DW Windsor

Daytona

**All-round performance.
All-round confidence.**

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All-round confidence.

Daytona balances style, efficiency and practicality to deliver a luminaire capable of maximising performance while providing outstanding service life to support the circular economy.

With its replaceable light modules, advanced control options and superior light quality, Daytona allows you to specify a high performing, future-proofed product with complete confidence.

Key advantages

- Future-proofed lighting solution with replaceable light engines to facilitate future upgrades
- Outstanding service life (100,000 hrs L90 B10) to support the circular economy
- Toolless entry for easy luminaire maintenance, saving time and lowering costs
- 2700K, 3000K and 4000K CCT options for high performance, up to 193lm/W
- Tunable White technology improves visual comfort whilst minimising the impact to wildlife
- Supports a range of NEMA and Zhaga connectivity and control options via top and/or bottom sockets
- DarkSky Approved with 0% ULOR plus optional light shields for additional light management

Applications

Roads

Housing developments

Car parks

Footpaths

Cycle routes

DarkSky® Approved

DarkSky is a globally recognised authority on light pollution, offering third-party certification through its DarkSky Approved program for lighting products that don't pollute the night sky.

The DarkSky Approved seal shows that it Daytona has passed certification by the DarkSky technical lighting team and has demonstrated that it does not cause light pollution.

DARKSKY APPROVED
✓
· Reduces light pollution ·

Certified by DarkSky.org

Daytona range

Daytona is an intelligent lighting solution that helps specifiers deliver the right light at the right time. Its modern design and advanced features make it ideal for a range of urban applications, including the illumination of roadways and residential streets, pedestrian and cycle paths, and public spaces. Daytona is offered in two sizes with multiple LED configurations and flexible drive currents to deliver tailored performance.

Daytona 450

Lumen Range	1,050 – 14,300 lm
Power Range	6 – 95 W
LED Quantity	8 / 16 / 24 / 32
Mounting Height	4 - 8 m
Typical Applications	Footpaths / Cycleways / Residential / Car Parks

Daytona 500

Lumen Range	6,250 – 25,700 lm
Power Range	34 – 187W
LED Quantity	48 / 64
Mounting Height	8 - 10 m
Typical Applications	Roads / Pedestrian Crossings / Carriageways

Circular by design

Designed with circularity in mind, Daytona is manufactured using recycled materials and constructed with mechanical fixings to limit its environmental impact.

Adaptable lighting

Daytona 450 is offered with Tunable White LED technology and can be specified with a range of autonomous lighting controls to deliver lighting that adapts to the needs of its surroundings.

Futureproofed design

By offering a wide range of connectivity options, including Zhaga sockets, we've ensured Daytona can perform consistently over it's 100,000 hour lifetime, whatever the future may bring.

Targeted illumination

Available with a wide range of Diamond+ Optics and offered with a choice of light shields, Daytona delivers precise illumination to ensure light is only directed where needed.

Easy to upgrade

Daytona featured toolless entry for quick access and replaceable light engines to ensure the luminaire is easy to upgrade and maintain, helping to extend its service life.

Enhanced urban living

Daytona's modern design, precision optics, and advanced features make it ideally suited to various urban applications, including inner city roads, footpaths and public spaces.

For sensitive locations, to address light pollution concerns, Daytona is DarkSky Approved, preserving the integrity of the night sky. Furthermore, Tunable White technology and warmer colour temperatures are available to minimise the effects on wildlife and biodiversity.

A circular solution

To support the industry's ongoing efforts towards circularity, we have built Daytona to last. Constructed for durability, it features interchangeable light engines that can be upgraded as future innovations come to market.

Toolless entry makes maintenance an easier, more desirable option than replacement, lengthening service life, and reducing waste.

2.7 | **TM66 EXCELLENT CIRCULARITY**

Watch our Daytona video to learn how easy it is to replace light engines.

