

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: P520414

Luminaire Tested: **SQ4-F-150U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520414
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-19)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18808.6 lumens
Efficiency: N/A
Efficacy: 126.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

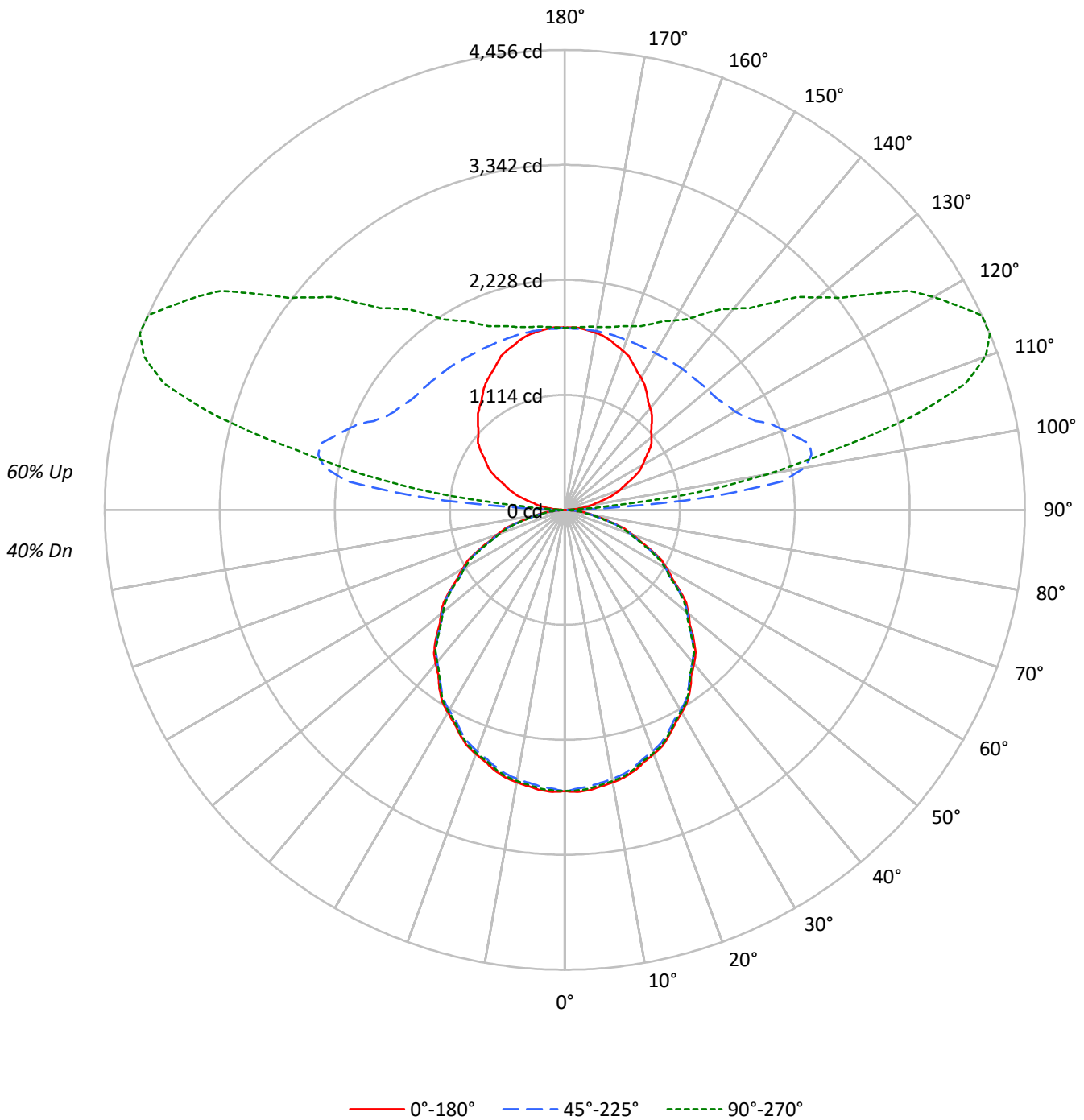
Input Watts (W): 148.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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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	95	95	95	95	78	78	78	61	61	61	47	47	47	40
1	95	91	87	84	87	83	80	77	68	66	64	54	52	51	41	40	39	33
2	87	80	73	68	79	73	67	63	59	56	52	47	45	42	36	34	33	28
3	79	70	63	57	72	64	57	52	52	48	44	42	39	36	32	30	28	23
4	72	62	54	48	65	56	50	44	46	41	37	37	33	31	28	26	24	20
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	26	23	21	17
6	61	49	41	35	55	45	38	33	37	32	28	30	26	23	23	20	18	15
7	56	44	36	31	51	41	34	29	34	28	24	27	23	20	21	18	16	13
8	52	40	32	27	47	37	30	25	31	25	22	25	21	18	19	17	14	12
9	48	36	29	24	44	34	27	22	28	23	19	23	19	16	18	15	13	11
10	45	33	26	21	41	31	24	20	26	21	17	21	17	15	16	14	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12572	12572	12572
5°	12628	12455	12551
10°	12565	12407	12503
15°	12488	12319	12417
20°	12360	12213	12314
25°	12225	12082	12177
30°	12076	11946	12006
35°	11924	11776	11840
40°	11726	11590	11602
45°	11519	11361	11324
50°	11222	11088	11061
55°	10892	10772	10696
60°	10561	10372	10337
65°	10046	9821	9739
70°	9335	9107	8932
75°	8334	8067	7901
80°	6857	6610	6309
85°	4060	4457	4552



