

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: P520222

Luminaire Tested: **SQ4-F-100U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

Test Information

Test Method: LM-79-2019
Report Number: P520222
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, 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-100U-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

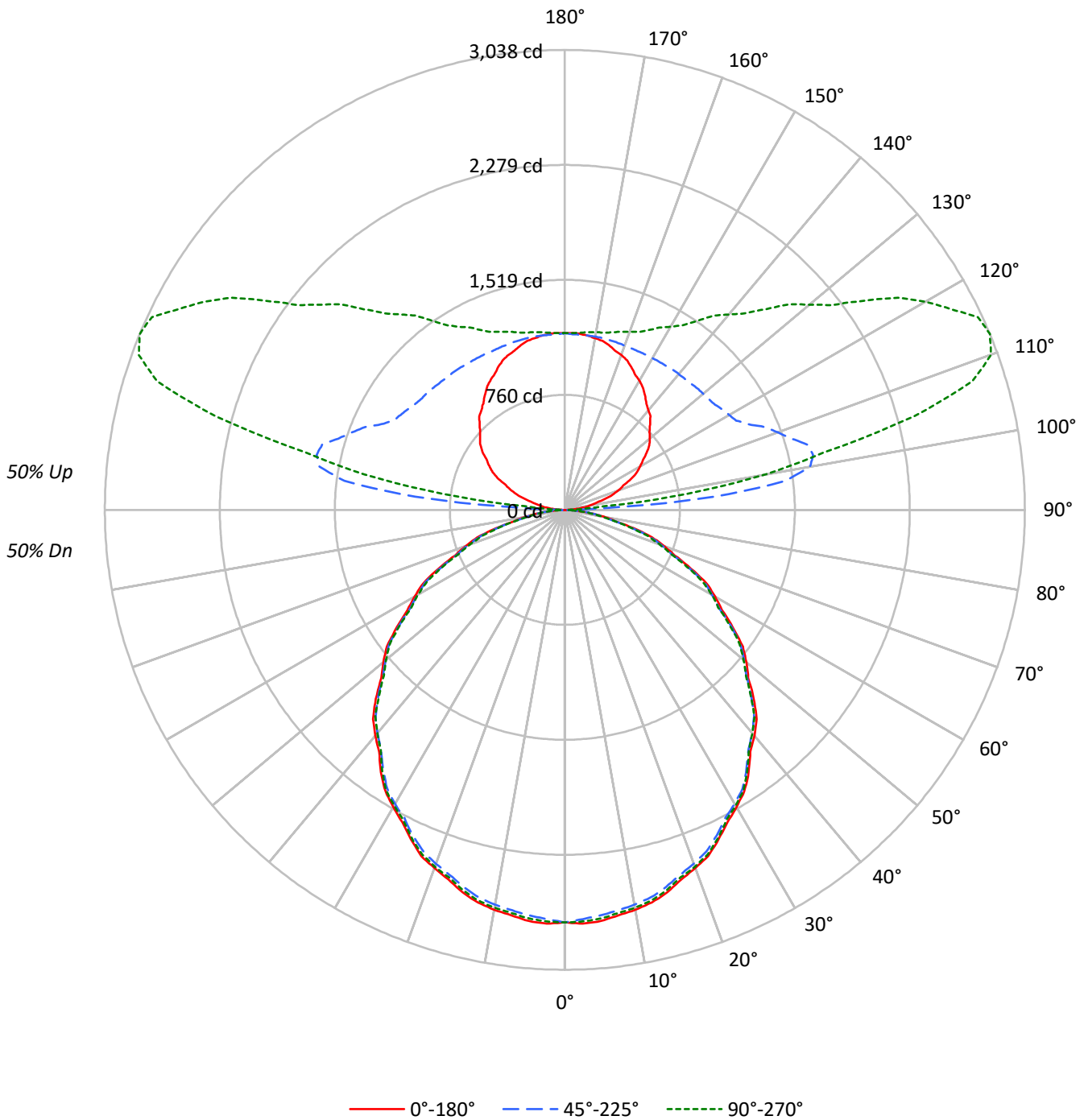
Lumens per Lamp: N/A
Luminaire Lumens: 15017.3 lumens
Efficiency: N/A
Efficacy: 125.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 119.8
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



