Nonresidential Appendix NA8

~~Appendix NA8 – Illuminance Categories and Luminaire Power~~

~~*NA8.1 Illuminance Categories*~~

~~Please see Chapter 10 in the IESNA Lighting Handbook, Ninth Edition.~~

~~*NA8.2 Illuminance Categories and Luminaire Power*~~

~~Luminaire power shall be taken from the following tables.~~

~~Table NA8-1 – Fluorescent Circline~~

~~Table NA8-2 – Compact Fluorescent 2D~~

~~Table NA8-3 – Compact Fluorescent~~

~~Table NA8-4 – Long Compact Fluorescent~~

~~Table NA8-5 – Fluorescent U-Tubes~~

~~Table NA8-6 – Fluorescent Linear Lamps – Preheat~~

~~Table NA8-7 – Fluorescent Linear Lamps T5~~

~~Table NA8-8 – Fluorescent Rapid Start T-8~~

~~Table NA8-9 – Fluorescent Rapid Start T-12~~

~~Table NA8-10 – Fluorescent Rapid Start High Output (HO) T8 & T12, 8 ft~~

~~Table NA8-11 – Fluorescent Instant Start (single pin base "Slimline") T12, 4 ft~~

~~Table NA8-12 – Fluorescent Instant Start (single pin base "Slimline") T8 & T12, 8 ft.~~

~~Table NA8-13 – High Intensity Discharge~~

~~Table NA8-14 – 12 Volt Tungsten Halogen Lamps Including MR16, Bi-pin, AR70, AR111, PAR36~~

~~Table NA8-1 – Fluorescent Circline~~

	~~Lamps~~		~~Ballasts~~				
~~Type~~	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~	~~System Watts~~	~~Comment~~
~~Rapid Start (22 W)~~	~~1~~	~~FC8T9~~	~~1~~	~~MAG-STAND.~~	~~Mag. Stand.~~	~~29~~	~~8" OD~~
~~T5 Program Start (22 W)~~	~~1~~	~~FC9T5~~	~~1~~	~~ELECT-NO~~	~~Electronic Normal Light~~	~~28~~	~~8" OD~~
	~~2~~	~~FC9T5~~	~~1~~	~~ELECT-NO~~	~~Electronic Normal Light~~	~~53~~	
~~T5 Program Start (40 W)~~	~~1~~	~~FC12T5~~	~~1~~	~~ELECT-NO~~	~~Electronic Normal Light~~	~~44~~	~~12" OD~~
	~~2~~	~~FC12T5~~	~~1~~	~~ELECT-NO~~	~~Electronic Normal Light~~	~~84~~	
~~T5 Rapid Start (55 W)~~	~~1~~	~~FC12T5HO~~	~~1~~	~~ELECT-NO~~	~~Electronic Normal Light~~	~~61~~	~~12" OD~~
	~~2~~	~~FC12Tag5HO~~	~~1~~	~~ELECT-NO~~	~~Electronic Normal Light~~	~~111~~	
	~~1~~	~~FC12T5HO~~	~~1~~	~~ELECT-DIM~~	~~Electronic Dimming~~	~~8~62~~	
	~~2~~	~~FC12T5HO~~	~~1~~	~~ELECT-DIM~~	~~Electronic Dimming~~	~~18~120~~	
~~T5 Rapid Start (40 + 22 W)~~	~~1+1~~	~~FC12T5/FC9T5~~	~~1~~	~~ELECT-NO~~	~~Electronic Normal Light~~	~~68~~	~~8" & 12" OD~~

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

~~Table NA8-2 – Compact Fluorescent 2D~~

	~~Lamps~~		~~Ballasts~~				
~~Type~~	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~	~~System Watts~~	~~Comment~~
~~10W, GR10q-4 Four Pin Base~~	~~1~~	~~CFS10W/GR10q~~	~~1~~	~~MAG-STD~~	~~Mag. Stand.~~	~~16~~	~~3.6" across~~
	~~1~~	~~CFS10W/GR10q~~	~~1~~	~~ELECT~~	~~Electronic~~	~~13~~	
	~~2~~	~~CFS10W/GR10q~~	~~1~~	~~ELECT~~	~~Electronic~~	~~26~~	
~~16W, GR10q-4 Four Pin Base~~	~~1~~	~~CFS16W/GR10q~~	~~1~~	~~MAG-STD~~	~~Mag. Stand.~~	~~23~~	~~5.5" across~~
	~~1~~	~~CFS16W/GR10q~~	~~1~~	~~ELECT~~	~~Electronic~~	~~15~~	
	~~2~~	~~CFS16W/GR10q~~	~~1~~	~~ELECT~~	~~Electronic~~	~~30~~	
~~21W, GR10q-4 Four Pin Base~~	~~1~~	~~CFS21W/GR10q~~	~~1~~	~~MAG-STD~~	~~Mag. Stand.~~	~~31~~	~~5.5" across~~
	~~1~~	~~CFS21W/GR10q~~	~~1~~	~~ELECT~~	~~Electronic~~	~~21~~	
	~~2~~	~~CFS21W/GR10q~~	~~1~~	~~ELECT~~	~~Electronic~~	~~42~~	
~~28W, GR10q-4 Four Pin Base~~	~~1~~	~~CFS28W/GR10q~~	~~1~~	~~MAG-STD~~	~~Mag. Stand.~~	~~38~~	~~8.1" across~~
	~~1~~	~~CFS28W/GR10q~~	~~1~~	~~ELECT~~	~~Electronic~~	~~28~~	
	~~2~~	~~CFS28W/GR10q~~	~~1~~	~~ELECT~~	~~Electronic~~	~~56~~	
~~(38W, GR10q-4 Four Pin Base~~	~~1~~	~~CFS38W/GR10q~~	~~1~~	~~ELECT~~	~~Electronic~~	~~37~~	~~8.1" across~~
	~~2~~	~~CFS38W/GR10q~~	~~1~~	~~ELECT~~	~~Electronic~~	~~74~~	

