



CATALOGUE

of

LAMPS

AS MADE BY

SAWYER-MAN ELECTRIC CO.

NEW YORK, N. Y.

AND SOLD BY

Westinghouse Electric & Manufacturing Co.

PITTSBURG, PA.

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Standard Sawyer-Man Lamps are represented in the illustrations on the following pages, and are made up according to the characteristics represented by the illustrations and the accompanying data. For instance, page 4 shows a cut of a lamp made with a coiled loop unanchored filament. The scale to which cut is made is full size, the bulb is a straight sided bulb and measures from end of base to tip three and three-eighths inches. The diameter of the largest horizontal section is one and three-fourths inches. Lamps are made up in this type in voltages from forty to sixty and from ninety to one hundred and thirty volts, and in two, three and four candle powers. These lamps are, however, regularly so made that at two candle power the energy consumption is seven watts per candle. The three candle power lamp made in this type consumes approximately 16.5 watts, or burns, using five and one-half watts per candle. The four candle lamp is a four and one-half watt per candle lamp.

SPECIAL LAMPS

Lamps not represented in this catalogue are not made as a stock article and can only be made up to order.

COLORED LAMPS

Lamps made up in natural colored glass as called for in some types are made in green, blue, ruby, purple, opal and amber.

Frosted and artificially colored lamps are furnished in all candle powers, types and sizes, but lamps so colored are generally not satisfactory in the higher candle powers or for out of door work.

SERIES LAMPS

Lamps for use in multiple series by railway lighting and for use with the Westinghouse Shunt Coil System differ from other lamps only in the careful selection made for current consumption. Orders for lamps for use in series with lamps of other makes should, if possible, be accompanied by a new sample of such lamp. Special care is exercised in the factory to furnish on subsequent orders lamps of the same characteristics.

SELECTION

As described at length in other publications, the selection of the lamp to be ordered is quite as important as the selection used on the order. The proper lamp should be ordered according to the actual conditions of use, not the ideal condition prevailing a short part of the time.

The factory system and conditions are such that orders calling for special selections can be promptly attended to.

BASES

Lamps are furnished in any base desired. Unless otherwise specified, when T. H. or "B" base is called for, the porcelain type is used with from 2-25 c.p.; from 32 to 100 c.p. the brass base is used.

Unless otherwise specified as to be used in places of extreme high temperatures all lamps are based, using a cement that is waterproof.

DIMENSIONS

Lengths as specified in the cuts are for lamps with the standard Edison or F base. For other bases the following correction is necessary.

Thompson-H	oustor	(Porcelai	in)	2 to	25	c.p.	add		1	inch
**		(Brass)								
				. 1	00	c.p.	4.6		1/8	
Sawyer-Man	estinghous	se	2 to	32	c.p.	add		5		
		44					4			

STANDARD OF LIGHT

All Sawyer-Man Lamps are measured for candle power by comparison with the British Parliamentary Standard Candle Power, as furnished by the National Bureau of Standards at Washington.



SCALE FULL SIZE



Length 33/8

Diam. 13/4

Volts 40-60 and 90-130

2 c.p.—7 w.p.c.

3 c.p.—5.5 w.p.c.

4 c.p. 4.5 w.p.c.

Made in clear and frosted glass only.

SCALE FULL SIZE



Length 37/8

Diam. 17/8

Volts 40-60

4 c.p. -5.8 w.p.c.

5 c.p. -5 w.p.c.

6 c.p. 4.5 w.p.c.

8 c.p.—3.7 w.p.c.

SCALE FULL SIZE



Length 37/8

Diam. 17/8

Volts 90-130

4 c.p.—5.8 w.p.c.

5 c.p.-5 w.p.c.

6 c.p.—4.5 w.p.c.

8 c.p.—3.7 w.p.c.

SCALE FULL SIZE



Length 43/8

Diam. 21/8

· Volts 40-60

6 c.p. 41/4, 4.8 and 51/2 w.p.c.

8 c.p.—3½, 4 and 4½ w.p.c.

10 c.p.—3.1, 3½ and 4 w.p.c.

SCALE FULL SIZE



Length 43/8

Diam. 21/8

Volts 90-130

6 c.p. $-4\frac{1}{4}$, 4.8 and $5\frac{1}{2}$ w.p.c. 8 c.p. $-3\frac{1}{2}$, 4 and $4\frac{1}{2}$ w.p.c.

10 c.p.—3.1, 3½ and 4 w.p.c.

SCALE FULL SIZE



Length 4)4

Diam. 256

Volts 190-250

8 c.p.—5 w.p.c. 10 c.p.—4.5 w.p.c.

