

No. 1 Workshop, M-10, Middle Section, Science & Technology Park,

District Shenzhen, China 518057

Telephone: +86 (0) 755 2601 2053 Report No.:SZEMO10100640501

# **FCC Test Report**

Application No.: SZEMO101006405IT

Applicant/Manufacturer/

Factory:

Shenzhen GBD Electronic CO., LTD.

Address of Applicant/

5/F, Block 4, LianChuang Tech-Park, Buji Town, ShenZhen, China

Manufacturer/Factory:

**Equipment Under Test (EUT):** 

EUT Name: digital photo frame

Item No.: GB-1200D

FCC ID: YVOGBD-GB-1200D

Standards: FCC PART15 SUBPART B:2009

**Date of Receipt**: 2010-10-13

**Date of Test**: 2010-10-13 to 2010-10-14

**Date of Issue**: 2010-10-22

Test Result : Pass\*

Authorized Signature:

Jack Zhang EMC Laboratory Manager

The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report. If the product in this report is used in any configuration other than that detailed in the report, the manufacturer must ensure the new system complies with all relevant standards. Any mention of SGS International Electrical Approvals or testing done by SGS International Electrical Approvals in connection with, distribution or use of the product described in this report must be approved by SGS International Electrical Approvals in writing.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the federal government. All test results in this report can be traceable to National or International Standards.

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at www.sgs.com/terms\_and\_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms\_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



Report No.: SZEMO10100640501

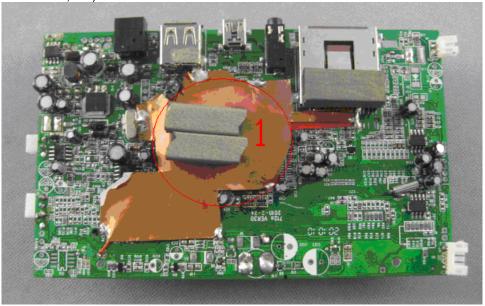
Page: 2 of 27

### 2 Test Summary

Test	Test Requirement	Test Method	Class / Severity	Result
Radiated Emission (30MHz to 1GHz)	FCC PART 15, SUBPART B: 2009	ANSI C63.4:2009	Class B	PASS**
Conducted Emission (150KHz to 30MHz)	FCC PART 15, SUBPART B: 2009	ANSI C63.4:2009	Class B	PASS

#### Remark:

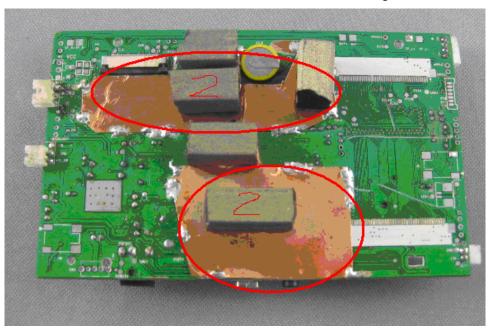
- \*\*: The EUT passed the Radiated Emission test after modification. See information and pictures below.
- 1. Shield the part of PCB backplane with copper foil. (manufacturer: Shenzhen XunYao electric Co., Ltd.)
- 2. Stick electric foam on the bottom of the PCB and let it conect with the painted enclosure.
- 3. The SMD DIP( PR5 and PR10) Change into 220 Ohm.
- 4. Change the R14 into 4.7K and bunch a resister of 560 Ohm in the line of XTALO.
- 5. Adding a magnet ring on the distant control line (model: UF-70, Shenzhen Sanbao electric Co., Ltd)
- 6. Shield the LCD screen line with copper foil and bunch 6 magnet ring. (model: FS40\*6, size: 5\*12, Shenzhen Sanbao electric Co., Ltd)
- 7. Adding two magnet ring on the USB line close to two terminals, (model: 5\*10\*20, Shenzhen Sanbao electric Co., Ltd)

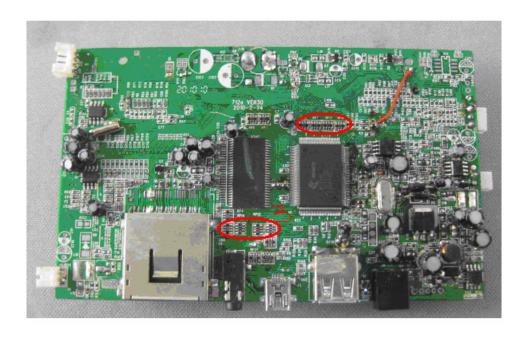




Report No.: SZEMO10100640501

Page: 3 of 27

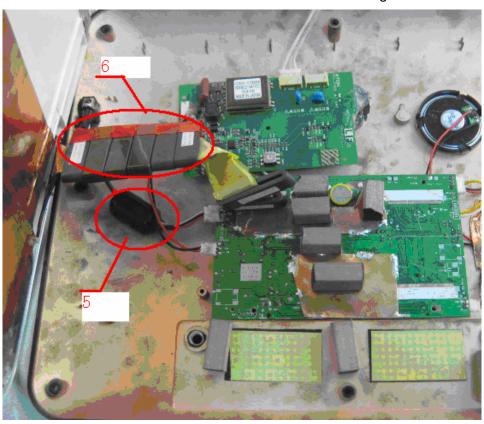






Report No.: SZEMO10100640501

Page: 4 of 27





Report No.: SZEMO10100640501

Page: 5 of 27

### 3 Contents

		Pa	age
1	COVER	R PAGE	1
2	TEST S	SUMMARY	2
RE	EMARK :		2
**:	THE EUT	PASSED THE RADIATED EMISSION TEST AFTER MODIFICATION. SEE INFORMATION RES BELOW	
3	CONTE	ENTS	5
4	GENEF	RAL INFORMATION	6
	4.2 D 4.3 S 4.4 TI 4.5 TI 4.6 D 4.7 A	ETAILS OF E.U.T.  ESCRIPTION OF SUPPORT UNITS  TANDARDS APPLICABLE FOR TESTING  EST LOCATION  EST FACILITY  EVIATION FROM STANDARDS  BNORMALITIES FROM STANDARD CONDITIONS	6 6 7 7
5	EQUIP	MENTS USED DURING TEST	8
6	TEST F	RESULTS	10
	6.1.1 6.1.2 6.2 R 6.2.1	ONDUCTED EMISSIONS MAINS TERMINALS, 150kHz TO 30MHz	10 10 19 19



