

Desire Series



Type(s)	
Project	
Date	
Notes	

GENERAL INFORMATION

The Desire Fresnel takes the best of incandescent Fresnels and adds in a color-mixing LED engine. This classic fixture has been reimagined to bring you bright, beautiful light, cutting-edge technology, and a wide zoom range. We reworked how the lens and lamp work together in Desire Fresnel, so the light you get is bright and efficient through the entire zoom range. Providing more lumens regardless of angle, this fixture is up to 25% more efficient than traditional Fresnel optical systems. Add in the Lustr X8 color system with deep red LEDs, City Theatrical's wireless DMX Multiverse® technology, and an intuitive user interface, and we know this will become your new favorite fixture.

PRODUCT FEATURES

- Lustr X8 full-color array
- 5 inch or 7 inch glass Fresnel lens aperture
- Smooth wash
- Built-in manual zoom
- Multiverse wireless DMX control
- Intuitive user interface
- Mobile app setup with NFC
- Standard 5/10 year LED fixture warranty

ORDERING INFORMATION

Desire Fresnel

MODEL	DESCRIPTION	ETL PART NUMBER	CE PART NUMBER	
DFL5	Desire Fresnel, 5 inch, Lustr X8	7419A1002	7419A1202	
DFL7	Desire Fresnel, 7 inch, Lustr X8	7419A1001	7419A1201	

Color options: -1 = white, -5 = silver gray

Additional ordering information (including accessories) can be found on page 10.

PRODUCT SPECIFICATIONS

Source

LED details	Lumileds LUXEON® C
Max lumens (5/7 inch)	5,158/6,176
Lumens per watt (5/7 inch)	31.6/54
L70 rating (hours to 70% output)*	>54,000 hours

Color

Colors used	Deep Red, Red, Amber, Lime, Green, Cyan, Blue, Indigo
Color temperature range	1900–10450 K
Calibrated array	Yes
Red shift	Yes (selectable)

Optical

Beam angle range (5/7 inch)	14°–49°/13°–55°
Gate size	N/A
Aperture size	127 mm (5 in) or 178 mm (7 in)
Pattern projection	No
Pattern size	N/A
Camera flicker control/Hz range	Yes: 5 kHz, 25 kHz

Control

Input method	5-Pin XLR, Multiverse wireless and NFC
Protocols	DMX-512, RDM, City Theatrical Multiverse, NFC
Modes (footprint)	6 modes (1–12 channels)
RDM configuration	Yes
UI type	Full color display
Local control	Yes
Onboard presets	Yes (12)
Onboard sequences	Yes
FixtureLink	Yes

Wireless

Band	2.400–2.480 GHz
Range	100 m indoors, 500 m line of sight (subject to conditions)
Max receivers	DMX: No limit RDM: Varies by transmitter used Multiverse SHoW Baby®: 585 Multiverse Transmitter: 5,000
Broadcast power	100 mW

Electrical

Voltage range	100–230 VAC
Input method	AC via powerCON® TRUE1® TOP
Inrush (first half-cycle) (5/7 inch)	120 V: 26 A/40 A (first half-cycle) 230 V: 55 A/77 A (first half-cycle)
Fixtures per circuit on standard R20 breaker*	7 (link up to 6 via Power Thru connector) Note: TRUE1 connector rated for 20 A (120 V / 60 Hz) and 16 A (230 V / 50 Hz)
Wattage (typical) (5/7 inch)	120 V: 163.3 W/138 W 230 V: 160.7 W/132 W
Current draw (5/7 inch)	120 V: 1.39 A/1.2 A 230 V: 0.76 A/0.6 A

*All measurements are for 120 V, 60 Hz. Results may vary in different regions.

Thermal

Ambient operating temp	0°–40° C (32°–104° F)
Fan (controllable)	Yes (yes)
Droop compensation	Yes
dB range	8.4–37.7 dBA
BTUs/hour (120 V) (5/7 inch)	557/606

Physical

Materials	Cast and extruded aluminum
Color options	Black, white or custom color
Mounting options	Yoke
IP rating	IP20
Weight (5/7 inch)	7.8 kg (17.2 lb)/10.8 kg (23.7 lb)
Included accessories	Yoke, power cable

Warranty

Fixture	5 years
LED array	10 years

Regulatory and Compliance

Approved regulatory standards	cETLus Listed CE Compliant FCC Compliant
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*Note: All LED sources experience some lessening of light output and some color shift over time. LED output will vary with thermal conditions. In individual situations, LEDs will be used for different durations and levels. This can eventually lead to minor alterations in color performance, necessitating slight adjustments to presets, cues or programs.

PRODUCT FEATURES



DEEP RED
The Lustr X8 array adds deep red to the mix greatly enhancing skin tones, fabrics, and scenery.



