

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: CORELITE

Report Number: P521169

Luminaire Tested: **SQ4-BB-0U-100D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521169  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-0U-100D-93050-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

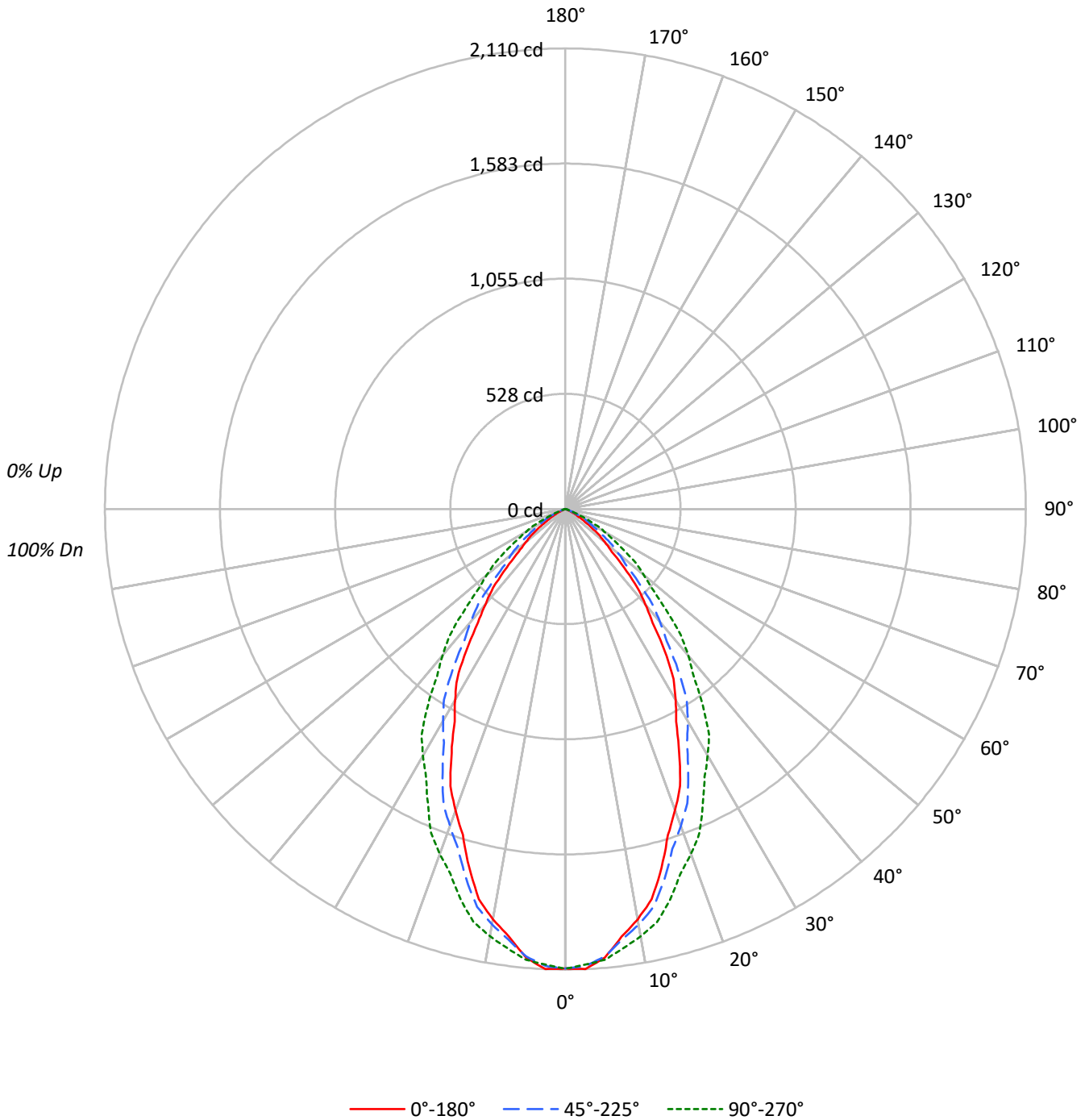
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2511.3 lumens  
Efficiency: N/A  
Efficacy: 59.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 42.4  
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	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				100
1	112	109	106	104	110	107	104	102	103	101	99	99	98	96	96	94	93	91				91
2	106	100	95	91	103	98	94	90	95	91	88	92	89	86	89	86	84	82				82
3	99	91	85	81	97	90	84	80	87	82	79	85	81	77	82	79	76	74				74
4	93	84	77	72	91	83	76	72	80	75	71	78	74	70	76	72	69	67				67
5	87	77	70	65	85	76	70	65	74	68	64	72	67	64	71	66	63	61				61
6	82	71	64	59	80	70	64	59	69	63	58	67	62	58	66	61	58	56				56
7	77	66	59	54	75	65	59	54	64	58	53	62	57	53	61	56	53	51				51
8	72	61	54	50	71	61	54	49	59	53	49	58	53	49	57	52	49	47				47
9	68	57	50	46	67	57	50	46	56	50	46	55	49	45	54	49	45	44				44
10	65	54	47	42	63	53	47	42	52	46	42	51	46	42	51	46	42	41				41

