

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: P519436

Luminaire Tested: **SQ4-WB-100U-125D-840-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519436  
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-840-1D-UNV-STD-W-4  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH WHITE BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 1000 LUMENS PER FOOT  
Light Source: 4000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

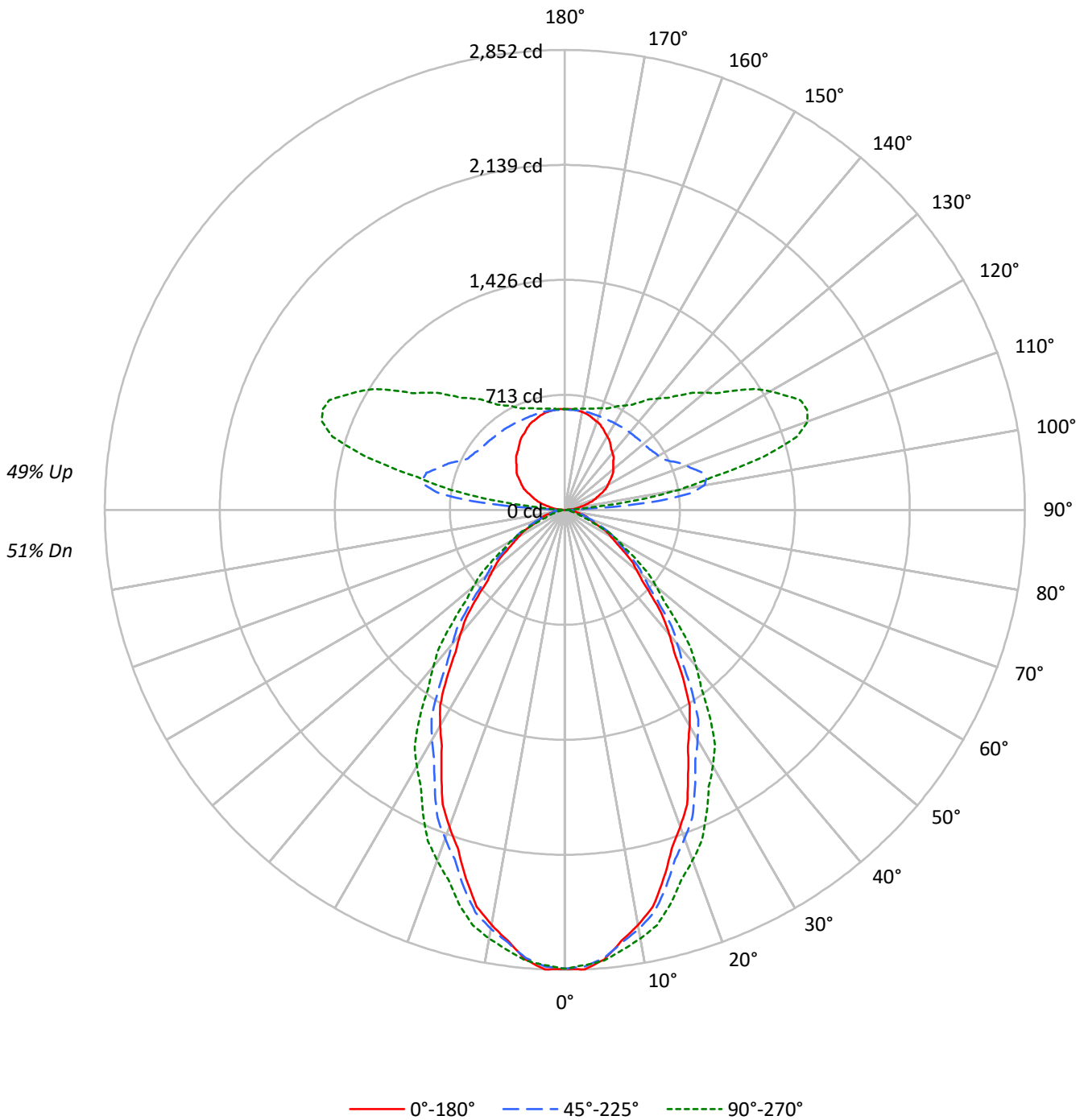
Lumens per Lamp: N/A  
Luminaire Lumens: 8204.3 lumens  
Efficiency: N/A  
Efficacy: 119.4 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

