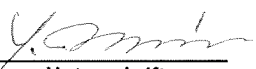
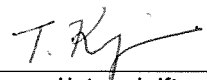



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<i>Test Report No.:</i>					
Auftraggeber: <i>Client:</i>			KYOCERA Document Solutions Inc. 1-2-28 Tamatsukuri, Chuo-ku, Osaka-shi, Osaka, 540-8585 Japan		
Gegenstand der Prüfung: Facsimile Kit for MFP <i>Test item:</i>					
Bezeichnung: <i>Identification:</i>		FAX System(X)		Serien-Nr.: <i>Serial No.:</i>	
				Prototype	
Wareneingangs-Nr.: <i>Receipt No.:</i>		PT0214042255-1-1		Eingangsdatum: 2013-10-28 <i>Date of receipt:</i>	
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>				Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>	
Prüfort: <i>Testing location:</i>		TÜV Rheinland Japan Ltd. 4-25-2, Kita-Yamata, Tuzuki-ku, Yokohama 224-0021, Japan Phone: +81-45-914-0239 Fax: +81-45-914-3347 e-mail: telecom-lab@jpn.tuv.com			
Prüfgrundlage: <i>Test specification:</i>		EG 201 120 V1.1.1 (1998 - 01)			
Prüfergebnis: <i>Test Result:</i>		Der Prüfgegenstand entspricht oben genannter Prüfgrundlage(n). <i>The test item passed the test specification(s).</i>			
Prüflaboratorium: <i>Testing Laboratory:</i>		TÜV Rheinland Japan Ltd. 4-25-2, Kita-Yamata, Tuzuki-ku, Yokohama 224-0021, Japan Phone: +81-45-914-0239 Fax: +81-45-914-3347 e-mail: telecom-lab@jpn.tuv.com			
geprüft/ tested by:			kontrolliert/ reviewed by:		
2013-11-07, Y. Miura 			2013-11-07, T. Kuriyama 		
Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name/Stellung <i>Name/Position</i>	Unterschrift <i>Signature</i>
Sonstiges/ Other Aspects:					
<p>Accredited Testing Laboratory under the terms of ISO 17025 D-PL-12059-01-03</p>  <p>DAkkS Deutsche Akkreditierungsstelle</p>					
<p>* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested</p>					
<p>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.</i></p>					

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Appendix C: Circuit Diagrams.....	0	pages
Appendix D: Photographs	0	pages

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Test result:

No deviations have been found from the technical requirements during the tests. ☒

The deviations from the technical requirements found during the tests are enclosed this report. ☐

Climatic conditions during testing

Temperature: 23 - 25 °C

Air pressure: 1000 - 1020 hPa

Humidity: 40 - 50 %

Appliance Documentation

Hardware: -

Software: -

User manual: FAX System(X) Fax functions

Circuit diagram: FAX PCB(1/2-2/2)

Test System Configuration

Hardware: FAX System(X)

Software: 001.400

Test Sample Configuration

☐ One - Port - TE (only a1/b1)

☒ Two - Port TE (a1/b1 and a2/b2)

☒ DTMF dialling function

☐ Decadic pulse dialling function

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Measurement equipment list

Measuring instrument	Identification	
Automatic Measurement System AMS from ESP-Telekom	TL-9000	
Outband Receiver and Ringer Amplifier ARE1000 from ESP-Telekom	TL-9001	
International Feeding Bridge ISB1000 from ESP-Telekom	TL-9002	
Digital Multimeter Fluke	TL-9108	
Oscilloscope Tektronix TDS210	TL-9008	
Task probe I / II / Voltage Probe I / II	TL-9036, TL-9037	
Connector Box	TL-9010	
Resistor Box	TL-9011	
Reference Impedance Zref-quer TBR21, Type28	TL-9020, TL-9021	
Reference Impedance Zref-längs TBR21, Type 29	TL-9022	
Reference Impedance 150 Ohm crosswise, Type 50	TL-9033	
Reference Impedance Z-Ref.\EG201120 - 4k Ohm crosswise	TL-9047	
Reference Impedance Z-Ref.\EG201120 - 4k Ohm length balanced	TL-9048	

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Measurement uncertainties

	Measuring	Measurement Uncertainty K=2
6.2-1	Resistance to earth	Resistance : $\pm 0.19 \text{ M}\Omega$
6.2-2	Impedance to earth at 50 Hz	Impedance Z : $\pm 2 \%$
6.2-3	DC resistance	DC Voltage : $\pm 0.81 \text{ V}$ Current : $\pm 1.5 \mu\text{A}$
6.2-4	Lowest impedance at 25Hz and 50Hz	Impedance : $\pm 54 \Omega$
6.2 - 5 a	Lowest impedance 0.3 – 3.4kHz, Z(f)	Impedance : $\pm 35 \Omega$
6.2 - 5 b	Lowest impedance at 12kHz and 16kHz	Impedance : $\pm 35 \Omega$
6.2 - 6	DC current during ringing	DC Voltage : $\pm 0.55 \text{ V}$ DC current : $\pm 0.094 \text{ mA}$
6.2 - 7-1	Lowest unbalance loss about earth 50-3400Hz (Quiescent, Loop)	Impedance unbalance: $\pm 1.1 \text{ dB}$
6.2 - 7-2	Lowest unbalance loss about earth 50-3400Hz (Transferred)	Impedance unbalance: $\pm 1.1 \text{ dB}$
6.2 - 8-1	Noise (Quiescent)	"Limit = -80dB: Voltage: $\pm 0.02 \text{ mV}$ Limit = -37dB: Voltage: $\pm 1.56 \text{ mV}$
6.2 - 8-2	Noise (Transferred)	"Limit = -80dB: Voltage: $\pm 0.02 \text{ mV}$ Limit = -37dB: Voltage: $\pm 1.56 \text{ mV}$
6.3.2 – 1	DC series resistance	DC current : $\pm 0.2 \text{ mA}$ Resistance : $\pm 1.0 \Omega$
6.3.2 – 2	Insertion loss at 25Hz and 50Hz	Insertion loss : $\pm 0.095 \text{ dB}$
6.3.2 – 2	Insertion loss 0.3 – 3.4 kHz	Insertion loss : $\pm 0.095 \text{ dB}$
	Insertion loss 12kHz and 16kHz	Insertion loss : $\pm 0.095 \text{ dB}$

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Summary Report: EG 201 120

Table 1 : Parallel aspects of parallel/series connection						
Requirements					N/A N/T fail OK	Appendix A
Resistance to earth - TBR 21, A.4.4.4					<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	1
Measurement results:						
Wire	U	I	R	LF (1,000/R)		
1	100 V	< 2 µA	> 50 MΩ	20 LU		
2	100 V	< 2 µA	> 50 MΩ	20 LU		
Impedance to earth at 50 Hz - ETS 300 001, A.9.2.2.1					<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	-
Measurement results:						
Wire	U	I	Z	LF (20,000/Z)		
1	100 Vrms	< 5 µA	>20 kΩ	10 LU		
2	100 Vrms	< 5 µA	>20 kΩ	10 LU		
DC resistance - TBR 21, A.4.4.1					<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	2
Measurement results:						
U _{DC} (Normal)		I _{max}	R _{TE}	LF (100/R)		
25 V		< 2.5 µA	> 10 MΩ	10 LU		
100 V		< 10.0 µA	> 10 MΩ	10 LU		
U _{DC} (Inverse)		I _{max}	R _{TE}	LF (100/R)		
25 V		< 2.5 µA	> 10 MΩ	10 LU		
100 V		< 10.0 µA	> 10 MΩ	10 LU		
Lowest Impedance at 25 Hz and 50 Hz - TBR 21, A.4.4.2.1					<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	3
Measurement results:						
f	U		Z _{TE}	LF (400/Z _{TE})		
25 Hz	> 30 Vrms		>200 kΩ	2.0 LU		
50 Hz	> 30 Vrms		168.8 kΩ	2.4 LU		
Lowest Impedance in the range 0.3 - 3.4 kHz - ETS 300 001, A.4.1.1					<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	4-5
Measurement results:						
frequency range	U		Z (min.)	LF (1,000/Z)		
300 Hz – 3400 Hz	1.0 Vrms		41.9 kΩ	23.9 LU		
Lowest Impedance at 12 kHz and 16 kHz ± 1% - ETS 300 001, A.4.1.1					<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	6-9
Measurement results:						
frequency range	U		Z (min.)	LF (1,000/Z)		
11.88 kHz - 12.12 kHz	1.0 Vrms		13.6 kΩ	73.5		
15.84 kHz - 16.16 kHz	1.0 Vrms		10.3 kΩ	97.1		

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Table 1 : Parallel aspects of parallel/series connection				
Requirements			N/A N/T fail OK	Appendix A
DC current during ringing - TBR 21, A.4.4.2.3 Measurement results: f I_{DC} (max.) LF ($100 \times I_{DC} / 0.6$) 25 Hz < 0.06 mA 10 LU 50 Hz < 0.06 mA 10 LU			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	10
Lowest unbalance loss about earth - TBR 21, A.4.4.3 Quiescent state Measurement results: frequency range LCL (min.) LF ($100 \times 10^{(46-LCL)/20}$) 50 Hz - 3,400 Hz 57.3 dB 27.2 LU			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	11-13
Lowest unbalance loss about earth - TBR 21, A.4.7.4 Loop state Measurement results: frequency range LCL (min.) LF ($100 \times 10^{(46-LCL)/20}$) 50 Hz - 3,400 Hz 59.08 dB 22.2 LU			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	14-16
Lowest unbalance loss about earth – ETS 300 001, A.4.2.2.2 Transferred state Measurement results: frequency range LCL (min.) LF ($100 \times 10^{(46-LCL)/20}$) 50 Hz - 3,400 Hz 59.98 dB 20.0 LU			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	17-20
Inband Noise (Psophometrically weighted) - ETS 300 001, A.4.5.1 Measurement results: Quiescent state N LF ($100 \times 10^{(64+N)/20}$) -99.4 dBmp 0.02 LU Loop state -93.8 dBmp 0.10 LU			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	21-22
Maximum Loading factor: 97.1 LU			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	-

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Table 2 : Recommended maximum values for series connected TEs			
Requirements	N/A N/T fail OK	Appendix A	
DC series resistance - ETS 300 001, A.2.5 Recommended maximum value: 50 Ω (DC feeding voltage: 50 Vdc, RL = 360 Ω) Measurement results: U 50 Vdc R 42 Ω	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	23	
Insertion loss at 25 Hz and 50 Hz - ETS 300 001, A.4.3 Recommended maximum value: 0.4 dB (Z = 4 k Ω) Measurement results: U ₁ 30 Vrms IL (20×logU ₁ /U ₂) 0.19 dB	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	24-25	
Insertion loss in the range 0.3 - 3.4 kHz - ETS 300 001, A.4.3 Recommended maximum value: 0.4 dB (Z = ZR) Measurement results: frequency range 300 Hz - 3400 Hz IL (max.) (20×logU ₁ /U ₂) 0.11 dB	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	26-27	
Insertion loss at 12 kHz and 16 kHz ± 1% - ETS 300 001, A.4.3 Recommended maximum value: 0.4 dB (Z = 200 Ω) Measurement results: frequency range 11.88 kHz - 12.12 kHz 15.84 kHz - 16.16 kHz IL (max.) (20×logU ₁ /U ₂) 0.1 dB 0.11 dB	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	28-31	

