

QUALIFYING PRODUCTS¹
High-Performance 120 and 277V T8 Dimming Ballasts
CEE High-Performance Commercial Lighting Systems Initiative
Updated 11/02/09

Legend: **Red Font (Italics)** is a product no longer manufactured, but still meets the criteria as a qualifying product

| Manufacturer | Product Name | Model Number | NEMA ⁴ Premium® | Lamp Wattage | Voltage (V) | Ballast Type ² | Ballast Factor Range | Ballast Factor | Input Watts (W) | BEF ³ |
|--|-----------------------------|-------------------------|----------------------------|--------------|-------------|---------------------------|----------------------|----------------|-----------------|------------------|
| HP T8 Qualified Ballasts with 1 Lamp | | | | | | | | | | |
| Fifth Light Technology | DALI | FLT-120-1x32WT8HBF-DALI | no | 32 | 120 | PD | Normal | 1.00 | 35 | 2.86 |
| | | FLT-277-1x32WT8HBF-DALI | no | 32 | 277 | PD | Normal | 1.00 | 35 | 2.86 |
| Leviton | Sector | SD1F8-32M | no | 32 | 120/277 | PD | High | 1.15 | 39 | 2.95 |
| | | SD1J8-32M | no | 32 | 120/277 | PD | High | 1.15 | 39 | 2.95 |
| Lutron | Hi-Lume3D | H3D T832 C UNV 1 10 | no | 32 | 120/277 | PD | Normal | 1.00 | 35.1/34.8 | 2.85/2.87 |
| | | H3D T832 C UNV 1 17 | no | 32 | 120/277 | PD | High | 1.17 | 39.7 | 2.95 |
| Osram - Sylvania | Quicktronic | QTP1X32T8/UNVDIM-TC | no | 32 | 120/277 | PD | Normal | 0.88 | 30 | 2.93 |
| Philips - Advance | Mark 10 Powerline | REZ-132-SC | no | 32 | 120 | PD | Normal | 1.00 | 35 | 2.86 |
| | | VEZ-132-SC | no | 32 | 277 | PD | Normal | 1.00 | 35 | 2.86 |
| | Mark 7 | 1ZT-132-SC | no | 32 | 120/277 | PD | Normal | 1.00 | 35 | 2.86 |
| Universal Lighting Technologies | DemandFlex | B232PUNVDRL-A | yes | 32 | 120/277 | PD | Low | 0.683/0.684 | 23.7/23.8 | 2.88/2.87 |
| | | B232PUNVDR-A | yes | 32 | 120/277 | PD | Normal | 0.88 | 29/30 | 3.03/2.93 |
| | Ballastar | B232PUS50-A | yes | 32 | 120/277 | PD | Normal | 0.88 | 29 | 3.03 |
| HP T8 Qualified Ballasts with 2 Lamps | | | | | | | | | | |
| General Electric Company | UltraMax Bi-Level Switching | GE232MAX90-S60 | yes | 32 | 120/277 | PD | High | 1.18 | 75/74 | 1.57/1.59 |
| | | GE232MAX90-S60 | yes | 28 | 120/277 | PD | High | 1.18 | 64/63 | 1.84/1.87 |
| | | GE232MAX90-S60 | yes | 25 | 120/277 | PD | High | 1.18 | 59/57 | 2.00/2.07 |
| | UltraMax LoadShed Dimming | GE232MAX90-V60 | yes | 32 | 120/277 | PD | High | 1.18 | 75/74 | 1.57/1.59 |
| | | GE232MAX90-V60 | yes | 28 | 120/277 | PD | High | 1.18 | 63/62 | 1.87/1.90 |
| | | GE232MAX90-V60 | yes | 25 | 120/277 | PD | High | 1.18 | 59/57 | 2.00/2.07 |
