

THORN

Oracle

High performance street and road lighting in a timeless design





More than a vision

Few aluminium lanterns can combine such a high degree of advanced performance and modern styling as the Oracle. Its precision optics deliver better lighting to the designer, the road user and local residents. Whether it's a major traffic route or minor street, Oracle offers minimised installation and maintenance costs and maximised energy savings.

- Versatile in performance, timeless in design and impressively flexible in the variety of optical combinations available, Oracle has the added advantage of being able to incorporate future innovations in light sources and associated controls
- In two sizes, with a power range from 42 to 600 watts, the lantern can be either post-top or side entry mounted, in a wide range of applications
- A choice of three optics; Access, Wide and Comfort for improved visibility and reduced obtrusive light
- Wide and Comfort optic versions feature the Optibloc® system for extended maintenance cycles
- Choice of 25 lamp options and first class, energy efficient gear components
- The die-cast aluminium body and high quality materials ensure durability and recyclability
- Fully complies with the WEEE and RoHS requirements
- Oracle's design is simple and efficient and includes a number of subtle features which make it vandal resistant, vibration resistant and suitable for use in harsh environments



Purity, simplicity and long life

Road and street lighting demands more than just the functional supply of light to enhance vision. There is also the need to incorporate lighting into the design of the urban setting.

The designers of Oracle made no compromise between function and aesthetics in the quest for better lighting.

The curved shape of the Oracle luminaire offers distinctively pure and timeless design, which integrates easily in a variety of environments.

- This simple design will not date, increasing the lifetime of your luminaires
- A choice of glass or polycarbonate enclosures with flat or shallow profiles offers versatility in lighting performance
- Various mounting options for post-top or side entry allows a choice of appearance and installation
- Luminaire finished in hardwearing powder coating in aluminium grey (RAL 9006) to complement existing installations. Other finishes available to order

A range of dedicated column packages have been designed to compliment the pure and simple design of the lantern.
(See page 11 for more details)



What are the benefits of aluminium?

Aluminium is a supreme material for the construction of luminaires, as it will last significantly longer and has greater U.V. resistance than most construction materials, increasing luminaire life and reducing the amount of maintenance needed.

It is resistant to harsh outdoor conditions including wind, water and pollution and it also offers good vandal resistant qualities in a well designed fitting. Aluminium is easy to dismantle and recycle.

Applications

The flexibility of the Oracle range ensures its suitability in a wide variety of street and road lighting applications because versatility is key to better lighting

- Wattages ranging from 42-600W to address road applications from residential to motorways, through inner city links, car parks and country roads
- All of the latest lamp innovations for road lighting are available in the Oracle range to provide improved ambience and visibility
- Two sizes available to help achieve visual consistency at different mounting heights from 5m to 16m
- Shallow enclosures, offering medium cut-off or flat glass, providing sharp cut-off, give the right light performance for particular project requirements
- Glass enclosures provide extra translucency whilst polycarbonate is more durable for use in residential areas
- Shallow enclosures in both materials have exactly the same profile to allow visual consistency when mixed in a single project
- Road lighting packages can include lighting management and dimming for energy saving during low traffic periods



At Thorn we are committed to enhancing quality of life and conserving our natural environment, which, at the same time, has the effect of reducing energy costs

Energy savings and the environment

In a world where energy resources are becoming a major issue and capital costs need to be low, Oracle offers the perfect solution.

Energy savings

- Engineered optical engine: with its flexible optics Oracle can be adapted to the special demands of any project
- Reduced lighting points: DLOR and spacing have been optimised for savings in initial expenditure and future maintenance costs
- Photocell options: with a Nema socket or a complete minicell offered as standard, Oracle provides a simple autonomous and cost efficient way of controlling the light installation
- First class gear components: selected for their longevity and low energy loss, no compromise has been made on conventional and electronic devices
- Electronic benefits: electronic ballasts are widely known for their ability to burn less energy and to offer longer lamp life including the opportunity to save on maintenance costs. Oracle offers a wide choice of reliable solutions for HID and fluorescent lamps
- Dimming features: are available for both standard wire wound and electronic gears without the need for an extra control line. Not only can you achieve direct savings but Oracle's dimming function provides a minimum light for safety without altering the colour of light while preserving the uniformity, which is essential for perfect visibility
- New light sources: Oracle is ready to incorporate tomorrow's innovations in light sources, for example the introduction of the new CosmoPolis lamp and reduced cost of energy consumption

Sustainability

Oracle has been designed to comply with the WEEE and RoHS requirements. When the luminaire is decommissioned at the end of its life the majority of its components are recyclable. Consequently the aluminium, glass and plastic parts can be entirely re-used.



