

Urbane Construction Corporation

CHANGE ORDER REQUEST

No. 00001

170 Cannon Street
Cranston, RI 02920

Phone: 401-944-6500
Fax: 401-944-1650

TITLE: Lighting
PROJECT: Hunt Street Park - Central Falls
TO: Attn: James A. Diossa
City of Central Falls

DATE: 12/01/2016
JOB: 1608
CONTRACT NO: 1608-P

580 Broad Street
Central Falls, RI 02863
Phone: Fax:

RE: **To:** **From:** **Number:**

DESCRIPTION OF PROPOSAL

Upgrade (12) 12' steel light poles to (12) 12' cedar light poles. Upgrade (13) metal halide pole mounted fixtures to (13) led pole mounted fixtures.

Item	Description	Stock #	Quantity	Units	Unit Price	Tax Rate	Tax Amount	Net Amount
00001	Credit metal light Poles		-12.000		\$362.00	0.00%	\$0.00	(\$4,344.00)
00002	Add Cedar Light Poles		12.000		\$579.00	0.00%	\$0.00	\$6,948.00
00003	Upgrade MH pole fixtures to LED		13.000		\$252.00	0.00%	\$0.00	\$3,276.00
00004	OHP		1.000		\$882.00	0.00%	\$0.00	\$882.00

Unit Cost: \$6,762.00

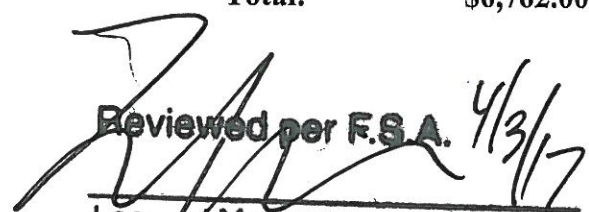
Unit Tax: \$0.00

Total: \$6,762.00

Approved as to form and correctness



City Solicitor


Reviewed per F.S.A. 4/3/17

Leonard Morganis
Administration & Finance Officer

APPROVAL:

By: 

James A. Diossa

By: 

Jason Moon

Date: 4/7/17

Date: _____



12" & 16" LED Shoebox Hercules Area & Flood Lights, Olympia Series

Advanced light engine technology in a traditional housing design.
 Wisconsin engineering and craftsmanship utilizing premium components.

Our LED lights, light poles and brackets are proudly engineered and manufactured in the USA. We use only the highest quality components, and our LED Shoebox fixtures deliver unmatched light output and efficiency for any area or flood lighting project. Precision engineered for performance and energy savings, these products dramatically reduce energy consumption by up to 80% and virtually eliminate ongoing maintenance expenses for a variety of customers and applications.

Product Overview

Highlights:

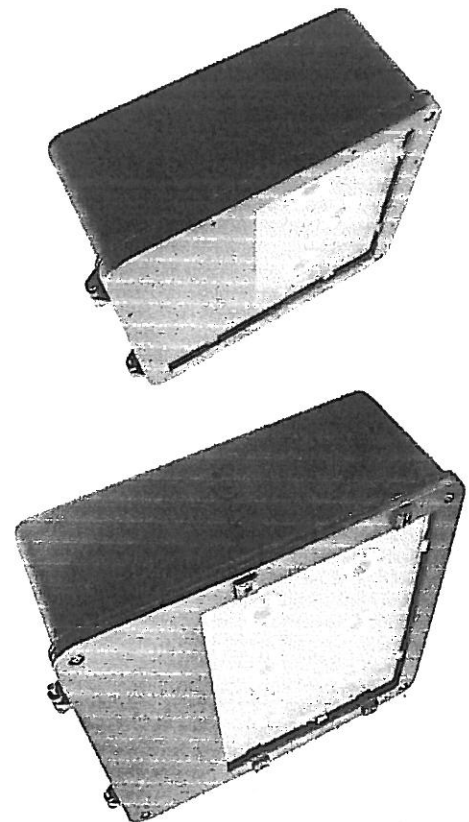
- Engineered and manufactured in Wisconsin, USA from domestic and imported components
- ETL Certified: Conforms to UL STD 1598 & CSA STD G22.2 # 250.0 for wet locations
- L70 calculated LED life over 400,000+ hours
- Drivers are 0-10v dimming standard
- Seven light engine options from 2,717 – 31,191 lumens for 50-1000w HID replacements
- Premium high-output Chip-On-Board (COB) LEDs in 5000K, 4000K and 3000K options, custom color temps available upon request
- Minimum CRI of 70, custom CRI available

Common Applications:

- Parking lots, ramps, walkways and roadways
- General area and site lighting
- Car dealerships, schools, hospitals, hotels and gas stations
- Retail stores and commercial buildings
- Sports lighting and ball fields

Light Engine Warranty:

- 5-year standard limited warranty on all light engine components
- Accessories and adders covered by separate OEM supplier warranties



lightpolesplus.com

206 W. McWilliams St. | 888-791-1463
 Suite 101 | quotes@lightpolesplus.com
 Fond du Lac, WI 54935 | LightPolesPlus.com



Rev V11072016

This specification brochure is intended to serve as a general guide. Our products are continually being engineered and improved, and specifications are subject to change without notice.

Product Specifications

Housing Construction, Finish & Mounting:

- Rugged, die-cast, soft square aluminum housing
- Impact resistant, tempered glass lens and durable silicone gasket
- Durable, multi-layer, polyester powder coat or industrial grade liquid paint
- Available in a variety of colors such as dark bronze, black, white, light gray, dark green and natural aluminum (custom colors available upon request)
- 6" pole mount, 10" pole mount, adjustable slipfitter and trunion yolk brackets available as standard mounting accessories

Optics & Lighting Distribution:

- Innovative IP67 silicone optics assembly with precision light control and cutoff
- Standard photometric distributions include V WIDE, 3/4 FWD, 30° NARROW SPOT and 70° MEDIUM SPOT
- No secondary optics used for base model
- IES files, photometric reports and simulations available upon request

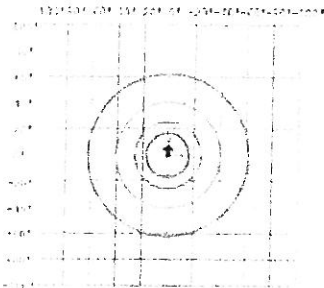
Automotive Dealership Optics:

- Left and right optical rotation available for applications like car dealership front lines (optics are not field-rotatable, must be done at factory)
- Delivers enhanced lighting and proper photometric control of auto dealership merchandise
- Allows for simple 2@180 pole mount while rotating forward throw light patterns toward dealership merchandise

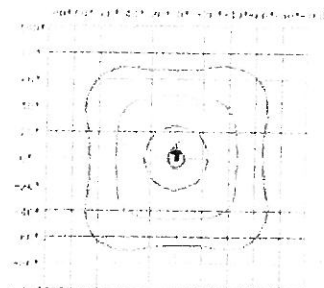
LEGEND:

0.1 fc 0.5 fc 2.0 fc 5.0 fc

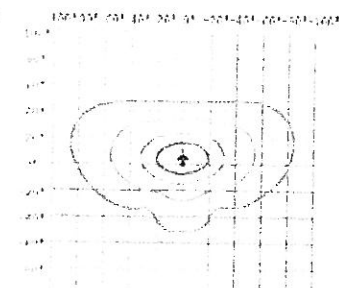
Created & Simulated per IESNA LM-63-1995



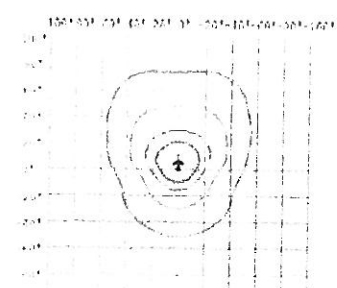
160w Shoebox, Type V, 20' Height



160w Shoebox, Type V Square, 20' Height



160w Shoebox, Type III/IV, 20' Height



160w Shoebox, Type IV, 20' Height

Electrical:

