ANSI/IES RP-6-22

Illuminating
ENGINEERING SOCIETY

RECOMMENDED PRACTICE:
LIGHTING SPORTS AND RECREATIONAL AREAS

AN AMERICAN NATIONAL STANDARD

Approved American National Standard
ANSI

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Publication of this document has been approved by IES. Suggestions for revisions should be directed to IES.

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Prepared by the IES Sports and Recreational Area Lighting Committee.

CONTENTS

Preface

This Preface is not part of ANSI/IES RP-6-22. It is provided for informational purposes only.

This Recommended Practice (RP) does not provide general lighting information that is included in other IES documents. If the reader does not already have this information, it may be obtained as needed from the following IES Standards:

The Lighting Science Series:

- *ANSI/IES LS-1-22, Lighting Science: Nomenclature and Definitions for Illuminating Engineering*
- *ANSI/IES LS-2-20, Lighting Science: Concepts and Language of Lighting*
- *ANSI/IES LS-3-20, Lighting Science: Physics and Optics of Radiant Power*
- *ANSI/IES LS-4-20, Lighting Science: Measurement of Light – The Science of Photometry*
- *ANSI/IES LS-5-21, Lighting Science: Color*
- *ANSI/IES LS-6-20, Lighting Science: Calculation of Light and Its Effects*
- *ANSI/IES LS-7-20, Lighting Science: Vision – Eye and Brain*
- *ANSI/IES LS-8-20: Lighting Science: Vision – Perceptions and Performance*

The Lighting Practice Series:

- *ANSI/IES LP-1-20, Lighting Practice: Designing Quality Lighting for People and Buildings*
- *ANSI/IES LP-2-20, Lighting Practice: Designing Quality Lighting for People in Outdoor Environments*
- *ANSI/IES LP-3-20, Lighting Practice: Designing and Specifying Daylighting for Buildings*
- *ANSI/IES LP-4-20, Lighting Practice: Electric Light Sources – Properties, Selection, and Specification*
- *ANSI/IES LP-6-20, Lighting Practice: Lighting Control Systems – Properties, Selection, and Specification*
- *ANSI/IES LP-7-20, Lighting Practice: The Lighting Design and Construction Process*
- *ANSI/IES LP-8-20, Lighting Practice: The Commissioning Process Applied to Lighting and Control Systems*
- *ANSI/IES LP-9-20, Lighting Practice: Upgrading Lighting Systems in Commercial and Industrial Facilities*
- *ANSI/IES LP-10-20, Lighting Practice: Sustainable Lighting – An Introduction to the Environmental Impacts of Lighting*
- *ANSI/IES LP-11-20, Lighting Practice: Environmental Considerations for Outdoor Lighting*
- *ANSI/IES LP-12-21, Lighting Practice: IoT Connected Lighting*
- *ANSI/IES LP-13-21, Lighting Practice: Introduction to Resilient Lighting Systems*
- *ANSI/IES LP-16-22, Lighting Practice: Documenting Control Intent Narratives and Sequences of Operations*
- *The Lighting Application Series: ...RP-11, RP-9, RP-43*

1.0 Introduction and Scope

1.1 Introduction

Over the years, there have been increases in the demand for both indoor and outdoor sports facilities. To meet the increase in demand, lighting is a cost-effective way to extend hours of play during hours of darkness. Lighting is also required for indoor sporting facilities during the day. With increasing power and operational costs, energy efficiency should be a key consideration when designing a lighting system.

There are some sports activities that are purely social or recreational and may not require even the minimum Class IV light levels recommended in this document. The facility's owner can use discretion to provide adequate lighting for safe and effective participation in those activities.

1.2 Scope

The purpose of this Recommended Practice is to provide the reader with recommendations to aid in the design of sports lighting systems. Popular sports such as baseball, tennis, basketball and football, as well as recreational social activities such as horseshoe pitching and croquet are covered. Venues for spectators of amateur, collegiate, and professional sports are complex facilities that should provide not only for the spectators but also the equipment used in modern sports broadcasting.