

DESCRIPTION

The Steeler combines computerized design, durable cold-rolled steel and a field-adjustable reflector to provide a degree of versatility unmatched in other industrials. U.L. listed and labeled for damp location. CSA Certified. The Steeler is perfect for warehouses, gymnasiums, assembly areas, hangars, manufacturing and automotive service areas.

Catalog #	Type
Project	
Comments	Date
Prepared by	

SPECIFICATION FEATURES

Construction

HOUSING: Heavy-duty, formed steel housing with an open air ballast for cooler operation is finished in a white polyester powder coat. **UNIVERSAL BRACKETS:** Universal ladder brackets allow for the flexibility to change out with other reflectors available in acrylic or glass.

Electrical

BALLAST: High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HPS and -30°C (-20°F) for MH, MP and ML. **SOCKET:** Mogul-base socket standard for HPS. For Metal Halide, protected socket standard, for use with "O" rated protected Metal Halide lamps only.

Optical

REFLECTOR: Computer-designed, field-adjustable reflector mounts easily and allows multiple distribution patterns for precise control.

Mounting

Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit.



SS 15" STEELER

70 - 450W

High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

ALUMINUM HIGH-BAY

TECHNICAL DATA

EISA Compliant ©
65° Ambient Environment.
90° Supply Wire Rating.

ENERGY DATA

Reactor Ballast Input Watts

70W HPS NPF/HPF (82 Watts)
100W HPS NPF/HPF (118 Watts)
150W HPS NPF/HPF (175 Watts)
150W MH NPF/HPF (185 Watts)

CWI Ballast Input Watts

250W HPS HPF (300 Watts)
250W MH HPF (300 Watts)
400W HPS HPF (465 Watts)
400W MH HPF (475 Watts)

CWA Ballast Input Watts

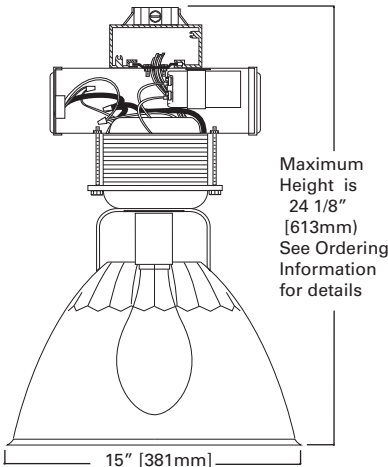
175W MP HPF (198 Watts) ©
200W MP HPF (227 Watts) ©
250W MP HPF (283 Watts) ©
320W MP HPF (365 Watts) ©
350W MP HPF (400 Watts) ©
400W MP HPF (452 Watts) ©
400W HPS HPF (465 Watts)
450W MP HPF (508 Watts) ©

Shipping Data

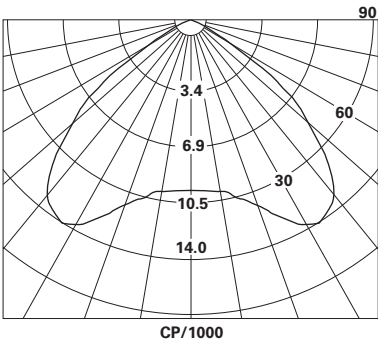
Approximate Net Weight:
30 lbs. (13 kgs.)



DIMENSIONS



PHOTOMETRICS



MPSS-SA15-400-MT-Q
400-Watt MP, Medium Distribution
44,000-Lumen Clear Lamp

Coefficients Of Utilization

		Effective floor cavity reflectance												20%											
		80%				70%				50%				30%				10%				0%			
rc		70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10		50	30	10	0
RCR																									
1		88	85	82	80	86	83	80	78	79	77	76		76	74	73		73	72	71		69			
2		81	76	71	67	79	74	70	66	71	68	65		68	66	63		66	64	62		60			
3		75	67	62	57	73	66	61	57	64	59	56		61	58	55		59	56	53		52			
4		69	60	54	49	67	59	53	49	57	52	48		55	51	47		53	50	47		45			
5		63	54	47	43	62	53	47	42	51	46	42		50	45	41		48	44	41		39			
6		58	49	42	37	57	48	42	37	46	41	37		45	40	36		44	39	36		34			
7		54	44	37	33	53	43	37	33	42	36	32		41	36	32		40	35	32		30			
8		50	40	34	29	49	39	33	29	38	33	29		37	32	29		36	32	28		27			
9		47	37	30	26	46	36	30	26	35	30	26		34	29	26		33	29	25		24			
10		44	33	27	23	43	33	27	23	32	27	23		31	26	23		31	26	23		22			

