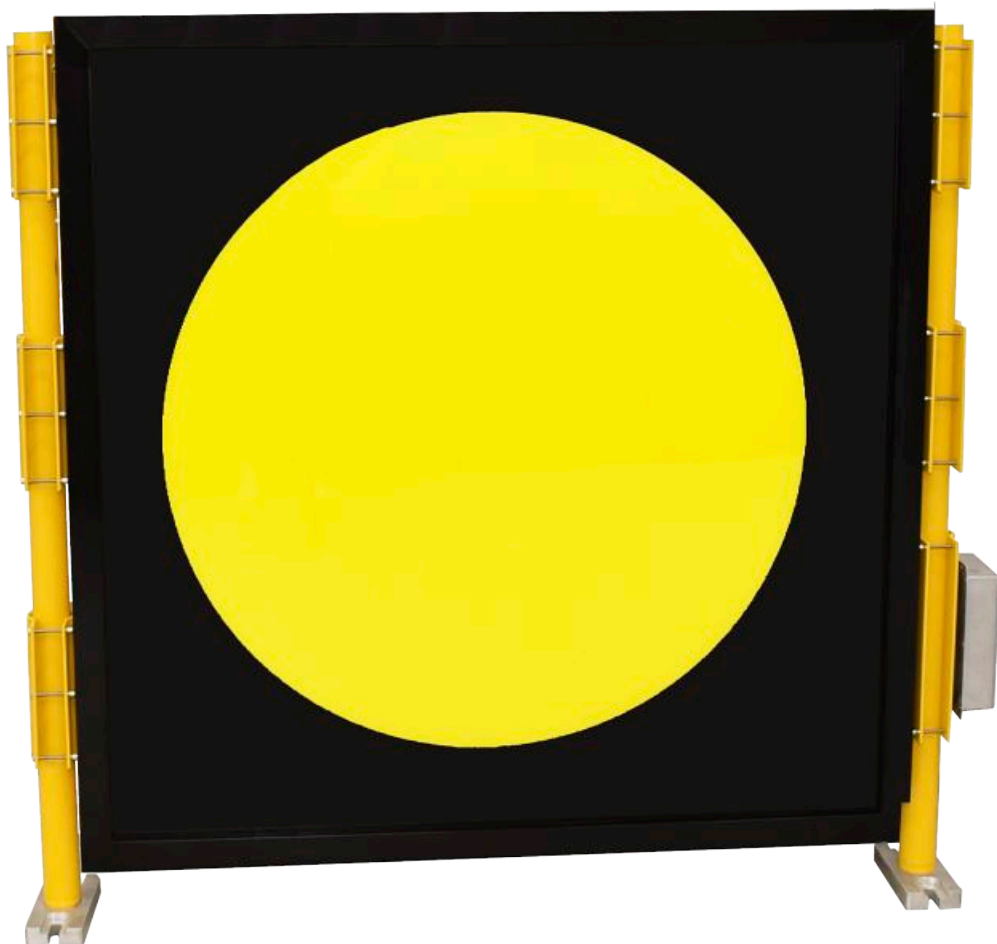



# AGMs

Arresting Gear Marking

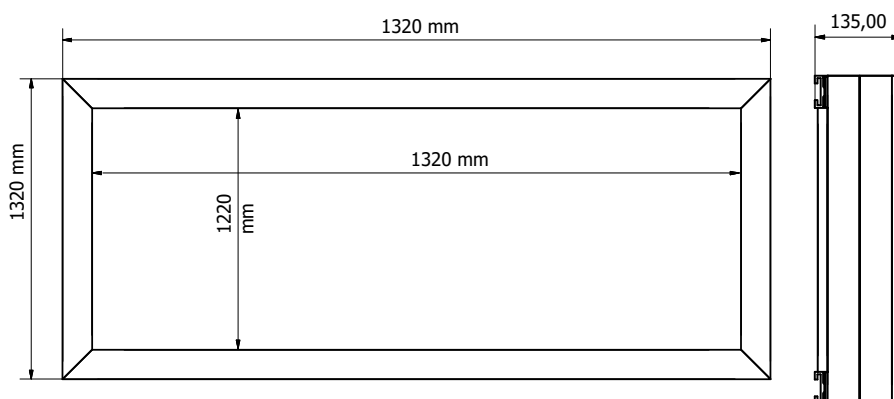


<b>Compliance to standards</b>	<p><b>ICAO:</b> Annex 14, Volume I - Aerodrome Design and Operations Annex 14, Volume II - Heliports</p> <p><b>FAA :</b> AC 150-5220-9A</p>								
<b>Application</b>	<p>Arrestor Gear Markers (AGMs) taking the form of an internally-lighted yellow translucent circle approximately 39 inches / 1 metre in diameter on a square black background should be present on both sides of the runway at or within 10 feet /3 metres of the cable position and equidistant from the runway edge.</p>								
<b>Features</b>	<p>Designed and built with simplicity and ease of maintenance in mind. High power LED technology. Lightweight, low-energy and environment friendly lighting fitting. Extensive use of aluminium alloys reduces fitting weight and eases handling in the field.</p>								
<b>Product Code</b>	<p><b>AL - 070 - XXX - YY</b></p> <table> <tr> <td>Series Indicator (Airfield Lighting)</td><td><b>AL</b></td></tr> <tr> <td>Product Indicator</td><td><b>070</b></td></tr> <tr> <td>Length of the panel in centimetres</td><td><b>XXX</b></td></tr> <tr> <td>Height of the panel in centimetres</td><td><b>YY</b></td></tr> </table> <p><b>Note:</b> Each ordering code shall be completed with the legend panels, colours and any additional options required.</p>	Series Indicator (Airfield Lighting)	<b>AL</b>	Product Indicator	<b>070</b>	Length of the panel in centimetres	<b>XXX</b>	Height of the panel in centimetres	<b>YY</b>
Series Indicator (Airfield Lighting)	<b>AL</b>								
Product Indicator	<b>070</b>								
Length of the panel in centimetres	<b>XXX</b>								
Height of the panel in centimetres	<b>YY</b>								

<b>Description</b>	<div>  </div> <p><b>Housing</b> - Powder coated aluminium RAL 1004 (aviation yellow)</p> <p><b>Fastening system powder</b> - coated aluminium, RAL 1004 (aviation yellow)</p> <p><b>Front and back pane</b> - 4mm thick polycarbonate UV and abrasion resistant.