BRAND	MODEL	Start Method	# of Lamps		t Factor Value	Lamp Connection	1 Lamp	Load 277V	2+ Lamp Loa 120V 277	
ACT	ACT 2P32ISUNVE	IS	2	Type N	0.89	Parallel	12UV	Z//V ✓	_	Z11
AUI	GOPA-2P32-N	IS	2	N	/	Parallel	V		-	
	ICN-132-MC	IS	1	N	0.88	Parallel	V		_	V
	ICN-132-WC ICN-1P32-N	IS	1	N N	0.88	-	-	-	-))
	ICN-1P32-N ICN-2P16-TLED-N	IS	2	N	0.91	- Parallel		- /		,
					-		· ·	· ·	-	V
	ICN-2P32-N	IS	2	N	0.89	Parallel	√	√	-	
	ICN-3P32-SC	IS	3	N	0.89	Parallel	√	√	-	V
	ICN-3P32-N	IS	3	N	0.88	Parallel	N	N		
	ICN-4P16-TLED-N	IS	4	N	/	Parallel	✓	√		•
	ICN-4P32-N	IS	4	N	0.90	Parallel	√	✓	-	V
	IOP-1P32-N	IS	1	N	0.89	-	X	X		
	IOP-2P32-N	IS	2	N	0.89	Parallel	✓	✓	-	,
	IOP-2P32-LW-N	IS	2	L	0.77	Parallel	✓	✓	-	١
	IOP-2P32HL-SC	IS	2	Н	1.18	Parallel	X	X	X)
	IOP-3P32-N	IS	3	N	0.87	Parallel	N	N	N	ı
	IOP-3PSP32-SC	PS	3	N	0.88	Parallel	✓	✓	✓	
	IOP-3P32HL-90C-SC	IS	3	Н	1.22	Parallel	X	X	X)
DVANCE	IOP-4PSP32-LW-SC	PS	4	L	0.69	Parallel	✓	✓	✓	,
DVANCE	IOP-4PSP32-SC	PS	4	N	0.89	Parallel	/	√	V	
	IOP-4P32-HL-SC	IS	4	Н	1.18	Parallel	X	X	X	
	IOP-4P32-LW-N	IS	4	L	0.77	Parallel	✓	√		١,
	IOP-4P32-N	IS	4	N	0.87	Parallel	/		-	
	IOP-4P32-SC	IS	4	N	0.87	Parallel	S	S	-	
	IOPA-1P32-N	IS	1	N	0.88	- aranci	X	X	_	
	10PA-2P32-HL-N	IS	2	H	1.18	Parallel	N	N		ĺ
	IOPA-3P32-LW-N	IS	3	L	0.76	Parallel	N	N		
		IS		_		Parallel				'
	IOPA-3P32-N		3	N	0.86		N	N		_
	IOPA-4P32-HL	IS	4	H	1.18	Parallel	✓	√ ✓	-	1
	IOPA-4P32-SC	IS	4	N	0.92	Parallel	✓		-	,
	REB-2P32-SC	IS	2	N	0.88	Parallel	F	-	-	
	REB-4P32-SC	IS	4	N	0.81	Parallel	✓	-	X	
	REL-2P32-RH-TP	IS	2	Н	1	Parallel	✓	✓	√	١
	VEL-2P32-SC	IS	2	N	0.88	Parallel	-	T	-	١
	VEL-3P32-SC	IS	3	N	0.88	Parallel	✓	✓	✓	•
	VEL-2P32-RH-TP	IS	2	N	1	Parallel	-	P, T	-	•
ANTRON	A32T8MICLO	IS	2	L	0.78	Parallel	✓	✓	✓	,
ARCATA	ACT 3P32ISUNVLE	IS	3	L	0.78	Parallel	✓	✓	✓	١,
COOPER	CL-432ISUNV-R1-B	IS	4	Н	1.18	Parallel	✓	√	√	,
	EL232-120/277HF(1688B)	IS	2	N	1	Parallel	✓	F	✓	,
	EL232HL-120/277HF(1688D)	IS	2	Н	1	Parallel	✓	√	-	,
	EL332-120/277HF(3654C)	IS	3	N	1	Parallel	· /	· ✓		
