



TEST REPORT



Report No. : KES-EM253648

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KES Co., Ltd.

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1. Client

- Name : Hanwha Vision Co., Ltd.
- Address : 6, Pangyo-ro 319beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

2. Sample Description

- Product item : NETWORK CAMERA
- Model name : XNV-A9085R
- Variant model : -
- Manufacturer etc. : HANWHA VISION VIETNAM COMPANY LIMITED
- Manufacturer address : Lot O-2, Que Vo Industrial Zone Extended Area, Nam Son Ward, Bac Ninh Province, Vietnam
- Manufacturer etc. : D-TECH CO.,LTD.
- Manufacturer address : 173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi-do, Korea (Suwon Industrial Complex)

3. Date of test : 2025. 10. 25. ~ 2025. 10. 28.

4. Location of Test : Permanent Testing Lab
○ Address : 473-21, Gayeo-ro, Yeosu-si, Gyeonggi-do, 12658, Republic of Korea

5. Test method used : FCC 47 CFR Part 15, Subpart B (ANSI C63.4a-2017),
IC ICES-003 Issue 7 (ANSI C63.4a-2017)

6. Test result : PASS

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.

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Affirmation	Tested by	Technical Manager by
	Name : YoungJae Kim	Name : DaeJung,Choi

2025. 11. 07

KES Co., Ltd.

**REPORT REVISION HISTORY**

Date	Test Report No.	Revision History
2025. 11. 07	KES-EM253648	Issued

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Use of uncertainty of measurement for decisions on conformity (decision rule):

- ☒ No decision rule is specified by the standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty ("simple acceptance" decision rule, previously known as "accuracy method").
- ☐ Other (to be specified, for example when required by the standard or client)



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1 Laboratory Information

1.1 Test Location

Category	Details
Address	473-21, Gayeo-ro, Yeosu-si, Gyeonggi-do, 12658, Republic of Korea
Telephone Number	031-883-5092
Facsimile Number	031-883-5169

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

1.2 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 Test Summary

2.1 Class and Voltage

Test Class	Test Voltage
☒ Class A ☐ Class B	AC 120 V, 60 Hz

2.2 Summary of Test Results

Regulation			
47 CFR Part 15, Subpart B, ICES-003 Issue 7			
Test Item	Test Standard	Test Result	Remark
Conducted Emissions at Mains Power Ports	ANSI C63.4a-2017	PASS	-
Radiated Emissions(Below 1 GHz)		PASS	-
Radiated Emissions(Above 1 GHz)		PASS	-
* N/A: Not Applicable			

2.3 Remarks when standards applied

N/A

2.4 Variant Model Differences

N/A

2.5 Device Modifications

N/A



3 General Product Description

Division		Specificity
Internal maximum operating frequency		3.2 GHz
Power	Rated power supply	DC 12 V, PoE
	Test Power	AC 120 V, 60 Hz
I/O Ports	User port	2 Pin 1 EA, 8 Pin (MIC, SPEAKER, Alarm IN, Alarm OUT) 1 EA, RJ-45 1 EA Micro SD Card Slot 2 EA
	Administrator Port	USB Type-C 1 EA
function	Product features	NETWORK CAMERA
	Wireless function	N/A
Components		Main body 1 EA, Cable 1 EA
Others		Please refer to the specifications listed below.



Video	
Imaging Device	1/1.8" CMOS
Resolution	3840x2160, 3328x1872, 3072x1728, 2592x1944, 2688x1512, 2560x1440, 1920x1080, 1600x1200, 1280x960, 1280x720, 1024x768, 800x600, 640x480, 640x360, 320x240, 320x180
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps(@8MP Max. 5fps)
NETD	None
Pixel Size	None
Min. Illumination	Color: 0.04Lux(F1.3, 1/30sec, 30IRE) BW: 0.004Lux(F1.3, 1/30sec, 30IRE), 0Lux(IR LED on)
Video Out	USB: Micro USB Type C for installation
Video Transmission Distance	None
Lens	
Focal Length (Zoom Ratio)	4.4~9.3mm(2.1x) motorized varifocal
Optical Zoom	None
Max. Aperture Ratio	F1.3(Wide)~F2.15(Tele)
Angular Field of View	H: 113°(Wide)~47°(Tele) V: 58°(Wide)~26°(Tele) D: 138°(Wide)~54°(Tele)
Min. Object Distance	0.5m(1.64ft)
Focus Control	Simple focus, manual
Lens Type	P-iris(IR corrected)
Mount Type	None
Optional Lens	None
Pan / Tilt / Rotate	
Pan / Tilt / Rotate Range	0°~360° / 0°~85° / 0°~355°
Operational	
Camera Title	Displayed up to 85 characters
Direction Indicator	None
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSDR
Wide Dynamic Range	extremeWDR (120dB)
Digital Noise Reduction	SSNR V, WiseNR II (Based on AI engine)
Digital Image Stabilization	Support (built-in gyro sensor)
Defog	Support
Motion Detection	8ea, 8point polygonal zones



Privacy Masking	32ea, 8point polygonal zones - Color: gray/green/red/blue/black/white/purple/yellow - Mosaic Dynamic Privacy Mask(Based on AI engine) - Color: gray/green/red/blue/black/white/purple/yellow - Mosaic
Gain Control	Off / Max Gain / Manual
White Balance	ATW / NarrowATW / AWC / Manual / Indoor / Outdoor
LDC	Support(Fill/Stretch mode)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker(2~1/30,000sec) Prefer shutter control(Based on AI engine)
Digital PTZ	None
Video Rotation	Flip, mirror, hallway view(90°/270°)
Analytics	Classified object type: Person/Face/Vehicle(Type: car/bus/truck/motorcycle/bicycle)/License plate Attributes: Person(Gender, Clothing top/bottom color, Bag), Face(Age, Gender, Mask, Glasses), Vehicle(Type: car/bus/truck/motorcycle/bicycle, Color) Support BestShot Support Re-ID(Person) Analytics events based on AI engine - Motion detection, Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear), Slip & fall detection, Face mask detection, Social distancing detection, Sound classification(To be released) Analytics events - Defocus detection, Tampering, Shock detection, Audio detection
Business Intelligence	Based on AI engine: People/Vehicle/Crowd counting, Queue management, Heatmap
Serial Interface	None
Alarm I/O	2 configurable I/O ports, DC 12V output(Max. 50mA) *Support extra alarm I/O via optional I/O box
Alarm Triggers	Analytics, Network disconnection, Alarm input, Time schedule, MQTT subscription, Day/Night, Storage disruption, Case tampering



Alarm Events	When alarm trigger occurred - File upload(image): e-mail/FTP/SFTP - File upload(video clip): FTP/SFTP - Notification: e-mail - Recording: SD/SDHC/SDXC or NAS recording at event triggers - Alarm output - Handover: PTZ preset, send message by HTTP/HTTPS/TCP - Audio clip playback(WAV, MP3) - MQTT: publication - SIP: call generation
Audio Streaming	None
Audio In	Selectable(mic in/line in)
Audio Out	Line out
Light Type	IR LED
Light Viewable Length	WiseIR PoE+: 50m(164.04ft) PoE: 30m(98.43ft)



Network	
Ethernet	Metal shielded RJ-45(10/100/1000 BASE-T)
Video Compression	H.265/H.264: Main/Baseline/High MJPEG
Audio Compression	G.711(PCM): 8kHz(64Kbps) G.726(ADPCM): 8kHz(16/24/32/40Kbps) AAC-LC: 16kHz(48Kbps) OPUS: 48kHz(64Kbps)
Smart Codec	WiseStream(Based on AI engine)
Video Quality Adjustment	None
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 5 profiles, 3 virtual channel support)
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP/SFTP, SMTP(StartTLS), ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP(TCP, UDP Unicast), CDP, MQTT, Syslog, SIP
SIP support (VoIP, Peer-to-peer)	Support
Security	None
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI(HTTP API) Hanwha Vision Open Platform
Security	
OS / Firmware Protect	Encrypted Firmware, Secure boot, Signed Firmware
User authentication	Digest Authentication, Prevent brute-force attack
Network authentication	802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)
Secure Communication	HTTPS, SRTP, WSS(Websocket secure)
Access Control	IP-based access control, MAC-based access control, Auto logout
Data Protect	Encryption Credentials, Encrypt compress for live recording file export
Audit	Access / System / Event Log management
Device ID	Device Certificate(Hanwha vision Root CA)
Secure Storage	Secure element, SDcard partition encrypt
Security Certificate	ETSI EN 303 645(TBD), Secure element(FIPS 140-3 level3, CC EAL6+)



General	
Webpage Language	English, Korean, Simplified Chinese, Traditional Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Web Viewer	None
Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 2TB(1TBx2)
Memory	4GB RAM, 8GB eMMC
Environmental & Electrical	
Operating Temperature / Humidity	-50°C~+60°C(-58°F~+140°F) +74°C(+165°F)(MAX) based on NEMA-TS 2(2.2.7) * Start up should be done at above -30°C 0~100%RH(Condensing) Humidity control with air vent
Storage Temperature / Humidity	-50°C~+60°C(-58°F~+140°F) / 0~90% RH
Wind Load	None
EPA(Effective Projected Area)	0.017m ²
Certification	IP66/IP67/IP6K9K, NEMA4X, IK11, NEMA-TS 2(2.2.7.2-8, 2.2.8, 2.2.9)
Input Voltage	PoE(IEEE802.3af, Class3), PoE+(IEEE802.3at Type2, Class4), 12VDC
Power Consumption	PoE+ : Max. 14.2W, typical 9.4W PoE : Max. 12.9W, typical 8.3W 12VDC: Max. 9.5W, typical 14.5W Support Wisepower - Power monitoring(Max./Current/Avg.)
Mechanical	
Color / Material	White / Aluminum Bubble: Hard-coated dome
RAL Code	RAL9003
Product Dimensions / Weight	ø180x125mm(ø7.09x4.92"), 1860g(4.10 lb)
Compatible Conduit hole / Gang	19.1mm(3/4")(M25) single, double, 4" octagon, 4" square



4 EUT Setup and Operation Mode

4.1 EUT Configuration

Product Name	Model Number	Serial Number	Manufacturer	Remarks
NETWORK CAMERA	XNV-A9085R	–	HANWHA VISION VIETNAM COMPANY LIMITED	EUT
AC/DC Adaptor	2ACB022F	–	Channel Well Technology (Guangzhou) Co., Ltd.	–
PoE Injector	PT-PSE109GBRO-A	–	Dongguan PROCET Network Technology Co.,Ltd	–
LED Alarm	–	–	–	–
Button Alarm	–	–	–	–
Headset	K550	–	Britz®	–
Micro SD Card 1	–	–	Sandisk	8 GB
Micro SD Card 2	–	–	Sandisk	8 GB
Laptop	LG15N54	–	LG Electronics Inc.	–
Laptop Adaptor	PA-1650-43(65W)	–	LITE-ON TECHNOLOGY (CHANGZHOU) CO.,LTD.	–

