



CELMA ENERGY CLASSIFICATION SYSTEM FOR BALLASTS

Lamp Type	Lamp wattage		Ilcos Code	EEI-Class						
	A1	A2		A3	B1	B2	C	D		
	50 Hz	HF								
T5	4	3,4	FD-4-E-G5-16/150	≤3,5 w	≤6w	≤7 w	≤8 w	≤10 w	≤12w	>12w
T5	6	5,1	FD-6-E-G5-16/225	≤4 w	≤7 w	≤8 w	≤9 w	≤11 w	≤13w	>13w
T5	8	6,7	FD-8-E-G5-16/300	≤5 w	≤9 w	≤10 w	≤11 w	≤13 w	≤15w	>15w
T5	13	11,8	FD-13-E-G5-16/525	≤8 w	≤15 w	≤16 w	≤17 w	≤19 w	≤21w	>21w
T5	14	14,0	FDH-14-G5-L/H-16/550	≤9,5 w	≤17 w	≤19 w	-	-	-	-
T5	21	20,6	FDH-21-G5-L/H-16/850	≤13w	≤24w	≤26 w	-	-	-	-
T5	24	22,5	FDH-24-G5-L/H-16/550	≤14w	≤26 w	≤28 w	-	-	-	-
T5	28	27,9	FDH-28-G5-L/H-16/1150	≤17w	≤32 w	≤34 w	-	-	-	-
T5	35	35,5	FDH-35-G5-L/H-16/1450	≤21w	≤39 w	≤42 w	-	-	-	-
T5	39	38	FDH-39-G5-L/H-16/850	≤23w	≤43 w	≤46 w	-	-	-	-
T5	49	49,2	FDH-49-G5-L/H-16/1450	≤29w	≤55 w	≤58 w	-	-	-	-
T5	54	54,1	FDH-54-G5-L/H-16/1150	≤31,5w	≤60 w	≤63 w	-	-	-	-
T5	80	79,8	FDH-80-G5-L/H-16/1150	≤47,5w	≤88 w	≤92 w	-	-	-	-
T5 circline	22	22	FCH-22-L/P-2GX13-16	≤14w	≤26 w	≤28 w	-	-	-	-
T5 circline	40	40	FCH-40-L/P-2GX13-16	≤24w	≤45 w	≤48 w	-	-	-	-
T5 circline	55	55	FCH-55-L/P-2GX13-16	≤32,5w	≤61 w	≤65 w	-	-	-	-

Lamp Type	Lamp wattage		Ilcos Code	EEI-Class						
	A1	A2		A3	B1	B2	C	D		
	50 Hz	HF								
T8	15	13,5	FD-15-E-G13-26/450	≤9 w	≤16w	≤18w	≤21 w	≤23 w	≤25w	>25w
T8	18	16	FD-18-E-G13-26/600	≤10,5 w	≤19 w	≤21w	≤24w	≤26 w	≤28w	>28w
T8	30	24	FD-30-E-G13-26/895	≤16,5 w	≤31 w	≤33 w	≤36 w	≤38 w	≤40w	>40w
T8	36	32	FD-36-E-G13-26/1200	≤19w	≤36 w	≤38 w	≤41 w	≤43 w	≤45w	>45w
T8	38	32	FD-38-E-G13-26/1047	≤20 w	≤58 w	≤40 w	≤43 w	≤45 w	≤47 w	>47w
T8	58	50	FD-58-E-G13-26/1500	≤29,5w	≤55w	≤59 w	≤64 w	≤67 w	≤70 w	>70w
T8	70	60	FD-70E-G13-26/1800	≤36w	≤68 w	≤72 w	≤77 w	≤80 w	≤83 w	>83w
T8	5	5	FSD-5-E-2G7	≤4w	≤7 w	≤8 w	≤9 w	≤11 w	≤13 w	>13w
T8	7	6,5	FSD-7-E-2G7	≤5w	≤9 w	≤10 w	≤11 w	≤13 w	≤15 w	>15w
T8	9	8	FSD-9-E-2G7	≤6w	≤11 w	≤12 w	≤13 w	≤15 w	≤17 w	>17w
T8	11	11	FSD-11-E-2G7	≤7,5w	≤14 w	≤15 w	≤15 w	≤17 w	≤19 w	>19w
T8 circline	22	19	FC-22-E-G10Q-29	≤12w	≤22 w	≤24 w	≤28 w	≤30 w	≤32 w	>32w
T8 circline	32	30	FC-32-E-G10Q-29	≤18,5w	≤35 w	≤37 w	≤38 w	≤40 w	≤42 w	>42w
T8 circline	40	32	FC-32-E-G10Q-29	≤19,5w	≤37 w	≤39 w	≤46 w	≤48 w	≤50 w	>50w