Spacing Criterion 1.8

Zone	%Lamp	Zone	%Lamp
0-30	22.8	0-90	78.0
0-40	42.3	90-180	1.2
0-60	73.9	Total	79.2

Candlepower	
Degree	CP
0	10052
5	10086
15	10829
25	12819
35	13908
45	11170
55	6188
65	1182
75	276
85	28
95	7
105	23
115	17
125	18
135	40
145	83
155	614
165	288
175	18
180	17

ORDERING INFORMATION

Sample Number: MPSS-SA15-M-175-MT-OR

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Lamp Type**MP**=Pulse Start Metal¹ Halide**MH**=Metal Halide^{1, 2}**HP**=High Pressure³ Sodium**Series****SS**= Steeler**Reflector Type****SA**=Anodized Spun Aluminum**Reflector Diameter****15**= 15" Diameter**Distribution**⁴**C**= Concentrated**M**= Medium**W**= Wide**Lamp Wattage****MP****70**=70W**100**=100W**175**=175W**200**=200W**250**=250W**320**=320W**350**=350W**400**=400W**450**=450W**MH**²**175**=175W**250**=250W**400**=400W**HP****70**=70W**100**=100W**150**=150W**250**=250W**400**=400W**Voltage**⁵**120V**=120V**208V**=208V**240V**=240V**277V**=277V**347V**=347V**480V**=480V**MT**= Multi-Tap, ⁶ wired 277V**TT**= Triple-Tap, ⁷ wired 347V**5T**= 5-Tap⁸**Socket****OR**= Open Rated ⁹ Socket for Metal Halide Lamps

= Non Applicable (HPS or Not compatible with OR Socket)

