

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: P564973

Luminaire Tested: **SQ4-PW1-100U-100D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564973
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-940-1D-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: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20211.7 lumens
Efficiency: N/A
Efficacy: 110.9 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

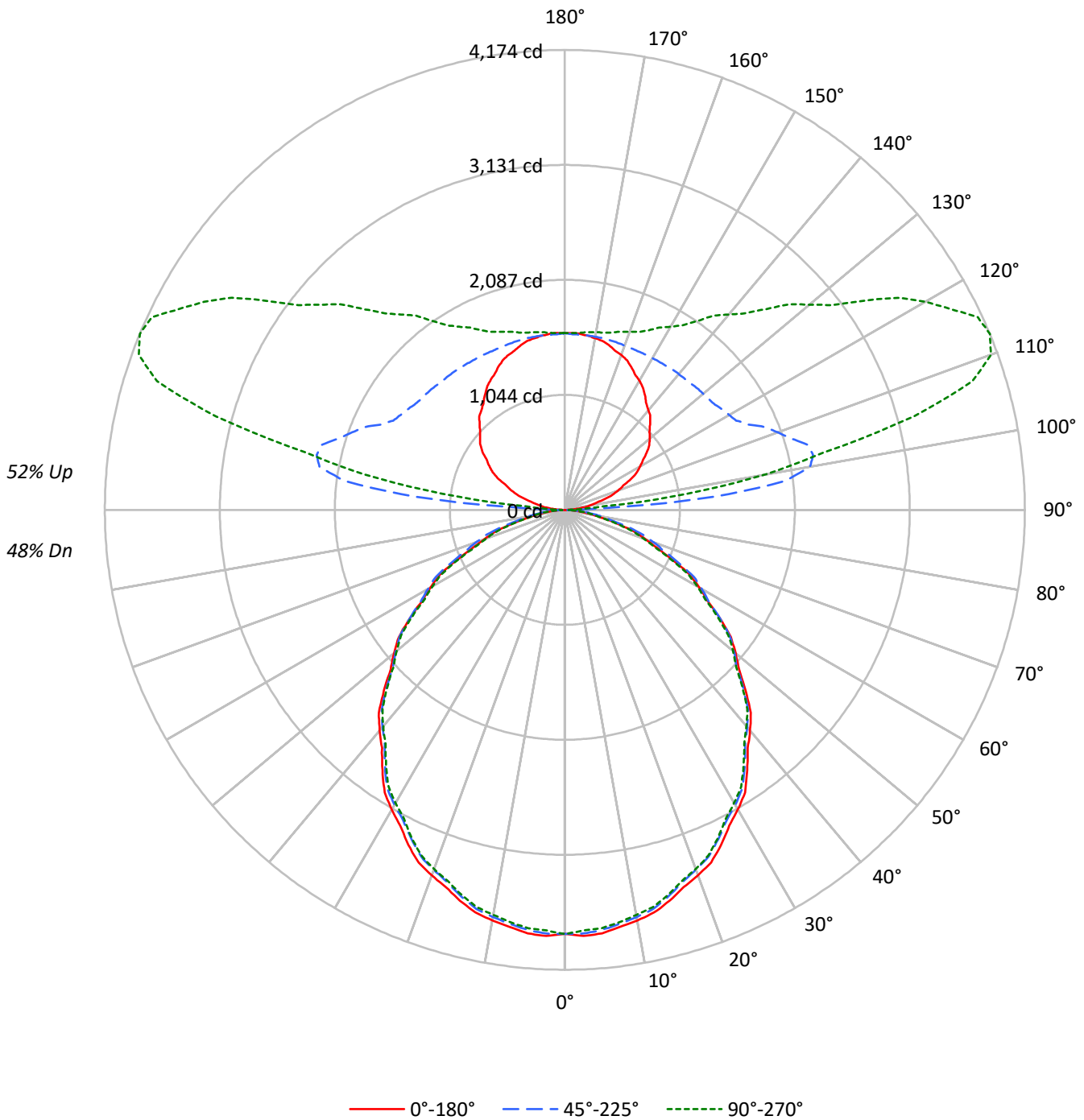
Input Watts (W): 182.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48				48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46	41				41
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39	35				35
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33	29				29
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29	25				25
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25	22				22
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22	19				19
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20	17				17
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18	15				15
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16	14				14
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14	12				12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11837	11837	11837
5°	11913	11819	11767
10°	11818	11723	11659
15°	11693	11563	11520
20°	11553	11376	11353
25°	11392	11184	11150
30°	11151	10982	10910
35°	10834	10681	10618
40°	10496	10333	10292
45°	10088	9955	9911
50°	9669	9589	9523
55°	9218	9218	9073
60°	8656	8823	8510
65°	7921	8316	7724
70°	6982	7653	6800
75°	5964	6850	5802
80°	4624	5765	4684
85°	2992	4428	3949



