





TEST REPORT No. E/1/16.10.15./01

**SIA Baltic Photometric Laboratory Test Report for
Electrical Measurements of Solid-State Lighting Products**

Report reference No.	Report No.: E/1/16.10.15./01
Date of Issue	29.10.2015.
Project Handler	Ingmārs Felcis
Testing Laboratory	SIA Baltic Photometric Laboratory
Address	Gaujas iela 24/32, LV-2136, Inčukalna nov., Vangaži, Latvia
Testing location	Same as above
Client	SIA "VIZULO"
Client number	1
Address	Ganību dambis 7a, Rīga, LV-1045
Contact person	Sergejs Burtovojš, sergey.burtovoy@vizulo.eu
Standard	This SIA Baltic Photometric Laboratory test method is based on the requirements in the following standards: IES LM-79-08 and EN 13032-1:2004+A1:2012
TRF originated by	SIA Baltic Photometric Laboratory, Ingmārs Felcis
Copyright blank test report	This report based on the content of the standard (see above). The test report considered selected clauses of the a.m. standard(s) and experience gained with product testing. It was prepared by SIA Baltic Photometric Laboratory SIA Baltic Photometric Laboratory takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.
Number of pages (Report)	45
Compiled and approved by:	
Head of Laboratory Ingmārs Felcis-Kaipšteins	
(+signature)	





Test sample	1	
Type of test object	LED street luminaire	
Trade mark	VIZULO STORK	
Model and/or type reference	SR 037 740 02 011 S N DD 03 1	
Rating(s)	AC: 210-250 V~, 50 Hz	
Manufacturer	Same as above	
Address	Same as above	
Order Description	<input checked="" type="checkbox"/> Full test according to testing application <input type="checkbox"/> Partial test according to manufacturer's specification <input type="checkbox"/> Repeated test <input type="checkbox"/> Device check <input type="checkbox"/> Other ()	
Date of order	01.09.2015.	
Date of receipt of test item	06.10.2015.	
Date(s) of performance of test	16.10.2015.	
Equipment used	Digital Multimeter: TEKTRONIX DMM4050 (Current $\pm 0,07$ %) Single-Phase AC Power Analyzer: TEKTRONIX PA1000 (Voltage $\pm 0,08$ % $\pm 0,005$ V, Current $\pm 0,08$ %, Active power $\pm 0,15$ %) Basic AC Power Source, 1000 VA, 270 V, 5 A: KEYSIGHT AC6802A	
Test item particulars:	Lamp type: <input type="checkbox"/> Bare lamp <input checked="" type="checkbox"/> Cover lamp, no reflector <input type="checkbox"/> Lamp with reflector <input type="checkbox"/> Other:	
Rated Voltage:	210-250 V~	
Rated Frequency:	50 Hz	
Attachments:	1. Concise form of the test report	



General remarks:

"(See remark #)" refers to a remark appended to the report.

"(See appended table)" refers to a table appended to the report.

Throughout this report, a point is used as the decimal separator.

The test results presented in this report relate only to the object tested.

This report shall not be reproduced except on full without the written approval of the testing laboratory.

SIA Baltic Photometric Laboratory is an accredited photometric, colorimetric testing laboratory by LATAK (Latvian National Accreditation Bureau) acc. to EN 17025 using testing methods based on IESNA LM-79-08 and EN 13032-1+A1:2012 standards.

The report must not be used by the client to claim product certification, approval or endorsement by any agency of the federal government

Summary of testing object:

Product Name	Product code	Version number (if applicable)
VIZULO STORK Street luminaire	SR 037 740 02 011 S N DD 03 1	

Additional information:

As the electronic components used in the luminaires are the same, the results of the performed tests can be considered the same or very similar for products from VIZULO product ranges Stork and Stork Little Brother with following parameters:

Power: 18 ... 37 [W]

LED module type: 01 (16 LEDs)

LED module quantity: 1

LED driver: Philips Xitanium 75W 0.35-0.7A GL Prog sXt

These parameters correspond to following model numbers:

SR ppp xxx xx 011 x x xx xx x;

SRL ppp xxx xx 011 x x xx xx x, where ppp - 018 ... 037 [W]

Complete model number overviews of aforementioned product ranges can be seen below.



SR

Power [W]	018 ... 200
Color rendering index	≥70 - 7 ≥80 - 8
Color temperature [K]	3000 ... 5000 Standard values: 3000 K - 30 4000 K - 40
Lens type	01 ... 99
LED module type	01 ... 04 16 LEDs - 01 108 LEDs - 02 78 LEDs - 03 84 LEDs - 04 98 LEDs - 05
LED module quantity	1 ... 4
Body color	Silver (RAL 9006) - S Gray (RAL 9007) - G Asphalt (RAL 7138) - A Black (RAL 9005) - B
Console	Narrow - N
Dimming	Non dimmable - ND DALI - DD 1-10V - D1 Night time dimming - DY Wireless - DW
Surge protection [kV]	03; 06; 10
Protection class	Class I - 1 Class II - 2 Class III - 3

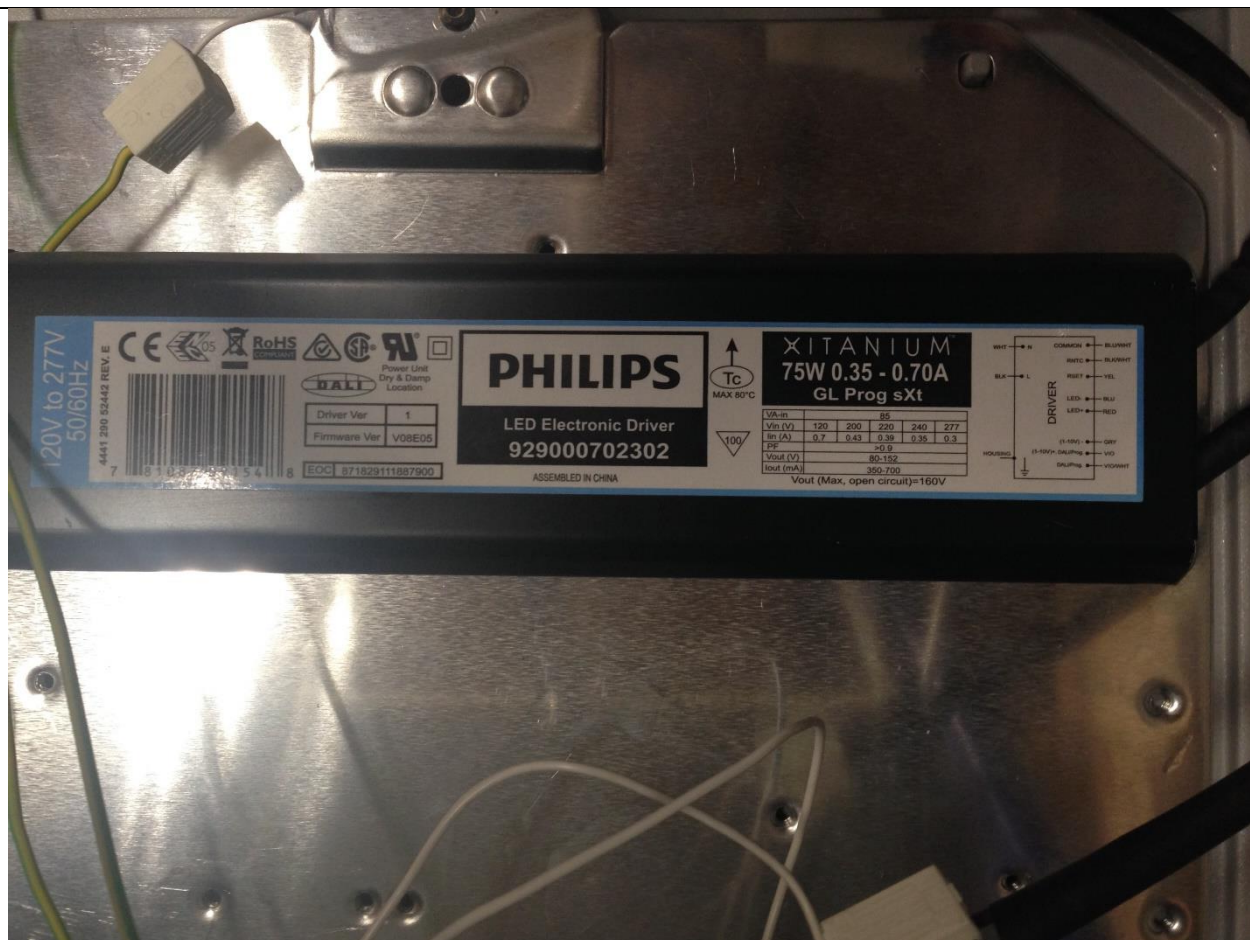
SRL

Power	018 ... 137 [W]
Color rendering index	≥70 - 7 ≥80 - 8
Color temperature [K]	3000 ... 5000 Standard values: 3000 K - 30 4000 K - 40
Lens type	01 ... 99
LED module type	16 LEDs - 01
LED module quantity	1 ... 4
Body color	Silver (RAL 9006) - S Gray (RAL 9007) - G Asphalt (RAL 7138) - A Black (RAL 9005) - B
Console	Narrow - N
Dimming	Non dimmable - ND DALI - DD 1-10V - D1 Night time dimming - DY Wireless - DW
Surge protection [kV]	03; 06; 10
Insulation class	Class I - 1 Class II - 2 Class III - 3

Photo of the sample and measuring devices:







Model No.: SR 037 740 02 011 S N DD 03 1



Purpose of the product
(description of intended use)

LED street lamp for general lighting purpose.

Possible test case verdicts:

- test case does not apply to the test object: N (not/ not included in the order)
- test object does meet the requirement: P (pass)
- test object does not meet the requirement: F (fail)

Possible suffixes to the verdicts:

- suffix for detailed information for the client..... C (comment)
- suffix for important information for manufacturer..... M (manufacturing)



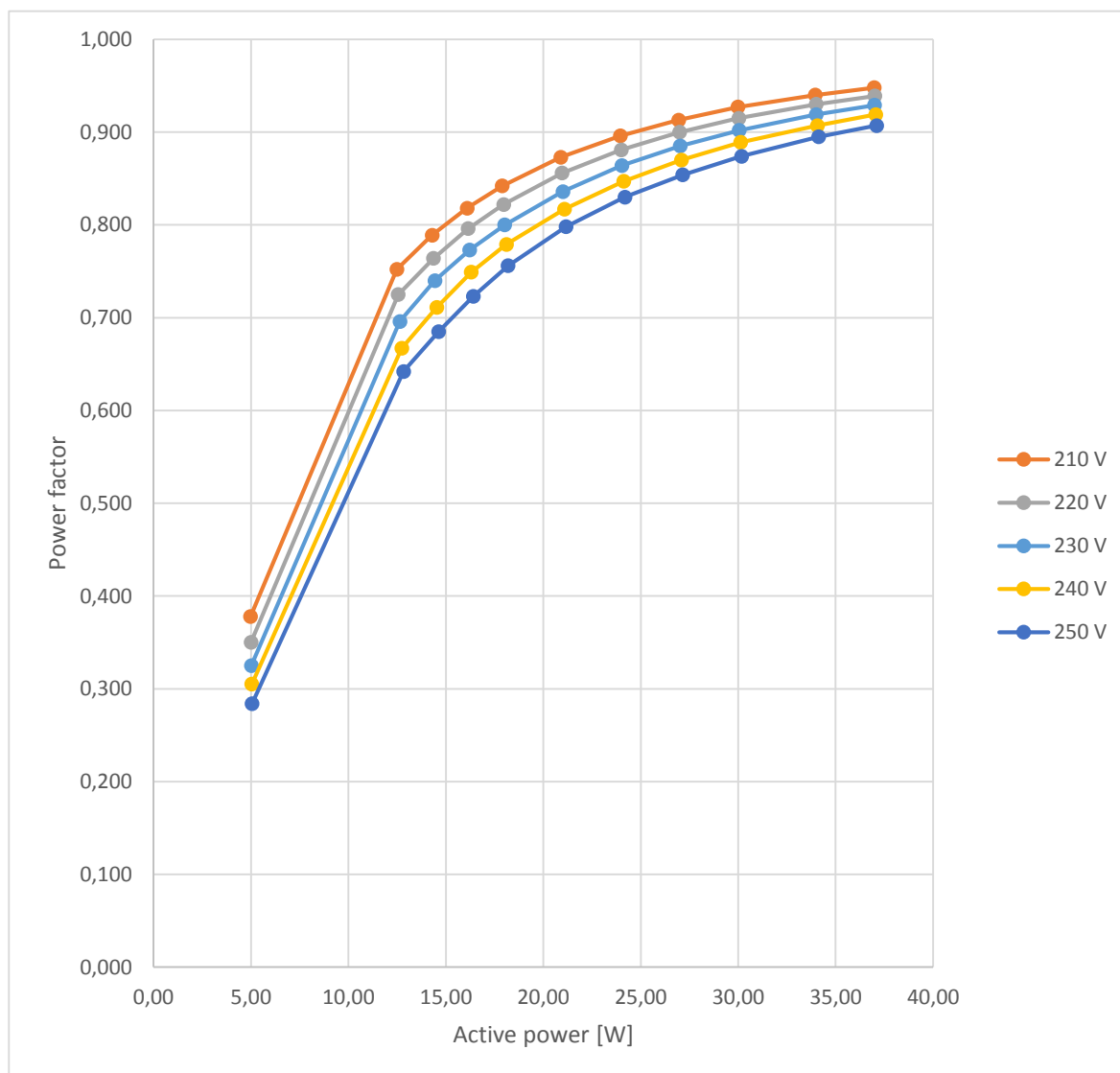
Clause	Requirement - Test	Measuring result – Remark	Verdict
2.0	Ambient Conditions		
2.1	General		P
2.2	Air Temperature		P
2.3	Thermal Condition for Mounting SSL Products		P
2.4	Air Movement		P
3.0	Power Supply Characteristics		
3.1	Wave shape of AC power supply		P
3.2	Voltage regulation		P
4.0	Seasoning of SSL Product		N
	No seasoning of SSL product		P
5.0	Stabilisation of SSL Product		
	SSL product has sufficiently stabilised before measurement		P
6.0	Operation Orientation		
	SSL product Shall be stabilized and measured in intended operating orientation	Test object is not dependent on operating orientation	P
7.0	Electrical Settings		
	SSL product shall be operated at rated voltage		P
	SSL product with dimming capability are tested at maximum input power condition		N
	SSL product with different modes are measured in all relevant modes		N
8.0	Electrical Instrumentations		
8.1	Circuits		P



Table 1	Test data		
Model:	SR 037 740 02 011 S N DD 03 1		
Rated Voltage (V):	220-240	Rated Power (W):	37
Rated Frequency (Hz):	50 Hz	Ambient temperature 25 ±1 (°C):	24.4
Test item		Measured Value	
Electrical Input Results			
Input Voltage (Volts AC)		210 - 250	
Input Frequency (Hertz)		50	
Additional Information			
Ambient Temperature (°C):		24.4	
Supplementary Information: <ul style="list-style-type: none">- Stabilisation considered reached: the variation (maximum-minimum) of readings every 5 minutes of the light output and electrical power over a period of 30 minutes is less than 0.5%.			



