

GENERAL INFORMATION

ETC's Selador Desire D22 luminaire puts the x7 Color System™ into a compact, round washlight package. Highly efficient primary lenses and careful colour choices make the D22 fixture ideal for stage, studio, architecture and anywhere vibrant colour and high intensity are requirements. The Selador® x7 Color System produces the widest range of spectrally-balanced saturated and tinted colour choices available, the static-white options provide an impressive punch and the variable white Studio HD combines quality white with the option setting the exact colour temperature required. D22's rugged die-cast enclosure, noiseless fan-free operation, multiple lens options, convenient size and advanced user interface make it an ideal addition to the Desire family of LED luminaires.

D22 LED ARRAY

D22 fixtures are available with any one of the following arrays (not interchangeable) to best suit the intended application.

- D22 Lustr+™: Optimised array with six colours plus, high intensity white LEDs to create an ideal wash fixture for full-range colour mixing
- D22 Studio Daylight: Contains twenty-two 5600K LEDs for high-intensity, non-variable cool-white output
- D22 Studio Tungsten: Contains twenty-two 3000K LEDs for high-intensity, non-variable warm-white output
- D22 Studio HD: Combines warm white and cool white LEDs for variable-colour-temperature mixing. Added to this are carefully chosen colours from the Selador x7 Color System to fill in the white LED spectral gaps, providing the richest variable-white light possible in an LED fixture.

D22 MOUNTING CONFIGURATIONS

D22 fixtures are available in three different mounting options to fit any installation:

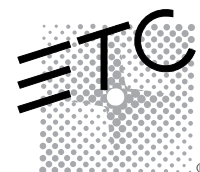
- D22 Portable: Standard yoke-mount hardware; 1.8m power lead with Schuko or UK13A connector and DMX in/thru chassis-mount XLR5 connectors
- D22 Canopy (for ceiling mount): Single cable between fixture and canopy for power and DMX in/hru
- D22 Track Mount: Eutrac 3-circuit + data and a single cable between fixture and track adapter for power and DMX

ORDERING INFORMATION

Selador Desire CE D22

PART NO.	DESCRIPTION
7411A1250-0S	D22 Lustr+ Portable wash luminaire, Schuko, Black
7411A1220-0S	D22 Studio HD Portable wash luminaire, Schuko, Black
7411A1260-0S	D22 Tungsten Portable wash luminaire, Schuko, Black
7411A1270-0S	D22 Daylight Portable wash luminaire, Schuko, Black
7411A1250-0U	D22 Lustr+ Portable wash luminaire, UK13A, Black
7411A1220-0U	D22 Studio HD Portable wash luminaire, UK13A, Black
7411A1260-0U	D22 Tungsten Portable wash luminaire, UK13A, Black
7411A1270-0U	D22 Daylight Portable wash luminaire, UK13A, Black
7411A1252	D22 Lustr+ Canopy wash luminaire, Black
7411A1222	D22 Studio HD Canopy wash luminaire, Black
7411A1262	D22 Tungsten Canopy wash luminaire, Black
7411A1272	D22 Daylight Canopy wash luminaire, Black
7411A1251	D22 Lustr+ 3c Track w/data wash luminaire, Black
7411A1221	D22 Studio HD 3c Track w/data wash luminaire, Black
7411A1261	D22 Tungsten 3c Track w/data wash luminaire, Black
7411A1271	D22 Daylight 3c Track w/data wash luminaire, Black

Note: All part numbers above are for black luminaires. Add -1(S,U) for white or -5(S,U) for silver grey. Custom colours are available upon request



SPECIFICATIONS

GENERAL

- 22-LED colour-mixing wash fixture (Lustr+™)
- 22-LED variable white-light fixture (Studio HD)
- 22-LED static cool- or warm-white wash fixture (Studio Tungsten and Studio Daylight)
- CE compliant
- IP20-rated for indoor use
- DMX in/thru for easy setup (no DMX thru on D22 Track)
- User-friendly control interface with multiple modes and fixture settings

