

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: P394025

Luminaire Tested: **146-40-L4-840**

Issue Date: 4/2/2020

Test Information

Test Method: LM-79-08
Report Number: P394025
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-L4-840
Description: SHAPER 106 FABRIQUE ROUND CYLINDER PENDANT
40 INCH HEIGHT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

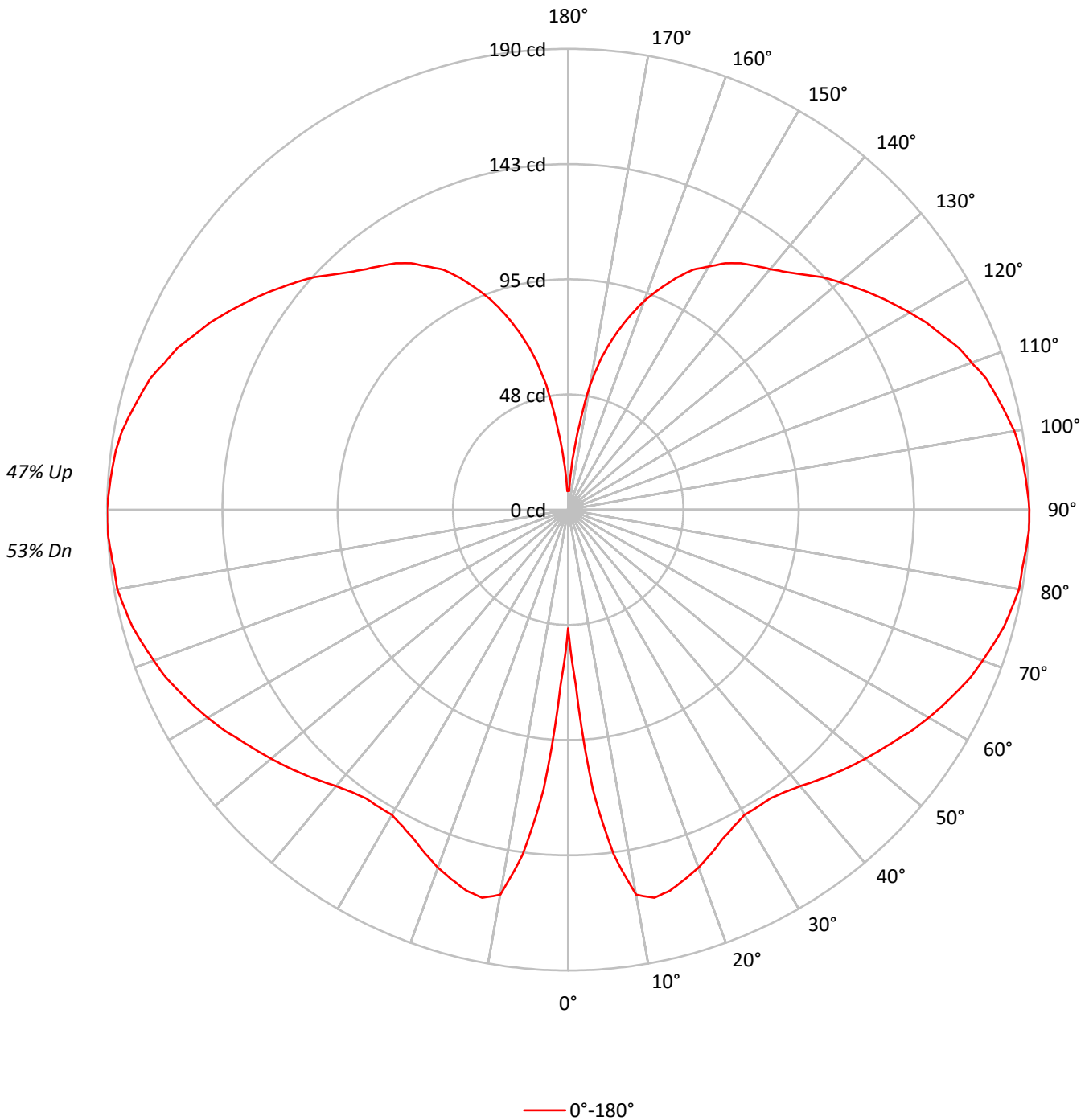
Lumens per Lamp: N/A
Luminaire Lumens: 2030.1 lumens
Efficiency: N/A
Efficacy: 67.7 lumens/watt
Spacing Criteria (0/90/45): 3.25 / 3.25 / 3.15
Luminous Opening: Vertical Cylinder (Dia: 0.83' x H: 3.33')
CIE Type: General Diffuse

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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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20						20								20		
RC	80					70						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°	965
5°	1586
10°	1702
15°	1404
20°	1155
25°	968
30°	840
35°	767
40°	727
45°	707
50°	694
55°	687
60°	689
65°	693
70°	700
75°	709
80°	718
85°	724



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	12.3	0.6
10°-20°	45.6	2.2
20°-30°	69.5	3.4
30°-40°	91.8	4.5
40°-50°	119.6	5.9
50°-60°	148.6	7.3
60°-70°	175.7	8.7
70°-80°	196.4	9.7
80°-90°	206.7	10.2
90°-100°	205.8	10.1
100°-110°	193.0	9.5
110°-120°	169.0	8.3
120°-130°	138.5	6.8
130°-140°	106.6	5.3
140°-150°	77.7	3.8
150°-160°	48.8	2.4
160°-170°	21.4	1.1
170°-180°	3.0	0.1
0°-30°	127.4	6.3
0°-40°	219.2	10.8
0°-60°	487.5	24.0
0°-90°	1066.2	52.5
90°-120°	567.8	28.0
90°-150°	890.7	43.9
90°-180°	964.0	47.5
0°-180°	2030.1	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	49	
5°	116	12
15°	162	46
25°	150	70
35°	145	92
45°	154	120
55°	165	149
65°	177	176
75°	186	196
85°	189	155
90°	190	104
95°	189	154
105°	182	193
115°	170	169
125°	154	139
135°	137	107
145°	124	78
155°	105	49
165°	74	21
175°	21	3
180°	8	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	48.9
2.5°	72.3
5°	115.7
7.5°	143.3
10°	161.2
12.5°	163.9
15°	162.5
17.5°	159.8
20°	157.0
22.5°	153.6
25°	150.1
27.5°	147.4
30°	145.3
32.5°	145.3
35°	145.3
37.5°	146.7
40°	148.8
42.5°	151.5
45°	154.3
47.5°	157.0
50°	159.8
52.5°	162.5
55°	165.3
57.5°	168.7
60°	171.5
62.5°	174.3
65°	177.0
67.5°	179.8
70°	181.8
72.5°	183.9
75°	186.0
77.5°	187.3
80°	188.7
82.5°	188.7
85°	189.4
87.5°	190.1
90°	190.1
92.5°	189.4
95°	188.7
97.5°	188.0
100°	186.7
102.5°	184.6
105°	182.5
107.5°	180.5
110°	177.0



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	174.3
115°	170.1
117.5°	166.7
120°	162.5
122.5°	158.4
125°	154.3
127.5°	150.1
130°	146.0
132.5°	141.9
135°	137.1
137.5°	132.9
140°	129.5
142.5°	126.7
145°	124.0
147.5°	120.5
150°	115.7
152.5°	111.6
155°	105.4
157.5°	98.5
160°	91.6
162.5°	83.3
165°	74.4
167.5°	64.7
170°	52.3
172.5°	35.1
175°	20.7
177.5°	7.6
180°	8.3

(END OF REPORT)