



F3S-01-2x6, F3S-02-2x6, & F3S-03-2x6 Streetlight Lens Panel

Designed to meet IESNA lighting applications

- Available in Type I, Type II and Type III Medium illumination patterns
- Scalable optic allows design flexibility for a variety of street lighting and wide area lighting applications
- Incorporates attachment, alignment and IP features to aid fixture design and assembly
- Features a common 2 x 6, one inch on center LED array
- Constructed of optical grade, UV stabilized polycarbonate for superior weather and impact resistance

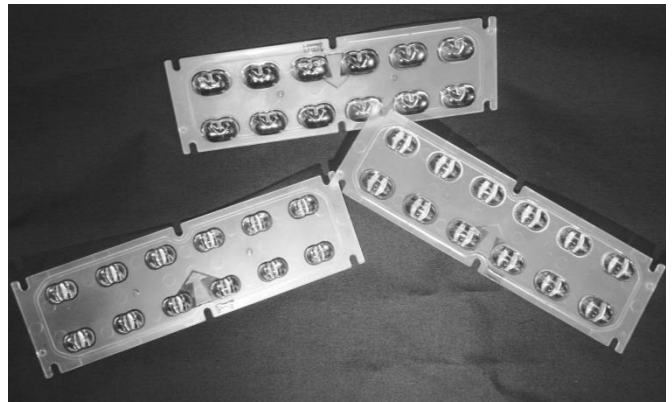
The Fraen F3S Streetlight optic, specifically designed to meet rigorous IESNA street lighting specifications, is also well suited to many Wide Area LED Lighting applications.

Intended to promote energy and labor savings by enabling modern LED lighting technology, the F3S optic can meet dark sky requirements in properly designed fixtures.

The F3S optic can be used with LEDs from a number of manufacturers, including Cree, Philips Lumileds, Seoul Semiconductor, Osram Opto Semiconductors, LG Innotek, Samsung and Nichia.

Typical applications are:

- Roadway lights
- Bike and walkway illumination
- Parking area lights
- Architectural lighting
- Industrial lighting
- Stage Lighting



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<http://www.fraen.com/optics/contact-us/>.



General Characteristics

Materials

Lens Material	Optical grade UV stabilized polycarbonate
Flammability Rating (UL94)	V-2 0.4mm
Operating Temperature range	-40° C / + 128° C
Storage Temperature range	-40° C / + 128°C
Gasket Material	Silicone Rubber

Average transmittance in visible spectrum (400 – 700nm) >90%; 3mm thickness per ISO 13468 test method

Please note that flow lines and weld lines on the external surfaces of the lenses are acceptable if the optical performance of the lens is within the specification described in the section “OPTICAL CHARACTERISTICS”

IMPORTANT NOTE – Lenses handling and cleaning:

- *Handling: Always use gloves to handle lenses and/or handle the lenses only by the flange. Never touch the outside surfaces of the lenses with fingers; finger oils and contamination will absorb or refract light.*
- *Cleaning: Clean lenses only if necessary. Use only soap and water to clean the surfaces and lenses. Never expose the lenses to solvents such as alcohol, as it will damage the plastic.*

Scope

This datasheet provides information about the F3S Streetlight Optic

F3S-01-2X6	IESNA Type I medium lens panel (2 x 6 array)
F3S-02-2X6	IESNA Type II medium lens panel (2 x 6 array)
F3S-03-2X6	IESNA Type III medium lens panel (2 x 6 array)

and the F3S sealing gasket.

F3S-2X6-S	Gasket for 2X6 streetlight lens
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Optical Characteristics

