



TEST REPORT



Report No. : KES-EM260945

Page 1 / 44

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 : XNP-A9314R
- 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

: 2026. 03. 21. ~ 2026. 03. 25.

4. Location of Test

- : Permanent Testing Lab
- Address : 473-21, Gayeo-ro, Yeuju-si, Gyeonggi-do, 12658, Republic of Korea

5. Test method used

: EN 55032:2015+A1:2020, EN 50130-4:2011+A1:2014

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 laboratory is not accredited for the test results marked *.

This test report is not related to KOLAS accreditation.

Affirmation	Tested by	Technical Manager by
	Name : EunGu Jeon	Name : DongHun Jang

2026. 04. 02.

KES Co., Ltd.

**REPORT REVISION HISTORY**

Date	Test Report No.	Revision History
2026. 04. 02.	KES-EM260945	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)



TABLE OF CONTENTS

1	Laboratory Information	4
1.1	Test Location.....	4
1.2	Laboratory Accreditations and Listings	4
2	Test Summary	5
2.1	Class and Voltage.....	5
2.2	Summary of Test Results	5
2.3	Remarks when standards applied	6
2.4	Variant Model Differences	6
2.5	Device Modifications	6
3	General Product Description	7
4	EUT Setup and Operation Mode	12
4.1	EUT Configuration	12
4.2	System Configuration	12
4.3	External I/O Cabling	13
4.4	EUT Operating Mode(s)	13
4.5	Test operating S/W	13
4.6	Configuration	14
5	General Performance Criteria	15
6	Test Item	17
6.1	Conducted Emissions at Telecommunication Ports	17
6.2	Radiated Emissions(Below 1 GHz)	19
6.3	Radiated Emissions(Above 1 GHz)	21
6.4	Electrostatic Discharge.....	23
6.5	Continuous RF electromagnetic field disturbances	26
6.6	Electrical Fast Transients/Bursts	29
6.7	Surge	31
6.8	Continuous Induced RF Disturbances	33
7	Test Setup Photos and EUT Photographs	35
7.1	Test Setup Photos	35
7.2	EUT Photographs	41
7.3	Label	44



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	AC 230 V, 50 Hz

2.2 Summary of Test Results

Regulation
EMC Directive 2014/30/EU, EMC Regulations SI 2016/1091

Test Item	Test Standard		Test Result	Remark
Conducted Emissions at Mains Power Ports	EN 55032:2015+A1:2020		N/A	NOTE 1
Conducted Emissions at Telecommunication Ports			PASS	-
Radiated Emissions(Below 1 GHz)			PASS	-
Radiated Emissions(Above 1 GHz)			PASS	-
Harmonic Current Emissions	EN IEC 61000-3-2:2019		N/A	NOTE 1
Voltage Fluctuations and Flicker	EN 61000-3-3:2013+A2:2021		N/A	NOTE 1
Electrostatic Discharge	EN 50130-4:2011+A1:2014	EN 61000-4-2:2009	PASS	-
Continuous RF electromagnetic field disturbances		EN IEC 61000-4-3:2020	PASS	-
Electrical Fast Transients/Bursts		EN 61000-4-4:2012	PASS	NOTE 1
Surge		EN 61000-4-5 :2014+A1:2017	PASS	NOTE 1
Continuous Induced RF Disturbances		EN IEC 61000-4-6:2023	PASS	NOTE 1
Voltage Dips and Interruptions		EN IEC 61000-4-11:2020	N/A	NOTE 1

* N/A: Not Applicable

(NOTE 1) PoE port is considered a wired network port, so power-related test items are excluded.



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

Video	
Imaging Device	1/1.8" CMOS
Resolution	3840x2160, 2592x1944, 2592x1464, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps/25fps(60Hz/50Hz) (@8MP Max. 5fps)
NETD	None
Pixel Size	None
Min. Illumination	Color: 0.06 Lux(F1.36, 1/30sec, 30 IRE) BW: 0.006 Lux(F1.36, IR LED Off), 0Lux (IR LED On)
Video Out	None
Video Transmission Distance	None
Lens	
Focal Length (Zoom Ratio)	6.91 ~ 214.7mm(31x) zoom (digital 32x, total 992x zoom) Support Quick zoom
Optical Zoom	31x
Max. Aperture Ratio	F1.36(Wide)~F4.6(Tele)
Angular Field of View	H : 60.6°(Wide)~2.59°(Tele) V : 35.1°(Wide)~1.45°(Tele) D : 68.8°(Wide)~2.97°(Tele)
Min. Object Distance	3m(9.84ft)
Focus Control	Oneshot AF, Focus save, Focus scan, Wise auto focus, MDE(TBD)
Lens Type	P-iris(IR corrected)
Mount Type	None
Optional Lens	None
Pan / Tilt / Rotate	
Pan / Tilt / Rotate Range	None
Pan Range	360° Endless
Pan Speed	Preset: 550°/sec, Manual: 0.024°/sec~200°/sec
Tilt Range	110° (90° ~ -20°)
Tilt Speed	Preset: 550°/sec, Manual: 0.024°/sec~200°/sec
Rotate Range	None
Sequence	Preset(300ea), Swing, Group(6ea), Trace, Tour, Auto Run, Schedule
Preset Accuracy	±0.05° (±20°C by temperature at preset setting)
Operational	



Camera Title	Displayed up to 127 characters
Direction Indicator	Support
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSSR
Wide Dynamic Range	120dB
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support(built-in gyro sensor)
Defog	Support
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	Setting area: 32ea, 4-point polygonal zones (8-points after R/C) - Color: gray/green/red/blue/black/white - 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 / Mercury / Sodium
LDC	None
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
Analytics	Classified object type: Person/Face/Vehicle/License plate Attributes: - Vehicle: (Type: car/bus/truck/motorcycle/bicycle, Color) - Person:(Gender, Clothing top/bottom color, Bag), Face(Age, Gender, Mask, Glasses) Support BestShot Support Re-ID(Person) Analytics events based on AI engine: Motion detection, Object detection, Line crossing(Crossing/Direction), IVA area(Loitering/Intrusion/Enter/Exit/Appear/Disappear), Slip & fall detection Analytics events: Tampering, Shock detection, Audio detection Support analytics by AI pack (WiseAI, Sound pack)
Business Intelligence	None
Serial Interface	None
Alarm I/O	None



Alarm Triggers	Analytics, Network disconnect, Alarm input((Via optional I/O box SPM-4210), Time schedule, MQTT subscription
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 *Alarm output (Via optional I/O box SPM-4210)
Audio Streaming	None
Audio In	None
Audio Out	None
Light Type	IR LED (850nm)
Light Viewable Length	None
IR Viewable Length	Wise IR 250m(820ft)
IR Illuminator (Optional)	None
IR Radiation angle	None
IR LED	None
IR Wavelength	None
IR Operation	None
Water Removal	Support(Spin dry)
Auto Tracking	Support Object auto tracking(Person/Vehicle) Target lock tracking
Coaxial Protocol	None
Color Palettes	None
Radiometry	
Temperature Detect Range	None
Temperature Accuracy	None
Temperature Detection	None
Additional	None
Network	
Ethernet	Metal shielded RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/Baseline/High, MJPEG
Audio Compression	None
Smart Codec	WiseStream(Based on AI engine)



Video Quality Adjustment	H.264/H.265: Target bitrate level control MJPEG: Target bitrate level control
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 10 profiles)
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP/SFTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), NTCIP1205, MQTT
SIP support (VoIP, Peer-to-peer, SIP/PBX integration)	None
Security	None
Application Programming Interface	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 included
Security	
OS / Firmware Protect	Encrypted Firmware, Secure boot, Signed Firmware
User authentication	Digest Authentication, Prevent brute-force attacks
Network authentication	802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2), 802.1AE(MACsec)
Secure Communication	IP-based access control, MAC-based access control, Auto logout
Access Control	IP-based access control
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
Supply Chain Security	SBOM
Security Certificate	ETSI EN 303 645, Secure element(FIPS 140-3 level3, CC EAL6+), 국정원인증(RK)
General	
Webpage Language	English, Korean, 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 * Hanwha Vision branded microSD cards have been certified and recommended for OnCloud edge recording.