- Operating temp: -40 °C to +50 °C
- Standard AC input of 120-277v VAC, up to 480v available
- EMI filter: 47CFR, part 2, part 15
- Power factor: >0.9
- Total harmonic distortion <20%
- Surge protection: IEC/EN 61000-4-5 EMC test standard
- Licensed electrician required for installation

Energy Control Options:

- Daylight harvesting and photo controls
- Motion control and dimming
- Surge protection
- CA Title 24 compliance options available upon request

Effective Projected Area (EPA) & Weight:

- 12" Housing (15 LBS)
 - 0.75 EPA at 0°
 - 1.3 EPA at 45°
- 16" Housing (25 LBS)
 - 1.2 EPA at 0°
 - 2.0 EPA at 45°

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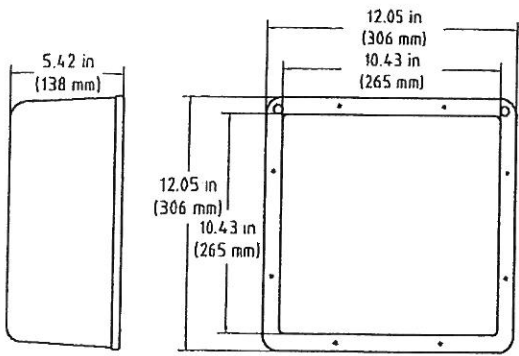
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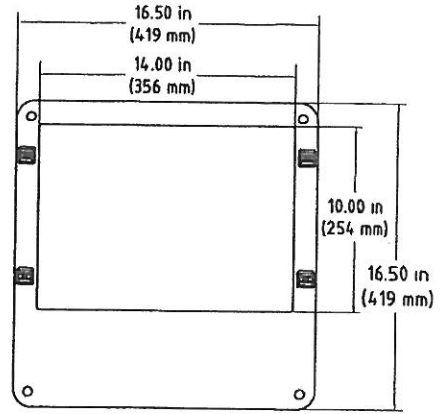
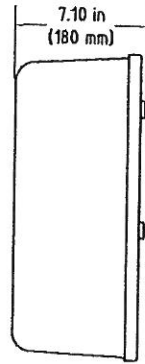
Rev. VI1072016

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12"



16"



Light Engine Specifications (Values Listed for Type V, 5000K)

Base Model	System Watts	LED Watts	HID Replacement ¹	Number of COBs	Drive Current	Nominal Lumens ²	Delivered Lumens ³	L70 EnergySTAR LED Life ⁴
12-SBHC-20-50-MV-5	20w	17w	40-100w	1	500 mA	2,717	2,445	422,000 Hrs
12-SBHC-40-50-MV-5	40w	34w	75-175w	1	1,000 mA	5,043	4,539	422,000 Hrs
12-SBHC-60-50-MV-5	79w	71w	125-300w	2	1,050 mA	10,397	9,357	422,000 Hrs
12-SBHC-120-50-MV-5	118w	107w	200-400w	3	1,050 mA	15,595	14,036	422,000 Hrs
16-SBHC-160-50-MV-5	158w	142w	300-525w	4	1,050 mA	20,794	18,714	422,000 Hrs
16-SBHC-200-50-MV-5	198w	178w	400-650w	5	1,050 mA	25,993	23,393	422,000 Hrs
16-SBHC-240-50-MV-5	237w	213w	750-1000w	6	1,050 mA	31,191	28,072	422,000 Hrs

Recommended Lumen Maintenance Factor (LMF)⁴

Type	Ambient	Initial LMF	25K Hour Projected LMF	50K Hour Projected LMF	75K Hour Projected LMF	100K Hour Projected LMF
COB	25 °C (77 °F)	100%	96%	94%	92%	90%

1. Considered to be a typical HID equivalent. Specific HID wattage equivalents will depend on things like environmental and application characteristics, distribution type and design options.
2. Considered initial nominal value of the LED light engine as specified by the LED chip manufacturer. Future efficacy and lumen output will depend on things like color temperature, distribution type and environmental characteristics.
3. Considered the typical initial delivered lumens of the LED light engine. Specific lumens for an application will depend on things like color temperature, distribution type and environmental characteristics.
4. Lumen maintenance values at 25 °C are calculated per TM-21 based on LM-80 data and in-house luminaire testing.
5. In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip.
6. In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip.

Note: Additional wattages and configurations available upon request. Specifications are subject to change without notice.

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Suite 101
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Ordering Information

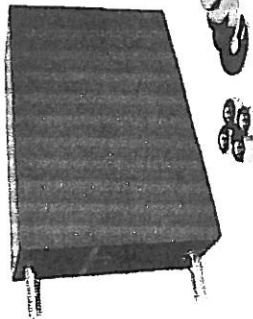
Ex. 12-SBHC-120-50-MV-5-DB-6S-BPC1

Designation	Wattage	Color Temperature	Input Voltage	Distribution Type	Color
12-SBHC = 12" Shoebox COB	20 = 20 Watt 40 = 40 Watt 80 = 80 Watt 120 = 120 Watt 160 = 160 Watt 200 = 200 Watt 240 = 240 Watt	50 = 5000K 40 = 4000K 30 = 3000K CT = Custom	MV = 100-277V HV = 347-480V CV = Custom	5 = Type V Round 5W = Type V Square 4 = Type IV FWD 34 = Type III/IV FWD 3 = Type III Wide 70 = 70° Medium Spot 30 = 30° Narrow Spot CD = Custom	DB = Dark Bronze BK = Black WH = White SG = Slate Gray LG = Light Gray DG = Dark Green NA = Nat Alum. CC = Custom Color

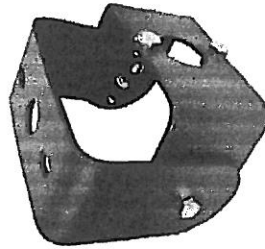
Accessories	
Mounting	
6S = 5" Arm (Square Pole)	
6R = 6" Arm (Round Pole)	
10S = 10" Arm (Square Pole)	
10R = 10" Arm (Round Pole)	
SF = 2.38" OD Slipfitter	
TR = Trunnion Yolk	
Housing	
WG12 = 12" Wire Guard	
WG16 = 16" Wire Guard	
HSY12 = 12" House Side Visor	
HSY16 = 16" House Side Visor	
Controls	
BPC1 = Button Photocontrol, 120 VAC	
BPC2 = Button Photocontrol, 208 to 277 VAC	
SPC1 = Swivel Photocontrol, 120 VAC	
SPC2 = Swivel Photocontrol, 208 to 277 VAC	
SPC3 = Swivel Photocontrol, 480 VAC	
WSPA-EM-UNV-360 = WASP Controls, 120/277/347v, 12" Housing, 360 Degree Lens*	
WSPA-EM-208-360 = WASP Controls, 208/240v, 12" Housing, 360 Degree Lens*	
WSPA-SM-UNV-360 = WASP Controls, 120/277/347v, 16" Housing, 360 Degree Lens*	
WSPA-SM-208-360 = WASP Controls, 208/240v, 16" Housing, 360 Degree Lens*	
SRG1 = Surge Protector, 120V	
SRG2 = Surge Protector, 240V	
SRG3 = Surge Protector, 277V	
SRG4 = Surge Protector, 347V	
SRG5 = Surge Protector, 480V	
Other	
WHP-10-NP = 10' Cord w/o Plug, Stripped Pigtail Both Ends (Not Installed)	
WHP-6-NP = 6' Cord w/o Plug, Stripped Pigtail Both Ends (Not Installed)	
WHP-10-120P = 10' Cord w/ NEMA 5-15P, Stripped Pigtail One End (Not Installed)	
WHP-6-120P = 6' Cord w/ NEMA 5-15P, Stripped Pigtail One End (Not Installed)	
CG1 = 1/2" NPT Cord Grip, 0.180-C 40P* Cord DP Range (Not Installed)	

