

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: P520271

Luminaire Tested: **SQ4-F-125U-050D-835-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520271
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-24, 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-125U-050D-835-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 500 LUMENS PER FOOT
UPLIGHT 1250 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

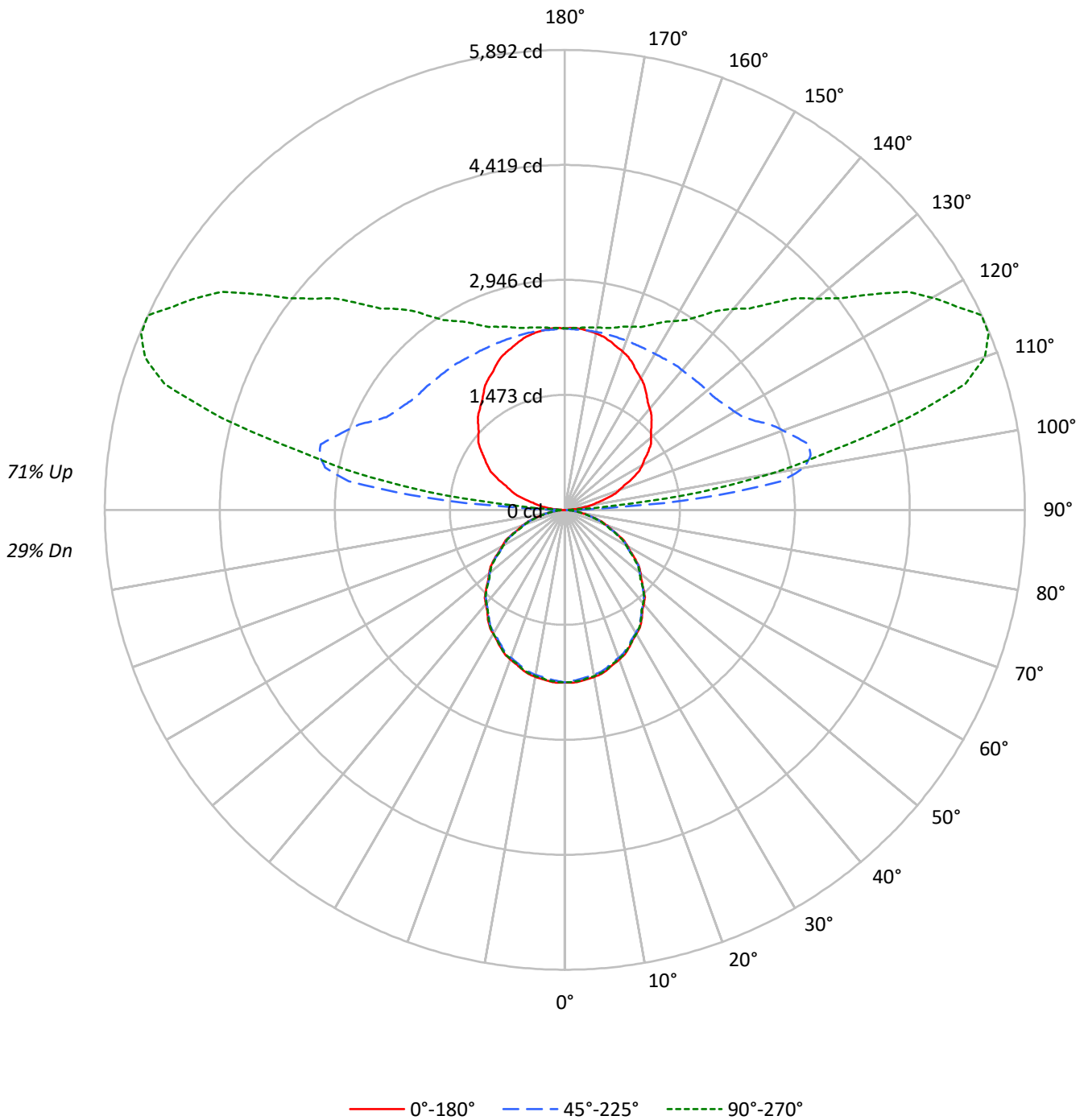
Lumens per Lamp: N/A
Luminaire Lumens: 21034.5 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Semi-Indirect

