

Nonresidential Appendix NA8

Appendix NA8 –Luminaire Power

Appendix NA8 –Luminaire Power 1
 NA8.1 Luminaire Power 1

NA8.1 Luminaire Power

The following tables contain a limited list of lamp and ballast combinations. These tables provide an alternate voluntary option to the provision in Section 130(c) for determining luminaire power for any lamp and ballast combination specifically listed in Appendix NA8. This appendix is not intended to list all possible lamp and ballast combinations, and shall not to be used to determine luminaire power for any lighting system not specifically listed in this appendix.

Table NA8-1 – Fluorescent U-Tubes

Type	Lamps		Ballasts			System Watts
	Number	Designation	Number	Designation	Description	
2 ft. Fluorescent U-Tube T8	1	FB31T8/F32T8U	1	ELECT NO	Electronic Normal Output	39
	2	FB31T8/F32T8U	1	ELECT NO	Electronic Normal Output	62
	3	FB31T8/F32T8U	1	ELECT NO	Electronic Normal Output	92
	1	FB31T8/F32T8U	1	ELECT DIM	Electronic Dimming	33
	2	FB31T8/F32T8U	1	ELECT DIM	Electronic Dimming	64
	3	FB31T8/F32T8U	1	ELECT DIM	Electronic Dimming	93
	4	FB31T8/F32T8U	1	ELECT DIM	Electronic Dimming	116

NO = ballast factor 85 to 100%

Table NA8-2 – Fluorescent Linear Lamps T5

Type	Lamps		Ballasts			System Watts
	Number	Designation	Number	Designation	Description	
~23" Fluorescent Program Start T5 (14W)	1	F14T5	1	ELECT	Elect. Program Start BF=1	18
	2	F14T5	1	ELECT	Elect. Program Start BF=1	34
~34.5" Fluorescent Program Start T5 (21W)	1	F21T5	1	ELECT	Elect. Program Start BF=1	27
	2	F21T5	1	ELECT	Elect. Program Start BF=1	50
~46" Fluorescent Program Start T5 (28W)	1	F28T5	1	ELECT	Elect. Program Start BF=1	30
	2	F28T5	1	ELECT	Elect. Program Start BF=1	60
~58.5" Fluorescent Program Start T5 (35W)	1	F35T5	1	ELECT	Elect. Program Start BF=1	40
	2	F35T5	1	ELECT	Elect. Program Start BF=1	78
~23" Fluorescent Program Start T5 High Output (24W)	1	F24T5HO	1	ELECT	Elect. Program Start BF=1	29
	2	F24T5HO	1	ELECT	Elect. Program Start BF=1	55
~34.5" Fluorescent Program Start T5 High Output(39W)	1	F39T5	1	ELECT	Elect. Program Start BF=1	43
	2	F39T5	1	ELECT	Elect. Program Start BF=1	85
~46" Fluorescent Program Start T5 High Output (54W)	1	F54T5	1	ELECT	Elect. Program Start BF=1	62
	2	F54T5	1	ELECT	Elect. Program Start BF=1	121
	1	F54T5	1	ELECT DIM	Elect. Dimming	63
	2	F54T5	1	ELECT DIM	Elect. Dimming	125
~57.5" Fluorescent Program Start T5 High Output (80W)	1	°F80T5	1	ELECT	Elect. Program Start BF=1	90

Table NA8-3 – Fluorescent Rapid Start T-8

Type	Lamps		Ballasts			System Watts
	Number	Designation	Number	Designation	Description	
2 foot Fluorescent Rapid Start T8 (17W) Electronic Ballasts	1	F17T8	1	ELECT NO	Electronic Normal Output	22
	2	F17T8	1	ELECT NO	Electronic Normal Output	33
	3	F17T8	1	ELECT NO	Electronic Normal Output	53
	3	F17T8	2	ELECT NO	Electronic Normal Output	55
	4	F17T8	1	ELECT NO	Electronic Normal Output	63
2 foot Fluorescent Rapid Start T8 (17W)	1	F17T8	1	ELECT DIM	Electronic Dimming	20
	2	F17T8	1	ELECT DIM	Electronic Dimming	37
	3	F17T8	1	ELECT DIM	Electronic Dimming	56
	4	F17T8	1	ELECT DIM	Electronic Dimming	69
3 foot Fluorescent Rapid Start T8 (25W) Electronic Ballasts	1	F25T8	1	ELECT NO	Electronic Normal Output	27
	2	F25T8	1	ELECT NO	Electronic Normal Output	48
	3	F25T8	1	ELECT NO	Electronic Normal Output	68
	4	F25T8	1	ELECT NO	Electronic Normal Output	89
	1	F25T8	1	ELECT RO	Electronic Reduced Output	24
	2	F25T8	1	ELECT RO	Electronic Reduced Output	41
	3	F25T8	1	ELECT RO	Electronic Reduced Output	59
	4	F25T8	1	ELECT RO	Electronic Reduced Output	76
	1	F25T8	1	ELECT HO	Electronic High Output	29
	2	F25T8	1	ELECT HO	Electronic High Output	51
	3	F25T8	1	ELECT HO	Electronic High Output	74
	1	F25T8	1	ELECT DIM	Electronic Dimming	25
	2	F25T8	1	ELECT DIM	Electronic Dimming	49
	3	F25T8	1	ELECT DIM	Electronic Dimming	76
	4	F25T8	1	ELECT DIM	Electronic Dimming	96

