



LED T8 DIRECT FIT BALLAST COMPATIBILITY

10W LED T8 Direct Fit (LED10WT8F/36/8xx-G8DR)

Manufacturer	Part Number	Start Method	# of Lamps	BF		Lamp Connect.	N-1 Lamp		N Lamp	
				Type	Value		120	277	120	277
Motorola	M2-IN-T8-GP-D-277	IS	2	/	/	Parallel	NA	✓	NA	✓
Motorola	M3-IN-T8-GP-A-277	IS	3	/	/	Parallel	NA	✓	NA	✓

✓ = Compatible ✗ = Incompatible P = PF < 0.85 T = THD > 30% NA = Not applicable

12W LED T8 Direct Fit (LED12WT8/48/8xx-G8DR)

Manufacturer	Part Number	Start Method	# of Lamps	BF		Lamp Connect.	N-1 Lamp		N Lamp	
				Type	Value		120	277	120	277
ACT	ACT 2P32ISUNVE	IS	2	N	0.89	Parallel	✓	✓	✓	✓
ANTRON ELECTRONICS	A32T8MICLO	IS	2	L	0.78	Parallel	✓	✓	✓	✓
ARCATA	ACT 3P32ISUNVLE	IS	3	L	0.78	Parallel	✓	✓	✓	✓
Cooper Lighting	CL-432ISUNV-R1-B	IS	4	H	1.18	Parallel	✓	✓	✓	✓
DAMAR	EL232-120/277HF(1688B)	IS	2	N		Parallel	✓	✓	✓	✓
DAMAR	EL232DIM/120/277HF	DPS	2	L	?	Series	✗	✗	✗	✗
DAMAR	EL232HL-120/277HF(1688D)	IS	2	H		Parallel	✓	✓	✓	✓
DAMAR	EL332-120/277HF(3654C)	IS	3	N		Parallel	✓	✓	✓	✓
DAMAR	EL332HL-120/277HF(3654H)	IS	3	H		Parallel	✓	✓	✓	✓
DAMAR	EL432-120/277HF(3093B)	IS	4	N		Parallel	✓	✓	✓	✓
DAMAR	EL432HL-120/277HF(3093C)	IS	4	H		Parallel	✓	✓	✓	✓
EIKO	PM-2x32T8-UNV-IS-H	IS	2	H	1.18	Parallel	✗	✗	✗	✗
EIKO	PM-2X32T8-UNV-IS	IS	2	N	0.87	Parallel	✓	✓	✓	✓
EIKO	PM-2X32T8-UNV-IS-L	IS	2	L	0.77	Parallel	✓	✓	✓	✓
EIKO	PM-2X32T8-UNV-PS	PS	2	N	0.88	Parallel	✗	✗	✗	✗
EIKO	PM-3X32T8-UNV-IS	IS	3	N	0.87	Parallel	✓	✓	✓	✓
EIKO	PM-3X32T8-UNV-IS-H	IS	3	H	1.18	Parallel	✓	✓	✓	✓
EIKO	PM-3X32T8-UNV-IS-L	IS	3	L	0.78	Parallel	✓	✓	✓	✓
EIKO	PM-3X32T8-UNV-PS	PS	3	N	0.88	Series	✗	✗	✗	✗
EIKO	PM-3X32T8-UNV-PS-H	PS	3	H	1.18	Series	✗	✗	✗	✗
EIKO	PM-4X32T8-UNV-IS	IS	4	N	0.88	Parallel	✓	✓	✓	✓
EIKO	PM-4X32T8-UNV-IS-L	IS	4	L	0.78	Parallel	✓	✓	✓	✓
ESPEN	VE232MVHIPE	IS	2	N	0.89	Parallel	✓	✓	✓	✓
ESPEN	VE232MVHIPHE	IS	2	H	1.19	Parallel	✓	✓	✓	✓
ESPEN	VE232MVHIPLE	IS	2	L	0.77	Parallel	✓	✓	✓	✓
ESPEN	VE232MVHRPHT3-AB	DPS	2	H	1.20	Series	✗	✗	✗	✗
ESPEN	VE2P32MVHIPE	IS	2	N	0.89	Parallel	✓	✓	✓	✓
General Electric	GE132MAX-G-N	IS	1	N	0.88	n.a	NA	NA	✗	✗
General Electric	GE132MAX-H/ULTRA	IS	1	H	1.18	n.a	NA	NA	✓	✓
General Electric	GE132MAX-L/ULTRA	IS	1	L	0.78	n.a	NA	NA	✗	✗
General Electric	GE132MAXP-N/ULTRA	IS	1	N	0.88	n.a	NA	NA	✓	✓
General Electric	GE132MVPSN-V03	DPS	1	N	0.88	n.a	NA	NA	✗	✗
General Electric	GE232MAX347-N	IS	2	H	1.02	Parallel	NA	✗	NA	✗
General Electric	GE232MAX-G-L	IS	2	L	0.77	Parallel	✓	✓	✓	✓
General Electric	GE232MAX-G-N	IS	2	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE-232-MAX-H/ULTRA	IS	2	H	1.15	Parallel	✗	✗	✗	✗
General Electric	GE-232-MAX-H-42T	IS	2	H	/	Parallel	✗	✗	✗	✗
General Electric	GE232MAX-L/ULTRA	IS	2	L	0.78	Parallel	✓	✓	✓	✓
General Electric	GE232MAX-N/ULTRA	IS	2	N	0.88	Parallel	✓	✓	✗	✗
General Electric	GE232MAXP-N/ULTRA	IS	2	N		Parallel	✓	✓	✓	✓
General Electric	GE232MAXP90-V60	IS	2	H	1.18	Parallel	✓	P,T	✓	P,T
General Electric	GE-232-MV-N	IS	2	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE232MV-N-DIY	IS	2	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE232MVPS-L-S30	DPS	2	N	0.96	Parallel	✗	✗	✗	✗
General Electric	GE232-MVPS-N	PS	2	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE-232-MV-PS-N	PS	2	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE332MAX-G-N	IS	3	N	0.87	Parallel	✓	✓	✓	✓
General Electric	GE332MAX-H-42T	IS	3	H	/	Parallel	✓	✓	✓	✓
General Electric	GE332MAX-H-84TS	IS	3	H	/	Parallel	✓	✓	✓	✓
General Electric	GE332MAX-L/ULTRA	IS	3	L	0.78	Parallel	✓	✓	✓	✓
General Electric	GE332MAX-N/ULTRA	IS	3	N	0.88	Parallel	✓	✓	✓	✓

✓ = Compatible ✗ = Incompatible P = PF < 0.85 T = THD > 30% NA = Not applicable



LED T8 DIRECT FIT BALLAST COMPATIBILITY

12W LED T8 Direct Fit (LED12WT8/48/8xx-G8DR)

