

# SUPER LED F10



DATASHEET

Desisti

# SUPER LED F10

LED Fresnel Spotlight 180W -  
CRI>96

## OVERVIEW

The Super LED F10 is a high efficiency Fresnel lens spotlight using the innovative High Power 180W 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 F10 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 2000W tungsten Fresnels, while the Daylight Balanced CCT is similar to a 700W 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                                     |
|---------|---|
| F10T.MO | Super LED F10 T - Tungsten CCT, Manual Operated |
| F10T.PO | Super LED F10 T - Tungsten CCT, Pole Operated   |
| F10D.MO | Super LED F10 D - Daylight CCT, Manual Operated |
| F10D.PO | Super LED F10 D - Daylight CCT, Pole Operated   |



## WHAT'S INSIDE

### FIXTURE HEAD

250 mm. (10") diameter Fresnel lens  
POWERCON IN & OUT PANEL CONNECTORS.  
XLR 5 Pin DMX IN & OUT PANEL CONNECTORS.  
180W high power CRI>96  
Built In Universal Power Supply 90-250V  
50/60Hz DMX controlled.

### YOKES

#### Manual Operated Versions

Mod. LT320.110.40 M.O. yoke with 28,57 mm (B.S. 1 1/8") with top end for "C" clamp

#### Pole Operated Versions

Mod. 321.110.40 P.O. yoke with 28,57 mm spigot (B.S. 1 1/8"), with top end for "C" clamp

### ACCESSORIES

Mod. 326.100 four leaf rotating barndoor  
Mod. 327.100 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

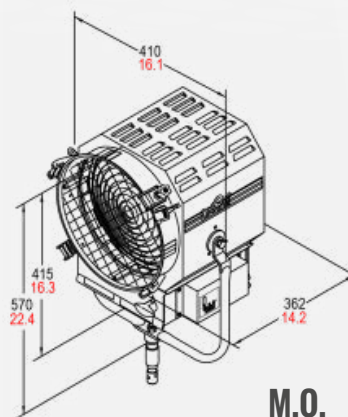
**DeSisti**

# SUPER LED F10

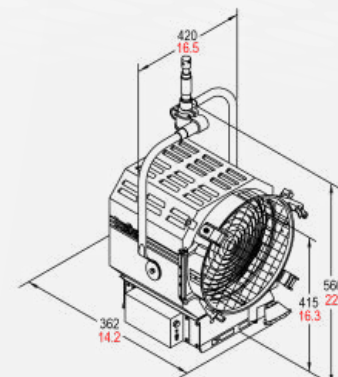
## FEATURES

|  |  |
|--|--|
| <b>Power to LED</b>                      | 180W - DC current to the LED - flicker free  |
| <b>Rated Voltage &amp; PFC</b>           | 90-250V 50-60Hz PFC 0,96   |
| <b>Power consumption</b>                 | 210W @ 230V   210W @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>                | 55.000 hours with 90% 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>                   | IP20   |
| <b>Max. Housing Surface Temperature</b>  | 70° C  |
| <b>Weight of Fixture</b>                 | <b>M.O.</b> 13,5 Kg (29.7 lb)<br><b>P.O.</b> 14,8 Kg (32.5 lb)   |
| <b>Weight of Barndoor</b>                | 4 leaf 1,4 Kg (3.09 lb)   8 leaf 1,65 Kg (3.64 lb)   |
| <b>Weight of color frame</b>             | 0,28 Kg (0.62 lb)  |
| <b>Barndoor ring diameter</b>            | Seat: 314mm / 12 1/3" - Accessory: 313mm / 12 1/3"   |
| <b>Scrims &amp; color frame diameter</b> | Seat 306mm / 12" - Accessory: 305mm / 12"  |
| <b>Lens diameter</b>                     | 250mm / 10"  |

## DIMENSION



**M.O.**



**P.O.**

## FEATURES

250 mm. (10") 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.

