

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: P518365

Luminaire Tested: **SQ4-BB-025U-100D-935-1D-UNV-STD-W-6**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518365  
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1910-536-32, 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-025U-100D-935-1D-UNV-STD-W-6  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1000 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3500K CCT, 90 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

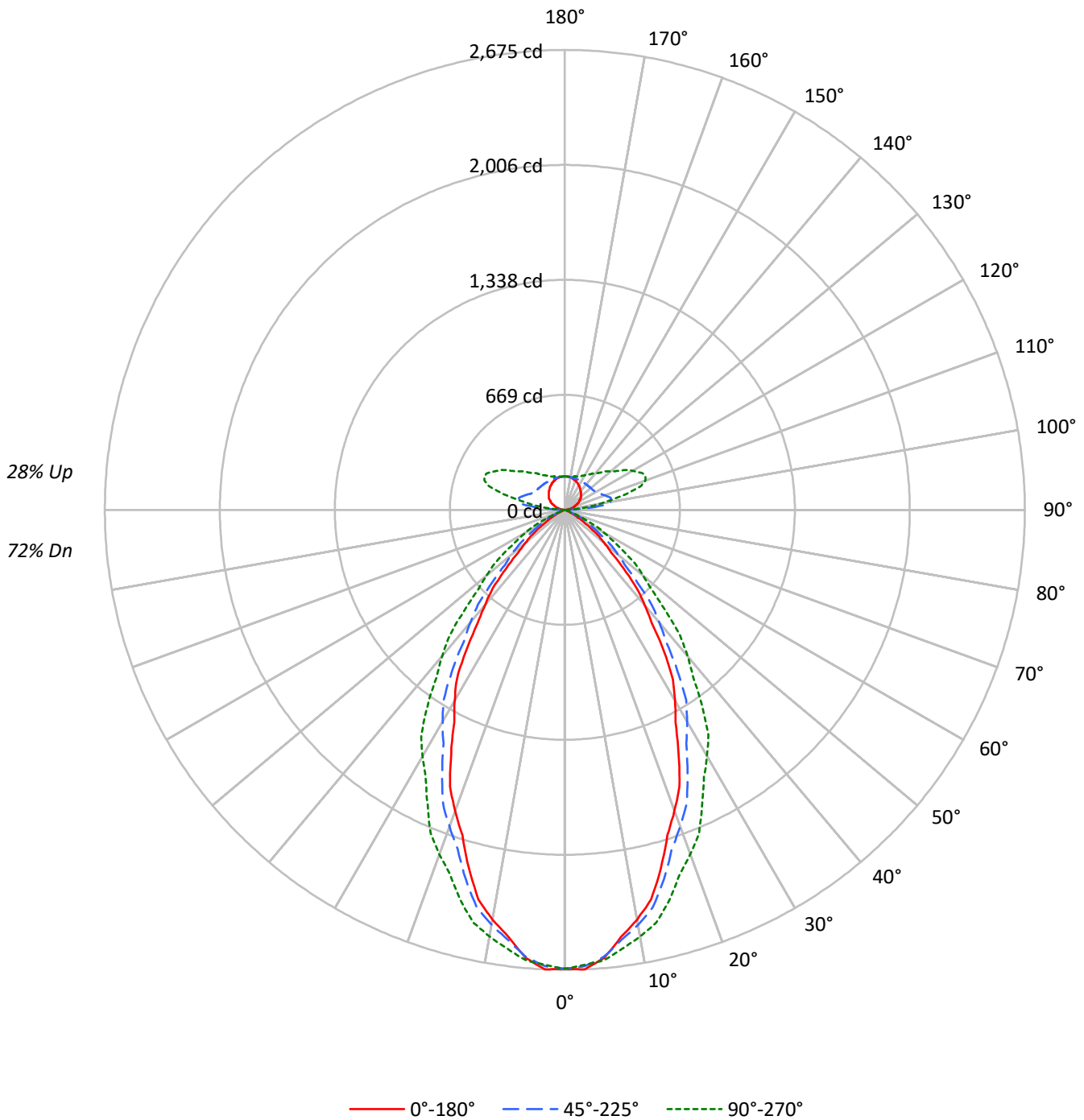
Lumens per Lamp: N/A  
Luminaire Lumens: 4443.9 lumens  
Efficiency: N/A  
Efficacy: 70.0 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 6' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 63.5  
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					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	112	112	112	112	106	106	106	106	95	95	95	85	85	85	76	76	76	76	76	76	72	
1	105	102	99	96	100	97	94	92	87	86	84	79	78	76	71	70	69	69	69	69	65	
2	98	92	87	83	93	88	83	80	80	77	74	73	70	68	66	64	62	62	62	62	59	
3	91	83	77	72	87	80	74	70	73	69	65	67	63	61	61	58	56	56	56	56	53	
4	85	76	69	64	81	73	67	62	67	62	58	61	58	55	56	53	51	51	51	51	48	
5	79	69	62	57	75	66	60	55	61	56	52	57	52	49	52	49	46	46	46	46	44	
6	74	63	56	51	70	61	55	50	57	51	47	52	48	45	48	45	42	42	42	42	40	
7	69	58	51	46	66	56	50	45	52	47	43	49	44	41	45	42	39	39	39	39	37	
8	65	54	47	42	62	52	46	41	49	43	39	45	41	38	42	38	36	36	36	36	34	
9	61	50	43	39	58	48	42	38	45	40	36	42	38	35	40	36	33	33	33	33	31	
10	58	47	40	36	55	45	39	35	42	37	33	40	35	32	37	33	31	31	31	31	29	

