

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: P521063

Luminaire Tested: **SQ4-BB-050U-100D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521063  
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-050U-100D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

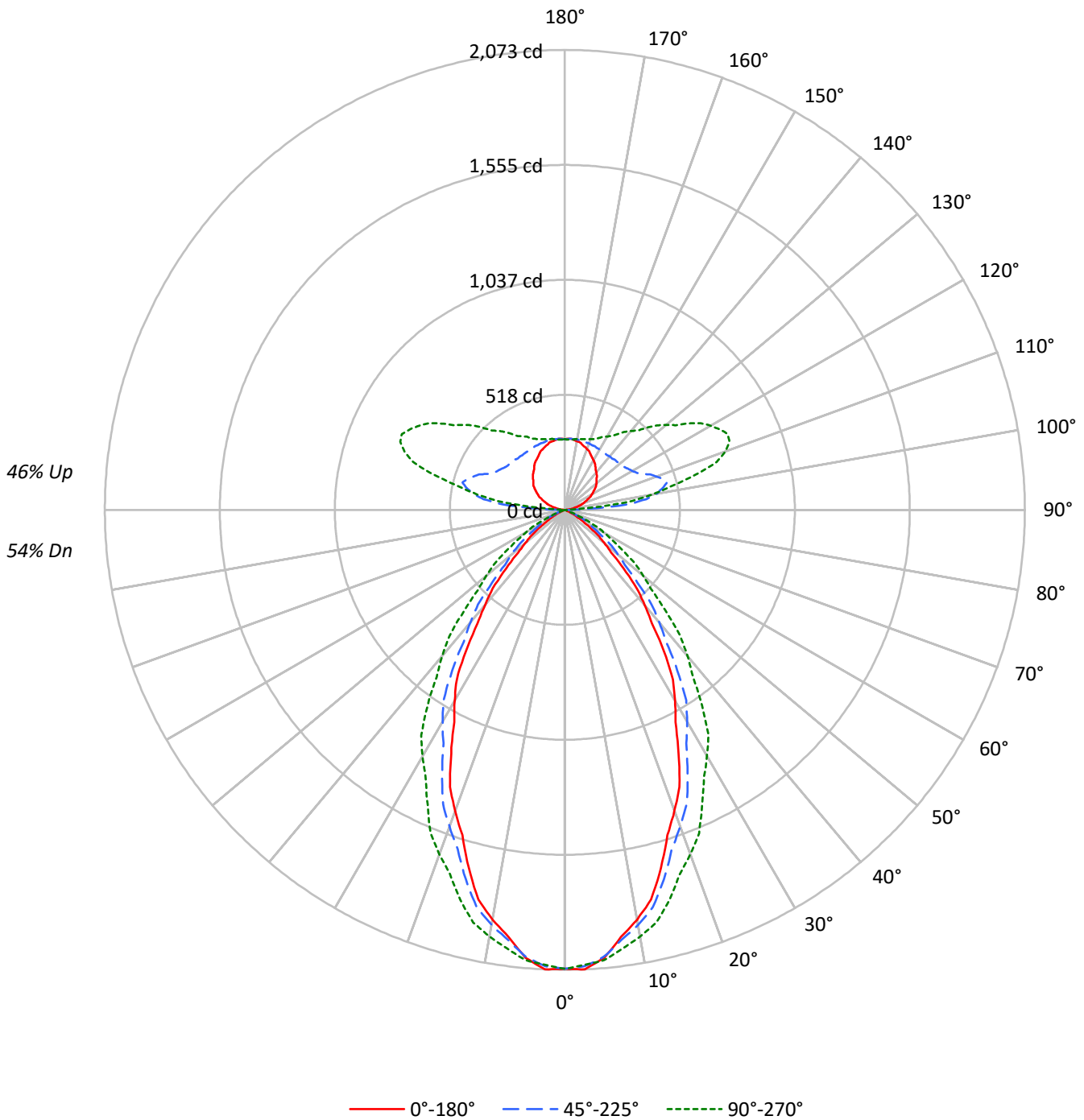
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4528.8 lumens  
Efficiency: N/A  
Efficacy: 77.4 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): 58.5  
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	108	108	108	108	100	100	100	100	86	86	86	72	72	72	60	60	60	54				
1	101	97	94	91	94	91	88	85	78	76	74	67	65	64	56	55	55	50				
2	93	87	82	78	87	81	77	73	71	68	65	61	59	57	52	50	49	45				
3	87	78	72	67	80	74	68	64	64	60	57	56	53	51	48	46	44	41				
4	80	71	64	59	75	67	61	56	59	54	51	51	48	45	44	42	40	37				
5	75	64	57	52	69	61	54	50	54	49	45	47	43	41	41	38	36	33				
6	69	59	51	46	65	55	49	44	49	44	41	43	40	37	38	35	33	30				
7	65	54	47	42	60	51	44	40	45	40	37	40	36	33	35	32	30	28				
8	61	49	42	38	57	47	41	36	42	37	33	37	33	31	33	30	28	26				
9	57	46	39	34	53	43	37	33	39	34	31	35	31	28	31	28	26	24				
10	53	42	36	31	50	40	34	30	36	31	28	33	29	26	29	26	24	22				

