

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: P520438

Luminaire Tested: **SQ4-F-150U-125D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520438
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-25, G3-1910-536-20)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-150U-125D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1250 LUMENS PER FOOT
UPLIGHT 1500 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

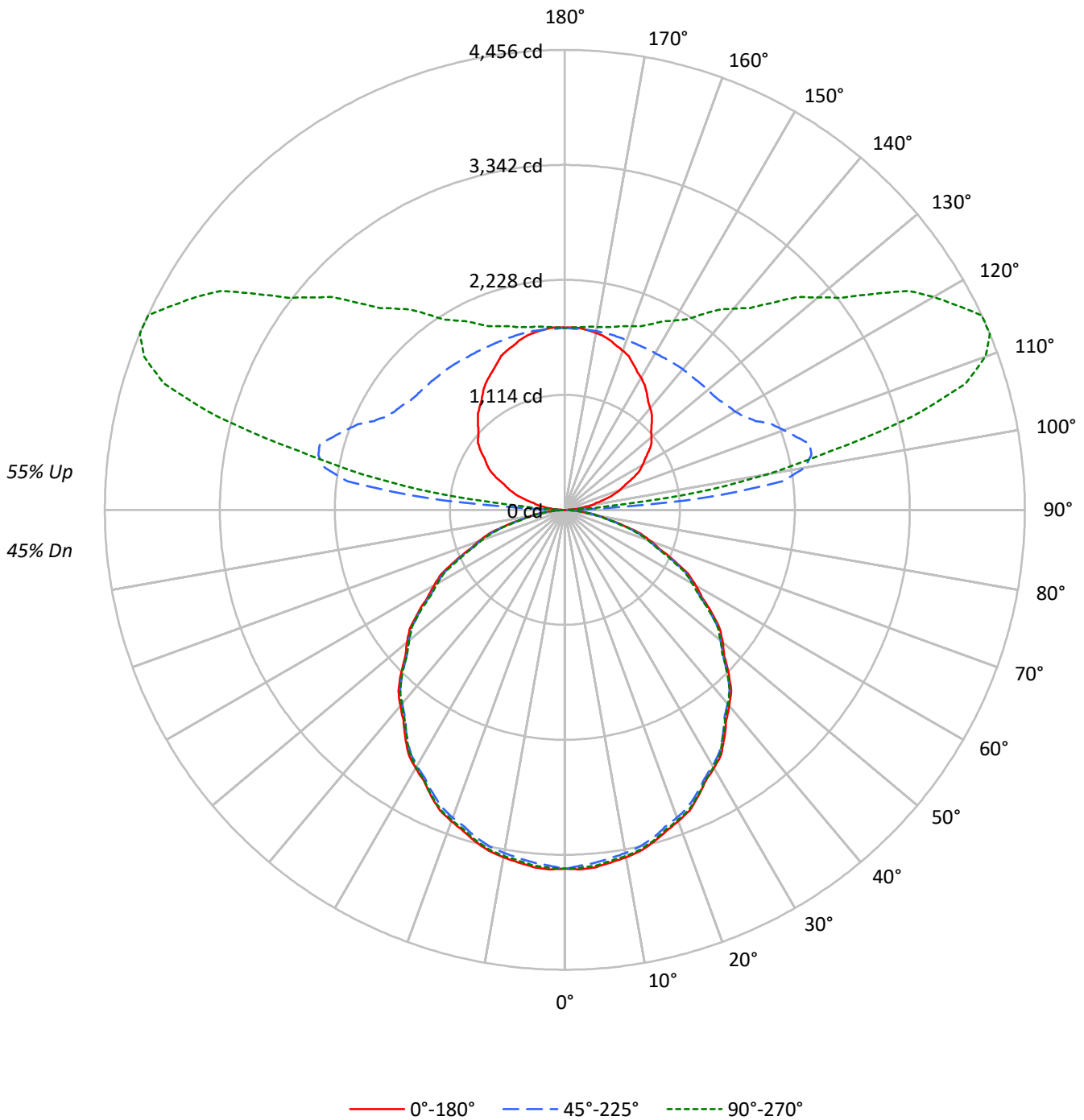
Lumens per Lamp: N/A
Luminaire Lumens: 20860.4 lumens
Efficiency: N/A
Efficacy: 124.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 167.3
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	106	106	106	106	97	97	97	97	81	81	81	66	66	66	52	52	52	45
1	97	92	89	85	89	85	82	79	71	68	66	58	56	55	46	45	44	38
2	88	81	75	69	80	74	69	64	62	58	55	51	48	46	40	38	37	32
3	80	71	63	58	73	65	59	54	55	50	46	45	41	38	36	33	31	27
4	73	63	55	49	67	58	51	45	48	43	39	40	36	33	32	29	27	23
5	67	56	48	42	61	51	44	39	43	38	34	36	32	28	29	26	23	20
6	62	50	42	36	57	46	39	34	39	33	29	32	28	25	26	23	20	17
7	57	45	37	31	52	42	35	29	35	30	26	29	25	22	24	20	18	15
8	53	41	33	28	48	38	31	26	32	27	23	27	22	19	22	19	16	14
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	20	17	15	12
10	46	34	27	22	42	32	25	21	27	22	18	23	19	16	18	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16037	16037	16037
5°	16089	15886	16019
10°	16016	15818	15944
15°	15908	15717	15844
20°	15761	15582	15705
25°	15582	15417	15543
30°	15390	15257	15338
35°	15171	15041	15052
40°	14921	14760	14806
45°	14642	14479	14505
50°	14322	14157	14115
55°	13956	13757	13726
60°	13504	13205	13133
65°	12802	12531	12364
70°	11923	11613	11458
75°	10605	10368	10060
80°	8639	8387	8336
85°	5166	5875	5875



