



West Virginia Purchasing Division

2019 Washington Street, East
Charleston, WV 25305
Telephone: 304-558-2306
General Fax: 304-558-6026
Bid Fax: 304-558-3970

The following documentation is an electronically-submitted vendor response to an advertised solicitation from the *West Virginia Purchasing Bulletin* within the Vendor Self-Service portal at ***wvOASIS.gov***. As part of the State of West Virginia's procurement process, and to maintain the transparency of the bid-opening process, this documentation submitted online is publicly posted by the West Virginia Purchasing Division at ***WVPurchasing.gov*** with any other vendor responses to this solicitation submitted to the Purchasing Division in hard copy format.

Header List View

General Information | Contact | Default Values | Discount | Document Information

Procurement Folder: 230128	SO Doc Code: CRFQ
Procurement Type: Central Purchase Order	SO Dept: 0432
Vendor ID: VS0000010497	SO Doc ID: DCH1700000002
Legal Name: BOMBids, LLC	Published Date: 8/18/16
Alias/DBA:	Close Date: 8/31/16
Total Bid: \$222,945.30	Close Time: 13:30
Response Date: 08/31/2016	Status: Closed
Response Time: 13:04	Solicitation Description: Addendum No. 1 - Theater/Production Lighting
	Total of Header Attachments: 0
	Total of All Attachments: 0



Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

State of West Virginia
 Request for Quotation
 04 - Audio/Video

Proc Folder: 230128

Doc Description: Theater/Production Lighting for the Norman L. Fagin Theater

Proc Type: Central Purchase Order

Date Issued	Solicitation Closes	Solicitation No	Version
2016-08-01	2016-08-31 13:30:00	CRFQ 0432 DCH1700000002	1

BID RECEIVING LOCATION

BID CLERK
 DEPARTMENT OF ADMINISTRATION
 PURCHASING DIVISION
 2019 WASHINGTON ST E
 CHARLESTON WV 25305
 US

VENDOR

Vendor Name, Address and Telephone Number:

910-208-4608
 Bombids, LLC
 1442 Military Cutoff Rd, #25
 Wilmington, NC 28405

FOR INFORMATION CONTACT THE BUYER

Michelle L Childers
 (304) 558-2063
 michelle.l.childers@wv.gov

Signature X

FEIN #

36-4788169

DATE

8-31-16

All offers subject to all terms and conditions contained in this solicitation

EXHIBIT "A"
PRICING PAGE
REQUEST FOR QUOTATION- CQRS DCH160000013
THEATRICAL/PRODUCTION LIGHTING FOR THE NORMAN L. FAGIN STATE THEATER

Submitted By: Bombids LLC (hereinafter called the "Vendor")

The Undersigned having examined the Solicitation and attached Specifications, proposes to supply the following contract items (include all shipping and related costs):

Item	Description	Equivalent Brand and Model Bid	Unit of Measure	Unit Cost	Quantity	Extended Cost
3.1.1	Light Emitting Diode (LED) Wash Lights		Each	1182.86	20	23,657.20
3.1.2	Light Emitting Diode (LED) 15°-30° Zoom Ellipsoidals		Each	1843.52	20	36,870.40
3.1.3	Light Emitting Diode (LED) 30°-50° Zoom Ellipsoidals.		Each	1843.52	50	92,176.00
3.1.4	Light Emitting Diode (LED) 10° Beam Angle, 72 Inch long, Linear (CYC/Strip) Lights.		Each	4747.25	6	28,483.50
3.1.5	Light Emitting Diode (LED), Moving Head, Spot Luminaires.		Each	2747.25	12	32,967.00
3.1.6	Short Arc lamp Follow Spots:		Each	4395.60	2	8,791.20

TOTAL BID AMOUNT: \$ 222,945.30

VENDOR: If submitting an "Or Equal" item for consideration, enter the Product Brand and Model Number above.

NOTICE OF ACCEPTANCE

The undersigned designates the person and office, to which Notice of Acceptance may be mailed, telegraphed or delivered:

Respectfully submitted,
BY (Signature) 

FIRM ADDRESS: 1442 Military Cutoff Rd, #25, Wilmington, NC 28405

DATED: 8/31/16

State of West Virginia

VENDOR PREFERENCE CERTIFICATE

Certification and application is hereby made for Preference in accordance with *West Virginia Code*, §5A-3-37. (Does not apply to construction contracts). *West Virginia Code*, §5A-3-37, provides an opportunity for qualifying vendors to request (at the time of bid) preference for their residency status. Such preference is an evaluation method only and will be applied only to the cost bid in accordance with the *West Virginia Code*. This certificate for application is to be used to request such preference. The Purchasing Division will make the determination of the Vendor Preference, if applicable.

- 1. **Application is made for 2.5% vendor preference for the reason checked:**
 Bidder is an individual resident vendor and has resided continuously in West Virginia for four (4) years immediately preceding the date of this certification; or,
 Bidder is a partnership, association or corporation resident vendor and has maintained its headquarters or principal place of business continuously in West Virginia for four (4) years immediately preceding the date of this certification;
 Bidder is a resident vendor partnership, association, or corporation with at least eighty percent of ownership interest of bidder held by another entity that meets the applicable four year residency requirement; or,
 Bidder is a nonresident vendor which has an affiliate or subsidiary which employs a minimum of one hundred state residents and which has maintained its headquarters or principal place of business within West Virginia continuously for the four (4) years immediately preceding the date of this certification; or,
- 2. **Application is made for 2.5% vendor preference for the reason checked:**
 Bidder is a resident vendor who certifies that, during the life of the contract, on average at least 75% of the employees working on the project being bid are residents of West Virginia who have resided in the state continuously for the two years immediately preceding submission of this bid; or,
- 3. **Application is made for 2.5% vendor preference for the reason checked:**
 Bidder is a nonresident vendor that employs a minimum of one hundred state residents, or a nonresident vendor which has an affiliate or subsidiary which maintains its headquarters or principal place of business within West Virginia and employs a minimum of one hundred state residents, and for purposes of producing or distributing the commodities or completing the project which is the subject of the bidder's bid and continuously over the entire term of the project, on average at least seventy-five percent of the bidder's employees or the bidder's affiliate's or subsidiary's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years and the vendor's bid; or,
- 4. **Application is made for 5% vendor preference for the reason checked:**
 Bidder meets either the requirement of both subdivisions (1) and (2) or subdivision (1) and (3) as stated above; or,
- 5. **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
 Bidder is an individual resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard and has resided in West Virginia continuously for the four years immediately preceding the date on which the bid is submitted; or,
- 6. **Application is made for 3.5% vendor preference who is a veteran for the reason checked:**
 Bidder is a resident vendor who is a veteran of the United States armed forces, the reserves or the National Guard, if, for purposes of producing or distributing the commodities or completing the project which is the subject of the vendor's bid and continuously over the entire term of the project, on average at least seventy-five percent of the vendor's employees are residents of West Virginia who have resided in the state continuously for the two immediately preceding years.
- 7. **Application is made for preference as a non-resident small, women- and minority-owned business, in accordance with *West Virginia Code* §5A-3-59 and *West Virginia Code of State Rules*.**
 Bidder has been or expects to be approved prior to contract award by the Purchasing Division as a certified small, women- and minority-owned business.

Bidder understands if the Secretary of Revenue determines that a Bidder receiving preference has failed to continue to meet the requirements for such preference, the Secretary may order the Director of Purchasing to: (a) rescind the contract or purchase order; or (b) assess a penalty against such Bidder in an amount not to exceed 5% of the bid amount and that such penalty will be paid to the contracting agency or deducted from any unpaid balance on the contract or purchase order.

By submission of this certificate, Bidder agrees to disclose any reasonably requested information to the Purchasing Division and authorizes the Department of Revenue to disclose to the Director of Purchasing appropriate information verifying that Bidder has paid the required business taxes, provided that such information does not contain the amounts of taxes paid nor any other information deemed by the Tax Commissioner to be confidential.

Bidder hereby certifies that this certificate is true and accurate in all respects; and that if a contract is issued to Bidder and if anything contained within this certificate changes during the term of the contract, Bidder will notify the Purchasing Division in writing immediately.

Bidder: _____ Signed: _____
Date: _____ Title: _____

*Check any combination of preference consideration(s) indicated above, which you are entitled to receive.

**ADDENDUM ACKNOWLEDGEMENT FORM
SOLICITATION NO.:**

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.


Addendum Numbers Received:

(Check the box next to each addendum received)

- | | |
|--|--|
| <input checked="" type="checkbox"/> Addendum No. 1 | <input type="checkbox"/> Addendum No. 6 |
| <input type="checkbox"/> Addendum No. 2 | <input type="checkbox"/> Addendum No. 7 |
| <input type="checkbox"/> Addendum No. 3 | <input type="checkbox"/> Addendum No. 8 |
| <input type="checkbox"/> Addendum No. 4 | <input type="checkbox"/> Addendum No. 9 |
| <input type="checkbox"/> Addendum No. 5 | <input type="checkbox"/> Addendum No. 10 |

I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.

Bombids, LLC
Company


Authorized Signature

8-31-16
Date

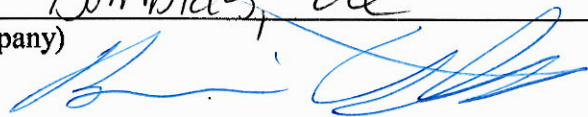
NOTE: This addendum acknowledgment should be submitted with the bid to expedite document processing.

DESIGNATED CONTACT: Vendor appoints the individual identified in this Section as the Contract Administrator and the initial point of contact for matters relating to this Contract.

Mary Shenk
 (Name, Title)
Mary E Shenk, OFFICE MGR
 (Printed Name and Title)
1442 Military Cutoff Rd., #25, Wilmington, NC 28405
 (Address)
910-208-4608 / 910-208-4575
 (Phone Number) / (Fax Number)
marys@bombids.com
 (email address)

CERTIFICATION AND SIGNATURE: By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Bombids, LLC
 (Company)


 (Authorized Signature) (Representative Name, Title)

Brian K Estes, President
 (Printed Name and Title of Authorized Representative)

8-31-16
 (Date)

910-208-4608 / 910-208-4575
 (Phone Number) (Fax Number)

STATE OF WEST VIRGINIA
Purchasing Division
PURCHASING AFFIDAVIT

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

EXCEPTION: The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

DEFINITIONS:

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceeds five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (W. Va. Code §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:

Vendor's Name: Bombicks LLC

Authorized Signature: [Signature] Date: 8-31-16

State of N.C.

County of New Hanover to-wit:

Taken, subscribed, and sworn to before me this 31 day of August, 2016.

My Commission expires 02-28-18, 2018

AFFIX SEAL HERE

NOTARY PUBLIC [Signature]
Purchasing Affidavit (Revised 08/01/2015)

Monica Jimeno Angeles
Notary Public
New Hanover County, NC
My Commission Expires Feb. 28, 2018

SPECTRA STRIP

200, 400, 600 WATT

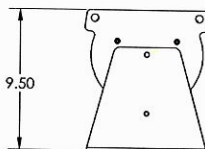
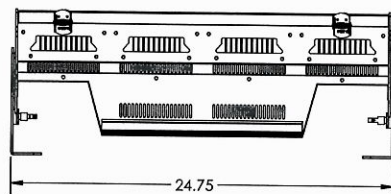
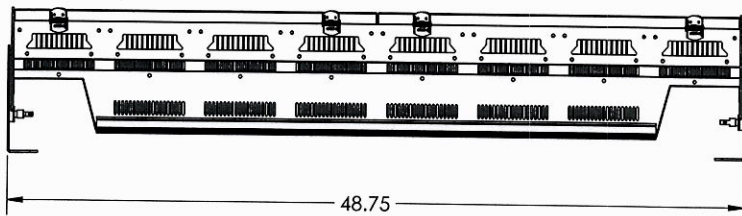
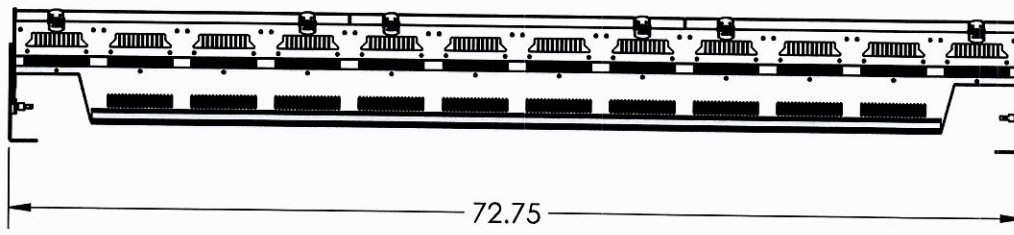
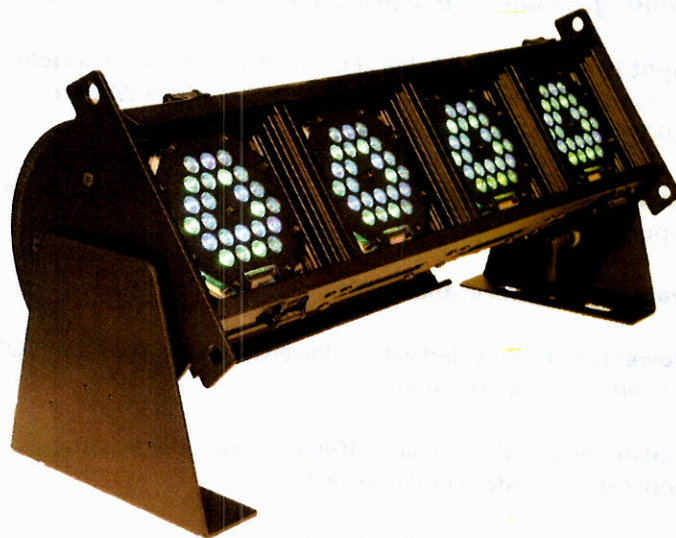
LED STRIPLIGHT

