

SECTION 2

Test Reports of Emission

(EN55022/2010, EN61000-3-2/2006+A1/2009+A2/2009, EN61000-3-3/2013)

EN55022/2010
(EN 301 489-1 V1.9.2 <8.2>)
Radiated Interference Measurement

<i>Equipment</i>	<i>Model</i>	<i>Serial No.</i>
Multi-Function Printer	TASKalfa 306ci	Z7F5300025
Paper Feeder	PF-5120	Z7J5300161
	PF-5130	Z7K5300101
	PF-5140	Z7L5300059
Finisher	DF-5100	Z7T5300071
Multi Tray	MT-5100	Z7U5300081
Job Separator	JS-5100	Z7H5300059
Printer NIC	IB-50	TEST-1
	IB-51	TEST-1
Bridge	AK-5100	Z7G5300123
FAX Kit	FAX System 11	ZEK5300004
Hard Disk Drive	HD-6	TEST-1
	HD-7	TEST-1

This test was applied as follows.

(30MHz – 1GHz)

<i>Frequency</i>	<i>Limit</i>	<i>Result</i>
30 - 230 MHz	30dB	Pass
230 - 1000 MHz	37dB	Pass

(1GHz-6GHz)

<i>Frequency</i>	<i>Limit</i>		<i>Result</i>
	<i>Average</i>	<i>Peak</i>	
1 - 3 GHz	50dB	70dB	Pass
3 - 6 GHz	54dB	74dB	Pass

We entrusted this test to Tokin EMC Engineering Co., Ltd.
See the attached documents for details.

EN55022/2010
(EN 301 489-1 V1.9.2 <8.4><8.7>)
Conducted Interference Measurement

<i>Equipment</i>	<i>Model</i>	<i>Serial No.</i>
Multi-Function Printer	TASKalfa 306ci	Z7F5300025
Paper Feeder	PF-5120	Z7J5300161
	PF-5130	Z7K5300101
	PF-5140	Z7L5300059
Finisher	DF-5100	Z7T5300071
Multi Tray	MT-5100	Z7U5300081
Job Separator	JS-5100	Z7H5300059
Printer NIC	IB-50	TEST-1
	IB-51	TEST-1
Bridge	AK-5100	Z7G5300123
FAX Kit	FAX System 11	ZEK5300004
Hard Disk Drive	HD-6	TEST-1
	HD-7	TEST-1

This test was applied as follows.

(AC Line)

<i>Frequency</i>	<i>Limit</i>	<i>Result</i>
0.15 - 0.5 MHz	66 - 56dB; Quasi-Peak 56 - 46dB; Average	Pass
0.5 - 5 MHz	56dB; Quasi-Peak 46dB; Average	Pass
5 - 30 MHz	60dB; Quasi-Peak 50dB; Average	Pass

(Telecommunication Line)

<i>Frequency</i>	<i>Current Limit</i>	<i>Result</i>
0.15 - 0.5 MHz	40 - 30dB; Quasi-Peak 30 - 20dB; Average	Pass
0.5 - 30 MHz	30dB; Quasi-Peak 20dB; Average	Pass

We entrusted this test to Tokin EMC Engineering Co., Ltd.
See the attached documents for details.

Data No. : S1550602

Test Site : Osaka Big Semi AC

Date of Measurement : May 9, 18, 31, 2014

Temperature : 18.2-22 degree C

Humidity : 57.7-66.6 %

Manufacturer : KYOCERA Document Solutions Inc.

Category : EN55022: 2010 Class B


Equipment Under Test : MFP

Model Name : TASKalfa 306ci

Serial No. : Z7F5300025

Power Supply

Voltage	:	AC 230V
Current	:	- A
Frequency	:	50 Hz

承認	担当
	

TEST INSTRUMENTATION USED

< Conducted Emission Measurement >

(モデル名/シリアルNo./製造者/管理番号/校正日/校正有効期限)

< Main Ports & Telecommunication Ports >

Field Strength Meter..... (ESCI/100295/Rohde & Schwarz/RE060/20 Aug.'14/Aug.'15)
Spectrum Analyzer (ESCI/100295/Rohde & Schwarz/RE060/20 Aug.'14/Aug.'15)
L.I.S.N. (KNW-407/8-1793-1/Kyoritsu/LI070/19 Nov.'14/Nov.'15)
ISN..... (T800/26083/TESEQ /LI084/07 Oct.'14/Oct.'15)
ISN..... (T200A/25710/TESEQ/LI082/29 Sep.'14/Sep.'15)
Site Establishment Cable.. (DKT37/CE/R/Tokin/DKT37/22 Mar.'15/Mar.'16)
50ohms Terminator (CT-03NP/1190282/TME/ME513/10 Sep.'14/Sep.'15)
Semi Anechoic Chamber.. (Osaka Big Semi AC/Osaka Big Semi AC/Tokin/
SA027/21 Mar.'15/Mar.'16)
Software (EP5CE/9902044/TOYO/SW025-6/---/---)
Software (EMC Data Calculation Program/---/AES/SW059-1/---/---)

< Radiated Emission Measurement >

(モデル名/シリアルNo./製造者/管理番号/校正日/校正有効期限)

< 30MHz to 1000MHz >

Field Strength Meter..... (ESCI/100295/Rohde & Schwarz/RE060/20 Aug.'14/Aug.'15)
Spectrum Analyzer (ESCI/100295/Rohde & Schwarz/RE060/20 Aug.'14/Aug.'15)
Biconical Antenna (VHA9103/2443/Schwarzbeck/TB038/02 Apr.'15/Apr.'16)
Logperiodic Antenna (UHALP9108-A/UHALP9108-A0754/Schwarzbeck/
TL026/02 Apr.'15/Apr.'16)
Pre-Amplifier (310N/261803/Sonowa instrument Co./AM037/22 Mar.'15/Mar.'16)
Site Establishment Cable.. (DKT33/10m/30-1000MHz/R/Tokin/DKT33/22 Mar.'15/Mar.'16)
Semi Anechoic Chamber.. (Osaka Big Semi AC/Osaka Big Semi AC/Tokin/
SA027/21 Mar.'15/Mar.'16)
Software (EP5RE/---/TOYO/SW035-5/---/---)
Software (EMC Data Calculation Program/---/AES/SW059-1/---/---)

< 1000MHz to 6000MHz >

Field Strength Meter..... (ESCI/100295/Rohde & Schwarz/RE060/20 Aug.'14/Aug.'15)
Spectrum Analyzer (FSP40/100238/Rohde & Schwarz/SP057/05 Sep.'14/Sep.'15)
DRG Horn Antenna..... (3117/00114388/ETS-LINDGREN/AN056/09 Apr.'15/Apr.'16)
Pre-amplifier..... (TPA0108-40/0608/TOYO/AM049/22 Mar.'15/Mar.'16)
Site Establishment Cable.. (DKT55/3m/1-6GHz/R/Tokin/DKT55/25 Jun.'15/Jun.'16)
Site Establishment Cable.. (DKT56/3m/1-6GHz/S/Tokin/DKT56/25 Jun.'16/Jun.'16)
Semi Anechoic Chamber.. (Osaka Big Semi AC/S-VSWR/Tokin/SA034/22 Mar.'15/Mar.'16)
Software (EP5RE/---/TOYO/SW035-5/---/---)
Software (EMC Data Calculation Program/---/AES/SW059-1/---/---)

★TASKalfa 306ci (EN55022 Class B)

◎EUT

Equipment	Model	S/N	System			Manufacturer
			A	B	C	
MFP	TASKalfa 306ci	Z7F5300025	●	●	●	Kyocera Document
Paper Feeder	PF-5120	Z7J5300161	●	●	●	Kyocera Document
	PF-5130	Z7K5300101		●	●	Kyocera Document
	PF-5140	Z7L5300059	●			Kyocera Document
Bridge	AK-5100	Z7G5300123		●	●	Kyocera Document
Document Finisher	DF-5100	Z7T5300071	●			Kyocera Document
Multi Tray	MT-5100	Z7U5300081		●	●	Kyocera Document
Printer NIC	IB-50	TEST-1	●			Kyocera Document
	IB-51	TEST-1			●	Kyocera Document
Hard Disk Drive	HD-7	TEST-1		●		Kyocera Document
FAX Kit	FAX System (11)	ZEK5300004	●	●	●	Kyocera Document
PC	Vostro 1200	29904650925	●	●	●	Dell
HUB	CentreCOM GS908XL	007613G101300195 E1	●	●	●	Allied Telesis
FAX Simulator	NSE3	10261	●	●	●	Arai Electric
FAX	ECOSYS M2535dn	ZVZ3700007	●	●	●	Kyocera Document
Telephone	TE-202	8100758A	●	●	●	TAKACHIHO
Wireless LAN Adapter	WLI-UC-G301N	420104			●	BUFFALO

◎Operation Modes

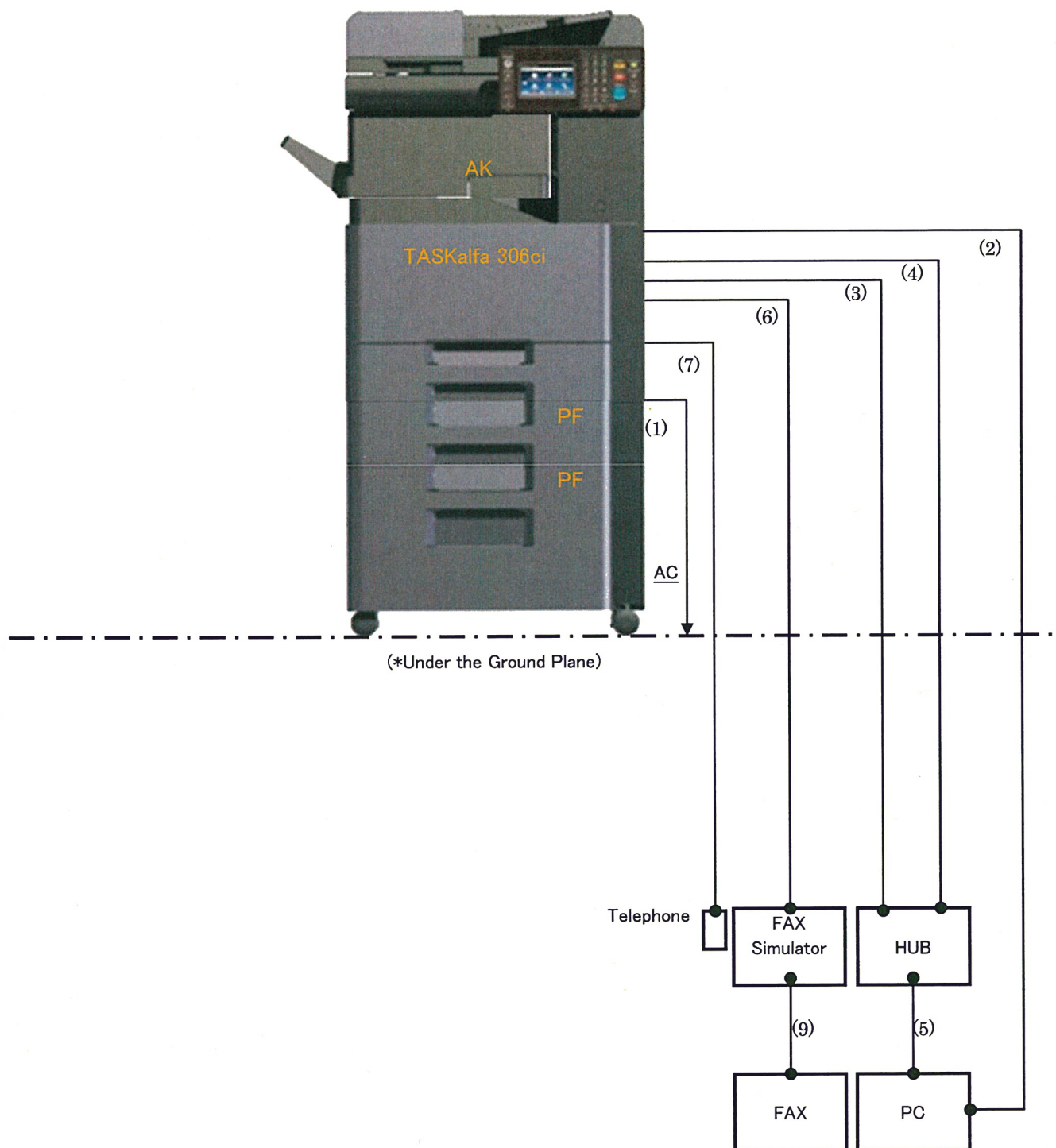
No.	Operation Mode	System	Rad.EMI		Con.EMI
			MHz	GHz	
①	Standby	A	○		○
		B		○	
②	Copy	A	○	○	○
③	USB Print + FAX TX	B	○	---	---
④	LAN Print (On Board) + FAX RX	B	○	---	○
⑤	LAN Print (Option NIC) (Wireless)	C	---	○	---
⑥	LAN Print (On Board) (Telecommunication Ports)	B	---	---	○
⑦	FAX TX (Main Port) (Telecommunication Ports)	A	---	---	○

◎Connected Cable / Cord

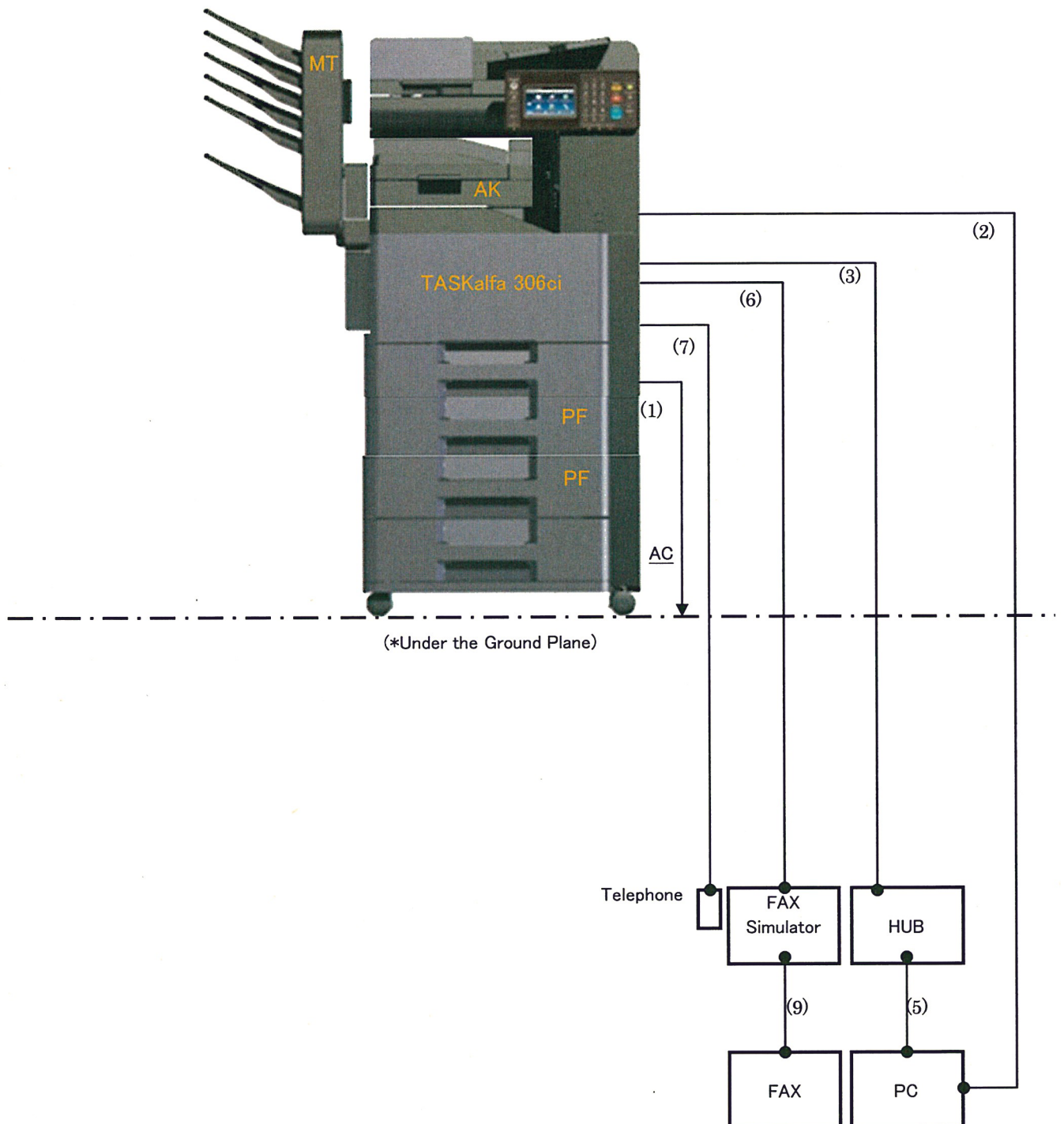
No.	Cable / Cord	Length	Core	Shielded	Connector
1	MFP Power Cord	2.5 m	---	---	Resinous
2	USB Cable	5 m	---	○	Metallic
3	LAN Cable (On Board) for Printer	10 m	---	○	Metallic
4	LAN Cable (Option) for Printer	10 m	---	○	Metallic
5	LAN Cable for PC	1 m	---	○	Metallic
6	Modular Cord for FAX Kit	7 m	---	---	Resinous
7	Modular Cord for Telephone	7 m	---	---	Resinous
8	Modular Cord for FAX	1 m	---	---	Resinous