Manufacturer	Part Number	Start Method	# of Lamps	BF		Lamp Connect.	N-1 Lamp		N Lamp	
				Type	Value		120	277	120	277
General Electric	GE332MAXP90-V60	IS	3	H	1.18	Parallel	✓	✓	✓	✓
General Electric	GE332MAXP-H/ULTRA	IS	3	H	1.18	Parallel	✓	✓	✓	✓
General Electric	GE332MAXP-L/ULTRA	IS	3	L	0.77	Parallel	✓	✓	✓	✓
General Electric	GE332MV-N	IS	3	N	0.87	Parallel	✓	✓	✓	✓
General Electric	GE-332-MVPS-N	PS	3	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE332MVPSN-V03	DPS	3	N	0.98	Parallel	✗	✗	✗	✗
General Electric	GE432-120-RES	IS	4	N	0.83	Parallel	✓	NA	✓	NA
General Electric	GE432MAX347-N	IS	4	N	0.94	Parallel	NA	(347V)	NA	(347V)
General Electric	GE432MAX90-S60	IS	4	H	1.18	Parallel	✓	✓	✓	✓
General Electric	GE432MAX-G-H	IS	4	H	1.18	Parallel	✓	✓	✓	✓
General Electric	GE432MAX-G-N	IS	4	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE432MAX-H/ULTRA	IS	4	H	1.18	Parallel	✓	✓	✓	✓
General Electric	GE432MAX-H-42T	IS	4	H	/	Parallel	✓	T	✓	T
General Electric	GE432MAX-L/ULTRA	IS	4	L	0.78	Parallel	✗	✗	✗	✗
General Electric	GE432MAX-N/ULTRA	IS	4	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE432MAXP90-S60	IS	4	H	1.18	Parallel	✗	✗	✗	✗
General Electric	GE432MV-N-42T	IS	4	N	0.93	Parallel	✓	✓	✓	✓
General Electric	GE432-MVPS-N	PS	4	N	0.88	Parallel	✗	✗	✗	✗
General Electric	GE432MVPS-N-V03	PS	4	N	0.90	Parallel	✗	✗	✗	✗
Halco	EP232IS/H/MV/HE	IS	2	H	1.18	Parallel	✓	✓	✓	✓
Halco	EP232IS/L/MV/HE	IS	2	L	0.78	Parallel	✓	✓	✓	✓
Halco	EP232IS/MV/HE	IS	2	N	0.88	Parallel	✓	✓	✓	✓
Halco	EP332IS/L/MV/HE	IS	3	L	0.78	Parallel	✓	✓	✓	✓
Halco	EP332IS/MV/HE	IS	3	N	0.87	Parallel	✓	✓	✓	✓
Halco	EP432IS/120/MC	IS	4	n	0.88	Parallel	✓	✓	✓	✓
Halco	EP432IS/L/MV/HE	IS	4	L	0.78	Parallel	✓	✓	✓	✓
Halco	EP432IS/MV/HE	IS	4	N	0.88	Parallel	✓	✓	✓	✓
HATCH	HL232BIS/UV/HE/W	IS	2	N	0.9	Parallel	✓	✓	✓	✓
HATCH	HL432BIS/UV/HE/W	IS	4	N	0.9	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	E2/32IS-120MC	IS	2	N	0.85	Parallel	P,T	NA	✓	NA
HOWARD INDUSTRIES	E2/32IS-277	IS	2			Parallel	NA	✗	NA	✗
HOWARD INDUSTRIES	EP2/32IS/MV/MC/HE	IS	2	N	0.89	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EP2/32PRS/MV/MC/HE	PRS	2	N	0.86	Parallel	✗	✗	✗	✗
HOWARD INDUSTRIES	EP3/32IS/208-277	IS	3			Parallel	NA	✗	NA	✗
HOWARD INDUSTRIES	EP3/32IS/MV/MC/HE	IS	3	N	0.88	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EP3/32IS/MV/SC/HE	IS	3	N	0.87	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EP4/32IS/MV/MC/HE	IS	4	N	0.88	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EP4/32PPRS/MV/SC/HE	PRS	4	N	?	Parallel	✗	✗	✗	✗
HOWARD INDUSTRIES	EPH2/32IS/MV/MC/HE	IS	2	H	1.18	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EPH3/32IS/MV/MC/HE	IS	3	N	0.91	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EPH4/32IS/MV/SC/HE	IS	4	H	1.16	Parallel	✗	✗	✗	✗
HOWARD INDUSTRIES	EPL2/32IS/MV/MC/HE	IS	2	L	0.78	Parallel	✓	P,T	✓	✓
HOWARD INDUSTRIES	EPL3/32IS/MV/SC/HE	IS	3	L	0.78	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EPL4/32IS/MV/MC/HE	IS	4	L	0.77	Parallel	✓	✓	✓	✓
KEYSTONE	KTEB-132-1-TP-FC	RS	1	N	?	NA	NA	NA	✗	NA
KEYSTONE	KTEB-232LBF-1-TP-PIC-EV	IS	2	N	0.88	Parallel	✗	NA	✗	NA
KEYSTONE	KTEB-232-UV-IS-H-P	IS	2	H	1.18	Parallel	✓	✓	✓	✓
KEYSTONE	KTEB-232-UV-IS-N-P	IS	2	N	0.87	Parallel	✓	✓	✓	✓
KEYSTONE	KTEB-332-UV-IS-H-P	IS	3	H	1.18	Parallel	✓	✓	✓	✓
KEYSTONE	KTEB-332-UV-IS-N-P	IS	3	N	0.87	Parallel	✓	✓	✓	✓
KEYSTONE	KTEB-432RIS-1-TP-SL	IS	4	N	0.80	Parallel	✓	NA	✓	NA
KEYSTONE	KTEB-432-UV-IS-H-P	IS	4	H	1.18	Parallel	✓	✓	✓	✓
KEYSTONE	KTEB-432-UV-IS-N-P	IS	4	N	0.87	Parallel	✓	✓	✓	✓
LIGHTING PRODUCTS LIMITED	EB-332EBF-UV-TP-HE	IS	3	L	0.78	Parallel	✓	✓	✓	✓
MAXLITE	MLEU322HEL/SC	IS	2	N	0.83	Parallel	✓	✓	✓	✓
MAXLITE	MLEU323H/SC	IS	3	H	1.18	Parallel	✗	✗	✗	✗
MAXLITE	MLEU324HE/SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓
MAXLITE	SKEU322HEL/SC	IS	2	L	0.77	Parallel	✓	✓	✓	✓
MAXLITE	SKEU323L/SC	IS	3	L	0.78	Parallel	✓	✓	✓	✓
MAXLITE	SKEU324HE/SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓

✓ = Compatible ✗ = Incompatible P = PF < 0.85 T = THD > 30% NA = Not applicable

12W LED T8 Direct Fit (LED12WT8/48/8xx-G8DR)