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

~~Table NA8-3 – Compact Fluorescent~~

	~~Lamps~~		~~Ballasts~~				
~~Type~~	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~	~~System Watts~~	~~Comment~~
~~Twin (5 W, G23 Two Pin Base - F5TT Lamp)~~	~~1~~	~~CFT5W/G23~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~9~~	~~4.1" MOL~~
	~~2~~	~~CFT5W/G23~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~18~~	
~~Twin (7 W, G23 Two Pin Base - F7TT Lamp)~~	~~1~~	~~CFT7W/G23~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~11~~	~~5.3" MOL~~
	~~2~~	~~CFT7W/G23~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~22~~	
~~Twin (7 W, 2G7 Four Pin Base - F7TT Lamp)~~	~~1~~	~~CFT7W/2G7~~	~~1~~	~~ELECT~~	~~Electronic~~	~~8~~	~~5.3" MOL~~
	~~2~~	~~CFT7W/2G7~~	~~2~~	~~ELECT~~	~~Electronic~~	~~16~~	
~~Twin (9 W, G23 Two Pin Base - F9TT Lamp)~~	~~1~~	~~CFT9W/G23~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~13~~	~~6.5" MOL~~
	~~2~~	~~CFT9W/G23~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~26~~	
~~Twin (9 W, 2G7 Four Pin Base - F9TT Lamp)~~	~~1~~	~~CFT9W/2G7~~	~~1~~	~~ELECT~~	~~Electronic~~	~~10~~	~~6.5" MOL~~
	~~2~~	~~CFT9W/2G7~~	~~2~~	~~ELECT~~	~~Electronic~~	~~20~~	
~~Twin (13 W, GX23 Two Pin Base - F13TT)~~	~~1~~	~~CFT13W/GX23~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~17~~	~~7.5" MOL~~
	~~2~~	~~CFT13W/GX23~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~34~~	
~~Twin (13 W, 2GX7 Four Pin Base - F13TT)~~	~~1~~	~~CFT13W/2GX7~~	~~1~~	~~ELECT~~	~~Electronic~~	~~17~~	~~7.5" MOL~~
	~~2~~	~~CFT13W/2GX7~~	~~2~~	~~ELECT~~	~~Electronic~~	~~34~~	
~~Quad (9 W, G23-2 Two Pin Base - F9DTT Lamp)~~	~~1~~	~~CFQ9W/G23-2~~	~~1~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~13~~	~~4.4" MOL~~
	~~2~~	~~CFQ9W/G23-2~~	~~2~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~26~~	
~~Quad (13 W, G24d-1 Two Pin Base - F13DTT Lamp)~~	~~1~~	~~CFQ13W/G24d-1~~	~~1~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~18~~	~~6.0" MOL~~
	~~2~~	~~CFQ13W/G24d-1~~	~~2~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~36~~	
	~~1~~	~~CFQ13W/G24d-1~~	~~1~~	~~MAG STD 277~~	~~277 V Mag. Stand.~~	~~16~~	
	~~2~~	~~CFQ13W/G24d-1~~	~~2~~	~~MAG STD 277~~	~~227 V Mag. Stand.~~	~~32~~	
~~Quad (13 W, GX23-2 Two Pin Base)~~	~~1~~	~~CFQ13W/GX23-2~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~17~~	~~4.8" MOL~~
	~~2~~	~~CFQ13W/GX23-2~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~34~~	
~~Quad (16W GX32d-1 Two Pin Base)~~	~~1~~	~~CFQ16W/GX32d-1~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~20~~	~~5.5" MOL~~
	~~2~~	~~CFQ16W/GX32d-1~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~40~~	
~~Quad (18 W, G24d-2 Two Pin Base - F18DTT Lamp)~~	~~1~~	~~CFQ18W/G24d-2~~	~~1~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~25~~	~~6.8" MOL~~
	~~2~~	~~CFQ18W/G24d-2~~	~~2~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~50~~	
	~~1~~	~~CFQ18W/G24d-2~~	~~1~~	~~MAG STD 277~~	~~227 V Mag. Stand.~~	~~22~~	
	~~2~~	~~CFQ18W/G24d-2~~	~~2~~	~~MAG STD 277~~	~~227 V Mag. Stand.~~	~~44~~	
	~~1~~	~~CFQ22W/GX32d-2~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~27~~	~~6.0" MOL~~
~~Quad (22W, GX32d Two Pin Base)~~	~~2~~	~~CFQ22W/GX32d-2~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~54~~	
~~Quad (26 W, G24d-3 Two Pin Base -~~	~~1~~	~~CFQ26W/G24d-3~~	~~1~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~37~~	~~7.6" MOL~~

	~~Lamps~~		~~Ballasts~~				
~~Type~~	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~	~~System Watts~~	~~Comment~~
~~F26DTT Lamp)~~	~~2~~	~~CFQ26W/G24d-3~~	~~2~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~74~~	
	~~1~~	~~CFQ26W/G24d-3~~	~~1~~	~~MAG STD 277~~	~~227 V Mag. Stand.~~	~~33~~	
	~~2~~	~~CFQ26W/G24d-3~~	~~2~~	~~MAG STD 277~~	~~227 V Mag. Stand.~~	~~66~~	
	~~1~~	~~CFQ26W/G24d-3~~	~~1~~	~~ELECT 277V~~	~~277 V Electronic~~	~~28~~	
	~~2~~	~~CFQ26W/G24d-3~~	~~2~~	~~ELECT 277V~~	~~277 V Electronic~~	~~54~~	
~~Quad (28W GX32d Two Pin Base)~~	~~1~~	~~CFQ28W/GX32d-3~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~34~~	~~6.8" MOL~~
	~~2~~	~~CFQ28W/GX32d-3~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~68~~	
~~Quad (10 W, G24q-1 Four Pin Base)~~	~~1~~	~~CFQ10W/G24q-1~~	~~1~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~16~~	~~4.6" MOL~~
	~~2~~	~~CFQ10W/G24q-1~~	~~2~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~32~~	
	~~1~~	~~CFQ10W/G24q-1~~	~~1~~	~~MAG STD 277~~	~~227 V Mag. Stand.~~	~~13~~	
	~~2~~	~~CFQ10W/G24q-1~~	~~2~~	~~MAG STD 277~~	~~227 V Mag. Stand.~~	~~26~~	
~~Quad (13 W, G24q-1 Four Pin Base)~~	~~1~~	~~CFQ13W/G24q-1~~	~~1~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~18~~	~~6.0" MOL~~
	~~2~~	~~CFQ13W/G24q-1~~	~~2~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~36~~	
	~~1~~	~~CFQ13W/G24q-1~~	~~1~~	~~MAG STD 277~~	~~227 V Mag. Stand.~~	~~16~~	
	~~2~~	~~CFQ13W/G24q-1~~	~~2~~	~~MAG STD 277~~	~~227 V Mag. Stand.~~	~~32~~	
	~~1~~	~~CFQ13W/G24q-1~~	~~1~~	~~ELECT~~	~~Electronic~~	~~16~~	
	~~2~~	~~CFQ13W/G24q-1~~	~~2~~	~~ELECT~~	~~Electronic~~	~~29~~	
~~Quad (13 W, GX7 Four Pin Base)~~	~~1~~	~~CFQ13W/GX7~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~17~~	~~4.8" MOL~~
	~~2~~	~~CFQ13W/GX7~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~34~~	
~~Quad (18 W, G24q-2 Four Pin Base)~~	~~1~~	~~CFQ18W/G24q-2~~	~~1~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~25~~	~~6.8" MOL~~
	~~2~~	~~CFQ18W/G24q-2~~	~~2~~	~~MAG STD 120~~	~~120 V Mag. Stand.~~	~~50~~	
	~~1~~	~~CFQ18W/G24q-2~~	~~1~~	~~MAG STD 277~~	~~227 V Mag. Stand.~~	~~22~~	
	~~2~~	~~CFQ18W/G24q-2~~	~~2~~	~~MAG STD 277~~	~~227 V Mag. Stand.~~	~~44~~	
	~~1~~	~~CFQ18W/G24q-2~~	~~1~~	~~ELECT~~	~~Electronic~~	~~21~~	
	~~2~~	~~CFQ18W/G24q-2~~	~~2~~	~~ELECT~~	~~Electronic~~	~~38~~	
~~Triple (13 W, GX24q-1 Four Pin Base)~~	~~1~~	~~CFM 13W/GX24q-1~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~18~~	~~4.2" MOL~~
	~~2~~	~~CFM 13W/GX24q-1~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~36~~	

