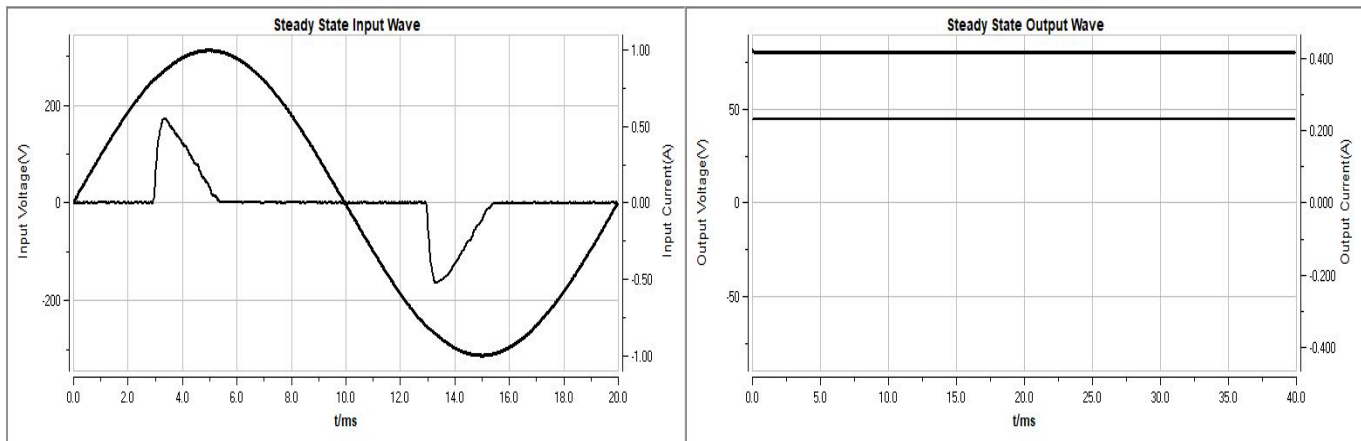


Synthesized Test Report

Steady State Vol Range(%) :	Load Adjustment(%) :
Voltage Adjustment(%) :0.1	Power Factor:
Full Load Efficiency(%) :	Input Impact Cur(A) :9.028
Vol Ripple(V) :0.0	Cur Ripple(A) :0.017
Start-up Time(s) : ---	Overshoot Margin Vol of Start(%) :



Steady State Test Condition: Input Vol:220.0V Mid Load Cur

LED Drive Power Type: Con Voltage

Rank According to <<Lighting LED Drive Power Standard>>: ---

Qualify According to Custom Define: ---

Model:LED driver 20W 230mA
 Manufacture:ELMARK
 Date:2018-09-26
 Humidity(%) :65
 Test Device: EVERFINE LT-101A

Number:LED driver 20W TRACYLED
 Tester:Petya Marinova
 TMP(deg.) :20
 Remarks:SH18BG-JC-ELM01-1_4872

Steady State Test Data

Steady State Test Data

1. Condition: Input Vol:190.0V Mid Load Cur
Input: U:190.3V I:0.187A P:21.21W PF:0.596 F:50.01Hz η : 91.2% Output: U= 82.3V I=0.235A P=19.34W
2. Condition: Input Vol:220.0V Mid Load Cur
Input: U:220.3V I:0.166A P:20.58W PF:0.563 F:50.00Hz η : 91.5% Output: U= 81.5V I=0.231A P=18.83W
3. Condition: Input Vol:240.0V Mid Load Cur
Input: U:240.3V I:0.156A P:20.47W PF:0.546 F:50.01Hz η : 92.2% Output: U= 81.4V I=0.232A P=18.88W

