

2x2 | 2x4  
Shown with RA lens

CATALOG #: \_\_\_\_\_

TYPE: \_\_\_\_\_

PROJECT: \_\_\_\_\_

## FEATURES

- Available with BIOS® SkyBlue® technology to support proper daytime circadian stimulus
- Upgrade existing fixtures to energy-efficient LED source
- Installs in less than 3 minutes without disrupting the ceiling plenum
- Tool-less access to the electrical from room-side of fixture
- Uniform ambient illumination
- Designed to fit into most 1x4, 2x2, and 2x4 fixture housings with a minimum fixture depth of 3-3/8"
- Maximize energy savings with efficacies up to 134 lm/W
- Reduces energy consumption up to 20%
- Made Right Here® in the USA

## ORDERING EXAMPLE: PTR - 2 4 - L90/835 - RA - OPTIONS - DIM - UNV

### ORDERING INFO

SERIES	WIDTH	LENGTH	LUMENS <sup>[1]</sup>	CRI	CCT	SHIELDING
PTR	1 1' <sup>[2]</sup>	2 2' <sup>[3]</sup>	1x4	8 80	27 2700K	RA Diffuse ribbed acrylic, round
		4 4'	L27 2,700lm	9 90 <sup>[4]</sup>	30 3000K	SA Diffuse ribbed acrylic, square <sup>[5]</sup>
	2 2'	4 4'	L45 4,500lm	2x2	40 4000K	50 5000K
			L26 2,600lm			
	2x4	4 4'	L38 3,800lm	2x4	40 4000K	50 5000K
			L47 4,700lm			
			L38 3,800lm			
			L49 4,900lm			
			L61 6,100lm			
			L90 9,000lm			

## SPECIFICATIONS

- HOUSING** – Provided by others, must fit within approved minimum dimensions.
- REFLECTOR/WIREWAY COVER** – 25-gauge C.R.S.
- SHIELDING** – Diffuse ribbed acrylic.
- FINISH** – 92% minimum average reflective white powder coat. All parts painted after fabrication to facilitate installation, increase efficiency, and inhibit corrosion.
- ELECTRICAL** – High quality mid-power LED boards. L70 >50,000 hours.
- MOUNTING** – Designed to retrofit existing troffers and parabolics in 1" nominal grid ceiling applications.
- LISTINGS** –
  - cCSAus certified as luminaire suitable for dry or damp locations.
  - DesignLights Consortium Premium qualified product. Not all versions of this product may be DLC Premium qualified, see the DLC Qualified Products List at [www.designlights.org/QPL](http://www.designlights.org/QPL).
- WARRANTY** – 5-year limited warranty, see [hew.com/warranty](http://hew.com/warranty).

### OPTIONS <sup>[6]</sup>

<b>EM/7W</b>	7-watt emergency LED battery
<b>EM/10W</b>	10-watt emergency battery
<b>EM/12W</b>	12-watt emergency battery
<b>(L__)</b>	Additional lower lumen packages available. Example: 8,000 lumens = PTR-24-L90/835-(L80) <sup>[8]</sup>

### CONTROL <sup>[7]</sup>

<b>DIM</b>	Dimming driver
<b>DRV</b>	Non-dimming driver
<b>VDO/DSR</b>	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) and sensor-ready driver
<b>VRF/DSR</b>	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and sensor-ready driver

### VOLTAGE

<b>120</b>	120V
<b>277</b>	277V
<b>UNV</b>	120-277V
<b>347</b>	347V <sup>[9]</sup>

Note: H.E. Williams, Inc. recommends installing a trial fixture prior to ordering full project quantities.



## NOTES

- Lumen output based on 3500 CCT. Actual lumens may vary +/-5%, see page 2 for FIXTURE PERFORMANCE DATA.
- 4' length only.
- 2' width only.
- Extended lead times may apply. Consult factory for availability.
- Increases lumen output by 3%.
- See [Technical Info](#) for Drywall Kit details.
- See page 3 for ADDITIONAL CONTROL OPTIONS.
- Specify in increments of 100 nominal lumens. Option must be specified with next higher lumen package.
- Not available with emergency batteries.



## FIXTURE PERFORMANCE DATA

	LED PACKAGE	DELIVERED LUMENS	WATTAGE	EFFICACY (lm/W)
1x4	L27	2723	21.4	127.4
	L45	4526	33.7	134.3
2x2	L26	2633	21.3	123.6
	L38	3804	32.6	116.7
	L47	4708	38.1	123.4
2x4	L38	3763	31.4	119.7
	L49	4928	37.2	132.6
	L61	6059	48.5	124.9
	L90	9018	71.4	126.4

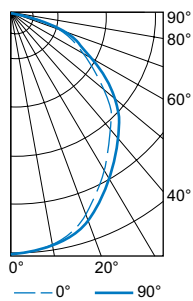
## MULTIPLIER TABLE

		COLOR TEMPERATURE	
		CCT	CONVERSION FACTOR
80 CRI	2700K		0.97
	3000K		0.99
	3500K		1.00
	4000K		1.03
	5000K		1.06
90 CRI	2700K		0.82
	3000K		0.83
	3500K		0.84
	4000K		0.86
	5000K		0.90

- Photometrics tested in accordance with IESNA LM-79. Results shown are based on 25°C ambient temperature.
- Wattage shown is average for 120V through 277V input.
- Results based on 3500K, 80 CRI, actual lumens may vary +/-5%
- Use multiplier table to calculate additional options.

