# 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 | : | XNV-A8085R |
| ◯ 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. 24. ~ 2025. 10. 26.

**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.
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This test report is not related to KOLAS accreditation.

| Affirmation | Tested by | Technical Manager by |
|---|---|---|
| | Name : DaeSoo Kim [김대수]2025/11/06 | Name : DongHun Jang [장동훈]2025/11/06 |

**2025. 11. 06.**

**KES Co., Ltd.**

# REPORT REVISION HISTORY

| Date | Test Report No. | Revision History |
|---|---|---|
| 2025. 11. 06. | KES-EM253634 | 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)

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# 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)<br>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)<br>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)<br>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

N/A

## 2.5 Device Modifications

N/A

# 3 General Product Description

| Division | | Specificity |
|---|---|---|
| Internal maximum operating frequency | | 3 200 ㎒ |
| Power | Rated power | DC 12 V,<br>PoE 56 V |
| | Test power | AC 230 V / 50 ㎐ |
| I/O Port | User port | DC IN 1 EA, RJ-45 1 EA, ALARM AUDIO 1 EA,<br>Micro SD Slot 2 EA |
| | Unused/Administrator Ports | USB-TYPE C 1 EA |
| function | Product function | NETWORK CAMERA |
| | Wireless function | Not applicable |
| Components | | Main body 1 EA, DC Cable 1 EA, ALARM AUDIO Cable 1 EA |
| Other | | Not applicable |

| | XNV-A8085R |
|---|---|
| **Video** | |
| Imaging Device | 1/2.8" CMOS |
| Resolution | 2560x1920, 2560x1440, 1920x1080, 1600x1200, 1280x960, 1280x720, 1024x768, 800x600, 640x480, 640x360, 320x240, 320x180 |
| Max. Framerate | H.265/H.264: Max. 30fps/25fps(60Hz/50Hz)<br>MJPEG: Max. 30fps(@5MP Max. 5fps) |
| NETD | None |
| Pixel Size | None |
| Min. Illumination | Color: 0.04Lux(F1.3, 1/30sec, 30IRE)<br>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) | 3.3~9.3mm(2.8x) motorized varifocal |
| Optical Zoom | None |
| Max. Aperture Ratio | F1.3(Wide)~F2.3(Tele) |
| Angular Field of View | H: 99°(Wide)~31°(Tele)<br>V: 71°(Wide)~23°(Tele)<br>D: 133°(Wide)~39°(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<br>- Color: gray/green/red/blue/black/white/purple/yellow<br>- Mosaic<br>Dynamic Privacy Mask(Based on AI engine)<br>- Color: gray/green/red/blue/black/white/purple/yellow<br>- 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)<br>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<br>Attributes: Person(Gender, Clothing top/bottom color, Bag), Face(Age, Gender, Mask, Glasses), Vehicle(Type: car/bus/truck/motorcycle/bicycle, Color)<br>Support BestShot<br>Support Re-ID(Person)<br><br>Analytics events based on AI engine<br>- 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)<br><br>Analytics events<br>- 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)<br>*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<br>- File upload(image): e-mail/FTP/SFTP<br>- File upload(video clip): FTP/SFTP<br>- Notification: e-mail<br>- Recording: SD/SDHC/SDXC or NAS recording at event triggers<br>- Alarm output<br>- Handover: PTZ preset, send message by HTTP/HTTPS/TCP<br>- Audio clip playback(WAV, MP3)<br>- MQTT: publication<br>- 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<br>PoE+: 50m(164.04ft)<br>PoE: 30m(98.43ft) |
| **Network** | |
| Ethernet | Metal shielded RJ-45(10/100/1000 BASE-T) |
| Video Compression | H.265/H.264: Main/Baseline/High<br>MJPEG |
| Audio Compression | G.711(PCM): 8kHz(64Kbps)<br>G.726(ADPCM): 8kHz(16/24/32/40Kbps)<br>AAC-LC: 16kHz(48Kbps)<br>OPUS: 48kHz(64Kbps) |
| Smart Codec | WiseStream(Based on AI engine) |
| Video Quality Adjustment | None |
| Bitrate Control | H.264/H.265: CBR or VBR<br>MJPEG: VBR |
| Streaming | Unicast(20 users) / Multicast<br>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, SIP/PBX integration) | Support |
| Security | None |
| Application Programming Interface | ONVIF Profile S/G/T/M<br>SUNAPI(HTTP API)<br>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)<br>+74°C(+165°F)(MAX) based on NEMA-TS 2(2.2.7)<br>* Start up should be done at above -30°C<br>0~100%RH(Condensing)<br>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) | 0.017 ㎡ |
| 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<br>PoE : Max. 12.9W, typical 8.3W<br>12VDC: Max. 9.5W, typical 14.5W<br>Support Wisepower<br>- Power monitoring(Max./Current/Avg.) |
| **Mechanical** | |
| Color / Material | White / Aluminum<br>Bubble: Hard-coated dome |
| RAL Code | RAL9003 |
| Product Dimensions / Weight | ø180x125mm(ø7.09x4.92"), 1860g(4.10 lb) |
| Compatible Conduit hole / Gangbox | 19.1mm(3/4")(M25)<br>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-A8085R | - | HANWHA VISION VIETNAM COMPANY LIMITED | EUT |
| AC/DC ADAPTOR | FSP060-DIBAN2 | - | Zhonghan Electronics(Shenzhen) Co., Ltd. | - |
| PoE Injector | PT-PSE109GBRO-AH | PT1933220259 | Dongguan PROCET Network Technology Co.,Ltd | - |
| Micro SD CARD 1 | - | - | Transcend | - |
| Micro SD CARD 2 | - | - | Transcend | - |
| SMART PHONE | V50 | - | LG | - |
| LAPTOP | NT630Z5J | JK9091EF400142M | SAMSUNG | - |
| LAPTOP ADAPTOR | PA-1400-14 | AA-PA2N40W | LITEON | - |
| HEADSET | K550 | - | Britz® | - |
| Button Alarm | - | - | - | - |
| LED Alarm | SIP-1201DD D0 | - | SAMSUNG TECHWIN 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) | DC IN (2 PIN) | AC/DC ADAPTOR | DC OUT (2 PIN) | 1.0 | U |
| | RJ-45 (PoE) | LAPTOP | RJ-45 | 3.1 | U |
| | Alarm In (2 PIN) | Button Alarm | Alarm OUT | 3.1 | U |
| | Alarm OUT (2 PIN) | LED Alarm | Alarm IN | 4.1 | U |
| | AUDIO OUT (3.5 mm) | HEADSET | 3.5 mm | 2.0 | U |
| | AUDIO IN (3.5 mm) | | 3.5 mm | | |
| | Micro SD SLOT | Micro SD CARD 1 | Micro SD SLOT | - | - |
| | Micro SD SLOT | Micro SD CARD 2 | Micro SD SLOT | - | - |
| LAPTOP | 3.5 mm | SMARTPHONE | 3.5 mm | 1.5 | U |
| | DC JACK | LAPTOP ADAPTOR | DC JACK | 1.0 | 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 |
| | Alarm In (2 PIN) | Button Alarm | Alarm OUT | 3.1 | U |
| | Alarm OUT (2 PIN) | LED Alarm | Alarm IN | 4.1 | U |
| | AUDIO OUT (3.5 mm) | HEADSET | 3.5 mm | 2.0 | U |
| | AUDIO IN (3.5 mm) | | 3.5 mm | | |
| | Micro SD SLOT | Micro SD CARD 1 | Micro SD SLOT | - | - |
| | Micro SD SLOT | Micro SD CARD 2 | Micro SD SLOT | - | - |
| LAPTOP | 3.5 mm | SMARTPHONE | 3.5 mm | 1.5 | U |
| | RJ-45 | PoE Injector | RJ-45 (LAN) | 1.0 | U |
| | DC JACK | LAPTOP ADAPTOR | DC JACK | 1.0 | U |

* Unshielded=U, Shielded=S

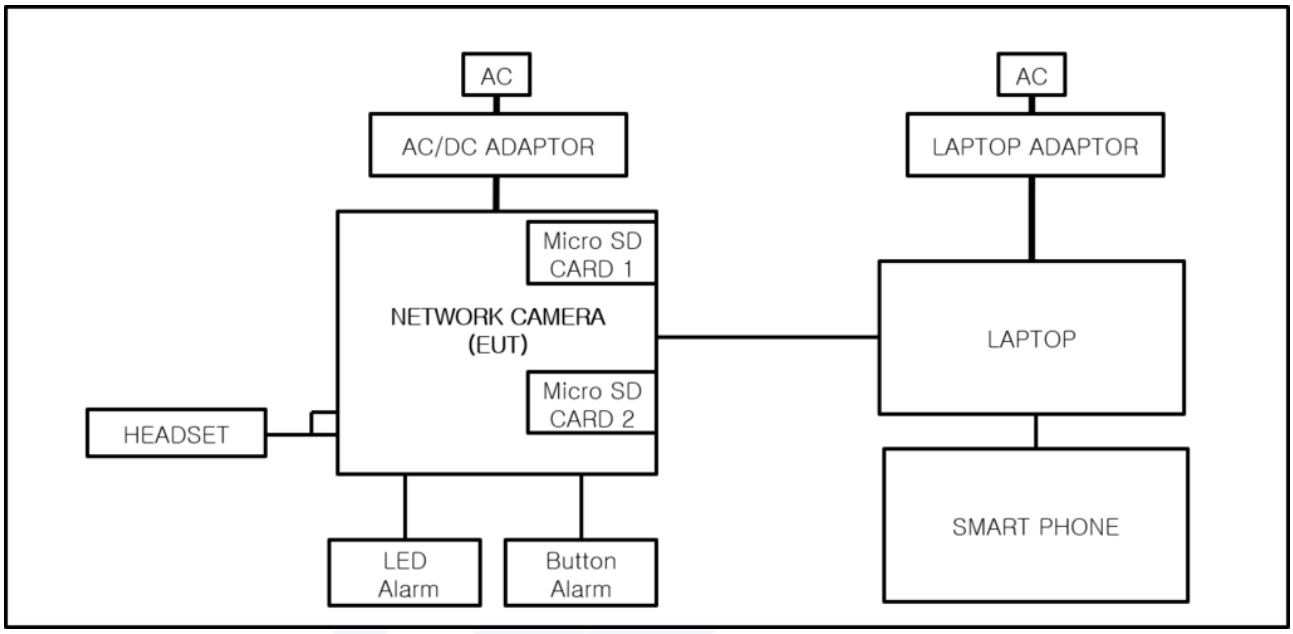
## 4.4 EUT Operating Mode(s)

