



TEST REPORT No. E/1/20.10.15./01

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

Report reference No.	Report No.: E/1/20.10.15./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 102 740 02 013 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	20.10.2015.	
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 102 740 02 013 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: 53 ... 102 [W]

LED module type: 01 (48 LEDs)

LED module quantity: 3

LED driver: Philips Xitanium 150W 0.35-0.7A GL Prog sXt

These parameters correspond to following model numbers:

SR ppp xxx xx 013 x x xx xx x;

SRL ppp xxx xx 013 x x xx xx x, where ppp - 053 ... 102 [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

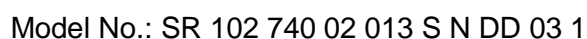
SRL

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:









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:

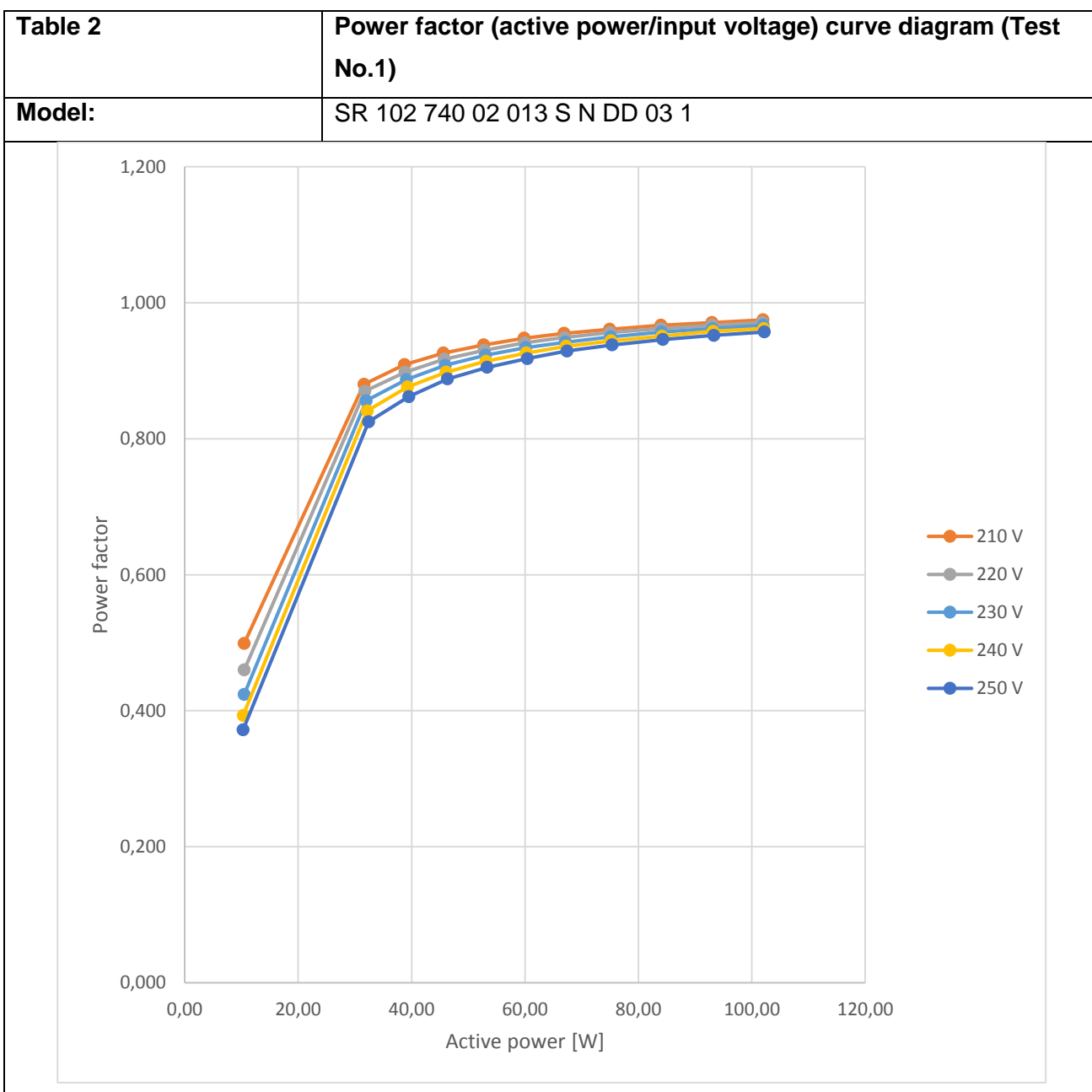
- suffix for detailed information for the client..... C (comment)
- suffix for important information for manufacturer..... M (manufacturing)

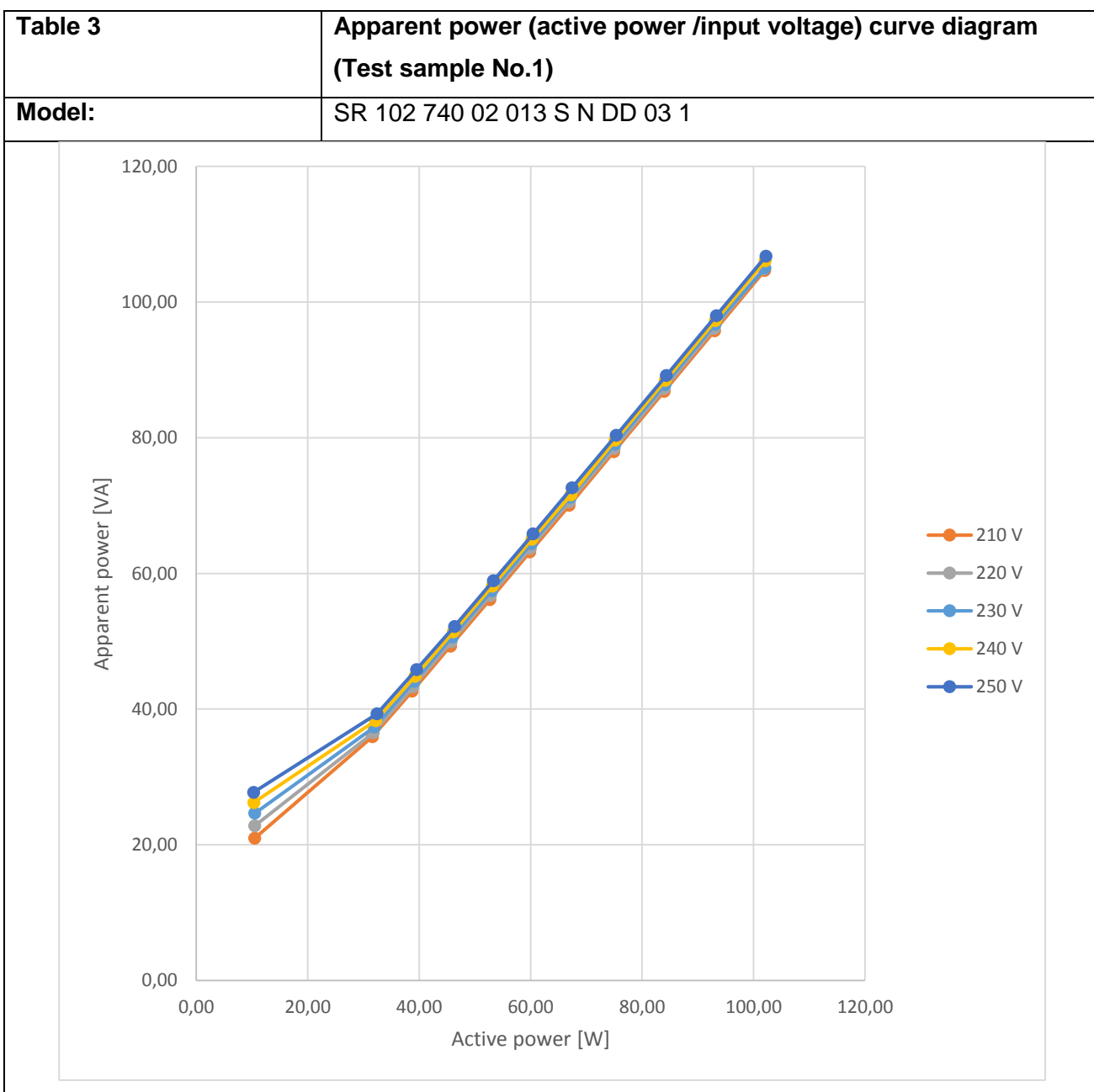


Clause	Requirement - Test	Measuring result – Remark	Verdict
2.0	Ambient Conditions		
2.1	General		P
2.2	Air Temperature		P
2.3	Thermal Condition for Mounting SSL Products		P
2.4	Air Movement		P
3.0	Power Supply Characteristics		
3.1	Wave shape of AC power supply		P
3.2	Voltage regulation		P
4.0	Seasoning 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 102 740 02 013 S N DD 03 1		
Rated Voltage (V):	220-240	Rated Power (W):	102
Rated Frequency (Hz):	50 Hz	Ambient temperature 25 ±1 (°C):	25.0
Test item		Measured Value	
Electrical Input Results			
Input Voltage (Volts AC)		210 - 250	
Input Frequency (Hertz)		50	
Additional Information			
Ambient Temperature (°C):		25.0	
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%.			





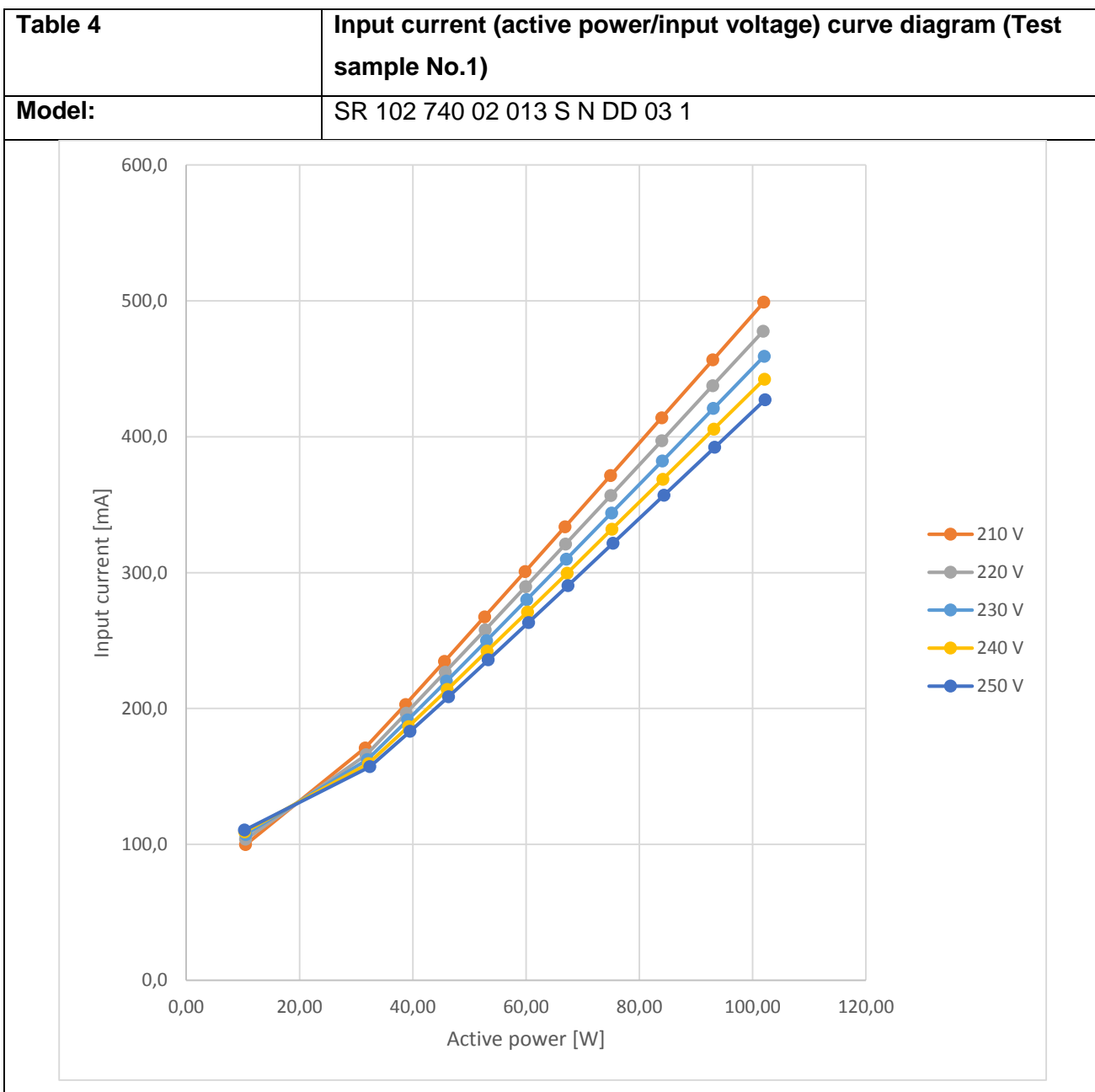




Table 5	Driver output current (active power/input voltage) curve diagram (Test sample No.1)
Model:	SR 102 740 02 013 S N DD 03 1