©Equipment Connection Figure

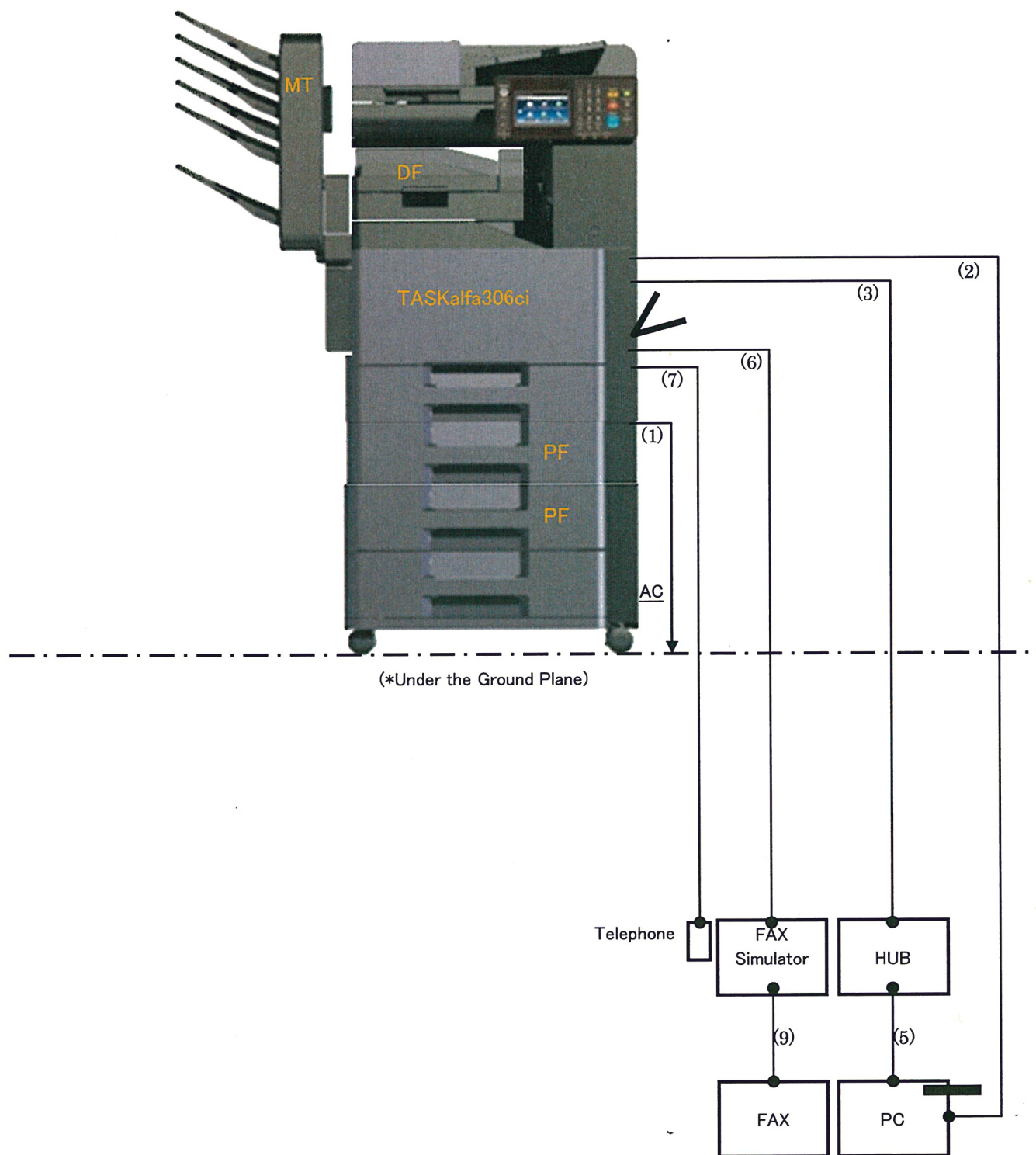
System A



System B



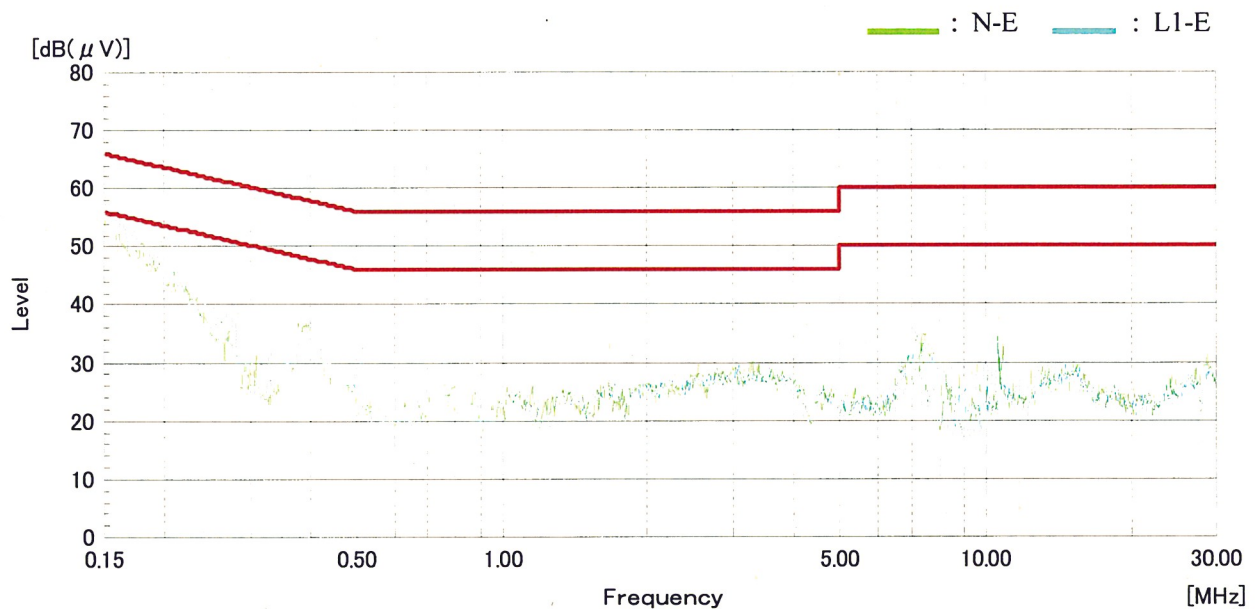
System C



雑音端子電圧試験結果 (QP: 準尖頭値 , AV: 平均値)

Operating mode: Standby Date of measurement: May 31, 2015
Test procedure: EN55022:2010 Class B Temperature: 22 degree C
Tested condition: Power input 1phase AC230V Humidity: 62.6 %
System: A

	Frequency (MHz)	Level		Total Factor (dB)	Result		Limit		Margin	
		QP (dBμV)	AV (dBμV)		QP (dBμV)	AV (dBμV)	QP (dBμV)	AV (dBμV)	QP (dB)	AV (dB)
N-E	0.153	40.1	23.2	11.3	51.4	34.5	65.8	55.8	14.4	21.3
	0.186	34.3	17.0	10.9	45.2	27.9	64.2	54.2	19.0	26.3
	0.197	31.7	15.4	10.8	42.5	26.2	63.7	53.7	21.2	27.5
	0.394	24.0	12.2	10.3	34.3	22.5	58.0	48.0	23.7	25.5
	0.520	6.8	0.1	10.2	17.0	10.3	56.0	46.0	39.0	35.7
	10.640	23.8	20.8	11.1	34.9	31.9	60.0	50.0	25.1	18.1
L1-E	0.150	41.4	24.4	11.3	52.7	35.7	66.0	56.0	13.3	20.3
	0.163	38.9	21.3	11.2	50.1	32.5	65.3	55.3	15.2	22.8
	0.210	31.3	13.8	10.8	42.1	24.6	63.2	53.2	21.1	28.6
	0.275	20.4	2.2	10.6	31.0	12.8	61.0	51.0	30.0	38.2
	0.397	24.3	12.0	10.3	34.6	22.3	57.9	47.9	23.3	25.6
	10.637	24.4	22.0	11.1	35.5	33.1	60.0	50.0	24.5	16.9



Tested by

Yuichiro Yoshida

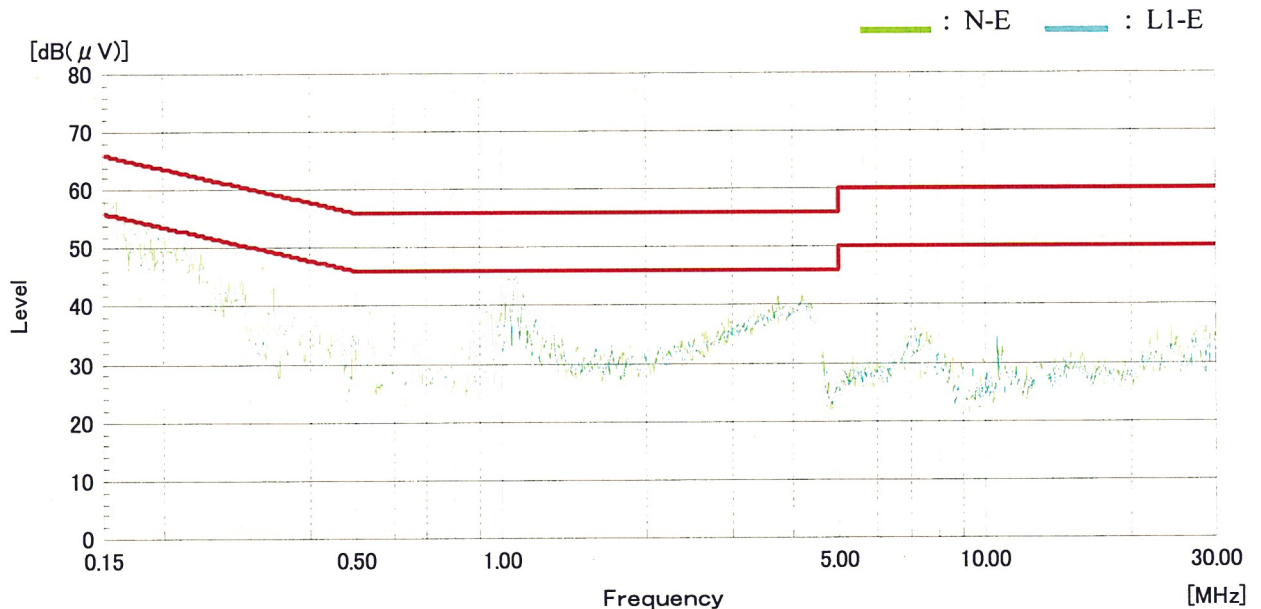
Yuichiro Yoshida, Engineer

雑音端子電圧試験結果 (QP: 準尖頭値 , AV: 平均値)

Operating mode: Copy Date of measurement: May 31, 2015
Test procedure: EN55022:2010 Class B Temperature: 22 degree C
Tested condition: Power input 1phase AC230V Humidity: 62.6 %
Test line: MFP Power Cord System: A

	Frequency (MHz)	Level		Total Factor (dB)	Result		Limit		Margin	
		QP (dBμV)	AV (dBμV)		QP (dBμV)	AV (dBμV)	QP (dBμV)	AV (dBμV)	QP (dB)	AV (dB)
N-E	0.151	42.2	23.5	11.3	53.5	34.8	66.0	56.0	12.5	21.2
	0.165	39.0	32.8	11.2	50.2	44.0	65.2	55.2	15.0	11.2
	0.333	29.7	28.6	10.3	40.0	38.9	59.4	49.4	19.4	10.5
	1.070	33.3	33.2	10.3	43.6	43.5	56.0	46.0	12.4	2.5
	4.264	26.0	20.6	10.6	36.6	31.2	56.0	46.0	19.4	14.8
	28.524	16.2	7.4	12.4	28.6	19.8	60.0	50.0	31.4	30.2

L1-E	0.161	38.0	30.7	11.2	49.2	41.9	65.4	55.4	16.2	13.5
	0.165	37.7	32.8	11.2	48.9	44.0	65.2	55.2	16.3	11.2
	0.333	30.1	28.7	10.4	40.5	39.1	59.4	49.4	18.9	10.3
	1.070	33.5	33.2	10.3	43.8	43.5	56.0	46.0	12.2	2.5
	4.243	25.9	20.9	10.6	36.5	31.5	56.0	46.0	19.5	14.5
	7.177	21.7	13.1	10.9	32.6	24.0	60.0	50.0	27.4	26.0



Tested by

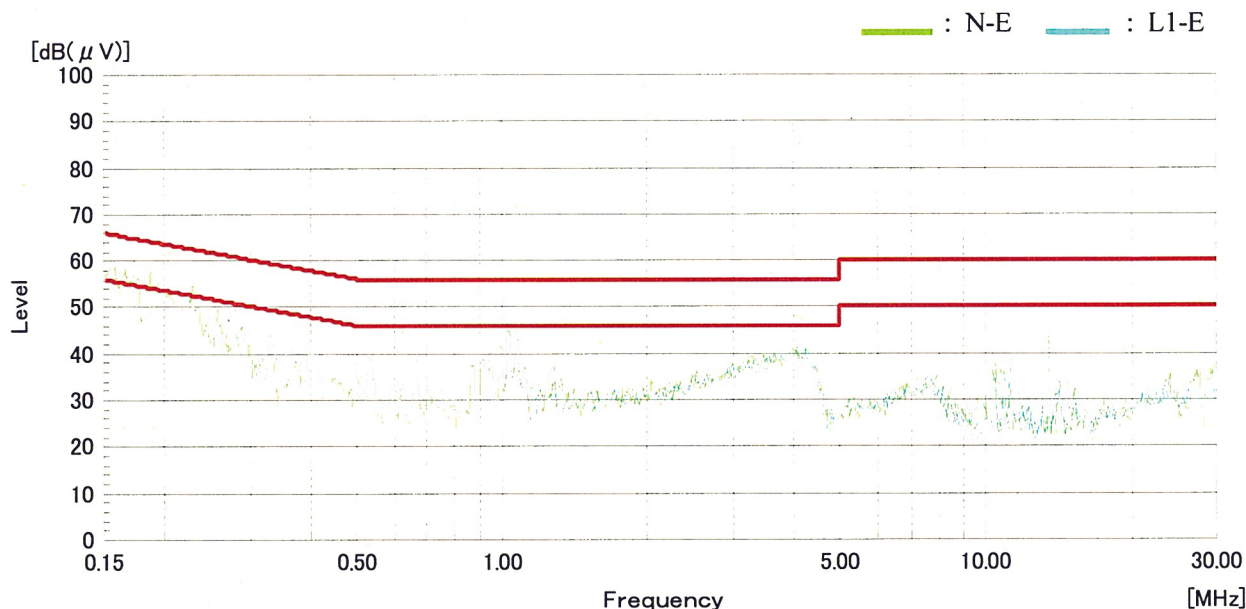
Yuichiro Yoshida

Yuichiro Yoshida, Engineer

雑音端子電圧試験結果 (QP: 準尖頭値 , AV: 平均値)

Operating mode: LAN Print (On Board) + FAX RX Date of measurement: May 31, 2015
Test procedure: EN55022:2010 Class B Temperature: 22 degree C
Tested condition: Power input 1phase AC230V Humidity: 62.6 %
Test line: MFP Power Cord System: B

	Frequency (MHz)	Level		Total Factor (dB)	Result		Limit		Margin	
		QP (dBμV)	AV (dBμV)		QP (dBμV)	AV (dBμV)	QP (dBμV)	AV (dBμV)	QP (dB)	AV (dB)
N-E	0.166	39.8	32.5	11.2	51.0	43.7	65.2	55.2	14.2	11.5
	0.174	38.2	19.8	11.1	49.3	30.9	64.8	54.8	15.5	23.9
	0.202	38.0	31.2	10.8	48.8	42.0	63.5	53.5	14.7	11.5
	1.036	33.2	33.0	10.3	43.5	43.3	56.0	46.0	12.5	2.7
	1.069	31.4	29.9	10.3	41.7	40.2	56.0	46.0	14.3	5.8
	4.230	25.6	20.2	10.6	36.2	30.8	56.0	46.0	19.8	15.2
L1-E	0.155	40.6	22.2	11.3	51.9	33.5	65.7	55.7	13.8	22.2
	0.165	38.6	32.8	11.2	49.8	44.0	65.2	55.2	15.4	11.2
	0.204	38.6	28.4	10.8	49.4	39.2	63.4	53.4	14.0	14.2
	1.030	33.3	33.3	10.3	43.6	43.6	56.0	46.0	12.4	2.4
	1.069	32.7	32.0	10.3	43.0	42.3	56.0	46.0	13.0	3.7
	4.147	26.3	20.7	10.5	36.8	31.2	56.0	46.0	19.2	14.8



Tested by

Yuichiro Yoshida

Yuichiro Yoshida, Engineer

雑音端子電圧試験結果 (QP: 準尖頭値 , AV: 平均値) — 通信ポート測定 —

Operating mode: LAN Print (On Board)

Date of measurement: May 31, 2015

Test procedure: EN55022:2010 Class B

Temperature: 22 degree C

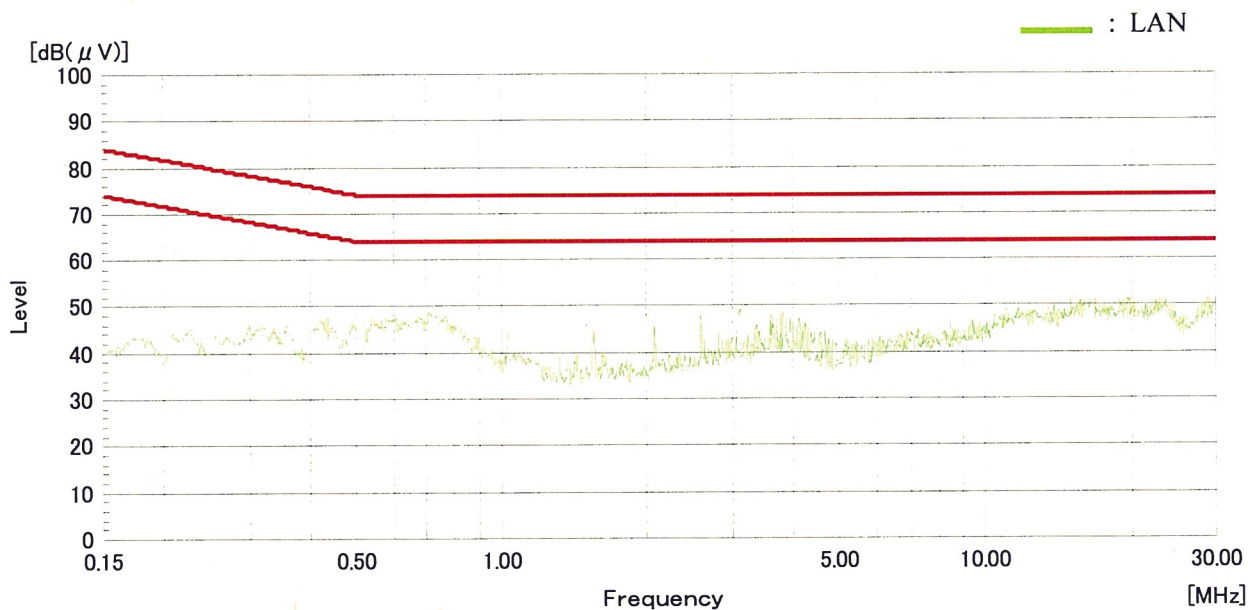
Tested condition: Power input 1phase AC230V

Humidity: 62.6 %

Test line: LAN Cable

System: B

	Frequency (MHz)	Level		Total Factor (dB)	Result		Limit		Margin	
		QP (dBμV)	AV (dBμV)		QP (dBμV)	AV (dBμV)	QP (dBμV)	AV (dBμV)	QP (dB)	AV (dB)
LAN	0.722	36.4	31.3	10.3	46.7	41.6	74.0	64.0	27.3	22.4
	1.036	33.5	32.0	10.3	43.8	42.3	74.0	64.0	30.2	21.7
	2.591	35.9	34.6	10.4	46.3	45.0	74.0	64.0	27.7	19.0
	3.110	36.8	34.6	10.5	47.3	45.1	74.0	64.0	26.7	18.9
	3.715	35.2	28.5	10.5	45.7	39.0	74.0	64.0	28.3	25.0
	16.041	35.6	30.2	11.3	46.9	41.5	74.0	64.0	27.1	22.5