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Anlage A
Appendix A

Messergebnisse
Measuring results

Protocol for Resistance to earth

EG201120 - 6.2 Resistance to earth in quiescent and transfer state

=====

Model No. : FAX System(X)
 TEUT : Facsimile Kit for MFP Feeding bridge : TBR21
 Number of TEUT: 214042256
 Manufacturer : KYOCERA DS Inc.
 Date : 5.11.13
 Time : 17:32.47
 Data Set : EG201120-6.2
 Requirement : If a connection to earth is intended, the DC resistance between
 each line terminal of TE and earth shall be not less than
 10 MOhm.
 ("E" means the socket "Plane" on the front side of the ARE1000.)
 Remark : -

Verdict : PASS

Uf V	Rf Ω	Polarity	Ut V	Rt Ω	Measure	Limit MΩ	Current uA	Resistance MΩ
50.0	230	Normal	100.0	10000	b - E	10	< 2.0	> 50
50.0	230	Normal	-100.0	10000	b - E	10	< 2.0	> 50
50.0	230	Normal	100.0	10000	a - E	10	< 2.0	> 50
50.0	230	Normal	-100.0	10000	a - E	10	< 2.0	> 50
50.0	230	Inverted	100.0	10000	b - E	10	< 2.0	> 50
50.0	230	Inverted	-100.0	10000	b - E	10	< 2.0	> 50
50.0	230	Inverted	100.0	10000	a - E	10	< 2.0	> 50
50.0	230	Inverted	-100.0	10000	a - E	10	< 2.0	> 50

Protocol for DC resistance quiescent condition

EG201120 - 6.2 DC resistance in quiescent and transfer state

Model No. : FAX System(X)
 TEUT : Facsimile Kit for MFP Gain (internal) : +20.0 dB
 Number of TEUT: 214042256
 Manufacturer : KYOCERA DS Inc.
 Date : 5.11.13
 Time : 17:39.06

Data set : EG201120-6.2
 Requirement : The current drawn by the TE shall not exceed that which would be drawn by a 1 MOhm resistor replacing the TE.

Remark : -

Verdict : PASS

Vt [V]	Rt [Ohm]	Polarity	Rl< [MOhm]	R [MOhm]	
25.0	1000	Normal	1.0	> 10	< 2.5 uA
25.0	1000	Inverted	1.0	> 10	< 2.5 uA
50.0	1000	Normal	1.0	> 10	< 5.0 uA
50.0	1000	Inverted	1.0	> 10	< 5.0 uA
100.0	1000	Normal	1.0	> 10	< 10.0 uA
100.0	1000	Inverted	1.0	> 10	< 10.0 uA

Protocol for Impedance of ringing devices

EG201120 - 6.2 Impedance of ringing devices

Model No. : FAX System(X) Feeding voltage : 50.0 V
TEUT : Facsimile Kit for MFP Feeding resistor: 2050.0 Ohm
Number of TEUT: 214042256
Manufacturer : KYOCERA DS Inc.
Date : 5.11.13
Time : 17:43.24

Data set : EG201120-6.2
Requirement : The impedance Z of the TE at frequencies of 25 Hz and 50 Hz shall not be less than 4.0 ... 999.0 kOhmwhen tested at 30 V rms.

Remark : -

Verdict : PASS

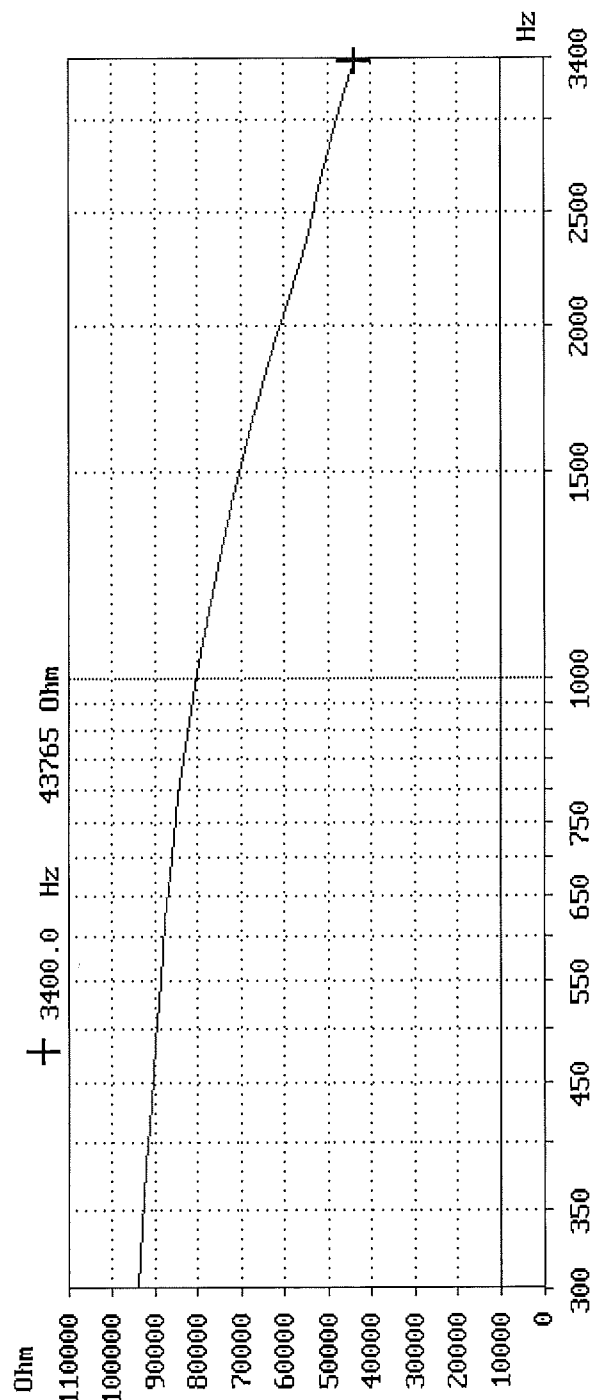
f Hz	Ute V	Z kΩ
25	30.0	> 200
50	30.0	168.8

Modulus of impedance Z(f)

EG 201 120/6.2

Test Job	: 214042256	Current Limitation	: 100.0 mA
TEUT	: Facsimile Kit for MFP	Feeding Voltage	: 50.0 V
Manufacturer	: KYOCERA DS Inc.	Dropping Resistor	: 2050.0 Ohm
Operator	: Y. Miura	Polarity	: Normal
Date	: 5.11.13	Level	: +0.0 dBV
Time	: 17:45.58		

Remark : -
Mask violations : 0
Verdict : PASS

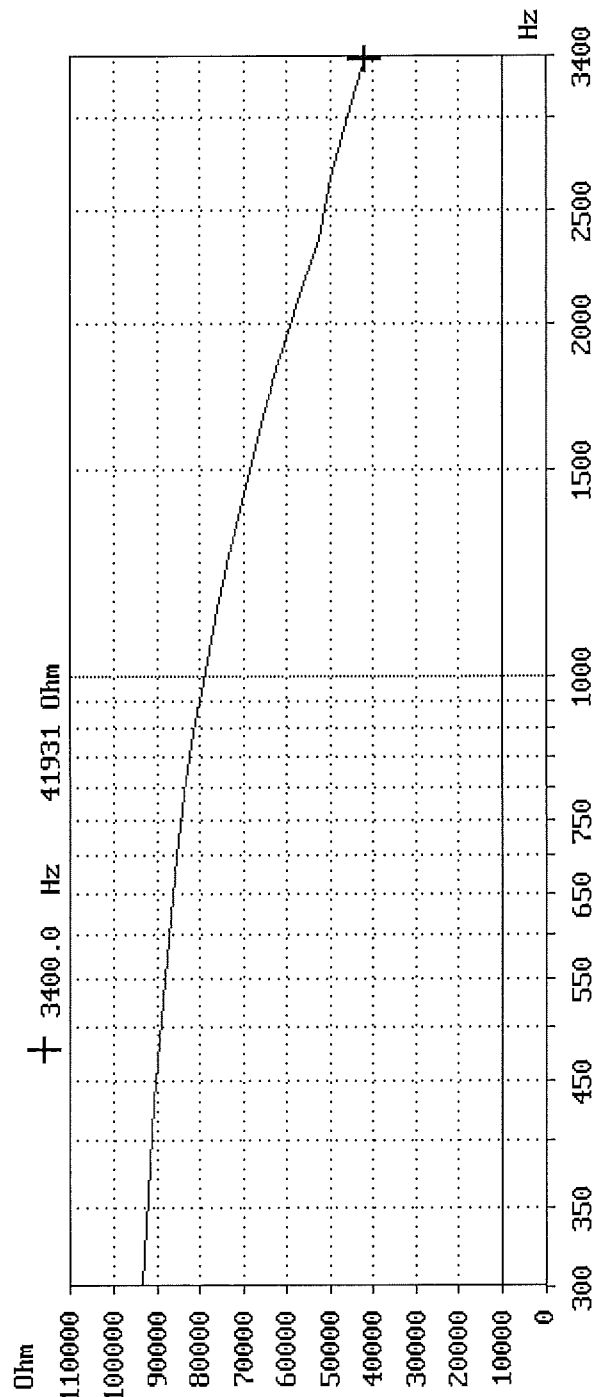


Modulus of impedance Z(f)

EG 201 120/6.2

Test Job	: 214042256	Current Limitation	: 100.0 mA
TEUT	: Facsimile Kit for MFP	Feeding Voltage	: 50.0 V
Manufacturer	: KYOCERA DS Inc.	Dropping Resistor	: 2050.0 Ohm
Operator	: Y. Miura	Polarity	: Inverted
Date	: 5.11.13	Level	: +0.0 dBV
Time	: 17:48.08		