PHYSICAL

- Rugged die cast all-metal housing
- Easy access slots for secondary lenses and 140mm accessories
- Available in black, white and silver grey (standard) custom colours available (contact ETC for quotation)
- DMX512 in/thru via five-pin XLR connectors (D22 Portable only)

ELECTRICAL

- 100VAC to 240VAC 50/60 Hz universal power input
- Requires power from a non-dim source

LED*

- 50,000-hour LED life (50,000 hours at 70% intensity)
- 22 Luxeon® Rebel LED emitters

*See additional LED notes on page three

COLOUR (LUSTR+ AND STUDIO HD ONLY)

- Exclusive x7 *Color System*™ seven-colour LED array (Lustr+)
- Unique mix of x7 colours and warm and cool LEDs (Studio HD)
- Beautifully illumination of skin tones and other objects for natural appearance and high colour rendering
- Broad-spectrum colour interacts seamlessly with conventional sources
- Exclusive, optional red-shift option emulates tungsten dimming performance (Lustr+ and Studio HD)

OPTICAL

- Primary field angle of 21°
- Secondary lenses available for multiple beam spread options
- Refer to accessories charts for lenses available

CONTROL

- Multiple control options, including RGB, HSI, strobe, and console-free Master/Slave mode
- See DMX Control Table for additional information
- 15-bit virtual dimming engine provides smooth, high-quality theatrical fades, and minimises colour shift during dimming
- RDM functionality for address and setting changes

THERMAL

- Ambient operating temperature of -20° to 40°C
- Active electronic thermal management for droop-free operation
- Noiseless, fan-free convection cooling for acoustically sensitive installations
- Fixture is designed for continuous operation up to 40°C ambient temperature and requires free flow of air around fixture housing

ADDITIONAL ORDERING INFORMATION

Accessories

PART NO.	DESCRIPTION
PSF1113	Barn door, Black (Use only as a flexible top hat to diminish aperture glare. Not for beam shaping.)
PSF1114	140 x 140mm Media Frame, Black (use for round and oblong lenses)
PSF1111	Egg Crate Louvre, Black
PSF1112	Half-Shield, Black
7411K1016	D22 Floor Stand Yoke, Black

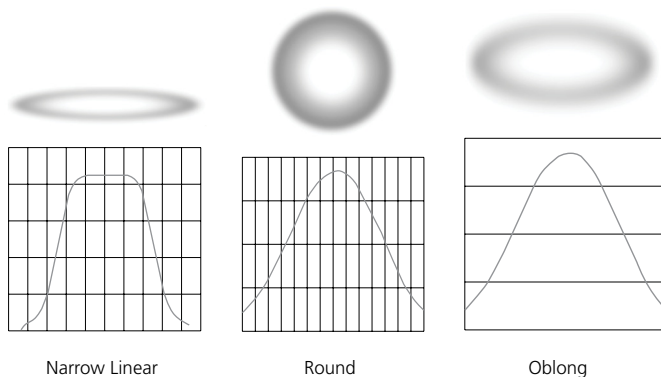
Note: All part numbers above are for black accessories. Add -1 for white or -5 for silver grey. Custom colours are available upon request.

ADDITIONAL ORDERING INFORMATION

Secondary Lens Options

DESCRIPTION: The following lenses are cut for D22 luminaires and create round, linear or oblong field patterns as described below. These lenses are not for use in Selador® Classic (Vivid-R™, Lustr®, Paletta™, etc.) fixtures. Media frame included with round and oblong lenses only	
PART NO.	DESCRIPTION
Narrow Linear Field	
Linear lenses (same material as used with Selador Classic) may be combined to create desired field size	
7411K1009	Ø140mm Very Narrow linear field lens
7411K1010	Ø140mm Narrow linear field lens
7411K1011	Ø140mm Medium linear field lens
7411K1012	Ø140mm Wide linear field lens
7411K1013	Ø140mm Extra Wide linear field lens
Round Field	
7411K1001	Very Narrow lens (round field) in frame
7411K1002	Narrow lens (round field) in frame
7411K1003	Medium lens (round field) in frame
7411K1004	Wide lens (round field) in frame
7411K1005	Extra Wide lens (round field) in frame
Oval (oblong) Field	
7411K1006	Narrow lens (oblong field)
7411K1007	Medium lens (oblong field)
7411K1008	Wide lens (oblong field)