Table 2	Power factor (active power/input voltage) curve diagram (Test No.1)
Model:	SR 037 740 02 011 S N DD 03 1



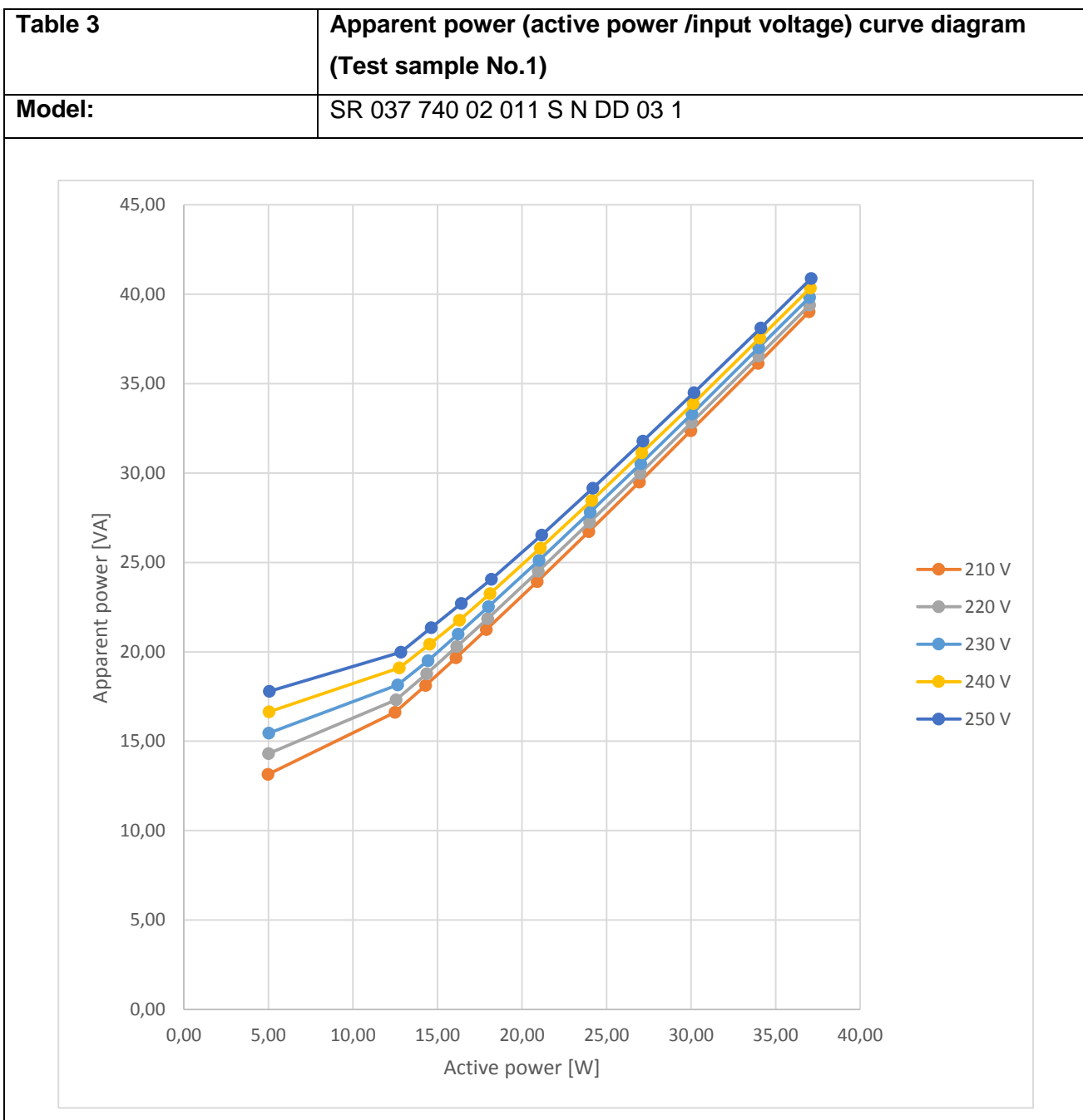




Table 4	Input current (active power/input voltage) curve diagram (Test sample No.1)
Model:	SR 037 740 02 011 S N DD 03 1

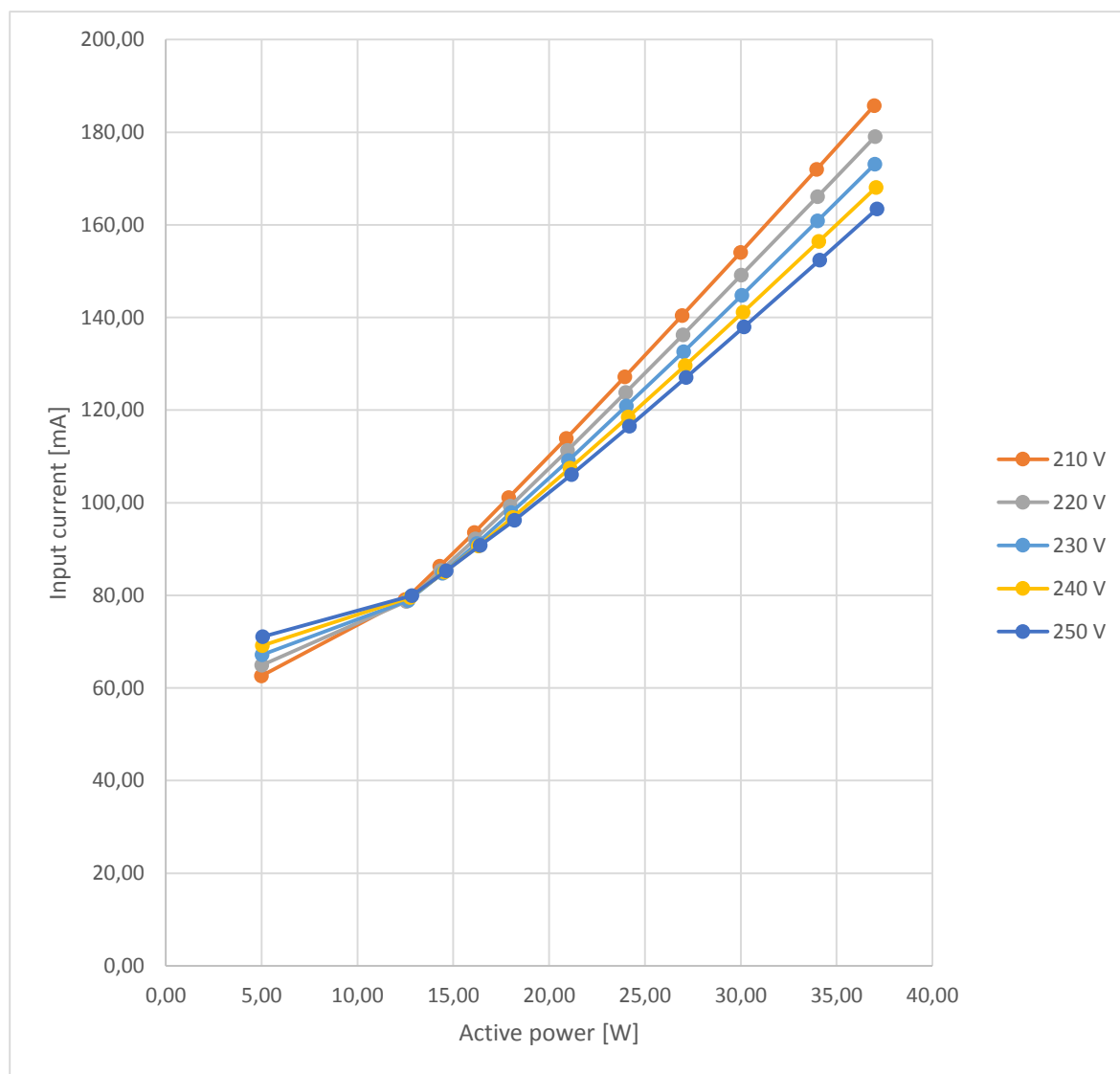




Table 5	Driver output current (active power/input voltage) curve diagram (Test sample No.1)
Model:	SR 037 740 02 011 S N DD 03 1

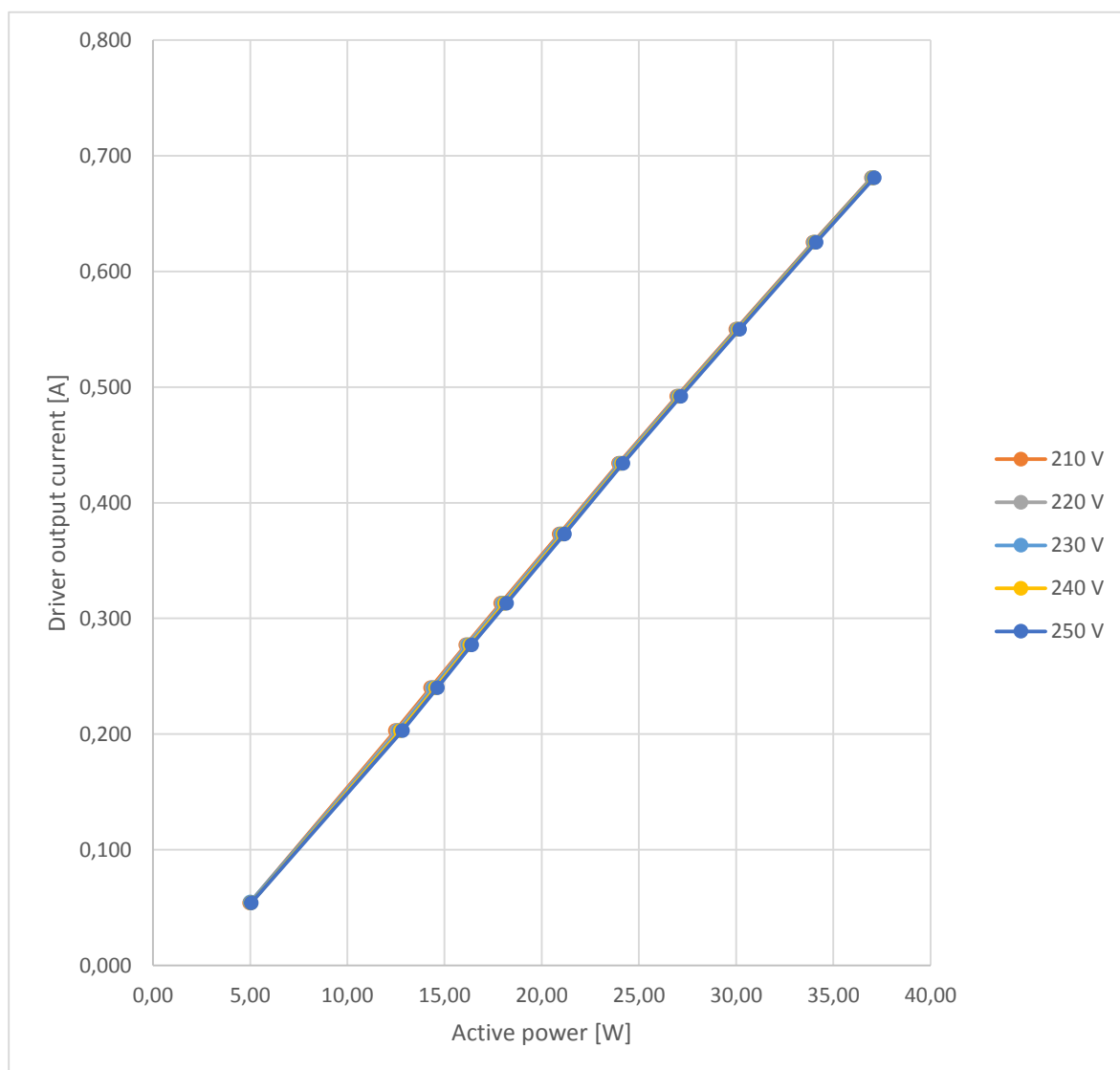




Table 6		Test data table No.1					
Model:		SR 037 740 02 011 S N DD 03 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	37,00	39,82	0,929	173,11	0,681	100,00%
2	230	34,00	37,01	0,919	160,84	0,625	91,78%
3	230	30,05	33,31	0,902	144,79	0,550	80,76%
4	230	27,02	30,52	0,885	132,61	0,492	72,25%
5	230	24,03	27,81	0,864	120,86	0,434	63,73%
6	230	21,00	25,12	0,836	109,12	0,373	54,77%
7	230	18,02	22,52	0,800	97,85	0,313	45,96%
8	230	16,22	20,99	0,773	91,17	0,277	40,68%
9	230	14,43	19,51	0,740	84,79	0,240	35,24%
10	230	12,64	18,15	0,696	78,87	0,203	29,81%
11	230	5,01	15,46	0,325	67,14	0,055	8,02%
1	210	36,97	39,02	0,948	185,77	0,681	100,00%
2	210	33,96	36,13	0,940	172,00	0,625	91,78%
3	210	29,99	32,36	0,927	154,01	0,550	80,76%
4	210	26,94	29,50	0,913	140,43	0,492	72,25%
5	210	23,95	26,72	0,896	127,18	0,434	63,73%
6	210	20,90	23,93	0,873	113,90	0,373	54,77%
7	210	17,89	21,25	0,842	101,10	0,313	45,96%



