

Curve Advanced Concealed Air Troffer, CRI >80

#### **FEATURES**

- Low-glare curved reflector and even light distribution
- · Concealed air louvers for air handling applications
- Same form factor as Curve Advanced and can be used interchangeably
- External LED driver for easy maintenance and installation
- Supplied with a choice of different softwiring and hardwiring options
- High efficiency design with >150Lm/W output
- Excellent L90B10 lifetime for energy efficient lighting designs
- Flicker free DALI-2 certified LED driver giving excellent compatibility

ORDERING INFORMATION	
Order code	13804
Description	17W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI
Driver Type	DALI DT6 LED Driver
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.	
Item Code	EV-CURVE-ADV-AIR-312-17W-DA

MECHANICAL	
Body Material	Cold rolled steel
Diffuser Material	PMMA
Product Finish	Powder coated
Fitting Colour	White
Installation Type	Recessed
IP Rating	IP40

ELECTRICAL	
Electrical Rating	Class II
Input Current	0.09 A
Input Frequency	50 Hz
Input voltage	230Vac
In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%	

15 W

**Maximum Wattage** 



LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
CCT Configuration	Single
CRI	>80
Lamp/LED Current	450 mA
Lamp/LED voltage	36 V
System Efficiency	150 lm/W
UGR	<19

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

# LED LIFETIME

#### **LED Lifetime** >54,000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Ektor does not list the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

25 °C	40 °C
53,000 hrs	53,000 hrs
>54,000 hrs	>54,000 hrs
	53,000 hrs



This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TM-21 Test Hours	9000 hrs

COLOUR TEMPERATURE	
ССТ	4000 K
Luminaire Lumens	2550 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Wiring Type	Re-wireable terminal block (4
	pin)

#### **COMPLIANCE**

#### Product Design Life

8 years

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

#### **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1
	AS/NZS 60598.2.2
	AS/NZS 61347.1
	AS/NZS 61347.2.13
	IEC/TR 62778
	IEC 62031
	AS CISPR 15
	IEC 62386-102
	IEC 62386-207

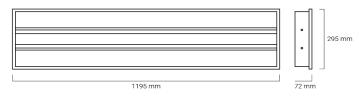
WARRANTY	
Commercial Use Warranty	5 RTB (Total 5 Years)
Warranty Operating Hours	30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

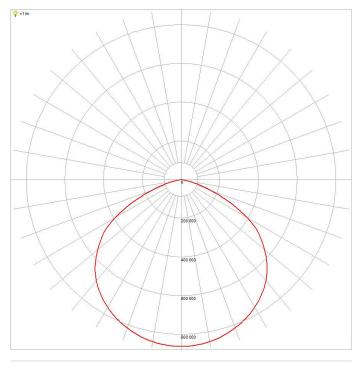
#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/17W





Curve Advanced Concealed Air Troffer, CRI >80

# **FEATURES**

- Low-glare curved reflector and even light distribution
- Concealed air louvers for air handling applications
- Same form factor as Curve Advanced and can be used interchangeably
- External LED driver for easy maintenance and installation
- Supplied with a choice of different softwiring and hardwiring options
- High efficiency design with >150Lm/W output
- Excellent L90B10 lifetime for energy efficient lighting designs
- Flicker free DALI-2 certified LED driver giving excellent compatibility

ORDERING INFORMATION	
Order code	13805
Description	17W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI - CMS Plug
Driver Type	DALI DT6 LED Driver
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.	
Item Code	EV-CURVE-ADV-AIR-312-17W-DC

MECHANICAL	
Body Material	Cold rolled steel
Diffuser Material	PMMA
Product Finish	Powder coated
Fitting Colour	White
Installation Type	Recessed
IP Rating	IP40

ELECTRICAL	
Electrical Rating	Class II
Input Current	0.09 A
Input Frequency	50 Hz
Input voltage	230Vac
In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%	

15 W

**Maximum Wattage** 



0.95
Via DALI
0 to 40 °C
V

LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
<b>CCT Configuration</b>	Single
CRI	>80
Lamp/LED Current	450 mA
Lamp/LED voltage	36 V
System Efficiency	150 lm/W
UGR	<19

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

## LED LIFETIME

#### **LED Lifetime** >54,000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Ektor does not list the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

Ambient Temp (°C)	25 °C	40 °C
L90B10	53,000 hrs	53,000 hrs
L80B10	>54,000 hrs	>54,000 hrs



This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TM-21 Test	Hours	9000 hrs

COLOUR TEMPERATURE	
ССТ	4000 K
Luminaire Lumens	2550 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Flex & Plug or Lead Length	2400 mm
Wiring Type	CMS Plug (5 pin)

 ${\rm CMS}\sim {\rm Supplied}$  with a CMS Electracom- 5 pin plug to suit QF series wiring, model number QFP3AT

