ULF8000 SP Series

ULF8000 SP Series
The ULF8000 SP Series of tubes primarily designed for horticulture lighting. Several models are available each with different LEDs to cater for different set-up conditions and requirements.

Key Applications
ULF8000 SP can replace HPS or Metal Halide lighting used in horticulture. It offers very much lower power consumption and radiates much less heat. Designed as a 4-foot tube it can be easily configured to provide optimum PPFD exposure to targeted grow foot-prints. Ease of mounting and waterproof connectors enables it to be efficiently daisy-chained minimizing wires required.

Thermal Management
The passive air-cooled heat-sink is incorporated into the ULF8000 SP design for reliable operation. Use of thermal profile and simulation enables the LEDs to operate at temperatures significantly below the maximum specification limits, hence ensuring prolonged life-span.

Features
Ingress Protection Rating: IP65 Compliant
RoHS: Compliant
Lumens Maintenance: IESNA LM80-08 certified LEDs

Product Specifications

ULF85VW SP01 KMML2000		
Input Voltage DC	volt	48
Total Power (typical)	watt	40
Typical Luminous Flux	lumens	1960
Typical Flux (PPF 400-700nm)	µmol/sec	44
PPF Efficacy	µmol/sec/W	1.1
Beam Angle	degree	120
Weight	kg (lb)	0.7(1.5)

ULF85VW SP02 KPNKL2000		
Input Voltage DC	volt	48
Total Power (typical)	watt	40
Typical Luminous Flux	lumens	2700
Typical Flux (PPF 400-700nm)	µmol/sec	58
PPF Efficacy	µmol/sec/W	1.5
Beam Angle	degree	120
Weight	kg (lb)	0.7(1.5)

ULF85VW SP03 KPNKL2000		
Input Voltage DC	volt	48
Total Power (typical)	watt	30
Typical Luminous Flux	lumens	2200
Typical Flux (PPF 400-700nm)	µmol/sec	45
PPF Efficacy	µmol/sec/W	1.5
Beam Angle	degree	120
Weight	kg (lb)	0.7(1.5)

ULF85VW SP04 KPNKL2000		
Input Voltage DC	volt	48
Total Power (typical)	watt	27
Typical Luminous Flux	lumens	2200
Typical Flux (PPF 400-700nm)	µmol/sec	45
PPF Efficacy	µmol/sec/W	1.65
Beam Angle	degree	120
Weight	kg (lb)	0.7(1.5)

ULF85VW SP05 K3050L2000		
Input Voltage DC	volt	48
Total Power (typical)	watt	25
Typical Luminous Flux	lumens	3200
Typical Flux (PPF 400-700nm)	µmol/sec	47
PPF Efficacy	µmol/sec/W	1.88
Beam Angle	degree	120
Weight	kg (lb)	0.7(1.5)

ULF85VW SP06 K3050L2000		
Input Voltage DC	volt	48
Total Power (typical)	watt	25
Typical Luminous Flux	lumens	3200
Typical Flux (PPF 400-700nm)	µmol/sec	47
PPF Efficacy	µmol/sec/W	1.88
Beam Angle	degree	120
Weight	kg (lb)	0.7(1.5)
Configuration		Non-daisy-chained

ULF85VW SP07 KMML2000		
Input Voltage DC	volt	48
Total Power (typical)	watt	33
Typical Luminous Flux	lumens	2000
Typical Flux (PPF 400-700nm)	µmol/sec	47
PPF Efficacy	µmol/sec/W	1.42
Beam Angle	degree	120
Weight	kg (lb)	0.7(1.5)
Configuration		Non-daisy-chained