8	210	16,09	19,66	0,818	93,55	0,277	40,68%
9	210	14,29	18,12	0,789	86,25	0,240	35,24%
10	210	12,48	16,61	0,752	79,05	0,203	29,81%
11	210	4,98	13,15	0,378	62,60	0,054	7,93%
1	220	37,01	39,40	0,939	179,06	0,681	100,00%
2	220	34,00	36,55	0,930	166,10	0,625	91,78%
3	220	30,03	32,83	0,915	149,15	0,550	80,76%
4	220	26,99	29,99	0,900	136,25	0,492	72,25%
5	220	24,00	27,24	0,881	123,79	0,434	63,73%
6	220	20,96	24,50	0,856	111,28	0,373	54,77%
7	220	17,96	21,85	0,822	99,28	0,313	45,96%
8	220	16,14	20,29	0,796	92,20	0,277	40,68%
9	220	14,36	18,78	0,764	85,35	0,240	35,24%
10	220	12,55	17,31	0,725	78,65	0,203	29,81%
11	220	5,00	14,30	0,350	64,90	0,054	7,93%
1	240	37,06	40,35	0,919	168,07	0,681	100,00%
2	240	34,07	37,55	0,907	156,40	0,625	91,78%
3	240	30,12	33,89	0,889	141,15	0,550	80,76%
4	240	27,09	31,13	0,870	129,63	0,492	72,25%
5	240	24,12	28,46	0,847	118,50	0,434	63,73%
6	240	21,09	25,80	0,817	107,44	0,373	54,77%
7	240	18,10	23,25	0,779	96,81	0,313	45,96%



8	240	16,30	21,77	0,749	90,62	0,277	40,68%
9	240	14,53	20,43	0,711	85,04	0,240	35,24%
10	240	12,73	19,10	0,667	79,51	0,203	29,81%
11	240	5,04	16,64	0,305	69,15	0,054	7,93%
1	250	37,10	40,89	0,907	163,47	0,681	100,00%
2	250	34,12	38,12	0,895	152,41	0,625	91,78%
3	250	30,17	34,50	0,874	137,94	0,550	80,76%
4	250	27,15	31,78	0,854	127,05	0,492	72,25%
5	250	24,18	29,15	0,830	116,55	0,434	63,73%
6	250	21,16	26,53	0,798	106,06	0,373	54,77%
7	250	18,19	24,06	0,756	96,18	0,313	45,96%
8	250	16,40	22,70	0,723	90,76	0,277	40,68%
9	250	14,63	21,35	0,685	85,32	0,240	35,24%
10	250	12,83	19,98	0,642	79,90	0,203	29,81%
11	250	5,05	17,79	0,284	71,06	0,054	7,93%



Table 7	Power factor (active power/input voltage) curve diagram (Test No.2)
Model:	SR 037 740 02 011 S N DD 03 1

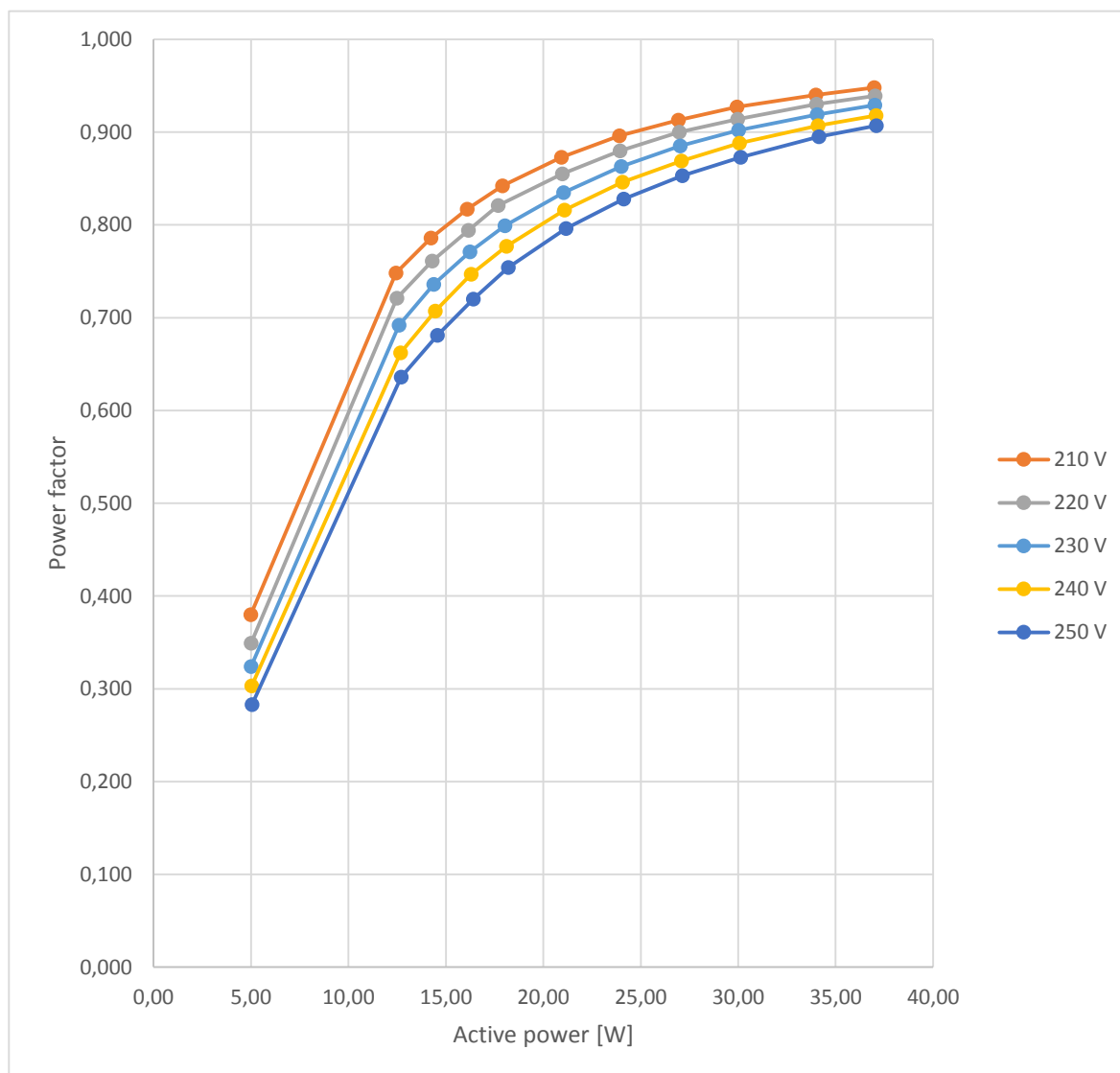




Table 8	Apparent power (active power /input voltage) curve diagram (Test sample No.2)
Model:	SR 037 740 02 011 S N DD 03 1

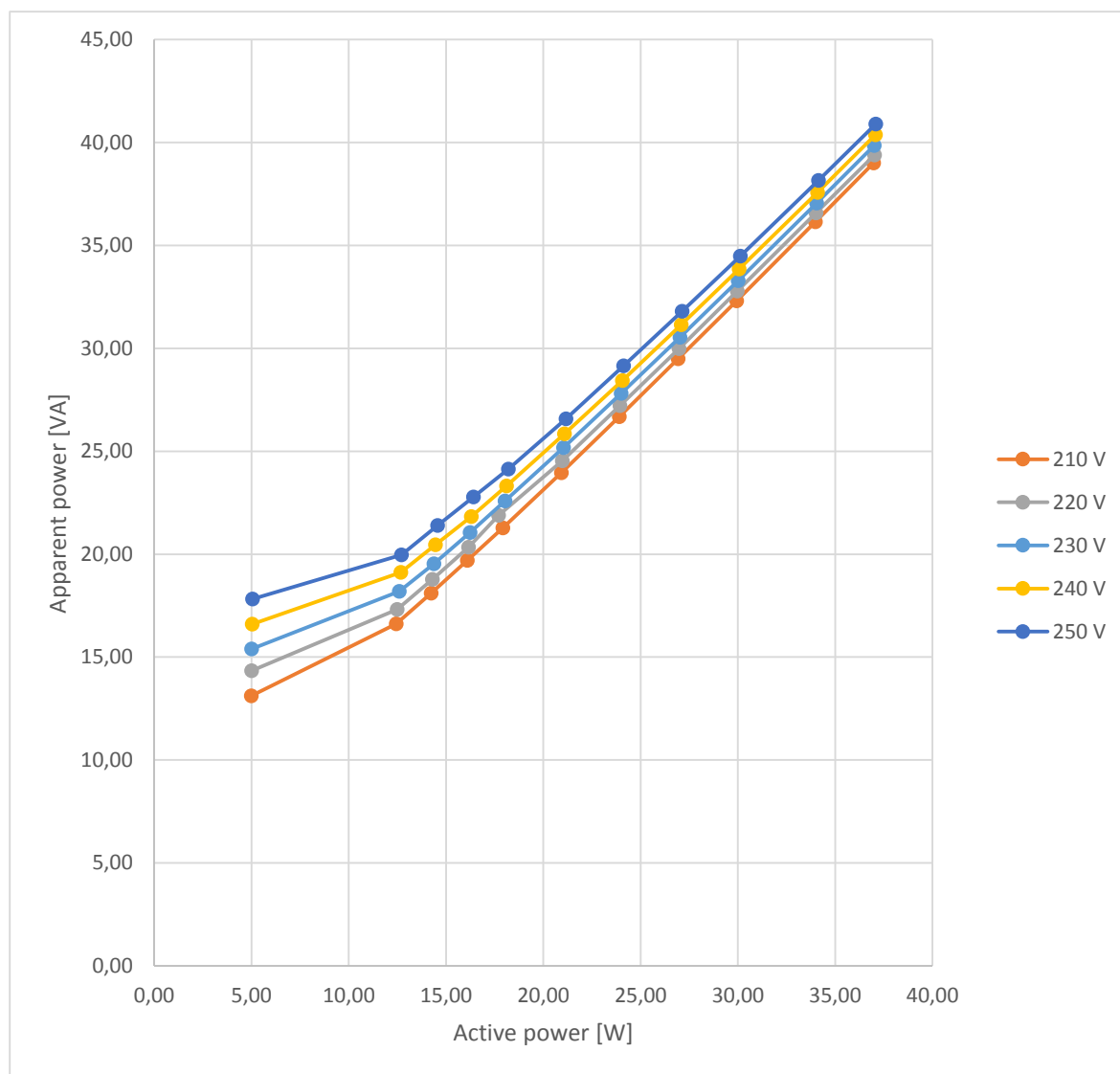




Table 9	Input current (active power/input voltage) curve diagram (Test sample No.2)
Model:	SR 037 740 02 011 S N DD 03 1

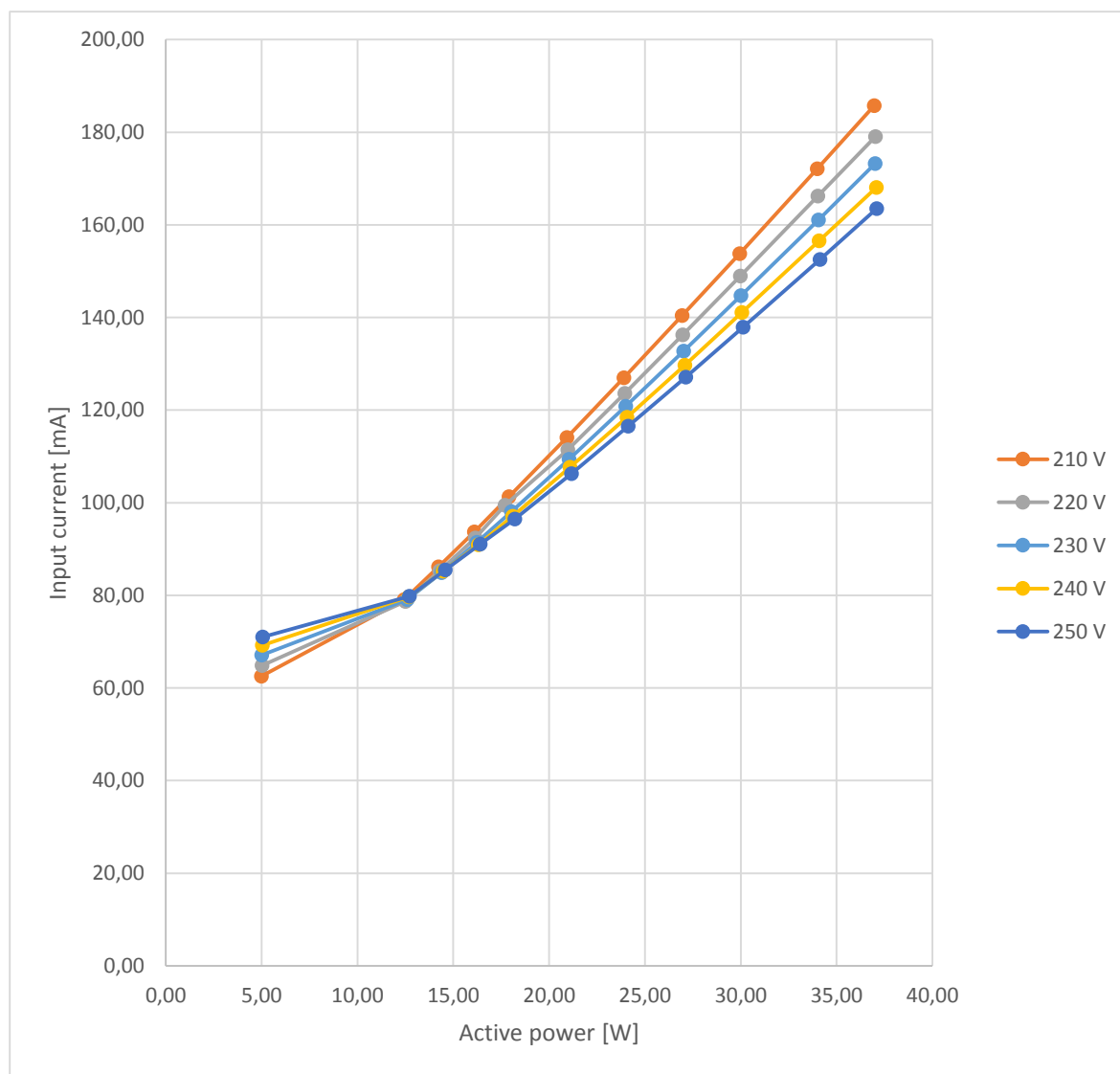




Table 10	Driver output current (active power/input voltage) curve diagram (Test sample No.2)
Model:	SR 037 740 02 011 S N DD 03 1

