

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: P564964

Luminaire Tested: **SQ4-PW1-100U-100D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564964
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2106-289-3)
Test Lab: INNOVATION CENTER
Issue Date: 7/30/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: CORELITE
Catalog Number: SQ4-PW1-100U-100D-840-1D-UNV-STD-W-8
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.
DOWNLIGHT 1000 LUMENS PER FOOT
UPLIGHT 1000 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

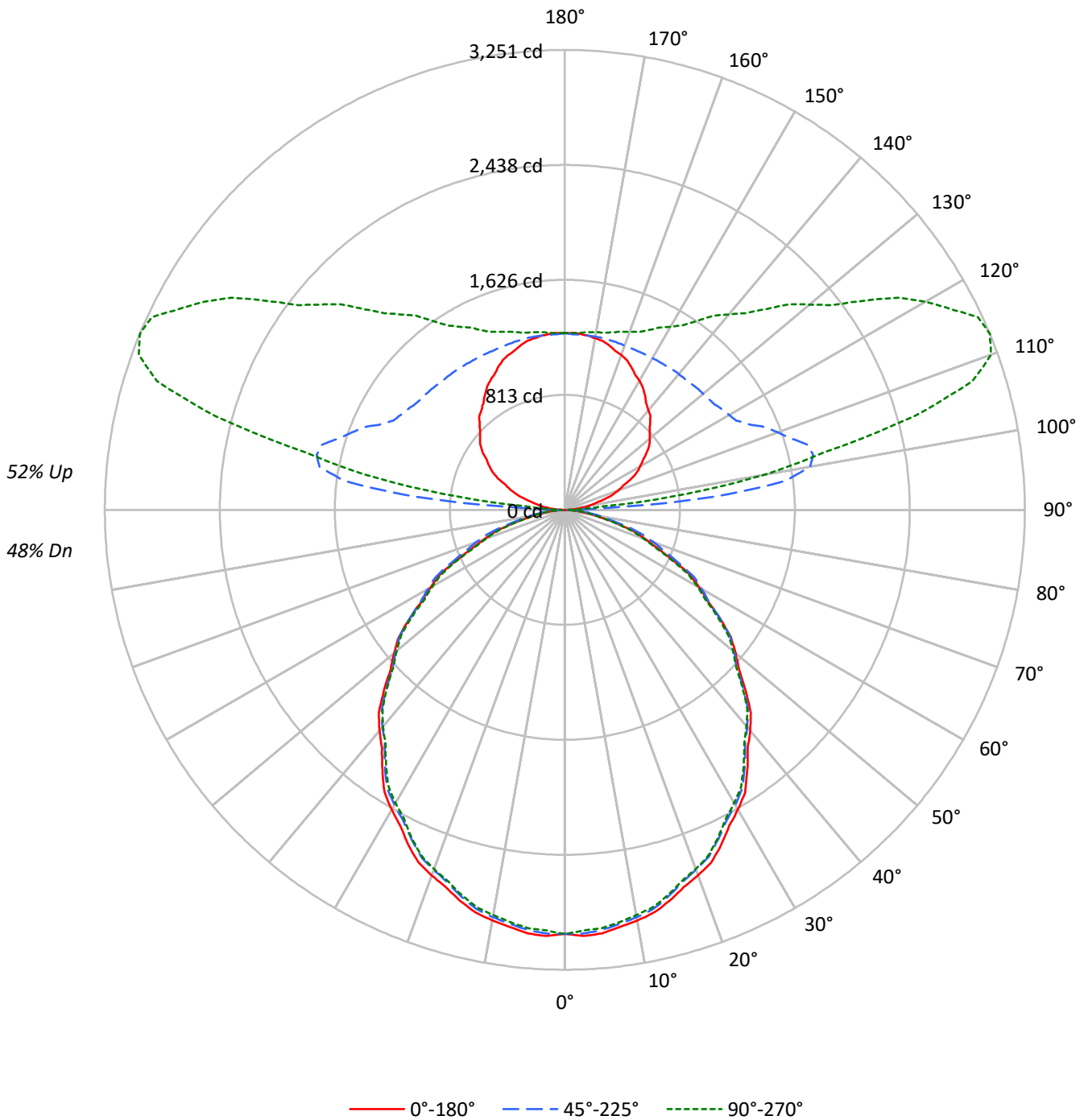
Lumens per Lamp: N/A
Luminaire Lumens: 15743.6 lumens
Efficiency: N/A
Efficacy: 129.9 lumens/watt
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	82	82	82	68	68	68	55	55	55	48				48
1	98	93	89	86	90	86	83	80	72	70	68	60	58	57	49	47	46				41	
2	89	82	75	70	82	75	70	66	64	60	56	53	50	48	43	41	39				35	
3	81	72	64	59	74	66	60	55	56	51	47	47	43	40	38	36	33				29	
4	74	63	56	50	68	59	52	47	50	45	40	42	38	35	34	31	29				25	
5	68	57	48	43	62	52	45	40	45	39	35	37	33	30	31	28	25				22	
6	63	51	43	37	58	47	40	35	40	35	30	34	30	26	28	25	22				19	
7	58	46	38	32	53	43	35	30	36	31	27	31	26	23	25	22	20				17	
8	54	42	34	29	49	39	32	27	33	28	24	28	24	21	23	20	18				15	
9	50	38	30	25	46	35	29	24	30	25	21	26	22	19	21	18	16				14	
10	47	35	28	23	43	32	26	22	28	23	19	24	20	17	20	17	14				12	

