

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: E430-19

Luminaire Tested:

Issue Date: 03/03/2020

Test Information

Test Method: LM-79-08
Report Number: E430-19
Test Lab:
Issue Date: 03/03/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SURE-LITES
Catalog Number:
Description: SURE-LITES EMERGENCY
EFFICIENCY 80.6
Light Source: 138 LUMENS Incandescent (Low Voltage)
ANSI# 915
Ballast/Driver: -

Summary

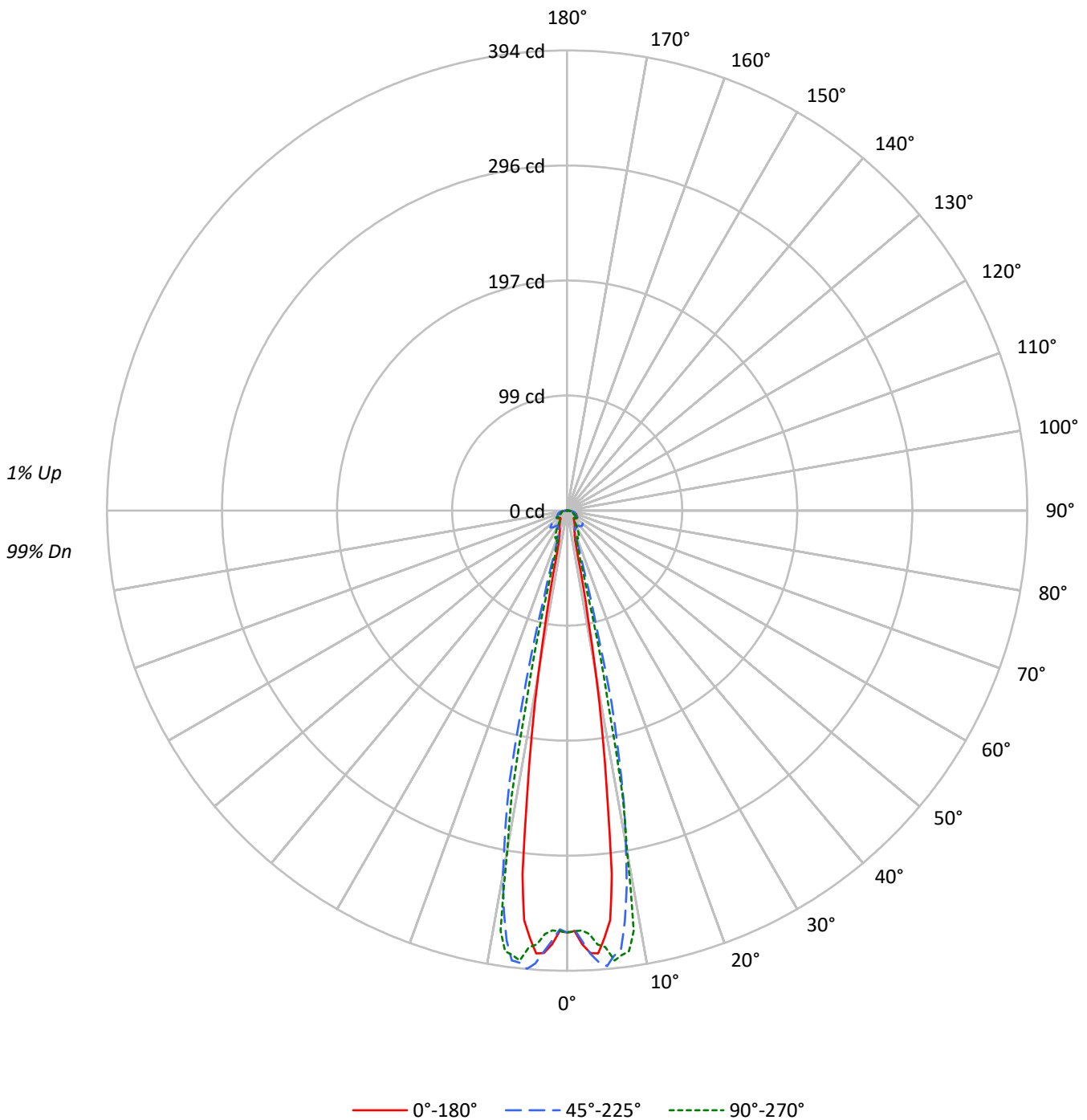
Lumens per Lamp: 138 (1 lamp)
Luminaire Lumens: 111.0 lumens
Efficiency: 80.4%
Efficacy: 11.1 lumens/watt
Spacing Criteria (0/90/45): 0.32 / 0.41 / 0.36
Luminous Opening: (L: 0.38 ' x W: -0.38 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 10
Input Voltage (V): NR
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: 25 FT



