



# BDA30-48-35-ND-L-1-A-ESS-SM1-SN-ESS

**Luminaire Description:** Silver rectangular metal housing, reflectors, and patterned plastic  
**Lamp:** 112 White LEDs  
**Mounting:** Surface – Wall  
**Ballast/Driver:** AC Electronics AC10CD250AT2K

Luminaire



### Luminaire Characteristics

Luminous Length: 48.00 in.  
Luminous Width: 2.000 in.  
Luminous Height: 1.00 in.

### Summary of Results

#### Integrating Sphere

Luminous Flux: 530.1 Lumens  
Efficacy: 67.99 lm/w  
CCT: 3517 K  
CRI (Ra): 92.9

#### Distribution

Roadway Classification: Type IV, Very Short  
Cutoff Classification: Noncutoff  
BUG Rating: B0 U1 G1

#### Electrical Data at 120 VAC

Test Temperature: 24.5 °C  
Voltage: 120.1 VAC  
Current: 0.06518 A  
Power: 7.797 W  
Power Factor: 0.996  
Frequency: 60 Hz  
Current THD: 6.85 %



## Color Quality - Integrating Sphere

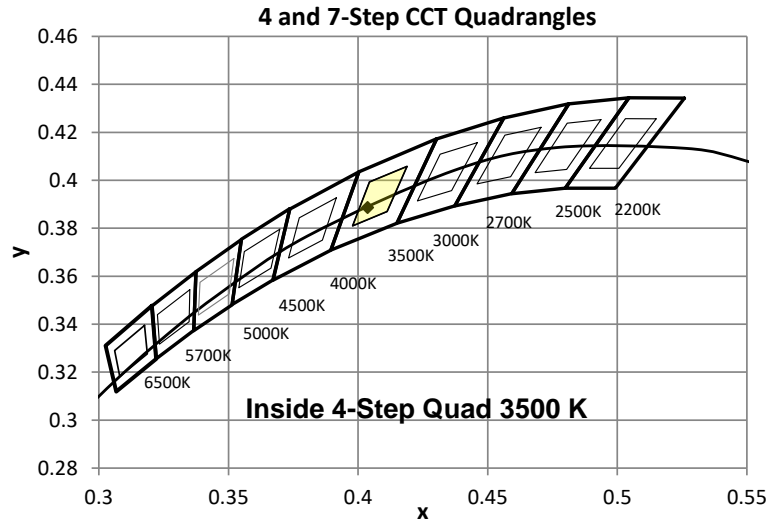
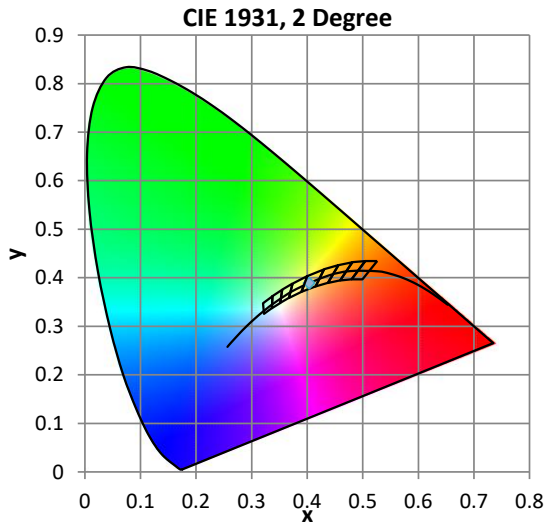
### Integrating Sphere Test Conditions

| Temperature | Voltage   | Current   | Power   | Power Factor | Frequency | Current THD |
|-------------|-----------|-----------|---------|--------------|-----------|-------------|
| 24.5 °C     | 120.1 VAC | 0.06518 A | 7.797 W | 0.996        | 60 Hz     | 6.85 %      |

