

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: P521076

Luminaire Tested: **SQ4-BB-050U-125D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521076  
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-125D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 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**

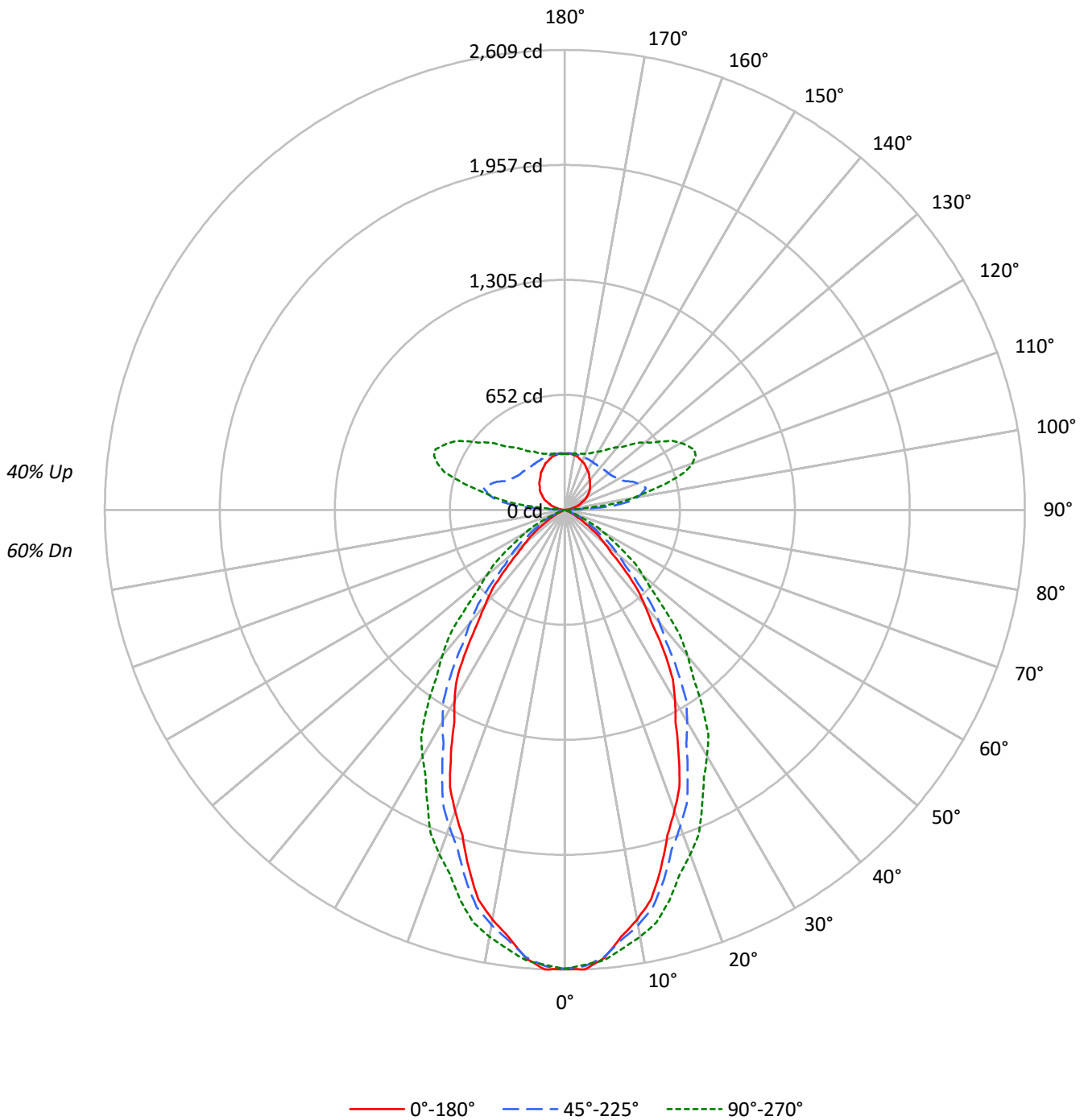
Lumens per Lamp: N/A  
Luminaire Lumens: 5167.0 lumens  
Efficiency: N/A  
Efficacy: 72.2 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 4' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 71.6  
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	0
RCR																		
0	110	110	110	110	102	102	102	102	89	89	89	77	77	77	65	65	65	60
1	102	99	95	93	96	93	90	87	81	79	77	71	69	68	61	60	59	55
2	95	89	84	79	89	84	79	75	74	71	68	65	62	60	57	55	53	50
3	88	80	74	69	82	76	70	66	67	63	60	59	56	54	52	50	48	45
4	82	72	66	61	77	69	63	58	61	57	53	55	51	48	48	46	44	41
5	76	66	59	54	71	63	56	52	56	51	47	50	46	43	45	42	40	37
6	71	60	53	48	67	57	51	46	52	47	43	46	42	39	41	38	36	34
7	66	55	48	43	62	53	46	42	48	42	39	43	39	36	39	35	33	31
8	62	51	44	39	58	49	42	38	44	39	35	40	36	33	36	33	30	28
9	58	47	40	36	55	45	39	35	41	36	32	37	33	30	34	30	28	26
10	55	44	37	33	52	42	36	32	38	33	30	35	31	28	32	28	26	24

