

HORTICULTURE LEDs

- Broad portfolio of mid-power & high-power LEDs for all applications
- Reported DLC Horticulture lifetimes up to Q90 >109k hrs
- Photophyll™ Select LEDs: new phosphor-converted LED color with blue and green spectral output tuned for horticulture applications

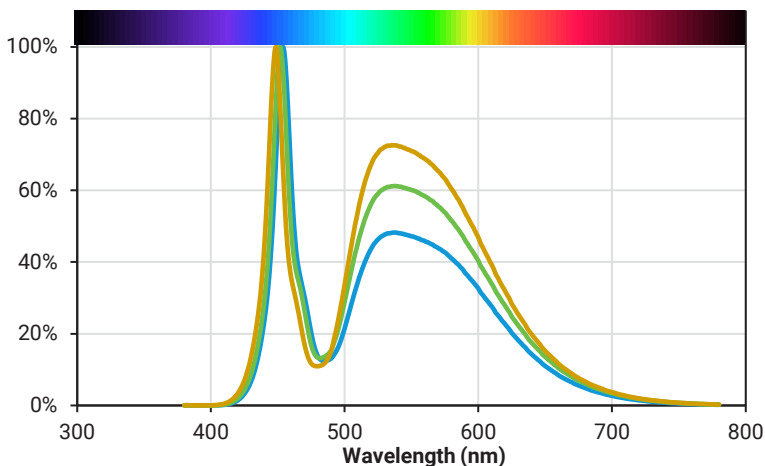
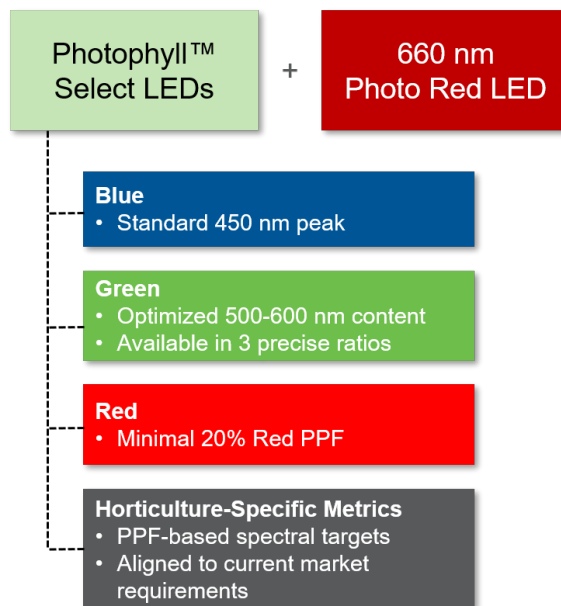
November 2022 (FS39R1)

PORTFOLIO OVERVIEW

| LED | J Series® 5050 K Class | XLamp® XP-G3 | XLamp XP-E2 | J Series 2835 3V |
|--------------------|------------------------|--------------|-------------|------------------|
| Footprint (mm) | 5.0 x 5.0 | 3.45 x 3.45 | 3.45 x 3.45 | 2.8 x 3.5 |
| Max Power (W) | 5 | 6 | 3 | 1 |
| Photophyll™ Select | | | | |
| White | | | | |
| 450 nm | | | | |
| 660 nm | | | | |
| 730 nm | | | | |
| PC Purple | | | | |

PHOTOPHYLL™ SELECT LEDs

- Advanced horticulture spectrum optimized for maximum performance with 660 nm Photo Red LEDs
- First LEDs with precise control over the green/blue ratio



PHOTOPHYLL™ SELECT LEDs

| Color | Red PPF % | Green/Blue Ratio | LED | Test Current (mA) | Min PPF (μmol/s) | Typ PPF (μmol/s) | PPF/W (μmol/J) | Order Code |
|-------------------|-----------|------------------|--------------------|-------------------|------------------|------------------|----------------|--------------------------------|
| Photophyll Select | 20% | 2.0 | XLamp® XP-G3 | 350 | 2.50 | 2.60 | 2.62 | XPGDWT-N1-0000-00XPP |
| | | | JB2835B 3V G Class | 55 | 0.43 | 0.48 | 3.23 | JB2835BWT-G-N001A0000-N0000001 |
| | | 2.5 | XLamp XP-G3 | 350 | 2.50 | 2.60 | 2.62 | XPGDWT-Q1-0000-00XPP |
| | | | JB2835B 3V G Class | 55 | 0.43 | 0.48 | 3.23 | JB2835BWT-G-Q001A0000-N0000001 |
| | | 3.0 | XLamp XP-G3 | 350 | 2.50 | 2.60 | 2.62 | XPGDWT-X1-0000-00XPP |
| | | | JB2835B 3V G Class | 55 | 0.43 | 0.48 | 3.23 | JB2835BWT-G-X001A0000-N0000001 |

