Vehicle Certification Agency

THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

COMMUNICATION CONCERNING THE APPROVAL GRANTED (1)~~/ APPROVAL EXTENDED (1)/ APPROVAL REFUSED (1)/ APPROVAL WITHDRAWN (1)/ PRODUCTION DEFINITIVELY DISCONTINUED (1)~~ OF A TYPE OF ELECTRICAL/ ELECTRONIC SUB-ASSEMBLY (1) WITH REGARD TO REGULATION NO. 10.06

E11 Approval No: E11*10R06/01*11334*00

1. Make (trade name of manufacturer): KENWOOD

2. Type and general commercial description(s): DMX-2, Monitor with Receiver

3. Means of identification of type, if marked on the ~~vehicle/~~component~~/ separate technical unit: (1)~~
Not Applicable

3.1. Location of that marking: Not Applicable

4. Category of vehicle: Not Applicable

5. Name and address of manufacturer:
JVCKENWOOD Corporation
2967-3 Ishikawa-machi, Hachioji-shi Tokyo 192-8525 Japan

6. In the case of components and separate technical units, location and method of affixing of the approval mark: Location: On the product, Method: Adhesive Label

7. Address(es) of assembly plant(s):
Jl.Surya Lestari Kav. I-16B, Suryacipta City of Industry, Kutamekar, Ciampel, Karawang 41363, Jawa Barat Indonesia

8. Additional information (where applicable): See appendix below

JAW502866

UK Approval Authority | Vehicle Certification Agency
02-Dec-20

9. Technical Service responsible for carrying out the tests: UL Japan, Inc.

10. Date of test report: 27 November 2020

11. No. of test report: 13554201S

12. Remarks (if any): See appendix below

13. Place: BRISTOL

14. Date: 02 DECEMBER 2020

15. Signature: 

D LAWLOR
Chief Technical and Statutory Operations Officer

16. The index to the information package lodged with the Approval Authority, which may be obtained on request, is attached:

17. Reasons for extension: Not Applicable

Appendix
to type approval communication form No. E11*10R06/01*11334*00
concerning the type approval of an electrical/electronic sub-assembly under UN Regulation No. 10.06

1. Additional information:

1.1. Electrical system rated voltage: DC 12 V. ~~pos./~~neg ground (1)

1.2. This ESA can be used on any vehicle type with the following restrictions:

1.2.1. Installation conditions, if any: 10.5 V to 16 V
-10 °C to +60 °C

1.3. This ESA can be used only on the following vehicle types: Not Applicable

1.3.1. Installation conditions, if any: Not Applicable

1.4. The specific test method(s) used and the frequency ranges covered to determine immunity were: (Please specify precise method used from Annex 9): Not Applicable

1.5. Laboratory accredited to ISO 17025 and recognized by the Approval Authority responsible for carrying out the tests:
UL Japan, Inc., Shonan EMC Lab., Kanagawa, Japan

2. Remarks: None

(1) Strike out what does not apply

Vehicle Certification Agency

THE UNITED KINGDOM VEHICLE APPROVAL AUTHORITY

APPROVAL NUMBER: E11*10R06/01*11334*00

INFORMATION PACKAGE CONTENTS

INDEX REVISION NUMBER: Not applicable

Conformity of Production (COP) Declaration	**COP Confirmed**	
Assessment Method	**ISO/TS Cert and Control Plans**	
Date of Initial Clearance		**Pre 2013**
Date of Last Clearance	**April**	**2018**

Total number of sheets: 09 (Nine)

Reasons for Revision: Not applicable ~~/ See manufacturer's documentation / See approval certificate~~

Revision Date
&
Office Stamp

UK Approval Authority | Vehicle Certification Agency
02-Dec-20

Information document

Relating to ECE type-approval of an electronic sub-assembly
with respect to electromagnetic compatibility

UN/ECE Regulation 10.06 Supplement 01

TYPE: DMX-2

CONTENTS LIST

GENERAL

1. Make (trade name of manufacturer): KENWOOD

2. Type and general commercial description(s): DMX-2, Monitor with Receiver

3. Means of identification of type, if marked on the component~~/separate technical unit~~:
Not Applicable

3.1. Location of that marking: Not Applicable

4. Name and address of manufacturer:
JVCKENWOOD Corporation
2967-3 Ishikawa-machi, Hachioji-shi Tokyo 192-8525 Japan
Name and address of authorised representative, if any: Not applicable

5. In the case of components and separate technical units, location and method of affixing of the EC approval mark: Location: On the product
Method: Adhesive Label
See Attachment 1

6. Address(es) of assembly plant(s):
Jl.Surya Lestari Kav. I-16B, Suryacipta City of Industry, Kutamekar, Ciampel, Karawang 41363, Jawa Barat Indonesia

7. This ESA shall be approved as a component~~/STU~~ (1)

8. Any restrictions of use and conditions for fitting: DC 10.5 V to 16 V
-10 °C to +60 °C

9. Electrical system rated voltage: DC 12 V, ~~positive/~~negative (1) ground

10. Charger: Not applicable

11. Charging current: Not applicable

12. Maximal nominal current: Not applicable

13. Nominal charging voltage: Not applicable

14. Basic ESA interface functions: Not applicable

15. Minimum R_{sce} value: Not applicable

Date: 27 November 2020

Appendix 1 [1/2]

Description of the ESA chosen to represent the type (electronic block diagram and list of main components constituting the ESA (e.g. make and type of microprocessor, crystal, etc.)).

Brief description of ESA: Monitor with Receiver

Block Diagram

Please see Documentation 1.

Specification

Size (W x H x D): 178 mm x 100 mm x 155 mm
Weight: 1.7 kg
Function: Monitor / USB / HDMI / Bluetooth / Wi-Fi / AM / FM / DAB
Picture Size: 156.6 mm (W) x 81.6 mm (H) (6.95 inches)
USB: USB2.0 High speed
HDMI: VGA, 480 p, 720 60 Hz
Bluetooth: Bluetooth 5.0, Power class 2
Wi-Fi: 802.11 a/b/g/n/ac 2.4/5 GHz Dual Band
DAB Tuner: Frequency range: Band 3 174.928 MHz - 239.200 MHz
FM Tuner: Frequency Range 87.5 MHz -108.0 MHz
AM Tuner: Frequency Range LW 153 kHz - 279 kHz, MW 531 kHz - 1611 kHz
Audio: Typical (full bandwidth 1 %THD) 22 W x 4 ch

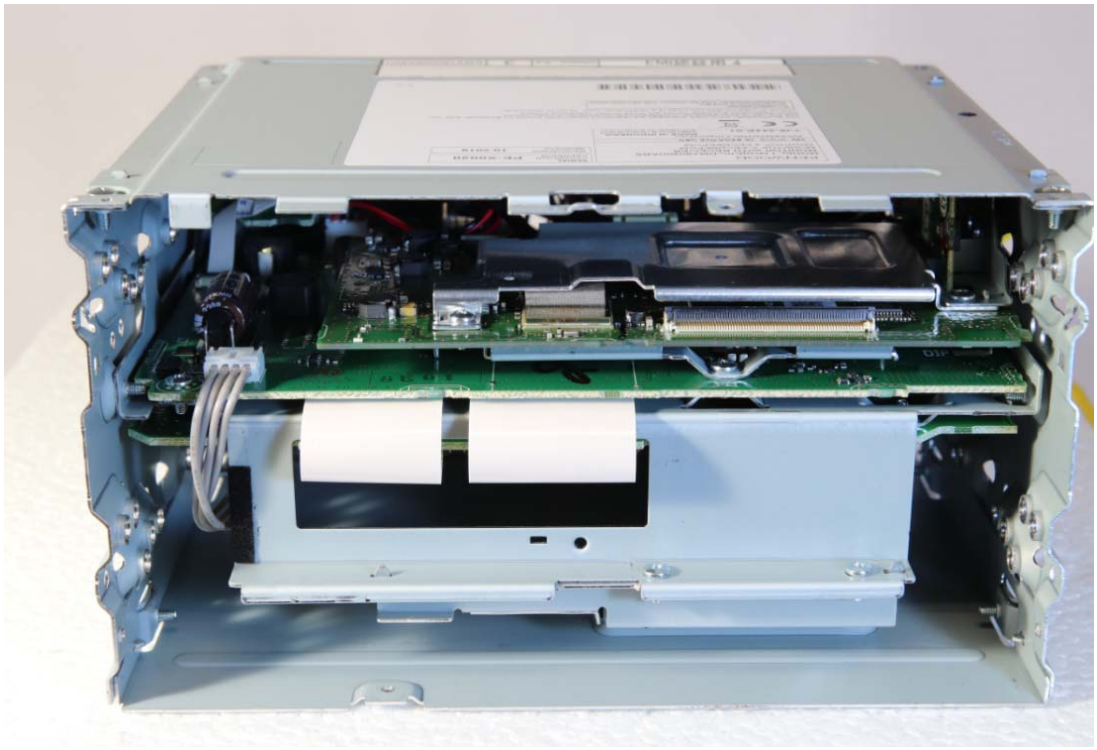
Component List

Please see Documentation 2.

Date: 27 November 2020

Appendix 1 [2/2]

Inside of Product

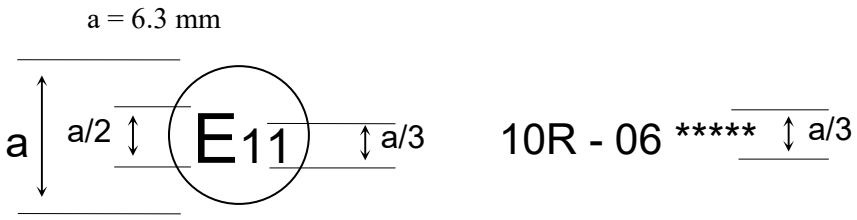


Date: 27 November 2020

Attachment 1 [1/1]

Approval Mark Location

Size of Approval Mark



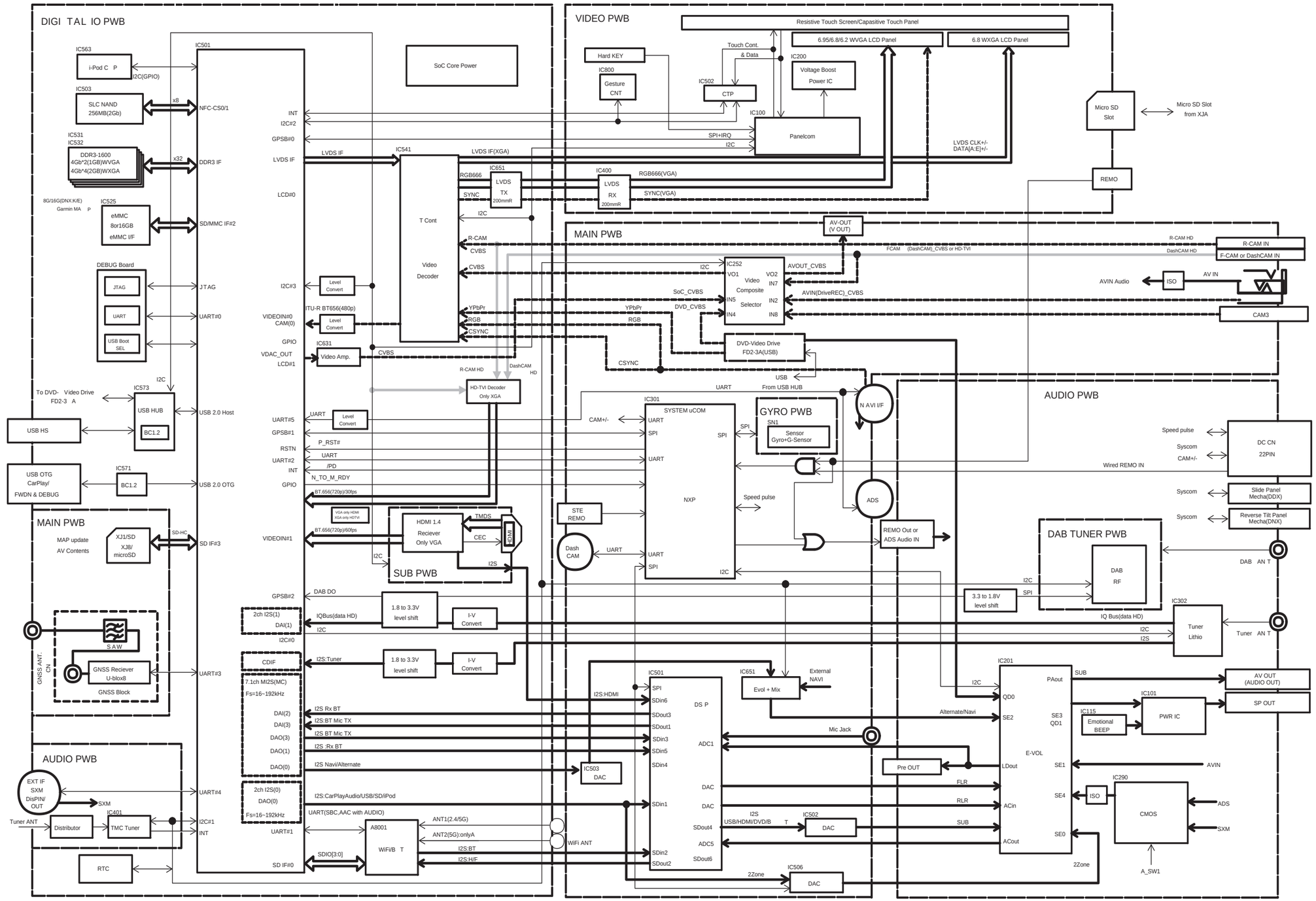
Date: 27 November 2020

Appendix 2

Relevant test report(s) supplied by the manufacturer from a test laboratory accredited to ISO 17025 and recognised by the Approval Authority for the purpose of drawing up the type-approval certificate.

Test Report No. 13554201S

BLOCK DIAGRAM· DMX8020DABS



DMX8020DABS

CPU & Clock

Unit	REF No	Frequency	Parts Name	Part Number	Remark
Audio	X301	9.216MHz	Crystal Oscillator	AA0928000	RF Processor
DAB	X1001	19.2MHz	Crystal Oscillator	DSX321G	RF tuner clock
Main	X301	16MHz	Crystal Oscillator	EXS00A-CG02359	Microproccessor
Main	X501	12.288M	Crystal Oscillator	EXS00A-CG03558	DSP
Main	X801	26.00MHz	TCXO	NT2016SA	GPS
Main	X802	32.768kHz	Crystal Oscillator	X1A000091001200/FC-13A	GPS
SoC	X5001	24.00MHz	Crystal Oscillator	EXS00A-CG0315	Mediaproccessor
SoC	X5401	32.00MHz	Crystal Oscillator	EXS00A-CG0451	Display Controller
SoC	X5701	26.00MHz	Crystal Oscillator	X1E000341011700	USB HUB
SoC	IC502	32.768KHz	Crystal Oscillator	RA8900CEUB-L3	RTC
SoC	-	37.4MHz	Crystal Oscillator	-	WiFi/BT CombModule
SoC	X8001	32.768KHz	TCXO	NZ2520SG-32.768KHz-NSA3565A	WiFi/BT CombModule
SoC	IC501	768MHz	MPU IC	TCC8974F-0AX1	Core clock
SoC		240MHz			USB clock
SoC		50MHz or 25MHz			SD clock
SoC		12.288MHz			Digital audio clock
SoC		400kHz			I2C
SoC		100kHz			I2C
SoC	IC531	933MHz	DRAM IC	H5TQ4G63EFRRDI or K4B4G1646DBFA	IC501 DDR
SoC	IC532	933MHz	DRAM IC	H5TQ4G63EFRRDI or K4B4G1646DBFA	IC501 DDR
SoC	IC525	50MHz	ROM IC	SDINBDG4-8G-A	IC501 eMMC
SoC	IC541	34.909MHz	MOS IC	ML86251LAZ07FL	Display output clock
SoC		72.25MHz			HDMI clock
HDMI/MHL	X700	27.00MHz	Crystal Oscillator	CX3225GA	HDMI Receiver

Capacitor & Regulator IC

Unit	REF number	Child part number	Child part number name
AUDIO	C1	CD04AZ1C332M2	E CAPACITOR
AUDIO	IC41	XC6223B331P-G	ANALOG-IC
AUDIO	IC301	XC6223B331P-G	ANALOG-IC
AUDIO	IC351	MM3411A18NE	ANALOG IC
DAB	IC1002	MM3411A33NRE	ANALOG IC
MAIN	IC1	NJU7108F3(TE1)	MOS-IC
MAIN	IC31	MP9943AGQ-Z	ANALOG-IC
MAIN	IC71	MM3411A33NE	ANALOG-IC
MAIN	IC72	XC6223B331P-G	ANALOG-IC
MAIN	IC91	MP9942AGJ-Z	ANALOG-IC
MAIN	IC131	MP9942AGJ-Z	ANALOG-IC
MAIN	IC231	XC6209B502P-G	MOS-IC
MAIN	IC302	XC6120N282N-G	MOS IC
MAIN	IC507	XC6209B502P-G	MOS-IC
MAIN	IC508	MM3411A33NE	ANALOG-IC
MAIN	IC602	NJM2871BF05(TE1)	ANALOG-IC
MAIN	IC803	BU33SD5WG	MOS-IC
MAIN	IC804	MM3411A18NE	ANALOG-IC
SoC	IC591	MP9943AGQ-Z	ANALOG-IC
SoC	IC592	MP9943AGQ-Z	ANALOG-IC
SoC	IC593	XC6223B331P-G	ANALOG IC
SoC	IC595	XC6223D181P-G	ANALOG-IC
SoC	IC596	BD00IC0EEFJ-ME2	ANALOG-IC
SoC	IC597	XC6223B151P-G	ANALOG IC
SoC	IC601	MP9943AGQ-Z	ANALOG-IC
SoC	IC602	MP9942AGJ-Z	ANALOG-IC
SoC	IC801	RP108J081B-T1-AE	MOS-IC
SoC	IC802	MM3411A18NRE	ANALOG IC

EMC TEST REPORT

VCA Job No. : JAW502866
Test Report No. : 13554201S

Applicant : **JVCKENWOOD Corporation**

Type of DUT : **Monitor with Receiver**

Model Number of DUT : **DMX8020DABS**

Test standard : **UN Regulation No.10 - Rev.6 Supplement 1 (Amend. 1)**

Test Result : **Complied (Refer to Section 4.2)**

1. This test report shall not be reproduced in full or partial, without the written approval of UL Japan, Inc.
2. The results in this report apply only to the sample tested.
3. This sample tested is in compliance with the limits of the above standard.
4. The test results in this test report are traceable to the national or international standards.
5. The all test items in this test report are conducted by UL Japan, Inc. Shonan EMC Lab.
6. The information provided from the customer for this report is identified in Section 1.

Date of test: October 20 to 23, 2020

Representative test engineer:
Yusuke Ohnuma
Engineer of
Consumer Technology Division

Approved by :
Takashi Nakazawa
Leader of
Consumer Technology Division

Vehicle Certification Agency

This laboratory is registered by the **Vehicle Certification Agency** (**VCA**).
This tests reports herein have been performed in accordance with its terms of registration.

