

***Brilliance by design***

**LED Replacements for  
Incandescent Lamps**

[www.SloanLED.com](http://www.SloanLED.com)

**LED Specifications and Technical Data**

LED data for models 160, 162, 164, 460, 510, 516, 522, 532, 513, 541

| Color Choice | LED Size | Raw Chip Material | Emitted Color | Wave Length | Viewing Angle (Deg.) | Iv (mcd) Typical | If (mA) Typical | Vf (V) Typical |
|--------------|----------|-------------------|---------------|-------------|----------------------|------------------|-----------------|----------------|
| 1            | T 1-3/4  | GaAlAs            | Red           | 660         | 22                   | 3000-4000        | 20              | 2.1            |
| 2            | T 1-3/4  | Gap               | Green         | 565         | 20                   | 750              | 20              | 1.8            |
| 3            | T 1-3/4  | AllnGap           | Yellow        | 595         | 22                   | 2000-3000        | 25              | 2.1            |
| 4            | T 1-3/4  | AllnGap           | Amber         | 611         | 22                   | 2000-3000        | 25              | 2.1            |
| 5            | T 1-3/4  | InGaN             | Ultra Green   | 575         | 30                   | 2200             | 25              | 3.5            |
| 6            | T 1-3/4  | InGaN             | Blue          | 470         | 30                   | 500              | 25              | 3.5            |
| 7            | T 1-3/4  | InGaN/<br>YAG     | Pure White    |             | 45                   | 1200             | 25              | 3.5            |

LED data for models 159, 197, 311

| Color Choice | LED Size | Raw Chip Material | Emitted Color | Wave Length | Viewing Angle (Deg.) | Iv (mcd) Typical | If (mA) Typical | Vf (V) Typical |
|--------------|----------|-------------------|---------------|-------------|----------------------|------------------|-----------------|----------------|
| 1            | T-1      | GaAlAs            | Red           | 660         | 30                   | 1250             | 20              | 1.8            |
| 2            | T-1      | Gap               | Green         | 568         | 20                   | 500              | 20              | 1.8            |
| 3            | T-1      | AllnGap           | Yellow        | 595         | 30                   | 500              | 25              | 2.1            |
| 4            | T-1      | AllnGap           | Amber         | 611         | 30                   | 500              | 25              | 2.1            |
| 5            | T-1      | InGaN             | Ultra Green   | 575         | 30                   | 1700             | 25              | 3.5            |
| 6            | T-1      | InGaN             | Blue          | 470         | 30                   | 650              | 25              | 3.5            |
| 7            | T-1      | InGaN/<br>YAG     | Pure White    |             | 45                   | 630              | 25              | 3.5            |

**Section 7**

Note: The specifications listed above are subject to change. For special LED requirements and color please contact SloanLED.