Features

- The Spectra Strip is a low profile LED linear wash luminaire comprised of 50W RGBA color mixing or 3000K high CRI white light engines.
- Each cell can be individually filtered, lensed or diffused using the filter slots provided.
- White light is suitable for no color wash applications, as well as tinting the RGBA light engines in a blended wash or use with traditional color media.
- Suitable for both floor and pipe mounted applications. The low-profile Spectra Strip is an LED replacement for traditional theatrical strip lights, foot lights and border lights.
- Available in 2', 4' and 6' lengths.
- ETL, cETL and CE Listed for Indoor Use
- Made in the USA

WASH LIGHTING

Catalog Numbers
STR*-*_*-***



Model #	
STR*-*_*-***	Spectra Strip LED Array
* (Length of Strip)	2, 4, or 6
** (LED Array)	RGBA, RGBW, 3K, 6K, or 3K6K
*** (Body Color)	Add the following code for Body Color: B=Black, W=White, S=Silver, C=Custom

ALTMAN
Lighting
BRINGING IMAGINATION TO LIGHT

57 Alexander St., Yonkers, NY 10701
© 2012 Altman Stage Lighting, Inc.

Tel: 914-476-7987

Visit our website at www.altmanlighting.com

SPECTRA STRIP

WASH LIGHTING

Specifications:

Materials: Construction employs all corrosion-resistant materials and hardware.

Housing: Rugged extruded and sheet aluminum construction.

Light Engine: Luxeon Rebel LED's, 50 Watt per cell. Available in standard configurations of RGBA, RGBW 3,000K White, or 3,000K - 6,000K Variable White.

Rating: Multi-Voltage; 100-240V AC 50/60 Hz universal power input.

Data Ports: DMX in and DMX through.

Power Input: Provided with 3' PowerCON to Edison PowerCON; PowerCON in and through.

Finish: Black, White or Silver TGIC polyester, electrostatic application. Custom Colors available.

Weights: Approx. 2'-16 lbs, 4'-32 lbs, 6'-48 lbs.

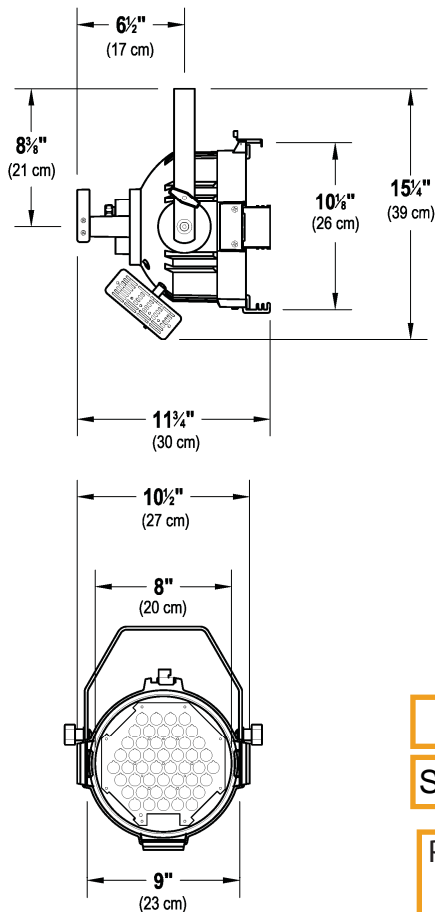
Included Accessories	
PCL-PBG-12-5	5' 20A PowerCON to male Edison power cable

Accessories	Description
SS-STR-LSD-601	60X1 light shaping diffuser
SS-STR-LSD-9525	95x25 light shaping diffuser
SS-STR-LSD-30	30° spread lens
SS-STR-LSD-40	40° spread lens
SS-STR-LSD-60	60° spread lens
SS-STR-FRP-FF	Filter frame (5-5/8"x5-5/8") fiber frame

SPECTRA STAR PAR

The Spectra Star PAR is a 100 Watt PAR Luminaire utilizing high efficiency Philips Luxeon Rebel LED emitters. Featuring a durable, light weight die cast aluminum housing the Spectra Star PAR is available as a pipe mount or Smart Track™ fixture. Designed for theatrical and architectural applications, the SPECTRA Star PAR acts as a true PAR lighting fixture with tools-free exchangeable VNSP, NSP, MFL, WFL, and (optional) XWFL Lenses.

An on board power supply allows for direct power & data connection to conventional distribution or a Smart Track™ systems. The Spectra StarPAR 100 watt PAR is compatible with both DMX & RDM protocols, and comes complete with a library of pre-programmed single colors and various color mixes. Shows and addressing are accessed via the push button display.



WASH LIGHTING

Catalog Numbers

SSSP-*-**

SSSPY-*-**



100 WATT SPECTRA STAR PAR

Features

- Available in 4 Standard LED color configurations: *RGBA, RGBW, 3K White or 3K-6K Tunable White¹*.
- Convection Cooled.
- Available in pipe mount and Smart Track™ versions.
- Tool-free exchangeable VNSP, NSP, MFL, WFL & XWFL lenses.
- On-board multi-voltage power supply 100-240VAC or Mains Dimmable drivers.
- Feed through data capabilities using 5-pin XLR connectors.
- Compatible with DMX and RDM protocols.
- Push button addressing.
- Pre-programmed modes for fixed colors, timed color changes and strobes.
- 16 lbs.
- ETL & cETL listed.
- Made in the USA

Model	LED Array	Finish Color	Control
SSSP <input type="button" value="v"/>	RGBA <input type="button" value="v"/>	B (Black) <input type="button" value="v"/>	D (DMX) <input type="button" value="v"/>

SSSPY for Smart Track mounting

Project:	Approval Date:
Location:	Fixture Type:

Specifications:

Materials: Construction employs all corrosion-resistant materials and hardware

Housing: Die-case aluminum construction

Light Engine: Luxeon Rebel LED's- 100 Watts Max at full RGBA

Lenses: Borosilicate glass 8" diameter PAR64

Lens Holder: Fully rotational, provided with three insulated finger tabs. Tool-free changing of lenses. 360° rotation

Rating: Multi-Voltage; 100-240 volt AC operation, or Mains Dimmable Drivers

Data Ports: Two 6' 5-Pin XLR cables for DMX:1 Male & 1 Female or Smart Track™

Power Cable: 6' total length with Edison connector

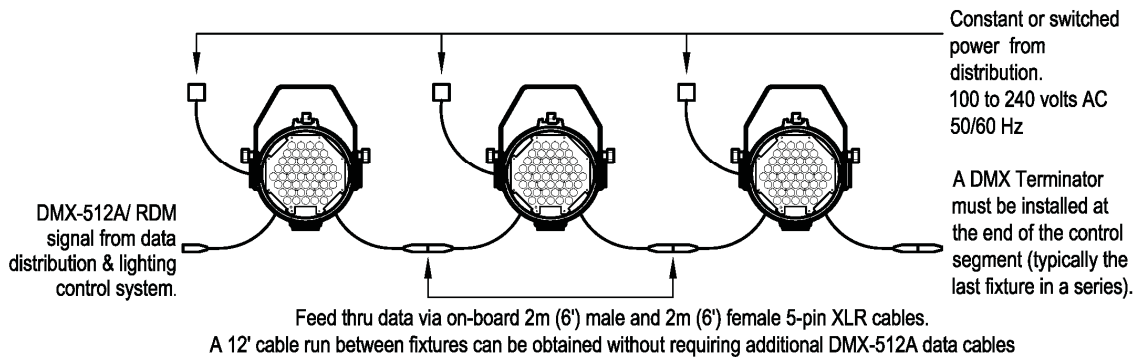
Finish: Black, White or Silver TGIC polyester, electrostatic application. Custom colors available

Weight: Approx. 16 lbs. (7.26 kg)

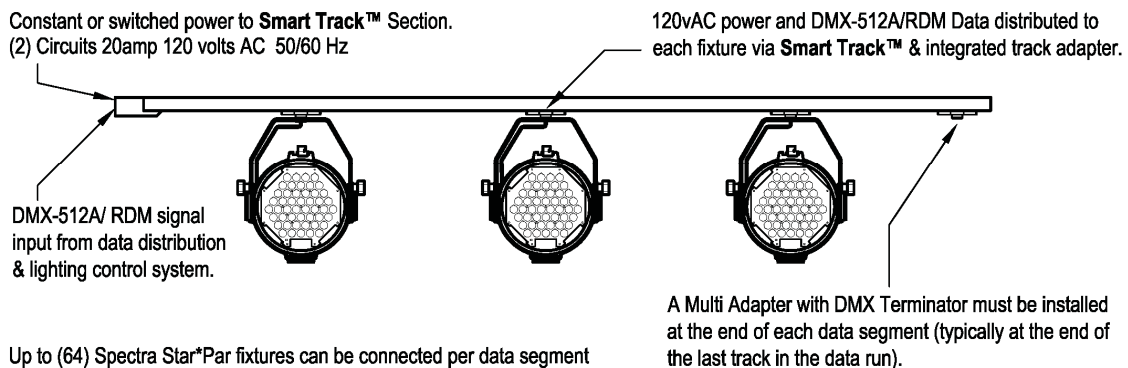
Accessories:

Model Number	Supplied with the fixture
97-0150	Set of 4 Lenses(VNSP, NSP, MFL, WFL)
SC-36-BK	36" Black Safety Cable w/ Spring Clip
Additional Accessories	
XLR-5-5	5' 5-Pin XLR Extension Cable
XLR-5-10	10' 5-pin XLR Extension Cable
XLR-5-25	25' 5-pin XLR Extension Cable
99-DMX-TERM	In line 5-pin DMX terminator
510	Malleable Iron Pipe Clamp for 3/4"-1 1/2" Pipe
8-BD-4	Four Leaf Barndoor
8-CFB	Black Color Frame 10"x10"
8-SN	Black Snoot

Basic wiring diagram for SSSP*-** Spectra Star PAR (Portable/Theatrical Version)



Basic wiring diagram for SSSPY*-** Spectra Star PAR (Smart Track™ Version)



Performance per Lens:

RGBA:

VNSP Lens

Throw Distance (d)	10' 3m	15' 4.6m	20' 6.1m	25' 7.6m
Beam Size, (H x V)	1.7' x 1.7' 0.5m x 0.5m	2.5' x 2.5' 0.8m x 0.8m	3.3' x 3.3' 1m x 1m	4.2' x 4.2' 1.3m x 1.3m
Illuminance (fc)	215	96	54	34
Illuminance (lux)	2,316	1,029	579	371

NSP Lens

Throw Distance (d)	10' 3m	15' 4.6m	20' 6.1m	25' 7.6m
Beam Size, (H x V)	2.2' x 2.2' 0.7m x 0.7m	3.3' x 3.3' 1m x 1m	4.4' x 4.4' 1.3m x 1.3m	5.5' x 5.5' 1.7m x 1.7m
Illuminance (fc)	147	65	37	23
Illuminance (lux)	1,579	702	395	253

MFL Lens

Throw Distance (d)	10' 3m	15' 4.6m	20' 6.1m	25' 7.6m
Beam Size, (H x V)	3.27' x 2.5' 1.1m x 0.7m	5.6' x 3.7' 1.7m x 1.1m	7.4' x 4.9' 2.3m x 1.5m	9.3' x 6.1' 2.8m x 1.9m
Illuminance (fc)	81	36	20	13
Illuminance (lux)	871	387	218	139

WFL Lens

Throw Distance (d)	10' 3m	15' 4.6m	20' 6.1m	25' 7.6m
Beam Size, (H x V)	7' x 3.5' 2.1m x 1.1m	10.5' x 5.3' 3.2m x 1.6m	14' x 7.1' 4.3m x 2.1m	17.5' x 8.8' 5.3m x 2.7m
Illuminance (fc)	41	18	10	7
Illuminance (lux)	438	194	109	70