Tested by

Yuichiro Yoshida

Yuichiro Yoshida, Engineer

雑音端子電圧試験結果 (QP: 準尖頭値 , AV: 平均値) — 通信ポート測定 —

Operating mode: FAX TX (Main Port)

Date of measurement: May 31, 2015

Test procedure: EN55022:2010 Class B

Temperature: 22 degree C

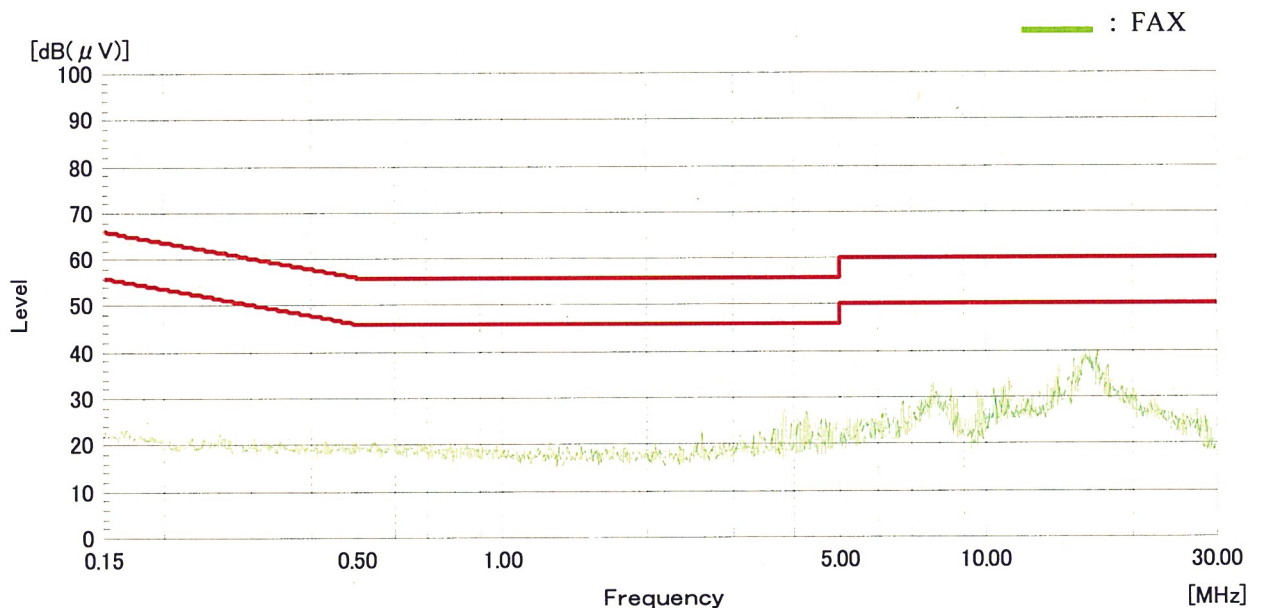
Tested condition: Power input 1phase AC230V

Humidity: 62.6 %

Test line: Modular Cord for FAX Kit

System: A

	Frequency (MHz)	Level		Total Factor (dB)	Result		Limit		Margin	
		QP (dBμV)	AV (dBμV)		QP (dBμV)	AV (dBμV)	QP (dBμV)	AV (dBμV)	QP (dB)	AV (dB)
FAX	8.479	19.1	16.1	10.9	30.0	27.0	74.0	64.0	44.0	37.0
	10.528	21.3	18.0	11.1	32.4	29.1	74.0	64.0	41.6	34.9
	11.282	21.0	17.1	11.1	32.1	28.2	74.0	64.0	41.9	35.8
	15.286	25.6	20.9	11.3	36.9	32.2	74.0	64.0	37.1	31.8
	16.211	26.3	21.1	11.3	37.6	32.4	74.0	64.0	36.4	31.6
	24.576	23.6	23.1	11.9	35.5	35.0	74.0	64.0	38.5	29.0



Tested by

Yuichiro Yoshida

Yuichiro Yoshida, Engineer

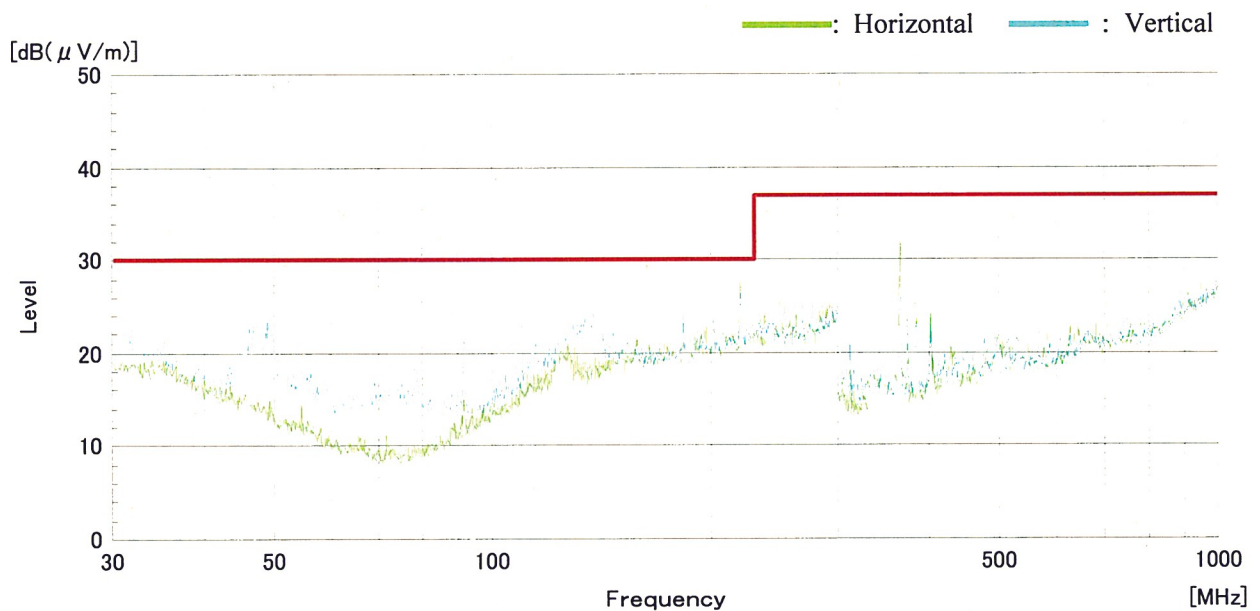
雑音電界強度試験結果 (QP: 準尖頭値)

Operating mode: Standby
Test procedure: EN55022:2010 Class B
Tested condition: Power input 1phase AC230V
Test distance: 10 m

Date of measurement: May 9, 2015
Temperature: 20.3 degree C
Humidity: 66.6 %
System: A

< 30MHz to 1000MHz >

Frequency (MHz)	Level		Cable Loss (dB)	Amp. Gain (dB)	Ant. Factor (dB/m)	Result		10m Limit (dBμV/m)	Margin	
	Ver. (dBμV)	Hor. (dBμV)				Ver. (dBμV/m)	Hor. (dBμV/m)		Ver. (dB)	Hor. (dB)
49.10	34.5		2.2	-32.7	17.3	21.3		30.0	8.7	
110.00		28.9	3.3	-32.7	17.6		17.1	30.0		12.9
125.01		29.5	3.5	-32.6	19.4		19.8	30.0		10.2
131.07	33.0		3.6	-32.6	19.8	23.8		30.0	6.2	
147.05	33.3	25.8	3.8	-32.6	20.6	25.1	17.6	30.0	4.9	12.4
220.50	30.6	30.5	4.7	-32.6	23.0	25.7	25.6	30.0	4.3	4.4
367.51	36.4	42.3	6.3	-32.5	15.7	25.9	31.8	37.0	11.1	5.2
1000.00	21.8	22.0	10.6	-30.9	22.7	24.2	24.4	37.0	12.8	12.6



Tested by

Yuichiro Yoshida

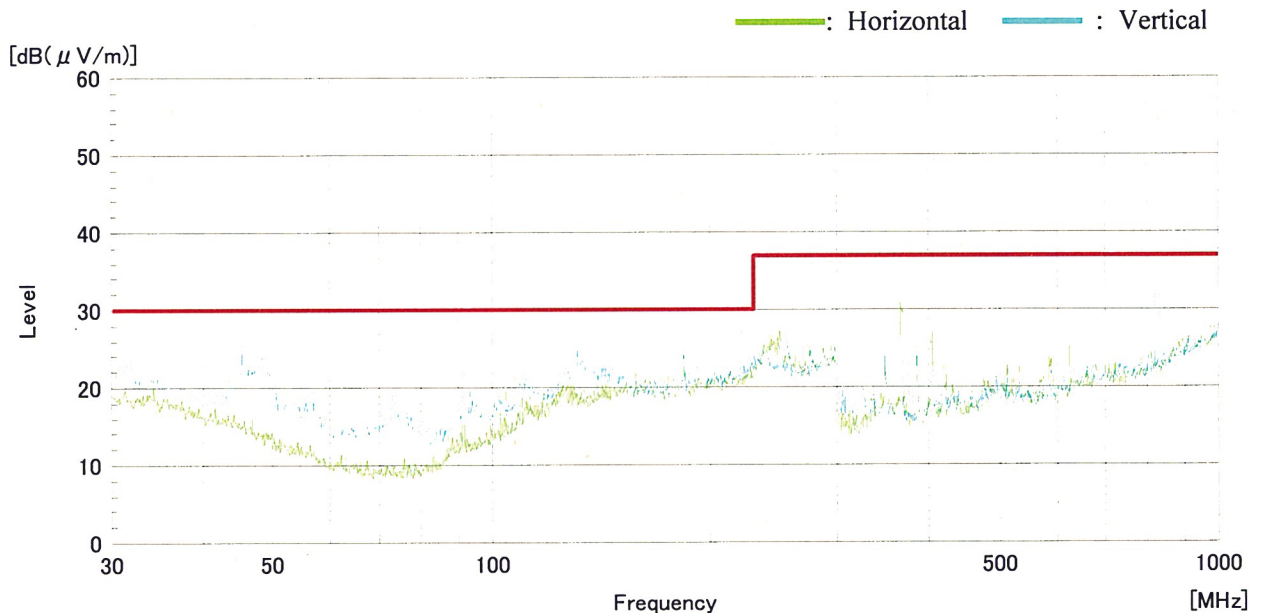
Yuichiro Yoshida, Engineer

雑音電界強度試験結果 (QP: 準尖頭値)

Operating mode: Copy
Test procedure: EN55022:2010 Class B
Tested condition: Power input 1phase AC230V
Test distance: 10 m
< 30MHz to 1000MHz >

Date of measurement: May 9, 2015
Temperature: 20.3 degree C
Humidity: 66.6 %
System: A

Frequency (MHz)	Level		Cable Loss (dB)	Amp. Gain (dB)	Ant. Factor (dB/m)	Result		10m Limit (dBμV/m)	Margin	
	Ver. (dBμV)	Hor. (dBμV)				Ver. (dBμV/m)	Hor. (dBμV/m)		Ver. (dB)	Hor. (dB)
125.00		32.8	3.5	-32.6	19.4		23.1	30.0		6.9
131.08	33.4		3.6	-32.6	19.8	24.2		30.0	5.8	
147.00	33.5		3.8	-32.6	20.6	25.3		30.0	4.7	
183.75	30.0	28.8	4.3	-32.6	22.3	24.0	22.8	30.0	6.0	7.2
202.12	28.2	27.3	4.5	-32.6	22.8	22.9	22.0	30.0	7.1	8.0
220.00	31.1	30.5	4.7	-32.6	23.0	26.2	25.6	30.0	3.8	4.4
367.50	36.2	40.4	6.3	-32.5	15.7	25.7	29.9	37.0	11.3	7.1
1000.00		25.1	10.6	-30.9	22.7		27.5	37.0		9.5



Tested by

(Signature)

Yuichiro Yoshida, Engineer

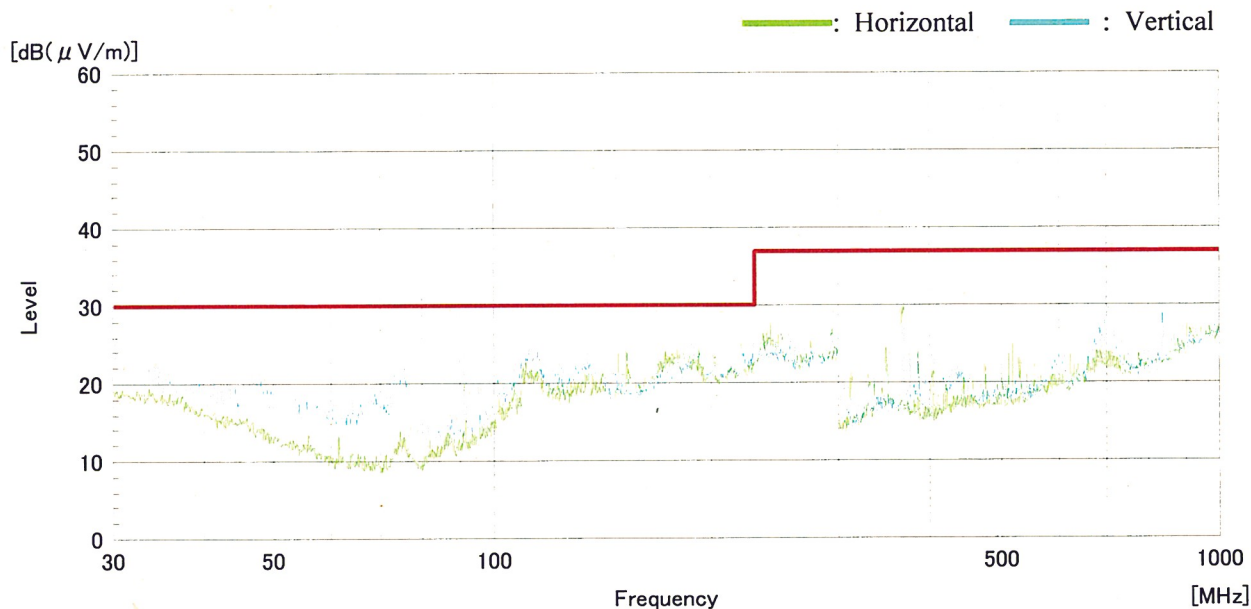
雑音電界強度試験結果 (QP: 準尖頭値)

Operating mode: USB Print + FAX TX
Test procedure: EN55022:2010 Class B
Tested condition: Power input 1phase AC230V
Test distance: 10 m

Date of measurement: May 9, 2015
Temperature: 20.3 degree C
Humidity: 66.6 %
System: B

< 30MHz to 1000MHz >

Frequency (MHz)	Level		Cable Loss (dB)	Amp. Gain (dB)	Ant. Factor (dB/m)	Result		10m Limit (dBμV/m)	Margin	
	Ver. (dBμV)	Hor. (dBμV)				Ver. (dBμV/m)	Hor. (dBμV/m)		Ver. (dB)	Hor. (dB)
30.00	28.4		1.8	-32.8	23.7	21.1		30.0	8.9	
110.00	34.4	31.5	3.3	-32.7	17.6	22.6	19.7	30.0	7.4	10.3
125.00	34.2		3.5	-32.6	19.4	24.5		30.0	5.5	
189.98	27.5		4.4	-32.6	22.5	21.8		30.0	8.2	
220.00		27.8	4.7	-32.6	23.0		22.9	30.0		7.1
232.43	25.7		4.9	-32.5	23.1	21.2		37.0	15.8	
250.00		29.9	5.1	-32.5	23.2		25.7	37.0		11.3
367.51		40.2	6.3	-32.5	15.7		29.7	37.0		7.3
701.30	25.5		8.6	-32.5	20.3	21.9		37.0	15.1	
1000.00		27.4	10.6	-30.9	22.7		29.8	37.0		7.2



Tested by

Yuichiro Yoshida

Yuichiro Yoshida, Engineer

雑音電界強度試験結果 (QP: 準尖頭値)

Operating mode: LAN Print (On Board) + FAX RX

Date of measurement: May 9, 2015

Test procedure: EN55022:2010 Class B

Temperature: 20.3 degree C

Tested condition: Power input 1phase AC230V

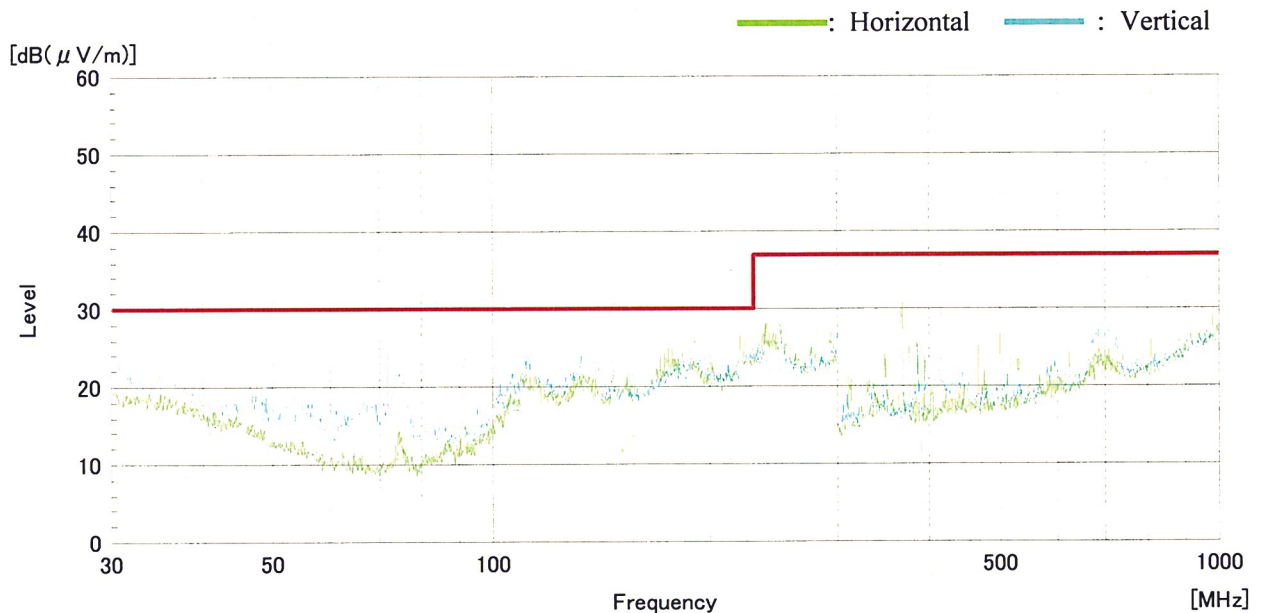
Humidity: 66.6 %

Test distance: 10 m

System: B

< 30MHz to 1000MHz >

Frequency (MHz)	Level		Cable Loss (dB)	Amp. Gain (dB)	Ant. Factor (dB/m)	Result		10m Limit (dBμV/m)	Margin	
	Ver. (dBμV)	Hor. (dBμV)				Ver. (dBμV/m)	Hor. (dBμV/m)		Ver. (dB)	Hor. (dB)
75.00	34.4		2.7	-32.7	12.3	16.7		30.0	13.3	
110.00	34.6		3.3	-32.7	17.6	22.8		30.0	7.2	
125.00	35.1	35.3	3.5	-32.6	19.4	25.4	25.6	30.0	4.6	4.4
220.50		28.4	4.7	-32.6	23.0		23.5	30.0		6.5
225.84		25.6	4.8	-32.6	23.0		20.8	30.0		9.2
225.97	26.0		4.8	-32.6	23.0	21.2		30.0	8.8	
238.82		28.6	4.9	-32.6	23.1		24.0	37.0		13.0
367.51	35.3	40.9	6.3	-32.5	15.7	24.8	30.4	37.0	12.2	6.6
703.00	26.4		8.6	-32.5	20.3	22.8		37.0	14.2	
1000.00		26.7	10.6	-30.9	22.7		29.1	37.0		7.9



