

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: P521011

Luminaire Tested: **SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521011  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2101-105-50,  
Test Lab: INNOVATION CENTER  
Issue Date: 5/5/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

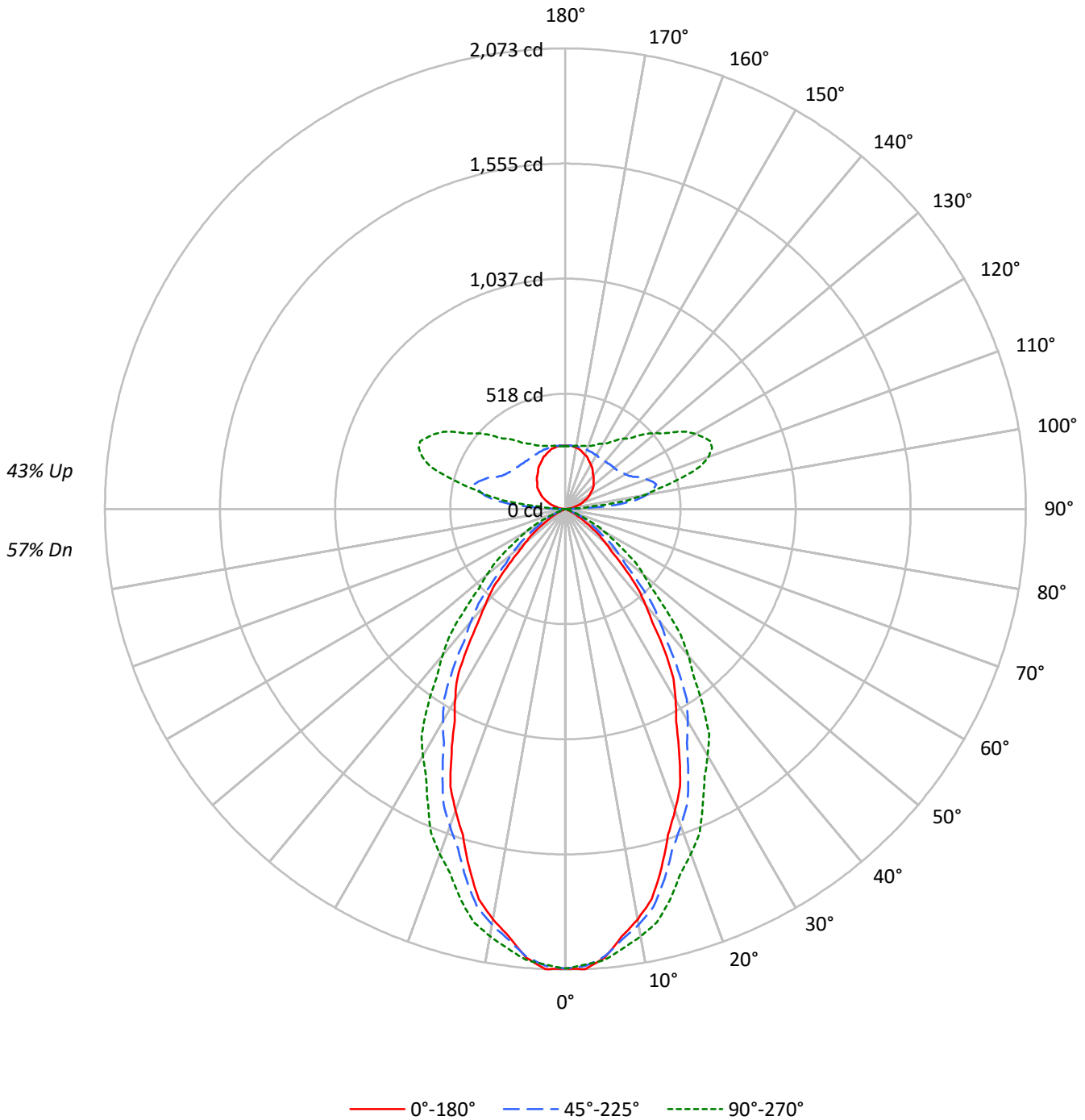
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4303.0 lumens  
Efficiency: N/A  
Efficacy: 75.8 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: General Diffuse