### Summary of Results

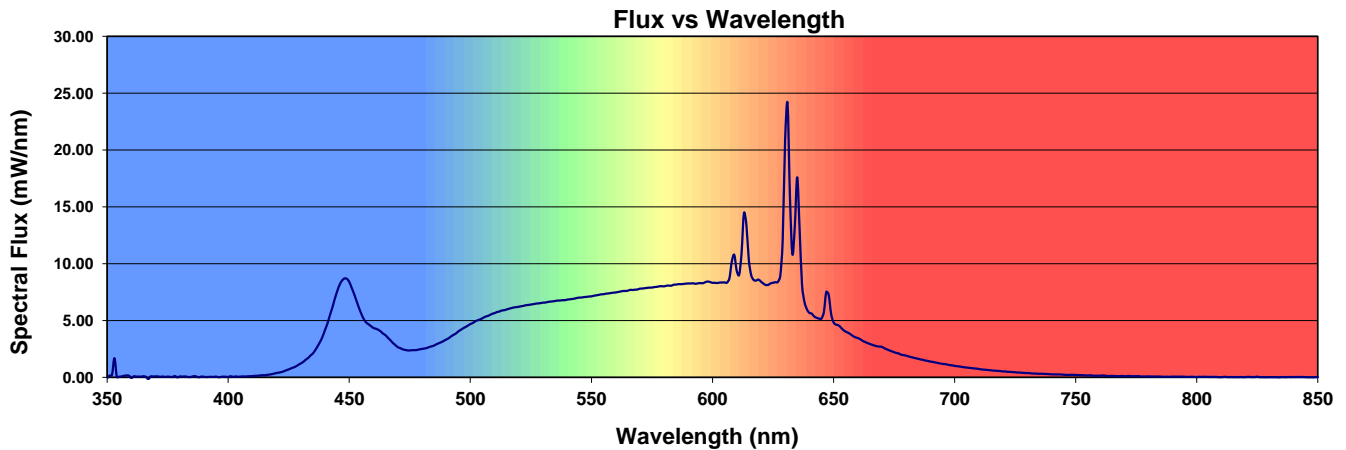
|                             |            |                           |         |
|-----------------------------|------------|---------------------------|---------|
| <b>Total Output:</b>        | 530 Lumens | <b>Chromaticity (x):</b>  | 0.4037  |
| <b>Efficacy:</b>            | 68.0 lm/w  | <b>Chromaticity (y):</b>  | 0.3887  |
| <b>CCT:</b>                 | 3517 K     | <b>Chromaticity (u'):</b> | 0.2355  |
| <b>CRI (Ra):</b>            | 92.9       | <b>Chromaticity (v'):</b> | 0.5102  |
| <b>CRI (R9):</b>            | 60.9       | <b>TM-30 Rf:</b>          | 91      |
| <b>Peak Wavelength:</b>     | 631 nm     | <b>TM-30 Rg:</b>          | 101     |
| <b>Dominant Wavelength:</b> | 581 nm     | <b>TM-30 Rcs,h1:</b>      | -5%     |
| <b>S/P Ratio:</b>           | 1.61       | <b>Duv:</b>               | -0.0006 |
| <b>M/P Ratio:</b>           | 0.63       |                           |         |

WELL Building Standard v2



### Color Rendering Index Detail

| Ra (CRI) | R1   | R2   | R3   | R4   | R5   | R6   | R7   | R8   | R9   | R10  | R11  | R12  | R13  | R14  | R15  |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 92.9     | 94.2 | 95.0 | 94.4 | 94.2 | 93.5 | 93.7 | 93.1 | 84.8 | 60.9 | 86.8 | 94.6 | 78.3 | 94.2 | 96.1 | 90.6 |