#### **COMPLIANCE**

#### Product Design Life

8 years

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

#### **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1
	AS/NZS 60598.2.2
	AS/NZS 61347.1
	AS/NZS 61347.2.13
	IEC/TR 62778
	IEC 62031
	AS/NZS 61535.1
	AS CISPR 15

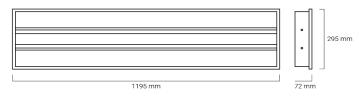
WARRANTY	
Commercial Use Warranty	5 RTB (Total 5 Years)
<b>Warranty Operating Hours</b>	30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

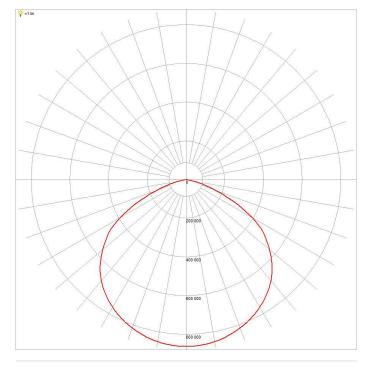
#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/17W



IEC 62386-102 IEC 62386-207



Curve Advanced Concealed Air Troffer, CRI >80

#### **FEATURES**

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- Same form factor as Curve Advanced and can be used interchangeably
- External LED driver for easy maintenance and installation
- Supplied with a choice of different softwiring and hardwiring options
- High efficiency design with >150Lm/W output
- Excellent L90B10 lifetime for energy efficient lighting
- Flicker free DALI-2 certified LED driver giving excellent compatibility

ORDERING INFORMATION		
Order code	13806	
Description	17W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI - Wire by Click Plug	
Driver Type	DALI DT6 LED Driver	
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.		
Item Code	EV-CURVE-ADV-AIR-312-17W-	

MECHANICAL	
<b>Body Material</b>	Cold rolled steel
Diffuser Material	PMMA
Product Finish	Powder coated

DW

Body Material	Cold rolled steel
Diffuser Material	PMMA
Product Finish	Powder coated
Fitting Colour	White
Installation Type	Recessed
IP Rating	IP40

ELECTRICAL	
Electrical Rating	Class II
Input Current	0.09 A
Input Frequency	50 Hz
Input voltage	230Vac

In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%



Maximum Wattage	15 W
Power Factor	0.95
Switch Type	Via DALI
Working Temp Range	0 to 40 °C

LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
CCT Configuration	Single
CRI	>80
Lamp/LED Current	450 mA
Lamp/LED voltage	36 V
System Efficiency	150 lm/W
UGR	<19

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

# **LED LIFETIME**

#### **LED Lifetime** >54,000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Ektor does not list the projected or calculated LED lifetime, which is normally longer as  $\mathsf{TM}\text{-}21$ Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

Ambient Temp (°C)	25 °C	40 °C
L90B10	53,000 hrs	53,000 hrs



L80B10	>54,000 hrs	>54,000 hrs
L70B10	>54,000 hrs	>54,000 hrs

This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TM-21 Test Hours	9000 hrs

COLOUR TEMPERATURE	
ССТ	4000 K
Luminaire Lumens	2550 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Flex & Plug or Lead Length	2400 mm
Wiring Type	WBC Plug (5 pin)

WBC ~ Supplied with a Wire by click- 5 pin plug, model number LA1025/5

#### **COMPLIANCE**

## Product Design Life 8 years

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

#### **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1	
	AS/NZS 60598.2.2	
	AS/NZS 61347.1	
	AS/NZS 61347.2.13	
	IEC/TR 62778	
	IEC 62031	
	AS/NZS 61535.1	
	AS CISPR 15	
	IEC 62386-102	
	IEC 62386-207	

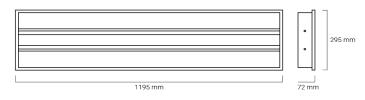
# WARRANTY Commercial Use Warranty 5 RTB (Total 5 Years) Warranty Operating Hours 30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

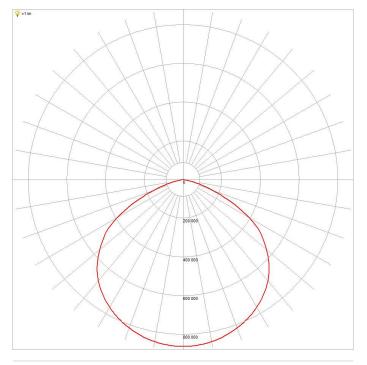
#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/17W





Curve Advanced Concealed Air Troffer, CRI >80

# **FEATURES**

- Low-glare curved reflector and even light distribution
- Concealed air louvers for air handling applications
- Same form factor as Curve Advanced and can be used interchangeably
- External LED driver for easy maintenance and installation
- Supplied with a choice of different softwiring and hardwiring options
- High efficiency design with >150Lm/W output
- Excellent L90B10 lifetime for energy efficient lighting designs
- Flicker free DALI-2 certified LED driver giving excellent compatibility

