

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: P519394

Luminaire Tested: **SQ4-WB-100U-075D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519394  
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-075D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

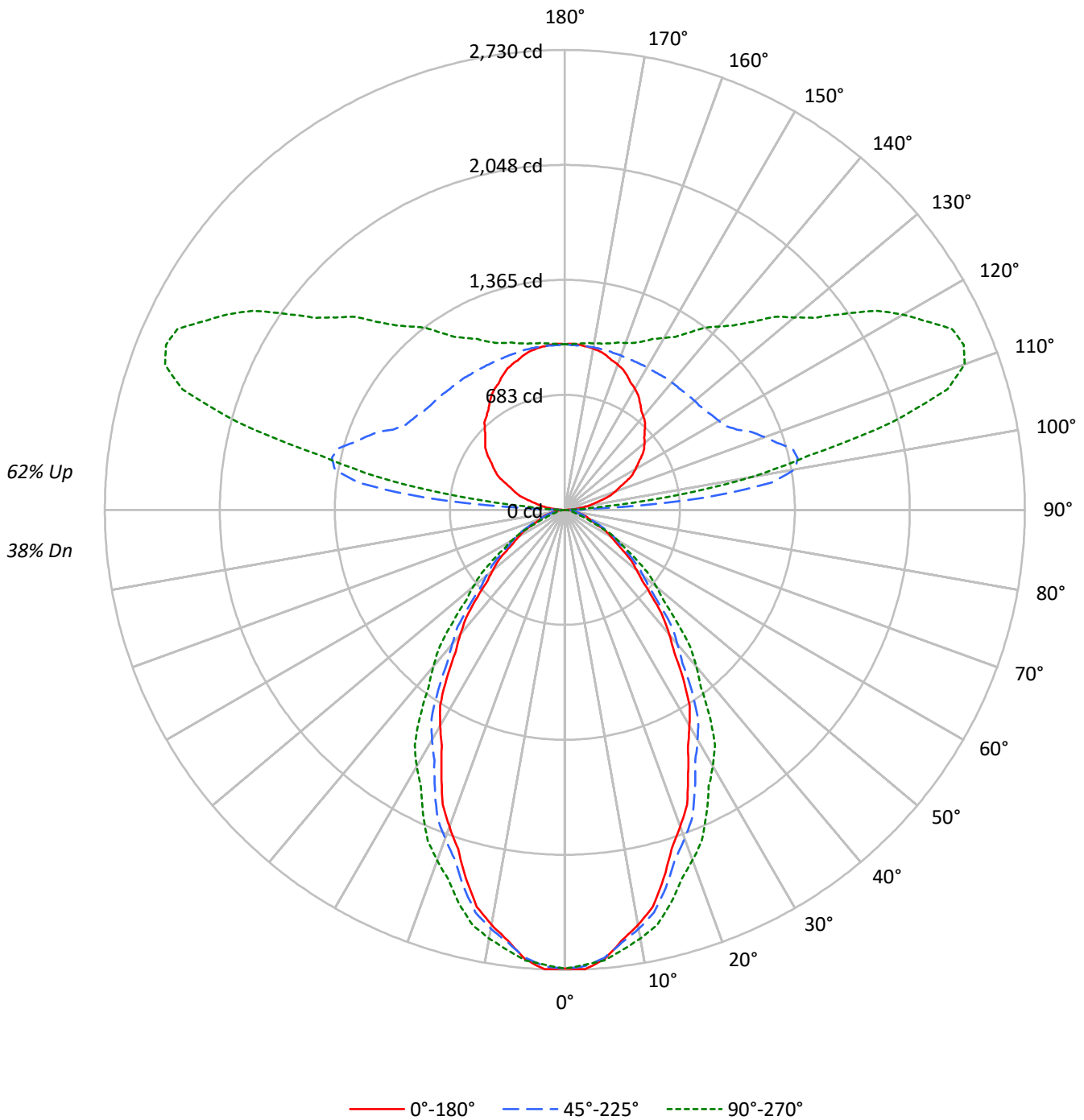
Lumens per Lamp: N/A  
Luminaire Lumens: 10362.3 lumens  
Efficiency: N/A  
Efficacy: 99.7 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 103.9  
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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	96	92	89	85	87	84	81	78	69	67	65	54	53	52	41	41	40	34
2	88	81	76	71	80	74	70	66	61	58	55	49	47	45	38	36	35	30
3	81	72	66	60	74	66	61	56	55	51	47	44	41	39	34	32	31	26
4	75	65	57	52	68	59	53	48	49	45	41	40	37	34	31	29	27	24
5	69	58	51	45	62	53	47	42	45	40	36	36	33	30	29	26	25	21
6	64	52	45	40	58	48	42	37	40	36	32	33	30	27	26	24	22	19
7	59	48	40	35	54	44	37	33	37	32	29	30	27	24	24	22	20	17
8	55	43	36	31	50	40	34	29	34	29	26	28	24	22	23	20	18	16
9	51	40	33	28	47	37	31	26	31	26	23	26	22	20	21	19	17	15
10	48	37	30	25	44	34	28	24	29	24	21	24	21	18	20	17	15	13