* Many lens options available; contact us for more options

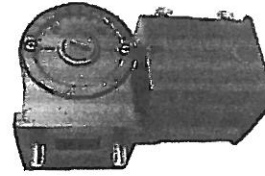
Mounting Accessories



Arm Mount



Trunnion Mount



Slipfitter Mount

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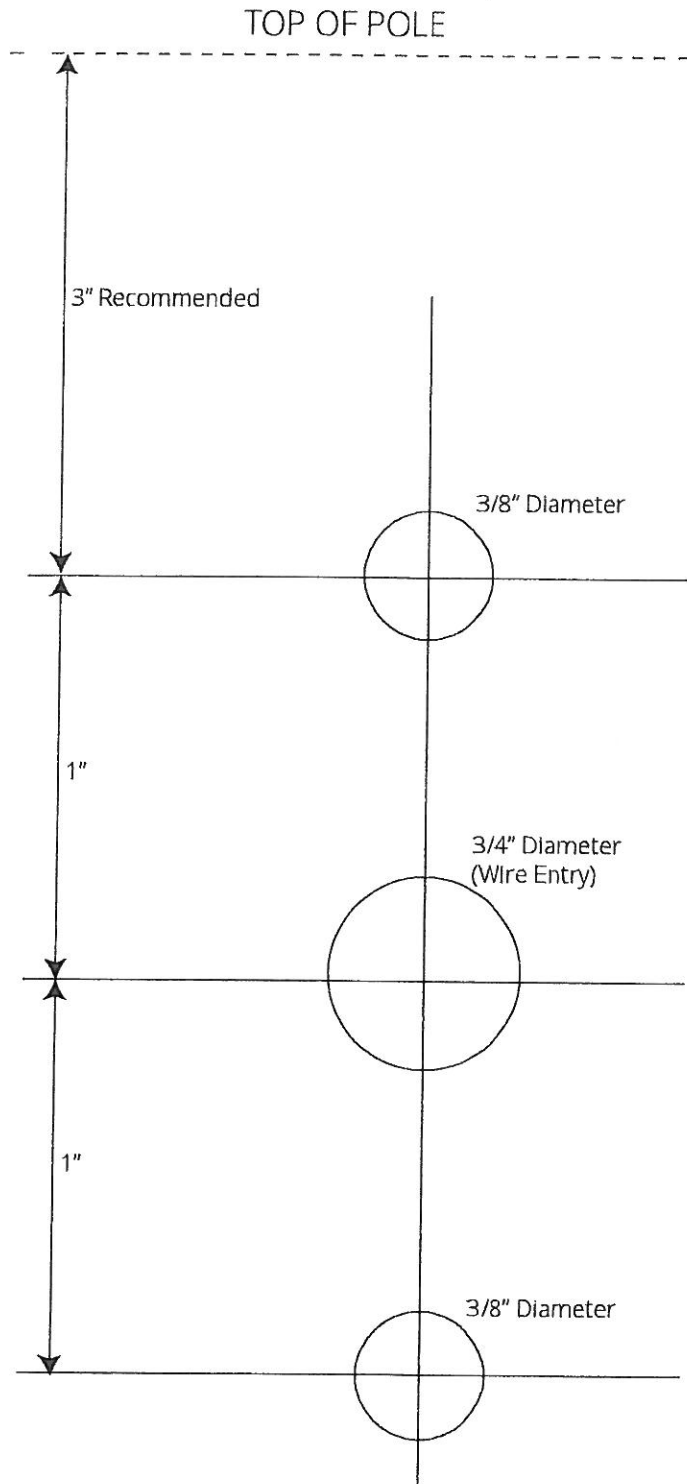
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6" & 10" Arm Drill Pattern for 12" & 16" Shoebox Fixtures



 **IMPORTANT: DIMENSIONS ARE NOT TO SCALE!**

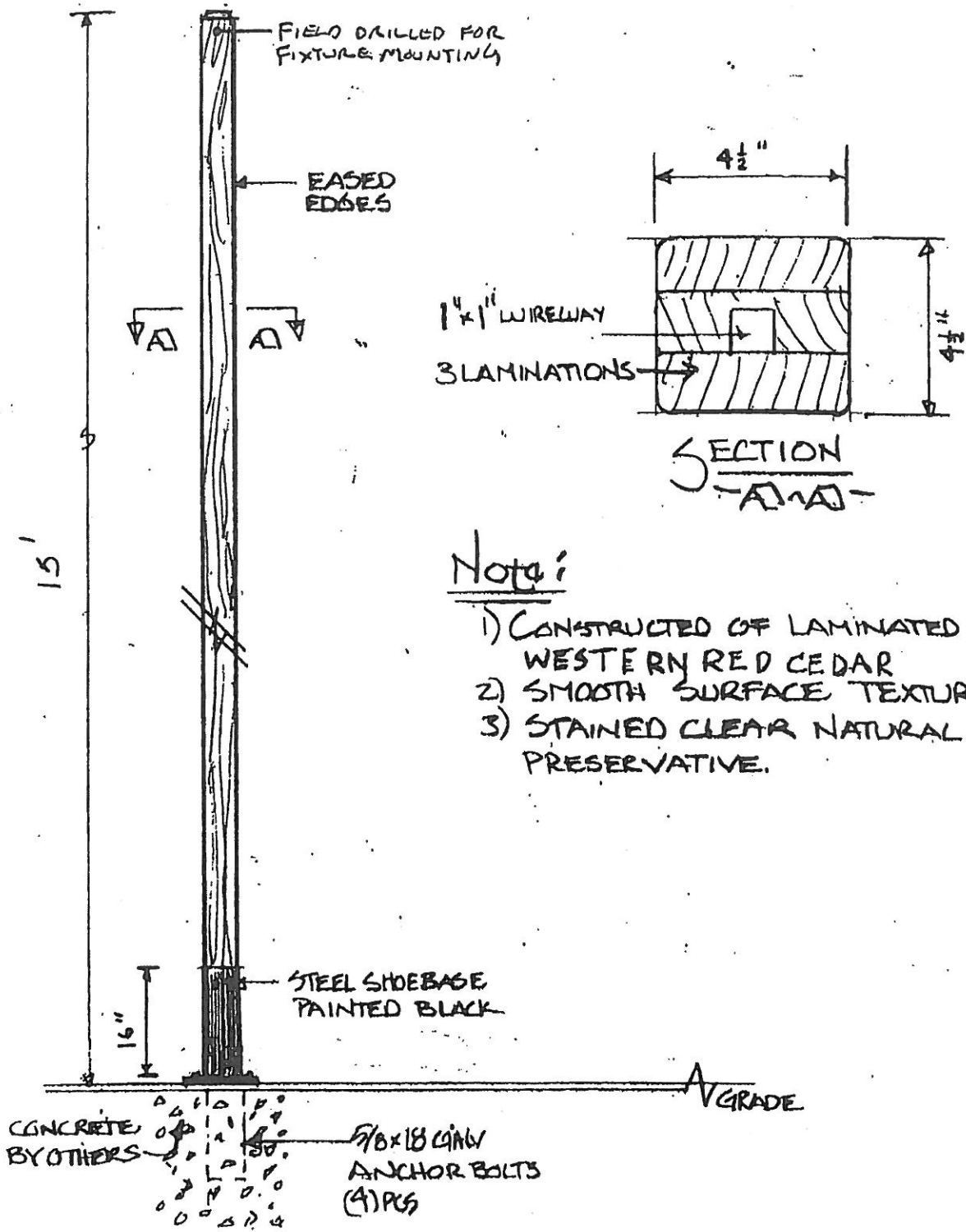
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Notes:

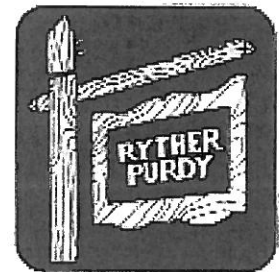
- 1) CONSTRUCTED OF LAMINATED WESTERN RED CEDAR
- 2) SMOOTH SURFACE TEXTURE.
- 3) STAINED CLEAR NATURAL WOODLIFE[®] PRESERVATIVE.