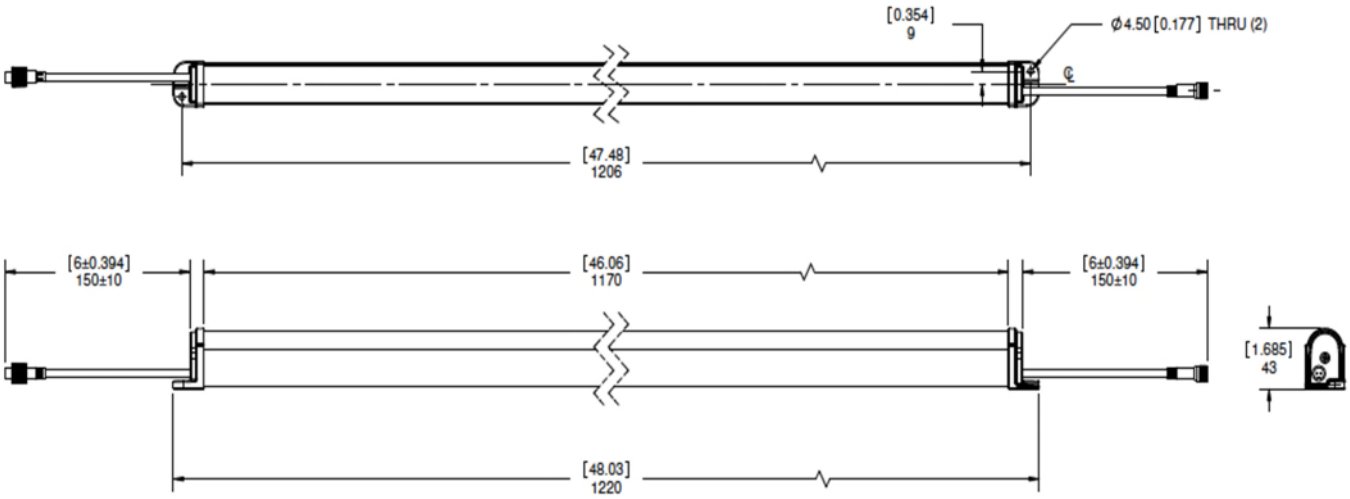
Environmental Specifications	
Operating Temperature	-40°C to +50°C
Thermal Management	No additional heat-sink required
Lumens Maintenance at L70	>50,000 hours

Mechanicals

[inches]
mm

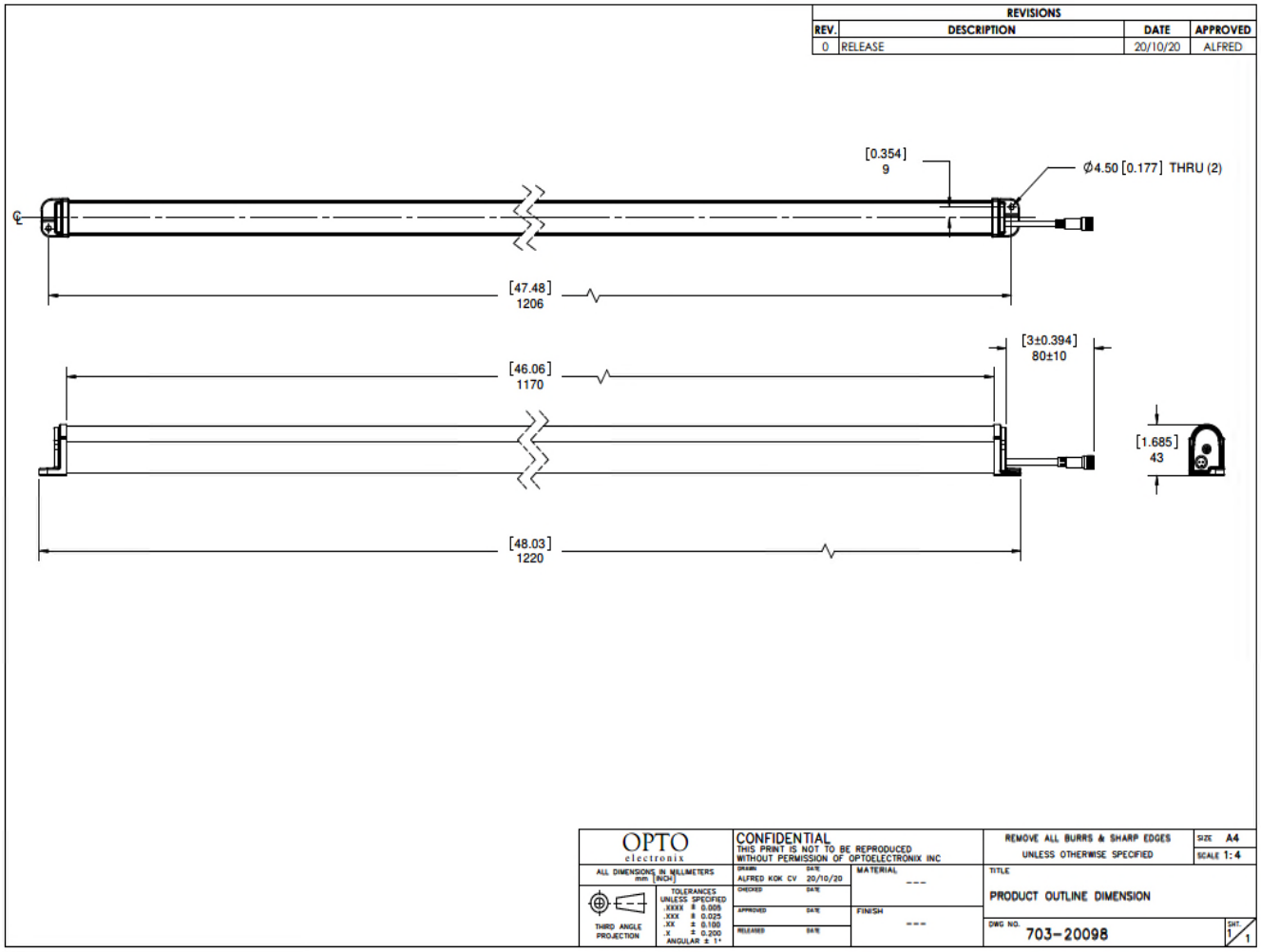
Applicable models:

