

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:

Luminaire Tested: **029-09**

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number:
Test Lab:
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SURE-LITES
Catalog Number: 029-09
Description: SURE-LITES EMERGENCY
EFFICIENCY 99.8
Light Source: 25PAR36 25 WATTS 128 LUMENS Incandescent (Low Voltage)
6 V PAR 36 INCANDESCENT SEALED BEAM
ANSI# 4510
Ballast/Driver: -

Summary

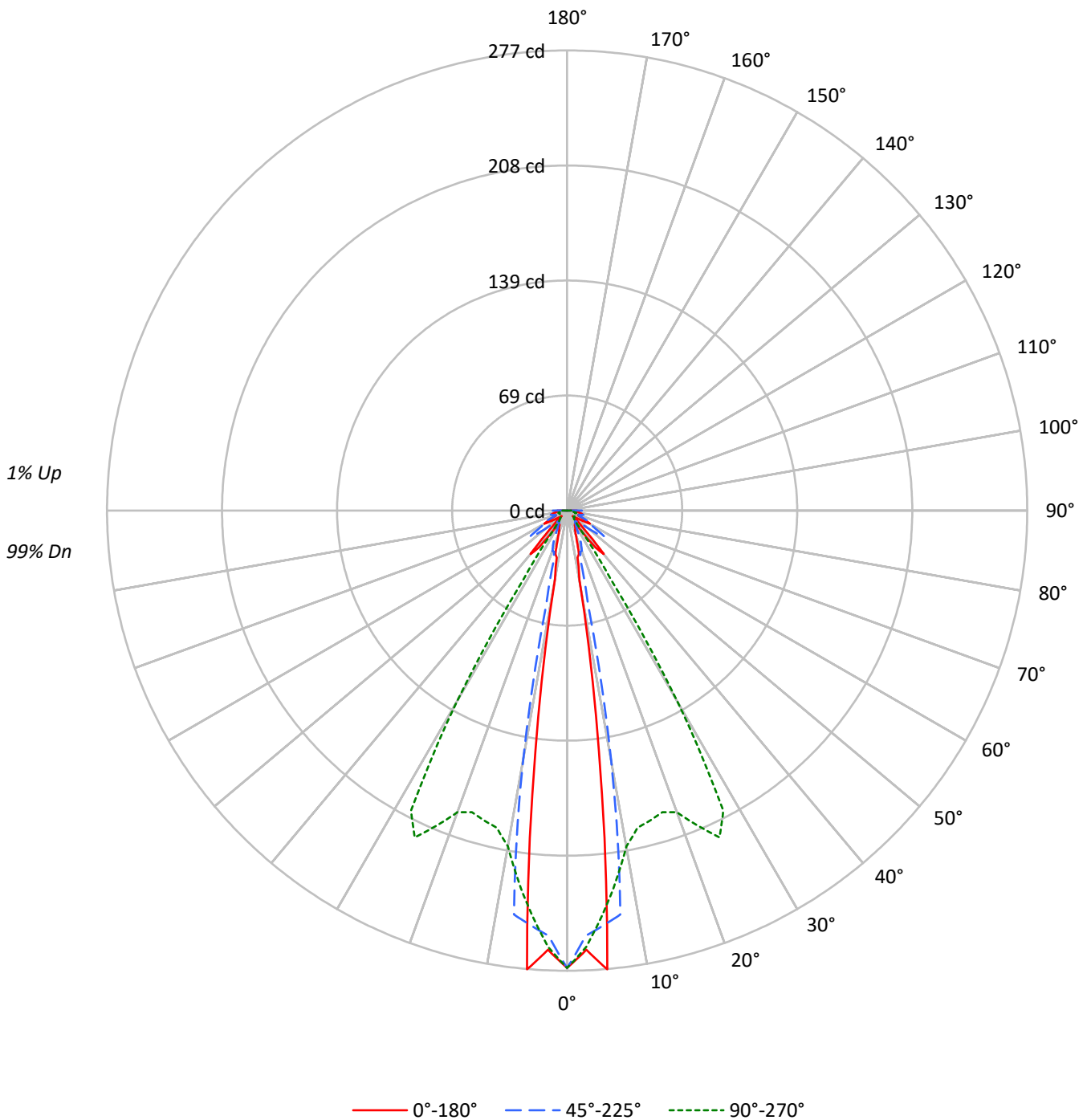
Lumens per Lamp: 128 (1 lamp)
Luminaire Lumens: 128.2 lumens
Efficiency: 100.1%
Efficacy: 5.1 lumens/watt
Spacing Criteria (0/90/45): 0.27 / 1.05 / 0.31
Luminous Opening: (L: 0 ' x W: -0.38 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 25
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	119	119	119	119	116	116	116	116	111	111	111		106	106	106		101	101	101	99
1	109	104	100	96	106	102	98	94	97	94	91		93	91	88		89	87	85	83
2	101	93	87	82	98	91	86	81	88	83	79		84	80	77		81	78	75	73
3	94	85	78	72	92	83	77	71	80	75	70		77	73	69		75	71	67	65
4	88	78	70	65	86	77	70	64	74	68	63		72	67	62		70	65	61	60
5	83	72	65	59	81	71	64	59	69	63	58		67	62	57		65	61	57	55
6	79	67	60	54	77	66	59	54	65	58	54		63	57	53		62	57	53	51
7	75	63	56	51	73	62	55	51	61	55	50		60	54	50		58	53	49	48
8	71	60	52	48	69	59	52	47	58	52	47		56	51	47		55	50	47	45
9	68	56	50	45	66	56	49	45	55	49	45		54	48	44		53	48	44	43
10	65	54	47	43	64	53	47	43	52	46	42		51	46	42		51	46	42	41