Report No.: SZEMO10100640501

Page: 6 of 27

### 4 General Information

#### 4.1 Details of E.U.T.

Power Supply: MODEL: HL-12/2-8E6S

INPUT: AC 100-240V 50/60Hz 680mA Max

OUTPUT : DC 12V 2A Test voltage : AC 120V 60Hz

3.0V DC (3.0V x 1 "CR2025" Button Cell) The highest frequency of EUT: 27MHz

USB cable: 80cm DC output cable: 140cm

### 4.2 Description of Support Units

The EUT has been tested with associated equipment below.

Description	Manufacturer	Model No.
PC (1)	DELL	OPTIPLEX 755
LCD-displaying	DELL	E1909WF
KEYBOARD	DELL	SK-8115
MOUSE	DELL	MOC5110
PC (2)	DELL	OPTIDLEX 330
LCD-displaying	DELL	SP2208WFPT
KEYBOARD	DELL	SK-8115
MOUSE	DELL	MOC5110
Coder	HengTong ELECTRON	HT4000
Printer	Canon	BJC-1000SP

#### 4.3 Standards Applicable for Testing

The customer requested FCC tests for digital photo frame. The standard used was FCC PART 15, SUBPART B, CLASS B.

#### 4.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch E&E Lab,

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.



Report No.: SZEMO10100640501

Page: 7 of 27

### 4.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### CNAS (No. CNAS L2929)

CNAS has accredited SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch EMC Lab to ISO/IEC 17025:2005 General Requirements for the Competence of Testing and Calibration Laboratories (CNAS-CL01 Accreditation Criteria for the Competence of Testing and Calibration Laboratories) for the competence in the field of testing.

#### VCCI

The 3m Semi-anechoic chamber and Shielded Room (7.5m x 4.0m x 3.0m) of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-2197 and C-2383 respectively.

Date of Registration: September 29, 2008. Valid until September 28, 2011.

#### FCC – Registration No.: 556682

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been registered and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Registration 556682, June 27, 2008.

### Industry Canada (IC)

The 3m Semi-anechoic chamber of SGS-CSTC Standards Technical Services Co., Ltd. has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing with Registration No.: 4620C-1.

#### 4.6 Deviation from Standards

None.

#### 4.7 Abnormalities from Standard Conditions

None.



Report No.: SZEMO10100640501

Page: 8 of 27

# 5 Equipments Used during Test

	RE in Chamber					
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)
1	3m Semi-Anechoic Chamber	ETS-LINDGREN	N/A	SEL0017	2010-06-17	2011-06-17
2	EMI Test Receiver	Rohde & Schwarz	ESIB26	SEL0023	2010-03-19	2011-03-19
3	EMI Test software	AUDIX	E3	SEL0050	N/A	N/A
4	Coaxial cable	SGS	N/A	SEL0028	2008-06-18	2011-06-18
5	BiConiLog Antenna (26-3000MHz)	ETS-LINDGREN	3142C	SEL0015	2009-11-05	2010-11-05
6	Pre-amplifier (0.1-1300MHz)	Agilent Technologies	8447D	SEL0053	2010-06-02	2011-06-02
7	Double-ridged horn (1-18GHz)	ETS-LINDGREN	3117	SEL0006	2009-11-10	2010-11-10
8	Horn Antenna (18-26GHz)	ETS-LINDGREN	3160	SEL0076	2009-11-10	2010-11-10
9	Pre-amplifier (18-26GHz)	Rohde & Schwarz	AFS33-18002 650-30-8P-44	SEL0080	2010-06-04	2011-06-04
10	Band filter	Amindeon	Asi 3314	SEL0094	2010-06-02	2011-06-01
11	Active Loop Antenna	Beijing Daze	ZN30900A	SEL0097	2010-08-10	2011-08-10

	Conducted Emission									
ltem	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)				
1	Shielding Room	ZhongYu Electron	GB-88	SEL0042	N/A	N/A				
2	LISN	ETS-LINDGREN	3816/2	SEL0021	2010-06-02	2011-06-02				
3	8 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T8-02	EMC0120	2010-01-25	2011-01-25				
4	4 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T4-02	EMC0121	2010-01-25	2011-01-25				
5	2 Line ISN	Fischer Custom Communications Inc.	FCC-TLISN-T2-02	EMC0122	2010-01-25	2011-01-25				
6	EMI Test Receiver	Rohde & Schwarz	ESCI	SEL0022	2010-06-02	2011-06-02				
7	Coaxial Cable	SGS	N/A	SEL0024	2008-06-18	2011-06-18				



Report No.: SZEMO10100640501

Page: 9 of 27

General used equipment								
Item	Test Equipment	Manufacturer	Model No.	Inventory No.	Cal.Date (yyyy-mm-dd)	Cal.Due date (yyyy-mm-dd)		
1	Humidity/ Temperature Indicator	Shanghai	ZJ1-2B	SEL0101 to SEL0103	2010-10-21	2011-10-21		
2	Barometer	ChangChun	DYM3	SEL0088	2010-06-08	2011-06-08		



Report No.: SZEMO10100640501

Page: 10 of 27

### 6 Test Results

#### 6.1 Conducted Emissions Mains Terminals, 150kHz to 30MHz

Test Requirement: FCC Part15 B
Test Method: ANSI C63.4

Frequency Range: 150KHz to 30MHz

Class / Severity: Class B

Detector: Peak for pre-scan (9kHz Resolution Bandwidth)

Quasi-Peak if maximised peak within 6dB of Quasi-Peak limit

#### 6.1.1 E.U.T. Operation

Operating Environment:

Temperature: 25.0 °C Humidity: 55 % RH Atmospheric Pressure: 1010 Mbar

EUT Operation: Test in read & write Int. memory mode, build the connection between EUT and PC,

keep data exchanging with Int. memory.