WS15XCSN-NC-SB-AB

DESIGNED FOR:		
URBANE CONSTRUCTION		
PROJECT: HUNT STREET PARK		
DATE:	DRAWINGS	DRAWN BY:
11-28-16	A8288-01	JMK

Laminated Poles

Craftsmanship
in wood
for more than 50 years



Unique Western Red Cedar Qualities

After extensive research and testing Ryther-Purdy now offers *Western Red Cedar* laminated poles in both the Type W Straight Shaft and Type K Knollwood styles. (See separate catalog pages.) Lamination is standard in all W and K poles with mounting heights to 25', and is available to mounting heights of 30' on request. (See chart below.)

We are pleased with the results of having combined the warmth and beauty of *Western Red Cedar* with the practical advantages of lamination. It provides additional strength and a vandal-proof center wireway, creating a lighting standard that will measure up to the most demanding applications.

Construction

Poles are fabricated of kiln-dried standard and better *Western Red Cedar* planks graded under West Coast Lumber Grading Rules #16 and laminated under PS 56-73 revision of commercial standard CS253-63 procedures and standards of the American Institute of Timber Construction (A.I.T.C.).

In the Ryther-Purdy tradition, these poles are over designed to assure rigid, longlasting installations which, with favorable soil conditions and adequate drainage at grade, should last indefinitely. (See "Installation Recommendations" in the specifications information pages of this catalog.)

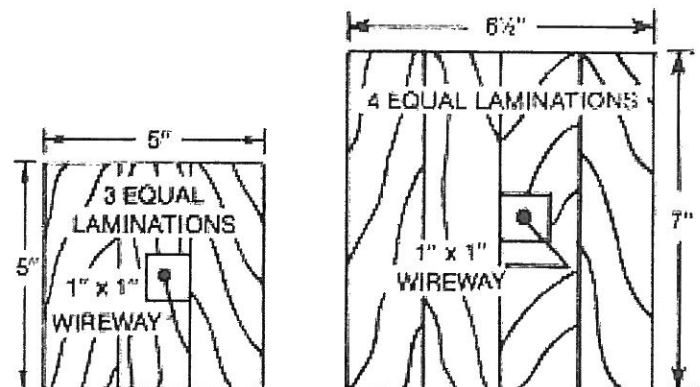
We provide two cross sections, 5" x 5" and 6 1/2" x 7" (see sketches) enabling us to offer a wide variety of mounting heights. Both cross sections feature a tamper-proof center wireway with access holes both below grade and at the fixture mounting position.

Finish

A unique, simulated adzed finish is standard. This is a handsome rugged surface which has the appearance of being hand hewn. It not only disguises the laminates but better prepares the pole to receive a stain. A pigmented, water repellent preservative stain, Dark Brown Wood-life*, is generally applied. Also available is a similar yet natural-colored preservative which allows the pole to weather to an attractive silver-gray. Upon request any Cabot stain will be factory applied. Although not recommended, other surface textures can be provided.

*Trademark: Roberts Consolidated Industries/Champion Int'l. Corp.

CROSS SECTION	TYPE W MTG. HEIGHT	TYPE K MTG. HEIGHT
5" x 5"	6' - 16'	8' - 15'
6 1/2" x 7"	17' - 30"	16' - 30"



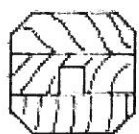
CROSS SECTIONS OF LAMINATED POLES

* NOTE: INSTALLATIONS OVER 25' ARE OCCASIONALLY RESTRICTED DUE TO PROJECTED AREA AND WEIGHT OF LUMINAIRES TO BE USED.

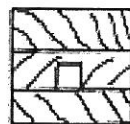
SPECIFICATIONS

CATALOG NUMBER	CROSS SECTION		HEIGHT ABOVE GRADE	BURIAL DEPTH	SHIPPING WEIGHT (lbs)	MAX TOTAL E.P.A. SQUARE FEET		
						80 MPH	90 MPH	100 MPH
W406F	4" X 4"	Solid	6' - 0"	3' - 0"	30	10.61	8.14	6.40
W408F	4" X 4"	Solid	8' - 0"	3' - 0"	37	7.70	5.80	4.44
W410F	4" X 4"	Solid	10' - 0"	3' - 0"	44	5.79	4.23	3.12
W510C	5" X 5"	Laminated	10' - 0"	3' - 0"	54	14.05	10.62	8.20
W512F	5" X 5"	Solid	12' - 0"	3' - 0"	84	9.77	7.17	5.34
W512C	5" X 5"	Laminated	12' - 0"	3' - 0"	63	11.19	8.29	6.24
W514F	5" X 5"	Solid	14' - 0"	4' - 0"	94	7.75	5.50	3.91
W514C	5" X 5"	Laminated	14' - 0"	4' - 0"	75	8.98	6.46	4.69
W516F	5" X 5"	Solid	16' - 0"	4' - 0"	104	6.10	4.12	2.71
W516C	5" X 5"	Laminated	16' - 0"	4' - 0"	84	7.18	4.98	3.40
W616F	6" X 6"	Solid	16' - 0"	4' - 0"	150	7.18	8.76	6.27
W618F	6" X 6"	Solid	18' - 0"	5' - 0"	173	10.01	6.94	4.77
W718C	6½" X 7"	Laminated	18' - 0"	5' - 0"	175	20.35	14.91	11.00
W718F	7" X 7"	Solid	18' - 0"	5' - 0"	235	17.68	12.82	9.37
W620F	6" X 6"	Solid	20' - 0"	6' - 0"	195	8.15	6.38	3.41
W720C	6½" X 7"	Laminated	20' - 0"	6' - 0"	197	17.34	12.43	8.95
W720F	7" X 7"	Solid	20' - 0"	6' - 0"	265	14.93	10.59	7.42
W920F	9" X 9"	Solid	20' - 0"	6' - 0"	439	36.45	27.08	20.29
W725C	6½" X 7"	Laminated	25' - 0"	6' - 0"	235	11.50	7.53	4.71
W925F	9" X 9"	Solid	25' - 0"	6' - 0"	523	26.18	18.63	13.27
W1025F	10" X 10"	Solid	25' - 0"	6' - 0"	646	38.27	27.90	20.58
W730C	6½" X 7"	Laminated	30' - 0"	6' - 0"	273	6.56	3.91	1.36
W930F	9" X 9"	Solid	30' - 0"	6' - 0"	608	18.48	12.29	7.81
W1030F	10" X 10"	Solid	30' - 0"	6' - 0"	750	28.41	19.70	13.68
W935F	9" X 9"	Solid	35' - 0"	N/A *	750	14.91	9.17	5.03
W1035F	10" X 10"	Solid	35' - 0"	N/A *	917	23.58	15.64	10.01
W1040F	10" X 10"	Solid	40' - 0"	N/A *	1021	16.77	9.84	4.95

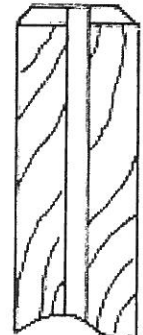
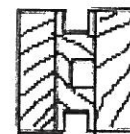
- NOTE: 1). * Shoebase mounted (anchor bolts by others).
 2). Shoebase mounting is available as an option on any Ryther Purdy Pole.
 3). See specification information page for fixture mounting details.



