





TEST REPORT No. E/1/12.10.15./01

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

Report reference No.	Report No.: E/1/12.10.15./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 06 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	12.10.2015.	
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 06 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: Osram OT 40/120...277/1A0 4DIMLT2 E

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

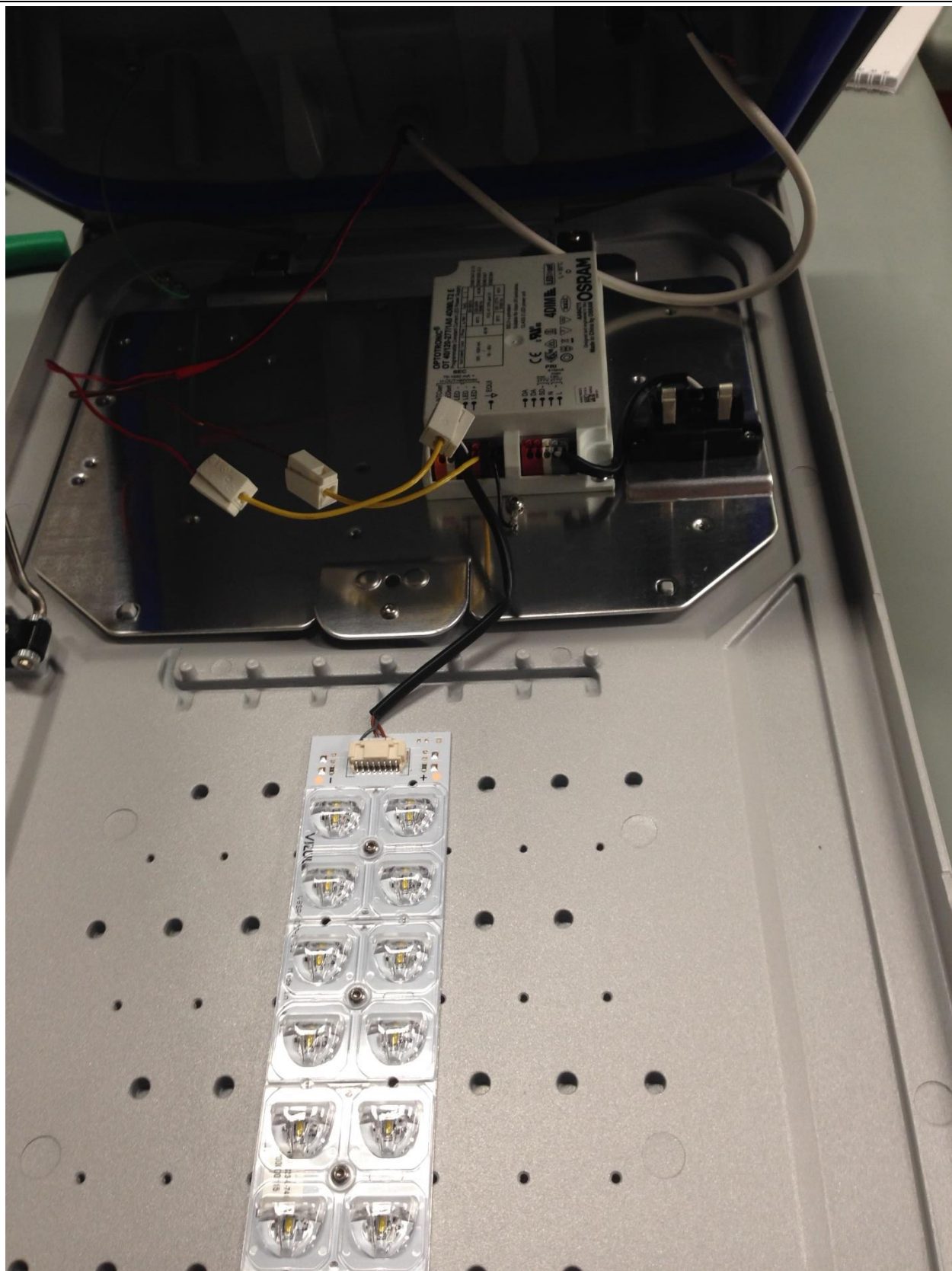
Power [W]	018 ... 200
Color rendering index	≥70 - 7 ≥80 - 8
Color temperature [K]	3000 ... 5000 Standard values: 3000 K - 30 4000 K - 40
Lens type	01 ... 99
LED module type	01 ... 04 16 LEDs - 01 108 LEDs - 02 78 LEDs - 03 84 LEDs - 04 98 LEDs - 05
LED module quantity	1 ... 4
Body color	Silver (RAL 9006) - 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

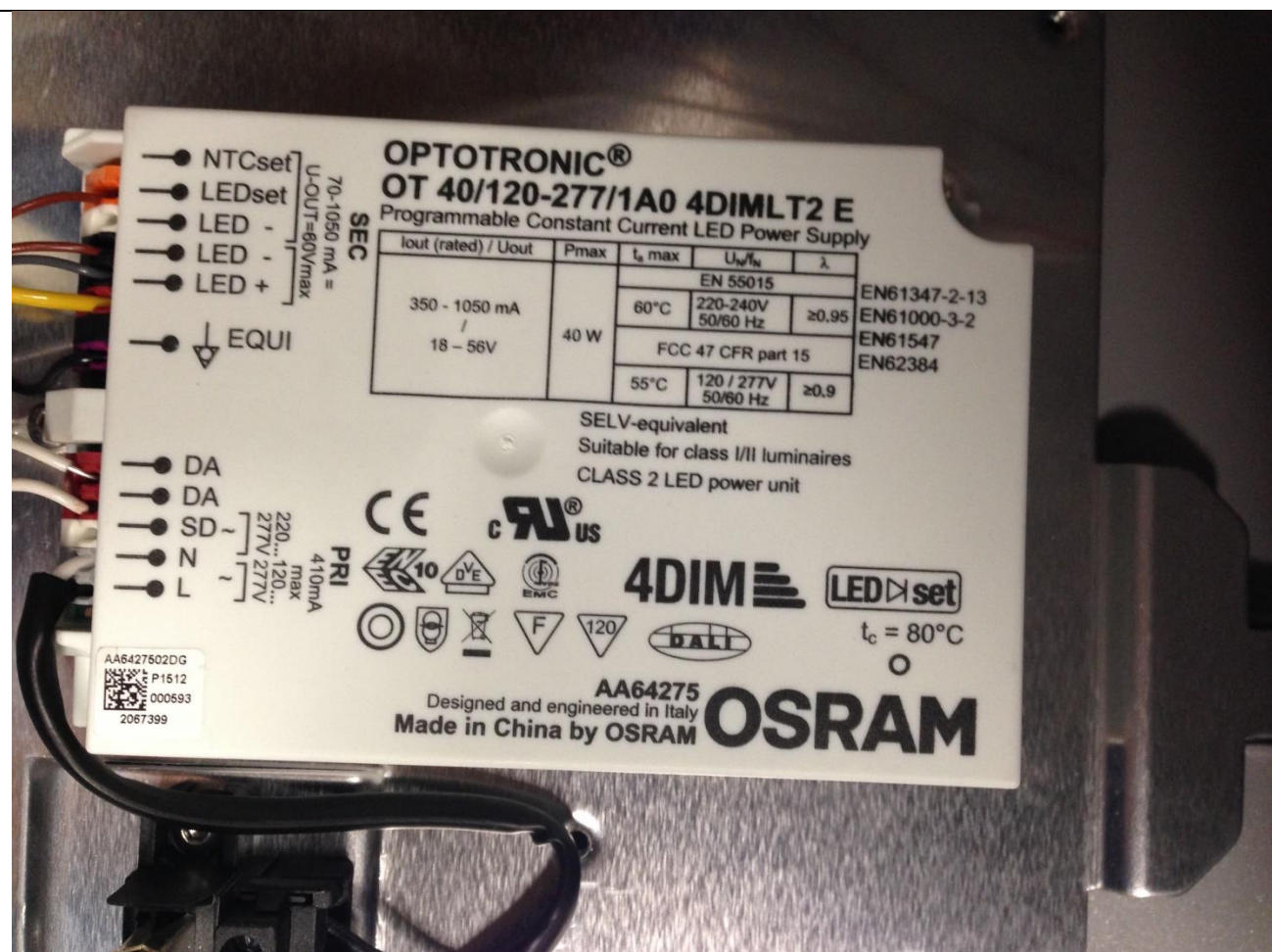
SRL

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 06 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 06 1		
Rated Voltage (V):	220-240	Rated Power (W):	37
Rated Frequency (Hz):	50 Hz	Ambient temperature 25 ±1 (°C):	25.3
Test item		Measured Value	
Electrical Input Results			
Input Voltage (Volts AC)		210 - 250	
Input Frequency (Hertz)		50	
Additional Information			
Ambient Temperature (°C):		25.3	
Supplementary Information:			
- 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 06 1

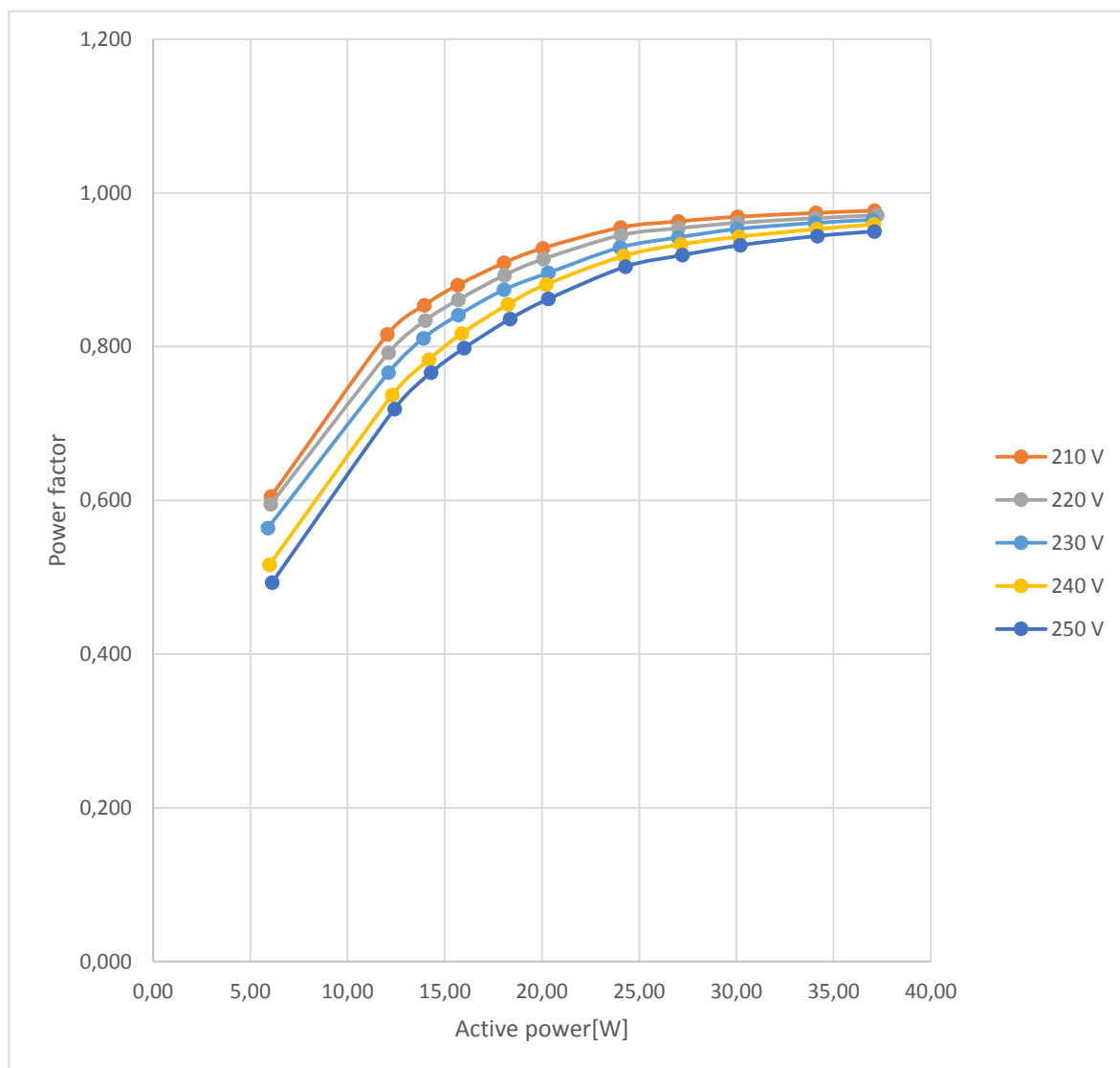




Table 3	Apparent power (active power /input voltage) curve diagram (Test sample No.1)
Model:	SR 037 740 02 011 S N DD 06 1