~~Type~~	~~Lamps~~ ~~Number~~	~~Designation~~	~~Ballasts~~ ~~Number~~	~~Designation~~	~~Description~~	~~System Watts~~	~~Comment~~
	~~1~~	~~CFM 13W/GX24q-1~~	~~1~~	~~ELECT~~	~~Electronic~~	~~16~~	
	~~2~~	~~CFM 13W/GX24q-1~~	~~2~~	~~ELECT~~	~~Electronic~~	~~29~~	
~~Triple (18W, GX24q-2 Four Pin Base)~~	~~1~~	~~CFM 18W/GX24q-2~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~25~~	~~5.0" MOL~~
	~~2~~	~~CFM 18W/GX24q-2~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~50~~	
	~~1~~	~~CFM 18W/GX24q-2~~	~~1~~	~~ELECT~~	~~Electronic~~	~~21~~	
	~~2~~	~~CFM 18W/GX24q-2~~	~~2~~	~~ELECT~~	~~Electronic~~	~~38~~	
~~Triple (26W, GX24q-3 Four Pin Base)~~	~~1~~	~~CFTR 26W/GX24q-3~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~37~~	~~4.9 to 5.4" MOL~~
	~~2~~	~~CFTR 26W/GX24q-3~~	~~2~~	~~MAG STD~~	~~Mag. Stand.~~	~~74~~	
	~~1~~	~~CFTR 26W/GX24q-3~~	~~1~~	~~ELECT~~	~~Electronic~~	~~28~~	
	~~2~~	~~CFTR 26W/GX24q-3~~	~~1~~	~~ELECT~~	~~Electronic~~	~~57~~	
	~~1~~	~~CFTR 26W/GX24q-3~~	~~1~~	~~ELECT DIM~~	~~Electronic DImming~~	~~8~29~~	~~BF .05~1.0~~
	~~2~~	~~CFTR 26W/GX24q-3~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~12~57~~	~~BF .05~1.0~~
~~Triple (32 W, GX24q-3 Four Pin Base)~~	~~1~~	~~CFTR32WGX24q-3~~	~~1~~	~~ELECT~~	~~Electronic~~	~~36~~	
	~~2~~	~~CFTR32WGX24q-3~~	~~1~~	~~ELECT~~	~~Electronic~~	~~69~~	
	~~1~~	~~CFTR32WGX24q-3~~	~~1~~	~~ELECT DIM~~	~~Electronic DImming~~	~~9~38~~	~~BF .05~1.05~~
	~~2~~	~~CFTR32WGX24q-3~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~20~76~~	~~BF .05~1.05~~
~~Triple or Quad (42W, GX24q-4 Four Pin Base)~~	~~1~~	~~CFTR42WGX24q-4~~	~~1~~	~~ELECT~~	~~Electronic~~	~~46~~	
	~~2~~	~~CFTR42WGX24q-4~~	~~1~~	~~ELECT~~	~~Electronic~~	~~94~~	
	~~1~~	~~CFTR42WGX24q-4~~	~~1~~	~~ELECT DIM~~	~~Electronic DImming~~	~~10~49~~	~~BF .05~1.05~~
	~~2~~	~~CFTR42WGX24q-4~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~20~98~~	~~BF .05~1.05~~
~~Triple or Quad (57W, GX24q-5 Four Pin Base)~~	~~1~~	~~CFTR57WGX24q-5~~	~~1~~	~~ELECT~~	~~Electronic~~	~~62~~	
	~~1~~	~~CFTR57WGX24q-5~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~18~66~~	~~BF .05~1.05~~
~~Triple or Quad (70W, GX24q-6 Four Pin Base)~~	~~1~~	~~CFTR70WGX24q-6~~	~~1~~	~~ELECT~~	~~Electronic~~	~~75~~	
	~~1~~	~~CFTR70WGX24q-6~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~18~80~~	~~BF .05~1.00~~

