

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: P518374

Luminaire Tested: **SQ4-BB-025U-125D-830-1D-UNV-STD-W-8**

Issue Date: 4/29/2021

**Test Information**

Test Method: LM-79-2019  
Report Number: P518374  
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-125D-830-1D-UNV-STD-W-8  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 1250 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

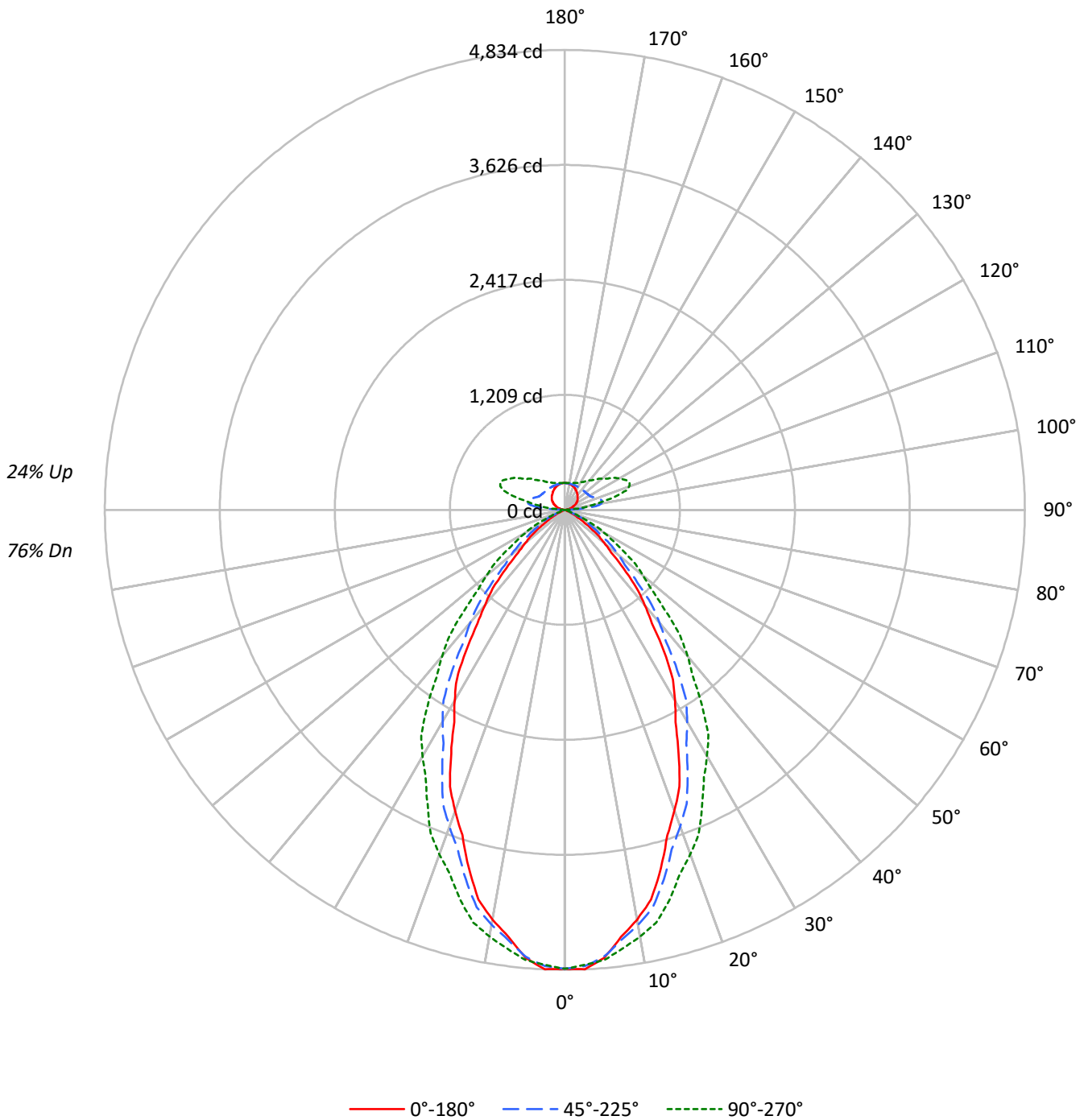
Lumens per Lamp: N/A  
Luminaire Lumens: 7578.2 lumens  
Efficiency: N/A  
Efficacy: 74.6 lumens/watt  
Spacing Criteria (0/90/45): 0.85 / 0.97 / 0.97  
Luminous Opening: Rectangular (W 0.29' x L: 8' x H: 0')  
CIE Type: Semi-Direct

