

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: P520023

Luminaire Tested: **SQ4-F-075U-075D-940-1D-UNV-STD-W-12**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520023
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-22, G3-1910-536-18)
Test Lab: INNOVATION CENTER
Issue Date: 4/29/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-F-075U-075D-940-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
UPLIGHT 750 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

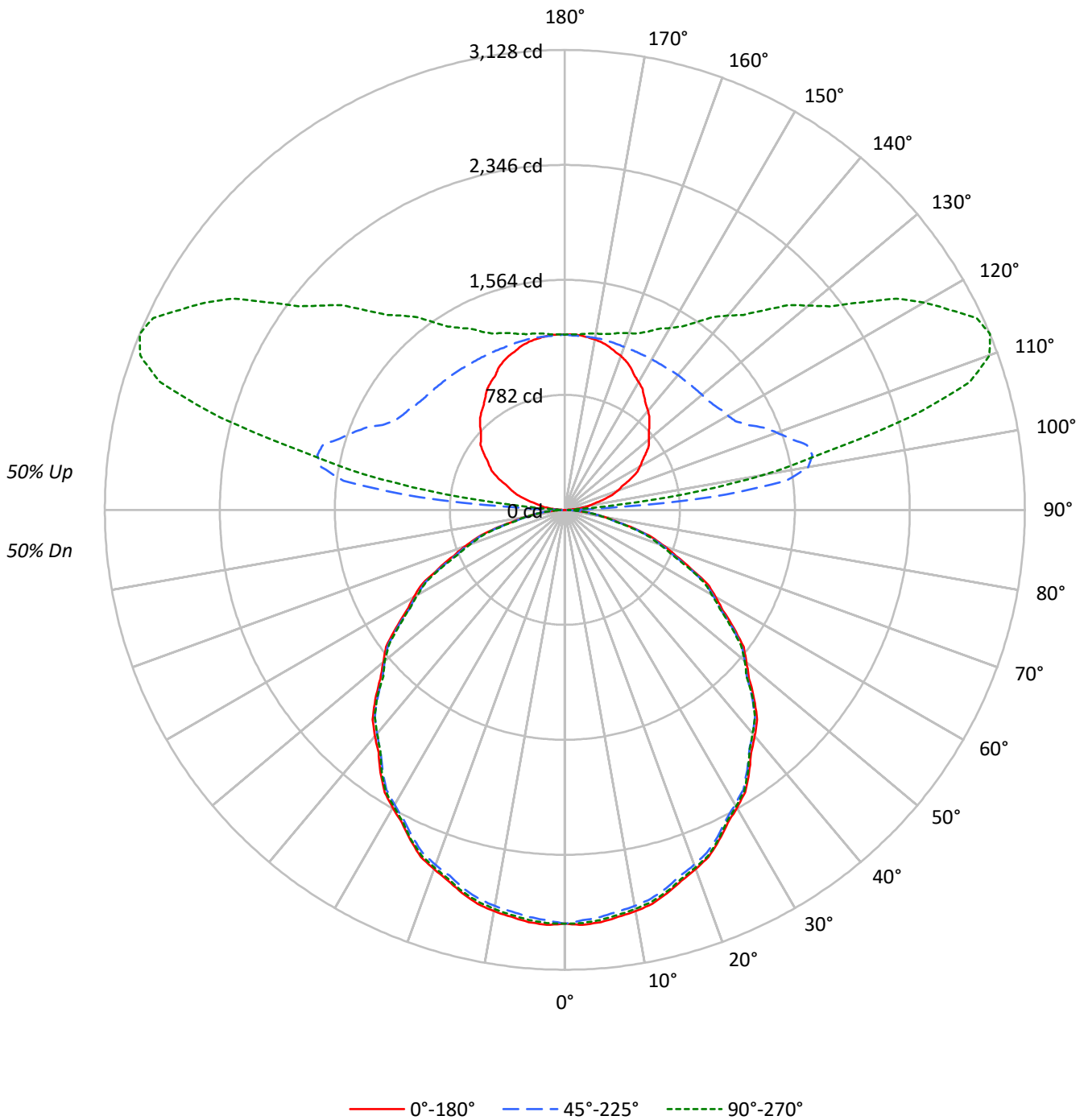
Lumens per Lamp: N/A
Luminaire Lumens: 15451.9 lumens
Efficiency: N/A
Efficacy: 114.9 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 134.5
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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	93	89	86	90	86	83	80	73	71	68	61	59	57	49	48	47	42
2	89	81	75	70	82	75	70	65	64	60	56	53	50	48	43	41	40	35
3	81	72	64	58	74	66	60	55	56	51	47	47	43	40	38	36	34	29
4	74	63	55	49	68	59	52	46	50	44	40	42	38	34	34	31	29	25
5	68	56	48	42	62	52	45	40	45	39	35	37	33	30	31	28	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	25	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	20	17
8	54	41	33	28	49	38	31	27	33	27	23	28	24	20	23	20	17	15
9	50	38	30	25	46	35	28	24	30	25	21	26	21	18	21	18	16	14
10	47	34	27	22	43	32	26	21	28	23	19	24	20	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8657	8657	8657
5°	8690	8580	8643
10°	8655	8544	8607
15°	8589	8483	8556
20°	8511	8411	8477
25°	8417	8331	8391
30°	8311	8220	8265
35°	8202	8115	8154
40°	8063	7982	7971
45°	7925	7826	7848
50°	7705	7644	7644
55°	7526	7430	7362
60°	7284	7158	7095
65°	6891	6760	6667
70°	6471	6310	6150
75°	5822	5611	5488
80°	4654	4564	4520
85°	2791	3155	3243



