

Scaled data based on original data using  
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-  
State Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: CORELITE

Report Number: P518410

Luminaire Tested: **SQ4-BB-050U-050D-930-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518410  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-21, G2-2009-966-12)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/29/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: CORELITE  
Catalog Number: SQ4-BB-050U-050D-930-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 500 LUMENS PER FOOT  
Light Source: 3000K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

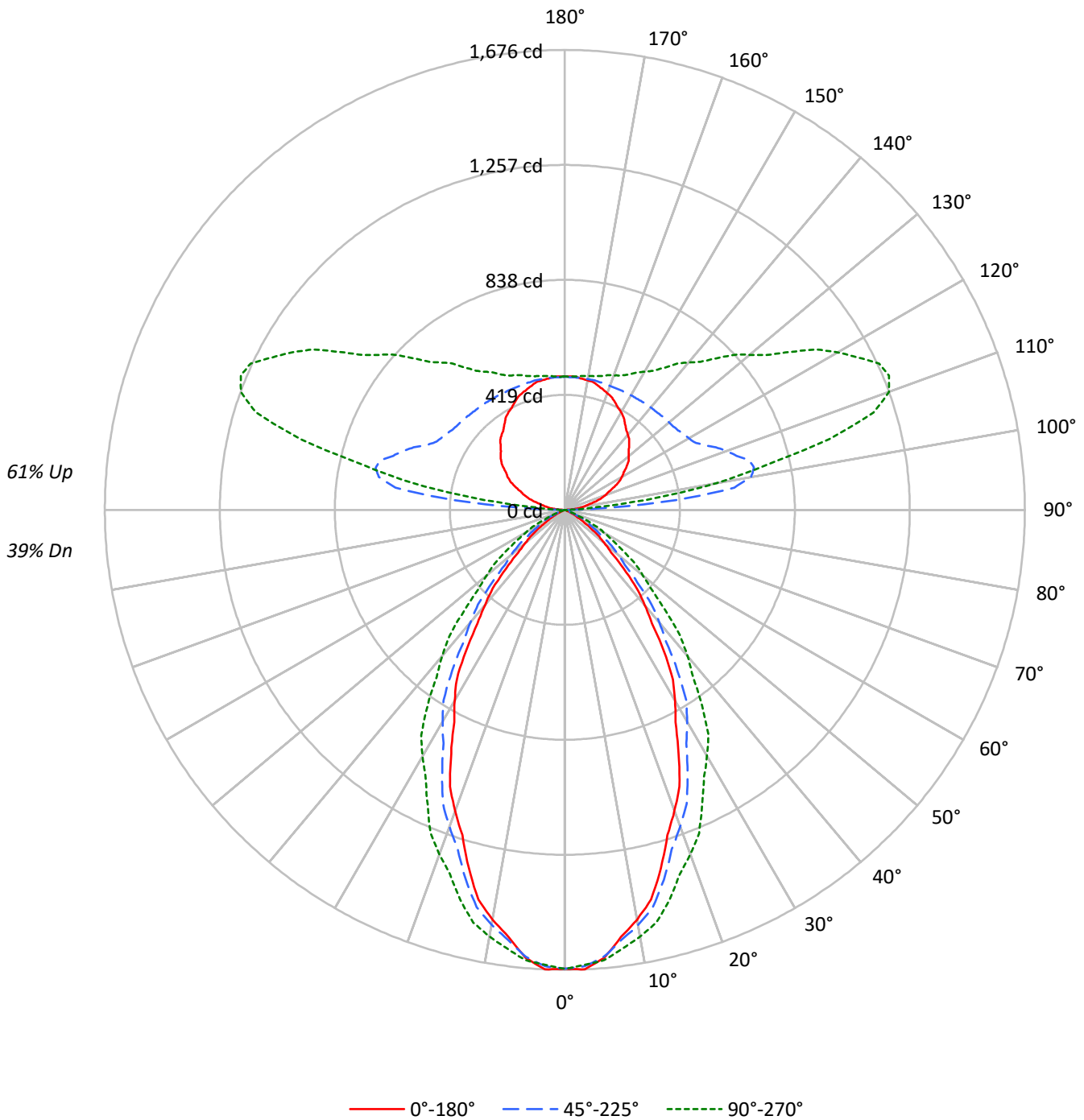
Lumens per Lamp: N/A  
Luminaire Lumens: 5166.9 lumens  
Efficiency: N/A  
Efficacy: 87.7 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Indirect

