CLEVELAND FAMILY OF PRODUCTS



OUTDOOR LIGHTING SPECIALISTS SINCE 1972

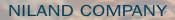
320 Clark Dr. I El Paso, TX 79951 Phone: (915) 779-1405 Toll Free: (800)648-9013 Fax: (915)779-3618 Toll Free: (888)779-3065 email: info@nilandco.com www.nilandco.com

Cleveland Family

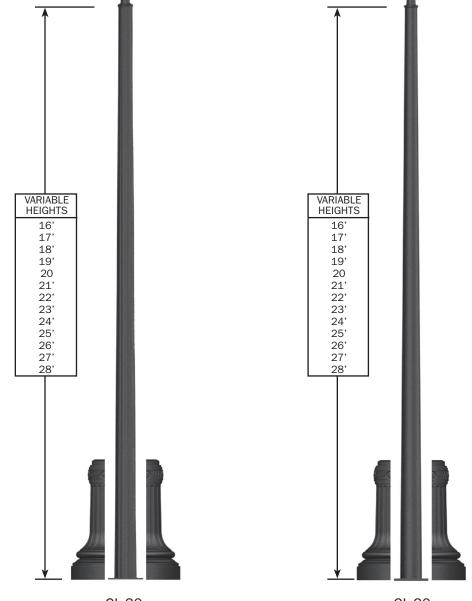
Niland Company poles are designed with maximum strength resistance to extreme wind loads but also functions with a wholesome selection of arms and luminaires. No matter the height, eight or twenty-eight feet, each pole is manufactured to the highest structural integrity.

Features:

- ~ 5" deep fluted steel or aluminum shaft circumferentially welded around the inside of the base for **uncompromised structural integrity**.
- Exterior transition ring to cast into the top of the base welded and ground smooth to mirror the design of shaft for *unitized construction*.
- ~ Optional *corporate branding* plate to customize anyone of your projects.
- Heavy cast anchorage plate. Four(4)
 L-shape anchor bolts to be used for anchoring. Optional direct burial.
- Historically accurate designs with heavy cast iron or aluminum at a minimum wall thickness of .250".







MODEL#:	CL-20	CL-20	
BASE HEIGHT:	38 INCHES	38 INCHES 38 INCHES	
BASE DIA:	20 INCHES - CLAMSHELL	20 INCHES - CLAMSHELL 20 INCHES - CLAMSHELL	
SHAFT DIA:	7.5 - 4.5 INCHES TAPERED FLUTED	7.5 - 4.5 INCHES TAPERED SMOOTH	
MATERIAL:	STEEL/CAST IRON	STEEL/CAST IRON	

Pole Heights Variable <u>Up to 28</u> Feet For Roadway Usage.

Shaft Options

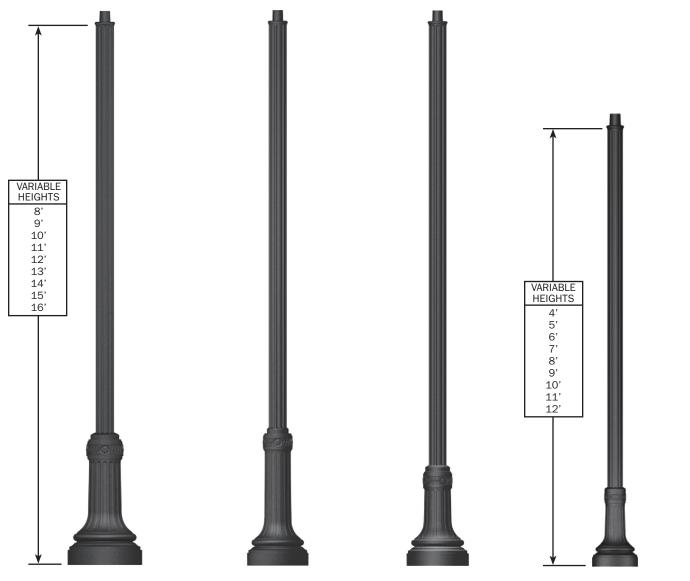
FLUTED SMOOTH TAPERED

All roadway shafts are tapered steel with 7.5 inch diameter from bottom to 4.5 inch diameter at top and clamshell base.