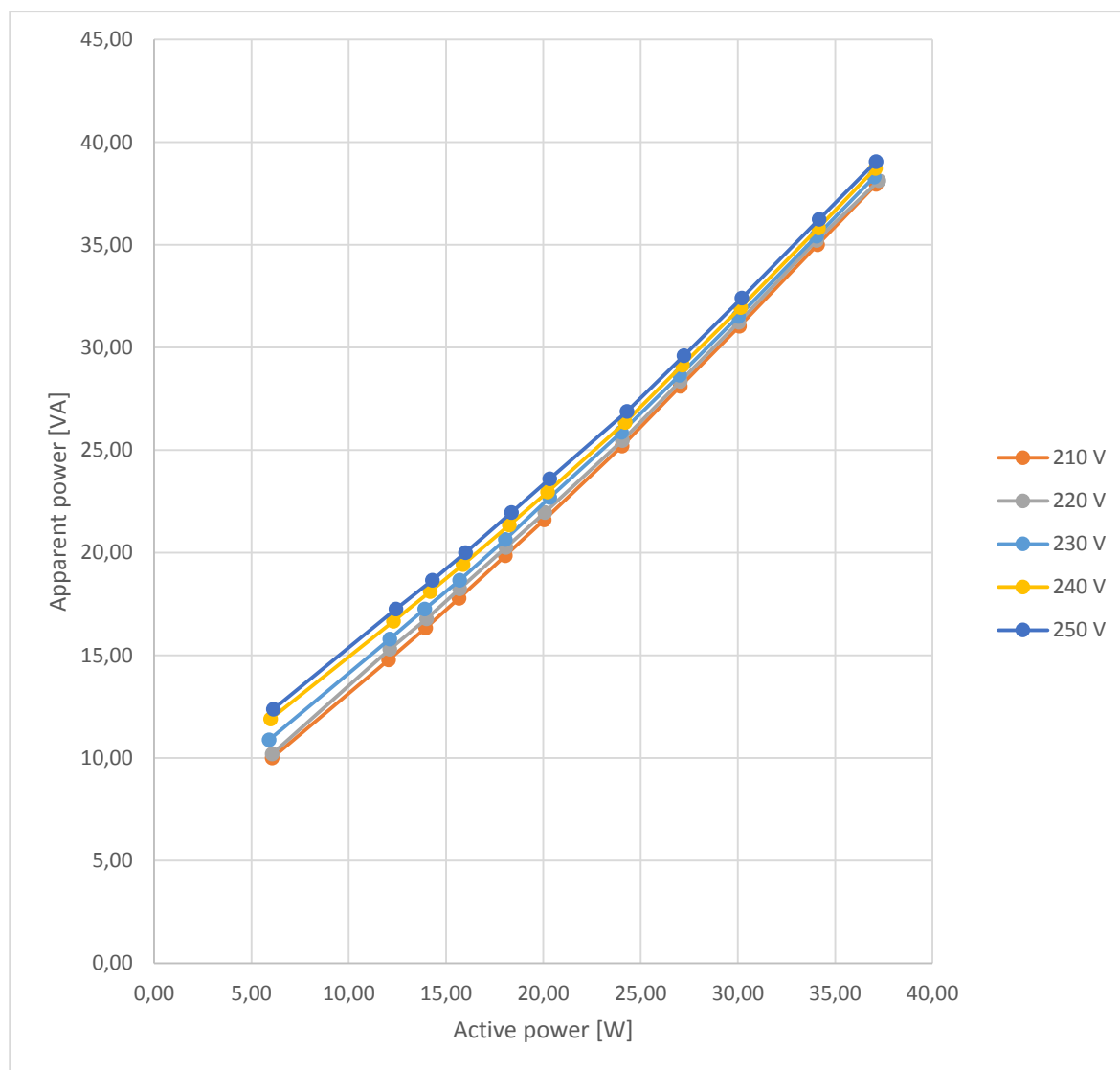




Table 4	Input current (active power/input voltage) curve diagram (Test sample No.1)
Model:	SR 037 740 02 011 S N DD 06 1

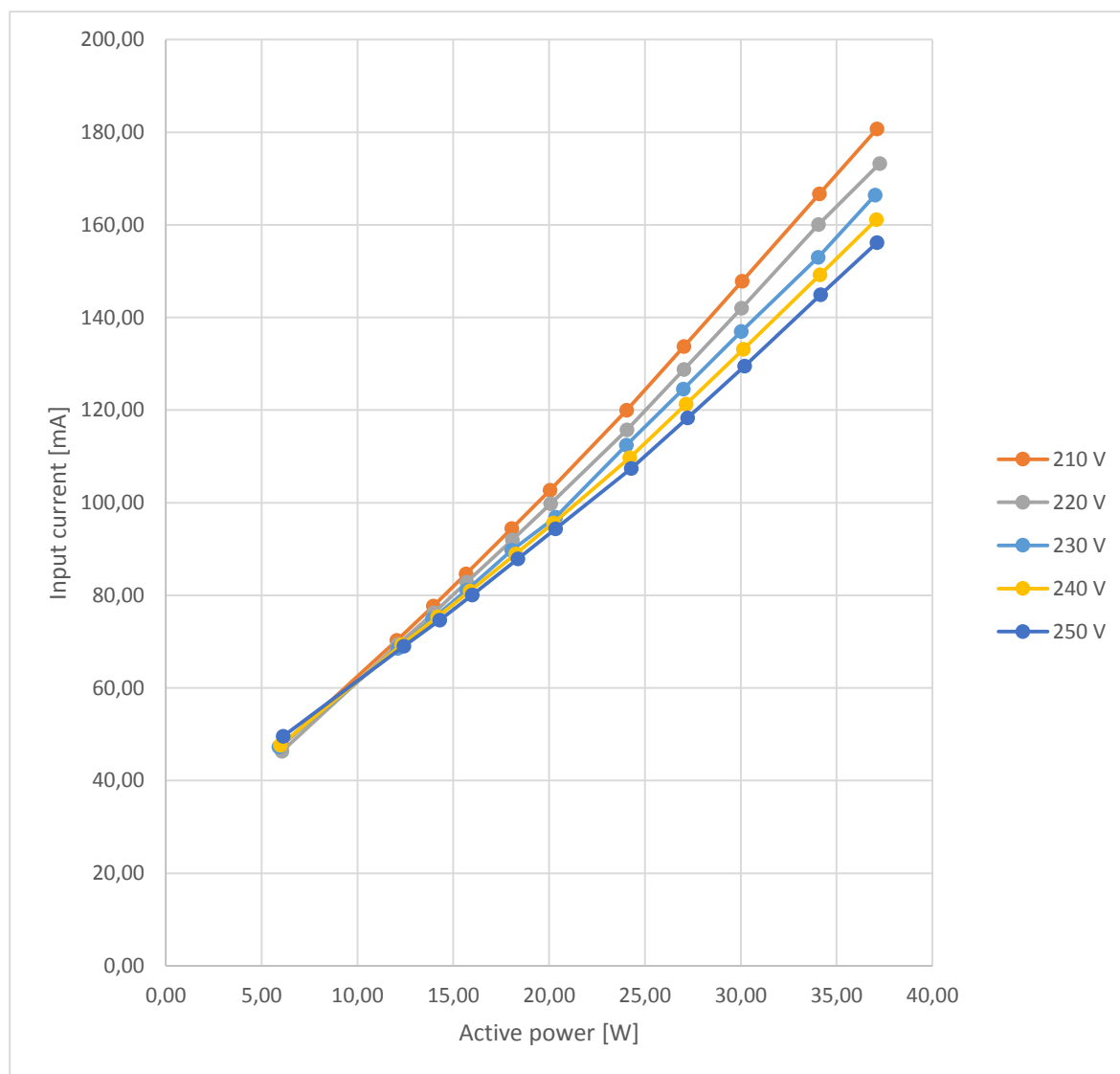




Table 5	Driver output current (active power/input voltage) curve diagram (Test sample No.1)
Model:	SR 037 740 02 011 S N DD 06 1

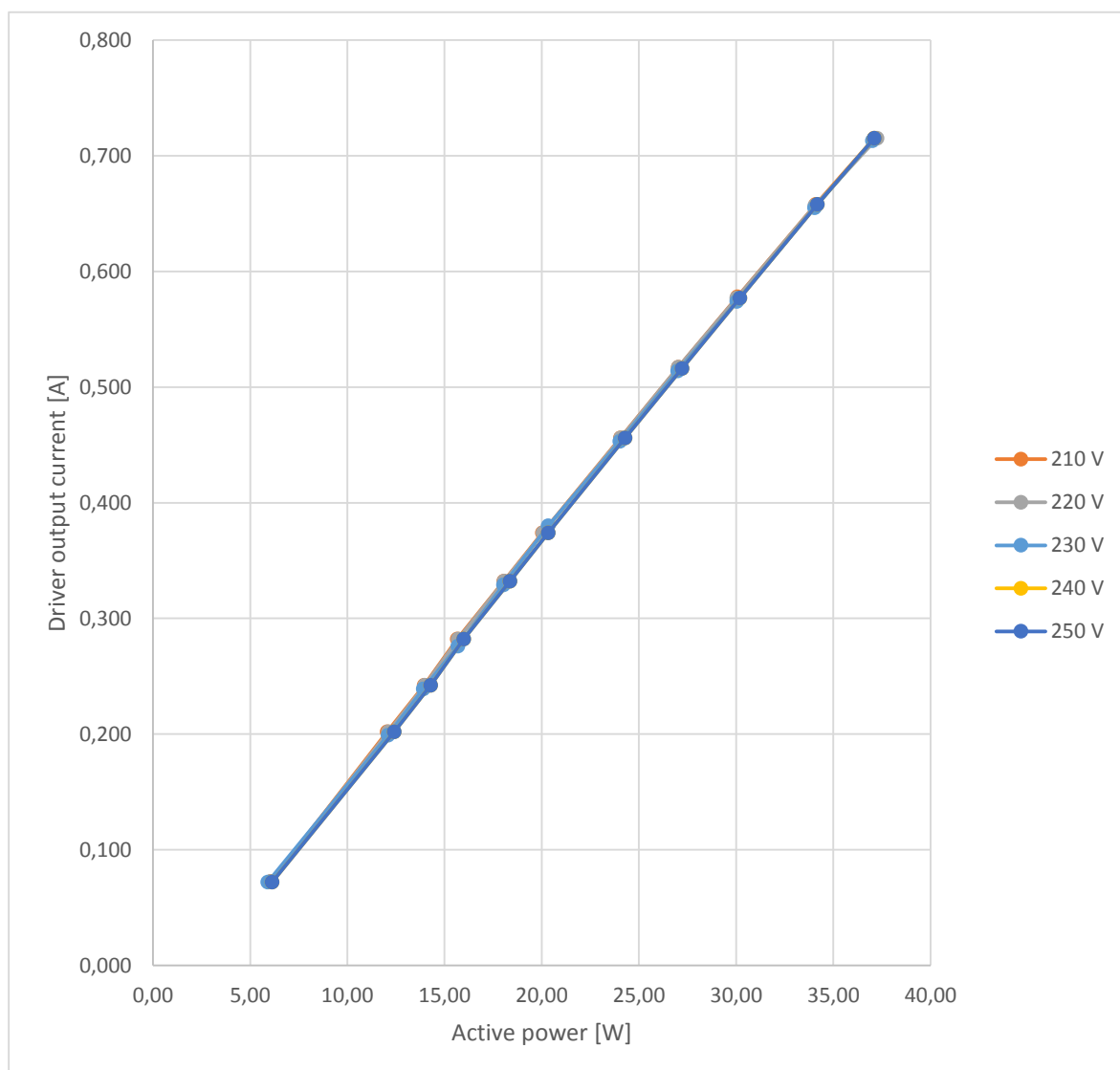




Table 6		Test data table No.1					
Model:		SR 037 740 02 011 S N DD 06 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	37,01	38,30	0,965	166,40	0,713	100,00%
2	230	34,04	35,42	0,961	153,00	0,655	91,61%
3	230	30,03	31,51	0,953	136,95	0,574	80,28%
4	230	27,00	28,65	0,942	124,54	0,514	71,89%
5	230	24,02	25,86	0,929	112,45	0,453	63,36%
6	230	20,33	22,68	0,896	96,90	0,380	53,15%
7	230	18,04	20,64	0,874	89,70	0,329	46,01%
8	230	15,69	18,66	0,841	81,14	0,276	38,60%
9	230	13,90	17,25	0,811	74,91	0,239	33,43%
10	230	12,10	15,79	0,766	68,56	0,199	27,83%
11	230	5,90	10,87	0,564	47,22	0,072	10,07%
1	210	37,10	37,95	0,977	180,70	0,715	100,00%
2	210	34,10	35,00	0,974	166,70	0,658	92,03%
3	210	30,07	31,04	0,969	147,81	0,578	80,84%
4	210	27,03	28,10	0,963	133,71	0,517	72,31%
5	210	24,05	25,19	0,955	119,95	0,456	63,78%
6	210	20,04	21,60	0,928	102,72	0,374	52,31%
7	210	18,05	19,85	0,909	94,45	0,332	46,43%