REVISION HISTORY

Original Test Report No.: 13554201S

Revision	Test report No.	Date	Page revised	Contents
- (Original)	13554201S	November 27, 2020	-	-

Reference: Abbreviations (Including words undescribed in this report)

AC	Alternating Current
ALSE	Absorber-Lined Shielded Enclosure
AM	Amplitude Modulation
Amend.	Amendment
AN	Artificial Network
Ant, ANT	Antenna
AV	Average
BB	Broad Band
BCI	Bulk Current Injection
BW	BandWidth
CAN	Controller Area Network
Cal Int	Calibration Interval
CISPR	Comite International Special des Perturbations Radioelectriques
Corr.	Correction
DC	Direct Current
deg.C	degree Celsius
div	division
DUT	Device Under Test
ECE	Economic Commission for Europe
EMC	ElectroMagnetic Compatibility
EMI	ElectroMagnetic Interference
EMS	ElectroMagnetic Susceptibility
EN	European Norm
ESA	Electrical/electronic sub-assembly
ESD	Electrostatic discharge
EU	European Union
EUT	Equipment Under Test
Freq.	Frequency
FWD	Forward
h	Hour
Hor	Horizontal
ILAC	International Laboratory Accreditation Conference
ISO	International Organization for Standardization
JAB	Japan Accreditation Board
LAN	Local Area Network
LIMS	Laboratory Information Management System
LISN	Line Impedance Stabilization Network
Log	Logarithm
Max,max	Maximum
Min,min	Minimum
MRA	Mutual Recognition Arrangement
N/A	Not Applicable
NB	NarrowBand
PK	Peak
PM	Pulse Modulation
Pol., Pola.	Polarization
QP	Quasi-Peak
RBW	Resolution Band Width
Rev.	Revision
REV	Reverse
Rs	Shunt Resistor
RH	Relative Humidity
S	Switch
Temp	Temperature
Tek	Tektronix, Inc.
TEM	Transverse Electromagnetic
TR	Technical Report
U_A	Supply voltage
UN	United Nations
U_{S1}	Transient with negative pulses
U_S	Peak voltage
U_{S2}	Transient with positive pulses
VBW	Video BandWidth
VCA	Vehicle Certification Agency
Ver	Vertical
WLAN	Wireless LAN

CONTENTS **PAGE**

UL Japan, Inc.
Shonan EMC Lab.
1-22-3 Megumigaoka, Hiratsuka-shi, Kanagawa-ken, 259-1220 JAPAN
Telephone : +81 463 50 6400
Facsimile : +81 463 50 6401

SECTION 1: CUSTOMER INFORMATION

Company Name	:	JVCKENWOOD Corporation
Address	:	2967-3 Ishikawa-machi, Hachioji-shi, Tokyo, 192-8525 Japan
Telephone Number	:	+81-42-646-5525
Facsimile Number	:	+81-42-646-1440
Contact Person	:	Hitoshi Aiso

The information provided from the customer is as follows:
- Applicant, Type of Equipment, Model No. on the cover page and other relevant pages
- Operating/Test Mode(s) (Mode(s)) on all the relevant pages
- SECTION 1: CUSTOMER INFORMATION
- SECTION 2: DEVICE UNDER TEST (DUT), other than Receipt Date
- SECTION 3: OPERATION OF DUT DURING TESTING

* The laboratory is exempted from liability of any test results affected from the information in SECTION 2 and 3.

SECTION 2: DEVICE UNDER TEST (DUT)

2.1 Identification of DUT

Type of DUT	:	Monitor with Receiver
Model Number	:	DMX8020DABS
Rating	:	DC 12 V
Receipt Date	:	October 22, 2020
Condition	:	Production prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Modification	:	No Modification by the test lab.

2.2 Product Description

JVCKENWOOD Corporation., DMX8020DABS is the Monitor with Receiver.

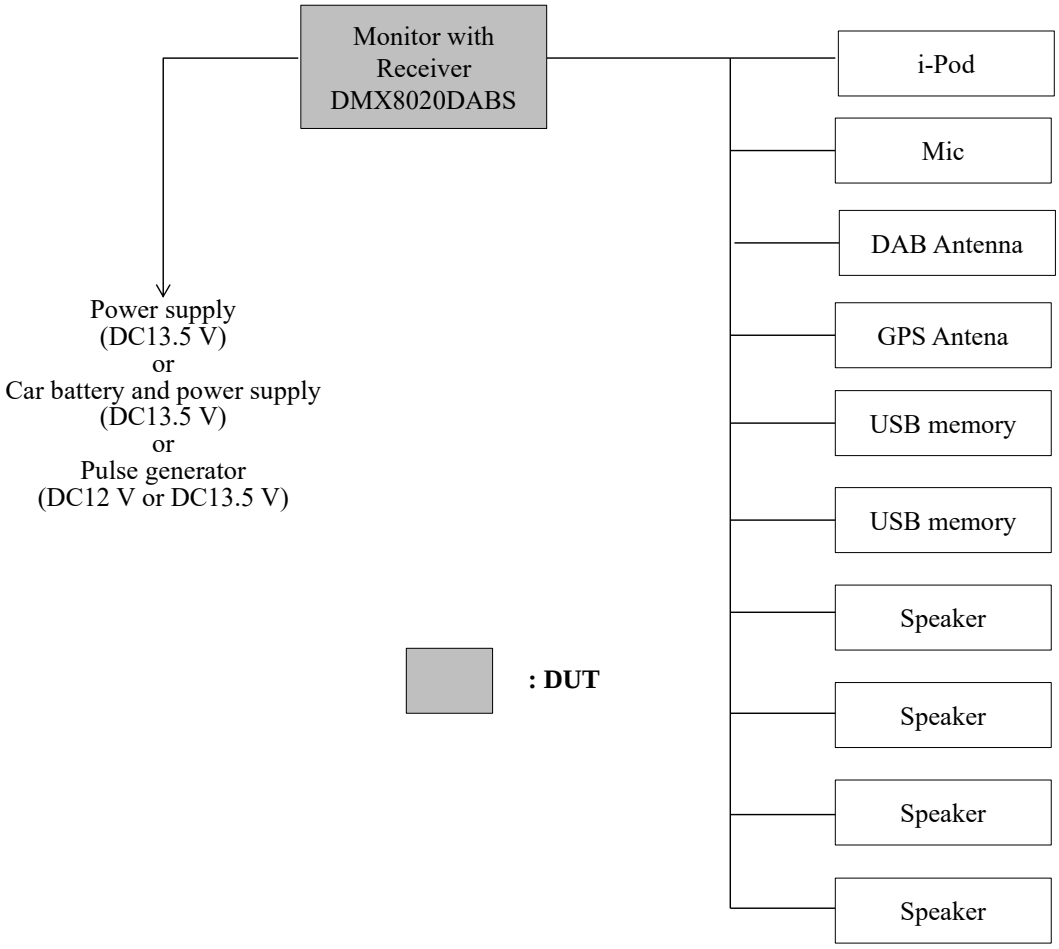
SECTION 3: OPERATION OF DUT DURING TESTING

3.1 Operating Mode

The mode(s) :

1. FM Receiving with GPS Receiving
2. AM Receiving with GPS Receiving
3. DAB Receiving with GPS Receiving
4. USB play with GPS Receiving
5. HDMI with GPS Receiving
6. AV INPUT with GPS Receiving
7. WLAN Communication with GPS Receiving
8. Bluetooth Communication with GPS Receiving

3.2 Configuration for Testing



3.3 Worst Case Record

Please refer to worst case record document No. ULJ2020-10-08.

SECTION 4: TEST SPECIFICATION, METHODS & RESULTS

4.1 Test Specification

EMC : UN Regulation No.10 - Rev.6 Supplement 1 (Amend. 1)
Title : Uniform Provisions concerning the approval of vehicles with regard to electromagnetic compatibility

4.2 Methods & Results

Emission

No.	Test Item	Test requirement	Test Methods	Results	Remarks
1	UN Regulation No.10 - Rev.6 Paragraph 6.5: Specifications concerning broadband electromagnetic interference generated by ESAs Paragraph 6.6: Specifications concerning narrowband electromagnetic interference generated by ESAs	Applicable	UN Regulation No.10 - Rev.6 Annex 7, 8 CISPR 25:2002 and 2004 (corr.) Clause 6.4 (ALSE method)	Complied a)	N/A
2	UN Regulation No.10 - Rev.6 Paragraph 6.7: Specifications concerning the emission of Transient conducted disturbances generated by ESAs on 12/24 V supply lines	Applicable	UN Regulation No.10 - Rev.6 Annex 10 ISO 7637-2: 2004 Clause 4.3	Complied b)	N/A
-					

a) Refer to APPENDIX 2
b) Refer to SECTION 6

Immunity

No.	Test Item	Test requirement	Test Methods	Results	Remarks
1	UN Regulation No.10 - Rev.6 Paragraph 6.8: Specifications concerning the Immunity of ESAs to electromagnetic radiation	Not Applicable	UN Regulation No.10 - Rev.6 Annex 9 Paragraph 4.2 (TEM cell testing) ISO 11452-3: 2016	N/A	*1)
2	UN Regulation No.10 - Rev.6 Paragraph 6.8: Specifications concerning the Immunity of ESAs to electromagnetic radiation	Not Applicable	UN Regulation No.10 - Rev.6 Annex 9 Paragraph 4.3 (Bulk current injection testing) ISO 11452-4: 2011	N/A	*1)
3	UN Regulation No.10 - Rev.6 Paragraph 6.8: Specifications concerning the Immunity of ESAs to electromagnetic radiation	Not Applicable	UN Regulation No.10 - Rev.6 Annex 9 Paragraph 4.1 (Absorber chamber test) ISO 11452-2: 2004	N/A	*1)
4	UN Regulation No.10 - Rev.6 Paragraph 6.9: Specifications concerning the immunity of ESAs to transient disturbances conducted along 12/24 V supply lines	Applicable	UN Regulation No.10 - Rev.6 Annex 10 ISO7637-2: 2004 Clause 4.4	Complied a)	N/A
UL Japan, Inc. hereby confirms that D.U.T. , in the configuration tested, complies with the specifications UN Regulation No.10 - Rev.6 *1) This test is not applicable because DUT don't have immunity related function.					

a) Refer to SECTION 7

4.3 Addition to standard

No addition, exclusion nor deviation has been made from the standard.

4.4 Test Equipment Used

See APPENDIX 3.

4.5 Test Location

UL Japan, Inc. Shonan EMC Lab.
1-22-3, Megumigaoka, Hiratsuka-shi, Kanagawa-ken 259-1220 JAPAN
Telephone: +81 463 50 6400, Facsimile: +81 463 50 6401
JAB Accreditation No. RTL02610

Test site	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Maximum measurement distance
No.1 Semi-anechoic chamber	2973D-1	20.6 x 11.3 x 7.65	20.6 x 11.3	10 m
No.2 Semi-anechoic chamber	2973D-2	20.6 x 11.3 x 7.65	20.6 x 11.3	10 m
No.3 Semi-anechoic chamber	2973D-3	12.7 x 7.7 x 5.35	12.7 x 7.7	5 m
No.4 Semi-anechoic chamber	-	8.1 x 5.1 x 3.55	8.1 x 5.1	-
No.1 Shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
No.2 Shielded room	-	6.8 x 4.1 x 2.7	6.8 x 4.1	-
No.3 Shielded room	-	6.3 x 4.7 x 2.7	6.3 x 4.7	-
No.4 Shielded room	-	4.4 x 4.7 x 2.7	4.4 x 4.7	-
No.5 Shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
No.6 Shielded room	-	7.8 x 6.4 x 2.7	7.8 x 6.4	-
No.8 shielded room	-	3.45 x 5.5 x 2.4	3.45 x 5.5	-
No.1 Measurement room	-	2.55 x 4.1 x 2.5	-	-

4.6 Test Configuration Photographs

See APPENDIX 1.

4.7 Data of Radiated Emission Test(s)

See APPENDIX 2.

SECTION 5: RADIATED EMISSION (UN Regulation No.10 - Rev.6 Annex 7&8)

5.1 Operating Environment

Test place	:	Shonan EMC Lab. No.4 semi anechoic chamber
Date	:	See APPENDIX 2
Temperature	:	See APPENDIX 2
Humidity	:	See APPENDIX 2
Engineer	:	See APPENDIX 2
Operating Mode	:	See SECTION 3.1

5.2 Test Configuration

A drawing of the test set-up is shown in Figure 1. This is not the actual test setup. For the actual one, refer to APPENDIX 1.

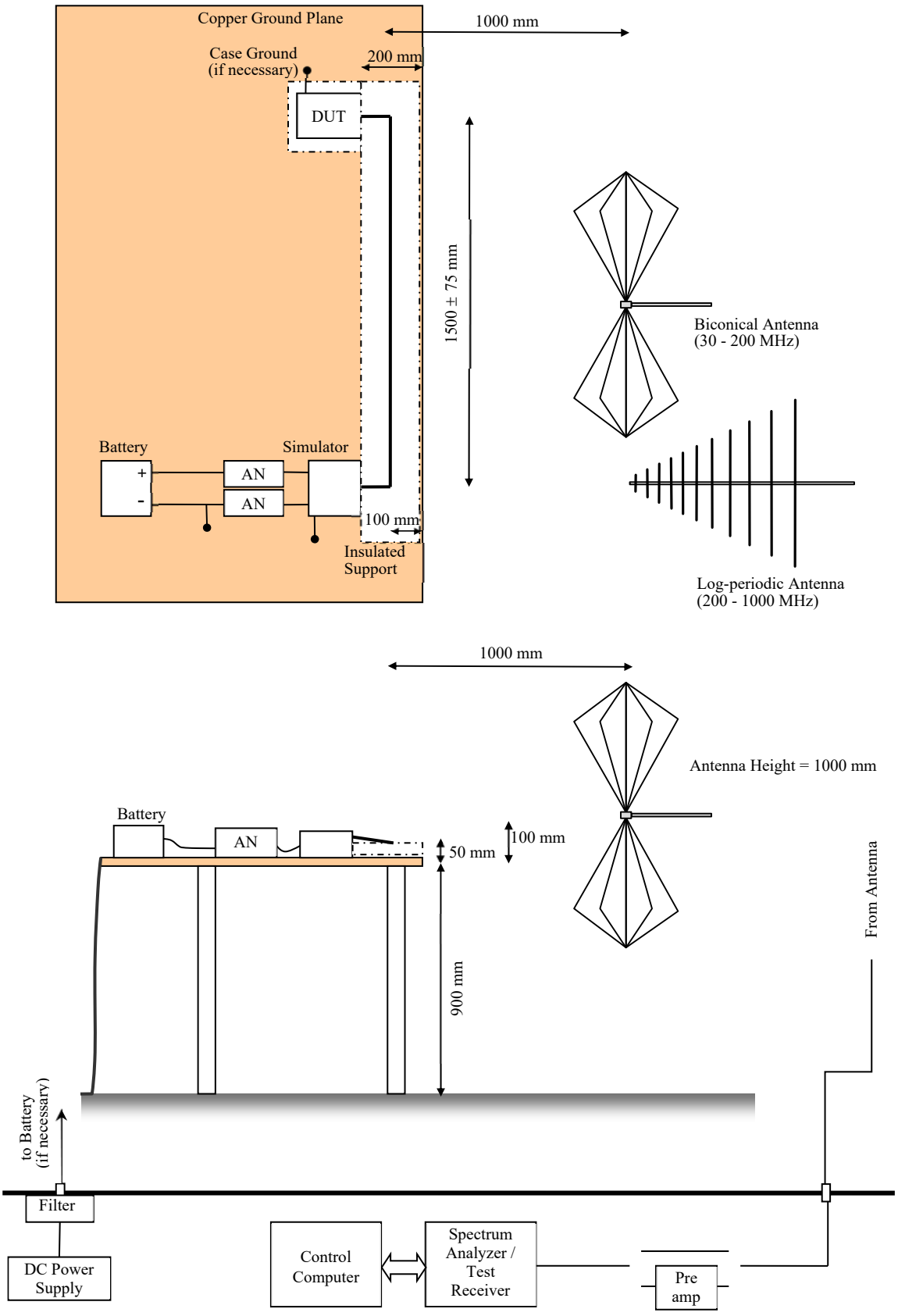


Figure 1

5.3 Test Procedure

It was measured based on "ALSE method" described in Clause 6.4. of "CISPR 25: 2002".
The DUT was in the operation condition specified, in maximum load. The measurements were performed with the Spectrum Analyzer or the Test Receiver. Using the Spectrum Analyzer or the Test Receiver, overview sweeps with peak detection were performed at "intervals of 14 frequency bands" specified in "CISPR 12" throughout the frequency range. If required, the measurements are performed with detector function (see SECTION 5.4) by using the Test Receiver to determine whether measured emissions are narrowband or broadband to apply limits properly. Factor of antennas, attenuator, cables and pre-amplifier were set in the Spectrum Analyzer or in the Test Receiver prior to test.

5.4 Test Conditions

Frequency range	:	30 MHz - 1000 MHz	
Antenna	:	Biconical Antenna	(30 MHz - 200 MHz)
	:	Logperiodic Antenna	(200 MHz - 1000 MHz)
Polarization	:	Horizontal and Vertical	
[Overview Sweeps]			
Used Measurement	:	Test Receiver	
Detector	:	Peak / Average	
[Final Reading]			
Used Measurement	:	Test Receiver	
Detector	:	Peak / Quasi-Peak / Average	

Spectrum Analyzer Setting (if used)

Bandwidth	:	RBW 100 kHz / VBW 300 kHz
Maximum scan rate	:	1 ms / MHz

Test Receiver Setting (if used)

Detector	:	Peak / Average	Quasi-Peak
Bandwidth	:	BW 120 kHz	BW 120 kHz
Dwell time	:	5 ms	1 s
Step size	:	50 kHz	50 kHz

5.5 Results

Summary of the test results: Pass
*The test result is rounded off to one or two decimal places, so some differences might be observed.

Sample Calculation
Result = Reading + Ant Factor + Loss (Cable + Attenuator [if used]) - Gain(Amplifier)

SECTION 6: ELECTRICAL TRANSIENT EMISSION (ISO7637-2)

6.1 Operating Environment

Test place	:	Shonan EMC Lab. No.4 Semi-anechoic chamber
Date	:	October 21, 2020
Temperature	:	24 deg. C
Humidity	:	36 % RH
Atmosphere	:	1014 hPa
Engineer	:	Yusuke Ohnuma
Operating Mode	:	See SECTION 3.1

6.2 Test Configuration

A drawing of the test set-up is shown in Figure 2. This is not the actual test setup.
For the actual one, refer to APPENDIX 1.

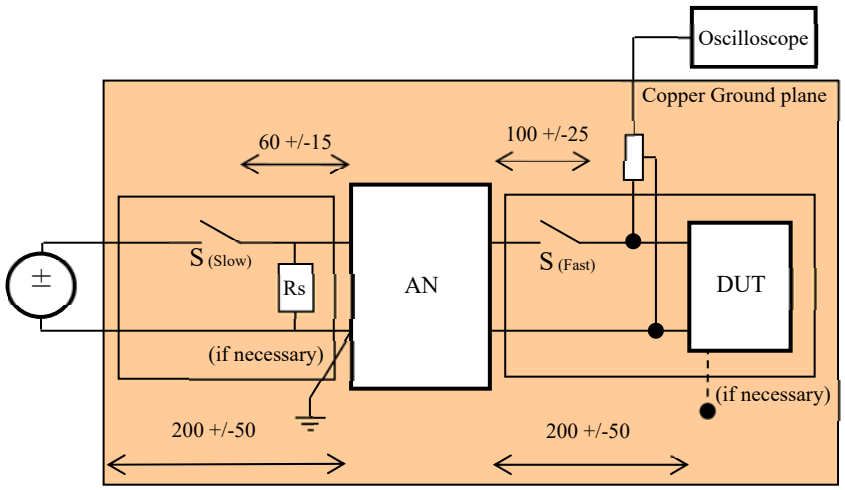


Figure 2

6.3 Test Procedure

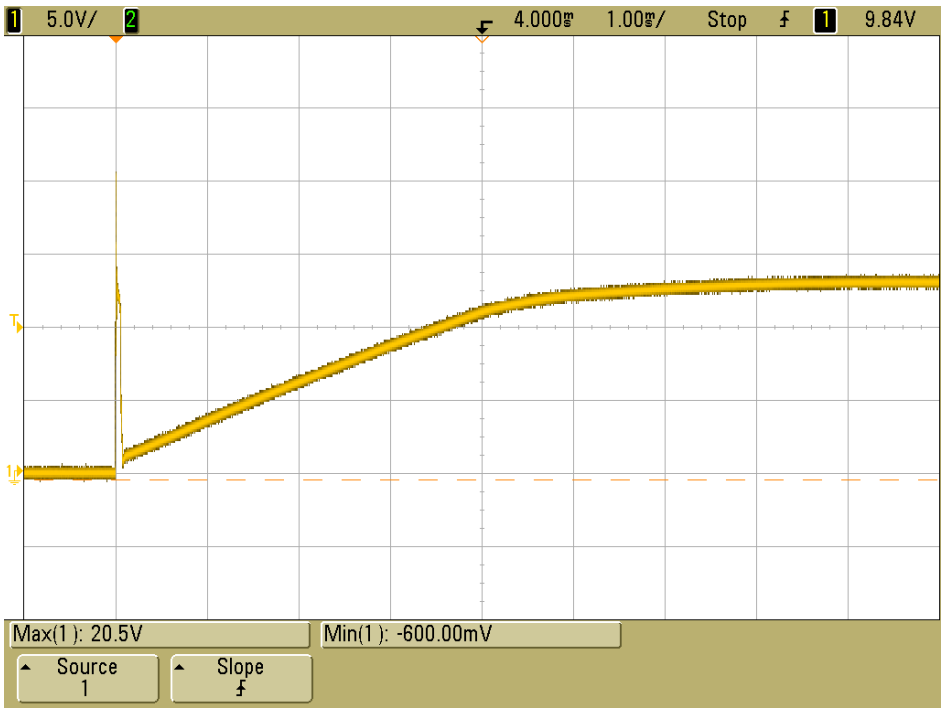
It was measured based on "Voltage transient emissions test" described in Clause 4.3. of "ISO 7637-2: 2004".
The DUT was in the operation condition specified, in maximum load. The measurements were performed with a voltage probe and an oscilloscope. Using the voltage probe and the oscilloscope, the disturbance voltage for conducted emissions of transients along the battery-fed or switched supply lines of DUT was measured with switch closed and opened. The test was performed 10 times at each mode, and the waveform with the largest amplitude noise level was used as the final test result.

