



TEST REPORT

STANDARD : FCC Part15B Class B

Applicant	Testing Laboratory
JVC KENWOOD Corporation 1-16-2, Hakusan, Midori-ku, Yokohama-shi Kanagawa, 226-8525 Japan Tel. +81 45 939 6254 Fax.: +81 45 939 6261	Intertek Japan K.K. Matsuda Laboratory (Open area test site) 1283 Yadoriki, Matsuda-machi, Ashigarakami-gun, Kanagawa-ken, 258-0001 Japan Tel.: +81 465 89 2316 Fax.: +81 465 89 2160 (Anechoic chamber) 1386 Yadoriki, Matsuda-machi, Ashigarakami-gun, Kanagawa-ken, 258-0001 Japan Tel.: +81 465 88 4100 Fax.: +81 465 88 4300 URL: http://www.japan.intertek-etlsemko.com

Equipment Type	USB PROGRAMMING INTERFACE CABLE
Trademark	KENWOOD
Model(s)	KPG-36X / KPG-46X
Serial No.	025 / 025
Equipment Authorization	Certification (FCC ID : K44463500)
Test Result	Complied
Report Number	14110235JMA-001
Original Issue Date	December 15, 2014
Revised Issue Date	December 24, 2014

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Approved by H. Kosemura
Hideaki Kosemura
[Manager]

Tested by S. Kobayashi
Shiro Kobayashi
[Engineer]



TABLE OF CONTENTS

	Page
SECTION 1. GENERAL INFORMATION	3
SECTION 2. SUMMARY OF TEST RESULTS	4
SECTION 3. EQUIPMENT UNDER TEST	5
SECTION 4. SUPPORT EQUIPMENT	6
SECTION 5. USED CABLE(S)	7
SECTION 6. TEST CONFIGURATION	8
SECTION 7. OPERATING CONDITION	10
SECTION 8. UNCERTAINTY	11
SECTION 9. EVALUATION OF TEST RESULTS	12
SECTION 10. PHOTOGRAPHS OF MAXIMUM EMISSION SET-UP	22
SECTION 11. LIST OF MEASURING INSTRUMENTS	26
ANNEX	27

SECTION 1. GENERAL INFORMATION

Test Performed

EUT Received	December 03, 2014
Date of Test	From December 08, 2014 to December 09, 2014
Standard Applied	FCC Part15B Class B
Test methods	ANSI C63.4-2003
Deviation from Standard(s)	None

Qualifications of Testing Laboratory

Accreditation	Scope	Lab. Code	Remarks
VLAC	EMC Testing	VLAC-008-3	JAPAN
BSMI	EMC Testing	SL2-IN-E-6009	TAIWAN
Filing			
VCCI	EMC Testing	A-0127	JAPAN
FCC	EMC Testing	Designation Number : JP0009	USA
CB-Scheme	EMC Testing	TL223	IECEE
SAUDI ARABIA	EMC Testing	N/A	

Abbreviations

EUT	Equipment Under Test	DoC	Declaration of Conformity
AMN	Artificial Mains Network	ISN	Impedance Stabilization Network
LISN	Line Impedance Stabilization Network	Q-P	Quasi-peak
AMP	Amplifier	AVG	Average
ATT	Attenuator	PK	Peak
ANT	Antenna	Cal	Calibration
BBA	Broadband Antenna	N/A	Not applicable or Not available
DIP	Dipole Antenna	LCD	Liquid-Crystal Display
AE	Associated Equipment	HDMI	High-Definition Multimedia Interface

Revision Summary

Revised Date	Section or page No.	Description of Changes
Dec. 24, 2014	Page 1	Removed the responsible party of the product information box.
	Section 5	Modified the Note 1, "One core of No. 1 and 2 cables is supplied together with EUT by the applicant" to "Both of core for No.1 and 2 cables are attached to cable by the applicant and sold together with EUT".

SECTION 2. SUMMARY OF TEST RESULTS

See Section9 for the detailed result.

Emission Tests

Standard Applied	FCC Part15B Class B	
Test Item	Minimum margin	Remarks
Conducted disturbance at mains terminals	7.8 dB (0.1500 MHz) [Q-P] PC Communication USB mode (KPG-36X)	-
Radiated disturbance	9.9 dB (48.00 MHz) PC Communication UART mode (KPG-46X)	-

SECTION 3. EQUIPMENT UNDER TEST

The equipment under test (EUT) consisted of the following apparatus.

3.1 System Configuration

Symbol	Item	Model No.	Serial No.	Manufacturer	Remarks
A1	USB PROGRAMMING INTERFACE CABLE	KPG-36X	025	JVC KENWOOD Corporation	-
A2	USB PROGRAMMING INTERFACE CABLE	KPG-46X	025	JVC KENWOOD Corporation	-
Rated Power : DC 5 V, 30 mA (USB Bus Powered)					
Supplied Power : DC 5 V					
Condition of Equipment		Prototype			
Type		Tabletop			
Suppression Devices		No Modifications by the laboratory were made to the device			

3.2 Port(s)/Connector(s)

Port Name	Connector Type	Connector Pin	Remarks
USB	Type A	4 pin	-
Radio	Universal	14 pin	KPG-36X
Radio	Modular	8 pin	KPG-46X

3.3 Highest Frequency Generated / Used

Operating Frequency	Operating mode	Remarks
48 MHz	PC Communication UART mode PC Communication USB mode	-

SECTION 4. SUPPORT EQUIPMENT

The EUT was supported by the following equipment during the test.

Symbol	Item	Model No.	Serial No.	Manufacturer	Remarks	FCC ID
B	Note PC	Elite Book 2170P	JPA4139KP1	HP	-	DoC
C	AC Adapter for Note PC	PPP009L-E	WBGST0A1 RZ61XC	HP	-	N/A
D	Hub	FXG-05TP	02FJ00529A	Planex	-	DoC
E	Transceiver	NX-5300-K6	B4890046	JVC KENWOOD Corporation	Jig for KPG-36X	K44431501
F	Battery	KNB-L3	0314700148	JVC KENWOOD Corporation	Jig for KPG-36X	N/A
G	Transceiver	NX-5800-K	074	JVC KENWOOD Corporation	Jig for KPG-46X	K44471200
H	REMOTE CONTROL HEAD	KCH-19	074	JVC KENWOOD Corporation	Jig for KPG-46X	N/A
I	DC Power Supply	PS-60	11/01 00142	JVC KENWOOD Corporation	Jig for KPG-46X	N/A
J	Dummy Load	1430-4	BW5572	Aeroflex/Weinschel	-	N/A
Supplied Power:						
C, D, I	AC120 V, 60 Hz					

SECTION 5. USED CABLE(S)

The following cable(s) was used for the test.

No.	Name	Length (m)	Shield	Metal Connector	Ferrite Core
1	Universal cable	0.8	No	No	Removable x 1
2	Modular cable	0.8	No	No	Removable x 1
3	USB cable	0.6	Yes	Yes	-
4	LAN cable	2.0	No	No	-
5	Coaxial cable	1.0	Yes	Yes	-
6	Power cable for Note PC (DC)	2.0	No	No	-
7	Power cable for Note PC (AC)	1.8	No	No	-
8	Power cable for Hub (AC)	2.0	No	No	-
9	Power cable for Transceiver (G) (DC)	0.3	No	No	-
10	Power cable for Transceiver (G) (DC)	2.8	No	No	-
11	Power cable for DC Power Supply (AC)	2.0	No	No	-