TEST NUMBER: E430-19
CATALOG NUMBER:

Luminous Intensity Polar Plot





TEST NUMBER: E430-19

CATALOG NUMBER:

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20												
RC	80				70				50				30				10												
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10									
RCR																													
0	96	96	96	96	94	94	94	94	89	89	89	85	85	85	82	82	82	80											
1	89	86	83	80	87	84	81	79	80	78	76	77	75	74	74	73	71	70											
2	83	77	73	69	81	76	72	68	73	70	67	70	68	65	68	66	64	62											
3	78	71	66	62	76	70	65	61	68	63	60	65	62	59	63	61	58	57											
4	74	66	61	56	72	65	60	56	63	59	55	61	58	54	60	56	54	52											
5	70	62	56	52	68	61	56	52	59	55	51	58	54	51	57	53	50	49											
6	67	59	53	49	65	58	53	49	56	52	49	55	51	48	54	50	48	46											
7	64	56	50	47	63	55	50	46	54	49	46	53	49	46	52	48	46	44											
8	61	53	48	44	60	53	48	44	52	47	44	51	47	44	50	46	44	42											
9	59	51	46	43	58	51	46	43	50	45	42	49	45	42	48	45	42	41											
10	57	49	44	41	56	49	44	41	48	44	41	47	44	41	47	43	41	40											

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
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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CATALOG NUMBER:

ZONAL LUMENS:

CANDELA DISTRIBUTION:

Zone	Lumens	% Fixture	% Lamp	0°	45°	90°	135°	180°	Flux
0°-10°	32.8	29.5	23.7	0°	361	361	361	361	
10°-20°	21.0	18.9	15.2	5°	367	391	375	394	27
20°-30°	8.4	7.6	6.1	15°	27	74	43	76	11
30°-40°	8.5	7.6	6.1	25°	16	17	24	18	7
40°-50°	9.4	8.5	6.8	35°	10	16	11	16	7
50°-60°	10.2	9.2	7.4	45°	9	18	9	20	7
60°-70°	9.3	8.4	6.8	55°	11	12	11	12	9
70°-80°	7.1	6.4	5.1	65°	9	8	6	9	9
80°-90°	3.7	3.3	2.7	75°	7	7	5	7	6
90°-100°	0.9	0.8	0.6	85°	2	3	2	3	2
100°-110°	0.0	0.0	0.0	90°	1	1	1	1	0
110°-120°	0.0	0.0	0.0	95°	0	0	0	0	0
120°-130°	0.0	0.0	0.0	105°	0	0	0	0	0
130°-140°	0.0	0.0	0.0	115°	0	0	0	0	0
140°-150°	0.0	0.0	0.0	125°	0	0	0	0	0
150°-160°	0.0	0.0	0.0	135°	0	0	0	0	0
160°-170°	0.0	0.0	0.0	145°	0	0	0	0	0
170°-180°	0.0	0.0	0.0	155°	0	0	0	0	0
0°-30°	62.2	56.0	45.0	165°	0	0	0	0	0
0°-40°	70.6	63.6	51.2	175°	0	0	0	0	0
0°-60°	90.2	81.3	65.4	180°	0	0	0	0	0
0°-90°	110.3	99.4	80.0						
90°-120°	0.9	0.8	0.7						
90°-150°	0.9	0.8	0.7						
90°-180°	1.0	0.9	0.7						
0°-180°	111.0	100.0	80.4						



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CATALOG NUMBER:

