



TEST REPORT



Report No. : KES-EM251946

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KES Co., Ltd.

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1. Client

Applicant : Hanwha Vision Co., Ltd

Applicant Address : 6, Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

2. Sample Description

Product name : Security LED Monitor

Model/Type No. : SMT-4345

Variant Model : -

Manufacturer : Weihai Daewoo Electronics Co., Ltd.

Manufacturer Address : No. 26, Hongkong Road, Economic & Technical Development Zone, Weihai City, Shandong Province, China

3. Date of Receipt : May. 29, 2025

4. Test date : Jun. 12, 2025

5. Date of Issue : Jun. 27, 2025

6. Test Results : In Compliance

Tested by

Reviewed by

Se Heon, Kim
EMC Test Engineer

Seong Min, Choi
EMC Technical Manager

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



REPORT REVISION HISTORY

Date	Test Report No.	Revision History
Jun. 27, 2025	KES-EM251946	Issued

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1.0 General Product Description

Main Specifications of EUT are:

Division		Specificity
Internal highest clock frequency		220 MHz
SMT-4345		
Display		
Type		LED Monitor
Screen Size		43"
Max. Resolution		3840*2160 60Hz
Brightness		250 cd/m ² (Min), 300 cd/m ² (Typ)
Contrast Ratio		1000:1 (Min) 1200:1 (Typ)
Aspect Ratio		16:9
Viewing Angle (H/V)		178°/178°
Display Color		1.07G (8bits + FRC)
Response Time		8ms(Typ)
Video System		None
Panel Life		30,000 hours
Filter Type		None
Interface		
Video	Connectors	HDMI 2.0(2), DP 1.4(1),(two Windows PIP/PBP)
Composite Video	Input	None
VGA	Connector	None
	Input Signal	None
	Available Format	None
HDMI	Connector	HDMI
	Available Format	640 x 480@60Hz, 800 x 600@56Hz/60Hz/72Hz/75Hz, 1024 x 768@60Hz/70Hz/75Hz, 1280 x 1024@60Hz/75Hz, 1440 x 900@60Hz, 1680 x 1050@60Hz, 1920 x 1080@50Hz/60Hz, 2560 x 1440@60Hz,3840x2160@60Hz, 3840 x 2160P@30/50/60Hz, 720 x 480P60Hz, 1280 x 720P@50Hz, 720 x 576P@50Hz, 1920x1080P@50/60Hz, 1280 x 800@60Hz, 1280 x 960@60Hz, 1280 x 720@60Hz
DP	Connector	DP
	Available Format	640 x 480@60Hz, 800 x 600@56Hz/60Hz/72Hz/75Hz, 1024 x 768@60Hz/70Hz/75Hz, 1280 x 1024@60Hz/75Hz, 1440 x 900@60Hz, 1680 x 1050@60Hz, 1920 x 1080@50Hz/60Hz, 2560 x 1440@60Hz,3840x2160@60Hz, 3840 x 2160P@30/50/60Hz, 720 x 480P60Hz, 1280 x 720P@50Hz, 720 x 576P@50Hz, 1920x1080P@50/60Hz, 1280 x 800@60Hz, 1280 x 960@60Hz, 1280 x 720@60Hz
Audio	Connector	Audio Out
	Output Signal	Speakers :6Ω 2Wx2
Application Support		Remote Controller
On Screen Display		
Functions		VESA™ DPMS Compatible
Language		Korean, English, Русский, Deutsch, Français, Español, Italiano, Português, Chinese (Simplified), Chinese (Traditional), Japanese, Arabic
General		
Electrical	Input Voltage	AC 100 ~ 240V(50/60Hz)
	Power Consumption	<85W
Environmental	Operating Temperature	0 ~ +40°C (+32°F ~ +104°F)
	Operating Humidity	10% ~ 80% (non-condensing)
Mechanical	Dimensions with Stand (WxHxD)	954.9*598.7*235.4mm
	Dimensions without Stand (WxHxD)	954.9*570.3*90.1mm
	Gross Weight	10.2kg
	Protection Glass	None
	Cabinet Color	Black
	Wall Mounts	None
	VESA Mounts Interface	100*100mm /200*200mm



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

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
Security LED Monitor	SMT-4345	-	Weihai Daewoo Electronics Co., Ltd.	EUT
Remote Control	-	-	Weihai Daewoo Electronics Co., Ltd.	EUT

1.5 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
PC	-	-	-	-
Mouse	-	-	Logitech	-
Keyboard	YU0036	-	Logitech	-
Earphone	-	-	-	-



1.6 External I/O Cabling

■mode 1, ■mode 2

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
Smart Display (EUT)	HDMI 1	PC	HDMI 1	1.5	S
	HDMI 2		HDMI 2	1.4	S
	DP		DP	1.2	S
	3.5 mm	Earphone	3.5 mm	1.8	U
PC	USB	Mouse	USB	1.0	U
	USB	Keyboard	USB	1.5	U

* Unshielded=U, Shielded=S

1.7 EUT Operating Mode(s)

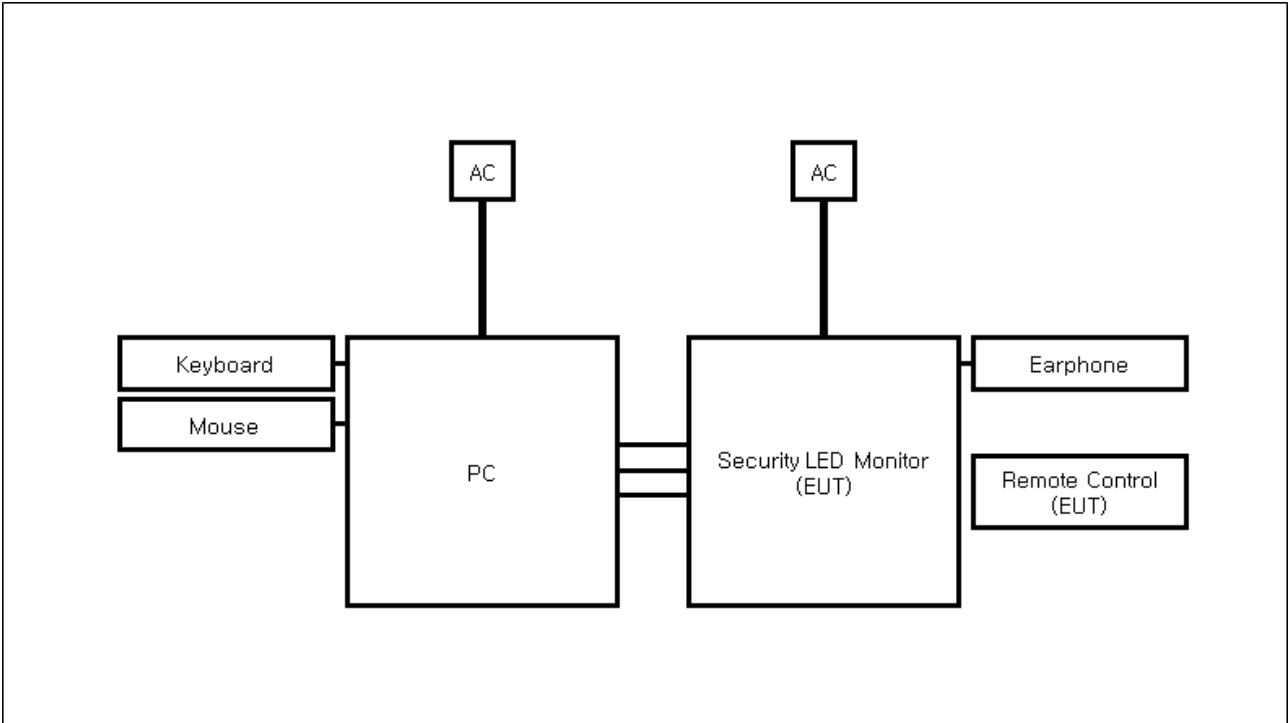
Test No.	Test mode	Operating	Test Voltages
mode 1	HDMI Input	After running the 1 kHz tone color bar on the PC, check the output of the monitor display and the 1 kHz tone output of the earphone.	AC 120 V, 60 Hz
mode 2	DP Input		

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



1.8 Configuration

■mode 1, mode 2





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 Measurement Procedure

- Conducted Emissions

The conducted emission levels were measured on each current-carrying line with the spectrum analyzer operating in the CISPR quasi-peak mode (or peak mode if applicable). The initial step in collecting conducted data is a spectrum analyzer peak scan of the measurement range. If the conducted emission exceed the average limit with the instrument set to the quasi-peak mode, the measurements are made in the average mode. The emission spectrum was scanned from 150 kHz to 30 MHz. The highest emission amplitudes relative to the appropriate limits were measured and have been recorded. Quasi-peak readings are distinguished with a "QP".

- Radiated Electric Field Emissions

The test was done at a SEMI ANECHOIC CHAMBER with quasi-peak detector. The final test data was measured using a Quasi-Peak detector below 1 GHz at 10 m or 3 m distance and a Peak and Average detector above 1 GHz at 3 m distance. Test was proceeded worst case test mode and cable configuration.

Measurements were made with the antenna positioned in both the horizontal and vertical planes of polarization. The antenna height was varied from 1 m to 4 m and the EUT was rotated 360° to find the maximum emitting point for each frequency.

Measurement procedures was In accordance with ANSI C63.4-2014 7.3.3, 7.3.4, 8.3.1.1, 8.3.1.2, 8.3.2.1, 8.3.2.2

**1.13 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 0008



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

Jun. 12, 2025

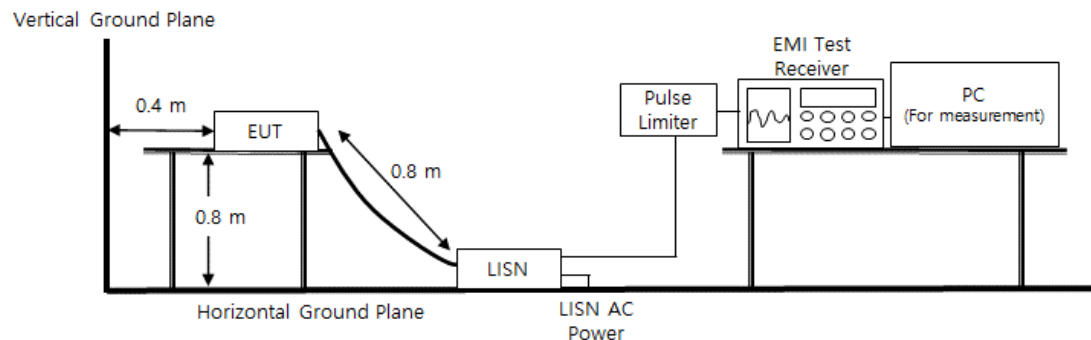
Test Location

Electro wave Shieldroom #6

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due	calibration interval
☒	EMI Test S/W	EMC32	R & S	9.12.00	-	-
☒	EMI TEST RECEIVER	ESR3	R & S	101783	11, 06, 2025	1 Year
☒	LISN	ENV216	R & S	101786	01, 09, 2026	1 Year
☒	ARTIFICIAL MAINS NETWORK	ESH2-Z5	R & S	100450	11, 06, 2025	1 Year
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	11, 06, 2025	1 Year

Diagram of test setup





Test Conditions

Temperature: (23,7 ± 0,1) °C
Relative Humidity: (46,7 ± 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.





