

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: P519418

Luminaire Tested: **SQ4-WB-100U-100D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519418  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-23, G2-2009-966-13)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-WB-100U-100D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

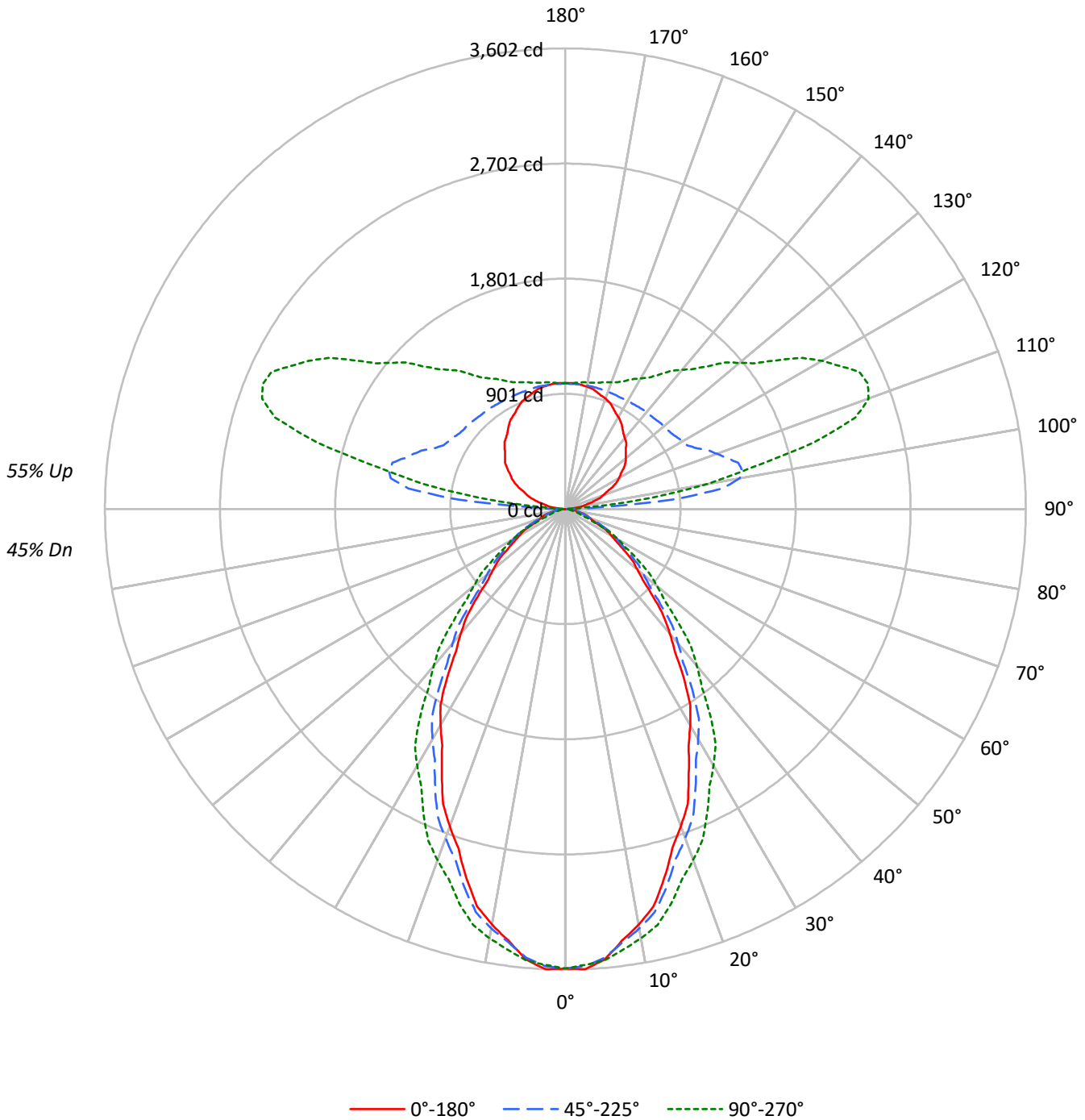
Lumens per Lamp: N/A  
Luminaire Lumens: 11630.7 lumens  
Efficiency: N/A  
Efficacy: 96.0 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