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

~~Table NA8-4 – Long Compact Fluorescent~~

	~~Lamps~~		~~Ballasts~~				
~~Type~~	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~	~~System Watts~~	~~Comment~~
~~T5 Twin (18W - F18TT Lamp)~~	~~1~~	~~FT18W/2G11~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~23~~	~~BF~1.0~~
	~~2~~	~~FT18W/2G11~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~46~~	~~BF~1.0~~
	~~3~~	~~FT18W/2G11~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~69~~	
	~~1~~	~~FT18W/2G11~~	~~1~~	~~ELECT~~	~~Electronic~~	~~24~~	
	~~2~~	~~FT18W/2G11~~	~~1~~	~~ELECT~~	~~Electronic~~	~~35~~	
	~~3~~	~~FT18W/2G11~~	~~1~~	~~ELECT~~	~~Electronic~~	~~52~~	
~~T5 Twin (24-27W - F24TT or F27TT Lamp)~~	~~1~~	~~FT24W/2G11~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~32~~	
	~~2~~	~~FT24W/2G11~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~66~~	
	~~3~~	~~FT24W/2G11~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~98~~	
	~~1~~	~~FT24W/2G11~~	~~1~~	~~ELECT~~	~~Electronic~~	~~27~~	~~BF~1.0~~
	~~2~~	~~FT24W/2G11~~	~~1~~	~~ELECT~~	~~Electronic~~	~~52~~	~~BF~1.0~~
~~T5 Twin (36-39W - F36TT or F39TT Lamp)~~	~~1~~	~~FT36W/2G11~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~51~~	
	~~2~~	~~FT36W/2G11~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~66~~	
	~~3~~	~~FT36W/2G11~~	~~2~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~117~~	
	~~1~~	~~FT36W/2G11~~	~~1~~	~~ELECT~~	~~Electronic~~	~~37~~	
	~~2~~	~~FT36W/2G11~~	~~1~~	~~ELECT~~	~~Electronic~~	~~70~~	
	~~1~~	~~FT36W/2G11~~	~~1~~	~~ELECTHO~~	~~Electronic High Output~~	~~46~~	~~BF=1.22~~
	~~2~~	~~FT36W/2G11~~	~~1~~	~~ELECTHO~~	~~Electronic High Output~~	~~86~~	~~BF=1.20~~
~~T5 Twin (40 W - F40TT Lamp)~~	~~1~~	~~FT40W/2G11~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~43~~	
	~~2~~	~~FT40W/2G11~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~86~~	
	~~3~~	~~FT40W/2G11~~	~~2~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~130~~	
~~Electronic Ballasts~~	~~1~~	~~FT40W/2G11~~	~~1~~	~~ELECT NO~~	~~Electronic~~	~~41~~	~~BF~.90~~
	~~2~~	~~FT40W/2G11~~	~~1~~	~~ELECT NO1~~	~~Electronic~~	~~72~~	~~BF~.88~~
	~~2~~	~~FT40W/2G11~~	~~1~~	~~ELECT NO2~~	~~Electronic~~	~~78~~	~~BF~.97~~
	~~3~~	~~FT40W/2G11~~	~~1~~	~~ELECT NO~~	~~Electronic~~	~~103~~ ~~110~~	~~BF~.86~~ ~~BF~.88~~
	~~1~~	~~FT40W/2G11~~	~~1~~	~~ELECT HO~~	~~Electronic High Output~~	~~50~~	~~BF ~ 1.1~~
	~~1~~	~~FT40W/2G11~~	~~1~~	~~ELECT DIM1~~	~~Electronic Dimming~~	~~10~ 45~~	~~BF .05~1.0~~
	~~2~~	~~FT40W/2G11~~	~~1~~	~~ELECT DIM1~~	~~Electronic Dimming~~	~~17~ 97~~	~~BF .05~1.0~~
	~~1~~	~~FT40W/2G11~~	~~1~~	~~ELECT DIM2~~	~~Electronic Dimming~~	~~11-38~~	~~BF .05~.88~~
	~~2~~	~~FT40W/2G11~~	~~1~~	~~ELECT DIM2~~	~~Electronic Dimming~~	~~16-76~~	~~BF .05~.88~~
~~T5 Twin (50 W - F50TT Lamp)~~	~~1~~	~~FT50W/2G11~~	~~1~~	~~ELECT NO~~	~~Electronic Normal Output~~	~~54~~	~~BF~.98~~
	~~2~~	~~FT50W/2G11~~	~~1~~	~~ELECT NO~~	~~Electronic Normal Output~~	~~106~~	~~BF~.98~~
	~~1~~	~~FT50W/2G11~~	~~1~~	~~ELECT HO~~	~~Electronic High Output~~	~~61~~	~~BF~1.12~~
	~~2~~	~~FT50W/2G11~~	~~1~~	~~ELECT HO~~	~~Electronic High Output~~	~~115~~	~~BF~1.10~~
	~~1~~	~~FT50W/2G11~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~51~~	
	~~2~~	~~FT50W/2G11~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~92~~	
~~T5 Twin (55 W - F55TT Lamp)~~	~~1~~	~~FT55W/2G11~~	~~1~~	~~ELECT NO~~	~~Electronic Normal Output~~	~~58~~ ~~62~~	~~BF~.92~~ ~~BF~1.0~~
	~~2~~	~~FT55W/2G11~~	~~1~~	~~ELECT NO~~	~~Electronic Normal Output~~	~~109~~ ~~116~~	~~BF~.90~~ ~~BF~.95~~
	~~1~~	~~FT55W/2G11~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~8~62~~	~~BF .01~98~~
	~~2~~	~~FT55W/2G11~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~8-120~~	~~BF .01~.98~~

Type	Lamps		Ballasts			System Watts	Comment
	Number	Designation	Number	Designation	Description		
T5 Twin (80 W – F80TT Lamp)	1	FT80W/2G11	1	ELECT NO	Electronic	91	BF~1.00

Table NA8-5 – Fluorescent U-Tubes

Type	Lamps		Ballasts			System Watts	Comment
	Number	Designation	Number	Designation	Description		
2 ft. Fluorescent U-Tube T8 (32W – FBO31T8 or F32T8/U/6 Lamp)	1	FB31T8/F32T8U	0.5	MAG.	Mag. Energy Efficient	35	Tandem wired
	1	FB31T8/F32T8U	1	MAG.	Mag. Energy Efficient	36	
	2	FB31T8/F32T8U	1	MAG.	Mag. Energy Efficient	69	
	3	FB31T8/F32T8U	1.5	MAG.	Mag. Energy Efficient	104	Tandem wired
	3	FB31T8/F32T8U	2	MAG.	Mag. Energy Efficient	105	
	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	9~33	BF .05~.88
	2	FB31T8/F32T8U	1	ELECT DIM	Electronic DImming	14~64	BF .05~.88
	3	FB31T8/F32T8U	1	ELECT DIM	Electronic Dimming	18~93	BF .05~.88
	4	FB31T8/F32T8U	1	ELECT DIM	Electronic Dimming	25~116	BF .05~.88
2 ft. Fluorescent U-Tube T12 ("Energy Saving" 34W)	1	FB40T12/ES	0.5	MAG.	Mag. Energy Efficient	36	Tandem wired
	1	FB40T12/ES	1	MAG.	Mag. Energy Efficient	43	
	2	FB40T12/ES	1	MAG.	Mag. Energy Efficient	87	
	3	FB40T12/ES	1	MAG.	Mag. Energy Efficient	105	
	3	FB40T12/ES	1.5	MAG.	Mag. Energy Efficient	108	Tandem wired
	3	FB40T12/ES	2	MAG.	Mag. Energy Efficient	115	
	1	FB40T12/ES	0.5	ELECT	Electronic	30	Tandem wired
	1	FB40T12/ES	1	ELECT	Electronic	31	
	2	FB40T12/ES	1	ELECT	Electronic	59	
	3	FB40T12/ES	1	ELECT	Electronic	90	
	3	FB40T12/ES	1.5	ELECT	Electronic	88	Tandem wired
	3	FB40T12/ES	2	ELECT	Electronic	90	