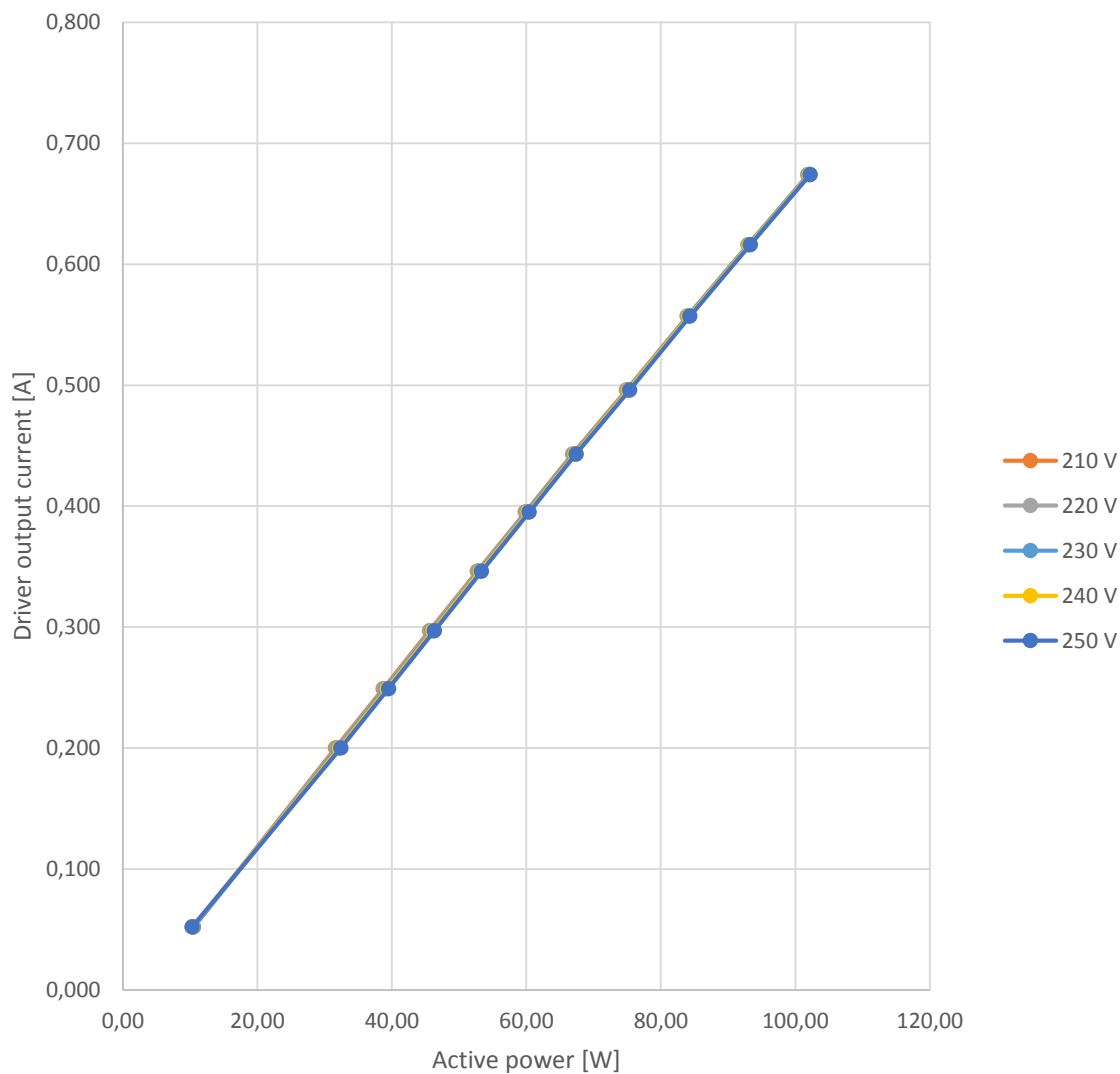




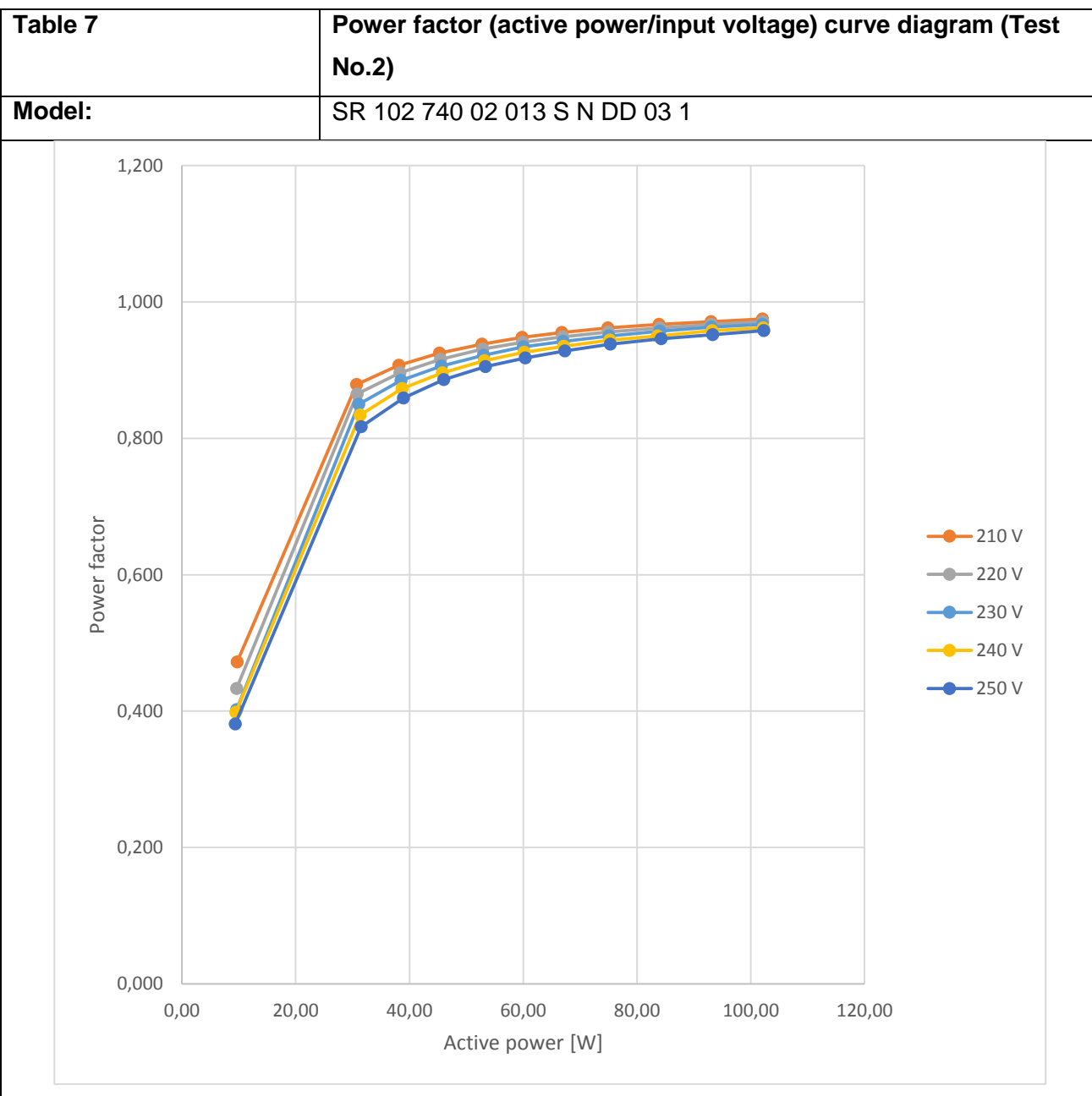
Table 6		Test data table No.1					
Model:		SR 102 740 02 013 S N DD 03 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	102,03	105,00	0,967	459,2	0,674	100,00%
2	230	93,06	96,69	0,962	420,8	0,616	91,39%
3	230	84,07	87,83	0,957	382,2	0,557	82,64%
4	230	75,09	79,03	0,950	343,8	0,496	73,59%
5	230	67,10	71,21	0,942	309,8	0,443	65,73%
6	230	60,10	64,38	0,934	280,0	0,395	58,61%
7	230	53,00	57,44	0,923	249,8	0,346	51,34%
8	230	45,94	50,62	0,908	220,1	0,297	44,07%
9	230	39,08	44,05	0,887	191,4	0,249	36,94%
10	230	31,98	37,37	0,856	162,4	0,200	29,67%
11	230	10,48	24,64	0,424	107,2	0,052	7,72%
1	210	101,97	104,63	0,975	499,0	0,674	100,00%
2	210	92,98	95,74	0,971	456,5	0,616	91,39%
3	210	83,94	86,81	0,967	413,9	0,557	82,64%
4	210	74,90	77,91	0,961	371,3	0,496	73,59%
5	210	66,88	70,02	0,955	333,7	0,443	65,73%
6	210	59,84	63,14	0,948	300,8	0,395	58,61%
7	210	52,68	56,15	0,938	267,4	0,346	51,34%