WHITE LEDs

| Color | Red PPF % | Green/Blue Ratio | LED | Test Current (mA) | Min PPF (μmol/s) | Typ PPF (μmol/s) | PPF/W (μmol/J) | Order Code |
|-----------------|-----------|------------------|---------------------|-------------------|------------------|------------------|----------------|--------------------------------|
| 5000K 70 CRI | ~27% | ~2.3 | JR5050B 6V K Class | 400 | --- | 6.04 | 2.66 | JR5050BWT-K-B50EB0000-N0000001 |
| | | | JR5050B 30V K Class | 80 | --- | 6.04 | 2.66 | JR5050BWT-K-B50EK0000-N0000001 |
| | | | XLamp XP-G3 S Line | 350 | 2.65 | --- | 2.73 | XPGDWT-BS-0000-00N3E |
| | | | JB2835B 3V G Class | 55 | --- | 0.45 | 3.05 | JB2835BWT-G-B50EA0000-N0000001 |
| 4000K 70 CRI | ~34% | ~3.0 | JR5050B 6V K Class | 400 | --- | 6.06 | 2.67 | JR5050BWT-K-B40EB0000-N0000001 |
| | | | JR5050B 30V K Class | 80 | --- | 6.06 | 2.67 | JR5050BWT-K-B40EK0000-N0000001 |
| | | | XLamp XP-G3 S Line | 350 | 2.66 | --- | 2.74 | XPGDWT-BS-0000-00N5E |
| | | | JB2835B 3V G Class | 55 | --- | 0.45 | 3.06 | JB2835BWT-G-B40EA0000-N0000001 |

• More CCT & CRI options are available for the white LEDs. Please see the product data sheets for more detail.

COLOR LEDs

| Color | Red PPF % | Green/Blue Ratio | LED | Test Current (mA) | Min PPF (μmol/s) | Typ PPF (μmol/s) | PPF/W (μmol/J) | Order Code |
|------------------------|-----------|------------------|--------------------|-------------------|------------------|------------------|----------------|--------------------------------|
| 450 nm (Royal Blue) | --- | --- | XLamp XP-G3 | 350 | 2.77 | --- | 2.83 | XPGDRY-L1-0000-00601 |
| | | | XLamp XP-G3 | 350 | 2.58 | --- | 2.64 | XPGDRY-L1-0000-00501 |
| | | | JB2835 3V N Class | 140 | --- | 1.01 | 2.43 | JE2835ARY-N-0002A0000-N0000001 |
| 660 nm (Photo Red) | ~99% | --- | XLamp XP-G3 S Line | 350 | 2.85 | 2.91 | 4.29 | XPGDPR-LS-0000-00G01 |
| | | | XLamp XP-E2 | 350 | 2.44 | --- | 3.41 | XPEBPR-L1-0000-00D01 |
| | | | JB2835 3V N Class | 140 | --- | 0.72 | 2.33 | JE2835AHR-N-0001A0000-N0000001 |
| 730 nm (Far Red) | --- | --- | XLamp XP-E2 | 350 | 2.34* | --- | 3.62* | XPEBFR-L1-0000-00B01 |
| | | | XLamp XP-E2 | 350 | 2.20* | --- | 3.39* | XPEBFR-L1-0000-00A01 |
| | | | JB2835 3V N Class | 140 | 0.72* | --- | 2.40* | JE2835AFR-N-0001A0000-N0000001 |
| PC Purple | 71% | 0.63 | JB2835 3V N Class | 140 | --- | 0.89 | 2.20 | JE2835APP-N-0001A0000-N0000001 |

• All performance figures shown for T_j = 25°C

• 730 nm LED flux values shown are photon flux (PF) for the range 380-780 nm