Gear tray and fluorescent electronic ballast



Wide optic with HID electronic ballast



Gear tray and HID electronic ballast



Gear tray with magnetic ballast



Photocell version



Minicell version

What are RoHS and WEEE?

RoHS (Restriction of Hazardous Substances)

Is the European Union's directive on the restriction of the use of certain hazardous substances such as Lead or Mercury in electrical and electronic equipment.

WEEE (Waste Electrical and Electronic Equipment)

Is a directive requiring the collection and treatment of electronic and electrical equipment (EEE) at the end of the products life. With the objective to preserve, protect and improve the quality of the environment, protect human health and utilise natural resources prudently and rationally. It is expected that WEEE will come into force by the end of 2006 in the UK.

While closely related, RoHS and WEEE deal with different parts of the product life cycle. RoHS seeks to reduce the amount of hazardous materials entering electronic products while WEEE deals with reducing the amount of electronics entering landfills. RoHS is the beginning, and WEEE is the end.

Materials and standards

Oracle's body exploits the benefits of quality materials for sustainability and a contribution to a healthy and comfortable environment



IP66

Oracle is a future proof lantern that offers IP66 protection against ingress of water or dust.

This is achieved by a strong oversized neoprene gasket that ensures ingress protection between body, canopy and a breathing system that allows cooling and air circulation. The Comfort and Wide optic versions also benefit from a double IP66 rating, through the enclosed optic.

IK08 or IK10

It is a common misunderstanding that the shock resistance rating is given by the enclosure.

While the materials used for the visor is considered it is the total fitting that has to be assessed. Often the weakest part of the fitting is not the enclosure but the hinges, clips or the gasket area.

Within Thorn all shock resistance tests are carried out before the IP tests to ensure that the product design first satisfies IK.

Wind Resistance

Oracle's lines have been designed to offer as little resistance to wind as possible so that columns do not have to be oversized.

Oracle size 1:
0.058m² with shallow enclosure
0.067m² with flat enclosure

Oracle size 2:
0.073m² with shallow enclosure
0.083m² with flat enclosure

EN, CE, ENEC

Our product design and technology exceed the standards.

What are ENEC, CE and EN-605998-2-3?

ENEC:

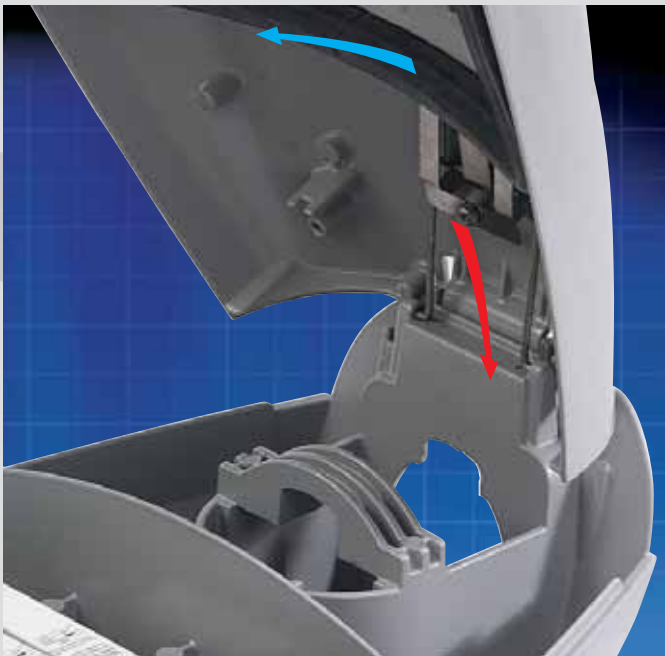
European Norms Electrical Certification. The ENEC certificate gives the certainty that products offer 'European-level' safety, which has been officially verified by an independent testing and certification body.

CE is a marking that:

- Indicates a product's conformity with the 'essential requirements' of the directives
- Allows products to be 'placed on the market'
- Ensures the free movement of goods
- Allows the 'withdrawal' of non-conforming goods by Customs

EN-605998-2-3:

This is the harmonised European standard for light fitting design and especially the electrical safety.



1.



3.



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6.

1. Breather Filter, located behind the canopy hinge, ensures circulation of air inside the gear compartment for cooling of the components and extra longevity while preserving IP66.

2. The gear is pre-drilled to be fixed to the body by two screws (not supplied) for areas with high vibrations like tramway lines or bridges.

3. Oracle's lines have been designed to offer as much wind resistance as possible so columns do not have to be oversized.

4. Two screws and bolts are used to secure the fitting through the integrated rotating spigot to the bracket or the column offering extra vandal resistance and ease of maintenance.