Test in play with SD card mode, keep the EUT playing music and photo with SD card.

Test in play with USB stick mode, keep the EUT playing music and photo with USB

stick.

Test in play with Int. memory mode, keep the EUT playing music and photo with Int.

memory.

#### 6.1.2 Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector.

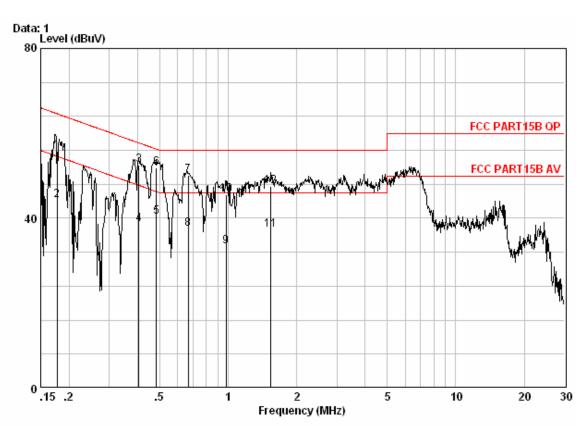
Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.



Report No.: SZEMO10100640501

Page: 11 of 27

Read & write Int. memory Line



Site : Shielding Room

Condition : FCC PART15B QP CE LINE

EUT : digital photo frame

Job No. : 6405IT

Mode : Read & write Int. memory

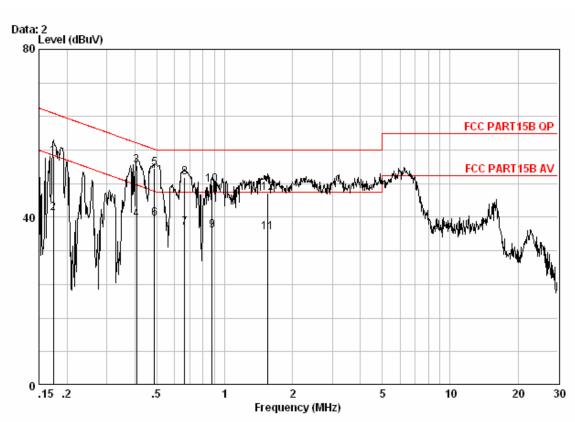
101000	•	. I co do co willo illo. Illoit	.ory						
			Cable	LISN	Read		Limit	Over	
		Freq	Loss	Factor	Level	Level	Line	Limit	Remark
		MHz	dB	dB	dBuV	dBuV	dBuV	dB	
	0	0.47700	0.04	0.05	FF 00	FF 00	64 60	0.50	O.B.
1	le .	0.17700	0.04	-0.05	55.90	55.89	64.63	-8.73	QP
2		0.17700	0.04	-0.05	44.20	44.19	54.63	-10.43	Average
3	0	0.40500	0.06	-0.04	52.60	52.61	57.75	-5.14	QP
4		0.40500	0.06	-0.04	38.50	38.51	47.75	-9.24	Average
5	0	0.48300	0.06	-0.04	40.40	40.42	46.29	-5.87	Average
6	0	0.48300	0.06	-0.04	51.80	51.82	56.29	-4.47	QP
7	0	0.66700	0.06	-0.05	50.20	50.21	56.00	-5.79	QP
8	0	0.66700	0.06	-0.05	37.40	37.41	46.00	-8.59	Average
9		0.97800	0.08	-0.05	33.30	33.33	46.00	-12.67	Average
10		0.97800	0.08	-0.05	45.60	45.63	56.00	-10.37	QP
11	0	1.540	0.10	-0.06	37.30	37.35	46.00	-8.65	Average
12	0	1.540	0.10	-0.06	47.50	47.55	56.00	-8.45	QP



Report No.: SZEMO10100640501

Page: 12 of 27

#### Neutral



Site : Shielding Room

Condition : FCC PART15B QP CE NEUTRAL

EUT : digital photo frame

Job No. : 6405IT

Mode : Read & write Int. memory

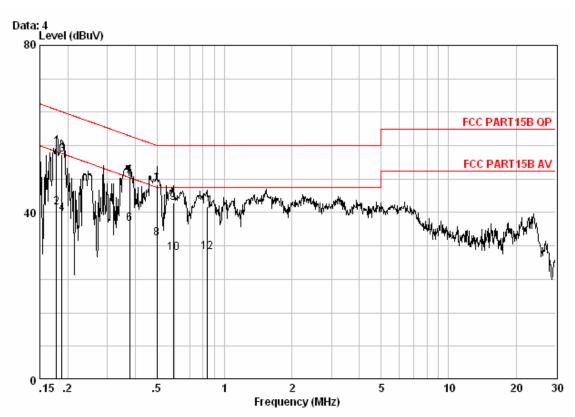
Mode	e :Read o	z wnie mi. mem	ory						
			Cable	LISN	Read		Limit	Over	
		Freq	Loss	Factor	Level	Level	Line	Limit	Remark
		MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1		0.17400	0.04	-0.04	54.50	54.50	64.77	-10.27	QP
2		0.17400	0.04	-0.04	40.90	40.90	54.77	-13.87	Average
3	0	0.40600	0.06	-0.04	52.30	52.32	57.73	-5.41	QP
4	0	0.40600	0.06	-0.04	39.40	39.42	47.73	-8.31	Average
5	0	0.48800	0.06	-0.04	51.70	51.72	56.20	-4.48	QP
6	0	0.48800	0.06	-0.04	39.60	39.62	46.20	-6.58	Average
7	0	0.66400	0.06	-0.04	37.50	37.52	46.00	-8.48	Average
8	0	0.66400	0.06	-0.04	49.40	49.42	56.00	-6.58	QP
9		0.88000	0.07	-0.04	36.90	36.93	46.00	-9.07	Average
10	0	0.88000	0.07	-0.04	47.80	47.83	56.00	-8.17	QP
11		1.550	0.10	-0.05	36.40	36.45	46.00	-9.55	Average
12		1.550	0.10	-0.05	45.80	45.85	56.00	-10.15	QP



