

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: SURE-LITES

Report Number: H27021

Luminaire Tested: **029-121**

Issue Date: 03/03/2020



**Test Information**

Test Method: LM-79-08  
Report Number: H27021  
Test Lab:  
Issue Date: 03/03/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SURE-LITES  
Catalog Number: 029-121  
Description: SURE-LITES EMERGENCY 4" DIA EMERGENCY HEAD  
EFFICIENCY 87.6  
Light Source: 5.4 WATTS 75 LUMENS Incandescent (Low Voltage)  
6 V WEDGE BASE  
ANSI#939  
Ballast/Driver: -

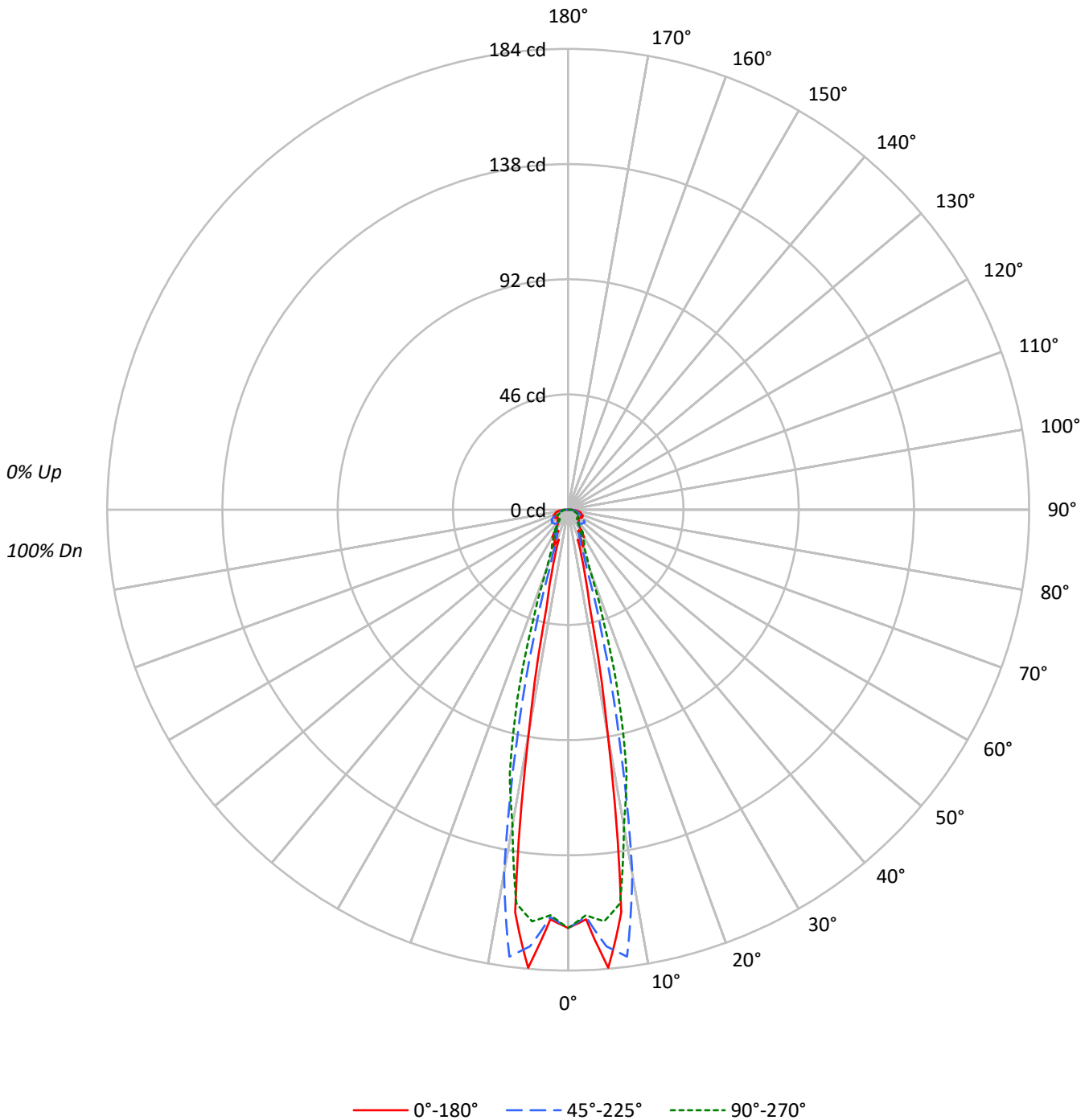
**Summary**

Lumens per Lamp: 75 (1 lamp)  
Luminaire Lumens: 66.0 lumens  
Efficiency: 88.0%  
Efficacy: 13.2 lumens/watt  
Spacing Criteria (0/90/45): 0.36 / 0.49 / 0.4  
Luminous Opening: (L: 0 ' x W: -0.33 ' x H: 0 '  
CIE Type: Direct