ORDERING INFORMATION	
Order code	13704
Description	19W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI
Driver Type	DALI DT6 LED Driver
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.	
Item Code	EV-CURVE-ADV-AIR-312-19W-DA

MECHANICAL		
Body Material	Cold rolled steel	
Diffuser Material	PMMA	
Product Finish	Powder coated	
Fitting Colour	White	
Installation Type	Recessed	
IP Rating	IP40	

ELECTRICAL	
Electrical Rating	Class II
Input Current	0.1 A
Input Frequency	50 Hz
Input voltage	230Vac
In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%	

19 W

**Maximum Wattage** 



LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
CCT Configuration	Single
CRI	>80
Lamp/LED Current	500 mA
Lamp/LED voltage	36 V
System Efficiency	153 lm/W
UGR	<19

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

## **LED LIFETIME**

#### **LED Lifetime** >54,000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Ektor does not list the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

Ambient Temp (°C)	25 °C	40 °C
L90B10	53,000 hrs	53,000 hrs
L80B10	>54,000 hrs	>54,000 hrs



This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TM-21 Test Hours	9000 hrs

COLOUR TEMPERATURE	
ССТ	4000 K
Luminaire Lumens	2900 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Wiring Type	Re-wireable terminal block (4	
	pin)	

#### **COMPLIANCE**

#### Product Design Life

8 years

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

#### **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1
	AS/NZS 60598.2.2
	AS/NZS 61347.1
	AS/NZS 61347.2.13
	IEC/TR 62778
	IEC 62031
	AS CISPR 15
	IEC 62386-102
	IEC 62386-207

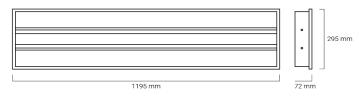
WARRANTY	
Commercial Use Warranty	5 RTB (Total 5 Years)
<b>Warranty Operating Hours</b>	30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

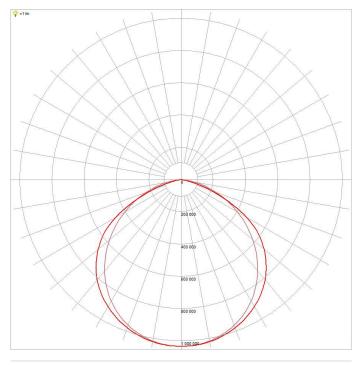
#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/19W





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#### **FEATURES**

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- Flicker free DALI-2 certified LED driver giving excellent compatibility

ORDERING INFORMATION		
Order code	13705	
Description	19W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI - CMS Plug	
Driver Type	DALI DT6 LED Driver	
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.		
Item Code	EV-CURVE-ADV-AIR-312-19W-DC	

MECHANICAL	
Body Material	Cold rolled steel
Diffuser Material	PMMA
Product Finish	Powder coated
Fitting Colour	White
Installation Type	Recessed
IP Rating	IP40

ELECTRICAL		
Electrical Rating	Class II	
Input Current	0.1 A	
Input Frequency	50 Hz	
Input voltage	230Vac	
In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%		

19 W

**Maximum Wattage** 



ALI
10 °C

LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
CCT Configuration	Single
CRI	>80
Lamp/LED Current	500 mA
Lamp/LED voltage	36 V
System Efficiency	153 lm/W
UGR	<19

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

LED LIFETIME	
LED Lifetime	>54.000 hrs

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Ambient Temp (°C)	25 °C	40 °C
L90B10	53,000 hrs	53,000 hrs
L80B10	>54,000 hrs	>54,000 hrs



This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TIVI-ZI TEST TIOUIS	TM-21	Test Hours	90	000 hrs
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COLOUR TEMPERATURE	
ССТ	4000 K
Luminaire Lumens	2900 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Flex & Plug or Lead Length	2400 mm
Wiring Type	CMS Plug (5 pin)

 ${\rm CMS}\sim {\rm Supplied}$  with a CMS Electracom- 5 pin plug to suit QF series wiring, model number QFP3AT

#### **COMPLIANCE**

# Product Design Life

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

8 years

#### **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1
	AS/NZS 60598.2.2
	AS/NZS 61347.1
	AS/NZS 61347.2.13
	IEC/TR 62778
	IEC 62031
	AS/NZS 61535.1
	AS CISPR 15
	IEC 62386-102

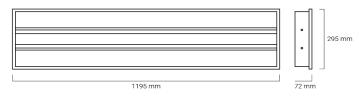
WARRANTY	
Commercial Use Warranty	5 RTB (Total 5 Years)
Warranty Operating Hours	30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

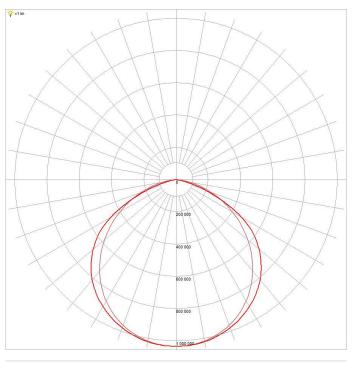
#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/19W