Tested by

Yoshida

Yuichiro Yoshida, Engineer

雑音電界強度試験結果 (Peak: 尖頭値, Average: 平均値)

Operating mode: Standby

Date of measurement: May 18, 2015

Test procedure: EN55022:2010 Class B

Temperature: 18.2 degree C

Tested condition: Power input 1phase AC230V

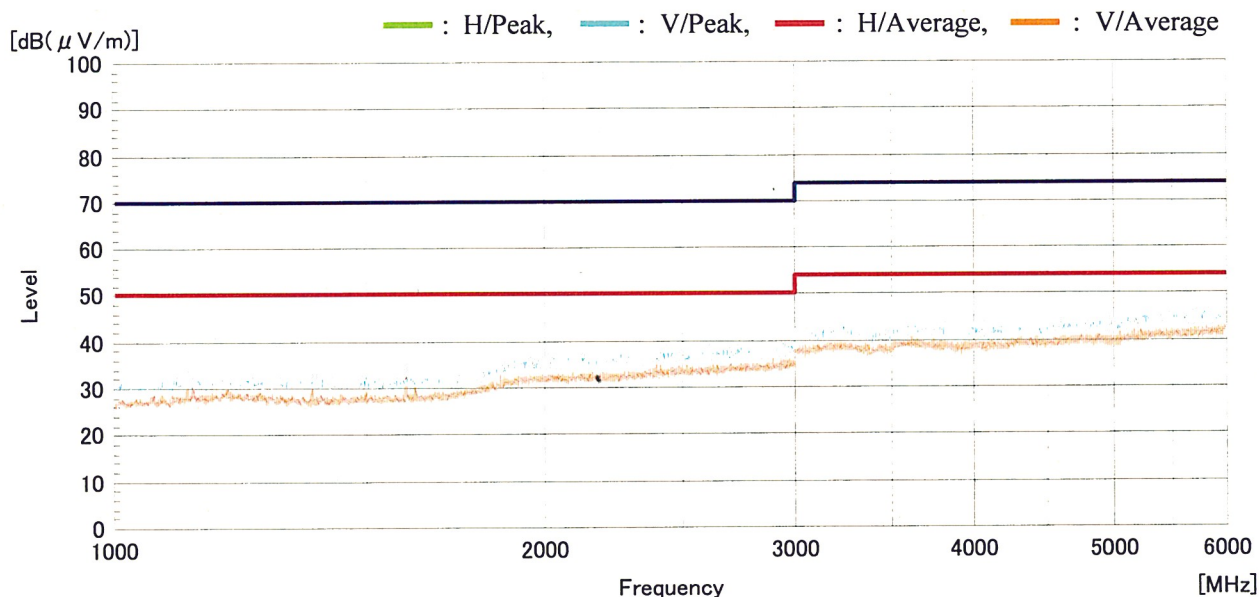
Humidity: 57.7 %

Test distance: 3 m

System: B

< 1000MHz to 6000MHz >

Frequency (MHz)	Level		Cable Loss (dB)	Amp. Gain (dB)	Ant. Factor (dB/m)	Result		3m Limit (dBμV/m)	Margin	
	Ver. (dBμV)	Hor.				Ver.	Hor.		Ver.	Hor.
Peak										
1000.00	48.6	48.1	6.7	-46.0	28.0	37.3	36.8	70.0	32.7	33.2
1124.98	47.9	47.2	7.2	-45.7	28.8	38.2	37.5	70.0	31.8	32.5
1375.08	48.1	49.2	8.0	-44.9	28.2	39.4	40.5	70.0	30.6	29.5
1600.07	46.6	46.9	8.7	-44.1	28.0	39.2	39.5	70.0	30.8	30.5
2400.00	40.5	39.4	10.9	-42.0	31.6	41.0	39.9	70.0	29.0	30.1
2659.88	37.9	37.9	11.8	-42.3	32.2	39.6	39.6	70.0	30.4	30.4
Average										
1000.00	40.0	39.3	6.7	-46.0	28.0	28.7	28.0	50.0	21.3	22.0
1124.98	38.7	38.5	7.2	-45.7	28.8	29.0	28.8	50.0	21.0	21.2
1375.08	41.5	43.4	8.0	-44.9	28.2	32.8	34.7	50.0	17.2	15.3
1600.07	36.3	37.4	8.7	-44.1	28.0	28.9	30.0	50.0	21.1	20.0
2400.00	27.4	28.1	10.9	-42.0	31.6	27.9	28.6	50.0	22.1	21.4
2659.87	24.4	24.5	11.8	-42.3	32.2	26.1	26.2	50.0	23.9	23.8



Tested by

Yuichiro Yoshida

Yuichiro Yoshida, Engineer

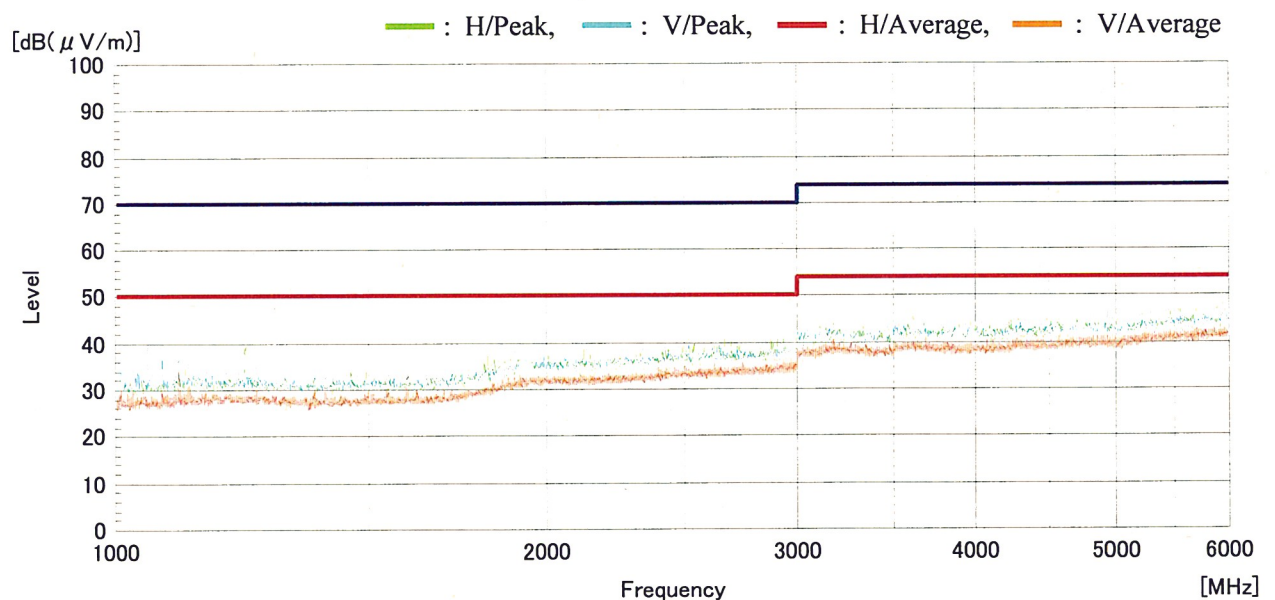
雑音電界強度試験結果 (Peak: 尖頭値, Average: 平均値)

Operating mode: Copy
Test procedure: EN55022:2010 Class B
Tested condition: Power input 1phase AC230V
Test distance: 3 m

Date of measurement: May 18, 2015
Temperature: 18.2 degree C
Humidity: 57.7 %
System: A

< 1000MHz to 6000MHz >

Frequency (MHz)	Level		Cable Loss (dB)	Amp. Gain (dB)	Ant. Factor (dB/m)	Result		3m Limit (dBμV/m)	Margin	
	Ver. (dBμV)	Hor. (dBμV)				Ver. (dBμV/m)	Hor. (dBμV/m)		Ver. (dB)	Hor. (dB)
Peak										
1000.00	56.1	59.9	6.7	-46.0	28.0	44.8	48.6	70.0	25.2	21.4
1106.19	53.7	53.1	7.1	-45.7	28.7	43.8	43.2	70.0	26.2	26.8
1125.00	52.5	52.5	7.2	-45.7	28.9	42.9	42.9	70.0	27.1	27.1
1230.99		55.9	7.6	-45.4	29.2		47.3	70.0		22.7
1375.10		54.2	8.0	-44.9	28.2		45.5	70.0		24.5
1401.19	54.0		8.1	-44.8	28.0	45.3		70.0	24.7	
1600.00	51.8	48.4	8.7	-44.1	28.0	44.4	41.0	70.0	25.6	29.0
4158.98	37.8		16.5	-44.6	33.0	42.7		74.0	31.3	
Average										
1000.00	38.1	43.6	6.7	-46.0	28.0	26.8	32.3	50.0	23.2	17.7
1106.19	44.2	36.7	7.1	-45.7	28.7	34.3	26.8	50.0	15.7	23.2
1125.00	43.7	39.5	7.2	-45.7	28.9	34.1	29.9	50.0	15.9	20.1
1230.99		29.8	7.6	-45.4	29.2		21.2	50.0		28.8
1375.10		38.0	8.0	-44.9	28.2		29.3	50.0		20.7
1401.19	39.3		8.1	-44.8	28.0	30.6		50.0	19.4	
1600.00	37.5	36.8	8.7	-44.1	28.0	30.1	29.4	50.0	19.9	20.6
4158.98	26.7		16.5	-44.6	33.0	31.6		54.0	22.4	



Tested by

Yuichiro Yoshida

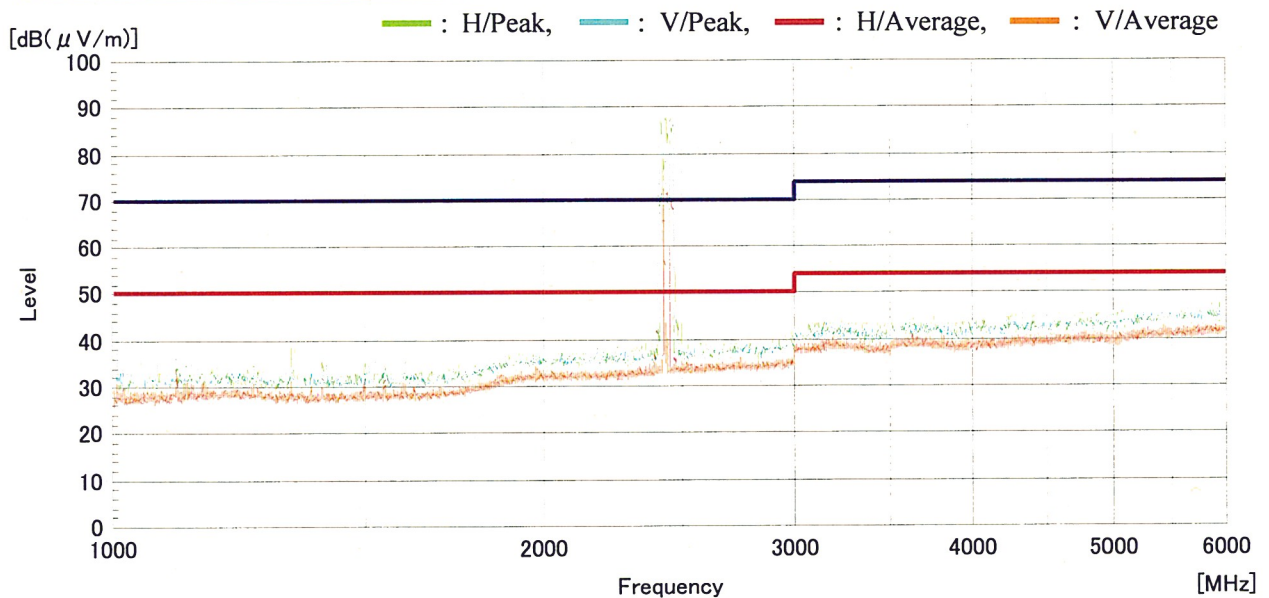
Yuichiro Yoshida, Engineer

雑音電界強度試験結果 (Peak: 尖頭値, Average: 平均値)

Operating mode: LAN Print (Option NIC)(Wireless) Date of measurement: May 18, 2015
Test procedure: EN55022:2010 Class B Temperature: 18.2 degree C
Tested condition: Power input 1phase AC230V Humidity: 57.7 %
Test distance: 3 m System: C

< 1000MHz to 6000MHz >

Frequency (MHz)	Level		Cable Loss (dB)	Amp. Gain (dB)	Ant. Factor (dB/m)	Result		3m Limit (dBμV/m)	Margin	
	Ver. (dBμV)	Hor.				Ver.	Hor.		Ver.	Hor.
Peak										
1106.31	57.0	67.5	7.1	-45.7	28.7	47.1	57.6	70.0	22.9	12.4
1125.01	55.4		7.2	-45.7	28.9	45.8		70.0	24.2	
1253.80		47.6	7.6	-45.3	29.0		38.9	70.0		31.1
1333.40	53.3	52.3	7.9	-45.0	28.4	44.6	43.6	70.0	25.4	26.4
1500.00		59.9	8.4	-44.5	28.0		51.8	70.0		18.2
1600.00	46.2	45.8	8.7	-44.1	28.0	38.8	38.4	70.0	31.2	31.6
2146.25		39.7	10.3	-42.2	31.2		39.0	70.0		31.0
2440.10	41.5		11.1	-42.0	31.9	42.5		70.0	27.5	
2549.92	36.5		11.4	-42.1	32.2	38.0		70.0	32.0	
Average										
1106.31	43.4	41.9	7.1	-45.7	28.7	33.5	32.0	50.0	16.5	18.0
1125.01	37.8		7.2	-45.7	28.9	28.2		50.0	21.8	
1253.80		39.0	7.6	-45.3	29.0		30.3	50.0		19.7
1333.40	33.3	33.8	7.9	-45.0	28.4	24.6	25.1	50.0	25.4	24.9
1500.00		37.1	8.4	-44.5	28.0		29.0	50.0		21.0
1600.00	35.5	35.3	8.7	-44.1	28.0	28.1	27.9	50.0	21.9	22.1
2146.25		25.1	10.3	-42.2	31.2		24.4	50.0		25.6
2440.10	21.7		11.1	-42.0	31.9	22.7		50.0	27.3	
2549.92	22.0		11.4	-42.1	32.2	23.5		50.0	26.5	



