

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: P33618

Luminaire Tested: **NPD-434-SH-14-P1S-L0/835-UNV-30**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P33618
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: SHAPER
Catalog Number: NPD-434-SH-14-P1S-L0/835-UNV-30
Description: SHAPER SCHOOL HOUSE PENDANT.
Light Source: (18) 3500K LEDS
Ballast/Driver: (1) ROAL ELECTRONIC DRIVER
RMLD-1000A-M-AA

Summary

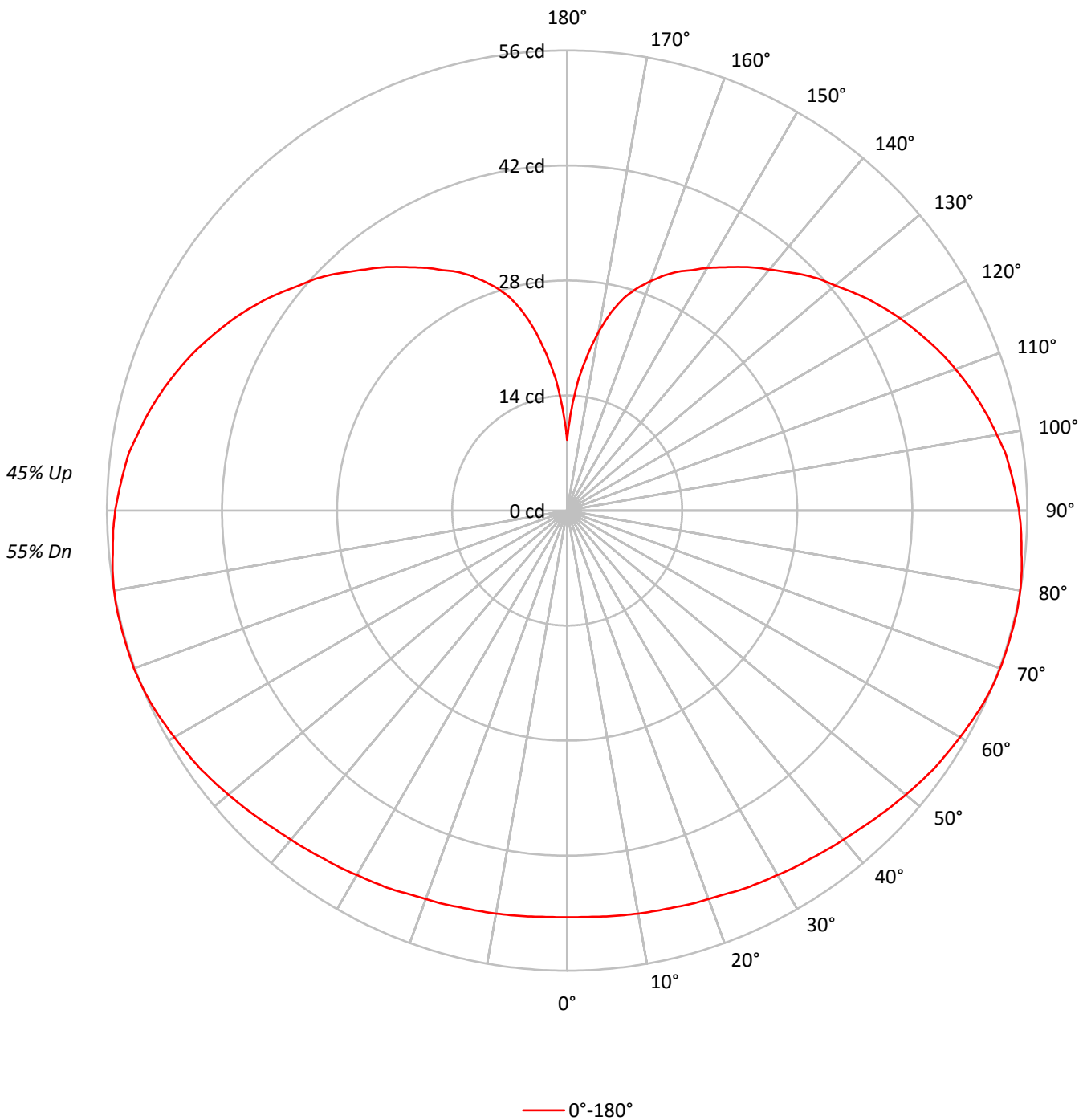
Lumens per Lamp: N/A
Luminaire Lumens: 621.0 lumens
Efficiency: N/A
Efficacy: 57.5 lumens/watt
Spacing Criteria (0/90/45): 1.6 / 1.6 / 1.83
Luminous Opening: Vertical Cylinder (Dia: 1' x H: 1')
CIE Type: General Diffuse

Input Watts (W): 10.8
Input Voltage (V): 120.06
Input Current (Ain): 0.0916
Voltage Rise (V): NR
Power Factor: 0.992
Total Harmonic Distortion (THDi): 12.8
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: HR
Ambient Temperature (°C): NR
Test Distance: 25 FT

