

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: P564284

Luminaire Tested: **SQ4-PR1-100U-100D-830-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564284
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-4)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PR1-100U-100D-830-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE RIPPLE CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

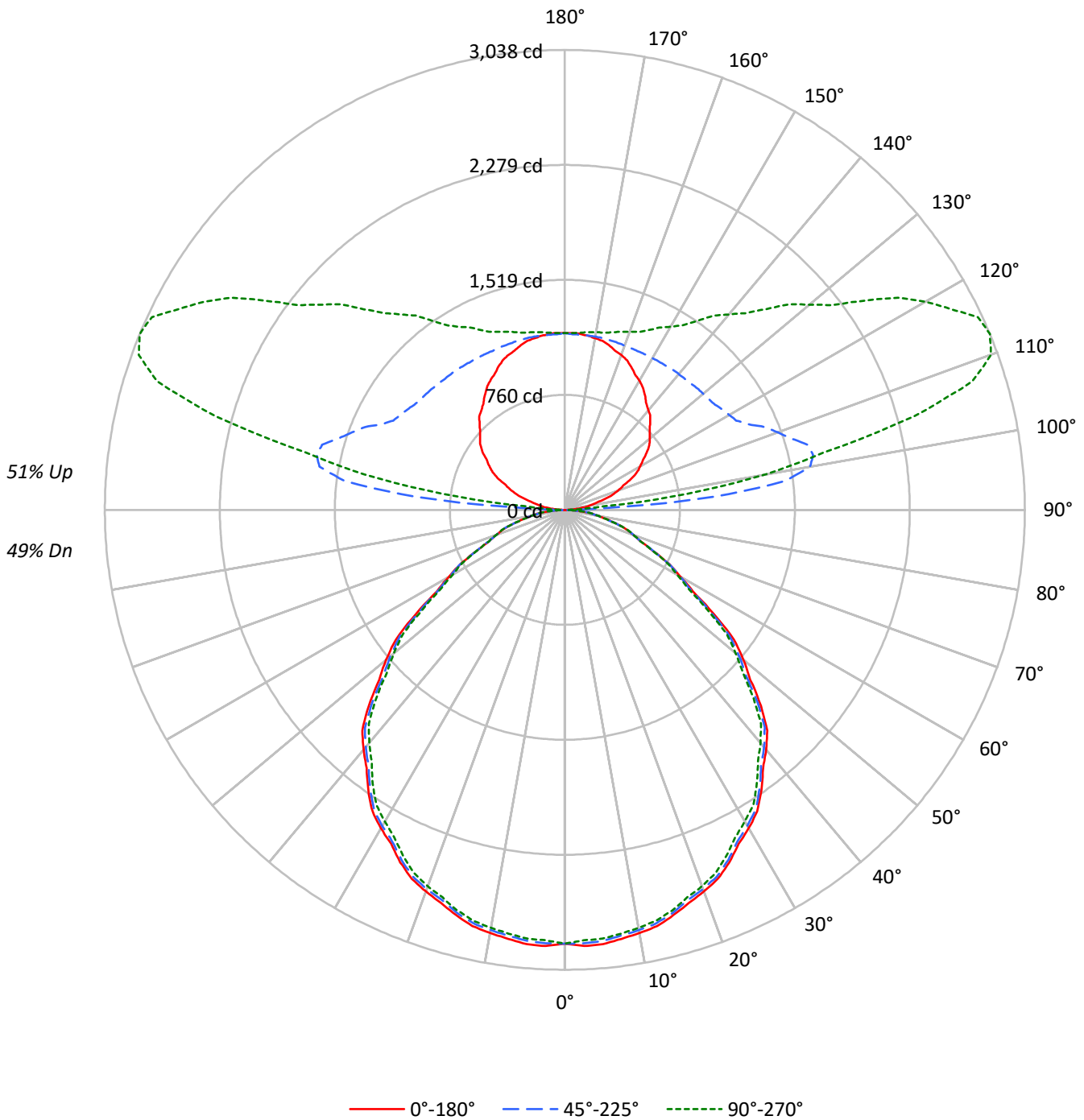
Lumens per Lamp: N/A
Luminaire Lumens: 14748.3 lumens
Efficiency: N/A
Efficacy: 121.7 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