6.4 Results

Summary of the test results: Pass

Sample Calculation (U_{S1}) = Min value – U_A
(U_{S2}) = Max value – U_A

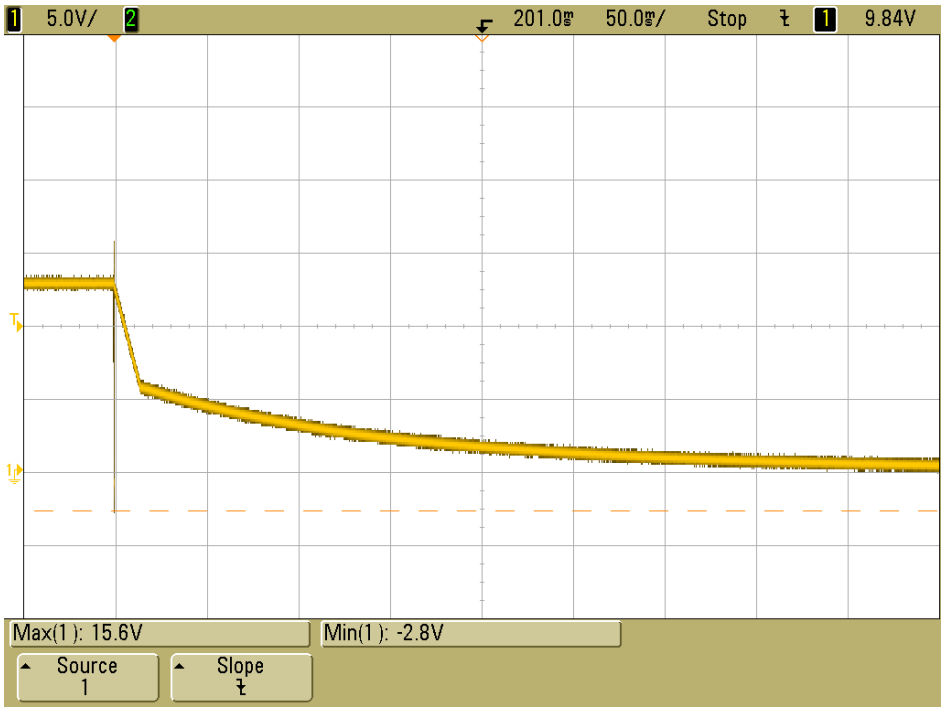
[Slow Pulse]
Switch ON



U_A: 13.5 V

Peak amplitude(Us2)	7.0 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-14.1 V	Maximum allowed pulse amplitude: -100 V

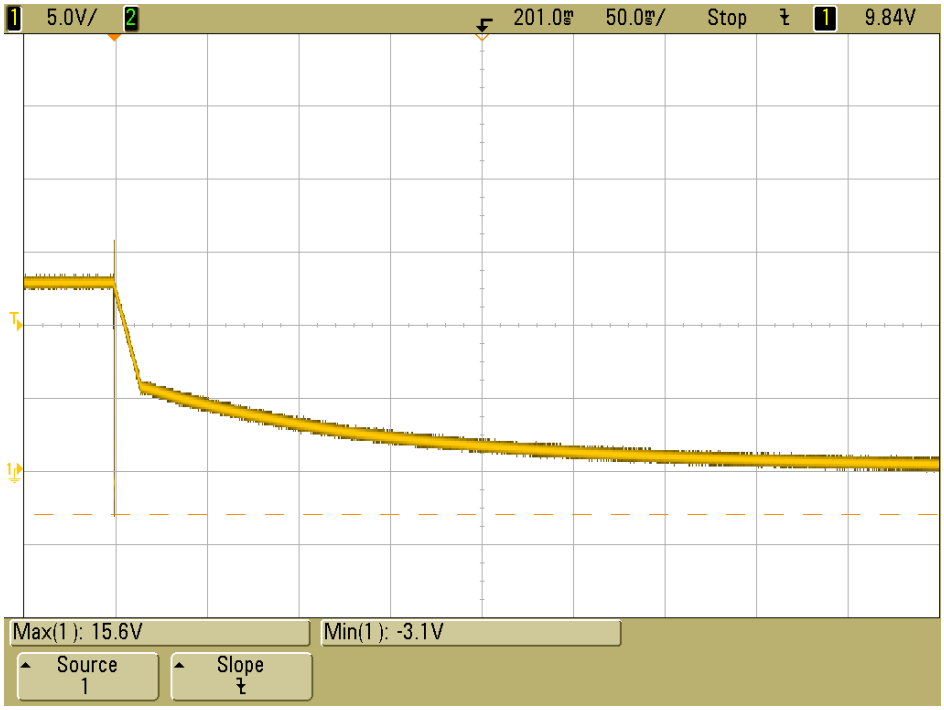
[Slow Pulse] Operating Mode : FM Receiving with GPS Receiving
Switch OFF



U_A: 13.5 V

Peak amplitude(Us2)	2.1 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-16.3 V	Maximum allowed pulse amplitude: -100 V

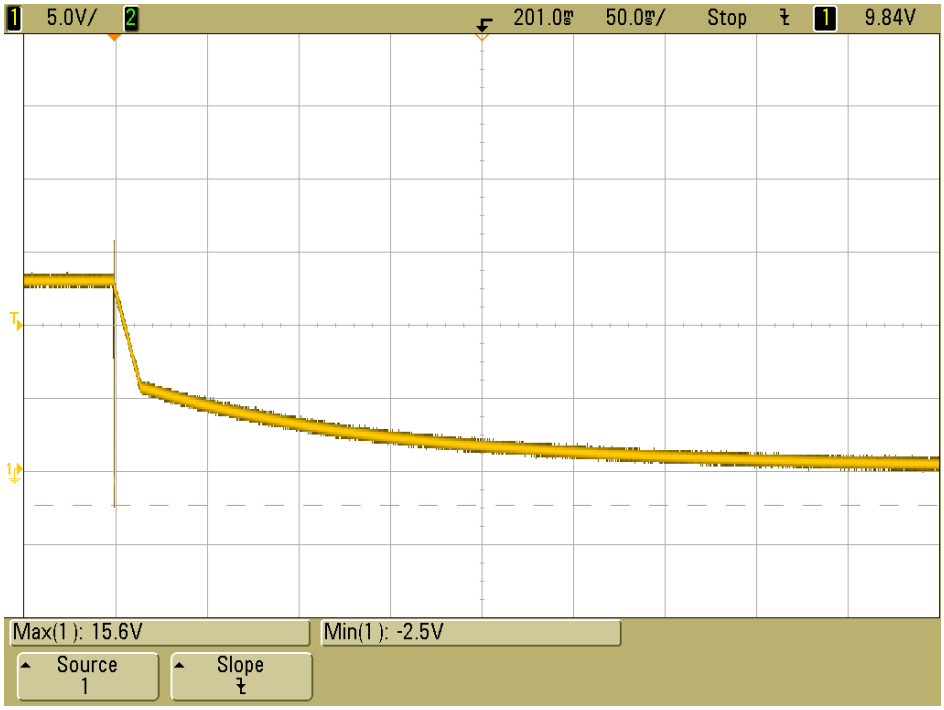
[Slow Pulse] Operating Mode : AM Receiving with GPS Receiving
Switch OFF



U_A: 13.5 V

Peak amplitude(Us2)	2.1 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-16.6 V	Maximum allowed pulse amplitude: -100 V

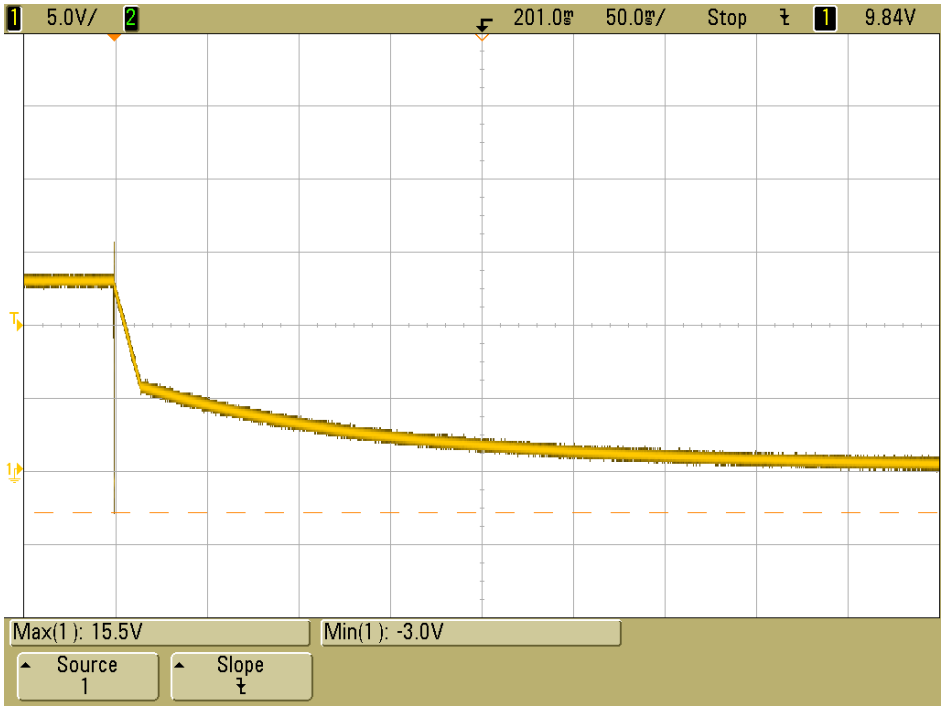
[Slow Pulse] Operating Mode : DAB Receiving with GPS Receiving
Switch OFF



U_A: 13.5 V

Peak amplitude(Us2)	2.1 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-16.0 V	Maximum allowed pulse amplitude: -100 V

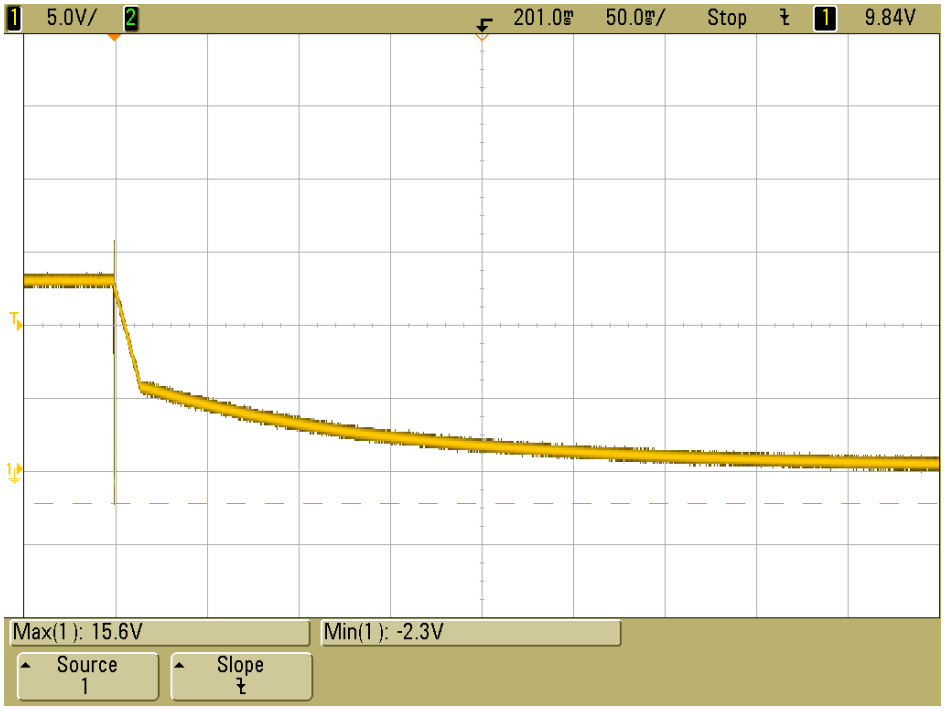
[Slow Pulse] Operating Mode : USB play with GPS Receiving
Switch OFF



U_A: 13.5 V

Peak amplitude(Us2)	2.0 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-16.5 V	Maximum allowed pulse amplitude: -100 V

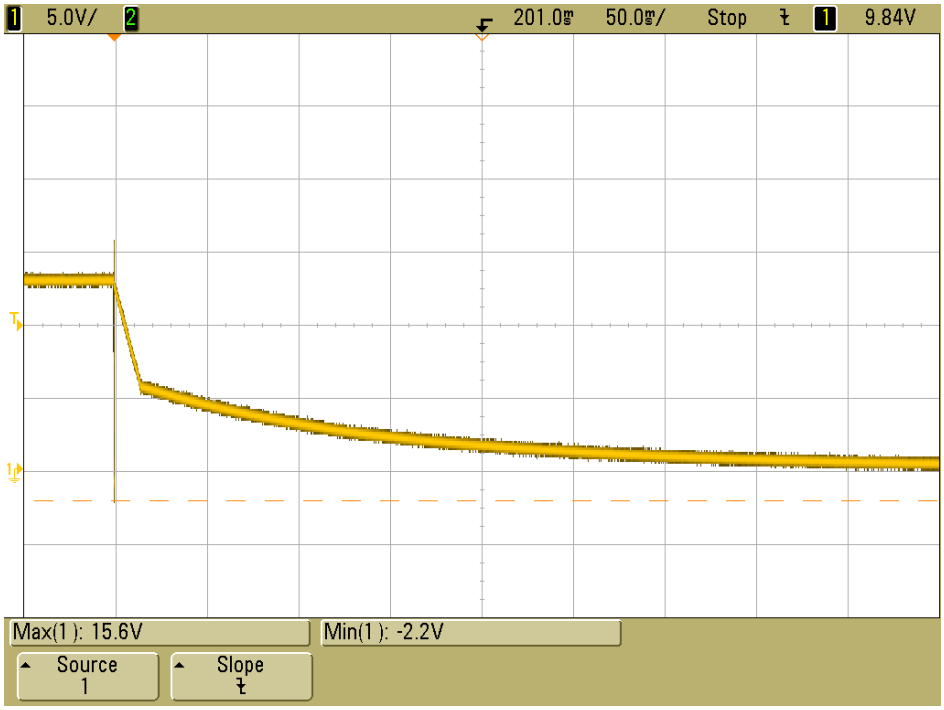
[Slow Pulse] Operating Mode : HDMI with GPS Receiving
Switch OFF



U_A: 13.5 V

Peak amplitude(Us2)	2.1 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-15.8 V	Maximum allowed pulse amplitude: -100 V

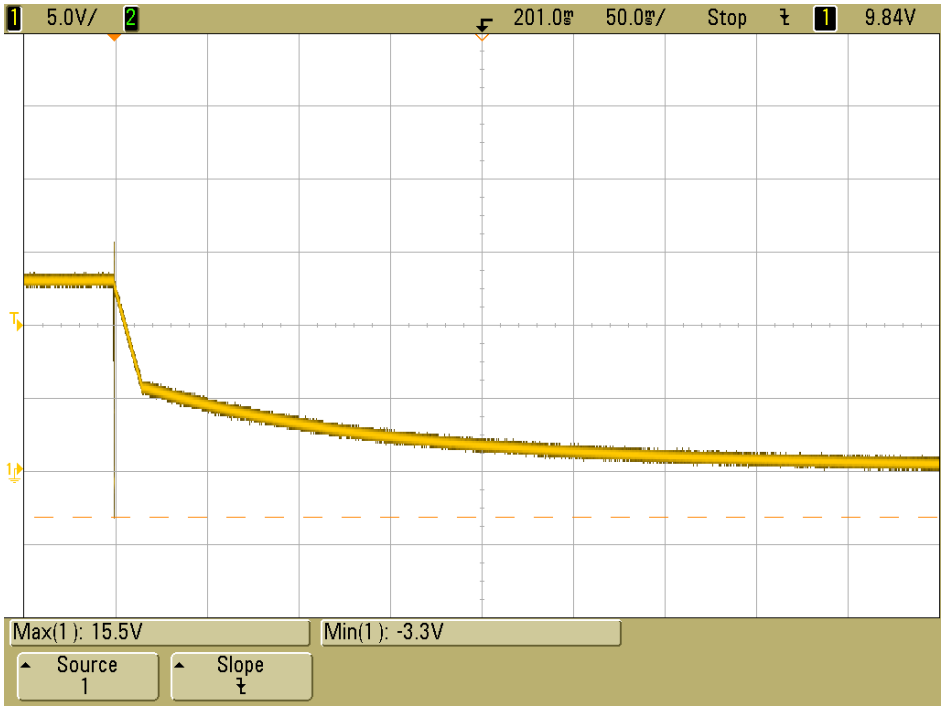
[Slow Pulse] Operating Mode : AV INPUT with GPS Receiving
Switch OFF



U_A: 13.5 V

Peak amplitude(Us2)	2.1 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-15.7 V	Maximum allowed pulse amplitude: -100 V

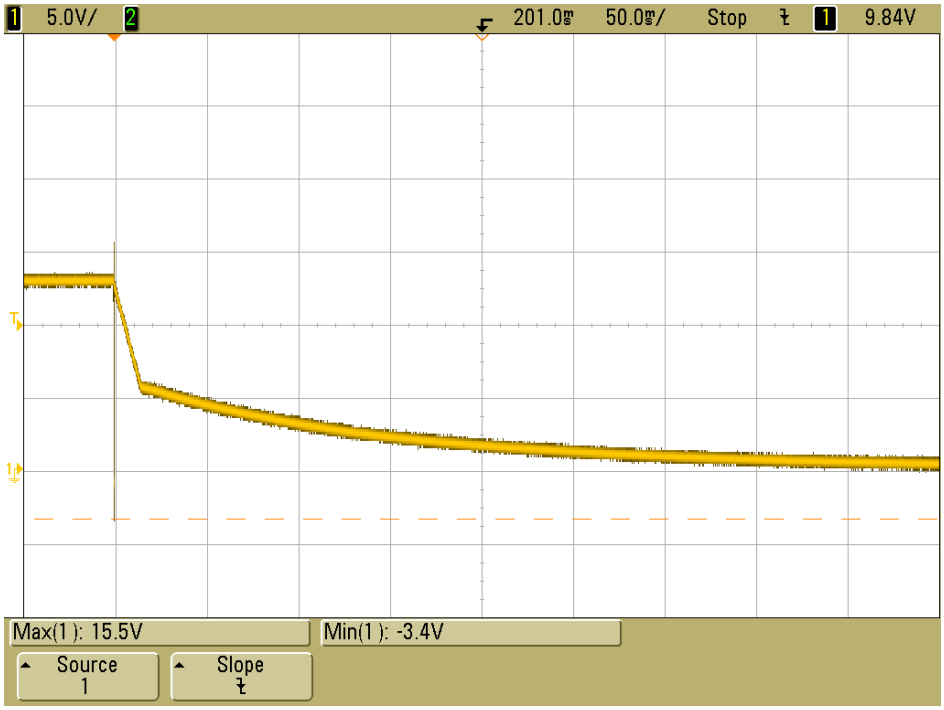
[Slow Pulse] Operating Mode : WLAN Communication with GPS Receiving
Switch OFF



U_A: 13.5 V

Peak amplitude(Us2)	2.1 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-16.8 V	Maximum allowed pulse amplitude: -100 V

