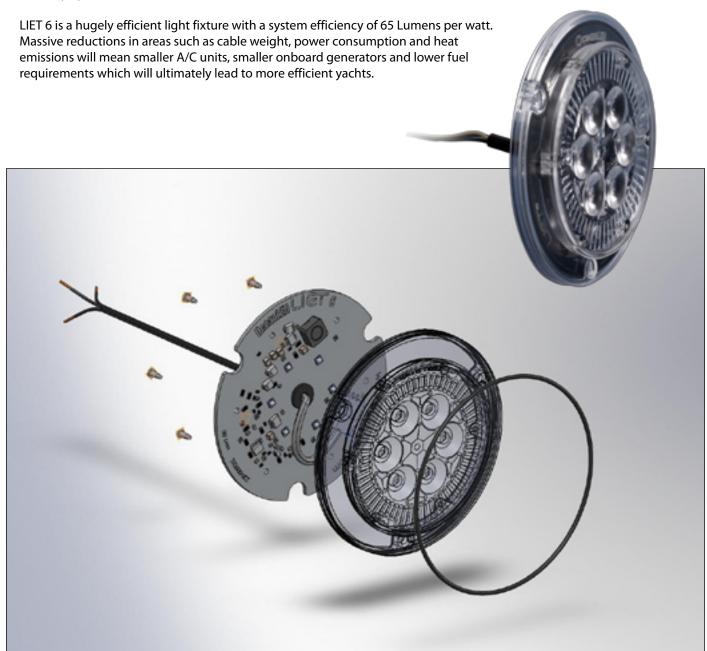


Retail Specifications Data Sheet Oct. 2009 Ver. R1.0



LIET is the world's most advanced, intelligent, high output LED light. The polymer body is a stunning, wafer thin 9mm (3/8"); yet incorporates all the electronic driver circuitry comprising of a full on-board 0-10v dimming system compatible with all known control systems and a complete self-diagnostic fault indication system surrounded by precision optics over each LED. In the LIET6, the high power LEDs consume a miniscule 5.3w in total, yet deliver a massive 345 Lumens in the first stage output prior to secondary stage collimated magnification via T.I.R. (Total Internal Reflection), boosting peak intensity by over 500%.



LIET6 Engine Assembly Shown Above.



LIET Engine

Description	6 LED collimated LIET Engine
Material	UV Stablised Optically Clear Injection Moulded Polycarbonate
Diameter of Body	106 mm - 4 11/64 (4.17) inches
Depth of LIET engine	9.85 mm - 25/64 (0.39) inches
Depth of LIET body	13.25 mm - 17/32 (0.53) inches
Weight	88 grams - 3 7/8 (3.87) ounces
Fire Rating	V0
Ingress Protection	IP66
Impact Resistant	10 joules
Maximum existing hole cut out diameter	84 mm - 3 5/16 (3.31) inches
Cable Grommit Diameter	8 mm - 5/16 (0.31) inches
Cable Length	110 mm - 4 1/3 (4.3) inches
Cable Colors	Black - Negative
	Red - Positive
	Yellow - 0 -10v Dimming
Cable Conductor Gauge	20 AWG - 0.5mm ²

Technical Data

Light output equivalent to	GU 10 50w Halogen
Input Voltage	12-24 VDC
Minmum operating voltage	10
Maximum operating voltage	35
Current / Amp Draw	12VDC 450mA, 24VDC 240mA
Typical Life Expectancy	50,000 hours to L70 (30% drop in light)
Filter Lens material	Polymer
Filter Lens Finish	Diffused
Wattage	5.3w
Number of LEDs	6
Touch Temperature of lens in 25° C / 77 °F ambient	45 Centigrade - 113 Fahrenheit
Wire Gauge	20 AWG - 0.5mm ²
Ingress Protection	IP66
Electrical Protections	Over Voltage Protection
	Under Voltage Protection
	Reverse Polarity
	Transient - Spike Protection
	Internal Fuse



Features

Long Life Components. Only components that have at least the same life expectancy as the LEDs are used by OceanLED, this is a critical area that is generally overlooked by most manufacturers.

Low Touch Temperature. All surfaces of LIET are safe to touch even after being on for extended periods of time, and have no risk of fire or burning.

Intelligent Lighting System. Each LIET fixture contains self-diagnostic indicators to ensure swift system fault diagnosis, such as over/under voltage and over temperature, as well as protection measures to ensure no damage is sustained by the light. A flashing yellow LED indicates power under/over voltage. A blinking red LED indicates over temperature. There will be a progressive thermal shut down of LIET before it switches off.

High Frequency Dimmers. This ensures that flicker free dimming is achieved over the entire output range, providing an enhanced illumination when compared to low frequency dimming techniques. Low frequency dimming can also be the cause of eye fatigue and headaches following exposure to flickering for extended periods of time.

No Noise Output. This ensures that any unpleasant background humming or whistling, that can be frequently heard with conventional lighting, is eliminated.

No Toxic Substances. All the materials used in LIET are RoHS compliant – they do not contain any hazardous materials, such as mercury, lead, or cadmium, and so there will be no leaching of harmful substances into the environment at the end of the product's life.

Environmentally Friendly. The use of LIET will dramatically aid efforts to reduce carbon footprints. Liet has low energy usage, low heat emissions and is a hugely efficient lighting fixture.







<u>Surface Mount</u>		
Mounting method	Screw Fixing	
Trim Ring Material	Injection Moulded Polymer	
	Stainless Steel, Plated Brass, Custom	
Diameter of Bezel	110mm - 4 21/64 (4.32) inches	
Depth of Bezel	16.7mm - 2/3 (0.65) inches	
Minimum cutout hole	10mm - 3/8 (0.375) inches	
Maximum cutout hole	84mm - 3 5/16 (3.31) inches	
Finish Options	Satin Chrome Chrome	
	Gold White Custom	
Custom shape -	enquire for details	
Weight of Polymer bezel	17 grams - 0.59 ounces	
Weight of other styles	available upon request	
Antiglare Honeycomb Baffle	available upon request	
Mounting accessories included		

Product Ordering Codes		
Chrome	003-000098	
Satin Chrome	003-000099	
Gold (24K gold plated)	003-000100	
White	003-000101	

Driver and Dimmer Functions

Driver & Dimmer modules	Built into light fixture
Connection Type	3 core flying lead (specific connectors required upon request)
Crestron compatible	yes
Lutron compatible	yes
Dimming method	PWM - Upon Special Request
	0 - 10 V
	10 - 0 V - Upon Special Request
	Pot
Zero Colour shift during dimming	yes
Analogue dimming capability	yes
Dimming effect on LED lifecycle	Tested on 500,000 cycles with no deterioration
Dimming Range	1 - 100%
High frequency dimmers used (flicker free dimming operation)	yes
Noise output during dimming cycle	no

Additional Safety Features

Ignition Protected	yes
Intelligent lighting system	Inbuilt visual safety communication system.
	Flashing Yellow LED indicates power under/over voltage
	Blinking Red LED indicates over temperature. Progressive thermal shut down of LIET before switching off.
	Shatter proof lens and body system - designed to ensure maximum safety and light output during emergency situations.

Classifications/Approvals

CE	yes
RoHS	yes
Energy Star	under application
selv	under application
EMC	EN60945 compliant
☑ Tick Mark	under application
Ignition Protected	under application
UL	under application
₩EEE	yes

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The models depicted in this catalog are the latest models. Technical specifications and design are subject to change.

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