2.2 Radiated Electric Field Emissions(Below 1 GHz)

Test Date

Jun. 12, 2025

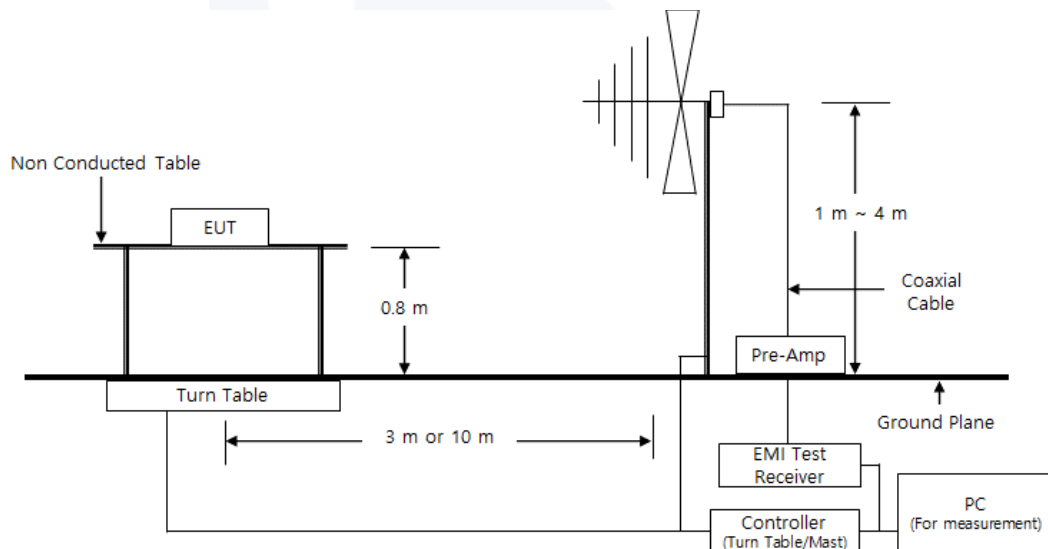
Test Location

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

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due	calibration interval
☒	EMI Test S/W	EP5/RE	TOYO Corporation	6.0.0	-	-
☒	EMI TEST RECEIVER	ESU26	R & S	100551	02, 13, 2026	1 Year
☒	AMPLIFIER	SCU 01	R & S	100603	11, 06, 2025	1 Year
☒	BILOG ANTENNA	VULB 9168	SCHWARZBECK	9168-461	05, 09, 2026	2 Year
☒	ATTENUATOR	6806.17.A	HUBER+SUHNER	-	02, 13, 2026	1 Year

Diagram of test setup





Test Conditions

Temperature: (23,6 ± 0,2) °C
Relative Humidity: (46,0 ± 0,0) % 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.





2.3 Radiated Electric Field Emissions(Above 1 GHz)

Test Date

Jun. 12, 2025

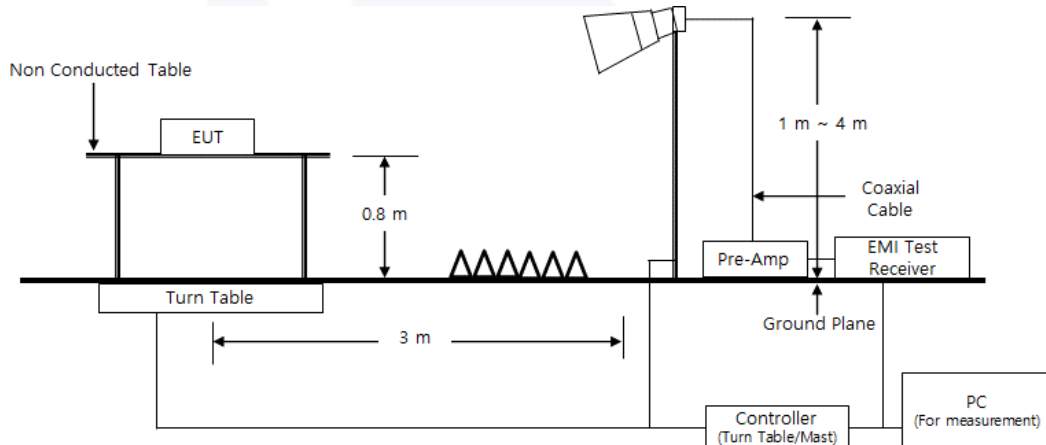
Test Location

SEMI ANECHOIC CHAMBER #5

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due	calibration interval
☒	EMI Test S/W	ES10/RE	TOYO Corporation	2022.01.000	-	-
☒	EMI TEST RECEIVER	ESU26	Rohde & Schwarz	100552	02, 13, 2026	1 Year
☒	HORN ANTENNA	BBHA 9120D	SCHWARZBECK	9120D-1802	11, 04, 2025	1 Year
☒	PREAMPLIFIER	8449B	HP	3008A00538	04, 30, 2026	1 Year
☒	ATTENUATOR	8491B	HP	23094	02, 13, 2026	1 Year

Diagram of test setup





Test Conditions

Temperature: (23,3 ± 0,2)°C
Relative Humidity: (46,2 ± 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.
- The Average of the test data is the cispr average result.



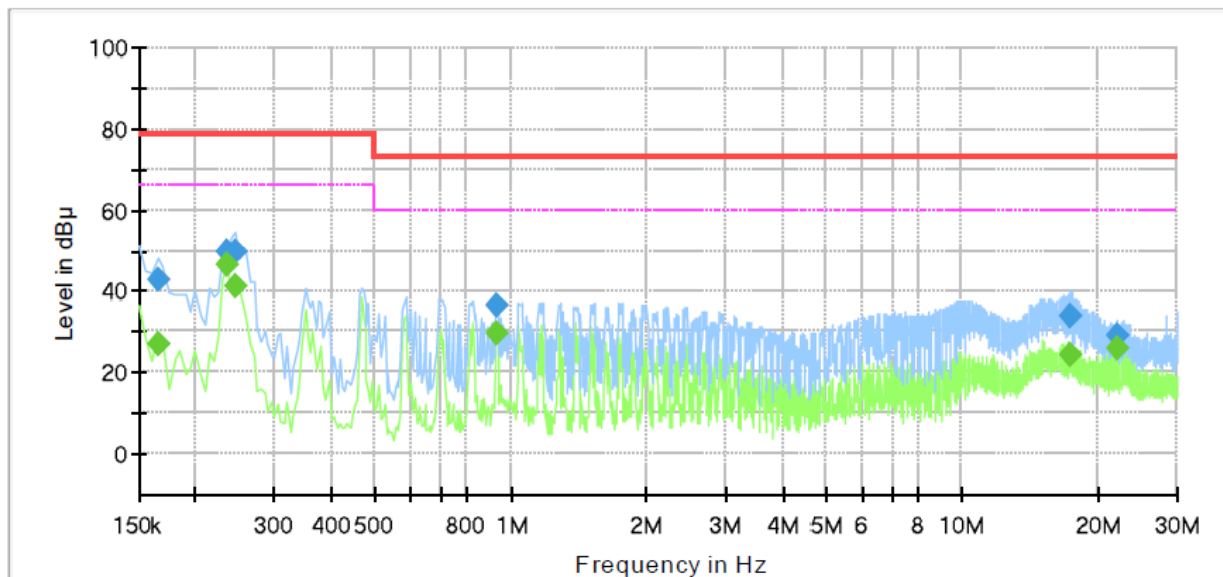
APPENDIX A – TEST DATA

Conducted Emissions at Mains Power Ports

■mode 1

HOT LINE

Test Description: Conducted Emission
Job No.: KES-EM251946
Phase: L
Mode: mode 1
Operator Name: KES



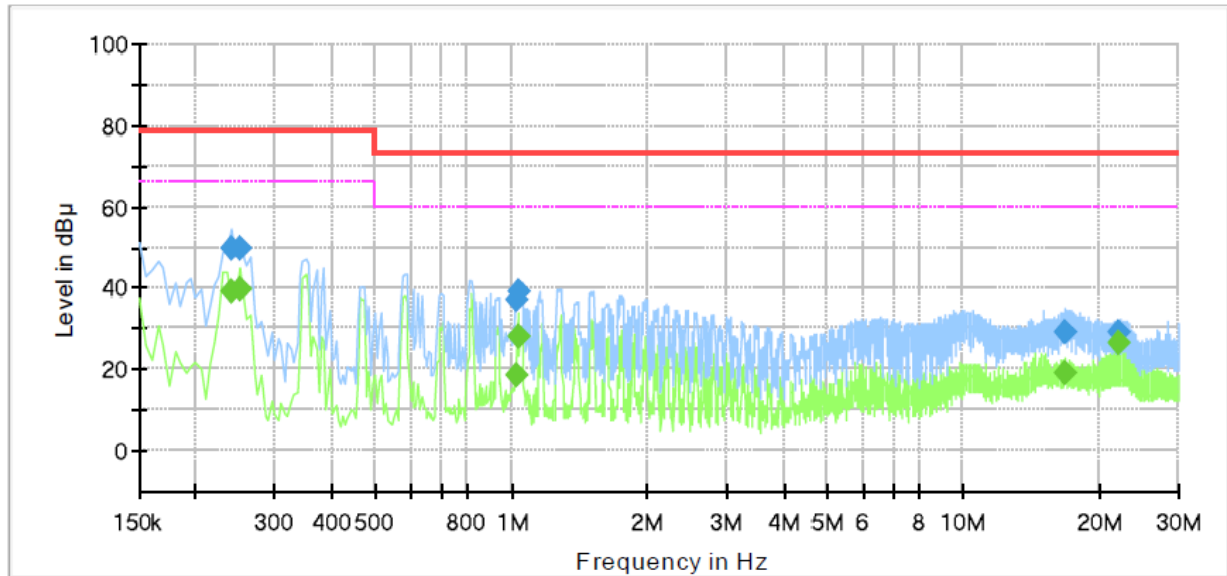
Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.165000	---	27.00	66.00	39.00	1000.0	9.000	L1	19.5
0.165000	42.89	---	79.00	36.11	1000.0	9.000	L1	19.5
0.235000	---	46.48	66.00	19.52	1000.0	9.000	L1	19.5
0.235000	49.81	---	79.00	29.19	1000.0	9.000	L1	19.5
0.245000	---	41.47	66.00	24.53	1000.0	9.000	L1	19.5
0.245000	49.80	---	79.00	29.20	1000.0	9.000	L1	19.5
0.930000	---	29.75	60.00	30.25	1000.0	9.000	L1	19.6
0.930000	36.46	---	73.00	36.54	1000.0	9.000	L1	19.6
17.420000	---	24.45	60.00	35.55	1000.0	9.000	L1	20.3
17.420000	34.13	---	73.00	38.87	1000.0	9.000	L1	20.3
22.140000	---	25.98	60.00	34.02	1000.0	9.000	L1	20.4
22.140000	29.25	---	73.00	43.75	1000.0	9.000	L1	20.4



