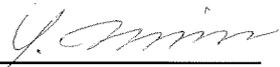
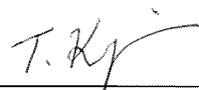


Prüfbericht - Nr.: 50016223 003 <i>Test Report No.:</i>		Seite 1 von 8 <i>Page 1 of 8</i>	
Auftraggeber: <i>Client:</i>		KYOCERA Document Solutions Inc. 1-2-28 Tamatsukuri, Chuo-ku ,Osaka-shi,Osaka,540-8585 Japan	
Gegenstand der Prüfung: Multi Function Printer <i>Test item:</i>			
Bezeichnung: <i>Identification:</i>	ECOSYS M6535cidn	Serien-Nr.: <i>Serial No.:</i>	Prototype
Wareneingangs-Nr.: <i>Receipt No.:</i>	A000115322-001	Eingangsdatum: <i>Date of receipt:</i>	2014-10-06
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:	
2014-11-05, Y.Miura 		2014-11-05, T.Kuriyama 	
<i>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
Sonstiges/ Other Aspects:			
Accredited Testing Laboratory under the terms of ISO 17025 D-PL-12059-01-03			
 <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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Test Sample Configuration	3	
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Appendix B: Description of the equipment	0	pages
Appendix C: Circuit Diagrams.....	0	pages
Appendix D: Photographs	0	pages

Prüfbericht - Nr.: 50016223 003
Test Report No.:

Seite 3 von 8
Page 3 of 8

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: 1020 - 1020 hPa
Humidity: 45 - 55 %

Appliance documentation

Hardware: -
Software: -
User manual: ECOSYS M6535cidn Specifications
Circuit diagram: FAX SUB PCB(1/1)

Test system configuration

Hardware: ECOSYS M6535cidn
Software: 004.001

Test Sample Configuration

One - Port - TE (only a1/b1)
 Two - Port TE (a1/b1 and a2/b2)

DTMF dialling function
 Decadic pulse dialling function

Measurement equipment list

Measuring instrument	Identification	Calibration Date
ESP Automatic Measurement System AMS	TL-9000	2014-01-21
ESP Outband Receiver and Ringer Amplifier ARE1000	TL-9001	2014-01-21
ESP International Feeding Bridge ISB1000	TL-9002	2014-01-21
Fluke Digital True RMS Multimeter	TL-9122	2014-10-14
Tektronix Oscilloscope TDS210	TL-9008	2014-05-22
Tektronix/ Voltage Probe I / II	TL-9036, TL-9037	2014-05-22
TRJ Connector Box	TL-9010	2014-02-28
TRJ Resistor Box	TL-9011	2014-02-28
ESP Reference Impedance Zref-quer TBR21, Type28	TL-9020, TL-9021	2014-02-28
ESP Reference Impedance Zref-längs TBR21, Type 29	TL-9022	2014-02-28
ESP Reference Impedance 150 Ohm crosswise, Type 50	TL-9033	2014-01-15
ESP Polarity Switch	TL-9042	2014-02-28
ESP Reference Impedance Z-Ref.\EG201120 - 4k Ohm crosswise	TL-9047	2014-01-15
ESP Reference Impedance Z-Ref.\EG201120 - 4k Ohm length balanced	TL-9048	2014-01-15

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 : $\pm 0.095 \text{ dB}$	

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		49.5 kΩ	8.1 LU					
50 Hz	> 30 Vrms		48.4 kΩ	8.3 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		39.5 kΩ	25.3 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		14.4 kΩ	69.4					
15.84 kHz - 16.16 kHz	1.0 Vrms		10.8 kΩ	92.6					

Table 2 : Recommended maximum values for series connected TEs											
Requirements		N/A N/T fail OK	Appendix A								
<p>DC series resistance - ETS 300 001, A.2.5 Recommended maximum value: 50 Ω (DC feeding voltage: 50 Vdc, RL = 360 Ω)</p> <p>Measurement results:</p> <table> <tr> <td>U</td> <td>R</td> </tr> <tr> <td>50 Vdc</td> <td>50 Ω</td> </tr> </table>	U	R	50 Vdc	50 Ω	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	23		
U	R										
50 Vdc	50 Ω										
<p>Insertion loss at 25 Hz and 50 Hz - ETS 300 001, A.4.3 Recommended maximum value: 0.4 dB (Z = 4 kΩ)</p> <p>Measurement results:</p> <table> <tr> <td>U₁</td> <td>IL (20×logU₁/U₂)</td> </tr> <tr> <td>30 Vrms</td> <td>0.28 dB</td> </tr> </table>	U ₁	IL (20×logU ₁ /U ₂)	30 Vrms	0.28 dB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	24-25		
U ₁	IL (20×logU ₁ /U ₂)										
30 Vrms	0.28 dB										
<p>Insertion loss in the range 0.3 - 3.4 kHz - ETS 300 001, A.4.3 Recommended maximum value: 0.4 dB (Z = ZR)</p> <p>Measurement results:</p> <table> <tr> <td>frequency range</td> <td>IL (max.) (20×logU₁/U₂)</td> </tr> <tr> <td>300 Hz - 3400 Hz</td> <td>0.38 dB</td> </tr> </table>	frequency range	IL (max.) (20×logU ₁ /U ₂)	300 Hz - 3400 Hz	0.38 dB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	26-27		
frequency range	IL (max.) (20×logU ₁ /U ₂)										
300 Hz - 3400 Hz	0.38 dB										
<p>Insertion loss at 12 kHz and 16 kHz ± 1% - ETS 300 001, A.4.3 Recommended maximum value: 0.4 dB (Z = 200 Ω)</p> <p>Measurement results:</p> <table> <tr> <td>frequency range</td> <td>IL (max.) (20×logU₁/U₂)</td> </tr> <tr> <td>11.88 kHz - 12.12 kHz</td> <td>0.31 dB</td> </tr> <tr> <td>15.84 kHz - 16.16 kHz</td> <td>0.06 dB</td> </tr> </table>	frequency range	IL (max.) (20×logU ₁ /U ₂)	11.88 kHz - 12.12 kHz	0.31 dB	15.84 kHz - 16.16 kHz	0.06 dB	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	28-31
frequency range	IL (max.) (20×logU ₁ /U ₂)										
11.88 kHz - 12.12 kHz	0.31 dB										
15.84 kHz - 16.16 kHz	0.06 dB										

Prüfbericht - Nr.:
Test Report No.:

50016223 003

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.       : M6535cidn
TEUT            : MFP                               Feeding bridge : TBR21
Number of TEUT : 214054091
Manufacturer    : KYOCERA DS Inc.
Date           : 28.10.14
Time           : 13:19.53
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. : M6535cidn
 TEUT : MFP Gain (internal) : +20.0 dB
 Number of TEUT: 214054091
 Manufacturer : KYOCERA DS Inc.
 Date : 28.10.14
 Time : 13:26.23

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

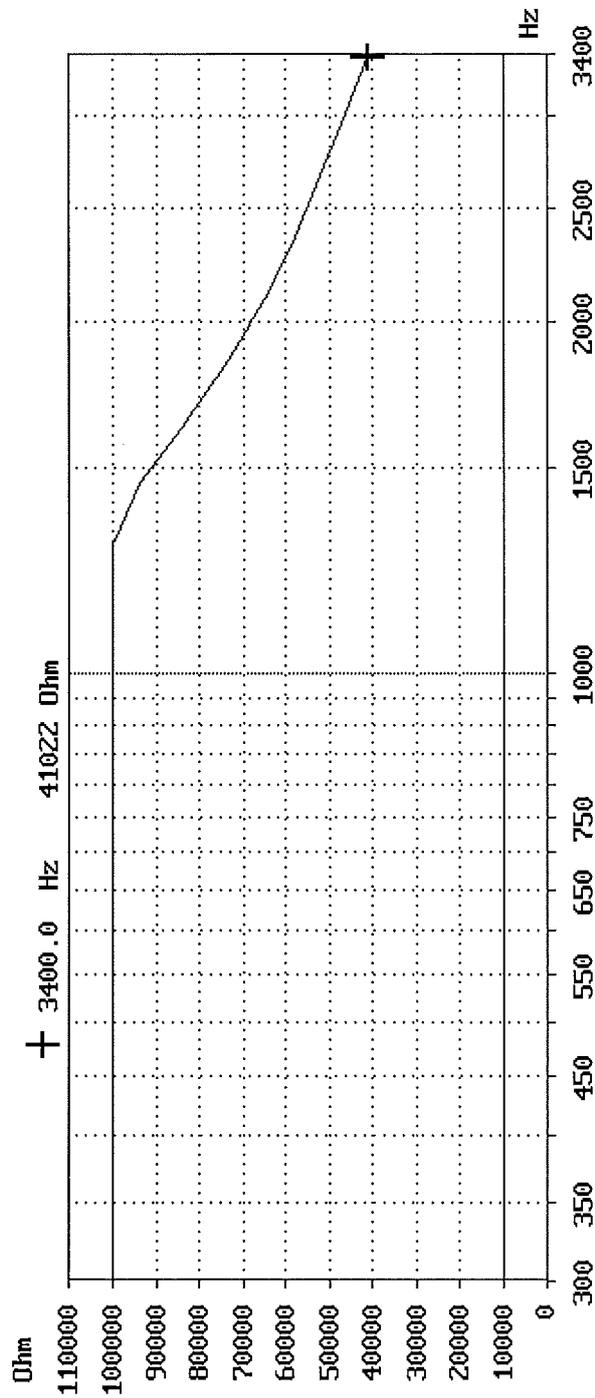
Modulus of impedance Z(f)