Daytona has been designed with circularity in mind, using upgradable components and recycled materials

Daytona is highly efficient, delivering increased electrical performance and lower energy consumption

Built to last, Daytona is made from durable materials and features toolless entry for easy maintenance

Daytona has been designed with mechanical fixings for easy disassembly at the end of its service life

Adaptable light

With Daytona, we aim to give designers the tools they need to tackle the ongoing challenges of balancing the safety of pedestrians and road users with light pollution and the impact on biodiversity.

To support this, our Daytona 450 luminaire is offered with Tunable White technology, providing a flexible, dynamic solution for night-time illumination. By adjusting the luminaire's colour temperature and brightness throughout the night, the innovative system can improve visual comfort, offering a sense of security while also minimising the impact on flora and fauna.

How it works

Luminaires include LEDs with two different colour temperatures (e.g. 3000K and 2200K). By adjusting the intensity of the LEDs, a range of colour temperatures can be produced.

DW Windsor can program a range of dimming profiles via Bluetooth depending on your individual project requirements.

Key advantages

- Dynamic system provides a sense of security whilst improving visual comfort
- Two transition options 3000K - 2200K and 4000K - 2700K
- Cooler colour temperatures provide better visibility during peak activity hours
- Warmer colour temperatures and low intensities minimise the impact on wildlife

Example profiles
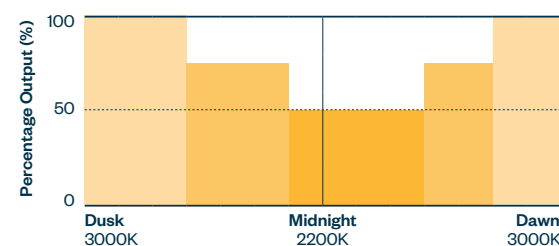
Pre-set lighting profile

Automatically adjusts colour temperature and intensity throughout the night. Ideal for areas with higher footfall, such as town centres and housing developments.
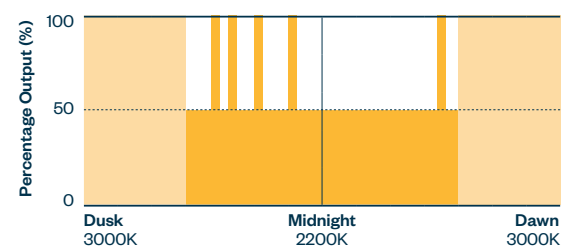
Dynamic lighting profile

Full intensity during peak hours with PIR activation during quieter periods. Ideal for areas with lower footfall, such as cycle and pedestrian paths or remote car parks.

DUSK / DAWN
Cooler colour temperatures provide better visibility during peak activity hours

NIGHT TIME
Warmer colour temperatures and low intensities minimise the impact on wildlife

Design features

Future-proofed Design

Following circular economy principles, Daytona features replaceable light modules that can be upgraded to prolong service life

High Performance

Daytona features high power LEDs capable of delivering up to 25,700lm, with luminaire efficacy of up to 193lm/W

Durable Construction

Manufactured from die-cast LM6 aluminium with a polyester powder coat or marine-grade finish for maximum protection

Control

Compatible with the latest lighting control technologies via optional top and bottom sockets, delivering additional energy savings

Dedicated Optics

Daytona is offered with a wide selection of Diamond+ optics for precise beam control, supporting a range of urban applications

SupportTag

A QR-based system designed to streamline the luminaire maintenance process. Ensures issues are dealt with quickly by our dedicated support team

Light Engines

Daytona is offered in three colour temperatures, (2700K / 3000K / 4000K) and two Tunable White options (4000K - 2700K and 3000K - 2200K)

Toolless Entry

Quick-release latches provide toolless entry, simplifying installation and maintenance

Flexible Mounting

Direct post [Ø60 or 76mm] and side entry [Ø34 - 42mm or 60mm] mounting options

DarkSky Approved

Daytona has a 0% ULOR (Upward Light Output Ratio) to combat light pollution and sky glow

Breather Valves

An anti-condensation valves regulates internal pressure and prevents condensation build up

Smart City Ready

Daytona can accommodate a range of internal and external networking solutions for CMS integration

Considered Design

A slender, sloped profile ensures moisture runs off the luminaire preserving its IP66 protection

Light Shields

Discreet light shields that echo Daytona's circular design can be fitted to prevent light trespass when illuminating sensitive areas

Connectivity

To support a wide range of connectivity and control options, including a selection of sensors and networking nodes, Daytona can be specified with both NEMA and Zhaga sockets mounted in top and bottom locations.