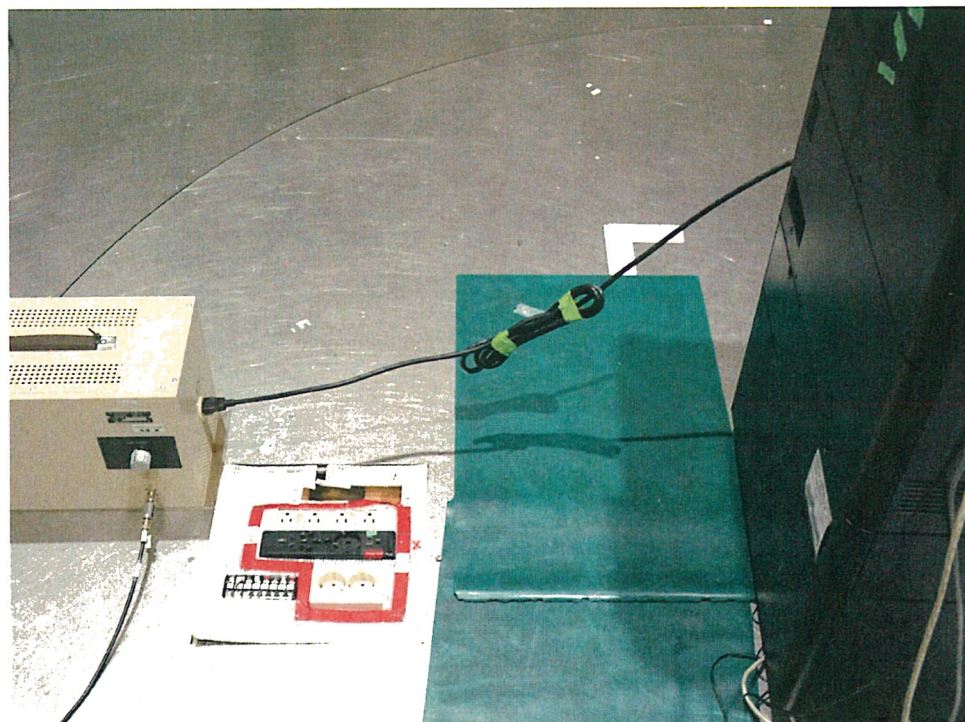
Tested by

Yuichiro Yoshida

Yuichiro Yoshida, Engineer

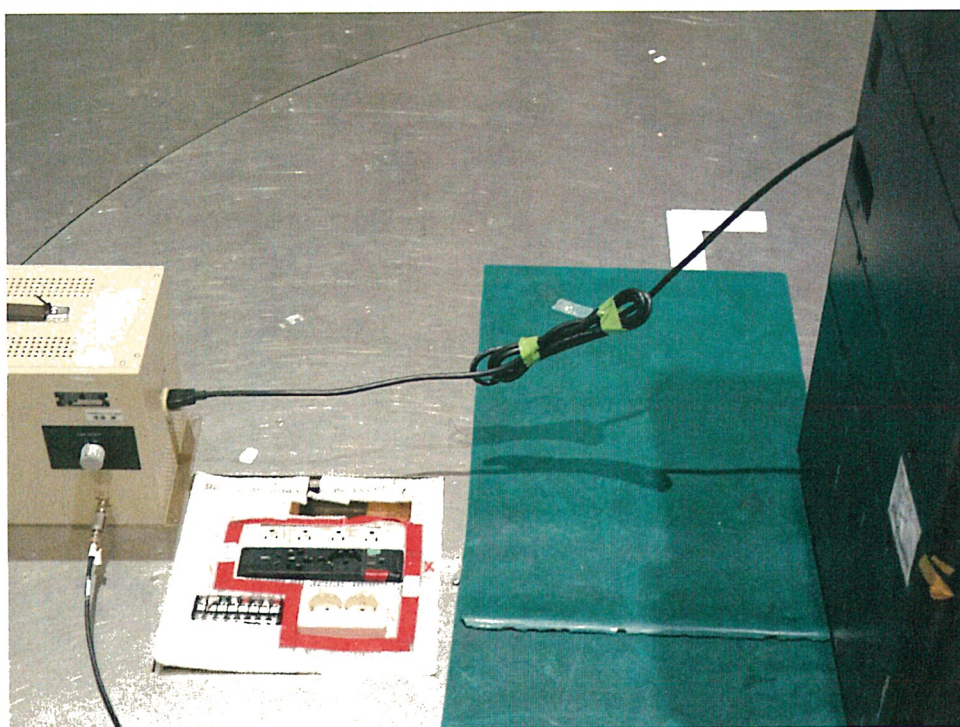
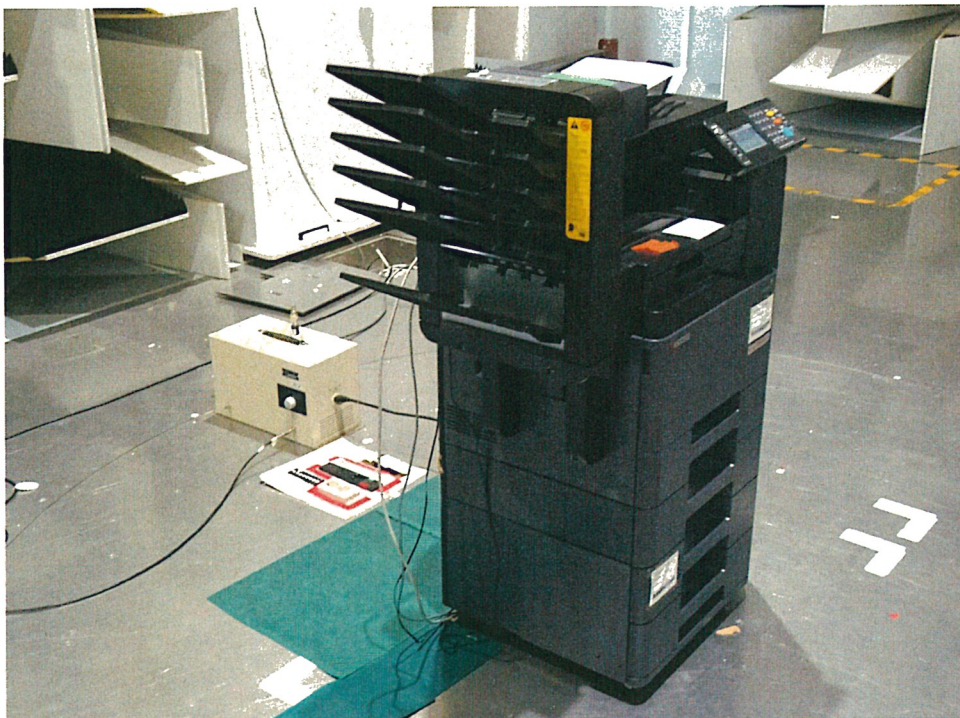
(Conducted Emission)

System-A

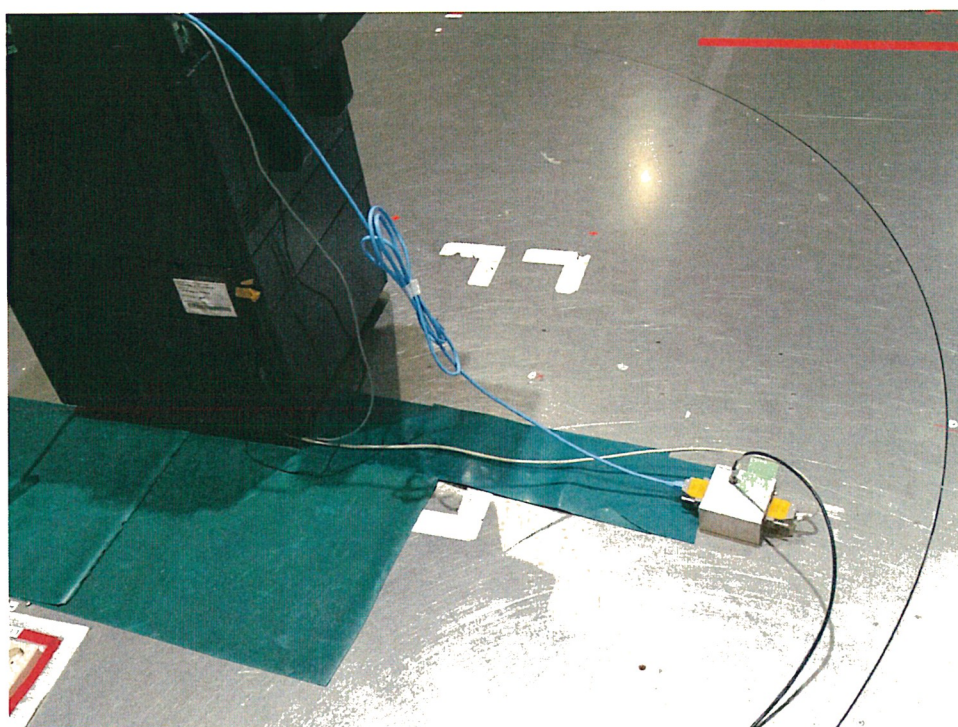
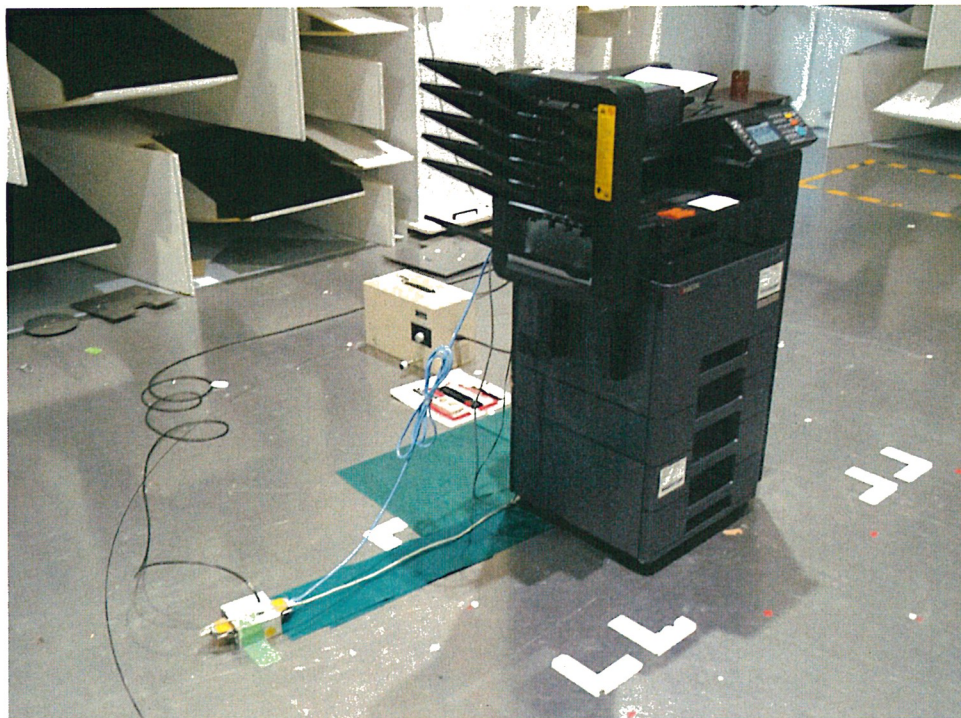


(Conducted Emission)

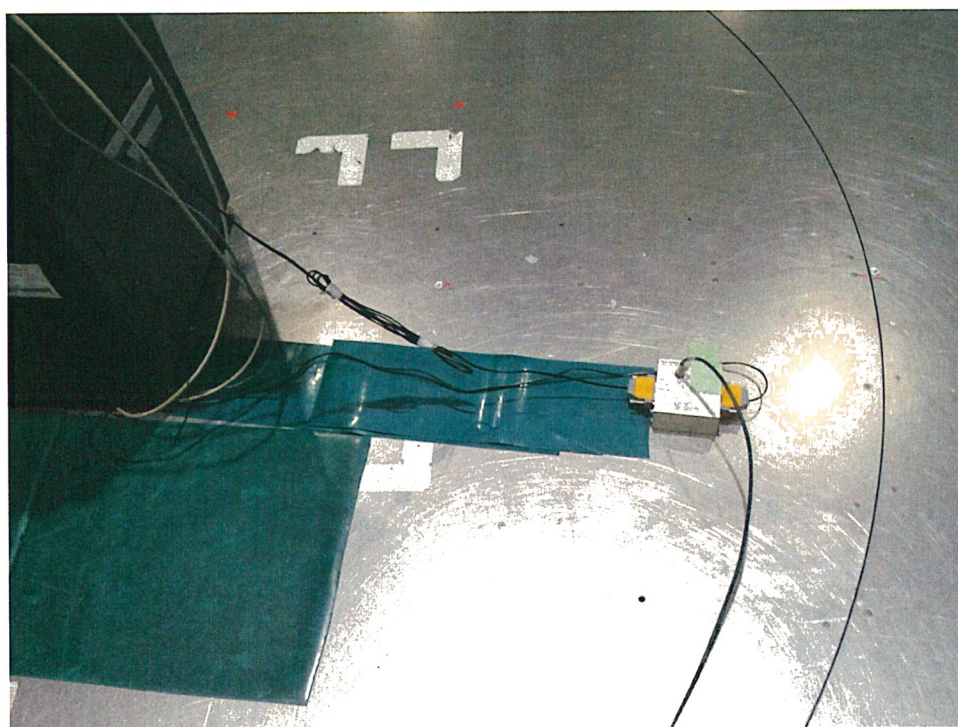
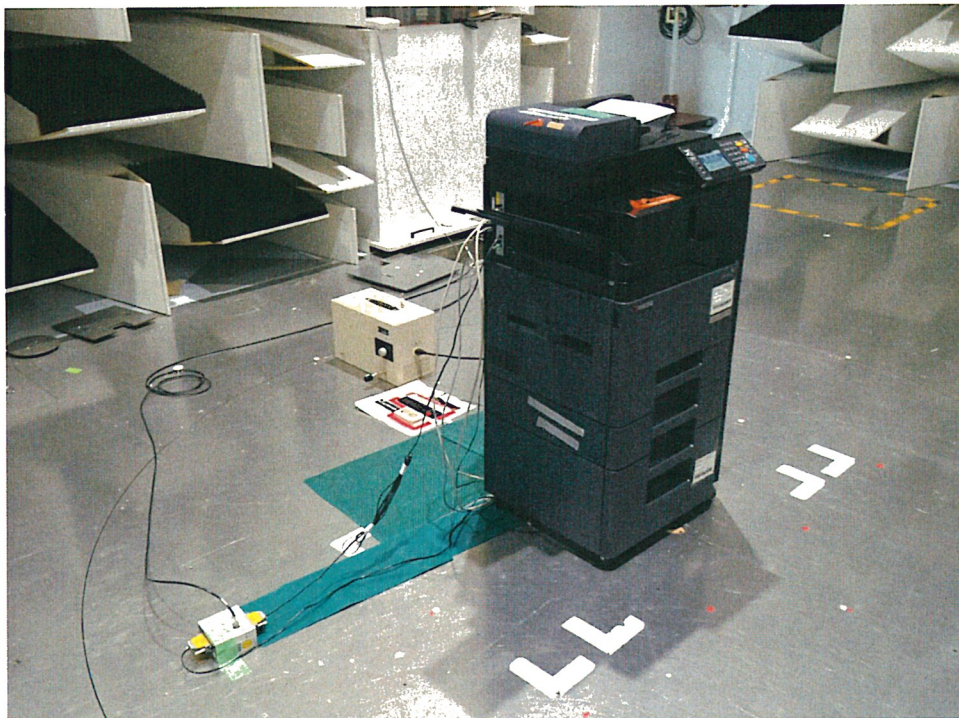
System-B



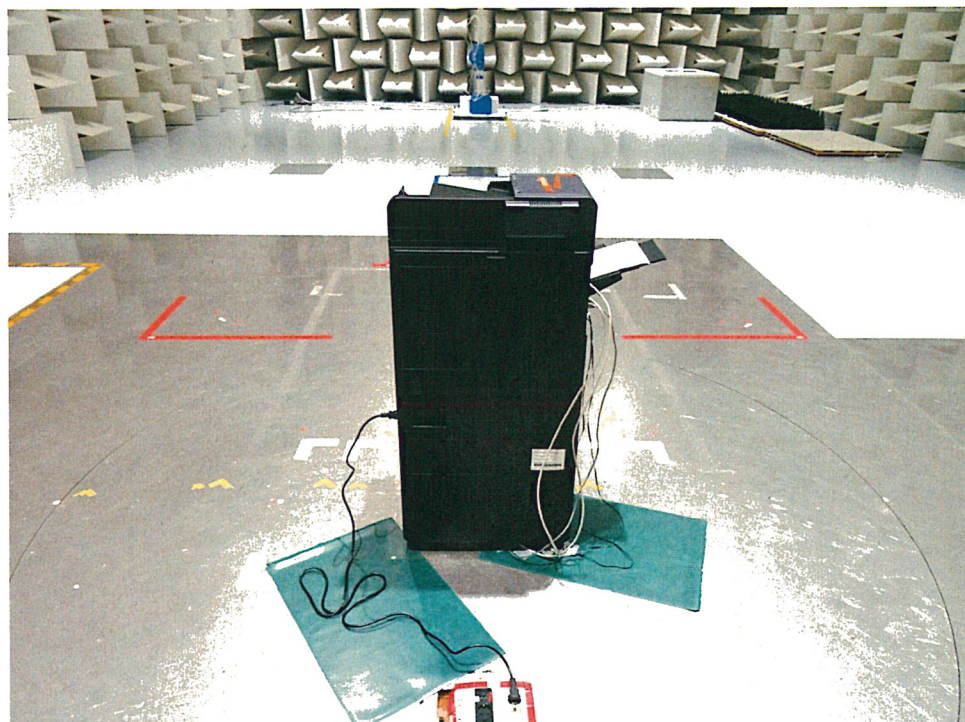
(Conducted Emission for Telecommunication ports)
(LAN)



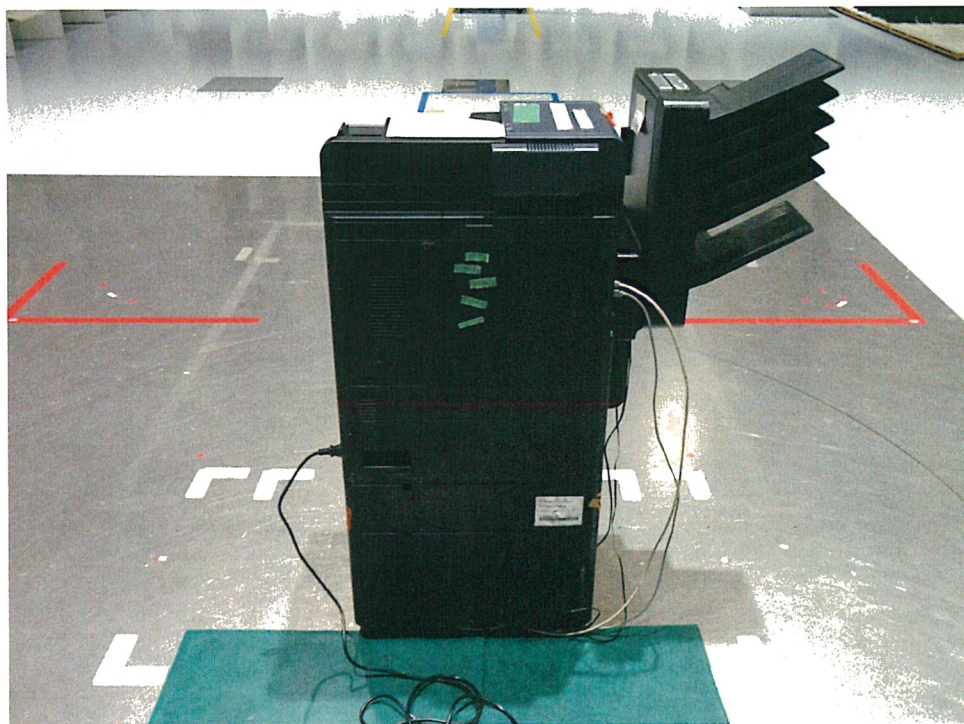
(Conducted Emission for Telecommunication ports)
(FAX)