XWFL Lens

Throw Distance (d)	10' 3m	15' 4.6m	20' 6.1m	25' 7.6m
Beam Size, (H x V)	9.5' x 9.6' 2.9m x 2.9m	14.3' x 14.3' 4.4m x 4.4m	19' x 19' 5.8m x 5.8m	23.8' x 24' 7.2m x 7.3m
Illuminance (fc)	35	18	11	7
Illuminance (lux)	377	204	118	75

3K White

VNSP Lens

Throw Distance (d)	10' 3m	15' 4.6m	20' 6.1m	25' 7.6m
Beam Size, (H x V)	1.7' x 1.7' 0.5m x 0.5m	2.5' x 2.5' 0.8m x 0.8m	3.3' x 3.3' 1m x 1m	4.2' x 4.2' 1.3m x 1.3m
Illuminance (fc)	471	209	118	75
Illuminance (lux)	5,068	2,252	1,267	811

NSP Lens

Throw Distance (d)	10' 3m	15' 4.6m	20' 6.1m	25' 7.6m
Beam Size, (H x V)	2.2' x 2.2' 0.7m x 0.7m	3.3' x 3.3' 1m x 1m	4.4' x 4.4' 1.3m x 1.3m	5.5' x 5.5' 1.7m x 1.7m
Illuminance (fc)	364	162	91	58
Illuminance (lux)	3,917	1,741	979	627

MFL Lens

Throw Distance (d)	10' 3m	15' 4.6m	20' 6.1m	25' 7.6m
Beam Size, (H x V)	3.27' x 2.5' 1.1m x 0.7m	5.6' x 3.7' 1.7m x 1.1m	7.4' x 4.9' 2.3m x 1.5m	9.3' x 6.1' 2.8m x 1.9m
Illuminance (fc)	181	80	45	29
Illuminance (lux)	1,948	866	487	312

WFL Lens

Throw Distance (d)	10' 3m	15' 4.6m	20' 6.1m	25' 7.6m
Beam Size, (H x V)	7' x 3.5' 2.1m x 1.1m	10.5' x 5.3' 3.2m x 1.6m	14' x 7.1' 4.3m x 2.1m	17.5' x 8.8' 5.3m x 2.7m
Illuminance (fc)	88	39	22	14
Illuminance (lux)	947	421	237	152

700 ARC BID SPECIFICATION
June 6, 2013

Part 1 GENERAL

1.01 RELATED DOCUMENTS:

Drawings and general provisions of Contract, including General and Supplementary Conditions, apply to work of this section

1.02 DESCRIPTION OF WORK:

- a. The Intent of this specification is to provide for the furnishing, installing, testing and placing in operation Metal Halide Followspots. This equipment is designed to provide high quality lighting capabilities, with maximum ease of use and reliability for the wide variety of functions housed in these facilities.
- b. This Contractor shall provide all labor and materials and make all necessary arrangements, except as specifically noted herein, so that when the Contractor is finished, a fully working Followspot system will be turned over to the Owner. Any errors, omissions, or ambiguities are not to condition this requirement, but shall be brought to the attention of the Owner in their possible effect on the intent of this specification.

1.03 QUALITY ASSURANCE:

- a. The equipment specified is the result of efforts to select equipment for reliability, ease of maintenance, and suitability for the Owner's purposes. Strict adherence to these specifications shall be required.
- b. Manufacturers:
 1. Provide products by the manufacturers indicated on the drawings and specifications. This apparatus is fully catalogued and described with complete technical data available from the manufacturers.
 2. Manufacturer approval shall not relieve the manufacturer from meeting the full requirements and intent of these specifications on each product specified.
 3. Alternate Manufacturers or Products shall be acceptable only when they are submitted and approved at least ten days prior to the bid. Only equipment that in the opinion of the Owner's Designated Representative equals or exceeds the features specified will be considered.
 - A. The Bidder shall provide working samples of proposed alternate equipment including lamping for any lighting fixtures, to be delivered to the premises designated, for examination by the Architects, Engineers, and such representatives as the Owner may direct. Handling shipping and delivery to, or removal from the site, of any sample required shall be at the cost of the Bidder.
 - B. The bidder shall further provide evidence of the alternate manufacturer's ability and plans to support the Followspots with service, parts and accessories.
 - C. Proposals which fail to address specification requirements or review comments will be rejected.
 4. Equipment by a manufacturer which has not been approved prior to the bid shall not be acceptable.

c. Warranties:

This contractor shall warranty the Followspots specified herein (except lamps) to be free from defects of material or workmanship for a period of two year from the date of acceptance. During the period of this warranty equipment which proves to be defective shall be repaired or replaced at no charge.

1.04 OPERATION AND MAINTENANCE MANUALS:

When the installation is complete, the owner shall be supplied with:

- a.** One (1) set of Operation and Maintenance Manuals per unit, including Safety and Maintenance information on all major units and principal components of the system.

1.05 PRODUCT STORAGE, DELIVERY AND HANDLING:

- a.** Deliver Followspots securely cushioned in fiberboard type containers.
- b.** Handle equipment and controls carefully to prevent breakage, denting and scoring finish. Do not install damaged equipment and controls; replace and return damaged units to equipment manufacturer.

Part 2 PRODUCTS

2.01 FOLLOWSPOT

- a.** The basis of this design shall be the Lycian Zot 7 follow spotlight. Only Followspots manufactured in the USA shall be acceptable.
- b. Physical**
 - 1. The unit frame and enclosure shall be constructed of formed cold rolled steel and sturdy aluminum extrusions, free of burrs and protected by a black powder coat finish with powder coat accents.
 - 2. A handle shall be provided to facilitate smooth operation and to lift the unit.
 - 3. A yoke with 1-1/8" industry standard spigot with three-point floor stand is to be included. Using standard 1-1/8" stock and custom fittings a variety of mounting options are available
 - 4. The yoke/stand will include:
 - A. Easy height adjustments,
 - B. Horizontal Swing Control Lever and
 - C. Vertical Tilt Control Lever
 - 5. The Power Supply shall be self-contained in the followspot, mounted in an easily removable tray for servicing. Followspots containing external power supplies shall not be acceptable.
 - 6. Weight of Head unit shall not exceed 98 pounds.
 - 7. Length of head unit with all controls shall not exceed 42-1/4".

c. Controls

8. The Lamphouse shall as a minimum incorporate the following:
 - A. Quiet forced-air cooling by internally wired fans;
 - B. Bayonet twist lamp mount/lamp combination
 - C. Bulb positioning controls.
9. The body of the unit shall, as minimum incorporate the following:
 - A. Nichrome steel iris
 - B. Fader
 - C. Spot Size Controller
 - 1) This followspot shall be capable of producing a continuous range of field angles from 2 degrees in spot to 9.5 degrees in flood
 - D. Fine Focus Control allowing adjustment between soft and sharp edges
 - E. An internal 6 color, self-canceling boomerang. Front mounted color boomerangs and color boomerangs that allow color frames to hang outside the main housing are not acceptable.

d. Optical

10. The unit's optical train shall consist of :
 - A. Socket mounted 700 watt single-ended metal halide lamp
 - B. Fixed Optical Quality faceted dichroic glass reflector
 - C. Fixed focus lens system utilizing 8" optical-quality glass front lens. Units having less than 8" lens are not acceptable
 - D. Nichrome Iris
11. The spot size control shall increase light intensity as it decreases the spot diameter

e. Electrical

12. Metal halide lamp system input shall be 110-120 V.AC, 60 Hz, single phase
13. Integrated Power Supply
14. Lamp shall be Philips 700 watt Fast-Fit or Osram 700 watt Lok-It.

f. Performance

15. The Field diameter at a 100 foot throw shall be continuously adjustable from 16.4 feet in Flood focus to 1.75 feet in Spot focus.

- g.** Furnish ___ Zot 7's complete with followspot head, standard 3 legged base with casters and all necessary accessories

Part 3 EXECUTION

3.01 INSTALLATION:

- a.** This Contractor must examine areas and conditions under which followspots are to be installed and notify owner in writing of conditions detrimental to proper completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected in an acceptable manner.
- b.** Prior to energizing the followspots, all wiring shall be checked and tested to insure the system is free from grounds, opens and shorts.

3.02 SYSTEM COMMISSIONING:

- a.** After installation is complete, and before energizing the followspots, this contractor shall provide the services of a factory trained and authorized technician to commission the system as follows:
 - 1. Safely lamp each followspot
 - 2. Mechanically adjust the followspots to correct any misalignment caused by transportation or handling during the construction period.
 - 3. Trim the light output of each followspot to maximize intensity with flat field.
- b.** This Contractor shall provide training to instruct persons designated in the safe operation and maintenance of the followspot system
- c.** This Contractor shall further submit certificates stating installed system is operating properly and complies with manufacturer's recommendations.

***** END OF SPECIFICATION *****

SUMMARY

The 15°-30° and 30°-50° PHX LED ellipsoidals are state of the art luminaires in function, style, and efficiency. These ellipsoidals have been designed and engineered with a number of innovative details and features enhancing versatility and efficiency without sacrificing performance.

A diverse line of LED choices are available including RGBA, RGBW, 3000k, 5600k, and tunable white 3000k/5600k versions versions.

A 360° rotating barrel help you keep the artistic part of your fixtures' focus intact and with virtually no light leak; you won't need to worry about any extra light illuminating unwanted parts of the ceiling or set pieces.

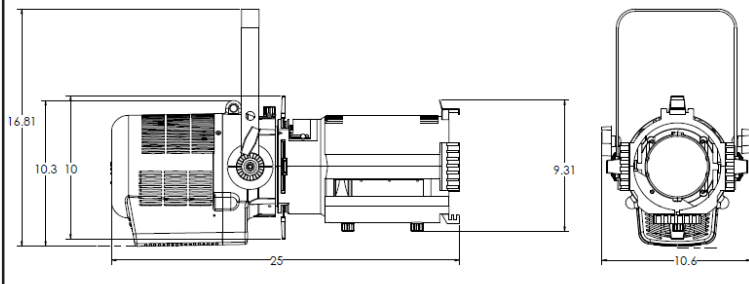
These new and innovative options are what makes the PHX LED ellipsoidals ideal for theatres, special events, television studios, or any location where superior, energy efficient lighting performance is required.



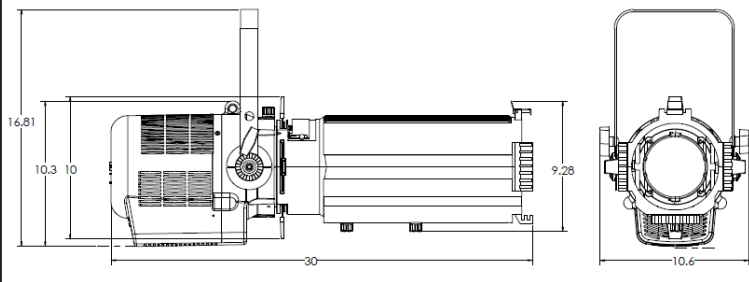
WORSHIP FACILITIES
NEW PRODUCT
AWARDS
WINNER
2014

plasa
MEMBERS
CHOICE
awards 2013
WINNER

30-50 Degree Zoom Lens



15-30 Degree Zoom Lens



FEATURES

- 360 degree rotating barrel
- Completely enclosed accessory holder
- Heat resistant Plano-Convex lensing
- Die cast aluminum and sheet metal fabrication
- Color frame, C-Clamp, Soft Focus Pattern Holder, safety cable & 5 Foot PowerCON included
- Carries standard three year Altman Warranty
- 28.25 lbs. (12.81kgs)
- ETL, cETL, & CE listed
- Assembled in the USA

SPECIFICATIONS

GENERAL

- 60 LED Array
- ETL listed to UL1573
- IP20 rated for indoor use
- powerCON and DMX in/thru for easy connection
- Control interface with multiple modes

PHYSICAL

- Rugged die-cast housing
- Available standard in Black, White or Silver with Custom Colors available
- Positive locking double-clutch fixture body
- Pattern slot fits glass or steel gobos
- Wide accessory slot with sliding cover for motorized pattern devices or optional iris
- Yoke made from rigid flat steel with dual locking handles, two mounting positions and indexed tilt angle markings

ELECTRICAL

- 100-240VAC, 50/60HZ Universal power input
- powerCON® in/thru
- Up to 8 fixtures (20A Max) may be linked via powerCON®
- Requires power from Non-Dim power source

CONTROL

- DMX512 in/thru via 5-pin XLR connector
- Multiple on-board control options: RGB(A/W) color fades and strobes
- Console free Master/Slave mode
- 8-bit or 16-bit virtual dimming engine provides smooth, high quality fades and minimizes color shift during dimming
- RDM Ansi E1.20 Compliant

