SECTION 1

Test Reports of Immunity

(EN55024/2010)

EN61000-4-2/1995
Electrostatic Discharge Immunity Test

Equipment	*Model*	*Serial No.*
Multi-Function Printer	TASKalfa 1801 / 2201	ZBH3900042
Paper Feeder	PF-480	LBN3900023
		LBN3900027
		LBN3900029
Document Processor	DP-480	ZBK3500252
Duplex Unit	DU-480	TEST-1
FAX Kit	FAX System (X)	TEST-1
Network Printer Kit	IB-33	TEST-1

Date ..... : 5 November, 2013
Temperature ..... : 24℃
Humidity ..... : 56%
Atom. Pressure ..... : 1016hPa
Testing Place ..... : Kyocera Document Solutions CE Test Room
Power Input ..... : AC230V, 50Hz
Tested by ..... : *Takayuki Matsuura* J. Matsuura

This test was applied as follows.

Voltage	*Discharging method*	*Criteria*	*Result*
±4.0kV	Contact discharge	B	Pass
±8.0kV	Air discharge	B	Pass
±4.0kV	Indirect discharge	B	Pass

Test equipment used:

ESD Generator : ESS-200AX (Noise Laboratory Co., Ltd.)
ESD Gun : TC-815D (Noise Laboratory Co., Ltd.)

Electrostatic Discharge Immunity Test

Model : TASKalfa 1801 / TASKalfa 2201

(Test Date : 2013.November.)

◎Operation Mode
1. Stand by
2. Copy
3. LAN Print
4. FAX Tx + USB Print

◎Discharge Method
C : Contact Discharge
A : Air Discharge
V : Discharge into VCP
H : Discharge into HCP

No.	*Discharged parts*	*Mode*	*Method*	*Result*
	●MFP (Main)			
01	Screws for Right Side	1, 2, 3, 4	C, A	*Worked Normal*
02	Fixing Mount for Printer , Printer NIC and FAX Kit	1, 2, 3, 4	C, A	*Worked Normal*
03	Connector for LAN Port Line	1, 2, 3, 4	C, A	*Worked Normal*
04	Connector for USB Port Line	1, 2, 3, 4	C, A	*Worked Normal*
05	Screws for Back Side	1, 2, 3, 4	C, A	*Worked Normal*
06	Fixing Mount for AC Inlet	1, 2, 3, 4	C, A	*Worked Normal*
07	Fixing Mount for Modular Connector	1, 2, 3, 4	C, A	*Worked Normal*
08	Screws for Left Side	1, 2, 3, 4	C, A	*Worked Normal*
09	Metallic Parts for Bypass	1, 2, 3, 4	C, A	*Worked Normal*
10	Screws for Top Side	1, 2, 3, 4	C, A	*Worked Normal*
11	Metallic Parts in Inner Tray	1, 2, 3, 4	C, A	*Worked Normal*
12	Screws for right side	1, 2, 3, 4	C, A	*Worked Normal*
13	Inner metallic parts in bypass part	1	C, A	*Worked Normal*
14	Inner metallic parts inside front cover (*opened)	1	C, A	*Worked Normal*
15	Inner metallic parts in paper cassettes	1	C, A	*Worked Normal*
	●DP			
16	Left / right hinge	1, 2, 3, 4	C, A	*Worked Normal*
17	Metallic parts for convey part	1, 2, 3, 4	C, A	*Worked Normal*
18	Inner metallic parts inside top cover	1	C, A	*Worked Normal*
19	Metallic parts for bottom side	1	C, A	*Worked Normal*
	●Paper Feeder			
20	Screws for Right Side	1, 2, 3, 4	C, A	*Worked Normal*
21	Screws for back side	1, 2, 3, 4	C, A	*Worked Normal*
22	Screws for Top side	1	C, A	*Worked Normal*
23	Inner metallic parts inside top cover	1	C, A	*Worked Normal*
24	Inner metallic parts in paper cassettes	1	C, A	*Worked Normal*