TAPERED CHAMFER



STRAIGHT SHAFT



REVEAL

Urbane Construction Corporation

CHANGE ORDER REQUEST

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Approved as to form and correctness

City Solicitor

Reviewed per F.S.A. 4/13/17
Leonard Morganis
Administration & Finance Officer

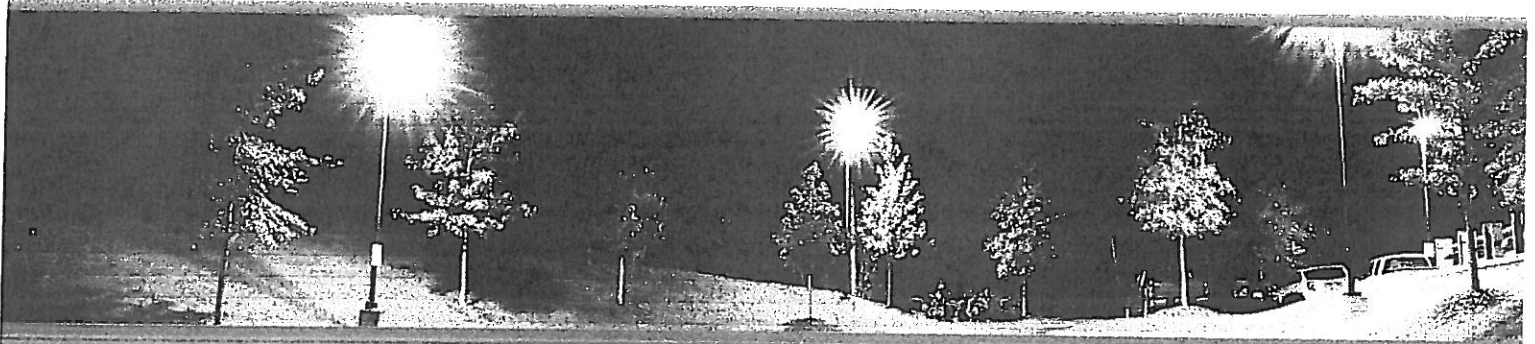
APPROVAL:

By: _____
James A. Diossa

Date: 4/7/17

By: _____
Jason Moon

Date: _____



12" & 16" LED Shoebox Hercules Area & Flood Lights, Olympia Series

Advanced light engine technology in a traditional housing design.
 Wisconsin engineering and craftsmanship utilizing premium components.

Our LED lights, light poles and brackets are proudly engineered and manufactured in the USA. We use only the highest quality components, and our LED Shoebox fixtures deliver unmatched light output and efficiency for any area or flood lighting project. Precision engineered for performance and energy savings, these products dramatically reduce energy consumption by up to 80% and virtually eliminate ongoing maintenance expenses for a variety of customers and applications.

Product Overview

Highlights:

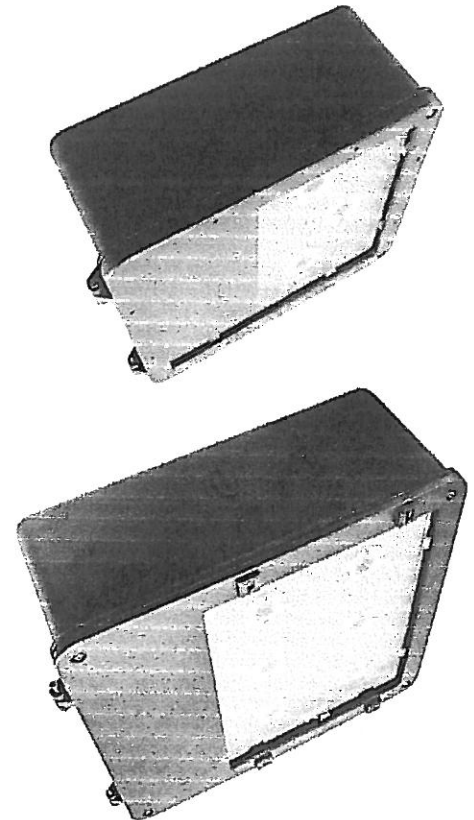
- Engineered and manufactured in Wisconsin, USA from domestic and imported components
- ETL Certified: Conforms to UL STD 1598 & CSA STD C22.2 # 250.0 for wet locations
- 1.70 calculated LED life over 400,000+ hours
- Drivers are 0-10v dimming standard
- Seven light engine options from 2,717 – 31,191 lumens for 50-1000w HID replacements
- Premium high-output Chip-On-Board (COB) LEDs in 5000K, 4000K and 3000K options, custom color temps available upon request
- Minimum CRI of 70, custom CRI available

Common Applications:

- Parking lots, ramps, walkways and roadways
- General area and site lighting
- Car dealerships, schools, hospitals, hotels and gas stations
- Retail stores and commercial buildings
- Sports lighting and ball fields

Light Engine Warranty:

- 5-year standard limited warranty on all light engine components
- Accessories and adders covered by separate OEM supplier warranties



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Product Specifications

Housing Construction, Finish & Mounting:

- Rugged die-cast, soft square aluminum housing
- Impact-resistant, tempered glass lens and durable silicone gasket
- Durable, multi-layer, polyester powder coat or industrial grade liquid paint
- Available in a variety of colors such as dark bronze, black, white, light gray, dark green and natural aluminum (custom colors available upon request)
- 6" pole mount, 10" pole mount, adjustable slipfitter and trunion yolk brackets available as standard mounting accessories

Optics & Lighting Distribution:

- Innovative IP67 silicone optics assembly with precision light control and cutoff
- Standard photometric distributions include V-WIDE, 3/4 EWD, 30° NARROW SPOJ and 70° MEDIUM SPOJ
- No secondary optics used for base model
- IES files, photometric reports and simulations available upon request

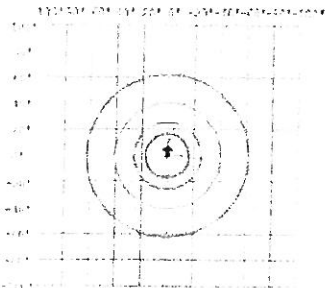
Automotive Dealership Optics:

- Left and right optical rotation available for applications like car dealership front lines (optics are not field-rotatable, must be done at factory)
- Delivers enhanced lighting and proper photometric control of auto dealership merchandise
- Allows for simple 2@180 pole mount while rotating forward throw light patterns toward dealership merchandise

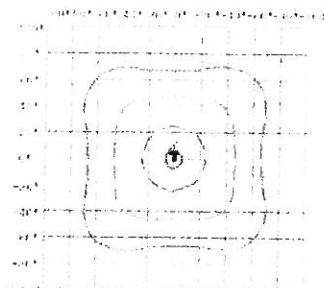
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0.1 fc 0.5 fc 2.0 fc 5.0 fc

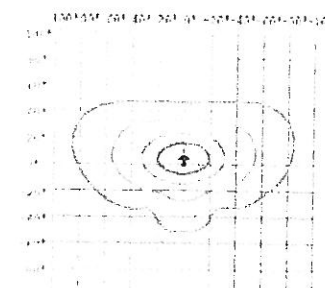
Created & Simulated per IESNA LM-63-1495



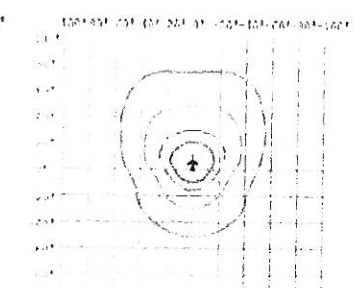
160w Shoebox, Type V, 20' Height



160w Shoebox, Type V Square, 20' Height



160w Shoebox, Type III IV, 20' Height



160w Shoebox, Type IV, 20' Height

Electrical:

- Operating temp: -40 °C to +50 °C
- Standard AC input of 120-277v VAC, up to 480v available
- EMI filter: 470FR, part 2, part 15
- Power factor: >0.9
- Total harmonic distortion: <20%
- Surge protection: IEC/EN 61000-4-5 EMC test standard
- Licensed electrician required for installation

Energy Control Options:

- Daylight harvesting and photo controls
- Motion control and dimming
- Surge protection
- CA Title 24 compliance options available upon request

Effective Projected Area (EPA) & Weight, 12" Housing (15 LBS)

- 0.75 EPA at 0'
- 1.3 EPA at 45'
- 16" Housing (25 LBS)
- 1.2 EPA at 0'
- 2.0 EPA at 45'