NEUTRAL LINE

Test Description: Conducted Emission
Job No.: KES-EM251946
Phase: N
Mode: mode 1
Operator Name: KES



Final_Result

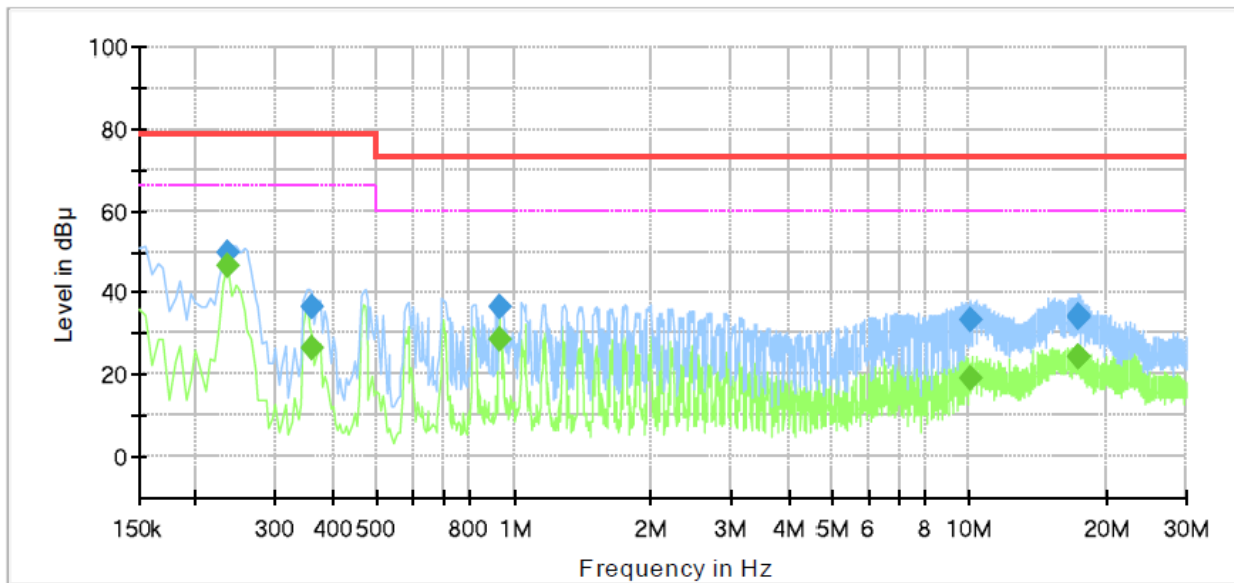
Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.240000	---	39.02	66.00	26.98	1000.0	9.000	N	19.5
0.240000	49.52	---	79.00	29.48	1000.0	9.000	N	19.5
0.250000	---	39.93	66.00	26.07	1000.0	9.000	N	19.5
0.250000	49.57	---	79.00	29.43	1000.0	9.000	N	19.5
1.025000	---	18.51	60.00	41.49	1000.0	9.000	N	19.6
1.025000	37.00	---	73.00	36.00	1000.0	9.000	N	19.6
1.035000	---	28.33	60.00	31.67	1000.0	9.000	N	19.6
1.035000	39.35	---	73.00	33.65	1000.0	9.000	N	19.6
16.845000	---	19.34	60.00	40.66	1000.0	9.000	N	20.3
16.845000	28.97	---	73.00	44.03	1000.0	9.000	N	20.3
22.140000	---	26.30	60.00	33.70	1000.0	9.000	N	20.4
22.140000	29.13	---	73.00	43.87	1000.0	9.000	N	20.4



■mode 2

HOT LINE

Test Description: Conducted Emission
Job No.: KES-EM251946
Phase: L
Mode: mode 2
Operator Name: KES



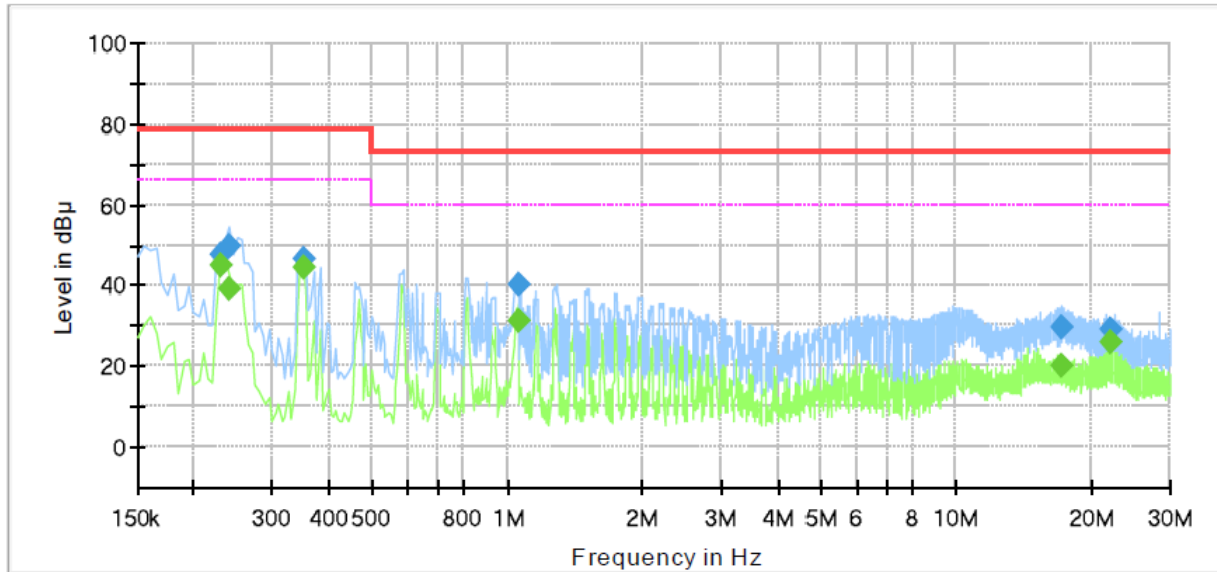
Final_Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.235000	---	46.62	66.00	19.38	1000.0	9.000	L1	19.5
0.235000	49.80	---	79.00	29.20	1000.0	9.000	L1	19.5
0.360000	---	26.40	66.00	39.60	1000.0	9.000	L1	19.6
0.360000	36.44	---	79.00	42.56	1000.0	9.000	L1	19.6
0.925000	---	28.81	60.00	31.19	1000.0	9.000	L1	19.6
0.925000	36.65	---	73.00	36.35	1000.0	9.000	L1	19.6
10.035000	---	19.17	60.00	40.83	1000.0	9.000	L1	20.0
10.035000	33.25	---	73.00	39.75	1000.0	9.000	L1	20.0
17.335000	---	24.19	60.00	35.81	1000.0	9.000	L1	20.3
17.335000	34.14	---	73.00	38.86	1000.0	9.000	L1	20.3
17.340000	---	24.56	60.00	35.44	1000.0	9.000	L1	20.3
17.340000	34.28	---	73.00	38.72	1000.0	9.000	L1	20.3



NEUTRAL LINE

Test Description: Conducted Emission
Job No.: KES-EM251946
Phase: N
Mode: mode 2
Operator Name: KES



Final_Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.230000	---	45.13	66.00	20.87	1000.0	9.000	N	19.5
0.230000	47.82	---	79.00	31.18	1000.0	9.000	N	19.5
0.240000	---	39.16	66.00	26.84	1000.0	9.000	N	19.5
0.240000	49.63	---	79.00	29.37	1000.0	9.000	N	19.5
0.350000	---	44.41	66.00	21.59	1000.0	9.000	N	19.5
0.350000	46.40	---	79.00	32.60	1000.0	9.000	N	19.5
1.055000	---	31.28	60.00	28.72	1000.0	9.000	N	19.6
1.055000	40.05	---	73.00	32.95	1000.0	9.000	N	19.6
17.270000	---	19.94	60.00	40.06	1000.0	9.000	N	20.3
17.270000	29.48	---	73.00	43.52	1000.0	9.000	N	20.3
22.140000	---	26.21	60.00	33.79	1000.0	9.000	N	20.4
22.140000	29.21	---	73.00	43.79	1000.0	9.000	N	20.4

◆ Calculation

QuasiPeak[dBuV] / CAverage [dBuV] = Reading Value[dBuV] + Corr. [dB]

QuasiPeak / CAverage : The Final Value

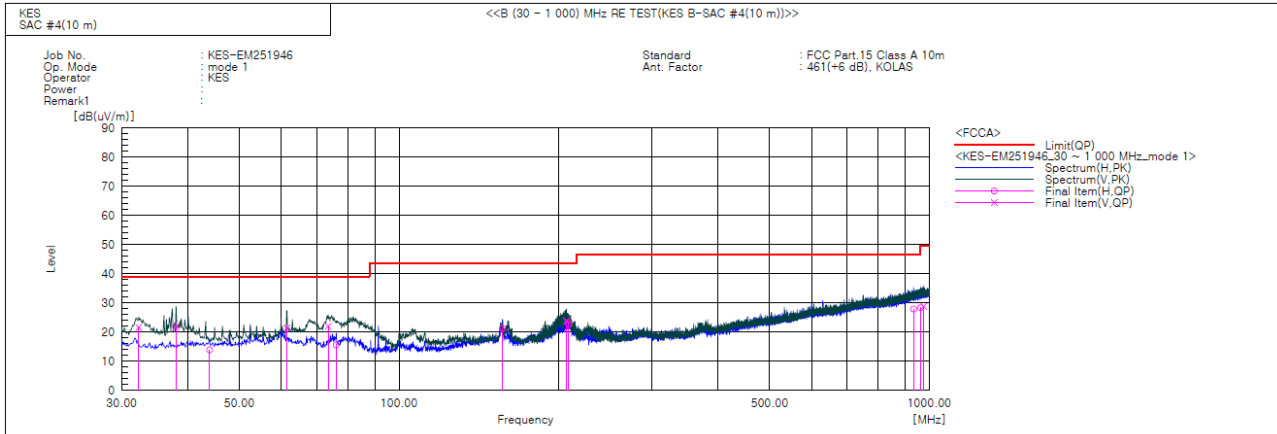
Reading Value : Not shown in the table.