ULF85VW SP01 KMML2000 **ULF85VW SP02 KPNKL2000**
ULF85VW SP03 KPNKL2000 **ULF85VW SP04 KPNKL2000**
ULF85VW SP05 K3050L2000



Applicable models:

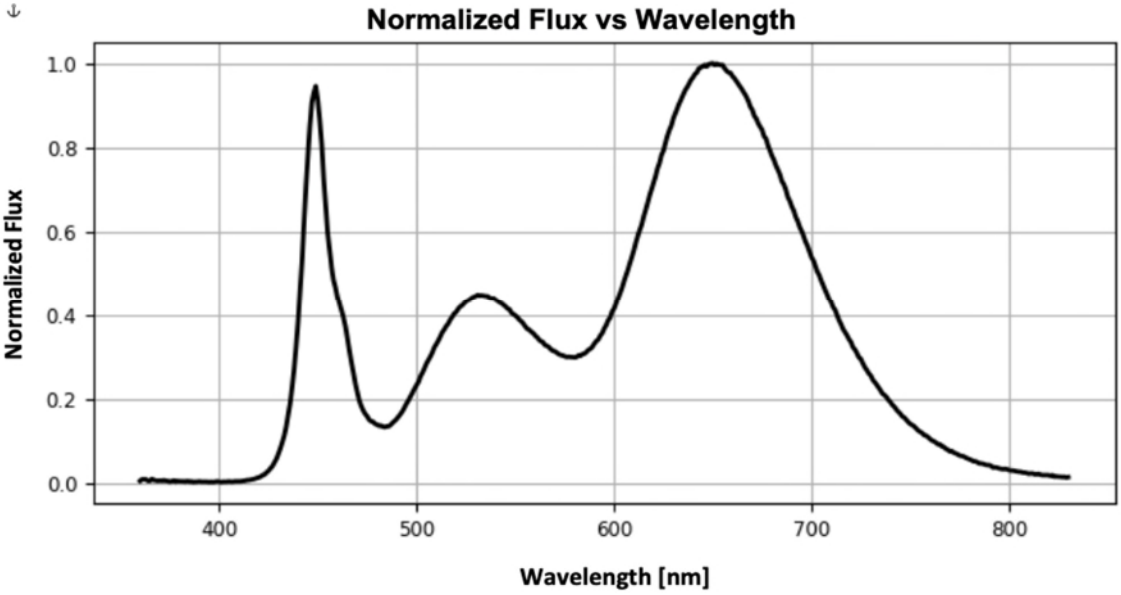
ULF85VW SP06 K3050L2000 and ULF85VW SP07 KMML2000