Memory	4GB RAM,16GB eMMC
Environmental & Electrical	
Operating Temperature / Humidity	Normal : -50°C~+55°(-58°F ~ +131°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 /w AIR vent
Storage Temperature / Humidity	-50°C~+60°C(-58°F~+140°F) / 0~90% RH
Wind Load	None
Certification	IP66/IP67, IK10, NEMA4X Safety(UL, KC-SDOC), EMC(FCC, CE, VCCI, RCM, KC) NEMA-TS 2(2.2.7, 2.2.8, 2.2.9)
Input Voltage	PoE++(IEEE802.3bt type3, Class6)
Power Consumption	PoE : Max 51.0W, typical 32.5W
Mechanical	
Color / Material	Body : White / Aluminum Head : Black / Polycarbonate Hard-coated dome
RAL Code	White: RAL9003 / Black: RAL9005
Product Dimensions / Weight	ø188x264.9mm(ø7.40x10.47") / 4570g (10.08lb)



4 EUT Setup and Operation Mode

4.1 EUT Configuration

Description	Model Number	Serial Number	Manufacturer	Remarks
NETWORK CAMERA	XNP-A9314R	-	HANWHA VISION VIETNAM COMPANY LIMITED	EUT
PoE Injector	PT-PSE109GBRO- AH-S	-	Dongguan PROCET Network Technology Co.,Ltd	-
Laptop	NT630Z5J	JK9091EF400142M	Samsung Electronics Co., Ltd.	-
Laptop Adaptor	PA-1400-14	AA-PA2N40W	LITEON	-
Micro SD Card1	-	-	SanDisk	-
Micro SD Card2	-	-	SanDisk	-

4.2 System Configuration

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



4.3 External I/O Cabling

Mode 1

Start		End		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
EUT	RJ-45 (PoE)	PoE Injector	RJ-45 (PoE)	3.1	U
	Micro SD Slot1	Micro SD Card1	Micro SD Slot	-	-
	Micro SD Slot2	Micro SD Card2	Micro SD Slot	-	-
Laptop	RJ-45	PoE Injector	RJ-45 (LAN)	2.8	U
	DC Jack	Laptop Adaptor	Line	1.5	U

* Unshielded=U, Shielded=S

4.4 EUT Operating Mode(s)

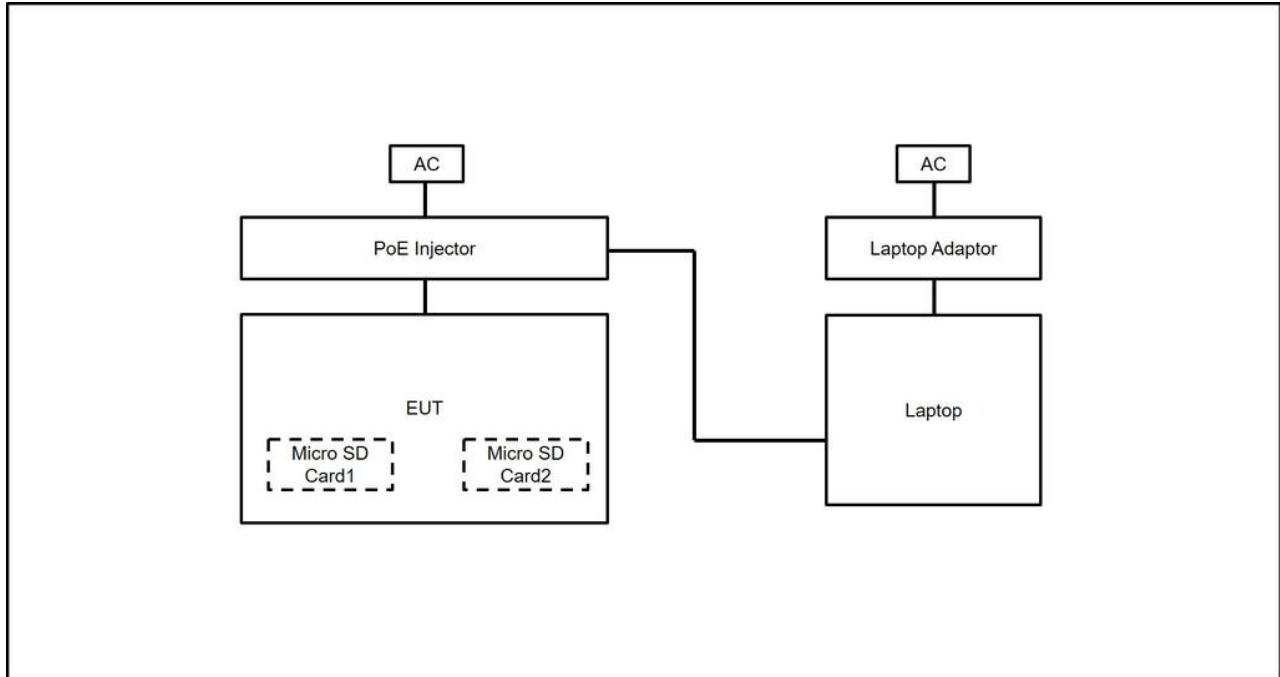
Category	Mode	Operating
Mode 1	Operation	- View images of the EUT through Web Viewer in Laptop - Ping test via Laptop to check the network status of the EUT - Check the files stored on the Micro SD Card after testing

4.5 Test operating S/W

Name	Version	Manufacture Company
Web Viewer	-	Hanwha Vision Co., Ltd.



4.6 Configuration



Mode 1



5 General Performance Criteria

Criteria for compliance was based on the following guidelines:

EN 50130-4 Alarm systems-Part 4: Electromagnetic compatibility Product family standard: Immunity requirements for components of fire, intruder and social alarm systems

The variety and the diversity of the apparatus within the scope of this document makes it difficult to define precise criteria for the evaluation of the immunity test results.

If as a result of the application of the tests defined in this standard, the apparatus becomes dangerous or unsafe then the apparatus shall be deemed to have failed the test.

A functional description and a definition of performance by the manufacture and noted in the test report, based on the following criteria:

Electrostatic discharge

There shall be no damage, malfunction or change of status due to the conditioning.