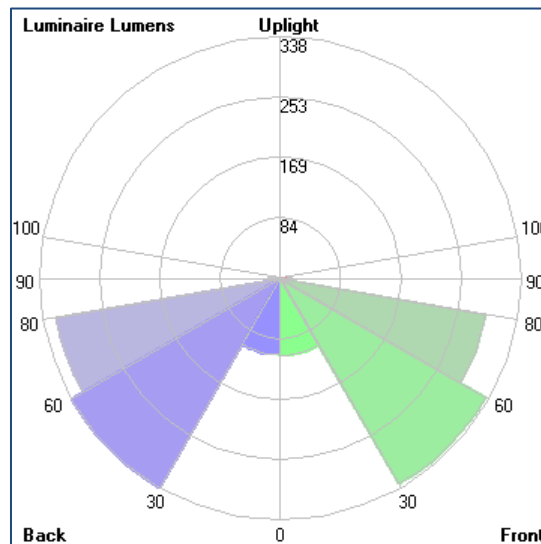
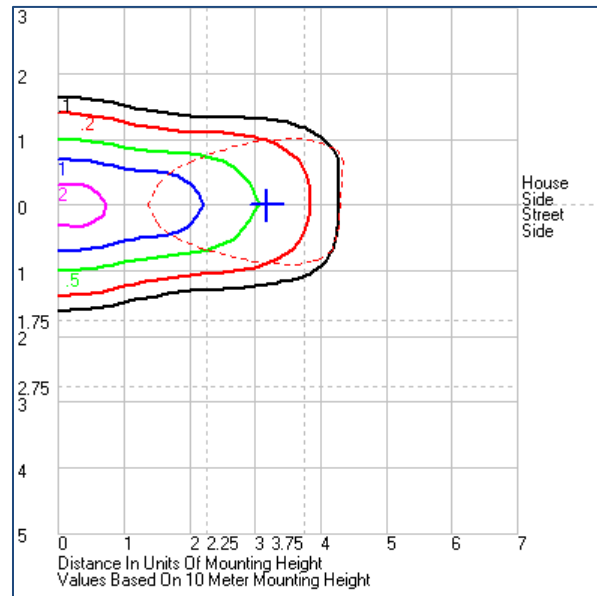
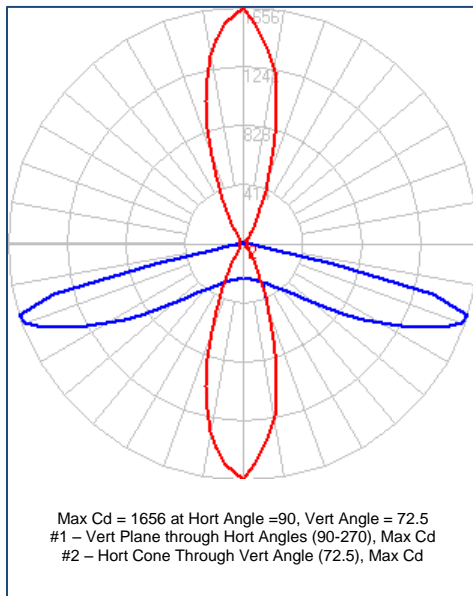


Figure 1: Typical light distribution F3S-01-2X6 (IESNA Type I medium)

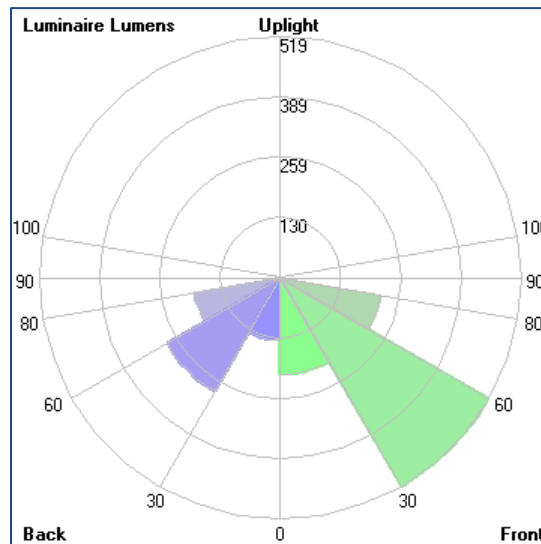
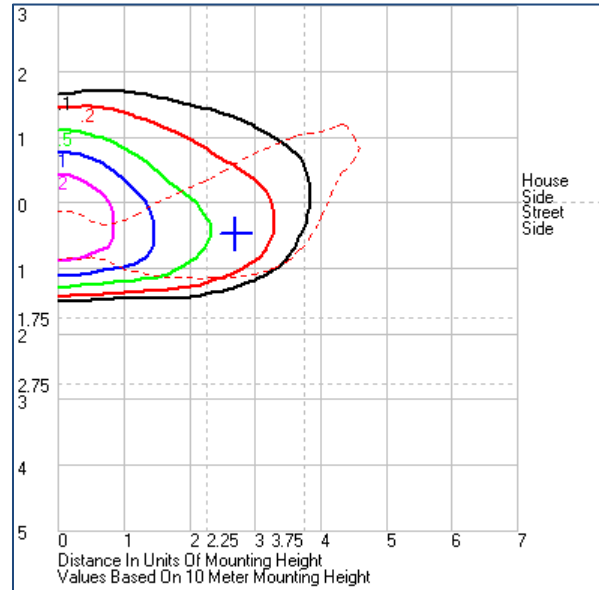
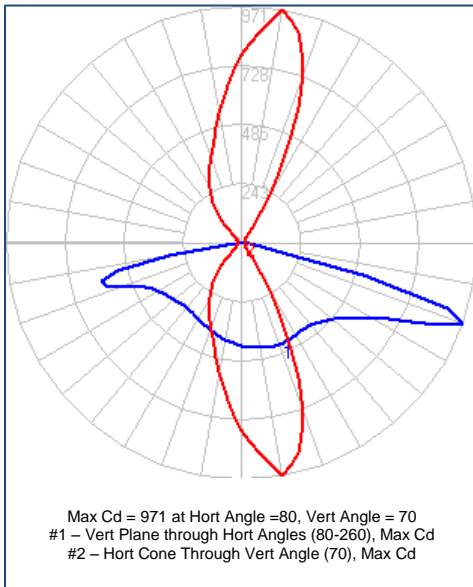