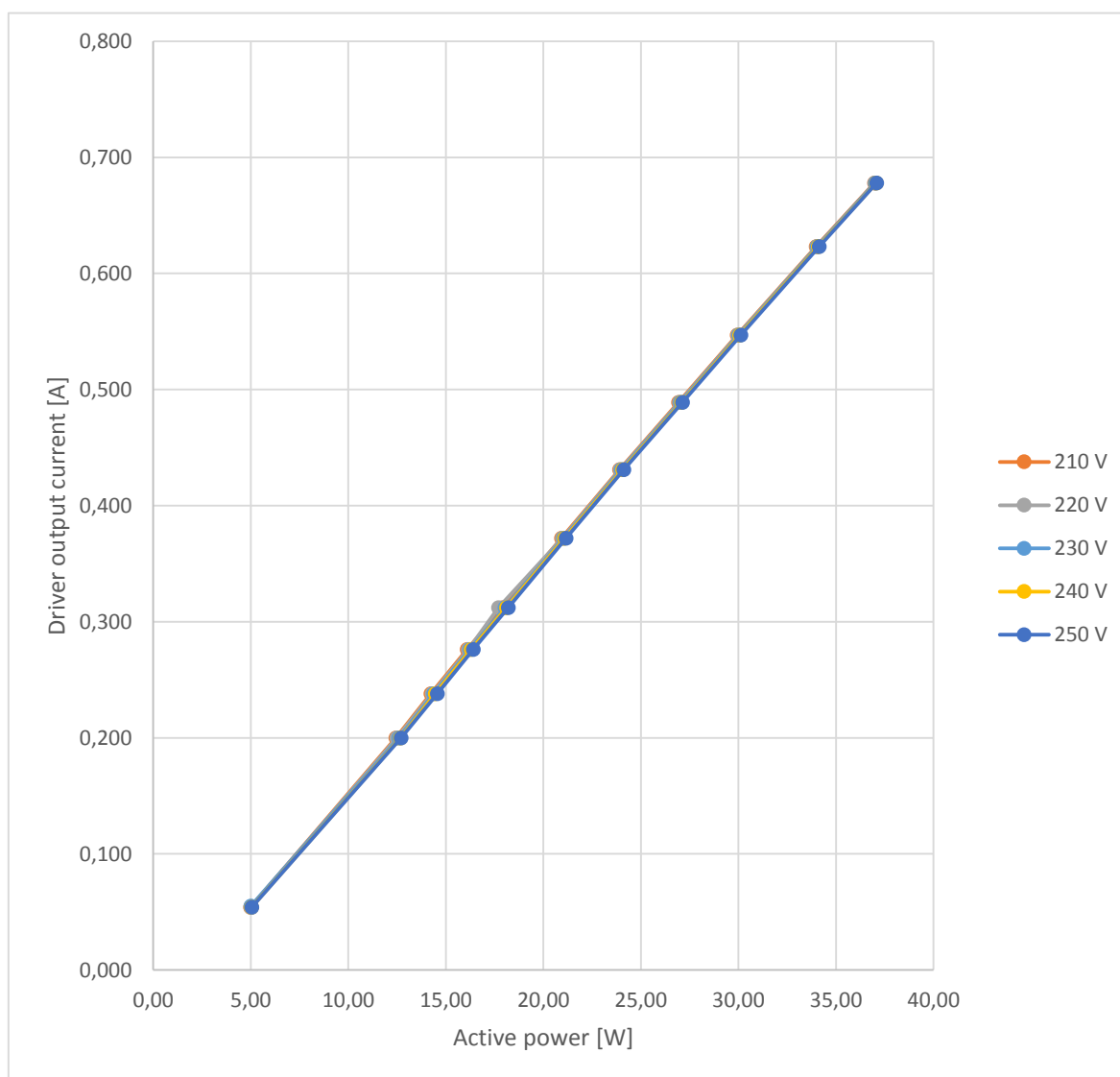




Table 11		Test data table No.2					
Model:		SR 037 740 02 011 S N DD 03 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	37,01	39,85	0,929	173,20	0,678	100,00%
2	230	34,05	37,05	0,919	161,07	0,623	91,89%
3	230	30,01	33,29	0,902	144,71	0,547	80,68%
4	230	27,02	30,54	0,885	132,72	0,489	72,12%
5	230	24,00	27,81	0,863	120,83	0,431	63,57%
6	230	21,03	25,18	0,835	109,40	0,372	54,87%
7	230	18,03	22,58	0,799	98,09	0,312	46,02%
8	230	16,23	21,05	0,771	91,44	0,276	40,71%
9	230	14,38	19,53	0,736	84,88	0,238	35,10%
10	230	12,59	18,20	0,692	79,09	0,200	29,50%
11	230	5,00	15,40	0,324	67,10	0,055	8,11%
1	210	36,97	39,01	0,948	185,71	0,678	100,00%
2	210	33,99	36,15	0,940	172,10	0,623	91,89%
3	210	29,94	32,31	0,927	153,80	0,547	80,68%
4	210	26,93	29,50	0,913	140,39	0,489	72,12%
5	210	23,90	26,68	0,896	127,01	0,431	63,57%
6	210	20,92	23,96	0,873	114,06	0,372	54,87%
7	210	17,91	21,28	0,842	101,29	0,312	46,02%



8	210	16,09	19,69	0,817	93,72	0,276	40,71%
9	210	14,23	18,10	0,786	86,17	0,238	35,10%
10	210	12,43	16,61	0,748	79,04	0,200	29,50%
11	210	4,99	13,12	0,380	62,54	0,054	7,96%
1	220	37,02	39,40	0,939	179,05	0,678	100,00%
2	220	34,02	36,58	0,930	166,22	0,623	91,89%
3	220	29,97	32,78	0,914	148,96	0,547	80,68%
4	220	26,97	29,98	0,900	136,22	0,489	72,12%
5	220	23,94	27,21	0,880	123,62	0,431	63,57%
6	220	20,97	24,53	0,855	111,41	0,372	54,87%
7	220	17,69	21,89	0,821	99,44	0,312	46,02%
8	220	16,15	20,34	0,794	92,37	0,276	40,71%
9	220	14,29	18,77	0,761	85,29	0,238	35,10%
10	220	12,49	17,32	0,721	78,68	0,200	29,50%
11	220	5,01	14,33	0,349	64,84	0,054	7,96%
1	240	37,07	40,37	0,918	168,10	0,678	100,00%
2	240	34,09	37,58	0,907	156,53	0,623	91,89%
3	240	30,06	33,86	0,888	141,05	0,547	80,68%
4	240	27,08	31,14	0,869	129,70	0,489	72,12%
5	240	24,06	28,44	0,846	118,44	0,431	63,57%
6	240	21,09	25,85	0,816	107,66	0,372	54,87%
7	240	18,10	23,31	0,777	97,04	0,312	46,02%



8	240	16,30	21,83	0,747	90,92	0,276	40,71%
9	240	14,46	20,45	0,707	85,20	0,238	35,10%
10	240	12,67	19,12	0,662	79,64	0,200	29,50%
11	240	5,03	16,60	0,303	69,20	0,054	7,96%
1	250	37,09	40,90	0,907	163,50	0,678	100,00%
2	250	34,14	38,16	0,895	152,55	0,623	91,89%
3	250	30,12	34,48	0,873	137,87	0,547	80,68%
4	250	27,13	31,80	0,853	127,12	0,489	72,12%
5	250	24,13	29,15	0,828	116,52	0,431	63,57%
6	250	21,17	26,58	0,796	106,26	0,372	54,87%
7	250	18,20	24,14	0,754	96,50	0,312	46,02%
8	250	16,40	22,78	0,720	91,03	0,276	40,71%
9	250	14,57	21,39	0,681	85,49	0,238	35,10%
10	250	12,70	19,96	0,636	79,79	0,200	29,50%
11	250	5,05	17,82	0,283	71,01	0,054	7,96%



Table 12	Power factor (active power/input voltage) curve diagram (Test No.3)
Model:	SR 037 740 02 011 S N DD 03 1

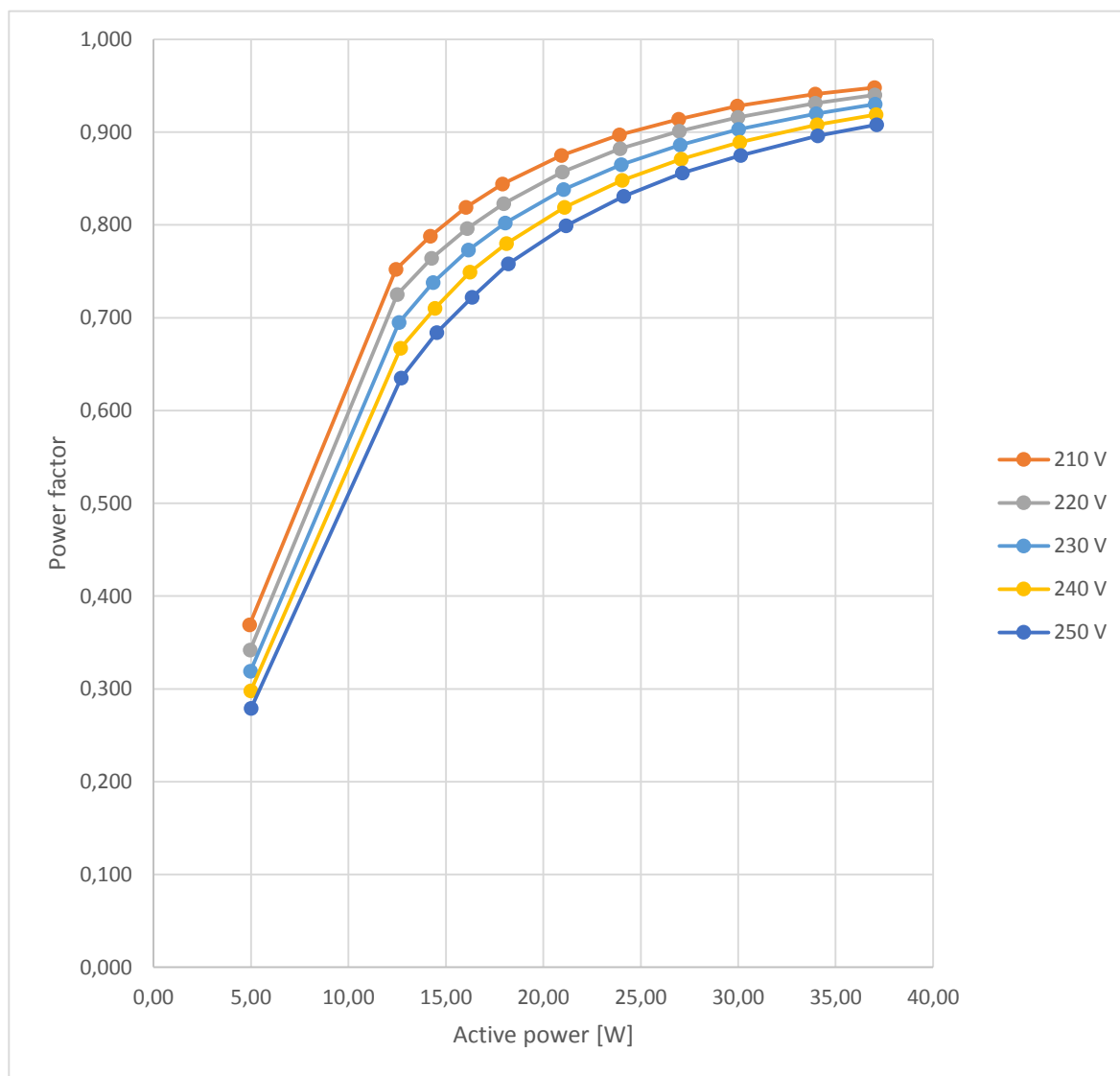




Table 13	Apparent power (active power /input voltage) curve diagram (Test sample No.3)
Model:	SR 037 740 02 011 S N DD 03 1

