



690 Chesterfield Pkwy W • Chesterfield MO 63017-0760 Phone: 636-537-4000 • Fax 636-537-4798 • www.chesterfield.mo.us

### **Architectural Review Board Staff Report**

Meeting Date: March 14, 2024

From: Isaak Simmers, Planner

**Location:** 18305 Edison Ave

Description: Spirit of St. Louis Airpark, Lot 19 (AVMATS Hangar): An Amended Site

Development Section Plan, Landscape Plan, Lighting Plan, Amended Architectural Elevations, and Architects Statement of Design for a 4.93-acre leasehold area within a 9.45-acre tract of land zoned "M-3" Planned Industrial District located north of Edison Avenue just east of its intersection with N Bell Avenue and approximately 700 feet west of its

intersection with Spirit of St. Louis Boulevard (Ward 4).

#### **PROPOSAL SUMMARY**

Stock and Associates Consulting Engineers, Inc., on behalf of Centurion Investments, Inc., has submitted an Amended Site Development Section Plan, Landscape Plan, Lighting Plan, Amended Architectural Elevations, and Architects Statement of Design for a proposed expansion of the existing hangar in addition to modifications to the site's circulation and parking area.



Figure 1: Subject Site

#### **SITE HISTORY**

The site was zoned "M-3" Planned Industrial for Spirit of St. Louis Airport via ordinance 2212 prior to the incorporation of the City of Chesterfield and remained undeveloped. The current ordinance governing the site is <u>Ordinance 1430</u>. A Site Development Section Plan, Landscape Plan, Lighting Plan, and Architectural Elevations were reviewed by the Architectural Review Board in August, 2018 and the Board made a recommendation for approval with the following conditions:

- Differentiation in color to the office and hangar buildings;
- Soften the color of the proposed man doors and hangar door to match the field or similar color palette;
- Additional landscaping to the west elevation to carry around from the office area to the mechanical units.

The Site Development Section Plan was ultimately approved by Planning Commission in October, 2018. Power of Review was called with concerns over the voice vote being 5 to 2, but was ultimately rescinded following further discussion between Council and the applicant's engineer.

#### **STAFF ANALYSIS**

The subject site consists of an existing 45,000SF office / warehouse and hangar facility located on the north side of Edison Ave just east of its intersection with N Bell Avenue. The location of the existing hangar, Hangar 40, is directly adjacent to an airport taxiway and the building entrance is facing the frontage along Edison Avenue. The applicant is proposing a 48,000SF expansion of the existing structure to the east referred to as Hanger 45. Proposed Hangar 45 is broken up into two sections; a lower section, shorter in elevation, colored "Medium Gray" which will include a drive-in door, and a larger section, taller in elevation, colored "Fox Gray" which will include the hangar door on the north elevation.

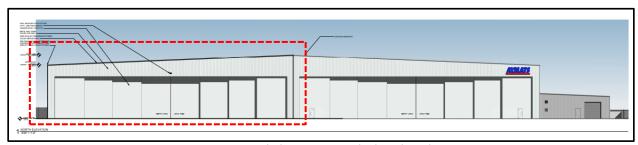


Figure 2: North Elevation, proposed indicated in red

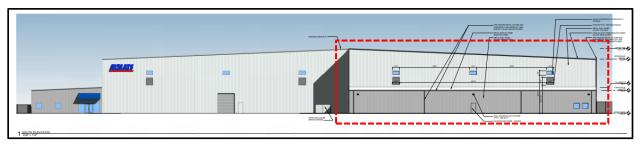


Figure 3: South Elevation, proposed indicated in red

#### **Circulation System & Access**

The subject site has one existing access on Edison Avenue. The proposed modifications include widening the existing access from thirty (30) feet to sixty (60) feet. In order to create the illusion of two separate access locations, painted striping will be incorporated as seen outlined in red in Figure 4. The design is to ensure the sixty (60) foot throat depth requirement is met at both entrances while allowing the space needed for the transportation of airport equipment and allow access to taxiways on the left and right sides of the parking area.

The proposed plan also includes the relocation of an existing screened trash enclosure to the northeast corner of the parking lot, seen outlined in blue.

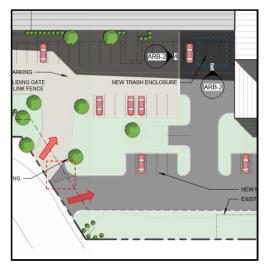


Figure 4: Proposed Access and Circulation

#### **Topography & Parking**

The natural topography of the site is relatively level and the applicant has not proposed the use or need for any site retaining walls. The proposed modifications to the parking area include a total of fifty-five (55) parking spaces on site in lieu of the maximum allowed sixty-eight (68) spaces. Per code requirements, office / warehouse (hangar) requires two (2) spaces for every three (3) employees on the maximum shift. The applicant has provided the maximum number of employees to be forty (40) employees, therefore the site requires a minimum of forty-one (41) spaces. All proposed parking is located on the southern portion of the site between the front of the building and Edison Avenue. There are two pre-existing ADA parking stalls located near the front entrance and there are no additional ADA parking stalls proposed.

#### Scale & Design

Proposed Hangar 45 is scaled to match the architecture of the existing AVMATS Hangar building to which the expansion is connecting. As previously stated, the proposed hangar is broken up into two building masses. The larger mass will make up a majority of the expansion and has a maximum height of approximately forty-five feet and three and a half inches (45' 3 ½"). This section of the expansion will have a hangar door along the north elevation. The smaller building mass has a maximum height of sixteen feet (16') and will extend further south than the existing office / hangar and be juxtaposed to the proposed parking area. The exterior of proposed Hangar 45 will be mainly comprised of Fox Gray metal wall panels with

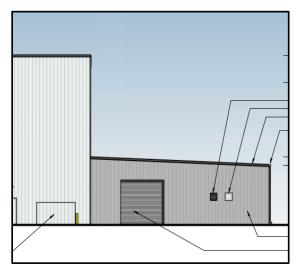


Figure 5: Patrial West Elevation of Proposed Addition

pre-finished metal gutter and downspouts. The north façade will include an exhaust louver, and a wall mounted light fixture. The smaller building mass will be finished with Medium Gray metal wall paneling and will also include an exhaust louver, fan, and pre-finished overhead door along the west elevation (see Figure 5). The proposed construction will be comparable to the scale and design of surrounding structure around the airport.

#### **Materials & Color**

The proposed exterior materials include; Pre-Engineered Metal Building Panels in Fox Gray, Medium Gray, and white. The Heavy Metal Doors and Frames (overhead doors, and hangar doors) will match either Fox Gray or Medium Gray and is compatible with the existing structure. The gutters and downspouts will also match either Fox Gray or Medium Gray. The glass windows seen in the elevations will be clear with low-E coating.

#### RENDERING



#### **Landscape Design & Screening**

Spirit of St. Louis Airport requested that all landscaping at developments within the airport's vicinity be limited to features that would not serve as wildlife attractants. Per City requirements, the applicant must provide a letter from a certified tree specialist to request modifications to the City's landscape requirements. The applicant has provided a letter from the United States Department of Agriculture (USDA) Wildlife Services which is included in the packet. The USDA reviewed the landscaping plan that was initially provided to Staff and determined that all the proposed plant species could attract hazardous wildlife. The applicant has since submitted a landscape plan that proposed existing trees to be removed where they will interfere with construction and keep all other existing landscaping. No new landscaping is proposed.

The trash enclosure will be screened with pre-finished sight-proof metal ribbed paneling to match existing materials on site. Adjacent to the entrance of the trash enclosure will be two six inches

(6") in diameter steel, concrete filled pipe bollards painted yellow. There is existing chain linked screening on site which will be expanded for security of the proposed expansion.

#### Lighting

The applicant has provided a site photometric plan and fixture cut sheets per code requirements. Site lighting was installed when the site was initially developed and all proposed fixtures have been chosen to be compatible with what is existing on site. The maximum footcandle (fc) on site is 7.3 fc is lieu of the maximum allowed 8.0 fc for commercial development per code requirements. All proposed parking is illuminated and all proposed fixtures will not exceed the maximum allowed height of twenty feet (20').

#### **DEPARTMENT INPUT**

Be advised, this project is still going through development review by the City Staff and will not proceed to the Planning Commission until all outstanding items have been addressed. All recommendations made by the Architectural Review Board will be included in Staff's report to the Planning Commission.

Staff requests review on an Amended Site Development Section Plan, Landscape Plan, Lighting Plan, Amended Architectural Elevations, and Architect's Statement of Design for a 4.93-acre leasehold area within a 9.45-acre tract of land zoned "M-3" Planned Industrial District located north of Edison Avenue just east of its intersection with N Bell Avenue and approximately 700 feet west of its intersection with spirit of St. Louis Boulevard, Lot 19 (AVMATS Hangar).

#### **MOTION**

The following options are provided to the Architectural Review Board for consideration relative to this application:

"I move to forward the Amended Site Development Section Plan, Landscape Plan, Lighting Plan, Amended Architectural Elevations, and Architect's Statement of Design for Spirit of St. Louis Airport, Lot 19 (AVMATS Hangar) as presented, with recommendation for approval (or denial) to the Planning Commission."

"I move to forward the Amended Site Development Section Plan, Landscape Plan, Lighting Plan, Amended Architectural Elevations, and Architect's Statement of Design for Spirit of St. Louis Airport, Lot 19 (AVMATS Hangar) to the Planning Commission with a recommendation for approval with the following recommendations..."

#### **Attachments**

- 1. ARB Application
- 2. Applicant's Statement of Design and Intent
- 3. Landscape Hazards Letter (STL Airport / USDA)
- 4. ARB Submittal



March 6, 2024

Architectural Review Board City of Chesterfield Planning Department 690 Chesterfield Parkway West Chesterfield. Missouri 63005 ACI BOLAND ARCHITECTS
17107 Chesterfield Airport Road, Suite 110
Chesterfield, Missouri 63005
T.314.991.9993

Re: AVMATS Hanger Expansion - Chesterfield, Missouri

ACI Boland Architects Project No. 2-23064

To City of Chesterfield – Planning Department:

We are pleased to submit the following project to The City of Chesterfield Architectural Review Board for their consideration. We have included in this Statement of Design listed below regarding how we plan to address each of the pertinent design standards as part of the design submittal requirements.

#### STATEMENT OF DESIGN INTENT

#### **General Requirements for Site Design**

#### Site Relationship

The 4.9 acre leasehold area contains an existing one story, 45,000 square foot building used as an office/warehouse and hangar. This proposal sets out to add a 48,000 square foot expansion at the East side of the existing building. This expansion will be used as additional hangar and storage space along with breakroom and restrooms. To the West of the property are existing hangars and to the East are existing office/warehouse buildings which front Spirit of St. Louis Blvd. Site access for the proposed building addition will be located on Edison Avenue, as illustrated by the Site Development drawings. The site has very little to no slope with existing trees and shrubs at the South and West sides of the existing building. Additional trees and plantings that comply with FAA regulations are included with this proposal. The adjacent properties to the West have very few trees or shrubs.

#### **Circulation System and Access**

The site is accessed off Edison Avenue and contains automobile parking in the front and a tarmac at the rear of the building with access to the taxi-ways. The vehicle entrance at the south is divided into two separate entrances with an overall width of approximately 60'. Existing landscaping will be supplemented with additional FAA compliant landscaping along the South Elevation to assist in screening the building from the street. Any required Mechanical and Electrical equipment will be placed on the East side of the proposed building and will be screened with FAA compliant landscaping. Located on the South side of the property, the trash dumpster will also be screened with a painted 6' high split face CMU and prefinished metal coping cap with composite or vinyl swinging gates and further veiled with additional FAA complaint landscaping. The visitor and employee parking is located near the entrance of the development along the fronts of the buildings. The accessible parking spaces are located along the front of the existing building allowing easy and safe access without needing to cross any drive lanes.

#### **Topography**

The natural topography is relatively level. Existing swales are located to the North, West, and South for

City of Chesterfield ACI Boland Architects Project No. 2-23064 March 6, 2024 Page 2

storm water management. We are following Spirit of St. Louis Airport regulations for bio-retention requirements.

#### **Retaining Walls**

We are not proposing the use or need for any site retaining walls at this time.

#### **General Requirements for Building Design**

#### **Scale**

The one story building is appropriately scaled to match the architecture of the existing AVMATS Hangar building to which this is connecting. To break down the scale of the building, the roof of the lean-to which houses the Storage and Breakroom/Restroom components has been brought down to a lower eave height to match the existing building. Windows are located on the South Elevation of the hangar to provide natural lighting into the hangar as well as articulation to the building facade.

#### Design

The building is designed to complement the other surrounding airport support buildings, but not overwhelm the existing AVSMATS Jet Support main headquarters which is located less than a quarter mile West of this building.

#### **Materials and Colors**

The materials on the building include two colors for the ribbed metal panels (a light and a dark), painted hollow metal doors, hangar doors, and overhead doors, one color standing seam metal roof, clear aluminum storefront windows with blue tinted glazing. The gutter, downspouts and trim will match the metal panels of the building.

Please refer to the exterior rendering and the larger material samples to be submitted at the Architectural Review Board meeting.

#### Landscape Design and Screening

The site has been carefully landscaped with trees and other shrubs/plantings to complement the existing landscape design, building scale and reduce the impact of the parking area and building to Edison Road. The required number of trees and shrubs has been provided and have been located to provide shade at strategic points while presenting visually pleasing vignettes to vehicular traffic and a beautiful buffer between the building and the street.

The plant palette, designed for low maintenance, has been selected from Chesterfield's list of approved trees. The chosen plants also provide pollinators and seasonal color & texture throughout the site as designed by the Landscape Architect.

We have also been advised by the USDA in cooperation with the FAA to eliminate certain plants that "produce seeds, fruit, or berries, or that provides dense roosting or nesting cover should not be used." This has also been taken into account for our submitted landscape plan.

Please refer to the submitted Landscape Plan and USDA letter for more information.

City of Chesterfield ACI Boland Architects Project No. 2-23064 March 6, 2024 Page 3

#### Signage

We understand that signage review is not part of this process and will be reviewed at a later date once the owner has selected signage for their building. Any signage submitted at that time will be designed to meet the City of Chesterfield Code.

#### Lighting

The site lighting has been carefully designed. See the submitted lighting plan and the referenced fixture cut-sheets for your reference.

Once again, we are please to be continuing our relationship with the City of Chesterfield through the development of your wonderful city. If should need any additional information or have questions, please feel free to call me.

Respectfully Submitted,

**ACI Boland Architects** 

Kristopher T. Mehrtens Senior Associate | Architect

Attachments:

City of Chesterfield – Architectural Review Board Project Statistics and Checklist

Sam Page County Executive

Jehn D. Bales, C.M. Director of Aviation



Business Aviation Center of the U.S.

December, 2023

Stock & Associates, Inc. Attn.: Joseph Fischer 257 Chesterfield Business Parkway Chesterfield, MO 63005

RE: AVMATS Hangar 45

Dear Mr. Fischer,

The Airport has reviewed sheets SD-1, SD-2, L1.01, LC-1 plus building exterior elevations submitted yesterday as the Site Development Section Plan for the above referenced project. The plants listed in the planting schedule on sheet L1.01 all serve as wildlife attractants, and we therefore request they be eliminated or replaced with non-fruit/seed bearing alternatives. See the attached letter from the Airport's director for more information on the matter.

The Airport also requests copies of all FAA form 7460 determinations once analysis has been completed.

We do not object to the width of the proposed parking lot entrance at the Edison curb line and believe it will be beneficial to future airport operations as the potential starting point for an access road to the northern portions of the airport, keeping fuel and maintenance vehicles off the public streets.

Feel free to call should you need further information.

Sincerely,

CC

SPIRIT OF ST. LOUIS AIRPORT

Justin Ryder Airport Engineer Digitally signed by Justin Ryder Date: 2023.12.05

14:40:07-06'00'

John D. Bales, CM, Director of Aviation David Schubert, Deputy Director of Aviation



Sam Page County Executive

John D. Bales, C.M. Director of Aviation Business Aviation Center of the U.S.

December 1,2023

RE:

Spirit of St. Louis Airport

Chesterfield, Missouri

Wildlife Management at Spirit of St. Louis Airport

To whom it may concern:

This letter is to address potential safety hazards created by certain types of landscaping features in and around Spirit of St. Louis Airport.

The Federal Aviation Administration (via FAA regulation subsection 139.337 and AC 150/5200-33C) makes it the responsibility of airport operators to minimize the chances of aircraft strikes with wildlife, both on the ground and in the air. One method is by controlling the amount and types of landscaping around the airport that could attract wildlife. Examples of landscape features that act as wildlife attractants include: water features, dense hedges, fruit and seed bearing trees, tall grasses, etc.

Therefore, the Spirit of St. Louis Airport requests that landscaping at developments within the airport's vicinity be limited only to the sorts of features that will not serve as an attractant to wildlife. Examples of this might include: decorative gravel, turf grasses, etc.

Thank you for your cooperation and please call, should you have any questions.

Sincerely,

**SPIRIT OF ST. LOUIS AIRPORT** 

John D. Bales

**Director of Aviation** 

David J. Schubert, Deputy Director of Aviation





CC





United States
Department of
Agriculture

Animal and Plant Health Inspection Service

Wildlife Services

18004 Edison Ave. Chesterfield, MO 63005 816-602-0672 (office)

### To whom it may concern

USDA Wildlife Services staff have reviewed the landscaping proposal and determined that all the proposed plant species listed in the planting schedule could attract hazardous wildlife. Per AC 150/5200-33C (Section 2.8.2.1), "Vegetation that produces seeds, fruits, or berries, or that provides dense roosting or nesting cover should not be used". Furthermore, the plant species in the proposed landscaping, particularly the tree and shrub selections, are known attractants to many of the bird species responsible for the majority of bird strikes indicated in the KSUS strike record. Black Gum of any variety provides roosting habitat, while also producing large amounts of attractive fruit desirable to birds during certain times of year. Junipers, Boxwoods, and tall ornamental grasses provide roosting/loafing opportunity and thermal cover for a variety of hazardous wildlife. Vegetative cover at airports should consist mostly of turf grasses whenever possible. In our region, endophyte infected fescues are generally the most suitable choice for our climate while minimizing any attractiveness to wildlife.

Dan Durbin USDA Wildlife Services



**DANIEL DURBIN** 

Digitally signed by DANIEL DURBIN

Date: 2024.02.22 14:23:19

-06'00'



VIEW LOOKING NORTH



VIEW LOOKING SOUTHWEST





VIEW LOOKING NORTHEAST

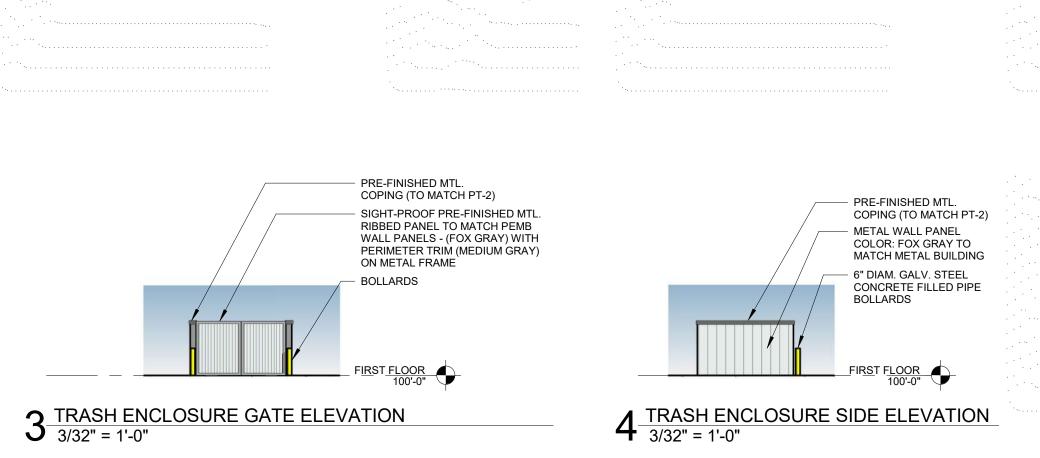


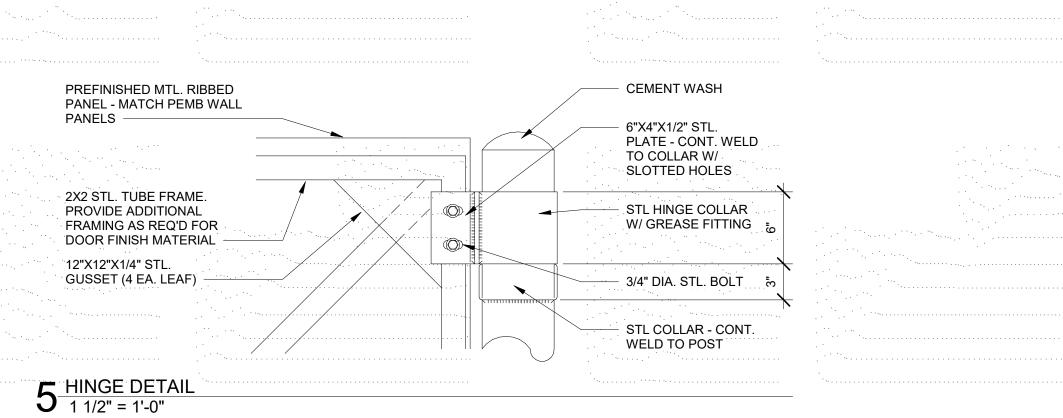
VIEW LOOKING EAST



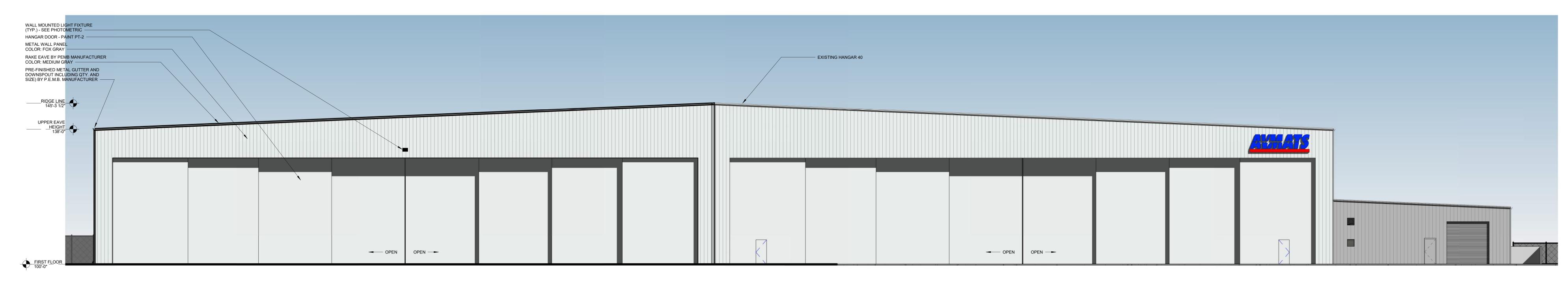
VIEW LOOKING SOUTH



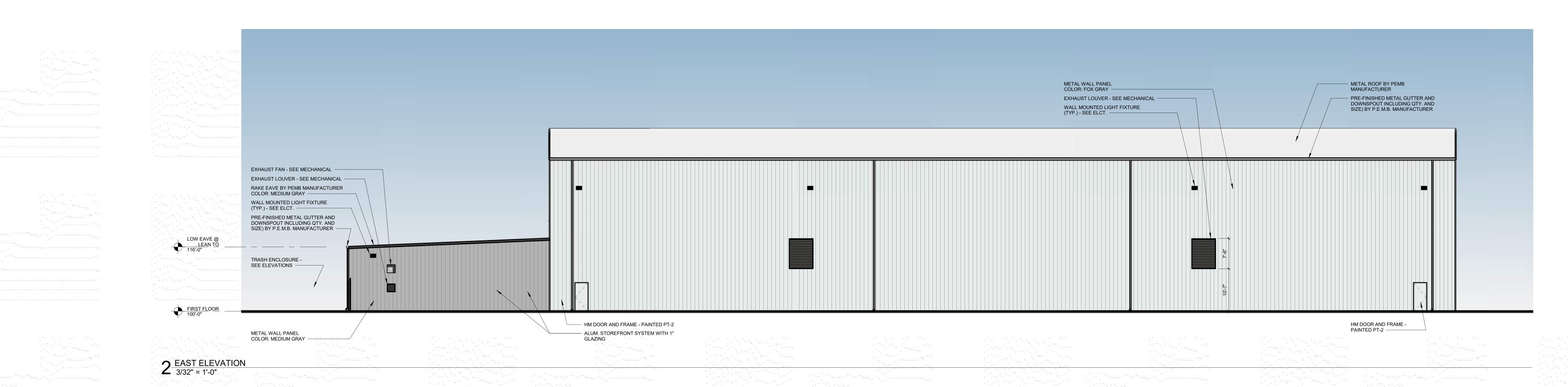




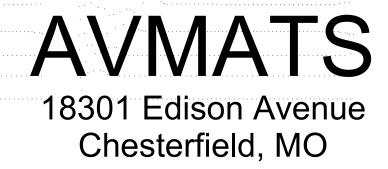
EXTERIOR MATERIAL LEGEND (BASIS OF DESIGN) Pre-Engineered Metal Building Panels (Warehouse) Pre-Engineered Metal Building Panels (Storage/Break) Medium Gray Pre-Engineered Metal Building Panels White PT-1 Match Fox Gray HM Doors & Frames, Overhead Doors, PT-2 Match Medium Gray and Hangar Door Aluminum Storefront 4 1/2" X 2" Thermally Broken Storefront System - Firestone Una-Clad, Kynar 500/Hyler 5000 - Anodized Aluminum Clear with Low-E Coating PT-1 Match Fox Gray Gutters and Downspouts PT-2 Match Medium Gray



