Input paper: [[1]](#footnote-1) ENG5-9.18.1

Input paper for the following Committee(s): check as appropriate Purpose of paper:

**□** ARM **🗹** ENG **□** PAP **🗹** Input

**□** ENAV **□** VTS **□** Information

Agenda item [[2]](#footnote-2) 9

Technical Domain / Task Number 2 Visual

Author(s) / Submitter(s) A. Williams

Determination and Calculation of Effective/Apparent Intensity

# Summary

The attached documents are draft Recommendation and Guideline documents on the Determination and Calculation of Effective Intensity. The documents are based on the existing IALA Recommendation E200-4, and have been separated into a simplified recommendation and a new guideline.

The documents are for consideration at the ENG5 meeting to determine the way forward on these documents.

This input is in response to Action item 39 from ENG4.

## Purpose of the document

The committee is to consider the attachments as draft recommendation and guidelines documents.

## Related documents

* Existing IALA Recommendation E200-4
* ENG5-9.18.2 Attached draft IALA Recommendation E200-4 (if that is what it will be called).
* ENG5-9.18.3 Attached draft IALA Guideline (yet to be numbered).

# Background

The ENG committee is asked to review existing documentation in light of the new documentation structure of the organisation. The attached draft documents are intended to do this for the existing IALA Recommendation E200-4. It also updates the current recommendation to use the Modified Allard Method only.

# Discussion

The two attached documents have been created from the existing IALA Recommendation E200-4 that originally specified 4 different methods of determining the effective intensity of a marine AtoN light. Recent work carried out by CIE suggests that the Modified Allard Method is the only method that should now be used, and that other methods have been superseded. The draft documents takes this development into account.

However, recall that at ENG4, the GLA submitted documents that suggests that while the procedure of the Modified Allard Method is appropriate at supra-threshold illumination, the visual impulse response function, q(t), needs to be modified to fit with observed results.

The change would be relatively simple to implement in the draft recommendation/guideline, but would require discussion and agreement at the Committee level to change the documents from the topic of effective intensity to apparent intensity. The draft documents would then incorporate a modified q(t), as recommended in a GLA input document to ENG4 [1].

# References

1. Input document ENG4-9-7-3: Visual Perception of Non-Rectangular Flashes at Supra-Threshold

# Action requested of the Committee

The Committee is requested to:

1. Consider the structure of the draft recommendation and guideline, and determine whether it fits with the new IALA documentation structure.
2. Consider whether the visual impulse response function, q(t), should be revised to the shear q(t) that seems to fit more accurately with observed data than the original Modified Allard Method.

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Leave open if uncertain [↑](#footnote-ref-2)