ENVIRONMENTAL

- Ambient operating temperature of -14°F to 104°F (-10°C to 40°C)
- Near silent fan cooling
- Fixture is designed for continuous operation up to 104°F (40°C) - ambient temperature requires free flow of air around fixture housing

Included Accessories	
6-CF	Black Color Frame, 7½" x 7½"
510	Malleable Iron Pipe Clamp
SC-36-BK	36" Black Safety Cable with Spring Clamp
PHXZ-SFLGSB	PHX Soft Focus lens with B Size Pattern Holder
PCL-PBG-12-*	5' 20A powerCON with Parallel Blade U Ground (Edison)

Additional Accessories	
510-HD	Heavy Duty Malleable Iron Pipe Clamp
6-DN	7½" x 7½" w/ 3" Hole Donut, Black
PHXZ-PHGSB	B Size Steel Pattern Holder (86mm OD/ 64.5mm IA)
PHXZ-PHGSB-3T	B Size Steel Pattern Holder (86mm OD/ 64.5mm IA) 3 Tab Style
PHX-PHISB	B Size Steel Pattern Holder (86mm OD/ 64.5mm IA) for Iris Slot
PHX-PHISA-GLS	A Size Glass Pattern Holder (100mm OD/75mm IA) for Iris Slot
PHX-PHISB-GLS	B Size Glass Pattern Holder (82mm OD/ 64.5mm IA) for Iris Slot
PHX-PHIS86-GLS	B Size Glass Pattern Holder (86mm OD/ 64.5mm IA) for Iris Slot
PCL-2P&G-12-5-*	5' 20A powerCON with 2P&G Stage Pin Connector, Male
PCL-TLG-12-5-*	5' 20A powerCON with L5-20P Twist Locking Ground Connector, Male
PCL-BARE-12-5-*	5' 20A powerCON with Bare End Lead

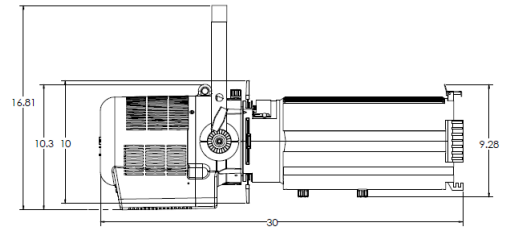
Additional gobo holder information available at www.altmanlighting.com
 * = W for White Cable, Black is standard and no suffix is required

ORDERING GUIDE

Fixture	Wattage	-	LED Array	-	Lens Type	-	Finish Color
PHX	2(250)	-	RGBA	-	(15Z) = 15°-30°	-	B (Black)
		-	RGBW	-	(30Z) = 30°-55°	-	W (White)
		-	3K	-		-	S (Silver)
		-	5K	-		-	C (Custom)
		-	3K5K	-		-	

Example: PHX2-RGBA-15Z-B

PHOTOMETRIC PERFORMANCE DATA
ENGINE: RGBA LENS: 15-30 Degree Zoom Lens



RGBA Full at 15 Degree

15°	Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
	Beam Size Diameter	2' - 9" 0.85m	3' - 11" 1.19m	5' 1.54m	6' - 2" 1.89m	7' - 4" 2.24m	8' - 6" 2.58m	9' - 7" 2.93m	10' - 9" 3.28m	11' - 11" 3.63m	13' 3.97m
Full on RGBA	Illuminance = fc (Illuminance = lux)	984.20 (10,589.99)	453.13 (4,875.71)	254.89 (2,742.59)	163.13 (1,755.26)	113.28 (1,218.93)	83.23 (895.54)	63.72 (685.65)	50.35 (541.75)	40.78 (438.81)	33.70 (362.66)
Red	Illuminance = fc (Illuminance = lux)	273.89 (2,947.00)	128.24 (1,379.91)	72.14 (776.19)	46.17 (496.77)	32.06 (344.98)	23.56 (253.45)	18.03 (194.05)	14.25 (153.32)	11.54 (124.19)	9.54 (102.64)
Green	Illuminance = fc (Illuminance = lux)	513.95 (5,530.10)	241.74 (2,601.10)	135.98 (1,463.12)	87.03 (936.39)	60.44 (650.28)	44.40 (477.75)	33.99 (365.78)	26.86 (289.01)	21.76 (234.09)	17.98 (193.47)
Blue	Illuminance = fc (Illuminance = lux)	108.30 (1,165.31)	49.20 (529.43)	27.68 (297.80)	17.71 (190.59)	12.30 (132.36)	9.04 (97.24)	6.92 (74.45)	5.47 (58.83)	4.43 (47.65)	3.66 (39.38)
Amber	Illuminance = fc (Illuminance = lux)	174.80 (1,880.85)	77.94 (838.59)	43.84 (471.71)	28.06 (301.89)	19.48 (209.65)	14.32 (154.03)	10.96 (117.93)	8.66 (93.18)	7.01 (75.47)	5.79 (62.38)

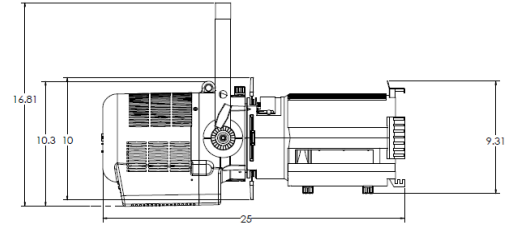
RGBA Full at 22.5 Degree

22.5°	Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
	Beam Size Diameter	4' - 3" 1.30m	6' - 2" 1.88m	8' - 1" 2.46m	9' - 11" 3.03m	11' - 10" 3.61m	13' - 9" 4.18m	15' - 7" 4.76m	17' - 6" 5.34m	19' - 5" 5.91m	21' - 3" 6.49m
Full on RGBA	Illuminance = fc (Illuminance = lux)	406.60 (4,375.02)	181.28 (1,950.53)	101.97 (1,097.17)	65.26 (702.19)	45.32 (487.63)	33.29 (358.26)	25.49 (274.29)	20.14 (216.73)	16.32 (175.55)	13.48 (145.08)
Red	Illuminance = fc (Illuminance = lux)	117.80 (1,267.53)	54.49 (586.37)	30.65 (329.83)	19.62 (211.09)	13.62 (146.59)	10.01 (107.70)	7.66 (82.46)	6.05 (65.15)	4.91 (52.77)	4.05 (43.61)
Green	Illuminance = fc (Illuminance = lux)	216.13 (2,325.51)	100.21 (1,078.24)	56.37 (606.51)	36.08 (388.17)	25.05 (269.56)	18.41 (198.04)	14.09 (151.63)	11.13 (119.80)	9.02 (97.04)	7.45 (80.19)
Blue	Illuminance = fc (Illuminance = lux)	44.65 (480.43)	19.93 (214.44)	11.21 (120.62)	7.17 (77.19)	4.98 (53.61)	3.66 (39.39)	2.80 (30.16)	2.21 (23.83)	1.79 (19.29)	1.48 (15.95)
Amber	Illuminance = fc (Illuminance = lux)	71.35 (767.67)	31.73 (341.37)	17.85 (192.02)	11.42 (122.89)	7.93 (85.34)	5.83 (62.70)	4.46 (48.01)	3.53 (37.93)	2.86 (30.72)	2.36 (25.39)

RGBA Full at 30 Degree

30°	Throw Distance (d)	10' 3.048m	15' 4.572m	20' 6.096m	25' 7.62m	30' 9.144m	35' 10.668m	40' 12.192m	45' 13.716m	50' 15.24m	55' 16.764m
	Beam Size Diameter	5' - 10" 1.79m	8' - 6" 2.60m	11' - 3" 3.42m	13' - 11" 4.24m	16' - 7" 5.05m	19' - 3" 5.87m	21' - 11" 6.69m	24' - 7" 7.50m	27' - 3" 8.32m	29' - 11" 9.14m
Full on RGBA	Illuminance = fc (Illuminance = lux)	245.86 (2,645.45)	112.99 (2,645.45)	63.56 (683.91)	40.68 (437.70)	28.25 (303.96)	20.75 (223.32)	15.89 (170.98)	12.55 (135.09)	10.17 (109.42)	8.41 (90.43)
Red	Illuminance = fc (Illuminance = lux)	72.87 (784.03)	34.23 (368.29)	19.25 (207.17)	12.32 (132.59)	8.56 (92.07)	6.29 (67.65)	4.81 (51.79)	3.80 (40.92)	3.08 (33.15)	2.55 (27.39)
Green	Illuminance = fc (Illuminance = lux)	130.34 (1,402.46)	61.03 (656.64)	34.33 (369.36)	21.97 (236.39)	15.26 (164.16)	11.21 (121.16)	8.58 (92.34)	6.78 (72.96)	5.49 (59.09)	4.54 (48.84)
Blue	Illuminance = fc (Illuminance = lux)	26.13 (281.11)	12.72 (136.90)	7.16 (77.01)	4.58 (49.28)	3.18 (34.23)	2.34 (25.15)	1.79 (19.25)	1.41 (15.21)	1.15 (12.32)	0.95 (10.18)
Amber	Illuminance = fc (Illuminance = lux)	43.99 (473.28)	19.66 (211.50)	11.06 (118.97)	7.08 (76.14)	4.91 (52.88)	3.61 (38.85)	2.76 (29.74)	2.18 (23.50)	1.77 (19.04)	1.46 (15.73)

PHOTOMETRIC PERFORMANCE DATA ENGINE: RGBA LENS: 30-50 Degree Zoom Lens



RGBA Full at 30 Degree

30°	Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
	Beam Size Diameter	5' - 6" 1.69m	8' 2.45m	10' - 7" 3.22m	13' - 1" 3.98m	15' - 7" 4.75m	18' - 1" 5.52m	20' - 7" 6.28m	23' - 2" 7.05m	25' - 8" 7.82m	28' - 2" 8.58m
Full on RGBA	Illuminance = fc (Illuminance = lux)	293.63 (3,160.58)	130.50 (1,404.70)	73.41 (790.15)	46.98 (505.69)	32.63 (351.18)	23.97 (258.01)	18.35 (197.54)	14.50 (156.08)	11.75 (126.42)	9.71 (104.48)
Red	Illuminance = fc (Illuminance = lux)	93.99 (1,011.67)	41.77 (449.63)	23.50 (252.92)	15.04 (161.87)	10.44 (112.41)	7.67 (82.59)	5.87 (63.23)	4.64 (49.96)	3.76 (40.47)	3.11 (33.44)
Green	Illuminance = fc (Illuminance = lux)	169.48 (1,824.28)	75.32 (810.79)	42.37 (456.07)	27.12 (291.88)	18.83 (202.70)	13.84 (148.92)	10.59 (114.02)	8.37 (90.09)	6.78 (72.97)	5.60 (60.31)
Blue	Illuminance = fc (Illuminance = lux)	33.94 (365.32)	15.08 (162.37)	8.48 (91.33)	5.43 (58.45)	3.77 (40.59)	2.77 (29.82)	2.12 (22.83)	1.68 (18.04)	1.36 (14.61)	1.12 (12.08)
Amber	Illuminance = fc (Illuminance = lux)	51.89 (558.55)	23.06 (248.25)	12.97 (139.64)	8.30 (89.37)	5.77 (62.06)	4.24 (45.60)	3.24 (34.91)	2.56 (27.58)	2.08 (22.34)	1.72 (18.46)

RGBA Full at 40 Degree

40°	Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
	Beam Size Diameter	7' - 1" 2.16m	10' - 5" 3.17m	13 - 8" 4.17m	17' 5.18m	20' - 3" 6.18m	23' - 7" 7.19m	26 - 11" 8.19m	30' - 2" 9.20m	33' - 6" 10.20m	36' - 9" 11.21m
Full on RGBA	Illuminance = fc (Illuminance = lux)	195.31 (2,102.32)	86.81 (934.37)	48.83 (525.58)	31.25 (336.37)	21.70 (233.59)	15.94 (171.62)	12.21 (131.40)	9.65 (103.82)	7.81 (84.09)	6.46 (69.50)
Red	Illuminance = fc (Illuminance = lux)	61.14 (658.05)	27.17 (292.47)	15.28 (164.51)	9.78 (105.29)	6.79 (73.12)	4.99 (53.72)	3.82 (41.13)	3.02 (32.50)	2.45 (26.32)	2.02 (21.75)
Green	Illuminance = fc (Illuminance = lux)	110.09 (1,184.96)	48.93 (526.65)	27.52 (296.24)	17.61 (189.59)	12.23 (131.66)	8.99 (96.73)	6.88 (74.06)	5.44 (58.52)	4.40 (47.40)	3.64 (39.17)
Blue	Illuminance = fc (Illuminance = lux)	22.84 (249.89)	10.15 (109.29)	5.71 (61.47)	3.66 (39.34)	2.54 (27.32)	1.86 (20.07)	1.43 (15.37)	1.13 (12.14)	0.91 (9.84)	0.76 (8.13)
Amber	Illuminance = fc (Illuminance = lux)	33.58 (361.50)	14.93 (160.67)	8.40 (90.38)	5.37 (57.84)	3.73 (40.17)	2.74 (29.51)	2.10 (22.59)	1.66 (17.85)	1.34 (14.46)	1.11 (11.95)

