COPY TO HAND IN

UNION COUNTY COURTHOUSE
HOK 10-01015-00

BID FORM
SECTION 004100

Date May 26, 2011

Bid of River City Construction, L.L.C.
(hereinafter called "Bidder").

*a corporation, organized and existing under the laws of the State of Illinois ;

*a partnership consisting of N/A ;

*an individual doing business as N/A

N/A

N/A

N/A

Ladies & Gentlemen:

The Bidder, in compliance with your invitation for work associated with Union County Courthouse, Jonesboro, Illinois project having read and examined the Conditions of the Contract, drawings and specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the renovation of the proposed project including the availability of labor, equipment, materials, and supplies, agrees to construct the project in accordance with the Contract Documents within the time set forth herein, and at prices stated below. These prices are to cover all expenses incurred in performing the work required under the Contract Documents, of which this bid is a part.

Bidder hereby agrees to commence work under this contract on or before date to be specified in written "Notice to Proceed" of the Owner and to fully complete the work within 540 consecutive calendar days thereafter. Bidder agrees that completion date will be computed from date of Notice To Proceed.

It is hereby understood and agreed that time is of the essence of each and every portion of this contract, and the Bidder shall be liable for actual damages for delay in completion.

Bidder acknowledges receipt of following addenda:

Addenda No. 1 Dated 5/02/2011
Addenda No. 2 Dated 5/09/2011
Addenda No. 3 Dated 5/16/2011
Addenda No. 4 Dated 5/19/2011

* Insert corporation, partnership or individual as applicable.
** Bidder to insert completion time.

The following amounts shall be shown in both written form and figures. In case of discrepancy, written amount will govern.

BASE PROPOSAL

Perform all work all as defined in the contract documents for the sum of.

TEN MILLION NINE HUNDRED NINETY TWO THOUSAND NO/100

Dollars ($ 10,992,000.00).

ALTERNATES

The above proposals may be changed in accordance with the following alternate proposals as the Owner may elect. Refer to section "012300 - Alternates".

Alternate No.1: Provide amount to be added to the Base Bid for furnishing and installing the additional landscape vegetation as indicate in lieu of the base bid plan:

Add TEN THOUSAND NINE HUNDRED NO/100

Dollars (10,900.00)

Alternate No.2: Provide amount to be added to the Base Bid for furnishing and installing natural cut limestone exterior cladding, trim, sills, and cornices, etc, in lieu of the precast concrete indicated:

Add THIRTY SEVEN THOUSAND NO/100

Dollars (37,000.00)

Alternate No.3: Provide amount to be added to the Base Bid for installing natural stone flooring system, furnished by the Owner, applied in a full mortar setting bed in a 2" floor depression in lieu of the thin set porcelain tile system specified and indicated.

DEDUCT LD

Add ~~FIVE TEN THOUSAND FIVE HUNDRED NO/100~~

LD TWENTY TWO THOUSAND NO/100 Dollars (~~14,400.00~~ LD (22,000.00) LD

Alternate No.4 Provide amount to be added to the Base Bid for furnishing and installing a concrete paving system in lieu of the asphalt paving system specified and indicated:

Add ONE HUNDRED THIRTEEN THOUSAND EIGHT HUNDRED NO/100

Dollars (113,800.00)

UNIT PRICES

For changing specified quantities of work from those indicated by Contract Drawings and Specifications, upon written instructions of Owner, following Unit Prices shall prevail in accordance with General Conditions.

Following Unit Prices include all labor, overhead and profit, materials, equipment, appliances, bailing, shoring, shoring removal, etc., to cover all work.

Following Unit Prices are required where applicable to particular Base Bid being submitted.

Only a single Unit Price shall be given and it shall apply for either MORE or LESS work than that indicated on Drawings and called for in Specifications as indicated to be included in Base Bid. In event that more or less units than so indicated is actually furnished, Change Orders will be issued for increased or decreased amounts as approved by Architect.

Price per cu.yd. for more or less building excavation, including disposal, not shown or specified.

Machine Excavation (neat) $ +15.00 / -6.00

Hand Excavation (neat) $ +25.00 / -10.00

Price per cu.yd. for more or less trench excavation outside building line prior to construction of grade beams, footings or exterior walls, including disposal.

Machine Excavation (neat) $ +17.50 / -8.00

Hand Excavation (neat) $ +25.00 / -10.00

Price per cu.yd. for more or less trench excavation inside building line after construction of grade beams, footings and exterior walls, including disposal.

Machine Excavation (neat) $ +20.00 / -10.00

Hand Excavation (neat) $ +25.00 / -10.00

Price per cu.yd. for more or less backfill in place and compacted: $ +38.50 / -25.00

Price for more or less concrete work:

Per cu.yd. for more or less concrete work in place: $ +250.00 / -100.00

Per sq. ft. of contact area of forms in place, including removal of forms: $ +18.00 / -6.00

Per pound reinforcing steel in place: $ +1.00 / ~~-0.75~~ -0.75 LD

Price per cu.yd. for more or less granular base course for under building slabs, in place and compacted: $ +31.00 / -25.00

The Bidder declares that he has an opportunity to examine the site of the work and he has examined the contract documents therefore, and that he has carefully prepared his bid upon the basis thereof and that he has carefully examined and checked this bid and the materials, equipment and labor required thereunder, the cost thereof, and his figures therefore, and hereby states that the amount or amounts set forth in this bid are correct and that no mistake or error has occurred in this bid or in the Bidder's computations upon which this bid is based, and the Bidder agrees that he will make no claim for reformation, modification, rescission or correction of this bid after the scheduled closing time for the receipt of bid.

In submitting this bid it is agreed that it may not be withdrawn for a period of 60 days after the scheduled closing time for receipt of bid.

Bidder understands that County reserves the right to reject any and all proposals received pursuant to this RFP and to waive or not waive any informalities or irregularities in proposals or proposal procedures, and to accept or further negotiate cost, terms or conditions of any proposal determined by the County to be in the best interests of the County even though not the lowest cost proposal.

Accompany this proposal is a bid bond or a certified or cashier's check payable without condition to Union County which is an amount of Two Hundred And Fifty Thousand Dollars ($260,000.00).

It is understood and agreed that if this proposal shall be accepted and the undersigned shall fail to execute the contract and furnish acceptable bond as provided by the Contract Documents the accompanying bid security will be realized upon or retained by the Owner; otherwise the bid bond or check shall be returned to the undersigned. It is understood that the bid security of the three lowest and best bidders will be retained until the contract has been executed and an acceptable bond has been furnished, when such bid security will be returned to the bidders promptly after the Owner has determined the three lowest ad best bides.

BIDDER'S CERTIFICATE

The Bidder hereby certifies:

That the bid is genuine and is not made in the interest of or on behalf of any undisclosed person, firm or corporation, and is not submitted in the conformity with any agreement or rules of any group, association or corporation;
That he has not directly or indirectly induced or solicited any other Bidder to put in a false or sham bid;

That he has not solicited or induced any person, firm or corporation to refrain from submitting a bid; an

That he has not sought by collusion or otherwise to obtain for himself any advantage over any other Bidder or over the Owner.

Bidder will not discriminate against any employee or applicant for employment because of race, creed, color or national origin in connection with the performance of the work.

IF A CORPORATION:

Name of Corporation **River City Construction, L.L.C.**

1. Incorporated under the laws of the State of **Illinois**.

Luigi Ori, Vice President
Name and Title of Officer

2. Licensed to do business in the State of **Illinois**.

ADDRESS: **1509 N. Main Street, Benton, IL 62812**

Yes **X** No _____

(Check One)

_____ (ATTEST)

John C. Hoelscher (Secretary)

(SEAL)

IF A PARTNERSHIP:

N/A
Partner *(Name, City and State)*

N/A
Partner *(Name, City and State)*

N/A
Partner *(Name, City and State)*

N/A
Name of Partnership

N/A
Official Address

IF INDIVIDUAL DOING BUSINESS UNDER A FIRM NAME:

City and State of Residence N/A *(City)* *(State)*

N/A
(Signature of Individual)

Doing business under the firm name and style of:

N/A
Firm Name

N/A
Official Address

IF AN INDIVIDUAL:

City and State of Residence N/A *(City)* *(State)*

N/A
(Signature of Individual)

N/A
Official Address

IF A JOINT VENTURE:

Incorporated under laws of State of N/A

Licensed to do business in the State of N/A : Yes N/A No N/A
(Check One)

N/A
Name of Corporation

N/A
Name and Title of Officer

N/A
Official Address

Incorporated under laws of State of N/A

Licensed to do business in the State of N/A : Yes N/A No N/A
(Check One)

N/A
Name of Corporation

N/A
Name and Title of Officer

N/A
Official Address

(Each Bidder must complete the bid form by signing in the proper signature line above and by supplying the required information called for in connection with the signature. The information called for is necessary in the proper preparation of the contract and performance bond.)

END OF SECTION 004100

RIVER CITY
CONSTRUCTION

UNION COUNTY COURTHOUSE
JONESBORO, ILLINOIS

DESIGNATION OF WORK TO BE PERFORMED BY RCC WITH ITS OWN FORCES.

SUPERVISION

BUILDING CONCRETE

FINISH CARPENTRY

SPECIALTIES

SITE CONCRETE

ROUGH CARPENTRY

DOORS & HARDWARE

P.O. Box 1389 Peoria, IL 61654 ☐ PH 309.694.3120 FAX 309.694.1332 EMAIL Info@RCCLLC.com WEB www.RCCLLC.com
MAIN OFFICE 101 Hoffer Lane, East Peoria, IL 61611 ☐ ADDITIONAL LOCATIONS Benton & Huntley, IL and Ashland, MO

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we River City Construction, LLC
1509 N Main St, Benton, IL 62812
as Principal, hereinafter called the Principal, and Continental Casualty Company
333 S Wabash Ave, Chicago, IL 60604
a corporation duly organized under the laws of the State of Illinois as Surety, hereinafter called the Surety, are held and firmly bound unto Union County, 309 West Market Street, Jonesboro, IL 62952 as Obligee, hereinafter called the Obligee, in the sum of Two Hundred Fifty Thousand and no/100 Dollars ($ 250,000.), for the payment of which sum well and truly to be made, the said Principal and the said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for Union County Courthouse

NOW, THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the bidding or Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void, otherwise to remain in full force and effect.

Signed and sealed this 20th day of May 2011

(Witness)

River City Construction, LLC
(Principal) (Seal)
LUIGI ORI (Title) VICE PRESIDENT

(Witness)

Continental Casualty Company
(Surety) (Seal)
Nicholas G. Yates (Title) Attorney-In-Fact

Published in cooperation with the American Institute of Architects (AIA) by the CNA Insurance Companies

The language in this document conforms exactly to the language used in AIA Document A310 - Bid Bond - February 1970 Edition.

G-106041-A

STATE OF Illinois
COUNTY OF Peoria

I, Roberta J. Hall, Notary Public of Peoria County, in the State of Illinois, do hereby certify that Nicholas G. Yates, Attorney-in-Fact, of the Continental Casualty Company, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that he signed, sealed and delivered said instrument, for and on behalf of the Continental Casualty Company, for the uses and purposes therein set forth.

Given under my hand and notarial seal in said County, this 20th day of May, 2011.

Roberta J. Hall, Notary Public
My Commission Expires June 6, 2014

"OFFICIAL SEAL"
ROBERTA J. HALL
Notary Public, State of Illinois
My Commission Expires 06-06-2014

POWER OF ATTORNEY APPOINTING INDIVIDUAL ATTORNEY-IN-FACT

Know All Men By These Presents, That Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company (herein called "the CNA Companies"), are duly organized and existing insurance companies having their principal offices in the City of Chicago, and State of Illinois, and that they do by virtue of the signatures and seals herein affixed hereby make, constitute and appoint

Paula G Chaney, Peter T Coyle, Roberta J Hall, Steven J Lohmeier, Susan E Mansfield, Nicholas G Yates, Individually

of Peoria, IL, their true and lawful Attorney(s)-in-Fact with full power and authority hereby conferred to sign, seal and execute for and on their behalf bonds, undertakings and other obligatory instruments of similar nature

- In Unlimited Amounts -

and to bind them thereby as fully and to the same extent as if such instruments were signed by a duly authorized officer of their insurance companies and all the acts of said Attorney, pursuant to the authority hereby given is hereby ratified and confirmed.

This Power of Attorney is made and executed pursuant to and by authority of the By-Law and Resolutions, printed on the reverse hereof, duly adopted, as indicated, by the Boards of Directors of the insurance companies.

In Witness Whereof, the CNA Companies have caused these presents to be signed by their Senior Vice President and their corporate seals to be hereto affixed on this 30th day of November, 2010.

Continental Casualty Company
National Fire Insurance Company of Hartford
American Casualty Company of Reading, Pennsylvania

Jacquelyne M. Belcastro Senior Vice President

State of Illinois, County of Cook, ss:

On this 30th day of November, 2010, before me personally came Jacquelyne M. Belcastro to me known, who, being by me duly sworn, did depose and say: that she resides in the City of Chicago, State of Illinois; that she is a Senior Vice President of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company described in and which executed the above instrument; that she knows the seals of said insurance companies; that the seals affixed to the said instrument are such corporate seals; that they were so affixed pursuant to authority given by the Boards of Directors of said insurance companies and that she signed her name thereto pursuant to like authority, and acknowledges same to be the act and deed of said insurance companies.

OFFICIAL SEAL
ELIZA PRICE
NOTARY PUBLIC - STATE OF ILLINOIS
MY COMMISSION EXPIRES 09/17/13

My Commission Expires September 17, 2013

Eliza Price Notary Public

CERTIFICATE

I, Mary A. Ribikawskis, Assistant Secretary of Continental Casualty Company, an Illinois insurance company, National Fire Insurance Company of Hartford, an Illinois insurance company, and American Casualty Company of Reading, Pennsylvania, a Pennsylvania insurance company do hereby certify that the Power of Attorney herein above set forth is still in force, and further certify that the By-Law and Resolution of the Board of Directors of the insurance companies printed on the reverse hereof is still in force. In testimony whereof I have hereunto subscribed my name and affixed the seal of the said insurance companies this 20th day of May, 2011.

