



CERTIFICATE OF TESTING

Work Order No. : WO/ETL/517/06-07

Date : 14.07.2006

CERTIFICATE No. : CT/ETL/740/06-07

Date of Testing : 17.07.2006

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Test Item: Electronic Ballast for Fluorescent Tube Light

Tested for: M/s. Aishwarya Energy Conservation (P) Ltd, 8A, Damji Shamji Trade Center, Vidyavihar (W),
Mumbai - 400 086

Tested at: IDEMI, Mumbai. 400 022

Specification of Items Under Calibration	Specification of Standards Used
Manufacturer : M/s. Aishwarya Energy Conservation (P) Ltd, Mumbai Condition of Item on receipt : Good Range /Rating / Size: 70V-270V 50Hz, 0.13A 36W Model/Markings/Sr.No.: - Accuracy : -	Dranetz Harmonic Analyser 8000 - 2 with HUR - 50 Accuracy : Voltage & Current : $\pm (0.1\% \text{ of rdg} + 0.01\% \text{ of FS})$ Frequency & PF : $\pm 0.2\%$


Ambient Conditions :

Temperature : $25^{\circ}\text{C} \pm 2.5^{\circ}\text{C}$ Relative Humidity : $35\% \text{ to } 65\%$

Remarks : Please refer page 2 to 4 for Test Results.

1) Procedure of Test : The above mentioned item is tested as per operating procedure in Dranetz 8000 - 2 Operators manual & as agreed between customer & Institute.

2) Total Uncertainty in Measurement at 95% CL N.A


S.G.KHALADKAR
QUALITY MANAGER
AUTHORISED SIGNATORY

(Note: This certificate refers only to the particular item(s) submitted for Testing. The certificate should not be reproduced except in full without the prior permission of IDEMI)

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स्वातंत्र्यवीर ताल्या टोपे मार्ग, चुनाभट्टी, सायन डाकघर, मुंबई-400 022



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ELECTRICAL TESTING LABORATORY

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Test Result of Electronic Ballast for 1X36W FTL

i) Various Electrical Parameters of Electronic Ballast at 230V, 50Hz

DRANETZ 8000	Jul-17-06 12:29:39	DRANETZ 8000	Jul-17-06 12:29:43	DRANETZ 8000	Jul-17-06 12:29:46
RISHWARYA CK		RISHWARYA CK		RISHWARYA CK	
ONE-CHANNEL METER MODE		ONE-CHANNEL METER MODE		ONE-CHANNEL METER MODE	
CHANNEL: A		CHANNEL: A		CHANNEL: A	
PARAMETER	VALUE	PARAMETER	VALUE	PARAMETER	VALUE
U	230.2	U _{RR}	-10.84	U _{cf}	1.363
I	0.120	PF	-0.932	I _{cf}	2.471
W	25.88	Hz	49.29	DPF	-0.985
VA	27.72			TDF	0.629

ii) Voltage and Current Waveform



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Test Result of Electronic Ballast for 1X36W FTL

iii) Voltage Harmonics in Graph Mode



iv) Voltage Harmonics in Text Mode

DRANETZ 8000 RISHWARYA CK Jul-17-06 12:30:00
 HARMONICS-CH A REF 230.1 U. 49.3Hz
 xFUND Uthd 2.786 %

H#	MAG%	PHS	H#	MAG%	PHS	H#	MAG%	PHS
02	0.323	011	19	0.000	000	36	0.000	000
03	0.053	214	20	0.000	000	37	0.023	225
04	0.000	000	21	0.023	231	38	0.000	000
05	2.559	106	22	0.000	000	39	0.000	000
06	0.023	343	23	0.000	000	40	0.000	000
07	0.669	158	24	0.000	030	41	0.000	000
08	0.000	000	25	0.059	251	42	0.000	000
09	0.046	299	26	0.000	000	43	0.023	274
10	0.000	000	27	0.023	030	44	0.000	000
11	0.115	327	28	0.000	000	45	0.000	000
12	0.000	000	29	0.000	000	46	0.000	000
13	0.000	000	30	0.000	000	47	0.023	065
14	0.000	000	31	0.000	000	48	0.000	000
15	0.092	052	32	0.000	000	49	0.023	212
16	0.000	000	33	0.000	000	50	0.000	000
17	0.669	127	34	0.000	000			
18	0.000	000	35	0.023	110			

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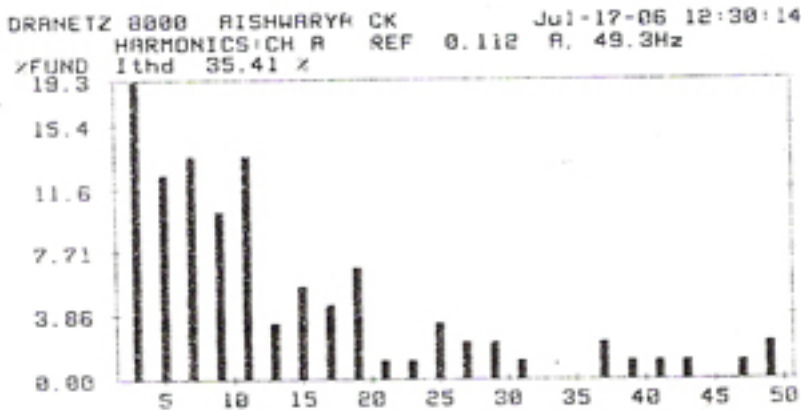
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Test Result of Electronic Ballast for 1X36W FTL

v) Current Harmonics in Graph Mode



vi) Current Harmonics in Text Mode

DRANETZ 8888 RISHWARYA CK Jul-17-06 12:38:19
 HARMONICS:CH A REF 0.112 A, 49.2Hz
 %FUND 1thd 34.92 %

H#	MAG%	PHS	H#	MAG%	PHS	H#	MAG%	PHS
02	0.000	000	19	7.23	178	35	0.000	000
03	19.28	012	20	0.000	000	37	2.410	048
04	0.000	000	21	1.20	196	38	0.000	000
05	13.25	002	22	0.000	000	39	1.205	138
06	0.000	000	23	1.205	264	40	0.000	000
07	14.46	350	24	0.000	000	41	1.205	159
08	0.000	000	25	3.514	167	42	0.000	000
09	10.84	054	26	0.000	000	43	1.205	319
10	0.000	000	27	2.410	255	44	0.000	000
11	13.25	078	28	0.000	000	45	1.205	127
12	0.000	000	29	2.410	290	46	0.000	000
13	2.410	141	30	0.000	000	47	1.205	156
14	0.000	000	31	2.410	077	48	0.000	000
15	5.024	054	32	0.000	000	49	2.410	275
16	3.000	000	33	0.000	000	50	0.000	000
17	4.819	085	34	0.000	000			
18	0.000	000	35	0.000	000			

CHECKED BY -

TESTED BY -