

**KES Co., Ltd.**

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www.kes.co.kr

Report No.:

KES-EM-22T0819-R1

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EMC TEST REPORT

Test Report No. : KES-EM-22T0819-R1
Date of Issue : Feb. 24, 2023
Product name : LED MONITOR
Model/Type No. : SMT-2212
Variant Model : -
Applicant : Hanwha Vision Co., Ltd
Applicant Address : 6, Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, Republic of Korea
Manufacturer : Weihai Daewoo Electronics Co., Ltd.
Manufacturer Address : No.26, Hongkong Road, Economic & Technical Development
Zone, 264205 Weihai City, Shandong Province, China
Equipment authorization : **Supplier's Declaration of Conformity**
Date of Receipt : Sep. 14, 2022
Test date : Sep. 14, 2022
Test Results : ☒ **In Compliance** ☐ **Not in Compliance**

Tested by

Dae Soo, Kim
EMC Test Engineer

Reviewed by

Dong-Hun, Jang
EMC Technical Manager

This test report is not related to KS Q ISO/IEC 17025 and KOLAS.

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REPORT REVISION HISTORY

Date	Test Report No.	Revision History
Sep. 29, 2022	KES-EM-22T0819	Issued
Feb. 24, 2023	KES-EM-22T0819-R1	Change the Applicant at the request of the customer

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1.0 General Product Description

Main Specifications of EUT are:

Model		SMT-2212
Display		
Screen Size		21.45"
Max. Resolution		1920*1080 60Hz (FHD)
Brightness		250cd/m2 (Typ)
Contrast Ratio		2000 : 1(min) 3000:1 (Typical)
Aspect Ratio		16:9
Viewing Angle (H/V)		178°/178°
Display Color		1.07B Colors(Typ)
Response Time		6.5ms (Typical)
Panel Life		30,000 hours
Interface		
Video	Connector	VGA (1) HDMI (1)
	Connector	VGA
VGA	Available Format	640 × 480@60Hz/72Hz/75Hz;800 × 600@60Hz/72Hz/75Hz;1024 × 768@60Hz/75Hz;1280 × 1024@60Hz/75Hz;1440× 900@60Hz;1680× 1050@60Hz ; 1920× 1080@60Hz
HDMI	Connector	HDMI
	Available Format	640 × 480@60Hz/72Hz/75Hz;800 × 600@60Hz/72Hz/75Hz;1024 × 768@60Hz/75Hz;1280 × 1024@60Hz/75Hz;1440× 900@60Hz;1680× 1050@60Hz ; 1920× 1080@60Hz
Remocon		NA
On Screen Display (OSD)		
Functions		VESA™ DPM Compatible
Language		12 (English, French, German, Italian, Simplified Chinese, Traditional Chinese, Korean, Japanese, Espanola, Portuguese, Russian, Arabic)
Electrical	Adapter	DC 12V 2.5A, Adapter included
	Power Consumption	<30W
Environmental	Operating Temperature	0 ~ +40°C (+32°F ~ +104°F)
	Operating Humidity	10% ~ 80% (non-condensing)
Mechanical	Dimensions with Stand	491.8*327.7*167.2mm
	Dimensions without Stand	491.8*289.5*35.9mm
	Bezel Size	3 Frameless Top:1.8mm Bottom:21.3mm Side : 1.8mm
	Cabinet Color	Black
	VESA Mounts Interface	100*100mm
Stand		including

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1.1 Test Voltage & Frequency

Unless indicated otherwise on the individual data sheet or test results, the test voltage and frequency was as indicated below.

☒ AC 120 V, 60 Hz (DC Adapter Input Power)

1.2 Variant Model Differences

Not applicable

1.3 Device Modifications

Not applicable

1.4 Equipment Under Test

Description	Model Number	Serial Number	Manufacturer	Remarks
LED MONITOR	SMT-2212	-	Weihai Daewoo Electronics Co., Ltd.	EUT

1.5 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
AC/DC ADAPTOR	FSP060-DHAN3	EP06-004404A	Zhonghan Electronics(Shenzhen) Co., Ltd.	EUT
Notebook	HSN-Q07C	5CD8367KND	HP	-
Notebook Adaptor	HSTNN-CA40	WFTKU0ERLB4QCH	HP	-

1.6 External I/O Cabling

■ HDMI, VGA MODE

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
LED MONITOR (EUT)	DC JACK	AC/DC ADAPTOR (EUT)	DC JACK	1.5	U
	HDMI	Notebook	HDMI	1.5	S
	VGA	Notebook	VGA	1.6	S

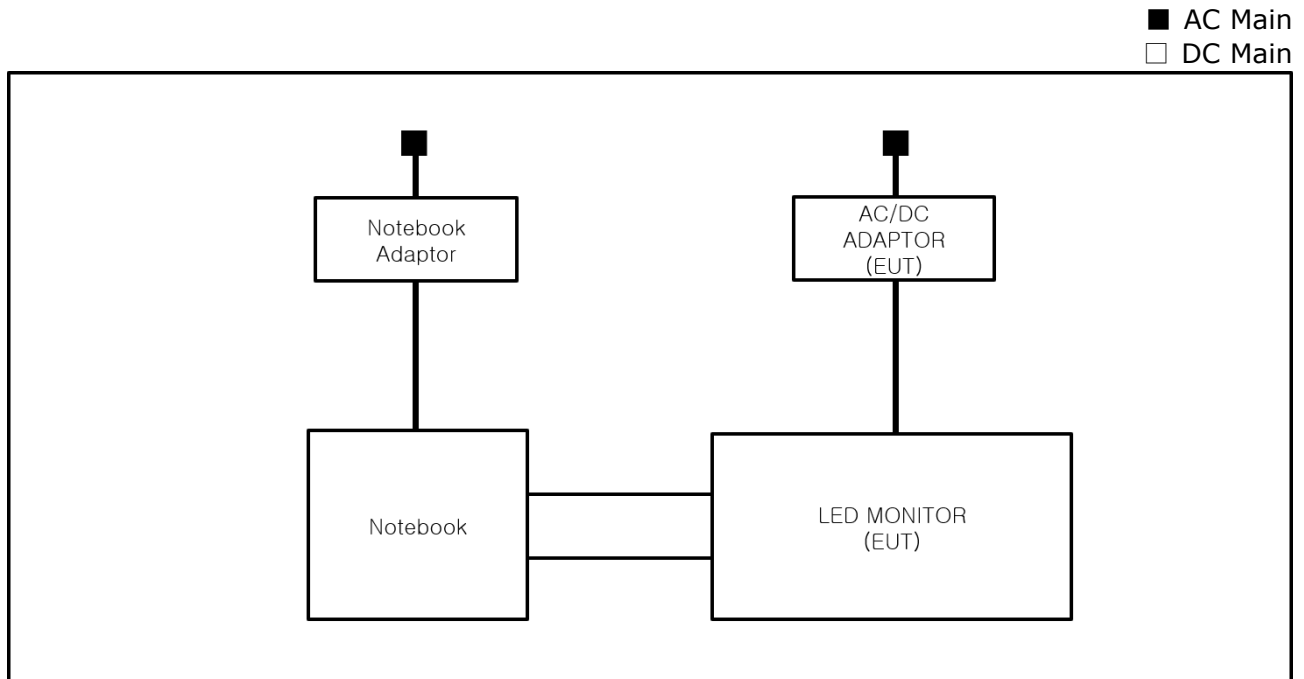
* Unshielded=U, Shielded=S

1.7 EUT Operating Mode(s)

Test Mode	operating
Operation (HDMI MODE, VGA MDE)	The test was conducted by converting the input mode of the test equipment into VGA and HDMI inputs and executing the moving color bar of the laptop to check whether it was normally output to the test equipment.

EUT Test operating S/W		
Name	Version	Manufacture Company
-	-	-

1.8 Configuration



1.9 Remarks when standards applied

N/A

1.10 Calibration Details of Equipment Used for Measurement

Test equipment and test accessories are calibrated on regular basis. The maximum time between calibrations is one year or what is recommended by the manufacturer, whichever is less.