Flickering of an indicator during the application of discharge is permissible, providing that is no residual change in the EUT or any change in outputs, which could be interpreted by associated equipment as a change.

Radiated electromagnetic fields

There shall be no damage, malfunction or change of status due to the conditioning.

Flickering of an indicator during the application of discharge is permissible, providing which could be interpreted by associated equipment as a change, and no such Flickering of indicators occurs at a field strength of 3 V/m.

For components of CCTV systems, where the picture is allowed at 10 V/m, providing.

- (a) there is no permanent damage or change to EUT
(e.g. no corruption of memory or changes to programmable setting etc.)
- (b) at 3 V/m, any deterioration of the picture is so minor that the system could still be used; and
- (c) there is no observable deterioration of the picture at 1 V/m.

Fast transient burst / slow high energy voltage surge

There shall be no damage, malfunction or change of status due to the conditioning.

Flickering of an indicator during the application of discharge is permissible, providing

That there is no residual is permissible, providing that there is no residual change in the EUT or any change in outputs, which could be interpreted by associated equipment as a change.

**Conducted RF immunity**

There shall be no damage, malfunction or change of status due to the conditioning.

Flickering of an indicator during the application of discharge is permissible, providing

That there is no residual is permissible, providing that there is no residual change in the EUT or any change in outputs, which could be interpreted by associated equipment as a change,

and no such flickering of indicators oeuvres at $U = 130 \text{ dB}\mu\text{V}$.

For component of CCTV systems, where the status is monitored by observing the TV picture, then deterioration of the picture is allowed at $U = 140 \text{ dB}\mu\text{V}$, providing:

(a) there is no permanent damage or change to the EUT

(e.g. no corruption of memory or changes to programmable settings etc.)

(b) at $U = 130 \text{ dB}\mu\text{V}$, any deterioration of the picture is so minor that the system could still be used; and

(c) there in no observable deterioration of the picture at $U = 120 \text{ dB}\mu\text{V}$.

Voltage dip/interruption / Voltage variation

There shall be no damage, malfunction or change of status due to the conditioning.

Flickering of an indicator during the conditioning is permissible, providing that there is no residual change in the EUT or any change in outputs, which could be interpreted by associated equipment as a change. The EUT shall meet the acceptance criteria for the functional test, after the conditioning.

◆ Calculation**- Conducted Emissions**

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

QuasiPeak / CAverage : The Final Value

Reading Value : Not shown in the table.

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

- Radiated Emissions(Below 1 GHz)

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

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

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)

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

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

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 Telecommunication 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	2025-11-03	2026-11-03	■
LISN	ENV216	Rohde & Schwarz	101787	2025-09-04	2026-09-04	■
ARTIFICIAL MAINS NETWORK	ESH2-Z5	Rohde & Schwarz	100450	2025-11-03	2026-11-03	■
PULSE LIMITER	ESH3-Z2	Rohde & Schwarz	101915	2025-11-03	2026-11-03	■
8-WIRE ISN CAT3,5	ENY81	Rohde & Schwarz	100174	2025-11-05	2026-11-05	■

6.1.2 Test Location : SHIELD ROOM #6

6.1.3 Test Conditions :

Temperature	Relative Humidity
(23.0 ~ 23.1) °C	(37.2 ~ 37.3) % R.H.



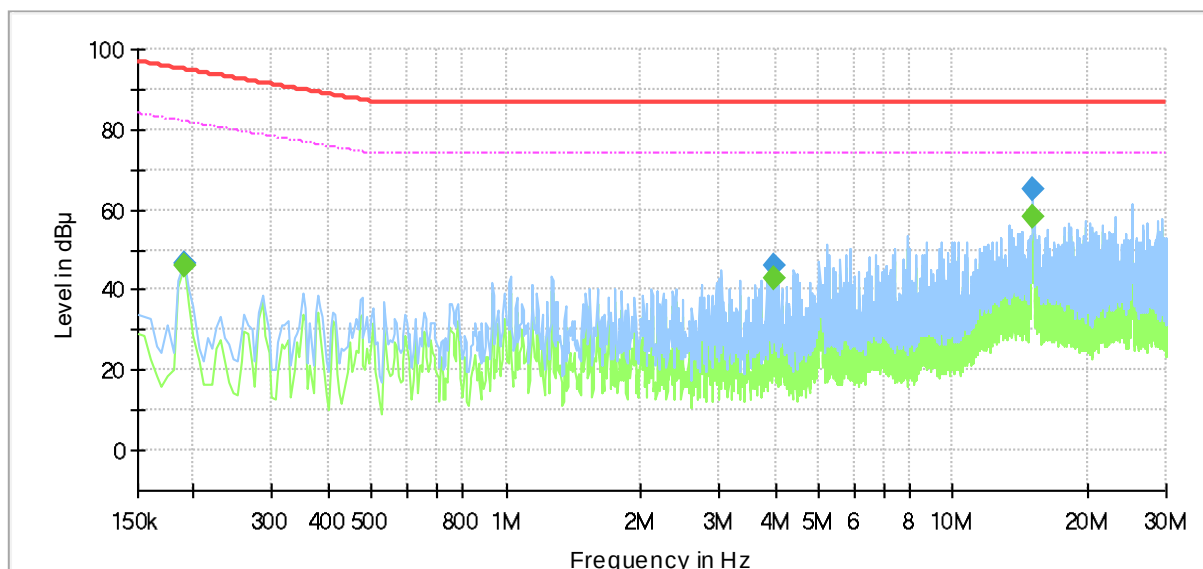
6.1.4 Test Result

- Test Date : 2026-03-21
- Test Mode : Mode 1

Test Report

Common Information

Test Description: Telecommunication Emission
Job No.: KES-EM260945
Mode :
Speed : 100 Mbps
Operator Name: KES



Final_Result

Frequency (MHz)	QuasiPeak (dB μ V)	CAverage (dB μ V)	Limit (dB μ V)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.190000	—	45.96	82.04	36.08	1000.0	9.000	Single Line	19.4
0.190000	46.38	—	95.04	48.66	1000.0	9.000	Single Line	19.4
3.955000	—	42.86	74.00	31.14	1000.0	9.000	Single Line	19.2
3.955000	45.90	—	87.00	41.10	1000.0	9.000	Single Line	19.2
15.095000	—	58.31	74.00	15.69	1000.0	9.000	Single Line	19.6
15.095000	64.91	—	87.00	22.09	1000.0	9.000	Single Line	19.6

6.1.5 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	2026-02-12	2027-02-12	■
AMPLIFIER	SCU 01	Rohde & Schwarz	100603	2025-11-03	2026-11-03	■
BILOG ANTENNA	VULB 9168	SCHWARZBEC K	9168-461	2024-05-09	2026-05-09	■