DAMAR	EL332HL-120/277HF(3654H)	IS	3	Н	1	Parallel	'	V		
	EL432-120/277HF(3093B)	IS	4	N	1	Parallel	/	V	-	
	EL432HL-120/277HF(3093C)	IS	4	Н	1	Parallel	V	✓		
	PM-2X32T8-UNV-IS	IS	2	N	0.87	Parallel	✓	✓	-	<u> </u>
	PM-2×32T8-UNV-IS-H	IS	2	H		Parallel	HT	HT	-	
			_	L	1.18				_	1
	PM-2X32T8-UNV-IS-L	IS	2	_	0.77	Parallel	√	√	-	,
EIKO	PM-3X32T8-UNV-IS	IS	3	N	0.87	Parallel	√	√		,
	PM-3X32T8-UNV-IS-H	IS	3	Н	1.18	Parallel	HT	HT		1
	PM-3X32T8-UNV-IS-L	IS	3	L	0.78	Parallel	✓	√		1
	PM-4X32T8-UNV-IS	IS	4	N	0.88	Parallel	✓	✓	\(\text{X} \) \(\text{X} \) \(\text{V} \) \(\text{V} \) \(\text{V} \) \(\text{N} \) \(\text{N} \) \(\text{N} \) \(\text{V} \) \(\te	1
	PM-4X32T8-UNV-IS-L	IS 4 L 0.78	Parallel	✓	✓	-	•			
	VE232MVHIPE	IS	2	N	0.89	Parallel	✓	✓	_	١
ESPEN	VE232MVHIPHE	IS	2	Н	1.19	Parallel	HT	HT	✓	•
LJFLN	VE232MVHIPLE	IS	2	L	0.77	Parallel	✓	✓	✓	,
	VE2P32MVHIPE	IS	2	N	0.89	Parallel	✓	✓	✓	•
			KEY							
Compatible	X Not Recommended	- Not	applicable		Т	THD > 30%				
vombalible	A INUL DECUIIIIIEIIUE	. ⊢ - ⊟NUL	applicable		1 1	111U / JU/0		1		

BRAND	MODEL	Start Method	# of		t Factor	Lamp Connection		•		np Load	
	222MAY II 42T		Lamps	Туре	Value					277V	
	332MAX-H-42T	IS	3	H	1	Parallel		-		√	
	332MAX-H-84TS GE132MAX-G-N	IS	1	H	-	Parallel	-	V		✓ 	
		IS	1	N L	0.88	-		-		X	
	GE132MAX-L/ULTRA GE232MAX347-N	IS		_	0.78 1.02	- Parallel					
		IS	2	H			_			√ (347\	
	GE232MAX-G-N	IS	2	N	0.88	Parallel		-			
	GE-232-MAX-H-42T	IS	2	H	115	Parallel				HT	
	GE-232-MAX-H/Ultra	IS	2	Н	1.15	Parallel				X	
	GE232MAXP90-V60	IS	2	H	1.18	Parallel				X	
	GE232MAX-L/ULTRA	IS	2	L	0.78	Parallel	_	-		√	
	GE232MAX-N/ULTRA	IS	2	N	0.88	Parallel				✓	
	GE-232-MV-N	IS	2	N	0.88	Parallel	+			✓	
	GE232MV-N-DIY	IS	2	N	0.88	Parallel	_	-		✓	
	GE232-MVPS-N	PS	2	N	0.88	Parallel	<u> </u>			✓	
	GE-232-MV-PS-N	PS	2	N	0.88	Parallel				✓	
	GE332MAXP-L/ULTRA	IS	3	L	0.77	Parallel		-		✓	
GE	GE332MAXP90-V60	IS	3	Н	1.18	Parallel	X	X	X	X	
	GE332MAX-G-N	IS	3	N	0.87	Parallel	✓	✓	✓	✓	
