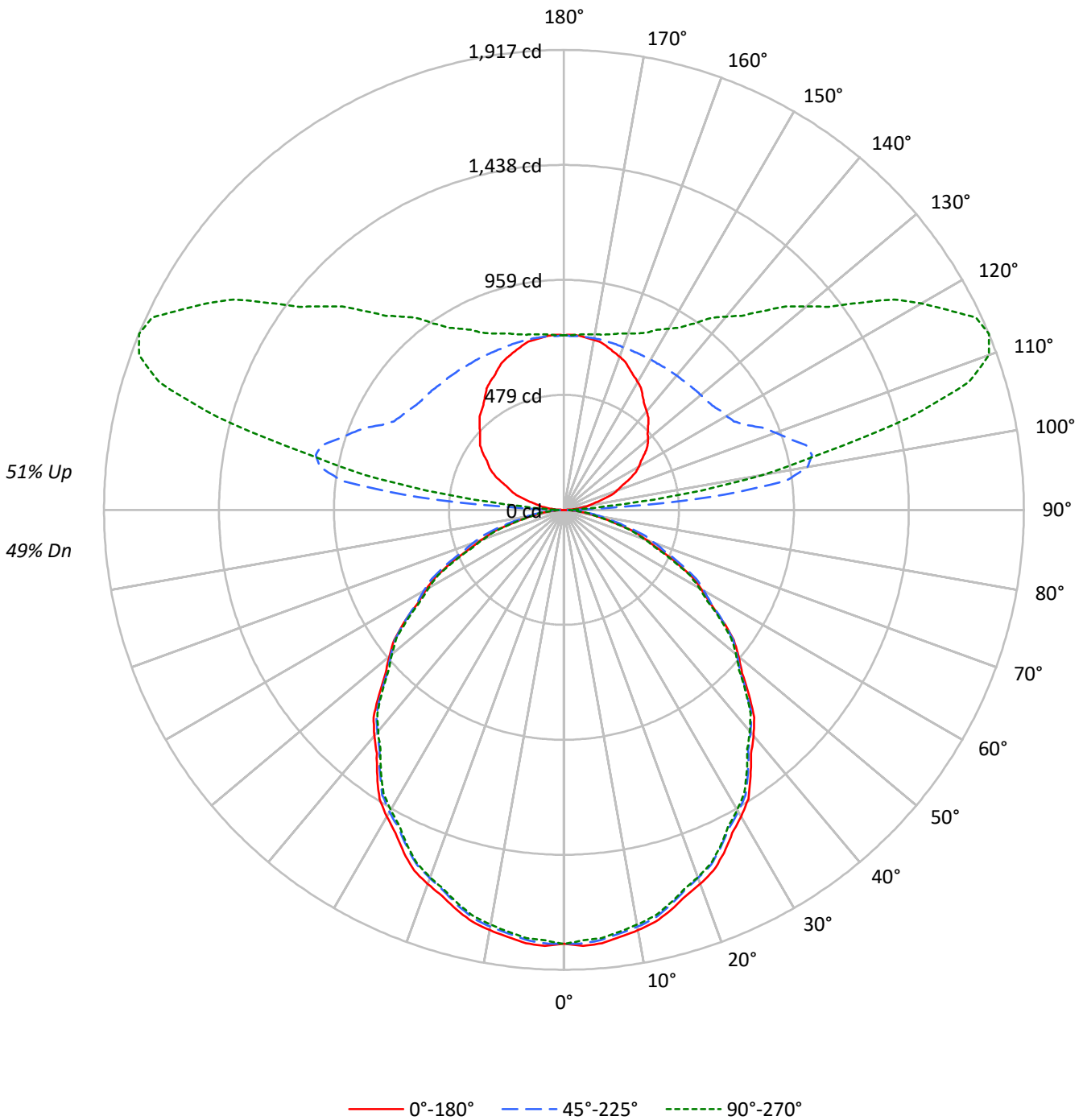
Input Watts (W): 79.6  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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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	99	99	99	99	83	83	83	69	69	69	55	55	55	49				49
1	98	93	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47				42	
2	89	82	76	70	82	75	70	66	64	60	57	53	50	48	43	41	40				35	
3	81	72	65	59	75	66	60	55	56	52	48	47	44	41	38	36	34				30	
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	32	29				26	
5	68	57	49	43	63	53	45	40	45	39	35	38	33	30	31	28	25				22	
6	63	51	43	37	58	47	40	35	40	35	31	34	30	26	28	25	22				19	
7	58	46	38	32	53	43	36	31	37	31	27	31	27	23	26	22	20				17	
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	24	20	18				15	
9	50	38	31	26	46	35	29	24	31	25	21	26	22	19	22	19	16				14	
10	47	35	28	23	43	33	26	22	28	23	19	24	20	17	20	17	15				13	

