

**KES Co., Ltd.**

3701, 40, Simin-daero 365beon-gil,
Dongan-gu, Anyang-si, Gyeonggi-do, 14057, Korea
Tel: +82-31-425-6200 / Fax: +82-31-424-0450
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Report No.:

KES-EM-21T1203-R1

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EMC TEST REPORT

Test Report No. : KES-EM-21T1203-R1
Date of Issue : Feb. 24, 2023
Product name : NETWORK CAMERA
Model/Type No. : XNZ-6320A
Variant Model : -
Applicant : Hanwha Vision Co., Ltd
Applicant Address : 6, Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, Republic of Korea
Manufacturer : 1. HANWHA VISION VIETNAM COMPANY LIMITED
2. D-TECH CO.,LTD.
Manufacturer Address : 1. Lot O-2, Que Vo Industrial Zone extended area,
Nam Son commune, Bac Ninh city, Bac Ninh province, Vietnam
2. 173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi- do,
Korea (Suwon Industrial Complex)
Equipment authorization : **Supplier's Declaration of Conformity**
Date of Receipt : Nov. 12, 2021
Test date : Nov. 24, 2021 ~ Nov. 26, 2021
Test Results : ☒ **In Compliance** ☐ **Not in Compliance**

Tested by

Sung Keun, Park
EMC Test Engineer

Reviewed by

Dong-Hun, Jang
EMC Technical Manager

Tested by Ki Man, Kim
(Retired person)
Proxy signature : Sung Keun, Park

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

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REPORT REVISION HISTORY

Date	Test Report No.	Revision History
Dec. 21, 2021	KES-EM-21T1203	Issued
Feb. 24, 2023	KES-EM-21T1203-R1	Change the Applicant and manufacturer at the request of the customer

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1.0 General Product Description

Main Specifications of EUT are:

Video	
Imaging Device	1/2.8" 2MP CMOS
Effective Pixels	1944(H)x1212(V)
Min. Illumination	Color: 0.05Lux (1/30sec, F1.6) B/W: 0.005 Lux (1/30sec, F1.6)
Video Out	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation USB: Micro USB Type B, 1280x720 for installation
Lens	
Focal Length (Zoom Ratio)	4.44 ~ 142.6mm(Optical 32X)
Max. Aperture Ratio	F1.6(Wide)~F4.4(Tele)
Angular Field of View	H: 64.66°(Wide)~2.29°(Tele) / V: 38.08°(Wide)~1.30°(Tele)
Min. Object Distance	Wide 1.5m(4.92ft) ,Tele 2m(6.56ft)
Focus Control	Auto, One shot AF
Lens Type	DC auto Iris
Operational	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR V
Digital Image Stabilization	Support
Defog	Support
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, rectangular zones - Color: Grey/Green/Red/Blue/Black/White - Mosaic
Gain Control	OFF/ LOW/ MID/ HIGH
White Balance	ATW / AWC / Manual / Indoor / Outdoor / Mercury / Sodium
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2~1/12,000sec)
Video Rotation	Flip, Mirror
Analytics	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Sound classification, Shock detection
Serial Interface	RS-485/422(Samsung-T, Pelco-D/P, Panasonic, Bosch, AD, GE, Vicon, Honeywell)
Alarm I/O	Input 1ea / Output 2ea
Alarm Triggers	Analytics, Network disconnect, Alarm input
Alarm Events	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output PTZ Preset
Audio In	Selectable(mic in/line in) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
Audio Out	Line out, Max.output level: 1Vrms
Network	
Ethernet	RJ-45(10/100BASE-T), SFP(100BASE-FX)
Video Compression	H.265/H.264: Main/Baseline/High, MJPEG
Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240

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Max. Framerate	H.265/H.264: Max. 60fps/50fps(60Hz/50Hz) MJPEG: Max. 30fps/25fps(60Hz/50Hz)
Smart Codec	Manual(5ea area), WiseStream II
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 10 profiles)
Audio Compression	G.711 u-law /G.726 Selectable G.726(ADPCM) 8KHz, G.711 8KHz G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC: 48Kbps at 16KHz
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour, LLDP, SRTP
Security	HTTPS(SSL) Login Authentication Digest Login Authentication IP Address Filtering User access Log 802.1X Authentication(EAP-TLS, EAP-LEAP)
Edge Storage	Micro SD/SDHC/SDXC 2 slot 512GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Web Viewer	None
Memory	1024MB RAM, 256MB Flash
Environmental	
Operating Temperature / Humidity	-10°C ~ +55°C(+14°F ~ +131°F) / Less than 90% RH
Storage Temperature / Humidity	-30°C ~ +60°C(-22°F ~ +140°F) / Less than 90% RH
Electrical	
Input Voltage	PoE(IEEE802.3af, Class3), 12VDC
Power Consumption	PoE: Max 7.5W, Typical 4.5W 12VDC: Max 7.0W, Typical 4.0W
Mechanical	
Color / Material	Dark grey / Aluminum
Product dimensions / weight	96 x 76 x 143.5mm, 578g
DORI (EN62676-4 standard)	
Detect (25PPM/ 8PPF)	Wide: 64.2m(199.1ft) / Tele: 1921.3m(6303.4ft)
Observe (63PPM/ 19PPF)	Wide: 24.3m(79.6ft) / Tele: 768.5m(2521.4ft)
Recognize (125PPM/ 38PPF)	Wide: 12.1m(39.8ft) / Tele: 384.3m(1260.7ft)
Identify (250PPM/ 76PPF)	Wide: 6.1m(19.9ft) / Tele: 192.1m(630.3ft)

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1.1 Test Voltage & Frequency

Unless indicated otherwise on the individual data sheet or test results, the test voltage and frequency was as indicated below.

☒ AC 120 V, 60 Hz (DC Adapter) ☒ PoE

1.2 Variant Model Differences

Not applicable

1.3 Device Modifications

Not applicable

1.4 Equipment Under Test

Description	Model Number	Serial Number	Manufacturer	Remarks
NETWORK CAMERA	XNZ-6320A	-	HANWHA VISION VIETNAM COMPANY LIMITED	EUT

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1.5 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
Adaptor	2ACB022F	-	Channel Well Technology (Guangzhou) Co., Ltd.	-
PoE Adaptor	PT-PSE106GBR-AH-S	-	Dongguan PROCET Network Technology Co., Ltd	-
Notebook	Latitude 5300	8C47BE45C060	DELL INC.	-
Notebook Adaptor	HA65NM130	-	Chicony Power Technology(Suzhou)Co., Ltd.	-
Gender	-	-	-	-
Converter	FIBERFLY-5001NZ	-	KTS OPTONICS CO., LTD.	-
Converter Adaptor	SAW06D-050-1000KD	-	SHENZHEN SHI YINGYUAN ELECTRONICS CO.,LTD	-
Smartphone	LG-SU760	108KPQJ0186212	LG	-
Headset	K550	-	Britz®	-
Alarm1	-	-	-	-
Alarm2	-	-	-	-
Alarm3	-	-	-	-
Controller1	SPC-1010	-	SamSung Techwin Co.,Ltd.	-
Controller1 Adaptor	AP-12005A	-	A-power.	-
Controller2	SPC-1010	-	SamSung Techwin Co.,Ltd.	-
Controller2 Adaptor	AP-12005A	-	A-power.	-
Micro SD Card1	-	-	SanDisk	-
Micro SD Card2	-	-	SanDisk	-
Optical Module1	SFP-SM	-	Interlink Telecom Co., Limited	-
Optical Module2	SFP-SM	-	Interlink Telecom Co., Limited	-

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1.6 External I/O Cabling

■ DC Mode

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
NETWORK CAMERA (EUT)	2 Pin	Adaptor	2 Pin	1.2	U
	RJ-45	Notebook	RJ-45	3.0	S
	3.5 mm	Headset	3.5 mm	1.7	U
	3.5 mm		3.5 mm	1.7	U
	RS-485	Controller1	RS-485	3.0	U
	RS-422	Controller2	RS-422	3.0	U
	SLOT	Micro SD Card1	SLOT	-	-
	SLOT	Micro SD Card2	SLOT	-	-
	2 Pin	Alarm1	2 Pin	3.0	U
	2 Pin	Alarm2	2 Pin	3.0	U
	2 Pin	Alarm3	2 Pin	3.0	U
Notebook	DC Jack	Notebook Adaptor	DC Jack	1.2	U
	3.5 mm	Gender	3.5 mm	0.1	U
Gender	3.5 mm	Smartphone	3.5 mm	1.0	U
Controller1	DC Jack	Controller1 Adaptor	DC Jack	1.6	U
Controller2	DC Jack	Controller2 Adaptor	DC Jack	1.6	U

* Unshielded=U, Shielded=S

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■ DC_Optical Mode

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
NETWORK CAMERA (EUT)	2 Pin	Adaptor	2 Pin	1.2	U
	SFP	Optical Module1	SFP	-	-
	3.5 mm	Headset	3.5 mm	1.7	U
	3.5 mm		3.5 mm	1.7	U
	RS-485	Controller1	RS-485	3.0	U
	RS-422	Controller2	RS-422	3.0	U
	SLOT	Micro SD Card1	SLOT	-	-
	SLOT	Micro SD Card2	SLOT	-	-
	2 Pin	Alarm1	2 Pin	3.0	U
	2 Pin	Alarm2	2 Pin	3.0	U
	2 Pin	Alarm3	2 Pin	3.0	U
Notebook	DC Jack	Notebook Adaptor	DC Jack	1.2	U
	3.5 mm	Gender	3.5 mm	0.1	U
	RJ-45	Converter	RJ-45	1.5	U
Gender	3.5 mm	Smartphone	3.5 mm	1.0	U
Controller1	DC Jack	Controller1 Adaptor	DC Jack	1.6	U
Controller2	DC Jack	Controller2 Adaptor	DC Jack	1.6	U
Optical Module1	Optical	Optical Module2	Optical	5.0	U
Converter	SFP	Optical Module2	SFP	-	-
	DC Jack	Converter Adaptor	DC Jack	1.4	U

* Unshielded=U, Shielded=S

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■ PoE Mode

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
NETWORK CAMERA (EUT)	RJ-45 (PoE)	PoE Adaptor	RJ-45 (PoE)	3.0	S
	3.5 mm	Headset	3.5 mm	1.7	U
	3.5 mm		3.5 mm	1.7	U
	RS-485	Controller1	RS-485	3.0	U
	RS-422	Controller2	RS-422	3.0	U
	SLOT	Micro SD Card1	SLOT	-	-
	SLOT	Micro SD Card2	SLOT	-	-
	2 Pin	Alarm1	2 Pin	3.0	U
	2 Pin	Alarm2	2 Pin	3.0	U
	2 Pin	Alarm3	2 Pin	3.0	U
Notebook	DC Jack	Notebook Adaptor	DC Jack	1.2	U
	3.5 mm	Gender	3.5 mm	0.1	U
	RJ-45 (LAN)	PoE Adaptor	RJ-45 (LAN)	3.0	S
Gender	3.5 mm	Smartphone	3.5 mm	1.0	U
Controller1	DC Jack	Controller1 Adaptor	DC Jack	1.6	U
Controller2	DC Jack	Controller2 Adaptor	DC Jack	1.6	U

* Unshielded=U, Shielded=S

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■ PoE_Optical Mode

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
NETWORK CAMERA (EUT)	RJ-45 (PoE)	PoE Adaptor	RJ-45 (PoE)	3.0	S
	SFP	Optical Module1	SFP	-	-
	3.5 mm	Headset	3.5 mm	1.7	U
	3.5 mm		3.5 mm	1.7	U
	RS-485	Controller1	RS-485	3.0	U
	RS-422	Controller2	RS-422	3.0	U
	SLOT	Micro SD Card1	SLOT	-	-
	SLOT	Micro SD Card2	SLOT	-	-
	2 Pin	Alarm1	2 Pin	3.0	U
	2 Pin	Alarm2	2 Pin	3.0	U
	2 Pin	Alarm3	2 Pin	3.0	U
Notebook	DC Jack	Notebook Adaptor	DC Jack	1.2	U
	3.5 mm	Gender	3.5 mm	0.1	U
	RJ-45	Converter	RJ-45	1.5	U
Gender	3.5 mm	Smartphone	3.5 mm	1.0	U
Controller1	DC Jack	Controller1 Adaptor	DC Jack	1.6	U
Controller2	DC Jack	Controller2 Adaptor	DC Jack	1.6	U
Optical Module1	Optical	Optical Module2	Optical	5.0	U
Converter	SFP	Optical Module2	SFP	-	-
	DC Jack	Converter Adaptor	DC Jack	1.4	U

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1.7 EUT Operating Mode(s)

operating
EUT Monitoring, Ping Test

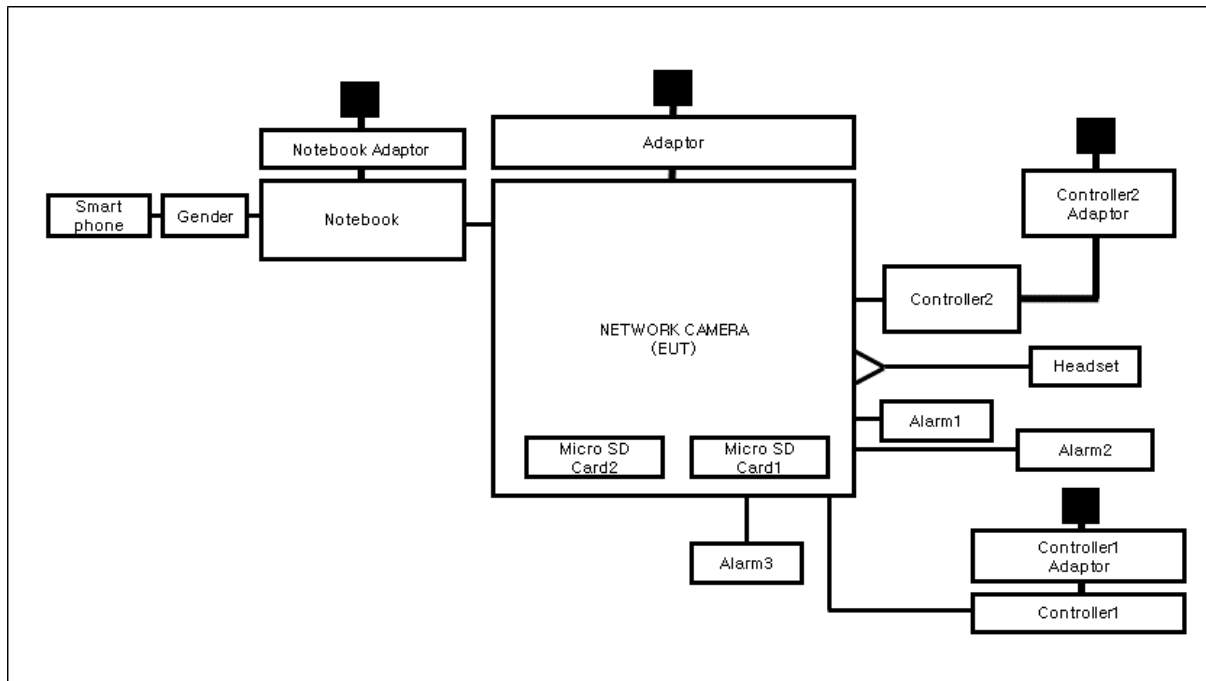
EUT Test operating S/W		
Name	Version	Manufacture Company
Web Viewer	-	Hanwha Vision Co., Ltd