4.2 System Configuration

Product Name	Model Number	Serial Number	Manufacturer	Remarks
-	-	-	-	-

**4.3 External I/O Cabling**

Mode 1

Start		End		Cable Spec.	
Product Name	I/O Port	Product Name	I/O Port	Length(m)	Shield
NETWORK CAMERA (EUT)	2 Pin	AC/DC Adaptor	2 Pin	0.8	U
	RJ-45 (LAN)	Laptop	RJ-45 (LAN)	3.1	U
	Micro SD Slot	Micro SD Card 1	Micro SD Slot	-	-
	Micro SD Slot	Micro SD Card 2	Micro SD Slot	-	-
	Alarm IN	Button Alarm	Alarm OUT	3.1	U
	Alarm OUT	LED Alarm	Alarm IN	3.2	U
	MIC	Headset	3.5 mm	2.0	U
	SPEAKER		3.5 mm		
Laptop	DC Jack	Laptop Adaptor	DC Jack	1.5	U

Mode 2

Start		End		Cable Spec.	
Product Name	I/O Port	Product Name	I/O Port	Length(m)	Shield
NETWORK CAMERA (EUT)	RJ-45 (PoE)	PoE Injector	RJ-45 (PoE)	3.1	U
	Micro SD Slot	Micro SD Card 1	Micro SD Slot	-	-
	Micro SD Slot	Micro SD Card 2	Micro SD Slot	-	-
	Alarm IN	Button Alarm	Alarm OUT	3.1	U
	Alarm OUT	LED Alarm	Alarm IN	3.2	U
	MIC	Headset	3.5 mm	2.0	U
	SPEAKER		3.5 mm		
Laptop	DC Jack	Laptop Adaptor	DC Jack	1.5	U

* Unshielded=U, Shielded=S

4.4 EUT Operating Mode(s)

Category	Mode	Operating
Mode 1	AC/DC Adaptor	- Run the Web Viewer on your laptop to see the EUT's image output - Check the behavior of the EUT's network through the laptop's ping test - After playing the 1 kHz tone stored in the Web Viewer, normal input and output were confirmed on the headset - After the test, I checked the file stored in Micro SD Card.
Mode 2	PoE	



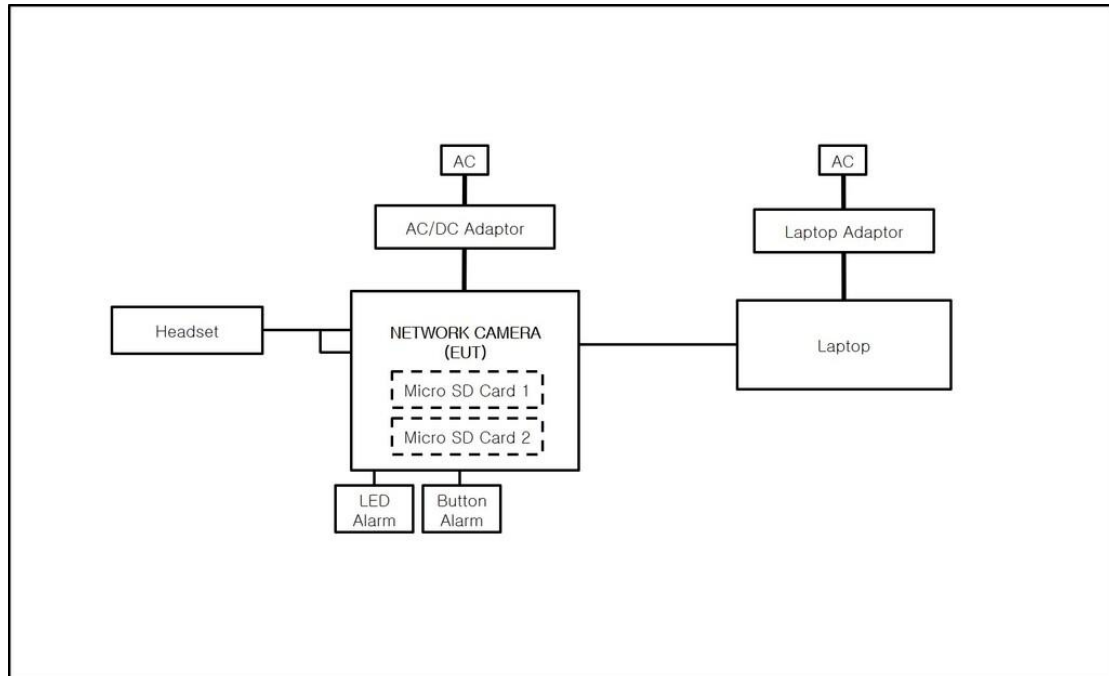
4.5 Test operating S/W

Name	Version	Manufacture Company
Web Viewer	-	HANWHA VISION VIETNAM COMPANY LIMITED

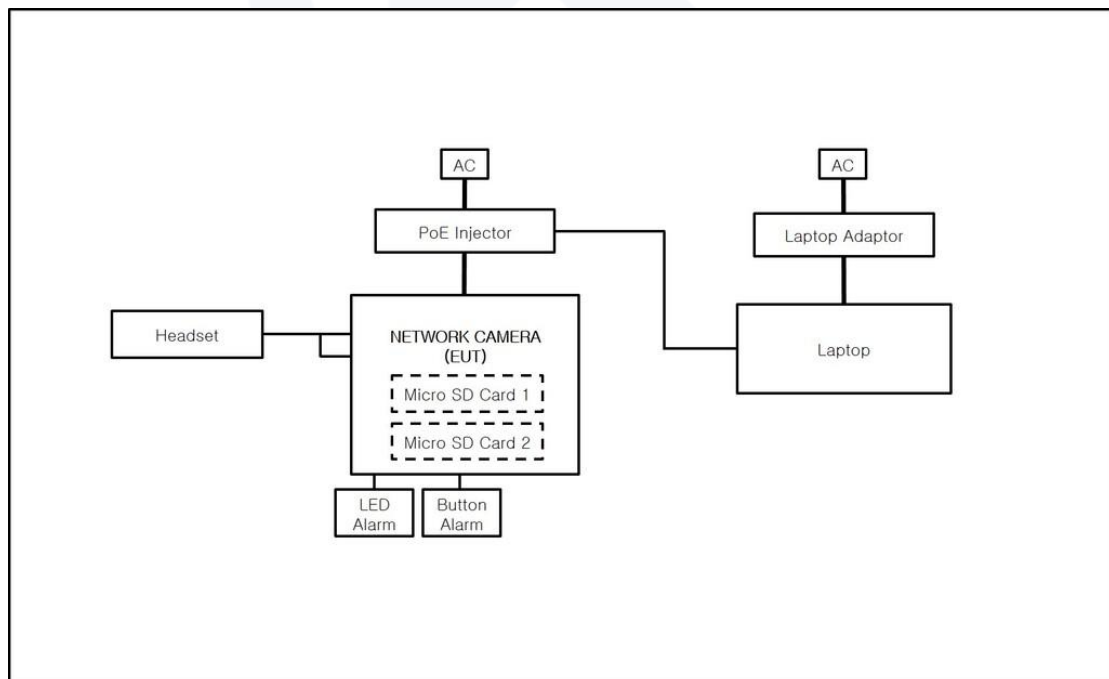




4.6 Configuration



Mode 1



Mode 2



5 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 or CISPR 32.

◆ Calculation

- Conducted Emissions

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

QuasiPeak / CAverage : The Final Value

Reading Value : Not shown in the table.

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

- Radiated Emissions(Below 1 GHz)

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

$\text{Margin(QP)[dB]} = \text{Limit[dB(}\mu\text{V/m)}] - \text{Result(QP) [dB(}\mu\text{V/m)}]$

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 Emissions(Above 1 GHz)

$\text{Result(PK/CAV) [dB(}\mu\text{V/m)}] = (\text{Reading(PK/CAV)[dB(}\mu\text{V)}] + \text{c.f[dB(1/m)}])$

$\text{Margin(PK/CAV)[dB]} = \text{Limit[dB(}\mu\text{V/m)}] - \text{Result(PK/CAV) [dB(}\mu\text{V/m)}]$

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



6 Test Item

6.1 Conducted Emissions at Mains Power Ports

6.1.1 Test Equipment

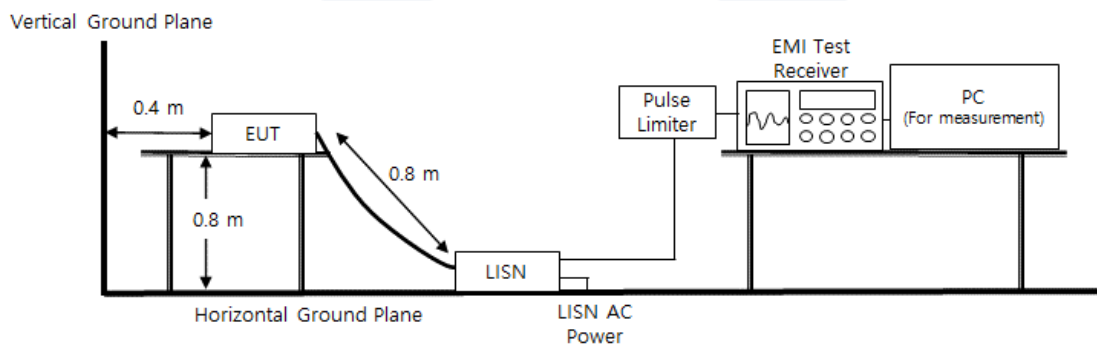
Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #6	-	DYMSTEC	-	-	-	■
EMC32 Measurement Software	EMC32	R&S	9.12.00	-	-	■
EMI TEST RECEIVER	ESR3	Rohde & Schwarz	101783	2024-11-06	2025-11-06	■
LISN	ENV216	Rohde & Schwarz	101786	2025-01-09	2026-01-09	■
ARTIFICIAL MAINS NETWORK	ESH2-Z5	Rohde & Schwarz	100450	2024-11-06	2025-11-06	■
PULSE LIMITER	ESH3-Z2	Rohde & Schwarz	101915	2024-11-06	2025-11-06	■

6.1.2 Test Location : SHIELD ROOM #6

6.1.3 Test Conditions :

Temperature	Relative Humidity
(23.2 ~ 23.3) °C	(50.7 ~ 50.8) % R.H.

