LSG Direct Replacement ("PnP") Compatible Ballast List

✓ compatible
✗ un-compatible
/ not tested

No	Ballast No.	Ballast Description							N-1 Lamp										N Lamp									
		Ballast Brand	Part Number	Start Method	# of Lamps	BF		Lamp	DR G1		DR G2		DR G3		DR G4		DR EM		DM		DR G1		DR G2		DR G3		DR G4		DR EM		DM	
						Type	Value	Connection	120	277	120	277	120	277	120	277	120	277	120	277	120	277	120	277	120	277	120	277	120	277	120	277
1	1	Philips-Advance	ICN-2P32-N	IS	2	N	0.89	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
2	2	Philips-Advance	IOPA-2P32-N	IS	2	N	0.89	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3	3	Philips-Advance	IOP-2P32-N	IS	2	N	0.89	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
4	4	Philips-Advance	IOP-2P32-LW-N	IS	2	L	0.77	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
5	5	OSRAM SYLVANIA	QTP 2X32T8/UNV ISN-SC	IS	2	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6	6	OSRAM SYLVANIA	QHE 2X32T8/UNV ISN-SC	IS	2	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
7	7	OSRAM SYLVANIA	QHE 2X32T8/UNV ISL-SC	IS	2	L	0.78	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
8	8	General Electric	GE-232-MV-N ☐	IS	2	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
9	9	General Electric	GE232MAX-N/ULTRA ☐	IS	2	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
10	10	Universal Lighting Technologies	B232IUNVHP-N	IS	2	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
11	11	Universal Lighting Technologies	B232IUNVEL-A	IS	2	L	0.77	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12	12	Universal Lighting Technologies	B233IUNVHE-A	IS	2	N	0.87	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
13	13	ESPEN	VE232MVHIPE	IS	2	N	0.89	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
14	14	ESPEN	VE232MVHIPHE	IS	2	H	1.19	Parallel	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
15	15	Philips-Advance	IOPA-3P32-LW-N	IS	3	L	0.76	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
16	16	OSRAM SYLVANIA	QHE 3X32T8/UNV ISH-SC	IS	3	H	1.18	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
17	17	Philips-Advance	IOPA-4P32-N	IS	4	N	0.87	Parallel	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗
18	18	Philips-Advance	IOPA-4P32-HL-SC	IS	4	H	1.18	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓
19	19	Philips-Advance	IOP-4P32-N	IS	4	N	0.87	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
20	20	Philips-Advance	IOP-4P32-LW-N	IS	4	L	0.77	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
21	21	Philips-Advance	ICN-4P32-N	IS	4	N	0.90	Parallel	✓	✓	✓	✓	✗	✗	✓	✓	✗	✗	✗	✗	✓	✓	✓	✓	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗
22	22	General Electric	GE432MAX-H/ULTRA ☐	IS	4	H	1.18	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
23	23	General Electric	GE432MAX-L/ULTRA ☐	IS	4	L	0.78	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
24	24	OSRAM SYLVANIA	QHE 4X32T8/UNV ISN-SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
25	25	OSRAM SYLVANIA	QHE 4X32T8/UNV ISL-SC	IS	4	L	0.78	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
26	26	Philips-Advance	IOP-1P32-N	IS	1	N	0.89	n.a													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
27	27	Philips-Advance	IOP-2P32HL-SC	IS	2	H	1.18	Parallel	/	/	/	/	/	/	✗	✗	/	/	/	/	/	/	/	/	/	/	✓	✓	/	/	/	/
28	28	General Electric	GE-232-MAX-H/Ultra ☐	IS	2	H	1.15	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
29	29	HOWARD INDUSTRIES	EPH4/32IS/MV/SC/HE	IS	4	H	1.16	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
30	30	HOWARD INDUSTRIES	EP3/32IS/MV/SC/HE	IS	3	N	0.87	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