No.	**Indirect Discharge*	*Mode*	*Method*	*Result*
01	Front Side	1, 2, 3, 4	V	*Worked Normal*
02	Rear Side	1, 2, 3, 4	V	*Worked Normal*
03	Left Side	1, 2, 3, 4	V	*Worked Normal*
04	Right Side	1, 2, 3, 4	V	*Worked Normal*

EN61000-4-4/1995
Electrical Fast Transient/Burst Immunity Test

Equipment	*Model*	*Serial No.*
Multi-Function Printer	TASKalfa 1801 / 2201	ZBH3900042
Paper Feeder	PF-480	LBN3900023
		LBN3900027
		LBN3900029
Document Processor	DP-480	ZBK3500252
Duplex Unit	DU-480	TEST-1
FAX Kit	FAX System (X)	TEST-1
Network Printer Kit	IB-33	TEST-1

Date ..... : 6 November, 2013
Temperature ..... : 24℃
Humidity ..... : 58%
Atom. Pressure ..... : 1018hPa
Testing Place ..... : Kyocera Document Solutions CE Test Room
Power Input ..... : AC230V, 50Hz
Tested by ..... : *Takayuki Matsuura*

This test was applied as follows.

		Voltage	*Duration*	*Criteria*	*Result*
E.U.T. Power Line	PE	±1.0kV, 5kHz	1 min.	B	Pass
	L				
	N				
Communication Line		±0.5kV, 5kHz	1 min.	B	Pass

Test equipment used:

EFT/B Test System : FNS-AX3-A16B (Noise Laboratory Co., Ltd.)

EFT/B Immunity Test

Model : TASKalfa 1801 / TASalfa 2201

(Test Date: 2013.November.)

		Power Supply Port			Communication Port	*Remarks*
		PE	L1	L2	LAN Cable/USB Cable/Modular Cable	
1.	Copy	*Worked normal*	*Worked normal*	*Worked normal*	*Worked normal*	
2.	USB Print + FAX Tx	*Worked normal*	*Worked normal*	*Worked normal*	*Worked normal*	
3.	LAN Print	*Worked normal*	*Worked normal*	*Worked normal*	*Worked normal*	

EN61000-4-5/1995
Surge Immunity Test

Equipment	*Model*	*Serial No.*
Multi-Function Printer	TASKalfa 1801 / 2201	ZBH3900042
Paper Feeder	PF-480	LBN3900023
		LBN3900027
		LBN3900029
Document Processor	DP-480	ZBK3500252
Duplex Unit	DU-480	TEST-1
FAX Kit	FAX System (X)	TEST-1
Network Printer Kit	IB-33	TEST-1

Date ..... : 6 November, 2013
Temperature ..... : 24℃
Humidity ..... : 58%
Atom. Pressure ..... : 1018hPa
Testing Place ..... : Kyocera Document Solutions CE Test Room
Power Input ..... : AC230V, 50Hz
Tested by ..... : *Takayuki Matsuura* T. Matsuura

This test was applied as follows.

		Voltage	*Degree*	*Criteria*	*Result*
E.U.T. Power Line	L1-L2	±1.0kV	0°, 90°, 270°	B	Pass
	L1-PE	±2.0kV			Pass
	L2-PE	±2.0kV			Pass

Test equipment used:

Surge Test System : LSS-F02C1 (Noise Laboratory Co., Ltd.)

Surge Immunity Test

Model: TASKalfa 1801 / TASKalfa 2201

(Test Date : 2013.November.)