Report No.: SZEMO10100640501

Page: 13 of 27

Play with SD card Line



Site : Shielding Room

Condition : FCC PART15B QP CE LINE

EUT : digital photo frame

Job No. : 6405IT

Mode : Play with SD card

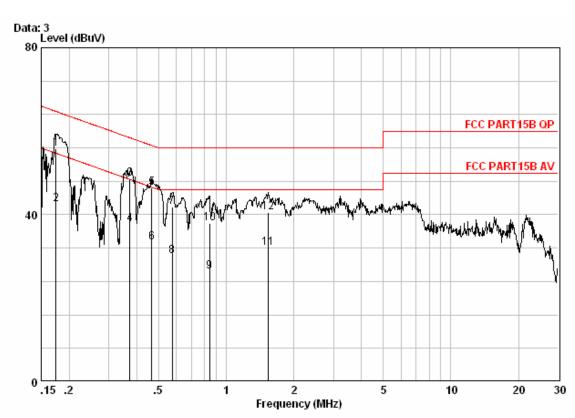
101040	. I lay willias out a	0-1-1-		D1		T 2 2	0	
		Cable	LISN	Read		Limit	Over	
	Fred	q Loss	Factor	Level	Level	Line	Limit	Remark
	MH	z dB	dB	dBuV	dBuV	dBuV	dB	
1 0	0.17800	0.04	-0.05	55.60	55.59	64.58	-8.99	QP
2	0.17800	0.04	-0.05	41.20	41.19	54.58	-13.39	Average
3	0.18800	0.04	-0.05	53.90	53.89	64.12	-10.23	QP
4	0.18800	0.04	-0.05	39.60	39.59	54.12	-14.53	Average
5	0.37700	0.05	-0.04	48.60	48.61	58.35	-9.73	QP
6	0.37700	0.05	-0.04	37.20	37.21	48.35	-11.13	Average
7	0.49900	0.06	-0.04	46.60	46.62	56.02	-9.40	QP
8	0.49900	0.06	-0.04	33.70	33.72	46.02	-12.30	Average
9	0.59100	0.06	-0.04	42.30	42.32	56.00	-13.68	QP
10	0.59100	0.06	-0.04	30.20	30.22	46.00	-15.78	Average
11	0.83400	0.07	-0.05	41.50	41.52	56.00	-14.48	QP
12	0.83400	0.07	-0.05	30.40	30.42	46.00	-15.58	Average
								5-



Report No.: SZEMO10100640501

Page: 14 of 27

#### Neutral



Site : Shielding Room

Condition : FCC PART15B QP CE NEUTRAL

EUT : digital photo frame

Job No. : 6405IT

Mode : Play with SD card

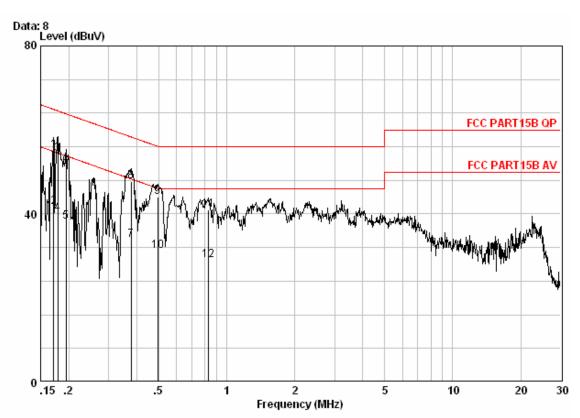
101046	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1 0	0.17500	0.04	-0.04	55.90	55.90	64.72	-8.82	QP
2	0.17500	0.04	-0.04	42.60	42.60	54.72	-12.12	Average
3	0.37300	0.05	-0.04	48.60	48.62	58.43	-9.82	QP
4	0.37300	0.05	-0.04	37.70	37.72	48.43	-10.72	Average
5	0.46600	0.06	-0.04	46.50	46.52	56.58	-10.07	QP
6	0.46600	0.06	-0.04	33.40	33.42	46.58	-13.17	Average
7	0.57600	0.06	-0.04	41.90	41.92	56.00	-14.08	QP
8	0.57600	0.06	-0.04	30.10	30.12	46.00	-15.88	Average
9	0.84300	0.07	-0.04	26.40	26.43	46.00	-19.57	Average
10	0.84300	0.07	-0.04	37.90	37.93	56.00	-18.07	QP
11	1.530	0.10	-0.05	31.90	31.95	46.00	-14.05	Average
12	1.530	0.10	-0.05	40.50	40.55	56.00	-15.45	QP



