ADDENDUM # 1

CITY OF TORRANCE 3031 Torrance Blvd. Torrance, CA 90503

BID NO. B2020-13

Bid for City of Torrance Park Exterior Lighting Retrofit

ADDENDUM # 1- Issued 6/11/20

THE FOLLOWING CHANGES ARE HEREBY INCORPORATED INTO AND MADE A MANDATORY PART OF SUBJECT BID:

CLARIFY: The Bid Due Date has been changed to <u>Wednesday, June 24, 2020 by 3:00 PM</u> in the Office of the City Clerk, 3031 Torrance Blvd., Torrance, CA 90503. <u>NO WALK-IN OR FAXED BIDS WILL BE ACCEPTED</u>.

CLARIFY: Park lighting labeled as 100-27 was a typo, should be 100-277 volt.

Voltage clarification also located on page 4 under "LED Fixture Compliance: Voltage". Please see the attached revised Bidder's Proposal with updated quantities and model #s. Bid packet was updated with the revised bidder's proposal and posted online.

CLARIFY: Park location total is <u>16</u> not 17. Please refer to the revised Bidder's Proposal attached.

CLARIFY: Attached is the revised Itemized Lighting Survey and Specifications.

Below are questions raised during the bid preparation period with answers in bold:

1. Are Substitutions allowed for the proposed fixture?

Substitutions will be allowed but they must be comparable products, on the Southern California Edison (SCE) approved list, and provided with the bid.

Link to the Edison Approved List: <u>https://www.designlights.org/search/</u>

2. Are partial bids allowed?

Partial bids are allowed as the City may award multiple locations to multiple contractors.

3. Will you accept alternative brands?

Alternative brands will be accepted but they must be comparable, on the Southern California Edison (SCE) approved list, and provided with the bid.

4. In the "Itemized Lighting Survey and Specifications" you have listed the AS15-40-T3-7PIN MSF-AS-00, however the specification sheet is missing.

Refer to the new specification sheets and revised Itemized Lighting Survey and Specifications.

5. You have the specification sheet for the BOS, BOF & BOQ however neither of these items are listed in the "Itemized Lighting Survey and Specifications". Could you please clarify?

Please disregard the specification sheet(s) for the BOS, BOF & BOQ.

6. Just want clarification, ITEM #16 Victor Park existing units is (15), but you state you only proposing replacements of (3) units ATG Electronics. Is this a typo?

This is a typo, refer to the revised Bidder's Proposal and Itemized Lighting Survey and Specifications attached for updated quantities and model #s.

7. How rigid or firm is the requirement, "Bidder, as the prime contractor, must have successfully completed at least three (3) public works retrofit projects of a similar size and scope valued at \$100,000 for each project within the last three (3) years. Bidder must have at least five (5) years' experience under current license (California State License Board), company registration (California Secretary of State). Are we automatically disqualified because we haven't performed these types of large scale jobs for public works?

Your company will not be disqualified for not performing large scale retrofits for "public works." The City of Torrance is amending the requirement to be as follows, "Bidder, as prime contractor, must have successfully completed at least (3) retrofit projects of a similar size and scope valued at \$75,000 for each project within the last five (5) years. Bidder must have at least five (5) years' experience under current license (California State License Board), company registration (California Secretary of State).

8. For Torrance Park Exterior Lighting Retrofit bid it is mentioned to fill PWCR number which is Contractor's Public Works Registration Number in bid proposal form. Can we know if it is mandatory to bid this job or can we get this number at the time of award? If it is mandatory at the time of bidding, may I know what is the process for getting that?

The PWCR Number is required at the time the bid is submitted as the City cannot award projects to companies that are not registered through the Department of Industrial Relations (DIR). The awarded company will be required to upload certified payrolls into the DIR website and provide them to the City for payment processing. The PWCR Number can be obtained from the DIR website at dir.ca.gov.

9. Are substitutions allowed for the lighting materials?

a. If so, is there a pre-approval process?

Are partial bids for items only allowed - i.e. the floodlights and shoebox lights only?

Substitutions will be allowed but they must be comparable products on the Southern California Edison (SCE) approved list and provided with the bid. Partial bids are allowed as the City may award multiple locations to multiple contractors. <u>There is no pre-approval process</u>.

Link to the Edison Approved List: https://www.designlights.org/search/

10. We have active C10 license in CA but not the business license and PWCR number (Contractor's Public Works Registration Number). Do we qualify to bid this job?

The PWCR Number is required at the time the bid is submitted as the City cannot award projects to companies that are not registered through the Department of Industrial Relations (DIR). The awarded company will be required to upload certified payrolls into the DIR website and provide them to the City for payment processing. The PWCR Number can be obtained from the DIR website at dir.ca.gov.

11. I been doing my research with lighting distributor, looks like most of the part # are wrong and outdated..Lastly, the Metzler fixture can't be found. I was able to get cut sheets for all fixtures except Metzler

Please see the revised Bidder's Proposal and Itemized Lighting Survey and Specifications with the corrected quantities and model #s.

12. Late last week I was able to visit all 17 sites and now have more follow up questions if that's ok. Want to make sure we do the best job possible!
<u>Delthorne-Electrical Room</u> - Need to upgrade 2 pcs of LED Wall Pack Full Cutoff in Survey specifies only 1
<u>El Nido - Park Area</u> - Existing 4 pcs of LED Area Light, need to upgrade 0 in Survey 4 pcs, please clarify
<u>El Nido - Parking lot</u> - Existing 1 pc of LED Area Light, need to upgrade 3 pcs in Survey 4 pcs
<u>El Retiro - Table Area</u> - In Survey 6 pcs of Wallpacks we found only 2 pcs
<u>El Retiro - Building exterior</u> - Need to upgrade 2 pcs of Canopy in Survey only 1.
<u>Hickory - Restroom</u> - Need to upgrade 3 pcs in Survey only 2
<u>Hickory - Tennis Court</u> - Need to upgrade 8 pcs in Survey only 6
<u>La Carretara - Basketball court</u> - Need to upgrade 1 pc of Mini Flood Light in Survey did not mentioned
Pueblo - Basketball court - Need to upgrade 2 pcs of Flood light in Survey only 1

Refer to the revised Itemized Lighting Survey and Specifications attached. Also, Delthorne-Electrical Room should be read as Delthorne-Pump Room.

13. Any update on the fixtures schedule.. I want to walk the parks before bidding, but need to know what fixtures going to work.. Who designed the project?

See attachment for updates to the fixture schedule. This project was not engineered.

14. Can we provide lighting products comparable to the products spec'd out in the bid? It appears the part numbers listed in the bid package are incomplete. Example:
01 Delthorne Park - "MESTER / 27V40KDT3 / SPAL04DA / JL-241C-Kit" MESTER = Brand 27V = 277 volts? 40K = 4000K color DT3 = Light Distribution Type The wattage information is missing (This fixture is available in 40w, 45w, 70w, 75w, 100w, 150w, 200w, 250w & 300w. We need to know which one want us to use and bid with) SPAL04DA = Slipfitter JL-241C-Kit = Photocell Please advise.

The MESTER's have been replaced with Maxlite, see attached new specification sheets and revised Bidder's Proposal for updated quantities and model #s.

16. Can you please let us know if "or equal" material substitution is acceptable for this project? If so, what is the timeline for submitting substitution?

Equal material substitution is acceptable as long as it's on the Edison approved list. Please submit substitution with your bid.

CLARIFY:

- A. LED Fixture Compliance:
 - 1. LED fixtures MUST be qualified by The DesignLights Consortium®, and be listed at <u>http://www.designlights.org/</u>. Excluding pool light fixtures.
 - 2. Replacement fixtures shall be compatible in size and shape as existing and shall fit into existing space and connect to existing lighting circuiting. Field verify prior to purchase.
 - 3. Voltage: 120, 277 or 480-V ac. Field verify prior to purchase or provide multitap ballast.
 - 4. Mounting: Match existing fixture mounting.
 - 5. Nominal Dimensions: Match existing.
 - 6. Ballast Types and Features: Electronic and Electronic Dimming as required, field verify.
 - 7. External Finish: Match existing.
 - 8. Trim and Hardware: Match existing.
 - 9. Special Environmental Conditions: Damp or wet location listed as required to match existing.
- B. Quality Assurance
 - 1. Installer should be a licensed electrical contractor and have experience with installing LED lighting fixtures and provide a minimum 1-year warranty for the system against any defects in materials or workmanship.
 - 2. Prior to purchase of proposed fixtures, the installer will verify that fixture light output is sufficient for each area being upgraded.
 - 3. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
 - 4. Comply with NFPA 70.

Please return this addendum with your bid proposal. I hereby acknowledge receipt of this addendum.

Name of Company

Address

City	State	Zip Code

BID FOR CITY OF TORRANCE PARK EXTERIOR LIGHTING RETROFIT B2020-13

In accordance with the Notice Inviting Bids pertaining to the receiving of sealed proposals by the City Clerk of the City of Torrance for the above titled improvement, the undersigned hereby proposes to furnish all work to be performed in accordance with the Contract Documents, prepared by the City of Torrance for the bid as set forth in the following schedules.