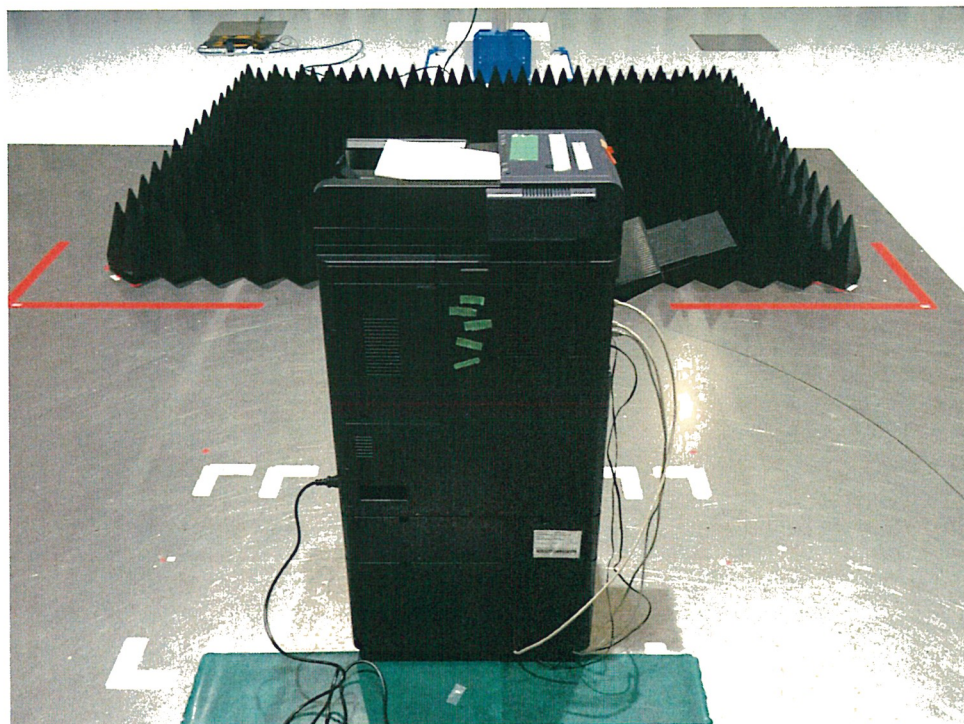
(Radiated Emission) System-A



(Radiated Emission) System-B



(Radiated Emission) -GHz-
System-A



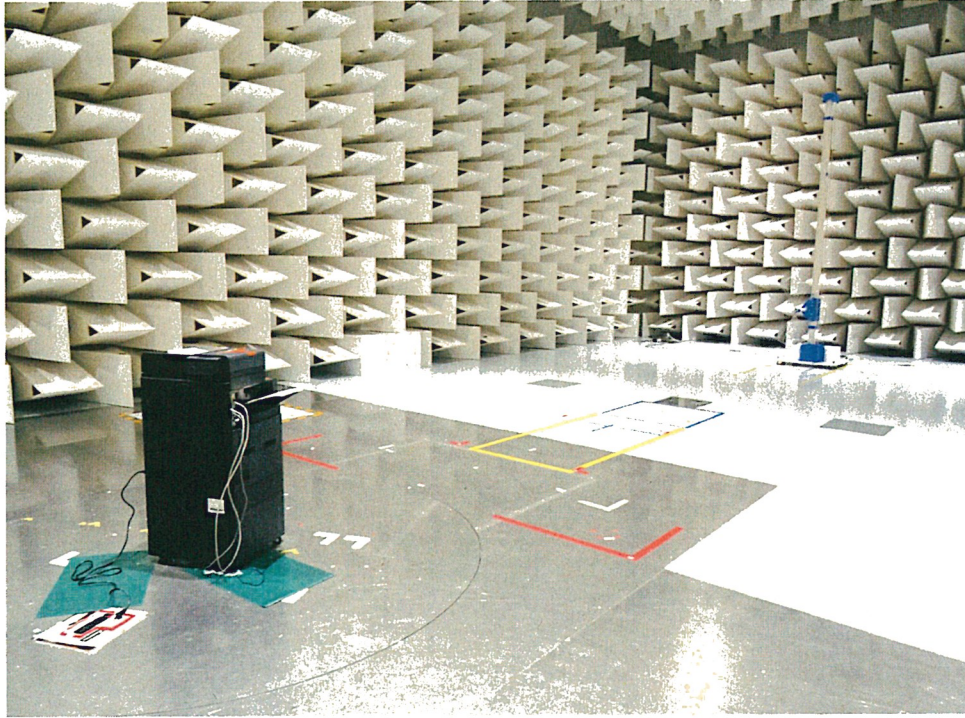
(Radiated Emission) -GHz- System-B



(Radiated Emission) -GHz- System-C

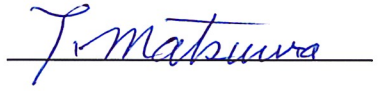


(Radiated Emission / Worst Case)



EN61000-3-2/2006+A1/2009+A2/2009
(EN 301 489-1 V1.9.2 <8.5>)
Harmonic Current Measurement

<i>Equipment</i>	<i>Model</i>	<i>Serial No.</i>
Multi-Function Printer	TASKalfa 306ci	Z7F5300025
Paper Feeder	PF-5120	Z7J5300161
	PF-5130	Z7K5300101
	PF-5140	Z7L5300059
Finisher	DF-5100	Z7T5300071
Multi Tray	MT-5100	Z7U5300081
Job Separator	JS-5100	Z7H5300059
Printer NIC	IB-50	TEST-1
	IB-51	TEST-1
Bridge	AK-5100	Z7G5300123
FAX Kit	FAX System 11	ZEK5300004
Hard Disk Drive	HD-6	TEST-1
	HD-7	TEST-1

Date : 6 July, 2015
 Temperature : 24°C
 Humidity : 56%
 Atom. Pressure : 1014hPa
 Testing Place : Kyocera Document Solutions CE Test Room
 Power Input : AC230V, 50Hz
 Tested by : Takayuki Matsuura 

This test was applied as follows.

Odd-harmonics			Even-harmonics		
<i>Order (n)</i>	<i>Limit</i>	<i>Result</i>	<i>Order (n)</i>	<i>Limit</i>	<i>Result</i>
3	2.30 A	Pass	2	1.08 A	Pass
5	1.14 A		4	0.43 A	
7	0.77 A		6	0.30 A	
9	0.40 A		8 ≤ n ≤ 40	0.23 x 8 / n A	
11	0.33 A				
13	0.21 A				
15 ≤ n < 40	0.15 x 8 / n A				

Test equipment used : Analyzing System : WT3000 (Yokogawa Electric Corporation)

TASKalfa 306ci (Average)

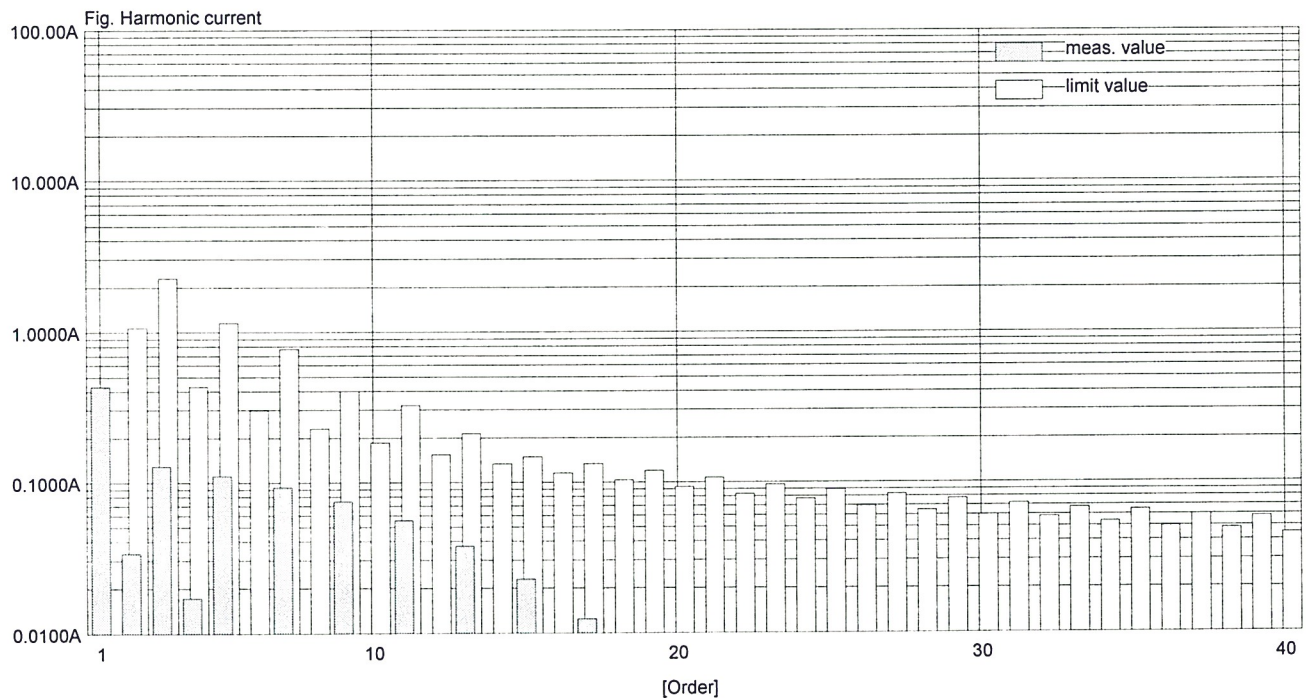
Print Date : Tue Jul 07 10:19:20 2015
 MeasureDate : Tue Jul 07 10:16:59 2015
 Comment : Standby
 Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-2 Ed3.0 am2
 IEC61000-4-7 Ed2.0 A1
 Class : CLASS A
 MeasureTime : 150.00sec
 Model : YOKOGAWA WT3000
 Rating Voltage : 230.00 V
 Wiring : single-phase 2-wire
 Element : 1
 Range : 300V/30A
 Current(rms) : 0.5491 A
 Voltage(rms) : 229.70 V
 Frequency : 50.000 Hz
 Power Factor : 0.6786
 POHC Limit : 0.2514 A
 POHC Max : 0.0343 A
 THC : 0.2313 A

PASS

Set Fundamental I : -----
 Set Power Factor : -----
 Set P : -----
 Sigma W Max : 416.8681 W
 Sigma PF : 0.6786
 Distortion factor(V) : 0.06 %
 V THDS : 0.06 %
 V THDG : 0.06 %
 Distortion factor(A) : 151.08 %
 A THDS : 151.36 %
 A THDG : 151.99 %
 P THD : 0.04 %
 Power Limit : 75 W

Order	Measure[A]	Limit[A]	Margin[%]	Order	Measure[A]	Limit[A]	Margin[%]
1	0.4314			2	0.0342	1.0800	96.8
3	0.1298	2.3000	94.4	4	0.0172	0.4300	96.0
5	0.1117	1.1400	90.2	6	0.0087	0.3000	97.1
7	0.0947	0.7700	87.7	8	0.0067	0.2300	97.1
9	0.0758	0.4000	81.0	10	0.0044	0.1840	97.6
11	0.0563	0.3300	82.9	12	0.0032	0.1533	97.9
13	0.0383	0.2100	81.7	14	0.0025	0.1314	98.1
15	0.0231	0.1500	84.6	16	0.0023	0.1150	98.0
17	0.0124	0.1324	90.6	18	0.0023	0.1022	97.7
19	0.0083	0.1184	93.0	20	0.0020	0.0920	97.8
21	0.0090	0.1071	91.6	22	0.0018	0.0836	97.9
23	0.0095	0.0978	90.3	24	0.0016	0.0767	98.0
25	0.0083	0.0900	90.8	26	0.0014	0.0708	98.0
27	0.0063	0.0833	92.4	28	0.0014	0.0657	97.9
29	0.0045	0.0776	94.2	30	0.0013	0.0613	97.8
31	0.0038	0.0726	94.8	32	0.0013	0.0575	97.8
33	0.0040	0.0682	94.1	34	0.0012	0.0541	97.9
35	0.0041	0.0643	93.6	36	0.0011	0.0511	97.9
37	0.0037	0.0608	93.9	38	0.0010	0.0484	97.9
39	0.0030	0.0577	94.7	40	0.0010	0.0460	97.8



TASKalfa 306ci (Maximum)

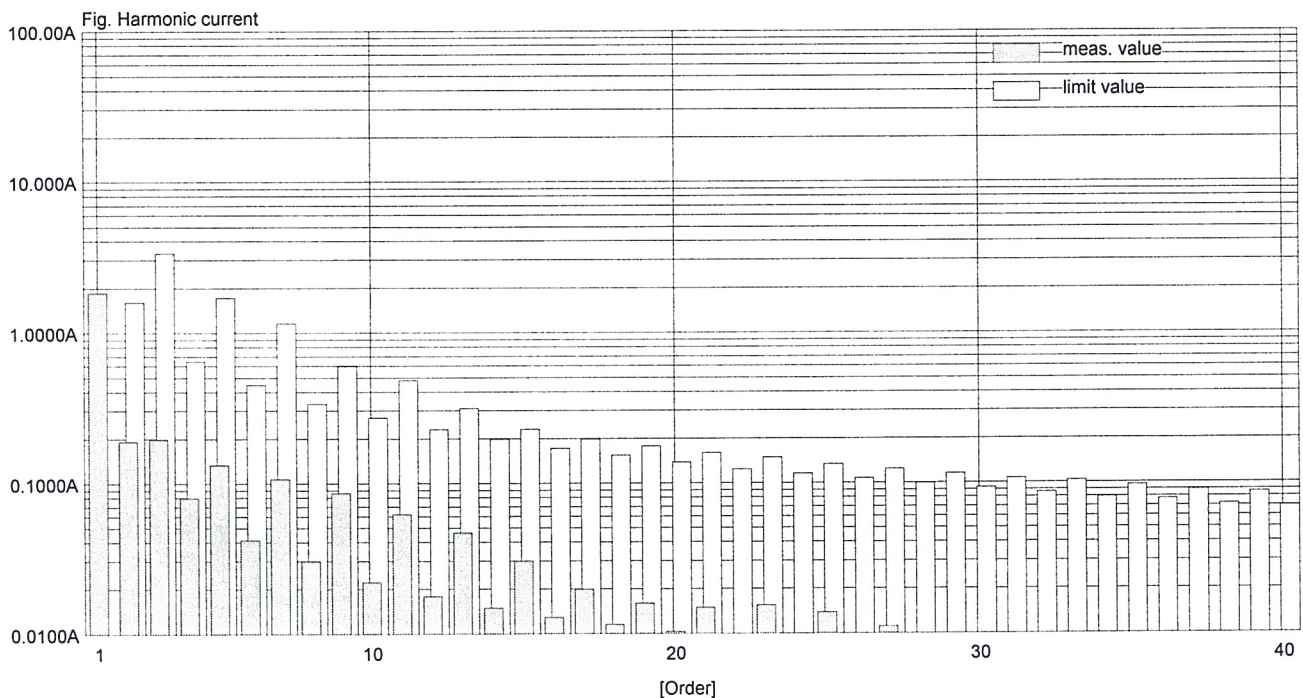
Print Date : Tue Jul 07 10:19:21 2015
 MeasureDate : Tue Jul 07 10:16:59 2015
 Comment : Standby
 Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-2 Ed3.0 am2
 IEC61000-4-7 Ed2.0 A1
 Class : CLASS A
 MeasureTime : 150.00sec
 Model : YOKOGAWA WT3000
 Rating Voltage : 230.00 V
 Wiring : single-phase 2-wire
 Element : 1
 Range : 300V/30A
 Current(rms) : 1.9212 A
 Voltage(rms) : 229.73 V
 Frequency : 50.008 Hz
 Power Factor : 0.9471
 Beyond Limit Time : 14.9999 s
 Beyond Total Time : 0.0000 s
 THC : 0.3617 A

PASS

Set Fundamental I : -----
 Set Power Factor : -----
 Set P : -----
 Sigma W Max : 416.8681 W
 Sigma PF : 0.9471
 Distortion factor(V) : 0.07 %
 V THDS : 0.07 %
 V THDG : 0.08 %
 Distortion factor(A) : 165.10 %
 A THDS : 165.10 %
 A THDG : 183.99 %
 P THD : 0.04 %
 Power Limit : 75 W

Order	Measure[A]	Limit[A]	Margin[%]	Order	Measure[A]	Limit[A]	Margin[%]
1	1.8194			2	0.1910	1.6200	88.2
3	0.2008	3.4500	94.2	4	0.0819	0.6450	87.3
5	0.1313	1.7100	92.3	6	0.0415	0.4500	90.8
7	0.1062	1.1550	90.8	8	0.0303	0.3450	91.2
9	0.0874	0.6000	85.4	10	0.0218	0.2760	92.1
11	0.0629	0.4950	87.3	12	0.0179	0.2300	92.2
13	0.0471	0.3150	85.1	14	0.0147	0.1971	92.6
15	0.0309	0.2250	86.2	16	0.0128	0.1725	92.6
17	0.0200	0.1985	89.9	18	0.0115	0.1533	92.5
19	0.0162	0.1776	90.9	20	0.0102	0.1380	92.6
21	0.0148	0.1607	90.8	22	0.0092	0.1255	92.6
23	0.0154	0.1467	89.5	24	0.0084	0.1150	92.7
25	0.0136	0.1350	89.9	26	0.0077	0.1062	92.7
27	0.0113	0.1250	91.0	28	0.0072	0.0986	92.6
29	0.0098	0.1164	91.6	30	0.0068	0.0920	92.6
31	0.0082	0.1089	92.4	32	0.0063	0.0862	92.7
33	0.0085	0.1023	91.7	34	0.0059	0.0812	92.7
35	0.0082	0.0964	91.5	36	0.0056	0.0767	92.7
37	0.0075	0.0912	91.8	38	0.0054	0.0726	92.6
39	0.0070	0.0865	91.9	40	0.0051	0.0690	92.6



TASKalfa 306ci (Average)

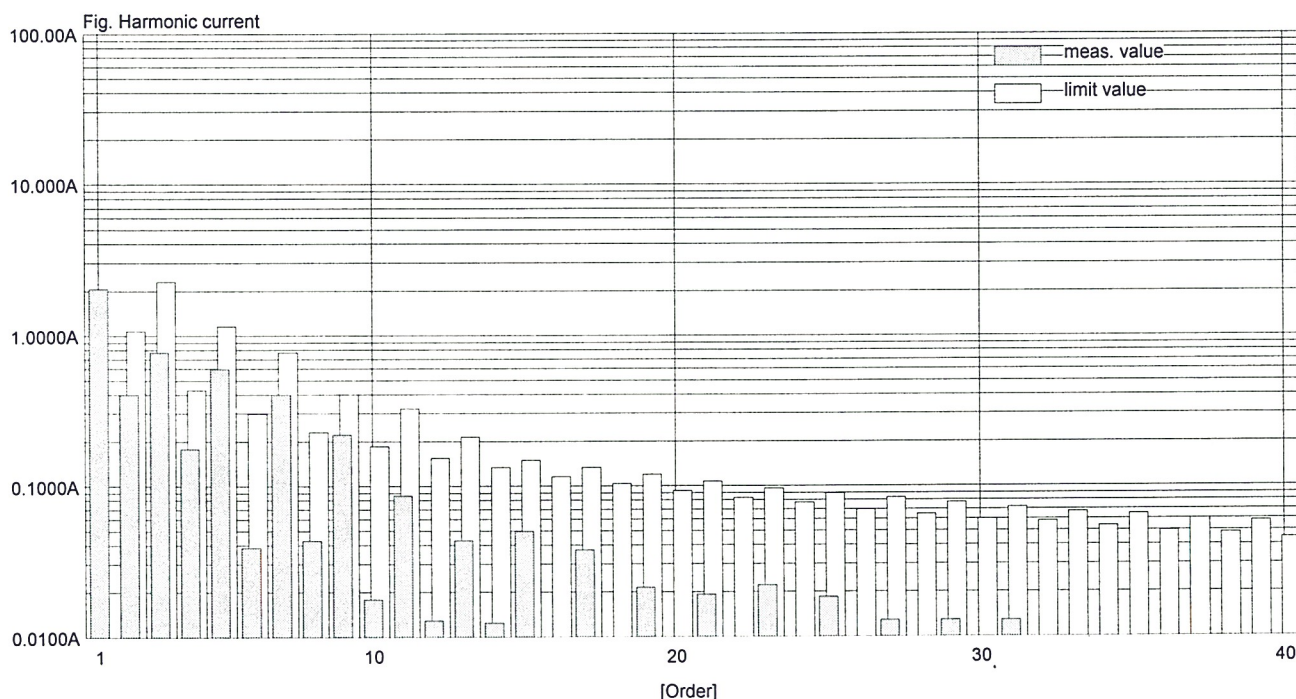
Print Date : Tue Jul 07 10:41:55 2015
 MeasureDate : Tue Jul 07 10:24:34 2015
 Comment : Duplex Copy
 Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-2 Ed3.0 am2
 IEC61000-4-7 Ed2.0 A1
 Class : CLASS A
 MeasureTime : 150.00sec
 Model : YOKOGAWA WT3000
 Rating Voltage : 230.00 V
 Wiring : single-phase 2-wire
 Element : 1
 Range : 300V/30A
 Current(rms) : 2.4026 A
 Voltage(rms) : 229.55 V
 Frequency : 50.000 Hz
 Power Factor : 0.8610
 POHC Limit : 0.2514 A
 POHC Max : 0.0457 A
 THC : 1.1756 A

