

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: P564988

Luminaire Tested: **SQ4-PW1-100U-125D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P564988  
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-125D-840-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH PERCEIVE WAVES CONTINUOUS LENS.  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

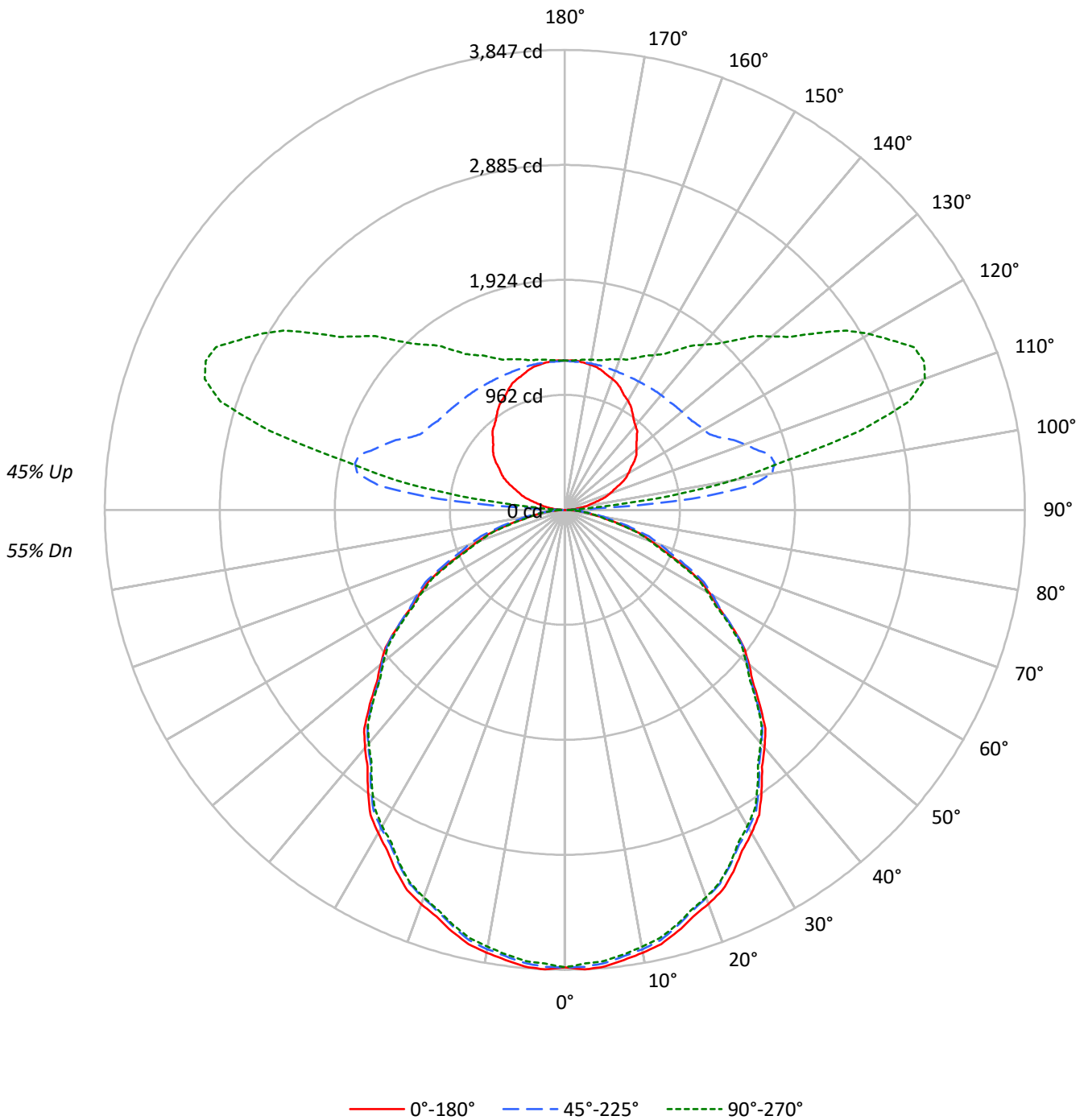
Lumens per Lamp: N/A  
Luminaire Lumens: 17849.9 lumens  
Efficiency: N/A  
Efficacy: 127.0 lumens/watt  
Spacing Criteria (0/90/45): 1.22 / 1.19 / 1.31  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 140.6  
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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55				
1	99	95	91	87	92	88	85	82	76	73	71	64	62	61	53	52	51	46				
2	90	83	77	71	83	77	72	67	66	62	59	56	53	51	47	45	43	39				
3	82	73	65	60	76	68	61	56	59	54	49	50	46	43	42	39	37	33				
4	75	64	57	50	70	60	53	48	52	47	42	44	40	37	37	34	32	28				
5	69	57	49	43	64	54	46	41	47	41	36	40	36	32	34	30	28	25				
6	64	52	43	38	59	48	41	36	42	36	32	36	32	28	31	27	24	22				
7	59	47	39	33	55	44	36	31	38	32	28	33	28	25	28	24	22	19				
8	55	42	35	29	51	40	33	28	35	29	25	30	26	22	26	22	19	17				
9	51	39	31	26	47	36	30	25	32	26	22	28	23	20	24	20	18	15				
10	48	36	28	23	44	33	27	22	29	24	20	26	21	18	22	19	16	14				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	17649	17649	17649
5°	17763	17623	17544
10°	17621	17479	17384
15°	17434	17241	17177
20°	17226	16961	16928
25°	16985	16677	16625
30°	16626	16375	16267
35°	16154	15927	15831
40°	15650	15407	15346
45°	15042	14843	14777
50°	14418	14297	14200
55°	13745	13745	13528
60°	12907	13155	12689
65°	11811	12399	11516
70°	10411	11412	10139
75°	8892	10213	8652
80°	6894	8597	6984
85°	4462	6600	5886