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

**Radiated Electric Field Emissions(Below 1 GHz)**

■ mode 1

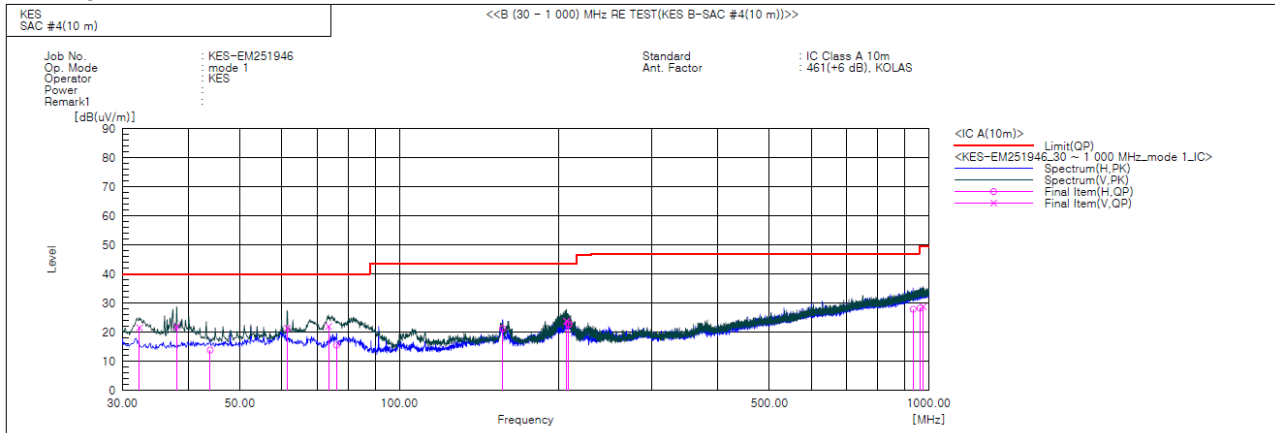
- 47 CFR Part 15, Subpart B

**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	32.304	V	44.1	-22.5	21.6	39.0	17.4	122.0	291.0	
2	38.003	V	43.8	-22.0	21.8	39.0	17.2	135.0	212.0	
3	43.944	H	35.3	-21.4	13.9	39.0	25.1	398.0	249.0	
4	61.404	V	42.8	-21.4	21.4	39.0	17.6	140.0	126.0	
5	73.529	V	45.7	-23.7	22.0	39.0	17.0	148.0	179.0	
6	76.196	H	40.1	-24.5	15.6	39.0	23.4	359.0	192.0	
7	156.706	H	40.6	-19.3	21.3	43.5	22.2	352.0	15.0	
8	206.904	V	45.5	-21.7	23.8	43.5	19.7	104.0	231.0	
9	208.965	H	44.4	-21.7	22.7	43.5	20.8	347.0	298.0	
10	934.525	H	28.8	-0.9	27.9	46.5	18.6	391.0	283.0	
11	963.140	H	28.7	-0.4	28.3	49.5	21.2	368.0	206.0	
12	976.478	V	29.0	-0.2	28.8	49.5	20.7	153.0	325.0	



- IC Regulation ICES-003 Issue 7



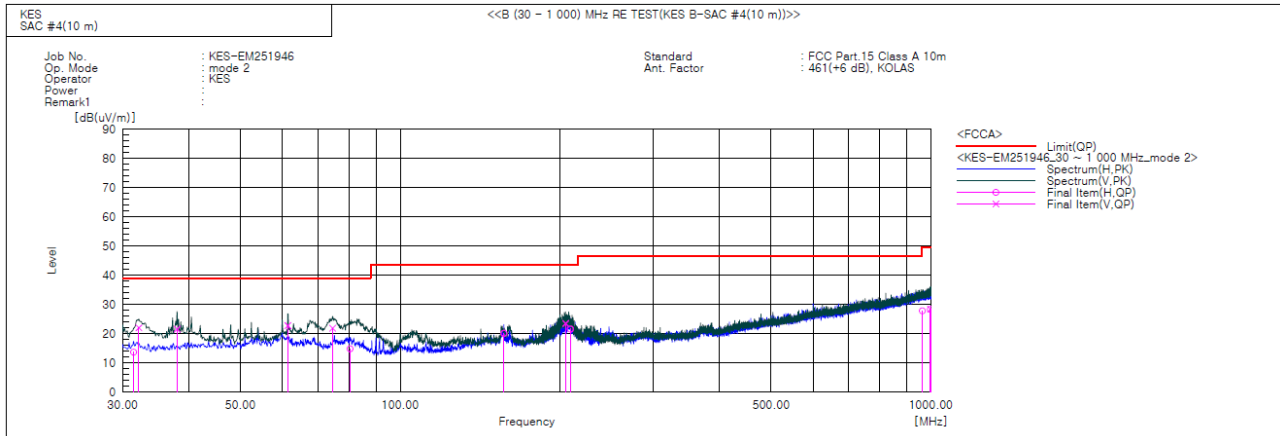
Final Result

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	32.304	V	44.1	-22.5	21.6	40.0	18.4	122.0	291.0	
2	38.003	V	43.8	-22.0	21.8	40.0	18.2	135.0	212.0	
3	43.944	H	35.3	-21.4	13.9	40.0	26.1	398.0	249.0	
4	61.404	V	42.8	-21.4	21.4	40.0	18.6	140.0	126.0	
5	73.529	V	45.7	-23.7	22.0	40.0	18.0	148.0	179.0	
6	76.196	H	40.1	-24.5	15.6	40.0	24.4	359.0	192.0	
7	156.706	H	40.6	-19.3	21.3	43.5	22.2	352.0	15.0	
8	206.904	V	45.5	-21.7	23.8	43.5	19.7	104.0	231.0	
9	208.965	H	44.4	-21.7	22.7	43.5	20.8	347.0	298.0	
10	934.525	H	28.8	-0.9	27.9	47.0	19.1	391.0	283.0	
11	963.140	H	28.7	-0.4	28.3	49.5	21.2	368.0	206.0	
12	976.478	V	29.0	-0.2	28.8	49.5	20.7	153.0	325.0	



■ mode 2

- 47 CFR Part 15, Subpart B



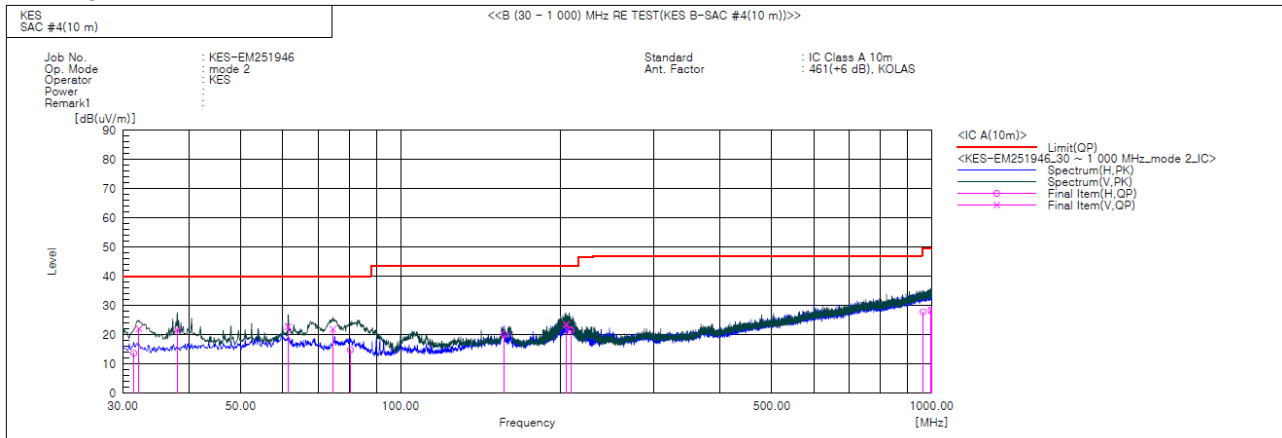
Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(μV)]	c.f [dB(1/m)]	Result QP [dB(μV/m)]	Limit QP [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]	Remark
1	31.455	H	36.3	-22.6	13.7	39.0	25.3	384.0	257.0	
2	32.183	V	44.5	-22.5	22.0	39.0	17.0	148.0	63.0	
3	38.003	V	43.6	-22.0	21.6	39.0	17.4	116.0	206.0	
4	61.404	V	44.2	-21.4	22.8	39.0	16.2	103.0	149.0	
5	74.620	V	45.9	-24.0	21.9	39.0	17.1	158.0	195.0	
6	80.440	H	40.4	-25.6	14.8	39.0	24.2	380.0	61.0	
7	156.828	H	39.4	-19.3	20.1	43.5	23.4	396.0	132.0	
8	204.964	V	45.3	-21.8	23.5	43.5	20.0	132.0	232.0	
9	209.329	H	43.3	-21.7	21.6	43.5	21.9	344.0	279.0	
10	963.625	H	28.2	-0.4	27.8	49.5	21.7	397.0	268.0	
11	997.454	H	28.2	0.1	28.3	49.5	21.2	350.0	283.0	
12	998.181	V	28.3	0.1	28.4	49.5	21.1	119.0	214.0	



Report No. : KES-EM251946

- IC Regulation ICES-003 Issue 7



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(μV)]	c.f [dB(1/m)]	Result QP [dB(μV/m)]	Limit QP [dB(μV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]	Remark
1	31.455	H	36.3	-22.6	13.7	40.0	26.3	384.0	257.0	
2	32.183	V	44.5	-22.5	22.0	40.0	18.0	148.0	63.0	
3	38.003	V	43.6	-22.0	21.6	40.0	18.4	116.0	206.0	
4	61.404	V	44.2	-21.4	22.8	40.0	17.2	103.0	149.0	
5	74.620	V	45.9	-24.0	21.9	40.0	18.1	158.0	195.0	
6	80.440	H	40.4	-25.6	14.8	40.0	25.2	380.0	61.0	
7	156.828	H	39.4	-19.3	20.1	43.5	23.4	396.0	132.0	
8	204.964	V	45.3	-21.8	23.5	43.5	20.0	132.0	232.0	
9	209.329	H	43.3	-21.7	21.6	43.5	21.9	344.0	279.0	
10	963.625	H	28.2	-0.4	27.8	49.5	21.7	397.0	268.0	
11	997.454	H	28.2	0.1	28.3	49.5	21.2	350.0	283.0	
12	998.181	V	28.3	0.1	28.4	49.5	21.1	119.0	214.0	