IEC 62386-207



Curve Advanced Concealed Air Troffer, CRI >80

#### **FEATURES**

- Low-glare curved reflector and even light distribution
- Concealed air louvers for air handling applications
- Same form factor as Curve Advanced and can be used interchangeably
- External LED driver for easy maintenance and installation
- Supplied with a choice of different softwiring and hardwiring options
- High efficiency design with >150Lm/W output
- Excellent L90B10 lifetime for energy efficient lighting designs
- Flicker free DALI-2 certified LED driver giving excellent compatibility

ORDERING INFORMATION		
Order code	13706	
Description	19W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI - Wire by Click Plug	
Driver Type	DALI DT6 LED Driver	
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.		
Item Code	EV-CURVE-ADV-AIR-312-19W- DW	

MECHANICAL	
Body Material	Cold rolled steel
Diffuser Material	PMMA
Product Finish	Powder coated
Fitting Colour	White
Installation Type	Recessed
IP Rating	IP40

ELECTRICAL	
Electrical Rating	Class II
Input Current	0.1 A
Input Frequency	50 Hz
Input voltage	230Vac

In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%



Maximum Wattage	19 W
Power Factor	0.95
Switch Type	Via DALI
Working Temp Range	0 to 40 °C

LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
<b>CCT Configuration</b>	Single
CRI	>80
Lamp/LED Current	500 mA
Lamp/LED voltage	36 V
System Efficiency	153 lm/W
UGR	<19

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

# **LED LIFETIME**

## **LED Lifetime** >54,000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Ektor does not list the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

Ambient Temp (°C)	25 °C	40 °C
L90B10	53,000 hrs	53,000 hrs



L80B10	>54,000 hrs	>54,000 hrs
L70B10	>54,000 hrs	>54,000 hrs

This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TM-21 Test Hours	9000 hrs

COLOUR TEMPERATURE	
ССТ	4000 K
Luminaire Lumens	2900 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Flex & Plug or Lead Length	2400 mm
Wiring Type	WBC Plug (5 pin)

WBC ~ Supplied with a Wire by click- 5 pin plug, model number LA1025/5

#### **COMPLIANCE**

## Product Design Life 8 years

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

#### **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1
	AS/NZS 60598.2.2
	AS/NZS 61347.1
	AS/NZS 61347.2.13
	IEC/TR 62778
	IEC 62031
	AS/NZS 61535.1
	AS CISPR 15
	IEC 62386-102
	IEC 62386-207

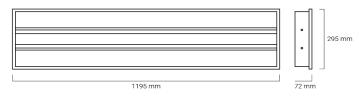
WARRANTY	
Commercial Use Warranty	5 RTB (Total 5 Years)
Warranty Operating Hours	30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

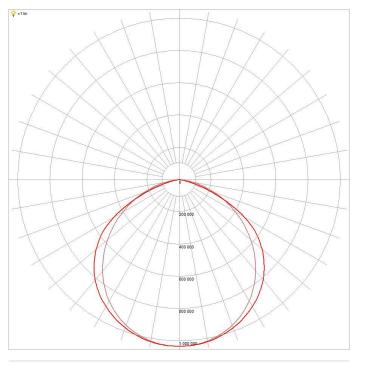
#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/19W





Curve Advanced Concealed Air Troffer, CRI >80

#### **FEATURES**

- Low-glare curved reflector and even light distribution
- Concealed air louvers for air handling applications
- Same form factor as Curve Advanced and can be used interchangeably
- External LED driver for easy maintenance and installation
- Supplied with a choice of different softwiring and hardwiring options
- High efficiency design with >150Lm/W output
- Excellent L90B10 lifetime for energy efficient lighting
- Flicker free DALI-2 certified LED driver giving excellent compatibility

ORDERING INFORMATION	
Order code	13583
Description	22W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI
Driver Type	DALI DT6 LED Driver
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.	
Item Code	EV-CURVE-ADV-AIR-312-22W-DA

	MECHANICAL
el	<b>Body Material</b>
	Diffuser Material
d	Product Finish
	Fitting Colour
	Installation Type
	IP Rating
	IP Rating

ELECTRICAL	
<b>Electrical Rating</b>	Class II
Input Current	0.11 A
Input Frequency	50 Hz
Input voltage	230Vac
In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%	

Maximum Wattage	22 W	
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Power Factor	0.95
Switch Type	Via DALI
Working Temp Range	0 to 40 °C

LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
<b>CCT Configuration</b>	Single
CRI	>80
Lamp/LED Current	600 mA
Lamp/LED voltage	36 V
System Efficiency	157 lm/W
UGR	<22

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

## **LED LIFETIME**

LED Lifetime	>54,000 hrs
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This is the Reported LED Lifetime in Hours based on TM-21. Ektor does not list the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

Ambient Temp (°C)	25 °C	40 °C
L90B10	53,000 hrs	53,000 hrs
L80B10	>54,000 hrs	>54,000 hrs