6.1.4 Diagram of test setup





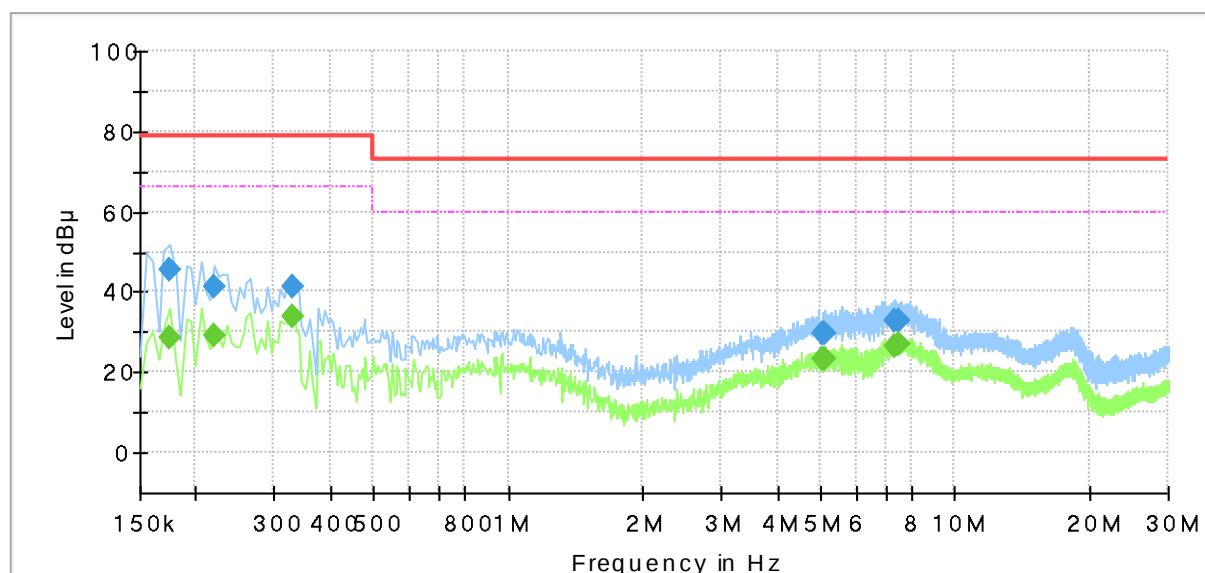
6.1.5 Test Result

○ Test Date : 2025-10-25

● Test Mode : Mode 1

Test Report

Test Description: Conducted Emission
Job No.: KES-EM253648
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)
0.175000	45.72	—	79.00	33.28	1000.0	9.000	L1	19.5
0.175000	—	28.64	66.00	37.36	1000.0	9.000	L1	19.5
0.220000	41.41	—	79.00	37.59	1000.0	9.000	L1	19.5
0.220000	—	29.06	66.00	36.94	1000.0	9.000	L1	19.5
0.330000	41.56	—	79.00	37.44	1000.0	9.000	L1	19.6
0.330000	—	34.09	66.00	31.91	1000.0	9.000	L1	19.6
5.045000	—	23.42	60.00	36.58	1000.0	9.000	L1	19.9
5.045000	29.42	—	73.00	43.58	1000.0	9.000	L1	19.9
5.105000	—	23.42	60.00	36.58	1000.0	9.000	L1	19.9
5.105000	29.50	—	73.00	43.50	1000.0	9.000	L1	19.9
7.300000	32.64	—	73.00	40.36	1000.0	9.000	L1	20.0
7.300000	—	26.72	60.00	33.28	1000.0	9.000	L1	20.0
7.485000	32.81	—	73.00	40.19	1000.0	9.000	L1	20.0
7.485000	—	26.93	60.00	33.07	1000.0	9.000	L1	20.0



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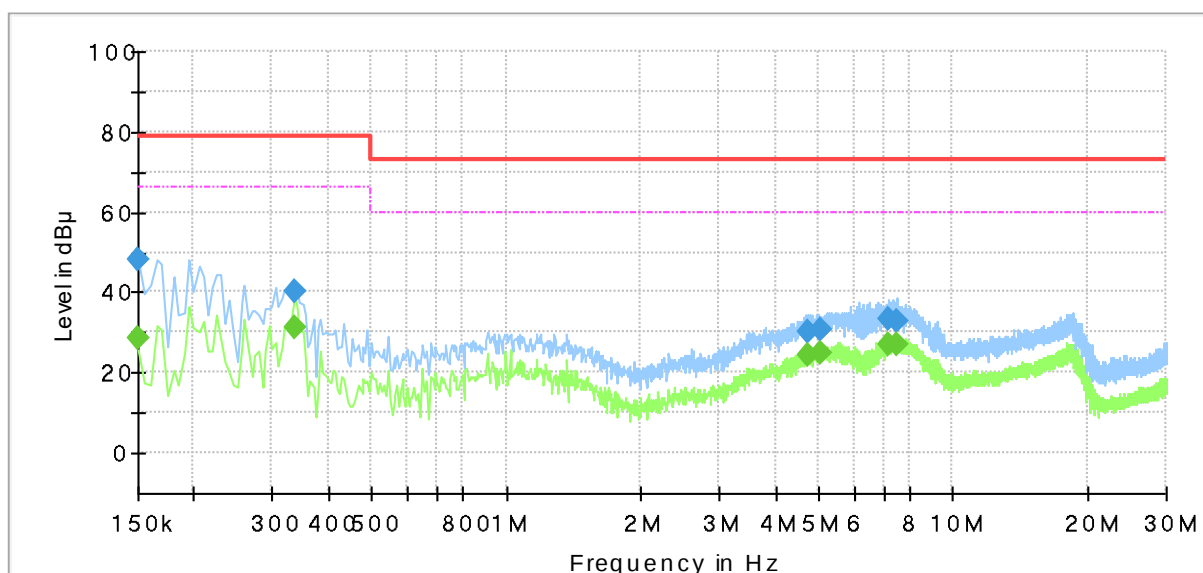
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○ Test Date : 2025-10-25

● Test Mode : Mode 1

Test Report

Test Description: Conducted Emission
Job No.: KES-EM253648
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)
0.150000	—	28.38	66.00	37.62	1000.0	9.000	N	19.5
0.150000	48.32	—	79.00	30.68	1000.0	9.000	N	19.5
0.335000	—	31.07	66.00	34.93	1000.0	9.000	N	19.5
0.335000	40.16	—	79.00	38.84	1000.0	9.000	N	19.5
4.720000	—	24.27	60.00	35.73	1000.0	9.000	N	19.8
4.720000	30.03	—	73.00	42.97	1000.0	9.000	N	19.8
5.080000	—	24.95	60.00	35.05	1000.0	9.000	N	19.9
5.080000	30.89	—	73.00	42.11	1000.0	9.000	N	19.9
7.165000	—	27.19	60.00	32.81	1000.0	9.000	N	20.0
7.165000	33.25	—	73.00	39.75	1000.0	9.000	N	20.0
7.510000	—	27.26	60.00	32.74	1000.0	9.000	N	20.0
7.510000	33.04	—	73.00	39.96	1000.0	9.000	N	20.0



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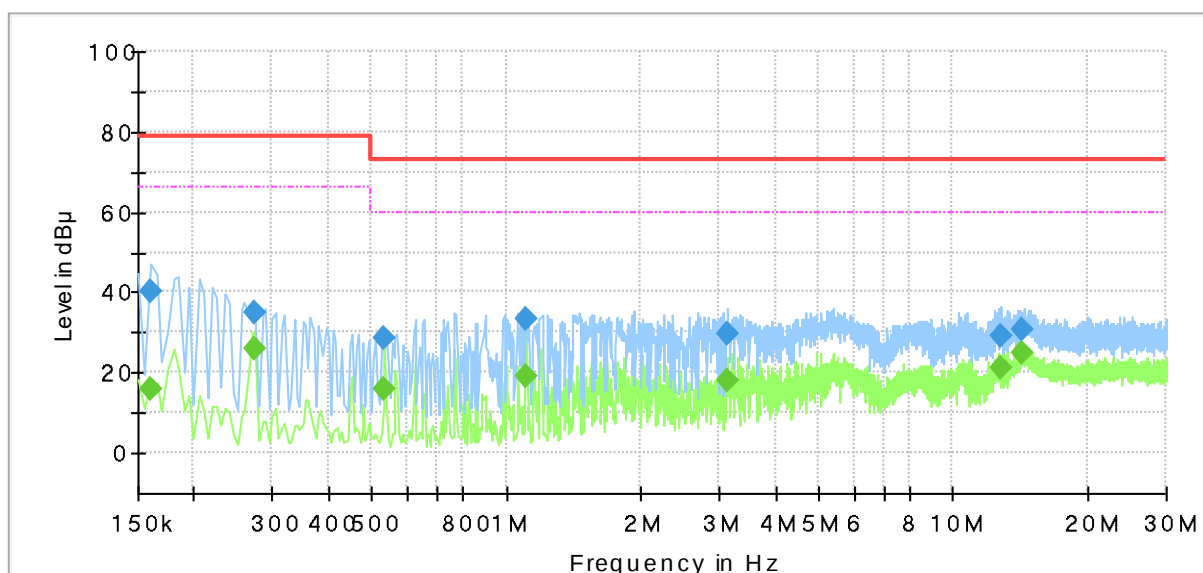
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○ Test Date : 2025-10-25

● Test Mode : Mode2

Test Report

Test Description: Conducted Emission
Job No.: KES-EM253648
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)
0.160000	40.45	—	79.00	38.55	1000.0	9.000	L1	19.5
0.160000	—	16.13	66.00	49.87	1000.0	9.000	L1	19.5
0.275000	—	26.15	66.00	39.85	1000.0	9.000	L1	19.5
0.275000	34.94	—	79.00	44.06	1000.0	9.000	L1	19.5
0.535000	28.48	—	73.00	44.52	1000.0	9.000	L1	19.6
0.535000	—	16.01	60.00	43.99	1000.0	9.000	L1	19.6
1.110000	—	19.09	60.00	40.91	1000.0	9.000	L1	19.6
1.110000	33.45	—	73.00	39.55	1000.0	9.000	L1	19.6
3.115000	—	18.11	60.00	41.89	1000.0	9.000	L1	19.7
3.115000	29.56	—	73.00	43.44	1000.0	9.000	L1	19.7
12.835000	—	21.43	60.00	38.57	1000.0	9.000	L1	20.2
12.835000	29.01	—	73.00	43.99	1000.0	9.000	L1	20.2
14.210000	—	24.85	60.00	35.15	1000.0	9.000	L1	20.2
14.210000	30.89	—	73.00	42.11	1000.0	9.000	L1	20.2