Lamp Type	Lamp wattage		Ilcos Code	A1	A2	A3	EEI-Class			
	50 Hz	HF					B1	B2	C	D
	TC-L	18					16	FSD-18-E-2G11	≤10,5 w	≤19w
TC-L	24	22	FSD-24-E-2G11	≤13,5 w	≤25 w	≤27w	≤30w	≤32 w	≤34w	>34w
TC-L	36	32	FSD-36-E-2G11	≤19 w	≤36 w	≤38 w	≤41 w	≤43 w	≤45w	>45w
TC-L	40	40	FSDH-40-L/P-2G11	≤23w	≤44 w	≤46 w	-	-	-	-
TC-L	55	55	FSDH-55-L/P-2G11	≤31,5 w	≤59 w	≤63 w	-	-	-	-

Lamp Type	Lamp wattage		Ilcos Code	A1	A2	A3	EEI-Class			
	50 Hz	HF					B1	B2	C	D
	TC-F	18					16	FSS-18-E-2G10	≤10,5 w	≤19w
TC-F	24	22	FSS-24-E-2G10	≤13,5 w	≤25 w	≤27w	≤30w	≤32 w	≤34w	>34w
TC-F	36	32	FSS-36-E-2G10	≤19 w	≤36 w	≤38 w	≤41 w	≤43 w	≤45w	>45w

Lamp Type	Lamp wattage		Ilcos Code	A1	A2	A3	EEI-Class			
	50 Hz	HF					B1	B2	C	D
	TC-D,TC-DEL	10					9,5	FSQ-10-E-G24Q=1FSQ-10-E-G24D=1	≤6,5 w	≤11w
TC-D,TC-DEL	13	12,5	FSQ-13-E-G24Q=1FSQ-13-E-G24D=1	≤8 w	≤14 w	≤16w	≤17w	≤19 w	≤21w	>21w
TC-D,TC-DEL	18	16,5	FSQ-18-E-G24Q=2FSQ-18-E-G24D=2	≤10,5 w	≤19 w	≤21 w	≤24 w	≤26 w	≤28w	>28w
TC-D,TC-DEL	26	24	FSQ-26-E-G24Q=3FSQ-26-E-G24D=3	≤14,5w	≤27 w	≤29 w	≤32 w	≤34 w	≤36 w	≤36 w

Lamp Type	Lamba wattage		Ilcos Code	A1	A2	A3	EEI-Class			
	50 Hz	HF					B1	B2	C	D
	TC-D,TC-TEL	18					16,5	FSM-18-I-GX24Q-2 FSM-18-E-GX24D-2	≤10,5 w	≤19w
TC-D,TC-TEL	26	24	FSM-26-I-GX24Q-3 FSM-26-E-GX24D-3	≤14,5w	≤27 w	≤29w	≤32w	≤34 w	≤36w	>36w
TC-D,TC-TEL	32	32	FSMH-32-L/P-GX24Q=4	≤19,5 w	≤36 w	≤39 w	-	-	-	-
TC-D,TC-TEL	42	43	FSMH-42-L/P-GX24Q=4	≤25w	≤47 w	≤50 w	-	-	-	-

Lamp Type	Lamp wattage		Ilcos Code	A1	A2	A3	EEI-Class			
	50 Hz	HF					B1	B2	C	D
TC- DD,TC- DDE	10	9	FSS-10-E-GR 10Q FSS-10- L/P/H-GR10Q	≤6,5 w	≤11w	≤13 w	≤14 w	≤16w	≤18w	>18w
	16	14	FSS-16-I- GR8FSS-16-E- GR 10Q FSS-16-L/PH- GR 10Q	≤8,5 w	≤17 w	≤19 w	≤21 w	≤23w	≤25w	>25w
TC- DD,TC- DDE	21	19	FSS-21-E-GR 10Q FSS-21- L/P/H-GR10Q	≤12w	≤22 w	≤24w	≤27w	≤29w	≤31w	>31w
	28	25	FSS-28-I- GR8FSS-28-E- GR 10Q FSS-28-L/P/L- GR10Q	≤15,5 w	≤29 w	≤31 w	≤34w	≤36w	≤38w	>38w
TC- DD,TC- DDE	38	34	FSS-38-E-GR 10Q FSS-38- L/P/H-GR10Q	≤20w	≤38 w	≤40w	≤43w	≤45w	≤47w	>47w
	55	55	FSS-55-E-GR 10Q-3 FSS-55-L/P/L- GR10Q-3	≤31,5w	≤59 w	≤63w	-	-	-	-

Note: The values as given in class A1 refer to the maximum total input power at a dimming level 25% ; i.e. 50% of the class A3 of the same lamp.