1 NORTH ELEVATION 3/32" = 1'-0"







EXTERIOR MATERIAL LEGEND
(BASIS OF DESIGN)

Pre-Engineered Metal Building Panels
(Warehouse)

Pre-Engineered Metal Building Panels
(Storage/Break)

Pre-Engineered Metal Building Panels
(Roof)

HM Doors & Frames, Overhead Doors, and Hangar Door

Aluminum Storefront

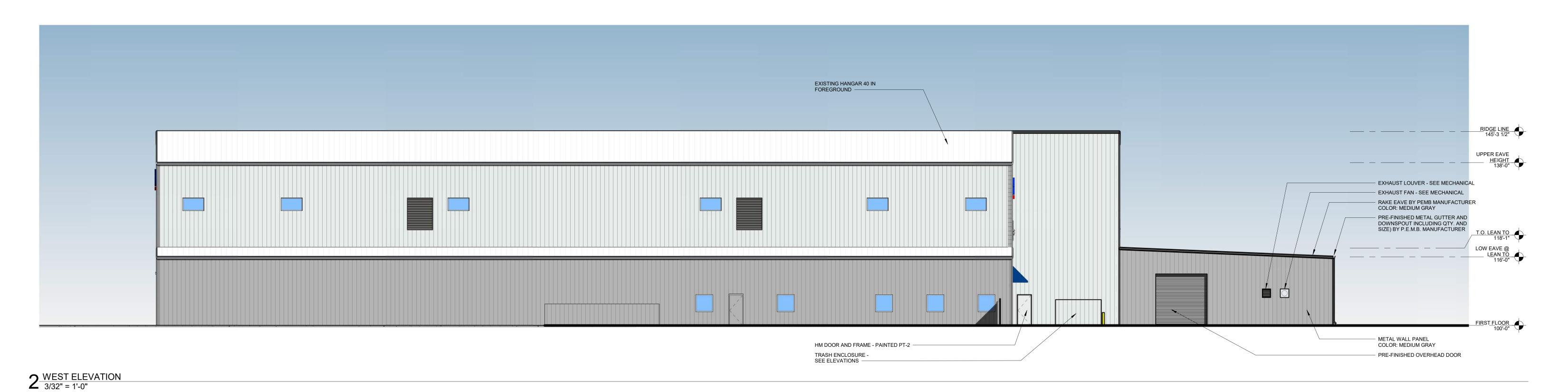
4 1/2" X 2" Thermally Broken Storefront System - Firestone Una-Clad, Kynar 500/Hyler 5000 - Anodized Aluminum

Glass

Clear with Low-E Coating

Gutters and Downspouts

PT-1 Match Fox Gray PT-2 Match Medium Gray



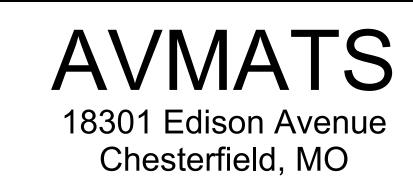
- ALUM. STOREFRONT SYSTEM WITH 1" GLAZING PRE-FINISHED METAL GUTTER AND DOWNSPOUT INCLUDING QTY. AND SIZE) BY P.E.M.B. MANUFACTURER EXHAUST FAN - SEE MECHANICAL - METAL WALL PANEL COLOR: FOX GRAY METAL ROOF BY PEMB MANUFACTURER RAKE EAVE BY PEMB MANUFACTURER COLOR: MEDIUM GRAY PRE-FINISHED METAL GUTTER AND DOWNSPOUT INCLUDING QTY. AND SIZE) BY P.E.M.B. MANUFACTURER EXISTING HANGAR 40 ——— METAL WALL PANEL
COLOR: MEDIUM GRAY UPPER EAVE 103'-9" T.O. LEAN TO 118'-1" LOW EAVE @ - WALL MOUNTED LIGHT FIXTURE
(TYP.) - SEE ELCT. TRASH ENCLOSURE -SEE ELEVATIONS — HM DOOR AND FRAME - PAINTED 1 SOUTH ELEVATION 3/32" = 1'-0"





PERSPECTIVE RENDERING 6" = 1'-0"





GENERAL NOTES

BEARINGS: MISSOURI STATE PLANE, GRID NORTH)

MAP NO. 29189C0145 K WITH AN EFFECTIVE DATE OF FEB. 4, 2015.

HIGHWAYS AND TRAFFIC AND MSD.

COMMENCEMENT OF ANY OFF-SITE GRADING.

MUST BE ESTABLISHED WITH THE SAINT LOUIS COUNTY.

ELEVATION AS ESTABLISHED BY THE FEMA MAP.

CHESTERFIELD STANDARDS.

CHESTERFIELD STANDARDS.

ADEQUATE DISCHARGE POINTS

SETBACKS: FRONT YARD - 30 FEET

**EXISTING CONTOURS** 

PROPOSED CONTOURS

**EXISTING SANITARY SEWERS** 

PROPOSED SANITARY SEWERS

EXISTING STORM SEWERS

PROPOSED STORM SEWERS

PROPOSED RIGHT-OF-WAY

EXISTING RIGHT-OF-WAY

NOTES PARKING SPACES

**EXISTING SPOT ELEVATION** 

PROPOSED SPOT ELEVATION

TO BE REMOVED & RELOCATED

CENTERLINE

EASEMENT

**GUY WIRE** 

**SWALE** 

TO BE REMOVED

BACK OF CURB

FACE OF CURB

GAS MAIN

WATER MAIN

TRASH ENCLOSURE

EXISTING LIGHT STANDARD

**UNDERGROUND TELEPHONE** 

UNDERGROUND TELEPHONE

- OVERHEAD ELECTRIC

- TELEPHONE TO BE REMOVED

- USE IN PLACE ADJUST TO GRADE

BACK OF CURB

- FACE OF CURB

- BOTTOM OF WALL

- TOP OF WALL

- PAVEMENT

- CONCRETE

- FINISHED GRADE

FINISHED FLOOR

LOWER LEVEL

TOP OF TURE

TOP OF CURB

METHANE GAS

SUBGRADE

- GROUND

- UNDERGROUND ELECTRIC

TBR & R - TO BE REMOVED AND REPLACED FND

TO BE USED IN PLACE

SIDE YARD - 10 FEET

REAR YARD - 10 FEET

**LEGEND** 

1.) BOUNDARY AND TOPOGRAPHICAL SURVEY BY STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC.(BASIS OF

3.) SUBJECT PROPERTY LIES WITHIN FLOOD ZONE "X" (AREAS WITH REDUCED FLOOD RISK DUE TO LEVEE, BASE

4.) ALL UTILITIES SHOWN HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATION

5.) ARCHITECTURAL ELEVATIONS. SITE LANDSCAPING PLANS. SITE LIGHTING PLANS AND SITE SIGNAGE PLANS

SHALL BE SUBMITTED TO THE CITY OF CHESTERFIELD AS INDIVIDUAL LOTS ARE DEVELOPED ON THEIR SITE

6.) ON-SITE STORM WATER DRAINAGE REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE CHESTERFIELD VALLEY

8.) CROSS-ACCESS EASEMENTS WHERE REQUIRED, SHALL BE EXECUTED AND RECORDED AS INDIVIDUAL LOTS ARE

TRAFFIC, A SPECIAL CASH ESCROW OR A SPECIAL ESCROW SUPPORTED BY AN IRREVOCABLE LINE OF CREDIT,

9.) PRIOR TO SPECIAL USE PERMIT ISSUANCE BY THE SAINT LOUIS COUNTY DEPARTMENT OF HIGHWAYS AND

10.) ALL BUILDINGS AND ROADWAYS SHALL BE ELEVATED A MINIMUM 1 FOOT ABOVE THE MAX. HIGH-WATER

11.) ALL PROPOSED IMPROVEMENTS SHALL BE CONSTRUCTED TO ST. LOUIS COUNTY, MODOT AND THE CITY OF

12.) ALL GRADING AND DRAINAGE TO BE IN CONFORMANCE WITH THE ST. LOUIS COUNTY, MSD AND CITY OF

13.) NO SLOPES WITHIN SAINT LOUIS COUNTY RIGHT-OF-WAY SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL).

14.) STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT. SINKHOLES ARE NOT

SUPPLEMENTAL PROTECTION AREA (SPA) AS DEFINED BY SECTION 405.05, FLOOD DAMAGE PREVENTION, OF

\_ \_ \_ \_ \_ 120 \_\_\_ \_ \_ \_

\_\_\_\_\_ 120 \_\_\_\_\_

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\_\_\_\_\_\_\_\_

+ EX. 120.15

<u>+ 120.10</u>

T.B.R.

\_\_\_\_ G \_\_\_\_

\_\_\_\_\_w \_\_\_\_

\_\_\_\_\_ T \_\_\_\_\_

- DEED BOOK

- PLAT BOOK

- SQUARE

- CLEANOUT

- MANHOLE

AREA INLET

- CURB INLET

- CLAY PIPE

- TAILSTAKE

- FLOWLINE

PROPOSED

ELEV, EL — ELEVATION

EXIST, EX - EXISTING

PROP, PR

- GRATE INLET

YARD DRAIN

- POLYVINYL CHLORIDE PIP

- CORRUGATED METAL PIPE

- REINFORCED CONCRETE PIPE

- BEST MANAGEMENT PRACTICES

- STORMWATER POLLUTION PREVENTION PLAN

- RIGHT-OF-WAY WIDTH - RECORD INFORMATION

- NOW OR FORMERLY

15.) AN ELEVATION CERTIFICATE WILL NEED TO BE COMPLETED FOR ANY STRUCTURE LOCATED WITHIN THE

16.) A SIGN PACKAGE IS REQUIRED FOR THIS DEVELOPMENT AND MUST BE APPROVED BY THE PLANNING

17.) LIGHT FIXTURES SHALL NOT EXCEED 20 FEET IN HEIGHT WHEN MOUNTED ON POLES.

18.) SITE IS ZONED M-3, PLANNED INDUSTRIAL DISTRICT WITH GOVERNING ORDINANCE NO. 1430.

BE EVIDENT, THE CONTRACTOR SHALL NOTIFY THE OFFICE OF THE ENGINEER IMMEDIATELY.

MASTER STORM WATER DRAINAGE PLAN AND AS DIRECTED BY THE CITY OF CHESTERFIELD.

7.) OFF-SITE GRADING EASEMENTS, IF REQUIRED, SHALL BE EXECUTED AND RECORDED PRIOR TO THE

FLOOD ELEVATIONS 459 FEET). ACCORDING TO THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE

RATE MAP FOR THE ST. LOUIS COUNTY, MISSOURI AND INCORPORATED AREAS. THIS MAP IS IDENTIFIED AS

SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR HAS THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES, PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED. SHOULD ANY CONFLICTS

2.) GRADING & STORM WATER PER THE CITY OF CHESTERFIELD, THE ST. LOUIS COUNTY DEPARTMENT OF

### **AVMATS JET SUPPORT** 18377 EDISON AVENUE CHESTERFIELD, MISSOURI 63005

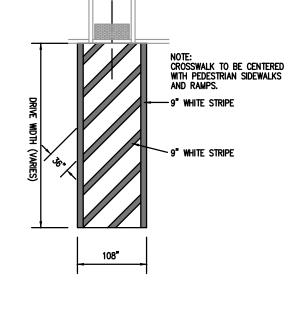
### 3050 WEST CLAY STREET ST. CHARLES, MISSOURI 63301 ATTN: JASON PREWITT

## ST. LOUIS COUNTY NOTES

FOR WORK PROPOSED WITHIN ST. LOUIS COUNTY RIGHT-OF-WAY (EDISON AVE.)

- 1.) ALL SIDEWALKS TO BE CONSTRUCTED TO SAINT LOUIS COUNTY ADA STANDARDS WITHIN ST. LOUIS COUNTY R/W. 2.) THE DEVELOPER IS REQUIRED TO PROVIDE ADEQUATE STORM WATER SYSTEMS IN ACCORDANCE WITH SAINT LOUIS COUNTY AND MSD STANDARDS.
- 3.) ALL GRADING AND DRAINAGE TO BE IN CONFORMANCE WITH SAINT LOUIS COUNTY AND MSD STANDARDS.
- 4.) NO SLOPES WITHIN ST. LOUIS COUNTY RIGHT-OF-WAY SHALL EXCEED 3 (HORIZONTAL) TO 1 (VERTICAL)
- 5.) STORM WATER SHALL BE DISCHARGED AT AN ADEQUATE NATURAL DISCHARGE POINT.
- SINKHOLES ARE NOT ADEQUATE DISCHARGE POINTS.
- 6.) ALL WORK WITHIN ST. LOUIS COUNTY RIGHT-OF-WAY SHALL BE TO COUNTY STANDARDS. 7.) ALL DISTURBED EARTH AREAS WITHIN ST. LOUIS COUNTY RIGHT-OF-WAY SHALL BE SODDED.
- 8.) INSTALLATION OF LANDSCAPING AND ORNAMENTAL ENTRANCE MONUMENT OR IDENTIFICATION SIGNAGE CONSTRUCTION, IF PROPOSED, SHALL BE REVIEWED BY THE DEPARTMENT OF HIGHWAYS AND TRAFFIC FOR SIGHT DISTANCE CONSIDERATIONS AND APPROVED PRIOR TO INSTALLATION OR CONSTRUCTION.
- 9.) THE DEVELOPER IS ADVISED THAT UTILITY COMPANIES WILL REQUIRE COMPENSATION FOR RELOCATION OF THEIR FACILITIES WITHIN THE PUBLIC ROAD RIGHT-OF-WAY. ST. LOUIS COUNTY SHALL BEAR NO RESPONSIBILITY FOR UTILITY RELOCATION OR ADJUSTMENT COSTS OR ASSOCIATED DELAYS. UTILITY RELOCATION COST SHALL BE CONSIDERED THE DEVELOPER'S RESPONSIBILITY. THE DEVELOPER SHALL ALSO BE AWARE OF EXTENSIVE DELAYS IN UTILITY COMPANY RELOCATION AND ADJUSTMENTS. SUCH DELAYS WILL NOT CONSTITUTE A CAUSE TO ALLOW OCCUPANCY PRIOR TO COMPLETION OF ROAD IMPROVEMENTS.
- 10.) PROVIDE ADEQUATE OFF—STREET PARKING FOR CONSTRUCTION EMPLOYEES. PARKING ON NON—SURFACED AREAS SHALL BE PROHIBITED IN ORDER TO ELIMINATE THE CONDITION WHEREBY MUD FROM CONSTRUCTION AND EMPLOYEE
- VEHICLES IS TRACKED ONTO THE PAVEMENT CAUSING HAZARDOUS ROADWAY AND DRIVEWAY CONDITIONS. 11.) ADDITIONAL SILTATION CONTROL SHALL BE INSTALLED AS REQUIRED BY ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS
- AND TRAFFIC.
- 12.) PERMIT WILL BE REQUIRED BY ST. LOUIS COUNTY DEPARTMENT OF PUBLIC WORKS FOR CONSTRUCTION OF RETAINING
- 13.) PERMIT WILL BE REQUIRED BY ST. LOUIS COUNTY DEPARTMENT OF PUBLIC WORKS FOR ROOF DRAIN CONNECTIONS.
- 14.) ALL OFFSITE PROPERTY OWNERS SHALL BE GIVEN NOTICE 48 HOURS IN ADVANCE OF ANY WORK.
- 15.) ANY DISTURBED OFF SITE PROPERTY (I.E. BUSHES, FENCES, MAILBOXES, ETC.) SHALL BE REPLACED, IN KIND, AT THE DEVELOPER'S EXPENSE.
- 16.) INTERNAL (PRIVATE) STORM SEWERS WILL REQUIRE A SEPARATE DRAINLAYER PERMIT FROM ST. LOUIS COUNTY DEPARTMENT OF PUBLIC WORKS.
- 17.) TREES AND/OR SHRUBS SHALL NOT BE REMOVED OR DISTURBED WITHIN ST. LOUIS COUNTY RIGHT-OF-WAY WITHOUT PRIOR APPROVAL OF THE ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS AND TRAFFIC.
- 18.) TRUCKS SHALL NOT EXCEED POSTED WEIGHT LIMITS FOR ST. LOUIS COUNTY BRIDGES DURING HAUL OPERATIONS.
- 19.) SEDIMENT SHALL BE WASHED FROM ALL VEHICLES AT WASHDOWN STATION PRIOR TO LEAVING SITE. NO TRACKING OF
- MUD ONTO COUNTY ROADS SHALL BE ALLOWED.
- 20.) INTERIM STORM WATER DRAINAGE CONTROL IN THE FORM OF SILTATION CONTROL MEASURES ARE REQUIRED.
- 21.) ALL CONSTRUCTION SHALL BE PER MOST CURRENT DETAILS LOCATED IN THE ST. LOUIS COUNTY DESIGN CRITERIA MANUAL AND/OR THE SEDIMENT AND EROSION CONTROL MANUAL.
- 22.) ALL HYDRANTS, POWER POLES OR OTHER OBSTRUCTIONS WITHIN ST. LOUIS COUNTY ROAD RIGHT-OF-WAY SHALL HAVE A MINIMUM TWO FOOT SETBACK FROM FACE OF CURB OR EDGE OF SHOULDER OF THE ULTIMATE PAVEMENT SECTION AS DIRECTED BY ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS AND TRAFFIC.
- 23.) RIGHT-OF-WAY DEDICATION SHALL BE COMPLETED PRIOR TO THE ISSUANCE OF A SPECIAL USE PERMIT. ROAD IMPROVEMENTS SHALL BE COMPLETED PRIOR TO THE ISSUANCE OF AN OCCUPANCY PERMIT. IF DEVELOPMENT PHASING IS ANTICPATED. THE DEVELOPER SHALL COMPLETE ROAD IMPROVEMENTS. RIGHT-OF-WAY DEDICATION. AND ACCESS REQUIREMENTS OF EACH PHASE OF DEVELOPMENT AS DIRECTED BY THE DEPARTMENT OF HIGHWAYS AND TRAFFIC. THE DELAYS DUE TO UTILITY RELOCATION AND ADJUSTMENTS WILL NOT CONSTITUTE A CAUSE TO ALLOW OCCUPANCY PRIOR TO COMPLETION OF ROAD IMPROVEMENTS.
- 24.) APPLICANT SHALL USE EXTREME CAUTION IN AREAS WHERE TRAFFIC SIGNAL FACILITIES ARE EXISTING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR/DEVELOPER TO CONTACT THE ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS AND TRAFFIC AT (314) 615–0215 A MINIMUM OF 48 HOURS IN ADVANCE OF CONSTRUCTION WORK FOR LOCATIN AND SPOTTING EXISTING TRAFFIC SIGNAL CONDUIT. IN THE EVENT THE CONTRACTOR DAMAGES ANY TRAFFIC SIGNAL FACILITIES, REPAIRS SHALL BE MADE AT THE CONTRACTOR'S EXPENSE BY AN ELECTRICAL CONTRACTOR AS DIRECTED
- 25.) THE CONTRACTOR SHALL NOTIFY THE ST. LOUIS COUNTY DIVISION OF OPERATIONS STRIPING PERSONNEL AT (314) 615–0233, 24 HOURS IN ADVANCE OF ANY STRIPING RELATED WORK. ALL GRINDING OF EXISTING STRIPING AND INSTALLATION OF TEMPORARY STRIPING AS REQUIRED BY ST. LOUIS COUNTY SHALL BE PERFORMED BY THE CONTRACTOR. ALL PERMANENT STRIPING WILL BE INSTALLED BY THE ST. LOUIS COUNTY DEPARTMENT OF HIGHWAYS
- 26.) ANY ENTITY THAT PERFORMS WORK ON ST. LOUIS COUNTY MAINTAINED PROPERTY SHALL PROVIDE THE COUNTY WITH A CERTIFICATE OF INSURANCE EVIDENCING GENERAL LIABILITY COVERAGE (BODILY INJURY AND PROPERTY DAMAGE) IN THE AMOUNTS SPECIFIED AS THE LIMITS OF LIABILITY SET BY THE STATE FOR PUBLIC ENTITIES. SUCH CERTIFICATE SHALL INCLUDE "ST. LOUIS COUNTY" AS AN ADDITIONAL INSURED AND SHALL BE PROVIDED PRIOR TO THE ISSUANCE OF ANY PERMIT. CERTIFICATE SHALL PROVIDE FOR A 30 DAY POLICY CANCELLATION NOTICE TO ST. LOUIS COUNTY. UPON REQUEST, THE COUNTY WILL PROVIDE THE SPECIFIC AMOUNTS FOR BOTH PER PERSON AND PER OCCURRENCE
- 27.) ALL SIDEWALKS, SIDEWALK TERMINATIONS, AND ASSOCIATED ACCESSIBILITY IMPROVEMENTS SHALL BE CONSTRUCTED TO ST. LOUIS COUNTY ADA STANDARDS, WITHIN ST. LOUIS COUNTY R/W.
- 28.) PRIOR TO IMPROVEMENTS/CONSTRUCTION PLAN APPROVAL. THE ENGINEERS SHALL PROVIDE A SIGNED AND SEALED NOTE ON THE PLANS FOR BOTH RESIDENTIAL AND COMMERCIAL PROJECTS STATING THAT THE UNIMPROVED EXISTING
- SIDEWALK ALONG THE PROJECT FRONTAGE MEETS CURRENT ST. LOUIS COUNTY/ADA STANDARDS. 29.) SIDEWALK TERMINATIONS IN COMPLIANCE WITH ST. LOUIS COUNTY ADA STANDARDS SHALL BE PROVIDED.
- 30.) CONTINUOUS PEDESTRIAN ACCESS SHALL BE PROVIDED DURING THE CONSTRUCTION PROCESS. PRIOR TO THE START OF CONSTRUCTION, ADEQUATE PEDESTRIAN ACCESS AROUND THE SITE SHALL BE PROVIDED AND VERIFIED. NO EXISTING SIDEWALK SHALL BE REMOVED WITHOUT PROVIDING ADEQUATE PEDESTRIAN FACILITIES AND ROUTES DURING
- 31.) MAXIMUM LEGAL LENGTHS IN THE COUNTY ARE FORTY (40) FEET FOR ANY SINGLE UNIT TRUCK AND FIFTY—FIVE (55) FEET FOR ANY COMBINATION OF VEHICLES, INCLUDING THE LOAD. MAXIMUM LEGAL WIDTH IS EIGHT (8) FEET AND MAXIMUM HEIGHT IS THIRTEEN AND ONE-HALF (13 ½) FEET. LEGAL WEIGHT LIMITS IN THE COUNTY ARE THE SAME AS THOSE REQUIRED BY MISSOURI STATE LAWS, EXCEPT IN CASES WHEN THE COUNTY COUNCIL HAS ESTABLISHED ROADWAY LOAD LIMITS BY ORDINANCE OR WHEN BRIDGES ARE POSTED UNDER STATE REGULATIONS. ANY VEHICLES EXCEEDING THESE LIMITS SHALL REQUIRE A SPECIAL USE PERMIT FOR OVERWEIGHT AND/OR OVER-DIMENSION
- VEHICLES PRIOR TO DRIVING ON ST. LOUIS COUNTY ROADWAYS. CONTACT (314) 615-8517 FOR PERMITS. 32.) ALL STRIPING WITHIN COUNTY RIGHT-OF-WAY SHALL BE INSTALLED BY COUNTY FORCES.
- 33.) THE CONTRACTOR SHALL MAINTAIN EXISTING TRAFFIC CONTROL SIGNS (STREET NAME, STOP, NO PARKING, ONE WAY, TURN, ETC) UNTIL SUCH TIME AS THEY NEED TO BE REMOVED/RELOCATED FOR CONSTRUCTION OPERATIONS. TEMPORARY SIGNING SHALL BE IN ACCORDANCE WITH THE CURRENT VERSION OF MUTCD CHAPTER 6F (TEMPORARY TRAFFIC CONTROL ZONE DEVICES). EXISTING SIGNS SHALL NOT LIE ON THE GROUND FOR ANY PERIOD OF TIME. PORTABLE SUPPORTS SHALL NOT BE LOCATED ON SIDEWALKS OR AREAS DESIGNATED FOR PEDESTRIAN TRAFFIC. SIGNS SHALL BE CRASHWORTHY AND PROPERLY MAINTAINED FOR CLEANINESS, VISIIBILITY, AND PROPER POSITIONING,
- AND SHALL BE COORDINATED WITH THE ST. LOUIS COUNTY SIGN SHOP AT (314) 615-0242. 34.) ACCESS TO ALL PROPERTIES SHALL BE MAINTAINED AT ALL TIMES DURING THE CONSTRUCTION PROCESS.