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

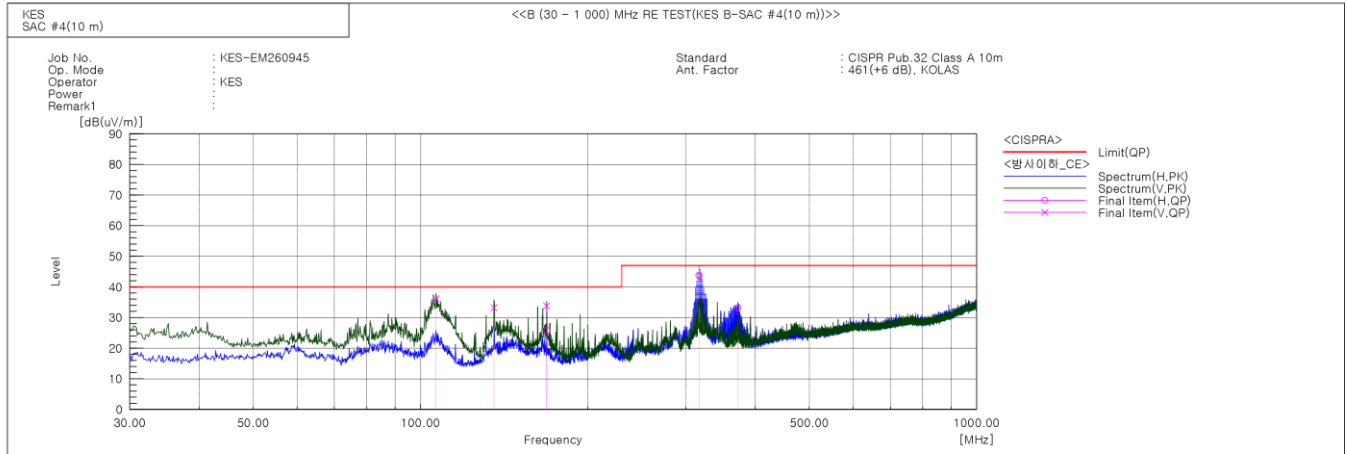
6.2.3 Test Conditions :

Temperature	Relative Humidity
(22.4 ~ 22.5) °C	(36.0 ~ 36.1) % R.H.



6.2.4 Test Result

- Test Date : 2026-03-21
- 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	106.630	V	59.8	-23.7	36.1	40.0	3.9	172.0	279.0	
2	135.609	V	53.6	-20.4	33.2	40.0	6.8	107.0	287.0	
3	168.482	V	53.7	-19.9	33.8	40.0	6.2	114.0	291.0	
4	168.813	H	45.7	-19.9	25.8	40.0	14.2	374.0	249.0	
5	316.756	H	60.2	-16.4	43.8	47.0	3.2	314.0	263.0	
6	372.168	H	47.7	-14.5	33.2	47.0	13.8	289.0	263.0	

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

6.2.5 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	2026-02-12	2027-02-12	■
PREAMPLIFIER	8449B	HP	3008A00538	2025-04-30	2026-04-30	■
ATTENUATOR	8491B	HP	23094	2026-02-12	2027-02-12	■
HORN ANTENNA	BBHA 9120D	SCHWARZBECK	9120D-1802	2025-11-05	2026-11-05	■

6.3.2 Test Location : SEMI ANECHOIC CHAMBER #5

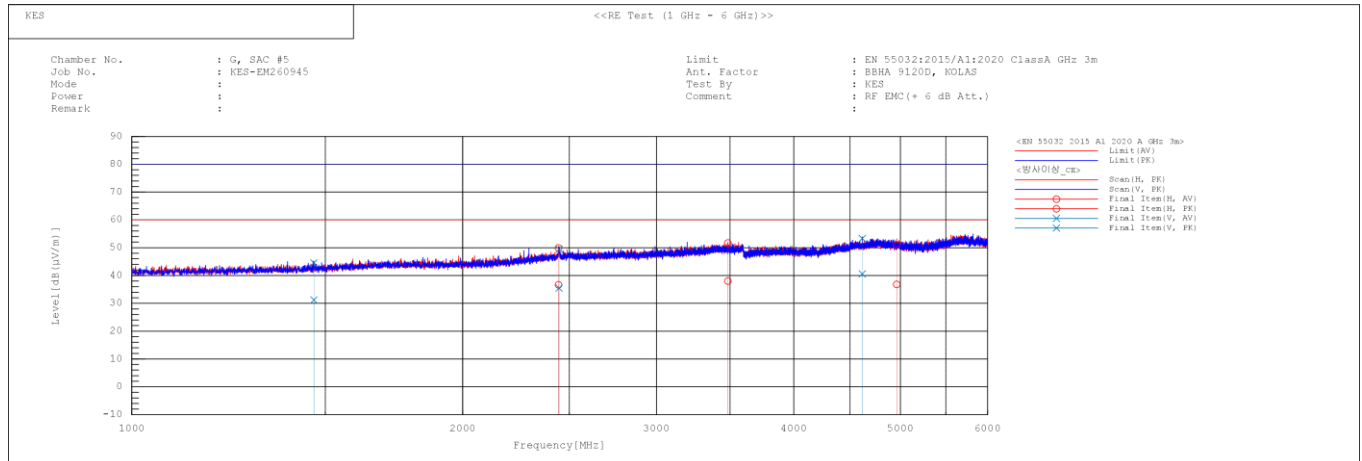
6.3.3 Test Conditions :

Temperature	Relative Humidity
(23.4 ~ 23.5) °C	(37.8 ~ 37.9) % R.H.



6.3.4 Test Result

- Test Date : 2026-03-22
- 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]	Angle [deg]	Remark
1	1464.824	V	30.0	43.3	1.2	31.2	44.5	60.0	80.0	28.8	35.5	287.9	
2	2444.358	H	31.2	44.4	5.5	36.7	49.9	60.0	80.0	23.3	30.1	49.2	
3	2446.812	V	30.0	43.9	5.5	35.5	49.4	60.0	80.0	24.5	30.6	174.4	
4	3484.712	H	30.4	44.1	7.6	38.0	51.7	60.0	80.0	22.0	28.3	278.4	
5	4616.812	V	29.0	41.7	11.6	40.6	53.3	60.0	80.0	19.4	26.7	204.3	
6	4960.912	H	23.9	38.1	12.9	36.8	51.0	60.0	80.0	23.2	29.0	239.1	

- ※ 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.

6.3.5 Remark

Complies with the test requirements.



6.4 Electrostatic Discharge

6.4.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #6	-	DYMSTEC	-	-	-	■
ESD SIMULATOR	ESS-2000	NoiseKen	ESS01Z0454	2026-01-13	2027-01-13	■
HCP	-	KES	-	-	-	■
VCP	-	Noise Ken	-	-	-	■

6.4.2 Test Location : SHIELD ROOM #6

6.4.3 Test Conditions :

Temperature	Relative Humidity
Temperature(15 ~ 35) °C	(23.0 ~ 23.1) °C
Relative Humidity(30 ~ 60) % R.H.	(37.2 ~ 37.3) % R.H.
Atmospheric Pressure(86 ~ 106) kPa	(100.5 ~ 100.5) kPa