Remark : -
Mask violations : 0
Verdict : PASS

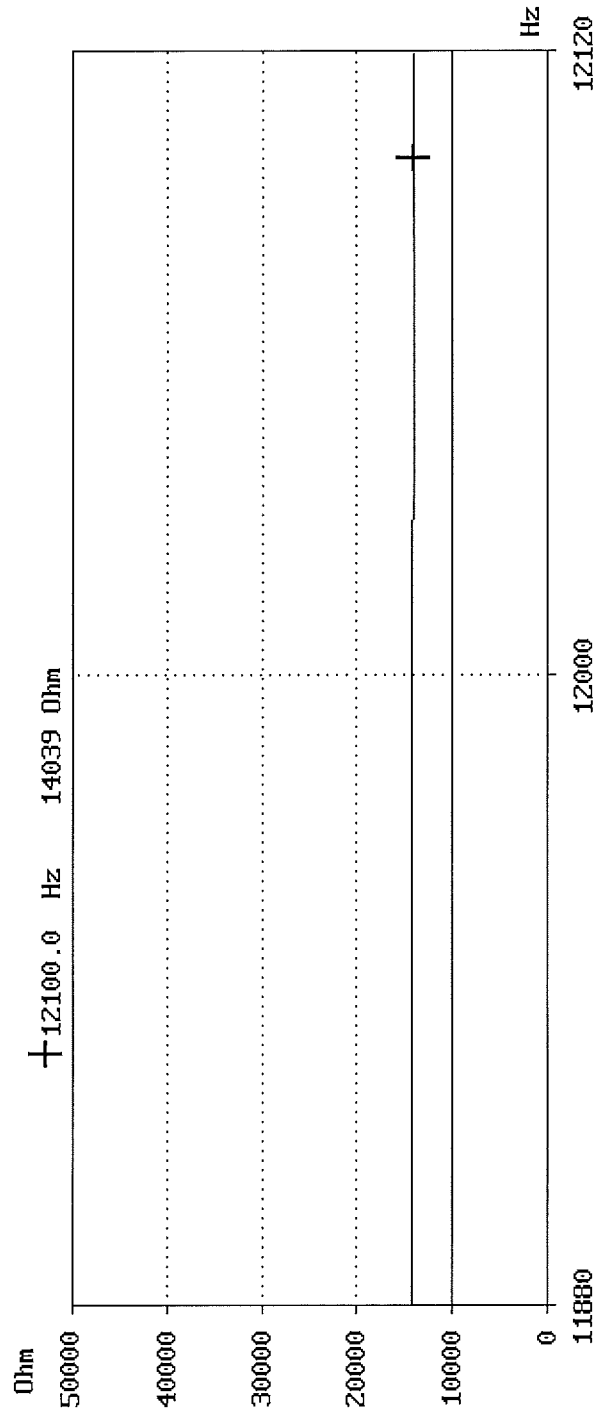


Modulus of impedance Z(f)

EG 201 120/6.2

Test Job	: 214042256	Current Limitation	: 100.0 mA
TEUT	: Facsimile Kit for MFP	Feeding Voltage	: 50.0 V
Manufacturer	: KYOCERA DS Inc.	Dropping Resistor	: 2050.0 Ohm
Operator	: Y. Miura	Polarity	: Normal
Date	: 5.11.13	Level	: +0.0 dBu
Time	: 17:49.48		

Remark : -
Mask violations : 0
Verdict : PASS

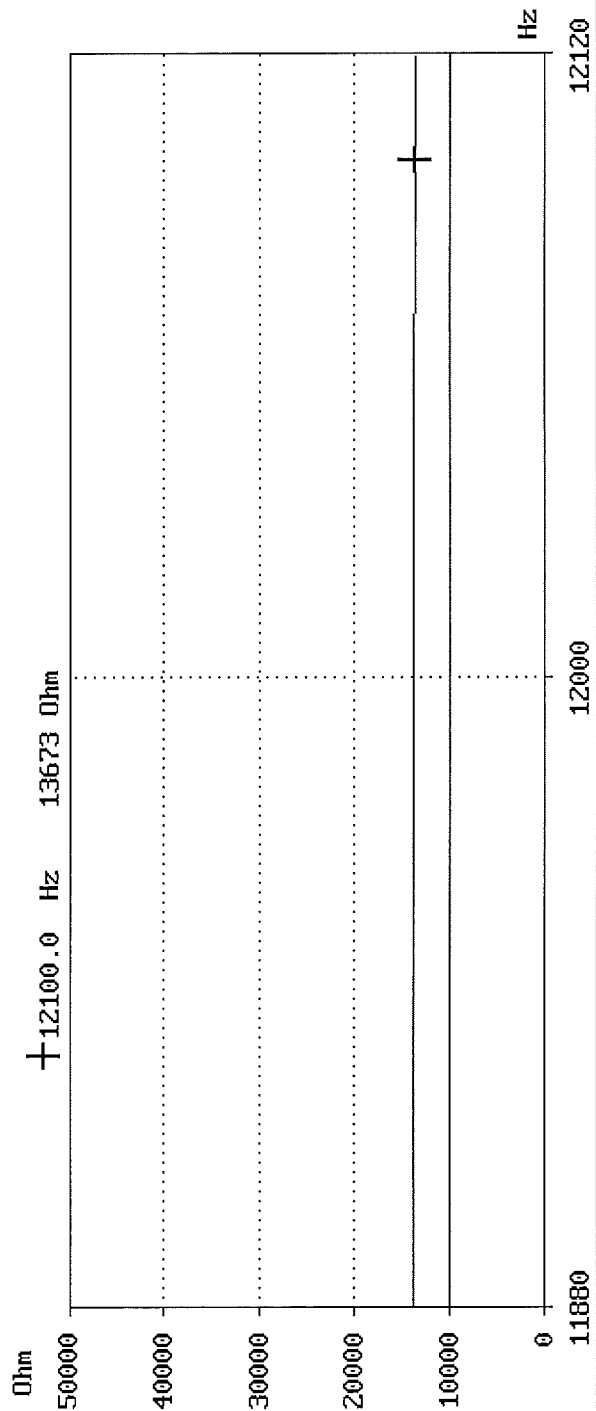


Modulus of impedance Z(f)

EG 201 120/6.2

Test Job	: 214042256	Current Limitation	: 100.0 mA
TEUT	: Facsimile Kit for MFP	Feeding Voltage	: 50.0 V
Manufacturer	: KYOCERA DS Inc.	Dropping Resistor	: 2050.0 Ohm
Operator	: Y. Miura	Polarity	: Inverted
Date	: 5.11.13	Level	: +0.0 dBu
Time	: 17:51.05		

Remark : -
Mask violations : 0
Verdict : PASS

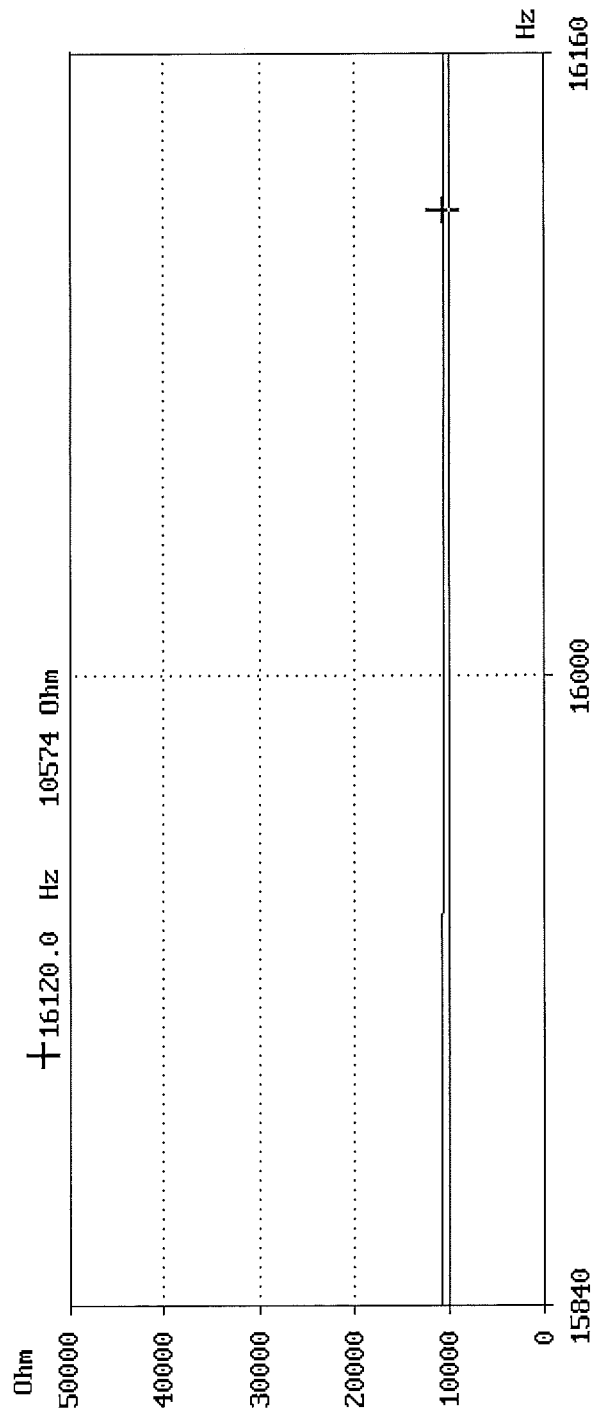


Modulus of impedance Z(f)

EG 201 120/6.2

Test Job	: 214042256	Current Limitation	: 100.0 mA
TEUT	: Facsimile Kit for MFP	Feeding Voltage	: 50.0 V
Manufacturer	: KYOCERA DS Inc.	Dropping Resistor	: 2050.0 Ohm
Operator	: Y. Miura	Polarity	: Normal
Date	: 5.11.13	Level	: +0.0 dBV
Time	: 17:52.18		

Remark : -
Mask violations : 0
Verdict : PASS

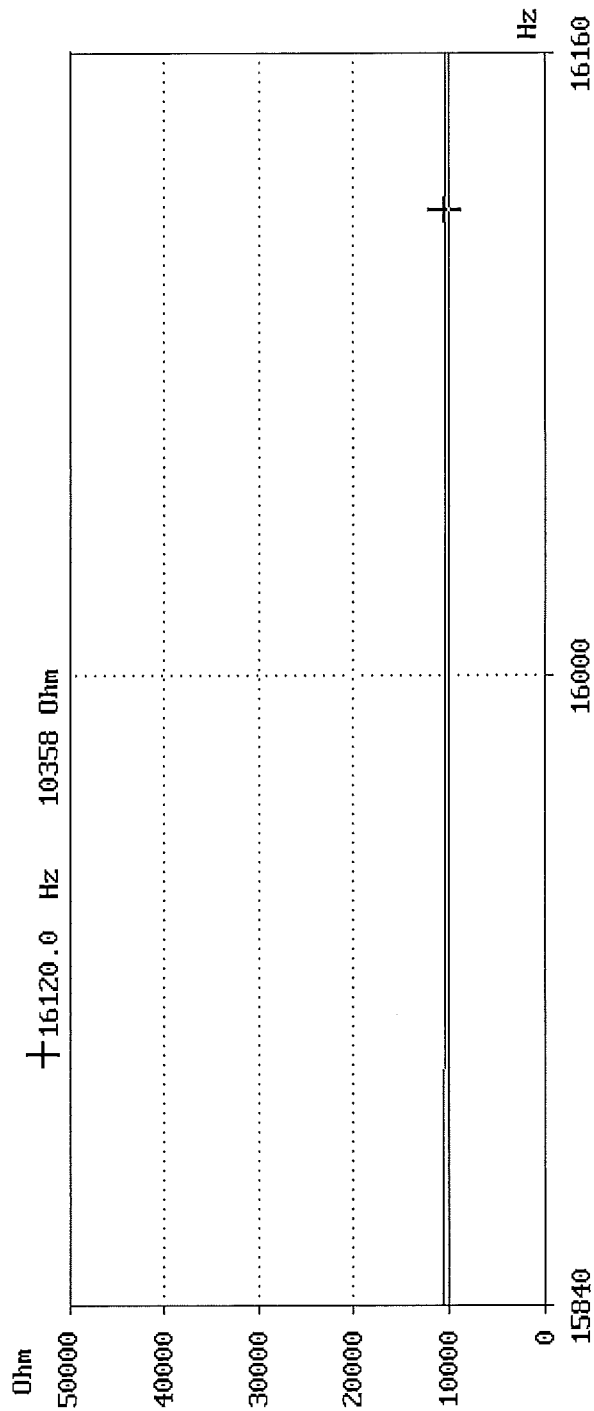


Modulus of impedance Z(f)