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	106	106	106	106	97	97	97	97	81	81	81	65	65	65	52	52	52	45
1	98	94	90	87	89	86	83	81	72	70	68	59	58	56	47	46	46	40
2	90	83	78	73	82	77	72	68	64	61	58	53	51	49	43	41	40	35
3	83	74	67	62	76	68	63	58	58	54	50	48	45	43	39	37	35	31
4	76	66	59	54	70	61	55	50	52	47	44	44	40	37	36	33	31	28
5	70	60	52	47	65	55	49	44	47	42	39	40	36	33	33	30	28	25
6	65	54	46	41	60	50	44	39	43	38	34	36	33	30	30	27	25	22
7	61	49	42	36	56	46	39	34	39	34	31	33	30	27	28	25	23	20
8	56	45	38	33	52	42	35	31	36	31	28	31	27	24	26	23	21	19
9	53	41	34	29	49	39	32	28	33	28	25	29	25	22	24	21	19	17
10	49	38	31	27	46	36	29	25	31	26	23	27	23	20	22	20	18	16

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

	0°	45°	90°
0°	16578	16578	16578
5°	16371	16313	16408
10°	15467	15608	15970
15°	14279	14610	15265
20°	12967	13454	14345
25°	11630	12264	13364
30°	10399	11079	12347
35°	9093	9750	11145
40°	7654	8262	9648
45°	6316	6862	8055
50°	5273	5749	6711
55°	4477	4933	5542
60°	3826	4277	4423
65°	3047	3598	2858
70°	2702	2807	1744
75°	2501	2276	1068
80°	2303	2093	922
85°	2085	1921	752



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	329.6	2.8
10°-20°	857.4	7.4
20°-30°	1110.6	9.5
30°-40°	1087.5	9.4
40°-50°	832.4	7.2
50°-60°	554.7	4.8
60°-70°	302.7	2.6
70°-80°	126.1	1.1
80°-90°	37.7	0.3
90°-100°	460.7	4.0
100°-110°	1271.9	10.9
110°-120°	1311.7	11.3
120°-130°	1054.1	9.1
130°-140°	828.4	7.1
140°-150°	635.3	5.5
150°-160°	456.6	3.9
160°-170°	279.2	2.4
170°-180°	94.1	0.8
0°-30°	2297.6	19.8
0°-40°	3385.1	29.1
0°-60°	4772.2	41.0
0°-90°	5238.7	45.0
90°-120°	3044.3	26.2
90°-150°	5562.0	47.8
90°-180°	6392.0	55.0
0°-180°	11630.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3594	3594	3594	3594	3594	
5°	3535	3500	3523	3531	3543	329
15°	2990	2979	3059	3142	3196	835
25°	2285	2291	2410	2514	2626	1051
35°	1615	1622	1731	1848	1979	1004
45°	968	987	1052	1131	1235	755
55°	557	580	613	637	689	505
65°	279	302	330	288	262	290
75°	140	140	128	88	60	150
85°	39	39	36	23	14	43
90°	3	6	13	14	16	7
95°	68	249	836	344	224	72
105°	227	350	1399	2136	2012	241
115°	406	491	1127	2231	2537	399
125°	557	634	1022	1729	2029	496
135°	670	743	993	1400	1579	519
145°	778	831	981	1192	1283	487
155°	877	906	973	1070	1103	404
165°	949	962	978	1015	1023	268
175°	984	985	979	993	990	93
180°	984	984	984	984	984	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3593.7	3593.7	3593.7	3593.7	3593.7
2.5°	3602.5	3570.5	3578.6	3578.3	3568.5
5°	3535.4	3499.9	3522.7	3530.9	3543.2
7.5°	3404.2	3377.3	3419.0	3449.8	3474.8
10°	3302.0	3278.9	3331.9	3376.8	3409.2
12.5°	3183.4	3164.0	3229.8	3290.0	3332.3
15°	2989.8	2979.0	3059.1	3142.4	3196.3
17.5°	2782.6	2777.3	2869.3	2966.4	3035.5
20°	2641.3	2639.7	2740.6	2841.8	2922.0
22.5°	2498.7	2502.1	2608.2	2713.4	2804.6
25°	2284.9	2291.1	2409.5	2514.5	2625.5
27.5°	2087.2	2089.9	2212.4	2323.2	2441.6
30°	1952.2	1959.9	2079.9	2194.7	2318.0
32.5°	1817.2	1826.1	1943.7	2062.3	2188.1
35°	1614.7	1622.4	1731.4	1847.9	1979.0
37.5°	1405.9	1416.4	1513.2	1623.3	1752.2
40°	1271.0	1286.4	1371.9	1475.7	1602.1
42.5°	1141.0	1160.1	1239.4	1337.9	1452.0
45°	968.2	986.7	1051.8	1131.4	1234.7
47.5°	819.3	840.6	890.6	959.2	1047.4
50°	734.8	754.9	801.1	851.8	935.1
52.5°	660.4	680.4	721.6	760.7	831.6
55°	556.6	579.8	613.4	636.7	689.1
57.5°	471.5	493.7	520.4	530.9	562.6
60°	414.7	439.4	463.6	462.4	479.4
62.5°	363.0	384.0	408.1	391.4	392.3
65°	279.1	302.2	329.6	288.0	261.8
67.5°	225.5	230.4	258.6	200.8	169.7
70°	200.3	200.3	208.1	155.5	129.3
72.5°	176.3	176.3	169.0	126.5	99.0
75°	140.3	140.3	127.7	87.7	59.9
77.5°	108.2	106.9	97.8	65.4	43.5
80°	86.7	86.7	78.8	51.7	34.7
82.5°	67.8	67.8	61.2	40.4	25.9
85°	39.4	39.4	36.3	23.4	14.2
87.5°	14.5	15.1	15.1	10.4	9.5
90°	3.1	6.2	12.6	14.2	15.7
92.5°	28.3	117.6	210.3	76.7	59.8
95°	67.7	249.3	835.8	343.6	223.5
97.5°	112.1	279.2	1238.1	953.2	690.4
100°	144.8	297.2	1386.7	1396.5	1134.9
102.5°	176.3	317.6	1415.7	1725.5	1477.4
105°	226.7	349.8	1399.3	2136.3	2011.6
107.5°	280.2	389.8	1321.2	2334.4	2379.9
110°	318.0	416.5	1260.8	2377.0	2524.7



