EMC TEST REPORT For CE

Test Report No.	:	KES-E1-17T0632
Date of Issue	:	Sep. 14, 2017
Product name	:	NETWORK CAMERA
Model/Type No.	:	XNF-8010RVMP
Variant Model	:	XNF-8010RVP, XNF-8010RP
Applicant	:	Hanwha Techwin Co., Ltd.
Applicant Address	:	1204, Changwon-daero, Seongsan-gu Changwon-si, Gyeongsangnam-do, Korea
Manufacturer	:	Hanwha Techwin (Tianjin) Co.,Ltd.
Manufacturer Address	:	No.11 Weiliu Rd,Micro-Electronic Industrial Park, TEDA, Tianjin, 300385, People's Republic of China
Date of Receipt	:	Aug. 04, 2017
Test date	:	Aug. 14, 2017 ~ Sep. 06, 2017
Test Results	:	☒ **In Compliance** ☐ **Not in Compliance**

Tested by

Dae Jung, Choi
EMC Test Engineer

Reviewed by

Dong-Hun, Jang
EMC Technical Manager

This test report is not related to KOLAS.

REPORT REVISION HISTORY

Date	Test Report No.	Revision History
Sep. 14, 2017	KES-E1-17T0632	Issued

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1.0 General Product Description

Main Specifications of E.U.T are:

Video	
Imaging Device	1/1.8" 6M CMOS
Total Pixels	3,096x2,094
Effective Pixels	2,048x2,048
Scanning System	Progressive
Min. Illumination	Color : 0.07Lux(F2.2, 30IRE) B/W : 0 Lux (IR LED On)
S / N Ratio	50dB
Video Out	CVBS : 1.0 Vp-p / 75Ω composite, 714x480(N), 702x576(P), for installation - DIP connector type USB
Lens	
Focal Length (Zoom Ratio)	1.6mm
Max. Aperture Ratio	F1.6
Angular Field of View	H : 187˚ / V : 187˚ / D : 187˚
Min. Object Distance	0.3m
Focus Control	Simple Focus / Manual - Remote control via network
Lens Type	Fixed Lens
Mount Type	Board Type
Operational	
Viewable Length	15m
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	120dB
Contrast Enhancement	SSDR Off / On
Digital Noise Reduction	SSNR V (2D+3D noise filter) Off / On
~~Digital Image Stabilization~~	~~Off/On~~
~~Defog~~	~~Off/Auto(input from fog detection) / Manual~~
Motion Detection	Off / On (8ea, 8point Polygonal zones), Hand over
Privacy Masking	Off / On (32ea, Polygonal) - Color : Gray, Green, Red, Blue, Black, White, Mosaic
Gain Control	Off / Low / Middle / High / Manual
White Balance	ATW / AWC / Manual / Indoor / Outdoor(Included mercury&Sodium)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker(2~1/12,000sec)
Digital Zoom	24x, Digital PTZ(Preset, Group)
Flip / Mirror	Off / On
Video & Audio Analytics	Tampering, Loitering, Directional detection, ~~Defocus detection, Fog detection~~, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, ~~Face detection~~, Motion detection, ~~Digital auto tracking~~, Sound classification
Alarm I/O	Input 1ea / Output 1ea
Alarm Triggers	Alarm Input, Motion Detection, Video & Audio Analytics , Network Disconnect, SD card error, NAS error
Alarm events	File upload via FTP and E-Mail Notification via E-Mail local storage(SD/SDHC/SDXC) or NAS recording at Event Triggers External output, ~~DPTZ preset~~

View Composition	<Camera Side> Fisheye Single Panorama Double Panorama Fisheye+4 PTZ Quad view Fisheye+8 PTZ
Pixel Counter	Support
Network	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265/H.264/MJPEG
Resolution	[Original View(1:1)] 2048x2048 / 1280x1280 / 1080x1080 / 960x960 / 768x768 / 720x720 / 640x640 / 480x480
	[Single Panorama(4:1)] 2048x512 / 1920x480 / 1280x320 / 640x160 / 704x176 [Double Panorama(2:1)] 2048x1024 / 1920x960 / 1280x640 / 640x320 / 704x352 [Quad View(4:3)] 2048x1536 / 1600x1200 / 1280x960 / 1024x768 / 800x600 / 640x480 / 704x576 [Q1/2/3/4] 1024x768, 800x600, 640x480
Max. Framerate	H.265/H.264 : 30fps@2,048x2,048
	MJPEG : Max 15fps
Smart Codec	Manual Mode (area-based : 5EA)
WiseStream Ⅱ	Support
Video Quality Adjustment	H.265/H.264 : Target Bitrate Level Control MJPEG : Quality Level Control
Bitrate Control Method	H.265/H.264 : CBR or VBR MJPEG : VBR
Streaming Capability	Multiple Streaming (Up to 10profiles)
Audio In	Selectable (Mic IN/Line IN/Built-in mic) Supply voltage: 2.5VDC(4mA), Input impedance: approx. 2K Ohm
Audio out	Line out (3.5mm mono jack), Max output level: 1 Vrms
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-directional(2way)
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, SIP
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 512GB) - Continuous recording(1st slot to 2nd slot) - motion Images recorded in the SD/SDHC/SDXC memory card can be downloaded. - camera can detect automatically when the memory is connected - memory status display (normal/error/active/formatting/lock) NAS(Network Attached Storage) Local PC for Instant Recording(plug-in viewer only)
Application Programming Inter	ONVIF Profile S/G SUNAPI Wisenet open plafrom

Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Portuguese, Turkish, Polish, Czech, Dutch, Hungary, Greek
Web Viewer	Supported OS: Windows 7, 8.1, 10, Mac OS X 10.9. 10.10. 10.11. 10.12 Plug-in Free Webviewer Supported Browser : Google Chrome, MS Edge, Mozilla Firefox (Window 64bit only), Apple Safari *Mac OS X only Plug-in Webviewer Supported Browser : MS Explore, Apple Safari * Mac OS X only
Central Management Software	Smart Viewer
Environmental	
Operating Temperature / Humidity	-10°C ~ +55°C / Less than 90% RH
Storage Temperature / Humidity	-50°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	-
Vandal Resistance	-
Electrical	
Input Voltage / Current	DC12V±10%,PoE(IEEE802.3af,Class3)
Power Consumption	DC12V(9.5W 0.8A), PoE(10.5W 0.28A)
Mechanical	
Color / Material	Ivory/ALUMINUM, PLASTIC
Dimension (WxHxD)	D146 x H54.8
Weight	730g

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

Frequency ☐ 50 Hz ☐ 60 Hz ☐ Hz

1.2 Variant Model Differences

Variant Model	Difference
XNF-8010RVP, XNF-8010RP	Classification by vendor.

1.3 Device Modifications

Not applicable

1.4 Equipment Under Test

Description	Model Number	Serial Number	Manufacturer	Remarks
NETWORK CAMERA	XNF-8010RVMP	-	Hanwha Techwin (Tianjin) Co.,Ltd	E.U.T

1.5 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
PoE ADAPTER	GS728TPP	-	NETGEAR, INC.	-
Notebook	NT730U3E	JJRE91CF200065A	Samsung Electronics Co., Ltd.	-
AC/DC ADAPTER	PA-1600-66	AD-6019P	LITE ON TECHNOLOGY CORPORATION	-
Speaker	BR10000A CUVE	-	BEIJING EDIFIER HI-TECH GROUP.	-
Mike	CMK-303	-	CAMAC	-
Alarm	-	-	-	-

1.6 External I/O Cabling

- 12 V (dc) Mode

Start		END		Cable Spec.	
Description	**I/O Port**	**Description**	**I/O Port**	**Length**	**Shield**
NETWORK CAMERA (E.U.T)	RJ-45(LAN)	Notebook	RJ-45(LAN)	4.0	U
	MIKE	Mike	MIKE	1.7	U
	AUDIO	Speaker	AUDIO	1.7	U
	Alarm	Alarm	Alarm	3.0	U