SCALE FULL SIZE



Length 43/4

Diam. 23/8

Volts 40-60

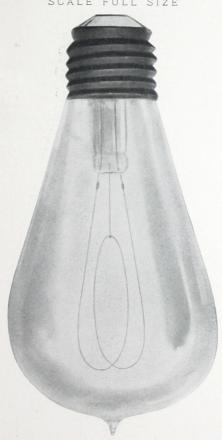
10 c.p.-4½ w.p.c.

12 c.p. -31/2, 4 and 41/2 w.p.c.

16 c.p.—3.1, 3½, 3.6 and 4 w.p.c.

20 c.p. -3.1 to 3.6 w.p.c.

SCALE FULL SIZE



Length 43/4

Diam. 23/8

Volts 90-130

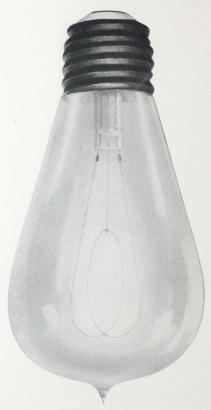
10 c.p.-4½ w.p.c.

12 c.p. -31/2, 4 and 41/2 w.p.c.

16 c.p.—From 2.8 to 41/4 w.p.c. as ordered.

20 c.p.—3.1 to 3.6 w.p.c.

SCALE FULL SIZE



Length 43/8

Diam. 21/8

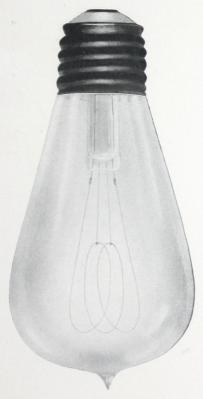
Volts 90-130

6 c.p. -41/4, 4.8 and 51/2 w.p.c.

8 c.p. -31/2, 4 and 41/2 w.p.c.

10 c.p.-3.1, 31/2 and 4 w.p.c.

SCALE FULL SIZE



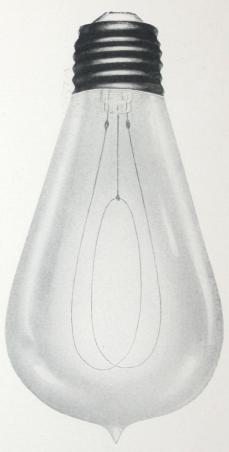
Length 43/8

Diam. 21/8

Volts 190-250

8 c.p.—5 w.p.c. 10 c.p.—4.5 w.p.c.

SCALE FULL SIZE



Length 43/4

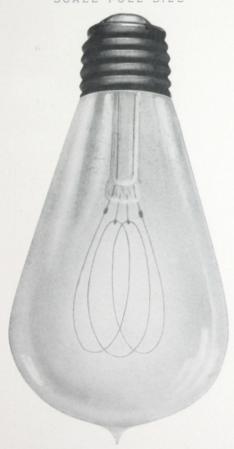
Diam. 23/8

Volts 90-130

16 c.p. 4¼ to 4¾ w.p.c.

20 c.p.— $3\frac{1}{2}$, 4 and $4\frac{1}{2}$ w.p.c. 24 and 25 c.p.—3.1, $3\frac{1}{2}$ and 4 w.p.c.

SCALE FULL SIZE



Length 434

Diam. 23/8

Volts 190-250

20 c.p. -41/2 w.p.c.

24 and 25 c.p.-4 w.p.c.

SCALE FULL SIZE



Length 33/8

Diam. 134

Volts 40-60 and 90-130

2 c.p.-7 w.p.c.

3 c.p. -5.5 w.p.c.

4 c.p. -4.5 w.p.c.

Made in clear and frosted glass only.

SCALE FULL SIZE



Length 37/8

Diam. 17/8

Volts 40-60

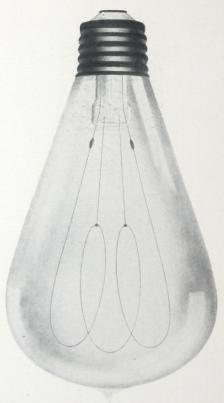
4 c.p. -5.8 w.p.c.

5 c.p. -5 w.p.c.

6 c.p.—4.5 w.p.c.

8 c.p.—3.7 w.p.c.

SCALE 34 SIZE



Length 53/4

Diam. 31/8

Volts 190-250

32 c.p.—4 w.p.c. 40 c.p.—3½ w.p.c.

SCALE 34 SIZE



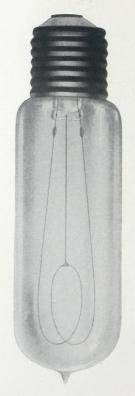
Length 61/8

Diam. 31/4

Volts 40-60

40 c.p. $-3\frac{1}{2}$, 4 and $4\frac{1}{2}$ w.p.c. 50 c.p. -3.1, $3\frac{1}{2}$ and 4 w.p.c.