uncompromised

All bases are Cast Iron with minimum wall thickness of .1875 inch. Base casting has an internal sleeve of up to 25 inches deep. Shaft will be seated into the base sleeve and circumferentially welded around the inside of the base for uncompromised structural intergity. All exterior welds ground smooth.

pedestrian poles



MODEL#:	CL-20	GCL-17	CL-17	CL-12
BASE HEIGHT:	38 INCHES	39 INCHES	27.75 INCHES	22 INCHES
BASE DIA:	20 INCHES	17 INCHES	17 INCHES	12 INCHES
SHAFT DIA:	5 INCHES	5 INCHES	5 INCHES	4 INCHES
MATERIAL:	CAST ALUMINUM	CAST ALUMINUM	CAST ALUMINUM	CAST ALUMINUM

Pole Heights Variable <u>Up to 16</u> Feet For Pedestrian Usage.

Shaft Options

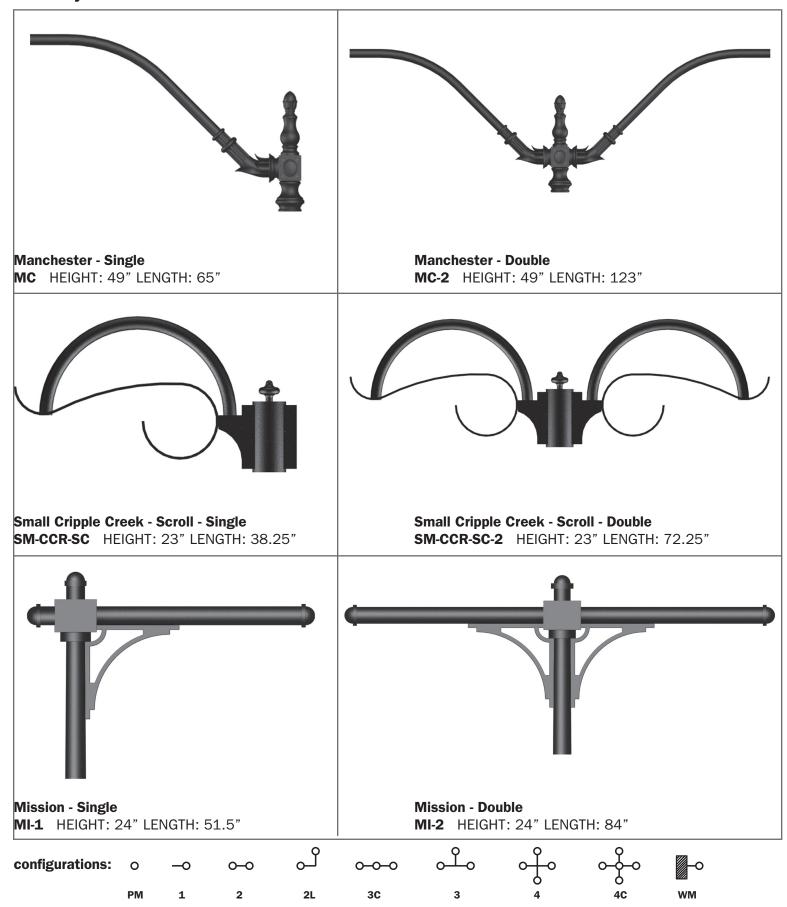
FLUTED SMOOTH TAPERED

All pedestrian shafts are 4 inch or 5 inch diameters. Tapered shafts are 6 inch diameter from bottom to 3 inch diameter at top.

