TEST REPORT

KES Co., Ltd.
#3002, #3503, #3701, 40, Simin-daero365beon-gil, Dongan-gu, Anyang-si, Gyeonggi-do, 14057, Republic of Korea
Tel : +82-31-425-6200, Fax : +82-31-341-3838

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	:	XNF-A9014RV
◯ Variant model	:	XNF-A8014RV
◯ 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. 03. ~ 2025. 10. 04.

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

5. Test method used : AS/NZS CISPR 32:2015/AMD1:2020

6. Test result : PASS

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
This test report cannot be reproduced and copied without permission without the written consent of KES Co., Ltd.
This test report is not related to KOLAS accreditation.

Affirmation	Tested by	Technical Manager by
	Name : SeongMin Jang [장성민]2025/11/14	Name : DongHun Jang [장동훈]2025/11/14

2025. 11. 14.

KES Co., Ltd.

REPORT REVISION HISTORY

Date	Test Report No.	Revision History
2025. 11. 14.	KES-EM253464	Issued

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

■ No decision rule is specified by the1 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)

TABLE OF CONTENTS

1 Laboratory Information

1.1 Test Location

Category	Details
Addres	473-21, Gayeo-ro, Yeoju-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, Yeoju-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	AC 240 V, 50 Hz

2.2 Summary of Test Results

Test Item	Test Standard	Test Result	Remark
Conducted Emissions at Mains Power Ports	AS/NZS CISPR 32:2015/AMD1:2020	PASS	-
Conducted Emissions at Telecommunication Ports		PASS	-
Radiated Emissions(Below 1 ㎓)		PASS	-
Radiated Emissions(Above 1 ㎓)		PASS	-
* N/A: Not Applicable			

2.3 Remarks when standards applied

N/A

2.4 Variant Model Differences

Simple derivations due to SW differences Add Model
(Basic models, circuits, hardware No changes. Same inside.)

2.5 Device Modifications

N/A

3 General Product Description

Division		Specificity
Internal maximum operating frequency		1.6 GHz
Power	Rated power supply	DC 12 V, PoE
	Test Power	AC 240 V, 50 Hz
I/O Ports	User port	DC 12 V, MIC, SPEAKER, Alarm IN, Alarm OUT, PoE, Micro SD Card Slot
	Unused/Administrator Port	N/A
function	Product features	NETWORK CAMERA
	Wireless function	N/A
Components		Main body 1 EA, Cable 2 EA
Others		Please refer to the specifications listed below.

	XNF-A9014RV
Video	
Imaging Device	1/1.6" CMOS
Resolution	Original view: 3536x3536, 3008x3008, 2560x2560, 1600x1600, 1280x1280, 800x800, 640x640, 480x480, 160x160 Double panorama: 3584x1792, 2560x1280, 1920x960, 1280x640, 1024x512, 640x320 Single panorama: 3584x896, 2560x640, 1920x480, 1280x320, 1024x256, 640x160 Quad view: 3584x2688, 2560x1920, 1792x1344, 1280x960, 1024x768, 800x600, 640x480 Q1/Q2/Q3/Q4: 1792x1344, 1280x960, 1024x768, 800x600, 640x480, 320x240
Max. Framerate	Original view: Max.30fps@3536x3536 Double panorama: Max.30fps@3584x1792 Single panorama: Max.30fps@3584x896 Quad view: Max.30fps@3584x2688 Q1/Q2/Q3/Q4(4:3): Max.30fps@1792x1344 MJPEG: Max.5fps
NETD	None
Pixel Size	None
Min. Illumination	Color: 0.02Lux (F1.8, 1/30sec) (TBD) BW: 0.001Lux (F1.8, 1/30sec) (TBD)
Video Out	None
Video Transmission Distance	None
Lens	
Focal Length (Zoom Ratio)	1.76mm fixed focal
Optical Zoom	None
Max. Aperture Ratio	F1.8
Angular Field of View	H: 185° / V: 185° / D: 185°
Min. Object Distance	0.5m(1.64ft)
Focus Control	None
Lens Type	None
Mount Type	None
Optional Lens	None
Pan / Tilt / Rotate	
Pan / Tilt / Rotate	**Digital Rotation**
Operational	
Camera Title	Displayed up to 85 characters
Direction Indicator	None
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNRV, WiseNRII(Based on AI engine/AI-ISP)
Digital Image Stabilization	Support
Defog	Support
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, 8point polygonal zones - Color: gray/green/red/blue/black/white - Mosaic
Gain Control	Off / Max Gain / Manual
White Balance	ATW / NarrowATW / AWC / Manual / Indoor / Outdoor
LDC	None
Electronic Shutter Speed	Minimum / Maximum / Anti flicker(2~1/30,000sec) Prefer shutter control(Based on AI engine)
Digital PTZ	Support
Video Rotation	Flip, mirror

Analytics	Classified object type: Person/Vehicle Attributes: Person(Upper/lower clothes color), Vehicle(Color) Support BestShot Analytics events based on AI engine - Motion detection, Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear), 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 *Support extra alarm I/O via optional I/O box
Alarm Triggers	Analytics, Network disconnection, Alarm input, App event, Time schedule, MQTT subscription, Day/Night change, SD/NAS disruption, Case open tempering
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(TBD)
Audio Streaming	None
Audio In	Selectable(mic in/line in). Built-in 3 mic with noise reduction
Audio Out	Line out
Light Type	IR LED
Light Viewable Length	WiseIR up to 15m(49.21ft)
IR Viewable Length	None
IR Illuminator (Optional)	None
IR Radiation angle	None
IR LED	None
IR Wavelength	850nm
IR Operation	None
Water Removal	None
Auto Tracking	None
Coaxial Protocol	None
Color Palettes	None
Network	
Ethernet	Metal shielded RJ-45(10/100BASE-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: 16/32/44.1/48kHz(48Kbps) OPUS: 8/16/48kHz
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)
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(TBD)
SIP support (VoIP, Peer-to-peer,	Support(TBD)

Security	None
Application Programming Interf	ONVIF Profile S/G/T/M SUNAPI(HTTP API) Hanwha Vision Open Platform - WiseAI application included - Cloud connector application included - Sound classification(Based on AI engine) application (To be released)
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), 802.1AE(MACsec)
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, 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 1slot Max. 1TB
Edge Storage(OnCloud)	Micro SD/SDHC/SDXC 1slot Max. 1TB * Hanwha Vision branded microSD cards have been certified and recommended for OnCloud edge recording.
Memory	4GB RAM, 8GB eMMC
Environmental & Electrical	
Operating Temperature / Humid	-40°C~+55°C (-40°F ~ +131°F) 0~100%RH(Condensing) In PoE+ mode, IR illuminator will turn off if the temperature is higher than 50°C
Storage Temperature / Humidity	-50°C~+60°C(-58°F~+140°F) / 0~95% RH
Wind Load	None
EPA(Effective Projected Area)	0.009m²
Input Voltage	WisePower(PoE(IEEE802.3af, class3)/PoE+(IEEE802.3at type2, Class4)), 12VDC
Power Consumption	PoE+: Max. 19.8W, typical 10.5W for 15m IR LED distance 12VDC: Max 20.0W, typical 10.9W PoE: Max. 11.2W, typical 7.7W for 10m IR LED distance 12VDC: Max 11.3W, typical 7.9W Support Wisepower - Power monitoring(Max./Current/Avg.) - Power logging
Mechanical	
RAL Code	RAL9003
Product Dimensions / Weight	Ø160x75mm(6.23x2.95") / 1020g
Compatible Conduit hole / Gan	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	XNF-A9014RV	-	HANWHA VISION VIETNAM COMPANY LIMITED	EUT
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	-	-	Sandisk	8 GB
Laptop	LG15N54	506NZGK000615	LG	-
Laptop Adaptor	PA-1650-43(65W)	OF58U63849302Y609	LG	-

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**	**Product Name**	**I/O Port**	**Product Name**
NETWORK CAMERA (EUT)	DC 12 V	Adaptor	2 Pin	0.8	U
	PoE	Laptop	RJ-45	3.2	U
	Micro SD Card Slot	Micro SD Card	Micro SD Card Slot	-	-
	Alarm OUT	LED Alarm	Alarm IN	3.1	U
	Alarm IN	Button Alarm	Alarm OUT	3.3	U
	MIC	Headset	3.5 ㎜	2.0	U
	SPEAKER				
Laptop	DC Jack	Laptop Adaptor	DC Jack	1.5	U