Manufacturer	Part Number	Start Method	# of Lamps	BF		Lamp Connect.	N-1 Lamp		N Lamp	
				Type	Value		120	277	120	277
MOTOROLA	M2-IN-T8-GP-D-277	IS	2	/	/	Parallel	NA	✓	NA	✓
MOTOROLA	M3-IN-T8-GP-A-277	IS	3	/	/	Parallel	NA	✓	NA	✓
OSRAM SYLVANIA	QHE 1X32T8/UNV DIM-TC	DPS	1	N	0.88	NA	NA	NA	✗	✗
OSRAM SYLVANIA	QHE 1X32T8/UNV ISH-SC	IS	1	L	0.77	NA	NA	NA	✓	P,T
OSRAM SYLVANIA	QHE 1X32T8/UNV ISL-SC	IS	1	L	0.78	n.a	NA	NA	✓	✓
OSRAM SYLVANIA	QHE 1X32T8/UNV ISN-SC	IS	1	N	0.88	n.a	NA	NA	✓	✓
OSRAM SYLVANIA	QHE 2X32T8/347 ISN-SC	IS	2	H	/	Parallel	NA	(347V)	NA	(347V)
OSRAM SYLVANIA	QHE 2x32T8/347 PSN-SC	PRS	2	N	0.88	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 2X32T8/UNV DIM-TC	PRS	2	N	0.88	Series	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 2X32T8/UNV ISH HT-SC	IS	2	H		Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 2X32T8/UNV ISH-SC	IS	2	H	1.20	Parallel	P,T	P,T	✗	P,T
OSRAM SYLVANIA	QHE 2X32T8/UNV ISL-SC	IS	2	L	0.78	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 2X32T8/UNV ISN-SC	IS	2	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 2X32T8/UNV PSH-HT	PRS	2	H	1.18	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 2X32T8/UNV PSN-MC	PRS	2	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 3X32T8/UNV ISH HT-SC	IS	3	H	1.18	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 3X32T8/UNV ISH-SC	IS	3	H	1.18	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 3X32T8/UNV ISH-SC	IS	3	H	1.18	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 3X32T8/UNV ISL-SC	IS	3	L	0.78	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 3X32T8/UNV ISN-SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 3X32T8/UNV PSH-HT-SC	DPS	3	H	1.15	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 3X32T8/UNV PSN-SC	PRS	3	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 4X32T8/347 ISN-SC	IS	4	H	/	Parallel	NA	(347V)	NA	(347V)
OSRAM SYLVANIA	QHE 4X32T8/UNV ISH HT-1	IS	4	H	1.18	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 4X32T8/UNV ISH-SC	IS	4	H		Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 4X32T8/UNV ISL-SC	IS	4	L	0.78	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 4X32T8/UNV ISN-SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 4X32T8/UNV PSN-SC	PRS	4	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 4X32T8/UNV PSX-SC	PRS	4	L	0.71	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 5X32T8/UNV PSL-SC	PRS	2	L	0.71	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QT 2X32 T8/277 ISN-SC	IS	2				NA	✓	NA	✓
OSRAM SYLVANIA	QT 2X32/347 ISH-SC	IS	2	H	1.20	Parallel	NA	NA	NA	(347V)
OSRAM SYLVANIA	QT 3X32/277 IS	IS	3			Parallel	NA	✓	NA	✓
OSRAM SYLVANIA	QT 4X32 T8/347 ISN-SC	IS	4	N	/	Parallel	NA	(347V)	NA	(347V)
OSRAM SYLVANIA	QT2X32/120 IS-SC	IS	2	N	0.9	Parallel	P,T	NA	✓	NA
OSRAM SYLVANIA	QT2X32T8/277 ISN-SC	IS			0.88	Parallel	NA	✓	NA	✓
OSRAM SYLVANIA	QTP 2X32T8/UNV ISN-SC	IS	2	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QTP 3X32T8/UNV ISN-SC	IS	3	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QTP 3X32T8/UNV PSX-SC	PRS	3	L	0.71	Series	✗	✗	✗	✗
OSRAM SYLVANIA	QTP 4x32T8/UNV ISN-SC	IS	4	N	0.88	Parallel	✓	P,T	✓	✓
OSRAM SYLVANIA	QTP2X32T8/277 ISN-D	IS	2	L	0.78	Parallel	NA	✓	NA	✓
OSRAM SYLVANIA	QTP2X32T8/UNV DIM-TC	DPS	2	N	0.88	?	✗	✗	✗	✗
OSRAM SYLVANIA	QTP3X32T8/UNV PSN-SC	PRS	3	N	0.88	Series	✗	✗	✗	✗
Pacific Fluorescent	EB-232IS-120-RES	IS	2	N		Parallel	P,T	NA	✗	NA
Philips-Advance	GOPA-2P32-N	IS	2	N	/	Parallel	✓	✓	✓	✓
Philips-Advance	GOPA-4P32-SC	IS	4	-	-	Parallel	(347V)	NA	(347V)	NA
Philips-Advance	ICN-132-MC	IS	1	N	0.88	NA	NA	NA	✗	✗
Philips-Advance	ICN-1P32-N	IS	1	N	0.91	NA	NA	NA	✗	✗
Philips-Advance	ICN-2P16-TLED-N	IS	2	N	1.18	NA	✓	✓	✓	✓
Philips-Advance	ICN-2P32-N	IS	2	N	0.89	Parallel	✓	✓	✓	✓
Philips-Advance	ICN-2P32-SC	IS	2			Parallel	✓	✓	✓	✓
Philips-Advance	ICN-3P32-N	IS	3	N	0.88	Parallel	✗	✗	✗	✗
Philips-Advance	ICN-3P32-SC	IS	3	N	0.89	Parallel	✓	✓	✓	✓
Philips-Advance	ICN-4P16-TLED-N	IS	4	N		Parallel	✓	✓	✓	✓
Philips-Advance	ICN-4P32-N	IS	4	N	0.90	Parallel	✓	✓	✓	✓
Philips-Advance	ICN-4P32-SC	IS	4			Parallel	✓	✓	✓	✓
Philips-Advance	IOP-1P32-N	IS	1	N	0.89	NA	✗	✗	✗	✗
Philips-Advance	IOP-2P32HL-SC	IS	2	H	1.18	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-2P32-LW-N	IS	2	L	0.77	Parallel	✓	✓	✓	✓

✓ = Compatible ✗ = Incompatible P = PF <0.85 T = THD >30% NA = Not applicable

12W LED T8 Direct Fit (LED12WT8/48/8xx-G8DR)

Manufacturer	Part Number	Start Method	# of Lamps	BF		Lamp Connect.	N-1 Lamp		N Lamp	
				Type	Value		120	277	120	277
Philips-Advance	IOP-2P32-N	IS	2	N	0.89	Parallel	✓	✓	✓	✓
Philips-Advance	IOP-2PSP32-LW-N	PS	2	L	0.71	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-2PSP32-N	PS	2	N		Parallel	✗	✗	✗	✗
Philips-Advance	IOP-2S32-SC	PS	2	N	0.87	Series	✗	✗	✗	✗
Philips-Advance	IOP-3P32HL-90C-SC	IS	3	H	1.22	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-3P32-N	IS	3	N	0.87	Parallel	✓	✓	✓	✓
Philips-Advance	IOP-3PSP32-LW-SC	PS	3	L	0.69	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-3PSP32-SC	PS	3	N	0.88	Parallel	✓	✓	✓	✓
Philips-Advance	IOP-4P32-HL-SC	IS	4	H	1.18	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-4P32-LW-N	IS	4	L	0.77	Parallel	✓	✓	✓	✓
Philips-Advance	IOP-4P32-N	IS	4	N	0.87	Parallel	✓	✓	✓	✓
Philips-Advance	IOP-4P32-SC	IS	4	N	0.87	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-4PSP32-LW-SC	PS	4	L	0.69	Parallel	✓	✓	✓	✓
Philips-Advance	IOP-4PSP32-SC	PS	4	N	0.89	Parallel	✓	✓	✓	✓
Philips-Advance	IOPA-1P32-N	IS	1	N	0.88	NA	✗	✗	✗	✗
Philips-Advance	IOPA-2P32-HL-N	IS	2	H	1.18	Parallel	✗	✗	✗	✗
Philips-Advance	IOPA-2P32-LW-N	IS	2	L	0.76	Parallel	✓	✓	✓	✓
Philips-Advance	IOPA-3P32-LW-N	IS	3	L	0.76	Parallel	✗	✗	✗	✗
Philips-Advance	IOPA-3P32-LW-SC	IS	3	L	0.78	Parallel	✓	✓	✓	✓
Philips-Advance	IOPA-3P32-N	IS	3	N	0.86	Parallel	✓	✓	✓	✓
Philips-Advance	IOPA-4P32-HL	IS	4	H	1.18	Parallel	✓	✓	✓	✓
Philips-Advance	IOPA-4P32-HL-SC	IS	4	H	1.18	Parallel	✓	✓	✓	✓
Philips-Advance	IOPA-4P32-N	IS	4	N	0.87	Parallel	✗	✗	✗	✗
Philips-Advance	IOPA-4P32-SC	IS	4	N	0.92	Parallel	✓	✓	✓	✓
Philips-Advance	IZT-2PSP32-SC	DPS	2	N	1.00	Parallel	✗	✗	✗	✗
Philips-Advance	IZT-2S32-SC	DPS	2	N	1.00	Series	✗	✗	✗	✗
Philips-Advance	IZT-3PSP32-SC	DPS	3	H	1	Parallel	✗	✗	✗	✗
Philips-Advance	REB-2P32-SC	IS	2	N	0.88	Parallel	✓	NA	✓	NA
Philips-Advance	REB-4P32-SC	IS	4	N	0.81	Parallel	✓	NA	✓	NA
Philips-Advance	REL-2P32-RH-TP	IS	2	H	/	Parallel	✓	✓	✓	✓
Philips-Advance	REZ-132-SC	DPS	1	H	1	NA	NA	NA	✗	NA
Philips-Advance	REZ-2S32-SC	DPS	2	N	?	Series	✗	NA	✗	NA
Philips-Advance	REZ-3S32-SC	DPS	3	N	0.97	Series	✗	NA	✗	NA
Philips-Advance	VCN-2P32-SC	IS	2			Parallel	NA	✓	NA	✓
Philips-Advance	VCN-4P32-SC	IS	4			Parallel	NA	✓	NA	✓
Philips-Advance	VEL-2P32-RH-TP	IS	2	N		Parallel	NA	P,T	NA	✓
Philips-Advance	VEL-2P32-SC (Rev. D)	IS	2	N	0.88	Parallel	NA	P,T	NA	✓
Philips-Advance	VEL-2P32-SC (Rev. G)	IS	2	N	0.88	Parallel	NA	✓	NA	✓
Philips-Advance	VEL-3P32-SC	IS	3	N	0.88	Parallel	✓	✓	✓	✓
Philips-Advance	VZT-4S32-HL	DPS	4			Parallel	NA	✗	NA	✗
PLUSRITE	BAF232IS/MV	IS	2	N	0.89	Parallel	✓	✓	✓	✓
Plusrite	BAF232IS/MV/L	IS	2	L	0.78	Parallel	✓	✓	✓	✓
PLUSRITE	BAF332IS/MV	IS	3	N	0.88	Parallel	✓	✓	✓	✓
Plusrite	BAF332IS/MV/L	IS	3	L	0.78	Parallel	✓	✓	✓	✓
Plusrite	BAF432IS/MV	IS	4	N	0.88	Parallel	✓	✓	✓	✓
Plusrite	BAF432IS/MV/L	IS	4	L	0.78	Parallel	✓	✓	✓	✓
ProLume	E432IS/120/R/SL	IS	4	N	0.87	Parallel	✓	NA	✓	NA
ProLume	EP232IS/L/MV/SL	IS	2	L	0.78	Parallel	✗	✗	✓	✓
Robertson	ISU232T8HEMV	IS	2			Parallel	✓	✓	✓	✓
SOLA	E-758-U-232-MC	IS	2	N	0.88	Parallel	✓	✓	✓	✓
Standard Products	E232T8IS120-277/N/AS	IS	2		0.87		✓	✓	✓	✓
Standard Products	E232T8IS120-277/N/AS	IS	2	N	0.88	Parallel	✓	✓	✓	✓
Standard Products	E432T8IS347/N/BULK	IS	4	-	-	Parallel	347V	NA	347V	NA
SUNPARK	120-1/32IS HPF	IS	1	N	0.88	NA	NA	NA	✓	NA
SUNPARK	120-3/32IS MPF	IS	3	N	0.88	Parallel	P,T	NA	P,T	NA
SUNPARK	LC 12011T	PS	1	H		NA	NA	NA	✗	NA
SUNPARK	LC 12013T	PS	1	H		NA	NA	NA	✗	NA
SUNPARK	SL15T	PS	2	N	0.88	Series	✗	NA	✗	NA
SUNPARK	U-1/32PSE	PS	1	N	0.88	n.a	NA	NA	✗	✗