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

~~Table NA8-6 – Fluorescent Linear Lamps – Preheat~~

~~Type~~	~~Lamps~~		~~Ballasts~~			~~System Watts~~	~~Comment~~
	~~Nmbr~~	~~Designation~~	~~Nmbr~~	~~Designation~~	~~Description~~		
~~Fluorescent Preheat T5 (8W)~~	~~1~~	~~F8T5~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~12~~	~~12" MOL~~
~~Fluorescent Preheat T8 (15W)~~	~~1~~	~~F15T8~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~22~~	~~18" MOL~~
~~Fluorescent Preheat T12 (15W)~~	~~1~~	~~F15T12~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~23~~	~~18" MOL~~
~~Fluorescent Preheat T12 (20W)~~	~~1~~	~~F20T12~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~25~~	~~24" MOL~~
	~~2~~	~~F20T12~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~50~~	~~24" MOL~~
~~Fluorescent Preheat T8 (30W)~~	~~1~~	~~F30T8~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~46~~	~~30" MOL~~
	~~2~~	~~F30T8~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~79~~	~~30" MOL~~

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

~~Table NA8-7 – Fluorescent Linear Lamps T5~~

~~Type~~	~~Lamps~~		~~Ballasts~~			~~System Watts~~	~~Comment~~
	~~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~~	~~8-63~~	
	~~2~~	~~F54T5~~	~~1~~	~~ELECT DIM~~	~~Elect. Dimming~~	~~18-125~~	
~~57.5" Fluorescent Program Start T5 High Output (80W)~~	~~1~~	~~ºF80T5~~	~~1~~	~~ELECT~~	~~Elect. Program Start BF=1~~	~~90~~	

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

~~Table NA8-8 – Fluorescent Rapid Start T-8~~

~~Type~~	~~Lamps~~		~~Ballasts~~			~~System Watts~~	~~Comment~~
	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~		
~~2 foot Fluorescent Rapid Start T8 (17W)~~	~~1~~	~~F17T8~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~31~~	
	~~2~~	~~F17T8~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~45~~	
~~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~~	~~1~~	~~F17T8~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~8~20~~	~~BF .05~.88~~

~~Type~~	~~Lamps~~		~~Ballasts~~			~~System Watts~~	~~Comment~~
	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~		
~~Start T8 (17W)~~	~~2~~	~~F17T8~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~10~37~~	~~BF .05~.88~~
	~~3~~	~~F17T8~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~12~56~~	~~BF .05~.88~~
	~~4~~	~~F17T8~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~18~69~~	~~BF .05~.88~~
~~3 foot Fluorescent Rapid Start T8 (25W)~~	~~1~~	~~F25T8~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~33~~	
	~~2~~	~~F25T8~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~65~~	
~~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~~	~~BF~1.05~~
	~~2~~	~~F25T8~~	~~1~~	~~ELECT HO~~	~~Electronic High Output~~	~~51~~	~~BF~1.05~~
	~~3~~	~~F25T8~~	~~1~~	~~ELECT HO~~	~~Electronic High Output~~	~~74~~	~~BF~1.05~~
	~~1~~	~~F25T8~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~8~25~~	~~BF .05~.94~~
	~~2~~	~~F25T8~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~13~49~~	~~BF .05~.94~~
	~~3~~	~~F25T8~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~16~76~~	~~BF .05~.94~~
	~~4~~	~~F25T8~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming~~	~~22~96~~	~~BF .05~.88~~
~~4 foot Fluorescent Rapid Start T12 for T-8 ballasts (“Energy Saving” 25W)~~	~~1~~	~~F25T12ES~~	~~1~~	~~ELECT NO~~	~~Electronic Normal Output~~	~~27~~	
	~~2~~	~~F25T12ES~~	~~1~~	~~ELECT NO~~	~~Electronic Normal Output~~	~~52~~	
	~~3~~	~~F25T12ES~~	~~1~~	~~ELECT NO~~	~~Electronic Normal Output~~	~~77~~	
	~~4~~	~~F25T12ES~~	~~1~~	~~ELECT NO~~	~~Electronic Normal Output~~	~~95~~	
~~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~~	

~~Type~~	~~Lamps~~		~~Ballasts~~			~~System Watts~~	~~Comment~~
	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~		
	~~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~~	
~~4 foot Fluorescent Rapid Start T8 (32W)~~	~~1~~	~~F32T8~~	~~0.5~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~35~~	~~Tandem wired~~
	~~1~~	~~F32T8~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~44~~	
	~~2~~	~~F32T8~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~74~~	
	~~3~~	~~F32T8~~	~~1.5~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~105~~	~~Tandem wired~~
	~~3~~	~~F32T8~~	~~2~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~109~~	
	~~4~~	~~F32T8~~	~~2~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~140~~	~~(2) two-lamp ballasts~~
~~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~~	~~BF~1.13~~
	~~3~~	~~F32T8~~	~~1~~	~~ELECT HO~~	~~Electronic High Output~~	~~112~~	~~BF~1.18~~
	~~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~~	

Type	Lamps		Ballasts			System Watts	Comment
	Number	Designation	Number	Designation	Description		
	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	9~35	BF .05~1.0
	2	F32T8	1	ELECT DIM1	Electronic Dimming	15~68	BF .05~1.0
	3	F32T8	1	ELECT DIM1	Electronic Dimming	20~102	BF .05~1.0
	1	F32T8	1	ELECT DIM2	Electronic Dimming	9~33	BF .05~.88
	2	F32T8	1	ELECT DIM2	Electronic Dimming	14~64	BF .05~.88
	3	F32T8	1	ELECT DIM2	Electronic Dimming	18~93	BF .05~.88
	4	F32T8	1	ELECT DIM2	Electronic Dimming	25~116	BF .05~.88
5 foot Fluorescent Rapid Start T8 (40W)	1	F40T8	1	MAG.	Mag. Energy Efficient	50	
	2	F40T8	1	MAG.	Mag. Energy Efficient	92	
	1	F40T8	1	ELECT	Electronic	46	
	2	F40T8	1	ELECT	Electronic	79	
	3	F40T8	1	ELECT	Electronic	112	
3 foot Fluorescent Rapid Start T12 ("Energy-Saving" 25W)	1	F30T12/ES	1	MAG STD	Mag. Stand.	42	
	2	F30T12/ES	1	MAG STD	Mag. Stand.	74	
	3	F30T12/ES	1.5	MAG STD	Mag. Stand.	111	Tandem wired
	3	F30T12/ES	2	MAG STD	Mag. Stand.	116	
	2	F30T12/ES	1	MAG.	Mag. Energy Efficient	66	
	1	F30T12/ES	1	ELECT	Electronic	26	
	2	F30T12/ES	1	ELECT	Electronic	53	
3 foot Fluorescent Rapid Start T12 ("Stand." 30W)	1	F30T12	1	MAG STD	Mag. Stand.	46	
	2	F30T12	1	MAG STD	Mag. Stand.	80	
	3	F30T12	1.5	MAG STD	Mag. Stand.	118	Tandem wired
	3	F30T12	2	MAG STD	Mag. Stand.	125	
	2	F30T12	1	MAG.	Mag. Energy Efficient	73	
	1	F30T12	1	ELECT	Electronic	30	
	2	F30T12	1	ELECT	Electronic	66	
4 foot Fluorescent Rapid Start T12 ("Energy-Saving Plus"32W)	1	F40T12/ES Plus	0.5	MAG.	Mag. Energy Efficient	34	Tandem wired
	1	F40T12/ES Plus	1	MAG.	Mag. Energy Efficient	41	
	2	F40T12/ES Plus	1	MAG.	Mag. Energy Efficient	68	
	3	F40T12/ES Plus	1	MAG.	Mag. Energy Efficient	99	
	3	F40T12/ES Plus	1.5	MAG.	Mag. Energy Efficient	102	Tandem wired
	3	F40T12/ES Plus	2	MAG.	Mag. Energy Efficient	109	
	4	F40T12/ES Plus	2	MAG.	Mag. Energy Efficient	136	(2) Two-lamp ballasts