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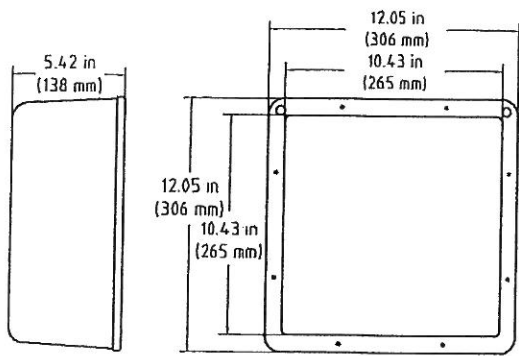
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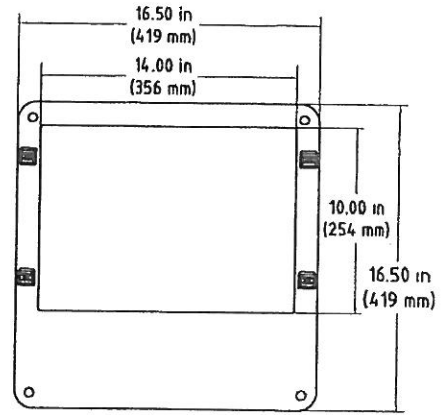
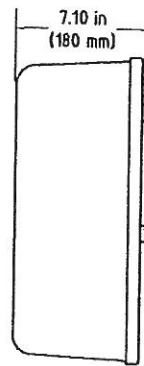
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12"



16"



Light Engine Specifications (Values Listed for Type V, 5000K)

Base Model	System Watts	LED Watts	HID Replacement ¹	Number of COBs	Drive Current	Nominal Lumens ²	Delivered Lumens ³	L70 EnergySTAR LED Life ⁴
12-SBHC-20-50-MV-5	20w	17w	40-100w	1	500 mA	2,717	2,445	422,000 Hrs
12-SBHC-40-50-MV-5	40w	34w	75-175w	1	1,000 mA	5,943	4,539	422,000 Hrs
12-SBHC-80-50-MV-5	79w	71w	125-300w	2	1,050 mA	10,397	9,357	422,000 Hrs
12-SBHC-120-50-MV-5	118w	107w	200-400w	3	1,050 mA	15,595	14,036	422,000 Hrs
16-SBHC-160-50-MV-5	158w	142w	300-525w	4	1,050 mA	20,794	18,714	422,000 Hrs
16-SBHC-200-50-MV-5	198w	178w	400-650w	5	1,050 mA	25,993	23,393	422,000 Hrs
16-SBHC-240-50-MV-5	237w	213w	750-1000w	6	1,050 mA	31,191	28,072	422,000 Hrs

Recommended Lumen Maintenance Factor (LMF)⁴

Type	Ambient	Initial LMF	25K Hour Projected LMF	50K Hour Projected LMF	75K Hour Projected LMF	100K Hour Projected LMF
COB	25 °C (77 °F)	100%	96%	94%	92%	90%

1. Considered to be a typical HID equivalent. Specific HID wattage equivalents will depend on things like environmental and application characteristics, distribution type and design criteria.
2. Considered initial nominal value of the LED light engine as specified by the LED chip manufacturer. Fixture efficacy and lumen output will depend on things like color temperature, distribution type and environmental characteristics.
3. Considered the typical initial delivered lumens of the LED light engine. Specific lumens for an application will depend on things like color temperature, distribution type and environmental characteristics.
4. Lumen maintenance values at 25 °C are calculated per TM-21 based on LM-80 data and in-house luminaire testing.
5. In accordance with IESNA TM-21-11, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip.
6. In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip.

Note: Additional wattages and configurations available upon request. Specifications are subject to change without notice.



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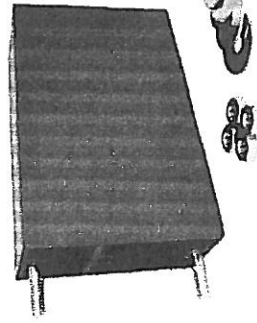
Ordering Information

Ex. 12-SBHC-120-50-MV-5-DB-6S-BPC1

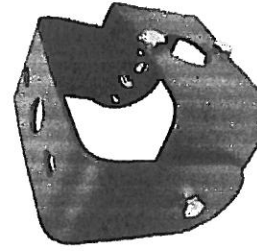
Designation	Wattage	Color Temperature	Input Voltage	Distribution Type	Color	Accessories	
12-SBHC = 12" Shoebox COB	20 = 20 Watt	50 = 5000K	MV = 100-277v	5 = Type V Round	DB = Dark Bronze	Mounting	
16-SBHC = 16" Shoebox COB	40 = 40 Watt	40 = 4090K	HV = 347-480v	SW = Type V Square	BK = Black		
	80 = 80 Watt	30 = 3000K	CV = Custom	4 = Type IV FWD	WH = White		
	120 = 120 Watt	CT = Custom		34 = Type III/IV FWD	SG = Slate Gray		
	160 = 160 Watt			3 = Type III Wide	LG = Light Gray		
	200 = 200 Watt			70 = 70" Medium Spot	DG = Dark Green		
	240 = 240 Watt			30 = 30" Narrow Spot	NA = Nat Alum		
				CD = Custom	PA = Paint		
					CC = Custom Color		
							Housing
							WG12 = 12" Wire Guard
							WG16 = 16" Wire Guard
							HSV12 = 12" House Side Visor
							HSV16 = 16" House Side Visor
							Controls
						BPC1 = Button Photocontrol, 120 VAC	
						BPC2 = Button Photocontrol, 208 to 277 VAC	
						SPC1 = Swivel Photocontrol, 120 VAC	
						SPC2 = Swivel Photocontrol, 208 to 277 VAC	
						SPC3 = Swivel Photocontrol, 480 VAC	
						WSPA-EM-UNV-360 = W.A.S.P. Controls, 120/277/347v, 12" Housing, 360 Degree Lens*	
						WSPA-EM-208-360 = W.A.S.P. Controls, 208/240v, 12" Housing, 360 Degree Lens*	
						WSPA-SM-UNV-360 = W.A.S.P. Controls, 120/277/347v, 16" Housing, 360 Degree Lens*	
						WSPA-SM-208-360 = W.A.S.P. Controls, 208/240v, 16" Housing, 360 Degree Lens*	
						SRG1 = Surge Protector, 120v	
						SRG2 = Surge Protector, 240v	
						SRG3 = Surge Protector, 277v	
						SRG4 = Surge Protector, 347v	
						SRG5 = Surge Protector, 480v	
						Other	
						WHP-10-NP = 10' Cord w/o Plug, Stripped Pigtail Both Ends (Not Installed)	
						WHP-6-NP = 6' Cord w/o Plug, Stripped Pigtail Both Ends (Not Installed)	
						WHP-10-120P = 10' Cord w/ NEMA 5-15P, Stripped Pigtail One End (Not Installed)	
						WHP-6-120P = 6' Cord w/ NEMA 5-15P, Stripped Pigtail One End (Not Installed)	
						CG1 = 1/2" NPT Cord Grip 0.180-0.400" Cord OD Range (Not Installed)	