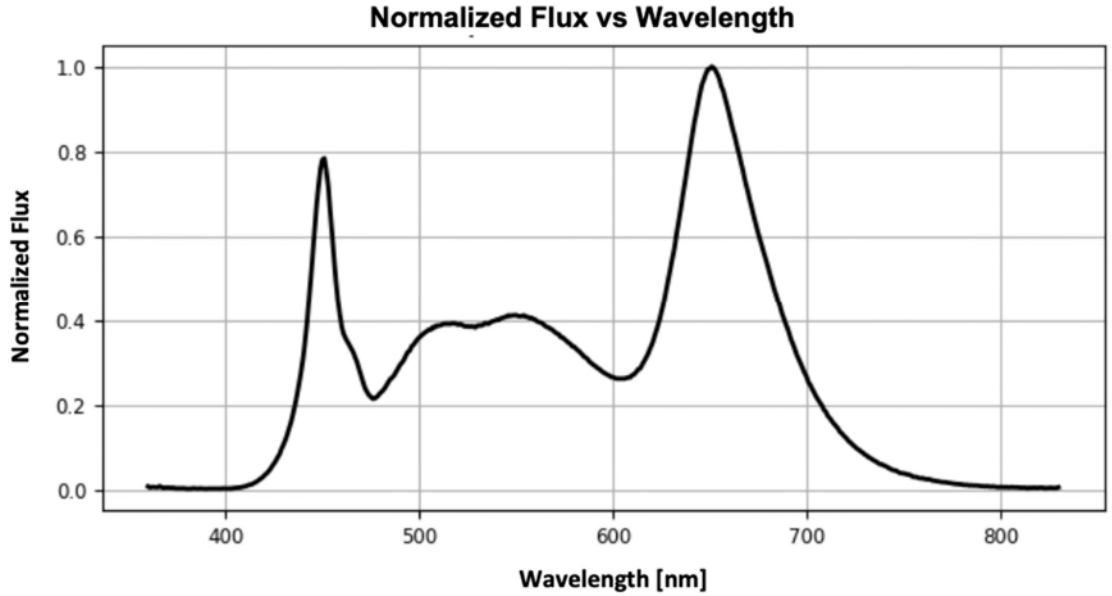
Mounting Screw Size: M4 (UNC #8)