EG 201 120/6.2

Test Job : 214054091
 TEUT : MFP
 Manufacturer : KYOCERA DS Inc.
 Operator : Y. Miura
 Date : 28.10.14
 Time : 13:33.38

Current Limitation : 100.0 mA
 Feeding Voltage : 50.0 V
 Dropping Resistor : 2050.0 Ohm
 Polarity : Normal
 Level : +0.0 dBV

Remark : -
 Mask violations : 0
 Verdict : PASS

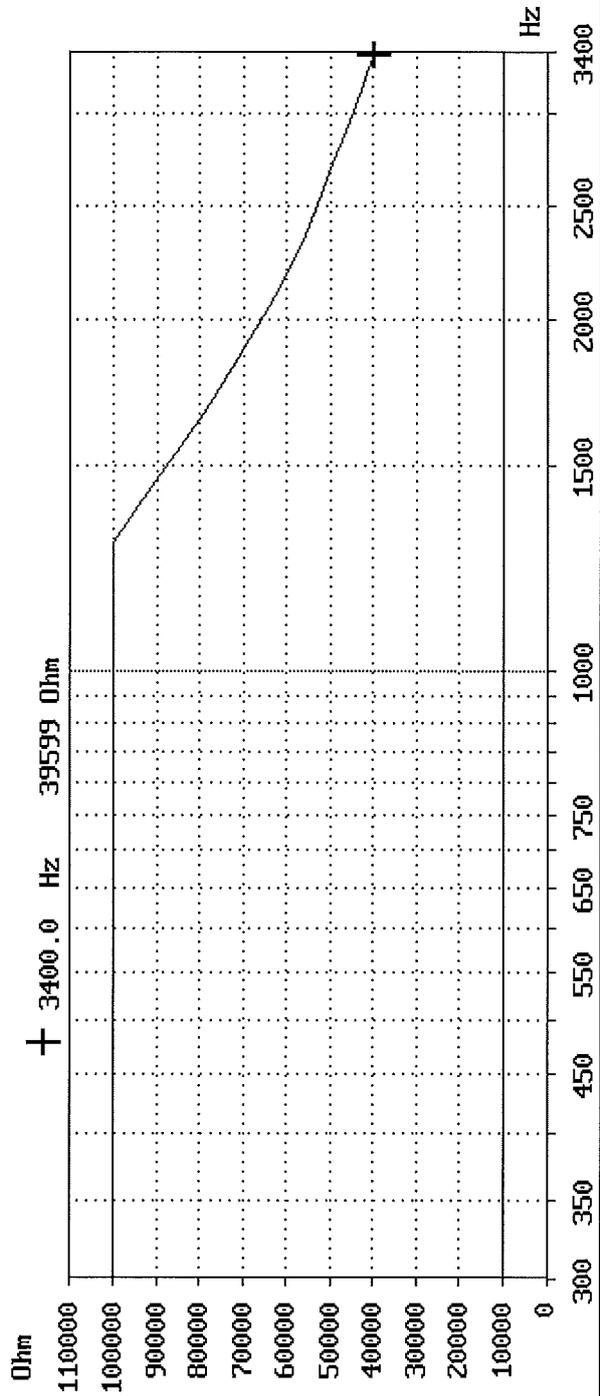


Modulus of impedance Z(f)

EG 201 120/6.2

Test Job	: 214054091	Current Limitation	: 100.0 mA
TEUT	: MFP	Feeding Voltage	: 50.0 V
Manufacturer	: KYOCERA DS Inc.	Dropping Resistor	: 2050.0 Ohm
Operator	: Y. Miura	Polarity	: Inverted
Date	: 28.10.14	Level	: +0.0 dBV
Time	: 13:42.17		

Remark : -
 Mask violations : 0
 Verdict : PASS

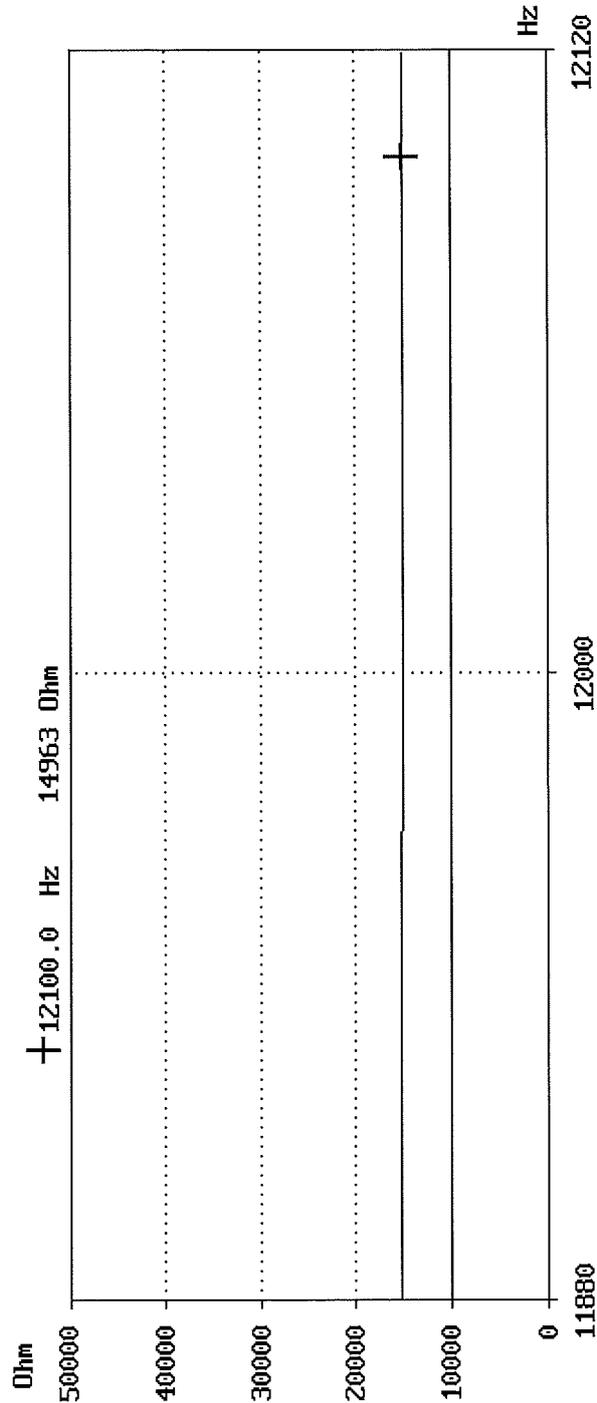


Modulus of impedance Z(f)

EG 201 120/6.2

Test Job	: 214054091	Current Limitation	: 100.0 mA
TEUT	: MFP	Feeding Voltage	: 50.0 V
Manufacturer	: KYOCERA DS Inc.	Dropping Resistor	: 2050.0 Ohm
Operator	: Y. Miura	Polarity	: Normal
Date	: 28.10.14	Level	: +0.0 dBV
Time	: 14:29.02		

Remark : -
 Mask violations : 0
 Verdict : PASS

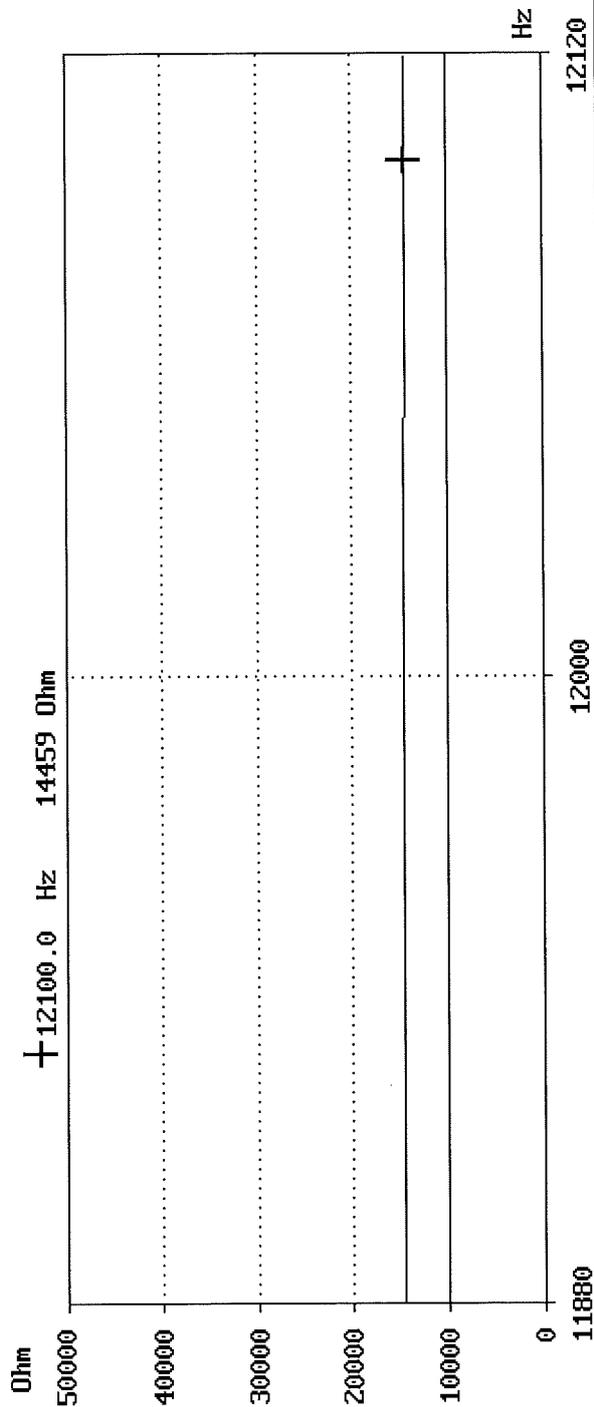


Modulus of impedance Z(f)

