COMPLIANCE REPORT FOR VCCI EVALUATION

Total page of Report: 33 page

Test Report No.	E15WD-330(K)		
Date of test	Oct. 29, 2015 ~ Oct. 31, 2015	Date of Issuing	Nov. 04, 2015

Applicant	Hanwha Techwin Company Limited		
Address	1204, Changwon-daero, Seongsan-gu, Chang-won-si, Gyeongsangnam-do, korea		
Manufacturer	Weihai Daewoo Electronics Co.,Ltd.		
Address	No.26, Hongkong Road, Economic & Technical Development Zone, 264205 Weihai City, Shandong Province, China		
Telephone No.	+82-70-7147-8361	Fax No.	+82-31-8108-3717

Type of Equipment	LCD MONITOR		
Model Name	SMT-2233	Serial Number	N/A
Multi Model Name	N/A	Brand Name	N/A

Supplementary Information

The EMI test report of information technology equipment is prepared on behalf of named applicant in accordance with the regulations for Voluntary Control Measures-2012.04. The detailed description of the measurement facilities were found to be in compliance with the requirements of V-3/2013.04 of the Voluntary Control Council for Interference by Information Technology Equipment Rules.
This test report only contains the result of a single test of the sample supplied for the examination.
It is not a general valid assessment of the features of the respective products of the mass-production

Tested by: 2015. 11. 04
Seung-Ju, Na / Associate Research Engineer
StandardBank / EMC Testing Team

Reviewed by: 2015. 11. 04
Chang-hun, Lee / Principle Research Engineer
StandardBank / EMC Testing Team

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1. TEST SUMMARY

1.1 Test standards and results

STANDARDS		RESULTS
VCCI Class B (CISPR 22: Ed 6.0 2008)	**V-3(4.1)** : Conducted Disturbance	Met Class B / PASS
	V-3(4.3) : Radiated Disturbance	Met Class B / PASS

The margin to the limit is within the uncertainty interval of the measured value.

1.2 Additions, deviations, exclusions from standards

-. EUT was tested respectively HDMI mode, VGA mode and VIDEO mode.

1.3 Purpose of the test

- To determine whether the equipment under test fulfills the EMC requirements of the standards stated in section 1.1.

1.4 Test Methodology

- All measurements contained in this report were conducted in accordance with **V-3/2013** and **V-4/2012 (CISPR 22: Ed 6.0: 2008).** This instrumentation utilized for the measurements conforms with **CISPR16** specification for radio disturbance and immunity measuring apparatus and methods.
Some accessories are used to increase sensitivity and prevent overloading of the measuring instrument.

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1.5 Test Facility

The Electromagnetic compatibility measurement facilities are located on at Gun-Po Lab #507,508, Dongyoung Central Tower, 847-2 Kumjung-Dong, Gunpo-Si, Kyunggi-Do, Korea and Yong-In Lab 390 Bora-dong, Giheung-gu, Yongin-si, Gyeonggi-do, Korea. Description details of test facilities were submitted to the **RRA** (National Radio Research Agency) according to the requirement of ISO 17025 and **KOLAS** (Korea Laboratory Accreditation Scheme) and **FCC** (Federal Communications Commission) and **Vietnam MRA** and **TUV-SUD CARAT** and approved by **VCCI**.

RRA Designation No. : **KR0144** (Sep. 17, 2009)

KOLAS Accreditation No. : **558** (Mar. 27, 2013)

FCC (DOC) Test Firm Registration No. : **727145** (May 06, 2015)

Vietnam MRA Designation No. : **KR0144** (May 13, 2015)

FCC registration number is **323115** (Apr. 24, 2015)

TUV-SUD CARAT Recognition of Agent's Testing (Oct. 14, 2013), Certificate ID-No. : **CARAT 13 10 86270 001**

VCCI member No. : **3096**

- Resistration No : **C-3479** (Mains Ports Conducted Interference Measurement) : (Jun. 10, 2015)
  T-1374 (Telecommunication Ports Conducted Disturbance Measurement): (Sep. 11, 2015)
  R-3136 (Radiation 10 meter site) : (Jun. 10, 2015)
  G-603 (Facility for measuring radiated disturbance above 1 GHz) : (Sep. 11, 2015)

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2. EUT (Equipment Under Test)

2.1 Additional information about the EUT

- The Hanwha Techwin Company Limited Model SMT-2233 (referred to as the EUT in this report) is a LCD MONITOR.

Product specification described herein was obtained from product data sheet or user's manual.

Name	Spec
Product	LCD MONITOR
I/O ports	VGA, HDMI, VIDEO IN (2 EA), VIDEO OUT (2 EA), AUDIO L (2 EA), AUDIO R (2 EA)
Power	AC 100 V, (50 / 60) Hz
Frequency	-

2.2 Peripheral equipment

-. Defined as equipment needed for correct operation of the EUT, but not considered as tested:

DESCRIPTION	MODEL NAME	MANUFACTURE NO.	MANUFACTURE	Remark
LCD MONITOR	SMT-2233	N/A	Weihai Daewoo Electronics Co., Ltd. / China	EUT
Notebook	20093	WB05687045	LENOVO INFORMATION PRODUCTS CO., LTD.	-
Adapter # 1	ADP-65KH B	11S36001929ZZ3002353K3	DELTA ELECTRONICS (JIANGSU) LTD	-
CCTV Camera	SCB-2000ND	C5A26V3C204721Y	Samsung Techwin Co.,Ltd.	-
Adapter # 2	DAD1205DKA	N/A	Samsung Techwin Co.,Ltd.	-
CCTV Monitor	10RTC	CND1304BIT00164	Orion Technology Co.,Ltd.	-
Adapter # 3	LSE0107A1240	A30912007693	Suzhou Li Shin Electronic Co.,Ltd.	-

2.3 Mode of operation during the test

-. After connecting the EUT as layout, it displayed the CCTV camera image, character "H" and video at the same time on each mode. And it was tested it.

2.4 Alternative type(s)/model(s); also covered by this test report.

-. None.

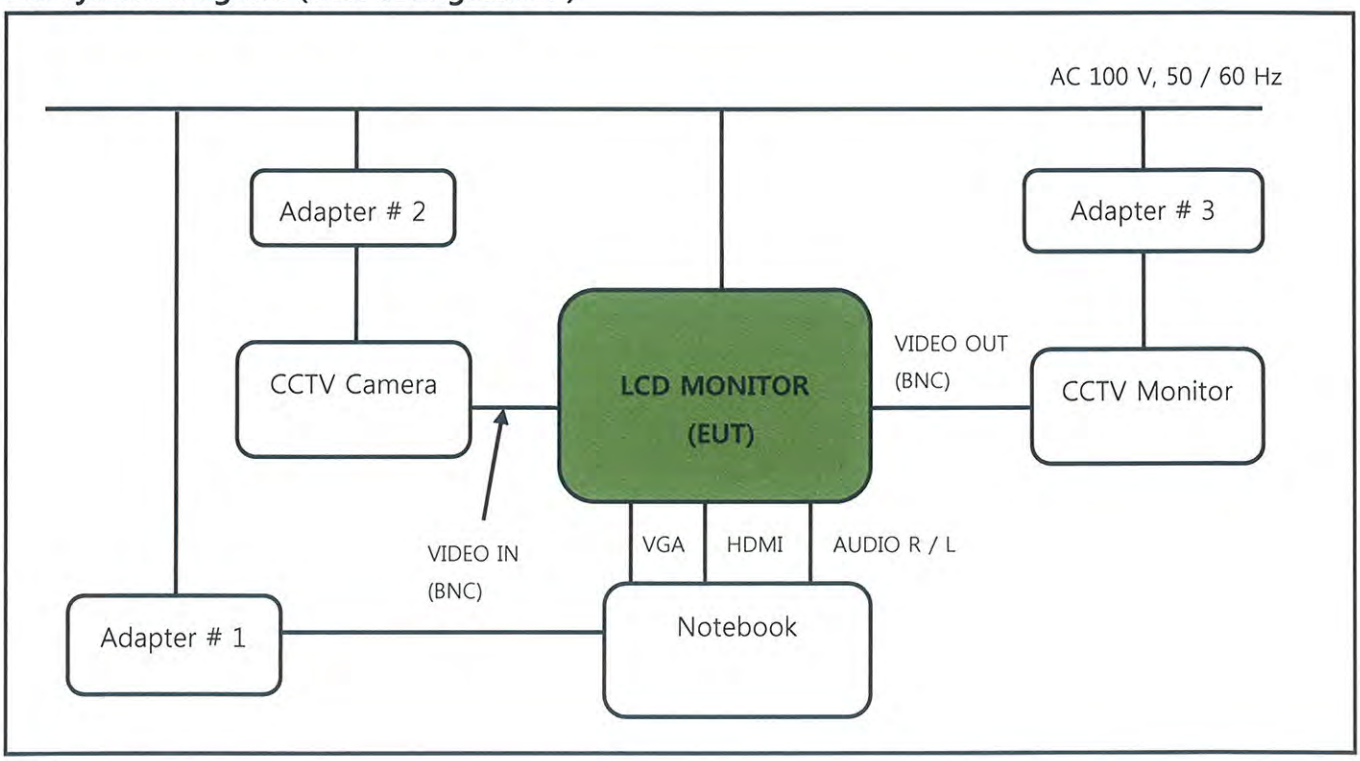
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2.5 Cable Description

