

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: SHAPER

Report Number: P33617

Luminaire Tested: **441GG-12-P1S-L0/835-UNV-NA-24**

Test Date: 12/01/14

**Test Information**

Test Method: LM-79-08  
Report Number: P33617  
Test Lab: INNOVATION CENTER-P3  
Test Date: 12/01/14  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 441GG-12-P1S-L0/835-UNV-NA-24  
Description: SHAPER STARTER HOUSE SERIES RETRO LUMINOUS 12 INCH GLOBE.  
Light Source: (18) 3500K LEDS  
Ballast/Driver: (1) ROAL ELECTRONIC DRIVER  
RMLD-1000A-M-AA

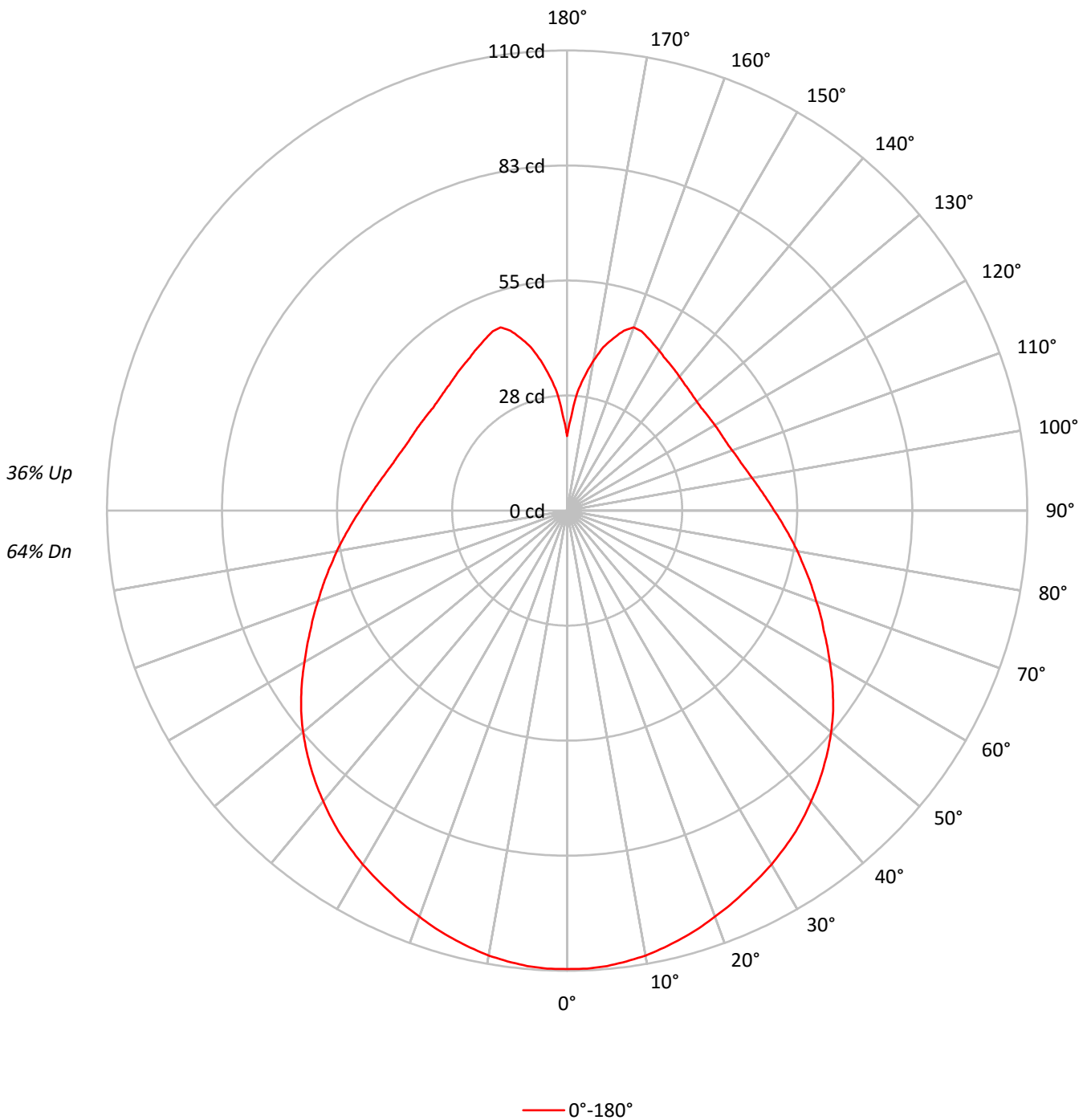
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 739.4 lumens  
Efficiency: N/A  
Efficacy: 67.2 lumens/watt  
Spacing Criteria (0/90/45): 1.34 / 1.34 / 1.5  
Luminous Opening: Vertical Cylinder (Dia: 1.17' x H: 0.62')  
CIE Type: Semi-Direct