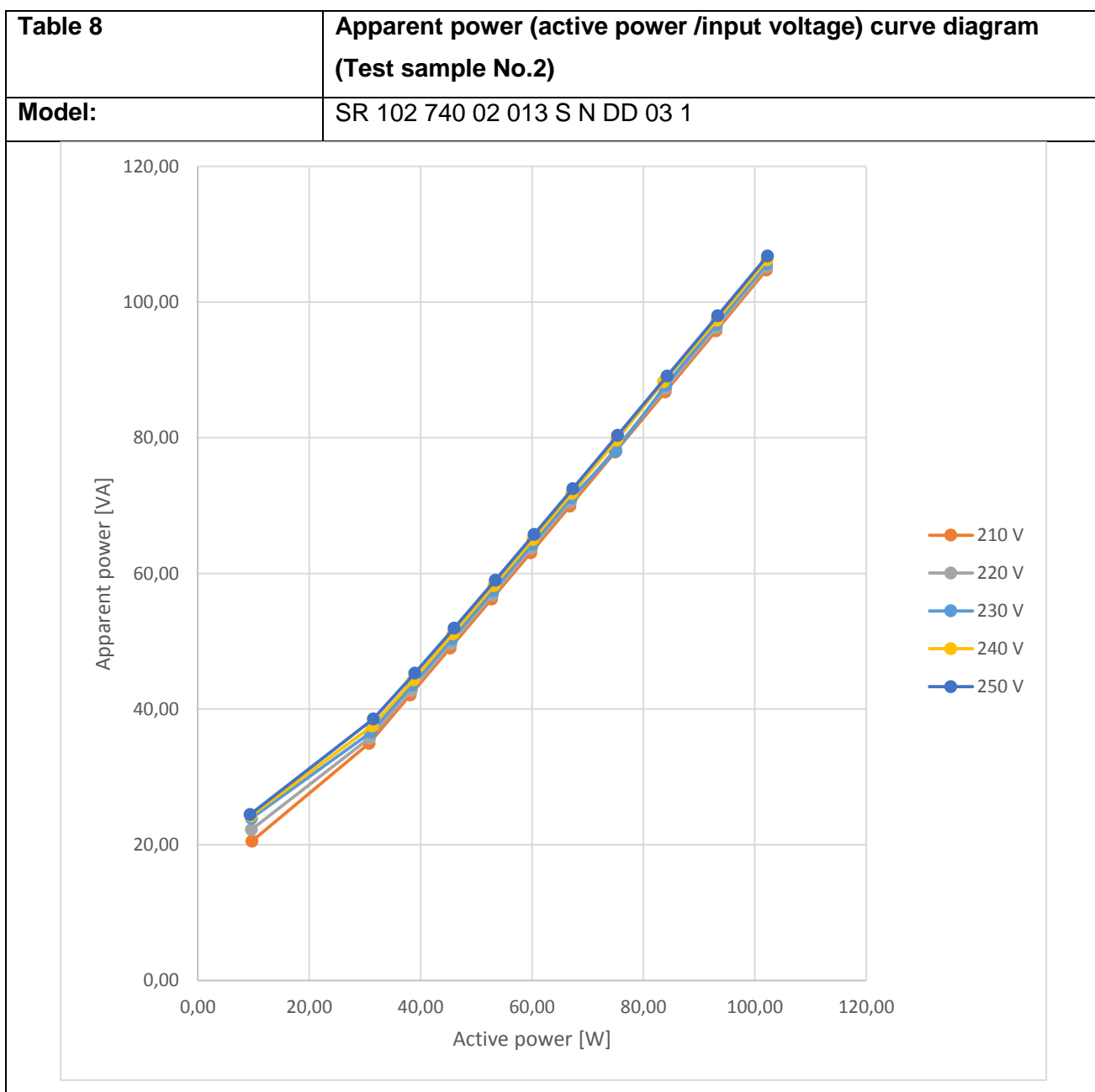


8	210	45,60	49,27	0,926	234,7	0,297	44,07%
9	210	38,72	42,62	0,909	202,9	0,249	36,94%
10	210	31,59	35,92	0,880	171,0	0,200	29,67%
11	210	10,47	20,97	0,499	99,8	0,052	7,72%
1	220	101,84	104,90	0,971	477,5	0,674	100,00%
2	220	92,95	96,13	0,967	437,5	0,616	91,39%
3	220	83,95	87,24	0,962	396,9	0,557	82,64%
4	220	74,96	78,40	0,956	356,6	0,496	73,59%
5	220	66,95	70,56	0,949	320,9	0,443	65,73%
6	220	59,92	63,69	0,941	289,6	0,395	58,61%
7	220	52,78	56,73	0,930	257,9	0,346	51,34%
8	220	45,72	49,88	0,917	226,7	0,297	44,07%
9	220	38,85	43,26	0,898	196,6	0,249	36,94%
10	220	31,74	36,50	0,870	165,8	0,200	29,67%
11	220	10,47	22,80	0,460	103,7	0,052	7,72%
1	240	102,09	106,06	0,962	442,3	0,674	100,00%
2	240	93,14	97,26	0,958	405,6	0,616	91,39%
3	240	84,14	88,44	0,951	368,7	0,557	82,64%
4	240	75,15	79,63	0,944	331,9	0,496	73,59%
5	240	67,23	71,56	0,936	299,5	0,443	65,73%
6	240	60,23	65,03	0,926	271,0	0,395	58,61%
7	240	53,11	58,12	0,914	242,2	0,346	51,34%



8	240	46,08	51,35	0,898	213,9	0,297	44,07%
9	240	39,25	44,81	0,876	186,7	0,249	36,94%
10	240	32,16	38,28	0,841	159,4	0,200	29,67%
11	240	10,31	26,20	0,393	109,1	0,052	7,72%
1	250	102,20	106,74	0,957	427,2	0,674	100,00%
2	250	93,30	97,99	0,952	392,2	0,616	91,39%
3	250	84,32	89,16	0,946	356,8	0,557	82,64%
4	250	75,36	80,37	0,938	321,6	0,496	73,59%
5	250	67,40	72,60	0,929	290,4	0,443	65,73%
6	250	60,42	65,80	0,918	263,2	0,395	58,61%
7	250	53,32	58,93	0,905	235,7	0,346	51,34%
8	250	46,32	52,18	0,888	208,7	0,297	44,07%
9	250	39,50	45,81	0,862	183,2	0,249	36,94%
10	250	32,41	39,29	0,825	157,1	0,200	29,67%
11	250	10,27	27,71	0,372	110,5	0,052	7,72%





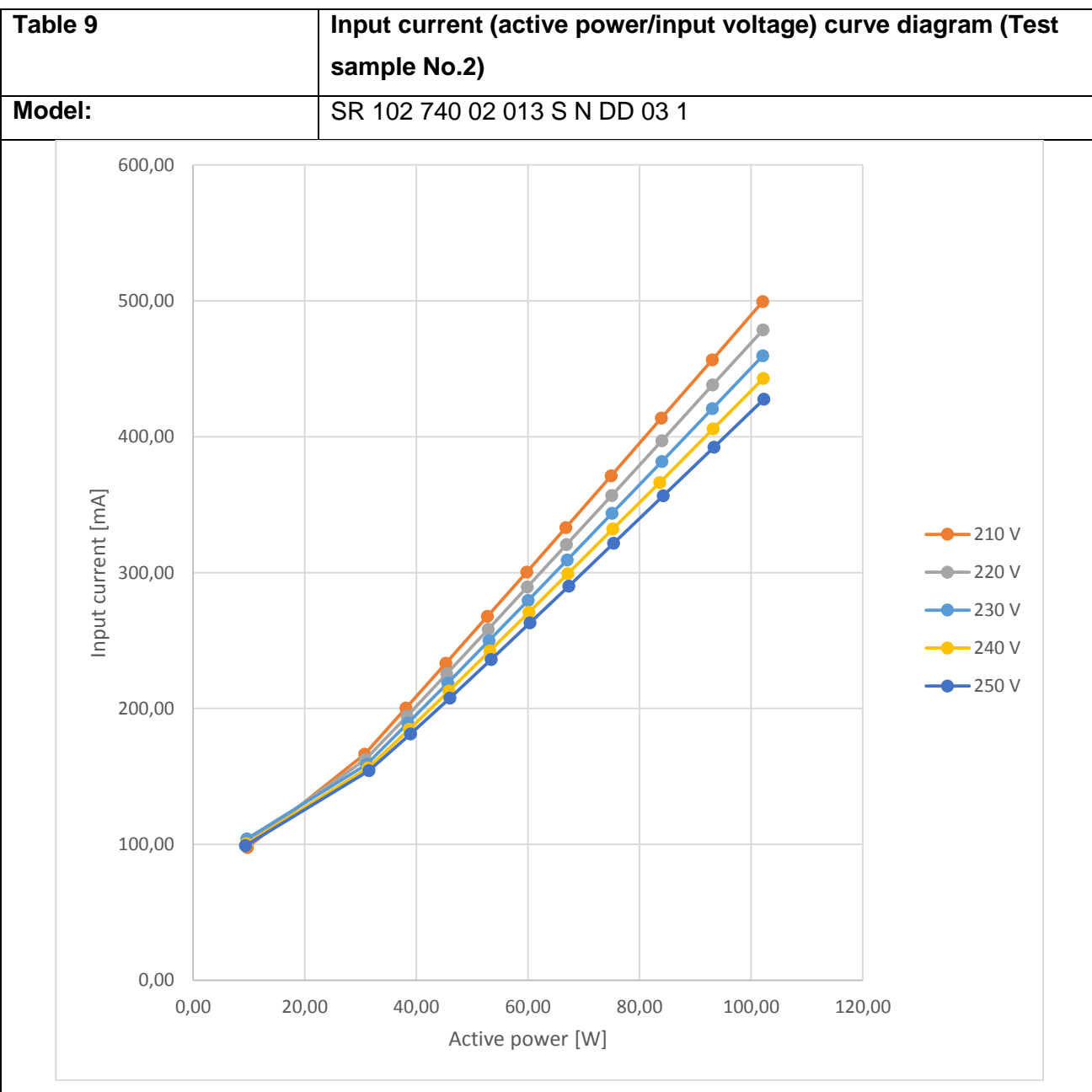




Table 10	Driver output current (active power/input voltage) curve diagram (Test sample No.2)
Model:	SR 102 740 02 013 S N DD 03 1

