

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: P520363

Luminaire Tested: **SQ4-F-150U-050D-830-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520363
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-17)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-050D-830-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

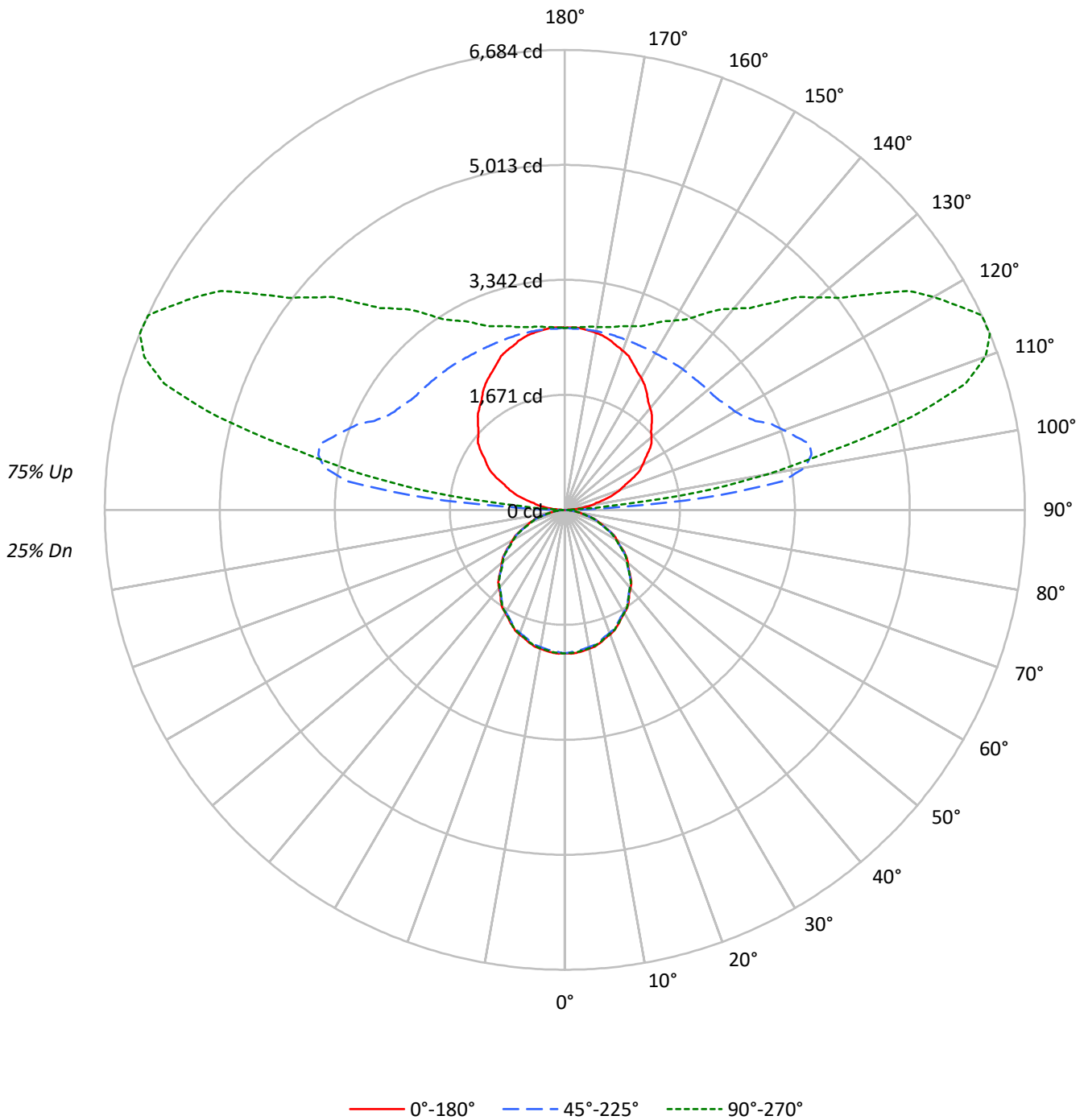
Lumens per Lamp: N/A
Luminaire Lumens: 22756.1 lumens
Efficiency: N/A
Efficacy: 129.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 175.9
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	101	101	101	101	90	90	90	90	69	69	69	51	51	51	33	33	33	25
1	92	88	84	81	82	79	75	73	61	59	57	44	43	42	29	29	28	21
2	84	77	71	66	74	69	64	59	53	50	47	39	37	35	26	25	23	18
3	76	67	60	55	68	60	54	49	47	43	39	34	32	29	23	21	20	15
4	70	59	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	39	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	39	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	42	35	29	48	38	31	27	30	25	22	22	19	16	15	13	11	8
8	50	38	31	26	44	34	28	23	27	22	19	20	17	15	14	12	10	8
9	47	35	28	23	41	31	25	21	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	39	29	23	18	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6415	6415	6415
5°	6430	6353	6405
10°	6409	6330	6374
15°	6365	6285	6338
20°	6306	6232	6278
25°	6234	6159	6216
30°	6147	6098	6138
35°	6080	6007	6038
40°	5963	5908	5919
45°	5841	5793	5793
50°	5718	5664	5638
55°	5584	5510	5479
60°	5375	5290	5255
65°	5121	5018	4958
70°	4770	4670	4570
75°	4280	4148	4048
80°	3461	3413	3314
85°	2071	2368	2463