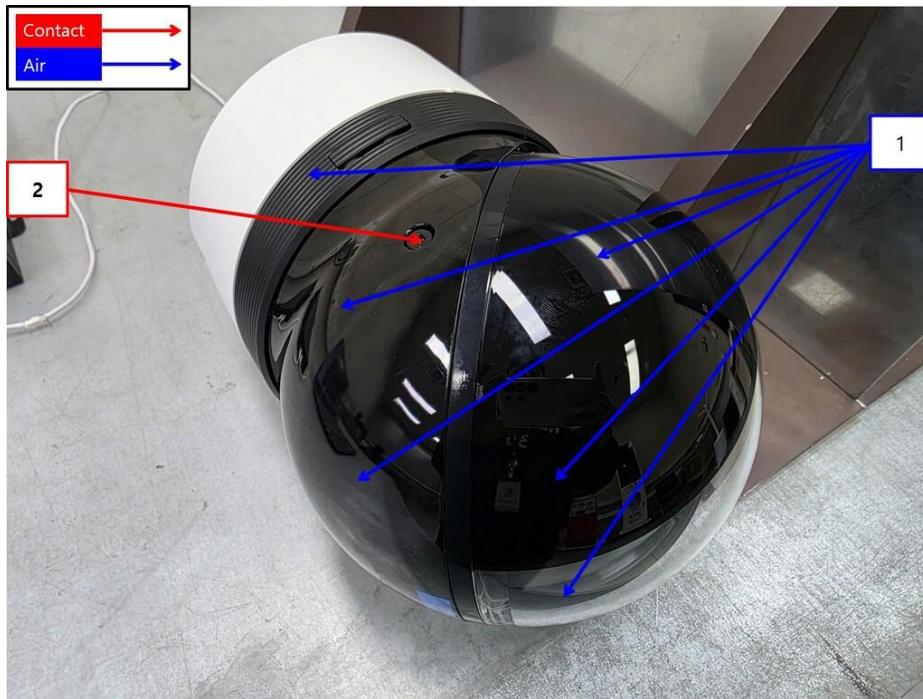
6.4.4 Test Specifications :

Discharge Factor	: 1 s
Discharge Impedance	: 330 Ω / 150 pF
Kind of Discharge	: Direct Discharge - Contact Discharge, Air Discharge Indirect Discharge - HCP, VCP
Polarity	: Positive and Negative
Number of Discharge	: 10 at all locations for Contact Discharge, 10 at all locations for Air Discharge
Performance Criteria	: Complied
Discharge Voltage	:

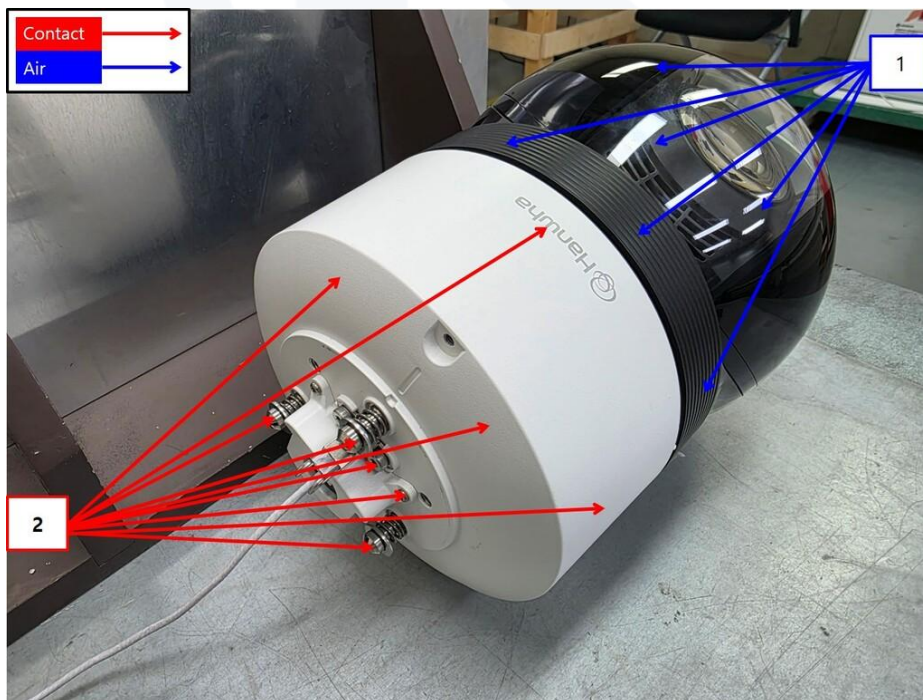
Type	Direct Discharge		Indirect Discharge	
	Contact Discharge	Air Discharge	Horizontal Coupling Plane	Vertical Coupling Plane
Test Voltage	-	± 2 kV	-	-
	± 6 kV	± 4 kV	± 6 kV	± 6 kV
	-	± 8 kV	-	-



6.4.5 Location of Discharge



<Location of Discharge-1>



<Location of Discharge-2>



6.4.6 Test Result

- Test Date : 2026-03-21
- Test Mode : Mode 1

○ Indirect Discharge

No.	Test Point	Discharge Method	Observations	Remarks
1	HCP Contact	Contact Discharge	Complied	-
2	VCP Contact	Contact Discharge	Complied	-

○ Direct Discharge

No.	Test Point	Discharge Method	Observations	Remarks
1	Enclosure1	Air Discharge	Complied	-
2	Enclosure2, Screw	Contact Discharge	Complied	-

6.4.7 Remark

No loss of performance of function.



6.5 Continuous RF electromagnetic field disturbances

6.5.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SEMI ANECHOIC CHAMBER #3	-	DYMSTEC	-	-	-	■
EMC32 Measurement Software	EMC32	R&S	10.10.02	-	-	■
SIGNAL GENERATOR	SMB 100A	Rohde & Schwarz	108252	2025-07-28	2026-07-28	■
HIGH POWER DUAL AMP	SSA532	SUNGSAN	SSA532-001	-	-	■
POWER METER	E4419B	Agilent	GB40203000	2026-02-12	2027-02-12	■
AVERAGE POWER SENSOR	E9301A	Agilent	MY52170007	2026-02-12	2027-02-12	■
AVERAGE POWER SENSOR	E9301A	Agilent	MY41498669	2026-02-12	2027-02-12	■
STACKED DOUBLE LOG-PER- ANTENNA	STPL9128 E	SCHWARZBECK	9128ES-121	-	-	■
DOUBLE RIDGED HORN ANTENNA	SAS-571	A.H. SYSTEM,INC	781	2026-03-06	2027-03-06	■

6.5.2 Test Location : SEMI ANECHOIC CHAMBER #3

6.5.3 Test Conditions :

Temperature	Relative Humidity
(21.8 ~ 22.0) °C	(35.8 ~ 36.0) % R.H.



6.5.4 Test Specifications :

Antenna Polarization	:	Horizontal & Vertical unless indicated otherwise
Antenna Distance	:	3 m
Field Strength	:	10 V/m (rms)
Frequency Range	:	80 MHz ~ 2.7 GHz
Modulation	:	AM 80 %, 1 kHz, Sine wave PM 1 Hz (0.5 s ON : 0.5 s OFF)
Dwell Time	:	3 s
Frequency Step	:	1 %
Application method	:	4
Performance Criteria	:	Complied



6.5.5 Test Result

- Test Date : 2026-03-25
- Test Mode : Mode 1
- Enclosure Port

Side Exposed	Observations	
	Horizontal	Vertical
Front	Complied	Complied
Rear	Complied	Complied
Right	Complied	Complied
Left	Complied	Complied

6.5.6 Remark

No loss of performance of function.