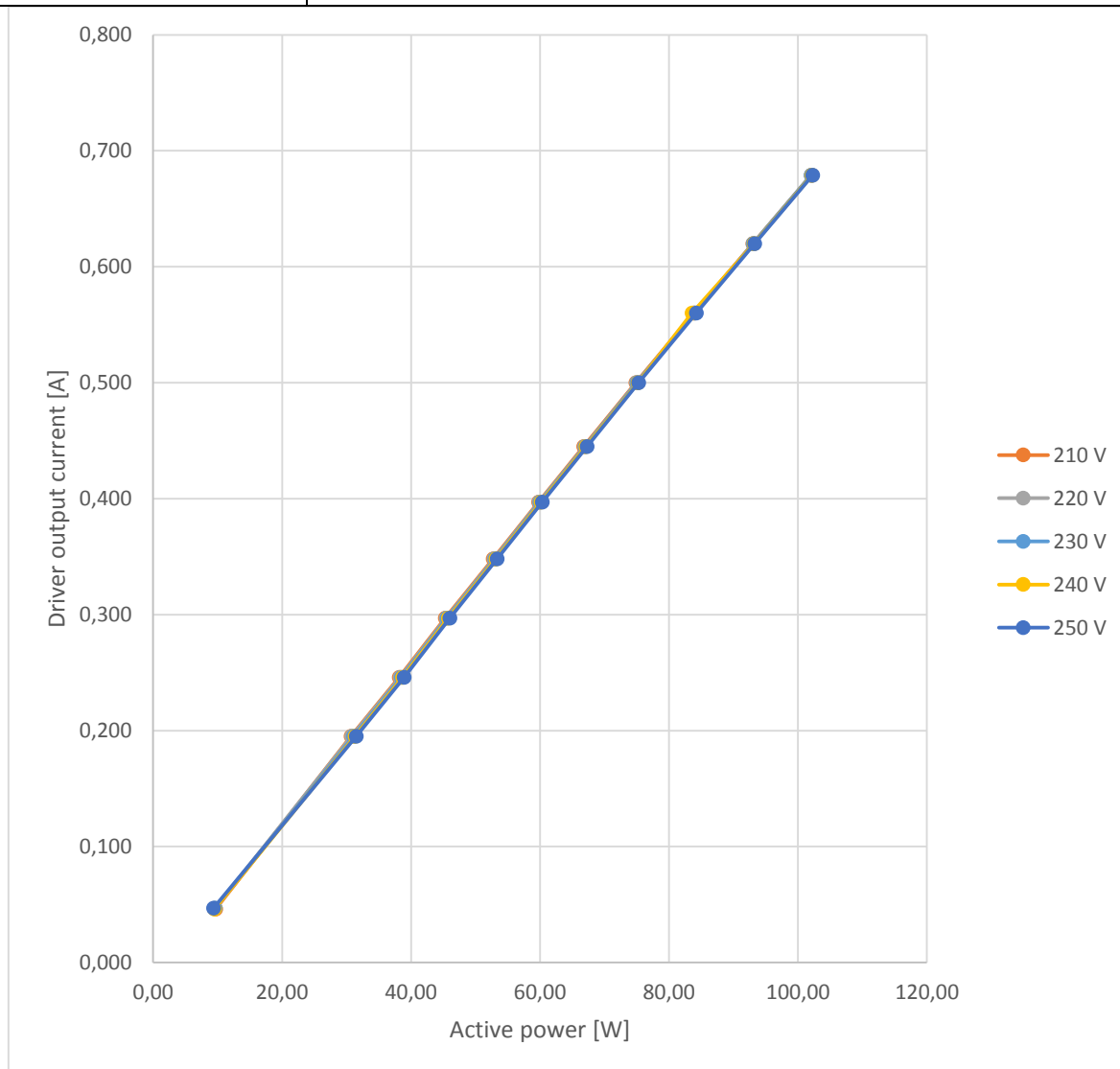




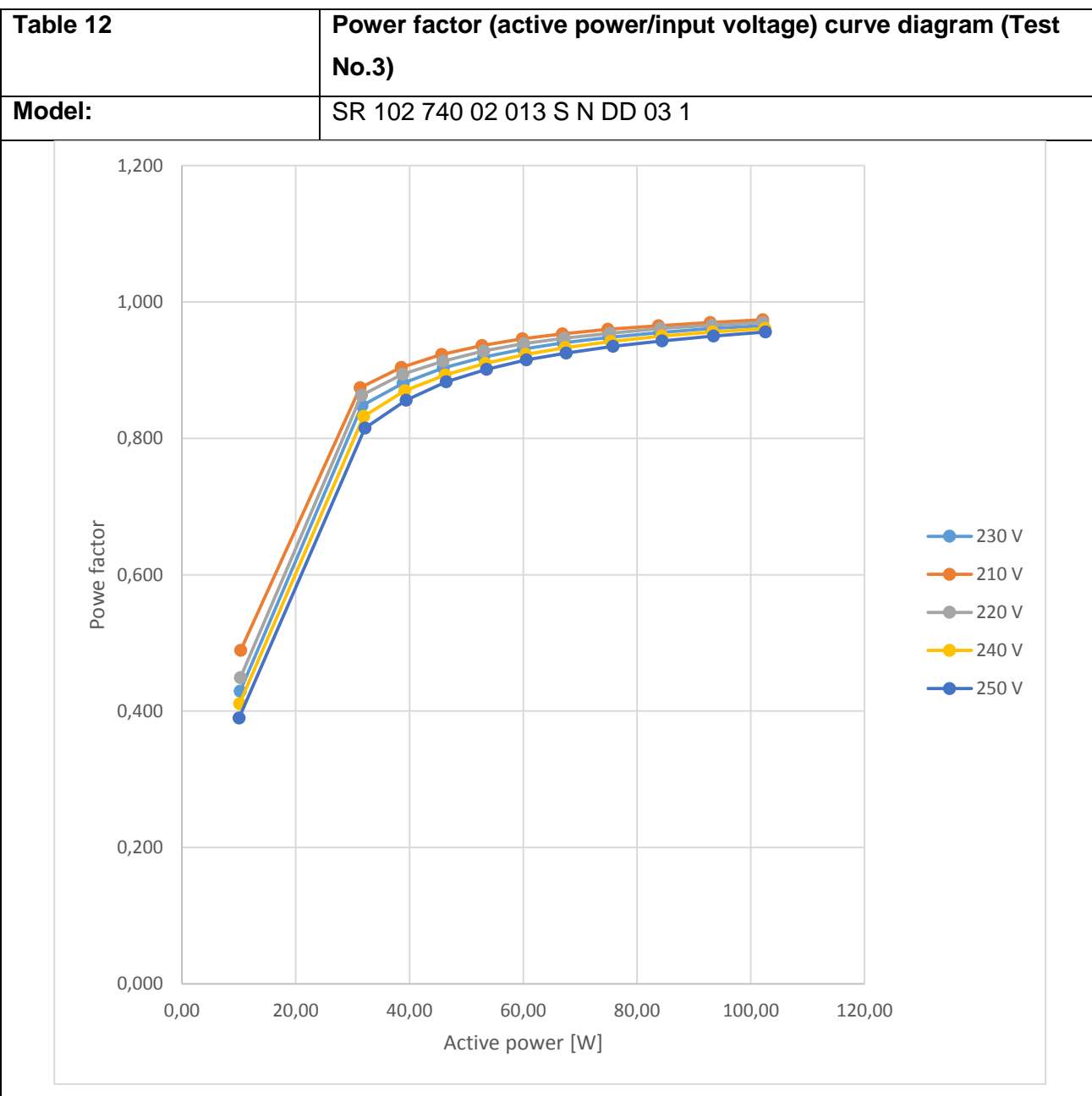
Table 11		Test data table No.2					
Model:		SR 102 740 02 013 S N DD 03 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	102,06	105,62	0,967	459,50	0,679	100,00%
2	230	93,05	96,66	0,963	420,70	0,620	91,31%
3	230	84,00	87,75	0,957	381,80	0,560	82,47%
4	230	75,06	77,99	0,950	343,60	0,500	73,64%
5	230	67,01	71,12	0,942	309,20	0,445	65,54%
6	230	60,00	64,26	0,934	279,50	0,397	58,47%
7	230	53,00	57,46	0,922	249,80	0,348	51,25%
8	230	45,61	50,33	0,906	218,80	0,297	43,74%
9	230	38,48	43,51	0,885	189,10	0,246	36,23%
10	230	31,08	36,56	0,850	158,87	0,195	28,72%
11	230	9,60	23,91	0,402	104,00	0,047	6,92%
1	210	102,06	104,72	0,975	499,40	0,679	100,00%
2	210	93,01	95,77	0,971	456,60	0,620	91,31%
3	210	83,89	86,76	0,967	413,60	0,560	82,47%
4	210	74,89	77,89	0,962	371,20	0,500	73,64%
5	210	66,78	69,91	0,955	333,10	0,445	65,54%
6	210	59,76	63,06	0,948	300,40	0,397	58,47%
7	210	52,72	56,20	0,938	267,70	0,348	51,25%

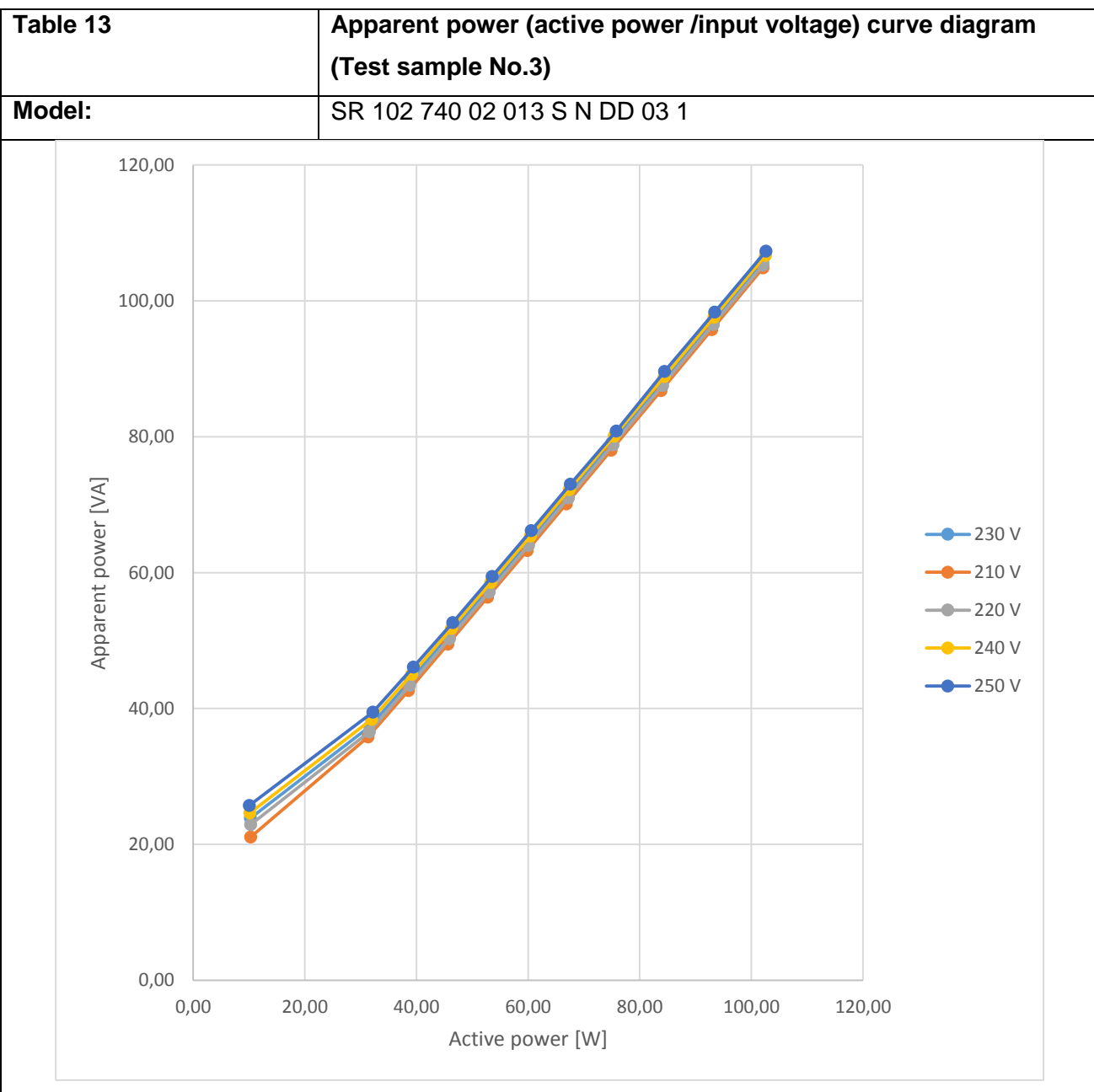


8	210	45,28	48,97	0,925	233,20	0,297	43,74%
9	210	38,14	42,07	0,907	200,30	0,246	36,23%
10	210	30,70	34,94	0,879	166,35	0,195	28,72%
11	210	9,69	20,53	0,472	97,68	0,046	6,77%
1	220	102,11	105,16	0,971	478,60	0,679	100,00%
2	220	93,08	96,24	0,967	438,00	0,620	91,31%
3	220	83,97	87,26	0,962	397,00	0,560	82,47%
4	220	74,98	78,42	0,956	356,70	0,500	73,64%
5	220	66,90	70,51	0,949	320,60	0,445	65,54%
6	220	59,89	63,66	0,941	289,40	0,397	58,47%
7	220	52,86	56,81	0,931	258,30	0,348	51,25%
8	220	45,44	49,61	0,916	225,50	0,297	43,74%
9	220	38,30	42,75	0,896	194,29	0,246	36,23%
10	220	30,80	35,71	0,865	162,25	0,195	28,72%
11	220	9,62	22,21	0,433	100,85	0,047	6,92%
1	240	102,18	106,18	0,962	442,80	0,679	100,00%
2	240	93,19	97,31	0,958	405,80	0,620	91,31%
3	240	83,59	88,24	0,950	366,30	0,560	82,47%
4	240	75,19	79,65	0,944	332,00	0,500	73,64%
5	240	67,13	71,77	0,935	299,10	0,445	65,54%
6	240	60,15	64,97	0,926	270,70	0,397	58,47%
7	240	53,17	58,19	0,914	242,40	0,348	51,25%



8	240	45,78	51,08	0,896	212,80	0,297	43,74%
9	240	38,68	44,32	0,873	184,60	0,246	36,23%
10	240	31,29	37,52	0,834	156,27	0,195	28,72%
11	240	9,48	24,24	0,398	100,51	0,046	6,77%
1	250	102,27	106,79	0,958	427,50	0,679	100,00%
2	250	93,30	97,97	0,952	392,20	0,620	91,31%
3	250	84,25	89,09	0,946	356,50	0,560	82,47%
4	250	75,32	80,35	0,938	321,50	0,500	73,64%
5	250	67,29	72,50	0,928	290,00	0,445	65,54%
6	250	60,33	65,74	0,918	262,90	0,397	58,47%
7	250	53,37	59,00	0,905	236,00	0,348	51,25%
8	250	46,00	51,92	0,886	207,60	0,297	43,74%
9	250	38,93	45,31	0,859	181,16	0,246	36,23%
10	250	31,51	38,56	0,817	154,16	0,195	28,72%
11	250	9,37	24,44	0,381	98,98	0,047	6,92%