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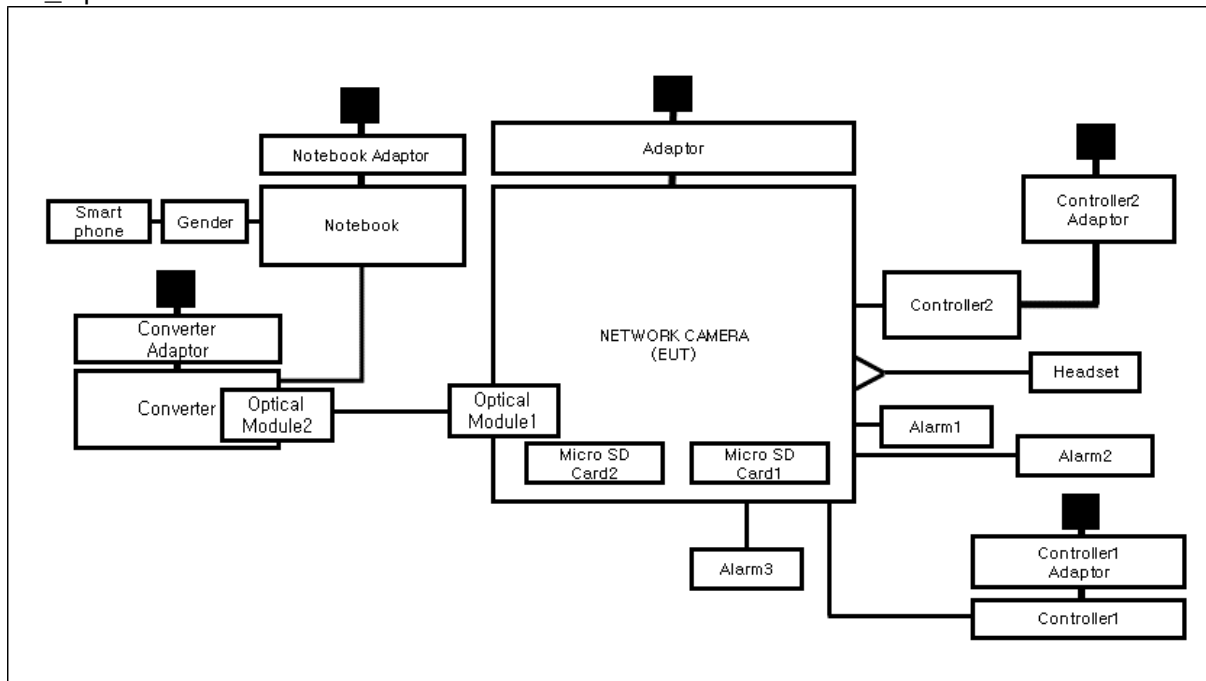
1.8 Configuration

■ AC Main
 □ DC Main

■ DC Mode

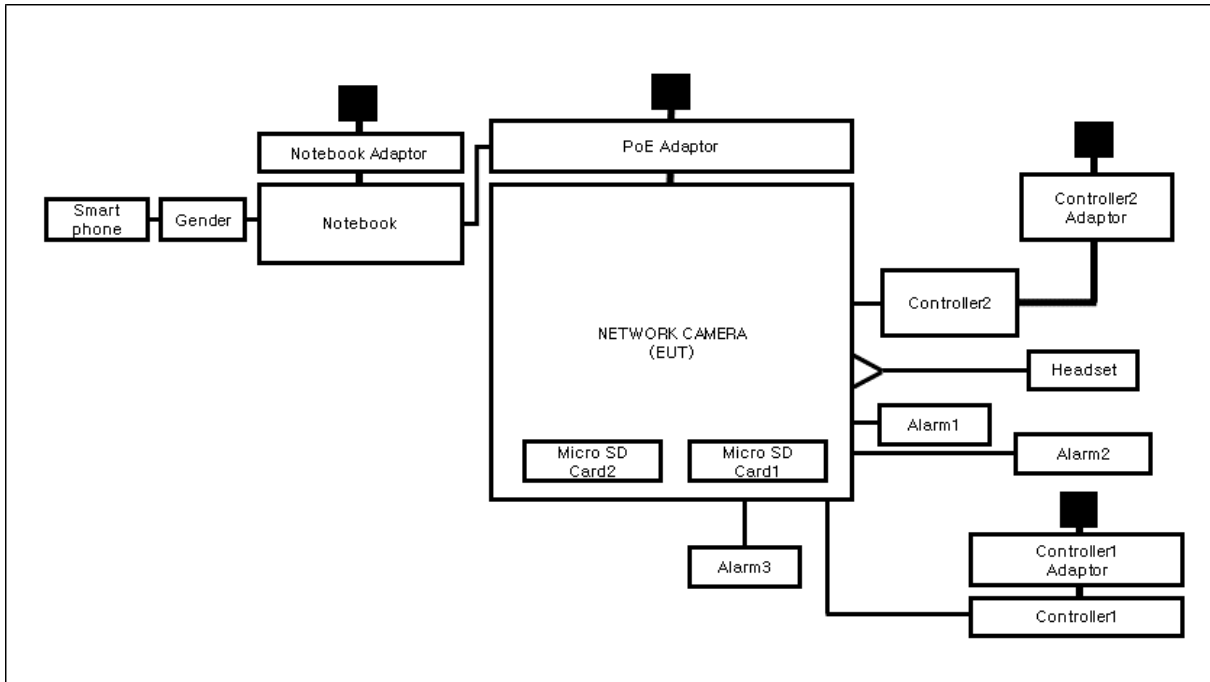


■ DC_Optical Mode

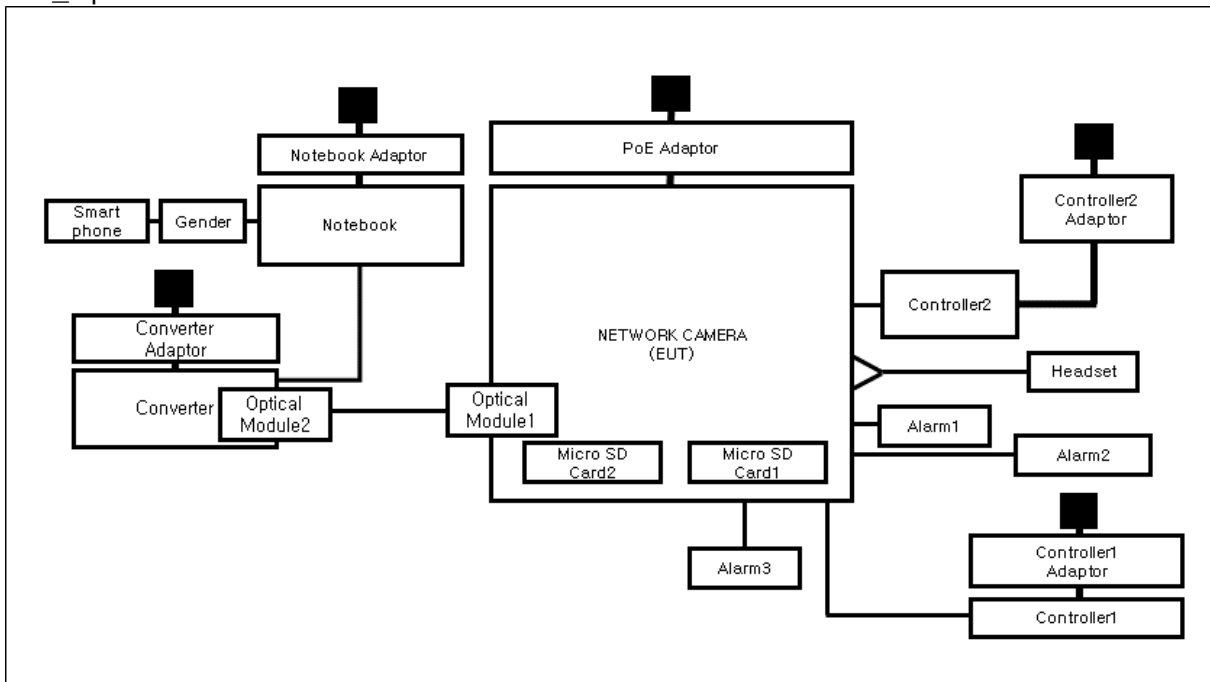


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■ PoE Mode



■ PoE_Optical Mode



1.9 Remarks when standards applied

- When connecting optical ports, RJ-45 ports were tested by mode as they did not communicate data.
- USB, VIDEO port is not tested because it is an unused port.

1.10 Calibration Details of Equipment Used for Measurement

Test equipment and test accessories are calibrated on regular basis. The maximum time between calibrations is one year or what is recommended by the manufacturer, whichever is less.

1.11 Test Facility

The measurement facility is located at 473-21, Gayeo-ro, Yeosu-si, Gyeonggi-do, 12658, Korea, Republic of. The sites are constructed in conformance with the requirements of ANSI C63.4a-2017 and CISPR 16-1-4:2019

1.12 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 0004

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2.0 Test Regulations

The emissions tests were performed according to following regulations:

☒ **47 CFR Part 15, Subpart B**

☐ CISPR 22:2009 +A1:2010

☐ Class A

☐ Class B

☒ ANSI C63.4a-2017

☒ Class A

☐ Class B

☒ **IC Regulation ICES-003 Issue 7**

☐ CAN/CSA-CISPR 32:17

☐ Class A

☐ Class B

☒ ANSI C63.4a-2017

☒ Class A

☐ Class B

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2.1 Conducted Emissions at Mains Power Ports

Test Date

Nov. 25, 2021

Test Location

Electro wave Shieldroom #6

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI Test S/W	EMC32	R & S	9.12.00	-
☒	EMI TEST RECEIVER	ESR3	R & S	101783	01, 15, 2022
☒	LISN	ENV216	R & S	101787	12, 29, 2021
☒	LISN	ESH2-Z5	R & S	100450	12, 29, 2021
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	12, 29, 2021

Test Conditions

Temperature: (22,8 ± 0,2) °C

Relative Humidity: (43,7 ± 0,3) % R.H.

Frequency Range of Measurement

150 kHz to 30 MHz

Instrument Settings

IF Band Width: 9 kHz

Test Results

The requirements are:

- ☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

RemarksSee Appendix A for test data.

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Dongan-gu, Anyang-si, Gyeonggi-do, 14057, Korea
Tel: +82-31-425-6200 / Fax: +82-31-424-0450
www.kes.co.kr

Report No.:

KES-EM-21T1203-R1

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2.2 Radiated Electric Field Emissions(Below 1 GHz)

Test Date

Nov. 24, 2021 / Nov. 25, 2021

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

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI Test S/W	EP5/RE	TOYO Corporation	6.0.0	-
☒	EMI TEST RECEIVER	ESU26	R & S	100551	04, 01, 2022
☒	AMPLIFIER	SCU 01	R & S	100603	11, 24, 2022
☒	TRILOG-BROADBAND ANTENNA	VULB9163	Schwarzbeck	715	12, 08, 2022
☒	ATTENUATOR	8491A	HP	32173	03, 10, 2022

Test Conditions

Test Date: Nov. 24, 2021

Nov. 25, 2021

Temperature: (23,1 ± 0,2) °C

(22,8 ± 0,4) °C

Relative Humidity: (44,0 ± 0,4)% R.H.

(43,7 ± 0,5)% R.H.

Frequency Range of Measurement

30 MHz to 1 GHz

Instrument Settings

IF Band Width: 120 kHz

Test Results

The requirements are:

☒ PASS☐ NOT PASS☐ NOT APPLICABLE**Remarks**See Appendix A for test data.

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2.3 Radiated Electric Field Emissions(Above 1 GHz)

Test Date

Nov. 26, 2021

Test Location

SEMI ANECHOIC CHAMBER #5

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI Test S/W	EP5/RE	TOYO Corporation	6.0.120	-
☒	EMI TEST RECEIVER	ESU26	Rohde & Schwarz	100552	04, 01, 2022
☒	HORN ANTENNA	BBHA 9120D	SCHWARZBECK	9120D-1802	12, 16, 2022
☒	PREAMPLIFIER	8449B	HP	3008A00538	06, 21, 2022

Test Conditions

Temperature: (23,4 ± 0,3) °C

Relative Humidity: (46,5 ± 0,5) % R.H.

Frequency Range of Measurement

1 GHz to 5 GHz

Instrument Settings

IF Band Width: 1 MHz

Test Results

The requirements are:

- ☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

Remarks

See Appendix A for test data.



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APPENDIX A – TEST DATA

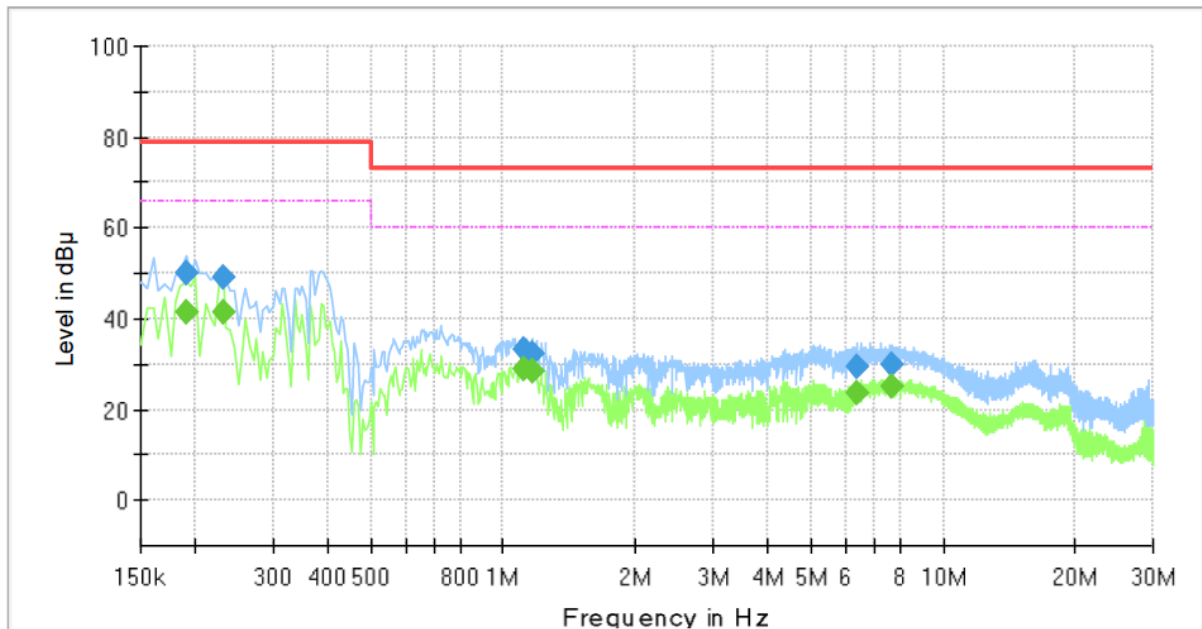
Conducted Emissions at Mains Power Ports

■ DC Mode

HOT LINE

Common Information

Test Description:	Conducted Emission
Model No.:	XNZ-6320A
Phase:	L1
Mode:	DC
Operator Name:	KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.190000	---	41.48	66.00	24.52	1000.0	9.000	L1	19.5
0.190000	50.24	---	79.00	28.76	1000.0	9.000	L1	19.5
0.230000	---	41.52	66.00	24.48	1000.0	9.000	L1	19.5
0.230000	49.31	---	79.00	29.69	1000.0	9.000	L1	19.5
1.110000	---	28.86	60.00	31.14	1000.0	9.000	L1	20.1
1.110000	33.21	---	73.00	39.79	1000.0	9.000	L1	20.1
1.160000	---	28.20	60.00	31.80	1000.0	9.000	L1	20.1
1.160000	32.50	---	73.00	40.50	1000.0	9.000	L1	20.1
6.340000	---	23.61	60.00	36.39	1000.0	9.000	L1	19.6
6.340000	29.35	---	73.00	43.65	1000.0	9.000	L1	19.6
7.660000	---	25.26	60.00	34.74	1000.0	9.000	L1	19.6
7.660000	30.10	---	73.00	42.90	1000.0	9.000	L1	19.6