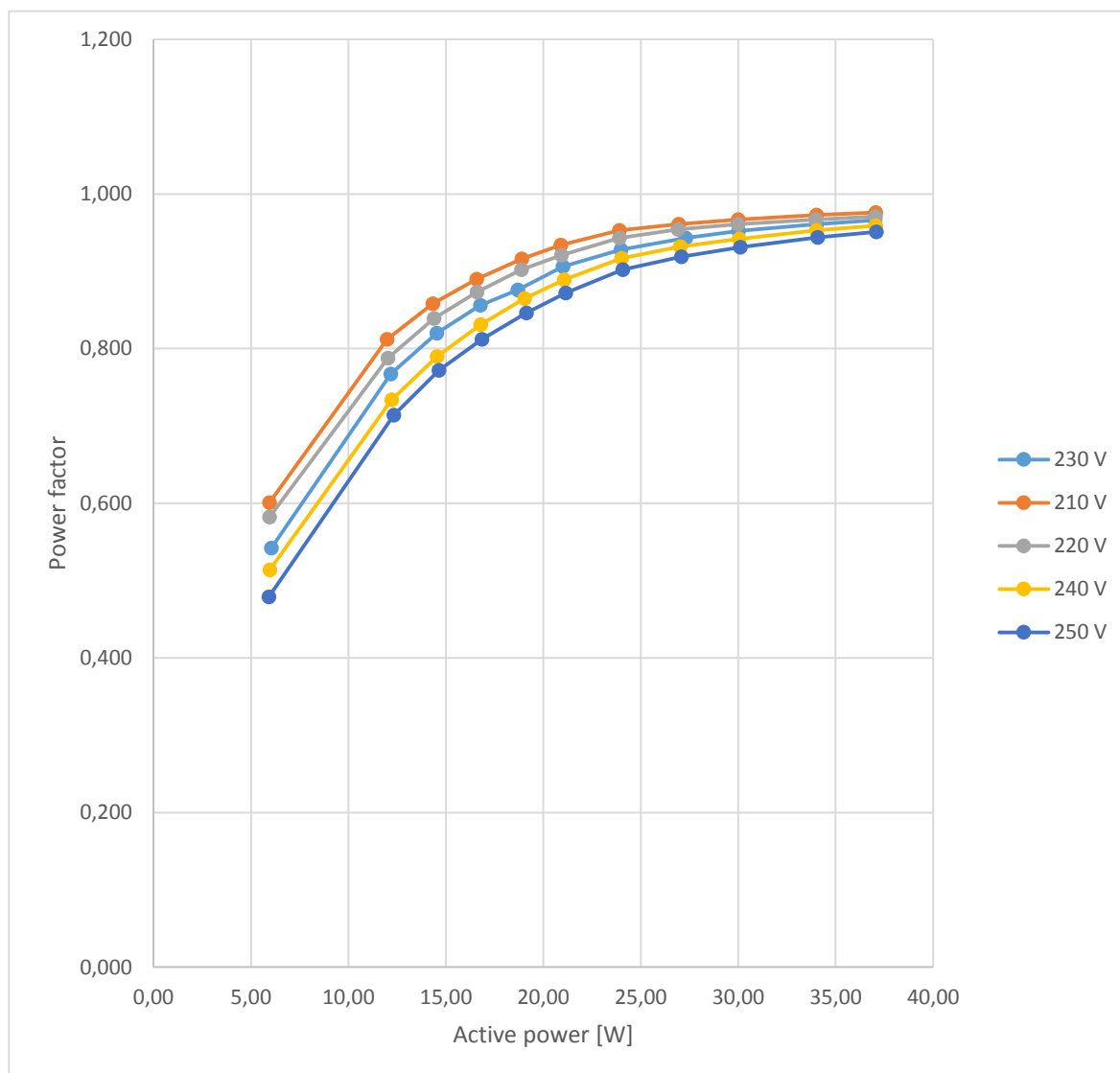
8	210	15,66	17,78	0,880	84,61	0,282	39,44%
9	210	13,95	16,32	0,854	77,70	0,242	33,85%
10	210	12,05	14,78	0,816	70,30	0,202	28,25%
11	210	6,06	10,00	0,605	47,58	0,072	10,13%
1	220	37,25	38,13	0,971	173,25	0,715	100,00%
2	220	34,05	35,22	0,967	160,05	0,657	91,89%
3	220	30,04	31,23	0,961	142,01	0,577	80,70%
4	220	27,03	28,34	0,954	128,75	0,517	72,31%
5	220	24,06	25,47	0,945	115,72	0,456	63,78%
6	220	20,07	21,95	0,914	99,75	0,374	52,31%
7	220	18,07	20,25	0,893	91,95	0,332	46,43%
8	220	15,70	18,24	0,861	82,85	0,282	39,44%
9	220	13,99	16,78	0,834	76,24	0,242	33,85%
10	220	12,11	15,29	0,792	69,41	0,202	28,25%
11	220	6,05	10,19	0,595	46,33	0,073	10,14%
1	240	37,07	38,72	0,959	161,15	0,715	100,00%
2	240	34,14	35,82	0,953	149,23	0,657	91,89%
3	240	30,14	31,95	0,943	133,11	0,577	80,70%
4	240	27,15	29,13	0,933	121,31	0,516	72,17%
5	240	24,20	26,34	0,918	109,69	0,456	63,78%
6	240	20,22	22,95	0,881	95,58	0,373	52,17%
7	240	18,25	21,35	0,855	88,91	0,332	46,43%



8	240	15,87	19,42	0,817	80,90	0,281	39,30%
9	240	14,18	18,11	0,783	75,38	0,242	33,85%
10	240	12,30	16,65	0,737	69,32	0,201	28,11%
11	240	5,98	11,90	0,516	47,65	0,067	9,37%
1	250	37,11	39,05	0,950	156,16	0,715	100,00%
2	250	34,17	36,24	0,944	144,90	0,658	92,03%
3	250	30,20	32,40	0,932	129,52	0,577	80,70%
4	250	27,22	29,60	0,919	118,32	0,516	72,17%
5	250	24,29	26,88	0,904	107,41	0,456	63,78%
6	250	20,33	23,60	0,862	94,34	0,374	52,31%
7	250	18,36	21,95	0,836	87,84	0,332	46,43%
8	250	15,99	20,00	0,798	80,08	0,282	39,44%
9	250	14,29	18,65	0,766	74,61	0,242	33,85%
10	250	12,42	17,26	0,719	68,99	0,202	28,25%
11	250	6,12	12,37	0,493	49,55	0,072	10,07%



Table 7	Power factor (active power/input voltage) curve diagram (Test No.2)
Model:	SR 037 740 02 011 S N DD 06 1



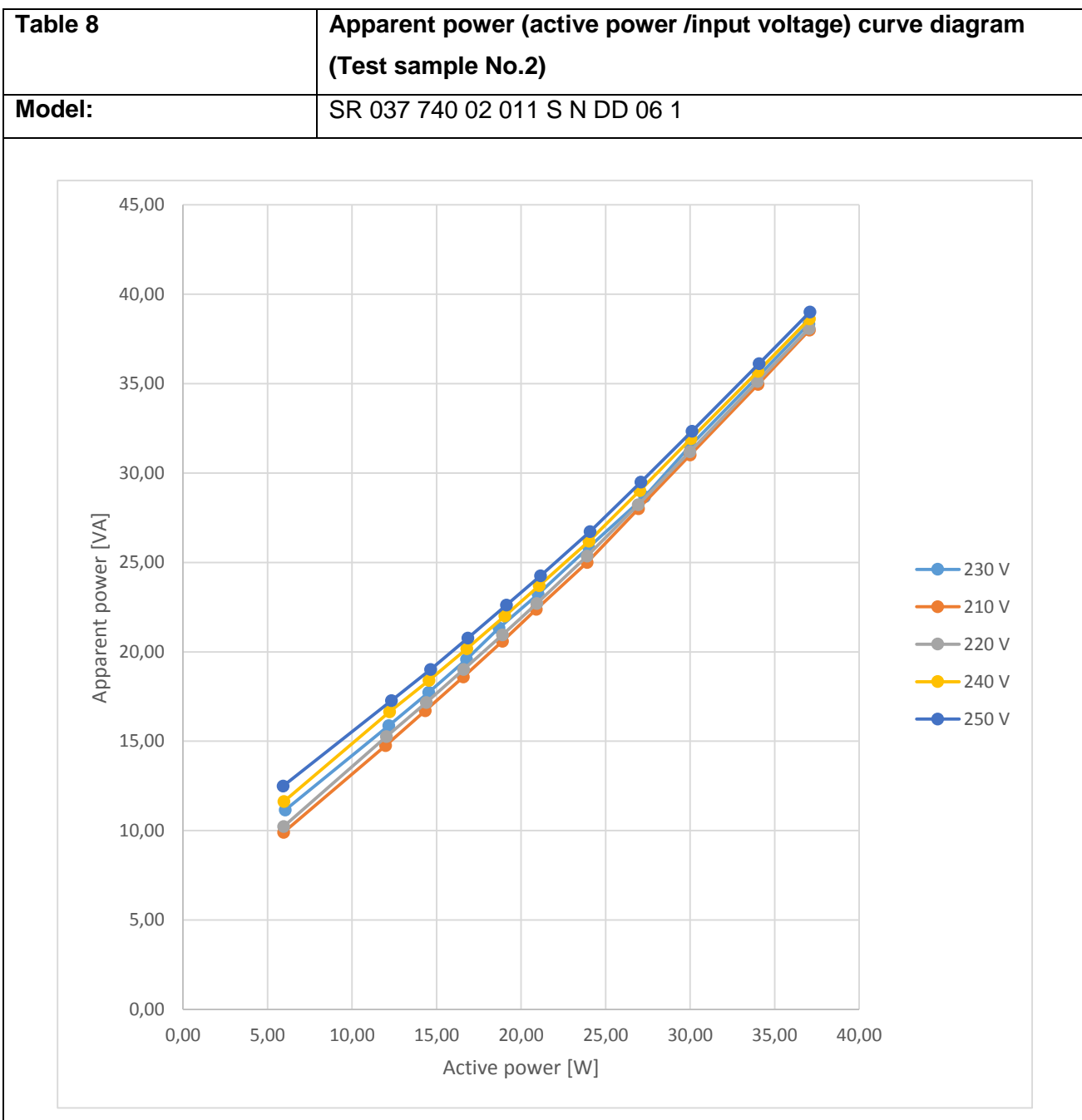




Table 9	Input current (active power/input voltage) curve diagram (Test sample No.2)
Model:	SR 037 740 02 011 S N DD 06 1

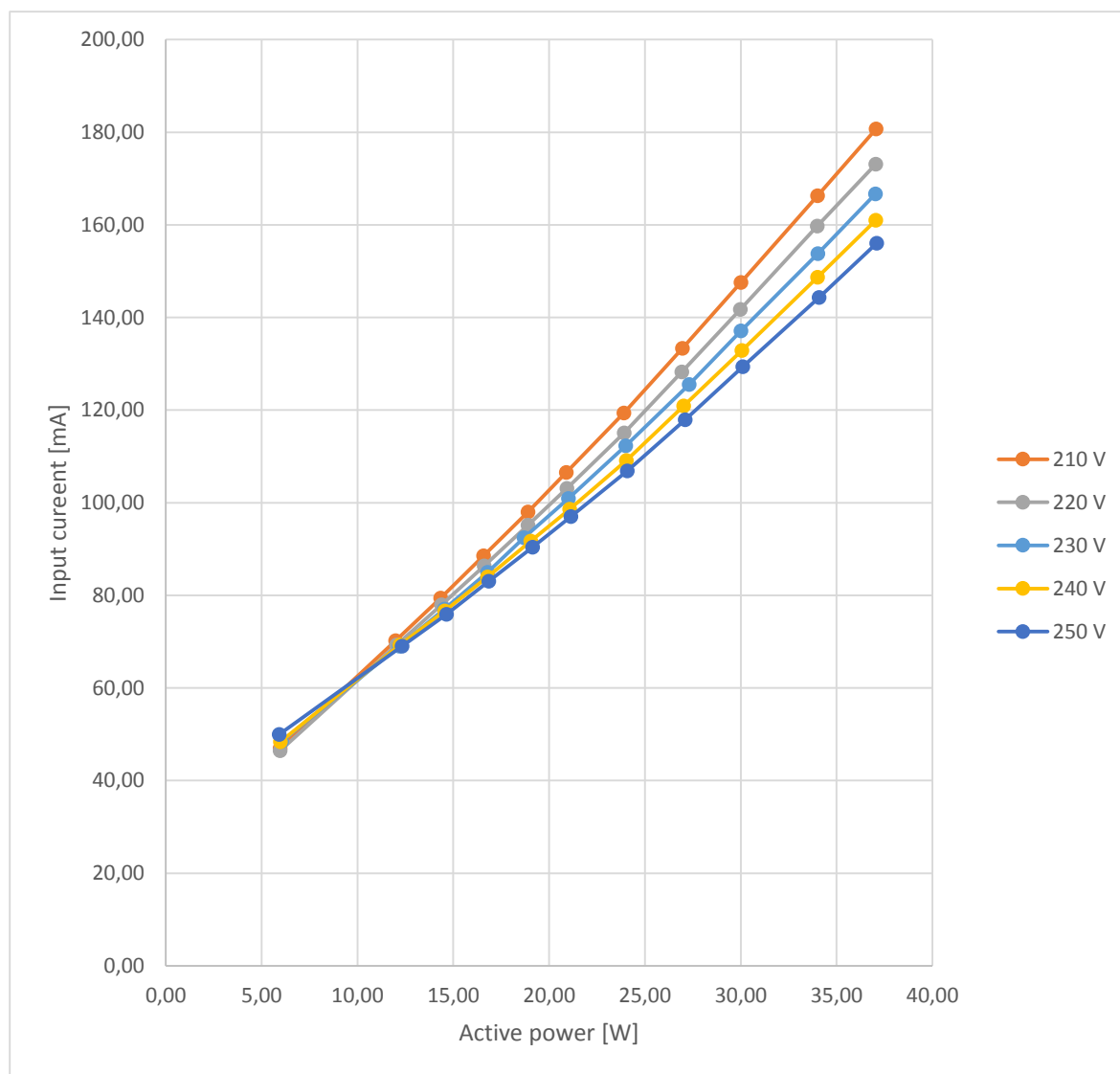




Table 10	Driver output current (active power/input voltage) curve diagram (Test sample No.2)
Model:	SR 037 740 02 011 S N DD 06 1