Continental Casualty Company
National Fire Insurance Company of Hartford
American Casualty Company of Reading, Pennsylvania

Mary A. Ribikawskis Assistant Secretary

Form F6853-5/2009

LICENSE / AUTHORIZED SIGNATORIES / OFFICERS

RIVER CITY
CONSTRUCTION

File Number 0015507-1

STATE OF ILLINOIS

OFFICE OF THE SECRETARY OF STATE

To all to whom these Presents Shall Come, Greeting:

I, Jesse White, Secretary of State of the State of Illinois, do hereby certify that

RIVER CITY CONSTRUCTION, L.L.C., HAVING ORGANIZED IN THE STATE OF ILLINOIS ON DECEMBER 18, 1997, APPEARS TO HAVE COMPLIED WITH ALL PROVISIONS OF THE LIMITED LIABILITY COMPANY ACT OF THIS STATE, AND AS OF THIS DATE IS IN GOOD STANDING AS A DOMESTIC LIMITED LIABILITY COMPANY IN THE STATE OF ILLINOIS.

In Testimony Whereof, *I hereto set my hand and cause to be affixed the Great Seal of the State of Illinois, this* 18TH *day of* OCTOBER *A.D.* 2010 .

Authentication #: 1029101736

Authenticate at: http://www.cyberdriveillinois.com

Jesse White

SECRETARY OF STATE

River City Construction, L.L.C. Authorized Signatories

Authorized Signatories

Name	Position
Bernie Koch	Manager/ Member/ President
Lu Ori	Member/ Vice President
Randee J. Lyons	Member/ Vice President
Eric Bursott	Member/ Vice President
John C. Hoelscher	Member/ Vice President
Steve Hamm	Member/ Vice President
Jeffrey Long	Member/ Vice President
John Sutherland	Member/ Vice President
Michael N. Cullinan	Manager/ Member
Ronald Olson	Manager/ Member

RIVER CITY
CONSTRUCTION

James M. Smith – Project Manager
309 West Market Street
Jonesboro, IL 62952

July 13, 2011

Re: Union County Courthouse Project
Revised Bid

Dear Sir:

The following is a recap of our revised base bid to include these value engineering items accepted by the owner and architect.

Base Bid:	$10,992,000.00
*Value Engineering Items:	<$ 521,943.00>
Revised Base Bid:	$10,470,057.00

Alternates #1 thru #4 shall remain the same along with the unit prices submitted with the original bid.

See the attached list.

If you should have any questions, please feel free to call.

Sincerely,
River City Construction, L.L.C.

Randee J. Lyons
Vice President

RE: Union County Courthouse
Value Engineering Items

July 13, 2011

Attention: Mike Smith-Project Manager

Dear Sir:

The following is a list of Value Engineering Items with confirming costs. These items should coincide with numbering system handed out at our last meeting.

#5 – Revise various low voltage systems per the attached CT & E Inc. proposal letter dated 6/2/11. <$75,000.00>

#6 – Refer to #49, 51, 52, 53, 60, and 62.

#7 – Eliminate 25 landscape benches. <$10,000.00>

#8 & #9 – Eliminate trees, shrubs and sod. <$28,000.00>

#10 – Eliminate parking area at the northeast corner of site. <$24,450.00> (see attached)

#16 – Need direction from HOK and Owner if River City Construction is to provide.

#17 – Reduce/revise millwork and public area enhancements eliminating the high trim at Hearing Room 111 (elevations 5, 6 and 7 on A601), simplifying door 202A by eliminating the sidelights and crown, eliminating the wood paneling above door height in both courtrooms (elevations 1, 2, and 3 on A603, eliminating the wood paneling wainscot at Public Corridor 201 (elevation 1 on A606) and eliminating the wood paneling at Exit Stair S12 and S22 (elevations 1,2,3, and 4 on A607. <$19,574.00>

#18 – Revise precast and masonry details at exterior of building . Any saving will require HOK/Owner to redraw detail of parapets and cornerstone and possibly simplify shapes and sizes of precast. River City Construction, owner, mason subcontractor, supplier and architect will continue working on cost saving solutions.

#19 – Substitute regular split face material in lieu of Ashler material specified. Seal split face block. Revise the masonry pattern to a standard 8"x16" running bond in lieu of the multiple size in a running Ashler pattern. <$16,000.00>

#20 – Change wood frame entry to aluminum. See elevation 8 on A601 and elevation 7 on A602. <$7,000.00.

#22 – Replace cast concrete storm lines and cast in place manholes with HDPE lines and precast manholes. <$20,000.00>

#23 – Revise level 2 detention holding rooms by using only benches with cuff rings. Only one unisex restroom in that secure room. Per attached sketch .<$5,000.00>

#24 – Delete the use of the original vault doors. Install heavier fire rated metal doors and frames. +$2,470.00

#25 – Revise floor schedule LL-all floor areas will be sealed concrete except rooms 003, 008, 010, and 024 which will be ceramic tile.
L1 all room floor coverings will be as drawn except for the flowing which will be sealed concrete M10, M11, 112, 114, 119, 120, 121, 124, 125, 130, 135, 136, 142, 143, 144 and 146.
L2 all room floor covering will be as drawn except for the flowing which will be sealed concrete M21, M22, M23 and 245, 249. <$4,450.00>

#27 – Reduce the size of the backup generator and feeder wiring from 450 kw to 200 kw. Per attached one-line diagram. <$23,100.00>

#27A – Owner provide the fuel for the generator. <$2,000.00>

#29 – Eliminate window treatments at:
A) 10-W6, 7-W1, 21-W8 – 9-W7. <$10,000.00>
B) Room 211 west elevation and room 221 east elevation. <$20,000.00>

#30 – Eliminate walk off mats at entries. <$16,300.00>

#33 – Move two (2) handicap parking spaces and eliminate handicap ramp at south east lot. Revise stairs. <$18,429.00>

#34 – Site furnishings – Eliminate three (3) trash receptacles. <$5,750.00>

#35 – Delete temporary chain link construction fence, Use construction safety fence. <$5,200.00>

#36 – Delete architects trailer and furnishing. <$4,000.00>

#37 – Substitute standard red oxide primer in lieu of structural steel primer complying with MPI #7. <$7,000.00>

#38 – Delete acoustic plaster system at courtrooms. <$23,400.00>

#39 – Change ACT-2 fabric covered ceiling tile to a 4x6 lay in panel instead of the clip in panel. <$9,300.00>

#40 – Change ACT-1 from USG "Mats" to USG "Olympic". <$10,100.00>

#41 – Change 9/16" grid system to 13/16" grid system. <$2,100.00>

#42 – Change ¼ #20 galvanized security mesh on walls at file room to ½ fire treated plywood. Also change ¾ fire treated plywood at security drywall ceiling to ½ fire treated plywood. <$2,600.00>

#43 – Change deflection requirements at exterior studs to L/720 per HOK request. <$2,000.00>

#49 – Use Phoenix light bollard fixtures in lieu of Hydro. This changes (16) bollard fixtures. (See attached cut sheet). <$26,050.00>

#50 – Eliminate the dimming controls from the lighting control panels. <$20,200.00>

#51 – Eliminate the (3) B13 chandelier fixtures in the 1st and 2nd floor light coves in the corridors/alcoves. <$5,090.00>

#52 – Use low voltage rope light in lieu of specified rope lights. (See attached cut sheet) <$10,000.00>

#53 – Delete the (4) parking lot lights associated with the northeast parking lot and change (1) pole from S04 to S02. See attached sketch. <$11,450.00>

#54 – Fixtures changed from dimming to non-dimming ballasts. <$5,400.00>

#55 – Revise 12x18 CT to 12x12 tile, revise pattern accordingly. <$10,000.00>

#60 – Revise the wall washer light fixtures type B04 from metal halide to compact fluorescent. (See attached cut sheet) <$4,350.00>

#62 – Replace B26 and B27 light fixtures to B05 lay in fixture for (94) fixtures. <$14,720.00>

#64 – Change from Tuffline doors to standard 500 wide stile. <$8,000.00>

#65 – Change from 7.5 inch curtain wall on window types W1, 2, 3, 4, 5, 6, 7, 8, and 9 to Kalwall 4 S IT 2"x41/2" front set inside glaze. <$16,000.00>

#66 – At interior courtroom clerestory eliminate 5/8 laminated sound proof system and install 1" insulated glass with ¼" laminate on both sides of insulated glass. <$14,500.00>

#67 – Eliminate decomposed granite at south façade. <$4,100.00>

#68 – Aluminum window and door systems provide clear anodized finish. <$3,800.00>

If we can be of any further service, please do not hesitate to call.

Sincerely,
River City Construction, L.L.C.

Randee J. Lyons
Vice President

(5) VE Item #5

CT&E, Inc/TELECO
MORE THAN JUST TALK
113 South Division
Carterville, Illinois 62918
(618) 958-6367 (618) 985-3526 Fax 866 668 8108

Date: 6-2-11

To: Belcher Electric dcorbel@mchsi.com

From: Denny Corbell d_corbell@CTETeleco.com

Subject: Union Co. Courthouse revisions for savings

Union Co. Courthouse considerations for cost reductions. These suggestions have been bounced off of the technology consultant engineer Allen Amy and will need to be fine tuned for exact numbers with his approval if determined to be needed. He is in agreement with concept changes outlined below to help lower project cost with little to no effect on project operational design.

1. Our original quote to all contractors contained an item quoted from our vendors in error and would have created a need for a change order deduct to correct. The power conditioner for the audio system was selected as a UPS /conditioner instead of just a power conditioner. Projected savings for correcting with correct part (credit-$17,000)

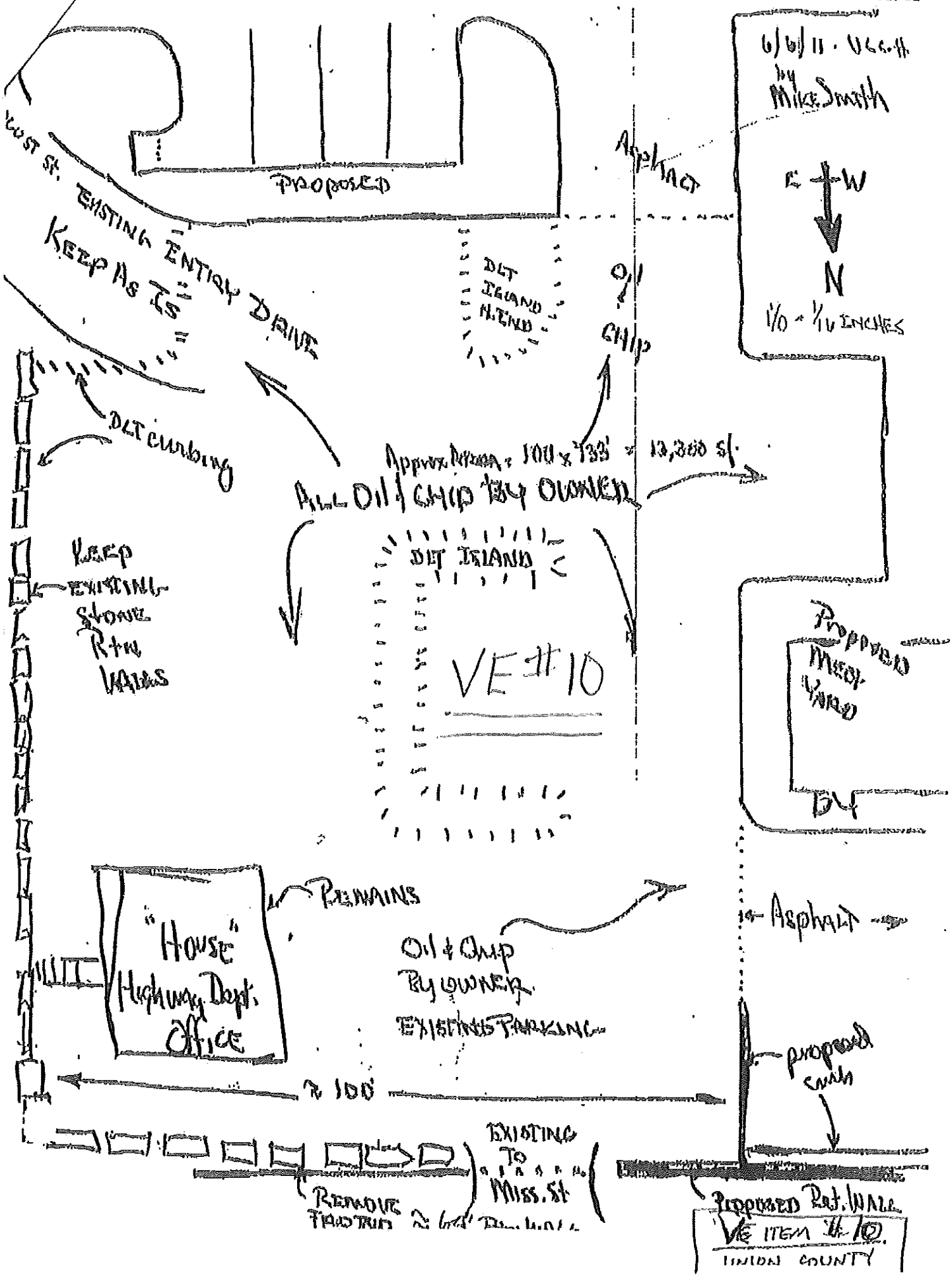
2. Revise the intercom system at doors for communication to dispatch from audio with video to audio only. This simplifies the dispatch desk and CCTV cameras cover all locations anyway. Projected savings is approx: -$15,000

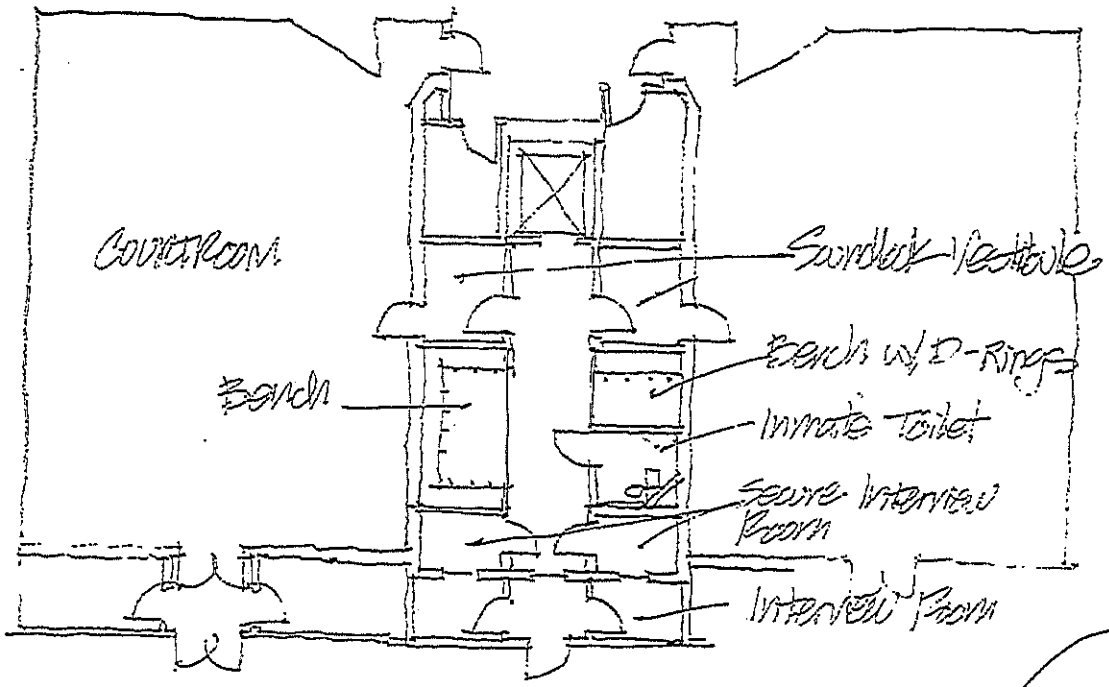
3 Revise CCTV system with elimination of several non critical cameras or cameras with almost duplicate coverage, changing the PDZ outdoor cameras to fixed cameras, and reducing the record capacity of the non-critical area camera DVR to a more reasonable size for expected activity. Sheriff's office area (lower floor) is not changed.

