

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: P394021

Luminaire Tested: **146-28-L3-840**

Issue Date: 4/2/2020

Test Information

Test Method: LM-79-08
Report Number: P394021
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-L3-840
Description: SHAPER 106 FABRIQUE ROUND CYLINDER PENDANT
28 INCH HEIGHT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

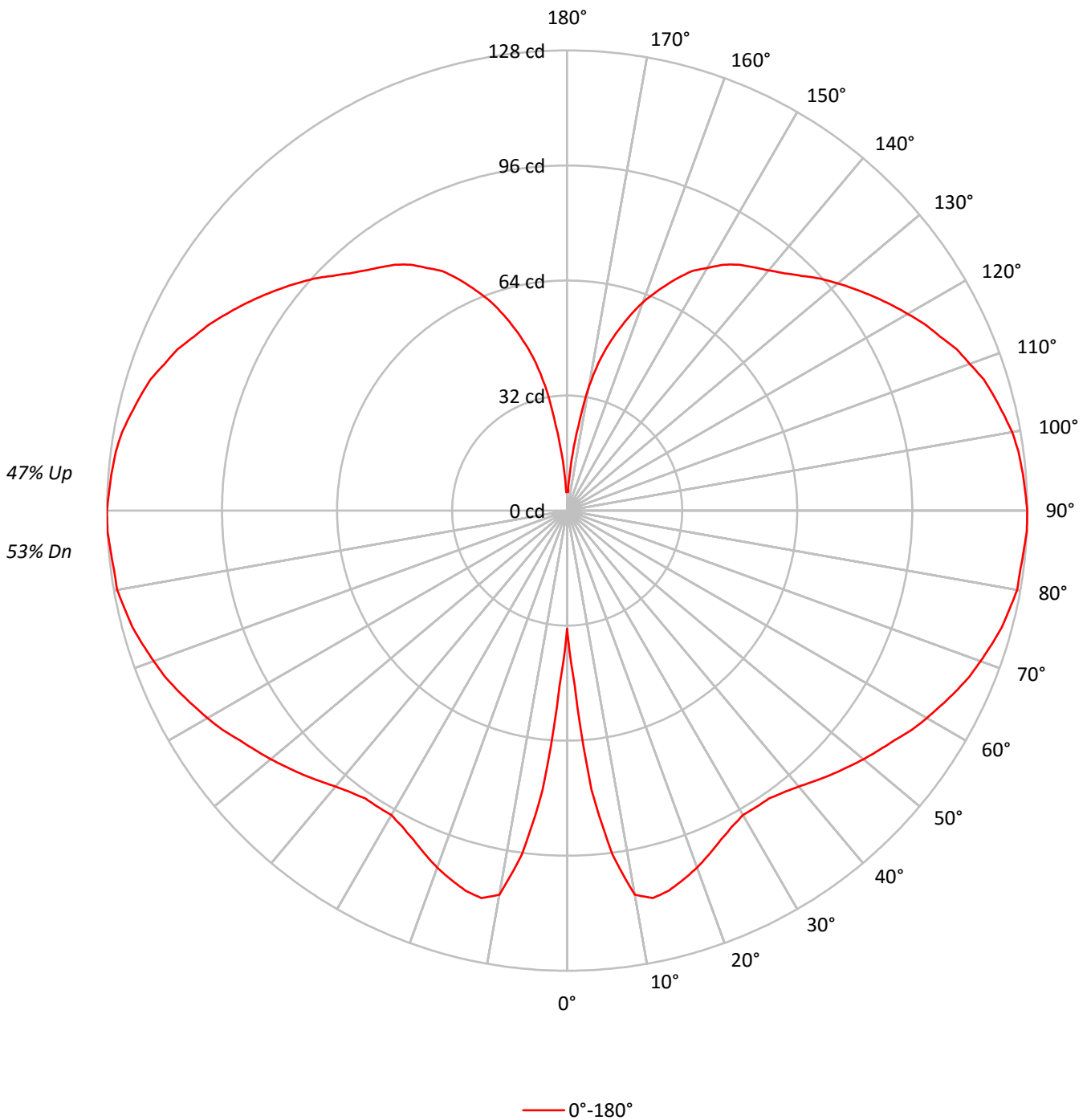
Lumens per Lamp: N/A
Luminaire Lumens: 1366.8 lumens
Efficiency: N/A
Efficacy: 67.0 lumens/watt
Spacing Criteria (0/90/45): 3.25 / 3.25 / 3.15
Luminous Opening: Vertical Cylinder (Dia: 0.83' x H: 2.33')
CIE Type: General Diffuse