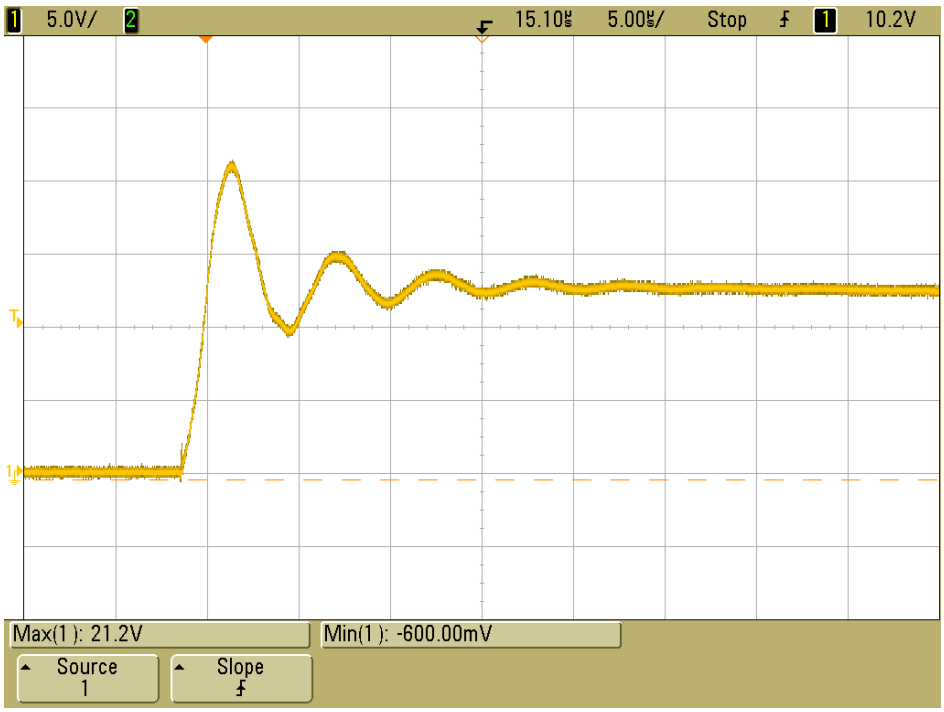
[Slow Pulse] Operating Mode : Bluetooth Communication with GPS Receiving
Switch OFF



U_A: 13.5 V

Peak amplitude(Us2)	2.0 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-16.9 V	Maximum allowed pulse amplitude: -100 V

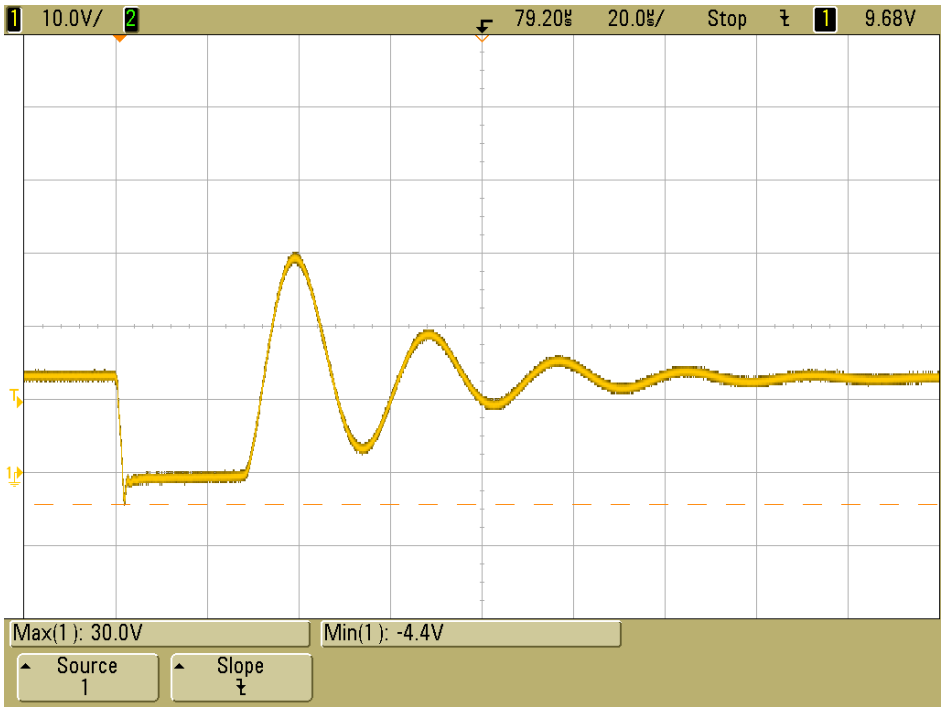
[Fast Pulse]
Switch ON



U_A: 13.5 V

Peak amplitude(Us2)	7.7 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-14.1 V	Maximum allowed pulse amplitude: -100 V

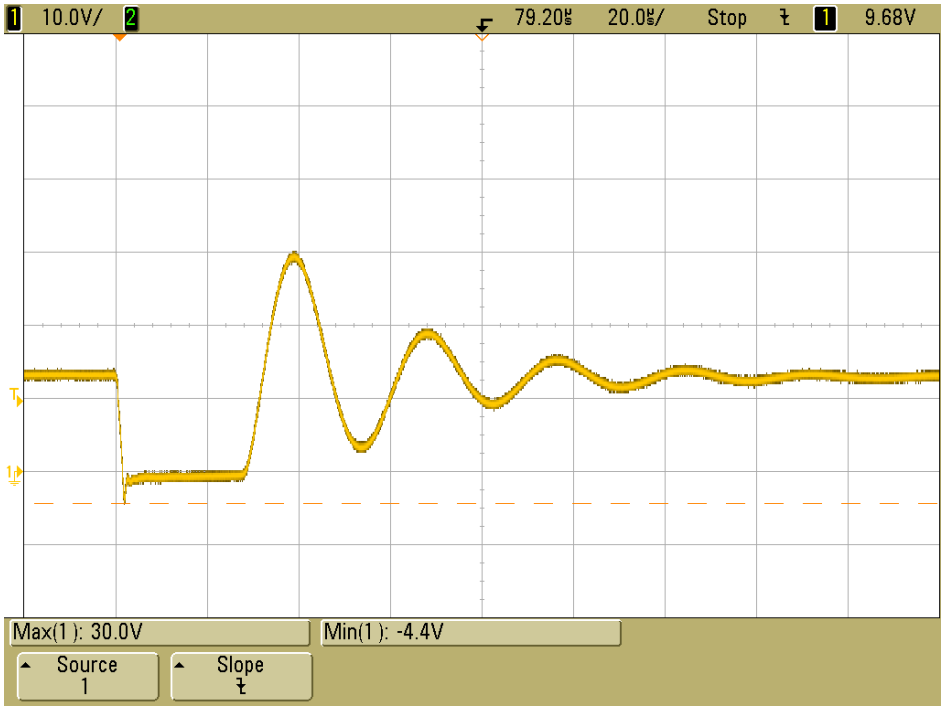
[Fast Pulse] Operating Mode : FM Receiving with GPS Receiving
Switch OFF



U_A: 13.5 V

Peak amplitude(Us2)	16.5 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-17.9 V	Maximum allowed pulse amplitude: -100 V

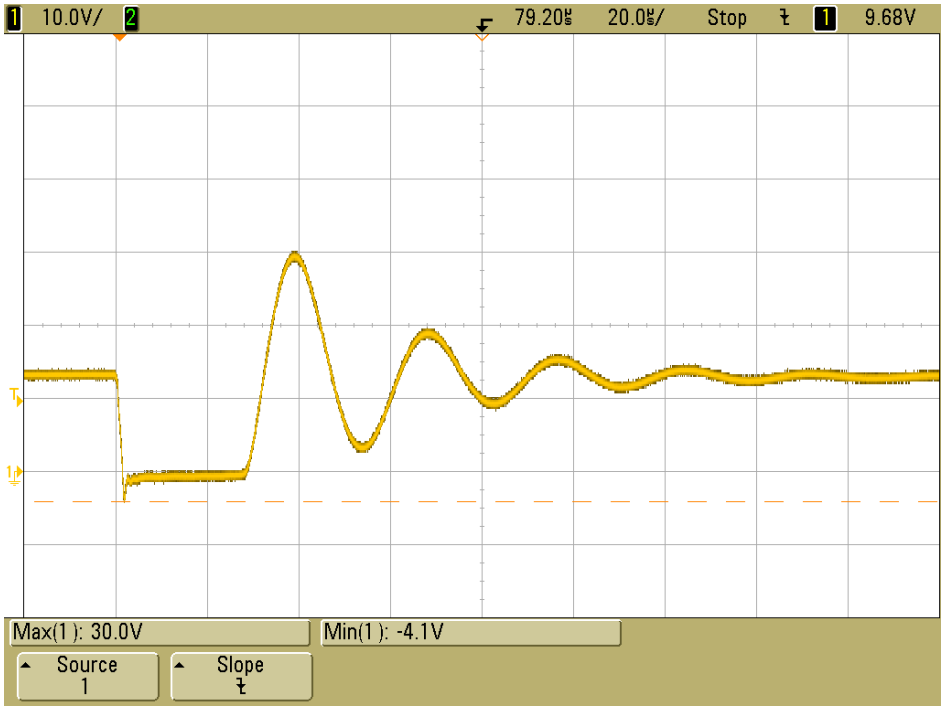
[Fast Pulse] Switch OFF Operating Mode : AM Receiving with GPS Receiving



U_A: 13.5 V

Peak amplitude(Us2)	16.5 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-17.9 V	Maximum allowed pulse amplitude: -100 V

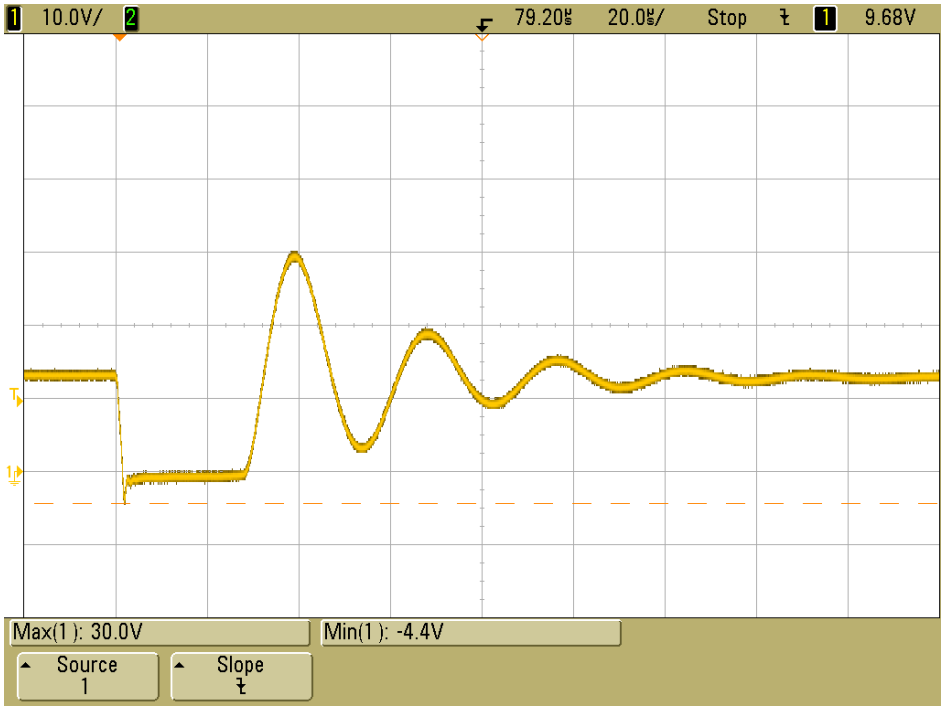
[Fast Pulse] witch OFF Operating Mode : DAB Receiving with GPS Receiving



U_A: 13.5 V

Peak amplitude(Us2)	16.5 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-17.6 V	Maximum allowed pulse amplitude: -100 V

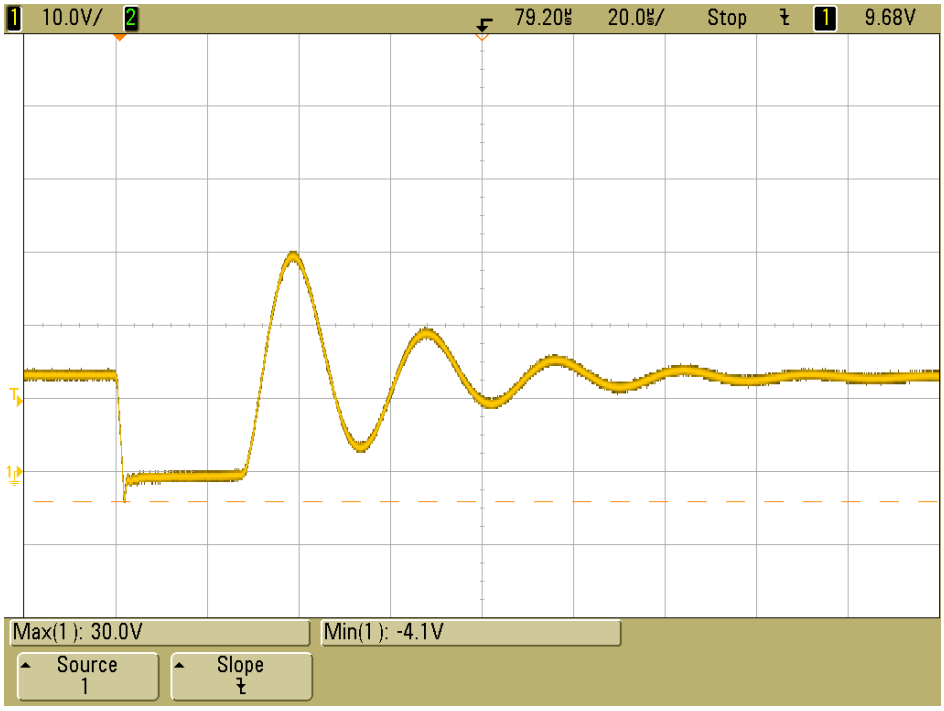
[Fast Pulse] Switch OFF Operating Mode : USB play with GPS Receiving



U_A: 13.5 V

Peak amplitude(Us2)	16.5 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-17.9 V	Maximum allowed pulse amplitude: -100 V

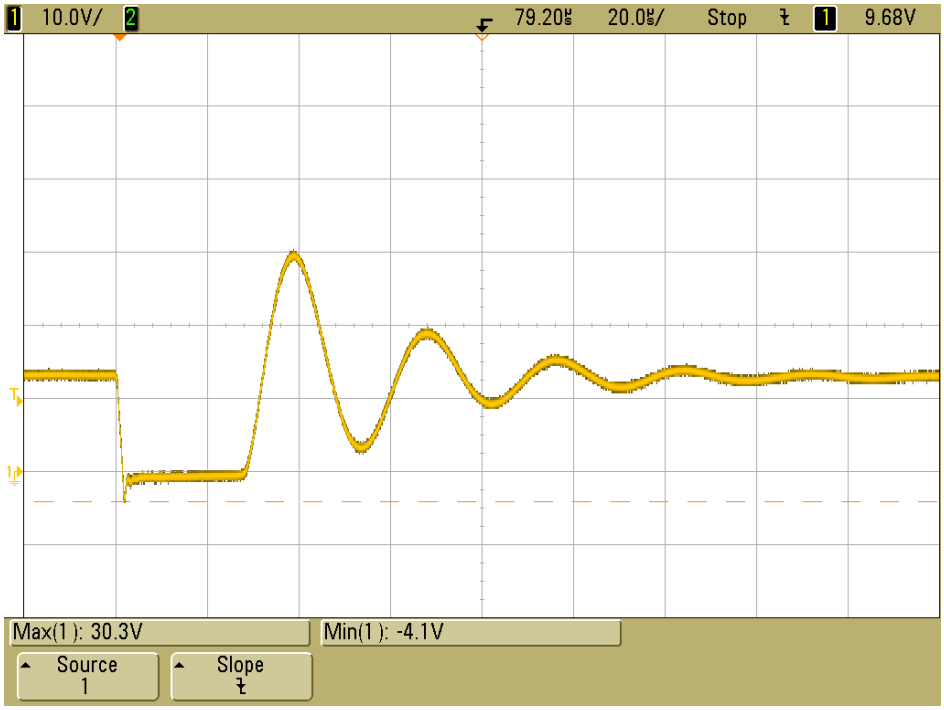
[Fast Pulse] Switch OFF Operating Mode : HDMI with GPS Receiving



U_A: 13.5 V

Peak amplitude(Us2)	16.5 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-17.6 V	Maximum allowed pulse amplitude: -100 V

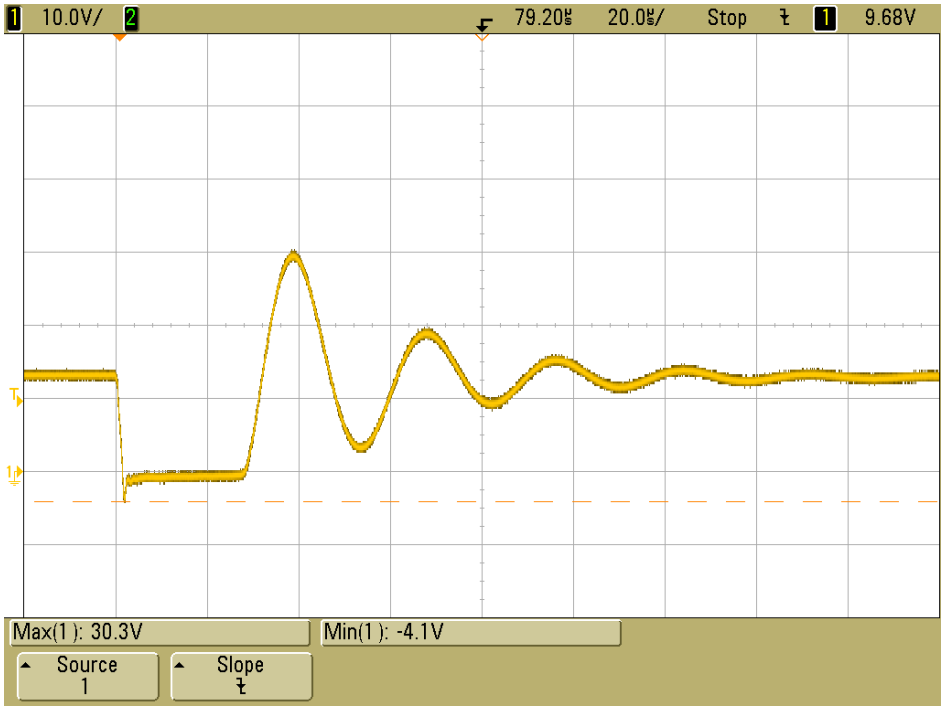
[Fast Pulse] Switch OFF Operating Mode : AV INPUT with GPS Receiving



U_A: 13.5 V

Peak amplitude(Us2)	16.8 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-17.6 V	Maximum allowed pulse amplitude: -100 V

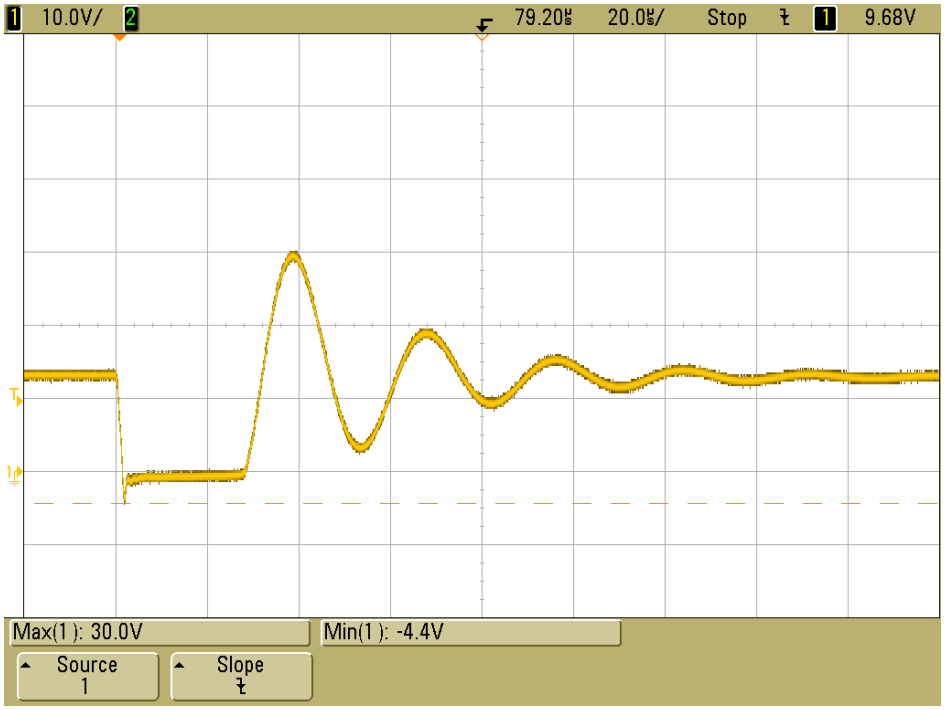
[Fast Pulse] Switch OFF Operating Mode : WLAN Communication with GPS Receiving



U_A: 13.5 V

Peak amplitude(Us2)	16.8 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-17.6 V	Maximum allowed pulse amplitude: -100 V

[Fast Pulse] Operating Mode : Bluetooth Communication with GPS Receiving
Switch OFF



U_A: 13.5 V

Peak amplitude(Us2)	16.5 V	Maximum allowed pulse amplitude: +75 V
Peak amplitude(Us1)	-17.9 V	Maximum allowed pulse amplitude: -100 V

SECTION 7: ELECTRICAL TRANSIENT IMMUNITY (ISO7637-2)

7.1 Operating Environment

Test place	:	Shonan EMC Lab. No.4 shielded room
Date	:	October 23, 2020
Temperature	:	25 deg. C
Humidity	:	54 % RH
Atmosphere	:	1009 hPa
Engineer	:	Yusuke Ohnuma
Operating Mode	:	See SECTION 3.1

7.2 Test Configuration

A drawing of the test set-up is shown in Figure 3. This is not the actual test setup.
For the actual one, refer to APPENDIX 1.