Mode : (1) Copy

Coupling	Surge Voltage	Phase		
		0 deg	90 deg	270 deg
L1 - L2	± 500V	Worked normal	Worked normal	Worked normal
	±1000V	Worked normal	Worked normal	Worked normal
L1 - PE	±1000V	Worked normal	Worked normal	Worked normal
	±2000V	Worked normal	Worked normal	Worked normal
L2 - PE	±1000V	Worked normal	Worked normal	Worked normal
	±2000V	Worked normal	Worked normal	Worked normal

Mode : (2) LAN Print

Coupling	Surge Voltage	Phase		
		0 deg	90 deg	270 deg
L1 - L2	± 500V	Worked normal	Worked normal	Worked normal
	±1000V	Worked normal	Worked normal	Worked normal
L1 - PE	±1000V	Worked normal	Worked normal	Worked normal
	±2000V	Worked normal	Worked normal	Worked normal
L2 - PE	±1000V	Worked normal	Worked normal	Worked normal
	±2000V	Worked normal	Worked normal	Worked normal

Mode : (2) FAX Tx + USB Print

Coupling	Surge Voltage	Phase		
		0 deg	90 deg	270 deg
L1 - L2	± 500V	Worked normal	Worked normal	Worked normal
	±1000V	Worked normal	Worked normal	Worked normal
L1 - PE	±1000V	Worked normal	Worked normal	Worked normal
	±2000V	Worked normal	Worked normal	Worked normal
L2 - PE	±1000V	Worked normal	Worked normal	Worked normal
	±2000V	Worked normal	Worked normal	Worked normal

EN61000-4-11/1994
Voltage Dips, Short Interruption and Voltage Variation Immunity Test

Equipment	***Model***	***Serial No.***
Multi-Function Printer	TASKalfa 1801 / 2201	ZBH3900042
Paper Feeder	PF-480	LBN3900023
		LBN3900027
		LBN3900029
Document Processor	DP-480	ZBK3500252
Duplex Unit	DU-480	TEST-1
FAX Kit	FAX System (X)	TEST-1
Network Printer Kit	IB-33	TEST-1

Date ..... : 7 November, 2013
Temperature ..... : 24℃
Humidity ..... : 54%
Atom. Pressure ..... : 1022hPa
Testing Place ..... : Kyocera Document Solutions CE Test Room
Power Input ..... : AC230V, 50Hz
Tested by ..... : *Takayuki Matsuura* T.Matsuura

This test was applied as follows.

	Reduction	***Term***	***Criteria***	***Result***
Voltage Dips	100%	0.5c/s	B	Pass
	30%	25c/s	C	Pass
Short Interruptions	100%	250c/s	C	Pass

Test equipment used:

Voltage Dip Simulator : VDS-220SB (Noise Laboratory Co., Ltd.)

Voltage Dips & Short Interruptions Test

Model: TASKalfa 1801 / TASalfa 2201

(Test Date : 2013.November.)

Mode : (1) Copy

	Reduction	*Term*	*Criteria*	*Result*	*Remarks*
Vol. Dips	100%	0.5c/s	B	Pass	*Worked Normal
	30%	25c/s	C	Pass	*Worked Normal
Short Int.	100%	250c/s	C	Pass	*Maked Reset

Mode : (2) LAN Print

	Reduction	*Term*	*Criteria*	*Result*	*Remarks*
Vol. Dips	100%	0.5c/s	B	Pass	*Worked Normal
	30%	25c/s	C	Pass	*Worked Normal
Short Int.	100%	250c/s	C	Pass	*Maked Reset

Mode : (3) FAX Tx + USB Print

	Reduction	*Term*	*Criteria*	*Result*	*Remarks*
Vol. Dips	100%	0.5c/s	B	Pass	*Worked Normal
	30%	25c/s	C	Pass	*Worked Normal
Short Int.	100%	250c/s	C	Pass	*Maked Reset

EN61000-4-3/1996 + ENV50204/1995
Radiated RF Electromagnetic Field Immunity Test

Equipment	***Model***	***Serial No.***
Multi-Function Printer	TASKalfa 1801 / 2201	ZBH3900042
Paper Feeder	PF-480	LBN3900023
		LBN3900027
		LBN3900029
Document Processor	DP-480	ZBK3500252
Duplex Unit	DU-480	TEST-1
FAX Kit	FAX System (X)	TEST-1
Network Printer Kit	IB-33	TEST-1

Date ..... : 17,18 October, 2013
Temperature ..... : 24℃
Humidity ..... : 55%
Atom. Pressure ..... : 1024hPa
Testing Place ..... : Kyocera Document Solutions Tamaki Factory
Power Input ..... : AC230V, 50Hz
Tested by ..... : *Takayuki Matsuura* J. Matsuura

This test was applied as follows.