Mode 2

Start		End		Cable Spec.	
Product Name	**I/O Port**	**Product Name**	**Product Name**	**I/O Port**	**Product Name**
NETWORK CAMERA (EUT)	PoE	PoE Injector	RJ-45	3.2	U
	Micro SD Card Slot	Micro SD Card	Micro SD Card Slot	-	-
	Alarm OUT	LED Alarm	Alarm IN	3.1	U
	Alarm IN	Button Alarm	Alarm OUT	3.3	U
	MIC	Headset	3.5 ㎜	2.0	U
	SPEAKER				
Laptop	DC Jack	Laptop Adaptor	DC Jack	1.5	U
	RJ-45	PoE Injector	RJ-45	3.2	U

* Unshielded=U, Shielded=S

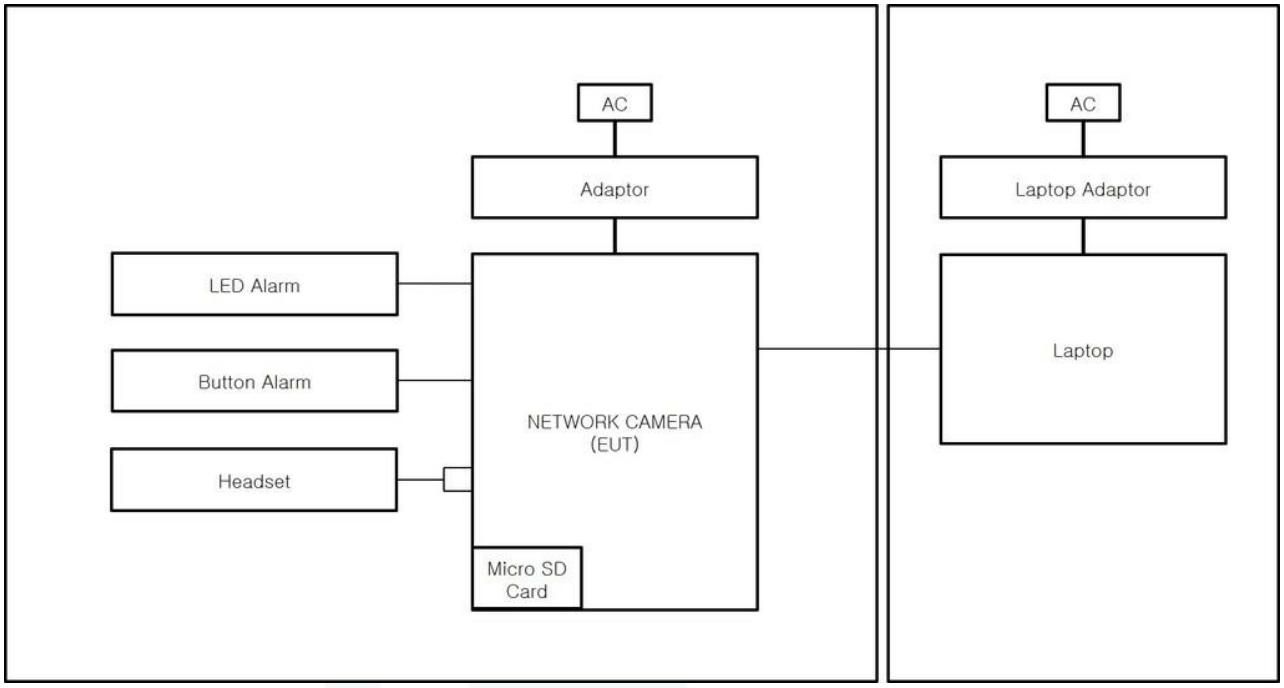
4.4 EUT Operating Mode(s)

Category	Mode	Operating
Mode 1	DC 12 V	- Check the network behavior of the EUT with the laptop's ping test - View images of the camera through the Web Viewer - Play the 1 kHz tone through the Web Viewer to see the sound output with the headset - When the alarm is pressed, make sure the button alarm is working - After testing, check the recording with Micro SD Card
Mode 2	PoE	

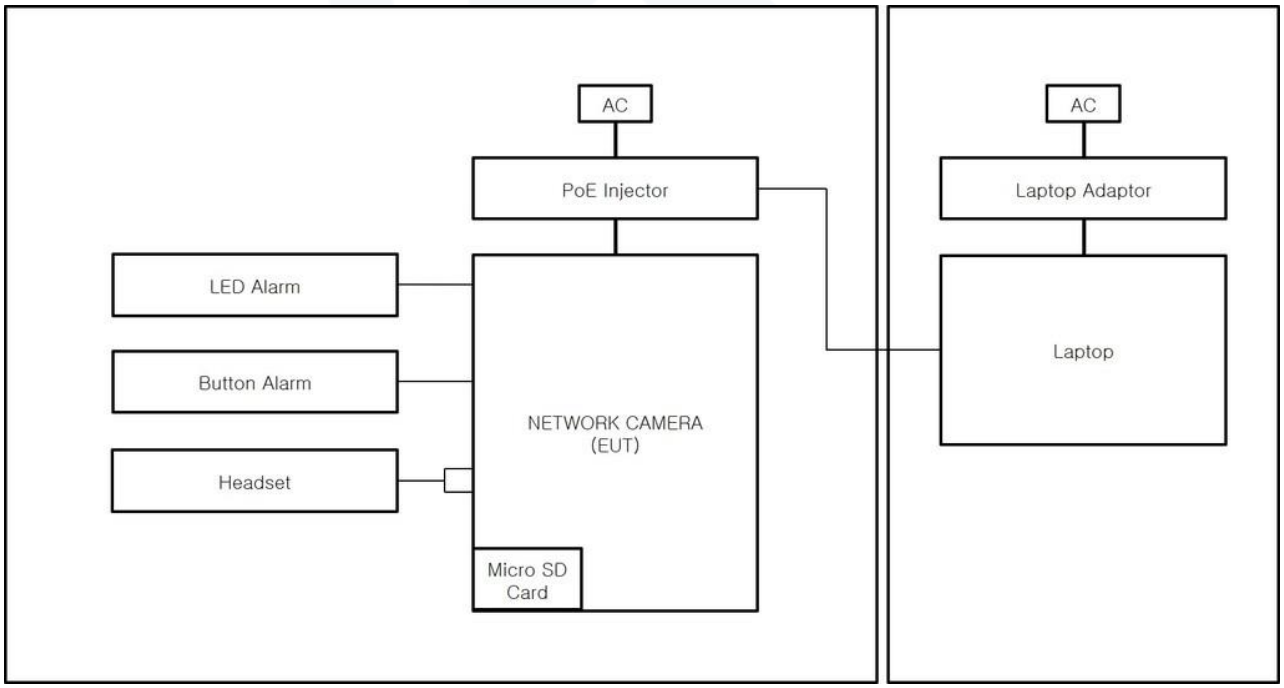
4.5 Test operating S/W

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 ㎑ to 30 ㎒. 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 ㎓ at 10 m or 3 m distance and a Peak and Average detector above 1 ㎓ 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 (Radiated Emissions(Below 1 ㎓)) and 1 m (Radiated Emissions(Above 1 ㎓)) 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

QuasiPeak[㏈uV] / CAverage [㏈uV] = Reading Value[㏈uV] + Corr. [㏈]
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 ㎓)

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

Result(PK/CAV) [㏈(㎶/m)] = (Reading(PK/CAV)[㏈(㎶)] + c.f[㏈(1/m)]
Margin(PK/CAV)[㏈] = Limit[㏈(㎶/m)] - Result(PK/CAV) [㏈(㎶/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
(25.7 ~ 25.8) °C	(56.0 ~ 56.1) % R.H.

