

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: P520422

Luminaire Tested: **SQ4-F-150U-100D-840-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520422
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-840-1D-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

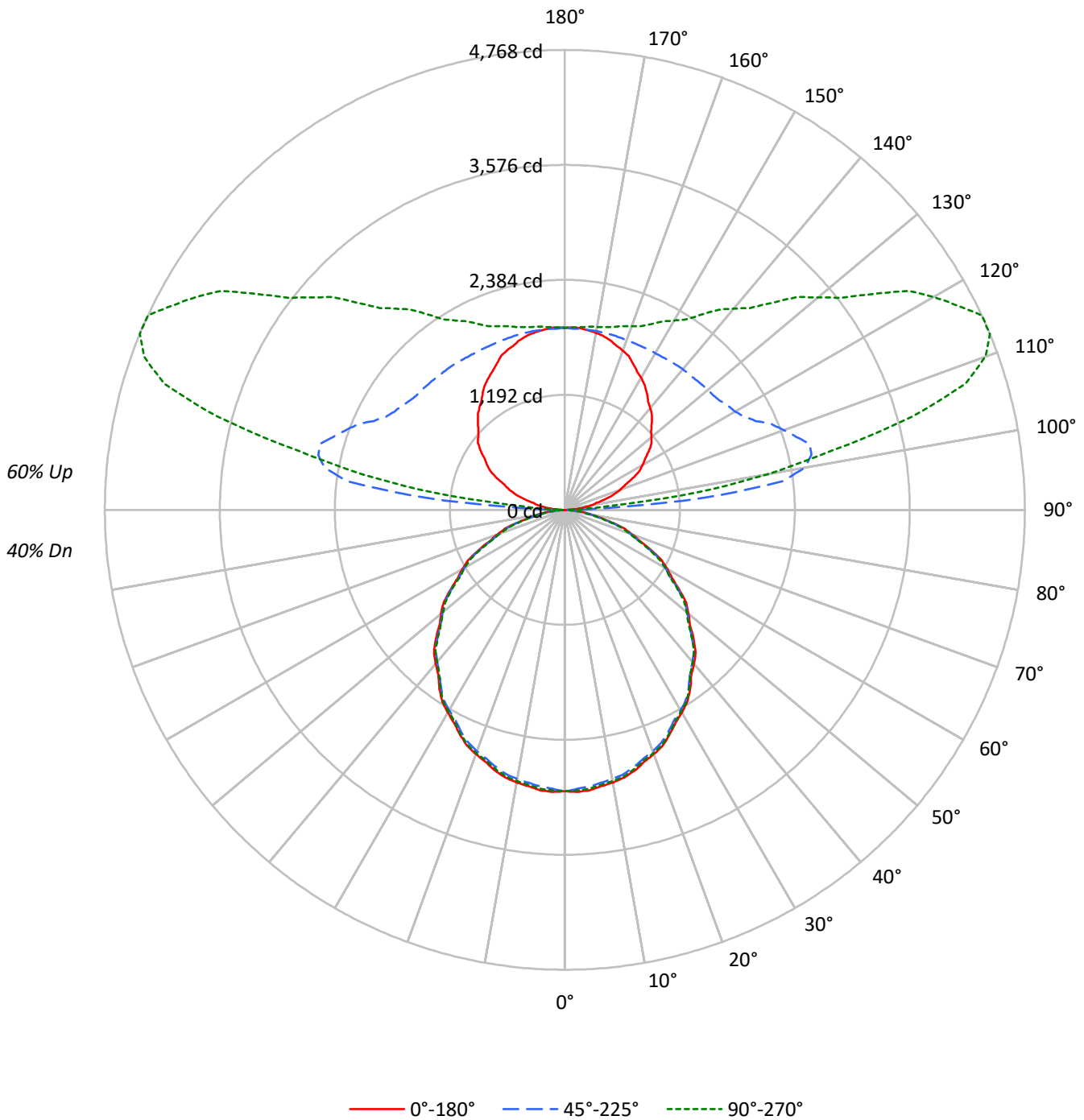
Lumens per Lamp: N/A
Luminaire Lumens: 20127.1 lumens
Efficiency: N/A
Efficacy: 135.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: Semi-Indirect