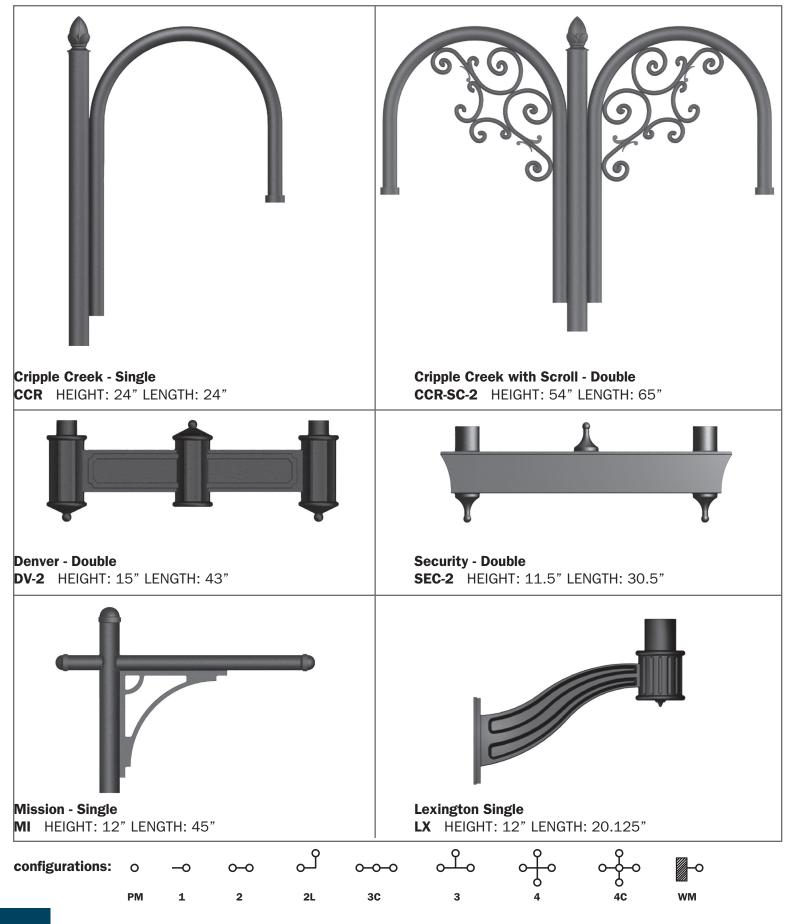
uncompromised

All bases are Cast Aluminum with minimum wall thickness of .250 inch. Base casting has an internal sleeve of up to 25 inches deep. Shaft will be seated into the base sleeve and circumferentially welded around the inside of the base for uncompromised structural integrity. All exterior welds ground smooth.

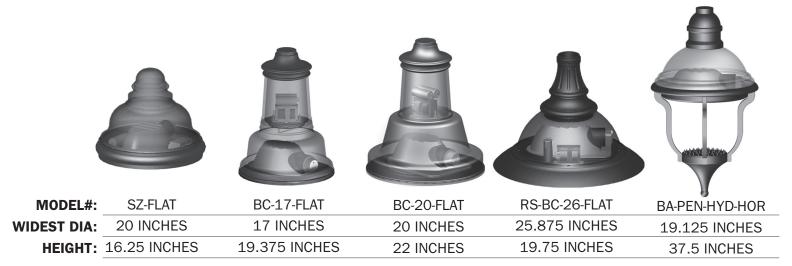
roadway arms



pedestrian arms



roadway luminaires







Lamp Access

Quick disconnect terminals between the lamp and ballast allow for safe removal of the lamp. Tool-free quarter-turn of the Twist 'N' Seal base makes for easy relamping with a sealed optics chamber.



Remote Ballast

Ballast is easily accessed by removing the bird plate and the unitized ballast tray. Quick disconnect terminals are again used to ensure safe ballast maintenance.

ballast/lamp

Model	Description
70HPS	70 watt high pressure sodium; use a medium base, clear ED-17 lamp.
100HPS	100 watt high pressure sodium; use a medium base, clear ED-17 lamp.
150HPS	150 watt high pressure sodium; use a medium base, clear ED-17 lamp.
50MH	50 watt metal halide; use a medium base, clear ED-17 lamp.
70MH	70 watt metal halide; use medium base, clear ED-17 lamp.
70MHT6	70 watt metal halide; use a G12 base, T-6 ceramic MH lamp.
100MH	100 watt metal halide; use medium base, clear ED-17 lamp.
150MH	150 watt metal halide; use medium base, clear ED-17 lamp.
150MHT6	150 watt metal halide; use G12 base, T-6 ceramic MH lamp.
175MH	175 watt metal halide; use medium base, clear ED-17 lamp.
CF	Compact Flourescent, electronic ballast; Use 4-pin 26,32 or 42 watt lamp.

voltage

120 / 208 / 240 / 277 / 347* / 480*

*Not available for QL lamp.