By offering both standards, Daytona is not limited to a single product ecosystem and can adapt to new technologies as they are developed. This provides added flexibility and the opportunity to add functionality, now or in the future.

NEMA socket (top)

An industry standard socket that provides both an electrical and mechanical connection to support numerous networking nodes and photocells. Available in 3, 5, 6 and 7-pin configurations

Zhaga socket (top)

An industry standard smart interface for outdoor lighting. The upper socket can accommodate different control devices that conform to the Zhaga Book 18 standard, such as a Bluetooth node

Zhaga socket (bottom)

An industry standard smart interface for outdoor lighting. The lower socket can accommodate different sensors that conform to the Zhaga Book 18 standard, such as a PIR motion sensor

Control options

Lighting control systems offer many benefits, from increased flexibility to helping lower energy consumption. Daytona can be specified with multiple control options to suit the individual needs of your scheme.

Photocells and part night dimming

For a basic control option, pair Daytona with a miniature photocell for dusk-to-dawn lighting. To trim burning hours, we recommend a 20lux photocell to limit 'on time'. To achieve greater energy savings, without the capital expenditure of a full CMS system, consider dimming your lanterns for part of the night. We can pre-program the driver to any regime for tailored energy savings.

Part Night Dim
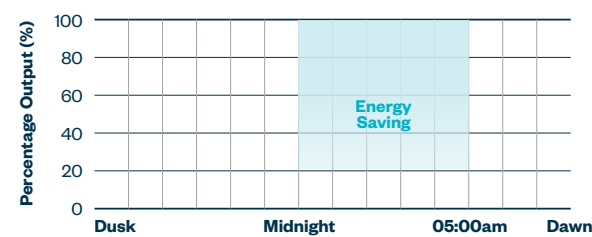
Part Night Switch
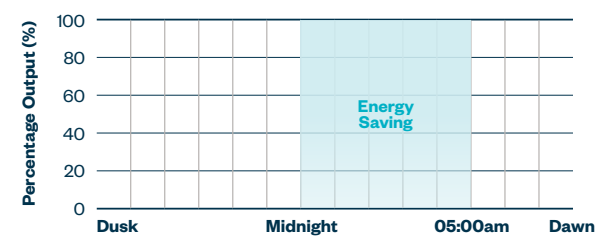
Sensors

Daytona can accommodate a variety of sensors on the underside of the luminaire. Motion sensors can be used to provide increased energy savings by dimming when no movement is detected.

Alternatively, environmental detectors such as pollution or road temperature sensors can be integrated to report data as part of a Connected Spaces installation.

Bluetooth

Switch, dim and configure luminaires wirelessly for increased convenience and flexibility. Manage luminaires individually or in a group using scenes. Controlled directly from a smart device, no additional controls cabling required.

CMS / Smart City integration

To allow our customers the greatest flexibility, we remain CMS agnostic and have supplied luminaires with all the current CMS and Connected Spaces platforms on the market.

With Daytona, we can fit internal nodes for all major systems minimising the visual impact on the lanterns aesthetic (an external aerial is still required). The following is a small selection of the control technologies we have installed in our lanterns:

urbancontrol   **Telensa**   **mayflower** SMART CONTROL

Light distributions

To ensure the most efficient lighting designs, Daytona is offered with our Diamond+ optics. Choose from 14 different distributions to ensure light is only placed where needed.
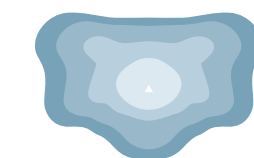
ROADS

