ALL COLOURS OF LIGHT

70˚x30˚ Monocolour Engines Family Overview

ACOL's 70x30 monocolour LED modules provide up to four times the light output of best in class 5 mm LEDs. And with our patented thermal management and high-level integration OEMs can build signs easier than ever before.

Build on a better foundation – build on ACOL

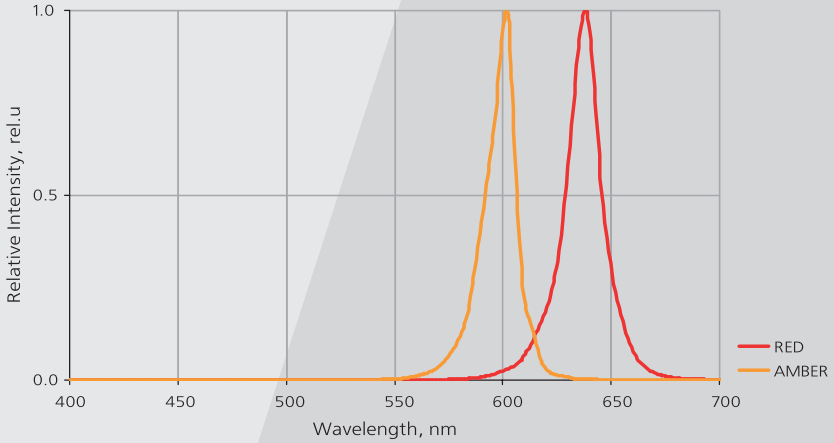
PRODUCT PERFORMANCE SUMMARY

Colour	Viewing Angle $2\Theta_{1/2}$, deg. (Fig.2) [3]	Typical dominant wavelength, nm [2] (Fig.1)			Part Number [4]	Luminous intensity per light point I_v, cd, at I_f=80 mA [1]	
		Min.	Typ.	Max.		Min.	Typ.
RED	70° x 30°	620	625	630	MC15-0080-070A-0090-RD	5	6
AMBER	70° x 30°	585	590	595	MC20-0080-070A-0160-AM	7	8

Notes:

1. The luminous intensity is measured on the mechanical axis of cluster.
2. Per CIE Chromaticity Diagram 1931.
3. $\Theta_{1/2}$ is the viewing angle with the luminous intensity of one half the on-axis intensity (Fig.2)
4. First group of four digits in the part number indicates the number of light points per cluster: 15 for red, 20 for amber.