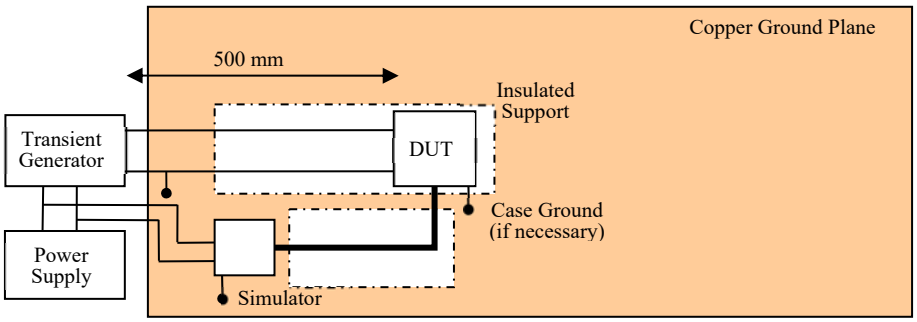


Figure 3

7.3 Test Procedure

It was measured based on "Transient immunity test" described in Clause 4.4. of "ISO 7637-2: 2004".

[Pulse injection] :
DUT was connected to the test pulse generator, while the oscilloscope was unconnected. DUT was in the operation condition specified. The test pulses 1, 2a, 2b, 3a, 3b and 4 were applied according to ISO 7637-2 to supply lines as well as to other connections of DUT which were operationally connected to supply lines. The performance criteria were applied to standard request (refer to test condition).
The verification of performance was established by monitoring the operation with a video camera during the test.

7.4 Test Conditions

Operating Mode : USB play with GPS Receiving

1) Pulse 1

Test level(U_S)	:	III (-75 V)
Number of pulses	:	5000
Burst cycle time(t_1)	:	0.5 s
Functional status	:	D

2) Pulse 2a

Test level(U_S)	:	III (+37 V)
Number of pulses	:	5000
Burst cycle time(t_1)	:	0.2 s
Functional status	:	D

3) Pulse 2b

Test level(U_S)	:	III (+10 V)
Number of pulses	:	10
td	:	0.2 s, 2 s
Functional status	:	D

4) Pulse 3a

Test level(U_S)	:	III (-112 V)
Test time	:	1 h
Functional status	:	D

5) Pulse 3b

Test level(U_S)	:	III (+75 V)
Test time	:	1 h
Functional status	:	D

6) Pulse 4

Test level(U_S)	:	III (-6 V)
Number of pulses	:	1
t_7	:	40 ms
t_9	:	20 s
t_{11}	:	5 ms, 100 ms
U_a	:	-2.5 V, -6 V
Functional status	:	D

7.5 Results

Summary of the test results: Pass
The equipment operated without any recorded disturbances.

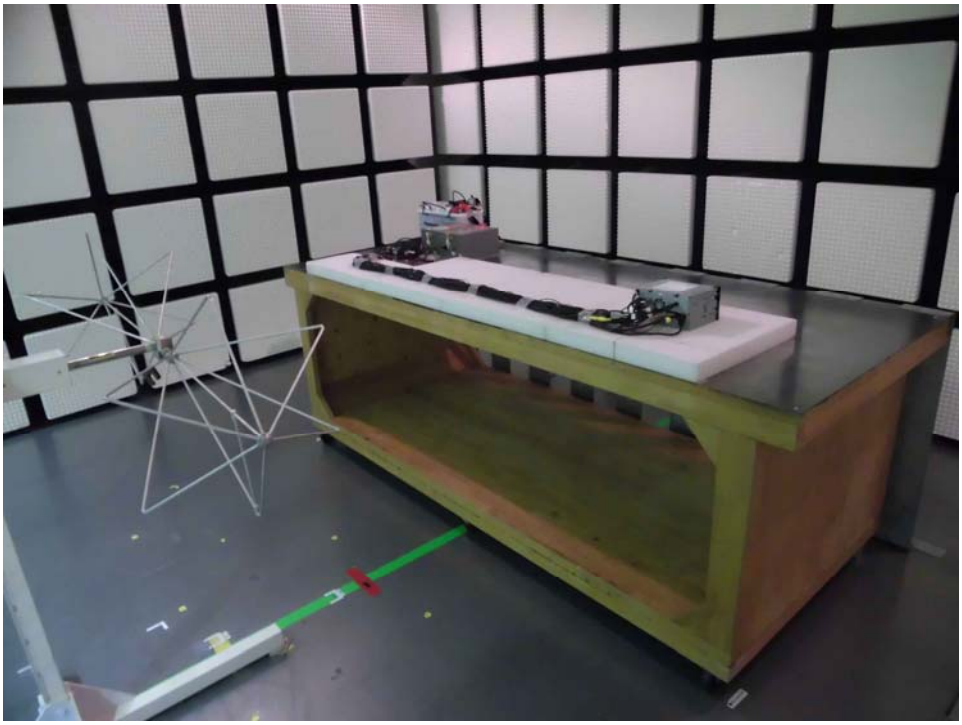
Table 1. Test Protocol

Operating Mode : USB play with GPS Receiving

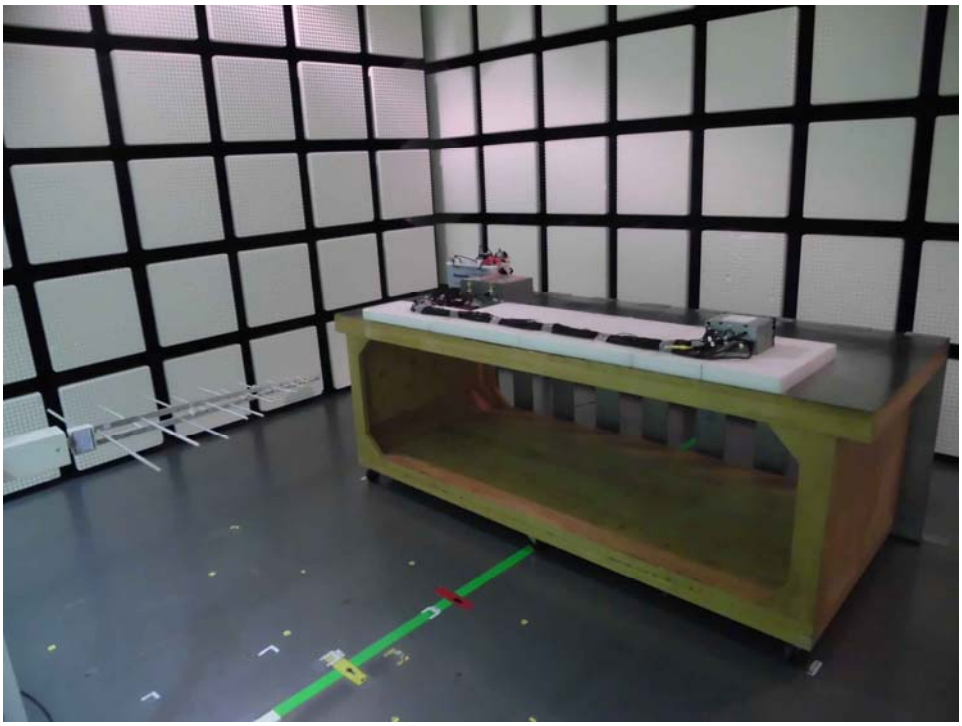
Test No.	Test Pulse Number	Test Level [V]	Result
1	1	-75	Pass
2	2a	+37	Pass
3	2b	+10	Pass
4	3a	-112	Pass
5	3b	+75	Pass
6	4	-6	Pass

APPENDIX 1: TEST CONFIGURATION PHOTOGRAPHS

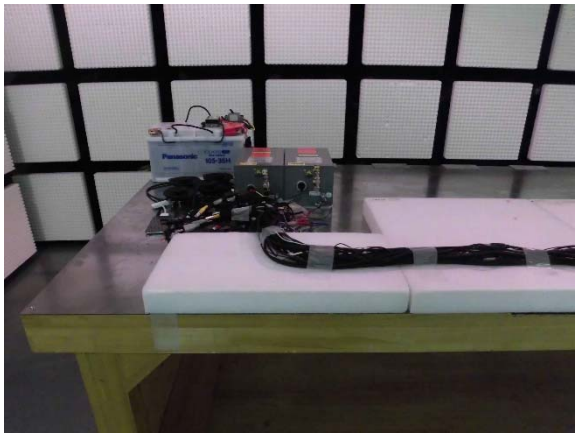
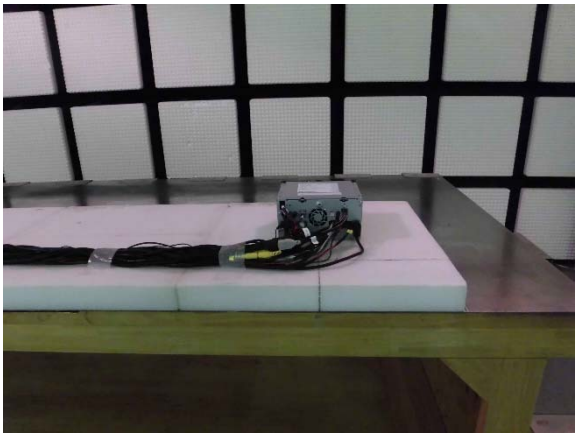
Measurement of Radiated Emission (UN Regulation No.10 - Rev.6 Annex 7&8)

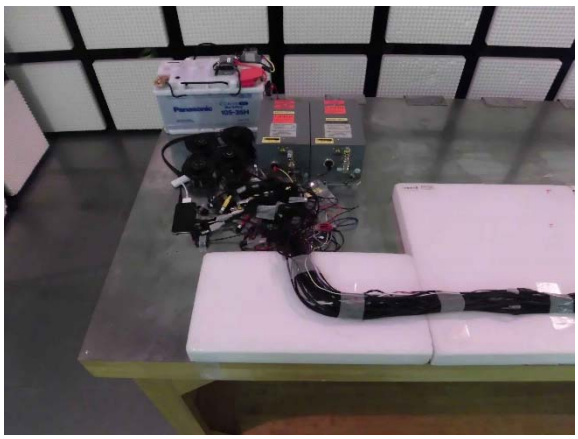


30 MHz - 200 MHz



200 MHz - 1000 MHz


UL Japan, Inc.
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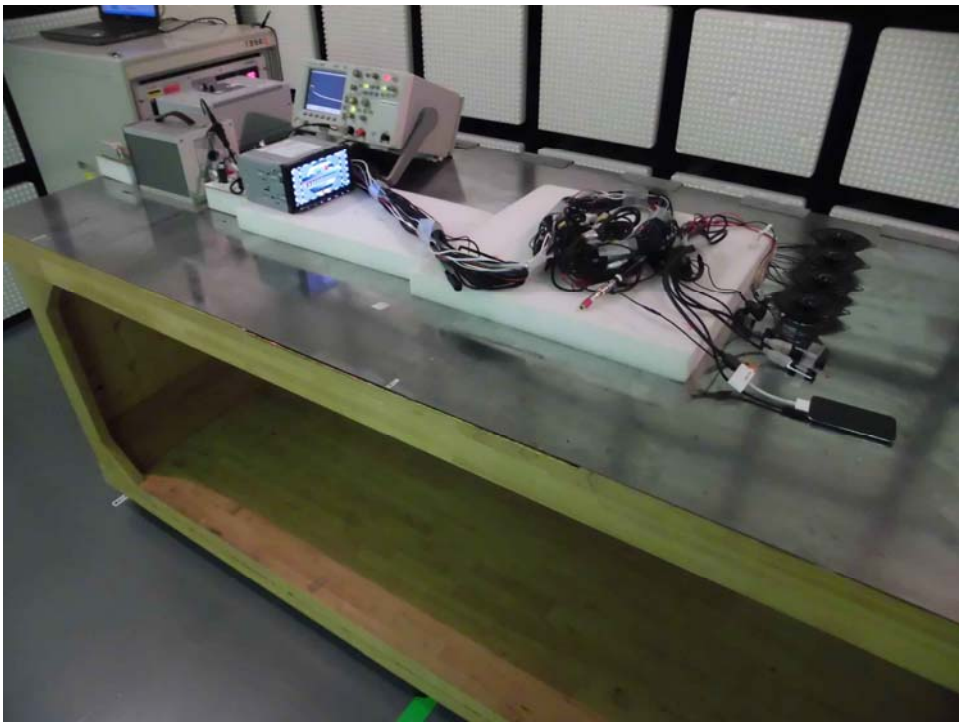
Telephone : +81 463 50 6400
Facsimile : +81 463 50 6401

Measurement of Electrical Transient Emission (ISO7637-2)

Set-up for Slow pulse



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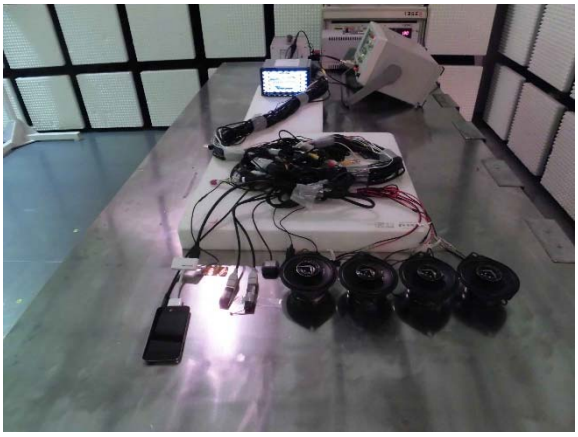
Telephone : +81 463 50 6400
Facsimile : +81 463 50 6401



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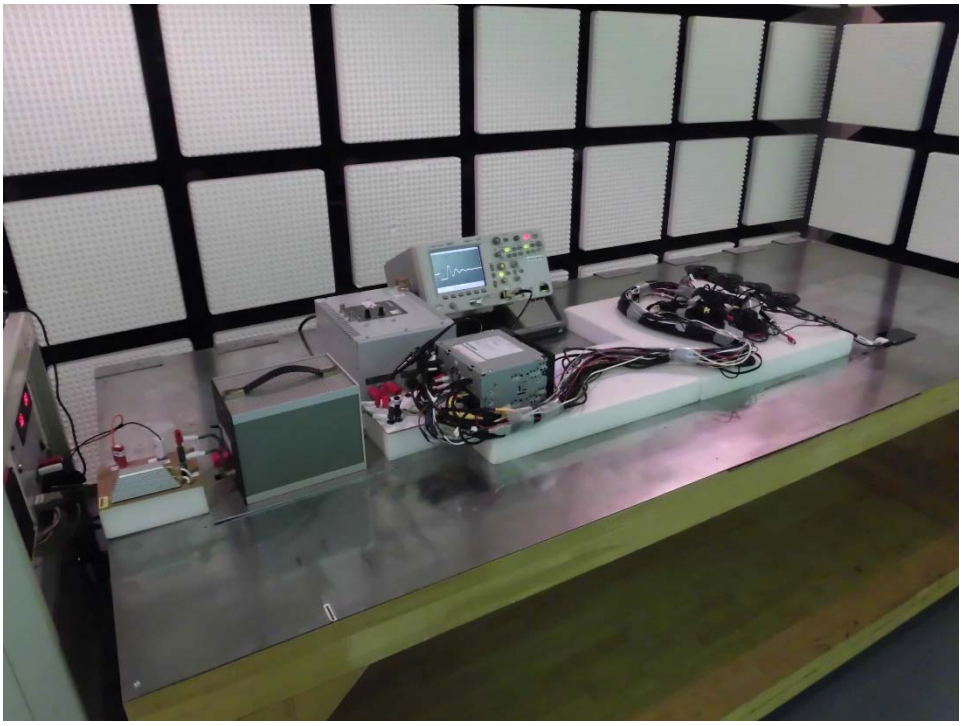
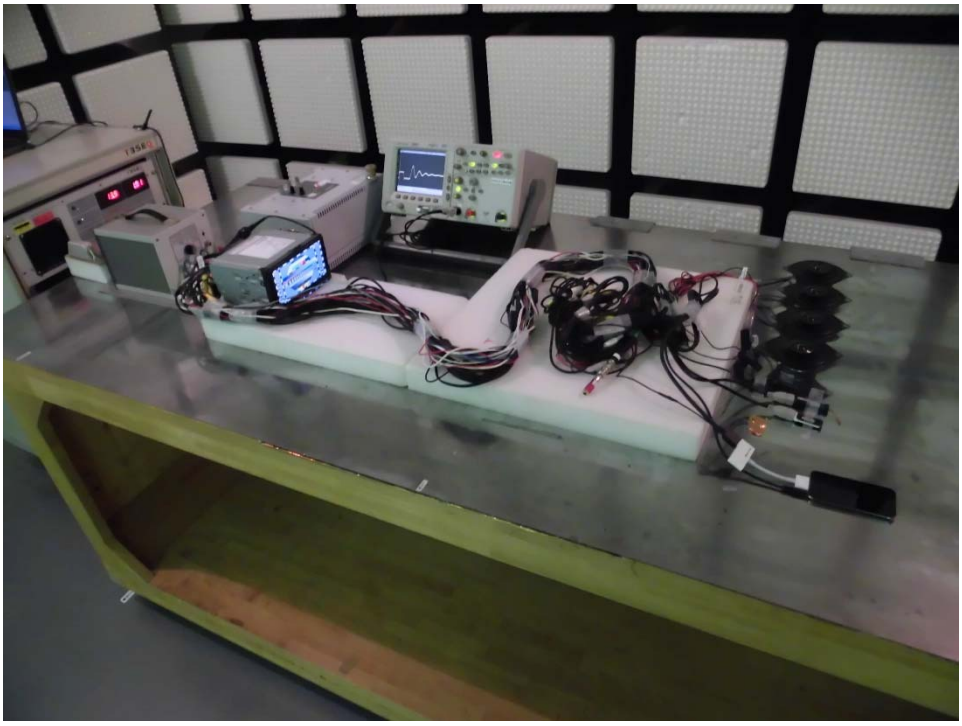
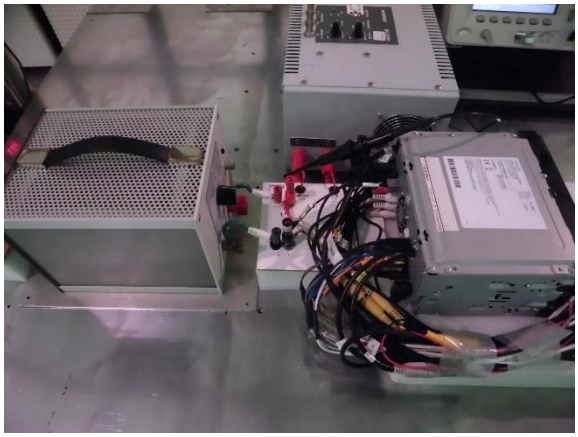
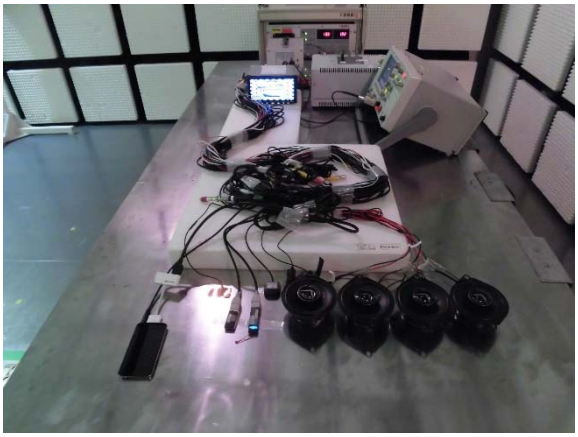
Telephone : +81 463 50 6400
Facsimile : +81 463 50 6401

Set-up for Fast pulse









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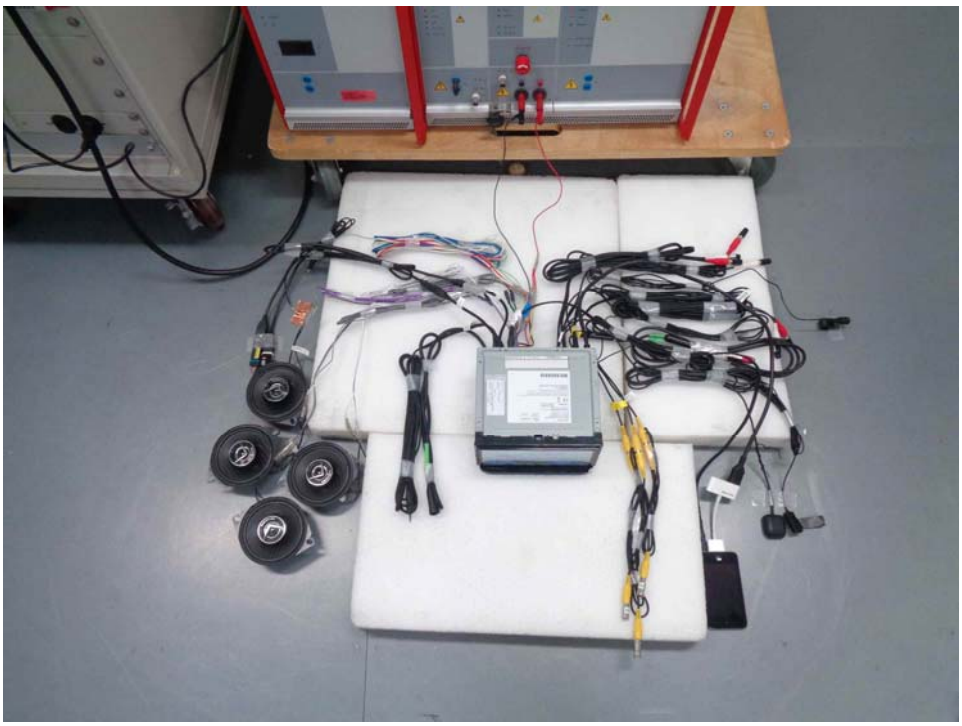
Telephone : +81 463 50 6400
Facsimile : +81 463 50 6401

Measurement of Electrical Transient Immunity (ISO7637-2)



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APPENDIX 2: DATA OF RADIATED EMISSION TEST

This section contains the following data

Note;

Blue line means the limit of UN Regulation No.10 - Rev.6 Annex 7 (Broad Band).
Red line means the limit of UN Regulation No.10 - Rev.6 Annex 8 (Narrow Band).