| Category | Mode | Operating |
|---|---|---|
| Mode 1 | DC | 1. By connecting the test equipment and the DC power supply with a wired connection, the image output of the test equipment is confirmed by the WEB VIEWER.<br>2. After activating the operation of the microphone, run a 1 KHz Tone voice file on a smartphone connected to a laptop to check whether the headset outputs sound normally or not on the headset connected to the test equipment.<br>3. Check the ping test of the laptop to see if the network of the test equipment is operating normally or not.<br>4. After the test, it was confirmed that the recorded image stored in the Micro SD Card was checked. |
| Mode 2 | PoE | 1. By connecting the test equipment and the PoE Injector by wire, the image output of the test equipment is checked by WEB VIEWER.<br>2. After activating the operation of the microphone, run a 1 KHz Tone voice file on a smartphone connected to a laptop to check whether the headset outputs sound normally or not on the headset connected to the test equipment.<br>3. Check the ping test of the laptop to see if the network of the test equipment is operating normally or not.<br>4. After the test, it was confirmed that the recorded image stored in the Micro SD Card was checked. |

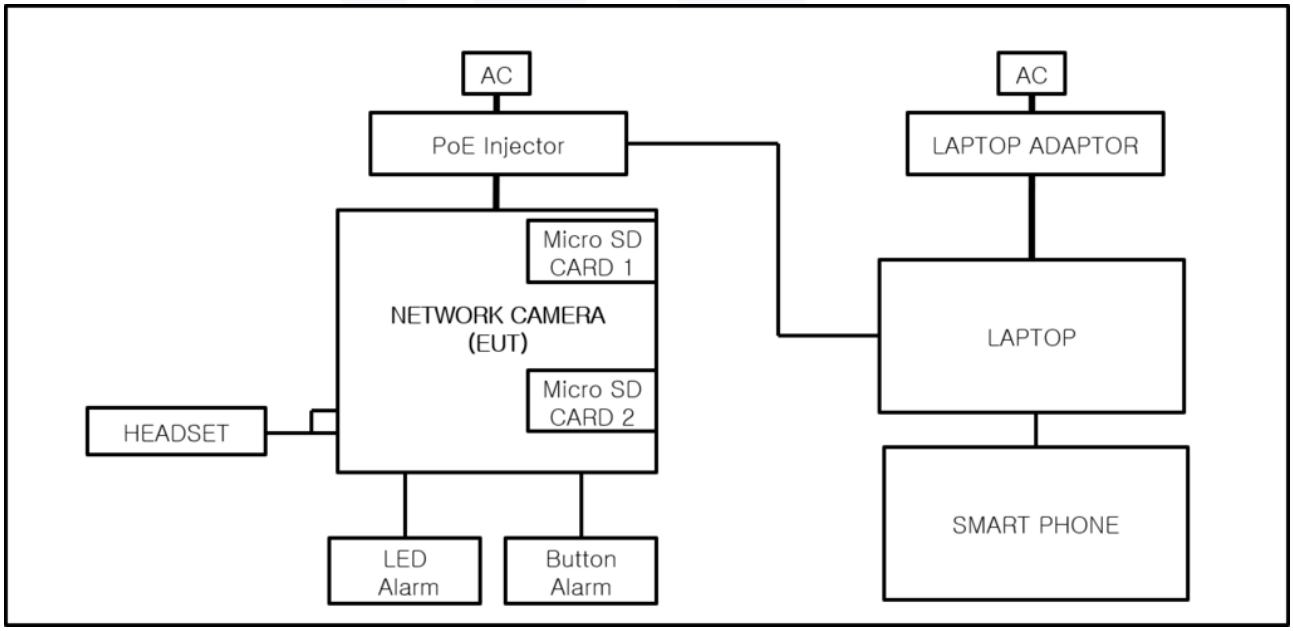
## 4.5 Test operating S/W

| Name | Version | Manufacture Company |
|---|---|---|
| WEB VIEWER | - | Hanwha Vision Co., Ltd. |

## 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 |
|---|---|
| (23.3 ~ 23.4) °C | (50.3 ~ 50.4) % R.H. |

### 6.1.4 Test Result

○ Test Date : 2025-10-24

● Test Mode : Mode 1

# Test Report

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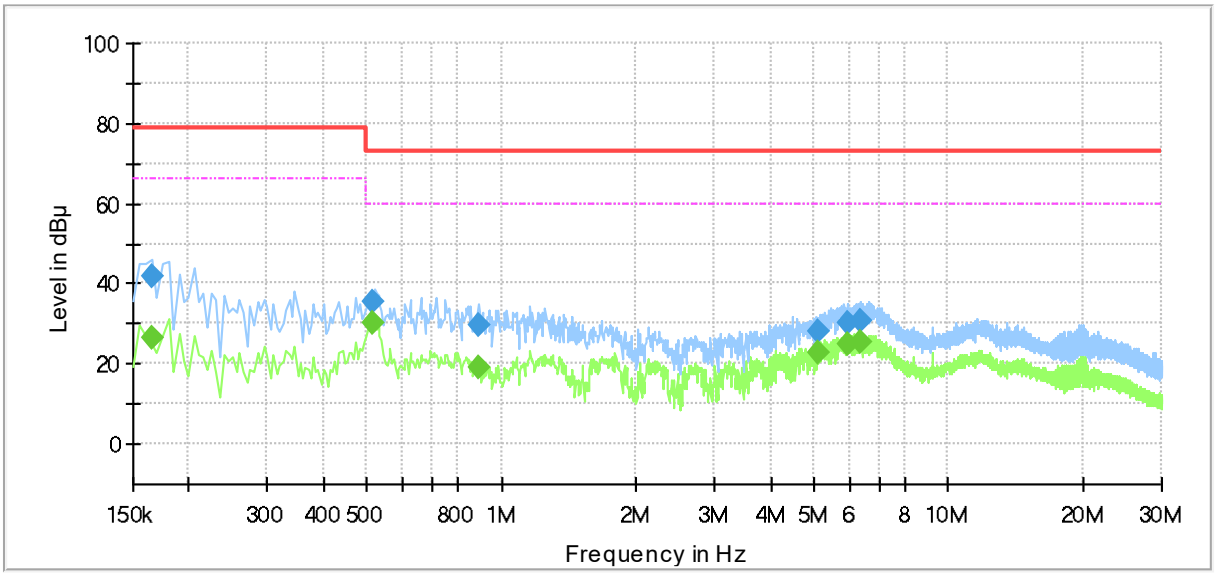
| | |
|---|---|
| Test Description: | Conducted Emission |
| Job No.: | KES-EM253634 |
| Phase: | L |
| Mode: | Mode 1 |
| Operator Name: | KES |




## Final_Result

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Line | Corr. (dB) |
|---|---|---|---|---|---|---|---|---|
| 0.165000 | --- | 26.73 | 66.00 | 39.27 | 1000.0 | 9.000 | L1 | 19.5 |
| 0.165000 | 41.77 | --- | 79.00 | 37.23 | 1000.0 | 9.000 | L1 | 19.5 |
| 0.515000 | --- | 30.44 | 60.00 | 29.56 | 1000.0 | 9.000 | L1 | 19.6 |
| 0.515000 | 35.67 | --- | 73.00 | 37.33 | 1000.0 | 9.000 | L1 | 19.6 |
| 0.890000 | --- | 19.33 | 60.00 | 40.67 | 1000.0 | 9.000 | L1 | 19.6 |
| 0.890000 | 29.60 | --- | 73.00 | 43.40 | 1000.0 | 9.000 | L1 | 19.6 |
| 5.120000 | --- | 22.62 | 60.00 | 37.38 | 1000.0 | 9.000 | L1 | 19.9 |
| 5.120000 | 28.21 | --- | 73.00 | 44.79 | 1000.0 | 9.000 | L1 | 19.9 |
| 5.950000 | --- | 24.75 | 60.00 | 35.25 | 1000.0 | 9.000 | L1 | 20.0 |
| 5.950000 | 30.41 | --- | 73.00 | 42.59 | 1000.0 | 9.000 | L1 | 20.0 |
| 6.380000 | --- | 25.63 | 60.00 | 34.37 | 1000.0 | 9.000 | L1 | 20.0 |
| 6.380000 | 30.89 | --- | 73.00 | 42.11 | 1000.0 | 9.000 | L1 | 20.0 |

○ Test Date : 2025-10-24
● Test Mode : Mode 1

# Test Report

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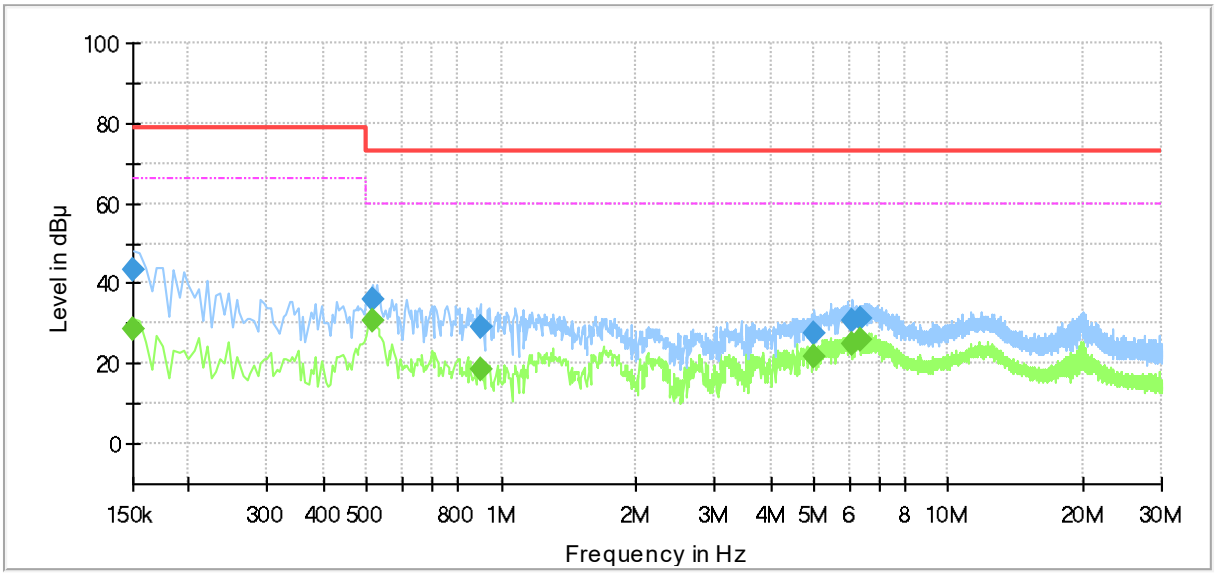
| | |
|---|---|
| Test Description: | Conducted Emission |
| Job No.: | KES-EM253634 |
| Phase: | N |
| Mode: | Mode 1 |
| Operator Name: | KES |