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.2	1.4
10°-20°	732.5	3.9
20°-30°	1100.0	5.8
30°-40°	1312.7	7.0
40°-50°	1345.5	7.2
50°-60°	1198.2	6.4
60°-70°	893.2	4.7
70°-80°	483.6	2.6
80°-90°	113.7	0.6
90°-100°	819.7	4.4
100°-110°	2216.3	11.8
110°-120°	2330.1	12.4
120°-130°	1892.7	10.1
130°-140°	1484.7	7.9
140°-150°	1139.5	6.1
150°-160°	819.5	4.4
160°-170°	500.6	2.7
170°-180°	168.8	0.9
0°-30°	2089.7	11.1
0°-40°	3402.4	18.1
0°-60°	5946.1	31.6
0°-90°	7436.6	39.5
90°-120°	5366.2	28.5
90°-150°	9883.0	52.5
90°-180°	11372.0	60.5
0°-180°	18808.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2725	2725	2725	2725	2725	
5°	2727	2722	2690	2714	2710	259
15°	2615	2606	2579	2600	2600	737
25°	2402	2396	2374	2387	2392	1107
35°	2117	2108	2091	2095	2102	1322
45°	1766	1756	1741	1732	1736	1359
55°	1354	1356	1339	1326	1330	1212
65°	920	917	900	890	892	910
75°	468	462	453	443	443	498
85°	77	84	84	86	86	107
90°	4	11	25	27	25	10
95°	127	447	1363	706	420	133
105°	412	637	2459	3627	3478	434
115°	725	887	2039	3947	4456	716
125°	993	1138	1838	3101	3644	885
135°	1190	1332	1788	2504	2835	920
145°	1384	1488	1764	2144	2307	866
155°	1563	1624	1749	1923	1986	721
165°	1701	1718	1756	1825	1834	479
175°	1766	1764	1758	1781	1777	168
180°	1764	1764	1764	1764	1764	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2725.3	2725.3	2725.3	2725.3	2725.3
2.5°	2735.8	2729.9	2705.8	2725.2	2722.3
5°	2727.1	2721.7	2689.7	2714.0	2710.3
7.5°	2701.7	2696.2	2668.0	2690.4	2687.1
10°	2682.3	2676.7	2648.6	2671.0	2669.2
12.5°	2656.8	2651.3	2623.1	2645.5	2643.7
15°	2614.9	2605.8	2579.4	2599.9	2599.9
17.5°	2559.5	2552.6	2528.1	2545.3	2545.7
20°	2517.7	2512.1	2487.8	2506.5	2508.3
22.5°	2475.8	2470.2	2442.8	2460.1	2463.4
25°	2401.7	2396.2	2373.6	2386.8	2392.3
27.5°	2325.4	2317.3	2295.0	2306.7	2310.8
30°	2267.0	2263.3	2242.7	2248.4	2253.9
32.5°	2205.7	2202.0	2184.4	2187.1	2197.0
35°	2117.4	2108.2	2091.1	2095.1	2102.4
37.5°	2013.0	2008.6	1992.0	1990.0	1996.9
40°	1947.2	1939.8	1924.7	1921.1	1926.6
42.5°	1875.3	1868.0	1849.9	1846.3	1853.2
45°	1765.7	1756.5	1741.4	1732.2	1735.8
47.5°	1643.0	1643.0	1627.3	1616.6	1622.1
50°	1563.7	1563.7	1545.0	1535.8	1541.2
52.5°	1481.4	1482.9	1462.7	1457.8	1456.0
55°	1354.3	1356.0	1339.3	1326.2	1329.9
57.5°	1231.5	1227.5	1207.9	1199.4	1201.2
60°	1144.7	1139.2	1124.2	1111.3	1120.4
62.5°	1056.4	1053.8	1038.9	1024.2	1023.1
65°	920.3	916.6	899.7	890.4	892.2
67.5°	784.8	780.5	765.0	751.6	756.4
70°	692.1	692.1	675.2	667.6	662.2
72.5°	606.8	599.4	587.0	576.4	572.4
75°	467.6	462.1	452.6	443.3	443.3
77.5°	340.4	335.7	329.5	323.2	321.3
80°	258.1	256.3	248.8	246.7	237.5
82.5°	181.8	181.4	177.0	172.1	171.7
85°	76.7	84.0	84.2	86.0	86.0
87.5°	14.2	24.5	25.9	23.2	22.8
90°	3.8	11.3	24.6	26.6	24.6
92.5°	53.9	196.5	387.7	168.3	121.9
95°	127.2	446.6	1363.2	705.5	419.6
97.5°	204.3	512.0	2124.9	1758.5	1291.4
100°	262.0	538.6	2361.9	2463.2	1991.7
102.5°	315.2	575.4	2445.5	2997.4	2644.7
105°	412.0	636.6	2458.7	3626.8	3478.3
107.5°	501.6	706.6	2351.2	4019.3	4068.7
110°	571.5	757.1	2255.5	4124.7	4334.5