# 4" BLUE STRIPE 4" BLUE STRIPE --- 4" WHITE STRIPE (n.t.s.)



PEDESTRIAN CROSSWALI

(n.t.s.)

(RESERVED)

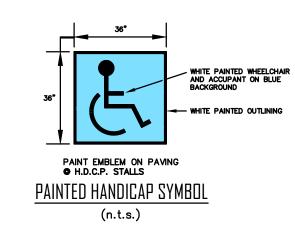
**PARKING** 

USDOT STANDARD R7-8 SIGN VAN

NOTE (R7-8 SIGN): THIS IS A STANDARD SIGN AND MAY BE CROERED FROM ANY TRAFFIC SIGN SUPPLIER BY NUMBER. THE SIGN MUST BE SUPPLEMENTED WITH A "VAN ACCESSIBLE" SIGN AS APPLICABLE AND/OR AMOUNT OF THE FINE FOR ILLEGALLY PARKING IN THE RESERVED SPACE(S) A MUNICIPALITY MAY IMPOSE. CONFIRM WITH LOCAL REGULATIONS.

ACCESSIBLE

ACCESSIBLE SIGN DETAI



2. PAINT BACK OF SIGNS TO MATCH POST.

CONC. FILLED 6"Ø DUCTILE IRON PIPE PAINTED BLACK —

P.C. CONCRETE — WITH #6-14" LONG BARS EACH WAY

ACCESSIBLE PARKING SIGN

### **BENCHMARK**

## SL-40: BRASS DISC STAMPED "SL-40. 1990" ON THE NORTH SIDE OF NORTH OUTER 40 RD, ACROSS FROM INTERSECTION OF SPIRIT OF ST. LOUIS BOULEVARD SITE BENCHMARK

<u>ABBREVIATIONS</u>

(\_'W)

ELEV.=461.90 FND. IRON PIPE AT THE NORTHWEST CORNER OF SITE AS SHOWN HEREON.

## prepared for:

ATTN: LAWRENCE HAWKINS

CONTEGRA CONSTRUCTION LLC

# SITE DEVELOPMENT SECTION PLAN HANGAR 45

A TRACT OF LAND BEING LOT 19 OF SIPIRT OF ST. LOUIS AIRPORT PLAT 1 AS RECORDED IN PLAT BOOK 258, PAGE 74 TOWNSHIP 45 NORTH. RANGE 3 EAST OF THE 5TH PRINCIPAL MERIDIAN CITY OF CHESTERFIELD, ST. LOUIS COUNTY, MISSOURI



PREVIOUS APPROVED PLANS ON SITE: SITE DEVELOPMENT SECTION PLAN RECORDED ON 11/07/2018, P.B. 366 PGS. 490-494

GEOTECHNICAL ENGINEER'S STATEMENT

SCI ENGINEERING, INC., at the request of Contegra Construction Company

CHESTERFIELD, MISSOURI", May 2018, SCI No. 2009-0313.11. Our findings

indicate that the earth-related aspects are suitable for the development

proposed pursuant to the geotechnical recommendations set forth in our

TIMOTHY J

NUMBER PE-2011015698

has provided geotechnical services for the project proposed hereon. A

geotechnical investigation titled "Geotechnical Report AVMATS HANGAR

Geotechnical Report.

Timothy J. Barrett, P.E.

### SITE INFORMATION

ADDRESS = 18301 EDISON AVENUE CHESTERFIELD, MO 63005

= 9.27 ACRES = CENTURION INVESTMENTS, INC. **OWNER** = CITY OF CHESTERFIELD CITY

= MSD

ZONING = "M3" PLANNED INDUSTRIAL DISTRICT ORDINANCE NO. = 1430FLOOD MAP = 29189C0145K

SEWER DISTRICT

WATERSHED = MISSOURI RIVER FIRE DISTRICT = MONARCH CHESTERFIELD SCHOOL DISTRICT = ROCKWOOD R-6

ELECTRIC SERVICE = AMEREN GAS SERVICE = SPIRE PHONE SERVICE = AT&T

WATER SERVICE = MISSOURI-AMERICAN WATER CO. = CHARTER COMMUNICATIONS CABLE SERVICE

### SPIRIT OF ST. LOUIS AIRPORT OPERATES UNDER THE FOLLOWING PERMITS: GENERAL PERMIT MO-R80F016 AND LAND DISTURBANCE PERMIT MOR 103441

### PARKING CALCULATIONS

TOTAL BUILDING AREA DATA: EXPANSION BUILDING AREA DATA: EXISTING BUILDING AREA DATA: HANGAR: 74,433 S.F. HANGAR: 39,300 S.F. HANGAR: 35,133 S.F. WAREHOUSE: 14,103 S.F. WAREHOUSE: 8,733 S.F. WAREHOUSE: 5,370 S.F. OFFICE: 4,497 S.F. OFFICE: 0 S.F. OFFICE: 4,497 S.F. TOTAL: 93,033 S.F.

REQUIRED PARKING: (MINIMUM)

 $3.3/1,000 \text{ GFA} = 3.3/1,000 \times 4,497 = 14 \text{ SPACES}$ 2 SPACES FOR EVERY 3 EMPLOYEES ON THE MAXIMUM SHIFT (40 EMPLOYEES = 27 SPACES) WAREHOUSE/HANGAR: TOTAL PERMITTED (MINIMUM):

(MAXIMUM) OFFICE:

 $4.5/1,000 \text{ GFA} = 4.5/1,000 \times 4,497 = 20 \text{ SPACES}$ WAREHOUSE/HANGAR: 1.2 SPACES PER EMPLOYEE ON THE MAXIMUM SHIFT (40 EMPLOYEES = 48 SPACES) TOTAL PERMITTED (MAXIMUM):

TOTAL PROVIDED: 55 SPACES (2 ACCESSIBLE)

REQUIRED LOADING: 10x40 LOADING SPACE (3 10x25 LOADING SPACE (0)

3 SPACES (10x40) 3 SPACES (10x40) 1 SPACE (10x25) TOTAL REQUIRED: TOTAL PROVIDED:

## OPEN SPACE CALCULATIONS

PERCENT OPENSPACE:

LOT AREA: 404,176 S.F. BUILDING AREA: 93,033 S.F. 0.23 F.A.R.: (93,033 / 404176) VEHICLE PAVEMENT AREA: 98,462 S.F.

 $[(404,176 - (93,033+98,462)) / 404,176] \times 100 = 52.62\%$ 

AVMATS Jet Support, the owner of the property shown on this plan for and in consideration of being granted approval of said plan to develop property under the provisions of Section 03,\_\_\_\_ \_\_ of City of (applicable subsection)

Chesterfield Unified Development Code, do hereby agree and declare that said property from the date of recording this plan shall be developed only as shown thereon, unless said plan is amended by the City of Chesterfield, or voided or vacated by order of ordinance of the City of Chesterfield Council.

State of \_\_\_\_\_ County of

A.D., 2024, before me personally appeared \_, to me known, who, being by me sworn in, did say (Officer of Corporation)

that he/she is the \_\_\_\_\_

(Name of Corporation) \_\_ , and that the seal affixed to the corporation in the State of foregoing instruments is the corporate seal of said corporation, and that said instrument was signed on behalf of said corporation by authority of its Board of Directors, and the said \_\_\_\_\_ \_\_\_\_\_ acknowledged said (Officer of Corporation)

instrument to be the free act and deed of said corporation. In testimony whereof, I have hereunto set my hand and affixed my Notarial Seal at \_\_\_\_, the day and year last above written. my office in \_\_\_

My term expires \_\_\_\_\_

(County and State)

Notary Public

This Site Development Plan was approved by the City of Chesterfield and duly verified on the \_\_\_\_\_ day of \_\_\_\_\_, 2024, by the Chairperson of said Commission, authorizing the recording of this Site Development Plan pursuant to Chesterfield Ordinance Number 200, as attested to by the Director of Planning and the City Clerk.

Justin Wyse, AICP Director of Planning City of Chesterfield, Missouri

Vickie McGownd, City Clerk City of Chesterfield, Missouri

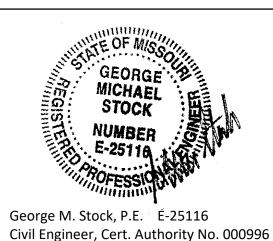
## SURVEYOR CERTIFICATE

This is to certify that Stock & Associates Consulting Engineers, Inc. has prepared this Site Development Section Plan from an actual survey. The information shown is a correct representation of all existing and proposed land divisions.

STOCK AND ASSOCIATES CONSULTING ENGINEERS, INC. LC 222-D

Walter J. Pfleger, Missouri P.L.S. No. 2008-000728





BOLAND ARCHITECTS

Kansas City | St. Louis 17107 Chesterfield Airport Road, Suite 110 Chesterfield, MO 63005 T: 314.991.9993 Licensee's Certificate of Authority Number:

Missouri: #000958

Stock & Associates 257 Chesterfiled Business Parkway

ACI/Boland, Inc.

St. Louis, MO 63005 (636) 530-9100 Licensee's Certificate of Authority Number: **LANDSCAPE** 

Loomis Associates 750 Spirit 40 Park Dr. Chesterfield, MO 63005 (636) 519-8668

**GENERAL CONTRACTOR** 

Licensee's Certificate of Authority Number:

Licensee's Certificate of Authority Number:

3050 W. Clay St., Suite 300 St. Charles, MO 63301 (618) 219-4868

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12/04/2023 218-6256.3 Job Number JEF Drawn By

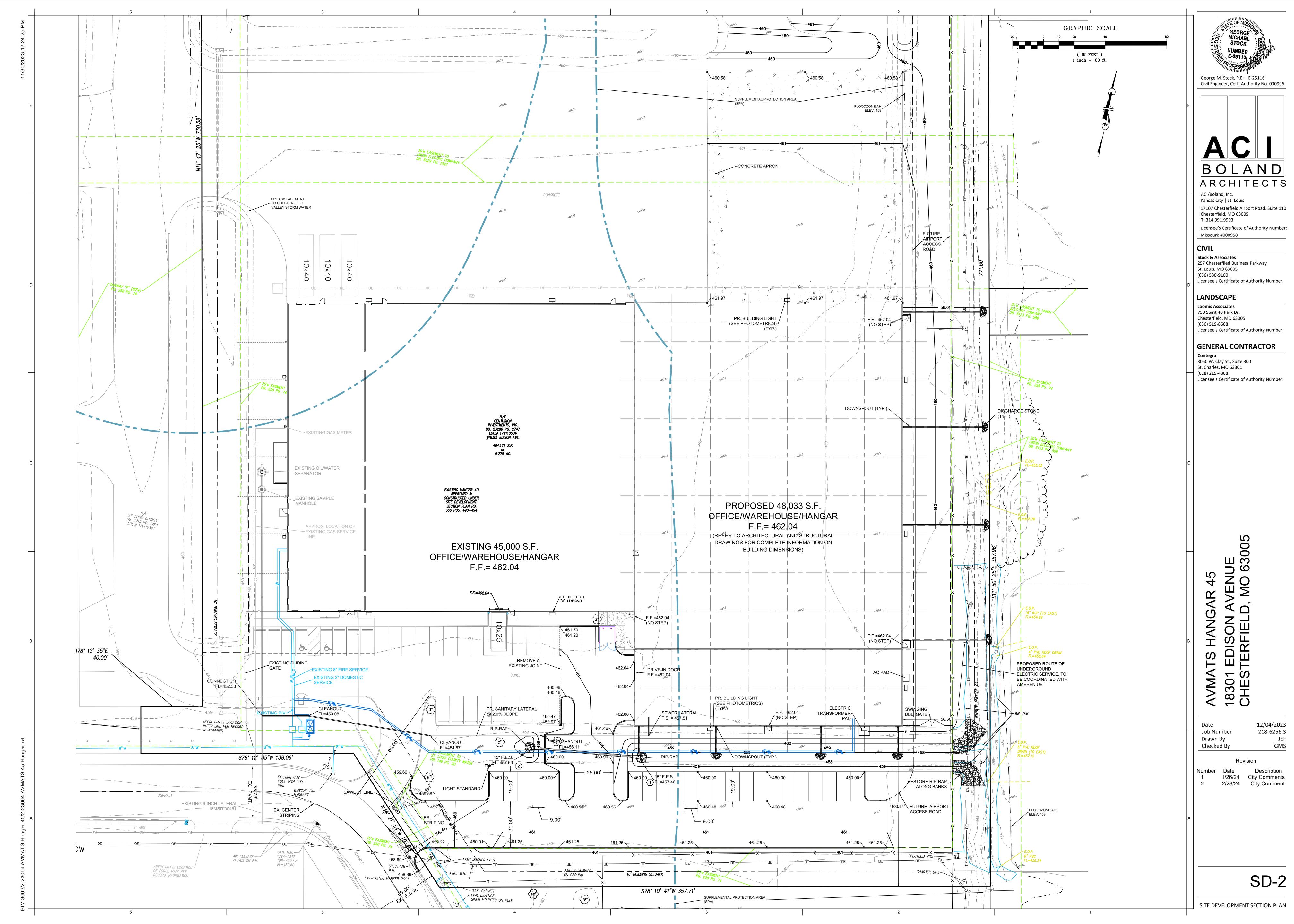
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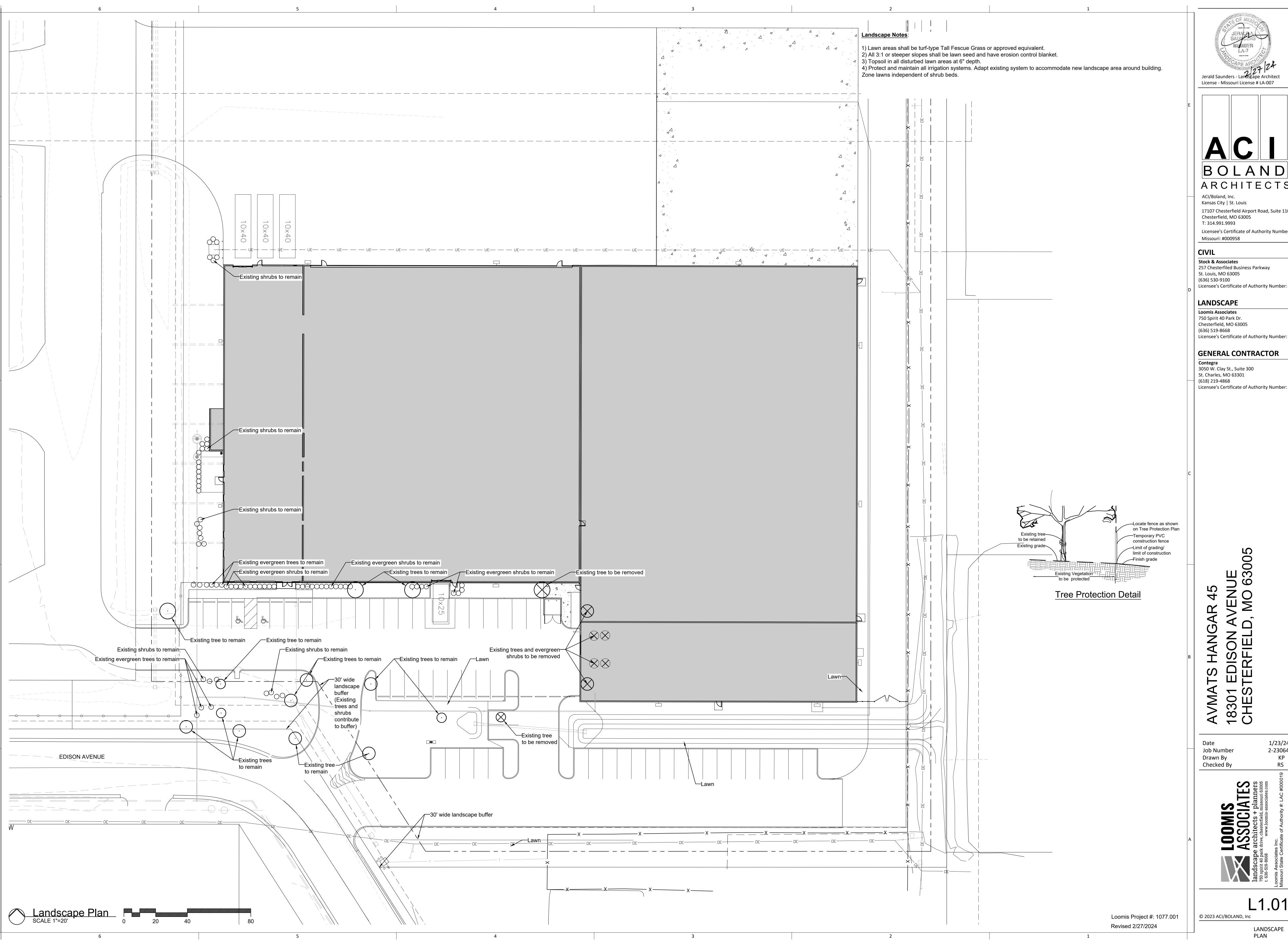
Description 1/26/24 City Comments

2/28/24 City Comment

SD-1

SITE DEVELOPMENT PLAN









17107 Chesterfield Airport Road, Suite 110 Chesterfield, MO 63005 T: 314.991.9993

Licensee's Certificate of Authority Number

Stock & Associates 257 Chesterfiled Business Parkway St. Louis, MO 63005

750 Spirit 40 Park Dr. Chesterfield, MO 63005

# GENERAL CONTRACTOR

Contegra 3050 W. Clay St., Suite 300 St. Charles, MO 63301 (618) 219-4868

Licensee's Certificate of Authority Number:

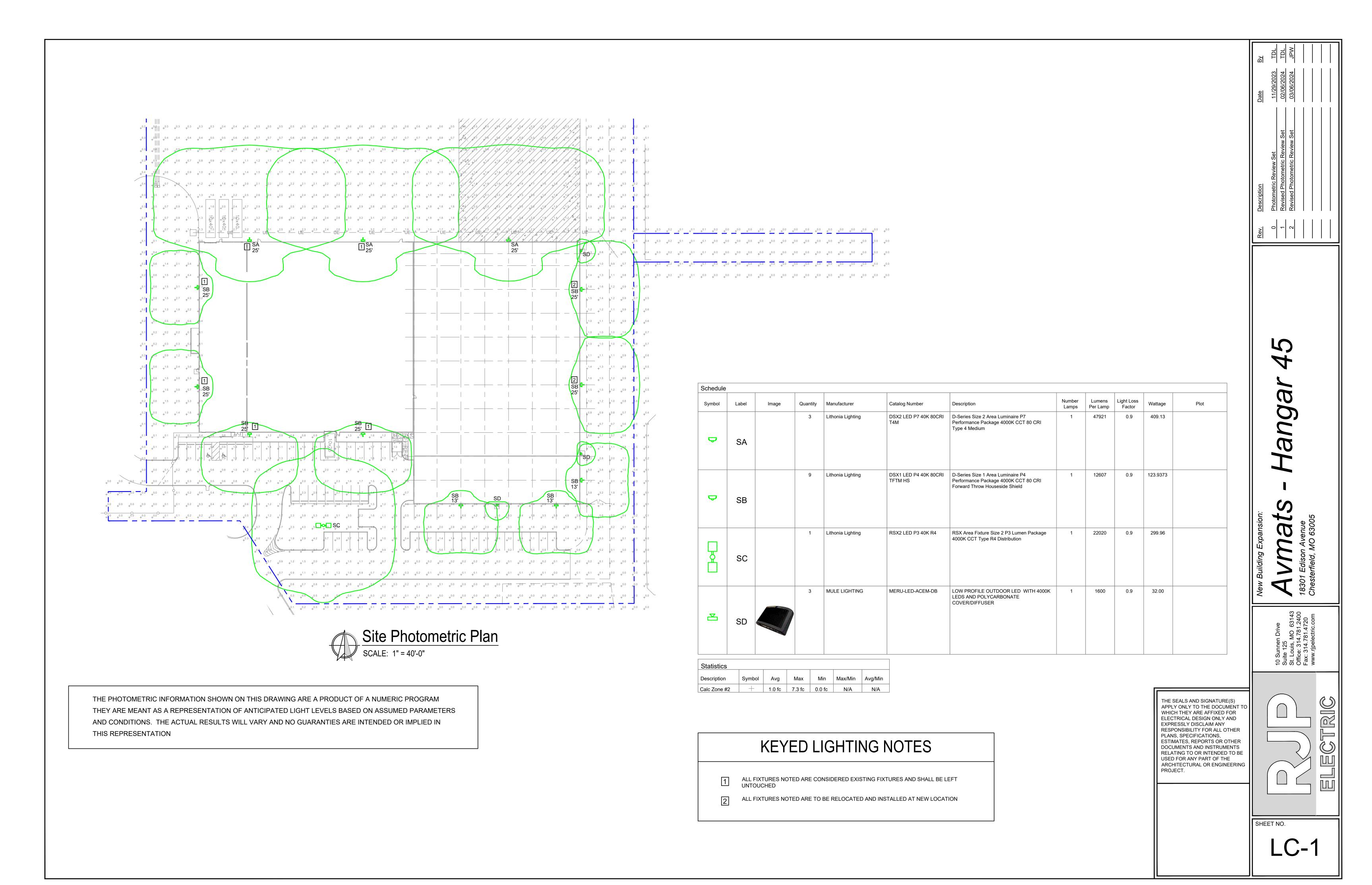
Job Number Checked By

Signature Signat

LANDSCAPE PLAN

1/23/24

2-23064 KP





### **D-Series Size 2**

### LED Area Luminaire













#### **Specifications**

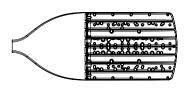
 $\begin{array}{ll} \mbox{EPA:} & 1.06 \ ft^2 \\ (0.10 \ m^2) \\ \mbox{Length:} & 40.59 \ ^{"} \\ (103.1 \ cm) \\ \end{array}$ 

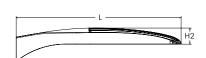
**Width:** 16.76" (42.6 cm)

Height H1: 8.11" (20.6 cm)

Height H2: 3.96" (10.1 cm)

**Weight:** 46 lbs (20.9 kg)









#### Introduction

Catalog

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The outstanding photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of up to 80% vs. 1000W HID and expected service life of over 100,000 hours.



Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit <a href="https://www.acuitybrands.com/designselect">www.acuitybrands.com/designselect</a>. \*See ordering tree for details



### **Ordering Information**

#### **EXAMPLE:** DSX2 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX2 LED								
Series	LEDs		Color temperature <sup>2</sup>	Color Rendering Index <sup>2</sup>	Distribution		Voltage	Mounting
DSX2 LED	P2 F P3 F P4 F <b>Rotated</b> P10 <sup>1</sup> F	P5 P6 P7 P8	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K (this section 80CRI only, extended lead times apply) 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive frow T1S Type I short T2M Type II medic T3M Type III medic T3LG Type IV low g T4M Type IV low g TFTM Forward thro medium	T5LG Type V low glare T5W Type V wide BLC3 Type III backlight control 3 re 3 BLC4 Type IV backlight control 3 LCC0 Left corner cutoff 3 BCC0 Right corner cutoff 3	MVOLT (120V-277V) <sup>4</sup> HVOLT (347V-480V) <sup>5,6</sup> XVOLT (277V - 480V) <sup>7,8</sup> 120 <sup>16, 26</sup> 208 <sup>16, 26</sup> 240 <sup>16, 26</sup> 277 <sup>16, 26</sup> 347 <sup>16, 26</sup> 480 <sup>16, 26</sup>	Shipped included  SPA Square pole mounting (#8 drilling)  RPA Round pole mounting (#8 drilling)  SPA5 Square pole mounting #5 drilling '9  RPA5 Round pole mounting #5 drilling '9  SPA8N Square narrow pole mounting #8 drilling  WBA Wall bracket 10  MA Mast arm adapter (mounts on 23/8" OD horizontal tenon)

Control options					Other options				Finish (required)	
Shipped install NLTAIR2 PIRHN PIR PER	nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc. 11, 12, 20, 21  High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc 13, 20, 21  NEMA twist-lock receptacle only (controls ordered separate) 14	PER7 FA0 BL30 BL50 DMG	Seven-pin receptacle only (controls ordered separate) <sup>14,21</sup> Field adjustable output <sup>15,21</sup> Bi-level switched dimming, 30% <sup>16,21</sup> Bi-level switched dimming, 50% <sup>16,21</sup> 0-10v dimming wires pulled outside fixture (for use with an external control, ordered separately) <sup>17</sup>	Shipped i SPD20KV HS L90 R90 CCE HA BAA	nstalled  20KV surge protection  Houseside shield (black finish standard) <sup>22</sup> Left rotated optics <sup>1</sup> Right rotated optics <sup>1</sup> Coastal Construction <sup>23</sup> 50°C ambient operation <sup>24</sup> Buy America(n) Act Compliant  Single fuse (120, 277, 347V) <sup>26</sup>	Shipped : EGSR BSDB	External Glare Shield (reversible, field install required, matches housing finish) Bird Spikes (field install required)	DDBXD DBLXD DNAXD DWHXD DDBTXD DBLBXD DNATXD DWHGXD	Dark Bronze Black Natural Aluminum White Textured dark bronze Textured black Textured natural aluminum Textured white	
PER5	Five-pin receptacle only (controls ordered separate) 14,21	DS	Dual switching <sup>18, 19, 21</sup>	DF 3G	Double fuse (208, 240, 480V) <sup>26</sup> Vibration rated for 3G <sup>27</sup>					



### **Ordering Information**

#### **Accessories**

ed and shipped separately

DLL127F 1.5 JU Photocell - SSL twist-lock (120-277V) 25 Photocell - SSI twist-lock (347V) 25 DLI 347F 1.5 CUL JU DLL480F 1.5 CUL JU Photocell - SSL twist-lock (480V) 25

Shorting cap 3 DSHORT SBK

House-side shield (enter package number 1-13 in DSX2HSP#

DSXRPA (FINISH) Round pole adapter (#8 drilling, specify finish) DSXSPA5 (FINISH) Square pole adapter #5 drilling (specify finish) DSXRPA5 (FINISH) Round pole adapter #5 drilling (specify finish) DSX1EGSR (FINISH) External glare shield (specify finish) DSX2BSDB (FINISH) Bird spike deterrent bracket (specify finish)

#### NOTES

- Rotated optics available with packages P10, P11, P12, P13 and P14. Must be combined with option L90 or R90.
- 30K, 40K, and 50K available in 70CRI and 80CRI. 27K and 35K only available with 80CRI. Contact Technical Support for other possible combinations.
- T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.
- MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).
- HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).
- HVOLT not available with package P10 when combined with option NLTAIR2 PIRHN or option PIR. XVOLT operates with any voltage between 277V and 480V (50/60~Hz).
- XVOLT not available in package P10. XVOLT not available with fusing (SF or DF). SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).
- WBA cannot be combined with Type 5 distributions plus photocell (PER).
- 11 NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link
  12 NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P10
- using HVOLT. NLTAIR2 PIRHN not available with P10 using WOLT.

  13 PIR not available with NLTAIR2 PIRHN, PER, PER5, PER7, FAO BL30, BL50, DMG and D5. PIR not available with P10 using HVOLT. PIR not available with NLTAIR2 PIRHN, PER, PER5, PER7, FAO BL30, BL50, DMG and D5. PIR not available with P10 using HVOLT. PIR not available with P10 using XVOLT.
- 14) PERPER5/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from
- Acuity Brands Controls. See accessories. Shorting Cap included.

  15 FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, DMG and DS.
- 16 BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS. BL30 or BL50 must specify 120, 277 or 347V. Consult
- tech support for 208, 240 or 480V.

  17 DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.
- DS not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG.
- 19 DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads on P1, P2, P3, P4, P5 (2 drivers). Note: Provides 60/40 operation using (2) different sets of leads on P6, P7, P8, P9, P10, P11, P12, P13, P14 (3 drivers).
- Reference Motion Sensor Default Settings table on page 4 to see functionality.
- Reference Controls Options table on page 4.
  HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information. CCE option not available with option BS and EGSR. Contact Technical Support for availability.
- Option HA not available with performance packages P5, P6, P7, P8, P13 and P14.
  Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
- Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).
- Option 3G for use with (MA) mast arm mount only when 3G vibration is required.

#### **Shield Accessories**

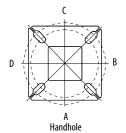


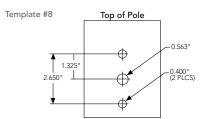
External Glare Shield (EGSR)

House Side Shield (HS)

#### **Drilling**

#### **HANDHOLE ORIENTATION**





#### **Tenon Mounting Slipfitter**

	<b>3</b> 1									
Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @120	4 @ 90			
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490			
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490			
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490			

		-8		₹	_I_	Y	-1-		
Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90		
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D		
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS		
		Minimum Acceptable Outside Pole Dimension							
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"		
RPA	#8	3"	3"	3"	3"	3"	3"		
SPA5	#5	3"	3"	3"	3"		3"		
RPA5	#5	3"	3"	3"	3"	3"	3"		
SPA8N	#8	3"	3"	3"	3"		3"		

#### DSX2 Area Luminaire - EPA

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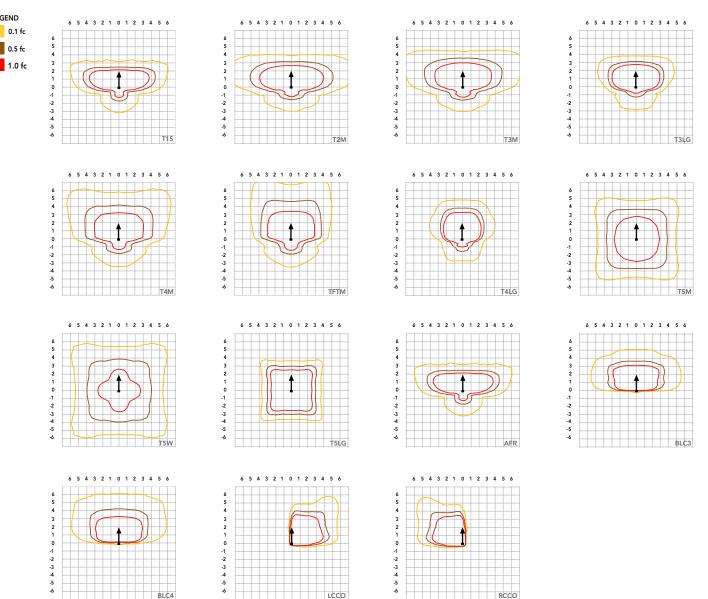
\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type	-	-	₹.	<u>-1-</u>	Y	
DSX2 with SPA	1.06	2.12	1.84	2.32		2.33
DSX2 with SPA5, SPA8N	1.07	2.14	1.90	2.43		2.44
DSX2 with RPA, RPA5	1.07	2.14	1.90	2.43	2.31	2.44
DSX2 with MA	1.20	2.40	2.12	3.00	2.92	3.00



LEGEND

Isofootcandle plots for the DSX2 LED P8 40K 70CRI. Distances are in units of mounting height (40').



#### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Amb	Ambient					
0°C	32°F	1.04				
5°C	41°F	1.03				
10°C	50°F	1.03				
15°C	50°F	1.02				
20°C	68°F	1.01				
25°C	77°F	1.00				
30°C	86°F	0.99				
35°C	95°F	0.98				
40°C	104°F	0.97				

#### **Projected LED Lumen Maintenance**

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.95
50,000	0.90
100 000	0.82

#### **FAO Dimming Settings**

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

\*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use published values for each package based on input watts and lumens by optic type.

#### **Electrical Load**

							Curre	nt (A)		
	Performance Package	LED Count	Drive Current (mA)	Wattage	120V	208V	240V	277V	347V	480V
	P1	80	530	135	1.12	0.65	0.56	0.49	0.39	0.28
	P2	80	700	181	1.49	0.86	0.75	0.65	0.52	0.37
	P3	80	850	222	1.83	1.05	0.91	0.79	0.63	0.46
Forward Optics	P4	80	1050	277	2.27	1.31	1.14	0.98	0.79	0.57
(Non-Rotated)	P5	80	1250	333	2.72	1.57	1.36	1.18	0.94	0.68
	P6	100	1050	345	2.85	1.64	1.42	1.23	0.98	0.71
	P7	100	1250	414	3.41	1.97	1.70	1.48	1.18	0.85
	P8	100	1400	466	3.85	2.22	1.93	1.67	1.33	0.96
	P10	90	530	152	1.27	0.73	0.63	0.55	0.44	0.32
Rotated Optics	P11	90	700	203	1.69	0.97	0.84	0.73	0.58	0.42
(Requires L90	P12	90	850	249	2.06	1.19	1.03	0.89	0.71	0.52
or R90)	P13	90	1200	358	2.95	1.70	1.47	1.28	1.02	0.74
	P14	90	1400	421	3.46	2.00	1.73	1.50	1.20	0.87

#### **LED Color Temperature / Color Rendering Multipliers**

	70 CRI		80	OCRI	90CRI		
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability	
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)	
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)	
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)	
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)	
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)	

 $Note: Some\ LED\ types\ are\ available\ as\ per\ special\ request.\ Contact\ Technical\ Support\ for\ more\ information.$ 

#### **Motion Sensor Default Settings**

Option	Unoccupied Dimmed Level	High Level (when occupied)	Phototcell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

#### **Controls Options**

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V



#### **Lumen Output**

Forward Op	tics																			
Performance			Drive				30K					40K					50K			
Package	System Watts	LED Count	Current (mA)	Distribution Type			00K, 70	_				00K, 70				_	00K, 70	_		
				T1S	19,946	B 2	0	G 3	148	Lumens 20,787	<u>B</u>	0	G 3	155	21,192	B 2	0	3	LPW 158	
				T2M	18,477	3	0	4	137	19,256	3	0	4	143	19,632	3	0	4	146	
				T3M	18,691	3	0	5	139	19,480	3	0	5	145	19,859	3	0	5	148	
				T3LG	16,696	2	0	2	124	17,400	2	0	2	129	17,740	2	0	2	132	
				T4M	18,970	3	0	5	141	19,770	3	0	5	147	20,155	3	0	5	150	
				T4LG TFTM	17,253	2	0	2	128	17,981	3	0	5	134	18,331	2	0	5	136	
P1	135W	80	530	T5M	19,101 19,517	3 5	0	5 3	142 145	19,907 20,341	5	0	3	148 151	20,295	5	0	3	151 154	
	155**	00	330	T5W	19,834	5	0	3	147	20,670	5	0	3	154	21,073	5	0	3	157	
				T5LG	19,574	4	0	2	146	20,400	4	0	2	152	20,797	4	0	2	155	
				BLC3	13,595	0	0	3	101	14,169	0	0	3	105	14,445	0	0	3	107	
				BLC4	14,042	0	0	4	104	14,634	0	0	4	109	14,919	0	0	4	111	
				RCCO	13,718	1	0	3	102	14,297	1	0	3	106	14,576	1	0	3	108	
				LCCO AFR	13,718	1	0	3	102	14,297	1	0	3	106	14,576	1	0	3	108	
				T1S	19,946 25,520	3	0	3	148 142	20,787	3	0	3	155 148	21,192 27,116	3	0	3	158 151	
				T2M	23,641	3	0	5	132	24,638	3	0	5	137	25,118	3	0	5	140	
				T3M	23,915	3	0	5	133	24,924	3	0	5	139	25,410	3	0	5	142	
				T3LG	21,363	3	0	3	119	22,264	3	0	3	124	22,698	3	0	3	127	
				T4M	24,272	3	0	5	135	25,296	3	0	5	141	25,789	3	0	5	144	
				T4LG	22,075	3	0	3	123	23,006	3	0	3	128	23,455	3	0	3	131	
<b>D</b> 2	47011	00	700	TFTM	24,440	3	0	5	136	25,471	3	0	5	142	25,967	3	0	5	145	
P2	179W	80	700	T5M T5W	24,972 25,377	5	0	3 4	139 142	26,026 26,448	5	0	3	145 148	26,533 26,963	5	0	4	148 150	
				TSLG	25,045	4	0	2	140	26,101	4	0	2	146	26,610	4	0	2	148	
				BLC3	17,395	0	0	4	97	18,129	0	0	4	101	18,482	0	0	4	103	
				BLC4	17,966	0	0	4	100	18,724	0	0	5	104	19,089	0	0	5	107	
				RCCO	17,552	1	0	4	98	18,293	1	0	4	102	18,649	1	0	4	104	
				LCCO	17,552	1	0	4	98	18,293	1	0	4	102	18,649	1	0	4	104	
				AFR	25,520	3	0	3	142	26,597	3	0	3	148	27,116	3	0	3	151	
				T1S T2M	30,127 27,908	3	0	5	137 127	31,398	3	0	4 5	143 133	32,010	3	0	5	146 135	
				T3M	28,232	3	0	5	127	29,085 29,423	3	0	5	134	29,652 29,996	3	0	5	137	
				T3LG	25,218	3	0	3	115	26,282	3	0	3	120	26,794	3	0	3	122	
					T4M	28,652	3	0	5	131	29,861	3	0	5	136	30,443	3	0	5	139
				T4LG	26,059	3	0	3	119	27,159	3	0	3	124	27,688	3	0	3	126	
				TFTM	28,851	3	0	5	132	30,068	3	0	5	137	30,654	3	0	5	140	
P3	219W	80	850	T5M	29,479	5	0	4	134	30,723	5	0	4	140	31,322	5	0	4	143	
				T5W T5LG	29,957 29,565	5 4	0	2	137 135	31,221 30,812	5	0	2	142 140	31,830 31,413	5	0	2	145 143	
				BLC3	29,505	0	0	4	94	21,401	0	0	4	98	21,818	0	0	4	99	
				BLC4	21,209	0	0	5	97	22,104	0	0	5	101	22,534	0	0	5	103	
				RCCO	20,720	1	0	4	94	21,594	1	0	4	98	22,015	1	0	4	100	
				LCC0	20,720	1	0	4	94	21,594	1	0	4	98	22,015	1	0	4	100	
				AFR	30,127	3	0	4	137	31,398	3	0	4	143	32,010	3	0	4	146	
				T1S	35,879	3	0	4	132	37,392	3	0	4	137	38,121	3	0	4	140	
				T2M	33,236	3	0	5	122	34,638	3	0	5	127	35,313	3	0	5	130	
				T3M T3LG	33,622 30,033	3	0	5 4	123 110	35,040 31,300	3	0	5 4	129 115	35,723 31,910	3	0	5 4	131 117	
				T4M	34,123	3	0	5	125	35,562	3	0	5	130	36,255	3	0	5	133	
				T4LG	31,035	3	0	4	114	32,344	3	0	4	119	32,974	3	0	4	121	
				TFTM	34,359	3	0	5	126	35,808	3	0	5	131	36,506	3	0	5	134	
P4	273W	80	1050	T5M	35,108	5	0	4	129	36,589	5	0	4	134	37,302	5	0	4	137	
				T5W	35,677	5	0	4	131	37,182	5	0	5	136	37,907	5	0	5	139	
				T5LG	35,209	5	0	3	129	36,695	5	0	3	135	37,410	5	0	3	137	
				BLC3 BLC4	24,456	0	0	5	90	25,487	0	0	5	93	25,984	0	0	5	95 98	
				RCCO	25,258 24,676	1	0	4	93 91	26,324 25,717	1	0	4	97 94	26,837 26,218	1	0	4	96	
				LCCO	24,676	1	0	4	91	25,717	1	0	4	94	26,218	1	0	4	96	
				AFR	35,879	3	0	4	132	37,392	3	0	4	137	38,121	3	0	4	140	
					, ,,,,,,,					, ,,,,,,					,					



#### **Lumen Output**

Forward Op	tics																												
Performance			Drive				30K					40K					50K												
Package	System Watts	LED Count	Current (mA)	Distribution Type			00K, 70		LDW			00K, 70	_	LDW		_	00K, 70	_	LDW										
				T1S	41,149	B 3	0	<b>G</b>	126	42,885	B 3	0	<b>G</b>	131	43,721	B 3	0	<b>G</b>	134										
				T2M	38,118	4	0	5	117	39,727	4	0	5	122	40,501	4	0	5	124										
				T3M	38,561	3	0	5	118	40,187	3	0	5	123	40,971	3	0	5	125										
				T3LG	34,445	3	0	4	105	35,898	3	0	4	110	36,598	3	0	4	112										
				T4M	39,135	3	0	5	120	40,786	3	0	5	125	41,581	3	0	5	127										
				T4LG TFTM	35,594	3	0	4	109	37,095	3	0	5	114	37,818	3	0	5	116 128										
P5	327W	80	1250	T5M	39,406 40,265	3 5	0	5 4	121 123	41,069 41,964	5	0	4	126 128	41,869 42,782	3 5	0	5	131										
13	32/11	00	1250	T5W	40,918	5	0	5	125	42,644	5	0	5	131	43,475	5	0	5	133										
				T5LG	40,382	5	0	3	124	42,085	5	0	3	129	42,906	5	0	3	131										
				BLC3	28,048	0	0	5	86	29,231	0	0	5	90	29,801	0	0	5	91										
				BLC4	28,969	0	0	5	89	30,191	0	0	5	92	30,779	0	0	5	94										
				RCCO	28,301	2	0	5	87	29,495	2	0	5	90	30,070	2	0	5	92										
				LCCO	28,301	2	0	5	87	29,495	2	0	5	90	30,070	2	0	5	92										
				AFR T1S	41,149 45,968	3	0	4	126 135	42,885 47,907	3	0	5	131 140	43,721 48,841	3	0	5	134 143										
				T2M	42,582	4	0	5	125	44,379	4	0	5	130	45,244	4	0	5	132										
				T3M	43,076	4	0	5	126	44,894	4	0	5	131	45,769	4	0	5	134										
				T3LG	38,479	3	0	4	113	40,102	3	0	4	117	40,884	3	0	4	120										
				T4M	43,719	4	0	5	128	45,563	4	0	5	133	46,451	4	0	5	136										
				T4LG	39,762	3	0	4	116	41,439	3	0	4	121	42,247	3	0	4	124										
				TFTM	44,021	3	0	5	129	45,878	4	0	5	134	46,772	4	0	5	137										
P6	342W	100	1050	T5M	44,980	5	0	5	132	46,878	5	0	5	137	47,792	5	0	5	140										
				T5W T5LG	45,710 45,111	5	0	5 3	134 132	47,638 47,014	5	0	5 3	139 138	48,566 47,930	5	0	5 3	142 140										
				BLC3	31,333	0	0	5	92	32,655	0	0	5	96	33,291	0	0	5	97										
				BLC4	32,361	0	0	5	95	33,726	0	0	5	99	34,384	0	0	5	101										
				RCCO	31,615	2	0	5	93	32,949	2	0	5	96	33,591	2	0	5	98										
				LCCO	31,615	2	0	5	93	32,949	2	0	5	96	33,591	2	0	5	98										
				AFR	45,968	3	0	4	135	47,907	3	0	5	140	48,841	3	0	5	143										
				T1S	52,692	3	0	5	129	54,915	3	0	5	134	55,986	3	0	5	137										
				T2M	48,811	4	0	5	119	50,871	4	0	5	124	51,862	4	0	5	127										
														T3M T3LG	49,378 44,107	3	0	5 4	121 108	51,461 45,968	3	0	5 4	126 112	52,464 46,864	3	0	5	128 115
				T4M	50,114	4	0	5	122	52,228	4	0	5	128	53,246	4	0	5	130										
				T4LG	45,579	3	0	4	111	47,501	3	0	4	116	48,427	3	0	4	118										
				TFTM	50,460	4	0	5	123	52,589	4	0	5	129	53,614	4	0	5	131										
P7	409W	100	1250	T5M	51,560	5	0	5	126	53,735	5	0	5	131	54,783	5	0	5	134										
				T5W	52,396	5	0	5	128	54,607	5	0	5	133	55,671	5	0	5	136										
				T5LG	51,710	5	0	4	126	53,891	5	0	4	132	54,941	5	0	4	134										
				BLC3 BLC4	35,916 37,095	0	0	5	88 91	37,431 38,660	0	0	5	91 94	38,161 39,413	0	0	5	93 96										
				RCCO	36,240	2	0	5	89	37,769	2	0	5	92	38,505	2	0	5	94										
				LCCO	36,240	2	0	5	89	37,769	2	0	5	92	38,505	2	0	5	94										
				AFR	52,692	3	0	5	129	54,915	3	0	5	134	55,986	3	0	5	137										
				T1S	57,662	3	0	5	125	60,094	4	0	5	130	61,266	4	0	5	132										
				T2M	53,415	4	0	5	116	55,668	4	0	5	120	56,753	4	0	5	123										
				T3M	54,034	4	0	5	117	56,314	4	0	5	122	57,412	4	0	5	124										
				T3LG	48,267	3	0	5	104	50,304	3	0	5	109	51,284	4	0	5	111										
				T4M T4LG	54,840 49,877	3	0	5	119 108	57,154 51,981	3	0	5	124 112	58,268 52,994	3	0	5	126 115										
				TFTM	55,219	4	0	5	119	57,549	4	0	5	124	58,671	4	0	5	127										
P8	462W	100	1400	T5M	56,423	5	0	5	122	58,803	5	0	5	127	59,949	5	0	5	130										
				T5W	57,338	5	0	5	124	59,757	5	0	5	129	60,921	5	0	5	132										
				T5LG	56,586	5	0	4	122	58,974	5	0	4	128	60,123	5	0	4	130										
				BLC3	39,303	1	0	5	85	40,962	1	0	5	89	41,760	1	0	5	90										
				BLC4	40,593	0	0	5	88	42,306	0	0	5	91	43,130	0	0	5	93										
				RCCO	39,658	2	0	5	86	41,331	2	0	5	89	42,137	2	0	5	91										
				LCCO AER	39,658	2	0	5	86 125	41,331	2	0	5	130	42,137	2	0	5	91										
				AFR	57,662	3	U	5	125	60,094	4	0	5	130	61,266	4	0	5	132										