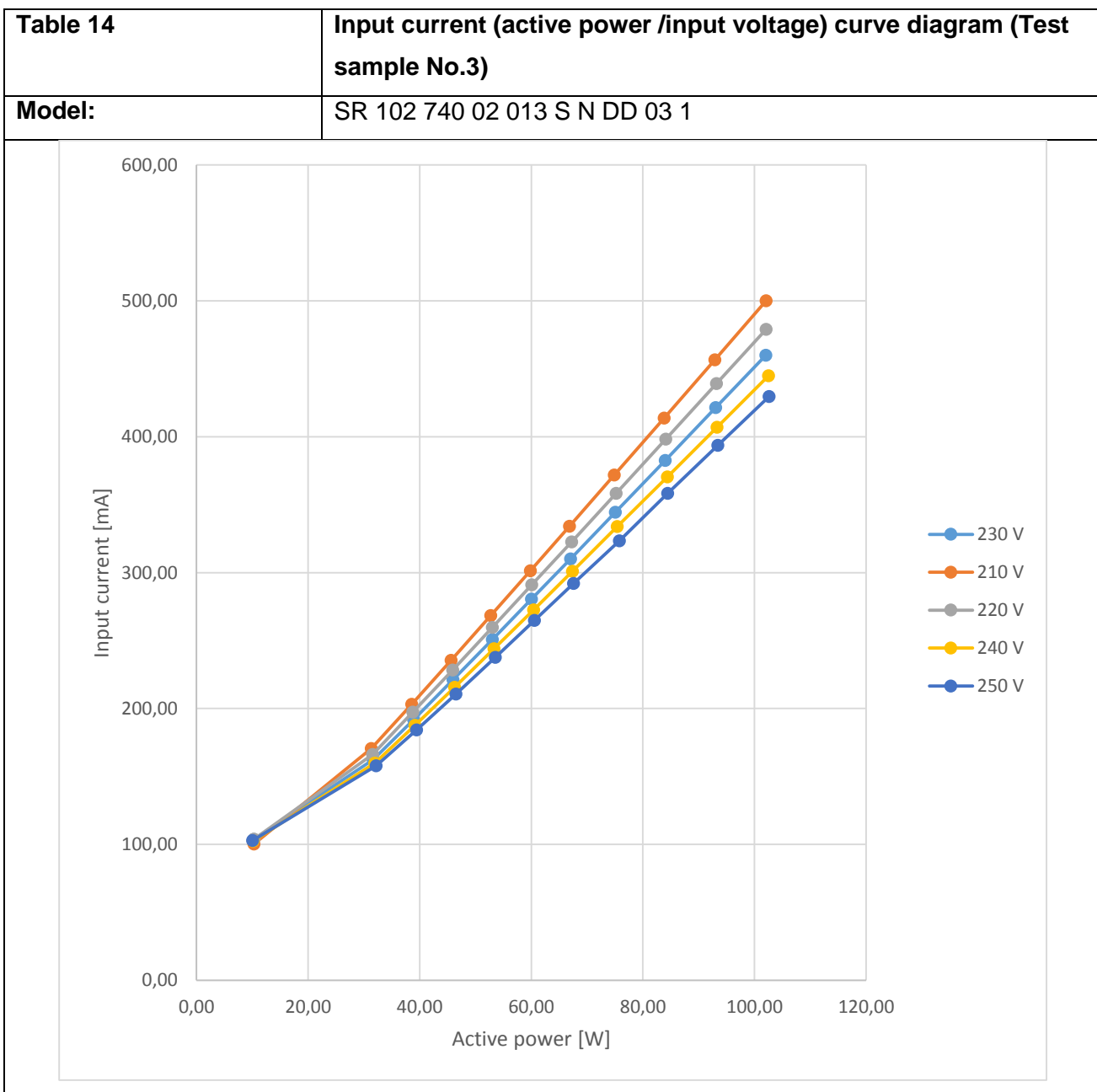




Table 15	Driver output current (active power/input voltage) curve diagram (Test sample No.3)
Model:	SR 102 740 02 013 S N DD 03 1

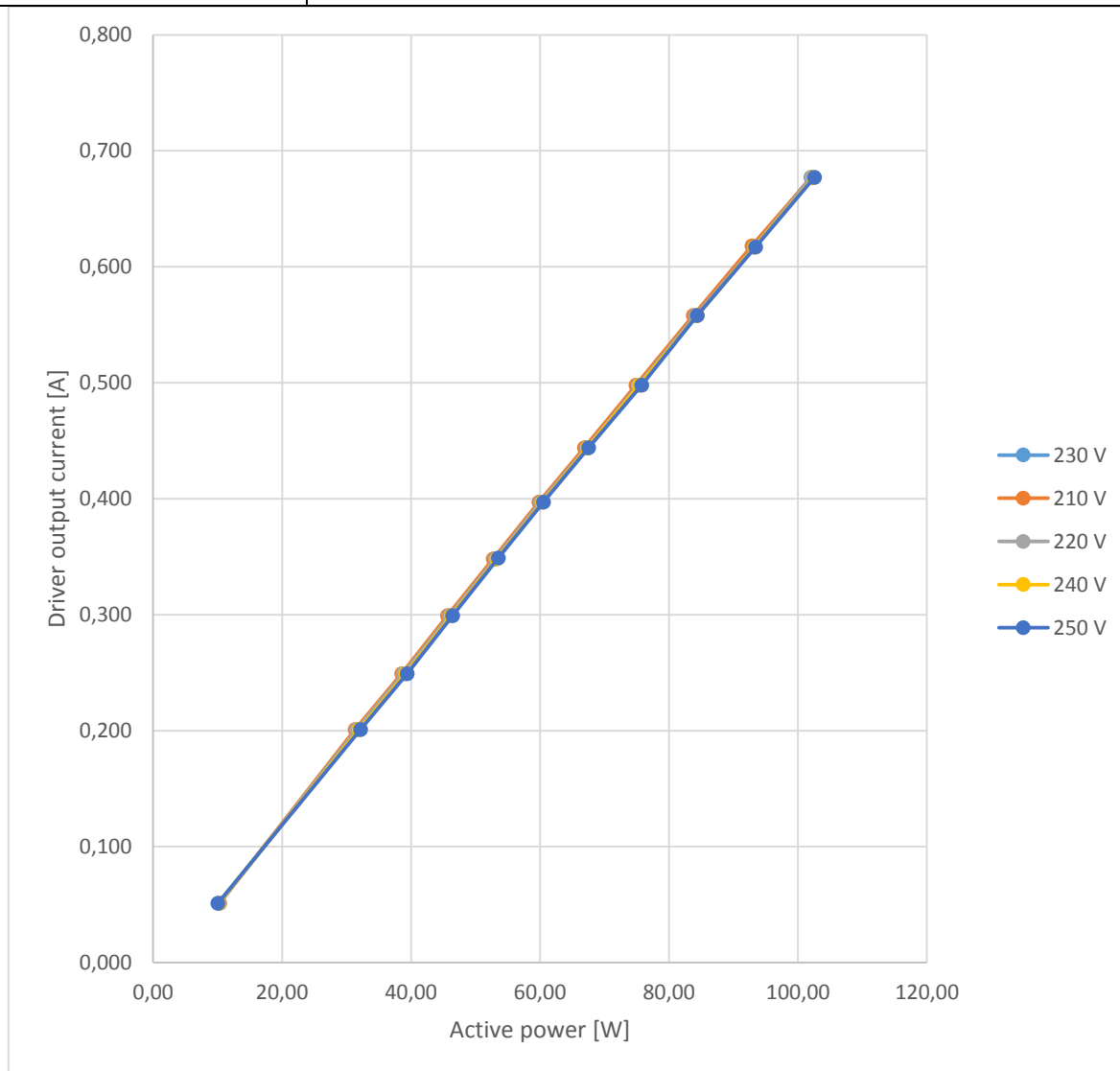




Table 16		Test data table No.3					
Model:		SR 102 740 02 013 S N DD 03 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	102,02	105,69	0,965	460,00	0,677	100,00%
2	230	93,04	96,86	0,961	421,50	0,617	91,14%
3	230	84,00	87,92	0,955	382,40	0,558	82,42%
4	230	75,06	79,15	0,948	344,30	0,498	73,56%
5	230	67,01	71,30	0,940	310,10	0,444	65,58%
6	230	60,02	64,49	0,931	280,40	0,397	58,64%
7	230	53,00	57,67	0,919	250,70	0,348	51,40%
8	230	45,94	50,85	0,903	221,10	0,299	44,17%
9	230	38,87	44,10	0,881	191,66	0,249	36,78%
10	230	31,65	37,35	0,848	162,31	0,201	29,69%
11	230	10,21	23,84	0,429	103,50	0,051	7,53%
1	210	102,08	104,85	0,974	500,10	0,677	100,00%
2	210	92,87	95,75	0,970	456,60	0,618	91,29%
3	210	83,79	86,79	0,965	413,70	0,558	82,42%
4	210	74,85	77,99	0,960	371,70	0,498	73,56%
5	210	66,85	70,12	0,953	334,10	0,444	65,58%
6	210	59,81	63,25	0,946	301,30	0,397	58,64%
7	210	52,73	56,36	0,936	268,40	0,348	51,40%



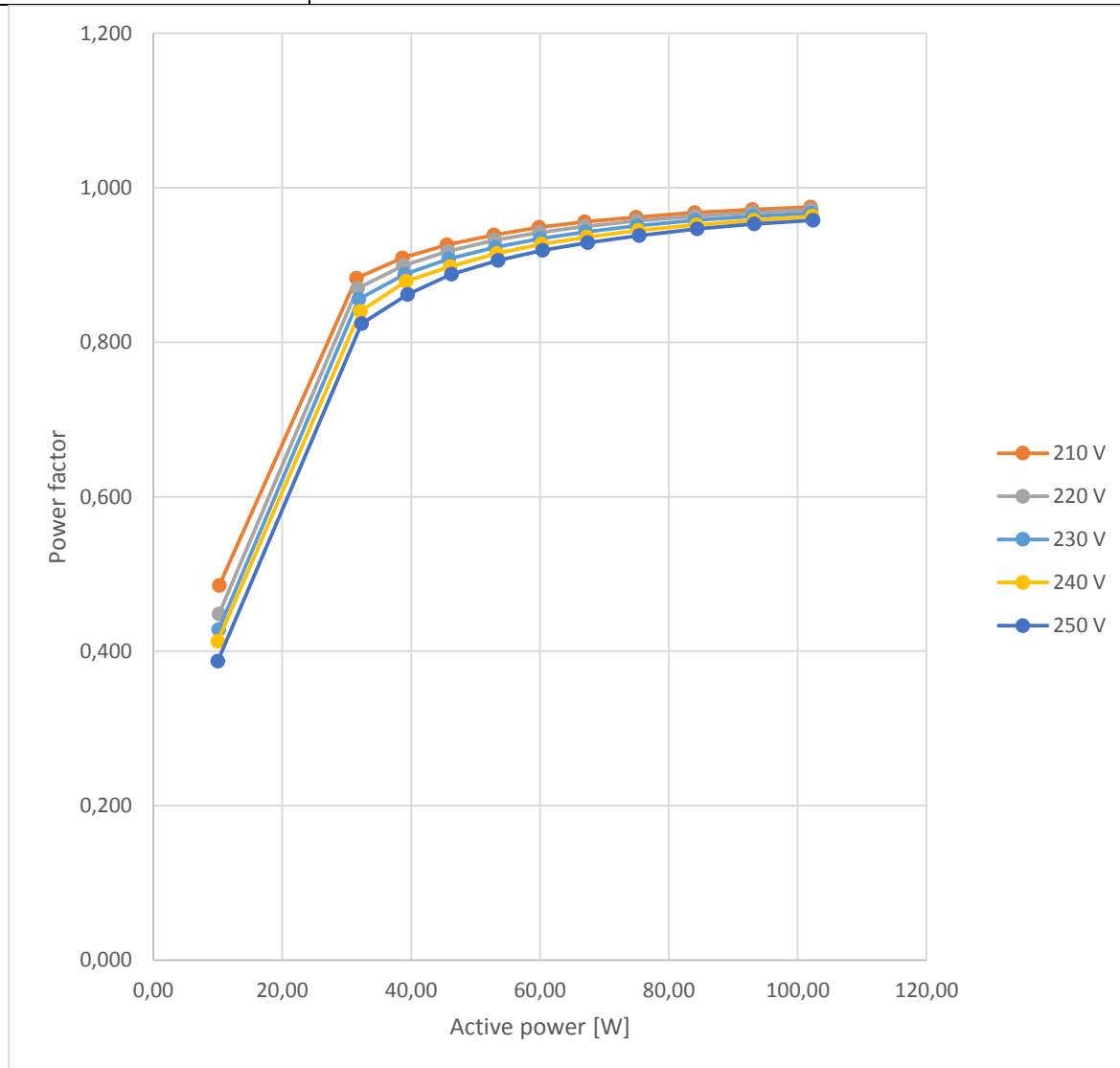
8	210	45,63	49,46	0,923	235,50	0,299	44,17%
9	210	38,56	42,64	0,904	203,00	0,249	36,78%
10	210	31,30	35,81	0,874	170,54	0,201	29,69%
11	210	10,30	21,06	0,489	100,20	0,051	7,53%
1	220	102,09	105,26	0,970	479,00	0,677	100,00%
2	220	93,18	96,50	0,966	439,10	0,617	91,14%
3	220	84,09	87,52	0,961	398,10	0,558	82,42%
4	220	75,19	78,80	0,954	358,30	0,498	73,56%
5	220	67,22	70,97	0,947	322,60	0,444	65,58%
6	220	60,07	64,01	0,939	291,00	0,397	58,64%
7	220	53,00	57,11	0,928	259,70	0,348	51,40%
8	220	45,90	50,24	0,913	228,30	0,299	44,17%
9	220	38,77	43,40	0,894	197,26	0,249	36,78%
10	220	31,55	36,54	0,863	166,09	0,201	29,69%
11	220	10,27	22,89	0,449	103,88	0,051	7,53%
1	240	102,50	106,67	0,961	444,90	0,677	100,00%
2	240	93,28	97,59	0,956	406,90	0,617	91,14%
3	240	84,40	88,86	0,950	370,30	0,558	82,42%
4	240	75,40	80,08	0,942	333,80	0,498	73,56%
5	240	67,37	72,22	0,933	300,90	0,444	65,58%
6	240	60,39	65,39	0,923	272,50	0,397	58,64%
7	240	53,29	58,56	0,910	244,00	0,348	51,40%