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	50°	55°	65°	75°	85°
0°	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3
1°	360.1	359.9	359.7	359.2	358.2	358.7	358.6	359.6	359.8	359.8	359.0
2°	371.7	372.2	371.6	369.6	371.0	368.9	368.6	366.9	365.1	362.6	359.3
3°	379.3	380.7	380.9	382.6	381.6	380.1	377.8	376.9	370.9	366.0	365.4
4°	380.1	379.6	381.0	385.0	387.3	387.4	388.5	387.8	383.0	376.4	370.4
5°	366.9	368.4	374.0	380.2	385.0	391.5	393.8	393.1	388.6	382.0	376.0
6°	352.6	351.0	360.2	371.6	376.7	383.3	389.3	394.8	398.7	393.6	386.4
7°	313.7	317.3	321.4	331.8	350.1	378.6	388.0	392.5	399.2	394.7	386.1
8°	245.2	242.6	208.2	284.6	316.2	355.0	371.8	380.6	387.6	391.0	383.0
9°	193.9	194.8	208.7	223.8	270.6	326.0	346.7	367.0	374.3	377.7	367.3
10°	139.7	136.3	145.8	177.9	227.4	289.2	316.5	337.8	343.2	324.7	305.3
11°	93.3	95.7	106.3	119.6	181.2	254.6	276.8	298.6	297.3	262.4	249.1
12°	66.3	66.5	69.5	88.4	135.5	210.5	237.5	249.8	228.2	206.1	175.5
13°	42.7	45.3	50.4	63.2	101.4	168.4	174.2	180.4	167.6	132.1	117.5
14°	32.1	33.3	33.7	45.4	72.8	109.9	123.8	123.7	97.0	77.5	65.7
15°	27.0	27.4	27.2	33.2	54.8	74.1	75.5	75.1	59.6	49.5	45.8
16°	24.0	25.2	23.3	27.5	37.4	47.1	49.8	47.7	39.5	35.4	34.3
17°	21.8	23.5	21.8	24.0	27.1	34.7	33.7	31.1	30.3	73.4	27.9
18°	20.8	22.4	20.3	21.0	21.8	25.7	26.5	26.3	26.3	26.0	26.7
19°	19.6	21.1	19.7	19.1	19.7	23.3	22.1	23.3	23.8	25.2	26.6
20°	18.6	19.3	19.2	17.9	19.0	20.4	20.1	22.5	22.6	23.2	24.2
21°	17.5	17.9	18.7	17.9	19.5	20.0	20.2	21.6	22.0	22.4	23.5
22°	17.1	17.3	18.4	16.9	19.5	18.9	18.5	19.3	21.5	23.1	25.0
23°	16.6	16.9	17.9	17.2	18.1	17.4	17.9	18.1	21.4	23.5	25.7
24°	16.1	16.6	17.5	17.6	16.8	16.3	18.6	18.2	21.4	22.2	24.9
25°	15.7	15.9	16.4	17.7	16.2	16.9	17.5	18.7	20.1	21.7	23.4
30°	12.7	13.1	14.2	15.2	16.7	15.6	15.9	17.3	15.4	15.6	15.9
35°	10.4	10.3	13.9	12.7	16.1	15.8	15.7	14.0	13.3	10.7	10.9
40°	8.8	8.8	11.9	11.2	14.7	17.5	18.7	16.6	11.2	9.4	9.4
45°	8.6	8.4	9.5	11.0	13.3	18.3	20.5	16.7	11.9	9.5	9.1
50°	10.4	8.7	9.5	9.6	13.5	17.3	16.0	13.7	13.6	10.5	9.4
55°	10.6	9.4	10.1	9.8	11.9	12.4	11.9	11.8	14.5	12.8	10.6
60°	9.5	8.7	9.1	9.1	11.4	8.3	9.4	12.5	16.2	13.1	7.9
65°	8.8	8.4	8.4	9.1	9.4	8.2	8.8	10.9	14.0	9.7	6.2
75°	6.5	6.3	6.8	7.5	6.7	6.8	7.3	5.9	7.8	10.1	6.1
85°	2.0	2.1	2.3	3.0	3.4	2.9	3.0	2.7	4.4	5.1	2.9
95°	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CATALOG NUMBER:

