

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: P521000

Luminaire Tested: **SQ4-BB-025U-075D-93050-1D-UNV-STD-W-4 (4500K)**

Issue Date: 5/5/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P521000  
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-075D-93050-1D-UNV-STD-W-4 (4500K)  
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE WITH BLACK BAFFLE  
DOWNLIGHT 750 LUMENS PER FOOT  
UPLIGHT 250 LUMENS PER FOOT  
Light Source: 3000K/5000K CCT, 90 CRI LEDS, TUNED TO 4500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

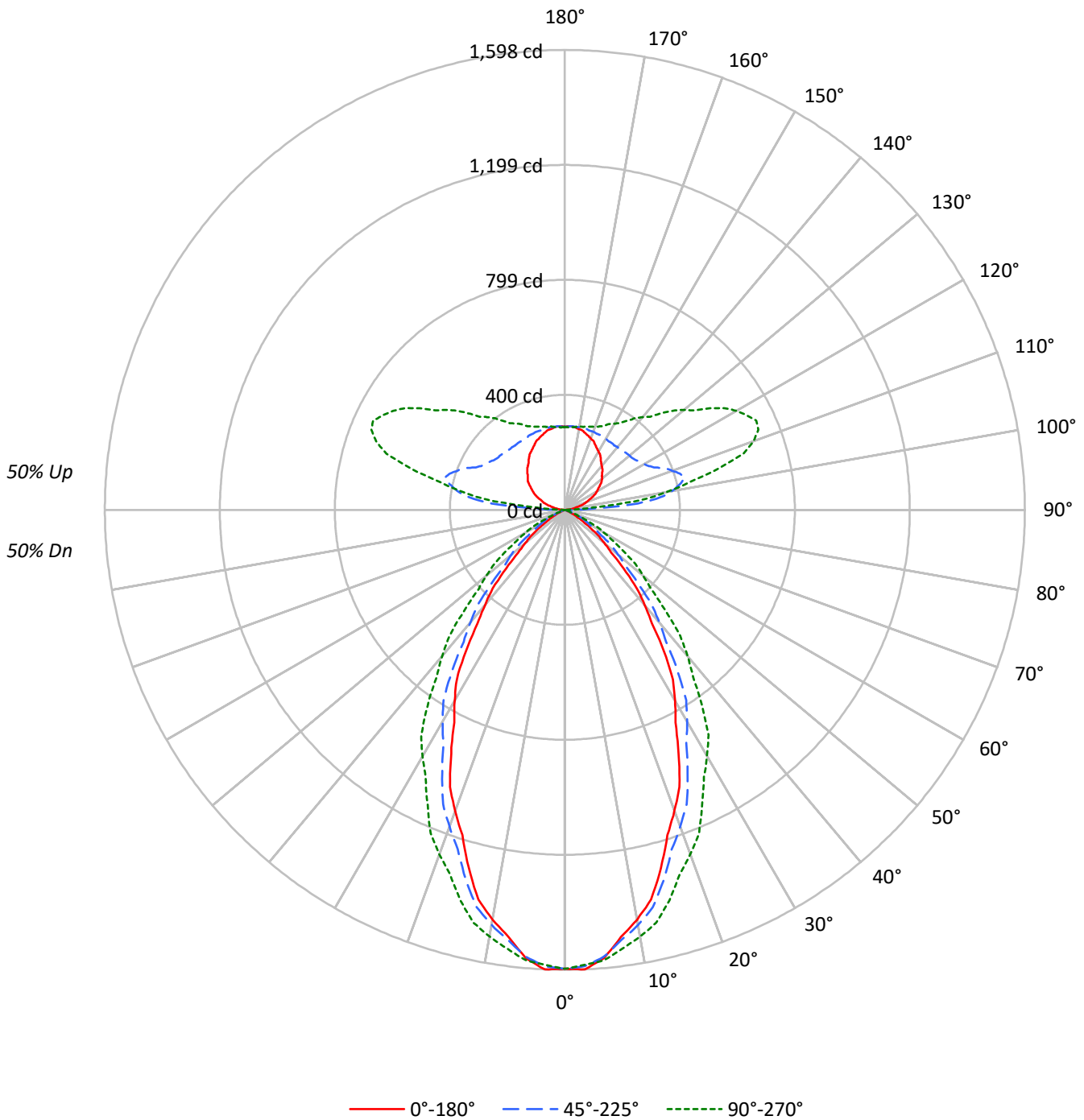
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3770.3 lumens  
Efficiency: N/A  
Efficacy: 82.1 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): 45.9  
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	107	107	107	107	99	99	99	99	84	84	84	69	69	69	57	57	57	50						
1	100	96	93	90	92	89	86	84	76	74	72	64	63	61	53	52	51	46						
2	92	86	81	77	85	80	76	72	69	66	63	58	56	54	49	47	46	42						
3	85	77	71	66	79	72	67	62	62	58	55	53	51	48	45	43	41	38						
4	79	70	63	58	73	65	59	55	57	52	49	49	46	43	41	39	37	34						
5	73	63	56	51	68	59	53	48	52	47	43	45	41	39	38	36	34	31						
6	68	58	50	45	63	54	48	43	47	43	39	41	38	35	36	33	31	28						
7	64	53	46	41	59	50	43	39	44	39	35	38	34	32	33	30	28	26						
8	60	48	41	37	55	46	39	35	40	35	32	35	32	29	31	28	26	24						
9	56	45	38	33	52	42	36	32	37	33	29	33	29	27	29	26	24	22						
10	52	41	35	30	49	39	33	29	35	30	27	31	27	25	27	24	22	20						