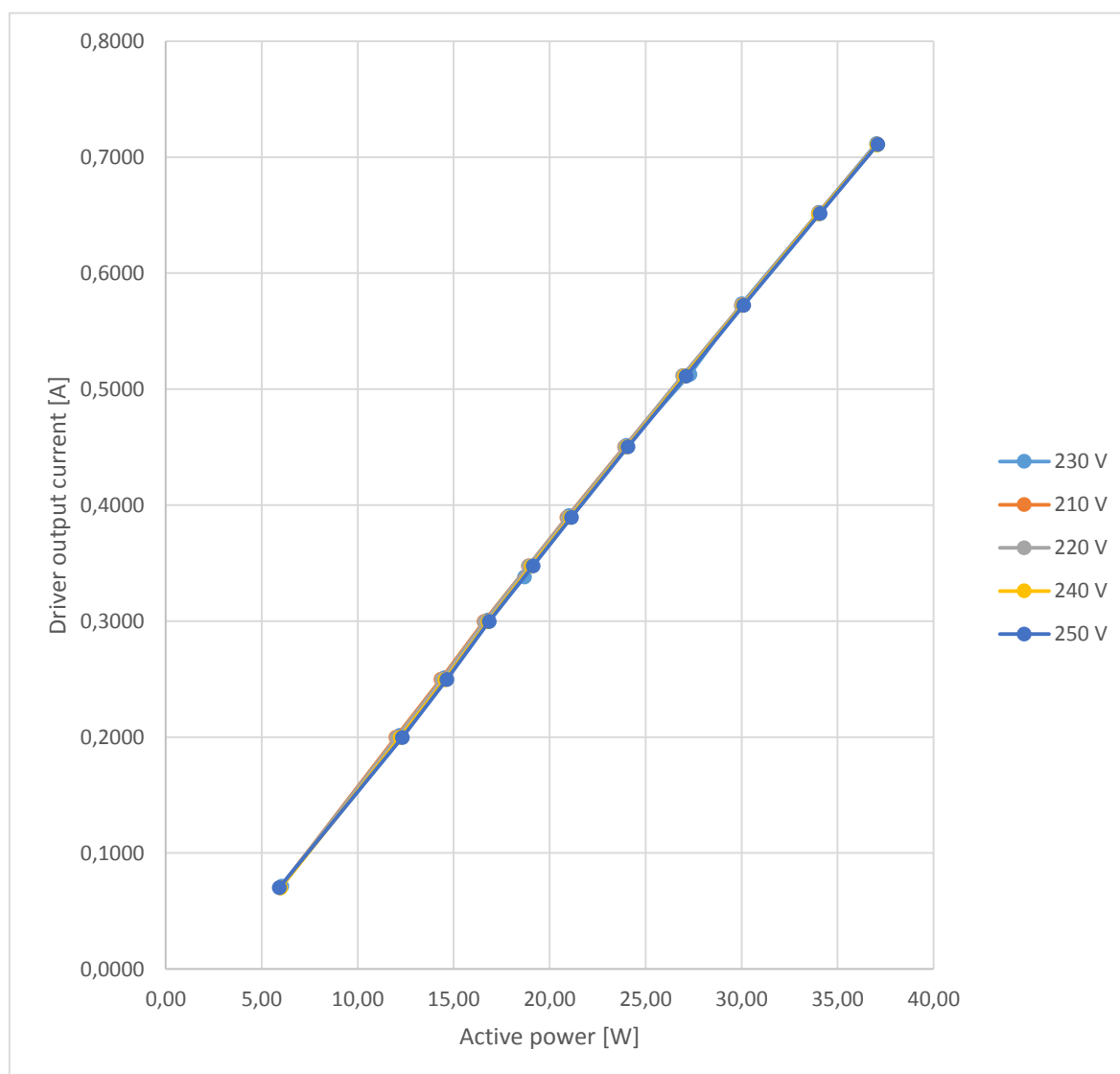




Table 11		Test data table No.2					
Model:		SR 037 740 02 011 S N DD 06 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	37,03	38,33	0,966	166,65	0,7117	100,00%
2	230	34,02	35,40	0,961	153,80	0,6525	91,68%
3	230	30,01	31,53	0,952	137,09	0,5737	80,61%
4	230	27,30	28,67	0,943	125,50	0,5128	72,05%
5	230	23,99	25,85	0,928	112,30	0,4516	63,45%
6	230	21,01	23,22	0,906	100,90	0,3911	54,95%
7	230	18,69	21,34	0,876	92,42	0,3380	47,49%
8	230	16,78	19,57	0,856	84,98	0,3010	42,29%
9	230	14,54	17,73	0,820	77,05	0,2512	35,30%
10	230	12,18	15,87	0,767	68,98	0,2014	28,30%
11	230	6,04	11,15	0,542	48,45	0,0716	10,06%
1	210	37,06	37,99	0,976	180,70	0,7112	100,00%
2	210	34,01	34,95	0,973	166,30	0,6516	91,62%
3	210	30,00	31,01	0,967	147,55	0,5725	80,50%
4	210	26,95	28,00	0,961	133,36	0,5115	71,92%
5	210	23,90	25,00	0,953	119,34	0,4504	63,33%
6	210	20,90	22,38	0,934	106,52	0,3895	54,77%
7	210	18,89	20,59	0,916	98,00	0,3475	48,86%



8	210	16,57	18,59	0,890	88,50	0,2997	42,14%
9	210	14,33	16,70	0,858	79,43	0,2498	35,12%
10	210	11,99	14,76	0,812	70,23	0,1998	28,09%
11	210	5,95	9,90	0,601	47,01	0,0701	9,86%
1	220	37,04	38,09	0,971	173,10	0,7107	100,00%
2	220	33,99	35,12	0,967	159,71	0,6513	91,64%
3	220	29,98	31,19	0,961	141,72	0,5721	80,50%
4	220	26,92	28,23	0,954	128,26	0,5117	72,00%
5	220	23,91	25,35	0,943	115,08	0,4502	63,35%
6	220	20,92	22,70	0,921	103,11	0,3894	54,79%
7	220	18,89	20,94	0,902	95,17	0,3475	48,90%
8	220	16,60	19,01	0,873	86,35	0,2995	42,14%
9	220	14,39	17,17	0,839	77,96	0,2496	35,12%
10	220	12,03	15,25	0,788	69,30	0,1997	28,10%
11	220	5,96	10,23	0,582	46,47	0,0701	9,86%
1	240	37,05	38,62	0,959	160,97	0,7104	100,00%
2	240	34,01	35,69	0,953	148,70	0,6512	91,67%
3	240	30,05	31,92	0,942	132,86	0,5722	80,55%
4	240	27,02	29,01	0,932	120,87	0,5112	71,96%
5	240	24,02	26,19	0,917	109,11	0,4502	63,37%
6	240	21,07	23,70	0,889	98,60	0,3894	54,81%
7	240	19,03	22,01	0,865	91,72	0,3474	48,90%



8	240	16,78	20,17	0,831	83,99	0,2995	42,16%
9	240	14,55	18,40	0,790	76,61	0,2495	35,12%
10	240	12,21	16,64	0,734	69,27	0,1997	28,11%
11	240	5,97	11,63	0,514	48,38	0,0700	9,85%
1	250	37,09	39,01	0,951	156,01	0,7109	100,00%
2	250	34,08	36,12	0,944	144,32	0,6514	91,63%
3	250	30,11	32,34	0,931	129,34	0,5724	80,52%
4	250	27,09	29,49	0,919	117,92	0,5113	71,92%
5	250	24,08	26,72	0,902	106,89	0,4502	63,33%
6	250	21,14	24,25	0,872	97,02	0,3894	54,78%
7	250	19,13	22,62	0,846	90,41	0,3475	48,88%
8	250	16,85	20,77	0,812	83,07	0,2998	42,17%
9	250	14,65	19,01	0,772	75,88	0,2496	35,11%
10	250	12,33	17,27	0,714	69,00	0,1997	28,09%
11	250	5,91	12,49	0,479	49,97	0,0701	9,86%



Table 12	Power factor (active power/input voltage) curve diagram (Test No.3)
Model:	SR 037 740 02 011 S N DD 06 1

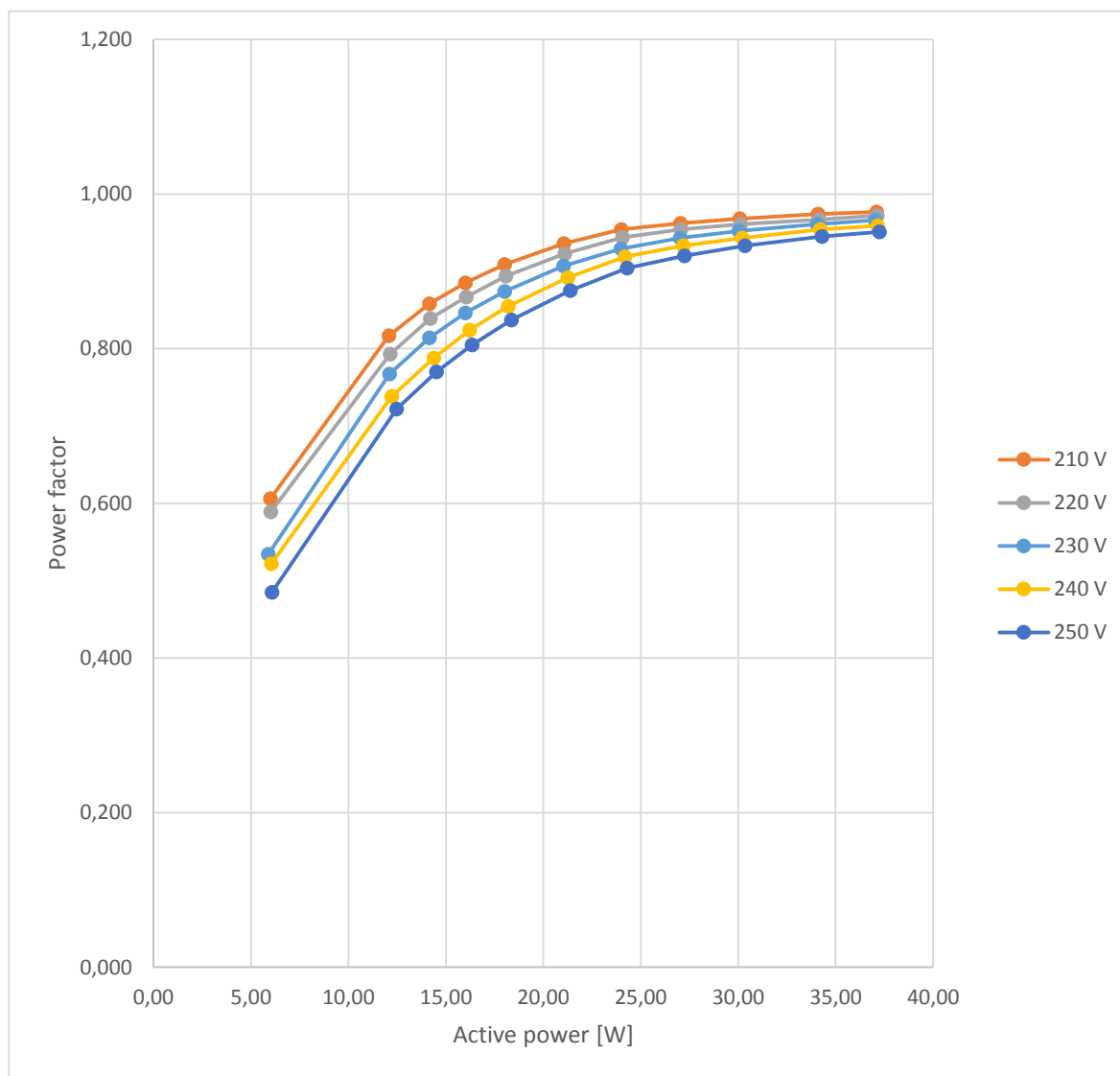




Table 13	Apparent power (active power /input voltage) curve diagram (Test sample No.3)
Model:	SR 037 740 02 011 S N DD 06 1