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	328.0	1.6
10°-20°	934.2	4.5
20°-30°	1403.5	6.7
30°-40°	1674.7	8.0
40°-50°	1716.6	8.2
50°-60°	1530.0	7.3
60°-70°	1139.0	5.5
70°-80°	617.1	3.0
80°-90°	145.4	0.7
90°-100°	819.7	3.9
100°-110°	2216.3	10.6
110°-120°	2330.1	11.2
120°-130°	1892.7	9.1
130°-140°	1484.7	7.1
140°-150°	1139.5	5.5
150°-160°	819.5	3.9
160°-170°	500.6	2.4
170°-180°	168.8	0.8
0°-30°	2665.8	12.8
0°-40°	4340.4	20.8
0°-60°	7587.1	36.4
0°-90°	9488.5	45.5
90°-120°	5366.2	25.7
90°-150°	9883.0	47.4
90°-180°	11372.0	54.5
0°-180°	20860.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3476	3476	3476	3476	3476	
5°	3474	3469	3431	3461	3459	330
15°	3331	3324	3291	3320	3318	939
25°	3061	3056	3029	3046	3054	1410
35°	2694	2692	2671	2671	2673	1685
45°	2244	2239	2219	2216	2223	1729
55°	1735	1730	1710	1697	1707	1550
65°	1173	1165	1148	1140	1133	1161
75°	595	595	582	570	564	632
85°	98	111	111	113	111	135
90°	4	11	25	27	25	11
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°	3476.5	3476.5	3476.5	3476.5	3476.5
2.5°	3487.2	3481.2	3450.4	3476.4	3471.9
5°	3474.5	3469.0	3430.6	3461.2	3459.2
7.5°	3445.0	3438.0	3403.0	3431.7	3428.2
10°	3419.1	3413.4	3376.9	3405.6	3403.8
12.5°	3387.0	3381.3	3344.8	3373.5	3373.2
15°	3331.0	3323.5	3290.9	3319.6	3317.6
17.5°	3264.1	3255.5	3223.2	3245.8	3249.5
20°	3210.5	3204.9	3174.1	3195.3	3199.1
22.5°	3155.4	3148.3	3116.0	3140.2	3143.9
25°	3061.3	3055.7	3028.8	3046.1	3053.6
27.5°	2958.0	2958.0	2933.1	2945.5	2949.9
30°	2889.1	2889.1	2864.2	2872.0	2879.5
32.5°	2815.7	2809.7	2786.2	2792.4	2799.9
35°	2693.9	2692.1	2670.9	2671.0	2672.8
37.5°	2568.1	2562.8	2539.7	2541.5	2550.4
40°	2477.7	2474.0	2451.0	2451.1	2458.6
42.5°	2385.9	2382.2	2362.2	2359.2	2362.2
45°	2244.3	2238.7	2219.4	2215.8	2223.3
47.5°	2093.5	2095.0	2072.1	2066.9	2070.9
50°	1995.6	1995.6	1972.6	1961.3	1966.8
52.5°	1893.0	1890.0	1867.0	1854.3	1867.4
55°	1735.3	1729.8	1710.5	1697.3	1706.7
57.5°	1573.9	1565.3	1545.9	1531.5	1536.8
60°	1463.7	1450.5	1431.2	1419.7	1423.5
62.5°	1348.9	1341.8	1320.9	1303.5	1311.8
65°	1172.8	1165.3	1148.0	1140.2	1132.7
67.5°	1000.2	995.4	975.8	967.6	962.7
70°	884.0	874.6	861.0	851.4	849.5
72.5°	770.7	759.8	746.2	738.0	733.2
75°	595.0	595.0	581.7	570.0	564.4
77.5°	427.8	429.3	418.3	414.3	411.8
80°	325.2	325.2	315.7	312.0	313.8
82.5°	227.3	231.8	228.4	223.1	220.4
85°	97.6	110.7	111.0	112.8	111.0
87.5°	17.6	29.6	34.1	31.3	28.0
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)