Input Watts (W): 68.7  
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	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	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°	26252	26252	26252
5°	25925	25832	25982
10°	24493	24715	25288
15°	22611	23135	24173
20°	20533	21305	22715
25°	18417	19420	21162
30°	16467	17544	19552
35°	14400	15441	17648
40°	12120	13082	15278
45°	10002	10866	12756
50°	8351	9104	10627
55°	7089	7813	8776
60°	6060	6774	7005
65°	4825	5696	4526
70°	4278	4446	2762
75°	3960	3604	1690
80°	3650	3315	1461
85°	3303	3038	1186



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	261.0	3.2
10°-20°	678.8	8.3
20°-30°	879.3	10.7
30°-40°	861.1	10.5
40°-50°	659.1	8.0
50°-60°	439.2	5.4
60°-70°	239.7	2.9
70°-80°	99.9	1.2
80°-90°	29.6	0.4
90°-100°	292.4	3.6
100°-110°	807.2	9.8
110°-120°	832.5	10.1
120°-130°	669.0	8.2
130°-140°	525.7	6.4
140°-150°	403.2	4.9
150°-160°	289.8	3.5
160°-170°	177.2	2.2
170°-180°	59.8	0.7
0°-30°	1819.1	22.2
0°-40°	2680.2	32.7
0°-60°	3778.5	46.1
0°-90°	4147.5	50.6
90°-120°	1932.1	23.5
90°-150°	3530.0	43.0
90°-180°	4057.0	49.4
0°-180°	8204.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2845	2845	2845	2845	2845	
5°	2799	2771	2789	2796	2805	260
15°	2367	2359	2422	2488	2531	661
25°	1809	1814	1908	1991	2079	832
35°	1278	1285	1371	1463	1567	795
45°	767	781	833	896	978	598
55°	441	459	486	504	546	400
65°	221	239	261	228	207	230
75°	111	111	101	69	47	119
85°	31	31	29	19	11	34
90°	2	4	8	9	10	5
95°	43	158	530	218	142	46
105°	144	222	888	1356	1277	153
115°	258	312	715	1416	1610	253
125°	354	402	648	1097	1288	315
135°	426	472	630	889	1002	329
145°	494	528	622	756	814	309
155°	556	575	617	679	700	256
165°	602	610	620	644	649	170
175°	624	625	621	630	628	59
180°	624	624	624	624	624	