## Final_Result

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time | Bandwidth (kHz) | Line | Corr. (dB) |
|---|---|---|---|---|---|---|---|---|
| 0.150000 | --- | 28.39 | 66.00 | 37.61 | 1000.0 | 9.000 | N | 19.5 |
| 0.150000 | 43.21 | --- | 79.00 | 35.79 | 1000.0 | 9.000 | N | 19.5 |
| 0.515000 | --- | 30.68 | 60.00 | 29.32 | 1000.0 | 9.000 | N | 19.5 |
| 0.515000 | 36.01 | --- | 73.00 | 36.99 | 1000.0 | 9.000 | N | 19.5 |
| 0.895000 | --- | 18.65 | 60.00 | 41.35 | 1000.0 | 9.000 | N | 19.6 |
| 0.895000 | 28.96 | --- | 73.00 | 44.04 | 1000.0 | 9.000 | N | 19.6 |
| 5.000000 | --- | 21.88 | 60.00 | 38.12 | 1000.0 | 9.000 | N | 19.9 |
| 5.000000 | 27.77 | --- | 73.00 | 45.23 | 1000.0 | 9.000 | N | 19.9 |
| 6.120000 | --- | 25.09 | 60.00 | 34.91 | 1000.0 | 9.000 | N | 19.9 |
| 6.120000 | 30.73 | --- | 73.00 | 42.27 | 1000.0 | 9.000 | N | 19.9 |
| 6.380000 | --- | 25.75 | 60.00 | 34.25 | 1000.0 | 9.000 | N | 19.9 |
| 6.380000 | 31.04 | --- | 73.00 | 41.96 | 1000.0 | 9.000 | N | 19.9 |

### 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 | ■ |
| 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 | ■ |
| 8-WIRE ISN CAT6 | ENY81-CAT6 | Rohde & Schwarz | 101666 | 2025-02-27 | 2026-02-27 | ■ |

### 6.2.2 Test Location : SHIELD ROOM #6

### 6.2.3 Test Conditions :

| Temperature | Relative Humidity |
|---|---|
| (23.3 ~ 23.4) °C | (50.3 ~ 50.4) % R.H. |

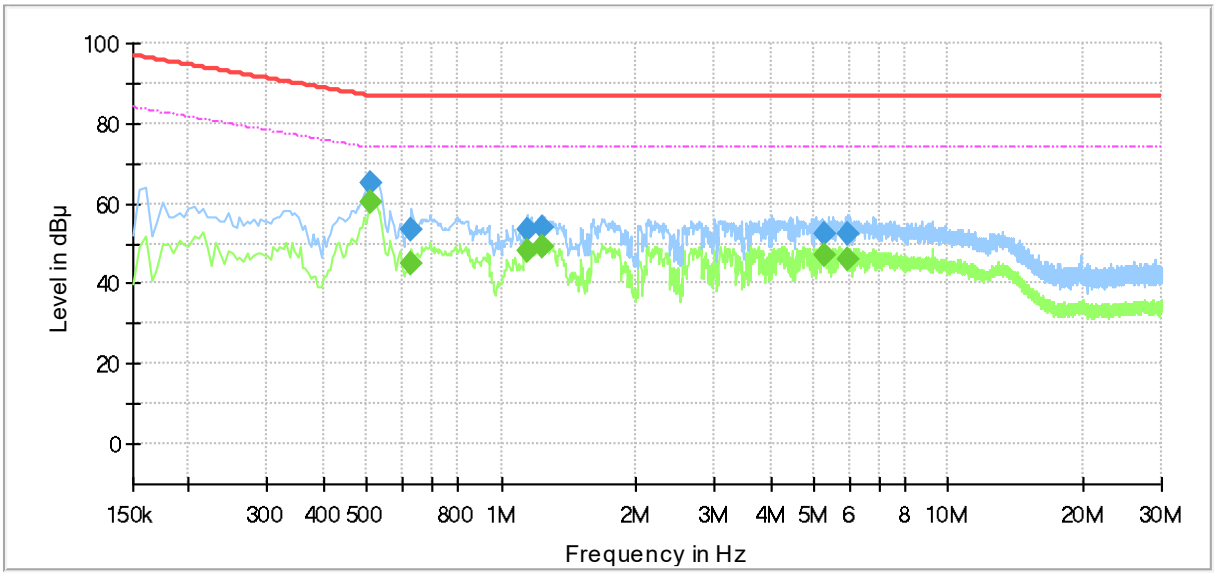
### 6.2.4 Test Result

○ Test Date : 2025-10-24
● Test Mode : Mode 1

# Test Report

1 / 1

| | |
|---|---|
| Test Description: | Telecommunication Emission |
| Job No.: | KES-EM253634 |
| Mode : | Mode 1 |
| Speed : | 1 000 Mbps |
| Operator Name: | KES |




## Final_Result

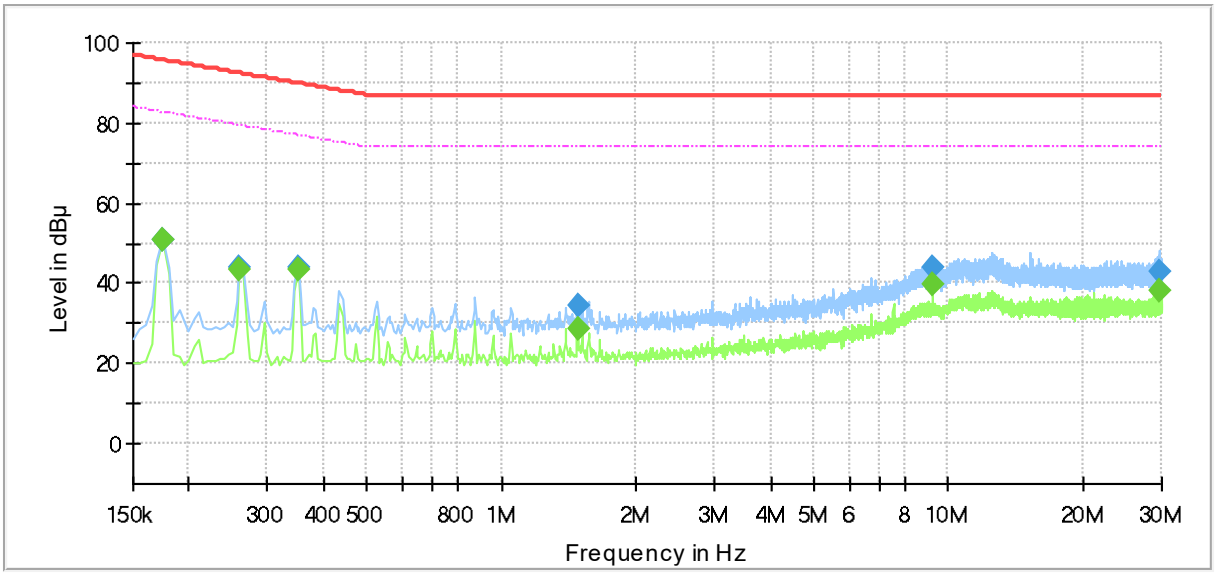
| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Corr. (dB) |
|---|---|---|---|---|---|---|---|---|
| 0.510000 | 65.35 | --- | 87.00 | 21.65 | 1000.0 | 9.000 | Single Line | 19.4 |
| 0.510000 | --- | 60.40 | 74.00 | 13.60 | 1000.0 | 9.000 | Single Line | 19.4 |
| 0.630000 | 53.48 | --- | 87.00 | 33.52 | 1000.0 | 9.000 | Single Line | 19.4 |
| 0.630000 | --- | 44.86 | 74.00 | 29.14 | 1000.0 | 9.000 | Single Line | 19.4 |
| 1.150000 | 53.21 | --- | 87.00 | 33.79 | 1000.0 | 9.000 | Single Line | 19.3 |
| 1.150000 | --- | 48.24 | 74.00 | 25.76 | 1000.0 | 9.000 | Single Line | 19.3 |
| 1.230000 | 53.98 | --- | 87.00 | 33.02 | 1000.0 | 9.000 | Single Line | 19.3 |
| 1.230000 | --- | 49.39 | 74.00 | 24.61 | 1000.0 | 9.000 | Single Line | 19.3 |
| 5.310000 | 52.48 | --- | 87.00 | 34.52 | 1000.0 | 9.000 | Single Line | 19.5 |
| 5.310000 | --- | 46.95 | 74.00 | 27.05 | 1000.0 | 9.000 | Single Line | 19.5 |
| 5.960000 | 52.17 | --- | 87.00 | 34.83 | 1000.0 | 9.000 | Single Line | 19.5 |
| 5.960000 | --- | 45.90 | 74.00 | 28.10 | 1000.0 | 9.000 | Single Line | 19.5 |

○ Test Date : 2025-10-24
● Test Mode : Mode 2

# Test Report

1 / 1

| | |
|---|---|
| Test Description: | Telecommunication Emission |
| Job No.: | KES-EM253634 |
| Mode : | Mode 2 |
| Speed : | 1 000 Mbps |
| Operator Name: | KES |