Diamond+ Optic – A1   Diamond+ Optic – A2   Diamond+ Optic – A3

Diamond+ Optic – A5   Diamond+ Optic – A6

PATHWAYS

Diamond+ Optic – B1   Diamond+ Optic – B2   Diamond+ Optic – B3
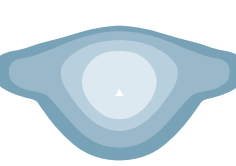
AREAS

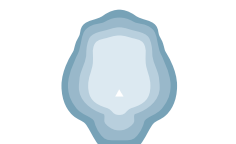Diamond+ Optic – C1   Diamond+ Optic – C2   Diamond+ Optic – C6

CROSSINGS

Diamond+ Optic – ZL   Diamond+ Optic – ZR   Diamond+ Optic – ZF

Daytona lumen packages and wattages matrix

Model	No of LEDs		250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1050
Daytona 450	8	lm	1,044	1,234	1,418	1,596	1,769	1,936	2,097	2,253	2,403	2,547	2,686	2,819	2,947	3,069	3,185	3,297	3,402
		W	6	7	8	9	10	12	13	14	15	16	17	19	20	21	22	24	25
	16	lm	2,047	2,420	2,781	3,130	3,469	3,769	4,112	4,417	4,711	4,994	5,266	5,527	2,778	6,017	6,246	6,464	6,671
		W	11	13	16	18	20	22	24	27	29	31	34	36	38	41	43	46	48
	24	lm	2,969	3,509	4,032	4,539	5,030	5,504	5,962	6,405	6,831	7,241	7,636	8,015	8,378	8,725	9,057	9,373	9,673
		W	17	20	23	27	30	33	37	40	43	47	50	54	57	61	65	68	72
	32	lm	4,416	5,205	5,972	6,718	7,441	8,142	8,821	9,477	10,109	10,719	11,305	11,868	12,406	12,921	13,411	13,876	14,316
		W	23	27	31	35	40	44	48	53	57	62	67	71	76	81	85	90	95
Daytona 500	48	lm	6,251	7,374	8,464	9,523	10,549	11,544	12,506	13,435	14,331	15,194	16,025	16,821	17,584	18,313	19,008	19,668	20,294
		W	34	41	47	54	60	67	74	81	87	94	101	109	116	123	130	138	145
	64	lm	7,913	9,334	10,714	12,054	13,353	14,612	15,830	17,006	18,141	19,234	20,284	21,293	22,258	23,181	24,060	24,897	25,689
		W	44	53	61	69	78	86	95	104	113	122	131	140	149	159	168	177	187

Lumen data based on 4000K with A2 optic and no Light Output Reduction (LOR) factor applied. Data provided as indication of performance. Please refer to photometric files for individual optic results.
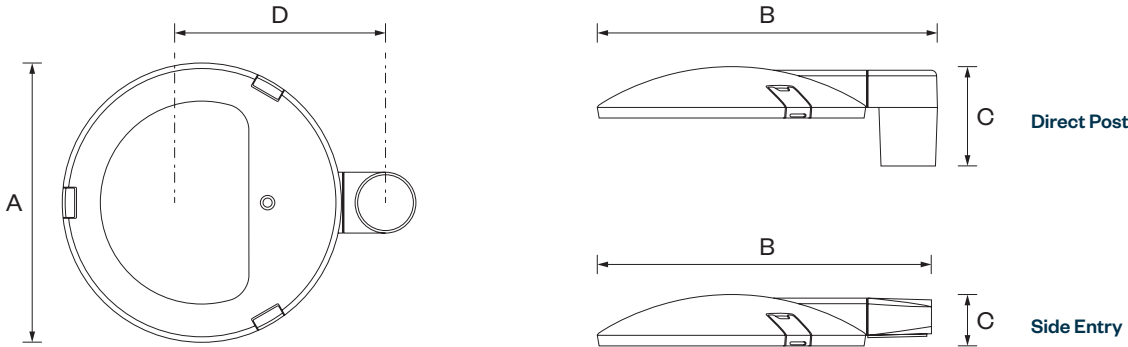
Luminaire dimensions