Projected savings is approx: -$37,000

4. Revising the manufacture and type of the courtroom 60" and hearing room 52" monitors (considering the limited usage will not effect life expectancy) and hall display monitors for the Docket display, to more economical models with extended warranties. Other minor audio system changes. Projected savings is approx: -$5-6000

Total projected savings min. - $75,000


6/6/11 - Updated by Mike Smith
Proposed
Asphalt
West St.
Existing Entry Drive
Keep As Is
DLT Island Mound
Oil & Chip
E
W
N
1/0 = 1/10 Inches
DLT curbing
Approx Area: 100 x 133 = 13,300 s/.
All Oil & Chip by Owner
DLT Island
Keep Existing Stone Rtn Walls
VE #10
Proposed Mech. Yard
DLT
"House" Highway Dept. Office
Remains
Oil & Chip By Owner Existing Parking
Asphalt
proposed curb
± 100'
Existing To Miss. St
Remove Existing
Proposed Rel. Wall
VE Item #10
Union County



Court Holding Area Modifications

0 4 12 20 Feet

VE ITEM #23

Raised Layout

833-44164

Kent Kampwerth

m:	Eric Rogers [erogers@BricPartnership.com]
t:	Wednesday, June 22, 2011 4:19 PM
To:	Kent Kampwerth
Cc:	Randee J. Lyons; Sean Twomey
Subject:	RE: Union County Courthouse
Attachments:	E501 - VE REV.pdf

Kent Kampwerth
Project Manager
1509 N. Main Street
Benton, IL 62812
Ph: 618-435-2612
Fx: 618-435-2457
www.rccllc.com

VE #27

-----Original Message-----
From: Eric Rogers [mailto:erogers@BricPartnership.com]
Sent: Wednesday, June 22, 2011 4:19 PM
To: Kent Kampwerth
Randee J. Lyons; Sean Twomey
Subject: RE: Union County Courthouse

Kent,

Attached is the revised electrical one-line with the smaller generator size.

I believe David at HOK has covered the lighting and with regard to the metal clad cable option we did specify that it was allowed, so go ahead and have Wade provide the price, please have him follow the spec on the type of MC cable allowed and where.

Let me know if you need more information on anything to assist Wade in his pricing.

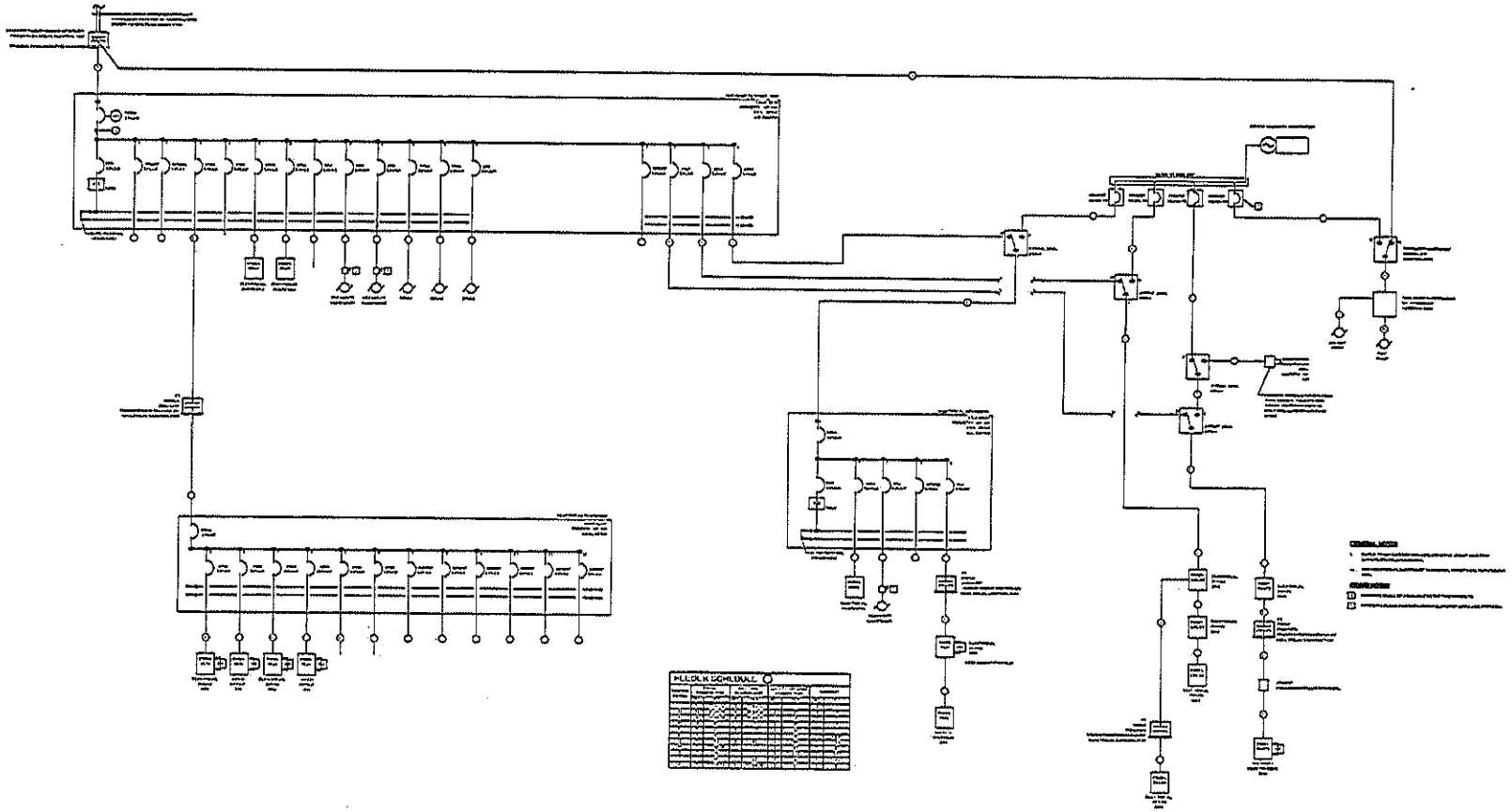
Do you have anything more from Corbell on their pricing?

Thanks

Eric

-----Original Message-----
From: Kent Kampwerth
Sent: Tuesday, June 21, 2011 9:49 AM
To: 'erogers@bricpartnership.com'
Cc: Randee Lyons (rlyons@rccllc.com); Kent Kampwerth
Subject: FW: Union County Courthouse

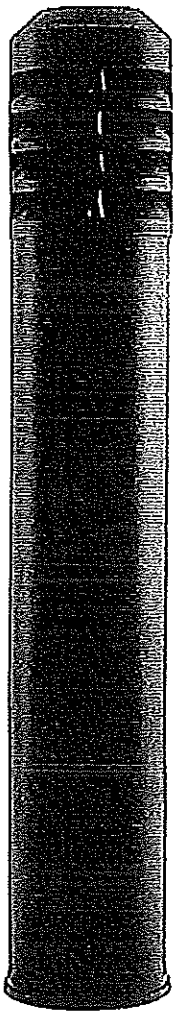
See attached list of electrical changes. Please hand write add any notes to each item as you see fit and I will add to the description so Belcher Electric can price the various items. I



VE item # 27

VE (49)

ALLURE

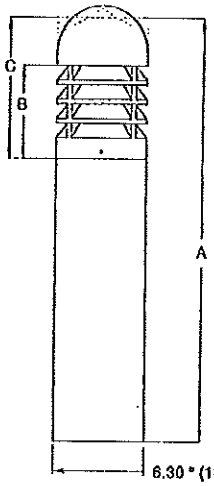


Dome Top

Cone Top

Flat Top

Beveled Top



c UL us LISTED

SIZE	TOP STYLE	DIM "A"	DIM "B"	DIM "C"
6"	BEVELED AND FLAT	42.6" (1082mm)	6.2" (158mm)	9.6" (243mm)
	DOME	41.3" (1049mm)	6.2" (158mm)	10.3" (262mm)
	CONE	41.1" (1044mm)	6.2" (158mm)	10.1" (257mm)

NOTE: STANDARD 42" MODEL DIMENSION. FOR OPTIONAL 30" MODEL, SUBTRACT 12" FROM DIMENSION "A"

General: The cast louvers on the Allure Bollard provide excellent downward light for pathway lighting.

Housing: Cast low-copper content aluminum tops, lamp chamber, base, etc. Bollard tube from extruded aluminum. All external hardware is stainless steel.

Lens: Opal glass lens is standard.

Lamps: Accepts MH and HPS ED-17 lamps to 100 watts, incandescent lamps 100 watts or less, and 26-42 watt compact fluorescent lamps. 55 watt induction lamps systems are available for extreme long life and low maintenance applications.

Ballast: Integral ballast mounted to lamp/socket plate for easy maintenance. 50W HID units standard with dual volt (120/277V) 60HZ ballast; 70W and higher units standard with quad volt (120/208/240/277V) 60HZ ballast; compact fluorescent units standard with universal 120-277V 50/60HZ electronic ballast; induction lamp units provided with 120V system generator.

Finish: Textured polyester powder coat finish. Black standard. Bronze, gray, white, silver, and verde green options available. For custom colors, please contact factory.

Gaskets: EPDM gaskets are standard.

Dimensions: Available in 6" diameter. 42" height is standard; 30" height option available.

Tops: Four top styles available: beveled, cone, dome and flat.

Mounting: Mount the fixture using the provided mounting template and 1/2" anchor bolt kit (4 bolts).

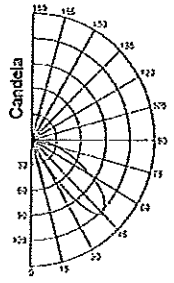
Listings: UL Listed 1598 for Wet Locations and suitable for mounting within 4' of ground. Indoor/Outdoor listed for use in Canada.

PHOENIX Intrigue SERIES

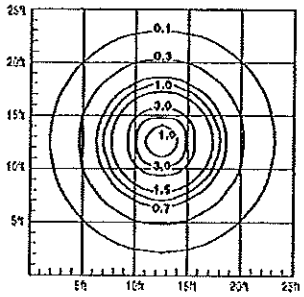
PHOENIX
Durability by Design

8711 West Port Avenue • Milwaukee, WI 53224 USA • Phone: 414-973-3300 • Fax: 414-973-3210
www.phoenixproducts.com

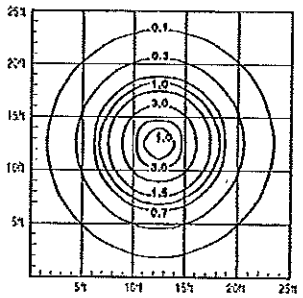
PHOTOMETRICS



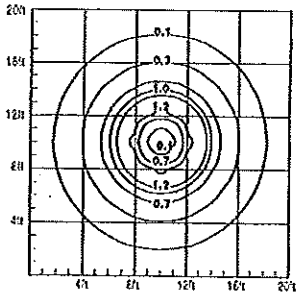
AR6B70MH*
70W Medium Base MH
NEMA Type: 7x7
Lumens - 5500
* Insert Top Style



AR6B70MH*
70W Medium Base MH
Lumens - 5500
* Insert Top Style



AR6B70HPS*
70W Medium Base HPS
Lumens - 6400
* Insert Top Style



AR6B32CFL*
32W Compact Fluorescent
Lumens - 2400
* Insert Top Style

ORDERING INFORMATION

	SERIES	DIAMETER (nominal inches)	MOUNT	WATT/ TYPE	TOP STYLE	OPTIONS: LENS (opal standard)	VOLTAGE (120V standard)	HEIGHT (42" standard) (nominal inches)	FINISH (Black standard)
Example	AR	6	B	42CFL	B	OL/HSS	120	42	BRZ
	AR	6	B	50MH 70MH 100MH 50HPS 70HPS 100HPS INC 26CFL 32CFL 42CFL 55IL	B C D F	OL HSS	220/240-50H 347V ELB	30	BRZ WHT VGN GRY SIL CC

Lamp Wattage/Type
50MH = 50W Metal Halide (ED17)
70MH = 70W Metal Halide (ED17)
100MH = 100W Metal Halide (ED17)
50HPS = 50W High Pressure Sodium (ED17)
70HPS = 70W High Pressure Sodium (ED17)
100HPS = 100W High Pressure Sodium (ED17)
INC = Incandescent (100W max.)
26CFL = 26W Compact Fluorescent
32CFL = 32W Compact Fluorescent
42CFL = 42W Compact Fluorescent
55IL = 55W Induction Lamp System