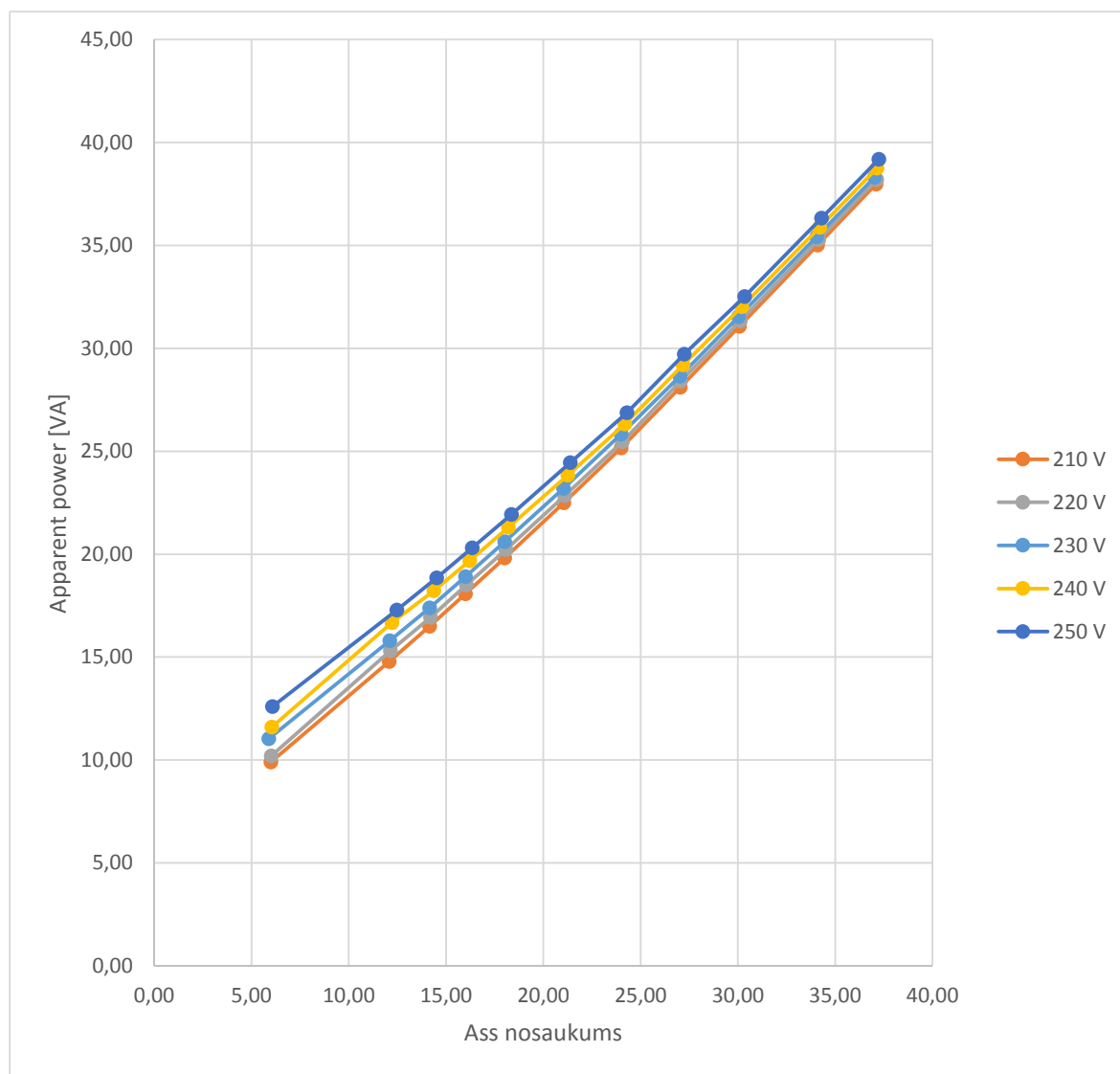




Table 14	Input current (active power /input voltage) curve diagram (Test sample No.3)
Model:	SR 037 740 02 011 S N DD 06 1

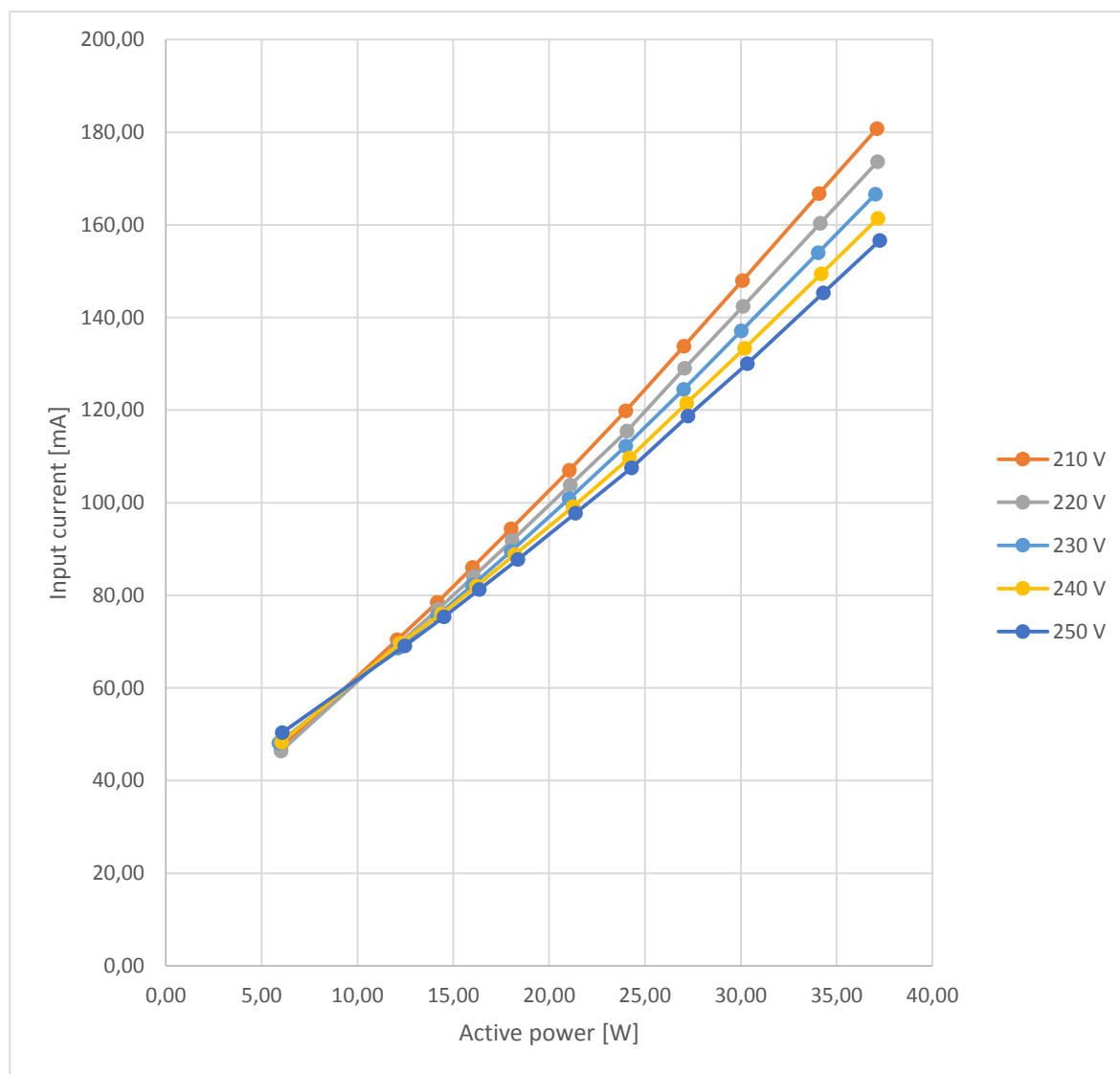




Table 15	Driver output current (active power/input voltage) curve diagram (Test sample No.3)
Model:	SR 037 740 02 011 S N DD 06 1

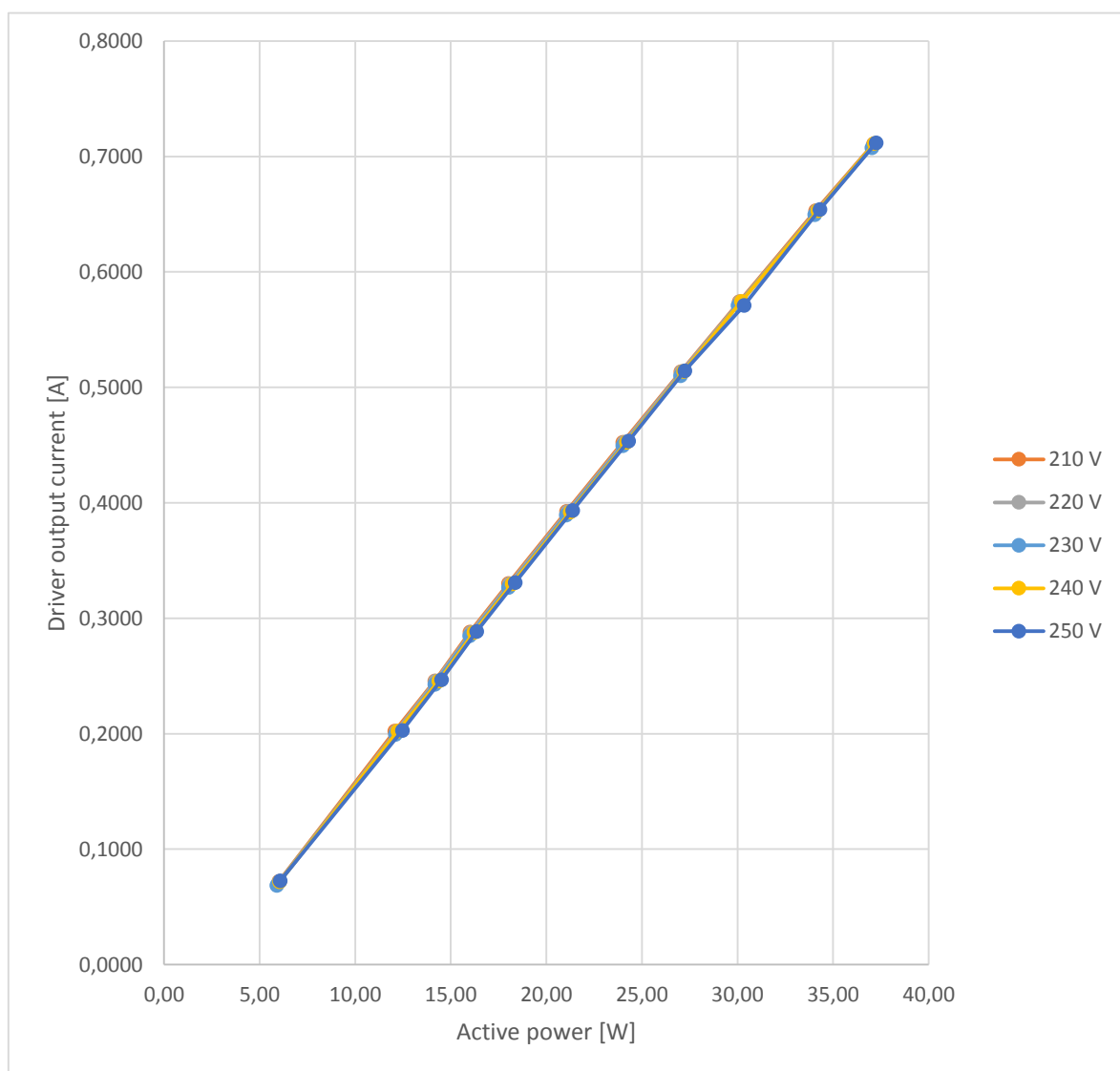




Table 16		Test data table No.3					
Model:		SR 037 740 02 011 S N DD 06 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	37,02	38,31	0,966	166,61	0,7076	100,00%
2	230	34,04	35,42	0,961	153,98	0,6497	91,82%
3	230	30,03	31,54	0,952	137,07	0,5709	80,68%
4	230	27,02	28,65	0,943	124,48	0,5102	72,10%
5	230	23,99	25,83	0,929	112,25	0,4495	63,52%
6	230	21,04	23,20	0,907	100,86	0,3893	55,02%
7	230	18,01	20,61	0,874	89,55	0,3267	46,17%
8	230	15,99	18,91	0,846	82,20	0,2848	40,25%
9	230	14,16	17,39	0,814	75,55	0,2427	34,30%
10	230	12,10	15,80	0,767	68,63	0,1993	28,17%
11	230	5,89	11,03	0,534	48,12	0,0687	9,71%
1	210	37,10	37,98	0,977	180,76	0,7108	100,00%
2	210	34,09	35,02	0,974	166,72	0,6531	91,88%
3	210	30,08	31,07	0,968	147,96	0,5742	80,78%
4	210	27,04	28,11	0,962	133,77	0,5135	72,24%
5	210	24,00	25,16	0,954	119,84	0,4523	63,63%
6	210	21,05	22,49	0,936	107,02	0,3925	55,22%
7	210	18,01	19,82	0,909	94,34	0,3301	46,44%



8	210	16,00	18,07	0,885	86,01	0,2881	40,53%
9	210	14,16	16,49	0,858	78,50	0,2458	34,58%
10	210	12,07	14,79	0,817	70,37	0,2022	28,45%
11	210	6,00	9,90	0,606	47,14	0,0720	10,13%
1	220	37,14	38,20	0,972	173,60	0,7109	100,00%
2	220	34,15	35,29	0,967	160,35	0,6530	91,86%
3	220	30,12	31,34	0,961	142,39	0,5742	80,77%
4	220	27,06	28,40	0,954	129,02	0,5135	72,23%
5	220	24,06	25,46	0,944	115,45	0,4524	63,64%
6	220	21,10	22,84	0,923	103,81	0,3924	55,20%
7	220	18,07	20,22	0,894	91,85	0,3299	46,41%
8	220	16,05	18,51	0,867	84,05	0,2878	40,48%
9	220	14,20	16,93	0,839	76,95	0,2457	34,56%
10	220	12,14	15,30	0,793	69,50	0,2020	28,41%
11	220	6,01	10,20	0,589	46,35	0,0717	10,09%
1	240	37,15	38,76	0,959	161,41	0,7114	100,00%
2	240	34,20	35,88	0,954	149,40	0,6531	91,80%
3	240	30,20	32,02	0,943	133,30	0,5743	80,73%
4	240	27,18	29,19	0,933	121,46	0,5137	72,21%
5	240	24,19	26,32	0,919	109,62	0,4524	63,59%
6	240	21,25	23,83	0,892	99,12	0,3920	55,10%
7	240	18,20	21,31	0,855	88,77	0,3299	46,37%