Frequency	***Polarity***	***RF Level***	***Criteria***	***Result***
80～1000 MHz	Vertical	3V/m, 80%, 1kHz AM Modulation	A	Pass
	Horizontal			Pass
900±5 MHz	Vertical	3V/m, 100%, 1kHz Frequency 200Hz Duty Cycle 50% PulseMod.	A	Pass
	Horizontal			Pass

We tested at Tamaki EMC Laboratory of KYOCERA Document Solutions Tamaki Factory.

Test equipment used : See the attached documents for details.

Radiated RF Electromagnetic Field Immunity Test

Model: TASKalfa 1801 / TASKalfa 2201

(Test Date : 2013.November.)

Mode : (1) Copy

Test Face	*Polar.*	*Result*	*Remarks*
Front	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	
Right	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	
Rear	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	
Left	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	

Mode : (2) LAN Print

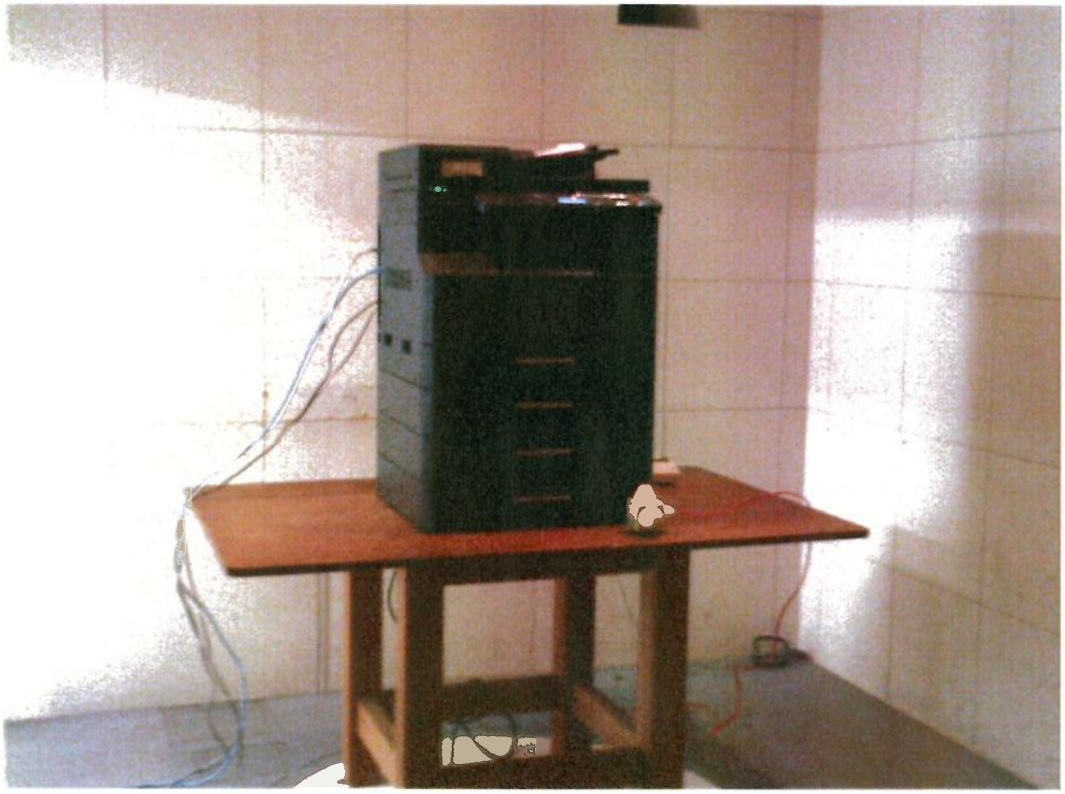
Test Face	*Polar.*	*Result*	*Remarks*
Front	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	
Right	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	
Rear	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	
Left	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	