Top Style
B = Beveled Top
C = Cone Top
D = Dome Top
F = Flat Top

Lens (Opal Lens Standard)
OL = Opal Lens (Standard)
HSS = Houseside Shield

Voltage
HID: 50W = 120/277V; 60 Hz standard
70W = 120/208/240/277V standard
CFL: 120-277V; 50/60 Hz standard
IL: 120V; 60Hz standard
220/240-50H = 220/240V, 50HZ (HID units only)
347V = 347 Volt (70W HID or higher units only)
ELB = Electronic Ballast (HID units)

Height (42" Standard)
30" = 30" Overall Height

Finish (Black Standard)
BRZ = Bronze
WHT = White
VGN = Verde Green
GRY = Gray
SIL = Silver
CC = Custom Colors (contact factory)

Mounting
B = Bollard

N5610311E

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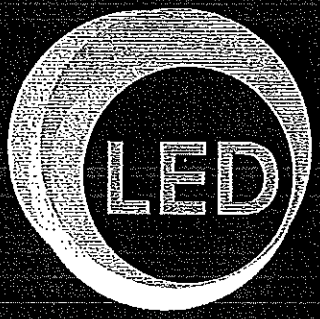
www.phoenixproducts.com

VE (52)

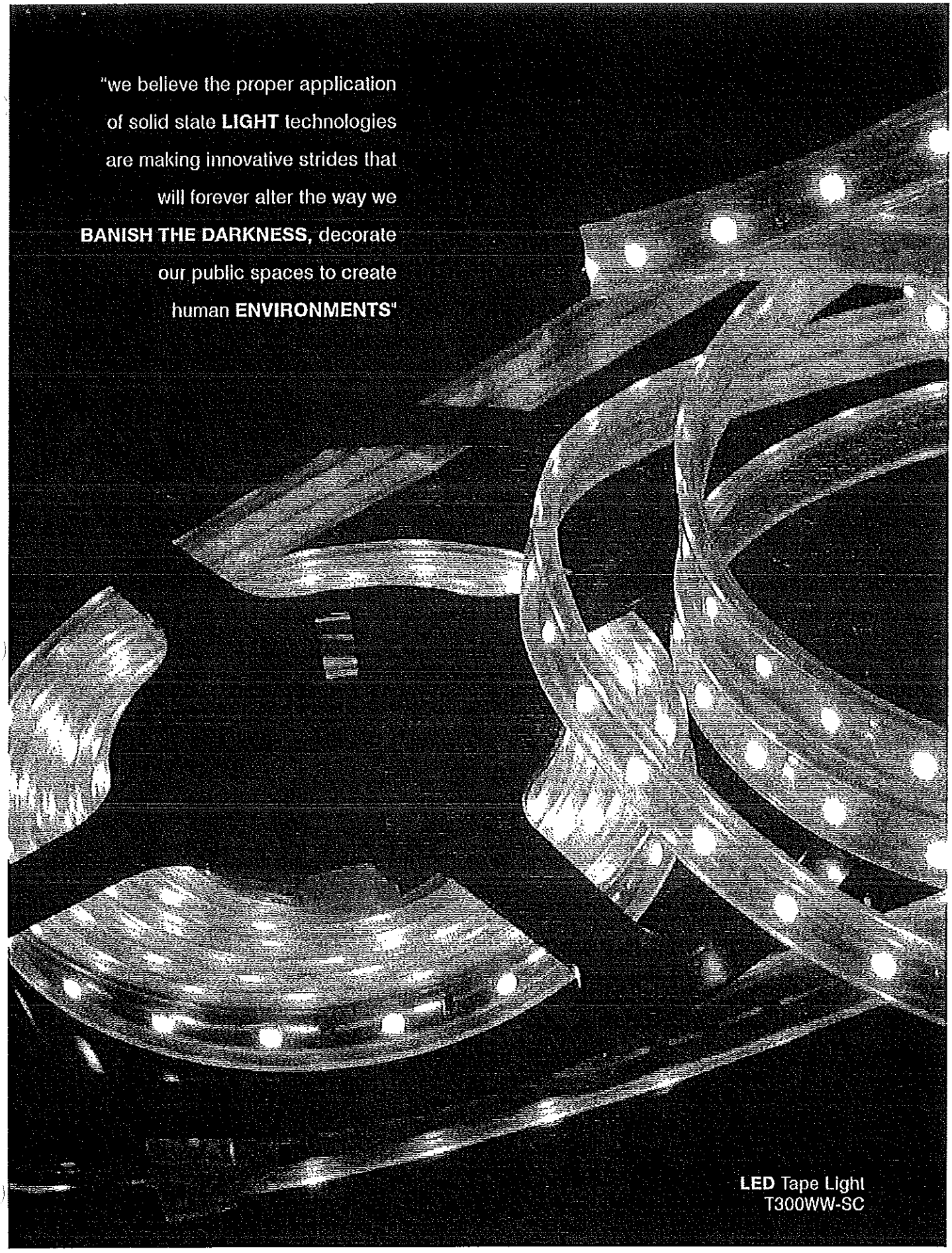
Kent Kampwerth

From: Wade Belcher [belcher-elec@hotmail.com]
Sent: Friday, July 01, 2011 11:07 AM
To: Kent Kampwerth
Subject: FW: LED_Lighting_Inc_Catalog_2010.pdf
Attachments: LED_Lighting_Inc_Catalog_2010.pdf



LED lighting inc

Architectural & Decorative Lighting


"we believe the proper application
of solid state **LIGHT** technologies
are making innovative strides that
will forever alter the way we
BANISH THE DARKNESS, decorate
our public spaces to create
human **ENVIRONMENTS**"
LED Tape Light
T300WW-SC

LED – THE FUTURE of lighting

LED tape light is a flexible narrow strip with LED's mounted on its surface. Applications include both interior and exterior, with color changing and waterproofing options available.

- energy efficient
- lower maintenance costs
- flexible
- extensive color options
- dimmable and programmable
- long lifetime, last longer than any other lighting option
- rugged and vibration resistant
- instantaneous
- performs well in extreme cold temperatures
- environmentally sound, no damaging UV, infrared radiation or mercury

St. Louis Hilton – Lighting Designer Michael Jacobwith, 2009

LED TAPE LIGHT

4 **STANDARD, HIGH, SUPER HIGH LUMINOSITY**
Under cabinet, shelving and cove lighting.

6 **COLOR CHANGING**
Dramatic color effects.

8 **DIGITAL RGB**
Dynamic powerful color scenes.

10 **SIDE EMITTING, STANDARD & HIGH**
Perfect for glass display cases and curved counter tops.

12 **WATERPROOF**
Most durable washable tape.

VERSA BAR

14 **STANDARD, HIGH**
Under cabinet, shelving and OEM products.

ETCETERA

16 **COMMERCIAL DRIVERS**

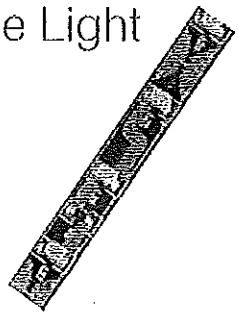
17 **ACCESSORIES**

18 **INSTRUCTIONS**

LED

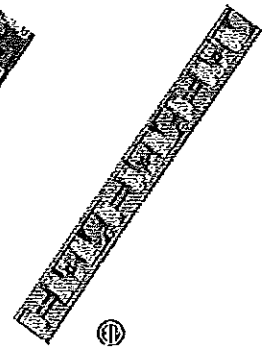
STANDARD, HIGH, SUPER HIGH LUMINOSITY

Tape Light

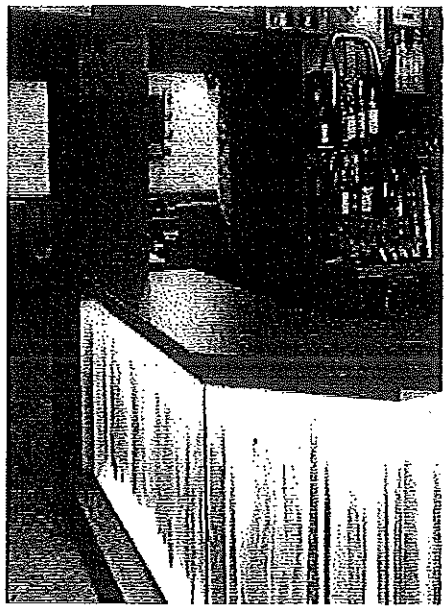


T300WW

THL480WW



TSHL600WW



MODELS	STANDARD LUMINOSITY	HIGH LUMINOSITY	SUPER HIGH LUMINOSITY
warm white, ± 3000K	T300WW	THL480WW	TSHL600WW
cool white ± 5500K	T300CW	THL480CW	TSHL600CW
red	T300R	THL480R	TSHL600R
green	T300G	THL480G	TSHL600G
blue	T300B	THL480B	TSHL600B
amber	T300A	THL480A	TSHL600A
LEDS PER REEL	300	480	600
LENGTH	16.4' per reel • custom available	16.4' per reel • custom available	16.4' per reel • custom available
LUMEN OUTPUT	1000 per reel (WW)	1725 per reel (WW)	2750 per reel (WW)
	61 per foot	105 per foot	168 per foot
WATTAGE	24W per reel	30W per reel	36W per reel
	1.5W per foot	1.83W per foot	2.2W per foot
CURRENT	2 amps	3 amps	4 amps
MAX RUN/driver	32.8 feet/10M	32.8 feet/10M	32.8 feet/10M
VOLTAGE	12V DC	12V DC	12V DC
CUTTABLE	every 3 leds or 2"	every 3 leds or 1.25	every 3 leds or 1"
WIDTH • HEIGHT	0.31"W • 0.094"H	0.31"W • 0.094"H	0.31"W • 0.094"H
VIEWING ANGLE	120°	120°	120°
CONNECTORS	available for all configurations		
POWER SUPPLIES	6 to 96 watt		
NOTE	lumen specifications are for warm white only		
FEATURES	• flexible for versatile designs • even illumination • slim profile • dimmable • available in custom lengths with plug-n-play connectors • easy mounting with double sided tape • mounts to wood, steel or metal & most hard smooth surfaces • waterproof versions available • low energy costs • 50,000 hours • maintenance free–no bulbs to burnout • ROHS compliant		

EN

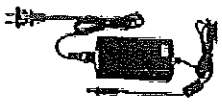
EFFI

LED DRIVERS: PLUG-IN POWER SUPPLIES

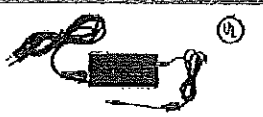
See page 16 for commercial grade power supplies

6W-12VPLUG
6 watt direct plug-in driver with a cord length of 10'.

24W-12VPLUG
24 watt direct plug-in driver with a cord length of 10'.



P36W12V
36 watt plug-in driver with a combined cord length of 16'.
4.25"L x 2.125"W x 1.25"H



P72W12V
72 watt plug-in driver with a combined cord length of 8'.
5.125"L x 2.25"W x 1.25"H

Rockit Bar and Grill, Chicago

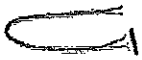
FLEXIBLE

ERGY

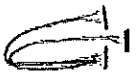
CIENT

CONNECTORS

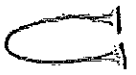
all connectors available with custom wire lead lengths



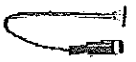
TCONNECT-_
Single tape connector with 3", 6", 12", 24", 36" or 60" wire lead, specify length.



TYCONNECT-_
Single tape connector "Y" to two tape connectors with 3", 6", 12", 24" or 36" wire lead, specify length.



TCORNER-_
Single tape connector to single connector with 3", 6", 12", 24", 36" or 60" wire lead, specify length.



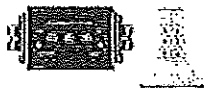
TPWRCONNECT-_
Tape connector to power supply connector with 3", 6", 12", 24", 36" or 60" wire lead, specify length.

TYPWRCONNECT-_
Single power connector to two-way split tape connectors with 3", 6", 12", 24" or 36" wire lead, specify length.

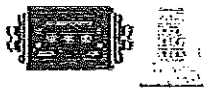
TSPLICE
Single color tape to tape connector (no wire lead).

DIMMERS

TDIMMER-12V
Inline 12V dimmer, 96W max. a driver is required.
4.5"L x 2.25"W x 1.5"H



TDIMMER-12V-WM-RF
Inline 12V dimmer with wireless (RF) Decora switch for installation in standard switch box, 96W max. A driver is required.
4.5"L x 2.25"W x 1.5"H



TDIMMER-12V-WM-HW
Inline 12V dimmer with hard wire Decora switch for installation in standard switch box, 96W max, a driver is required.
4.5"L x 2.25"W x 1.5"H

DIMMABLE DRIVER

TDIMDRIVER60W
A dimmable 60W LED driver (power supply) for use with magnetic low voltage wall dimmer, hard wire, multitap input 120-277V and 12V or 24V output. Note: Lutron Maestro series is not compatible. Length is 6.93" with mounting bracket.
3"W x 4.91"L x 3.75"D

WATERPROOF OPTIONS

SILICONE COVER (SC)
Tape light completely sealed in clear silicone cover.
0.44"W x 0.13"H

RESIN DIPPED (RD)
Compact resin coating conforming closely to size of tape light.
0.31"W x 0.098"H

SOLID SILICONE (SS)
Totally waterproof, UV resistant and suitable for outdoor application.
0.51"W x 0.23"H

LED DRIVERS / HARD-WIRE POWER SUPPLIES

P96W12V
96 watt plug-in driver with a combined cord length of 8'6".
6"L x 2.25"W x 1.44"H

P30WHW12V
30 watt hard-wire driver with an 8' lead on both ends, waterproof (IP66).
9.1"L x 1.43"W x 1.06"H

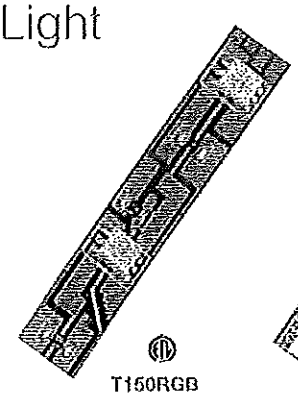
P60WHW12V
60 watt hard-wire driver with an 8' lead on both ends, waterproof (IP66).
9.44"L x 2.67"W x 1.23"H

P96WHW12V
96 watt hard-wire driver with an 8' lead on both ends, waterproof (IP66).
8.07"L x 4.06"W x 2.2"H