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Report No.:

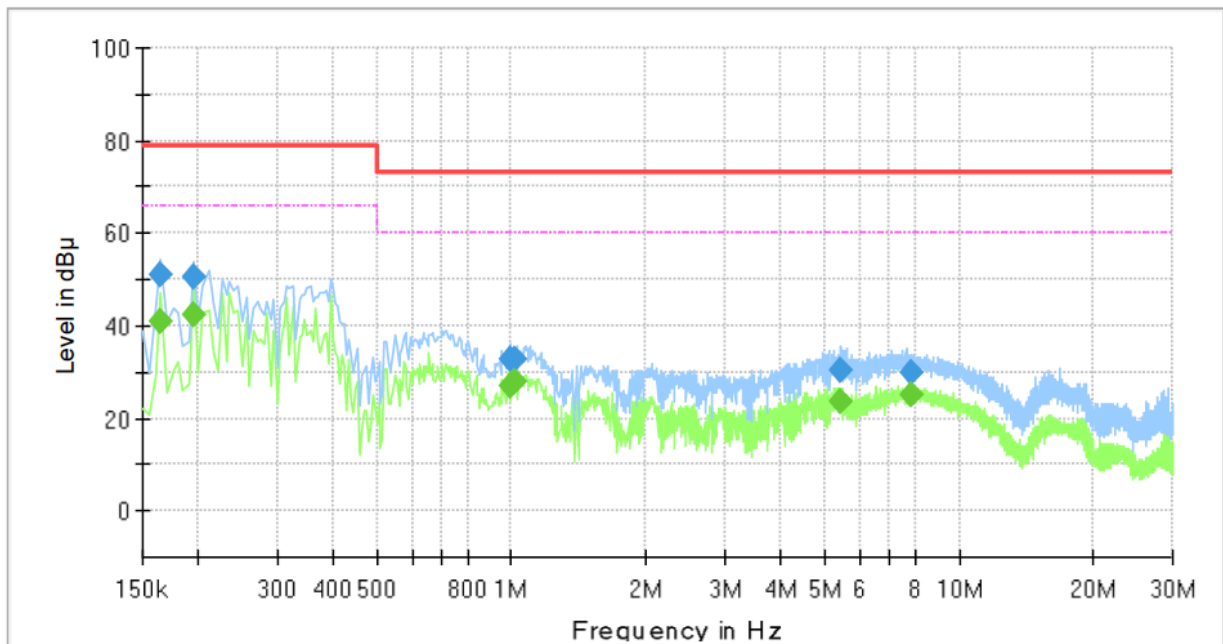
KES-EM-21T1203-R1

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NEUTRAL LINE

Common Information

Test Description:	Conducted Emission
Model No.:	XNZ-6320A
Phase:	N
Mode:	DC
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.165000	---	40.84	66.00	25.16	1000.0	9.000	N	19.4
0.165000	50.89	---	79.00	28.11	1000.0	9.000	N	19.4
0.195000	---	42.50	66.00	23.50	1000.0	9.000	N	19.5
0.195000	50.42	---	79.00	28.58	1000.0	9.000	N	19.5
0.990000	---	26.95	60.00	33.05	1000.0	9.000	N	20.1
0.990000	32.58	---	73.00	40.42	1000.0	9.000	N	20.1
1.015000	---	27.93	60.00	32.07	1000.0	9.000	N	20.1
1.015000	32.60	---	73.00	40.40	1000.0	9.000	N	20.1
5.460000	---	23.64	60.00	36.36	1000.0	9.000	N	19.6
5.460000	30.37	---	73.00	42.63	1000.0	9.000	N	19.6
7.845000	---	25.12	60.00	34.88	1000.0	9.000	N	19.6
7.845000	30.01	---	73.00	42.99	1000.0	9.000	N	19.6

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■ DC_Optical Mode

HOT LINE

Common Information

Test Description:

Model No.:

Phase:

Mode:

Operator Name:

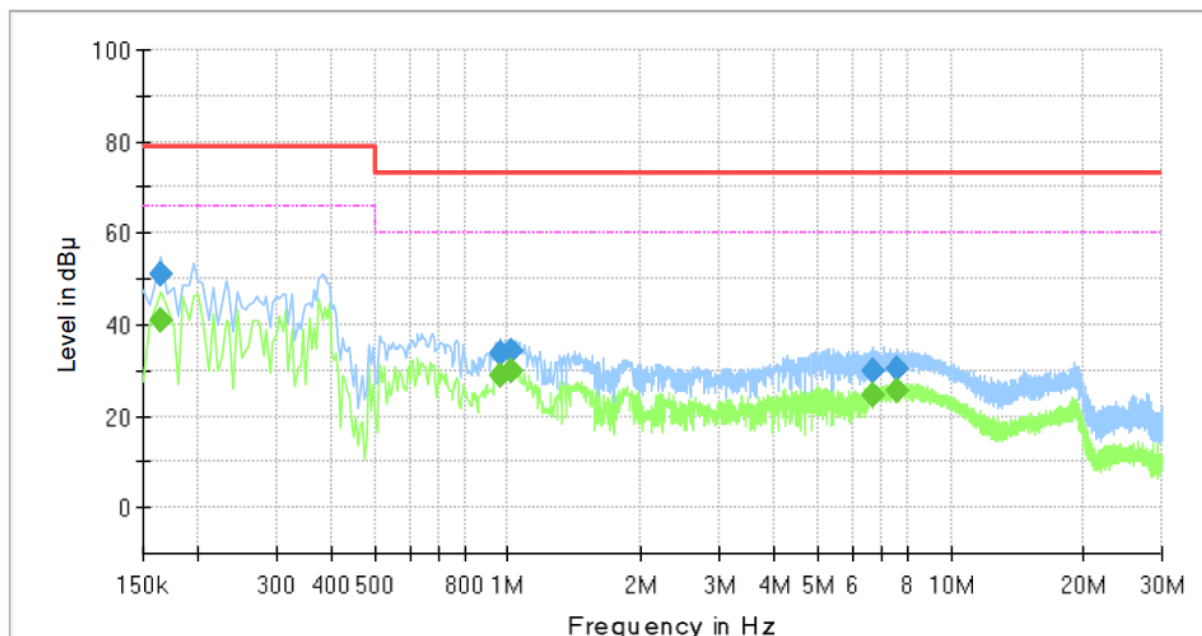
Conducted Emission

XNZ-6320A

DC_Optical

L1

KES



Final_Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.165000	---	40.91	66.00	25.09	1000.0	9.000	L1	19.5
0.165000	51.06	---	79.00	27.94	1000.0	9.000	L1	19.5
0.965000	---	28.77	60.00	31.23	1000.0	9.000	L1	20.1
0.965000	33.91	---	73.00	39.09	1000.0	9.000	L1	20.1
1.020000	---	29.66	60.00	30.34	1000.0	9.000	L1	20.1
1.020000	34.36	---	73.00	38.64	1000.0	9.000	L1	20.1
6.705000	---	24.50	60.00	35.50	1000.0	9.000	L1	19.5
6.705000	29.91	---	73.00	43.09	1000.0	9.000	L1	19.5
7.525000	---	25.44	60.00	34.56	1000.0	9.000	L1	19.6
7.525000	30.49	---	73.00	42.51	1000.0	9.000	L1	19.6

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Report No.:

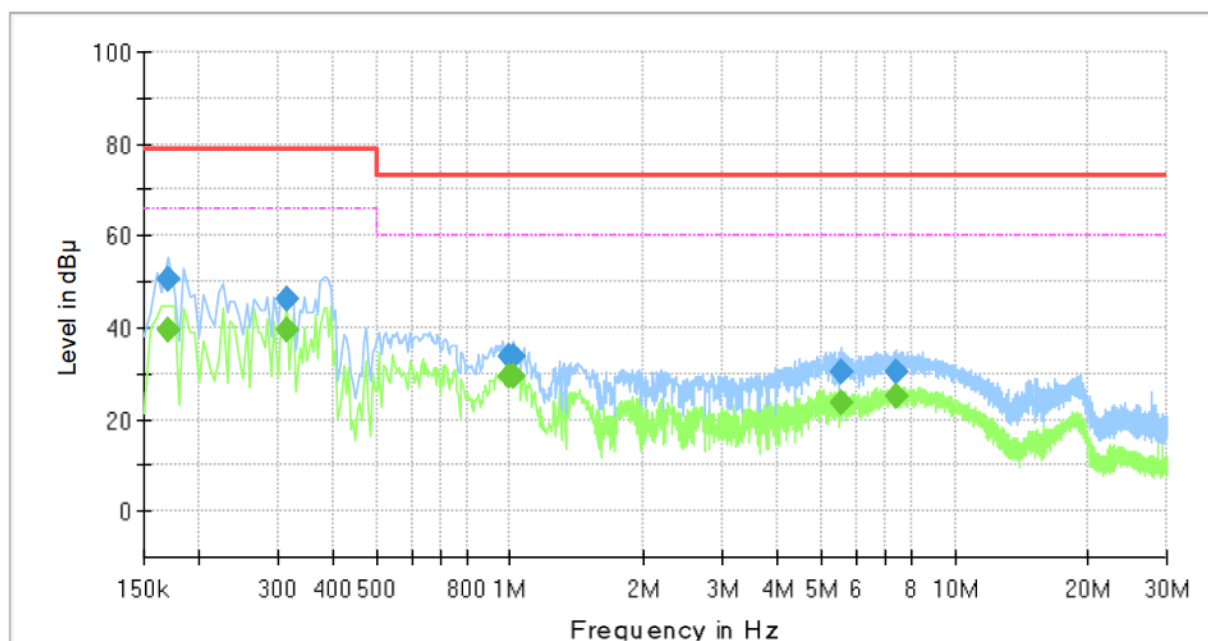
KES-EM-21T1203-R1

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NEUTRAL LINE

Common Information

Test Description:	Conducted Emission
Model No.:	XNZ-6320A
Phase:	DC_Optical
Mode:	N
Operator Name:	KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.170000	---	39.69	66.00	26.31	1000.0	9.000	N	19.4
0.170000	50.53	---	79.00	28.47	1000.0	9.000	N	19.4
0.315000	---	39.68	66.00	26.32	1000.0	9.000	N	19.6
0.315000	46.26	---	79.00	32.74	1000.0	9.000	N	19.6
0.995000	---	29.38	60.00	30.62	1000.0	9.000	N	20.1
0.995000	33.91	---	73.00	39.09	1000.0	9.000	N	20.1
1.015000	---	29.31	60.00	30.69	1000.0	9.000	N	20.1
1.015000	33.86	---	73.00	39.14	1000.0	9.000	N	20.1
5.540000	---	23.63	60.00	36.37	1000.0	9.000	N	19.6
5.540000	30.46	---	73.00	42.54	1000.0	9.000	N	19.6
7.355000	---	25.13	60.00	34.87	1000.0	9.000	N	19.6
7.355000	30.43	---	73.00	42.57	1000.0	9.000	N	19.6

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■ PoE Mode

HOT LINE

Common Information

Test Description:

Model No.:

Phase:

Mode:

Operator Name:

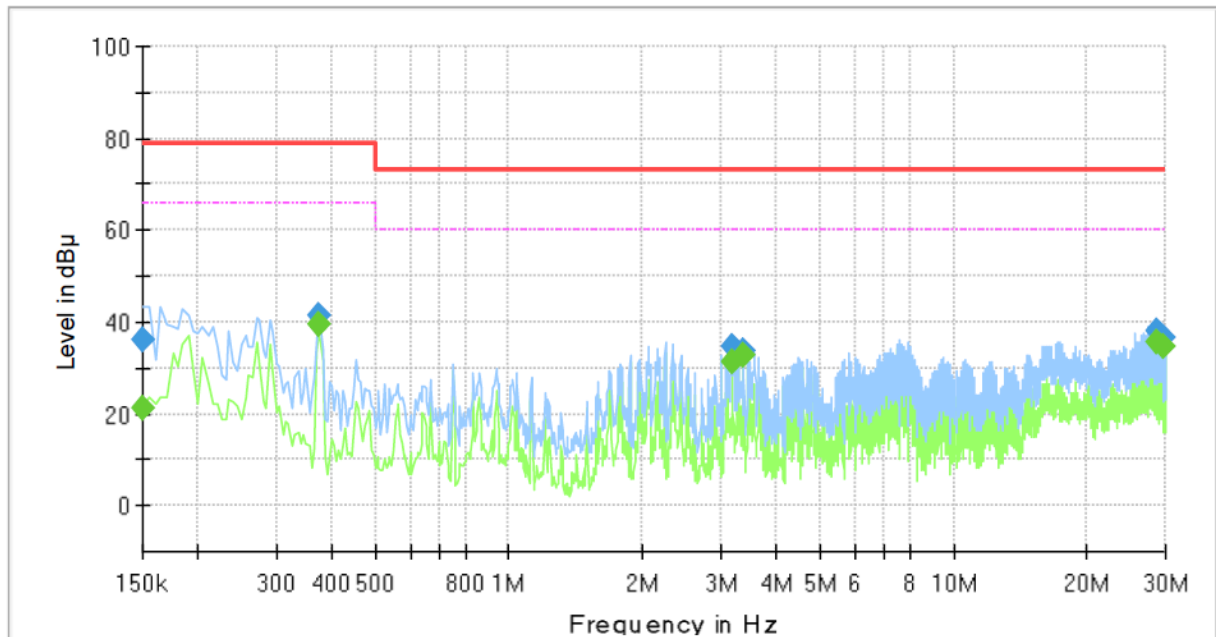
Conducted Emission

XNZ-6320A

PoE

L1

KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	---	21.31	66.00	44.69	1000.0	9.000	L1	19.4
0.150000	35.95	---	79.00	43.05	1000.0	9.000	L1	19.4
0.375000	---	39.62	66.00	26.38	1000.0	9.000	L1	19.6
0.375000	41.41	---	79.00	37.59	1000.0	9.000	L1	19.6
3.185000	---	31.16	60.00	28.84	1000.0	9.000	L1	20.1
3.185000	34.82	---	73.00	38.18	1000.0	9.000	L1	20.1
3.375000	---	32.83	60.00	27.17	1000.0	9.000	L1	20.1
3.375000	33.67	---	73.00	39.33	1000.0	9.000	L1	20.1
28.605000	---	35.81	60.00	24.19	1000.0	9.000	L1	20.3
28.605000	37.89	---	73.00	35.11	1000.0	9.000	L1	20.3
29.730000	---	34.58	60.00	25.42	1000.0	9.000	L1	20.4
29.730000	36.49	---	73.00	36.51	1000.0	9.000	L1	20.4