8	240	46,24	51,77	0,893	215,60	0,299	44,17%
9	240	39,15	45,02	0,870	187,53	0,249	36,78%
10	240	31,92	38,38	0,832	159,80	0,201	29,69%
11	240	10,11	24,59	0,411	102,32	0,051	7,53%
1	250	102,58	107,31	0,956	429,50	0,677	100,00%
2	250	93,43	98,33	0,950	393,70	0,617	91,14%
3	250	84,41	89,59	0,943	358,30	0,558	82,42%
4	250	75,78	80,81	0,935	323,30	0,498	73,56%
5	250	67,55	73,00	0,925	292,00	0,444	65,58%
6	250	60,55	66,19	0,915	264,80	0,397	58,64%
7	250	53,53	59,41	0,901	237,60	0,349	51,55%
8	250	46,47	52,64	0,883	210,60	0,299	44,17%
9	250	39,41	46,07	0,856	184,19	0,249	36,78%
10	250	32,18	39,45	0,815	157,72	0,201	29,69%
11	250	10,02	25,71	0,390	102,71	0,051	7,53%



Table 17	Power factor (active power/input voltage) curve diagram (Test No.4)
Model:	SR 102 740 02 013 S N DD 03 1



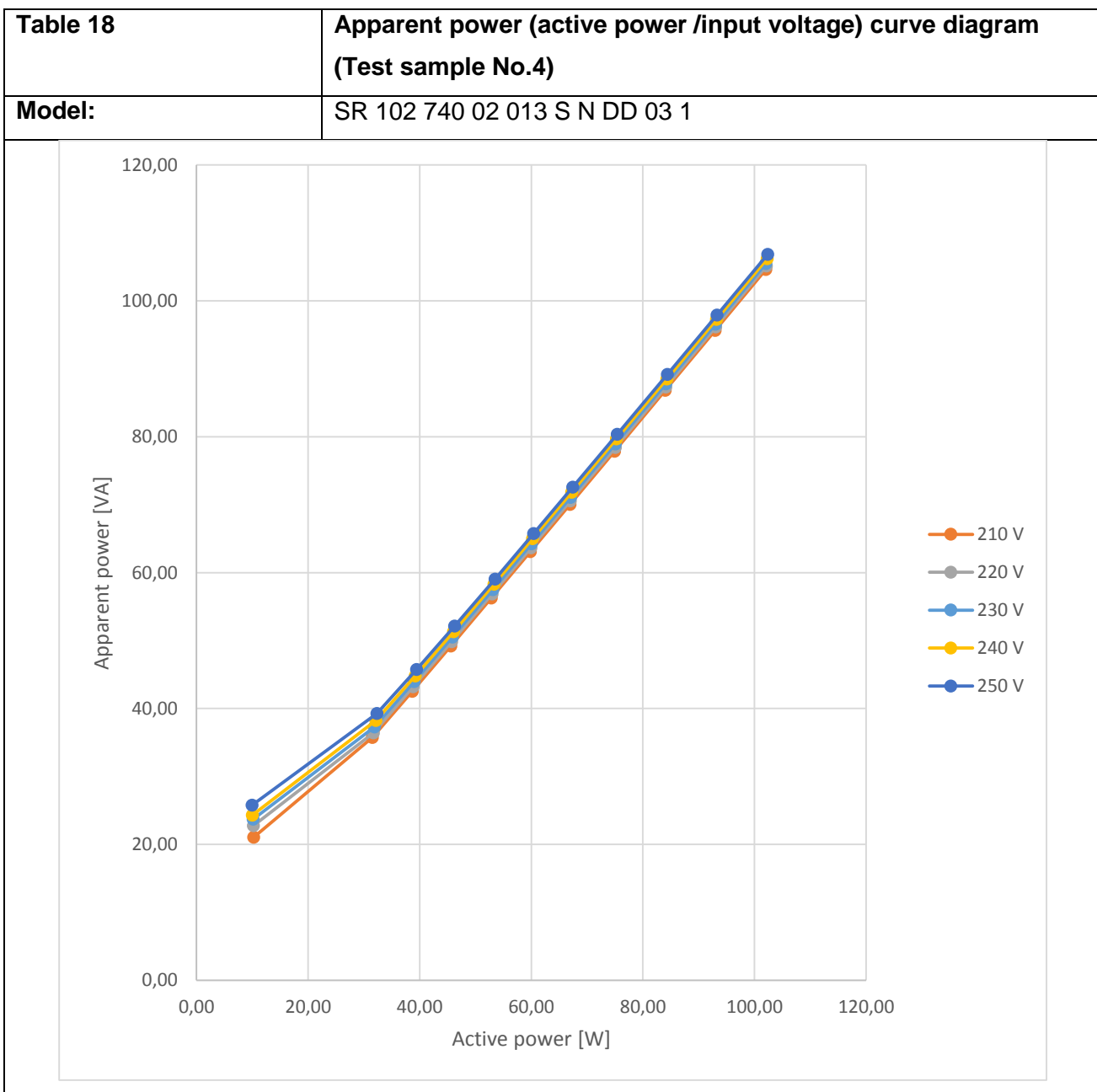




Table 19	Input current (active power /input voltage) curve diagram (Test sample No.4)
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Model:	SR 102 740 02 013 S N DD 03 1
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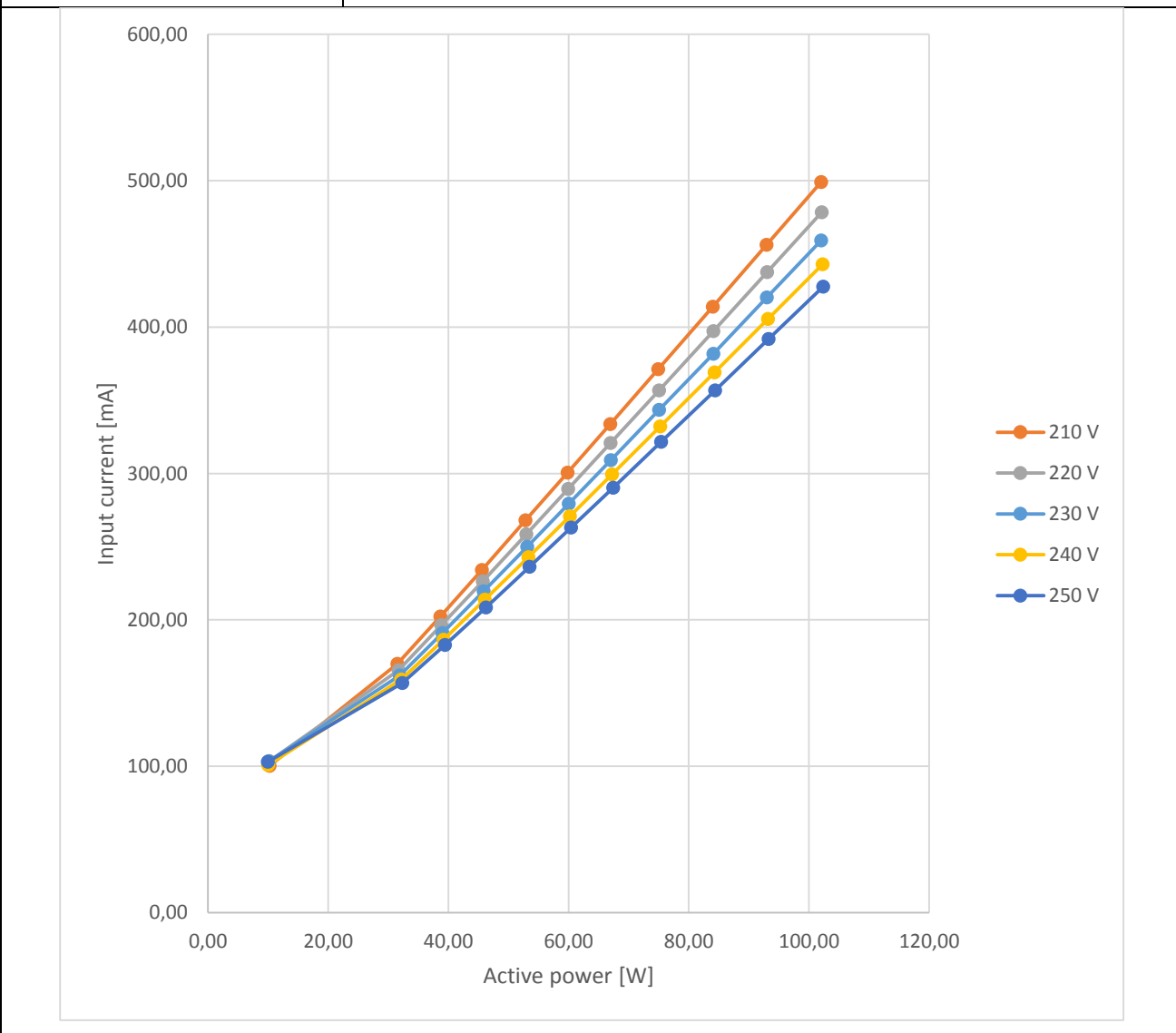




Table 20	Driver output current (active power/input voltage) curve diagram (Test sample No.4)
Model:	SR 102 740 02 013 S N DD 03 1