## Distribution - Goniophotometer

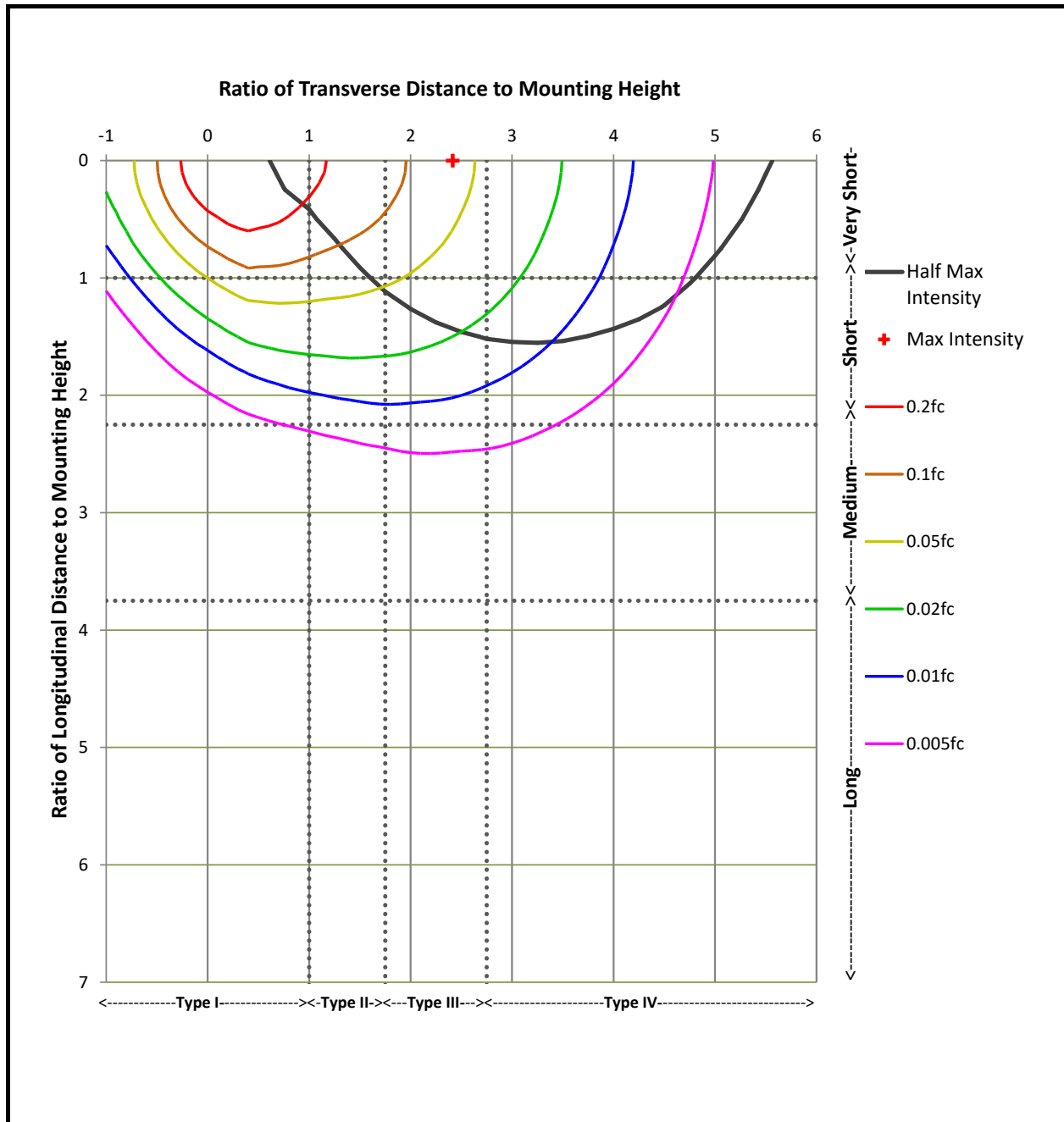
### Distribution Test Conditions

| Temperature | Voltage   | Current   | Power   | Power Factor | Frequency | Current THD |
|-------------|-----------|-----------|---------|--------------|-----------|-------------|
| 24.8 °C     | 120.1 VAC | 0.06526 A | 7.804 W | 0.996        | 60 Hz     | 6.89 %      |