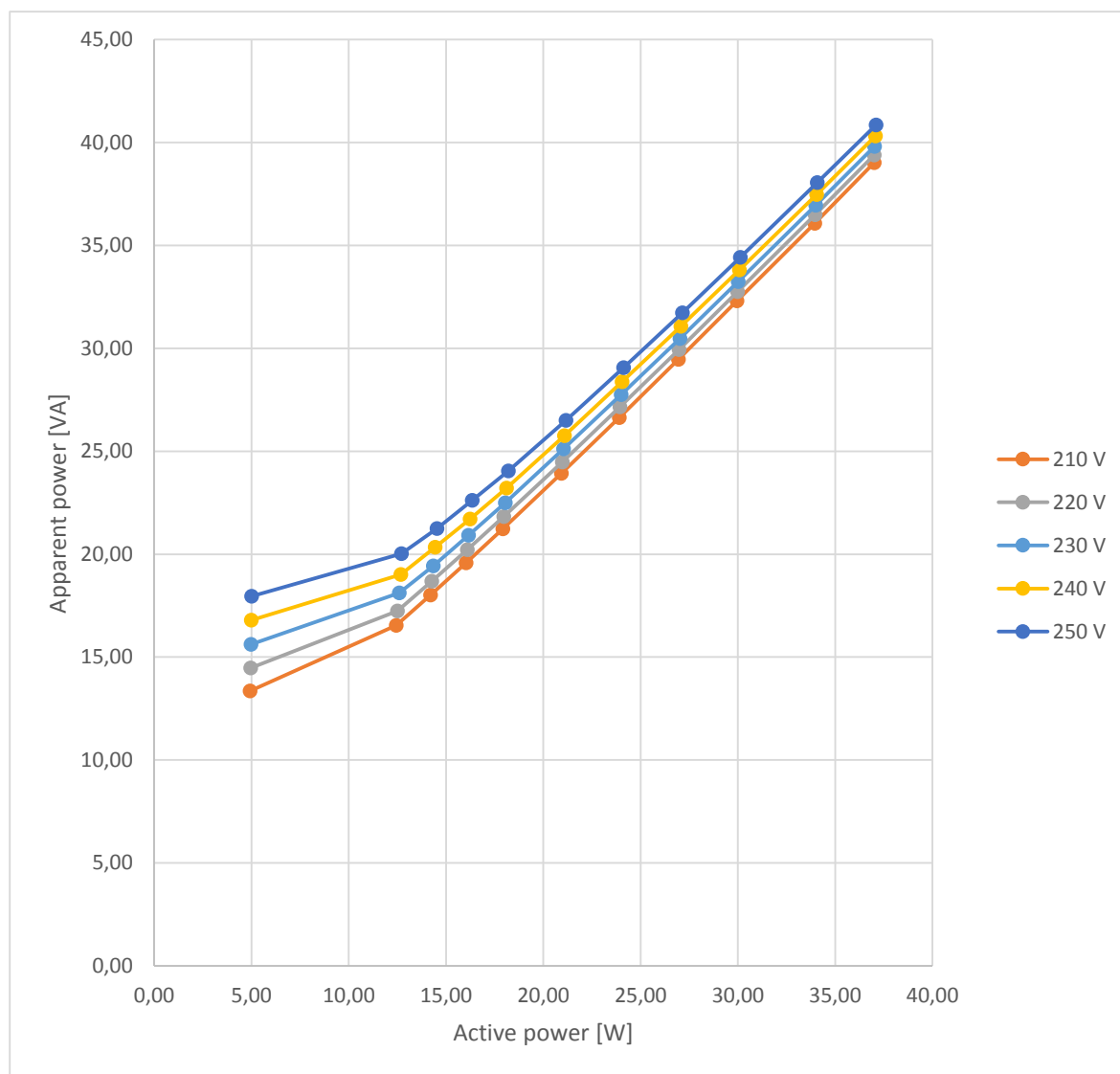




Table 14	Input current (active power /input voltage) curve diagram (Test sample No.3)
Model:	SR 037 740 02 011 S N DD 03 1

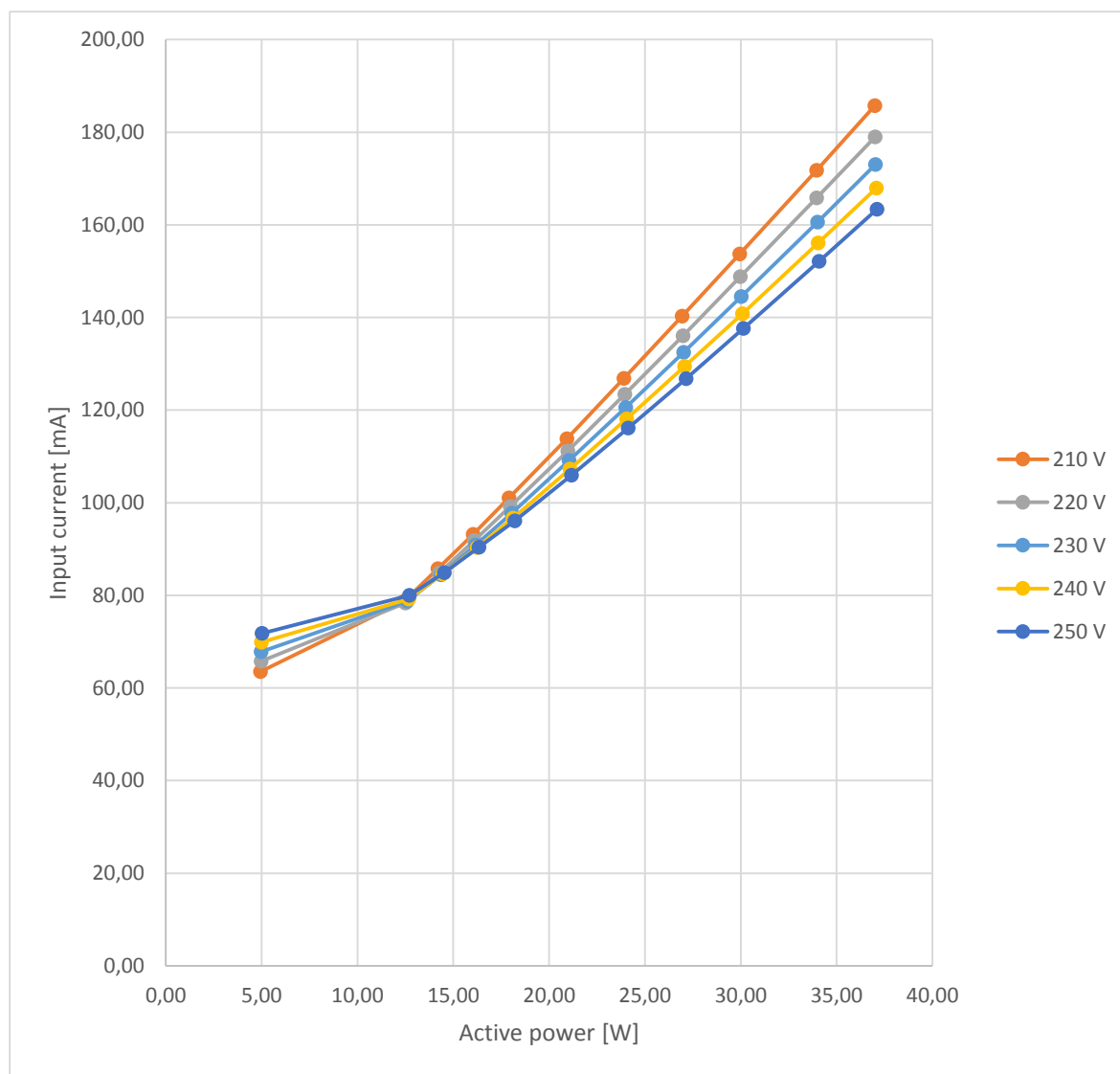




Table 15	Driver output current (active power/input voltage) curve diagram (Test sample No.3)
Model:	SR 037 740 02 011 S N DD 03 1

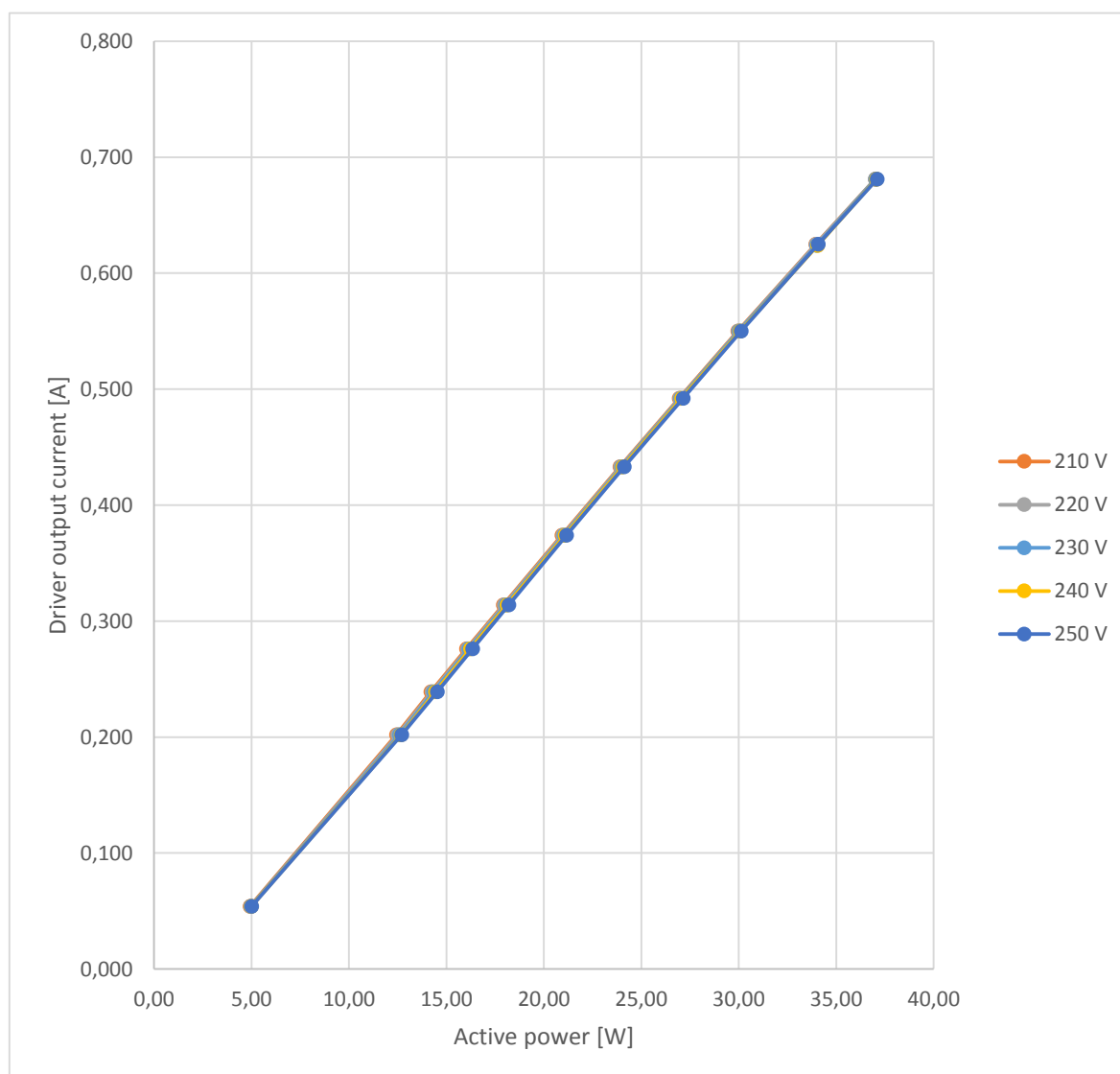




Table 16		Test data table No.3					
Model:		SR 037 740 02 011 S N DD 03 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	37,02	39,81	0,930	173,02	0,681	100,00%
2	230	34,00	36,95	0,920	160,61	0,624	91,63%
3	230	30,02	33,25	0,903	144,51	0,550	80,76%
4	230	27,02	30,48	0,886	132,49	0,492	72,25%
5	230	24,00	27,75	0,865	120,58	0,433	63,58%
6	230	21,03	25,11	0,838	109,08	0,374	54,92%
7	230	18,04	22,50	0,802	97,76	0,314	46,11%
8	230	16,16	20,92	0,773	90,88	0,276	40,53%
9	230	14,35	19,43	0,738	84,44	0,239	35,10%
10	230	12,59	18,12	0,695	75,71	0,202	29,66%
11	230	4,97	15,62	0,319	67,85	0,054	7,93%
1	210	37,00	39,02	0,948	185,75	0,681	100,00%
2	210	33,95	36,08	0,941	171,79	0,625	91,78%
3	210	29,95	32,30	0,928	153,74	0,550	80,76%
4	210	26,94	29,47	0,914	140,25	0,492	72,25%
5	210	23,90	26,64	0,897	126,82	0,433	63,58%
6	210	20,92	23,92	0,875	113,82	0,374	54,92%
7	210	17,91	21,23	0,844	101,05	0,314	46,11%