Input Watts (W): 58.9  
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



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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	104	104	104	104	95	95	95	95	77	77	77	61	61	61	46	46	46	39				
1	97	93	90	87	88	85	82	79	69	68	66	55	54	53	42	42	41	35				
2	89	83	77	73	81	76	71	67	63	59	57	50	48	47	39	38	37	32				
3	82	74	68	63	75	68	62	58	56	53	49	46	43	41	36	34	33	29				
4	76	66	60	54	69	61	55	51	51	47	43	42	39	37	33	31	30	26				
5	70	60	53	47	64	55	49	44	46	42	38	38	35	33	31	29	27	24				
6	65	54	47	42	59	50	44	39	42	38	34	35	32	29	28	26	25	22				
7	61	50	42	37	55	46	40	35	39	34	31	32	29	27	26	24	22	20				
8	56	45	38	33	52	42	36	32	36	31	28	30	27	24	25	22	21	18				
9	53	42	35	30	48	39	33	29	33	29	25	28	25	22	23	21	19	17				
10	49	38	32	27	45	36	30	26	31	26	23	26	23	20	22	19	18	16				

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

	0°	45°	90°
0°	7714	7714	7714
5°	7590	7571	7628
10°	7102	7196	7397
15°	6456	6661	7032
20°	5731	6029	6557
25°	4991	5386	6025
30°	4275	4745	5521
35°	3545	4028	4911
40°	2723	3221	4185
45°	1969	2439	3368
50°	1341	1817	2671
55°	872	1314	2076
60°	500	925	1500
65°	132	565	760
70°	66	174	219
75°	29	14	0
80°	21	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	152.6	3.0
10°-20°	390.3	7.6
20°-30°	488.6	9.5
30°-40°	451.3	8.7
40°-50°	303.3	5.9
50°-60°	156.6	3.0
60°-70°	49.1	0.9
70°-80°	3.1	0.1
80°-90°	1.9	0.0
90°-100°	233.1	4.5
100°-110°	633.2	12.3
110°-120°	651.0	12.6
120°-130°	520.5	10.1
130°-140°	409.0	7.9
140°-150°	313.6	6.1
150°-160°	225.5	4.4
160°-170°	137.9	2.7
170°-180°	46.5	0.9
0°-30°	1031.5	20.0
0°-40°	1482.8	28.7
0°-60°	1942.6	37.6
0°-90°	1996.7	38.6
90°-120°	1517.2	29.4
90°-150°	2760.3	53.4
90°-180°	3170.0	61.4
0°-180°	5166.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1672	1672	1672	1672	1672	
5°	1639	1622	1635	1641	1647	152
15°	1352	1347	1395	1442	1472	377
25°	980	988	1058	1131	1184	450
35°	629	645	715	799	872	390
45°	302	320	374	446	516	237
55°	108	127	163	210	258	101
65°	12	23	52	62	70	20
75°	2	2	1	0	0	2
85°	0	0	0	0	0	0
90°	2	6	11	14	14	2
95°	34	128	406	177	119	36
105°	112	175	696	1060	998	119
115°	200	243	557	1109	1263	197
125°	275	313	504	850	1002	245
135°	331	368	490	692	781	256
145°	382	410	484	588	632	240
155°	432	448	481	528	543	199
165°	468	474	482	503	504	132
175°	486	487	484	490	489	46
180°	486	486	486	486	486	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1672.3	1672.3	1672.3	1672.3	1672.3
2.5°	1676.1	1660.3	1664.5	1664.4	1660.0
5°	1639.1	1622.5	1635.0	1640.8	1647.2
7.5°	1569.8	1556.9	1581.0	1599.1	1612.2
10°	1516.1	1505.0	1536.3	1561.0	1579.2
12.5°	1454.0	1445.4	1483.3	1517.1	1540.4
15°	1351.9	1347.1	1394.8	1441.6	1472.4
17.5°	1242.5	1242.3	1296.7	1354.8	1392.0
20°	1167.4	1169.8	1228.1	1292.2	1335.7
22.5°	1092.3	1097.9	1160.1	1227.0	1276.8
25°	980.5	988.5	1058.2	1130.6	1183.6
27.5°	873.1	884.7	958.0	1033.3	1097.8
30°	802.6	816.0	890.7	969.9	1036.4
32.5°	733.3	749.3	822.1	905.9	973.6
35°	629.4	645.2	715.2	799.4	872.1
37.5°	522.1	537.7	606.0	688.8	767.4
40°	452.2	469.6	534.8	615.1	695.0
42.5°	388.8	406.2	467.5	546.4	621.8
45°	301.8	320.0	373.8	446.5	516.2
47.5°	229.6	249.4	296.6	362.4	425.9
50°	186.9	206.7	253.2	311.2	372.2
52.5°	152.6	171.7	213.7	268.4	324.3
55°	108.4	126.6	163.4	209.8	258.1
57.5°	74.9	90.6	123.6	162.3	200.2
60°	54.2	69.2	100.3	131.8	162.6
62.5°	36.1	49.8	80.3	104.4	125.1
65°	12.1	23.2	51.8	62.5	69.6
67.5°	6.1	7.4	27.2	28.7	31.1
70°	4.9	4.9	12.9	13.8	16.2
72.5°	3.6	3.6	5.2	6.6	7.1
75°	1.6	1.6	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°	0.3	1.2	2.2	2.8	2.8
90°	1.6	6.1	10.9	14.1	14.1
92.5°	14.1	63.8	110.8	47.6	40.3
95°	34.3	127.5	405.9	176.7	118.7
97.5°	56.8	140.8	622.3	484.1	340.0
100°	71.8	149.7	688.5	697.9	563.6
102.5°	86.8	158.5	706.0	863.1	744.7
105°	112.4	175.0	696.3	1060.2	997.6
107.5°	138.9	194.2	656.0	1161.9	1179.3
110°	157.7	208.1	626.0	1182.0	1256.8