5. Shaped Nema socket gasket in silicon follows the contours of the canopy to create an IP66 seal.

6. IP66 optic and gear construction for full protection against water and dust.



2.

Ergonomic Design

The Oracle designers have taken time and consideration to ensure that the outside of the product reflects what's inside to provide a consistent intuitive design

External

Within simple lines, Oracle offers intuitive access and an understandable layout. The fixing spigot is instantly visible and there is one single entry point to get inside the luminaire.

Internal

Smaller lanterns do not necessarily make for a friendly internal design, this can often be complex with little room for manoeuvre. Oracle optimises its internal space by clever layout and clear understandable positioning.

- You can gain access from above and each side for a safe working position
- Divided into three separate compartments to offer space, easy access and to allow for future evolution
- Plug and socket systems have been utilised throughout
- Leads are fixed
- Cabling is colour coded
- All areas which have to be handled have been designed for ease of use

All these features combine to make simple, safe and user friendly lighting.



Dedicated brackets

Simply designed brackets and columns to complement the urban setting



A range of exclusive column and bracket packages has been created to enhance the simple and pure shape of the lantern and provide a stylish appearance from ground to sky.

- Constructed from robust materials to the very latest standards
- Single or twin arm brackets available for post-top use as well as intermediate or wall mounted to match any design scheme
- Brackets finished in aluminium grey (RAL 9006). Other finishes available to order to provide a match with urban furniture by day

Performance

A choice of three efficient optics (Comfort, Wide, Access) contributes to Oracle's intelligent design

Optical systems are employed in Oracle to provide the fine control that is needed to meet the environmental demands. Three optical systems deliver uniform lighting precisely where it is needed according to the lamp choice and application.

Access or Optibloc®?

The Access optic has an IP66 rating and allows maintenance to be quick and easy with extra fast lamp changing. The Optibloc® system has a double IP66 protection to the optical engine, which allows for extension of the maintenance cycles. This is recommended for applications with extreme water or dust levels.

Self-cleaning treatment available on request for the flat or shallow glass enclosures, providing;

- Dirt retardant reduces diffuser cleaning cycles
- Maintenance factor increases from 0.80 to 0.89
- Up to 10% savings on lamp flux

Wide choice of lamp settings ensures the lamp is positioned precisely to match project requirements and deliver better performance.



Comfort Optic:

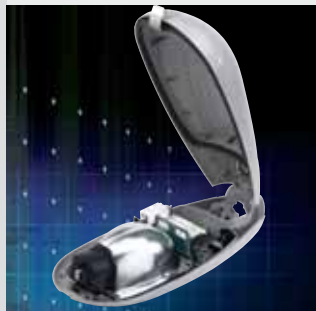
This is a new innovative optical development that has been designed around the EN13201 standards. It maximises comfort by meeting all TI constraints while optimising all other criteria. Also, this brand new generation of reflector operates in a much better way than all other optics, working with all metal halide and the new generation of lamps such as CosmoPolis. The white light trend is then better addressed. This optic is particularly suitable for new projects where reduced amount of energy and better visual comfort are sought. The optic is sealed to IP66 and combining this with the body, provides a Double IP66 unit.



Wide Optic:

This version is the new generation of Optibloc®. Both the Optibloc® and the body are IP66, thus making it a double IP66 unit. While offering first class photometric performances it enables maximum spacing when TI is not the first constraint.

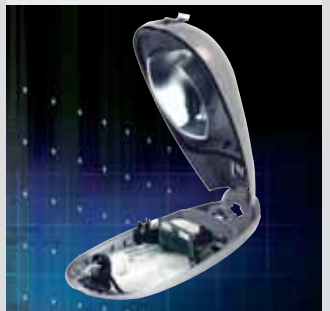
It is particularly suitable for refurbishment projects where the scheme is already set.



Access Optic:

This version is for projects where the Optibloc® system and its double IP66 protection is not required, and the IP66 protection from the luminaire is sufficient. It offers direct access to the lamp and lampholder when the canopy is opened. The unique combination of the high performance reflector, multi-lamp settings lampholder and choice of enclosure make it a first class photometric performer for road and street applications.

The increased space around the lamp means this optic is ideally suited to high wattage applications, such as the 600w version.



What is Glare and the TI ratio?

Glare is the discomfort or impairment of vision experienced when parts of the visual field are excessively bright in relation to the general surroundings. Glare can be direct from the luminaires, sunlight or indirect, reflected from specular surfaces.