Assignment of Contractor's values:

ltem	Park Location	# Units	Existing Fixture/Lamp Type	Proposed Fixture Manufacturer/Catalog #	Total Amount In Figures
01	<i>Delthorne Park</i> - 3401 Spencer St, Torrance 90503	33	 (2) Wallpack – HPS70 (4) Surface mount - MH 175 (4) Flood double fixture – MH 400 (4) Flood double fixture – MH 250 (3) Flood triple fixture – MH 250 (1) Flood – MH 250 (15) Shoebox – MH 250 		\$
02	<i>El Nido Park</i> - 18301 Kingsdale Ave, Redondo Beach, CA 90278	7	(7) Area lighter – MH 250	(7) Maxlite AR100UT3-40BA	\$
03	<i>El Retiro Park</i> - 126 Vista Del Parque, Redondo Beach, CA 90277	32	 (2) Wallpacks table area – MH 175 (3) Wallpacks building exterior (6) Surface mount – MH 175 (20) Flood – MH 400 (1) Pumpkin head – HPS 200 	 (2) ATG Electronics / WPDS-60-40-G3 (3) ATG Electronics / WPDS-40-40-G3 (6) RAB / WP1LED30N (20) ATG Electronics - AS15-40-V-T3-7PIN MSF-AS-00 (1) RAB / ALED5T78N 	\$
04	<i>Hickory Park</i> - 2850 W 232nd St, Torrance, CA 90505	6	(6) Surface mount – MH 175	(6) RAB / VANLED40	\$
05	<i>La Carretara Park -</i> 2040 186th St, Torrance, CA 90504	9	 (4) Flood – MH 400 (2) Flood – MH 250 (3) Shoebox – MH 250 	(4) ATG Electronics - AS15-40-V-T3-7PIN MSF-AS-00 (5) Maxlite AR100UT3-40BA	\$
06	<i>La Romeria Park</i> - 19501 S Inglewood Ave, Torrance, CA 90503	a Romeria Park - (3) Flood – MH 9501 S Inglewood Ave, 18 (12) Flood – M		 (3) Maxlite AR100UT3-40BA (12) Maxlite AR280UT3-40BA (3) RAB / VANLED40 	\$
07	Lago Seco Park - 3920 W 235th St, Torrance, CA 90505	3	(2) Wallpack – MH 250 (1) Wallpack – MH 175	(3) ATG Electronics / WPDS-40-40-G3	\$

BIDDER'S PROPOSAL – Continued

<i>rk</i> - 17002 e, Torrance, <i>Park</i> - 5006 rrance, CA <i>Park</i> - 180th St Ave, Torrance, <i>ark</i> - 2252 Del Torrance, CA <i>Park</i> - 22730 Torrance	2 19 2 12	 (2) Flood – MH 250 (3) Surface mount – MH 175 (16) Shoebox – MH 1000 (1) Pumpkin head – MH 150 (1) Area lighter – HPS 200 (8) Surface mount – MH 50 (2) Flood – MH 175 (3) Flood – MH 175 	 (2) Maxlite AR100UT3-40BA (3) RAB / VANLED40 (16) ATG Electronics - AS30-40-V-T3-7PIN MAM-AS-0S (1) RAB / ALED5T78N (1) Maxlite AR100UT3-40BA (8) RAB / VANLED20 (2) Maxlite AR100UT3-40BA 	In Figures \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
rrance, CA Park - 180th St Ave, Torrance, ark - 2252 Del Torrance, CA Park - 22730	2	 (16) Shoebox – MH 1000 (1) Pumpkin head – MH 150 (1) Area lighter – HPS 200 (8) Surface mount – MH 50 (2) Flood – MH 175 	 (16) ATG Electronics - AS30-40-V-T3-7PIN MAM-AS-0S (1) RAB / ALED5T78N (1) Maxlite AR100UT3-40BA (8) RAB / VANLED20 	\$
Ave, Torrance, ark - 2252 Del Torrance, CA Park - 22730		 (1) Area lighter – HPS 200 (8) Surface mount – MH 50 (2) Flood – MH 175 	(1) Maxlite AR100UT3-40BA (8) RAB / VANLED20	
Torrance, CA Park - 22730	12	(2) Flood – MH 175		¢
		(2) Flood – MH 400	(2) ATG Electronics - AS15-40-V-T3-7PIN MSF-AS-00	\$
	3	(3) Flood – HPS 400	(3) ATG Electronics - AS15-40-V-T3-7PIN MSF-AS-00	\$
n Park - 5525 Blvd, Torrance,	13	(3) Shoebox – MH 250 (10) Pumpkin heads – HPS 200	(3) Maxlite AR100UT3-40BA (10) RAB / ALED5T78N	\$
ea Park - 1951 it, Torrance	52	(25) Flood – MH 400 (2) Wallpacks – MH175 (10) Surface mount – MH 50 (15) Pumpkin heads – HPS 200	 (25) ATG Electronics - AS15-40-V-T3-7PIN MSF-AS-00 (2) ATG Electronics / WPDS-60-40-G3 (10) RAB / VANLED20 (15) RAB / ALED5T78N 	\$
r k - 4727 t, Torrance,	15	(1) Wallpack – MH 175 (12) Pumpkin head – HPS 200 (2) Area Lighter – HPS 200	(1) ATG Electronics / WPDS-60-40-G3 (12) RAB / ALED5T78N (2) Maxlite AR100UT3-40BA	\$
Park - 3855 W Torrance, CA	8	(4) Flood – MH 400 (4) Surface mount – MH 175	(4) ATG Electronics - AS15-40-V-T3-7PIN MSF-AS-00 (4) RAB / VANLED20	\$
	k - 4727 , Torrance, ark - 3855 W Forrance, CA	k - 4727 5, Torrance, 15 ark - 3855 W Forrance, CA 8	(10) Surface mount – MH 50 (15) Pumpkin heads – HPS 200 k - 4727 (1) Wallpack – MH 175 (12) Pumpkin head – HPS 200 (2) Area Lighter – HPS 200 ark - 3855 W Forrance, CA 8 (4) Flood – MH 400 (4) Surface mount – MH 175	(10) Surface mount – MH 50 (10) RAB / VANLED20 (15) Pumpkin heads – HPS 200 (15) RAB / ALED5T78N k - 4727 (1) Wallpack – MH 175 (1) ATG Electronics / WPDS-60-40-G3 (12) Pumpkin head – HPS 200 (12) RAB / ALED5T78N (12) Pumpkin head – HPS 200 (12) RAB / ALED5T78N (2) Area Lighter – HPS 200 (2) Maxlite AR100UT3-40BA ark - 3855 W (4) Flood – MH 400 Forrance A

Bidders Proposal – B2020-13

BASE BID TOTAL:

(In Words)*

BIDDER'S PROPOSAL – Continued

Bidders may bid on all or part of these requirements as indicated on the price proposal. The City may award one or more contracts for these items to the lowest responsible bidder of each item or group of items. The City may award to one vendor if doing so is in the best interest of the City.

*BID MAY BE REJECTED IF TOTAL IS NOT SHOWN IN FIGURES AND WORDS.

The City of Torrance awards to the lowest responsible bidder per the Torrance Municipal Code. Based on the funding available, the City reserves the right to select any combination of roofs to proceed with replacement to determine the lowest responsible bidder for award.

The undersigned furthermore agrees to enter into and execute a contract, with necessary bonds, at the prices set forth herein and in case of default in executing such contract, with necessary bonds, the check or bond accompanying this bid and the money payable thereon shall be forfeited thereby to and remain the property of the City of Torrance.

The above prices include all work appurtenant to the various items as outlined in the project plans and specifications and all work or expense required for the satisfactory completion of said item.

The undersigned declares that it has carefully examined the Specifications, Plans and Contract Documents, and has investigated the site of the work and is familiar with the conditions thereon.

Company Name	Signature of principal in company
Date	Name and Title of Signer
Address:	Phone:
Fax:	Email:
Public Works Registration (PWCR) N	lumber:
License No. & Classifications	

ITEMIZED LIGHTING SURVEY AND SPECIFICATIONS

Park Name	Area	Existing Fixture Type	SCE Solution Code	Replacement Description	Qty.	Existing Lamp Type	Proposed Operating Hours	Proposed Manuf.	Proposed M/N
Delthorne	Pump House	Wallpack	LT-96754	Exterior HPS to LED	2	HPS 70	4100	ATG Electronics	WPDS-28-40-G3 / FULL CUTOFF
Delthorne	Restroom	Surface mount	LT-96754	Exterior MH to LED	4	MH 175	4100	RAB	VANLED40
Delthorne	Basketball court	Flood Double fixture	LT-85834	Exterior MH to LED	4	MH 400	1250	ATG Electronics	AS15-40-T3-7PIN MSF-AS-00
Delthorne	Parking lot	Flood Double fixture	LT-19132	Exterior MH to LED	2	MH 250	3485	Maxlite	AR100UT3-40BA
Delthorne	Park area	Flood Double fixture	LT-19132	Exterior MH to LED	2	MH 250	3485	Maxlite	AR100UT3-40BA
Delthorne	Park area	Flood Triple fixture	LT-19132	Exterior MH to LED	3	MH 250	3485	Maxlite	AR100UT3-40BA
Delthorne	Pathway	Flood	LT-19132	Exterior MH to LED	1	MH 250	3485	Maxlite	AR100UT3-40BA
Delthorne	Pathway	Shoebox	LT-19132	Exterior MH to LED	15	MH 250	3485	Maxlite	AR100UT3-40BA
El Nido	Parking lot	Area lighter	LT-19132	Exterior MH to LED	5	MH 250	4100	Maxlite	AR100UT3-40BA
El Nido	Parking lot	Area lighter	LT-19132	Exterior MH to LED	2	MH 250	4100	Maxlite	AR100UT3-40BA
El Retiro	Table area	Wallpacks	LT-96754	Exterior MH to LED	2	MH 175	4100	ATG Electronics	WPDS-60-40-G3
El Retiro	Building exterior	Surface mount	LT-96754	Exterior MH to LED	6	MH 175	4100	RAB	WP1LED30N
El Retiro	Building exterior	Wallpacks	LT-96754	Exterior MH to LED	3	MH 175	4100	ATG Electronics	WPDS-40-40-G3
El Retiro	Tennis court	Flood	LT-85834	Exterior MH to LED	12	MH 400	1250	ATG Electronics	AS15-40-V-T3-7PIN MSF-AS-00
El Retiro	Pathway	Pumpkin head	LT-19132	Exterior MH to LED	1	HPS 200	3485	RAB	ALED5T78N
El Retiro	Parking lot	Flood	LT-19132	Exterior MH to LED	8	MH 400	3485	ATG Electronics	AS15-40-V-T3-7PIN MSF-AS-00
Hickory	Restroom	Surface mount	LT-96754	Exterior MH to LED	6	MH 175	4100	RAB	VANLED40
La Carretara	Basketball court	Flood	LT-85834	Exterior MH to LED	4	MH 400	3485	ATG Electronics	AS15-40-V-T3-7PIN MSF-AS-00
La Carretara	Park area	Flood	LT-19132	Exterior MH to LED	2	MH 250	3485	Maxlite	AR100UT3-40BA
La Carretara	Park area	Shoebox	LT-19132	Exterior MH to LED	3	MH 250	3485	Maxlite	AR100UT3-40BA
La Romeria	Tennis court	Flood	LT-85834	Exterior MH to LED	6	MH 1000	800	Maxlite	AR280UT3-40BA
La Romeria	Basketball court	Flood	LT-85834	Exterior MH to LED	2	MH 175	800	Maxlite	AR100UT3-40BA
La Romeria	Basketball court	Flood	LT-85834	Exterior MH to LED	6	MH 1000	800	Maxlite	AR280UT3-40BA
La Romeria	Rec building	Flood	LT-96754	Exterior MH to LED	1	MH 175	4000	Maxlite	AR100UT3-40BA
La Romeria	Rec building	Surface mount	LT-96754	Exterior MH to LED	3	MH 175	4000	RAB	VANLED40
Lago Seco	Restroom	wallpack	LT-96754	Exterior HPS to LED	2	MH 250	3800	ATG Electronics	WPDS-40-40-G3
Lago Seco	Restroom	wallpack	LT-96754	Exterior MH to LED	1	MH 175	3800	ATG Electronics	WPDS-40-40-G3
Osage	Parking lot	flood	LT-19132	Exterior MH to LED	2	MH 250	1600	Maxlite	AR100UT3-40BA
Paradise	Rec building	Surface mount	LT-96754	Exterior MH to LED	3	MH 175	4000	RAB	VANLED40
Paradise	Tennis courts	Shoebox	LT-85834	Exterior MH to LED	16	MH 1000	1150	ATG Electronics	AS30-40-V-T3-7PIN MAM-AS-0S