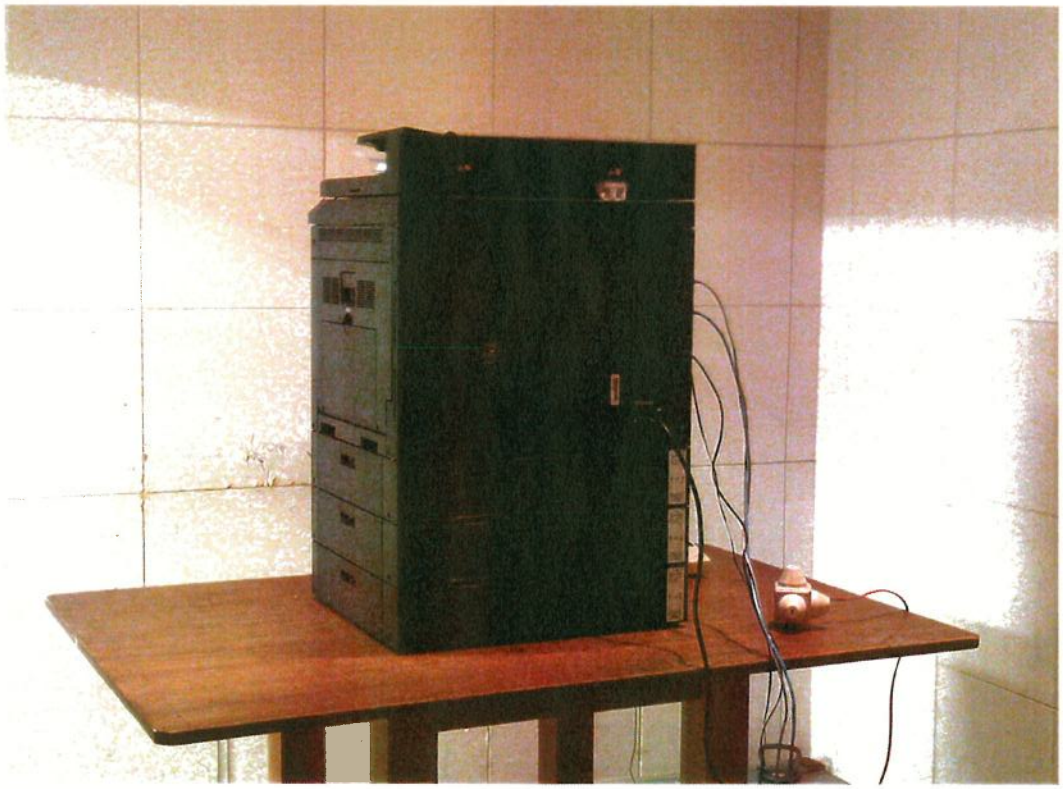
Mode : (3) FAX Tx + USB Print

Test Face	*Polar.*	*Result*	*Remarks*
Front	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	
Right	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	
Rear	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	
Left	Vertical	***EUT worked normal.***	
	Horizontal	***EUT worked normal.***	

Photograph of Tested Device Configuration

(Radiated RF Electromagnetic Field Immunity Test)





EN61000-4-6/1996
Conducted RF Electromagnetic Field Immunity Test

Equipment	***Model***	***Serial No.***
Multi-Function Printer	TASKalfa 1801 / 2201	ZBH3900042
Paper Feeder	PF-480	LBN3900023
		LBN3900027
		LBN3900029
Document Processor	DP-480	ZBK3500252
Duplex Unit	DU-480	TEST-1
FAX Kit	FAX System (X)	TEST-1
Network Printer Kit	IB-33	TEST-1

Date ..... : 18 October, 2013
Temperature ..... : 24℃
Humidity ..... : 55%
Atom. Pressure ..... : 1028hPa
Testing Place ..... : Kyocera Document Solutions Tamaki Factory
Power Input ..... : AC230V, 50Hz
Tested by ..... : *Takayuki Matsuura* T.Matsuura

This test was applied as follows.