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

	0°	45°	90°
0°	16416	16416	16416
5°	16153	16112	16232
10°	15113	15315	15742
15°	13740	14175	14965
20°	12196	12830	13954
25°	10621	11462	12821
30°	9097	10097	11748
35°	7543	8571	10452
40°	5796	6853	8906
45°	4189	5190	7166
50°	2854	3868	5684
55°	1855	2797	4417
60°	1064	1969	3192
65°	282	1202	1615
70°	138	372	464
75°	62	31	0
80°	46	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	243.6	5.5
10°-20°	622.9	14.0
20°-30°	779.8	17.5
30°-40°	720.3	16.2
40°-50°	484.0	10.9
50°-60°	250.0	5.6
60°-70°	78.3	1.8
70°-80°	5.0	0.1
80°-90°	1.1	0.0
90°-100°	94.7	2.1
100°-110°	248.9	5.6
110°-120°	258.1	5.8
120°-130°	207.0	4.7
130°-140°	162.4	3.7
140°-150°	124.6	2.8
150°-160°	89.8	2.0
160°-170°	54.9	1.2
170°-180°	18.6	0.4
0°-30°	1646.3	37.0
0°-40°	2366.6	53.3
0°-60°	3100.6	69.8
0°-90°	3184.9	71.7
90°-120°	601.6	13.5
90°-150°	1095.7	24.7
90°-180°	1259.0	28.3
0°-180°	4443.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2669	2669	2669	2669	2669	
5°	2616	2590	2610	2619	2629	243
15°	2158	2150	2226	2301	2350	601
25°	1565	1578	1689	1804	1889	717
35°	1005	1030	1142	1276	1392	622
45°	482	511	597	713	824	378
55°	173	202	261	335	412	161
65°	19	37	83	100	111	33
75°	3	3	1	0	0	4
85°	0	0	0	0	0	0
90°	1	4	10	5	5	1
95°	12	49	163	84	57	14
105°	45	68	275	418	390	48
115°	80	97	220	440	502	79
125°	111	124	200	339	400	98
135°	132	145	194	274	310	102
145°	153	163	192	233	252	96
155°	173	178	192	211	217	80
165°	187	189	192	199	202	53
175°	194	194	193	196	196	18
180°	194	194	194	194	194	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2669.0	2669.0	2669.0	2669.0	2669.0
2.5°	2675.2	2649.9	2656.6	2656.4	2649.4
5°	2616.1	2589.5	2609.6	2618.9	2629.0
7.5°	2505.5	2484.8	2523.3	2552.2	2573.2
10°	2419.8	2402.1	2452.1	2491.5	2520.5
12.5°	2320.6	2307.0	2367.4	2421.4	2458.5
15°	2157.7	2150.1	2226.1	2300.8	2350.1
17.5°	1983.1	1982.8	2069.6	2162.4	2221.7
20°	1863.3	1867.1	1960.1	2062.4	2131.8
22.5°	1743.4	1752.3	1851.6	1958.3	2037.8
25°	1565.0	1577.6	1688.9	1804.5	1889.1
27.5°	1393.5	1411.9	1529.1	1649.2	1752.2
