

# SUPER LED F7



DATASHEET

Desisti

# SUPER LED F7

LED Fresnel Spotlight 160W - CRI>96  
White light, either Tungsten or Daylight balanced

## OVERVIEW

The Super LED F7 is a high efficiency Fresnel lens spotlight using the innovative High Power 160W COB (Chip on Board) LED ARRAY, in combination with the DE SISTI Internationally Patented optical system for LED FRESNEL and with an enhanced CRI (Color Rendering Index) higher than 96 for appropriate chromacity performances.

The Lighting Fixture is DMX Controlled from 0 to 100% with a super smooth Dimming and a negligible variation of Colour Temperature while controlling the Light intensity.

The F7 is available with either Tungsten (3.200°K) or Daylight (5.600°K) Balanced CCT (Correlated Color Temperature), in both cases with a CRI higher than 96 and both in Manual or Pole operated versions.

The lighting Performances of the Tungsten Balanced CCT from medium to full flood are similar to those of a 1500W tungsten Fresnels, while the Daylight Balanced CCT is greater than a 575W HMI. The fixture combines the classical SPOT/FLOOD beam control on an equivalent FOCUS RANGE to a conventional lamp fresnel, with an excellent barn door cutting.

It utilizes Standard accessories from the DE SISTI range of equivalent Fresnel Lens size, such as Barndoor, Color Frame, Cones, Scrim.

| MODEL  | DESCRIPTION                                    |
|--------|--|
| F7T.MO | Super LED F7 T - Tungsten CCT, Manual Operated |
| F7T.PO | Super LED F7 T - Tungsten CCT, Pole Operated   |
| F7D.MO | Super LED F7 D - Daylight CCT, Manual Operated |
| F7D.PO | Super LED F7 D - Daylight CCT, Pole Operated   |



## WHAT'S INSIDE

### FIXTURE HEAD

175 mm. (7") diameter Fresnel lens  
POWERCON IN & OUT PANEL CONNECTORS.  
XLR 5 Pin DMX IN & OUT PANEL CONNECTORS.  
120W high power CRI>96  
Built In Universal Power Supply 90-250V  
50/60Hz DMX controlled.

### YOKES

#### Manual Operated Versions

Mod. LT310.110.40 M.O. stirrup with 28,57 mm (B.S. 1 1/8") with top end for "C" clamp

#### Pole Operated Versions

Mod. 311.110.40 P.O. yoke with 28,57 mm. spigot (B.S. 1 1/8"), with top end for "C" clamp

### ACCESSORIES

Mod. 316.100 four leaf rotating barndoor  
Mod. 317.100 color frame

### CABLES

Mod. 5403.135 3 mt. (9.8 ft) detachable Blue POWERCON power cable with bare ends.

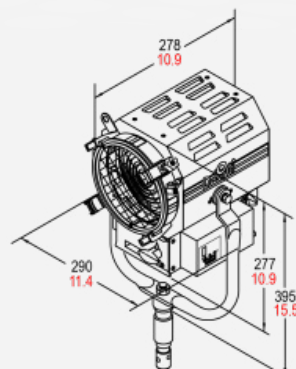
DMX cable is not included, to be ordered separately

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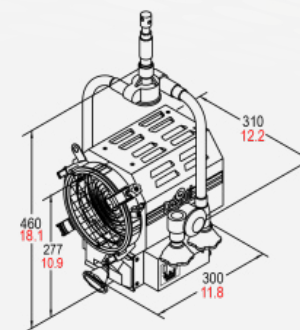
## FEATURES