## Final_Result

| Frequency (MHz) | QuasiPeak (dBµV) | CAverage (dBµV) | Limit (dBµV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Corr. (dB) |
|---|---|---|---|---|---|---|---|---|
| 0.175000 | 50.87 | --- | 95.72 | 44.85 | 1000.0 | 9.000 | Single Line | 19.7 |
| 0.175000 | --- | 50.83 | 82.72 | 31.89 | 1000.0 | 9.000 | Single Line | 19.7 |
| 0.260000 | 44.05 | --- | 92.43 | 48.38 | 1000.0 | 9.000 | Single Line | 19.5 |
| 0.260000 | --- | 43.41 | 79.43 | 36.02 | 1000.0 | 9.000 | Single Line | 19.5 |
| 0.350000 | 43.79 | --- | 89.96 | 46.17 | 1000.0 | 9.000 | Single Line | 19.4 |
| 0.350000 | --- | 43.20 | 76.96 | 33.76 | 1000.0 | 9.000 | Single Line | 19.4 |
| 1.485000 | 34.46 | --- | 87.00 | 52.54 | 1000.0 | 9.000 | Single Line | 19.3 |
| 1.485000 | --- | 28.70 | 74.00 | 45.30 | 1000.0 | 9.000 | Single Line | 19.3 |
| 9.210000 | 43.88 | --- | 87.00 | 43.12 | 1000.0 | 9.000 | Single Line | 19.6 |
| 9.210000 | --- | 39.60 | 74.00 | 34.40 | 1000.0 | 9.000 | Single Line | 19.6 |
| 29.780000 | 42.83 | --- | 87.00 | 44.17 | 1000.0 | 9.000 | Single Line | 20.1 |
| 29.780000 | --- | 37.94 | 74.00 | 36.06 | 1000.0 | 9.000 | Single Line | 20.1 |

### 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

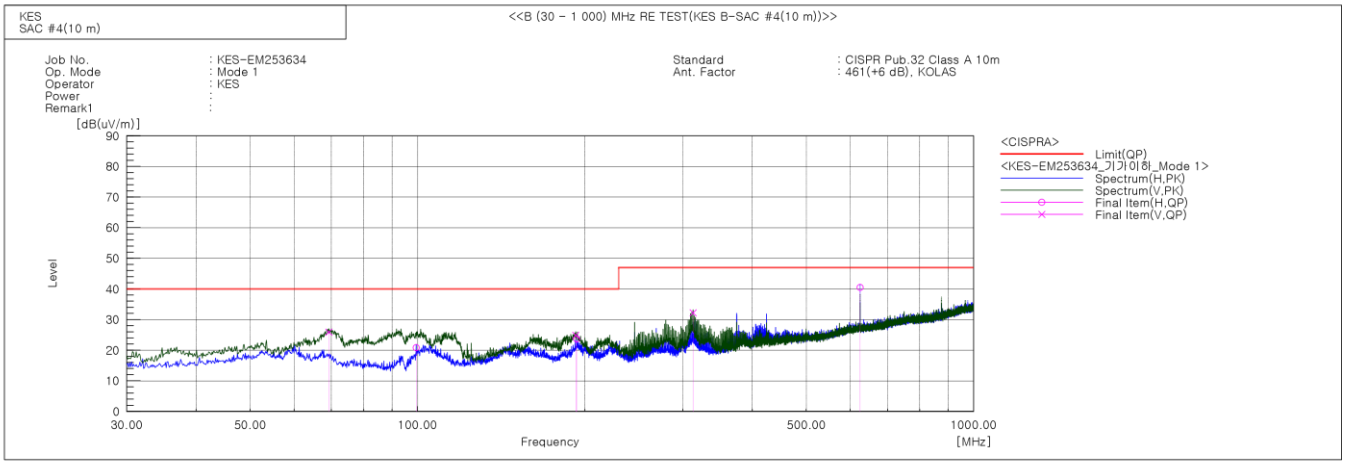
### 6.3.3 Test Conditions :

| Temperature | Relative Humidity |
|---|---|
| (21.0 ~ 21.3) °C | (52.6 ~ 52.9) % R.H. |

### 6.3.4 Test Result

○ Test Date : 2025-10-26

● Test Mode : Mode 1



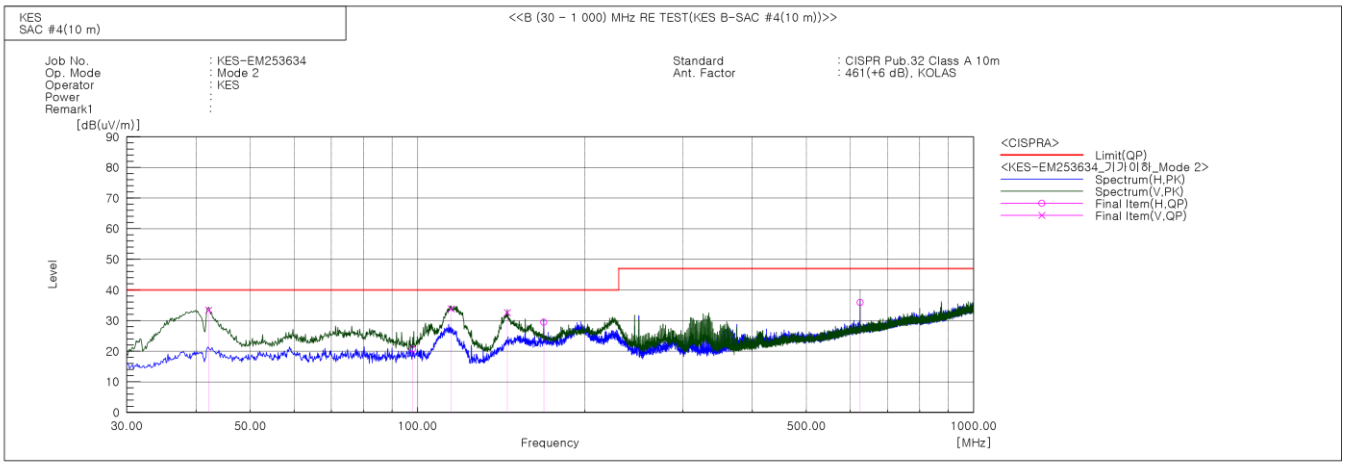

Final Result

| 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 | 69.285 | V | 48.5 | -22.6 | 25.9 | 40.0 | 14.1 | 100.0 | 309.0 | |
| 2 | 99.476 | H | 45.8 | -25.0 | 20.8 | 40.0 | 19.2 | 357.0 | 18.0 | |
| 3 | 192.475 | V | 46.7 | -21.8 | 24.9 | 40.0 | 15.1 | 124.0 | 122.0 | |
| 4 | 193.324 | H | 45.6 | -21.9 | 23.7 | 40.0 | 16.3 | 312.0 | 117.0 | |
| 5 | 312.876 | V | 48.8 | -16.6 | 32.2 | 47.0 | 14.8 | 110.0 | 200.0 | |
| 6 | 624.974 | H | 47.0 | -6.5 | 40.5 | 47.0 | 6.5 | 294.0 | 196.0 | |

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

○ Test Date : 2025-10-26

● 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 | 42.125 | V | 55.1 | -21.7 | 33.4 | 40.0 | 6.6 | 106.0 | 262.0 | |
| 2 | 97.900 | H | 46.0 | -25.3 | 20.7 | 40.0 | 19.3 | 372.0 | 353.0 | |
| 3 | 114.875 | V | 56.8 | -23.0 | 33.8 | 40.0 | 6.2 | 168.0 | 139.0 | |
| 4 | 145.066 | V | 52.2 | -19.6 | 32.6 | 40.0 | 7.4 | 100.0 | 26.0 | |
| 5 | 168.710 | H | 49.5 | -20.0 | 29.5 | 40.0 | 10.5 | 336.0 | 137.0 | |
| 6 | 624.974 | H | 42.4 | -6.5 | 35.9 | 47.0 | 11.1 | 293.0 | 193.0 | |

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

### 6.3.5 Remark

Complies with the test requirements.

## 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 #3 | - | DYMSTEC | - | - | - | ■ |
| EP5/RE Software | EP5/RE | TOYO | 6.0.0 | - | - | ■ |
| EMI TEST RECEIVER | ESU26 | Rohde & Schwarz | 100517 | 2025-07-08 | 2026-07-08 | ■ |
| PREAMPLIFIER | 8449B | AGILENT | 3008A01967 | 2025-03-05 | 2026-03-05 | ■ |
| ATTENUATOR | 8491A | HP | 35496 | 2025-02-13 | 2026-02-13 | ■ |
| DOUBLE RIDGED HORN ANTENNA | SAS-571 | A.H. SYSTEM,INC | 781 | 2025-03-05 | 2026-03-05 | ■ |

### 6.4.2 Test Location : SEMI ANECHOIC CHAMBER #3

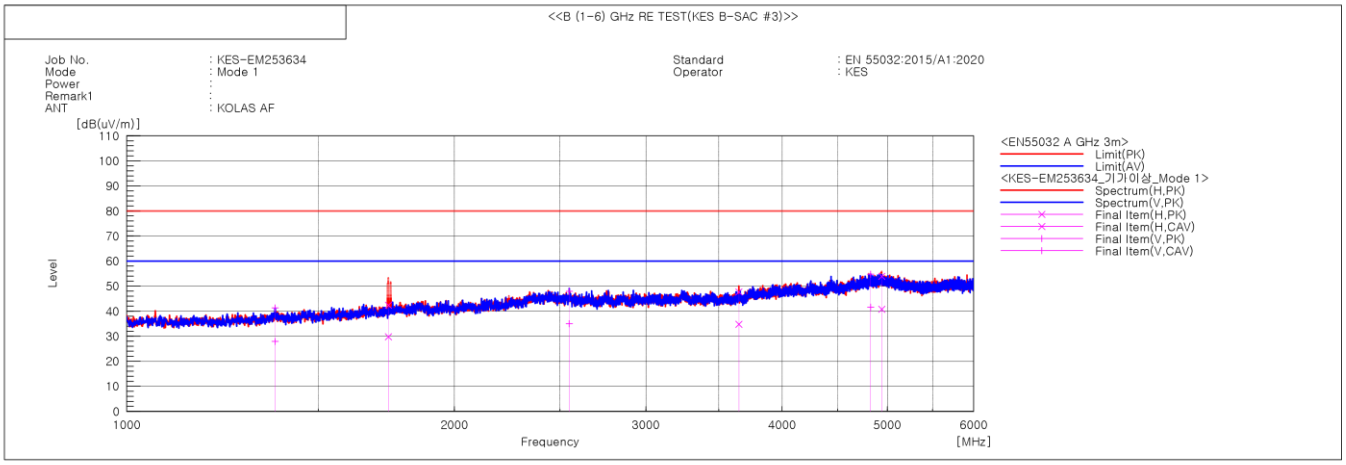
### 6.4.3 Test Conditions :

| Temperature | Relative Humidity |
|---|---|
| (21.4 ~ 21.6) °C | (51.8 ~ 52.0) % R.H. |