ITEMIZED LIGHTING SURVEY AND SPECIFICATIONS

Park Name	Area	Existing Fixture Type	SCE Solution Code	Replacement Description	Qty.	Existing Lamp Type	Proposed Operating Hours	Proposed Manuf.	Proposed M/N
Pequeno	Park area	Pumpkin head	LT-19132	Exterior MH to LED	1	MH 150	3485	RAB	ALED5T78N
Pequeno	Park area	Area lighter	LT-19132	Exterior MH to LED	1	HPS 200	3485	Maxlite	AR100UT3-40BA
Pueblo	Table area	Surface mount	LT-96754	Exterior MH to LED	8	MH 50	1250	RAB	VANLED20
Pueblo	Basketball court	Flood	LT-19132	Exterior MH to LED	2	MH 175	1250	Maxlite	AR100UT3-40BA
Pueblo	Basketball court	Flood	LT-19132	Exterior MH to LED	2	MH 400	1250	ATG Electronics	AS15-40-V-T3-7PIN MSF-AS-00
Sea-Aire	Park area	Flood	LT-19132	Exterior HPS to LED	3	HPS 400	3485	ATG Electronics	AS15-40-V-T3-7PIN MSF-AS-00
Sunnyglen	Park area	Shoebox	LT-19132	Exterior MH to LED	3	MH 250	3485	Maxlite	AR100UT3-40BA
Sunnyglen	Park area	Pumpkin heads	LT-19132	Exterior MH to LED	10	HPS 200	3485	RAB	ALED5T78N
Sur La Brea	Park area	Flood	LT-19132	Exterior MH to LED	3	MH 400	3485	ATG Electronics	AS15-40-V-T3-7PIN MSF-AS-00
Sur La Brea	Restroom	Wallpacks	LT-96754	Exterior MH to LED	4	MH 175	4000	ATG Electronics	WPDS-60-40-G3
Sur La Brea	Tennis courts	Flood	LT-85834	Exterior MH to LED	18	MH 400	2100	ATG Electronics	AS15-40-V-T3-7PIN MSF-AS-00
Sur La Brea	Basketball court	Flood	LT-85834	Exterior HPS to LED	4	MH 400	1250	ATG Electronics	AS15-40-V-T3-7PIN MSF-AS-00
Sur La Brea	Rec building	Surface mount	LT-96754	Exterior MH to LED	10	MH50	4000	RAB	VANLED20
Sur La Brea	Pathway	Pumpkin heads	LT-19132	Exterior MH to LED	15	HPS 200	3485	RAB	ALED5T78N
Victor	Outdoor kitchen area	wallpacks	LT-96754	Exterior MH to LED	1	MH 175	4000	ATG Electronics	WPDS-60-40-G3
Victor	Parking Lot	Area Lighter	LT-19132	Exterior MH to LED	2	HPS 200	4000	Maxlite	AR100UT3-40BA
Victor	Pathway	Pumpkin head	LT-19132	Exterior HPS to LED	12	HPS 200	3485	RAB	ALED5T78N
Walteria	Ball field	flood	LT-85834	Exterior MH to LED	4	MH 400	4000	ATG Electronics	AS15-40-V-T3-7PIN MSF-AS-00
Walteria	Table area	surface mount	LT-96754	Exterior MH to LED	4	MH 175	4000	RAB	VANLED20

VANLED40N





Low-profile vandal-resistant fixture covers the footprint of most traditional canopy lights. Available in flat or drop lens with frosted and unfrosted options. Color: Bronze Weight: 10.3 lbs

Proje	ect:	Type:	
Prep	ared By:	Date:	
Driver I	nfo	LED Info	
Type 120V	Constant Current 0.35A	Watts Color Temp	40W 4000K (Neutral)

208V 0.2A 240V 0.18A 277V 0.16A Input Watts 40.50W

Color Temp 4000K (Neutral) Color Accuracy 83 CRI L70 Lifespan 100.000 Lumens 5.467 Efficacy 135 LPW

Technical Specifications

Listings

UL Listed:

Suitable for Wet Locations. Covered Ceiling Mount Only.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. DLC Product Code: P3TD73HM

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Color Stability:

RAB LEDs exceed industry standards for chromatic stability

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

Cold Weather Starting:

for low glare drop lens

Minimum starting temperature is -40°C (-40°F)

Lens:

Vandal-resistant polycarbonate textured opaque

Housing: Die-cast aluminum housing and lens frame with (4) 1/2" NPS side conduit entries and

weatherproof rear wire plug and access plate Mounting:

Ceiling mount to recessed junction with knockout template or directy to ceiling surface, utilizing side conduit entry points

IP Rating:

Ingress Protection rating of IP66 for dust and water

Air Tight:

Housing certified Air Tight as per ASTM E283 Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Electrical

Driver:

Class 2, Constant Current, 120-277V, 50-60Hz, 120V: 0.35A, 208V: 0.2A, 240V: 0.18A, 277V: 0.16A

THD

8.26% at 120V. 7.26% at 277V

Power Factor:

99.8% at 120V, 94.9% at 277V

Need help? Tech help line: (888) 722-1000 Email: custserv@rablighting.com Website: www.rablighting.com Copyright © 2020 RAB Lighting All Rights Reserved Note: Specifications are subject to change at any time without notice

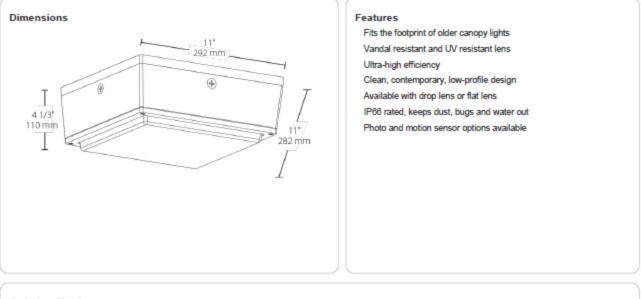
VANLED40N

Maximum Ambient Temperature: Suitable for use in 40°C (104°F)

Page 2 of 3

VANLED40N

RAB



Ordering Matrix

Family VANLED	Wattage 40	Color Temp N	Lens-Optics	Finish	Voltage	Options	Suffix	
	10 = 10W 20 = 20W 28 = 28W 40 = 40W 52 = 52W 65 = 65W 75 = 75W	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Drop lens F = Flat lens ¹ FR = Frosted Drop Lens FFR = Frosted Flat Lens ¹	Blank = Bronze W = White	Blank = 120-277V, 0-10V Dim Standard /480 = 480V, 0-10V Dim Standard	Blank = No Options /MVS = Microwave Sensor ¹ /WS = Wattstopper, 8ft /WS2 = Wattstopper, 20ft /PCS = 120V Swivel Photocell /PCS2 = 277V Swivel Photocell /PCS4 = 480V Swivel Photocell /LC = Lightcloud® Control factory Installed /E2 = Battery, 120-277V only	Blank = Standard USA = Complies with the BAA	
	¹ /MVS option not available with F and FFR lens							

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VANLED20N





Low-profile vandal-resistant fixture covers the footprint of most traditional canopy lights. Available in flat or drop lens with frosted and unfrosted options. Color: Bronze Weight: 10.0 lbs

Proje	ect:	Type:	
Prep	ared By:	Date:	
Driver I Type 120V	nfo Constant Current 0.19A	LED Info Watts Color Temp	20W 4000K (Neutral)

208V 0.12A 240V 0.1A 277V 0.09A Input Watts 22.10W

Color Temp 4000K (Neutral) Color Accuracy 83 CRI L70 Lifespan 100.000 Lumens 3.038 Efficacy 137.5 LPW

Technical Specifications

Listings

UL Listed:

Suitable for Wet Locations. Covered Ceiling Mount Only.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is listed by Design Lights Consortium (DLC) as an ultra-efficient premium product that qualifies for the highest tier of rebates from DLC Member Utilities. DLC Product Code: PV77ES5U

LED Characteristics

LEDs:

Long-life, high-efficacy, surface-mount LEDs

Color Stability:

RAB LEDs exceed industry standards for chromatic stability

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

Cold Weather Starting:

for low glare drop lens

Minimum starting temperature is -40°C (-40°F)

Lens:

Vandal-resistant polycarbonate textured opaque

Housing: Die-cast aluminum housing and lens frame with (4) 1/2" NPS side conduit entries and

weatherproof rear wire plug and access plate

Mounting:

Ceiling mount to recessed junction with knockout template or directy to ceiling surface, utilizing side conduit entry points

IP Rating:

Ingress Protection rating of IP66 for dust and water

Air Tight:

Housing certified Air Tight as per ASTM E283 Finish:

Our environmentally friendly polyester powder coatings are formulated for high-durability and long-lasting color

Other

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.