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				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	50	30	10	0
RCR																					
0	108	108	108	108	100	100	100	100	85	85	85	71	71	71	58	58	58	58	58	58	53
1	93	87	81	76	86	80	75	70	67	63	59	55	52	49	44	41	39	44	41	39	34
2	83	73	65	58	76	67	60	54	56	50	45	45	41	37	36	33	30	36	33	30	25
3	75	63	54	46	68	58	50	43	48	41	36	39	34	30	30	27	23	30	27	23	19
4	68	55	45	38	62	50	42	35	42	35	30	34	28	24	26	22	19	26	22	19	15
5	62	48	39	32	56	44	36	29	37	30	25	30	24	20	23	19	16	23	19	16	12
6	57	43	34	27	52	39	31	25	33	26	21	27	21	17	21	17	13	21	17	13	10
7	52	38	30	23	48	35	27	22	30	23	18	24	19	15	19	15	12	19	15	12	9
8	48	35	26	20	44	32	24	19	27	20	16	22	17	13	17	13	10	17	13	10	8
9	45	32	23	18	41	29	22	17	24	18	14	20	15	12	16	12	9	16	12	9	7
10	42	29	21	16	38	27	19	15	22	17	12	18	14	10	15	11	8	15	11	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	649
5°	1176
10°	1335
15°	1143
20°	966
25°	827
30°	729
35°	674
40°	647
45°	635
50°	629
55°	629
60°	635
65°	644
70°	654
75°	667
80°	681
85°	692



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.3	0.6
10°-20°	30.7	2.2
20°-30°	46.8	3.4
30°-40°	61.8	4.5
40°-50°	80.5	5.9
50°-60°	100.1	7.3
60°-70°	118.3	8.7
70°-80°	132.2	9.7
80°-90°	139.2	10.2
90°-100°	138.6	10.1
100°-110°	129.9	9.5
110°-120°	113.8	8.3
120°-130°	93.3	6.8
130°-140°	71.8	5.3
140°-150°	52.3	3.8
150°-160°	32.9	2.4
160°-170°	14.4	1.1
170°-180°	2.0	0.1
0°-30°	85.8	6.3
0°-40°	147.6	10.8
0°-60°	328.2	24.0
0°-90°	717.9	52.5
90°-120°	382.3	28.0
90°-150°	599.7	43.9
90°-180°	649.0	47.5
0°-180°	1366.8	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	33	
5°	78	8
15°	109	31
25°	101	47
35°	98	62
45°	104	81
55°	111	100
65°	119	118
75°	125	132
85°	128	104
90°	128	70
95°	127	104
105°	123	130
115°	114	114
125°	104	93
135°	92	72
145°	84	52
155°	71	33
165°	50	14
175°	14	2
180°	6	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	32.9
2.5°	48.7
5°	77.9
7.5°	96.5
10°	108.5
12.5°	110.4
15°	109.4
17.5°	107.6
20°	105.7
22.5°	103.4
25°	101.1
27.5°	99.2
30°	97.8
32.5°	97.8
35°	97.8
37.5°	98.8
40°	100.2
42.5°	102.0
45°	103.9
47.5°	105.7
50°	107.6
52.5°	109.4
55°	111.3
57.5°	113.6
60°	115.5
62.5°	117.3
65°	119.2
67.5°	121.0
70°	122.4
72.5°	123.8
75°	125.2
77.5°	126.1
80°	127.1
82.5°	127.1
85°	127.5
87.5°	128.0
90°	128.0
92.5°	127.5
95°	127.1
97.5°	126.6
100°	125.7
102.5°	124.3
105°	122.9
107.5°	121.5
110°	119.2

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CANDELA DISTRIBUTION (continued):

	0°
112.5°	117.3
115°	114.5
117.5°	112.2
120°	109.4
122.5°	106.7
125°	103.9
127.5°	101.1
130°	98.3
132.5°	95.5
135°	92.3
137.5°	89.5
140°	87.2
142.5°	85.3
145°	83.5
147.5°	81.1
150°	77.9
152.5°	75.1
155°	70.9
157.5°	66.3
160°	61.7
162.5°	56.1
165°	50.1
167.5°	43.6
170°	35.2
172.5°	23.6
175°	13.9
177.5°	5.1
180°	5.6

(END OF REPORT)