EG 201 120/6.2

Test Job	: 214042256	Current Limitation	: 100.0 mA
TEUT	: Facsimile Kit for MFP	Feeding Voltage	: 50.0 V
Manufacturer	: KYOCERA DS Inc.	Dropping Resistor	: 2050.0 Ohm
Operator	: Y. Miura	Polarity	: Inverted
Date	: 5.11.13	Level	: +0.0 dBu
Time	: 17:53.31		

Remark : -
Mask violations : 0
Verdict : PASS



Protocol for DC current during ringing

EG201120 - 6.2 DC current during ringing

=====

Model No.	: FAX System(X)	Feeding voltage	: 60.0 V
TEUT	: Facsimile Kit for MFP	Feeding resistor	: 850 Ohm
Number of TEUT	: 214042256	Polarity	: Normal
Manufacturer	: KYOCERA DS Inc.		
Date	: 5.11.13		
Time	: 17:54.28		

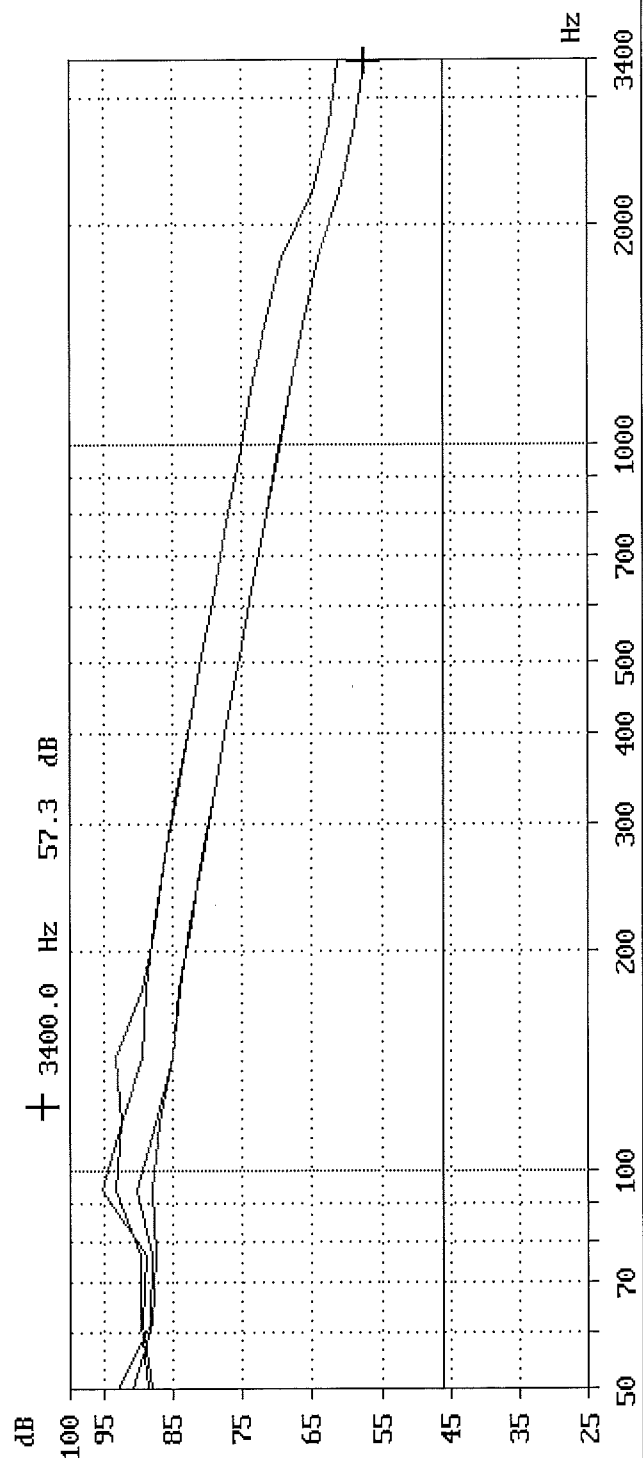
Data set : EG201120-6.2
Requirement : The resulting DC current during the ringing signal shall be less 0.60 mA.

Remark : -

Verdict : PASS

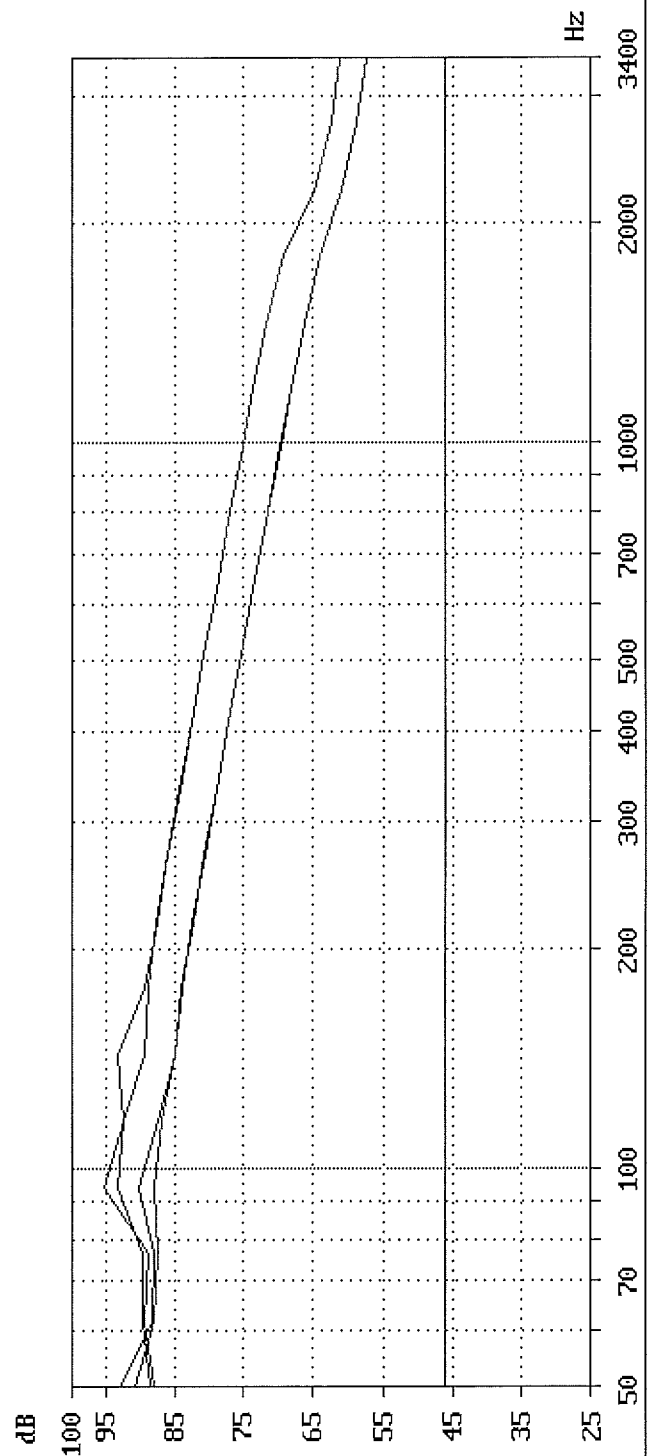
f Hz	Uac V	R kΩ	I mA
25	90.0	> 1Meg	< 0.06
50	90.0	> 1Meg	< 0.06

EG 201 120



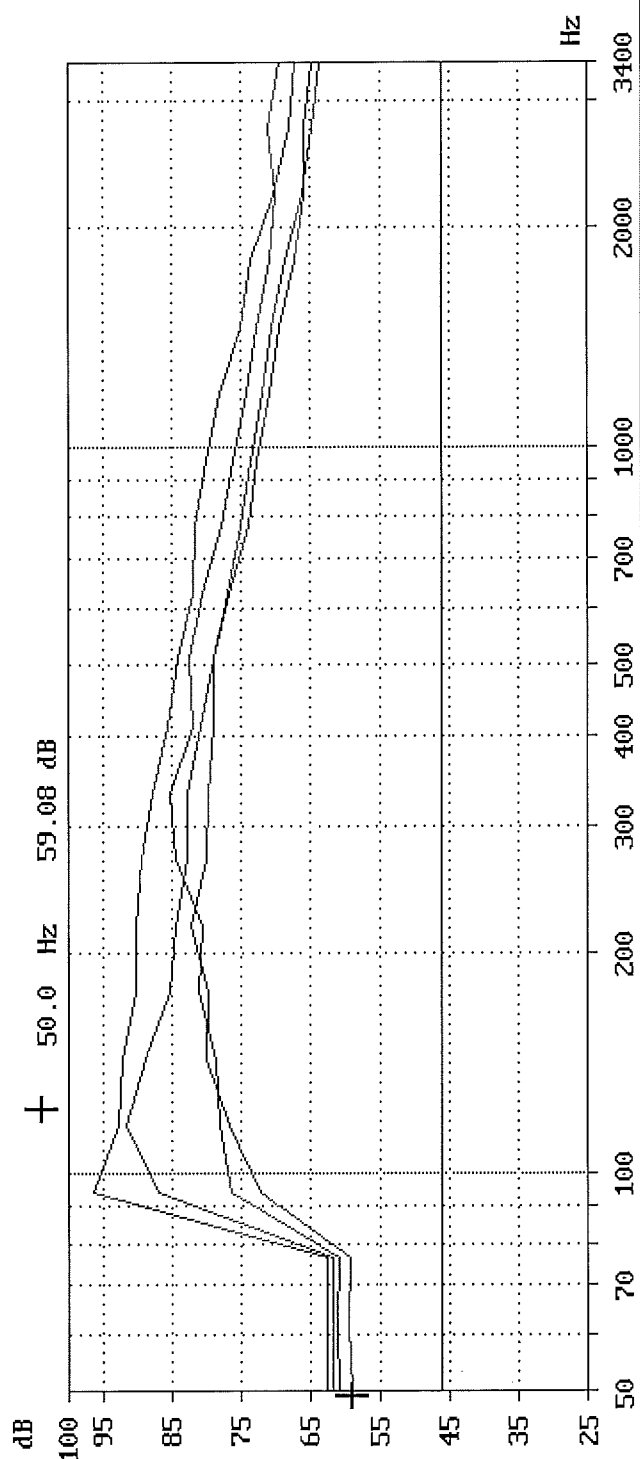
EG 201 120

Comission : 214042256
Printing time : 5.11.13 18:03.33
Graph 1 _____
Graph 2 _____
Graph 3 _____
Graph 4 _____