Input Watts (W): 101.6  
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	50	30	10	0	
RCR																						
0	113	113	113	113	108	108	108	108	98	98	98	88	88	88	80	80	80	76				
1	106	103	100	97	101	98	96	93	90	88	86	82	81	79	75	74	73	69				
2	99	93	88	84	95	89	85	81	82	79	76	75	73	71	69	67	66	63				
3	92	84	78	74	88	81	76	71	75	71	67	69	66	63	64	62	59	57				
4	86	77	70	65	82	74	68	63	69	64	60	64	60	57	59	56	54	51				
5	80	70	63	58	77	68	62	57	63	58	54	59	55	51	55	52	49	46				
6	75	65	57	52	72	62	56	51	58	53	49	55	50	47	51	47	45	42				
7	70	59	52	47	67	58	51	46	54	49	45	51	46	43	48	44	41	39				
8	66	55	48	43	63	53	47	42	50	45	41	47	43	39	44	41	38	36				
9	62	51	44	40	60	50	43	39	47	41	38	44	40	36	42	38	35	33				
10	59	48	41	37	56	46	40	36	44	38	35	41	37	34	39	35	32	31				

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

	0°	45°	90°
0°	22249	22249	22249
5°	21890	21836	21998
10°	20482	20756	21334
15°	18620	19211	20281
20°	16529	17388	18911
25°	14394	15534	17375
30°	12329	13684	15921
35°	10223	11616	14165
40°	7854	9288	12070
45°	5678	7033	9711
50°	3868	5241	7703
55°	2515	3791	5986
60°	1442	2669	4327
65°	382	1630	2191
70°	189	503	630
75°	84	41	0
80°	61	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	440.1	5.8
10°-20°	1125.6	14.9
20°-30°	1409.1	18.6
30°-40°	1301.6	17.2
40°-50°	874.6	11.5
50°-60°	451.7	6.0
60°-70°	141.5	1.9
70°-80°	8.9	0.1
80°-90°	1.7	0.0
90°-100°	137.1	1.8
100°-110°	360.4	4.8
110°-120°	373.8	4.9
120°-130°	299.8	4.0
130°-140°	235.2	3.1
140°-150°	180.5	2.4
150°-160°	130.0	1.7
160°-170°	79.6	1.0
170°-180°	26.9	0.4
0°-30°	2974.8	39.3
0°-40°	4276.4	56.4
0°-60°	5602.7	73.9
0°-90°	5754.8	75.9
90°-120°	871.3	11.5
90°-150°	1586.9	20.9
90°-180°	1823.0	24.1
0°-180°	7578.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	4823	4823	4823	4823	4823	
5°	4727	4679	4716	4732	4750	438
15°	3899	3885	4022	4158	4246	1086
25°	2828	2851	3052	3261	3414	1296
35°	1815	1861	2063	2305	2515	1125
45°	870	923	1078	1288	1489	684
55°	313	365	471	605	744	292
65°	35	67	149	180	201	59
75°	5	5	2	0	0	7
85°	0	0	0	0	0	1
90°	2	5	14	7	7	2
95°	18	71	236	122	83	20
105°	65	98	398	605	564	69
115°	115	140	319	637	727	114
125°	160	180	290	491	579	142
135°	191	211	281	396	449	148
145°	222	236	278	338	364	139
155°	251	258	278	305	314	115
165°	270	274	278	289	292	76
175°	281	281	280	283	283	27
180°	281	281	281	281	281	