|  |  |
|--|--|
| <b>Power to LED</b>                      | 160W - DC current to the LED - flicker free  |
| <b>Rated Voltage &amp; PFC</b>           | 90-250V 50-60Hz PFC 0,96   |
| <b>Power consumption</b>                 | 180W @ 230V   180W @120V   |
| <b>Power Connection</b>                  | powerCON IN & OUT  |
| <b>DMX Data link<br/>USITT DMX512-A</b>  | 5-pin XLR for DMX in & out.<br>Use shielded data cables.<br>Do not overload the daisy chain.<br>Up to a maximum of 32 devices can be used on a single DMX chain. |
| <b>DMX Channels</b>                      | 1 @ 8bit   2 @ 16bit   |
| <b>LED ARRAY Lifetime</b>                | 50.000 hours with 70% Lumen Maintenance.<br>The LED ARRAYS are tested and certified up to LM80   |
| <b>CCT</b>                               | <b>T:</b> 3.200°K<br><b>D:</b> 5.600°K   |
| <b>CRI / TLCI</b>                        | <b>T:</b> 97 / 96<br><b>D:</b> 96 / 97   |
| <b>Protection Type</b>                   | IP22   |
| <b>Max. Housing Surface Temperature</b>  | 70° C  |
| <b>Weight of Fixture</b>                 | <b>M.O.</b> 7,8 Kg (17.2 lb)<br><b>P.O.</b> 9,1 Kg (20.1 lb)   |
| <b>Weight of Barndoor</b>                | 4 leaf 0,63 Kg (1.39 lb)   8 leaf 0,85 Kg (1.87 lb)  |
| <b>Weight of color frame</b>             | 0,13 Kg (0.29 lb)  |
| <b>Barndoor ring diameter</b>            | Seat: 192mm / 7 3/4" - Accessory: 190mm / 7 1/2"   |
| <b>Scrims &amp; color frame diameter</b> | Seat 187mm / 7 1/3" - Accessory: 185mm / 7 1/4"  |
| <b>Lens diameter</b>                     | 175mm / 7"   |

## DIMENSION



**M.O.**



**P.O.**

## FEATURES

175 mm. (7") diameter high quality, shock resistant Borosilicate glass Fresnel lens on spring supports.

Rugged and lightweight Carbon Steel Housing with low glare black epoxy powder coating and reinforces internal double walls.

High efficiency Self Stabilizing Active Cooling: automatic, thermal stabilization of the LED operating temperature is managed by an internal thermal sensor and CPU, variable speed fan and heat sink to maintain the LED Array's constant temperature at a maximum of 65°C. The hydro dynamic bearing fan operates silently with a very low RPM.

Special Patented Optics for LED Technology.

Helix Screw driven focus mechanism which guides Teflon bushings supported LED ENGINE along 2 rods. This ensures smooth operation during focusing in any tilting position of the fixture. The Teflon bushings also provide a wiping action, which cleans the steel guide rails during focus.

The unit is equipped with a hinged lens door and wire guard. One of the 4 accessory brackets has a spring loaded locking knob to safely secure external accessories.

Accessories have been designed for one hand installation.

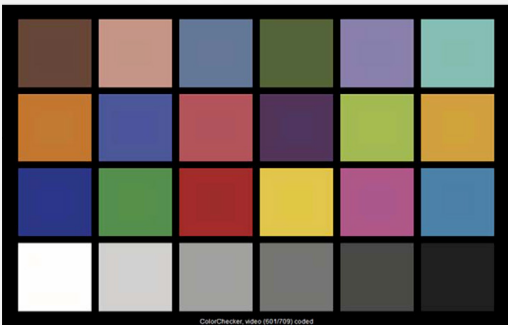
Available with either positive lock manual yokes for comfort and ease of handling, or pole operated yokes which can be used via the lighting pole for Panning and Tilting the lights as well as manually, since the mechanical activators are equipped with clutches.

# SUPER LED F7

## TLCI

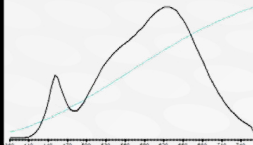
### TUNGSTEN CCT

De Sisti SUPER LED F6 - 120W - Tungsten : CCT = P3025 (+0.2)  
TLCI-2012: 96 (P3025)