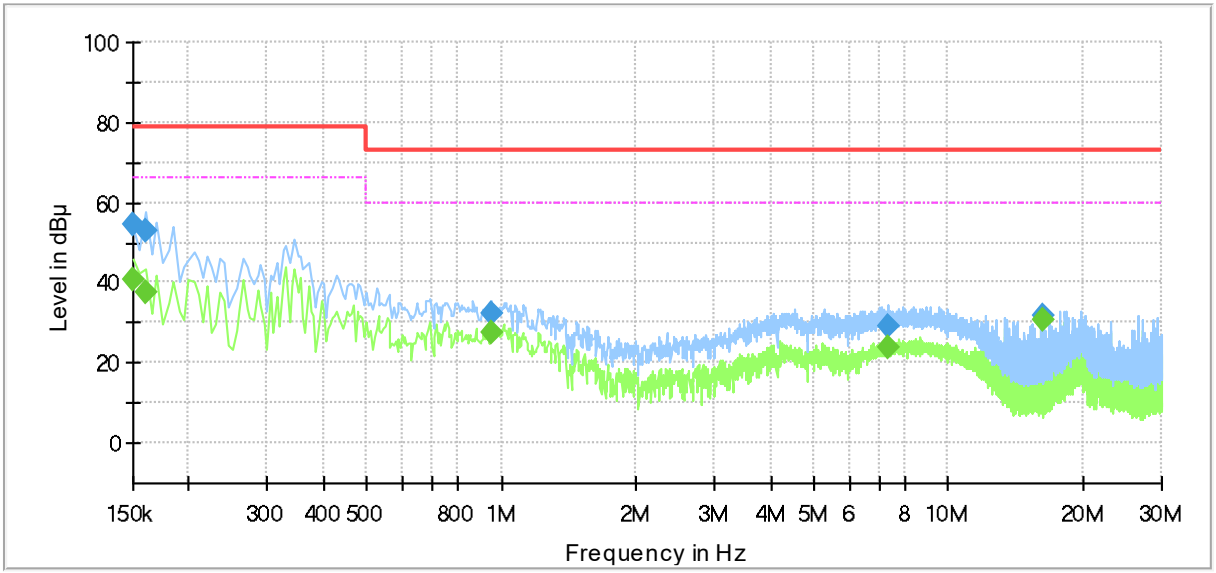
6.1.4 Test Result

○ Test Date : 2025-10-03
● Test Mode : Mode 1

Test Report

1 / 1

Test Description:	Conducted Emission
Job No.:	KES-EM253464
Phase:	L
Mode:	Mode 1
Operator Name:	KES



Final_Result

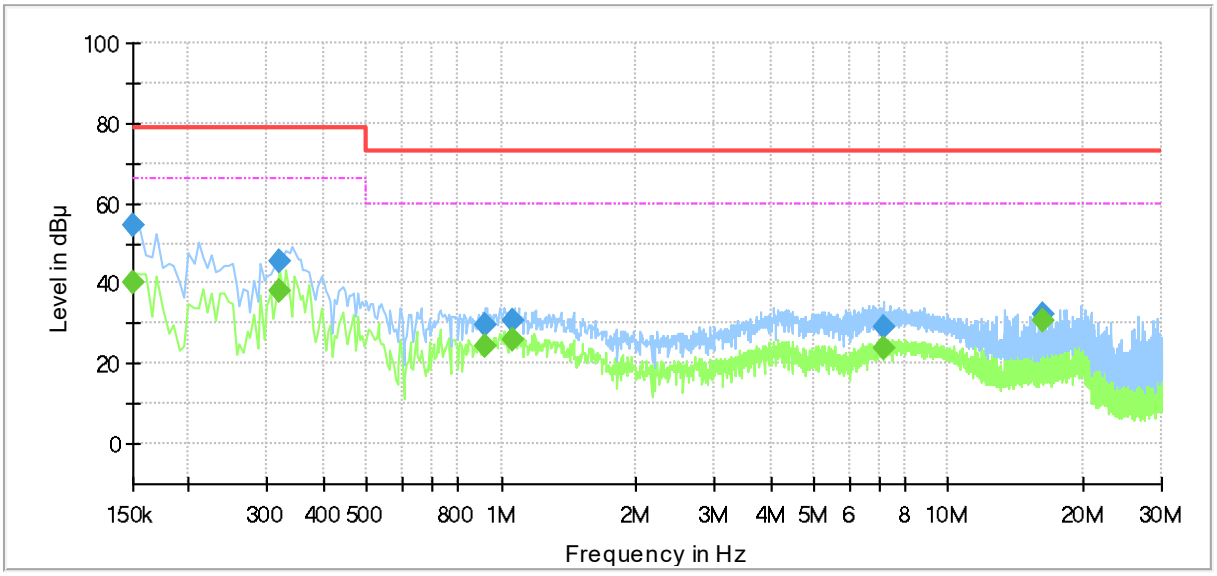
Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	---	40.91	66.00	25.09	1000.0	9.000	L1	19.5
0.150000	54.77	---	79.00	24.23	1000.0	9.000	L1	19.5
0.160000	---	37.64	66.00	28.36	1000.0	9.000	L1	19.5
0.160000	52.70	---	79.00	26.30	1000.0	9.000	L1	19.5
0.950000	---	27.58	60.00	32.42	1000.0	9.000	L1	19.6
0.950000	32.12	---	73.00	40.88	1000.0	9.000	L1	19.6
7.335000	---	23.80	60.00	36.20	1000.0	9.000	L1	20.0
7.335000	28.99	---	73.00	44.01	1000.0	9.000	L1	20.0
16.230000	---	30.53	60.00	29.47	1000.0	9.000	L1	20.3
16.230000	31.88	---	73.00	41.12	1000.0	9.000	L1	20.3

○ Test Date : 2025-10-03
● Test Mode : Mode 1

Test Report

1 / 1

Test Description:	Conducted Emission
Job No.:	KES-EM253464
Phase:	N
Mode:	Mode 1
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	---	40.45	66.00	25.55	1000.0	9.000	N	19.5
0.150000	54.64	---	79.00	24.36	1000.0	9.000	N	19.5
0.320000	---	37.97	66.00	28.03	1000.0	9.000	N	19.5
0.320000	45.60	---	79.00	33.40	1000.0	9.000	N	19.5
0.920000	---	24.27	60.00	35.73	1000.0	9.000	N	19.6
0.920000	29.92	---	73.00	43.08	1000.0	9.000	N	19.6
1.055000	---	26.08	60.00	33.92	1000.0	9.000	N	19.6
1.055000	30.62	---	73.00	42.38	1000.0	9.000	N	19.6
7.200000	---	23.81	60.00	36.19	1000.0	9.000	N	20.0
7.200000	29.22	---	73.00	43.78	1000.0	9.000	N	20.0
16.230000	---	30.63	60.00	29.37	1000.0	9.000	N	20.3
16.230000	32.57	---	73.00	40.43	1000.0	9.000	N	20.3

6.1.5 Remark

Complies with the test requirements.

6.2 Conducted Emissions at Telecommunication Ports

6.2.1 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	■
PULSE LIMITER	ESH3-Z2	Rohde & Schwarz	101915	2024-11-06	2025-11-06	■
8-WIRE ISN CAT3,5	ENY81	Rohde & Schwarz	100174	2024-11-12	2025-11-12	■

6.2.2 Test Location : SHIELD ROOM #6

6.2.3 Test Conditions :

Temperature	Relative Humidity
(25.0 ~ 25.1) °C	(57.7 ~ 57.8) % R.H.

