EMC TEST REPORT For VCCI

Test Report No.	:	KES-E1-17T0310-R1
Date of Issue	:	Feb. 24, 2023
Product name	:	NETWORK CAMERA
Model/Type No.	:	XNV-6120R
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)
Date of Receipt	:	Apr. 14, 2017
Test date	:	Apr. 29, 2017
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 Young Suk, Song
(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
May. 02, 2017	KES-E1-17T0310	Issued
Feb. 24, 2023	KES-E1-17T0310-R1	Change the Model/Type No., Applicant, Applicant Address, manufacturer and manufacturer Address at the request of the customer

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1.0 General Product Description

Main Specifications of EUT are:

	XNV-6120R
Video	
Imaging Device	1/2.8" 2M CMOS
Total Pixels	1945(H) x 1109(V) 2.16M
Effective Pixels	1945(H) x 1097(V) 2.13M
Scanning System	Progressive
Min. Illumination	Color : 0.03 Lux (1/30sec, F1.6) B/W : 0 Lux (IR LED On)
S / N Ratio	50dB
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)	**5.2~62.4mm(Optical 12X)**
Max. Aperture Ratio	F1.6 (Wide) ~ F3.0(Tele)
Angular Field of View	W : 54.58(H) X 32.19(V) X 61.40(D) T : 5.30(H) X 3.00(V) X 6.06(D)
Min. Object Distance	2.1m
Focus Control	Auto / Manual / One Push
Lens Type	DC Auto Iris
Mount Type	Board-in type
Pan / Tilt / Rotate	
Pan Range	0 ° ~ +354 °
Tilt Range	0 ° ~ +75 °
Rotate Range	0 ° ~ +355 °
Operational	
Viewable Length	70m
Camera Title	Off / On (Displayed up to 85 characters) - W/W : English/Numeric/Special Characters - China : English/Numeric/Special/Chinese Characters - Common : Multi-line (Max 5), Color (Grey/Green/Red/Blue/Black/White), Transparency, Auto Scale by Resolution
Day & Night	Auto (ICR) / Color / B/W / External / Schedule
Backlight Compensation	Off / BLC / HLC(Masking/Dimming), WDR
Wide Dynamic Range	150dB
Contrast Enhancement	SSDR (Off / On)
Digital Noise Reduction	SSNR5 (2D+3D Noise Filter) (Off / On)
Digital Image Stabilization	Off / On
Defog	Auto / Manual / Off
Motion Detection	Off/ On(8ea, 8point Polygonal zones)
Privacy Masking	Off / On (32ea, Rectangle zones) - Color : Grey/Green/Red/Blue/Black/White - Mosaic
Gain Control	Off / Low / Meddle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor (included Mercury & Sodium)
Contrast	level adjustment
LDC	On/Off (5 levels with Min/Max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2 ~ 1/12,000sec)
Digital PTZ	24X
Preset	300 ea
Rotate Image	Flip : On/Off Mirror : On/Off Hallway : 90° /270°
Video&Audio Analytics	Tampering, Loitering, Directional Detection, Defocus Detection, Fog Detection, Virtual Line, Enter/Exit, Appear / Disappear, Audio Detection, Face Detection, Motion Detection Sound Classification
Alarm I/O	Input 1ea / Output 1ea

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Alarm Triggers	Alarm Input, Motion Detection, Video & Audio Analytics, Network Disconnect
Alarm events	File upload via FTP, E-Mail Notification via E-Mail local storage(SD/SDHC/SDXC) or NAS recording at Event Triggers External output preset
Audio In	Selectable (Mic IN/Line IN), Supply voltage: 2.5VDC(4mA), Input impedance: approx. 2K Ohm
Audio out	Line out (3.5mm mono jack), Max output level: 1 Vrms
Pixel Counter	support
Network	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265/H.264 (MPEG-4 Part 10/AVC) : Main/Baseline/High Motion JPEG
Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.264/H.265 : Max 60fps at all resolutions Motion JPEG : Max. 30fps at all resolutions
Smart Codec	Manual Mode (area-based : 5EA)
WiseStream II	support
Video Quality Adjustment	H.264/H.265/MJPEG : Target Bitrate Level Control
Bitrate Control Method	H.264/H.265 : CBR or VBR Motion JPEG : VBR
Streaming Capability	Multiple Streaming (Up to 10 Profiles)
Audio Compression Format	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
Audio Communication	Bi-dierctional (2-Way)
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) Login Authentication Digest Login Authentication IP Address Filtering User access Log 802.1X Authentication (EAP-TLS, EAP-LEAP)
Streaming Method	Unicast / Multicast
Max. User Access	20 users at Unicast Mode
Edge Storage	SD/SDHC/SDXC 2slot (up to 512 GB) - Continuous recording(1'st slot to 2'nd slot) - Motion Images recorded in the SD/SDHC/SDXC memory card can be downloaded. NAS(Network Attached Storage) Local PC for Instant Recording
Application Programming Interface	ONVIF Profile S/G SUNAPI 2.0(HTTP API) Wisenet Open Plarform
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish,, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Web Viewer	Supported OS: Windows 7, 8.1, 10, Mac OS X 10.10. 10.11 10.12 Non-plugin Webviewer Supported Browser: Google Chrome 56, MS Edge 39, Mozilla Firefox 49(Window 64bit only) , Apple Safari 10 (Mac OS X only) Plug-in Webviewer Supported Browser : MS Explore 11, Apple Safari 10 (Mac OS X only)

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Central Management Software	SmartViewer
Environmental	
Operating Temperature / Humidity	-40°C ~ +55°C(-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -35°C
Storage Temperature / Humidity	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP67, IP66, NEMA 4X
Vandal Resistance	IK10
Electrical	
Input Voltage / Current	AC24V, DC12V,PoE(IEEE802.3af,Class3)
Power Consumption	24V AC : Max 14W 12V DC : Max 11.5W PoE : Max 12.95W
Mechanical	
Color / Material	Ivory / Aluminum
Dimension (WxHxD)	Ø160 x H128.5mm
Weight	995g

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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.

Voltage ☐ 230 Vac ☐ 100 Vac ☒ 24 Vac ☒ 12 Vdc ☒ PoE

Frequency ☒ 50 Hz ☐ 60 Hz ☐ Hz

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	XNV-6120R	-	HANWHA VISION VIETNAM COMPANY LIMITED	E.U.T

1.5 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
POE Adaptor	POE36U-1AT-R	-	PHIHONG	-
Notebook	RV518	HTK991NC600187E	Samsung Electronics Co., Ltd	-
Notebook Adaptor	ADP-60ZH	AD-6019R	DELTA ELECTRONICS, INC.	-
Speaker	BR10000A CUVE	-	BEIJING EDIFIER HI-TECH GROUP.	-
MIC	CMK-303	-	CAMAC	-
Alarm	SIP-1201DD D0	-	SAMSUNG TECHWIN CO., LTD.	-

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1.6 External I/O Cabling

- AC 24 V Mode

Start		END		Cable Spec.	
Description	**I/O Port**	**Description**	**I/O Port**	**Length**	**Shield**
NETWORK CAMERA (E.U.T)	RJ-45	Notebook	RJ-45	3.0	U
	3.5 ㎜	Speaker	3.5 ㎜	1.6	U
	3.5 ㎜	MIC	3.5 ㎜	1.7	U
	3 Pin	Alarm	3 Pin	1.7	U

- DC 12 V Mode

Start		END		Cable Spec.	
Description	**I/O Port**	**Description**	**I/O Port**	**Length**	**Shield**
NETWORK CAMERA (E.U.T)	RJ-45	Notebook	RJ-45	3.0	U
	3.5 ㎜	Speaker	3.5 ㎜	1.6	U
	3.5 ㎜	MIC	3.5 ㎜	1.7	U
	3 Pin	Alarm	3 Pin	1.7	U

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- PoE Mode

Start		END		Cable Spec.	
Description	**I/O Port**	**Description**	**I/O Port**	**Length**	**Shield**
NETWORK CAMERA (E.U.T)	RJ-45 (POE)	POE Adaptor	RJ-45 (POE)	3.0	U
	RJ-45	Notebook	RJ-45	3.0	U
	3.5 ㎜	Speaker	3.5 ㎜	1.6	U
	3.5 ㎜	MIC	3.5 ㎜	1.7	U
	3 Pin	Alarm	3 Pin	1.7	U
Notebook	RJ-45 (DATA)	POE Adaptor	RJ-45 (DATA)	3.0	U

* Unshielded = U, Shielded = S

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1.7 EUT Operating Mode(s)

Test mode	operating
AC 24 V Mode	E.U.T Monitoring, Ping test, 1 ㎑
DC 12 V Mode	E.U.T Monitoring, Ping test
POE Mode	E.U.T Monitoring, Ping test

E.U.T Test operating S/W		
Name	Version	Manufacture Company
Webviewer	-	Hanwha Vision Co., Ltd

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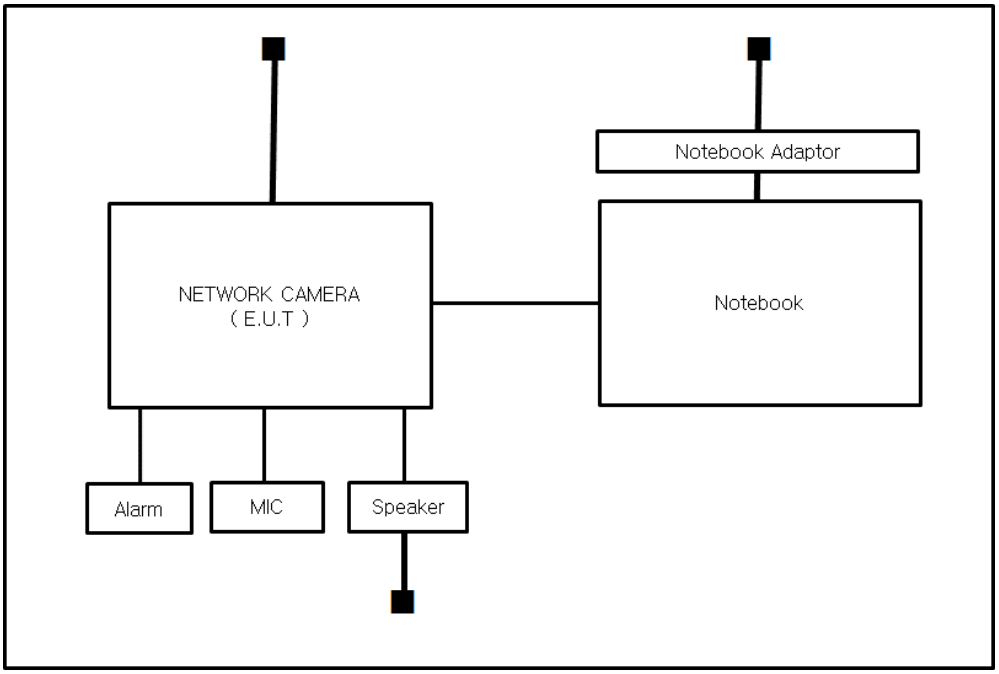
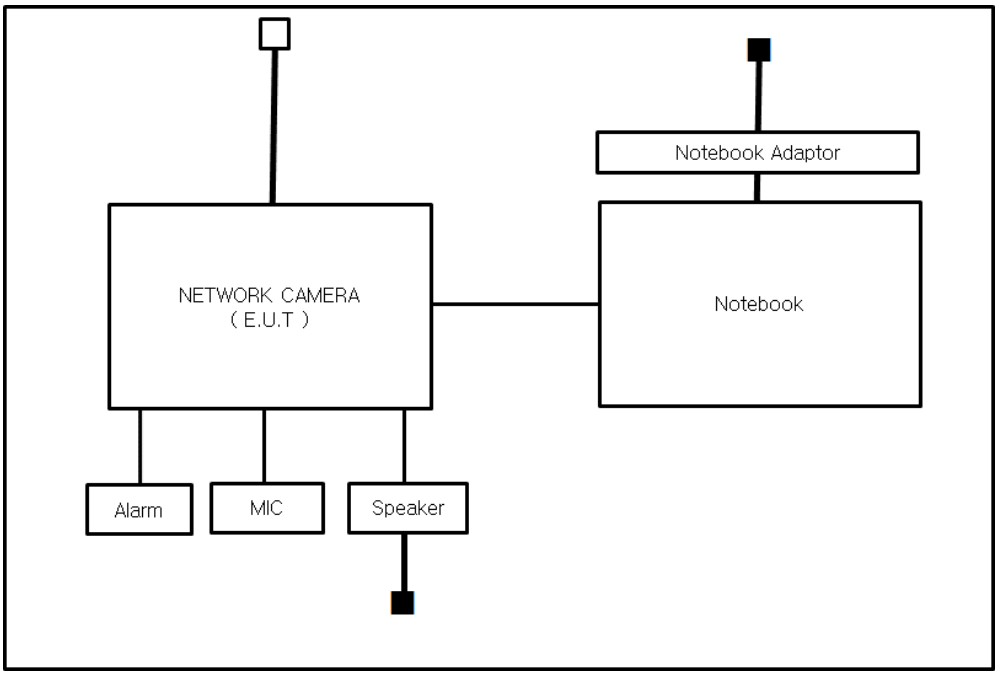
1.8 Configuration

■ AC Main

- AC 24 V Mode



- DC 12 V Mode



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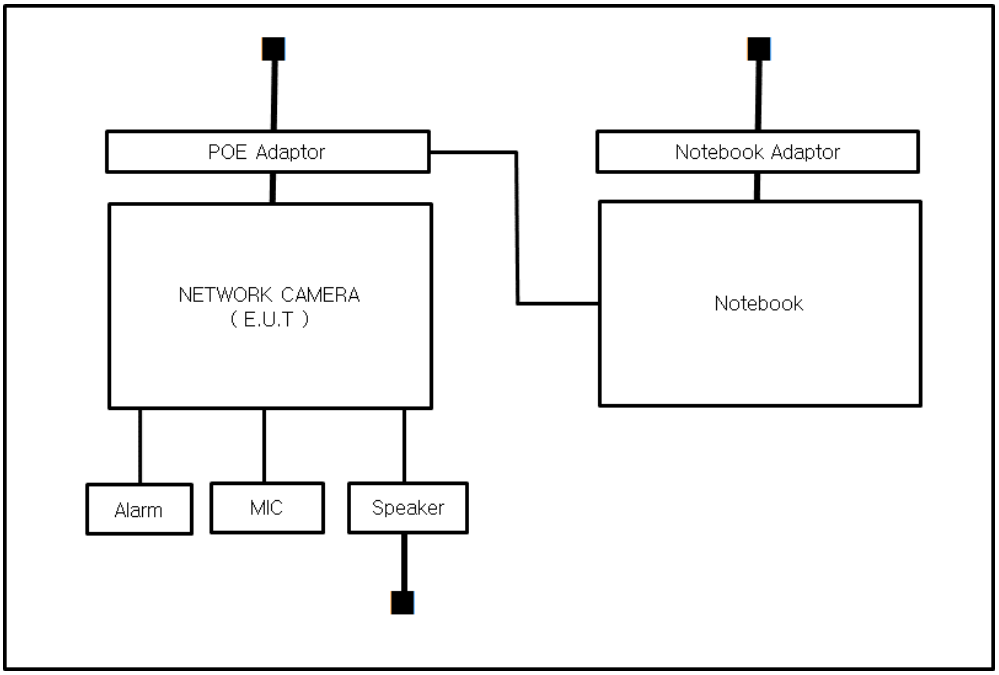
- PoE Mode



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1.9 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.