Input Watts (W): 56.8  
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

TEST NUMBER: P521011  
CATALOG NUMBER: SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (3500K)

### Luminous Intensity Polar Plot





TEST NUMBER: P521011

CATALOG NUMBER: SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (3500K)

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20				
RC	80					70					50					30				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																				
0	109	109	109	109	101	101	101	101	87	87	87	75	75	75	63	63	63	57		
1	101	98	95	92	95	92	89	86	80	78	76	69	67	66	59	58	57	52		
2	94	88	83	79	88	83	78	74	72	69	66	63	61	59	54	53	51	47		
3	87	79	73	68	82	75	69	65	66	62	58	58	55	52	50	48	46	43		
4	81	72	65	60	76	68	62	57	60	55	52	53	49	47	46	44	42	39		
5	75	65	58	53	70	62	55	51	55	50	46	49	45	42	43	40	38	35		
6	70	59	52	47	66	56	50	45	50	45	42	45	41	38	40	37	35	32		
7	65	55	47	42	61	52	45	41	47	41	38	42	38	35	37	34	32	29		
8	61	50	43	38	58	48	41	37	43	38	34	39	35	32	35	31	29	27		
9	58	46	40	35	54	44	38	34	40	35	31	36	32	29	32	29	27	25		
10	54	43	36	32	51	41	35	31	37	32	29	34	30	27	30	27	25	23		

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

	0°	45°	90°
0°	19083	19083	19083
5°	18776	18729	18869
10°	17568	17803	18300
15°	15971	16478	17395
20°	14178	14914	16221
25°	12346	13325	14904
30°	10576	11737	13657
35°	8768	9963	12150
40°	6737	7966	10353
45°	4869	6032	8330
50°	3319	4495	6607
55°	2157	3251	5134
60°	1236	2290	3711
65°	327	1397	1880
70°	162	432	540
75°	71	36	0
80°	53	0	0
85°	0	0	0



TEST NUMBER: P521011

CATALOG NUMBER: SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (3500K)

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.8	4.4
10°-20°	482.7	11.2
20°-30°	604.3	14.0
30°-40°	558.2	13.0
40°-50°	375.1	8.7
50°-60°	193.7	4.5
60°-70°	60.7	1.4
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	146.1	3.4
100°-110°	353.2	8.2
110°-120°	376.7	8.8
120°-130°	305.1	7.1
130°-140°	236.2	5.5
140°-150°	180.2	4.2
150°-160°	130.4	3.0
160°-170°	80.3	1.9
170°-180°	27.2	0.6
0°-30°	1275.8	29.6
0°-40°	1834.0	42.6
0°-60°	2402.8	55.8
0°-90°	2467.4	57.3
90°-120°	876.1	20.4
90°-150°	1597.6	37.1
90°-180°	1836.0	42.7
0°-180°	4303.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2068	2068	2068	2068	2068	
5°	2027	2007	2022	2030	2037	188
15°	1672	1666	1725	1783	1821	466
25°	1213	1223	1309	1398	1464	556
35°	778	798	885	989	1079	482
45°	373	396	462	552	638	293
55°	134	157	202	260	319	125
65°	15	29	64	77	86	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	14	73	250	163	114	16
105°	56	98	424	549	542	60
115°	103	132	341	647	721	102
125°	147	169	296	514	604	131
135°	181	202	284	406	466	140
145°	214	230	279	345	372	134
155°	245	256	282	305	316	113
165°	271	275	286	290	294	76
175°	286	285	286	284	283	27
180°	283	283	283	283	283	



