

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: P521062

Luminaire Tested: **SQ4-BB-050U-100D-93050-1D-UNV-STD-W-4 (3000K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521062  
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 (3000K)  
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 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

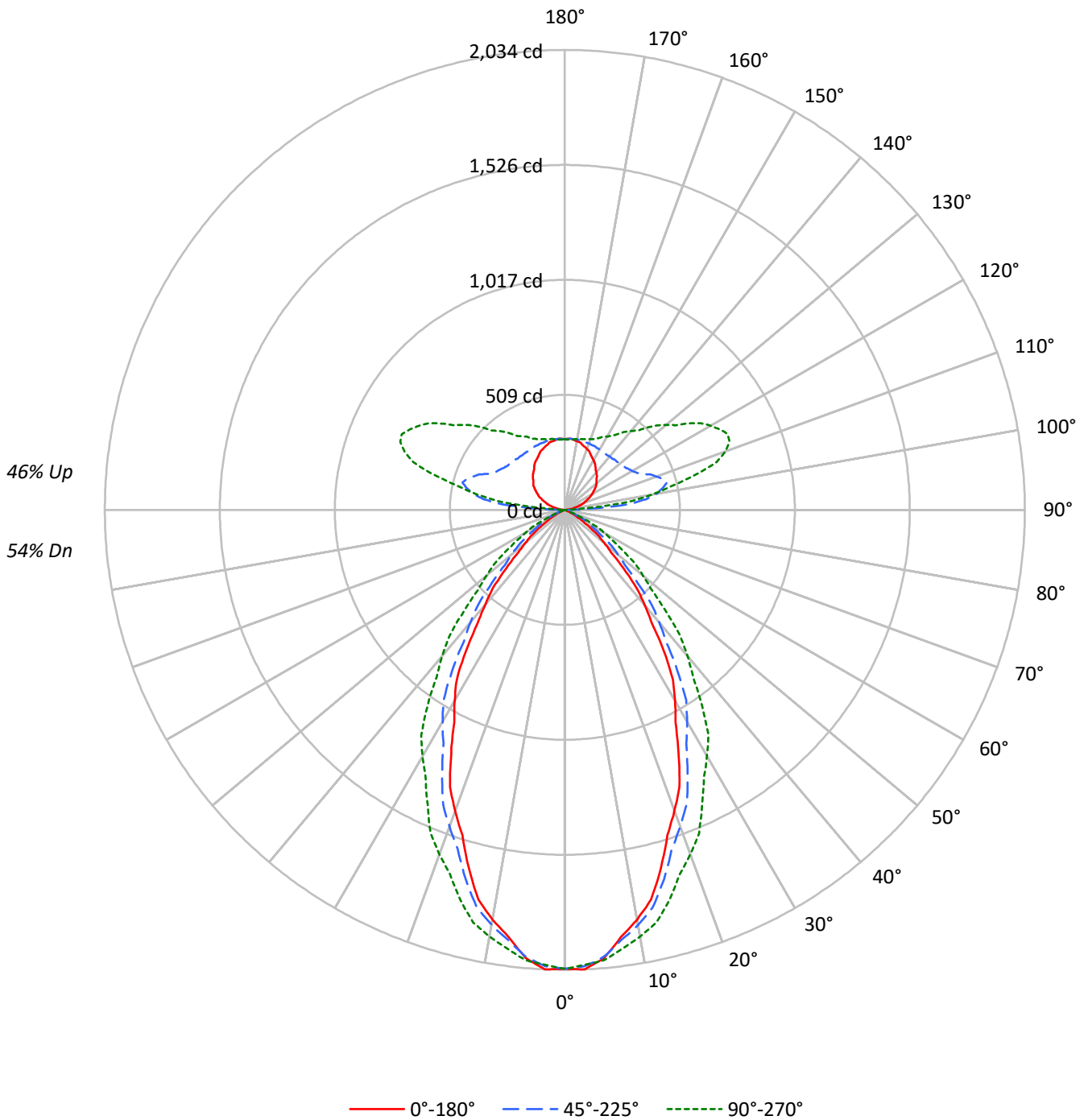
Lumens per Lamp: N/A  
Luminaire Lumens: 4443.7 lumens  
Efficiency: N/A  
Efficacy: 76.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: General Diffuse

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				
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	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°	18725	18725	18725
5°	18424	18377	18515
10°	17238	17469	17956
15°	15671	16168	17069
20°	13911	14634	15916
25°	12114	13074	14624
30°	10377	11516	13400
35°	8604	9776	11921
40°	6611	7817	10158
45°	4778	5918	8173
50°	3255	4411	6483
55°	2117	3190	5038
60°	1214	2248	3643
65°	321	1371	1843
70°	159	424	529
75°	71	36	0
80°	53	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	185.2	4.2
10°-20°	473.7	10.7
20°-30°	593.0	13.3
30°-40°	547.7	12.3
40°-50°	368.0	8.3
50°-60°	190.1	4.3
60°-70°	59.5	1.3
70°-80°	3.8	0.1
80°-90°	0.1	0.0
90°-100°	161.0	3.6
100°-110°	389.2	8.8
110°-120°	415.1	9.3
120°-130°	336.2	7.6
130°-140°	260.3	5.9
140°-150°	198.6	4.5
150°-160°	143.7	3.2
160°-170°	88.5	2.0
170°-180°	30.0	0.7
0°-30°	1251.8	28.2
0°-40°	1799.5	40.5
0°-60°	2357.7	53.1
0°-90°	2421.0	54.5
90°-120°	965.3	21.7
90°-150°	1760.4	39.6
90°-180°	2023.0	45.5
0°-180°	4443.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2030	2030	2030	2030	2030	
5°	1989	1969	1984	1991	1999	184
15°	1641	1635	1693	1750	1787	457
25°	1190	1200	1284	1372	1436	546
35°	764	783	868	970	1058	473
45°	366	388	454	542	626	288
55°	132	154	198	255	313	123
65°	15	28	63	76	84	25
75°	2	2	1	0	0	3
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	16	81	276	179	126	18
105°	62	108	468	605	598	66
115°	114	146	376	712	795	113
125°	162	187	326	567	666	145
135°	199	222	313	447	514	154
145°	236	253	307	380	410	147
155°	270	282	311	336	349	125
165°	298	303	315	320	324	84
175°	316	314	316	313	312	30
180°	312	312	312	312	312	