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	352.0	446.8	1204.1	2343.3	2561.3
115°	406.1	490.7	1127.0	2231.1	2537.3
117.5°	453.3	537.7	1076.3	2073.0	2421.5
120°	484.8	567.9	1056.2	1966.1	2317.0
122.5°	515.0	594.4	1039.8	1866.2	2198.6
125°	557.2	634.2	1021.5	1728.8	2028.9
127.5°	593.1	670.0	1010.8	1612.7	1871.5
130°	617.0	694.0	1005.8	1541.6	1777.1
132.5°	639.7	712.9	1000.8	1481.9	1695.2
135°	670.5	742.9	993.2	1400.2	1578.8
137.5°	705.2	771.0	989.4	1331.6	1484.0
140°	724.1	788.7	986.9	1285.9	1419.8
142.5°	745.5	805.2	984.4	1245.2	1363.1
145°	777.6	831.4	980.6	1192.0	1282.8
147.5°	808.4	855.5	977.2	1147.2	1217.7
150°	831.1	869.6	975.9	1120.4	1177.4
152.5°	848.7	884.7	974.6	1097.5	1144.6
155°	876.7	906.0	972.7	1069.5	1103.4
157.5°	902.5	925.0	973.1	1049.1	1072.2
160°	917.7	937.7	974.3	1037.7	1054.6
162.5°	930.3	947.8	975.6	1027.5	1040.7
165°	949.1	961.5	977.5	1015.4	1023.1
167.5°	963.6	971.0	979.0	1008.1	1010.5
170°	971.2	977.3	979.0	1004.2	1004.2
172.5°	977.5	981.2	979.0	999.2	997.9
175°	983.8	985.3	979.0	993.1	990.1
177.5°	986.3	985.1	978.7	987.5	985.0
180°	983.8	983.8	983.8	983.8	983.8

(END OF REPORT)