</p> <p><b>Cable gland</b> - nickel plated brass</p> <p><b>The AGMs</b> consist of a rigid, self-supporting aluminium extruded profile frame holding the front and rear panels, the LED strings and the diffuser. Construction is modular with commonality of mechanical and electrical components throughout the entire sign range.</p> <p><b>The FASCIA</b> message is obtained by applying, on the inner face of the panel only, a self-adhesive film optimise for lighting applications using LED light sources and eliminating glare whilst providing a uniform colour.</p> <p><b>The legs</b> are mounted on the side of the sign, participating actively in the sign's mechanical strenght.</p>
<b>Environment</b>	<p><b>Temperature range:</b> - 40° to +55°</p> <p><b>Degree of protection:</b> IP 65 or better</p> <p><b>Humidity:</b> 0 - 100%</p> <p>FASCIA message is guaranteed for a period of 10 years.</p> <p>The sign is designed to withstand wind velocities up to 320 km/h.</p> <p>The legs have provision for attaching an optional safety cable to hold the sign captive to the mounting flanges if the legs break.</p>
<b>Mounting</b>	<p>Sirius - AGMs have to be installed on a concrete foundation at the recom-mended distance from the runway or taxiway edge.</p> <p>Low-weight construction allows for ease of handling and installation of the Sirius by two men.</p> <p>Legs flanges are secured on the foundation using expansion bolts.</p>

## Mechanical Characteristics

<b>Fascia:</b>	Face of 1220x1220 mm
<b>Total dimension:</b>	1320x1320 mm
<b>Pole dimension:</b>	400 mm
<b>Pole bases:</b>	included
<b>Anchore cable:</b>	included
<b>Packaging:</b>	carboard and copliant wooden crate.



## Electrical Characteristics

<b>Power consumption</b>	40W
<b>Power supply</b>	Type M - 110/230VAC from mains Type S - 2.8 up to 6.6A series circuit Solar power pack

### Electrical Instalation

The AGMs can be supplied in either a 110/230V AC powered configuration, a 2.8 up to 6.6A series circuit, or photovoltaic system. Please ensure that you connect the equipment to the correct supply.

#### Connecting to a Type M - 110/230VAC supply:

The 110/230V AC sign issupplied with a 3-core (3 x 1.0mm<sup>2</sup>) 1m flying lead. The overall diameter of the cable is nominally 7.5mm. Connect the free ends of the cable to the proper voltage source.