	GE332MAX-N/ULTRA	IS	3	N	0.88	Parallel	✓	✓	✓	✓	
	GE332MAXP-H/ULTRA	IS	3	Н	1.18	Parallel	HT	HT	✓	✓	
	GE332MAX-L/ULTRA	IS	3	L	0.78	Parallel	✓	✓	✓	✓	
	GE332MV-N	IS	3	N	0.87	Parallel	✓	✓	✓	✓	
	GE-332-MVPS-N	PS	3	N	0.88	Parallel	✓	✓	✓	✓	
	GE432-120-RES	IS	4	N	0.83	Parallel	✓	-	√	-	
	GE432MAX347-N	IS	4	N	0.94	Parallel	-	✓ (347V)	-	√ (347	
	GE432MAX90-S60	IS	4	Н	1.18	Parallel	/	/	√	✓	
	GE432MAXP90-S60	IS	4	Н	1.18	Parallel	Х	X	Х	Х	
	GE432MAX-H-42T	IS	4	Н	1	Parallel	/	Т	X X X Y HT X X ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓ ✓	Т	
	GE432MAX-H/ULTRA	IS	4	Н	1,18	Parallel		/		/	
	GE432MAX-N/ULTRA	IS	4	N	0.88	Parallel	/	/	√	V	
	GE432MAX-G-H	IS	4	Н	1.18	Parallel		/		/	
	GE432MV-N-42T	IS	4	N	0.93	Parallel		-		√	
	GE432MAX-H/ULTRA	IS	4	Н	1.18	Parallel	-		120V	1	
	EP232IS/H/MV/HE	IS	2	H	1.18	Parallel		-		\ \ \ \	
	EP232IS/L/MV/HE	IS	2	i	0.78	Parallel	-		•		
	EP232IS/MV/HE	IS	2	N	0.88	Parallel	-			\ \ \ \	
	EP332IS/L/MV/HE	IS	3	L	0.78	Parallel	_	-		\ \ \	
HALCO	EP332IS/MV/HE	IS	3	N	0.70	Parallel				\ \ \	
	EP432IS/120/MC	IS	4	n	0.88	Parallel	√ √ √ HT HT √ √ √ √ √ ← - √ (347V) ✓ X X X ✓ T ✓ ✓		S		
	EP432IS/MV/HE	IS	4	N	0.88	Parallel	_	_			
			<u> </u>								
	EP432IS/L/MV/HE	IS	4	L	0.78	Parallel		-		√	
HATCH	HL232BIS/UV/HE/W	IS	2	N	0.9	Parallel				√	
	HL432BIS/UV/HE/W	IS	4	N	0.9	Parallel				✓	
	E2/32IS-120MC	IS	2	N	0.85	Parallel				-	
HATCH	EP2/32IS/MV/MC/HE	IS	2	N	0.89	Parallel	+ -			√	
	EP3/32IS/MV/MC/HE	IS	3	N	0.88	Parallel		-		√	
	EP3/32IS/MV/SC/HE	IS	3	N	0.87	Parallel		-		√	
	EP4/32IS/MV/MC/HE	IS	4	N	0.88	Parallel	-	-		✓	
HOWARD	EPH2/321S/MV/MC/HE	IS	2	Н	1.18	Parallel				✓	
	EPH4/32IS/MV/SC/HE	IS	4	Н	1.16	Parallel				X	
	EPH3/32IS/MV/MC/HE	IS	3	N	0.91	Parallel	HT		✓	✓	
	EPL2/32IS/MV/MC/HE	IS	2	L	0.78	Parallel	✓	Т	✓	✓	
	EPL3/32IS/MV/SC/HE	IS	3	L	0.78	Parallel	✓	✓	120V	✓	
	EPL4/32IS/MV/MC/HE	IS	4	L	0.77	Parallel	✓	/	✓	✓	

	KEY													
✓	Compatible	Χ	Not Recommended	-	Not applicable	T	THD > 30%	,	Not Tootod					