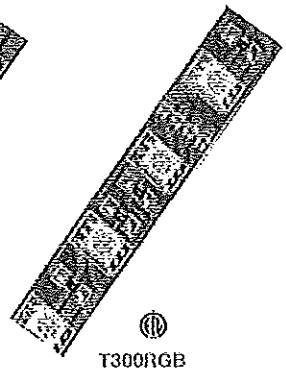
LED

COLOR CHANGING
STANDARD, HIGH, LUMINOSITY

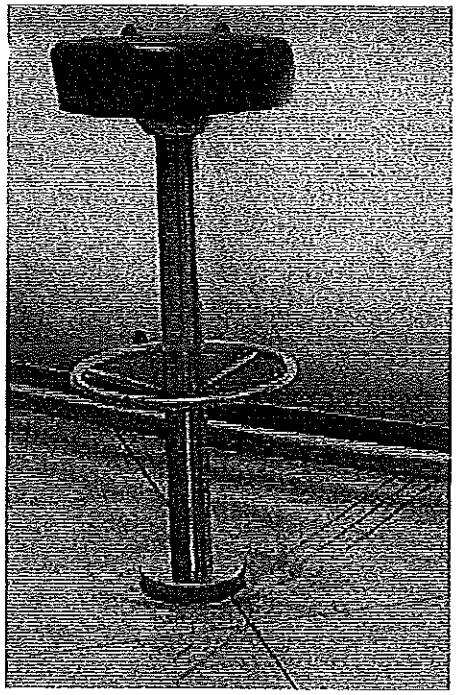
Tape Light



T150RGB



T300RGB



MODELS	STANDARD LUMINOSITY	HIGH LUMINOSITY
red, green, blue	T150RGB	T300RGB
LEDS PER REEL	150	300
LENGTH	16.4' per reel • custom available	16.4' per reel • custom available
LUMEN OUTPUT	750 per reel	1500 per reel
	46 per foot	91 per foot
WATTAGE	36W per reel	72W per reel
	2.2W per foot	4.4W per foot
CURRENT	3 amps	6 amps
MAX RUN/driver	32.8 feet/10M	22.9 feet/6.7M
VOLTAGE	12V DC	12V DC
CUTTABLE	every 3 leds or 4"	every 3 leds or 2"
WIDTH • HEIGHT	0.39 W • 0.094"H	0.39 W • 0.094"H
	16.4' • custom available	16.4' • custom available
VIEWING ANGLE	120°	120°
CONNECTORS	available for all configurations	
POWER SUPPLIES	6 to 96 watt	
RGB SIGNAL	maximum 262 feet/80M from handheld remote or RF switch	
REQUIRED	- a controller is required - an RGB-AMP/DRIVER is required every additional 16.4' or 72 watts	
FEATURES	• programmable remote color options• flexible for versatile designs • even illumination • slim profile • dimmable • available in custom lengths with plug-n-play connectors • easy mounting with double sided tape • mounts to wood, steel or metal & most hard smooth surfaces • waterproof versions available • low energy costs • 50,000 hours • maintenance free–no bulbs to burnout • ROHS compliant • DMX512 compatible with DMX adaptor consult factory	

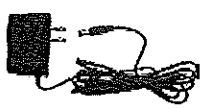
TWENT

C

SET

LED DRIVERS / PLUG-IN POWER SUPPLIES

See page 16 for commercial grade power supplies

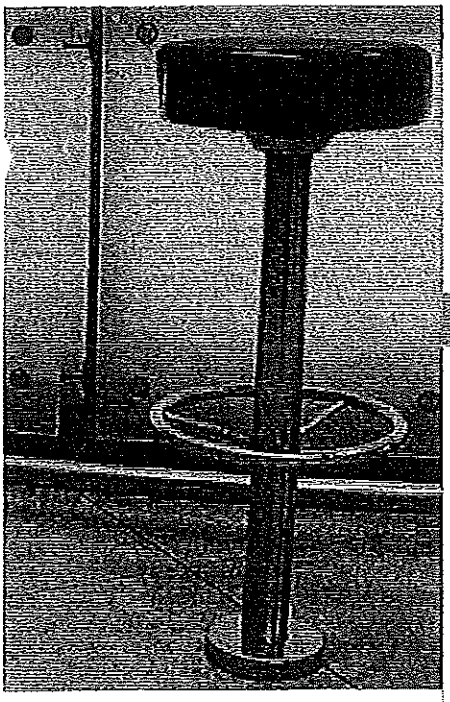


6W-12VPLUG
6 watt direct plug-in driver with a cord length of 10'.

24W-12VPLUG
24 watt direct plug-in driver with a cord length of 10'.

P36W12V
36 watt plug-in driver with a combined cord length of 16'. 4.25"L x 2.125"W x 1.25"H

P72W12V
72 watt plug-in driver with a combined cord length of 5'3". 5.125"L x 2.25"W x 1.25"H



VIBRANT

Y-FIVE
COLOR
TINGS

CONNECTORS

all connectors available with custom wire lead lengths

TRGBCONNECT-_
A single RGB tape connector with 3", 6", 12", 24" or 36" wire lead, connects tape to controller or amplifier specify length.

TRGBCORNER-_
Single RGB tape connector to single connector with 3", 6", 12", 24" or 36" wire lead, specify length.

TRGBSPLICE
RGB tape to tape connector (no wire lead).

CONTROLLERS

controllers required

RESIDENTIAL CONTROLLERS

RGBIR
Remote controller, infrared control. 16 RGB programmable color settings, 72W max output, a driver is required.

CONTROLLERS

controllers required

COMMERCIAL CONTROLLERS

RGB-CGC-HH
RGB commercial grade manual controller with wireless (RF) hand-held. A driver is required.
4.75"L x 3"W x 1"H

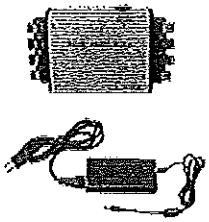
RGB-CGC-WM
RGB commercial grade manual controller with wireless (RF) Decora switch. Surface mount hardware is included for switch. A driver is required.
4.75"L x 3"W x 1"H

RGB-CGC-HW
RGB commercial grade manual controller and hard wired Decora switch. Surface mount hardware is included for switch. A driver is required.
4.75"L x 3"W x 1"H

DIMMERS

dimming options are built into RGB controllers

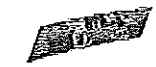
AMPLIFIERS



RGB-AMP/DRIVER
Amplifier requires every additional 16.4' or 72 watts. RGB Amp is powered by 12V DC, max output 144W. A 72 watt plug-in driver is included.
4.2"L x 2.5"W x 1"H

WATERPROOF OPTIONS

SILICONE COVER (SC)
tape light completely sealed in clear silicone cover.
0.44"W x 0.19"H



RESIN DIPPED (RD)
Compact resin coating conforming closely to size of tape light
0.31"W x 0.06"H

SOLID SILICONE (SS)
totally waterproof, UV resistant and suitable for outdoor application.
0.55"W x 0.27"H

LED DRIVERS (HARD-WIRE POWER SUPPLIES)

P96W12V
96 watt plug-in driver with a combined cord length of 8'8", 6'L x 2.25"W x 1.44"H

P30WHW12V
30 watt hard-wire driver with an 8' lead on both ends, waterproof (IP65).
9.1"L x 1.48"W x 1.06"H

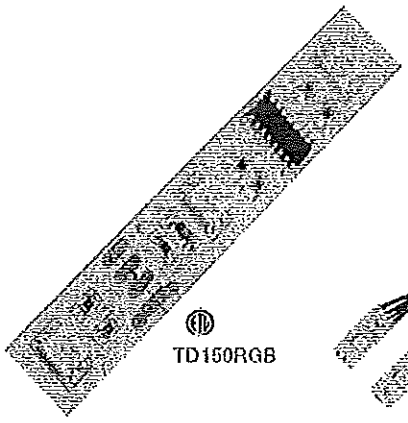
P60WHW12V
60 watt hard-wire driver with an 8' lead on both ends, waterproof (IP65).
9.44"L x 2.67"W x 1.73"H

P96WHW12V
96 watt hard-wire driver with an 8' lead on both ends, waterproof (IP65).
8.07"L x 4.58"W x 2.2"H

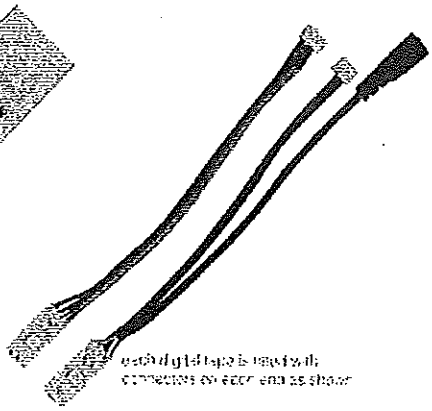
LED Tape Light

DIGITAL RGB

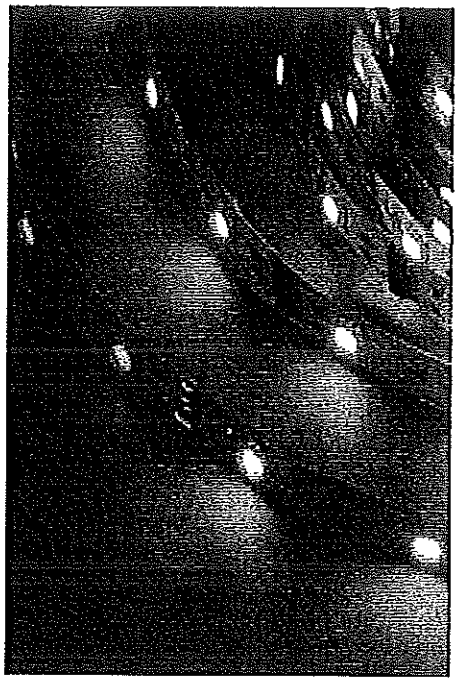
Colors flow, come and go, move forward and backward, roll, strobe, static, etc.



TD150RGB



each digital tape is supplied with connectors on each end as shown



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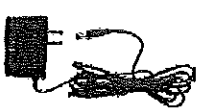
MODELS	**DIGITAL RGB**
red, green, blue	TD150RGB
LEDS PER REEL	150
LENGTH	16.4' per reel • custom available
LUMEN OUTPUT	750 per reel
	46 per foot
WATTAGE	36W per reel
	2.2W per foot
CURRENT	3 amps
MAX RUN/driver	32.8 feet/10M
VOLTAGE	12V DC
CUTTABLE	every 3 feet or 4"
WIDTH • HEIGHT	0.39"W • 0.094"H
VIEWING ANGLE	120°
CONNECTORS	available for all configurations
POWER SUPPLIES	6 to 96 watt
RGB SIGNAL	maximum 262 feet/80M from handheld remote
DIGITAL REQUIRES	- RGB-DIG-RF/P3612V controller - a new driver is required every 16.4'/5M - an additional controller is required every 131 feet/40M
FEATURES	• flexible for versatile designs • even illumination • slim profile • dimmable • available in custom lengths with plug-n-play connectors • easy mounting with double sided tape • mounts to wood, steel or metal & most hard smooth surfaces • waterproof versions available • low energy costs • maintenance free–no bulbs to burnout • 50,000 hours • ROHS compliant • DMX612 compatible with DMX adaptor, consult factory

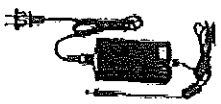
LED DRIVERS PLUG-IN POWER SUPPLIES

See page 16 for commercial grade power supplies



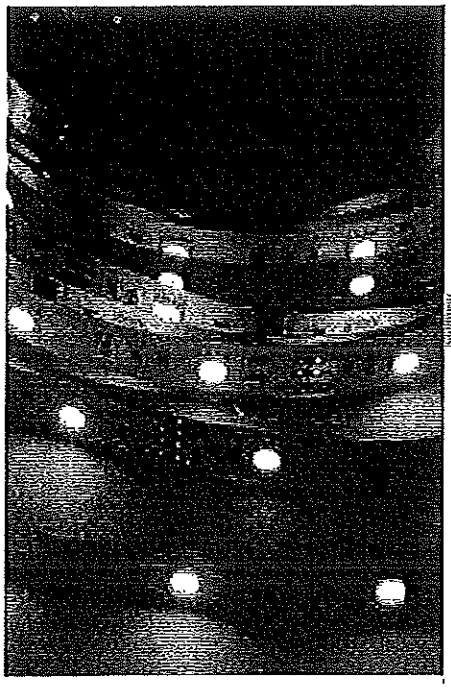
6W-12VPLUG
6 watt direct plug-in driver with a cord length of 10'.

24W-12VPLUG
24 watt direct plug-in driver with a cord length of 10'.



P36W12V
36 watt plug-in driver with a combined cord length of 16'.
4.25"L x 2.125"W x 1.25"H

P72W12V
72 watt plug-in driver with a combined cord length of 6'9.
5.125"L x 2.25"W x 1.25"H



DYNAMIC

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CONNECTORS

all connectors available with custom wire lead lengths

TRGBSPLICE
RGB tape to tape connector (no wire lead).