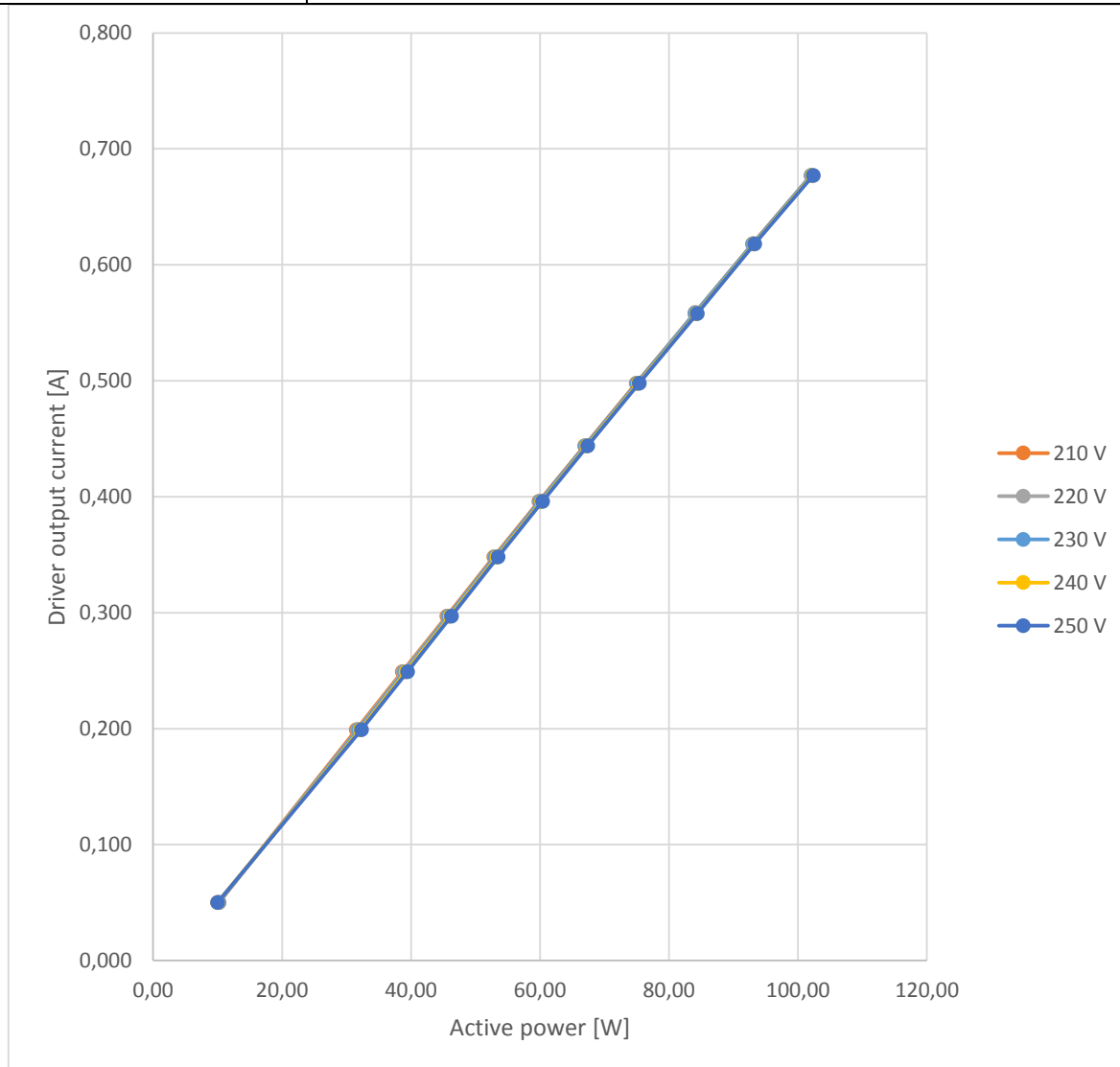




Table 21		Test data table No.4					
Model:		SR 102 740 02 013 S N DD 03 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	102,04	105,48	0,967	459,20	0,677	100,00%
2	230	93,00	96,55	0,963	420,20	0,618	91,29%
3	230	84,07	87,76	0,958	381,80	0,558	82,42%
4	230	75,06	78,93	0,951	343,40	0,498	73,56%
5	230	67,04	71,08	0,943	309,10	0,444	65,58%
6	230	60,00	64,23	0,934	279,30	0,396	58,49%
7	230	53,08	57,48	0,923	249,90	0,348	51,40%
8	230	45,85	50,51	0,908	219,60	0,297	43,87%
9	230	39,00	43,94	0,888	190,99	0,249	36,78%
10	230	31,88	37,26	0,856	161,88	0,199	29,39%
11	230	10,12	23,69	0,428	103,30	0,050	7,39%
1	210	102,03	104,62	0,975	499,00	0,677	100,00%
2	210	92,95	95,64	0,972	456,10	0,618	91,29%
3	210	84,01	86,82	0,968	413,90	0,558	82,42%
4	210	74,92	77,86	0,962	371,10	0,498	73,56%
5	210	66,94	70,02	0,956	333,70	0,444	65,58%
6	210	59,83	63,08	0,949	300,50	0,396	58,49%
7	210	52,83	56,25	0,939	267,90	0,348	51,40%



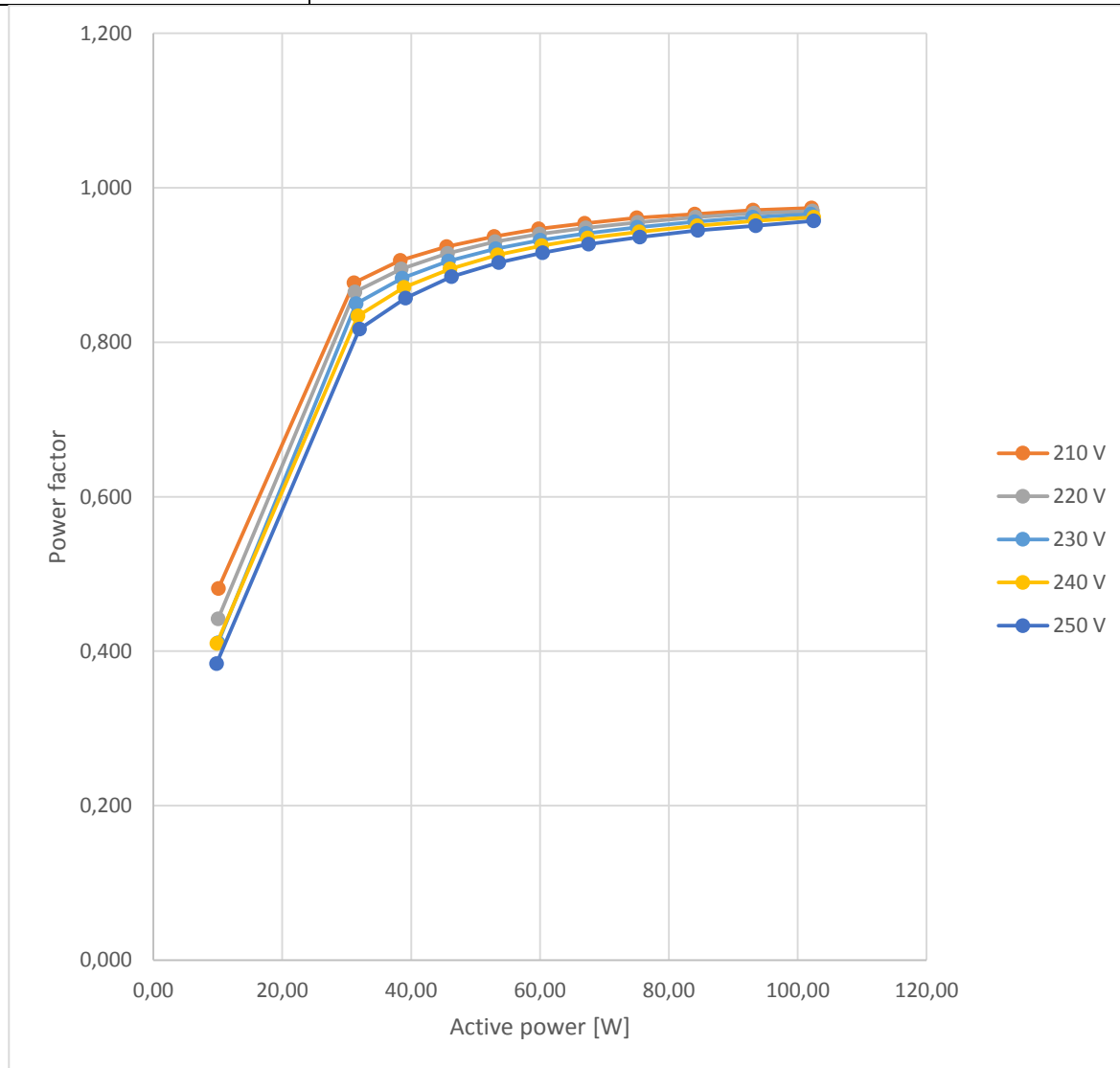
8	210	45,55	49,17	0,926	234,10	0,297	43,87%
9	210	38,65	42,50	0,909	202,30	0,249	36,78%
10	210	31,52	35,74	0,883	169,91	0,199	29,39%
11	210	10,22	21,05	0,485	100,13	0,050	7,39%
1	220	102,12	105,12	0,972	478,40	0,677	100,00%
2	220	93,03	96,14	0,968	437,50	0,618	91,29%
3	220	84,08	87,31	0,963	397,20	0,559	82,57%
4	220	75,03	78,40	0,957	356,60	0,498	73,56%
5	220	66,97	70,53	0,950	320,70	0,444	65,58%
6	220	59,94	63,65	0,942	289,40	0,396	58,49%
7	220	52,97	56,86	0,932	258,50	0,348	51,40%
8	220	45,69	49,80	0,918	226,30	0,297	43,87%
9	220	38,80	43,18	0,899	196,23	0,249	36,78%
10	220	31,67	36,41	0,870	165,43	0,199	29,39%
11	220	10,19	22,76	0,448	103,44	0,050	7,39%
1	240	102,25	106,18	0,963	442,80	0,677	100,00%
2	240	93,19	97,25	0,958	405,50	0,618	91,29%
3	240	84,28	88,50	0,952	369,00	0,558	82,42%
4	240	75,26	79,66	0,945	332,00	0,498	73,56%
5	240	67,24	71,82	0,936	299,30	0,444	65,58%
6	240	60,23	64,98	0,927	270,80	0,396	58,49%
7	240	53,30	58,26	0,915	242,70	0,348	51,40%

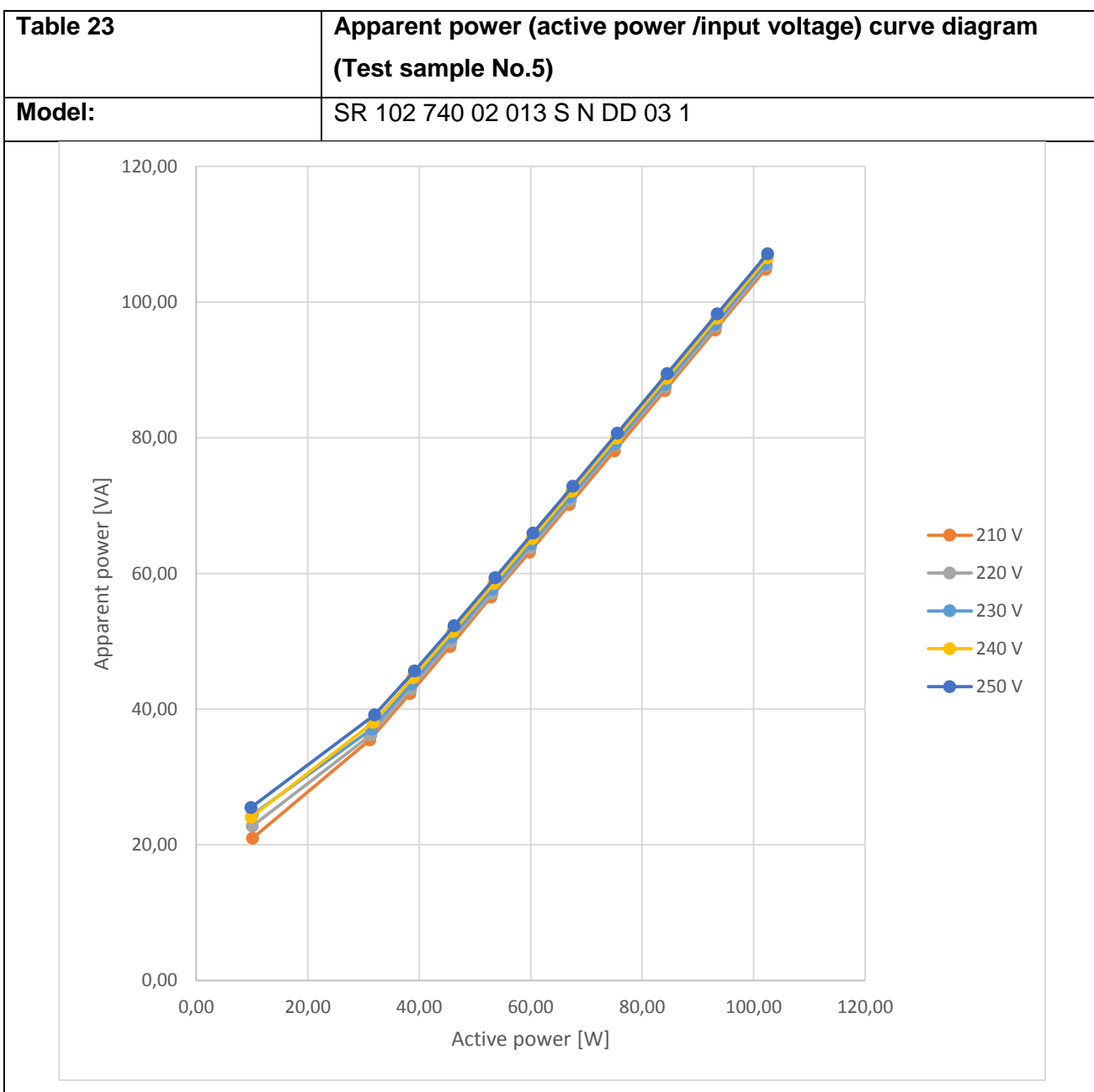


8	240	46,06	51,29	0,898	213,70	0,297	43,87%
9	240	39,20	44,77	0,879	186,42	0,249	36,78%
10	240	32,11	38,22	0,840	159,17	0,199	29,39%
11	240	10,00	24,28	0,413	100,80	0,050	7,39%
1	250	102,37	106,82	0,958	427,60	0,677	100,00%
2	250	93,27	97,89	0,953	391,80	0,618	91,29%
3	250	84,38	89,15	0,947	356,70	0,558	82,42%
4	250	75,41	80,36	0,938	321,50	0,498	73,56%
5	250	67,40	72,55	0,929	290,20	0,444	65,58%
6	250	60,40	65,74	0,919	262,90	0,396	58,49%
7	250	53,48	59,05	0,906	236,20	0,348	51,40%
8	250	46,26	52,12	0,888	208,40	0,297	43,87%
9	250	39,44	45,73	0,862	182,88	0,249	36,78%
10	250	32,32	39,24	0,824	156,83	0,199	29,39%
11	250	9,96	25,75	0,387	102,95	0,050	7,39%



