

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: P394024

Luminaire Tested: **146-40-L4-835**

Issue Date: 4/2/2020

Test Information

Test Method: LM-79-08
Report Number: P394024
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-L4-835
Description: SHAPER 106 FABRIQUE ROUND CYLINDER PENDANT
40 INCH HEIGHT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

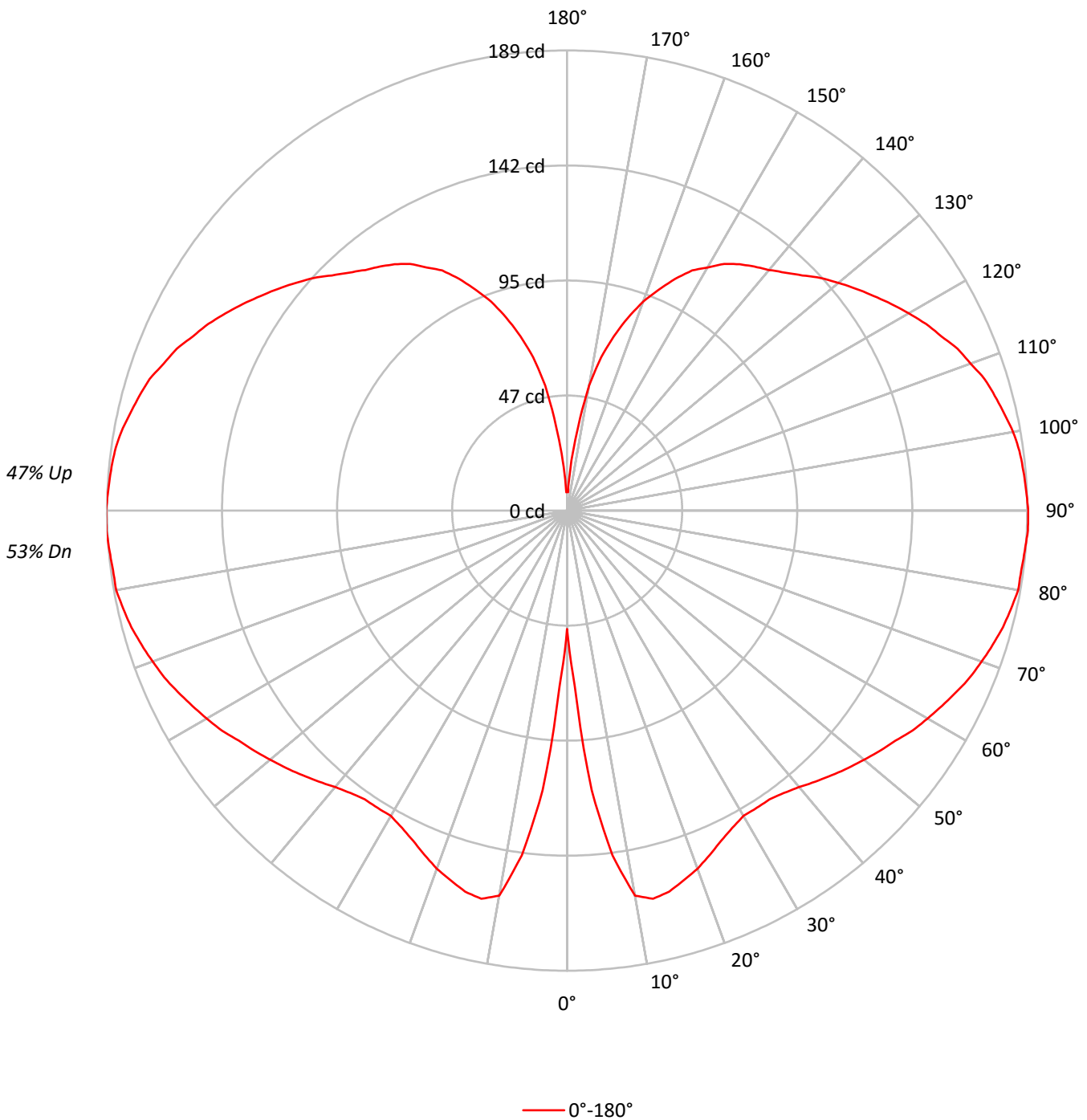
Lumens per Lamp: N/A
Luminaire Lumens: 2023.0 lumens
Efficiency: N/A
Efficacy: 67.4 lumens/watt
Spacing Criteria (0/90/45): 3.25 / 3.25 / 3.15
Luminous Opening: Vertical Cylinder (Dia: 0.83' x H: 3.33')
CIE Type: General Diffuse