◆ Calculation

$$\text{Result(QP)} [\text{dB}(\mu\text{V/m})] = (\text{Reading(QP)} [\text{dB}(\mu\text{V})] + \text{c.f} [\text{dB}(1/\text{m})])$$
$$\text{Margin(QP)} [\text{dB}] = \text{Limit} [\text{dB}(\mu\text{V/m})] - \text{Result(QP)} [\text{dB}(\mu\text{V/m})]$$

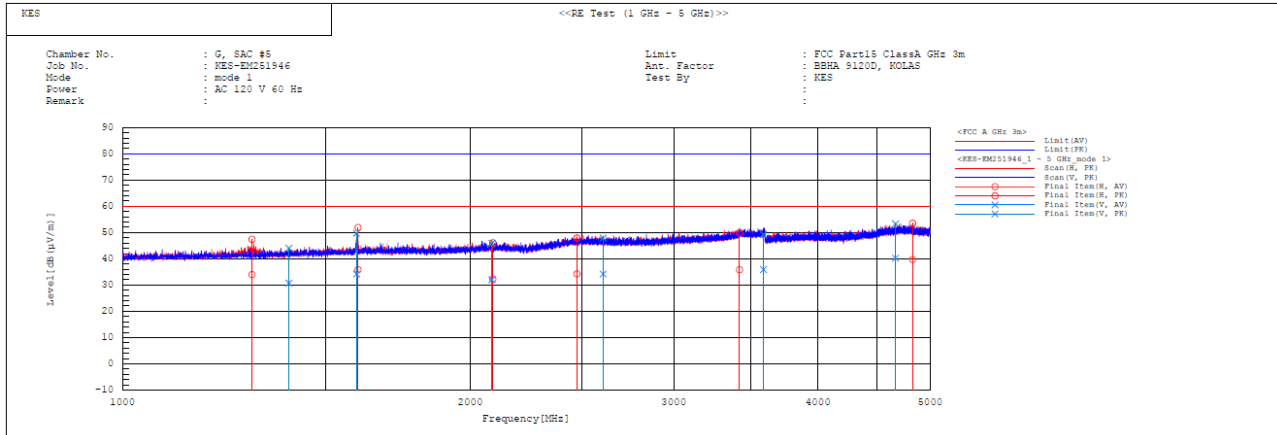
Reading(QP) : Reading value, Result(QP) : Reading value + Factor value

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

**Radiated Electric Field Emissions(Above 1 GHz)**

■ mode 1

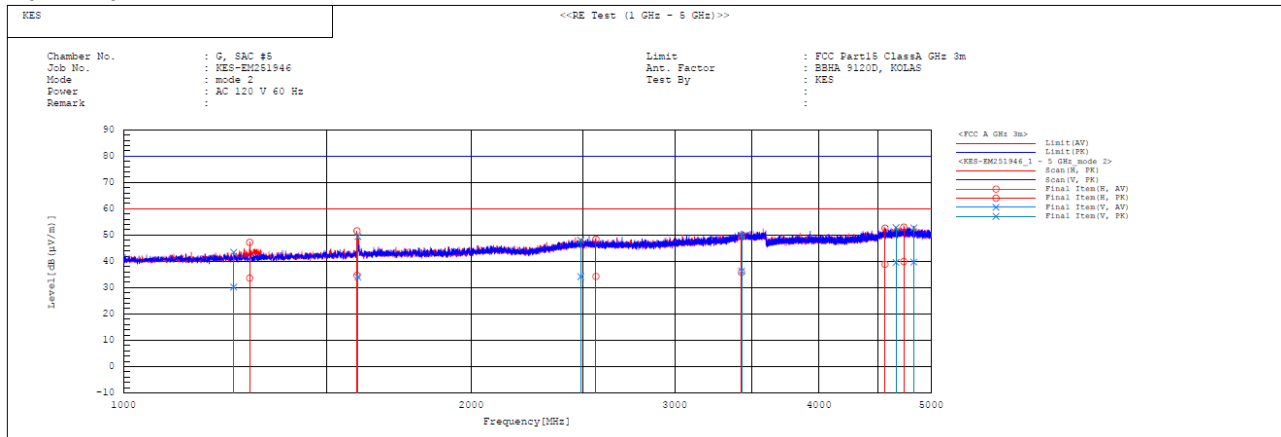
- (1 ~ 5) GHz

**Final Result**

No.	Frequency [MHz]	Pol	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f [dB(1/m)]	Result PK [dB(μV/m)]	Limit AV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [deg]	Remark
1	1294.917	H	34.0	47.4	0.0	47.4	60.0	80.0	26.0	32.6	387.7	358.0	
2	1394.006	V	30.2	43.5	0.5	44.0	60.0	80.0	29.3	36.0	109.4	0.9	
3	1594.738	V	32.7	48.2	1.5	49.7	60.0	80.0	25.8	30.3	168.0	275.6	
4	1599.760	H	34.3	50.4	1.5	51.9	60.0	80.0	24.2	28.1	284.6	37.4	
5	2088.624	V	28.7	42.6	3.3	45.9	60.0	80.0	28.0	34.1	148.8	157.1	
6	2092.614	H	28.9	42.7	3.4	46.1	60.0	80.0	27.7	33.9	343.2	81.8	
7	2473.903	H	29.4	43.0	4.9	47.9	60.0	80.0	25.7	32.1	378.1	319.8	
8	2606.288	V	28.9	42.6	5.3	47.9	60.0	80.0	25.8	32.1	111.8	72.3	
9	3420.945	H	28.6	42.7	7.2	49.9	60.0	80.0	24.2	30.1	389.7	359.2	
10	3588.540	V	28.4	41.7	7.5	49.2	60.0	80.0	24.1	30.8	155.8	180.7	
11	4667.506	V	28.8	41.9	11.4	53.3	60.0	80.0	19.8	26.7	134.8	75.9	
12	4830.777	H	27.8	41.6	11.9	53.5	60.0	80.0	20.3	26.5	368.5	306.9	



■ mode 2
- (1 ~ 5) GHz



Final Result

No.	Frequency [MHz]	Pol	Reading AV [dB (μV)]	Reading PK [dB (μV)]	c.f [dB (1/m)]	Result PK [dB (μV/m)]	Limit AV [dB (μV/m)]	Limit PK [dB (μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [deg]	Remark
1	1246.205	V	30.5	43.7	-0.3	43.4	60.0	80.0	29.8	36.6	165.0	211.4	
2	1286.471	H	33.7	47.3	-0.1	47.2	60.0	80.0	26.4	32.8	306.9	346.8	
3	1592.800	H	33.2	50.1	1.5	51.6	60.0	80.0	25.3	28.4	395.7	34.4	
4	1595.670	V	32.5	47.9	1.5	49.4	60.0	80.0	26.0	30.6	109.2	237.4	
5	2488.822	V	29.2	42.9	5.0	47.9	60.0	80.0	25.8	32.1	133.3	213.9	
6	2564.685	H	29.1	43.2	5.2	48.4	60.0	80.0	25.7	31.6	374.0	131.7	
7	3427.911	H	28.6	42.2	7.2	49.4	60.0	80.0	24.2	30.6	383.6	98.4	
8	3428.727	V	29.1	42.7	7.2	49.9	60.0	80.0	23.7	30.1	101.6	259.7	
9	4562.798	H	27.8	41.5	11.1	52.6	60.0	80.0	21.1	27.4	321.1	172.3	
10	4662.770	V	28.2	41.4	11.4	52.8	60.0	80.0	20.4	27.2	122.6	222.5	
11	4735.455	H	28.3	41.4	11.6	53.0	60.0	80.0	20.1	27.0	308.6	211.0	
12	4831.956	V	27.8	40.8	11.9	52.7	60.0	80.0	20.3	27.3	148.4	211.4	

◆ Calculation

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

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

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

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



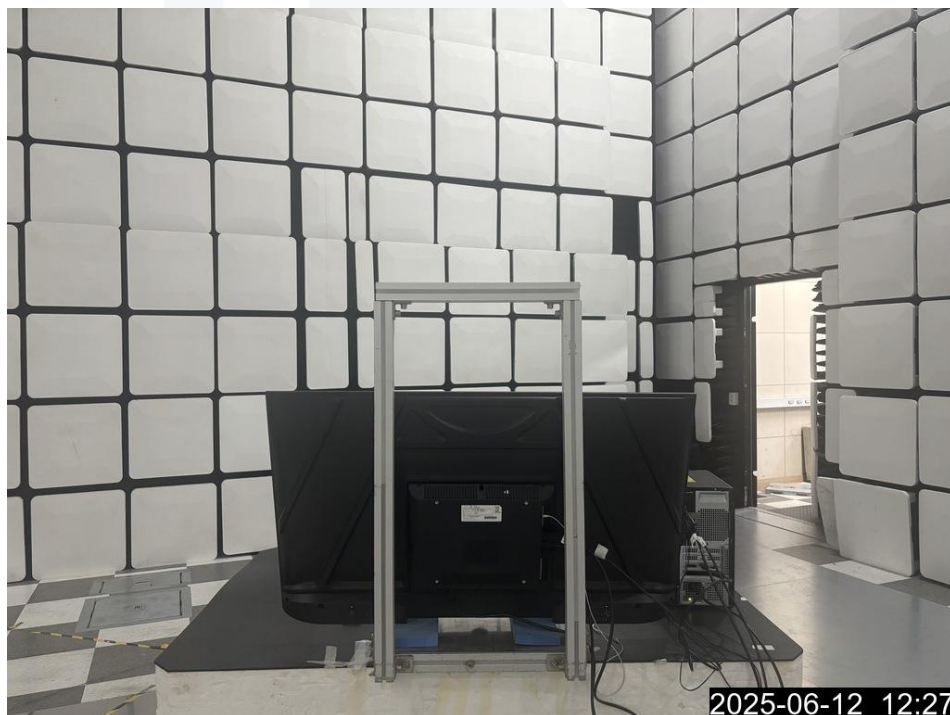
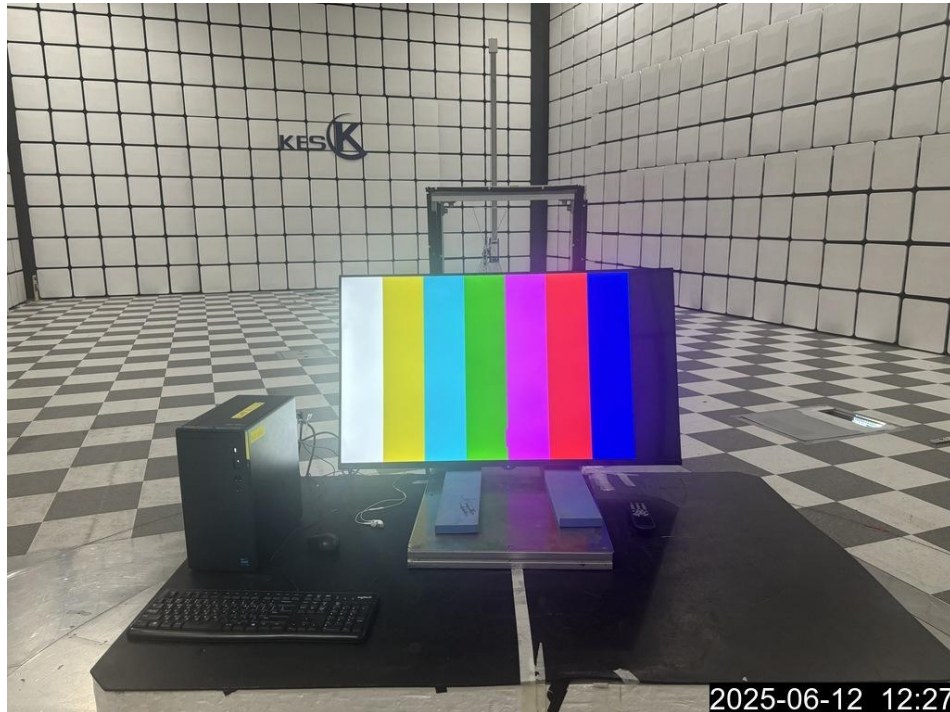
Test Setup Photos and Configuration