Report No. : KES-EM253648

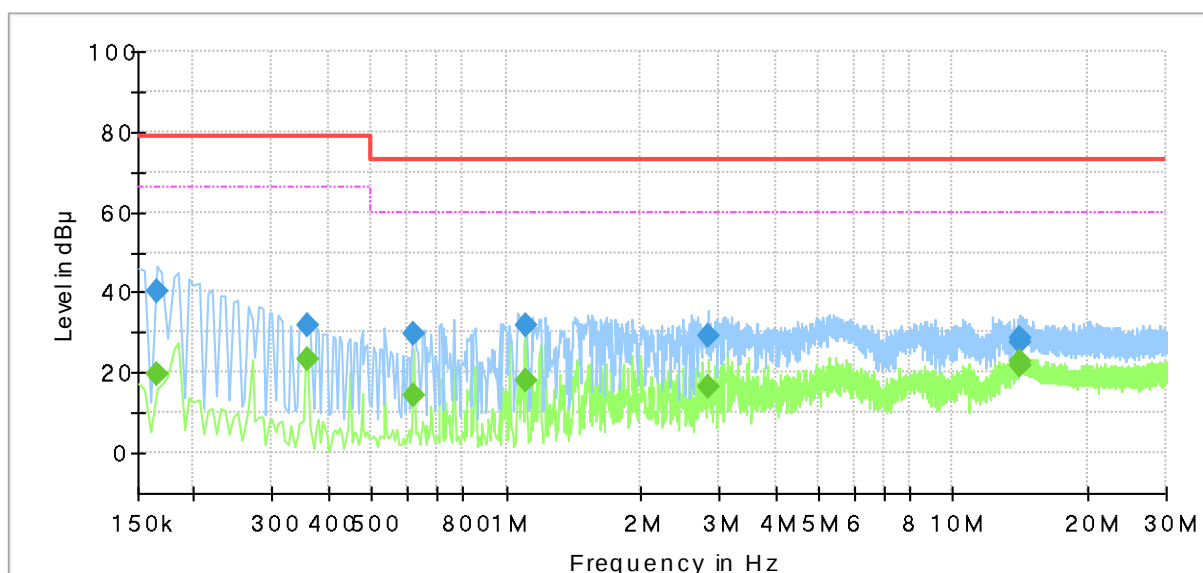
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○ Test Date : 2025-10-25

● Test Mode : Mode2

Test Report

Test Description: Conducted Emission
Job No.: KES-EM253648
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)
0.165000	40.37	—	79.00	38.63	1000.0	9.000	N	19.5
0.165000	—	19.67	66.00	46.33	1000.0	9.000	N	19.5
0.360000	—	23.39	66.00	42.61	1000.0	9.000	N	19.5
0.360000	31.56	—	79.00	47.44	1000.0	9.000	N	19.5
0.620000	29.47	—	73.00	43.53	1000.0	9.000	N	19.6
0.620000	—	14.41	60.00	45.59	1000.0	9.000	N	19.6
1.105000	—	18.08	60.00	41.92	1000.0	9.000	N	19.6
1.105000	31.93	—	73.00	41.07	1000.0	9.000	N	19.6
2.840000	—	16.42	60.00	43.58	1000.0	9.000	N	19.7
2.840000	28.93	—	73.00	44.07	1000.0	9.000	N	19.7
14.045000	—	21.77	60.00	38.23	1000.0	9.000	N	20.2
14.045000	27.48	—	73.00	45.52	1000.0	9.000	N	20.2
14.055000	—	23.02	60.00	36.98	1000.0	9.000	N	20.2
14.055000	28.39	—	73.00	44.61	1000.0	9.000	N	20.2

6.1.6 Remark

Complies with the test requirements.



6.2 Radiated Emissions(Below 1 GHz)

6.2.1 Test Equipment

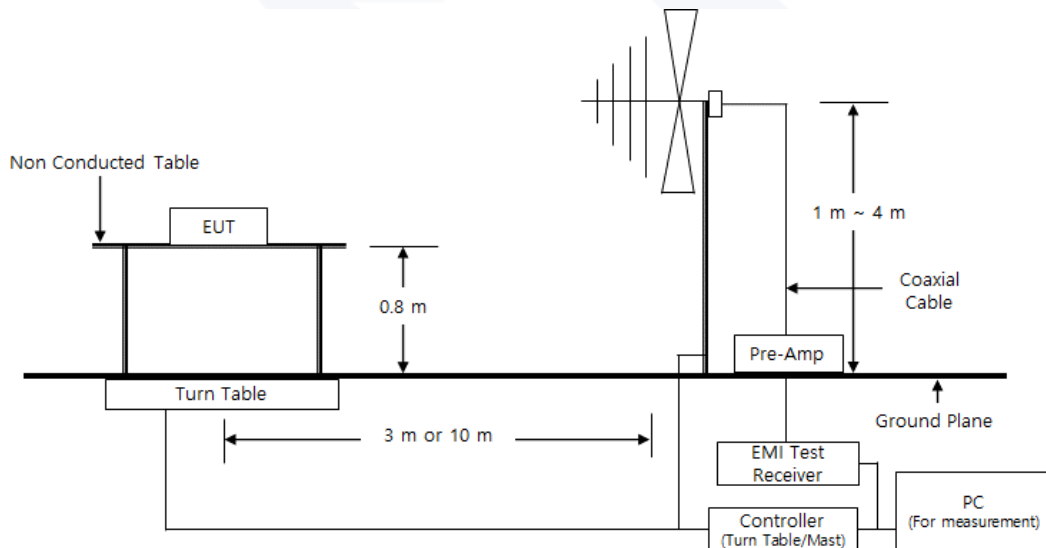
Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SEMI ANECHOIC CHAMBER #4(10 m)	-	DYMSTEC	-	-	-	■
EP5/RE Software	EP5/RE	TOYO	6.0.0	-	-	■
EMI TEST RECEIVER	ESU26	Rohde & Schwarz	100551	2025-02-13	2026-02-13	■
AMPLIFIER	SCU 01	Rohde & Schwarz	100603	2024-11-06	2025-11-06	■
BILOG ANTENNA	VULB 9168	SCHWARZBEC K	9168-461	2024-05-09	2026-05-09	■
ATTENUATOR	6806.17.A	HUBER+SUHNER	-	2025-02-13	2026-02-13	■

6.2.2 Test Location : SEMI ANECHOIC CHAMBER #4(10 m) Measurement Distance : □ 3 m, ■ 10 m

6.2.3 Test Conditions :

Temperature	Relative Humidity
(21.4 ~ 21.5) °C	(46.7 ~ 46.8) % R.H.

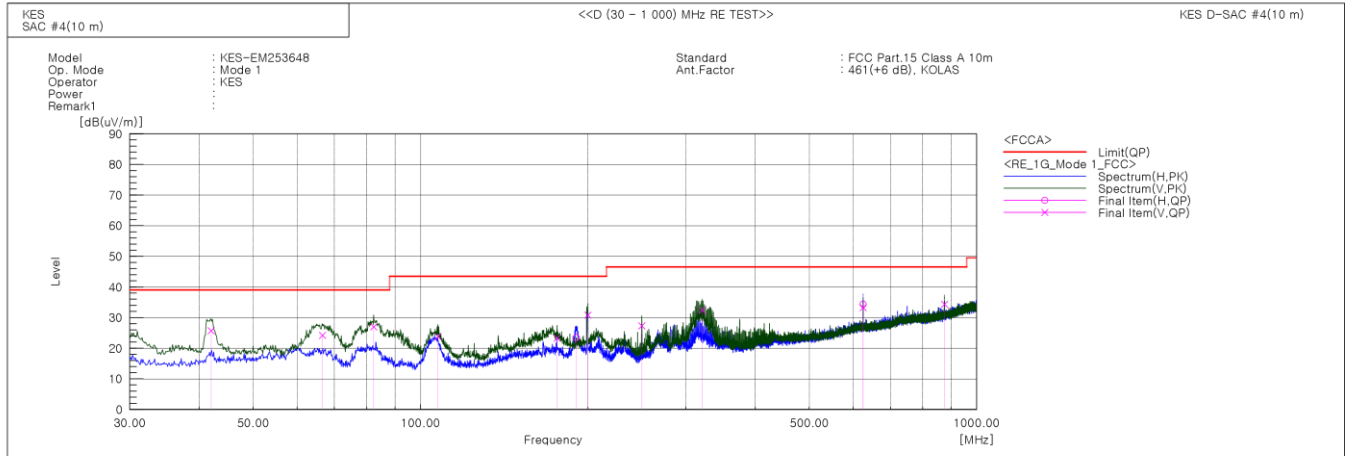
6.2.4 Diagram of test setup





6.2.5 Test Result

- Test Date : 2025-10-28
- Test Mode : Mode 1_FCC



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	42.004	V	47.4	-21.7	25.7	39.0	13.3	108.0	263.0	
2	66.618	V	46.3	-22.1	24.2	39.0	14.8	103.0	119.0	
3	82.384	V	52.9	-25.9	27.0	39.0	12.0	110.0	74.0	
4	107.479	V	47.6	-23.8	23.8	43.5	19.7	109.0	267.0	
5	175.985	V	43.8	-20.5	23.3	43.5	20.2	153.0	244.0	
6	190.656	H	45.1	-21.7	23.4	43.5	20.1	397.0	348.0	
7	199.871	V	52.8	-22.0	30.8	43.5	12.7	106.0	33.0	
8	249.948	V	46.8	-19.5	27.3	46.5	19.2	394.0	21.0	
9	321.024	V	48.7	-16.3	32.4	46.5	14.1	108.0	176.0	
10	624.974	V	39.8	-6.5	33.3	46.5	13.2	102.0	47.0	
11	625.095	H	40.9	-6.5	34.4	46.5	12.1	196.0	209.0	
12	875.113	V	36.8	-2.4	34.4	46.5	12.1	105.0	127.0	

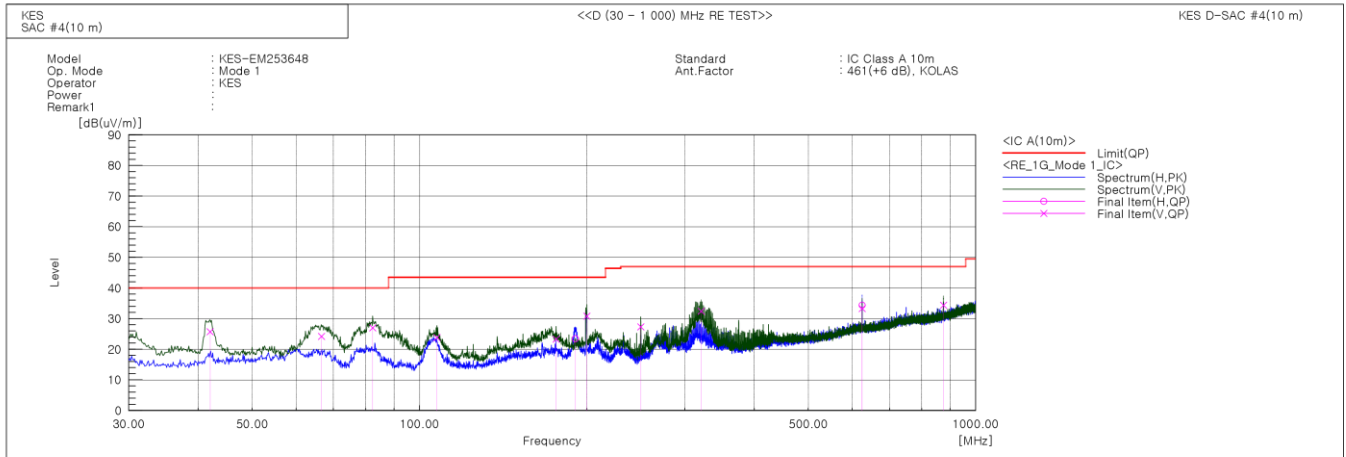
※ The data is the result measured by the detector in Quasi-Peak mode on the Peak graph.