Input Watts (W): 152.8
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



TEST NUMBER: P520271
CATALOG NUMBER: SQ4-F-125U-050D-835-1D-UNV-STD-W-12

Luminous Intensity Polar Plot





TEST NUMBER: P520271

CATALOG NUMBER: SQ4-F-125U-050D-835-1D-UNV-STD-W-12

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	102	102	102	102	91	91	91	91	71	71	71	53	53	53	37	37	37	29				
1	93	89	85	82	83	80	77	74	63	60	58	47	45	44	32	31	31	24				
2	85	77	72	67	76	70	65	60	55	51	48	41	39	37	28	27	26	20				
3	77	68	61	55	69	61	55	50	48	44	40	36	33	31	25	23	22	17				
4	70	60	52	47	63	54	47	42	43	38	34	32	29	26	22	20	19	15				
5	64	53	45	40	57	48	41	36	38	33	29	29	25	23	20	18	16	13				
6	59	48	40	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11				
7	55	43	35	30	49	39	32	27	31	26	22	23	20	17	16	14	13	10				
8	51	39	31	26	45	35	28	24	28	23	20	21	18	15	15	13	11	9				
9	47	35	28	23	42	32	26	21	26	21	17	20	16	14	14	12	10	8				
10	44	32	25	21	39	29	23	19	23	19	16	18	15	12	13	11	9	7				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6796	6796	6796
5°	6813	6731	6785
10°	6790	6707	6753
15°	6743	6659	6715
20°	6680	6603	6651
25°	6605	6525	6585
30°	6513	6461	6503
35°	6441	6364	6397
40°	6318	6259	6270
45°	6189	6137	6137
50°	6058	6001	5972
55°	5916	5837	5805
60°	5695	5604	5568
65°	5425	5317	5253
70°	5054	4947	4841
75°	4534	4394	4288
80°	3668	3615	3510
85°	2191	2505	2611



TEST NUMBER: P520271

CATALOG NUMBER: SQ4-F-125U-050D-835-1D-UNV-STD-W-12

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	208.5	1.0
10°-20°	593.7	2.8
20°-30°	891.8	4.2
30°-40°	1064.5	5.1
40°-50°	1090.8	5.2
50°-60°	972.8	4.6
60°-70°	724.5	3.4
70°-80°	393.3	1.9
80°-90°	96.5	0.5
90°-100°	1086.8	5.2
100°-110°	2927.6	13.9
110°-120°	3072.5	14.6
120°-130°	2493.2	11.9
130°-140°	1955.3	9.3
140°-150°	1501.2	7.1
150°-160°	1079.4	5.1
160°-170°	659.4	3.1
170°-180°	222.4	1.1
0°-30°	1694.0	8.1
0°-40°	2758.5	13.1
0°-60°	4822.2	22.9
0°-90°	6036.5	28.7
90°-120°	7086.9	33.7
90°-150°	13036.7	62.0
90°-180°	14998.0	71.3
0°-180°	21034.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2210	2210	2210	2210	2210	
5°	2207	2204	2180	2201	2198	210
15°	2118	2112	2091	2109	2109	597
25°	1946	1941	1923	1935	1941	896
35°	1716	1710	1695	1695	1704	1071
45°	1423	1426	1411	1408	1411	1098
55°	1103	1103	1089	1080	1083	983
65°	746	743	731	722	722	738
75°	382	379	370	364	361	403
85°	62	68	71	74	74	87
90°	6	18	36	38	38	13
95°	166	591	1782	911	630	173
105°	542	843	3238	4844	4546	569
115°	956	1170	2696	5210	5892	941
125°	1305	1499	2421	4092	4815	1165
135°	1572	1754	2353	3301	3738	1213
145°	1817	1959	2323	2822	3031	1140
155°	2063	2138	2302	2532	2613	950
165°	2237	2263	2311	2403	2415	631
175°	2326	2323	2314	2347	2341	221
180°	2323	2323	2323	2323	2323	