	Frequency	***RF Level***	***Criteria***	***Result***
E.U.T. Power Line	0.15～80 MHz	3V/m, 80%, 1kHz AM Modulation	A	Pass
Communication Line				

We tested at Tamaki EMC Laboratory of KYOCERA Document Solutions Tamaki Factory.

Test equipment used : See the attached documents for details.

Conducted RF Electromagnetic Field Immunity Test

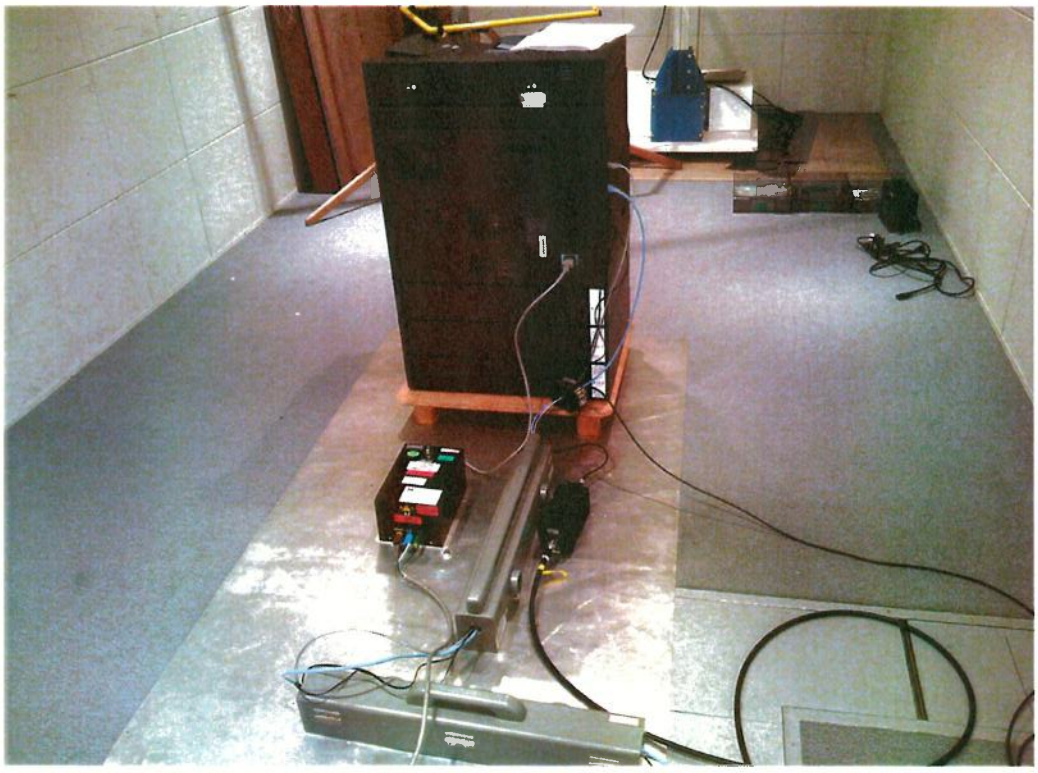
Model : TASKalfa 1801 / TASKalfa 2201

(Test Date: 2013.November.)