Multitap ballast also available.

**Please specify wattage and voltage upon ordering.

Lamps (bulbs) not included in packages.

Induction Lighting Systems 100,000 HOURS AVERAGE LIFE

Multiple Wattage Systems Offering Electrodeless Technology with up to 100,000 Hours Rated Average Life!



High Power LED Units 100,000 HOURS AVERAGE LIFE

Retrofits for Existing Fixtures or As A Complete Unit

Features: Increased Visual Acuity Minimal Energy Consumption Dark Sky Friendly **Decreased Maintenance** Instant "On" Wireless Access and **Dimming Capabilities** 40ft Maximum Mounting Height Lighting Detection System

Without the use of harmful mercury that traditional HID lamps use,

the grass is not only greener, it's growing!

light distribution options



Horizontal Hydro-Formed **Reflector (HYD-HOR)**

Type III hydro-formed reflector shield. Full cut-off optics with Twist 'N' Seal mogul base. Dark Sky compliant with fully sealed reflector housing.



Louver Reflector (LOUVER)

Spun aluminum with mirror finish. Assists in reflecting light downward.



Borosilicate Refractor (BOR)

Glass with high resistance to intense amounts of heat for long periods of time. Type III or V light distribution.



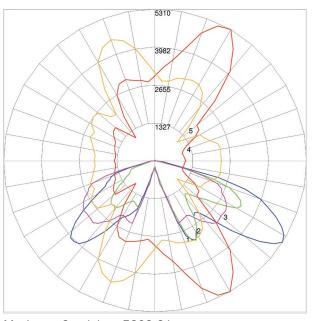
photometric data - BA-CON-HYD-HOR 150HPS

The values below are initial footcandles. Decrease values to justify light losses due to voltage, temperature and atmospheric variations which may affect light output. All testing performed by a certified independent laboratory. Photometry is available in IES formatted files on CD-ROM and website at www.nilandco.com or call your local representative.



FLUX DISTRIBUTION	Lumens	Percent Of Lamp
Downward Street Side	5729.6	35.8
Downward House Side	4806.0	30.0
Downward Total	10535.6	65.8
Upward Street Side	7.7	0.0
Upward House Side	10.5	0.1
Upward Total	18.2	0.1
Total Flux	10553.8	66.0

POLAR GRAPH

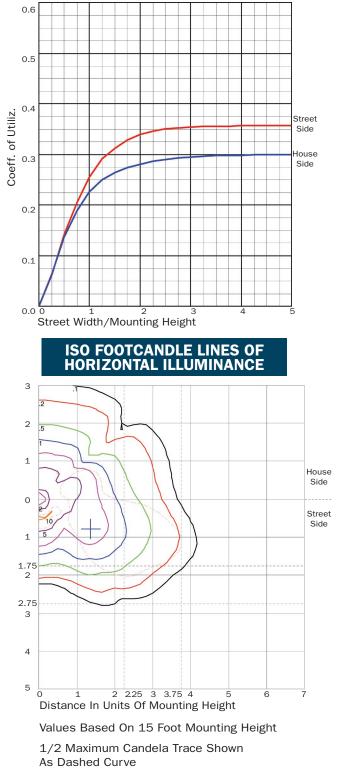


Maximum Candela = 5309.91

Located at Horizontal Angle = 60, Vertical Angle = 57.5 #1 - Vertical Plane Through Horizontal Angles (60-240) (Through Max. Cd.)

- #2 Vertical Plane Through Horizontal Angles (45-225)
- #3 Vertical Plane Through Horizontal Angles (90-270)
- #4 Horizontal Cone Through Vertical Angle (57.5)
- (Through Max. Cd.)