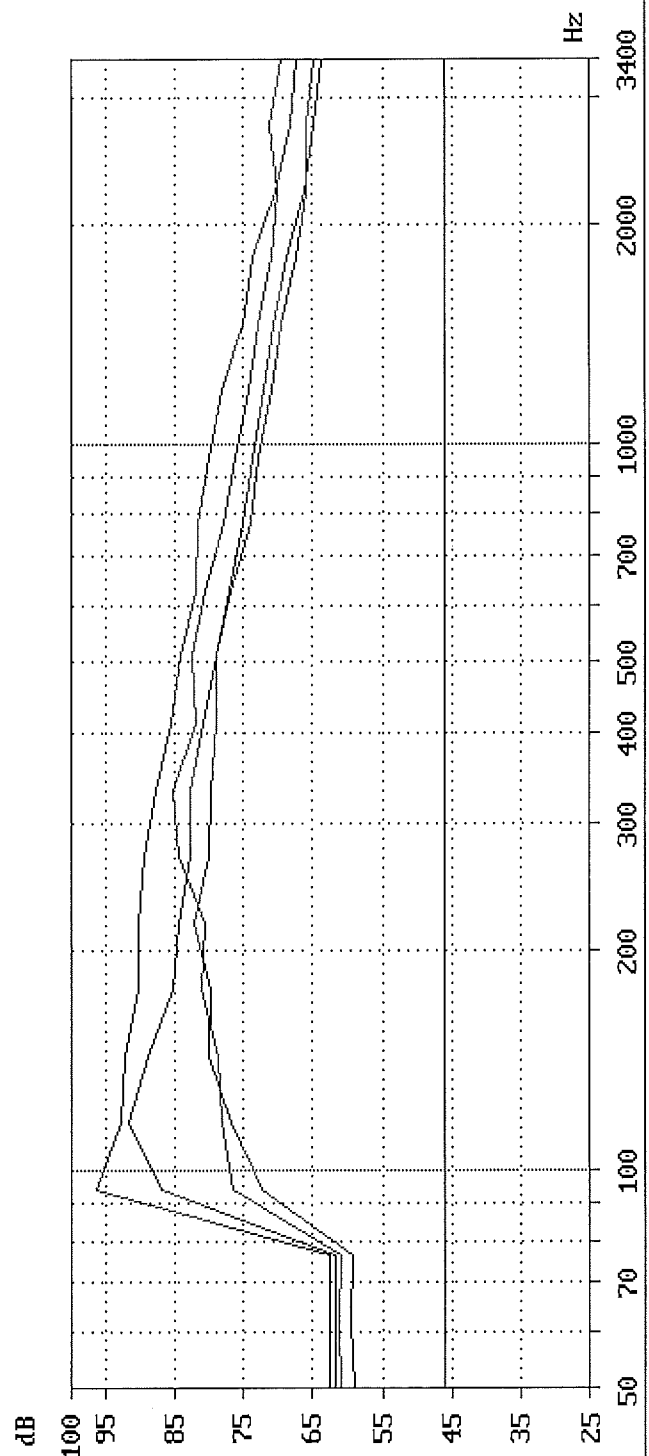
Longitudinal conversion loss Comission : 214042256		Printing time : 5.11.13 18:03.33	
Graph 1		Graph 2	
Test Job	Longitudinal conversion loss	Longitudinal conversion loss	
TEUT	214042256	214042256	
Manufacturer	Facsimile Kit for MFP	Facsimile Kit for MFP	
Operator	KYOCERA DS Inc.	KYOCERA DS Inc.	
Date	Y. Miura	Y. Miura	
Time	5.11.13	5.11.13	
Tol.mask violations	17:56.07	17:56.33	
Verdict	0	0	
Current Limitation	PASS	PASS	
Feeding Voltage	60.0 mA	60.0 mA	
Feeding Bridge	50.0 V	50.0 V	
Feeding resistor	TBR21	TBR21	
Level	3200 Ohm	2050 Ohm	
Remark	+0.0 dB(0.775 V)	+0.0 dB(0.775 V)	
	Quiescent	-	
Graph 3		Graph 4	
Test Job	Longitudinal conversion loss	Longitudinal conversion loss	
TEUT	214042256	214042256	
Manufacturer	Facsimile Kit for MFP	Facsimile Kit for MFP	
Operator	KYOCERA DS Inc.	KYOCERA DS Inc.	
Date	Y. Miura	Y. Miura	
Time	5.11.13	5.11.13	
Tol.mask violations	17:56.57	17:57.20	
Verdict	0	0	
Current Limitation	PASS	PASS	
Feeding Voltage	60.0 mA	60.0 mA	
Feeding Bridge	50.0 V	50.0 V	
Feeding resistor	TBR21	TBR21	
Level	850 Ohm	230 Ohm	
Remark	+0.0 dB(0.775 V)	+0.0 dB(0.775 V)	
	-	-	

EG 201 120



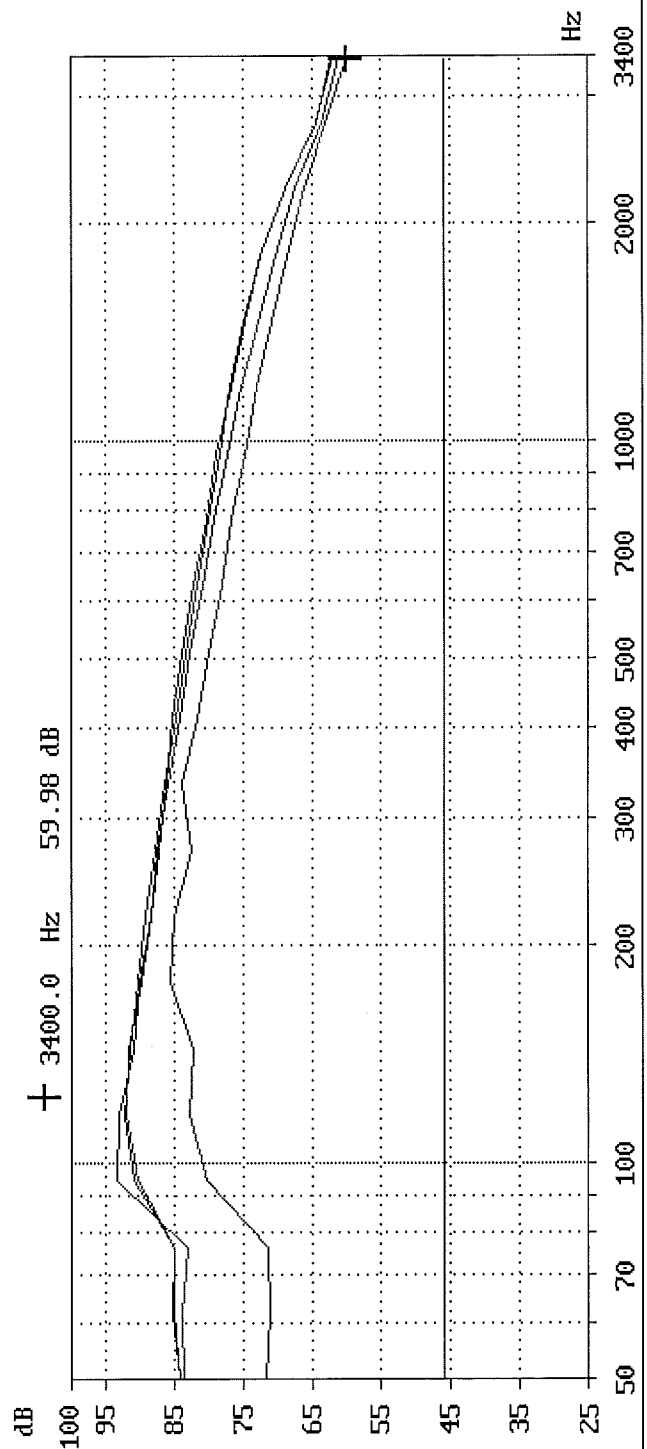
EG 201 120

Comission : 214042256
Printing time : 5.11.13 18:06.16
Graph 1 _____
Graph 2 _____
Graph 3 _____
Graph 4 _____



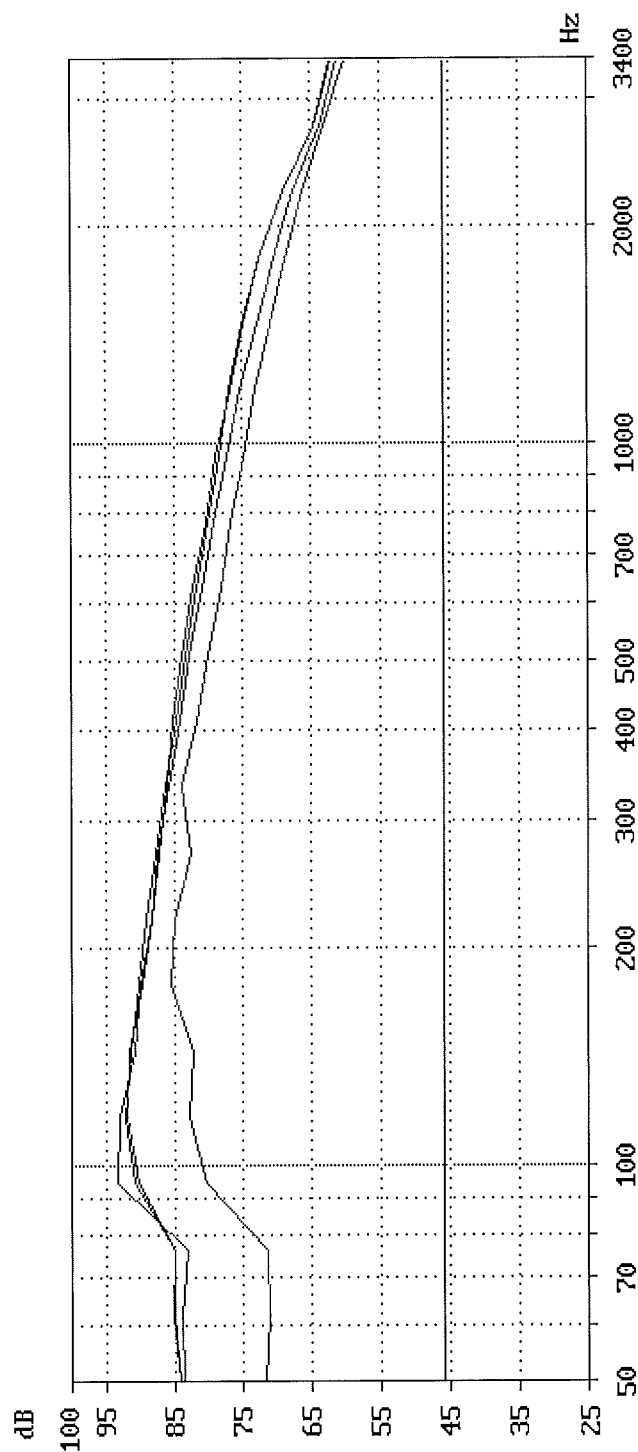
Longitudinal conversion loss Comission : 214042256		Printing time : 5.11.13 18:06.16	
Graph 1		Graph 2	
Test Job	Longitudinal conversion loss	Longitudinal conversion loss	
TEUT	214042256	214042256	
Manufacturer	Facsimile Kit for MFP	Facsimile Kit for MFP	
Operator	KYOCERA DS Inc.	KYOCERA DS Inc.	
Date	Y. Miura	Y. Miura	
Time	5.11.13	5.11.13	
Tol.mask violations	18:04.16	18:04.38	
Verdict	0	0	
Current Limitation	PASS	PASS	
Feeding Voltage	60.0 mA	60.0 mA	
Feeding Bridge	50.0 V	50.0 V	
Feeding resistor	TBR21	TBR21	
Level	3200 Ohm	2050 Ohm	
Remark	+0.0 dB(0.775 V)	+0.0 dB(0.775 V)	
	Loop	-	
Graph 3		Graph 4	
Test Job	Longitudinal conversion loss	Longitudinal conversion loss	
TEUT	214042256	214042256	
Manufacturer	Facsimile Kit for MFP	Facsimile Kit for MFP	
Operator	KYOCERA DS Inc.	KYOCERA DS Inc.	
Date	Y. Miura	Y. Miura	
Time	5.11.13	5.11.13	
Tol.mask violations	18:04.59	18:05.19	
Verdict	0	0	
Current Limitation	PASS	PASS	
Feeding Voltage	60.0 mA	60.0 mA	
Feeding Bridge	50.0 V	50.0 V	
Feeding resistor	TBR21	TBR21	
Level	850 Ohm	230 Ohm	
Remark	+0.0 dB(0.775 V)	+0.0 dB(0.775 V)	
	-	-	