✓ = Compatible ✗ = Incompatible P = PF <0.85 T = THD >30% NA = Not applicable

12W LED T8 Direct Fit (LED12WT8/48/8xx-G8DR)

Manufacturer	Part Number	Start Method	# of Lamps	BF		Lamp Connect.	N-1 Lamp		N Lamp	
				Type	Value		120	277	120	277
SUNPARK	U-2/32IS HBF	IS	2	H	1.18	Parallel	✓	✓	✓	✓
SUNPARK	U-2/32ISE-LBF	IS	2	L	0.78	Parallel	✓	✓	✓	✓
SUNPARK	U-2/32PSE	RS	2	N	0.88		✗	✗	✗	✗
SUNPARK	U-2/32PSE-HBF	RS	2	H	1.15		✗	✗	✗	✗
SUNPARK	U-232PS3	RS	2	N	0.88		✗	✗	✗	✗
SUNPARK	U-232PS3-HBF	RS	2	H	1.15		✗	✗	✗	✗
SUNPARK	U-3/32ISE	IS	3	N	0.88	Parallel	✓	✓	✓	✓
SUNPARK	U-3/32ISE-HBF	IS	3	H	1.18	Parallel	✓	✓	✓	✓
SUNPARK	U-4/32IS HBF	IS	4	H	1.18	Parallel	✓	✓	✓	✓
SUNPARK	U-4/32IS HP,F	IS	4	N	0.88	Parallel	✓	✓	✓	✓
SUNPARK	U-4/32ISE-LBF	IS	4	L	0.77	Parallel	✓	✓	✓	✓
Superior Life	70201	IS	2	N	0.88	Parallel	✓	✓	✓	✓
Superior Life	70210	PS	2	N	0.88	Parallel	✗	✗	✗	✗
Superior Life	70211	PS	4	N	0.87	Parallel	✗	✗	✗	✗
TCP	E2P32ISUNVHE	IS	2	H	1.18	Parallel	✗	✗	✗	✗
TCP	E3P32ISUNVE	IS	3	N	0.88	Parallel	✓	✓	✓	✓
TCP	E3P32ISUNVHE	IS	3	H	/	Parallel	✓	✓	✓	✓
TCP	E3P32ISUNVLE	IS	3	L	0.78	Parallel	✓	✗	✓	✓
TCP	E4P32ISUNVE	IS	4	N	0.88	Parallel	✓	✓	✓	✓
TCP	E4P32ISUNVHE	IS	4	N	1.18	Parallel	✓	✓	✓	✓
TCP	E4P32ISUNVLE	IS	4	L	0.78	Parallel	✗	✗	✗	✗
TCP	TCP3P32ISUNVH	IS	3	H	1.18	Parallel	✓	✓	✓	✓
TOPAZ	B232IUNVHEH/A-TPZ	IS	2	H	1.18	Parallel	✓	✓	✓	✓
TOPAZ	B432IUNVHEH/A-TPZ	IS	4	H	1.18	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B132IUNVHP-N	IS	1	N	0.88	n.a	NA	NA	✓	✓
Universal Lighting Technologies	B2321120RES-A	IS	2	N	0.88	Parallel	T	NA	T	NA
Universal Lighting Technologies	B2321277RH-A	IS	2	H	1.09	Parallel	NA	✗	NA	✓
Universal Lighting Technologies	B232IUNV-C	IS	2	N	0.88	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B232IUNVEL-A	IS	2	L	0.77	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B232IUNVHEH-A	IS	2	N	118.00	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B232IUNVHP-B	IS	2	N	0.88	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B232IUNVHP-N	IS	2	N	0.88	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B232PU104S50A	PRS	2	H	1.04	Parallel	✗	✗	✗	✗
Universal Lighting Technologies	B232PUNVHE-B	PS	2	N	0.88	Parallel	✗	✗	✗	✗
Universal Lighting Technologies	B232PUNVHP-A	PS	2	N	0.88	Parallel	✗	✗	✗	✗
Universal Lighting Technologies	B233IUNVHE-A	IS	2	N	0.87	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B3321HRVHB-E	IS	3	H	/	Parallel	✗	✗	✗	✗
Universal Lighting Technologies	B332IUNVHP-A	IS	3	N	0.88	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B332PUNVHEH-A	PS	3	H	1.18	Parallel	✗	✗	✗	✗
Universal Lighting Technologies	B432IUNVHE L-A	IS	4	L	0.77	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B432IUNVHE-A	IS	4	N	0.87	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B432IUNVHEH-E	IS	4	H	1.15	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B432IUNVHP-A	IS	4	N	0.88	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B432PUNVHE-A	PS	4	N	0.87	Parallel	✓	✓	✓	✓
Watran	DB-232N-MV-TP-HE	IS	2	N	0.87	Parallel	✓	✓	✓	✓
Watran	DB-232N-MV-TP-HE (SC)	IS	2	N	0.87	Parallel	✓	✓	✓	✓
Watran	DB-332N-MV-TP-HE	IS	3	N	0.87	Parallel	✓	✓	✓	✓
Watran	DB-432L-MV-TP-HE	IS	4	L	0.77	Parallel	✓	✓	✓	✓
Watran	DB-432N-MV-TP-HE	IS	4	N	0.87	Parallel	✓	✓	✓	✓
Watran	DBG32N-MV-TP-PS-HL	PS	3	H			✗	✗	✗	✗
WORK HORSE	WHS3G3-UNV-T8-IS	IS	3	N	0.99	Parallel	✓	✓	✓	✓
WORK HORSE	WHS4G4-UNV-T8-IS	IS	4	N	0.96	Parallel	✓	✓	✓	✓

