

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: P521036

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

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521036  
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-050D-93050-1D-UNV-STD-W-4 (3000K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3000K CCT  
Ballast/Driver: ELECTRONIC DRIVER

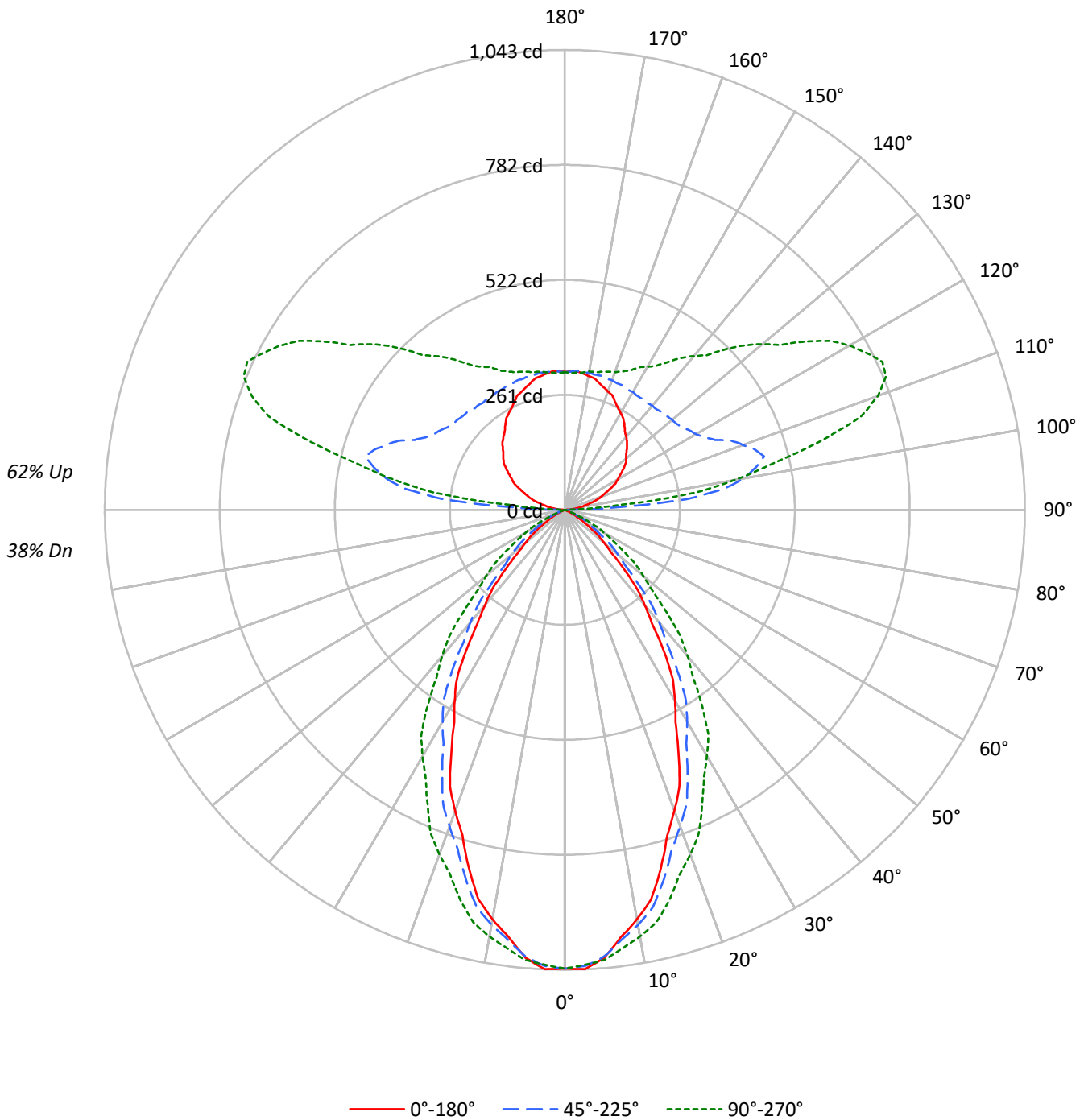
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3263.9 lumens  
Efficiency: N/A  
Efficacy: 88.5 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: Semi-Indirect

Input Watts (W): 36.9  
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: P521036  
CATALOG NUMBER: SQ4-BB-050U-050D-93050-1D-UNV-STD-W-4 (3000K)