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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	70	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	39	35
3	81	71	64	58	74	66	60	55	56	51	47	47	43	40	38	36	33	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	44	39	35	37	33	30	31	27	25	22
6	63	50	42	36	57	47	40	34	40	34	30	34	29	26	28	24	22	19
7	58	45	37	32	53	42	35	30	36	31	26	31	26	23	25	22	19	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	19	17	20	17	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12572	12572	12572
5°	12628	12455	12551
10°	12565	12407	12503
15°	12488	12319	12417
20°	12360	12213	12314
25°	12225	12082	12177
30°	12076	11946	12006
35°	11924	11776	11840
40°	11726	11590	11602
45°	11519	11361	11324
50°	11222	11088	11061
55°	10892	10772	10696
60°	10561	10372	10337
65°	10046	9821	9739
70°	9335	9107	8932
75°	8334	8067	7901
80°	6857	6610	6309
85°	4060	4457	4552



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	257.2	1.7
10°-20°	732.5	4.9
20°-30°	1100.0	7.3
30°-40°	1312.7	8.7
40°-50°	1345.5	9.0
50°-60°	1198.2	8.0
60°-70°	893.2	5.9
70°-80°	483.6	3.2
80°-90°	112.5	0.7
90°-100°	546.5	3.6
100°-110°	1508.6	10.0
110°-120°	1555.9	10.4
120°-130°	1250.3	8.3
130°-140°	982.6	6.5
140°-150°	753.6	5.0
150°-160°	541.6	3.6
160°-170°	331.2	2.2
170°-180°	111.7	0.7
0°-30°	2089.7	13.9
0°-40°	3402.4	22.7
0°-60°	5946.1	39.6
0°-90°	7435.4	49.5
90°-120°	3611.0	24.0
90°-150°	6597.4	43.9
90°-180°	7582.0	50.5
0°-180°	15017.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2725	2725	2725	2725	2725	
5°	2727	2722	2690	2714	2710	259
15°	2615	2606	2579	2600	2600	737
25°	2402	2396	2374	2387	2392	1107
35°	2117	2108	2091	2095	2102	1322
45°	1766	1756	1741	1732	1736	1359
55°	1354	1356	1339	1326	1330	1212
65°	920	917	900	890	892	910
75°	468	462	453	443	443	498
85°	77	84	84	86	86	107
90°	4	7	15	17	19	8
95°	80	296	991	408	265	86
105°	269	415	1660	2534	2386	286
115°	482	582	1337	2646	3010	473
125°	661	752	1212	2051	2407	588
135°	795	881	1178	1661	1873	615
145°	922	986	1163	1414	1522	578
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1160	1204	1214	317
175°	1167	1169	1161	1178	1174	111
180°	1167	1167	1167	1167	1167	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2725.3	2725.3	2725.3	2725.3	2725.3
2.5°	2735.8	2729.9	2705.8	2725.2	2722.3
5°	2727.1	2721.7	2689.7	2714.0	2710.3
7.5°	2701.7	2696.2	2668.0	2690.4	2687.1
10°	2682.3	2676.7	2648.6	2671.0	2669.2
12.5°	2656.8	2651.3	2623.1	2645.5	2643.7
15°	2614.9	2605.8	2579.4	2599.9	2599.9
17.5°	2559.5	2552.6	2528.1	2545.3	2545.7
20°	2517.7	2512.1	2487.8	2506.5	2508.3
22.5°	2475.8	2470.2	2442.8	2460.1	2463.4
25°	2401.7	2396.2	2373.6	2386.8	2392.3
27.5°	2325.4	2317.3	2295.0	2306.7	2310.8
30°	2267.0	2263.3	2242.7	2248.4	2253.9
32.5°	2205.7	2202.0	2184.4	2187.1	2197.0
35°	2117.4	2108.2	2091.1	2095.1	2102.4
37.5°	2013.0	2008.6	1992.0	1990.0	1996.9
40°	1947.2	1939.8	1924.7	1921.1	1926.6
42.5°	1875.3	1868.0	1849.9	1846.3	1853.2
45°	1765.7	1756.5	1741.4	1732.2	1735.8
47.5°	1643.0	1643.0	1627.3	1616.6	1622.1
50°	1563.7	1563.7	1545.0	1535.8	1541.2
52.5°	1481.4	1482.9	1462.7	1457.8	1456.0
55°	1354.3	1356.0	1339.3	1326.2	1329.9
57.5°	1231.5	1227.5	1207.9	1199.4	1201.2
60°	1144.7	1139.2	1124.2	1111.3	1120.4
62.5°	1056.4	1053.8	1038.9	1024.2	1023.1
65°	920.3	916.6	899.7	890.4	892.2
67.5°	784.8	780.5	765.0	751.6	756.4
70°	692.1	692.1	675.2	667.6	662.2
72.5°	606.8	599.4	587.0	576.4	572.4
75°	467.6	462.1	452.6	443.3	443.3
77.5°	340.4	335.7	329.5	323.2	321.3
80°	258.1	256.3	248.8	246.7	237.5
82.5°	181.8	181.4	177.0	172.1	171.7
85°	76.7	84.0	84.2	86.0	86.0
87.5°	14.2	23.7	24.0	21.3	21.7
90°	3.8	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.5	91.0	70.9
95°	80.3	295.7	991.4	407.6	265.1
97.5°	133.0	331.2	1468.6	1130.7	818.9
100°	171.7	352.5	1644.9	1656.4	1346.1
102.5°	209.1	376.7	1679.2	2046.7	1752.4
105°	268.9	414.9	1659.8	2534.0	2386.1
107.5°	332.4	462.4	1567.2	2768.9	2822.9
110°	377.2	494.0	1495.5	2819.5	2994.8