✓ = Compatible ✗ = Incompatible P = PF <0.85 T = THD >30% NA = Not applicable

12W LED T8 Direct Fit (LED12WT8/48/8xx-G8DR) - Emergency Ballasts

Manufacturer	Part Number	Start Method	# of Lamps	N Lamp
ESPEN	VEM500DV(L)	AC	1	✓
ESPEN	VEM700DV(L)	AC	2	✓
EXITRONIX	XEB-7-B-LM	AC	1	✓
KEYSTONE	KT-EMRG-800-T5	AC	1	✓
TAMLITE	BAL1400LPACTD	AC	2	✓
TAMLITE	PACO457	AC	2	✓

✓ = Compatible

15W LED T8 Direct Fit (LED15WT8/48/8xx-G8DR)

Manufacturer	Part Number	Start Method	# of Lamps	BF		Lamp Connect.	N-1 Lamp		N Lamp	
				Type	Value		120	277	120	277
ACT	ACT 2P32ISUNVE	IS	2	N	0.89	Parallel	✓	✓	✓	✓
ANTRON ELECTRONICS	A32T8MICLO	IS	2	L	0.78	Parallel	✓	✓	✓	✓
ARCATA	ACT 3P32ISUNVLE	IS	3	L	0.78	Parallel	✓	✓	✓	✓
Cooper Lighting	CL-432ISUNV-R1-B	IS	4	H	1.18	Parallel	✓	✓	✓	✓
DAMAR	EL232-120/277HF(1688B)	IS	2	N	?	Parallel	✓	✗	✓	✓
DAMAR	EL232DIM/120/277HF	DPS	2	L	?	Series	✗	✗	✗	✗
DAMAR	EL232HL-120/277HF(1688D)	IS	2	H	?	Parallel	✓	✓	✓	✓
DAMAR	EL332-120/277HF(3654C)	IS	3	N	?	Parallel	✓	✓	✓	✓
DAMAR	EL332HL-120/277HF(3654H)	IS	3	H	?	Parallel	✓	✓	✓	✓
DAMAR	EL432-120/277HF(3093B)	IS	4	N	?	Parallel	✓	✓	✓	✓
DAMAR	EL432HL-120/277HF(3093C)	IS	4	H	?	Parallel	✓	✓	✓	✓
EIKO	PM-2x32T8-UNV-IS-H	IS	2	H	1.18	Parallel	✗	✗	✓	✓
EIKO	PM-2x32T8-UNV-PS	PS	2	N	0.88	Parallel	✗	✗	✗	✗
EIKO	PM-2X32T8-UNV-IS	IS	2	N	0.87	Parallel	✓	✓	✓	✓
EIKO	PM-2X32T8-UNV-IS-L	IS	2	L	0.77	Parallel	✓	✓	✓	✓
EIKO	PM-3X32T8-UNV-IS	IS	3	N	0.87	Parallel	✓	✓	✓	✓
EIKO	PM-3X32T8-UNV-IS-H	IS	3	H	1.18	Parallel	✗	✗	✓	✓
EIKO	PM-3X32T8-UNV-IS-L	IS	3	L	0.78	Parallel	✓	✓	✓	✓
EIKO	PM-3X32T8-UNV-PS	PS	3	N	0.88	Series	✗	✗	✗	✗
EIKO	PM-3X32T8-UNV-PS-H	PS	3	H	1.18	Series	✗	✗	✗	✗
EIKO	PM-4X32T8-UNV-IS	IS	4	N	0.88	Parallel	✓	✓	✓	✓
EIKO	PM-4X32T8-UNV-IS-L	IS	4	L	0.78	Parallel	✓	✓	✓	✓
ESPEN	VE232MVHIPE	IS	2	N	0.89	Parallel	✓	✓	✓	✓
ESPEN	VE232MVHIPHE	IS	2	H	1.19	Parallel	✗	✗	✓	✓
ESPEN	VE232MVHIPE	IS	2	L	0.77	Parallel	✓	✓	✓	✓
ESPEN	VE232MVHRPHT3-AB	DPS	2	H	1.20	Series	✗	✗	✗	✗
ESPEN	VE2P32MVHIPE	IS	2	N	0.89	Parallel	✓	✓	✓	✓
General Electric	GE132MAX-G-N	IS	1	N	0.88	NA	NA	NA	✗	✗
General Electric	GE132MAX-L/ULTRA	IS	1	L	0.78	NA	NA	NA	✗	✗
General Electric	GE132MAXP-N/ULTRA	IS	1	N	0.88	NA	NA	NA	✓	✓
General Electric	GE132MVPSN-V03	DPS	1	N	0.88	n.a	NA	NA	✗	✗
General Electric	GE232MAX347-N	IS	2	H	1.02	Parallel	NA	P,T,347V	NA	347V
General Electric	GE232MAX-G-L	IS	2	L	0.77	Parallel	✓	✓	✓	✓
General Electric	GE232MAX-G-N	IS	2	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE-232-MAX-H/Ultra	IS	2	H	1.15	Parallel	✗	✗	✗	✗
General Electric	GE-232-MAX-H-42T	IS	2	H	/	Parallel	✗	✗	✗	✗
General Electric	GE232MAX-L/ULTRA	IS	2	L	0.78	Parallel	✓	✓	✓	✓
General Electric	GE232MAX-N/ULTRA	IS	2	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE232MAXP90-V60	IS	2	H	1.18	Parallel	✗	✗	✗	✗
General Electric	GE-232-MV-N	IS	2	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE232MV-N-DIY	IS	2	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE232MVPS-L-S30	DPS	2	N	0.96	Parallel	✗	✗	✗	✗
General Electric	GE232-MVPS-N	PS	2	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE-232-MV-PS-N	PS	2	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE332MAX-G-N	IS	3	N	0.87	Parallel	✓	✓	✓	✓
General Electric	GE332MAX-H-42T	IS	3	H	/	Parallel	✓	✓	✓	✓
General Electric	GE332MAX-H-84TS	IS	3	H	/	Parallel	✓	✓	✓	✓
General Electric	GE332MAX-L/ULTRA	IS	3	L	0.78	Parallel	✓	✓	✓	✓

✓ = Compatible ✗ = Incompatible P = PF <0.85 T = THD >30% NA = Not applicable

15W LED T8 Direct Fit (LED15WT8/48/8xx-G8DR)