1.11 Test Facility

The measurement facility is located at 473-21, Gayeo-ro, Yeosu-si, Gyeonggi-do, 12658, Korea, Republic of. The sites are constructed in conformance with the requirements of ANSI C63.4a-2017 and CISPR 16-1-4:2019

1.12 Laboratory Accreditations and Listings

Country	Agency	Scope of Accreditation	Logo
KOREA	RRA	EMI (3 m & 10 m Semi-Anechoic Chamber and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 KR0100
International	KOLAS	EMI (3 m & 10 m Semi-Anechoic Chamber and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 KT489
USA	FCC	3 m & 10 m Semi-Anechoic Chamber Conducted test site to perform FCC Part 15/18 measurements.	 KR0100
Canada	ISED	3 m & 10 m Semi-Anechoic Chamber and Conducted test site	 23298
JAPAN	VCCI	EMI (3 m & 10 m Semi-Anechoic Chamber and conducted test site)	 C-20136, T-20137, R-20181, G-20176
Europe	TÜV SÜD	EMI (3 m & 10 m Semi-Anechoic Chamber and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 CARAT 001633 0004

2.0 Test Regulations

The emissions tests were performed according to following regulations:

☒ **47 CFR Part 15, Subpart B**

☐ CISPR 22:2009 +A1:2010

☐ Class A

☐ Class B

☒ ANSI C63.4a-2017

☒ Class A

☐ Class B

☒ **IC Regulation ICES-003 Issue 7**

☐ CAN/CSA-CISPR 32:17

☐ Class A

☐ Class B

☒ ANSI C63.4a-2017

☒ Class A

☐ Class B

2.1 Conducted Emissions at Mains Power Ports

Test Date

Sep. 14, 2022

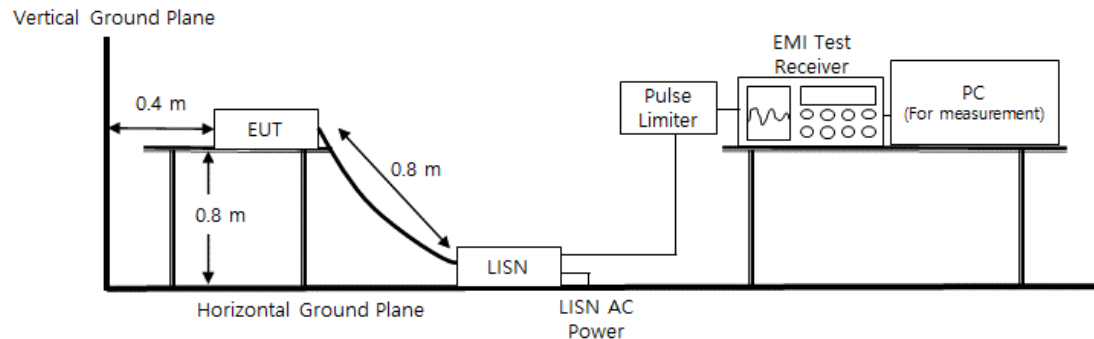
Test Location

Electro wave Shieldroom #6

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI Test S/W	EMC32	R & S	9.12.00	-
☒	EMI TEST RECEIVER	ESR3	R & S	101783	12, 28, 2022
☒	LISN	ENV216	R & S	101787	12, 27, 2022
☒	LISN	ESH2-Z5	R & S	100450	12, 27, 2022
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	12, 27, 2022

Diagram of test setup





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Test Conditions

Temperature: (24,8 ± 0,1) °C

Relative Humidity: (45,7 ± 0,0) % R.H.

Frequency Range of Measurement

150 kHz to 30 MHz

Instrument Settings

IF Band Width: 9 kHz

Test Results

The requirements are:

- ☒ PASS
- ☐ NOT PASS
- ☐ NOT APPLICABLE

Remarks

See Appendix A for test data.

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2.2 Radiated Electric Field Emissions(Below 1 GHz)

Test Date

Sep. 14, 2022

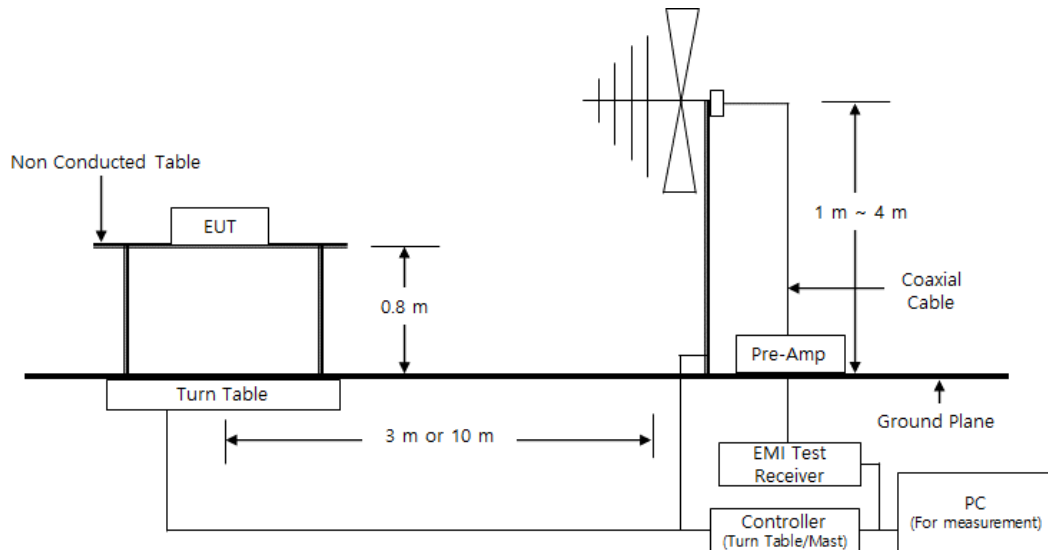
Test Location

☐ OPEN AREA TEST SITE #2 ☒ SEMI ANECHOIC CHAMBER #4(10m)

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI Test S/W	EP5/RE	TOYO Corporation	6.0.0	-
☒	EMI TEST RECEIVER	ESU26	R & S	100551	03, 31, 2023
☒	AMPLIFIER	SCU 01	R & S	100603	11, 24, 2022
☒	TRILOG-BROADBAND ANTENNA	VULB9163	Schwarzbeck	715	12, 08, 2022
☒	ATTENUATOR	8491A	HP	32173	03, 08, 2023

Diagram of test setup





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Test Conditions

Temperature: (25,4 ± 0,1) °C

Relative Humidity: (46,7 ± 0,1) % R.H.

Frequency Range of Measurement

30 MHz to 1 GHz

Instrument Settings

IF Band Width: 120 kHz

Test Results

The requirements are:

- ☒ PASS
- ☐ NOT PASS
- ☐ NOT APPLICABLE

Remarks

See Appendix A for test data.

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2.3 Radiated Electric Field Emissions(Above 1 GHz)

Test Date

Sep. 14, 2022

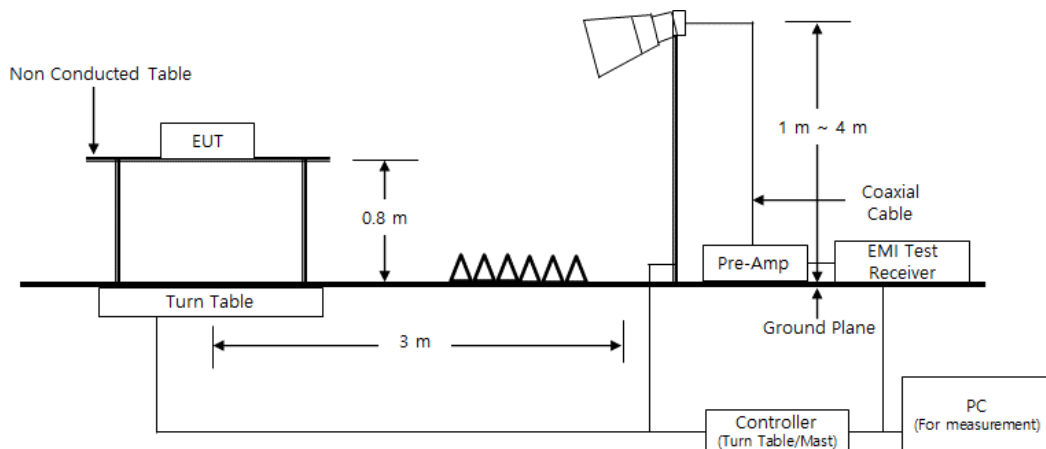
Test Location

SEMI ANECHOIC CHAMBER #4(10 m)

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI Test S/W	EP5/RE	TOYO Corporation	6.0.0	-
☒	EMI TEST RECEIVER	ESU26	R & S	100551	03, 31, 2023
☒	PREAMPLIFIER	8449B	AGILENT	3008A01742	12, 27, 2022
☒	HORN ANTENNA	BBHA 9120D	SCHWARZBECK	9120D-1802	12, 16, 2022

Diagram of test setup



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Test Conditions

Temperature: (25,4 ± 0,1) °C

Relative Humidity: (46,7 ± 0,1) % R.H.