CONTROLLERS

controllers required

RGB-DIG-RF/P36W12V
RGB digital controller with wireless (RF) remote and 36 watt driver. Produces 100s of patterns of color synchronization, sequencing, advancing, rolling, flashing etc. Maximum per controller is 131 feet/40M. An additional driver is required every 16.4'/5M. Each reel of tape is fitted with connectors needed to continue the run. Note with mounting bracket controller lengths 5" (lateral punching)
4"L x 2.5"W x 1"H

RGB-DIG-RF

4.25"L x 2.125"W x 1.25"H
P36W12V

DIMMERS

dimming options are built into RGB controllers

WATERPROOF OPTIONS

SILICONE COVER (SC)
Tape light completely sealed in clear silicone cover.
0.44"W x 0.19"H

RESIN DIPPED (RD)
Compact resin coating conforming closely to size of tape light
0.31"W x 0.05"H

LED DRIVERS - HARD WIRE POWER SUPPLIES

P96W12V
96 watt plug-in driver with 4 combined cord lengths of 3'6", 6'L x 2.25"W x 1.13"H

P30WHW12V
30 watt hard-wire driver with an 8" lead on both ends, waterproof (IP66).
9.1"L x 1.43"W x 1.06"H

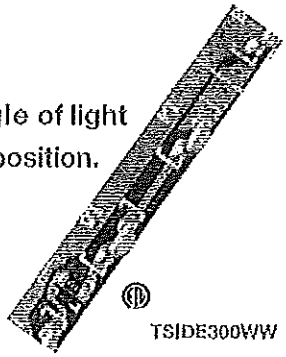
P60WHW12V
60 watt hard-wire driver with an 8" lead on both ends, waterproof (IP66).
9.4"L x 2.67"W x 1.73"H

P96WHW12V
96 watt hard-wire driver with an 8" lead on both ends, waterproof (IP66).
8.07"L x 4.96"W x 2.2"H

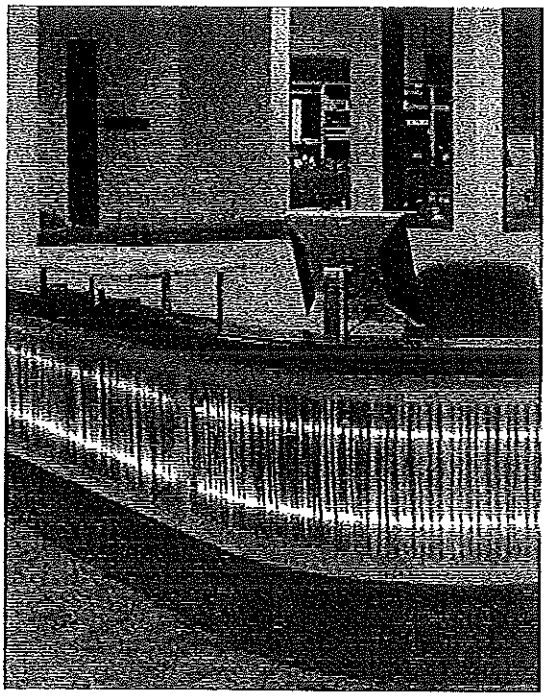
LED Tape Light

SIDE EMITTING STANDARD, HIGH LUMINOSITY

Control the viewing angle of light for upward or downward position. Perfect for glass display cases, coves and curved counter-tops.



TSIDE300WW



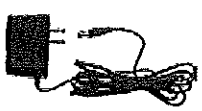
Hershey Hunter Lightin

FOL

MODELS	STANDARD LUMINOSITY	HIGH LUMINOSITY
warm white ± 3000K	TSIDE300WW	TSIDE600WW
cool white ± 5500K	TSIDE300CW	TSIDE600CW
red	TSIDE300R	TSIDE600R
green	TSIDE300G	TSIDE600G
blue	TSIDE300B	TSIDE600B
amber	TSIDE300A	TSIDE600A
LEDS PER REEL	300	600
LENGTH	16.4' per reel • custom available	16.4' per reel • custom available
LUMEN OUTPUT	1050 per reel (WW)	2250
	64 per foot	137 per foot
WATTAGE	22W per reel	34W per reel
	1.34W per foot	2W per foot
CURRENT	1.83 amps	2.6 amps
MAX RUN/driver	49 feet/15M	32.8 feet/10M
VOLTAGE	12V DC	12V DC
CUTTABLE	every 3 leds or 2"	every 3 leds or 1"
WIDTH • HEIGHT	0.19"W • 0.05"H	0.19"W • 0.05"H
VIEWING ANGLE	60°	60°
CONNECTORS	available for all configurations	
POWER SUPPLIES	6 to 96 watt	
NOTE	lumen specifications are for warm white only	
FEATURES	• flexible for versatile designs • even illumination • slim profile • dimmable • available in custom lengths with plug-n-play connectors • easy mounting with double sided tape • mounts to wood, steel or metal & most hard smooth surfaces • waterproof versions available • low energy costs • 50,000 hours • maintenance free–no bulbs to burnout • ROHS compliant	

LED DRIVERS PLUG-IN POWER SUPPLIES

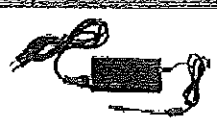
See page 16 for commercial grade power supplies



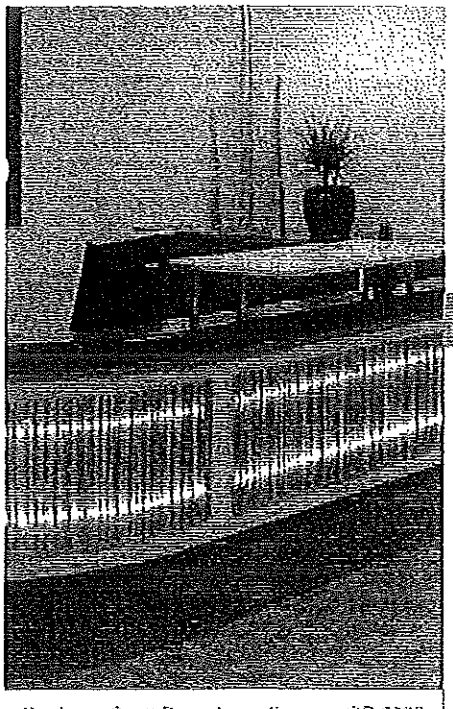
6W-12VPLUG
6 watt direct plug-in driver with a cord length of 10'.

24W-12VPLUG
24 watt direct plug-in driver with a cord length of 10'.

P36W12V
36 watt plug-in driver with a combined cord length of 10'.
4.25"L x 2.125"W x 1.2"H



P72W12V
72 watt plug-in driver with a combined cord length of 5'3
5.125"L x 2.25"W x 1.25"H



y Designer Scott Rosenberg, Eugene, OR 2009

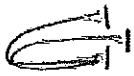
SEAMLESS

.LOWS THE CURVE

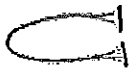
CONNECTORS

all connectors available with custom wire lead lengths

TCONNECT-_
Single tape connector with 3", 6", 12", 24", 36" or 60" wire lead, specify length.



TYCONNECT-_
Single tape connector "Y" to two tape connectors with 3", 6", 12", 24" or 36" wire lead, specify length.



TCORNER-_
Single tape connector to single connector with 3", 6", 12", 24", 36" or 60" wire lead, specify length.

TPWRCONNECT-_
Tape connector to power supply connector with 3", 6", 12", 24", 36" or 60" wire lead, specify length.

TYPWRCONNECT-_
Single power connector to two way split tape connectors with 3", 6", 12", 24" or 36" wire lead, specify length.

TSPLICE
Single color tape to tape connector (no wire lead).

DIMMERS

TDIMMER-12V
Inline 12V dimmer, 96W max, a driver is required.
4.5"L x 2.25"W x 1.5"H

TDIMMER-12V-WM-RF
Inline 12V dimmer with wireless (RF) Decora switch for installation in standard switch box, 36W max, a driver is required.
4.5"L x 2.25"W x 1.5"H

TDIMMER-12V-WM-HW
Inline 12V dimmer with hard wire Decora switch for installation in standard switch box, 96W max, a driver is required.
4.5"L x 2.25"W x 1.5"H

DIMMABLE DRIVER

TDIMDRIVER60W
A dimmable 60W LED driver (power supply) for use with magnetic low voltage wall dimmer, hard wire, multitap input 120-277V and 12V or 24V output. Note: Lutron Maestro series is not compatible, Length is 6.93" with mounting bracket.
3"W x 4.3"L x 3.75"D

WATERPROOF OPTIONS

SILICONE COVER (SC)
Tape light completely sealed in clear silicone cover.
0.44"W x 0.19"H

LED DRIVERS / HARD-WIRE POWER SUPPLIES

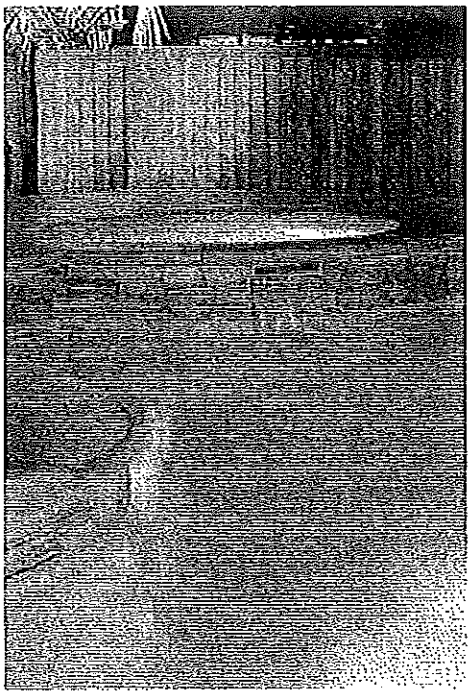
P96W12V
96 watt plug-in driver with a hardwired cord length of 6'6".
6"L x 2.25"W x 1.44"H

P30WHW12V
30 watt hardwire driver with an 8' lead on both ends, waterproof (IP67).
9.1"L x 1.43"W x 1.06"H

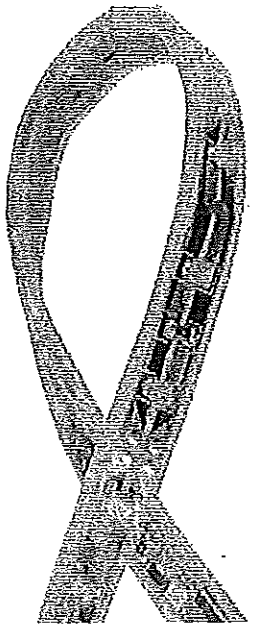
P60WHW12V
60 watt hardwire driver with an 8' lead on both ends, waterproof (IP67).
9.44"L x 2.67"W x 1.73"H

P96WHW12V
96 watt hardwire driver with an 8' lead on both ends, waterproof (IP67).
8.07"L x 4.56"W x 2.2"H

LED WATERPROOF
Tape Light

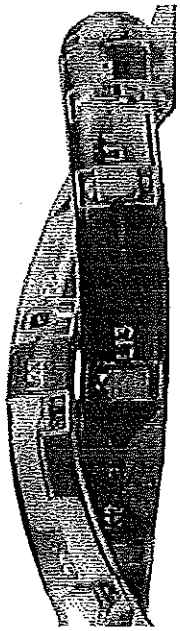


Upgrade any of our Standard, High luminosity and Color Changing RGB tapes to one of our waterproof options. Waterproof is the most rugged and versatile of our line, easy to maintain, vibration resistant and still flexible–the possibilities are endless. Perfect for interior or exterior applications.



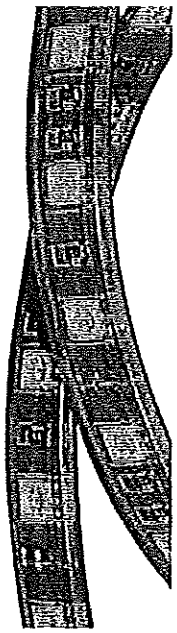
SILICONE COVER (SC)

Tape lights completely sealed in clear silicone cover, very flexible and easy to customize in the field.



RESIN DIPPED (RD)

Compact resin coating conforming closely to size of tape light providing protection from exterior elements. Flexible, excellent for tight spaces.



SOLID SILICONE (SS)

Totally waterproof, UV resistant and suitable for outdoor application, flexible, durable offering heavy duty silicone protection.

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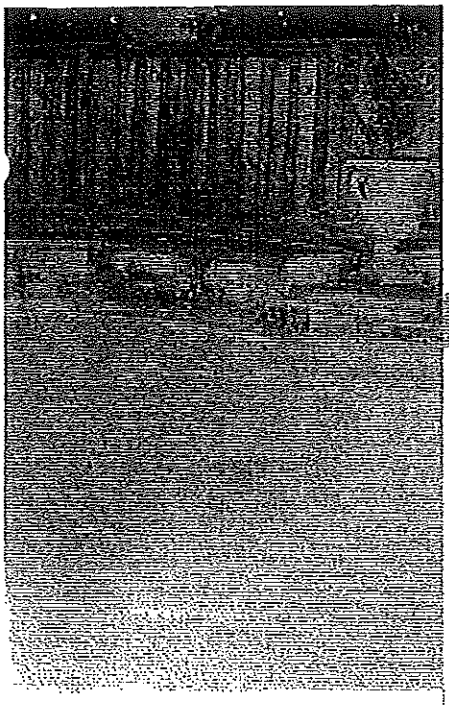

VERSATILE

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CONNECTORS

all connectors available with custom wire lead lengths

WPCONNECT
Waterproof connectors on both ends consult factory.

TCONNECT-_
Single tape connector with 3", 6", 12", 24", 36" or 60" wire lead, specify length.

TSPLICE
Single color tape to tape connector (no wire lead). For use with Silicone Cover (SC).

CONTROLLERS

RGBRF-WP
Remote and controller, radio frequency (RF) control, 21 RGB programmed color settings, 144W max output, waterproof (IP65).

LED DRIVERS W/ HARD-WIRE POWER SUPPLIES

P30WHW12V
30 watt hard-wire driver with an 8' lead on both ends, waterproof (IP66).
9.11"L x 1.43"W x 1.06"H

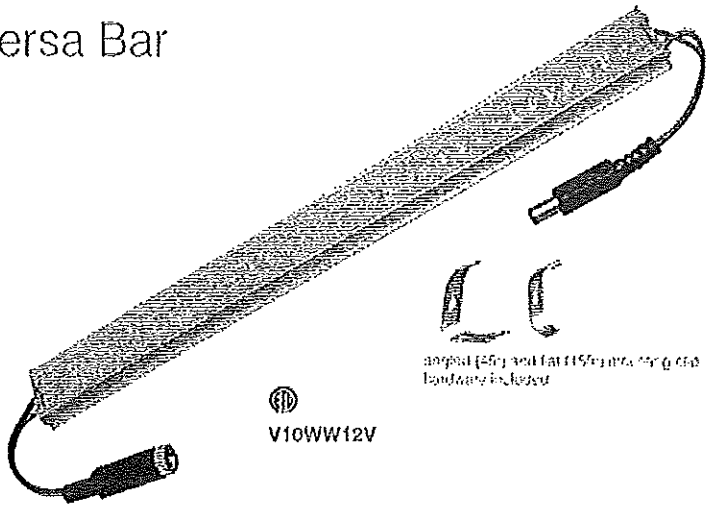
P60WHW12V
60 watt hard-wire driver with an 8' lead on both ends, waterproof (IP66).
9.44"L x 2.67"W x 1.73"H

P96WHW12V
96 watt hard-wire driver with an 8' lead on both ends, waterproof (IP66).
8.07"L x 4.06"W x 2.2"H

See page 16 for commercial grade drivers and page 17 for waterproof enclosures.