Discomfort Glare - glare which causes visual discomfort, usually resulting in fatigue and/or headaches = G

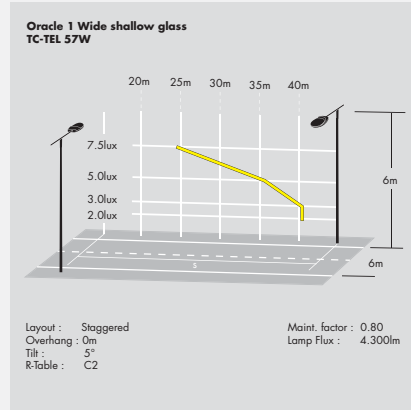
Disability Glare - glare which impairs the ability to see detail as you would normally see them and can be described as a veiling haze in the eye. = TI

Lighting Schemes

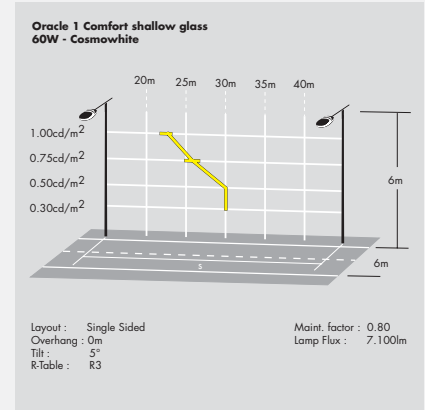
CEN values

	Lave	UO	UI	TI	Max	S1	Eav	Emin
	(cd/m ²)	Min.	Min.	(%)	SR			
Me1	2	0.4	0.7	10	0.5	S1	15	5
Me2	1.5	0.4	0.7	10	0.5	S2	10	3
Me3a	1	0.4	0.7	15	0.5	S3	7.5	1.5
Me3b	1	0.4	0.6	15	0.5	S4	5	1
Me3c	1	0.4	0.5	15	0.5	S5	3	0.6
Me3c	1	0.4	0.6	15	0.5	S6	2	0.6
Me4a	0.75	0.4	0.5	15	0.5			
Me4b	0.75	0.4	0.5	15	0.5			
Me5	0.5	0.35	0.4	15	0.5			
Me6	0.3	0.35	0.4	15				

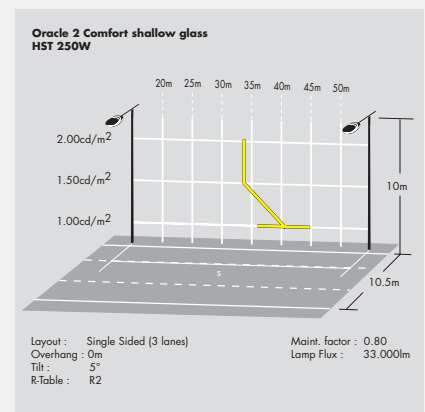
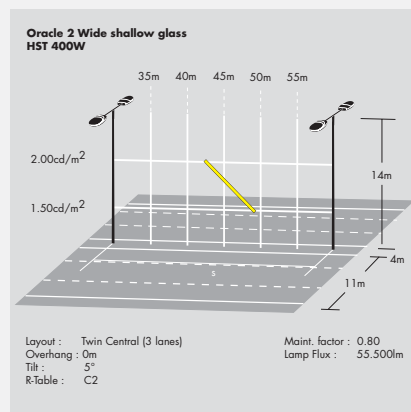
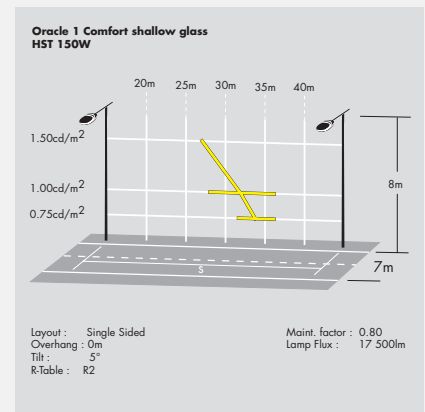
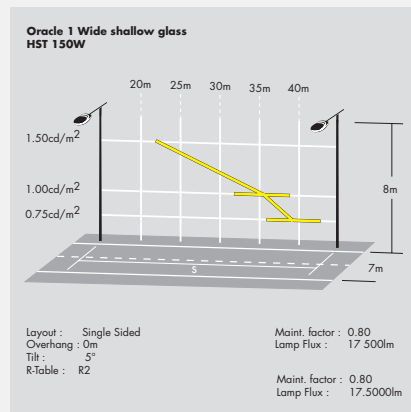
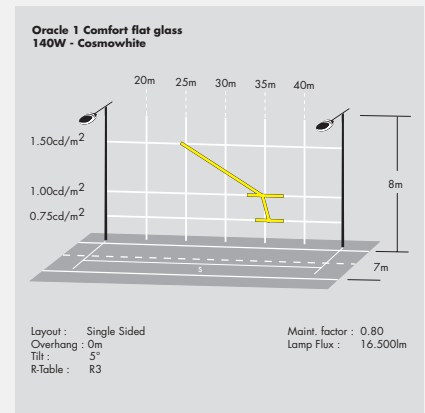
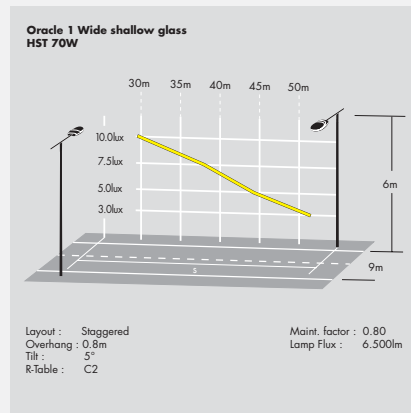
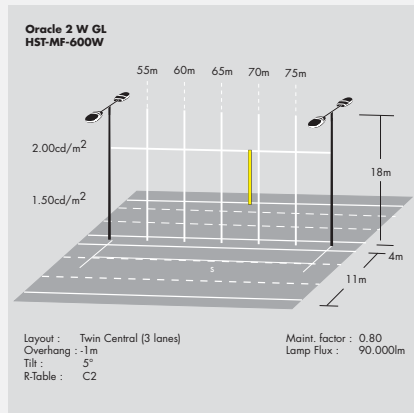
Wide



