

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: P394018

Luminaire Tested: **146-28-L3-827**

Issue Date: 4/2/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P394018  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33614)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/2/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: SHAPER  
Catalog Number: 146-28-L3-827  
Description: SHAPER 106 FABRIQUE ROUND CYLINDER PENDANT  
28 INCH HEIGHT  
Light Source: 2700K CCT, 80 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

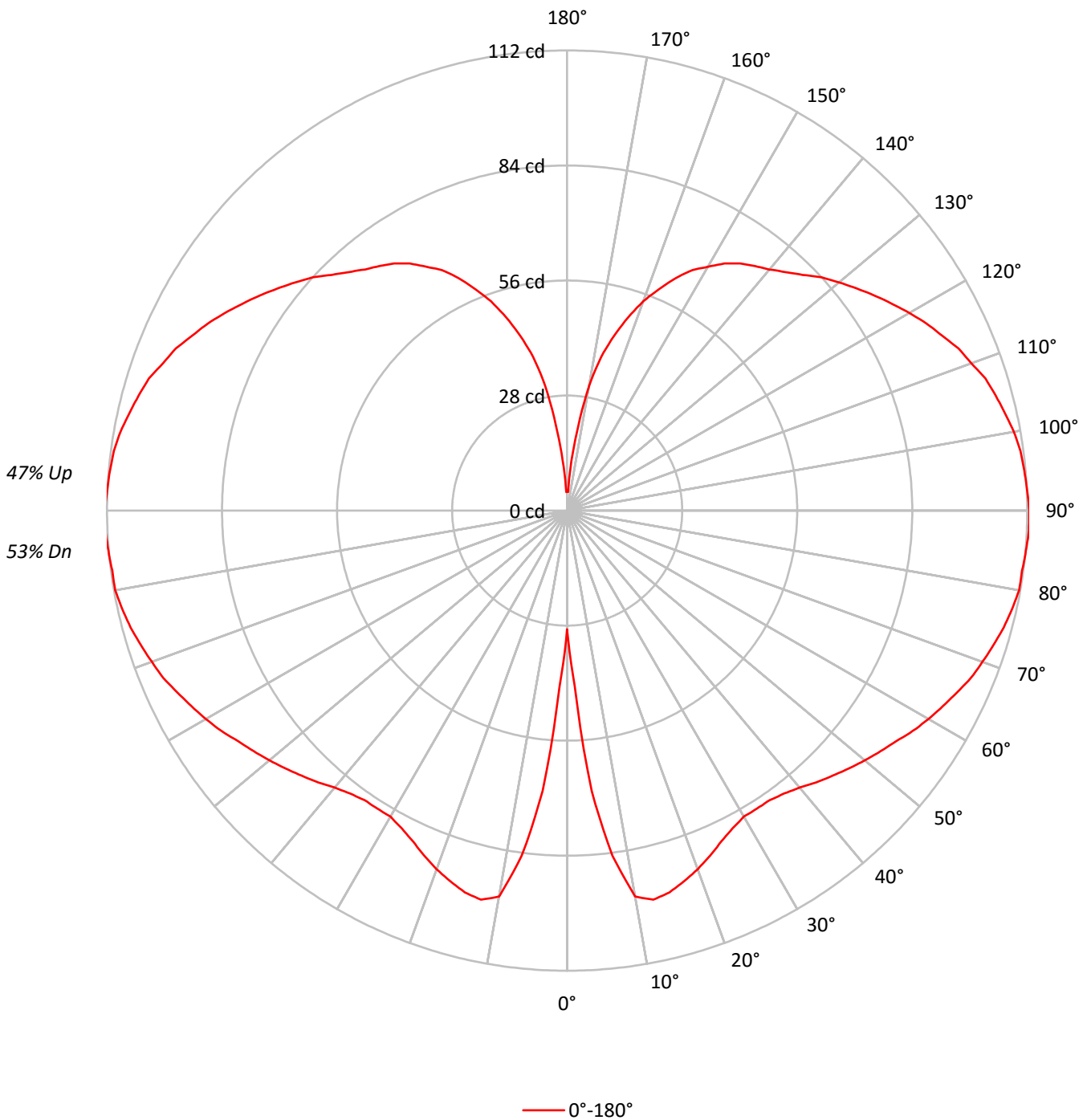
Lumens per Lamp: N/A  
Luminaire Lumens: 1201.3 lumens  
Efficiency: N/A  
Efficacy: 58.9 lumens/watt  
Spacing Criteria (0/90/45): 3.25 / 3.25 / 3.15  
Luminous Opening: Vertical Cylinder (Dia: 0.83' x H: 2.33')  
CIE Type: General Diffuse

