NCAA Best Lighting Practices

Goals:
1. Quality TV Broadcasts: To establish best practices for lighting televised NCAA events, providing quality broadcasts within a reasonable budget. The light level expectations are applicable for both SD and HD broadcast.
2. Value-based Lighting System: To provide recommended best practices for lighting college level sporting events with considerations for quality lighting for player safety; reduced energy, maintenance and life cycle costs; and environmental sensitivity.

Considerations:

Track & Field  Soccer  Volleyball / Baseball
Tennis  Swimming / Basketball*  Football  Lacrosse  Wrestling**  Softball
Infield / Outfield  Infield / Outfield  Water Polo  Ice Hockey
Volleyball

Horizontal Footcandles:
1.5:1 / 2:1 2:1 2:1 2:1 2:1 / 2.5:1 2.5:1 2:1 / 2.5:1 2.5:1 1.7:1 3:1 3:1 2:1 2:1
Vertical Uniformity:
N/A 2:1 2:1 2:1 2:1 2.5:1 2:1 2:1 2.5:1 2:1 2:1 2:1 2:1 2:1

Typical Seating:
N/A N/A Under 5K N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A

Pole position:
6+ poles N/A 4+ poles 4+ poles 4+ poles N/A 4+ poles 4+ poles 4+ poles N/A N/A

Horizontal Footcandles:
100 100 100 100 100 100 100 / 100 100 100 100 100 100 100 / 100 100
Vertical Uniformity:
N/A 1.7:1 1.7:1 1.7:1 1.7:1 1.7:1 1.7:1 / 1.7:1 1.7:1 1.7:1 1.7:1 1.7:1 1.7:1 / 1.7:1 1.7:1

Typical Seating:
N/A 35 - 45K N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A N/A

Pole position:
N/A N/A 6-8 poles 6-8 poles 6-8 poles N/A 6-8 poles N/A 6-8 poles N/A N/A N/A N/A

Horizontal Footcandles:
90 / 50 75 75 75 75 75 90 / 50 75 75 N/A N/A 75 75
Vertical Uniformity:
N/A 1.5:1 1.5:1 1.5:1 1.5:1 1.5:1 1.5:1 / 1.7:1 1.5:1 1.5:1 1.5:1 1.5:1 1.5:1 / 1.5:1 1.5:1

Notes:
1. All footcandle levels are target minimum averages
2. New HID lighting system designs are recommended to use 0.7 Recoverable Light Loss Factor or Constant Illumination
3. Lamp Characteristics
   a. LED - Recommended color temperature 4500 - 5700 degrees Kelvin
   b. LED - Minimum Color Rendering Index (CRI) must be 75
   c. HID - Minimum color temperature 4200 degrees Kelvin
   d. HID - Minimum Color Rendering Index (CRI) must be 65
4. Refer to the NCAA Broadcast Lighting Requirements for additional information
5. Refer to sport and broadcast specific documents for design examples and verification forms
6. Sports presentation should be considered for fan and TV enhancement for new LED systems
7. NCAA’s preferred Lighting Service provider is Musco Sports Lighting LLC

Contact NCAA at 317/917-6222 or www.NCAA.com with questions.