PASS

Set Fundamental I : -----
 Set Power Factor : -----
 Set P : -----
 Sigma W Max : 570.4852 W
 Sigma PF : 0.8610
 Distortion factor(V) : 0.09 %
 V THDS : 0.09 %
 V THDG : 0.09 %
 Distortion factor(A) : 59.03 %
 A THDS : 59.12 %
 A THDG : 61.21 %
 P THD : 0.04 %
 Power Limit : 75 W

Order	Measure[A]	Limit[A]	Margin[%]	Order	Measure[A]	Limit[A]	Margin[%]
1	2.0790			2	0.4066	1.0800	62.4
3	0.7699	2.3000	66.5	4	0.1752	0.4300	59.3
5	0.5967	1.1400	47.7	6	0.0395	0.3000	86.8
7	0.4013	0.7700	47.9	8	0.0443	0.2300	80.8
9	0.2197	0.4000	45.1	10	0.0177	0.1840	90.4
11	0.0874	0.3300	73.5	12	0.0129	0.1533	91.6
13	0.0433	0.2100	79.4	14	0.0126	0.1314	90.4
15	0.0498	0.1500	66.8	16	0.0072	0.1150	93.7
17	0.0385	0.1324	70.9	18	0.0063	0.1022	93.8
19	0.0214	0.1184	82.0	20	0.0068	0.0920	92.6
21	0.0195	0.1071	81.8	22	0.0045	0.0836	94.6
23	0.0223	0.0978	77.2	24	0.0036	0.0767	95.3
25	0.0185	0.0900	79.4	26	0.0039	0.0708	94.5
27	0.0131	0.0833	84.3	28	0.0026	0.0657	96.0
29	0.0129	0.0776	83.4	30	0.0029	0.0613	95.2
31	0.0128	0.0726	82.4	32	0.0022	0.0575	96.1
33	0.0096	0.0682	85.9	34	0.0020	0.0541	96.3
35	0.0075	0.0643	88.3	36	0.0020	0.0511	96.1
37	0.0077	0.0608	87.3	38	0.0019	0.0484	96.2
39	0.0072	0.0577	87.6	40	0.0015	0.0460	96.8



TASKalfa 306ci (Maximum)

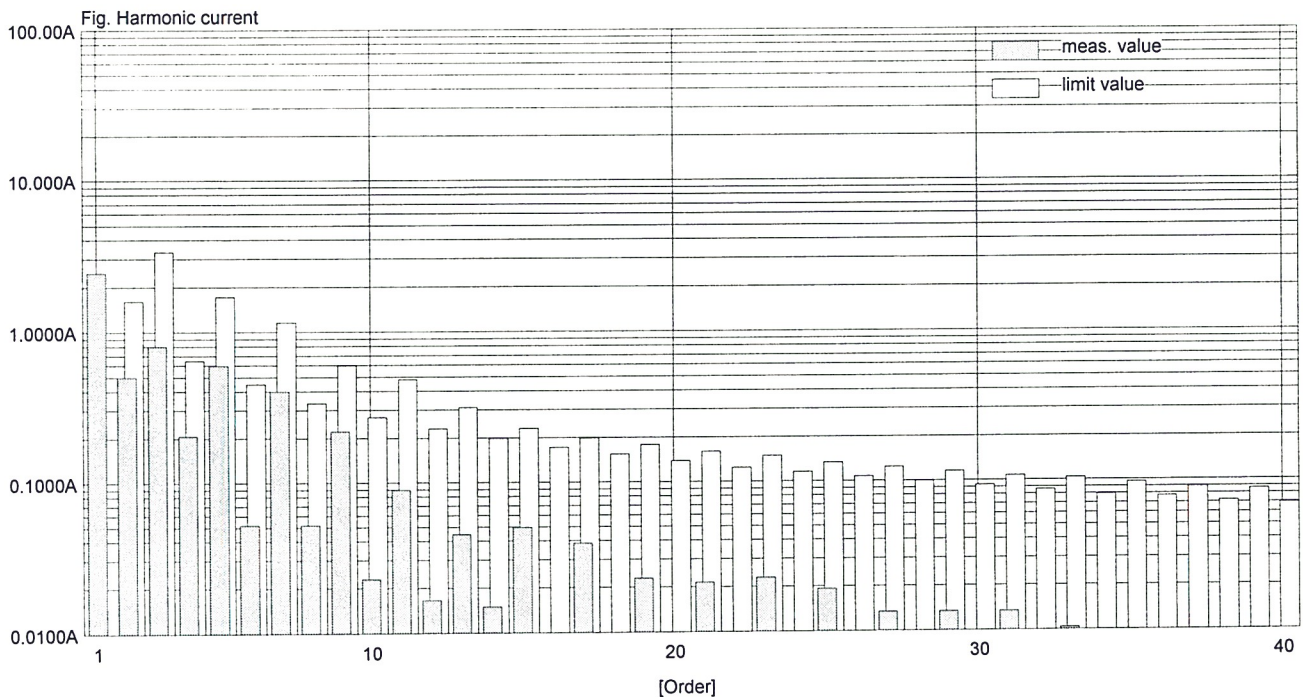
Print Date : Tue Jul 07 10:41:55 2015
 MeasureDate : Tue Jul 07 10:24:34 2015
 Comment : Duplex Copy
 Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-2 Ed3.0 am2
 IEC61000-4-7 Ed2.0 A1
 Class : CLASS A
 MeasureTime : 150.00sec
 Model : YOKOGAWA WT3000
 Rating Voltage : 230.00 V
 Wiring : single-phase 2-wire
 Element : 1
 Range : 300V/30A
 Current(rms) : 2.7589 A
 Voltage(rms) : 229.65 V
 Frequency : 50.007 Hz
 Power Factor : 0.9009
 Beyond Limit Time : 15.0000 s
 Beyond Total Time : 0.0000 s
 THC : 1.2353 A

PASS

Set Fundamental I : -----
 Set Power Factor : -----
 Set P : -----
 Sigma W Max : 570.4852 W
 Sigma PF : 0.9009
 Distortion factor(V) : 0.11 %
 V THDS : 0.11 %
 V THDG : 0.11 %
 Distortion factor(A) : 127.79 %
 A THDS : 127.81 %
 A THDG : 127.83 %
 P THD : 0.08 %
 Power Limit : 75 W

Order	Measure[A]	Limit[A]	Margin[%]	Order	Measure[A]	Limit[A]	Margin[%]
1	2.4868			2	0.5063	1.6200	68.7
3	0.7989	3.4500	76.8	4	0.2072	0.6450	67.9
5	0.6101	1.7100	64.3	6	0.0529	0.4500	88.2
7	0.4093	1.1550	64.6	8	0.0521	0.3450	84.9
9	0.2238	0.6000	62.7	10	0.0225	0.2760	91.8
11	0.0905	0.4950	81.7	12	0.0164	0.2300	92.9
13	0.0446	0.3150	85.9	14	0.0149	0.1971	92.5
15	0.0509	0.2250	77.4	16	0.0089	0.1725	94.8
17	0.0396	0.1985	80.0	18	0.0078	0.1533	94.9
19	0.0225	0.1776	87.3	20	0.0079	0.1380	94.3
21	0.0212	0.1607	86.8	22	0.0054	0.1255	95.7
23	0.0230	0.1467	84.3	24	0.0045	0.1150	96.1
25	0.0191	0.1350	85.9	26	0.0045	0.1062	95.7
27	0.0136	0.1250	89.2	28	0.0032	0.0986	96.7
29	0.0134	0.1164	88.5	30	0.0034	0.0920	96.3
31	0.0133	0.1089	87.8	32	0.0027	0.0862	96.8
33	0.0102	0.1023	90.0	34	0.0024	0.0812	97.0
35	0.0078	0.0964	91.9	36	0.0024	0.0767	96.9
37	0.0080	0.0912	91.3	38	0.0022	0.0726	96.9
39	0.0076	0.0865	91.2	40	0.0019	0.0690	97.3



TASKalfa 306ci (Average)

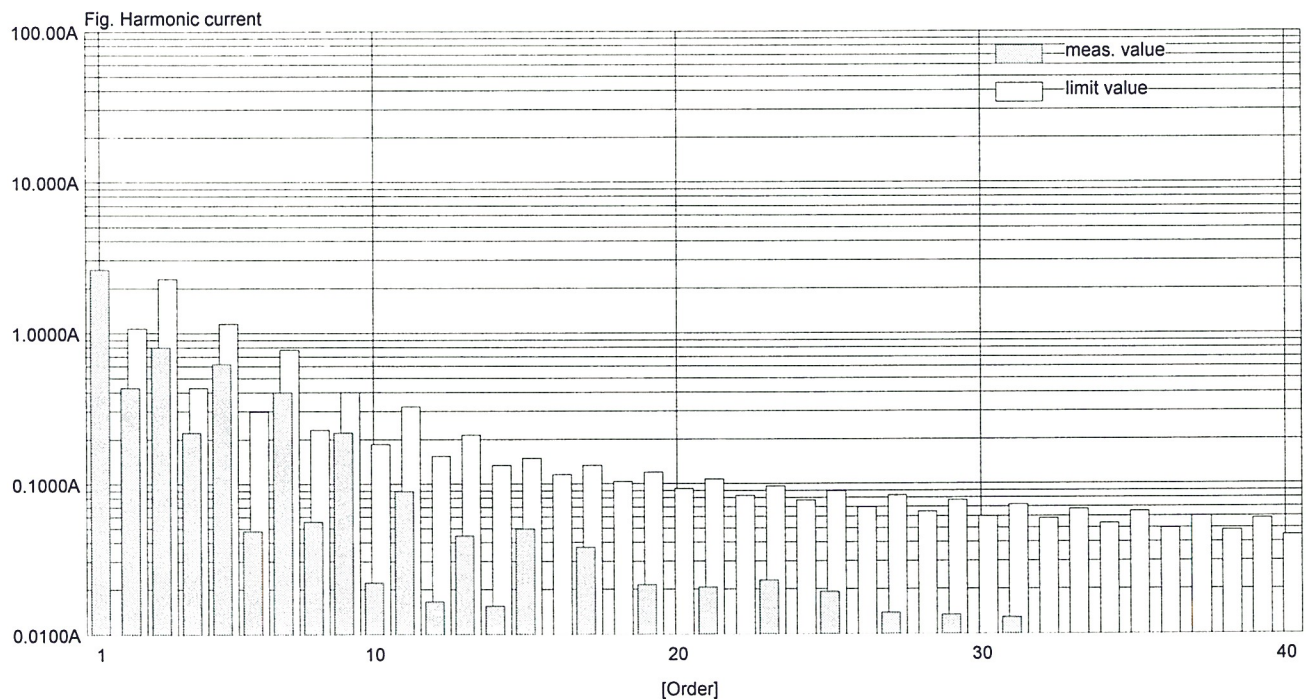
Print Date : Tue Jul 07 10:46:43 2015
 MeasureDate : Tue Jul 07 10:46:17 2015
 Comment : 1 Side Copy
 Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-2 Ed3.0 am2
 IEC61000-4-7 Ed2.0 A1
 Class : CLASS A
 MeasureTime : 150.00sec
 Model : YOKOGAWA WT3000
 Rating Voltage : 230.00 V
 Wiring : single-phase 2-wire
 Element : 1
 Range : 300V/30A
 Current(rms) : 2.8941 A
 Voltage(rms) : 229.51 V
 Frequency : 50.001 Hz
 Power Factor : 0.9035
 POHC Limit : 0.2514 A
 POHC Max : 0.0476 A
 THC : 1.2213 A

PASS

Set Fundamental I : -----
 Set Power Factor : -----
 Set P : -----
 Sigma W Max : 715.5692 W
 Sigma PF : 0.9035
 Distortion factor(V) : 0.09 %
 V THDS : 0.09 %
 V THDG : 0.09 %
 Distortion factor(A) : 44.01 %
 A THDS : 44.60 %
 A THDG : 47.60 %
 P THD : 0.03 %
 Power Limit : 75 W

Order	Measure[A]	Limit[A]	Margin[%]	Order	Measure[A]	Limit[A]	Margin[%]
1	2.6207			2	0.4301	1.0800	60.2
3	0.7935	2.3000	65.5	4	0.2169	0.4300	49.6
5	0.6172	1.1400	45.9	6	0.0487	0.3000	83.8
7	0.4135	0.7700	46.3	8	0.0553	0.2300	75.9
9	0.2242	0.4000	44.0	10	0.0219	0.1840	88.1
11	0.0882	0.3300	73.3	12	0.0166	0.1533	89.2
13	0.0452	0.2100	78.5	14	0.0154	0.1314	88.3
15	0.0504	0.1500	66.4	16	0.0092	0.1150	92.0
17	0.0376	0.1324	71.6	18	0.0079	0.1022	92.3
19	0.0209	0.1184	82.3	20	0.0083	0.0920	91.0
21	0.0208	0.1071	80.6	22	0.0055	0.0836	93.4
23	0.0230	0.0978	76.5	24	0.0044	0.0767	94.2
25	0.0188	0.0900	79.1	26	0.0048	0.0708	93.2
27	0.0136	0.0833	83.7	28	0.0030	0.0657	95.4
29	0.0135	0.0776	82.5	30	0.0036	0.0613	94.1
31	0.0130	0.0726	82.1	32	0.0027	0.0575	95.4
33	0.0094	0.0682	86.2	34	0.0025	0.0541	95.4
35	0.0077	0.0643	88.0	36	0.0023	0.0511	95.5
37	0.0080	0.0608	86.8	38	0.0022	0.0484	95.4
39	0.0070	0.0577	87.9	40	0.0018	0.0460	96.0



TASKalfa 306ci (Maximum)

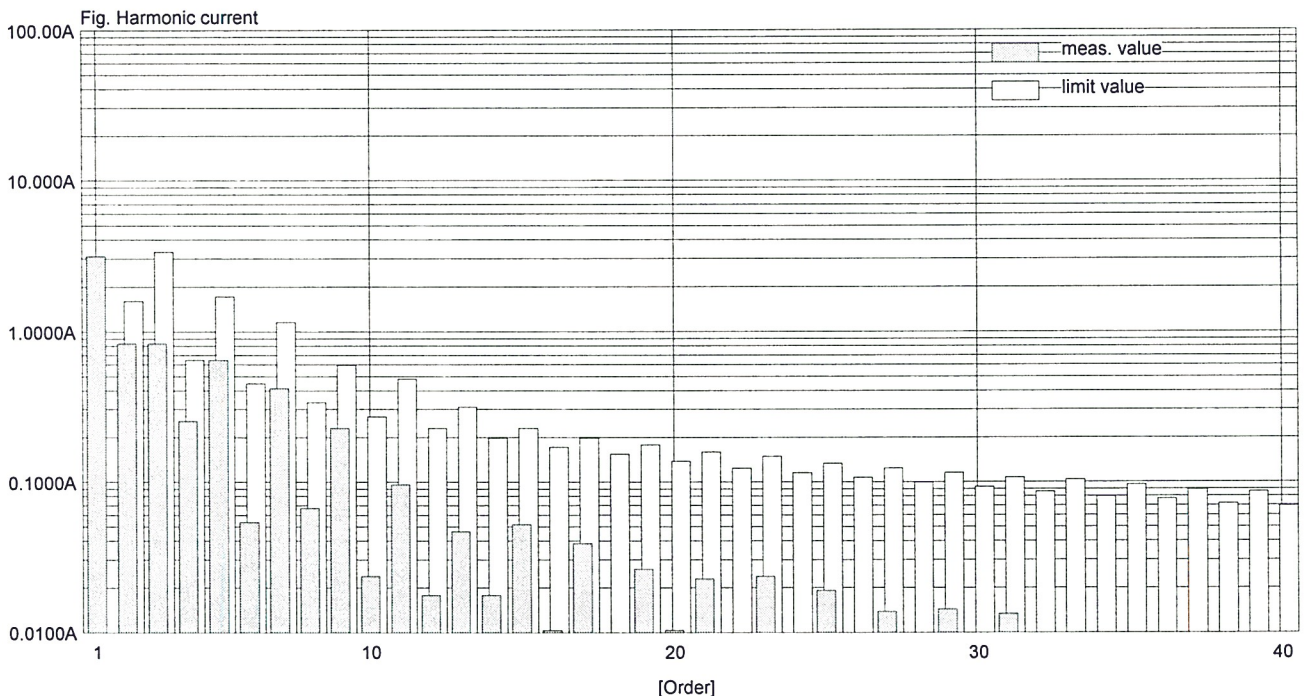
Print Date : Tue Jul 07 10:46:43 2015
 MeasureDate : Tue Jul 07 10:46:17 2015
 Comment : 1 Side Copy
 Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-2 Ed3.0 am2
 IEC61000-4-7 Ed2.0 A1
 Class : CLASS A
 MeasureTime : 150.00sec
 Model : YOKOGAWA WT3000
 Rating Voltage : 230.00 V
 Wiring : single-phase 2-wire
 Element : 1
 Range : 300V/30A
 Current(rms) : 3.4384 A
 Voltage(rms) : 229.66 V
 Frequency : 50.010 Hz
 Power Factor : 0.9219
 Beyond Limit Time : 14.9998 s
 Beyond Total Time : 0.0000 s
 THC : 1.4425 A

PASS

Set Fundamental I : -----
 Set Power Factor : -----
 Set P : -----
 Sigma W Max : 715.5692 W
 Sigma PF : 0.9219
 Distortion factor(V) : 0.11 %
 V THDS : 0.11 %
 V THDG : 0.11 %
 Distortion factor(A) : 130.36 %
 A THDS : 130.36 %
 A THDG : 130.36 %
 P THD : 0.07 %
 Power Limit : 75 W