Frequency Range of Measurement

1 GHz to 5 GHz

Instrument Settings

IF Band Width: 1 MHz

Test Results

The requirements are:

☒ PASS

☐ NOT PASS

☐ NOT APPLICABLE

Remarks

See Appendix A for test data.

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APPENDIX A – TEST DATA

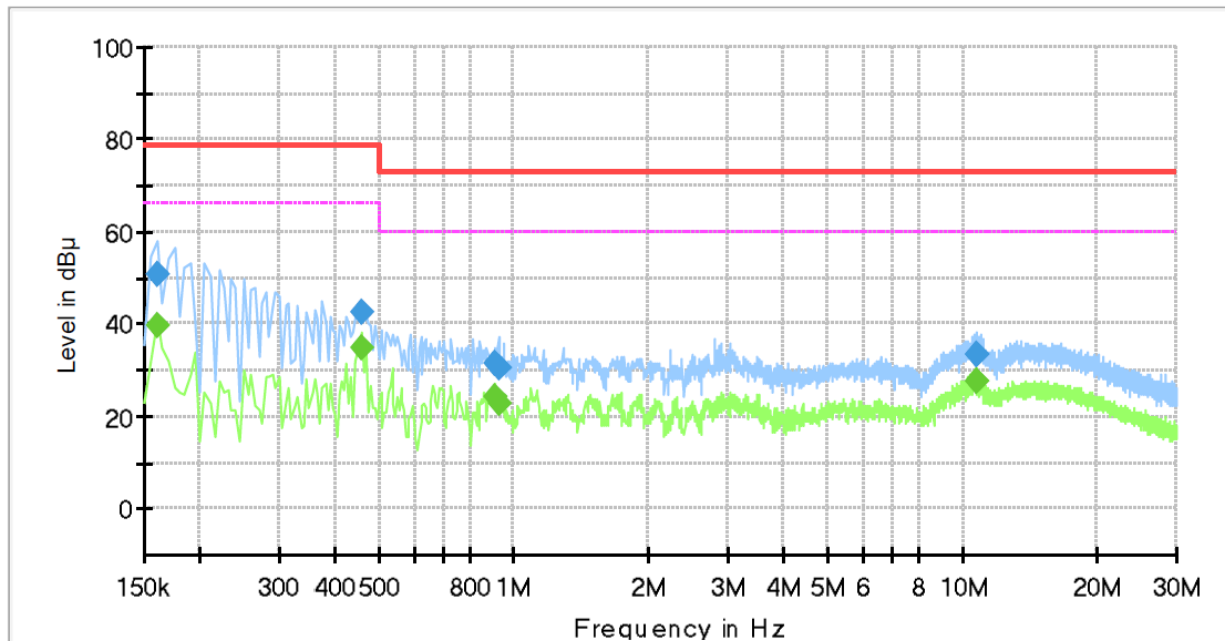
Conducted Emissions at Mains Power Ports

■ HDMI MODE

HOT LINE

Common Information

Test Description:	Conducted Emission
Model No.:	SMT-2212
Phase:	H
Mode:	HDMI
Operator Name:	KES



Final Result

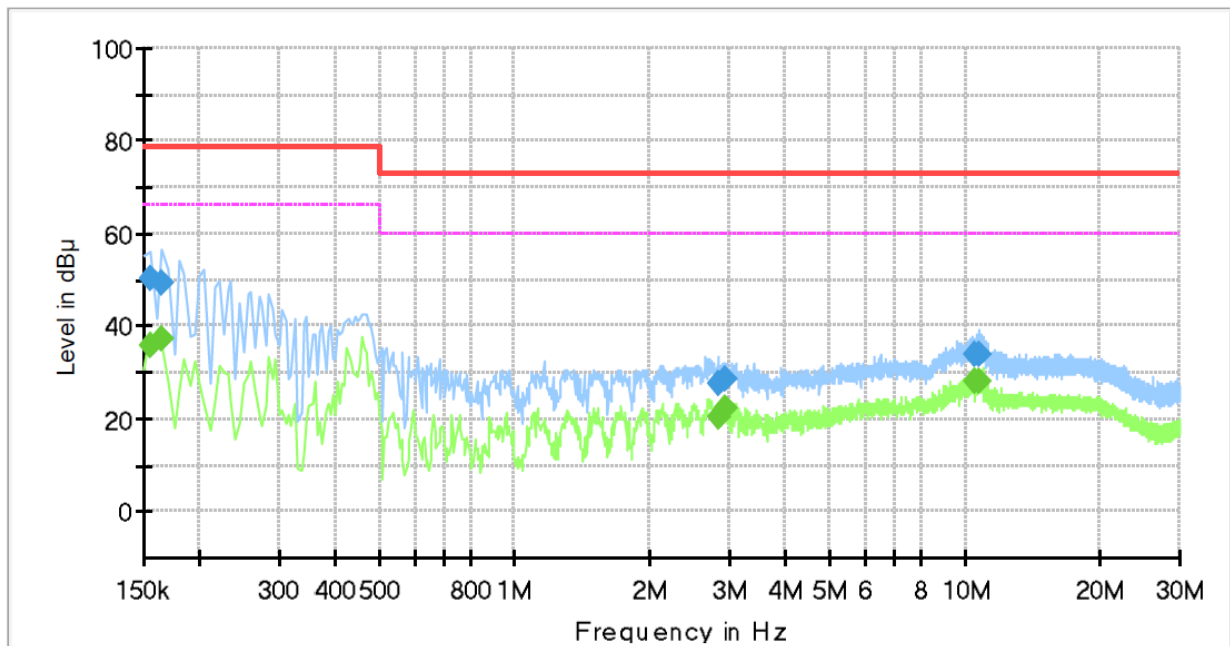
Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.160000	50.71	---	79.00	28.29	1000.0	9.000	L1	19.4
0.160000	---	39.77	66.00	26.23	1000.0	9.000	L1	19.4
0.460000	---	34.93	66.00	31.07	1000.0	9.000	L1	19.7
0.460000	42.50	---	79.00	36.50	1000.0	9.000	L1	19.7
0.910000	---	24.49	60.00	35.51	1000.0	9.000	L1	20.1
0.910000	31.61	---	73.00	41.39	1000.0	9.000	L1	20.1
0.925000	---	22.91	60.00	37.09	1000.0	9.000	L1	20.1
0.925000	30.74	---	73.00	42.26	1000.0	9.000	L1	20.1
10.770000	---	27.71	60.00	32.29	1000.0	9.000	L1	19.9
10.770000	33.37	---	73.00	39.63	1000.0	9.000	L1	19.9
10.785000	---	27.75	60.00	32.25	1000.0	9.000	L1	19.9
10.785000	33.44	---	73.00	39.56	1000.0	9.000	L1	19.9

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NEUTRAL LINE

Common Information

Test Description:	Conducted Emission
Model No.:	SMT-2212
Phase:	N
Mode:	HDMI
Operator Name:	KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.155000	---	35.67	66.00	30.33	1000.0	9.000	N	19.4
0.155000	50.48	---	79.00	28.52	1000.0	9.000	N	19.4
0.165000	---	37.27	66.00	28.73	1000.0	9.000	N	19.4
0.165000	49.54	---	79.00	29.46	1000.0	9.000	N	19.4
2.840000	---	20.26	60.00	39.74	1000.0	9.000	N	20.2
2.840000	27.79	---	73.00	45.21	1000.0	9.000	N	20.2
2.920000	---	22.27	60.00	37.73	1000.0	9.000	N	20.2
2.920000	28.46	---	73.00	44.54	1000.0	9.000	N	20.2
10.575000	---	28.15	60.00	31.85	1000.0	9.000	N	19.9
10.575000	33.91	---	73.00	39.09	1000.0	9.000	N	19.9
10.760000	---	28.23	60.00	31.77	1000.0	9.000	N	19.9
10.760000	34.08	---	73.00	38.92	1000.0	9.000	N	19.9