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	13830	13830	13830
5°	13919	13809	13748
10°	13808	13697	13622
15°	13662	13510	13460
20°	13499	13291	13265
25°	13310	13068	13028
30°	13029	12832	12747
35°	12659	12480	12406
40°	12264	12073	12025
45°	11787	11631	11580
50°	11298	11203	11127
55°	10771	10771	10600
60°	10114	10308	9943
65°	9255	9716	9024
70°	8159	8942	7944
75°	6967	8003	6780
80°	5403	6737	5473
85°	3493	5171	4615



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.3	1.8
10°-20°	797.0	5.1
20°-30°	1182.2	7.5
30°-40°	1383.3	8.8
40°-50°	1377.2	8.7
50°-60°	1189.2	7.6
60°-70°	856.0	5.4
70°-80°	448.9	2.9
80°-90°	113.9	0.7
90°-100°	584.8	3.7
100°-110°	1614.4	10.3
110°-120°	1664.9	10.6
120°-130°	1337.9	8.5
130°-140°	1051.5	6.7
140°-150°	806.4	5.1
150°-160°	579.6	3.7
160°-170°	354.4	2.3
170°-180°	119.5	0.8
0°-30°	2261.6	14.4
0°-40°	3644.9	23.2
0°-60°	6211.3	39.5
0°-90°	7630.2	48.5
90°-120°	3864.1	24.5
90°-150°	7060.0	44.8
90°-180°	8113.0	51.5
0°-180°	15743.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	2998	2998	2998	2998	2998	
5°	3006	2972	2982	2974	2969	285
15°	2861	2824	2829	2824	2818	806
25°	2615	2571	2567	2552	2560	1202
35°	2248	2217	2216	2195	2203	1405
45°	1807	1791	1783	1778	1775	1394
55°	1339	1337	1339	1321	1318	1195
65°	848	874	890	855	827	840
75°	391	427	449	419	380	419
85°	66	87	98	92	87	87
90°	4	8	16	18	20	8
95°	86	316	1061	436	284	92
105°	288	444	1776	2712	2553	306
115°	516	623	1430	2832	3221	507
125°	707	805	1297	2194	2575	629
135°	851	943	1261	1777	2004	659
145°	987	1055	1245	1513	1628	618
155°	1113	1150	1235	1358	1401	513
165°	1205	1220	1241	1289	1299	340
175°	1249	1251	1243	1261	1257	119
180°	1249	1249	1249	1249	1249	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	2998.0	2998.0	2998.0	2998.0	2998.0
2.5°	3014.9	2990.1	2998.0	2991.3	2976.8
5°	3005.9	2972.3	2982.1	2974.1	2968.9
7.5°	2975.2	2944.2	2951.5	2942.9	2939.8
10°	2947.8	2916.8	2924.0	2913.3	2908.1
12.5°	2916.1	2883.0	2890.2	2879.5	2876.5
15°	2860.6	2824.4	2828.9	2823.5	2818.3
17.5°	2796.2	2759.5	2760.2	2751.8	2750.7
20°	2749.7	2710.9	2707.4	2697.0	2702.1
22.5°	2699.0	2658.1	2654.6	2639.9	2647.2
25°	2615.0	2571.0	2567.4	2551.7	2559.5
27.5°	2517.8	2474.4	2474.4	2452.4	2460.7
30°	2445.9	2404.6	2408.9	2382.7	2393.1
32.5°	2369.8	2332.6	2335.0	2308.8	2319.1
35°	2247.8	2216.8	2216.1	2195.2	2202.9
37.5°	2123.1	2095.8	2091.4	2079.3	2081.4
40°	2036.5	2013.3	2004.8	1996.9	1996.9
42.5°	1945.6	1924.5	1916.0	1910.2	1908.1
45°	1806.7	1791.2	1782.9	1777.6	1775.0
47.5°	1669.3	1654.9	1647.7	1643.9	1641.3
50°	1574.3	1563.9	1561.0	1553.1	1550.5
52.5°	1479.2	1473.0	1470.2	1460.1	1457.5
55°	1339.2	1336.6	1339.2	1320.6	1318.0
57.5°	1193.4	1197.5	1206.0	1181.1	1174.9
60°	1096.2	1106.5	1117.3	1088.0	1077.7
62.5°	996.9	1013.4	1028.5	994.9	980.5
65°	847.9	873.7	890.1	855.2	826.7
67.5°	704.2	736.2	756.0	718.3	686.2
70°	604.9	641.0	663.0	625.2	589.0
72.5°	518.2	558.5	576.3	540.7	504.5
75°	390.9	427.1	449.0	419.1	380.4
77.5°	277.3	311.4	329.6	303.6	271.5
80°	203.4	239.5	253.6	231.9	206.0
82.5°	144.2	174.2	183.8	170.8	153.2
85°	66.0	86.7	97.7	92.3	87.2
87.5°	17.7	32.9	43.3	43.8	46.3
90°	4.0	7.9	16.0	18.0	20.0
92.5°	36.0	149.3	266.9	97.4	75.9
95°	85.9	316.4	1060.9	436.1	283.7
97.5°	142.3	354.4	1571.6	1210.0	876.3
100°	183.8	377.2	1760.2	1772.6	1440.5
102.5°	223.8	403.1	1796.9	2190.2	1875.3
105°	287.7	444.0	1776.2	2711.6	2553.4
107.5°	355.6	494.7	1677.1	2963.1	3020.9
110°	403.6	528.6	1600.3	3017.1	3204.7



