

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: P394022

Luminaire Tested: **146-40-L4-827**

Issue Date: 4/2/2020

Test Information

Test Method: LM-79-08
Report Number: P394022
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: 146-40-L4-827
Description: SHAPER 106 FABRIQUE ROUND CYLINDER PENDANT
40 INCH HEIGHT
Light Source: 2700K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

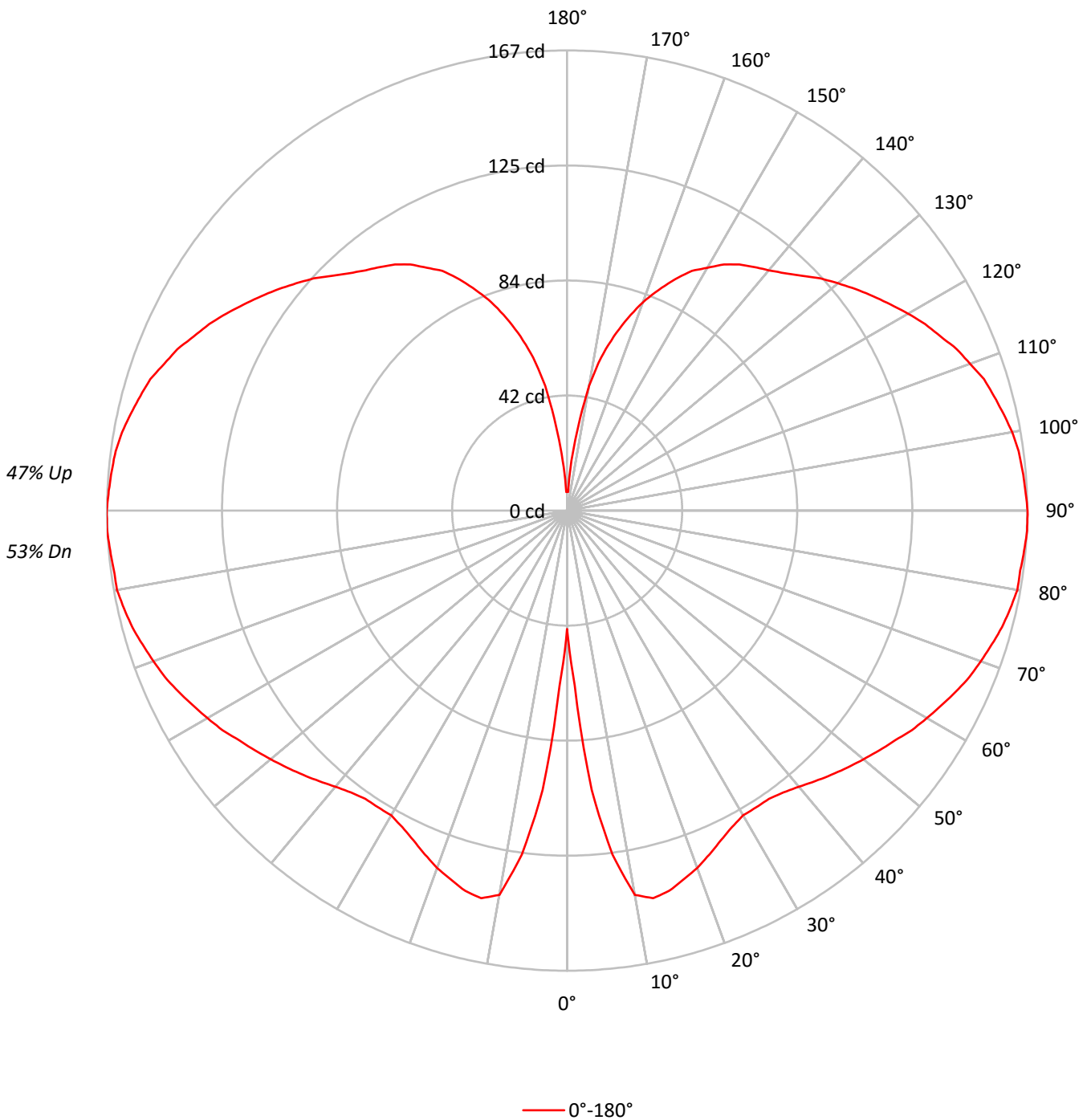
Lumens per Lamp: N/A
Luminaire Lumens: 1784.3 lumens
Efficiency: N/A
Efficacy: 59.5 lumens/watt
Spacing Criteria (0/90/45): 3.25 / 3.25 / 3.15
Luminous Opening: Vertical Cylinder (Dia: 0.83' x H: 3.33')
CIE Type: General Diffuse

Input Watts (W): 30
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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CATALOG NUMBER: 146-40-L4-827

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°	849
5°	1394
10°	1495
15°	1235
20°	1016
25°	852
30°	739
35°	674
40°	639
45°	621
50°	610
55°	604
60°	606
65°	609
70°	615
75°	623
80°	631
85°	637



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	10.8	0.6
10°-20°	40.1	2.2
20°-30°	61.1	3.4
30°-40°	80.7	4.5
40°-50°	105.1	5.9
50°-60°	130.6	7.3
60°-70°	154.4	8.7
70°-80°	172.6	9.7
80°-90°	181.7	10.2
90°-100°	180.9	10.1
100°-110°	169.6	9.5
110°-120°	148.6	8.3
120°-130°	121.8	6.8
130°-140°	93.7	5.3
140°-150°	68.3	3.8
150°-160°	42.9	2.4
160°-170°	18.8	1.1
170°-180°	2.6	0.1
0°-30°	112.0	6.3
0°-40°	192.7	10.8
0°-60°	428.4	24.0
0°-90°	937.1	52.5
90°-120°	499.0	28.0
90°-150°	782.8	43.9
90°-180°	847.0	47.5
0°-180°	1784.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	43	
5°	102	11
15°	143	40
25°	132	61
35°	128	81
45°	136	105
55°	145	131
65°	156	154
75°	163	173
85°	166	136
90°	167	92
95°	166	135
105°	160	170
115°	150	149
125°	136	122
135°	120	94
145°	109	68
155°	93	43
165°	65	19
175°	18	3
180°	7	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	43.0
2.5°	63.6
5°	101.7
7.5°	125.9
10°	141.6
12.5°	144.1
15°	142.9
17.5°	140.4
20°	138.0
22.5°	135.0
25°	132.0
27.5°	129.5
30°	127.7
32.5°	127.7
35°	127.7
37.5°	128.9
40°	130.8
42.5°	133.2
45°	135.6
47.5°	138.0
50°	140.4
52.5°	142.9
55°	145.3
57.5°	148.3
60°	150.7
62.5°	153.1
65°	155.6
67.5°	158.0
70°	159.8
72.5°	161.6
75°	163.4
77.5°	164.7
80°	165.9
82.5°	165.9
85°	166.5
87.5°	167.1
90°	167.1
92.5°	166.5
95°	165.9
97.5°	165.3
100°	164.0
102.5°	162.2
105°	160.4
107.5°	158.6
110°	155.6



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	153.1
115°	149.5
117.5°	146.5
120°	142.9
122.5°	139.2
125°	135.6
127.5°	132.0
130°	128.3
132.5°	124.7
135°	120.5
137.5°	116.8
140°	113.8
142.5°	111.4
145°	109.0
147.5°	105.9
150°	101.7
152.5°	98.1
155°	92.6
157.5°	86.6
160°	80.5
162.5°	73.2
165°	65.4
167.5°	56.9
170°	46.0
172.5°	30.9
175°	18.2
177.5°	6.7
180°	7.3

(END OF REPORT)