[Mode: FM Receiving with GPS Receiving]

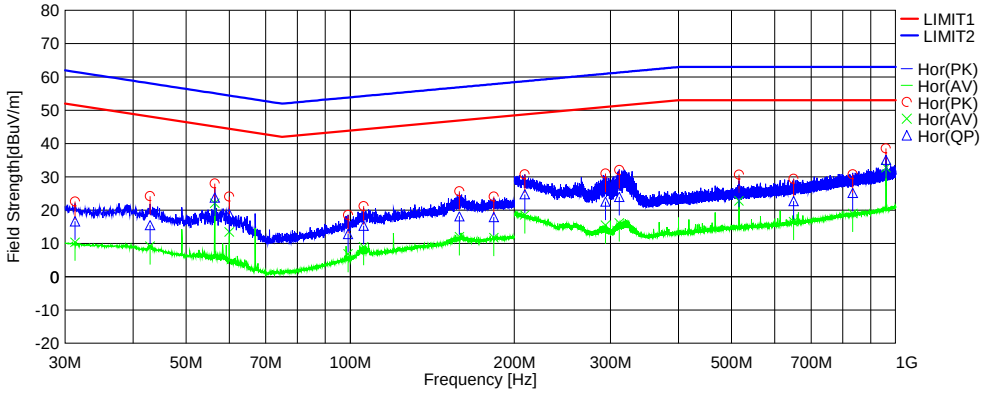
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : FM Receiving with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	31.3000	Horizo.	28.10	15.90	22.20	-5.50	22.60	10.40	16.70	BB	61.54	44.84	OK	
	42.9500	Horizo.	31.80	16.80	23.10	-7.57	24.23	9.23	15.53	BB	58.08	42.55	OK	
	56.4802	Horizo.	39.60	33.70	35.40	-11.61	27.99	22.09	23.79	NB	45.10	23.01	OK	
	60.0166	Horizo.	36.90	26.30	31.70	-12.83	24.07	13.47	18.87	BB	54.43	35.56	OK	
	99.0500	Horizo.	28.60	16.90	22.90	-10.02	18.58	6.88	12.88	BB	53.83	40.95	OK	
	105.8500	Horizo.	30.20	18.00	24.30	-8.97	21.23	9.03	15.33	BB	54.26	38.93	OK	
	158.6015	Horizo.	30.00	16.30	22.50	-4.31	25.69	11.99	18.19	BB	56.92	38.73	OK	
	183.4500	Horizo.	27.30	15.00	21.20	-3.26	24.04	11.74	17.94	BB	57.88	39.94	OK	
	208.9500	Horizo.	27.40	15.20	21.40	3.37	30.77	18.57	24.77	BB	58.73	33.96	OK	
	293.7433	Horizo.	34.20	18.70	25.80	-3.22	30.98	15.48	22.58	BB	60.97	38.39	OK	
	311.3510	Horizo.	35.50	19.60	27.40	-3.40	32.10	16.20	24.00	BB	61.35	37.35	OK	
	516.1000	Horizo.	31.10	23.20	26.90	-0.40	30.70	22.80	26.50	BB	63.00	36.50	OK	
	649.9000	Horizo.	28.50	15.60	21.80	0.95	29.45	16.55	22.75	BB	63.00	40.25	OK	
	834.7000	Horizo.	26.80	15.10	21.30	3.93	30.73	19.03	25.23	BB	63.00	37.77	OK	
	960.2663	Horizo.	32.70	27.00	29.30	5.82	38.52	32.82	35.12	NB	53.00	20.18	OK	

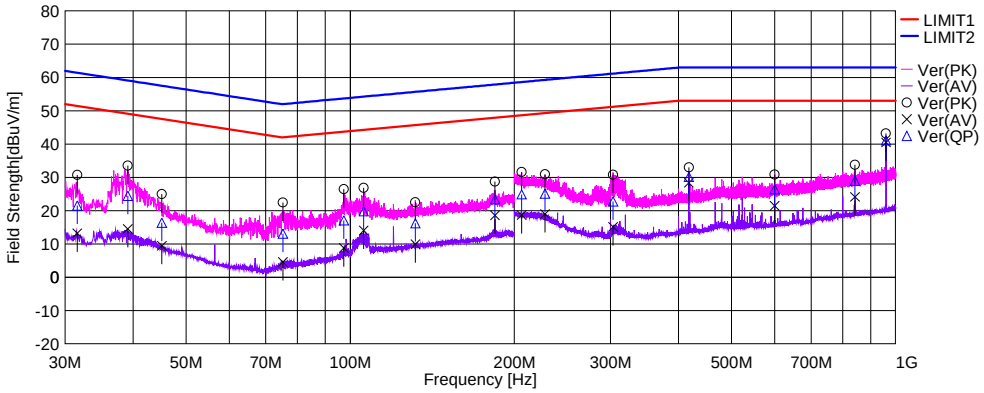
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : FM Receiving with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	31.6000	Vertic.	36.30	18.80	27.10	-5.55	30.75	13.25	21.55	BB	61.43	39.88	OK	
	39.1053	Vertic.	40.30	21.30	31.20	-6.71	33.59	14.59	24.49	BB	59.11	34.62	OK	
	45.1552	Vertic.	33.10	17.60	24.50	-8.09	25.01	9.51	16.41	BB	57.54	41.13	OK	
	75.2797	Vertic.	36.50	18.60	27.10	-13.99	22.51	4.61	13.11	BB	52.02	38.91	OK	
	97.3550	Vertic.	36.80	19.10	27.40	-10.30	26.50	8.80	17.10	BB	53.71	36.61	OK	
	105.8791	Vertic.	35.80	23.00	28.80	-8.97	26.83	14.03	19.83	BB	54.27	34.44	OK	
	131.6530	Vertic.	28.80	16.20	22.50	-6.22	22.58	9.98	16.28	BB	55.70	39.42	OK	
	184.3186	Vertic.	32.00	21.90	26.70	-3.25	28.75	18.65	23.45	BB	57.91	34.46	OK	
	206.2000	Vertic.	28.00	15.10	21.30	3.62	31.62	18.72	24.92	BB	58.65	33.73	OK	
	227.6017	Vertic.	29.20	17.30	23.40	1.76	30.96	19.06	25.16	BB	59.29	34.13	OK	
	303.4000	Vertic.	34.40	18.70	26.40	-3.57	30.83	15.13	22.83	BB	61.18	38.35	OK	
	417.7887	Vertic.	34.50	29.90	31.70	-1.51	32.99	28.39	30.19	NB	53.00	24.61	OK	
	600.0004	Vertic.	30.70	21.30	26.30	0.21	30.91	21.51	26.51	BB	63.00	36.49	OK	
	842.5341	Vertic.	29.80	20.20	25.00	3.99	33.79	24.19	28.99	BB	63.00	34.01	OK	
	960.2665	Vertic.	37.40	34.70	35.30	5.82	43.22	40.52	41.12	NB	53.00	12.48	OK	

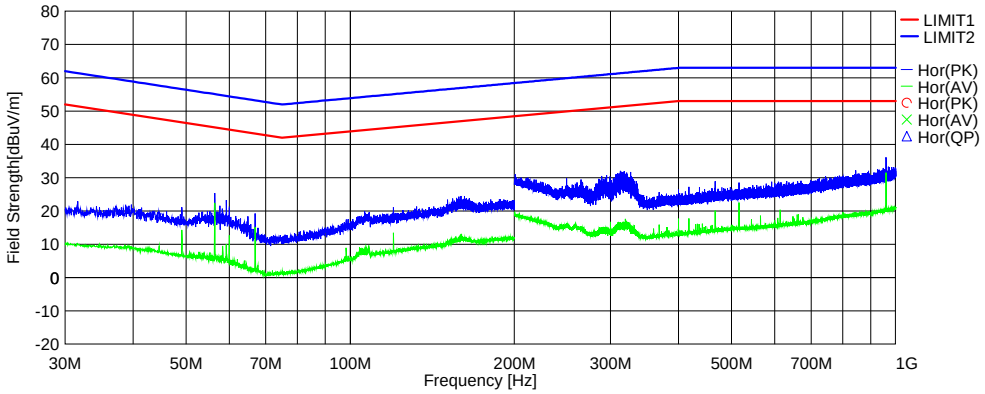
[Mode: AM Receiving with GPS Receiving]

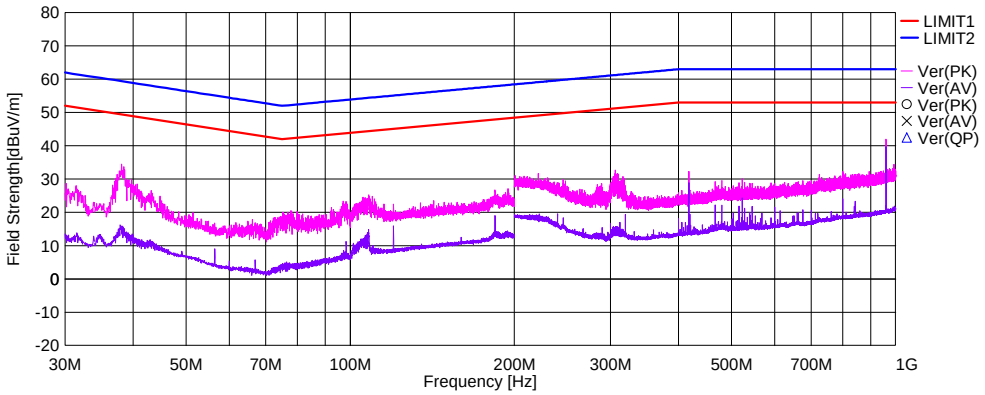
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No.	: 13554201S	Kind of EUT	: Monitor with Receiver
Tested Date	: 2020/10/20	Model No	: DMX8020DABS
Temp/Humid	: 23 deg.C / 40 %RH	Serial No	: PE-X0021
Engineer	: Yusuke Ohnuma	Remarks	: -
Mode	: AM Receiving with GPS Receiving		

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)





[Mode: DAB Receiving with GPS Receiving]

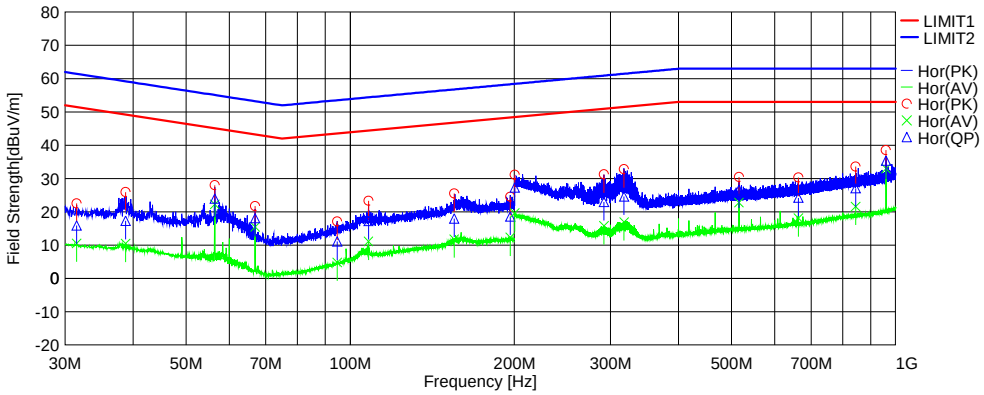
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : DAB Receiving with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	31.5110	Horizo.	28.10	16.10	21.50	-5.54	22.56	10.56	15.96	BB	61.46	45.50	OK	
	38.7460	Horizo.	32.60	17.20	24.00	-6.66	25.94	10.54	17.34	BB	59.21	41.87	OK	
	56.4480	Horizo.	39.60	33.90	35.60	-11.59	28.01	22.31	24.01	NB	45.10	22.79	OK	
	66.9519	Horizo.	35.80	29.60	32.20	-14.09	21.71	15.51	18.11	BB	53.24	35.13	OK	
	94.6560	Horizo.	27.90	15.60	21.90	-10.75	17.15	4.85	11.15	BB	53.53	42.38	OK	
	108.0302	Horizo.	32.00	19.80	25.90	-8.65	23.35	11.15	17.25	BB	54.40	37.15	OK	
	155.1095	Horizo.	30.10	16.40	22.60	-4.62	25.48	11.78	17.98	BB	56.77	38.79	OK	
	196.5795	Horizo.	27.30	15.10	21.40	-2.77	24.53	12.33	18.63	BB	58.33	39.70	OK	
	200.2550	Horizo.	27.00	15.50	23.20	4.17	31.17	19.67	27.37	BB	58.45	31.08	OK	
	291.8500	Horizo.	34.40	18.90	26.10	-3.09	31.31	15.81	23.01	BB	60.93	37.92	OK	
	317.7334	Horizo.	36.10	20.20	27.90	-3.27	32.83	16.93	24.63	BB	61.49	36.86	OK	
	516.0923	Horizo.	30.90	23.20	27.10	-0.40	30.50	22.80	26.70	BB	63.00	36.30	OK	
	663.4785	Horizo.	29.20	17.00	23.10	1.14	30.34	18.14	24.24	BB	63.00	38.76	OK	
	844.6000	Horizo.	29.60	17.60	23.10	4.01	33.61	21.61	27.11	BB	63.00	35.89	OK	
	960.2665	Horizo.	32.70	27.20	29.60	5.82	38.52	33.02	35.42	NB	53.00	19.98	OK	

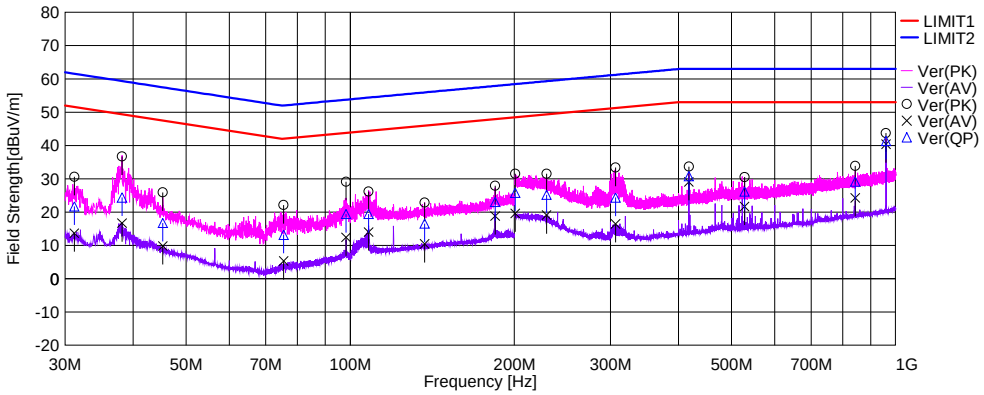
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : DAB Receiving with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	31.2000	Vertic.	36.10	19.20	27.20	-5.48	30.62	13.72	21.72	BB	61.57	39.85	OK	
	38.1536	Vertic.	43.30	23.30	31.00	-6.58	36.72	16.72	24.42	BB	59.38	34.96	OK	
	45.3500	Vertic.	34.10	18.00	24.90	-8.13	25.97	9.87	16.77	BB	57.49	40.72	OK	
	75.5110	Vertic.	36.10	19.30	27.20	-13.97	22.13	5.33	13.23	BB	52.04	38.81	OK	
	98.3033	Vertic.	39.30	22.60	29.60	-10.15	29.15	12.45	19.45	BB	53.78	34.33	OK	
	108.0605	Vertic.	34.90	22.70	28.10	-8.65	26.25	14.05	19.45	BB	54.40	34.95	OK	
	136.9045	Vertic.	28.70	16.30	22.40	-5.83	22.87	10.47	16.57	BB	55.95	39.38	OK	
	184.3500	Vertic.	31.20	22.10	26.30	-3.24	27.96	18.86	23.06	BB	57.91	34.85	OK	
	200.7500	Vertic.	27.40	15.50	21.70	4.12	31.52	19.62	25.82	BB	58.47	32.65	OK	
	229.0050	Vertic.	29.90	17.50	23.60	1.64	31.54	19.14	25.24	BB	59.33	34.09	OK	
	306.5206	Vertic.	36.90	20.00	27.90	-3.50	33.40	16.50	24.40	BB	61.25	36.85	OK	
	417.7889	Vertic.	35.20	30.60	32.30	-1.51	33.69	29.09	30.79	NB	53.00	23.91	OK	
	528.4000	Vertic.	30.90	22.00	26.50	-0.31	30.59	21.69	26.19	BB	63.00	36.81	OK	
	842.7589	Vertic.	29.90	20.30	25.20	4.00	33.90	24.30	29.20	BB	63.00	33.80	OK	
	960.2500	Vertic.	37.90	34.60	35.60	5.82	43.72	40.42	41.42	NB	53.00	12.58	OK	

[Mode: USB play with GPS Receiving]