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	173.9	221.8	596.1	1165.3	1278.0
115°	199.8	242.6	557.3	1108.8	1263.0
117.5°	224.2	265.1	532.7	1028.7	1202.4
120°	240.4	280.1	521.4	975.0	1147.5
122.5°	254.2	293.8	513.9	921.1	1087.5
125°	274.8	312.9	504.3	849.6	1002.3
127.5°	293.2	331.0	499.0	795.4	926.4
130°	304.4	341.1	496.5	761.4	878.9
132.5°	315.7	352.3	494.0	732.4	836.5
135°	331.0	367.6	490.2	692.1	780.6
137.5°	347.5	380.8	488.3	656.5	730.9
140°	357.5	389.6	487.1	633.8	701.0
142.5°	367.5	397.1	485.8	616.1	672.2
145°	382.5	410.0	484.0	588.0	632.3
147.5°	399.4	422.9	482.4	565.9	600.7
150°	410.6	430.4	482.4	553.3	580.8
152.5°	419.3	436.7	481.2	541.9	564.5
155°	432.4	447.7	480.8	528.0	543.3
157.5°	445.3	457.2	480.8	518.6	530.2
160°	452.7	463.4	480.8	512.3	521.4
162.5°	460.2	468.5	482.1	507.2	513.9
165°	468.4	474.5	482.4	502.7	504.3
167.5°	476.8	479.8	484.0	497.4	498.6
170°	479.3	482.3	484.0	494.9	494.9
172.5°	481.8	483.6	484.0	492.4	492.4
175°	485.5	487.1	484.0	490.2	488.7
177.5°	486.8	486.8	483.0	488.0	485.5
180°	485.5	485.5	485.5	485.5	485.5

(END OF REPORT)