Electrical

Driver:

Class 2, Constant Current, 120-277V, 50-60Hz, 120V: 0.19A, 208V: 0.12A, 240V: 0.1A, 277V: 0.004

THD

8.26% at 120V. 7.26% at 277V

Power Factor:

99.8% at 120V, 94.9% at 277V

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VANLED20N

Maximum Ambient Temperature: Suitable for use in 40°C (104°F)

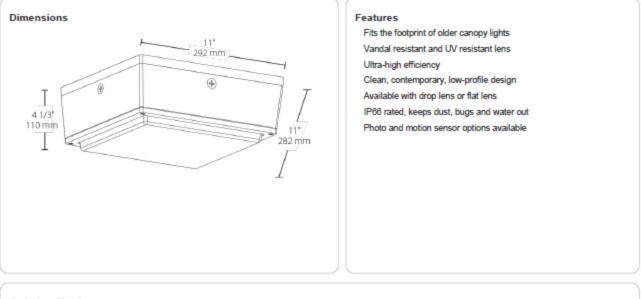
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VANLED20N

RAB



Ordering Matrix

Family VANLED	Wattage 20	Color Temp N	Lens-Optics	Finish	Voltage	Options	Suffix
	10 = 10W 20 = 20W 28 = 28W 40 = 40W 52 = 52W 65 = 65W 75 = 75W	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Drop lens F = Flat lens ' FR = Frosted Drop Lens FFR = Frosted Flat Lens '	Blank = Bronze W = White	Blank = 120-277V, 0-10V Dim Standard /480 = 480V, 0-10V Dim Standard	Blank = No Options /MVS = Microwave Sensor ¹ /WS = Wattstopper, 8ft /WS2 = Wattstopper, 20ft /PCS = 120V Swivel Photocell /PCS2 = 277V Swivel Photocell /PCS4 = 480V Swivel Photocell /LC = Lightcloud® Control factory Installed /E2 = Battery, 120-277V only	Blank = Standard USA = Complies with the BAA
			¹ /MVS option n	ot available with	F and FFR lens	-	

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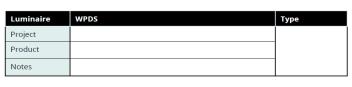
Page 3 of 3

WPDS Wall Pack

Outdoor

Customers have installed our eLucent Wall Pack in stairways, tunnels, alleyways, building perimeters, security walls, overpasses, and parking garages. The compact form factor allows for a wide range of use cases.





Features

- IP65 Rated
- Heavy-wall, Die-cast aluminum housing
- Flexible Universal Mounting



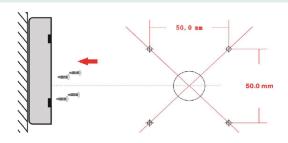
Order Format

Sample: WPDS-40-50-G3

Series		Wattage		ССТ		Voltage		Dimming	Generation
WPDS =WPDS Wall Pack	-	28=28W 40=40W 60=60W 90=90W	-	40=4000К 50=5000К	-	Blank=100-277V -V=347-480VAC	-	Blank=1-10V Dimming ND=Non-Dimming	-G=Generation 3

Application

Convenient, modular design means the eLucent wall pack may be mounted to nearly any vertical surface for secure, reliable, illumination.



Construction

Input Voltage (VAC)

CRI

The eLucent WPDS housing is precision-manufactured from heavy-wall, die-cast aluminum. Thermal management is integral to the design and our heat sinks facilitate excellent thermal transfer, including at temperatures over 40°C. The back plate contains knockout plates for the installation of add-ons. The eLucent WPDS is IP65 rated, tested for use in wet locations. The fixtures include built in photocells and glass lenses.

Electrical

Standard input voltage is 120-277V, and 347-480V drivers are available on all units. Luminous efficiency is 117 Lm/W or higher with models available in 28W, 40W, 60W, and 90W.

Optics

The eLucent WPDS Wall Packs lead their segment for optical performance. With CRI over 80 across standard offerings of CCT 4000K and 5000K, these fixtures offer excellent performance over a broad band of application requirements. The lens is glass, carefully fitted for uniform light distribution. Output is tuned for a superior balance of performance and visual comfort.

Certifications

- DLC Premium
- ETL
- CE
- RoHSTitle 24
- IP65 rated

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CCT(K)	4000, 5000*				
PF	.9				
THD	<20%				
L70 (Hours)	74,000+ Bronze				
Color					
Housing	Die-Cast Aluminum				
Optic Type	Glass				
Temperature Range	-40°C to 40°C				
Warranty	10 Years				

100-277, 347-480

80+

www.atgelectronics.com T: 951.245.6222 E: sales@atgelectronics.com WPDS

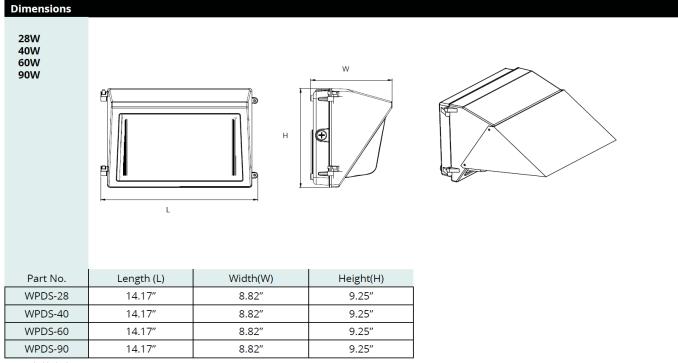
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WPDS Wall Pack

Outdoor



Lumen Data									
	System	4К		5К					
Wattage (W)	Wattage	Efficacy (Lm/W)	Lumens (Lm)	Efficacy (Lm/W)	Lumens (Lm)				
28W	28	127	3,556	128	3,584				
40W	39	126	5,040	129	5,160				
60W	60	134	8,040	137	8,220				
90W	91	117	10,642	119	10,710				



Recorded in inches

<u>WPDS</u>

Outdoor

Photocell

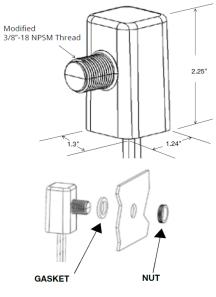
EK4036S

Electrical Accessories

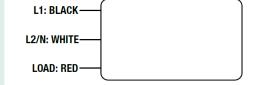
Photocontrol Button

Power Supply	105-305VAC 50/60Hz
Dielectric Strength	2500 VAC
Operating Ambient Temperature Range	-40°C -70°C
Instant Turn ON Light Level	1.5 fc
OFF Light Level	2.25 fc
Turn OFF to On Ratio	1.5:1 with 2-5 second delay
Fail Mode	ON
Power Consumption	<.5W @277 VAC
Surge Protection	255 Joule MOV
Wire	9″ Long, 18 awg

Dimensions



Wiring





WPDS

WPDS

Wall Pack Outdoor



Electrical Accessories			
Photocell Motion Sensor			
1-10V Dim		Load Ratings	@120V 0-800W tungsten, ballast, LED driver; 1/6hp motor @230-240V 0-300W ballast, LED driver @277V 0-1200W ballast, LED driver; 1/6hp motor @347/480V 0-1200W ballast, LED driver
FSP-221B-D*		0-10V Sinking Current	50mA
BiLevel Sensor IP66 Rated	Co	High/Low Modes	high:0-10V, low: off, 0-9.8V
110-480V		Time Delay	30 sec, 1-30 min
		Cut Off Delay	none, 1-59 minutes, 1-5 hours
	town -	Sensitivity/Service mode	low, med, max: on-fix, off-fix
	- and the second se	Setpoints	hold off setpoint: none, 1-250 fc, auto photocell on/off setpoint: 1-250fc
		Ramp and Fade Times	1-60 sec
		Op Temperature	-40°F to +167°F (-40°C to +75°C)
Dimensions	1.29" 32.80mm 16.33mm	-	P-2x1B-D
Wiring	Wiring with non-dimming load	Load (Red)	Wiring with dimming load.
*See Sensor Specsheet		Phase A	Black Line of Phase A

*See Sensor Specsheet for more information

Black Line or Phase A

Black Line or Phase A

WPDS

utdoor



10 Year Warranty

ATG Electronics® Industry Leading 10 Year Limited Warranty For North American LED Lighting Fixtures

ATG Electronics warrants to the original purchaser of ATG Electronics Domestic LED products listed above that were manufactured for which the ATG Electronics Spec Sheet located on our website contains the words "To year limited warranty" that, subject to the below terms and conditions of this warranty, when such LED products are properly installed they will comply with ATG Electronics or if lesser, 50,000 hours of operation (at an average of 13.6 hours per day operation). The LED arrays in the Product(s) will be considered defective in material or workmanship only if a total of 15% or more of the individual light emitting diodes in the Product(s) fail to illuminate.