EG 201 120/6.2

Test Job	: 214054091	Current Limitation	: 100.0 mA
TEUT	: MFP	Feeding Voltage	: 50.0 V
Manufacturer	: KYOCERA DS Inc.	Dropping Resistor	: 2050.0 Ohm
Operator	: Y. Miura	Polarity	: Inverted
Date	: 28.10.14	Level	: +0.0 dBV
Time	: 14:30.28		

Remark : -
 Mask violations : 0
 Verdict : PASS



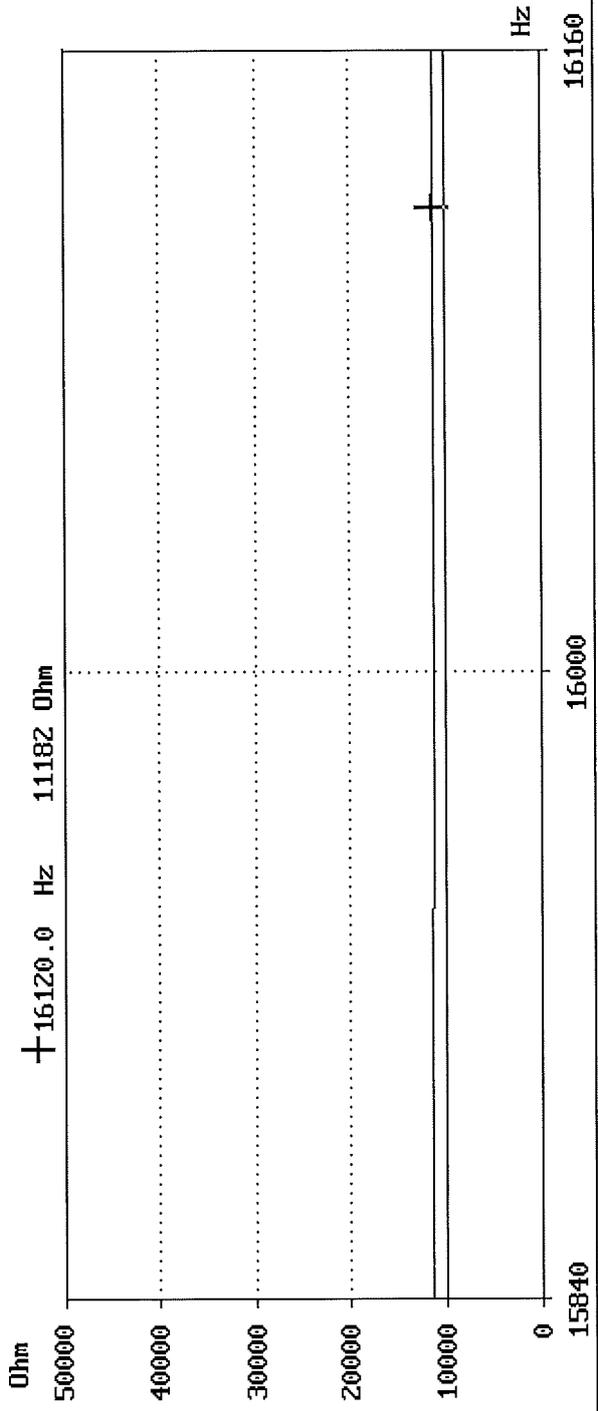
Modulus of impedance Z(f)

EG 201 120/6.2

Test Job : 214054091
 TEUT : MFP
 Manufacturer : KYOCERA DS Inc.
 Operator : Y. Miura
 Date : 28.10.14
 Time : 14:31.39

Current Limitation : 100.0 mA
 Feeding Voltage : 50.0 V
 Dropping Resistor : 2050.0 Ohm
 Polarity : Normal
 Level : +0.0 dBV

Remark : -
 Mask violations : 0
 Verdict : PASS



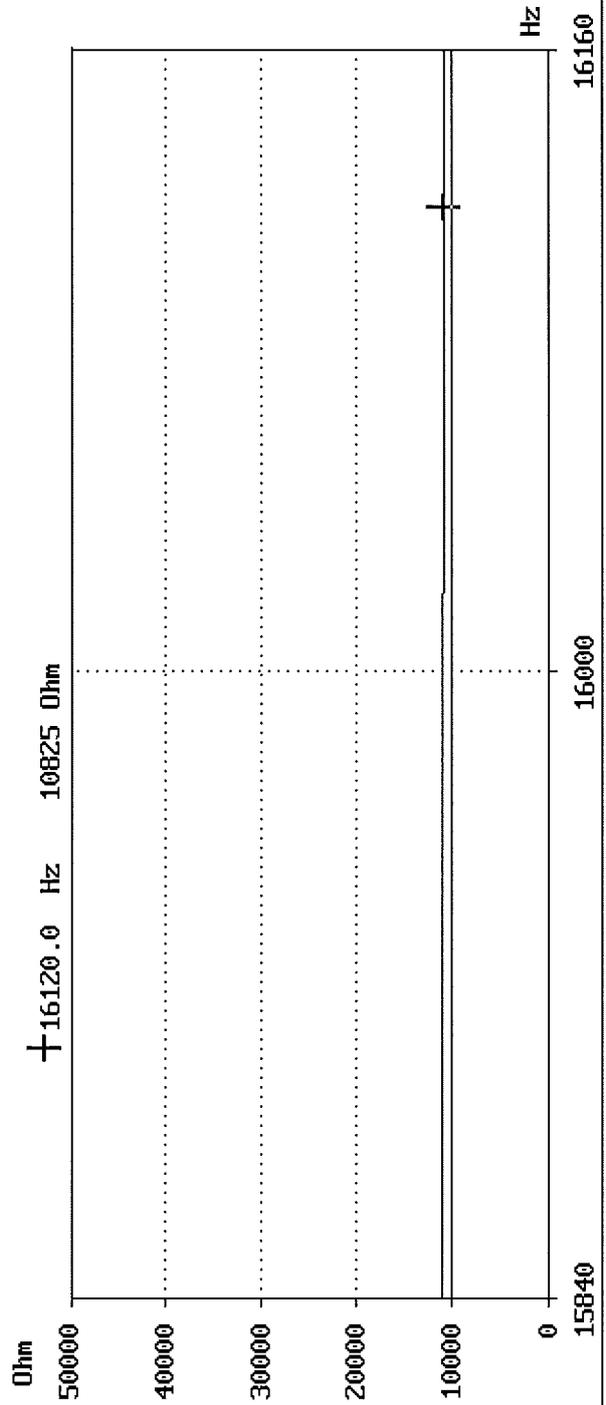
Modulus of impedance Z(f)

EG 201 120/6.2

Test Job : 214054091
 TEUT : MFP
 Manufacturer : KYOCERA DS Inc.
 Operator : Y. Miura
 Date : 28.10.14
 Time : 14:32.49

Current Limitation : 100.0 mA
 Feeding Voltage : 50.0 V
 Dropping Resistor : 2050.0 Ohm
 Polarity : Inverted
 Level : +0.0 dBu

Remark : -
 Mask violations : 0
 Verdict : PASS



Protocol for DC current during ringing

EG201120 - 6.2 DC current during ringing
=====

Model No. : M6535cidn Feeding voltage : 60.0 V
TEUT : MFP Feeding resistor: 850 Ohm
Number of TEUT: 214054091 Polarity : Normal
Manufacturer : KYOCERA DS Inc.
Date : 28.10.14
Time : 15:12.05

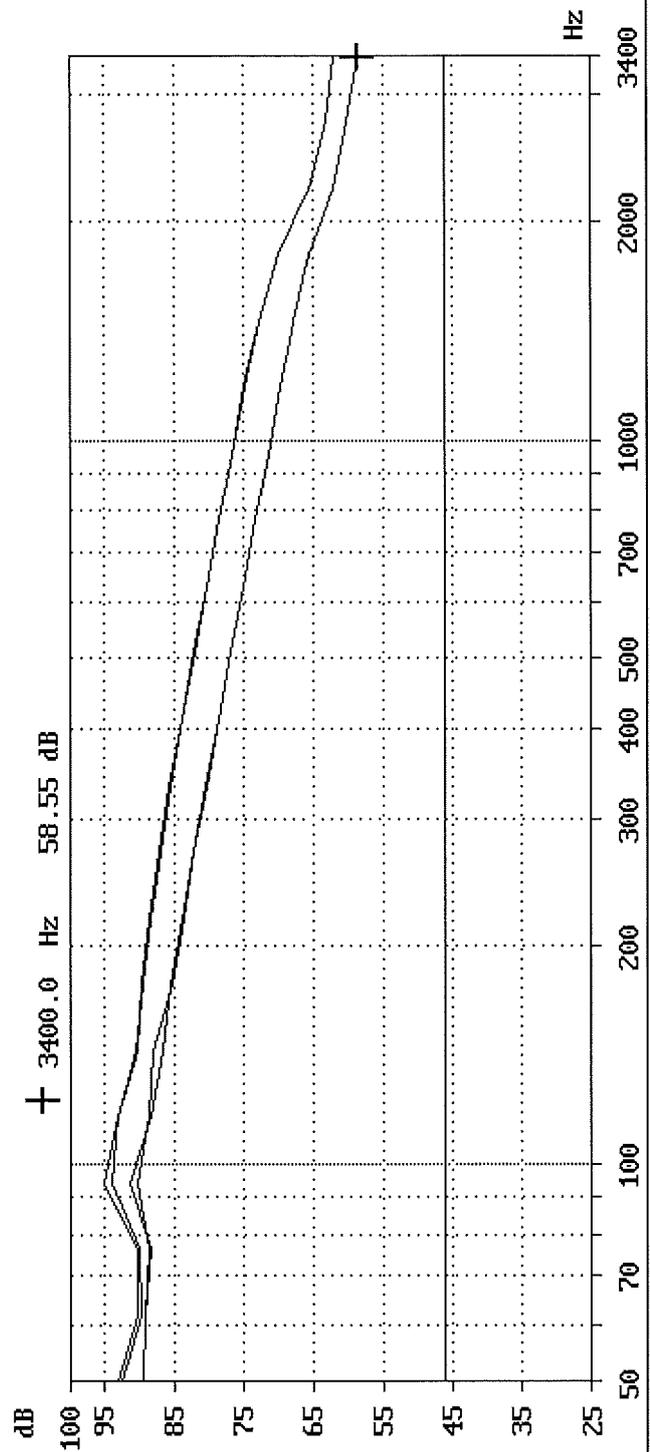
Data set : EG201120-6.2
Requirement : The resulting DC current during the ringing signal shall
be less 0.60 mA.