1.10 Test Facility

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

1.11 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:

☐ **EMC – Directive 2014/30/EU**

☐ EN 61000-6-3:2011

☐ EN 61000-6-1:2007

☐ EN 61000-6-4:2007 +A1:2011

☐ EN 61000-6-2:2005

☐ EN 55011:2007 +A1:2010 ☐ Group 1 ☐ Class A ☐ Group 2 ☐ Class B

☐ EN 55014-1:2006 +A2:2011

☐ EN 55014-2:1997 +A2:2008

☐ EN 55015:2013

☐ EN 61547 :2009

☐ EN 55032:2015 ☐ Class A ☐ Class B

☐ EN 55024:2010 +A1:2015

☐ EN 50130-4:2011 +A1:2014

☐ EN 61000-3-2:2014

☐ EN 61000-3-3:2013

☐ EN 61326-1:2013

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☒ **VCCI V-3 / 2015.04** ☒ Class A ☐ Class B

☐ **AS/NZS CISPR22:2009 +A1:2010** ☐ Class A ☐ Class B

☐ **47 CFR Part 15, Subpart B**

- ☐ CISPR 22:2009 +A1:2010 ☒ Class A ☐ Class B
- ☐ ANSI C63.4-2009

☐ **IC Regulation ICES-003 : 2016**

- ☐ CAN/CSA CISPR 22-10 ☐ Class A ☐ Class B
- ☐ ANSI C63.4-2014

☐ **RE– Directive 2014/53/EU**

☐ EN 301 489-1 V1.9.2

- ☐ Equipment for fixed use
- ☐ Equipment for vehicular use
- ☐ Equipment for portable use

☐ EN 301 489-3 V1.6.1

☐ EN 301 489-17 V2.2.1

☐ EN 60945:2002

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2.1 Conducted Emissions Mains Power Ports

Test Date
Apr. 29, 2017

Test Location
Electro wave Shieldroom

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	101781	04, 27, 2018
☒	LISN	ENV216	R & S	101787	01, 11, 2018
☒	LISN	ESH2-Z5	R & S	100450	04, 27, 2018
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	12, 13, 2017

Test Conditions
Temperature: 21,2 ℃
Relative Humidity: 36,3 %

Frequency Range of Measurement
150 ㎑ to 30 ㎒

Instrument Settings
IF Band Width: 9 ㎑

Test Results
The requirements are:

☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

Remarks
See Appendix A for test data.

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2.2 Conducted Emissions at Telecommunication Ports

Test Date
Apr. 29, 2017

Test Location
Electro wave Shieldroom

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	101781	04, 27, 2018
☒	LISN	ENV216	R & S	101787	01, 11, 2018
☒	LISN	ESH2-Z5	R & S	100450	04, 27, 2018
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	12, 13, 2017
☒	8-WIRE ISN CAT3,5	ENY81	Rohde & Schwarz	100174	11, 01, 2018

Test Conditions
Temperature: 21,2 ℃
Relative Humidity: 36,3 %

Frequency Range of Measurement
150 ㎑ to 30 ㎒

Instrument Settings
IF Band Width: 9 ㎑

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(Below 1 ㎓)

Test Date
Apr. 29, 2017

Test Location
☒ Open Area Test Site #1 ☐ Open Area Test Site #2

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI Test S/W	-	-	-	-
☒	EMI TEST RECEIVER	ESVS10	Rohde & Schwarz	826008/014	04, 18, 2018
☐	TRILOG-BROADBAND ANTENNA	VULB9163	Schwarzbeck	714	11, 28, 2018
☒	TRILOG-BROADBAND ANTENNA	VULB9163	Schwarzbeck	715	04, 14, 2018

Test Conditions
Temperature: 23,0℃
Relative Humidity: 29,0 %

Frequency Range of Measurement
30 ㎒ to 1 ㎓

Instrument Settings
IF Band Width: 120 ㎑

Test Results
The requirements are:

☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

Remarks
See Appendix A for test data.

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2.4 Radiated Electric Field Emissions(Above 1 ㎓)

Test Date
Apr. 29, 2017

Test Location
Semi Anechoic Chamber #2

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI Test S/W	e3	AUDIX	8.083b	-
☒	EMI TEST RECEIVER	ESU26	R & S	100552	04, 19, 2018
☒	BROADBAND PREAMPLIFIER	BBV 9718	Schwarzbeck Mess - Elektronik	9718-246	10, 14, 2017
☒	LOG-PERIODIC ANTENNA	STLP 9149	SCHWARZBECK	9149-255	05, 17, 2018

Test Conditions
Temperature: 19,2 ℃
Relative Humidity: 38,2 %

Frequency Range of Measurement
1 ㎓ to 6 ㎓

Instrument Settings
IF Band Width: 1 ㎒

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

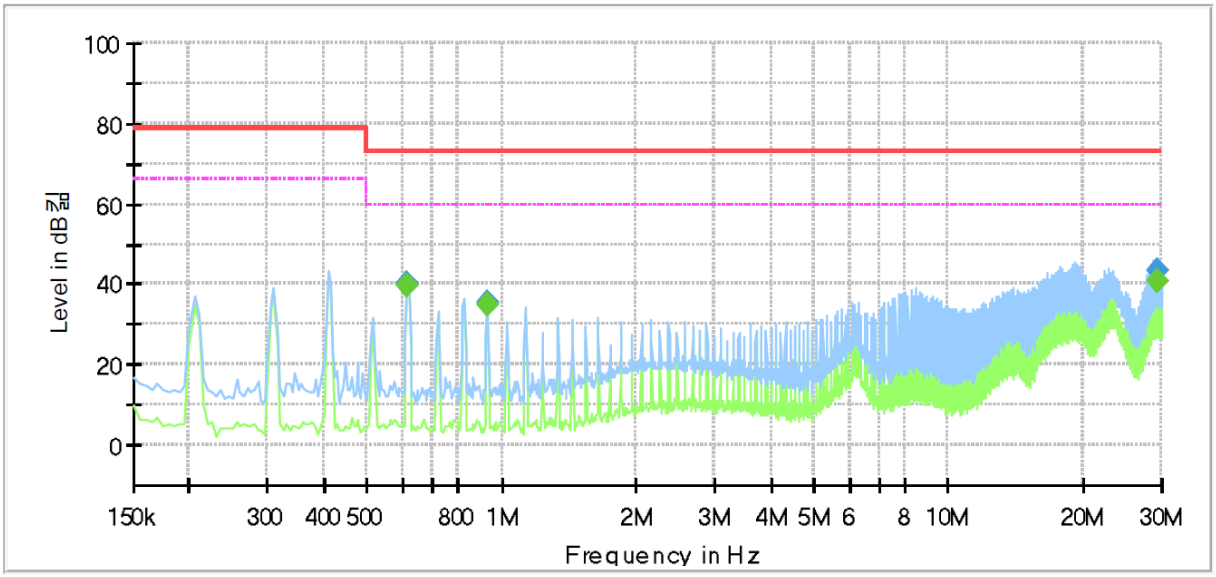
Conducted Emissions at Mains Power Ports

- AC 24 V Mode

[HOT]

Common Information

Test Description:	Conducted Emission
Model No.:	XNV-6120RN
Mode	AC 24 V_H
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.615000	---	39.63	60.00	20.37	1000.0	9.000	L1	20.4
0.615000	40.12	---	73.00	32.88	1000.0	9.000	L1	20.4
0.925000	---	34.88	60.00	25.12	1000.0	9.000	L1	20.1
0.925000	35.67	---	73.00	37.33	1000.0	9.000	L1	20.1
29.420000	---	40.84	60.00	19.16	1000.0	9.000	L1	20.5
29.420000	43.51	---	73.00	29.49	1000.0	9.000	L1	20.5

♦ 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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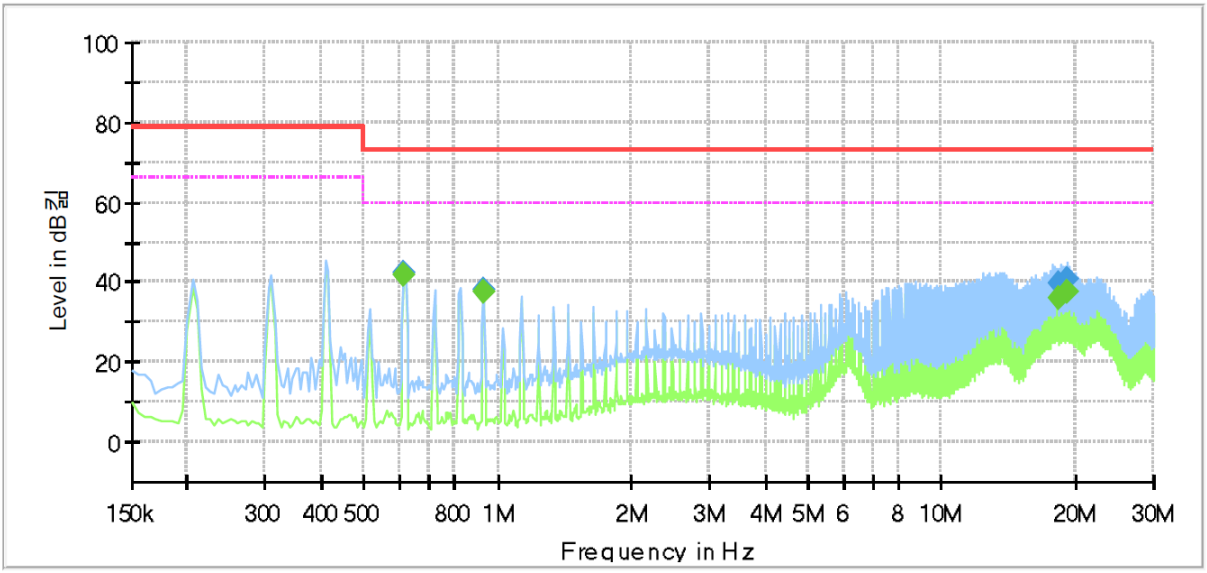
The authenticity of the test report, contact kes@kes.co.kr

[NEUTRAL]

Common Information

Test Description:	Conducted Emission
Model No.:	XNV-6120RN
Mode	AC 24 V_N
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.615000	---	41.96	60.00	18.04	1000.0	9.000	N	20.4
0.615000	42.48	---	73.00	30.52	1000.0	9.000	N	20.4
0.925000	---	37.49	60.00	22.51	1000.0	9.000	N	20.1
0.925000	38.19	---	73.00	34.81	1000.0	9.000	N	20.1
18.415000	---	35.87	60.00	24.13	1000.0	9.000	N	20.3
18.415000	39.51	---	73.00	33.49	1000.0	9.000	N	20.3
19.240000	---	37.46	60.00	22.54	1000.0	9.000	N	20.4
19.240000	40.76	---	73.00	32.24	1000.0	9.000	N	20.4

♦ 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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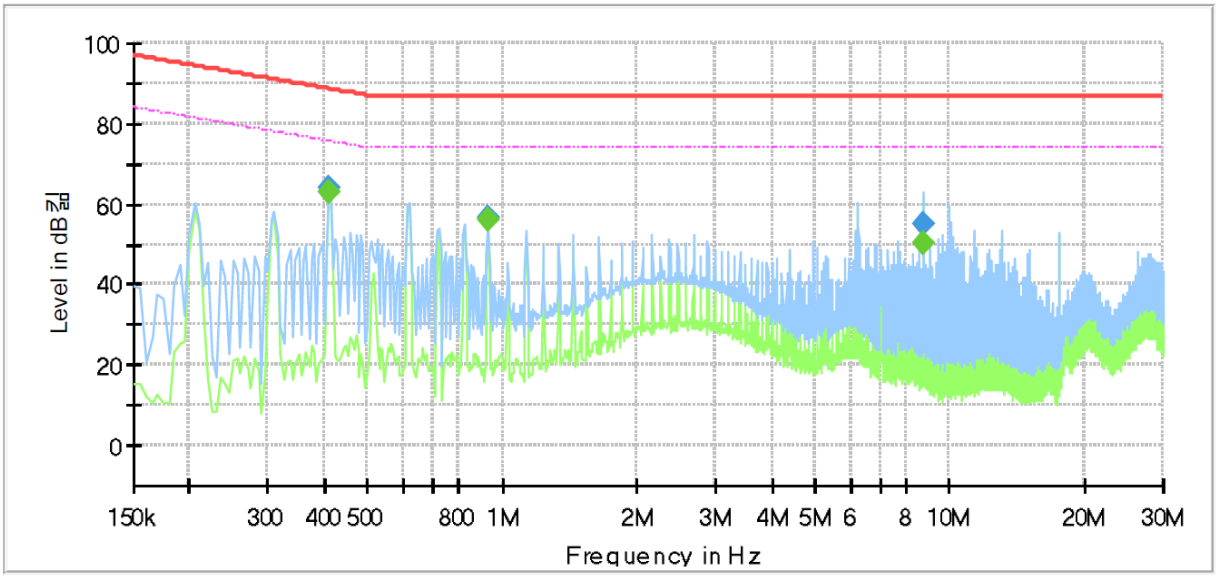
Conducted Emissions at Telecommunication Ports