31	31	HOWARD INDUSTRIES	EPL4/32IS/MV/MC/HE	IS	4	L	0.77	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
32	32	Halco	EP232IS/L/MV/SL	IS	2	L	0.78	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
33	33	Halco	E432IS/120/R/SL	IS	4	N	0.87	Parallel	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	
34	34	General Electric	GE432MAX-G-N	IS	4	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
35	35	Universal Lighting Technologies	B432IUNVHE L-A	IS	4	L	0.77	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
36	36	OSRAM SYLVANIA	QTP 4×32T8/UNV ISN-SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
37	37	Philips-Advance	ICN-1P32-N	IS	1	H	0.91	n.a													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
38	38	Philips-Advance	IOPA-1P32-N	IS	1	H	0.88	n.a													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
39	39	General Electric	GE132MAX-G-N	IS	1	H	0.88	n.a													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
40	40	General Electric	GE132MAX-H/ULTRA	IS	1	H	1.18	n.a													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
41	41	General Electric	GE132MAX-L/ULTRA	IS	1	H	0.78	n.a													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
42	42	General Electric	GE132MAXP-N/ULTRA	IS	1	N	0.88	n.a													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
43	43	OSRAM SYLVANIA	QHE 1X32T8/UNV ISN-SC	IS	1	N	0.88	n.a													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
44	44	OSRAM SYLVANIA	QHE 1X32T8/UNV ISL-SC	IS	1	L	0.78	n.a													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
45	45	OSRAM SYLVANIA	QTP 1X32T8/UNV ISN-SC	IS	1	N	0.88	n.a													✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
46	46	ESPEN	VE232MVHIPLE	IS	2	L	0.77	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
47	47	Philips-Advance	IOPA-2P32HL-SC	IS	2	H	1.18	Parallel	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✓	✗	✓
48	48	Philips-Advance	REB-2P32-SC	IS	2	N	0.88	Parallel	✓		/		✓		✓		/		/		✓		/		✓		✓		/		/	
49	49	General Electric	GE232MV-N-DIY	IS	2	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
50	50	General Electric	GE232-120-RES	IS	2	N	0.83	Parallel	✓	✓	✓	✓	/	/	/	/	✓	✓	/	/	✓	✓	✓	✓	/	/	/	/	✓	✓	/	/	/	/
51	51	General Electric	GE232MAX-L/ULTRA	IS	2	L	0.78	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
52	52	General Electric	GE232MAX347-N	IS	2	N	0.87	Parallel	/	/	/	/	/	/	/	347✓	/	/	/	/	/	/	/	/	/	/	/	347✓	/	/	/	/
53	53	Halco	EP232IS/MV/HE	IS	2	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
54	54	Universal Lighting Technologies	B232IUNVHEH-A	IS	2	H	1.18	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗
55	55	OSRAM SYLVANIA	QHE 2X32T8/UNV ISH-SC	IS	2	H	1.20	Parallel	✓	✗	✓	✗	✓	✗	✗	✗	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
56	56	HOWARD INDUSTRIES	EPH2/321S/MV/MC/HE	IS	2	H	1.18	Parallel	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
57	57	SOLA	E-758-F-232-SC	IS	2	N	0.88	Parallel	✓	✓	✓	✓	/	/	/	/	✓	✓	/	/	✓	✓	✓	✓	/	/	/	/	✓	✓	/	/	/	/
58	58	MAXLITE	SKEU322HEL/SC	IS	2	L	0.77	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
59	59	KEYSTONE	KTEB-232-UV-IS-N-P	IS	2	N	0.87	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
60	60	Robertson	ISU232T8120 3P20116	IS	2	N	0.88	Parallel	✓		✓		/		/		✓		/		✓		✓		/		/		✓		/	
61	61	Philips-Advance	IOPA-3P32-N	IS	3	N	0.86	Parallel	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	✓	✓	✓	✓
62	62	Philips-Advance	IOP-3P32-N	IS	3	N	0.87	Parallel	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	✓	✓	✗	✗	✗	✗	✗	✗	✓	✓	✗	✗	✓	✓	✓	✓