6.6 Electrical Fast Transients/Bursts

6.6.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #7	-	DYMSTEC	-	-	-	■
iec.control Software	iec.control	EM TEST	5.4.8	-	-	■
ULTRA COMPACT SIMULATOR	UCS 500N7	EM TEST	P1608172950	2025-11-05	2026-11-05	■
MOTOR VARIAC	MV 2616	EM TEST	P1552169719	2025-11-05	2026-11-05	■
CAPACITIVE COUPLING CLAMP	HFK	EM TEST	P1633183115	2025-11-05	2026-11-05	■

6.6.2 Test Location : SHIELD ROOM #7

6.6.3 Test Conditions :

Temperature	Relative Humidity
(23.0 ~ 23.1) °C	(37.4 ~ 37.5) % R.H.

6.6.4 Test Specifications :

Pulse Amplitude & Polarity	: Input a.c power ports ± 2.0 kV Other supply and Signal ports ± 1 kV
Repetition Rate	: 100 kHz
Impulse Rise Time	: 5 ns ± 30 %
Impulse Period	: 50 ns ± 30 %
Burst Duration	: 15 ms ± 20 %
Burst Period	: 300 ms ± 20 %
Duration of Test Voltage	: 1 min
Application Method	: a.c / d.c power ports (Coupling / Decoupling Network) Other than a.c / d.c power poerts (Capacitive Coupling Clamp)
Performance Criteria	: Complied



6.6.5 Test Result

○ Test Date : 2026-03-21

● Test Mode : Mode 1

○ Input a.c power ports

Mode of Application	Observations	
	(+) Burst	(-) Burst
N/A	-	-

○ Input d.c power ports

Mode of Application	Observations	
	(+) Burst	(-) Burst
N/A	-	-

○ Signal ports and telecommunication ports

Mode of Application	Observations	
	(+) Burst	(-) Burst
RJ-45(PoE)	Complied	Complied

6.6.6 Remark

No loss of performance of function.



6.7 Surge

6.7.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #7	-	DYMSTEC	-	-	-	■
iec.control Software	iec.control	EM TEST	5.4.8	-	-	■
ULTRA COMPACT SIMULATOR	UCS 500N7	EM TEST	P1608172950	2025-11-05	2026-11-05	■
MOTOR VARIAC	MV 2616	EM TEST	P1552169719	2025-11-05	2026-11-05	■
CDN	CNV 508N1	EM TEST	P1610176296	2025-11-05	2026-11-05	■

6.7.2 Test Location : SHIELD ROOM #7

6.7.3 Test Conditions :

Temperature	Relative Humidity
(23.0 ~ 23.1) °C	(37.4 ~ 37.5) % R.H.

6.7.4 Test Specifications :

Surge	: Input a.c power ports	Line to Line ±0.5 kV, ±1.0 kV
		Line to Ground ±0.5 kV, ±1.0 kV, ±2.0 kV
	Other supply / Signal lines	Line to Ground ±0.5 kV, ±1.0 kV
Input a.c / Other supply / Signal lines		
Open-Circuit Voltage Waveform	: 1.2/50 μs	
Short-Circuit Current Waveform	: 8/20 μs	
Number of Applications	: Apply 5 surges for each polarity	
Phase Angle	: 0° ~ 270° (input a.c. power port)	
Polarity	: Positive and Negative	
Repetition Rate	: 1 surge per 30 s	
Performance Criteria	: Complied	



6.7.5 Test Result

- Test Date : 2026-03-21
- Test Mode : Mode 1

- Input a.c power ports

Mode of Application	Observations	
	(+) Surge	(-) Surge
N/A	-	-

- Signal ports and telecommunication ports

Mode of Application	Coupling Method	Observations	
		(+) Surge	(-) Surge
RJ-45(PoE)	CDN	Complied	Complied
	LINE	Complied	Complied

6.7.6 Remark

No loss of performance of function.



6.8 Continuous Induced RF Disturbances

6.8.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #7	-	DYMSTEC	-	-	-	■
icd.control Software	icd.control	EM TEST	8.0.0	-	-	■
TEST SYSTEM FOR CONDUCTED AND RADIATED	NSG4070	TESEQ	65585	2025-11-03	2026-11-03	■
ATTENUATOR	ATT 6/80	EM TEST	P1614178148	2025-11-03	2026-11-03	■
CDN	CDN M016	TESEQ	43694	2025-11-03	2026-11-03	■
CDN	CDN M016	TESEQ	43697	2025-11-03	2026-11-03	■
CDN	CDN T8 RJ45	SCHWARZBEC K	00103	2025-07-07	2026-07-07	■

6.8.2 Test Location : SHIELD ROOM #7

6.8.3 Test Conditions :

Temperature	Relative Humidity
(22.5 ~ 22.6)°C	(36.2 ~ 36.3) % R.H.

6.8.4 Test Specifications

Frequency range and Voltage Level	:	0.15 MHz ~ 100 MHz : 10 V(r.m.s)
Modulation	:	AM 80 %, 1 kHz, Sine wave PM 1 Hz (0.5 s ON : 0.5 s OFF)
Dwell Time	:	3 s
Frequency Step	:	1 %
Performance Criteria	:	Complied



6.8.5 Test Result

- Test Date : 2026-03-22
- Test Mode : Mode 1
- Input a.c power ports

Coupling Location (Line Stressed)	Coupling Method	Observations
N/A	-	-

- Input d.c power ports

Coupling Location (Line Stressed)	Coupling Method	Observations
N/A	-	-

- Signal ports and telecommunication ports

Coupling Location (Line Stressed)	Coupling Method	Observations
RJ-45(PoE)	CDN	Complied

6.8.6 Remark

No loss of performance of function.



