

IALA RECOMMENDATION

R0201(E200-1) MARINE SIGNAL LIGHTS - COLOURS

Edition 3.0

December 2018

DOCUMENT HISTORY

Revisions to this IALA document are to be noted in the table prior to the issue of a revised document.

Date	Page / Section Revised	Approval
December 2008	1 st Edition	Council 44
December 2017	Entire document: Removal of temporary regions and explanations. Removal of explanatory annex content to a Guideline. Document style updated.	Council 65
December 2018	Chromaticity chart Figure 1: Correction to blue region.	Council 68

THE COUNCIL

RECALLING:

- 1 The function of IALA with respect to Safety of Navigation, the efficiency of maritime transport and the protection of the environment.
- 2 Article 8 of the IALA Constitution regarding the authority, duties and functions of the Council.

RECOGNISING

- 1 The need to provide guidance within which the colours and colour boundaries of lights on aids to navigation should be determined.
- 2 That such guidance should enable a common approach to be made world-wide, thus greatly assisting mariners, who, while passing through waters of different authorities, should not be confused by light colours that are ambiguous.

NOTING that this document only applies to Marine Aid-to-Navigation lights installed after the date of this publication.

ADOPTS the tables and charts in the annex of this recommendation.

INVITES Members and marine aids to navigation authorities worldwide to implement the provisions of the Recommendation.

RECOMMENDS that National Members and other appropriate Authorities providing aids to navigation services:

- note that the colour model used throughout all specifications is the chromaticity chart according to the CIE 1931 standard colorimetric observer (2° observer);
- adopt the system for coloured light signals set out in the annex to this Recommendation.

REQUESTS the IALA AtoN Engineering and Sustainability Committee or such other committee as the Council may direct to keep the Recommendation under review and to propose amendments as necessary.

ANNEX A COLOUR REGIONS

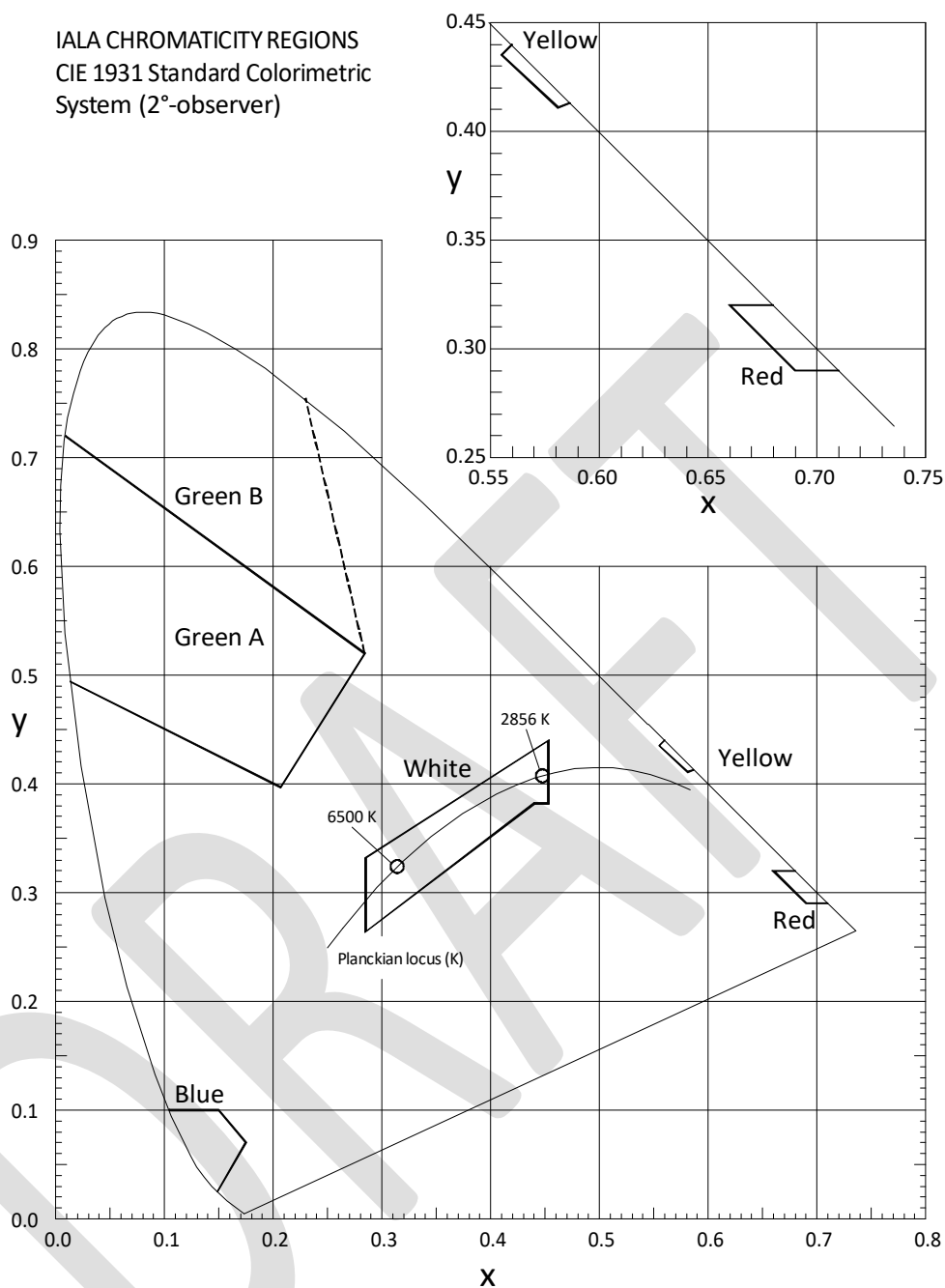
Table 1 Chromaticity Corner Coordinates

Colour	1		2		3		4		5	
	x	y	x	y	x	y	x	y	x	y
Red	0.710	0.290	0.690	0.290	0.660	0.320	0.680	0.320		
Yellow	0.5865	0.413	0.581	0.411	0.555	0.435	0.560	0.440		
Green A	0.009	0.720	0.284	0.520	0.207	0.397	0.013	0.494		
Green B	0.2296	0.7543	0.284	0.520	0.207	0.397	0.013	0.494		
White	0.440	0.382	0.285	0.264	0.285	0.332	0.453	0.440	0.453	0.382
Blue	0.104	0.100	0.150	0.100	0.175	0.070	0.149	0.025		

Note:

- Colours are specified with CIE 1931 standard colorimetric observer (2°-observer).
- The boundaries between the colours at spectrum locus is the spectrum locus.
- Green A is the preferred region for all green lights.
- Green B is an accepted region, where Green A cannot be achieved with the required luminous intensity for the intended application.

Figure 1 Chromaticity chart



Note:

- The boundaries between the colours at spectrum locus is the spectrum locus.
- Green B includes Green A completely.

Reference:

ISO 11664-1:2007(E)/CIE S 014/E:2006 CIE Colorimetry – Part 1: Standard Colorimetric Observers