- AC 24 V Mode

[10 Mbps]

Common Information

Test Description:	Telecommunication Emission
Model No.:	XNV-6120RN
Mode	AC 24 V_10 Mbps
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.410000	---	62.89	75.65	12.76	1000.0	9.000	Single Line	20.5
0.410000	64.04	---	88.65	24.61	1000.0	9.000	Single Line	20.5
0.925000	---	55.97	74.00	18.03	1000.0	9.000	Single Line	20.0
0.925000	56.56	---	87.00	30.44	1000.0	9.000	Single Line	20.0
8.750000	---	50.03	74.00	23.97	1000.0	9.000	Single Line	19.6
8.750000	55.02	---	87.00	31.98	1000.0	9.000	Single Line	19.6

♦ 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 (ISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

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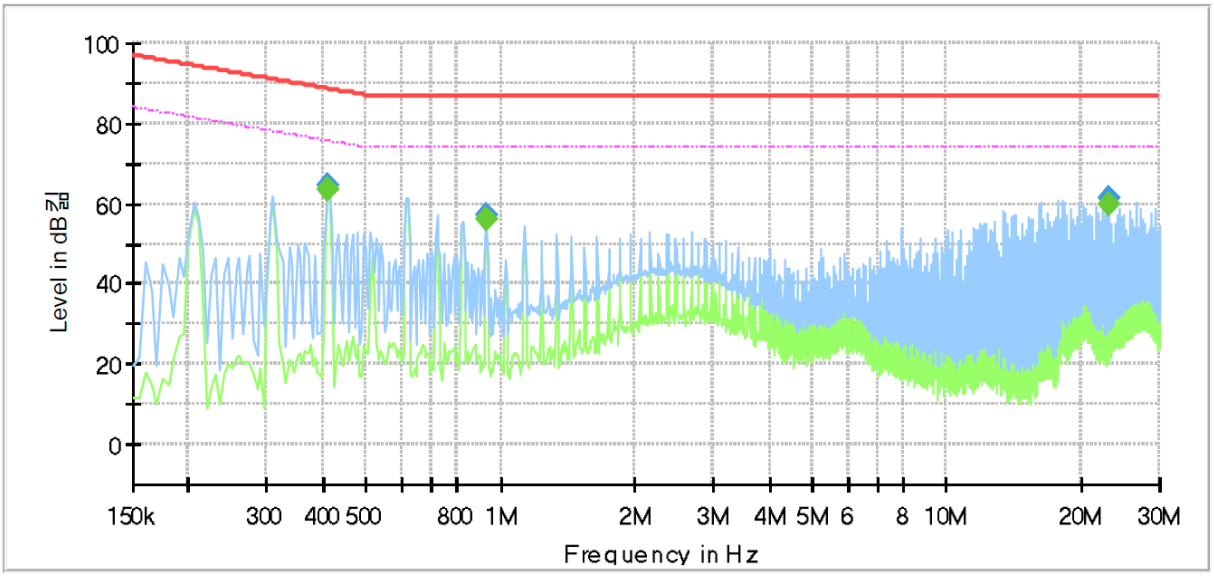
[100 Mbps]

Common Information

Test Description:	Telecommunication Emission
Model No.:	XNV-6120RN
Mode	AC 24 V_100 Mbps
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.410000	---	63.35	75.65	12.30	1000.0	9.000	Single Line	20.8
0.410000	64.49	---	88.65	24.16	1000.0	9.000	Single Line	20.8
0.925000	---	56.37	74.00	17.63	1000.0	9.000	Single Line	20.3
0.925000	56.97	---	87.00	30.03	1000.0	9.000	Single Line	20.3
23.130000	---	59.93	74.00	14.07	1000.0	9.000	Single Line	20.5
23.130000	61.56	---	87.00	25.44	1000.0	9.000	Single Line	20.5

♦ 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 (ISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

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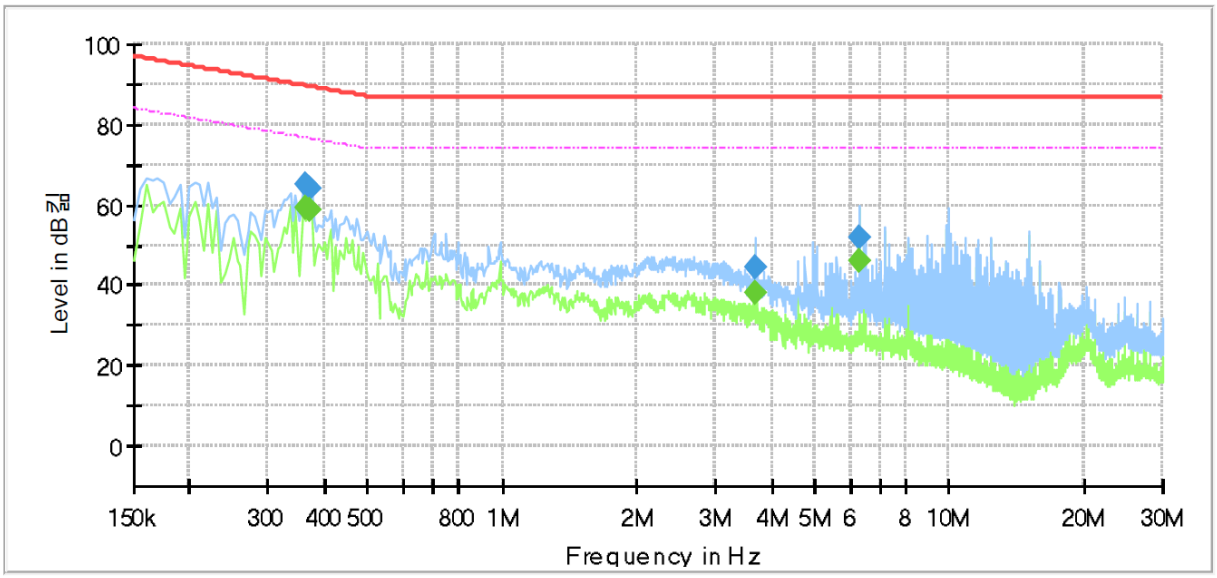
- DC 12 V Mode

[10 Mbps]

Common Information

Test Description:	Telecommunication Emission
Model No.:	XNV-6120RN
Mode	DC 12 V_10 Mbps
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.365000	---	59.41	76.61	17.20	1000.0	9.000	Single Line	20.6
0.365000	65.36	---	89.61	24.25	1000.0	9.000	Single Line	20.6
0.370000	---	58.97	76.50	17.53	1000.0	9.000	Single Line	20.6
0.370000	64.30	---	89.50	25.20	1000.0	9.000	Single Line	20.6
3.695000	---	38.11	74.00	35.89	1000.0	9.000	Single Line	19.5
3.695000	44.62	---	87.00	42.38	1000.0	9.000	Single Line	19.5
6.305000	---	46.18	74.00	27.82	1000.0	9.000	Single Line	19.5
6.305000	52.04	---	87.00	34.96	1000.0	9.000	Single Line	19.5

♦ 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 (ISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

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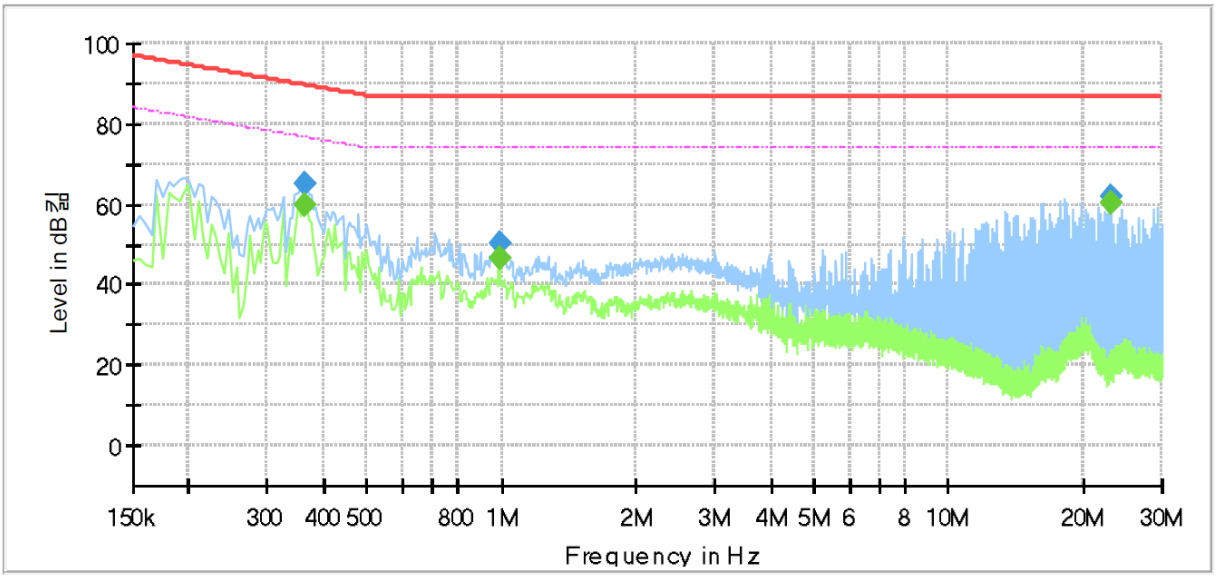
[100 Mbps]

Common Information

Test Description:	Telecommunication Emission
Model No.:	XNV-6120RN
Mode	DC 12 V_100 Mbps
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.365000	---	59.58	76.61	17.03	1000.0	9.000	Single Line	20.9
0.365000	65.24	---	89.61	24.37	1000.0	9.000	Single Line	20.9
0.990000	---	46.65	74.00	27.35	1000.0	9.000	Single Line	20.2
0.990000	50.19	---	87.00	36.81	1000.0	9.000	Single Line	20.2
23.130000	---	60.13	74.00	13.87	1000.0	9.000	Single Line	20.5
23.130000	61.79	---	87.00	25.21	1000.0	9.000	Single Line	20.5

♦ 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 (ISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

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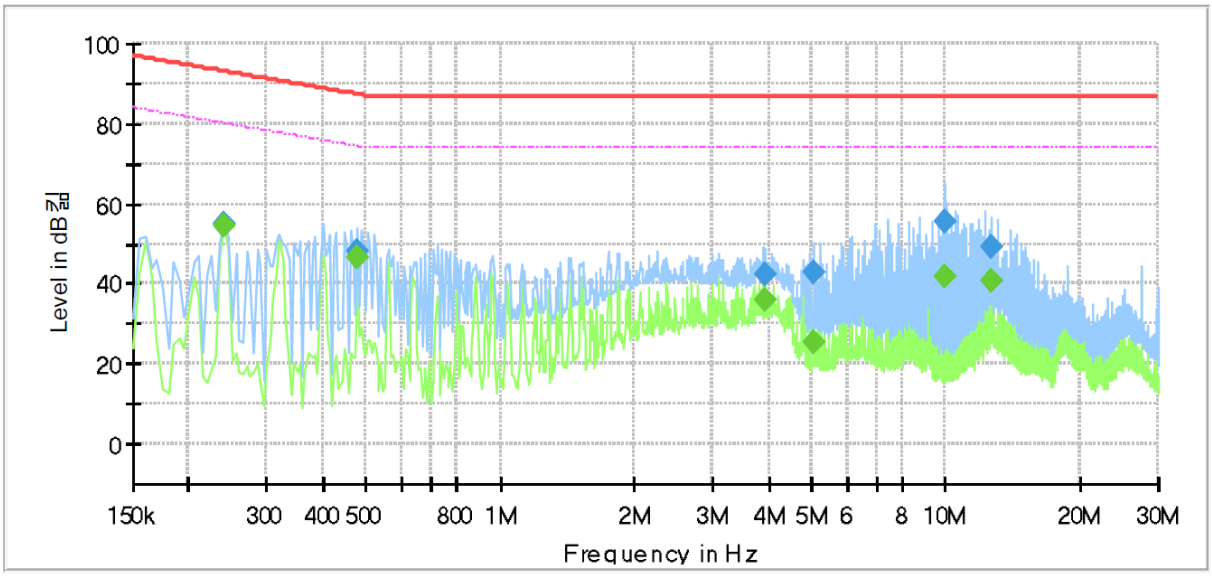
- PoE Mode

[10 Mbps]

Common Information

Test Description:	Telecommunication Emission
Model No.:	XNV-6120RN
Mode	POE_10 Mbps
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.240000	---	54.70	80.10	25.40	1000.0	9.000	Single Line	20.8
0.240000	54.93	---	93.10	38.17	1000.0	9.000	Single Line	20.8
0.480000	---	46.41	74.34	27.93	1000.0	9.000	Single Line	20.4
0.480000	48.03	---	87.34	39.31	1000.0	9.000	Single Line	20.4
3.915000	---	36.04	74.00	37.96	1000.0	9.000	Single Line	19.4
3.915000	42.42	---	87.00	44.58	1000.0	9.000	Single Line	19.4
5.065000	---	25.57	74.00	48.43	1000.0	9.000	Single Line	19.5
5.065000	42.74	---	87.00	44.26	1000.0	9.000	Single Line	19.5
10.000000	---	41.78	74.00	32.22	1000.0	9.000	Single Line	19.7
10.000000	55.56	---	87.00	31.44	1000.0	9.000	Single Line	19.7
12.610000	---	40.98	74.00	33.02	1000.0	9.000	Single Line	19.8
12.610000	49.33	---	87.00	37.67	1000.0	9.000	Single Line	19.8

♦ 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 (ISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