EG 201 120



EG 201 120

Comission : 214042256
Printing time : 5.11.13 18:14.13
Graph 1 _____
Graph 2 _____
Graph 3 _____
Graph 4 _____



Longitudinal conversion loss 4-wire		Printing time : 5.11.13 18:14.13
Comission : 214042256		
Graph 1		
Test Job	Longitudinal conversion loss 4-wire	
TEUT	214042256	
Manufacturer	Facsimile Kit for MFP	
Operator	KYOCERA DS Inc.	
Date	Y. Miura	
Time	5.11.13	
Tol.mask violations	18:09.16	
Verdict	0	
Current Limitation	PASS	
Feeding Voltage	100.0 mA	
Feeding Bridge	50.0 V	
Feeding resistor	germany	
Drop resistor HC	3200 Ohm	
Termination	300 Ohm	
Level	600 Ohm	
Remark	+0.0 dB(0.775 V)	
	-	
Graph 2		
Test Job	Longitudinal conversion loss 4-wire	
TEUT	214042256	
Manufacturer	Facsimile Kit for MFP	
Operator	KYOCERA DS Inc.	
Date	Y. Miura	
Time	5.11.13	
Tol.mask violations	18:09.40	
Verdict	0	
Current Limitation	PASS	
Feeding Voltage	100.0 mA	
Feeding Bridge	50.0 V	
Feeding resistor	germany	
Drop resistor HC	2050 Ohm	
Termination	300 Ohm	
Level	600 Ohm	
Remark	+0.0 dB(0.775 V)	
	-	
Graph 3		
Test Job	Longitudinal conversion loss 4-wire	
TEUT	214042256	
Manufacturer	Facsimile Kit for MFP	
Operator	KYOCERA DS Inc.	
Date	Y. Miura	
Time	5.11.13	
Tol.mask violations	18:10.02	
Verdict	0	
Current Limitation	PASS	
Feeding Voltage	100.0 mA	
Feeding Bridge	50.0 V	
Feeding resistor	germany	
Drop resistor HC	850 Ohm	
Termination	300 Ohm	
Level	600 Ohm	
Remark	+0.0 dB(0.775 V)	
	-	

Longitudinal conversion loss 4-wire
Comission : 214042256

Printing time : 5.11.13 18:14.13

Graph 4

Test Job	Longitudinal conversion loss 4-wire
TEUT	214042256
Manufacturer	Facsimile Kit for MFP
Operator	KYOCERA DS Inc.
Date	Y. Miura
Time	5.11.13
Tol.mask violations	18:10.23
Verdict	0
Current Limitation	PASS
Feeding Voltage	100.0 mA
Feeding Bridge	50.0 V
Feeding resistor	germany
Drop resistor HC	230 Ohm
Termination	300 Ohm
Level	600 Ohm
Remark	+0.0 dB(0.775 V)
	-

Protocol for Noise level sending 2-wire

Noise level sending 2-wire
EG 201 120, 6.2

Date	: 5.11.13	Current Limitation	: 100.0 mA
Time	: 18:15.38	Feeding Voltage	: 50.0 V
Operator	: Y. Miura	Feeding Bridge	: TBR21
Commission	: 214042256	Receiver Impedance	: 600 Ohm
TEUT	: Facsimile Kit for MFP	Filter	: Psophometric
Manufacturer	: KYOCERA DS Inc.	Time Constant	: $\tau = 200$ msec
		Limit	: ≤ -64.0 dBmp
Remark	: -	Verdict	: PASS

ps
[dBmp]

Rf
[Ω]

Polarity

-101.9	3200	Inverted
-99.4	2050	Normal
-102.3	850	Inverted
-99.6	230	Normal

Protocol for Noise level sending 4-wire

Noise level sending 4-wire
EG 201 120, 6.2

Date : 5.11.13
Time : 18:16.46
Operator : Y. Miura
Commission : 214042256
TEUT : Facsimile Kit for MFP
Manufacturer: KYOCERA DS Inc.

Current Limitation : 100.0 mA
Feeding Voltage : 50.0 V
Feeding Bridge : TBR21
Termination Za : 600 Ohm
Drop resistor of HC: 300 Ohm
Filter : Psophometric
Time Constant : $\tau = 200$ msec
Receiver Impedance : 600 Ohm
Limit : ≤ -64.0 dBmp

Remark : -

Verdict : PASS

ps
[dBmp]

Rf
[Ω]

Polarity

-101.4	3200	Inverted
-98.9	2050	Normal
-104.2	850	Inverted
-93.8	230	Normal

Protocol for Series DC resistance

Series DC resistance
EG 201120, 6.3.1

Date	: 5.11.13	Feeding Voltage	: 50.0 V
Time	: 18:30.41	Feed current/limit	: 100.0 mA
Operator	: Y. Miura	Trigger I [mA]	: 5 mA
Test Job	: 214042256	Termination	: 600 Ohm
TEUT	: Facsimile Kit for MFP	Verdict	: PASS
Parameter set	: EG 201120, 6.3.1		
Remark	: -		

Limit	: Rs1 < 50 Ohm	Rs2 < 50 Ohm	Rs < 50 Ohm
Rf Ohm	Polarity	I mA	Vs1 V
			Vs2 V
			Rs1 Ohm
			Rs2 Ohm
			Rs Ohm

230	Inverted	56.946	0.112	2.261	2	40	42
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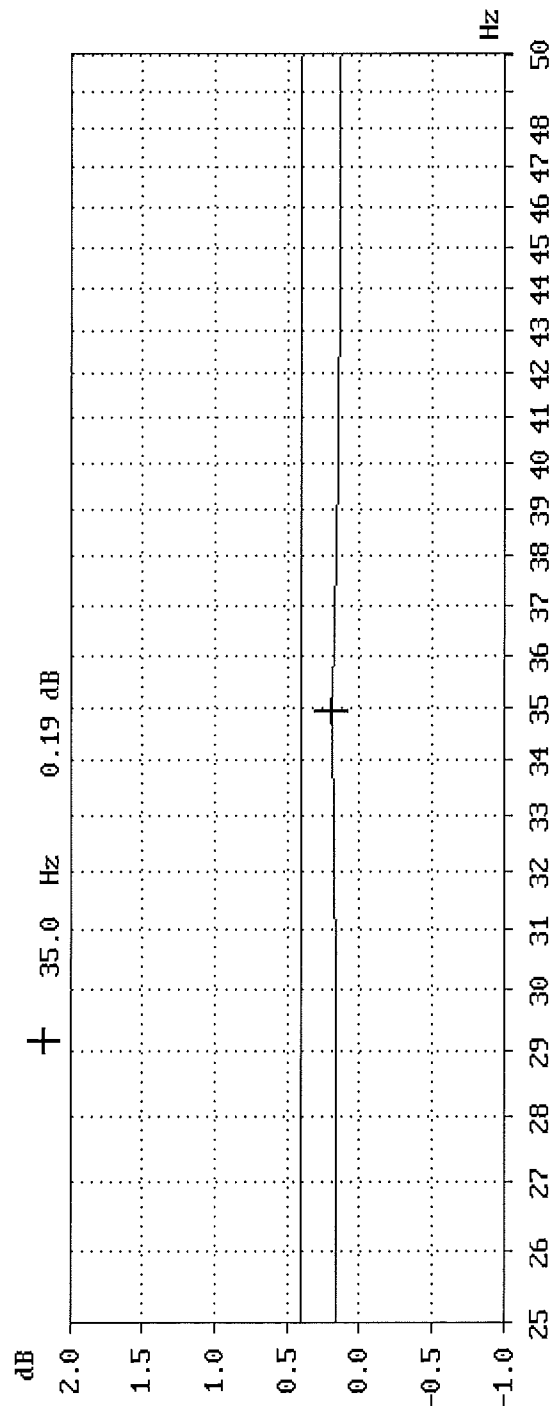
Insertion loss 4-wire

EG 201 120/6.3.1

Test job	: 214042256	Level	: +20.0 dBu
TEUT	: Facsimile Kit for MFP	Generator imp.	: 4 kOhm symmetrical
Manufacturer:	KYOCERA DS Inc.	Input impedance	: 4 kOhm
Operator	: Y. Miura	Feeding voltage	: 50.0 V
Date	: 5.11.13	Feeding resistor Rf	: 2050.0 Ohm
Time	: 18:32.02	Drop resistor of HC	: 300 Ohm
Remark	: -	Direction	: Normal
		Feeding current:	100.0 mA
		Polarity	: Normal