Options**C3**=3' Cord with no plug (Specify Voltage)¹⁰**PC3**=3' Cord with NEMA Plug (120V-L5-15P, ¹⁰ 208V-L6-15P, 347V-L37-20P, AND 480V-L8-20P) Other cord lengths are available by specifying length (PC6 for 6' Cord) Requires FH-1 or FL-1, or SHK. Example: PC3-120V Use with TPPH-NEMA. Specify Voltage.**PHC**= Power Cord and Plug (18" Power Cord and Non-NEMA plug configuration. Must be used with FL-1 and TPPH (Thru-Way Pendant Power Hook). Must specify single voltage.**PHC-NEMA**= Power Cord and NEMA Plug (18" Power Cord and 20 AMP NEMA plug configuration). Must be used with FL-1 and TPPH-NEMA (Thru-Way Pendant Power Hook).**P**= Pre-set Socket Position from the factory**FH-1**= Die-cast Aluminum Fixture Hook (with 3/4" threads for easy installation)**FL-1**= Malleable Iron Plated Fixture Loop (with 3/4" threads for easy installation)**SHK**=Die-cast Aluminum Fixture Hook (with safety screw and 3/4" threads for easy installation)**HSW**=Integral LumaWatt Sensor and Control¹¹ w/ Wide Distribution**F1**=Single Fuse (120, 277 or 347V only)**F2**=Double Fuse (208, 240 or 480V only)**SCF**=3' Aircraft Safety Cable secures Housing to Ceiling (Alternative lengths available. Example: SCF6 = 6' Cable)**Q**=Quartz Restrike (Hot Strike Only)**EM**=Quartz Restrike with "Delay Relay" (Quartz lamp strikes at both hot and cold starts)**EM/SC**=Emergency Separate Circuit¹²**LTCB**=Less Top Connector Box (Housing shipped less top connector box. (Specify when using TWMBBS accessory)**LL**=Lamp Included¹³**SCR**=Aircraft Safety Cable-Housing to Reflector**W/MWS**=MWS Industrial components attached to the fixture at the factory. (Standard cord length is 3 ft. 6 ft. and 11 ft. also available. Please refer to MWS Modular Wiring System section for additional information.**HC**=LumaWatt Fixture Control Module ^{11, 14} (Low voltage leads pulled out of top connection box for areas requiring all wiring to be installed in conduit)**HL**=LumaWatt Fixture Control Module ¹¹ (Allows low voltage control wire to be daisy-chained between fixtures outside AC conduit run similar to low voltage intercom's, fire alarms and phone systems)**QLL**=Quartz Lamp Included (Lamp is Cooper designated product based on luminaire requirements. Lamp is shipped separate from luminaire unless otherwise noted)**Accessories**¹⁵**C3**=3' Cord-No Plug - Requires FH-1, FL-1, ¹⁰ or SHK**PC3**=3' Cord with NEMA Plug - (120V-L5, ¹⁰ 208V-L6-15P, 347V-L37-20P and 480V-L8-20P) Other cord lengths are available by specifying length (PC6 for 6' cord). Requires FH-1 or FL-1, or SHK. Use with TPPH-NEMA. Specify Voltage.**PHC**= Power Hook Cord and Non-NEMA plug configuration. Must be used with FL-1 and TPPH (Thru-Way Pendant Power Hook)**PHC-NEMA**= Power Cord and NEMA plug - 18" Power Cord and 20 Amp NEMA plug configuration. Must be used with FL-1 and TPPH-NEMA (Thru-Way Pendant Power Hook)**SGB15**= Safety Glass Bottom (Not Compatible with "WG15")**WG15**= Wire Guard (Not Compatible with "SGB15")**WG15/GLC**= Gym Wireguard w/ Safety Glass**M8T**= Twin Mount Bracket (Fixtures must be same voltage and without hooks, loops or plugs.)**TPPH**=Thru-Way Pendant Power Hook. Requires FL-1 and PHC. Specify Voltage.**TPPH-F**=Thru-Way Pendant Power Hook Single Fuse, 120, 277 or 347 Volt. Requires FL-1 and PHC. Specify Voltage.**TPPH-F2**=Thru-Way Pendant Power Hook - Double Fused, 208, 240, or 480 Volt. Requires FL-1 and PHC. Specify Voltage.**TPPH-F-QD**=Thru-Way Pendant Power Hook Single Fuse, Quick Disconnect. Requires FL-1 and PHC. Specify Voltage (120, 277, or 347V)**TPPH-F2-QD**=Thru-Way Pendant Power Hook Double Fuse, Quick Disconnect. Requires FL-1 and PHC. Specify Voltage (208, 240, or 480V)**TPPH-NEMA**=Thru-Way Pendant Power Hook. Requires FL-1 and PHC-XXXV-NEMA. (Specify Voltage).**FH-1**=Fixture Hook**FL-1**=Fixture Loop**SHK**=Hook with Safety Screw**TWMBBS**=Thru-Way Mounting Box¹⁶

- Notes:**
- 1 Open Rated socket and lamp must be used.
 - 2 MH available in non-U.S. markets only.
 - 3 Not available in 175, 200, 320, 350 and 450W.
 - 4 Factory set for concentrated, medium or wide distributions otherwise fixture is shipped in medium setting.
 - 5 Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Representative for availability and ordering information. 88% Efficient EISA Compliant MP Fixtures not available in 347V and TT Voltages.
 - 6 Multi-Tap ballast 120/208/240/277V wired 277V.
 - 7 Triple-Tap ballast 120/277/347V wired 347V.
 - 8 5-Tap ballast 120/208/240/277/480V wired 277V. 400W Metal Halide only. 88% efficient EISA Compliant MP fixtures not available in 5-Tap Voltages.
 - 9 Not applicable for HPS.
 - 10 Requires FH-1 or FL-1 or SHK.
 - 11 30 second time delay when switching from bright to dim. Consult individual lamp manufacturers recommendations for compatible lamps. For use with CWA ballast only.
 - 12 Not available with HL or HC options.
 - 13 Lamp is shipped separately.
 - 14 Not available with PC3, C3, PHC or MWS. Not available with single circuit MWS special order.
 - 15 Order separately.
 - 16 Specify LTCB when using thru-way mounting box (TWMBBS) accessory.

VOLTAGE CHART

MT=Multi-Tap	120/208/240/277 (wired 277V)
TT=Triple-Tap	120/277/347 (wired 347V)
5T=5-Tap ¹⁰	120/208/240/277/480 (wired 277V)

LAMP TYPE	WATTAGE
Pulse Start Metal Halide (MP)	70, 100, 175, 200, 250, 320, 350, 400, 450W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HPS)	70, 100, 150, 250, 400W

DESCRIPTION

The Steeler combines computerized design, durable cold-rolled steel and a field-adjustable reflector to provide a degree of versatility unmatched in other industrials. U.L. listed and labeled for damp location. CSA Certified. The Steeler is perfect for warehouses, gymnasiums, assembly areas, hangars, manufacturing and automotive service areas.