### 6.4.4 Test Result

○ Test Date : 2025-10-24

● Test Mode : Mode 1



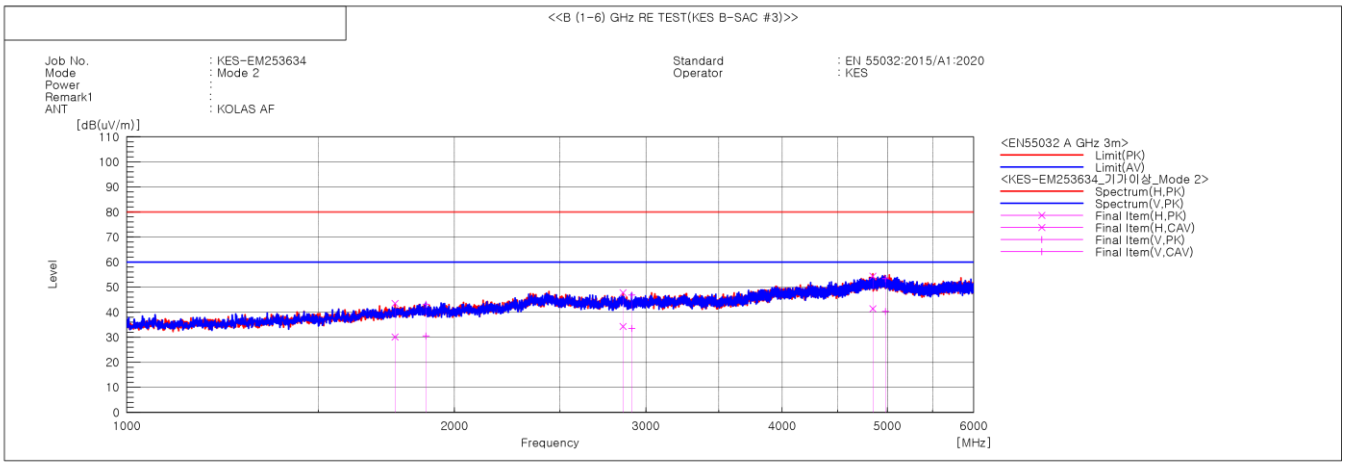

Final Result

| No. | Frequency [MHz] | (P) | Reading PK [dB(uV)] | Reading CAV [dB(uV)] | c.f [dB(1/m)] | Result PK [dB(uV/m)] | Result CAV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin CAV [dB] | Height [cm] | Angle [deg] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1368.750 | V | 42.1 | 28.7 | -0.8 | 41.3 | 27.9 | 80.0 | 60.0 | 38.7 | 32.1 | 100.0 | 49.9 | |
| 2 | 1739.375 | H | 39.4 | 26.8 | 3.0 | 42.4 | 29.8 | 80.0 | 60.0 | 37.6 | 30.2 | 100.0 | 119.6 | |
| 3 | 2550.625 | V | 40.5 | 27.6 | 7.4 | 47.9 | 35.0 | 80.0 | 60.0 | 32.1 | 25.0 | 100.0 | 134.9 | |
| 4 | 3651.250 | H | 37.8 | 24.9 | 9.9 | 47.7 | 34.8 | 80.0 | 60.0 | 32.3 | 25.2 | 100.0 | 334.6 | |
| 5 | 4825.625 | V | 38.7 | 25.5 | 16.1 | 54.8 | 41.6 | 80.0 | 60.0 | 25.2 | 18.4 | 100.0 | 296.7 | |
| 6 | 4939.375 | H | 37.3 | 24.2 | 16.6 | 53.9 | 40.8 | 80.0 | 60.0 | 26.1 | 19.2 | 100.0 | 267.7 | |

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

○ Test Date : 2025-10-24

● Test Mode : Mode 2




Final Result

| No. | Frequency [MHz] | (P) | Reading PK [dB(uV)] | Reading CAV [dB(uV)] | c.f [dB(1/m)] | Result PK [dB(uV/m)] | Result CAV [dB(uV/m)] | Limit PK [dB(uV/m)] | Limit AV [dB(uV/m)] | Margin PK [dB] | Margin CAV [dB] | Height [cm] | Angle [deg] | Remark |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 1764.375 | H | 40.2 | 26.8 | 3.3 | 43.5 | 30.1 | 80.0 | 60.0 | 36.5 | 29.9 | 100.0 | 170.1 | |
| 2 | 1883.750 | V | 39.1 | 26.4 | 4.1 | 43.2 | 30.5 | 80.0 | 60.0 | 36.8 | 29.5 | 100.0 | 265.4 | |
| 3 | 2857.500 | H | 39.4 | 25.9 | 8.4 | 47.8 | 34.3 | 80.0 | 60.0 | 32.2 | 25.7 | 100.0 | 235.5 | |
| 4 | 2910.625 | V | 38.5 | 25.2 | 8.3 | 46.8 | 33.5 | 80.0 | 60.0 | 33.2 | 26.5 | 100.0 | 265.4 | |
| 5 | 4846.875 | H | 38.1 | 25.1 | 16.3 | 54.4 | 41.4 | 80.0 | 60.0 | 25.6 | 18.6 | 100.0 | 268.2 | |
| 6 | 4978.750 | V | 36.7 | 23.6 | 16.7 | 53.4 | 40.3 | 80.0 | 60.0 | 26.6 | 19.7 | 100.0 | 357.4 | |

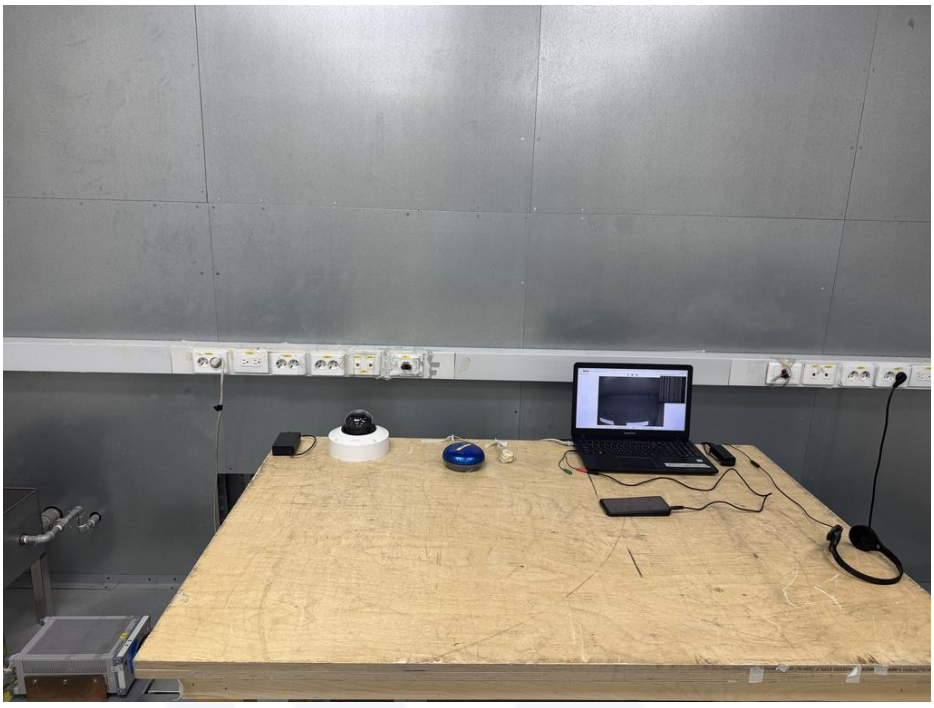
※ The data is the result of measured by the detector in PK and CISPR Average on the Peak graph.

### 6.4.5 Remark

Complies with the test requirements.