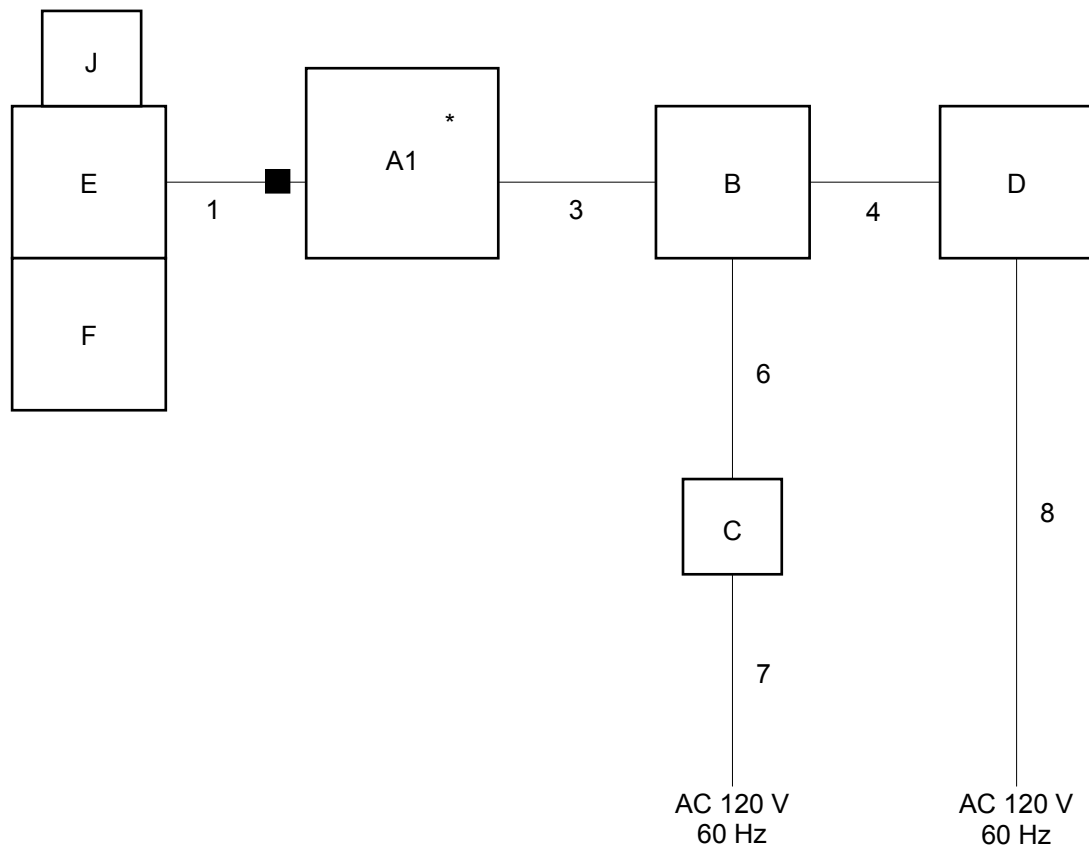
Note :

1. Both of core for No.1 and 2 cables are attached to cable by the applicant and sold together with EUT.

SECTION 6. TEST CONFIGURATION

6.1 KPG-36X

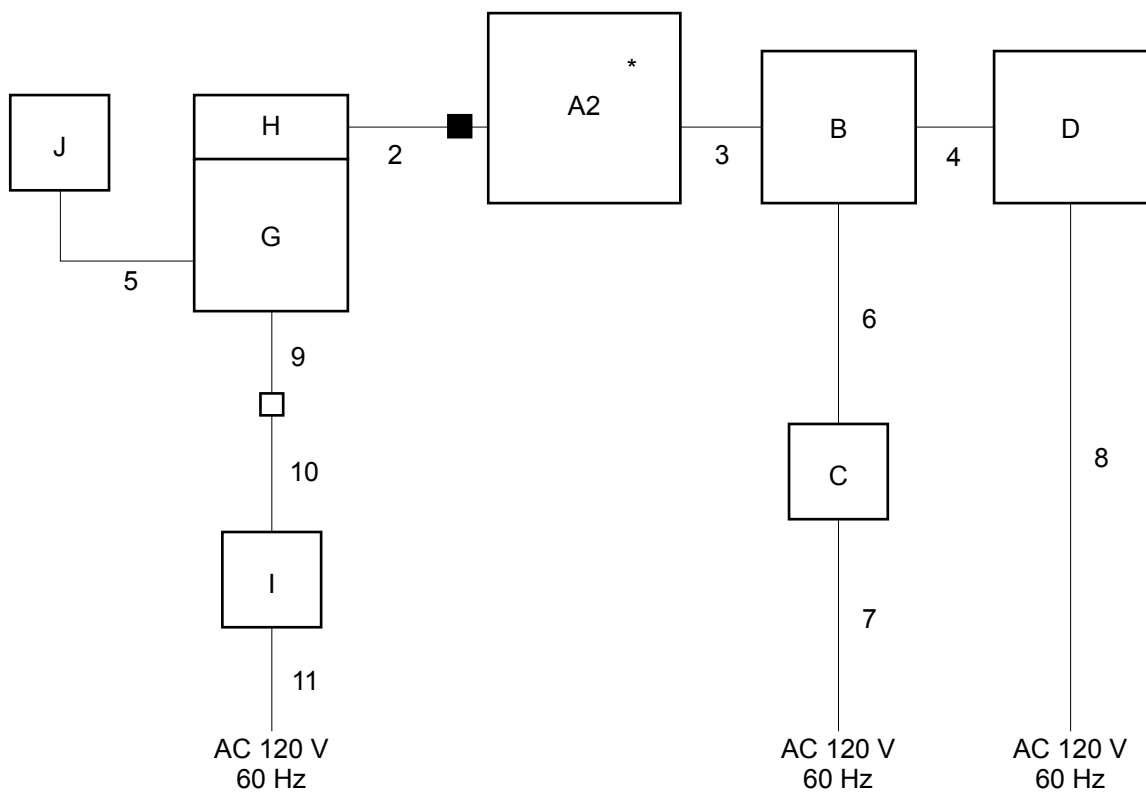
* : EUT
■ : Ferrite core



The symbols and numbers assigned to the equipments and cables on this diagram correspond to the ones in Sections 3 to 5.

6.2 KPG-46X

* : EUT
■ : Ferrite core



The symbols and numbers assigned to the equipments and cables on this diagram correspond to the ones in Sections 3 to 5.

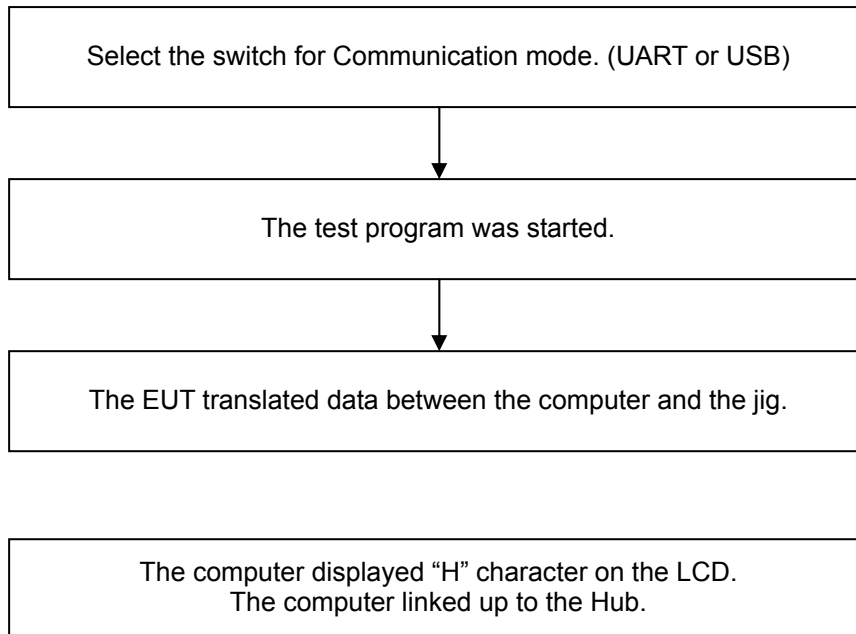
SECTION 7. OPERATING CONDITION

The test was carried out under the following mode.