Comfort



Access



Installation and Maintenance

The installation and maintenance operations are quick and efficient, saving time and increasing the safety of the contractor and the road user

Oracle has been designed with the contractor in mind. Each feature has been considered from the installers point of view for ease of use and safety.

- With minimal use of materials Oracle is lightweight and easy to carry
- The integrated rotating spigot can take a diameter of up to 60mm for side entry mounting and up to 76mm for post-top mounting without the need for additional attachments
- Simply secured with two screws and bolts to ensure the luminaire does not rotate along the column or bracket but keeps its initial position
- A single robust front clip acts as the entry point of the fitting also supplying quick release and security
- Retaining mechanism to keep canopy open even in high winds
- Access from above allows operations to be performed safely
- Luminaire is delivered complete (no lamp) to limit unnecessary handling and confusion in gear selection which then reduces installation time
- Plug and socket connections have been implemented where possible to aid the tool free installation procedure
- Wiring is comprehensive between the three sections
- Easy to achieve horizontal and vertical lamp settings, additionally the factory lamp settings have been optimised for good performances
- The gear is retained by two springs but for extra security you can use two additional screws for applications like bridges and railway stations
- On size two, through wiring can be realised on twin central installation by using a second cable gland thus permitting only one mains cable to be used from ground to luminaire



1.



2.



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4.



5.

1. Strong stainless steel clip with easy and safe releasing and securing

2. Two screws and bolts secure the fitting for its lifetime

3. Integral rotating spigot allows 34 (through included accessory) to 60mm side entry and 60 to 76mm post-top mounting

4 & 5. Side entry or post-top easily achieved by rotating the spigot

- Oracle's self cleaning shape does not let dust settle ensuring that cleaning operations are reduced to a minimum
- Full IP66 protection ensures that components including lamp, reflector and enclosure are protected against dust and moisture for extended life span and reduced need for cleaning
- TC-TELL lamps are attached to the lampholder through a twist and lock mechanism
- Fully earthed for safety of the installer
- Gear is released by two springs – no tool needed
- Gear tray has been designed with a handle for easy removal
- The lamp settings are not changed when the lamp or gear is removed, so that your original settings are maintained after an operation has taken place

With the three Oracle optics, lamp and gear replacement is possible in seconds without the use of tools



Wide and Comfort optics:
The lamp/gear can easily be removed



Access optic:
Once the luminaire is open, the lamp/gear is directly accessible





Oracle 1 and 2



Conventional gear tray



Photocell version

Lamps Oracle 1

- ☉ 50-150W HST (ST) high pressure sodium. Cap: E27/40
- ☉ 70-150W HIT-CE (MT) metal halide. Cap: E27/40
- ☉ 80-125 HME (QE) high pressure mercury. Cap: E27
- ☉ 42-57W TC-TEL (FSMH) compact fluorescent. Cap: GX24q-4/5
- ☉ 60-85W TC-TELI (FSMH) compact fluorescent. Cap: 2G8
- ☉ 60-140W HIT-CE (MT) cosmowhite. Cap: PGZ12
- ☉ 65-140W HST (ST) cosmogold. Cap: PGZ12