Figure 1. Relative Intensity vs. Wavelength



Document # ADS0S-2 05/06

ABSOLUTE MAXIMUM RATINGS

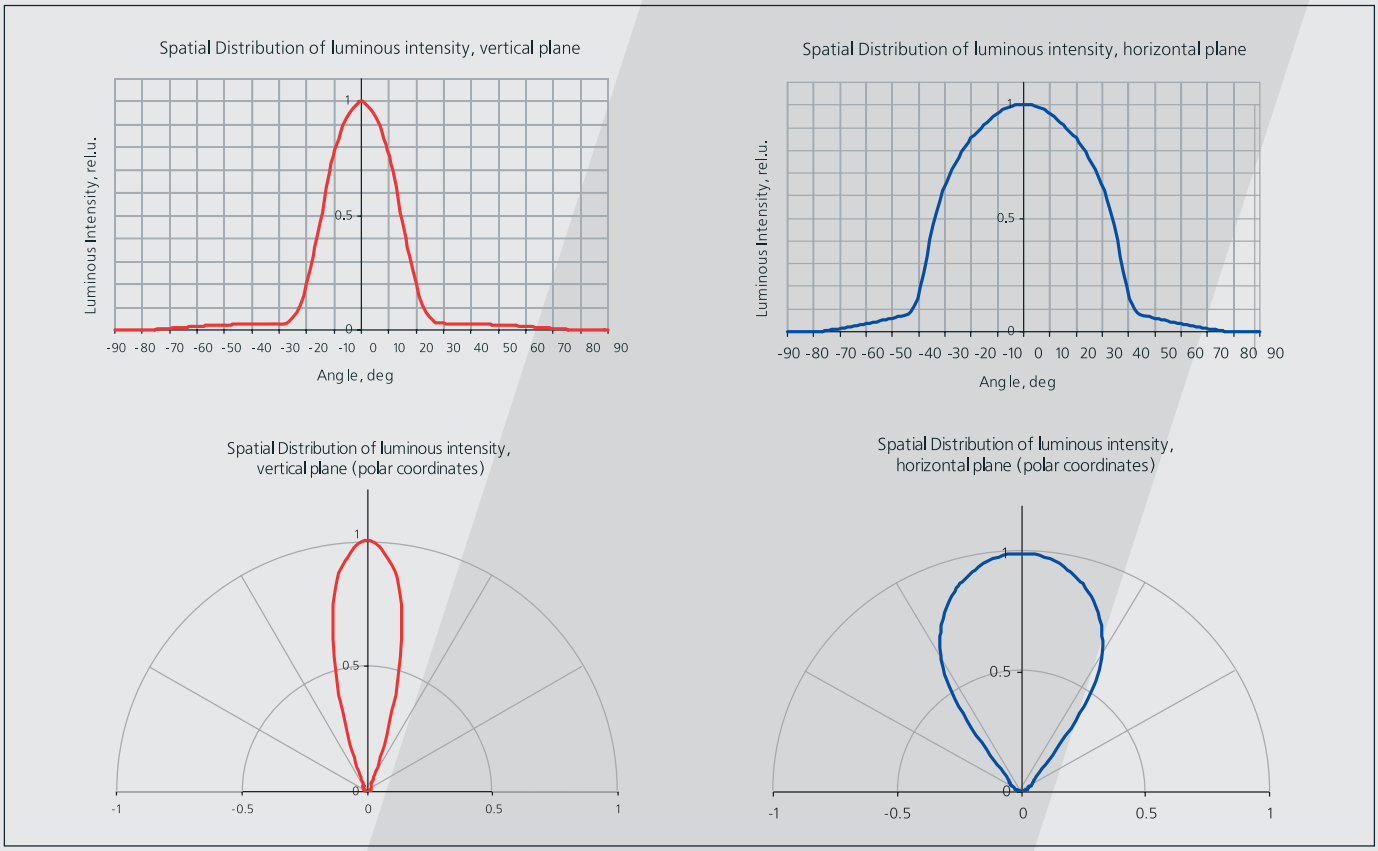
Forward current per light point at T_{amb} = 25°C [1]	80 mA
Minimum forward voltage	0 V
Operating Temperature, ambient	-40°C to +60°C

Notes:
1. For long term performance with minimal light output degradation, drive currents per light point between **10 mA** and **80 mA** are recommended. Please contact your ACOL sales representative for details

ELECTRICAL/OPTICAL CHARACTERISTICS at T_A=25°C

Parameter	Symbol	Typ.	Max.	Units	Test Conditions
Forward Voltage per each light point					
RED	V_f	2.5	3.0	V	I_f = 80 mA
AMBER	V_f	2.5	3.0	V	I_f = 80 mA
Reverse Current per each light point	I_r		10	µA	V_r = 5 V

Figure 2. Representative Spatial Radiation Pattern



MECHANICAL AND ELECTRICAL LAYOUTS

Mechanical and electrical layouts are at the discretion of the OEM. ACOL can adapt the electronic board to major customer requirements. In addition, ACOL can place a combination of mounting holes and light points position as specified by the OEM.

For technical assistance or the location of your nearest ACOL sales office, call:

Worldwide: +41 22 306 0910
US: +1 508 347 0111
Asia: +886 3 320 1738
Europe: +41 22 306 0910

ACOL Technologie

Email us at **sales@acol.com**

Document # ADS05-2 05/06