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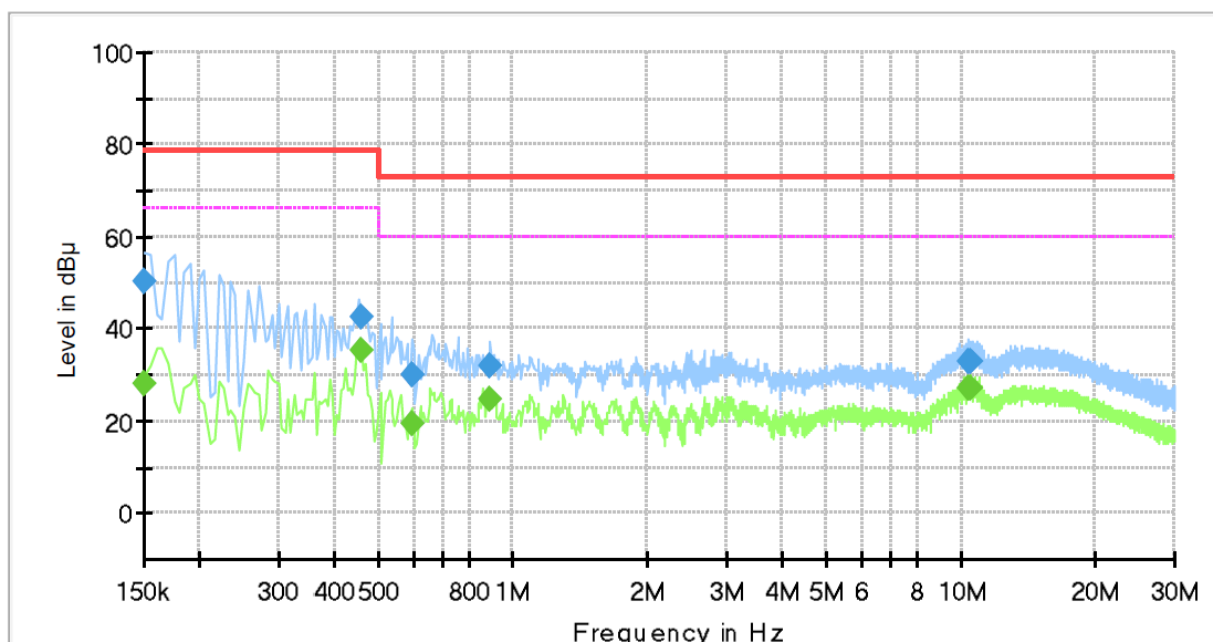
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■ VGA MODE

HOT LINE

Common Information

Test Description:	Conducted Emission
Model No.:	SMT-2212
Phase:	H
Mode:	VGA
Operator Name:	KES



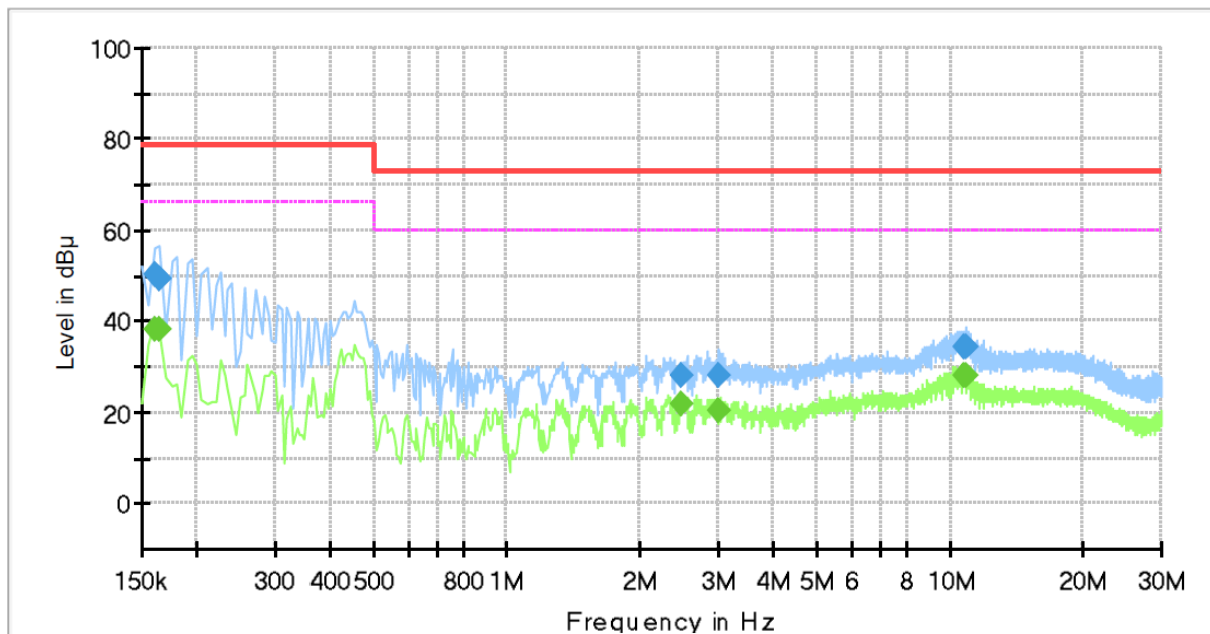
Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	50.39	---	79.00	28.61	1000.0	9.000	L1	19.4
0.150000	---	28.02	66.00	37.98	1000.0	9.000	L1	19.4
0.460000	42.54	---	79.00	36.46	1000.0	9.000	L1	19.7
0.460000	---	35.24	66.00	30.76	1000.0	9.000	L1	19.7
0.595000	29.89	---	73.00	43.11	1000.0	9.000	L1	19.8
0.595000	---	19.25	60.00	40.75	1000.0	9.000	L1	19.8
0.890000	---	24.51	60.00	35.49	1000.0	9.000	L1	20.1
0.890000	32.07	---	73.00	40.93	1000.0	9.000	L1	20.1
10.445000	---	27.25	60.00	32.75	1000.0	9.000	L1	19.9
10.445000	33.07	---	73.00	39.93	1000.0	9.000	L1	19.9
10.460000	---	27.18	60.00	32.82	1000.0	9.000	L1	19.9
10.460000	33.09	---	73.00	39.91	1000.0	9.000	L1	19.9

NEUTRAL LINE

Common Information

Test Description:	Conducted Emission
Model No.:	SMT-2212
Phase:	N
Mode:	VGA
Operator Name:	KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.160000	---	38.46	66.00	27.54	1000.0	9.000	N	19.4
0.160000	50.31	---	79.00	28.69	1000.0	9.000	N	19.4
0.165000	---	38.28	66.00	27.72	1000.0	9.000	N	19.4
0.165000	49.47	---	79.00	29.53	1000.0	9.000	N	19.4
2.480000	---	21.99	60.00	38.01	1000.0	9.000	N	20.2
2.480000	27.89	---	73.00	45.11	1000.0	9.000	N	20.2
3.020000	---	20.46	60.00	39.54	1000.0	9.000	N	20.1
3.020000	28.11	---	73.00	44.89	1000.0	9.000	N	20.1
10.755000	---	28.30	60.00	31.70	1000.0	9.000	N	19.9
10.755000	34.28	---	73.00	38.72	1000.0	9.000	N	19.9
10.840000	---	28.22	60.00	31.78	1000.0	9.000	N	19.9
10.840000	34.21	---	73.00	38.79	1000.0	9.000	N	19.9

◆ Calculation

$$\text{QuasiPeak [dBuV]} / \text{CAverage [dBuV]} = \text{Reading Value [dBuV]} + \text{Corr. [dB]}$$

QuasiPeak / CAverage : The Final Value

Reading Value : Not shown in the table.