		Dimensions (mm)				Weight (kg)	Windage (m²)
		A	B	C	D		
Daytona 450	DP	480	580	170	350	8.7	0.043
	SE	480	570	90	350		
Daytona 500	DP	580	700	190	430	13.5	0.065
	SE	580	685	110	430		

CCT details

	Light output reduction factor	S/P Ratio
4000K	1.00	1.5
3000K	0.93	1.4
2700K	0.86	1.3

Daytona 450

Direct Post

Side Entry

Daytona 500

Direct Post

Side Entry
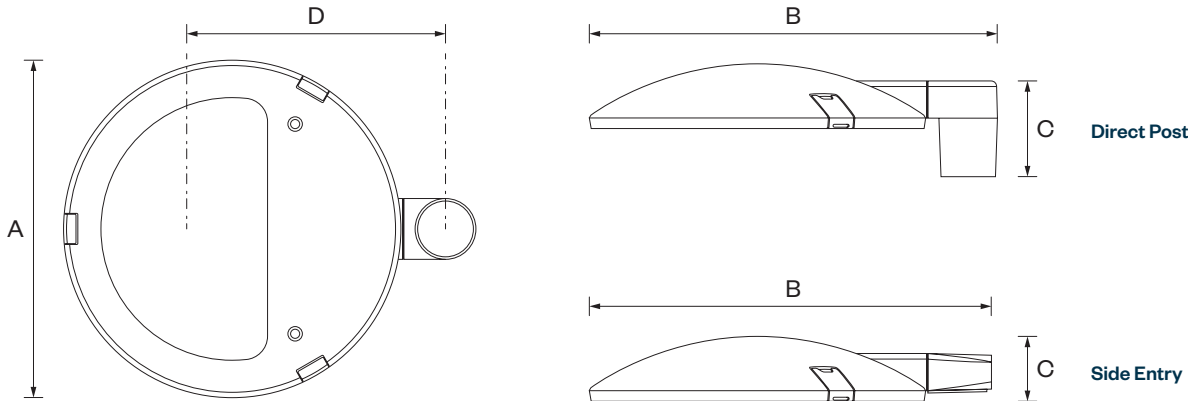
Product codes

			Code	Example
Family				
Daytona			DAY	DAY
Size				
450			45	45
	500		50	
Mounting				
Ø60mm Direct post			D60	
Ø60mm Side entry			S60	D76
Ø76mm Direct post			D76	
Ø34 - 42mm Side entry			S	
Light Engine				
Static White				
8 LED		-	8	
16 LED		-	16	
24 LED		-	24	24
32 LED	32 LED Tunable White	-	32	
-		48 LED	48	
-		64 LED	64	
Colour Temperature				
2700K			27	
3000K			30	
4000K			40	30
	Tunable White (2200K - 3000K)		TW30	
	Tunable White (2700K - 4000K)		TW40	
Drive Current				
Drive currents from 250mA to 1050mA in 50mA increments. Insert drive current value (eg 750mA - 750)	(Supplied at full output)	Drive currents from 250mA to 1050mA in 50mA increments. Insert drive current value (eg 750mA - 750)	250 / 300 / 350 400 / 450 / 500 550 / 600 / 650 700 / 750 / 800 850 / 900 / 950 1000 / 1050	750
Light Distribution				
Roads – Diamond+ A Optic			A1 / A2 / A3 / A5 / A6	
Pathways – Diamond+ B Optic			B1 / B2 / B3	A1
Areas – Diamond+ C Optic			C1 / C2 / C6	
Crossings – Diamond+ Z Optic			ZL / ZR / ZF	
Glazing				
Toughened glass (IK08) [standard option]			FG	FG
Polycarbonate (IK10)			RA	
Colour Finish				
RAL 9005 Black			10	
RAL 7046 Mid grey			CF	
RAL 7035 Light grey			29	10
DB 703 Metallic dark grey			DB	
Other RAL colour [on request]			RAL [specify]	
Paint Finish				
Polyester powder coat [standard option]			PP	PP
Marine-grade coating			MG	
Connectivity				
No connectivity or control	No connectivity or control		N	
Miniature photocell 20 lux (1:1) / 35 lux (1:0.5)	Miniature photocell 20 lux (1:1) / 35 lux (1:0.5)		U20 / U35	
NEMA socket – 3-pin / 5-pin / 6-pin / 7-pin	NEMA socket – 3-pin		E / C3 / B1 / D2	U20
Zhaga socket – 4-pin (top)			Z4	
Zhaga socket – 4-pin (bottom) [can be combined with top 3/7-pin NEMA or miniature photocell]			Z4A	
Zhaga socket – 4-pin (top and bottom)			Z4B	
Control (optional)				
Bluetooth [can be combined with 3-pin NEMA]	Bluetooth		BLU	
Integral CMS – Urban Control (AC node with puck antenna)			UAC	
Integral CMS – Urban Control (DC node with puck antenna)			UDC	-
Integral CMS – Telensa (with monopole antenna)			ITE	
Integral CMS – Mayflower (with stub antenna)			IMA	
Emergency (optional)				
Integral 3 hour emergency [DALI versions only]			EM	-
Accessories (ordered separately)				
Light shield – one side				
Light shield – two sided				-
Zhaga Book 18 presence detector [via Zhaga 4-pin socket]				