Remark : -

Verdict : PASS

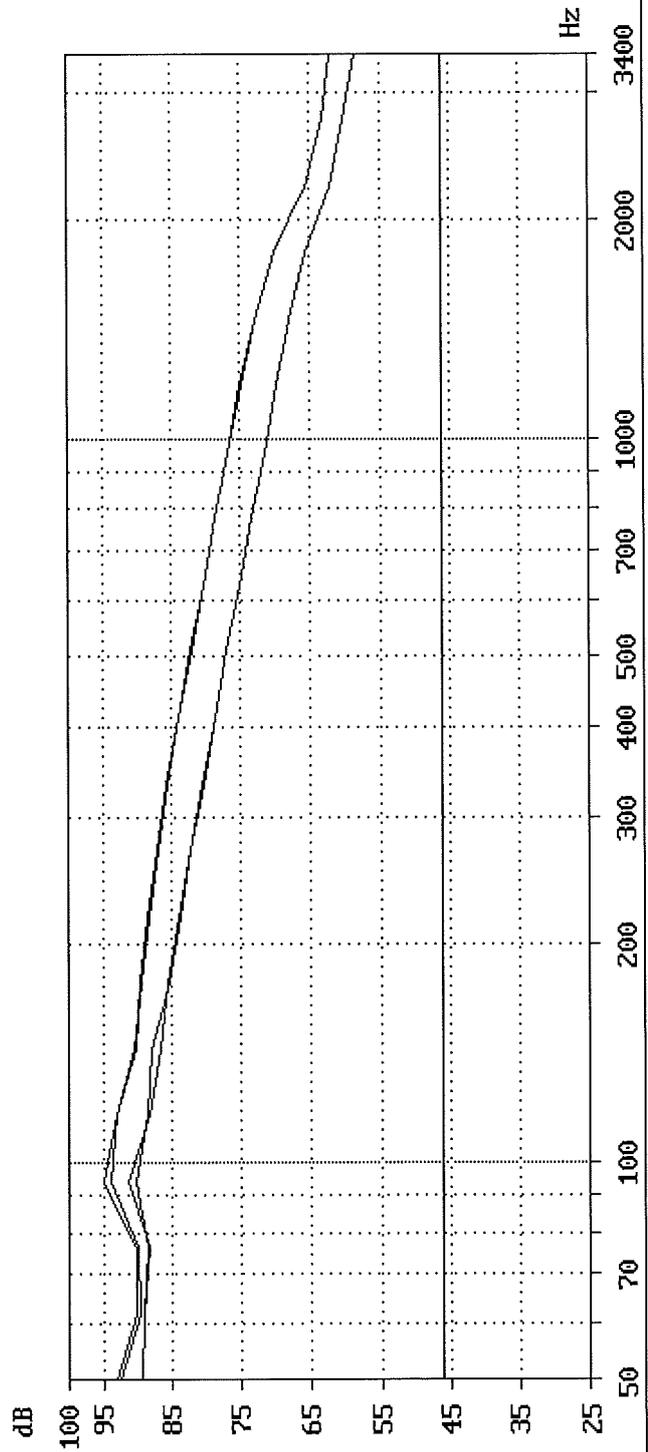
f Hz	Uac V	R kΩ	I mA
25	90.0	> 1Meg	< 0.06
50	90.0	> 1Meg	< 0.06

EG 201 120



EG 201 120

Comission : 214054091
Printing time : 28.10.14 15:20.06
Graph 1 _____
Graph 2 _____
Graph 3 _____
Graph 4 _____



Longitudinal conversion loss
Comission : 214054091

Printing time : 28.10.14 15:20.06

Graph 1

Graph 2

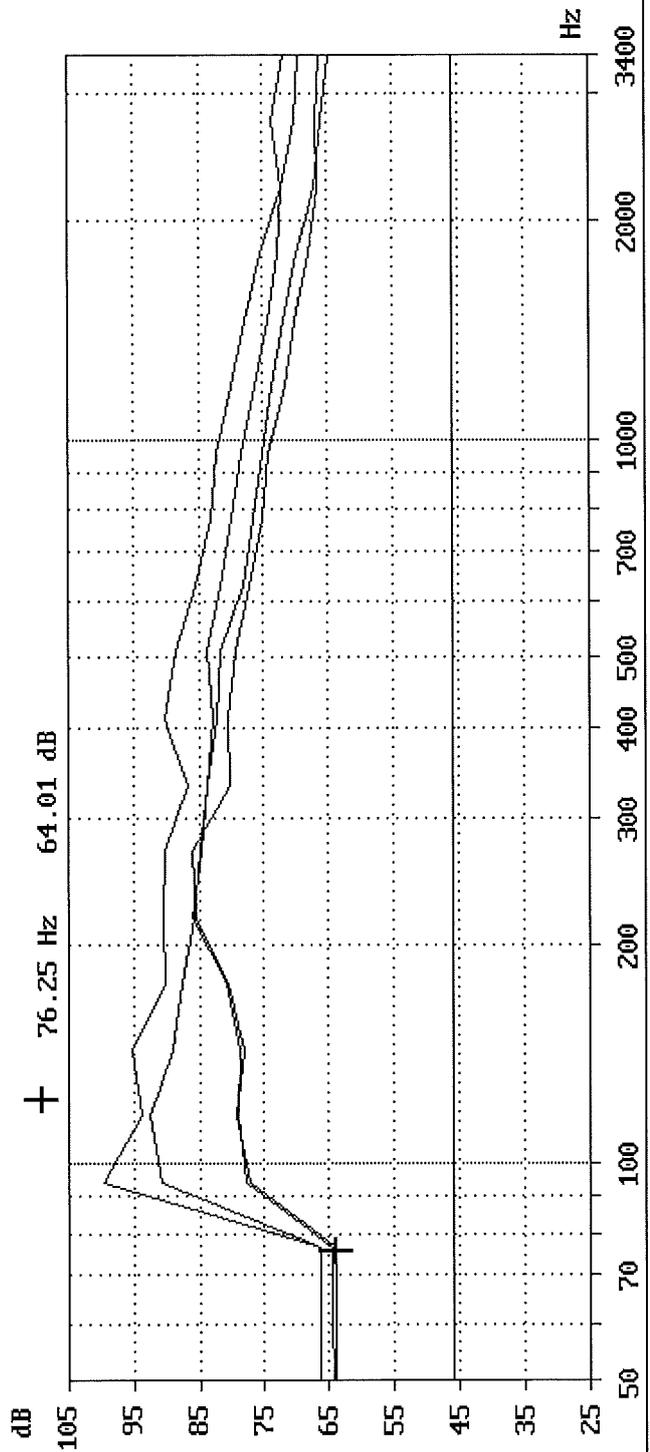
Test Job	Longitudinal conversion loss	Longitudinal conversion loss
TEUT	214054091	214054091
Manufacturer	MFP	MFP
Operator	KYOCERA DS Inc.	KYOCERA DS Inc.
Date	Y. Miura	Y. Miura
Time	28.10.14	28.10.14
Tol.mask violations	15:18.10	15:18.36
Verdict	0	0
Current Limitation	PASS	PASS
Feeding Voltage	60.0 mA	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)
	-	-