- 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 ADAPTER	RJ-45(PoE)	4.0	U
	MIKE	Mike	MIKE	1.7	U
	AUDIO	Speaker	AUDIO	1.7	U
	Alarm	Alarm	Alarm	3.0	U
PoE ADAPTER	RJ-45(LAN)	Notebook	RJ-45(LAN)	5.0	U

* Unshielded=U, Shielded=S

1.7 E.U.T Operating Mode(s)

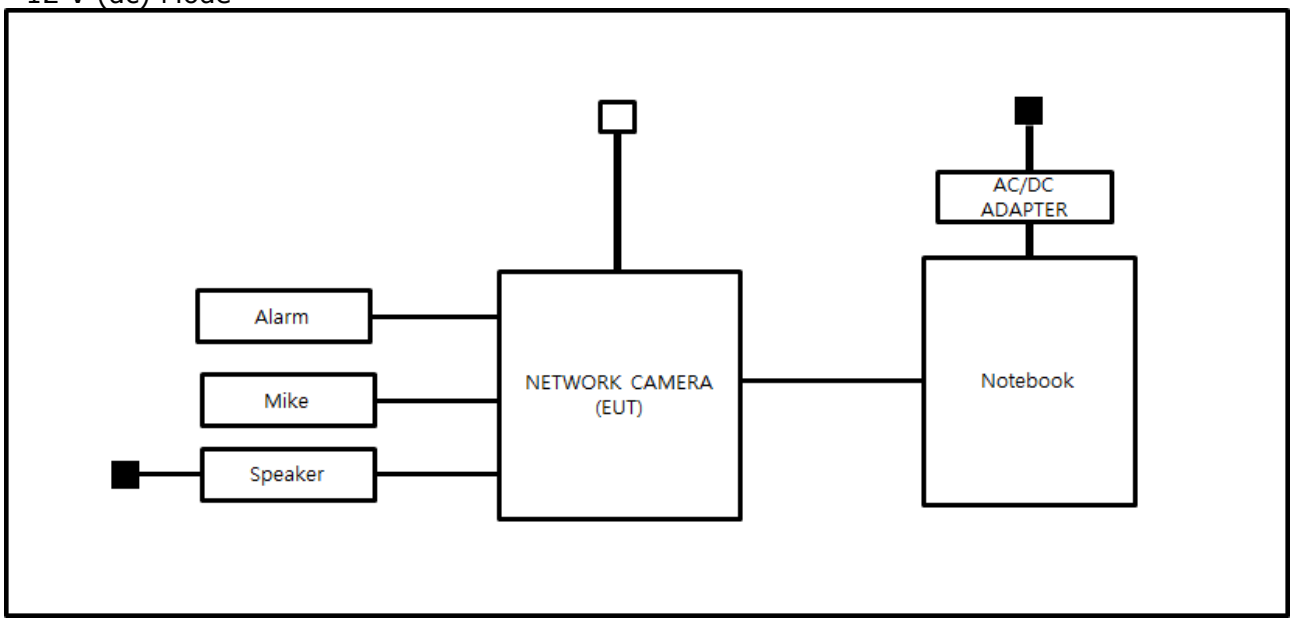
Test mode	operating
12 V (dc)	E.U.T Monitoring, Ping test
PoE	E.U.T Monitoring, Ping test

E.U.T Test operating S/W		
Name	**Version**	**Manufacture Company**
-	-	-

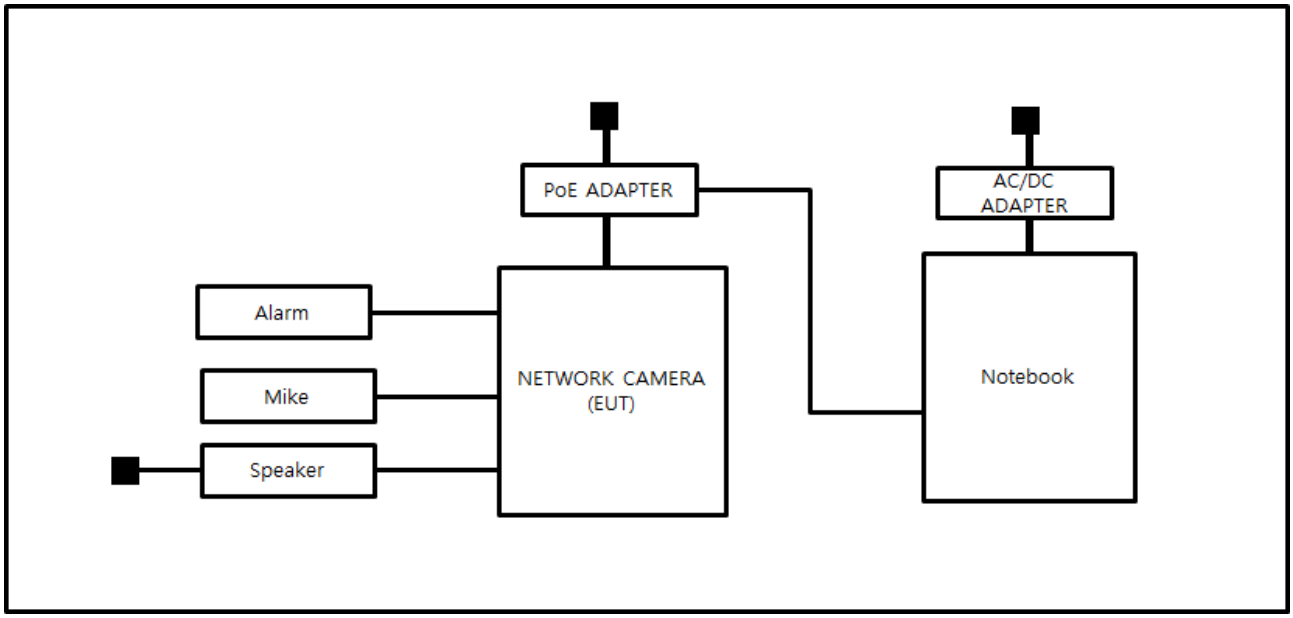
1.8 Configuration

■ AC Main
□ DC Main

- 12 V (dc) Mode



- PoE Mode



1.9 Remarks when standards applied

- N/A

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, Yeoju-si, Gyeonggi-do, 12658, Korea. The sites are constructed in conformance with the requirements of ANSI C63.4 and CISPR Publication 22.

1.12 Laboratory Accreditations and Listings

Country	Agency	Scope of Accreditation	Logo
USA	**FCC**	3 & 10 meter Open Area Test Sites and one conducted site to perform FCC Part 15/18 measurements.	
JAPAN	**VCCI**	Mains Ports Conducted Interference Measurement, Telecommunication Ports Conducted Disturbance Measurement and Radiation 10 meter site, Facility for measuring radiated disturbance above 1 GHz	R-4308, C-4798, T-2311, G-914
KOREA	**MSIP**	EMI (10 meter Open Area Test Site and two conducted sites) Radio(3 & 10 meter Open Area Test Sites and one conducted site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	KR0100
Canada	**IC**	3 & 10 meter Open Area Test Sites and one conducted site	4769B-1
Europe	**CE**	EMI (10 meter Open Area Test Site and two conducted sites) Radio(3 & 10 meter Open Area Test Sites and one conducted site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	
International	**KOLAS**	EMI (10 meter Open Area Test Site and two conducted sites) Radio(3 & 10 meter Open Area Test Sites and one conducted site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	KOREA LABORATORY ACCREDITATION SCHEME KOLAS TESTING NO. 489

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 55032:2012/AC:2013 ☐ 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

☒ EN 50121-3-2:2016

☐ **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

2.1 Conducted Emissions at Mains Power Ports

Test Date
Aug. 14, 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	101783	04, 27, 2018
☒	LISN	ENV216	R & S	101137	02, 03, 2018
☒	LISN	ENV216	R & S	101786	04, 27, 2018
☒	PULSE LIMITER	ESH3-Z2	R & S	101914	12, 13, 2017

Test Conditions
Temperature: 21,9 ℃
Relative Humidity: 48,2 %
.

