

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: P521050

Luminaire Tested: **SQ4-BB-050U-075D-93050-1D-UNV-STD-W-4 (3500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521050  
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-075D-93050-1D-UNV-STD-W-4 (3500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 3500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

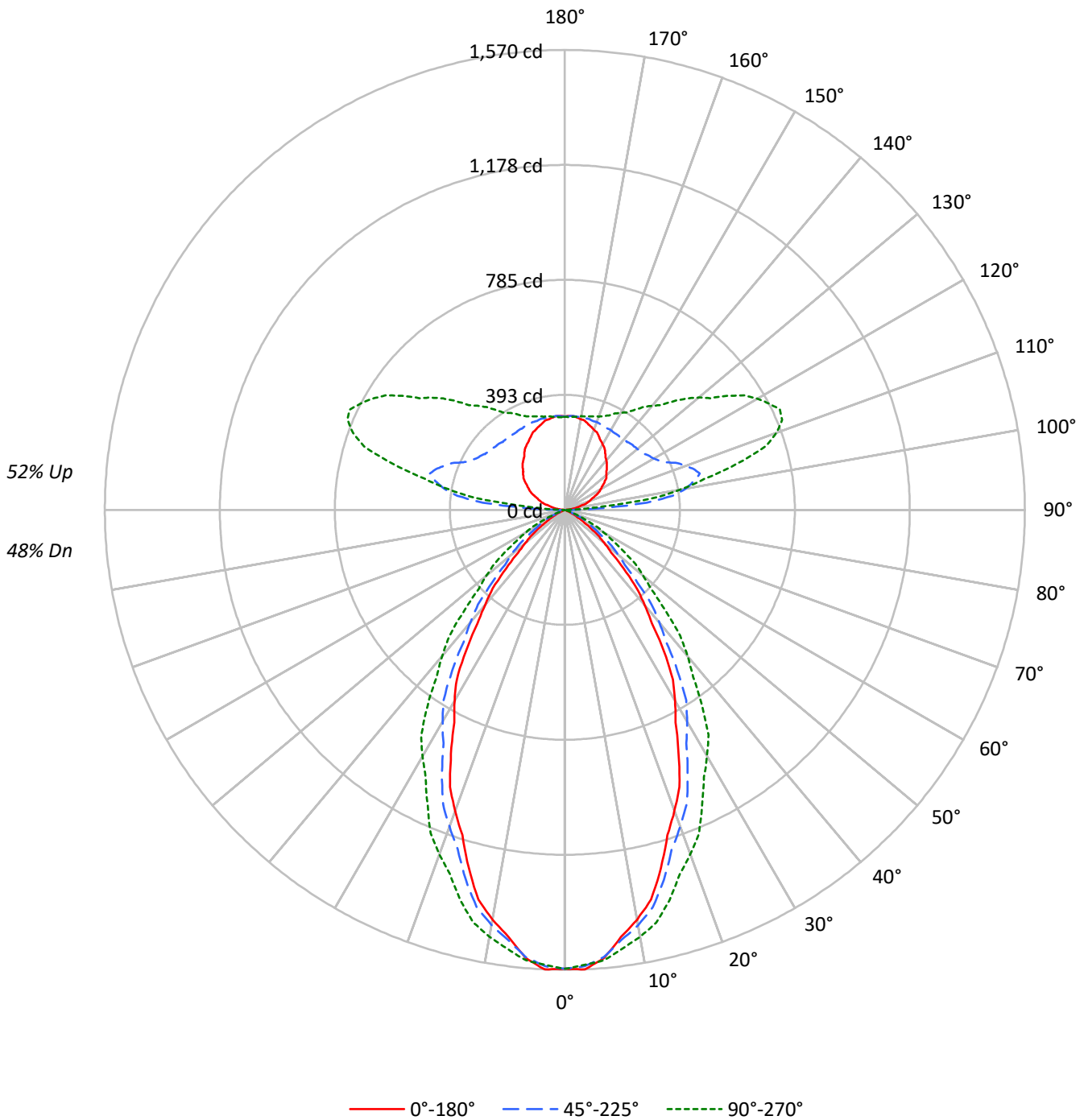
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3930.3 lumens  
Efficiency: N/A  
Efficacy: 82.6 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): 47.6  
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				
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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48		
1	99	95	92	89	91	88	85	83	74	72	71	62	61	59	50	49	49	43		
2	92	85	80	76	84	79	75	71	67	64	61	56	54	52	46	45	44	39		
3	85	77	70	65	78	71	66	61	61	57	54	51	49	46	43	41	39	35		
4	78	69	62	57	72	64	58	54	55	51	47	47	44	41	39	37	36	32		
5	73	62	55	50	67	58	52	47	51	46	42	43	40	37	36	34	32	29		
6	68	57	50	44	62	53	47	42	46	41	38	40	36	34	34	31	29	27		
7	63	52	45	40	58	49	42	38	43	38	34	37	33	30	31	29	27	24		
8	59	48	41	36	54	45	39	34	39	34	31	34	30	28	29	27	25	22		
9	55	44	37	32	51	41	35	31	36	32	28	32	28	26	27	25	23	21		
10	52	41	34	30	48	38	32	28	34	29	26	30	26	24	26	23	21	19		