Tol.mask violations: 0

Verdict : PASS



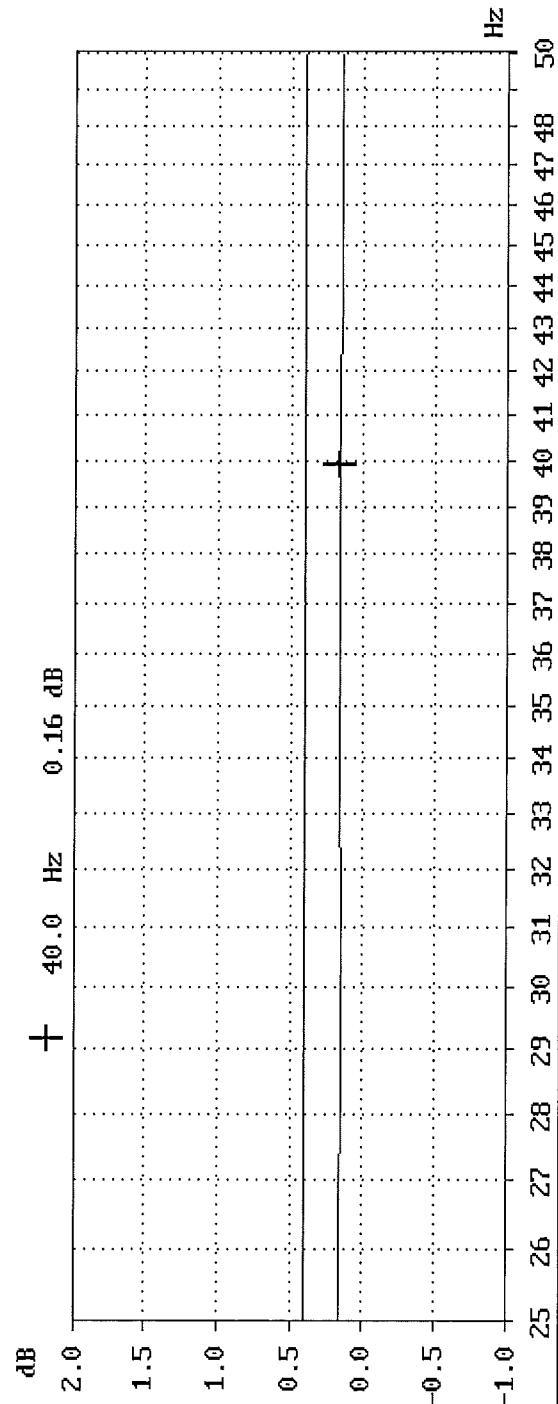
Insertion loss 4-wire

EG 201 120/6.3.1

Test job	: 214042256	Level	: +20.0 dBV
TEUT	: Facsimile Kit for MFP	Generator imp.	: 4 kOhm symmetrical
Manufacturer:	KYOCERA DS Inc.	Input impedance	: 4 kOhm
Operator	: Y. Miura	Feeding voltage	: 50.0 V
Date	: 5.11.13	Feeding resistor Rf	: 2050.0 Ohm
Time	: 18:32.49	Drop resistor of HC	: 300 Ohm
Remark	: -	Direction	: Normal
Tol.mask violations:	0		
Verdict	: PASS		

Tol.mask violations: 0

Verdict : PASS

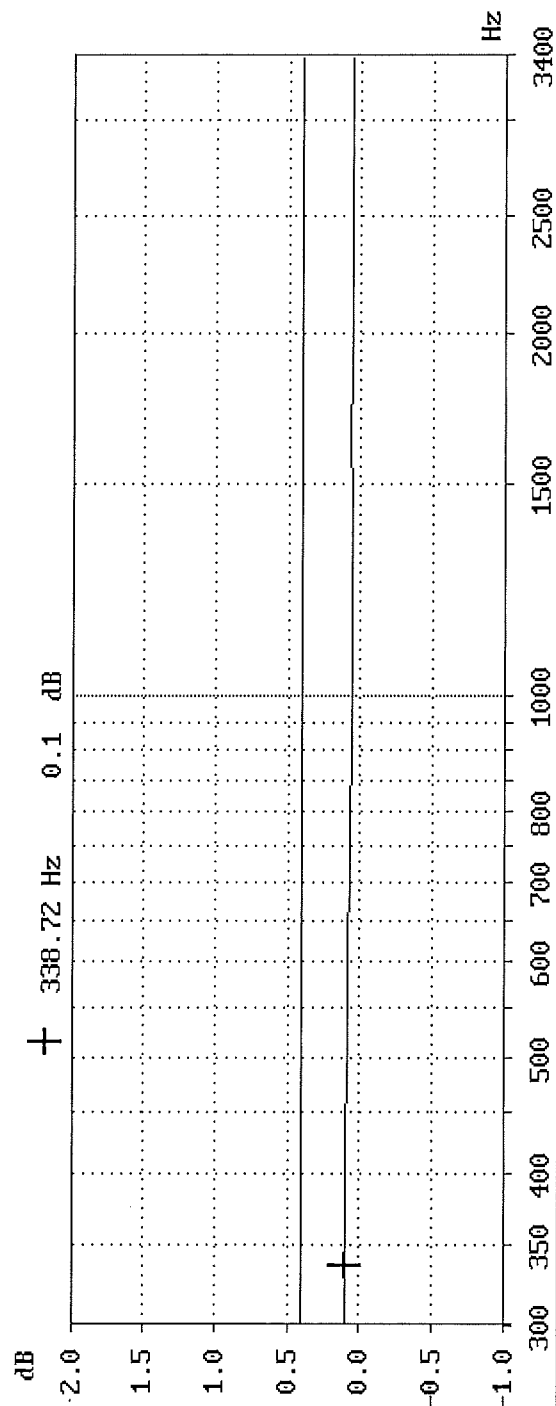


Insertion loss 4-wire

EG 201 120/6.3.1

Test job	: 214042256	Level	: +0.0 dBV
TEUT	: Facsimile Kit for MFP	Generator imp.	: Zr TBR21 symmetrical
Manufacturer	: KYOCERA DS Inc.	Input impedance	: Zr TBR21
Operator	: Y. Miura	Feeding voltage	: 50.0 V
Date	: 5.11.13	Feeding resistor Rf	: 2050.0 Ohm
Time	: 18:39.51	Drop resistor of HC	: 300 Ohm
Remark	: -	Direction	: Normal
		Feeding current	: 100.0 mA
		Polarity	: Normal

Tol.mask violations: 0
Verdict : PASS



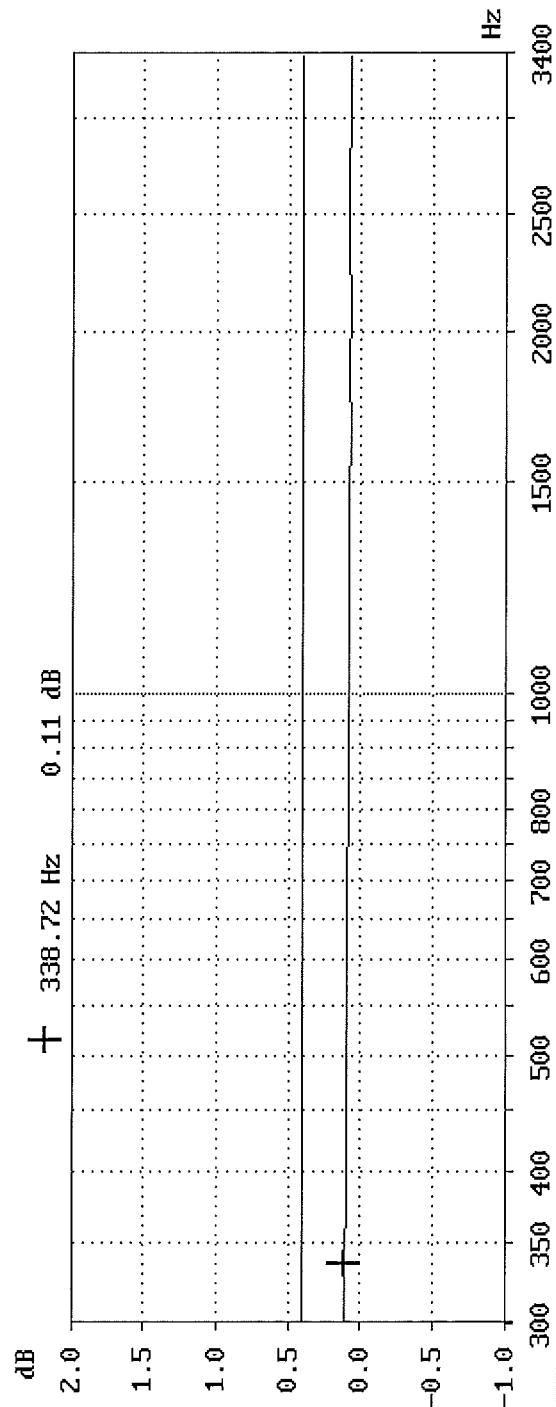
Insertion loss 4-wire

EG 201 120/6.3.1

Test job	: 214042256	Level	: +0.0 dBV
TEUT	: Facsimile Kit for MFP	Generator imp.	: Zr TBR21 symmetrical
Manufacturer:	KYOCERA DS Inc.	Input impedance	: Zr TBR21
Operator	: Y. Miura	Feeding voltage	: 50.0 V
Date	: 5.11.13	Feeding resistor Rf	: 2050.0 Ohm
Time	: 18:39.01	Drop resistor of HC	: 300 Ohm
Remark	: -	Feeding current:	100.0 mA
		Polarity	: Inverted
		Direction	: Normal

Tol.mask violations: 0

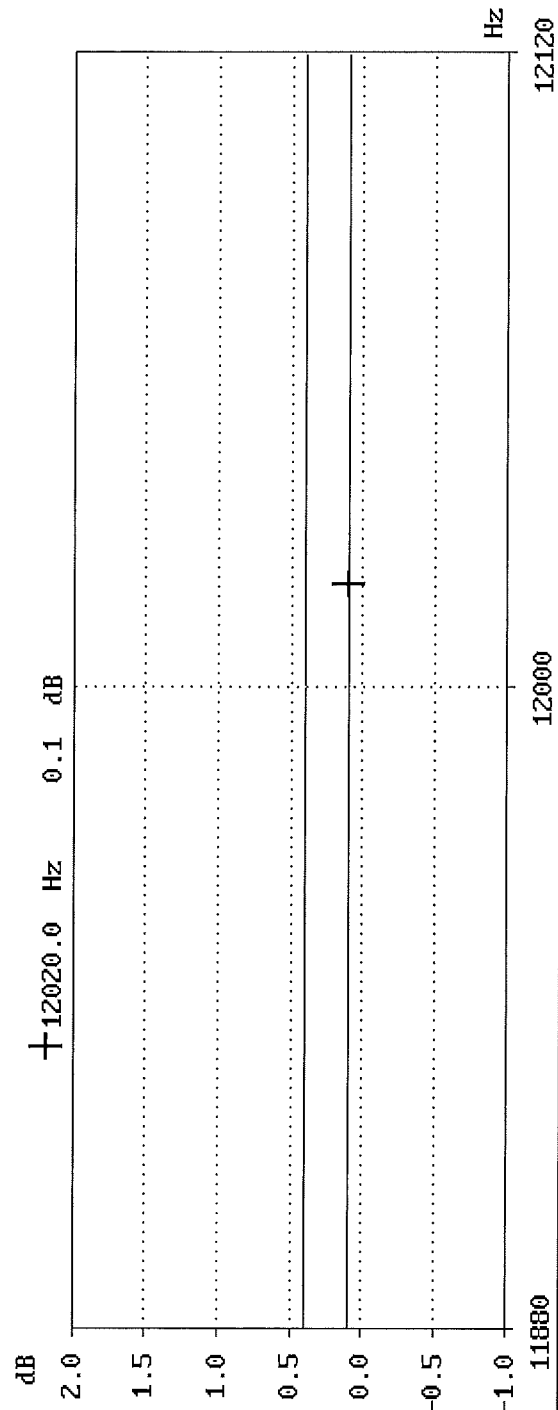
Verdict : PASS



Insertion loss 4-wire

EG 201 120/6.3.1

Test job	: 214042256	Level	: +0.0 dBV
TEUT	: Facsimile Kit for MFP	Generator imp.	: 200 Ohm symmetrical
Manufacturer	: KYOCERA DS Inc.	Input impedance	: 200 Ohm
Operator	: Y. Miura	Feeding voltage	: 50.0 V
Date	: 5.11.13	Feeding resistor Rf	: 2050.0 Ohm
Time	: 18:43.16	Drop resistor of HC	: 300 Ohm
Remark	: -	Direction	: Normal
Tol.mask violations:	0	Feeding current:	100.0 mA
Verdict	: PASS	Polarity	: Normal



