**PRODUCT DESCRIPTION:**

The Nb3 profile offers multiple lamping and integral ballast options while maximizing fixture efficacy in a 50/50 housing/ lens square profile. Various lens options offer different aesthetics while maintaining an incredibly clean form and contemporary aesthetic.

**FEATURES:**
- Clean square profile
- 50/50 Extruded aluminum housing and lens
- High transmission frosted and clear linear prismatic lenses
- Integral ballasts for all fixture options
- Multiple lamps in a single housing
- No visible fasteners
- 3/8" thick machined end cap options

**SPECIFICATION INFORMATION**

**GENERAL NOTES:**
All fixtures are UL listed for dry and damp locations. Please contact the factory with any questions. Italicized grayed out options may have additional costs and/or lead times.

**FIXTURE ORIENTATION:**
- “Direct” (D) for downlight applications
- “Indirect” (I) for uplight applications
- “Rotational” (R) for adjustable applications: 360 degree rotational capacity

**VOLTAGEx**
- “Rotational” (R) for adjustable applications
- “Indirect” (I) for uplight applications
- “Direct” (D) for downlight applications

**Ballasts:**
- Niobium 3 can accommodate almost any ballast requirement inside the fixture, including dimming and emergency battery backup. If there is a specific ballast requirement or if there are any questions, please contact the factory.
  1. **DIMMING:** Contact factory for specific dimming information.
  2. **EMERGENCY:** Specify ballast type under the Ballast Options category. Specify EOB under the Options/Customization category at the end of the cut sheet. Remote ballast housing is required for this fixture with EM requirements. Contact factory.

**FINISHES:**
- The standard finish is a satin white powder coated or satin clear anodized housing with Machined Finish hardware. Machined finish is preferable for the machined components (Hardware Detail) - Powder coating may result in additional costs. Please consult the factory with any questions about standard or custom finishing options.

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**AIRCRAFT CABLE LENGTH:**
- Aircraft cable is field adjustable and cuttable. For drops longer than 4’, specify a cable length which encompasses that distance.

**LENSES:**
- Clear Frost (CF) Highly transmissive lens, but does have lamp imaging with this fixture.
- White Frost (WF) should be used when lamp imaging is a concern. This option slightly reduces fixture efficacy.

**CUSTOMIZATION:**
- We have numerous custom options available as seen above. From simple options to complete custom requests, we are more than willing to accommodate any creative notions you might have. Just ask.
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**SPECIFICATION INFORMATION**

**GENERAL NOTES:**

All fixtures are UL listed for dry and damp locations. Please contact the factory with any specification questions. Italicized grayed out options may have additional costs and/or lead times.

**VOLTAGE:**

System voltage is helpful as it provides more ballast options. Please use the Universal (U) specification only when the project voltage is unknown. For integral ballast options, fixture voltage must be specified.

**BALLAST:**

Niobium 3 can accommodate almost any ballast requirement inside the fixture, including dimming and emergency battery backup. If there is a specific ballast requirement or if there are any questions, please contact the factory.

1) DIMMING: Contact factory for specific dimming information.
2) EMERGENCY: Specify ballast type under the Ballast Options category. Specify EMB under the Options/Customization category at the end of the cut sheet. Remote ballast housing is required for this fixture with EM requirements. Contact factory for more information.

**FINISHES:**

The standard finish is a satin white powder coated or satin clear anodized housing with Machined Finish hardware. Machined finish is preferable for the machined components (Hardware Detail). Powder coating may result in additional costs. Please consult the factory with any questions about standard or custom finishing options.

**LENSES:**

Clear Frost (CF) Highly transmissive lens, but does have lamp imaging with this fixture.

White Frost (WF) should be used when lamp imaging is a concern. This option slightly reduces fixture efficacy.