Graph 3

Graph 4

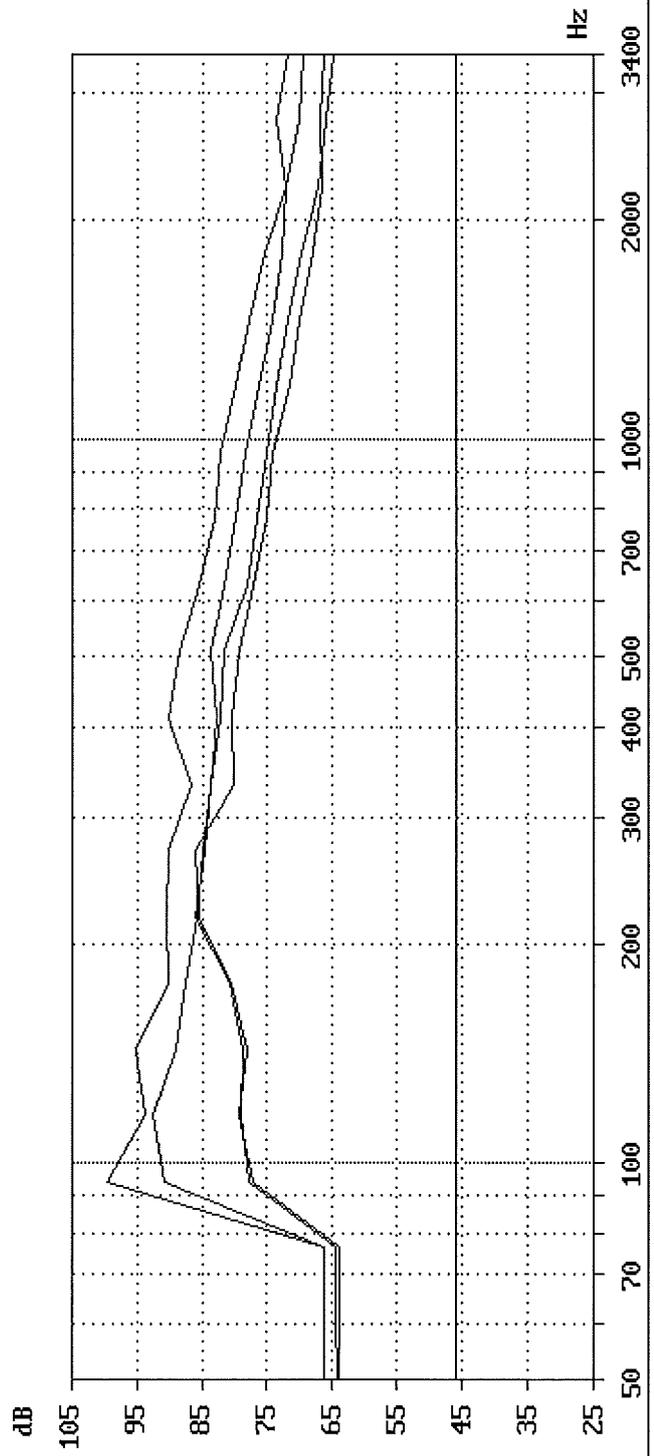
Test Job	Longitudinal conversion loss	Longitudinal conversion loss
TEUT	214054091	214054091
Manufacturer	MFP	MFP
Operator	KYOCERA DS Inc.	KYOCERA DS Inc.
Date	Y. Miura	Y. Miura
Time	28.10.14	28.10.14
Tol.mask violations	15:19.01	15:19.24
Verdict	0	0
Current Limitation	PASS	PASS
Feeding Voltage	60.0 mA	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 : 214054091
Printing time : 28.10.14 15:22.49
Graph 1 _____
Graph 2 _____
Graph 3 _____
Graph 4 _____



Longitudinal conversion loss
Comission : 214054091

Printing time : 28.10.14 15:22.49

Graph 1

Graph 2

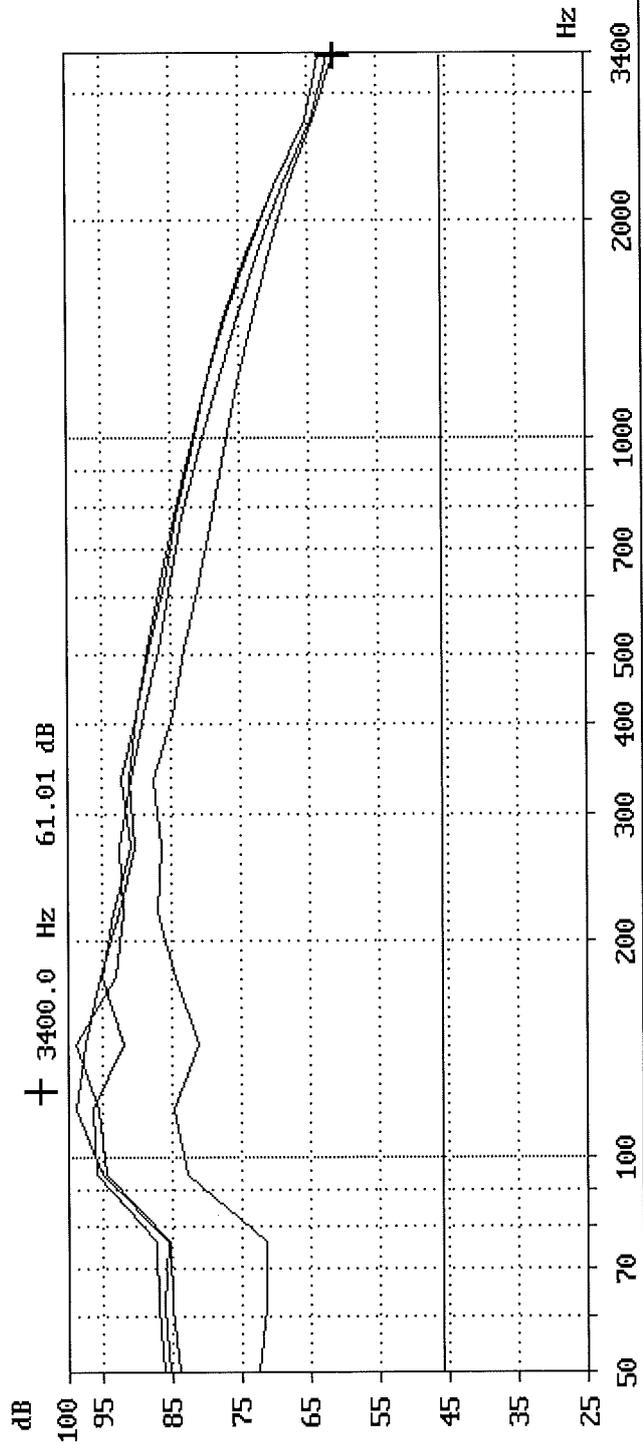
	Longitudinal conversion loss 214054091	Longitudinal conversion loss 214054091
Test Job	MFP	MFP
TEUT	MFP	MFP
Manufacturer	KYOCERA DS Inc.	KYOCERA DS Inc.
Operator	Y. Miura	Y. Miura
Date	28.10.14	28.10.14
Time	15:20.46	15:21.08
Tol.mask violations	0	0
Verdict	PASS	PASS
Current Limitation	60.0 mA	60.0 mA
Feeding Voltage	50.0 V	50.0 V
Feeding Bridge	TBR21	TBR21
Feeding resistor	3200 Ohm	2050 Ohm
Level	+0.0 dB(0.775 V)	+0.0 dB(0.775 V)
Remark	-	-

Graph 3

Graph 4

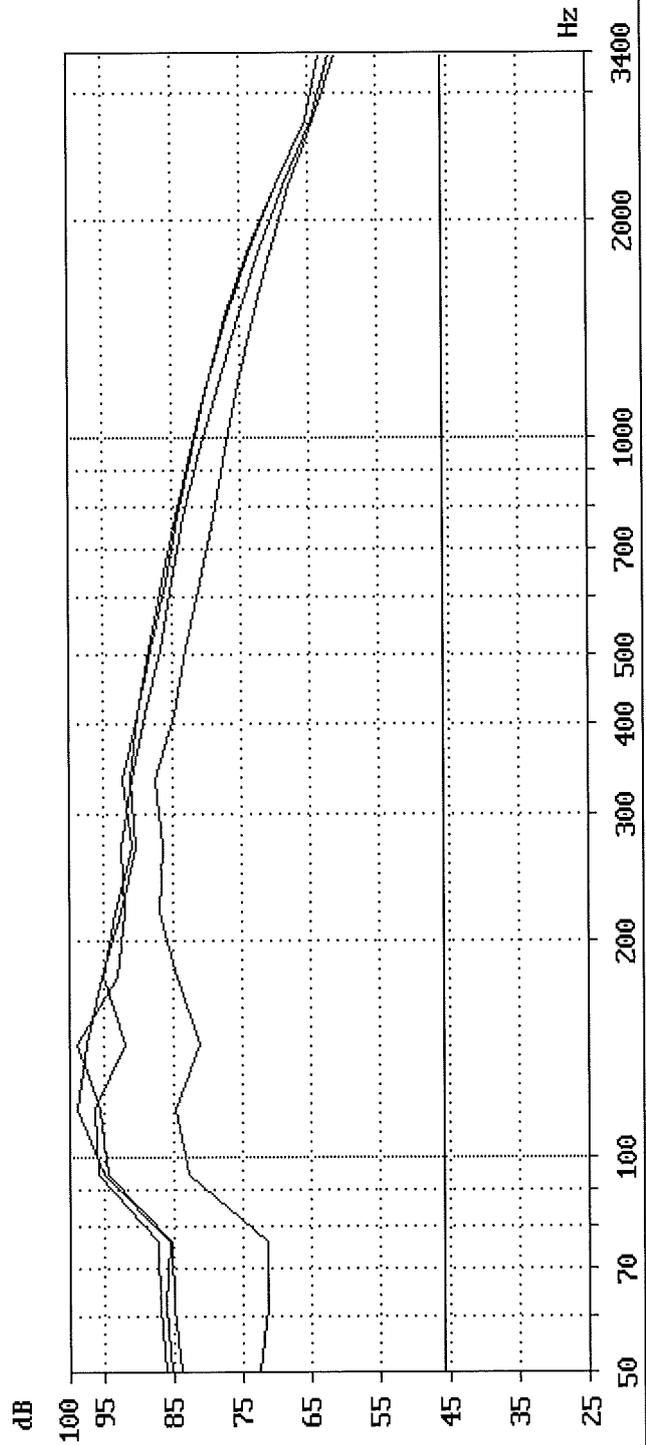
	Longitudinal conversion loss 214054091	Longitudinal conversion loss 214054091
Test Job	MFP	MFP
TEUT	MFP	MFP
Manufacturer	KYOCERA DS Inc.	KYOCERA DS Inc.
Operator	Y. Miura	Y. Miura
Date	28.10.14	28.10.14
Time	15:21.29	15:21.50
Tol.mask violations	0	0
Verdict	PASS	PASS
Current Limitation	60.0 mA	60.0 mA
Feeding Voltage	50.0 V	50.0 V
Feeding Bridge	TBR21	TBR21
Feeding resistor	850 Ohm	230 Ohm
Level	+0.0 dB(0.775 V)	+0.0 dB(0.775 V)
Remark	-	-