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Electrical

BALLAST: High power factor ballast with class H insulation. Minimum starting temperature is -40°C (-40°F) for HPS and -30°C (-20°F) for MH, MP and ML. **SOCKET:** Mogul-base socket standard for HPS. For Metal Halide, protected socket standard, for use with "O" rated protected Metal Halide lamps only.

Optical

REFLECTOR: Computer-designed, field-adjustable reflector mounts easily and allows multiple distribution patterns for precise control.

Mounting

Easy slide-on die-cast aluminum mounting box with tapped opening for 3/4" conduit.



SS 15" STEELER

70 - 450W

High Pressure Sodium
Pulse Start Metal Halide
Metal Halide

ALUMINUM HIGH-BAY

TECHNICAL DATA

EISA Compliant ©
65° Ambient Environment.
90° Supply Wire Rating.

ENERGY DATA

Reactor Ballast Input Watts

70W HPS NPF/HPF (82 Watts)
100W HPS NPF/HPF (118 Watts)
150W HPS NPF/HPF (175 Watts)
150W MH NPF/HPF (185 Watts)

CWI Ballast Input Watts

250W HPS HPF (300 Watts)
250W MH HPF (300 Watts)
400W HPS HPF (465 Watts)
400W MH HPF (475 Watts)

CWA Ballast Input Watts

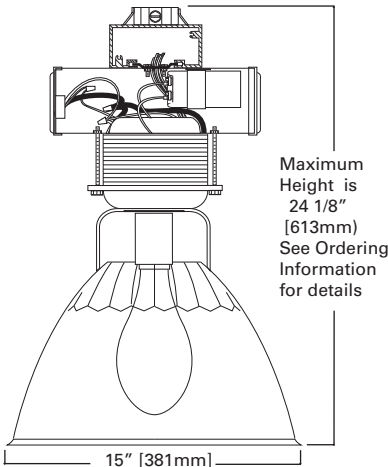
175W MP HPF (198 Watts) ©
200W MP HPF (227 Watts) ©
250W MP HPF (283 Watts) ©
320W MP HPF (365 Watts) ©
350W MP HPF (400 Watts) ©
400W MP HPF (452 Watts) ©
400W HPS HPF (465 Watts)
450W MP HPF (508 Watts) ©

Shipping Data

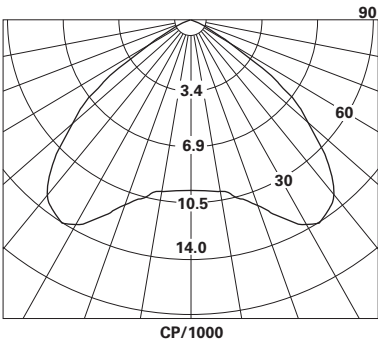
Approximate Net Weight:
30 lbs. (13 kgs.)



DIMENSIONS



PHOTOMETRICS



MPSS-SA15-400-MT-Q
400-Watt MP, Medium Distribution
44,000-Lumen Clear Lamp

Coefficients Of Utilization																		
Effective floor cavity reflectance																		
20%																		
rc	80%				70%				50%			30%			10%			0%
rv	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																		
1	88	85	82	80	86	83	80	78	79	77	76	76	74	73	73	72	71	69
2	81	76	71	67	79	74	70	66	71	68	65	68	66	63	66	64	62	60
3	75	67	62	57	73	66	61	57	64	59	56	61	58	55	59	56	53	52
4	69	60	54	49	67	59	53	49	57	52	48	55	51	47	53	50	47	45
5	63	54	47	43	62	53	47	42	51	46	42	50	45	41	48	44	41	39
6	58	49	42	37	57	48	42	37	46	41	37	45	40	36	44	39	36	34
7	54	44	37	33	53	43	37	33	42	36	32	41	36	32	40	35	32	30
8	50	40	34	29	49	39	33	29	38	33	29	37	32	29	36	32	28	27
9	47	37	30	26	46	36	30	26	35	30	26	34	29	26	33	29	25	24
10	44	33	27	23	43	33	27	23	32	27	23	31	26	23	31	26	23	22