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

~~Table NA8-9 – Fluorescent Rapid Start T-12~~

Type	Lamps		Ballasts			System Watts	Comment
	Number	Designation	Number	Designation	Description		
4 foot Fluorescent Rapid Start T12 ("Energy-Saving"34W)	1	F40T12/ES	0.5	MAG STD**	Mag. Stand.	42	Tandem wired
	1	F40T12/ES	1	MAG STD**	Mag. Stand.	48	
	2	F40T12/ES	1	MAG STD**	Mag. Stand.	82	

~~Type~~	~~Lamps~~		~~Ballasts~~			~~System Watts~~	~~Comment~~
	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~		
	~~3~~	~~F40T12/ES~~	~~1.5~~	~~MAG STD**~~	~~Mag. Stand.~~	~~122~~	~~Tandem wired~~
	~~3~~	~~F40T12/ES~~	~~2~~	~~MAG STD**~~	~~Mag. Stand.~~	~~130~~	
	~~4~~	~~F40T12/ES~~	~~2~~	~~MAG STD**~~	~~Mag. Stand.~~	~~164~~	~~(2) Two-lamp ballasts~~
	~~1~~	~~F40T12/ES~~	~~0.5~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~36~~	~~Tandem wired~~
	~~1~~	~~F40T12/ES~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~43~~	
	~~2~~	~~F40T12/ES~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~72~~	
	~~3~~	~~F40T12/ES~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~105~~	
	~~3~~	~~F40T12/ES~~	~~1.5~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~108~~	~~Tandem wired~~
	~~3~~	~~F40T12/ES~~	~~2~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~112~~	
	~~4~~	~~F40T12/ES~~	~~2~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~144~~	~~(2) Two-lamp ballasts~~
	~~2~~	~~F40T12/ES~~	~~1~~	~~MAG HC~~	~~Mag. Heater Cutout~~	~~58~~	
	~~3~~	~~F40T12/ES~~	~~1.5~~	~~MAG HC~~	~~Mag. Heater Cutout~~	~~87~~	~~Tandem wired~~
	~~4~~	~~F40T12/ES~~	~~2~~	~~MAG HC~~	~~Mag. Heater Cutout~~	~~116~~	~~(2) Two-lamp ballasts~~
	~~2~~	~~F40T12/ES~~	~~1~~	~~MAG HC FO~~	~~Mag. Heater Cutout Full Light~~	~~66~~	
	~~3~~	~~F40T12/ES~~	~~1.5~~	~~MAG HC FO~~	~~Mag. Heater Cutout Full Light~~	~~99~~	~~Tandem wired~~
	~~4~~	~~F40T12/ES~~	~~2~~	~~MAG HC FO~~	~~Mag. Heater Cutout Full Light~~	~~132~~	~~(2) Two-lamp ballasts~~
	~~1~~	~~F40T12/ES~~	~~0.5~~	~~ELECT~~	~~Electronic~~	~~30~~	~~Tandem wired~~
	~~1~~	~~F40T12/ES~~	~~1~~	~~ELECT~~	~~Electronic~~	~~31~~	
	~~2~~	~~F40T12/ES~~	~~1~~	~~ELECT~~	~~Electronic~~	~~62~~	
	~~3~~	~~F40T12/ES~~	~~1~~	~~ELECT~~	~~Electronic~~	~~90~~	
	~~3~~	~~F40T12/ES~~	~~1.5~~	~~ELECT~~	~~Electronic~~	~~93~~	~~Tandem wired~~
	~~3~~	~~F40T12/ES~~	~~2~~	~~ELECT~~	~~Electronic~~	~~93~~	
	~~4~~	~~F40T12/ES~~	~~1~~	~~ELECT~~	~~Electronic~~	~~121~~	
	~~4~~	~~F40T12/ES~~	~~2~~	~~ELECT~~	~~Electronic~~	~~124~~	~~(2) Two-lamp ballasts~~
	~~2~~	~~F40T12/ES~~	~~1~~	~~ELECT AO~~	~~Elec. Adjustable Output (to 15%)~~	~~60~~	
	~~3~~	~~F40T12/ES~~	~~1.5~~	~~ELECT AO~~	~~Elec. Adjustable Output (to 15%)~~	~~90~~	~~Tandem wired~~
	~~4~~	~~F40T12/ES~~	~~2~~	~~ELECT AO~~	~~Elec. Adjustable Output (to 15%)~~	~~120~~	~~(2) Two-lamp ballasts~~
~~4 foot Fluorescent Rapid Start Stand. (40W)~~	~~1~~	~~F40T12~~	~~0.5~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~44~~	~~Tandem wired~~
	~~1~~	~~F40T12~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~46~~	
	~~2~~	~~F40T12~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~88~~	
	~~3~~	~~F40T12~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~127~~	
	~~3~~	~~F40T12~~	~~1.5~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~132~~	~~Tandem wired~~
	~~3~~	~~F40T12~~	~~2~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~134~~	
	~~4~~	~~F40T12~~	~~2~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~176~~	~~(2) Two-lamp ballasts~~
	~~2~~	~~F40T12~~	~~1~~	~~MAG HC~~	~~Mag. Heater Cutout~~	~~71~~	
	~~3~~	~~F40T12~~	~~1.5~~	~~MAG HC~~	~~Mag. Heater Cutout~~	~~107~~	~~Tandem wired~~