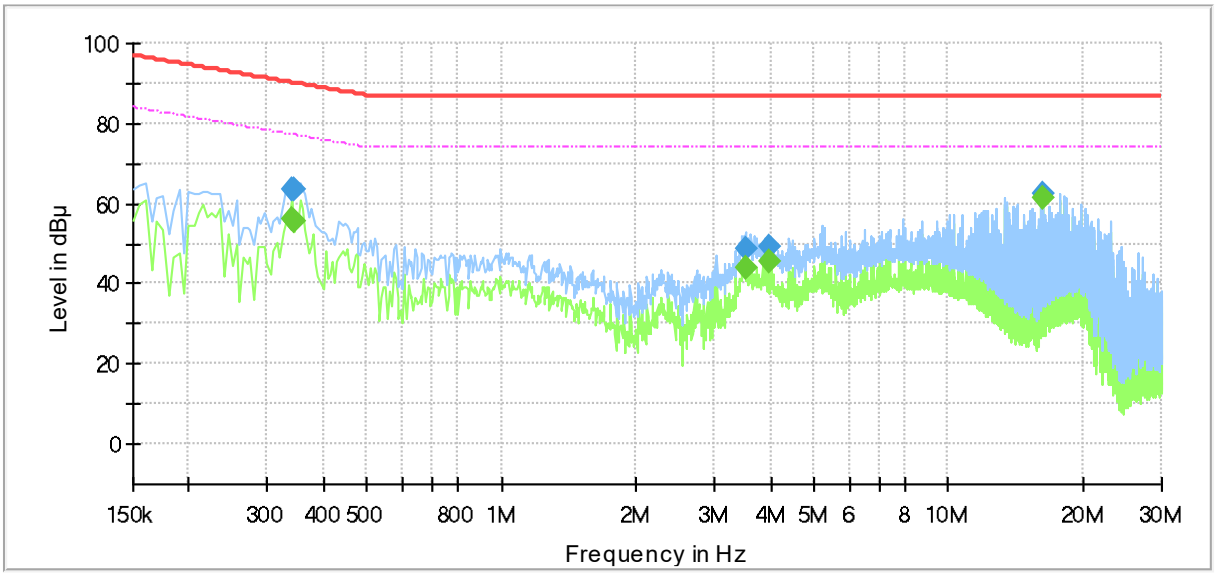
6.2.4 Test Result

○ Test Date : 2025-10-03
● Test Mode : Mode 1

Test Report

1 / 1

Test Description:	Telecommunication Emission
Job No.:	KES-EM253464
Mode :	Mode 1
Speed :	100 Mbps
Operator Name:	KES



Final_Result

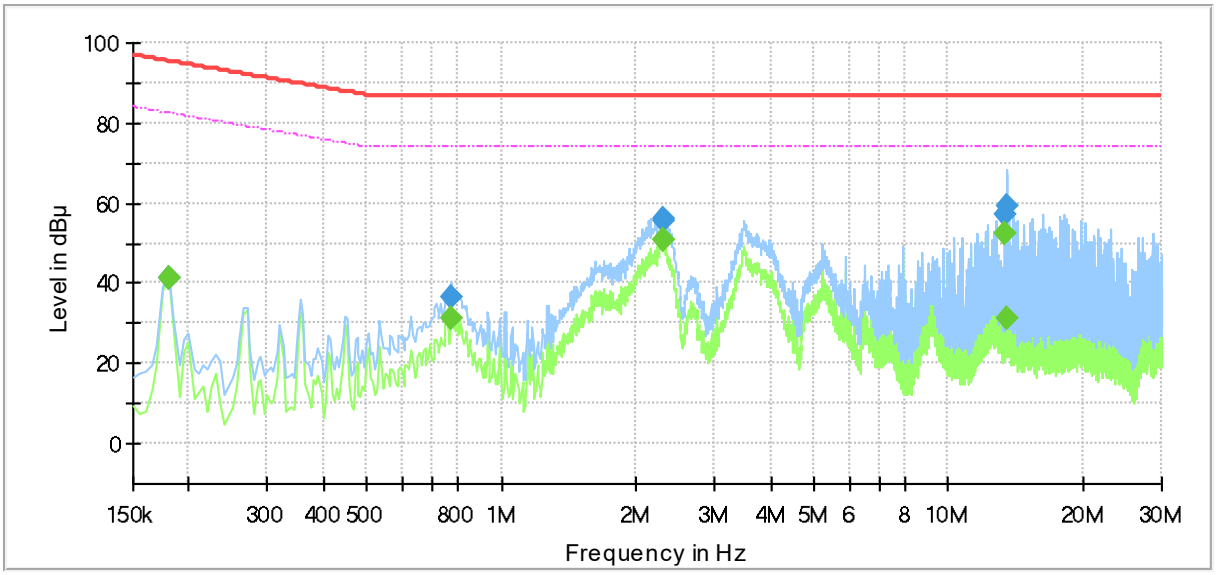
Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.340000	---	56.09	77.20	21.11	1000.0	9.000	Single Line	19.4
0.340000	63.36	---	90.20	26.84	1000.0	9.000	Single Line	19.4
0.345000	---	55.52	77.08	21.56	1000.0	9.000	Single Line	19.4
0.345000	63.47	---	90.08	26.61	1000.0	9.000	Single Line	19.4
3.510000	---	43.71	74.00	30.29	1000.0	9.000	Single Line	19.4
3.510000	48.64	---	87.00	38.36	1000.0	9.000	Single Line	19.4
3.955000	---	45.61	74.00	28.39	1000.0	9.000	Single Line	19.4
3.955000	49.35	---	87.00	37.65	1000.0	9.000	Single Line	19.4
16.230000	---	61.48	74.00	12.52	1000.0	9.000	Single Line	19.8
16.230000	62.32	---	87.00	24.68	1000.0	9.000	Single Line	19.8

○ Test Date : 2025-10-03
● Test Mode : Mode 2

Test Report

1 / 1

Test Description:	Telecommunication Emission
Job No.:	KES-EM253464
Mode :	Mode 2
Speed :	100 Mbps
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.180000	---	41.06	82.49	41.43	1000.0	9.000	Single Line	19.6
0.180000	41.23	---	95.49	54.26	1000.0	9.000	Single Line	19.6
0.775000	---	31.44	74.00	42.56	1000.0	9.000	Single Line	19.3
0.775000	36.39	---	87.00	50.61	1000.0	9.000	Single Line	19.3
2.295000	---	50.83	74.00	23.17	1000.0	9.000	Single Line	19.3
2.295000	55.88	---	87.00	31.12	1000.0	9.000	Single Line	19.3
2.300000	---	51.06	74.00	22.94	1000.0	9.000	Single Line	19.3
2.300000	55.36	---	87.00	31.64	1000.0	9.000	Single Line	19.3
13.420000	---	52.42	74.00	21.58	1000.0	9.000	Single Line	19.7
13.420000	56.91	---	87.00	30.09	1000.0	9.000	Single Line	19.7
13.565000	---	31.03	74.00	42.97	1000.0	9.000	Single Line	19.7
13.565000	59.46	---	87.00	27.54	1000.0	9.000	Single Line	19.7

6.2.5 Remark

Complies with the test requirements.

6.3 Radiated Emissions(Below 1 ㎓)

6.3.1 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	SCHWARZBECK	9168-461	2024-05-09	2026-05-09	■
ATTENUATOR	6806.17.A	HUBER+SUHNER	-	2025-02-13	2026-02-13	■

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

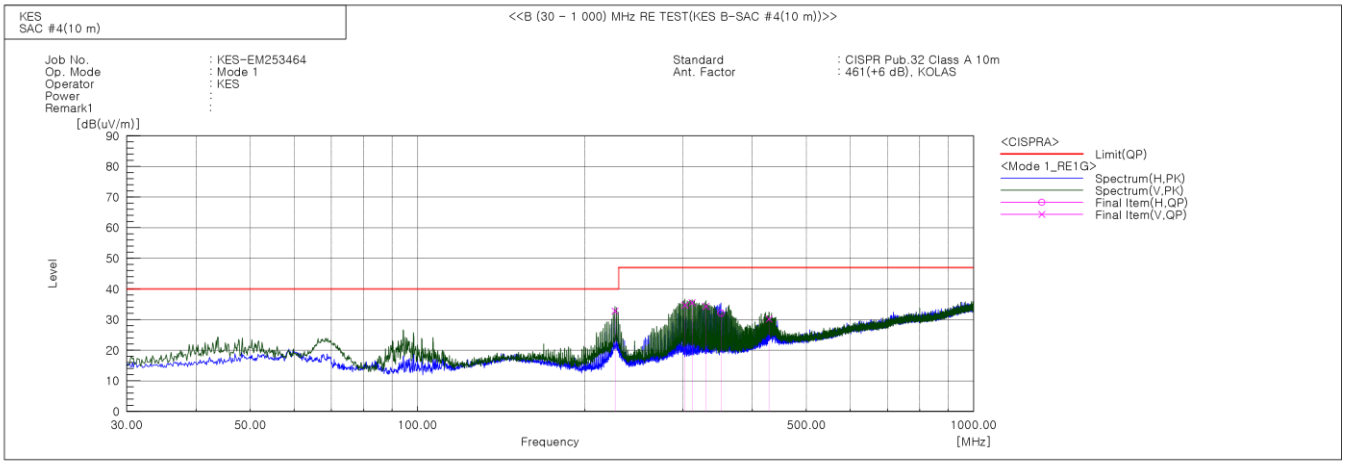
6.3.3 Test Conditions :

Temperature	Relative Humidity
(23.1 ~ 23.2) °C	(56.4 ~ 56.5) % R.H.

