

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: P564253

Luminaire Tested: **SQ4-PR1-100U-050D-940-1D-UNV-STD-W-12**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564253
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-050D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

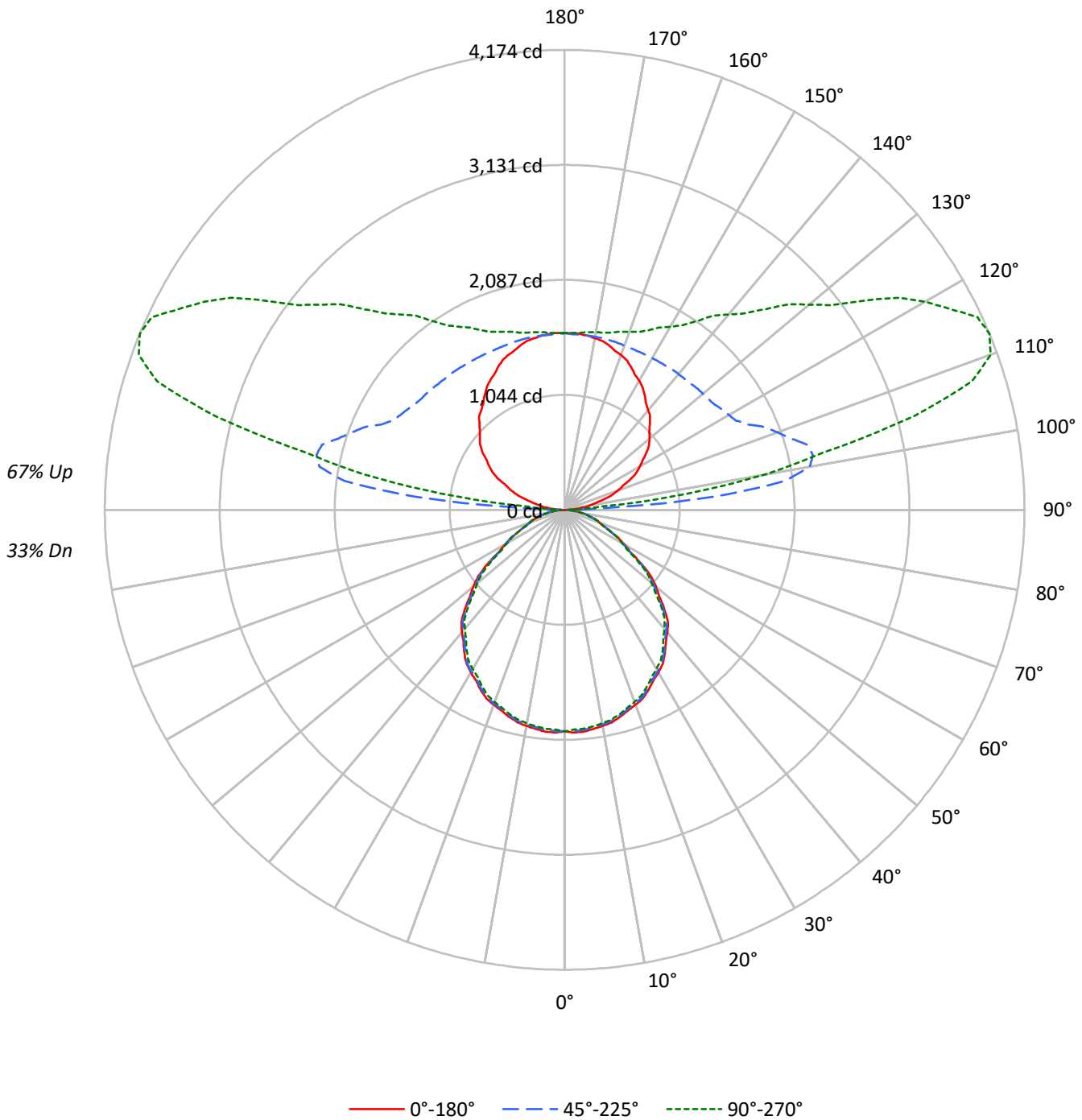
Lumens per Lamp: N/A
Luminaire Lumens: 15445.0 lumens
Efficiency: N/A
Efficacy: 121.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