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	140°	145°	155°	165°	175°
0°	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3	361.3
1°	360.1	359.0	359.8	359.8	359.6	358.6	358.7	358.2	359.2	359.7	359.9
2°	359.8	359.3	362.6	365.1	366.9	368.6	368.9	371.0	369.6	371.6	372.2
3°	363.0	365.4	366.0	370.9	376.9	377.8	380.1	381.6	382.6	380.9	380.7
4°	372.6	370.4	376.4	383.0	387.8	388.5	387.4	387.3	385.0	381.0	379.6
5°	375.1	376.0	382.0	388.6	393.1	393.8	391.5	385.0	380.2	374.0	368.4
6°	387.4	386.4	393.6	398.7	394.8	389.3	383.3	376.7	371.6	360.2	351.0
7°	383.5	386.1	394.7	399.2	392.5	388.0	378.6	350.1	331.8	321.4	317.3
8°	381.0	383.0	391.0	387.6	380.6	371.8	355.0	316.2	284.6	208.2	242.6
9°	364.2	367.3	377.7	374.3	367.0	346.7	326.0	270.6	223.8	208.7	194.8
10°	294.4	305.3	324.7	343.2	337.8	316.5	289.2	227.4	177.9	145.8	136.3
11°	249.8	249.1	262.4	297.3	298.6	276.8	254.6	181.2	119.6	106.3	95.7
12°	170.3	175.5	206.1	228.2	249.8	237.5	210.5	135.5	88.4	69.5	66.5
13°	119.7	117.5	132.1	167.6	180.4	174.2	168.4	101.4	63.2	50.4	45.3
14°	66.2	65.7	77.5	97.0	123.7	123.8	109.9	72.8	45.4	33.7	33.3
15°	43.3	45.8	49.5	59.6	75.1	75.5	74.1	54.8	33.2	27.2	27.4
16°	33.9	34.3	35.4	39.5	47.7	49.8	47.1	37.4	27.5	23.3	25.2
17°	28.4	27.9	73.4	30.3	31.1	33.7	34.7	27.1	24.0	21.8	23.5
18°	26.6	26.7	26.0	26.3	26.3	26.5	25.7	21.8	21.0	20.3	22.4
19°	27.5	26.6	25.2	23.8	23.3	22.1	23.3	19.7	19.1	19.7	21.1
20°	24.0	24.2	23.2	22.6	22.5	20.1	20.4	19.0	17.9	19.2	19.3
21°	24.1	23.5	22.4	22.0	21.6	20.2	20.0	19.5	17.9	18.7	17.9
22°	25.8	25.0	23.1	21.5	19.3	18.5	18.9	19.5	16.9	18.4	17.3
23°	25.6	25.7	23.5	21.4	18.1	17.9	17.4	18.1	17.2	17.9	16.9
24°	24.9	24.9	22.2	21.4	18.2	18.6	16.3	16.8	17.6	17.5	16.6
25°	24.1	23.4	21.7	20.1	18.7	17.5	16.9	16.2	17.7	16.4	15.9
30°	16.7	15.9	15.6	15.4	17.3	15.9	15.6	16.7	15.2	14.2	13.1
35°	10.8	10.9	10.7	13.3	14.0	15.7	15.8	16.1	12.7	13.9	10.3
40°	9.5	9.4	9.4	11.2	16.6	18.7	17.5	14.7	11.2	11.9	8.8
45°	9.1	9.1	9.5	11.9	16.7	20.5	18.3	13.3	11.0	9.5	8.4
50°	9.1	9.4	10.5	13.6	13.7	16.0	17.3	13.5	9.6	9.5	8.7
55°	11.1	10.6	12.8	14.5	11.8	11.9	12.4	11.9	9.8	10.1	9.4
60°	7.2	7.9	13.1	16.2	12.5	9.4	8.3	11.4	9.1	9.1	8.7
65°	5.6	6.2	9.7	14.0	10.9	8.8	8.2	9.4	9.1	8.4	8.4
75°	5.1	6.1	10.1	7.8	5.9	7.3	6.8	6.7	7.5	6.8	6.3
85°	2.3	2.9	5.1	4.4	2.7	3.0	2.9	3.4	3.0	2.3	2.1
95°	0.1	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



TEST NUMBER: E430-19

CATALOG NUMBER:

CANDELA DISTRIBUTION (continued):

	180°
0°	361.3
1°	360.1
2°	371.7
3°	379.3
4°	380.1
5°	366.9
6°	352.6
7°	313.7
8°	245.2
9°	193.9
10°	139.7
11°	93.3
12°	66.3
13°	42.7
14°	32.1
15°	27.0
16°	24.0
17°	21.8
18°	20.8
19°	19.6
20°	18.6
21°	17.5
22°	17.1
23°	16.6
24°	16.1
25°	15.7
30°	12.7
35°	10.4
40°	8.8
45°	8.6
50°	10.4
55°	10.6
60°	9.5
65°	8.8
75°	6.5
85°	2.0
95°	0.0
105°	0.0
115°	0.0
180°	0.0

(END OF REPORT)