WIRELESS DMX/RDM AND NFC
City Theatrical's Multiverse broadcasts as many as 10 universes of DMX from a single transmitter.



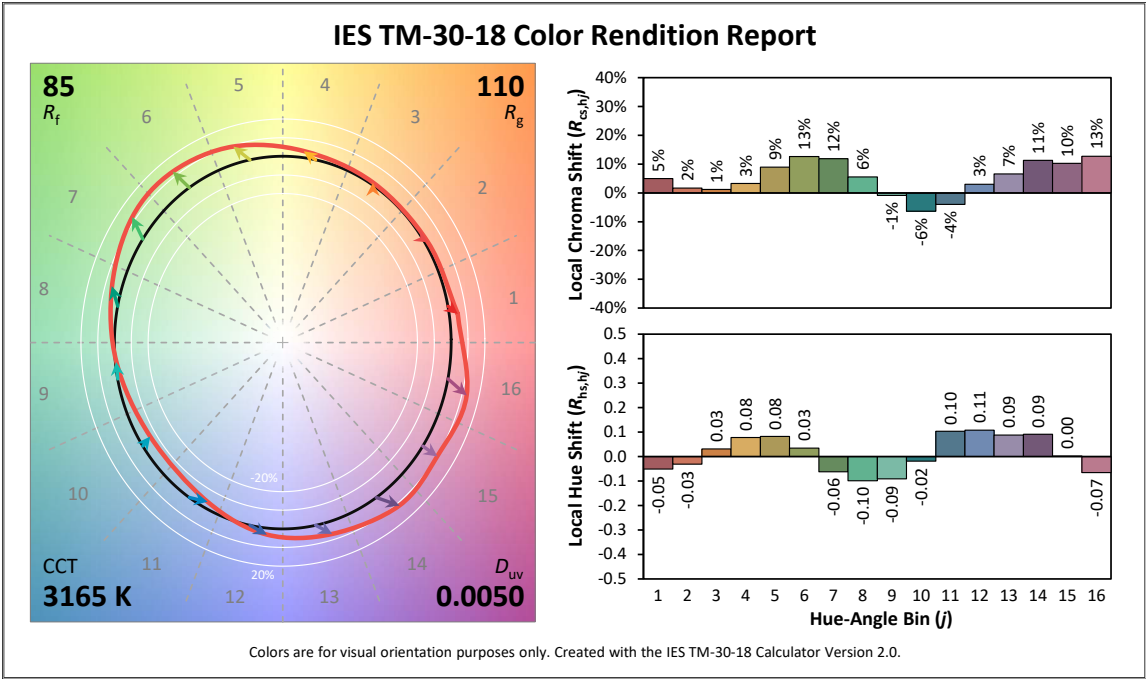
MOBILE COMMUNICATION
Use built-in NFC to configure your fixture using the Set Light app on your mobile device.

COLOR METRIC INFORMATION

Additional Color Metrics

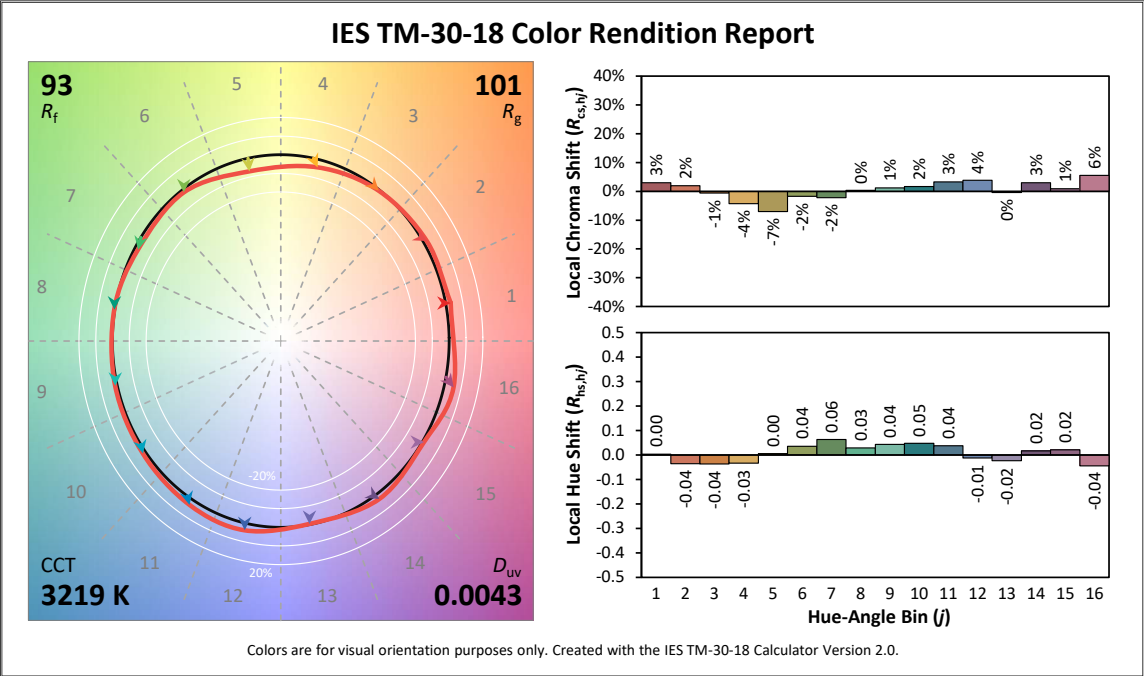
	LUSTR X8 3200 K	LUSTR X8 4500 K	LUSTR X8 5600 K
CRI R_a	93	95	98
TLCI	96	97	98
SSI	78	76	75