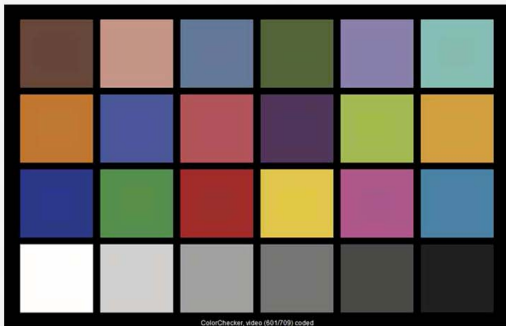
Available with either positive lock manual yokes for comfort and ease of handling, or pole operated yokes which can be used via the lighting pole for Panning and Tilting the lights as well as manually, since the mechanical activators are equipped with clutches.

# SUPER LED F10

## TLCI

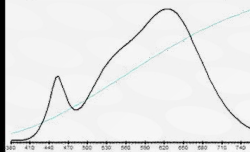
### TUNGSTEN CCT

De Sisti SUPER LED F10 - 180W - Tungsten : CCT = P3065 (+0.4)  
TLCI-2012: 96 (P3065)



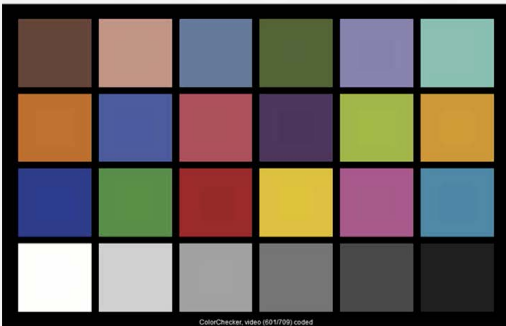
### Television Lighting Consistency Index-2012

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



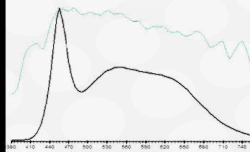
### DAYLIGHT CCT

De Sisti SUPER LED F10 - 180W - Daylight : CCT = D5850 (+1.2)  
TLCI-2012: 97 (D5850)



### Television Lighting Consistency Index-2012

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



## PHOTOMETRICS

### // SUPER LED F10

Central Light intensity (Candle Power)

Illumination center values at Distances

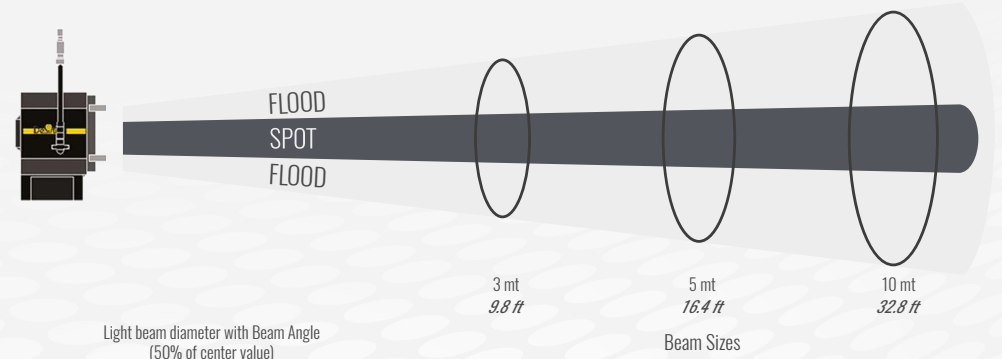
#### 3.200°K TUNGSTEN BALANCED C.C.T. (Correlated Color Temperature) - 180W (CRI 97) - TLCI: 96

|              | Central Light intensity (Candle Power) | 3m                            | 5m                         | 10m                        |
|--------------|--|-------------------------------|----------------------------|----------------------------|
| <b>FLOOD</b> | 22.500 cd                              | 2.500 lux<br><i>232 FC</i>    | 900 lux<br><i>84 FC</i>    | 225 lux<br><i>21 FC</i>    |
| <b>SPOT</b>  | 170.100 cd                             | 18.900 lux<br><i>1,756 FC</i> | 6.804 lux<br><i>632 FC</i> | 1.701 lux<br><i>158 FC</i> |