TEST NUMBER: P519436

CATALOG NUMBER: SQ4-WB-100U-125D-840-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2845.4	2845.4	2845.4	2845.4	2845.4
2.5°	2852.4	2827.0	2833.4	2833.2	2825.4
5°	2799.2	2771.1	2789.2	2795.7	2805.4
7.5°	2695.3	2674.1	2707.1	2731.5	2751.3
10°	2614.4	2596.1	2638.1	2673.7	2699.3
12.5°	2520.5	2505.1	2557.2	2604.9	2638.4
15°	2367.2	2358.7	2422.1	2488.0	2530.8
17.5°	2203.2	2199.0	2271.8	2348.7	2403.4
20°	2091.3	2090.1	2169.9	2250.0	2313.5
22.5°	1978.4	1981.1	2065.1	2148.4	2220.6
25°	1809.1	1814.0	1907.7	1990.9	2078.8
27.5°	1652.6	1654.7	1751.7	1839.5	1933.2
30°	1545.7	1551.8	1646.8	1737.7	1835.3
32.5°	1438.8	1445.9	1538.9	1632.8	1732.5
35°	1278.5	1284.6	1370.9	1463.1	1566.9
37.5°	1113.2	1121.5	1198.1	1285.3	1387.4
40°	1006.3	1018.5	1086.2	1168.4	1268.5
42.5°	903.4	918.6	981.3	1059.3	1149.6
45°	766.6	781.2	832.8	895.8	977.6
47.5°	648.7	665.6	705.2	759.4	829.3
50°	581.8	597.7	634.3	674.5	740.4
52.5°	522.9	538.8	571.3	602.3	658.5
55°	440.7	459.0	485.7	504.1	545.6
57.5°	373.3	390.9	412.0	420.3	445.5
60°	328.4	347.9	367.1	366.1	379.6
62.5°	287.4	304.0	323.1	309.9	310.6
65°	221.0	239.3	260.9	228.0	207.3
67.5°	178.5	182.4	204.8	159.0	134.3
70°	158.6	158.6	164.8	123.1	102.4
72.5°	139.6	139.6	133.8	100.1	78.4
75°	111.1	111.1	101.1	69.4	47.4
77.5°	85.6	84.7	77.4	51.8	34.5
80°	68.7	68.7	62.4	40.9	27.5
82.5°	53.7	53.7	48.4	32.0	20.5
85°	31.2	31.2	28.7	18.6	11.2
87.5°	11.4	11.8	11.6	7.8	7.0
90°	2.0	4.0	8.0	9.0	10.0
92.5°	18.0	74.6	133.5	48.7	38.0
95°	43.0	158.2	530.5	218.0	141.9
97.5°	71.1	177.2	785.8	605.0	438.1
100°	91.9	188.6	880.1	886.3	720.3
102.5°	111.9	201.6	898.5	1095.1	937.6
105°	143.9	222.0	888.1	1355.8	1276.7
107.5°	177.8	247.4	838.5	1481.5	1510.4
110°	201.8	264.3	800.2	1508.6	1602.3

TEST NUMBER: P519436

CATALOG NUMBER: SQ4-WB-100U-125D-840-1D-UNV-STD-W-4

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	223.4	283.5	764.2	1487.2	1625.5
115°	257.7	311.5	715.3	1416.0	1610.3
117.5°	287.7	341.2	683.1	1315.7	1536.8
120°	307.7	360.4	670.3	1247.8	1470.5
122.5°	326.9	377.3	659.9	1184.4	1395.4
125°	353.6	402.5	648.3	1097.2	1287.7
127.5°	376.4	425.2	641.5	1023.5	1187.8
130°	391.6	440.4	638.3	978.4	1127.8
132.5°	406.0	452.5	635.1	940.5	1075.9
135°	425.6	471.5	630.3	888.7	1002.0
137.5°	447.5	489.3	628.0	845.1	941.8
140°	459.5	500.5	626.4	816.1	901.1
142.5°	473.1	511.0	624.8	790.3	865.1
145°	493.5	527.7	622.4	756.5	814.2
147.5°	513.1	543.0	620.2	728.1	772.8
150°	527.5	551.9	619.4	711.1	747.2
152.5°	538.6	561.5	618.6	696.6	726.4
155°	556.4	575.0	617.4	678.8	700.3
157.5°	572.8	587.1	617.6	665.8	680.5
160°	582.4	595.1	618.4	658.6	669.3
162.5°	590.4	601.5	619.2	652.1	660.5
165°	602.4	610.2	620.4	644.4	649.3
167.5°	611.6	616.3	621.4	639.8	641.3
170°	616.4	620.3	621.4	637.3	637.3
172.5°	620.4	622.7	621.4	634.1	633.3
175°	624.4	625.3	621.4	630.3	628.4
177.5°	626.0	625.2	621.2	626.7	625.2
180°	624.4	624.4	624.4	624.4	624.4

(END OF REPORT)