The above express limited warranty is extended by ATG Electronics® only to the original or first end-user purchaser and only for the original installed location. This warranty only applies to prod-ucts purchased after June 1, 2017. This warranty is non-transferrable, whether by assignment or operation of law. The original purchaser must provide warranty claims to ATG Electronics within the warranty period promptly upon discovery and in accordance with ATG Electronics Return and Repair Procedures as outlined within this document.

Should any defects be found by ATG Electronics upon its inspection of the properly returned product, ATG Electronics sole responsibility and liability under this warranty will be, at its option, to ei-ther repair or replace the defective part or parts or else make available a new replacement unit that will provide equal or better performance. All decisions regarding the existence or non-existence of defects or otherwise affecting the warranty shall be made by ATG ELECTRONICS and shall be final and binding on all parties. Where a defective LED product is replaced under this warranty, the balance of the original warranty period shall remain effective.

Conditions and Exclusions

This warranty is conditioned upon proper installation, use and maintenance. This warranty will automatically become null and void and shall not be applicable to any LED fixture which (i) has not been timely paid for, (ii) is not installed and operated in accordance with the current edition of The National Electric Code (NEC), the Standards for Safety of Underwriters' Laboratory, Inc. (UL) or with ATG Electronics instructions and guidelines, (iii) has been moved from its original installation, (iv) has been installed within an area that has exposure to sulfur or any area with high acidic compounds in use, (v) has been operated in a ambient temperature or humidity that is higher than 35 degrees Celsius, (vi) has been subjected to a lightning strike, power surge or overvoltage condition, (vii) has its LED Board subjected to static electricity due to failure to discharge same prior to connecting or disconnecting the lead from the LED board, (viii) was not installed and/or operated in accordance with ATG Electronics and guidelines, (ix) has been mishandled, misused, abused, tampered with, modified or altered by anyone other than ATG ELECTRONICS, (x) has been subjected to abnormal stresses and operating conditions, or (xi) has been operated in accordance in place.

Limitations

Disclaimers & Limitations of Liability

The foregoing warranty is exclusive of all other statutory, written or oral warranties and no other warranties of any kind, statutory, by operation of law or course of performance, or otherwise, are given, herein expressed or otherwise received. EXCEPT AS EXPRESSLY PROVIDED ABOVE, ATG ELECTRONICS DISCLAIMS ALL REPRESENTATIONS, WARRANTIES AND CONDITIONS OF ANY KIND, EXPRESS OR IMPLIED, REGARDING THE LED PRODUCTS AND ITS SERVICES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE OR PURPOSE.

LIMITATION OF LIABILITY. Other than the obligation to repair or replace as provided above, ATG Electronics shall have no liability for any losses, expenses or damages as a result of the installation, use, inability to use, removal or replacement of any LED product. ATG Electronics will not under any circumstances whether as a result of breach of contract, breach of warranty, tort, strict liability or or otherwise be liable for consequential, incidental, special or exemplary damages including but not limited to, loss of profits or revenues, loss of any other goods or associated equipment, cost of capital, cost of substitute products, facilities or services, down time cost or claims of claimant's customers. ATG Electronics liability on any claim of any loss or damages arising out of, resulting from or concerning any LED product, any aspect of this warranty or for any products or services furnished hereunder shall not exceed the price of the fixture which gives rise to the claim.

Return and Repair Procedures

All warranty requests and or questions are to be directed to ATG Electronics Customer Service Department (CSD) at 888-618-7298. If deemed necessary, the CSD will issue a Returned Merchandise Authorization (RMA) number which must be included on both the packing slip of the component or fixture being returned and on the outside of the box. You must include your name and contact information, including your email address, on the packing slip so that we can contact you easily. Each component or fixture must be packaged very carefully and properly so as to prevent damages in shipment and must be shipped freight prepaid. Please obtain a proof of delivery to ensure that the material is received.

Once the component or fixture has been received and tested, an evaluation report will be provided to the end user via email. This report will clarify the following:

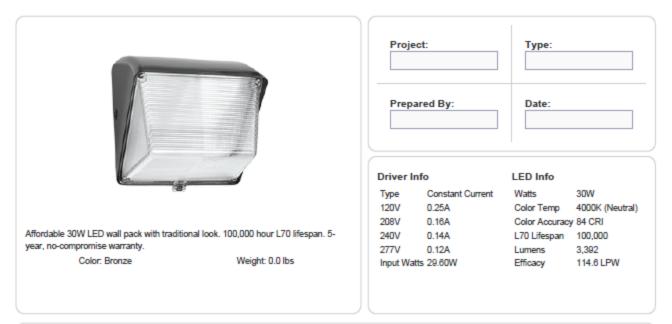
A) The component / fixture is covered under the warranty policy and will either be repaired or replaced.
B) The component / fixture is not covered under the warranty policy and the reason for this determination.

If ATG ELECTRONICS determines that the component or fixture is covered under the warranty, then the appropriate repairs will be started or a replacement fixture will be manufactured and shipped. Please note that in the event the returned component or fixture is found not to be covered under this warranty, you may be subject to a labor charge for the evaluation process and will be responsible for all return shipping charges and fees. For components and fixtures determined to be covered under this warranty prior to the first anniversary of the Sale Date, the repaired or replacement component or fixture will be returned to you at no charge. You will be responsible for all other shipping charges.

All components and fixtures determined to be covered by this warranty as provided above, will be repaired or replaced at no charge to the customer, however, except as expressly provided above with respect to recessed and linear fixtures during the first year, the customer must hire and pay for an electrician to remove and reinstall such components and fixtures. No labor costs will be covered for the removal or reinstallation of any components or fixtures. The warranty does not cover modifications, repairs or replacements, or the related labor or materials costs, that may be necessary to facilities or third party products in connection with the removal, repair, or replacement of any LED product under this warranty.

WP1LED30N US





Technical Specifications

Listings

UL Listed:

Suitable for wet locations. Wall mount only.

IESNA LM-79 & LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: PXC78HW2

Optical

BUG Rating:

B1 U3 G3

Construction

Thermal Management:

Superior thermal management with die-cast aluminum heatsink

Maximum Ambient Temperature:

Suitable for use in 40°C (104°F)

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Housing:

Precision die-cast aluminum housing

Mounting:

Housing has three (3) conduit entry points and knockout pattern for junction box or direct wall mounting. Hinged door for easy re-assembly.

Lens:

High-impact, prismatic, UV-stabilized polycarbonate refractor lens

Reflector:

High-gloss white aluminum

Gaskets:

High-temperature silicone gaskets

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

LED Characteristics

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Other

Replacement:

Replaces 100W Metal Halide

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at <u>rablighting.com/warranty.</u>

FTC Country of Origin:

This product was assembled in the USA by RAB using imported components

Buy American Act Compliance:

This product complies with the Buy American Act

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WP1LED30N US

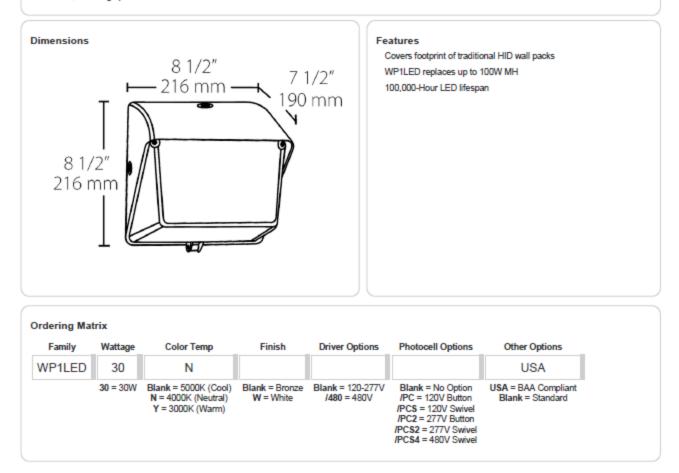


Technical Specifications (continued)

Electrical

Driver:

Constant Current, Class 2, 700mA, 50/60 Hz. 100 - 277V, 4kV surge protection



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PROJECT NAME:

NOTES:

CATALOG NUMBER:

_FIXTURE SCHEDULE:__

LED SLIM AREA LIGHTS **AR SERIES, GENERATION 2** Fixture shown with Slipfitter Knuckle 60W Model Fixture shown with Trunnion Swivel Π п 100-140W Model Fixture shown with Straight Arm 210-280W Model DIMENSIONS: Please see page 3 and 4 for dimension drawings.

PRODUCT DESCRIPTION:

The LED Slim Area Lights deliver class-leading efficacy in a lightweight design that can be effortlessly applied to new and retrofit outdoor projects. Offered in lumen packages ranging from 7,700lm to over 35,000lm, the AR Series achieves up to 130 lumens per watt while providing significant long-term energy and maintenance cost savings.

MaxLite Makes It!

Don't see what you need? Additional wattages and specifications available upon request - contact your MaxLite rep!

FEATURES:

- Trade Agreements Act (TAA) compliant product available contact MaxLite for details
- Replaces up to 750W MH/HPS equivalent
- Universal 120-277V dimming driver standard, 347-480V available

Page: 1 of 4

- Dusk-to-dawn and occupancy sensor capability
- Meets ANSI 3G vibration standard for bridges and overpasses
- 10kV surge suppression standard
- Comes with 41" 18/3 SO cord

MOUNTING:

- 7.5" Straight Arm¹
- Trunnion Swivel
- 2-3/8" Slipfitter Knuckle

WARRANTY:

10-year standard warranty with labor allowance* (further details available at www.maxlite.com/warranties)

*Warranty Limitations: Product must be rated for the application per the Product Data Sheet (PDS); operated ≤16 hrs/day; in ambient of -29°F to 104°F. *Up to \$25/unit; labor allowances of up to \$500/unit available for purchase – contact MaxLite representative for details.