Figure 2: Typical light distribution F3S-02-2X6 (IESNA Type II medium)

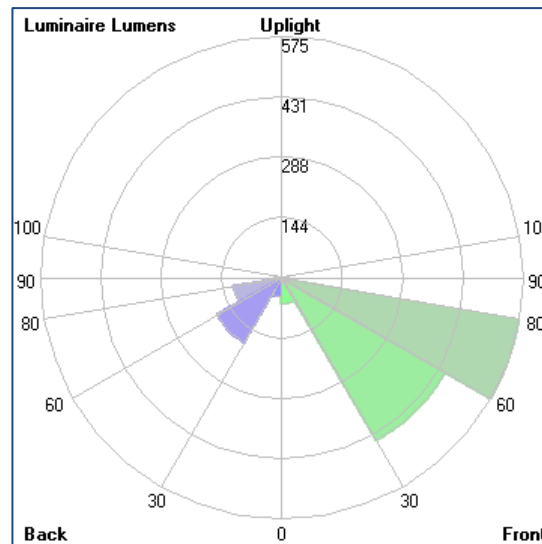
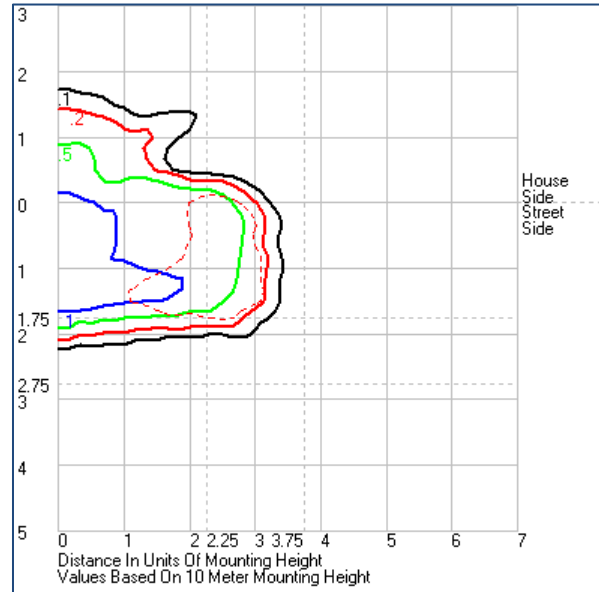
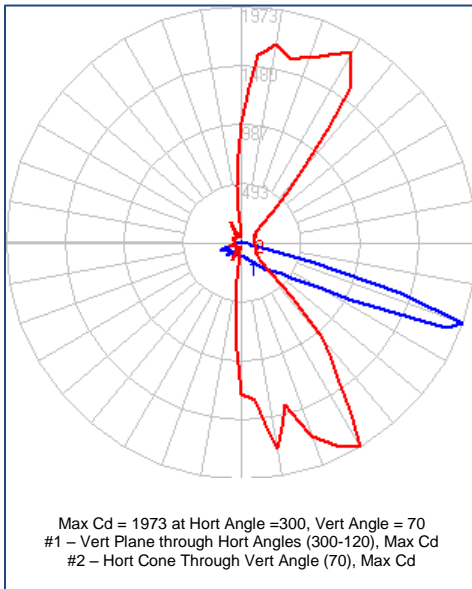