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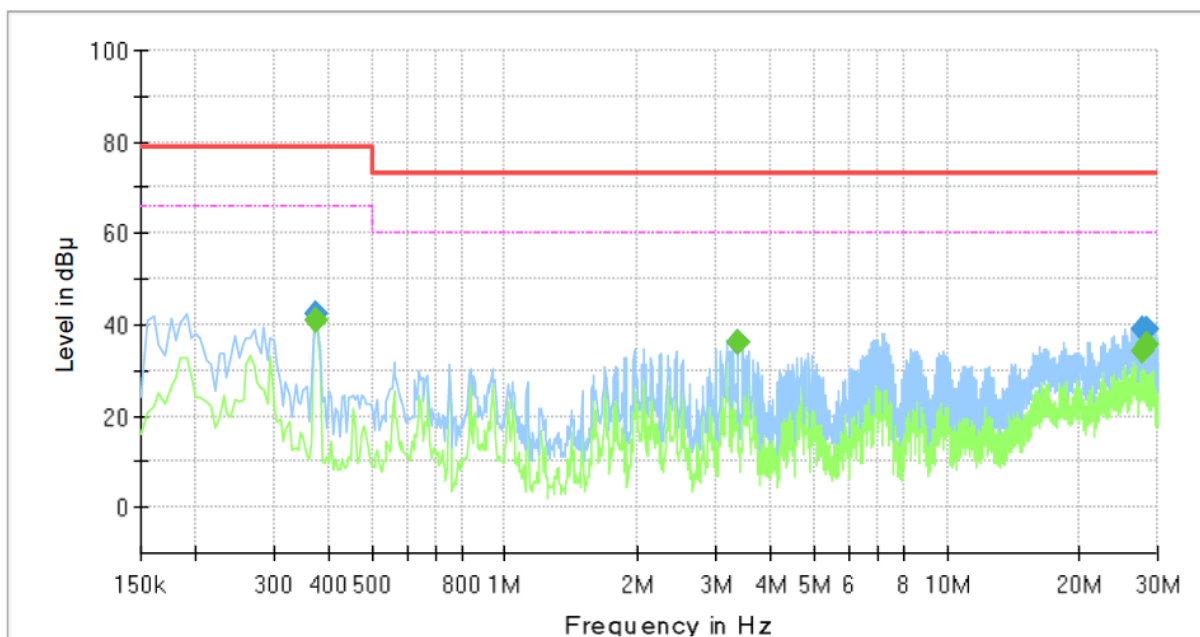
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NEUTRAL LINE

Common Information

Test Description:	Conducted Emission
Model No.:	XNZ-6320A
Phase:	PoE
Mode:	N
Operator Name:	KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.375000	---	41.05	66.00	24.95	1000.0	9.000	N	19.6
0.375000	42.41	---	79.00	36.59	1000.0	9.000	N	19.6
3.370000	---	35.95	60.00	24.05	1000.0	9.000	N	20.1
3.370000	36.32	---	73.00	36.68	1000.0	9.000	N	20.1
27.705000	---	33.99	60.00	26.01	1000.0	9.000	N	20.3
27.705000	39.13	---	73.00	33.87	1000.0	9.000	N	20.3
28.380000	---	35.61	60.00	24.39	1000.0	9.000	N	20.4
28.380000	39.10	---	73.00	33.90	1000.0	9.000	N	20.4

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PoE_Optical Mode

HOT LINE

Common Information

Test Description:

Model No.:

Phase:

Mode:

Operator Name:

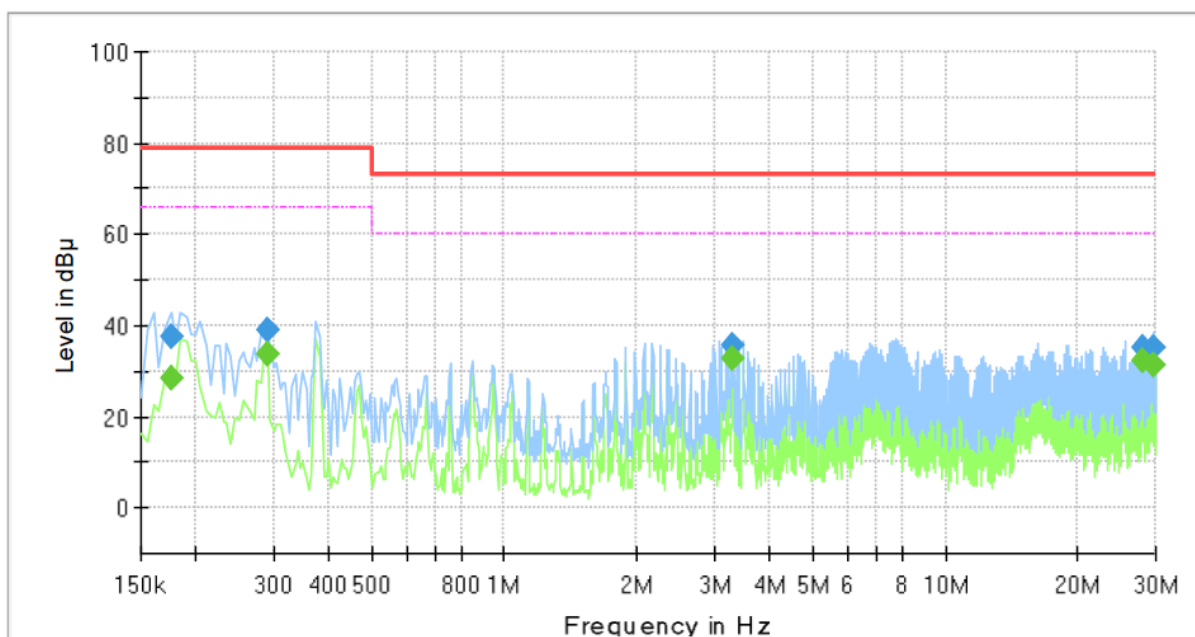
Conducted Emission

XNZ-6320A

PoE_Optical

L1

KES



Final_Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.175000	---	28.48	66.00	37.52	1000.0	9.000	L1	19.5
0.175000	37.37	---	79.00	41.63	1000.0	9.000	L1	19.5
0.290000	---	33.69	66.00	32.31	1000.0	9.000	L1	19.5
0.290000	39.00	---	79.00	40.00	1000.0	9.000	L1	19.5
3.300000	---	32.64	60.00	27.36	1000.0	9.000	L1	20.1
3.300000	35.47	---	73.00	37.53	1000.0	9.000	L1	20.1
28.155000	---	32.13	60.00	27.87	1000.0	9.000	L1	20.3
28.155000	35.21	---	73.00	37.79	1000.0	9.000	L1	20.3
29.510000	---	31.20	60.00	28.80	1000.0	9.000	L1	20.4
29.510000	35.16	---	73.00	37.84	1000.0	9.000	L1	20.4

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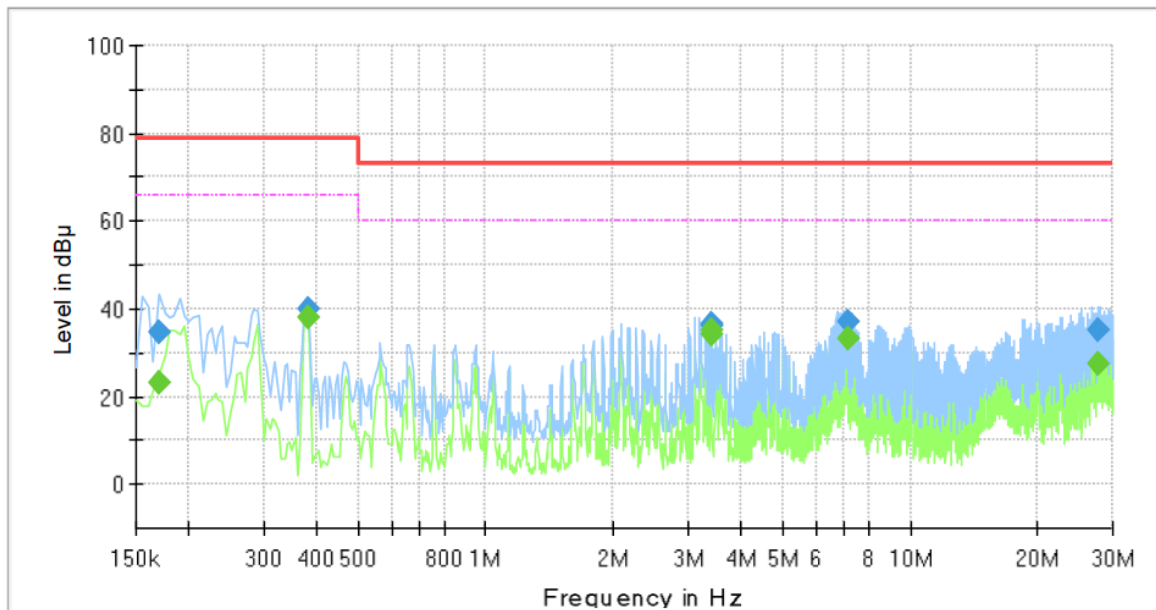
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NEUTRAL LINE

Common Information

Test Description:	Conducted Emission
Model No.:	XNZ-6320A
Phase:	PoE_Optical
Mode:	N
Operator Name:	KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.170000	---	23.10	66.00	42.90	1000.0	9.000	N	19.4
0.170000	34.79	---	79.00	44.21	1000.0	9.000	N	19.4
0.380000	---	38.18	66.00	27.82	1000.0	9.000	N	19.6
0.380000	39.76	---	79.00	39.24	1000.0	9.000	N	19.6
3.395000	---	35.32	60.00	24.68	1000.0	9.000	N	20.1
3.395000	36.78	---	73.00	36.22	1000.0	9.000	N	20.1
3.400000	---	34.34	60.00	25.66	1000.0	9.000	N	20.1
3.400000	36.00	---	73.00	37.00	1000.0	9.000	N	20.1
7.175000	---	33.32	60.00	26.68	1000.0	9.000	N	19.6
7.175000	36.95	---	73.00	36.05	1000.0	9.000	N	19.6
27.820000	---	27.52	60.00	32.48	1000.0	9.000	N	20.3
27.820000	35.13	---	73.00	37.87	1000.0	9.000	N	20.3

◆ Calculation

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

QuasiPeak / CAverage : The Final Value

Reading Value : Not shown in the table.

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

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Report No.:

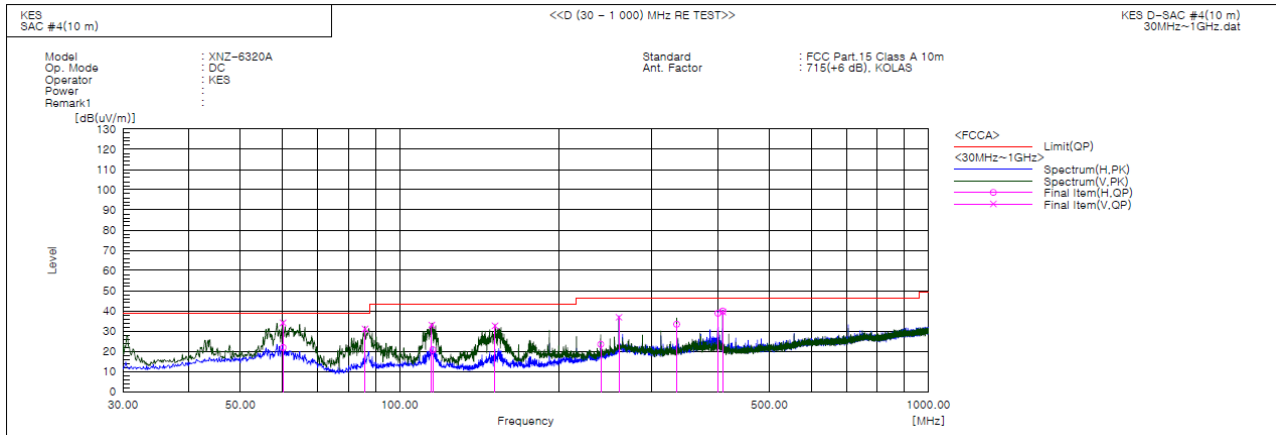
KES-EM-21T1203-R1

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Radiated Electric Field Emissions(Below 1 GHz)

- 47 CFR Part 15, Subpart B

■ DC Mode



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	60.191	V	56.2	-22.1	34.1	39.0	4.9	141.0	96.0	
2	60.231	H	44.0	-22.1	21.9	39.0	17.1	400.0	8.0	
3	86.018	V	56.9	-25.8	31.1	39.0	7.9	146.0	81.0	
4	114.996	V	56.0	-23.0	33.0	43.5	10.5	115.0	208.0	
5	115.603	H	43.9	-23.1	20.8	43.5	22.7	315.0	8.0	
6	151.493	V	57.7	-25.1	32.6	43.5	10.9	121.0	74.0	
7	240.005	H	42.9	-19.5	23.4	46.5	23.1	369.0	145.0	
8	259.890	V	55.8	-18.9	36.9	46.5	9.6	100.0	178.0	
9	334.095	H	49.3	-15.9	33.4	46.5	13.1	157.0	137.0	
10	400.055	H	53.1	-14.3	38.8	46.5	7.7	241.0	38.0	
11	408.300	H	54.0	-14.1	39.9	46.5	6.6	228.0	167.0	
12	408.421	V	53.5	-14.1	39.4	46.5	7.1	100.0	51.0	

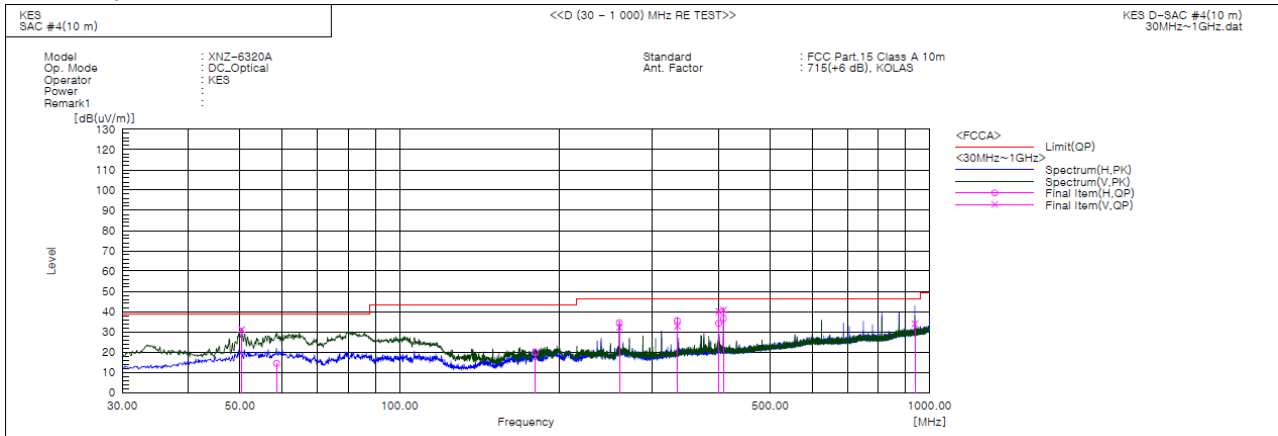
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■ DC_Optical Mode

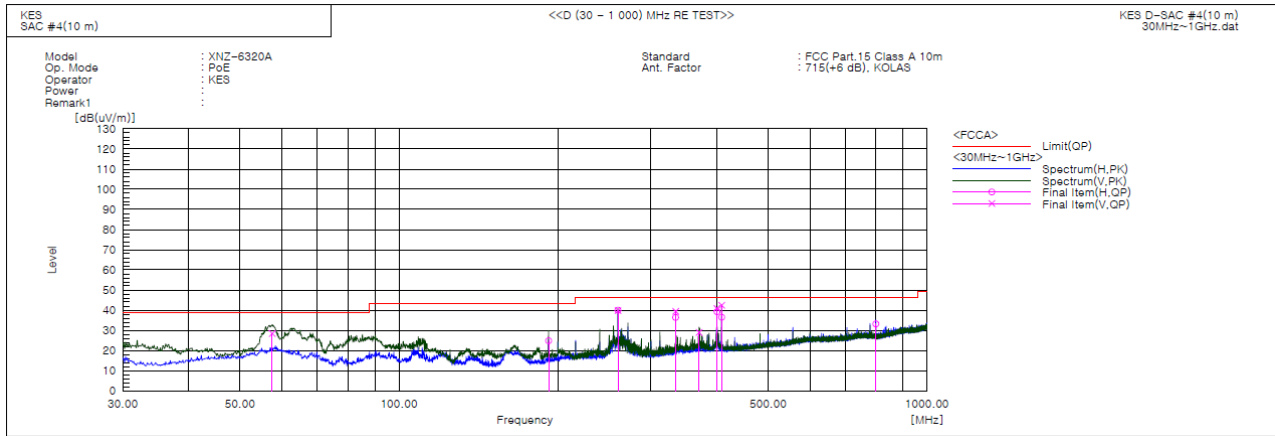


Final Result

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	50.370	V	52.1	-20.9	31.2	39.0	7.8	142.0	113.0	
2	58.615	H	36.0	-21.6	14.4	39.0	24.6	331.0	27.0	
3	180.350	H	43.2	-23.3	19.9	43.5	23.6	400.0	192.0	
4	259.854	H	53.5	-18.9	34.6	46.5	11.9	400.0	344.0	
5	259.895	V	51.1	-18.9	32.2	46.5	14.3	166.0	198.0	
6	334.095	H	51.4	-15.8	35.6	46.5	10.9	211.0	102.0	
7	334.295	V	48.6	-15.8	32.8	46.5	13.7	357.0	175.0	
8	400.055	H	48.2	-14.0	34.2	46.5	12.3	178.0	244.0	
9	400.155	V	54.1	-14.0	40.1	46.5	6.4	100.0	199.0	
10	408.421	H	50.6	-13.9	36.7	46.5	9.8	255.0	117.0	
11	408.436	V	54.7	-13.9	40.8	46.5	5.7	100.0	207.0	
12	937.556	V	37.7	-3.7	34.0	46.5	12.5	400.0	13.0	