### Television Lighting Consistency Index-2012

| Sector | Lightness | Chroma | Hue |
|--------|-----------|--------|-----|
| R      | 0         | 0      | 0   |
| RY     | 0         | 0      | --  |
| Y      | 0         | -      | --  |
| YG     | 0         | -      | 0   |
| G      | 0         | 0      | +   |
| G/C    | 0         | 0      | +   |
| C      | 0         | 0      | ++  |
| C/B    | +         | 0      | --  |
| B      | 0         | -      | --  |
| B/M    | +         | +      | ++  |
| M      | 0         | 0      | +++ |
| M/R    | +         | 0      | ++  |



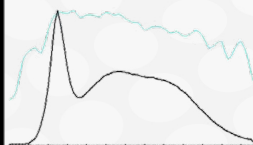
### DAYLIGHT CCT

De Sisti SUPER LED F6 - 120W - Daylight : CCT = D5750 (+1.1)  
TLCI-2012: 97 (D5750)



### Television Lighting Consistency Index-2012

| Sector | Lightness | Chroma | Hue |
|--------|-----------|--------|-----|
| R      | 0         | 0      | 0   |
| RY     | 0         | 0      | --  |
| Y      | 0         | -      | --  |
| YG     | 0         | 0      | 0   |
| G      | 0         | 0      | 0   |
| G/C    | 0         | 0      | 0   |
| C      | +         | 0      | -   |
| C/B    | +         | 0      | --- |
| B      | 0         | -      | --  |
| B/M    | 0         | 0      | +   |
| M      | 0         | 0      | +   |
| M/R    | +         | 0      | +   |



## PHOTOMETRICS

### // SUPER LED F7

Central Light intensity (Candle Power)

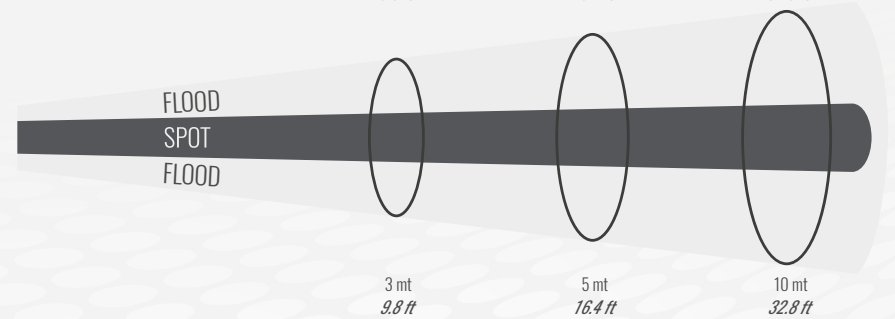
Illumination center values at Distances

**3.200°K TUNGSTEN BALANCED C.C.T. (Correlated Color Temperature) - 160W (CRI 97) - TLCI: 96**

|              | Central Light Intensity (cd) | 3m (9.8 ft)                | 5m (16.4 ft)               | 10m (32.8 ft)           |
|--------------|------------------------------|----------------------------|----------------------------|-------------------------|
| <b>FLOOD</b> | 19.440 cd                    | 2.160 lux<br><i>201 FC</i> | 778 lux<br><i>72 FC</i>    | 194 lux<br><i>18 FC</i> |
| <b>SPOT</b>  | 81.960 cd                    | 9.107 lux<br><i>846 FC</i> | 3.278 lux<br><i>305 FC</i> | 820 lux<br><i>76 FC</i> |

**5.600°K DAYLIGHT BALANCED C.C.T. (Correlated Color Temperature) 160W (CRI 96) - TLCI: 97**

|              | Central Light Intensity (cd) | 3m (9.8 ft)                | 5m (16.4 ft)               | 10m (32.8 ft)           |
|--------------|------------------------------|----------------------------|----------------------------|-------------------------|
| <b>FLOOD</b> | 21.600 cd                    | 2.400 lux<br><i>223 FC</i> | 864 lux<br><i>80 FC</i>    | 216 lux<br><i>20 FC</i> |
| <b>SPOT</b>  | 86.274 cd                    | 9.586 lux<br><i>891 FC</i> | 3.451 lux<br><i>321 FC</i> | 863 lux<br><i>80 FC</i> |