S	Can't-start up	F	Flicker after>2s start-up	P	PF < 0.85	N	Acoustic noise > 20dB	_ ′	Not Tested					

BRAND	MODEL	Start	# of		t Factor	Lamp		p Load		mp Load	
		Method	Lamps	Туре	Value	Connection	120V	277V	_	277V	
	KTEB-232LBF-1-TP-PIC-EV	IS	2	N	0.88	Parallel	√	-		-	
	KTEB-432RIS-1-TP-SL	IS	4	N	0.80	Parallel	√	-	-	-	
	KTEB-232-UV-IS-H-P	IS	2	Н	1.18	Parallel	HT		-	√	
KEYSTONE	KTEB-332-UV-IS-H-P	IS	3	Н	1.18	Parallel	HT	_	_	√	
	KTEB-332-UV-IS-N-P	IS	3	N	0.87	Parallel	√	-	-	✓	
	KTEB-432-UV-IS-H-P	IS	4	Н	1.18	Parallel	✓	277V 120 -	_	✓	
	KTEB-432-UV-IS-N-P	IS	4	N	0.87	Parallel	✓	+ -	-	✓	
LIMITED	EB-332EBF-UV-TP-HE	IS	3	L	0.78	Parallel	✓		-	✓	
	MLEU322HEL/SC	IS	2	N	0.83	Parallel	✓	✓	-	✓	
	MLEU323H/SC	IS	3	Н	1.18	Parallel	✓	✓	✓	✓	
MAXLITE	MLEU324HE/SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓	
WALLIE	SKEU322HEL/SC	IS	2	L	0.77	Parallel	✓	✓		✓	
	SKEU323L/SC	IS	3	L	0.78	Parallel	✓	✓	✓	✓	
	SKEU324HE/SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓	
	QHE 1X32T8/UNV ISH-SC	IS	1	Н	1.20	-	-	-	✓	P, T	
	QHE 1X32T8/UNV ISL-SC	IS	1	L	0.78	-	-	-	✓	✓	
	QHE 2X32T8/UNV ISH HT-SC	IS	2	Н	1	Parallel	HT	HT	V	✓	
	QHE 2X32T8/UNV ISL-SC	IS	2	L	0.78	Parallel	/	/		/	
	QHE 2X32T8/UNV ISN-SC	IS	2	N	0.88	Parallel	/		-		
	OHE 2X32T8/UNV PSN-MC	PRS	2	N	0.88	Parallel		-	-	/	
	OHE 3x32T8/UNV ISH HT-SC	IS	3	Н	1.18	Parallel	HT	-	-		
	QHE 3X32T8/UNV ISL-SC	IS	3	L	0.78	Parallel	<u> </u>	_	-		
	OHE 3X32T8/UNV ISN-SC	IS	4	N	0.88	Parallel	'	· ·	-	V	
OSRAM	QHE 3X32T8/UNV PSN-SC	PRS	3	N	0.88	Parallel	V	<u> </u>		V	
USHAW	QHE 4x32T8/UNV ISH-SC	IS	4	H	1	Parallel	X	-		X	
	QHE 4x32T8/UNV ISH HT-1	IS	4	H	1.18	Parallel	^			^	
	QHE 4X32T8/UNV ISL-SC	IS	4	L	0.78	Parallel	\ \ \	<u> </u>			
	-		4	N		Parallel	V	<u> </u>	_	\ \ \ \	
	QHE 4X32T8/UNV PSN-SC	PRS		_	0.88		•	<u> </u>	-	+ -	
	QT2X32/120 IS-SC	IS	2	N	0.9	Parallel	P, T		· ·	- (0.47)	
	QT 2x32/347 ISH-SC	IS	2	H	1.20	Parallel	-			√ (347	
	QTP 2X32T8/UNV ISN-SC	IS	2	N	0.88	Parallel	✓	-	· ·	/	