Adjustment Test Data

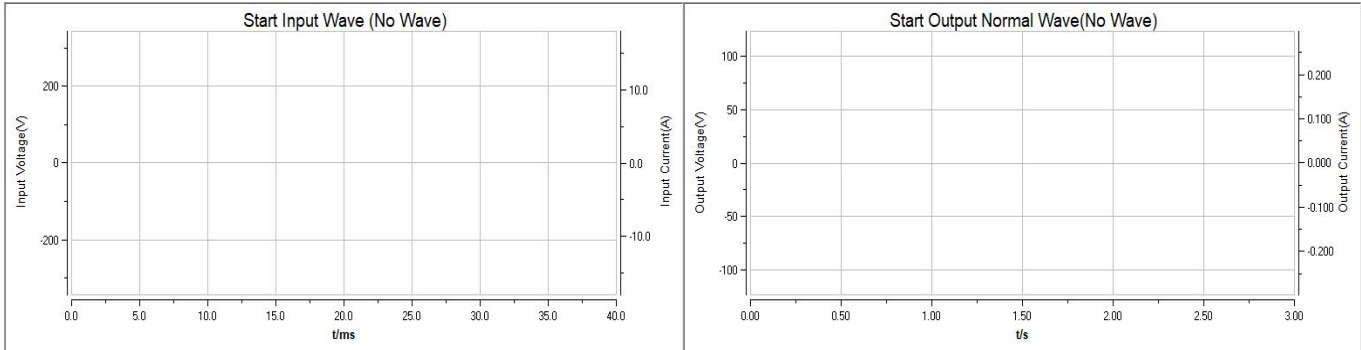
1. Condition: Input Vol:220.0V Mid Load Cur
Input: U:220.3V I:0.165A P:20.41W PF:0.561 F:50.01Hz η : 92.0% Output: U= 81.3V I=0.231A P=18.78W
2. Condition: Input Vol:190.0V Mid Load Cur
Input: U:190.4V I:0.182A P:20.37W PF:0.588 F:50.01Hz η : 91.8% Output: U= 81.3V I=0.230A P=18.70W
3. Condition: Input Vol:220.0V Mid Load Cur
Input: U:220.3V I:0.165A P:20.38W PF:0.561 F:50.01Hz η : 91.7% Output: U= 81.2V I=0.230A P=18.68W
4. Condition: Input Vol:240.0V Mid Load Cur
Input: U:240.3V I:0.156A P:20.40W PF:0.544 F:50.00Hz η : 92.0% Output: U= 81.2V I=0.231A P=18.76W

Model:LED driver 20W 230mA
Manufactory:ELMARK
Date:2018-09-26
Humidity(%):65
Test Device: EVERFINE LT-101A

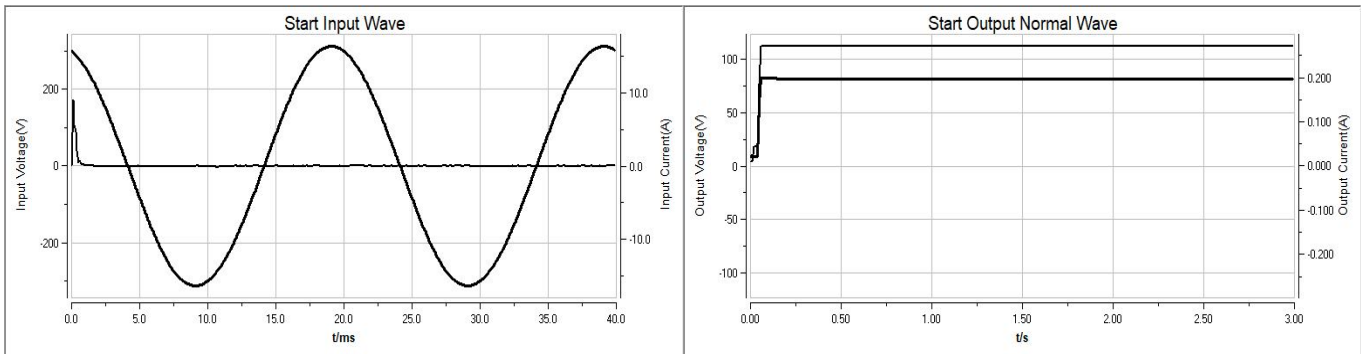
Number:LED driver 20W TRACYLED
Tester:Petya Marinova
TMP(deg.):20
Remarks:SH18BG-JC-ELM01-1_4872