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.

2.2 Radiated Electric Field Emissions(Below 1 ㎓)

Test Date
Aug. 16, 2017

Test Location
☐ OPEN AREA TEST SITE #2 ☒ SAC #4(10 m)

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, 18, 2018
☒	AMPLIFIER	SCU 01	R & S	100603	12, 13, 2017
☒	TRILOG-BROADBAND ANTENNA	VULB9163	Schwarzbeck	716	11, 28, 2018

Test Conditions
Temperature: 24,1 ℃
Relative Humidity: 52,4 %

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.

2.3 Radiated Electric Field Emissions(Above 1 ㎓)

Test Date
Aug. 17, 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
☒	PREAMPLIFIER	8449B	AGILENT	3008A01729	05, 31, 2018
☐	ATTENUATOR	8491A	HP	35496	03, 24, 2018
☒	LOG-PERIODIC ANTENNA	STLP 9149	SCHWARZBECK	9149-255	05, 17, 2018

Test Conditions
Temperature: 23,1 ℃
Relative Humidity: 49,6 %

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.

2.4 Harmonic Current Emissions

Test Date
N/A

Test Location
Electro wave Shieldroom

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☐	EMI Test S/W	dpa.control	EM TEST	5.4.11.0	-
☐	DIGITAL POWER ANALYZER	DPA 500N	EM TEST	V1024106759	08, 07, 2018
☐	POWER SOURCE	ACS 500N6	EM TEST	V1024106760	08, 07, 2018

Test Conditions
℃
Relative Humidity: %

Classification of Equipment for Harmonic Current Emissions
☐ Class A
☐ Class B
☐ Class C(Below 25 W)
☐ Class C(Above 25 W)
☐ Class D

Test Results
The requirements are:

☐ PASS
☐ NOT PASS
☒ NOT APPLICABLE

Remarks
-

2.5 Voltage Fluctuations and Flicker

Test Date
N/A

Test Location
Electro wave Shieldroom

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☐	EMI Test S/W	dpa.control	EM TEST	5.4.11.0	-
☐	DIGITAL POWER ANALYZER	DPA 500N	EM TEST	V1024106759	08, 07, 2018
☐	POWER SOURCE	ACS 500N6	EM TEST	V1024106760	08, 07, 2018

Test Conditions

℃

Relative Humidity: %

Test Results
The requirements are:

☐ PASS
☐ NOT PASS
☒ NOT APPLICABLE

Remarks
-

3.0 Criteria for compliance

Criteria for compliance was based on the following guidelines:

General performance criteria

The general principles (performance criteria) for the evaluation of the immunity test results are the following.

Performance criterion A

The apparatus shall continue to operate as intended during and after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.

Performance criterion B

The apparatus shall continue to operate as intended after the test. No degradation of performance or loss of function is allowed below a performance level specified by the manufacturer, when the apparatus is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is however allowed. No change of actual operating state or stored data is allowed. If the minimum performance level or the permissible performance loss is not specified by the manufacturer, either of these may be derived from the product description and documentation and what the user may reasonably expect from the apparatus if used as intended.

Performance criterion C

Temporary loss of function is allowed, provided the function is self-recoverable or can be restored by the operation of the controls.

3.1 Electrostatic Discharge

Reference Standard
EN 61000-4-2:2009

Test Date
Sep. 05, 2017

Test Location
EMS-ESD: Electro wave Shieldroom

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☐	EMS Test S/W	-	-	-	-
☒	ESD SIMULATOR	ESS-2000	Noise Ken	ESS05X4620	02, 24, 2018
☒	HCP	-	Noise Ken	-	-
☒	VCP	-	Noise Ken	-	-

Test Conditions

Temperature:	22,8 ℃
Relative Humidity:	50,9 %
Atmospheric Pressure:	99,6 kPa

Test Specifications

Discharge Factor: ≥ 1 s

Discharge Impedance: 330 ohm / 150 pF

Kind of Discharge: Air, Contact (direct and indirect)

Polarity: Positive and Negative

Number of Discharge: 10 at all locations for Air discharge
10 at all locations for Contact discharge

Discharge Voltage:	Contact	Air	HCP	VCP
	☐ 2 kV	☒ 2 kV	☐ 2 kV	☐ 2 kV
	☐ 4 kV	☒ 4 kV	☐ 4 kV	☐ 4 kV
	☒ 6 kV	☐ 6 kV	☒ 6 kV	☒ 6 kV
	☐ 8 kV	☒ 8 kV	☐ 8 kV	☐ 8 kV
	☐ 15 kV	☐ 15 kV	☐ 15 kV	☐ 15 kV

Notes: HCP: Horizontal coupling plane
VCP: Vertical coupling plane

Required Performance Criteria: ☒ B

Location of Discharge:

Air
Contact

Test Data

- 12 V (dc) Mode

Indirect Discharge

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

Direct Discharge

No.	Test Point	Discharge Method	Observations	Remarks
1	Enclosure 1	Contact Discharge	A	-
2	Enclosure 2	Contact Discharge	A	-

- PoE Mode

Indirect Discharge

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

Direct Discharge

No.	Test Point	Discharge Method	Observations	Remarks
1	Enclosure 1	Contact Discharge	A	-
2	Enclosure 2	Contact Discharge	A	-

Note: "Blank" = Not performed

Observations:
Complied – No degradation of function

Test Results

☒ PASS Required Performance Criteria
☐ NOT PASS Required Performance Criteria

Remarks

PASS Required Performance Criteria.

3.2 Radiated Electric Field Immunity

Reference Standard
EN 61000-4-3:2006 +A2:2010

Test Date
Sep. 06, 2017

Test Location
EMS-RS: ☐ SEMI ANECHOIC CHAMBER #3 ☒ SEMI ANECHOIC CHAMBER #4

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMS Test S/W	EMC32	R & S	9.12.00	-
☒	SIGNAL GENERATOR	SMB 100A	Rohde & Schwarz	108252	08, 07, 2018
☒	HIGH POWER DUAL AMP	SSA532	성산전자	SSA532-001	05, 18, 2018
☒	POWER METER	E4419B	Agilent	GB40203000	06, 26, 2018
☒	CW POWER SENSOR	E4412A	Agilent	US38488240	06, 26, 2018
☒	CW POWER SENSOR	E4412A	Agilent	MY41501662	06, 26, 2018
☒	STACKED DOUBLE LOG-PER- ANTENNA	STPL9128 D	SCHWARZBECK	9128D038	-
☒	LOG-PERIODIC ANTENNA	STLP 9149	SCHWARZBECK	9149-255	05, 17, 2018

Test Conditions

Temperature: 23,9 ℃
Relative Humidity: 46,3 %
Atmospheric Pressure: 99,1 kPa

Test Specifications

Antenna Polarization: Horizontal & vertical unless indicated otherwise

Antenna Distance: ☒ 3 m

Field Strength: ☒ 3 V/m ☒ 5 V/m ☒ 10 V/m ☒ 20 V/m

Frequency Range: ☐ 80 MHz to 1 GHz ☐ 1,4 GHz to 2,7 GHz ☐ 80 MHz to 2,7 GHz ☒ 80 GHz to 6 GHz

Modulation: ☒ AM, 80 %, 1 kHz sine wave

Frequency step: ☒ 1 % step

Dwell Time: ☒ 1 s ☐ 3 s

# of Sides Radiated: ☒ 4

Required Performance Criteria: ☒ A

Test Data

- 12 V (dc) Mode

Side Exposed	Observations	
	Horizontal	Vertical
Front	A	A
Right	A	A
Back	A	A
Left	A	A

- PoE Mode

Side Exposed	Observations	
	Horizontal	Vertical
Front	A	A
Right	A	A
Back	A	A
Left	A	A

Note: "Blank" = Not performed

Observations:
Complied – No degradation of function

Test Results

☒ PASS Required Performance Criteria
☐ NOT PASS Required Performance Criteria

Remarks

PASS Required Performance Criteria.