Photometric

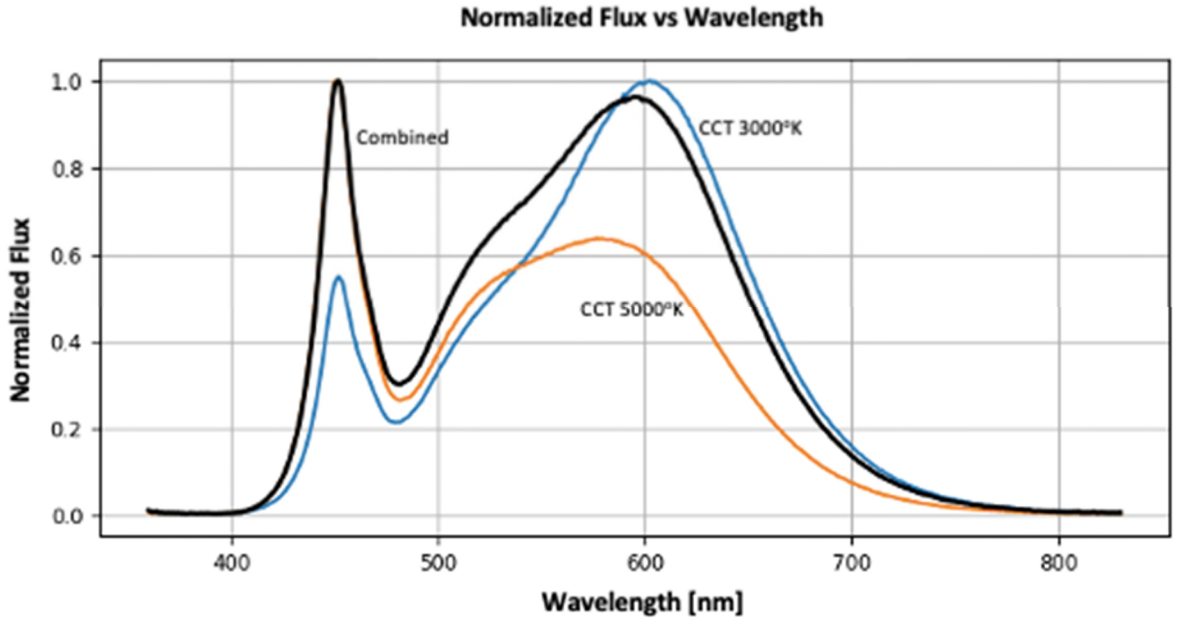
ULF85VW SP01 KMML2000 and ULF85VW SP07 KMML2000



ULF85VW SP02 KPNKL2000
ULF85VW SP03 KPNKL2000
ULF85VW SP04 KPNKL2000



ULF85VW SP05 K3050L2000 and ULF85VW SP06 K3050L2000

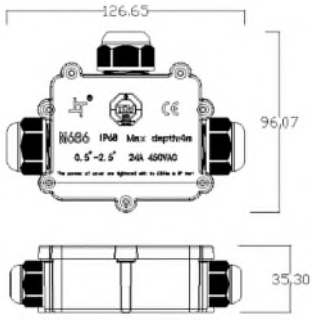


Accessories

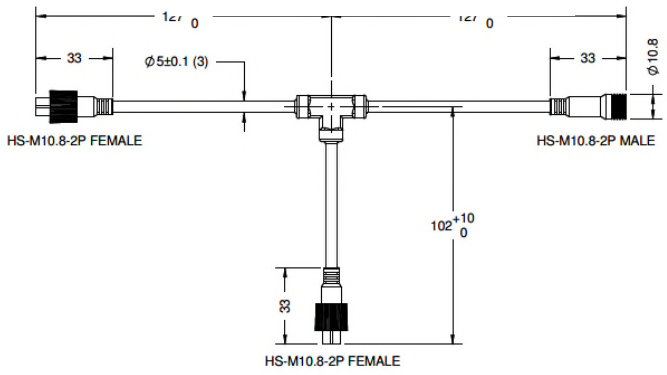
The following accessories are available for order.

Item	Description	Part Number	Specifications
1	Male End Connector	702-19296	Terminated, 2 Pins 2*0.5mm2, IP67, Black
2	Female Connector with wire	702-19297	20AWG, 2 Pins 2*0.5mm2, IP67, 300mm, Black
3	Junction Box T-Type	702-19298	IP68, 24A, 450V AC, Cable Diameter 4~8mm
4	250W Power Supply	702-19309	IP67, In:176~305V AC, Out: 48V DC Constant Voltage
5	150W Power Supply	702-19300	IP67, In:176~305V AC, Out: 48V DC Constant Voltage
6	2-Way Wire Splitter	702-20324	IP67, 24A, 450V AC, Cable Diameter 5mm
7	End Cap	702-20325	Silicone Rubber
8	Female Connector with wire	702-20323	20AWG, 2 Pins 2*0.5mm2, IP67, 130mm, Black