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°	20.4	16.0	16.0	0°	275	275	275	275	275	
10°-20°	24.4	19.1	19.1	5°	277	268	251	244	244	17
20°-30°	21.7	17.0	17.0	15°	27	27	31	176	193	7
30°-40°	11.4	8.9	8.9	25°	12	12	18	50	217	5
40°-50°	11.5	9.0	9.0	35°	14	10	8	24	15	12
50°-60°	11.7	9.1	9.1	45°	5	28	11	15	6	9
60°-70°	9.7	7.5	7.6	55°	10	9	27	14	5	9
70°-80°	8.3	6.5	6.5	65°	8	14	10	7	5	10
80°-90°	7.9	6.2	6.2	75°	10	8	10	7	6	9
90°-100°	1.0	0.7	0.8	85°	6	7	10	7	3	5
100°-110°	0.0	0.0	0.0	90°	6	8	9	6	3	2
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°	66.6	52.0	52.1	165°	0	0	0	0	0	0
0°-40°	78.0	60.9	61.0	175°	0	0	0	0	0	0
0°-60°	101.3	79.0	79.1	180°	0	0	0	0	0	0
0°-90°	127.2	99.3	99.4							
90°-120°	1.0	0.7	0.8							
90°-150°	1.0	0.7	0.8							
90°-180°	1.0	0.8	0.8							
0°-180°	128.2	100.0	100.1							



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	275.3	275.3	275.3	275.3	275.3
2.5°	264.6	261.6	256.2	255.6	262.9
5°	277.2	267.8	250.6	244.1	244.2
7.5°	145.8	190.6	245.3	226.5	225.0
10°	42.1	50.9	153.0	214.6	205.3
12.5°	29.0	30.6	58.0	204.7	195.6
15°	27.1	26.9	31.3	176.5	193.1
17.5°	20.0	22.4	26.0	137.2	190.4
20°	14.8	16.4	25.9	98.6	193.2
22.5°	12.5	13.6	21.9	69.9	205.2
25°	11.6	11.9	17.7	50.2	217.0
27.5°	9.9	11.1	12.8	40.9	203.5
30°	9.3	10.0	11.0	31.4	132.9
32.5°	9.6	8.9	9.3	24.7	48.6
35°	14.2	9.5	8.2	23.9	15.3
37.5°	27.8	13.2	8.0	25.9	8.0
40°	34.2	23.1	8.6	24.3	6.5
42.5°	15.8	33.9	9.5	19.8	5.9
45°	4.7	27.5	10.7	15.0	5.7
47.5°	6.2	15.5	12.7	12.7	5.7
50°	6.7	10.3	16.8	12.0	5.7
52.5°	7.4	10.8	22.8	11.9	5.5
55°	9.7	9.1	27.2	13.6	5.4
57.5°	12.0	9.5	20.1	14.0	5.2
60°	15.8	10.7	15.5	12.2	5.0
62.5°	12.2	13.1	14.3	9.9	5.2
65°	7.7	14.1	10.1	7.4	4.9
67.5°	7.2	13.0	7.3	6.6	4.8
70°	7.9	9.5	7.8	6.7	4.8
72.5°	8.6	7.8	8.7	6.8	5.3
75°	9.5	7.7	9.8	7.1	5.5
77.5°	9.3	8.3	10.5	7.2	4.5
80°	7.5	8.0	10.4	7.1	3.7
82.5°	6.7	7.7	10.0	7.1	3.4
85°	6.2	6.8	10.1	7.3	3.1
87.5°	5.7	6.4	10.7	6.6	3.1
90°	6.0	7.7	9.3	6.4	3.3
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)