30°	1280.9	1302.4	1421.7	1548.0	1654.1
32.5°	1170.4	1195.9	1312.2	1445.8	1553.9
35°	1004.6	1029.8	1141.5	1275.8	1392.0
37.5°	833.4	858.1	967.1	1099.4	1224.9
40°	721.8	749.6	853.5	981.7	1109.2
42.5°	620.6	648.3	746.1	872.0	992.4
45°	481.6	510.7	596.6	712.7	823.8
47.5°	366.5	398.0	473.4	578.5	679.7
50°	298.3	329.8	404.2	496.8	594.0
52.5°	243.5	274.1	341.1	428.4	517.5
55°	173.0	202.1	260.8	334.9	411.9
57.5°	119.6	144.6	197.3	259.1	319.5
60°	86.5	110.5	160.1	210.3	259.5
62.5°	57.6	79.6	128.1	166.5	199.6
65°	19.4	37.0	82.6	99.7	111.0
67.5°	9.8	11.8	43.4	45.8	49.6
70°	7.7	7.7	20.7	22.0	25.8
72.5°	5.7	5.7	8.3	10.6	11.4
75°	2.6	2.6	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°	0.2	0.7	2.0	1.0	1.0
90°	1.2	3.7	10.0	5.0	5.0
92.5°	5.2	25.2	55.8	24.7	15.9
95°	12.5	49.0	163.1	84.1	57.3
97.5°	21.7	53.8	244.0	194.1	142.9
100°	28.6	57.9	268.9	272.5	211.7
102.5°	34.6	61.9	275.9	339.5	287.4
105°	44.8	68.0	275.2	417.7	389.7
107.5°	55.3	76.7	259.5	458.3	465.2
110°	62.3	81.7	246.5	468.8	498.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	69.2	87.7	234.6	462.2	507.0
115°	79.7	96.7	220.4	439.7	501.8
117.5°	89.9	105.5	210.7	408.5	477.4
120°	95.9	110.5	206.7	387.5	454.4
122.5°	101.8	116.5	203.7	366.6	432.5
125°	110.8	124.2	200.5	338.8	399.7
127.5°	118.0	131.7	197.7	316.4	367.8
130°	122.0	136.6	196.7	302.4	349.9
132.5°	126.0	140.6	195.7	290.3	332.9
135°	132.0	145.4	194.2	273.5	310.0
137.5°	138.2	151.3	194.0	260.9	290.8
140°	143.2	155.4	193.0	250.9	278.9
142.5°	147.2	158.4	193.0	243.8	267.9
145°	153.1	162.9	191.7	233.2	251.5
147.5°	159.1	168.6	191.7	224.5	239.6
150°	163.1	171.6	191.7	219.4	231.6
152.5°	167.1	173.7	191.7	215.4	224.6
155°	173.1	177.9	191.7	210.6	216.6
157.5°	177.5	182.2	191.7	206.3	210.7
160°	180.5	184.2	191.7	204.2	206.7
162.5°	183.5	186.2	191.7	202.3	204.7
165°	186.8	189.2	191.7	199.3	201.7
167.5°	189.7	191.0	193.0	198.0	199.0
170°	191.7	193.0	193.0	198.0	198.0
172.5°	192.7	193.0	193.0	196.9	196.0
175°	194.2	194.2	193.0	195.5	195.5
177.5°	194.2	194.2	193.2	195.2	194.2
180°	194.2	194.2	194.2	194.2	194.2

(END OF REPORT)