Ports Name	Shielded	Ferrite Bead	Metal Shell	Length (m)	Connected to
VGA	Y	N	N	1.2	LCD MONITOR (EUT)
AUDIO R / L	N	N	N	0.7	
HDMI	Y	N	N	1.8	
VIDEO OUT (BNC)	Y	N	N	3.0	
VIDEO IN (BNC)	Y	N	N	3.0	
DC IN	N	N	N	1.2	Notebook
DC IN	N	N	N	0.8	CCTV Camera
DC IN	N	N	N	1.0	CCTV Monitor
AC IN	N	N	N	1.2	Adapter # 1
AC IN	N	N	N	1.2	Adapter # 2
AC IN	N	N	N	1.3	Adapter # 3

2.6 System diagram (Test configuration)



3. EUT MODIFICATIONS

-. None.

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4. EMISSION TESTS

4.1 MAINS TERMINAL CONTINUOUS DISTURBANCE VOLTAGE

4.1.1 Operating environment

Ambient temperature	(22.5 ± 0.5) °C
Relative humidity	(35.5 ± 1.5) % R.H.

4.1.2 Test set-up (Measurement procedure)

- The power line conducted emission measurements were performed in a shielded enclosure, using the setup in accordance with V-3/CISPR22 conducted emission measurement procedure.

The measurements were performed in a shielded room. EUT was placed on a non-metallic table height of 80 cm above the reference ground plane. They were folded back and forth forming a bundle 30 cm to 40 cm long and were hanged at a 80 cm height to the ground plane.

Each EUT power lead, except ground (safety) lead, was individually connected through a LISN to input power source. Both lines of power cord, hot and neutral, were measured.

4.1.3 Measurement uncertainty

Conducted emission, quasi-peak detection : 2.4 dB(Confidence level about 95 %, k = 2)

Conducted emission, average detection : 2.4 dB(Confidence level about 95 %, k = 2)

4.1.4 Test equipment used

Description	Model Number	Manufacturer	Serial Number	Last Cal.	Use
EMI Receiver	9010	NARDA	495WX10106	Jul. 21, 2015	■
EMI RECEIVER	PMM9010	NARDA S.T.S	697WW30607	Feb. 02, 2015	□
Pulse Limiter	EPL-30	LIG Nex1	N/A	Feb. 02, 2015	□
TWO LINE V-NETWORK	ENV216	ROHDE&SCHWARZ	101770	Feb. 02, 2015	■
LISN	LN2-16	EMCIS	LN09009	Feb. 02, 2015	■
ISN	ISN ST08	Testq GmbH	32278	Feb. 03, 2015	□
ISN	NTFM 8158 CAT6	SCHWARZBECK	8158-0031	Feb. 03, 2015	□

- All test equipment used is calibrated on a regular basis.

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4.1.5 Test data

Test Date	Oct. 29, 2015
Resolution bandwidth	9 kHz
Frequency range	0.15 MHz ~ 30 MHz
Line	"L": Live Line / "N": Neutral line

[HDMI - 50 Hz]

Frequency (MHz)	Line	Quasi Peak (dBμV)		Margin (dB)	Average (dBμV)		Margin (dB)
		Emission level	Q.P Limits		Emission level	Limits	
0.195	N	45.51	63.82	-18.31	43.28	53.82	-10.54
0.325	N	36.64	59.58	-22.94	-	49.58	-
0.470	N	39.51	56.51	-17.00	30.13	46.51	-16.38
1.695	L	45.42	56.00	-10.58	27.34	46.00	-18.66
3.800	N	40.45	56.00	-15.55	31.51	46.00	-14.49
8.705	N	38.47	60.00	-21.53	-	50.00	-
16.585	L	37.79	60.00	-22.21	33.06	50.00	-16.94

- Tabulated test data for Mains Terminal Continuous Disturbance Voltage
- It may not recorded Average value if Quasi Peak value didn't over Average value limit.

[HDMI - 60 Hz]

Frequency (MHz)	Line	Quasi Peak (dBμV)		Margin (dB)	Average (dBμV)		Margin (dB)
		Emission level	Q.P Limits		Emission level	Limits	
0.195	N	46.62	63.82	-17.20	44.42	53.82	-9.40
0.265	L	37.62	61.27	-23.65	-	51.27	-
0.470	N	38.19	56.51	-18.32	29.73	46.51	-16.78
1.660	L	45.43	56.00	-10.57	25.10	46.00	-20.90
4.010	N	38.77	56.00	-17.23	30.99	46.00	-15.01
8.845	N	40.47	60.00	-19.53	35.12	50.00	-14.88
15.325	N	36.61	60.00	-23.39	34.95	50.00	-15.05

- Tabulated test data for Mains Terminal Continuous Disturbance Voltage
- It may not recorded Average value if Quasi Peak value didn't over Average value limit.

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[VGA - 50 Hz]

Frequency (MHz)	Line	Quasi Peak (dBμV)		Margin (dB)	Average (dBμV)		Margin (dB)
		Emission level	Q.P Limits		Emission level	Limits	
0.190	N	43.32	64.04	-20.72	38.88	54.04	-15.16
0.325	N	37.64	59.58	-21.94	-	49.58	-
0.400	N	37.92	57.85	-19.93	-	47.85	-
1.625	N	45.23	56.00	-10.77	30.82	46.00	-15.18
3.945	L	40.13	56.00	-15.87	28.97	46.00	-17.03
8.715	N	39.79	60.00	-20.21	35.17	50.00	-14.83
16.160	N	37.51	60.00	-22.49	34.78	50.00	-15.22

- Tabulated test data for Mains Terminal Continuous Disturbance Voltage
- It may not recorded Average value if Quasi Peak value didn't over Average value limit.

[VGA - 60 Hz]

Frequency (MHz)	Line	Quasi Peak (dBμV)		Margin (dB)	Average (dBμV)		Margin (dB)
		Emission level	Q.P Limits		Emission level	Limits	
0.195	N	45.01	63.82	-18.81	42.68	53.82	-11.14
0.325	N	36.65	59.58	-22.93	-	49.58	-
0.405	N	38.64	57.75	-19.11	-	47.75	-
1.645	N	44.30	56.00	-11.70	29.07	46.00	-16.93
3.675	N	38.73	56.00	-17.27	30.95	46.00	-15.05
9.020	L	39.28	60.00	-20.72	34.20	50.00	-15.80
16.625	N	35.79	60.00	-24.21	-	50.00	-

- Tabulated test data for Mains Terminal Continuous Disturbance Voltage
- It may not recorded Average value if Quasi Peak value didn't over Average value limit.