* Many lens options available, contact us for more options

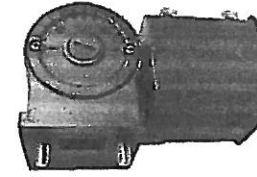
Mounting Accessories



Arm Mount



Transition Mount



Slipfitter Mount

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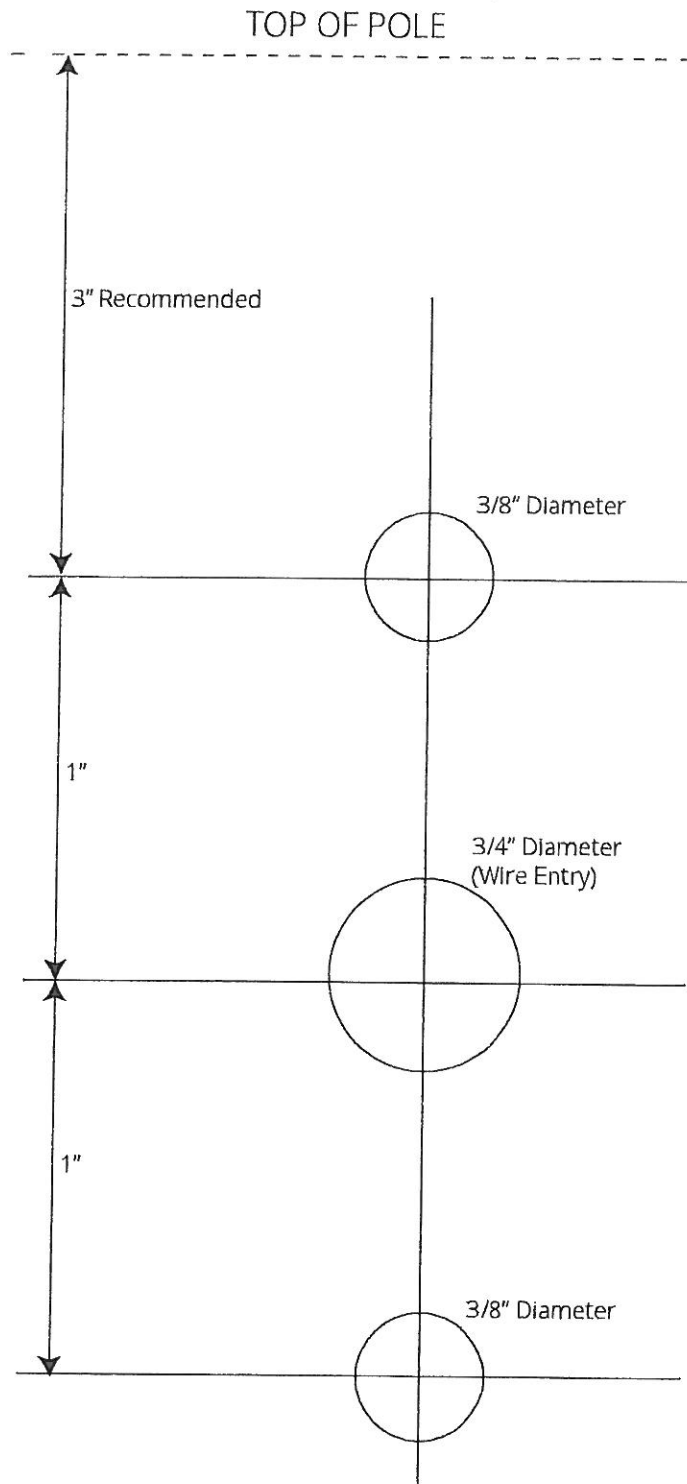
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6" & 10" Arm Drill Pattern for 12" & 16" Shoebox Fixtures



 **IMPORTANT: DIMENSIONS ARE NOT TO SCALE!**

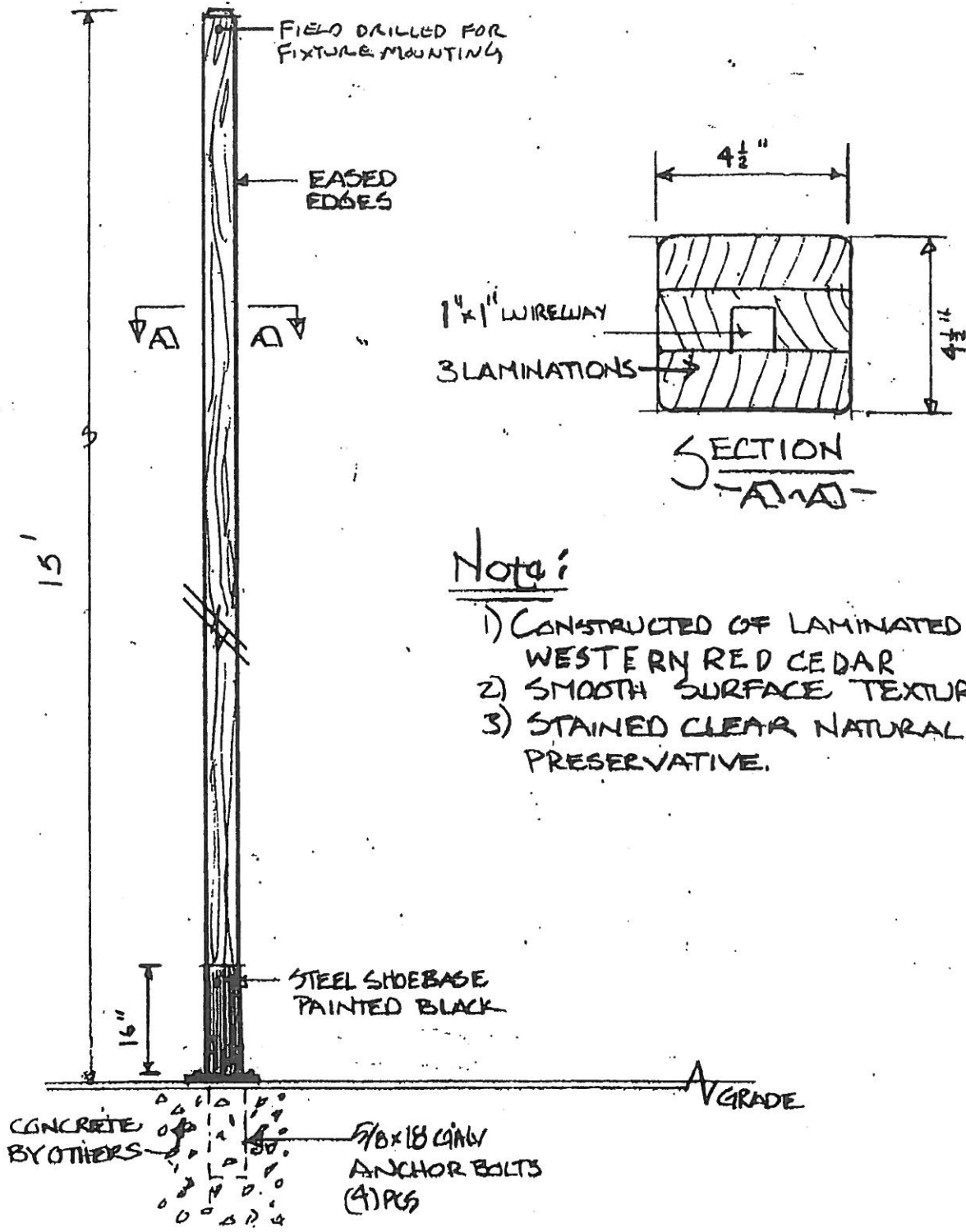
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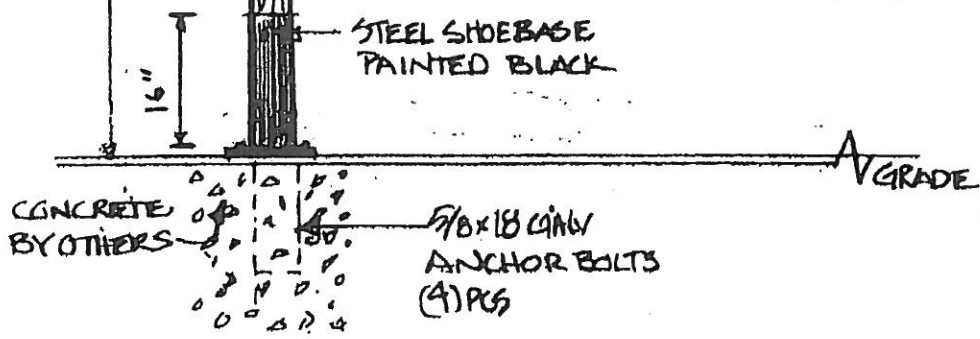
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Notes:

- 1) CONSTRUCTED OF LAMINATED WESTERN RED CEDAR
- 2) SMOOTH SURFACE TEXTURE.
- 3) STAINED CLEAR NATURAL WOODLIFE[®] PRESERVATIVE.