Typical Lens-Field Profiles



Read more about lens spreads at: http://www.etcconnect.com/docs/docs_downloads/miscdocs/Desire_vs_PAR_EA_revB.pdf

Power Consumption at Full Intensity

NOTES ABOUT LED LUMINAIRES

All LED sources experience light-output reduction and some colour shift over time. LED output will vary with thermal conditions, which can be affected by ambient temperatures and orientation. See the D40 Ambient Temperature and Power Budgeting Guide for more details. Based on the LED manufacturer's B50 L70 specification, a Selador luminaire will achieve ~70% of its initial output after 50,000 hours of typical usage. In individual situations, LEDs will be used for different durations and at different levels. This can eventually lead to minor alterations in colour performance, necessitating slight adjustment to presets, cues or programs.

CRI AND CQS RATINGS

Desire fixtures were evaluated for CRI and CQS performance using measured output spectrum and optimized mix solutions for the best spectral match to black body sources at 3200K and 5600K.

Fixture	CRI	CQS	Colour Fidelity	Duv
D22 Lustr+ at 3200K	86	88	88	0.000
D22 Lustr+ at 5600K	93	92	90	0.000

The D22 luminaire provides excellent colour rendering to the eye, particularly at higher colour-temperature settings such as 5600K. A Duv rating of 0.000 indicates that the colour mix used is exactly on the black body line, with no green or magenta tint.

CONTROL OPTIONS

User settings on D22 fixtures allow multiple operational modes and settings for either control desk operation via DMX protocol or stand-alone operation. The expanded LCD display provides easy navigation to all possible settings and options. Some of them are:

- Multiple DMX choices, ranging from a simple RGB profile – which effectively controls all seven LED colours via three channels – to nine-channel ‘direct’ colour and intensity control
- Multiple dimming curve options
- Preset colours and sequences for stand-alone (no console required) operation
- White-point selection: White-light and colour behavior based on a specific-colour-temperature white light, i.e. 3200K, 5600K, etc.
- Loss of data behavior options: Instant off, hold last look for two minutes, etc.
- Output modes: Three output options that offer the user a choice between maximum output and maximum consistency

See the user manual for a complete explanation of all of the control settings and options for the D22.

Quick Setups

To assist in managing the numerous control and fixture behavior choices, five combinations of operational settings are available to quickly get started. These settings are specifically created for different applications and are easily accessible at the fixture display. Each setting can then be modified as required to take advantage of all of the possible control features.

Setting Title	Profile	Description	Typical Features*
General	Direct	Factory default: For general-purpose use, including interior architectural applications	<ul style="list-style-type: none"> • Standard dimming curve • Regulated output for colour consistency
Stage	HSI Plus 7 Enabled	Theatrical lighting: Duplicates the colour and dimming behavior of tungsten stage lighting fixtures.	<ul style="list-style-type: none"> • Incandescent dimming curve • Regulated output for color consistency • 3250K white-point setting
XT Arch	HSI	Exterior architectural lighting: Provides a high degree of colour consistency in high ambient-temperature environments.	<ul style="list-style-type: none"> • Standard dimming curve • Protected output • 3200K white-point setting
High Impact	RGB	Event lighting: Enables quickest response, simple RGB control and strobe channel for maximum effect usage	<ul style="list-style-type: none"> • Quick dimming curve • Boost mode for maximum intensity • 5600K white-point setting
Studio	Studio	Studio factory default: Enables three-parameter control of white light (intensity, white point, and tint) via DMX from a control desk or from the fixture display – without a console	<ul style="list-style-type: none"> • Linear dimming curve • Regulated output mode for color consistency