3.3 Electrical Fast Transients/Bursts

Reference Standard
EN 61000-4-4:2012

Test Date
Sep. 04, 2017

Test Location
EMS-EFT: Electro wave Shieldroom #3

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMS Test S/W	iec.control	EM TEST	5.3.9	-
☒	ULTRA COMPACT SIMULATOR	UCS 500N5T	EM TEST	P1317117973	02, 08, 2018
☒	MOTOR VARIAC	MV2616	EM TEST	V0936105123	02, 08, 2018
☒	CAPACITIVE COUPLING CLAMP	HFK	EM TEST	070925	06, 26, 2018

Test Conditions

Temperature:	24,7 ℃
Relative Humidity:	51,7 %
Atmospheric Pressure:	99,5 ㎪

Test Specifications

Pulse Amplitude & Polarity: (AC Power Lines)	☐ ± 1.0 ㎸ ☐ ± 4.0 ㎸	☐ ± 2.0 ㎸
Pulse Amplitude & Polarity: (Other supply / Signal Lines)	☐ ± 0.5 ㎸ ☒ ± 2.0 ㎸	☐ ± 1.0 ㎸
Burst Period:	☒ 300 ㎳	☐ 2 s
Repetition Rate:	☒ 5 ㎑	☐ 100 ㎑
Duration of Test Voltage:	☒ ≥ 1 min	
Required Performance Criteria:	☒ A	

Test Data

- 12 V (dc) Mode

☐ Input a.c. power ports – Coupling/Decoupling Network used

Mode of Application	Observations	
	(+) Burst (㎸)	(-) Burst (㎸)
-	-	-

☒ Input d.c. power ports – Coupling/Decoupling Network used

Mode of Application	Observations	
	(+) Burst (㎸)	(-) Burst (㎸)
L1 - L2	A	A

☒ Signal ports and telecommunication ports – Coupling Clamp used

Mode of Application	Observations	
	(+) Burst (㎸)	(-) Burst (㎸)
RJ-45	A	A
Alarm	A	A

- PoE Mode

☐ Input a.c. power ports – Coupling/Decoupling Network used

Mode of Application	Observations	
	(+) Burst (㎸)	(-) Burst (㎸)
-	-	-

☐ Input d.c. power ports – Coupling/Decoupling Network used

Mode of Application	Observations	
	(+) Burst (㎸)	(-) Burst (㎸)
-	-	-

☒ Signal ports and telecommunication ports – Coupling Clamp used

Mode of Application	Observations	
	(+) Burst (㎸)	(-) Burst (㎸)
RJ-45	A	A
Alarm	A	A

Note: "Blank" = Not performed
Observations:
Complied – No degradation of function

Test Results

☒ PASS Required Performance Criteria
☐ NOT PASS Required Performance Criteria

Remarks

PASS Required Performance Criteria.

3.4 Surge Transients

Reference Standard
EN 61000-4-5:2014

Test Date
Sep. 04, 2017

Test Location
EMS-Surge: Electro wave Shieldroom #3

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMS Test S/W	iec.control	EM TEST	5.3.9	-
☒	ULTRA COMPACT SIMULATOR	UCS 500N5T	EM TEST	P1317117973	02, 08, 2018
☒	MOTOR VARIAC	MV2616	EM TEST	V0936105123	02, 08, 2018
☒	CDN	CNV 508N1	EM TEST	P1551168979	04, 26, 2018
☐	CDN	CNV 508T5	EM TEST	P1549168422	04, 26, 2018

Test Conditions

Temperature:	24,7 ℃
Relative Humidity:	51,7 %
Atmospheric Pressure:	99,5 kPa

Test Specifications

AC Power Lines

Source Impedance: 42 ohm for common mode

Surge Amplitude : Common Mode
☐ 2 kV
Differential Mode
☐ 1 kV

Number of Surges: ☐ 5 surges per angle

Angle: ☐ 0°, 90°, 180°, 270° (input a.c. DC power port)

Polarity: ☐ Positive & Negative

Repetition Rate: ☐ 1 surge per min ☐ 1 surge per 30 sec.

Required Performance Criteria: ☐ B

Other supply

Source Impedance: 42 ohm for common mode

Surge Amplitude: Common Mode
☐ 2 kV
Differential Mode
☒ 1 kV

Number of Surges: ☒ 5 Surges

Polarity: ☒ Positive & Negative

Repetition Rate: ☒ 1 surge per min ☐ 1 surge per 30 sec.

Required Performance Criteria: ☒ B

Test Data

- 12 V (dc) Mode

☒ Line to Line – Differential Mode

Mode of Application	Observations	
	(+) Surge (㎸)	(-) Surge (㎸)
L1 – L2	A	A

☐ Line to Ground – Common Mode

Mode of Application	Observations	
	(+) Surge (㎸)	(-) Surge (㎸)
-	-	-
-	-	-

- PoE Mode

☐ Line to Earth – Differential Mode

Mode of Application	Observations	
	(+) Surge (㎸)	(-) Surge (㎸)
-	-	-

☐ Line to Ground – Common Mode

Mode of Application	Observations	
	(+) Surge (㎸)	(-) Surge (㎸)
-	-	-
-	-	-

Note: "Blank" = Not performed
Observations:
Complied – No degradation of function

Test Results

☒ PASS Required Performance Criteria
☐ NOT PASS Required Performance Criteria

Remarks

PASS Required Performance Criteria.

3.5 Conducted Disturbance

Reference Standard
EN 61000-4-6:2014

Test Date
Sep. 05, 2017

Test Location
EMS-CS: Electro wave Shieldroom #3

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMS Test S/W	icd.control	EM TEST	5.3.7	-
☒	CONTINUOUS WAVE SIMULATOR	CWS 500N1	EM TEST	V0936105119	08, 07, 2018
☒	ATTENUATOR	ATT6	EM TEST	1208-34	08, 07, 2018
☒	CDN	CDN-M2/M3N	EM TEST	0909-06	08, 07, 2018
☒	CDN	CDN T8RJ45	EM TEST	0909-09	08, 07, 2018
☒	EM INJECTION CLAMP	EM 101	Liithi	35943	02, 03, 2018

Test Conditions
Temperature: 22,8 ℃
Relative Humidity: 50,9 %
Atmospheric Pressure: 99,6 ㎪

Test Specifications

Frequency range: ☐ 150 ㎑ to 100 ㎒ ☒ 150 ㎑ to 80 ㎒

Voltage Level: ☐ 1 Vrms ☐ 3 Vrms
☒ 10 Vrms

Modulation: ☒ AM, 80 %, 1 ㎑ sine wave

Frequency step: ☒ 1 % step

Dwell Time: ☒ 1 s ☐ 3 s

Required Performance Criteria: ☒ A

Test Data

- 12 V (dc) Mode

☐ Input a.c. power ports

Coupling Location (Line Stressed)	Coupling Method	Observations
-	CDN (☐M2, ☐M3)	-

☒ Input d.c. power ports

Coupling Location (Line Stressed)	Coupling Method	Observations
L1 - L2	CDN (☒M2, ☐M3)	A

☒ Signal ports and telecommunication ports

Coupling Location (Line Stressed)	Coupling Method	Observations
RJ-45	CDN	A
Alarm	Clamp	A

- PoE Mode

☐ Input a.c. power ports

Coupling Location (Line Stressed)	Coupling Method	Observations
-	CDN (☐M2, ☐M3)	-

☐ Input d.c. power ports

Coupling Location (Line Stressed)	Coupling Method	Observations
-	CDN (☐M2, ☐M3)	-

☒ Signal ports and telecommunication ports

Coupling Location (Line Stressed)	Coupling Method	Observations
RJ-45	CDN	A
Alarm	Clamp	A

Notes: CDN = Coupling Decoupling Network
"blank" = Not performed

Observations:
Complied – No degradation of function

Test Results

☒ PASS Required Performance Criteria
☐ NOT PASS Required Performance Criteria

Remarks

PASS Required Performance Criteria.