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	196.8	0.9
10°-20°	560.4	2.5
20°-30°	841.7	3.7
30°-40°	1004.8	4.4
40°-50°	1029.6	4.5
50°-60°	918.3	4.0
60°-70°	683.9	3.0
70°-80°	371.2	1.6
80°-90°	91.5	0.4
90°-100°	1229.6	5.4
100°-110°	3324.5	14.6
110°-120°	3495.2	15.4
120°-130°	2839.1	12.5
130°-140°	2227.0	9.8
140°-150°	1709.2	7.5
150°-160°	1229.3	5.4
160°-170°	750.9	3.3
170°-180°	253.2	1.1
0°-30°	1599.0	7.0
0°-40°	2603.7	11.4
0°-60°	4551.6	20.0
0°-90°	5698.2	25.0
90°-120°	8049.2	35.4
90°-150°	14824.5	65.1
90°-180°	17058.0	75.0
0°-180°	22756.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2086	2086	2086	2086	2086	
5°	2083	2080	2058	2077	2075	198
15°	1999	1994	1974	1991	1991	563
25°	1837	1832	1815	1826	1832	846
35°	1620	1614	1600	1600	1608	1011
45°	1343	1346	1332	1329	1332	1036
55°	1042	1042	1028	1019	1022	928
65°	704	701	690	681	681	697
75°	360	357	349	343	341	381
85°	59	64	67	70	70	82
90°	6	17	37	40	37	14
95°	191	670	2045	1058	629	200
105°	618	955	3688	5440	5217	651
115°	1088	1330	3059	5921	6684	1074
125°	1490	1707	2757	4652	5465	1328
135°	1786	1997	2683	3756	4252	1380
145°	2076	2232	2646	3215	3460	1299
155°	2344	2436	2623	2884	2979	1081
165°	2552	2577	2634	2737	2751	719
175°	2649	2646	2637	2671	2666	251
180°	2646	2646	2646	2646	2646	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2085.8	2085.8	2085.8	2085.8	2085.8
2.5°	2092.5	2088.1	2070.1	2085.7	2083.5
5°	2082.9	2080.3	2057.8	2077.3	2074.6
7.5°	2067.9	2062.4	2040.5	2059.5	2056.7
10°	2052.3	2046.8	2027.1	2043.8	2041.1
12.5°	2032.2	2028.9	2007.0	2023.8	2023.2
15°	1999.2	1993.7	1974.1	1990.8	1990.8
17.5°	1955.6	1952.4	1933.4	1949.4	1947.3
20°	1926.7	1921.1	1904.3	1918.3	1918.3
22.5°	1890.9	1887.6	1870.7	1882.6	1884.7
25°	1837.2	1831.8	1814.9	1826.2	1831.7
27.5°	1778.1	1773.7	1759.6	1767.0	1770.8
30°	1731.1	1731.1	1717.2	1720.2	1728.4
32.5°	1688.7	1688.7	1672.5	1675.4	1679.3
35°	1619.5	1614.0	1599.9	1600.1	1608.3
37.5°	1539.0	1536.3	1527.3	1525.7	1527.9
40°	1485.4	1482.7	1471.5	1474.3	1474.3
42.5°	1431.9	1429.1	1417.9	1414.1	1418.4
45°	1343.0	1345.8	1331.9	1329.1	1331.9
47.5°	1255.3	1255.3	1244.2	1236.5	1240.9