Spacing Criterion 1.8			
Zone	%Lamp	Zone	%Lamp
0-30	22.8	0-90	78.0
0-40	42.3	90-180	1.2
0-60	73.9	Total	79.2

Candlepower	
Degree	CP
0	10052
5	10086
15	10829
25	12819
35	13908
45	11170
55	6188
65	1182
75	276
85	28
95	7
105	23
115	17
125	18
135	40
145	83
155	614
165	288
175	18
180	17

ORDERING INFORMATION

Sample Number: MPSS-SA15-M-175-MT-OR

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Lamp Type**MP**=Pulse Start Metal¹
Halide**MH**=Metal Halide^{1, 2}**HP**=High Pressure³
Sodium**Series****SS**= Steeler**Reflector Type****SA**=Anodized Spun
Aluminum**Reflector Diameter****15**= 15" Diameter**Distribution**⁴**C**= Concentrated**M**= Medium**W**= Wide**Lamp Wattage****MP****70**=70W**100**=100W**175**=175W**200**=200W**250**=250W**320**=320W**350**=350W**400**=400W**450**=450W**MH**²**175**=175W**250**=250W**400**=400W**HP****70**=70W**100**=100W**150**=150W**250**=250W**400**=400W**Voltage**⁵**120V**=120V**208V**=208V**240V**=240V**277V**=277V**347V**=347V**480V**=480V**MT**= Multi-Tap,⁶
wired 277V**TT**= Triple-Tap,⁷
wired 347V**5T**= 5-Tap⁸**Socket****OR**= Open Rated⁹
Socket for
Metal
Halide
Lamps= Non
Applicable
(HPS or Not
compatible
with OR
Socket)**Options****C3**=3' Cord with no plug (Specify Voltage)¹⁰**PC3**=3' Cord with NEMA Plug (120V-L5-15P,¹⁰
208V-L6-15P, 347V-L37-20P, AND
480V-L8-20P) Other cord lengths are
available by specifying length (PC6 for
6' Cord) Requires FH-1 or FL-1, or
SHK. Example: PC3-120V Use with
TPPH-NEMA. Specify Voltage.**PHC**= Power Cord and Plug (18" Power Cord
and Non-NEMA plug configuration. Must
be used with FL-1 and TPPH (Thru-Way
Pendant Power Hook). Must specify
single voltage.**PHC-NEMA**= Power Cord and NEMA Plug (18"
Power Cord and 20 AMP NEMA
plug configuration). Must be
used with FL-1 and TPPH-NEMA
(Thru-Way Pendant Power
Hook).**P**= Pre-set Socket Position from the factory**FH-1**= Die-cast Aluminum Fixture Hook (with
3/4" threads for easy installation)**FL-1**= Malleable Iron Plated Fixture Loop (with
3/4" threads for easy installation)**SHK**=Die-cast Aluminum Fixture Hook (with
safety screw and 3/4" threads for easy
installation)**HSW**=Integral LumaWatt Sensor and Control¹¹
w/ Wide Distribution**F1**=Single Fuse (120, 277 or 347V only)**F2**=Double Fuse (208, 240 or 480V only)**SCF**=3' Aircraft Safety Cable secures
Housing to Ceiling (Alternative lengths
available. Example: SCF6 = 6' Cable)**Q**=Quartz Restrike (Hot Strike Only)**EM**=Quartz Restrike with "Delay Relay" (Quartz
lamp strikes at both hot and cold starts)**EM/SC**=Emergency Separate Circuit¹²**LTCB**=Less Top Connector Box (Housing
shipped less top connector box.
(Specify when using TWMBBS
accessory)**LL**=Lamp Included¹³**SCR**=Aircraft Safety Cable-Housing to
Reflector**W/MWS**=MWS Industrial components attached
to the fixture at the factory. (Standard
cord length is 3 ft. 6 ft. and 11 ft. also
available. Please refer to MWS
Modular Wiring System section for
additional information.**HC**=LumaWatt Fixture Control Module^{11, 14}
(Low voltage leads pulled out of top
connection box for areas requiring all
wiring to be installed in conduit)**HL**=LumaWatt Fixture Control Module¹¹
(Allows low voltage control wire to be
daisy-chained between fixtures outside
AC conduit run similar to low voltage
intercom's, fire alarms and phone
systems)**QLL**=Quartz Lamp Included (Lamp is Cooper
designated product based on luminaire
requirements. Lamp is shipped separate
from luminaire unless otherwise noted)**Accessories**¹⁵**C3**=3' Cord-No Plug - Requires FH-1, FL-1,¹⁰
or SHK**PC3**=3' Cord with NEMA Plug - (120V-L5,¹⁰
208V-L6-15P, 347V-L37-20P and
480V-L8-20P) Other cord lengths are
available by specifying length (PC6 for
6' cord). Requires FH-1 or FL-1, or
SHK. Use with TPPH-NEMA. Specify
Voltage.**PHC**= Power Hook Cord and Non-NEMA plug
configuration. Must be used with FL-1
and TPPH (Thru-Way Pendant Power
Hook)**PHC-NEMA**= Power Cord and NEMA plug -
18" Power Cord and 20 Amp
NEMA plug configuration. Must
be used with FL-1 and
TPPH-NEMA (Thru-Way
Pendant Power Hook)**SGB15**= Safety Glass Bottom (Not
Compatible with "WG15")**WG15**= Wire Guard (Not Compatible with
"SGB15")**WG15/GLC**= Gym Wireguard w/ Safety Glass**M8T**= Twin Mount Bracket (Fixtures must be
same voltage and without hooks, loops
or plugs.)**TPPH**=Thru-Way Pendant Power Hook.
Requires FL-1 and PHC. Specify
Voltage.**TPPH-F**=Thru-Way Pendant Power Hook
Single Fuse, 120, 277 or 347 Volt.
Requires FL-1 and PHC. Specify
Voltage.**TPPH-F2**=Thru-Way Pendant Power Hook -
Double Fused, 208, 240, or 480
Volt. Requires FL-1 and PHC.
Specify Voltage.**TPPH-F-QD**=Thru-Way Pendant Power Hook
Single Fuse, Quick Disconnect.
Requires FL-1 and PHC. Specify
Voltage (120, 277, or 347V)**TPPH-F2-QD**=Thru-Way Pendant Power
Hook Double Fuse, Quick
Disconnect. Requires FL-1 and
PHC. Specify Voltage (208,
240, or 480V)**TPPH-NEMA**=Thru-Way Pendant Power
Hook. Requires FL-1 and
PHC-XXXV-NEMA. (Specify
Voltage).**FH-1**=Fixture Hook**FL-1**=Fixture Loop**SHK**=Hook with Safety Screw**TWMBBS**=Thru-Way Mounting Box¹⁶