Report No. : KES-EM253648

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- Test Date : 2025-10-28
- Test Mode : Mode 1_IC



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	42.004	V	47.4	-21.7	25.7	40.0	14.3	108.0	263.0	
2	66.618	V	46.3	-22.1	24.2	40.0	15.8	103.0	119.0	
3	82.384	V	52.9	-25.9	27.0	40.0	13.0	110.0	74.0	
4	107.479	V	47.6	-23.8	23.8	43.5	19.7	109.0	267.0	
5	175.985	V	43.8	-20.5	23.3	43.5	20.2	153.0	244.0	
6	190.656	H	45.1	-21.7	23.4	43.5	20.1	397.0	348.0	
7	199.871	V	52.8	-22.0	30.8	43.5	12.7	106.0	33.0	
8	249.948	V	46.8	-19.5	27.3	47.0	19.7	394.0	21.0	
9	321.024	V	48.7	-16.3	32.4	47.0	14.6	108.0	176.0	
10	624.974	V	39.8	-6.5	33.3	47.0	13.7	102.0	47.0	
11	625.095	H	40.9	-6.5	34.4	47.0	12.6	196.0	209.0	
12	875.113	V	36.8	-2.4	34.4	47.0	12.6	105.0	127.0	

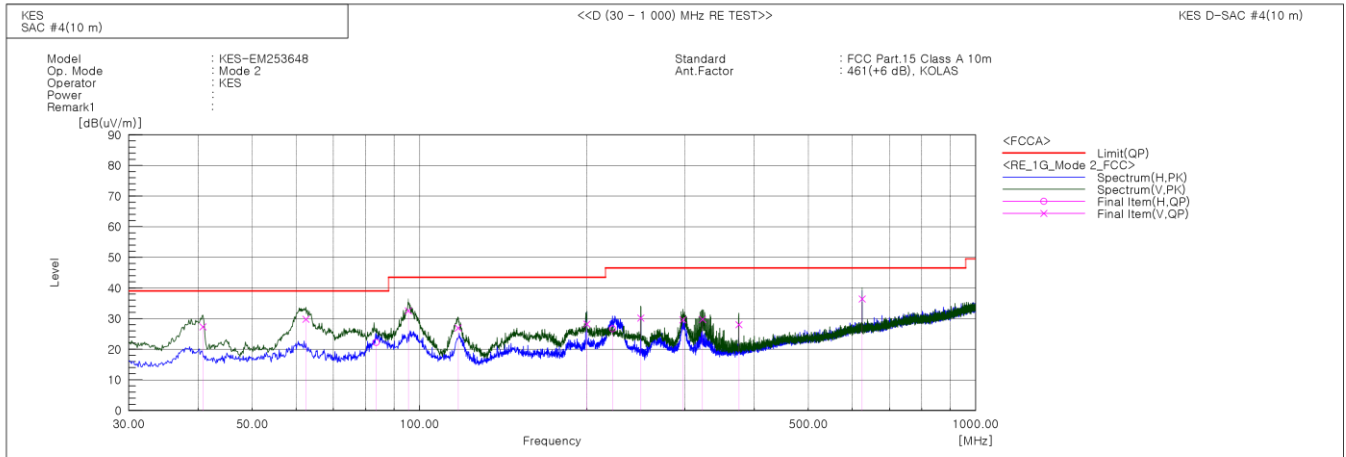
※ The data is the result measured by the detector in Quasi-Peak mode on the Peak graph.



Report No. : KES-EM253648

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- Test Date : 2025-10-28
- Test Mode : Mode 2_FCC



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	40.791	V	49.1	-21.8	27.3	39.0	11.7	104.0	44.0	
2	62.495	V	51.4	-21.6	29.8	39.0	9.2	109.0	141.0	
3	83.593	H	48.2	-26.0	22.2	39.0	16.8	395.0	321.0	
4	95.478	V	58.1	-25.6	32.5	43.5	11.0	152.0	228.0	
5	117.308	V	49.6	-22.7	26.9	43.5	16.6	116.0	265.0	
6	199.871	V	50.2	-22.0	28.2	43.5	15.3	108.0	12.0	
7	222.303	H	47.9	-21.2	26.7	46.5	19.8	390.0	1.0	
8	249.949	V	49.7	-19.5	30.2	46.5	16.3	107.0	12.0	
9	297.599	V	46.7	-17.1	29.6	46.5	16.9	157.0	12.0	
10	322.698	V	46.0	-16.3	29.7	46.5	16.8	104.0	141.0	
11	375.078	V	42.6	-14.6	28.0	46.5	18.5	113.0	119.0	
12	624.974	V	42.9	-6.5	36.4	46.5	10.1	109.0	342.0	

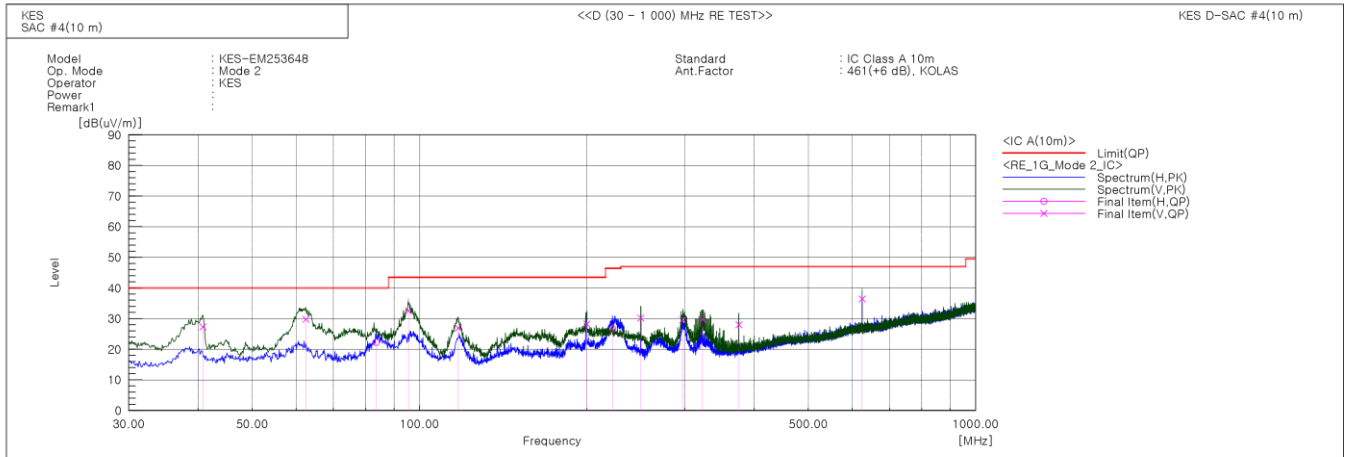
※ The data is the result measured by the detector in Quasi-Peak mode on the Peak graph.



Report No. : KES-EM253648

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- Test Date : 2025-10-28
- Test Mode : Mode 2_IC



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	40.791	V	49.1	-21.8	27.3	40.0	12.7	104.0	44.0	
2	62.495	V	51.4	-21.6	29.8	40.0	10.2	109.0	141.0	
3	83.593	H	48.2	-26.0	22.2	40.0	17.8	395.0	321.0	
4	95.478	V	58.1	-25.6	32.5	43.5	11.0	152.0	228.0	
5	117.308	V	49.6	-22.7	26.9	43.5	16.6	116.0	265.0	
6	199.871	V	50.2	-22.0	28.2	43.5	15.3	108.0	12.0	
7	222.303	H	47.9	-21.2	26.7	46.4	19.7	390.0	1.0	
8	249.949	V	49.7	-19.5	30.2	47.0	16.8	107.0	12.0	
9	297.599	V	46.7	-17.1	29.6	47.0	17.4	157.0	12.0	
10	322.698	V	46.0	-16.3	29.7	47.0	17.3	104.0	141.0	
11	375.078	V	42.6	-14.6	28.0	47.0	19.0	113.0	119.0	
12	624.974	V	42.9	-6.5	36.4	47.0	10.6	109.0	342.0	

※ The data is the result measured by the detector in Quasi-Peak mode on the Peak graph.

6.2.6 Remark

Complies with the test requirements.