7 Test Setup Photos and EUT Photographs

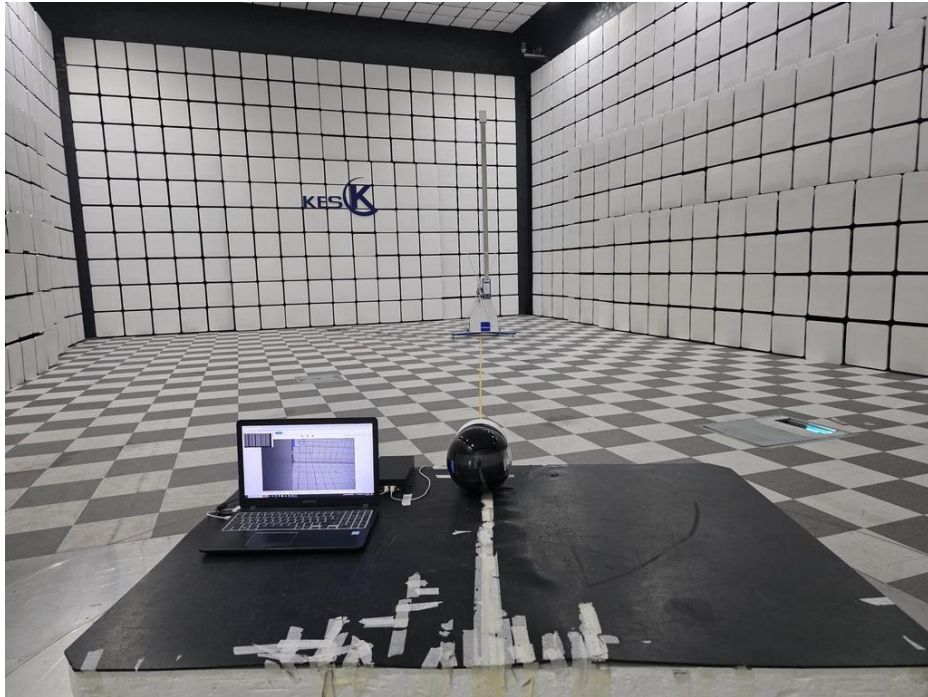
7.1 Test Setup Photos



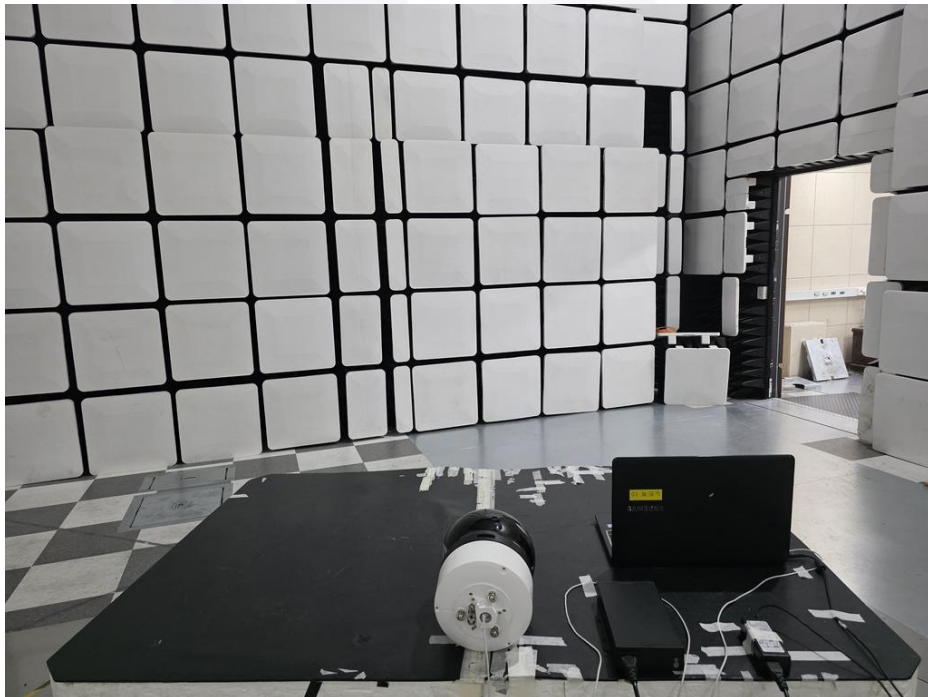
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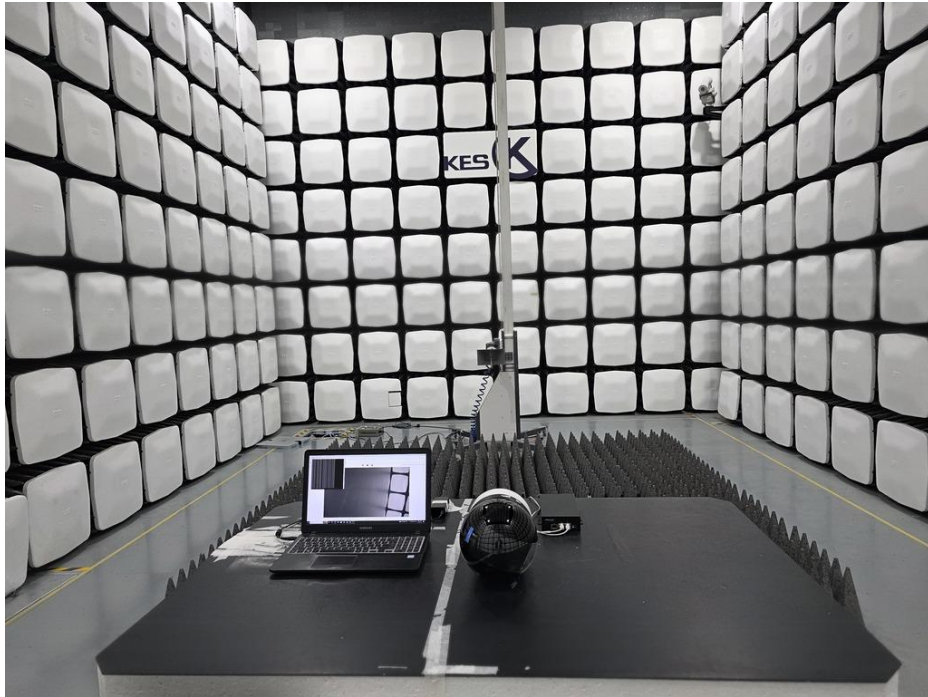
<Conducted Emissions at Telecommunication Ports - Rear>



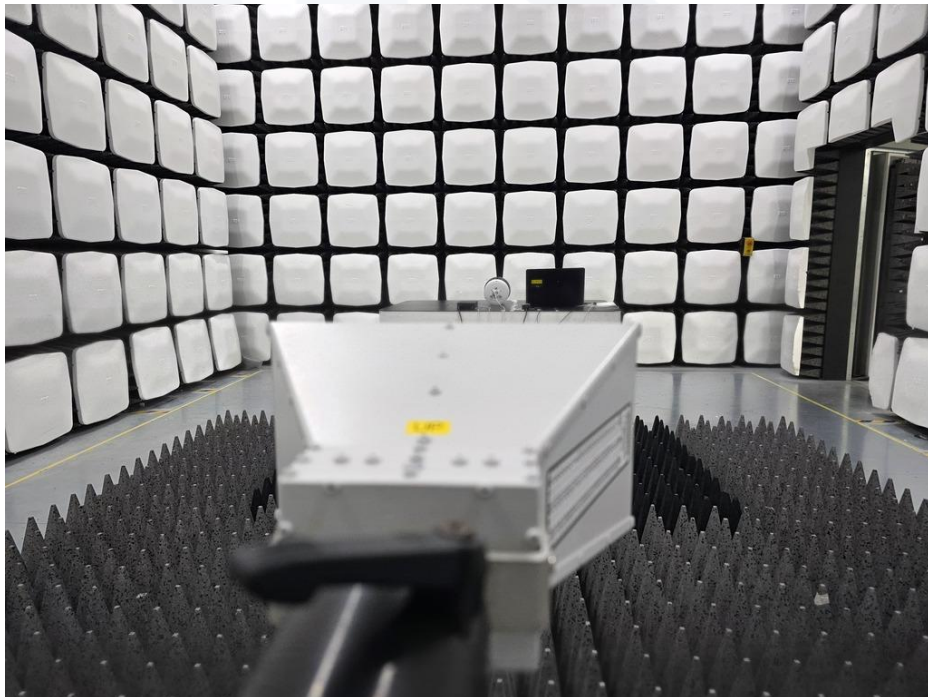
<Radiated Emissions(Below 1 GHz) - Front>