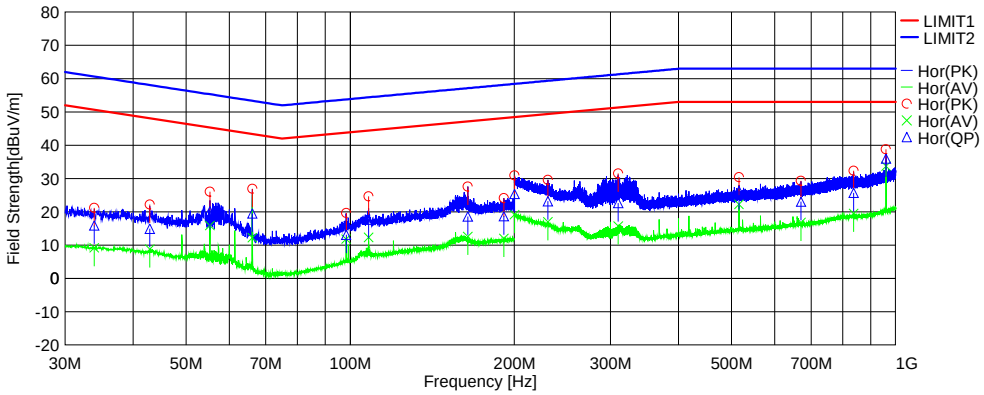
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : USB play with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	33.9320	Horizo.	27.20	15.20	21.90	-5.94	21.26	9.26	15.96	BB	60.66	44.70	OK	
	42.9020	Horizo.	29.80	16.40	22.50	-7.56	22.24	8.84	14.94	BB	58.10	43.16	OK	
	55.3002	Horizo.	37.30	27.10	31.40	-11.18	26.12	15.92	20.22	BB	55.33	35.11	OK	
	66.1592	Horizo.	40.90	26.20	33.50	-13.95	26.95	12.25	19.55	BB	53.37	33.82	OK	
	98.3210	Horizo.	29.80	22.00	23.30	-10.14	19.66	11.86	13.16	BB	53.78	40.62	OK	
	108.0550	Horizo.	33.30	21.00	26.30	-8.65	24.65	12.35	17.65	BB	54.40	36.75	OK	
	164.2450	Horizo.	31.70	16.70	22.70	-4.07	27.63	12.63	18.63	BB	57.15	38.52	OK	
	191.3100	Horizo.	27.20	15.10	21.80	-3.07	24.13	12.03	18.73	BB	58.15	39.42	OK	
	200.1500	Horizo.	26.80	15.00	21.20	4.18	30.98	19.18	25.38	BB	58.45	33.07	OK	
	230.4450	Horizo.	28.10	15.50	21.70	1.52	29.62	17.02	23.22	BB	59.38	36.16	OK	
	310.0000	Horizo.	35.00	19.20	26.10	-3.43	31.57	15.77	22.67	BB	61.32	38.65	OK	
	516.1012	Horizo.	30.80	22.70	26.70	-0.40	30.40	22.30	26.30	BB	63.00	36.70	OK	
	670.5530	Horizo.	28.10	15.60	21.80	1.24	29.34	16.84	23.04	BB	63.00	39.96	OK	
	837.3500	Horizo.	28.40	15.60	21.80	3.95	32.35	19.55	25.75	BB	63.00	37.25	OK	
	960.2667	Horizo.	33.00	27.90	30.20	5.82	38.82	33.72	36.02	NB	53.00	19.28	OK	

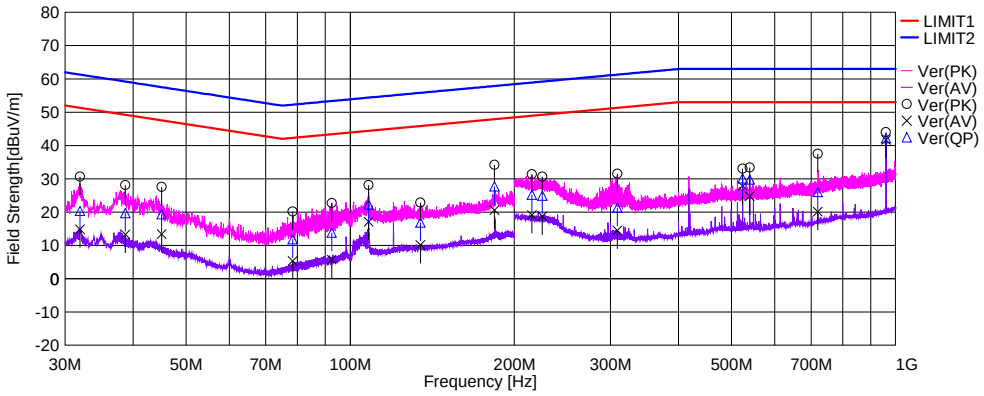
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : USB play with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	31.9501	Vertic.	36.30	20.50	26.00	-5.61	30.69	14.89	20.39	BB	61.31	40.92	OK	
	38.7045	Vertic.	34.80	20.00	26.40	-6.66	28.14	13.34	19.74	BB	59.22	39.48	OK	
	45.1040	Vertic.	35.70	21.50	27.50	-8.08	27.62	13.42	19.42	BB	57.55	38.13	OK	
	78.4220	Vertic.	33.90	19.00	25.50	-13.65	20.25	5.35	11.85	BB	52.29	40.44	OK	
	92.5110	Vertic.	33.90	16.90	25.00	-11.12	22.78	5.78	13.88	BB	53.38	39.50	OK	
	108.0617	Vertic.	36.80	25.80	31.00	-8.65	28.15	17.15	22.35	BB	54.40	32.05	OK	
	134.4980	Vertic.	28.90	16.20	22.90	-6.01	22.89	10.19	16.89	BB	55.84	38.95	OK	
	183.8800	Vertic.	37.50	23.90	31.00	-3.25	34.25	20.65	27.75	BB	57.89	30.14	OK	
	215.3775	Vertic.	28.60	16.40	22.50	2.80	31.40	19.20	25.30	BB	58.93	33.63	OK	
	225.0500	Vertic.	28.70	16.80	23.00	1.97	30.67	18.77	24.97	BB	59.22	34.25	OK	
	308.8448	Vertic.	35.00	18.00	24.80	-3.45	31.55	14.55	21.35	BB	61.30	39.95	OK	
	524.2883	Vertic.	33.40	28.20	30.50	-0.34	33.06	27.86	30.16	NB	53.00	25.14	OK	
	540.0001	Vertic.	33.60	25.00	30.00	-0.22	33.38	24.78	29.78	BB	63.00	33.22	OK	
	720.2001	Vertic.	35.50	18.10	24.00	2.07	37.57	20.17	26.07	BB	63.00	36.93	OK	
	960.2667	Vertic.	38.20	35.90	36.40	5.82	44.02	41.72	42.22	NB	53.00	11.28	OK	

[Mode: HDMI with GPS Receiving]

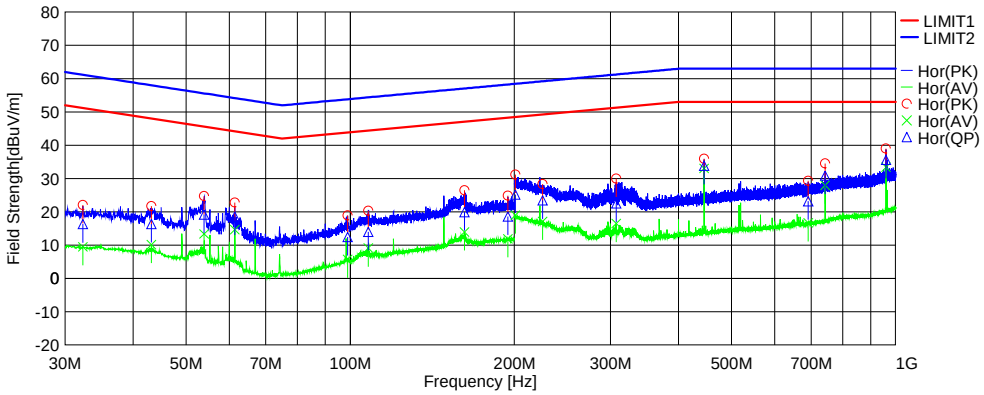
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : HDMI with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	32.3445	Horizo.	27.80	15.20	22.00	-5.68	22.12	9.52	16.32	BB	61.18	44.86	OK	
	43.2015	Horizo.	29.40	17.80	24.00	-7.63	21.77	10.17	16.37	BB	58.02	41.65	OK	
	53.9882	Horizo.	35.50	24.10	29.90	-10.69	24.81	13.41	19.21	BB	55.59	36.38	OK	
	61.4401	Horizo.	35.90	27.80	31.70	-13.10	22.80	14.70	18.60	BB	54.18	35.58	OK	
	98.9380	Horizo.	29.00	15.80	22.50	-10.04	18.96	5.76	12.46	BB	53.82	41.36	OK	
	107.9440	Horizo.	29.00	17.80	22.70	-8.66	20.34	9.14	14.04	BB	54.39	40.35	OK	
	162.0235	Horizo.	30.60	18.10	24.10	-4.13	26.47	13.97	19.97	BB	57.06	37.09	OK	
	194.5505	Horizo.	27.80	14.80	21.50	-2.88	24.92	11.92	18.62	BB	58.26	39.64	OK	
	200.8040	Horizo.	27.10	14.90	21.10	4.12	31.22	19.02	25.22	BB	58.47	33.25	OK	
	225.1550	Horizo.	26.40	15.20	21.50	1.96	28.36	17.16	23.46	BB	59.22	35.76	OK	
	307.4100	Horizo.	33.50	20.00	26.00	-3.48	30.02	16.52	22.52	BB	61.27	38.75	OK	
	445.5042	Horizo.	37.10	34.20	35.00	-1.15	35.95	33.05	33.85	NB	53.00	19.95	OK	
	691.4210	Horizo.	27.80	15.20	21.70	1.53	29.33	16.73	23.23	BB	63.00	39.77	OK	
	742.5070	Horizo.	32.00	25.50	28.40	2.53	34.53	28.03	30.93	BB	63.00	32.07	OK	
	960.2667	Horizo.	33.20	27.60	29.80	5.82	39.02	33.42	35.62	NB	53.00	19.58	OK	

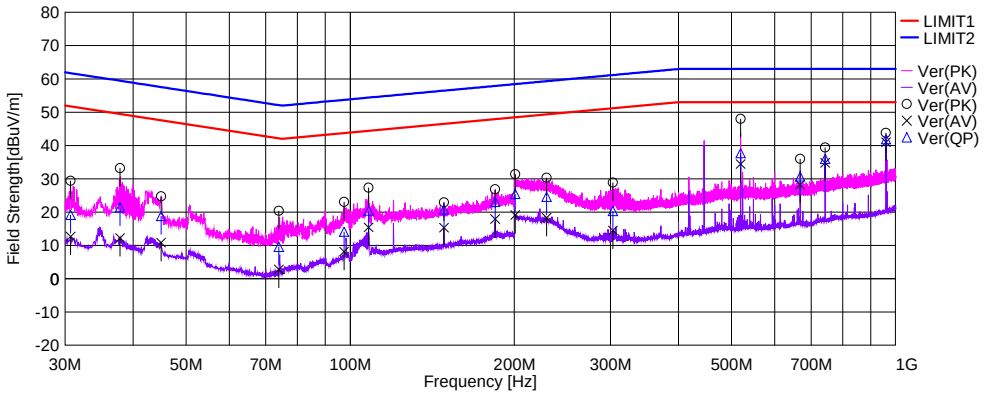
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : HDMI with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	30.7150	Vertic.	34.80	18.10	24.60	-5.40	29.40	12.70	19.20	BB	61.74	42.54	OK	
	37.8550	Vertic.	39.80	18.80	28.00	-6.54	33.26	12.26	21.46	BB	59.46	38.00	OK	
	45.0000	Vertic.	32.80	18.90	26.90	-8.05	24.75	10.85	18.85	BB	57.57	38.72	OK	
	74.0040	Vertic.	34.40	16.80	23.60	-14.14	20.26	2.66	9.46	BB	52.15	42.69	OK	
	97.4140	Vertic.	33.40	18.50	24.40	-10.29	23.11	8.21	14.11	BB	53.72	39.61	OK	
	108.0614	Vertic.	36.00	24.10	29.10	-8.65	27.35	15.45	20.45	BB	54.40	33.95	OK	
	148.5500	Vertic.	28.10	20.50	26.00	-5.17	22.93	15.33	20.83	BB	56.49	35.66	OK	
	184.3550	Vertic.	30.10	21.20	26.30	-3.24	26.86	17.96	23.06	BB	57.91	34.85	OK	
	200.6480	Vertic.	27.30	15.00	21.30	4.13	31.43	19.13	25.43	BB	58.47	33.04	OK	
	229.0980	Vertic.	28.70	16.70	23.00	1.63	30.33	18.33	24.63	BB	59.34	34.71	OK	
	303.1280	Vertic.	32.50	18.10	23.90	-3.58	28.92	14.52	20.32	BB	61.18	40.86	OK	
	519.7550	Vertic.	48.40	34.80	38.10	-0.37	48.03	34.43	37.73	BB	63.00	25.27	OK	
	668.2563	Vertic.	34.80	27.10	29.50	1.21	36.01	28.31	30.71	BB	63.00	32.29	OK	
	742.5078	Vertic.	36.90	32.30	33.50	2.53	39.43	34.83	36.03	NB	53.00	18.17	OK	
	960.2667	Vertic.	38.00	35.20	36.10	5.82	43.82	41.02	41.92	NB	53.00	11.98	OK	

[Mode: AV INPUT with GPS Receiving]

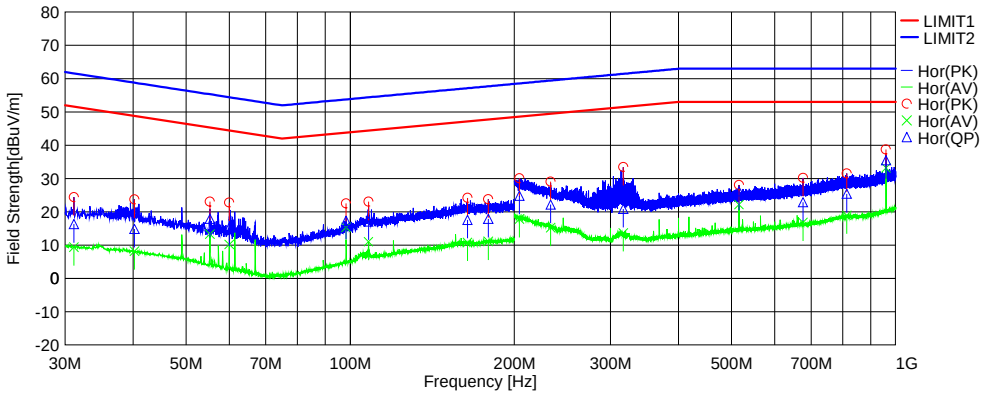
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : AV INPUT with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	31.1530	Horizo.	29.90	14.90	21.80	-5.48	24.42	9.42	16.32	BB	61.59	45.27	OK	
	40.2290	Horizo.	30.60	15.10	21.80	-6.89	23.71	8.21	14.91	BB	58.80	43.89	OK	
	55.2958	Horizo.	34.30	24.50	29.10	-11.18	23.12	13.32	17.92	BB	55.33	37.41	OK	
	60.0167	Horizo.	35.70	23.10	28.20	-12.83	22.87	10.27	15.37	BB	54.43	39.06	OK	
	98.3032	Horizo.	32.70	25.50	27.50	-10.15	22.55	15.35	17.35	BB	53.78	36.43	OK	
	108.0300	Horizo.	31.70	19.70	25.80	-8.65	23.05	11.05	17.15	BB	54.40	37.25	OK	
	164.0550	Horizo.	28.30	14.90	21.70	-4.08	24.22	10.82	17.62	BB	57.14	39.52	OK	
	179.1000	Horizo.	27.20	14.50	21.30	-3.37	23.83	11.13	17.93	BB	57.72	39.79	OK	
	204.3553	Horizo.	26.30	14.10	21.10	3.79	30.09	17.89	24.89	BB	58.59	33.70	OK	
	233.0980	Horizo.	27.80	14.00	20.90	1.31	29.11	15.31	22.21	BB	59.45	37.24	OK	
	316.7500	Horizo.	36.80	17.00	24.20	-3.29	33.51	13.71	20.91	BB	61.47	40.56	OK	
	516.0984	Horizo.	28.50	22.60	26.60	-0.40	28.10	22.20	26.20	NB	53.00	30.80	OK	
	676.3530	Horizo.	28.90	15.50	21.60	1.32	30.22	16.82	22.92	BB	63.00	40.08	OK	
	813.1520	Horizo.	27.80	15.20	21.70	3.75	31.55	18.95	25.45	BB	63.00	37.55	OK	
	960.2666	Horizo.	32.90	27.40	29.70	5.82	38.72	33.22	35.52	NB	53.00	19.78	OK	

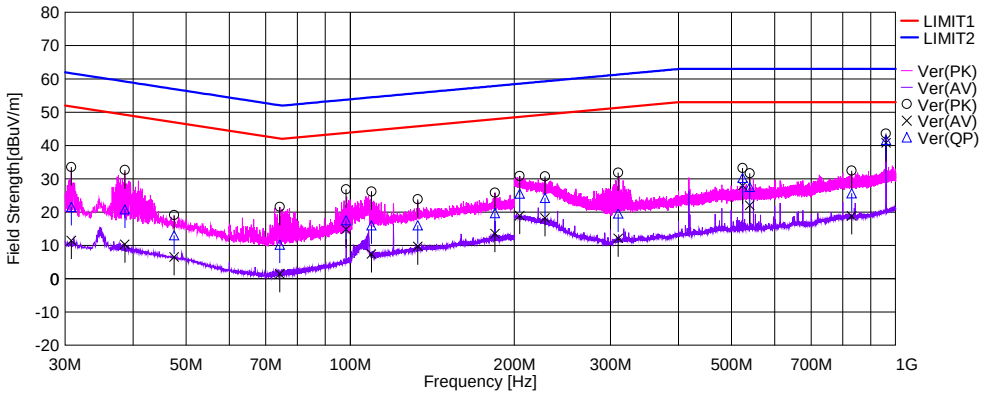
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : AV INPUT with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	30.8075	Vertic.	39.00	16.90	27.00	-5.41	33.59	11.49	21.59	BB	61.71	40.12	OK	
	38.6200	Vertic.	39.30	17.00	27.50	-6.64	32.66	10.36	20.86	BB	59.24	38.38	OK	
	47.5580	Vertic.	27.80	15.20	21.70	-8.63	19.17	6.57	13.07	BB	56.97	43.90	OK	
	74.3015	Vertic.	35.70	15.60	24.40	-14.10	21.60	1.50	10.30	BB	52.10	41.80	OK	
	98.3035	Vertic.	37.00	25.00	27.70	-10.15	26.85	14.85	17.55	BB	53.78	36.23	OK	
	109.3340	Vertic.	34.70	15.90	24.50	-8.46	26.24	7.44	16.04	BB	54.48	38.44	OK	
	133.0500	Vertic.	30.00	15.90	22.20	-6.12	23.88	9.78	16.08	BB	55.77	39.69	OK	
	184.3000	Vertic.	29.10	16.80	23.00	-3.25	25.85	13.55	19.75	BB	57.91	38.16	OK	
	204.5040	Vertic.	27.10	15.20	21.80	3.77	30.87	18.97	25.57	BB	58.59	33.02	OK	
	227.4850	Vertic.	29.00	16.50	22.50	1.77	30.77	18.27	24.27	BB	59.29	35.02	OK	
	309.9469	Vertic.	35.30	15.60	23.00	-3.43	31.87	12.17	19.57	BB	61.32	41.75	OK	
	524.2834	Vertic.	33.60	28.30	30.60	-0.34	33.26	27.96	30.26	NB	53.00	25.04	OK	
	539.9941	Vertic.	31.90	22.30	27.80	-0.22	31.68	22.08	27.58	BB	63.00	35.42	OK	
	830.3488	Vertic.	28.60	15.00	21.80	3.90	32.50	18.90	25.70	BB	63.00	37.30	OK	
	960.2665	Vertic.	37.80	35.00	35.90	5.82	43.62	40.82	41.72	NB	53.00	12.18	OK	

[Mode: WLAN Communication with GPS Receiving]