7.1 PC Communication mode

Cycle time for operation: 550 ms

Test Program: KPG-D1 Version1.10



SECTION 8. UNCERTAINTY

Traceability to national standard in SI units is ensured with these values.
Compliance with the limits in this standard are determined without in consideration of the measurement uncertainty of the measurement instrumentation.

Radiated disturbance at 3m	$U_{lab} [k = 2]$	U_{cispr}
30 MHz – 1000 MHz	+/- 3.96 dB	6.3 dB
Above 1 GHz CISPR22	+/- 4.87 dB	5.2 dB
ANCI 63.4	+/- 4.16 dB	5.2 dB
Radiated disturbance at 10m		
30 MHz – 1000 MHz	+/- 4.41 dB	6.3 dB
Above 1 GHz	+/- 4.59 dB	
Radiated disturbance at 30m		
	N/A	Nil
Conducted disturbance at mains terminals		
9 kHz – 150 kHz	+/- 1.46 dB	3.8 dB
150 kHz – 30 MHz	+/- 1.54 dB	3.4 dB
Conducted disturbance at telecommunication ports (ISN)		
150 kHz – 30 MHz	+/- 3.24 dB	5.0 dB
Conducted disturbance at telecommunication ports (Capacitive Voltage Probe)		
150 kHz – 30 MHz	+/- 2.92 dB	3.9 dB
Conducted disturbance at telecommunication ports (Current Probe)		
150 kHz – 30 MHz	+/- 1.65 dB	2.9 dB
Conducted disturbance at terminals		
150 kHz – 30 MHz	+/- 1.52 dB	2.9 dB
Disturbance power		
30 MHz – 300 MHz	+/- 2.36 dB	4.5 dB

The above expanded instrumentation uncertainty, U_{lab} , is estimated in accordance with CISPR 16-4-2:2011.

SECTION 9. EVALUATION OF TEST RESULTS

9.1 Conducted disturbance at mains terminals

Location	Matsuda No.4 Test Site
Test Engineer	Shiro Kobayashi

Frequency Range of Measurements

Required Measurement Frequency Range	Measured Frequency Range
0.15 – 30 MHz	0.15 – 30 MHz

Test Procedure

Item	Document number
Conducted disturbance at mains terminals	RJP-EM001

Setting for the Measuring instruments

Instrument	Detector	Resolution Bandwidth	Video Bandwidth
Receiver	Quasi Peak	10 kHz	N/A
	Average	10 kHz	N/A

< Measurement data correction >

Emission Level = Meter Reading + Factor

Margin = Limit- Emission Level

Factor = LISN Factor + Cable Loss + Attenuator

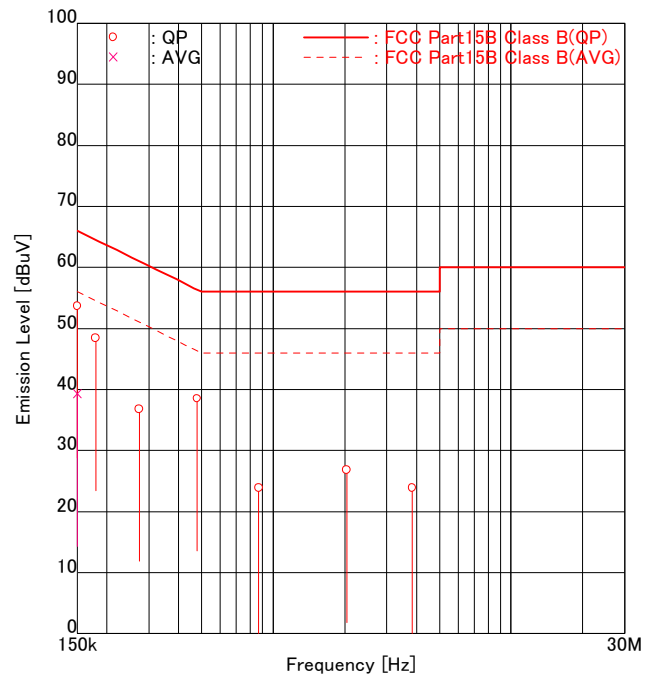
Result of Conducted disturbance at mains terminals
9.1.1 KPG-36X: PC Communication UART mode

Intertek Japan K.K.

Matsuda No.4 Test Site

Conducted Voltages on Mains Port

APPLICANT : JVC KENWOOD Corporation
EUT NAME : USB PROGRAMMING INTERFACE
CABLE :
MODEL NO. : KPG-36X
SERIAL NO. : 025
TEST MODE : PC Communication UART mode
POWER SOURCE : DC 5 V (PC: AC 120 V, 60 Hz)
DATE TESTED : Dec 09 2014
FILE NO. : -
REGULATION : FCC Part15B Class B
TEST METHOD : ANSI C63.4-2003
TEMPERATURE : 18.0 [degC]
HUMIDITY : 43.0 [%]
NOTE :



ENGINEER : Shiro Kobayashi

FREQUENCY [No]	MODE [MHz]		READING [dBuV]		FACTOR [dB]		EMISSION [dBuV]		LIMIT [dBuV]	MARGIN [dB]	
			Line1	Line2	Line1	Line2	Line1	Line2		Line1	Line2
1	0.1500	QP	43.3	<u>43.7</u>	10.0	10.0	53.3	<u>53.7</u>	66.0	12.7	<u>12.3</u>
2	0.1500	AVG	<u>29.3</u>	29.2	10.0	10.0	<u>39.3</u>	39.2	56.0	<u>16.7</u>	16.8
3	0.1795	QP	<u>38.4</u>	38.2	10.0	10.0	<u>48.4</u>	48.2	64.5	<u>16.1</u>	16.3
4	0.2733	QP	<u>26.7</u>	26.4	10.1	10.1	<u>36.8</u>	36.5	61.0	<u>24.2</u>	24.5
5	0.4789	QP	28.3	<u>28.4</u>	10.1	10.1	38.4	<u>38.5</u>	56.4	18.0	<u>17.9</u>
6	0.8694	QP	13.7	12.4	10.2	10.2	23.9	22.6	56.0	32.1	33.4
7	2.0340	QP	15.3	<u>16.5</u>	10.3	10.3	25.6	<u>26.8</u>	56.0	30.4	<u>29.2</u>
8	3.8300	QP	12.0	13.5	10.4	10.4	22.4	23.9	56.0	33.6	32.1

Higher six points are underlined.
Other frequencies : Below the FCC Part15B Class B limit
Emission Level = Read + Factor(LISN,Pad,Cable)

emiT 3, 0, 0, 0

Copyright(c)2007 Intertek Japan K.K.

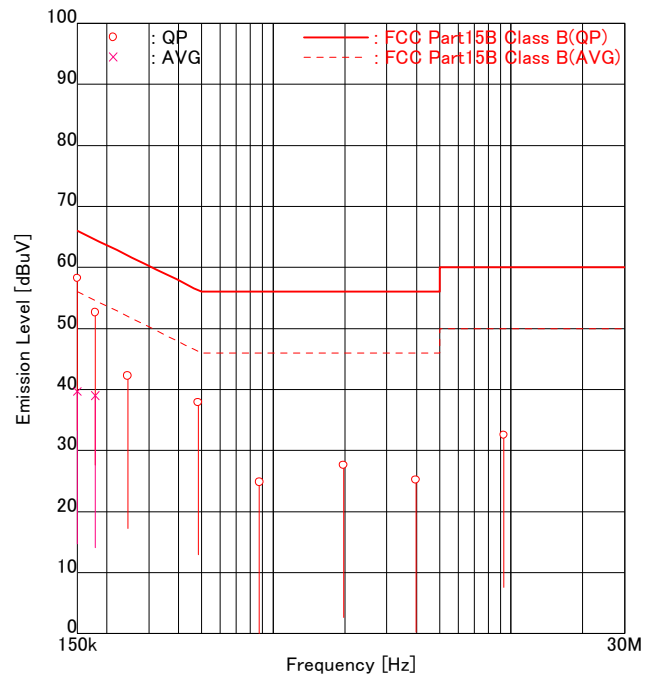
9.1.2 KPG-36X: PC Communication USB mode

Intertek Japan K.K.