Table NA8-3 (continued) – Fluorescent Rapid Start T-8

4 foot Fluorescent Instant Start T8 ("Energy Saving" 30W)	1	F32T8/30ES	1	ELECT NO	Electronic Normal Output	29
	2	F32T8/30ES	1	ELECT NO	Electronic Normal Output	54
	3	F32T8/30ES	1	ELECT NO	Electronic Normal Output	79
	4	F32T8/30ES	1	ELECT NO	Electronic Normal Output	104
	1	F32T8/30ES	1	ELECT RO	Electronic Reduced Output	27
	2	F32T8/30ES	1	ELECT RO	Electronic Reduced Output	48
	3	F32T8/30ES	1	ELECT RO	Electronic Reduced Output	70
	4	F32T8/30ES	1	ELECT RO	Electronic Reduced Output	91
	1	F32T8/30ES	1	ELECT NO EE	EE Normal Output	33
	2	F32T8/30ES	1	ELECT NO EE	Energy efficiency Normal Output	52
	3	F32T8/30ES	1	ELECT NO EE	Energy efficiency Normal Output	77
	4	F32T8/30ES	1	ELECT NO EE	Energy efficiency Normal Output	101
	1	F32T8/30ES	1	ELECT RO EE	EE Reduced Output	28
	2	F32T8/30ES	1	ELECT RO EE	EE Reduced Output	45
	3	F32T8/30ES	1	ELECT RO EE	EE Reduced Output	66
	4	F32T8/30ES	1	ELECT RO EE	EE Reduced Output	88

Table NA8-3 (continued) – Fluorescent Rapid Start T-8

4 foot Fluorescent Rapid Start T8 (32W)	1	F32T8	1	ELECT NO	Electronic Normal Output	32
	2	F32T8	1	ELECT NO	Electronic Normal Output	62
	3	F32T8	1	ELECT NO	Electronic Normal Output	93
	4	F32T8	1	ELECT NO	Electronic Normal Output	114
	1	F32T8	1	EE NO	EE Normal Output	35
	2	F32T8	1	EE NO	EE Normal Output	55
	3	F32T8	1	EE NO	EE Normal Output	82
	4	F32T8	1	EE NO	EE Normal Output	107
	1	F32T8	1	ELECT RO	Electronic Reduced Output	29
	2	F32T8	1	ELECT RO	Electronic Reduced Output	51
	3	F32T8	1	ELECT RO	Electronic Reduced Output	76
	4	F32T8	1	ELECT RO	Electronic Reduced Output	98
	2	F32T8	1	ELECT HO	Electronic High Output	77
	3	F32T8	1	ELECT HO	Electronic High Output	112
	1	F32T8	1	EE RO	EE Reduced Output	30
	2	F32T8	1	EE RO	EE Reduced Output	48
	3	F32T8	1	EE RO	EE Reduced Output	73
	4	F32T8	1	EE RO	EE Reduced Output	96
	2	F32T8	1	ELECT TL	Electronic Two Level (50 & 100%)	65
	1	F32T8	1	ELECT DIM1	Electronic Dimming	35
2	F32T8	1	ELECT DIM1	Electronic Dimming	68	
3	F32T8	1	ELECT DIM1	Electronic Dimming	102	
1	F32T8	1	ELECT DIM2	Electronic Dimming	33	
2	F32T8	1	ELECT DIM2	Electronic Dimming	64	
3	F32T8	1	ELECT DIM2	Electronic Dimming	93	
4	F32T8	1	ELECT DIM2	Electronic Dimming	116	
5 foot Fluorescent Rapid Start T8 (40W)	1	F40T8	1	ELECT	Electronic	46
	2	F40T8	1	ELECT	Electronic	79
	3	F40T8	1	ELECT	Electronic	112