DESIRE FRESNEL LUSTR X8 3200 K BRIGHTEST TM-30-18

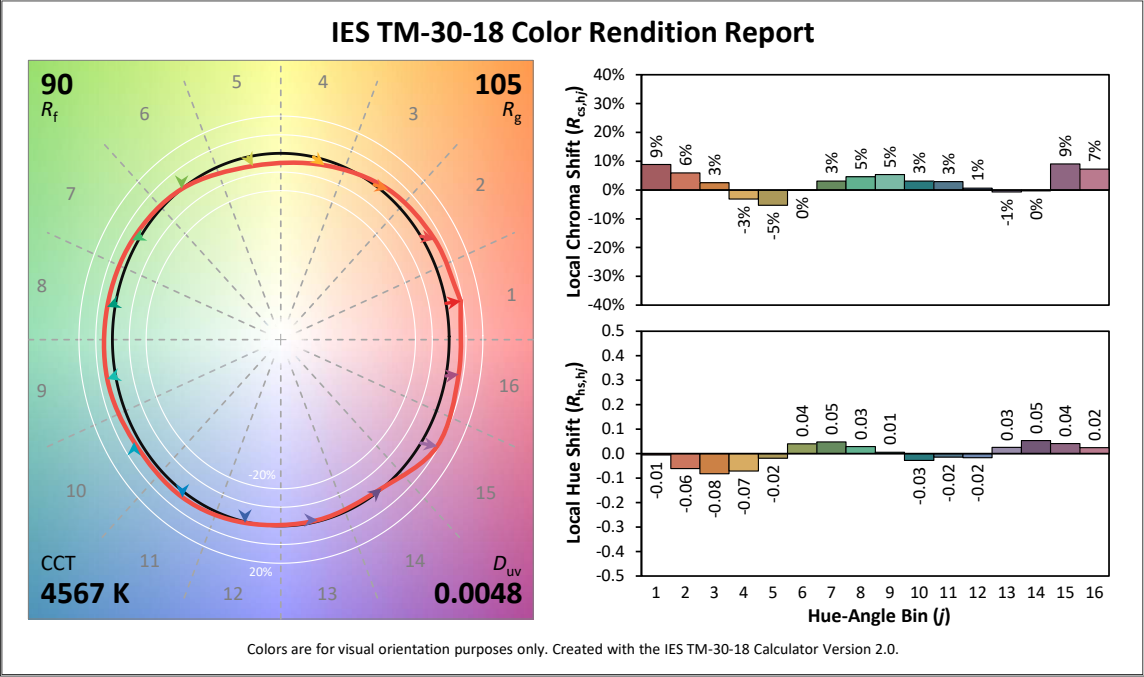


COLOR METRIC INFORMATION

DESIRE FRESNEL LUSTR X8 3200 K SPECTRAL TM-30-18

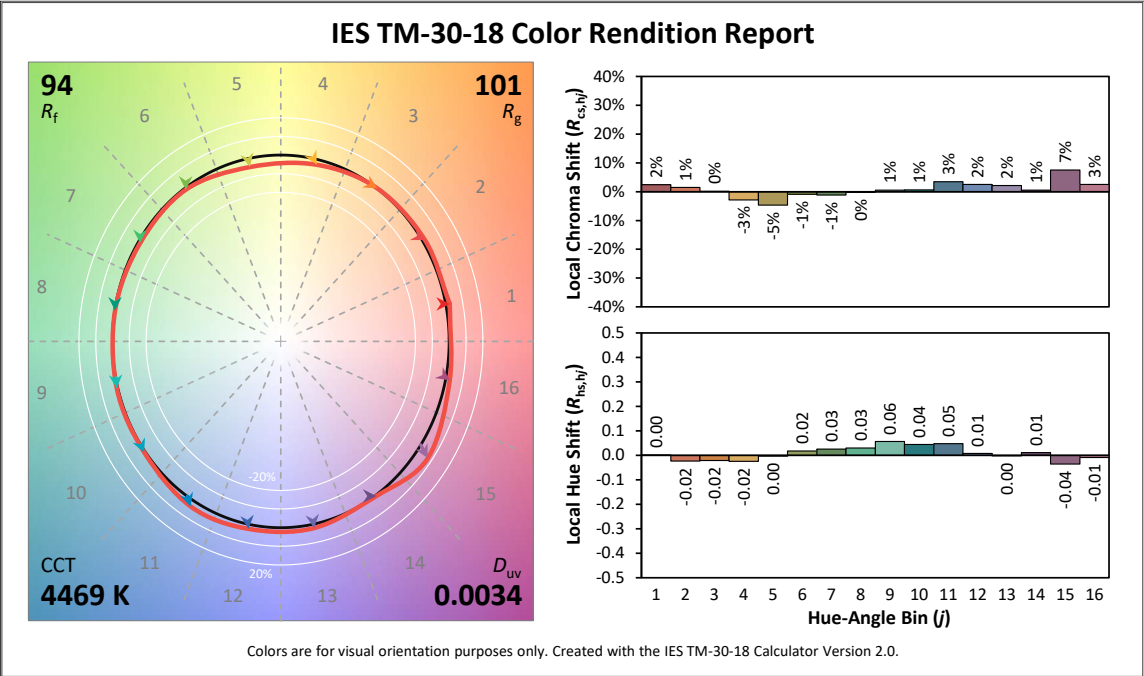


DESIRE FRESNEL LUSTR X8 4500 K BRIGHTEST TM-30-18

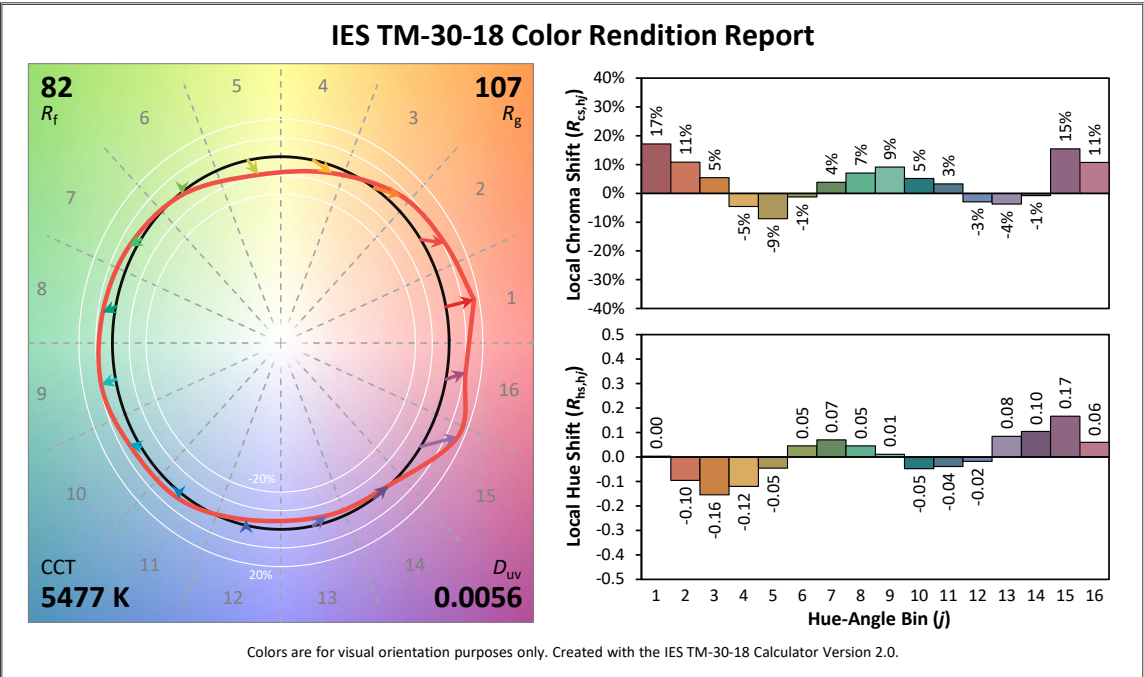


COLOR METRIC INFORMATION

DESIRE FRESNEL LUSTR X8 4500 K SPECTRAL TM-30-18

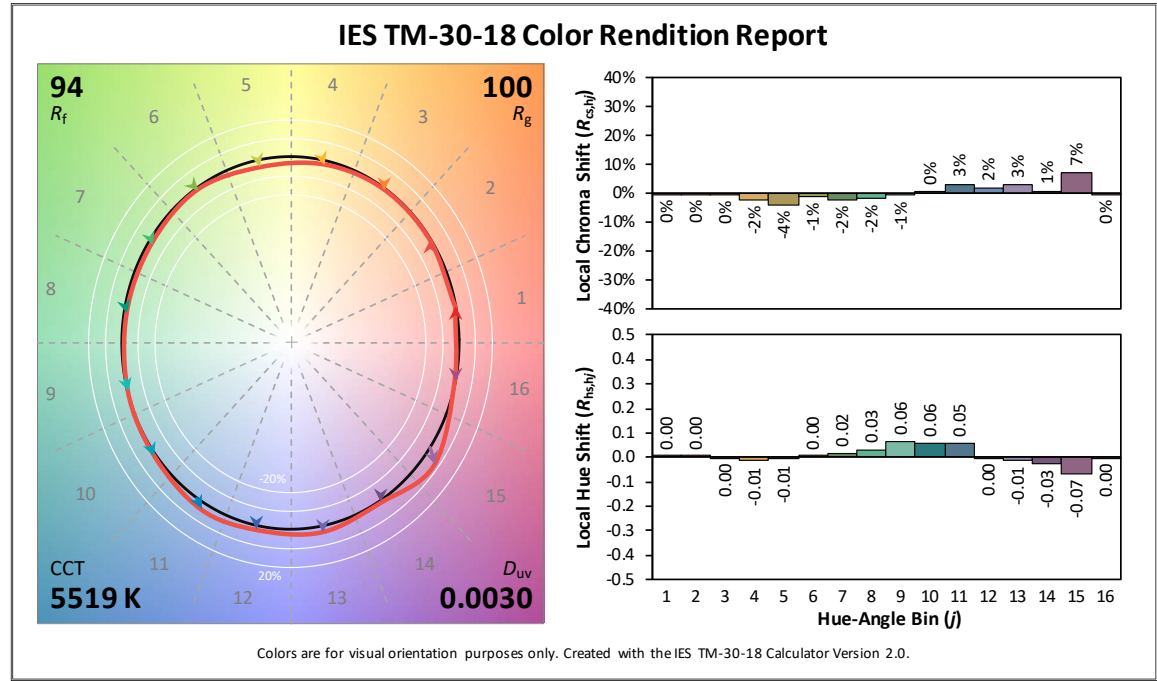


DESIRE FRESNEL LUSTR X8 5600 K BRIGHTEST TM-30-18



COLOR METRIC INFORMATION

DESIRE FRESNEL LUSTR X8 5600 K SPECTRAL TM-30-18



PHOTOMETRY INFORMATION

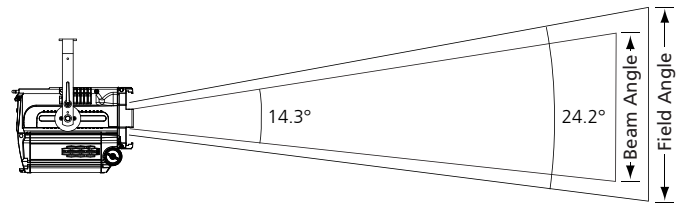
Desire Fresnel 5 in Lustr X8 Spot

Mode	Candela	Beam Lumens	Field Lumens	Power Consumption	Efficacy (lpw)