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

	0°	45°	90°
0°	14711	14711	14711
5°	14475	14439	14546
10°	13543	13724	14107
15°	12312	12703	13411
20°	10929	11497	12505
25°	9517	10272	11489
30°	8152	9048	10528
35°	6760	7680	9366
40°	5193	6141	7980
45°	3754	4650	6422
50°	2558	3466	5093
55°	1663	2506	3959
60°	954	1766	2862
65°	253	1078	1447
70°	124	332	415
75°	53	29	0
80°	43	0	0
85°	0	0	0



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	145.5	3.9
10°-20°	372.1	9.9
20°-30°	465.9	12.4
30°-40°	430.3	11.4
40°-50°	289.1	7.7
50°-60°	149.4	4.0
60°-70°	46.8	1.2
70°-80°	3.0	0.1
80°-90°	0.1	0.0
90°-100°	148.7	3.9
100°-110°	359.5	9.5
110°-120°	383.4	10.2
120°-130°	310.5	8.2
130°-140°	240.4	6.4
140°-150°	183.4	4.9
150°-160°	132.8	3.5
160°-170°	81.8	2.2
170°-180°	27.7	0.7
0°-30°	983.5	26.1
0°-40°	1413.8	37.5
0°-60°	1852.3	49.1
0°-90°	1902.1	50.4
90°-120°	891.6	23.6
90°-150°	1626.0	43.1
90°-180°	1868.0	49.5
0°-180°	3770.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1594	1594	1594	1594	1594	
5°	1563	1547	1559	1565	1571	145
15°	1289	1284	1330	1374	1404	359
25°	935	942	1009	1078	1129	429
35°	600	615	682	762	832	372
45°	288	305	356	426	492	226
55°	103	121	156	200	246	96
65°	12	22	49	60	66	20
75°	2	2	1	0	0	2
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	



TEST NUMBER: P521000

CATALOG NUMBER: SQ4-BB-025U-075D-93050-1D-UNV-STD-W-4 (4500K)