Example Code: DAY 45 D76 24 30 750 A1 FG 10 PP U20

Daytona®

Features & Benefits

Future-proofed lighting solution with replaceable light engines to support future upgrades as new innovations come to market

Outstanding service life to support the circular economy. Toolless entry for easy luminaire maintenance

Elegant design suitable to a range of urban applications, including high street & road lighting, public realm, paths & walkways, and car parks

Tunable White technology improves visual comfort for road users whilst minimising the impact on wildlife and biodiversity

Compatible with the latest lighting control technologies, supporting a range of NEMA and Zhaga devices via top and/or bottom sockets

Lumen Outputs

8 LED: up to 3,400lm

16 LED: up to 6,700lm

24 LED: up to 9,700lm

32 LED: up to 14,300lm

48 LED: up to 20,300lm

64 LED: up to 25,700m

Tunable White option available (Daytona 450 32 LED only)

Optical Control

Diamond+ A Optic: Roads (A1 / A2 / A3 / A5 / A6)

Diamond+ B Optic: Pathways (B1 / B2 / B3)

Diamond+ C Optic: Areas (C1 / C2 / C6)

Diamond+ Z Optic: Crossings (ZL / ZR / ZF)

Lifetime

100,000 hours L90 B10

Luminaire Efficacy

Up to 193lm/W

Colour Temperature

2700K

3000K

4000K

Tunable White – 3000K - 2200K / 4000K - 2700K

Colour Rendering Index

70Ra

Drive Current

250mA - 1050mA (in 50mA increments)

Mounting

Direct post: Ø60mm

Direct post: Ø76mm

Side entry: Ø60mm

Side entry: Ø34 - 42mm

Control

Switch: On/off through conventional miniature or NEMA photocell

Dim: Factory set pre-programmed dimming profiles

CMS: Compatible with all available CMS systems

Bluetooth: Switch, dim and configure wirelessly

Zhaga Book 18 compliant interface for connecting a wide array of sensors or wireless communication modules

urbancontrol® ready with an internal or external CMS node solution - allows for full asset management through the urbanmaster® platform

Colours

RAL 9005 Black

RAL 7046 Mid grey

RAL 7035 Light grey

DB 703 Metallic dark grey

(Other RAL colours available on request)

Materials

Body: High-pressure die-cast aluminium (LM6)

Glazing: Toughened glass (IK08) / Polycarbonate (IK10)

Seals: Silicone

Finish: Polyester powder coat / Marine grade coating

Accessories

Light shield - one side / Light shield - two sided

Installation & Maintenance

Available pre-wired

Includes SupportTag for easy luminaire maintenance

Surge protection: 8kV

Operational temperature range: −40°C to +40°C

* Class II on request

MADE IN BRITAIN