

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: P518638

Luminaire Tested: **SQ4-BB-0U-100D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518638  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-0U-100D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

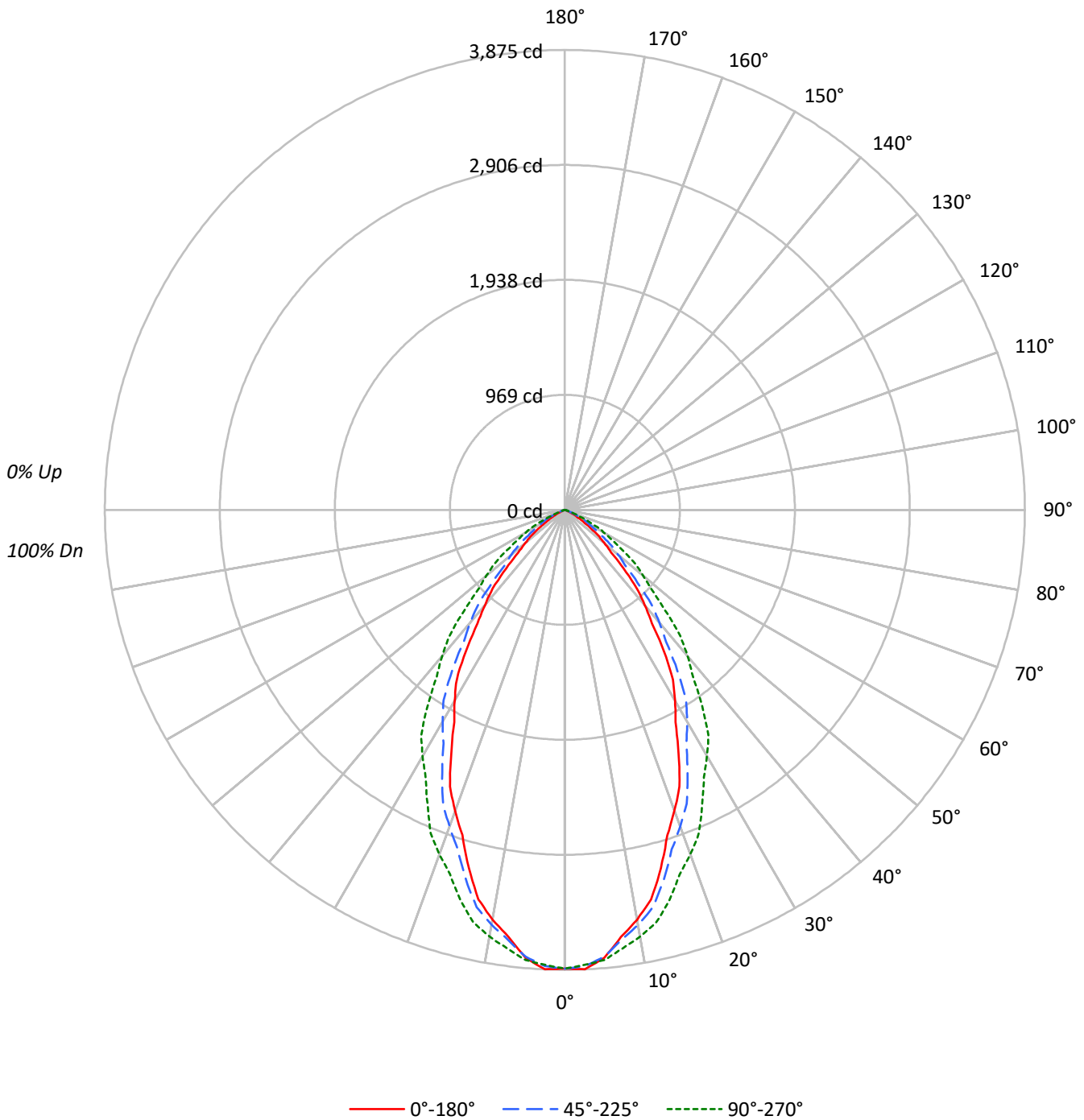
Lumens per Lamp: N/A  
Luminaire Lumens: 4611.6 lumens  
Efficiency: N/A  
Efficacy: 64.3 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Direct

