

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: P34347

Luminaire Tested: **147-28-P1S-L3/840-UNV-NA-40**

Test Date: 08/10/15

Test Information

Test Method: LM-79-08
Report Number: P34347
Test Lab: INNOVATION CENTER-P3
Test Date: 08/10/15
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: 147-28-P15-L3/840-UNV-NA-40
Description: SHAPER 147 SERIES 28" FABRIQUE SQUARE CYLINDER PENDANT LUMINAIRE.
Light Source: 18 CKTS 3500K LEDS
12499797
Ballast/Driver: (1) PHILIPS ELECTRONIC DRIVER
LEDINTA2000C24DOM

Summary

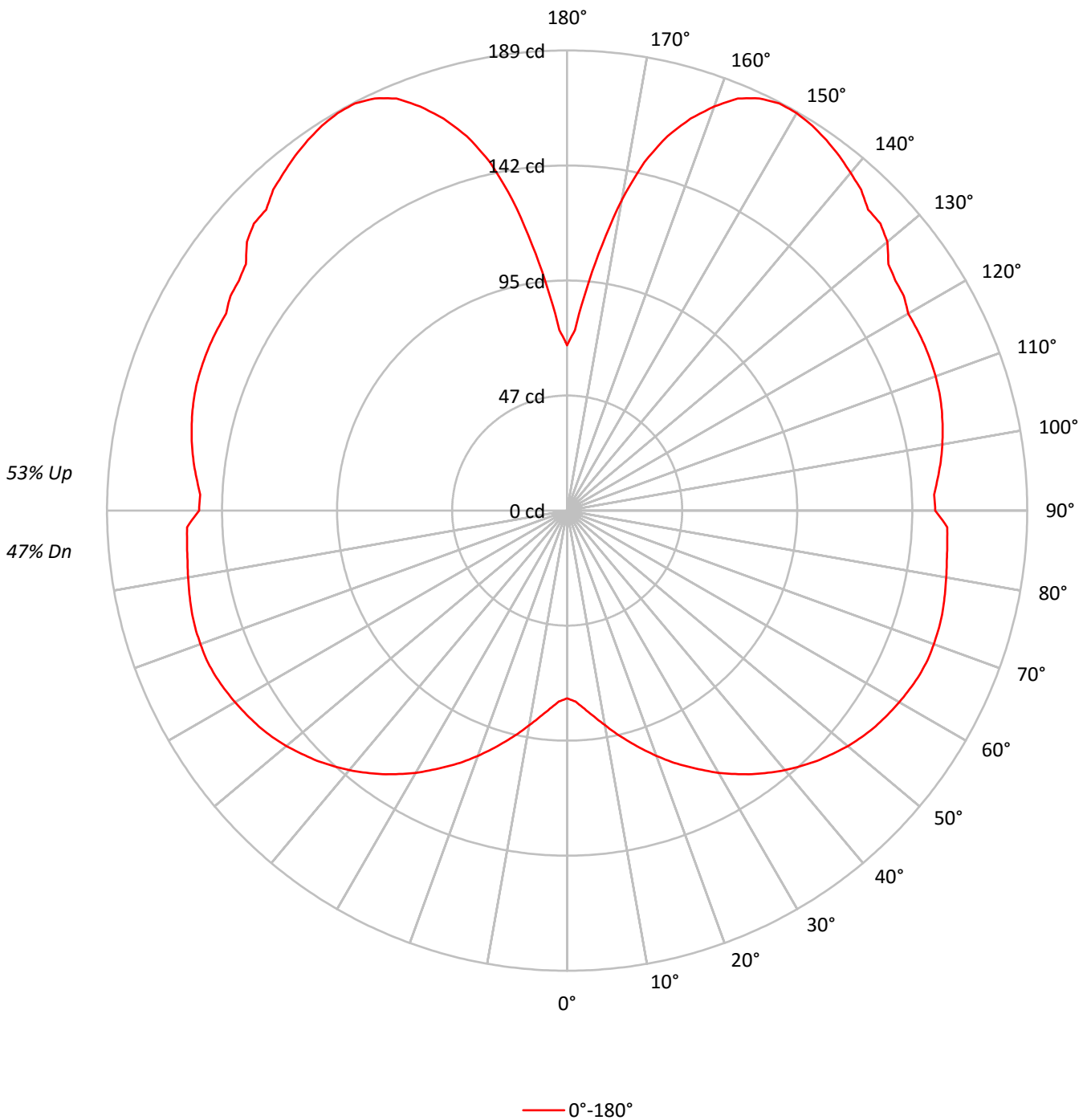
Lumens per Lamp: N/A
Luminaire Lumens: 1959.3 lumens
Efficiency: N/A
Efficacy: 93.3 lumens/watt
Spacing Criteria (0/90/45): 2.44 / 2.44 / 2.47
Luminous Opening: Rectangular w/ Sides (W: 0.83' x L: 0.83' x H: 2.33')
CIE Type: General Diffuse

