

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: P564292

Luminaire Tested: **SQ4-PR1-100U-100D-840-1D-UNV-STD-W-8**

Issue Date: 7/30/2021

Test Information

Test Method: LM-79-2019
Report Number: P564292
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-840-1D-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: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

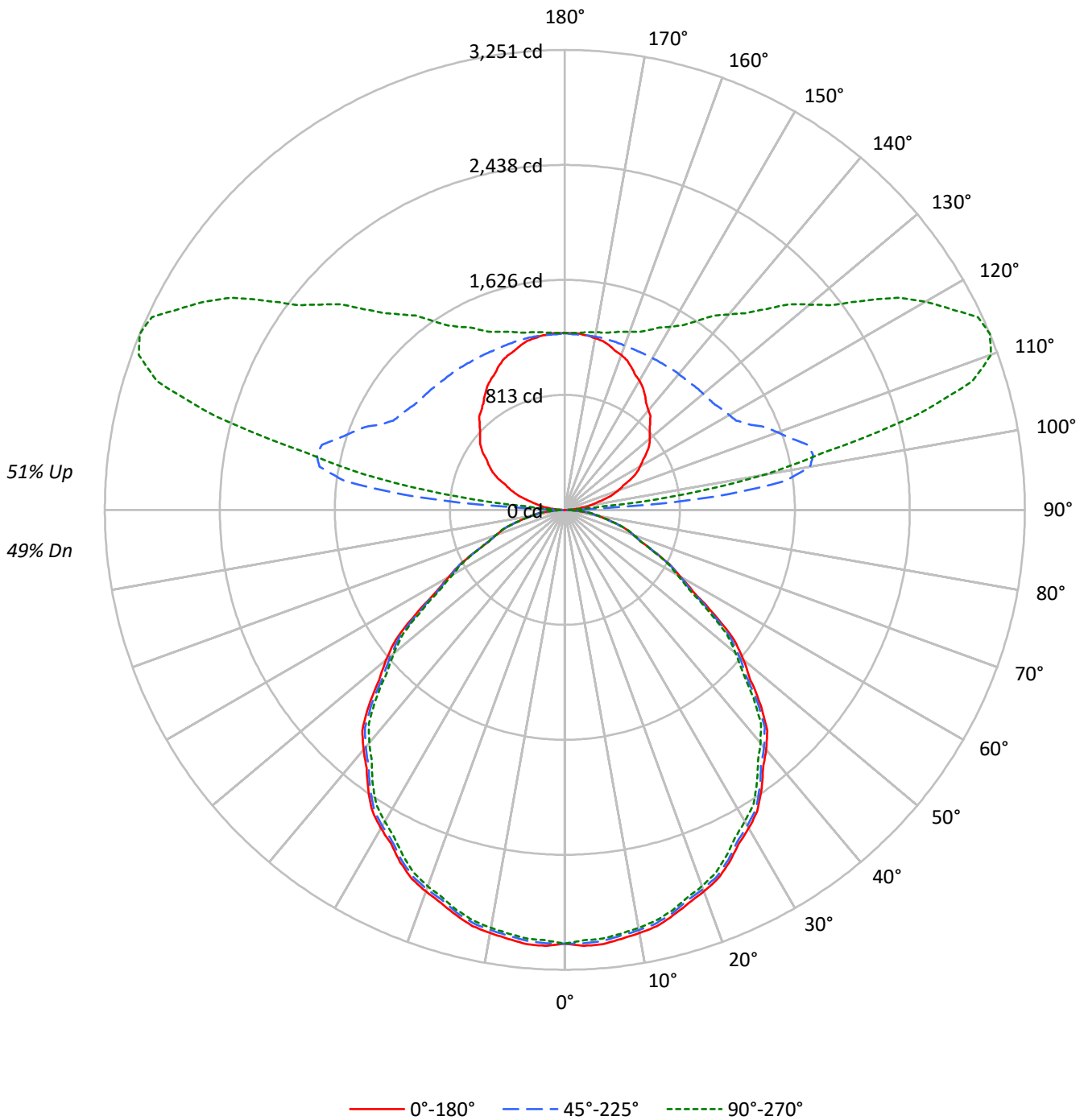
Lumens per Lamp: N/A
Luminaire Lumens: 15782.3 lumens
Efficiency: N/A
Efficacy: 130.2 lumens/watt
Spacing Criteria (0/90/45): 1.26 / 1.24 / 1.35
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')
CIE Type: General Diffuse