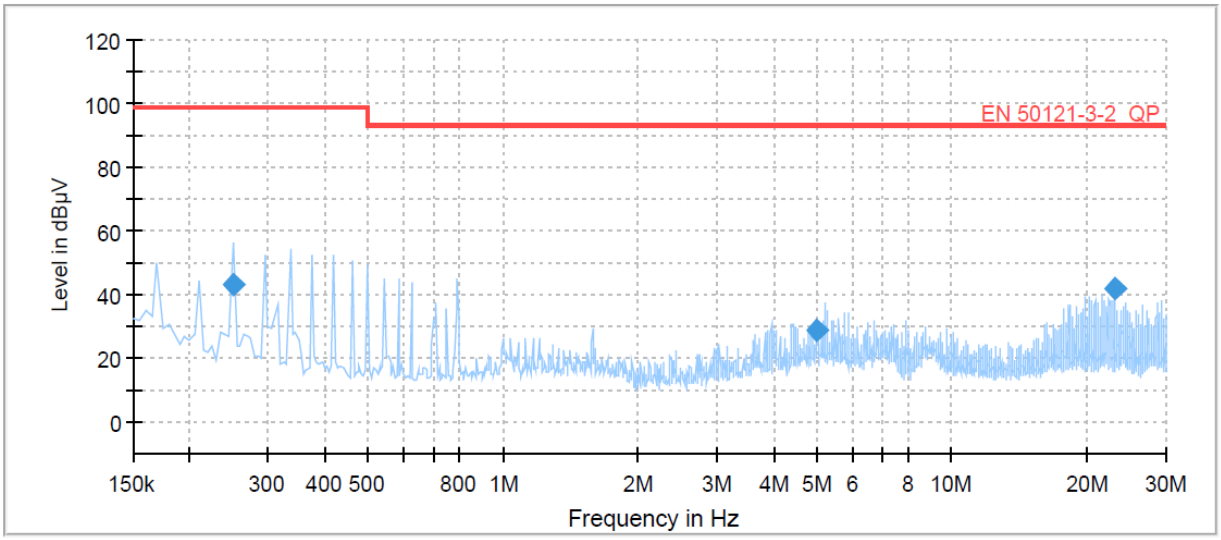
APPENDIX A – TEST DATA

Conducted Emissions at Mains Power Ports

- 12 V (dc) Mode
[HOT]

Common Information

Test Description:	Conducted Emission
Model No.:	XNF-8010RVMP
Mode	H
Operator Name:	KES



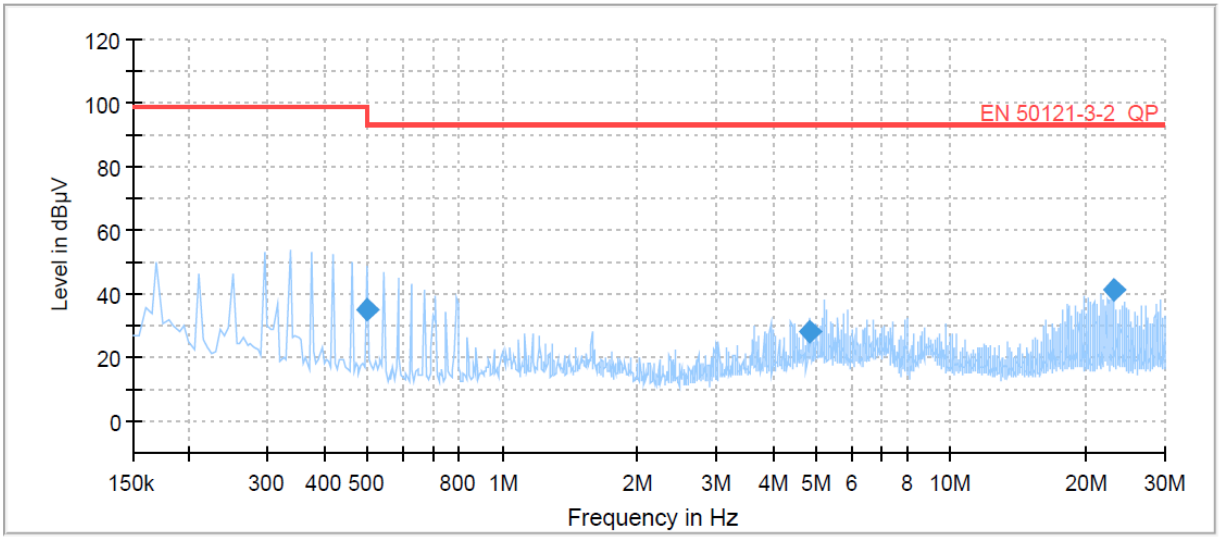
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.250000	42.95	99.00	56.05	1000.0	9.000	L1	19.5
5.020000	28.94	93.00	64.06	1000.0	9.000	L1	19.9
23.130000	41.57	93.00	51.43	1000.0	9.000	L1	20.2

[NEUTRAL]

Common Information

Test Description:	Conducted Emission
Model No.:	XNF-8010RVMP
Mode	N
Operator Name:	KES



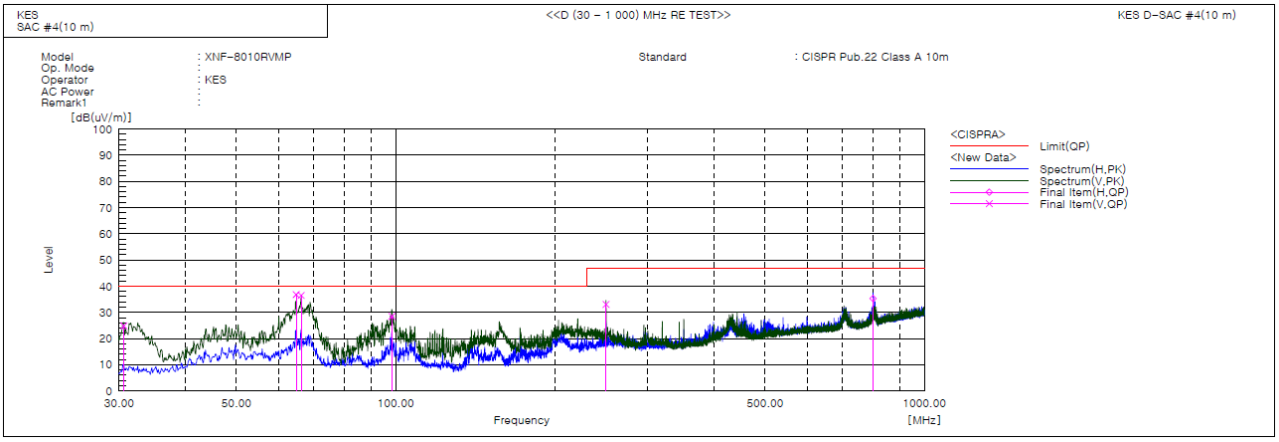
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.500000	35.31	99.00	57.69	1000.0	9.000	N	19.6
4.845000	27.91	93.00	65.09	1000.0	9.000	N	19.9
23.130000	41.47	93.00	51.53	1000.0	9.000	N	20.0

♦ 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))

Radiated Electric Field Emissions(Below 1 ㎓)