SCALE FULL SIZE



Tubular Lamp

Length 43/8

Diam. 11/4

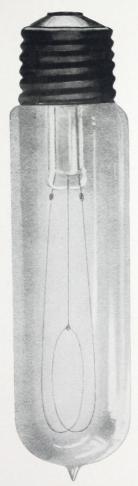
Volts 40-60, 90-130

4 c.p.—5.8 w.p.c.

6 c.p.-4.5 w.p.c.

Made in clear and frosted glass only.

SCALE FULL SIZE



Tubular Lamp

Length 51/8

Diam. 1¼

8 c.p.-4½ w.p.c., 40-60, 90-130 volts 10 c.p.-4 w.p.c., 40-60, 90-130 volts

16 c.p.—3½ w.p.c., 40-60 volts

Made in clear and frosted glass.



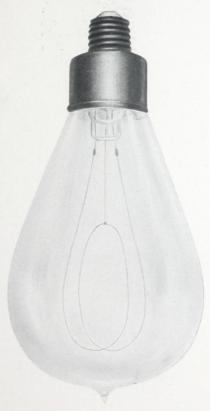


Length 9

Diam. 41/2

Volts 40-60
75 c.p.—3.6 w.p.c.
100 c.p.—3.1 w.p.c.
Made in clear and frosted only,



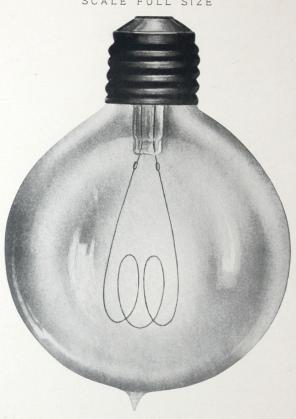


Length 9

Diam. 41/2

Volts 90-130
75 c.p.—3.6 and 4 w.p.c.
100 c.p.—3.1 and 3½ w.p.c.
Made in clear and frosted glass only.

SCALE FULL SIZE



31/8" Spherical Lamp

Length 43/8

Diam. 31/8

Volts 40-60, 90-130, 200-230

8 c.p. -4 and $4\frac{1}{2}$ w.p c.

10 c.p.—4 w.p.c.

16 c.p. -31/2 and 4 w.p.c.

20 c.p. -3½ w.p.c.

25 c.p.—3.1 w.p.c.

32 c.p.—3.5 w.p.c.

Made in clear and frosted glass.

SCALE FULL SIZE



35/8" Spherical Lamp

Length 5

Diam. 35/8

Volts 40-60, 90-130, 200-230

8 c.p. $-4\frac{1}{2}$ w.p.c. 16 c.p. $-3\frac{1}{2}$ w.p.c.

32 c.p. -3½ w.p.c.

Made in clear and frosted glass only.

SCALE FULL SIZE



R-2 Silvered Reflector Lamp

Length 41/8

Color of backing, aluminum or maroon

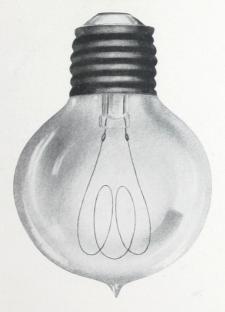
Bulb clear, as represented, or frosted

Volts 40-60, 90-130, 200-230

Approximate end c.p. 42

Wattage consumption, 52 watts per lamp.

SCALE FULL SIZE



21/11 Spherical Lamp

Length 31/4

Diam. 21/4

Volts 40-60, 90-130

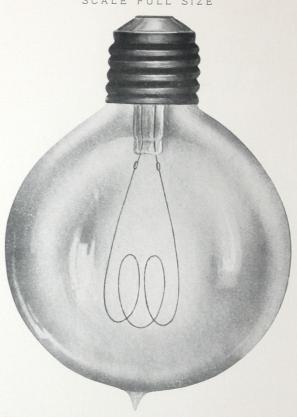
4 c.p.—5.8 w.p.c.

6 c.p. -4½ w.p.c.

8 c.p. 4½ w.p.c. 10 c.p. 4 w.p.c.

16 c.p.—3½ w.p.c.

SCALE FULL SIZE



31/8" Spherical Lamp

Length 43/8

Diam. 31/8

Volts 40-60, 90-130, 200-230

8 c.p.-4 and 4½ w.p c.

10 c.p.—4 w.p.c.

16 c.p. - 31/2 and 4 w.p.c.