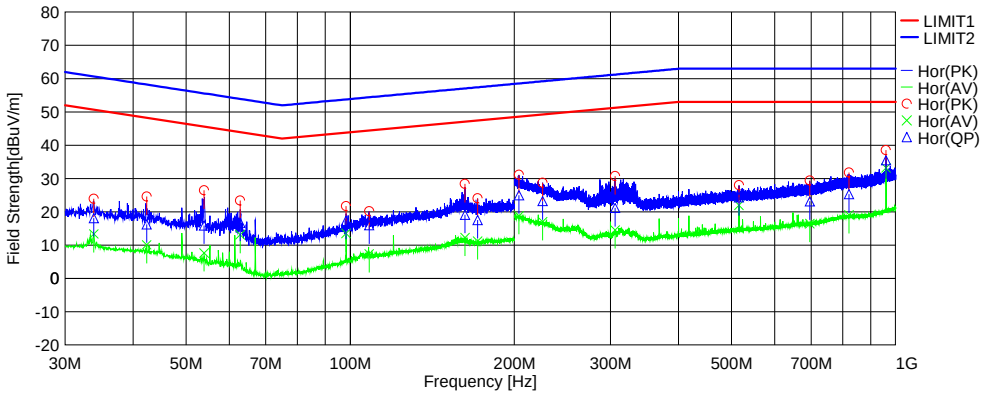
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : WLAN Communication with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	33.8836	Horizo.	29.90	19.30	24.10	-5.93	23.97	13.37	18.17	BB	60.67	42.50	OK	
	42.3445	Horizo.	32.00	17.50	23.70	-7.39	24.61	10.11	16.31	BB	58.24	41.93	OK	
	53.9973	Horizo.	37.20	18.40	26.70	-10.72	26.48	7.68	15.98	BB	55.59	39.61	OK	
	62.8447	Horizo.	36.80	26.50	30.10	-13.36	23.44	13.14	16.74	BB	53.93	37.19	OK	
	98.3033	Horizo.	31.90	23.70	27.50	-10.15	21.75	13.55	17.35	BB	53.78	36.43	OK	
	108.2990	Horizo.	28.80	16.00	24.60	-8.61	20.19	7.39	15.99	BB	54.41	38.42	OK	
	162.3675	Horizo.	32.50	16.40	23.30	-4.13	28.37	12.27	19.17	BB	57.08	37.91	OK	
	171.2114	Horizo.	27.90	15.10	21.40	-3.85	24.05	11.25	17.55	BB	57.42	39.87	OK	
	203.8503	Horizo.	27.30	15.00	21.20	3.83	31.13	18.83	25.03	BB	58.57	33.54	OK	
	225.3050	Horizo.	26.80	15.10	21.30	1.95	28.75	17.05	23.25	BB	59.23	35.98	OK	
	305.9000	Horizo.	34.30	18.10	24.70	-3.51	30.79	14.59	21.19	BB	61.24	40.05	OK	
	516.1226	Horizo.	28.40	22.40	24.80	-0.40	28.00	22.00	24.40	NB	53.00	31.00	OK	
	696.2448	Horizo.	27.80	14.90	21.60	1.59	29.39	16.49	23.19	BB	63.00	39.81	OK	
	821.1886	Horizo.	28.00	15.30	21.50	3.82	31.82	19.12	25.32	BB	63.00	37.68	OK	
	960.2667	Horizo.	32.70	27.40	29.70	5.82	38.52	33.22	35.52	NB	53.00	19.78	OK	

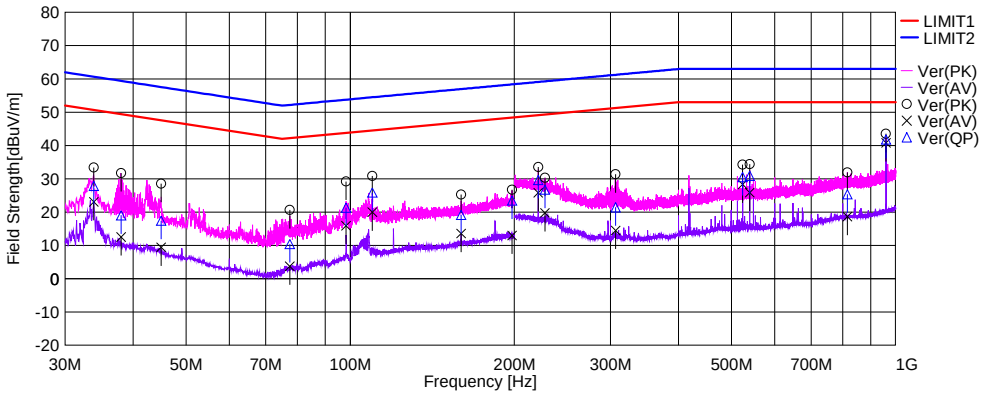
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : WLAN Communication with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	33.8839	Vertic.	39.30	29.00	33.80	-5.93	33.37	23.07	27.87	BB	60.67	32.80	OK	
	38.0210	Vertic.	38.30	19.10	25.60	-6.56	31.74	12.54	19.04	BB	59.41	40.37	OK	
	45.0210	Vertic.	36.60	17.50	25.50	-8.06	28.54	9.44	17.44	BB	57.57	40.13	OK	
	77.4895	Vertic.	34.40	17.50	24.20	-13.75	20.65	3.75	10.45	BB	52.21	41.76	OK	
	98.3034	Vertic.	39.40	26.10	31.50	-10.15	29.25	15.95	21.35	BB	53.78	32.43	OK	
	109.7809	Vertic.	39.30	28.40	34.30	-8.40	30.90	20.00	25.90	BB	54.50	28.60	OK	
	159.7445	Vertic.	29.50	17.80	23.40	-4.21	25.29	13.59	19.19	BB	56.97	37.78	OK	
	198.1000	Vertic.	29.40	15.70	26.20	-2.68	26.72	13.02	23.52	BB	58.38	34.86	OK	
	221.1823	Vertic.	31.30	23.50	27.40	2.29	33.59	25.79	29.69	BB	59.11	29.42	OK	
	227.4500	Vertic.	28.60	18.00	25.00	1.77	30.37	19.77	26.77	BB	59.29	32.52	OK	
	306.6100	Vertic.	34.90	18.00	25.00	-3.51	31.39	14.49	21.49	BB	61.25	39.76	OK	
	524.2886	Vertic.	34.60	28.70	30.90	-0.34	34.26	28.36	30.56	NB	53.00	24.64	OK	
	540.0006	Vertic.	34.60	26.10	31.20	-0.22	34.38	25.88	30.98	BB	63.00	32.02	OK	
	815.4550	Vertic.	28.20	14.90	21.60	3.77	31.97	18.67	25.37	BB	63.00	37.63	OK	
	960.2668	Vertic.	37.70	35.00	36.00	5.82	43.52	40.82	41.82	NB	53.00	12.18	OK	

[Mode: Bluetooth Communication with GPS Receiving]

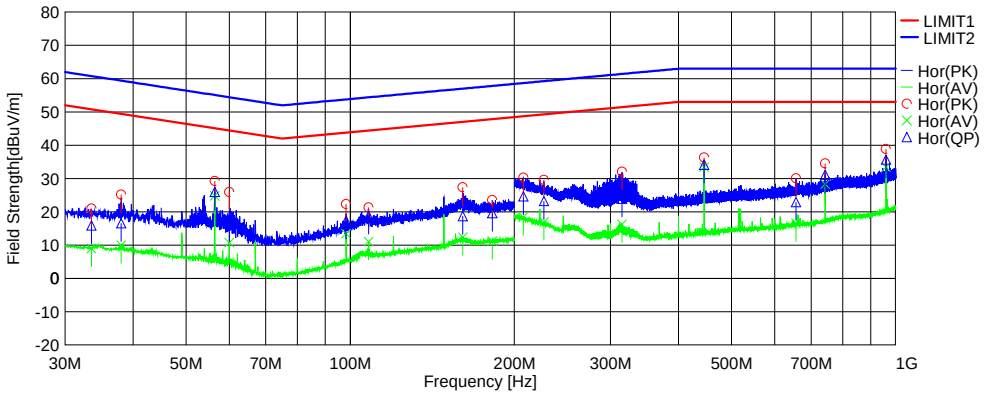
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : Bluetooth Communication with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	33.5500	Horizo.	26.90	14.90	21.80	-5.88	21.02	9.02	15.92	BB	60.78	44.86	OK	
	38.0349	Horizo.	31.80	16.60	23.20	-6.56	25.24	10.04	16.64	BB	59.41	42.77	OK	
	56.4485	Horizo.	40.90	36.40	37.60	-11.59	29.31	24.81	26.01	NB	45.10	20.29	OK	
	60.0171	Horizo.	38.80	23.60	29.60	-12.83	25.97	10.77	16.77	BB	54.43	37.66	OK	
	98.3020	Horizo.	32.50	23.60	27.50	-10.15	22.35	13.45	17.35	BB	53.78	36.43	OK	
	108.0500	Horizo.	30.00	19.70	27.50	-8.65	21.35	11.05	18.85	BB	54.40	35.55	OK	
	160.8432	Horizo.	31.60	16.60	22.90	-4.17	27.43	12.43	18.73	BB	57.01	38.28	OK	
	182.2000	Horizo.	26.80	14.50	22.90	-3.28	23.52	11.22	19.62	BB	57.83	38.21	OK	
	207.8501	Horizo.	26.80	15.00	21.20	3.47	30.27	18.47	24.67	BB	58.70	34.03	OK	
	226.6400	Horizo.	27.80	15.20	21.40	1.84	29.64	17.04	23.24	BB	59.27	36.03	OK	
	314.9552	Horizo.	35.40	19.60	27.30	-3.33	32.07	16.27	23.97	BB	61.43	37.46	OK	
	445.5046	Horizo.	37.50	34.60	35.30	-1.15	36.35	33.45	34.15	NB	53.00	19.55	OK	
	656.6555	Horizo.	29.00	15.60	21.90	1.05	30.05	16.65	22.95	BB	63.00	40.05	OK	
	742.5078	Horizo.	32.00	25.80	28.60	2.53	34.53	28.33	31.13	BB	63.00	31.87	OK	
	960.2668	Horizo.	33.10	27.60	29.90	5.82	38.92	33.42	35.72	NB	53.00	19.58	OK	

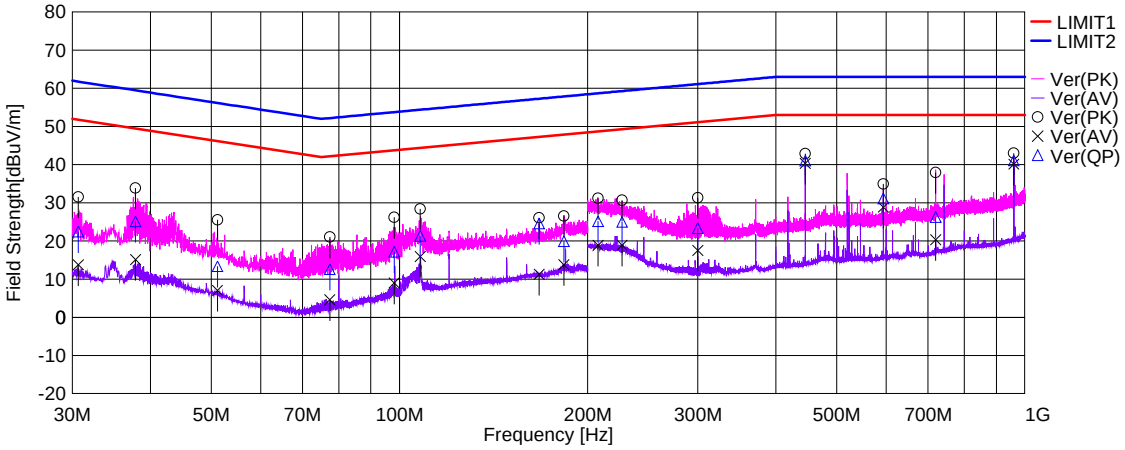
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No. : 13554201S
Tested Date : 2020/10/20
Temp/Humid : 23 deg.C / 40 %RH
Engineer : Yusuke Ohnuma
Mode : Bluetooth Communication with GPS Receiving

Kind of EUT : Monitor with Receiver
Model No : DMX8020DABS
Serial No : PE-X0021
Remarks : -

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)



Band ID	Freq.	Pol	Level			Factor	Result			NB/BB	Limit	Margin		Memo
			PK	AV	QP		PK	AV	QP					
	[MHz]		[dBuV]			[dB]	[dBuV/m]				[dBuV/m]	[dB]		
	30.6720	Vertic.	37.00	19.20	27.90	-5.39	31.61	13.81	22.51	BB	61.76	39.25	OK	
	37.8500	Vertic.	40.40	21.70	31.70	-6.53	33.87	15.17	25.17	BB	59.46	34.29	OK	
	51.2000	Vertic.	35.20	16.70	23.00	-9.62	25.58	7.08	13.38	BB	56.17	42.79	OK	
	77.3995	Vertic.	34.80	18.40	26.40	-13.76	21.04	4.64	12.64	BB	52.21	39.57	OK	
	98.0520	Vertic.	36.40	19.20	27.40	-10.19	26.21	9.01	17.21	BB	53.76	36.55	OK	
	107.9926	Vertic.	37.10	24.60	30.00	-8.66	28.44	15.94	21.34	BB	54.40	33.06	OK	
	167.3320	Vertic.	30.10	15.30	28.60	-3.99	26.11	11.31	24.61	BB	57.27	32.66	OK	
	183.2525	Vertic.	29.80	17.10	23.20	-3.26	26.54	13.84	19.94	BB	57.87	37.93	OK	
	207.7330	Vertic.	27.70	15.40	21.70	3.48	31.18	18.88	25.18	BB	58.69	33.51	OK	
	227.0550	Vertic.	28.90	17.10	23.20	1.80	30.70	18.90	25.00	BB	59.28	34.28	OK	
	300.0001	Vertic.	35.00	21.20	27.00	-3.64	31.36	17.56	23.36	BB	61.11	37.75	OK	
	445.5000	Vertic.	44.00	41.50	42.20	-1.15	42.85	40.35	41.05	NB	53.00	12.65	OK	
	594.0000	Vertic.	34.80	28.70	31.00	0.16	34.96	28.86	31.16	BB	63.00	31.84	OK	
	720.1999	Vertic.	35.90	18.30	24.20	2.06	37.96	20.36	26.26	BB	63.00	36.74	OK	
	960.2666	Vertic.	37.20	34.30	35.30	5.82	43.02	40.12	41.12	NB	53.00	12.88	OK	

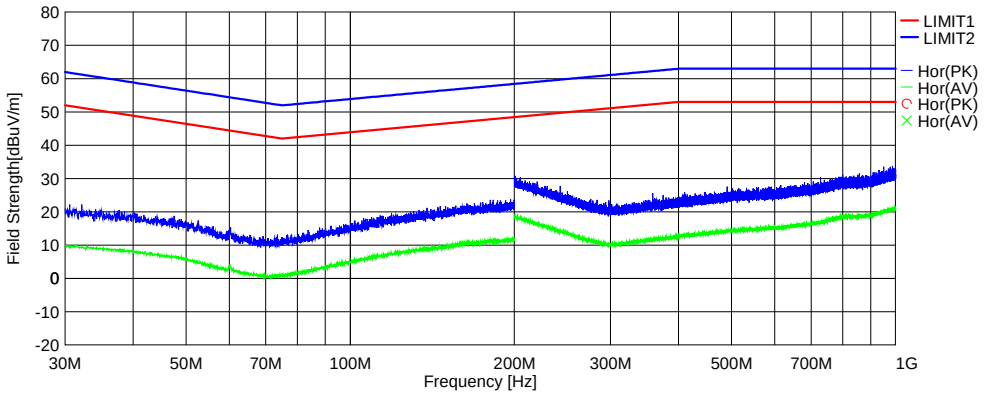
[Ambient noise]

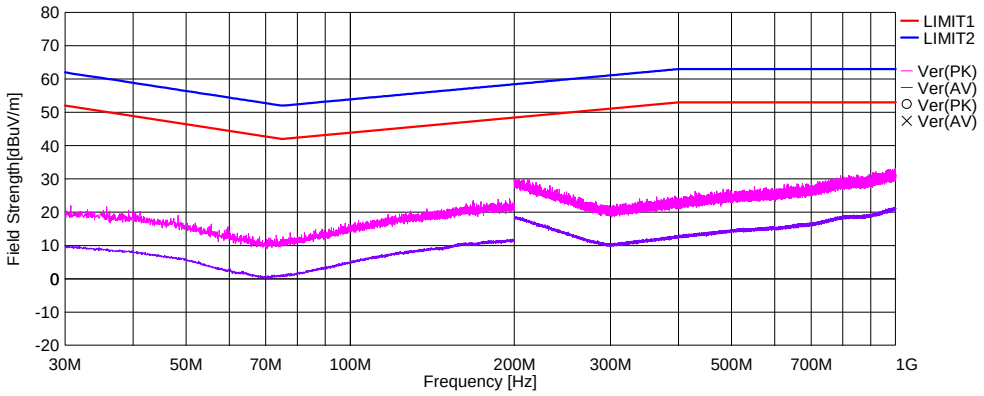
UL Japan. Inc. No.4 Semi Anechoic Chamber

Radiated Emission Test

Order No.	: 13554201S	Kind of EUT	: **********
Tested Date	: 2020/10/20	Model No	: **********
Temp/Humid	: 23 deg.C / 40 %RH	Serial No	: **********
Engineer	: Yusuke Ohnuma	Remarks	: Ambient noise
Mode	: -		

LIMIT1 : UN Regulation No.10 - Rev.6 Narrow Band(1m)
LIMIT2 : UN Regulation No.10 - Rev.6 Broad Band(1m)





APPENDIX 3: TEST EQUIPMENT USED

Test equipment (1/2)

Test Name	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
RE	COTS-SEMI-4	144868	Emission RE/CE Test Software	TSJ (Techno Science Japan)	TEPTO-DV/(RE,CE)	-	-	-
RE	SAF-12	145130	Pre Amplifier	Keysight Technologies Inc	8447D	2944A09965	2020/07/16	12
RE	SAT6-11	145153	Attenuator	HIROSE ELECTRIC CO.,LTD.	AT-406(40)	-	2020/08/18	12
RE	SBA-05V	145050	Biconical Antenna	Schwarzbeck Mess - Elektronik	BBA9106	1908	2020/03/10	12
RE	SBM-07	145027	Barometer	Sunoh	SBR121	1075	2020/09/28	36
RE	SCC-D2/D3/D4/D5	145037	Coaxial Cable	Fujikura Shoji Co., LTD	5D2W/8D2W/5D2W	-	2020/06/24	12
RE	SJM-15	145338	Measure	ASKUL	-	-	-	-
RE	SLA-04V	145535	Logperiodic Antenna	Schwarzbeck Mess - Elektronik	USLP9143B	9143B006	2020/03/10	12
RE	SLS-11	145548	LISN	FCC	FCC-LISN	8139	2020/03/24	12
RE	SLS-12	145549	LISN	FCC	FCC-LISN-5-50-1-01-CISPR25	9598	2020/09/17	12
RE	SOS-25	191843	Humidity Indicator	CUSTOM. Inc	CTH-201	-	2020/09/28	12
RE	STM-11	145764	Terminator	TME	CT-01 BP	-	2019/12/05	12
RE	STM-15	146194	Terminator	TME	CT-01 BP	-	2019/12/05	12
RE	STR-06	146208	Test Receiver	Rohde & Schwarz	ESCI	101259	2020/04/01	12
RE	STS-04	146211	Digital Hitester	Hioki	3805-50	80997827	2020/04/09	12
TE	COTS-STI-01	144922	AUTOSTAR Software	Teseq	-	-	-	-
TE	KST-08	145093	Oscilloscope	Keysight Technologies Inc	DSO6052A	MY44001066	2020/06/25	12
TE	SLS-13	145550	LISN(AMN)	Schwarzbeck Mess - Elektronik	NNBM8125	8125-1367	2019/11/27	12
TE	SRS40-01	146174	Resistance	Baumer	RWH50/G40ΩJ	-	2020/03/26	12
TE	SSW-04	145738	Electronic switch	EM Test (Ametek)	BS200N	V1102108536	-	-
TE	STI-02	145743	Power Amplifier 60V-10A	TESEQ GmbH	PA5740	571-0038	2020/09/30	12
TE	STI-03	146187	Function Generator	Teseq	FG 5620	1271	2020/09/30	12
TE	SVPR-01	146217	Voltage probe	Tektronix	P5100	-	2020/06/26	12

Test equipment (2/2)

Test Name	Local ID	LIMS ID	Description	Manufacturer	Model	Serial	Last Calibration Date	Cal Int
TI	COTS-STI-01	144922	AUTOSTAR Software	Teseq	-	-	-	-
TI	KOS-11	145063	Humidity Indicator	Baumer	CTH-202	Q.C.13	2020/10/01	12
TI	SBM-08	145028	Barometer	Sunoh	SBR121	1006	2020/09/29	36
TI	SJM-15	145338	Measure	ASKUL	-	-	-	-
TI	SOS-25	191843	Humidity Indicator	CUSTOM. Inc	CTH-201	-	2020/09/28	12
TI	STI-01	146186	Transient Generator	Teseq	NSG 5500	090430-01	2020/09/30	12
TI	STI-02	145743	Power Amplifier 60V-10A	TESEQ GmbH	PA5740	571-0038	2020/09/30	12
TI	STI-03	146187	Function Generator	Teseq	FG 5620	1271	2020/09/30	12
TI	STS-04	146211	Digital Hitester	Hioki	3805-50	80997827	2020/04/09	12

***Hyphens for Last Calibration Date and Cal Int (month) are instruments that Calibration is not required (e.g. software), or instruments checked in advance before use.**

The expiration date of the calibration is the end of the expired month.
As for some calibrations performed after the tested dates, those test equipment have been controlled by means of an unbroken chains of calibrations.

All equipment is calibrated with valid calibrations. Each measurement data is traceable to the national or international standards.
Test Item:
RE: Radiated emission test / TE: Transient emission test.
TI: Transient immunity.

End of Report