Matsuda No.4 Test Site

Conducted Voltages on Mains Port

APPLICANT : JVC KENWOOD Corporation
EUT NAME : USB PROGRAMMING INTERFACE
CABLE :
MODEL NO. : KPG-36X
SERIAL NO. : 025
TEST MODE : PC Communication USB mode
POWER SOURCE : DC 5 V (PC: AC 120 V, 60 Hz)
DATE TESTED : Dec 09 2014
FILE NO. : -
REGULATION : FCC Part15B Class B
TEST METHOD : ANSI C63.4-2003
TEMPERATURE : 18.0 [degC]
HUMIDITY : 43.0 [%]
NOTE :



ENGINEER : Shiro Kobayashi

FREQUENCY [No]	MODE [MHz]		READING [dBuV]		FACTOR [dB]		EMISSION [dBuV]		LIMIT [dBuV]	MARGIN [dB]	
			Line1	Line2	Line1	Line2	Line1	Line2		Line1	Line2
1	0.1500	QP	<u>48.2</u>	47.9	10.0	10.0	<u>58.2</u>	57.9	66.0	<u>7.8</u>	8.1
2	0.1500	AVG	<u>29.7</u>	29.6	10.0	10.0	<u>39.7</u>	39.6	56.0	<u>16.3</u>	16.4
3	0.1783	QP	<u>42.6</u>	42.2	10.0	10.0	<u>52.6</u>	52.2	64.6	<u>12.0</u>	12.4
4	0.1783	AVG	<u>28.8</u>	<u>29.0</u>	10.0	10.0	<u>38.8</u>	<u>39.0</u>	54.6	<u>15.8</u>	<u>15.6</u>
5	0.2444	QP	<u>32.1</u>	31.6	10.1	10.1	<u>42.2</u>	41.7	61.9	<u>19.7</u>	20.2
6	0.4837	QP	<u>27.8</u>	27.4	10.1	10.1	<u>37.9</u>	37.5	56.3	<u>18.4</u>	18.8
7	0.8751	QP	14.6	12.9	10.2	10.2	24.8	23.1	56.0	31.2	32.9
8	1.9740	QP	15.7	17.3	10.3	10.3	26.0	27.6	56.0	30.0	28.4
9	3.9800	QP	12.8	14.8	10.4	10.4	23.2	25.2	56.0	32.8	30.8
10	9.3200	QP	21.3	21.8	10.7	10.7	32.0	32.5	60.0	28.0	27.5

Higher six points are underlined.
Other frequencies : Below the FCC Part15B Class B limit
Emission Level = Read + Factor(LISN,Pad,Cable)

emiT 3, 0, 0, 0

Copyright(c)2007 Intertek Japan K.K.

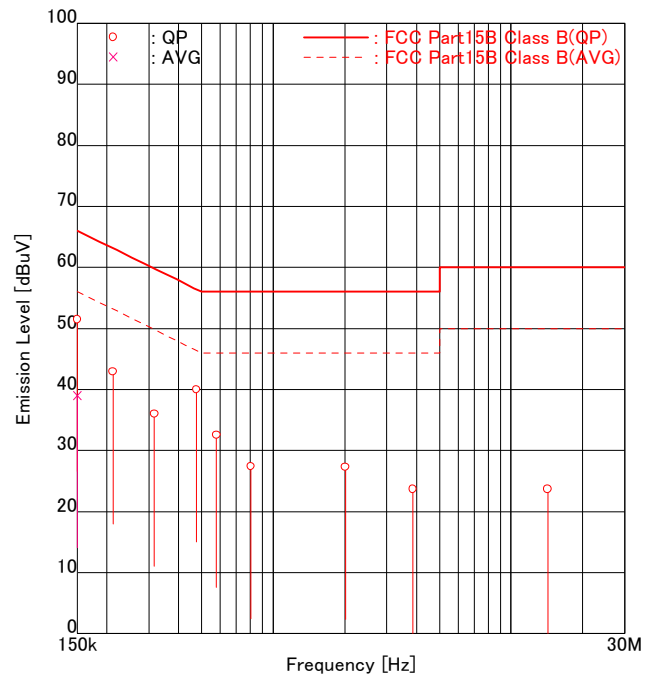
9.1.3 KPG-46X: PC Communication UART mode

Intertek Japan K.K.

Matsuda No.4 Test Site

Conducted Voltages on Mains Port

APPLICANT : JVC KENWOOD Corporation
EUT NAME : USB PROGRAMMING INTERFACE
CABLE :
MODEL NO. : KPG-46X
SERIAL NO. : 025
TEST MODE : PC Communication UART mode
POWER SOURCE : DC 5 V (PC: AC 120 V, 60 Hz)
DATE TESTED : Dec 09 2014
FILE NO. : -
REGULATION : FCC Part15B Class B
TEST METHOD : ANSI C63.4-2003
TEMPERATURE : 18.0 [degC]
HUMIDITY : 43.0 [%]
NOTE :



ENGINEER : Shiro Kobayashi

FREQUENCY [No]	MODE [MHz]		READING [dBuV]		FACTOR [dB]		EMISSION [dBuV]		LIMIT [dBuV]	MARGIN [dB]	
			Line1	Line2	Line1	Line2	Line1	Line2		Line1	Line2
1	0.1500	QP	<u>41.5</u>	41.1	10.0	10.0	<u>51.5</u>	51.1	66.0	<u>14.5</u>	14.9
2	0.1500	AVG	<u>29.0</u>	28.9	10.0	10.0	<u>39.0</u>	38.9	56.0	<u>17.0</u>	17.1
3	0.2121	QP	32.6	<u>32.8</u>	10.1	10.1	42.7	<u>42.9</u>	63.1	20.4	<u>20.2</u>
4	0.3167	QP	25.7	<u>25.9</u>	10.1	10.1	35.8	<u>36.0</u>	59.8	24.0	<u>23.8</u>
5	0.4764	QP	29.8	<u>29.9</u>	10.1	10.1	39.9	<u>40.0</u>	56.4	16.5	<u>16.4</u>
6	0.5776	QP	21.7	<u>22.4</u>	10.1	10.1	31.8	<u>32.5</u>	56.0	24.2	<u>23.5</u>
7	0.8063	QP	16.5	17.2	10.2	10.2	26.7	27.4	56.0	29.3	28.6
8	2.0114	QP	15.1	17.0	10.3	10.3	25.4	27.3	56.0	30.6	28.7
9	3.8625	QP	12.0	13.3	10.4	10.4	22.4	23.7	56.0	33.6	32.3
10	14.2591	QP	12.3	12.7	10.9	11.0	23.2	23.7	60.0	36.8	36.3

Higher six points are underlined.
Other frequencies : Below the FCC Part15B Class B limit
Emission Level = Read + Factor(LISN,Pad,Cable)

emiT 3, 0, 0, 0

Copyright(c)2007 Intertek Japan K.K.

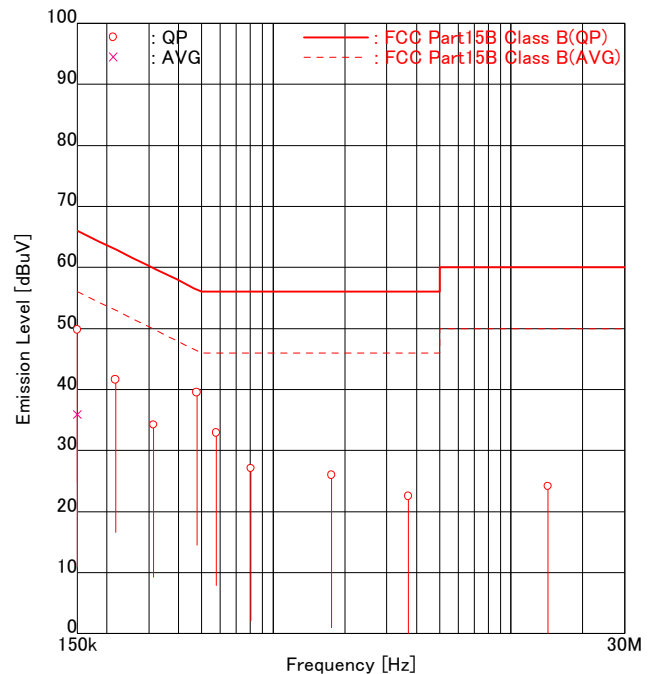
9.1.4 KPG-46X: PC Communication USB mode

Intertek Japan K.K.