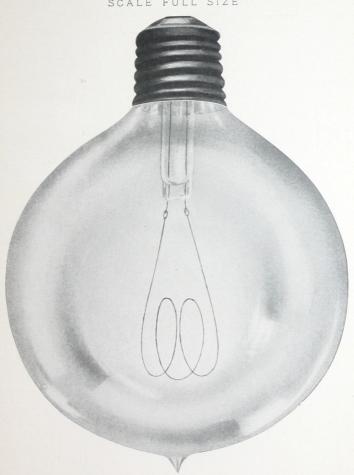
20 c.p. -3½ w.p.c.

25 c.p.-3.1 w.p.c.

32 c.p.—3.5 w.p.c.

Made in clear and frosted glass.

SCALE FULL SIZE



35/8" Spherical Lamp

Length 5

Diam. 35/8

Volts 40-60, 90-130, 200-230

8 c.p. -4½ w.p.c.

16 c.p. -3½ w.p.c. 32 c.p. -3½ w.p.c.

Made in clear and frosted glass only.

SCALE FULL SIZE



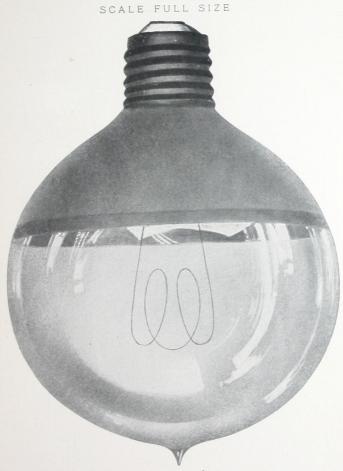
No. 2 LUMINO LAMP.

Length 43% Diam, 33%

Volts 40-60, 90-130, 200-230

Approximate horizontal and end candle power, 16

Wattage consumption, 55 watts per lamp.



No. 1 LUMINO LAMP
Length 5 Diam. 35%
Volts 40-60, 90-130, 200-230
Approximate horizontal and end candle power, 30
Energy consumed, 110 watts.

SCALE FULL SIZE



Tubular Lamp

Length 43/8

Diam. 14

Volts 40-60, 90-130

4 c.p.—5.8 w.p.c. 6 c.p.—4.5 w.p.c.

Made in clear and frosted glass only.

SCALE FULL SIZE



Tubular Lamp

Length 51/8

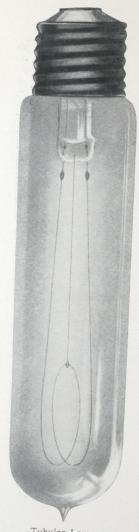
Diam. 11/4

8 c.p.-4½ w.p.c., 40-60, 90-130 volts 10 c.p.-4 w.p.c., 40-60, 90-130 volts

16 c.p.—3½ w.p.c., 40-60 volts

Made in clear and frosted glass.

SCALE FULL SIZE



Tubular Lamp

Length 53/4 gth 5¾ Diam. 1¼ 16 c.p.—90-130 volts, 4 w.p.c. 20 c.p.—90-130 volts, 3½ w.p.c. 32 c.p.—40-60 volts, 3½ w.p.c.



Edison Swan



Comb. Ed. and Wes.



Brush Swan



Sawyer-Man or Westinghouse



United States



Schaefer or National



Wes. Stopper



Edisor



Thompson-Houston Porcelain



Hawk Eye



Mather or Perkins

The principal types of bases as used for low candle power lamps are represented above.

The Edison, Thompson-Houston and Sawyer-Man or Westinghouse bases are the only ones used to any extent, and in comparative numbers as named. The Ediswan base is used extensively in England and English possessions, while the other bases shown are rapidly becoming obsolete.

SAWYER-MAN ELECTRIC COMPANY

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NEW YORK, 11 Pine Street ATLANTA, GA., Empire Building BALTIMORE, MD., 221 N. Calvert Street BOSTON, MASS., Board of Trade Building BUFFALO, N. Y., Ellicott Square CHICACO, ILL., New York Life Building CINCINNATI, OHIO, 1102 Traction Building CLEVELAND, OHIO, New England Building DALLAS, TEXAS, Scollard Building DENVER, COLO., Mountain Electric Company DETROIT, MICH., Union Trust Building LOS ANGELES, CAL., 621 Trust Building MINNEAPOLIS, MINN., Guaranty Loan Building NEW ORLEANS, LA., Hibernia Bank and Trust Building PHILADELPHIA, PA., Land Title Building PITTSBURG, PA., Westinghouse Building ST. LOUIS, MO., National Bank of Commerce Building SALT LAKE CITY, UTAH, 151 South Main Street SAN FRANCISCO, CAL., 425 Market Street, cor. First Street SEATTLE, WASH., 314 Occidental Avenue SYRACUSE, N. Y., University Building







WORKS OF THE SAWYER-MAN ELECTRIC CO., NEW YORK CITY