6.3.4 Test Result

○ Test Date : 2025-10-04

● Test Mode : Mode 1



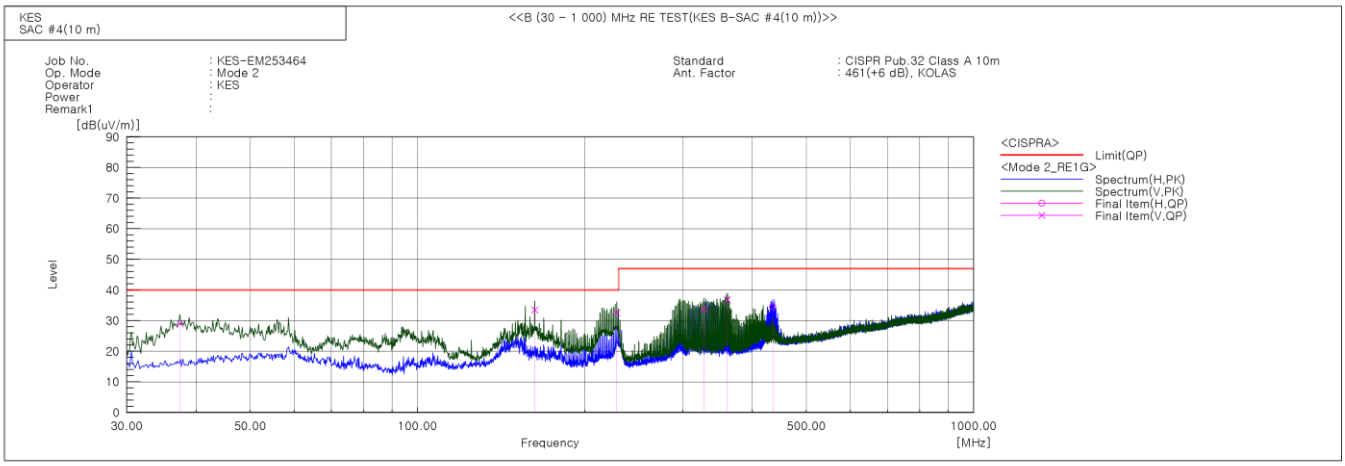
Final Result

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	226.546	V	53.8	-21.0	32.8	40.0	7.2	103.0	45.0	
2	302.570	V	51.7	-17.0	34.7	47.0	12.3	101.0	342.0	
3	311.664	V	52.1	-16.6	35.5	47.0	11.5	102.0	353.0	
4	329.973	V	50.4	-16.1	34.3	47.0	12.7	110.0	166.0	
5	351.191	H	47.6	-15.5	32.1	47.0	14.9	316.0	94.0	
6	428.670	V	42.6	-12.4	30.2	47.0	16.8	142.0	157.0	

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

○ Test Date : 2025-10-04

● Test Mode : Mode 2



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	37.396	V	51.1	-22.1	29.0	40.0	11.0	135.0	87.0	
2	162.526	V	53.1	-19.6	33.5	40.0	6.5	102.0	135.0	
3	228.244	V	53.4	-20.9	32.5	40.0	7.5	102.0	67.0	
4	327.184	V	50.0	-16.2	33.8	47.0	13.2	104.0	183.0	
5	360.649	V	51.9	-15.1	36.8	47.0	10.2	101.0	191.0	
6	435.218	H	46.6	-12.1	34.5	47.0	12.5	384.0	139.0	

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

6.3.5 Remark

The measurement value was satisfied compared to the disturbance limit.

6.4 Radiated Emissions(Above 1 ㎓)

6.4.1 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	SCHWARZBECK	9120D-1802	2024-11-04	2025-11-04	■

6.4.2 Test Location : SEMI ANECHOIC CHAMBER #5

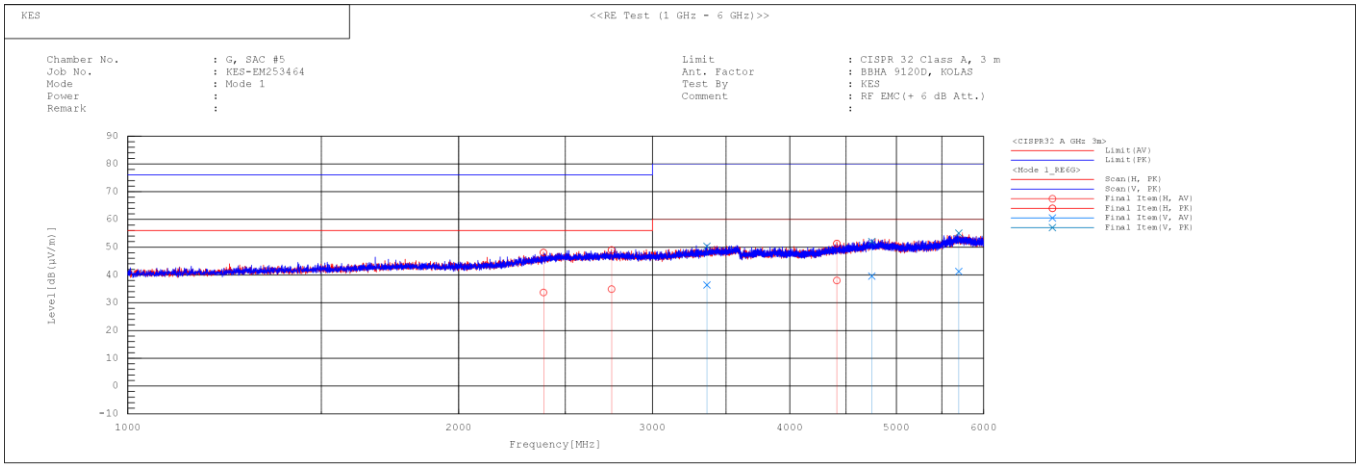
6.4.3 Test Conditions :

Temperature	Relative Humidity
(23.7 ~ 23.8) °C	(55.7 ~ 55.8) % R.H.

6.4.4 Test Result

○ Test Date : 2025-10-04

● Test Mode : Mode 1



Final Result

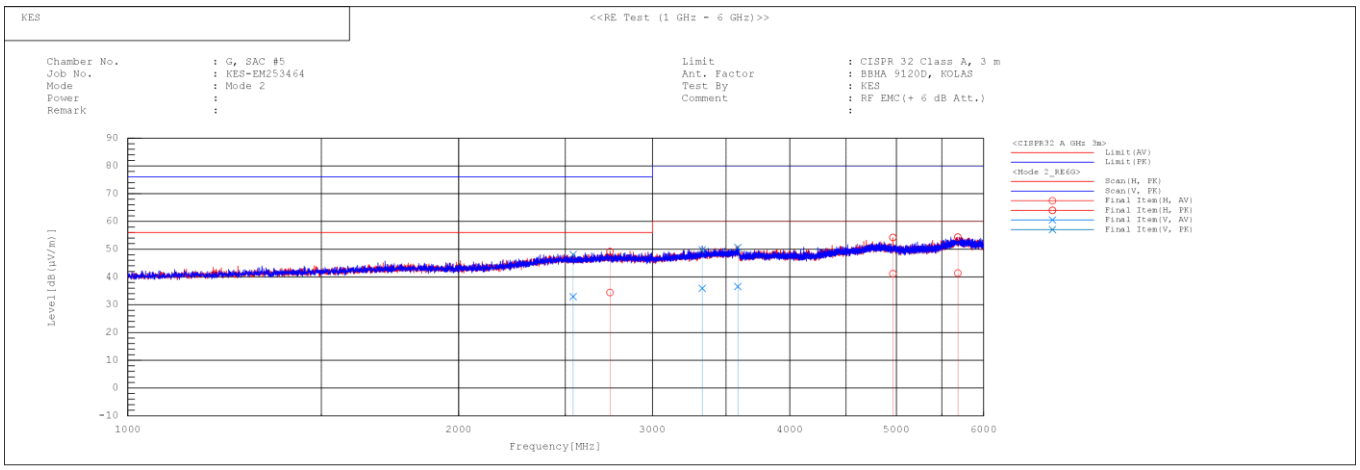
No.	Frequency [MHz]	Pol	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit AV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [deg]
1	2388.249	H	28.8	43.2	4.9	33.7	48.1	56.0	76.0	22.3	27.9	100.0	0.1
2	2753.783	H	28.9	43.0	6.0	34.9	49.0	56.0	76.0	21.1	27.0	100.0	245.3
3	3362.476	V	29.1	43.0	7.3	36.4	50.3	60.0	80.0	23.6	29.7	100.0	219.4
4	4413.257	H	27.4	40.7	10.6	38.0	51.3	60.0	80.0	22.0	28.7	100.0	256.6
5	4748.503	V	28.1	40.5	11.5	39.6	52.0	60.0	80.0	20.4	28.0	100.0	0.0
6	5698.360	V	27.3	41.1	14.0	41.3	55.1	60.0	80.0	18.7	24.9	100.0	202.4

※ 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.