PoE Mode

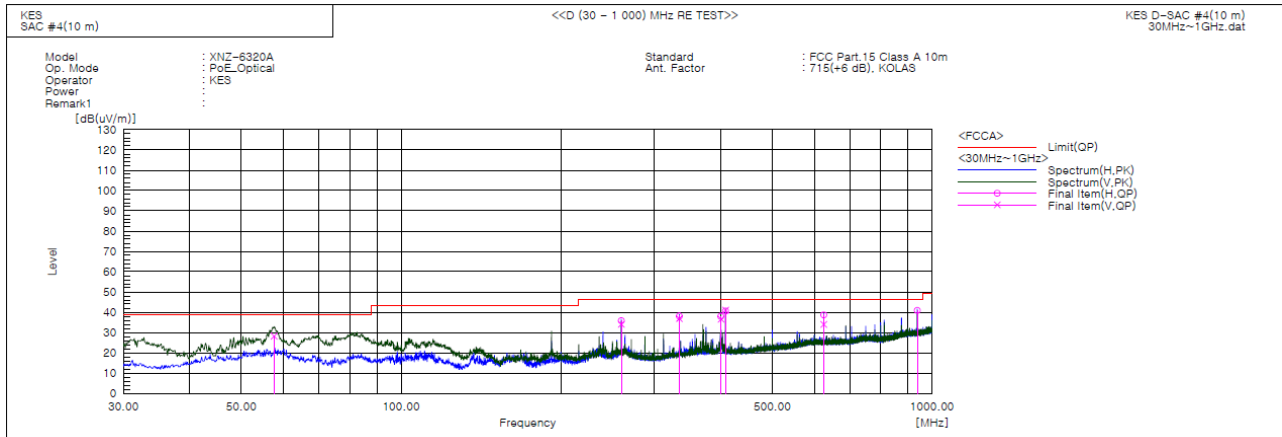


Final Result

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	57.524	V	49.9	-21.5	28.4	39.0	10.6	112.0	304.0	
2	191.990	H	46.5	-21.7	24.8	43.5	18.7	369.0	226.0	
3	259.890	V	58.7	-18.9	39.8	46.5	6.7	100.0	271.0	
4	259.894	H	58.9	-18.9	40.0	46.5	6.5	400.0	305.0	
5	334.095	H	52.2	-15.8	36.4	46.5	10.1	267.0	214.0	
6	334.185	V	55.2	-15.8	39.4	46.5	7.1	124.0	353.0	
7	369.985	V	43.7	-14.7	29.0	46.5	17.5	109.0	151.0	
8	400.055	V	54.9	-14.0	40.9	46.5	5.6	100.0	144.0	
9	400.159	H	53.3	-14.0	39.3	46.5	7.2	223.0	274.0	
10	408.421	V	56.4	-13.9	42.5	46.5	4.0	100.0	148.0	
11	408.429	H	50.4	-13.9	36.5	46.5	10.0	274.0	278.0	
12	800.059	H	40.0	-6.8	33.2	46.5	13.3	100.0	195.0	



■ PoE_Optical Mode



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	57.645	V	49.7	-21.5	28.2	39.0	10.8	142.0	102.0	
2	259.890	H	54.8	-18.9	35.9	46.5	10.6	367.0	281.0	
3	259.894	V	53.0	-18.9	34.1	46.5	12.4	100.0	8.0	
4	334.095	V	52.7	-15.8	36.9	46.5	9.6	106.0	191.0	
5	334.195	H	53.9	-15.8	38.1	46.5	8.4	231.0	109.0	
6	400.055	H	52.0	-14.0	38.0	46.5	8.5	197.0	124.0	
7	400.451	V	50.6	-14.0	36.6	46.5	9.9	100.0	8.0	
8	408.421	V	55.0	-13.9	41.1	46.5	5.4	108.0	132.0	
9	408.465	H	54.5	-13.9	40.6	46.5	5.9	232.0	117.0	
10	625.095	H	46.9	-8.2	38.7	46.5	7.8	400.0	154.0	
11	625.254	V	42.2	-8.2	34.0	46.5	12.5	114.0	22.0	
12	937.556	H	44.6	-3.7	40.9	46.5	5.6	100.0	54.0	

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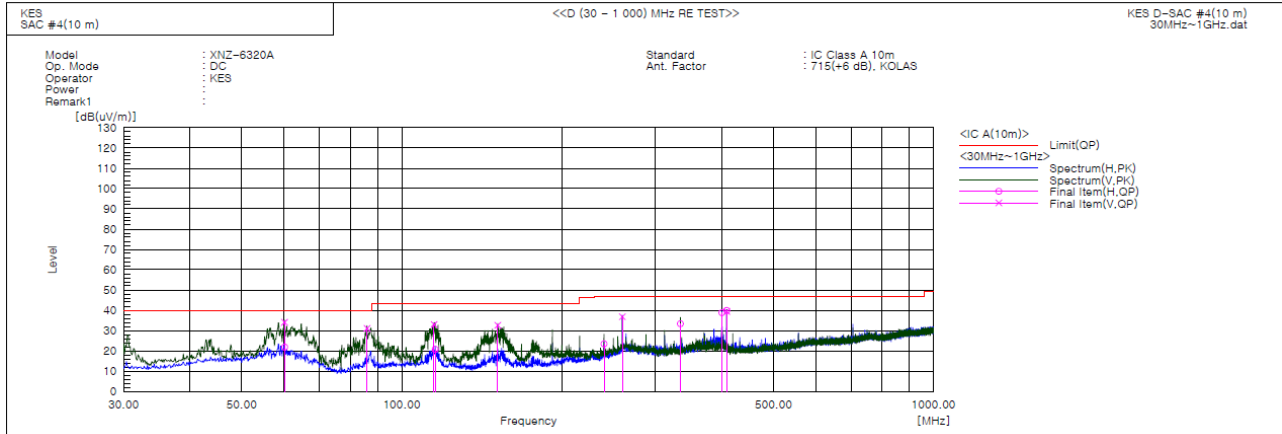
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- IC Regulation ICES-003 Issue 7

■ DC Mode



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	60.191	V	56.2	-22.1	34.1	40.0	5.9	141.0	96.0	
2	60.231	H	44.0	-22.1	21.9	40.0	18.1	400.0	8.0	
3	86.018	V	56.9	-25.8	31.1	40.0	8.9	146.0	81.0	
4	114.996	V	56.0	-23.0	33.0	43.5	10.5	115.0	208.0	
5	115.603	H	43.9	-23.1	20.8	43.5	22.7	315.0	8.0	
6	151.493	V	57.7	-25.1	32.6	43.5	10.9	121.0	74.0	
7	240.005	H	42.9	-19.5	23.4	47.0	23.6	369.0	145.0	
8	259.890	V	55.8	-18.9	36.9	47.0	10.1	100.0	178.0	
9	334.095	H	49.3	-15.9	33.4	47.0	13.6	157.0	137.0	
10	400.055	H	53.1	-14.3	38.8	47.0	8.2	241.0	38.0	
11	408.300	H	54.0	-14.1	39.9	47.0	7.1	228.0	167.0	
12	408.421	V	53.5	-14.1	39.4	47.0	7.6	100.0	51.0	

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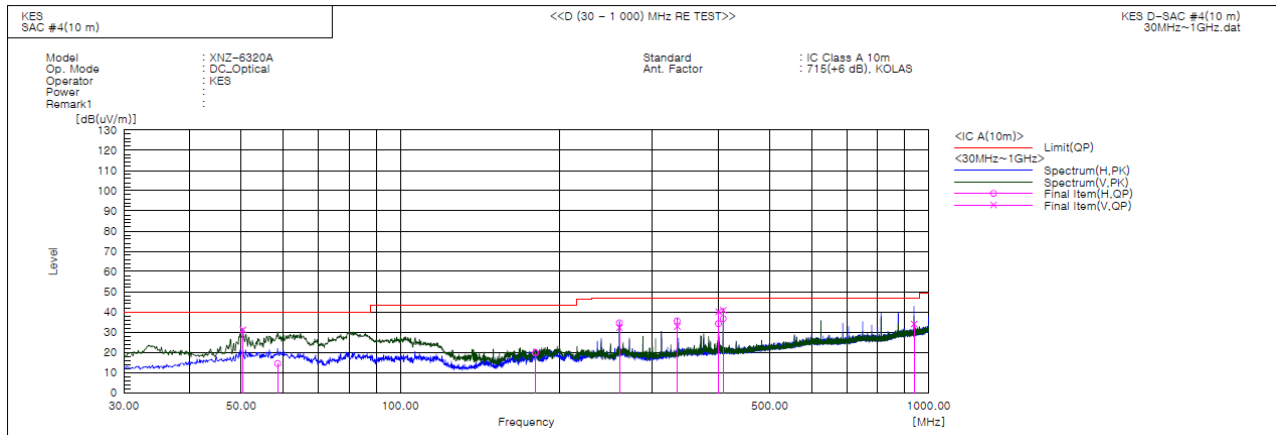
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DC_Optical Mode



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	50.370	V	52.1	-20.9	31.2	40.0	8.8	142.0	113.0	
2	58.615	H	36.0	-21.6	14.4	40.0	25.6	331.0	27.0	
3	180.350	H	43.2	-23.3	19.9	43.5	23.6	400.0	192.0	
4	259.854	H	53.5	-18.9	34.6	47.0	12.4	400.0	344.0	
5	259.895	V	51.1	-18.9	32.2	47.0	14.8	166.0	198.0	
6	334.095	H	51.4	-15.8	35.6	47.0	11.4	211.0	102.0	
7	334.295	V	48.6	-15.8	32.8	47.0	14.2	357.0	175.0	
8	400.055	H	48.2	-14.0	34.2	47.0	12.8	178.0	244.0	
9	400.155	V	54.1	-14.0	40.1	47.0	6.9	100.0	199.0	
10	408.421	H	50.6	-13.9	36.7	47.0	10.3	255.0	117.0	
11	408.436	V	54.7	-13.9	40.8	47.0	6.2	100.0	207.0	
12	937.556	V	37.7	-3.7	34.0	47.0	13.0	400.0	13.0	

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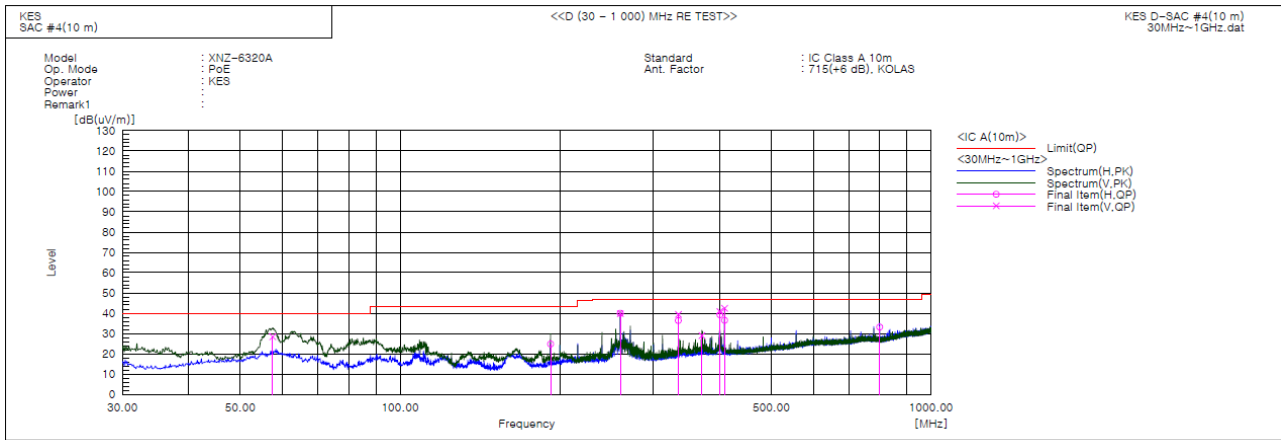
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PoE Mode



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	57.524	V	49.9	-21.5	28.4	40.0	11.6	112.0	304.0	
2	191.990	H	46.5	-21.7	24.8	43.5	18.7	369.0	226.0	
3	259.890	V	58.7	-18.9	39.8	47.0	7.2	100.0	271.0	
4	259.894	H	58.9	-18.9	40.0	47.0	7.0	400.0	305.0	
5	334.095	H	52.2	-15.8	36.4	47.0	10.6	267.0	214.0	
6	334.185	V	55.2	-15.8	39.4	47.0	7.6	124.0	353.0	
7	369.985	V	43.7	-14.7	29.0	47.0	18.0	109.0	151.0	
8	400.055	V	54.9	-14.0	40.9	47.0	6.1	100.0	144.0	
9	400.159	H	53.3	-14.0	39.3	47.0	7.7	223.0	274.0	
10	408.421	V	56.4	-13.9	42.5	47.0	4.5	100.0	148.0	
11	408.429	H	50.4	-13.9	36.5	47.0	10.5	274.0	278.0	
12	800.059	H	40.0	-6.8	33.2	47.0	13.8	100.0	195.0	

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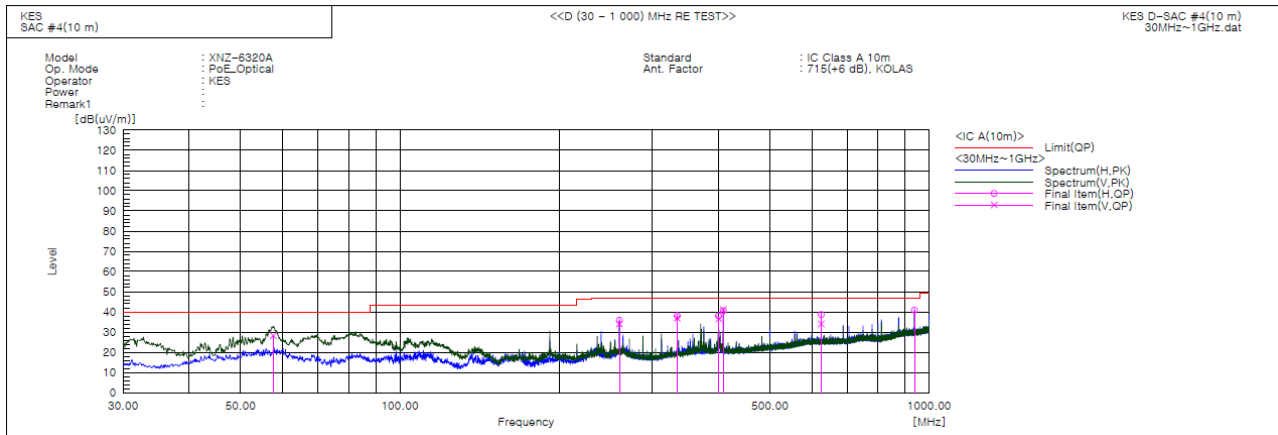
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■ PoE_Optical Mode