Figure 3: Typical light distribution F3S-03-2X6 (IESNA Type III medium)

Mechanical Characteristics

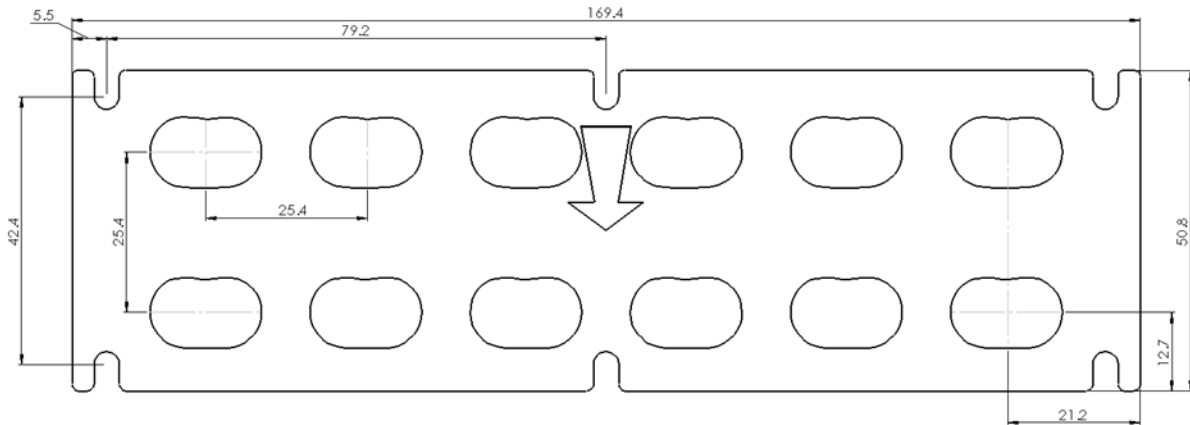


Figure 4: Top view with general dimensions (all dimensions in millimeters)
(Full mechanical CAD files are available)

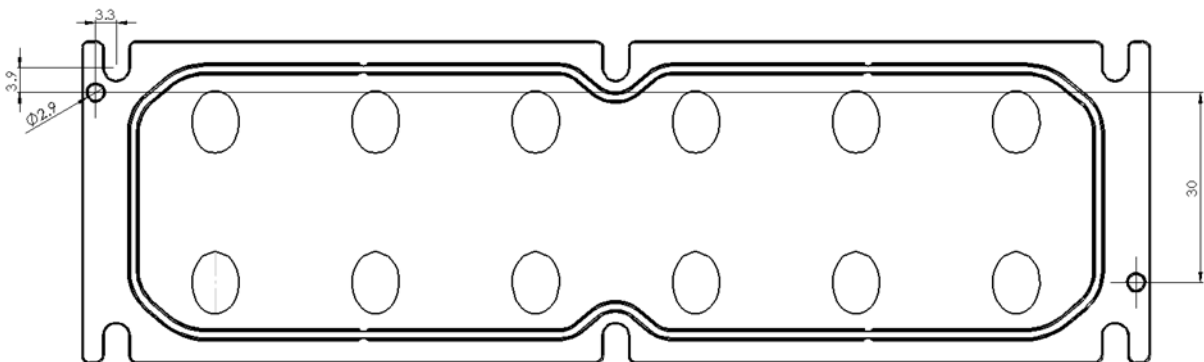


Figure 5: Bottom view

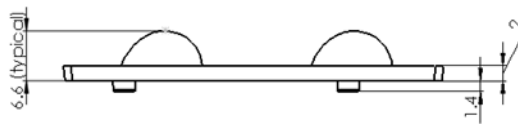


Figure 6: Side views (Lens heights vary Type I, II and III)



Compatible LEDs



XP-E, XP-E2, XP-G, XP-G2, XT-E



LUXEON Rebel, LUXEON Rebel ES, LUXEON R
LUXEON T



119, 219



3535 Ceramic



3535 Ceramic



Z5M, Z5P



Oslon SSL 150, Oslon Square

Ordering Part Numbers

F3S-01-2X6
F3S-02-2X6
F3S-03-2X6

IESNA Type I medium lens panel (2 x 6 array)
IESNA Type II medium lens panel (2 x 6 array)
IESNA Type III medium lens panel (2 x 6 array)

F3S-2X6-S

Gasket for 2X6 streetlight lens

For assistance, please contact Fraen <http://www.fraen.com/optics/contact-us/>.

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