Junction Box T-Type (702-19298)
- Suitable for wires with OD of 4mm to 8mm



2-Way Wire Splitter (702-20324)
- Fixed wire length



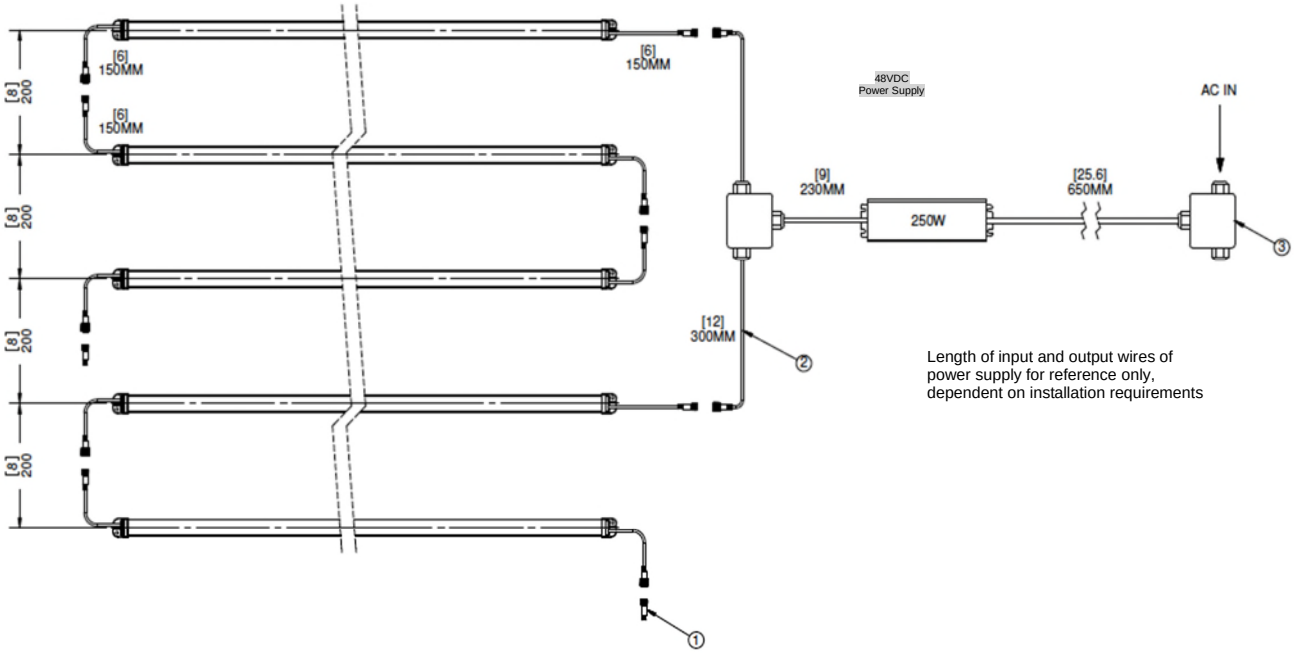
Installation

a. Use M4 (UNF #8) screw or bolt for the two mounting holes at the ends of the tube.
b. Daisy chain of up to 3 tubes max for optimum uniformity of output taking tolerances and variations of power supply into consideration.
c. For installation configuration examples refer to application notes OAN1009(0) ULF8500 Configuration Guide and wiring hook-up diagram below.

Wiring Hook-up

Applicable models:

ULF85VW SP01 KMML2000 **ULF85VW SP02 KPNKL2000**
ULF85VW SP03 KPNKL2000 **ULF85VW SP04 KPNKL2000**
ULF85VW SP05 K3050L2000