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[VIDEO - 50 Hz]

Frequency (MHz)	Line	Quasi Peak (dBμV)		Margin (dB)	Average (dBμV)		Margin (dB)
		Emission level	Q.P Limits		Emission level	Limits	
0.190	N	44.94	64.04	-19.10	41.01	54.04	-13.03
0.335	N	38.08	59.33	-21.25	-	49.33	-
0.405	N	38.70	57.75	-19.05	-	47.75	-
1.655	N	47.16	56.00	-8.84	31.57	46.00	-14.43
3.885	N	40.45	56.00	-15.55	29.80	46.00	-16.20
8.915	L	38.19	60.00	-21.81	33.14	50.00	-16.86
16.590	N	36.92	60.00	-23.08	33.69	50.00	-16.31

- Tabulated test data for Mains Terminal Continuous Disturbance Voltage
- It may not recorded Average value if Quasi Peak value didn't over Average value limit.

[VIDEO - 60 Hz]

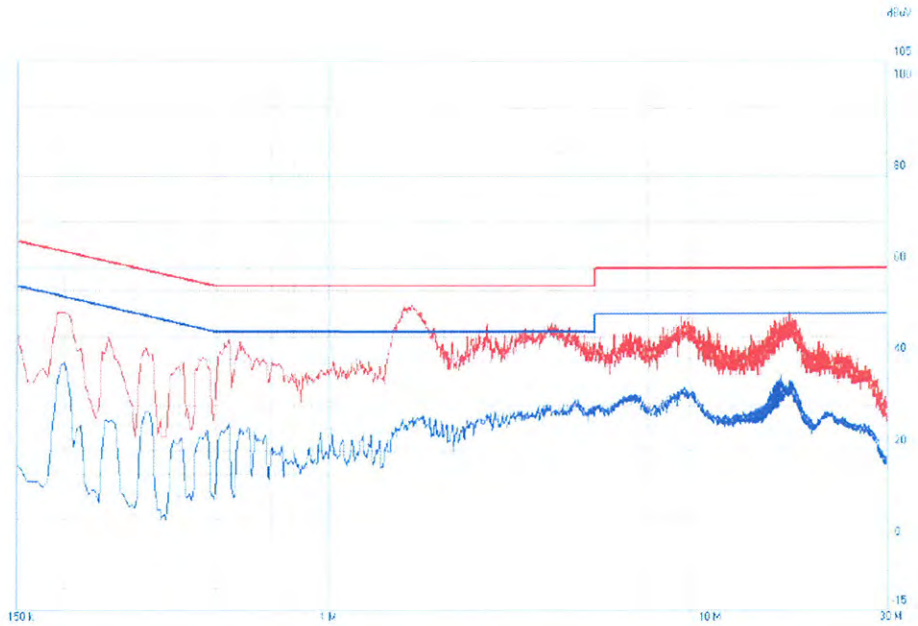
Frequency (MHz)	Line	Quasi Peak (dBμV)		Margin (dB)	Average (dBμV)		Margin (dB)
		Emission level	Q.P Limits		Emission level	Limits	
0.200	N	45.71	63.61	-17.90	43.72	53.61	-9.89
0.335	N	37.49	59.33	-21.84	-	49.33	-
0.475	N	37.83	56.43	-18.60	-	46.43	-
1.680	N	45.90	56.00	-10.10	30.22	46.00	-15.78
3.780	N	39.44	56.00	-16.56	29.29	46.00	-16.71
9.100	L	39.33	60.00	-20.67	33.42	50.00	-16.58
16.585	L	37.30	60.00	-22.70	-	50.00	-

- Tabulated test data for Mains Terminal Continuous Disturbance Voltage
- It may not recorded Average value if Quasi Peak value didn't over Average value limit.

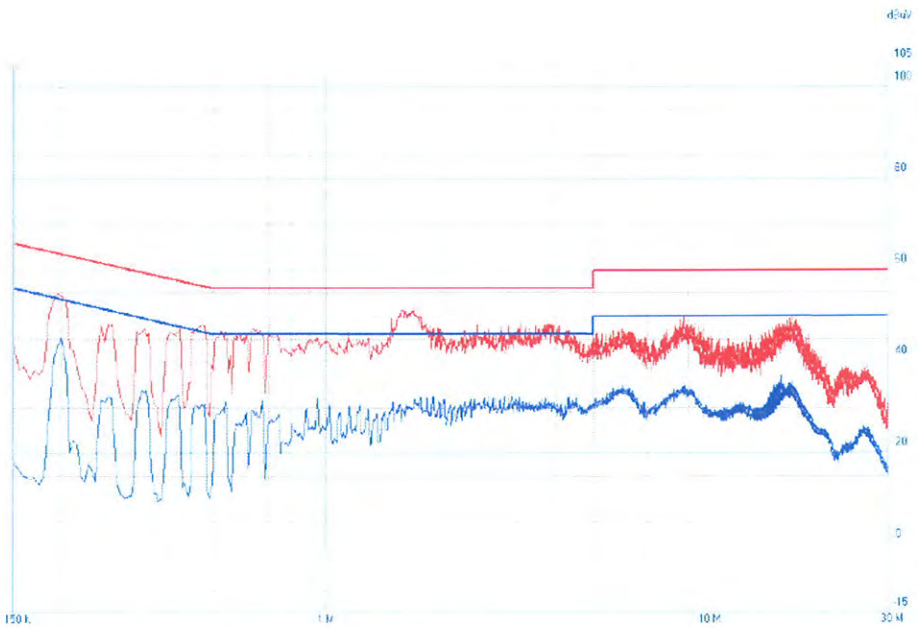
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[AC Power Port] – HDMI 50 Hz



