

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: P519432

Luminaire Tested: **SQ4-WB-100U-125D-835-1D-UNV-STD-W-4**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P519432  
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-835-1D-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: 3500K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

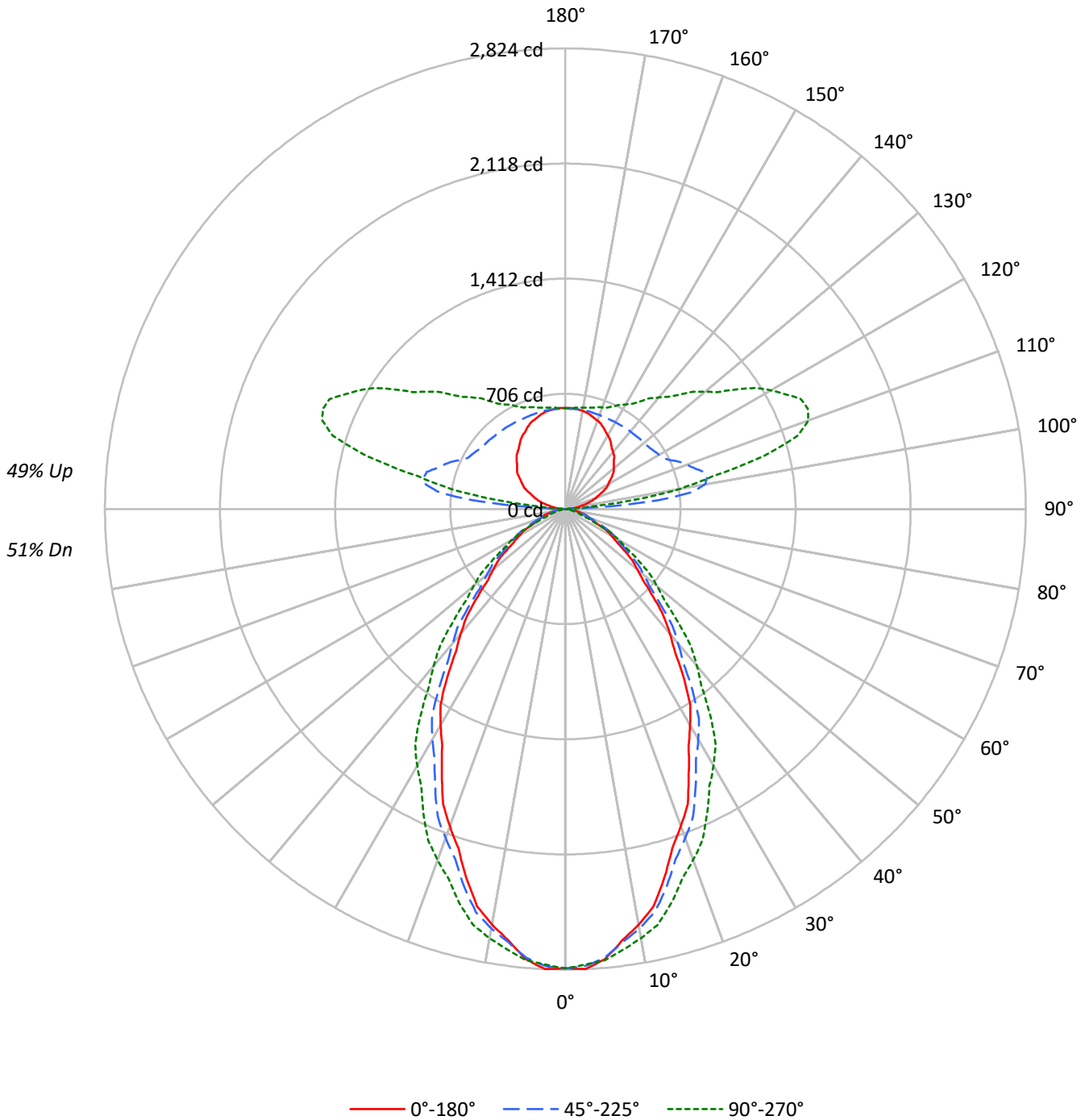
Lumens per Lamp: N/A  
Luminaire Lumens: 8122.5 lumens  
Efficiency: N/A  
Efficacy: 118.2 lumens/watt  
Spacing Criteria (0/90/45): 0.89 / 1 / 1.02  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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°	25990	25990	25990
5°	25666	25575	25724
10°	24250	24470	25036
15°	22385	22905	23933
20°	20328	21093	22489
25°	18233	19227	20951
30°	16303	17369	19358
35°	14257	15286	17472
40°	11999	12952	15126
45°	9903	10758	12629
50°	8268	9013	10521
55°	7018	7734	8689
60°	5999	6706	6934
65°	4777	5639	4480
70°	4235	4402	2735
75°	3921	3568	1675
80°	3613	3284	1445
85°	3271	3006	1175