| Leviton | Sector | SD2F8-32M | no | 32 | 120/277 | PD | High | 1.15 | 76 | 1.51 |
| | | SD2J8-32M | no | 32 | 120/277 | PD | High | 1.15 | 76 | 1.51 |
| Lutron | Hi-Lume3D | H3D T832 C UNV 2 10 | no | 32 | 120/277 | PD | Normal | 1.00 | 66.5/65.7 | 1.50/1.52 |
| | | H3D T832 C UNV 2 17 | no | 32 | 120/277 | PD | High | 1.17 | 76.9/75.4 | 1.52/1.55 |
| | | EC5 T832 G UNV 2L | no | 32 | 120/277 | PD | Low | 0.85 | 56.9 | 1.49 |
| | EcoSystem | EC5 T832 J UNV 2 | no | 32 | 120/277 | PD | Low | 0.85 | 59.1/57.4 | 1.44/1.48 |
| Osram - Sylvania | Quicktronic | QHES2X32T8/UNVPSN-SC | no | 32 | 120/277 | PD | Normal | 0.88 | 55/54 | 1.60/1.63 |
| | | QTP2X32T8/UNV DIM TC | no | 32 | 120/277 | PD | Normal | 0.88 | 60/58 | 1.47/1.52 |
| Philips Lighting Electronics | Mark 10 Powerline | REZ-2S32-SC | no | 32 | 120 | PD | Normal | 1.00 | 68 | 1.47 |
| | | VEZ-2S32-SC | no | 32 | 277 | PD | Normal | 1.00 | 68 | 1.47 |
| Universal Lighting Technologies | Demand Flex | B232PUNVDR-A | yes | 32 | 120/277 | PD | Normal | 0.88 | 56/55 | 1.57/1.6 |
| | | B232PUNVDRL-A | yes | 32 | 120/277 | PD | Low | 0.71 | 47 | 1.51 |
| | | B232PUNVDRH-A | yes | 32 | 120/277 | PD | High | 1.18 | 74/72 | 1.59/1.64 |
| | Ballastar | B232PU104S50-A | yes | 32 | 120/277 | PD | High | 1.04 | 65 | 1.60 |
| | | B232PUS50-A | yes | 32 | 120/277 | PD | Normal | 0.88 | 57/56 | 1.54/1.57 |
| HP T8 Qualified Ballasts with 3 Lamps | | | | | | | | | | |
| General Electric Company | UltraMax Bi-Level Switching | GE332MAX90-S60 | yes | 32 | 120/277 | PD | High | 1.18 | 113/110 | 1.04/1.07 |
| | | GE332MAX90-S60 | yes | 28 | 120/277 | PD | High | 1.18 | 95/93 | 1.24/1.27 |
| | | GE332MAX90-S60 | yes | 25 | 120/277 | PD | High | 1.18 | 91/90 | 1.30/1.31 |
| | UltraMax LoadShed Dimming | GE332MAX90-V60 | yes | 32 | 120/277 | PD | High | 1.18 | 113/110 | 1.04/1.07 |
| | | GE332MAX90-V60 | yes | 28 | 120/277 | PD | High | 1.18 | 95/94 | 1.24/1.26 |
| | | GE332MAX90-V60 | yes | 25 | 120/277 | PD | High | 1.18 | 91/90 | 1.30/1.31 |
| Lutron | Hi-Lume3D | H3D T832 C UNV 3 17 | no | 32 | 120/277 | PD | High | 1.17 | 106.8/105.7 | 1.10/1.11 |
| | | H3D T832 G UNV 3 10 | no | 32 | 120/277 | PD | Normal | 1.00 | 95.4/93.5 | 1.05/1.07 |
| | EcoSystem | EC5 T832 G UNV 317 | no | 32 | 120/277 | PD | High | 1.17 | 106.8/105.7 | 1.10/1.11 |
| | | EC5 T832 G UNV 3L | no | 32 | 120/277 | PD | Low | 0.85 | 85.9/86.5 | .99/98 |
| Osram - Sylvania | Quicktronic | QHELS3X32T8/UNVPSN-SC | no | 32 | 120/277 | ID | Normal | 0.88 | 83/82 | 1.06/1.07 |
| | | QTP3X32T8/UNVDIM-TC | no | 32 | 120/277 | PD | Normal | 0.88 | 87/84 | 1.01/1.05 |