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



TEST NUMBER: P394024
CATALOG NUMBER: 146-40-L4-835

Luminous Intensity Polar Plot





TEST NUMBER: P394024
 CATALOG NUMBER: 146-40-L4-835

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°	961
5°	1580
10°	1696
15°	1400
20°	1152
25°	965
30°	837
35°	764
40°	724
45°	704
50°	691
55°	685
60°	687
65°	691
70°	697
75°	706
80°	715
85°	722



TEST NUMBER: P394024
 CATALOG NUMBER: 146-40-L4-835

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.2	0.6
10°-20°	45.5	2.2
20°-30°	69.3	3.4
30°-40°	91.5	4.5
40°-50°	119.2	5.9
50°-60°	148.1	7.3
60°-70°	175.1	8.7
70°-80°	195.7	9.7
80°-90°	205.9	10.2
90°-100°	205.1	10.1
100°-110°	192.3	9.5
110°-120°	168.4	8.3
120°-130°	138.1	6.8
130°-140°	106.2	5.3
140°-150°	77.4	3.8
150°-160°	48.7	2.4
160°-170°	21.3	1.1
170°-180°	2.9	0.1
0°-30°	127.0	6.3
0°-40°	218.5	10.8
0°-60°	485.8	24.0
0°-90°	1062.5	52.5
90°-120°	565.8	28.0
90°-150°	887.5	43.9
90°-180°	960.0	47.5
0°-180°	2023.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	49	
5°	115	12
15°	162	45
25°	150	69
35°	145	91
45°	154	119
55°	165	148
65°	176	175
75°	185	196
85°	189	154
90°	189	104
95°	188	153
105°	182	192
115°	170	168
125°	154	138
135°	137	106
145°	124	77
155°	105	49
165°	74	21
175°	21	3
180°	8	



TEST NUMBER: P394024
CATALOG NUMBER: 146-40-L4-835

CANDELA DISTRIBUTION (FULL):

	0°
0°	48.7
2.5°	72.1
5°	115.3
7.5°	142.8
10°	160.6
12.5°	163.3
15°	162.0
17.5°	159.2
20°	156.5
22.5°	153.1
25°	149.6
27.5°	146.9
30°	144.8
32.5°	144.8
35°	144.8
37.5°	146.2
40°	148.2
42.5°	151.0
45°	153.7
47.5°	156.5
50°	159.2
52.5°	162.0
55°	164.7
57.5°	168.2
60°	170.9
62.5°	173.6
65°	176.4
67.5°	179.1
70°	181.2
72.5°	183.3
75°	185.3
77.5°	186.7
80°	188.1
82.5°	188.1
85°	188.7
87.5°	189.4
90°	189.4
92.5°	188.7
95°	188.1
97.5°	187.4
100°	186.0
102.5°	183.9
105°	181.9
107.5°	179.8
110°	176.4



TEST NUMBER: P394024
CATALOG NUMBER: 146-40-L4-835

CANDELA DISTRIBUTION (continued):

	0°
112.5°	173.6
115°	169.5
117.5°	166.1
120°	162.0
122.5°	157.9
125°	153.7
127.5°	149.6
130°	145.5
132.5°	141.4
135°	136.6
137.5°	132.5
140°	129.0
142.5°	126.3
145°	123.5
147.5°	120.1
150°	115.3
152.5°	111.2
155°	105.0
157.5°	98.1
160°	91.3
162.5°	83.0
165°	74.1
167.5°	64.5
170°	52.2
172.5°	35.0
175°	20.6
177.5°	7.5
180°	8.2

(END OF REPORT)