○ Test Date : 2025-10-04

● 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	2541.135	V	27.7	42.9	5.2	32.9	48.1	56.0	76.0	23.1	27.9	100.0	1.8
2	2745.379	H	28.5	43.2	5.9	34.4	49.1	56.0	76.0	21.6	26.9	100.0	1.0
3	3330.287	V	28.7	42.6	7.2	35.9	49.8	60.0	80.0	24.1	30.2	100.0	315.5
4	3588.376	V	28.7	42.8	7.8	36.5	50.6	60.0	80.0	23.5	29.4	100.0	3.8
5	4964.101	H	28.8	41.8	12.4	41.2	54.2	60.0	80.0	18.8	25.8	100.0	16.6
6	5685.028	H	27.5	40.5	13.9	41.4	54.4	60.0	80.0	18.6	25.6	100.0	305.6

※ 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.

6.4.5 Remark

Complies with the test requirements.

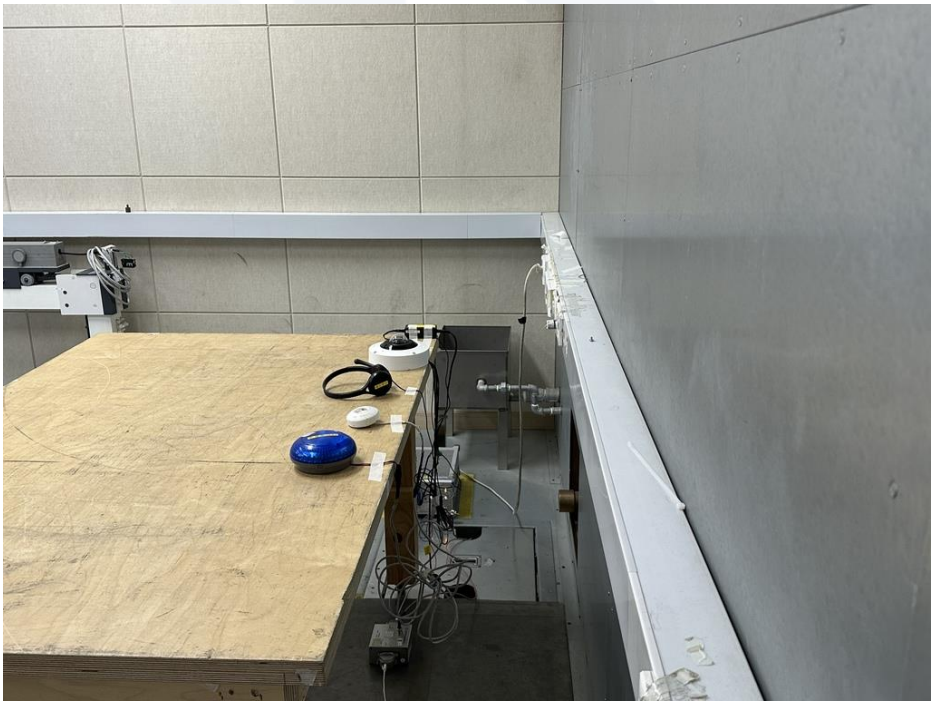
7 Test Setup Photos and EUT Photographs

7.1 Test Setup Photos

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

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

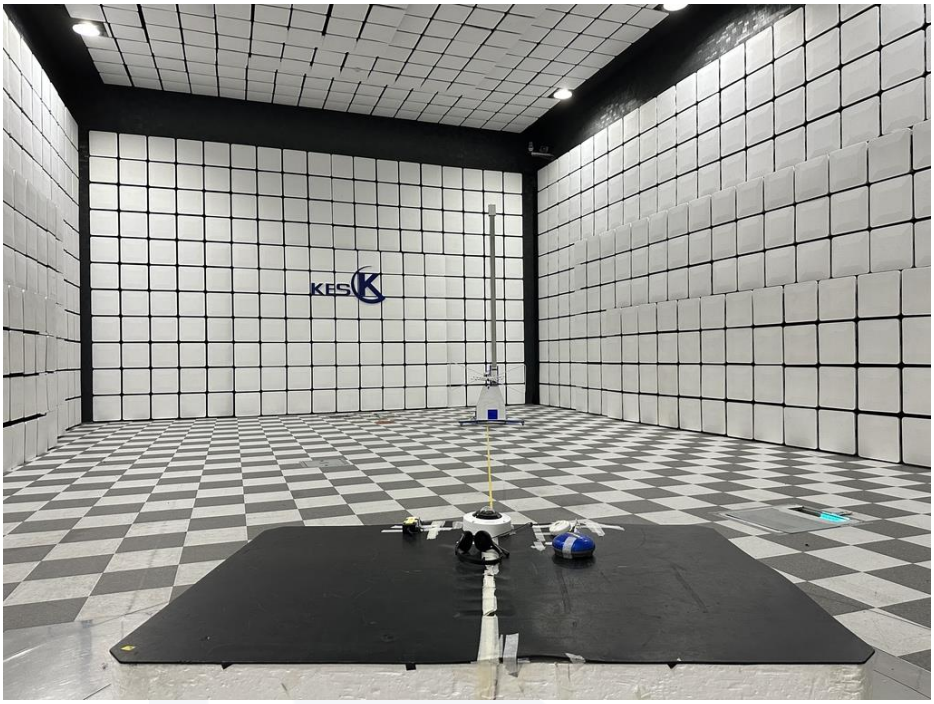
<Conducted Emissions at Telecommunication Ports - Front> Mode 1



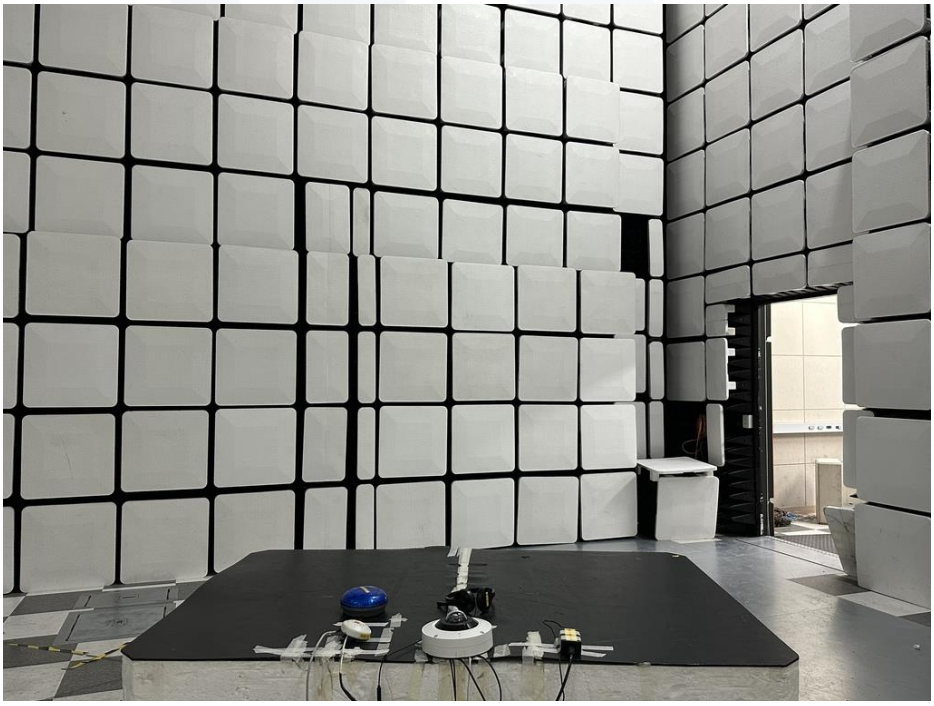
<Conducted Emissions at Telecommunication Ports - Rear> Mode 1

