

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: P521142

Luminaire Tested: **SQ4-BB-0U-050D-93050-1D-UNV-STD-W-4 (4000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521142  
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-050D-93050-1D-UNV-STD-W-4 (4000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
DIRECT ONLY  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

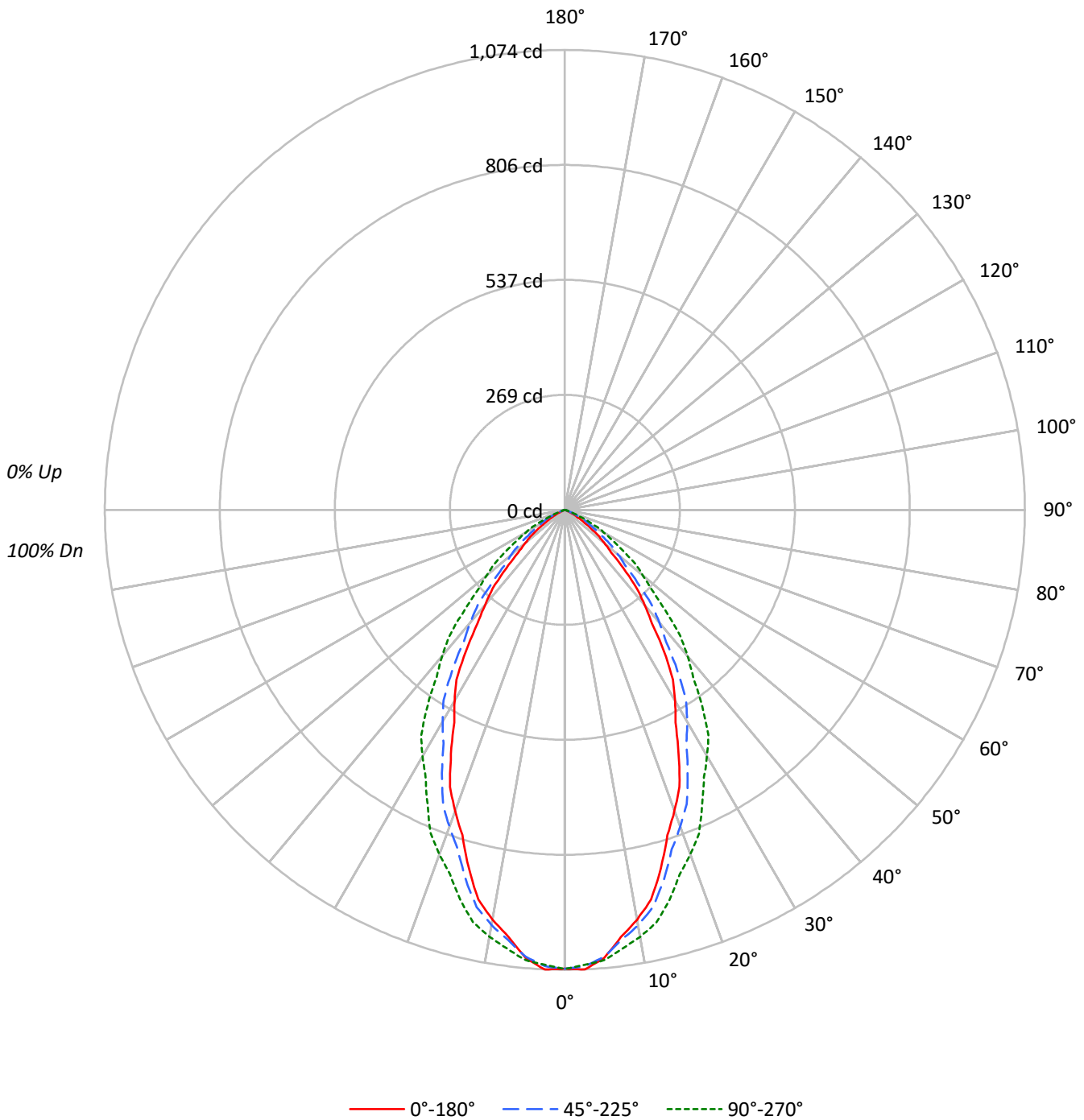
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 1278.4 lumens  
Efficiency: N/A  
Efficacy: 61.2 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): 20.9  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): 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