Report No.: SZEMO10100640501

Page: 15 of 27

Play with USB stick Line



Site : Shielding Room

Condition : FCC PART15B QP CE LINE

EUT : digital photo frame

Job No. : 6405IT

Mode : Play with USB stick

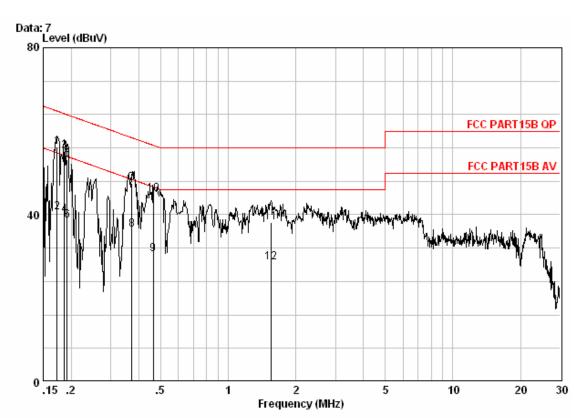
IMode	: Flay with USB stick							
		Cable	LISN	Read		Limit	Over	
	Freq	Loss	Factor	Level	Level	Line	Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.17124	0.04	-0.05	55.21	55.20	64.90	-9.70	QP
2	0.17124	0.04	-0.05	41.68	41.67	54.90	-13.23	Average
3	0.17866	0.04	-0.05	54.33	54.33	64.55	-10.22	QP
4	0.17866	0.04	-0.05	40.06	40.05	54.55	-14.50	Average
5	0.19447	0.04	-0.05	38.24	38.23	53.84	-15.61	Average
6	0.19447	0.04	-0.05	51.30	51.30	63.84	-12.55	QP
7	0.37711	0.05	-0.04	33.67	33.68	48.34	-14.66	Average
8	0.37711	0.05	-0.04	47.67	47.69	58.34	-10.66	QP
9	0.49411	0.06	-0.04	44.09	44.11	56.10	-11.99	QP
10	0.49411	0.06	-0.04	31.16	31.18	46.10	-14.92	Average
11	0.83047	0.07	-0.05	40.85	40.87	56.00	-15.13	QP
12	0.83047	0.07	-0.05	28.95	28.97	46.00	-17.03	Average



Report No.: SZEMO10100640501

Page: 16 of 27

#### Neutral



Site : Shielding Room

Condition : FCC PART15B QP CE NEUTRAL

EUT : digital photo frame

Job No. : 6405IT

Mode : Play with USB stick

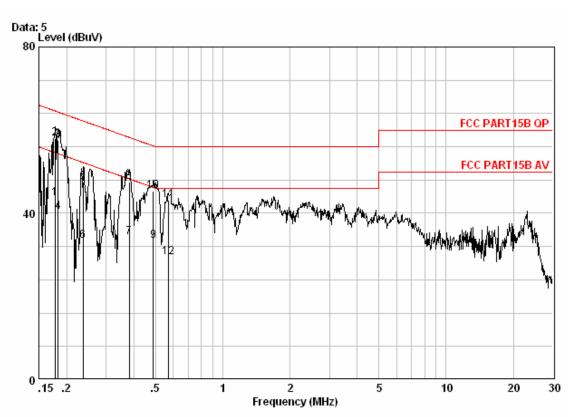
Mode	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.17300	0.04	-0.04	56.20	56.20	64.82	-8.62	QP
2	0.17300	0.04	-0.04	40.60	40.60	54.82	-14.22	Average
3	0.18600	0.04	-0.04	55.20	55.20	64.21	-9.02	QP
4	0.18600	0.04	-0.04	39.90	39.90	54.21	-14.32	Average
5	0.19200	0.04	-0.04	53.10	53.10	63.95	-10.85	QP
6	0.19200	0.04	-0.04	38.60	38.60	53.95	-15.35	Average
7	0.37300	0.05	-0.04	47.60	47.62	58.43	-10.82	QP
8	0.37300	0.05	-0.04	36.30	36.32	48.43	-12.12	Average
9	0.46400	0.06	-0.04	30.50	30.52	46.62	-16.10	Average
10	0.46400	0.06	-0.04	44.90	44.92	56.62	-11.70	QP
11	1.550	0.10	-0.05	38.20	38.25	56.00	-17.75	QP
12	1.550	0.10	-0.05	28.60	28.65	46.00	-17.35	Average



Report No.: SZEMO10100640501

Page: 17 of 27

Play with Int. memory Line



Site : Shielding Room

Condition : FCC PART15B QP CE LINE

EUT : digital photo frame

Job No. : 6405IT

Mode: Play with Int. memory

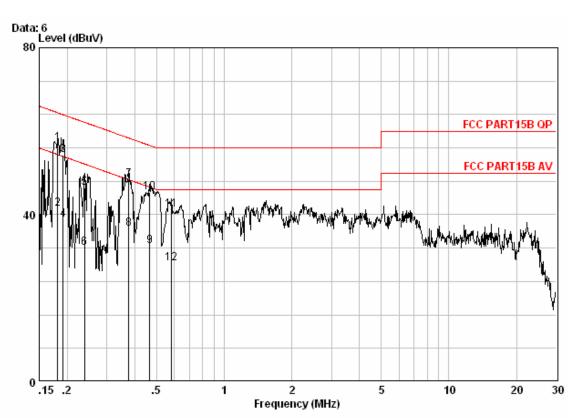
•	Freq	Cable Loss	LISN Factor	Read Level	Level	Limit Line	Over Limit	Remark
	MHz	dB	dB	dBuV	dBuV	dBuV	dB	
1	0.17700	0.04	-0.05	43.60	43.59	54.63	-11.03	Average
2 0	0.17700	0.04	-0.05	58.10	58.09	64.63	-6.53	QP
3	0.18300	0.04	-0.05	57.60	57.59	64.35	-6.76	QP
4	0.18300	0.04	-0.05	40.40	40.39	54.35	-13.96	Average
5	0.23700	0.04	-0.04	47.60	47.60	62.20	-14.60	QP
6	0.23700	0.04	-0.04	33.30	33.30	52.20	-18.90	Average
7	0.38100	0.05	-0.04	34.20	34.21	48.26	-14.05	Average
8	0.38100	0.05	-0.04	47.50	47.51	58.26	-10.75	QP
9	0.48800	0.06	-0.04	33.40	33.42	46.20	-12.79	Average
10	0.48800	0.06	-0.04	45.40	45.42	56.20	-10.79	QP
11	0.57000	0.06	-0.04	43.10	43.12	56.00	-12.88	QP
12	0.57000	0.06	-0.04	29.50	29.52	46.00	-16.48	Average