<Conducted Emissions at Telecommunication Ports - Front> Mode 2

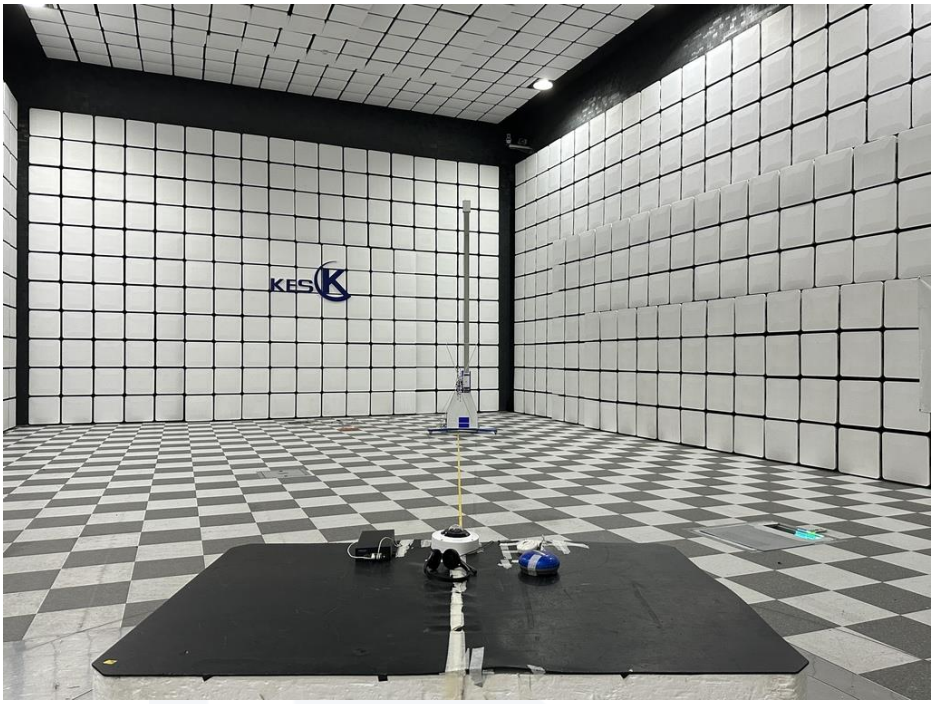
<Conducted Emissions at Telecommunication Ports - Rear> Mode 2



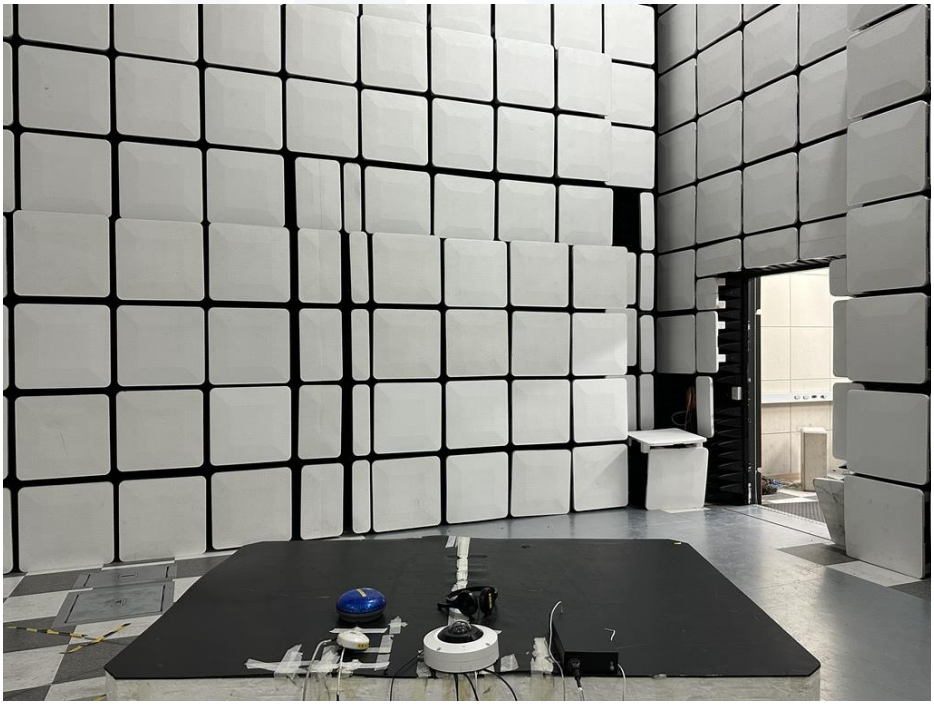
<Radiated Emissions(Below 1 ㎓) - Front> Mode 1



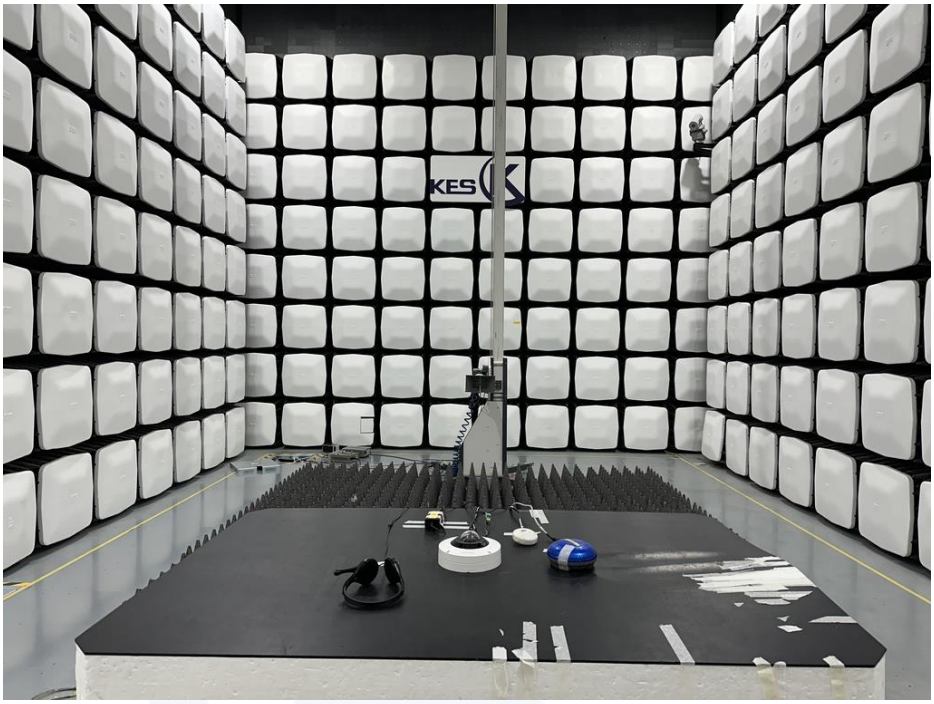
<Radiated Emissions(Below 1 ㎓) - Rear> Mode 1



