

NEOSOL™ DS



FEATURES & SPECIFICATIONS

General Description

The NeoSol™ DS grow light is suitable for a wide range of horticulture lighting applications including propagation, vegetative growth and flowering of plants in grow tents, compact growing areas or large-scale commercial grow operations. May be used in vertically stacked orientation of two or more layers of grow trays and NeoSol™ fixtures. Outperforms 1000W HID fixtures in 4x4 and 5x5 plant grow beds, giving growers more than 50% energy savings. Available in three dimming configurations: manual dimming, direct dimming system or non-dimming version.

Mechanical Construction

Eight 48" extruded aluminum LED bars and formed aluminum end caps and housing. 96 ultra-efficient Illumitex Surexi™ LED arrays. IP66-rated LED bar construction. Passive cooling.

Electrical Specifications

120VAC input voltage with a 15' cord and 3-prong plug. Available with either manual dimming knob, direct dimming cable or no dimming.

LEDs

The fixture utilizes Illumitex's patented, high-power Surexi™ LED packages. Each LED package consists of 16 individual LED dies and is protected against dust particle and water intrusion. Illumitex's patented Digital Distribution™ optical technology ensures that 65% of the light emitted is contained within the 50° beam angle.

Weight

37 lbs.

Finish

Clear anodized finish on bars. Green powder-coat on housing and end caps.

Testing and Compliance

IP66-rated LED bars

RoHS compliant

ETL/cETL listed

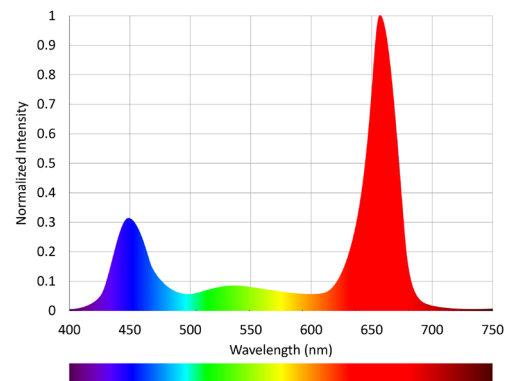
5-year warranty

60,000-hour life to L70



STANDARD SPECTRUM

F3 SPECTRUM



BEST FOR GERMINATION THROUGH FLOWERING

The F3 spectrum is the workhorse and most popular spectrum from Illumitex. It produces the fastest germination and drives the best vegetative and flowering results among all of the spectra options. In addition to the blue and red wavelengths, the F3 spectrum contains a small amount of green which is beneficial for the quality assessment of plants. The F3 spectrum is recommended for use in growth chambers as well as controlled environment agriculture operations of any size.

F3 WAVELENGTH MIX

Blue (400 - 499 nm)	22.4 ± 1.3%
Green (500 - 599 nm)	13.4 ± 0.6%
Red (600 - 699 nm)	63.9 ± 0.8%
Far Red (700 - 780 nm)	0.4 ± 0.1%

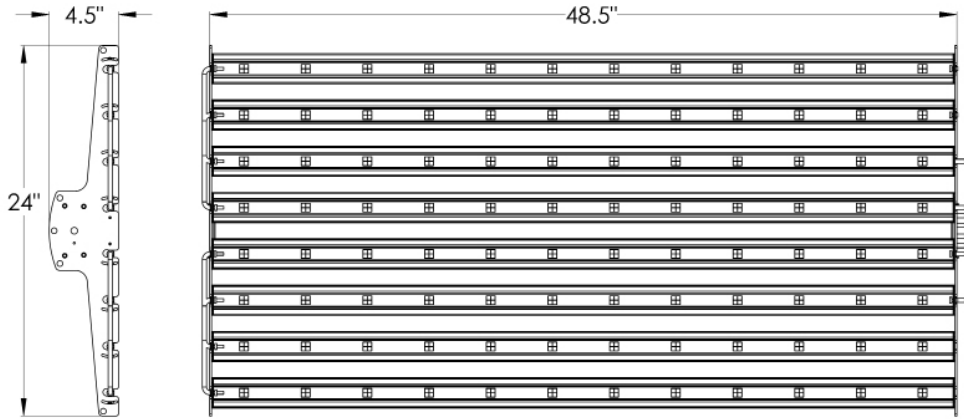
FIXTURE EFFICIENCY

SPECTRUM	FIXTURE PPF	FIXTURE WATTAGE	μmol/J
F3	830	520	1.6

PART NUMBER ORDERING GUIDE

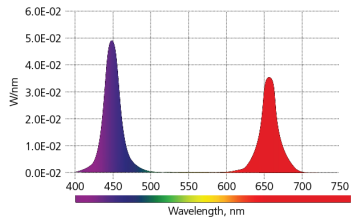
DS	8	48	12	F3	520	U	
SERIES	# OF BARS	BAR LENGTH	# OF LEDs	SPECTRA	POWER SUPPLY	INPUT	DIMMING
DS = NeoSol DS	8 = 8 Bars	48 = 48" Bars	12 = 12 LEDs per Bar	F3 = F3 Spectra	520 = 520 Watt	U = 120V	M = Manual D = Direct N = Non-Dimming

DIMENSION LINE DRAWINGS



CUSTOM SPECTRA

F6 SPECTRUM



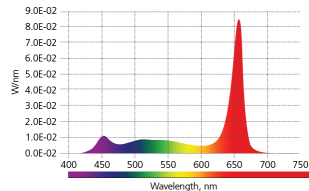
F6 WAVELENGTH MIX

Blue (400 - 499nm)	49.5%
Green (500 - 599nm)	0.5%
Red (600 - 699nm)	49.9%
Far Red (700 - 780nm)	0.1%

BEST FOR VEGETATIVE GROWTH

The Illumitex F6 spectrum has an enhanced blue region and provides the fastest vegetative growth results. The increased blue content reduces plant height, thereby improving plant appearance and space utilization. Recommended for the production of leafy green vegetables when the visible assessment of plant health is not important.

X5 SPECTRUM



X5 WAVELENGTH MIX

Blue (400 - 499nm)	18.0%
Green (500 - 599nm)	17.0%
Red (600 - 699nm)	64.0%
Far Red (700 - 780nm)	0.0%

BEST FOR HUMAN VISUALIZATION

Inspired by NASA scientists, the X5 growth spectrum offers the highest content of light within the green band of the PAR spectral range. This higher green content provides the best option for plant quality assessment.

FIXTURE EFFICIENCY

SPECTRUM	FIXTURE PPF	FIXTURE WATTAGE	μmol/J
F6	824	520	1.58
X5	816	520	1.57

NeoSol DS Specifications

NeoSol DS Manual/Direct/Non-Dimming	
Operating Voltage	120Vac
Typical Running Current	4.8A @ 120Vac 2.4A @ 240Vac 2.1A @ 277Vac
Operating Frequency	50/60Hz
Power Consumption	520 Watt
Heat Output	1773.2 BTU/hr
Weight	37 lbs. (16.8 Kg)
Efficiency	1.6 PPF/W
Operating Temperature	4°F to 104°F (-20°C to 40°C)
Power Factor	>0.90
Warranty	5 Years