#### **Lumen Output**

Rotated Opt	ated Optics																															
							30K			40K					50K																	
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type		(300	OK, 70	CRI)			(40	OOK, 70	CRI)			(50	00K, 70	CRI)														
ruchage			current (m/)		Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW													
				T1S	22,798	4	0	4	150	23,760	4	0	4	156	24,223	4	0	4	159													
				T2M	21,119	5	0	5	139	22,010	5	0	5	145	22,439	5	0	5	148													
				T3M	21,361	5	0	5	141	22,262	5	0	5	147	22,696	5	0	5	149													
				T3LG	19,084	4	0	4	126	19,889	4	0	4	131	20,277	4	0	4	133													
				T4M	21,679	5	0	5	143	22,594	5	0	5	149	23,034	5	0	5	152													
				T4LG	19,717	4	0	4	130	20,549	4	0	4	135	20,950	4	0	4	138													
P10	152W	90	530	TFTM T5M	21,833 22,305	5	0	5	144 147	22,754	5	0	5	150 153	23,197	5	0	5	153 156													
PIU	132W	90	330	T5W	22,303	5	0	3	147	23,623	5	0	4	155	24,084	5	0	4	158													
				T5LG	22,370	4	0	2	149	23,314	4	0	2	153	23,768	4	0	2	156													
				BLC3	15,539	4	0	4	102	16,194	4	0	4	107	16,510	4	0	4	109													
				BLC4	16,048	4	0	4	106	16,725	4	0	4	110	17,051	4	0	4	112													
				RCCO	15,679	1	0	3	103	16,340	1	0	3	108	16,659	1	0	3	110													
				LCCO	15,679	1	0	3	103	16,340	1	0	3	108	16,659	1	0	3	110													
				AFR	22,798	4	0	4	150	23,760	4	0	4	156	24,223	4	0	4	159													
				T1S	29,222	4	0	4	144	30,455	4	0	4	150	31,048	4	0	4	153													
				T2M	27,070	5	0	5	134	28,212	5	0	5	139	28,762	5	0	5	142													
				T3M	27,380	5	0	5	135	28,535	5	0	5	141	29,091	5	0	5	144													
			700		T3LG	24,462	4	0	4	121	25,493	4	0	4	126	25,990	4	0	4	128												
				T4M	27,788	5	0	5	137	28,960	5	0	5	143	29,525	5	0	5	146													
				T4LG	25,273	4	0	4	125	26,339	4	0	4	130	26,853	4	0	4	133													
				700	TFTM	27,985	5	0	5	138	29,165	5	0	5	144	29,734	5	0	5	147												
P11	203W	90		T5M	28,591	5	0	4	141	29,797	5	0	4	147	30,377	5	0	4	150													
				700														T5W	29,054	5	0	4	143	30,280	5	0	4	149	30,870	5	0	4
				T5LG	28,673	4	0	2	142	29,883	4	0	2	148	30,465	5	0	2	150													
				BLC3	19,917	4	0	4	98	20,757	4	0	4	102	21,162	4	0	4	104													
				BLC4	20,570	5	0	5	102	21,437	5	0	5	106	21,855	5	0	5	108													
				RCCO	20,097	1	0	4	99	20,945	1	0	4	103	21,353	1	0	4	105													
				LCCO	20,097	1	0	4	99	20,945	1	0	4	103	21,353	1	0	4	105													
				AFR T1S	29,222	5	0	5	144	30,455	5	0	5	150	31,048	4	0	5	153													
				T2M	34,526 31,984	5	0	5	139 129	35,983 33,333	5	0	5	145 135	36,684 33,983	5	0	5	148 137													
				T3M	31,984	5	0	5	131	33,715	5	0	5	136	34,372	5	0	5	137													
				T3LG	28,902	4	0	4	117	30,121	4	0	4	122	30,708	4	0	4	124													
				T4M	32,832	5	0	5	133	34,217	5	0	5	138	34,884	5	0	5	141													
				T4LG	29,861	4	0	4	121	31,120	4	0	4	126	31,727	5	0	4	128													
				TFTM	33,064	5	0	5	134	34,459	5	0	5	139	35,131	5	0	5	142													
P12	248W	90	850	T5M	33,780	5	0	4	136	35,205	5	0	4	142	35,891	5	0	4	145													
			850	T5W	34,327	5	0	4	139	35,776	5	0	4	145	36,473	5	0	4	147													
				T5LG	33,878	5	0	3	137	35,307	5	0	3	143	35,995	5	0	3	145													
				BLC3	23,532	5	0	5	95	24,525	5	0	5	99	25,003	5	0	5	101													
				BLC4	24,303	5	0	5	98	25,328	5	0	5	102	25,822	5	0	5	104													
				RCCO	23,745	1	0	4	96	24,747	1	0	4	100	25,229	1	0	4	102													
			LCCO	23,745	1	0	4	96	24,747	1	0	4	100	25,229	1	0	4	102														
				AFR	34,526	5	0	5	139	35,983	5	0	5	145	36,684	5	0	5	148													

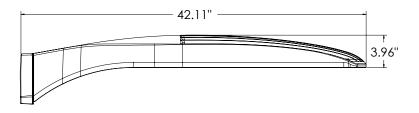


#### **Lumen Output**

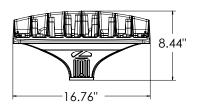
Rotated Opt	tics																		
							30K					40K					50K		
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type		(30	00K, 70	CRI)			(40	00K, 70	CRI)			(50	00K, 70	CRI)	
1 ackage			Current (IIIA)		Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW
				T1S	45,748	5	0	5	129	47,678	5	0	5	135	48,608	5	0	5	137
				T2M	42,380	5	0	5	120	44,168	5	0	5	125	45,029	5	0	5	127
				T3M	42,865	5	0	5	121	44,673	5	0	5	126	45,544	5	0	5	129
				T3LG	38,296	5	0	5	108	39,911	5	0	5	113	40,689	5	0	5	115
				T4M	43,503	5	0	5	123	45,339	5	0	5	128	46,222	5	0	5	131
				T4LG	39,566	5	0	5	112	41,235	5	0	5	117	42,039	5	0	5	119
				TFTM	43,811	5	0	5	124	45,659	5	0	5	129	46,549	5	0	5	132
P13	354W	90	1200	T5M	44,760	5	0	5	126	46,648	5	0	5	132	47,557	5	0	5	134
				T5W	45,485	5	0	5	129	47,404	5	0	5	134	48,328	5	0	5	137
				T5LG	44,889	5	0	3	127	46,783	5	0	3	132	47,695	5	0	3	135
				BLC3	31,181	5	0	5	88	32,496	5	0	5	92	33,130	5	0	5	94
				BLC4	32,202	5	0	5	91	33,561	5	0	5	95	34,215	5	0	5	97
				RCCO	31,463	2	0	5	89	32,790	2	0	5	93	33,429	2	0	5	94
				LCC0	31,463	2	0	5	89	32,790	2	0	5	93	33,429	2	0	5	94
				AFR	45,748	5	0	5	129	47,678	5	0	5	135	48,608	5	0	5	137
				T1S	51,272	5	0	5	123	53,435	5	0	5	129	54,476	5	0	5	131
				T2M	47,497	5	0	5	114	49,500	5	0	5	119	50,465	5	0	5	121
				T3M	48,040	5	0	5	116	50,067	5	0	5	121	51,043	5	0	5	123
				T3LG	42,919	5	0	5	103	44,730	5	0	5	108	45,602	5	0	5	110
				T4M	48,756	5	0	5	117	50,813	5	0	5	122	51,803	5	0	5	125
				T4LG	44,343	5	0	5	107	46,214	5	0	5	111	47,115	5	0	5	113
				TFTM	49,101	5	0	5	118	51,172	5	0	5	123	52,169	5	0	5	126
P14	415W	90	1400	T5M	50,164	5	0	5	121	52,280	5	0	5	126	53,299	5	0	5	128
				T5W	50,977	5	0	5	123	53,127	5	0	5	128	54,163	5	0	5	130
				T5LG	50,309	5	0	4	121	52,432	5	0	4	126	53,453	5	0	4	129
				BLC3	34,945	5	0	5	84	36,420	5	0	5	88	37,130	5	0	5	89
				BLC4	36,090	5	0	5	87	37,613	5	0	5	91	38,346	5	0	5	92
				RCCO	35,261	2	0	5	85	36,749	2	0	5	88	37,465	2	0	5	90
				LCCO	35,261	2	0	5	85	36,749	2	0	5	88	37,465	2	0	5	90
				AFR	51,272	5	0	5	123	53,435	5	0	5	129	54,476	5	0	5	131

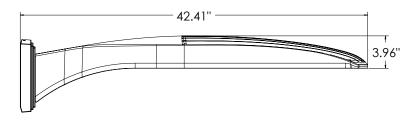


#### **Dimensions**

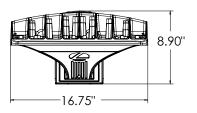


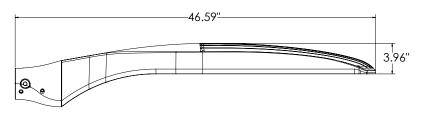
DSX2 with RPA, RPA5, SPA5, SPA8N mount Weight: 48 lbs



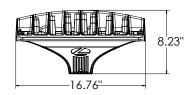


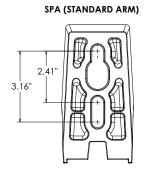
DSX2 with WBA mount Weight: 50 lbs

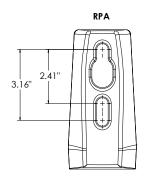


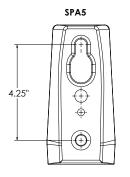


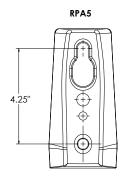
DSX2 with MA mount Weight: 50 lbs

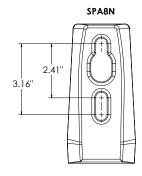










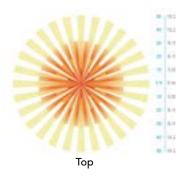


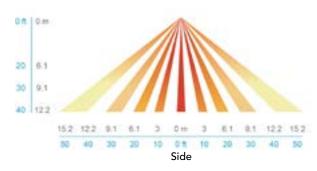
#### nLight Control - Sensor Coverage and Settings

### nLight Sensor Coverage Pattern

**NLTAIR2 PIRHN** 







#### **FEATURES & SPECIFICATIONS**

#### **INTENDED USE**

The sleek design of the D-Series Area Size 2 reflects the embedded high performance LED technology. It is ideal for applications like car dealerships and large parking lots adjacent to malls, transit stations, grocery stores, home centers, and other big-box retailers.

#### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 1.5G. 3G vibration rated available for (MA) mast arm mount when specifying option 3G. Low EPA (1.06 ft²) for optimized pole wind loading.

#### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

#### Coastal Construction (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

#### **OPTICS**

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in 3000 K, 4000 K, or 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 2 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

#### ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L82/100,000 hrs at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily-serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

#### INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

#### STANDARD CONTROLS

The DSX2 LED area luminaire has a number of control options. DSX Size 2, comes standard with 0-10V dimming drivers. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensor with onboard photocells feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

#### **nLIGHT AIR CONTROLS**

The DSX2 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

#### LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at <a href="www.designlights.org/QPL">www.designlights.org/QPL</a> to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

#### **BUY AMERICAN ACT**

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to <a href="https://www.acuitybrands.com/buy-american">www.acuitybrands.com/buy-american</a> for additional information.

#### WARRANTY

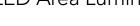
5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: <a href="https://www.acuitybrands.com/support/warranty/terms-and-conditions">www.acuitybrands.com/support/warranty/terms-and-conditions</a>

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25  $^{\circ}$ C. Specifications subject to change without notice.





# **D-Series Size 1**LED Area Luminaire















#### **Specifications**

**EPA:**  $0.69 \text{ ft}^2 \\ (0.06 \text{ m}^2)$ 

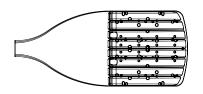
**Length:** 32.71" (83.1 cm)

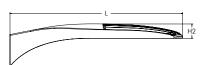
Width: 14.26" (36.2 cm)

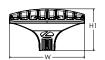
Height H1: 7.88" (20.0 cm)

Height H2: 2.73" (6.9 cm)

**Weight:** 34 lbs (15.4 kg)







# Catalog Number Notes

Hit the Tab key or mouse over the page to see all interactive element

#### Introduction

The modern styling of the D-Series features a highly refined aesthetic that blends seamlessly with its environment. The D-Series offers the benefits of the latest in LED technology into a high performance, high efficacy, long-life luminaire.

The photometric performance results in sites with excellent uniformity, greater pole spacing and lower power density. D-Series outstanding photometry aids in reducing the number of poles required in area lighting applications with typical energy savings of 65% and expected service life of over 100,000 hours.

#### **Ordering Information**

#### **EXAMPLE:** DSX1 LED P7 40K 70CRI T3M MVOLT SPA NLTAIR2 PIRHN DDBXD

DSX1 LED						
Series	LEDs	Color temperature <sup>2</sup>	Color Rendering Index <sup>2</sup>	Distribution	Voltage	Mounting
DSX1 LED	Forward optics P1 P6 P2 P7 P3 P8 P4 P9 P5 Rotated optics P101 P121 P111 P131	(this section 70CRI only) 30K 3000K 40K 4000K 50K 5000K  (this section 80CRI only, extended lead times apply) 27K 2700K 30K 3000K 35K 3500K 40K 4000K 50K 5000K	70CRI 70CRI 70CRI 80CRI 80CRI 80CRI 80CRI 80CRI	AFR Automotive front row T1S Type I short T2M Type II medium T3M Type III medium T3LG Type III low glare 3 T4M Type IV medium T4LG Type IV low glare 3 TFTM Forward throw medium T4CO Right corner cutoff 3  RCCO Right corner cutoff 3	MVOLT (120V-277V) <sup>4</sup> HVOLT (347V-480V) <sup>5,6</sup> XVOLT (277V - 480V) <sup>7,8</sup> 120 <sup>16, 26</sup> 208 <sup>16, 26</sup> 240 <sup>16, 26</sup> 277 <sup>16, 26</sup> 347 <sup>16, 26</sup> 480 <sup>16, 26</sup>	Shipped included  SPA Square pole mounting (#8 drilling)  RPA Round pole mounting (#8 drilling)  SPAS Square pole mounting #5 drilling 9  RPA5 Round pole mounting #5 drilling 9  SPA8N Square narrow pole mounting #8 drilling  WBA Wall bracket 10  MA Mast arm adapter (mounts on 2 3/8" OD horizontal tenon)

Control options			Other opti	ons	Finish (requ	iired)
NLTAIR2 PIRHN  nLight AIR gen 2 enabled with bi-level motion / ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc. 11, 12, 20, 21  PIR High/low, motion/ambient sensor, 8-40' mounting height, ambient sensor enabled at 2fc 13, 20, 21  PER NEMA twist-lock receptacle only (controls ordered separate) 14  PERS Five-pin receptacle only (controls ordered separate) 14, 21	PER7 FA0 BL30 BL50 DMG DS	Seven-pin receptacle only (controls ordered separate) <sup>14, 21</sup> Field adjustable output <sup>15, 21</sup> Bi-level switched dimming, 30% <sup>16, 21</sup> Bi-level switched dimming, 50% <sup>16, 21</sup> 0–10v dimming wires pulled outside fixture (for use with an external control, ordered separately) <sup>17</sup> Dual switching <sup>18, 19, 21</sup>	Shipped i SPD20KV HS L90 R90 CCE HA BAA SF DF Shipped s EGSR	nstalled  20KV surge protection  Houseside shield (black finish standard) <sup>22</sup> Left rotated optics <sup>1</sup> Right rotated optics <sup>1</sup> Coastal Construction <sup>23</sup> 50°C ambient operation <sup>24</sup> Buy America(n) Act Compliant  Single fuse (120, 277, 347V) <sup>26</sup> Double fuse (208, 240, 480V) <sup>26</sup> separately  External Glare Shield (reversible, field install required, matches housing finish)  Bird Spikes (field install required)	DDBXD DBLXD DNAXD DWHXD DDBTXD DBLBXD DNATXD DWHGXD	Dark Bronze Black Natural Aluminum White Textured dark bronze Textured black Textured natural aluminum Textured white



#### **Ordering Information**

#### **Accessories**

Ordered and shipped separately

DLL127F 1.5 JU Photocell - SSL twist-lock (120-277V) 25 Photocell - SSL twist-lock (347V) 25 DLL347F 1.5 CUL JU DLL480F 1.5 CUL JU Photocell - SSL twist-lock (480V) 25

DSHORT SBK Shorting cap 25

DSX1BSDB (FINISH)

House-side shield (enter package number 1-13 in DSX1HS P#

DSXRPA (FINISH) Round pole adapter (#8 drilling, specify finish) DSXSPA5 (FINISH) Square pole adapter #5 drilling (specify finish) DSXRPA5 (FINISH) Round pole adapter #5 drilling (specify finish) DSX1EGSR (FINISH) External glare shield (specify finish)

Bird spike deterrent bracket (specify finish)

#### NOTES

- Rotated optics available with packages P10, P11, P12 and P13. Must be combined with option L90 or R90.

  30K, 40K, and 50K available in 70CR1 and 80CR1. 27K and 35K only available with 80CR1. Contact Technical Support for other possible combinations.

  T3LG, T4LG, BLC3, BLC4, LCCO, RCCO not available with option HS.

  MVOLT driver operates on any line voltage from 120-277V (50/60 Hz).

- HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).

  HVOLT driver operates on any line voltage from 347-480V (50/60 Hz).

  HVOLT not available with package P1 and P10 when combined with option NLTAIR2 PIRHN or option PIR.

  XVOLT operates with any voltage between 277V and 480V (50/60 Hz).

  XVOLT not available in packages P1 or P10. XVOLT not available with fusing (SF or DF).

  SPA5 and RPA5 for use with #5 drilling only (Not for use with #8 drilling).

  WBA cannot be combined with Type 5 distributions plus photocell (PER).

- NLTAIR2 and PIRHN must be ordered together. For more information on nLight AIR2 visit this link
  NLTAIR2 PIRHN not available with other controls including PIR, PER, PER5, PER7, FAO, BL30, BL50, DMG and DS. NLTAIR2 PIRHN not available with P1 and P10 using HVOLT. NLTAIR2 PIRHN not available with P1 and P10 using XVOLT.
- and P10 using HVOLT. NLTAIR2 PIRHN not available with P1 and P10 using XVOLT.
  3 PIR not available with NLTAIR2 PIRHN, PER, PER5, PER7, FAO BL30, BL50, DMG and DS. PIR not available with P1 and P10 using XVOLT.
  4 PER/PER5/PER7 not available with NLTAIR2 PIRHN, PIR, BL30, BL50, FAO, DMG and DS. Photocell ordered and shipped as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.
  FAO not available with other dimming control options NLTAIR2 PIRHN, PIR, PER5, PER7, BL30, BL50, DMG and DS.
  BL30 and BL50 are not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, FAO, DMG and DS. BL30 or BL50 must specify 120, 277 or 347V. Consult tech support for 208, 240 or 480V.
  DMG not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DS.

- DS not available with NLTAIR2 PIRHN, PIR, PER, PER5, PER7, BL30, BL50, FAO and DMG
- DS requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads using (2) drivers. DS only available with packages P8, P9, P10, P11, P12 and P13.

  Reference Motion Sensor Default Settings table on page 4 to see functionality.

- Reference Controls Options table on page 4.
  HS not available with T3LG, T4LG, BLC3, BLC4, LCCO and RCCO distribution. Also available as a separate accessory; see Accessories information.

- CCE option not available with option BS and EGSR. Contact Technical Support for availability.

  Option HA not available with performance packages P4, P5, P7, P8, P9 and P13.

  Requires luminaire to be specified with PER, PER5 or PER7 option. See Controls Table on page 4.
- Single fuse (SF) requires 120V, 277V, or 347V. Double fuse (DF) requires 208V, 240V or 480V. XVOLT not available with fusing (SF or DF).