TEST NUMBER: P521011

CATALOG NUMBER: SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (3500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2068.4	2068.4	2068.4	2068.4	2068.4
2.5°	2073.2	2053.6	2058.8	2058.6	2053.2
5°	2027.3	2006.8	2022.3	2029.5	2037.4
7.5°	1941.7	1925.6	1955.5	1977.9	1994.1
10°	1875.2	1861.5	1900.3	1930.8	1953.3
12.5°	1798.4	1787.8	1834.6	1876.5	1905.3
15°	1672.1	1666.2	1725.1	1783.1	1821.2
17.5°	1536.8	1536.6	1603.9	1675.8	1721.7
20°	1444.0	1446.9	1519.0	1598.3	1652.1
22.5°	1351.1	1357.9	1435.0	1517.6	1579.3
25°	1212.8	1222.6	1308.9	1398.4	1464.0
27.5°	1079.9	1094.2	1185.0	1278.1	1357.9
30°	992.7	1009.3	1101.7	1199.7	1281.9
32.5°	907.0	926.8	1016.9	1120.4	1204.2
35°	778.5	798.1	884.6	988.7	1078.7
37.5°	645.8	665.0	749.5	852.0	949.2
40°	559.4	580.9	661.4	760.8	859.6
42.5°	480.9	502.4	578.2	675.8	769.1
45°	373.2	395.8	462.3	552.3	638.4
47.5°	284.0	308.4	366.8	448.3	526.8
50°	231.2	255.6	313.2	385.0	460.3
52.5°	188.7	212.4	264.4	332.0	401.1
55°	134.1	156.6	202.1	259.5	319.2
57.5°	92.7	112.0	152.9	200.8	247.6
60°	67.0	85.6	124.1	163.0	201.1
62.5°	44.6	61.7	99.3	129.1	154.7
65°	15.0	28.7	64.0	77.3	86.1
67.5°	7.6	9.2	33.6	35.5	38.4
70°	6.0	6.0	16.0	17.1	20.0
72.5°	4.4	4.4	6.4	8.2	8.8
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
92.5°	4.8	39.6	93.2	45.3	30.7
95°	14.4	73.1	250.4	162.8	114.1
97.5°	25.6	81.0	329.8	317.7	272.7
100°	34.2	85.9	373.5	394.3	357.3
102.5°	42.4	90.3	402.3	458.0	436.0
105°	56.4	97.5	424.5	549.3	542.2
107.5°	70.3	106.1	411.4	622.4	639.0
110°	79.9	113.3	390.3	654.0	685.1



TEST NUMBER: P521011

CATALOG NUMBER: SQ4-BB-025U-100D-93050-1D-UNV-STD-W-4 (3500K)

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	89.5	120.6	371.6	661.7	714.9
115°	103.3	132.0	341.1	646.6	721.1
117.5°	117.0	144.1	323.2	611.8	699.2
120°	126.1	151.3	311.6	584.5	676.1
122.5°	135.7	159.1	304.4	556.6	646.8
125°	147.1	169.4	296.0	514.2	604.1
127.5°	158.4	179.4	290.1	478.3	557.2
130°	165.1	185.7	288.2	453.3	530.8
132.5°	171.4	192.9	285.3	435.3	501.0
135°	180.7	201.9	284.0	405.5	466.5
137.5°	189.6	210.9	279.8	385.3	431.4
140°	196.3	215.7	279.8	370.8	413.1
142.5°	203.1	222.4	277.4	358.2	393.9
145°	213.8	229.6	278.6	344.7	371.7
147.5°	223.7	239.1	277.9	329.1	351.4
150°	230.0	243.5	279.8	322.2	339.9
152.5°	236.7	249.7	279.3	315.0	330.7
155°	245.0	255.6	282.2	305.3	316.4
157.5°	255.0	264.0	281.6	301.6	308.2
160°	258.8	266.4	284.0	296.7	301.4
162.5°	265.0	271.7	283.1	295.2	298.1
165°	270.8	274.9	285.8	290.1	294.2
167.5°	277.9	280.6	285.1	289.8	289.9
170°	279.8	281.6	287.0	286.5	289.4
172.5°	283.2	284.5	285.6	286.9	285.1
175°	286.4	285.2	286.4	284.0	283.4
177.5°	285.8	285.8	284.9	283.8	281.5
180°	283.4	283.4	283.4	283.4	283.4

(END OF REPORT)