Lamps Oracle 2

- ☉ 100-600*W HST (ST) high pressure sodium. Cap: E40
 - ☉ 100-150W HIT-CE (MT) metal halide. Cap: E40
 - ☉ 250-400W HIT (MT) metal halide, Cap: E40
 - ☉ 250-400W HME (QE) high pressure mercury. Cap: E40
 - ☉ 70W TC-TEL (FSMH) compact fluorescent. Cap: GX24q-6
 - ☉ 85-120W TC-TELI (FSMH) compact fluorescent. Cap: 2G8
- * Requires remote gear tray

Materials/Finish

Body: die-cast LM24 aluminium, powder coated grey (RAL 9006)
 Spigot: die-cast aluminium powder coated grey (RAL 9006)
 Enclosures: UV stabilised polycarbonate or toughened glass, self-cleaning treatment available on request
 Gasket: neoprene
 Gear plate: galvanised steel
 Reflector: high purity anodised aluminium
 Screws: stainless steel
 Clip: stainless steel

Installation/Mounting

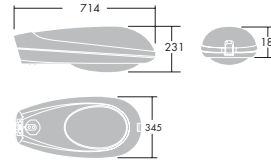
Integral tool free rotating spigot secured by 2 screws with safety bolts
 post-top mounting: Ø60/76mm x 80mm long spigot. Tilted to 5°
 Lateral mounting: Ø34/42/49/60mm x 120mm long spigot. Tilted to 0°
 Cable gland for Ø8 to 13mm cable
 Access from above to gear and optic system after quick release of the stainless steel front clip. Delivered ready to install, complete with factory fitted integral gear tray, all supplied in a single carton (without lamp).

Standards

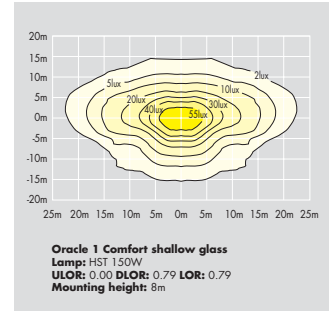
Designed and manufactured to comply with EN 60598-2-3
 ⚡ Class I electrical
 Ta -20/+35
 Maximum windage:
 Size 1: <0.067m²
 Size 2: <0.083m²
 IK08 (glass)
 IK10 (polycarbonate)
 ⚡ IP66
 ⚡ CE

Specification:

To specify state:
 Full IP66 aluminium road and street lighting fitting with silicon shaped gasket for photocell.
 For 42 to 600W lamps.
 From 34mm side entry to 76mm post-top mounting aided by integral rotating spigot.
 Tool free access to and removal of lamp and gear tray with handle.
 With options for photocells, electronic gears, dimming and lighting management system.
 As Thorn Oracle 1 and 2.

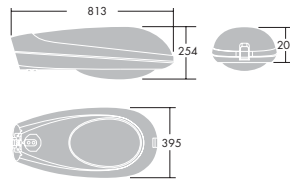


Windage: 0.058m² (shallow enclosure) 0.067m² (flat glass)