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

	0°	45°	90°
0°	14454	14454	14454
5°	14222	14187	14291
10°	13307	13484	13861
15°	12097	12481	13176
20°	10738	11296	12286
25°	9351	10092	11289
30°	8010	8890	10343
35°	6642	7546	9202
40°	5103	6034	7842
45°	3689	4569	6310
50°	2513	3405	5004
55°	1634	2463	3889
60°	937	1735	2810
65°	249	1059	1423
70°	121	326	410
75°	53	29	0
80°	43	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	143.0	3.6
10°-20°	365.6	9.3
20°-30°	457.7	11.6
30°-40°	422.8	10.8
40°-50°	284.1	7.2
50°-60°	146.7	3.7
60°-70°	46.0	1.2
70°-80°	2.9	0.1
80°-90°	0.1	0.0
90°-100°	164.1	4.2
100°-110°	396.6	10.1
110°-120°	423.1	10.8
120°-130°	342.6	8.7
130°-140°	265.3	6.7
140°-150°	202.4	5.1
150°-160°	146.5	3.7
160°-170°	90.2	2.3
170°-180°	30.6	0.8
0°-30°	966.3	24.6
0°-40°	1389.1	35.3
0°-60°	1820.0	46.3
0°-90°	1868.9	47.6
90°-120°	983.8	25.0
90°-150°	1794.1	45.6
90°-180°	2061.0	52.4
0°-180°	3930.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1567	1567	1567	1567	1567	
5°	1536	1520	1532	1537	1543	142
15°	1266	1262	1307	1350	1379	353
25°	919	926	991	1059	1109	421
35°	590	604	670	749	817	365
45°	283	300	350	418	484	222
55°	102	119	153	197	242	95
65°	11	22	48	58	65	19
75°	2	2	1	0	0	2
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	



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CATALOG NUMBER: SQ4-BB-050U-075D-93050-1D-UNV-STD-W-4 (3500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1566.6	1566.6	1566.6	1566.6	1566.6
2.5°	1570.3	1555.5	1559.4	1559.3	1555.1
5°	1535.6	1520.0	1531.8	1537.2	1543.1
7.5°	1470.7	1458.5	1481.1	1498.1	1510.4
10°	1420.4	1410.0	1439.3	1462.4	1479.5
12.5°	1362.2	1354.1	1389.6	1421.3	1443.1
15°	1266.5	1262.1	1306.7	1350.5	1379.4
17.5°	1164.0	1163.9	1214.8	1269.3	1304.1
20°	1093.7	1095.9	1150.5	1210.6	1251.3
22.5°	1023.4	1028.5	1086.9	1149.5	1196.2
25°	918.6	926.0	991.4	1059.2	1108.9
27.5°	818.0	828.8	897.5	968.0	1028.5
30°	751.9	764.5	834.5	908.7	970.9
32.5°	687.0	702.0	770.2	848.7	912.1
35°	589.7	604.5	670.0	748.9	817.0
37.5°	489.2	503.7	567.7	645.3	719.0
40°	423.7	440.0	501.0	576.2	651.1
42.5°	364.3	380.6	437.9	511.8	582.5
45°	282.7	299.8	350.2	418.3	483.6
47.5°	215.1	233.6	277.9	339.5	399.0
50°	175.1	193.6	237.2	291.6	348.6
52.5°	142.9	160.9	200.2	251.5	303.8
55°	101.6	118.6	153.1	196.6	241.8
57.5°	70.2	84.9	115.8	152.1	187.5
60°	50.8	64.9	94.0	123.4	152.3
62.5°	33.8	46.7	75.2	97.8	117.2
65°	11.4	21.7	48.5	58.5	65.2
67.5°	5.8	6.9	25.5	26.9	29.1
70°	4.5	4.5	12.1	12.9	15.2
72.5°	3.3	3.3	4.9	6.2	6.7
75°	1.5	1.5	0.8	0.0	0.0
77.5°	0.8	0.8	0.6	0.0	0.0
80°	0.8	0.8	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)