| Manufacturer | Product Name | Model Number | NEMA ⁴ Premium® | Lamp Wattage | Voltage (V) | Ballast Type ² | Ballast Factor Range | Ballast Factor | Input Watts (W) | BEF ³ |
|--|-----------------------------|----------------------|----------------------------|--------------|-------------|---------------------------|----------------------|----------------|-----------------|------------------|
| Universal Lighting Technologies | Demand Flex | B332PUNVDR-E | yes | 32 | 120/277 | PD | Normal | 0.87 | 85/83 | 1.02/1.05 |
| | | B332PUNVDRL-E | yes | 32 | 120/277 | PD | Low | 0.71 | 72 | 0.99 |
| | | B332PUNVDRH-E | yes | 32 | 120/277 | PD | High | 1.15 | 115/111 | 1.00/1.04 |
| HP T8 Qualified Ballasts with 4 Lamps | | | | | | | | | | |
| General Electric Company | UltraMax Bi-Level Switching | GE432MAX90-S60 | yes | 32 | 120/277 | PD | High | 1.18 | 149/146 | 0.79/.81 |
| | | GE432MAX90-S60 | yes | 28 | 120/277 | PD | High | 1.18 | 127/125 | .93/.94 |
| | | GE432MAX90-S60 | yes | 25 | 120/277 | PD | High | 1.18 | 116/114 | 1.02/1.04 |
| | UltraMax LoadShed Dimming | GE432MAX90-V60 | yes | 32 | 120/277 | PD | High | 1.18 | 149/146 | .79/.81 |
| | | GE432MAX90-V60 | yes | 28 | 120/277 | PD | High | 1.18 | 127/125 | .93/.94 |
| | | GE432MAX90-V60 | yes | 25 | 120/277 | PD | High | 1.18 | 116/114 | 1.02/1.04 |
| Osram - Sylvania | Quicktronic | QTP4X32T8/UNV DIM-TC | no | 32 | 120/277 | PD | Normal | 0.88 | 114/110 | .77/.80 |
| Philips - Advance | Mark 7 | 1ZT-4S32 | no | 32 | 120/277 | PD | Normal | 0.88 | 116 | 0.76 |
| Universal Lighting Technologies | Demand Flex | B432PUNVDR-E | yes | 32 | 120/277 | PD | Normal | 0.88 | 116/112 | 0.76/0.79 |
| | | B432PUNVDRL-E | yes | 32 | 120/277 | PD | Low | 0.71 | 93 | 0.76 |
| | Ballastar | B432P277V5-E | yes | 32 | 277 | P | Normal | 0.88 | 115 | 0.77 |
| | | B432P277V5H-E | yes | 32 | 277 | PD | High | 1.18 | 150 | 0.79 |
| HP T8 Qualified Ballasts with 6 Lamps | | | | | | | | | | |
| General Electric Company | UltraMax | GE632MAX-H90-S60 | yes | 32 | 120/277 | I | High | 1.18 | 221/215 | .53/.55 |
| | | GE632MAX-H90-V60 | yes | 32 | 120/277 | I | High | 1.18 | 221/215 | .53/.55 |

¹ CEE's specification uses the BALLAST EFFICACY FACTOR (BEF) as the true measure of efficiency. The input watt figure calculations are based on a premium 4', 32W T8 reference lamp.

² "P" signifies programmed start, "I" signifies instant start, "D" signifies dimming capabilities

³ BEF is calculated by multiplying the Ballast Factor by 100 and dividing by the input watts, except for Howard Industries and Standard Products, which provide the information in their catalog.

⁴ NEMA Premium® is a trademark of the National Electrical Manufacturers Association. It is an identifiable certification mark for manufacturers to use on products that meet the ballast portion of CEE's current specification for High Performance Lighting Systems. The label is available to all manufacturers that enroll in the NEMA Premium® program and sign a Memorandum of Understanding and Licensing agreement with NEMA.