EG 201 120



EG 201 120

Comission : 214054091
Printing time : 28.10.14 15:26.16
Graph 1 _____
Graph 2 _____
Graph 3 _____
Graph 4 _____



Longitudinal conversion loss 4-wire
Comission : 214054091

Printing time : 28.10.14 15:26.16

Graph 1

Test Job	Longitudinal conversion loss 4-wire
TEUT	214054091
Manufacturer	MFP
Operator	KYOCERA DS Inc.
Date	Y. Miura
Time	28.10.14
Tol.mask violations	15:24.05
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	214054091
Manufacturer	MFP
Operator	KYOCERA DS Inc.
Date	Y. Miura
Time	28.10.14
Tol.mask violations	15:24.31
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	214054091
Manufacturer	MFP
Operator	KYOCERA DS Inc.
Date	Y. Miura
Time	28.10.14
Tol.mask violations	15:24.55
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 : 214054091

Printing time : 28.10.14 15:26.16

Graph 4

Test Job	Longitudinal conversion loss 4-wire
TEUT	214054091
Manufacturer	MFP
Operator	KYOCERA DS Inc.
Date	Y. Miura
Time	28.10.14
Tol.mask violations	15:25.16
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	: 28.10.14	Current Limitation	: 100.0 mA
Time	: 15:27.06	Feeding Voltage	: 50.0 V
Operator	: Y. Miura	Feeding Bridge	: TBR21
Commission	: 214054091	Receiver Impedance	: 600 Ohm
TEUT	: MFP	Filter	: Psophometric
Manufacturer	: KYOCERA DS Inc.	Time Constant	: $\tau = 200$ msec
		Limit	: ≤ -64.0 dBmp
Remark	: -	Verdict	: PASS

ps [dBmp]	Rf [Ω]	Polarity
-105.4	3200	Inverted
-102.8	2050	Normal
-105.1	850	Inverted
-103.0	230	Normal

Protocol for Noise level sending 4-wire

Noise level sending 4-wire
EG 201 120, 6.2

Date	: 28.10.14	Current Limitation	: 100.0 mA
Time	: 15:28.08	Feeding Voltage	: 50.0 V
Operator	: Y. Miura	Feeding Bridge	: TBR21
Commission	: 214054091	Termination Za	: 600 Ohm
TEUT	: MFP	Drop resistor of HC	: 300 Ohm
Manufacturer	: KYOCERA DS Inc.	Filter	: Psophometric
		Time Constant	: $\tau = 200$ msec
		Receiver Impedance	: 600 Ohm
		Limit	: ≤ -64.0 dBmp
Remark	: -	Verdict	: PASS

ps [dBmp]	Rf [Ω]	Polarity
-100.6	3200	Inverted
-101.6	2050	Normal
-102.9	850	Inverted
-93.2	230	Normal

Protocol for Series DC resistance

Series DC resistance
EG 201120, 6.3.1

Date	: 28.10.14	Feeding Voltage	: 50.0 V
Time	: 15:31.08	Feed current/limit	: 100.0 mA
Operator	: Y. Miura	Trigger I [mA]	: 5 mA
Test Job	: 214054091	Termination	: 600 Ohm
TEUT	: 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	56.339	2.61	0.227	46	4	50

Insertion loss 4-wire

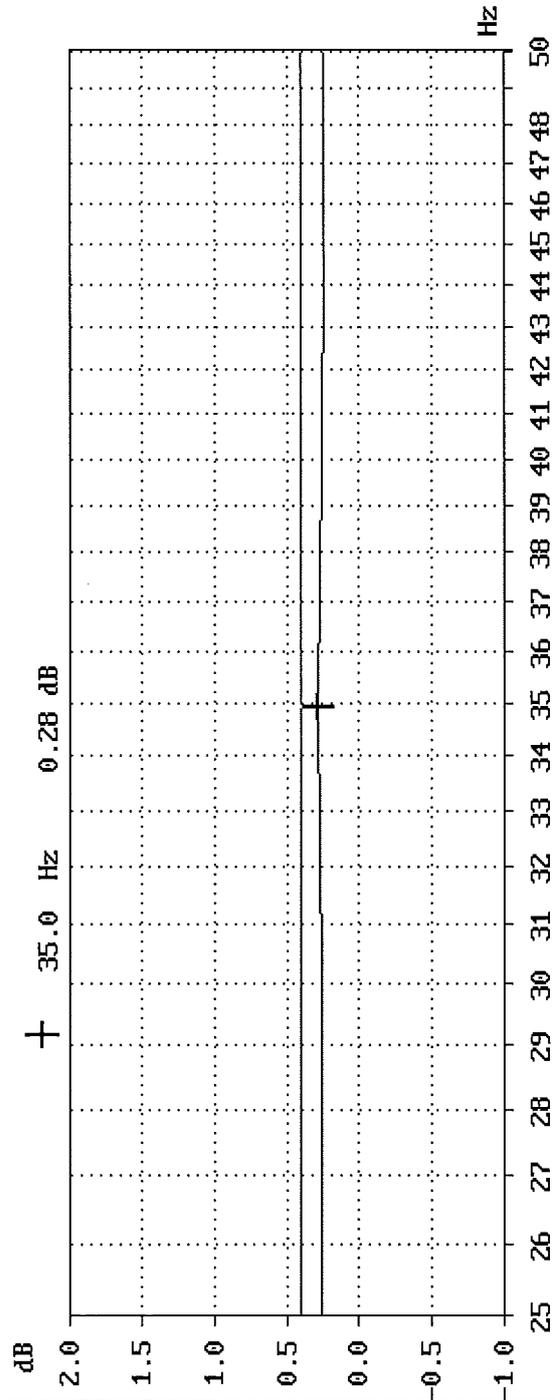
EG 201 120/6.3.1

Test job	: 214054091	Level	: +20.0 dBu		
TEUT	: MFP	Generator imp.	: 4 kOhm symmetrical		
Manufacturer	: KYOCERA DS Inc.	Input impedance	: 4 kOhm		
Operator	: Y. Miura	Feeding voltage	: 50.0 V	Feeding current	: 100.0 mA
Date	: 28.10.14	Feeding resistor Rf	: 2050.0 Ohm	Polarity	: Normal
Time	: 15:32.29	Drop resistor of HC	: 300 Ohm	Direction	: Normal

Remark : -

Tol.mask violations: 0

Verdict : PASS

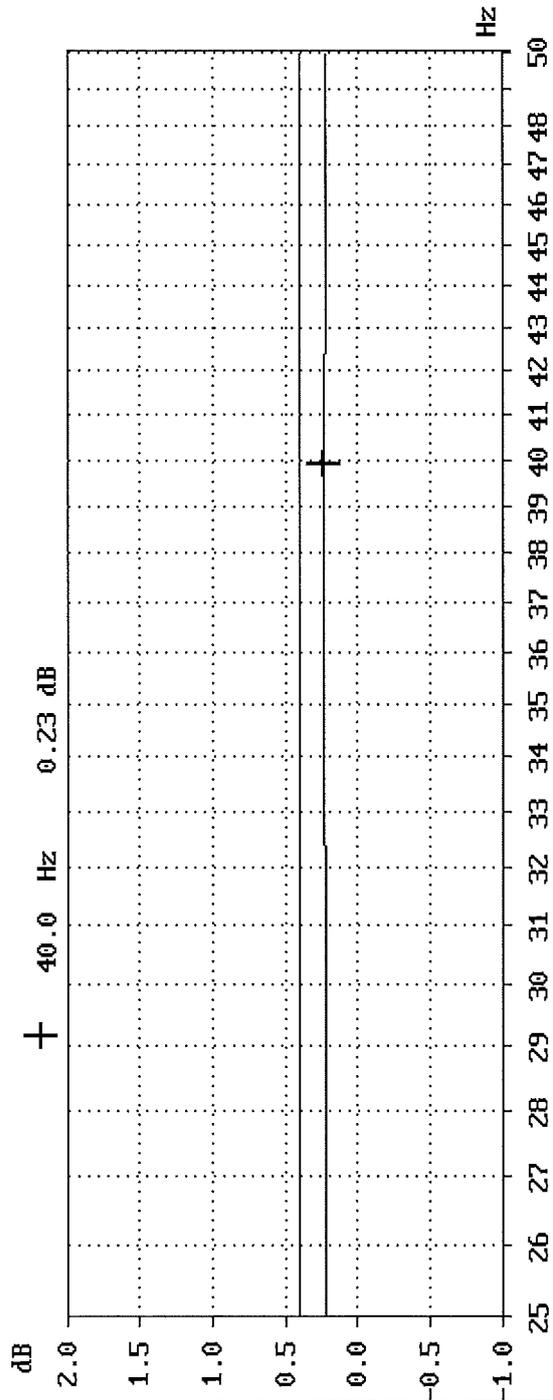


Insertion loss 4-wire

EG 201 120/6.3.1

Test job	: 214054091	Level	: +20.0 dBu		
TEUT	: MFP	Generator imp.	: 4 kOhm symmetrical		
Manufacturer	: KYOCERA DS Inc.	Input impedance	: 4 kOhm		
Operator	: Y. Miura	Feeding voltage	: 50.0 V	Feeding current	: 100.0 mA
Date	: 28.10.14	Feeding resistor Rf	: 2050.0 Ohm	Polarity	: Inverted
Time	: 15:33.46	Drop resistor of HC	: 300 Ohm		
Remark	: -	Direction	: Normal		