CONTROLS:

PC Option: NEMA standard C136.41 3-Pin twist lock receptacle for use with NEMA twist lock photocell. **The photocell is sold separately.**

Photo/Motion Sensor: The FSP-211 uses passive infrared (PIR) sensing technology to react to changes in infrared energy (i.e. moving body heat) within the coverage area. This slim, low-profile sensor is designed for installation inside the bottom of a light fixture body and is ideal for outdoor environments. The sensor operates at 120V/230V-240V and single phase 277V. The motion sensor is fully adjustable with high and low dimmed light level options with optional dusk to dawn control. Sensor can be combined with various lenses to operate at mounting heights from 8' to 40'. Please refer to page 4 for the sensor's factory default settings. Factory settings can be adjusted via the FSIR-100, a wireless configuration tool. Note that the sensor comes with photocell setting disabled and the FSIR-100 must be purchased if photocell functionality is desired.

Please refer to the FSP-211 Supplementary Datasheet for more product

MAX16071

MODEL SELECTIO	Турі	Typical order example: AR60UT5-50BK									
AR				-							
FAMILY	NOMINAL WATTAGE	VOLTAGE	DISTRIBUTION	-	сст	FINISH	MOUNTING	OPTIONS			
AR= Area Light	60= 60W,250W MH/HPS equivalent 100= 100W, 400W MH/HPS equivalent 140= 140W, 400W MH/HPS equivalent 210= 210W, 750W MH/HPS equivalent 280= 280W, 750W MH/HPS equivalent	U= 120-277V H= 347-480V	T2= Type II T3= Type III T4= Type IV T5= Type V	-	40= 4000K 50= 5000K	B= Bronze	A= Straight Arm ¹ K= 2-3/8" Slipfitter Knuckle T= Trunnion Swivel	(OMIT)= None MS= Daylight/Motion Sensor RPC= NEMA 3-pin receptacle (NEMA twist lock Photocell sold separately) PR7= NEMA 7-Pin receptable (control module sold separately)			

NOTES:

1. The straight arm mounting fits square poles. For compatibility with round poles, combine the straight arm mounting with a round pole adaptor. See adaptor selection table on page 3.

Phone: 1-800-555-5629 | Fax: 973-244-7333 | Web: www.maxlite.com | E-mail: info@maxlite.com Revised: 02/12/20



LED SLIM AREA LIGHTS AR-MAL SERIES, GENERATION 2

SPECIFICATIONS: **60 WATT** 100 WATT 210 WATT 140 WATT 280 WATT ITEM SPECIFICATION DETAILS Input Power (W) 60W 100W 140W 210W 280W 7846 12420 17014 25633 34547 Lumens 4000K **BUG Rating** B3-U0-G3 B3-U0-G3 B3-U0-G3 B3-U0-G3 B3-U0-G3 Туре 7860 12675 17922 26756 35886 Lumens 5000K B3-U0-G3 **BUG Rating** B3-U0-G3 B3-U0-G3 B3-U0-G3 B3-U0-G3 Lumens 7900 12420 17014 25663 34547 4000K **BUG Rating** B3-U0-G3 B3-U0-G3 B3-U0-G3 B3-U0-G3 B3-U0-G3 Туре Lumens 7900 12675 17922 26756 35886 5000K **BUG Rating** B3-U0-G3 B3-U0-G3 B3-U0-G3 B3-U0-G3 B3-U0-G3 Lumens 7615 12421 17015 25663 34548 4000K B3-U0-G3 B5-U0-G5 **BUG Rating** B3-U0-G3 B3-U0-G3 B4-U0-G4 Туре IV GENERAL Lumens 7699 12675 17922 26756 35886 5000K PERFORMANCE **BUG Rating** B3-U0-G3 B3-U0-G3 B3-U0-G3 B4-U0-G4 B5-U0-G5 Lumens 7787 12420 17014 25663 34547 4000K B3-U0-G1 B3-U0-G1 B3-U0-G1 B3-U0-G1 **BUG Rating** B3-U0-G1 Туре Lumens 7860 12675 17922 26756 35886 5000K B3-U0-G1 B3-U0-G1 B3-U0-G1 B3-U0-G1 **BUG Rating** B3-U0-G1 up to 130 lm/W Efficacy (Im/W) CRI > 70 Lumen Maintenance (L90, TM21 > 100,000 hours @ 25°C) Color Temperature 4000K and 5000K available Power Factor > 0.9 THD < 16% 120-277V standard, 347-480V available Input Voltage Range ELECTRICAL Housing Die-cast aluminum Polycarbonate lens Lens Housing 2-3/8" Slipfitter, Straight Arm, Trunnion Swivel Lens Type II, Type III, Type IV, Type V - Frosted lens Slip Fitter, Straight Arm, Trunnion Mount options Mounting PHYSICAL 15.9"x8.7"x3.4" 16.9" x 10.3" x 3.4" Dimensions (Module) 16.6" x 15.0" x 3.5" Weight 8.5 lbs 11.8 lbs 12.5 lbs 22.5 lbs 23.9 lbs EPA (sq. ft) 0°/90° 0.43/1.34 0.43/1.64 0.49/2.26 Operating Temperature -40°F to 131° F (-40°C to 55°C) Certifications cULus, supports T24 compliance Material Usage RoHS compliant; no mercury CERTIFICATION Environment Outdoor, Wet location, IP65 rating, 3G Vibration Warranty 10-year standard warranty* QUALIFICATION DesignLight Consortium **DLC** Premium

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MAX16071 Revised: 02/12/20

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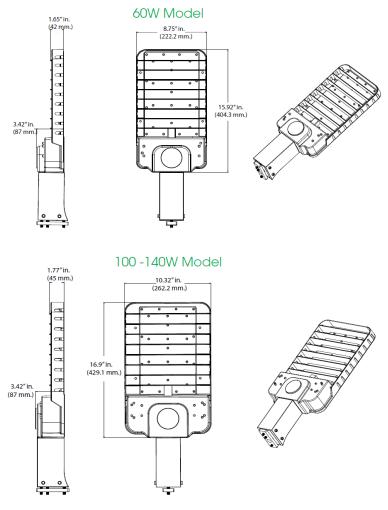
LED SLIM AREA LIGHTS AR-MAL SERIES, GENERATION 2

Page: 3 of 4

ACCESSORIES:

ORDER CODE	MODEL	DESCRIPTION
107846	AR-MAL-4RPA	4" Round Pole Adaptor for AR-MAL Series, to be used with straight arm
107847	AR-MAL-5RPA	5" Round Pole Adaptor for AR-MAL Series, to be used with straight arm
72055	6390LBK	NEMA Twist-Lock Photo Control 120V-277V
1408292	6394LL	NEMA Twist-Lock Photo Control 347V-480V
96268	MLRTLPCRSP	Shorting Cap Photocontrol 3 Pin NEMA Rotatable Twist Lock
103658	AR-S-HS-GEN2-B	House Side Shield for AR GEN 2 Series, Bronze Finish, Small Size compatible with 60W/100W/140 Models
1408946	AR-MAL-L-HS-B	House Side Shield for AR-MAL Series, Bronze Finish, Large Size compatible with 210W/280W Model
102944	UPMA-B	Universal Pole Mount Adaptor, Bronze, hardware and gasket included
102945	UPMA-S	Universal Pole Mount Adaptor, Silver, hardware and gasket included
102225	UPMA-4RPA-B	Round Pole Adaptor for 4" pole for Universal Pole Mount Adaptor
102976	UPMA-5RPA-B	Round Pole Adaptor for 5" pole for Universal Pole Mount Adaptor
102184	FSIR-100	Remote Handheld Configuration Tool

DIMENSIONS:



Phone: 1-800-555-5629 | Fax: 973-244-7333 | Web: www.maxlite.com | E-mail: info@maxlite.com Revised: 02/

MAX16071 Revised: 02/12/20

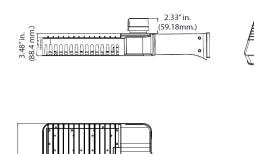


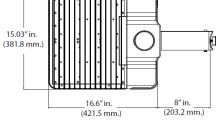
LED SLIM AREA LIGHTS **AR-MAL SERIES, GENERATION 2**

Page: 4 of 4

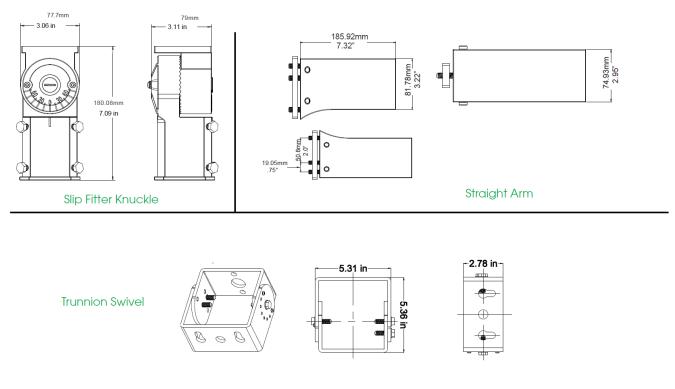
DIMENSIONS:

210-280W Model





MOUNTING DIMENSIONS:



MAX16071 MAX16071



Outdoor

With high efficacy and precision-engineered polycarbonate lenses, the Access Area Light ensures the most energy saved with a wider smoother, and more uniform light output. The lower glare of the Access will be sure to offer improved visual comfort in parking lots and university campuses.



-40°C - 50°C

Operating

Photo

Motion

Sensor

Year

Warranty

Luminaire	Access Area Light	Туре
Project		
Product		
Notes		

Features

- IP65 rated and tested for use in wet locations
- Convenient modular design and knockout
- High-transmittance, prismatic acrylic lens



Order Format

Sample: AS11-50-T3

-10V Dim

Toxin-Free

Series	Wattage		ССТ		Voltage		Dimming		Optic	Finish Color
AS=Access Area Light	11=110W 15=150W 30=300W	-	40=4000K 50=5000K	-	Blank=100-277V -V=347-480V	-	Blank=1-10V Dimming ND=Non-Dimming	-	T3= Type III	Blank=Black

Application

Multiple brackets are available for customizable mounting, improving installation time and reducing blind area of visual field. Slipfitter, arm mount, trunnion and yoke are available for the Access. See mounting accessories on accessory specsheet.