LIVE LINE

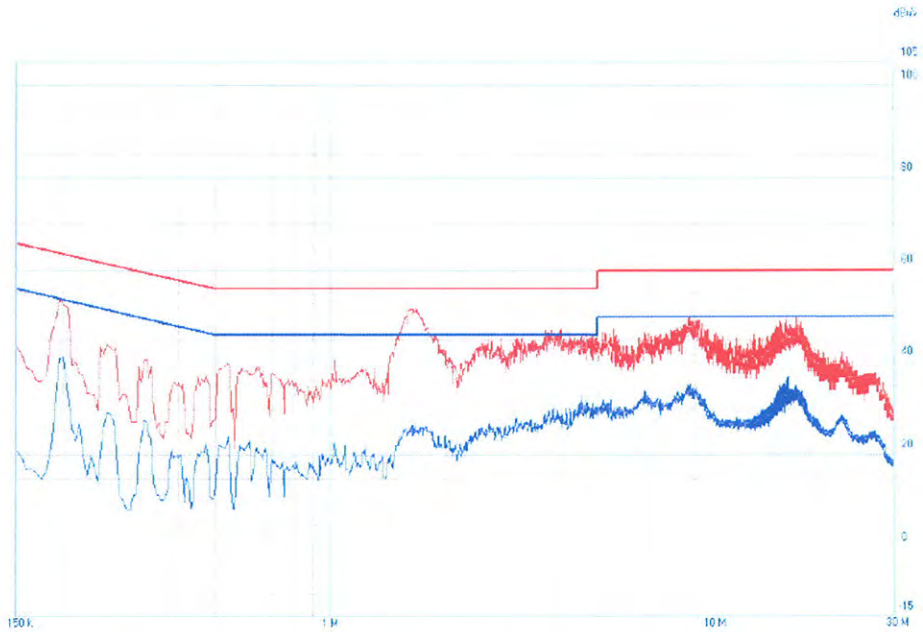


NEUTRAL LINE

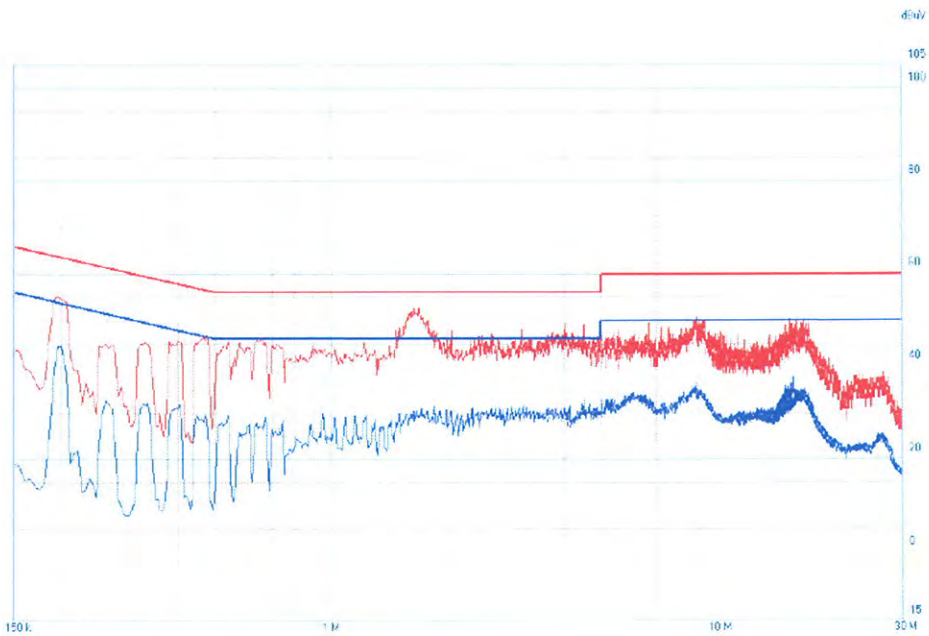
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[AC Power Port] – HDMI 60 Hz



LIVE LINE

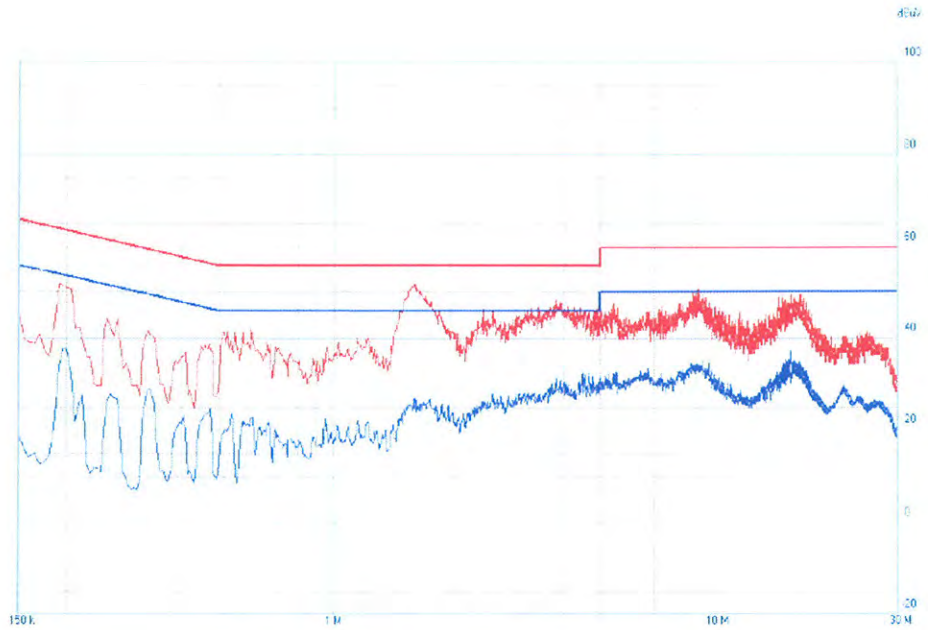


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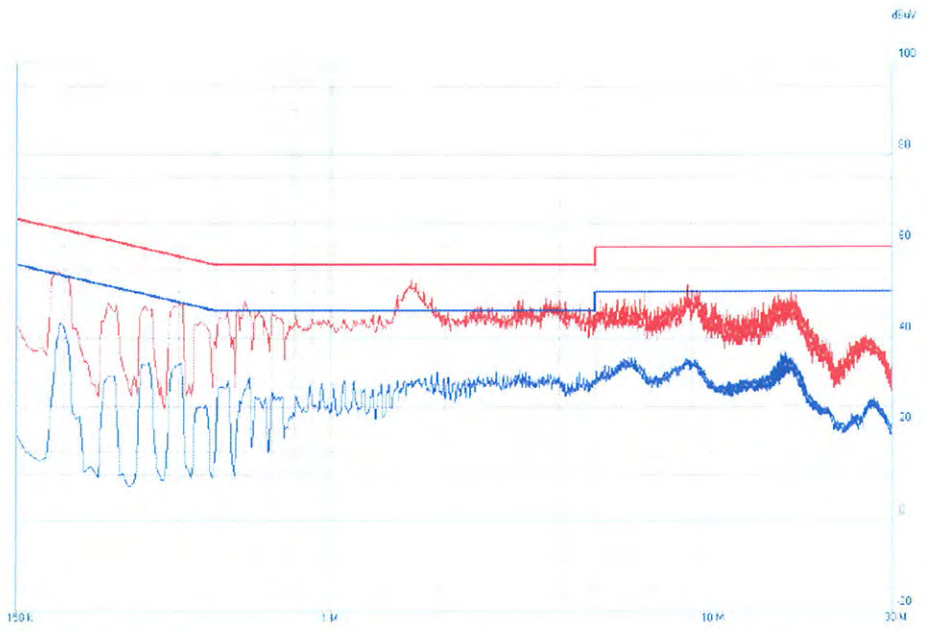
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[AC Power Port] – VGA 50 Hz



LIVE LINE

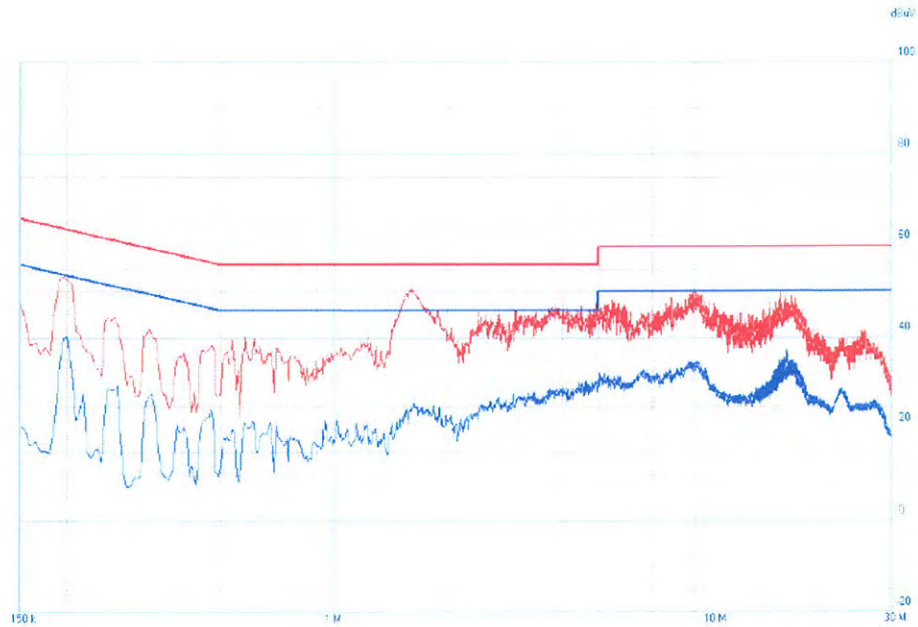


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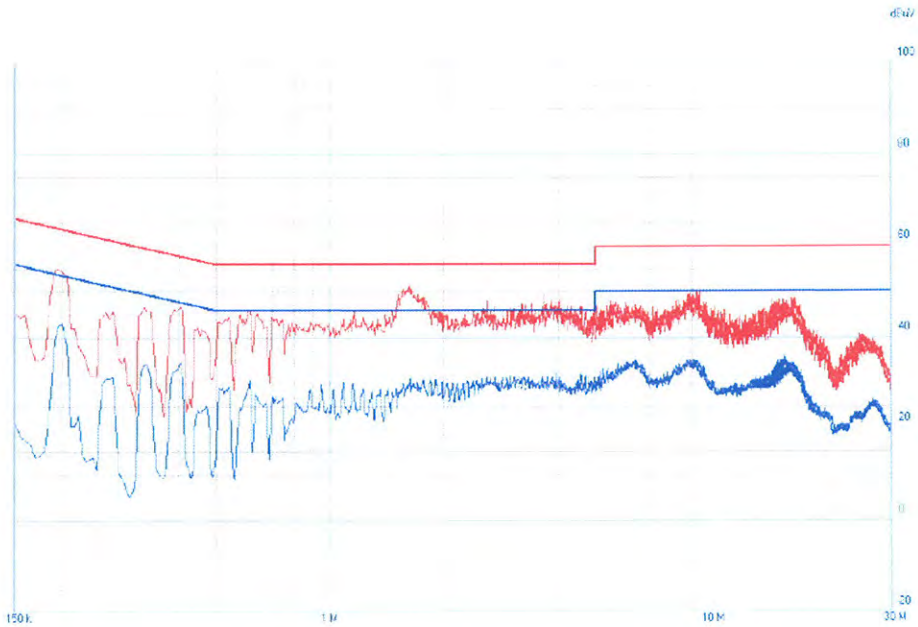
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[AC Power Port] – VGA 60 Hz