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	57.645	V	49.7	-21.5	28.2	40.0	11.8	142.0	102.0	
2	259.890	H	54.8	-18.9	35.9	47.0	11.1	367.0	281.0	
3	259.894	V	53.0	-18.9	34.1	47.0	12.9	100.0	8.0	
4	334.095	V	52.7	-15.8	36.9	47.0	10.1	106.0	191.0	
5	334.195	H	53.9	-15.8	38.1	47.0	8.9	231.0	109.0	
6	400.055	H	52.0	-14.0	38.0	47.0	9.0	197.0	124.0	
7	400.451	V	50.6	-14.0	36.6	47.0	10.4	100.0	8.0	
8	408.421	V	55.0	-13.9	41.1	47.0	5.9	108.0	132.0	
9	408.465	H	54.5	-13.9	40.6	47.0	6.4	232.0	117.0	
10	625.095	H	46.9	-8.2	38.7	47.0	8.3	400.0	154.0	
11	625.254	V	42.2	-8.2	34.0	47.0	13.0	114.0	22.0	
12	937.556	H	44.6	-3.7	40.9	47.0	6.1	100.0	54.0	

◆ Calculation - SAC #4(10 m)

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

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

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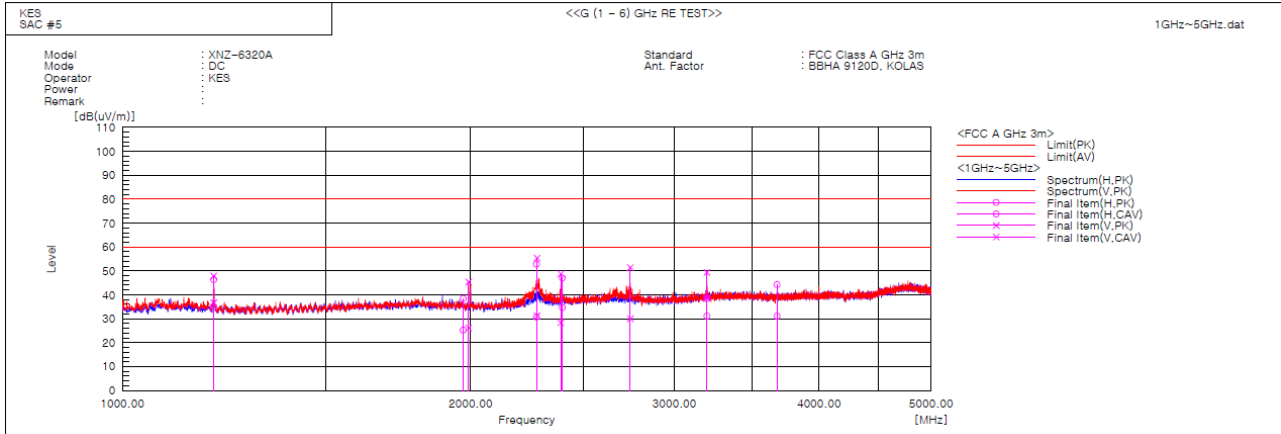
Report No.:

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Radiated Electric Field Emissions(Above 1 GHz)

■ DC Mode



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	1199.375	V	54.8	43.6	-6.9	47.9	36.7	80.0	60.0	32.1	23.3	145.0	4.7	
2	1199.379	H	53.3	42.0	-6.9	46.4	35.1	80.0	60.0	33.6	24.9	400.0	63.0	
3	1970.000	H	41.9	28.8	-3.5	38.4	25.3	80.0	60.0	41.6	34.7	336.0	338.9	
4	1991.875	V	48.9	29.6	-3.5	45.4	26.1	80.0	60.0	34.6	33.9	332.0	105.8	
5	2279.375	H	55.3	33.2	-2.5	52.8	30.7	80.0	60.0	27.2	29.3	100.0	190.2	
6	2281.875	V	57.9	33.8	-2.5	55.4	31.3	80.0	60.0	24.6	28.7	257.0	302.9	
7	2393.125	V	50.9	30.5	-2.1	48.8	28.4	80.0	60.0	31.2	31.6	400.0	98.1	
8	2399.375	H	49.2	36.8	-2.1	47.1	34.7	80.0	60.0	32.9	25.3	105.0	325.5	
9	2748.125	V	51.9	30.5	-0.5	51.4	30.0	80.0	60.0	28.6	30.0	231.0	184.2	
10	3200.000	H	30.4	37.7	0.7	31.1	38.4	80.0	60.0	48.9	21.6	256.0	35.6	
11	3200.000	V	48.7	37.9	0.7	49.4	38.6	80.0	60.0	30.6	21.4	317.0	44.8	
12	3678.750	H	43.1	29.9	1.2	44.3	31.1	80.0	60.0	35.7	28.9	268.0	338.9	

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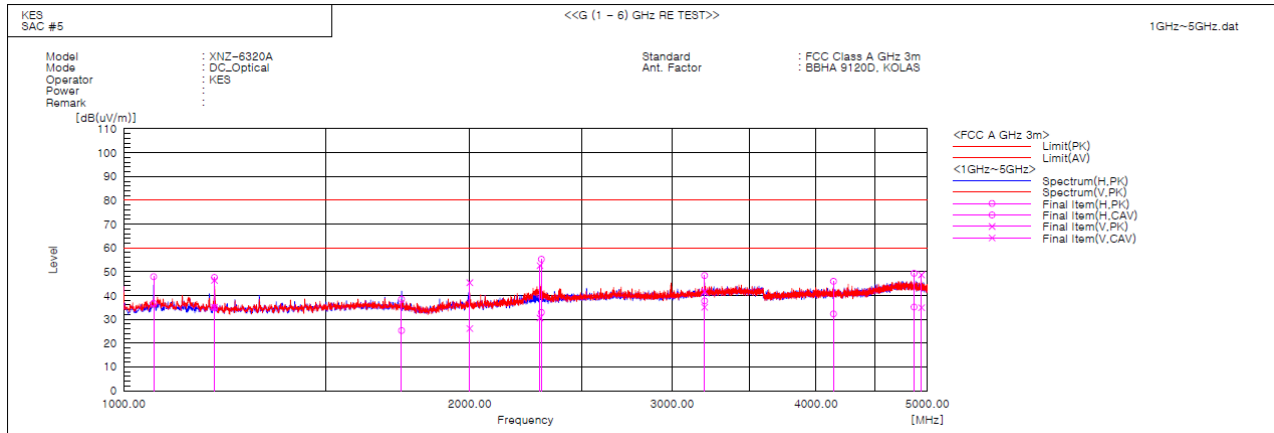
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DC_Optical Mode



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	1061.875	H	55.5	44.3	-7.6	47.9	36.7	80.0	60.0	32.1	23.3	256.0	14.4	
2	1199.375	V	53.3	42.0	-6.9	46.4	35.1	80.0	60.0	33.6	24.9	311.0	31.0	
3	1199.375	H	54.5	41.8	-6.9	47.6	34.9	80.0	60.0	32.4	25.1	247.0	42.9	
4	1744.375	H	42.7	29.6	-4.3	38.4	25.3	80.0	60.0	41.6	34.7	112.0	4.8	
5	2000.000	V	48.8	29.5	-3.4	45.4	26.1	80.0	60.0	34.6	33.9	268.0	170.0	
6	2301.250	V	55.0	33.0	-2.4	52.6	30.6	80.0	60.0	27.4	29.4	368.0	296.7	
7	2308.750	H	57.6	35.3	-2.4	55.2	32.9	80.0	60.0	24.8	27.1	400.0	69.6	
8	3200.000	H	47.7	37.0	0.7	48.4	37.7	80.0	60.0	31.6	22.3	157.0	42.9	
9	3200.023	V	40.9	34.4	0.7	41.6	35.1	80.0	60.0	38.4	24.9	226.0	312.4	
10	4143.125	H	43.4	29.7	2.6	46.0	32.3	80.0	60.0	34.0	27.7	100.0	166.0	
11	4868.125	H	43.7	29.6	5.6	49.3	35.2	80.0	60.0	30.7	24.8	101.0	137.6	
12	4940.625	V	42.8	29.0	5.9	48.7	34.9	80.0	60.0	31.3	25.1	126.0	228.5	

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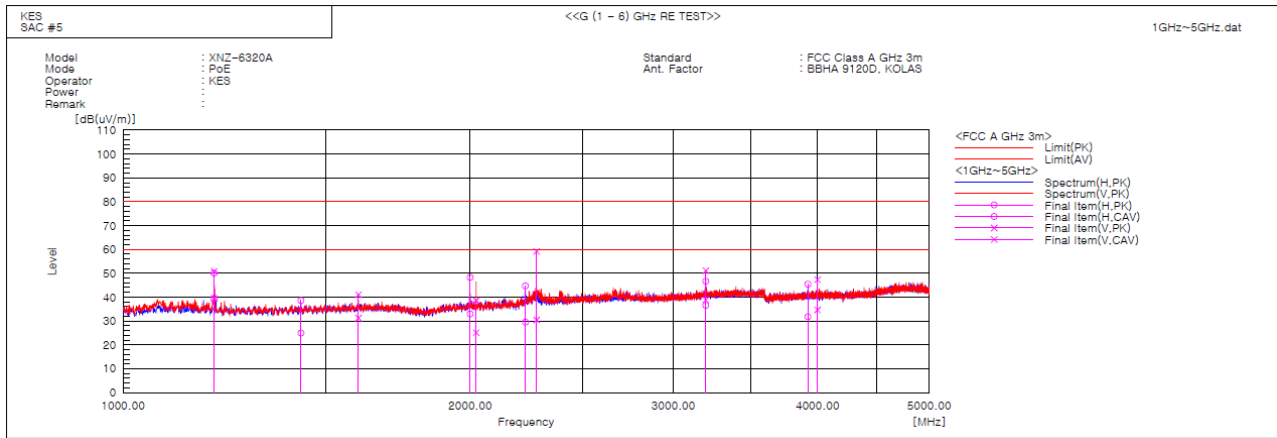
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■ PoE Mode



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	1199.375	H	57.0	46.2	-6.9	50.1	39.3	80.0	60.0	29.9	20.7	241.0	26.1	
2	1199.378	V	57.8	46.4	-6.9	50.9	39.5	80.0	60.0	29.1	20.5	104.0	349.3	
3	1426.250	H	44.3	30.7	-5.7	38.6	25.0	80.0	60.0	41.4	35.0	234.0	10.0	
4	1600.000	V	46.0	36.2	-4.9	41.1	31.3	80.0	60.0	38.9	28.7	387.0	188.7	
5	2000.000	H	51.7	36.4	-3.4	48.3	33.0	80.0	60.0	31.7	27.0	366.0	316.9	
6	2023.125	V	41.9	28.5	-3.4	38.5	25.1	80.0	60.0	41.5	34.9	241.0	240.6	
7	2233.127	H	47.4	32.3	-2.7	44.7	29.6	80.0	60.0	35.3	30.4	105.0	49.3	
8	2282.500	V	61.7	33.0	-2.5	59.2	30.5	80.0	60.0	20.8	29.5	167.0	318.6	
9	3200.000	H	46.0	35.9	0.7	46.7	36.6	80.0	60.0	33.3	23.4	231.0	36.2	
10	3200.040	V	50.4	38.2	0.7	51.1	38.9	80.0	60.0	28.9	21.1	230.0	54.4	
11	3924.375	H	43.5	29.9	1.9	45.4	31.8	80.0	60.0	34.6	28.2	374.0	323.6	
12	4000.625	V	45.3	32.6	2.1	47.4	34.7	80.0	60.0	32.6	25.3	100.0	116.8	

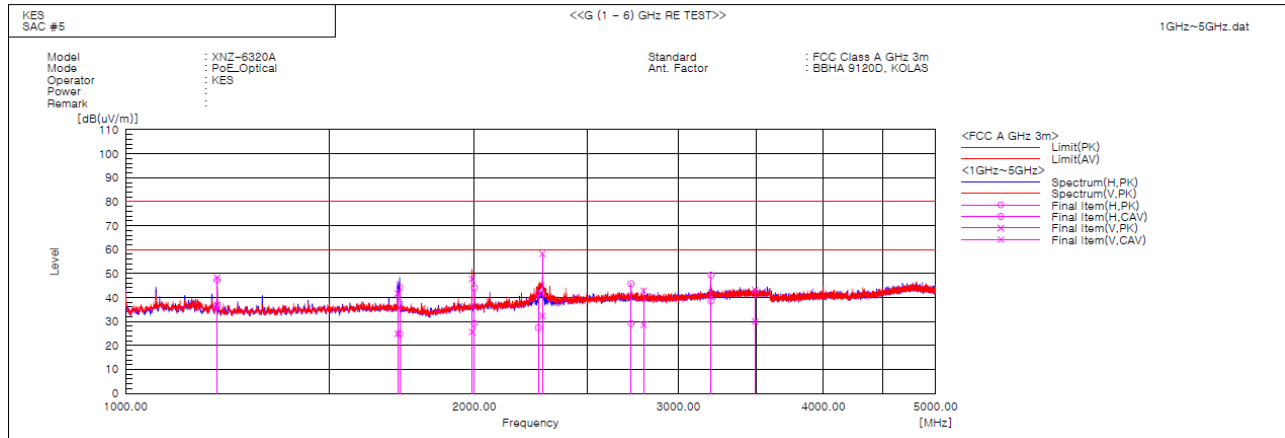
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PoE_Optical Mode



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	1199.351	V	55.2	43.6	-6.9	48.3	36.7	80.0	60.0	31.7	23.3	224.0	357.9	
2	1199.375	H	54.3	43.5	-6.9	47.4	36.6	80.0	60.0	32.6	23.4	114.0	23.1	
3	1716.875	V	46.1	29.3	-4.4	41.7	24.9	80.0	60.0	38.3	35.1	400.0	40.5	
4	1723.750	H	48.7	29.2	-4.4	44.3	24.8	80.0	60.0	35.7	35.2	234.0	198.6	
5	1990.000	V	51.3	29.2	-3.5	47.8	25.7	80.0	60.0	32.2	34.3	197.0	186.6	
6	2000.000	H	47.5	32.5	-3.4	44.1	29.1	80.0	60.0	35.9	30.9	100.0	339.8	
7	2270.050	H	44.3	29.9	-2.5	41.8	27.4	80.0	60.0	38.2	32.6	400.0	247.5	
8	2288.750	V	60.8	34.9	-2.5	58.3	32.4	80.0	60.0	21.7	27.6	241.0	322.2	
9	2729.375	H	46.4	29.8	-0.6	45.8	29.2	80.0	60.0	34.2	30.8	101.0	18.8	
10	2799.357	V	43.2	29.0	-0.3	42.9	28.7	80.0	60.0	37.1	31.3	196.0	61.8	
11	3200.000	H	48.6	37.8	0.7	49.3	38.5	80.0	60.0	30.7	21.5	131.0	23.1	
12	3492.500	V	42.3	29.2	0.8	43.1	30.0	80.0	60.0	36.9	30.0	238.0	244.3	