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1594.5	1594.5	1594.5	1594.5	1594.5
2.5°	1598.2	1583.1	1587.1	1587.0	1582.8
5°	1562.9	1547.0	1559.0	1564.6	1570.6
7.5°	1496.8	1484.5	1507.5	1524.7	1537.3
10°	1445.6	1435.1	1464.9	1488.4	1505.8
12.5°	1386.4	1378.2	1414.3	1446.6	1468.8
15°	1289.0	1284.5	1329.9	1374.5	1404.0
17.5°	1184.7	1184.6	1236.4	1291.8	1327.3
20°	1113.1	1115.4	1171.0	1232.1	1273.6
22.5°	1041.6	1046.8	1106.2	1169.9	1217.4
25°	934.9	942.5	1009.0	1078.0	1128.6
27.5°	832.5	843.5	913.5	985.3	1046.8
30°	765.2	778.1	849.3	924.8	988.2
32.5°	699.2	714.4	783.9	863.7	928.3
35°	600.2	615.2	681.9	762.2	831.6
37.5°	497.9	512.7	577.8	656.8	731.8
40°	431.2	447.8	509.9	586.5	662.6
42.5°	370.7	387.3	445.7	520.9	592.9
45°	287.7	305.1	356.4	425.8	492.2
47.5°	218.9	237.8	282.8	345.6	406.1
50°	178.2	197.1	241.5	296.8	354.8
52.5°	145.5	163.7	203.8	255.9	309.2
55°	103.4	120.7	155.8	200.1	246.1
57.5°	71.4	86.4	117.9	154.8	190.8
60°	51.7	66.0	95.7	125.6	155.1
62.5°	34.4	47.5	76.5	99.5	119.3
65°	11.6	22.1	49.4	59.6	66.3
67.5°	5.9	7.1	25.9	27.4	29.6
70°	4.6	4.6	12.3	13.2	15.4
72.5°	3.4	3.4	4.9	6.3	6.8
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°	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°	<i>91.1</i>	122.7	378.2	673.5	727.6
115°	<i>105.1</i>	134.4	347.1	658.1	734.0
117.5°	<i>119.0</i>	146.7	328.9	622.7	711.6
120°	<i>128.3</i>	154.0	317.2	594.9	688.1
122.5°	<i>138.1</i>	161.9	309.8	566.5	658.3
125°	<i>149.7</i>	172.4	301.3	523.4	614.8
127.5°	<i>161.2</i>	182.6	295.3	486.8	567.1
130°	<i>168.1</i>	189.0	293.3	461.4	540.2
132.5°	<i>174.4</i>	196.3	290.4	443.0	509.9
135°	<i>183.9</i>	205.5	289.1	412.7	474.8
137.5°	<i>193.0</i>	214.6	284.8	392.2	439.0
140°	<i>199.8</i>	219.6	284.8	377.4	420.5
142.5°	<i>206.7</i>	226.4	282.3	364.6	400.9
145°	<i>217.6</i>	233.7	283.6	350.8	378.3
147.5°	<i>227.7</i>	243.4	282.8	334.9	357.6
150°	<i>234.1</i>	247.8	284.8	328.0	345.9
152.5°	<i>240.9</i>	254.2	284.3	320.6	336.6
155°	<i>249.3</i>	260.1	287.2	310.7	322.1
157.5°	<i>259.5</i>	268.7	286.6	306.9	313.6
160°	<i>263.4</i>	271.2	289.1	302.0	306.8
162.5°	<i>269.8</i>	276.6	288.1	300.5	303.4
165°	<i>275.6</i>	279.8	290.9	295.3	299.5
167.5°	<i>282.8</i>	285.6	290.2	294.9	295.1
170°	<i>284.8</i>	286.6	292.1	291.6	294.6
172.5°	<i>288.2</i>	289.5	290.7	292.0	290.2
175°	<i>291.5</i>	290.3	291.5	289.0	288.5
177.5°	<i>290.9</i>	290.9	289.9	288.9	286.5
180°	<i>288.5</i>	288.5	288.5	288.5	288.5

(END OF REPORT)