LED STANDARD, HIGH* LUMINOSITY

Versa Bar



V10WW12V

MODELS	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
warm white, ± 3000K	O V10WW12V	O V20WW12V	O V30WW12V	O V40WW12V	O V70WW12V
neutral white, ± 3900K	O V10NW12V	O V20NW12V	O V30NW12V	O V40NW12V	O V70NW12V
cool white, ± 6250K	O V10CW12V	O V20CW12V	O V30CW12V	O V40CW12V	O V70CW12V
LENGTH	9.8"	19.6"	29.4"	39.2"	68.6"
LUMEN OUTPUT	144 (WW)	288 (WW)	432 (WW)	576 (WW)	1008 (WW)
WATTAGE	3.5W	7W	10.5W	14W	28W
CURRENT	0.29 amps	0.59 amps	0.84 amps	1.17 amps	2.08 amps
MAX RUN/driver	12 feet/3.7M	12 feet/3.7M	12 feet/3.7M	12 feet/3.7M	12 feet/3.7M
VOLTAGE	12V DC	12V DC	12V DC	12V DC	12V DC
WIDTH • HEIGHT	0.94"W x 0.39"H	00.94"W x 0.39"H	0.94"W x 0.39"H	0.94"W x 0.39"H	0.94"W x 0.39"H
VIEWING ANGLE	90°	90°	90°	90°	90°
CONNECTORS	available for all configurations				
POWER SUPPLIES	6 to 96 watt				
OEM	customizing available				
OPTIONS	* high luminosity available, consult factory • wet location with waterproof connectors, consult factory • 24 Volt available consult factory				
NOTE	lumen specifications are for warm white only				
FEATURES	• aluminum alloy housing • even illumination • slim design • easy mounting clip & screw installation includes angled (45°) and flat (180°) clips • mounts to wood, steel or metal & most hard smooth surfaces • damp location • solid-state, high shock and vibration resistant • major reduction in power costs • no UV or IR radiation • ROHS compliant				

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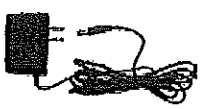
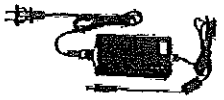
LED DRIVERS PLUG-IN POWER SUPPLIES

See page 16 for commercial grade power supplies



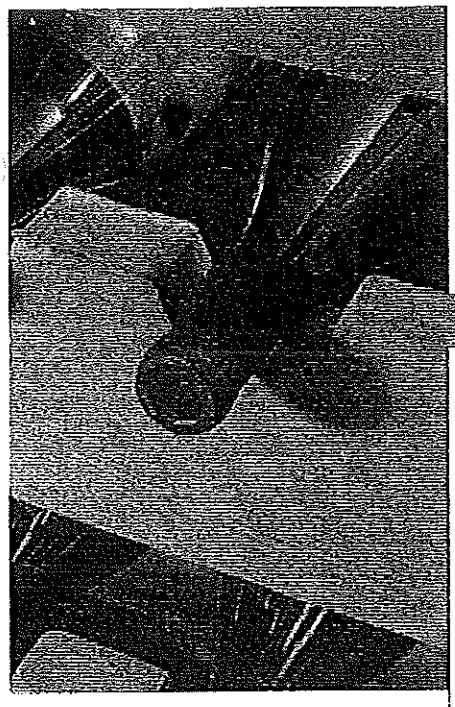
6W-12VPLUG
6 watt direct plug-in driver with a cord length of 10'.

24W-12VPLUG
24 watt direct plug-in driver with a cord length of 10'.



P36W12V
36 watt plug-in driver with a combined cord length of 16'.
4.25"L x 2.125"W x 1.25"H

P72W12V
72 watt plug-in driver with a combined cord length of 9'3".
5.125"L x 2.25"W x 1.25"H



RUGGED

SOLID STATE HTING

CONNECTORS

all connectors available with custom wire lead lengths

VCONNECT-_
Versa to Versa or Versa to power, available lengths 3', 6', 12', 18', 24', 36', or 60', specify length.

Consult factory for waterproof connectors.

DIMMERS

TDIMMER-12V
Inline 12V dimmer, 96W max. a driver is required.
4.5'L x 2.25'W x 1.5'H

TDIMMER-12V-WM-RF
Inline 12V dimmer with wireless (RF) Decora switch for installation in standard switch box. 96W max a driver is required.
4.5'L x 2.25'W x 1.5'H

TDIMMER-12V-WM-HW
Inline 12V dimmer with hard wire Decora switch for installation in standard switch box. 96W max a driver is required.
4.5'L x 2.25'W x 1.5'H

DIMMABLE DRIVER

TDIMDRIVER60W
A dimmable 60W LED driver (power supply) for use with magnetic low voltage wall dimmer, hard wire, multitap input 120-277V and 12V or 24V output. Note: Lutron Maestro series is not compatible. Length is 6.93" with mounting bracket.
3'W x 4.91'L x 3.75'D

OPTIONS

All Versa Bars are available with a connector on one end and dead end (no connector) on the other end, please consult factory for options and pricing.

All Versa Bars are available with waterproof connectors, please consult factory for options and pricing.

24 Volt systems are available please consult factory for options and pricing.

LED DRIVERS - HARD WIRE POWER SUPPLIES

P96W12V
96 watt plug-in driver with a hardwired cord length of 5.6'.
6'L x 2.25'W x 1.44'H

P30WHW12V
30 watt hard-wire driver with an 8' lead on both ends, waterproof (IP66).
9.1'L x 1.43'W x 1.06'H

P60WHW12V
60 watt hard-wire driver with an 8' lead on both ends, waterproof (IP66).
9.44'L x 2.67'W x 1.75'H

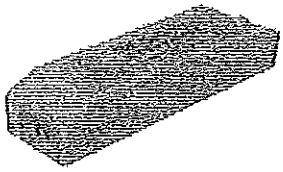
P96WHW12V
96 watt hard-wire driver with an 8' lead on both ends, waterproof (IP66).
8.07'L x 4.08'W x 2.2'H

See page 16 for commercial grade drivers and page 17 for waterproof enclosures.

COMMERCIAL

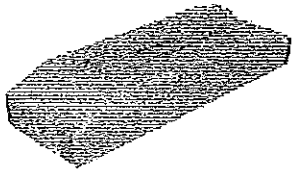
DRIVERS

Single Output Class 2 with PFC
LED Series 30-96W



P30W-12VCG
P30W-24VCG

P45W-12VCG / P60W-12VCG
P45W-24VCG / P60W-24VCG



P96W-12VCG
P96W-24VCG

MODELS	P30W-12VCG	P45W-12VCG	P60W-12VCG	P96W-12VCG
MEASUREMENTS	6.3"L x 1.8"W x 1.2"H	7.2"L x 2.5"W x 1.4"H	7.2"L x 2.5"W x 1.4"H	7.9"L x 2.9"W x 1.4"H
OUTPUT	12V, 0-2.5A	12V, 0-3.8A	12V, 0-5.0A	12V, 0-8.00A
VOLTAGE TOLERANCE	±10%	±10%	±10%	±3%
RIPPLE & NOISE	2.0V	2.0V	2.0V	150mV
EFFICIENCY	83%	86.0%	85.0%	86%
OPTIONS	• all models available with 24 Volt, consult factory • wet location with use of Nema Enclosure, see page 17 • IP64 rated model of drivers available, consult factory			
FEATURES	• Universal AC input/full range 90-264VAC • Fully isolated plastic case with screw terminal style of I/O • Built-in constant current limiting circuit • Adjustable output voltage and current level • Built-in active PFC function, PF>0.9 for 75% of load or higher • Cooling by free air convection • UL1310 Class 2 power unit • Pass LPS • Protections: Short circuit, Overload, Over Voltage, Over temperature • 100% full load burn-in test • Suitable for LED lighting and moving sign applications			
SAFETY	UL1310 Class 2, CAN/CSA-C22.2 No.223-M91, EN61347-1, EN61347-2-13 approved; UL60950-1, TUV EN60950-1, UL879 (listed in Sign Components Manual - SAM)			

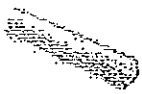
ACCESSORIES

TILDIMMER
Inline dimmer for single color LED Tape only, on and off with full range of dimming. 24 watt maximum.

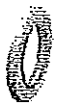
TILSWITCH
Inline 12 volt on and off switch for retrofit applications between power supply and any of our Led Tape Lights or Versa Bars.

TALCHANNEL
Aluminum channel for mounting LED Tape Lights.
6'L x 0.5'W x 0.31'H

TRGBCHANNEL
Aluminum channel for use with RGB Tape Light and Silicone Sleeve (SS) Waterproof Tape. max channel length 6'.
6'L x .55W x .31H



TPCHANNEL
Plastic channel for mounting LED Tape Light silicone mounting clips with #6 wood screws included.
39'L x 0.56'W x 0.5'H



3MTAPE
Double coated thin film tape. with easy release flat back white paper liner, high peel strength.
108'L x 0.5'W

3MFTAPE
High density double coated urethane black foam 3M tape.
108'L x 0.5'W

GLUE
The go-to product for bonding dissimilar surfaces both indoors and out 100% waterproof.
4 oz.

WP-KIT
Waterproof relocating kit contains one tube silicone, 4 splice covers and 4 end caps.

WP-CLIPS
Silicone mounting clips with #6 screws. Bag of 20.

VELCRO
Pressure sensitive hook and loop Velcro.
15'L x 0.75'W

WCONNECT
UL approved push connector. 2-wire ports

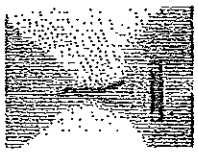
NEMA ENCLOSURE
UL waterproof NEMA enclosure with liquid tight connects. AC connection uses SHAL light cable. DC connection uses 14/3 SJO cable.
11'L x 4'W x 4'H

LED INSTRUCTIONAL GUIDE

Tape Light

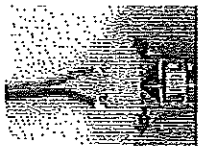
TAPE LIGHT

POWERFEED - How to connect tape to power supply.



STEP 1
Carefully pull and extend the black clip on the connector (open position).

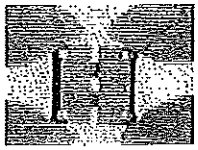
STEP 2
Push the tape light into the space between the clip and connector.



STEP 3
Push the black clip back into the connector (closed position).

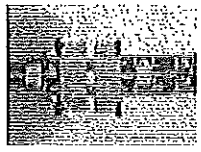
STEP 4
Finished view. End not shown is connected to power supply.

SPLICE - join two runs of tape together.

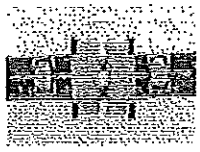


STEP 1
Carefully pull out the black clip on each side.

STEP 2
Put the tape light in the space between the clip and connector at one side. Then push the black clip back into the connector (closed position).



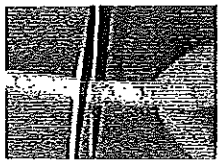
STEP 3
Put the tape light in the space between the clip and connector at the other side and push the black clip back into the connector (closed position).



STEP 4
Finished view.

WATERPROOF - This guide is for tape with the Silicone Cover (SC) option and demonstrates the ease of adding additional tape for field modifications.

DEAD-END SIDE OF TAPE

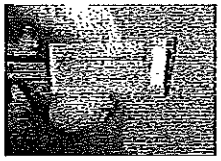


STEP 1
Tape may be cut every 3 leds. It must be cut exactly down the middle of the brass pads marked as follows.

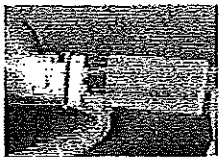
Indication on tape for cutting point.

STEP 2
To seal cut end, put on the end cap and inject silicon gel.

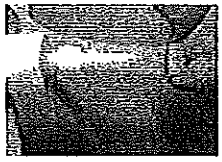
CONNECTOR END - to seal the power supply or splice a connection of tape.



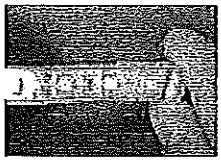
STEP 1
Pull the connector wires through the end cap's holes. use the connector to clip onto the tape light. Be sure the plastic clip locks the strip firmly.