RGBA Full at 50 Degree

50°	Throw Distance (d)	10' 3.048m	15' 4.572m	20' 6.096m	25' 7.62m	30' 9.144m	35' 10.668m	40' 12.192m	45' 13.716m	50' 15.24m	55' 16.764m
	Beam Size Diameter	8' - 10" 2.68m	13' 3.95m	17.1' 5.22m	21' - 3" 6.48m	25' - 5" 7.75m	29' - 7" 9.01m	33' - 9" 10.28m	37' - 10" 11.54m	42' 12.81m	46' - 2" 14.08m
Full on RGBA	Illuminance = fc (Illuminance = lux)	139.34 (1,499.86)	61.93 (666.60)	34.84 (374.96)	22.29 (239.98)	15.48 (166.65)	11.37 (122.44)	8.71 (93.74)	6.88 (74.07)	5.57 (59.99)	4.61 (49.58)
Red	Illuminance = fc (Illuminance = lux)	44.38 (477.73)	19.73 (212.33)	11.10 (119.43)	7.10 (76.44)	4.93 (53.08)	3.62 (39.00)	2.77 (29.86)	2.19 (23.59)	1.78 (19.11)	1.47 (15.79)
Green	Illuminance = fc (Illuminance = lux)	78.54 (845.40)	34.91 (375.73)	19.64 (211.35)	12.57 (135.26)	8.73 (93.93)	6.41 (69.01)	4.91 (52.84)	3.88 (41.75)	3.14 (33.82)	2.60 (27.95)
Blue	Illuminance = fc (Illuminance = lux)	16.32 (175.64)	7.25 (78.06)	4.08 (43.91)	2.61 (28.10)	1.81 (19.52)	1.33 (14.34)	1.02 (10.98)	0.81 (8.67)	0.65 (7.03)	0.54 (5.81)
Amber	Illuminance = fc (Illuminance = lux)	24.22 (260.71)	10.76 (115.87)	6.06 (65.18)	3.88 (41.71)	2.69 (28.97)	1.98 (21.28)	1.51 (16.29)	1.20 (12.87)	0.97 (10.43)	0.80 (8.62)

PHOTOMETRIC PERFORMANCE DATA
ENGINE: RGBW LENS: 15-30 Degree Zoom Lens

RGBW Full at 15 Degree

15°	Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
	Beam Size Diameter	2' - 9" 0.85m	3' - 11" 1.19m	5' 1.54m	6' - 2" 1.89m	7' - 4" 2.24m	8' - 6" 2.58m	9' - 7" 2.93m	10' - 9" 3.28m	11' - 11" 3.63m	13' 3.97m
Full on RGBW	Illuminance = fc (Illuminance = lux)	1,324.30 (14,249.47)	615.32 (6,620.88)	346.12 (3,724.25)	221.52 (2,383.52)	153.83 (1,655.22)	113.02 (1,216.08)	86.53 (931.06)	68.37 (735.65)	55.38 (595.88)	45.77 (492.46)
Red	Illuminance = fc (Illuminance = lux)	273.89 (2,947.00)	128.24 (1,379.91)	72.14 (776.19)	46.17 (496.77)	32.06 (344.98)	23.56 (253.45)	18.03 (194.05)	14.25 (153.32)	11.54 (124.19)	9.54 (102.64)
Green	Illuminance = fc (Illuminance = lux)	513.95 (5,530.10)	241.74 (2,601.10)	135.98 (1,463.12)	87.03 (936.39)	60.44 (650.28)	44.40 (477.75)	33.99 (365.78)	26.86 (289.01)	21.76 (234.09)	17.98 (193.47)
Blue	Illuminance = fc (Illuminance = lux)	108.30 (1,165.31)	49.20 (529.43)	27.68 (297.80)	17.71 (190.59)	12.30 (132.36)	9.04 (97.24)	6.92 (74.45)	5.47 (58.83)	4.43 (47.65)	3.66 (39.38)
White	Illuminance = fc (Illuminance = lux)	483.55 (5,202.99)	224.74 (2,418.17)	126.41 (1,360.22)	80.91 (870.54)	56.18 (604.54)	41.28 (444.15)	31.60 (340.06)	24.97 (268.69)	20.23 (217.64)	16.72 (179.86)

RGBW Full at 22.5 Degree

22.5°	Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
	Beam Size Diameter	4' - 3" 1.30m	6' - 2" 1.88m	8' 2.46m	9' - 11" 3.03m	11' - 10" 3.61m	13' - 9" 4.18m	15' - 7" 4.76m	17' - 6" 5.34m	19' - 5" 5.91m	21' - 3" 6.49m
Full on RGBW	Illuminance = fc (Illuminance = lux)	554.33 (5,964.54)	249.28 (2,682.28)	140.22 (1,508.78)	89.74 (965.62)	62.32 (670.57)	45.79 (492.66)	35.06 (377.19)	27.69 (298.03)	22.44 (241.41)	18.54 (199.51)
Red	Illuminance = fc (Illuminance = lux)	117.80 (1,267.53)	54.49 (586.37)	30.65 (329.83)	19.62 (211.09)	13.62 (146.59)	10.01 (107.70)	7.66 (82.46)	6.06 (65.15)	4.91 (52.77)	4.05 (43.61)
Green	Illuminance = fc (Illuminance = lux)	216.13 (2,325.51)	100.21 (1,078.24)	56.37 (606.51)	36.08 (388.17)	25.05 (269.56)	18.41 (198.04)	14.09 (151.63)	11.13 (119.80)	9.02 (97.04)	7.45 (80.19)
Blue	Illuminance = fc (Illuminance = lux)	44.65 (480.43)	19.93 (214.44)	11.21 (120.62)	7.17 (77.19)	4.98 (53.61)	3.66 (39.39)	2.80 (30.16)	2.21 (23.83)	1.79 (19.29)	1.48 (15.95)
White	Illuminance = fc (Illuminance = lux)	202.35 (2,177.29)	93.12 (1,001.92)	52.38 (563.58)	33.52 (360.69)	23.28 (250.48)	17.10 (184.03)	13.09 (140.89)	10.35 (111.32)	8.38 (90.17)	6.93 (74.52)

RGBW Full at 30 Degree

30°	Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
	Beam Size Diameter	5' - 10" 1.79m	8' - 6" 2.60m	11' - 2" 3.42m	13' - 11" 4.24m	16' - 7" 5.05m	19' - 3" 5.87m	21' - 11" 6.69m	24' - 7" 7.50m	27' - 3" 8.32m	29' - 11" 9.14m
Full on RGBW	Illuminance = fc (Illuminance = lux)	329.65 (3,547.03)	159.09 (1,711.86)	89.49 (1,711.86)	57.27 (616.27)	39.77 (427.97)	29.22 (314.42)	22.37 (240.73)	17.68 (190.21)	14.32 (154.07)	11.83 (127.33)
Red	Illuminance = fc (Illuminance = lux)	72.87 (784.03)	34.23 (368.29)	19.25 (207.17)	12.32 (132.59)	8.56 (92.07)	6.29 (67.65)	4.81 (51.79)	3.80 (40.92)	3.08 (33.15)	2.55 (27.39)
Green	Illuminance = fc (Illuminance = lux)	130.34 (1,402.46)	61.03 (656.64)	34.33 (369.36)	21.97 (236.39)	15.26 (164.16)	11.21 (120.61)	8.58 (92.34)	6.78 (72.96)	5.49 (59.09)	4.54 (48.84)
Blue	Illuminance = fc (Illuminance = lux)	26.13 (281.11)	12.72 (136.90)	7.16 (77.01)	4.58 (49.28)	3.18 (34.23)	2.34 (25.15)	1.79 (19.25)	1.41 (15.21)	1.15 (12.32)	0.95 (10.18)
White	Illuminance = fc (Illuminance = lux)	122.27 (1,315.57)	57.42 (617.87)	32.30 (347.55)	20.67 (222.43)	14.36 (154.47)	10.55 (113.49)	8.08 (86.89)	6.38 (68.65)	5.17 (55.61)	4.27 (45.96)

PHOTOMETRIC PERFORMANCE DATA
ENGINE: RGBW LENS: 30-50 Degree Zoom Lens

RGBW Full at 30 Degree

30°	Throw Distance (d)	10'	15'	20'	25'	30'	35'	40'	45'	50'	55'
	Beam Size Diameter	5' - 6" 1.69m	8' 2.45m	10' - 7" 3.22m	13' - 1" 3.98m	15' - 7" 4.75m	18' - 1" 5.52m	20' - 7" 6.28m	23' - 2" 7.05m	25' - 8" 7.82m	28' - 2" 8.58m
Full on RGBW	Illuminance = fc (Illuminance = lux)	436.00 (4,693.01)	193.78 (2,085.78)	109.00 (1,173.25)	69.76 (750.88)	48.44 (521.45)	35.59 (383.10)	27.25 (293.31)	21.53 (231.75)	17.44 (187.72)	14.41 (155.14)
Red	Illuminance = fc (Illuminance = lux)	93.99 (1,011.67)	41.77 (449.63)	23.50 (252.92)	15.04 (161.87)	10.44 (112.41)	7.67 (82.59)	5.87 (63.23)	4.64 (49.96)	3.76 (40.47)	3.11 (33.44)
Green	Illuminance = fc (Illuminance = lux)	169.48 (1,824.28)	75.32 (810.79)	42.37 (456.07)	27.12 (291.88)	18.83 (202.70)	13.84 (148.92)	10.59 (114.02)	8.37 (90.09)	6.78 (72.97)	5.60 (60.31)
Blue	Illuminance = fc (Illuminance = lux)	33.94 (365.32)	15.08 (162.37)	8.48 (91.33)	5.43 (58.45)	3.77 (40.59)	2.77 (29.82)	2.12 (22.83)	1.68 (18.04)	1.36 (14.61)	1.12 (12.08)
White	Illuminance = fc (Illuminance = lux)	160.34 (1,725.92)	71.26 (767.08)	40.09 (431.48)	25.65 (276.15)	17.82 (191.77)	13.09 (140.89)	10.02 (107.87)	7.92 (85.23)	6.41 (69.04)	5.30 (57.06)

RGBW Full at 40 Degree

40°	Throw Distance (d)	10'	15'	20'	25'	30'	35'	40'	45'	50'	55'
	Beam Size Diameter	7' - 1" 2.16m	10' - 5" 3.17m	13 - 8" 4.17m	17" 5.18m	20' - 3" 6.18m	23' - 7" 7.19m	26 - 11" 8.19m	30' - 2" 9.20m	33' - 6" 10.20m	36' - 9" 11.21m
Full on RGBW	Illuminance = fc (Illuminance = lux)	290.01 (3,121.65)	128.89 (1,387.40)	72.50 (780.41)	46.40 (499.46)	32.22 (346.85)	23.67 (254.83)	18.13 (195.10)	14.32 (154.16)	11.60 (124.87)	9.59 (103.20)
Red	Illuminance = fc (Illuminance = lux)	61.14 (658.05)	27.17 (292.47)	15.28 (164.51)	9.78 (105.29)	6.79 (73.12)	4.99 (53.72)	3.82 (41.13)	3.02 (32.50)	2.45 (26.32)	2.02 (21.75)
Green	Illuminance = fc (Illuminance = lux)	110.09 (1,184.96)	48.93 (526.65)	27.52 (296.24)	17.61 (189.59)	12.23 (131.66)	8.99 (96.73)	6.88 (74.06)	5.44 (58.52)	4.40 (47.40)	3.64 (39.17)
Blue	Illuminance = fc (Illuminance = lux)	22.84 (249.89)	10.15 (109.29)	5.71 (61.47)	3.66 (39.34)	2.54 (27.32)	1.86 (20.07)	1.43 (15.37)	1.13 (12.14)	0.91 (9.84)	0.76 (8.13)
White	Illuminance = fc (Illuminance = lux)	103.78 (1,117.05)	46.12 (496.47)	25.94 (279.26)	16.60 (178.73)	11.53 (124.12)	8.47 (91.19)	6.49 (69.82)	5.12 (55.16)	4.15 (44.68)	3.43 (36.93)