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	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°	13453	13453	13453
5°	13514	13328	13430
10°	13445	13276	13379
15°	13364	13182	13287
20°	13226	13069	13177
25°	13081	12929	13030
30°	12922	12784	12848
35°	12760	12602	12670
40°	12548	12403	12415
45°	12327	12157	12118
50°	12009	11865	11837
55°	11655	11526	11446
60°	11302	11099	11062
65°	10750	10509	10422
70°	9988	9746	9556
75°	8919	8634	8456
80°	7337	7072	6753
85°	4340	4769	4870



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	275.2	1.4
10°-20°	783.8	3.9
20°-30°	1177.1	5.8
30°-40°	1404.7	7.0
40°-50°	1439.9	7.2
50°-60°	1282.2	6.4
60°-70°	955.8	4.7
70°-80°	517.5	2.6
80°-90°	121.7	0.6
90°-100°	877.2	4.4
100°-110°	2371.7	11.8
110°-120°	2493.5	12.4
120°-130°	2025.4	10.1
130°-140°	1588.7	7.9
140°-150°	1219.4	6.1
150°-160°	877.0	4.4
160°-170°	535.7	2.7
170°-180°	180.6	0.9
0°-30°	2236.2	11.1
0°-40°	3640.9	18.1
0°-60°	6363.0	31.6
0°-90°	7958.0	39.5
90°-120°	5742.4	28.5
90°-150°	10575.8	52.5
90°-180°	12169.0	60.5
0°-180°	20127.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2916	2916	2916	2916	2916	
5°	2918	2912	2878	2904	2900	277
15°	2798	2788	2760	2782	2782	788
25°	2570	2564	2540	2554	2560	1184
35°	2266	2256	2238	2242	2250	1414
45°	1890	1880	1863	1854	1858	1454
55°	1449	1451	1433	1419	1423	1297
65°	985	981	963	953	955	974
75°	500	494	484	474	474	533
85°	82	90	90	92	92	115
90°	4	12	26	28	26	11
95°	136	478	1459	755	449	142
105°	441	681	2631	3881	3722	464
115°	776	949	2182	4224	4768	766
125°	1063	1218	1967	3319	3899	947
135°	1274	1425	1914	2680	3033	984
145°	1481	1592	1887	2294	2468	927
155°	1672	1738	1871	2058	2125	771
165°	1820	1838	1879	1953	1963	513
175°	1889	1888	1881	1906	1902	179
180°	1887	1887	1887	1887	1887	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2916.3	2916.3	2916.3	2916.3	2916.3
2.5°	2927.5	2921.2	2895.5	2916.3	2913.1
5°	2918.3	2912.4	2878.2	2904.2	2900.3
7.5°	2891.1	2885.2	2855.1	2879.0	2875.5
10°	2870.3	2864.4	2834.2	2858.2	2856.2
12.5°	2843.1	2837.2	2807.0	2831.0	2829.0
15°	2798.2	2788.5	2760.2	2782.2	2782.2
17.5°	2738.9	2731.5	2705.3	2723.8	2724.2
20°	2694.1	2688.3	2662.1	2682.2	2684.1
22.5°	2649.3	2643.4	2614.1	2632.6	2636.1
25°	2570.0	2564.1	2540.0	2554.1	2560.0
27.5°	2488.4	2479.7	2456.0	2468.4	2472.8
30°	2425.9	2422.0	2399.9	2406.0	2412.0
32.5°	2360.2	2356.4	2337.4	2340.5	2351.0
35°	2265.8	2256.0	2237.8	2241.9	2249.8
37.5°	2154.1	2149.4	2131.7	2129.5	2136.9
40°	2083.7	2075.9	2059.6	2055.8	2061.6
42.5°	2006.8	1999.0	1979.6	1975.7	1983.1
45°	1889.5	1879.7	1863.4	1853.5	1857.5
47.5°	1758.2	1758.2	1741.4	1729.9	1735.8
50°	1673.3	1673.3	1653.3	1643.5	1649.3
52.5°	1585.2	1586.8	1565.2	1560.0	1558.1
55°	1449.2	1451.1	1433.1	1419.3	1423.1
57.5°	1317.9	1313.5	1292.6	1283.4	1285.4
60°	1225.0	1219.1	1203.0	1189.2	1199.0
62.5°	1130.5	1127.8	1111.7	1096.0	1094.9
65°	984.8	980.9	962.8	952.8	954.8
67.5°	839.8	835.2	818.6	804.3	809.4
70°	740.5	740.5	722.6	714.5	708.5
72.5°	649.3	641.5	628.1	616.8	612.5
75°	500.4	494.5	484.4	474.4	474.4
77.5°	364.3	359.2	352.6	345.8	343.9
80°	276.2	274.3	266.2	264.0	254.2
82.5°	194.6	194.2	189.3	184.1	183.7
85°	82.0	89.9	90.1	92.0	92.0
87.5°	15.3	26.2	27.6	24.8	24.4
90°	4.0	12.0	26.5	28.4	26.5
92.5°	57.7	210.3	414.9	180.1	130.5
95°	136.1	477.8	1458.8	754.9	449.0
97.5°	218.6	548.0	2273.9	1881.8	1381.9
100°	280.4	576.3	2527.4	2635.9	2131.3
102.5°	337.3	615.8	2616.9	3207.6	2830.1
105°	440.9	681.3	2631.1	3881.0	3722.0
107.5°	536.8	756.1	2516.1	4301.1	4353.9
110°	611.5	810.2	2413.7	4413.9	4638.4