**CUSTOMIZATION:**

We have numerous custom options available as seen above. From simple options to complete custom requests, we are more than willing to accommodate any creative notions you might have. Just ask.
NIOBIUM_3

DETAILED SPECIFICATION INFORMATION

FIXTURE CONSTRUCTION:
Housings: Extruded aluminum
Lenses: Extruded frosted acrylic
End caps: Machined aluminum
Reflectors: Specular, semi-specular, or high reflectance white
Internal components: Formed aluminum or steel sheet metal

No visible fasteners (unless requested as a custom option)

FINISHES:
Standard housing finishes are Satin Clear (SC) (anodized) and Satin White (SW) (powder coated). Custom anodized and powder coated finishes are available. Let us know what you are looking for and we will find a way to make it happen.

Given the precision nature of the product lines, whenever possible machined finishes are preferred for the machined components and are typically less expensive.

Cut sheets are set up so that two-tone finishes can be easily ordered. This option lends to an even higher end feel and creates a unique look. More detailed finishing is available if desired or needed. Contact the factory with specific requests or finish questions.

LENSES:
Clear Frost (CF): We have created our own acrylic blend to create a highly transmissive lens that significantly diminishes lamp imaging. This is our recommended lens for most fixtures.

White Frost (WF) is the ideal selection for reducing or eliminating lamp imaging and diminishing socket shadows in longer fixtures (6’ or greater) and continuous runs. However, this option does reduce fixture efficacy.

Custom lens colors and styles are available as well. If there is a specific request or project requirement, please contact the factory.

LAMPS:
Lamping options: T5, TSHO, and T8 (fixture dependent)

4’ T5 and T8 lamps offer the best potential efficacy. TSHO lamps offer the highest lumen output per lamp allowing for fewer fixtures in a space.

T5 and TSHO lamps are recommended for most Lumium fixtures as their smaller respective size allows for greater light distribution control and overall fixture efficacy. Typically the smallest fixtures in a series can only utilize T5 or TSHO lamps as T8 lamps are too large for the small profiles.

FIXTURE LENGTHS:
Fixtures are measured in nominal lengths. For specific fixture measurements and mounting information please see the installation instructions. (5’ T5 and TSHO lamp fixtures are available as a custom option. Consult factory.)

Lamp, nominal length, and corresponding fixture wattage information is as follows:

<table>
<thead>
<tr>
<th>Length</th>
<th>T5</th>
<th>TSHO</th>
<th>T8</th>
</tr>
</thead>
<tbody>
<tr>
<td>2’</td>
<td>14w</td>
<td>24w</td>
<td>17w</td>
</tr>
<tr>
<td>3’</td>
<td>21w</td>
<td>39w</td>
<td>25w</td>
</tr>
<tr>
<td>4’</td>
<td>28w</td>
<td>54w</td>
<td>32w</td>
</tr>
<tr>
<td>6’</td>
<td>2x23w</td>
<td>2x39w</td>
<td>2x25w</td>
</tr>
<tr>
<td>8’</td>
<td>2x28w</td>
<td>2x54w</td>
<td>2x32w</td>
</tr>
</tbody>
</table>

Continuous Run (CR) options are available for just about every fixture type and option. There are exceptions. Please contact the factory with specific run length information and questions.

BALLASTS:
Ballast specification is often dependent upon the fixture, options, and installation.

Instant Start (IS) ballasts work best when fixtures will not be switched on/off frequently (ie: motion sensor in a restroom). They also offer thinner power cords with remote ballast cable suspended applications.

Rapid Start (RS) ballasts should be used when fixtures will be switched often. There are more specification grade RS ballast options. When remote ballasts are used on cable suspended fixtures, the power cord is typically thicker.

Dimming (DIM) ballasts work great with the larger fixture lines (typically any fixture with a “3” in the name). Dimming ballasts have significant lead restrictions, limiting the ballast to furthest socket distance. Please consult the factory with questions or specific dimming requirements and we will ensure the proper specification.

Emergency (EM) ballasts can be specified with just about any fixture configuration. For integral EM ballast options, the fixture typically needs to be at least 3’ long; 4’ is the safest option. Consult the factory with any questions.

KNUCKLE/END CAP/Cover plate styles:
These details are offered to provide subtle specification differences to suit project needs. Customization is available if another aesthetic is desired. Please contact the factory with any specific requests.