Report No.: SZEMO10100640501

Page: 18 of 27

#### Neutral



Site : Shielding Room

Condition : FCC PART15B QP CE NEUTRAL

EUT : digital photo frame

Job No. : 6405IT

Mode: Play with Int. memory

141040	Freq MHz	Cable Loss dB	LISN Factor dB	Read Level dBuV	Level dBuV	Limit Line dBuV	Over Limit dB	Remark
1	0.18100	0.04	-0.04	57.20	57.20	64.44	-7.24	QP
2	0.18100	0.04	-0.04	41.40	41.40	54.44	-13.04	Average
3	0.19200	0.04	-0.04	54.20	54.20	63.95	-9.75	QP
4	0.19200	0.04	-0.04	38.90	38.90	53.95	-15.05	Average
5	0.23900	0.04	-0.04	46.40	46.40	62.13	-15.73	QP
6	0.23900	0.04	-0.04	32.10	32.10	52.13	-20.03	Average
7	0.37500	0.05	-0.04	48.40	48.42	58.39	-9.97	QP
8	0.37500	0.05	-0.04	36.60	36.62	48.39	-11.77	Average
9	0.46600	0.06	-0.04	32.50	32.52	46.58	-14.07	Average
10	0.46600	0.06	-0.04	45.40	45.42	56.58	-11.17	QP
11	0.57900	0.06	-0.04	41.20	41.22	56.00	-14.78	QP
12	0.57900	0.06	-0.04	28.30	28.32	46.00	-17.68	Average



Report No.: SZEMO10100640501

Page: 19 of 27

#### 6.2 Radiated Emissions, 30MHz to 1GHz

Test Requirement: FCC Part15 B
Test Method: ANSI C63.4
Frequency Range: 30MHz to 1GHz

Measurement Distance: 3m

Class: Class B

Limit:  $40.0 \text{ dB}\mu\text{V/m}$  between 30MHz & 88MHz

 $43.5 \text{ dB}\mu\text{V/m}$  between 88MHz & 216MHz  $46.0 \text{ dB}\mu\text{V/m}$  between 216MHz & 960MHz

54.0 dBµV/m above 960MHz

Detector: Peak for pre-scan (120kHz resolution bandwidth) 30MHz-1G

Quasi-Peak if maximised peak within 6dB of limit

#### 6.2.1 E.U.T. Operation

Operating Environment:

Temperature: 24.0 °C Humidity: 50 % RH Atmospheric Pressure: 1010 mbar

EUT Operation: Test in read & write Int. memory mode, build the connection between EUT and PC,

keep data exchanging with Int. memory.

Test in play with SD card mode, keep the EUT playing music and photo with SD card.

Test in play with USB stick mode, keep the EUT playing music and photo with USB

stick.

Test in play with Int. memory mode, keep the EUT playing music and photo with Int.

memory.

#### 6.2.2 Measurement Data

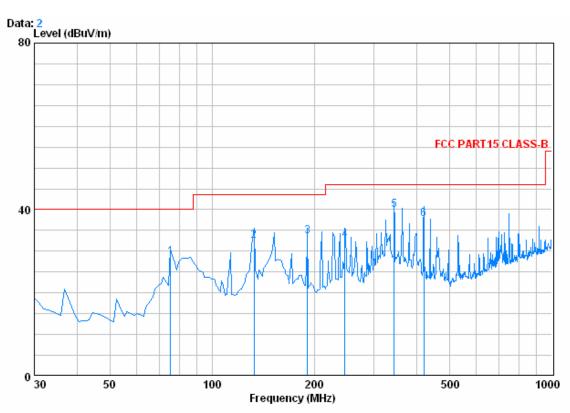
An initial pre-scan was performed in the chamber using the spectrum analyser in peak detection mode. Quasi-peak measurements were conducted based on the peak sweep graph. The EUT was measured by BiConiLog antenna with 2 orthogonal polarities.



Report No.: SZEMO10100640501

Page: 20 of 27

Read & write Int. memory Horizontal



Condition : FCC PART15 CLASS-B 3m 0042673 HORIZONTAL

EUT : DIGITAL PHOTO FRAME

Job No. : 6405IT

Mode : read & write Int. memory

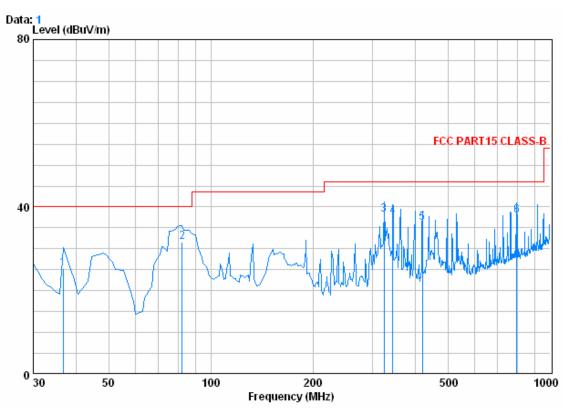
Mode	read & write int. memo	ory						
		Cablei	Antenna	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	75.590	0.97	7.37	28.00	48.28	28.63	40.00	-11.37
2	132.820	1.28	7.82	27.58	50.95	32.47	43.50	-11.03
3	191.020	1.39	10.11	27.20	49.28	33.57	43.50	-9.93
4	246.310	1.65	12.19	26.93	45.70	32.61	46.00	-13.39
5 0	343.310	2.04	15.25	27.05	49.58	39.82	46.00	-6.18
6	419.940	2.29	16.38	27.47	46.47	37.67	46.00	-8.33