Input Watts (W): 21
Input Voltage (V): 120.0
Input Current (A_{in}): 0.177
Voltage Rise (V): NR
Power Factor: 0.9952
Total Harmonic Distortion (THDi): 9.16
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: HR
Ambient Temperature (°C): 25.0
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			
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	106	106	106	106	98	98	98	98	82	82	82		67	67	67		53	53	53	47
1	93	87	81	76	84	79	74	70	65	61	58		52	49	47		40	38	36	31
2	83	73	65	59	75	67	60	54	54	49	45		43	39	36		33	30	27	22
3	74	63	54	47	67	57	49	43	47	41	35		37	32	28		28	24	21	17
4	67	55	45	38	61	50	42	35	41	34	29		32	27	23		24	20	17	13
5	61	48	39	32	55	44	36	29	36	29	24		28	23	19		21	17	14	11
6	56	43	34	27	51	39	31	25	32	25	20		25	20	16		19	15	12	9
7	52	38	29	23	47	35	27	21	29	22	18		23	18	14		17	13	10	7
8	48	34	26	20	43	31	24	18	26	20	15		20	16	12		15	12	9	6
9	44	31	23	18	40	29	21	16	23	18	13		19	14	11		14	11	8	6
10	41	28	21	15	38	26	19	14	21	16	12		17	13	9		13	10	7	5

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	1195
5°	1021
10°	943
15°	900
20°	876
25°	860
30°	851
35°	845
40°	841
45°	838
50°	837
55°	836
60°	835
65°	836
70°	836
75°	835
80°	836
85°	844



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	8.0	0.4
10°-20°	28.1	1.4
20°-30°	53.9	2.7
30°-40°	83.1	4.2
40°-50°	112.5	5.7
50°-60°	138.5	7.1
60°-70°	158.2	8.1
70°-80°	168.7	8.6
80°-90°	170.5	8.7
90°-100°	167.0	8.5
100°-110°	168.3	8.6
110°-120°	160.4	8.2
120°-130°	148.3	7.6
130°-140°	136.3	7.0
140°-150°	116.4	5.9
150°-160°	85.9	4.4
160°-170°	45.1	2.3
170°-180°	9.9	0.5
0°-30°	90.0	4.6
0°-40°	173.1	8.8
0°-60°	424.1	21.6
0°-90°	921.6	47.0
90°-120°	495.8	25.3
90°-150°	896.8	45.8
90°-180°	1038.0	53.0
0°-180°	1959.3	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	77	
5°	82	8
15°	98	28
25°	116	54
35°	132	83
45°	145	112
55°	155	139
65°	160	158
75°	160	169
85°	157	128
90°	151	84
95°	153	126
105°	159	168
115°	162	160
125°	165	148
135°	175	136
145°	186	116
155°	187	86
165°	159	45
175°	91	10
180°	68	



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CANDELA DISTRIBUTION (FULL):

0°	
0°	77.1
2.5°	78.5
5°	81.7
7.5°	85.4
10°	89.5
12.5°	93.9
15°	98.2
17.5°	102.7
20°	107.2
22.5°	111.7
25°	115.9
27.5°	120.1
30°	124.4
32.5°	128.3
35°	132.2
37.5°	135.7
40°	139.2
42.5°	142.3
45°	145.3
47.5°	147.9
50°	150.5
52.5°	152.7
55°	154.6
57.5°	156.1
60°	157.5
62.5°	158.7
65°	159.7
67.5°	160.3
70°	160.3
72.5°	160.2
75°	159.7
77.5°	158.9
80°	158.1
82.5°	157.3
85°	156.7
87.5°	156.3
90°	151.2
92.5°	150.9
95°	152.8
97.5°	154.8
100°	156.5
102.5°	158.0
105°	159.3
107.5°	160.4
110°	161.1

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CANDELA DISTRIBUTION (continued):

	0°
112.5°	161.5
115°	161.8
117.5°	161.8
120°	161.8
122.5°	164.0
125°	164.6
127.5°	166.3
130°	171.7
132.5°	174.5
135°	174.8
137.5°	178.7
140°	181.1
142.5°	183.6
145°	185.7
147.5°	187.4
150°	188.5
152.5°	188.6
155°	186.8
157.5°	183.2
160°	176.6
162.5°	168.8
165°	159.2
167.5°	146.6
170°	129.7
172.5°	110.1
175°	91.3
177.5°	74.2
180°	67.9

(END OF REPORT)