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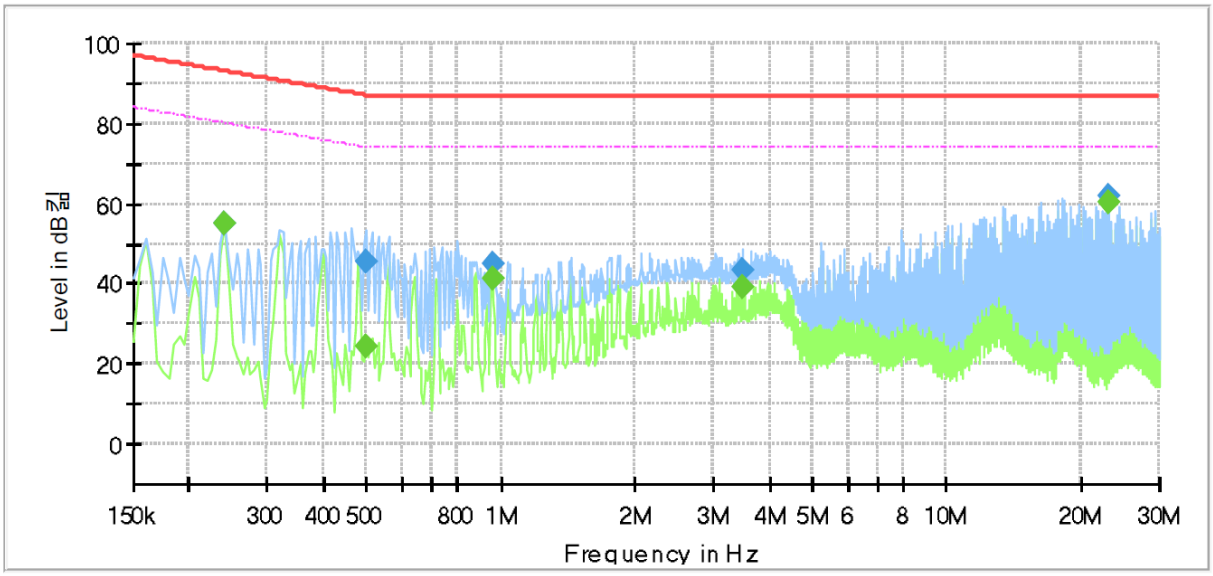
[100 Mbps]

Common Information

Test Description:	Telecommunication Emission
Model No.:	XNV-6120RN
Mode	POE_100 Mbps
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.240000	---	54.79	80.10	25.31	1000.0	9.000	Single Line	21.1
0.240000	55.14	---	93.10	37.96	1000.0	9.000	Single Line	21.1
0.500000	---	24.35	74.00	49.65	1000.0	9.000	Single Line	20.7
0.500000	45.58	---	87.00	41.42	1000.0	9.000	Single Line	20.7
0.960000	---	41.26	74.00	32.74	1000.0	9.000	Single Line	20.3
0.960000	45.03	---	87.00	41.97	1000.0	9.000	Single Line	20.3
3.495000	---	39.09	74.00	34.91	1000.0	9.000	Single Line	19.7
3.495000	43.65	---	87.00	43.35	1000.0	9.000	Single Line	19.7
23.130000	---	60.55	74.00	13.45	1000.0	9.000	Single Line	20.5
23.130000	62.01	---	87.00	24.99	1000.0	9.000	Single Line	20.5

♦ 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 (ISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

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Radiated Electric Field Emissions(Below 1 ㎓)

- AC 24 V Mode

Frequency	Amplitude	ANT Polar. (H/V)	ANT. Height	Correction Factor		Corrected Amplitude	Applicable Limit	Margin
[㎒]	[dB㎶]		[m]	ANT. [dB/m]	Cable [dB]	[dB㎶/m]	[dB㎶/m]	[dB]
74.48	19.90	V	3.22	8.43	2.00	30.33	40.00	9.67
250.65	17.20	H	3.12	12.56	3.70	33.46	47.00	13.54
311.52	16.30	V	2.86	13.65	4.14	34.09	47.00	12.91
350.62	17.40	H	2.98	14.50	4.25	36.15	47.00	10.85
400.18	11.80	V	3.21	15.57	4.60	31.97	47.00	15.03
460.64	12.50	H	3.16	16.62	5.13	34.25	47.00	12.75

* H : Horizontal, V : Vertical

♦ Calculation
Corrected Amplitude [㏈uV] = Amplitude[㏈uV] + Correction Factor [㏈]
Corrected Amplitude : The Final Value, Amplitude : Reading Value,
Correction Factor : ANT FACTOR + Cable loss

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- DC 12 V Mode

Frequency	Amplitude	ANT Polar. (H/V)	ANT. Height	Correction Factor		Corrected Amplitude	Applicable Limit	Margin
[㎒]	[dBμV]		[m]	ANT. [dB/m]	Cable [dB]	[dBμV/m]	[dBμV/m]	[dB]
58.33	15.30	V	2.98	12.86	1.77	29.93	40.00	10.07
250.32	15.10	H	3.21	12.56	3.70	31.36	47.00	15.64
299.14	15.90	H	2.85	13.39	4.10	33.39	47.00	13.61
333.52	16.20	V	3.12	14.13	4.20	34.53	47.00	12.47
375.82	16.80	H	3.15	15.05	4.43	36.28	47.00	10.72
459.37	14.20	V	3.20	16.60	5.13	35.93	47.00	11.07

* H : Horizontal, V : Vertical

♦ Calculation
Corrected Amplitude [㏈uV] = Amplitude[㏈uV] + Correction Factor [㏈]
Corrected Amplitude : The Final Value, Amplitude : Reading Value,
Correction Factor : ANT FACTOR + Cable loss

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- PoE Mode

Frequency	Amplitude	ANT Polar. (H/V)	ANT. Height	Correction Factor		Corrected Amplitude	Applicable Limit	Margin
[㎒]	[dBμV]		[m]	ANT. [dB/m]	Cable [dB]	[dBμV/m]	[dBμV/m]	[dB]
35.25	16.30	H	3.12	11.31	1.44	29.05	40.00	10.95
38.61	17.60	V	2.92	12.15	1.52	31.27	40.00	8.73
72.35	21.30	V	3.20	9.03	1.97	32.30	40.00	7.70
250.77	17.50	H	3.21	12.56	3.70	33.76	47.00	13.24
299.82	18.30	H	3.11	13.40	4.10	35.80	47.00	11.20
332.98	17.50	V	2.86	14.12	4.20	35.82	47.00	11.18

* H : Horizontal, V : Vertical

♦ Calculation
Corrected Amplitude [㏈uV] = Amplitude[㏈uV] + Correction Factor [㏈]
Corrected Amplitude : The Final Value, Amplitude : Reading Value,
Correction Factor : ANT FACTOR + Cable loss

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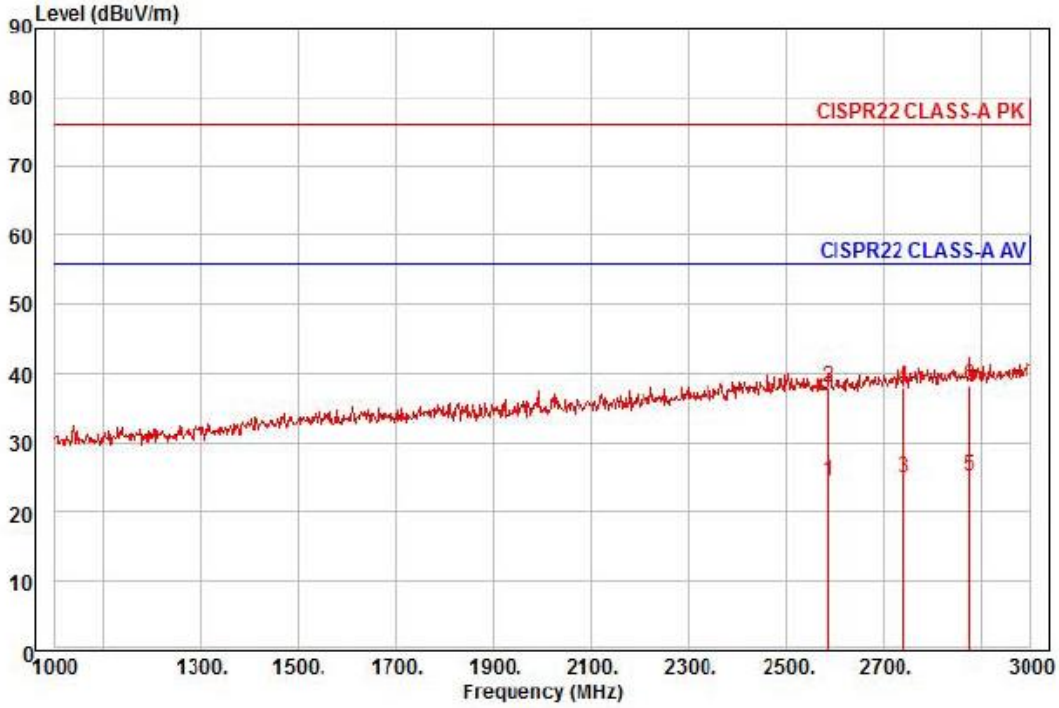
Radiated Electric Field Emissions(Above 1 ㎓)

- AC 24 V Mode




```
Site      : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) horizontal
          : RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project   :
Model     : XNV-6120RN
Mode      : AC 24 V
Memo      : 1 ~ 3 GHz
```

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	2586.00	25.58	27.95	10.71	39.63	302	56.00	-31.39	horizontal	Average
2	2586.00	38.88	27.95	10.71	39.63	302	76.00	-38.09	horizontal	Peak
3	2742.00	25.20	28.64	11.09	39.81	266	56.00	-30.88	horizontal	Average
4	2742.00	38.05	28.64	11.09	39.81	266	76.00	-38.03	horizontal	Peak
5 pp	2878.00	24.66	29.25	11.41	39.97	193	56.00	-30.65	horizontal	Average
6 pk	2878.00	37.57	29.25	11.41	39.97	193	76.00	-37.74	horizontal	Peak

♦ Calculation

Over Limit [㏈] = (Read Level[㏈uV] + Ant Factor[㏈/m] + Cable Loss [㏈] – Preamp Factor [㏈]) – Limit Line[㏈uV]

Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor, Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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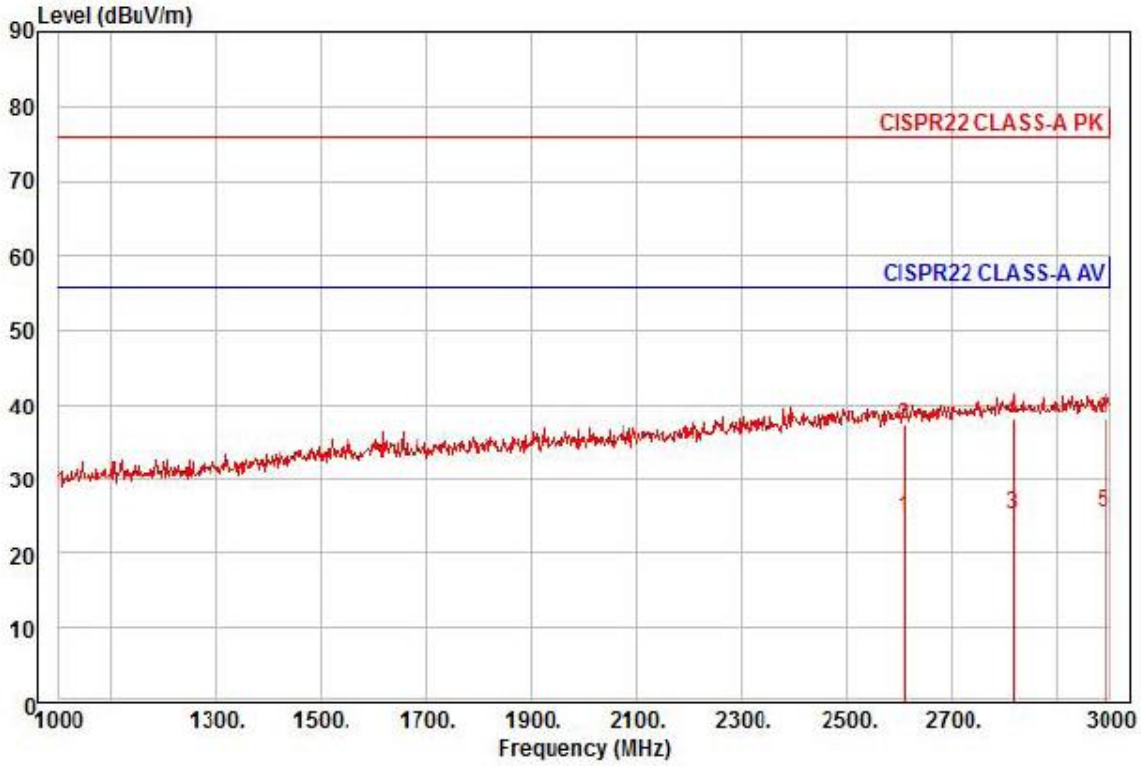

Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNV-6120RN
Mode : AC 24 V
Memo : 1 ~ 3 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	2612.00	25.47	28.07	10.77	39.66	27	56.00	-31.35	vertical	Average
2	2612.00	38.02	28.07	10.77	39.66	27	76.00	-38.80	vertical	Peak
3	2816.00	24.98	28.97	11.27	39.90	66	56.00	-30.68	vertical	Average
4 pk	2816.00	37.78	28.97	11.27	39.90	66	76.00	-37.88	vertical	Peak
5 pp	2990.00	24.28	29.75	11.67	40.10	115	56.00	-30.40	vertical	Average
6	2990.00	36.76	29.75	11.67	40.10	115	76.00	-37.92	vertical	Peak