Full On	45,967	1,377	2,648	162.1	16.3
3200 K (Studio) / Brightest	39,453	1,187	2,276	122.1	18.6
3200 K (Studio) / Spectral	33,725	1,010	1,944	104	18.7
4500 K (Studio) / Brightest	45,031	1,341	2,593	157	16.5
4500 K (Studio) / Spectral	38,309	1,140	2,208	124.3	17.8
5600 K (Studio) / Brightest	37,068	1,093	2,130	135.6	15.7
5600 K (Studio) / Spectral	34,775	1,042	2,006	110.3	18.2

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.

Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	214.4 ft 65.3 m
Field Diameter	4.3 ft 1.3 m	6.4 ft 2.0 m	8.6 ft 2.6 m	12.8 ft 3.9 m	—
Illuminance (fc)	460	204	115	51	1
Illuminance (lux)	4,948	2,199	1,237	550	10.76

For field diameter at any distance, multiply distance by 0.428.
For beam diameter at any distance, multiply by 0.251.



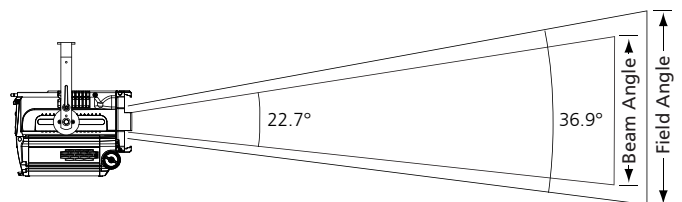
Desire Fresnel 5 in Lustr X8 Mid

Mode	Candela	Beam Lumens	Field Lumens	Power Consumption	Efficacy (lpw)
Full On	30,397	2,292	4,209	162.1	26.0
3200 K (Studio) / Brightest	26,025	1,954	3,603	122.1	29.5
3200 K (Studio) / Spectral	22,334	1,674	3,093	104	29.7
4500 K (Studio) / Brightest	29,765	2,230	4,121	157	26.2
4500 K (Studio) / Spectral	23,644	1,769	3,271	124.3	26.3
5600 K (Studio) / Brightest	24,668	1,858	3,411	135.6	25.2
5600 K (Studio) / Spectral	22,458	1,683	3,107	110.3	28.2

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.

Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	174.3 ft 53.1 m
Field Diameter	6.7 ft 2.0 m	10.0 ft 3.1 m	13.3 ft 4.1 m	20.0 ft 6.1 m	—
Illuminance (fc)	304	135	76	34	1
Illuminance (lux)	3,272	1,454	818	364	10.76

For field diameter at any distance, multiply distance by 0.667.
For beam diameter at any distance, multiply by 0.402.



PHOTOMETRY INFORMATION

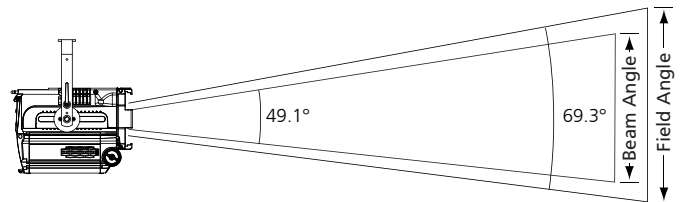
Desire Fresnel 5 in Lustr X8 Flood

Mode	Candela	Beam Lumens	Field Lumens	Power Consumption	Efficacy (lpw)
Full On	8,980	3,460	5,158	162.1	31.8
3200 K (Studio) / Brightest	7,784	2,992	4,465	122.1	36.6
3200 K (Studio) / Spectral	6,523	2,508	3,743	104	36.0
4500 K (Studio) / Brightest	8,826	3,380	5,069	157	32.3
4500 K (Studio) / Spectral	7,538	2,895	4,327	124.3	34.8
5600 K (Studio) / Brightest	7,058	2,715	4,061	135.6	29.9
5600 K (Studio) / Spectral	6,635	2,545	3,807	110.3	34.5

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.

Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	94.8 ft 28.9 m
Field Diameter	13.8 ft 4.2 m	20.7 ft 6.3 m	27.6 ft 8.4 m	41.5 ft 12.6 m	—
Illuminance (fc)	90	40	22	10	1
Illuminance (lux)	967	430	242	107	10.76

For field diameter at any distance, multiply distance by 1.382.
For beam diameter at any distance, multiply by 0.913.



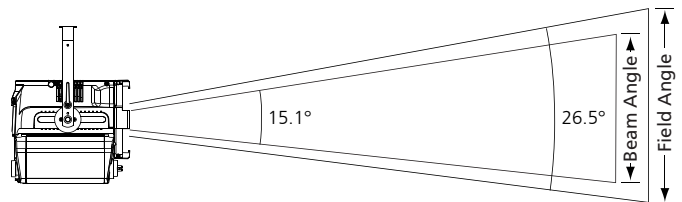
Desire Fresnel 7 in Lustr X8 Spot

Mode	Candela	Beam Lumens	Field Lumens	Power Consumption	Efficacy (lpw)
Full On	58,492	2,230	4,214	139	30.3
3200 K (Studio) / Brightest	52,585	1,982	3,809	110.8	34.4
3200 K (Studio) / Spectral	45,068	1,710	3,257	96	33.9
4500 K (Studio) / Brightest	60,238	2,270	4,338	143	30.3
4500 K (Studio) / Spectral	51,769	1,942	3,724	116	32.1
5600 K (Studio) / Brightest	51,224	1,921	3,691	125	29.5
5600 K (Studio) / Spectral	44,274	1,664	3,188	103.2	30.9

Metric conversions: For meters, multiply feet by 0.3048.
For lux, multiply footcandles by 10.76.

Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	241.9 ft 73.7 m
Field Diameter	4.7 ft 1.4 m	7.1 ft 2.2 m	9.4 ft 2.9 m	14.1 ft 4.3 m	—
Illuminance (fc)	585	260	146	65	1
Illuminance (lux)	6,296	2,798	1,574	700	10.76

For field diameter at any distance, multiply distance by 0.471.
For beam diameter at any distance, multiply by 0.265.