Matsuda No.4 Test Site

Conducted Voltages on Mains Port

APPLICANT : JVC KENWOOD Corporation
EUT NAME : USB PROGRAMMING INTERFACE
CABLE :
MODEL NO. : KPG-46X
SERIAL NO. : 025
TEST MODE : PC Communication USB mode
POWER SOURCE : DC 5 V (PC: AC 120 V, 60 Hz)
DATE TESTED : Dec 09 2014
FILE NO. : -
REGULATION : FCC Part15B Class B
TEST METHOD : ANSI C63.4-2003
TEMPERATURE : 18.0 [degC]
HUMIDITY : 43.0 [%]
NOTE :



ENGINEER : Shiro Kobayashi

FREQUENCY [No]	MODE [MHz]		READING [dBuV]		FACTOR [dB]		EMISSION [dBuV]		LIMIT [dBuV]	MARGIN [dB]	
			Line1	Line2	Line1	Line2	Line1	Line2		Line1	Line2
1	0.1500	QP	<u>39.8</u>	38.9	10.0	10.0	<u>49.8</u>	48.9	66.0	<u>16.2</u>	17.1
2	0.1500	AVG	25.8	<u>25.9</u>	10.0	10.0	35.8	<u>35.9</u>	56.0	20.2	<u>20.1</u>
3	0.2172	QP	<u>31.5</u>	30.2	10.1	10.1	<u>41.6</u>	40.3	62.9	<u>21.3</u>	22.6
4	0.3140	QP	<u>23.6</u>	<u>24.1</u>	10.1	10.1	<u>33.7</u>	<u>34.2</u>	59.9	26.2	<u>25.7</u>
5	0.4773	QP	<u>29.4</u>	<u>29.2</u>	10.1	10.1	<u>39.5</u>	39.3	56.4	<u>16.9</u>	17.1
6	0.5761	QP	<u>22.7</u>	<u>22.8</u>	10.1	10.1	<u>32.8</u>	<u>32.9</u>	56.0	23.2	<u>23.1</u>
7	0.8062	QP	16.4	16.9	10.2	10.2	26.6	27.1	56.0	29.4	28.9
8	1.7600	QP	14.5	15.7	10.3	10.3	24.8	26.0	56.0	31.2	30.0
9	3.6980	QP	10.9	12.1	10.4	10.4	21.3	22.5	56.0	34.7	33.5
10	14.2860	QP	12.7	13.1	10.9	11.0	23.6	24.1	60.0	36.4	35.9

Higher six points are underlined.
Other frequencies : Below the FCC Part15B Class B limit
Emission Level = Read + Factor(LISN,Pad,Cable)

emiT 3, 0, 0, 0

Copyright(c)2007 Intertek Japan K.K.

9.2 Radiated disturbance

Location	Matsuda No.4 Test Site
Test Engineer	Shiro Kobayashi

Frequency Range of Measurements

Operating mode	Required Frequency Range	Measured Frequency Range
PC Communication UART mode PC Communication USB mode	30 – 1000 MHz	30 – 1000 MHz

Test Procedure

Item	Document number
Radiated disturbance	RJP-EM003

Setting for the Measuring instruments

Frequency [MHz]	Instrument	Detector	Resolution Bandwidth	Video Bandwidth
30 – 1000	Receiver	Quasi Peak	120 kHz	N/A

< Measurement data correction >

Emission Level = Meter Reading + Factor

Margin = Limit - Emission Level

Factor = Antenna Factor + Cable Loss - Amplifier Gain + Attenuator (+ Distance Conversion Factor)*

* For other than Standard distance:

Distance Conversion Factor = $20 \log (\text{Measurement distance} / \text{Standard distance})$

Result of Radiated disturbances

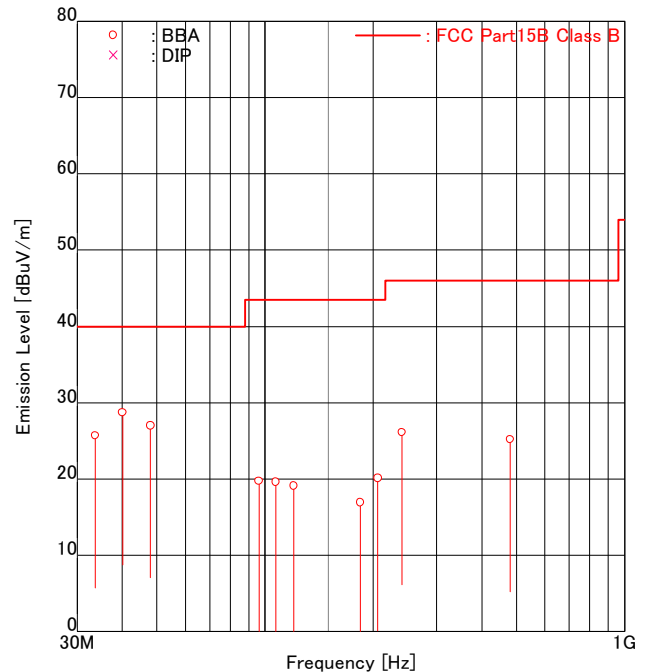
9.2.1 KPG-36X: PC Communication UART mode

Intertek Japan K.K.

Matsuda No.4 Test Site

Radiated Electric Field

APPLICANT : JVC KENWOOD Corporation
EUT NAME : USB PROGRAMMING INTERFACE
CABLE :
MODEL NO. : KPG-36X
SERIAL NO. : 025
TEST MODE : PC Communication UART mode
POWER SOURCE : DC 5 V
DATE TESTED : Dec 08 2014
FILE NO. : -
REGULATION : FCC Part15B Class B
TEST METHOD : ANSI C63.4-2003
DISTANCE : 3.00 [m]
TEMPERATURE : 21.0 [degC]
HUMIDITY : 32.0 [%]
NOTE :



ENGINEER : Shiro Kobayashi

FREQUENCY [No]	FREQ. [MHz]	ANT.	READING [dBuV]		FACTOR [dB/m]		EMISSION [dBuV/m]		LIMIT [dBuV/m]	MARGIN [dB]	
			Hori	Vert	Hori	Vert	Hori	Vert		Hori	Vert
1	33.65	BBA	-	<u>33.6</u>	-7.9	-7.9	-	<u>25.7</u>	40.0	-	<u>14.3</u>
2	40.09	BBA	28.0	<u>35.6</u>	-6.9	-6.9	21.1	<u>28.7</u>	40.0	18.9	<u>11.3</u>
3	48.00	BBA	-	<u>33.4</u>	-6.4	-6.4	-	<u>27.0</u>	40.0	-	<u>13.0</u>
4	96.06	BBA	-	30.8	-11.1	-11.1	-	19.7	43.5	-	23.8
5	107.00	BBA	29.1	27.8	-9.5	-9.5	19.6	18.3	43.5	23.9	25.2
6	120.00	BBA	24.8	27.1	-8.0	-8.0	16.8	19.1	43.5	26.7	24.4
7	183.90	BBA	24.0	23.8	-7.1	-7.1	16.9	16.7	43.5	26.6	26.8
8	205.70	BBA	27.5	<u>28.6</u>	-8.5	-8.5	19.0	<u>20.1</u>	43.5	24.5	<u>23.4</u>
9	240.14	BBA	<u>33.2</u>	<u>28.4</u>	-7.1	-7.1	<u>26.1</u>	<u>21.3</u>	46.0	<u>19.9</u>	<u>24.7</u>
10	480.00	BBA	<u>24.6</u>	23.3	0.6	0.6	<u>25.2</u>	23.9	46.0	<u>20.8</u>	22.1

Higher six points are underlined.