♦ Calculation
Over Limit [㏈] = (Read Level[㏈uV] + Ant Factor[㏈/m] + Cable Loss [㏈] – Preamp Factor [㏈]) – Limit Line[㏈uV]
Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor,
Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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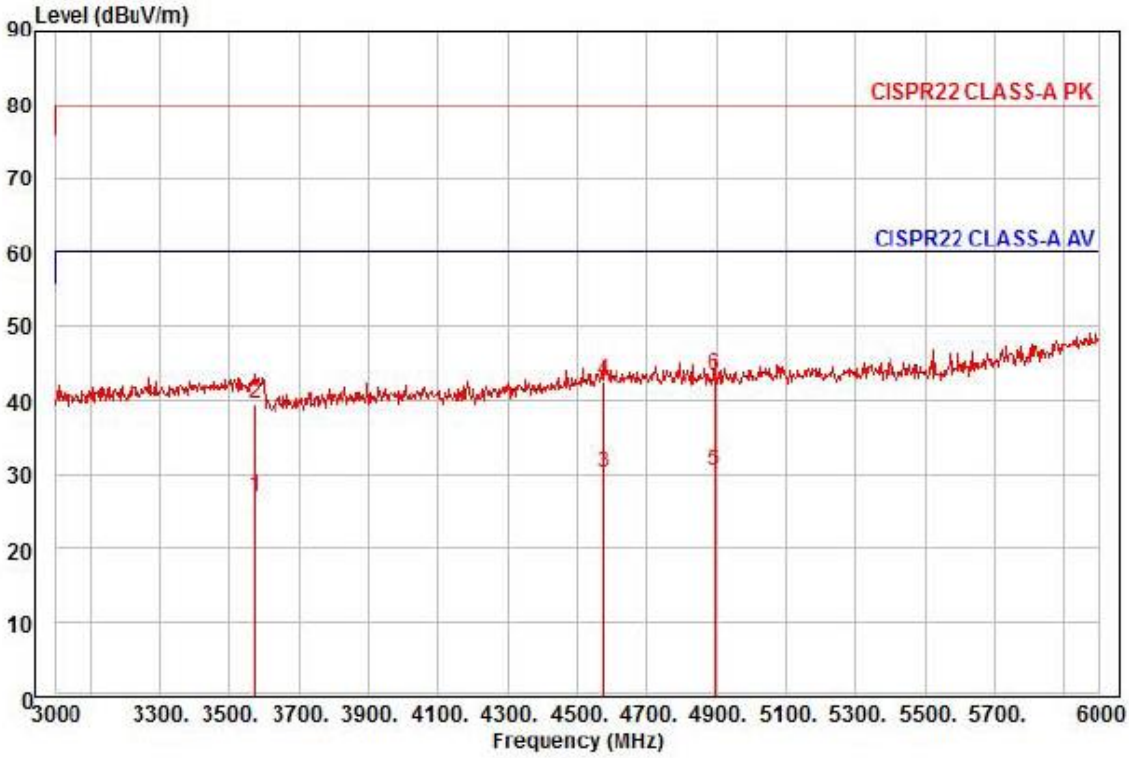

Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNV-6120RN
Mode : AC 24 V
Memo : 3 ~ 6 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	3573.00	24.58	30.45	12.76	40.85	299	60.00	-33.06	horizontal	Average
2	3573.00	37.22	30.45	12.76	40.85	299	80.00	-40.42	horizontal	Peak
3	4575.00	23.32	32.86	14.61	40.69	1	60.00	-29.90	horizontal	Average
4	4575.00	35.97	32.86	14.61	40.69	1	80.00	-37.25	horizontal	Peak
5 pp	4896.00	22.52	33.14	15.20	40.37	358	60.00	-29.51	horizontal	Average
6 pk	4896.00	35.40	33.14	15.20	40.37	358	80.00	-36.63	horizontal	Peak

♦ Calculation
Over Limit [㏈] = (Read Level[㏈uV] + Ant Factor[㏈/m] + Cable Loss [㏈] – Preamp Factor [㏈]) – Limit Line[㏈uV]
Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor,
Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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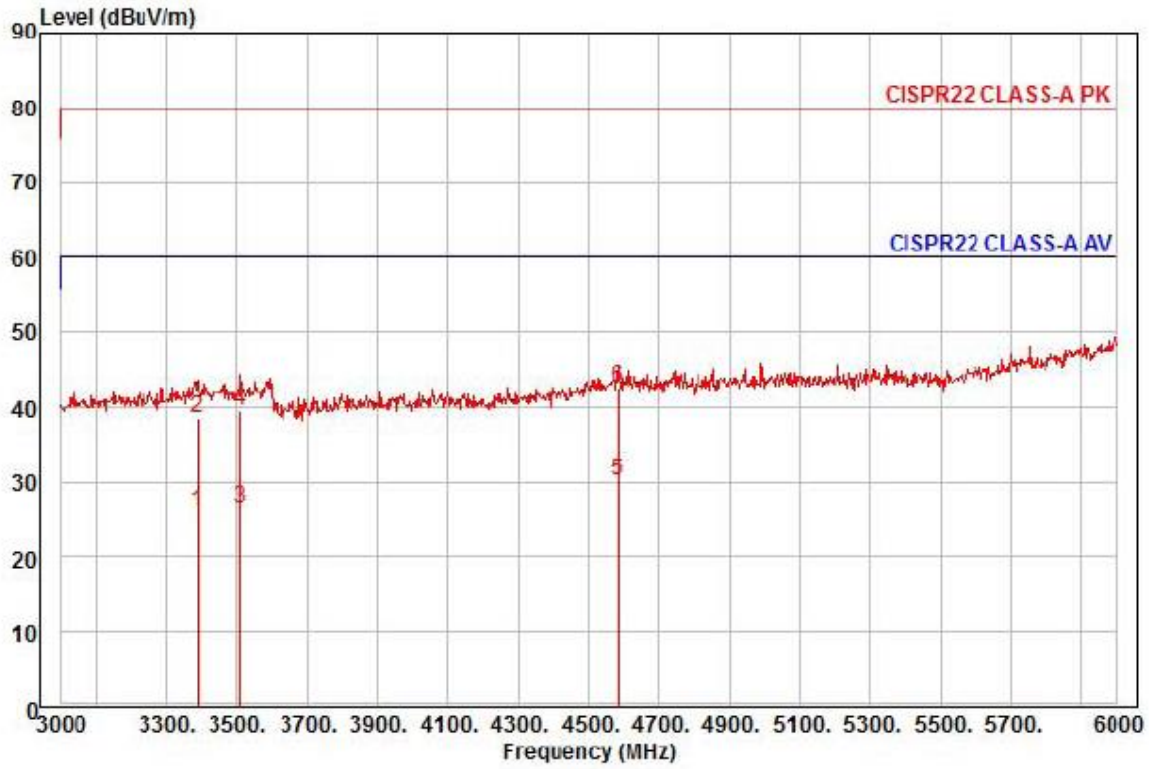

Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNV-6120RN
Mode : AC 24 V
Memo : 3 ~ 6 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	3387.00	24.09	30.18	12.42	40.71	104	60.00	-34.02	vertical	Average
2	3387.00	36.58	30.18	12.42	40.71	104	80.00	-41.53	vertical	Peak
3	3510.00	24.42	30.31	12.64	40.88	54	60.00	-33.51	vertical	Average
4	3510.00	37.32	30.31	12.64	40.88	54	80.00	-40.61	vertical	Peak
5 pp	4581.00	23.31	32.87	14.62	40.69	6	60.00	-29.89	vertical	Average
6 pk	4581.00	35.89	32.87	14.62	40.69	6	80.00	-37.31	vertical	Peak

♦ Calculation
Over Limit [㏈] = (Read Level[㏈uV] + Ant Factor[㏈/m] + Cable Loss [㏈] – Preamp Factor [㏈]) – Limit Line[㏈uV]
Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor, Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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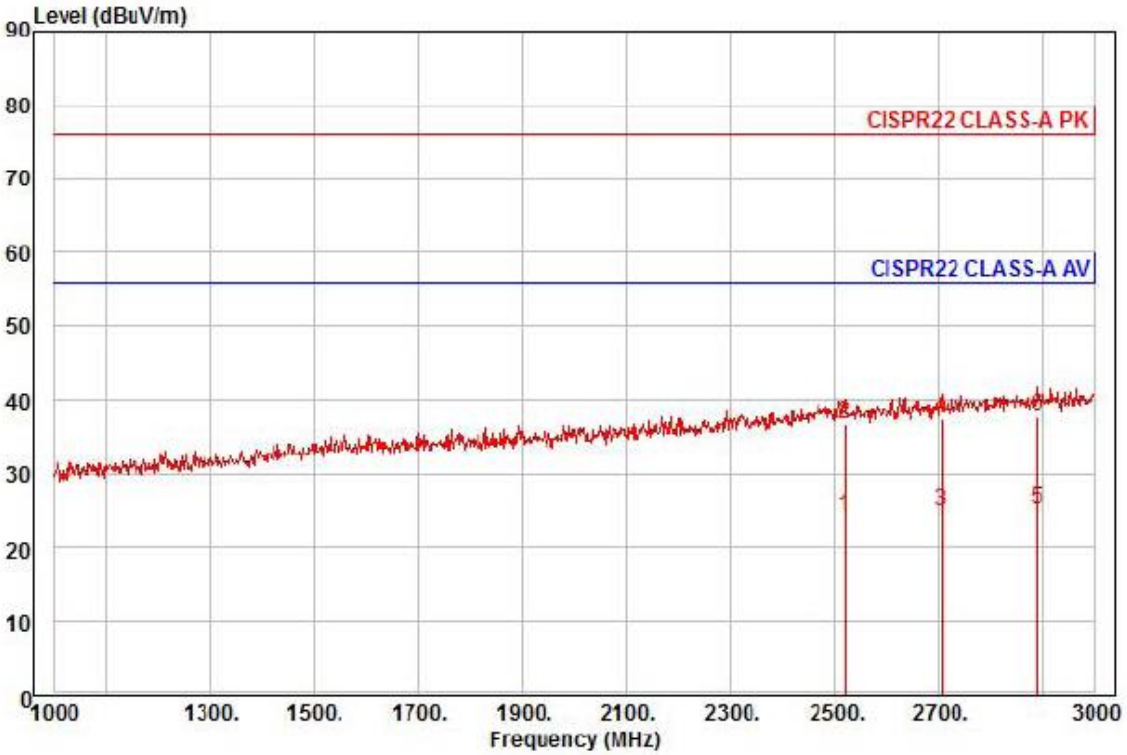
- DC 12 V Mode




```
Site      : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) horizontal
          : RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project   :
Model     : XNV-6120RN
Mode      : DC 12 V
Memo      : 1 ~ 3 GHz
```

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	2520.00	25.53	27.66	10.57	39.56	124	56.00	-31.80	horizontal	Average
2	2520.00	38.23	27.66	10.57	39.56	124	76.00	-39.10	horizontal	Peak
3	2706.00	25.27	28.48	11.00	39.77	128	56.00	-31.02	horizontal	Average
4	2706.00	37.93	28.48	11.00	39.77	128	76.00	-38.36	horizontal	Peak
5 pp	2892.00	24.54	29.31	11.45	39.99	222	56.00	-30.69	horizontal	Average
6 pk	2892.00	37.08	29.31	11.45	39.99	222	76.00	-38.15	horizontal	Peak

♦ Calculation

Over Limit [dB] = (Read Level[dBuV] + Ant Factor[dB/m] + Cable Loss [dB] – Preamp Factor [dB]) – Limit Line[dBuV]

Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor, Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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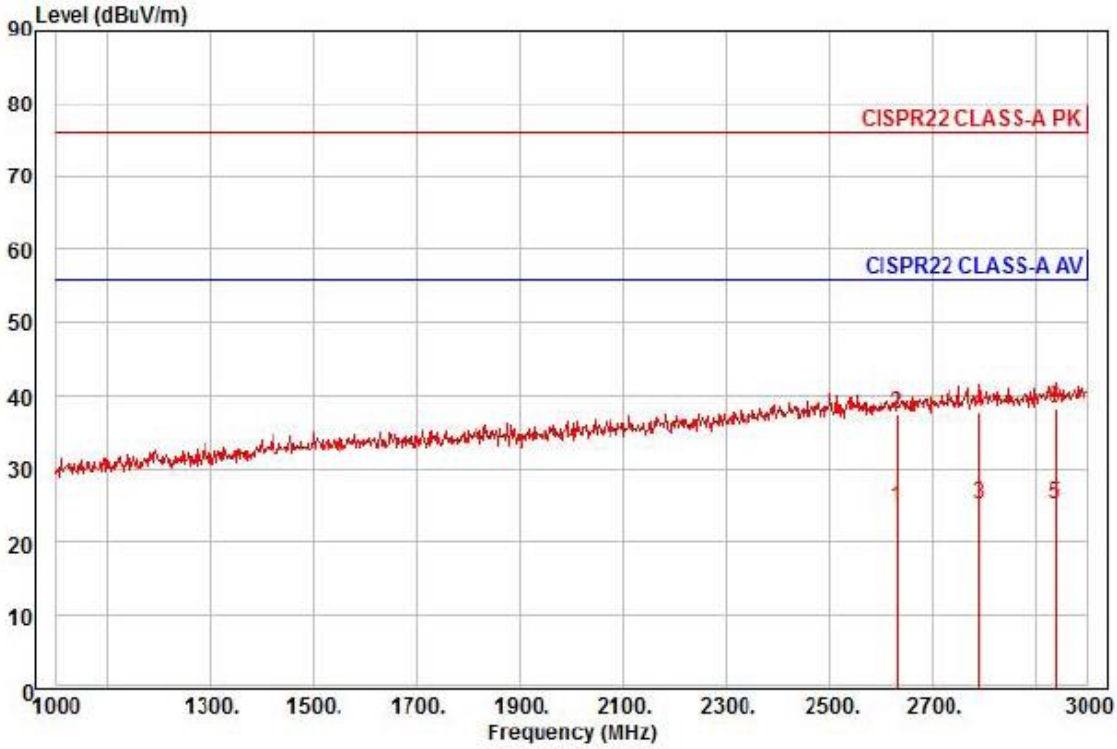


```
Site      : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) vertical
          : RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project   :
Model     : XNV-6120RN
Mode      : DC 12 V
Memo      : 1 ~ 3 GHz
```

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	2632.00	25.42	28.16	10.82	39.69	5	56.00	-31.29	vertical	Average
2	2632.00	38.17	28.16	10.82	39.69	5	76.00	-38.54	vertical	Peak
3	2790.00	25.09	28.86	11.21	39.87	263	56.00	-30.71	vertical	Average
4	2790.00	37.45	28.86	11.21	39.87	263	76.00	-38.35	vertical	Peak
5 pp	2938.00	24.32	29.51	11.55	40.04	71	56.00	-30.66	vertical	Average
6 pk	2938.00	37.33	29.51	11.55	40.04	71	76.00	-37.65	vertical	Peak

♦ Calculation

Over Limit [㏈] = (Read Level[㏈uV] + Ant Factor[㏈/m] + Cable Loss [㏈] – Preamp Factor [㏈]) – Limit Line[㏈uV]

Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor, Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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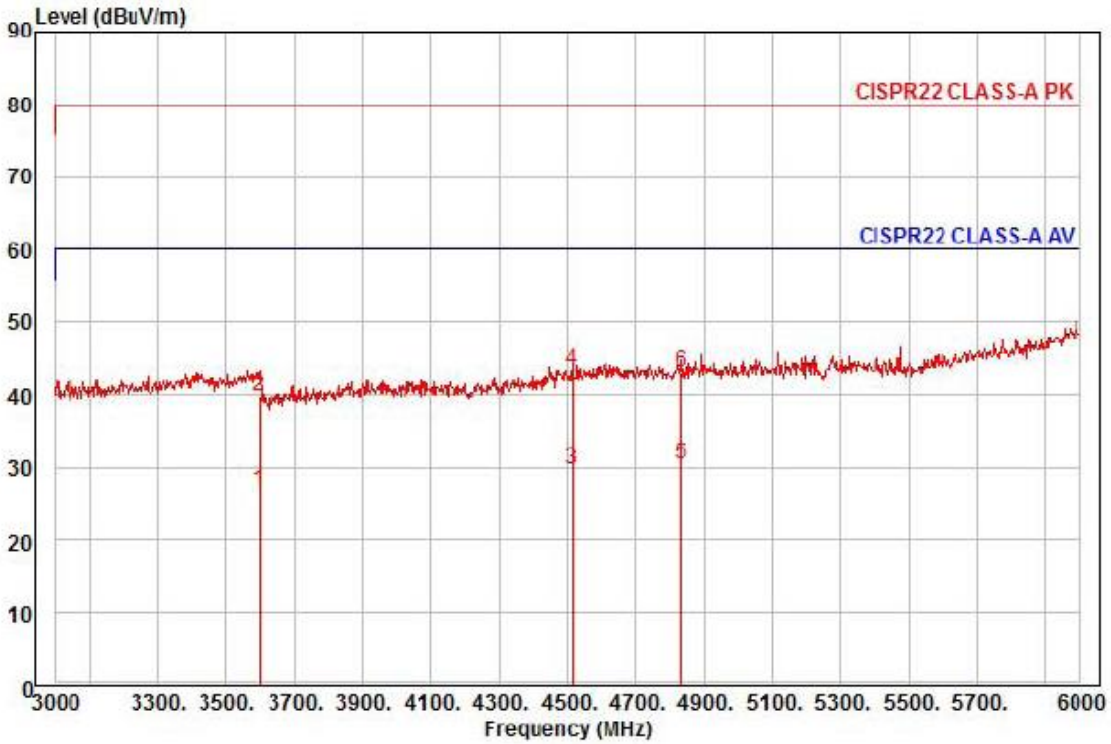

Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNV-6120RN
Mode : DC 12 V
Memo : 3 ~ 6 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	3597.00	24.37	30.50	12.80	40.85	32	60.00	-33.18	horizontal	Average
2	3597.00	37.40	30.50	12.80	40.85	32	80.00	-40.15	horizontal	Peak
3	4515.00	23.13	32.81	14.49	40.76	133	60.00	-30.33	horizontal	Average
4 pk	4515.00	36.75	32.81	14.49	40.76	133	80.00	-36.71	horizontal	Peak
5 pp	4836.00	22.59	33.09	15.14	40.43	49	60.00	-29.61	horizontal	Average
6	4836.00	35.28	33.09	15.14	40.43	49	80.00	-36.92	horizontal	Peak

♦ Calculation
Over Limit [dB] = (Read Level[dBuV] + Ant Factor[dB/m] + Cable Loss [dB] – Preamp Factor [dB]) – Limit Line[dBuV]
Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor,
Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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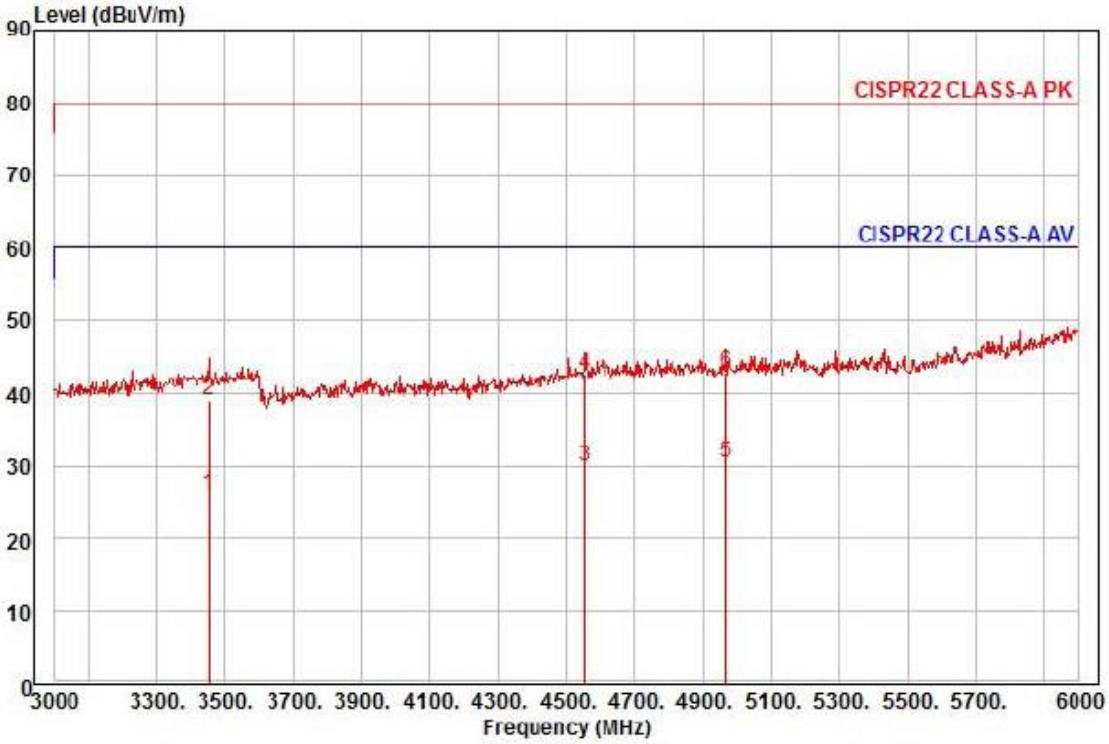

Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNV-6120RN
Mode : DC 12 V
Memo : 3 ~ 6 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	3456.00	24.06	30.25	12.55	40.81	275	60.00	-33.95	vertical	Average
2	3456.00	36.97	30.25	12.55	40.81	275	80.00	-41.04	vertical	Peak
3	4554.00	23.22	32.85	14.57	40.72	204	60.00	-30.08	vertical	Average
4	4554.00	35.99	32.85	14.57	40.72	204	80.00	-37.31	vertical	Peak
5 pp	4965.00	22.26	33.20	15.28	40.31	247	60.00	-29.57	vertical	Average
6 pk	4965.00	34.70	33.20	15.28	40.31	247	80.00	-37.13	vertical	Peak

♦ Calculation
Over Limit [dB] = (Read Level[dBuV] + Ant Factor[dB/m] + Cable Loss [dB] – Preamp Factor [dB]) – Limit Line[dBuV]
Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor,
Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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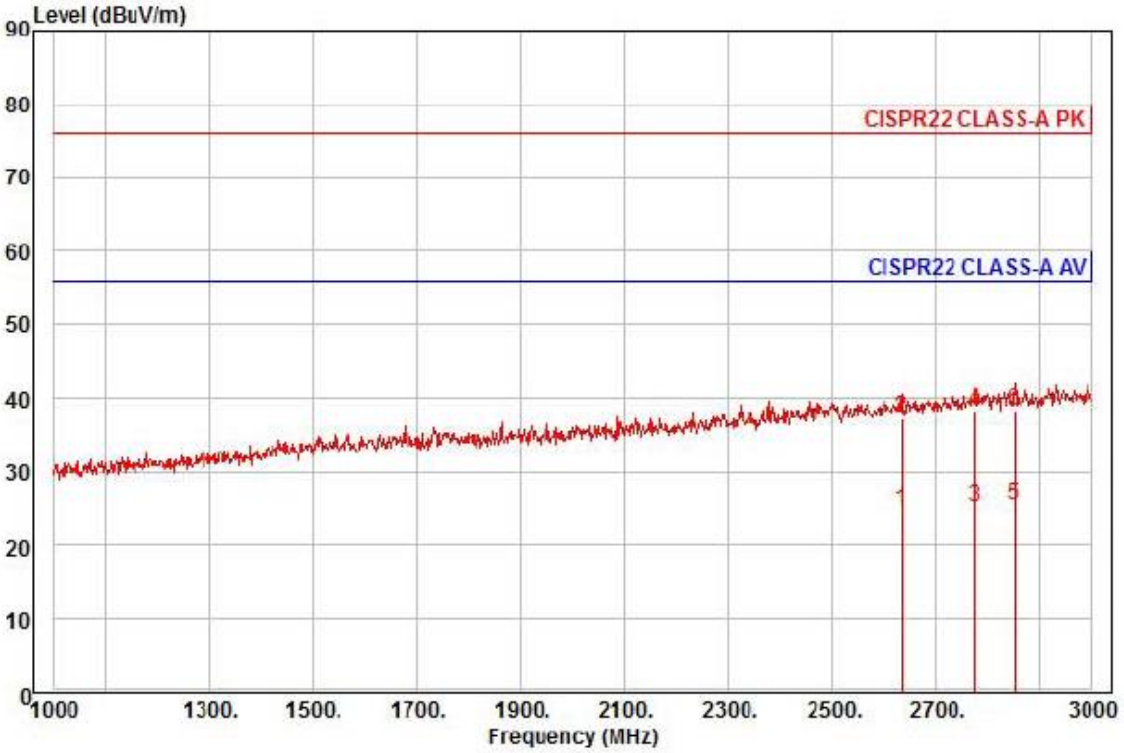
- PoE Mode



Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNV-6120RN
Mode : POE
Memo : 1 ~ 3 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	2636.00	25.46	28.17	10.83	39.69	133	56.00	-31.23	horizontal	Average
2	2636.00	37.88	28.17	10.83	39.69	133	76.00	-38.81	horizontal	Peak
3	2776.00	25.07	28.80	11.17	39.85	348	56.00	-30.81	horizontal	Average
4 pk	2776.00	38.24	28.80	11.17	39.85	348	76.00	-37.64	horizontal	Peak
5 pp	2852.00	24.84	29.13	11.35	39.94	351	56.00	-30.62	horizontal	Average
6	2852.00	37.66	29.13	11.35	39.94	351	76.00	-37.80	horizontal	Peak

♦ Calculation
Over Limit [㏈] = (Read Level[㏈uV] + Ant Factor[㏈/m] + Cable Loss [㏈] – Preamp Factor [㏈]) – Limit Line[㏈uV]
Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor,
Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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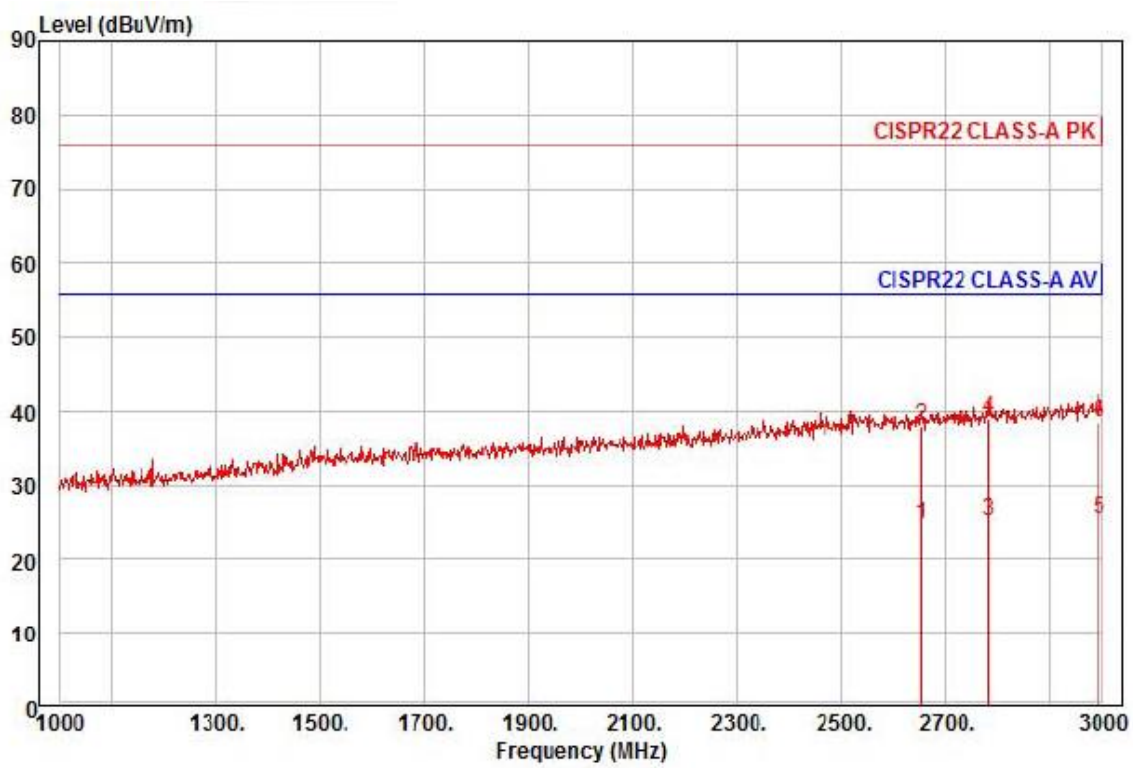

Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNV-6120RN
Mode : POE
Memo : 1 ~ 3 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	2654.00	25.39	28.25	10.87	39.71	305	56.00	-31.20	vertical	Average
2	2654.00	38.55	28.25	10.87	39.71	305	76.00	-38.04	vertical	Peak
3	2784.00	25.09	28.83	11.19	39.86	271	56.00	-30.75	vertical	Average
4 pk	2784.00	38.85	28.83	11.19	39.86	271	76.00	-36.99	vertical	Peak
5 pp	2996.00	24.20	29.77	11.69	40.11	313	56.00	-30.45	vertical	Average
6	2996.00	37.06	29.77	11.69	40.11	313	76.00	-37.59	vertical	Peak