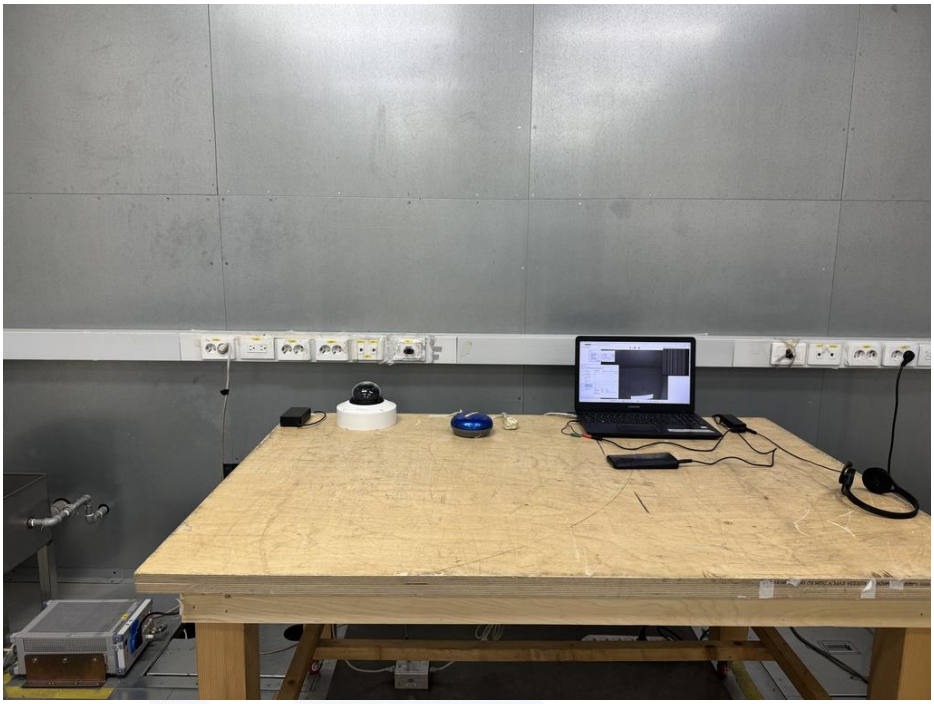
# 7 Test Setup Photos and EUT Photographs

## 7.1 Test Setup Photos

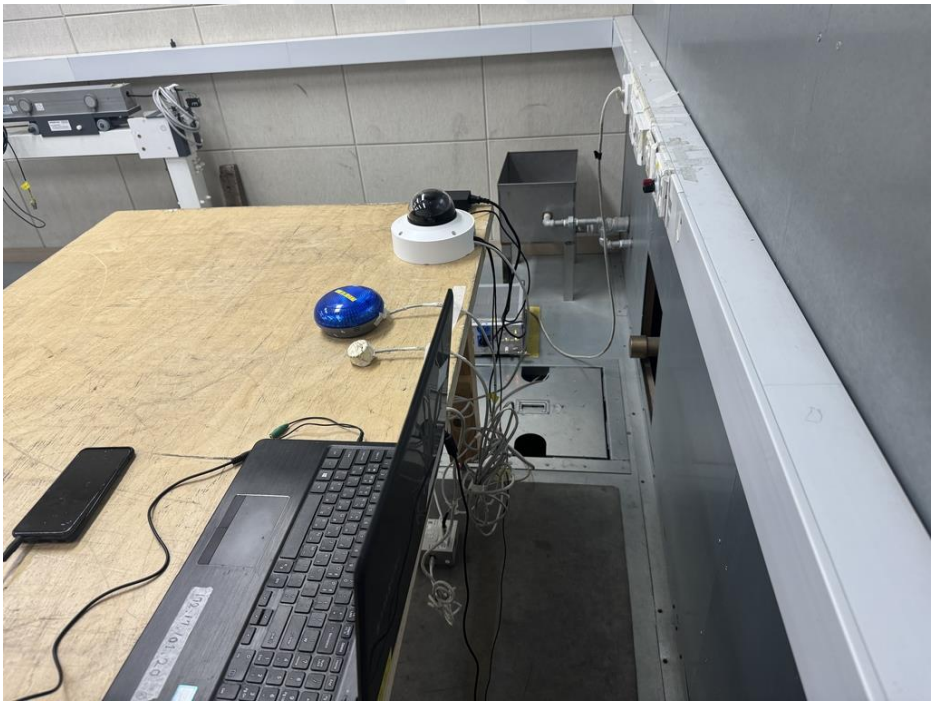


<Conducted Emissions at Mains Power Ports - Front> Mode 1

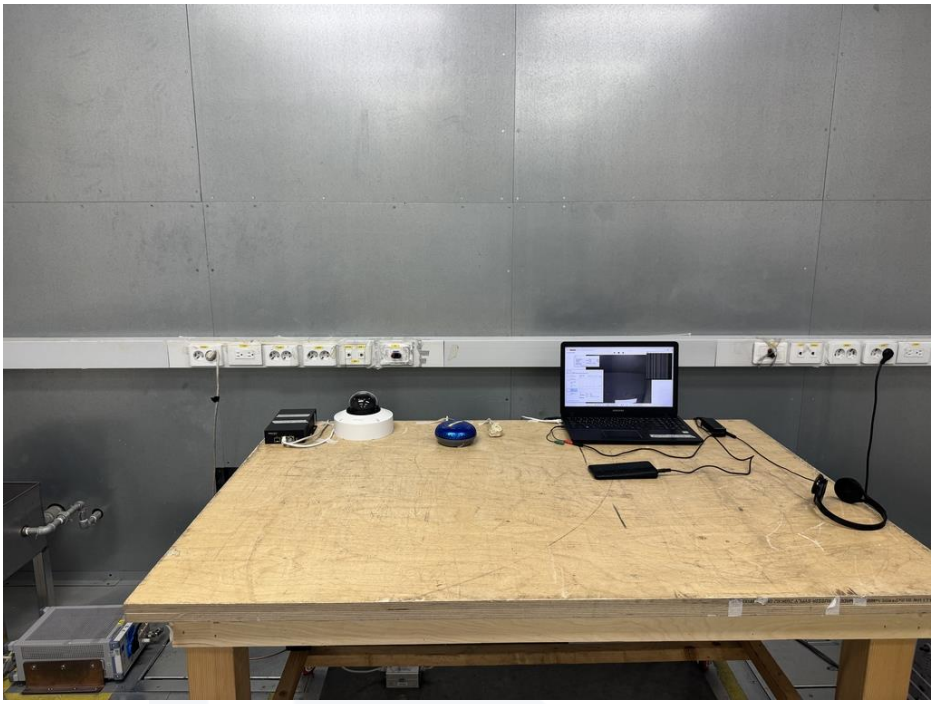
<Conducted Emissions at Mains Power Ports - Rear> Mode 1



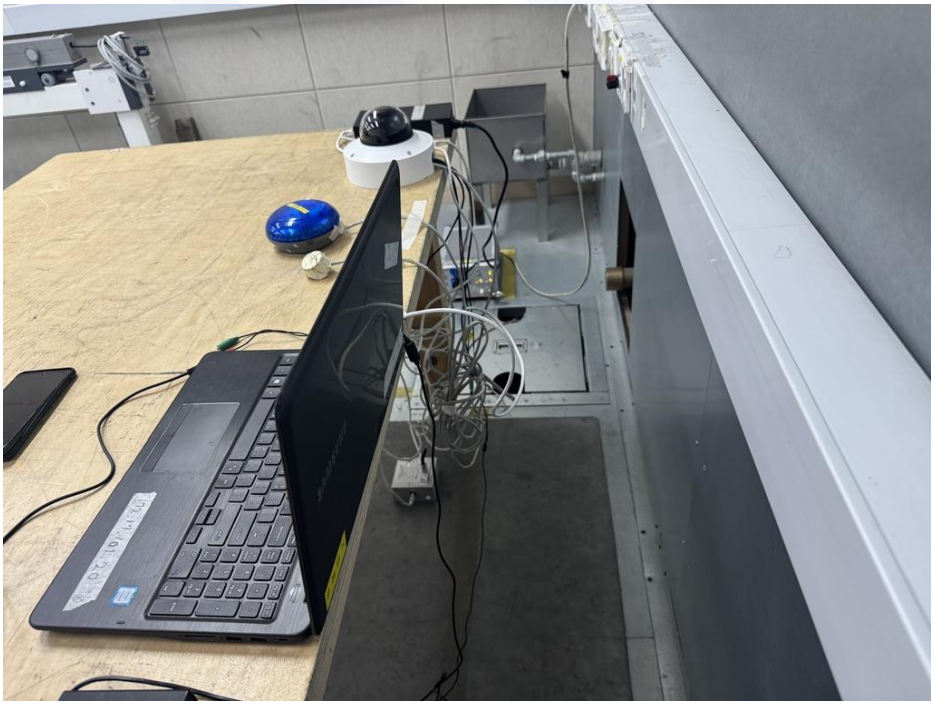
<Conducted Emissions at Telecommunication Ports - Front> Mode 1



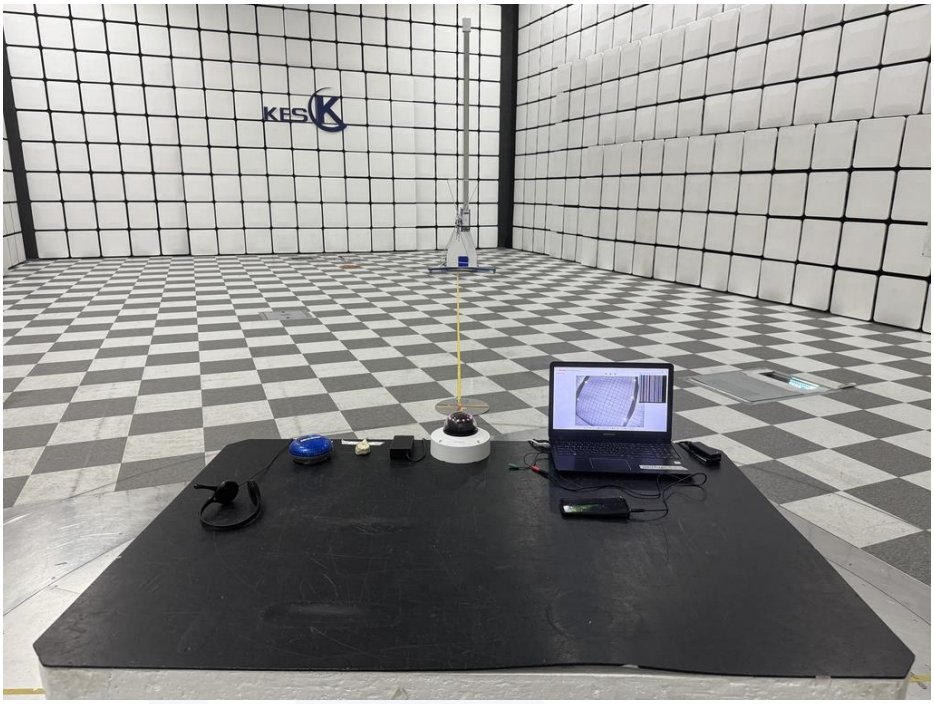
<Conducted Emissions at Telecommunication Ports - Rear> Mode 1