<Radiated Emissions(Below 1 GHz) - Rear>



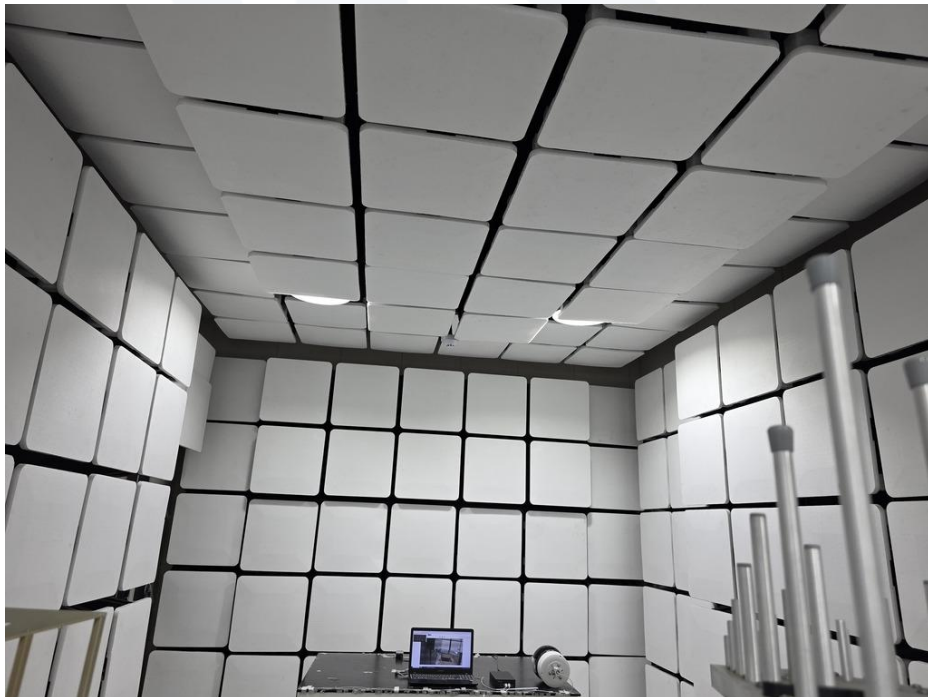
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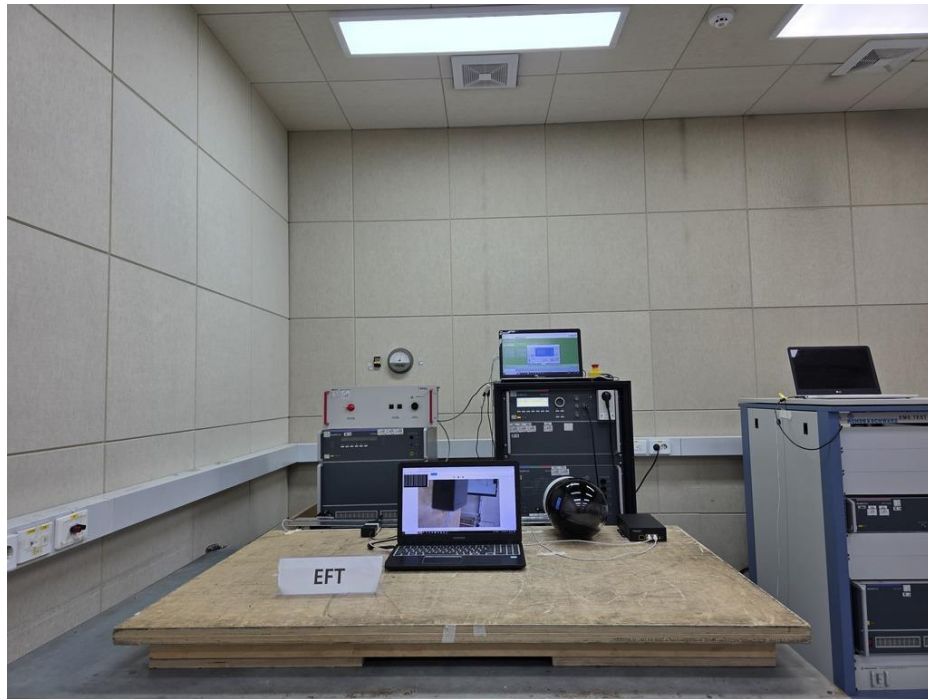
<Radiated Emissions(Above 1 GHz) - Rear>



<Electrostatic Discharge>



<Continuous RF electromagnetic field disturbances>



<Electrical Fast Transients/Bursts>



<Surge>



<Continuous Induced RF Disturbances>



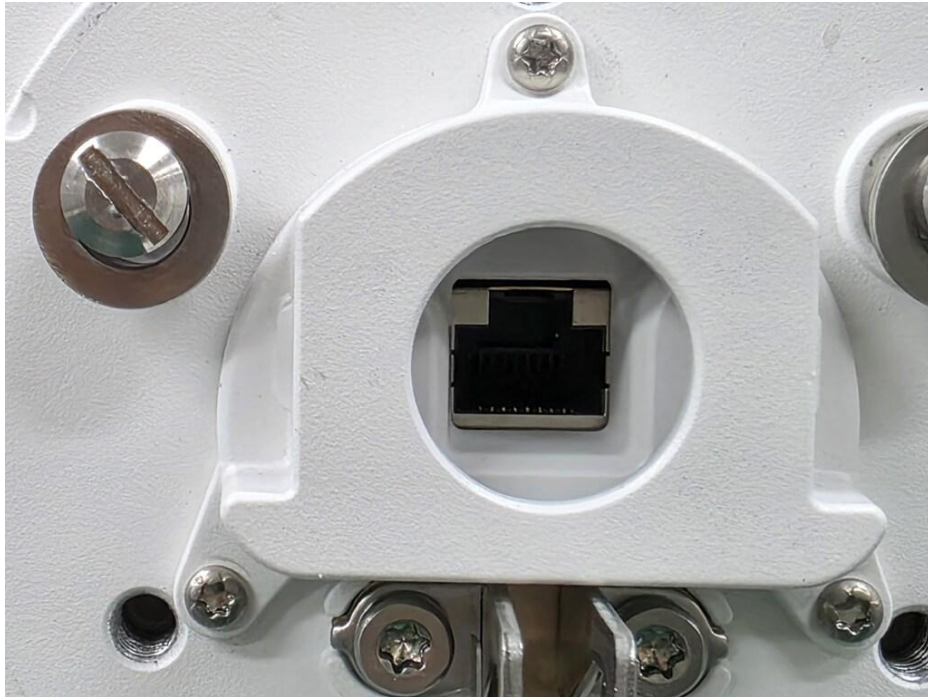
7.2 EUT Photographs



<EUT External Photographs - Top>



<EUT External Photographs - Bottom>



<Port-1>



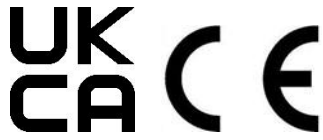
<Port-2>



<EUT Internal Photographs>



7.3 Label



Name : Hanwha Vision Co., Ltd.
Product item : NETWORK CAMERA
Model name : XNP-A9314R

The End.