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

	0°	45°	90°
0°	5564	5564	5564
5°	5600	5555	5531
10°	5555	5510	5480
15°	5496	5435	5415
20°	5430	5347	5337
25°	5355	5257	5241
30°	5241	5162	5128
35°	5092	5021	4991
40°	4934	4857	4838
45°	4742	4679	4659
50°	4545	4507	4476
55°	4333	4333	4265
60°	4069	4147	4000
65°	3723	3908	3631
70°	3282	3598	3196
75°	2803	3220	2727
80°	2173	2710	2201
85°	1404	2082	1856



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	170.4	1.8
10°-20°	481.0	5.1
20°-30°	713.4	7.6
30°-40°	834.8	8.9
40°-50°	831.0	8.9
50°-60°	717.6	7.7
60°-70°	516.6	5.5
70°-80°	270.9	2.9
80°-90°	70.0	0.7
90°-100°	349.6	3.7
100°-110°	949.7	10.1
110°-120°	976.5	10.4
120°-130°	780.7	8.3
130°-140°	613.5	6.6
140°-150°	470.4	5.0
150°-160°	338.3	3.6
160°-170°	206.9	2.2
170°-180°	69.7	0.7
0°-30°	1364.7	14.6
0°-40°	2199.5	23.5
0°-60°	3748.1	40.0
0°-90°	4605.5	49.2
90°-120°	2275.9	24.3
90°-150°	4140.4	44.2
90°-180°	4755.0	50.8
0°-180°	9360.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1809	1809	1809	1809	1809	
5°	1814	1794	1800	1795	1792	172
15°	1726	1704	1707	1704	1701	487
25°	1578	1552	1549	1540	1544	726
35°	1356	1338	1337	1325	1329	848
45°	1090	1081	1076	1073	1071	841
55°	808	806	808	797	795	721
65°	512	527	537	516	499	507
75°	236	258	271	253	230	253
85°	40	52	59	56	53	53
90°	2	9	16	21	21	5
95°	52	191	609	265	178	55
105°	169	262	1044	1590	1496	179
115°	300	364	836	1663	1894	296
125°	412	469	756	1274	1503	367
135°	496	551	735	1038	1171	384
145°	574	615	726	882	948	360
155°	649	672	721	792	815	299
165°	702	712	724	754	756	198
175°	728	731	726	735	733	69
180°	728	728	728	728	728	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1809.1	1809.1	1809.1	1809.1	1809.1
2.5°	1819.3	1804.3	1809.1	1805.0	1796.3
5°	1813.9	1793.6	1799.5	1794.7	1791.5
7.5°	1795.4	1776.7	1781.0	1775.9	1774.0
10°	1778.8	1760.1	1764.4	1758.0	1754.9
12.5°	1759.7	1739.7	1744.0	1737.6	1735.8
15°	1726.2	1704.4	1707.1	1703.8	1700.7
17.5°	1687.3	1665.2	1665.6	1660.5	1659.9
20°	1659.2	1635.9	1633.7	1627.4	1630.6
22.5°	1628.6	1604.0	1601.9	1593.0	1597.4
25°	1578.0	1551.5	1549.3	1539.8	1544.5
27.5°	1519.3	1493.1	1493.2	1479.9	1484.9
30°	1475.9	1451.0	1453.6	1437.8	1444.1
32.5°	1430.0	1407.6	1409.0	1393.2	1399.4
35°	1356.4	1337.7	1337.3	1324.6	1329.3
37.5°	1281.2	1264.7	1262.0	1254.7	1256.0
40°	1228.9	1214.9	1209.8	1205.0	1205.0
42.5°	1174.1	1161.3	1156.2	1152.7	1151.4
45°	1090.2	1080.9	1075.9	1072.7	1071.1
47.5°	1007.3	998.6	994.3	992.0	990.4
50°	950.0	943.7	942.0	937.2	935.6
52.5°	892.6	888.8	887.2	881.1	879.5
55°	808.1	806.5	808.1	796.9	795.4
57.5°	720.1	722.6	727.8	712.7	709.0
60°	661.5	667.7	674.2	656.5	650.3
62.5°	601.5	611.5	620.7	600.4	591.7
65°	511.6	527.2	537.1	516.0	498.9
67.5°	424.9	444.3	456.2	433.4	414.1
70°	365.0	386.8	400.1	377.3	355.4
72.5°	312.7	337.0	347.8	326.3	304.4
75°	235.9	257.7	271.0	252.9	229.5
77.5°	167.4	187.9	198.9	183.2	163.9
80°	122.7	144.5	153.0	139.9	124.3
82.5°	87.0	105.1	110.9	103.0	92.4
85°	39.8	52.3	59.0	55.7	52.6
87.5°	10.7	20.8	27.5	28.5	29.7
90°	2.3	9.2	16.4	21.1	21.1
92.5°	21.1	95.7	166.3	71.4	60.4
95°	51.5	191.2	608.9	265.0	178.0
97.5°	85.2	211.2	933.4	726.2	510.0
100°	107.7	224.5	1032.7	1046.9	845.4
102.5°	130.2	237.8	1059.0	1294.7	1117.0
105°	168.6	262.5	1044.4	1590.3	1496.4
107.5°	208.4	291.3	984.0	1742.9	1769.0
110°	236.5	312.1	939.1	1772.9	1885.1