*See user manual for complete list of features for each Quick Setup

CONTROL OPTIONS

DMX Input Channel Profiles

DMX Profile	DMX Channels	Channel Assignments	Notes
Direct	9	1 – Red 2 – Orange (white for Lustr+) 3 – Amber 4 – Green 5 – Cyan 6 – Blue 7 – Indigo 8 – Intensity 9 – Strobe	Direct control of each individual colour with a separate master-intensity channel. Colour calibration of LEDs is not active in this mode. The nine-channel profile will produce the highest-quality colour crossfades.
HSI	5	1 – Hue (coarse) 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe	High-resolution hue (two channels), saturation, and intensity control. HSI mode will produce arbitrary colour crossfades around the colour space.
HSIC	6	1 – Hue (coarse) 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe 6 – Colour Point (CCT)	High-resolution hue, saturation and intensity control as above, with the addition of a colour-point channel to adjust the colour temperature of the fixture in both white light and colour. Colour crossfade performance is the same as HSI.
RGB	5 (Ch. 4 not used)	1 – Red 2 – Green 3 – Blue 4 – n/a 5 – Strobe	Effectively addresses all seven colours via three channels of control. RGB profile will produce medium-quality colour crossfades
Studio	3	1 – Intensity 2 – Colour Point (CCT) 3 – Tint	Controls fixture as a white-light unit. If for example, no DMX control input is present, the fixture can be adjusted for these three parameters on the U/I at the back of the unit.
Additional profile options			
Plus 7		Seven additional colour-control channels are available in RGB, HSI, HSIC, and Studio profile settings. For example, HSI with ‘Plus 7’ enabled becomes a 14-channel profile:	
		1 – Hue (coarse) 2 – Hue (fine) 3 – Saturation 4 – Intensity 5 – Strobe 6 – n/a 7 – Plus 7 Control on/off 8 – Red 9 – Orange (white for Lustr+) 10 – Amber 11 – Green 12 – Cyan 13 – Blue 14 – Indigo	The desired colour and intensity is achieved by using the HSI or RGB channels. Placing channel seven at a value over 51% gives the fixture a 14-channel profile. Channels 8-14 represent the native colours of the fixture and allow the operator to adjust individual colour channels to fine tune the color output.
Strobe		Variable strobe control: 0% is no strobe. The fixture output will strobe more rapidly as the strobe channel value approaches 100%.	

CONTROL OPTIONS

Studio Daylight and Studio Tungsten (only)

Quick Set-Ups

Setting Title	Profile	Description	Typical Features
Studio	Studio	Enables control of intensity from luminaire UI; no console required	<ul style="list-style-type: none"> • Linear dimming curve • Regulated output for intensity stability
Single Channel	Direct	For general purpose architectural use	<ul style="list-style-type: none"> • Standard dimming curve • Regulated output for colour consistency
Stage	Direct	Matches conventional luminaire performance	<ul style="list-style-type: none"> • Incandescent dimming curve • Regulated output

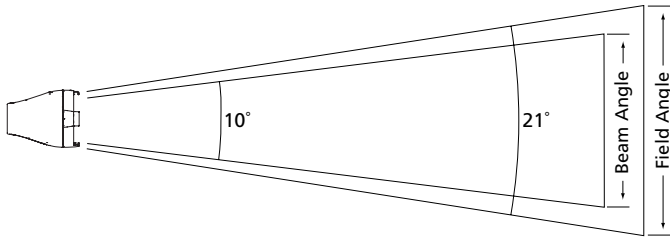
DMX Input Channel Profiles

DMX Profile	DMX Channels	Channel Assignments	Notes
Studio	3	1 – Intensity 2 – Strobe 3 – Fan Control (D60 only)	Control of parameters is also enabled from the luminaire's user interface. No console required.
Direct	3	1 – Intensity 2 – Strobe 3 – Fan Control (D60 only)	

PHOTOMETRICS

D22 Lustr+™

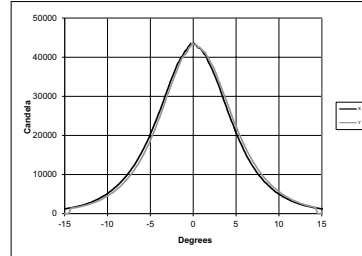
Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Boost - Cold	21°	49,151	1,681	707	32
Regulated	21°	43,669	1,499	629	31