#### 5.600°K DAYLIGHT BALANCED C.C.T. (Correlated Color Temperature) - 180W (CRI 96) - TLCI: 97

|              | Central Light intensity (Candle Power) | 3m                            | 5m                         | 10m                        |
|--------------|--|-------------------------------|----------------------------|----------------------------|
| <b>FLOOD</b> | 24.300 cd                              | 2.700 lux<br><i>251 FC</i>    | 972 lux<br><i>90 FC</i>    | 243 lux<br><i>23 FC</i>    |
| <b>SPOT</b>  | 178.200 cd                             | 19.800 lux<br><i>1,839 FC</i> | 7.128 lux<br><i>662 FC</i> | 1.782 lux<br><i>166 FC</i> |

3 mt 9.8 ft      5 mt 16.4 ft      10 mt 32.8 ft



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

|              | Beam Angle | 3m                        | 5m                        | 10m                        |
|--------------|------------|---------------------------|---------------------------|----------------------------|
| <b>FLOOD</b> | 55°        | 3,12 mt<br><i>10.2 ft</i> | 5,21 mt<br><i>17.1 ft</i> | 10,41 mt<br><i>34.2 ft</i> |
| <b>SPOT</b>  | 12°        | 0,63 mt<br><i>2.1 ft</i>  | 1,05 mt<br><i>3.4 ft</i>  | 2,10 mt<br><i>6.9 ft</i>   |

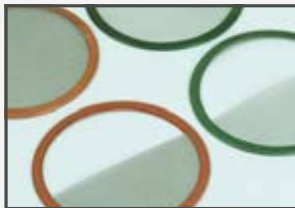
Light beam diameter with Field Angle (10% of center value)

|              | Field Angle | 3m                        | 5m                        | 10m                        |
|--------------|-------------|---------------------------|---------------------------|----------------------------|
| <b>FLOOD</b> | 75°         | 4,60 mt<br><i>15.1 ft</i> | 7,67 mt<br><i>25.2 ft</i> | 15,35 mt<br><i>50.3 ft</i> |
| <b>SPOT</b>  | 23°         | 1,22 mt<br><i>4.0 ft</i>  | 2,03 mt<br><i>6.7 ft</i>  | 4,07 mt<br><i>13.4 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>F10X.X0.DIN</b>  | adder code to order DIN Spigot  |
| <b>325.310</b>      | Stainless Steel wire guard  |
| <b>326.100</b>      | Four leaf rotating barndoor   |
| <b>326.200</b>      | Eight way rotating barndoor   |
| <b>327.100</b>      | Color Frame   |
| <b>328.100</b>      | Cone with two discs (with front aperture diameter: 70 mm. 50 mm. 30 mm.)  |
| <b>329.100</b>      | Set of scrims - Stainless steel   |
| <b>329.101</b>      | Full single scrim - Stainless steel   |
| <b>329.102</b>      | Full double scrim - Stainless steel   |
| <b>329.103</b>      | 1/2 single scrim - Stainless steel  |
| <b>329.104</b>      | 1/2 double scrim - Stainless steel  |
| <b>91.210</b>       | 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) |
| <b>93.102</b>       | Extruded black "C" clamp with M 12 threaded stud  |
| <b>93.103</b>       | Extruded black "C" clamp with M 10 threaded stud  |
| <b>20.100</b>       | Safety cable 800 mm. long with 4 mm. diameter steel rope and safety catch.  |
| <b>LT320.110.40</b> | Steel tube Manual Operated stirrup with 28,57 mm. spigot (B.S. 1 1/8"), with top end for attachment to "C" clamp.                                   |
| <b>LT320.300.40</b> | Steel tube Manual Operated stirrup with 28,00 mm. spigot (D.I.N 1 1/9")   |
| <b>LT320.220.40</b> | Steel tube Manual Operated stirrup with M 12 Threaded hole  |
| <b>LT321.110.40</b> | Pole operated stirrup with 28,57 mm. spigot (B.S. 1 1/8"), with top end for attachment to "C" clamp.  |
| <b>321.300.40</b>   | Pole operated stirrup with 28,00 mm. spigot (D.I.N 1 1/9")  |