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

	0°	45°	90°
0°	12563	12563	12563
5°	12406	12362	12433
10°	11721	11827	12101
15°	10820	11071	11568
20°	9826	10195	10870
25°	8813	9294	10127
30°	7880	8395	9357
35°	6891	7389	8445
40°	5800	6260	7311
45°	4787	5200	6104
50°	3996	4356	5085
55°	3392	3738	4200
60°	2900	3241	3352
65°	2309	2726	2166
70°	2047	2127	1322
75°	1895	1725	809
80°	1745	1586	699
85°	1583	1456	572



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	249.8	2.4
10°-20°	649.7	6.3
20°-30°	841.6	8.1
30°-40°	824.1	8.0
40°-50°	630.8	6.1
50°-60°	420.3	4.1
60°-70°	229.4	2.2
70°-80°	95.6	0.9
80°-90°	29.1	0.3
90°-100°	460.7	4.4
100°-110°	1271.9	12.3
110°-120°	1311.7	12.7
120°-130°	1054.1	10.2
130°-140°	828.4	8.0
140°-150°	635.3	6.1
150°-160°	456.6	4.4
160°-170°	279.2	2.7
170°-180°	94.1	0.9
0°-30°	1741.0	16.8
0°-40°	2565.1	24.8
0°-60°	3616.3	34.9
0°-90°	3970.3	38.3
90°-120°	3044.3	29.4
90°-150°	5562.0	53.7
90°-180°	6392.0	61.7
0°-180°	10362.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2723	2723	2723	2723	2723	
5°	2679	2652	2670	2676	2685	249
15°	2266	2257	2318	2381	2422	633
25°	1732	1736	1826	1905	1990	796
35°	1224	1230	1312	1400	1500	761
45°	734	748	797	857	936	572
55°	422	439	465	482	522	382
65°	212	229	250	218	198	220
75°	106	106	97	66	45	114
85°	30	30	28	18	11	33
90°	3	6	13	14	16	6
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°	2723.3	2723.3	2723.3	2723.3	2723.3
2.5°	2729.9	2705.6	2711.8	2711.6	2704.1
5°	2679.0	2652.2	2669.5	2675.7	2685.0
7.5°	2579.6	2559.3	2590.9	2614.2	2633.2
10°	2502.2	2484.7	2524.9	2558.9	2583.4
12.5°	2412.3	2397.6	2447.5	2493.1	2525.1
15°	2265.6	2257.4	2318.2	2381.2	2422.1
17.5°	2108.6	2104.6	2174.3	2247.9	2300.2
20°	2001.5	2000.3	2076.8	2153.5	2214.2
22.5°	1893.5	1896.1	1976.4	2056.1	2125.3
25°	1731.5	1736.1	1825.9	1905.4	1989.6
27.5°	1581.6	1583.7	1676.5	1760.5	1850.2
30°	1479.3	1485.2	1576.1	1663.1	1756.6
32.5°	1377.0	1383.8	1472.9	1562.8	1658.1
35°	1223.6	1229.5	1312.0	1400.3	1499.6
37.5°	1065.4	1073.3	1146.7	1230.1	1327.8
40°	963.1	974.8	1039.6	1118.2	1214.1
42.5°	864.7	879.1	939.2	1013.8	1100.3
45°	733.7	747.7	797.0	857.4	935.6
47.5°	620.9	637.0	674.9	726.8	793.7
50°	556.8	572.0	607.0	645.5	708.6
52.5°	500.4	515.6	546.8	576.5	630.2
55°	421.8	439.3	464.8	482.5	522.2
57.5°	357.3	374.1	394.3	402.3	426.4
60°	314.3	333.0	351.3	350.4	363.3
62.5°	275.1	291.0	309.2	296.6	297.3
65°	211.5	229.0	249.7	218.2	198.4
67.5°	170.9	174.6	196.0	152.2	128.6
70°	151.8	151.8	157.7	117.8	98.0
72.5°	133.6	133.6	128.1	95.8	75.0
75°	106.3	106.3	96.8	66.4	45.4
77.5°	82.0	81.0	74.1	49.6	33.0
80°	65.7	65.7	59.7	39.1	26.3
82.5°	51.4	51.4	46.4	30.6	19.6
85°	29.9	29.9	27.5	17.8	10.8
87.5°	11.1	11.8	12.1	8.6	7.9
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)