**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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	188.8	4.2
10°-20°	482.7	10.7
20°-30°	604.3	13.3
30°-40°	558.2	12.3
40°-50°	375.1	8.3
50°-60°	193.7	4.3
60°-70°	60.7	1.3
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	164.1	3.6
100°-110°	396.6	8.8
110°-120°	423.1	9.3
120°-130°	342.6	7.6
130°-140°	265.3	5.9
140°-150°	202.4	4.5
150°-160°	146.5	3.2
160°-170°	90.2	2.0
170°-180°	30.6	0.7
0°-30°	1275.8	28.2
0°-40°	1834.0	40.5
0°-60°	2402.8	53.1
0°-90°	2467.4	54.5
90°-120°	983.8	21.7
90°-150°	1794.1	39.6
90°-180°	2061.0	45.5
0°-180°	4528.8	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°	16	82	281	183	128	18
105°	63	110	477	617	609	67
115°	116	148	383	726	810	115
125°	165	190	332	578	678	147
135°	203	227	319	455	524	157
145°	240	258	313	387	417	150
155°	275	287	317	343	355	127
165°	304	309	321	326	330	86
175°	322	320	322	319	318	30
180°	318	318	318	318	318	



TEST NUMBER: P521063

CATALOG NUMBER: SQ4-BB-050U-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°	5.4	44.4	104.7	50.9	34.5
95°	16.2	82.1	281.2	182.8	128.1
97.5°	28.7	91.0	370.3	356.8	306.3
100°	38.4	96.5	419.4	442.7	401.2
102.5°	47.6	101.4	451.8	514.3	489.7
105°	63.4	109.5	476.7	616.8	608.9
107.5°	78.9	119.1	462.0	699.0	717.6
110°	89.7	127.3	438.3	734.4	769.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	100.5	135.4	417.3	743.1	802.8
115°	116.0	148.3	383.0	726.1	809.8
117.5°	131.4	161.8	362.9	687.1	785.2
120°	141.6	170.0	350.0	656.4	759.3
122.5°	152.4	178.6	341.9	625.1	726.4
125°	165.2	190.3	332.4	577.5	678.3
127.5°	177.9	201.5	325.8	537.1	625.8
130°	185.4	208.5	323.7	509.1	596.1
132.5°	192.4	216.6	320.4	488.8	562.6
135°	203.0	226.7	318.9	455.4	523.9
137.5°	212.9	236.8	314.2	432.7	484.4
140°	220.5	242.3	314.2	416.4	463.9
142.5°	228.0	249.8	311.5	402.3	442.3
145°	240.1	257.9	312.9	387.1	417.4
147.5°	251.2	268.5	312.1	369.5	394.6
150°	258.3	273.4	314.2	361.9	381.7
152.5°	265.8	280.4	313.7	353.7	371.4
155°	275.1	287.0	316.9	342.8	355.4
157.5°	286.3	296.5	316.2	338.7	346.1
160°	290.6	299.2	318.9	333.2	338.5
162.5°	297.6	305.2	317.9	331.6	334.7
165°	304.1	308.7	321.0	325.8	330.4
167.5°	312.1	315.1	320.2	325.4	325.6
170°	314.2	316.2	322.3	321.7	325.0
172.5°	318.0	319.5	320.7	322.1	320.2
175°	321.6	320.3	321.6	318.9	318.3
177.5°	321.0	321.0	319.9	318.7	316.1
180°	318.3	318.3	318.3	318.3	318.3

(END OF REPORT)