LIVE LINE

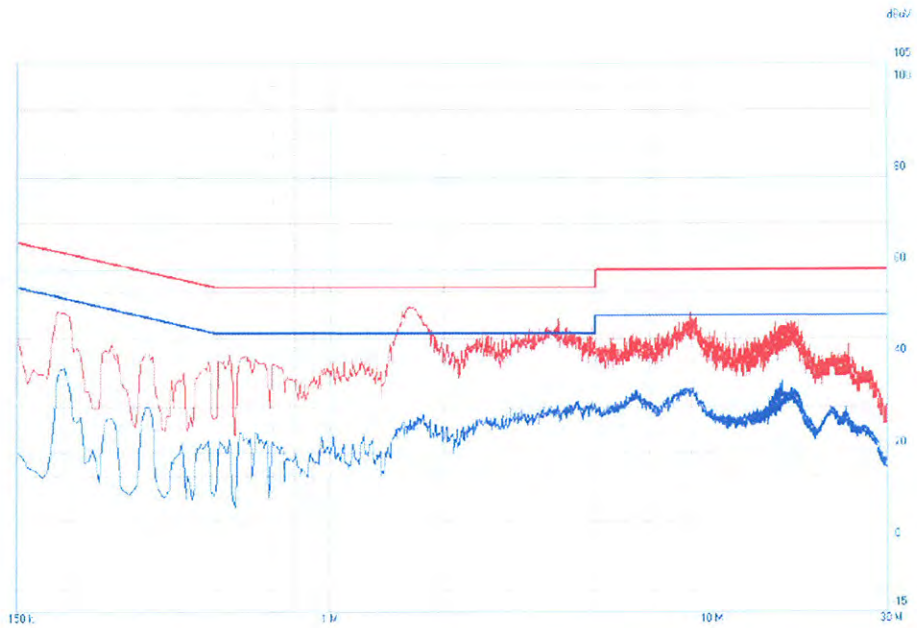


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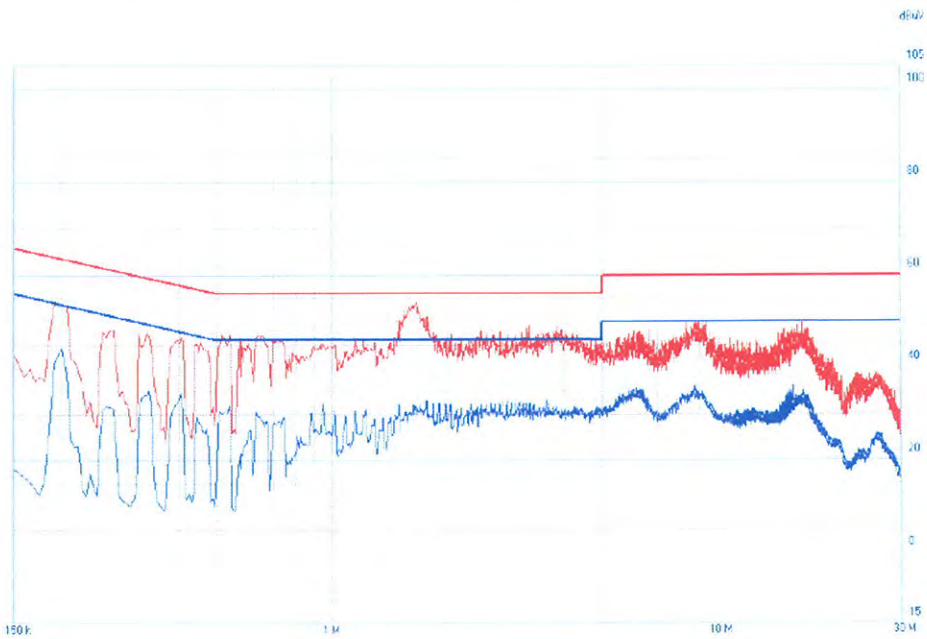
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[AC Power Port] – VIDEO 50 Hz



LIVE LINE

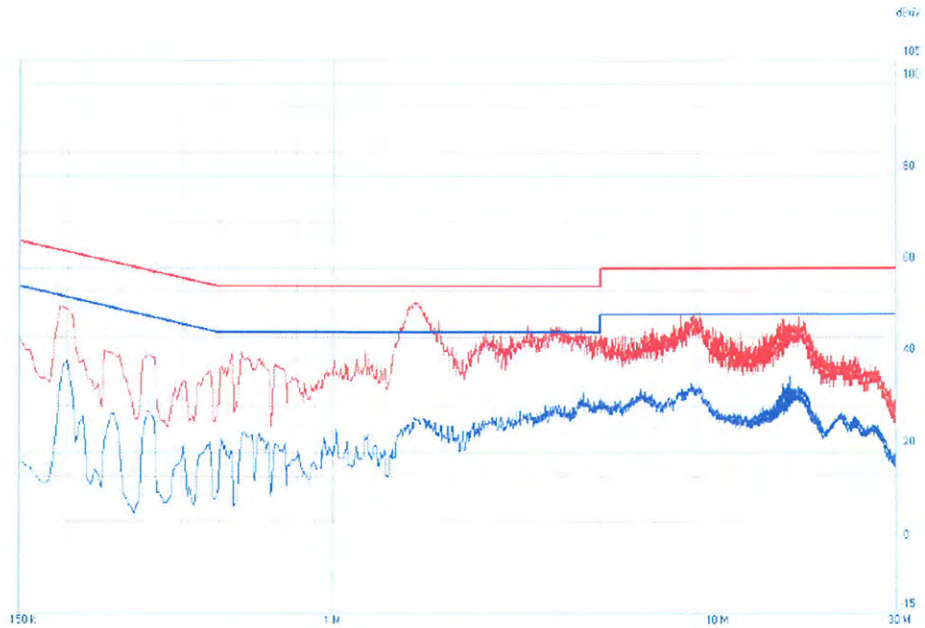


NEUTRAL LINE

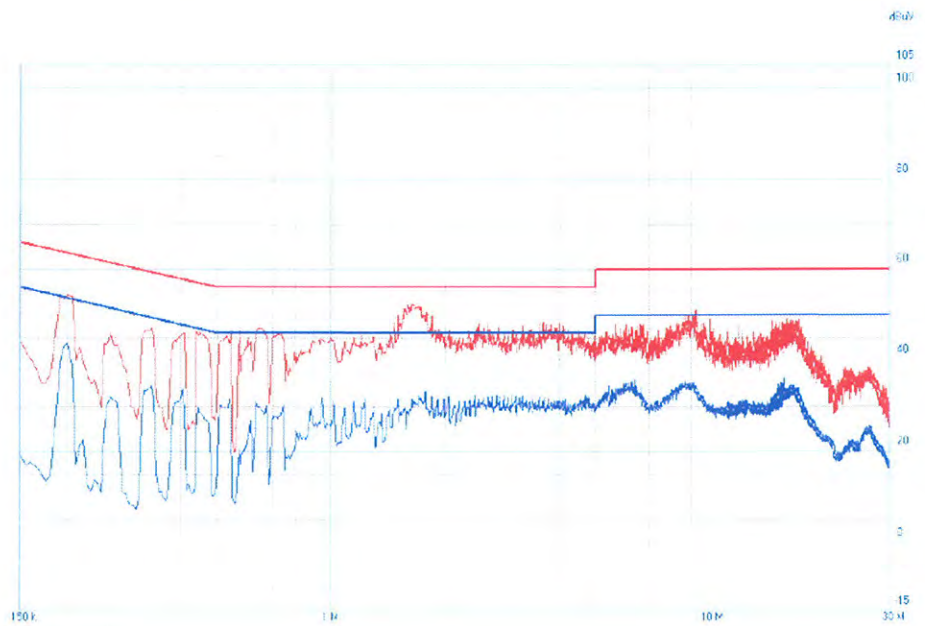
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[AC Power Port] – VIDEO 60 Hz



LIVE LINE



NEUTRAL LINE

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4.2 RADIATED ELECTROMAGNETIC FIELD

4.2.1 Operating environment

[Below 1 GHz]

Ambient temperature	(10.5 ± 3.0) °C
Relative humidity	(32.0 ± 5.0) % R.H.