63	63	General Electric	GE332MV-N	IS	3	N	0.87	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
64	64	General Electric	GE332MAX-N/ULTRA	IS	3	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
65	65	General Electric	GE332MAX-L/ULTRA	IS	3	L	0.78	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
66	66	General Electric	GE332MAX-G-N	IS	3	N	0.87	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗
67	67	General Electric	GE332MAXP-H/ULTRA	IS	3	H	1.18	Parallel	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
68	68	OSRAM SYLVANIA	QTP 3X32T8/UNV ISN-SC	IS	3	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
69	69	OSRAM SYLVANIA	QHE 3X32T8/UNV ISN-SC	IS	3	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	/	/	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	/	/	✓	✓	✓	✓	✓	✓
70	70	OSRAM SYLVANIA	QHE 3X32T8/UNV ISL-SC	IS	3	L	0.78	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
71	71	Universal Lighting Technologies	B332IUNVHP-A	IS	3	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
72	72	MAXLITE	SKEU324HE/SC	IS	4	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
73	73	MAXLITE	SKEU323L/SC	IS	3	N	0.78	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
74	74	Halco	EP332IS/MV/HE	IS	3	N	0.87	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
75	75	LumaPro	4KGH1 EB-432IS-120	IS	4	N	0.87	Parallel	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	
76	76	Universal Lighting Technologies	B432IUNVHP-A	IS	4	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
77	77	Halco	EP432IS/MV/HE	IS	4	N	0.88	Parallel	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✓	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✓	✗	✓
78	78	Halco	EP432IS/L/MV/HE	IS	4	L	0.78	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
79	79	Philips-Advance	REB-4P32-SC	IS	4	N	0.81	Parallel	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	
80	80	Philips-Advance	IOP-4P32-HL-SC	IS	4	H	1.18	Parallel	✓	✓	✗	✗	✓	✓	✓	✓	✗	✗	✗	✗	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗
81	81	General Electric	GE432-120-RES	IS	4	N	0.83	Parallel	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	
82	82	General Electric	GE432MV-N-42T	IS	4	N	?	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
83	83	General Electric	GE432MAX-N/ULTRA	IS	4	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
84	84	General Electric	GE432MAX347-N	IS	4	N	0.88	Parallel	/	/	/	/	/	/	/	347✓	/	/	/	/	/	/	/	/	/	/	/	347✓	/	/	/	/
85	85	MAXLITE	MLEU322HEL/SC	IS	2	L	0.83	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
86	86	MAXLITE	MLEU323H/SC	IS	3	H	1.18	Parallel	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✓	✗	✓	✓	✓	✓	✓	✓	✓	✗	✓	✗	✓	✗	✓
87	87	TCP	E2P32ISUNVHE	IS	2	H	1.18	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✗	✗	✗	✗	✗	✗
88	88	TCP	E4P32ISUNVLE	IS	4	L	0.78	Parallel	✓	✗	✓	✗	✓	✗	✓	✗	✓	✓	✓	✗	✓	✗	✓	✓	✓	✗	✓	✗	✓	✓	✓	✓	✓	✓
89	89	Universal Lighting Technologies	B232I120RES-A	IS	2	N	0.88	Parallel	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	
90	90	Universal Lighting Technologies	B432I120RES-A	IS	4	N	0.80	Parallel	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	
91	91	General Electric	GE232MAXP90-V60	IS	2	H	1.18	Parallel	/	/	/	/	/	/	✗	✗	/	/	/	/	/	/	/	/	/	/	✓	✓	/	/	/	/
92	92	HOWARD INDUSTRIES	E2/32IS-120MC	IS	2	N	0.85	Parallel	✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓		✓	
93	93	HOWARD INDUSTRIES	EPL2/32IS/MV/MC/HE	IS	2	L	0.78	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
94	94	PLUSRITE	BAF232IS/MV	IS	2	N	0.89	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

