

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: P519442

Luminaire Tested: **SQ4-WB-100U-125D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519442  
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-125D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

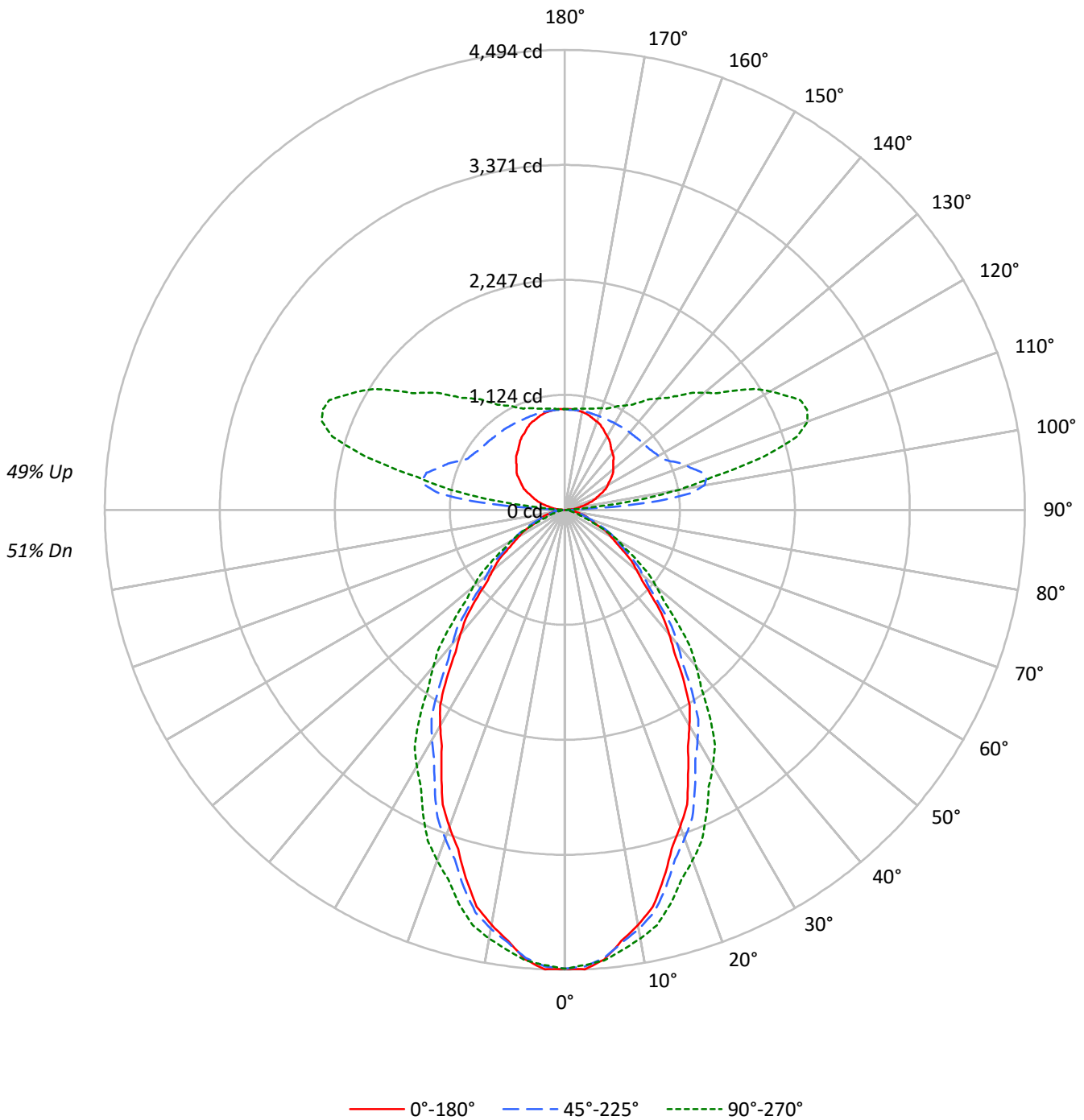
Lumens per Lamp: N/A  
Luminaire Lumens: 12927.1 lumens  
Efficiency: N/A  
Efficacy: 91.9 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51				51
1	99	95	92	89	91	88	85	83	75	73	71	63	62	60	52	51	50				45	
2	91	84	79	74	84	78	74	70	67	64	61	57	54	52	47	45	44				40	
3	84	75	69	63	78	70	64	60	60	56	53	51	48	46	43	41	39				35	
4	77	68	60	55	72	63	57	52	54	50	46	47	43	40	39	37	35				31	
5	72	61	53	48	66	57	50	45	49	44	40	42	39	36	36	33	31				28	
6	66	55	48	42	61	52	45	40	45	40	36	39	35	32	33	30	28				25	
7	62	50	43	38	57	47	41	36	41	36	32	36	32	29	31	28	25				23	
8	58	46	39	34	53	43	37	32	38	33	29	33	29	26	28	25	23				21	
9	54	42	35	30	50	40	33	29	35	30	27	31	27	24	27	24	21				19	
10	50	39	32	28	47	37	31	27	33	28	24	29	25	22	25	22	20				18	

