

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: P520215

Luminaire Tested: **SQ4-F-100U-075D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520215
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-100U-075D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

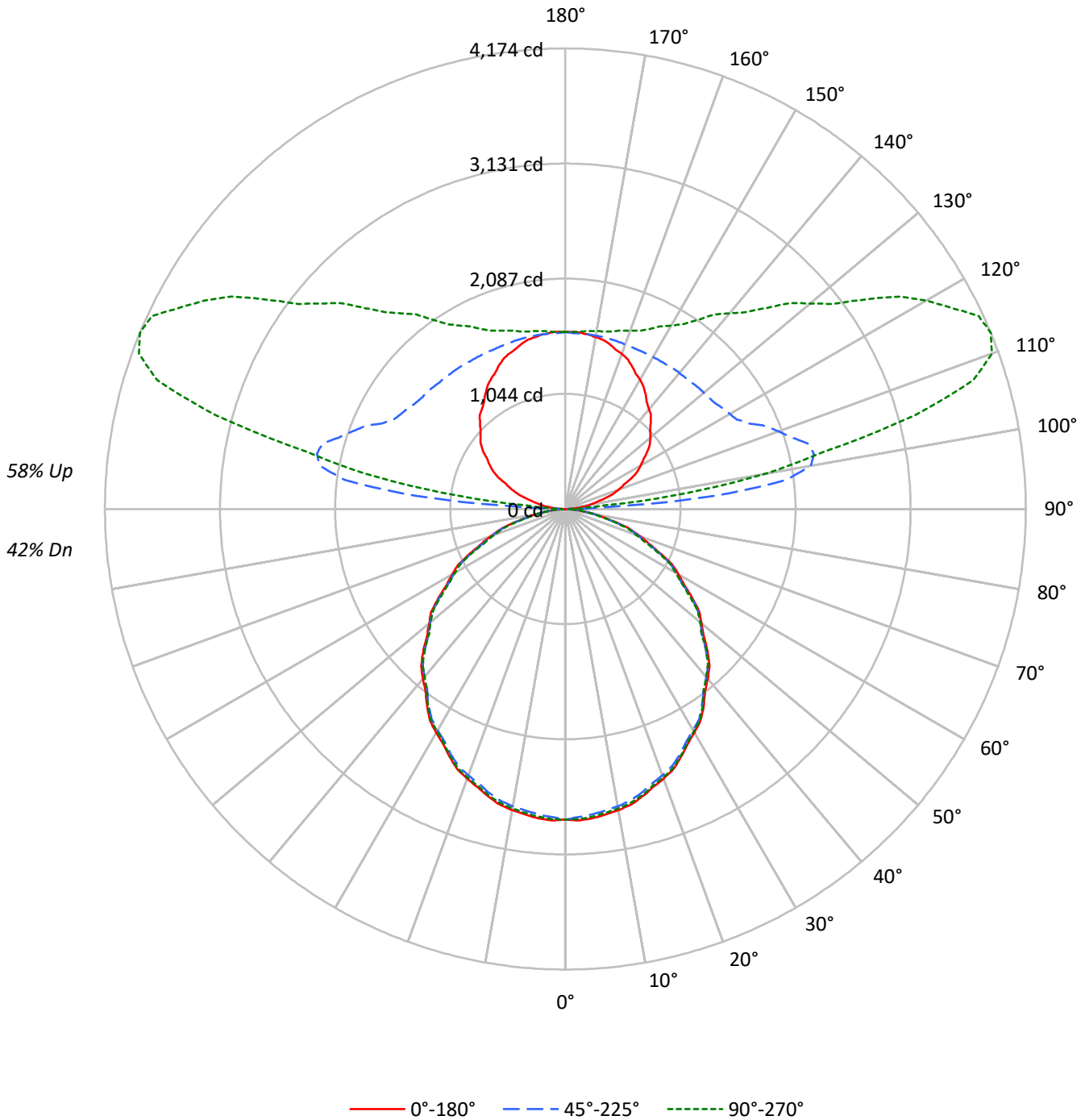
Lumens per Lamp: N/A
Luminaire Lumens: 18104.1 lumens
Efficiency: N/A
Efficacy: 116.1 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 156
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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	49	49	49	42
1	96	92	88	84	88	84	81	78	69	67	65	56	54	53	43	42	42	36
2	87	80	74	69	80	73	68	64	61	57	54	49	46	44	38	36	35	30
3	80	70	63	57	72	64	58	53	53	49	45	43	40	37	34	31	30	25
4	73	62	54	48	66	57	50	45	47	42	38	38	35	32	30	28	25	22
5	67	55	47	41	61	51	44	38	42	37	33	34	30	27	27	24	22	19
6	61	49	41	36	56	45	38	33	38	33	29	31	27	24	24	22	19	16
7	57	45	37	31	52	41	34	29	34	29	25	28	24	21	22	19	17	14
8	53	40	33	27	48	37	30	26	31	26	22	26	22	19	20	18	15	13
9	49	37	29	24	45	34	27	23	29	23	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	20	26	21	18	22	18	15	17	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8657	8657	8657
5°	8690	8580	8643
10°	8655	8544	8607
15°	8589	8483	8556
20°	8511	8411	8477
25°	8417	8331	8391
30°	8311	8220	8265
35°	8202	8115	8154
40°	8063	7982	7971
45°	7925	7826	7848
50°	7705	7644	7644
55°	7526	7430	7362
60°	7284	7158	7095
65°	6891	6760	6667
70°	6471	6310	6150
75°	5822	5611	5488
80°	4654	4564	4520
85°	2791	3155	3243