RGBW Full at 50 Degree

50°	Throw Distance (d)	10'	15'	20'	25'	30'	35'	40'	45'	50'	55'
	Beam Size Diameter	8' - 10" 2.68m	13' 3.95m	17.1' 5.22m	21' - 3" 6.48m	25' - 5" 7.75m	29' - 7" 9.01m	33' - 9" 10.28m	37' - 10" 11.54m	42' 12.81m	46' - 2" 14.08m
Full on RGBW	Illuminance = fc (Illuminance = lux)	206.90 (2,227.07)	91.96 (989.81)	51.73 (556.77)	33.10 (356.33)	22.99 (247.45)	16.89 (181.80)	12.93 (139.19)	10.22 (109.98)	8.28 (89.08)	6.84 (73.62)
Red	Illuminance = fc (Illuminance = lux)	44.38 (477.73)	19.73 (212.33)	11.10 (119.43)	7.10 (76.44)	4.93 (53.08)	3.62 (39.00)	2.77 (29.86)	2.19 (23.59)	1.78 (19.11)	1.47 (15.79)
Green	Illuminance = fc (Illuminance = lux)	78.54 (845.40)	34.91 (375.73)	19.64 (211.35)	12.57 (135.26)	8.73 (93.93)	6.41 (69.01)	4.91 (52.84)	3.88 (41.75)	3.14 (33.82)	2.60 (27.95)
Blue	Illuminance = fc (Illuminance = lux)	16.32 (175.64)	7.25 (78.06)	4.08 (43.91)	2.61 (28.10)	1.81 (19.52)	1.33 (14.34)	1.02 (10.98)	0.81 (8.67)	0.65 (7.03)	0.54 (5.81)
White	Illuminance = fc (Illuminance = lux)	74.84 (805.59)	33.26 (358.04)	18.71 (201.42)	11.97 (128.89)	8.32 (89.51)	6.11 (65.76)	4.68 (50.35)	3.70 (39.78)	2.99 (32.22)	2.47 (26.63)

PHOTOMETRIC PERFORMANCE DATA
ENGINE: 3K LENS: 15-30 Degree Zoom Lens
3K Full at 15 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	2'-9" 0.85m	3'-11" 1.19m	5' 1.54m	6'-2" 1.89m	7'-4" 2.24m	8'-6" 2.58m	9'-7" 2.93m	10'-9" 3.28m	11'-11" 3.63m	13' 3.97m
Illuminance = fc (Illuminance = lux)	2,085.25 (22,437.29)	966.84 (10,403.25)	543.85 (5,851.83)	348.06 (3,745.17)	241.71 (2,600.81)	177.58 (1,910.80)	135.96 (1,462.96)	107.43 (1,155.92)	87.02 (936.29)	71.91 (773.79)

3k Full at 22.5 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	4'-3" 1.30m	6'-2" 1.88m	8'-1" 2.46m	9'-11" 3.03m	11'-10" 3.61m	13'-9" 4.18m	15'-7" 4.76m	17'-6" 5.34m	19'-5" 5.91m	21'-3" 6.49m
Illuminance = fc (Illuminance = lux)	874.0 (9,404.24)	400.26 (4,306.75)	225.14 (2,422.55)	144.09 (1,550.43)	100.06 (1,076.69)	73.52 (791.04)	56.29 (605.64)	44.47 (478.53)	36.02 (387.61)	29.77 (320.34)

3K Full at 30 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	5'-10" 1.79m	8'-6" 2.60m	11'-2" 3.42m	13'-11" 4.24m	16'-7" 5.05m	19'-3" 5.87m	21'-11" 6.69m	24'-7" 7.50m	27'-3" 8.32m	29'-11" 9.14m
Illuminance = fc (Illuminance = lux)	496.85 (5,346.11)	233.81 (2,515.78)	131.52 (1,415.13)	84.17 (905.68)	58.45 (628.94)	42.94 (462.08)	32.88 (353.78)	25.98 (279.53)	21.04 (226.42)	17.39 (187.12)

PHOTOMETRIC PERFORMANCE DATA
ENGINE: 3K LENS: 30-50 Degree Zoom Lens
3K Full at 30 Degree Lens

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	5'-6" 1.69m	8' 2.45m	10'-7" 3.22m	13'-1" 3.98m	15'-7" 4.75m	18'-1" 5.52m	20'-7" 6.28m	23'-2" 7.05m	25'-8" 7.82m	28'-2" 8.58m
Illuminance = fc (Illuminance = lux)	616.09 (6,631.53)	273.82 (2,947.35)	154.02 (1,657.88)	98.57 (1,061.05)	68.45 (736.84)	50.29 (541.35)	38.51 (414.47)	30.42 (327.48)	24.64 (265.26)	20.37 (219.22)

3K Full at 40 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	7'-1" 2.16m	10'-5" 3.17m	13'-8" 4.17m	17' 5.18m	20'-3" 6.18m	23'-7" 7.19m	26'-11" 8.19m	30'-2" 9.20m	33'-6" 10.20m	36'-9" 11.21m
Illuminance = fc (Illuminance = lux)	409.80 (4,411.09)	182.14 (1,960.49)	102.45 (1,102.77)	65.57 (705.78)	45.53 (490.12)	33.45 (360.09)	25.61 (275.69)	20.24 (217.83)	16.39 (176.44)	13.55 (145.82)

3K Full at 50 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	8'-10" 2.68m	13' 3.95m	17.1' 5.22m	21'-3" 6.48m	25'-5" 7.75m	29'-7" 9.01m	33'-9" 10.28m	37'-10" 11.54m	42' 12.81m	46'-2" 14.08m
Illuminance = fc (Illuminance = lux)	292.37 (3,147.00)	129.94 (1,398.67)	73.09 (786.75)	46.78 (503.52)	32.49 (349.67)	23.87 (256.90)	18.27 (196.69)	14.44 (155.41)	11.69 (125.88)	9.66 (104.03)

PHOTOMETRIC PERFORMANCE DATA
ENGINE: 5K LENS: 15-30 Degree Zoom Lens
5K Full at 15 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	2' - 9" 0.85m	3' - 11" 1.19m	5' 1.54m	6' - 2" 1.89m	7' - 4" 2.24m	8' - 6" 2.58m	9' - 7" 2.93m	10' - 9" 3.28m	11' - 11" 3.63m	13' 3.97m
Illuminance = fc (Illuminance = lux)	2,612.50 (28,110.50)	1,076.39 (11,581.98)	605.47 (6,514.86)	387.50 (4,169.51)	269.09 (2,895.49)	197.71 (2,127.30)	151.37 (1,628.72)	119.59 (1,286.89)	96.88 (1,042.38)	80.06 (861.47)

5k Full at 22.5 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	4' - 3" 1.30m	6' - 2" 1.88m	8' - 1" 2.46m	9' - 11" 3.03m	11' - 10" 3.61m	13' - 9" 4.18m	15' - 7" 4.76m	17' - 6" 5.34m	19' - 5" 5.91m	21' - 3" 6.49m
Illuminance = fc (Illuminance = lux)	1,121.00 (12,061.96)	464.05 (4,993.21)	261.03 (2,808.68)	167.06 (1,797.56)	116.01 (1,248.30)	85.23 (917.12)	65.26 (702.17)	51.56 (554.80)	41.77 (449.39)	34.52 (371.39)

5K Full at 30 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	5' - 10" 1.79m	8' - 6" 2.60m	11' - 2" 3.42m	13' - 11" 4.24m	16' - 7" 5.05m	19' - 3" 5.87m	21' - 11" 6.69m	24' - 7" 7.50m	27' - 3" 8.32m	29' - 11" 9.14m
Illuminance = fc (Illuminance = lux)	496.85 (5,346.11)	233.81 (2,515.78)	131.52 (1,415.13)	84.17 (905.68)	58.45 (628.94)	42.94 (462.08)	32.88 (353.78)	25.98 (279.53)	21.04 (226.42)	17.39 (187.12)

PHOTOMETRIC PERFORMANCE DATA
ENGINE: 5K LENS: 30-50 Degree Zoom Lens
5K Full at 30 Degree Lens

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	5' - 6" 1.69m	8' 2.45m	10' - 7" 3.22m	13' - 1" 3.98m	15' - 7" 4.75m	18' - 1" 5.52m	20' - 7" 6.28m	23' - 2" 7.05m	25' - 8" 7.82m	28' - 2" 8.58m
Illuminance = fc (Illuminance = lux)	723.16 (7,784.04)	321.40 (3,459.57)	180.79 (1,946.01)	115.71 (1,245.45)	80.35 (864.89)	59.03 (635.43)	45.20 (486.50)	35.71 (384.40)	28.93 (311.36)	23.91 (257.32)

5K Full at 40 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	7' - 1" 2.16m	10' - 5" 3.17m	13' - 8" 4.17m	17' 5.18m	20' - 3" 6.18m	23' - 7" 7.19m	26' - 11" 8.19m	30' - 2" 9.20m	33' - 6" 10.20m	36' - 9" 11.21m
Illuminance = fc (Illuminance = lux)	481.02 (5,177.71)	213.79 (2,301.20)	120.26 (1,294.43)	76.96 (828.43)	53.45 (575.30)	39.27 (422.67)	30.06 (323.61)	23.75 (255.69)	19.24 (207.11)	15.90 (171.16)

5K Full at 50 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	8' - 10" 2.68m	13' 3.95m	17.1' 5.22m	21' - 3" 6.48m	25' - 5" 7.75m	29' - 7" 9.01m	33' - 9" 10.28m	37' - 10" 11.54m	42' 12.81m	46' - 2" 14.08m
Illuminance = fc (Illuminance = lux)	343.18 (3,693.92)	152.52 (1,641.74)	85.79 (923.48)	54.91 (591.03)	38.13 (410.44)	28.01 (301.54)	21.45 (230.87)	16.95 (182.42)	13.73 (147.76)	11.34 (122.11)



PHOENIX LED ZOOM PROFILE SPOT

PHOTOMETRIC PERFORMANCE DATA

ENGINE: TUNABLE WHITE AT FULL (4200K) LENS: 15-30 Degree Zoom Lens

3K & 5.6K Channels at Full at 15 Degree (4.2K)

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	2'-9" 0.85m	3'-11" 1.19m	5' 1.54m	6'-2" 1.89m	7'-4" 2.24m	8'-6" 2.58m	9'-7" 2.93m	10'-9" 3.28m	11'-11" 3.63m	13' 3.97m
Illuminance = fc (Illuminance = lux)	2,121.42 (22,834.77)	9,42.85 (10,148.79)	530.36 (5,708.69)	339.43 (3,653.56)	235.71 (2,537.20)	173.18 (1,864.06)	132.59 (1,427.17)	104.76 (1,127.64)	84.86 (913.39)	70.13 (754.87)

3K & 5.6K Channels at Full at 22.5 Degree (4.2K)

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	4'-3" 1.30m	6'-2" 1.88m	8'-1" 2.46m	9'-11" 3.03m	11'-10" 3.61m	13'-9" 4.18m	15'-7" 4.76m	17'-6" 5.34m	19'-5" 5.91m	21'-3" 6.49m
Illuminance = fc (Illuminance = lux)	889.16 (9,570.83)	395.18 (4,253.70)	222.29 (2,392.71)	142.27 (1,531.33)	98.80 (1,063.42)	72.58 (781.29)	55.57 (598.17)	43.91 (472.63)	35.57 (382.83)	29.39 (316.39)

3K & 5.6K Channels at Full at 30 Degree (4.2K)

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	5'-10" 1.79m	8'-6" 2.60m	11'-2" 3.42m	13'-11" 4.24m	16'-7" 5.05m	19'-3" 5.87m	21'-11" 6.69m	24'-7" 7.50m	27'-3" 8.32m	29'-11" 9.14m
Illuminance = fc (Illuminance = lux)	518.47 (5,580.86)	230.44 (2,480.38)	129.62 (1,395.21)	82.96 (892.93)	57.61 (620.09)	42.32 (455.58)	32.40 (348.80)	25.60 (275.59)	20.74 (223.23)	17.14 (184.49)

PHOTOMETRIC PERFORMANCE DATA

ENGINE: TUNABLE 3K5K (3K Channel @ FULL) LENS: 15-30 Degree Zoom Lens

3K Channel Full at 15 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	2'-9" 0.85m	3'-11" 1.19m	5' 1.54m	6'-2" 1.89m	7'-4" 2.24m	8'-6" 2.58m	9'-7" 2.93m	10'-9" 3.28m	11'-11" 3.63m	13' 3.97m
Illuminance = fc (Illuminance = lux)	973.59 (10,479.65)	432.71 (4,657.62)	243.40 (2,619.91)	155.77 (1,676.74)	108.18 (1,164.40)	79.48 (855.48)	60.85 (654.97)	48.08 (517.51)	38.94 (419.18)	32.18 (346.43)

3K Channel Full at 22.5 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	4'-3" 1.30m	6'-2" 1.88m	8'-1" 2.46m	9'-11" 3.03m	11'-10" 3.61m	13'-9" 4.18m	15'-7" 4.76m	17'-6" 5.34m	19'-5" 5.91m	21'-3" 6.49m
Illuminance = fc (Illuminance = lux)	408.06 (4392.38)	181.36 (1952.16)	102.02 (1098.09)	65.29 (702.78)	45.34 (488.04)	33.31 (358.56)	25.50 (274.52)	20.15 (216.90)	16.32 (175.69)	13.49 (145.20)