### Luminous Intensity Polar Plot





TEST NUMBER: P521036

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

**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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38				
1	96	93	89	86	88	85	82	79	69	67	66	55	54	53	42	41	41	35				
2	89	83	77	73	81	76	71	67	62	59	57	50	48	46	39	37	36	31				
3	82	74	67	62	75	68	62	58	56	52	49	45	43	41	36	34	33	28				
4	76	66	59	54	69	61	55	50	51	47	43	41	39	36	33	31	29	26				
5	70	60	53	47	64	55	49	44	46	42	38	38	35	32	30	28	27	23				
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	24	21				
7	60	49	42	37	55	46	39	35	39	34	31	32	29	26	26	24	22	19				
8	56	45	38	33	52	42	36	31	36	31	28	30	26	24	24	22	20	18				
9	53	42	35	30	48	39	33	28	33	28	25	28	24	22	23	20	19	17				
10	49	38	32	27	45	36	30	26	31	26	23	26	22	20	21	19	17	15				

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

	0°	45°	90°
0°	9600	9600	9600
5°	9446	9422	9492
10°	8837	8955	9206
15°	8035	8289	8751
20°	7132	7502	8160
25°	6211	6703	7497
30°	5320	5904	6869
35°	4411	5012	6111
40°	3389	4007	5208
45°	2450	3035	4191
50°	1669	2262	3324
55°	1086	1636	2583
60°	622	1151	1867
65°	166	703	945
70°	81	219	272
75°	36	18	0
80°	27	0	0
85°	0	0	0



TEST NUMBER: P521036

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

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	95.0	2.9
10°-20°	242.8	7.4
20°-30°	304.0	9.3
30°-40°	280.8	8.6
40°-50°	188.7	5.8
50°-60°	97.5	3.0
60°-70°	30.5	0.9
70°-80°	1.9	0.1
80°-90°	0.0	0.0
90°-100°	161.0	4.9
100°-110°	389.2	11.9
110°-120°	415.1	12.7
120°-130°	336.2	10.3
130°-140°	260.3	8.0
140°-150°	198.6	6.1
150°-160°	143.7	4.4
160°-170°	88.5	2.7
170°-180°	30.0	0.9
0°-30°	641.8	19.7
0°-40°	922.6	28.3
0°-60°	1208.7	37.0
0°-90°	1241.2	38.0
90°-120°	965.3	29.6
90°-150°	1760.4	53.9
90°-180°	2023.0	62.0
0°-180°	3263.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1020	1010	1017	1021	1025	95
15°	841	838	868	897	916	234
25°	610	615	658	704	736	280
35°	392	402	445	497	543	243
45°	188	199	233	278	321	147
55°	68	79	102	131	161	63
65°	8	14	32	39	43	13
75°	1	1	0	0	0	1
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	



TEST NUMBER: P521036

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

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1040.5	1040.5	1040.5	1040.5	1040.5
2.5°	1042.9	1033.1	1035.7	1035.6	1032.8
5°	1019.9	1009.5	1017.3	1020.9	1024.9
7.5°	976.8	968.7	983.7	995.0	1003.1
10°	943.3	936.4	955.9	971.3	982.6
12.5°	904.7	899.4	922.9	944.0	958.4
15°	841.2	838.2	867.8	897.0	916.2
17.5°	773.1	773.0	806.8	843.0	866.1
20°	726.4	727.9	764.1	804.0	831.1
22.5°	679.7	683.1	721.8	763.4	794.4
25°	610.1	615.0	658.4	703.5	736.4
27.5°	543.2	550.4	596.1	642.9	683.1
30°	499.4	507.7	554.2	603.5	644.8
32.5°	456.3	466.2	511.5	563.6	605.8
35°	391.6	401.5	445.0	497.4	542.6
37.5°	324.9	334.5	377.0	428.6	477.5
40°	281.4	292.2	332.7	382.7	432.4
42.5°	241.9	252.8	290.9	339.9	386.9
45°	187.8	199.1	232.6	277.8	321.2
47.5°	142.9	155.2	184.5	225.5	265.0
50°	116.3	128.6	157.6	193.7	231.6
52.5°	94.9	106.8	133.0	167.0	201.8
55°	67.5	78.8	101.7	130.6	160.6
57.5°	46.6	56.4	76.9	101.0	124.5
60°	33.7	43.1	62.4	82.0	101.2
62.5°	22.5	31.0	49.9	64.9	77.8
65°	7.6	14.4	32.2	38.9	43.3
67.5°	3.8	4.6	16.9	17.9	19.3
70°	3.0	3.0	8.1	8.6	10.1
72.5°	2.2	2.2	3.2	4.1	4.4
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
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

TEST NUMBER: P521036

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

**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)