Manufacturer	Part Number	Start Method	# of Lamps	BF		Lamp Connect.	N-1 Lamp		N Lamp	
				Type	Value		120	277	120	277
General Electric	GE332MAX-N/ULTRA	IS	3	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE332MAXP90-V60	IS	3	H	1.18	Parallel	✗	✗	✗	✗
General Electric	GE332MAXP-H/ULTRA	IS	3	H	1.18	Parallel	✗	✗	✓	✓
General Electric	GE332MAXP-L/ULTRA	IS	3	L	0.77	Parallel	✓	✓	✓	✓
General Electric	GE332MV-N	IS	3	N	0.87	Parallel	✓	✓	✓	✓
General Electric	GE-332-MVPS-N	PS	3	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE332MVPSN-V03	DPS	3	N	0.98	Parallel	✗	✗	✗	✗
General Electric	GE432-120-RES	IS	4	N	0.83	Parallel	✓	NA	✓	NA
General Electric	GE432MAX347-N	IS	4	N	0.94	Parallel	NA	347V	NA	347V
General Electric	GE432MAX90-S60	IS	4	H	1.18	Parallel	✓	✓	✓	✓
General Electric	GE432MAX-G-H	IS	4	H	1.18	Parallel	✓	✓	✓	✓
General Electric	GE432MAX-G-N	IS	4	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE432MAX-H/ULTRA	IS	4	H	1.18	Parallel	✓	✓	✓	✓
General Electric	GE432MAX-H/ULTRA	IS	4	H	1.18	Parallel	✓	✓	✓	✓
General Electric	GE432MAX-H-42T	IS	4	H	/	Parallel	✓	✓	✓	✓
General Electric	GE432MAX-N/ULTRA	IS	4	N	0.88	Parallel	✓	✓	✓	✓
General Electric	GE432MAXP90-S60	IS	4	H	1.18	Parallel	✗	✗	✗	✗
General Electric	GE432MV-N-42T	IS	4	N	0.93	Parallel	✓	✓	✓	✓
General Electric	GE432-MVPS-N	PS	4	N	0.88	Parallel	✗	✗	✗	✗
General Electric	GE432MVPS-N-V03	PS	4	N	0.90	Parallel	✗	✗	✗	✗
Halco	EP232IS/H/MV/HE	IS	2	H	1.18	Parallel	✓	✓	✓	✓
Halco	EP232IS/L/MV/HE	IS	2	L	0.78	Parallel	✓	✓	✓	✓
Halco	EP232IS/MV/HE	IS	2	N	0.88	Parallel	✓	✓	✓	✓
Halco	EP332IS/L/MV/HE	IS	3	L	0.78	Parallel	✓	✓	✓	✓
Halco	EP332IS/MV/HE	IS	3	N	0.87	Parallel	✓	✓	✓	✓
Halco	EP432IS/120/MC	IS	4	n	0.88	Parallel	✗	✗	✗	✗
Halco	EP432IS/L/MV/HE	IS	4	L	0.78	Parallel	✓	✓	✓	✓
Halco	EP432IS/MV/HE	IS	4	N	0.88	Parallel	✓	✓	✓	✓
HATCH	HL232BIS/UV/HE/W	IS	2	N	0.9	Parallel	✓	✓	✓	✓
HATCH	HL432BIS/UV/HE/W	IS	4	N	0.9	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	E2/32IS-120MC	IS	2	N	0.85	Parallel	✓	NA	✓	NA
HOWARD INDUSTRIES	E2/32IS-277	IS	2			Parallel	NA	✗	NA	✗
HOWARD INDUSTRIES	EP2/32IS/MV/MC/HE	IS	2	N	0.89	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EP2/32PRS/MV/MC/HE	PRS	2	N	0.86	Parallel	✗	✗	✗	✗
HOWARD INDUSTRIES	EP3/32IS/208-277	IS	3			Parallel	NA	✗	NA	✗
HOWARD INDUSTRIES	EP3/32IS/MV/MC/HE	IS	3	N	0.88	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EP3/32IS/MV/SC/HE	IS	3	N	0.87	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EP4/32IS/MV/MC/HE	IS	4	N	0.88	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EP4/32PPRS/MV/SC/HE	PRS	4	N	?	Parallel	✗	✗	✗	✗
HOWARD INDUSTRIES	EPH2/32IS/MV/MC/HE	IS	2	H	1.18	Parallel	✗	✗	✓	✓
HOWARD INDUSTRIES	EPH3/32IS/MV/MC/HE	IS	3	N	0.91	Parallel	✗	✗	✓	✓
HOWARD INDUSTRIES	EPH4/32IS/MV/SC/HE	IS	4	H	1.16	Parallel	✗	✗	✗	✗
HOWARD INDUSTRIES	EPL2/32IS/MV/MC/HE	IS	2	L	0.78	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EPL3/32IS/MV/SC/HE	IS	3	L	0.78	Parallel	✓	✓	✓	✓
HOWARD INDUSTRIES	EPL4/32IS/MV/MC/HE	IS	4	L	0.77	Parallel	✓	✓	✓	✓
KEYSTONE	KTEB-132-1-TP-FC	RS	1	N	?	NA	NA	NA	✗	NA
KEYSTONE	KTEB-232LBF-1-TP-PIC-EV	IS	2	N	0.88	Parallel	✓	NA	✓	NA
KEYSTONE	KTEB-232-UV-IS-H-P	IS	2	H	1.18	Parallel	✗	✗	✓	✓
KEYSTONE	KTEB-332-UV-IS-H-P	IS	3	H	1.18	Parallel	✗	✗	✓	✓
KEYSTONE	KTEB-332-UV-IS-N-P	IS	3	N	0.87	Parallel	✓	✓	✓	✓
KEYSTONE	KTEB-432RIS-1-TP-SL	IS	4	N	0.80	Parallel	✓	NA	✓	NA
KEYSTONE	KTEB-432-UV-IS-H-P	IS	4	H	1.18	Parallel	✓	✓	✓	✓
KEYSTONE	KTEB-432-UV-IS-N-P	IS	4	N	0.87	Parallel	✓	✓	✓	✓
LIGHTING PRODUCTS LIMITED	EB-332EBF-UV-TP-HE	IS	3	L	0.78	Parallel	✓	✓	✓	✓
MAXLITE	MLEU322HEL/SC	IS	2	N	0.83	Parallel	✓	✓	✓	✓
MAXLITE	MLEU323H/SC	IS	3	H	1.18	Parallel	✓	✓	✓	✓
MAXLITE	MLEU324HE/SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓
MAXLITE	SKEU322HEL/SC	IS	2	L	0.77	Parallel	✓	✓	✓	✓
MAXLITE	SKEU323L/SC	IS	3	L	0.78	Parallel	✓	✓	✓	✓
MAXLITE	SKEU324HE/SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓
MOTOROLA	M2-IN-T8-GP-D-277	IS	2	/	/	Parallel	NA	✓	NA	✓

✓ = Compatible ✗ = Incompatible P = PF <0.85 T = THD >30% NA = Not applicable

15W LED T8 Direct Fit (LED15WT8/48/8xx-G8DR)