[Abov 1 GHz]

Ambient temperature	(21.5 ± 1.5) °C
Relative humidity	(34.0 ± 4.0) % R.H.

4.2.2 Test set-up

The measurement was performed over the frequency range of 30 MHz to 1 GHz using antenna as the input transducer to a Spectrum analyzer or a Field Intensity Meter. The measurement was made with the detector set for "quasi-peak" within a bandwidth of 120 kHz.

Preliminary measurements were made at 3 meter using bi-log antennas, and spectrum analyzer to determine the frequency producing the max. emission in Semi-anechoic chamber. Appropriate precaution was taken to ensure that all emission from the EUT were maximized and investigated. The system configuration, mode of operation, turn-table azimuth and height with respect to the antenna were noted for each frequency found. The spectrum was scanned from 30 MHz to 1000 MHz using bi-log antenna. Above 1 GHz, linearly polarized double ridge horn antennas were used. Final measurements were made at open site with 10-meters test distance using bi-log antenna or horn antenna. The OATS have been verified in regular for its normalized site attenuation. The test equipment was placed on a wooden table. Sufficient time for the EUT, peripheral equipment, and test equipment was allowed in order for them to warm up to their normal operating condition. Each frequency found during pre-scan measurements was re-examined by manual. The detector function was set to CISPR quasi-peak mode and the bandwidth of the receiver was set to 120 kHz or 1 MHz depending on the frequency of type of signal. The EUT, peripheral equipment and interconnecting cables were re-configured to the set-up producing the max. emission for the frequency and were placed on top of a 0.8-meter high nonmetallic 1 x 1.5 meter table. The EUT, peripheral equipment, and interconnecting cables were re-arranged and manipulated to maximize each emission. The turntable containing the system was rotated; the antenna height was varied 1 to 4 meters and stopped at the azimuth or height producing the maximum emission. Each emission was maximized by: varying the mode of operation to the EUT and/or peripheral equipment and changing the polarity of the antenna, whichever determined the worst-case emission.(The bandwidth below 1 GHz setting on the field strength meter is 120 kHz and above 1 GHz is 1 MHz.)

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4.2.3 Measurement uncertainty

Radiated emission electric field intensity, 30 MHz ~ 300 MHz : 4.3 dB(Confidence level about 95 %, k = 2)

Radiated emission electric field intensity, 300 MHz ~ 1000 MHz : 4.3 dB(Confidence level about 95 %, k = 2)

Radiated emission electric field intensity, 1000 MHz ~ 6000 MHz : 5.6 dB(Confidence level about 95 %, k = 2)

4.2.4 Test equipment used

Description	Model Number	Manufacturer	Serial Number	Last Cal.	Use
EMI Test Receiver	ESVS10	Rohde & Schwarz	840241/015	Feb. 02, 2015	■
Spectrum Analyzer	R3132	ADVANTEST	91700627	Jan. 27, 2015	■
AMPLIFIER	310N	Sonoma Instrument	187066	Sep. 08. 2015	■
BILOG ANTENNA	CBL6111C	SCHAFFNER	2734	Mar. 16, 2015	■
PREAMPLIFIER	87405C	AGILENT	MY53010022	Feb. 03, 2014	□
Double Ridged Horn Antenna	BBHA9120D	SCHWARZBECK	9120D-1166	Jun. 24, 2014	■
Spectrum Analyzer	3254	AEROFLEX	I1011M031	Feb. 02, 2015	□
EMI TEST RECEIVER	ESCI 7	ROHDE&SCHWARZ	100971	Dec. 19, 2014	■

- All test equipments used are calibrated on a regular basis.

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4.2.5 Test data

Test Date	Oct. 31, 2015
Resolution bandwidth	120 kHz
Frequency range	30 MHz ~ 1 000 MHz
Measurement distance	10 m
Ant. Pol.	"H": Horizontal, "V": Vertical

[HDMI - 50 Hz]

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amplifier (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)
30.12	33.8	V	22.24	1.12	31.75	25.41	30.00	-4.59
35.46	34.2	V	19.91	1.24	31.75	23.60	30.00	-6.40
157.34	40.4	V	11.00	2.83	31.54	22.69	30.00	-7.31
158.46	43.3	H	10.96	2.84	31.54	25.57	30.00	-4.43
162.38	43.9	H	10.64	2.88	31.53	25.89	30.00	-4.11
165.97	42.5	H	10.22	2.91	31.52	24.11	30.00	-5.89
378.02	38.9	V	15.32	4.66	31.33	27.55	37.00	-9.45

[HDMI - 60 Hz]

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amplifier (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)
30.24	33.5	V	22.19	1.12	31.75	25.06	30.00	-4.94
36.58	35.5	V	19.58	1.26	31.75	24.59	30.00	-5.41
58.64	44.5	V	9.35	1.63	31.72	23.76	30.00	-6.24
368.48	41.8	H	15.06	4.56	31.29	30.13	37.00	-6.87
374.28	43.8	H	15.22	4.62	31.31	32.32	37.00	-4.68
378.69	44.2	H	15.33	4.66	31.33	32.87	37.00	-4.13
385.46	42.6	H	15.51	4.73	31.35	31.49	37.00	-5.51

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[VGA - 50 Hz]

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amplifier (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)
55.40	43.2	V	11.11	1.58	31.73	24.17	30.00	-5.84
57.74	44.7	V	9.85	1.62	31.72	24.44	30.00	-5.56
159.58	42.0	V	10.93	2.85	31.53	24.25	30.00	-5.75
162.48	42.7	V	10.63	2.88	31.53	24.68	30.00	-5.32
167.59	41.9	H	10.03	2.92	31.51	23.34	30.00	-6.66
225.34	39.8	H	10.67	3.45	31.37	22.54	30.00	-7.46
371.68	41.6	H	15.15	4.59	31.30	30.03	37.00	-6.97

[VGA - 60 Hz]

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amplifier (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)
40.12	34.0	V	18.46	1.32	31.74	22.04	30.00	-7.96
58.49	42.1	V	9.46	1.63	31.72	21.46	30.00	-8.54
159.64	43.1	H	10.92	2.86	31.53	25.35	30.00	-4.65
162.15	41.5	H	10.66	2.88	31.53	23.51	30.00	-6.49
371.41	42.8	H	15.14	4.59	31.30	31.23	37.00	-5.77
378.25	43.4	H	15.32	4.66	31.33	32.05	37.00	-4.95
386.64	43.5	H	15.54	4.74	31.35	32.43	37.00	-4.57

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[VIDEO - 50 Hz]

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amplifier (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)
33.25	34.8	V	20.84	1.19	31.75	25.08	30.00	-4.92
57.58	43.5	V	9.96	1.62	31.73	23.35	30.00	-6.66
157.61	41.7	H	10.99	2.83	31.54	23.98	30.00	-6.02
162.67	40.5	V	10.60	2.88	31.52	22.46	30.00	-7.54
368.15	34.5	V	15.05	4.55	31.29	22.82	37.00	-14.18
368.94	43.9	H	15.08	4.56	31.29	32.24	37.00	-4.76
380.64	40.6	H	15.39	4.68	31.33	29.33	37.00	-7.67