Input Watts (W): 11  
Input Voltage (V): 120.05  
Input Current (Ain): 0.0930  
Voltage Rise (V): NR  
Power Factor: 0.9923  
Total Harmonic Distortion (THDi): 12.9  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: HR  
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	110	110	110	110	104	104	104	104	91	91	91		79	79	79		69	69	69	64
1	97	91	86	81	91	85	81	76	74	71	67		64	61	59		55	53	51	46
2	87	78	70	64	81	73	66	60	63	58	53		55	50	47		46	43	40	36
3	79	67	59	52	73	63	55	49	55	48	43		47	42	38		40	36	33	29
4	72	59	50	43	67	55	47	41	48	41	36		42	36	32		35	31	28	24
5	66	52	43	36	61	49	41	34	43	36	31		37	31	27		32	27	23	20
6	60	47	38	31	56	44	36	29	38	31	26		33	28	23		28	24	20	18
7	56	42	33	27	52	39	31	26	35	28	23		30	25	20		26	21	18	15
8	52	38	30	24	48	36	28	23	32	25	20		27	22	18		24	19	16	13
9	48	35	27	21	45	33	25	20	29	22	18		25	20	16		22	17	14	12
10	45	32	24	19	42	30	23	18	27	20	16		23	18	14		20	16	13	11

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

	0°
0°	1104
5°	1043
10°	986
15°	933
20°	887
25°	847
30°	815
35°	786
40°	758
45°	734
50°	712
55°	690
60°	669
65°	655
70°	649
75°	653
80°	666
85°	690



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	10.4	1.4
10°-20°	29.9	4.0
20°-30°	46.5	6.3
30°-40°	59.2	8.0
40°-50°	67.0	9.1
50°-60°	69.5	9.4
60°-70°	67.3	9.1
70°-80°	63.0	8.5
80°-90°	57.4	7.8
90°-100°	51.4	6.9
100°-110°	45.8	6.2
110°-120°	41.0	5.5
120°-130°	36.4	4.9
130°-140°	31.8	4.3
140°-150°	26.9	3.6
150°-160°	21.0	2.8
160°-170°	12.1	1.6
170°-180°	2.9	0.4
0°-30°	86.8	11.7
0°-40°	146.0	19.7
0°-60°	282.5	38.2
0°-90°	470.1	63.6
90°-120°	138.2	18.7
90°-150°	233.2	31.5
90°-180°	269.0	36.4
0°-180°	739.4	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	110	
5°	109	10
15°	106	30
25°	100	46
35°	94	59
45°	87	67
55°	78	70
65°	68	67
75°	60	63
85°	52	44
90°	50	27
95°	47	38
105°	43	46
115°	41	41
125°	40	36
135°	41	32
145°	43	27
155°	46	21
165°	43	12
175°	28	3
180°	18	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	109.6
2.5°	109.6
5°	109.3
7.5°	108.7
10°	108.0
12.5°	107.0
15°	105.9
17.5°	104.7
20°	103.3
22.5°	102.0
25°	100.5
27.5°	99.1
30°	97.7
32.5°	96.1
35°	94.5
37.5°	92.7
40°	90.7
42.5°	88.8
45°	86.7
47.5°	84.6
50°	82.4
52.5°	80.1
55°	77.6
57.5°	75.1
60°	72.5
62.5°	70.1
65°	67.7
67.5°	65.6
70°	63.4
72.5°	61.4
75°	59.5
77.5°	57.6
80°	55.9
82.5°	54.2
85°	52.5
87.5°	51.0
90°	49.5
92.5°	48.2
95°	47.0
97.5°	45.9
100°	44.9
102.5°	44.0
105°	43.2
107.5°	42.6
110°	42.0

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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	41.5
115°	41.2
117.5°	41.0
120°	40.8
122.5°	40.6
125°	40.5
127.5°	40.4
130°	40.5
132.5°	40.7
135°	41.0
137.5°	41.3
140°	41.8
142.5°	42.3
145°	42.8
147.5°	43.3
150°	44.1
152.5°	44.8
155°	45.6
157.5°	46.4
160°	46.6
162.5°	45.1
165°	42.6
167.5°	40.0
170°	36.4
172.5°	32.5
175°	28.5
177.5°	22.6
180°	17.8

(END OF REPORT)