Input Watts (W): 20.4  
Input Voltage (V): 120  
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



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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	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	53
1	93	87	81	76	86	80	75	70	67	63	59	55	52	49	44	41	39	34
2	83	73	65	58	76	67	60	54	56	50	45	45	41	37	36	33	30	25
3	75	63	54	46	68	58	50	43	48	41	36	39	34	30	30	27	23	19
4	68	55	45	38	62	50	42	35	42	35	30	34	28	24	26	22	19	15
5	62	48	39	32	56	44	36	29	37	30	25	30	24	20	23	19	16	12
6	57	43	34	27	52	39	31	25	33	26	21	27	21	17	21	17	13	10
7	52	38	30	23	48	35	27	22	30	23	18	24	19	15	19	15	12	9
8	48	35	26	20	44	32	24	19	27	20	16	22	17	13	17	13	10	8
9	45	32	23	18	41	29	22	17	24	18	14	20	15	12	16	12	9	7
10	42	29	21	16	38	27	19	15	22	17	12	18	14	10	15	11	8	6

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

	0°
0°	570
5°	1034
10°	1174
15°	1005
20°	849
25°	726
30°	641
35°	593
40°	568
45°	558
50°	553
55°	552
60°	558
65°	566
70°	575
75°	586
80°	598
85°	608



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	7.3	0.6
10°-20°	27.0	2.2
20°-30°	41.1	3.4
30°-40°	54.3	4.5
40°-50°	70.8	5.9
50°-60°	87.9	7.3
60°-70°	104.0	8.7
70°-80°	116.2	9.7
80°-90°	122.3	10.2
90°-100°	121.8	10.1
100°-110°	114.2	9.5
110°-120°	100.0	8.3
120°-130°	82.0	6.8
130°-140°	63.1	5.3
140°-150°	46.0	3.8
150°-160°	28.9	2.4
160°-170°	12.7	1.1
170°-180°	1.8	0.1
0°-30°	75.4	6.3
0°-40°	129.7	10.8
0°-60°	288.5	24.0
0°-90°	630.9	52.5
90°-120°	336.0	28.0
90°-150°	527.0	43.9
90°-180°	570.0	47.4
0°-180°	1201.3	100.0

**CANDELA DISTRIBUTION:**

	0°	Flux
0°	29	
5°	68	7
15°	96	27
25°	89	41
35°	86	54
45°	91	71
55°	98	88
65°	105	104
75°	110	116
85°	112	91
90°	112	62
95°	112	91
105°	108	114
115°	101	100
125°	91	82
135°	81	63
145°	73	46
155°	62	29
165°	44	13
175°	12	2
180°	5	



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**CANDELA DISTRIBUTION (FULL):**

0°	
0°	28.9
2.5°	42.8
5°	68.5
7.5°	84.8
10°	95.4
12.5°	97.0
15°	96.2
17.5°	94.6
20°	92.9
22.5°	90.9
25°	88.8
27.5°	87.2
30°	86.0
32.5°	86.0
35°	86.0
37.5°	86.8
40°	88.0
42.5°	89.7
45°	91.3
47.5°	92.9
50°	94.6
52.5°	96.2
55°	97.8
57.5°	99.8
60°	101.5
62.5°	103.1
65°	104.7
67.5°	106.4
70°	107.6
72.5°	108.8
75°	110.0
77.5°	110.9
80°	111.7
82.5°	111.7
85°	112.1
87.5°	112.5
90°	112.5
92.5°	112.1
95°	111.7
97.5°	111.3
100°	110.4
102.5°	109.2
105°	108.0
107.5°	106.8
110°	104.7



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**CANDELA DISTRIBUTION (continued):**

	0°
112.5°	103.1
115°	100.7
117.5°	98.6
120°	96.2
122.5°	93.7
125°	91.3
127.5°	88.8
130°	86.4
132.5°	84.0
135°	81.1
137.5°	78.7
140°	76.6
142.5°	75.0
145°	73.4
147.5°	71.3
150°	68.5
152.5°	66.0
155°	62.4
157.5°	58.3
160°	54.2
162.5°	49.3
165°	44.0
167.5°	38.3
170°	31.0
172.5°	20.8
175°	12.2
177.5°	4.5
180°	4.9

(END OF REPORT)