~~Type~~	~~Lamps~~		~~Ballasts~~			~~System Watts~~	~~Comment~~
	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~		
	~~4~~	~~F40T12~~	~~2~~	~~MAG HC~~	~~Mag. Heater Cutout~~	~~142~~	~~(2) Two-lamp ballasts~~
~~4 foot Fluorescent Rapid Start Stand. (40W) *cont.*~~	~~2~~	~~ºF40T12~~	~~1~~	~~MAG ºF FO~~	~~Mag. Heater Cutout Full Light~~	~~80~~	
	~~3~~	~~ºF40T12~~	~~1.5~~	~~MAG ºF FO~~	~~Mag. Heater Cutout Full Light~~	~~120~~	~~Tandem wired~~
	~~4~~	~~ºF40T12~~	~~2~~	~~MAG ºF FO~~	~~Mag. Heater Cutout Full Light~~	~~160~~	~~(2) Two-lamp ballasts~~
	~~1~~	~~ºF40T12~~	~~0.5~~	~~ELECT~~	~~Electronic~~	~~36~~	~~Tandem wired~~
	~~1~~	~~ºF40T12~~	~~1~~	~~ELECT~~	~~Electronic~~	~~37~~	
	~~2~~	~~ºF40T12~~	~~1~~	~~ELECT~~	~~Electronic~~	~~72~~	
	~~3~~	~~ºF40T12~~	~~1~~	~~ELECT~~	~~Electronic~~	~~107~~	
	~~3~~	~~ºF40T12~~	~~1.5~~	~~ELECT~~	~~Electronic~~	~~108~~	~~Tandem wired~~
	~~3~~	~~ºF40T12~~	~~2~~	~~ELECT~~	~~Electronic~~	~~109~~	
	~~4~~	~~ºF40T12~~	~~1~~	~~ELECT~~	~~Electronic~~	~~135~~	
	~~4~~	~~ºF40T12~~	~~2~~	~~ELECT~~	~~Electronic~~	~~144~~	~~(2) Two-lamp ballasts~~
	~~2~~	~~ºF40T12~~	~~1~~	~~ELECT RO~~	~~Electronic Reduce Output (75%)~~	~~61~~	
	~~3~~	~~ºF40T12~~	~~1~~	~~ELECT RO~~	~~Electronic Reduce Output (75%)~~	~~90~~	
	~~3~~	~~ºF40T12~~	~~1.5~~	~~ELECT RO~~	~~Electronic Reduce Output (75%)~~	~~92~~	~~Tandem wired~~
	~~4~~	~~ºF40T12~~	~~2~~	~~ELECT RO~~	~~Electronic Reduce Output (75%)~~	~~122~~	~~(2) Two-lamp ballasts~~
	~~2~~	~~ºF40T12~~	~~1~~	~~ELECT TL~~	~~Elec. Two Level (50 & 100%)~~	~~69~~	
	~~3~~	~~ºF40T12~~	~~1.5~~	~~ELECT TL~~	~~Elec. Two Level (50 & 100%)~~	~~104~~	~~Tandem wired~~
	~~4~~	~~ºF40T12~~	~~2~~	~~ELECT TL~~	~~Elec. Two Level (50 & 100%)~~	~~138~~	~~(2) Two-lamp ballasts~~
	~~2~~	~~ºF40T12~~	~~1~~	~~ELECT AO~~	~~Elec. Adjustable Output (to 15%)~~	~~73~~	
	~~3~~	~~ºF40T12~~	~~1.5~~	~~ELECT AO~~	~~Elec. Adjustable Output (to 15%)~~	~~110~~	~~Tandem wired~~
	~~4~~	~~ºF40T12~~	~~2~~	~~ELECT AO~~	~~Elec. Adjustable Output (to 15%)~~	~~146~~	~~(2) Two-lamp ballasts~~
	~~2~~	~~ºF40T12~~	~~1~~	~~ELECT DIM~~	~~Electronic Dimming (to 1%)~~	~~83~~	
	~~3~~	~~ºF40T12~~	~~1.5~~	~~ELECT DIM~~	~~Electronic Dimming (to 1%)~~	~~125~~	~~Tandem wired~~
	~~4~~	~~ºF40T12~~	~~2~~	~~ELECT DIM~~	~~Electronic Dimming (to 1%)~~	~~166~~	~~(2) Two-lamp ballasts~~

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

~~*Table NA8-10 – Fluorescent Rapid Start High Output (HO) T8 & T12, 8 ft*~~

~~Type~~	~~Lamps~~		~~Ballasts~~			~~System Watts~~	~~Comment~~
	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~		
~~8 foot Fluorescent Rapid~~	~~1~~	~~F96T8/HO~~	~~1~~	~~ELECT~~	~~Electronic~~	~~88~~	

~~Start T8 High Output (86W)~~	~~2~~	~~F96T8/HO~~	~~1~~	~~ELECT~~	~~Electronic~~	~~160~~
~~8 foot Fluorescent Rapid Start T12 High Output ("Energy Saving" 95W)~~	~~1~~	~~F96T12/HO/ES~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~125~~
	~~2~~	~~F96T12/HO/ES~~	~~1~~	~~MAG STD**~~	~~Mag. Stand.~~	~~227~~
	~~2~~	~~F96T12/HO/ES~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~208~~
	~~2~~	~~F96T12/HO/ES~~	~~1~~	~~ELECT~~	~~Electronic~~	~~170~~
~~8 foot Fluorescent Rapid Start T12 High Output ("Stand." 110W)~~	~~1~~	~~F96T12/HO~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~140~~
	~~2~~	~~F96T12/HO~~	~~1~~	~~MAG STD**~~	~~Mag. Stand.~~	~~252~~
	~~2~~	~~F96T12/HO~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~237~~
	~~1~~	~~F96T12/HO~~	~~1~~	~~ELECT~~	~~Electronic~~	~~119~~
	~~2~~	~~F96T12/HO~~	~~1~~	~~ELECT~~	~~Electronic~~	~~205~~
~~8 foot Fluorescent Rapid Start T12 Very High Output ("Energy Saving" 195W)~~	~~1~~	~~F96T12/VHO/ES~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~200~~
	~~2~~	~~F96T12/VHO/ES~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~325~~
~~8 foot Fluorescent Rapid Start T12 Very High Output ("Stand." 215W)~~	~~1~~	~~Stand.96T12/VHO~~	~~1~~	~~MAG STAND.~~	~~Mag. Stand.~~	~~230~~
	~~2~~	~~Stand.96T12/VHO~~	~~1~~	~~MAG STAND.~~	~~Mag. Stand.~~	~~452~~

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

~~*Table NA8-11 – Fluorescent Instant Start (single pin base "Slimline") T12, 4 ft*~~