- Notes:**
- 1 Open Rated socket and lamp must be used.
 - 2 MH available in non-U.S. markets only.
 - 3 Not available in 175, 200, 320, 350 and 450W.
 - 4 Factory set for concentrated, medium or wide distributions otherwise fixture is shipped in medium setting.
 - 5 Products also available in non-US voltages and 50HZ for international markets. Consult your Cooper Representative for availability and ordering information. 88% Efficient EISA Compliant MP Fixtures not available in 347V and TT Voltages.
 - 6 Multi-Tap ballast 120/208/240/277V wired 277V.
 - 7 Triple-Tap ballast 120/277/347V wired 347V.
 - 8 5-Tap ballast 120/208/240/277/480V wired 277V. 400W Metal Halide only. 88% efficient EISA Compliant MP fixtures not available in 5-Tap Voltages.
 - 9 Not applicable for HPS.
 - 10 Requires FH-1 or FL-1 or SHK.
 - 11 30 second time delay when switching from bright to dim. Consult individual lamp manufacturers recommendations for compatible lamps. For use with CWA ballast only.
 - 12 Not available with HL or HC options.
 - 13 Lamp is shipped separately.
 - 14 Not available with PC3, C3, PHC or MWS. Not available with single circuit MWS special order.
 - 15 Order separately.
 - 16 Specify LTCB when using thru-way mounting box (TWMBBS) accessory.

VOLTAGE CHART

MT=Multi-Tap	120/208/240/277 (wired 277V)
TT=Triple-Tap	120/277/347 (wired 347V)
5T=5-Tap ¹⁰	120/208/240/277/480 (wired 277V)

LAMP TYPE	WATTAGE
Pulse Start Metal Halide (MP)	70, 100, 175, 200, 250, 320, 350, 400, 450W
Metal Halide (MH)	175, 250, 400W
High Pressure Sodium (HPS)	70, 100, 150, 250, 400W