Table 22	Power factor (active power/input voltage) curve diagram (Test No.5)
Model:	SR 102 740 02 013 S N DD 03 1





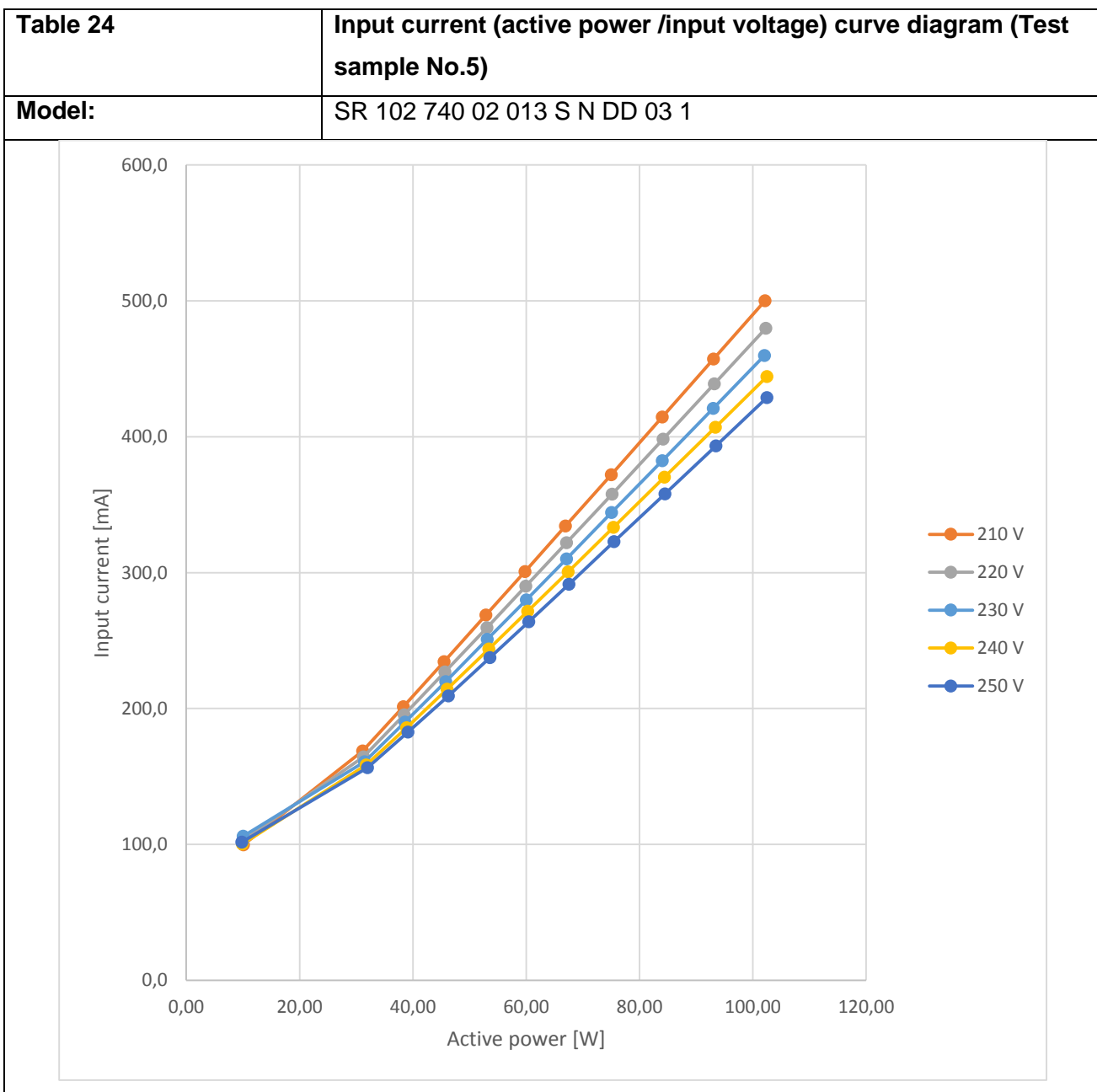




Table 25	Driver output current (active power/input voltage) curve diagram (Test sample No.5)
Model:	SR 102 740 02 013 S N DD 03 1

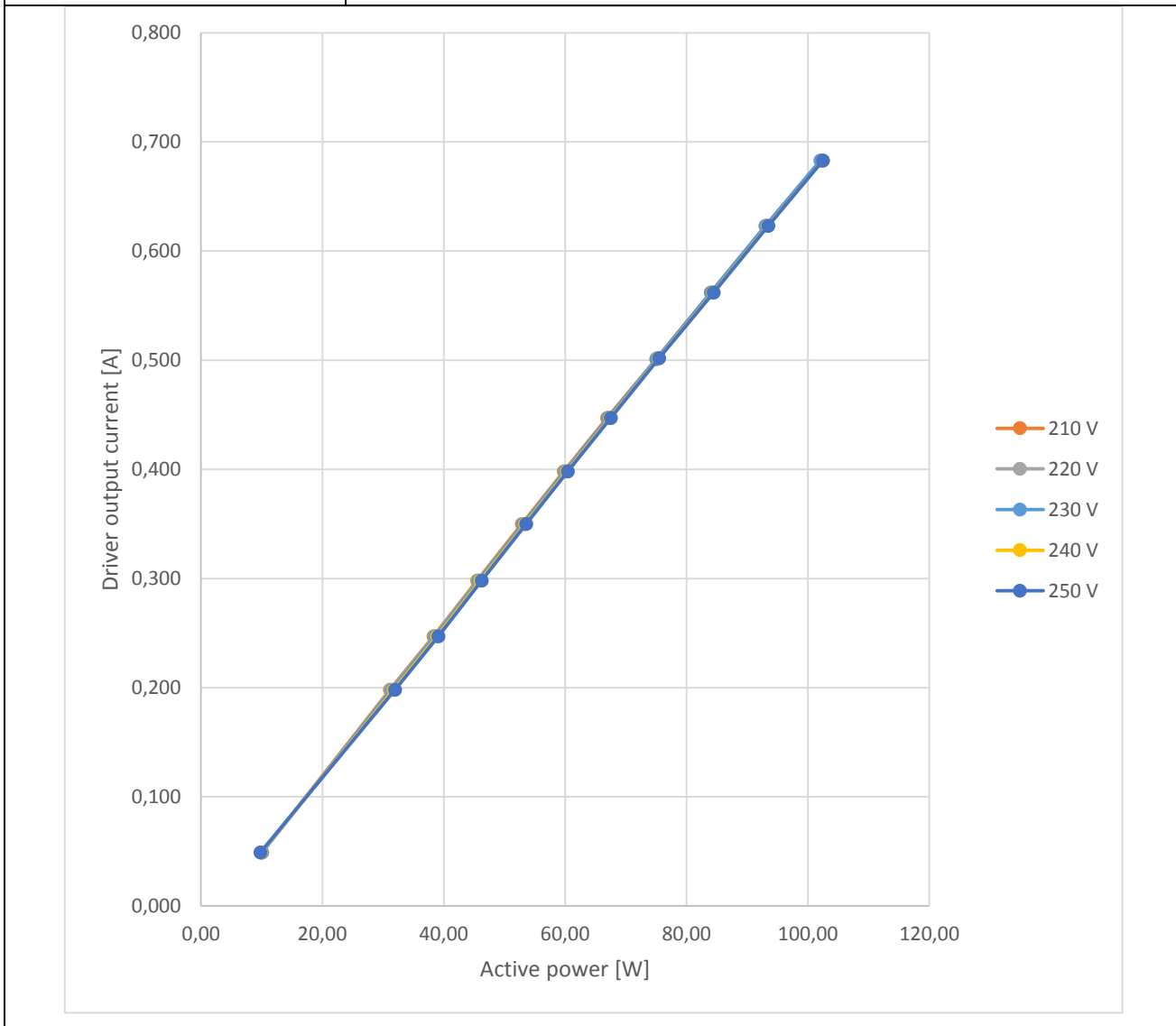




Table 26		Test data table No.5					
Model:		SR 102 740 02 013 S N DD 03 1					
Test Nr.	Input voltage [V]	Active power [W]	Apparent power [VA]	Power factor	Input current [mA]	Driver output current [A]	Dimming level
1	230	102,03	105,60	0,966	459,7	0,683	100,00%
2	230	93,03	96,72	0,962	420,9	0,623	91,22%
3	230	84,02	87,87	0,956	382,3	0,562	82,28%
4	230	75,08	79,10	0,949	344,1	0,501	73,35%
5	230	67,09	71,29	0,941	310,1	0,447	65,45%
6	230	60,00	64,35	0,932	279,8	0,398	58,27%
7	230	53,11	57,68	0,921	250,8	0,350	51,24%
8	230	45,77	50,57	0,905	219,8	0,298	43,63%
9	230	38,59	43,70	0,883	189,9	0,247	36,16%
10	230	31,45	37,02	0,850	160,8	0,198	28,99%
11	230	10,03	24,40	0,411	106,0	0,049	7,17%
1	210	102,16	104,84	0,974	500,0	0,683	100,00%
2	210	93,07	95,88	0,971	457,2	0,623	91,22%
3	210	84,02	86,94	0,966	414,4	0,562	82,28%
4	210	74,99	78,03	0,961	371,9	0,501	73,35%
5	210	66,93	70,13	0,954	334,2	0,447	65,45%
6	210	59,77	63,13	0,947	300,8	0,398	58,27%
7	210	52,88	56,51	0,937	268,7	0,350	51,24%



8	210	45,50	49,23	0,924	234,5	0,298	43,63%
9	210	38,29	42,27	0,906	201,3	0,247	36,16%
10	210	31,12	35,44	0,877	168,7	0,198	28,99%
11	210	10,08	20,96	0,481	99,7	0,049	7,17%
1	220	102,30	105,41	0,970	479,7	0,683	100,00%
2	220	93,22	96,44	0,967	438,9	0,623	91,22%
3	220	84,17	87,52	0,962	398,2	0,562	82,28%
4	220	75,14	78,95	0,955	357,7	0,502	73,50%
5	220	67,10	70,78	0,948	321,9	0,447	65,45%
6	220	59,94	63,77	0,940	290,0	0,398	58,27%
7	220	53,04	57,06	0,930	259,4	0,350	51,24%
8	220	45,65	49,90	0,915	226,8	0,298	43,63%
9	220	38,44	42,97	0,895	195,3	0,247	36,16%
10	220	31,28	36,18	0,865	164,4	0,198	28,99%
11	220	10,05	22,73	0,442	103,3	0,049	7,17%
1	240	102,46	106,51	0,962	444,2	0,683	100,00%
2	240	93,41	97,62	0,957	407,0	0,623	91,22%
3	240	84,39	88,76	0,951	370,1	0,562	82,28%
4	240	75,39	79,94	0,943	333,2	0,502	73,50%
5	240	67,38	72,11	0,935	300,5	0,447	65,45%
6	240	60,24	65,15	0,925	271,5	0,398	58,27%
7	240	53,38	58,50	0,913	243,8	0,350	51,24%



8	240	46,02	51,42	0,895	214,2	0,298	43,63%
9	240	38,86	44,60	0,871	185,8	0,247	36,16%
10	240	31,72	38,04	0,834	158,4	0,198	28,99%
11	240	9,86	24,06	0,410	100,1	0,049	7,17%
1	250	102,49	107,13	0,957	428,8	0,683	100,00%
2	250	93,47	98,25	0,951	393,3	0,623	91,22%
3	250	84,49	89,44	0,945	357,9	0,562	82,28%
4	250	75,51	80,65	0,936	322,7	0,502	73,50%
5	250	67,54	72,86	0,927	291,4	0,447	65,45%
6	250	60,42	65,93	0,916	263,7	0,398	58,27%
7	250	53,59	59,34	0,903	237,3	0,350	51,24%
8	250	46,25	52,28	0,885	209,1	0,298	43,63%
9	250	39,11	45,63	0,857	182,5	0,247	36,16%
10	250	31,96	39,12	0,817	156,4	0,198	28,99%
11	250	9,78	25,49	0,384	101,7	0,049	7,17%