Report No.: SZEMO10100640501

Page: 21 of 27

#### Vertical



Condition : FCC PART15 CLASS-B 3m 0042673 VERTICAL

EUT : DIGITAL PHOTO FRAME

Job No. : 6405IT

Mode : read & write Int. memory

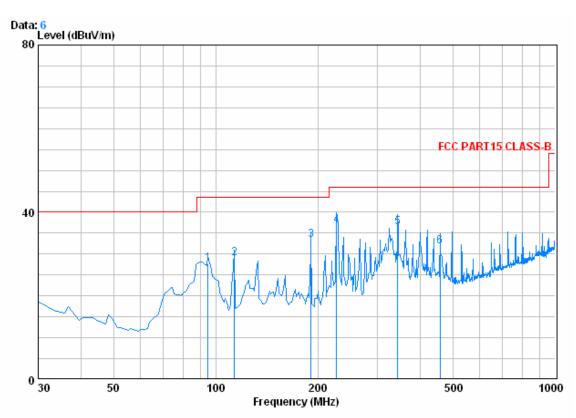
101046	. Tead & write fift, filefill	лy						
		Cablei	Antenna	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	36.790	0.60	12.30	28.12	40.51	25.29	40.00	-14.71
2	82.380	1.10	7.95	27.99	50.52	31.58	40.00	-8.42
3	323.910	1.98	14.76	26.91	48.29	38.12	46.00	-7.88
4	343.310	2.04	15.25	27.05	47.37	37.61	46.00	-8.39
5	419.940	2.29	16.38	27.47	44.89	36.08	46.00	-9.92
6	796.300	3.19	22.08	26.95	39.62	37.94	46.00	-8.06



Report No.: SZEMO10100640501

Page: 22 of 27

Play with SD card Horizontal



Condition : FCC PART15 CLASS-B 3m 0042673 HORIZONTAL

EUT : DIGITAL PHOTO FRAME

Job No. : 6405IT

Mode : play with SD card

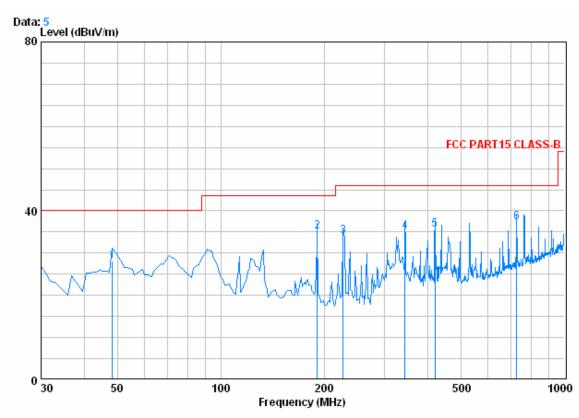
101046	. pray with SD card							
		Cablei	Antenna	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	94.990	1.15	8.91	27.91	45.51	27.66	43.50	-15.84
2	113.420	1.24	8.36	27.74	47.13	28.98	43.50	-14.52
3	191.020	1.39	10.11	27.20	49.07	33.36	43.50	-10.14
4	226.910	1.56	11.56	27.02	50.71	36.81	46.00	-9.19
5	343.310	2.04	15.25	27.05	46.17	36.41	46.00	-9.59
6	458.740	2.45	17.22	27.59	39.70	31.77	46.00	-14.23



Report No.: SZEMO10100640501

Page: 23 of 27

#### Vertical



Condition : FCC PART15 CLASS-B 3m 0042673 VERTICAL

EUT : DIGITAL PHOTO FRAME

Job No. : 6405IT

Mode : play with SD card

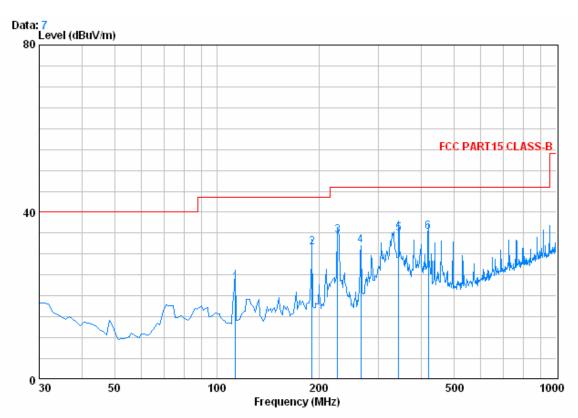
		Cablei	Antenna	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	48.430	0.77	8.47	28.11	46.96	28.09	40.00	-11.91
2	191.020	1.39	10.11	27.20	50.85	35.15	43.50	-8.35
3	226.910	1.56	11.56	27.02	47.97	34.07	46.00	-11.93
4	343.310	2.04	15.25	27.05	44.77	35.01	46.00	-10.99
5	419.940	2.29	16.38	27.47	44.44	35.64	46.00	-10.36
6	726.460	2.99	21.60	27.19	39.89	37.29	46.00	-8.71