♦ Calculation
Over Limit [㏈] = (Read Level[㏈uV] + Ant Factor[㏈/m] + Cable Loss [㏈] – Preamp Factor [㏈]) – Limit Line[㏈uV]
Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor,
Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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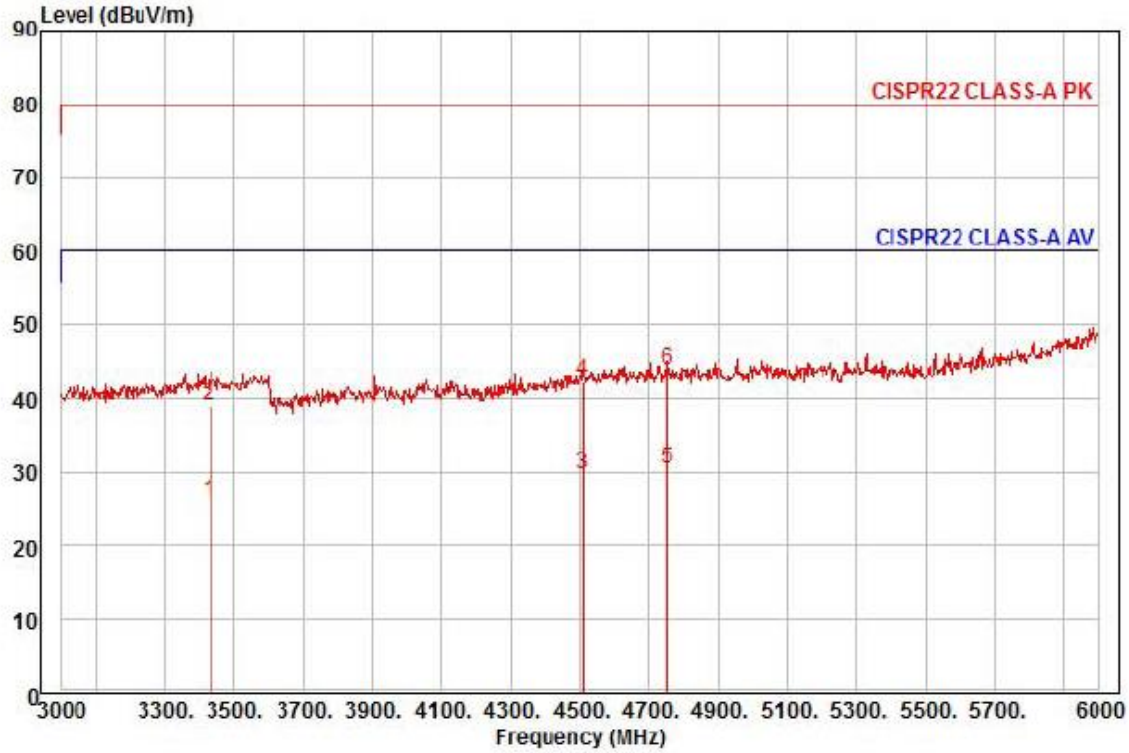

Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNV-6120RN
Mode : POE
Memo : 3 ~ 6 GHz

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	3429.00	24.09	30.22	12.50	40.77	77	60.00	-33.96	horizontal	Average
2	3429.00	36.95	30.22	12.50	40.77	77	80.00	-41.10	horizontal	Peak
3	4509.00	23.12	32.81	14.48	40.76	147	60.00	-30.35	horizontal	Average
4	4509.00	35.96	32.81	14.48	40.76	147	80.00	-37.51	horizontal	Peak
5 pp	4752.00	23.04	33.02	14.99	40.52	236	60.00	-29.47	horizontal	Average
6 pk	4752.00	36.33	33.02	14.99	40.52	236	80.00	-36.18	horizontal	Peak

♦ Calculation
Over Limit [㏈] = (Read Level[㏈uV] + Ant Factor[㏈/m] + Cable Loss [㏈] – Preamp Factor [㏈]) – Limit Line[㏈uV]
Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor,
Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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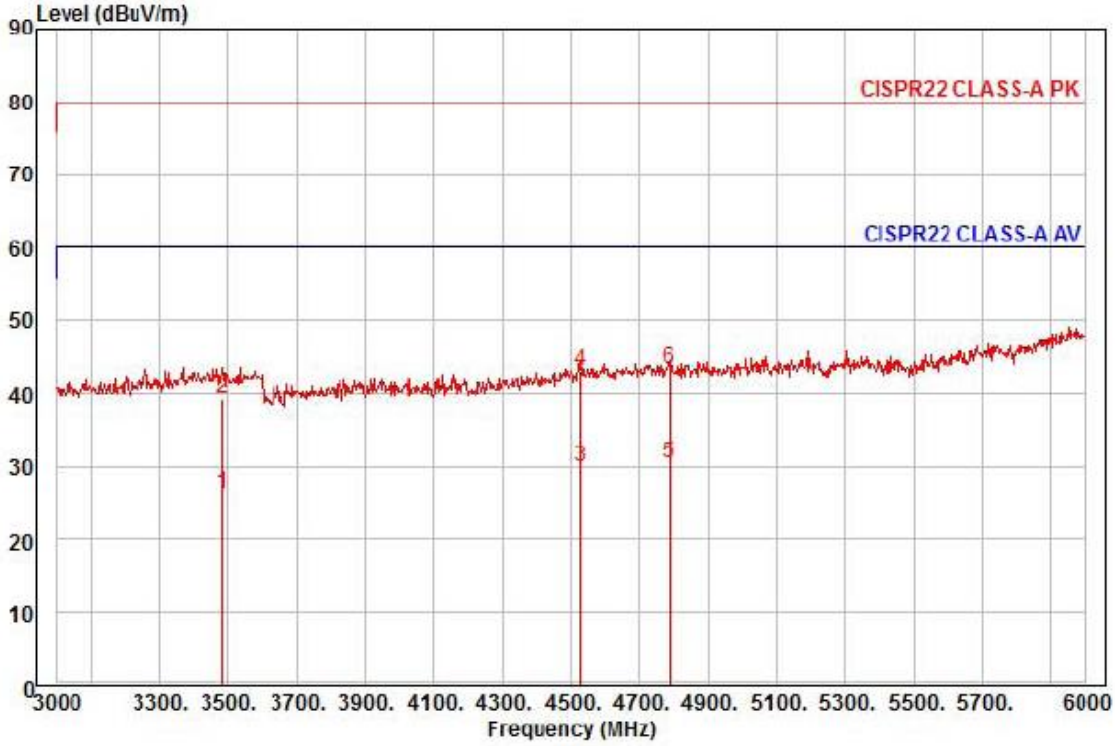


```
Site      : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(9149-255,2016-05-17) vertical
          : RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project   :
Model     : XNV-6120RN
Mode      : POE
Memo      : 3 ~ 6 GHz
```

	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	3483.00	24.12	30.27	12.60	40.85	114	60.00	-33.86	vertical	Average
2	3483.00	37.22	30.27	12.60	40.85	114	80.00	-40.76	vertical	Peak
3	4527.00	23.26	32.82	14.52	40.74	308	60.00	-30.14	vertical	Average
4	4527.00	36.54	32.82	14.52	40.74	308	80.00	-36.86	vertical	Peak
5 pp	4785.00	22.83	33.05	15.06	40.49	122	60.00	-29.55	vertical	Average
6 pk	4785.00	35.82	33.05	15.06	40.49	122	80.00	-36.56	vertical	Peak

♦ Calculation
Over Limit [dB] = (Read Level[dBuV] + Ant Factor[dB/m] + Cable Loss [dB] – Preamp Factor [dB]) – Limit Line[dBuV]
Over Limit : Margin Value, Read Level : Reading Value, Ant Factor : Ant Factor,
Cable Loss : Cable loss, Preamp Factor : Preamp Factor

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Test Setup Photos and Configuration

Conducted Voltage Emissions

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Conducted Telecommunication Emissions

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Radiated Electric Field Emissions(Below 1 ㎓)

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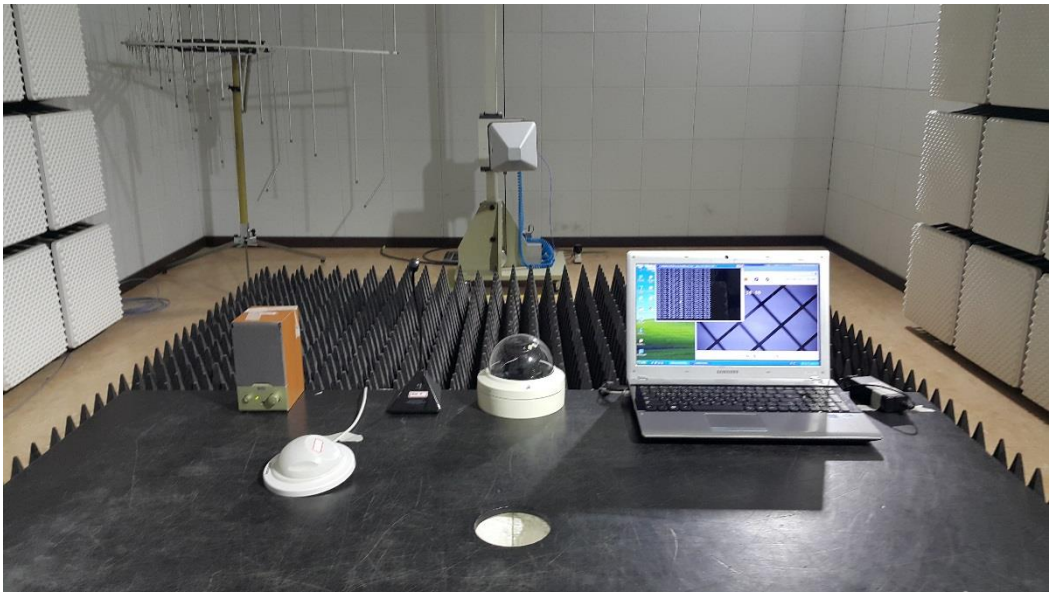
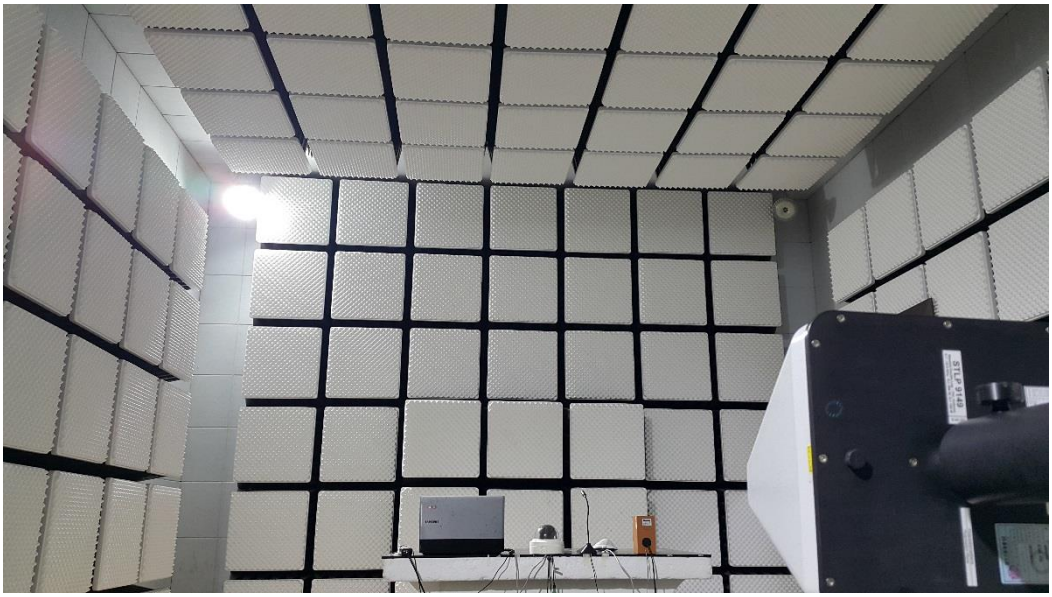
Radiated Electric Field Emissions(Above 1 ㎓)





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EUT External Photographs

(Top)

(Bottom)

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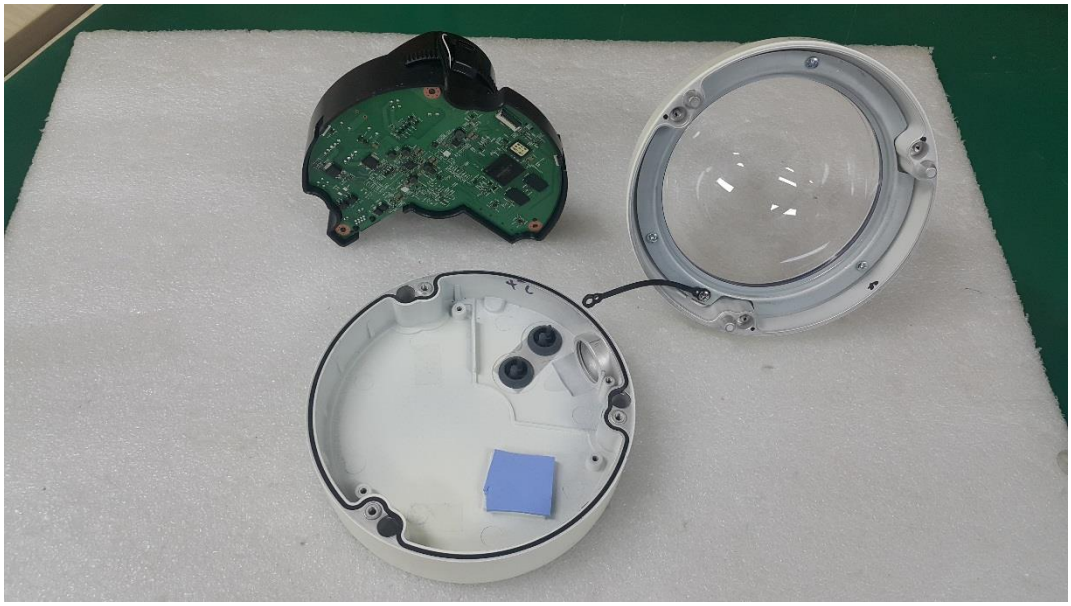
EUT Internal Photographs

(Internal View)