Tol.mask violations: 0
Verdict : PASS

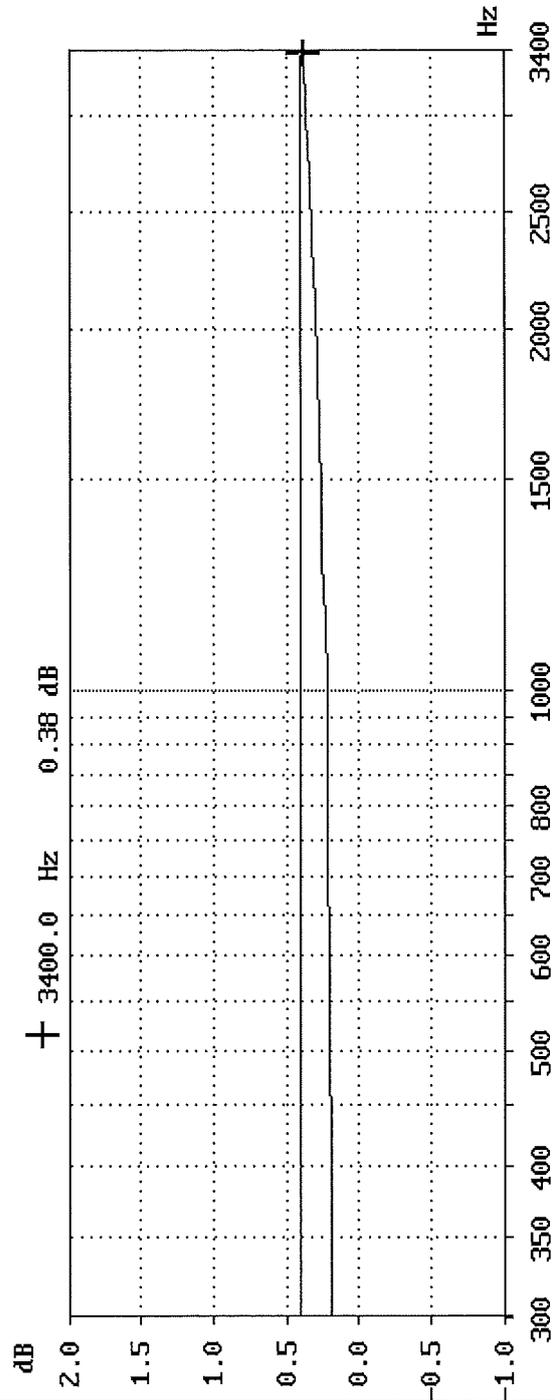


Insertion loss 4-wire

EG 201 120/6.3.1

Test job	: 214054091	Level	: +0.0 dBV
TEUT	: MFP	Generator imp.	: Zr IBR21 symmetrical
Manufacturer	: KYOCERA DS Inc.	Input impedance	: Zr IBR21
Operator	: Y. Miura	Feeding voltage	: 50.0 V
Date	: 28.10.14	Feeding resistor Rf	: 2050.0 Ohm
Time	: 15:34.35	Feeding current	: 100.0 mA
		Drop resistor of HC	: 300 Ohm
		Direction	: Normal
Remark	: -		

Tol.mask violations: 0
Verdict : PASS



Insertion loss 4-wire

EG 201 120/6.3.1

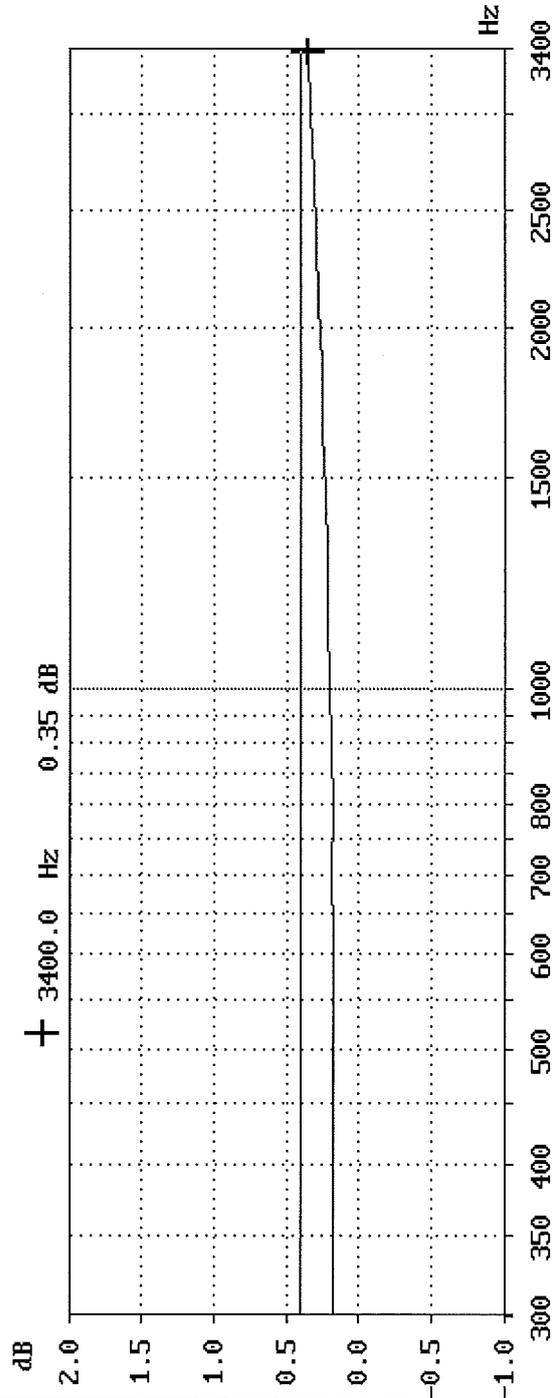
Test job : Z14054091
TEUT : MFP
Manufacturer: KYOCERA DS Inc.
Operator : Y. Miura
Date : 28.10.14
Time : 15:35.54

Level : +0.0 dBV
Generator imp. : Zr TBR21 symmetrical
Input impedance : Zr TBR21
Feeding voltage : 50.0 V Feeding current: 100.0 mA
Feeding resistor Rf: 2050.0 Ohm Polarity : Inverted
Drop resistor of HC: 300 Ohm
Direction : Normal

Remark : -

Tol.mask violations: 0

Verdict : PASS



Insertion loss 4-wire

EG 201 120/6.3.1

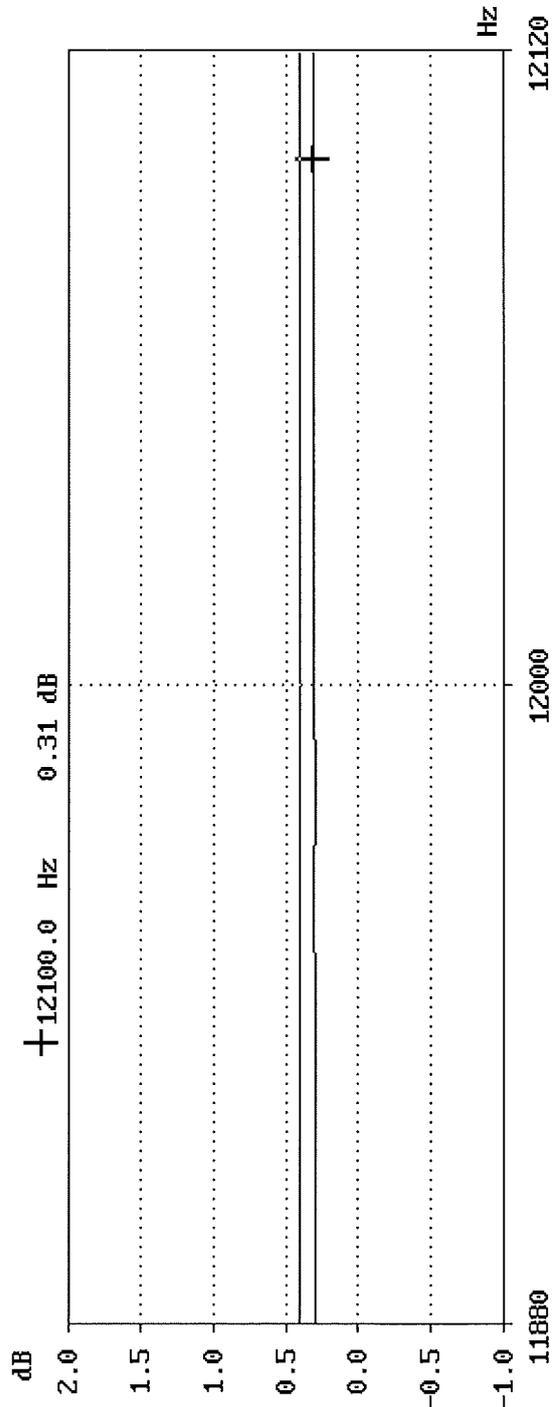
Test job : 214054091
TEUT : MFP
Manufacturer: KYOCERA DS Inc.
Operator : Y. Miura
Date : 28.10.14
Time : 15:37.44

Level : +0.0 dBV
Generator imp. : 200 Ohm symmetrical
Input impedance : 200 Ohm
Feeding voltage : 50.0 V Feeding current: 100.0 mA
Feeding resistor Rf: 2050.0 Ohm Polarity : Normal
Drop resistor of HC: 300 Ohm
Direction : Normal