MOUNTING:

Cable Suspended (CS and CS-R): 1/16” aircraft cable suspension system. Fixtures can be static down-lights: Direct (D), static up-lights: Indirect (I), or Rotational (R). Rotational fixtures offer just over 360 degrees of rotation with locking fasteners. Various cable finishes, sleeve options, and canopy colors offer options to match almost any space.

Rotational Arm Mount (RAM): 1/2” to 5/8” diameter aluminum arms with various knuckle options and 360 degree rotational capacity. There are no visible fasteners. Standard mounting uses 3-O mud rings (supplied by others) or a 1” optional trim ring for furniture mounted applications.

Surface Mount - Wall/Side or Ceiling/Top Mount (SMS or SMT): Fixtures mount directly to the surface. Ceiling or Wall Mount specification denotes the power feed hole location(s).

Optional stand-offs allow for fixtures to be mounted from 1/2” to 12” as well as custom lengths if needed.

Asymmetric Suspension Mount (ASM and ASM-R): A unique configuration wherein the fixture is balanced from an off-center mounting point creating a dynamic aesthetic. This mounting option also allows integral ballast options on the “1” series fixtures with standard T5 lamps. Static and rotational options lend to fixture versatility.

CUSTOM:
We take pride in not only offering creative options, aesthetic appearances, and finishes, but we are also more than willing to accommodate any creative notions you might have. Our experience in fixture design, engineering, and manufacturing will ensure your expectations are met or exceeded. Please contact the factory with any questions about our processes or to have us help design a fixture tailored for your specific needs and project requirements.

PHOTOMETRIC DATA

T8 Fixture Efficacy: 87%

Fixture Properties:

4’ Lamp
Clear Frost (CF) lens
High Efficacy White Reflector

32w T8 Zonal Lumen Summary

<table>
<thead>
<tr>
<th>Zone</th>
<th>Lumens</th>
<th>%Lamp</th>
<th>%Fixt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-30</td>
<td>307</td>
<td>10.6</td>
<td>12.1</td>
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<tr>
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</tr>
<tr>
<td>0-180</td>
<td>2535</td>
<td>87.4</td>
<td>100.0</td>
</tr>
</tbody>
</table>
### MOUNTING OPTIONS

**Cable Suspended (CS)**
1/16” aircraft cable suspension system. Fixtures can be static down-lights: Direct, static up-lights: Indirect, or Rotational (see CSR below). Standard and custom power cord finishes, sleeve options, and canopy colors offer options to match almost any space. Stainless steel cables come in various lengths (4’ is standard) and are field adjustable.

**Cable Suspended Rotational (CS-R)**
Using a similar setup to the Cable Suspended system above, the Cable Suspended - Rotational system has 360 degree rotational capacity with mechanical fasteners to lock fixtures in place if desired. This system offers incredible flexibility, light direction control, and a dynamic aesthetic.

**Rotational Arm Mount (RAM)**
This system uses 1/2” to 5/8” diameter aluminum arms and subtle details in combination with 360° rotational capacity to create some of the most versatile linear fixtures in the architectural market. Standard mounting uses 3-O mud rings (supplied by others) or a 1” optional trim ring for furniture mounted applications. Engineered with no visible fasteners, smooth rotation, and mechanical locking, the RAM system reveals an impressive aesthetic with exceptional versatility.

**Surface Mount (SM)**
(Ceiling Mount or Wall Mount - CM or WM): Fixtures mount directly to the surface. Ceiling or Wall Mount specification denotes the power feed hole location(s). Optional stand-offs allow for fixtures to be mounted from 1/2” to 12” as well as custom lengths if needed.

**Asymmetric Mount (ASM)**
A unique configuration wherein the fixture is balanced from an off-center mounting point creating a dynamic aesthetic. This mounting option also allows some integral ballast options on the “1” series fixtures with standard T5 lamps. Direct, indirect, or rotational options round out this creative mounting option.