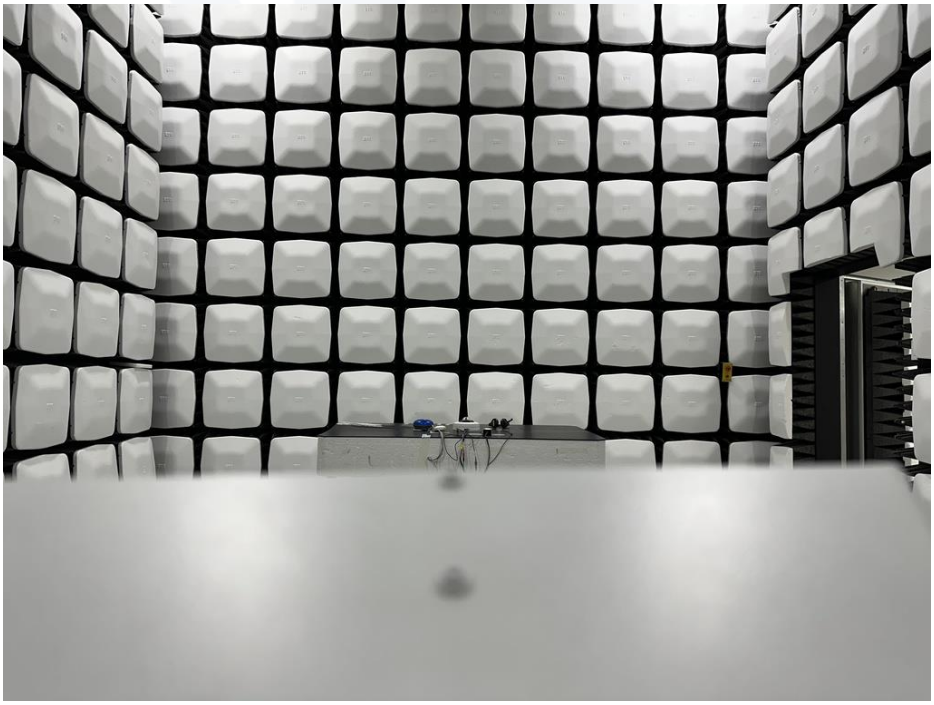
<Radiated Emissions(Below 1 ㎓) - Front> Mode 2



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

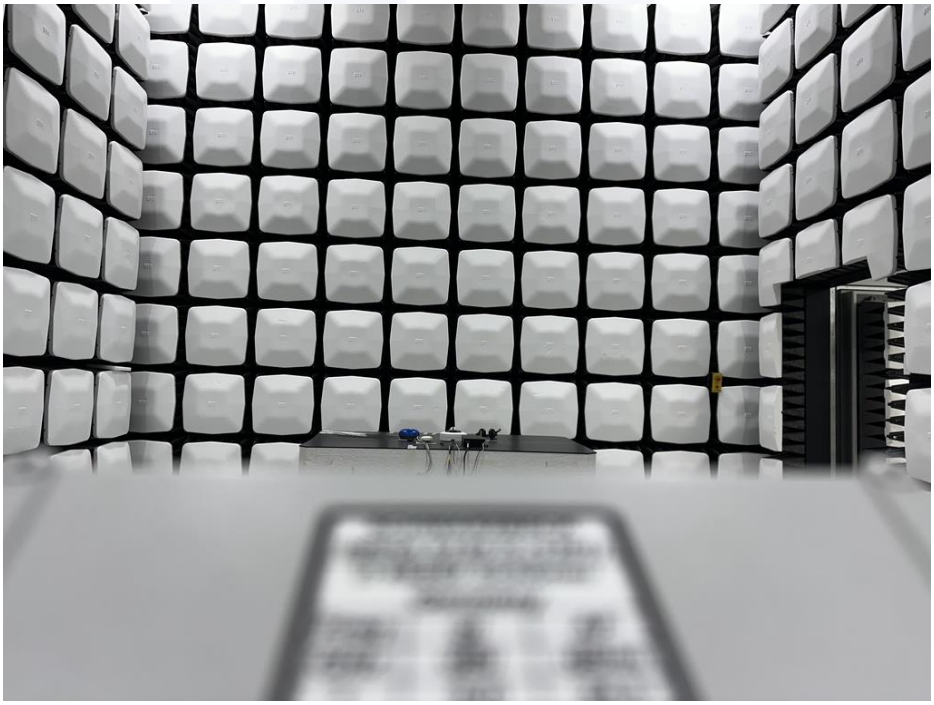


<Radiated Emissions(Above 1 ㎓) - Front> Mode 1



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

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

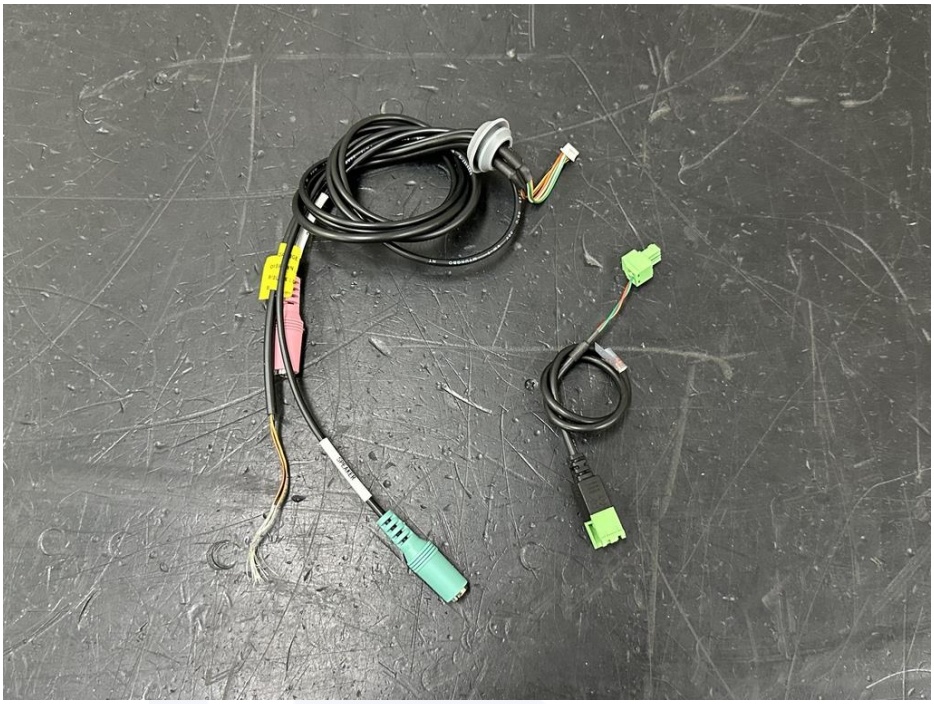


<Radiated Emissions(Above 1 ㎓) - Rear> Mode 2

7.2 EUT Photographs

<EUT External Photographs - Top>

<EUT External Photographs - Bottom>



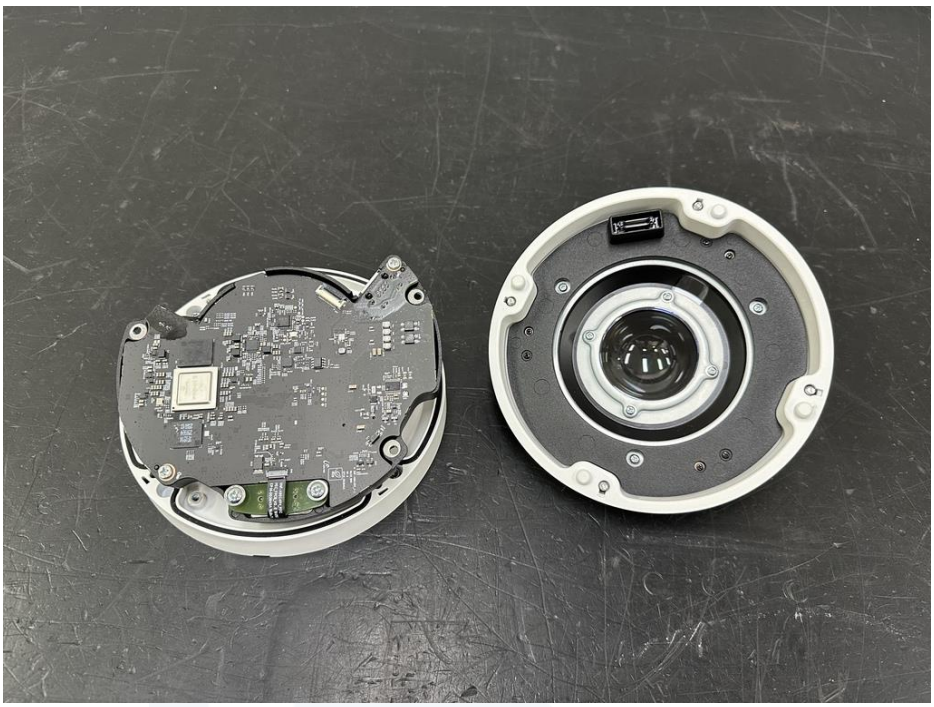
<Components>

<Port-1>

<Port-2>

<Port-3>

<Port-4>



<EUT Internal Photographs>

7.3 Label

Name	:	Hanwha Vision Co., Ltd.
Product item	:	NETWORK CAMERA
Model name	:	XNF-A9014RV

The End.