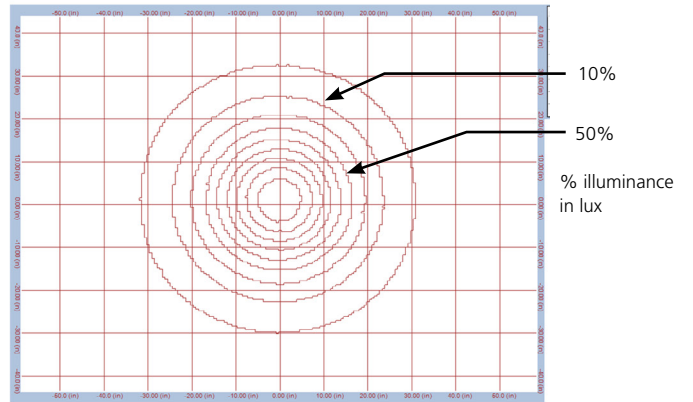
Throw Distance (d)	3.0m	4.6m	6.1m	9.1m
Field Diameter	1.1m	1.7m	2.3m	3.4m
Illuminance (lux)	4,704	2,091	1,176	523

For field diameter at any distance, multiply distance by .301
 For beam diameter at any distance, multiply by 0.145

Cosine Candela Plot

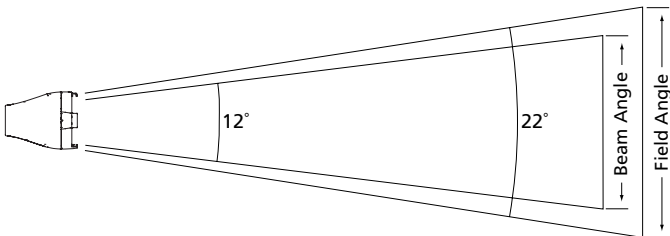


Iso-Illuminance Diagram (Flat Surface Distribution)



D22 Studio Daylight

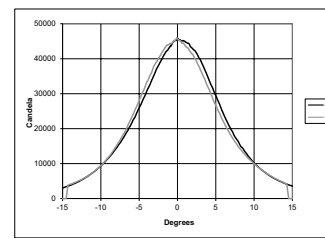
Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Boost - Cold	22°	49,808	2,722	1,099	51
Regulated	22°	46,151	2,533	1,031	50



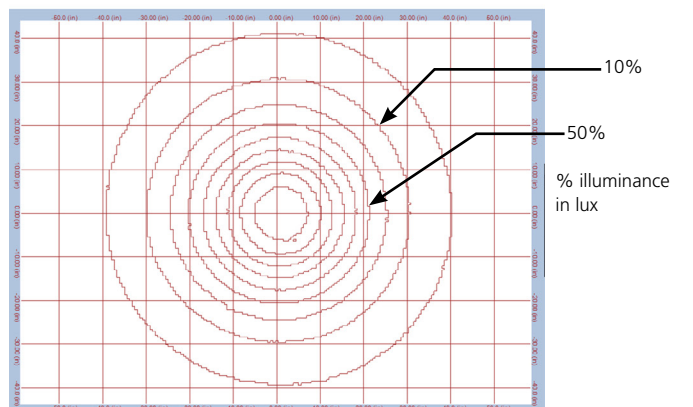
Throw Distance (d)	3.0m	4.6m	6.1m	9.1m
Field Diameter	1.5m	2.2m	2.9m	4.4m
Illuminance (lux)	4,968	2,208	1,242	552

For field diameter at any distance, multiply distance by .390
 For beam diameter at any distance, multiply by 0.198

Cosine Candela Plot



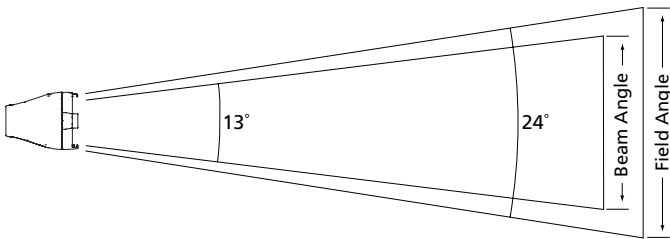
Iso-Illuminance Diagram (Flat Surface Distribution)