- 12 V (dc) Mode

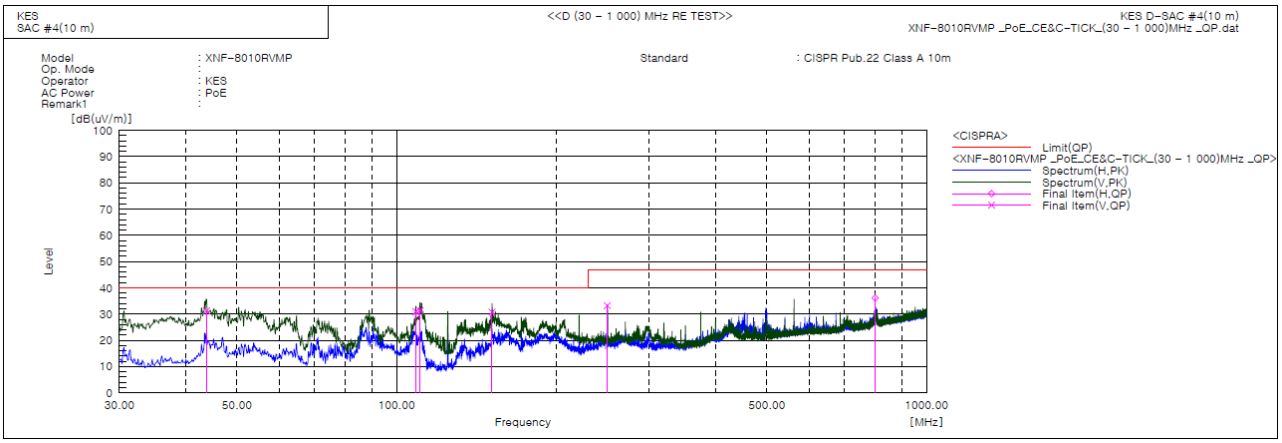


Final Result

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	30.634	V	57.0	-32.2	24.8	40.0	15.2	100.0	226.0	
2	64.879	V	67.0	-30.2	36.8	40.0	3.2	209.0	87.0	
3	66.290	V	67.2	-30.7	36.5	40.0	3.5	213.0	105.0	
4	98.430	V	56.9	-28.4	28.5	40.0	11.5	100.0	246.0	
5	249.997	V	58.3	-25.3	33.0	47.0	14.0	103.0	8.0	
6	799.995	H	47.4	-12.1	35.3	47.0	11.7	195.0	10.0	

♦ Calculation
Result(QP) [㏈(㎶/m)] = (Reading(QP)[㏈(㎶)] + c.f[㏈(1/m)]
Margin(QP)[㏈] = Limit[㏈(㎶/m)] - Result(QP) [㏈(㎶/m)]
Reading(QP) : Reading value, Result(QP) : Reading value + Factor value
Limit(QP) : Limit value, c.f : (ANT Factor + Cable Loss - Preamp Factor), Margin: Marjin value

- PoE Mode



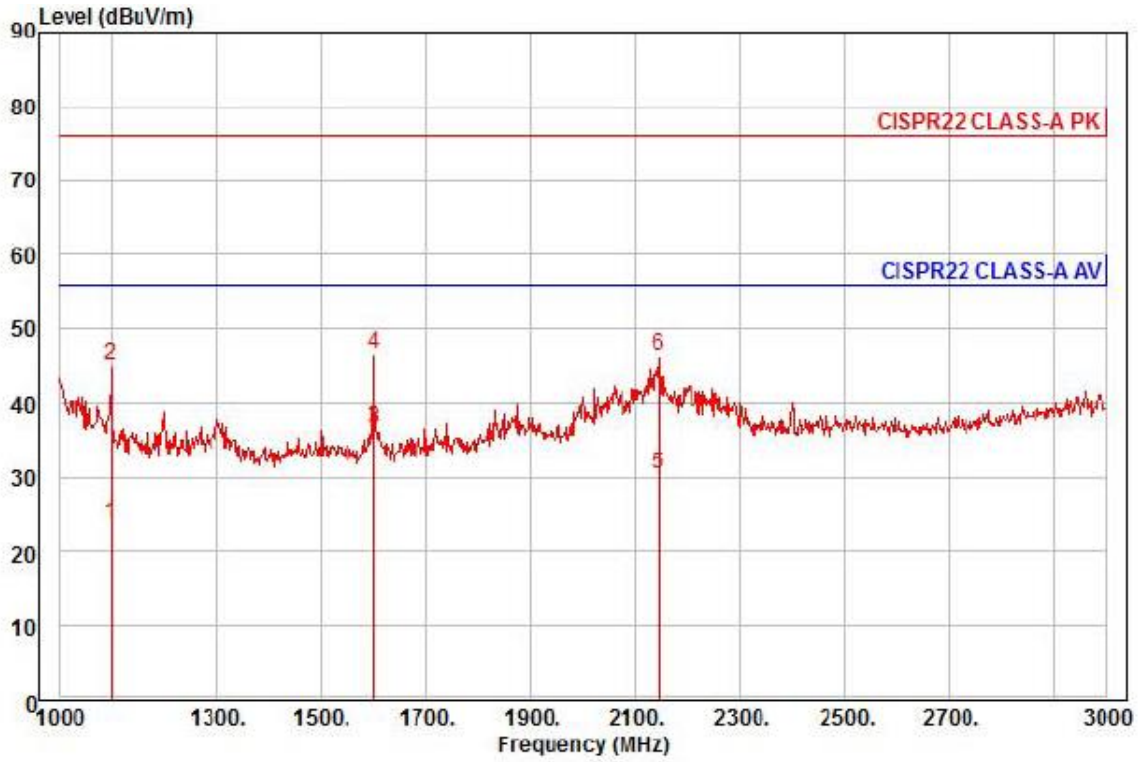
Final Result

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	43.807	V	59.3	-28.1	31.2	40.0	8.8	397.0	291.0	
2	108.813	V	59.9	-29.0	30.9	40.0	9.1	100.0	102.0	
3	110.772	V	60.6	-29.3	31.3	40.0	8.7	123.0	125.0	
4	151.493	V	62.0	-31.3	30.7	40.0	9.3	125.0	193.0	
5	249.948	V	58.5	-25.3	33.2	47.0	13.8	105.0	345.0	
6	800.059	H	48.2	-12.1	36.1	47.0	10.9	352.0	275.0	

♦ 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

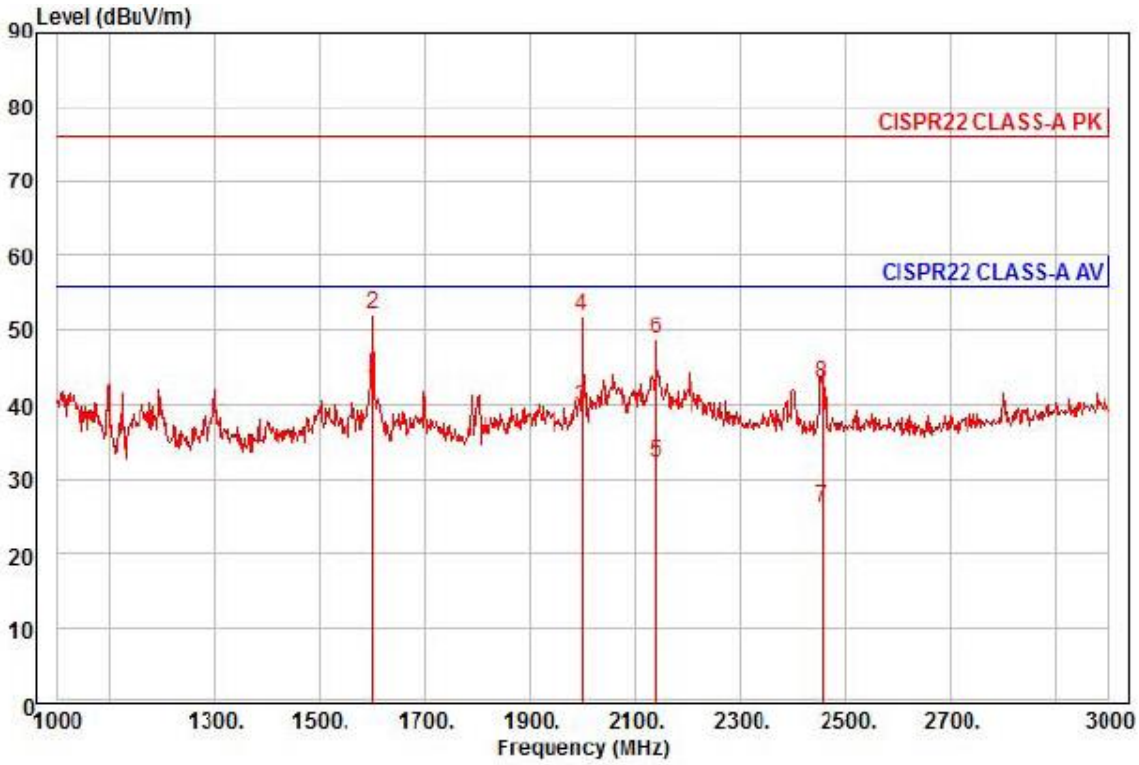
Radiated Electric Field Emissions(Above 1 ㎓)