	QTP2x32T8/277 ISN-D	IS	2	L	0.78	Parallel	-	-	\(\sqrt{\frac{1}{\sqrt{\colored}}} \) \(\sqrt{\colored}} \) \(\sqrt{\frac{1}{\sqrt{\colored}}} \) \(\sqrt{\colored}} \) \(\sqrt{\colored} \) \(\sqrt{\colored}} \) \(\sqrt{\colored} \) \(\sqrt{\colored}} \) \(\sqrt{\colored} \) \(\sqr	✓	
	QTP 3X32T8/UNV ISN-SC	IS	3	N	0.88	Parallel	√	· ·	_	√	
PACIFIC	EB-232IS-120-RES	IS	2	N	1	Parallel	✓		-	-	
	BAF232IS/MV	IS	2	N	0.89	Parallel	√	· ·	-	✓	
	BAF232IS/MV/L	IS	2	L	0.78	Parallel	✓	<u> </u>	-	✓	
PLUSRITE	BAF332IS/MV	IS	3	N	0.88	-	✓	✓	✓	✓	
LOSIIIL	BAF332IS/MV/L	IS	3	L	0.78	Parallel	✓	✓	✓	✓	
	BAF432IS/MV	IS	4	N	0.88	Parallel	✓	✓	✓	✓	
	BAF432IS/MV/L	IS	4	L	0.78	Parallel	✓	✓	✓	✓	
PROLUME	EP232IS/L/MV/SL	IS	2	L	0.78	Parallel	✓	✓	✓	✓	
PHOLUMIE	E432IS/120/R/SL	IS	4	N	0.87	Parallel	P, T	-	P, T	-	
SOLA	E-758-U-232-MC	IS	2	N	0.88	Parallel	✓	✓	X	X	
	120-1/32IS HPF	IS	1	N	0.88	-	-	-	✓	-	
	120-3/32IS MPF	IS	3	N	0.88	Parallel	✓	-	✓	-	
	SL15T	PS	2	N	0.88	Series	S		S	-	
	U-2/32IS HBF	IS	2	Н	1.18	Parallel	/	/			
	U-2/32ISE-LBF	IS	2	Ĺ	0.78	Parallel					
SUNPARK	U-3/32ISE	IS	3	N	0.88	Parallel			_		
	U-3/32ISE-HBF	IS	3	Н	1.18	Parallel	HT	-	-		
	U-4/32IS HBF	IS	4	H	1.18	Parallel	HT		_		
	U-4/32IS HP,F	IS	4	N	0.88	Parallel	√			✓	
	U-4/32ISE-LBF	IS	4				V	-			
CHDEDIODITE				L	0.77	Parallel	-			\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
SUPERIOR LIFE	70201	IS IS	2	N	0.88	Parallel	✓	F	· ·	√	
SYLVANIA	QT 3x32/277 IS	IS	3		Parallel	Parallel	-	✓	-	✓	

	KEY													
✓	Compatible	Χ	Not Recommended	-	Not applicable	T	THD > 30%	,	Not Tooted					
S	Can't-start up	F	Flicker after>2s start-up	Р	PF < 0.85	N	Acoustic noise > 20dB	_ ′	Not Tested					

DDAND	MODEL	Start	# of	Ballas	t Factor	Lamp	1 Lam	p Load	2+ Lamp Load	
BRAND	MODEL	Method	Lamps	Type	Value	Connection	120V	277V	120V	277\
	E2P32ISUNVHE	IS	2	Н	1.18	Parallel	HT	HT	✓	
	E3P32ISUNVE	IS	3	N	0.88	Parallel	✓	✓	✓	✓
	E4P32ISUNVE	IS	4	N	0.88	Parallel	✓	✓	✓	√
TOD	E3P32ISUNVHE	IS	3	Н	1	Parallel	✓	✓	✓	✓
TCP	E3P32ISUNVLE	IS	3	L	0.78	Parallel	✓	F	✓	✓