### Summary of Results

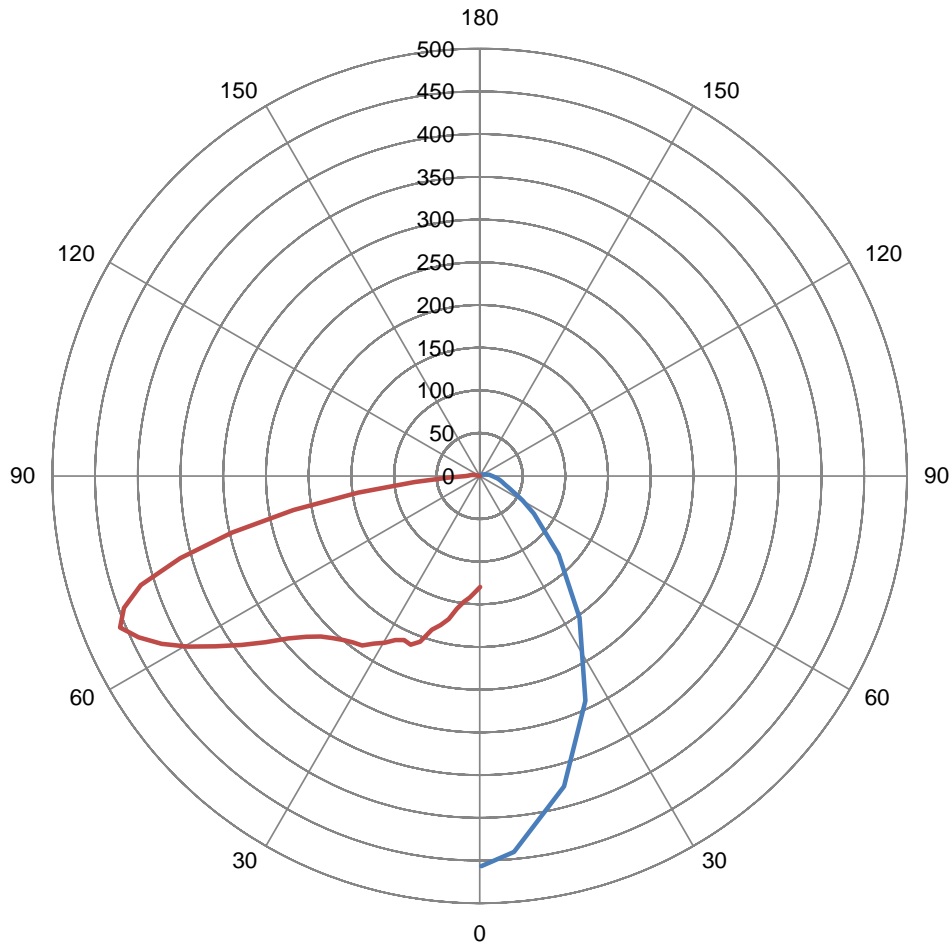
|                                    |                     |                            |             |
|------------------------------------|---------------------|----------------------------|-------------|
| <b>IES Roadway Classification:</b> | Type IV, Very Short | <b>Total Lumen Output:</b> | 505 Lumens  |
| <b>Cutoff Classification</b>       | Noncutoff           | <b>Luminaire Efficacy:</b> | 64.7 lm/w   |
| <b>BUG Rating:</b>                 | B0 U1 G1            | <b>Maximum Candela:</b>    | 457 Candela |