PHOTOMETRICS

D22 Tungsten

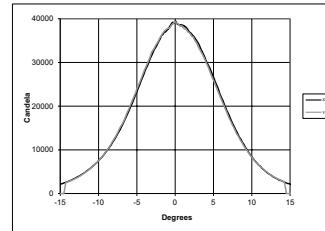
Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Boost - Cold	24°	41,656	2,210	1,031	41
Regulated	24°	39,502	2,096	978	41



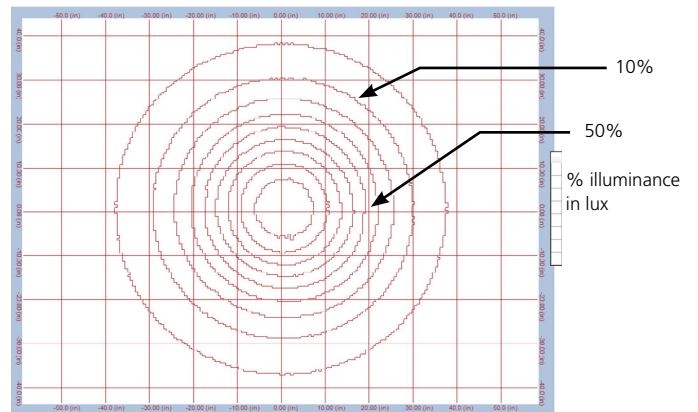
Throw Distance (d)	3.0m	4.6m	6.1m	9.1m
Field Diameter	1.4m	2.1m	2.7m	4.1m
Illuminance (lux)	4,252	1,890	1,063	472

For field diameter at any distance, multiply distance by .414
 For beam diameter at any distance, multiply by 0.189

Cosine Candela Plot

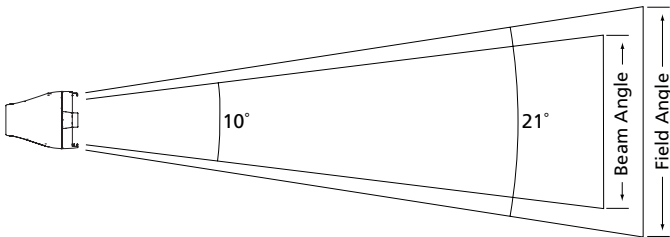


Iso-Illuminance Diagram (Flat Surface Distribution)



D22 Studio HD

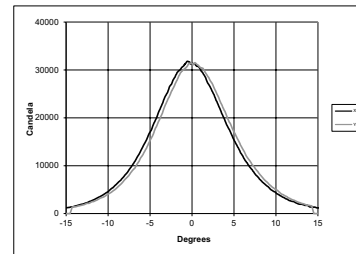
Mode	Degree	Candela	Field Lumens	Beam Lumens	Lumens Per Watt
Boost - Cold	21°	44,555	1,731	715	33
Regulated	21°	32,166	1,247	507	31



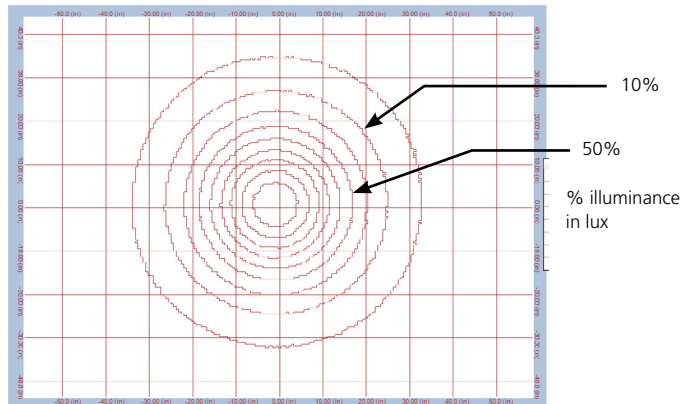
Throw Distance (d)	3.0m	4.6m	6.1m	9.1m
Field Diameter	1.2m	1.8m	2.4m	3.7m
Illuminance (lux)	3,462	1,539	866	385