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	417.5	529.9	1428.3	2779.6	3038.1
115°	481.7	582.1	1336.8	2646.4	3009.7
117.5°	537.7	637.7	1276.7	2459.0	2872.3
120°	575.0	673.7	1252.7	2332.1	2748.3
122.5°	610.9	705.1	1233.4	2213.6	2607.9
125°	660.9	752.2	1211.7	2050.6	2406.7
127.5°	703.5	794.7	1199.0	1912.9	2219.9
130°	731.9	823.1	1193.0	1828.6	2107.9
132.5°	758.7	845.7	1187.1	1757.7	2010.8
135°	795.3	881.2	1178.1	1660.9	1872.7
137.5°	836.5	914.5	1173.6	1579.5	1760.2
140°	858.8	935.5	1170.6	1525.3	1684.0
142.5°	884.3	955.1	1167.7	1477.0	1616.9
145°	922.3	986.3	1163.1	1413.9	1521.6
147.5°	958.9	1014.7	1159.1	1360.8	1444.4
150°	985.8	1031.5	1157.6	1329.0	1396.6
152.5°	1006.7	1049.5	1156.1	1301.8	1357.7
155°	1040.0	1074.6	1153.8	1268.7	1308.8
157.5°	1070.5	1097.2	1154.2	1244.4	1271.8
160°	1088.5	1112.2	1155.7	1230.9	1251.0
162.5°	1103.5	1124.2	1157.2	1218.8	1234.4
165°	1125.8	1140.5	1159.5	1204.5	1213.6
167.5°	1143.0	1151.7	1161.3	1195.8	1198.6
170°	1151.9	1159.3	1161.3	1191.2	1191.2
172.5°	1159.5	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.8	1161.3	1178.1	1174.4
177.5°	1169.8	1168.5	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)