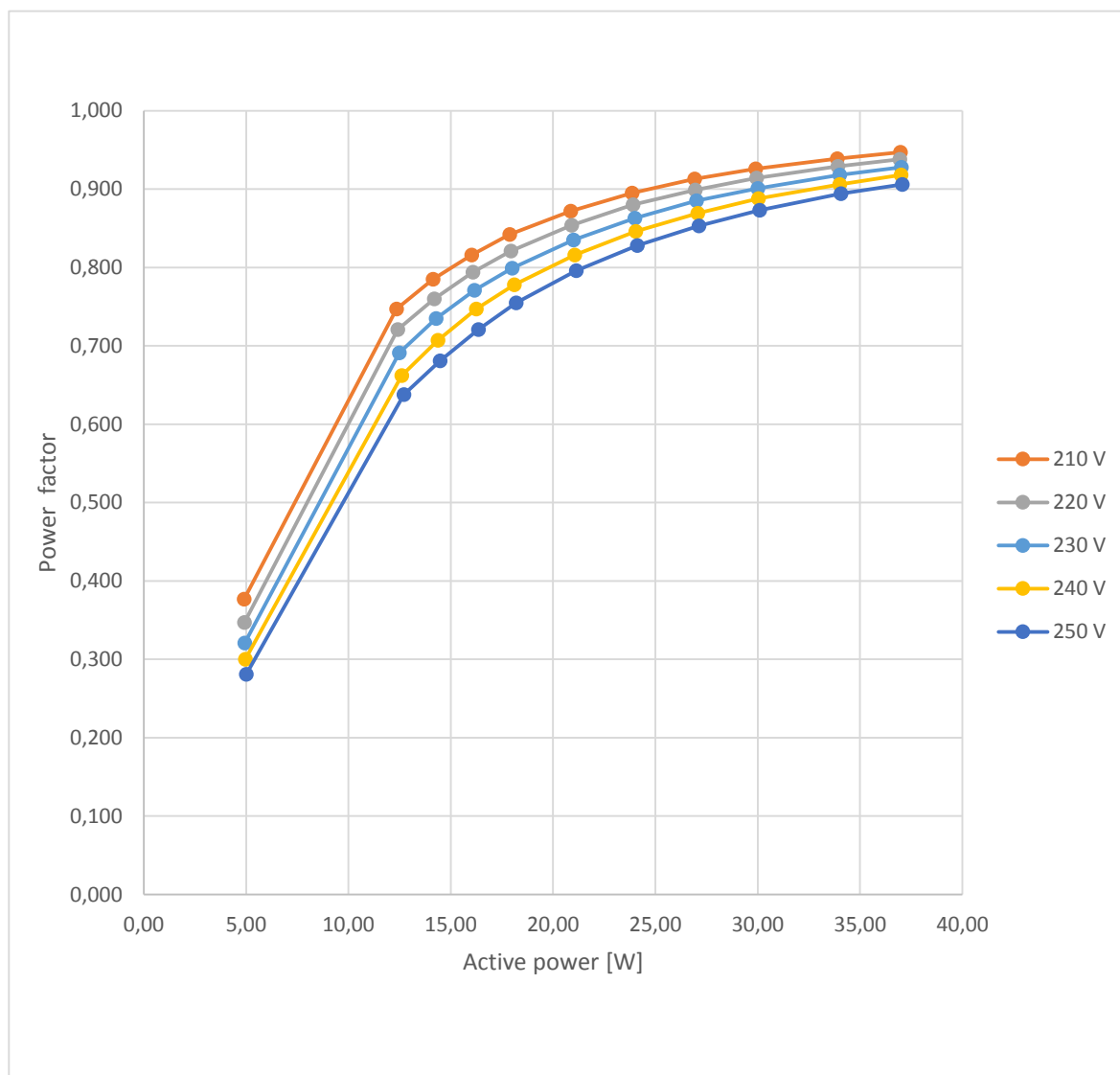
8	210	16,03	19,58	0,819	93,17	0,276	40,53%
9	210	14,20	18,01	0,788	85,74	0,239	35,10%
10	210	12,43	16,54	0,752	78,73	0,202	29,66%
11	210	4,93	13,35	0,369	63,55	0,054	7,93%
1	220	37,01	39,39	0,940	178,99	0,681	100,00%
2	220	33,96	36,49	0,931	165,81	0,625	91,78%
3	220	29,98	32,75	0,916	148,80	0,550	80,76%
4	220	26,98	29,94	0,901	136,05	0,492	72,25%
5	220	23,94	27,16	0,882	123,40	0,433	63,58%
6	220	20,97	24,47	0,857	111,16	0,374	54,92%
7	220	17,97	21,83	0,823	99,16	0,314	46,11%
8	220	16,09	20,22	0,796	91,83	0,276	40,53%
9	220	14,27	18,68	0,764	84,85	0,239	35,10%
10	220	12,50	17,24	0,725	78,33	0,202	29,66%
11	220	4,96	14,47	0,342	65,74	0,054	7,93%
1	240	37,07	40,32	0,919	167,93	0,681	100,00%
2	240	34,04	37,48	0,908	156,10	0,624	91,63%
3	240	30,08	33,81	0,889	140,82	0,550	80,76%
4	240	27,07	31,07	0,871	129,40	0,492	72,25%
5	240	24,05	28,37	0,848	118,10	0,433	63,58%
6	240	21,09	25,76	0,819	107,28	0,374	54,92%
7	240	18,11	23,21	0,780	96,65	0,314	46,11%



8	240	16,24	21,70	0,749	90,30	0,276	40,53%
9	240	14,43	20,33	0,710	84,66	0,239	35,10%
10	240	12,67	19,01	0,667	79,17	0,202	29,66%
11	240	4,99	16,79	0,298	69,90	0,054	7,93%
1	250	37,11	40,86	0,908	163,35	0,681	100,00%
2	250	34,08	38,05	0,896	152,11	0,625	91,78%
3	250	30,13	34,42	0,875	137,60	0,550	80,76%
4	250	27,14	31,72	0,856	126,81	0,492	72,25%
5	250	24,13	29,06	0,831	116,15	0,433	63,58%
6	250	21,17	26,50	0,799	105,91	0,374	54,92%
7	250	18,20	24,04	0,758	96,06	0,314	46,11%
8	250	16,34	22,62	0,722	90,40	0,276	40,53%
9	250	14,53	21,24	0,684	84,90	0,239	35,10%
10	250	12,70	20,02	0,635	80,02	0,202	29,66%
11	250	5,01	17,95	0,279	71,77	0,054	7,93%



Table 17	Power factor (active power/input voltage) curve diagram (Test No.4)
Model:	SR 037 740 02 011 S N DD 03 1



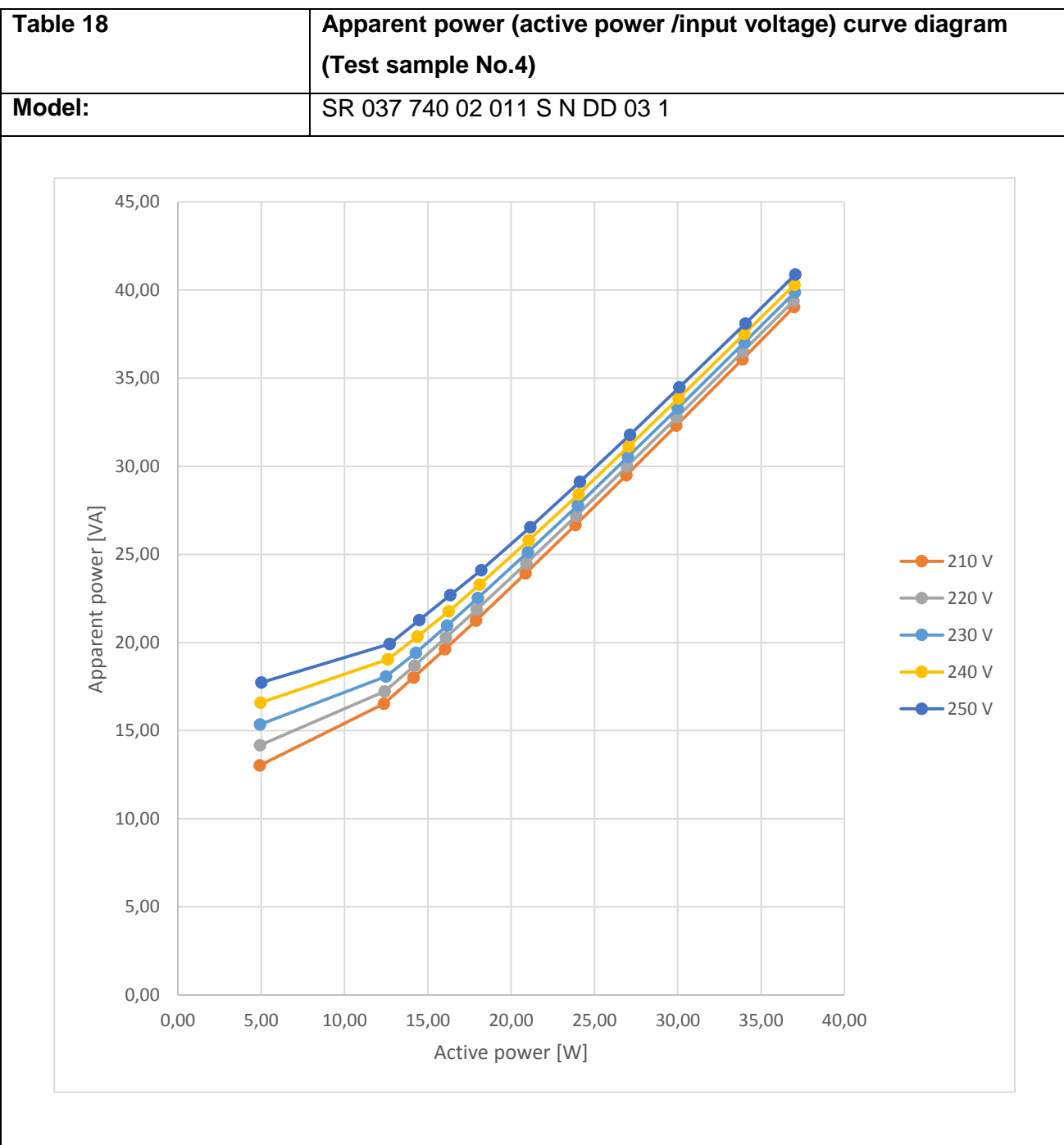




Table 19	Input current (active power /input voltage) curve diagram (Test sample No.4)
Model:	SR 037 740 02 011 S N DD 03 1

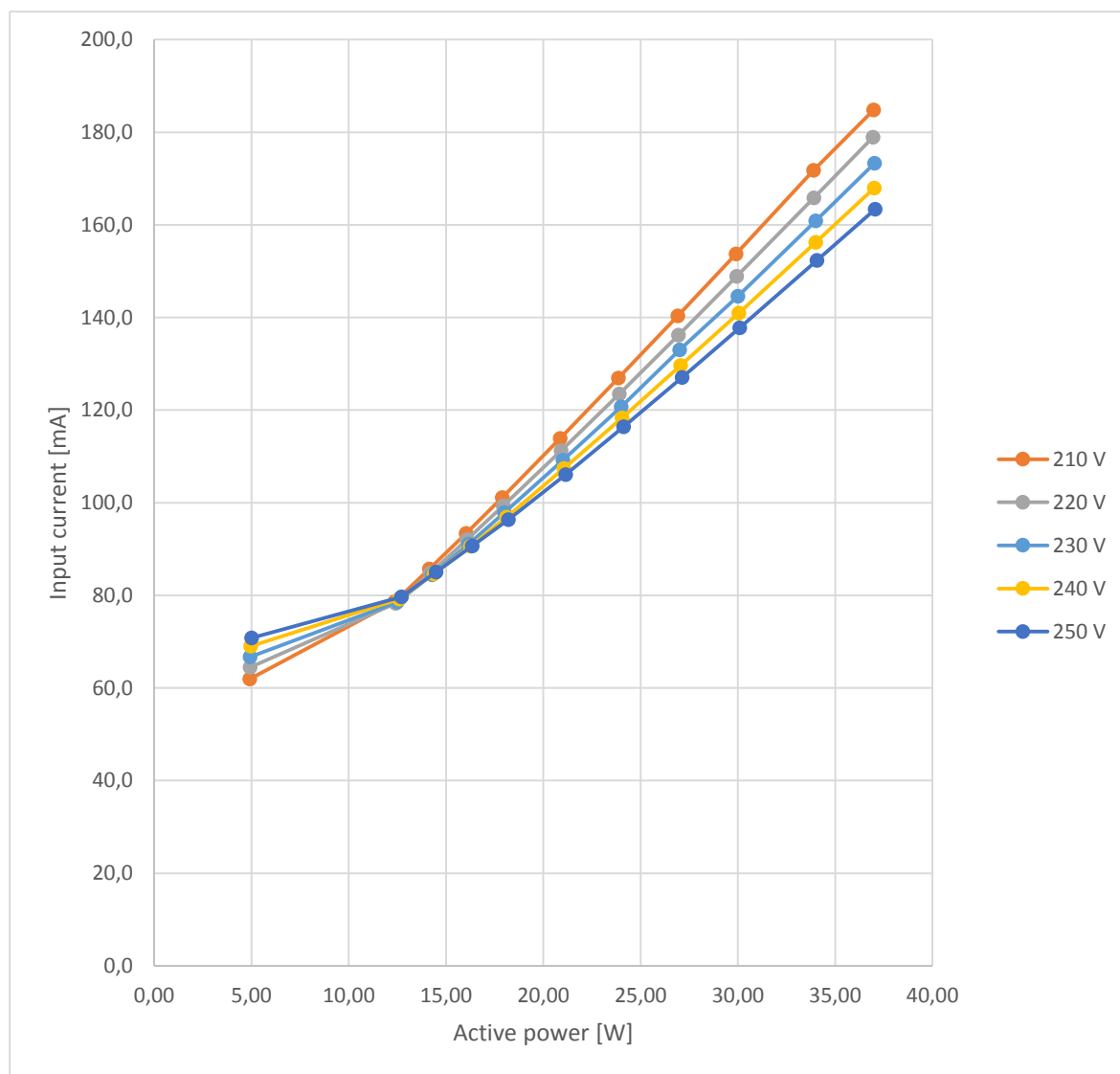




Table 20	Driver output current (active power/input voltage) curve diagram (Test sample No.4)
Model:	SR 037 740 02 011 S N DD 03 1