Conducted Emissions at Mains Power Ports



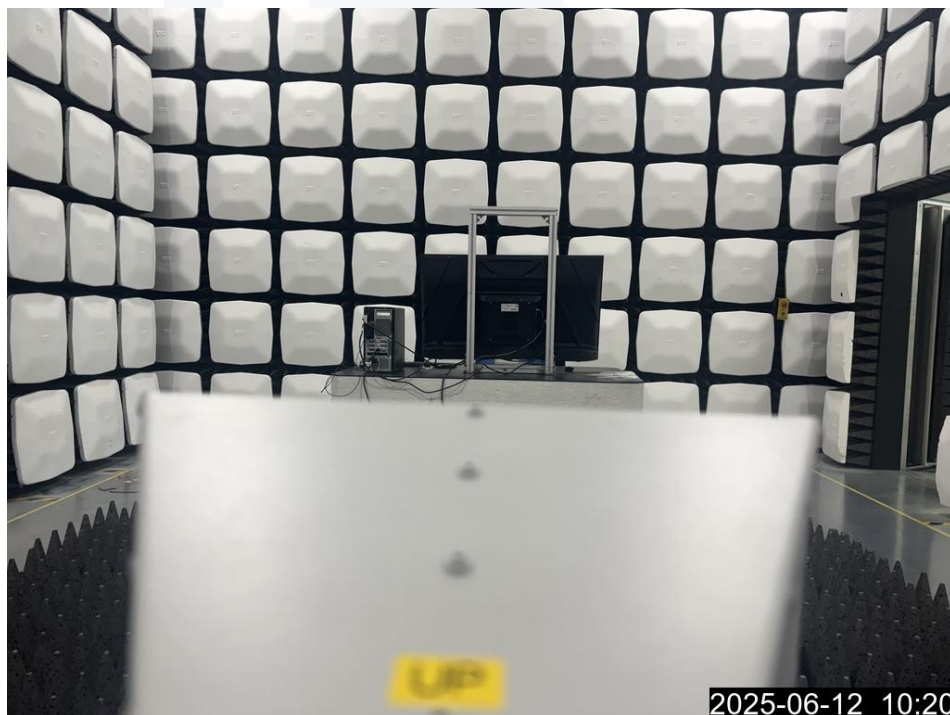
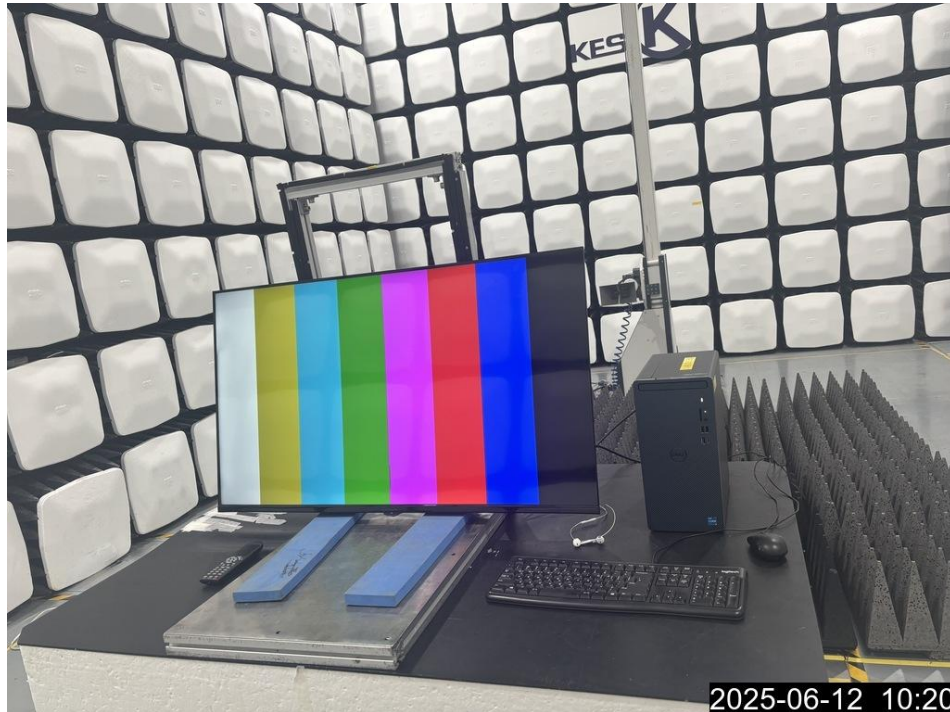


Radiated Electric Field Emissions(Below 1 GHz)





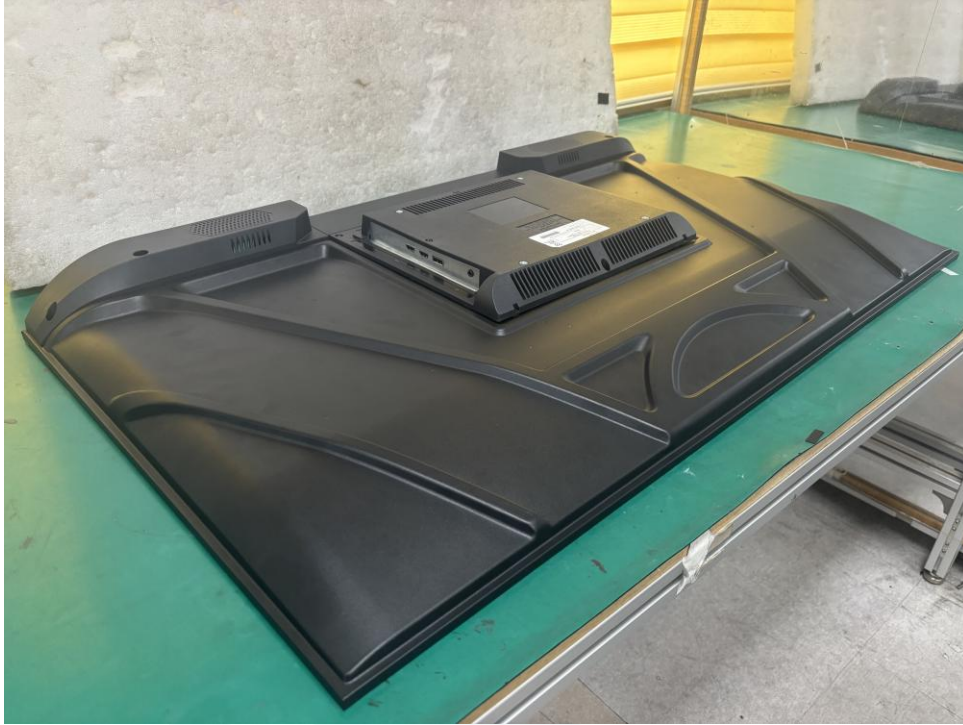
Radiated Electric Field Emissions(Above 1 GHz)





EUT External Photographs

(Top)



(Bottom)





EUT Internal Photographs

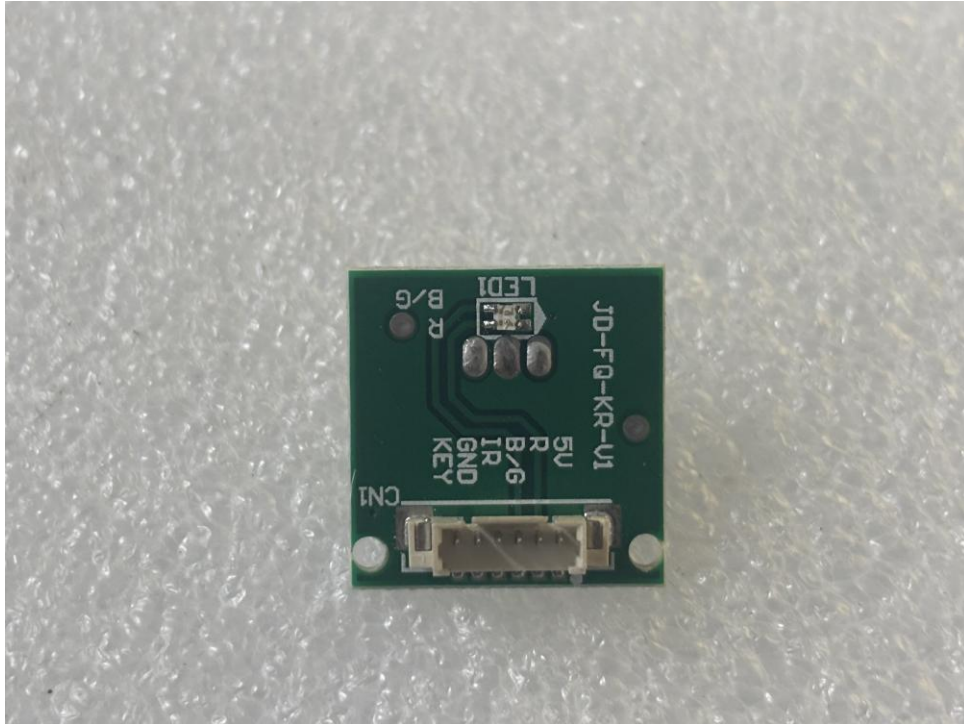
(Internal View)



