

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: P520987

Luminaire Tested: **SQ4-BB-025U-050D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P520987  
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-025U-050D-93050-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 500 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

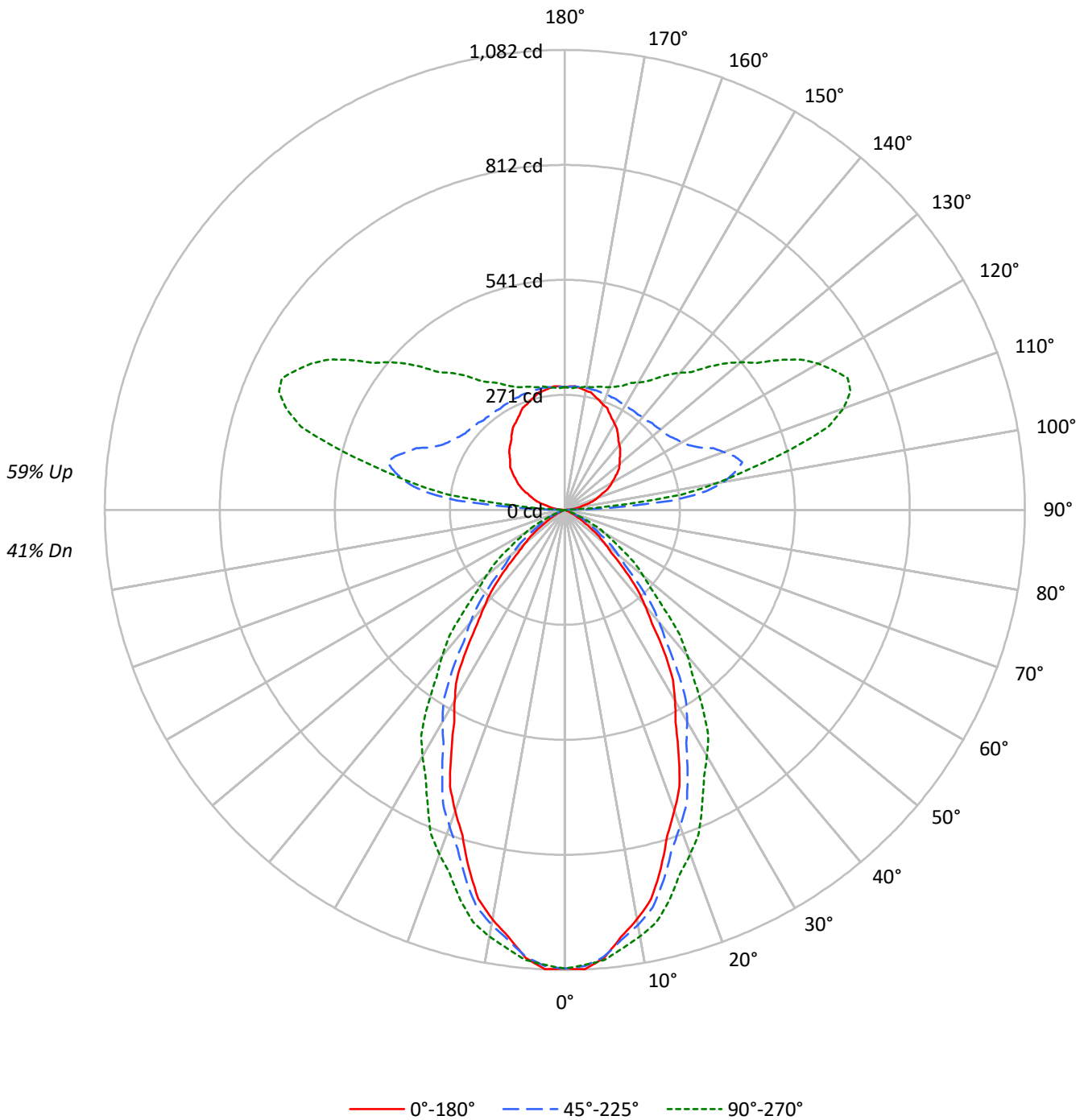
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3155.7 lumens  
Efficiency: N/A  
Efficacy: 89.7 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): 35.2  
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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	97	93	90	87	89	86	83	80	71	69	67	57	56	55	44	44	43	37
2	90	83	78	74	82	77	72	68	64	61	58	52	50	48	41	40	39	34
3	83	75	68	63	76	69	63	59	58	54	51	47	45	42	38	36	35	30
4	77	67	60	55	70	62	56	51	52	48	44	43	40	38	35	33	31	27
5	71	61	53	48	65	56	50	45	47	43	39	39	36	34	32	30	28	25
6	66	55	48	43	60	51	45	40	43	39	35	36	33	30	30	27	26	23
7	61	50	43	38	56	47	40	36	40	35	32	34	30	28	28	25	23	21
8	57	46	39	34	52	43	37	32	37	32	29	31	28	25	26	23	22	19
9	53	42	35	31	49	39	33	29	34	29	26	29	25	23	24	22	20	18
10	50	39	32	28	46	36	31	27	32	27	24	27	24	21	23	20	18	17