3K Channel at 30 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	5'-10" 1.79m	8'-6" 2.60m	11'-2" 3.42m	13'-11" 4.24m	16'-7" 5.05m	19'-3" 5.87m	21'-11" 6.69m	24'-7" 7.50m	27'-3" 8.32m	29'-11" 9.14m
Illuminance = fc (Illuminance = lux)	237.94 (2,561.24)	105.75 (1,138.33)	59.49 (640.31)	38.07 (409.79)	26.44 (284.58)	19.42 (209.08)	14.87 (160.07)	11.75 (126.48)	9.52 (102.44)	7.87 (84.66)



BRINGING IMAGINATION TO LIGHT

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20160205 PHX LED Zoom Data

PHOTOMETRIC PERFORMANCE DATA

ENGINE: TUNABLE 3K5K (5.6K Channel @ FULL) LENS: 15-30 Degree Zoom

5.6K Channel Full at 15 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	2'-9" 0.85m	3'-11" 1.19m	5' 1.54m	6'-2" 1.89m	7'-4" 2.24m	8'-6" 2.58m	9'-7" 2.93m	10'-9" 3.28m	11'-11" 3.63m	13' 3.97m
Illuminance = fc (Illuminance = lux)	1,171.30 (12,607.83)	520.58 (5,603.48)	292.83 (3,151.95)	187.41 (2,017.25)	130.15 (1,400.87)	95.62 (1,028.21)	73.21 (787.98)	57.84 (622.60)	46.85 (504.31)	38.72 (416.78)

5.6K Channel Full at 22.5 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	4'-3" 1.30m	6'-2" 1.88m	8'-1" 2.46m	9'-11" 3.03m	11'-10" 3.61m	13'-9" 4.18m	15'-7" 4.76m	17'-6" 5.34m	19'-5" 5.91m	21'-3" 6.49m
Illuminance = fc (Illuminance = lux)	490.93 (5,284.37)	218.19 (2,348.61)	122.73 (1,321.09)	78.55 (845.5)	54.55 (587.15)	40.08 (431.37)	30.68 (330.27)	24.24 (260.95)	19.64 (211.37)	16.23 (174.69)

5.6K Channel at 30 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	5'-10" 1.79m	8'-6" 2.60m	11'-2" 3.42m	13'-11" 4.24m	16'-7" 5.05m	19'-3" 5.87m	21'-11" 6.69m	24'-7" 7.50m	27'-3" 8.32m	29'-11" 9.14m
Illuminance = fc (Illuminance = lux)	286.26 (3,081.37)	127.23 (1,369.50)	71.57 (770.34)	45.80 (493.02)	31.81 (342.37)	23.37 (251.54)	17.89 (192.58)	14.14 (152.16)	11.45 (123.25)	9.46 (101.86)

PHOTOMETRIC PERFORMANCE DATA

ENGINE: TUNABLE WHITE AT FULL (4.2K) LENS: 30-50 Degree Zoom Lens

3K & 5.6K Channels at Full at 30 Degree Lens (4.2K)

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	5'-6" 1.69m	8' 2.45m	10'-7" 3.22m	13'-1" 3.98m	15'-7" 4.75m	18'-1" 5.52m	20'-7" 6.28m	23'-2" 7.05m	25'-8" 7.82m	28'-2" 8.58m
Illuminance = fc (Illuminance = lux)	642.91 (6,920.22)	285.74 (3,075.65)	160.73 (1,730.05)	102.87 (1,107.23)	71.43 (768.91)	52.48 (564.91)	40.18 (432.51)	31.75 (341.73)	25.72 (276.80)	21.25 (228.76)

3K & 5.6K Channels at Full at 40 Degree (4.2K)

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	7'-1" 2.16m	10'-5" 3.17m	13'-8" 4.17m	17' 5.18m	20'-3" 6.18m	23'-7" 7.19m	26'-11" 8.19m	30'-2" 9.20m	33'-6" 10.20m	36'-9" 11.21m
Illuminance = fc (Illuminance = lux)	432.85 (4,659.21)	192.38 (2,070.76)	108.21 (1,164.80)	69.26 (745.47)	48.10 (517.69)	35.34 (380.34)	27.05 (291.20)	21.38 (230.08)	17.31 (186.36)	14.31 (154.02)

3K & 5.6K Channels at Full at 50 Degree (4.2K)

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	8'-10" 2.68m	13' 3.95m	17.1' 5.22m	21'-3" 6.48m	25'-5" 7.75m	29'-7" 9.01m	33'-9" 10.28m	37'-10" 11.54m	42' 12.81m	46'-2" 14.08m
Illuminance = fc (Illuminance = lux)	305.49 (3,288.27)	135.77 (1,461.45)	76.37 (822.06)	48.88 (526.12)	33.94 (365.36)	24.94 (265.51)	19.09 (205.51)	15.09 (162.38)	12.22 (131.53)	10.10 (108.70)



PHOENIX LED ZOOM PROFILE SPOT

PHOTOMETRIC PERFORMANCE DATA

ENGINE: TUNABLE 3K5K (3K Channel @ FULL) LENS: 30-50 Degree Zoom Lens

3K Channel Full at 30 Degree Lens

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	5'-6" 1.69m	8' 2.45m	10'-7" 3.22m	13'-1" 3.98m	15'-7" 4.75m	18'-1" 5.52m	20'-7" 6.28m	23'-2" 7.05m	25'-8" 7.82m	28'-2" 8.58m
Illuminance = fc (Illuminance = lux)	295.05 (3,175.92)	131.13 (1,411.52)	73.76 (793.98)	47.21 (508.14)	32.78 (352.88)	24.09 (259.25)	18.44 (198.49)	14.57 (156.83)	11.80 (127.03)	9.75 (104.98)

3K Channel Full at 40 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	7'-1" 2.16m	10'-5" 3.17m	13'-8" 4.17m	17' 5.18m	20'-3" 6.18m	23'-7" 7.19m	26'-11" 8.19m	30'-2" 9.20m	33'-6" 10.20m	36'-9" 11.21m
Illuminance = fc (Illuminance = lux)	198.65 (2,138.27)	88.29 (950.34)	49.66 (534.56)	31.78 (342.12)	22.07 (237.58)	16.22 (174.55)	12.42 (133.64)	9.81 (105.59)	7.95 (85.53)	6.57 (70.68)

3K Channel Full at 50 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.764m
Beam Size Diameter	8'-10" 2.68m	13' 3.95m	17.1' 5.22m	21'-3" 6.48m	25'-5" 7.75m	29'-7" 9.01m	33'-9" 10.28m	37'-10" 11.54m	42' 12.81m	46'-2" 14.08m
Illuminance = fc (Illuminance = lux)	140.20 (1,509.10)	62.31 (670.71)	35.05 (377.27)	22.43 (241.45)	15.58 (167.67)	11.44 (123.19)	8.76 (94.31)	6.92 (74.52)	5.61 (60.36)	4.63 (49.88)

PHOTOMETRIC PERFORMANCE DATA

ENGINE: TUNABLE 3K5K (5.6K Channel @ FULL) LENS: 30-50 Degree Zoom

5.6K Channel Full at 30 Degree Lens

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	5'-6" 1.69m	8' 2.45m	10'-7" 3.22m	13'-1" 3.98m	15'-7" 4.75m	18'-1" 5.52m	20'-7" 6.28m	23'-2" 7.05m	25'-8" 7.82m	28'-2" 8.58m
Illuminance = fc (Illuminance = lux)	354.97 (3,820.88)	157.77 (1,698.16)	88.74 (955.22)	56.80 (611.34)	39.44 (424.54)	28.98 (311.90)	22.19 (238.80)	17.53 (188.68)	14.20 (152.83)	11.73 (126.31)

5.6K Channel Full at 40 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.76m
Beam Size Diameter	7'-1" 2.16m	10'-5" 3.17m	13'-8" 4.17m	17' 5.18m	20'-3" 6.18m	23'-7" 7.19m	26'-11" 8.19m	30'-2" 9.20m	33'-6" 10.20m	36'-9" 11.21m
Illuminance = fc (Illuminance = lux)	238.99 (2,572.50)	106.22 (1,143.33)	59.75 (643.12)	38.24 (411.60)	26.55 (285.83)	19.51 (210.00)	14.94 (160.78)	11.80 (127.03)	9.56 (102.90)	7.90 (85.04)

5.6K Channel Full at 50 Degree

Throw Distance (d)	10' 3.05m	15' 4.57m	20' 6.09m	25' 7.62m	30' 9.14m	35' 10.67m	40' 12.19m	45' 13.72m	50' 15.24m	55' 16.764m
Beam Size Diameter	8'-10" 2.68m	13' 3.95m	17.1' 5.22m	21'-3" 6.48m	25'-5" 7.75m	29'-7" 9.01m	33'-9" 10.28m	37'-10" 11.54m	42' 12.81m	46'-2" 14.08m
Illuminance = fc (Illuminance = lux)	168.67 (1,815.56)	74.97 (806.91)	42.17 (453.89)	26.99 (290.49)	18.74 (201.72)	13.77 (148.20)	10.54 (113.47)	8.33 (89.65)	6.75 (72.62)	5.58 (60.01)



BRINGING IMAGINATION TO LIGHT

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20160205 PHX LED Zoom Data



PLATINUM SPOT III™

SKU# **EPS084**

The Platinum Spot LED III™ features a new 230W 8,500K >79CRI Cool White LED engine, delivering total 7,200 lumens, 16° to 32° zoom, 8 dichroic colors, 7 rotating-interchangeable glass and 7 static-stamped metal gobos, a bi-directional variable speed animation wheel, 3-facet rotating prism, frost filter, motorized iris and focus, variable dimming curves, high speed mechanical shutter and strobe, hibernation mode, 3 and 5pin DMX in/out connections, RDM (Remote Device Management), full color 180° reversible menu display with 6 button touch control panel, battery backup for display power, flicker free operation for TV and FILM, and a multi-voltage universal auto switching power supply (100-240v).

FEATURES

Cool White LED Spot Luminaire

230W, 8,500K, >79CRI, 7,200 Lumen, 60,000 Hours

16° to 32° Motorized Zoom, 8 Dichroic Colors

7 Rotating-Interchangeable and 7 Static-Stamped Gobos

Bi-Directional Variable Speed Animation Wheel

3-Facet Rotating Prism and Frost Filter

High Speed Mechanical Shutter and Strobe

Motorized Iris and Focus and Variable Dimming Curves

Low Heat, Quiet Operation, Hibernation Mode

Flicker Free Operation For Broadcast TV and FILM



PRODUCT SPECIFICATIONS

SOURCE

230W Cool White LED Engine
60,000 Hour Average LED Life

PHOTOMETRIC DATA

6,500K, >79CRI, 7,200 Lumens
17,500 LUX 1,626 FC @8.2' (2.5m) (16° Full ON)
5,373 LUX 499 FC @8.2' (2.5m) (32° Full ON)

EFFECTS

16° - 32° Motorized Zoom
Bi-Directional Variable Speed Animation Wheel
3-Facet Rotating Prism and Prism Macros
Frost Filter Hybrid Wash Effect
Motorized Zoom, Iris and Focus
High Speed Mechanical Shutter and Strobe
Variable Dimming Curves

COLOR

8 Dichroic Colors

GOBOS

7 Interchangeable-Rotating / Indexing Glass Gobos
7 Static-Stamped Metal Gobos

CONTROL / CONNECTIONS

(3) DMX Channel Modes (18 / 20 / 27)
RDM (Remote Device Management)
6 Button Touch Control Panel
Full Color 180° Reversible LCD Menu Display
8 / 16 Bit Resolution Adjustable Movement
3pin & 5pin DMX In/Out

SIZE / WEIGHT

Length: 14.8" (375mm)
Width: 15.1" (384mm)
Vertical Height: 23.7" (601mm)
Weight: 46.0 lbs. (20.8 kg)

ELECTRICAL / THERMAL

AC 100-240V - 50/60Hz
350W Max Power Consumption
-13°F to 113°F (-25°C to 45°C)

APPROVALS / RATINGS



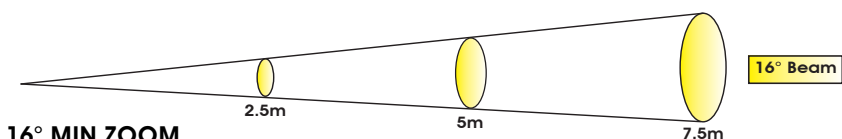
INSTALLATION

Rigging: Clamps (Not Included)
Working Position: Flat Surface / Inverted (180°)