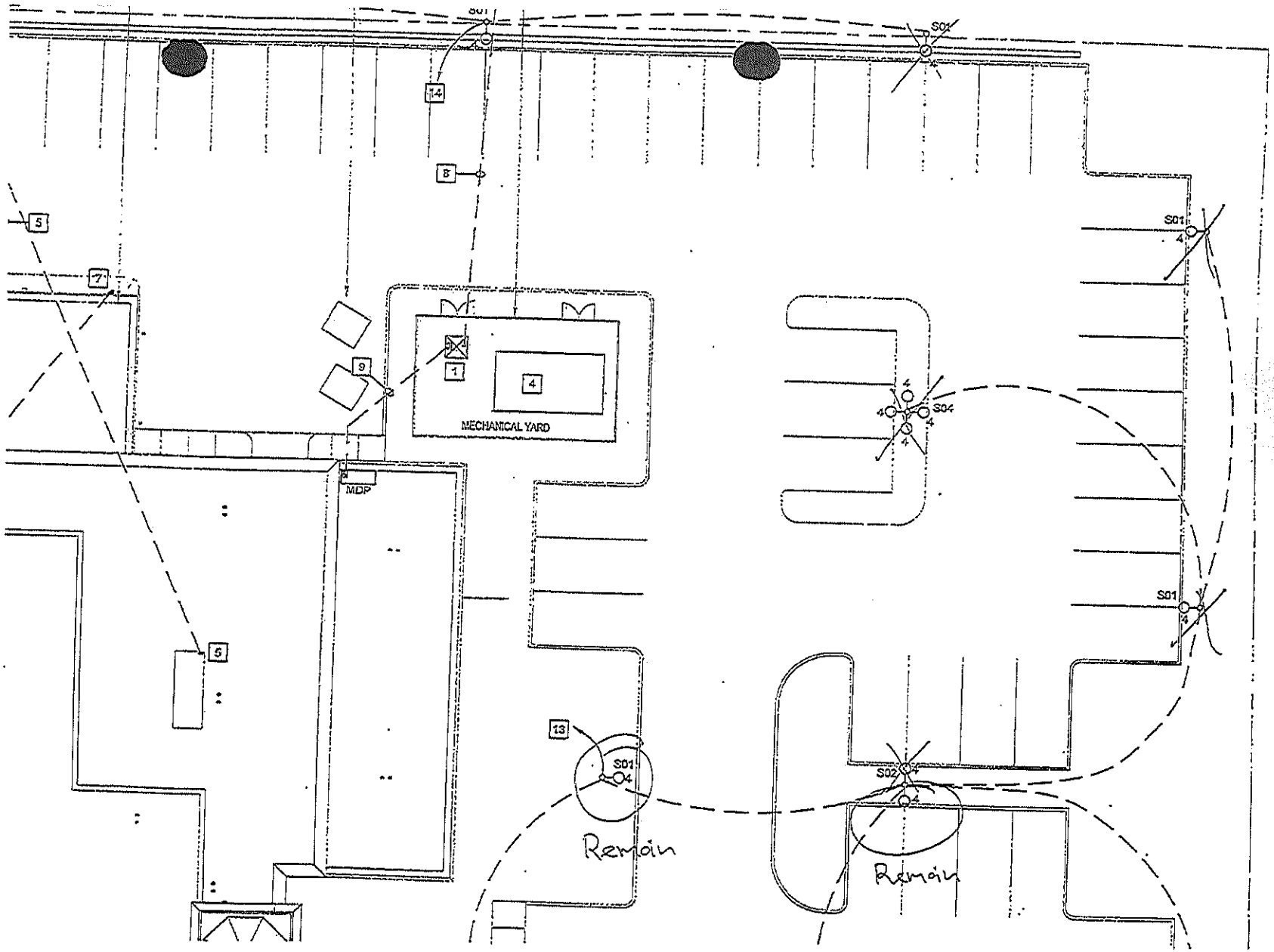
STEP 2



STEP 3
Push the whole strip into the end cap and inject the silicon gel for a tight waterproof seal.



STEP 4
Finished view



VE item #53

VE (60) B-04

DESCRIPTION

Recessed lens wall wash luminaire with 6 inch square aperture utilizing one horizontal 26W DTT or 26/32/42WTTT compact fluorescent lamp. Platform is suitable for commercial construction. Insulation must be kept 3" from top and sides of housing. Platform + optical element combination produces smooth vertical illumination with a minimal downlight component.

IRIS®

Catalog #		Type
Project		
Comments		Date
Prepared by		

SPECIFICATION FEATURES

Mechanical Frame
Pre-galvanized steel plaster frame with integral bar hanger receivers. Setscrews provide positive horizontal locking.

Collar
Matte black steel collar adjusts vertically for ½" - 2" thick ceilings and can be rotated ± 7.5° thru the aperture. Integral gun sights facilitate the use of guide strings or laser lines. Shipped with a paint overspray protector.

Housing
Steel housing painted matte black for a visually dark interior. Removable hinged top allow for top re-lamp. All fasteners are captive.

Gasket
Closed cell gaskets achieve restrictive airflow requirements without additional caulking.

Universal Mounting Bracket
Accepts ½" EMT, C channel and bar hangers and adjusts 3" vertically from above the ceiling.

Optical Primary Reflector
Miro® upper reflector provides uniform lens brightness. Lamp orientation can be changed thru the aperture to 0°, 90°, 180° and 270°. Reflector assembly is removable from above to facilitate top re-lamp. Accepts (1) 26W DTT or 26/32/42WTTT compact fluorescent lamp.

Lower Shielding Reflector
Specular aluminum kicker reflector, angle cut parabolic shielding prismatoid and neutral color glass linear spread lens provides smooth vertical illumination with a minimal downlight component. Available in die cast metal trim ring, self-flanged or rimless versions.

Optical Element Retention
Springs pull flange tight to ceiling. Gasket eliminates spill light at edge of flange. Integral safety chain prevents assembly from falling during service.

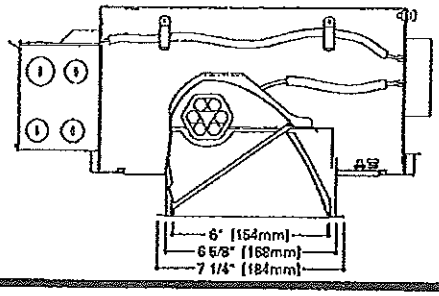
Electrical Junction Box
(8) ½" and (2) ¾" trade size pry outs positioned to allow straight conduit runs. Listed for (8) #12 AWG 90°C conductors and feed thru branch wiring. Line and low voltage field wiring are separated to meet local codes.

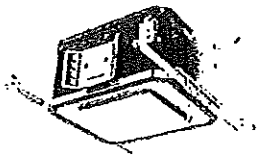
Lamp Socket
4-pin GX24 q-3+q-4 base with rotary lock socket ensures positive lamp retention. In-line connector allows rapid socket replacement.

Ballast
Thermally protected universal input 120 - 277V or 347V electronic ballast provides program start for full light output and rated lamp life.

Emergency Option
Provides 90 minutes of standby lighting meeting most life safety codes for egress lighting. Integral charge indicator and test switch. Available with optional wireless test switch.

Code Compliance
Thermally protected, cULus listed for wet locations and ASTM-E283 airtight. Peel down wattage labels for 26W and 32W for restricted LPD requirements. Optional City of Chicago environmental air (CCEA) marking for plenum applications. EMI/RFI emissions per FCC 47CFR Part 18 non consumer limits.

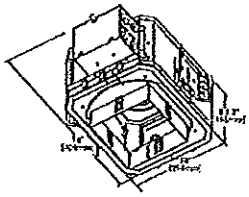




PN6L1H42
E6LWW

(1) 26W DTT
26/32/42WTTT
Compact Fluorescent

6 Inch Square Aperture
Lens Wallwash



ORDERING INFORMATION EXAMPLE: PN6L1H42E + E6LWWHSF = 6" square, non IC, air tight housing platform, UNV 120/277V electronic ballast for (1) 26W DTT or 26/32/42WTTT lamp, self flanged lens wall wash optical element with semi-specular haze finish.

Platform	Lamp Type/Wattage	Ballast	Options	Element	Texture	Finish	Flange Style	Accessories
	1H42			E6LWW				

Platform
- PN6L = 6" square aperture, non-IC, AT, for lens wall wash
- PN6LCP = 6" square aperture, non-IC, AT, for lens wall wash, CCEA listed for City of Chicago plenum requirements

Lamp Type/Wattage
- 1H42 = (1) 26W DTT or 26/32/42WTTT GX24 q-3+q-4 CFL lamp

Ballast
- E = UNV 120 – 277V electronic, 50/60Hz
- 3E = 347V electronic, 50/60Hz
- ED26/32ES = 120 – 277V 26/32W electronic 5% 3-wire & DALI
- ED42ES = 120 – 277V 42W electronic 5% 3-wire & DALI
- 1D26RL = 120V 26W electronic 1% 3-wire dimming
- 1D32RL = 120V 32W electronic 1% 3-wire dimming
- 2D26RL = 277V 26W electronic 1% 3-wire dimming
- 2D32RL = 277V 32W electronic 1% 3-wire dimming

Options
- IEM = Emergency battery pack with integral test switch
- WRT = Wireless remote test switch

Element
- E6LWW = 6" lens wall wash

Texture
- [Blank] = Smooth

Finish
- Alzak Finishes[a]
  - LI = Low Iridescent specular clear
  - H = Haze
  - G = Gold
  - WMH = Warm Haze
  - WH = Wheat
  - WHH = Wheat Haze
  - K = Cognac
  - KH = Cognac Haze
  - CC = Chocolate
  - CCH = Chocolate Haze
  - GP = Graphite
  - GPH = Graphite Haze
  - B = Black
  - BH = Black Haze
- Painted Finishes
  - MB = Matte black
  - MW = Matte white
  - W = Gloss white

Flange Style
- [Blank] = Metal trim ring, matte white
- SF = Self-flanged
- SFWF = Self-flanged, matte white painted flange
- RL = Rimless, use with rimless adapter

Accessories
- MB22 = 24" long No-Flex™ mounting bars with integral nail and tee grid clip
- RA6X6 = Rimless adapter for 6" elements
- MTR6MW = 6" metal trim ring, matte white
- MTR6MB = 6" metal trim ring, matte black
- MTR6SN = 6" metal trim ring, satin nickel
- MTR6TBZ = 6" metal trim ring, Tuscan bronze
- WHRCT1 = Wireless remote control for WRT option, order 1 or more for each facility

COOPER Lighting
www.cooperlighting.com

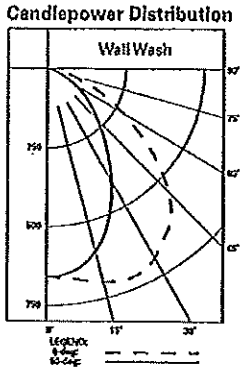
Specifications and dimensions subject to change without notice.
Consult your representative for additional options and finishes.

Photometric Results

Efficiency = 49.9%

Test No. P12960
Platform = PN6
Element = E6LWW
Lumens = 2400
Lamp = GX24Q-3/32WTTT

Candlepower Distribution



Candelas

Vertical Angle	cd
90	0
85	1
75	16
65	68
55	143
45	227
35	341
25	481
15	599
5	654
0	657

Zonal Lumens Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	463	19.3	38.7
0-40	709	29.6	59.2
0-60	1078	44.9	90.0
0-90	1197	49.9	100.0
90-180	0	0.0	0.0
0-180	1197	49.9	100.0

Single Unit Footcandles

	3' from wall (distance from fixture along wall)			
DD	■	1'	2'	3'
1	10.6	8.1	3.9	1.7
2	21.9	17.6	9.5	4.3
3	21.6	18.5	11.7	6
4	15.4	13.8	9.9	6
5	10.4	9.6	7.6	5
6	7.1	6.7	5.5	4
7	4.9	4.7	4	3.2
8	3.5	3.3	3	2.4
9	2.5	2.5	2.2	1.9
10	1.9	1.8	1.7	1.5

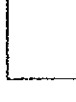
Multiple Unit Footcandles

	3' from wall (spacing between fixtures)						4' from wall (spacing between fixtures)					
	■	3'	■	■	4'	■	■	3'	■	■	4'	■
DD												
1	12.4	11.8	12.4	11.4	7.9	11.4	5	5.3	5	4.4	4.1	4.4
2	26.2	30.4	26.2	23.9	19	23.9	13.3	14.7	13.3	11.9	11.5	11.9
3	27.6	30.4	27.6	24.5	23.3	24.5	17.8	20	17.8	15.6	16.4	15.6
4	21.3	24	21.3	18.7	19.7	18.7	17.8	19.9	17.8	15.5	17.1	15.5
5	15.3	17.2	15.3	13.5	14.9	13.5	14.8	16.5	14.8	13	14.6	13
6	11.1	12.2	11.1	9.8	10.9	9.8	11.4	12.5	11.4	10.2	11.4	10.2
7	8	8.7	8	7.1	8	7.1	8.9	9.6	8.9	8	8.9	8
8	5.8	6.3	5.8	5.3	5.9	5.3	6.8	7.3	6.8	6.2	6.9	6.2
9	4.4	4.7	4.4	4	4.4	4	5.3	5.6	5.3	4.9	5.3	4.9
10	3.3	3.5	3.3	3.1	3.4	3.1	4.1	4.3	4.1	3.8	4.2	3.8

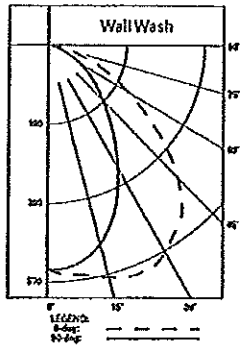
Photometric Results

Efficiency = 54.8%

Test No. P12962
Platform = PN6
Element = E6LWW
Lumens = 1800
Lamp = GX24Q-3/26WTTT



Candlepower Distribution



Candelas

Vertical Angle	cd
90	0
85	1
75	14
65	58
55	120
45	189
35	284
25	399
15	495
5	538
0	540

Zonal Lumens Summary

Zone	Lumens	% Lamp	% Luminaire
0-30	381	21.2	38.7
0-40	585	32.5	59.3
0-60	889	49.4	90.1
0-90	986	54.8	100.0
90-180	0	0.0	0.0
0-180	986	54.8	100.0

Single Unit Footcandles

	3' from wall (distance from fixture along wall)			
DD	■	1'	2'	3'
1	8.5	6.6	3.2	1.4
2	17.6	14.1	7.6	3.4
3	17.6	15.2	9.5	4.9
4	12.8	11.5	8.2	4.9
5	8.6	7.9	6.2	4.2
6	5.8	5.5	4.6	3.3
7	4	3.8	3.3	2.6
8	2.8	2.7	2.4	2
9	2.1	2	1.8	1.6
10	1.5	1.5	1.4	1.2

Multiple Unit Footcandles

	3' from wall (spacing between fixtures)						4' from wall (spacing between fixtures)					
	■	3'	■	■	4'	■	■	3'	■	■	4'	■
DD												
1	9.9	9.4	9.9	9.1	6.3	9.1	4	4.3	4	3.5	3.3	3.5
2	21	21.6	21	19.2	15.3	19.2	10.6	11.7	10.6	9.5	9.2	9.5
3	22.5	24.9	22.5	20.1	19.1	20.1	14.3	16.2	14.3	12.6	13.3	12.6
4	17.7	20	17.7	16.5	16.4	16.5	14.5	16.4	14.5	12.7	14	12.7
5	12.8	14.3	12.8	11.2	12.4	11.2	12.3	13.7	12.3	10.8	12.1	10.8
6	9.2	10.2	9.2	8.1	9.1	8.1	9.5	10.5	9.5	8.5	9.5	8.5
7	6.6	7.2	6.6	5.9	6.7	5.9	7.4	8	7.4	6.6	7.4	6.6
8	4.9	5.2	4.9	4.4	4.9	4.4	5.7	6.1	5.7	5.2	5.7	5.2
9	3.6	3.9	3.6	3.3	3.7	3.3	4.4	4.7	4.4	4	4.4	4
10	2.8	2.9	2.8	2.6	2.8	2.6	3.4	3.6	3.4	3.2	3.5	3.2