~~Type~~	~~Lamps~~		~~Ballasts~~			~~System Watts~~	~~Comment~~
	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~		
~~4 foot Fluorescent Slimline Energy Saving T12 (32W)~~	~~1~~	~~Stand.48T12/ES~~	~~1~~	~~MAG STAND.~~	~~Mag. Stand.~~	~~51~~	
	~~2~~	~~Stand.48T12/ES~~	~~1~~	~~MAG STAND.~~	~~Mag. Stand.~~	~~82~~	
~~4 foot Fluorescent Slimline Stand. Stand. (39W)~~	~~1~~	~~Stand.48T12~~	~~1~~	~~MAG Stand.~~	~~Mag. Stand.~~	~~59~~	
	~~2~~	~~Stand.48T12~~	~~1~~	~~MAG Stand.~~	~~Mag. Stand.~~	~~98~~	

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

~~*Table NA8-12 – Fluorescent Instant Start (single pin base "Slimline") T8 & T12, 8 ft.*~~

~~Type~~	~~Lamps~~		~~Ballasts~~			~~System Watts~~	~~Comment~~
	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~		
~~8 foot Fluorescent T8 Slimline (59W)~~	~~1~~	~~F96T8~~	~~1~~	~~MAG.~~	~~Mag. Stand.~~	~~58~~	
	~~2~~	~~F96T8~~	~~1~~	~~MAG.~~	~~Mag. Stand.~~	~~120~~	
	~~2~~	~~F96T8~~	~~1~~	~~ELECT NO~~	~~Electronic Normal Output~~	~~110~~	
	~~1~~	~~F96T8~~	~~1~~	~~ELECT HO~~	~~Electronic High Output~~	~~72~~	~~BF~1.10~~
	~~2~~	~~F96T8~~	~~1~~	~~ELECT HO1~~	~~Electronic High Output~~	~~140~~	~~BF~1.10~~
	~~2~~	~~F96T8~~	~~1~~	~~ELECT HO2~~	~~Electronic High Output~~	~~151~~	~~BF~1.20~~
~~8 foot Fluorescent T12 Slimline ("Energy Saving" 60W)~~	~~1~~	~~F96T12/ES~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~87~~	
	~~2~~	~~F96T12/ES~~	~~1~~	~~MAG STD**~~	~~Mag. Stand.~~	~~135~~	

	~~2~~	~~F96T12/ES~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~112~~
	~~1~~	~~F96T12/ES~~	~~1~~	~~ELECT~~	~~Electronic~~	~~70~~
	~~2~~	~~F96T12/ES~~	~~1~~	~~ELECT~~	~~Electronic~~	~~107~~
~~8 foot Fluorescent T12 Slimline ("Stand." 75W)~~	~~1~~	~~F96T12~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~101~~
	~~2~~	~~F96T12~~	~~1~~	~~MAG STD**~~	~~Mag. Stand.~~	~~160~~
	~~2~~	~~F96T12~~	~~1~~	~~MAG.~~	~~Mag. Energy Efficient~~	~~144~~
	~~1~~	~~F96T12~~	~~1~~	~~ELECT~~	~~Electronic~~	~~85~~
	~~2~~	~~F96T12~~	~~1~~	~~ELECT~~	~~Electronic~~	~~132~~

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

~~*Table NA8-13 – High Intensity Discharge*~~

~~Type~~	~~Lamps~~		~~Ballasts~~			~~System Watts~~	~~Comment~~
	~~Number~~	~~Designation~~	~~Number~~	~~Designation~~	~~Description~~		
~~Mercury Vapor~~	~~1~~	~~H40~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~51~~	
	~~1~~	~~H50~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~68~~	
	~~1~~	~~H75~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~92~~	
	~~1~~	~~H100~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~120~~	
	~~1~~	~~H175~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~205~~	
	~~1~~	~~H250~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~285~~	
	~~1~~	~~H400~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~454~~	
	~~1~~	~~H1000~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~1080~~	
~~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.~~	~~68~~	
	~~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~~	~~M125~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~150~~	
	~~1~~	~~M150~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~189~~	
	~~1~~	~~M150~~	~~1~~	~~ELECT~~	~~Electronic~~	~~168~~	
	~~1~~	~~M175~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~208~~	
	~~1~~	~~M200~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~232~~	
	~~1~~	~~M225~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~258~~	
	~~1~~	~~M250~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~295~~	
	~~1~~	~~M320~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~368~~	
	~~1~~	~~M320~~	~~1~~	~~MAG LR~~	~~277v Linear Reactor~~	~~345~~	
	~~1~~	~~M360~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~422~~	
	~~1~~	~~M360~~	~~1~~	~~MAG LR~~	~~277v Linear Reactor~~	~~388~~	
	~~1~~	~~M400~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~461~~	
	~~1~~	~~M400~~	~~1~~	~~MAG LR~~	~~277v Linear Reactor~~	~~426~~	
	~~1~~	~~M450~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~502~~	
	~~1~~	~~M450~~	~~1~~	~~MAG LR~~	~~277v Linear Reactor~~	~~478~~	
	~~1~~	~~M750~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~820~~	
	~~1~~	~~M900~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~990~~	
	~~1~~	~~M1000~~	~~1~~	~~MAG STD~~	~~Mag. Stand.~~	~~1080~~	

Type	Lamps		Ballasts			System Watts	Comment
	Number	Designation	Number	Designation	Description		
	1	M1500	1	MAG STD	Mag. Stand.	1650	
	1	M1650	1	MAG STD	Mag. Stand.	1810	
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.	93	
	1	S100	1	MAG STD	Mag. Stand.	128	
	1	S150	1	MAG STD	Mag. Stand.	188	
	1	S200	1	MAG STD	Mag. Stand.	240	
	1	S250	1	MAG STD	Mag. Stand.	302	
High Pressure Sodium *cont.*	1	S400	1	MAG STD	Mag. Stand.	469	
	1	S1000	1	MAG STD	Mag. Stand.	1100	
Low Pressure Sodium	1	LPS18	1	MAG STAND.	Mag. Stand.	30	
	1	LPS35	1	MAG STAND.	Mag. Stand.	60	
	1	LPS55	1	MAG STAND.	Mag. Stand.	80	
	1	LPS90	1	MAG STAND.	Mag. Stand.	125	
	1	LPS135	1	MAG STAND.	Mag. Stand.	178	
	1	LPS180	1	MAG STAND.	Mag. Stand.	220	

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

Table NA8-14 – 12 Volt Tungsten Halogen Lamps Including MR16, Bi-pin, AR70, AR111, PAR36

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	100 watt lamp	1	ELECT	Electronic Power Supply	106	
	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	
	1	100 watt lamp	1	MAG	Mag. Transformer	108	

Appendix NA8 –Luminaire Power

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 for any lighting system not specifically listed in this appendix.

Table NA8-1 – Fluorescent U-Tubes

Table NA8-2 – Fluorescent Linear Lamps T5

Table NA8-3 – Fluorescent Rapid Start T-8

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

Table NA8-5 – High Intensity Discharge

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	ºF80T5	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	