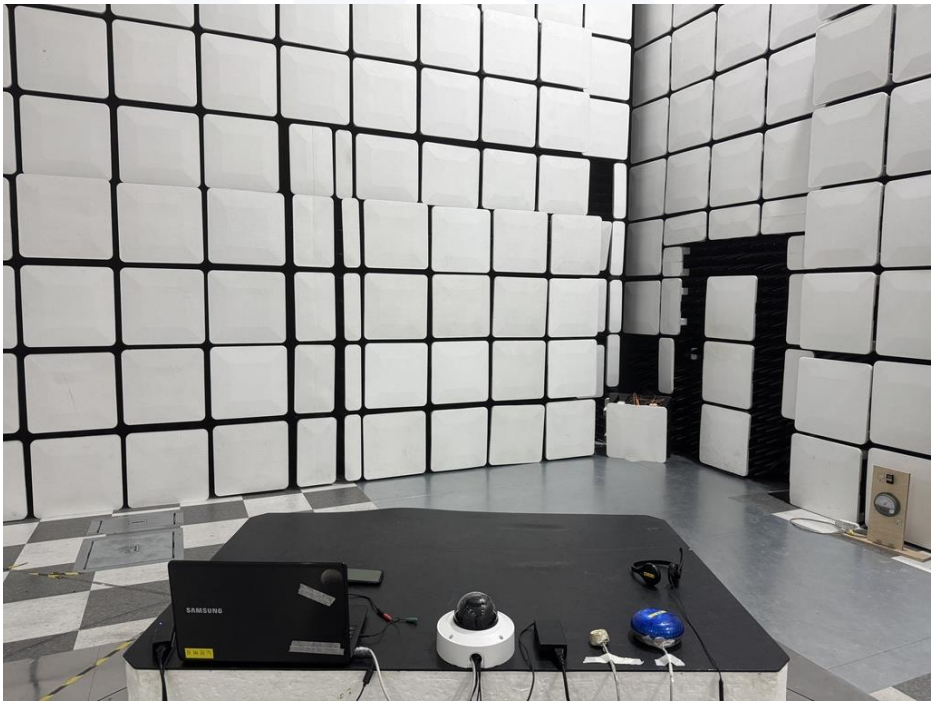
<Conducted Emissions at Telecommunication Ports - Front> Mode 2



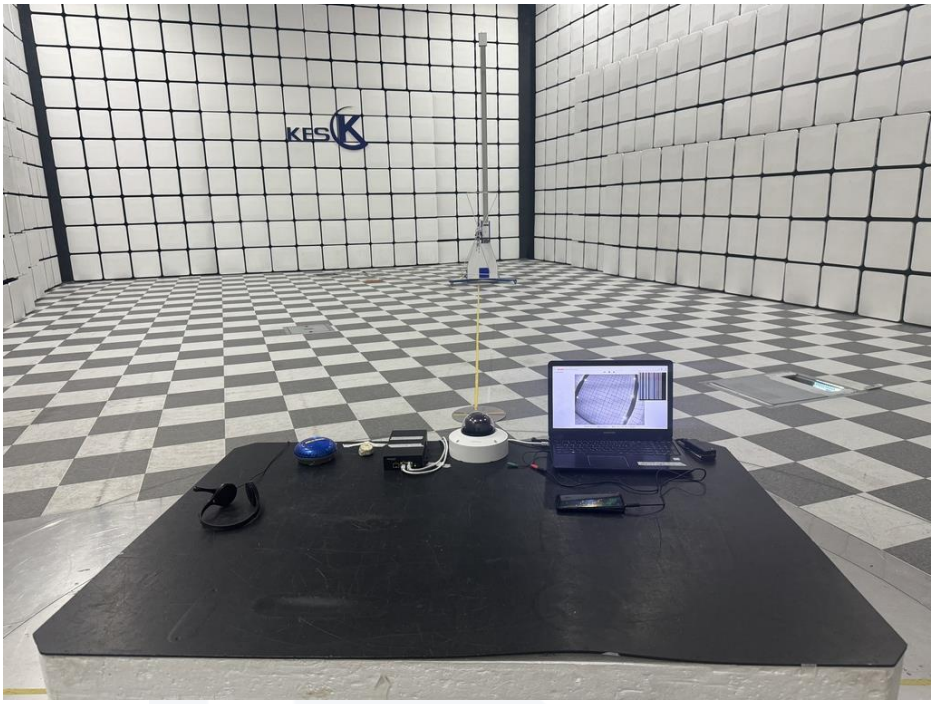
<Conducted Emissions at Telecommunication Ports - Rear> Mode 2



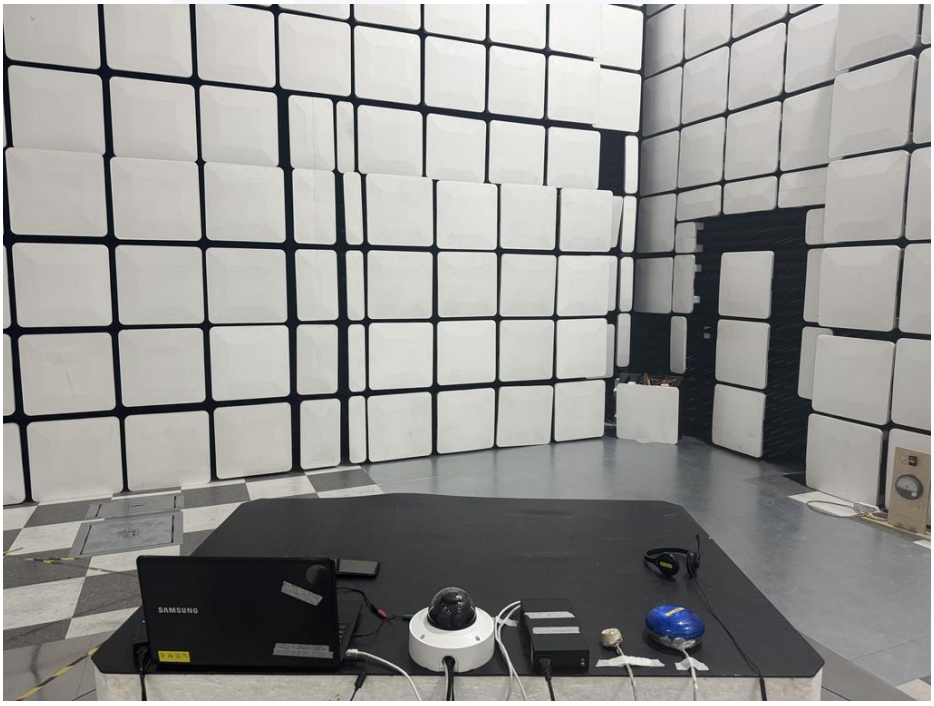
<Radiated Emissions(Below 1 ㎓) - Front> Mode 1



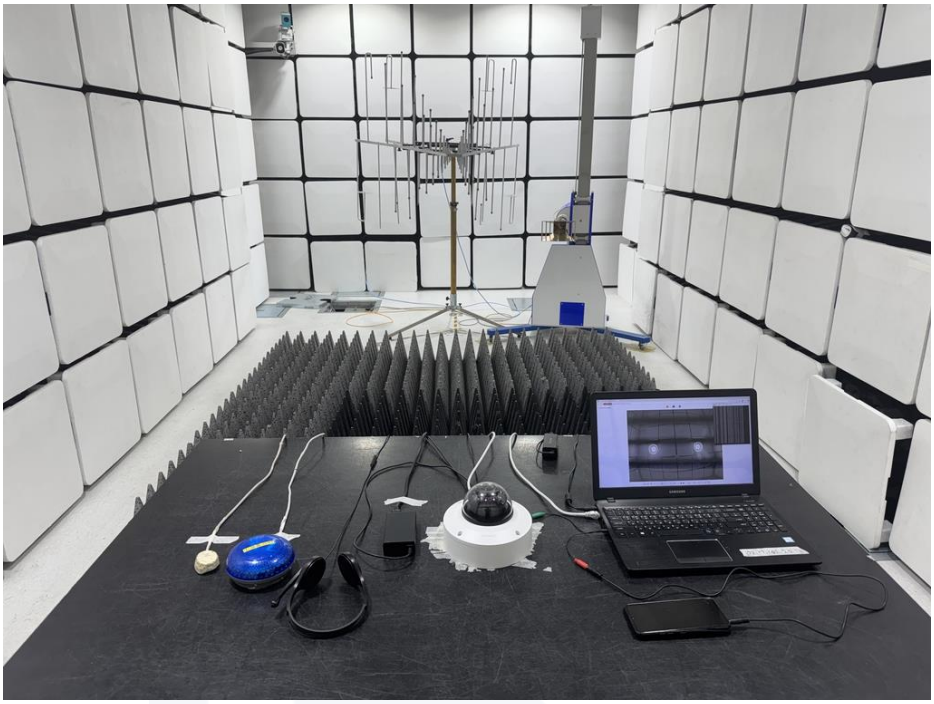
<Radiated Emissions(Below 1 ㎓) - Rear> Mode 1



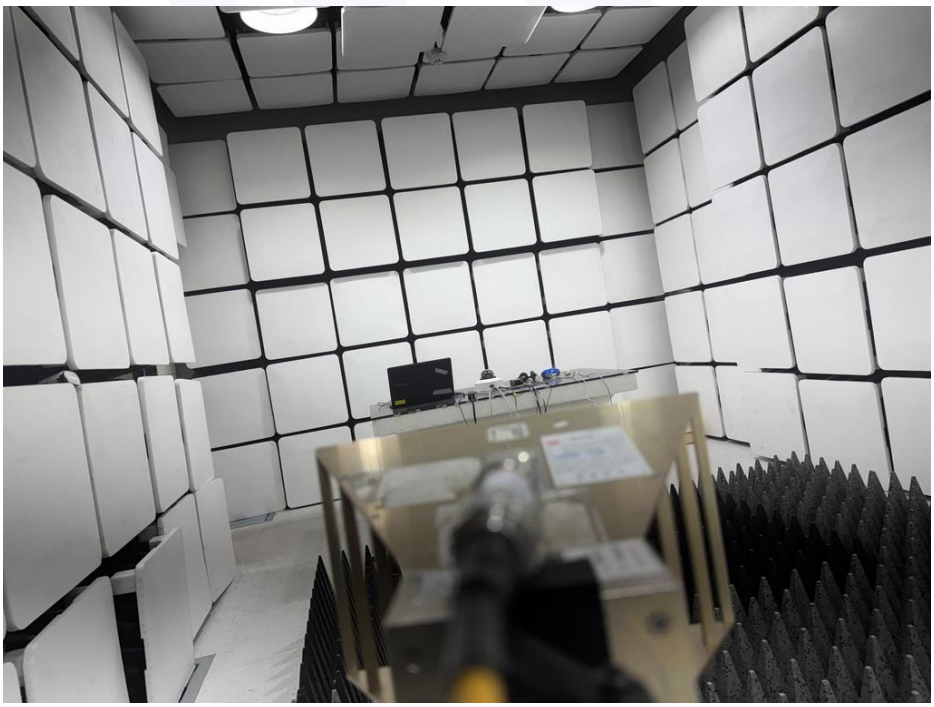
<Radiated Emissions(Below 1 ㎓) - Front> Mode 2