### COLOR AND FINISH OPTIONS

<table>
<thead>
<tr>
<th>Standard Finishes</th>
<th>Custom Finishes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satin Clear Anodizing</td>
<td>Specular, Gunmetal, Nickel Plating</td>
</tr>
<tr>
<td>Satin White Power coat</td>
<td>Matte Black, RAL Colors, Bronze</td>
</tr>
<tr>
<td><em>Custom Finishes</em></td>
<td>Color Anodize, Color Powder coat, Brushed</td>
</tr>
</tbody>
</table>

Satin Clear anodizing and Satin White are standard finishes. Our Satin White is a semi-matte powder coating finish with a subtle, rich luster. Numerous custom anodizing and powder coated finishes are available as well. If you have a particular color/finish treatment in mind, please contact the factory and we will do our best to accommodate your project needs.

*RAL and Custom Finishes may involve additional costs and may have fixture length restrictions. Please consult the factory with any questions or for specific finish information.

### CONTINUOUS RUN OPTIONS

Continuous runs are available with all fixtures and have several connection options. Single Seam continuous run options offer smooth section transitions while Component Seams lend to a more dramatic visual statement. The 360 (degree symbol) Rotational option enables individual sections to rotate independently of each other, which offers adjustable asymmetric light distribution capacity along with striking appearances such as alternating up/down fixtures or spiral transitions. The flexibility within the rotational option makes for infinite design and functional possibilities.

### FINISH CONFIGURATIONS

Standard finish configurations are Satin Clear (SC) or Satin White (SW) housings with Machined Finish (MF) machined components (end caps, knuckles, cover plates, etc.). The incredibly clean detail within all of the machined components lends to an incredibly high end aesthetic with a two tone finish.
KNUCKLE OPTIONS

Almost all Lumium fixtures have mounting options with rotational capacity. Flat knuckles are standard and require no change to any RAM or CS-R specification. Concave and Convex knuckles are optional and can be specified under the “Options/Customization”. Use the annotations listed to the right. Other custom options are available such as larger knuckles to match a fixture’s size or custom shapes if a specific aesthetic is desired. Consult factory with any questions or further customization requests.

COVER PLATE OPTIONS

Cover plates are standard for Rotational Arm Mounting (RAM) systems. Standard options are Flat (FT), Curved (CV), or Trim Ring (TR). With certain applications, cover plates or trim rings may not be necessary. Contact factory with questions or for more information.

Custom cover plates are also available. If a certain aesthetic is desired, please contact the factory to review any concepts and we will do our best to bring your vision to life.

Lightstream is our unique 1/16” aperture lens that creates a striking light accent. This design element is inherent to the Radium2 (Ra2) and Rubidium2 (Rb2) fixtures and can be specified as an option on the Thallium2 (Tl2) and Trinium2 (Tr2) fixtures. (Note: using this option on the Thallium2 eliminates the integral ballast option.)

Clear Frost (CF) or White Frost (WF) are standard, but colored gels can be utilized to create custom color Lightstream accents. In addition, matching or two-tone metal accents can be used in lieu of an emissive lens. Please contact the factory or your local rep agency with any questions, color requests, or for specification assistance.

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GTR2 with matching knuckle size

O2 with custom square knuckle

Square Knuckle (Custom)
Lumium has developed a unique Clear Frost (CF) polymer composite that maintains superb lumen transmission while limiting lamp imaging. White Frost (WF) lenses diminish and often eliminate lamp imaging while sacrificing only slightly reduced fixture efficacy. These options do carry a higher cost than standard canopies, but also have an impressive appearance.

**LENSES**

- **Clear Frost (CF)**: Excellent light transmission, reduced lamp image.
- **White Frost (WF)**: Minimal to no lamp image, slightly reduced efficacy.
- **Custom**: Custom colors and lens styles available - consult factory.

**CANOPIES**

- **STANDARD**
  - Canopies have several standard options as well as custom options to suit various environment aesthetics. The standard cable suspension system has 5" Satin White canopies. However, other standard options include a 2" non-power feed canopy option as well as no canopy at all. Both of these include a 5" diameter power feed canopy.

- **MACHINED OPTIONS**
  - Machined canopies are 4" in diameter and can be anodized as well as powder coated to match a desired color or they can be left with a mill finish for a more striking look. Similar non-power feed options are available with this aesthetic as well. These options do carry a higher cost than standard canopies, but also have an impressive appearance.