[VIDEO - 60 Hz]

Frequency (MHz)	Reading (dBμV)	Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss	Amplifier (dB)	Emission Level (dBμV/m)	Limits (dBμV/m)	Margin (dB)
30.45	32.6	V	22.10	1.13	31.75	24.08	30.00	-5.92
36.18	36.1	V	19.70	1.25	31.75	25.30	30.00	-4.70
208.58	40.3	V	9.49	3.30	31.40	21.69	30.00	-8.31
229.46	40.1	H	10.95	3.49	31.37	23.18	30.00	-6.82
376.15	39.9	H	15.27	4.64	31.32	28.48	37.00	-8.52
376.85	40.7	V	15.29	4.64	31.32	29.31	37.00	-7.69
385.67	40.2	H	15.52	4.73	31.35	29.10	37.00	-7.90

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Test Date	Oct. 30, 2015
Resolution bandwidth	1 MHz
Frequency range	1 GHz ~ 6 GHz
Measurement distance	3 m
Ant. Pol.	"H": Horizontal, "V": Vertical

[HDMI - 50 Hz]

Frequency (MHz)	Reading (dBμV/m)		Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP. GAIN (dB)	Emission Level (dBμV/m)		Limits (dBμV/m)		Margin (dB)	
	PK	AV					PK	AV	PK	AV	PK	AV
1089.20	27.95	4.45	V	25.22	2.63	-	55.80	32.30	70.00	50.00	-14.20	-17.70
1281.20	26.32	4.82	V	25.46	2.82	-	54.60	33.10	70.00	50.00	-15.40	-16.90
1915.60	23.20	5.00	H	25.85	3.65	-	52.70	34.50	70.00	50.00	-17.30	-15.50

-. When it tested above 1 GHz, it may not recorded Average value if Peak value didn't over Average value limit.

[HDMI - 60 Hz]

Frequency (MHz)	Reading (dBμV/m)		Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP. GAIN (dB)	Emission Level (dBμV/m)		Limits (dBμV/m)		Margin (dB)	
	PK	AV					PK	AV	PK	AV	PK	AV
1002.40	27.08	7.08	V	25.11	2.50	-	54.70	34.70	70.00	50.00	-15.30	-15.30
1072.00	30.69	6.39	V	25.20	2.61	-	58.50	34.20	70.00	50.00	-11.50	-15.80
1916.80	24.10	8.90	H	25.85	3.65	-	53.60	38.40	70.00	50.00	-16.40	-11.60

-. When it tested above 1 GHz, it may not recorded Average value if Peak value didn't over Average value limit.

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[VGA - 50 Hz]

Frequency (MHz)	Reading (dBμV/m)		Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP. GAIN (dB)	Emission Level (dBμV/m)		Limits (dBμV/m)		Margin (dB)	
	PK	AV					PK	AV	PK	AV	PK	AV
1077.60	26.28	6.38	H	25.21	2.62	-	54.10	34.20	70.00	50.00	-15.90	-15.80
1283.20	22.72	7.32	H	25.46	2.82	-	51.00	35.60	70.00	50.00	-19.00	-14.40
2803.20	18.58	5.18	V	27.90	4.42	-	50.90	37.50	70.00	50.00	-19.10	-12.50

-. When it tested above 1 GHz, it may not recorded Average value if Peak value didn't over Average value limit.

[VGA - 60 Hz]

Frequency (MHz)	Reading (dBμV/m)		Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP. GAIN (dB)	Emission Level (dBμV/m)		Limits (dBμV/m)		Margin (dB)	
	PK	AV					PK	AV	PK	AV	PK	AV
1176.80	21.77	-	V	25.33	2.70	-	49.80	-	70.00	50.00	-20.20	-
1275.60	22.64	5.94	H	25.45	2.81	-	50.90	34.20	70.00	50.00	-19.10	-15.80
2080.00	23.04	6.54	V	26.09	3.77	-	52.90	36.40	70.00	50.00	-17.10	-13.60

-. When it tested above 1 GHz, it may not recorded Average value if Peak value didn't over Average value limit.

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[VIDEO - 50 Hz]

Frequency (MHz)	Reading (dBμV/m)		Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP. GAIN (dB)	Emission Level (dBμV/m)		Limits (dBμV/m)		Margin (dB)	
	PK	AV					PK	AV	PK	AV	PK	AV
1270.80	26.75	5.25	V	25.44	2.80	-	55.00	33.50	70.00	50.00	-15.00	-16.50
1613.60	21.90	4.40	V	25.76	3.23	-	50.90	33.40	70.00	50.00	-19.10	-16.60
1999.20	27.09	4.29	H	25.88	3.73	-	56.70	33.90	70.00	50.00	-13.30	-16.10

-. When it tested above 1 GHz, it may not recorded Average value if Peak value didn't over Average value limit.

[VIDEO - 60 Hz]

Frequency (MHz)	Reading (dBμV/m)		Ant. Pol. (H/V)	Ant. Factor (dB/m)	Cable Loss (dB)	AMP. GAIN (dB)	Emission Level (dBμV/m)		Limits (dBμV/m)		Margin (dB)	
	PK	AV					PK	AV	PK	AV	PK	AV
1108.80	23.50	4.50	H	25.24	2.66	-	51.40	32.40	70.00	50.00	-18.60	-17.60
1609.20	22.41	4.41	V	25.76	3.23	-	51.40	33.40	70.00	50.00	-18.60	-16.60
2158.80	17.38	-	H	26.29	3.83	-	47.50	-	70.00	50.00	-22.50	-

-. When it tested above 1 GHz, it may not recorded Average value if Peak value didn't over Average value limit.

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5. Product Labeling

5.1 VCCI Label & Message

Class B ITE shall be placed the following warning statement on the product;

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取扱説明書に従って正しい取り扱いをして下さい。

VCCI－B

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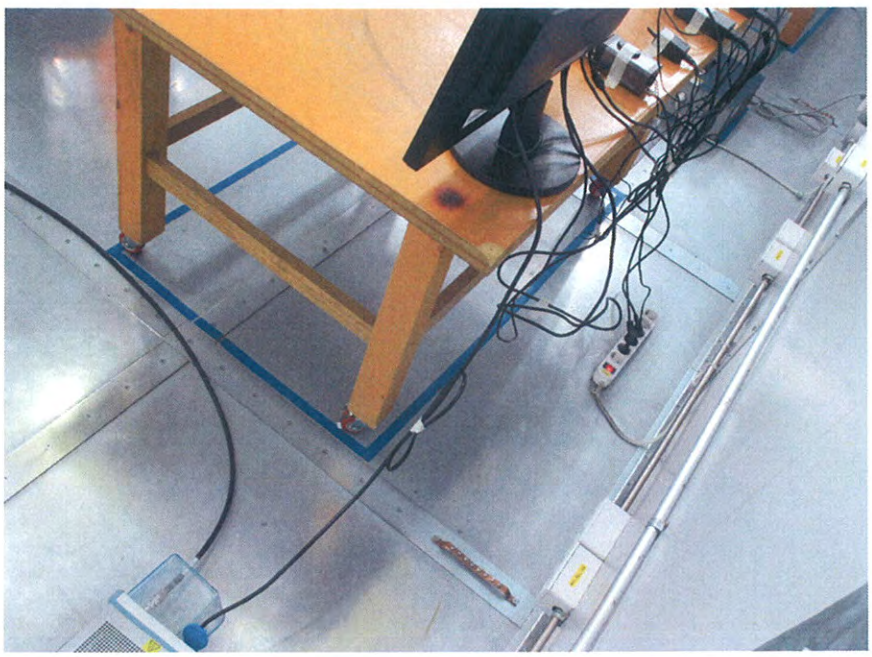
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1. TEST SET-UP PHOTOS: (Mains Terminal Continuous Disturbance Voltage)

[HDMI / VGA]