Input Watts (W): 121.2
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	98	98	98	98	83	83	83	68	68	68	55	55	55	49
1	98	94	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	41
2	89	82	76	71	82	76	71	66	64	60	57	53	51	48	43	42	40	35
3	82	72	65	59	75	67	61	56	57	52	48	47	44	41	39	36	34	30
4	75	64	56	50	69	59	53	47	51	45	41	42	39	35	35	32	30	26
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	31	28	26	23
6	63	51	43	38	58	48	41	36	41	35	31	34	30	27	28	25	23	20
7	59	46	39	33	54	43	36	31	37	32	28	31	27	24	26	23	20	18
8	54	42	34	29	50	39	32	28	34	28	25	29	24	21	24	21	18	16
9	51	38	31	26	47	36	29	25	31	26	22	26	22	19	22	19	17	14
10	47	35	28	23	44	33	27	22	29	23	20	24	20	17	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13220	13220	13220
5°	13339	13236	13167
10°	13297	13204	13135
15°	13238	13156	13085
20°	13172	13087	12990
25°	13079	12991	12840
30°	12938	12846	12662
35°	12747	12636	12455
40°	12456	12322	12099
45°	11949	11739	11498
50°	11054	10788	10576
55°	9648	9430	9231
60°	8130	8062	7902
65°	7032	7059	7006
70°	6459	6492	6492
75°	6203	6203	6247
80°	5837	5900	5837
85°	4705	5224	5224