Other frequencies : Below the FCC Part15B Class B limit

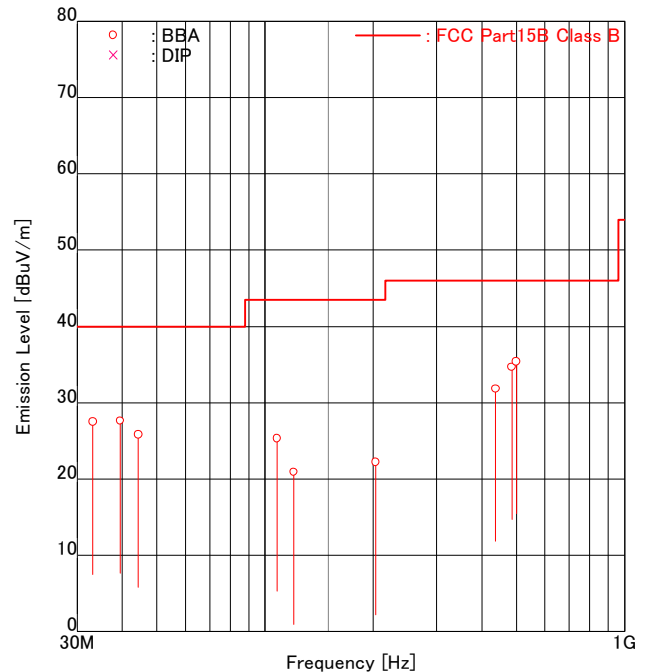
Emission Level = Read + Factor(Antenna, Antenna Pad, Cable, Preamp)

ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

9.2.2 KPG-36X: PC Communication USB mode

Intertek Japan K.K. Matsuda No.4 Test Site Radiated Electric Field

APPLICANT : JVC KENWOOD Corporation
EUT NAME : USB PROGRAMMING INTERFACE
CABLE
MODEL NO. : KPG-36X
SERIAL NO. : 025
TEST MODE : PC Communication USB mode
POWER SOURCE : DC 5 V
DATE TESTED : Dec 08 2014
FILE NO. : -
REGULATION : FCC Part15B Class B
TEST METHOD : ANSI C63.4-2003
DISTANCE : 3.00 [m]
TEMPERATURE : 21.0 [degC]
HUMIDITY : 32.0 [%]
NOTE :



ENGINEER : Shiro Kobayashi

FREQUENCY [No]	ANT. [MHz]		READING [dBuV]		FACTOR [dB/m]		EMISSION [dBuV/m]		LIMIT [dBuV/m]	MARGIN [dB]	
			Hori	Vert	Hori	Vert	Hori	Vert		Hori	Vert
1	33.17	BBA	-	<u>35.5</u>	-8.0	-8.0	-	<u>27.5</u>	40.0	-	<u>12.5</u>
2	39.49	BBA	-	<u>34.6</u>	-7.0	-7.0	-	<u>27.6</u>	40.0	-	<u>12.4</u>
3	44.35	BBA	-	<u>32.2</u>	-6.4	-6.4	-	<u>25.8</u>	40.0	-	<u>14.2</u>
4	107.95	BBA	34.7	33.4	-9.4	-9.4	25.3	24.0	43.5	18.2	19.5
5	120.00	BBA	25.5	28.9	-8.0	-8.0	17.5	20.9	43.5	26.0	22.6
6	202.80	BBA	28.7	30.8	-8.6	-8.6	20.1	22.2	43.5	23.4	21.3
7	438.01	BBA	<u>32.6</u>	29.5	-0.8	-0.8	<u>31.8</u>	28.7	46.0	<u>14.2</u>	17.3
8	485.98	BBA	33.1	<u>34.0</u>	0.7	0.7	33.8	<u>34.7</u>	46.0	12.2	<u>11.3</u>
9	499.28	BBA	32.6	<u>34.3</u>	1.1	1.1	33.7	<u>35.4</u>	46.0	12.3	<u>10.6</u>

Higher six points are underlined.
Other frequencies : Below the FCC Part15B Class B limit
Emission Level = Read + Factor(Antenna,Antenna Pad,Cable,Preamp)
ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

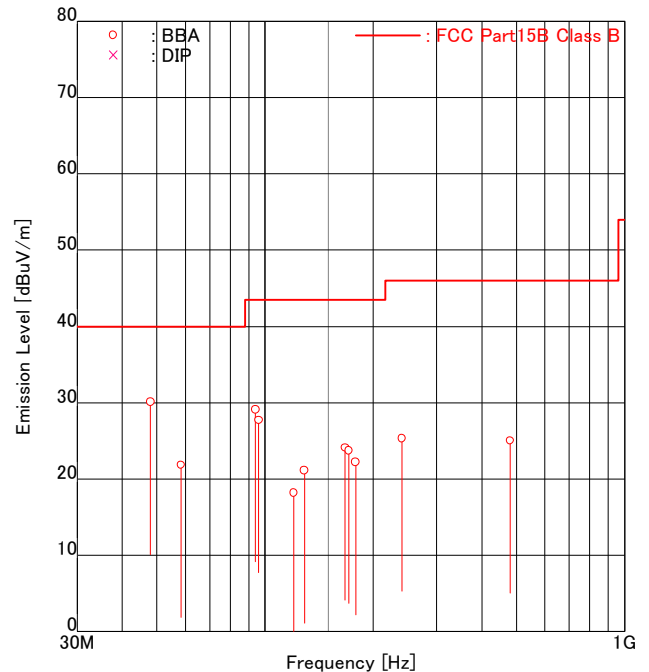
emiT 3, 0, 0, 0

Copyright(c)2007 Intertek Japan K.K.

9.2.3 KPG-46X: PC Communication UART mode

Intertek Japan K.K. Matsuda No.4 Test Site Radiated Electric Field

APPLICANT : JVC KENWOOD Corporation
EUT NAME : USB PROGRAMMING INTERFACE
CABLE
MODEL NO. : KPG-46X
SERIAL NO. : 025
TEST MODE : PC Communication UART mode
POWER SOURCE : DC 5 V
DATE TESTED : Dec 08 2014
FILE NO. : -
REGULATION : FCC Part15B Class B
TEST METHOD : ANSI C63.4-2003
DISTANCE : 3.00 [m]
TEMPERATURE : 21.0 [degC]
HUMIDITY : 32.0 [%]
NOTE :



ENGINEER : Shiro Kobayashi

FREQUENCY [No]	FREQ. [MHz]	ANT.	READING [dBuV]		FACTOR [dB/m]		EMISSION [dBuV/m]		LIMIT [dBuV/m]	MARGIN [dB]	
			Hori	Vert	Hori	Vert	Hori	Vert		Hori	Vert
1	48.00	BBA	-	<u>36.5</u>	-6.4	-6.4	-	<u>30.1</u>	40.0	-	<u>9.9</u>
2	58.40	BBA	-	<u>28.7</u>	-6.9	-6.9	-	<u>21.8</u>	40.0	-	<u>18.2</u>
3	94.08	BBA	39.8	<u>40.4</u>	-11.3	-11.3	28.5	<u>29.1</u>	43.5	15.0	<u>14.4</u>
4	96.00	BBA	35.5	<u>38.8</u>	-11.1	-11.1	24.4	<u>27.7</u>	43.5	19.1	<u>15.8</u>
5	120.00	BBA	25.9	<u>26.2</u>	-8.0	-8.0	17.9	<u>18.2</u>	43.5	25.6	<u>25.3</u>
6	128.64	BBA	28.4	<u>24.4</u>	-7.3	-7.3	21.1	<u>17.1</u>	43.5	22.4	<u>26.4</u>
7	167.04	BBA	<u>30.1</u>	<u>28.7</u>	-6.0	-6.0	<u>24.1</u>	<u>22.7</u>	43.5	<u>19.4</u>	<u>20.8</u>
8	170.88	BBA	<u>29.9</u>	<u>29.5</u>	-6.2	-6.2	<u>23.7</u>	<u>23.3</u>	43.5	<u>19.8</u>	<u>20.2</u>
9	178.56	BBA	28.8	<u>28.9</u>	-6.7	-6.7	22.1	<u>22.2</u>	43.5	21.4	<u>21.3</u>
10	240.00	BBA	32.4	<u>28.6</u>	-7.1	-7.1	25.3	<u>21.5</u>	46.0	20.7	<u>24.5</u>
11	480.00	BBA	24.4	<u>23.5</u>	0.6	0.6	25.0	<u>24.1</u>	46.0	21.0	<u>21.9</u>

Higher six points are underlined.