8	240	16,21	19,68	0,824	81,95	0,2877	40,44%
9	240	14,37	18,22	0,788	75,97	0,2458	34,55%
10	240	12,22	16,67	0,738	69,68	0,2022	28,42%
11	240	6,04	11,59	0,522	48,30	0,0719	10,11%
1	250	37,25	39,18	0,951	156,65	0,7117	100,00%
2	250	34,30	36,33	0,945	145,31	0,6541	91,91%
3	250	30,35	32,52	0,933	129,99	0,5709	80,22%
4	250	27,24	29,71	0,920	118,73	0,5143	72,26%
5	250	24,30	26,88	0,904	107,51	0,4535	63,72%
6	250	21,38	24,45	0,875	97,72	0,3933	55,26%
7	250	18,36	21,93	0,837	87,75	0,3308	46,48%
8	250	16,35	20,31	0,805	81,23	0,2887	40,56%
9	250	14,52	18,85	0,770	75,35	0,2467	34,66%
10	250	12,47	17,28	0,722	69,09	0,2029	28,51%
11	250	6,07	12,59	0,485	50,36	0,0727	10,21%



Table 17	Power factor (active power/input voltage) curve diagram (Test No.4)
Model:	SR 037 740 02 011 S N DD 06 1

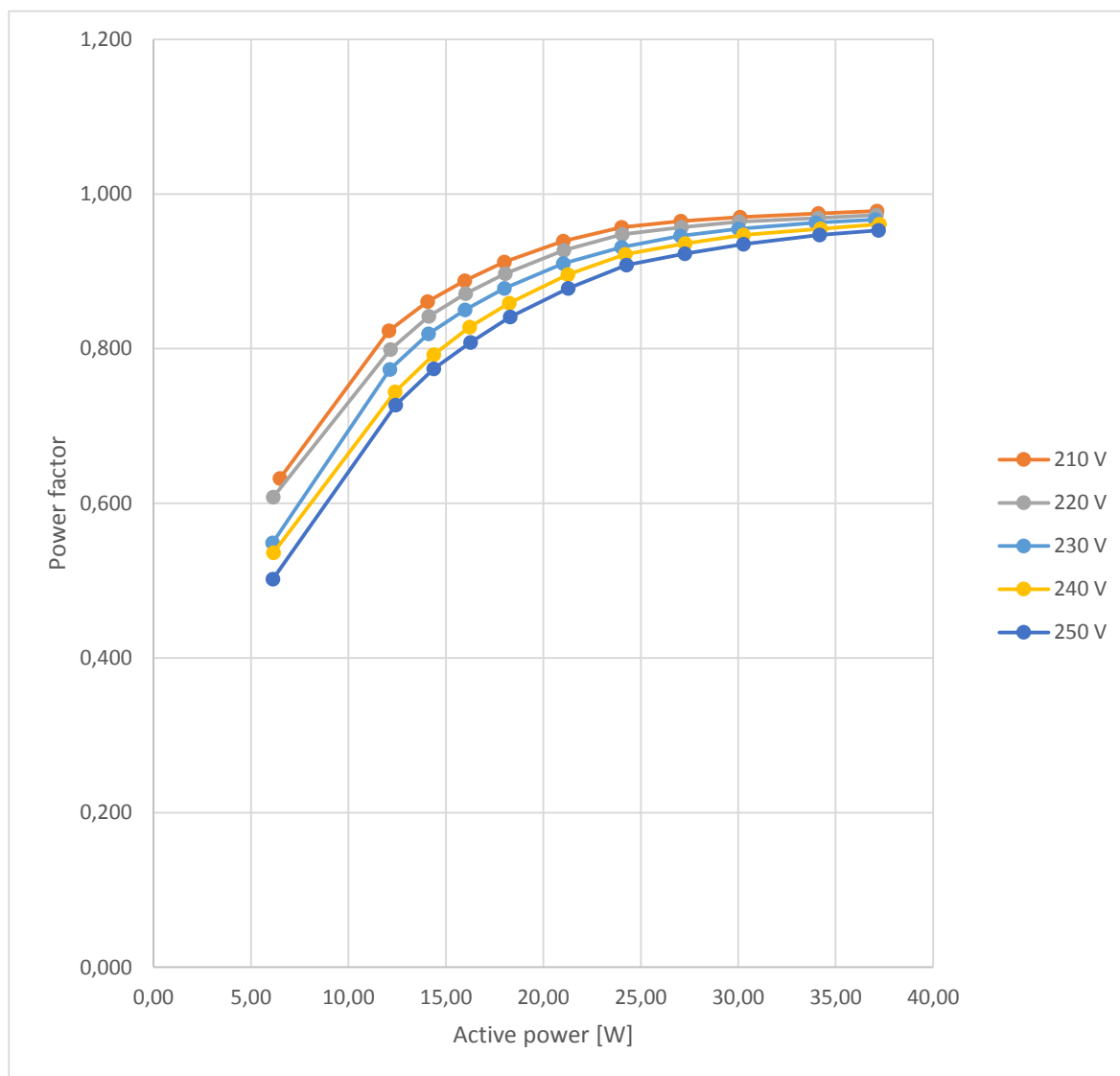




Table 18	Apparent power (active power /input voltage) curve diagram (Test sample No.4)
Model:	SR 037 740 02 011 S N DD 06 1

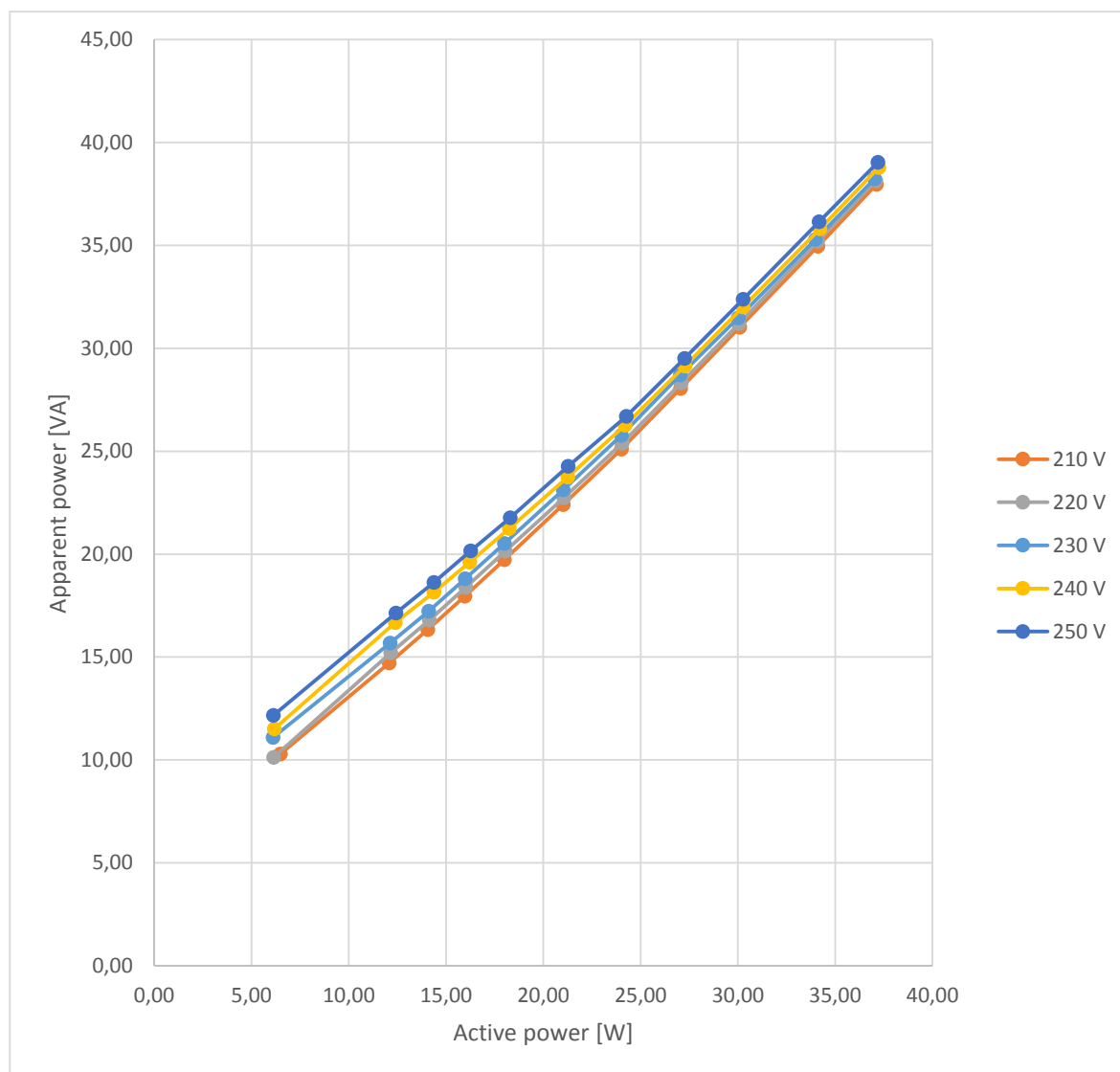




Table 19	Input current (active power /input voltage) curve diagram (Test sample No.4)
Model:	SR 037 740 02 011 S N DD 06 1

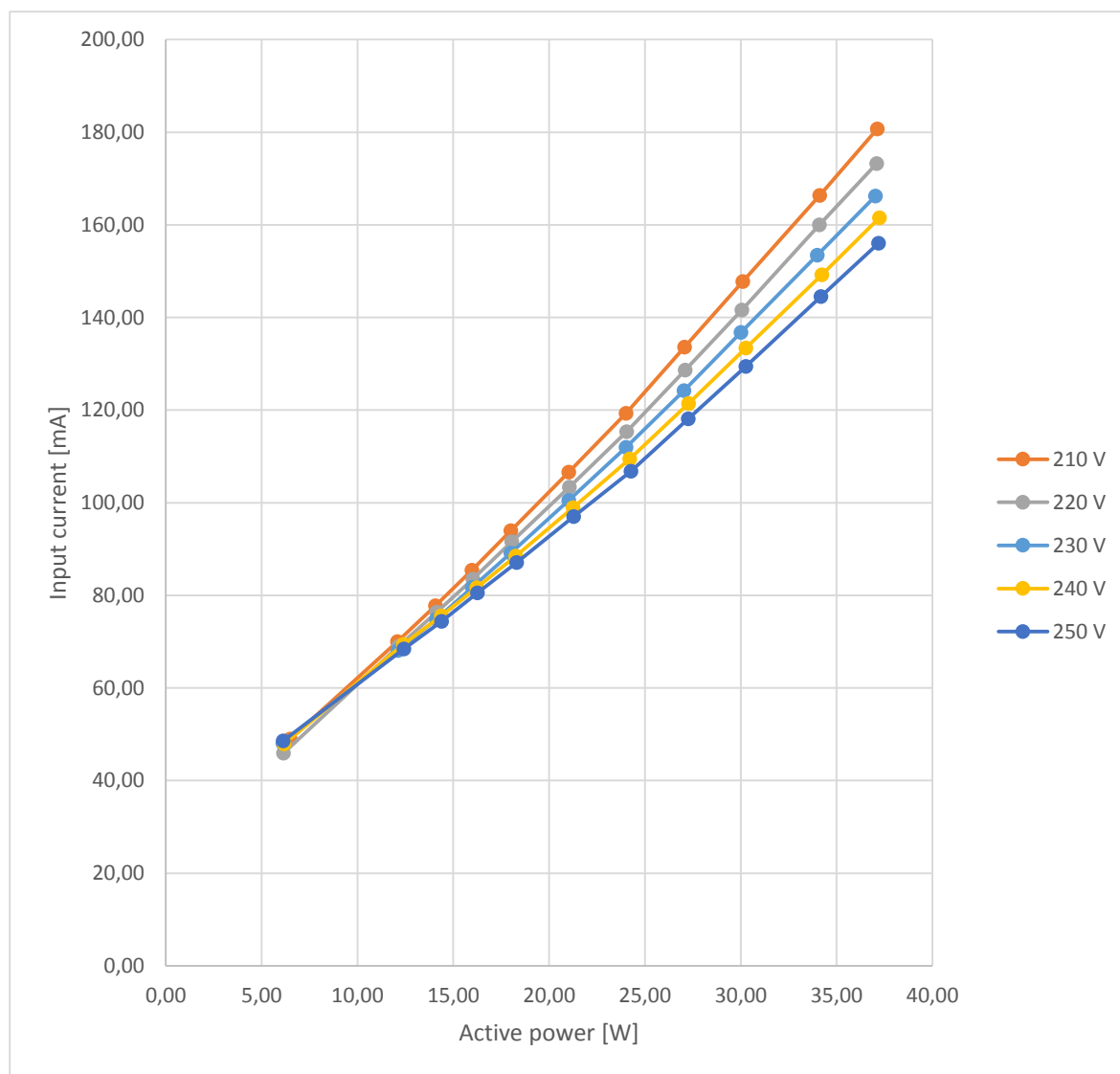




Table 20	Driver output current (active power/input voltage) curve diagram (Test sample No.4)
Model:	SR 037 740 02 011 S N DD 06 1