#5 - Horizontal Cone Through Vertical Angle (45)

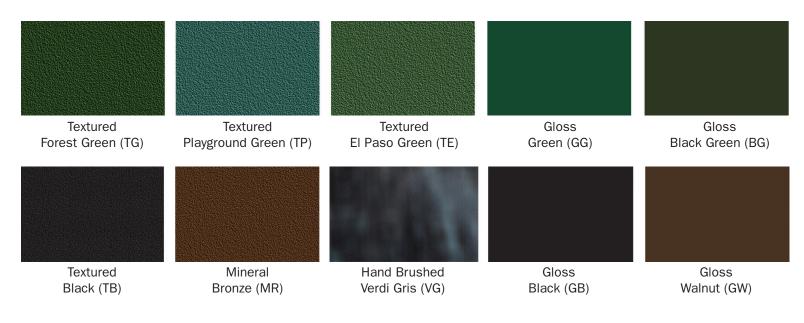


COEFFICIENTS OF UTILIZATION

(+) = Maximum Candela Point

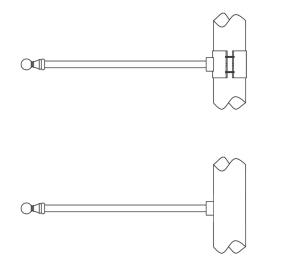
Photometric data containing additional wattages and luminaires are available online at http://www.nilandco.com.

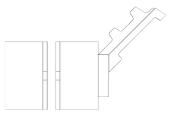
finish options



All finishes above are standard and offered at no extra charge. Custom colors: please provide RAL number or sample chip.

accessories







Banner Arms (BAN)

All banner arms fabricated with 24-inch rounded aluminum shaft at 1-inch diameter. Clamped around diameter of 4 or 5 inch pole. Double banner arms also available.

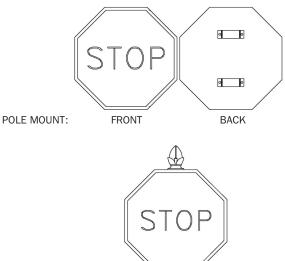
Planter Arms (PA)

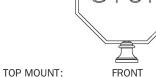
All planter arms fabricated with aluminum at 28 inch height and 24 inch length. Clamped around diameter of 4 inch or 5 inch pole. Double planter arms also available.

Flag Pole Holder (FLAG)

Holders are available as clamp or bolt mount for 4 inch or 5 inch poles. Overall height is 4 inches and reach is 3 inches.

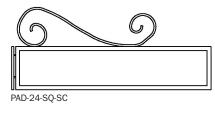
sign backers







Stop Signs available in 24 inch or 30 inch diameter. Fabricated in 356 cast aluminum with a thickness of .1875 inch and .375 inch offset lip. Can be clamped around 4 inch or 5 inch diameter pole. Bolt and top mount also available. Please specify mounting height upon ordering.



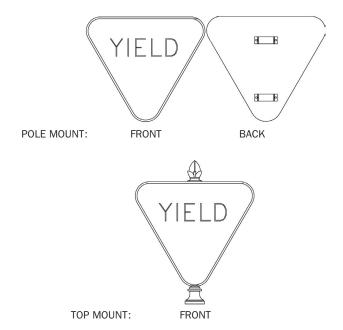
D-24-S0		

24 Inch Square Paddle Sign Backer (PAD-24-SQ)

Square Street Sign Paddles available in 24 inch length by 4.5 inch height. Fabricated in 356 cast aluminum with a thickness of .1875 inch and .375 inch offset lip. Can be clamped around 4 inch or 5 inch diameter pole. Bolt mount also available. Please specify mounting height upon ordering. Optional decorative scroll available.

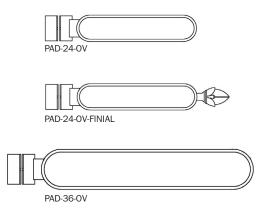
All signage does NOT include dacals.

Please specify heighth and width when ordering custom sizes.



