

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: H27018

Luminaire Tested: **029-88**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: H27018
Test Lab:
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SURE-LITES
Catalog Number: 029-88
Description: SURE-LITES 4" DIA EMERGENCY HEAD
SPECULAR REFLECTOR WITH GLASS LENS, EFFICIENCY 87.6
Light Source: 7.2 WATTS 101 LUMENS Incandescent (Low Voltage)
6 V WEDGE BASE
ANSI# 927
Ballast/Driver: -

Summary

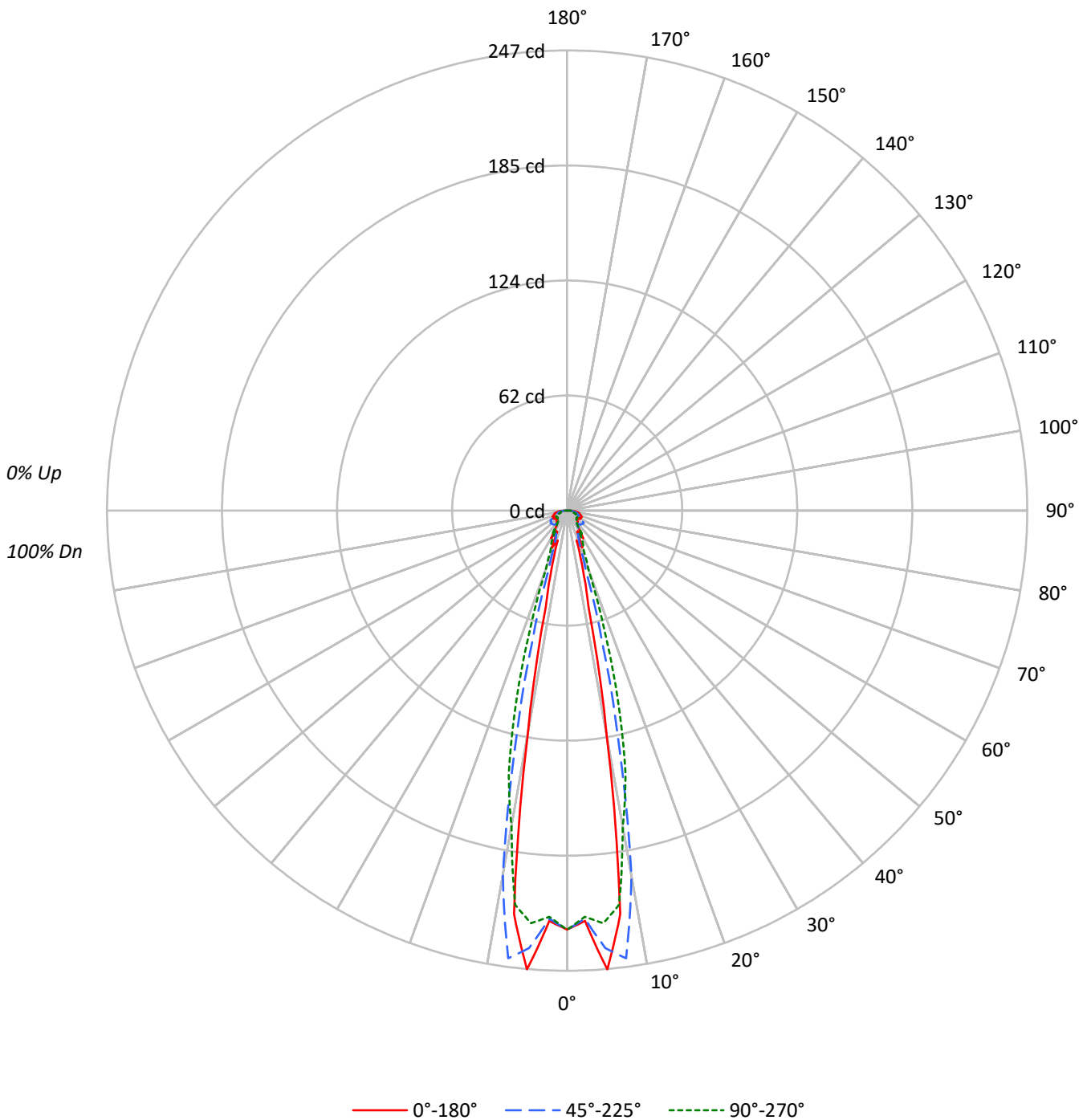
Lumens per Lamp: 101 (1 lamp)
Luminaire Lumens: 88.8 lumens
Efficiency: 88.0%
Efficacy: 12.7 lumens/watt
Spacing Criteria (0/90/45): 0.36 / 0.49 / 0.4
Luminous Opening: (L: 0 ' x W: -0.33 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 7
Input Voltage (V): NR
Input Current (A_{in}): 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	89	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	62	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°	20.7	23.3	20.5	0°	225	225	225	225	225	
10°-20°	22.0	24.7	21.8	5°	247	244	236	225	222	20
20°-30°	8.0	9.0	7.9	15°	32	34	72	122	105	11
30°-40°	6.6	7.4	6.5	25°	13	15	14	18	20	7
40°-50°	6.8	7.7	6.7	35°	10	11	10	10	10	7
50°-60°	7.4	8.3	7.3	45°	8	10	11	7	7	6
60°-70°	7.6	8.5	7.5	55°	8	7	10	8	6	7
70°-80°	5.9	6.7	5.9	65°	8	7	7	9	6	8
80°-90°	3.7	4.1	3.6	75°	7	5	5	6	4	7
90°-100°	0.3	0.3	0.3	85°	4	4	3	4	3	4