### ISO FootCandle Plot at 20 Feet





**Maximum Plane and Cone Plots of Candela**



Vertical Plane Through

0 ° Lateral

Lateral Cone Through

67.5 ° Vertical

**Maximum Intensity (Candlepower):**

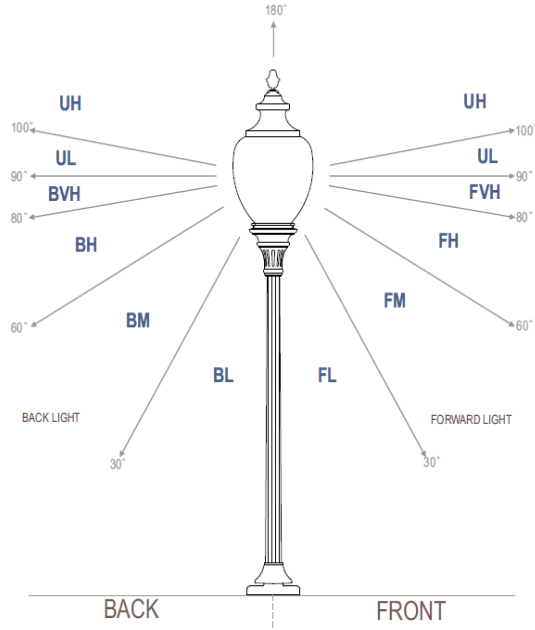
457 Candela

**Zonal Lumen Summary**

| Zone  | Lumens | % of Luminaire | Zone    | Lumens | % of Luminaire | Zone    | Lumens | % of Luminaire |
|-------|--------|----------------|---------|--------|----------------|---------|--------|----------------|
| 0-5   | 3.3    | 0.6%           | 60-65   | 44.9   | 8.9%           | 120-125 | 0.0    | 0.0%           |
| 5-10  | 9.1    | 1.8%           | 65-70   | 45.6   | 9.0%           | 125-130 | 0.0    | 0.0%           |
| 10-15 | 14.8   | 2.9%           | 70-75   | 40.4   | 8.0%           | 130-135 | 0.0    | 0.0%           |
| 15-20 | 20.1   | 4.0%           | 75-80   | 29.0   | 5.7%           | 135-140 | 0.0    | 0.0%           |
| 20-25 | 25.0   | 4.9%           | 80-85   | 14.9   | 2.9%           | 140-145 | 0.0    | 0.0%           |
| 25-30 | 28.6   | 5.7%           | 85-90   | 4.9    | 1.0%           | 145-150 | 0.0    | 0.0%           |
| 30-35 | 31.8   | 6.3%           | 90-95   | 1.8    | 0.4%           | 150-155 | 0.0    | 0.0%           |
| 35-40 | 34.3   | 6.8%           | 95-100  | 0.9    | 0.2%           | 155-160 | 0.0    | 0.0%           |
| 40-45 | 36.1   | 7.1%           | 100-105 | 0.3    | 0.1%           | 160-165 | 0.0    | 0.0%           |
| 45-50 | 37.7   | 7.5%           | 105-110 | 0.1    | 0.0%           | 165-170 | 0.0    | 0.0%           |
| 50-55 | 39.6   | 7.8%           | 110-115 | 0.0    | 0.0%           | 170-175 | 0.0    | 0.0%           |
| 55-60 | 42.1   | 8.3%           | 115-120 | 0.0    | 0.0%           | 175-180 | 0.0    | 0.0%           |



**IES "BUG" Rating**  
 (Back Light, Uplight, Glare)  
 Per IES TM-15-11



Luminaire Classification System (LCS)

| LCS               | Zone            | Lumens | Luminaire % |
|-------------------|-----------------|--------|-------------|
| FL                | (0-30)          | 66.1   | 13.1%       |
| FM                | (30-60)         | 190.5  | 37.7%       |
| FH                | (60-80)         | 157.2  | 31.1%       |
| FVH               | (80-90)         | 19.8   | 3.9%        |
| BL                | (0-30)          | 34.8   | 6.9%        |
| BM                | (30-60)         | 30.9   | 6.1%        |
| BH                | (60-80)         | 2.7    | 0.5%        |
| BVH               | (80-90)         | 0.0    | 0.0%        |
| UL                | (90-100)        | 2.7    | 0.5%        |
| UH                | (100-180)       | 0.4    | 0.1%        |
| Total             |                 | 505.1  | 100.0%      |
| <b>BUG Rating</b> | <b>B0 U1 G1</b> |        |             |