Order	Measure[A]	Limit[A]	Margin[%]	Order	Measure[A]	Limit[A]	Margin[%]
1	3.1202			2	0.8234	1.6200	49.2
3	0.8279	3.4500	76.0	4	0.2584	0.6450	59.9
5	0.6408	1.7100	62.5	6	0.0546	0.4500	87.9
7	0.4268	1.1550	63.0	8	0.0672	0.3450	80.5
9	0.2295	0.6000	61.8	10	0.0235	0.2760	91.5
11	0.0964	0.4950	80.5	12	0.0176	0.2300	92.4
13	0.0466	0.3150	85.2	14	0.0179	0.1971	90.9
15	0.0519	0.2250	77.0	16	0.0104	0.1725	94.0
17	0.0391	0.1985	80.3	18	0.0083	0.1533	94.6
19	0.0268	0.1776	84.9	20	0.0102	0.1380	92.6
21	0.0226	0.1607	86.0	22	0.0061	0.1255	95.2
23	0.0240	0.1467	83.6	24	0.0048	0.1150	95.8
25	0.0193	0.1350	85.7	26	0.0060	0.1062	94.4
27	0.0140	0.1250	88.8	28	0.0035	0.0986	96.5
29	0.0142	0.1164	87.8	30	0.0042	0.0920	95.5
31	0.0135	0.1089	87.6	32	0.0034	0.0862	96.0
33	0.0100	0.1023	90.2	34	0.0028	0.0812	96.5
35	0.0083	0.0964	91.4	36	0.0026	0.0767	96.6
37	0.0083	0.0912	90.9	38	0.0027	0.0726	96.2
39	0.0072	0.0865	91.6	40	0.0021	0.0690	97.0



TASKalfa 306ci (Average)

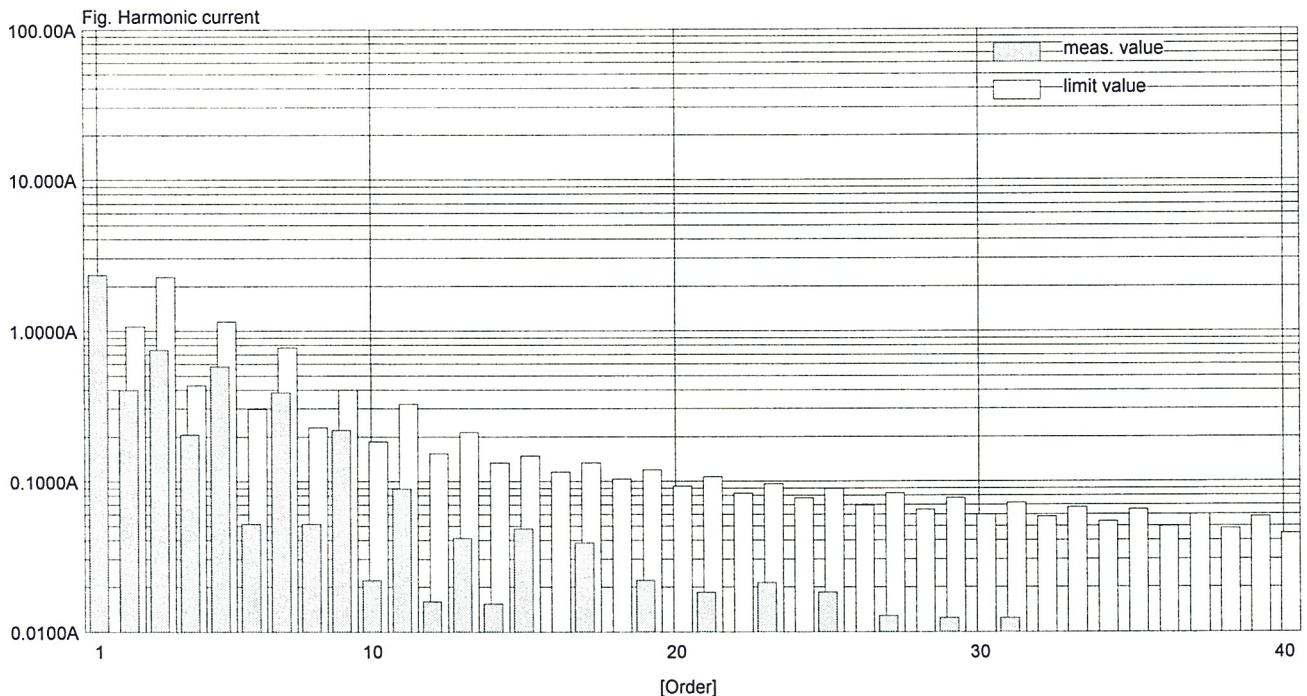
Print Date : Tue Jul 07 10:52:16 2015
 MeasureDate : Tue Jul 07 10:51:52 2015
 Comment : Print
 Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-2 Ed3.0 am2
 IEC61000-4-7 Ed2.0 A1
 Class : CLASS A
 MeasureTime : 150.00sec
 Model : YOKOGAWA WT3000
 Rating Voltage : 230.00 V
 Wiring : single-phase 2-wire
 Element : 1
 Range : 300V/30A
 Current(rms) : 2.6562 A
 Voltage(rms) : 229.53 V
 Frequency : 50.001 Hz
 Power Factor : 0.9012
 POHC Limit : 0.2514 A
 POHC Max : 0.0437 A
 THC : 1.1457 A

PASS

Set Fundamental I : -----
 Set Power Factor : -----
 Set P : -----
 Sigma W Max : 654.5978 W
 Sigma PF : 0.9012
 Distortion factor(V) : 0.08 %
 V THDS : 0.09 %
 V THDG : 0.09 %
 Distortion factor(A) : 44.45 %
 A THDS : 44.67 %
 A THDG : 48.01 %
 P THD : 0.03 %
 Power Limit : 75 W

Order	Measure[A]	Limit[A]	Margin[%]	Order	Measure[A]	Limit[A]	Margin[%]
1	2.3956			2	0.4041	1.0800	62.6
3	0.7382	2.3000	67.9	4	0.2089	0.4300	51.4
5	0.5793	1.1400	49.2	6	0.0517	0.3000	82.8
7	0.3931	0.7700	48.9	8	0.0522	0.2300	77.3
9	0.2178	0.4000	45.5	10	0.0222	0.1840	87.9
11	0.0886	0.3300	73.1	12	0.0161	0.1533	89.5
13	0.0425	0.2100	79.8	14	0.0151	0.1314	88.5
15	0.0488	0.1500	67.5	16	0.0088	0.1150	92.3
17	0.0390	0.1324	70.6	18	0.0077	0.1022	92.5
19	0.0219	0.1184	81.5	20	0.0078	0.0920	91.5
21	0.0184	0.1071	82.8	22	0.0054	0.0836	93.5
23	0.0215	0.0978	78.0	24	0.0044	0.0767	94.3
25	0.0185	0.0900	79.5	26	0.0045	0.0708	93.6
27	0.0128	0.0833	84.6	28	0.0032	0.0657	95.1
29	0.0123	0.0776	84.2	30	0.0034	0.0613	94.5
31	0.0126	0.0726	82.6	32	0.0026	0.0575	95.4
33	0.0098	0.0682	85.7	34	0.0024	0.0541	95.6
35	0.0075	0.0643	88.3	36	0.0023	0.0511	95.5
37	0.0075	0.0608	87.7	38	0.0022	0.0484	95.5
39	0.0071	0.0577	87.7	40	0.0017	0.0460	96.3



TASKalfa 306ci (Maximum)

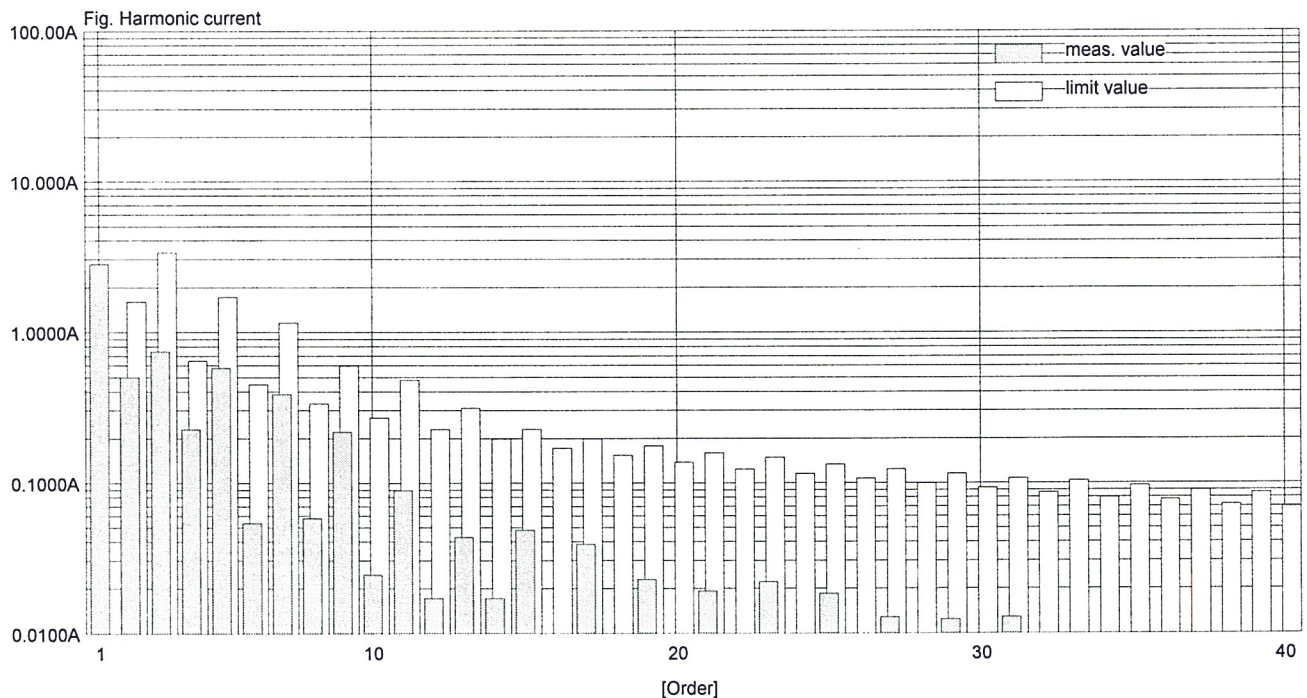
Print Date : Tue Jul 07 10:52:16 2015
 MeasureDate : Tue Jul 07 10:51:52 2015
 Comment : Print
 Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-2 Ed3.0 am2
 IEC61000-4-7 Ed2.0 A1
 Class : CLASS A
 MeasureTime : 150.00sec
 Model : YOKOGAWA WT3000
 Rating Voltage : 230.00 V
 Wiring : single-phase 2-wire
 Element : 1
 Range : 300V/30A
 Current(rms) : 3.0935 A
 Voltage(rms) : 229.55 V
 Frequency : 50.011 Hz
 Power Factor : 0.9222
 Beyond Limit Time : 14.9997 s
 Beyond Total Time : 0.0000 s
 THC : 1.1948 A

PASS

Set Fundamental I : -----
 Set Power Factor : -----
 Set P : -----
 Sigma W Max : 654.5978 W
 Sigma PF : 0.9222
 Distortion factor(V) : 0.10 %
 V THDS : 0.10 %
 V THDG : 0.10 %
 Distortion factor(A) : 61.51 %
 A THDS : 61.73 %
 A THDG : 63.13 %
 P THD : 0.05 %
 Power Limit : 75 W

Order	Measure[A]	Limit[A]	Margin[%]	Order	Measure[A]	Limit[A]	Margin[%]
1	2.8533			2	0.5093	1.6200	68.6
3	0.7492	3.4500	78.3	4	0.2321	0.6450	64.0
5	0.5845	1.7100	65.8	6	0.0550	0.4500	87.8
7	0.3960	1.1550	65.7	8	0.0585	0.3450	83.1
9	0.2197	0.6000	63.4	10	0.0244	0.2760	91.2
11	0.0908	0.4950	81.7	12	0.0170	0.2300	92.6
13	0.0430	0.3150	86.3	14	0.0171	0.1971	91.3
15	0.0492	0.2250	78.1	16	0.0098	0.1725	94.3
17	0.0394	0.1985	80.2	18	0.0080	0.1533	94.8
19	0.0228	0.1776	87.1	20	0.0090	0.1380	93.5
21	0.0190	0.1607	88.2	22	0.0058	0.1255	95.4
23	0.0218	0.1467	85.2	24	0.0046	0.1150	96.0
25	0.0187	0.1350	86.2	26	0.0053	0.1062	95.0
27	0.0130	0.1250	89.6	28	0.0034	0.0986	96.5
29	0.0125	0.1164	89.3	30	0.0037	0.0920	96.0
31	0.0128	0.1089	88.3	32	0.0031	0.0862	96.4
33	0.0100	0.1023	90.2	34	0.0025	0.0812	96.9
35	0.0076	0.0964	92.1	36	0.0025	0.0767	96.7
37	0.0076	0.0912	91.7	38	0.0025	0.0726	96.5
39	0.0072	0.0865	91.7	40	0.0018	0.0690	97.4



EN61000-3-3/2008

(EN 301 489-1 V1.9.2 <8.6>)

Voltage Fluctuations/Flicker Measurement

<i>Equipment</i>	<i>Model</i>	<i>Serial No.</i>
Multi-Function Printer	TASKalfa 306ci	Z7F5300025
Paper Feeder	PF-5120	Z7J5300161
	PF-5130	Z7K5300101
	PF-5140	Z7L5300059
Finisher	DF-5100	Z7T5300071
Multi Tray	MT-5100	Z7U5300081
Job Separator	JS-5100	Z7H5300059
Printer NIC	IB-50	TEST-1
	IB-51	TEST-1
Bridge	AK-5100	Z7G5300123
FAX Kit	FAX System 11	ZEK5300004
Hard Disk Drive	HD-6	TEST-1
	HD-7	TEST-1

Date : 6 July, 2015

Temperature : 24°C

Humidity : 56%

Atom. Pressure : 1014hPa

Testing Place : Kyocera Document Solutions CE Test Room

Power Input : AC230V, 50Hz

Tested by : Takayuki Matsuura

T. Matsuura

This test was applied as follows.

<i>Evaluate item</i>	<i>Limit</i>	<i>Result</i>
Relative steady-state voltage change	$d_c \leq 3.3\%$	Pass
Maximum relative voltage change	$d_{\max} \leq 4\%$	
Relative voltage change characteristic	$dt \leq 500\text{ms}$	
Short-term flicker indicator	$P_{ST} \leq 1$	
Long-term flicker indicator	$P_{LT} \leq 0.65$	

Test equipment used : Analyzing System : WT3000 (Yokogawa Electric Corporation)

TASKalfa 306ci

Print Date : Mon Jul 06 16:17:06 2015
MeasureDate : Mon Jul 06 15:29:41 2015
Comment : Standby
Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-3 Ed2.0
IEC61000-4-15 Ed2.0
Interval : 10Min0Sec
Model : YOKOGAWA WT3000
Wiring : single-phase 2wire
Voltage Range : 300.00V
Set Voltage : 230V
Set Frequency : 50Hz
Voltage U1 : 228.43V
Frequency U1 : 50.000Hz
Element : 1
dmin : 0.20%

PASS(Under dmin)

Element1 : Pass(Under dmin)
dc (3.30%) : Pass
dmax (4.00%) : Pass
d(t) (500ms) : Pass
Pst (1.00) : Pass
Plt (0.65) : Pass

No.	dc[%]	dmax[%]	d(t)[ms]	Pst
1	0.09	3.71	10.10	0.63
2	0.01	3.40	10.10	0.63
3	0.01	3.43	10.10	0.63
4	0.00	0.00	0.00	0.07
5	0.00	0.00	0.00	0.07
6	0.00	0.00	0.00	0.07
7	0.00	0.00	0.00	0.07
8	0.00	0.00	0.00	0.07
9	0.00	0.00	0.00	0.07
10	0.00	0.00	0.00	0.07
11	0.00	0.00	0.00	0.07
12	0.00	0.00	0.00	0.07

Plt
0.40

TASKalfa 306ci

Print Date : Mon Jul 06 16:42:40 2015
MeasureDate : Mon Jul 06 16:41:43 2015
Comment : Dulex Copy
Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-3 Ed2.0
IEC61000-4-15 Ed2.0
Interval : 10Min0Sec
Model : YOKOGAWA WT3000
Wiring : single-phase 2wire
Voltage Range : 300.00V
Set Voltage : 230V
Set Frequency : 50Hz
Voltage U1 : 229.41V
Frequency U1 : 50.000Hz
Element : 1
dmin : 0.20%

PASS

Element1 : Pass
dc (3.30%) : Pass
dmax (4.00%) : Pass
d(t) (500ms) : Pass
Pst (1.00) : Pass
Plt (0.65) : Pass

No.	dc[%]	dmax[%]	d(t)[ms]	Pst
1	0.10	2.63	0.00	0.81
				Plt
				0.35

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Print Date : Mon Jul 06 16:54:50 2015
MeasureDate : Mon Jul 06 16:54:23 2015
Comment : 1 Side Copy
Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-3 Ed2.0
IEC61000-4-15 Ed2.0
Interval : 10Min0Sec
Model : YOKOGAWA WT3000
Wiring : single-phase 2wire
Voltage Range : 300.00V
Set Voltage : 230V
Set Frequency : 50Hz
Voltage U1 : 228.87V
Frequency U1 : 50.003Hz
Element : 1
dmin : 0.20%

PASS

Element1 : Pass
dc (3.30%) : Pass
dmax (4.00%) : Pass
d(t) (500ms) : Pass
Pst (1.00) : Pass
Plt (0.65) : Pass

No.	dc[%]	dmax[%]	d(t)[ms]	Pst
1	0.21	1.67	0.00	0.73
				Plt
				0.32

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Print Date : Mon Jul 06 17:25:40 2015
MeasureDate : Mon Jul 06 17:25:10 2015
Comment : Print
Option : PF-5120, PF-5140, DF-5100, FAX System (11), IB-50

Regulation : IEC61000-3-3 Ed2.0
IEC61000-4-15 Ed2.0
Interval : 10Min0Sec
Model : YOKOGAWA WT3000
Wiring : single-phase 2wire
Voltage Range : 300.00V
Set Voltage : 230V
Set Frequency : 50Hz
Voltage U1 : 228.59V
Frequency U1 : 50.000Hz
Element : 1
dmin : 0.20%

PASS

Element1 : Pass
dc (3.30%) : Pass
dmax (4.00%) : Pass
d(t) (500ms) : Pass
Pst (1.00) : Pass
Plt (0.65) : Pass

No.	dc[%]	dmax[%]	d(t)[ms]	Pst
1	0.67	1.91	0.00	0.72
				Plt
				0.32