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	446.7	567.1	1528.4	2974.4	3251.0
115°	515.5	622.9	1430.5	2831.9	3220.7
117.5°	575.4	682.5	1366.2	2631.3	3073.6
120°	615.4	720.9	1340.6	2495.6	2941.0
122.5°	653.7	754.5	1319.8	2368.8	2790.7
125°	707.3	804.9	1296.7	2194.4	2575.3
127.5°	752.8	850.5	1283.1	2047.0	2375.5
130°	783.2	880.9	1276.7	1956.8	2255.7
132.5°	812.0	904.9	1270.3	1881.0	2151.8
135°	851.1	942.9	1260.7	1777.3	2003.9
137.5°	895.1	978.7	1255.9	1690.3	1883.7
140°	919.1	1001.1	1252.7	1632.2	1802.1
142.5°	946.2	1022.0	1249.5	1580.6	1730.2
145°	987.0	1055.4	1244.7	1513.1	1628.3
147.5°	1026.1	1085.9	1240.3	1456.1	1545.6
150°	1054.9	1103.7	1238.7	1422.2	1494.5
152.5°	1077.3	1123.0	1237.1	1393.1	1452.9
155°	1112.9	1150.0	1234.7	1357.6	1400.6
157.5°	1145.6	1174.1	1235.1	1331.7	1361.0
160°	1164.8	1190.2	1236.7	1317.1	1338.6
162.5°	1180.8	1203.1	1238.3	1304.2	1321.0
165°	1204.8	1220.4	1240.7	1288.9	1298.7
167.5°	1223.1	1232.5	1242.7	1279.5	1282.7
170°	1232.7	1240.5	1242.7	1274.7	1274.7
172.5°	1240.7	1245.4	1242.7	1268.3	1266.7
175°	1248.7	1250.7	1242.7	1260.6	1256.7
177.5°	1251.9	1250.3	1242.3	1253.4	1250.3
180°	1248.7	1248.7	1248.7	1248.7	1248.7

(END OF REPORT)