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

	0°	45°	90°
0°	20682	20682	20682
5°	20424	20351	20470
10°	19296	19472	19923
15°	17813	18227	19044
20°	16176	16785	17895
25°	14509	15301	16672
30°	12973	13822	15404
35°	11345	12164	13904
40°	9548	10307	12036
45°	7880	8561	10049
50°	6579	7172	8372
55°	5585	6155	6914
60°	4774	5336	5517
65°	3801	4488	3565
70°	3369	3503	2176
75°	3121	2839	1333
80°	2874	2614	1150
85°	2604	2392	937



TEST NUMBER: P519442

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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	411.2	3.2
10°-20°	1069.6	8.3
20°-30°	1385.5	10.7
30°-40°	1356.7	10.5
40°-50°	1038.5	8.0
50°-60°	692.0	5.4
60°-70°	377.6	2.9
70°-80°	157.3	1.2
80°-90°	46.6	0.4
90°-100°	460.7	3.6
100°-110°	1271.9	9.8
110°-120°	1311.7	10.1
120°-130°	1054.1	8.2
130°-140°	828.4	6.4
140°-150°	635.3	4.9
150°-160°	456.6	3.5
160°-170°	279.2	2.2
170°-180°	94.1	0.7
0°-30°	2866.3	22.2
0°-40°	4223.1	32.7
0°-60°	5953.6	46.1
0°-90°	6535.1	50.6
90°-120°	3044.3	23.5
90°-150°	5562.0	43.0
90°-180°	6392.0	49.4
0°-180°	12927.1	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4483	4483	4483	4483	4483	
5°	4411	4366	4395	4405	4420	410
15°	3730	3716	3816	3920	3988	1042
25°	2850	2858	3006	3137	3276	1311
35°	2014	2024	2160	2305	2469	1252
45°	1208	1231	1312	1412	1540	942
55°	694	723	765	794	860	630
65°	348	377	411	359	327	362
75°	175	175	159	109	75	187
85°	49	49	45	29	18	54
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	

TEST NUMBER: P519442

CATALOG NUMBER: SQ4-WB-100U-125D-930-1D-UNV-STD-W-8

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4483.4	4483.4	4483.4	4483.4	4483.4
2.5°	4494.4	4454.4	4464.5	4464.2	4451.9
5°	4410.6	4366.3	4394.8	4405.0	4420.4
7.5°	4246.9	4213.4	4265.4	4303.9	4335.0
10°	4119.4	4090.6	4156.8	4212.8	4253.2
12.5°	3971.5	3947.2	4029.3	4104.5	4157.2
15°	3729.9	3716.4	3816.5	3920.3	3987.6
17.5°	3471.4	3464.9	3579.6	3700.8	3787.0
20°	3295.1	3293.2	3419.1	3545.3	3645.3
22.5°	3117.3	3121.5	3253.8	3385.1	3498.9
25°	2850.5	2858.2	3006.0	3137.0	3275.5
27.5°	2603.8	2607.3	2760.0	2898.4	3046.1
30°	2435.5	2445.1	2594.8	2738.0	2891.9
32.5°	2267.1	2278.2	2424.8	2572.8	2729.8
35°	2014.5	2024.1	2160.0	2305.4	2468.9
37.5°	1754.0	1767.1	1887.8	2025.2	2186.0
40°	1585.6	1604.8	1711.5	1841.0	1998.7
42.5°	1423.5	1447.4	1546.3	1669.1	1811.4
45°	1207.9	1231.0	1312.2	1411.5	1540.4
47.5°	1022.2	1048.7	1111.1	1196.6	1306.6
50°	916.7	941.7	999.4	1062.7	1166.6
52.5°	823.9	848.9	900.2	949.0	1037.5
55°	694.4	723.3	765.3	794.3	859.7
57.5°	588.2	615.9	649.2	662.3	701.9
60°	517.4	548.2	578.4	576.9	598.0
62.5°	452.9	479.0	509.1	488.3	489.5
65°	348.2	377.1	411.2	359.3	326.6
67.5°	281.3	287.5	322.6	250.5	211.7
70°	249.8	249.8	259.7	194.0	161.3
72.5°	219.9	219.9	210.9	157.8	123.5
75°	175.1	175.1	159.3	109.4	74.8
77.5°	135.0	133.4	122.0	81.6	54.3
80°	108.2	108.2	98.4	64.4	43.3
82.5°	84.6	84.6	76.3	50.3	32.3
85°	49.2	49.2	45.2	29.2	17.7
87.5°	17.9	18.6	18.3	12.2	11.0
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

TEST NUMBER: P519442

CATALOG NUMBER: SQ4-WB-100U-125D-930-1D-UNV-STD-W-8

**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)