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	271.0	1.8
10°-20°	775.3	5.3
20°-30°	1169.5	7.9
30°-40°	1393.4	9.4
40°-50°	1373.8	9.3
50°-60°	1049.9	7.1
60°-70°	649.7	4.4
70°-80°	369.0	2.5
80°-90°	114.7	0.8
90°-100°	546.5	3.7
100°-110°	1508.6	10.2
110°-120°	1555.9	10.5
120°-130°	1250.3	8.5
130°-140°	982.6	6.7
140°-150°	753.6	5.1
150°-160°	541.6	3.7
160°-170°	331.2	2.2
170°-180°	111.7	0.8
0°-30°	2215.8	15.0
0°-40°	3609.2	24.5
0°-60°	6033.0	40.9
0°-90°	7166.4	48.6
90°-120°	3611.0	24.5
90°-150°	6597.5	44.7
90°-180°	7582.0	51.4
0°-180°	14748.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2866	2866	2866	2866	2866	
5°	2880	2849	2858	2848	2844	273
15°	2772	2743	2755	2745	2740	782
25°	2570	2538	2552	2525	2523	1182
35°	2264	2237	2244	2214	2212	1413
45°	1832	1807	1799	1767	1762	1403
55°	1200	1180	1172	1153	1148	1075
65°	644	639	647	642	642	653
75°	348	348	348	350	350	368
85°	89	94	99	99	99	103
90°	4	7	15	17	19	9
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	577
155°	1040	1075	1154	1269	1309	479
165°	1126	1140	1159	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°	2865.7	2865.7	2865.7	2865.7	2865.7
2.5°	2883.5	2858.4	2865.7	2859.5	2846.0
5°	2880.5	2849.2	2858.3	2848.3	2843.5
7.5°	2858.3	2827.4	2836.6	2826.7	2823.8
10°	2838.6	2809.6	2818.8	2808.8	2804.0
12.5°	2816.8	2786.0	2797.1	2785.1	2780.3
15°	2771.9	2743.0	2754.6	2744.7	2739.8
17.5°	2722.6	2691.7	2703.3	2691.8	2685.5
20°	2683.1	2654.1	2665.8	2648.5	2646.0
22.5°	2639.6	2610.7	2622.3	2599.1	2598.6
25°	2569.5	2538.1	2552.2	2525.0	2522.6
27.5°	2486.1	2457.1	2468.8	2441.1	2438.2
30°	2428.8	2399.9	2411.6	2381.8	2377.0
32.5°	2363.7	2336.6	2346.4	2316.7	2313.8
35°	2263.5	2236.9	2243.7	2214.0	2211.6
37.5°	2149.4	2125.3	2129.2	2096.5	2094.1
40°	2068.5	2044.3	2046.2	2011.6	2009.2
42.5°	1979.6	1955.5	1953.4	1918.8	1916.4
45°	1831.5	1807.4	1799.4	1767.2	1762.4
47.5°	1662.7	1638.5	1623.7	1597.4	1594.0
50°	1540.2	1516.1	1503.2	1480.8	1473.6
52.5°	1407.9	1383.8	1372.9	1352.5	1345.2
55°	1199.6	1180.3	1172.5	1152.6	1147.8
57.5°	1001.6	988.6	986.3	967.0	965.1
60°	881.2	874.0	873.8	856.5	856.5
62.5°	778.5	773.2	777.0	765.6	763.7
65°	644.2	639.4	646.7	641.8	641.8
67.5°	538.1	538.1	542.5	540.6	540.6
70°	478.9	478.9	481.3	481.3	481.3
72.5°	425.5	423.6	430.0	429.9	428.0
75°	348.0	348.0	348.0	350.5	350.5
77.5°	271.0	271.5	273.5	273.0	271.0
80°	219.7	222.1	222.1	219.7	219.7
82.5°	168.3	170.8	170.8	170.3	168.3
85°	88.9	93.7	98.7	98.7	98.7
87.5°	26.4	34.9	42.5	42.8	41.3
90°	3.7	7.4	14.9	16.8	18.7
92.5°	33.6	139.5	249.4	91.0	70.9
95°	80.3	295.7	991.4	407.5	265.1
97.5°	132.9	331.2	1468.6	1130.7	818.9
100°	171.8	352.5	1644.9	1656.5	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°	332.3	462.3	1567.2	2768.9	2823.0
110°	377.1	494.0	1495.5	2819.5	2994.7



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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	637.8	1276.7	2459.0	2872.3
120°	575.1	673.6	1252.8	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	2406.6
127.5°	703.5	794.8	1199.0	1912.9	2219.9
130°	731.9	823.2	1193.0	1828.6	2107.9
132.5°	758.8	845.7	1187.1	1757.8	2010.8
135°	795.4	881.2	1178.1	1660.9	1872.7
137.5°	836.4	914.6	1173.6	1579.5	1760.3
140°	858.8	935.5	1170.6	1525.3	1684.1
142.5°	884.2	955.1	1167.7	1477.0	1616.9
145°	922.3	986.2	1163.2	1413.9	1521.6
147.5°	958.9	1014.8	1159.1	1360.7	1444.3
150°	985.8	1031.4	1157.6	1329.0	1396.6
152.5°	1006.7	1049.4	1156.1	1301.9	1357.7
155°	1039.9	1074.6	1153.8	1268.6	1308.8
157.5°	1070.6	1097.2	1154.2	1244.5	1271.8
160°	1088.5	1112.2	1155.7	1230.8	1250.9
162.5°	1103.4	1124.2	1157.2	1218.8	1234.5
165°	1125.8	1140.4	1159.4	1204.5	1213.6
167.5°	1143.0	1151.8	1161.3	1195.7	1198.6
170°	1152.0	1159.3	1161.3	1191.2	1191.2
172.5°	1159.4	1163.8	1161.3	1185.2	1183.7
175°	1166.9	1168.7	1161.3	1178.0	1174.4
177.5°	1169.9	1168.4	1160.9	1171.3	1168.4
180°	1166.9	1166.9	1166.9	1166.9	1166.9

(END OF REPORT)