## PHOTOMETRY

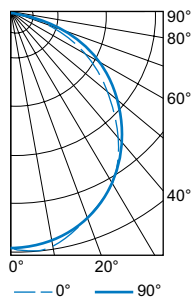
**PTR-24-L90/835-RA-DIM-UNV** Total Luminaire Output: 9018 lumens; 71.4 Watts | Efficacy: 126 lm/W | 82.7 CRI; 3494K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	3405	3405	3405	
5	3388	3388	3390	322
15	3167	3181	3201	907
25	2803	2850	2891	1324
35	2356	2444	2527	1529
45	1917	2069	2190	1572
55	1349	1525	1673	1362
65	875	1081	1246	1054
75	406	645	817	681
85	81	290	340	267
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	2553	28
	0 - 40	4082	45
	0 - 60	7016	78
	0 - 90	9018	100
	0 - 180	9018	100

**PT-14-L45/835-RA-DIM-UNV** Total Luminaire Output: 4526 lumens; 33.7 Watts | Efficacy: 134 lm/W | 84.9 CRI; 3544K CCT



VERTICAL ANGLE	HORIZONTAL ANGLE			ZONAL LUMENS
	0°	45°	90°	
0	1649	1649	1649	
5	1687	1668	1643	158
15	1612	1608	1588	451
25	1475	1482	1464	678
35	1283	1300	1301	806
45	1023	1069	1084	815
55	733	805	839	715
65	470	557	571	532
75	209	293	305	297
85	32	53	62	73
90	0	0	0	

LUMEN SUMMARY	ZONE	LUMENS	% FIXTURE
	0 - 30	1287	28
	0 - 40	2093	46
	0 - 60	3623	80
	0 - 90	4526	100
	0 - 180	4526	100

## RETROFIT GUIDE

FLUORESCENT	WATTAGE	LED	WATTAGE	SAVINGS
1 - 32W T8	31	PTR-14-L27/	21	32%
2 - 32W T8	58	PTR-14-L45/	34	41%
3 - 17W T8	48	PTR-22-L47/	38	20%
2 - 32W T8	58	PTR-24-L49/	37	36%
3 - 32W T8	88	PTR-24-L61/	49	45%
4 - 32W T8	112	PTR-24-L90/	71	37%

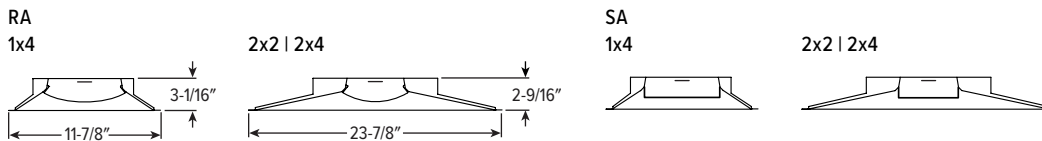


## ADDITIONAL CONTROL OPTIONS

Note: Lumen restrictions apply, consult product builder at [hew.com/product-builder](http://hew.com/product-builder).

CATALOG NUMBER	DESCRIPTION
DRV	Driver prewired for non-dimming applications
DIM	Dimming driver prewired for 0-10V low voltage applications
DIM1	1% dimming driver prewired for 0-10V low voltage applications
DIM LINE	Line voltage dimming driver (TRIAC and ELV compatible, 120V only)
DIM TRC	Line voltage dimming driver (TRIAC compatible, 120V or 277V only)
DSR	Sensor-ready driver
SD40	40% step-dimming driver
SD50	50% step-dimming driver
DALI	DALI dimming driver
LTE LINE	Lutron Hi-lume 1% 2-wire dimming driver forward phase line voltage controls (120V only)
LDE1	Lutron Hi-lume 1% EcoSystem dimming LED driver
LDE5	Lutron 5-Series 5% EcoSystem dimming LED driver
VDO/DSR	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC) and sensor-ready driver
VRF/DSR	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF) and sensor-ready driver
VDO/DBI/LDE1	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface
VDO/DBI/LDE5	Lutron Vive integral fixture control, RF with daylight and occupancy sensor (DFCSJ-OEM-OCC), Lutron 5-Series 5% EcoSystem dimming LED driver, and digital link interface
VRF/DBI/LDE1	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron Hi-lume 1% EcoSystem dimming LED driver, and digital link interface
VRF/DBI/LDE5	Lutron Vive integral fixture control, RF only (DFCSJ-OEM-RF), Lutron 5-Series 5% EcoSystem dimming LED driver, and digital link interface
ELDO SOLOB	EldoLED Solodrive, 0.1% dimming driver for 0-10V controls
ELDO SOLOB DALI	EldoLED Solodrive, 0.1% dimming driver for DALI controls
ELDO ECO1	EldoLED Ecodrive, 1% dimming driver for 0-10V controls
ELDO ECO1 DALI	EldoLED Ecodrive, 1% dimming driver for DALI controls

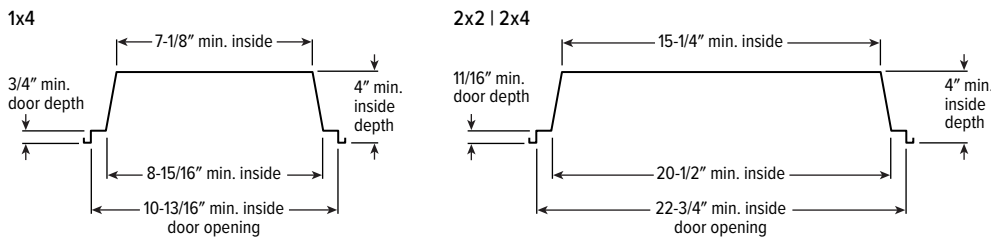
## CROSS SECTIONS



## FIXTURE DETAILS

The PTR retrofit kit is designed to fit the following fixture housing dimensions. H.E. Williams, Inc. recommends a trial installation prior to purchasing full quantities.

### WIDTH



### LENGTH

