Product information sheet and technical documentation for **Asteria medium (light-source)**

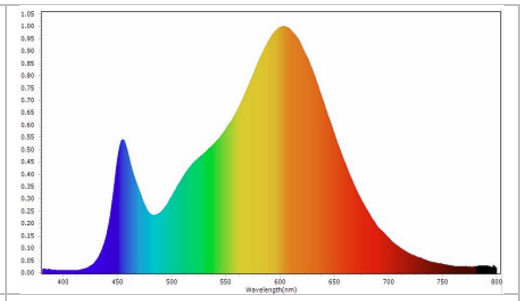
Supplier name: UMAGE ApS

Supplier address: Havnegade 29, 1058 Copenhagen Denmark

Model identifier: Light-source contained in all “Asteria medium” models

Type of light source: Custom PCB with SMD LED’s

Lighting technology used:	LED
Light-source cap type	Custom PCB with SMD LED’s
Non directional or direction light?	Non directional
Mains connected or non-mains connected?	Non-mains connected
Connected light source?	No
Color-turnable light source?	No
Envelope:	No
High luminance light source:	No
Anti-glare shield:	No
Dimmable:	Only with specific dimmers
General product parameters:	
Parameter	**Value**
Electric parameters input:	19,7V DC 700mA
Electric parameters output:	N/A
Energy consumption in on-mode (kWh/1000 h) (rounded up to nearest integer):	14 kWh/1000h
Energy efficiency class:	D
Useful luminous flux, indicating if it refers to the flux in a sphere (360°), in a wide cone (120°) or in a narrow cone (90°):	2308 in sphere
Correlated color temperature, rounded to the nearest 100 K, or the range of correlated color temperatures, rounded to the nearest 100 K, that can be set:	3000 K
On-mode power, expressed in W:	13,8 W
Standby power, expressed in W:	0 W
Network standby power for CLS (connected light source), expressed in W:	N/A
Color rendering index (CRI) rounded to the nearest integer, or the range of CRI values that can be set:	84
Outer dimension in mm (excluded cord, separate control gear, lighting control parts, canopy, non-lighting control parts, if any)	Height = 410
	Width = 410
	Depth = 1,2

Spectral power distribution	
Claim of equivalent power:	No
If yes to "claim of equivalent power", then equivalent power (W) is:	N/A
Chromaticity coordinates (x and y):	x = 0,437 y = 0,400
Parameters for directional light sources:	
Parameter	**Value**
Peak luminous intensity (cd) if directional light source:	N/A
Beam angle in degrees, or the range of beam angles that can be set if directional light source:	N/A
Parameters for LED and OLED light sources:	
Parameter	**Value**
R9 color rendering index value:	14
Survival factor:	0,9
Lumen maintenance factor:	0,96
LED life time	25000 hours
Parameters for LED and OLED mains light sources:	
Parameter	**Value**
Displacement factor (cos ϕ1):	N/A
Color consistency in McAdam ellipses:	N/A
Flicker metric (Pst LM]:	N/A
Stroboscopic effect metric (SVM):	N/A

Calculation of energy efficiency class according to (EU) 2019/2015 Annex II:

$$\frac{Useful\ luminous\ flux\ [lm]}{Max\ power\ consumption\ [W]} \times Light\ source\ type\ factor = Total\ mains\ efficacy\ \left[\frac{lm}{W}\right]$$

$$Calculation:$$

$$\frac{2308}{13{,}8} \times 0{,}926 = 154{,}9$$

$$154{,}9 = Energy\ effiency\ class\ \boldsymbol{D}$$

Calculation of energy efficiency requirements according to (EU) 2019/2020 Annex II:

$$Correction\ factor \times \left(End\ loss\ factor + \frac{Useful\ luminous\ flux\ [lm]}{(Efficacy\ factor \times Threshold\ efficacy)}\right) \times CRI\ factor = Maximum\ allowed\ power[W]$$

$$Calculation:$$

$$1{,}00 \times \left(1{,}5 + \frac{2308}{(1{,}00 \times 120{,}0)}\right) \times 1{,}03 = 21{,}4\ W$$

Reference to harmonized standards used and testing conditions:

Please see separate test reports in EPREL database

Reference control settings, and how to implement them if applicable:

N/A

How to remove/switch off lighting control parts / non-lighting control parts, if any during light-source testing:

N/A

Specific precautions that must be taken when model is assembled, installed, maintained or tested:

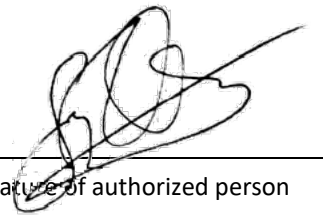
N/A

How to remove light-source and/or separate control gear for verification:

See user guide, which can be downloaded on our website

Technical justification for why replacement of light-source and/or control gear is not appropriate, if applicable:

N/A

23-08-2021	Søren Ravn Christensen Chief Creative Developer & Partner	
Date of issue	Name of authorized person	Signature of authorized person