0.15 MHz to 30 MHz Front View – AC Power Port



0.15 MHz to 30 MHz Rear View – AC Power Port

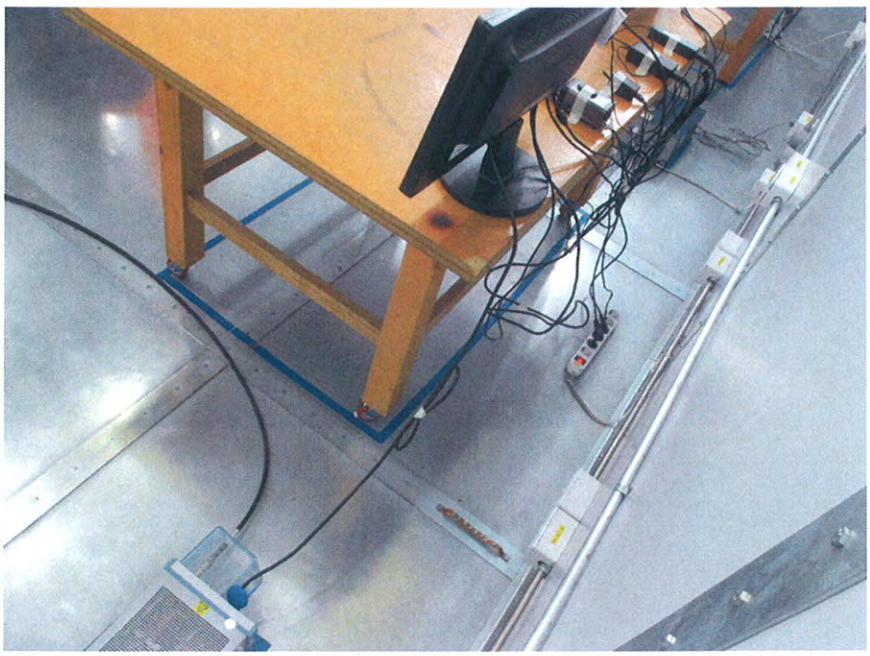
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[VIDEO]



0.15 MHz to 30 MHz Front View – AC Power Port



0.15 MHz to 30 MHz Rear View – AC Power Port

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2. TEST SET-UP PHOTOS: (Radiated electromagnetic field)

[HDMI / VGA]



30 MHz to 1 000 MHz Front View



30 MHz to 1 000 MHz Rear View

[VIDEO]

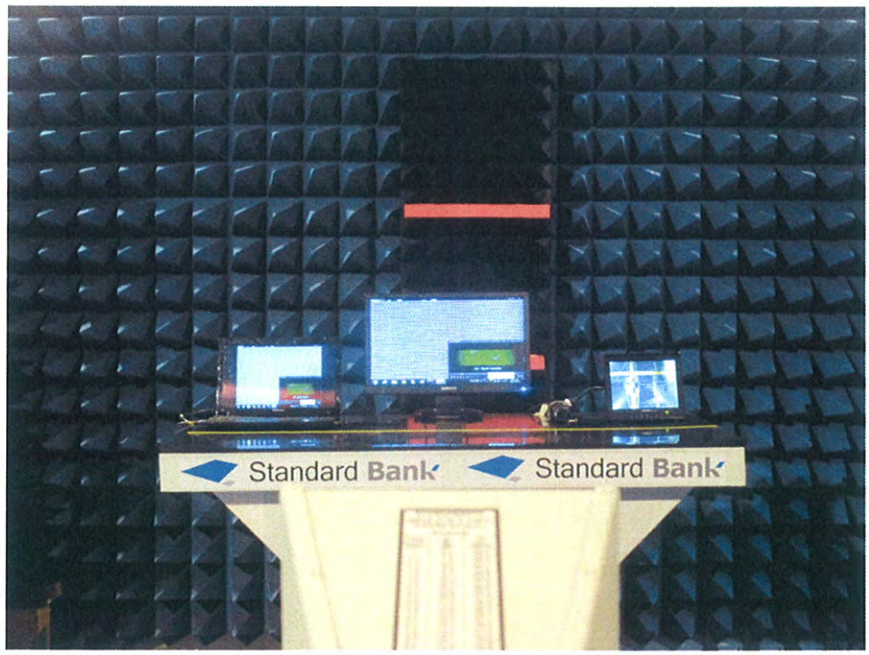


30 MHz to 1 000 MHz Front View



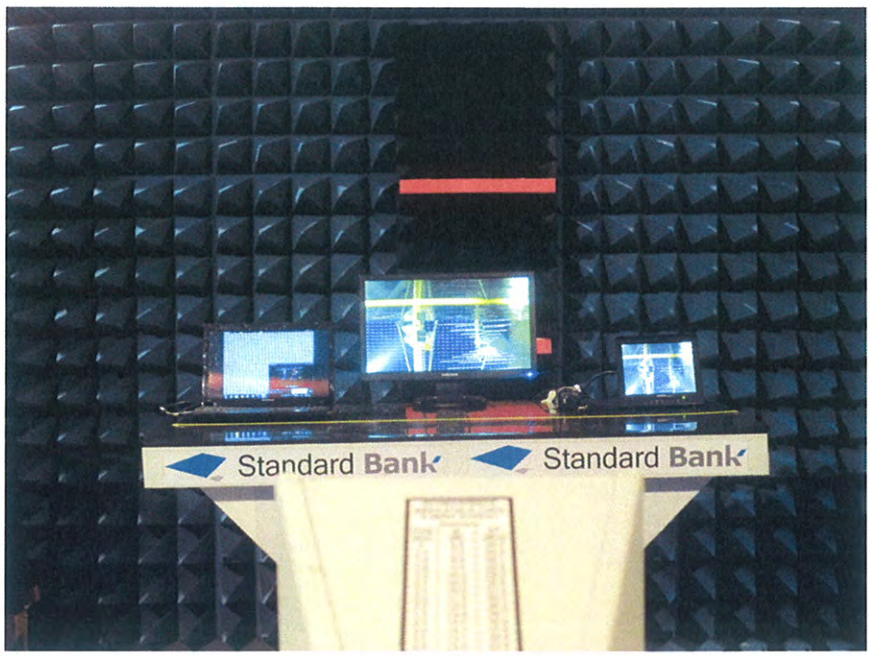
30 MHz to 1 000 MHz Rear View

[HDMI / VGA]



1 GHz to 6 GHz View

[VIDEO]



1 GHz to 6 GHz View

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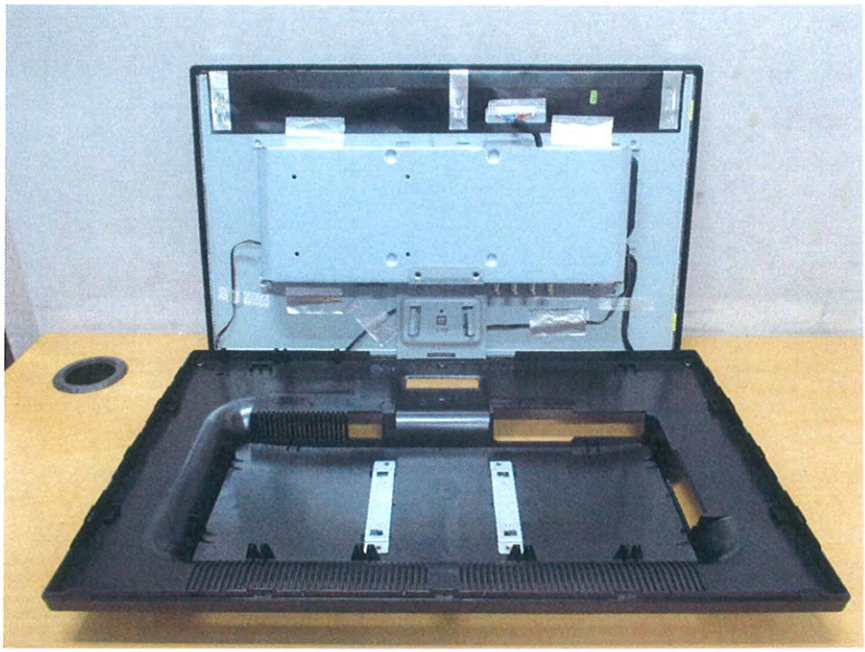
3. EUT PHOTOS



Front View



Rear View



Internal View

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