












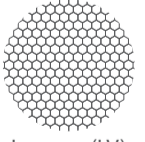
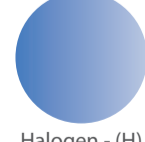


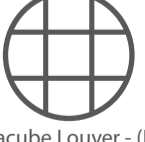


# System of Illumination

Clarte' Lighting provides a system that offers the lighting designer nearly unlimited fixture element combinations that result in specific fixture visual aesthetics and optical performance to meet the designer's criteria for each specific application and project.

The Clarte' System is based around high center beam candle power created from proprietary TIR optics using various light engine choices, with multiple optics options, while offering up to 3 to 4 field adjustable beam shaping accessories per fixture.

(a)  5 Optical Size Fixture Families	<p>PAR8 SCALE</p>  <p>1100 delivered lumens</p>	<p>PAR16 SCALE</p>  <p>1300 delivered lumens</p>	<p>PAR20 SCALE</p>  <p>2500 delivered lumens</p>	<p>PAR30 SCALE</p>  <p>4500 delivered lumens</p>	<p>PAR38 SCALE</p>  <p>5800 delivered lumens</p>		
(b)  5 Fixture Families	 <p>Recessed</p>	 <p>Recessed Slot Multiple</p>		 <p>Surface</p>	 <p>Track</p>	 <p>Retrofit</p>	
(c)  15 Chromaticity Choices  <small>(Select Any 1 of 15 Different LED Hues for 100% Of All Clarté Lighting Fixtures– 3 McAdam Ellipse)</small>	<p>2200 Kelvin (candlelight)</p>	<p>2700 Kelvin 84 or 94 CRI LED (incandescent color)</p>	<p>3000 Kelvin 84 or 94 CRI LED (halogen color)</p>	<p>3500 Kelvin 84 or 94 CRI LED (neutral white)</p>	<p>4000 Kelvin 84 CRI LED (cool white)</p>		
	<p>5000 Kelvin 84 CRI LED (day white)</p>	<p>6500 Kelvin 84 CRI LED (12 Noon Sunlight)</p>	<p>UV365 Themed Effect (365 nm UVA light)</p>		<p>UV390 Architectural Accent (390 nm UVA light)</p>		
	<p>Blue (465 - 485 nm) Back Stage Running Lights</p>	<p>Green (520 - 535 nm)</p>	<p>Amber (585 - 595 nm)</p>	<p>Red (620 - 630 nm)</p>	<p>RGBW - 3K and 4K White (Red, Green, Blue, White)</p>		
(d)  4 TM-30-18 Color Metric Options	<p>3K 80+ CRI</p> <ul style="list-style-type: none"> <li>Fidelity (<math>R_f</math>) = 84</li> <li>Gamut (<math>R_g</math>) = 102</li> <li>1st Bin Local Color Fidelity - RED (<math>R_{f,h1}</math>) = 84</li> <li>Black Body (<math>R_{cs,h1}</math>) = .0048%</li> <li>3,000 Kelvin</li> <li>CRI(<math>R_a</math>) = 86</li> </ul>		<p>3K 90+ CRI</p> <ul style="list-style-type: none"> <li>Fidelity (<math>R_f</math>) = 93</li> <li>Gamut (<math>R_g</math>) = 101</li> <li>1st Bin Local Color Fidelity - RED (<math>R_{f,h1}</math>) = 94</li> <li>Black Body (<math>R_{cs,h1}</math>) = .0016%</li> <li>3,000 Kelvin</li> <li>CRI(<math>R_a</math>) = 95</li> </ul>		<p>3K 90+ CRI H (Halogen)</p> <ul style="list-style-type: none"> <li>Fidelity (<math>R_f</math>) = 94</li> <li>Gamut (<math>R_g</math>) = 101</li> <li>1st Bin Local Color Fidelity - RED (<math>R_{f,h1}</math>) = 95</li> <li>Black Body (<math>R_{cs,h1}</math>) = .0014%</li> <li>2,900 Kelvin</li> <li>CRI(<math>R_a</math>) = 96</li> </ul>	<p>3K 90+ CRI DH (Dimmed Halogen)</p> <ul style="list-style-type: none"> <li>Fidelity (<math>R_f</math>) = 93</li> <li>Gamut (<math>R_g</math>) = 98</li> <li>1st Bin Local Color Fidelity - RED (<math>R_{f,h1}</math>) = 92</li> <li>Black Body (<math>R_{cs,h1}</math>) = .0008%</li> <li>2,600 Kelvin</li> <li>CRI(<math>R_a</math>) = 95</li> </ul>	
(e)  7 Dimming Options	<p>D = .01% 2-wire forward phase MLV glow to ON fade to OFF (voltage reduction dumb dimming in existence since the 1970's)</p>		<p>DALI2 V8 = 0.1% bidirectional dimming</p>	<p>0-10V = 4-wire 1% dimming</p>	<p>ED = 2-wire reverse phase 2 wire dimming</p>	<p>Lutron = 2-wire 1% dimming</p>	<p>RDM DMX 16-bit dimming = .001 65,536 step glows to ON fade to OFF dimming</p>
	<p>Absolute Light – DIN Rail remote class 2 dimming system to .001% – Recessed, surface or recessed slot multiples – PAR8, PAR16, or PAR20 scale optic – Approved &amp; Operates with 12 dimming controls manufacturers</p>						<ul style="list-style-type: none"> <li>Warm dim from 3K down to 2K</li> <li>Tunable white 1700K to 7000K</li> <li>Sunrise or sunset big island of Hawaii</li> <li>16.7 million colors</li> </ul>
(f)  6 AC Voltage Options	<p>12V (Remote Power Supply)</p>	<p>100V (Japan)</p>	<p>120V (North America)</p>	<p>230V (Europe/Asia)</p>	<p>277V (North America)</p>	<p>347V (Canada)</p>	
(g)  3 DC Voltage Options	<ul style="list-style-type: none"> <li>12V DC – MRI Rooms Remote Driver</li> <li>12V DC – Solar w/ No Invertor</li> </ul>			<p>24V ETC F Drive 24V Solar (Offered 100% fixture offering 2-wire forward phase glow to on fade to off)</p>		<p>48V Absolute Light Din Rail remote 48V power supply</p>	
(h)  4 Interchangeable Beam Options	<p>Narrow Spot 12 degree</p>		<p>Spot 17 degree</p>		<p>Narrow Flood 23 degrees</p>		<p>Flood 40 degrees</p>
(i)  8 Beam Shaping Optical Accessories  <small>(Up to 4 Accessories Per Fixture)</small>	 <p>Lens Softener - (LS) 20% Increase Beam Width</p>		 <p>Linear Spread Lens - (LSL) 20 x 60 Rectangular Beam Shaping</p>		 <p>Wide Flood Lens - (WFL) +50% increase beam width</p>		 <p>Louver - (LV) Honeycomb Louver</p>
	 <p>Halogen - (H) 100K Warmer, 2700K to 2600K</p>		 <p>Dimmed Halogen - (DH) 400K Warmer, 2700K to 2300K</p>		 <p>Cross Hair Louver - (CHL) 1/2" Deep</p>		 <p>Paracube Louver - (PL) 5/8" Deep Cell Louver</p>
(j)  3 Mechanical Adaptations Available for Each Fixture	<p>Retrofit</p>		<p>Remodel</p>		<p>New Construction</p>		
(k)  6,500+ Color Finish Choices	<ul style="list-style-type: none"> <li>Select any color finish for 100% of Clarté Lighting fixtures.</li> </ul>						