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

	0°	45°	90°
0°	9958	9958	9958
5°	9798	9774	9846
10°	9167	9290	9548
15°	8334	8598	9077
20°	7398	7782	8464
25°	6442	6953	7776
30°	5519	6125	7126
35°	4575	5199	6340
40°	3516	4156	5402
45°	2542	3147	4346
50°	1731	2345	3448
55°	1126	1697	2680
60°	646	1194	1938
65°	170	729	980
70°	84	227	281
75°	36	18	0
80°	27	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	98.5	3.1
10°-20°	251.9	8.0
20°-30°	315.3	10.0
30°-40°	291.3	9.2
40°-50°	195.7	6.2
50°-60°	101.1	3.2
60°-70°	31.7	1.0
70°-80°	2.0	0.1
80°-90°	0.0	0.0
90°-100°	148.7	4.7
100°-110°	359.5	11.4
110°-120°	383.4	12.1
120°-130°	310.5	9.8
130°-140°	240.4	7.6
140°-150°	183.4	5.8
150°-160°	132.8	4.2
160°-170°	81.8	2.6
170°-180°	27.7	0.9
0°-30°	665.7	21.1
0°-40°	957.0	30.3
0°-60°	1253.8	39.7
0°-90°	1287.5	40.8
90°-120°	891.6	28.3
90°-150°	1626.0	51.5
90°-180°	1868.0	59.2
0°-180°	3155.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1079	1079	1079	1079	1079	
5°	1058	1047	1055	1059	1063	98
15°	872	869	900	930	950	243
25°	633	638	683	730	764	290
35°	406	416	462	516	563	252
45°	195	206	241	288	333	153
55°	70	82	106	135	167	65
65°	8	15	33	40	45	13
75°	1	1	0	0	0	1
85°	0	0	0	0	0	0
90°	0	0	0	0	0	1
95°	15	74	255	166	116	16
105°	57	99	432	559	552	61
115°	105	134	347	658	734	104
125°	150	172	301	523	615	134
135°	184	206	289	413	475	142
145°	218	234	284	351	378	136
155°	249	260	287	311	322	115
165°	276	280	291	295	300	78
175°	292	290	292	289	288	28
180°	288	288	288	288	288	