Manufacturer	Part Number	Start Method	# of Lamps	BF		Lamp Connect.	N-1 Lamp		N Lamp	
				Type	Value		120	277	120	277
MOTOROLA	M3-IN-T8-GP-A-277	IS	3	/	/	Parallel	NA	✓	NA	✓
OSRAM SYLVANIA	QHE 1X32T8/UNV DIM-TC	DPS	1	N	0.88	NA	NA	NA	✗	✗
OSRAM SYLVANIA	QHE 1X32T8/UNV ISH-SC	IS	1	H	1.20	NA	NA	NA	✓	P,T
OSRAM SYLVANIA	QHE 1X32T8/UNV ISL-SC	IS	1	L	0.78	NA	NA	NA	✓	✓
OSRAM SYLVANIA	QHE 2X32T8/347 ISN-SC	IS	2	H	/	Parallel	NA	347V	NA	347V
OSRAM SYLVANIA	QHE 2x32T8/347 PSN-SC	PRS	2	N	0.88	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 2X32T8/UNV DIM-TC	PRS	2	N	0.88	Series	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 2X32T8/UNV ISH HT-SC	IS	2	H		Parallel	✗	✗	✓	✓
OSRAM SYLVANIA	QHE 2X32T8/UNV ISL-SC	IS	2	L	0.78	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 2X32T8/UNV ISN-SC	IS	2	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 2X32T8/UNV PSH-HT	PRS	2	H	1.18	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 2X32T8/UNV PSN-MC	PRS	2	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 3x32T8/UNV ISH HT-SC	IS	3	H	1.18	Parallel	✗	✗	✓	✓
OSRAM SYLVANIA	QHE 3X32T8/UNV ISH-SC	IS	3	H	1.18	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 3X32T8/UNV ISL-SC	IS	3	L	0.78	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 3X32T8/UNV ISN-SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 3X32T8/UNV PSH-HT-SC	DPS	3	H	1.15	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 3X32T8/UNV PSN-SC	PRS	3	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 4X32T8/347 ISN-SC	IS	4	H	/	Parallel	NA	347V	NA	347V
OSRAM SYLVANIA	QHE 4x32T8/UNV ISH HT-1	IS	4	H	1.18	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 4x32T8/UNV ISH-SC	IS	4	H		Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHE 4X32T8/UNV ISL-SC	IS	4	L	0.78	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 4X32T8/UNV PSN-SC	PRS	4	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QHE 4X32T8/UNV PSX-SC	PRS	4	L	0.71	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QHES 2x32T8/UNV PSL-SC	PRS	2	L	0.71	Parallel	✗	✗	✗	✗
OSRAM SYLVANIA	QT 2x32 T8/277 ISN-SC	IS	2				NA	✓	NA	✓
OSRAM SYLVANIA	QT 2x32/347 ISH-SC	IS	2	H	1.20	Parallel	NA	NA	NA	347V
OSRAM SYLVANIA	QT 3x32/277 IS	IS	3			Parallel	NA	✓	NA	✓
OSRAM SYLVANIA	QT 4x32 T8/347 ISN-SC	IS	4	N	/	Parallel	NA	347V	NA	347V
OSRAM SYLVANIA	QT2X32/120 IS-SC	IS	2	N	0.9	Parallel	P,T	NA	✓	NA
OSRAM SYLVANIA	QT2x32T8/277 ISN-SC	IS			0.88	Parallel	NA	✓	NA	✓
OSRAM SYLVANIA	QTP 2X32T8/UNV ISN-SC	IS	2	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QTP 3X32T8/UNV ISN-SC	IS	3	N	0.88	Parallel	✓	✓	✓	✓
OSRAM SYLVANIA	QTP 3X32T8/UNV PSX-SC	PRS	3	L	0.71	Series	✗	✗	✗	✗
OSRAM SYLVANIA	QTP2x32T8/UNV DIM-TC	DPS	2	N	0.88	?	✗	✗	✗	✗
OSRAM SYLVANIA	QTP2X32T8/277 ISN-D	IS	2	L	0.78	Parallel	NA	✓	NA	✓
OSRAM SYLVANIA	QTP3X32T8/UNV PSN-SC	PRS	3	N	0.88	Series	✗	✗	✗	✗
Pacific Fluorescent	EB-232IS-120-RES	IS	2	N		Parallel	✓	NA	✓	NA
Philips-Advance	GOPA-2P32-N	IS	2	N	/	Parallel	✓	✓	✓	✓
Philips-Advance	GOPA-4P32-SC	IS	4	-	-	Parallel	(347V)	NA	(347V)	NA
Philips-Advance	ICN-132-MC	IS	1	N	0.88	NA	NA	NA	✓	✓
Philips-Advance	ICN-1P32-N	IS	1	N	0.91	NA	NA	NA	✗	✗
Philips-Advance	ICN-2P16-TLED-N	IS	2	N		Parallel	✓	✓	✓	✓
Philips-Advance	ICN-2P32-N	IS	2	N	0.89	Parallel	✓	✓	✓	✓
Philips-Advance	ICN-2P32-SC	IS	2			Parallel	✓	✓	✓	✓
Philips-Advance	ICN-3P32-N	IS	3	N	0.88	Parallel	✗	✗	✗	✗
Philips-Advance	ICN-3P32-SC	IS	3	N	0.89	Parallel	✓	✓	✓	✓
Philips-Advance	ICN-4P16-TLED-N	IS	4	N		Parallel	✓	✓	✓	✓
Philips-Advance	ICN-4P32-N	IS	4	N	0.90	Parallel	✓	✓	✓	✓
Philips-Advance	ICN-4P32-SC	IS	4			Parallel	✓	✓	✓	✓
Philips-Advance	IOP-1P32-N	IS	1	N	0.89	NA	✗	✗	✗	✗
Philips-Advance	IOP-2P32HL-SC	IS	2	H	1.18	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-2P32-LW-N	IS	2	L	0.77	Parallel	✓	✓	✓	✓
Philips-Advance	IOP-2P32-N	IS	2	N	0.89	Parallel	✓	✓	✓	✓
Philips-Advance	IOP-2PSP32-LW-N	PS	2	L	0.71	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-2PSP32-N	PS	2	N	0.94	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-2S32-SC	PS	2	N	0.87	Series	✗	✗	✗	✗
Philips-Advance	IOP-3P32HL-90C-SC	IS	3	H	1.22	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-3P32-N	IS	3	N	0.87	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-3PSP32-LW-SC	PS	3	L	0.69	Parallel	✗	✗	✗	✗
Philips-Advance	IOP-3PSP32-SC	PS	3	N	0.88	Parallel	✓	✓	✓	✓

✓ = Compatible ✗ = Incompatible P = PF <0.85 T = THD >30% NA = Not applicable

15W LED T8 Direct Fit (LED15WT8/48/8xx-G8DR)

Manufacturer	Part Number	Start Method	# of Lamps	BF		Lamp Connect.	N-1 Lamp		N Lamp	
				Type	Value		120	277	120	277
Philips-Advance	IOP-4P32-HL-SC	IS	4	H	1.18	Parallel	X	X	X	X
Philips-Advance	IOP-4P32-LW-N	IS	4	L	0.77	Parallel	✓	✓	✓	✓
Philips-Advance	IOP-4P32-N	IS	4	N	0.87	Parallel	✓	✓	✓	✓
Philips-Advance	IOP-4P32-SC	IS	4	N	0.87	Parallel	X	X	X	X
Philips-Advance	IOP-4PSP32-LW-SC	PS	4	L	0.69	Parallel	✓	✓	✓	✓
Philips-Advance	IOP-4PSP32-SC	PS	4	N	0.89	Parallel	✓	✓	✓	✓
Philips-Advance	IOPA-1P32-N	IS	1	N	0.88	NA	X	X	X	X
Philips-Advance	IOPA-2P32-HL-N	IS	2	H	1.18	Parallel	X	X	X	X
Philips-Advance	IOPA-2P32-LW-N	IS	2	L	0.76	Parallel	✓	✓	✓	✓
Philips-Advance	IOPA-3P32-LW-N	IS	3	L	0.76	Parallel	X	X	X	X
Philips-Advance	IOPA-3P32-LW-SC	IS	3	L	0.78	Parallel	✓	✓	✓	✓
Philips-Advance	IOPA-3P32-N	IS	3	N	0.86	Parallel	X	X	X	X
Philips-Advance	IOPA-4P32-HL	IS	4	H	1.18	Parallel	✓	✓	✓	✓
Philips-Advance	IOPA-4P32-SC	IS	4	N	0.92	Parallel	✓	✓	✓	✓
Philips-Advance	IZT-2PSP32-SC	DPS	2	N	1.00	Parallel	X	X	X	X
Philips-Advance	IZT-2S32-SC	DPS	2	N	1.00	Series	X	X	X	X
Philips-Advance	IZT-3PSP32-SC	DPS	3	H	1	Parallel	X	X	X	X
Philips-Advance	REB-2P32-SC	IS	2	N	0.88	Parallel	X	NA	✓	NA
Philips-Advance	REB-4P32-SC	IS	4	N	0.81	Parallel	✓	NA	✓	NA
Philips-Advance	REL-2P32-RH-TP	IS	2	H	/	Parallel	✓	✓	✓	✓
Philips-Advance	REZ-132-SC	DPS	1	H	1	n.a	NA	NA	X	NA
Philips-Advance	REZ-2S32-SC	DPS	2	N	?	Series	X	NA	X	NA
Philips-Advance	REZ-3S32-SC	DPS	3	N	0.97	Series	X	NA	X	NA
Philips-Advance	VCN-2P32-SC	IS	2			Parallel	NA	✓	NA	✓
Philips-Advance	VCN-4P32-SC	IS	4			Parallel	NA	✓	NA	✓
Philips-Advance	VEL-2P32-RH-TP	IS	2	N		Parallel	NA	P,T	NA	✓
Philips-Advance	VEL-2P32-SC (Rev. D)	IS	2	N	0.88	Parallel	NA	✓	NA	✓
Philips-Advance	VEL-2P32-SC (Rev. G)	IS	2	N	0.88	Parallel	NA	T	NA	✓
Philips-Advance	VEL-3P32-SC	IS	3	N	0.88	Parallel	✓	✓	✓	✓
Philips-Advance	VZT-4S32-HL	DPS	4			Parallel	NA	X	NA	X
PLUSRITE	BAF232IS/MV	IS	2	N	0.89	Parallel	✓	✓	✓	✓
Plusrite	BAF232IS/MV/L	IS	2	L	0.78	Parallel	✓	✓	✓	✓
PLUSRITE	BAF332IS/MV	IS	3	N	0.88	?	✓	✓	✓	✓
Plusrite	BAF332IS/MV/L	IS	3	L	0.78	Parallel	✓	✓	✓	✓
Plusrite	BAF432IS/MV	IS	4	N	0.88	Parallel	✓	✓	✓	✓
Plusrite	BAF432IS/MV/L	IS	4	L	0.78	Parallel	✓	✓	✓	✓
ProLume	E432IS/120/R/SL	IS	4	N	0.87	Parallel	P,T	NA	P,T	NA
ProLume	EP232IS/L/MV/SL	IS	2	L	0.78	Parallel	✓	✓	✓	✓
Robertson	ISU232T8HEMV	IS	2			Parallel	✓	✓	✓	✓
SOLA	E-758-U-232-MC	IS	2	N	0.88	Parallel	✓	✓	X	X
Standard Products	E232T8IS120-277/N/AS	IS	2		0.87		✓	✓	✓	✓
Standard Products	E232T8IS120-277/N/AS	IS	2	N	0.88	Parallel	✓	✓	✓	✓
Standard Products	E432T8IS347/N/BULK	IS	4	-	-	Parallel	347V	NA	347V	NA
SUNPARK	120-1/32IS HPF	IS	1	N	0.88	NA	NA	NA	✓	NA
SUNPARK	120-3/32IS MPF	IS	3	N	0.88	Parallel	✓	NA	✓	NA
SUNPARK	LC 12011T	PS	1	H		NA	NA	NA	X	NA
SUNPARK	LC 12013T	PS	1	H		NA	NA	NA	X	NA
SUNPARK	SL15T	PS	2	N	0.88	Series	X	NA	X	NA
SUNPARK	U-1/32PSE	PS	1	N	0.88	n.a	NA	NA	X	X
SUNPARK	U-2/32IS HBF	IS	2	H	1.18	Parallel	✓	✓	✓	✓
SUNPARK	U-2/32ISE-LBF	IS	2	L	0.78	Parallel	✓	✓	✓	✓
SUNPARK	U-2/32PSE	RS	2	N	0.88		X	X	X	X
SUNPARK	U-2/32PSE-HBF	RS	2	H	1.15		X	X	X	X
SUNPARK	U-232PS3	RS	2	N	0.88		X	X	X	X
SUNPARK	U-232PS3-HBF	RS	2	H	1.15		X	X	X	X
SUNPARK	U-3/32ISE	IS	3	N	0.88	Parallel	✓	✓	✓	✓
SUNPARK	U-3/32ISE-HBF	IS	3	H	1.18	Parallel	X	X	✓	✓
SUNPARK	U-4/32IS HBF	IS	4	H	1.18	Parallel	X	X	✓	✓
SUNPARK	U-4/32IS HP,F	IS	4	N	0.88	Parallel	✓	✓	✓	✓
SUNPARK	U-4/32ISE-LBF	IS	4	L	0.77	Parallel	✓	✓	✓	✓
Superior Life	70201	IS	2	N	0.88	Parallel	✓	X	✓	✓