PHOTOMETRY INFORMATION

Desire Fresnel 7 in Lustr X8 Mid

Mode	Candela	Beam Lumens	Field Lumens	Power Consumption	Efficacy (lpw)
Full On	20,550	3,523	5,583	139	40.2
3200 K (Studio) / Brightest	18,345	3,128	4,975	110.8	44.9
3200 K (Studio) / Spectral	15,816	2,714	4,292	96	44.7
4500 K (Studio) / Brightest	21,344	3,608	5,769	143	40.3
4500 K (Studio) / Spectral	18,073	3,101	4,911	116	42.3
5600 K (Studio) / Brightest	17,937	3,087	4,873	125	39.0
5600 K (Studio) / Spectral	15,776	2,693	4,273	103.2	41.4

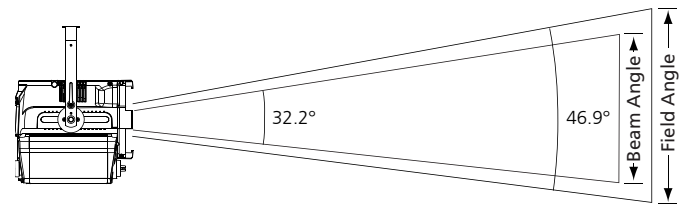
Metric conversions: For meters, multiply feet by 0.3048.

For lux, multiply footcandles by 10.76.

Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	143.4 ft 43.7 m
Field Diameter	8.7 ft 2.6 m	13.0 ft 4.0 m	17.4 ft 5.3 m	26.0 ft 7.9 m	—
Illuminance (fc)	206	91	51	23	1
Illuminance (lux)	2,212	983	553	246	10.76

For field diameter at any distance, multiply distance by 0.868.

For beam diameter at any distance, multiply by 0.577.



Desire Fresnel 7 in Lustr X8 Flood

Mode	Candela	Beam Lumens	Field Lumens	Power Consumption	Efficacy (lpw)
Full On	8,582	3,876	5,914	139	42.5
3200 K (Studio) / Brightest	7,827	3,536	5,379	110.8	48.5
3200 K (Studio) / Spectral	6,722	3,017	4,595	96	47.9
4500 K (Studio) / Brightest	8,991	4,046	6,176	143	43.2
4500 K (Studio) / Spectral	7,704	3,473	5,285	116	45.6
5600 K (Studio) / Brightest	7,646	3,449	5,248	125	42.0
5600 K (Studio) / Spectral	6,659	3,008	4,576	103.2	44.3

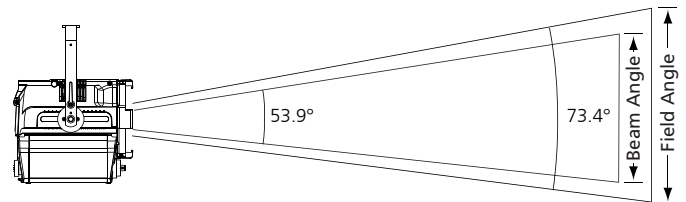
Metric conversions: For meters, multiply feet by 0.3048.

For lux, multiply footcandles by 10.76.

Throw Distance (d)	10 ft 3.0 m	15 ft 4.6 m	20 ft 6.1 m	30 ft 9.1 m	92.6 ft 28.2 m
Field Diameter	14.9 ft 4.5 m	22.4 ft 6.8 m	29.8 ft 9.1 m	44.7 ft 13.6 m	—
Illuminance (fc)	86	38	21	10	1
Illuminance (lux)	924	411	231	103	10.76

For field diameter at any distance, multiply distance by 1.491.

For beam diameter at any distance, multiply by 1.016.



ADDITIONAL ORDERING INFORMATION

Power Input Cables

Use information below to order 5 ft power input leads with factory-fitted connectors. CE fixtures ship with 2 m powerCON TRUE1 TOP to bare end (2500B7035).

MODEL	DESCRIPTION	PART NUMBER (NOT CE)	
T1PA-A	5 ft TRUE1 TOP to parallel blade U-ground (Edison) connector	2500B7029-A	
T1PA-B	5 ft TRUE1 TOP to 20 A two-pin and ground (stage-pin) connector	2500B7029-B	
T1PA-C	5 ft TRUE1 TOP to grounded 20 A twistlock connector	2500B7029-C	
T1PA-X	5 ft TRUE1 TOP to bare-end power input lead	2500B7029-X	

Note: One cable of your choice is included with each fixture.

Power Thru Jumpers

Power thru jumpers connect to output (thru) connectors to provide power to successive luminaires inline.

MODEL	DESCRIPTION	PART NUMBER	
T1PJ-5	5 ft TRUE1 TOP to TRUE1 TOP fixture to fixture jumper (ETL only)	2500B7030	
T1PJ-10	10 ft TRUE1 TOP to TRUE1 TOP fixture to fixture jumper (ETL only)	2500B7031	

Accessories

TYPE	5 IN 159 mm (6.25 in)			7 IN 190 mm (7.5 in)		
	Model	Part No.		Model	Part No.	
Top Hat	400TH	PSF1021		400PTH6	PSF1023	
Half Hat	400HH	PSF1026		400PHH	PSF1027	
Color Frame	400CF	7060A3043		407CF	7061A3007	
Barn Door (8-leaf)	FRESBD5	PSF1208		FRESBD7.5	PSF1191	