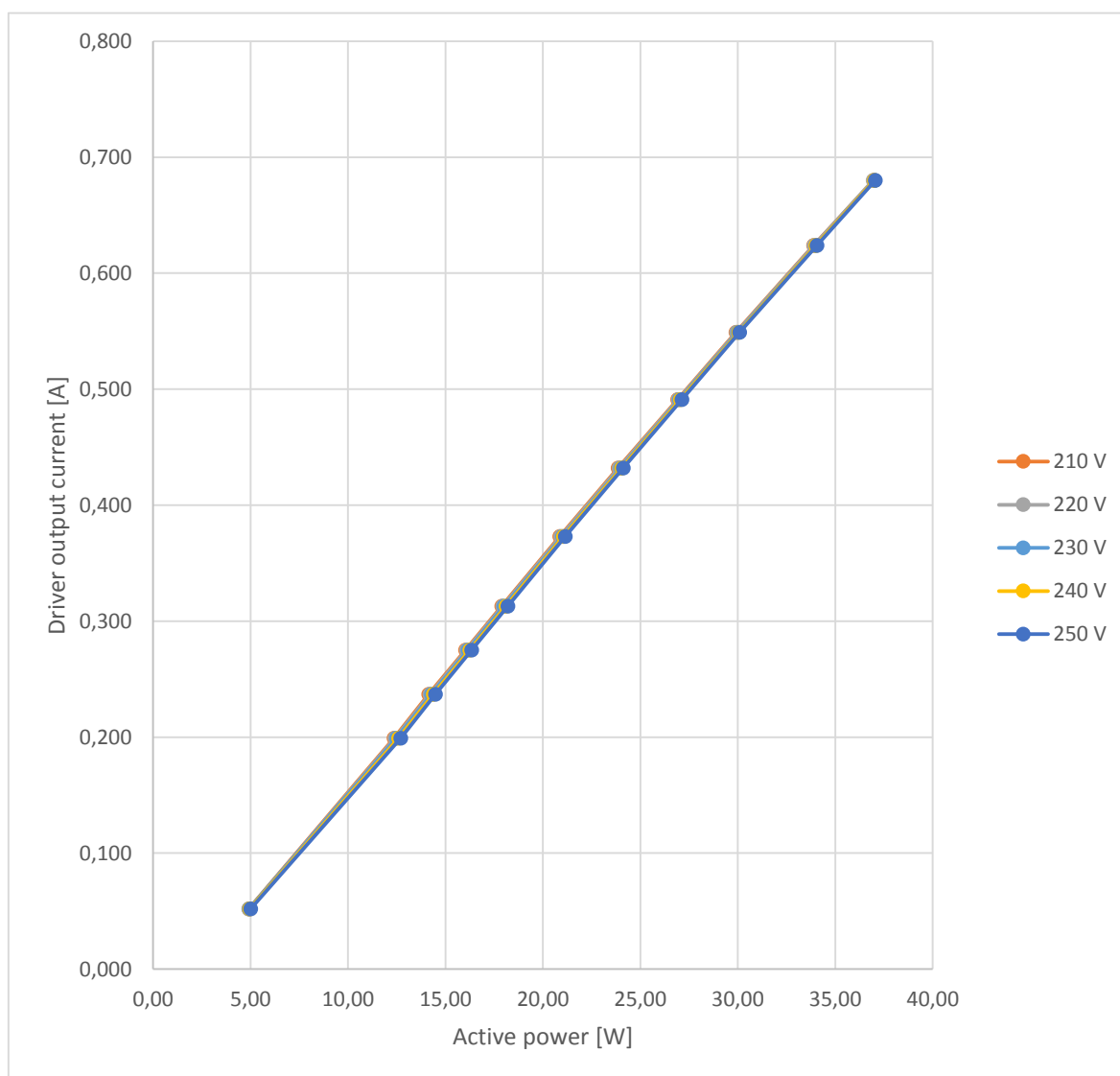




Table 21		Test data table No.4					
Model:		SR 037 740 02 011 S N DD 03 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	37,02	39,87	0,928	173,3	0,680	100,00%
2	230	34,00	37,02	0,918	160,8	0,624	91,76%
3	230	30,00	33,29	0,901	144,6	0,549	80,74%
4	230	27,01	30,54	0,885	133,0	0,491	72,21%
5	230	24,00	27,78	0,863	120,7	0,432	63,53%
6	230	21,00	25,13	0,835	109,2	0,373	54,85%
7	230	18,00	22,53	0,799	97,9	0,313	46,03%
8	230	16,15	20,96	0,771	91,0	0,275	40,44%
9	230	14,28	19,42	0,735	84,4	0,237	34,85%
10	230	12,49	18,08	0,691	78,6	0,199	29,26%
11	230	4,93	15,35	0,321	66,7	0,052	7,65%
1	210	36,97	39,03	0,947	184,8	0,680	100,00%
2	210	33,89	36,08	0,939	171,8	0,624	91,76%
3	210	29,90	32,30	0,926	153,7	0,549	80,74%
4	210	26,91	29,49	0,913	140,3	0,491	72,21%
5	210	23,86	26,66	0,895	126,9	0,432	63,53%
6	210	20,87	23,93	0,872	113,9	0,373	54,85%
7	210	17,88	21,25	0,842	101,1	0,313	46,03%



8	210	16,02	19,62	0,816	93,4	0,275	40,44%
9	210	14,13	18,01	0,785	85,7	0,237	34,85%
10	210	12,35	16,52	0,747	78,6	0,199	29,26%
11	210	4,90	13,02	0,377	62,0	0,052	7,65%
1	220	36,94	39,38	0,938	178,9	0,680	100,00%
2	220	33,91	36,51	0,929	165,8	0,624	91,76%
3	220	29,94	32,77	0,914	148,9	0,549	80,74%
4	220	26,95	29,98	0,899	136,2	0,491	72,21%
5	220	23,91	27,18	0,880	123,5	0,432	63,53%
6	220	20,91	24,49	0,854	111,2	0,373	54,85%
7	220	17,94	21,87	0,821	99,3	0,313	46,03%
8	220	16,08	20,27	0,794	92,1	0,275	40,44%
9	220	14,20	18,68	0,760	84,8	0,237	34,85%
10	220	12,41	17,23	0,721	78,3	0,199	29,26%
11	220	4,92	14,18	0,347	64,5	0,052	7,65%
1	240	37,01	40,30	0,918	168,0	0,680	100,00%
2	240	34,00	37,52	0,906	156,2	0,624	91,76%
3	240	30,04	33,85	0,888	140,9	0,549	80,74%
4	240	27,06	31,13	0,869	129,6	0,491	72,21%
5	240	24,04	28,41	0,846	118,3	0,432	63,53%
6	240	21,06	25,80	0,816	107,4	0,373	54,85%
7	240	18,10	23,28	0,778	96,9	0,313	46,03%



8	240	16,25	21,76	0,747	90,6	0,275	40,44%
9	240	14,37	20,34	0,707	84,7	0,237	34,85%
10	240	12,60	19,04	0,662	79,2	0,199	29,26%
11	240	4,96	16,59	0,300	69,0	0,052	7,65%
1	250	37,06	40,88	0,906	163,4	0,680	100,00%
2	250	34,06	38,10	0,894	152,3	0,624	91,76%
3	250	30,10	34,48	0,873	137,8	0,549	80,74%
4	250	27,13	31,79	0,853	127,1	0,491	72,21%
5	250	24,12	29,12	0,828	116,4	0,432	63,53%
6	250	21,14	26,54	0,796	106,1	0,373	54,85%
7	250	18,20	24,10	0,755	96,3	0,313	46,03%
8	250	16,35	22,69	0,721	90,7	0,275	40,44%
9	250	14,48	21,27	0,681	85,0	0,237	34,85%
10	250	12,71	19,92	0,638	79,7	0,199	29,26%
11	250	5,00	17,73	0,281	70,8	0,052	7,65%



Table 22	Power factor (active power/input voltage) curve diagram (Test No.5)
Model:	SR 037 740 02 011 S N DD 03 1

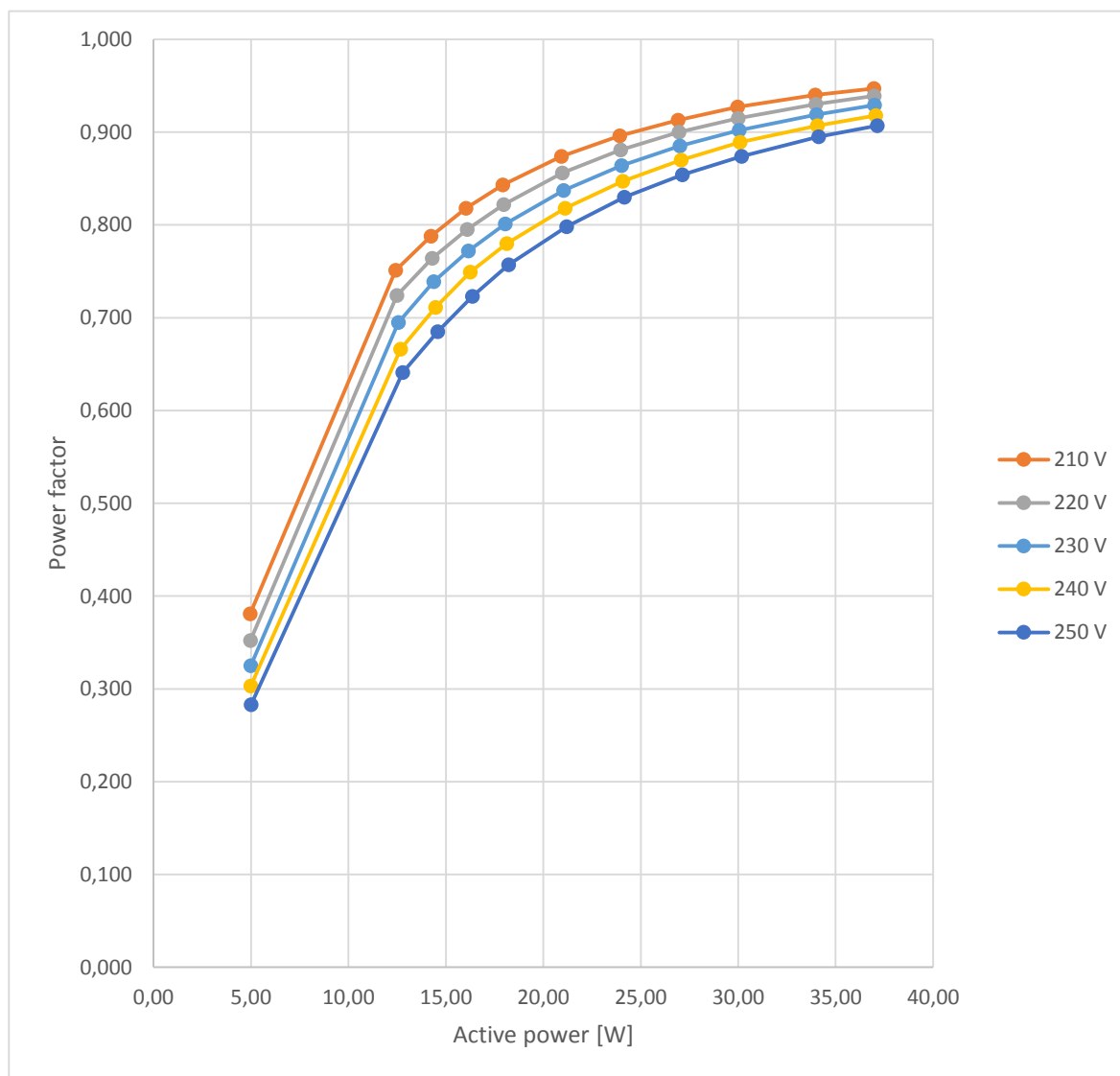
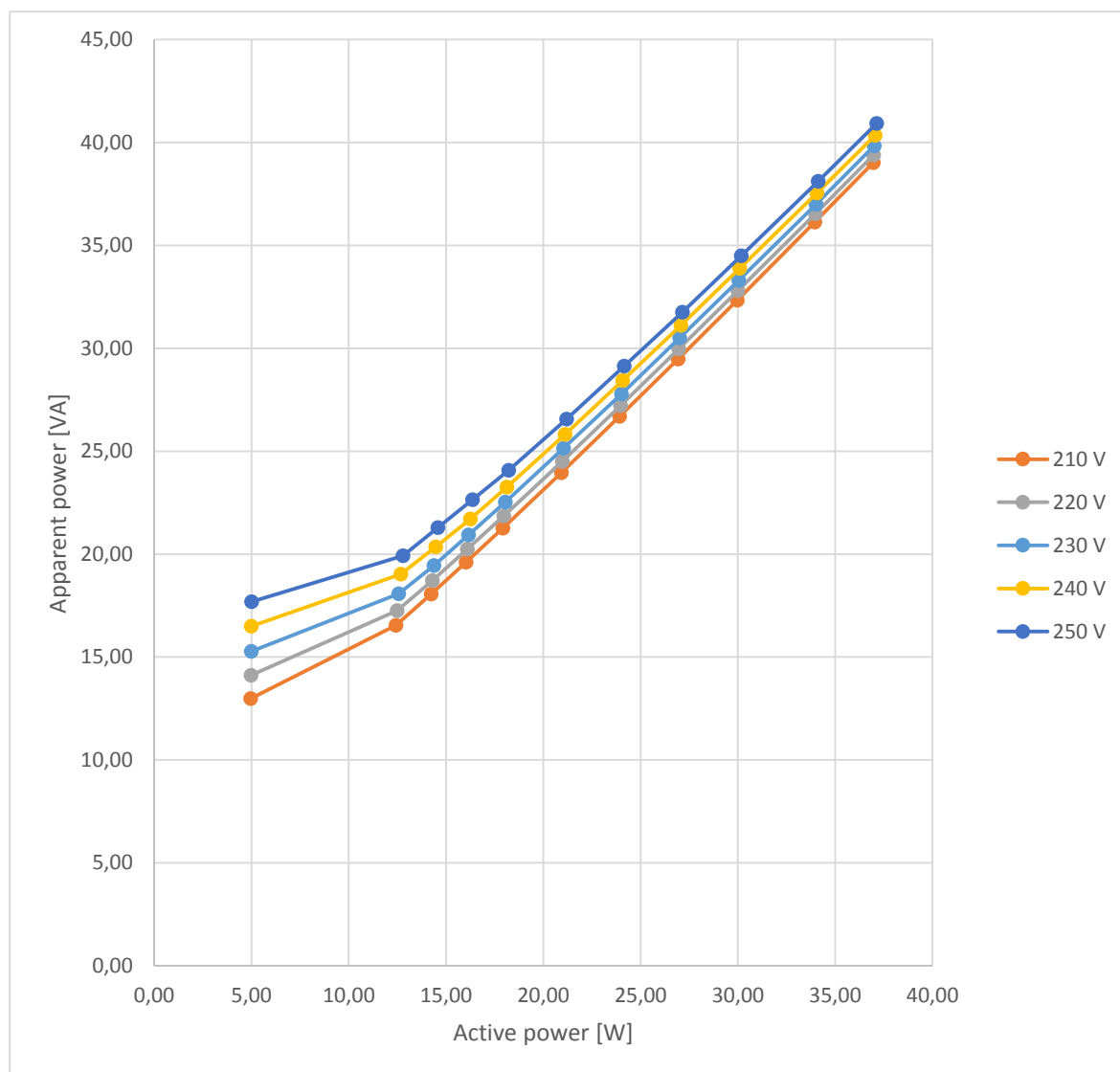