Other frequencies : Below the FCC Part15B Class B limit

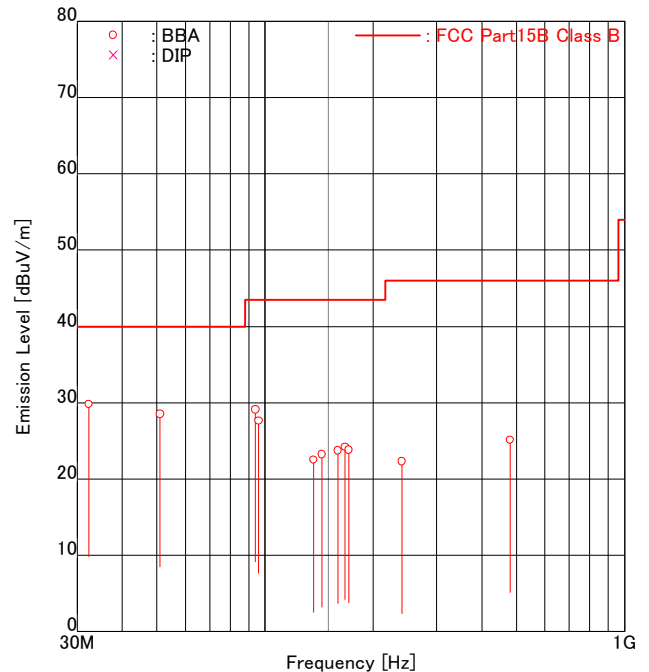
Emission Level = Read + Factor(Antenna, Antenna Pad, Cable, Preamp)

ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

9.2.4 KPG-46X: PC Communication USB mode

Intertek Japan K.K. Matsuda No.4 Test Site Radiated Electric Field

APPLICANT : JVC KENWOOD Corporation
EUT NAME : USB PROGRAMMING INTERFACE
CABLE
MODEL NO. : KPG-46X
SERIAL NO. : 025
TEST MODE : PC Communication USB mode
POWER SOURCE : DC 5 V
DATE TESTED : Dec 08 2014
FILE NO. : -
REGULATION : FCC Part15B Class B
TEST METHOD : ANSI C63.4-2003
DISTANCE : 3.00 [m]
TEMPERATURE : 21.0 [degC]
HUMIDITY : 32.0 [%]
NOTE :



ENGINEER : Shiro Kobayashi

FREQUENCY [No]	FREQ. [MHz]	ANT.	READING [dBuV]		FACTOR [dB/m]		EMISSION [dBuV/m]		LIMIT [dBuV/m]	MARGIN [dB]	
			Hori	Vert	Hori	Vert	Hori	Vert		Hori	Vert
1	32.30	BBA	-	<u>37.8</u>	-8.0	-8.0	-	<u>29.8</u>	40.0	-	<u>10.2</u>
2	51.06	BBA	-	<u>34.8</u>	-6.3	-6.3	-	<u>28.5</u>	40.0	-	<u>11.5</u>
3	94.08	BBA	40.0	<u>40.4</u>	-11.3	-11.3	28.7	<u>29.1</u>	43.5	14.8	<u>14.4</u>
4	96.00	BBA	36.2	<u>38.7</u>	-11.1	-11.1	25.1	<u>27.6</u>	43.5	18.4	<u>15.9</u>
5	136.32	BBA	29.1	<u>25.5</u>	-6.6	-6.6	22.5	<u>18.9</u>	43.5	21.0	<u>24.6</u>
6	144.00	BBA	29.4	<u>27.3</u>	-6.2	-6.2	23.2	<u>21.1</u>	43.5	20.3	<u>22.4</u>
7	159.36	BBA	29.3	<u>27.5</u>	-5.6	-5.6	23.7	<u>21.9</u>	43.5	19.8	<u>21.6</u>
8	167.04	BBA	<u>30.2</u>	<u>28.6</u>	-6.0	-6.0	<u>24.2</u>	<u>22.6</u>	43.5	<u>19.3</u>	<u>20.9</u>
9	170.88	BBA	<u>30.0</u>	<u>29.9</u>	-6.2	-6.2	<u>23.8</u>	<u>23.7</u>	43.5	<u>19.7</u>	<u>19.8</u>
10	240.00	BBA	29.4	<u>28.2</u>	-7.1	-7.1	22.3	<u>21.1</u>	46.0	23.7	<u>24.9</u>
11	480.00	BBA	24.5	<u>23.9</u>	0.6	0.6	25.1	<u>24.5</u>	46.0	20.9	<u>21.5</u>

Higher six points are underlined.
Other frequencies : Below the FCC Part15B Class B limit
Emission Level = Read + Factor(Antenna, Antenna Pad, Cable, Preamp)
ANT. : Used antenna(BBA = Broadband antenna, DIP = Dipole antenna)

SECTION 11. LIST OF MEASURING INSTRUMENTS

Test instruments are calibrated according to Quality Manual and Calibration Rules of Intertek Japan K.K.

Instrument	Model No.	Serial No.	Manufacturer	Cal. Interval	Effective period
Conducted disturbance at mains terminals					
LISN(EUT)	ESH2-Z5	882395/019	Rohde & Schwarz	1 Y	Jun, 2015
10dB LISN Pad	CFA-01	E04AT10B	TAMAGAWA	1 Y	Jun, 2015
LISN(Peripheral)	KNW-242	8-851-23	Kyoritsu	1 Y	Jan, 2015
10dB LISN Pad	CFA-01	E00KNW242	TAMAGAWA	1 Y	Jan, 2015
50Ω Termination	SK50	E00TRM50D	SK	1 Y	Jul, 2015
Coaxial Cable (C1)	3D-2W(5.0m)	MTS04CSR-1	Intertek	1 Y	Aug, 2015
Coaxial Cable (C2)	RG-5A/U(4.0m)	MTS04CSR-2	Intertek	1 Y	Aug, 2015
Coaxial Cable (C3)	RG214HF(1.5m)	MTS04CSR-3	SUHNER	1 Y	Aug, 2015
Coaxial Cable (C4)	RG214HF(1.5m)	MTS04CSR-4	SUHNER	1 Y	Aug, 2015
Coaxial Cable (C5)	RG214HF(1.5m)	MTS04CSR-5	SUHNER	1 Y	Aug, 2015
Radiated disturbance					
Broad Band Antenna	VULB9168	332	Schwarzbeck	1 Y	Nov, 2015
Amplifier	8447D	1937A02669	Hewlett Packard	1 Y	Aug, 2015
6dB Attenuator	6806.17AC	E04AT6RB	SUHNER	1 Y	Aug, 2015
Step Attenuator	8494B	1510A08521	Hewlett Packard	1 Y	Aug, 2015
Coaxial Cable (R1)	RG214HF(9.0m)	MTS04R3-1	SUHNER	1 Y	Aug, 2015
Coaxial Cable (R2)	8D-2W(15.0m)	MTS04R3-2	Intertek	1 Y	Aug, 2015
Coaxial Cable (R3)	RG214HF(2.0m)	MTS04R3-3	SUHNER	1 Y	Aug, 2015
Coaxial Cable (R4)	RG214HF(0.4m)	MTS04R3-4	SUHNER	1 Y	Aug, 2015
Coaxial Cable (R5)	RG214HF(0.4m)	MTS04R3-5	SUHNER	1 Y	Aug, 2015
Coaxial Cable (R6)	RG214HF(1.5m)	MTS04R3-6	SUHNER	1 Y	Aug, 2015
Coaxial Cable (R7)	RG214HF(1.5m)	MTS04R3-7	SUHNER	1 Y	Aug, 2015
Coaxial Cable (R8)	RG214HF(1.5m)	MTS04R3-8	SUHNER	1 Y	Aug, 2015
Coaxial Cable (R9)	RG214HF(6.0m)	MTS04R3-9	SUHNER	1 Y	Aug, 2015
Site Attenuation				1 Y	May, 2015
Common					
Test Receiver	ESS (Firmware Version 1.21)	842123/007	Rohde & Schwarz	1 Y	Mar, 2015
RF Switch(1)	MP59B	M21448	ANRITSU	1 Y	Aug, 2015
RF Switch(2)	ACX-150-1	E04301501	Intertek	1 Y	Aug, 2015
Testing Software	emiT (Version 3,0,0,0)	-	-	N/A	N/A