Start-up Input/Output Wave

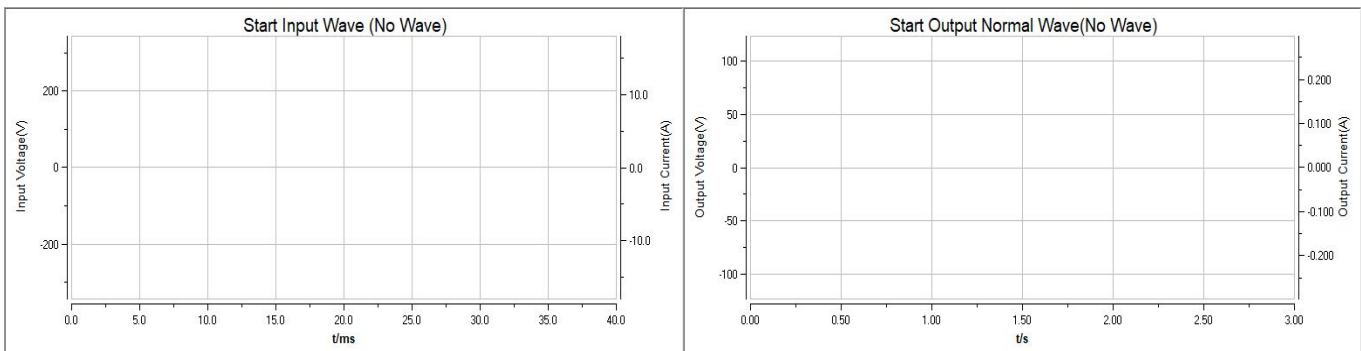
1. Input Vol:220.0V Min Load Cur



2. Input Vol:220.0V Mid Load Cur



3. Input Volt:220.0V Max Load Cur



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Start-up Test Data**1. Condition: Input Vol: 220.0V Mid Load Cur**

Input Parameters: Impact Cur: 9.028A

Peak Vol: 312.3V

Output Parameters: Start-up Time: 0.05s

Peak Vol: 81.9V

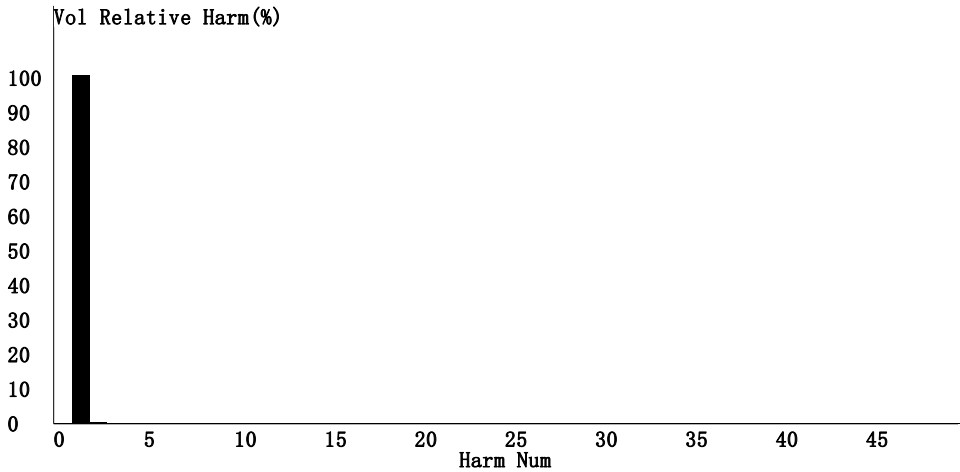
Peak Cur: 0.271A

Model:LED driver 20W 230mA
Manufactory:ELMARK
Date:2018-09-26
Humidity(%):65
Test Device: EVERFINE LT-101A

Number:LED driver 20W TRACYLED
Tester:Petya Marinova
TMP(deg.):20
Remarks:SH18BG-JC-ELM01-1_4872