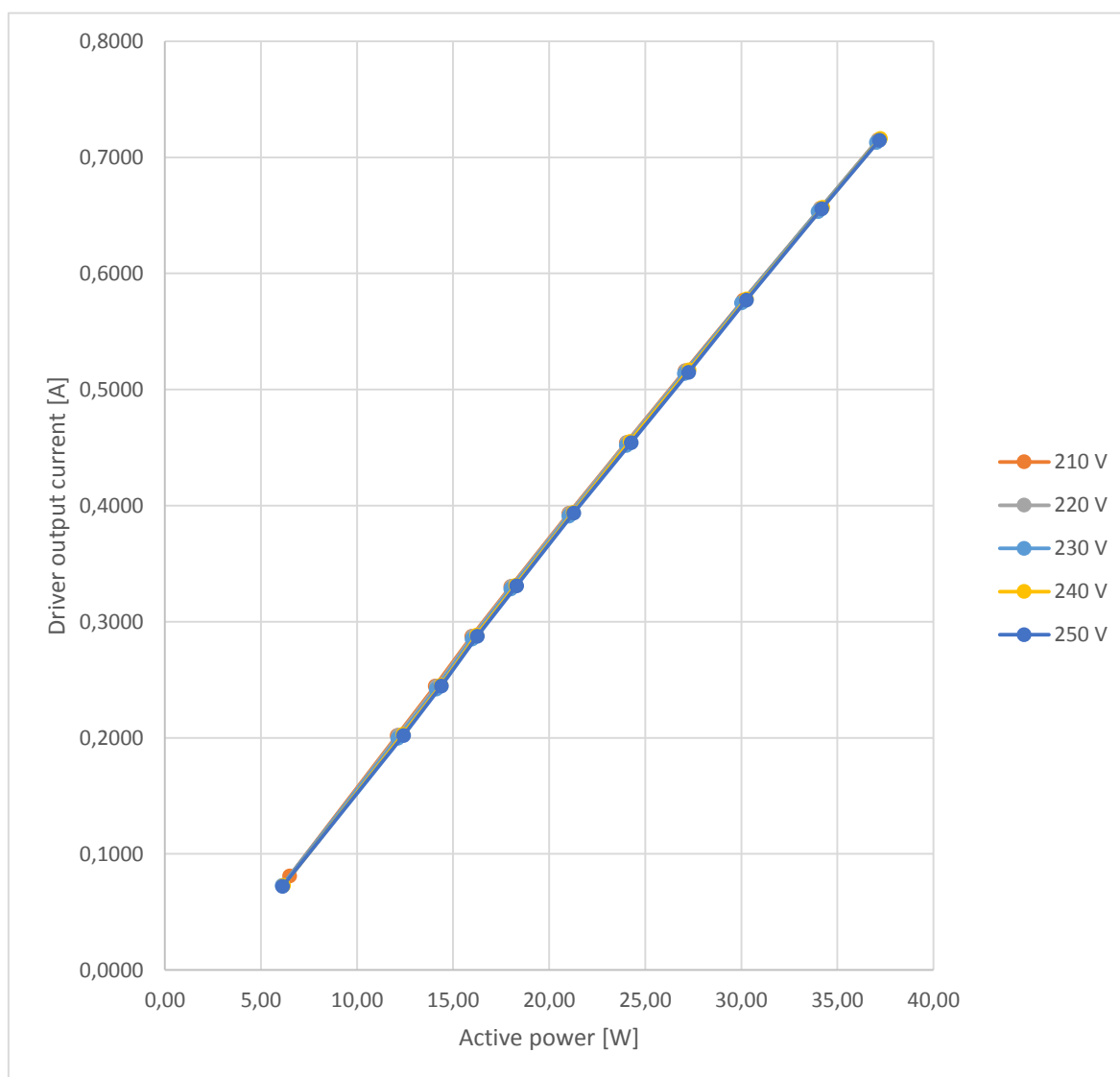




Table 21		Test data table No.4					
Model:		SR 037 740 02 011 S N DD 06 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	37,03	38,23	0,967	166,22	0,7129	100,00%
2	230	33,99	35,29	0,963	153,42	0,6532	91,63%
3	230	30,01	31,47	0,955	136,75	0,5747	80,61%
4	230	27,04	28,70	0,946	124,22	0,5137	72,06%
5	230	24,01	25,77	0,931	111,98	0,4518	63,37%
6	230	21,02	23,12	0,910	100,51	0,3909	54,83%
7	230	18,00	20,51	0,878	89,15	0,3284	46,07%
8	230	15,98	18,80	0,850	81,71	0,2851	39,99%
9	230	14,11	17,23	0,819	74,84	0,2420	33,95%
10	230	12,12	15,67	0,773	68,11	0,1996	28,00%
11	230	6,10	11,09	0,549	48,02	0,0729	10,23%
1	210	37,12	37,97	0,978	180,72	0,7153	100,00%
2	210	34,11	34,96	0,975	166,34	0,6562	91,74%
3	210	30,10	31,02	0,970	147,74	0,5771	80,68%
4	210	27,06	28,05	0,965	133,59	0,5162	72,17%
5	210	24,01	25,10	0,957	119,29	0,4543	63,51%
6	210	21,02	22,41	0,939	106,61	0,3935	55,01%
7	210	18,00	19,72	0,912	93,95	0,3305	46,20%



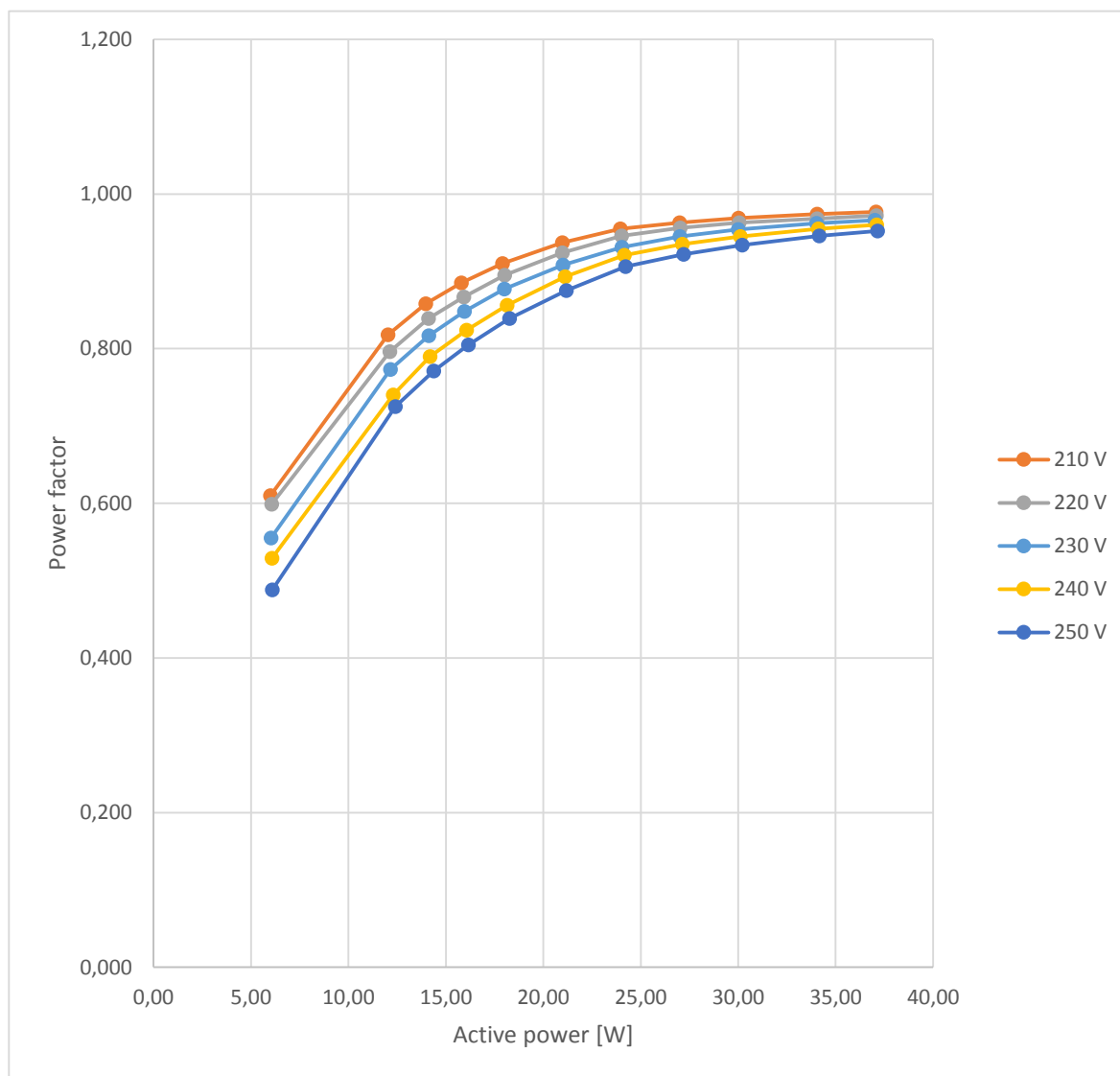
8	210	15,96	17,96	0,888	85,39	0,2876	40,21%
9	210	14,06	16,34	0,861	77,74	0,2445	34,18%
10	210	12,08	14,71	0,823	69,99	0,2021	28,25%
11	210	6,49	10,29	0,632	48,93	0,0810	11,32%
1	220	37,09	38,14	0,973	173,23	0,7145	100,00%
2	220	34,10	35,20	0,969	160,01	0,6560	91,81%
3	220	30,05	31,19	0,964	141,63	0,5754	80,53%
4	220	27,09	28,32	0,957	128,66	0,5162	72,25%
5	220	24,05	25,39	0,948	115,31	0,4545	63,61%
6	220	21,06	22,73	0,927	103,34	0,3934	55,06%
7	220	18,05	20,14	0,897	91,55	0,3307	46,28%
8	220	16,01	18,38	0,871	83,50	0,2875	40,24%
9	220	14,13	16,79	0,842	76,34	0,2444	34,21%
10	220	12,15	15,20	0,799	69,00	0,2022	28,30%
11	220	6,14	10,13	0,608	45,90	0,0729	10,20%
1	240	37,24	38,78	0,961	161,55	0,7162	100,00%
2	240	34,22	35,81	0,955	149,22	0,6569	91,72%
3	240	30,27	32,01	0,947	133,40	0,5781	80,72%
4	240	27,27	29,14	0,936	121,39	0,5171	72,20%
5	240	24,21	26,26	0,922	109,42	0,4554	63,59%
6	240	21,25	23,75	0,896	98,95	0,3943	55,05%
7	240	18,25	21,24	0,859	88,46	0,3314	46,27%



8	240	16,22	19,61	0,828	81,66	0,2885	40,28%
9	240	14,37	18,15	0,792	75,55	0,2453	34,25%
10	240	12,39	16,67	0,744	69,38	0,2030	28,34%
11	240	6,16	11,51	0,536	47,88	0,0729	10,18%
1	250	37,19	39,04	0,953	156,02	0,7147	100,00%
2	250	34,18	36,15	0,947	144,53	0,6557	91,74%
3	250	30,27	32,38	0,935	129,40	0,5771	80,75%
4	250	27,26	29,51	0,923	118,10	0,5150	72,06%
5	250	24,26	26,70	0,908	106,81	0,4543	63,57%
6	250	21,28	24,27	0,878	97,02	0,3936	55,07%
7	250	18,30	21,77	0,841	87,09	0,3308	46,29%
8	250	16,26	20,16	0,808	80,52	0,2874	40,21%
9	250	14,38	18,62	0,774	74,39	0,2446	34,22%
10	250	12,42	17,13	0,727	68,44	0,2021	28,28%
11	250	6,12	12,16	0,502	48,57	0,0721	10,09%



Table 22	Power factor (active power/input voltage) curve diagram (Test No.5)
Model:	SR 037 740 02 011 S N DD 06 1



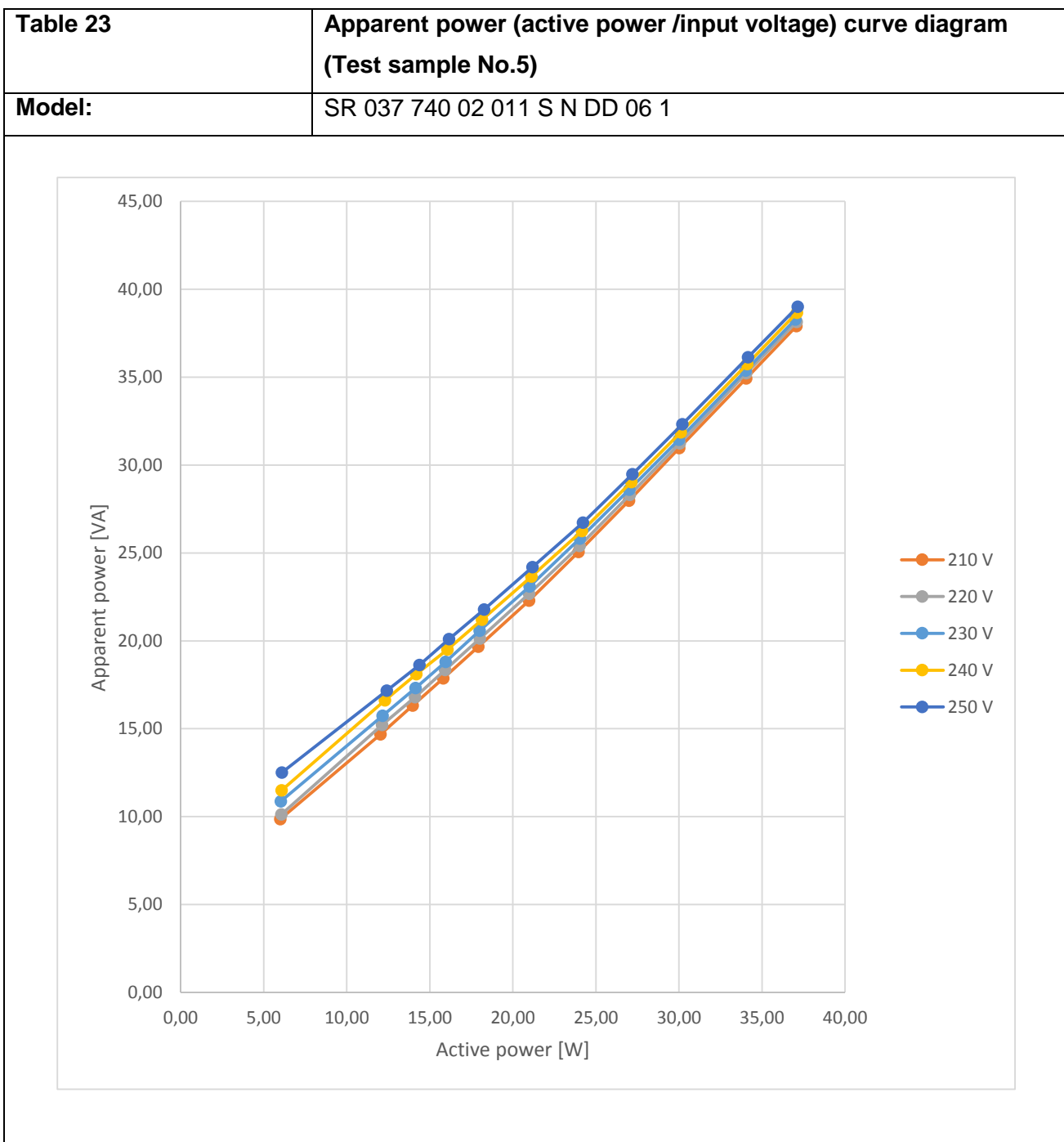




Table 24	Input current (active power /input voltage) curve diagram (Test sample No.5)
Model:	SR 037 740 02 011 S N DD 06 1

