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| IALA RECOMMENDATION |

Draft

Marine Signal Lights

Colours

Edition x.x

Document date

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

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| Date | Page / Section Revised | Requirement for Revision |
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THE COUNCIL

**RECALLING** the function of IALA with respect to Safety of Navigation, the efficiency of maritime transport and the protection of the environment;

**RECOGNISING** the need to provide guidance within which the colours and colour boundaries of lights on aids to navigation should be determined;

**RECOGNISING ALSO** that 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** 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; and,

**RECOMMENDS**

* that the colour model used throughout all specifications is the chromaticity chart according to the CIE 1931 standard colorimetry system (2°-observer);
* that National Members, other appropriate Authorities and manufacturers providing marine aids to navigation services adopt the system for coloured light signals set out in the Annexes to this Recommendation.

1. 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 System (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 the accepted region for high intensity LED lights, where investigations have shown that Green A cannot be achieved with suitable LEDs.
* This recommendation will be reviewed every IALA 4 year work period.

Figure 1 Chromaticity chart



Note:

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