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

	0°	45°	90°
0°	24019	24019	24019
5°	23633	23575	23750
10°	22113	22408	23033
15°	20102	20740	21895
20°	17845	18772	20416
25°	15540	16771	18759
30°	13310	14773	17188
35°	11037	12540	15292
40°	8480	10027	13030
45°	6130	7593	10485
50°	4175	5658	8316
55°	2715	4092	6463
60°	1557	2882	4672
65°	413	1760	2364
70°	205	545	680
75°	89	46	0
80°	69	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	237.6	4.6
10°-20°	607.6	11.8
20°-30°	760.6	14.7
30°-40°	702.6	13.6
40°-50°	472.1	9.1
50°-60°	243.8	4.7
60°-70°	76.4	1.5
70°-80°	4.8	0.1
80°-90°	0.1	0.0
90°-100°	164.1	3.2
100°-110°	396.6	7.7
110°-120°	423.1	8.2
120°-130°	342.6	6.6
130°-140°	265.3	5.1
140°-150°	202.4	3.9
150°-160°	146.5	2.8
160°-170°	90.2	1.7
170°-180°	30.6	0.6
0°-30°	1605.8	31.1
0°-40°	2308.4	44.7
0°-60°	3024.3	58.5
0°-90°	3105.6	60.1
90°-120°	983.8	19.0
90°-150°	1794.1	34.7
90°-180°	2061.0	39.9
0°-180°	5167.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2603	2603	2603	2603	2603	
5°	2552	2526	2546	2554	2564	237
15°	2105	2097	2171	2244	2292	586
25°	1526	1539	1647	1760	1843	700
35°	980	1004	1113	1244	1358	607
45°	470	498	582	695	804	369
55°	169	197	254	327	402	157
65°	19	36	81	97	108	32
75°	2	2	1	0	0	4
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: P521076

CATALOG NUMBER: SQ4-BB-050U-125D-93050-1D-UNV-STD-W-4 (3500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2603.4	2603.4	2603.4	2603.4	2603.4
2.5°	2609.4	2584.8	2591.3	2591.1	2584.3
5°	2551.8	2525.9	2545.5	2554.5	2564.4
7.5°	2443.9	2423.7	2461.3	2489.5	2509.9
10°	2360.3	2343.1	2391.8	2430.2	2458.6
12.5°	2263.6	2250.3	2309.2	2361.9	2398.1
15°	2104.6	2097.2	2171.4	2244.3	2292.3
17.5°	1934.3	1934.1	2018.7	2109.2	2167.1
20°	1817.5	1821.2	1911.9	2011.7	2079.4
22.5°	1700.6	1709.2	1806.1	1910.2	1987.7
25°	1526.5	1538.8	1647.4	1760.1	1842.7
27.5°	1359.3	1377.2	1491.5	1608.7	1709.1
30°	1249.4	1270.4	1386.7	1510.0	1613.4
32.5°	1141.6	1166.5	1279.9	1410.3	1515.7
35°	979.9	1004.5	1113.4	1244.4	1357.7
37.5°	812.9	837.0	943.4	1072.4	1194.8
40°	704.1	731.2	832.5	957.5	1081.9
42.5°	605.3	632.4	727.7	850.6	968.1
45°	469.8	498.1	581.9	695.2	803.6
47.5°	357.4	388.2	461.7	564.2	663.0
50°	290.9	321.7	394.2	484.5	579.4
52.5°	237.5	267.3	332.8	417.9	504.8
55°	168.8	197.1	254.4	326.7	401.8
57.5°	116.6	141.0	192.5	252.7	311.6
60°	84.4	107.8	156.2	205.1	253.2
62.5°	56.2	77.6	124.9	162.5	194.7
65°	18.9	36.1	80.6	97.2	108.3
67.5°	9.6	11.5	42.3	44.7	48.4
70°	7.6	7.6	20.2	21.5	25.2
72.5°	5.5	5.5	8.1	10.3	11.1
75°	2.5	2.5	1.3	0.0	0.0
77.5°	1.3	1.3	1.0	0.0	0.0
80°	1.3	1.3	0.0	0.0	0.0
82.5°	0.3	0.3	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)