#### **Shield Accessories**

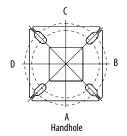


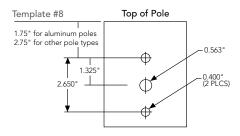
External Glare Shield (EGSR)

House Side Shield (HS)

#### **Drilling**

#### HANDHOLE ORIENTATION





#### **Tenon Mounting Slipfitter**

	• •						
Tenon O.D.	Mounting	Single Unit	2 @ 180	2 @ 90	3 @ 90	3 @120	4 @ 90
2-3/8"	RPA	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 390	AS3-5 320	AS3-5 490
2-7/8"	RPA	AST25-190	AST25-280	AST25-290	AST25-390	AST25-320	AST25-490
4"	RPA	AST35-190	AST35-280	AST35-290	AST35-390	AST35-320	AST35-490

		-	==	₹_	<u>-T-</u>	**	
Mounting Option	Drilling Template	Single	2 @ 180	2 @ 90	3 @ 90	3 @ 120	4 @ 90
Head Location		Side B	Side B & D	Side B & C	Side B, C & D	Round Pole Only	Side A, B, C & D
Drill Nomenclature	#8	DM19AS	DM28AS	DM29AS	DM39AS	DM32AS	DM49AS
			N	linimum Acceptable	Outside Pole Dimer	sion	
SPA	#8	3.5"	3.5"	3.5"	3.5"		3.5"
RPA	#8	3"	3"	3"	3"	3"	3"
SPA5	#5	3"	3"	3"	3"		3"
RPA5	#5	3"	3"	3"	3"	3"	3"
SPA8N	#8	3"	3"	3"	3"		3"

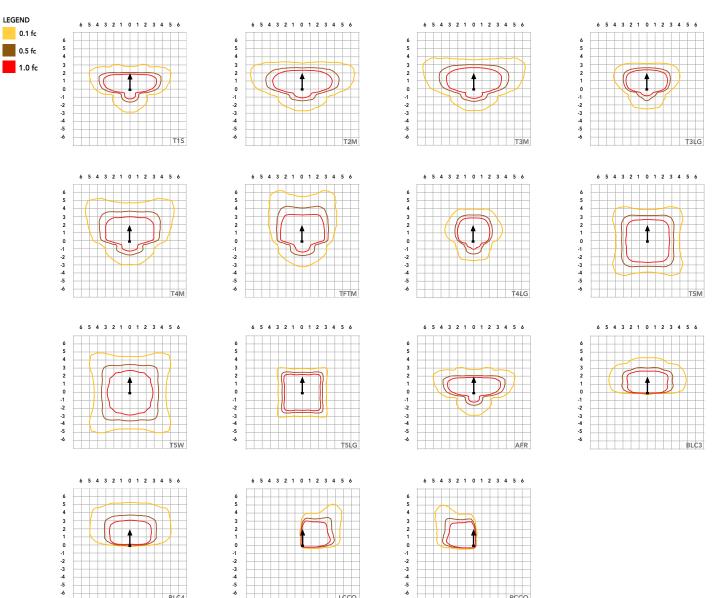
#### DSX1 Area Luminaire - EPA

\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

Fixture Quantity & Mounting Configuration	Single DM19	2 @ 180 DM28	2 @ 90 DM29	3 @ 90 DM39	3 @ 120 DM32	4 @ 90 DM49
Mounting Type	-		₹_	_T_	Y	
DSX1 with SPA	0.69	1.38	1.23	1.54		1.58
DSX1 with SPA5, SPA8N	0.70	1.40	1.30	1.66		1.68
DSX1 with RPA, RPA5	0.70	1.40	1.30	1.66	1.60	1.68
DSX1 with MA	0.83	1.66	1.50	2.09	2.09	2.09



Isofootcandle plots for the DSX1 LED P9 40K 70CRI. Distances are in units of mounting height (25').



#### Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-40°C (32-104°F).

Ambi	ent	Lumen Multiplier
0°C	32°F	1.04
5°C	41°F	1.04
10°C	50°F	1.03
15℃	50°F	1.02
20°C	68°F	1.01
25°C	77°C	1.00
30°C	86°F	0.99
35℃	95°F	0.98
40°C	104°F	0.97

#### **Projected LED Lumen Maintenance**

Data references the extrapolated performance projections for the platforms noted in a 25°C ambient, based on 10,000 hours of LED testing (tested per IESNA LM-80-08 and projected per IESNA TM-21-11).

To calculate LLF, use the lumen maintenance factor that corresponds to the desired number of operating hours below. For other lumen maintenance values, contact factory.

Operating Hours	Lumen Maintenance Factor
0	1.00
25,000	0.95
50,000	0.90
100.000	0.81

#### **FAO Dimming Settings**

FAO Position	% Wattage	% Lumen Output
8	100%	100%
7	93%	95%
6	80%	85%
5	66%	73%
4	54%	61%
3	41%	49%
2	29%	36%
1	15%	20%

\*Note: Calculated values are based on original performance package data. When calculating new values for given FAO position, use maximum published values by package listed on specification sheet (input watts and lumens by optic type).

#### **Electrical Load**

							Curre	nt (A)		
	Performance Package	LED Count	Drive Current (mA)	Wattage	120V	208V	240V	277V	347V	480V
	P1	30	530	51	0.42	0.24	0.21	0.18	0.15	0.11
	P2	30	700	68	0.56	0.33	0.28	0.24	0.20	0.14
	P3	30	1050	104	0.85	0.49	0.43	0.37	0.29	0.21
	P4	30	1250	125	1.03	0.60	0.52	0.45	0.36	0.26
Forward Optics (Non-Rotated)	P5	30	1400	142	1.15	0.66	0.58	0.50	0.40	0.29
	P6	40	1250	167	1.38	0.79	0.69	0.60	0.48	0.34
	P7	40	1400	188	1.54	0.89	0.77	0.67	277V         347V         480V           0.18         0.15         0.11           0.24         0.20         0.14           0.37         0.29         0.21           0.45         0.36         0.26           0.50         0.40         0.29           0.60         0.48         0.34           0.67         0.53         0.38           0.78         0.62         0.45           1.00         0.80         0.58           0.37         0.29         0.21           0.49         0.39         0.28           0.74         0.59         0.43	0.38
	P8	60	1100	216	1.80	1.04	0.90	0.78		0.45
	P9	60	1400	279	2.31	1.33	1.15	1.00	0.80	0.58
	P10	60	530	101	0.84	0.49	0.42	0.37	0.29	0.21
Rotated Optics	P11	60	700	135	1.12	0.65	0.56	0.49	0.39	0.28
(Requires L90 or R90)	P12	60	1050	206	1.72	0.99	0.21         0.18         0.15         0.2           0.28         0.24         0.20         0.2           0.43         0.37         0.29         0.2           0.52         0.45         0.36         0.3           0.58         0.50         0.40         0.0           0.69         0.60         0.48         0.0           0.77         0.67         0.53         0.0           0.90         0.78         0.62         0.0           1.15         1.00         0.80         0.0           0.42         0.37         0.29         0.0           0.56         0.49         0.39         0.0           0.86         0.74         0.59         0.0	0.43		
	P13	60	1400	279	2.30	1.33	1.15	1.00	0.79	0.57

#### **LED Color Temperature / Color Rendering Multipliers**

	70 CRI		80	OCRI	90CRI				
	Lumen Multiplier	Availability	Lumen Multiplier	Availability	Lumen Multiplier	Availability			
5000K	102%	Standard	92%	Extended lead-time	71%	(see note)			
4000K	100%	Standard	92%	Extended lead-time	67%	(see note)			
3500K	100%	(see note)	90%	Extended lead-time	63%	(see note)			
3000K	96%	Standard	87%	Extended lead-time	61%	(see note)			
2700K	94%	(see note)	85%	Extended lead-time	57%	(see note)			

 ${\sf Note: Some \ LED \ types \ are \ available \ as \ per \ special \ request. \ Contact \ Technical \ Support \ for \ more \ information.}$ 

#### **Motion Sensor Default Settings**

Option	Unoccupied Dimmed Level	High Level (when occupied)	Phototcell Operation	Dwell Time	Ramp-up Time	Dimming Fade Rate
PIR	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min
NLTAIR2 PIRHN	30%	100%	Enabled @ 2FC	7.5 min	3 sec	5 min

#### **Controls Options**

Nomenclature	Description	Functionality	Primary control device	Notes
FAO	Field adjustable output device installed inside the luminaire; wired to the driver dimming leads.	Allows the luminaire to be manually dimmed, effectively trimming the light output.	FAO device	Cannot be used with other controls options that need the 0-10V leads
DS (not available on DSX0)	Drivers wired independently for 50/50 luminaire operation	The luminaire is wired to two separate circuits, allowing for 50/50 operation.	Independently wired drivers	Requires two separately switched circuits. Consider nLight AIR as a more cost effective alternative.
PER5 or PER7	Twist-lock photocell receptacle	Compatible with standard twist-lock photocells for dusk to dawn operation, or advanced control nodes that provide 0-10V dimming signals.	Twist-lock photocells such as DLL Elite or advanced control nodes such as ROAM.	Pins 4 & 5 to dimming leads on driver, Pins 6 & 7 are capped inside luminaire. Cannot be used with other controls options that need the 0-10V leads.
PIR	Motion sensor with integral photocell. Sensor suitable for 8' to 40' mounting height.	Luminaires dim when no occupancy is detected.	Acuity Controls rSBG	Cannot be used with other controls options that need the 0-10V leads.
NLTAIR2 PIRHN	nLight AIR enabled luminaire for motion sensing, photocell and wireless communication.	Motion and ambient light sensing with group response. Scheduled dimming with motion sensor over-ride when wirelessly connected to the nLight Eclypse.	nLight Air rSBG	nLight AIR sensors can be programmed and commissioned from the ground using the CIAIRity Pro app. Cannot be used with other controls options that need the 0-10V leads.
BL30 or BL50	Integrated bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output	BLC device provides input to 0-10V dimming leads on all drivers providing either 100% or dimmed (30% or 50%) control by a secondary circuit	BLC UVOLT1	BLC device is powered off the 0-10V dimming leads, thus can be used with any input voltage from 120 to 480V



#### **Lumen Output**

Forward Op	tics																		
							30K					40K					50K		
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type		(30	OK, 70	CRI)			(40	00K, 70	CRI)			(50	00K, 70	CRI)	
rackage			Current (IIIA)		Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW
				T1S	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162
				T2M	7,203	1	0	3	142	7,507	2	0	3	147	7,653	2	0	3	150
				T3M	7,287	1	0	3	143	7,594	1	0	3	149	7,742	1	0	3	152
				T3LG	6,509	1	0	1	128	6,783	1	0	1	133	6,916	1	0	1	136
				T4M	7,395	1	0	3	145	7,707	1	0	3	151	7,857	1	0	3	154
				T4LG	6,726	1	0	1	132	7,010	1	0	1	138	7,146	1	0	1	140
D1	P1 51W	20	520	TFTM	7,446	1	0	3	146	7,760	1	0	3	152	7,912	1	0	3	155
PI		30	530	T5M T5W	7,609	3	0	2	149 152	7,930	3	0	2	156 158	8,084	3	0	2	159 161
			T5LG	7,732 7,631	3	0	1	150	8,058 7,953	3	0	1	156	8,215 8,108	3	0	1	159	
				BLC3	5,300	0	0	2	104	5,524	0	0	2	109	5,631	0	0	2	111
				BLC4	5,474	0	0	3	104	5,705	0	0	3	112	5,816	0	0	3	114
				RCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112
				LCCO	5,348	0	0	2	105	5,573	0	0	2	109	5,682	0	0	2	112
				AFR	7,776	1	0	2	153	8,104	1	0	2	159	8,262	1	0	2	162
				T1S	9,997	1	0	2	147	10,418	1	0	2	154	10,621	1	0	2	157
				T2M	9,260	2	0	3	137	9,651	2	0	3	142	9,839	2	0	3	145
				T3M	9,368	2	0	3	138	9,763	2	0	3	144	9,953	2	0	3	147
				T3LG	8,368	1	0	2	123	8,721	1	0	2	129	8,891	1	0	2	131
				T4M	9,507	2	0	3	140	9,909	2	0	3	146	10,102	2	0	3	149
				T4LG	8,647	1	0	2	128	9,012	1	0	2	133	9,187	1	0	2	136
			700	TFTM	9,573	2	0	3	141	9,977	2	0	3	147	10,172	2	0	3	150
P2	68W	30		T5M	9,782	4	0	2	144	10,195	4	0	2	150	10,393	4	0	2	153
				T5W	9,940	4	0	2	147	10,360	4	0	2	153	10,562	4	0	2	156
				T5LG	9,810	3	0	1	145	10,224	3	0	1	151	10,423	3	0	1	154
				BLC3	6,814	0	0	2	101	7,101	0	0	2	105	7,240	0	0	2	107
				BLC4 RCCO	7,038 6,875	0	0	3	104 101	7,334 7,165	0	0	3	108 106	7,477	0	0	3	110 108
				LCCO	6,875	1	0	2	101	7,165	1	0	2	106	7,305 7,305	1	0	2	108
				AFR	9,997	1	0	2	147	10,418	1	0	2	154	10,621	1	0	2	157
				T1S	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147
				T2M	13,055	2	0	3	128	13,605	2	0	3	133	13,871	2	0	3	136
				T3M	13,206	2	0	4	129	13,763	2	0	4	135	14,031	2	0	4	137
				T3LG	11,797	2	0	2	115	12,294	2	0	2	120	12,534	2	0	2	123
				T4M	13,403	2	0	4	131	13,968	2	0	4	137	14,241	2	0	4	139
				T4LG	12,190	2	0	2	119	12,704	2	0	2	124	12,952	2	0	2	127
				TFTM	13,496	2	0	4	132	14,065	2	0	4	138	14,339	2	0	4	140
P3	102W	30	1050	T5M	13,790	4	0	2	135	14,371	4	0	2	141	14,652	4	0	2	143
				T5W	14,013	4	0	3	137	14,605	4	0	3	143	14,889	4	0	3	146
				T5LG	13,830	3	0	2	135	14,413	3	0	2	141	14,694	3	0	2	144
				BLC3	9,606	0	0	2	94	10,011	0	0	2	98	10,206	0	0	2	100
				BLC4	9,921	0	0	3	97	10,340	0	0	3	101	10,541	0	0	3	103
				RCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101
				LCCO	9,692	1	0	2	95	10,101	1	0	2	99	10,298	1	0	2	101
				AFR	14,093	2	0	2	138	14,687	2	0	2	144	14,973	2	0	2	147



#### **Lumen Output**

Forward Optics																				
Performance			Duivo				30K					40K			50K					
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type		(30	OOK, 70	CRI)				(5000K, 70 CRI)								
- a charge			carrene (min)		Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	
				T1S	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141	
				T2M	15,207	3	0	4	123	15,849	3	0	4	128	16,158	3	0	4	130	
				T3M	15,383	2	0	4	124	16,032	2	0	4	129	16,345	2	0	4	132	
				T3LG	13,742	2	0	2	111	14,321	2	0	2	116	14,600	2	0	2	118	
				T4M	15,613	2	0	4	126	16,272	2	0	4	131	16,589	2	0	4	134	
				T4LG	14,200	2	0	2	115	14,799	2	0	2	119	15,087	2	0	2	122	
	45.00	20	4250	TFTM	15,721	2	0	4	127	16,384	2	0	4	132	16,703	2	0	4	135	
P4	124W	30	1250	T5M	16,063	4	0	2	130	16,741	4	0	2	135	17,067	4	0	2	138	
				T5W	16,324	5	0	3	132	17,013	5	0	3	137	17,344	5	0	3	140	
				T5LG	16,110	3	0	2	130	16,790	4	0	2	135	17,117	4	0	2	138	
				BLC3 BLC4	11,190 11,557	0	0	3	90	11,662 12,044	0	0	3	94 97	11,889 12,279	0	0	3	96 99	
				RCCO	11,291	1	0	3	93	11,767	1	0	3	95	11,996	1	0	3	99	
				LCCO	11,291	1	0	3	91	11,767	1	0	3	95	11,996	1	0	3	97	
				AFR	16,416	2	0	3	132	17,109	2	0	3	138	17,442	2	0	3	141	
				T1S	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139	
				T2M	16,723	3	0	4	121	17,428	3	0	4	126	17,768	3	0	4	129	
				T3M	16,917	3	0	4	122	17,630	3	0	4	128	17,974	3	0	4	130	
				T3LG	15,111	2	0	2	109	15,749	2	0	2	114	16,055	2	0	2	116	
				T4M	17,169	3	0	5	124	17,893	3	0	5	130	18,242	3	0	5	132	
				T4LG	15,615	2	0	2	113	16,274	2	0	2	118	16,591	2	0	2	120	
			1400	TFTM	17,288	2	0	4	125	18,017	2	0	5	130	18,368	3	0	5	133	
P5	138W	30		T5M	17,664	5	0	3	128	18,410	5	0	3	133	18,768	5	0	3	136	
				T5W	17,951	5	0	3	130	18,708	5	0	3	135	19,073	5	0	3	138	
				T5LG	17,716	4	0	2	128	18,463	4	0	2	134	18,823	4	0	2	136	
				BLC3	12,305	0	0	3	89	12,824	0	0	3	93	13,074	0	0	3	95	
				BLC4	12,709	0	0	4	92	13,245	0	0	4	96	13,503	0	0	4	98	
				RCCO	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95	
				LCC0	12,416	1	0	3	90	12,940	1	0	3	94	13,192	1	0	3	95	
				AFR	18,052	2	0	3	131	18,814	2	0	3	136	19,180	2	0	3	139	
				T1S	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135	
				T2M	19,482	3	0	4	118	20,303	3	0	4	123	20,699	3	0	4	125	
				T3M	19,708	3	0	5	119	20,539	3	0	5	124	20,939	3	0	5	127	
				T3LG	17,604	2	0	2	107	18,347	2	0	2	111	18,704	2	0	2	113	
				T4M	20,001	3	0	5	121	20,845	3	0	5	126	21,251	3	0	5	129	
				T4LG	18,191	2	0	2	110	18,959	2	0	2	115	19,328	2	0	2	117	
Dr.	165111	40	1350	TFTM	20,140	3	0	5	122	20,989	3	0	5	127	21,398	3	0	5	129	
P6	165W	40	1250	T5M T5W	20,579	5	0	3	125	21,447	5	0	3	130	21,865	5	0	3	132 134	
				T5LG	20,912 20,638	5 4	0	2	127 125	21,795 21,509	4	0	2	132 130	22,219 21,928	5 4	0	2	134	
				BLG	14,335	0	0	3	87	14,940	0	0	3	90	15,231	0	0	3	92	
				BLC4	14,333	0	0	4	90	15,430	0	0	4	93	15,731	0	0	4	95	
				RCCO	14,464	1	0	3	88	15,430	1	0	3	91	15,368	1	0	3	93	
				LCCO	14,464	1	0	3	88	15,074	1	0	3	91	15,368	1	0	3	93	
				AFR	21,031	2	0	3	127	21,918	2	0	3	133	22,345	2	0	3	135	



#### **Lumen Output**

Forward Op	tics																		
							30K					40K					50K		
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type		(300	OK, 70	CRI)				(5000K, 70 CRI)							
rackage			Current (IIIA)		Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW
				T1S	22,741	2	0	3	123	23,700	2	0	3	129	24,162	3	0	3	131
				T2M	21,066	3	0	4	114	21,955	3	0	4	119	22,383	3	0	4	121
				T3M	21,311	3	0	5	116	22,210	3	0	5	120	22,642	3	0	5	123
				T3LG	19,036	2	0	2	103	19,839	2	0	3	108	20,226	2	0	3	110
	D7 104W			T4M	21,628	3	0	5	117	22,541	3	0	5	122	22,980	3	0	5	125
				T4LG	19,671	2	0	2	107	20,501	2	0	3	111	20,900	2	0	3	113
				TFTM	21,778	3	0	5	118	22,697	3	0	5	123	23,139	3	0	5	125
P7	184W	40	1400	T5M	22,252	5	0	3	121	23,191	5	0	3	126	23,643	5	0	3	128
			T5W	22,613	5	0	3	123	23,567	5	0	4	128	24,027	5	0	4	130	
				T5LG	22,317	4	0	2	121	23,258	4	0	2	126	23,712	4	0	2	129
				BLC3 BLC4	15,501	0	0	3	84 87	16,155	0	0	4	88	16,470	0	0	4	89
				RCCO	16,010 15,641	0	0	4	85	16,685	0	0	3	90	17,010	1	0	3	92 90
				LCCO	15,641	1	0	3	85	16,301 16,301	1	0	3	89 89	16,619	1	0	3	90
				AFR	22,741	2	0	3	123	23,700	2	0	3	129	16,619 24,162	3	0	3	131
				T1S	28,701	3	0	3	133	29,912	3	0	4	139	30,495	3	0	4	141
				T2M	26,587	3	0	5	123	27,709	3	0	5	128	28,249	3	0	5	131
				T3M	26,895	3	0	5	125	28,030	3	0	5	130	28,576	3	0	5	132
				T3LG	24,025	3	0	3	111	25,038	3	0	3	116	25,526	3	0	3	118
				T4M	27,296	3	0	5	127	28,448	3	0	5	132	29,002	3	0	5	134
				T4LG	24,826	3	0	3	115	25,873	3	0	3	120	26,378	3	0	3	122
				TFTM	27,485	3	0	5	127	28,645	3	0	5	133	29,203	3	0	5	135
P8	216W	60	1100	T5M	28,084	5	0	4	130	29,269	5	0	4	136	29,839	5	0	4	138
				T5W	28,539	5	0	4	132	29,743	5	0	4	138	30,323	5	0	4	141
				T5LG	28,165	4	0	2	131	29,354	4	0	2	136	29,926	4	0	2	139
				BLC3	19,563	0	0	4	91	20,388	0	0	4	94	20,786	0	0	4	96
				BLC4	20,205	0	0	5	94	21,057	0	0	5	98	21,468	0	0	5	99
				RCCO	19,740	1	0	4	91	20,572	1	0	4	95	20,973	1	0	4	97
				LCC0	19,740	1	0	4	91	20,572	1	0	4	95	20,973	1	0	4	97
				AFR	28,701	3	0	3	133	29,912	3	0	4	139	30,495	3	0	4	141
				T1S	34,819	3	0	4	126	36,288	3	0	4	131	36,996	3	0	4	134
				T2M	32,255	3	0	5	116	33,616	3	0	5	121	34,271	3	0	5	124
				T3M	32,629	3	0	5	118	34,006	3	0	5	123	34,668	3	0	5	125
				T3LG	29,146	3	0	3	105	30,376	3	0	4	110	30,968	3	0	4	112
				T4M	33,116	3	0	5	120	34,513	3	0	5	125	35,185	3	0	5	127
				T4LG	30,119	3	0	3	109	31,389	3	0	4	113	32,001	3	0	4	116
				TFTM	33,345	3	0	5	120	34,751	3	0	5	125	35,429	3	0	5	128
P9	277W	60	1400	T5M	34,071	5	0	4	123	35,509	5	0	4	128	36,201	5	0	4	131
				T5W	34,624	5	0	4	125	36,084	5	0	4	130	36,788	5	0	4	133
				T5LG	34,170	5	0	3	123	35,612	5	0	3	129	36,306	5	0	3	131
				BLC3	23,734	0	0	4	86	24,735	0	0	4	89	25,217	0	0	4	91
				BLC4	24,513	0	0	5	88	25,547	0	0	5	92	26,045	0	0	5	94
				RCCO	23,948	1	0	4	86	24,958	1	0	4	90	25,445	1	0	4	92
				LCCO	23,948	1	0	4	86	24,958	1	0	4	90	25,445	1	0	4	92
				AFR	34,819	3	0	4	126	36,288	3	0	4	131	36,996	3	0	4	134



# **Performance Data**

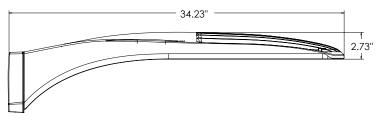
# **Lumen Output**

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of configurations shown within the tolerances described within LM-79. Contact factory for performance data on any configurations not shown here.