Additional Accessories

MODEL	DESCRIPTION	PART NUMBER	
400SC	Safety cable	7060A1022	
400CC	C-clamp	7060A2009	
400PTH3	Top hat, 3 in	PSF1022	
400WB	Weighted base	PSF1032	
400XBTH	Cross baffle top hat	PSF1031	
400L	Egg crate louver	PSF1028	
400BD	Barn door, 4-leaf with extension ring, 190 mm (7.5 in), black (for use in inner accessory slot to reduce light leak)	PSF1019	
400BDS	Barn door, 4-leaf with short extension ring, 190mm (7.5 in), black	PSF1095	
BDS	Studio barn door, 4-leaf, 190 mm (7.5 in), black	PSF1101	

Multiverse

MODEL	DESCRIPTION	PART NUMBER	
CT-5900	City Theatrical Multiverse SHoW Baby	4360A1091	
CT-5903	City Theatrical Multiverse Node 2.4 GHz	4360A1093	
CT-5911	City Theatrical Multiverse Transmitter 2.4 GHz	4360A1095	

PHYSICAL

Desire Fresnel 5 in Dimensions

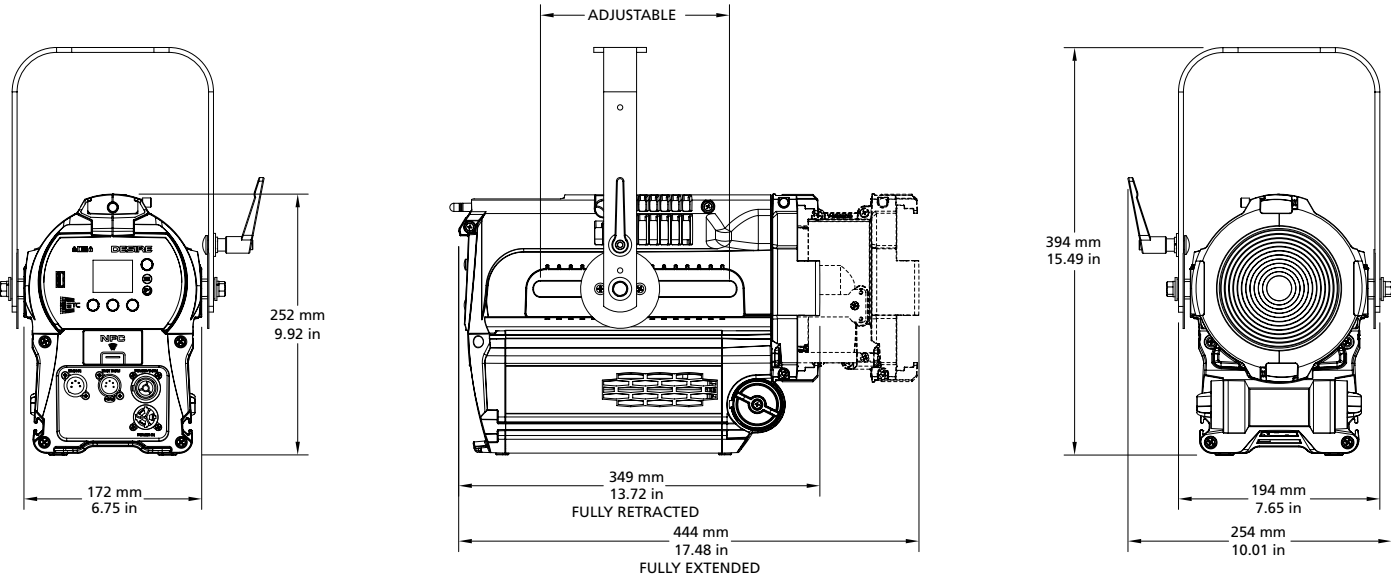
MODEL	HEIGHT		WIDTH		DEPTH	
	mm	in	mm	in	mm	in
Desire Fresnel 5 in	394	15.49	254	10.01	349	13.72
					444	17.48

Desire Fresnel 5 in Weights

MODEL	WEIGHT		SHIPPING WEIGHT	
	kg	lb	kg	lb
Desire Fresnel 5 in	7.8	17.2	10.0	21.9

Depth measurements reflect the fully retracted and fully extended zoom positions.

DESIRE FRESNEL 5 INCH



PHYSICAL

Desire Fresnel 7 in Dimensions

MODEL	HEIGHT		WIDTH		DEPTH	
	mm	in	mm	in	mm	in
Desire Fresnel 7 in	455	17.91	304	11.95	356	14.00
					505	19.87

Depth measurements reflect the fully retracted and fully extended zoom positions.

Desire Fresnel 7 in Weights

MODEL	WEIGHT		SHIPPING WEIGHT	
	kg	lb	kg	lb
Desire Fresnel 7 in	10.8	23.7	13.5	29.65