6.3 Radiated Emissions(Above 1 GHz)

6.3.1 Test Equipment

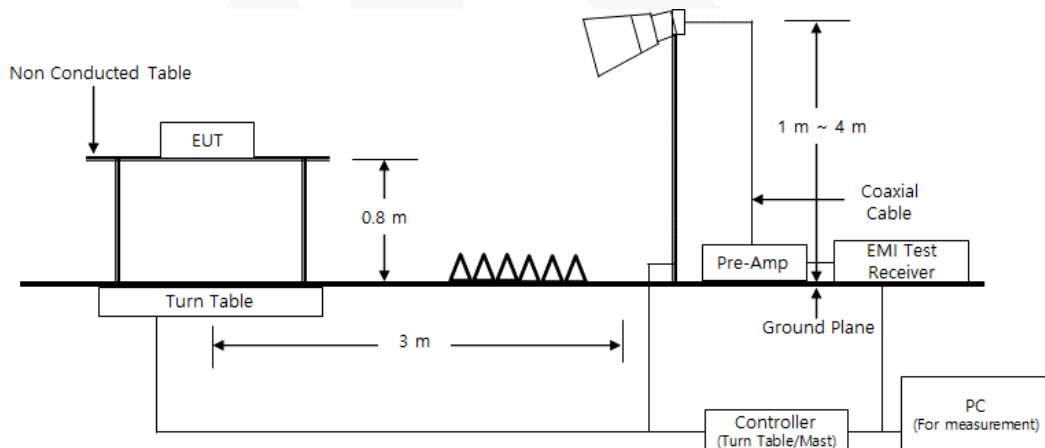
Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SEMI ANECHOIC CHAMBER #5	-	SY Corporation	-	-	-	■
ES10/RE Software	ES10/RE	TOYO	2022.01.000	-	-	■
EMI TEST RECEIVER	ESU26	Rohde & Schwarz	100552	2025-02-13	2026-02-13	■
PREAMPLIFIER	8449B	HP	3008A00538	2025-04-30	2026-04-30	■
ATTENUATOR	8491B	HP	23094	2025-02-13	2026-02-13	■
HORN ANTENNA	BBHA 9120D	SCHWARZBEC K	9120D-1802	2024-11-04	2025-11-04	■

6.3.2 Test Location : SEMI ANECHOIC CHAMBER #5

6.3.3 Test Conditions :

Temperature	Relative Humidity
(22.1 ~ 22.2) °C	(53.2 ~ 53.3) % R.H.

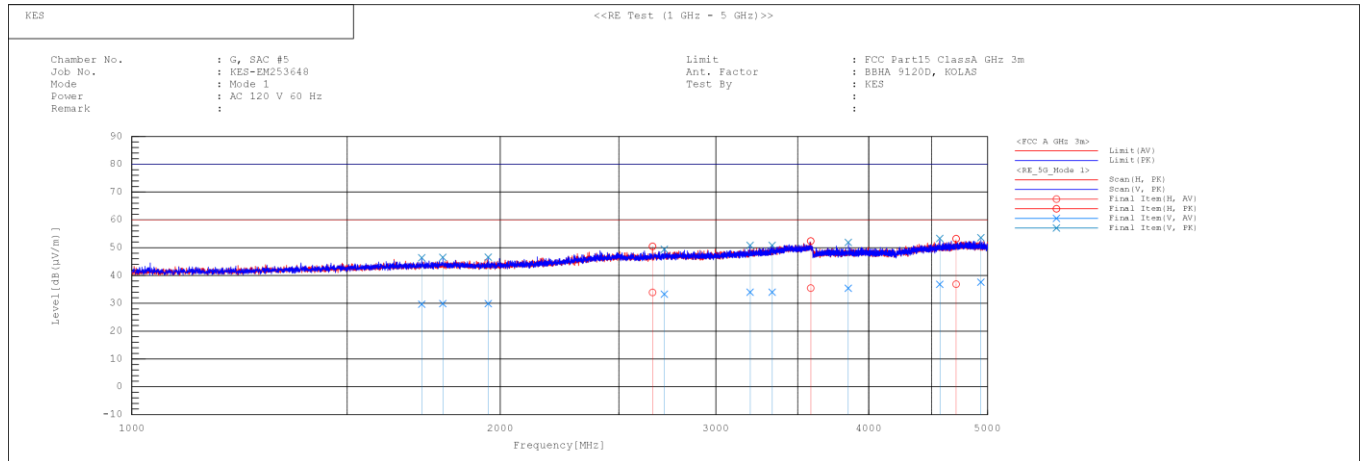
6.3.4 Diagram of test setup





6.3.5 Test Result

- Test Date : 2025-10-26
- Test Mode : Mode 1



Final Result

No.	Frequency [MHz]	Pol	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f [dB(1/m)]	Result AV [dB(μV/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]
1	1725.673	V	27.6	44.3	2.1	29.7	46.4	60.0	80.0	30.3	33.6	153.0	228.3
2	1795.426	V	27.5	44.1	2.4	29.9	46.5	60.0	80.0	30.1	33.5	158.0	171.3
3	1955.509	V	27.1	43.8	2.8	29.9	46.6	60.0	80.0	30.1	33.4	106.0	233.9
4	2662.836	H	28.3	44.9	5.6	33.9	50.5	60.0	80.0	26.1	29.5	206.0	98.7
5	2723.509	V	27.4	43.5	5.9	33.3	49.4	60.0	80.0	26.7	30.6	103.0	299.5
6	3199.319	V	27.1	43.9	6.9	34.0	50.8	60.0	80.0	26.0	29.2	398.0	120.2
7	3335.219	V	26.8	43.6	7.2	34.0	50.8	60.0	80.0	26.0	29.2	393.0	77.5
8	3585.426	H	27.7	44.6	7.8	35.5	52.4	60.0	80.0	24.5	27.6	116.0	88.1
9	3849.169	V	27.1	43.6	8.3	35.4	51.9	60.0	80.0	24.6	28.1	153.0	240.0
10	4570.097	V	25.9	42.4	10.9	36.8	53.3	60.0	80.0	23.2	26.7	100.0	136.9
11	4712.883	H	25.6	41.9	11.3	36.9	53.2	60.0	80.0	23.1	26.8	398.0	179.7
12	4939.239	V	25.3	41.3	12.3	37.6	53.6	60.0	80.0	22.4	26.4	108.0	348.4

- ✘ The data is the result of measured by the detector in PK and CISPR Average on the Peak graph.
- ✘ The Average of the test data is the cispr average result.



Report No. : KES-EM253648

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○ Test Date : 2025-10-26

● Test Mode : Mode 1

(5 ~ 16) GHz

PK

Frequency (MHz)	Reading PK (dBuV)	Polarization	Height (m)	ANT Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
7 014.949	40.200	V	1.000	35.340	10.480	34.600	51.420	80.000	28.580
8 774.968	41.000	H	1.000	37.640	11.240	34.020	55.860	80.000	24.140

Cispr-AV

Frequency (MHz)	Reading CISPR AV (dBuV)	Polarization	Height (m)	ANT Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
7 014.949	27.000	V	1.000	35.340	10.480	34.600	38.220	60.000	21.780
8 774.968	27.300	H	1.000	37.640	11.240	34.020	42.160	60.000	17.840

※ No spurious emission were detected above 16 GHz

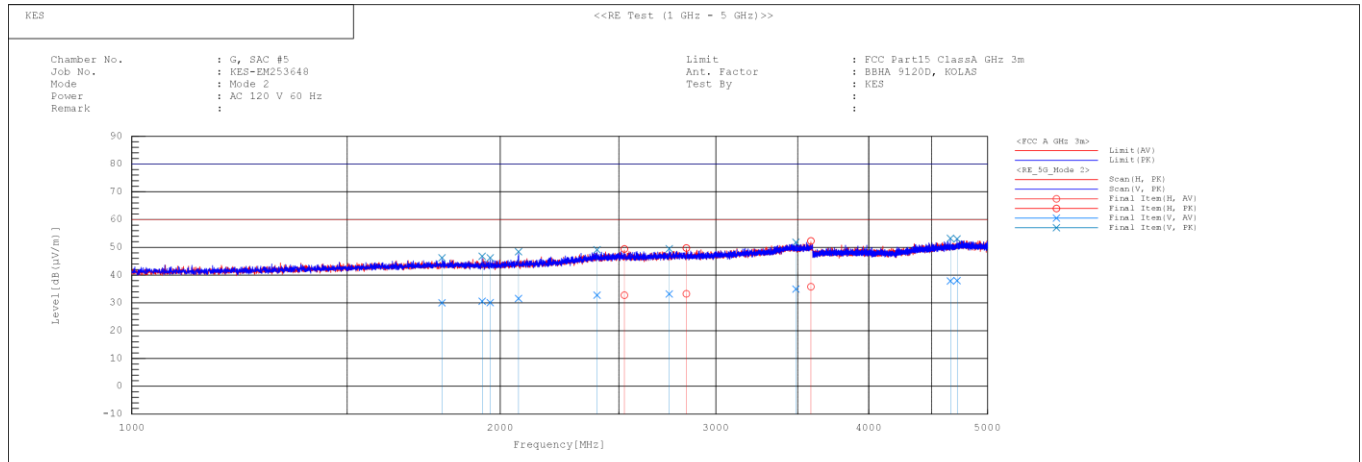


Report No. : KES-EM253648

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○ Test Date : 2025-10-26

● Test Mode : Mode 2



Final Result

No.	Frequency [MHz]	Pol	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f. [dB(1/m)]	Result AV [dB(μV/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]
1	1792.824	V	27.6	43.8	2.4	30.0	46.2	60.0	80.0	30.0	33.8	102.0	330.6
2	1932.824	V	27.9	44.1	2.7	30.6	46.8	60.0	80.0	29.4	33.2	107.0	261.8
3	1962.447	V	27.3	43.4	2.8	30.1	46.2	60.0	80.0	29.9	33.8	394.0	190.9
4	2070.027	V	28.4	45.2	3.2	31.6	48.4	60.0	80.0	28.4	31.6	156.0	238.2
5	2399.687	V	27.9	44.2	4.9	32.8	49.1	60.0	80.0	27.2	30.9	115.0	295.4
6	2525.547	H	27.6	44.2	5.2	32.8	49.4	60.0	80.0	27.2	30.6	208.0	140.2
7	2748.467	V	27.2	43.5	6.0	33.2	49.5	60.0	80.0	26.8	30.5	107.0	32.6
8	2838.387	H	27.1	43.6	6.2	33.3	49.8	60.0	80.0	26.7	30.2	397.0	118.9
9	3487.189	V	27.5	44.3	7.5	35.0	51.8	60.0	80.0	25.0	28.2	158.0	1.0
10	3586.887	H	28.0	44.5	7.8	35.8	52.3	60.0	80.0	24.2	27.7	388.0	260.3
11	4662.387	V	26.8	42.1	11.1	37.9	53.2	60.0	80.0	22.1	26.8	103.0	174.5
12	4722.506	V	26.6	41.6	11.4	38.0	53.0	60.0	80.0	22.0	27.0	153.0	105.4

✘ The data is the result of measured by the detector in PK and CISPR Average on the Peak graph.

✘ The Average of the test data is the cispr average result.