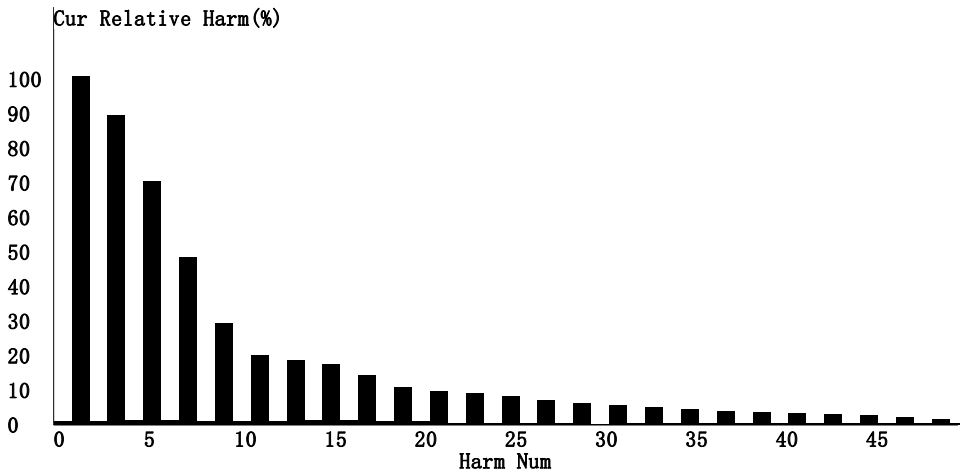
Steady State Input Harm Wave

Steady State Input Vol Harm Wave



Input Vol Harm IEC:0.3%
 Input Vol Harm CSA:0.3%
 1degree Relative Harm:100.0%

Steady State Input Cur Harm Wave



Input Cur Harm IEC:133.2%
 Input Cur Harm CSA:80.0%
 1degree Relative Harm:100.0%
 3degree Relative Harm:88.9%
 4degree Relative Harm:1.2%
 5degree Relative Harm:69.9%
 6degree Relative Harm:1.2%
 7degree Relative Harm:47.9%
 8degree Relative Harm:1.1%
 9degree Relative Harm:29.2%
 11degree Relative Harm:19.8%
 . . .

Steady State Input Vol and Cur Harm Test Condition:
 Input Vol:220.0V Mid Load Cur

Model:LED driver 20W 230mA
 Manufactory:ELMARK
 Date:2018-09-26
 Humidity(%):65
 Test Device: EVERFINE LT-101A

Number:LED driver 20W TRACYLED
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 TMP(deg.):20
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Steady State Input Harm Data

Harm Num	Vol Harm(V)	Vol Relative Harm(%)	Cur Harm(A)	Cur Relative Harm(%)	Cur Harm per(mA/W)
1	220.3	100.0	0.101	100.0	4.898
2	0.4	0.2	0.001	0.9	0.046
3	0.2	0.1	0.090	88.9	4.356
4	0.2	0.1	0.001	1.2	0.057
5	0.3	0.1	0.070	69.9	3.423
6	0.1	0.1	0.001	1.2	0.060
7	0.3	0.1	0.048	47.9	2.345
8	0.1	0.0	0.001	1.1	0.053
9	0.2	0.1	0.029	29.2	1.428
10	0.0	0.0	0.001	0.9	0.046
11	0.1	0.0	0.020	19.8	0.968
12	0.1	0.0	0.001	1.0	0.049
13	0.1	0.0	0.019	18.5	0.904
14	0.0	0.0	0.001	1.1	0.055
15	0.1	0.0	0.017	17.3	0.848
16	0.0	0.0	0.001	1.1	0.056
17	0.1	0.0	0.014	14.1	0.691
18	0.0	0.0	0.001	1.0	0.048
19	0.1	0.0	0.011	10.8	0.531
20	0.0	0.0	0.001	0.7	0.037
21	0.0	0.0	0.010	9.5	0.464
22	0.0	0.0	0.001	0.5	0.026
23	0.0	0.0	0.009	9.1	0.446
24	0.1	0.0	0.000	0.4	0.021
25	0.0	0.0	0.008	8.2	0.402
26	0.1	0.0	0.000	0.3	0.016
27	0.0	0.0	0.007	6.9	0.336
28	0.0	0.0	0.000	0.2	0.009
29	0.0	0.0	0.006	5.9	0.291
30	0.0	0.0	0.000	0.1	0.005
31	0.0	0.0	0.006	5.5	0.269
32	0.0	0.0	0.000	0.2	0.012
33	0.0	0.0	0.005	5.0	0.245
34	0.0	0.0	0.000	0.4	0.017
35	0.0	0.0	0.004	4.3	0.211
36	0.0	0.0	0.000	0.4	0.018
37	0.0	0.0	0.004	3.7	0.181
38	0.0	0.0	0.000	0.3	0.016
39	0.0	0.0	0.003	3.4	0.165
40	0.0	0.0	0.000	0.3	0.016
41	0.0	0.0	0.003	3.2	0.156
42	0.0	0.0	0.000	0.4	0.019
43	0.0	0.0	0.003	3.0	0.146
44	0.0	0.0	0.000	0.4	0.021
45	0.0	0.0	0.003	2.6	0.129
46	0.0	0.0	0.000	0.4	0.019
47	0.0	0.0	0.002	2.1	0.101
48	0.0	0.0	0.000	0.3	0.013
49	0.0	0.0	0.001	1.5	0.073
50	0.0	0.0	0.000	0.3	0.013

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