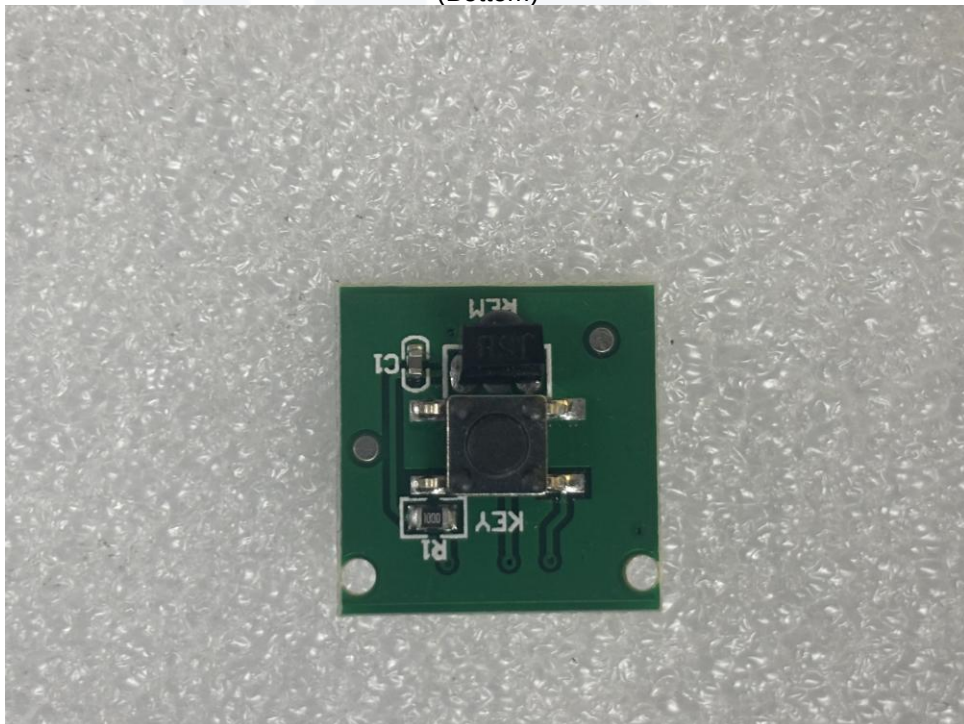


EUT Internal View – Board 1

(Top)



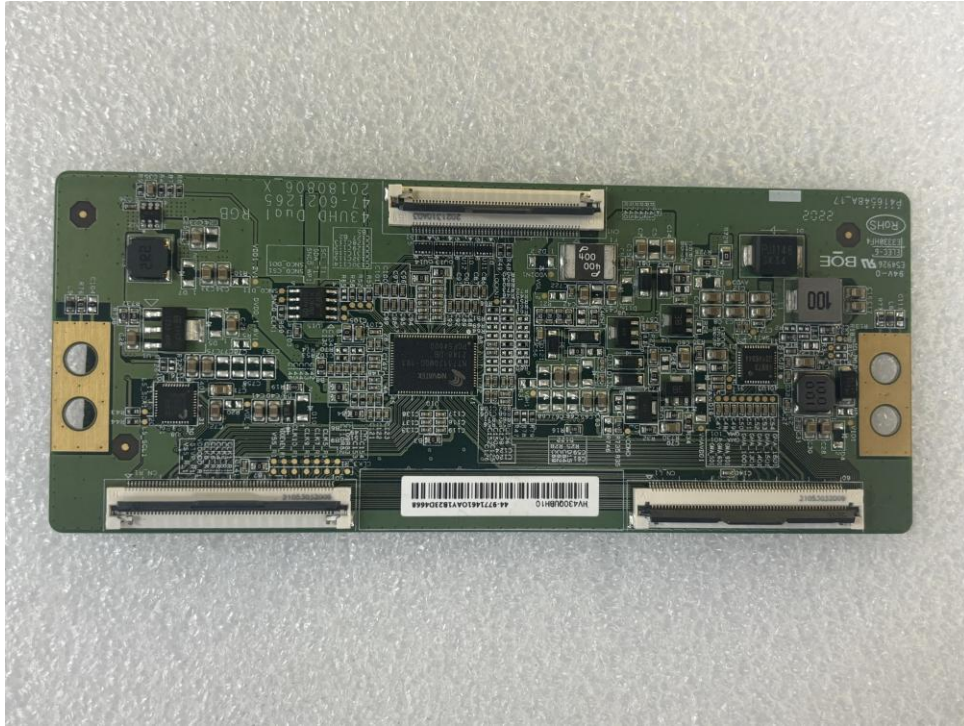
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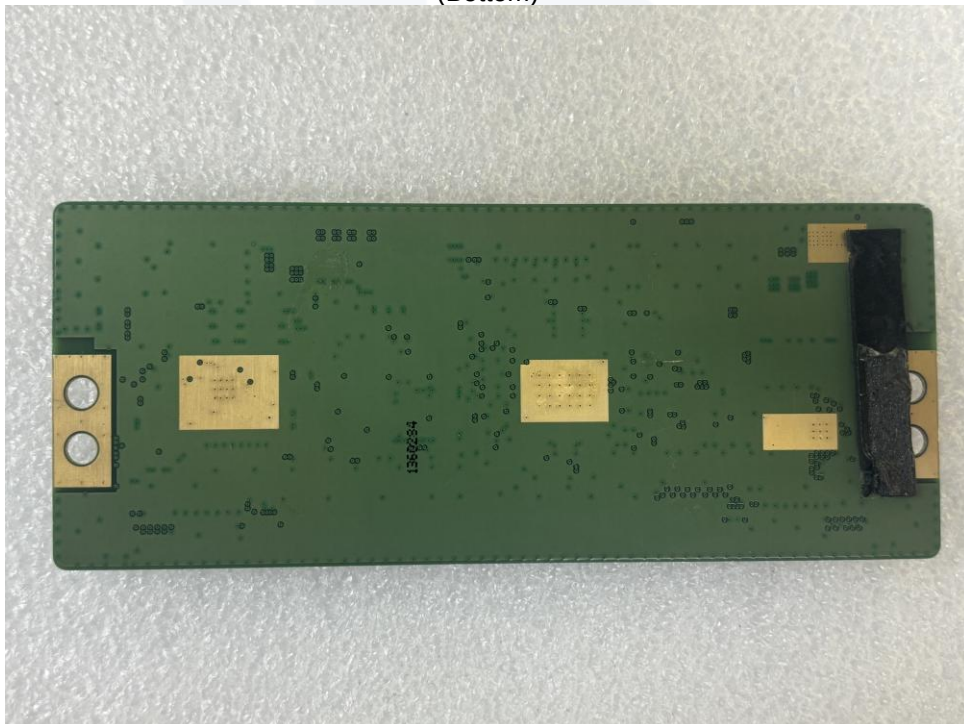


EUT Internal View – Board 2

(Top)



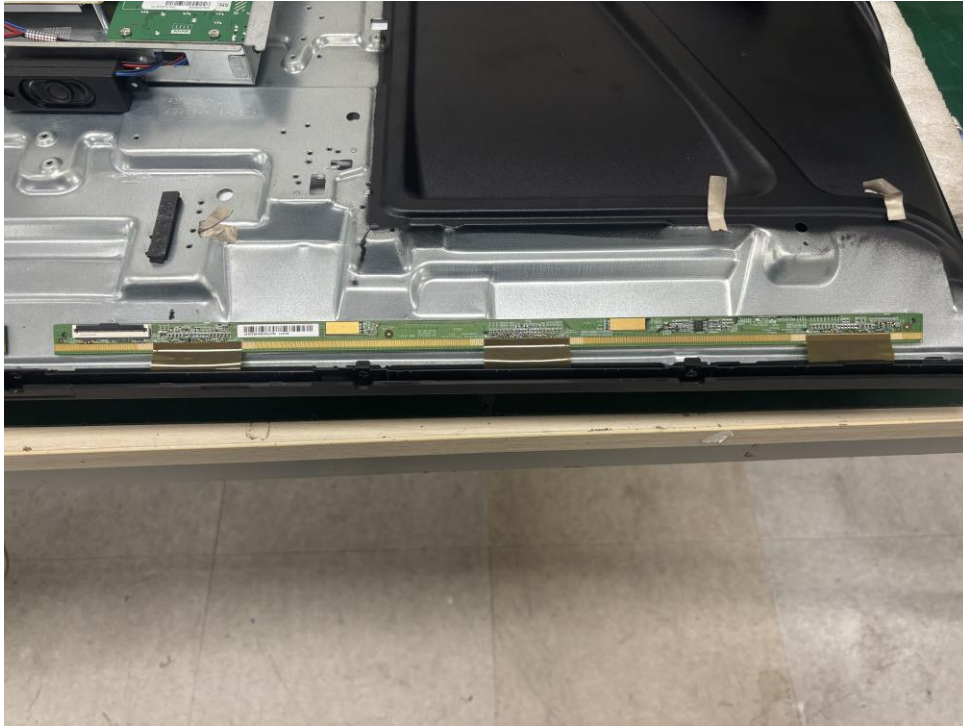
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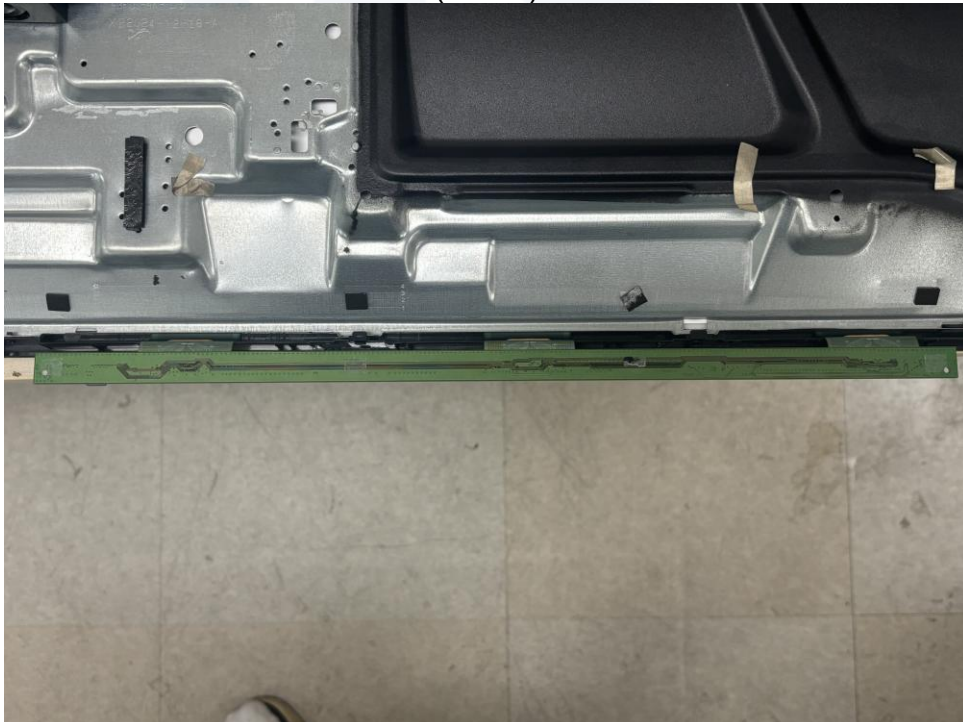