Yield Sign Backer (YIELD)

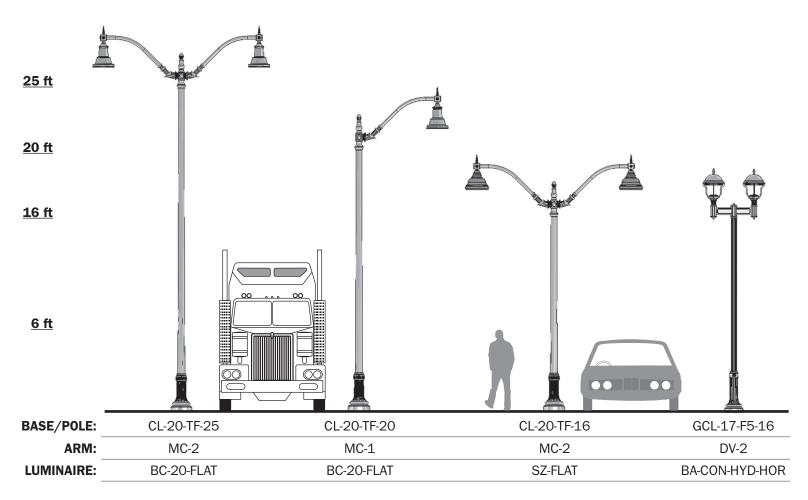
Yield Signs available in 28 inch or 30 inch height. Fabricated in 356 cast aluminum with a thickness of .1875 inch and .375 inch offset lip. Can be clamped around 4 inch or 5 inch diameter pole. Bolt and top mount also available. Please specify mounting height upon ordering.

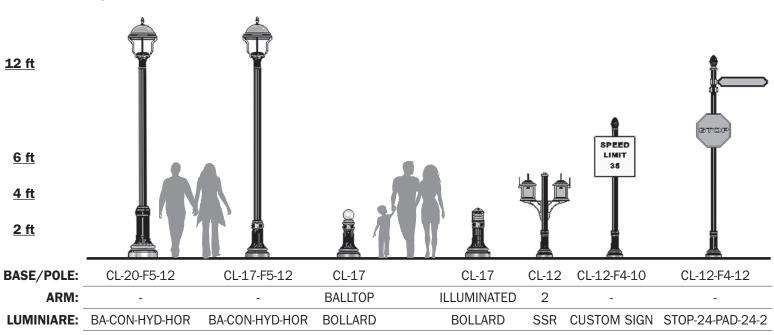


24 Inch Oval Paddle Sign Backer (PAD-24-OV or PAD-36-OV)

Oval Street Sign Paddles available in 24 inch length by 4.5 inch height or 36 inch length by 6 inch height. Fabricated in 356 cast aluminum with a thickness of .1875 inch and .375 inch offset lip. Can be clamped around 4 inch or 5 inch diameter pole. Bolt mount also available. Please specify mounting height upon ordering. Optional decorative finial available.

scaled view: roadway





scaled view: pedestrian

(J)WATTAGE:

(K)FINISH:

Pease reference ballast chart.

TE = Textured El Paso Green

TG = Textured Forest Green

TP = Textured Playground Green

TB = Textured Black

MR = Mineral Bronze

GB = Gloss Black

GG = Gloss Green

BG = Black Green

(L)ACCESSORES:

GW = Gloss Walnut

VG = Handbrushed Verdi Gris

or Provide Sample

STOP-TM = Top Mount Stop Sign Backer

STOP-PM = Pole Mount Stop Sign Backer

YIELD-TM = Top Mount Yield Sign Backer

YIELD-PM = Pole Mount Yield \overline{Sign} Backer PAD-24-SQ = 24" Square Paddle Sign Backer

PAD-24-SQ-SC = 24" Square Paddle Sign Backer with Scroll

PAD-24-OV = 24" Oval Paddle Sign Backer

PAD-24-OV-FINIAL = 24" Oval Paddle Sign

PAD-36-OV = 36" Oval Paddle Sign Backer

CUSTOM = Specify RAL #

BAN-1 = Single Banner Arm

BAN-2 = Double Banner Arm

PA-1 = Single Planter Arm

PA-2 = Double Planter Arm

FLAG = Flag Pole Holder

Example: CL-17 - F5 - 14 - DV - 2 - BA-CON - HYD-HOR - MH - 240 - 100 - TB - BAN-1(G) (H) (I) (J) (K) (L)

(A)BASE TYPE:

CL-12 = Cleveland Series with 12" base dia. CL-17 = Cleveland Series with 17" base dia. GCL-17 = Grand Cleveland Series with 17" base dia. CL-20 = Cleveland Series with 20" base dia.