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	633.8	807.5	2167.5	4103.7	4456.0
115°	725.3	886.8	2039.1	3947.4	4456.0
117.5°	814.8	966.4	1954.4	3708.6	4285.2
120°	869.6	1018.1	1904.3	3537.1	4125.7
122.5°	921.2	1066.7	1874.0	3353.6	3946.5
125°	993.0	1137.8	1837.8	3101.4	3643.5
127.5°	1059.0	1201.2	1816.6	2895.6	3372.3
130°	1095.5	1242.2	1807.5	2768.5	3199.1
132.5°	1133.4	1278.6	1798.4	2653.8	3050.4
135°	1190.4	1331.5	1788.4	2504.2	2834.7
137.5°	1247.7	1381.0	1780.1	2382.8	2652.0
140°	1287.3	1411.6	1777.1	2304.6	2544.1
142.5°	1325.2	1442.2	1771.0	2234.1	2443.8
145°	1384.0	1488.1	1763.8	2143.5	2306.8
147.5°	1437.7	1529.7	1755.4	2061.4	2186.8
150°	1477.1	1558.8	1752.4	2016.7	2117.0
152.5°	1513.6	1584.8	1750.9	1975.3	2057.7
155°	1562.6	1623.9	1748.6	1922.8	1985.9
157.5°	1613.4	1656.2	1749.0	1886.2	1927.9
160°	1642.3	1677.6	1750.5	1863.2	1892.9
162.5°	1665.1	1694.4	1752.0	1844.8	1867.1
165°	1701.1	1717.8	1756.3	1824.8	1834.0
167.5°	1725.9	1737.3	1756.6	1807.6	1812.0
170°	1741.1	1746.6	1758.2	1799.9	1799.9
172.5°	1753.1	1754.3	1758.2	1790.8	1789.2
175°	1765.7	1763.9	1758.2	1780.8	1777.1
177.5°	1769.9	1765.4	1757.8	1772.8	1768.3
180°	1763.8	1763.8	1763.8	1763.8	1763.8

(END OF REPORT)