This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

IM-ZI lest hours 9000 nrs	TM-21 Test Hours	9000 hrs
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COLOUR TEMPERATURE	
ССТ	4000 K
Luminaire Lumens	3450 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Wiring Type	Re-wireable terminal block (4
	pin)

#### **COMPLIANCE**

# Product Design Life

8 years

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

#### **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1 AS/NZS 60598.2.2 AS/NZS 61347.1 AS/NZS 61347.2.13
	IEC/TR 62778
	IEC 62031 AS CISPR 15
	IEC 62386-102 IEC 62386-207

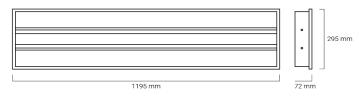
WARRANTY	
Commercial Use Warranty	5 RTB (Total 5 Years)
<b>Warranty Operating Hours</b>	30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

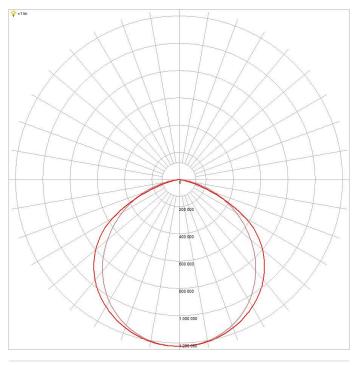
#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/22W





Curve Advanced Concealed Air Troffer, CRI >80

# **FEATURES**

- Low-glare curved reflector and even light distribution
- Concealed air louvers for air handling applications
- Same form factor as Curve Advanced and can be used interchangeably
- External LED driver for easy maintenance and installation
- Supplied with a choice of different softwiring and hardwiring options
- High efficiency design with >150Lm/W output
- Excellent L90B10 lifetime for energy efficient lighting designs
- Flicker free DALI-2 certified LED driver giving excellent compatibility

ORDERING INFORMATION		
Order code	13584	
Description	22W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI - CMS Plug	
Driver Type	DALI DT6 LED Driver	
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.		
Item Code	EV-CURVE-ADV-AIR-312-22W-DC	

MECHANICAL	
Body Material	Cold rolled steel
Diffuser Material	PMMA
Product Finish	Powder coated
Fitting Colour	White
Installation Type	Recessed
IP Rating	IP40

ELECTRICAL	
Electrical Rating	Class II
Input Current	0.11 A
Input Frequency 50 Hz	
Input voltage	230Vac
In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%	

22 W

**Maximum Wattage** 



LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
<b>CCT Configuration</b>	Single
CRI	>80
Lamp/LED Current	600 mA
Lamp/LED voltage	36 V
System Efficiency	157 lm/W
UGR	<22

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

# **LED LIFETIME**

#### **LED Lifetime** >54,000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Ektor does not list the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

25 °C	40 °C
53,000 hrs	53,000 hrs
>54,000 hrs	>54,000 hrs
	53,000 hrs



This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TIVI-ZI TEST TIOUIS	TM-21	Test Hours	90	000 hrs
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COLOUR TEMPERATURE	
ССТ	4000 K
Luminaire Lumens	3450 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Flex & Plug or Lead Length	2400 mm
Wiring Type	CMS Plug (5 pin)

 ${\rm CMS}\sim {\rm Supplied}$  with a CMS Electracom- 5 pin plug to suit QF series wiring, model number QFP3AT

#### **COMPLIANCE**

#### Product Design Life

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

8 years

#### **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1
	AS/NZS 60598.2.2
	AS/NZS 61347.1
	AS/NZS 61347.2.13
	IEC/TR 62778
	IEC 62031
	AS/NZS 61535.1
	AS CISPR 15
	IEC 62386-102
	IEC 62386-207

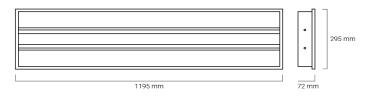
WARRANTY	
Commercial Use Warranty	5 RTB (Total 5 Years)
<b>Warranty Operating Hours</b>	30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

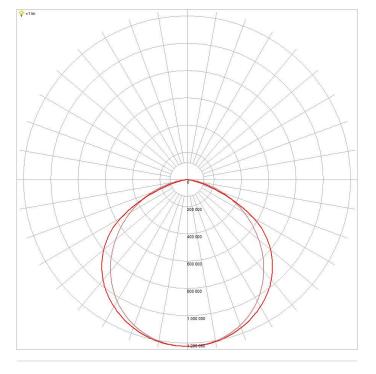
#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/22W





Curve Advanced Concealed Air Troffer, CRI >80

#### **FEATURES**

- Low-glare curved reflector and even light distribution
- Concealed air louvers for air handling applications
- Same form factor as Curve Advanced and can be used interchangeably
- External LED driver for easy maintenance and installation
- Supplied with a choice of different softwiring and hardwiring options
- High efficiency design with >150Lm/W output
- Excellent L90B10 lifetime for energy efficient lighting designs
- Flicker free DALI-2 certified LED driver giving excellent compatibility