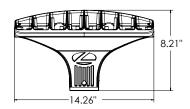
Rotated Op	tics																																								
Dayfaymanca			Duine				30K					40K					50K																								
Performance Package	System Watts	LED Count	Drive Current (mA)	Distribution Type			00K, 70					00K, 70	_		<u> </u>	_	00K, 70	_																							
				T1C	Lumens	В	U	G	LPW	Lumens	B	U	G	LPW	Lumens	B	U	G	LPW																						
				T1S T2M	15,164 14,047	3	0	3	150 139	15,803 14,640	3	0	3	156 145	16,112 14,925	3	0	3	159 147																						
				T3M	14,208	4	0	4	140	14,807	4	0	4	146	15,096	4	0	4	149																						
				T3LG	12,693	3	0	3	125	13,229	3	0	3	131	13,487	3	0	3	133																						
				T4M	14,420	4	0	4	142	15,028	4	0	4	148	15,321	4	0	4	151																						
				T4LG	13,115	3	0	3	129	13,668	3	0	3	135	13,934	3	0	3	138																						
D10	404111		530	TFTM	14,522	4	0	4	143	15,134	4	0	4	149	15,429	4	0	4	152																						
P10	101W	60	530	T5M T5W	14,836 15,076	4	0	3	146 149	15,462 15,712	5	0	3	153 155	15,763 16,019	5	0	3	156 158																						
				T5LG	14,879	3	0	2	147	15,507	3	0	2	153	15,809	3	0	2	156																						
				BLC3	10,335	3	0	3	102	10,771	4	0	4	106	10,981	4	0	4	108																						
				BLC4	10,674	4	0	4	105	11,124	4	0	4	110	11,341	4	0	4	112																						
				RCCO	10,429	1	0	2	103	10,869	1	0	2	107	11,080	1	0	2	109																						
				LCC0	10,429	1	0	2	103	10,869	1	0	2	107	11,080	1	0	2	109																						
				AFR T1S	15,164 19,437	3	0	3	150 144	15,803 20,257	3	0	3	156 150	16,112 20,651	3	0	3	159 153																						
				T2M	18,005	4	0	4	133	18,765	4	0	4	139	19,131	4	0	4	142																						
				T3M	18,211	4	0	4	135	18,980	4	0	4	141	19,350	4	0	4	143																						
				T3LG	16,270	3	0	3	121	16,957	3	0	3	126	17,287	4	0	4	128																						
				T4M	18,483	4	0	4	137	19,263	5	0	5	143	19,638	5	0	5	146																						
				T4LG	16,810	3	0	3	125	17,519	3	0	3	130	17,861	3	0	3	132																						
P11	12EW	60	700	TFTM T5M	18,614	4	0	3	138	19,399	5	0	3	144 147	19,777	5	0	5	147																						
PII	135W	60	700	T5W	19,017 19,325	5	0	3	141 143	19,819 20,140	5	0	3	147	20,205	5	0	3	150 152																						
				T5LG	19,072	4	0	2	141	19,876	4	0	2	147	20,264	4	0	2	150																						
				BLC3	13,247	4	0	4	98	13,806	4	0	4	102	14,075	4	0	4	104																						
				BLC4	13,682	4	0	4	101	14,259	4	0	4	106	14,537	4	0	4	108																						
				RCCO	13,367	1	0	3	99	13,931	1	0	3	103	14,203	1	0	3	105																						
				LCCO	13,367	1	0	3	99	13,931	1	0	3	103	14,203	1	0	3	105																						
				AFR T1S	19,437 27,457	4	0	4	144 133	20,257	4	0	4	150 139	20,651	4	0	4	153 142																						
			-																							T2M	25,436	5	0	5	124	26,509	5	0	5	129	27,025	5	0	5	131
																											T3M	25,727	5	0	5	125	26,812	5	0	5	130	27,335	5	0	5
				T3LG	22,984	4	0	4	112	23,954	4	0	4	116	24,421	4	0	4	119																						
				T4M	26,110	5	0	5	127	27,212	5	0	5	132	27,742	5	0	5	135																						
				T4LG	23,747	4	0	4	115	24,749	4	0	4	120	25,231	4	0	4	123																						
P12	206W	60	1050	TFTM T5M	26,295 26,864	5	0	5 4	128 130	27,404 27,997	5	0	5 4	133 136	27,938 28,543	5	0	5 4	136 139																						
FIZ	200W	60	1050	T5W	27,299	5	0	4	133	28,451	5	0	4	138	29,006	5	0	4	141																						
				T5LG	26,942	4	0	2	131	28,078	4	0	2	136	28,626	4	0	2	139																						
				BLC3	18,714	4	0	4	91	19,504	4	0	4	95	19,884	4	0	4	97																						
				BLC4	19,327	5	0	5	94	20,143	5	0	5	98	20,535	5	0	5	100																						
				RCCO	18,883	1	0	4	92	19,680	1	0	4	96	20,064	1	0	4	97																						
				LCCO	18,883	1	0	4	92	19,680	1	0	4	96	20,064	1	0	4	97																						
				AFR T1S	27,457 34,436	5	0	5	133 125	28,616 35,889	5	0	5	139 130	29,174 36,588	5	0	5	142 133																						
				T2M	31,900	5	0	5	116	33,246	5	0	5	121	33,894	5	0	5	123																						
				T3M	32,265	5	0	5	117	33,626	5		5	122	34,282	5	0	5	124																						
				T3LG	28,826	4	0	4	105	30,042	4	0	4	109	30,628	4	0	4	111																						
				T4M	32,746	5	0	5	119	34,128	5	0	5	124	34,793	5	0	5	126																						
				T4LG	29,782	4	0	4	108	31,039	4	0	4	113	31,644	5	0	4	115																						
P13	276W	60	1400	TFTM T5M	32,978	5	0	5	120	34,369	5	0	5	125	35,039	5	0	5	127																						
F 13	276W	60	1400	T5W	33,692 34,238	5	0	4	122 124	35,113 35,682	5	0	4	127 129	35,797 36,378	5	0	4	130 132																						
				T5LG	33,789	5	0	3	122	35,002	5	0	3	128	35,901	5	0	3	130																						
				BLC3	23,471	5	0	5	85	24,461	5	0	5	89	24,937	5	0	5	90																						
				BLC4	24,240	5	0	5	88	25,262	5	0	5	92	25,755	5	0	5	93																						
				RCCO	23,683	1	0	4	86	24,682	1	0	4	89	25,163	1	0	4	91																						
				LCCO	23,683	1	0	4	86	24,682	1	0	4	89	25,163	1	0	4	91																						
				AFR	34,436	5	0	5	125	35,889	5	0	5	130	36,588	5	0	5	133																						

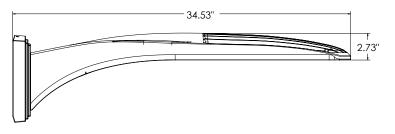


# **Dimensions**

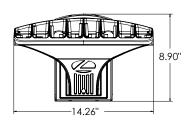


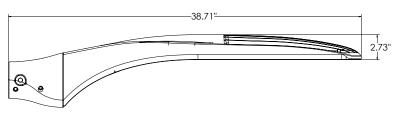
DSX1 with RPA, RPA5, SPA5, SPA8N mount Weight: 36 lbs



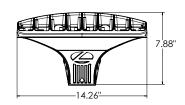


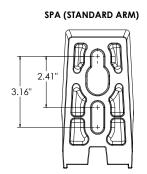
DSX1 with WBA mount Weight: 38 lbs

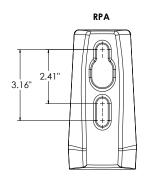


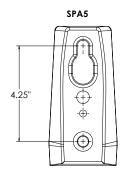


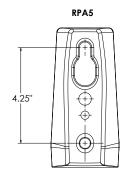
DSX1 with MA mount Weight: 39 lbs

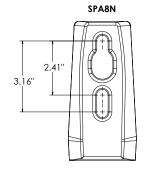










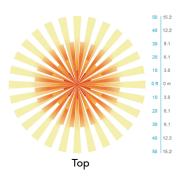


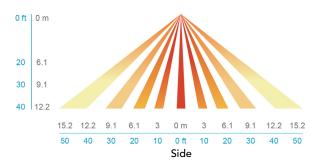
# nLight Control - Sensor Coverage and Settings

# nLight Sensor Coverage Pattern

**NLTAIR2 PIRHN** 







#### **FEATURES & SPECIFICATIONS**

#### INTENDED USE

The sleek design of the D-Series Size 1 reflects the embedded high performance LED technology. It is ideal for many commercial and municipal applications, such as parking lots, plazas, campuses, and streetscapes.

#### CONSTRUCTION

Single-piece die-cast aluminum housing has integral heat sink fins to optimize thermal management through conductive and convective cooling. Modular design allows for ease of maintenance and future light engine upgrades. The LED drivers are mounted in direct contact with the casting to promote low operating temperature and long life. Housing driver compartment is completely sealed against moisture and environmental contaminants (IP66). Vibration rated per ANSI C136.31 for 3G for SPA and MA. 1.5G for mountings RPA, RPA5, SPA5 and SPA8N. Low EPA (0.69 ft²) for optimized pole wind loading.

#### FINISH

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures a minimum 3 mils thickness for a finish that can withstand extreme climate changes without cracking or peeling. Available in both textured and non-textured finishes.

#### Coastal Construction (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times may apply.

#### **OPTICS**

Precision-molded proprietary silicone lenses are engineered for superior area lighting distribution, uniformity, and pole spacing. Light engines are available in standard 3000 K, 4000 K and 5000 K (70 CRI) configurations. 80CRI configurations are also available. The D-Series Size 1 has zero uplight and qualifies as a Nighttime Friendly™ product, meaning it is consistent with the LEED® and Green Globes™ criteria for eliminating wasteful uplight.

#### ELECTRICAL

Light engine configurations consist of high-efficacy LEDs mounted to metal-core circuit boards to maximize heat dissipation and promote long life (up to L81/100,000 hours at 25°C). Class 1 electronic drivers are designed to have a power factor >90%, THD <20%, and an expected life of 100,000 hours with <1% failure rate. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

# STANDARD CONTROLS

The DSX1 LED area luminaire has a number of control options. DSX Size 1, comes standard with 0-10V dimming drivers. Dusk to dawn controls can be utilized via optional NEMA twist-lock photocell receptacles. Integrated motion sensor with on-board photocells feature field-adjustable programing and are suitable for mounting heights up to 40 feet. Control option BL features a bi-level device that allows a second control circuit to switch all light engines to either 30% or 50% light output.

#### **nLIGHT AIR CONTROLS**

The DSX1 LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing and photocontrol functionality and is suitable for mounting heights up to 40 feet. Once commissioned using a smartphone and the easy-to-use CLAIRITY app, nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found here.

#### INSTALLATION

Integral mounting arm allows for fast mounting using Lithonia standard #8 drilling and accommodates pole drilling's from 2.41 to 3.12" on center. The standard "SPA" option for square poles and the "RPA" option for round poles use the #8 drilling. For #5 pole drillings, use SPA5 or RPA5. Additional mountings are available including a wall bracket (WBA) and mast arm (MA) option that allows luminaire attachment to a 2 3/8" horizontal mast arm.

#### LISTINGS

UL listed to meet U.S. and Canadian standards. UL Listed for wet locations. Light engines are IP66 rated; luminaire is IP66 rated. Rated for -40°C minimum ambient.

DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at <a href="https://www.designlights.org/QPL">www.designlights.org/QPL</a> to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only.

#### **BUY AMERICAN ACT**

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations. Please refer to <a href="https://www.acuitybrands.com/buy-american">www.acuitybrands.com/buy-american</a> for additional information.

#### WARRANTY

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at: www.acuitybrands.com/support/warranty/terms-and-conditions

**Note:** Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.





# RSX2 LED Area Luminaire















# **Specifications**

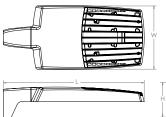
**EPA** 0.69 ft2 (0.06 m2) (ft2@0°):

29.3" (74.4 cm) Length: (SPA mount)

Width: 13.4" (34.0 cm)

3.0" (7.6 cm) Main Body Height: 7.2" (18.3 cm) Arm

Weight: 30.0 lbs (13.6 kg) (SPA mount)







#### Introduction

The new RSX LED Area family delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The RSX2 delivers 11,000 to 31,000 lumens allowing it to replace 250W to 1000W HID luminaires.

The RSX features an integral universal mounting mechanism that allows the luminaire to be mounted on most existing drill hole patterns. This "no-drill" solution provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.



# ds design select

Items marked by a shaded background qualify for the Design Select program and ship in 15 days or less. To learn more about Design Select, visit www.acuitybrands.com/designselect. \*See ordering tree for details

# Design Select options indicated by this color background.

# **Ordering Information**

#### **EXAMPLE:** RSX2 LED P6 40K R3 MVOLT SPA DDBXD

RSX2 LED											
Series	Performance Package	Color Temperature	Distribut	Distribution V			Mounting				
RSX2 LED	P1 P2 P3 P4 P5 P6	30K 3000K 40K 4000K 50K 5000K	R2 R3 R3S R4 R4S R5 R5 R5S AFR AFRR90	Type 2 Wide Type 3 Wide Type 3 Short Type 4 Wide Type 4 Short Type 5 Short Type 5 Short Automotive Front Row Automotive Front Row Left Rotated	MVOLT HVOLT XVOLT (use spe options 120 <sup>3</sup> 208 <sup>3</sup> 240 <sup>3</sup>	(120V-277V) <sup>2</sup> (347V-480V) <sup>3</sup> (277V-480V) <sup>4</sup> cific voltage for as noted) 277 <sup>5</sup> 347 <sup>5</sup> 480 <sup>5</sup>	SPA RPA MA IS WBA WBASC AASP AARP AAWB	Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°) Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 180°, 3 at 120°) Mast arm adaptor (fits 2–3/8" 0D horizontal tenon) Adjustable slipfitter (fits 2–3/8" 0D tenon) 6 Wall bracket 1 Wall bracket with surface conduit box Adjustable tilt arm square pole mounting 6 Adjustable tilt arm round pole mounting 6 Adjustable tilt arm with wall bracket 6 Adjustable tilt arm wall bracket and surface conduit box 6			

Options				Finish	
Shipped I	nstalled	Shipped Insta	alled	DDBXD	Dark Bronze
HS	House-side shield <sup>7</sup>	*Standalone	and Networked Sensors/Controls (factory default settings, see table page 9)	DBLXD	Black
PE	Photocontrol, button style 8,9	NLTAIR2 PIRHN	nLight AIR generation 2, with Networked, Bi-Level motion/ambient sensor 9, 13, 14, 15	DNAXD	Natural Aluminum
PER7	Seven-wire twist-lock receptacle only (no controls) <sup>9, 10, 11</sup>	BAA	Buy America(n) Act Compliant	DWHXD	White
SF	Single fuse (120, 277, 347) <sup>5</sup>	CCE	Coastal Construction <sup>16</sup>	DDBTXD	Textured Dark Bronze
DF	Double fuse (208, 240, 480) <sup>5</sup>	*Note: NLTAIR2	2 PIRHN with nLight Air can be used as a standalone dimming sensor with out-of-box	DBLBXD	Textured Black
SPD20KV	20KV Surge pack (10KV standard)	settings or as a	wireless networked solution. See factory default settings table. Sensor coverage ted when luminaire is tilted.	DNATXD	Textured Natural Aluminum
FA0	Field adjustable output <sup>9</sup>	i '	arately (requires some field assembly)	DWHGXD	Textured White
DMG	0–10V dimming extend out back of housing for external control (control ordered separate) 9	EGS EGS	External glare shield <sup>7</sup>		
DS	Dual switching 9,12	EGFV	External glare full visor (360° around light aperture) 7		
	•	BS	Bird spikes 17		



# **Ordering Information**

#### Accessories

RSX2HS RSX2 House side shield (includes 2 shields)

RSX2EGS (FINISH) U External glare shield (specify finish)

RSX2HSAFRR (FINISH) U RSX2 House side shields for AFR rotated optics (includes 2 shields)

RSX2EGEV (FINISH) U External glare full visor (specify finish)

RSXRPA (FINISH) U RSX Universal round pole adaptor plate (specify finish) RSXWBA (FINISH) U

RSX WBA wall bracket (specify finish) <sup>1</sup> RSX Surface conduit box (specify finish, for use with WBA, WBA not included) RSXSCB (FINISH) U

Photocell -SSL twist-lock (120-277V) 18 DLL127F 1.5 JU DLL347F 1.5 CUL JU Photocell -SSL twist-lock (347V) 18 DLL480F 1.5 CUL JU Photocell -SSL twist-lock (480V) 18

DSHORT SBK U Shorting cap 18



It may be ordered as an accessory.

NOTES



- Any Type 5 distribution, is not available with WBA.

  MYOLT driver operates on any line voltage from 120-277V (50/60 Hz).

  HYOLT driver operates on any line voltage from 347-480V (50/60 Hz).

  XYOLT driver not available with P1. XYOLT driver operates on any line voltage from 277V-480V (50/60 Hz).

  XYOLT driver not available with PE. Single fuse (SF) requires 120V, 277V or 347V. Double fuse (DF) requires 208V, 240V or 480V.

  Maximum tilt is 90° above horizontal.

  It may be ordered as an accessory. as a separate line item from Acuity Brands Controls. See accessories. Shorting Cap included.\_\_\_
- Shorting Cap included. For units with option PER7, the mounting must be restricted to +/- 45° from horizontal aim per ANSI C136.10-2010. Ds requires (2) separately switched circuits. DS provides 50/50 fixture operation via (2) different sets of leads using (2) drivers. DS only available with packages P5 and P6. Must be ordered with PIRHIN.

  - Requires MVOLT or HVOLT.

    Must be ordered with NLTAIR2. For additional information on PIRHN
  - vist here.

    CCE option not available with WBA, WBASC, AASP, AARP, AAWB,
    AAWBSC, EGS, EGFV and BS.

    Must be ordered with fixture for factory pre-drilling.
    Requires luminaire to be specified with PER7 option. Ordered and shipped as a separate line item from Acuity Brands Controls. 16

#### **External Shields**



**House Side Shield** 



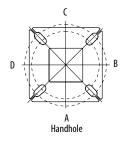


External 360 Full Visor

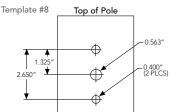
# **Pole/Mounting Informatiion**

Accessories including bullhorns, cross arms and other adpaters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit Accessories.

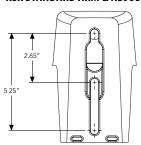
#### HANDHOLE ORIENTATION



#### **RSX POLE DRILLING**



#### **RSX STANDARD ARM & ADJUSTABLE ARM**



#### **Round Tenon Mount - Pole Top Slipfitters**

Tenon O.D.	RSX Mounting	Single	2 at 180°	2 at 90°	3 at 120°	3 at 90°	4 at 90°
2 - 3/8"	RPA, AARP	AS3-5 190	AS3-5 280	AS3-5 290	AS3-5 320	AS3-5 390	AS3-5 490
2 - 7/8"	RPA, AARP	AST25-190	AST25-280	AST25-290	AST25-320	AST25-390	AST25-490
4"	RPA, AARP	AST35-190	AST35-280	AST35-290	AST35-320	AST35-390	AST35-490

#### **Drill/Side Location by Configuration Type**

		-		7		_1_	-1-
Drilling Template	Mounting Option	Single	2 @ 180	2 @ 90	3 @ 120	3 @ 90	4 @ 90
	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
#8	Drill Nomenclature	DM19AS	DM28AS	DM29AS	DM32AS	DM39AS	DM49AS

#### RSX2 - Luminaire EPA

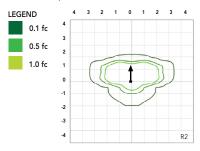
\*Includes luminaire and integral mounting arm. Other tenons, arms, brackets or other accessories are not included in this EPA data.

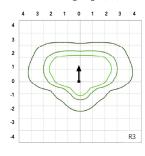
Fixture Quantity & Mo Configuration	unting	Single	2 @ 90	2 @ 180	3 @ 90	3 @ 120	4 @ 90	2 Side by Side	3 Side by Side	4 Side by Side
Mounting Type	Tilt	-	-1		<u>.</u>	*	+			m
SPA - Square Pole Adaptor	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
RPA - Round Pole Adaptor		0.74	1.27	1.37	1.9	1.71	2.49	1.42	2.16	2.84
MA - Mast Arm Adaptor		0.61	1.14	1.11	1.64	1.45	2.23	1.29	1.9	2.58
	0°	0.69	1.22	1.27	1.8	1.61	2.39	1.37	2.06	2.74
	10°	0.53	1.06	1.05	1.58	1.37	2.08	1.06	1.59	2.12
	20°	0.52	1.02	1.03	1.52	1.33	2.02	1.03	1.55	2.07
	30°	0.64	1.11	1.18	1.63	1.45	2.21	1.27	1.91	2.54
IS - Integral Slipfitter	40°	0.81	1.21	1.35	1.74	1.65	2.39	1.62	2.43	3.23
AASP/AARP - Adjustable	45°	0.91	1.25	1.5	1.81	1.75	2.48	1.82	2.73	3.64
Arm Square/Round Pole	50°	1.34	1.83	2.17	2.61	2.56	3.62	2.68	4.02	5.36
	60°	2.2	2.97	3.57	4.24	4.17	5.89	4.41	6.61	8.82
	70°	2.86	4.13	4.7	5.89	5.71	8.21	5.71	8.57	11.42
	80°	3.4	5.13	5.67	7.34	7.09	10.21	6.79	10.19	13.59
	90°	3.85	5.96	6.55	8.58	8.31	11.88	7.70	11.56	15.41

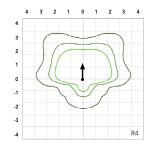
# **Photometric Diagrams**

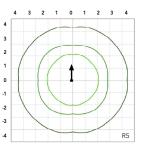
To see complete photometric reports or download .ies files for this product, visit Lithonia Lighting's RSX Area homepage.

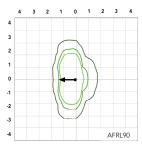
Isofootcandle plots for the RSX2 LED P6 40K. Distances are in units of mounting height (30').

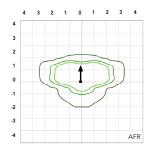


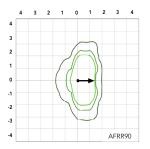












# **Performance Data**

# Lumen Ambient Temperature (LAT) Multipliers

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

Ambient	Ambient	Lumen Multiplier				
0°C	32°F	1.05				
5°C	41°F	1.04				
10°C	50°F	1.03				
15℃	59°F	1.02				
20°C	68°F	1.01				
25℃	77°F	1.00				
30°C	86°F	0.99				
35℃	95°F	0.98				
40°C	104°F	0.97				
45°C	113°F	0.96				
50°C	122°F	0.95				

#### **Electrical Load**

					nt (A)		
Performance Package	System Watts (W)	120V	208V	240V	277V	347V	480V
P1	71W	0.59	0.34	0.30	0.26	0.20	0.15
P2	111W	0.93	0.53	0.46	0.40	0.32	0.23
P3	147W	1.23	0.70	0.61	0.53	0.42	0.31
P4	187W	1.55	0.90	0.78	0.68	0.53	0.38
P5	210W	1.75	1.01	0.87	0.76	0.60	0.44
P6	244W	2.03	1.17	1.01	0.88	0.70	0.51

# **Projected LED Lumen Maintenance**

Operating Hours	50,000	75,000	100,000
Lumen Maintenance Factor	>0.97	>0.95	>0.92

Values calculated according to IESNA TM-21-11 methodology and valid up to  $40^{\circ}\text{C}.$ 

# **Performance Data**

# **Lumen Output**

Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown, within the tolerances allowed by Lighting Facts. Contact factory for performance data on any configurations not shown here.

