

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: P394023

Luminaire Tested: **146-40-L4-830**

Issue Date: 4/2/2020

Test Information

Test Method: LM-79-08
Report Number: P394023
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-L4-830
Description: SHAPER 106 FABRIQUE ROUND CYLINDER PENDANT
40 INCH HEIGHT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

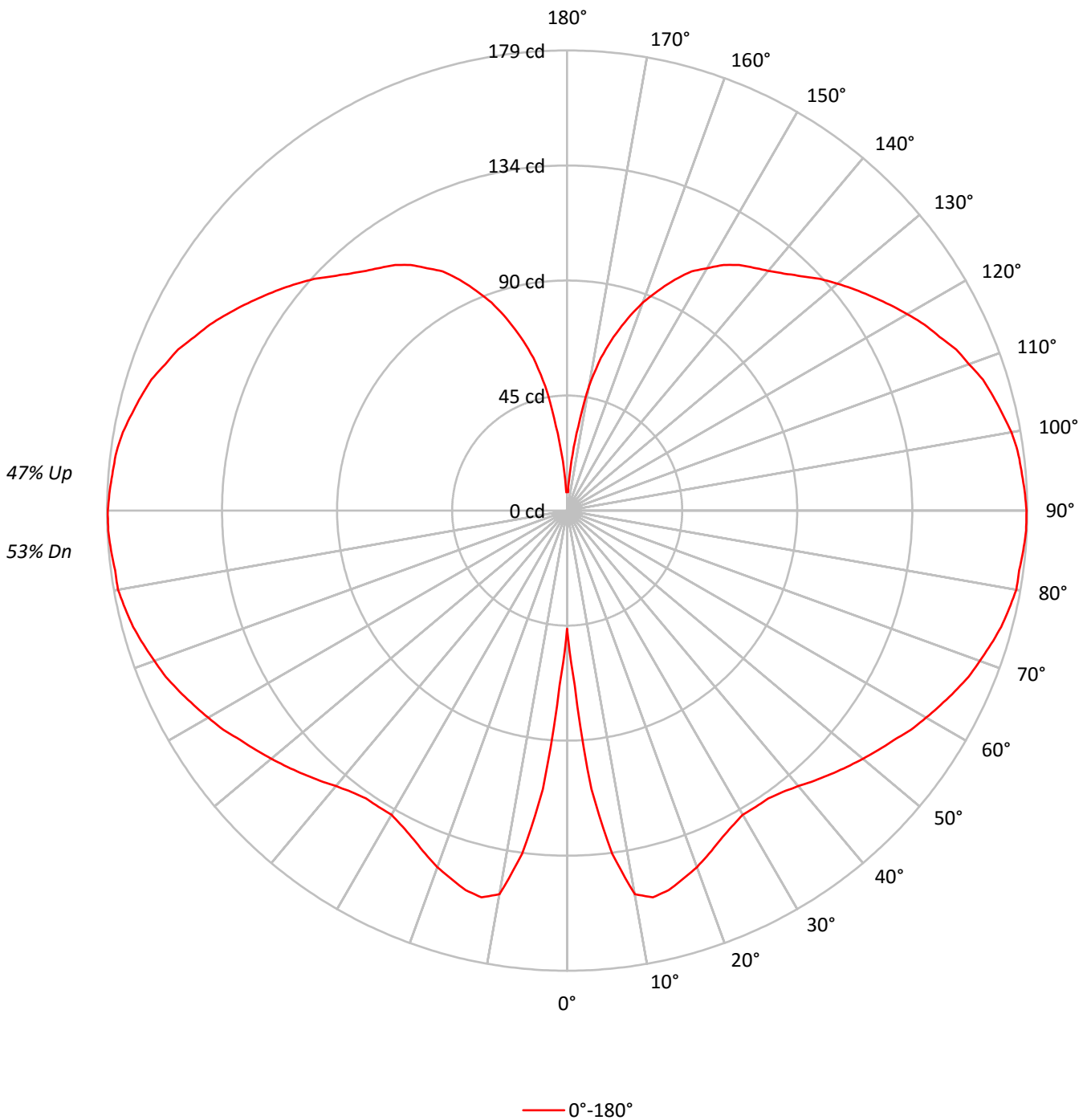
Lumens per Lamp: N/A
Luminaire Lumens: 1908.5 lumens
Efficiency: N/A
Efficacy: 63.6 lumens/watt
Spacing Criteria (0/90/45): 3.25 / 3.25 / 3.15
Luminous Opening: Vertical Cylinder (Dia: 0.83' x H: 3.33')
CIE Type: General Diffuse

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°	908
5°	1491
10°	1600
15°	1320
20°	1086
25°	911
30°	790
35°	721
40°	683
45°	664
50°	652
55°	646
60°	648
65°	652
70°	658
75°	666
80°	675
85°	681



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	11.5	0.6
10°-20°	42.9	2.2
20°-30°	65.4	3.4
30°-40°	86.3	4.5
40°-50°	112.4	5.9
50°-60°	139.7	7.3
60°-70°	165.1	8.7
70°-80°	184.6	9.7
80°-90°	194.3	10.2
90°-100°	193.5	10.1
100°-110°	181.4	9.5
110°-120°	158.9	8.3
120°-130°	130.3	6.8
130°-140°	100.2	5.3
140°-150°	73.1	3.8
150°-160°	45.9	2.4
160°-170°	20.1	1.1
170°-180°	2.8	0.1
0°-30°	119.8	6.3
0°-40°	206.1	10.8
0°-60°	458.3	24.0
0°-90°	1002.3	52.5
90°-120°	533.8	28.0
90°-150°	837.3	43.9
90°-180°	906.0	47.5
0°-180°	1908.5	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	46	
5°	109	12
15°	153	43
25°	141	65
35°	137	86
45°	145	112
55°	155	140
65°	166	165
75°	175	185
85°	178	145
90°	179	98
95°	177	145
105°	172	181
115°	160	159
125°	145	130
135°	129	100
145°	117	73
155°	99	46
165°	70	20
175°	19	3
180°	8	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	46.0
2.5°	68.0
5°	108.8
7.5°	134.7
10°	151.5
12.5°	154.1
15°	152.8
17.5°	150.2
20°	147.6
22.5°	144.4
25°	141.2
27.5°	138.6
30°	136.6
32.5°	136.6
35°	136.6
37.5°	137.9
40°	139.9
42.5°	142.5
45°	145.0
47.5°	147.6
50°	150.2
52.5°	152.8
55°	155.4
57.5°	158.6
60°	161.2
62.5°	163.8
65°	166.4
67.5°	169.0
70°	170.9
72.5°	172.9
75°	174.8
77.5°	176.1
80°	177.4
82.5°	177.4
85°	178.1
87.5°	178.7
90°	178.7
92.5°	178.1
95°	177.4
97.5°	176.8
100°	175.5
102.5°	173.5
105°	171.6
107.5°	169.6
110°	166.4



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CANDELA DISTRIBUTION (continued):

	0°
112.5°	163.8
115°	159.9
117.5°	156.7
120°	152.8
122.5°	148.9
125°	145.0
127.5°	141.2
130°	137.3
132.5°	133.4
135°	128.9
137.5°	125.0
140°	121.7
142.5°	119.1
145°	116.6
147.5°	113.3
150°	108.8
152.5°	104.9
155°	99.1
157.5°	92.6
160°	86.1
162.5°	78.3
165°	69.9
167.5°	60.9
170°	49.2
172.5°	33.0
175°	19.4
177.5°	7.1
180°	7.8

(END OF REPORT)