RO = ballast factor 70 to 85% NO = ballast factor 85 to 100% HO = ballast factor >100%

Table NA8-4 – Fluorescent Rapid Start High Output (HO) T8, 8 ft

Type	Lamps		Ballasts			System Watts	Comment
	Number	Designation	Number	Designation	Description		
8 foot Fluorescent Rapid Start T8 High Output (86W)	1	F96T8/HO	1	ELECT	Electronic	88	
	2	F96T8/HO	1	ELECT	Electronic	160	

HO = ballast factor >100%

Table NA8-5 – High Intensity Discharge

Type	Lamps		Ballasts			System Watts	Comment
	Number	Designation	Number	Designation	Description		
Metal Halide	1	M35/39	1	MAG STD	Mag. Stand.	58	
	1	M35/39	1	ELECT	Electronic	44	
	1	M50	1	MAG STD	Mag. Stand.	67	
	1	M50	1	ELECT	Electronic	58	
	1	M70	1	MAG STD	Mag. Stand.	95	
	1	M70	1	ELECT	Electronic	86	
	1	M100	1	MAG STD	Mag. Stand.	130	
	1	M100	1	ELECT	Electronic	110	
	1	M150	1	MAG STD	Mag. Stand.	185	
	1	M150	1	ELECT	Electronic	168	
	1	M175	1	MAG STD	Mag. Stand.	208	
	1	M175	1	ELECT	Electronic	194	
	1	M200	1	MAG STD	Mag. Stand.	232	
	1	M250	1	MAG STD	Mag. Stand.	295	
	1	M250	1	ELECT	Electronic	269	
	1	M320	1	MAG STD	Mag. Stand.	368	
	1	M320	1	ELECT	Electronic	343	
	1	M360	1	MAG STD	Mag. Stand.	422	
	1	M400	1	MAG STD	Mag. Stand.	452	
	1	M400	1	ELECT	Electronic	430	
1	M450	1	MAG STD	Mag. Stand.	508		
1	M750	1	MAG STD	Mag. Stand.	818		
1	M1000	1	MAG STD	Mag. Stand.	1080		
1	M1500	1	MAG STD	Mag. Stand.	1605		
High Pressure Sodium	1	S35	1	MAG STD	Mag. Stand.	47	
	1	S50	1	MAG STD	Mag. Stand.	66	
	1	S70	1	MAG STD	Mag. Stand.	91	
	1	S100	1	MAG STD	Mag. Stand.	128	
	1	S150	1	MAG STD	Mag. Stand.	188	
	1	S200	1	MAG STD	Mag. Stand.	230	
	1	S250	1	MAG STD	Mag. Stand.	295	
	1	S400	1	MAG STD	Mag. Stand.	464	
1	S1000	1	MAG STD	Mag. Stand.	1100		

Table NA8-6 –12 Volt Tungsten Halogen Lamps Including MR16, Bi-pin, AR70, AR111, PAR36

(Shall NOT apply to track lighting systems)

Type	Lamps		Ballasts			System Watts	Comment
	Number	Designation	Number	Designation	Description		
	1	20 watt lamp	1	ELECT	Electronic Power Supply	23	
	1	25 watt lamp	1	ELECT	Electronic Power Supply	28	
	1	35 watt lamp	1	ELECT	Electronic Power Supply	38	
	1	37 watt lamp	1	ELECT	Electronic Power Supply	41	
	1	42 watt lamp	1	ELECT	Electronic Power Supply	45	
	1	50 watt lamp	1	ELECT	Electronic Power Supply	54	
	1	65 watt lamp	1	ELECT	Electronic Power Supply	69	
	1	71 watt lamp	1	ELECT	Electronic Power Supply	75	
	1	75 watt lamp	1	ELECT	Electronic Power Supply	80	
	1	20 watt lamp	1	MAG	Mag. Transformer	24	
	1	25 watt lamp	1	MAG	Mag. Transformer	29	
	1	35 watt lamp	1	MAG	Mag. Transformer	39	
	1	37 watt lamp	1	MAG	Mag. Transformer	42	
	1	42 watt lamp	1	MAG	Mag. Transformer	46	
	1	50 watt lamp	1	MAG	Mag. Transformer	55	
	1	65 watt lamp	1	MAG	Mag. Transformer	70	
	1	71 watt lamp	1	MAG	Mag. Transformer	76	
	1	75 watt lamp	1	MAG	Mag. Transformer	81	