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



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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	103	103	103	103	93	93	93	93	74	74	74	56	56	56	40	40	40	33
1	94	90	86	83	85	81	78	75	65	63	61	50	48	47	36	35	34	28
2	86	79	73	68	77	71	66	62	57	53	50	44	42	40	32	30	29	24
3	78	69	62	57	70	63	57	52	50	46	43	39	36	34	28	26	25	20
4	72	61	54	48	64	56	49	44	45	40	36	35	31	29	25	23	22	17
5	66	55	47	41	59	50	43	38	40	35	31	31	28	25	23	21	19	15
6	60	49	41	35	54	44	38	33	36	31	27	28	25	22	21	18	17	13
7	56	44	36	31	50	40	33	29	33	28	24	25	22	19	19	17	15	12
8	52	40	32	27	47	36	30	25	30	25	21	23	20	17	17	15	13	11
9	48	36	29	24	43	33	27	22	27	22	19	21	18	15	16	14	12	10
10	45	33	26	22	40	30	24	20	25	20	17	20	16	14	15	12	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6182	6182	6182
5°	6238	6190	6158
10°	6219	6175	6143
15°	6191	6153	6119
20°	6160	6120	6075
25°	6116	6075	6005
30°	6050	6008	5922
35°	5961	5909	5825
40°	5825	5763	5659
45°	5588	5490	5377
50°	5170	5045	4946
55°	4512	4410	4317
60°	3802	3770	3695
65°	3288	3302	3276
70°	3020	3037	3037
75°	2901	2901	2922
80°	2729	2759	2729
85°	2198	2445	2445



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	190.1	1.2
10°-20°	543.9	3.5
20°-30°	820.4	5.3
30°-40°	977.5	6.3
40°-50°	963.7	6.2
50°-60°	736.5	4.8
60°-70°	455.8	3.0
70°-80°	258.9	1.7
80°-90°	82.1	0.5
90°-100°	750.7	4.9
100°-110°	2072.5	13.4
110°-120°	2137.5	13.8
120°-130°	1717.6	11.1
130°-140°	1349.9	8.7
140°-150°	1035.3	6.7
150°-160°	744.1	4.8
160°-170°	455.0	2.9
170°-180°	153.4	1.0
0°-30°	1554.4	10.1
0°-40°	2531.9	16.4
0°-60°	4232.2	27.4
0°-90°	5028.9	32.6
90°-120°	4960.7	32.1
90°-150°	9063.6	58.7
90°-180°	10416.0	67.4
0°-180°	15445.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2010	2010	2010	2010	2010	
5°	2021	1999	2005	1998	1995	192
15°	1944	1924	1932	1925	1922	549
25°	1802	1780	1790	1771	1770	830
35°	1588	1569	1574	1553	1552	991
45°	1285	1268	1262	1240	1236	984
55°	842	828	822	809	805	754
65°	452	448	454	450	450	458
75°	244	244	244	246	246	258
85°	62	66	69	69	69	73
90°	5	10	20	23	26	10
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°	2010.3	2010.3	2010.3	2010.3	2010.3
2.5°	2022.8	2005.2	2010.3	2006.0	1996.5
5°	2020.7	1998.7	2005.1	1998.1	1994.7
7.5°	2005.1	1983.5	1989.9	1982.9	1980.9
10°	1991.3	1971.0	1977.4	1970.4	1967.0
12.5°	1976.0	1954.4	1962.2	1953.8	1950.4
15°	1944.5	1924.2	1932.4	1925.4	1922.0
17.5°	1909.9	1888.2	1896.4	1888.3	1883.9
20°	1882.2	1861.9	1870.1	1857.9	1856.2
22.5°	1851.7	1831.4	1839.6	1823.3	1823.0
25°	1802.5	1780.5	1790.4	1771.3	1769.6
27.5°	1744.0	1723.7	1731.9	1712.5	1710.4
30°	1703.8	1683.5	1691.7	1670.9	1667.5
32.5°	1658.1	1639.2	1646.0	1625.2	1623.2
35°	1587.8	1569.2	1574.0	1553.2	1551.5
37.5°	1507.8	1490.9	1493.6	1470.7	1469.0
40°	1451.0	1434.1	1435.5	1411.2	1409.5
42.5°	1388.7	1371.8	1370.3	1346.1	1344.4
45°	1284.8	1267.9	1262.3	1239.7	1236.3
47.5°	1166.4	1149.4	1139.0	1120.6	1118.2
50°	1080.5	1063.6	1054.5	1038.8	1033.7
52.5°	987.7	970.7	963.1	948.8	943.7
55°	841.5	828.0	822.5	808.6	805.2
57.5°	702.7	693.5	691.9	678.4	677.0
60°	618.2	613.1	613.0	600.8	600.8
62.5°	546.1	542.4	545.1	537.1	535.7
65°	451.9	448.5	453.7	450.2	450.2
67.5°	377.5	377.5	380.6	379.2	379.2
70°	335.9	335.9	337.7	337.7	337.7
72.5°	298.5	297.2	301.6	301.6	300.3
75°	244.1	244.1	244.1	245.9	245.9
77.5°	190.1	190.5	191.9	191.5	190.1
80°	154.1	155.8	155.8	154.1	154.1
82.5°	118.1	119.8	119.8	119.4	118.1
85°	62.3	65.7	69.3	69.3	69.3
87.5°	19.0	25.5	31.8	32.3	31.4
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)