Calculation

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

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

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

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

Test Setup Photos and Configuration

Conducted Emissions at Mains Power Ports

■ DC Mode



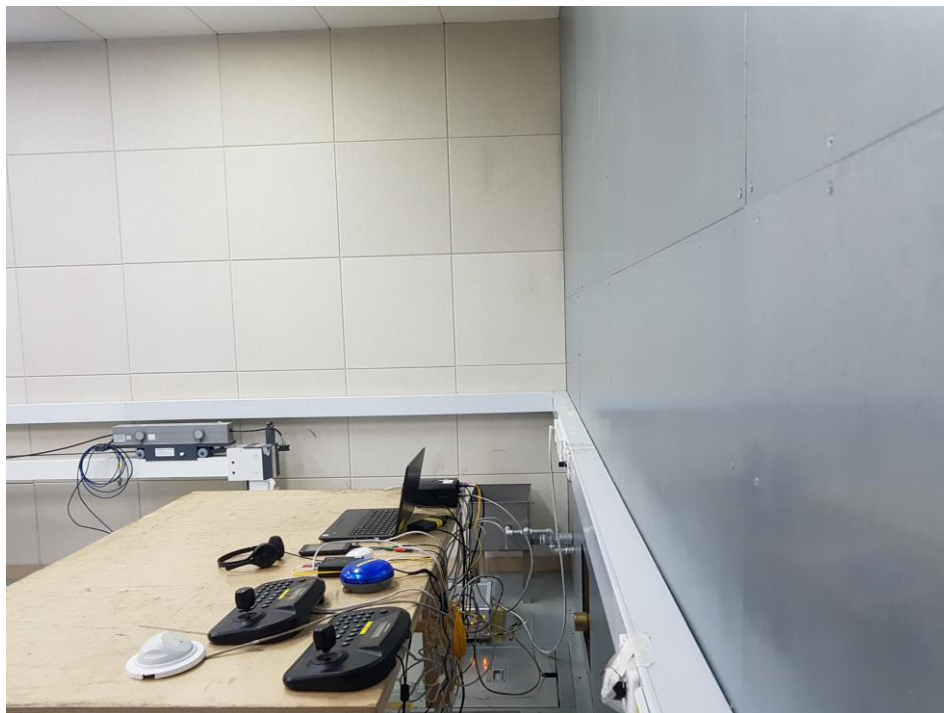
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■ DC_Optical Mode

■ PoE Mode



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■ PoE_Optical Mode

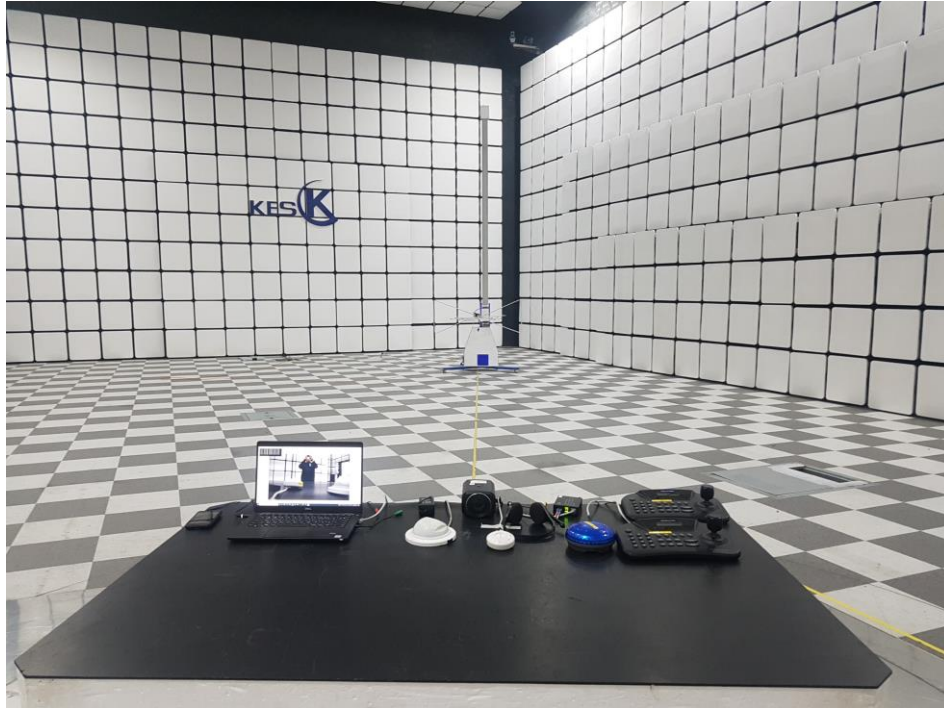
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Radiated Electric Field Emissions(Below 1 GHz)

■ DC Mode

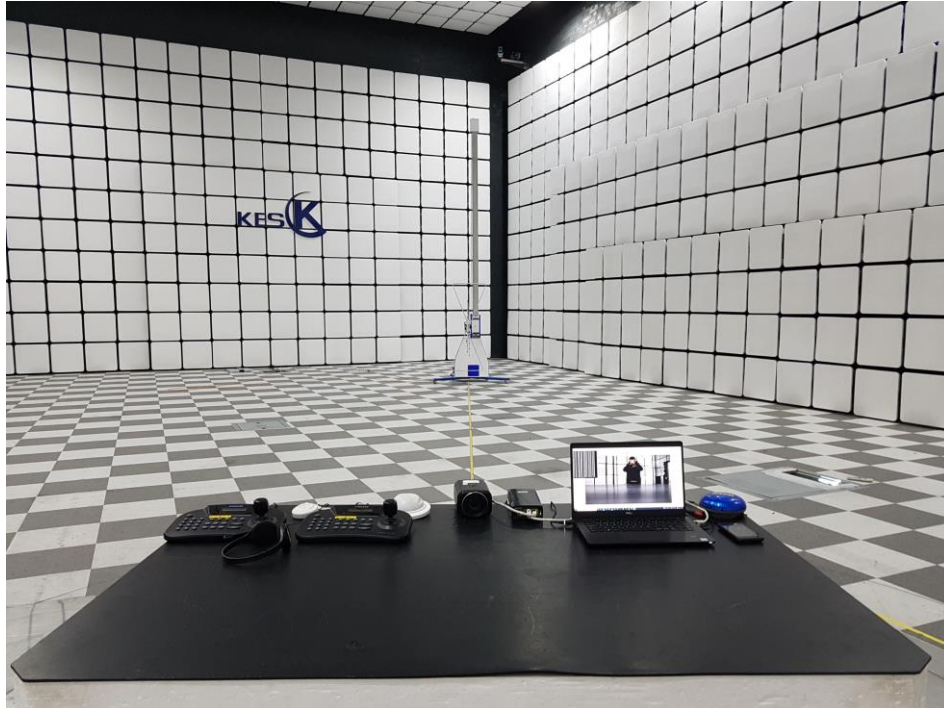


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■ DC_Optical Mode

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■ PoE Mode



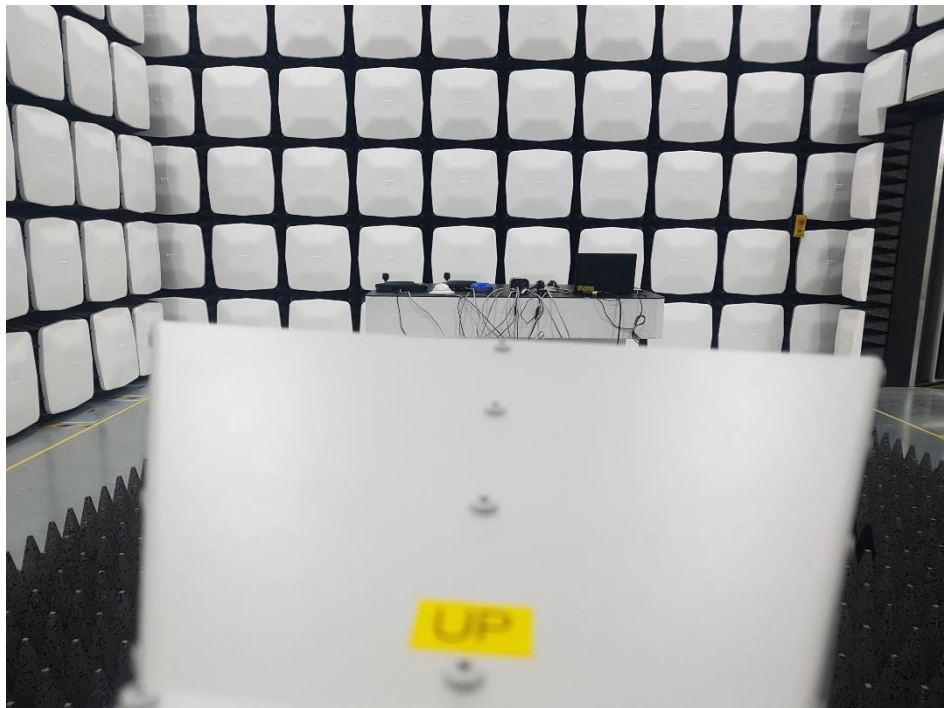
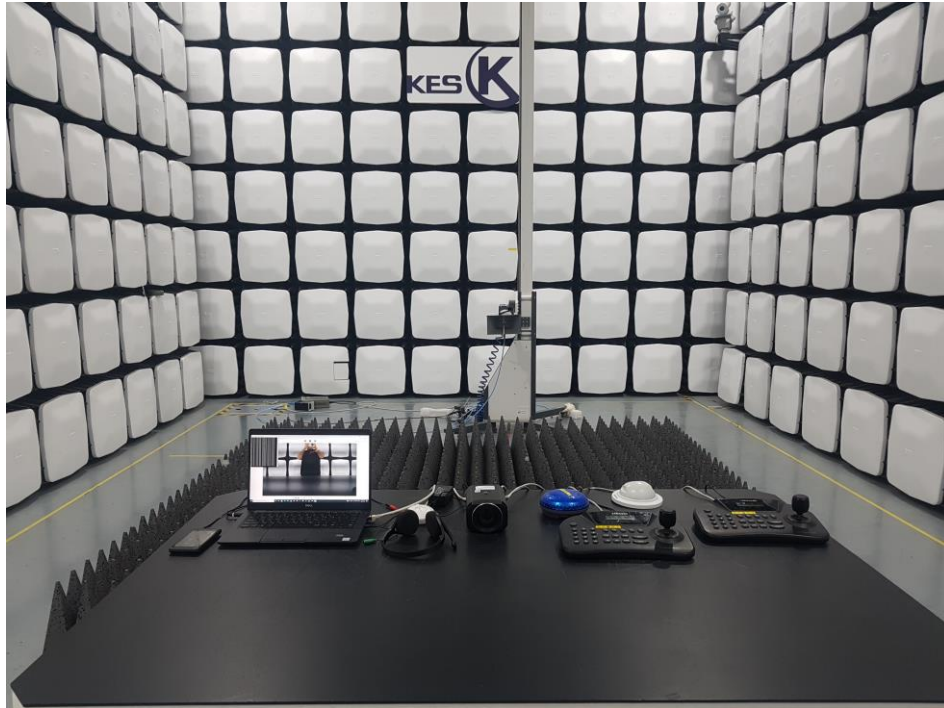
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■ PoE_Optical Mode

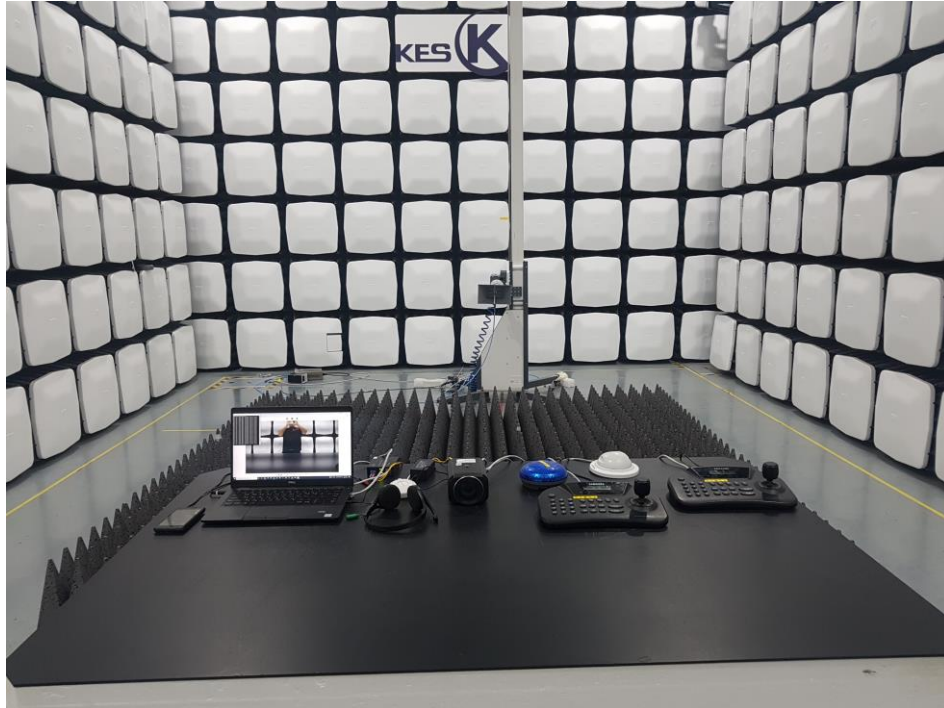
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Radiated Electric Field Emissions(Above 1 GHz)