Corr. : Correction values (LISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

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Report No.:

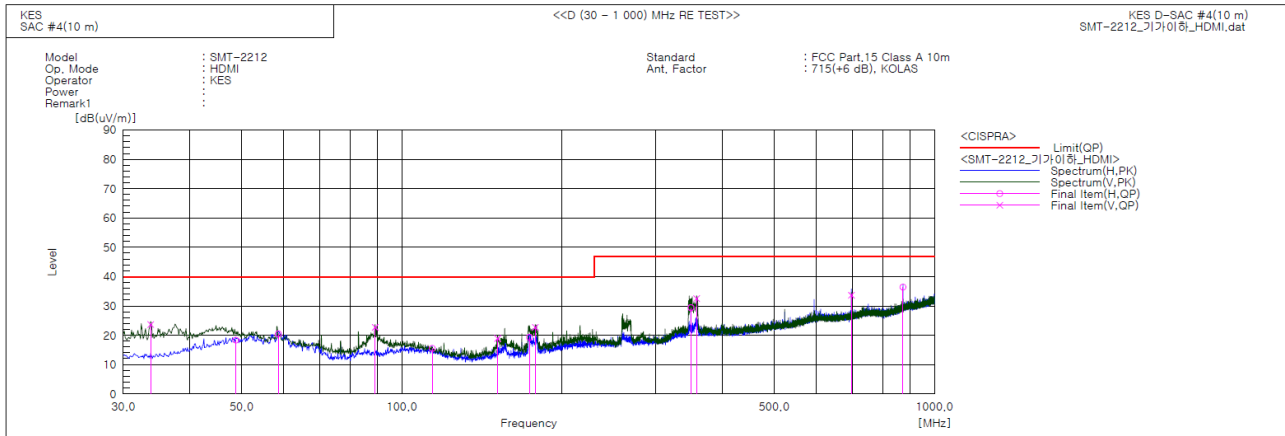
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Radiated Electric Field Emissions(Below 1 GHz)

- 47 CFR Part 15, Subpart B

■ HDMI MODE



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]	Remark
1	33.759	V	48.3	-24.6	23.7	39.0	15.3	116.0	198.0	
2	48.794	H	39.2	-20.9	18.3	40.0	21.7	313.0	266.0	
3	58.615	H	42.1	-21.6	20.5	39.0	18.5	378.0	316.0	
4	89.049	V	46.9	-24.2	22.7	40.0	17.3	162.0	134.0	
5	114.026	H	38.1	-22.6	15.5	40.0	24.5	344.0	167.0	
6	151.250	V	43.9	-25.0	18.9	40.0	21.1	145.0	8.0	
7	173.560	H	43.1	-23.8	19.3	43.5	24.2	315.0	270.0	
8	178.046	V	46.2	-23.5	22.7	43.5	20.8	102.0	8.0	
9	349.009	H	44.3	-14.9	29.4	47.0	17.6	390.0	202.0	
10	357.496	V	47.3	-14.8	32.5	47.0	14.5	106.0	2.0	
11	697.966	V	40.7	-7.0	33.7	46.5	12.8	124.0	51.0	
12	872.566	H	40.6	-4.2	36.4	46.5	10.1	299.0	296.0	

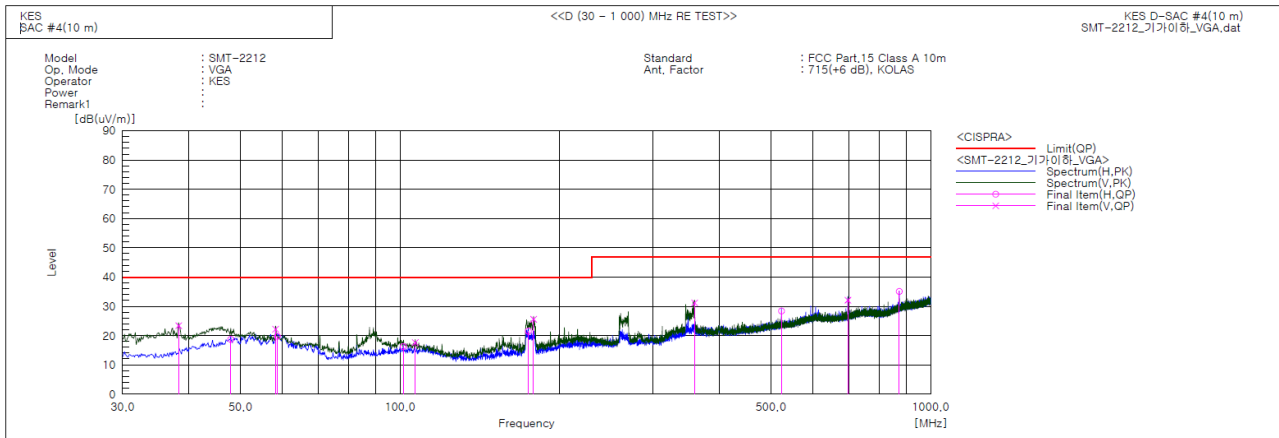
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VGA MODE



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]	Remark
1	38.245	V	46.8	-23.4	23.4	39.0	15.6	147.0	89.0	
2	47.945	H	39.6	-20.9	18.7	40.0	21.3	294.0	115.0	
3	58.251	V	43.8	-21.6	22.2	40.0	17.8	104.0	143.0	
4	58.736	H	41.3	-21.6	19.7	39.0	19.3	386.0	334.0	
5	101.416	H	38.5	-22.3	16.2	40.0	23.8	376.0	6.0	
6	106.751	V	39.8	-22.2	17.6	40.0	22.4	100.0	90.0	
7	174.409	H	45.3	-23.8	21.5	43.5	22.0	312.0	130.0	
8	178.410	V	49.1	-23.5	25.6	43.5	17.9	111.0	355.0	
9	359.073	V	46.0	-14.8	31.2	46.5	15.3	123.0	7.0	
10	523.488	H	39.1	-10.7	28.4	47.0	18.6	332.0	327.0	
11	697.966	V	39.1	-7.0	32.1	47.0	14.9	174.0	35.0	
12	872.566	H	39.3	-4.2	35.1	46.5	11.4	314.0	183.0	



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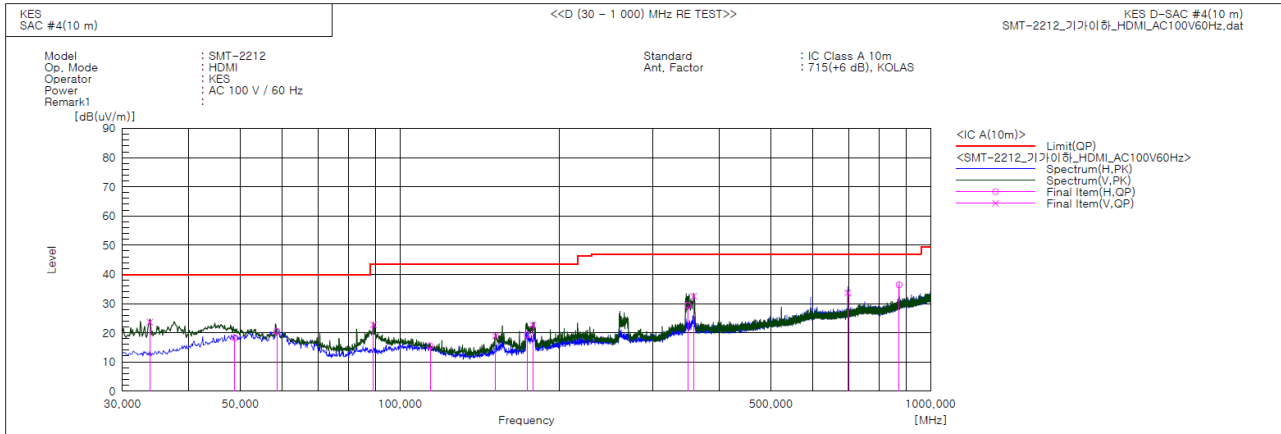
Report No.:

KES-EM-22T0819-R1

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■ HDMI MODE



Final Result

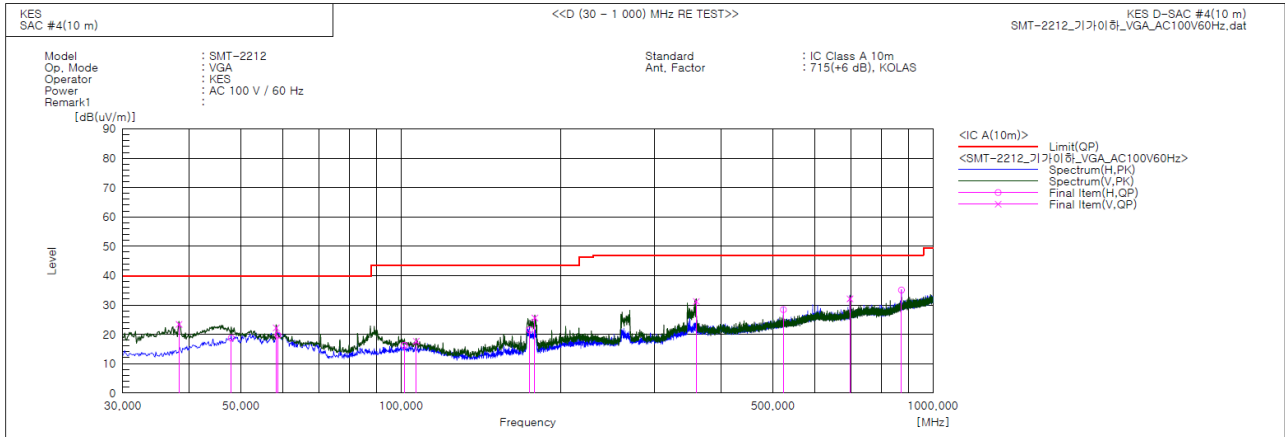
No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]	Remark
1	33.759	V	48.3	-24.6	23.7	40.0	16.3	116.0	198.0	
2	48.794	H	39.2	-20.9	18.3	40.0	21.7	313.0	266.0	
3	58.615	H	42.1	-21.6	20.5	40.0	19.5	378.0	316.0	
4	89.049	V	46.9	-24.2	22.7	43.5	20.8	162.0	134.0	
5	114.026	H	38.1	-22.6	15.5	43.5	28.0	344.0	167.0	
6	151.250	V	43.9	-25.0	18.9	43.5	24.6	145.0	8.0	
7	173.560	H	43.1	-23.8	19.3	43.5	24.2	315.0	270.0	
8	178.046	V	46.2	-23.5	22.7	43.5	20.8	102.0	8.0	
9	349.009	H	44.3	-14.9	29.4	47.0	17.6	390.0	202.0	
10	357.496	V	47.3	-14.8	32.5	47.0	14.5	106.0	2.0	
11	697.966	V	40.7	-7.0	33.7	47.0	13.3	124.0	51.0	
12	872.566	H	40.6	-4.2	36.4	47.0	10.6	299.0	296.0	