Performance	System Watts	Distribution.			30K K, 70 CR	l)				40K K, 70 CR	l)				50K K, 70 CR	l)	
Package	) Joseph Mates	Туре	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW	Lumens	В	U	G	LPW
		R2	10,040	2	0	1	139	11,031	2	0	1	153	11,031	2	0	1	153
		R3	10,005	2	0	2	141	10,992	2	0	2	155	10,992	2	0	2	155
		R3S	10,271	2	0	2	143	11,285	2	0	2	157	11,285	2	0	2	157
		R4	10,136	2	0	2	143	11,136	2	0	2	157	11,136	2	0	2	157
P1	71W	R4S	9,779	2	0	2	138	10,744	2	0	2	151	10,744	2	0	2	151
		R5	10,271	4	0	2	145	11,285	4	0	2	159	11,285	4	0	2	159
		R5S AFR	10,544 10,026	3	0	1	149 141	11,585 11,016	3	0	2	163 155	11,585 11,016	2	0	1	163 155
		AFRR90	10,020	3	0	2	140	11,121	3	0	2	154	11,121	3	0	2	154
		AFRL90	10,164	3	0	2	141	11,167	3	0	2	155	11,167	3	0	2	155
		R2	15,712	2	0	2	138	17,263	2	0	2	151	17,263	2	0	2	151
		R3	15,657	2	0	3	141	17,202	3	0	3	155	17,202	3	0	3	155
		R3S	16,075	2	0	2	141	17,661	2	0	2	155	17,661	2	0	2	155
		R4	15,862	2	0	3	143	17,427	2	0	3	157	17,427	2	0	3	157
P2	111W	R4S	15,304	2	0	2	138	16,815	2	0	2	151	16,815	2	0	2	151
		R5 R5S	16,075	4	0	2	145	17,661	5	0	3	159	17,661	5	0	3	159
		AFR	16,502 15,691	2	0	2	149 141	18,130 17,240	2	0	2	163 155	18,130 17,240	2	0	2	163 155
		AFRR90	15,841	3	0	3	139	17,240	4	0	3	153	17,240	4	0	3	153
		AFRL90	15,907	3	0	3	139	17,477	4	0	3	153	17,477	4	0	3	153
		R2	19,855	3	0	2	132	21,814	3	0	2	145	21,814	3	0	2	145
		R3	19,785	3	0	3	135	21,737	3	0	4	148	21,737	3	0	4	148
		R3S	20,312	3	0	3	135	22,317	3	0	3	149	22,317	3	0	3	149
		R4	20,044	3	0	3	136	22,022	3	0	4	150	22,022	3	0	4	150
P3	147W	R4S	19,339	3	0	3	132	21,247	3	0	3	145	21,247	3	0	3	145
.,		R5	20,313	5	0	3	138	22,317	5	0	3	152	22,317	5	0	3	152
		R5S	20,852	4	0	2	142	22,910	4	0	2	156	22,910	4	0	2	156
		AFR AFRR90	19,828	3	0	3	135	21,785	3	0	3	148	21,785	3	0	3	148 147
		AFRL90	20,017 20,101	4	0	3	133 134	21,992 22,084	4	0	3	147 147	21,992 22,084	4	0	3	147
		R2	22,836	3	0	2	120	25,090	3	0	2	132	25,090	3	0	2	132
		R3	22,756	3	0	4	122	25,002	3	0	4	134	25,002	3	0	4	134
		R3S	23,363	3	0	3	123	25,668	3	0	3	135	25,668	3	0	3	135
		R4	23,054	3	0	4	123	25,329	3	0	4	135	25,329	3	0	4	135
P4	187W	R4S	22,243	3	0	3	119	25,059	3	0	3	134	25,059	3	0	3	134
17	10/11	R5	23,363	5	0	3	125	25,669	5	0	4	137	25,669	5	0	4	137
		R5S	23,983	4	0	2	128	26,350	4	0	2	141	26,350	4	0	2	141
		AFR	22,806	3	0	2	122	25,056	3	0	2	134	25,056	3	0	2	134
		AFRR90 AFRL90	23,023 23,120	4	0	3	121 122	25,295 25,401	4	0	3	133 134	25,295 25,401	4	0	3	133 134
		R2	26,141	3	0	2	122	28,721	3	0	2	134	28,721	3	0	2	135
		R3	26,049	3	0	4	124	28,620	3	0	4	136	28,620	3	0	4	136
		R3S	26,744	3	0	3	125	29,383	3	0	4	138	29,383	3	0	4	138
		R4	26,390	3	0	4	126	28,994	3	0	4	138	28,994	3	0	4	138
P5	210W	R4S	25,462	3	0	3	121	27,974	3	0	3	133	27,974	3	0	3	133
1 1	21000	R5	26,744	5	0	4	127	29,383	5	0	4	140	29,383	5	0	4	140
		R5S	27,454	4	0	2	131	30,163	4	0	2	144	30,163	4	0	2	144
		AFR	26,106	3	0	2	124	28,682	3	0	2	137	28,682	3	0	2	137
		AFRR90 AFRL90	26,354	4	0	3	123	28,955	5	0	3	136	28,955	5	0	3	136
		R2	26,465 27,646	3	0	2	124 112	29,077 30,374	3	0	2	136 123	29,077 30,374	3	0	2	136 123
		R3	27,549	3	0	4	113	30,374	3	0	4	123	30,374	3	0	4	123
		R3S	28,283	3	0	3	115	31,075	3	0	4	126	31,075	3	0	4	126
		R4	27,909	3	0	4	114	30,663	3	0	4	126	30,663	3	0	4	126
DC.	244W	R4S	26,928	3	0	3	110	29,585	3	0	3	121	29,585	3	0	3	121
P6	244W	R5	28,284	5	0	4	116	31,075	5	0	4	127	31,075	5	0	4	127
		R5S	29,035	4	0	2	119	31,900	5	0	3	131	31,900	5	0	3	131
		AFR	27,608	3	0	2	112	30,332	3	0	2	123	30,332	3	0	2	123
		AFRR90	27,872	4	0	3	113	30,622	5	0	3	124	30,622	5	0	3	124
		AFRL90	27,989	4	0	3	113	30,751	5	0	3	125	30,751	5	0	3	125

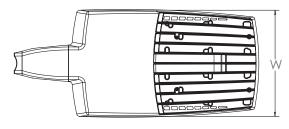


# **Dimensions & Weights**

# Luminaire Weight by Mounting Type

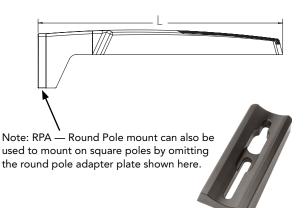
Mounting Configuration	Total Luminaire Weight
SPA	30 lbs
RPA	32 lbs
MA	30 lbs
WBA	33 lbs
WBASC	36 lbs
IS	33 lbs
AASP	33 lbs
AARP	35 lbs
AAWB	36 lbs
AAWSC	39 lbs

# RSX2 with Round Pole Adapter (RPA)



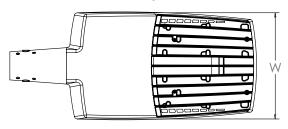
Length: 30.3" (77.0 cm) Width: 13.4" (34.0 cm)

Height: 3.0" (7.6 cm) Main Body 7.2" (18.3 cm) Arm

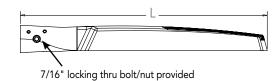




#### RSX2 with Mast Arm Adapter (MA)

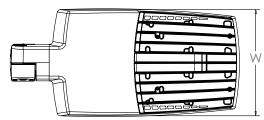


Length: 30.6" (77.7 cm) Width: 13.4" (34.0 cm) Height: 3.0" (7.6 cm) Main Body 3.5" (8.9 cm) Arm

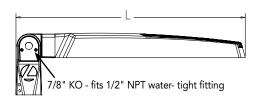


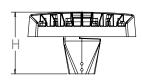


# RSX2 with Adjustable Slipfitter (IS)

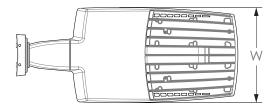


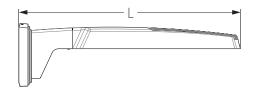
Length: 28.3" (71.9 cm) Width: 13.4" (34.0 cm) Height: 3.0" (7.6 cm) Main Body 7.6" (19.3 cm) Arm

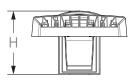




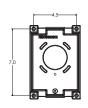
## RSX2 with Wall Bracket (WBA)

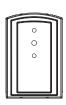


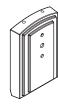




## Wall Bracket (WBA) Mounting Detail



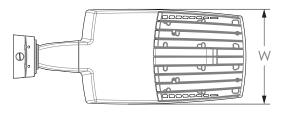


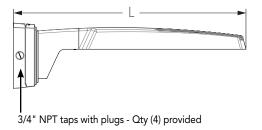


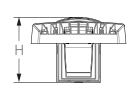
#### Length: 31.2" (79.2 cm) Width: 13.4" (41.7 cm)

Height: 3.0" (7.6 cm) Main Body 8.9" (22.6 cm) Arm

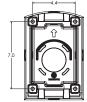
## RSX2 with Wall Bracket with Surface Conduit Box (WBASC)

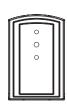


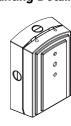




Surface Conduit Box (SCB) Mounting Detail

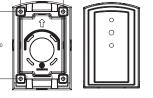




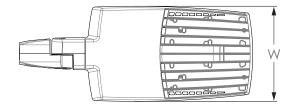


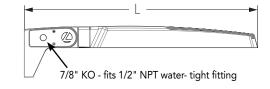
#### Length: 32.8" (83.3 cm) Width: 13.4" (41.7 cm) Height: 3.0" (7.6 cm) Main Body

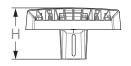
9.2" (23.4 cm) Arm



#### RSX2 with Adjustable Tilt Arm - Square or Round Pole (AASP or AARP)







Length: 32.8" (83.3 cm) AASP 33.8" (85.9 cm) AARP Width: 13.4" (34.0 cm)

Height: 3.0" (7.6 cm) Main Body 7.2" (18.2 cm) Arm

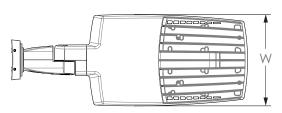


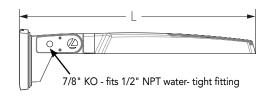
#### Notes

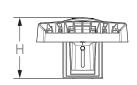
AASP: Requires 3.0" min. square pole for 1 at 90°. Requires 3.5" min. square pole for mounting 2, 3, 4 at 90°.

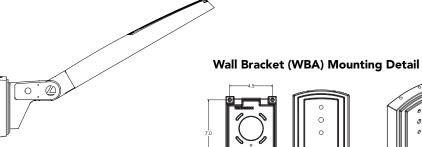
AARP: Requires 3.2" min. dia. round pole for 2, 3, 4 at 90°. Requires 3.0" min. dia. round pole for mounting 1 at 90°, 2 at 180°, 3 at 120°.

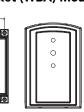
#### RSX2 with Adjustable Tilt Arm with Wall Bracket (AAWB)

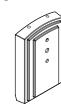












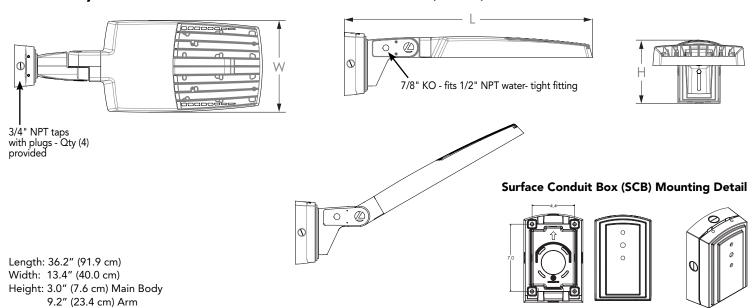
Length: 34.7" (88.0 cm) Width: 13.4" (34.0 cm)

Height: 3.0" (7.6 cm) Main Body 8.9" (22.6 cm) Arm

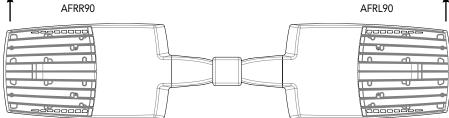


# **Dimensions**

## RSX2 with Adjustable Tilt Arm with Wall Bracket and Surface Conduit Box (AAWSC)



# Automotive Front Row - Rotated Optics (AFRL90/R90)

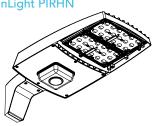


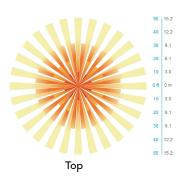
(Example: 2@180 - arrows indicate direction of light exiting the luminaire)

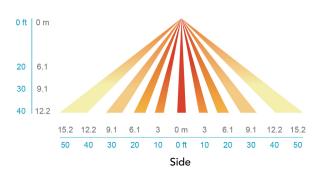
## nLight Control - Sensor Coverage and Settings

## NLTAIR2 PIRHN nLight Sensor Coverage Pattern

nLight PIRHN







	Motion Sensor Default Settings - Option PIRHN											
Option	Dimmed State (unoccupied)	High Level (when occupied)	Photocell Operation	Dwell Time (occupancy time delay)	Ramp-up Time (from unoccupied to occupied)	Ramp-down Time (from occupied to unoccupied)						
NLTAIR2 PIRHN	Approx. 30% Output	100% Output	Enabled @ 1.5FC	7.5 minutes	3 seconds	5 minutes						

\*Note: NLTAIR2 PIRHN default settings including photocell set-point, high/low dim rates, and occupancy sensor time delay are all configurable using the Clairity Pro App. Sensor coverage pattern shown with luminaire at 0°. Sensor coverage pattern is affected when luminaire is titled.

#### **FEATURES & SPECIFICATIONS**

#### INTENDED USE

The RSX LED area family is designed to provide a long-lasting, energy-efficient solution for the one-forone replacement of existing metal halide or high pressure sodium lighting. The RSX2 delivers 11,000 to 31,000 lumens and is ideal for replacing 250W to 1000W HID pole-mounted luminaires in parking lots and other area lighting applications.

#### CONSTRUCTION AND DESIGN

The RSX LED area luminaire features a rugged die-cast aluminum main body that uses heatdissipating fins and flow-through venting to provide optimal thermal management that both enhances LED performance and extends component life. Integral "no drill" mounting arm allows the luminaire to be mounted on existing pole drillings, greatly reducing installation labor. The light engines and housing are sealed against moisture and environmental contaminants to IP66. The low-profile design results in a low EPA, allowing pole optimization. Vibration rated per ANSI C136.31: 3G Mountings: Include SPA, RPA, MA, IS, AASP, AARP rated for 3G vibration. 1.5G Mountings: Include WBA, WBASC, AAWB and AAWSC rated for 1.5G vibration.

#### **FINISH**

Exterior parts are protected by a zinc-infused Super Durable TGIC thermoset powder coat finish that provides superior resistance to corrosion and weathering. A tightly controlled multi-stage process ensures superior adhesion as well as a minimum finish thickness of 3 mils. The result is a high-quality finish that is warrantied not to crack or peel.

## OPTICS

Precision acrylic refractive lenses are engineered for superior application efficiency, distributing the light to where it is needed most. Available in short and wide pattern distributions including Type 2, Type 3, Type 3S, Type 4, Type 4S, Type 5, Type 5S, AFR (Automotive Front Row) and AFR rotated AFRR90 and ARFL90.

#### COASTAL CONSTRUCTION (CCE)

Optional corrosion resistant construction is engineered with added corrosion protection in materials and/or pre-treatment of base material under super durable paint. Provides additional corrosion protection for applications near coastal areas. Finish is salt spray tested to over 5,000 hours per ASTM B117 with scribe rating of 10. Additional lead-times apply.

Light engine(s) configurations consist of high-efficacy LEDs mounted on metal-core circuit boards and aluminum heat sinks to maximize heat dissipation. Light engines are IP66 rated. LED lumen maintenance is >L92/100,000 hours. CCT's of 3000K, 4000K and 5000K (minimum 70 CRI) are available. Fixtures ship standard with 0-10v dimming driver. Class 1 electronic drivers ensure system power factor >90% and THD <20%. Easily serviceable 10kV surge protection device meets a minimum Category C Low operation (per ANSI/IEEE C62.41.2).

#### STANDARD CONTROLS

The RSX LED area luminaire has a wide assortment of control options. Dusk to dawn controls include MVOLT and 347V button-type photocells and NEMA twist-lock photocell receptacles.

#### nLIGHT AIR CONTROLS

The RSX LED area luminaire is also available with nLight® AIR for the ultimate in wireless control. This powerful controls platform provides out-of-the-box basic motion sensing with photocontrol functionality and is suitable for mounting heights up to 40 feet. No commissioning is required when using factory default settings that provide basic stand-alone motion occupancy dimming that is switched on and off with a built-in photocell. See chart above for motion sensor default outof-box settings. For more advanced wireless functionality, such as group dimming, nLight AIR can be commissioned using a smartphone and the easy-to-use CLAIRITY app. nLight AIR equipped luminaries can be grouped, resulting in motion sensor and photocell group response without the need for additional equipment. Scheduled dimming with motion sensor over-ride can be achieved when used with the nLight Eclypse. Additional information about nLight Air can be found he

#### INSTALLATION

Integral "no-drill" mounting arm allows for fast, easy mounting using existing pole drillings. Select the "SPA" option for square poles and the "RPA" option to mount to round poles. Note, the RPA mount can also be used for mounting to square poles by omitting the RPA adapter plate. Select the "MA" option to attach the luminaire to a 2 3/8" horizontal mast arm or the "IS" option for an adjustable slipfitter that mounts on a 2 3/8" OD tenon. The adjustable slipfitter has an integral junction box and offers easy installation. Can be tilted up to  $90^{\circ}$  above horizontal. Additional mountings are available including a wall bracket, adjustable tilt arm for direct-to-pole and wall and a surface conduit box for wall mount applications.

CSA Certified to meet U.S. and Canadian standards. Suitable for wet locations. Rated for -40°C minimum ambient. DesignLights Consortium® (DLC) Premium qualified product and DLC qualified product. Not all versions of this product may be DLC Premium qualified or DLC qualified. Please check the DLC Qualified Products List at w PL to confirm which versions are qualified.

International Dark-Sky Association (IDA) Fixture Seal of Approval (FSA) is available for all products on this page utilizing 3000K color temperature only. US Patent No. D882, 146S

#### BUY AMERICAN ACT

Product with the BAA option is assembled in the USA and meets the Buy America(n) government procurement requirements under FAR, DFARS and DOT regulations

w.acuitybrands.com/buy-american for additional information.

5-year limited warranty. This is the only warranty provided and no other statements in this specification sheet create any warranty of any kind. All other express and implied warranties are disclaimed. Complete warranty terms located at:

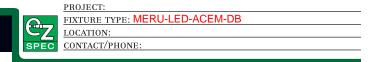
Note: Actual performance may differ as a result of end-user environment and application. All values are design or typical values, measured under laboratory conditions at 25 °C. Specifications subject to change without notice.





# **MERU Series**

LED GENERAL & EMERGENCY LIGHTING



#### PRODUCT DESCRIPTION

The MERU Series is an architectural, low-profile outdoor light, offering "normally On" AC and emergency lighting with powerful LED illumination. The housing is fully sealed and gasketed, and has an IP65 rating. Designed for wall mounting with universal K/O pattern in back-plate for easy installation to most standard size junction boxes. Includes a single ½" NPT conduit entry in the top, center of the housing. Illumination provided by 8 high power LEDs which achieve 1,600 lumens in AC and 600 lumens in emergency. LED color at 4000K.

## **PRODUCT SPECIFICATIONS**

#### CONSTRUCTION

Die cast aluminum housing with superior heat sink • Scratch resistant Polyester powder coat finish • UV resistant polycarbonate lens • Snap-fit housing and mounting plate are held together by four stainless steel clips • Universal mounting pattern molded into the back plate • 1/2" threaded top access for surface conduit installation • Silicone rubber seal with hollow center, shape adaptive design protects the electrical components • Junction box neoprene seal is attached to the back plate for a weather proof installation • Dark Bronze or White textured finish.

#### **ELECTRICAL**

Dual Voltage 120-277V 60Hz input • Solid state charging and switching • Battery low voltage disconnect • AC power indicator and test switch at the bottom of the unit • Standard with Self Diagnostics to monitor proper operation.

#### IAMPS

Supplied with eight (8) LG SMD 4000K LED'S • L70 > 72,000hours • 17 Watts total (32 Watts with IH option) • 1600 Lumens in AC mode, 600 Lumens in Emergency mode • Full cut-off optics for Dark Sky compliance

## **BATTERY**

Maintenance-free, long-life rechargeable NiCad battery will operate fixture for a minimum of 90 minutes in the event of a power outage • 24 hour recharge after 90 minute discharge.

#### **CODE COMPLIANCE**

UL924 • Listed for wet location applications (0°C-50°C) • Optional "IH" cold weather package for (-40°C-50°C) • IP65 Rated • NFPA 101 Life Safety Code compliant • NEC and OSHA compliant • DLC Listed • RoHS Compliant

#### WARRANTY

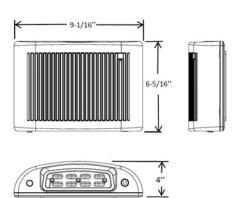
5-year warranty. Product specifications subject to change without notice.

#### **INSTALLATION**

#### MOUNTING

Suitable for indoor or outdoor wall mounting on junction box, or with surface conduit using the supplied 1/2" threaded top access • Mounting plate has molded universal mounting pattern for simple mounting over junction box.





#### **ACEM Model** (NiCad Battery Backup)

*Integral photocell*: Unit operates as a dusk to dawn luminaire and in the event of a power failure as an emergency light.

**Remote Switched**: The integral photocell can be defeated to allow remote switching for normal operation. In the event of a power failure unit operates as an emergency light.











ORDERING INFORMATION			
model	operation mode	housing color	options
MERU-LED	ACEM = General & Emergency Lighting	DB = Dark Bronze	Self-Diagnostics & Photocell (Included Standard)
	AC = General Lighting	WH = White	IH = Internal Heater
		BK = Black	
Ordering Evennle: MEDITACEM DB		NUZ NU 1 1	



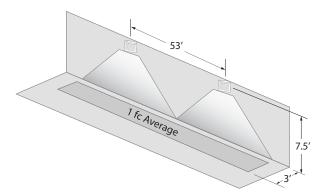
# **MERU Series**

PROJECT:
FIXTURE TYPE:
LOCATION:
SPEC CONTACT/PHONE:

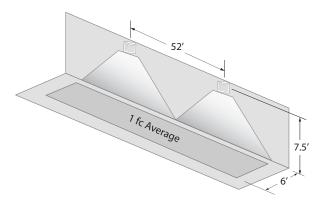
LED GENERAL & EMERGENCY LIGHTING

# **PHOTOMETRICS**

# 3ft Path Spacing



# 6ft Path Spacing



# **SELF DIAGNOSTICS**

# **Included Self Diagnostic**



# Manual Testing

Press button once - 1 minute test Press button twice - 5 minute test Press button 3 times - 30 minute test Press button 4 times - 90 minute test

Full self-test, self-diagnostic system is standard in every unit, performs a monthly, test as well as continuously monitoring all functions to ensure reliability, a manual test may be initiated at any time