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CATALOG NUMBER: SQ4-BB-050U-100D-93050-1D-UNV-STD-W-4 (3000K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2029.5	2029.5	2029.5	2029.5	2029.5
2.5°	2034.2	2015.0	2020.1	2020.0	2014.6
5°	1989.3	1969.1	1984.3	1991.4	1999.1
7.5°	1905.2	1889.5	1918.8	1940.7	1956.7
10°	1840.0	1826.6	1864.6	1894.5	1916.6
12.5°	1764.6	1754.2	1800.2	1841.2	1869.5
15°	1640.7	1634.9	1692.7	1749.6	1787.0
17.5°	1507.9	1507.8	1573.7	1644.3	1689.4
20°	1416.8	1419.7	1490.5	1568.3	1621.1
22.5°	1325.7	1332.4	1408.0	1489.1	1549.6
25°	1190.0	1199.6	1284.3	1372.1	1436.5
27.5°	1059.6	1073.6	1162.7	1254.1	1332.4
30°	974.0	990.3	1081.0	1177.1	1257.8
32.5°	890.0	909.4	997.8	1099.4	1181.6
35°	763.9	783.1	868.0	970.1	1058.4
37.5°	633.7	652.5	735.4	836.0	931.4
40°	548.9	570.0	649.0	746.5	843.4
42.5°	471.9	493.0	567.3	663.1	754.7
45°	366.2	388.3	453.6	541.9	626.4
47.5°	278.7	302.7	360.0	439.9	516.9
50°	226.8	250.8	307.3	377.7	451.7
52.5°	185.2	208.4	259.4	325.8	393.5
55°	131.6	153.7	198.3	254.7	313.2
57.5°	90.9	109.9	150.0	197.0	242.9
60°	65.8	84.0	121.8	159.9	197.4
62.5°	43.8	60.5	97.4	126.6	151.8
65°	14.7	28.2	62.8	75.8	84.4
67.5°	7.5	9.0	33.0	34.8	37.7
70°	5.9	5.9	15.7	16.8	19.6
72.5°	4.3	4.3	6.3	8.1	8.6
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°	5.3	43.6	102.7	49.9	33.9
95°	15.9	80.6	275.9	179.4	125.7
97.5°	28.2	89.3	363.4	350.1	300.5
100°	37.7	94.6	411.5	434.4	393.7
102.5°	46.7	99.5	443.3	504.7	480.5
105°	62.2	107.5	467.8	605.2	597.5
107.5°	77.4	116.9	453.4	685.9	704.1
110°	88.0	124.9	430.1	720.6	754.9

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	98.6	132.9	409.4	729.1	787.7
115°	113.8	145.5	375.8	712.5	794.6
117.5°	128.9	158.8	356.1	674.1	770.4
120°	138.9	166.8	343.4	644.1	745.0
122.5°	149.5	175.3	335.4	613.3	712.7
125°	162.1	186.7	326.2	566.6	665.6
127.5°	174.5	197.7	319.7	527.0	614.0
130°	181.9	204.6	317.6	499.5	584.9
132.5°	188.8	212.5	314.4	479.6	552.1
135°	199.2	222.4	313.0	446.8	514.1
137.5°	208.9	232.4	308.3	424.6	475.3
140°	216.4	237.7	308.3	408.6	455.2
142.5°	223.8	245.1	305.7	394.7	434.0
145°	235.5	253.0	307.0	379.8	409.6
147.5°	246.5	263.5	306.2	362.6	387.2
150°	253.4	268.3	308.3	355.1	374.5
152.5°	260.8	275.2	307.8	347.1	364.4
155°	269.9	281.6	311.0	336.4	348.7
157.5°	280.9	290.9	310.3	332.3	339.5
160°	285.2	293.6	313.0	327.0	332.1
162.5°	292.0	299.4	311.9	325.3	328.4
165°	298.4	302.9	314.9	319.7	324.2
167.5°	306.2	309.2	314.1	319.3	319.4
170°	308.3	310.3	316.3	315.7	318.9
172.5°	312.0	313.4	314.7	316.1	314.1
175°	315.6	314.3	315.6	312.9	312.3
177.5°	314.9	314.9	313.9	312.8	310.2
180°	312.3	312.3	312.3	312.3	312.3

(END OF REPORT)