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■ VGA MODE



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]	Remark
1	38.245	V	46.8	-23.4	23.4	40.0	16.6	147.0	89.0	
2	47.945	H	39.6	-20.9	18.7	40.0	21.3	294.0	115.0	
3	58.251	V	43.8	-21.6	22.2	40.0	17.8	104.0	143.0	
4	58.736	H	41.3	-21.6	19.7	40.0	20.3	386.0	334.0	
5	101.416	H	38.5	-22.3	16.2	43.5	27.3	376.0	6.0	
6	106.751	V	39.8	-22.2	17.6	43.5	25.9	100.0	90.0	
7	174.409	H	45.3	-23.8	21.5	43.5	22.0	312.0	130.0	
8	178.410	V	49.1	-23.5	25.6	43.5	17.9	111.0	355.0	
9	359.073	V	46.0	-14.8	31.2	47.0	15.8	123.0	7.0	
10	523.488	H	39.1	-10.7	28.4	47.0	18.6	332.0	327.0	
11	697.966	V	39.1	-7.0	32.1	47.0	14.9	174.0	35.0	
12	872.566	H	39.3	-4.2	35.1	47.0	11.9	314.0	183.0	

◆ Calculation - SAC #4(10 m)

Result(QP) [dB(μV/m)] = (Reading(QP)[dB(μV)] + c.f[dB(1/m)])

Margin(QP)[dB] = Limit[dB(μV/m)] - Result(QP) [dB(μV/m)]

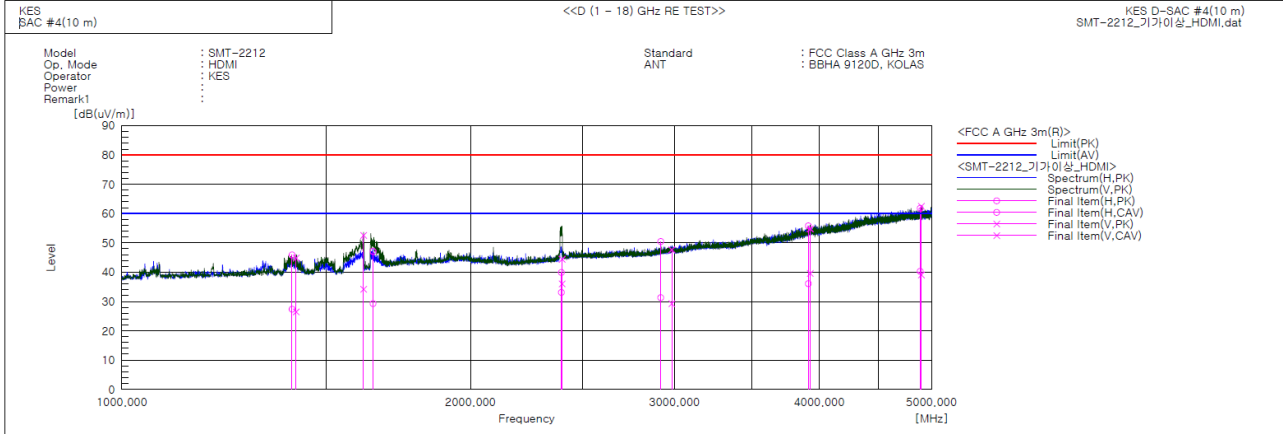
Reading(QP) : Reading value, Result(QP) : Reading value + Factor value

Limit(QP) : Limit value, c.f : (ANT Factor + Cable Loss - Preamp Factor), Margin: Margin value



Radiated Electric Field Emissions(Above 1 GHz)

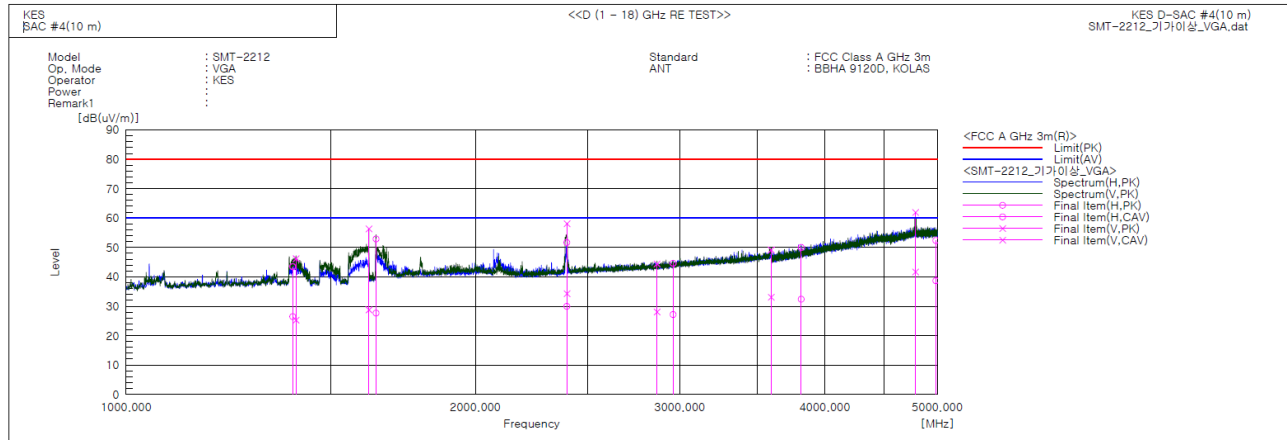
■ HDMI MODE



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VGA MODE



Final Result

No.	Frequency [MHz]	(P)	Reading PK [dB(uV)]	Reading CAV [dB(uV)]	c.f [dB(1/m)]	Result PK [dB(uV/m)]	Result CAV [dB(uV/m)]	Limit PK [dB(uV/m)]	Limit AV [dB(uV/m)]	Margin PK [dB]	Margin CAV [dB]	Height [cm]	Angle [deg]	Remark
1	1391.500	H	47.7	30.7	-4.2	43.5	26.5	80.0	60.0	36.5	33.5	361.0	36.0	
2	1401.000	V	50.4	29.5	-4.2	46.2	25.3	80.0	60.0	33.8	34.7	104.0	89.0	
3	1618.585	V	59.1	31.6	-2.8	56.3	28.8	80.0	60.0	23.7	31.2	117.0	125.0	
4	1641.610	H	55.4	30.2	-2.5	52.9	27.7	80.0	60.0	27.1	32.3	312.0	160.0	
5	2397.150	H	51.2	29.5	0.5	51.7	30.0	80.0	60.0	28.3	30.0	398.0	84.0	
6	2398.100	V	57.6	33.8	0.5	58.1	34.3	80.0	60.0	21.9	25.7	102.0	240.0	
7	2867.000	V	41.8	25.5	2.6	44.4	28.1	80.0	60.0	35.6	31.9	125.0	256.0	
8	2959.500	H	41.5	24.1	3.1	44.6	27.2	80.0	60.0	35.4	32.8	288.0	326.0	
9	3595.500	V	42.6	26.5	6.6	49.2	33.1	80.0	60.0	30.8	26.9	208.0	245.0	
10	3817.000	H	41.9	24.3	8.1	50.0	32.4	80.0	60.0	30.0	27.6	376.0	44.0	
11	4788.910	V	46.5	26.3	15.4	61.9	41.7	80.0	60.0	18.1	18.3	113.0	263.0	
12	4984.315	H	36.6	22.9	15.8	52.4	38.7	80.0	60.0	27.6	21.3	260.0	358.0	