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	260.9	332.8	894.1	1748.0	1917.0
115°	299.7	363.9	836.0	1663.2	1894.5
117.5°	336.3	397.6	799.0	1543.1	1803.6
120°	360.6	420.2	782.2	1462.5	1721.2
122.5°	381.2	440.8	770.9	1381.7	1631.3
125°	412.2	469.4	756.4	1274.4	1503.4
127.5°	439.8	496.6	748.4	1193.2	1389.6
130°	456.6	511.6	744.7	1142.1	1318.4
132.5°	473.5	528.5	740.9	1098.6	1254.7
135°	496.5	551.4	735.3	1038.1	1170.9
137.5°	521.3	571.2	732.5	984.7	1096.4
140°	536.3	584.4	730.6	950.7	1051.5
142.5°	551.3	595.7	728.8	924.1	1008.4
145°	573.7	615.0	726.0	882.0	948.4
147.5°	599.0	634.3	723.6	848.9	901.1
150°	615.9	645.7	723.6	829.9	871.1
152.5°	629.0	655.1	721.7	812.9	846.8
155°	648.7	671.6	721.3	792.0	814.9
157.5°	667.9	685.7	721.3	777.9	795.3
160°	679.1	695.1	721.3	768.4	782.2
162.5°	690.4	702.7	723.1	760.8	770.9
165°	702.5	711.7	723.6	754.1	756.4
167.5°	715.2	719.8	726.0	746.1	748.0
170°	718.9	723.5	726.0	742.3	742.3
172.5°	722.7	725.4	726.0	738.6	738.6
175°	728.3	730.6	726.0	735.3	733.0
177.5°	730.2	730.2	724.5	732.0	728.3
180°	728.3	728.3	728.3	728.3	728.3

(END OF REPORT)