50°	1195.1	1195.1	1183.9	1178.3	1178.3
52.5°	1132.5	1134.7	1121.3	1113.6	1115.7
55°	1041.5	1041.5	1027.6	1019.2	1021.9
57.5°	941.0	941.0	927.0	918.7	923.6
60°	873.9	873.9	860.0	851.7	854.4
62.5°	807.0	807.0	793.0	784.6	785.2
65°	703.7	700.9	689.6	681.3	681.3
67.5°	604.3	597.2	588.6	577.4	577.4
70°	530.5	527.7	519.4	508.2	508.2
72.5°	463.5	458.6	450.1	441.2	441.2
75°	360.2	357.4	349.1	343.3	340.7
77.5°	258.0	255.8	255.2	247.4	249.7
80°	195.4	195.4	192.7	187.1	187.1
82.5°	139.6	141.8	136.9	135.7	133.5
85°	58.7	64.1	67.1	69.8	69.8
87.5°	12.3	21.0	22.9	25.6	25.1
90°	5.7	16.8	37.0	39.8	37.0
92.5°	80.9	294.8	581.6	252.4	182.8
95°	190.8	669.8	2044.8	1058.2	629.3
97.5°	306.4	768.2	3187.4	2637.8	1937.1
100°	393.0	807.9	3542.8	3694.8	2987.5
102.5°	472.7	863.1	3668.1	4496.3	3967.1
105°	618.0	955.0	3688.0	5440.2	5217.3
107.5°	752.4	1059.8	3526.9	6029.0	6103.1
110°	857.2	1135.7	3383.3	6187.1	6501.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	950.7	1211.3	3251.1	6155.5	6684.1
115°	1087.9	1330.2	3058.7	5921.0	6684.1
117.5°	1222.4	1449.5	2931.6	5562.8	6427.7
120°	1304.4	1527.1	2856.5	5305.8	6188.5
122.5°	1381.8	1600.1	2810.9	5030.2	5919.6
125°	1489.5	1706.7	2756.8	4652.1	5465.1
127.5°	1588.6	1801.8	2724.9	4343.3	5058.5
130°	1643.3	1863.2	2711.2	4152.7	4798.8
132.5°	1700.2	1917.9	2697.6	3980.7	4575.4
135°	1785.6	1997.3	2682.8	3756.3	4251.9
137.5°	1871.6	2071.6	2670.2	3574.2	3978.0
140°	1930.9	2117.5	2665.7	3457.0	3816.2
142.5°	1987.8	2163.3	2656.5	3351.1	3665.8
145°	2076.2	2232.1	2645.7	3215.1	3460.2
147.5°	2156.4	2294.6	2633.2	3092.0	3280.2
150°	2215.7	2338.2	2628.6	3025.1	3175.4
152.5°	2270.3	2377.2	2626.3	2962.9	3086.6
155°	2343.8	2435.7	2622.9	2884.3	2978.9
157.5°	2420.2	2484.2	2623.5	2829.4	2891.8
160°	2463.5	2516.4	2625.8	2794.8	2839.4
162.5°	2497.7	2541.6	2628.0	2767.3	2800.7
165°	2551.7	2576.8	2634.3	2737.2	2751.1
167.5°	2588.7	2606.0	2634.9	2711.3	2718.1
170°	2611.5	2619.9	2637.2	2699.9	2699.9
172.5°	2629.7	2631.5	2637.2	2686.1	2683.9
175°	2648.6	2645.7	2637.2	2671.2	2665.7
177.5°	2654.8	2648.2	2636.6	2659.2	2652.6
180°	2645.7	2645.7	2645.7	2645.7	2645.7

(END OF REPORT)