	E4P32ISUNVHE	IS	4	N	1.18	Parallel	✓	✓	✓	✓
	E4P32ISUNVLE	IS	4	L	0.78	Parallel	✓	F	✓	✓
	TCP3P32ISUNVH	IS	3	Н	1.18	Parallel	HT	HT	✓	✓
T0047	B232IUNVHEH/A-TPZ	IS	2	Н	1.18	Parallel	HT	HT	/ 120V / / / / / / /	✓
TOPAZ	B432IUNVHEH/A-TPZ	IS	4	Н	1.18	Parallel	✓	✓	✓	√
	B132IUNVHP-N	IS	1	N	0.88	Value Connection 120V 27 1.18 Parallel HT H 0.88 Parallel ✓ ✓ 0.88 Parallel ✓ ✓ 0.78 Parallel ✓ ✓ 1.18 Parallel ✓ ✓ 0.78 Parallel ✓ ✓ 1.18 Parallel ✓ ✓ 1.18 Parallel HT H 1.18 Parallel ✓ ✓ 0.88 Parallel ✓ ✓ 0.88 Parallel ✓ ✓ 0.88 Parallel ✓ ✓ 0.87 Parallel ✓ ✓ 0.87 Parallel ✓ ✓ 0.88 Parallel ✓ ✓ 0.88 Parallel ✓ ✓ 0.87 Parallel ✓ ✓ 0.88 Parallel ✓ ✓ 0.88	-	F	✓	
	B232I277RH-A	IS	4	Н	1.09	Parallel	-	T	-	✓
	B232I120RES-A	IS	2	N	0.88	Parallel	T	-	T	-
	B232IUNV-C	IS	2	N	0.88	Parallel	✓	✓	✓	✓
	B232IUNVHEH-A	IS	2	Н	1.18	Parallel	HT	HT	✓	✓
	B232IUNVHP-B	IS	2	N	0.88	Parallel	√	✓	✓	√
	B232IUNVHP-N	IS	2	N	0.88	Parallel	N	N	✓	✓
	B232IUNVEL-A	IS	2	L	0.77	Parallel	✓	✓	✓	√
UNIVERSAL	B233IUNVHE-A	IS	2	N	0.87	Parallel	✓	N	✓	✓
	B332IHRVHB-E	IS	3	Н	1	Parallel	S		S	S
	B432IUNVHE-A	IS	4	N	0.87	Parallel	✓	✓	✓	✓
	B432IUNVHEH-E	IS	4	Н	1.15	Parallel	✓	✓	✓	√
	B332IUNVHP-A	IS	3	N	0.88	Parallel	✓	✓	✓	√
	B432IUNVHP-A	IS	4	N	0.88	Parallel	✓	✓	✓	✓
	B432IUNVHE L-A	IS	4	L	0.77	Parallel	✓	✓	✓	✓
	B432PUNVHE-A	PS	4	N	0.87	Parallel	✓	✓	✓	√
	B432I120RH-A	IS	4	N	0.88	Parallel	-	-	✓	✓
	DB-232N-MV-TP-HE	IS	2	N	0.87	Parallel	✓	✓	✓	✓
	DB-232N-MV-TP-HE (SC)	IS	2	N	0.87	Parallel	✓	√	✓	✓
MATRAN	DB-332N-MV-TP-HE	IS	3	N	0.87	Parallel	✓	✓	✓	✓
WATRAN	DBG32N-MV-TP-PS-HL	PS	3	Н	1	-	S	S	S	S
	DB-432L-MV-TP-HE	IS	4	L	0.77	Parallel	/	/	✓	√
	DB-432N-MV-TP-HE	IS	4	N	0.87	Parallel	/	/	✓	/
	WHSG3-UNV-T8-IS	IS	3	N	0.99	Parallel	/	/	V	V
WORK HORSE	WHSG4-UNV-T8-IS	IS	4	N	0.96	Parallel	1	1		1

	KEY													
✓	Compatible	X	Not Recommended	-	Not applicable	T	THD > 30%	,	Not Tootod					
S	Can't-start up	F	Flicker after>2s start-up	P	PF < 0.85	N	Acoustic noise > 20dB	_ /	Not Tested					