#### Connecting to a Type S - 2.8 up to 6.6A series circuit:

The sign is supplied with a 300mm flying lead and a factory fitted L-823 con-nector. The connector can be plugged directly into the secondary circuit. ON/OFF switch included.

#### Connecting to a solar power pack supply:

The sign is supplied with a 2-core (2 x 1.0mm<sup>2</sup>) 1m flying lead. The overall di-iameter of the cable is nominally 7.5mm.

## Photometric Characteristics

	Average luminance (cd/m <sup>2</sup> )			
	Yellow background	Red background	White lettering	Yellow lettering
Required	150 cd/m <sup>2</sup>	30 cd/m <sup>2</sup>	300 cd/m <sup>2</sup>	150 cd/m <sup>2</sup> 456
Calculated	567 cd/m <sup>2</sup>	50.7 cd/m <sup>2</sup>	346 cd/m <sup>2</sup>	cd/m <sup>2</sup>

	Max ratio of luminance between points	
	Yellow background	Red background
Required	1.5 : 1	1.5 : 1
Calculated	1.44	1.44

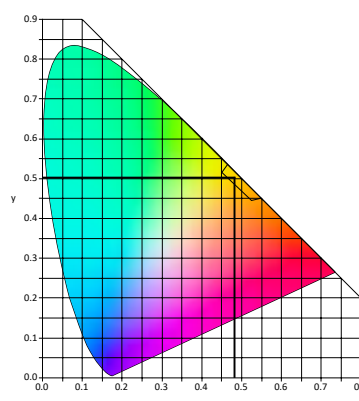
	Ratio between max and min values	
	Yellow background	Red background
Required	5 : 1	5 : 1
Calculated	1.64	1.72

### The brightness intensity values complies with:

ICAO requirements Annex 14 Vol.1, Appendix 4

### Emitted light - trichromatic coordinates

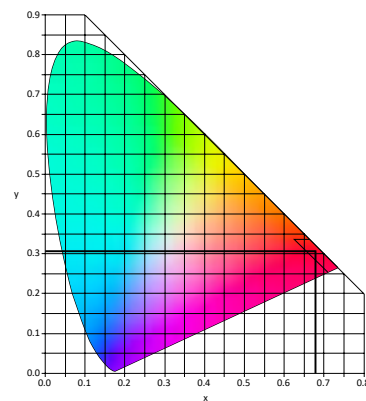
Yellow  
Background



x=0,482  
y=0,505  
z=0,013

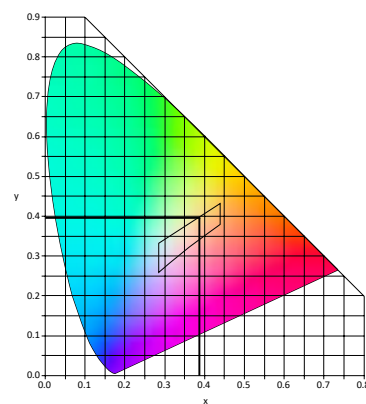
**Photometric Characteristics**

Red  
Background



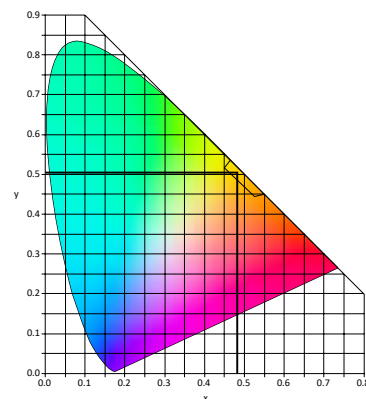
$x=0,684$   
 $y=0,315$   
 $z=0,001$

White  
Lettering



$x=0,390$   
 $y=0,395$   
 $z=0,215$

Yellow  
Lettering



$x=0,480$   
 $y=0,506$   
 $z=0,014$

**The measured trichromatic coordinates correspond to colour range requirements in:**

ICAO Annex 14 - Aerodromes Vol.1, fig. A1-1-1b.  
Colours for aeronautical ground lights (solid state lighting)

**Subassemblies**

Depending on the length of the signs, they have the following power supplies:

**Where XXX represents power supply type and light brightness**

- 120 - 2.8 up to 6.6A constant light brightness
- 121 - 2.8 up to 6.6A dimmable light brightness
- 122 - 230V constant light brightness



**Signalight**

**+40 254 515 465**  
**office@signalight.com**

36 Lunca Street, Petrosani,  
Hunedoara County, Romania

**[www.signalight.com](http://www.signalight.com)**