Table 23	Apparent power (active power /input voltage) curve diagram (Test sample No.5)
Model:	SR 037 740 02 011 S N DD 03 1



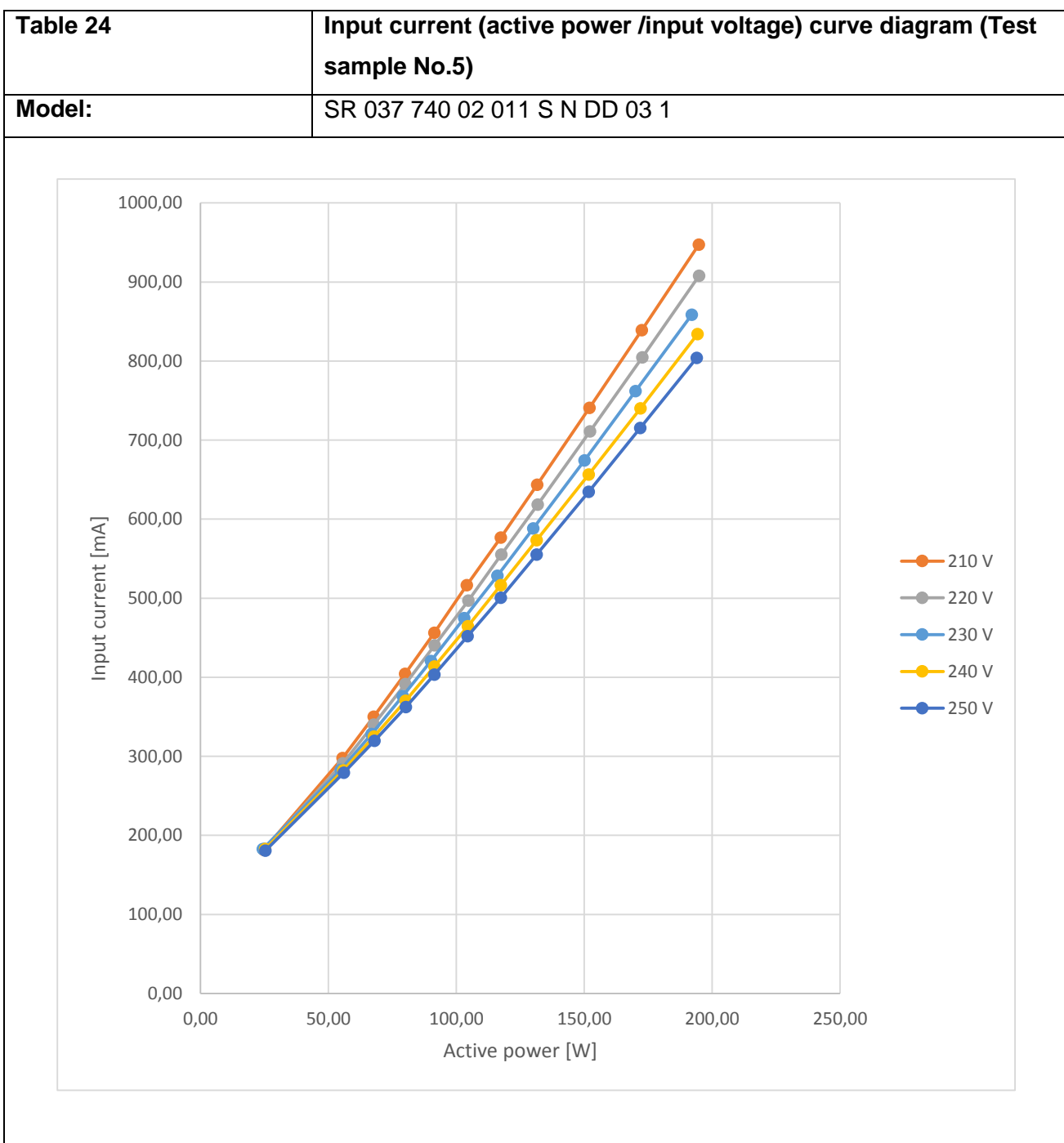




Table 25	Driver output current (active power/input voltage) curve diagram (Test sample No.5)
Model:	SR 037 740 02 011 S N DD 03 1

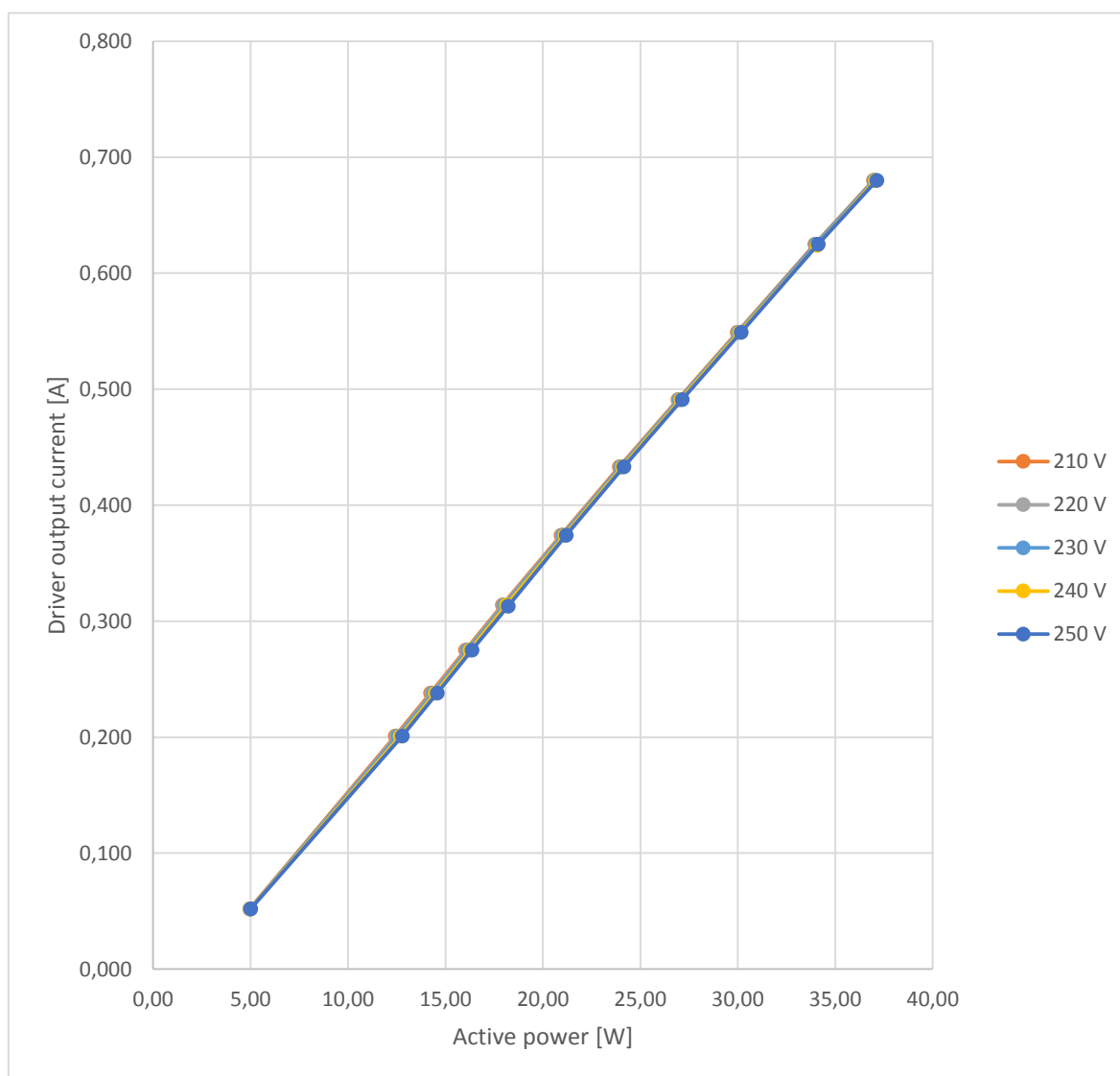




Table 26		Test data table No.5					
Model:		SR 037 740 02 011 S N DD 03 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	37,00	39,84	0,929	173,17	0,680	100,00%
2	230	34,01	37,00	0,919	160,83	0,625	91,91%
3	230	30,04	33,31	0,902	144,74	0,549	80,74%
4	230	27,00	30,50	0,885	132,59	0,491	72,21%
5	230	24,01	27,78	0,864	120,76	0,433	63,68%
6	230	21,04	25,14	0,837	109,20	0,374	55,00%
7	230	18,04	22,52	0,801	97,84	0,314	46,18%
8	230	16,16	20,93	0,772	90,92	0,275	40,44%
9	230	14,37	19,45	0,739	84,50	0,238	35,00%
10	230	12,57	18,08	0,695	78,58	0,201	29,56%
11	230	4,98	15,27	0,325	66,46	0,052	7,65%
1	210	36,96	39,02	0,947	185,77	0,680	100,00%
2	210	33,95	36,13	0,940	172,00	0,625	91,91%
3	210	29,96	32,34	0,927	153,94	0,549	80,74%
4	210	26,92	29,48	0,913	140,30	0,491	72,21%
5	210	23,92	26,70	0,896	127,08	0,433	63,68%
6	210	20,93	23,96	0,874	114,06	0,374	55,00%
7	210	17,92	21,26	0,843	101,17	0,314	46,18%



8	210	16,03	19,60	0,818	93,29	0,275	40,44%
9	210	14,23	18,06	0,788	85,98	0,238	35,00%
10	210	12,42	16,54	0,751	78,72	0,201	29,56%
11	210	4,95	12,98	0,381	61,74	0,052	7,65%
1	220	36,98	39,40	0,939	179,06	0,680	100,00%
2	220	33,98	36,54	0,930	166,07	0,625	91,91%
3	220	30,00	32,80	0,915	149,05	0,549	80,74%
4	220	26,96	29,97	0,900	136,15	0,491	72,21%
5	220	23,97	27,22	0,881	123,64	0,433	63,68%
6	220	20,98	24,51	0,856	111,35	0,374	55,00%
7	220	17,97	21,86	0,822	99,29	0,314	46,18%
8	220	16,09	20,24	0,795	91,94	0,275	40,44%
9	220	14,29	18,72	0,764	85,05	0,238	35,00%
10	220	12,49	17,25	0,724	78,35	0,201	29,56%
11	220	4,97	14,11	0,352	64,12	0,052	7,65%
1	240	37,06	40,35	0,918	168,05	0,680	100,00%
2	240	34,06	37,55	0,907	156,38	0,624	91,76%
3	240	30,10	33,88	0,889	141,10	0,549	80,74%
4	240	27,07	31,11	0,870	129,55	0,491	72,21%
5	240	24,08	28,43	0,847	118,38	0,433	63,68%
6	240	21,12	25,82	0,818	107,51	0,374	55,00%
7	240	18,13	23,26	0,780	96,83	0,314	46,18%



8	240	16,25	21,71	0,749	90,36	0,275	40,44%
9	240	14,47	20,35	0,711	84,74	0,238	35,00%
10	240	12,67	19,03	0,666	79,22	0,201	29,56%
11	240	4,99	16,49	0,303	68,60	0,052	7,65%
1	250	37,13	40,92	0,907	163,59	0,680	100,00%
2	250	34,12	38,12	0,895	152,43	0,625	91,91%
3	250	30,17	34,50	0,874	137,90	0,549	80,74%
4	250	27,14	31,76	0,854	126,98	0,491	72,21%
5	250	24,16	29,13	0,830	116,45	0,433	63,68%
6	250	21,20	26,56	0,798	106,16	0,374	55,00%
7	250	18,22	24,07	0,757	96,17	0,313	46,03%
8	250	16,36	22,65	0,723	90,50	0,275	40,44%
9	250	14,58	21,29	0,685	85,08	0,238	35,00%
10	250	12,78	19,92	0,641	79,65	0,201	29,56%
11	250	5,00	17,68	0,283	70,61	0,052	7,65%