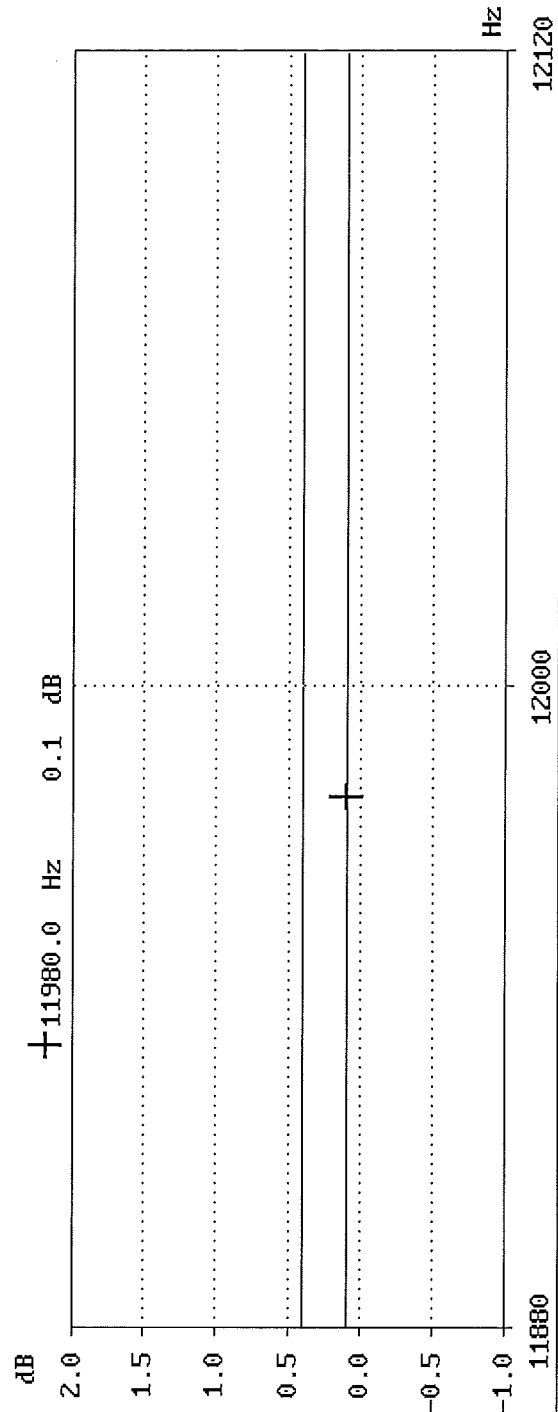
Insertion loss 4-wire

EG 201 120/6.3.1

Test job	: 214042256	Level	: +0.0 dBV
TEUT	: Facsimile Kit for MFP	Generator imp.	: 200 Ohm symmetrical
Manufacturer	: KYOCERA DS Inc.	Input impedance	: 200 Ohm
Operator	: Y. Miura	Feeding voltage	: 50.0 V
Date	: 5.11.13	Feeding resistor Rf	: 2050.0 Ohm
Time	: 18:44.08	Drop resistor of HC	: 300 Ohm
Remark	: -	Direction	: Normal
		Feeding current	: 100.0 mA
		Polarity	: Inverted

Tol.mask violations: 0

Verdict : PASS



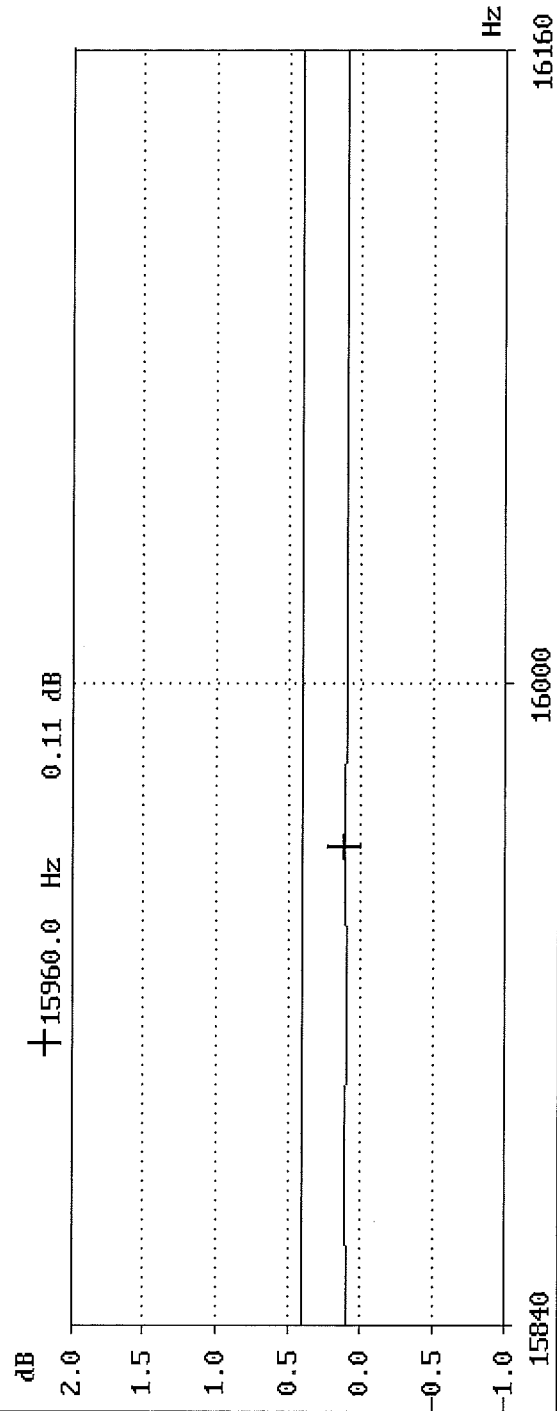
Insertion loss 4-wire

EG 201 120/6.3.1

Test job	: 214042256	Level	: +0.0 dBu
TEUT	: Facsimile Kit for MFP	Generator imp.	: 200 Ohm symmetrical
Manufacturer	: KYOCERA DS Inc.	Input impedance	: 200 Ohm
Operator	: Y. Miura	Feeding voltage	: 50.0 V
Date	: 5.11.13	Feeding resistor Rf	: 2050.0 Ohm
Time	: 18:44.52	Drop resistor of HC	: 300 Ohm
Remark	: -	Direction	: Normal
		Feeding current	: 100.0 mA
		Polarity	: Normal

Tol.mask violations: 0

Verdict : PASS



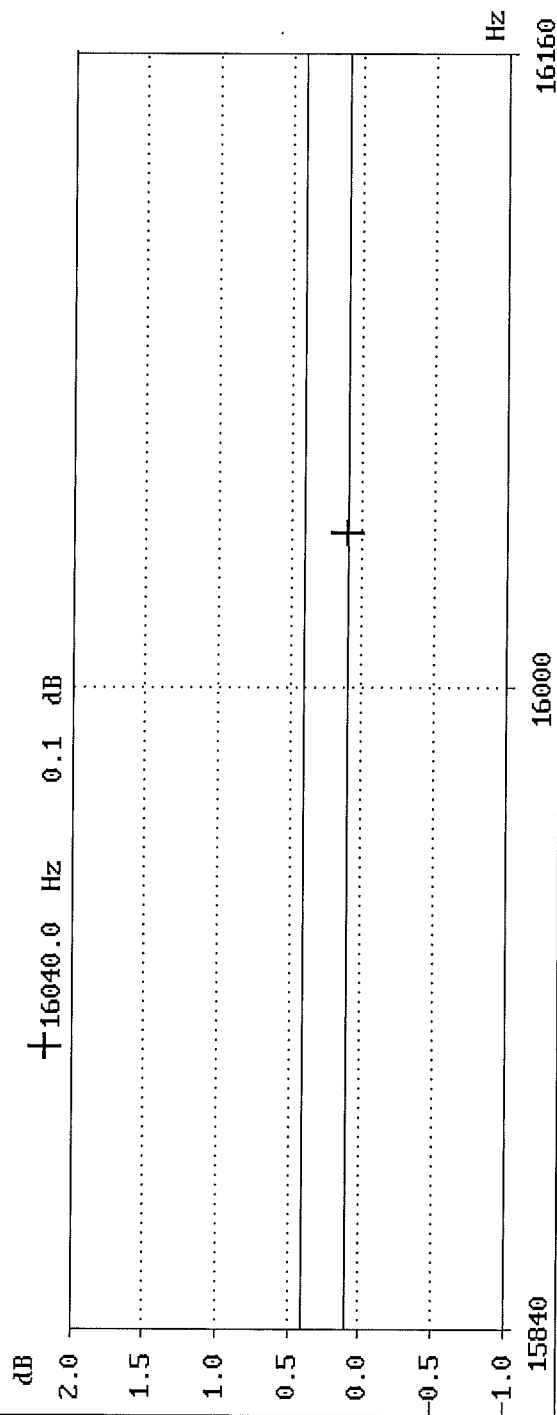
Insertion loss 4-wire

EG 201 120/6.3.1

Test job	: 214042256	Level	: +0.0 dBV
TEUT	: Facsimile Kit for MFP	Generator imp.	: 200 Ohm symmetrical
Manufacturer:	KYOCERA DS Inc.	Input impedance	: 200 Ohm
Operator	: Y. Miura	Feeding voltage	: 50.0 V
Date	: 5.11.13	Feeding resistor Rf	: 2050.0 Ohm
Time	: 18:45.36	Drop resistor of HC	: 300 Ohm
Remark	: -	Direction	: Normal
		Feeding current:	100.0 mA
		Polarity	: Inverted

Tol.mask violations: 0

Verdict : PASS



Prüfbericht - Nr.:
Test Report No.:

12030966 003

Anlage B
Appendix B

Produktbeschreibung
Description of Equipment

Refer to test report 12030966 001

Prüfbericht - Nr.:
Test Report No.:

12030966 003

Anlage C
Appendix C

Schaltpläne
Circuit diagrams

Refer to test report 12030966 001

Prüfbericht - Nr.:
Test Report No.:

12030966 003

Anlage D
Appendix D

Fotos
Photographs

Refer to test report 12030966 001