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.7	1.5
10°-20°	756.4	4.2
20°-30°	1136.5	6.3
30°-40°	1356.0	7.5
40°-50°	1390.7	7.7
50°-60°	1239.2	6.8
60°-70°	923.9	5.1
70°-80°	501.1	2.8
80°-90°	118.5	0.7
90°-100°	750.7	4.1
100°-110°	2072.6	11.4
110°-120°	2137.5	11.8
120°-130°	1717.7	9.5
130°-140°	1349.9	7.5
140°-150°	1035.3	5.7
150°-160°	744.1	4.1
160°-170°	455.0	2.5
170°-180°	153.4	0.8
0°-30°	2158.6	11.9
0°-40°	3514.6	19.4
0°-60°	6144.5	33.9
0°-90°	7688.0	42.5
90°-120°	4960.8	27.4
90°-150°	9063.6	50.1
90°-180°	10416.0	57.5
0°-180°	18104.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2815	2815	2815	2815	2815	
5°	2815	2810	2779	2802	2800	267
15°	2698	2693	2664	2685	2687	761
25°	2481	2478	2455	2468	2473	1143
35°	2185	2180	2162	2162	2172	1365
45°	1822	1815	1799	1799	1804	1402
55°	1404	1401	1386	1373	1373	1254
65°	947	947	929	919	916	943
75°	490	480	472	464	462	515
85°	79	84	89	89	92	110
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°	2815.0	2815.0	2815.0	2815.0	2815.0
2.5°	2825.1	2819.2	2794.5	2814.9	2812.9
5°	2815.0	2810.0	2779.3	2802.1	2799.7
7.5°	2792.0	2786.6	2756.3	2779.3	2778.7
10°	2771.6	2764.1	2735.9	2758.8	2756.3
12.5°	2745.0	2737.6	2709.3	2732.2	2729.7
15°	2697.6	2692.6	2664.4	2684.9	2687.4
17.5°	2643.5	2634.0	2608.7	2628.7	2631.2
20°	2600.6	2593.1	2570.0	2587.9	2590.3
22.5°	2555.7	2548.2	2525.1	2543.0	2545.5
25°	2480.6	2478.2	2455.1	2468.0	2472.9
27.5°	2399.5	2392.5	2373.9	2383.8	2388.8
30°	2340.3	2335.3	2314.8	2322.6	2327.5
32.5°	2279.0	2276.0	2257.6	2261.4	2268.4
35°	2184.6	2179.6	2161.6	2161.9	2171.8
37.5°	2080.0	2074.5	2059.5	2057.1	2061.1
40°	2008.5	2001.0	1988.1	1985.5	1985.5
42.5°	1935.1	1929.5	1912.5	1908.1	1914.1
45°	1822.2	1814.7	1799.3	1799.4	1804.4
47.5°	1700.3	1697.2	1679.3	1671.1	1673.2
50°	1610.4	1615.3	1597.6	1587.7	1597.6
52.5°	1532.8	1529.8	1513.9	1503.8	1507.8
55°	1403.7	1401.2	1385.8	1373.1	1373.1
57.5°	1274.0	1267.6	1251.5	1242.0	1249.6
60°	1184.2	1181.7	1163.8	1146.0	1153.5
62.5°	1094.4	1089.8	1071.8	1060.2	1065.7
65°	946.9	946.9	929.0	918.7	916.2
67.5°	817.7	805.7	795.7	783.4	780.0
70°	719.7	709.7	701.8	691.5	683.9
72.5°	623.7	617.8	605.9	595.7	594.2
75°	490.0	480.0	472.2	464.4	461.9
77.5°	348.7	346.6	339.4	335.4	336.8
80°	262.8	262.8	257.7	257.7	255.2
82.5°	185.3	187.3	186.3	182.2	181.8
85°	79.1	84.1	89.4	89.4	91.9
87.5°	15.4	26.3	26.6	27.1	27.6
90°	5.1	10.2	20.5	23.1	25.6
92.5°	46.2	191.6	342.7	125.0	97.4
95°	110.3	406.3	1362.0	559.8	364.2
97.5°	182.6	454.9	2017.6	1553.4	1125.0
100°	235.9	484.2	2259.8	2275.7	1849.3
102.5°	287.3	517.5	2307.0	2811.8	2407.5
105°	369.4	570.0	2280.2	3481.2	3278.0
107.5°	456.5	635.2	2153.0	3803.9	3878.2
110°	518.2	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	3635.7	4134.7
117.5°	738.7	876.2	1753.9	3378.1	3945.9
120°	790.0	925.4	1721.0	3203.8	3775.6
122.5°	839.3	968.6	1694.4	3041.1	3582.8
125°	908.0	1033.4	1664.7	2817.2	3306.3
127.5°	966.5	1091.9	1647.2	2627.9	3049.8
130°	1005.4	1130.9	1639.0	2512.1	2895.8
132.5°	1042.4	1161.7	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	2169.9	2418.2
140°	1179.8	1285.2	1608.3	2095.4	2313.6
142.5°	1214.8	1312.1	1604.1	2029.2	2221.3
145°	1267.1	1354.8	1598.0	1942.4	2090.4
147.5°	1317.3	1394.1	1592.3	1869.4	1984.3
150°	1354.3	1417.0	1590.3	1825.8	1918.6
152.5°	1383.0	1441.7	1588.2	1788.5	1865.3
155°	1428.7	1476.3	1585.1	1742.9	1798.0
157.5°	1470.8	1507.4	1585.6	1709.7	1747.3
160°	1495.4	1527.9	1587.7	1691.0	1718.6
162.5°	1515.9	1544.5	1589.8	1674.4	1695.9
165°	1546.6	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	1636.5	1636.5
172.5°	1592.8	1598.9	1595.4	1628.2	1626.2
175°	1603.1	1605.6	1595.4	1618.4	1613.3
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)