103	203	TCP	E3P32ISUNVE	IS	3	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
104	204	TCP	E3P32ISUNVLE	IS	3	L	0.78	Parallel	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✗	✓	✓	✓	✓	✓	✓
105	205	TCP	E4P32ISUNVE	IS	4	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
106	206	TCP	E4P32ISUNVHE	IS	4	H	1.18	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
107	207	HOWARD INDUSTRIES	EP4/32IS/MV/MC/HE	IS	4	N	0.88	Parallel	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
108	208	WORK HORSE	WHCG4-120-T8-IS	IS	4	N	0.86	Parallel	✓			✓			✓			✓			✓			✓			✓			✓		
109	209	PES	PES120ET8-12SMT-4	IS	4	N	0.88	?	✗			✗			/			/			✗			✗			✗			/			✗		
110	210	EIKO	PM-4X32T8-UNV-IS	IS	4	N	0.88	Parallel	✗	✓		✓	✓		✓	✓		✗	✓		✗	✓		✗	✓		✓	✓		✓	✓		✗	✓		✓
111	211	EIKO	PM-4X32T8-UNV-IS-L	IS	4	L	0.78	Parallel	✓	✓		✓	✓		✓	✓		✗	✓		✗	✓		✗	✓		✓	✓		✓	✓		✗	✓		✓
112	212	Universal Lighting Technologies	B132IUNVHP-N	IS	1	N	0.88	n.a													✓	✓		✓	✓		✓	✓		✓	✓		✓	
113	213	SOLA	E-758-U-232-MC	IS	2	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✗	✓		✓
114	214	HOWARD INDUSTRIES	EP2/32IS/MV/MC/HE	IS	2	N	0.89	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
115	215	HOWARD INDUSTRIES	EP3 / 32IS / MV / MC / HE	IS	3	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
116	216	WORK HORSE	WHSG3-UNV-T8-IS	IS	3	N	0.99	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
117	217	WORK HORSE	WHSG4-UNV-T8-IS	IS	4	N	0.96	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
118	218	KEYSTONE	KTEB-432RIS-1-TP-SL	IS	4	N	0.80	Parallel	✓			✓			✓			✓			✓			✓			✓			✓			✓		
119	219	MAXLITE	MLEU324HE/SC	IS	4	N	0.88	Parallel	✗	✓		✓	✓		✓	✓		✗	✓		✗	✓		✗	✓		✓	✓		✓	✓		✗	✓		✓
120	220	SUNPARK	120-1/32IS HPF	IS	1	N	0.88	n.a													✓			✓			✓			✓			✓		
121	221	Superior Life	70201	IS	2	N	0.88	Parallel	✓	✗		✓	✗		✓	✗		✓	✗		✓	✗		✓	✓		✓	✓		✓	✓		✓	✓		✓
122	222	SUNPARK	U-2/32IS HBF	IS	2	H	1.18	Parallel	✓	✓		✓	✓		✗	✗		✓	✓		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗
123	223	SUNPARK	U-2/32ISE-LBF	IS	2	L	0.78	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
124	224	SUNPARK	U-3/32ISE	IS	3	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
125	225	SUNPARK	U-3/32ISE-HBF	IS	3	H	1.18	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
126	226	SUNPARK	120-3/32IS MP,F	IS	3	N	0.88	Parallel	✓			✓			✓			✓			✓			✓			✓			✓			✓		
127	227	SUNPARK	U-4/32IS HP,F	IS	4	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
128	228	SUNPARK	U-4/32IS HBF	IS	4	H	1.18	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
129	229	SUNPARK	U-4/32ISE-LBF	IS	4	L	0.88	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
130	230	Philips-Advance	ICN-4P32-SC	IS	4	N	0.89	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
131	231	EIKO	PM-2X32T8-UNV-IS	IS	2	N	0.87	Parallel	✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓	✓		✓
132	232	KEYSTONE	KTEB-332-UV-IS-N-P	IS	3	N	0.87	Parallel	✓	✓		✓	✓		✓	✓		/	/		/	/		✓	✓		✓	✓		✓	✓		/	/		/
133	233	KEYSTONE	KTEB-432-UV-IS-N-P	IS	4	N	0.87	Parallel	✗	✓		✓	✓		✓	✓		/	/		/	/		✗	✓		✓	✓		✓	✓		/	/		/
134	234	General Electric	GE432MAX-H/ULTRA ☐	IS	4	H	1.18	Parallel	/	/		/	/		✓	✓		/	/		/	/		/	/		✓	✓		✓	✓		/	/		/
135	235	Philips-Advance	ICN-3P32-N	IS	3	N	0.88	Parallel	/	/		✓	✓		✗	✗		✓	✓		/	/		/	/		/	/		✓	✓		✗	✗		✓
136	236	Halco	EP232IS/L/MV/HE	IS	2	L	0.78	Parallel	/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		✓	✓		✓
137	237	Halco	EP232IS/H/MV/HE	IS	2	H	1.18	Parallel	/	/		/	/		✗	✗		/	/		/	/		/	/		/	/		✓	✓		✓	✓		✓
138	238	Halco	EP332IS/L/MV/HE	IS	3	L	0.78	Parallel	/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		✓	✓		✓