Report No. : KES-EM253648

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○ Test Date : 2025-10-26

● Test Mode : Mode 2

(5 ~ 16) GHz

PK

Frequency (MHz)	Reading PK (dBuV)	Polarization	Height (m)	ANT Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
6 822.632	41.000	H	1.000	35.450	9.840	34.720	51.570	80.000	28.430
9 806.191	40.500	V	1.000	39.300	11.320	33.890	57.230	80.000	22.770

Cispr-AV

Frequency (MHz)	Reading CISPR AV (dBuV)	Polarization	Height (m)	ANT Factor (dB)	Cable Loss (dB)	Preamp Factor (dB)	Result (dBuV/m)	Limit (dBuV/m)	Margin (dB)
6 822.632	27.800	H	1.000	35.450	9.840	34.720	38.370	60.000	21.630
9 806.191	27.100	V	1.000	39.300	11.320	33.890	43.830	60.000	16.170

※ No spurious emission were detected above 16 GHz

6.3.6 Remark

Complies with the test requirements.



7 Test Setup Photos and EUT Photographs

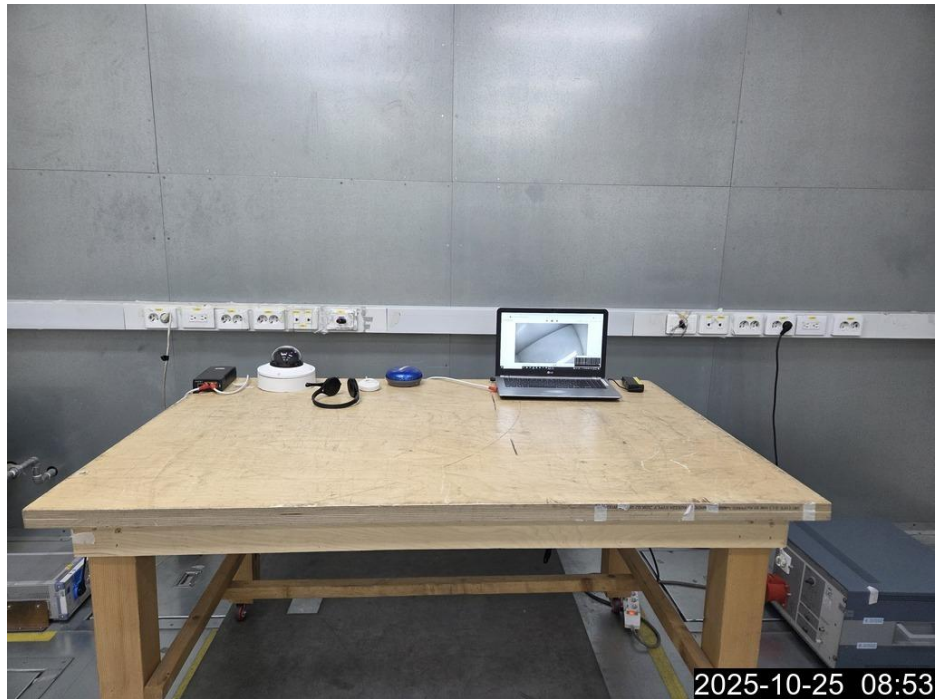
7.1 Test Setup Photos



<Conducted Emissions at Mains Power Ports - Front> Mode 1



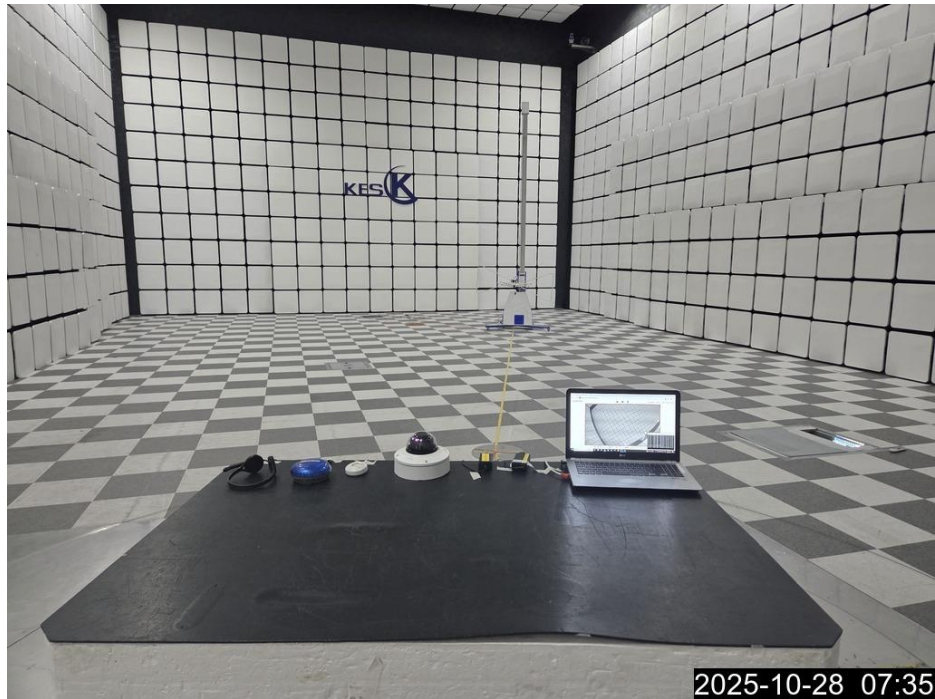
<Conducted Emissions at Mains Power Ports - Rear> Mode 1



<Conducted Emissions at Mains Power Ports - Front> Mode 2



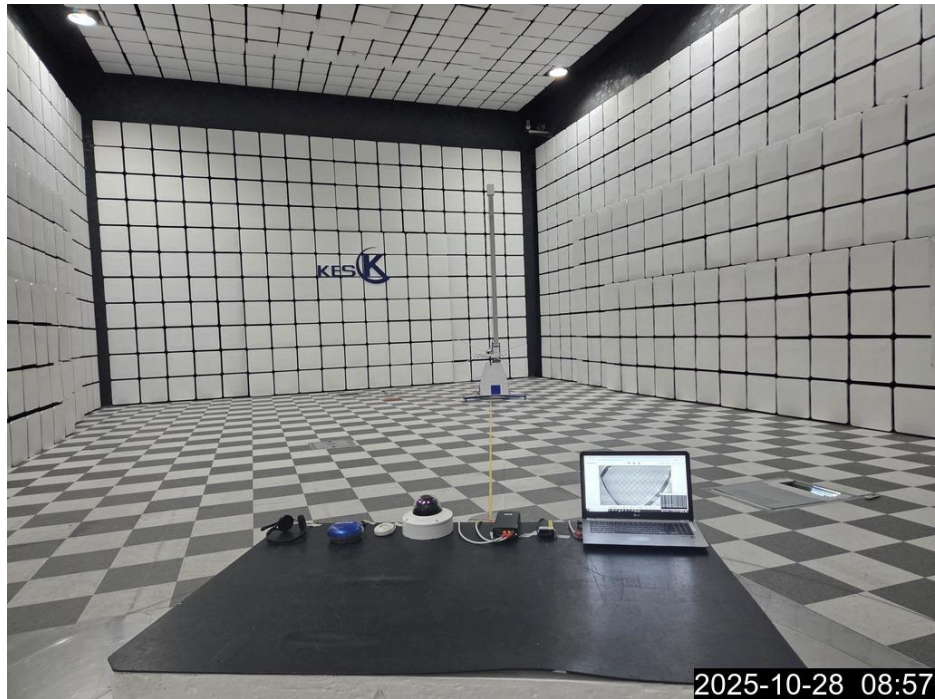
<Conducted Emissions at Mains Power Ports - Rear> Mode 2



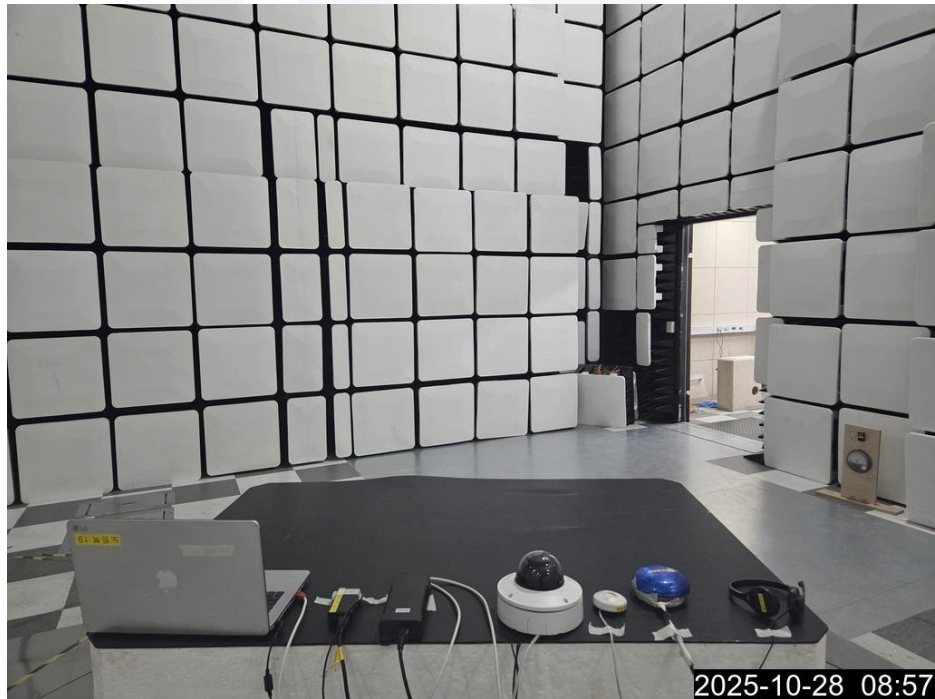
<Radiated Emissions(Below 1 GHz) - Front> Mode 1



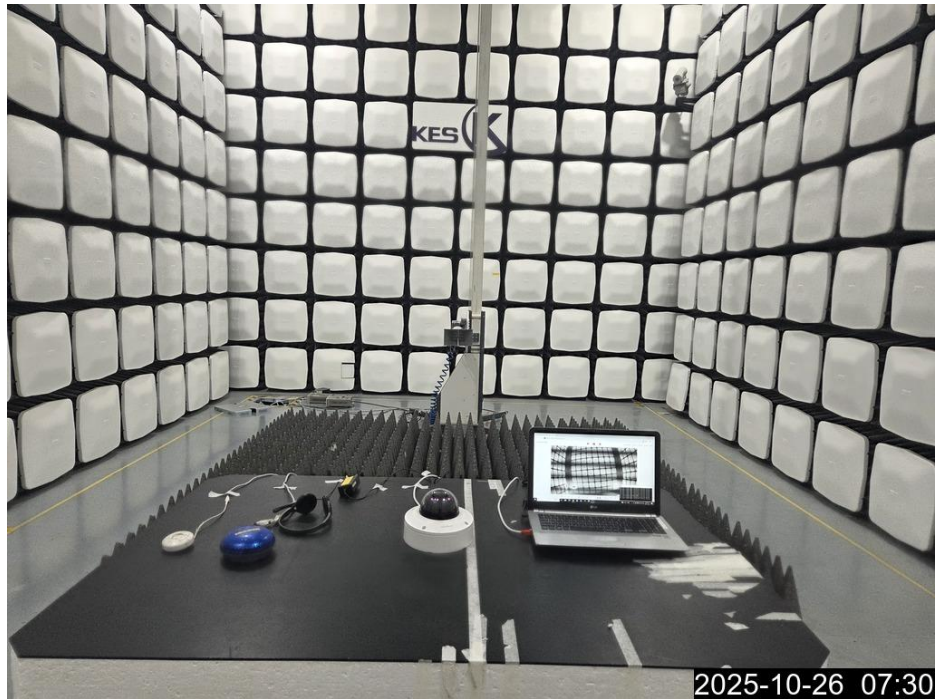
<Radiated Emissions(Below 1 GHz) - Rear> Mode 1