Construction

Input Voltage (VAC)

CRI

The Access Area Light is precision manufactured from Die-cast aluminum. The luminaire comes with a built-in occupancy sensor, following Title 24 standards.

100-240/277

73+

3,000

Catalog #	Description	110W	150W	300W
MSF-AS-00	Slip Fitter for Access Area Light	х	х	X
MAM-AS-0S	Square Pole Arm for Access Area Light	х	Х	X
MTN-AS-00	Trunnion Mount for Access Area Light	х	х	х
MTN-AS-00	Round Pole Adapter for Access Area Light, 6 inch	х	х	X
MYK-AS-01	Yoke Mount Bracket for 110W/150W Access Area Light	х	х	
MYK-AS-01	Yoke Mount Bracket for 300W Access Area Light			×
SHD-AS-01	Shield for 110W/150W Access Area Light	х	х	
SHD-AS-02	Shield for 300W Access Area Light			Х



Electrical

110W, 150W, and 320W models are available, with custom orders up to 1500Wuponrequest. System efficacy is rated up to 170 lm/W and lifespan at greater than 50,000 hours. The fixture has the standard input of 100-240/277VAC.

Optics

The Access is available in type III beam angles with type II and V available upon request. Color accuracy is rated at 70+ CRI, in a color temperature of 4000K and 5000K.

Certifications

- **DLC** Premium
- **UL** Listed
- CE
- RoHS
- Title 24
- IP65 rated

ССТ(К)	4,000 5,000 5,700
PF	.9
L70 (Hours)	50,000+
Color	Black
Housing	Die Cast Aluminum
Optic Types	T3=Type III T5=TypeV
Temperature Range	-40°C to 50°C
Warranty	10 Years
om	AS

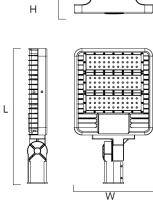


Lu	men Data								
					4K		5K		
	Catalog Number	Wattage (W)	System Wattage		Т3			Т3	
				Efficacy (Lm/W)	Lui	mens (Lm)	Efficacy (Lm/W)	Lumens (Lm)	
	AS11-50-T3	110W	114.5	132	1	15,181	135	15,412	
, ·	AS15-50-T3	150W	149.5	132	1	19,761	134	20,058	
<i>'</i> ,	AS30-50-T3	300W	313.5	130	4	41,007	132	41,474	
v	Catalog Number	SPD	Distribution	BUG		EPA		Stock Item ATG Core Poduct	
	AS11-XX	10KV Optional	T2	B3U2G	i2	2.	1		
	AS15-XX	10KV Optional	T2	B3U2G	i3	2.	1		
	AS30-XX	10KV Optional	T2	B4U3G	i3	3.	2		

Dimensions

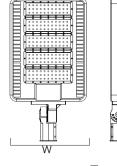
Slipfitter 110W

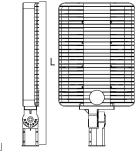
150W



Part No.	Length (L)	Width (W)	Height (H)	
AS11	20.9	11.8	3	
AS15	20.9	11.8	3	







Height (H)

3.1

∏∏н

Part No.	Length (L)	Width (W)	Height (H)		
AS11	20.9	11.8	3	A	٩S
AS15	20.9	11.8	3	R	Reco

Part No.	Length (L)	Width (W)
AS30	27.2	14.2
Recorded in inches		

Recorded in inches

Recorded in Inches	Γ	_ _					
Squaremount 110W	нГЕ			Squaremount 300W	н	⊥ <u>I • I</u> W	
150W					·		
Part No.	Length (L)	Width (W)	Height (H)	Part No.	Length (L)	Width (W)	Height <mark>(</mark> H)
AS11	20.5	11.8	5.8	AS11	26.7	14.2	5.8
AS15	20.5	11.8	5.8	Recorded in inches			
Be see well and implements and							

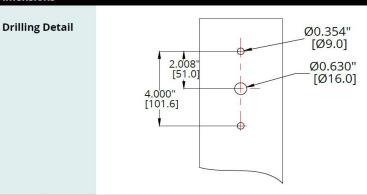
Recorded in inches

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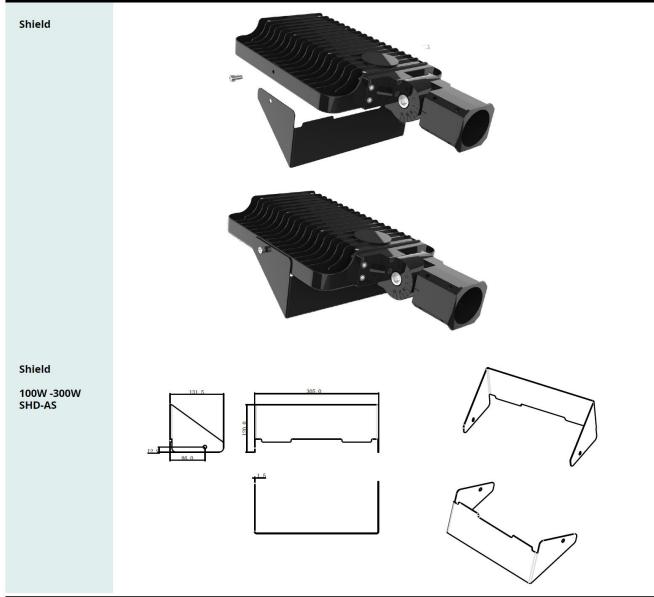
www.atgledlighting.com T: 951.245.6222 E: sales@atgledlighting.com

LED LIGHTING

Dimensions

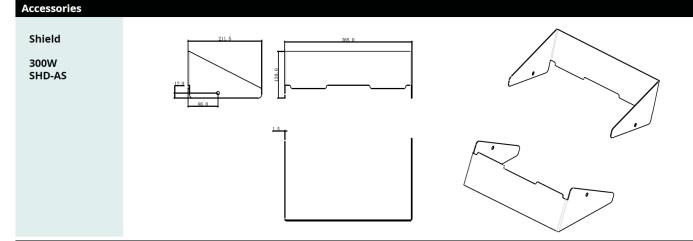


Accessories



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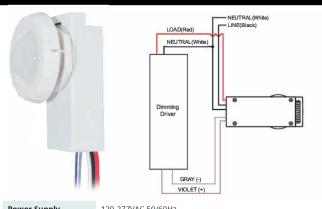
Electrical Accessories

BRI823 Digital PIR Bilevel Sensor





See sensor specsheet for more information



Power Supply	120-277VAC 50/60Hz
Maximum Load -40°C-70 °C	Resistive/Tungsten - 600W@120V Ballast Electronic (LED) -800/1200VA@120/277V
Dim Control Output	0-10V, max. 25mA sinking current
Detection Radius/ Angle	30ft@40ft height/360 °
Mounting Height	Max 24ft. @LW1 Max 40ft. @LS2
Remote Range	50ft. (15m) indoor, no backlight
Humidity	Max. 95% RH
Temperature	-40 °C - +70°C

FSP-221B-D* **BiLevel Sensor** IP66 Rated 110-480V



<u>*See Sensor Specsheet</u> for more information

Motion

Sensor



Load Ratings	@120V 0-800W tungsten, ballast, LED driver; 1/6hp motor @230-240V 0-300W ballast, LED driver @277V 0-1200W ballast, LED driver; 1/6hp motor @347/480V 0-1200W ballast, LED driver
0-10V Sinking Current	50mA
High/Low Modes	high:0-10V, low: off, 0-9.8V
Time Delay	30 sec, 1-30 min
Cut Off Delay	none, 1-59 minutes, 1-5 hours
Sensitivity/Service mode	low, med, max: on-fix, off-fix
Setpoints	hold off setpoint: none, 1-250 fc, auto photocell on/off setpoint: 1-250fc
Ramp and Fade Times	1-60 sec
Op Temperature	-40°F to +167°F (-40°C to +75°C)

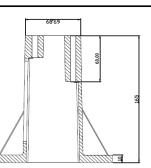
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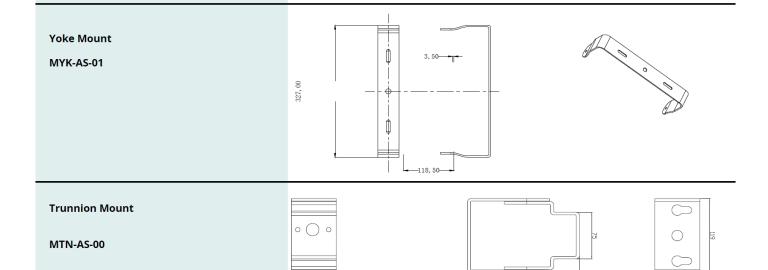


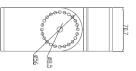
Mounting





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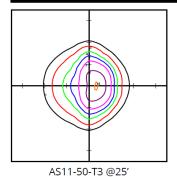
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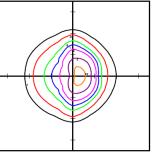
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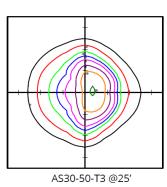


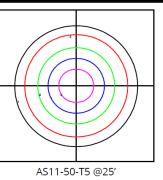
Photometric

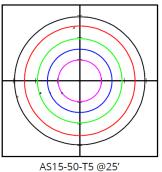




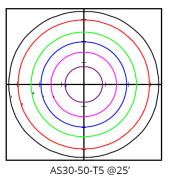
AS15-50-T3 @25'











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Outdoor



10 Year Warranty

ATG Electronics®

Industry Leading 10 Year Limited Warranty For North American LED Lighting Fixtures

ATG Electronics warrants to the original purchaser of ATG Electronics Domestic LED products listed above that were manufactured for which the ATG Electronics Spec Sheet located on our website contains the words "10 year limited warranty" that, subject to the below terms and conditions of this warranty, when such LED products are properly installed they will comply with ATG Electronics, published product specifications for such products and will be free from material defects in material and workmanship for a period of ten (10) years from the date of sale by ATG Electronics, or, if lesser, 50,000 hours of operation (at an average of 13.6 hours per day operation). The LED arrays in the Product(s) will be considered defective in material or workmanship only if a total of 15% or more of the individual light emitting diodes in the Product(s) fail to illuminate.