139	239	Halco	EP432IS/120/MC	IS	4	N	0.88	Parallel	/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		✓	✓		✓
140	240	Philips-Advance	VEL-2P32-SC	IS	2			Parallel	/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/	/		/
141	241	Universal Lighting Technologies	B232IUNVHP-B	IS	2			Parallel	/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/	/		/
142	242	OSRAM SYLVANIA	QTP2x32T8/277 ISN-D	IS	2			Parallel	/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/	/		/
143	243	KEYSTONE	KTEB-232LBF-1-TP-PIC-EV	IS	2			Parallel	/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/	/		/
144	244	HATCH	HL232BIS/UV/HE/W	IS	2			Parallel	/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/	/		/
145	245	HATCH	HL432BIS/UV/HE/W	IS	4			Parallel	/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/	/		/
146	256	DAMAR	EL232-120/277HF(1688B)	IS	2	N		Parallel	/	/		/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/
147	257	DAMAR	EL232HL-120/277HF(1688D	IS	2	H		Parallel	/	/		/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/
148	258	DAMAR	EL332-120/277HF(3654C)	IS	3	N		Parallel	/	/		/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/
149	259	DAMAR	EL332HL-120/277HF(3654H	IS	3	H		Parallel	/	/		/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/
150	260	DAMAR	EL432-120/277HF(3093B)	IS	4	N		Parallel	/	/		/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/
151	261	DAMAR	EL432HL-120/277HF(3093C	IS	4	H		Parallel	/	/		/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/
152	101	Philips-Advance	IOP-2PSP32-N	PS	2	N	0.94	Parallel	✗	✗		✗	✓		✓	✓		✓	✓		✗	✗		✗	✗		✗	✓		✓	✓		✓	✓		✗	✗
153	102	Philips-Advance	IOP-3PSP32-SC	PS	3	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
154	103	Philips-Advance	IOP-3PSP32-LW-SC	PS	3	L	0.69	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
155	104	Philips-Advance	IOP-4PSP32-SC	PS	4	N	0.89	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
156	105	Philips-Advance	IOP-4PSP32-LW-SC	PS	4	L	0.69	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
157	106	OSRAM SYLVANIA	QHE 4X32T8/UNV PSX-SC	PRS	4	L	0.71	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
158	107	OSRAM SYLVANIA	QHE 2X32T8/UNV PSH-HT	PRS	2	H	1.18	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
159	108	Philips-Advance	IOP-2S32-SC	PS	2	N	0.87	Series	✗	✗		✗	✗		✗	✗		✓	✗		✗	✗		✗	✗		✗	✗		✓	✓		✓	✓		✗	✗
160	109	Philips-Advance	IZT-2S32-SC	DPS	2	N	1.00	Series	✗	✗		✗	✗		✗	✗		✓	✓		✗	✗		✗	✗		✗	✗		✓	✓		✓	✓		✗	✗
161	110	ESPEN	VE232MVHRPHT3-AB	PS	2	H	1.20	Series	✗	✗		✗	✗		✗	✗		/	/		✗	✗		✗	✗		✗	✗		✓	✓		✗	✗		/	/
162	111	PES	PES120DET8	PS	2	N	0.95	Parallel	/	/		/	/		/	/		✗	✗		✗	✗		/	/		/	/		/	/		✗	✗		✗	✗
163	112	Universal Lighting Technologies	B432PUNVHE-A	PS	4	N	0.87	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
164	113	General Electric	GE232-MVPS-N	PS	2	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
165	115	Universal Lighting Technologies	B232PUNVHE-B	PS	2	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
166	116	OSRAM SYLVANIA	QHE 2X32T8/UNV PSN-MC	PRS	2	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
167	117	Philips-Advance	IOP-2PSP32-LW-N	PS	2	L	0.71	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
168	118	Philips-Advance	IZT-2PSP32-SC	DPS	2	N	1.00	Parallel	✗	✗		✗	✗		✗	✗		✓	✓		✗	✗		✗	✗		✗	✗		✗	✗		✓	✓		✗	✗
169	119	Universal Lighting Technologies	B332PUNVHE-A	PS	3	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
170	120	General Electric	GE-332-MVPS-N	PS	3	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
171	121	OSRAM SYLVANIA	QHE 3X32T8/UNV PSN-SC	PRS	3	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