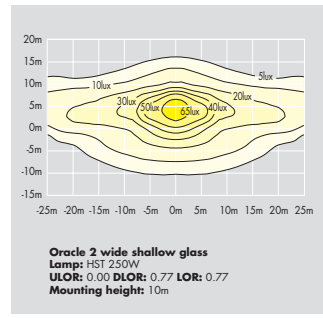


Oracle size 1 Ordering Guide Lamps are to be supplied separately

Optic	Gear type	Description	Icos Code	Socket	Plain			Minicell			Nema socket		
					Flat Glass	Shallow Glass	Shallow PC	Flat Glass	Shallow Glass	Shallow PC	Flat Glass	Shallow Glass	Shallow PC
Wide	Conventional	ORACLE 50W HST	ST	E27	96249628	96249630	96220481	96249672	96249673	96249674	96249629	96249631	96220491
		ORACLE 70W HID	ST/MT (CE)	E27	96220483	96220484	96220482	96249854	96249855	96249856	96220493	96220494	96220492
		ORACLE 100W HID	ST/MT (CE)	E40	96220486	96220487	96220485	96250024	96250025	96250026	96220496	96220497	96220495
		ORACLE 150W HID	ST/MT (CE)	E40	96220489	96220490	96220488	96250184	96250185	96250186	96220499	96220500	96220498
		ORACLE 80W HME	QE	E27	96249886	96249888	96249890	96249924	96249925	96249926	96249887	96249889	96249891
		ORACLE 125W HME	QE	E27	96250055	96250057	96250059	96250092	96250093	96250094	96250056	96250058	96250060
Comfort	Conventional	ORACLE 50W HST	ST	E27	96249621	96249623	96220511	96249669	96249670	96249671	96249622	96249624	96220521
		ORACLE 70W HID	ST/MT (CE)	E27	96220513	96220514	96220512	96249851	96249852	96249853	96220523	96220524	96220522
		ORACLE 100W HID	ST/MT (CE)	E40	96220516	96220517	96220515	96250021	96250022	96250023	96220526	96220527	96220525
		ORACLE 150W HID	ST/MT (CE)	E40	96220519	96220520	96220518	96250181	96250182	96250183	96220529	96220530	96220528
		ORACLE 80W HME	QE	E27	96249877	96249879	96249881	96249921	96249922	96249923	96249878	96249880	96249882
		ORACLE 125W HME	QE	E27	96250046	96250048	96250050	96250089	96250090	96250091	96250047	96250049	96250051
Wide	Electronic	ORACLE 50W HST DGE	ST	E27	96249654	96249656	96249658	96249682	96249683	96249684	96249655	96249657	96249659
		ORACLE 70W HST DGE	ST	E27	96249816	96249818	96249820	96249864	96249865	96249866	96249817	96249819	96249821
		ORACLE 100W HST DGE	ST	E40	96249986	96249988	96249990	96250034	96250035	96250036	96249987	96249989	96249991
		ORACLE 150W HST DGE	ST	E40	96250146	96250148	96250150	96250194	96250195	96250196	96250147	96250149	96250151
		ORACLE 70W HIT DGE	MT	E27	96231912	96231915	96231918	96231913	96231916	96231919	96231914	96231917	96231920
		ORACLE 100W HIT DGE	MT	E40	96231950	96231953	96231956	96231951	96231954	96231957	96231952	96231955	96231958
		ORACLE 150W HIT DGE	MT	E40	96231987	96231990	96231993	96231988	96231991	96231994	96231989	96231992	96231995
		ORACLE 42W TC-TEL	FSMH	Gx24q-4	96249592	96249594	96249596	96249610	96249611	96249612	96249593	96249595	96249597
		ORACLE 57W TC-TEL	FSMH	Gx24q-5	96249704	96249706	96249708	96249722	96249723	96249724	96249705	96249707	96249709
		ORACLE 60W TC-TELI	FSMH	2G8	96249744	96249746	96249748	96249774	96249775	96249776	96249745	96249747	96249749
		ORACLE 85W TC-TELI	FSMH	2G8	96249946	96249948	96249950	96249964	96249965	96249966	96249947	96249949	96249951
		Comfort	Electronic	ORACLE 50W HST DGE	ST	E27	96249645	96249647	96249649	96249679	96249680	96249681	96249646
ORACLE 70W HST DGE	ST			E27	96249807	96249809	96249811	96249861	96249862	96249863	96249808	96249810	96249812
ORACLE 100W HST DGE	ST			E40	96249977	96249979	96249981	96250031	96250032	96250033	96249978	96249980	96249982
ORACLE 150W HST DGE	ST			E40	96250137	96250139	96250141	96250191	96250192	96250193	96250138	96250140	96250142
ORACLE 70W HIT DGE	MT			E27	96231900	96231901	96231904	96231910	96231902	96231905	96231911	96231903	96231906
ORACLE 100W HIT DGE	MT			E40	96231938	96231941	96231944	96231939	96231942	96231945	96231940	96231943	96231946
ORACLE 150W HIT DGE	MT			E40	96231975	96231977	96231980	96231983	96231978	96231981	96231976	96231979	96231982
ORACLE 65W CPO-TG	ST			PGZ12	96249782	96249784	96249786	96249794	96249795	96249796	96249783	96249785	96249787
ORACLE 140W CPO-TG	ST			PGZ12	96250108	96250110	96250112	96250124	96250125	96250126	96250109	96250111	96250113
ORACLE 60W CPO-TW	MT			PGZ12	96249756	96249758	96249760	96249778	96249779	96249780	96249757	96249759	96249761
ORACLE 140W CPO-TW	MT			PGZ12	96250096	96250098	96250100	96250120	96250121	96250122	96250097	96250099	96250101
ORACLE 42W TC-TEL	FSMH			Gx24q-4	96249583	96249585	96249587	96249607	96249608	96249609	96249584	96249586	96249588
ORACLE 57W TC-TEL	FSMH	Gx24q-5	96249695	96249697	96249699	96249719	96249720	96249721	96249696	96249698	96249700		
ORACLE 60W TC-TELI	FSMH	2G8	96249735	96249737	96249739	96249771	96249772	96249773	96249736	96249738	96249740		
ORACLE 85W TC-TELI	FSMH	2G8	96249937	96249939	96249941	96249961	96249962	96249963	96249938	96249940	96249942		



Windage: 0.073m² (shallow enclosure) 0.083m² (flat glass)