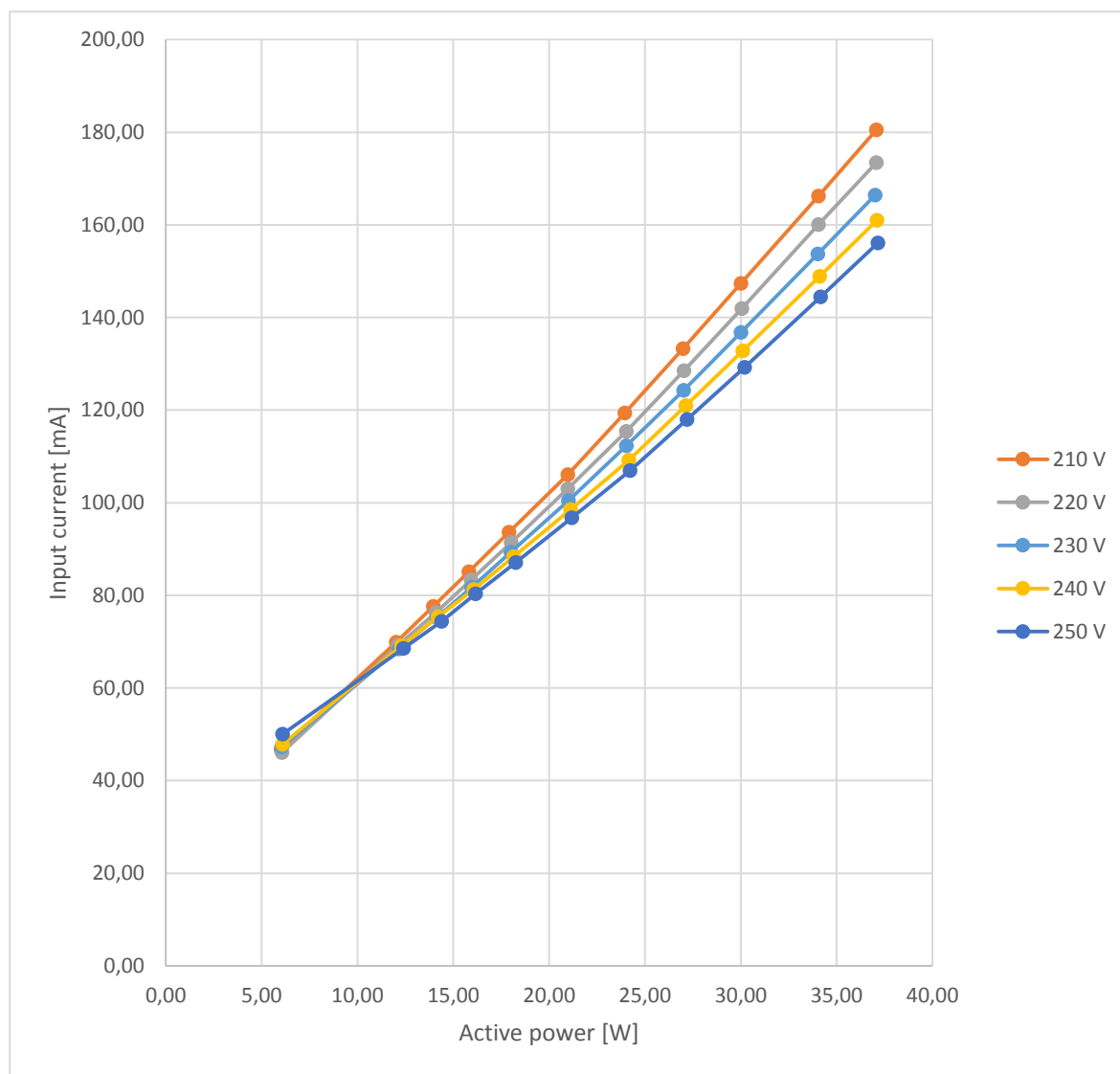




Table 25	Driver output current (active power/input voltage) curve diagram (Test sample No.5)
Model:	SR 037 740 02 011 S N DD 06 1

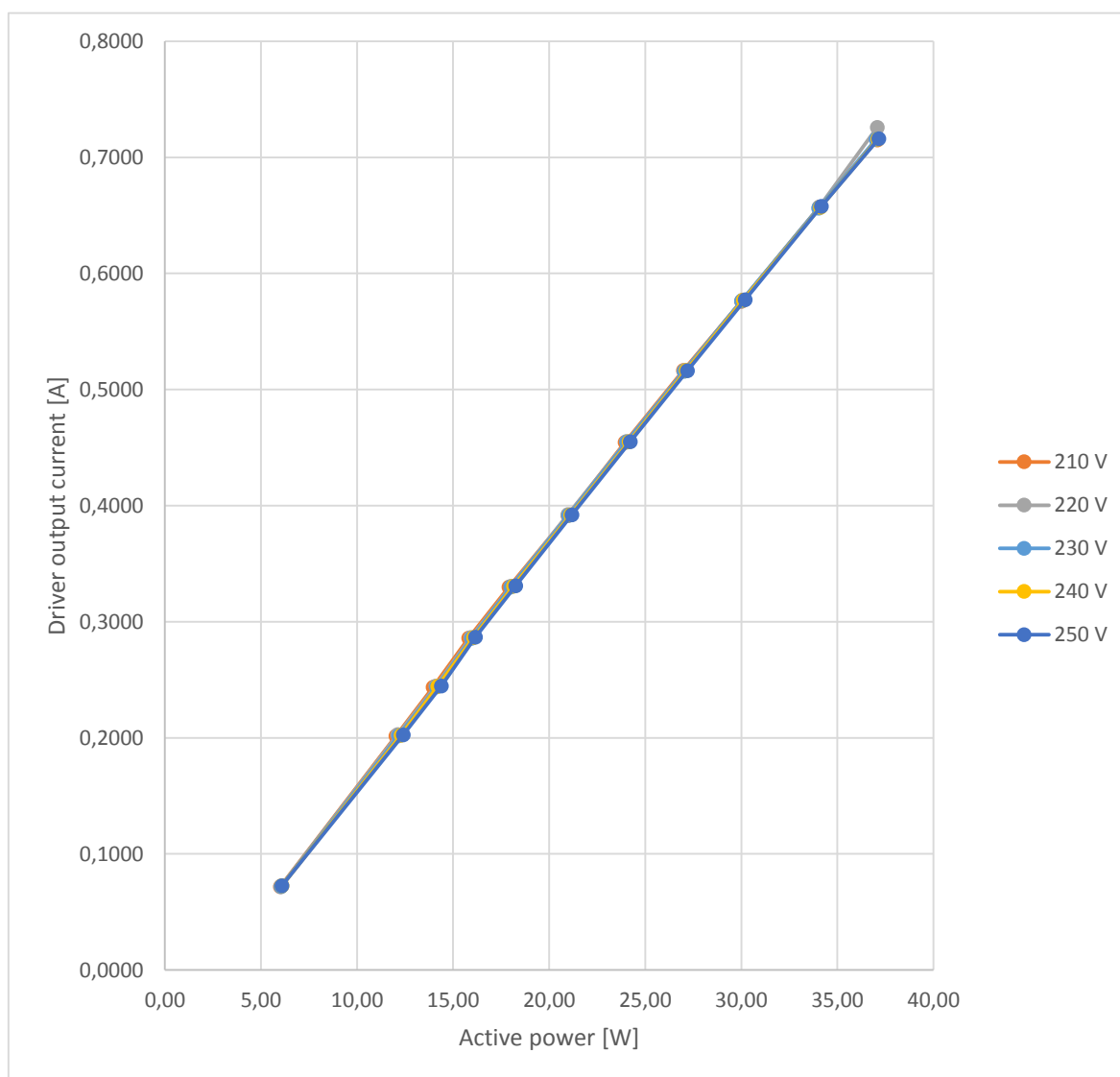




Table 26		Test data table No.5					
Model:		SR 037 740 02 011 S N DD 06 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	37,01	38,28	0,966	166,43	0,7154	100,00%
2	230	34,02	35,38	0,962	153,70	0,6563	91,74%
3	230	30,00	31,45	0,954	136,76	0,5762	80,54%
4	230	27,01	28,60	0,945	124,26	0,5156	72,07%
5	230	24,03	25,82	0,931	112,30	0,4547	63,56%
6	230	21,00	23,09	0,908	100,42	0,3915	54,72%
7	230	18,00	20,57	0,877	89,33	0,3299	46,11%
8	230	15,95	18,81	0,848	81,69	0,2857	39,94%
9	230	14,13	17,31	0,817	75,20	0,2438	34,08%
10	230	12,16	15,74	0,773	68,42	0,2018	28,21%
11	230	6,03	10,87	0,555	47,21	0,0718	10,04%
1	210	37,07	37,90	0,977	180,49	0,7150	100,00%
2	210	34,05	34,93	0,974	166,25	0,6569	91,87%
3	210	30,01	30,96	0,969	147,34	0,5761	80,57%
4	210	26,99	27,98	0,963	133,28	0,5164	72,22%
5	210	23,95	25,05	0,955	119,39	0,4545	63,57%
6	210	20,97	22,29	0,937	106,08	0,3915	54,76%
7	210	17,91	19,67	0,910	93,65	0,3299	46,14%



8	210	15,80	17,86	0,885	85,06	0,2859	39,99%
9	210	13,96	16,32	0,858	77,60	0,2437	34,08%
10	210	12,02	14,68	0,818	69,84	0,2015	28,18%
11	210	6,00	9,85	0,610	46,74	0,0719	10,06%
1	220	37,08	38,15	0,972	173,40	0,7259	100,00%
2	220	34,05	35,22	0,968	160,08	0,6572	90,54%
3	220	30,05	31,23	0,963	141,94	0,5770	79,49%
4	220	27,03	28,30	0,956	128,53	0,5165	71,15%
5	220	24,02	25,40	0,946	115,39	0,4553	62,72%
6	220	20,98	22,68	0,924	103,01	0,3923	54,04%
7	220	18,01	20,13	0,895	91,40	0,3307	45,56%
8	220	15,92	18,34	0,867	83,32	0,2864	39,45%
9	220	14,10	16,80	0,839	76,32	0,2445	33,68%
10	220	12,12	15,22	0,796	69,18	0,2027	27,92%
11	220	6,06	10,12	0,599	46,05	0,0727	10,02%
1	240	37,11	38,66	0,960	161,02	0,7159	100,00%
2	240	34,11	35,74	0,955	148,91	0,6571	91,79%
3	240	30,11	31,86	0,945	132,81	0,5771	80,61%
4	240	27,13	29,03	0,935	120,95	0,5164	72,13%
5	240	24,15	26,25	0,921	109,21	0,4550	63,56%
6	240	21,11	23,65	0,893	98,51	0,3921	54,77%
7	240	18,14	21,20	0,856	88,31	0,3307	46,19%



8	240	16,06	19,50	0,824	81,26	0,2864	40,01%
9	240	14,19	18,11	0,790	75,35	0,2443	34,12%
10	240	12,29	16,62	0,740	69,11	0,2024	28,27%
11	240	6,08	11,50	0,529	47,82	0,0726	10,14%
1	250	37,15	39,01	0,952	156,09	0,7161	100,00%
2	250	34,16	36,13	0,946	144,42	0,6577	91,84%
3	250	30,20	32,32	0,934	129,20	0,5774	80,63%
4	250	27,20	29,48	0,922	117,99	0,5162	72,08%
5	250	24,22	26,73	0,906	106,92	0,4551	63,55%
6	250	21,18	24,19	0,875	96,72	0,3921	54,75%
7	250	18,26	21,78	0,839	87,10	0,3308	46,19%
8	250	16,16	20,10	0,805	80,32	0,2866	40,02%
9	250	14,38	18,62	0,771	74,40	0,2445	34,14%
10	250	12,40	17,16	0,725	68,54	0,2026	28,29%
11	250	6,09	12,50	0,488	50,01	0,0726	10,14%