For field diameter at any distance, multiply distance by .414
 For beam diameter at any distance, multiply by 0.189

Cosine Candela Plot



Iso-Illuminance Diagram (Flat Surface Distribution)

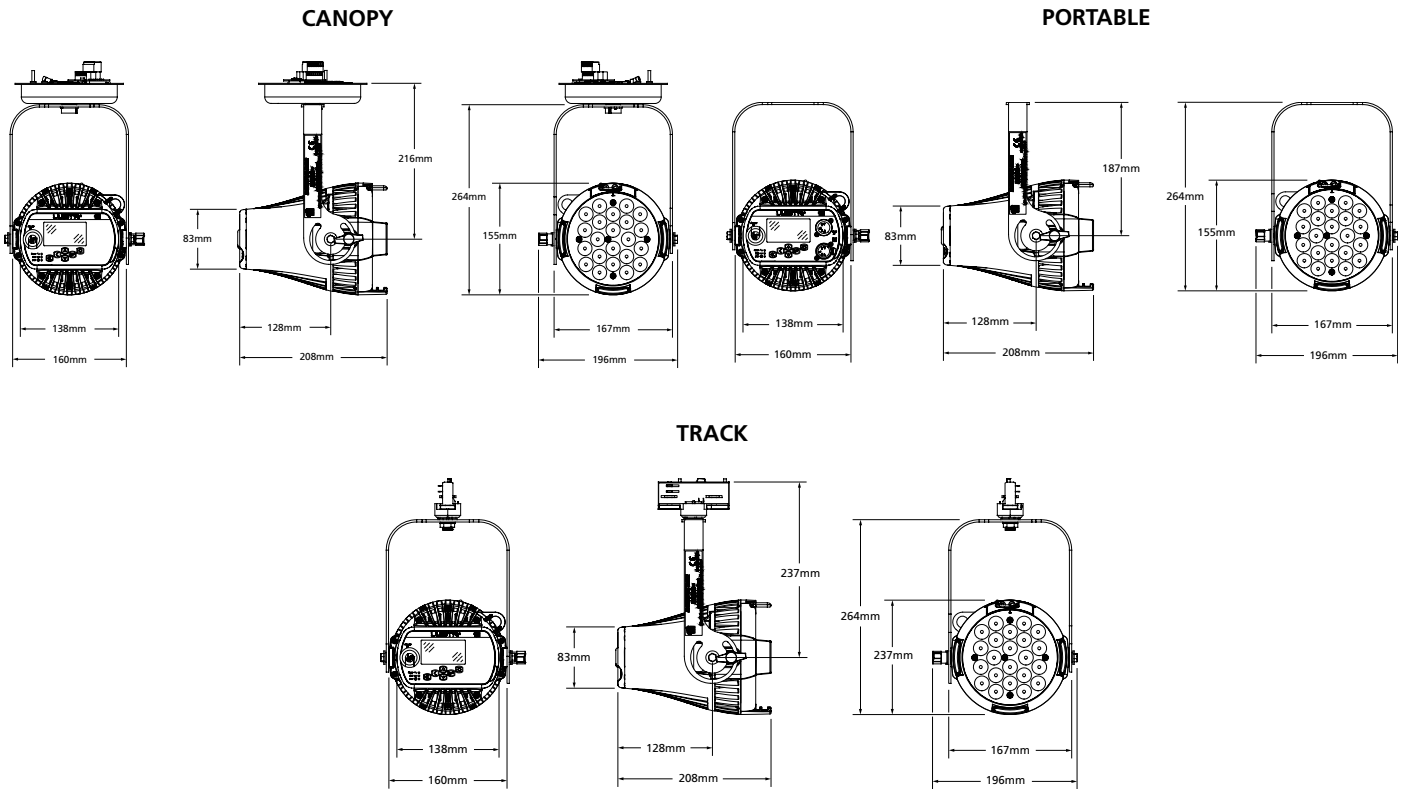


PHYSICAL

Selador D22 Weights and Dimensions

WEIGHT*	SHIPPING WEIGHT
kg	kg
3.1	3.9

* Does not include mounting hardware



AVAILABLE FROM



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