TEST NUMBER: P520271

CATALOG NUMBER: SQ4-F-125U-050D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2209.8	2209.8	2209.8	2209.8	2209.8
2.5°	2216.9	2212.2	2193.2	2209.7	2207.4
5°	2206.8	2203.9	2180.2	2200.8	2197.9
7.5°	2190.8	2185.0	2161.8	2181.8	2179.0
10°	2174.3	2168.4	2147.6	2165.3	2162.4
12.5°	2153.0	2149.5	2126.3	2144.1	2143.5
15°	2118.0	2112.2	2091.4	2109.2	2109.2
17.5°	2071.9	2068.5	2048.2	2065.3	2063.0
20°	2041.1	2035.3	2017.5	2032.3	2032.3
22.5°	2003.3	1999.8	1982.0	1994.5	1996.8
25°	1946.5	1940.7	1922.8	1934.7	1940.6
27.5°	1883.8	1879.1	1864.2	1872.0	1876.1
30°	1834.1	1834.1	1819.3	1822.4	1831.1
32.5°	1789.1	1789.1	1771.9	1775.0	1779.0
35°	1715.7	1709.9	1695.0	1695.2	1703.9
37.5°	1630.5	1627.7	1618.1	1616.4	1618.7
40°	1573.7	1570.9	1559.0	1561.9	1561.9
42.5°	1516.9	1514.1	1502.2	1498.1	1502.8
45°	1422.9	1425.7	1411.0	1408.2	1411.0
47.5°	1330.0	1330.0	1318.2	1310.0	1314.6
50°	1266.1	1266.1	1254.3	1248.3	1248.3
52.5°	1199.8	1202.1	1188.0	1179.8	1182.1
55°	1103.4	1103.4	1088.6	1079.8	1082.7
57.5°	996.9	996.9	982.1	973.3	978.6
60°	925.9	925.9	911.1	902.3	905.2
62.5°	854.9	854.9	840.1	831.2	831.8
65°	745.5	742.6	730.7	721.8	721.8
67.5°	640.1	632.7	623.6	611.7	611.7
70°	562.1	559.2	550.2	538.4	538.4
72.5°	491.1	485.8	476.9	467.4	467.4
75°	381.6	378.7	369.8	363.8	360.9
77.5°	273.3	271.1	270.4	262.2	264.5
80°	207.1	207.1	204.1	198.2	198.2
82.5°	147.9	150.2	145.0	143.7	141.4
85°	62.1	67.9	71.0	74.0	74.0
87.5°	13.0	22.3	23.7	26.6	26.6
90°	5.9	17.5	35.5	38.5	38.5
92.5°	72.2	255.1	504.3	242.7	168.7
95°	165.8	591.1	1781.6	911.0	630.4
97.5°	264.5	676.7	2794.4	2334.5	1760.3
100°	340.3	710.7	3116.4	3260.6	2705.1
102.5°	413.7	758.7	3223.0	3954.3	3498.2
105°	541.6	842.6	3237.7	4844.0	4545.9
107.5°	662.4	930.9	3099.9	5301.1	5378.1
110°	742.9	997.5	2974.4	5443.1	5723.7

TEST NUMBER: P520271

CATALOG NUMBER: SQ4-F-125U-050D-835-1D-UNV-STD-W-12

CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	828.1	1064.2	2853.6	5411.6	5872.9
115°	955.9	1170.0	2696.2	5209.6	5892.5
117.5°	1072.6	1273.4	2574.2	4886.9	5647.5
120°	1148.3	1342.2	2512.7	4655.4	5436.7
122.5°	1214.6	1406.2	2467.7	4418.6	5197.6
125°	1305.1	1499.0	2420.9	4091.7	4815.2
127.5°	1392.2	1583.2	2391.3	3803.5	4449.4
130°	1444.3	1635.3	2379.5	3638.3	4205.6
132.5°	1496.4	1685.0	2367.6	3492.9	4013.8
135°	1571.5	1753.8	2352.8	3301.0	3737.9
137.5°	1643.2	1817.9	2345.1	3138.2	3497.0
140°	1692.9	1860.7	2338.0	3038.0	3362.0
142.5°	1744.9	1901.2	2333.3	2944.5	3217.7
145°	1817.1	1958.9	2323.2	2822.2	3030.6
147.5°	1895.3	2018.6	2313.2	2719.4	2883.2
150°	1947.4	2054.4	2308.4	2654.9	2790.8
152.5°	1994.7	2087.9	2306.1	2602.2	2712.8
155°	2062.8	2138.0	2302.5	2532.3	2613.3
157.5°	2122.6	2181.0	2303.1	2483.2	2537.5
160°	2160.5	2209.7	2305.5	2454.4	2494.9
162.5°	2193.7	2233.5	2307.8	2430.5	2459.4
165°	2237.4	2263.4	2311.4	2403.4	2415.0
167.5°	2272.9	2288.0	2314.3	2382.5	2387.2
170°	2296.6	2302.4	2314.3	2370.6	2370.6
172.5°	2310.8	2312.0	2316.7	2358.7	2358.7
175°	2326.2	2323.3	2314.3	2346.8	2341.0
177.5°	2332.7	2328.1	2316.1	2335.0	2330.3
180°	2323.2	2323.2	2323.2	2323.2	2323.2

(END OF REPORT)