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	50	30	10	0	
RCR																						
0	107	107	107	107	98	98	98	98	83	83	83	68	68	68	55	55	55	49				49
1	98	94	90	86	90	86	83	80	73	70	68	60	59	57	49	48	47	41				41
2	89	82	76	71	82	76	71	66	64	60	57	53	51	48	43	42	40	35				35
3	82	72	65	59	75	67	61	56	57	52	48	47	44	41	39	36	34	30				30
4	75	64	56	50	69	59	53	47	51	45	41	42	39	35	35	32	30	26				26
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	31	28	26	23				23
6	63	51	43	38	58	48	41	36	41	35	31	34	30	27	28	25	23	20				20
7	59	46	39	33	54	43	36	31	37	32	28	31	27	24	26	23	20	18				18
8	54	42	34	29	50	39	32	28	34	28	25	29	24	21	24	21	18	16				16
9	51	38	31	26	47	36	29	25	31	26	22	26	22	19	22	19	17	14				14
10	47	35	28	23	44	33	27	22	29	23	20	24	20	17	20	17	15	13				13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14147	14147	14147
5°	14274	14164	14090
10°	14229	14130	14056
15°	14166	14078	14002
20°	14095	14004	13900
25°	13996	13902	13740
30°	13845	13746	13549
35°	13640	13521	13328
40°	13330	13186	12948
45°	12786	12562	12303
50°	11829	11544	11317
55°	10324	10090	9878
60°	8700	8626	8457
65°	7525	7554	7497
70°	6911	6948	6948
75°	6638	6638	6686
80°	6246	6315	6246
85°	5034	5595	5595



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	290.0	1.8
10°-20°	829.7	5.3
20°-30°	1251.5	7.9
30°-40°	1491.1	9.4
40°-50°	1470.1	9.3
50°-60°	1123.5	7.1
60°-70°	695.3	4.4
70°-80°	394.9	2.5
80°-90°	122.7	0.8
90°-100°	584.8	3.7
100°-110°	1614.4	10.2
110°-120°	1664.9	10.5
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	2.2
170°-180°	119.5	0.8
0°-30°	2371.2	15.0
0°-40°	3862.3	24.5
0°-60°	6455.9	40.9
0°-90°	7668.8	48.6
90°-120°	3864.1	24.5
90°-150°	7060.0	44.7
90°-180°	8113.0	51.4
0°-180°	15782.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	3067	3067	3067	3067	3067	
5°	3082	3049	3059	3048	3043	292
15°	2966	2935	2948	2937	2932	837
25°	2750	2716	2731	2702	2700	1265
35°	2422	2394	2401	2369	2367	1512
45°	1960	1934	1926	1891	1886	1501
55°	1284	1263	1255	1233	1228	1150
65°	689	684	692	687	687	698
75°	372	372	372	375	375	393
85°	95	100	106	106	106	111
90°	4	8	16	18	20	10
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°	3066.6	3066.6	3066.6	3066.6	3066.6
2.5°	3085.6	3058.8	3066.6	3060.0	3045.5
5°	3082.5	3048.9	3058.7	3048.0	3042.8
7.5°	3058.7	3025.6	3035.5	3024.8	3021.7
10°	3037.6	3006.6	3016.4	3005.8	3000.6
12.5°	3014.3	2981.3	2993.2	2980.4	2975.2
15°	2966.2	2935.3	2947.8	2937.1	2931.9
17.5°	2913.4	2880.4	2892.8	2880.5	2873.8
20°	2871.2	2840.2	2852.7	2834.1	2831.5
22.5°	2824.7	2793.7	2806.2	2781.3	2780.8
25°	2749.7	2716.1	2731.2	2702.1	2699.5
27.5°	2660.4	2629.4	2641.9	2612.2	2609.1
30°	2599.1	2568.1	2580.6	2548.8	2543.6
32.5°	2529.4	2500.4	2510.9	2479.1	2476.0
35°	2422.1	2393.7	2401.0	2369.2	2366.7
37.5°	2300.1	2274.3	2278.4	2243.5	2240.9
40°	2213.5	2187.6	2189.7	2152.7	2150.1
42.5°	2118.4	2092.5	2090.4	2053.3	2050.8
45°	1959.9	1934.1	1925.6	1891.1	1885.9
47.5°	1779.2	1753.4	1737.5	1709.4	1705.8
50°	1648.2	1622.4	1608.6	1584.6	1576.9
52.5°	1506.6	1480.8	1469.1	1447.3	1439.5
55°	1283.7	1263.0	1254.6	1233.4	1228.2
57.5°	1071.9	1057.9	1055.5	1034.8	1032.8
60°	943.0	935.2	935.0	916.6	916.6
62.5°	833.1	827.4	831.5	819.3	817.2
65°	689.4	684.2	692.0	686.8	686.8
67.5°	575.8	575.8	580.6	578.5	578.5
70°	512.4	512.4	515.1	515.1	515.1
72.5°	455.4	453.3	460.1	460.1	458.0
75°	372.4	372.4	372.4	375.1	375.1
77.5°	290.0	290.5	292.7	292.1	290.0
80°	235.1	237.7	237.7	235.1	235.1
82.5°	180.1	182.7	182.8	182.2	180.1
85°	95.1	100.3	105.7	105.7	105.7
87.5°	28.3	37.3	45.5	45.8	44.1
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)