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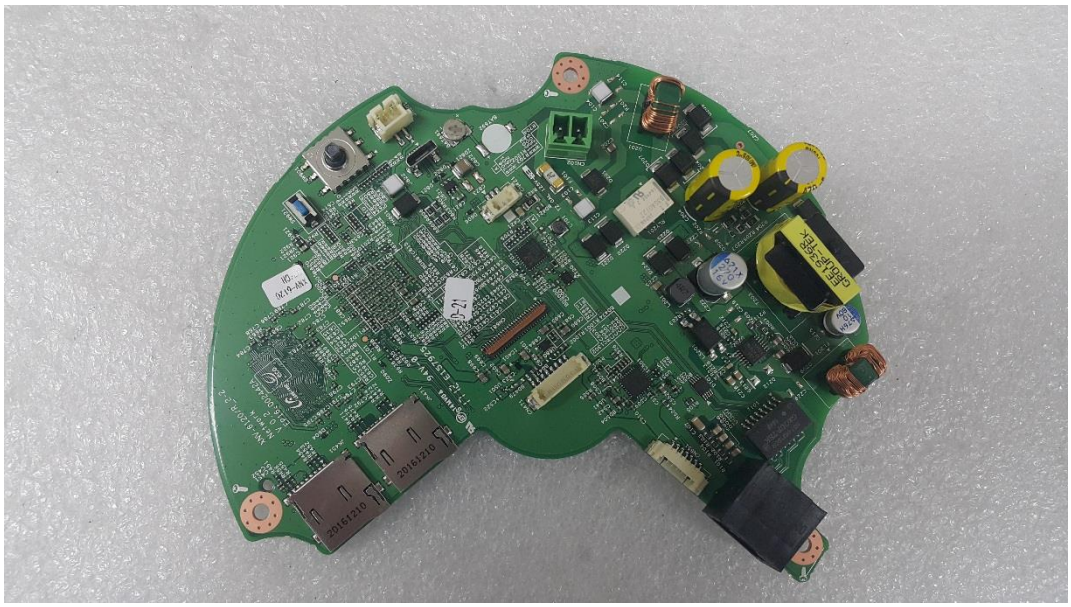
EUT Internal View – Board

(Top)



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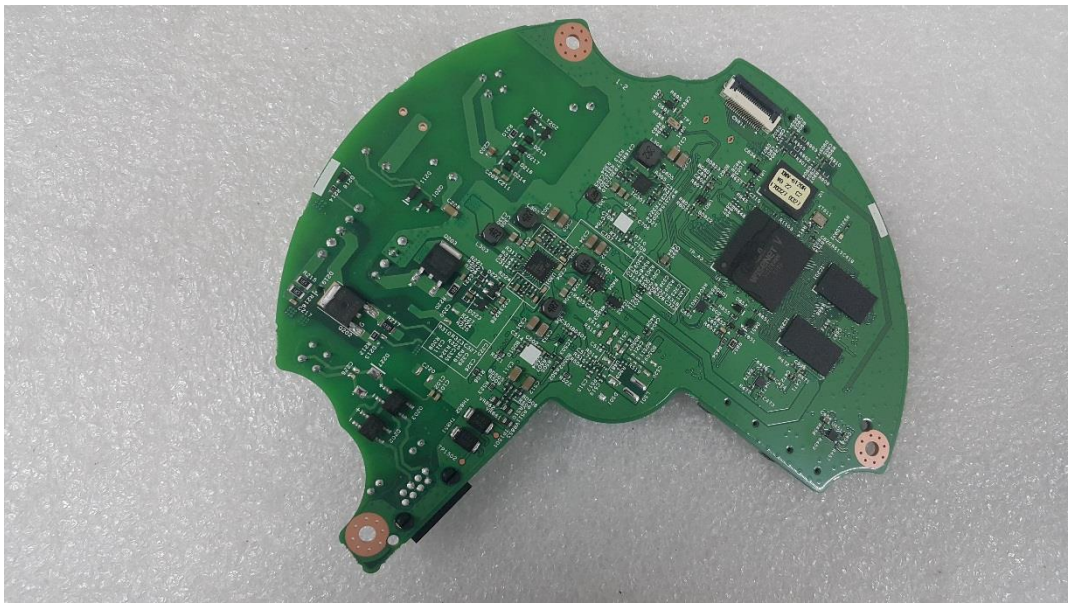

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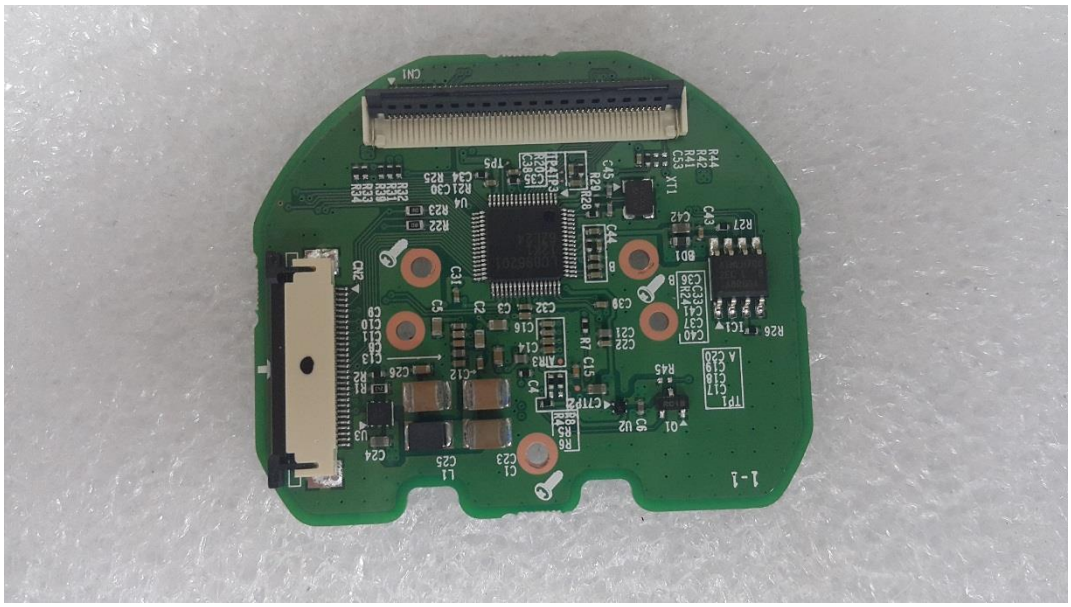
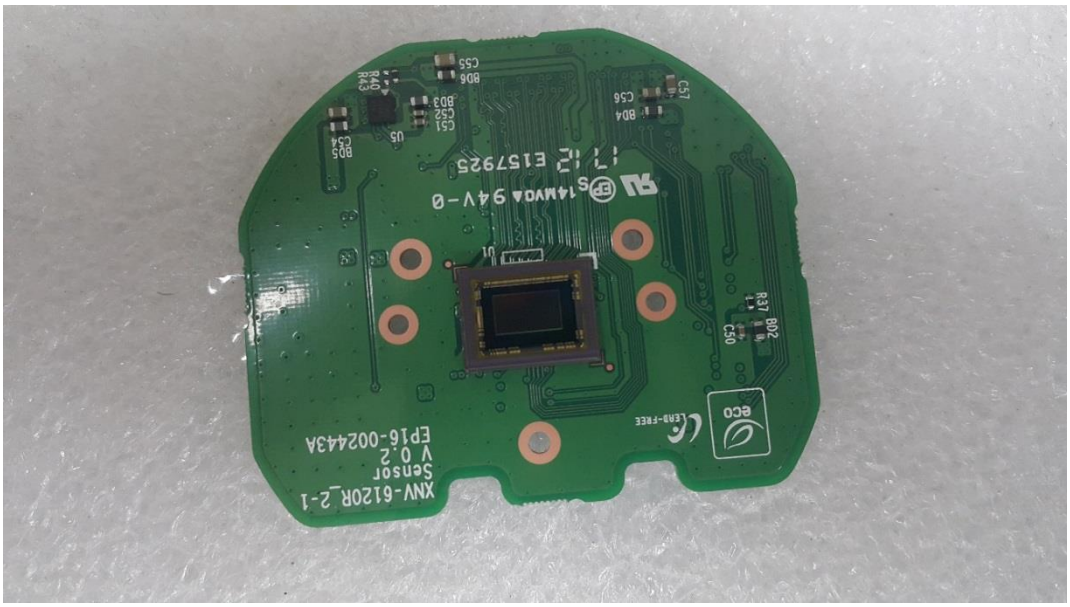
EUT Internal View – Lens Board

(Top)



(Bottom)



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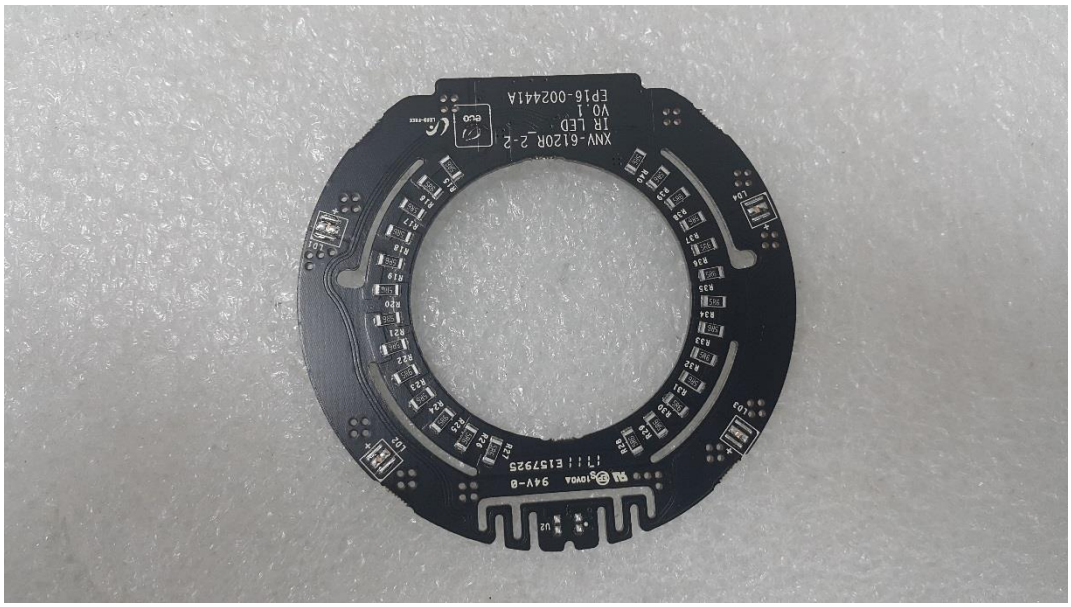
EUT Internal View – LED Board

(Top)



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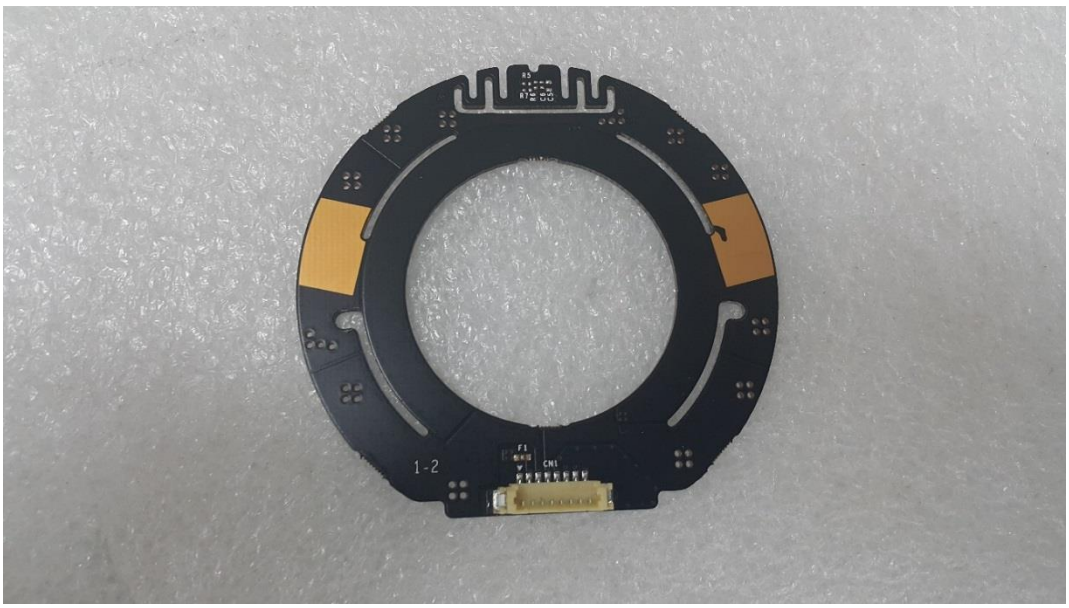

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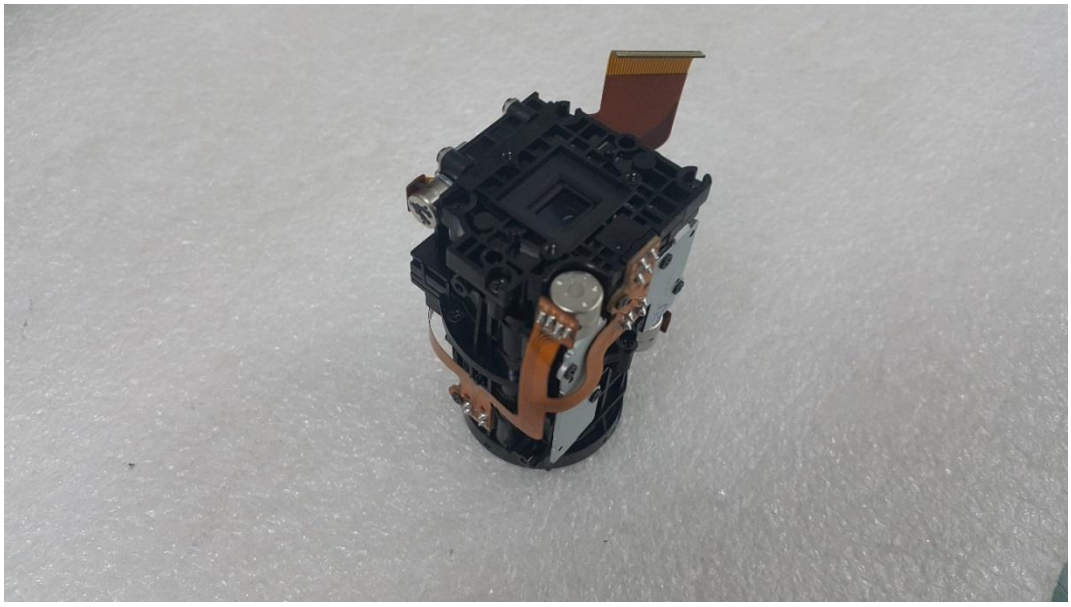
EUT Internal View – Lens

(Top)

(Bottom)



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