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Temporal Light Artifacts: Test Methods and Guidance for Acceptance Criteria

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CONTENTS

Foreword iv

1 General 1

1.1 Scope 1

1.2 References 1

2 Definitions 3

2.1 Flicker 3

2.2 Flicker Index 3

2.3 Jitter 3

2.4 Maximum Light Output Waveform (MLOW) 4

2.5 Modulation Depth 4

2.6 Percent Flicker 4

2.7 Phantom Array Effect 4

2.8 Short Term Flicker Indicator, P_{st} 4

2.9 Stroboscopic Effect 4

2.10 Stroboscopic Visibility Measure (SVM) 4

2.11 Temporal Light Artifact (TLA) 5

3 Background 5

3.1 TLA in Common Experience 5

3.2 Quantification of TLA 5

3.2.1 Modulation Depth and Flicker Index 6

3.2.2 Review of IEEE 1789 Metrics and Recommendations 7

3.2.3 Balancing TLA Requirements with Performance Requirements 8

3.2.4 Metrics for Objective Assessment of TLA Visibility 9

4 Selected Metrics 14

5 Measurement Method—Light Source 14

5.1 General 14

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5.2 Testing Environment 15
5.3 Mains Supply 15
5.4 Test Equipment 15
5.5 Data Collection 16
5.6 Detailed Instructions 17
5.6.1 Equipment Setup for Light Source DUT 18
5.6.2 Test Procedure for Light Source DUT 18
5.6.3 Confirm Data Integrity 20
5.6.4 Evaluate Results 21
5.7 Conditions of Testing 22
6 Measurement Method—Dimmer 23
6.1 General 23
6.2 Testing Environment 23
6.3 Mains Supply 23
6.4 Test Equipment 23
6.5 Data Collection 24
6.6 Detailed Instructions 26
6.6.1 Equipment Setup for Dimmer DUT 26
6.6.2 Test Procedure for Dimmer DUT 27
6.6.3 Confirm Data Integrity 28
6.6.4 Evaluate Results 28
6.7 Conditions of Testing 29
7 Recommendations 29
Annex A 31

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FIGURES

Figure 1 Definitions of Percent Flicker (Also called Modulation Depth or Modulation Percent) and Flicker Index 3
Figure 2 Example of Stroboscopic Effect 6
Figure 3 Comparison of IEEE 1789 Recommended Limits with Several Existing Light Sources and with SVM and Pst 7
Figure 4 Plot of ASSIST and IEC Pst metrics Calculated for a 30% Modulation Depth Single-Frequency Sine Wave Light Waveform 10
Figure 5 Plot of the Visibility Threshold 11
Figure 6 Plot of the SVM Metric, as a Function of Frequency, for Single Sine Wave Modulation 12
Figure 7 Plot of the SVM Metric 13
Figure 8 Equipment setup for TLA measurement of a light source. 14
Figure 9 General Test Procedure for Light Sources 18
Figure 10 Setup Measurement Equipment and Light Source DUT 18
Figure 11 Procedure for Collecting Light Source TLA Data 20
Figure 12 Confirm Light Source Data Integrity 21
Figure 13 Procedure to Evaluate Light Source DUT Measurements 22
Figure 14 Equipment Setup for Dimmer Measurement 23
Figure 15 Output of Dimmer DUT 25
Figure 16 General Test Procedure for Dimmers 26
Figure 17 Setup Measurement Equipment and Dimmer DUT 26
Figure 18 Procedure to Collect Dimmer Data 27
Figure 19 Procedure to Confirm Dimmer Data Integrity 28
Figure 20 Procedure to Evaluate Dimmer DUT Measurements 29

TABLES

Table 1 Equipment Requirements for TLA Measurement 16
Table 2 Data Sampling Scheme 17
Table 3 Column Headings for Measurement Data Map 17
Table 4 Equipment Requirements for Dimmer TLA Measurement 24
Table 5 Format for Data Results Table 25
Table 6 Guidelines for Pst and SVM Acceptance Criteria 30

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Foreword

A NEMA working group formed by a compilation of the Lighting, Lighting Controls, and Luminaire Sections has prepared this standard, *Temporal Light Artifacts: Test Methods and Guidance for Acceptance Criteria*. This standard provides measurement methods for metrics that address temporal light artifacts (TLA) for light sources, as well as measurement methods for leading-edge phase cut dimmers. It provides initial broad guidelines for limits on these metrics.

Inquiries, comments, and proposed or recommended revisions should be submitted to:

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Section approval of the standard does not necessarily imply that all section members voted for its approval or participated in its development.

At the time the standard was approved, the Lighting Controls, Light Source and Luminaire sections were composed of the following members:

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1 General

1.1 Scope

The purpose of the standard is to recommend a method of quantifying the visibility of temporal light artifacts (TLA) and to recommend initial, broad application-dependent limits on TLA.

The photometric recommendations and measurement methods are applicable to any lighting equipment (e.g., luminaires, light engines, self-ballasted lamps, drivers, and sensors) with any control system. Specific recommendations and measurement methods for controls are only included for phase-cut dimming.

The standard applies to visibility of TLA to human observers in applications with limited speeds of motion, such as an office environment. It does not address interference with optical equipment such as cameras and bar-code scanners. It does not address the potential for adverse stroboscopic effect in high-speed environments, such as machine shops. It does not address the phantom array effect.

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