Calculation

Result(PK/CAV) [dB(uV/m)] = (Reading(PK/CAV)[dB(uV)] + c.f[dB(1/m)])

Margin(PK/CAV)[dB] = Limit[dB(uV/m)] - Result(PK/CAV) [dB(uV/m)]

Reading(PK/CAV) : Reading value, Result(PK/CAV) : Reading value + Factor value

Limit(QP) : Limit value, c.f : (ANT Factor + Cable Loss - Preamp Factor), Margin: Margin value

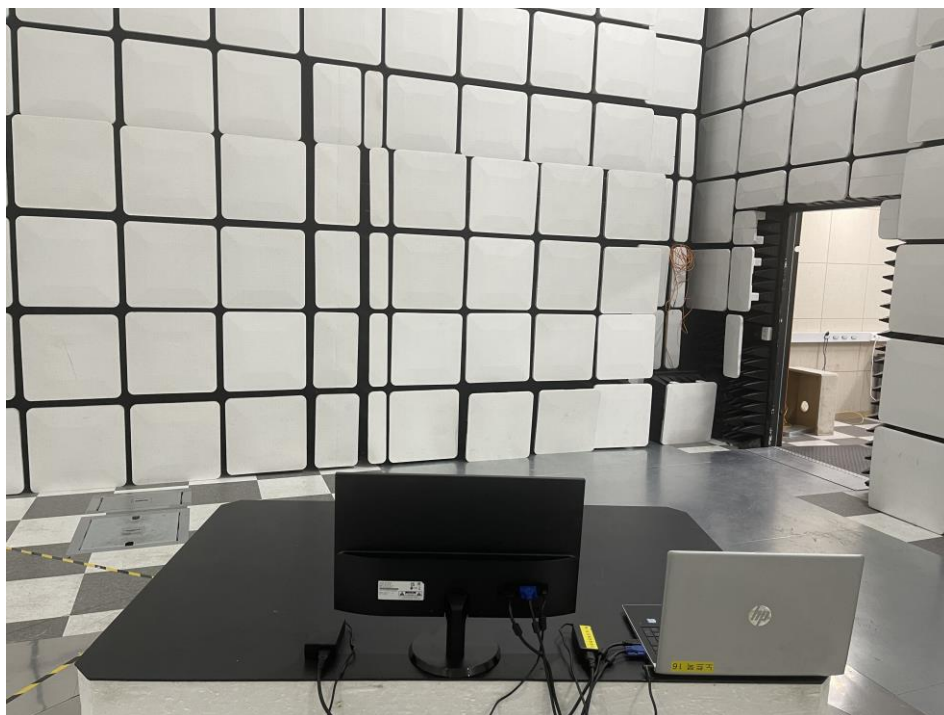
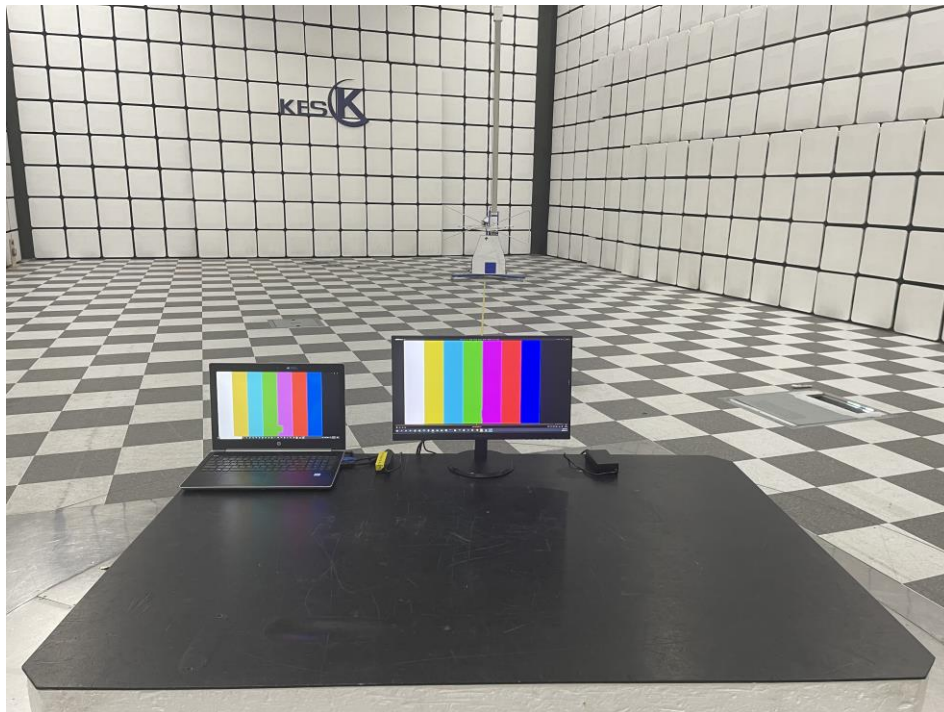
Test Setup Photos and Configuration

Conducted Emissions at Mains Power Ports



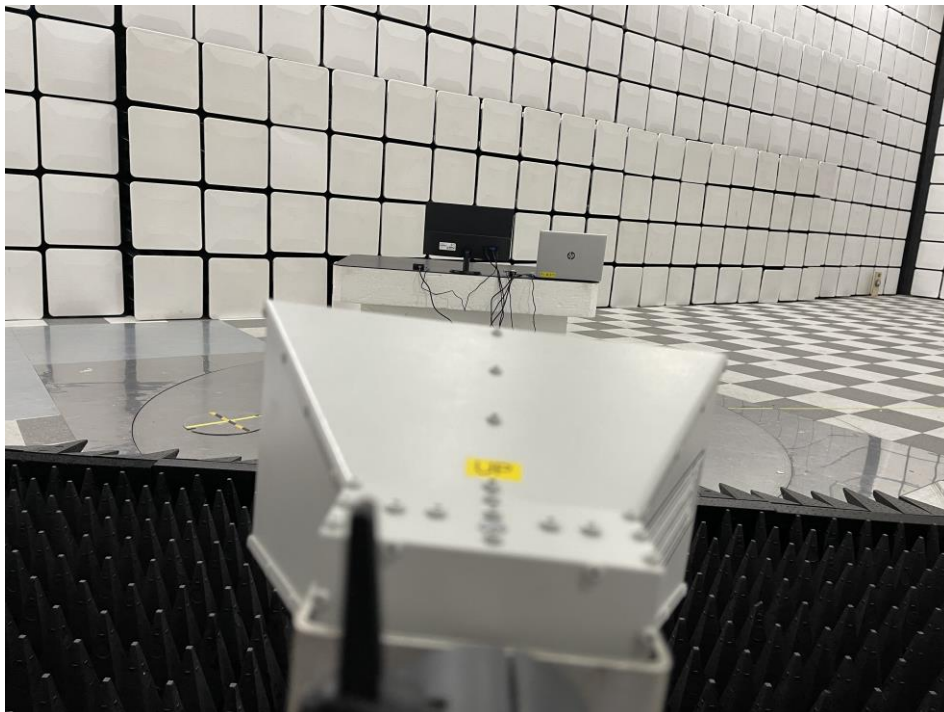
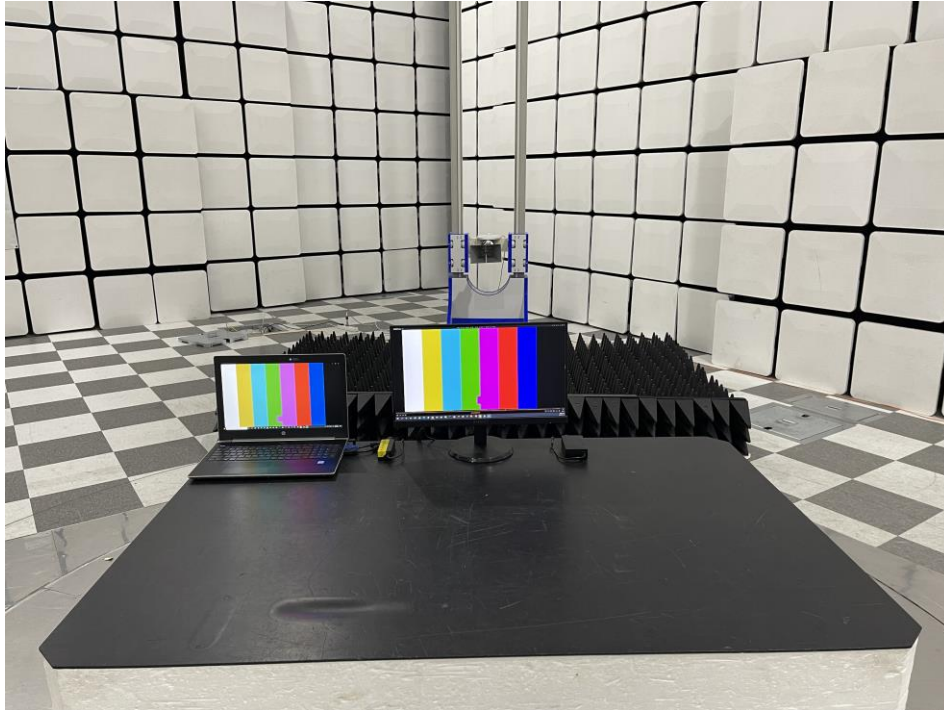
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Radiated Electric Field Emissions(Below 1 GHz)