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	362.4	1.8
10°-20°	1023.2	5.1
20°-30°	1517.8	7.5
30°-40°	1775.9	8.8
40°-50°	1768.0	8.7
50°-60°	1526.8	7.6
60°-70°	1099.0	5.4
70°-80°	576.3	2.9
80°-90°	146.2	0.7
90°-100°	750.7	3.7
100°-110°	2072.5	10.3
110°-120°	2137.5	10.6
120°-130°	1717.6	8.5
130°-140°	1349.9	6.7
140°-150°	1035.3	5.1
150°-160°	744.1	3.7
160°-170°	455.0	2.3
170°-180°	153.4	0.8
0°-30°	2903.4	14.4
0°-40°	4679.4	23.2
0°-60°	7974.1	39.5
0°-90°	9795.6	48.5
90°-120°	4960.7	24.5
90°-150°	9063.6	44.8
90°-180°	10416.0	51.5
0°-180°	20211.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3849	3849	3849	3849	3849	
5°	3859	3816	3828	3818	3812	366
15°	3672	3626	3632	3625	3618	1035
25°	3357	3301	3296	3276	3286	1544
35°	2886	2846	2845	2818	2828	1804
45°	2319	2300	2289	2282	2279	1790
55°	1719	1716	1719	1695	1692	1534
65°	1088	1122	1143	1098	1061	1079
75°	502	548	576	538	488	538
85°	85	111	126	118	112	112
90°	5	10	20	23	26	11
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	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	3848.8	3848.8	3848.8	3848.8	3848.8
2.5°	3870.5	3838.7	3848.8	3840.2	3821.7
5°	3859.0	3815.8	3828.4	3818.1	3811.5
7.5°	3819.6	3779.8	3789.1	3778.2	3774.2
10°	3784.4	3744.6	3753.8	3740.1	3733.5
12.5°	3743.7	3701.2	3710.4	3696.8	3692.8
15°	3672.4	3626.0	3631.8	3624.8	3618.2
17.5°	3589.7	3542.6	3543.6	3532.7	3531.4
20°	3530.0	3480.3	3475.8	3462.4	3469.0
22.5°	3464.9	3412.5	3408.0	3389.2	3398.5
25°	3357.1	3300.7	3296.0	3275.9	3285.9
27.5°	3232.3	3176.6	3176.7	3148.4	3159.1
30°	3140.1	3087.0	3092.6	3059.0	3072.2
32.5°	3042.4	2994.7	2997.6	2964.0	2977.3
35°	2885.7	2845.9	2845.0	2818.1	2828.1
37.5°	2725.7	2690.5	2685.0	2669.5	2672.1
40°	2614.5	2584.6	2573.8	2563.6	2563.6
42.5°	2497.8	2470.6	2459.8	2452.3	2449.7
45°	2319.4	2299.5	2288.9	2282.1	2278.7
47.5°	2143.1	2124.5	2115.3	2110.5	2107.2
50°	2021.0	2007.8	2004.1	1993.8	1990.5
52.5°	1899.0	1891.0	1887.4	1874.5	1871.2
55°	1719.2	1715.9	1719.2	1695.4	1692.1
57.5°	1532.1	1537.4	1548.3	1516.3	1508.3
60°	1407.3	1420.5	1434.4	1396.8	1383.5
62.5°	1279.8	1301.0	1320.5	1277.3	1258.7
65°	1088.5	1121.7	1142.8	1097.9	1061.4
67.5°	904.0	945.2	970.5	922.1	881.0
70°	776.5	823.0	851.1	802.6	756.2
72.5°	665.3	717.0	739.9	694.1	647.7
75°	501.9	548.3	576.5	538.0	488.3
77.5°	356.1	399.8	423.2	389.7	348.6
80°	261.1	307.5	325.5	297.7	264.5
82.5°	185.1	223.6	236.0	219.2	196.7
85°	84.8	111.3	125.5	118.5	111.9
87.5°	22.7	42.3	55.6	56.2	59.4
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



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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)