Input Watts (W): 71.7  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	67
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	61
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	51
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	47
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	41

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

	0°	45°	90°
0°	17833	17833	17833
5°	17547	17503	17633
10°	16418	16637	17101
15°	14925	15399	16256
20°	13249	13938	15159
25°	11538	12452	13927
30°	9883	10969	12762
35°	8194	9311	11354
40°	6296	7444	9675
45°	4551	5637	7784
50°	3100	4201	6174
55°	2015	3039	4798
60°	1156	2140	3468
65°	307	1307	1755
70°	151	403	504
75°	66	34	0
80°	50	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	352.8	7.7
10°-20°	902.2	19.6
20°-30°	1129.5	24.5
30°-40°	1043.3	22.6
40°-50°	701.0	15.2
50°-60°	362.1	7.9
60°-70°	113.4	2.5
70°-80°	7.2	0.2
80°-90°	0.1	0.0
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	2384.5	51.7
0°-40°	3427.8	74.3
0°-60°	4490.9	97.4
0°-90°	4611.6	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4611.6	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3866	3866	3866	3866	3866	
5°	3789	3751	3780	3793	3808	351
15°	3125	3114	3224	3333	3404	870
25°	2267	2285	2446	2614	2736	1039
35°	1455	1492	1653	1848	2016	901
45°	698	740	864	1032	1193	548
55°	251	293	378	485	597	234
65°	28	54	120	144	161	47
75°	4	4	2	0	0	5
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3865.8	3865.8	3865.8	3865.8	3865.8
2.5°	3874.8	3838.2	3847.9	3847.6	3837.4
5°	3789.2	3750.8	3779.8	3793.2	3807.9
7.5°	3629.1	3599.1	3654.9	3696.7	3727.1
10°	3504.9	3479.3	3551.6	3608.7	3650.8
12.5°	3361.2	3341.5	3428.9	3507.2	3561.0
15°	3125.2	3114.2	3224.3	3332.6	3403.9
17.5°	2872.4	2872.0	2997.7	3132.0	3218.0
20°	2698.8	2704.3	2839.1	2987.2	3087.8
22.5°	2525.2	2538.0	2682.0	2836.4	2951.7
25°	2266.8	2285.0	2446.3	2613.7	2736.2
27.5°	2018.4	2045.1	2214.8	2388.7	2537.9
30°	1855.3	1886.4	2059.2	2242.2	2395.8
32.5°	1695.2	1732.1	1900.6	2094.1	2250.7
35°	1455.1	1491.6	1653.3	1847.9	2016.1
37.5°	1207.1	1242.9	1400.8	1592.4	1774.1
40°	1045.5	1085.7	1236.2	1421.9	1606.6
42.5°	898.8	939.1	1080.6	1263.0	1437.5
45°	697.6	739.7	864.1	1032.3	1193.2
47.5°	530.8	576.5	685.6	837.8	984.5
50°	432.0	477.7	585.4	719.5	860.3
52.5°	352.7	397.0	494.1	620.5	749.6
55°	250.6	292.7	377.8	485.1	596.6
57.5°	173.2	209.4	285.8	375.3	462.7
60°	125.3	160.1	231.9	304.6	375.9
62.5°	83.4	115.2	185.5	241.2	289.1
65°	28.1	53.7	119.7	144.4	160.8
67.5°	14.2	17.1	62.8	66.3	71.8
70°	11.2	11.2	29.9	31.9	37.4
72.5°	8.2	8.2	12.0	15.4	16.5
75°	3.7	3.7	1.9	0.0	0.0
77.5°	1.9	1.9	1.5	0.0	0.0
80°	1.9	1.9	0.0	0.0	0.0
82.5°	0.4	0.4	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)