Tested Port	*Copupling*	*Operation Mode*	*Result*	*Remarks*
AC Power Cord for Printer	CDN M3	Copy	***EUT worked normal.***	
LAN Cable	EM Clamp	LAN Print	***EUT worked normal.***	
USB Cable	EM Clamp	FAX Tx + USB Print	***EUT worked normal.***	

Photograph of Tested Device Configuration

(Conducted RF Electromagnetic Field Immunity Test)



EN61000-4-8/1993
Power-Frequency Magnetic Field
Immunity Test

Equipment	***Model***	***Serial No.***
Multi-Function Printer	TASKalfa 1801 / 2201	ZBH3900042
Paper Feeder	PF-480	LBN3900023
		LBN3900027
		LBN3900029
Document Processor	DP-480	ZBK3500252
Duplex Unit	DU-480	TEST-1
FAX Kit	FAX System (X)	TEST-1
Network Printer Kit	IB-33	TEST-1

Date ..... : 18 October, 2013
Temperature ..... : 24℃
Humidity ..... : 55%
Atom. Pressure ..... : 1028hPa
Testing Place ..... : Kyocera Document Solutions Tamaki Factory
Power Input ..... : AC230V, 50Hz
Tested by ..... : *Takayuki Matsuura* T. Matsuura

This test was applied as follows.

Frequency	***Level***	***Criteria***	***Result***
50 Hz	1A/m	A	Pass

We tested at Tamaki EMC Laboratory of KYOCERA Document Solutions Tamaki Factory.

Test equipment used : See the attached documents for details.

Power-Frequency Magnetic Field Immunity Test

Model : TASKalfa 1801 / TASKalfa 2201

(Test Date: 2013.November.)

Polarization	*Operation Mode*	*Result*	*Remarks*
X	Copy	***EUT worked normal.***	
Y	Copy	***EUT worked normal.***	
Z	Copy	***EUT worked normal.***	

Photograph of Tested Device Configuration

(Power-Frequency Magnetic Field Immunity Test)

List of Tests and Measurement Equipment

『Test Clause』
EN61000-4-3/ENV50204 : Radiated RF Electromagnetic Field Immunity Test
EN61000-4-6 : Conducted RF Electromagnetic Field Immunity Test

Equipment	*Type*	*Manufacturer*	*Serial No.*
RF Signal Generator	HP8648B	Hewlett Packard	3642U01646
RF Power Amplifier	757LCB	Kalmas Engineering	8289-1
Amplifier Interface	IF-488	Kalmas Engineering	8289-2
Power Reflection Meter	NRT	Rohde&Schwarz	825490 / 003
Power Head	NAP-Z5	Rohde&Schwarz	847424 / 027
Field Sensor	HI-4422	Comtest International	96168
O/E Converter	HI-4413P	Comtest International	800－9205
Birog Antenna	CBL6140	Schaffner Chase EMC	1107
Pulse Generator	2416A	Pragmatic Instruments	818314 820344
Current Sensor Probe	CSP9160	Schaffner Chase EMC	1059
Millivolt Meter	URV55	Rohde&Schwarz	846100 / 028
Insertion Unit	URV5-Z4	Rohde&Schwarz	848566 / 018
Spectrum Analyzer	HP8568B	Hewlett Packard	2517A01396
EM Injection Clamp	T/EM-801-23mm	Fisher Custom Communication	102
Decoupling Network	T/EM-DCN-23mm	Fisher Custom Communication	313
Calibration Fixture	T/EM-801-CF-23mm	Fisher Custom Communication	338
CDN	TCDN-801-M3-32	Fisher Custom Communication	9851
CDN	TCDN-801-S25	Fisher Custom Communication	9850
CDN(Calibration tools)	TCDN-801-150-50	Fisher Custom Communication	9852, 9853

『Test Clause』
EN61000-4-8 : Power-Frequency Magnetic Field Immunity Test
(MFP/Printer : A3 Model)

Equipment	*Type*	*Manufacturer*	*Serial No.*
Immunity Test System	*Handmade	――	――
Coupling Clamp	*Not used	――	――
Magnetic Field Coil	*Handmade	――	――

(MFP/Printer : A4 Model)

Equipment	*Type*	*Manufacturer*	*Serial No.*
Conducted immunity test system	BEST Plus 1	SCHAFFNER	199848-001SC
Magnetic field coil	INA 702	SCHAFFNER	199815-004SC
Coupling clamp	CDN126	SCHAFFNER	130