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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	4822.9	4822.9	4822.9	4822.9	4822.9
2.5°	4834.1	4788.4	4800.5	4800.2	4787.4
5°	4727.2	4679.3	4715.5	4732.3	4750.5
7.5°	4527.5	4490.0	4559.7	4611.9	4649.7
10°	4372.5	4340.6	4430.9	4502.1	4554.5
12.5°	4193.3	4168.7	4277.8	4375.5	4442.5
15°	3898.9	3885.2	4022.5	4157.6	4246.5
17.5°	3583.4	3583.0	3739.8	3907.4	4014.6
20°	3366.9	3373.7	3541.9	3726.7	3852.2
22.5°	3150.4	3166.3	3345.9	3538.6	3682.4
25°	2827.9	2850.7	3051.9	3260.7	3413.6
27.5°	2518.1	2551.4	2763.0	2980.1	3166.2
30°	2314.6	2353.4	2568.9	2797.3	2988.9
32.5°	2114.9	2161.0	2371.1	2612.6	2807.8
35°	1815.3	1860.9	2062.6	2305.4	2515.3
37.5°	1505.9	1550.6	1747.6	1986.6	2213.3
40°	1304.3	1354.5	1542.3	1773.9	2004.3
42.5°	1121.4	1171.6	1348.2	1575.7	1793.3
45°	870.3	922.8	1078.0	1287.9	1488.6
47.5°	662.2	719.2	855.4	1045.3	1228.2
50°	539.0	596.0	730.3	897.6	1073.3
52.5°	440.1	495.3	616.4	774.1	935.2
55°	312.7	365.1	471.3	605.1	744.3
57.5°	216.1	261.2	356.5	468.2	577.2
60°	156.3	199.7	289.3	380.0	469.0
62.5°	104.1	143.8	231.5	300.9	360.7
65°	35.0	66.9	149.3	180.1	200.7
67.5°	17.7	21.4	78.4	82.8	89.6
70°	14.0	14.0	37.3	39.8	46.7
72.5°	10.3	10.3	14.9	19.2	20.5
75°	4.7	4.7	2.3	0.0	0.0
77.5°	2.3	2.3	1.9	0.0	0.0
80°	2.3	2.3	0.0	0.0	0.0
82.5°	0.5	0.5	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0
87.5°	0.4	1.1	2.9	1.4	1.4
90°	1.8	5.3	14.4	7.2	7.2
92.5°	7.6	36.5	80.8	35.8	23.1
95°	18.0	70.9	236.2	121.7	83.0
97.5°	31.4	77.9	353.5	281.1	207.0
100°	41.5	83.8	389.5	394.7	306.6
102.5°	50.1	89.6	399.6	491.7	416.2
105°	64.9	98.4	398.5	605.0	564.5
107.5°	80.1	111.1	375.8	663.9	673.7
110°	90.2	118.4	357.1	679.0	721.4

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	100.3	127.1	339.8	669.4	734.3
115°	115.4	140.1	319.2	636.8	726.8
117.5°	130.2	152.8	305.1	591.6	691.4
120°	138.9	160.0	299.4	561.3	658.2
122.5°	147.5	168.7	295.0	530.9	626.5
125°	160.5	179.9	290.3	490.7	578.9
127.5°	171.0	190.7	286.4	458.3	532.7
130°	176.7	197.9	284.9	438.0	506.7
132.5°	182.5	203.7	283.5	420.5	482.2
135°	191.2	210.6	281.3	396.1	449.0
137.5°	200.2	219.2	281.0	377.9	421.3
140°	207.4	225.0	279.5	363.4	404.0
142.5°	213.2	229.4	279.5	353.2	388.1
145°	221.8	235.9	277.7	337.8	364.3
147.5°	230.5	244.2	277.7	325.1	347.0
150°	236.2	248.6	277.7	317.8	335.4
152.5°	242.0	251.5	277.7	311.9	325.3
155°	250.7	257.7	277.7	305.0	313.8
157.5°	257.2	263.9	277.7	298.8	305.1
160°	261.5	266.8	277.7	295.8	299.4
162.5°	265.8	269.7	277.7	292.9	296.5
165°	270.5	274.0	277.7	288.6	292.1
167.5°	274.8	276.6	279.5	286.8	288.2
170°	277.7	279.5	279.5	286.7	286.7
172.5°	279.2	279.5	279.5	285.3	283.9
175°	281.3	281.3	279.5	283.1	283.1
177.5°	281.3	281.3	279.9	282.7	281.3
180°	281.3	281.3	281.3	281.3	281.3

(END OF REPORT)