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	265.7	1.7
10°-20°	756.4	4.9
20°-30°	1136.5	7.4
30°-40°	1356.0	8.8
40°-50°	1390.7	9.0
50°-60°	1239.2	8.0
60°-70°	923.9	6.0
70°-80°	501.1	3.2
80°-90°	118.2	0.8
90°-100°	562.1	3.6
100°-110°	1546.5	10.0
110°-120°	1596.3	10.3
120°-130°	1278.9	8.3
130°-140°	1004.5	6.5
140°-150°	769.8	5.0
150°-160°	553.5	3.6
160°-170°	338.4	2.2
170°-180°	114.1	0.7
0°-30°	2158.6	14.0
0°-40°	3514.6	22.7
0°-60°	6144.5	39.8
0°-90°	7687.7	49.8
90°-120°	3704.9	24.0
90°-150°	6758.2	43.7
90°-180°	7764.0	50.2
0°-180°	15451.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2815	2815	2815	2815	2815	
5°	2815	2810	2779	2802	2800	267
15°	2698	2693	2664	2685	2687	761
25°	2481	2478	2455	2468	2473	1143
35°	2185	2180	2162	2162	2172	1365
45°	1822	1815	1799	1799	1804	1402
55°	1404	1401	1386	1373	1373	1254
65°	947	947	929	919	916	943
75°	490	480	472	464	462	515
85°	79	84	89	89	92	110
90°	2	10	18	23	23	8
95°	84	307	994	425	271	88
105°	276	425	1704	2595	2422	291
115°	490	596	1367	2722	3089	483
125°	674	769	1240	2098	2457	602
135°	814	903	1204	1696	1920	628
145°	941	1005	1187	1445	1557	590
155°	1065	1100	1179	1299	1336	489
165°	1151	1166	1184	1232	1240	324
175°	1192	1194	1187	1202	1200	113
180°	1192	1192	1192	1192	1192	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2815.0	2815.0	2815.0	2815.0	2815.0
2.5°	2825.1	2819.2	2794.5	2814.9	2812.9
5°	2815.0	2810.0	2779.3	2802.1	2799.7
7.5°	2792.0	2786.6	2756.3	2779.3	2778.7
10°	2771.6	2764.1	2735.9	2758.8	2756.3
12.5°	2745.0	2737.6	2709.3	2732.2	2729.7
15°	2697.6	2692.6	2664.4	2684.9	2687.4
17.5°	2643.5	2634.0	2608.7	2628.7	2631.2
20°	2600.6	2593.1	2570.0	2587.9	2590.3
22.5°	2555.7	2548.2	2525.1	2543.0	2545.5
25°	2480.6	2478.2	2455.1	2468.0	2472.9
27.5°	2399.5	2392.5	2373.9	2383.8	2388.8
30°	2340.3	2335.3	2314.8	2322.6	2327.5
32.5°	2279.0	2276.0	2257.6	2261.4	2268.4
35°	2184.6	2179.6	2161.6	2161.9	2171.8
37.5°	2080.0	2074.5	2059.5	2057.1	2061.1
40°	2008.5	2001.0	1988.1	1985.5	1985.5
42.5°	1935.1	1929.5	1912.5	1908.1	1914.1
45°	1822.2	1814.7	1799.3	1799.4	1804.4
47.5°	1700.3	1697.2	1679.3	1671.1	1673.2
50°	1610.4	1615.3	1597.6	1587.7	1597.6
52.5°	1532.8	1529.8	1513.9	1503.8	1507.8
55°	1403.7	1401.2	1385.8	1373.1	1373.1
57.5°	1274.0	1267.6	1251.5	1242.0	1249.6
60°	1184.2	1181.7	1163.8	1146.0	1153.5
62.5°	1094.4	1089.8	1071.8	1060.2	1065.7
65°	946.9	946.9	929.0	918.7	916.2
67.5°	817.7	805.7	795.7	783.4	780.0
70°	719.7	709.7	701.8	691.5	683.9
72.5°	623.7	617.8	605.9	595.7	594.2
75°	490.0	480.0	472.2	464.4	461.9
77.5°	348.7	346.6	339.4	335.4	336.8
80°	262.8	262.8	257.7	257.7	255.2
82.5°	185.3	187.3	186.3	182.2	181.8
85°	79.1	84.1	89.4	89.4	91.9
87.5°	14.8	26.3	26.1	27.1	27.1
90°	2.5	10.0	17.7	22.8	22.8
92.5°	35.0	149.6	259.2	99.5	81.7
95°	83.7	306.8	994.1	425.1	271.3
97.5°	136.4	340.2	1516.9	1168.8	824.7
100°	175.0	360.9	1681.2	1696.9	1384.5
102.5°	211.5	385.6	1723.8	2105.3	1818.6
105°	276.4	425.2	1704.1	2595.2	2421.6
107.5°	338.2	474.2	1607.1	2835.2	2886.7
110°	382.9	506.9	1534.2	2894.8	3073.3