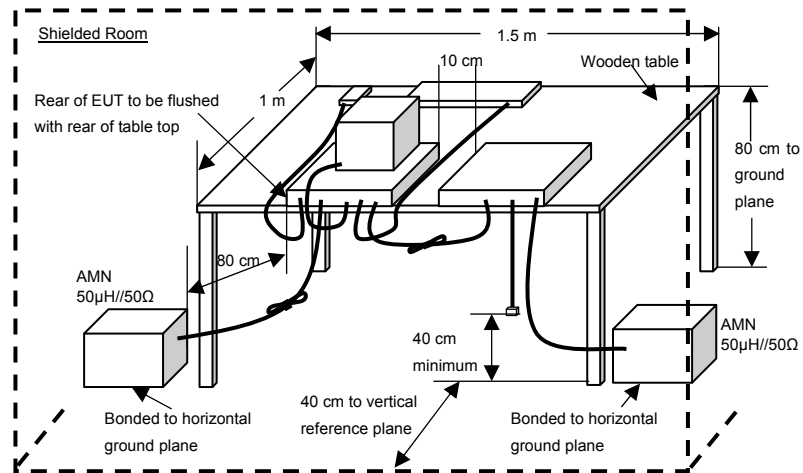
ANNEX

A. TEST PROCEDURE(S)

Test was carried out under the following conditions.

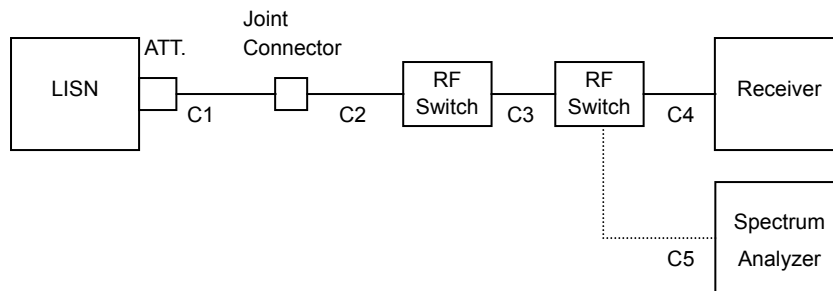
Conducted disturbance at mains terminals

Test setup as per standard



* Reference Ground plane : greater than 2 x 2m

Diagram of the measuring instruments



[Preliminary Measurement]

EUT is tested on all operating conditions.

The spectrum analyzer is controlled by the computer program to sweep the frequency range to be measured, then spectrum chart is plotted out to find the worst emission conditions in operating mode and/or configuration decision for the final test.

All leads other than safety ground are tested.

[Final Measurement]

The EUT is operated in the worst emission condition found by the preliminary test.

The equipment and cables are arranged or manipulated within the range of the test standard in the above condition.

At least six highest spectrum are measured in quasi-peak and average (if necessary) using the test receiver.

Radiated disturbance

Test setup as per standard

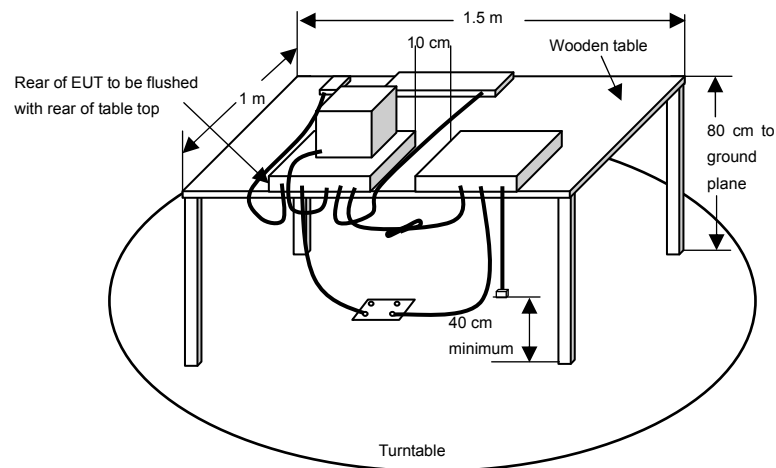
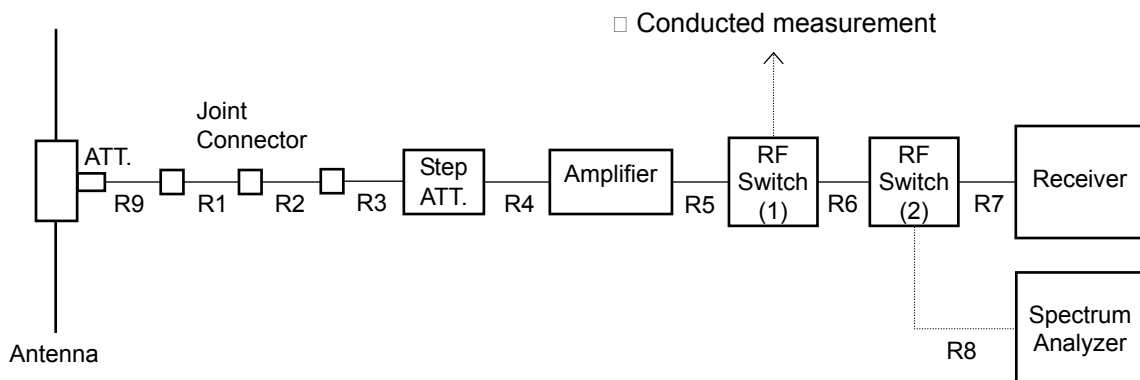


Diagram of the measuring instruments (30-1000MHz)



[Preliminary Measurement]

EUT is tested on all operating conditions.

The spectrum analyzer is set max-hold mode and swept during turntable was rotated 0 to 360 degree, And find the worst emission conditions in configuration, operating mode, or ambient noise notation.

[Final Measurement]

The EUT operated in the worst emission condition found by the preliminary test.

The turntable azimuth (EUT direction) and antenna height are adjusted the position so that maximum field strength is obtained for each frequency spectrum to be measured.

The equipment and cables are arranged or manipulated within the range of the test standard in the above condition. At least six highest spectrums are measured by the test receiver (quasi-peak) and spectrum analyzer (peak and average). When the uncertain result was obtained (30 – 1000 MHz), the measurement is retried by using the half wave dipole antenna instead of the broadband antenna.