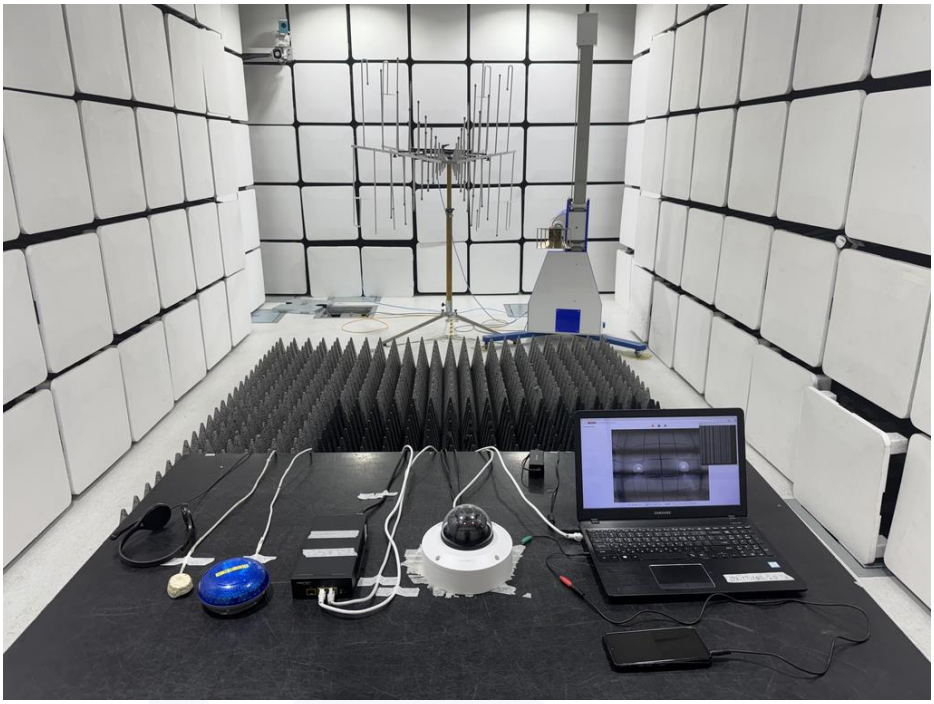
<Radiated Emissions(Below 1 ㎓) - Rear> Mode 2



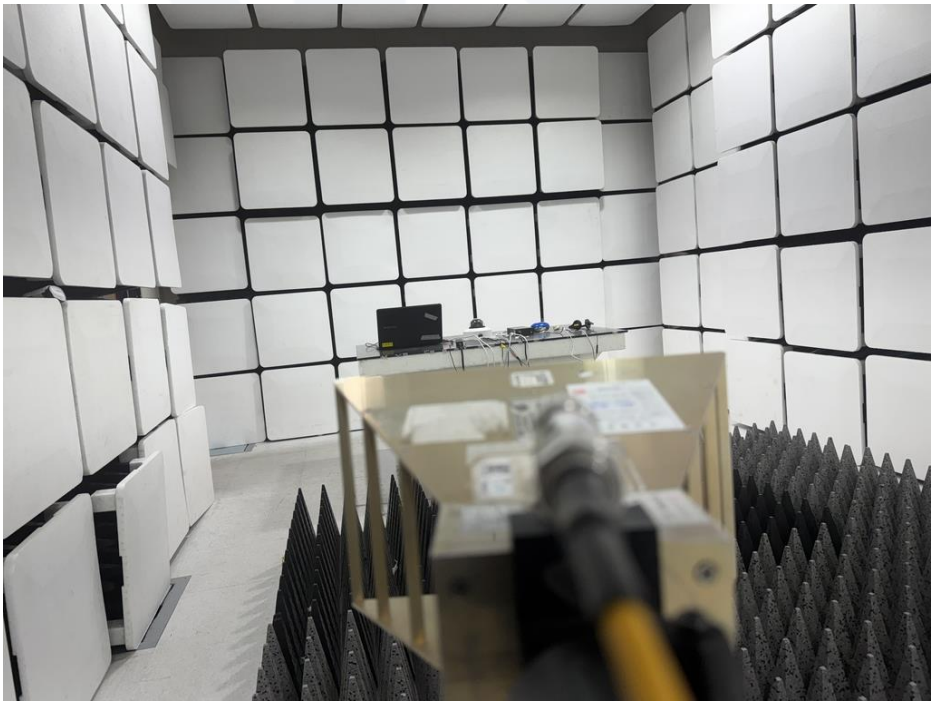
<Radiated Emissions(Above 1 ㎓) - Front> Mode 1



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



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

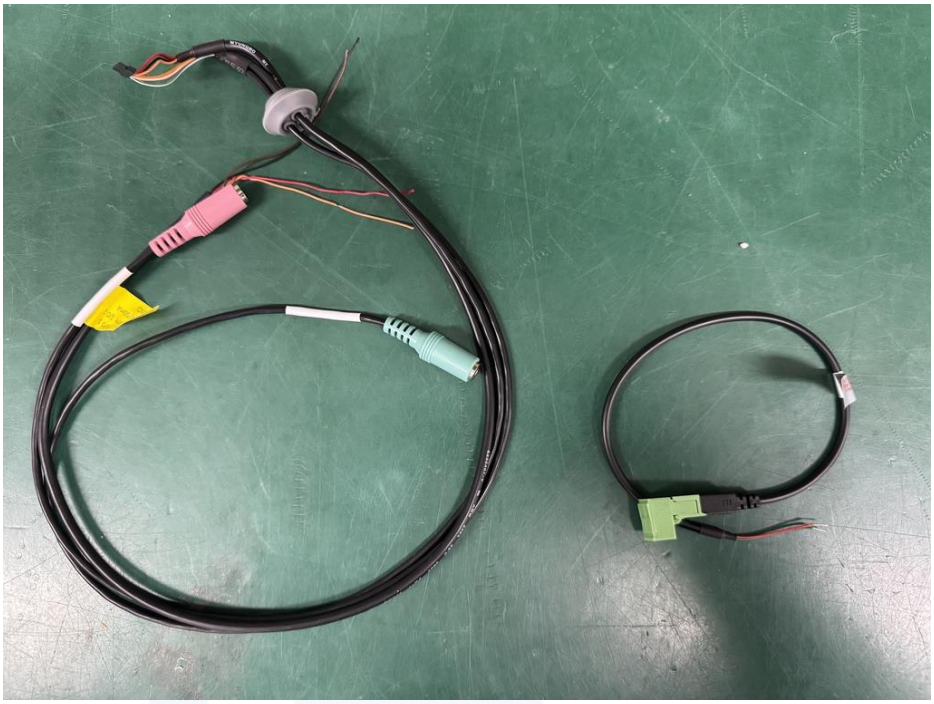


<Radiated Emissions(Above 1 ㎓) - Rear> Mode 2

## 7.2 EUT Photographs

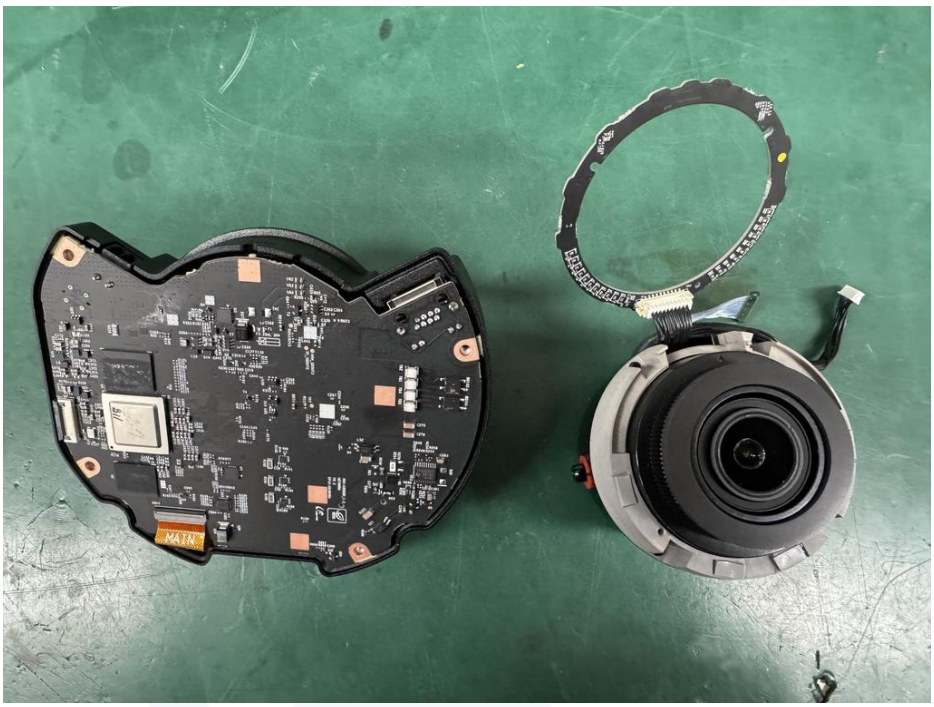
<EUT External Photographs - Top>

<EUT External Photographs - Bottom>



<Components>


<Port-1>




<EUT Internal Photographs>

## 7.3 Label

Name : Hanwha Vision Co., Ltd.
Product item : NETWORK CAMERA
Model name : XNV-A8085R

**The End.**