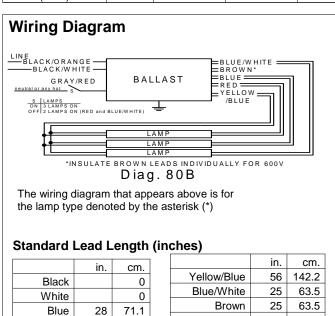


HOP4PSP54	HOP4PSP542LSG@347V					
Brand Name	OPTANIUM T5					
Ballast Type	Electronic					
Starting Method	Programmed Start					
Lamp Connection	Parallel					
Input Voltage	347-480					
Input Frequency	50/60HZ					
Status	Active					

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
* F54T5/HO	3	54	-20/-29	0.53	180	1.00	10	0.98	1.7	0.56
F54T5/HO	4	54	-20/-29	0.70	240	1.00	10	0.98	1.7	0.42
F54T5/HO/ES (49W)	3	49	-20/-29	0.47	160	1.00	10	0.98	1.7	0.63
F54T5/HO/ES (49W)	4	49	-20/-29	0.62	214	1.00	10	0.98	1.7	0.47



76.2

76.2

0

0

30

Red

Yellow

Gray

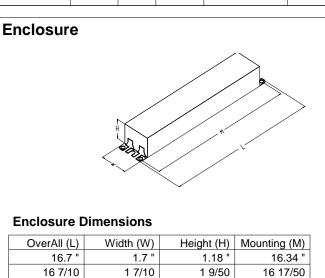
Violet

Orange

Orange/Black

Black/White

Red/White



4.3 cm

3 cm



0

0

78.7

78.7

31

31



42.4 cm

Revised 09/26/11

41.5 cm

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Brand Name | OPTANIUM T5 Ballast Type | Electronic Starting Method | Programmed Start Lamp Connection | Parallel Input Voltage 347-480 Input Frequency 50/60HZ Status

Active

HOP4PSP542LSG@347V

Notes:

Section I - Physical Characteristics

- 1.1 Ballast shall be physically interchangeable with standard electromagnetic or standard electronic ballasts, where applicable.
- 1.2 Ballast shall be provided with integral leads color-coded per ANSI C82.11.

Section II - Performance

- 2.1 Ballast shall be Programmed Start.
- 2.2 Ballast shall provide Independent Lamp Operation (ILO) for Programmed Start Parallel ballasts allowing remaining lamp(s) to maintain full light output when one or more lamps fail.
- 2.3 Ballast shall contain auto restart circuitry in order to restart lamps without resetting power.
- 2.4 Ballast shall operate from 50/60 Hz input source of _ (120V through 277V or 347V through 480V) with sustained variations of +/- 10% (voltage and frequency).
- 2.5 Ballast shall be high frequency electronic type and operate lamps at a frequency between 42 kHz and 52 KHz to avoid interference with infrared devices, eliminate visible flicker and avoid Article Surveillance Systems, such as anti-theft devices.
- 2.6 Ballast shall have a Power Factor greater than 0.98 for primary lamp.
- 2.7 Ballast shall have a ballast factor of 1.0 for primary T5HO lamps or a ballast factor of 0.95 or 1.15 for primary T5HE lamps at full light output.
- 2.8 Ballast shall provide for a Lamp Current Crest Factor of 1.7 or less.
- 2.9 Ballast input current shall have Total Harmonic Distortion (THD) of less than 10% when operated at nominal line with primary lamp.
- 2.10 Ballast shall have a Class A sound rating.
- 2.11 Ballast shall have a minimum starting temperature of {-18C (0F) or -29C (-20F) or 0C (32F)} for primary lamp. Consult lamp manufacturer for temperature versus light output characteristics.
- 2.12 Ballast shall tolerate sustained open circuit and short circuit output conditions.
- 2.13 Ballast shall provide Lamp EOL Protection Circuit.
- 2.14 Ballast for step-dim applications shall have a 50% control step where the input power is <=50% of the full light input power for the primary lamp.

Section III - Regulatory

- 3.1 Ballast shall not contain any Polychlorinated Biphenyl (PCB).
- 3.2 Ballast shall be Underwriters Laboratories (UL) listed, Class P and Type 1 Outdoor; and Canadian Standards Association (CSA) certified where applicable.
- 3.3 Ballast shall comply with ANSI C62.41 Category A for Transient protection.
- 3.4 Ballast shall comply with ANSI C82.11 where applicable.
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with UL Type CC rating.
- 3.7 Ballast shall comply with NEMA 410 for in-rush current limits.

Section IV - Other

- 4.1 Ballast shall be manufactured in a factory certified to ISO 9001 Quality System Standards.
- 4.2 Ballast shall carry a five-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 70C.
- 4.3 Ballast designated 90C shall carry a three-year warranty from date of manufacture against defects in material or workmanship, including replacement, for operation at a maximum case temperature of 90C.
- 4.4 Manufacturer shall have a twenty-year history of producing electronic ballasts for the North American market





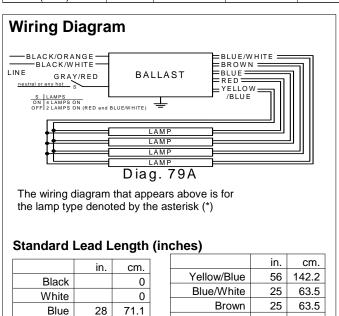
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HOP4PSP54	2LSG@480V
Brand Name	OPTANIUM T5
Ballast Type	Electronic
Starting Method	Programmed Start
Lamp Connection	Parallel
Input Voltage	347-480
Input Frequency	50/60 HZ
Status	Active

Lamp Type	Num. of Lamps	Rated Lamp Watts	Min. Start Temp (F/C)	Input Current (Amps)	Input Power (ANSI Watts)	Ballast Factor	MAX THD %	Power Factor	MAX Lamp Current Crest Factor	B.E.F.
F54T5/HO	3	54	-20/-29	0.36	174	1.00	10	0.98	1.7	0.57
* F54T5/HO	4	54	-20/-29	0.48	234	1.00	10	0.98	1.7	0.43
F54T5/HO/ES (49W)	3	49	-20/-29	0.32	154	1.00	10	0.98	1.7	0.65
F54T5/HO/ES (49W)	4	49	-20/-29	0.43	206	1.00	10	0.98	1.7	0.49



76.2

76.2

0

0

30

30

Red

Yellow

Gray

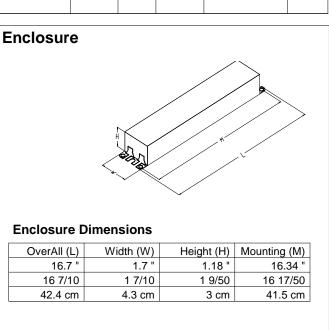
Violet

Orange

Orange/Black

Black/White

Red/White





0

0

78.7

78.7

31

31

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OPTANIUM T5	Brand Name
Electronic	Ballast Type
Programmed Start	Starting Method
Parallel	Lamp Connection
347-480	Input Voltage
50/60 HZ	Input Frequency
Active	Status

HOP4PSP542LSG@480V

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- $3.4\ Ballast\ shall\ comply\ with\ ANSI\ C82.11\ where\ applicable.$
- 3.5 Ballast shall comply with applicable requirements of the Federal Communications Commission (FCC) rules and regulations, Title 47 CFR part 18, for Non-Consumer equipment.
- 3.6 Ballast shall comply with UL Type CC rating.
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