172	122	OSRAM SYLVANIA	QTP 3X32T8/UNV PSX-SC	PRS	3	L	0.71	Series	✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✓	✓		✓	✓		✗	✗
173	123	OSRAM SYLVANIA	QTP3X32T8/UNV PSN-SC	PRS	3	N	0.88	Series	✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✓	✓		✓	✓		✗	✗
174	124	General Electric	GE432-MVPS-N	PS	4	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
175	125	General Electric	GE432MVPS-N-V03	PS	4	N	0.90	Parallel	/	/		/	/		/	/		✓	✓		✗	✗		✗	✗		/	/		/	/		/	/		✗	✗
176	126	OSRAM SYLVANIA	QHE 4X32T8/UNV PSN-SC	PRS	4	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
177	127	OSRAM SYLVANIA	QHE 2X32T8/UNV DIM-TC	PRS	2	N	0.88	Series	✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✓	✓		✓	✓		✗	✗
178	128	Watran	DBG32N-MV-TP-PS-HL	PS	3	?	?	Series	✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✓	✓		✓	✓		✗	✗
179	129	General Electric	GE-232-MV-PS-N	PS	2	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
180	130	KEYSTONE	KTEB-2C72-1-TP	PS	1	N	0.97	Parallel													✗			✗			/			/			✗			✗	
181	131	Robertson	RSZ132T8120	PS	1	N	0.80	n.a													✗			✗			/			/			✗			✗	
182	132	PES	PES120DET8-12SMT	PS	2	N	0.95	Parallel	✗			✗			/						✗			✗			✗			/			✗			✗	
183	133	SUNPARK	U-1/32PSE	PS	1	N	0.88	n.a													✗	✗		✗	✗		✓	✓		✗	✗		✗	✗		✗	✗
184	134	SUNPARK	U-2/32PSE	RS	2	N	0.88	Series	✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✓	✓		✗	✗		✗	✗		✗	✗
185	135	SUNPARK	U-2/32PSE-HBF	RS	2	H	1.15	Series	✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✓	✓		✗	✗		✗	✗		✗	✗
186	136	SUNPARK	U-232PS3	RS	2	N	0.88	Series	✗	✗		✗	✗		✗	✗		✓	✓		✗	✗		✗	✗		✗	✗		✓	✓		✓	✓		✗	✗
187	137	SUNPARK	U-232PS3-HBF	RS	2	H	1.15	Series	✗	✗		✗	✗		✗	✗		✓	✓		✗	✗		✗	✗		✗	✗		✓	✓		✓	✓		✗	✗
188	138	Superior Life	70210	PS	2	N	0.88	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
189	139	Superior Life	70211	PS	4	N	0.87	Parallel	✓	✓		✓	✓		✓	✓		✗	✗		✗	✗		✓	✓		✓	✓		✓	✓		✓	✓		✗	✗
190	140	SUNPARK	SL15T	RS	2	N	0.88	Parallel	✗			✗			✓			✗			✗			✗			✓			✓			✓			✗	
191	141	SUNPARK	LC 12011T	PS	1	?	?	n.a													✗			✗			✓			✓			✗			✗	
192	142	SUNPARK	LC 12013T	PS	1	?	?	n.a													✓			✓			✓			✓			✗			✗	
193	143	Ballast Wise	DXE118M8	PS	1	N	0.92	n.a													/			/			/			/			✗			✗	
194	144	EIKO	PM-3X32T8-UNV-PS	PS	3	N	0.88	Series	✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✓	✓		✓	✓		✗	✗
195	145	EIKO	PM-3X32T8-UNV-PS-H	PS	3	H	1.18	Series	✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✗	✗		✓	✓		✗	✗		✗	✗
196	146	Philips-Advance	REZ-3S32-SC	DPS	3	N	0.97	Series	/			/			✗			✗			✗			✗			/			/			✓			✗	
197	148	General Electric	GE232MVPS-L-S30	DPS	2	N	0.96	Parallel	/	/		/	/		✓	✓		✓	✓		✗	✗		✗	✗		/	/		/	/		✓	✓		✗	✗
198	149	General Electric	GE132MVPSN-V03	DPS	1	N	0.88	n.a													/	/		/	/		✓	✓		✓	✓		✗	✗		✗	✗
199	150	General Electric	GE332MVPSN-V03	DPS	3	N	0.98	Parallel	/	/		/	/		✓	✓		✓	✓		✗	✗		✗	✗		/	/		/	/		✓	✓		✗	✗
200	151	OSRAM SYLVANIA	QTP2×32T8/UNV DIM-TC	DPS	2	N	0.88	Series	/	/		/	/		✗	✗		✗	✗		✗	✗		✗	✗		/	/		/	/		✓	✓		✗	✗
201	152	KEYSTONE	KTEB-132-1-TP-FC	RS	1	N		n.a													/			/			✓			✓			✗	✗		✗	✗
202	153	Universal Lighting Technologies	B332PUNVHEH-A	PS	3			Parallel	/	/		/	/		✓	✓		✓	✓		✗	✗		✗	✗		/	/		/	/		✓	✓		✗	✗
203	154	Universal Lighting Technologies	B232PU104S50A	PRS	2			Parallel	/	/		/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/	/
204	155	DAMAR	EL232DIM/120/277HF	DPS	2			Series	/	/		/	/		/	/		✗	✗		/	/		/	/		/	/		/	/		✓	✓		/	/
205	157	HOWARD INDUSTRIES	EP2/32PRS/MV/MC/HE	PRS	2	N	0.86	Parallel	/	/		/	/		/	/		✓	✓		/	/		/	/		/	/		/	/		✓	✓		/	/