Oracle size 2 Ordering Guide Lamps are to be supplied separately

Optic	Gear type	Description	Ilcos Code	Socket	Plain Flat Glass		Minicell Flat Glass		Nema socket Flat Glass	
					Shallow Glass	Shallow Glass	Shallow Glass	Shallow Glass	Shallow Glass	Shallow Glass
Access**	Conventional	ORACLE 600W HST NG*	ST	E40	-	96250633	-	96250636	-	96250634
		php 1x600 SANS AMORCEUR	remote gear for 600w Access version		-	96216252	-	-	-	-
Wide	Conventional	ORACLE 100W HID	ST/MT (CE)	E40	96250266	96250268	96250300	96250301	96250267	96250269
		ORACLE 150W HID	ST/MT (CE)	E40	96220568	96232061	96250377	96250378	96220572	96232062
		ORACLE 250W HID	ST/MT	E40	96220570	96220571	96250461	96250462	96220574	96220575
		ORACLE 400W HID	ST	E40	96250490	96250492	96250573	96250720	96250491	96250493
		ORACLE 250W HME	QE	E40	96250413	96250415	96250468	96250469	96250414	96250416
Comfort	Conventional	ORACLE 100W HID	ST/MT (CE)	E40	96250260	96250262	96250298	96250299	96250261	96250263
		ORACLE 150W HID	ST/MT (CE)	E40	96232058	96220581	96250375	96250376	96232059	96232060
		ORACLE 250W HID	ST/MT	E40	96220582	96220583	96250459	96250460	96220586	96220587
		ORACLE 400W HID	ST	E40	96250484	96250486	96250571	96250572	96250485	96250487
		ORACLE 250W HME	QE	E40	96250407	96250409	96250466	96250467	96250408	96250410

* Please note, remote gear must be ordered separately when ordering the 600w access version of oracle

** Access Optic ideally suited to a 600w with remote gear version, however other wattages, with integral gear are available as standard. Please refer to your local sales engineer for order guide

Wide	Electronic	ORACLE 100W HST DGE	ST	E40	96250287	96250289	96250307	96250308	96250288	96250290		
		ORACLE 150W HST DGE	ST	E40	96250364	96250366	96250384	96250385	96250365	96250367		
		ORACLE 250W HST DGE*	ST	E40	96250448	96250450	96250475	96250476	96250449	96250451		
		ORACLE 400W HST DGE*	ST	E40	96250560	96250562	96250663	96250662	96250561	96250563		
		ORACLE 100W HIT DGE	MT	E40	96232093	96232095	96232105	96232106	96232094	96232096		
		ORACLE 150W HIT DGE	MT	E40	96232137	96232133	96232130	96232131	96232134	96232121		
		ORACLE 250W HIT DGE*	MT	E40	96232153	96232155	96232162	96232163	96232154	96232156		
		ORACLE 400W HIT DGE*	MT	E40	96250578	96250579	96232171	96232170	96250587	96250580		
		ORACLE 70W TC-TEL	FSMH	Gx24q-6	96250210	96250212	96250223	96250224	96250211	96250213		
		ORACLE 85W TC-TELI	FSMH	2G8	96250238	96250240	96250251	96250252	96250239	96250241		
		ORACLE 120W TC-TELI	FSMH	2G8	96250322	96250324	96250335	96250336	96250323	96250325		
		Comfort	Electronic	ORACLE 100W HST DGE	ST	E40	96250281	96250283	96250305	96250306	96250282	96250284
				ORACLE 150W HST DGE	ST	E40	96250358	96250360	96250382	96250383	96250359	96250361
ORACLE 250W HST DGE*	ST			E40	96250442	96250444	96250473	96250474	96250443	96250445		
ORACLE 400W HST DGE*	ST			E40	96250554	96250556	96250661	96232068	96250555	96250557		
ORACLE 100W HIT DGE	MT			E40	96232089	96232090	96232103	96232104	96232082	96232092		
ORACLE 150W HIT DGE	MT			E40	96232116	96232118	96232128	96232129	96232117	96232119		
ORACLE 250W HIT DGE	MT			E40	96232150	96232151	96232160	96232161	96232141	96232142		
ORACLE 400W HIT DGE	MT			E40	96232178	96232181	96232169	96250586	96232179	96232182		
ORACLE 70W TC-TEL	FSMH			Gx24q-6	96250204	96250206	96250221	96250222	96250205	96250207		
ORACLE 85W TC-TELI	FSMH			2G8	96250232	96250234	96250249	96250250	96250233	96250235		
ORACLE 120W TC-TELI	FSMH			2G8	96250316	96250318	96250333	96250334	96250317	96250319		

* Please contact us regarding 250w and 400w electronic gear versions. Other electronic ballast manufacturers are available on request.

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