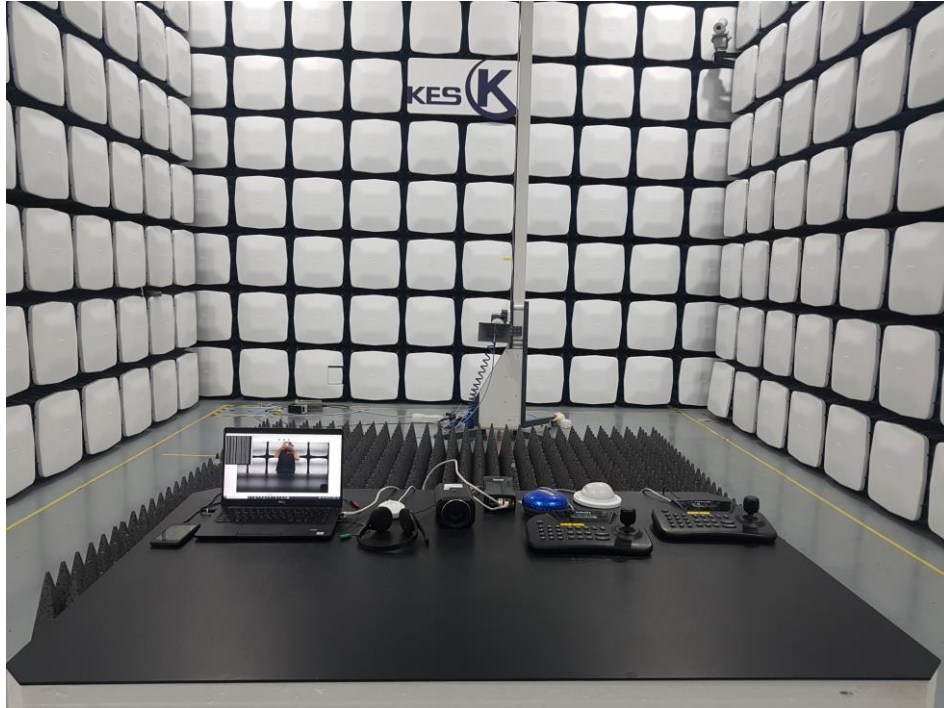
■ DC Mode



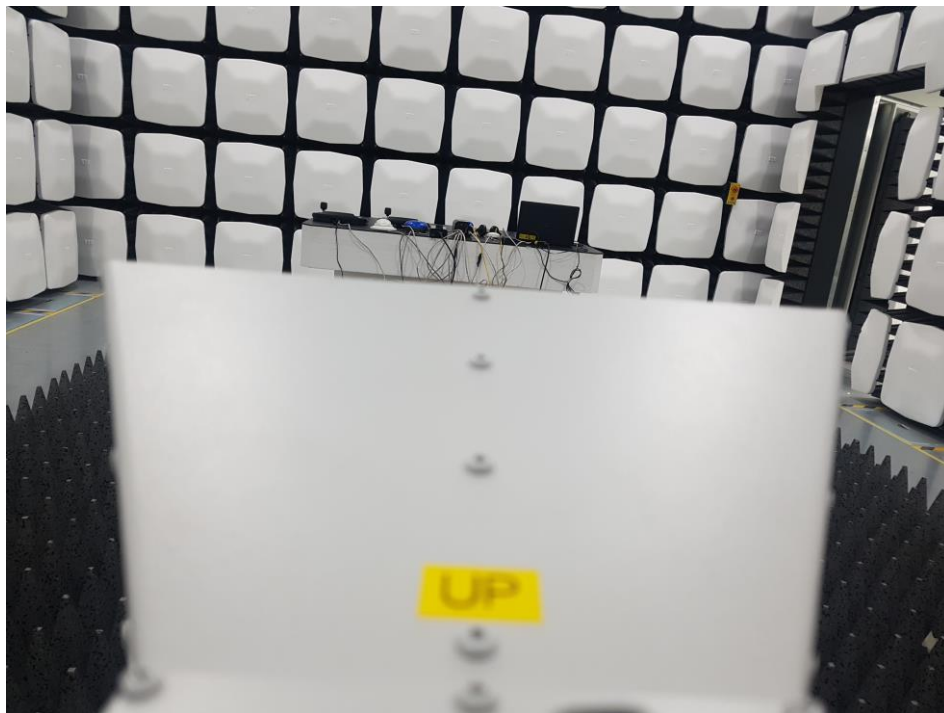
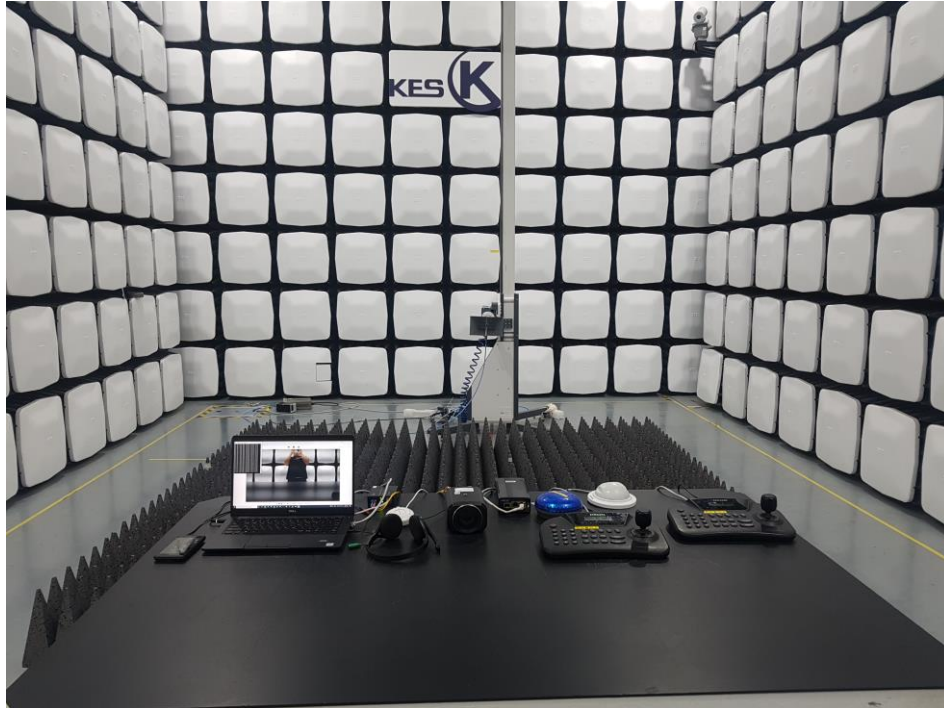
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■ DC_Optical Mode

■ PoE Mode



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■ PoE_Optical Mode

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EUT External Photographs

(Top)



(Bottom)



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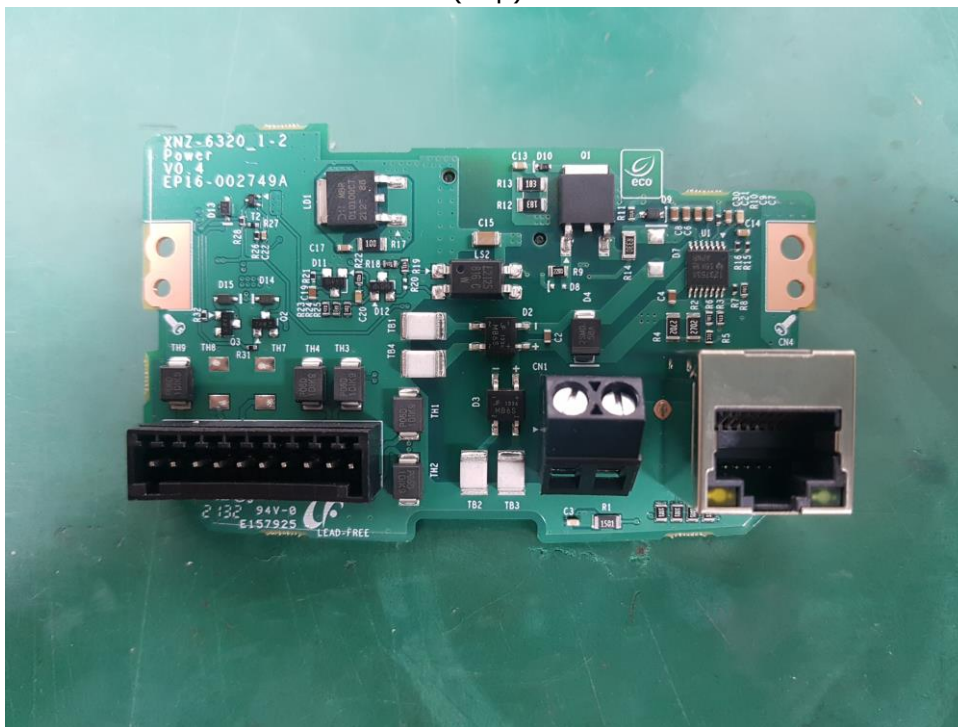
EUT Internal Photographs

(Internal View)

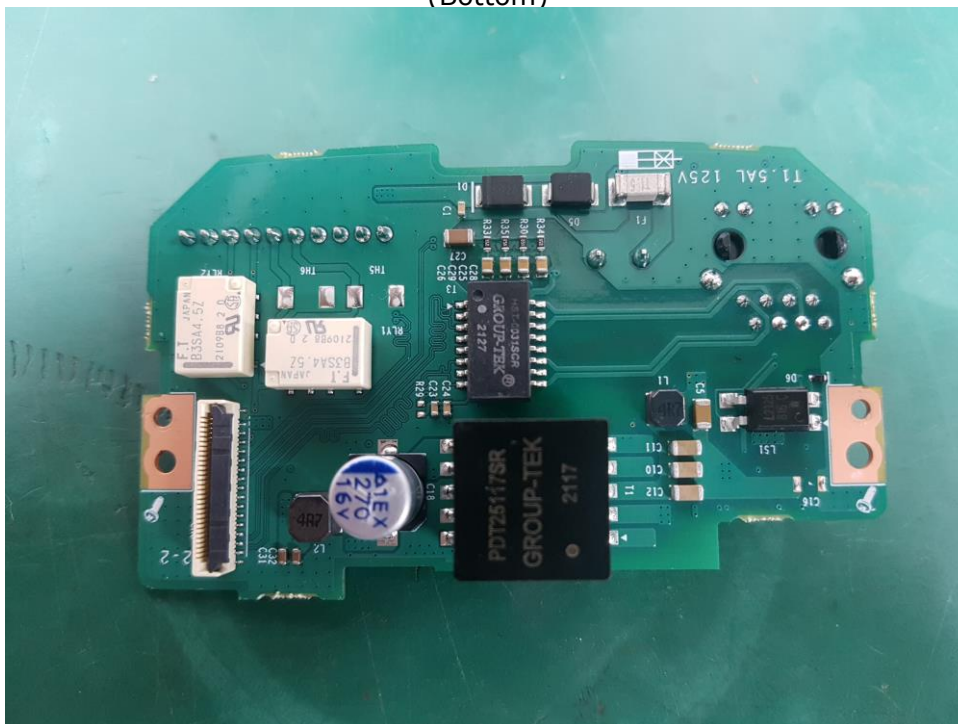


EUT Internal View – Board 1

(Top)



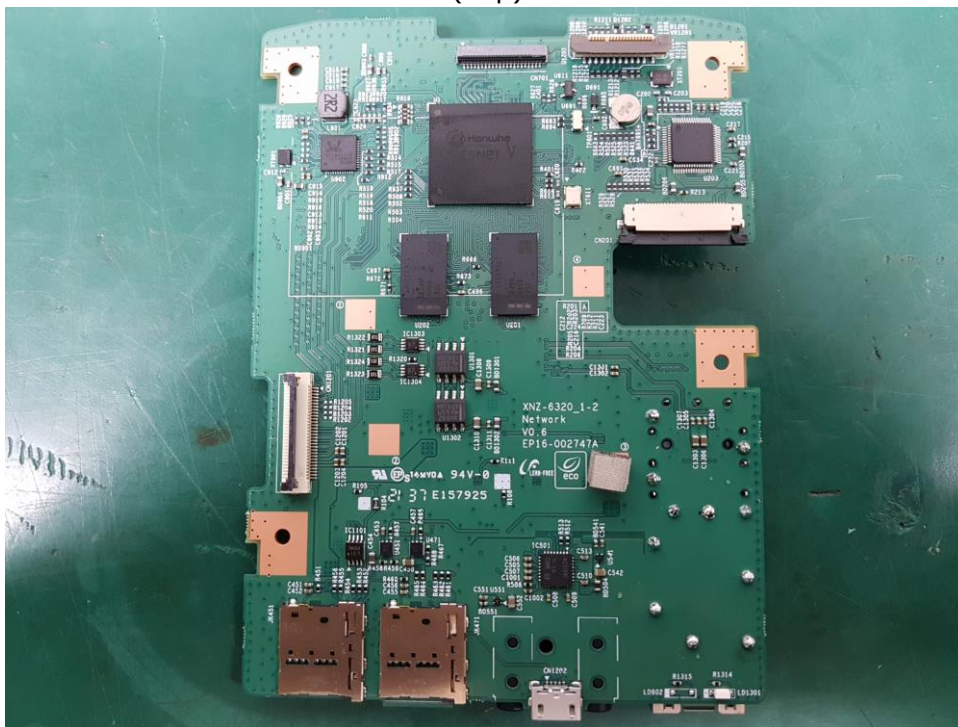
(Bottom)



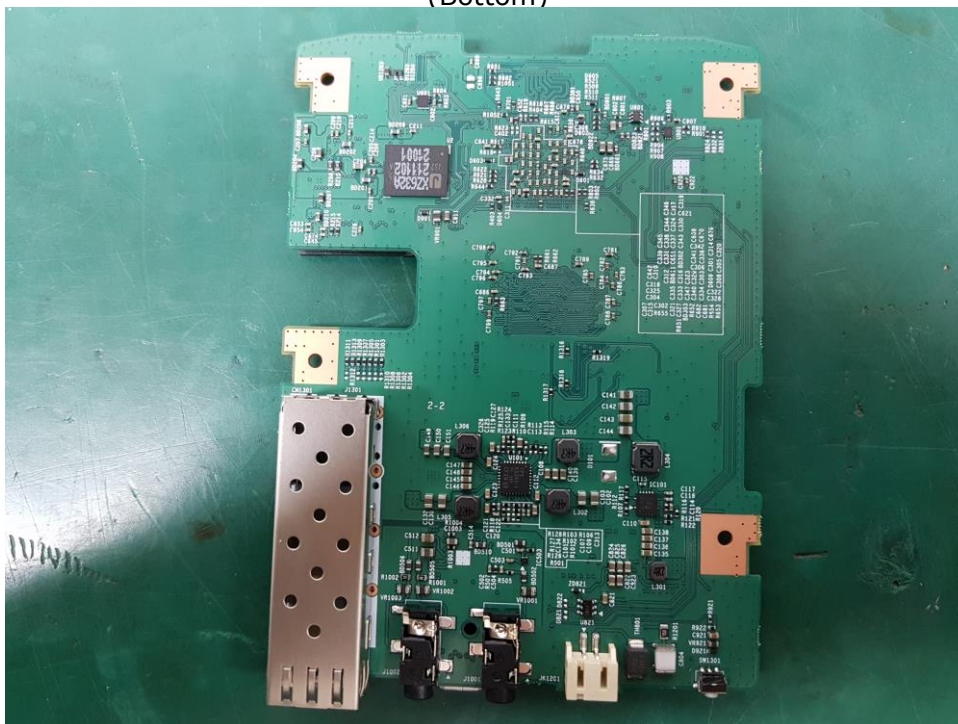
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EUT Internal View – Board 2

(Top)



(Bottom)



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EUT Internal View – Camera Board

(Top)

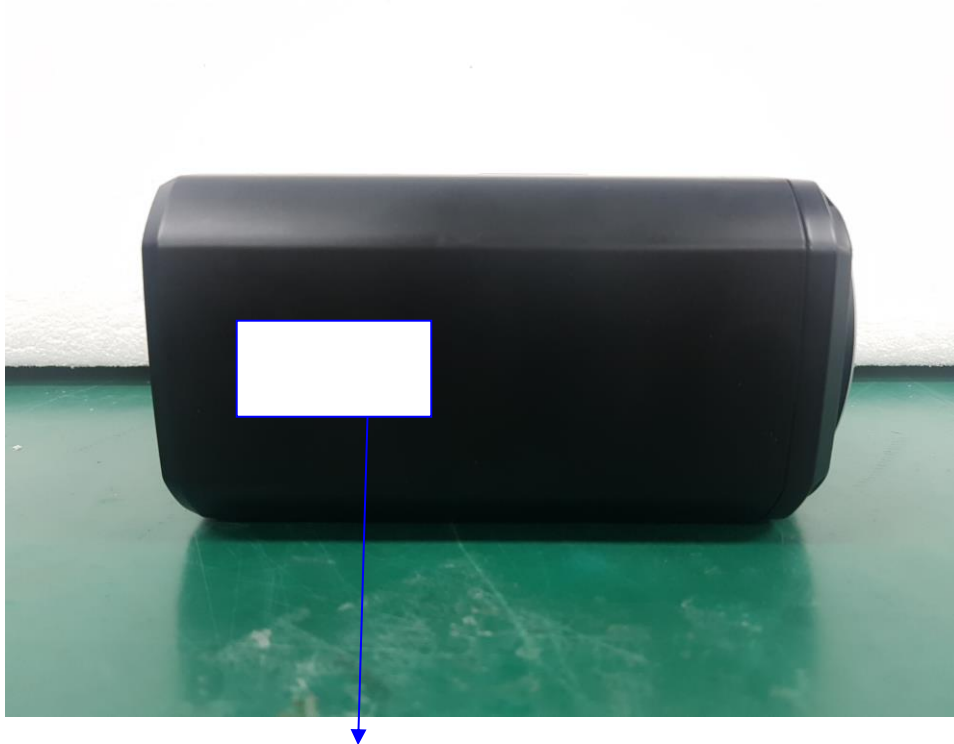


(Bottom)



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Label Photographs



CAN ICES-3(A) / NMB-3(A)

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

(1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.