Input Watts (W): 5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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: 25 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	102	102	102	102	98	98	98		93	93	93		90	90	90	88
1	97	93	90	86	94	91	88	85	87	85	82		84	82	80		81	79	77	76
2	90	84	79	75	88	82	78	74	79	75	72		76	73	70		74	71	69	67
3	85	77	71	67	83	76	70	66	73	69	65		71	67	64		69	65	63	61
4	80	71	65	61	78	70	65	60	68	63	59		66	62	59		65	61	58	56
5	76	67	61	56	74	66	60	56	64	59	55		63	58	55		61	57	54	53
6	72	63	57	53	71	62	56	52	61	56	52		59	55	51		58	54	51	50
7	69	60	54	50	68	59	53	49	58	53	49		57	52	49		56	52	49	47
8	66	57	51	47	65	56	51	47	55	50	47		54	50	47		53	49	46	45
9	64	54	49	45	63	54	49	45	53	48	45		52	48	45		52	48	45	43
10	61	52	47	43	60	52	47	43	51	46	43		50	46	43		50	46	43	42

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

	0°	45°	90°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



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**ZONAL LUMENS:**

**CANDELA DISTRIBUTION:**

Zone	Lumens	% Fixture	% Lamp		0°	22.5°	45°	67.5°	90°	Flux
0°-10°	15.4	23.3	20.5	0°	167	167	167	167	167	
10°-20°	16.3	24.7	21.8	5°	184	181	175	167	165	15
20°-30°	5.9	8.9	7.9	15°	24	26	53	90	78	8
30°-40°	4.9	7.4	6.5	25°	9	11	10	13	15	5
40°-50°	5.1	7.7	6.7	35°	7	8	7	7	7	5
50°-60°	5.5	8.3	7.3	45°	6	7	8	6	5	5
60°-70°	5.6	8.5	7.5	55°	6	5	8	6	5	5
70°-80°	4.4	6.7	5.9	65°	6	5	6	7	4	6
80°-90°	2.7	4.2	3.7	75°	5	4	4	5	3	5
90°-100°	0.2	0.3	0.3	85°	3	3	2	3	2	3
100°-110°	0.0	0.0	0.0	90°	1	1	1	2	1	1
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0	0
0°-30°	37.6	57.0	50.2	165°	0	0	0	0	0	0
0°-40°	42.5	64.4	56.7	175°	0	0	0	0	0	0
0°-60°	53.0	80.3	70.7	180°	0	0	0	0	0	0
0°-90°	65.8	99.7	87.7							
90°-120°	0.2	0.3	0.3							
90°-150°	0.2	0.3	0.3							
90°-180°	0.0	0.0	0.0							
0°-180°	66.0	100.0	88.0							



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	167.0	167.0	167.0	167.0	167.0
2.5°	163.7	163.8	162.8	162.7	162.1
5°	183.6	181.1	175.0	167.1	165.0
7.5°	162.2	167.0	180.0	170.0	158.5
10°	90.8	111.6	147.5	154.7	127.9
12.5°	39.5	55.2	94.7	121.0	107.6
15°	23.9	25.5	53.4	90.2	78.2
17.5°	12.5	16.9	24.3	71.5	47.8
20°	14.0	12.8	15.0	31.0	24.8
22.5°	16.0	12.3	11.7	15.9	17.2
25°	9.4	10.9	10.3	13.4	15.1
27.5°	9.3	11.4	11.3	11.5	12.6
30°	12.7	10.2	8.7	10.5	9.6
32.5°	9.4	10.2	8.4	7.8	11.0
35°	7.3	8.3	7.2	7.2	7.3
37.5°	6.8	7.2	6.4	5.6	6.4
40°	6.6	7.3	6.9	5.3	5.4
42.5°	6.3	7.7	7.7	6.1	5.0
45°	5.9	7.3	7.9	5.5	5.3
47.5°	5.3	7.2	7.9	5.5	5.0
50°	5.4	6.6	8.2	5.4	4.9
52.5°	5.4	5.9	8.3	5.4	4.7
55°	5.8	5.1	7.6	5.7	4.8
57.5°	6.2	5.2	7.8	5.7	4.8
60°	6.4	5.1	7.7	6.1	4.9
62.5°	5.7	5.1	6.6	6.6	5.0
65°	6.1	4.9	5.5	6.9	4.1
67.5°	6.4	5.1	4.9	7.1	3.7
70°	5.7	4.8	4.5	6.6	3.4
72.5°	5.5	4.5	4.2	5.7	2.6
75°	5.2	3.9	3.8	4.9	2.8
77.5°	5.0	3.5	3.5	4.2	2.5
80°	4.4	3.3	3.0	3.8	2.3
82.5°	3.6	3.0	2.5	3.5	2.1
85°	3.3	2.6	2.1	3.1	1.9
87.5°	2.1	2.2	1.6	2.7	1.7
90°	1.2	1.4	1.0	2.1	1.2
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)