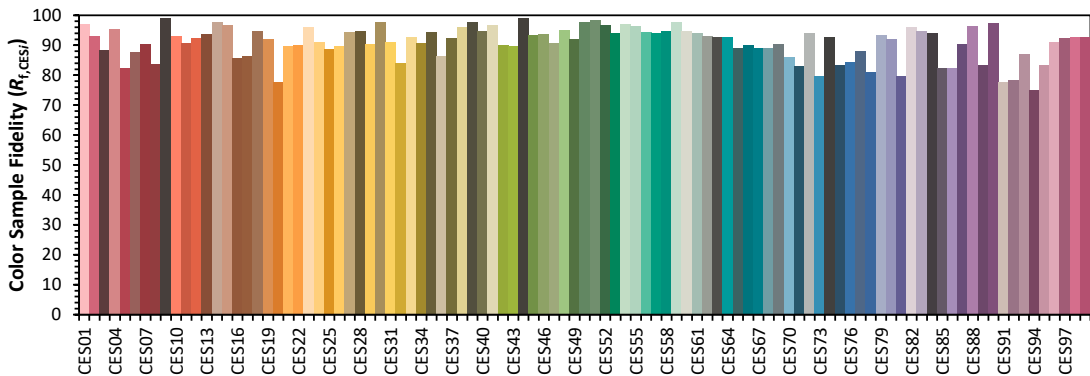
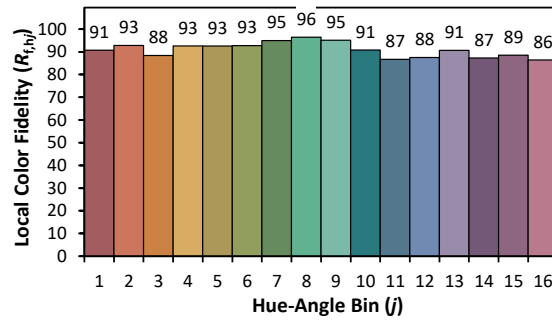
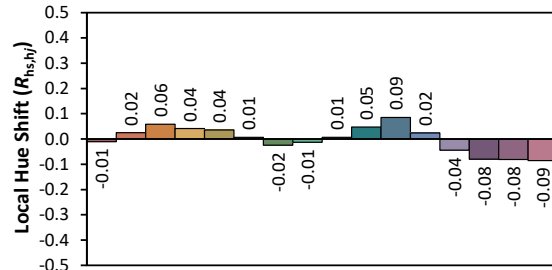
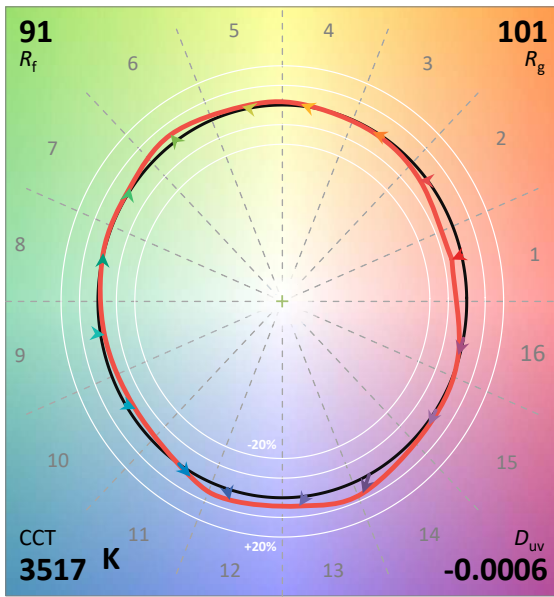
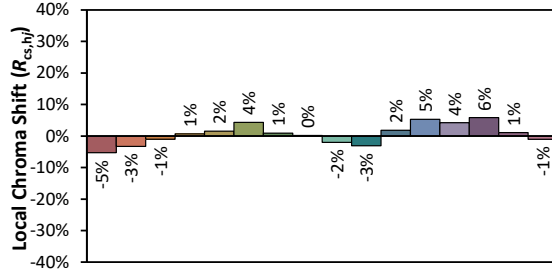
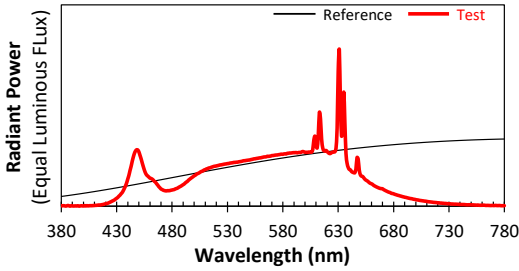
# ANSI/IES TM-30-18 Color Rendition Report

Date: 2021-08-05

Manufacturer: BARTCO LIGHTING INC

Model:

BDA30-48-35-ND-L-1-A-ESS-SM1-SN-ESS



Notes: This is a recommended method for displaying ANSI/IES TM-30-18 information.

x **0.4037**  
 y **0.3887**  
 u' **0.2355**  
 v' **0.5102**

|                     |    |
|---------------------|----|
| CIE 13.3-1995 (CRI) |    |
| R <sub>a</sub>      | 93 |
| R <sub>9</sub>      | 61 |

Colors are for visual orientation purposes only. Created with the IES TM-30-18 Calculator Version 2.00.