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	258.4	3.2
10°-20°	672.1	8.3
20°-30°	870.5	10.7
30°-40°	852.5	10.5
40°-50°	652.5	8.0
50°-60°	434.8	5.4
60°-70°	237.3	2.9
70°-80°	98.9	1.2
80°-90°	29.3	0.4
90°-100°	289.5	3.6
100°-110°	799.1	9.8
110°-120°	824.2	10.1
120°-130°	662.3	8.2
130°-140°	520.5	6.4
140°-150°	399.2	4.9
150°-160°	286.9	3.5
160°-170°	175.5	2.2
170°-180°	59.2	0.7
0°-30°	1801.0	22.2
0°-40°	2653.5	32.7
0°-60°	3740.8	46.1
0°-90°	4106.2	50.6
90°-120°	1912.8	23.5
90°-150°	3494.8	43.0
90°-180°	4016.0	49.4
0°-180°	8122.5	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2817	2817	2817	2817	2817	
5°	2771	2744	2761	2768	2778	258
15°	2344	2335	2398	2463	2506	654
25°	1791	1796	1889	1971	2058	824
35°	1266	1272	1357	1449	1551	787
45°	759	774	824	887	968	592
55°	436	454	481	499	540	396
65°	219	237	258	226	205	227
75°	110	110	100	69	47	117
85°	31	31	28	18	11	34
90°	2	4	8	9	10	5
95°	42	157	525	216	140	45
105°	142	220	879	1342	1264	152
115°	255	308	708	1402	1594	251
125°	350	398	642	1086	1275	312
135°	421	467	624	880	992	326
145°	489	522	616	749	806	306
155°	551	569	611	672	693	254
165°	596	604	614	638	643	168
175°	618	619	615	624	622	59
180°	618	618	618	618	618	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2817.0	2817.0	2817.0	2817.0	2817.0
2.5°	2824.0	2798.8	2805.2	2805.0	2797.3
5°	2771.3	2743.5	2761.4	2767.8	2777.5
7.5°	2668.5	2647.4	2680.1	2704.3	2723.8
10°	2588.4	2570.2	2611.9	2647.0	2672.4
12.5°	2495.4	2480.2	2531.8	2579.0	2612.1
15°	2343.6	2335.2	2398.0	2463.3	2505.6
17.5°	2181.2	2177.1	2249.2	2325.3	2379.5
20°	2070.4	2069.2	2148.3	2227.6	2290.5
22.5°	1958.7	1961.4	2044.5	2127.0	2198.5
25°	1791.1	1795.9	1888.7	1971.1	2058.1
27.5°	1636.1	1638.3	1734.2	1821.1	1914.0
30°	1530.3	1536.3	1630.4	1720.4	1817.1
32.5°	1424.5	1431.5	1523.6	1616.6	1715.2
35°	1265.8	1271.8	1357.2	1448.6	1551.3
37.5°	1102.1	1110.3	1186.2	1272.5	1373.5
40°	996.3	1008.4	1075.4	1156.8	1255.9
42.5°	894.4	909.4	971.6	1048.8	1138.2
45°	759.0	773.5	824.5	886.9	967.9
47.5°	642.3	659.0	698.1	751.9	821.0
50°	576.0	591.7	627.9	667.7	733.0
52.5°	517.7	533.4	565.6	596.3	651.9
55°	436.3	454.5	480.8	499.1	540.2
57.5°	369.6	387.0	407.9	416.1	441.0
60°	325.1	344.4	363.4	362.5	375.8
62.5°	284.5	301.0	319.9	306.8	307.5
65°	218.8	236.9	258.3	225.7	205.2
67.5°	176.8	180.6	202.7	157.4	133.0
70°	157.0	157.0	163.2	121.9	101.4
72.5°	138.2	138.2	132.5	99.1	77.6
75°	110.0	110.0	100.1	68.7	47.0
77.5°	84.8	83.8	76.6	51.3	34.1
80°	68.0	68.0	61.8	40.5	27.2
82.5°	53.2	53.2	48.0	31.6	20.3
85°	30.9	30.9	28.4	18.4	11.1
87.5°	11.3	11.7	11.5	7.7	6.9
90°	2.0	3.9	7.9	8.9	9.9
92.5°	17.8	73.9	132.1	48.2	37.6
95°	42.5	156.6	525.2	215.9	140.4
97.5°	70.4	175.4	778.0	599.0	433.8
100°	91.0	186.7	871.3	877.5	713.1
102.5°	110.8	199.5	889.5	1084.2	928.3
105°	142.4	219.8	879.2	1342.3	1264.0
107.5°	176.0	244.9	830.2	1466.8	1495.4
110°	199.8	261.7	792.2	1493.5	1586.4



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	221.1	280.7	756.6	1472.4	1609.3
115°	255.2	308.4	708.1	1401.9	1594.3
117.5°	284.8	337.8	676.3	1302.6	1521.5
120°	304.6	356.8	663.6	1235.3	1455.8
122.5°	323.6	373.5	653.3	1172.6	1381.5
125°	350.1	398.5	641.9	1086.3	1274.8
127.5°	372.7	421.0	635.1	1013.3	1175.9
130°	387.7	436.0	632.0	968.6	1116.6
132.5°	401.9	448.0	628.8	931.1	1065.2
135°	421.3	466.8	624.1	879.8	992.0
137.5°	443.1	484.5	621.7	836.7	932.4
140°	454.9	495.6	620.1	808.0	892.1
142.5°	468.4	505.9	618.5	782.4	856.5
145°	488.6	522.4	616.2	749.0	806.0
147.5°	508.0	537.5	614.0	720.8	765.1
150°	522.2	546.4	613.2	704.0	739.8
152.5°	533.3	555.9	612.4	689.6	719.2
155°	550.9	569.3	611.2	672.0	693.3
157.5°	567.1	581.2	611.4	659.2	673.7
160°	576.6	589.2	612.2	652.0	662.6
162.5°	584.5	595.5	613.0	645.6	653.9
165°	596.4	604.1	614.2	638.0	642.9
167.5°	605.5	610.1	615.2	633.4	634.9
170°	610.2	614.1	615.2	631.0	631.0
172.5°	614.2	616.5	615.2	627.8	627.0
175°	618.1	619.1	615.2	624.0	622.1
177.5°	619.7	618.9	615.0	620.5	618.9
180°	618.1	618.1	618.1	618.1	618.1

(END OF REPORT)