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	423.4	543.4	1461.1	2856.4	3128.1
115°	489.5	596.1	1366.8	2721.6	3088.6
117.5°	552.2	650.4	1307.0	2532.5	2947.6
120°	590.9	685.1	1280.6	2390.8	2819.8
122.5°	625.3	719.5	1262.3	2266.6	2673.7
125°	674.5	768.7	1240.0	2097.7	2457.1
127.5°	721.2	811.0	1225.3	1956.6	2272.1
130°	745.5	837.3	1217.2	1872.9	2160.5
132.5°	773.9	865.6	1211.1	1799.2	2059.0
135°	814.0	903.3	1204.5	1696.4	1919.6
137.5°	851.6	934.3	1198.9	1613.4	1797.4
140°	879.9	956.8	1196.9	1558.2	1724.3
142.5°	904.3	975.2	1192.8	1508.9	1651.3
145°	940.8	1005.2	1186.8	1445.4	1557.0
147.5°	979.8	1035.3	1183.7	1389.1	1478.3
150°	1004.1	1053.7	1181.7	1358.2	1427.7
152.5°	1026.4	1072.1	1179.6	1331.6	1389.1
155°	1065.1	1099.7	1179.1	1299.1	1336.4
157.5°	1092.9	1121.2	1179.1	1272.5	1298.4
160°	1113.2	1135.5	1179.1	1258.2	1278.0
162.5°	1129.4	1147.8	1181.2	1245.9	1261.8
165°	1151.2	1166.1	1184.2	1232.5	1240.0
167.5°	1166.5	1177.9	1186.8	1221.3	1223.2
170°	1176.6	1184.0	1186.8	1217.2	1217.2
172.5°	1184.7	1188.2	1186.8	1211.0	1209.1
175°	1191.8	1194.3	1186.8	1201.9	1199.5
177.5°	1193.9	1193.9	1185.8	1197.8	1193.9
180°	1191.8	1191.8	1191.8	1191.8	1191.8

(END OF REPORT)