TEST NUMBER: P33618

CATALOG NUMBER: NPD-434-SH-14-P1S-L0/835-UNV-30

Luminous Intensity Polar Plot





TEST NUMBER: P33618

CATALOG NUMBER: NPD-434-SH-14-P1S-L0/835-UNV-30

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	101	101	101	101	86	86	86	73	73	73	61	61	61	55
1	94	88	82	77	87	81	76	71	68	64	61	57	54	51	46	44	42	36
2	84	74	66	59	77	68	61	55	57	52	47	47	43	39	38	34	32	27
3	75	64	54	47	69	59	50	44	49	43	37	40	35	31	32	28	25	21
4	68	55	46	39	62	51	43	36	43	36	31	35	30	25	28	24	20	17
5	62	49	39	32	57	45	36	30	38	31	26	31	26	21	25	20	17	14
6	57	43	34	27	52	40	32	26	34	27	22	28	22	18	22	18	15	11
7	53	39	30	24	48	36	28	22	30	24	19	25	20	16	20	16	13	10
8	49	35	27	21	45	33	25	19	27	21	16	23	18	14	18	14	11	9
9	45	32	24	18	42	30	22	17	25	19	15	21	16	12	17	13	10	8
10	42	29	21	16	39	27	20	15	23	17	13	19	14	11	16	12	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°
0°	678
5°	614
10°	566
15°	529
20°	501
25°	482
30°	467
35°	457
40°	452
45°	452
50°	456
55°	463
60°	472
65°	485
70°	500
75°	516
80°	538
85°	561



TEST NUMBER: P33618

CATALOG NUMBER: NPD-434-SH-14-P1S-L0/835-UNV-30

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4.7	0.8
10°-20°	14.2	2.3
20°-30°	23.5	3.8
30°-40°	32.5	5.2
40°-50°	41.1	6.6
50°-60°	49.0	7.9
60°-70°	55.3	8.9
70°-80°	59.3	9.6
80°-90°	60.6	9.8
90°-100°	59.1	9.5
100°-110°	54.8	8.8
110°-120°	48.3	7.8
120°-130°	40.2	6.5
130°-140°	31.4	5.1
140°-150°	22.8	3.7
150°-160°	14.9	2.4
160°-170°	7.6	1.2
170°-180°	1.7	0.3
0°-30°	42.4	6.8
0°-40°	75.0	12.1
0°-60°	165.0	26.6
0°-90°	340.2	54.8
90°-120°	162.1	26.1
90°-150°	256.6	41.3
90°-180°	281.0	45.3
0°-180°	621.0	100.0

CANDELA DISTRIBUTION:

	0°	Flux
0°	50	
5°	50	5
15°	50	14
25°	51	24
35°	52	33
45°	53	41
55°	55	49
65°	56	55
75°	56	59
85°	56	45
90°	55	30
95°	54	44
105°	52	55
115°	49	48
125°	45	40
135°	41	31
145°	36	23
155°	32	15
165°	27	8
175°	16	2
180°	9	

TEST NUMBER: P33618

CATALOG NUMBER: NPD-434-SH-14-P1S-L0/835-UNV-30

CANDELA DISTRIBUTION (FULL):

	0°
0°	49.5
2.5°	49.5
5°	49.6
7.5°	49.7
10°	49.8
12.5°	49.9
15°	50.0
17.5°	50.2
20°	50.3
22.5°	50.5
25°	50.8
27.5°	51.0
30°	51.2
32.5°	51.5
35°	51.7
37.5°	52.0
40°	52.3
42.5°	52.6
45°	53.0
47.5°	53.4
50°	53.8
52.5°	54.2
55°	54.6
57.5°	54.9
60°	55.2
62.5°	55.5
65°	55.8
67.5°	56.0
70°	56.1
72.5°	56.1
75°	56.1
77.5°	56.1
80°	56.0
82.5°	55.8
85°	55.5
87.5°	55.3
90°	55.0
92.5°	54.6
95°	54.2
97.5°	53.8
100°	53.1
102.5°	52.5
105°	51.8
107.5°	51.1
110°	50.3



TEST NUMBER: P33618

CATALOG NUMBER: NPD-434-SH-14-P1S-L0/835-UNV-30

CANDELA DISTRIBUTION (continued):

	0°
112.5°	49.5
115°	48.6
117.5°	47.7
120°	46.8
122.5°	45.8
125°	44.8
127.5°	43.7
130°	42.6
132.5°	41.7
135°	40.6
137.5°	39.4
140°	38.3
142.5°	37.3
145°	36.2
147.5°	35.1
150°	34.1
152.5°	33.0
155°	32.1
157.5°	31.0
160°	29.7
162.5°	28.4
165°	26.8
167.5°	24.7
170°	22.1
172.5°	19.1
175°	16.1
177.5°	12.4
180°	8.6

(END OF REPORT)