The above express limited warranty is extended by ATG Electronics® only to the original or first end-user purchaser and only for the original installed location. This warranty only applies to products purchased after June 1, 2017. This warranty is non-transferrable, whether by assignment or operation of law. The original purchaser must provide warranty claims to ATG Electronics within the warranty period promptly upon discovery and in accordance with ATG Electronics Return and Repair Procedures as outlined within this document.

Should any defects be found by ATG Electronics upon its inspection of the properly returned product, ATG Electronics sole responsibility and liability under this warranty will be, at its option, to either repair or replace the defective part or parts or else make available a new replacement unit that will provide equal or better performance. All decisions regarding the existence or nonexistence of defects or otherwise affecting the warranty shall be made by ATG ELECTRONICS and shall be final and binding on all parties. Where a defective LED product is replaced under this warranty, the balance of the original warranty period shall remain effective.

Conditions and Exclusions

This warranty is conditioned upon proper installation, use and maintenance. This warranty will automatically become null and void and shall not be applicable to any LED fixture which (i) has not been timely paid for, (ii) is not installed and operated in accordance with the current edition of The National Electric Code (NEC), the Standards for Safety of Underwriters' Laboratory, Inc. (UL) or with ATG Electronics instructions and guidelines, (iii) has been moved from its original installation, (iv) has been installed within an area that has exposure to sulfur or any area with high acidic compounds in use, (v) has been operated in an ambient temperature or humidity that is higher than 35 degrees Celsius, (vi) has been subjected to a lightning strike, power surge or overvoltage condition, (viii) has its LED Board subjected to static electricity due to failure to discharge same prior to connecting or disconnecting the lead from the LED board, (viii) was not installed and/or operated in accordance with ATG Electronics and guidelines, (ix) has been mishandled, misused, abused, tampered with, modified or altered by anyone other than ATG ELECTRONICS, (x) has been subjected to abnormal stresses and operating conditions, or (xi) has been operated without overvoltage and lightning protection devices in place.

Limitations

Disclaimers & Limitations of Liability

The foregoing warranty is exclusive of all other statutory, written or oral warranties and no other warranties of any kind, statutory, by operation of law or course of performance, or otherwise, are given, herein expressed or otherwise received. EXCEPT AS EXPRESSLY PROVIDED ABOVE, ATG ELECTRONICS DISCLAIMS ALL REPRESENTATIONS, WARRANTIES AND CONDITIONS OF ANY KIND, EXPRESS OR IMPLIED, REGARDING THE LED PRODUCTS AND ITS SERVICES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE OR PURPOSE.

LIMITATION OF LIABILITY. Other than the obligation to repair or replace as provided above, ATG Electronics shall have no liability for any losses, expenses or damages as a result of the installation, use, inability to use, removal or replacement of any LED product. ATG Electronics will not under any circumstances whether as a result of breach of contract, breach of warranty, tort, strict liability or or otherwise be liable for consequential, incidental, special or exemplary damages including but not limited to, loss of profits or loss of any other goods or associated equipment, cost of capital, cost of substitute products, facilities or services, down time cost or claims of claimant's customers. ATG Electronics liability on any claim of or any loss or damages arising out of, resulting from or concerning any LED product, any aspect of this warranty or for any products or services furnished hereunder shall not exceed the price of the fixture which gives rise to the claim.

Return and Repair Procedures

All warranty requests and or questions are to be directed to ATG Electronics Customer Service Department (CSD) at 888-618-7298. If deemed necessary, the CSD will issue a Returned Merchandise Authorization (RMA) number which must be included on both the packing slip of the component or fixture being returned and on the outside of the box. You must include your name and contact information, including your email address, on the packing slip so that we can contact you easily. Each component or fixture must be packaged very carefully and properly so as to prevent damages in shipment and must be shipped freight prepaid. Please obtain a proof of delivery to ensure that the material is received.

Once the component or fixture has been received and tested, an evaluation report will be provided to the end user via email. This report will clarify the following:

A) The component / fixture is covered under the warranty policy and will either be repaired or replaced.
B) The component / fixture is not covered under the warranty policy and the reason for this determination.

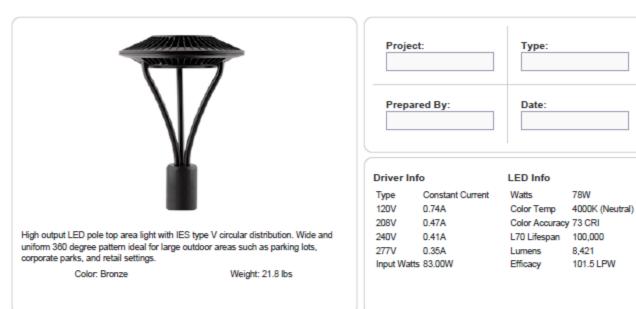
If ATG ELECTRONICS determines that the component or fixture is covered under the warranty, then the appropriate repairs will be started or a replacement fixture will be manufactured and shipped. Please note that in the event the returned component or fixture is found not to be covered under this warranty, you may be subject to a labor charge for the evaluation process and will be responsible for all return shipping charges and fees. For components and fixtures determined to be covered under this warranty prior to the first anniversary of the Sale Date, the repaired or replacement component or fixture will be responsible for all other shipping charges.

No Labor Reimbursement

All components and fixtures determined to be covered by this warranty as provided above, will be repaired or replaced at no charge to the customer, however, except as expressly provided above with respect to recessed and linear fixtures during the first year, the customer must hire and pay for an electrician to remove and reinstall such components and fixtures. No labor costs will be covered for the removal or reinstallation of any components or fixtures. The warranty does not cover modifications, repairs or replacements, or the related labor or materials costs, that may be necessary to facilities or third party products in connection with the removal, repair, or replacement of any LED product under this warranty.

ALED5T78N





Technical Specifications

Listings

UL Listed:

Suitable for wet locations

IESNA LM-79 & IESNA LM-80 Testing:

RAB LED luminaires and LED components have been tested by an independent laboratory in accordance with IESNA LM-79 and LM-80.

DLC Listed:

This product is on the Design Lights Consortium (DLC) Qualified Products List and is eligible for rebates from DLC Member Utilities. DLC Product Code: P00001776

LED Characteristics

LEDs:

6x13W high-output, long-life LEDs

Lifespan:

100,000-hour LED lifespan based on IES LM-80 results and TM-21 calculations

Color Consistency:

3-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color

Color Stability:

LED color temperature is warrantied to shift no more than 200K in color temperature over a 5year period

Color Uniformity:

RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017.

Construction

IP Rating:

Ingress Protection rating of IP66 for dust and water

Cold Weather Starting:

Minimum starting temperature is -40°C (-40°F)

Maximum Ambient Temperature:

Suitable for use in 40°C (104°F)

Effective Projected Area:

EPA = 1.2

Housing:

Precision die-cast aluminum, Type V distribution

Support Arms:

Extruded aluminum

Lens:

Clear tempered glass lens

Reflector:

Specular vacuum-metallized polycarbonate, Type V distribution

Gaskets:

High-temperature silicone

Finish:

Formulated for high durability and long-lasting color

Green Technology:

Mercury and UV free. RoHS-compliant components.

Other

Equivalency:

Equivalent to 350W Pulse Start Metal Halide

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ALED5T78N

RAB

Technical Specifications (continued)

Other Patents:

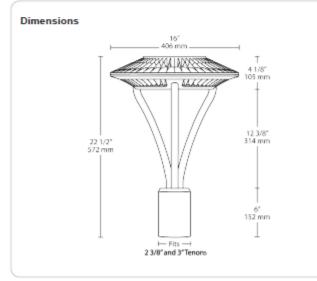
The designs of the ALED5T78 are protected by patents pending in US, Canada, China, Taiwan and Mexico

Warranty:

RAB warrants that our LED products will be free from defects in materials and workmanship for a period of five (5) years from the date of delivery to the end user, including coverage of light output, color stability, driver performance and fixture finish. RAB's warranty is subject to all terms and conditions found at rablighting.com/warranty.

Buy American Act Compliance:

RAB values USA manufacturing! Upon request, RAB may be able to manufacture this product to be compliant with the Buy American Act (BAA). Please contact customer service to request a quote for the product to be made BAA compliant.



Optical

BUG Rating: B3 U1 G1 Electrical

THD:

7% at 120V, 16.4% at 277V Power Factor:

99.2% at 120V, 90.6% at 277V

Drivers (3):

Constant Current, 720mA, Class 2 with 6kV surge protection, 100-277VAC, 50/60 Hz

Features

IES type V (circular) distribution 100,000-hour LED lifespan Compatible with standard 2 3/8" and 3" tenons "Air-Flow" fins for maximum heat dissipation 5-Year, No-Compromise Warranty

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ALED5T78N

RAB

Family	Distribution	Wattage	Color Temp	Finish	Driver Option	Options	Other Options
ALED	5T	78	N				
	5T = Type V	26 = 26W 52 = 52W 78 = 78W	Blank = 5000K (Cool) N = 4000K (Neutral) Y = 3000K (Warm)	Blank = Bronze W = White K = Black RG = Gray	Blank = 120-277V /D10 = Dimmable /BL = Bi-Level /480 = 480V /480/D10 = 480V w/ Dimmable	Blank = No Option /LC = Lightcloud Controller /PCT = 120-277V Twistlock Photocell /PCT4 = 480V Twistlock Photocell	USA = BAA Complian Blank = Standard

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