ORDERING INFORMATION	
Order code	13585
Description	22W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI - Wire by Click Plug
Driver Type	DALI DT6 LED Driver
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.	
Item Code	EV-CURVE-ADV-AIR-312-22W- DW

MECHANICAL	
Body Material	Cold rolled steel
Diffuser Material	PMMA
Product Finish	Powder coated
Fitting Colour	White
Installation Type	Recessed
IP Rating	IP40

ELECTRICAL	
<b>Electrical Rating</b>	Class II
Input Current	0.11 A
Input Frequency	50 Hz
Input voltage	230Vac

In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%



Maximum Wattage	22 W
Power Factor	0.95
Switch Type	Via DALI
Working Temp Range	0 to 40 °C

LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
CCT Configuration	Single
CRI	>80
Lamp/LED Current	600 mA
Lamp/LED voltage	36 V
System Efficiency	157 lm/W
UGR	<22

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

## **LED LIFETIME**

## **LED Lifetime** >54,000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Ektor does not list the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

Ambient Temp (°C)	25 °C	40 °C
L90B10	53,000 hrs	53,000 hrs



L80B10	>54,000 hrs	>54,000 hrs
L70B10	>54,000 hrs	>54,000 hrs

This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TM-21 Test Hours	9000 hrs

COLOUR TEMPERATURE	
ССТ	4000 K
Luminaire Lumens	3450 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Flex & Plug or Lead Length	2400 mm
Wiring Type	WBC Plug (5 pin)

WBC ~ Supplied with a Wire by click- 5 pin plug, model number LA1025/5

#### **COMPLIANCE**

## Product Design Life 8 years

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

#### **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1
	AS/NZS 60598.2.2
	AS/NZS 61347.1
	AS/NZS 61347.2.13
	IEC/TR 62778
	IEC 62031
	AS/NZS 61535.1
	AS CISPR 15
	IEC 62386-102
	IEC 62386-207

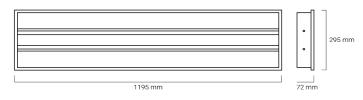
WARRANTY	
Commercial Use Warranty	5 RTB (Total 5 Years)
Warranty Operating Hours	30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

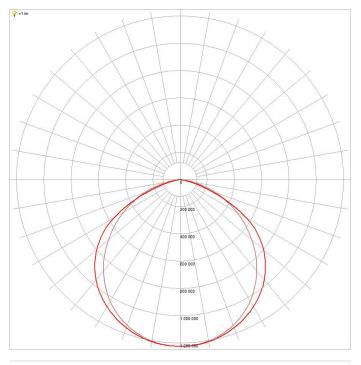
#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/22W





Curve Advanced Concealed Air Troffer, CRI >80

# **FEATURES**

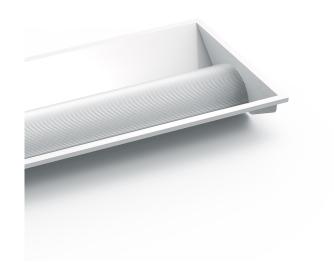
- Low-glare curved reflector and even light distribution
- Concealed air louvers for air handling applications
- Same form factor as Curve Advanced and can be used interchangeably
- External LED driver for easy maintenance and installation
- Supplied with a choice of different softwiring and hardwiring options
- High efficiency design with >150Lm/W output
- Excellent L90B10 lifetime for energy efficient lighting designs
- Flicker free DALI-2 certified LED driver giving excellent compatibility

ORDERING INFORMATION	
Order code	13589
Description	30W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI
Driver Type	DALI DT6 LED Driver
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.	
Item Code	EV-CURVE-ADV-AIR-312-30W-DA

Cold rolled steel
PMMA
Powder coated
White
Recessed
IP40

ELECTRICAL	
Electrical Rating	Class II
Input Current	0.16 A
Input Frequency	50 Hz
Input voltage	230Vac
In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%	

+6%	
Maximum Wattage	30 W



LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
CCT Configuration	Single
CRI	>80
Lamp/LED Current	800 mA
Lamp/LED voltage	36 V
System Efficiency	153 lm/W
UGR	<22

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

# **LED LIFETIME**

#### **LED Lifetime** >54,000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Ektor does not list the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

Ambient Temp (°C)	25 °C	40 °C
L90B10	53,000 hrs	53,000 hrs
L80B10	>54,000 hrs	>54,000 hrs
L80B10	>54,000 hrs	>54,000 hrs



This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TM-21 Test	Hours	9000 hrs

COLOUR TEMPERATURE	
ССТ	4000 K
Luminaire Lumens	4600 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Wiring Type	Re-wireable terminal block (4
	pin)

#### **COMPLIANCE**

#### Product Design Life

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

8 years

# **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1
	AS/NZS 60598.2.2
	AS/NZS 61347.1
	AS/NZS 61347.2.13
	IEC/TR 62778
	IEC 62031
	AS CISPR 15
	IEC 62386-102
	IFC 62386-207