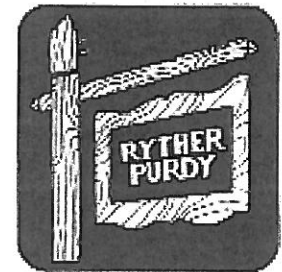


W515X65N-NC-SB-AB

DESIGNED FOR:		
URBANE CONSTRUCTION		
PROJECT: HUNT STREET PARK		
DATE:	DRAWINGS	DRAWN BY:
11-28-16	A8288-01	JVK

Laminated Poles

Craftsmanship
In wood
for more than 50 years



Unique Western Red Cedar Qualities

After extensive research and testing Ryther-Purdy now offers *Western Red Cedar* laminated poles in both the Type W Straight Shaft and Type K Knollwood styles. (See separate catalog pages.) Lamination is standard in all W and K poles with mounting heights to 25', and is available to mounting heights of 30' on request. (See chart below.)

We are pleased with the results of having combined the warmth and beauty of *Western Red Cedar* with the practical advantages of lamination. It provides additional strength and a vandal-proof center wireway, creating a lighting standard that will measure up to the most demanding applications.

Construction

Poles are fabricated of kiln-dried standard and better *Western Red Cedar* planks graded under West Coast Lumber Grading Rules #16 and laminated under PS 56-73 revision of commercial standard CS253-63 procedures and standards of the American Institute of Timber Construction (A.I.T.C.).

In the Ryther-Purdy tradition, these poles are over designed to assure rigid, longlasting installations which, with favorable soil conditions and adequate drainage at grade, should last indefinitely. (See "Installation Recommendations" in the specifications information pages of this catalog.)

We provide two cross sections, 5" x 5" and 6½" x 7" (see sketches) enabling us to offer a wide variety of mounting heights. Both cross sections feature a tamper-proof center wireway with access holes both below grade and at the fixture mounting position.

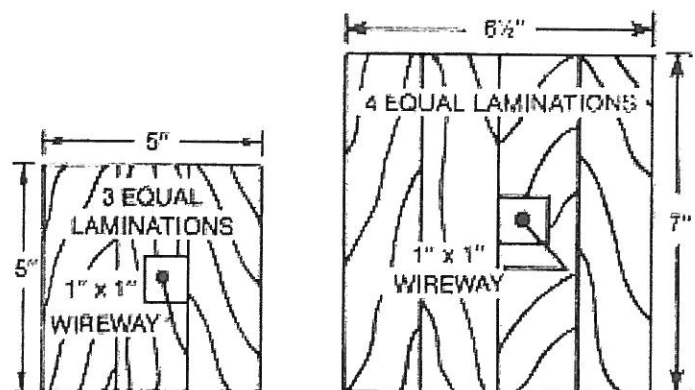
Finish

A unique, simulated adzed finish is standard. This is a handsome rugged surface which has the appearance of being hand hewn. It not only disguises the laminates but better prepares the pole to receive a stain. A pigmented, water repellent preservative stain, Dark Brown Wood-life*, is generally applied. Also available is a similar yet natural-colored preservative which allows the pole to weather to an attractive silver-gray. Upon request any Cabot stain will be factory applied. Although not recommended, other surface textures can be provided.

*Trademark: Roberts Consolidated Industries/Champion Int. Corp.

CROSS SECTION	TYPE W MTG. HEIGHT	TYPE K MTG. HEIGHT
5" x 5"	6' - 16'	8' - 15'
6½" x 7"	17' - 30'	16' - 30'

* NOTE: INSTALLATIONS OVER 25' ARE OCCASIONALLY RESTRICTED DUE TO PROJECTED AREA AND WEIGHT OF LUMINAIRES TO BE USED.

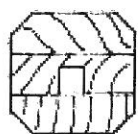


CROSS SECTIONS OF LAMINATED POLES

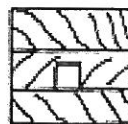
SPECIFICATIONS

CATALOG NUMBER	CROSS SECTION		HEIGHT ABOVE GRADE	BURIAL DEPTH	SHIPPING WEIGHT (lbs)	MAX TOTAL E.P.A. SQUARE FEET		
						80 MPH	90 MPH	100 MPH
W406F	4" X 4"	Solid	6' - 0"	3' - 0"	30	10.61	8.14	6.40
W408F	4" X 4"	Solid	8' - 0"	3' - 0"	37	7.70	5.80	4.44
W410F	4" X 4"	Solid	10' - 0"	3' - 0"	44	5.79	4.23	3.12
W510C	5" X 5"	Laminated	10' - 0"	3' - 0"	54	14.05	10.62	8.20
W512F	5" X 5"	Solid	12' - 0"	3' - 0"	84	9.77	7.17	5.34
W512C	5" X 5"	Laminated	12' - 0"	3' - 0"	63	11.19	8.29	6.24
W514F	5" X 5"	Solid	14' - 0"	4' - 0"	94	7.75	5.50	3.91
W514C	5" X 5"	Laminated	14' - 0"	4' - 0"	75	8.98	6.46	4.69
W516F	5" X 5"	Solid	16' - 0"	4' - 0"	104	6.10	4.12	2.71
W516C	5" X 5"	Laminated	16' - 0"	4' - 0"	84	7.18	4.98	3.40
W616F	6" X 6"	Solid	16' - 0"	4' - 0"	150	7.18	8.76	6.27
W618F	6" X 6"	Solid	18' - 0"	5' - 0"	173	10.01	6.94	4.77
W718C	6½" X 7"	Laminated	18' - 0"	5' - 0"	175	20.35	14.91	11.00
W718F	7" X 7"	Solid	18' - 0"	5' - 0"	235	17.68	12.82	9.37
W620F	6" X 6"	Solid	20' - 0"	6' - 0"	195	8.15	6.38	3.41
W720C	6½" X 7"	Laminated	20' - 0"	6' - 0"	197	17.34	12.43	8.95
W720F	7" X 7"	Solid	20' - 0"	6' - 0"	265	14.93	10.59	7.42
W920F	9" X 9"	Solid	20' - 0"	6' - 0"	439	36.45	27.08	20.29
W725C	6½" X 7"	Laminated	25' - 0"	6' - 0"	235	11.50	7.53	4.71
W925F	9" X 9"	Solid	25' - 0"	6' - 0"	523	26.18	18.63	13.27
W1025F	10" X 10"	Solid	25' - 0"	6' - 0"	646	38.27	27.90	20.58
W730C	6½" X 7"	Laminated	30' - 0"	6' - 0"	273	6.58	3.91	1.36
W930F	9" X 9"	Solid	30' - 0"	6' - 0"	608	18.48	12.29	7.81
W1030F	10" X 10"	Solid	30' - 0"	6' - 0"	750	28.41	19.70	13.68
W935F	9" X 9"	Solid	35' - 0"	N/A *	750	14.91	9.17	5.03
W1035F	10" X 10"	Solid	35' - 0"	N/A *	917	23.58	15.64	10.01
W1040F	10" X 10"	Solid	40' - 0"	N/A *	1021	16.77	9.84	4.95

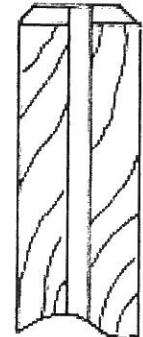
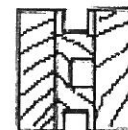
- NOTE: 1). * Shoebase mounted (anchor bolts by others).
 2). Shoebase mounting is available as an option on any Ryther Purdy Pole.
 3). See specification information page for fixture mounting details.



TAPERED CHAMFER



STRAIGHT SHAFT



REVEAL