100°-110°	0.0	0.0	0.0	90°	2	2	1	3	2	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°	50.7	57.0	50.2	165°	0	0	0	0	0	0
0°-40°	57.2	64.4	56.7	175°	0	0	0	0	0	0
0°-60°	71.4	80.3	70.7	180°	0	0	0	0	0	0
0°-90°	88.6	99.7	87.7							
90°-120°	0.3	0.3	0.3							
90°-150°	0.3	0.3	0.3							
90°-180°	0.0	0.0	0.0							
0°-180°	88.8	100.0	88.0							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	224.9	224.9	224.9	224.9	224.9
2.5°	220.4	220.6	219.3	219.2	218.2
5°	247.2	243.9	235.7	225.0	222.3
7.5°	218.4	224.8	242.4	228.9	213.4
10°	122.2	150.3	198.7	208.4	172.2
12.5°	53.2	74.4	127.5	162.9	144.9
15°	32.1	34.3	71.9	121.5	105.4
17.5°	16.8	22.8	32.7	96.3	64.3
20°	18.9	17.2	20.2	41.8	33.4
22.5°	21.5	16.6	15.8	21.5	23.2
25°	12.6	14.7	13.9	18.1	20.3
27.5°	12.5	15.3	15.3	15.5	16.9
30°	17.2	13.8	11.7	14.2	13.0
32.5°	12.6	13.7	11.2	10.5	14.8
35°	9.8	11.1	9.7	9.7	9.8
37.5°	9.2	9.7	8.6	7.6	8.6
40°	8.9	9.9	9.3	7.2	7.3
42.5°	8.5	10.3	10.3	8.2	6.8
45°	7.9	9.8	10.6	7.4	7.2
47.5°	7.1	9.6	10.6	7.4	6.7
50°	7.3	8.9	11.0	7.3	6.6
52.5°	7.3	7.9	11.2	7.3	6.3
55°	7.8	6.9	10.3	7.6	6.4
57.5°	8.3	7.0	10.5	7.7	6.5
60°	8.6	6.9	10.3	8.2	6.6
62.5°	7.7	6.8	8.9	8.9	6.7
65°	8.1	6.7	7.4	9.3	5.5
67.5°	8.6	6.9	6.6	9.5	5.0
70°	7.7	6.4	6.1	8.9	4.6
72.5°	7.4	6.0	5.7	7.7	3.5
75°	7.0	5.3	5.1	6.5	3.8
77.5°	6.7	4.7	4.8	5.6	3.4
80°	5.9	4.5	4.0	5.1	3.1
82.5°	4.9	4.0	3.4	4.6	2.9
85°	4.5	3.5	2.8	4.2	2.6
87.5°	2.8	3.0	2.1	3.7	2.2
90°	1.6	1.9	1.3	2.8	1.6
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)