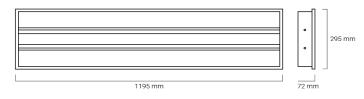
WARRANTY	
Commercial Use Warranty	5 RTB (Total 5 Years)
<b>Warranty Operating Hours</b>	30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

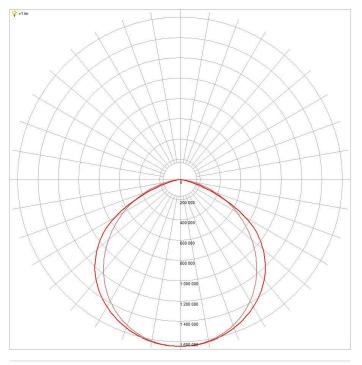
#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/30W





Curve Advanced Concealed Air Troffer, CRI >80

# **FEATURES**

- Low-glare curved reflector and even light distribution
- Concealed air louvers for air handling applications
- Same form factor as Curve Advanced and can be used interchangeably
- External LED driver for easy maintenance and installation
- Supplied with a choice of different softwiring and hardwiring options
- High efficiency design with >150Lm/W output
- Excellent L90B10 lifetime for energy efficient lighting
- Flicker free DALI-2 certified LED driver giving excellent compatibility

ORDERING INFORMATION		
Order code	13590	
Description	30W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI - CMS Plug	
Driver Type	DALI DT6 LED Driver	
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.		
Item Code	EV-CURVE-ADV-AIR-312-30W-DC	

	MECHANICAL
el	<b>Body Material</b>
	Diffuser Material
d	Product Finish
	Fitting Colour
	Installation Type
	IP Rating
	IP Rating

ELECTRICAL	
Electrical Rating	Class II
Input Current	0.16 A
Input Frequency	50 Hz
Input voltage	230Vac
In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%	

30 W

**Maximum Wattage** 



LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
<b>CCT Configuration</b>	Single
CRI	>80
Lamp/LED Current	800 mA
Lamp/LED voltage	36 V
System Efficiency	153 lm/W
UGR	<22

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

LED LIFETIME	
LED Lifetime	>54,000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Ektor does not list

the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

Ambient Temp (°C)	25 °C	40 °C
L90B10	53,000 hrs	53,000 hrs
L80B10	>54,000 hrs	>54,000 hrs



This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TIVI-ZI TEST TIOUIS	TM-21 Test	Hours	9000 hrs
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COLOUR TEMPERATURE	
ССТ	4000 K
Luminaire Lumens	4600 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Flex & Plug or Lead Length	2400 mm
Wiring Type	CMS Plug (5 pin)

CMS  $\sim$  Supplied with a CMS Electracom- 5 pin plug to suit QF series wiring, model number QFP3AT

#### **COMPLIANCE**

#### Product Design Life

8 years

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

#### **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1
	AS/NZS 60598.2.2
	AS/NZS 61347.1
	AS/NZS 61347.2.13
	IEC/TR 62778
	IEC 62031
	AS/NZS 61535.1
	AS CISPR 15

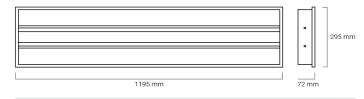
WARRANTY	
Commercial Use Warranty	5 RTB (Total 5 Years)
<b>Warranty Operating Hours</b>	30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

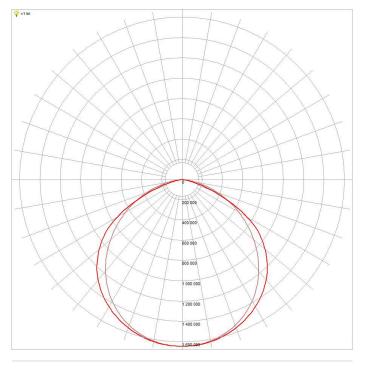
#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/30W



IEC 62386-102 IEC 62386-207



Curve Advanced Concealed Air Troffer, CRI >80

#### **FEATURES**

- Low-glare curved reflector and even light distribution
- Concealed air louvers for air handling applications
- Same form factor as Curve Advanced and can be used interchangeably
- External LED driver for easy maintenance and installation
- Supplied with a choice of different softwiring and hardwiring options
- High efficiency design with >150Lm/W output
- Excellent L90B10 lifetime for energy efficient lighting designs
- Flicker free DALI-2 certified LED driver giving excellent compatibility

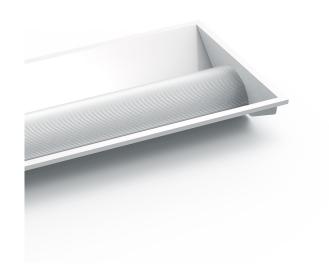
ORDERING INFORMATION	
Order code	13591
Description	30W Curve Adv Concealed Air Troffer 300x1200mm - 4000K - DALI - Wire by Click Plug
Driver Type	DALI DT6 LED Driver
DALI DT6 $\sim$ Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.	
Item Code	EV-CURVE-ADV-AIR-312-30W-