(B)POLE/SHAFT TYPE:

F4 = Fluted 4" dia. F5 = Fluted 5" dia. TFS = Tapered Fluted Steel* S4 = Smooth 4" dia. S5 = Smooth 5" dia. TSS = Tapered Smooth Steel* *Roadway Only.

*Roadway Only

(C)HEIGHT:

- Pedestrian 8 = 8Ft 9 = 9Ft 10 = 10Ft 11 = 11Ft 12 = 12Ft UP TO 16Ft Roadway
- 16 = 16Ft 17 = 17Ft 18 = 18Ft 19 = 19Ft 20 = 20Ft UP TO 28Ft

(D)ARM TYPE:

MC = Manchester SM-CCR-SC = Small Cripple Creek with Scroll MI = Mission LX = Lexington SEC = Denver CCR = Cripple Creek CCR-SC = Cripple Creek with Scroll

(E)NUMBER OF ARMS:

UP TO 4 ARMS

(F)FIXTURE TYPE:

(following luminaires come stock with type III hydro-formed reflector)
SZ-FLAT = Santa Cruz Flat
BC-20-FLAT = Boston Common 20" Flat
RS-BC-26-FLAT = Residency 26" Flat
BA-PEN-HYD-HOR = Barcelona Pendent Mount
BA-CON-HYD-HOR = Barcelona Standard Finial
JT-HYD-HOR = Jamestown Full Cut Off
AP-HYD-HOR = Aspen Full Cut Off
(following luminaires come stock with refractive lexilite lens)
MS-LEX-424-CON-E = Mesilla 424 Lexilite Lens
CR-LEX-424-CON-S = Carolina 424 Lexilite Lens

(G)REFLECTOR/REFRACTOR TYPE:

HYD-HOR = Hydroformed Horizontal Reflector LOUVER = Louvers Reflector BOR = Borosillicate Glass Refractor

(H)LAMP TYPE:

MH = Metal Halide HPS = High Pressure Sodium CF = Compact Flourescent QL = QL Induction Lamp

(I)VOLTAGE:

120 = 120 Volts 208 = 200 Volts 240 = 240 Volts 277 = 277 Volts 347* = 347 Volts* 480* = 480 Volts* MT = Multitap (120,208,240,277)

*Not available for QL lamp.

Rotation of Rotational Molders





Backer with Standard Finial

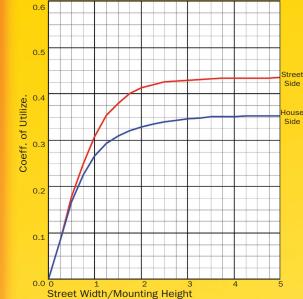
CLEVELAND FAMILY OF PRODUCTS

BC-17-FLAT: 175MH

CHARACTERISTICS

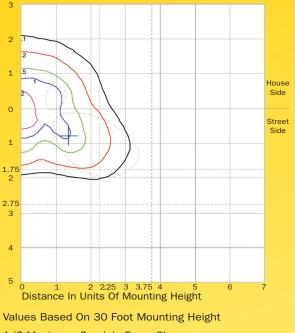
IES Classification Longitudinal Classification Cutoff Classification Total Rated Lamp Lumens Maximum Candela Maximum Candela Angle Maximum Candela at 90 Degrees Vertical Maximum Candela at 80 Degrees Vertical Downward total Efficiency Type III Short Full Cutoff 14000 6329.3 60H 57.5V 0 (0.00% Lamp Lms) 776.59 (5.55% Lamp Lms) 78.9%

COEFFICIENTS OF UTILIZATION



FLUX DISTRIBUTION		Percent
	Lumens	Of Lamp
Downward Street Side	6102.8	43.6
Downward House Side	4945.6	35.3
Downward Total	11048.4	78.9
Upward Street Side	0.0	0.0
Upward House Side	0.0	0.0
Upward Total	0.0	0.0
Total Flux	11048.4	78.9

ISO FOOTCANDLE LINE OF HORIZONTAL ILLUMINANCE



1/2 Maximum Candela Trace Shown As Dashed Curve

(+) = Maximum Candela Point



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