✓ = Compatible X = Incompatible P = PF < 0.85 T = THD > 30% NA = Not applicable

15W LED T8 Direct Fit (LED15WT8/48/8xx-G8DR)

Manufacturer	Part Number	Start Method	# of Lamps	BF		Lamp Connect.	N-1 Lamp		N Lamp	
				Type	Value		120	277	120	277
Superior Life	70210	PS	2	N	0.88	Parallel	X	X	X	X
Superior Life	70211	PS	4	N	0.87	Parallel	X	X	X	X
TCP	E2P32ISUNVHE	IS	2	H	1.18	Parallel	X	X	✓	✓
TCP	E3P32ISUNVE	IS	3	N	0.88	Parallel	✓	✓	✓	✓
TCP	E3P32ISUNVHE	IS	3	H	/	Parallel	✓	✓	✓	✓
TCP	E3P32ISUNVLE	IS	3	L	0.78	Parallel	✓	X	✓	✓
TCP	E4P32ISUNVE	IS	4	N	0.88	Parallel	✓	✓	✓	✓
TCP	E4P32ISUNVHE	IS	4	N	1.18	Parallel	✓	✓	✓	✓
TCP	E4P32ISUNVLE	IS	4	L	0.78	Parallel	✓	X	✓	✓
TCP	TCP3P32ISUNVH	IS	3	H	1.18	Parallel	X	X	✓	✓
TOPAZ	B232IUNVHEH/A-TPZ	IS	2	H	1.18	Parallel	X	X	✓	✓
TOPAZ	B432IUNVHEH/A-TPZ	IS	4	H	1.18	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B132IUNVHP-N	IS	1	N	0.88	NA	NA	NA	X	✓
Universal Lighting Technologies	B232I120RES-A	IS	2	N	0.88	Parallel	T	NA	T	NA
Universal Lighting Technologies	B232I277RH-A	IS	2	H	1.09	Parallel	NA	T	NA	✓
Universal Lighting Technologies	B232IUNV-C	IS	2	N	0.88	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B232IUNVEL-A	IS	2	L	0.77	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B232IUNVHEH-A	IS	2	H	1.18	Parallel	X	X	✓	✓
Universal Lighting Technologies	B232IUNVHP-B	IS	2	N	0.88	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B232IUNVHP-N	IS	2	N	0.88	Parallel	X	X	✓	✓
Universal Lighting Technologies	B232PU104S50A	PRS	2	H	1.04	Parallel	X	X	X	X
Universal Lighting Technologies	B232PUNVHE-B	PS	2	N	0.88	Parallel	X	X	X	X
Universal Lighting Technologies	B232PUNVHP-A	PS	2	N	0.88	Parallel	X	X	X	X
Universal Lighting Technologies	B233IUNVHE-A	IS	2	N	0.87	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B332IHRVHB-E	IS	3	H	/	Parallel	X	X	X	X
Universal Lighting Technologies	B332IUNVHP-A	IS	3	N	0.88	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B332PUNVHEH-A	PS	3	H	1.18	Parallel	X	X	X	X
Universal Lighting Technologies	B432IUNVHE L-A	IS	4	L	0.77	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B432IUNVHE-A	IS	4	N	0.87	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B432IUNVHEH-E	IS	4	H	1.15	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B432IUNVHP-A	IS	4	N	0.88	Parallel	✓	✓	✓	✓
Universal Lighting Technologies	B432PUNVHE-A	PS	4	N	0.87	Parallel	✓	✓	✓	✓
Watran	DB-232N-MV-TP-HE	IS	2	N	0.87	Parallel	✓	✓	✓	✓
Watran	DB-232N-MV-TP-HE (SC)	IS	2	N	0.87	Parallel	✓	✓	✓	✓
Watran	DB-332N-MV-TP-HE	IS	3	N	0.87	Parallel	✓	✓	✓	✓
Watran	DB-432L-MV-TP-HE	IS	4	L	0.77	Parallel	✓	✓	✓	✓
Watran	DB-432N-MV-TP-HE	IS	4	N	0.87	Parallel	✓	✓	✓	✓
Watran	DBG32N-MV-TP-PS-HL	PS	3	H			X	X	X	X
WORK HORSE	WHS3G3-UNV-T8-IS	IS	3	N	0.99	Parallel	✓	✓	✓	✓
WORK HORSE	WHS4G4-UNV-T8-IS	IS	4	N	0.96	Parallel	✓	✓	✓	✓

✓ = Compatible X = Incompatible P = PF < 0.85 T = THD > 30% NA = Not applicable

15W LED T8 Direct Fit (LED15WT8/48/8xx-G8DR) - Emergency Ballasts

Manufacturer	Part Number	Start Method	# of Lamps	N Lamp
ESPEN	VEM500DV(L)	AC	1	✓
ESPEN	VEM700DV(L)	AC	2	✓
EXITRONIX	XEB-7-B-LM	AC	1	✓
KEYSTONE	KT-EMRG-800-T5	AC	1	✓
TAMLITE	BAL1400LPACTD	AC	2	✓

✓ = Compatible