Light beam diameter with Beam Angle (50% of center value)

|              | Beam Angle | 3m (9.8 ft)              | 5m (16.4 ft)              | 10m (32.8 ft)             |
|--------------|------------|--------------------------|---------------------------|---------------------------|
| <b>FLOOD</b> | 53°        | 2,99 mt<br><i>9.8 ft</i> | 4,99 mt<br><i>16.4 ft</i> | 9,97 mt<br><i>32.7 ft</i> |
| <b>SPOT</b>  | 13°        | 0,68 mt<br><i>2.2 ft</i> | 1,14 mt<br><i>3.7 ft</i>  | 2,28 mt<br><i>7.5 ft</i>  |

Light beam diameter with Field Angle (10% of center value)

|              | Field Angle | 3m (9.8 ft)               | 5m (16.4 ft)              | 10m (32.8 ft)              |
|--------------|-------------|---------------------------|---------------------------|----------------------------|
| <b>FLOOD</b> | 69°         | 4,12 mt<br><i>13.5 ft</i> | 6,87 mt<br><i>22.5 ft</i> | 13,75 mt<br><i>45.1 ft</i> |
| <b>SPOT</b>  | 22°         | 1,17 mt<br><i>3.8 ft</i>  | 1,94 mt<br><i>6.4 ft</i>  | 3,89 mt<br><i>12.8 ft</i>  |

LUX AT ANY DISTANCE = Candle Power: [Distance(in m.)]<sup>2</sup>

FC. AT ANY DISTANCE = Candle Power: [Distance(in ft)]<sup>2</sup>

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## OPTIONALS & ACCESSORIES

|                     |  |
|---------------------|--|
| <b>F7X.X0.DIN</b>   | <i>add code to order DIN Spigot</i>  |
| <b>305.310</b>      | <i>Stainless Steel wire guard</i>  |
| <b>316.100</b>      | <i>Four leaf rotating barndoor</i>   |
| <b>316.200</b>      | <i>Eight way rotating barndoor</i>   |
| <b>317.100</b>      | <i>Color Frame</i>   |
| <b>318.100</b>      | <i>Cone with two discs (with front aperture diameter: 70 mm. 50 mm. 30 mm.)</i>  |
| <b>319.100</b>      | <i>Set of scrims - Stainless steel</i>   |
| <b>319.101</b>      | <i>Full single scrim - Stainless steel</i>   |
| <b>319.102</b>      | <i>Full double scrim - Stainless steel</i>   |
| <b>319.103</b>      | <i>1/2 single scrim - Stainless steel</i>  |
| <b>319.104</b>      | <i>1/2 double scrim - Stainless steel</i>  |
| <b>91.210</b>       | <i>Aluminum black painted "C" clamp to hang fixtures overhead and for mounting on pipe with diameters up to 52 mm. (2"), with safety pin (no adapters)</i> |
| <b>93.102</b>       | <i>Extruded black "C" clamp with M 12 threaded stud</i>  |
| <b>93.103</b>       | <i>Extruded black "C" clamp with M 10 threaded stud</i>  |
| <b>20.100</b>       | <i>Safety cable 800 mm. long with 4 mm. diameter steel rope and safety catch.</i>  |
| <b>LT310.110.40</b> | <i>Steel tube Manual Operated stirrup with 28,57 mm. spigot (B.S. 1 1/8"), with top end for attachment to "C" clamp.</i>                                   |
| <b>LT310.300.40</b> | <i>Steel tube Manual Operated stirrup with 28,00 mm. spigot (D.I.N 1 1/9")</i>   |
| <b>LT310.220.40</b> | <i>Steel tube Manual Operated stirrup with M 12 Threaded hole</i>  |
| <b>311.110.40</b>   | <i>Pole operated stirrup with 28,57 mm. spigot (B.S. 1 1/8"), with top end for attachment to "C" clamp.</i>  |
| <b>311.300.40</b>   | <i>Pole operated stirrup with 28,00 mm. spigot (D.I.N 1 1/9")</i>  |