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	360.3	2.0
10°-20°	1017.1	5.7
20°-30°	1508.7	8.5
30°-40°	1765.3	9.9
40°-50°	1757.5	9.8
50°-60°	1517.6	8.5
60°-70°	1092.4	6.1
70°-80°	572.9	3.2
80°-90°	144.6	0.8
90°-100°	584.8	3.3
100°-110°	1614.4	9.0
110°-120°	1664.9	9.3
120°-130°	1337.9	7.5
130°-140°	1051.5	5.9
140°-150°	806.4	4.5
150°-160°	579.6	3.2
160°-170°	354.4	2.0
170°-180°	119.5	0.7
0°-30°	2886.1	16.2
0°-40°	4651.4	26.1
0°-60°	7926.5	44.4
0°-90°	9736.4	54.5
90°-120°	3864.1	21.6
90°-150°	7060.0	39.6
90°-180°	8113.0	45.5
0°-180°	17849.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3826	3826	3826	3826	3826	
5°	3836	3793	3806	3795	3789	363
15°	3650	3604	3610	3603	3597	1029
25°	3337	3281	3276	3256	3266	1534
35°	2868	2829	2828	2801	2811	1793
45°	2306	2286	2275	2268	2265	1779
55°	1709	1706	1709	1685	1682	1525
65°	1082	1115	1136	1091	1055	1072
75°	499	545	573	535	485	535
85°	84	111	125	118	111	111
90°	4	8	16	18	20	9
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°	3825.8	3825.8	3825.8	3825.8	3825.8
2.5°	3847.4	3815.7	3825.8	3817.3	3798.8
5°	3835.9	3793.1	3805.6	3795.3	3788.7
7.5°	3796.8	3757.3	3766.5	3755.6	3751.6
10°	3761.7	3722.2	3731.4	3717.8	3711.2
12.5°	3721.3	3679.1	3688.3	3674.7	3670.7
15°	3650.5	3604.4	3610.1	3603.2	3596.6
17.5°	3568.3	3521.5	3522.4	3511.6	3510.3
20°	3508.9	3459.5	3455.0	3441.7	3448.3
22.5°	3444.2	3392.1	3387.6	3368.9	3378.2
25°	3337.0	3281.0	3276.4	3256.4	3266.2
27.5°	3213.0	3157.6	3157.7	3129.6	3140.2
30°	3121.3	3068.6	3074.1	3040.7	3053.9
32.5°	3024.2	2976.8	2979.7	2946.3	2959.5
35°	2868.5	2828.9	2828.1	2801.3	2811.2
37.5°	2709.4	2674.5	2669.0	2653.5	2656.1
40°	2598.8	2569.2	2558.4	2548.3	2548.3
42.5°	2482.9	2455.9	2445.1	2437.7	2435.0
45°	2305.6	2285.8	2275.2	2268.4	2265.1
47.5°	2130.3	2111.9	2102.7	2097.9	2094.6
50°	2009.0	1995.8	1992.1	1981.9	1978.6
52.5°	1887.6	1879.7	1876.2	1863.3	1860.0
55°	1709.0	1705.7	1709.0	1685.3	1682.0
57.5°	1522.9	1528.2	1539.1	1507.2	1499.3
60°	1398.9	1412.0	1425.8	1388.4	1375.3
62.5°	1272.1	1293.2	1312.6	1269.7	1251.2
65°	1082.0	1115.0	1135.9	1091.3	1055.0
67.5°	898.6	939.5	964.7	916.6	875.7
70°	771.9	818.0	846.1	797.8	751.7
72.5°	661.3	712.8	735.5	690.0	643.8
75°	498.9	545.0	573.0	534.8	485.4
77.5°	353.9	397.4	420.7	387.4	346.5
80°	259.5	305.7	323.6	295.9	262.9
82.5°	184.0	222.3	234.6	217.9	195.5
85°	84.3	110.6	124.7	117.8	111.2
87.5°	22.4	41.6	54.4	54.9	57.9
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)