Remark : -

Tol.mask violations: 0

Verdict : PASS



Insertion loss 4-wire

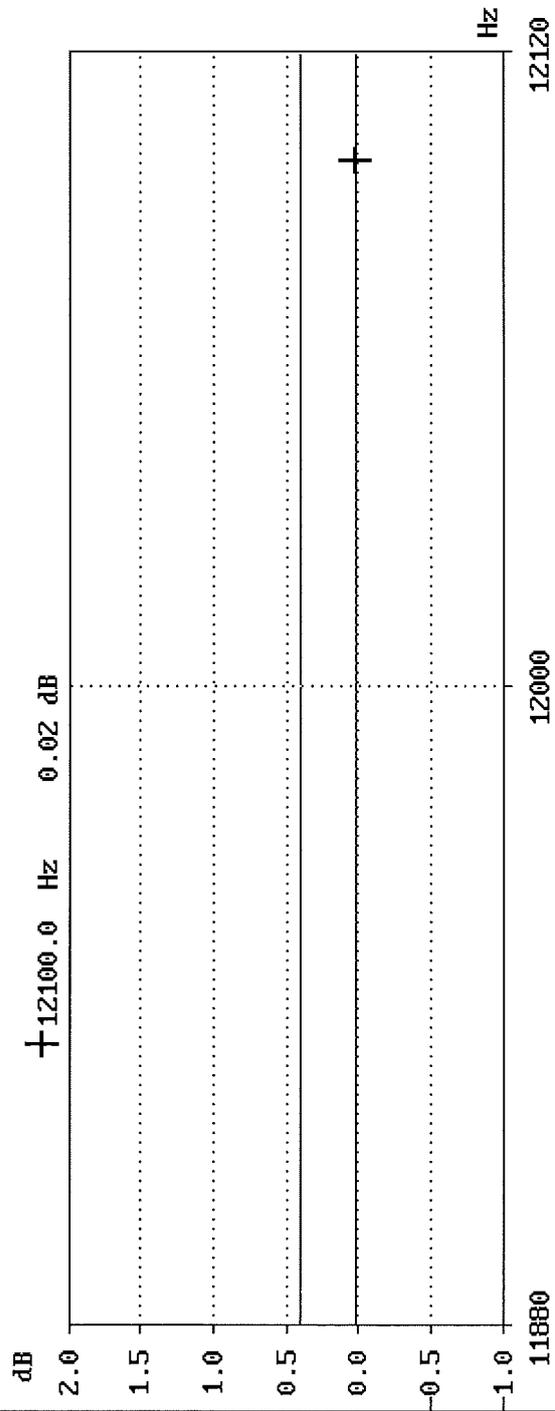
EG 201 120/6.3.1

Test job : 214054091
TEUT : MFP
Manufacturer: KYOCERA DS Inc.
Operator : Y. Miura
Date : 28.10.14
Time : 15:38.38
Level : +0.0 dBu
Generator imp. : 200 Ohm symmetrical
Input impedance : 200 Ohm
Feeding voltage : 50.0 V
Feeding resistor Rf: 2050.0 Ohm Polarity : Inverted
Drop resistor of HC: 300 Ohm
Direction : Normal

Remark : -

Tol.mask violations: 0

Verdict : PASS



Insertion loss 4-wire

EG 201 120/6.3.1

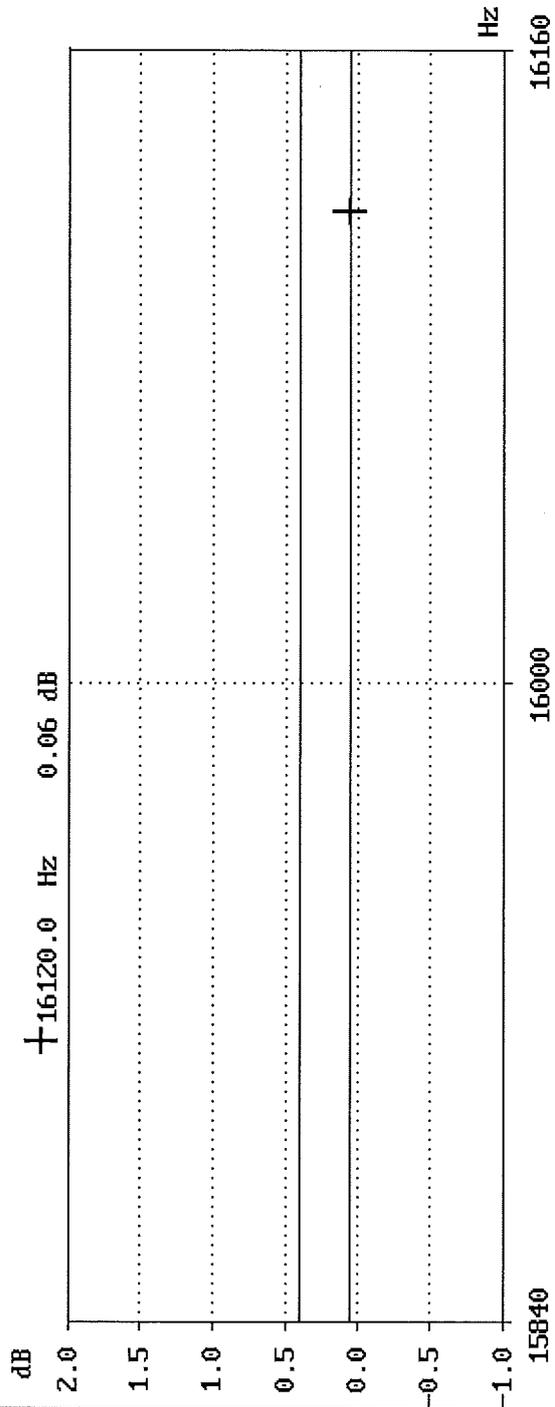
Test job : 214054091
TEUT : MFP
Manufacturer: KYOCERA DS Inc.
Operator : Y. Miura
Date : 28.10.14
Time : 15:40.46

Level : +0.0 dBu
Generator imp. : 200 Ohm symmetrical
Input impedance : 200 Ohm
Feeding voltage : 50.0 V Feeding current: 100.0 mA
Feeding resistor Rf: 2050.0 Ohm Polarity : Normal
Drop resistor of HC: 300 Ohm
Direction : Normal

Remark : -

Tol.mask violations: 0

Verdict : PASS



Insertion loss 4-wire

EG 201 120/6.3.1

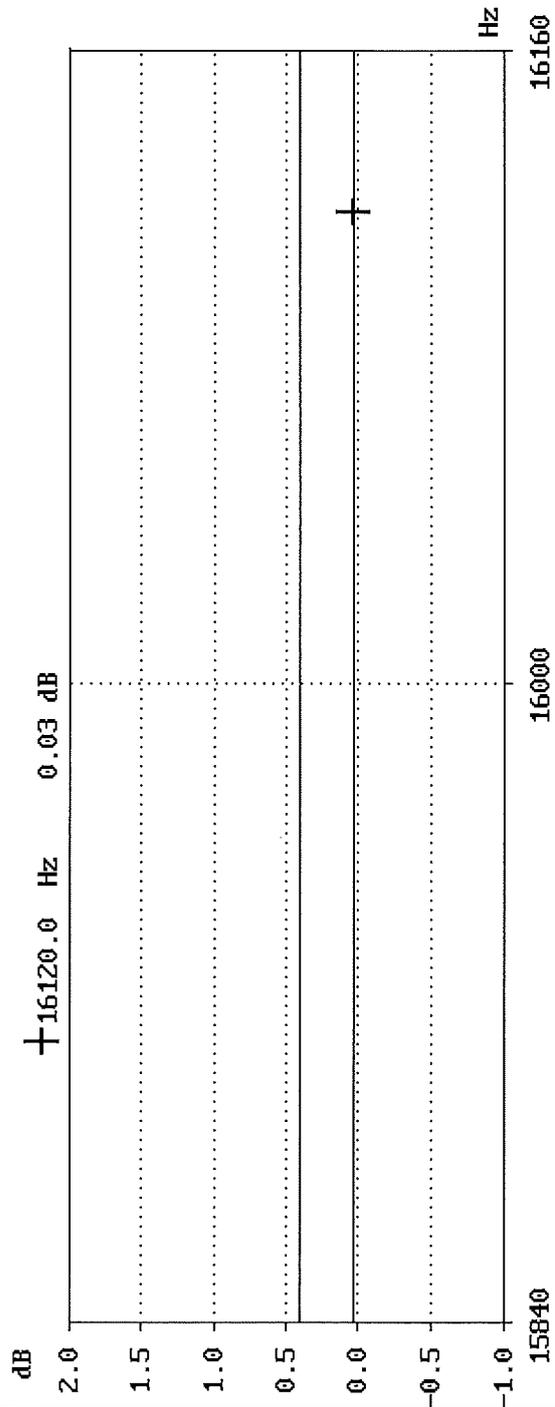
Test job : 214054091
TEUT : MFP
Manufacturer: KYOCERA DS Inc.
Operator : Y. Miura
Date : 28.10.14
Time : 15:41.46

Level : +0.0 dBV
Generator imp. : 200 Ohm symmetrical
Input impedance : 200 Ohm
Feeding voltage : 50.0 V Feeding current: 100.0 mA
Feeding resistor Rf: 2050.0 Ohm Polarity : Inverted
Drop resistor of HC: 300 Ohm
Direction : Normal

Remark : -

Tol.mask violations: 0

Verdict : PASS



Prüfbericht - Nr.:
Test Report No.:

50016223 003

Anlage B
Appendix B

Produktbeschreibung
Description of Equipment

Refer to test report 50016223 001

Prüfbericht - Nr.:
Test Report No.:

50016223 003

Anlage C
Appendix C

Schaltpläne
Circuit diagrams

Refer to test report 50016223 001

Prüfbericht - Nr.:
Test Report No.:

50016223 003

Anlage D
Appendix D

Fotos
Photographs

Refer to test report 50016223 001