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CATALOG NUMBER: SQ4-BB-025U-050D-93050-1D-UNV-STD-W-4 (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1079.3	1079.3	1079.3	1079.3	1079.3
2.5°	1081.8	1071.6	1074.3	1074.2	1071.3
5°	1057.9	1047.1	1055.3	1059.0	1063.1
7.5°	1013.2	1004.8	1020.4	1032.1	1040.5
10°	978.5	971.4	991.6	1007.5	1019.2
12.5°	938.4	932.9	957.3	979.2	994.2
15°	872.5	869.4	900.2	930.4	950.3
17.5°	801.9	801.8	836.9	874.4	898.4
20°	753.5	755.0	792.6	834.0	862.1
22.5°	705.0	708.6	748.8	791.9	824.0
25°	632.8	637.9	683.0	729.7	763.9
27.5°	563.5	571.0	618.3	666.9	708.5
30°	518.0	526.6	574.9	626.0	668.9
32.5°	473.3	483.6	530.6	584.6	628.3
35°	406.2	416.4	461.6	515.9	562.9
37.5°	337.0	347.0	391.1	444.6	495.3
40°	291.9	303.1	345.1	397.0	448.5
42.5°	250.9	262.2	301.7	352.6	401.3
45°	194.8	206.5	241.2	288.2	333.1
47.5°	148.2	160.9	191.4	233.9	274.9
50°	120.6	133.4	163.4	200.9	240.2
52.5°	98.5	110.8	138.0	173.2	209.3
55°	70.0	81.7	105.5	135.4	166.6
57.5°	48.4	58.5	79.8	104.8	129.2
60°	35.0	44.7	64.7	85.0	105.0
62.5°	23.3	32.2	51.8	67.3	80.7
65°	7.8	15.0	33.4	40.3	44.9
67.5°	4.0	4.8	17.5	18.5	20.1
70°	3.1	3.1	8.4	8.9	10.4
72.5°	2.3	2.3	3.3	4.3	4.6
75°	1.0	1.0	0.5	0.0	0.0
77.5°	0.5	0.5	0.4	0.0	0.0
80°	0.5	0.5	0.0	0.0	0.0
82.5°	0.1	0.1	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°	4.9	40.3	94.8	46.1	31.3
95°	14.7	74.4	254.8	165.7	116.1
97.5°	26.0	82.4	335.6	323.3	277.6
100°	34.8	87.4	380.1	401.3	363.6
102.5°	43.1	91.9	409.5	466.1	443.8
105°	57.4	99.3	432.1	559.0	551.8
107.5°	71.5	108.0	418.7	633.5	650.4
110°	81.3	115.3	397.2	665.6	697.3

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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	91.1	122.7	378.2	673.5	727.6
115°	105.1	134.4	347.1	658.1	734.0
117.5°	119.0	146.7	328.9	622.7	711.6
120°	128.3	154.0	317.2	594.9	688.1
122.5°	138.1	161.9	309.8	566.5	658.3
125°	149.7	172.4	301.3	523.4	614.8
127.5°	161.2	182.6	295.3	486.8	567.1
130°	168.1	189.0	293.3	461.4	540.2
132.5°	174.4	196.3	290.4	443.0	509.9
135°	183.9	205.5	289.1	412.7	474.8
137.5°	193.0	214.6	284.8	392.2	439.0
140°	199.8	219.6	284.8	377.4	420.5
142.5°	206.7	226.4	282.3	364.6	400.9
145°	217.6	233.7	283.6	350.8	378.3
147.5°	227.7	243.4	282.8	334.9	357.6
150°	234.1	247.8	284.8	328.0	345.9
152.5°	240.9	254.2	284.3	320.6	336.6
155°	249.3	260.1	287.2	310.7	322.1
157.5°	259.5	268.7	286.6	306.9	313.6
160°	263.4	271.2	289.1	302.0	306.8
162.5°	269.8	276.6	288.1	300.5	303.4
165°	275.6	279.8	290.9	295.3	299.5
167.5°	282.8	285.6	290.2	294.9	295.1
170°	284.8	286.6	292.1	291.6	294.6
172.5°	288.2	289.5	290.7	292.0	290.2
175°	291.5	290.3	291.5	289.0	288.5
177.5°	290.9	290.9	289.9	288.9	286.5
180°	288.5	288.5	288.5	288.5	288.5

(END OF REPORT)