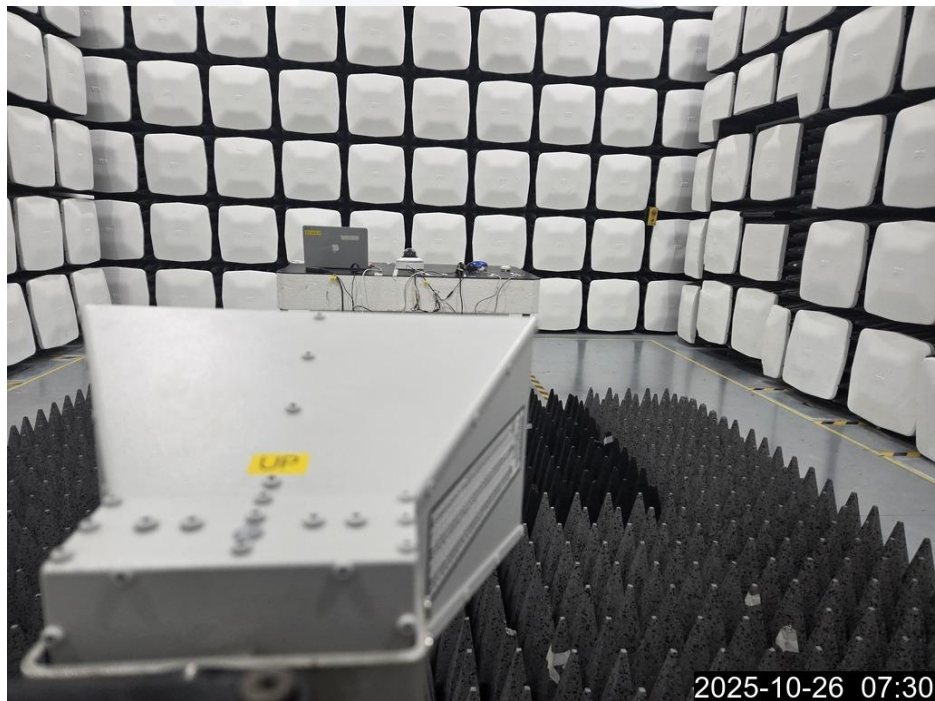
<Radiated Emissions(Below 1 GHz) - Front> Mode 2



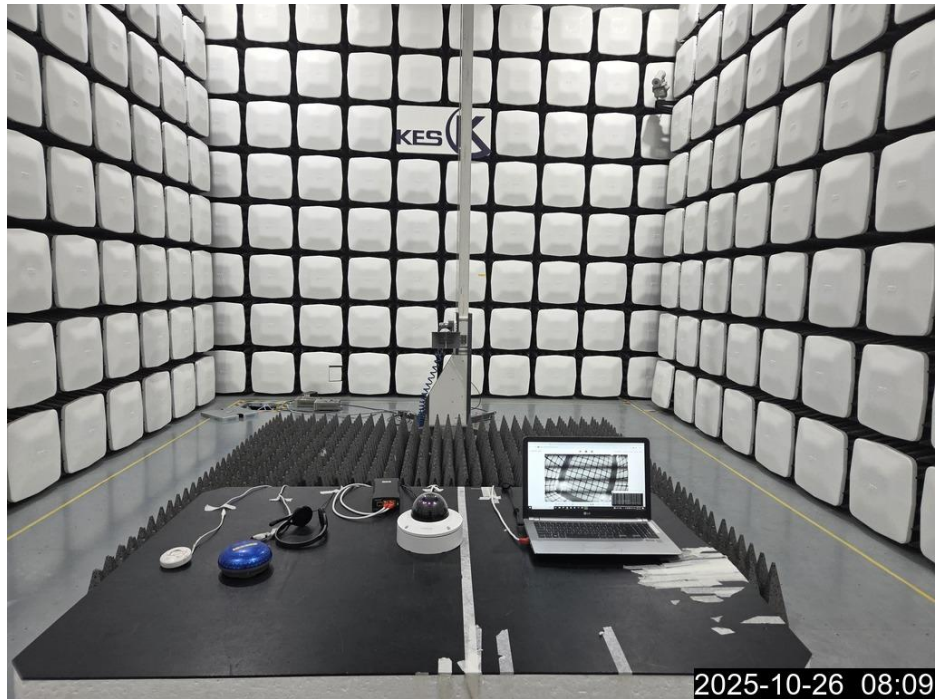
<Radiated Emissions(Below 1 GHz) - Rear> Mode 2



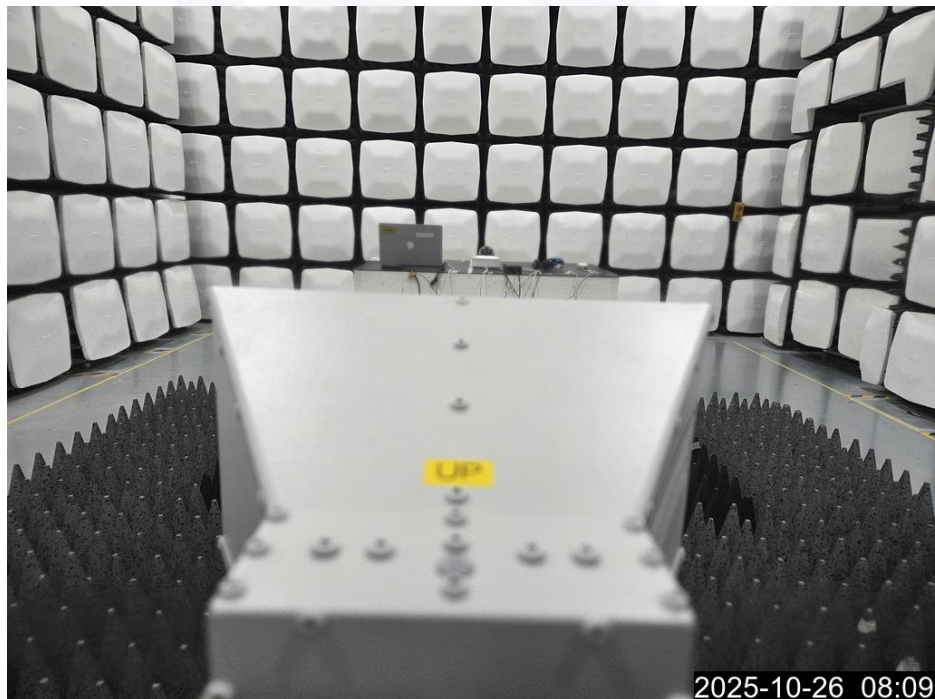
<Radiated Emissions(Above 1 GHz) - Front> Mode 1



<Radiated Emissions(Above 1 GHz) - Rear> Mode 1



<Radiated Emissions(Above 1 GHz) - Front> Mode 2



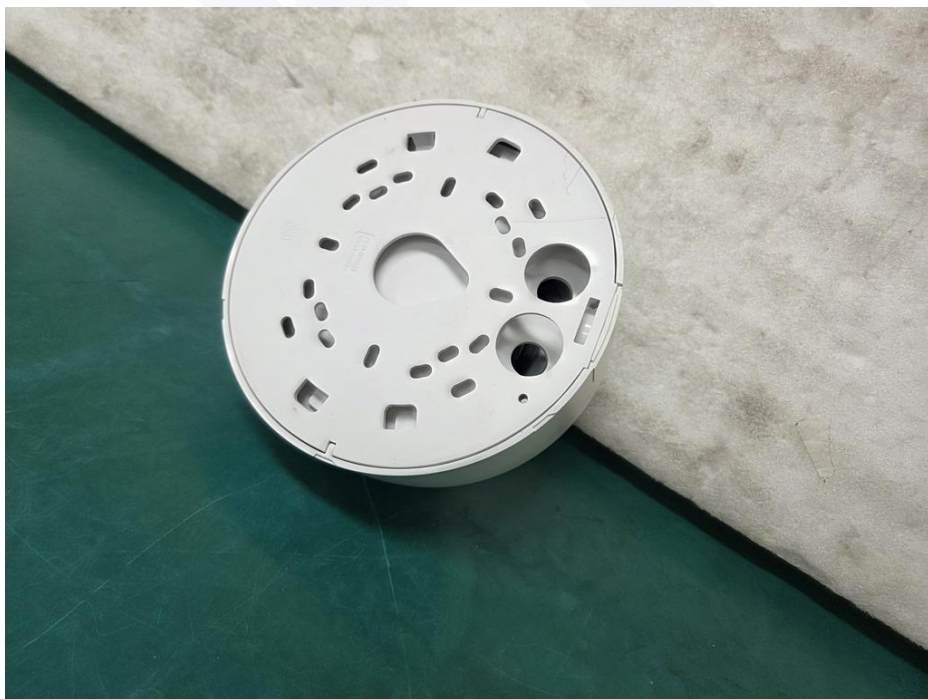
<Radiated Emissions(Above 1 GHz) - Rear> Mode 2



7.2 EUT Photographs



<EUT External Photographs - Top>



<EUT External Photographs - Bottom>



<Components>



<Port-1>



<Port-2>



<Port-3>



<Port-4>



<Port-5>



<EUT Internal Photographs>



7.3 Label

	Name : Hanwha Vision Co., Ltd. Product item : NETWORK CAMERA Model name : XNV-A9085R
This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.	
The above label is only an example. The specific format is left to the manufacturer to decide, as long as the label includes the required information, in accordance with ICES-Gen. The requirements specified in ICES-Gen shall apply. An example ISED compliance label, to be placed on each unit of an equipment model (or in the user manual, if allowed), is given below:	
CAN ICES-003(A) / NMB-003(A)	

The End.