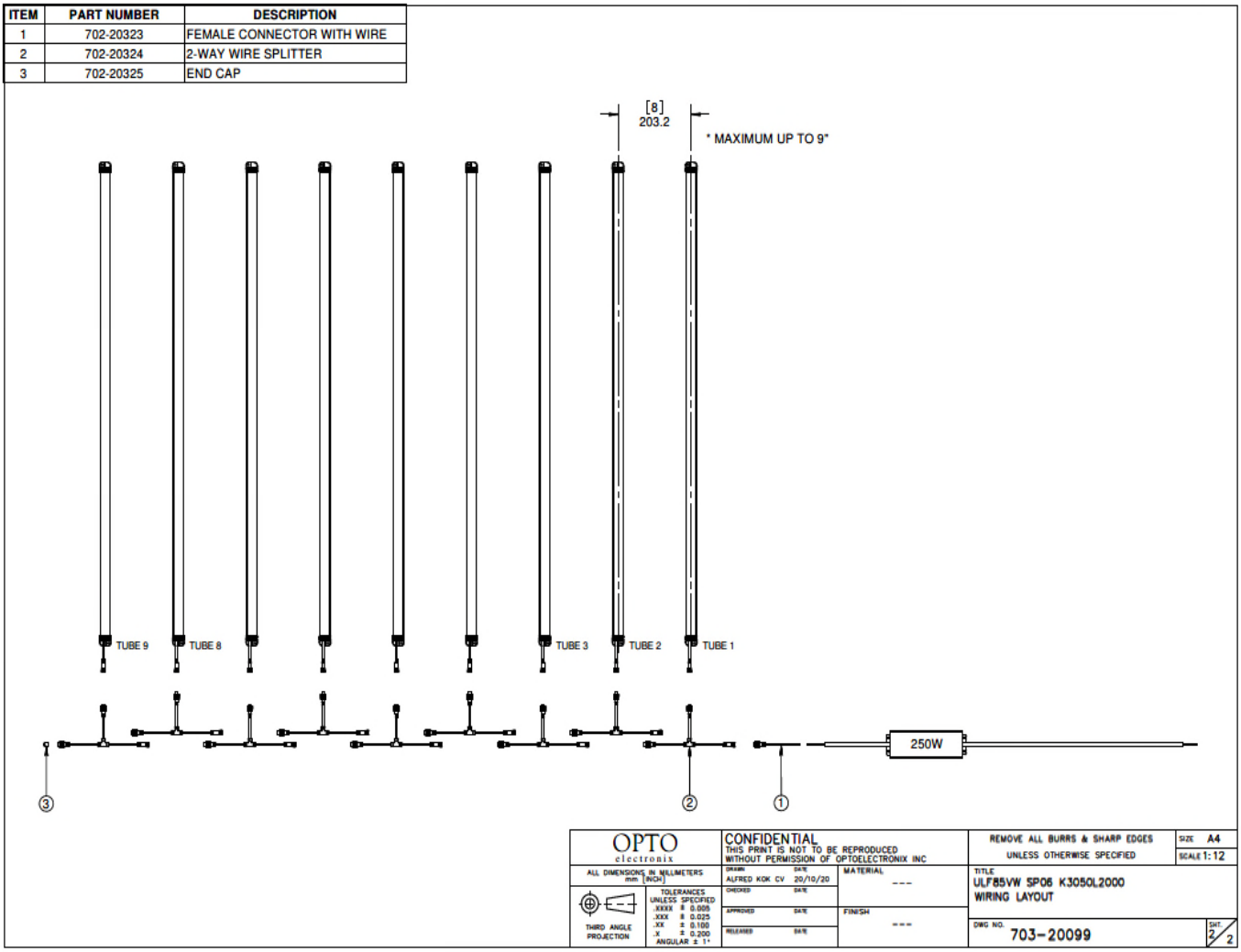


ITEM	PART NUMBER	DESCRIPTION	SPECIFICATION
1	702-19296	END CAP	WATERPROOF
2	702-19297	FEMALE CONNECTOR WITH WIRE	LENGTH 300mm
3	702-19298	JUNCTION BOX T-TYPE	WATERPROOF

Wiring Hook-up
Applicable models:

ULF85VW SP06 K3050L2000 and ULF85VW SP07 KMML2000

ITEM	PART NUMBER	DESCRIPTION
1	702-20323	FEMALE CONNECTOR WITH WIRE
2	702-20324	2-WAY WIRE SPLITTER
3	702-20325	END CAP



Note: Maximum 7 tubes for ULF85VW SP07 KMML2000.