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	678.1	864.1	2319.4	4391.3	4768.4
115°	776.1	948.9	2182.1	4224.1	4768.4
117.5°	872.0	1034.2	2091.4	3968.5	4585.6
120°	930.5	1089.5	2037.8	3785.1	4414.9
122.5°	985.8	1141.5	2005.3	3588.6	4223.1
125°	1062.6	1217.5	1966.7	3318.7	3898.8
127.5°	1133.2	1285.4	1944.0	3098.5	3608.7
130°	1172.3	1329.2	1934.2	2962.5	3423.5
132.5°	1212.9	1368.2	1924.5	2839.8	3264.1
135°	1273.9	1424.9	1913.9	2679.7	3033.4
137.5°	1335.2	1477.9	1904.9	2549.9	2837.9
140°	1377.5	1510.6	1901.7	2466.2	2722.5
142.5°	1418.1	1543.3	1895.2	2390.7	2615.3
145°	1481.1	1592.4	1887.4	2293.7	2468.5
147.5°	1538.5	1636.9	1878.5	2205.8	2340.1
150°	1580.7	1668.1	1875.3	2158.0	2265.4
152.5°	1619.6	1696.0	1873.6	2113.8	2202.0
155°	1672.0	1737.6	1871.2	2057.6	2125.1
157.5°	1726.6	1772.2	1871.6	2018.5	2063.0
160°	1757.5	1795.2	1873.2	1993.9	2025.7
162.5°	1781.8	1813.2	1874.9	1974.1	1998.0
165°	1820.4	1838.3	1879.3	1952.7	1962.7
167.5°	1846.8	1859.2	1879.8	1934.3	1939.0
170°	1863.1	1869.0	1881.4	1926.1	1926.1
172.5°	1876.1	1877.3	1881.4	1916.3	1914.7
175°	1889.4	1887.5	1881.4	1905.6	1901.7
177.5°	1894.0	1889.1	1881.0	1897.1	1892.4
180°	1887.4	1887.4	1887.4	1887.4	1887.4

(END OF REPORT)