Report No.: SZEMO10100640501

Page: 24 of 27

Play with USB stick Horizontal



Condition : FCC PART15 CLASS-B 3m 0042673 HORIZONTAL

EUT : DIGITAL PHOTO FRAME

Job No. : 6405IT

Mode : play with USB stick

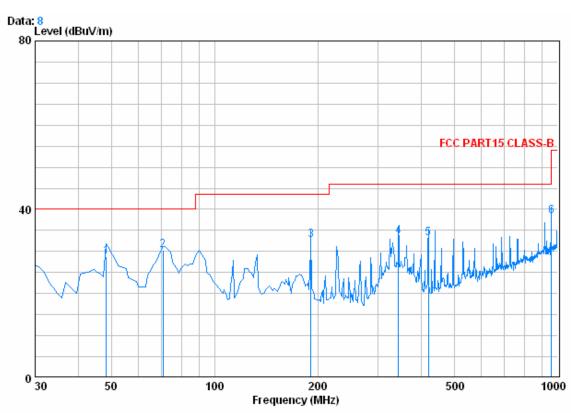
101046	. pray with opp suck							
		Cablei	Antenna	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	113.420	1.24	8.36	27.74	41.33	23.18	43.50	-20.32
2	191.020	1.39	10.11	27.20	47.37	31.67	43.50	-11.83
3	226.910	1.56	11.56	27.02	48.25	34.35	46.00	-11.65
4	265.710	1.75	12.63	26.85	44.57	32.09	46.00	-13.91
5	343.310	2.04	15.25	27.05	44.60	34.84	46.00	-11.16
6 0	419.940	2.29	16.38	27.47	44.15	35.35	46.00	-10.65



Report No.: SZEMO10100640501

Page: 25 of 27

#### Vertical



Condition : FCC PART15 CLASS-B 3m 0042673 VERTICAL

EUT : DIGITAL PHOTO FRAME

Job No. : 6405IT

Mode : play with USB stick

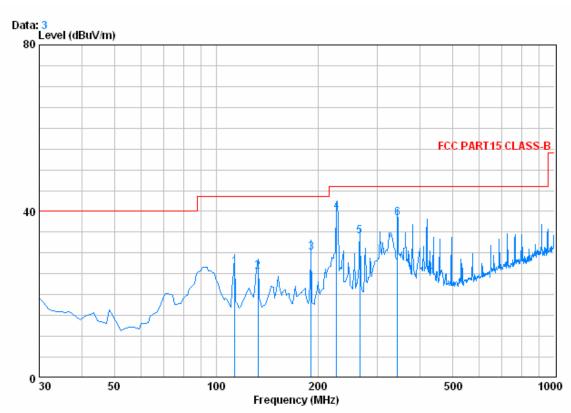
		Cablei	Antenna	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	48.430	0.77	8.47	28.11	47.75	28.88	40.00	-11.12
2	70.740	0.82	6.97	28.00	50.45	30.24	40.00	-9.76
3	191.020	1.39	10.11	27.20	48.49	32.79	43.50	-10.71
4	343.310	2.04	15.25	27.05	43.27	33.52	46.00	-12.48
5	419.940	2.29	16.38	27.47	42.04	33.24	46.00	-12.76
6 0	959.260	3.66	23.60	26.44	37.65	38.47	46.00	-7.53



Report No.: SZEMO10100640501

Page: 26 of 27

Play with Int. memory Horizontal



Condition : FCC PART15 CLASS-B 3m 0042673 HORIZONTAL

EUT : DIGITAL PHOTO FRAME

Job No. : 6405IT

Mode : play with Int memory

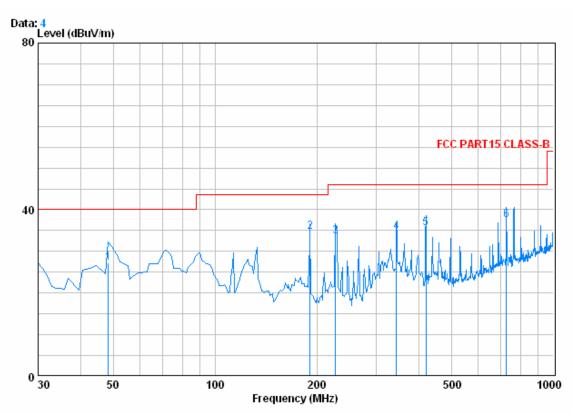
	Freq		intenna Factor	Preamp Factor	Read Level	Level	Limit Line	Over Limit	
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB	
1	113.420	1.24	8.36	27.74	44.83	26.68	43.50	-16.82	
2	132.820	1.28	7.82	27.58	44.05	25.57	43.50	-17.93	
3	191.020	1.39	10.11	27.20	45.79	30.08	43.50	-13.42	
4 0	226.910	1.56	11.56	27.02	53.74	39.83	46.00	-6.17	
5	265.710	1.75	12.63	26.85	46.52	34.05	46.00	-11.95	
6	343.310	2.04	15.25	27.05	48.23	38.47	46.00	-7.53	



Report No.: SZEMO10100640501

Page: 27 of 27

#### Vertical



Condition : FCC PART15 CLASS-B 3m 0042673 VERTICAL

EUT : DIGITAL PHOTO FRAME

Job No. : 6405IT

Mode : play with Int memory

Mode	: pray with the memory							
		Cablei	lntenna	Preamp	Read		Limit	Over
	Freq	Loss	Factor	Factor	Level	Level	Line	Limit
	MHz	dB	dB/m	dB	dBuV	dBuV/m	dBuV/m	dB
1	48.430	0.77	8.47	28.11	46.04	27.17	40.00	-12.83
2	191.020	1.39	10.11	27.20	50.41	34.70	43.50	-8.80
3	226.910	1.56	11.56	27.02	47.50	33.59	46.00	-12.41
4	343.310	2.04	15.25	27.05	44.50	34.74	46.00	-11.26
5	419.940	2.29	16.38	27.47	44.31	35.51	46.00	-10.49
6	726.460	2.99	21.60	27.19	40.20	37.60	46.00	-8.40