OPTIONAL ACCESSORIES

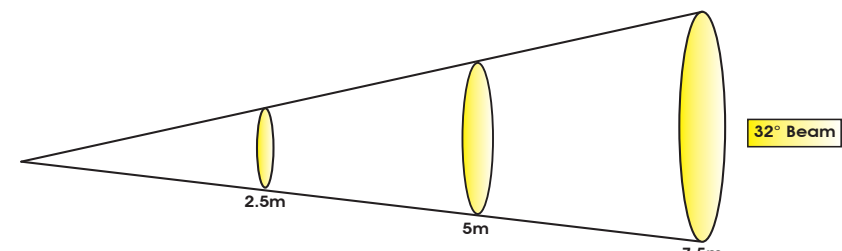
ORDER CODE	ITEM
TRIGGER CLAMP	Heavy Duty Wrap Around Hook Style Clamp
*** pending ***	Road Case For Platinum Spot LED III™
EWDMXSYSTEM	Wireless DMX System (1 Transmitter, 1 Receiver)
AC3PDMX5PRO	5 ft. (1.5m) 3pin PRO DMX Cable
AC5PDMX5PRO	5 ft. (1.5m) 5pin PRO DMX Cable
	Additional cable lengths available

PHOTOMETRIC DATA



16° MIN ZOOM

Distance	2.5m	8.2 ft	5m	16.4 ft	7.5m	24.6 ft
Diameter	0.7	2.3	1.4	4.6	2.1	6.9
Photometrics	lux	fc	lux	fc	lux	fc
FULL ON	17,500	1,626	4,450	413	2,178	202



32° MAX ZOOM

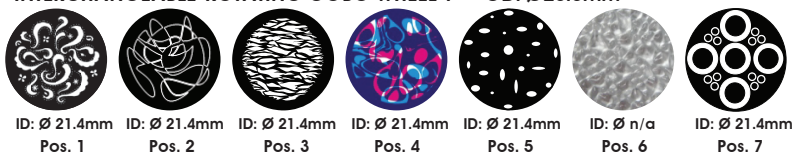
Distance	2.5m	8.2 ft	5m	16.4 ft	7.5m	24.6 ft
Diameter	1.43	4.7	2.86	9.4	4.29	14.1
Photometrics	lux	fc	lux	fc	lux	fc
FULL ON	5,373	499	1,438	134	700	65

COLORS AND GOBOS

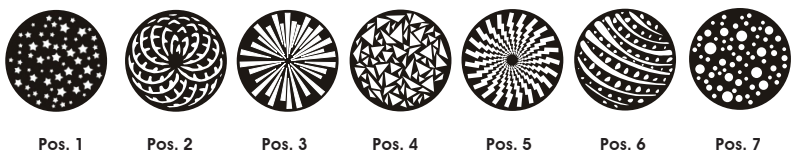
COLOR WHEEL



INTERCHANGEABLE-ROTATING GOBO WHEEL 1 - OD: Ø26.8mm**



STATIC-STAMPED GOBO WHEEL 2



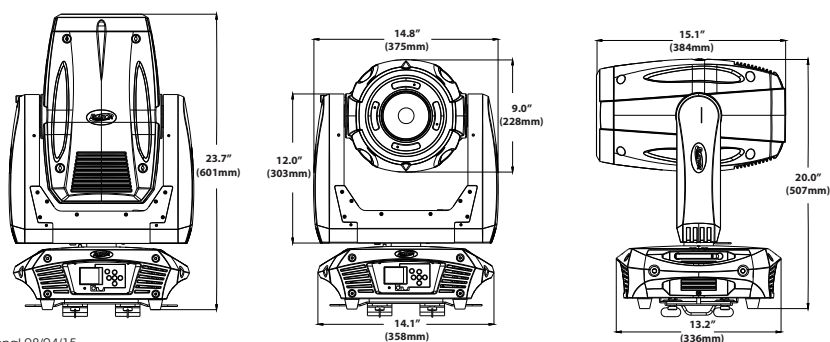
BI-DIRECTIONAL ANIMATION WHEEL



****IMPORTANT NOTICE REGARDING GOBO DIMENSIONS AND CUSTOM GOBOS**

OD = Outside Diameter | ID = Image Diameter
Due to varying manufacturing processes, it is highly recommended to provide a gobo and holder sample from the fixture to 3rd party custom gobo vendors for accurate sizing.

DIMENSIONAL DIAGRAMS



Specifications are subject to change without notice ©Elation Professional 08/04/15

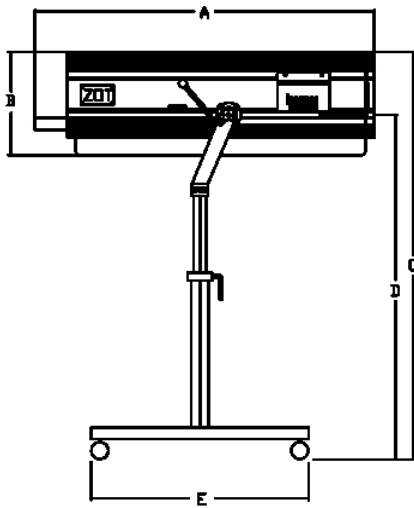
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323-582-3322 | 323-832-9142 fax | www.elationlighting.com | info@elationlighting.com

Elation Professional B.V. | Junostraat 2 | 6468 EW Kerkrade, Netherlands
+31 45 546 85 66 | +31 45 546 85 96 fax | www.elationlighting.eu | info@elationlighting.eu

The luminaire is available in 4 versions- ZOT 12, a 1200 watt tungsten, Zot 5, a 575 watt MSR/HMI, ZOT 7, A 700 watt MSR and ZOT 12 HP, a 1200 watt MSR. Spot diameter shall be controlled via an insulated external lever, controlling a unique optical light intensifier system, linked to a nichrome steel iris. This "Spot Size Control" intensifies the light as the unit goes from flood to spot. Units that iris down without an increase in light output shall not be acceptable. The unit shall include an external fine focus control, rear operated fader and a side mounted 6- color, self-cancelling boomerang. A resiliently mounted, dichroic glass reflector and optical quality glass lenses shall complete the optical system. Lamping shall be through a rear door using a 1/4 turn latch. Units requiring the removal of screws or requiring handling of the glass parts of the lamp shall not be acceptable. Lamping utilizes a "bayonet" style lamp/socket combination. The lamp is inserted through the socket and with a slight twist, locks in place. The ZOT, 5, 7, 12, shall have self-contained power supplies with an ON/OFF switch. Zot 5 & 7 also include a circuit breaker. An 11 foot line cord, terminated in a NEMA 5-15P connector is also supplied. The ZOT 12HP shall have an external power supply connected to the spotlight head via a 6 foot flexible cord terminated in a head mounted twist- loc type connector. The ON/ OFF switch and circuit breaker shall be power supply mounted. The external power supply shall have a 10 foot line cord terminated in a NEMA 5-15P connector. A Lycian "forward lean" yoke will be included. A three legged fixed base will be standard with an optional tripod available. The ZOT yokes utilize the industry standard 1-1/8" male spigot, allowing the spotlight to be mounted on stands or mounting brackets using that standard. The yoke shall allow for a 70 degree downward tilt and 35 degree upward tilt. Units shall be cooled by low volume (70 cfm maximum) muffin fans. Units using high volume fans shall not be acceptable. Housing shall be constructed of extruded aluminum and cold rolled steel and be powder coated using black and gold powder. Unit heads (all units) shall measure 42-1/2" long x 15" wide and 13" high including all controls.

LYCIAN STAGE LIGHTING, ZOT 5, ZOT 7, ZOT 12, ZOT 12HP shall be specified. Units are manufactured in the United States of America

PHOTOMETRICS



- A. Head Length- 42-1/4"
- B. Head Height- 13"
- C. Overall Height with Base- 46-1/2"
- * Additional upward height adjustment 13"
- *D. Height of Pivot- 39-3/4"
- E. Base Width- 40"
- Maximun Width of Head- 14"

Distance	30 ft.	60ft	80 ft.	100 ft.	125 ft
Distance	9 meters	18 meters	25 meters	30 meters	38 meters
Spot Dia. Feet	7"	15"	17"	21"	2' 3"
Spot Dia. Meters	18 cm	38 cm	43 cm	53 cm	69 cm
Flood Dia. Feet	4 '5"	8' 10"	11' 9"	16' 5"	18' 4"
Flood Dia. Meters	1.3 m	2.7 m	3.6 m	5 m	5.6 m

ZOT 12

FC Spot	708	177	100	64	41
Lux Spot	7621	1905	1076	689	441
FC Flood	653	120	92	59	38
Lux Flood	7029	1292	990	635	409

ZOT 5

FC Spot	1035	259	145	93	60
Lux Spot	11,141	2788	1561	1001	646
FC Flood	654	163	92	59	38
Lux Flood	7040	1755	990	635	409

ZOT 7

FC Spot	1524	381	214	137	88
Lux Spot	16,404	4101	2304	1475	947
FC Flood	1361	340	191	123	78
Lux Flood	14,650	3660	2056	1324	840

ZOT 12 HP

FC Spot	2613	653	368	235	151
Lux Spot	28,126	7029	3961	2530	1625
FC Flood	1960	653	368	235	151
Lux Flood	21,097	5274	2971	1894	1216

ORDER CODE

- : 1200W Tungsten Followspot
- : 575W ARC Followspot
- : 700W ARC Followspot
- : 1200W ARC Followspot
- Tripod (Optional Substitute for Fixed Base)

Followspots inc. Head, Yoke, & Base

Specifications subject to change



LYCIAN
STAGE LIGHTING

PO Box 214, 1144 Kings Highway
Sugar Loaf, NY 10981 USA
Tel: +1 (845) 469-2285



Purchasing Division
 2019 Washington Street East
 Post Office Box 50130
 Charleston, WV 25305-0130

**State of West Virginia
 Solicitation Response**

Proc Folder : 230128
Solicitation Description : Addendum No. 1 - Theater/Production Lighting
Proc Type : Central Purchase Order

Date issued	Solicitation Closes	Solicitation Response	Version
	2016-08-31 13:30:00	SR 0432 ESR08311600000000901	1

VENDOR
VS0000010497 BOMBids, LLC

Solicitation Number: CRFQ 0432 DCH1700000002

Total Bid : \$222,945.30 **Response Date:** 2016-08-31 **Response Time:** 13:04:53

Comments: 1/2% discount offered if payment made within 10 days

FOR INFORMATION CONTACT THE BUYER
 Michelle L Childers
 (304) 558-2063
 michelle.l.childers@wv.gov

Signature on File	FEIN #	DATE
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All offers subject to all terms and conditions contained in this solicitation

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
1	Light Emitting Diode (LED) Wash Lights.	20.00000	EA	\$1,182.860000	\$23,657.20

Comm Code	Manufacturer	Specification	Model #
39112300			

Extended Description :	Light Emitting Diode (LED) Wash Lights.
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Comments: ALTMAN SPECTRA STAR PAR 100W

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
2	Light Emitting Diode (LED) 15 Deg -30 Deg Zoom Ellipsoidals	20.00000	EA	\$1,843.520000	\$36,870.40

Comm Code	Manufacturer	Specification	Model #
39112300			

Extended Description :	Light Emitting Diode (LED) 15 Deg -30 Deg Zoom Ellipsoidals
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Comments: ALTMAN PHX LED ZOOM PROFILE SPOT 15-30 DEG

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
3	Light Emitting Diode (LED) 30 Deg-50 Deg Zoom Ellipsoidals	50.00000	EA	\$1,843.520000	\$92,176.00

Comm Code	Manufacturer	Specification	Model #
39112300			

Extended Description :	Light Emitting Diode (LED) 30 Deg-50 Deg Zoom Ellipsoidals
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Comments: ALTMAN PHX LED ZOOM PROFILE SPOT 30-50 DEG

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
4	Light Emitting Diode (LED) 10 Beam Angle Linear (CYC) Light	6.00000	EA	\$4,747.250000	\$28,483.50

Comm Code	Manufacturer	Specification	Model #
39112300			

Extended Description :	Light Emitting Diode (LED) 10 Beam Angle Linear (CYC) Light
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Comments: LED 10DEG BEAM ANGLE, 72INCH LINEAR (CYC/STRIP) LIGHTS

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
5	Light Emitting Diode (LED), Moving Head, Spot Luminaires.	12.00000	EA	\$2,747.250000	\$32,967.00

Comm Code	Manufacturer	Specification	Model #
39112300			

Extended Description :	Light Emitting Diode (LED), Moving Head, Spot Luminaires.
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Comments: ELATION PRO PLATINUM SPOT 3

Line	Comm Ln Desc	Qty	Unit Issue	Unit Price	Ln Total Or Contract Amount
6	Short Arc lamp Follow spots.	2.00000	EA	\$4,395.600000	\$8,791.20

Comm Code	Manufacturer	Specification	Model #
39112300			

Extended Description :	Short Arc lamp Follow spots.
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Comments: LYCIAN ZOT 7