Item Code	EV-CURVE-ADV-AIR-312-30W- DW

MECHANICAL	
Body Material	Cold rolled steel
Diffuser Material	PMMA
Product Finish	Powder coated
Fitting Colour	White
Installation Type	Recessed
IP Rating	IP40

ELECTRICAL	
Electrical Rating	Class II
Input Current	0.16 A
Input Frequency	50 Hz
Input voltage	230Vac

In Australia the Input voltage is defined as 230Vac -6%/+10%. This effectively means that the voltage range of these products are 216Vac - 253Vac or 240V +6%



Maximum Wattage	30 W
Power Factor	0.95
Switch Type	Via DALI
Working Temp Range	0 to 40 °C

LAMP	
Macadam Steps (SDCM)	4-step MacAdam Ellipse
CCT Configuration	Single
CRI	>80
Lamp/LED Current	800 mA
Lamp/LED voltage	36 V
System Efficiency	153 lm/W
UGR	<22

UGR (Unified Glare Rating) is reported as per AS/NZS 1680.2 using the following design parameters; room reflectance 0.7/0.5/0.2 (C/W/F), ceiling height 2.7m, LLF=0.8 (Nominal) from the corrected UGR table.

# **LED LIFETIME**

## **LED Lifetime** >54,000 hrs

This is the Reported LED Lifetime in Hours based on TM-21. Ektor does not list the projected or calculated LED lifetime, which is normally longer as TM-21 Addendum B explicitly states "The Calculated and Projected Lp(Dk) are not to be reported". This Lifetime refers to the life of a single LED however the system life is longer since the probability and binomial distribution of all LEDs in the system means that the average led is performing above the specification and compensates for the LEDs falling below.

Ambient Temp (°C)	25 °C	40 °C
L90B10	53,000 hrs	53,000 hrs



L80B10	>54,000 hrs	>54,000 hrs
L70B10	>54,000 hrs	>54,000 hrs

This rating defines the performance of the led within its lifetime. L relates to lumen depreciation, where the proceeding number gives the resultant lumen output at the end of it reported lifetime. L70, would mean 30% lumen depreciation which means 70% of its initial output and is tested accordingly to TM-21. The B part refers to failures, which can be define as the percentage of LEDs which fall below the L value in the projected lifetime. A value of B10 refers to 10% failure and a value of B50 refers to 50% failure. After the defined lifetime, the system will reach the defined lumen depreciation and the average led failures is defined by the B rating. The B rating is defined in and tested to IEC62717.

TM-21 Test Hours	9000 hrs

COLOUR TEMPERATURE	
CCT	4000 K
Luminaire Lumens	4600 lm

All photometric data has a tolerance of  $\pm 10\%$ . Luminaire lumens refers to the exit lumens or delivered lumens from the luminaire.

DRIVER	
Dimmable	Yes
Driver Included	Yes
Integrated Driver	No
Driver Mode	Constant Current
Driver Type	DALI DT6 LED Driver

DALI DT6  $\sim$  Includes DALI-2 Driver with full support for DT6 allowing flicker free dimming with compliant DALI-2 Application controllers.

Flex & Plug or Lead Length	2400 mm
Wiring Type	WBC Plug (5 pin)

WBC ~ Supplied with a Wire by click- 5 pin plug, model number LA1025/5

#### **COMPLIANCE**

## Product Design Life 8 years

The product design life relates to the total product life which includes LEDs, drivers and the enclosure. This is different to the LED lifetime which only refers to the economical lifetime of the LEDs at which time the lumen output has dropped below the L Value. The product design life is calculated at the maximum ambient or working temperature of the product and takes into account the Daily Use.

#### **Daily Use** 16 hrs

The Daily Use is the recommended time required to meet the product's design life. Installations can exceed this time, however the product design life will be reduced proportionally.

Standards	AS/NZS 60598.1	
	AS/NZS 60598.2.2	
	AS/NZS 61347.1	
	AS/NZS 61347.2.13	
	IEC/TR 62778	
	IEC 62031	
	AS/NZS 61535.1	
	AS CISPR 15	
	IEC 62386-102	
	IFC 62386-207	

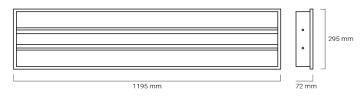
WARRANTY	
Commercial Use Warranty	5 RTB (Total 5 Years)
Warranty Operating Hours	30000 hrs

This product is provided with a warranty up until the stated warranty period or until the stated warranty operating hours has been reached (whichever occurs first).

DIMENSIONS	
Product Height	72 mm
Product Length	1195 mm
Product Width	295 mm

#### **LINE DRAWINGS**

#### EV/CURVE/ADV/312



#### **PHOTOMETRICS**

#### EV/CURVE/ADV/AIR/312/30W