TEST NUMBER: P521142  
CATALOG NUMBER: SQ4-BB-0U-050D-93050-1D-UNV-STD-W-4 (4000K)

### Luminous Intensity Polar Plot





TEST NUMBER: P521142

CATALOG NUMBER: SQ4-BB-0U-050D-93050-1D-UNV-STD-W-4 (4000K)

**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°	9888	9888	9888
5°	9728	9704	9776
10°	9102	9224	9482
15°	8276	8538	9013
20°	7346	7728	8404
25°	6397	6904	7722
30°	5479	6081	7076
35°	4544	5162	6295
40°	3490	4127	5364
45°	2523	3125	4316
50°	1720	2330	3423
55°	1118	1684	2661
60°	640	1186	1923
65°	170	725	974
70°	84	224	281
75°	36	18	0
80°	27	0	0
85°	0	0	0



TEST NUMBER: P521142

CATALOG NUMBER: SQ4-BB-0U-050D-93050-1D-UNV-STD-W-4 (4000K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	97.8	7.7
10°-20°	250.1	19.6
20°-30°	313.1	24.5
30°-40°	289.2	22.6
40°-50°	194.3	15.2
50°-60°	100.4	7.9
60°-70°	31.4	2.5
70°-80°	2.0	0.2
80°-90°	0.0	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°	661.0	51.7
0°-40°	950.3	74.3
0°-60°	1245.0	97.4
0°-90°	1278.4	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	1278.4	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1072	1072	1072	1072	1072	
5°	1050	1040	1048	1052	1056	97
15°	866	863	894	924	944	241
25°	628	634	678	725	758	288
35°	403	414	458	512	559	250
45°	193	205	240	286	331	152
55°	70	81	105	134	165	65
65°	8	15	33	40	45	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	0



TEST NUMBER: P521142

CATALOG NUMBER: SQ4-BB-0U-050D-93050-1D-UNV-STD-W-4 (4000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1071.7	1071.7	1071.7	1071.7	1071.7
2.5°	1074.2	1064.0	1066.7	1066.7	1063.8
5°	1050.4	1039.8	1047.8	1051.6	1055.6
7.5°	1006.1	997.7	1013.2	1024.8	1033.2
10°	971.6	964.5	984.6	1000.4	1012.1
12.5°	931.8	926.3	950.6	972.3	987.2
15°	866.4	863.3	893.9	923.9	943.6
17.5°	796.3	796.2	831.0	868.3	892.1
20°	748.2	749.7	787.1	828.1	856.0
22.5°	700.1	703.6	743.5	786.3	818.3
25°	628.4	633.5	678.2	724.6	758.5
27.5°	559.5	566.9	614.0	662.2	703.6
30°	514.3	523.0	570.8	621.6	664.2
32.5°	470.0	480.2	526.9	580.5	623.9
35°	403.4	413.5	458.3	512.3	558.9
37.5°	334.6	344.6	388.3	441.4	491.8
40°	289.8	301.0	342.7	394.2	445.4
42.5°	249.2	260.3	299.6	350.1	398.5
45°	193.4	205.1	239.5	286.2	330.8
47.5°	147.1	159.8	190.1	232.3	272.9
50°	119.8	132.4	162.3	199.5	238.5
52.5°	97.8	110.1	137.0	172.0	207.8
55°	69.5	81.1	104.7	134.5	165.4
57.5°	48.0	58.0	79.2	104.0	128.3
60°	34.7	44.4	64.3	84.4	104.2
62.5°	23.1	31.9	51.4	66.9	80.2
65°	7.8	14.9	33.2	40.0	44.6
67.5°	3.9	4.8	17.4	18.4	19.9
70°	3.1	3.1	8.3	8.8	10.4
72.5°	2.3	2.3	3.3	4.3	4.6
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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)