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

	0°	45°	90°
0°	19423	19423	19423
5°	19110	19063	19205
10°	17881	18120	18625
15°	16255	16771	17705
20°	14429	15179	16510
25°	12566	13561	15168
30°	10763	11946	13899
35°	8925	10140	12366
40°	6857	8108	10537
45°	4957	6139	8478
50°	3377	4576	6725
55°	2196	3309	5226
60°	1258	2331	3777
65°	334	1423	1912
70°	165	440	550
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	192.1	7.7
10°-20°	491.3	19.6
20°-30°	615.1	24.5
30°-40°	568.1	22.6
40°-50°	381.8	15.2
50°-60°	197.2	7.9
60°-70°	61.8	2.5
70°-80°	3.9	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°	1298.5	51.7
0°-40°	1866.6	74.3
0°-60°	2445.5	97.4
0°-90°	2511.3	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	2511.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2105	2105	2105	2105	2105	
5°	2063	2042	2058	2066	2074	191
15°	1702	1696	1756	1815	1854	474
25°	1234	1244	1332	1423	1490	566
35°	792	812	900	1006	1098	491
45°	380	403	470	562	650	298
55°	136	159	206	264	325	127
65°	15	29	65	79	88	26
75°	2	2	1	0	0	3
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°	2105.2	2105.2	2105.2	2105.2	2105.2
2.5°	2110.0	2090.1	2095.4	2095.3	2089.7
5°	2063.4	2042.5	2058.3	2065.6	2073.6
7.5°	1976.2	1959.9	1990.3	2013.1	2029.6
10°	1908.6	1894.7	1934.1	1965.1	1988.0
12.5°	1830.4	1819.6	1867.2	1909.9	1939.1
15°	1701.8	1695.9	1755.8	1814.8	1853.6
17.5°	1564.2	1564.0	1632.4	1705.6	1752.4
20°	1469.6	1472.6	1546.0	1626.7	1681.5
22.5°	1375.1	1382.1	1460.5	1544.6	1607.3
25°	1234.4	1244.3	1332.1	1423.3	1490.0
27.5°	1099.1	1113.7	1206.1	1300.8	1382.1
30°	1010.3	1027.2	1121.3	1221.0	1304.6
32.5°	923.1	943.2	1035.0	1140.4	1225.6
35°	792.4	812.3	900.3	1006.3	1097.9
37.5°	657.3	676.8	762.8	867.1	966.1
40°	569.3	591.2	673.2	774.3	874.9
42.5°	489.5	511.4	588.5	687.8	782.8
45°	379.9	402.8	470.5	562.1	649.8
47.5°	289.0	313.9	373.4	456.3	536.1
50°	235.3	260.2	318.8	391.8	468.5
52.5°	192.1	216.2	269.1	337.9	408.2
55°	136.5	159.4	205.7	264.1	324.9
57.5°	94.3	114.0	155.6	204.4	252.0
60°	68.2	87.2	126.3	165.9	204.7
62.5°	45.4	62.8	101.0	131.4	157.5
65°	15.3	29.2	65.2	78.6	87.6
67.5°	7.7	9.3	34.2	36.1	39.1
70°	6.1	6.1	16.3	17.4	20.4
72.5°	4.5	4.5	6.5	8.4	9.0
75°	2.0	2.0	1.0	0.0	0.0
77.5°	1.0	1.0	0.8	0.0	0.0
80°	1.0	1.0	0.0	0.0	0.0
82.5°	0.2	0.2	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)