EUT Internal View – Board 3

(Top)



(Bottom)





EUT Internal View – Board 4

(Top)



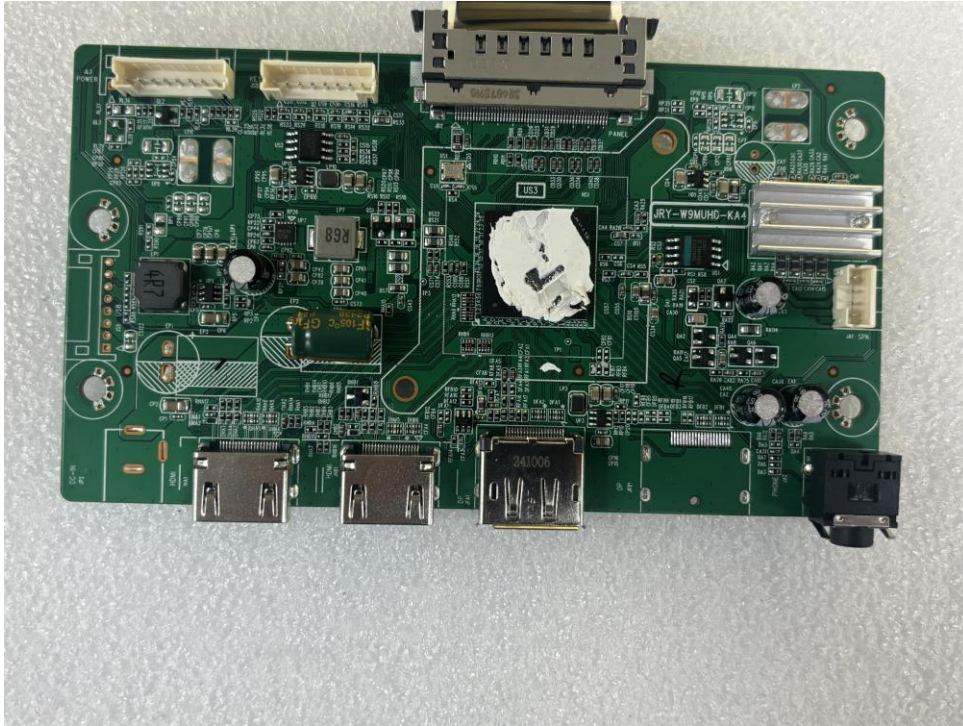
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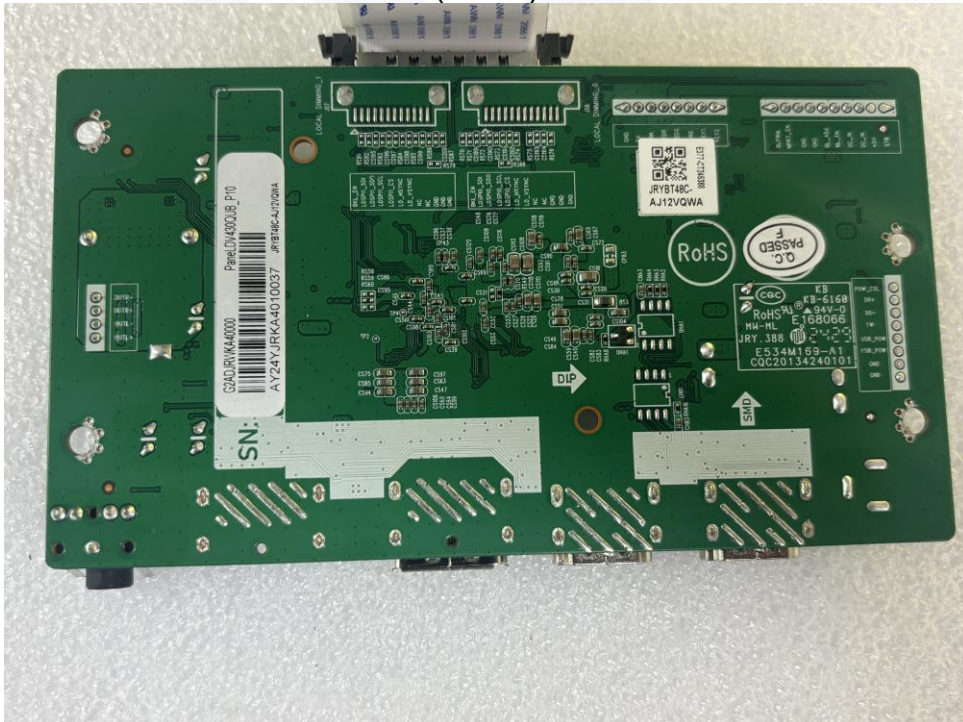


EUT Internal View – Board 5

(Top)



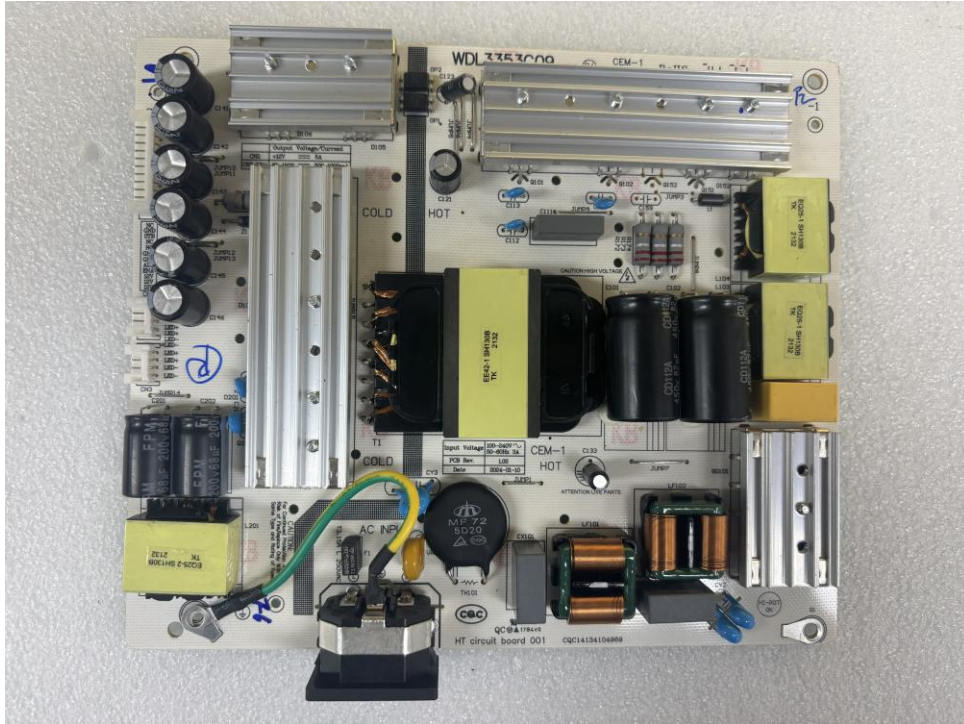
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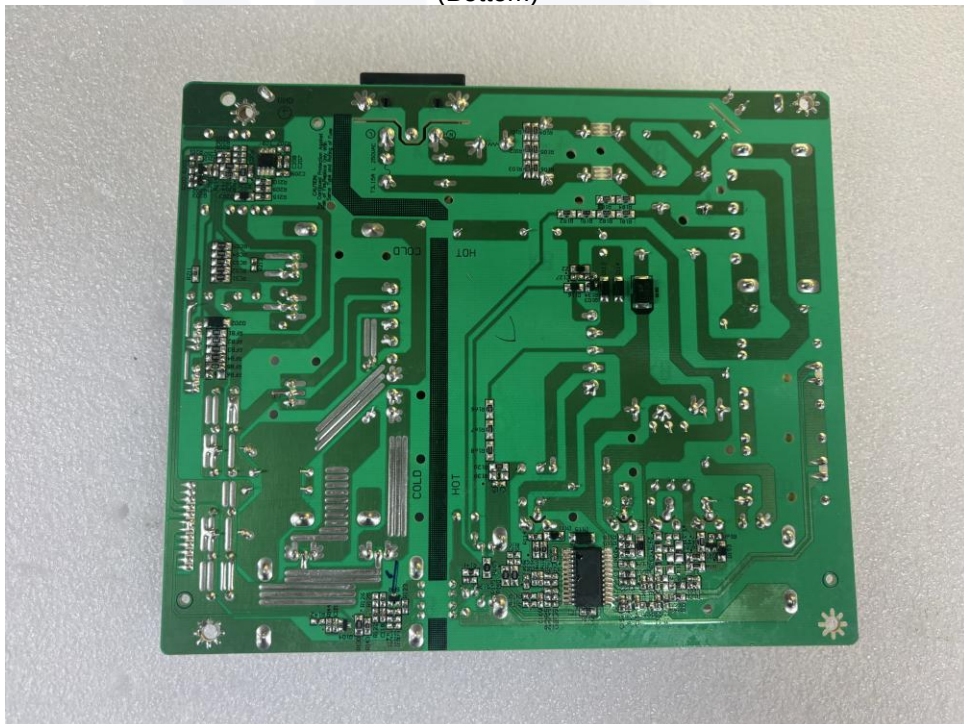


EUT Internal View – Board 6

(Top)



(Bottom)





EUT Internal View – Speaker

(Top)



(Bottom)





Label Photographs

FCC Label



Security LED Monitor

SMT-4345

IC Label

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

This device complies with ICES-003 Canada Rules 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.

The End.