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Radiated Electric Field Emissions(Above 1 GHz)



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EUT External Photographs

(Top)



(Bottom)



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EUT Internal Photographs

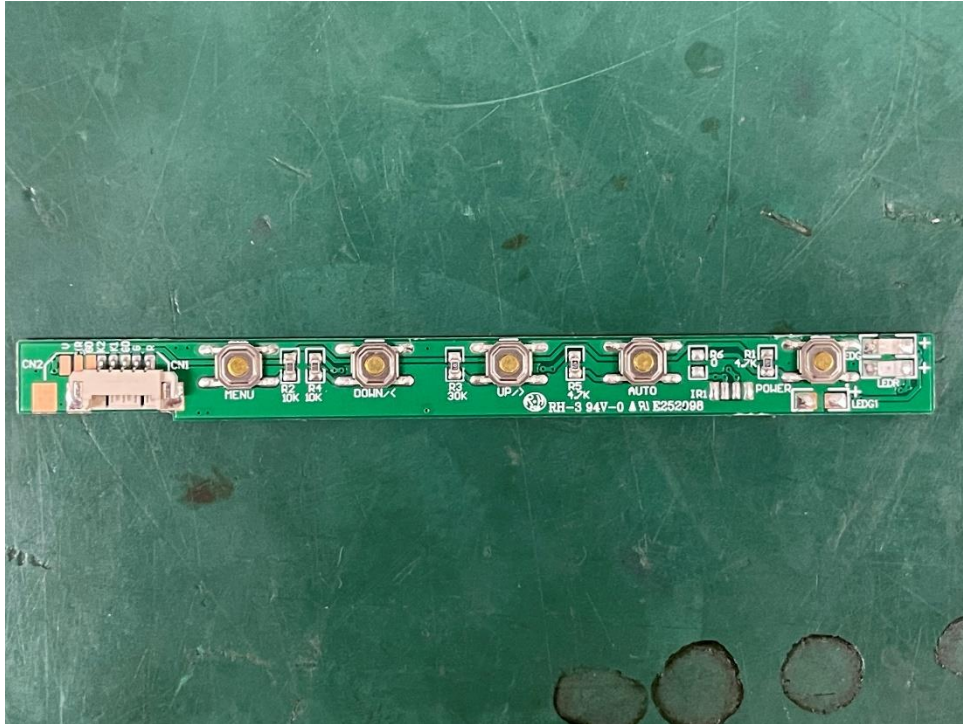
(Internal View)



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EUT Internal View –Board 1

(Top)



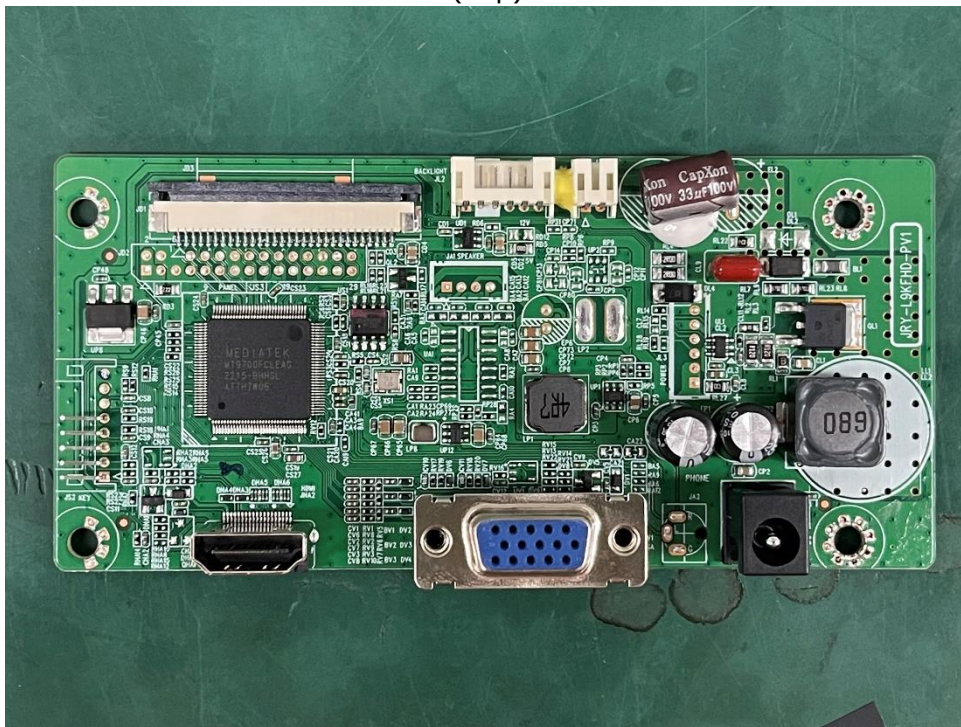
(Bottom)



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EUT Internal View –Board 2

(Top)



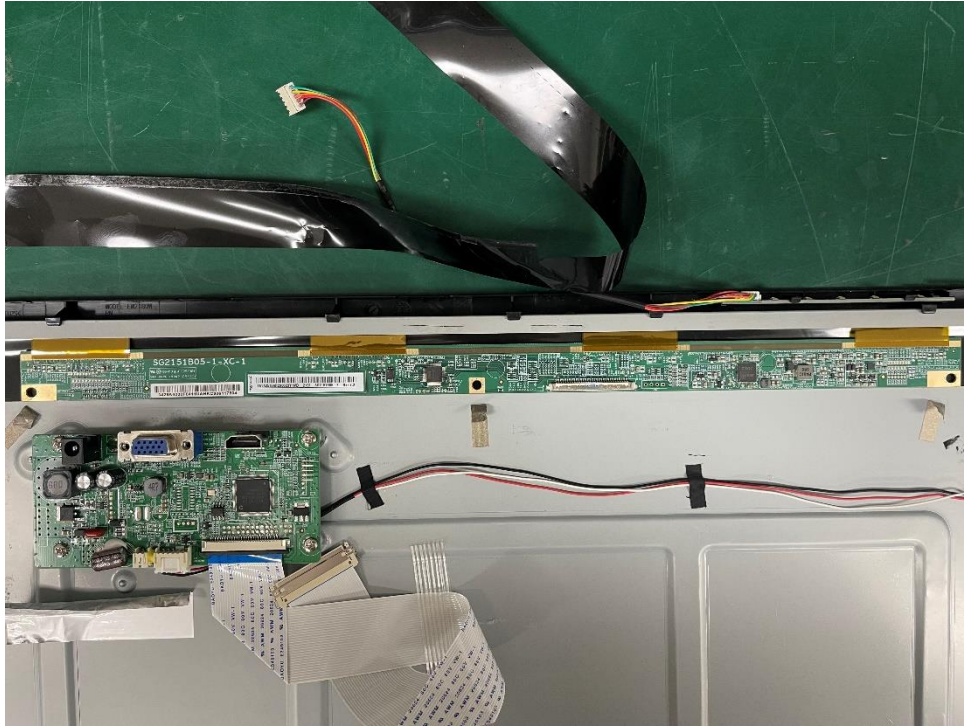
(Bottom)



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EUT Internal View – Board 3

(Top)



(Bottom)



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EUT Internal View – Adaptor

[\(Top\)](#)



(Bottom)



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EUT Internal View – Panel

(Label)



Label Photographs

FCC Label



Hanwha Techwin Co., Ltd.

SMT-2212

IC Label

CAN ICES-003(A) / NMB-003(A)

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:
(1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.