- 12 V (dc) Mode



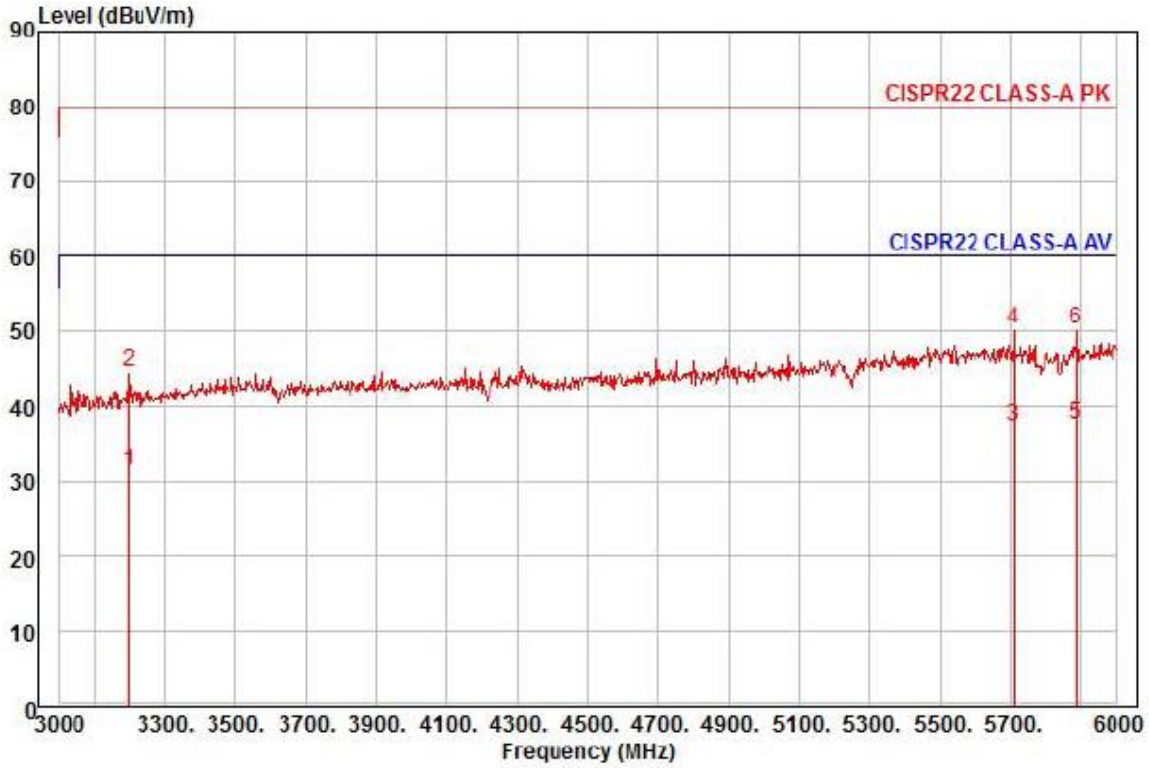
Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(RRA CAL 2017-05-18) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNF-8010RVMP
Mode : 12 V (dc)
Memo : (1 - 3) GHz

	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	1098.00	29.92	22.80	6.95	35.97	139	56.00	-32.30	horizontal	Average
2	1098.00	51.33	22.80	6.95	35.97	139	76.00	-30.89	horizontal	Peak
3 pp	1600.00	39.05	24.42	8.51	35.53	54	56.00	-19.55	horizontal	Average
4 pk	1600.00	49.07	24.42	8.51	35.53	54	76.00	-29.53	horizontal	Peak
5	2146.00	29.23	26.45	9.99	35.23	32	56.00	-25.56	horizontal	Average
6	2146.00	45.21	26.45	9.99	35.23	32	76.00	-29.58	horizontal	Peak



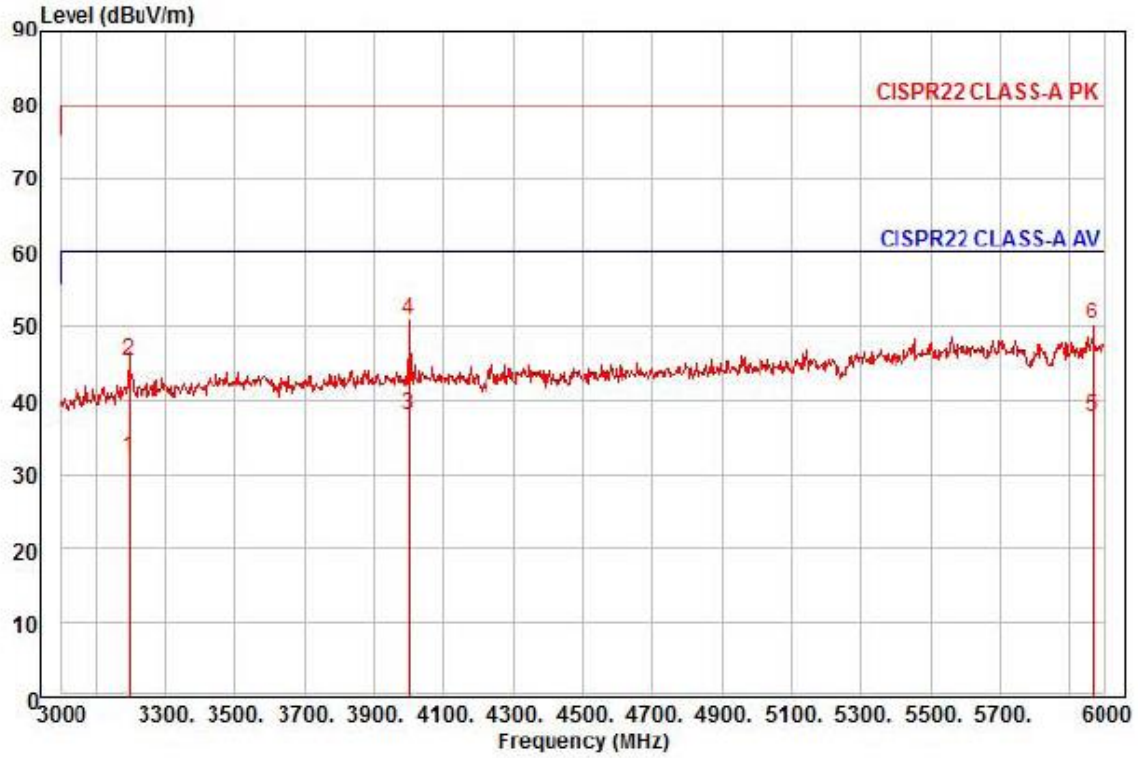
Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(RRA CAL 2017-05-18) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNF-8010RVMP
Mode : 12 V (dc)
Memo : (1 - 3) GHz

	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 pp	1600.00	44.86	24.42	8.51	35.53	142	56.00	-13.74	vertical	Average
2 pk	1600.00	54.87	24.42	8.51	35.53	142	76.00	-23.73	vertical	Peak
3	2000.00	39.14	26.01	9.65	35.17	252	56.00	-16.37	vertical	Average
4	2000.00	51.44	26.01	9.65	35.17	252	76.00	-24.07	vertical	Peak
5	2140.00	31.19	26.44	9.98	35.22	347	56.00	-23.61	vertical	Average
6	2140.00	47.69	26.44	9.98	35.22	347	76.00	-27.11	vertical	Peak
7	2454.00	23.43	27.39	10.72	35.35	311	56.00	-29.81	vertical	Average
8	2454.00	40.09	27.39	10.72	35.35	311	76.00	-33.15	vertical	Peak



Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(RRA CAL 2017-05-18) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNF-8010RVMP
Mode : 12 V (dc)
Memo : (3 - 6) GHz

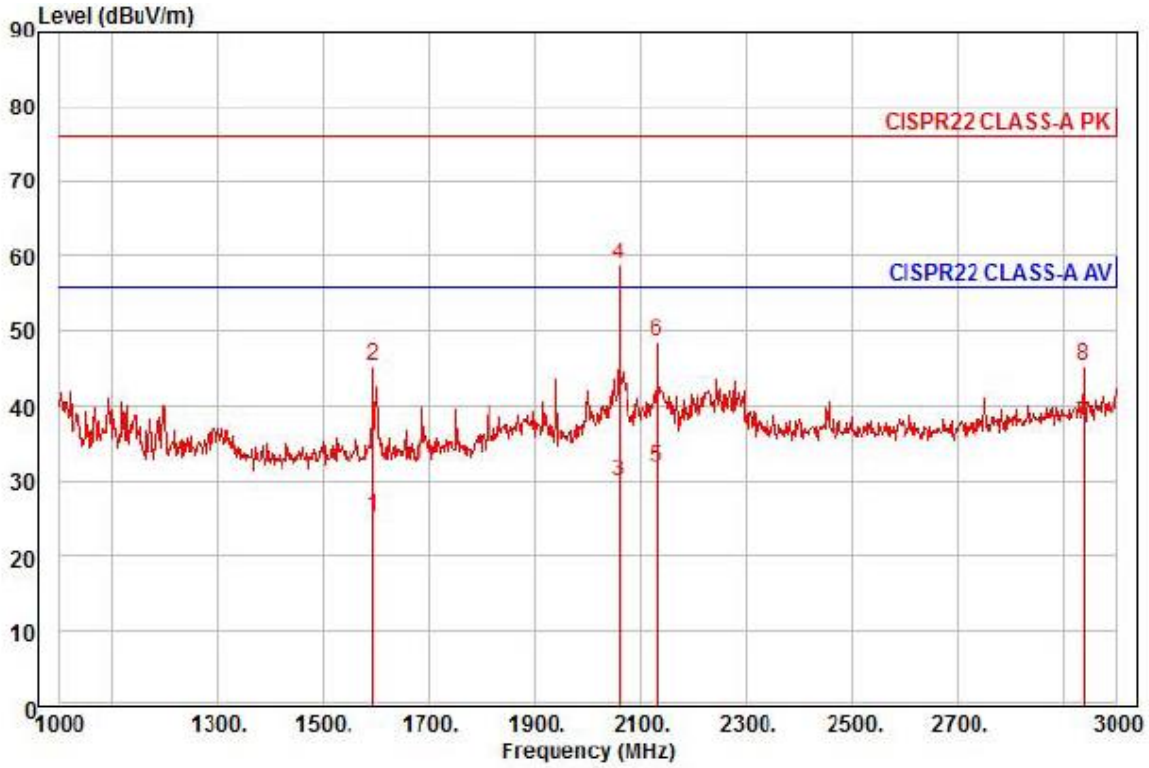
	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	3198.00	23.87	30.30	12.66	35.50	50	60.00	-28.67	horizontal	Average
2	3198.00	37.11	30.30	12.66	35.50	50	80.00	-35.43	horizontal	Peak
3	5709.00	20.42	35.68	16.92	35.67	225	60.00	-22.65	horizontal	Average
4	5709.00	33.39	35.68	16.92	35.67	225	80.00	-29.68	horizontal	Peak
5 pp	5886.00	19.94	35.95	17.30	35.68	103	60.00	-22.49	horizontal	Average
6 pk	5886.00	32.80	35.95	17.30	35.68	103	80.00	-29.63	horizontal	Peak



Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(RRA CAL 2017-05-18) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNF-8010RVMP
Mode : 12 V (dc)
Memo : (3 - 6) GHz

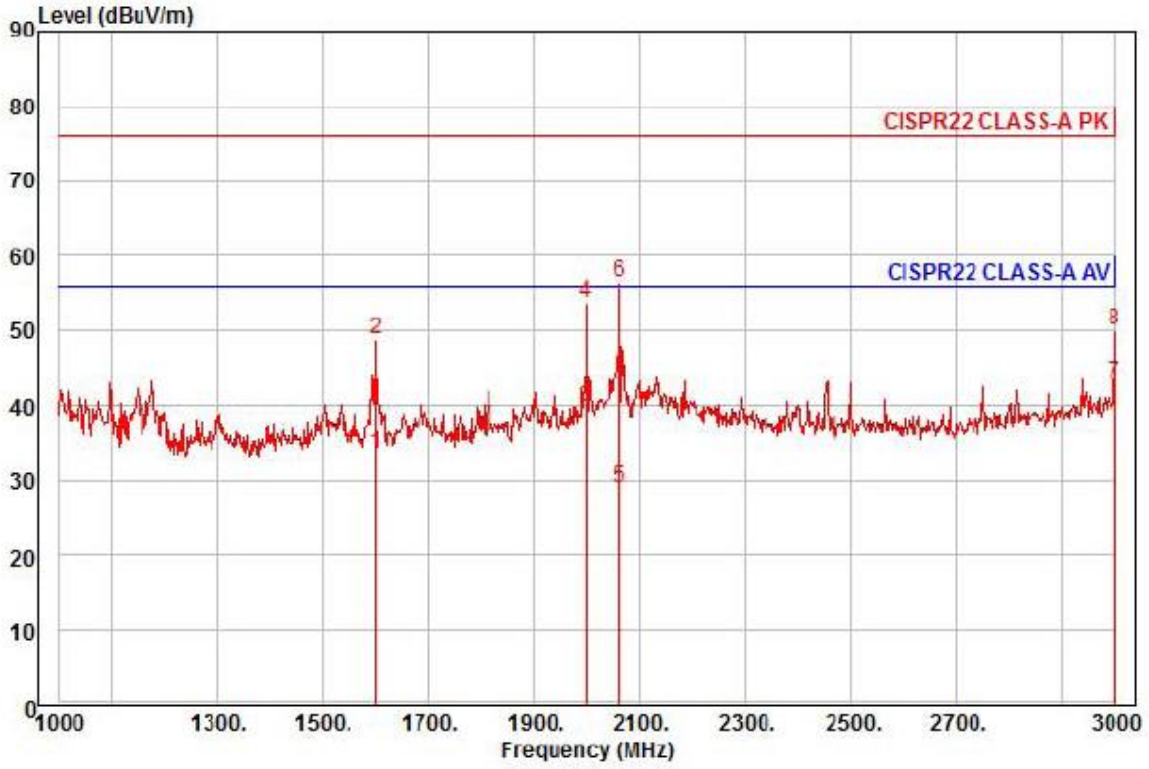
	Freq	Read Level	Ant Factor	Cable Loss	Preamp Factor	TPos	Limit Line	Over Limit	Pol/Phase	Remark
	MHz	dBuV	dB/m	dB	dB	deg	dBuV/m	dB		
1	3195.00	24.82	30.29	12.65	35.51	339	60.00	-27.75	vertical	Average
2	3195.00	37.95	30.29	12.65	35.51	339	80.00	-34.62	vertical	Peak
3 pp	3999.00	26.68	32.50	14.07	35.28	24	60.00	-22.03	vertical	Average
4 pk	3999.00	39.77	32.50	14.07	35.28	24	80.00	-28.94	vertical	Peak
5	5964.00	19.89	36.07	17.54	35.69	321	60.00	-22.19	vertical	Average
6	5964.00	32.38	36.07	17.54	35.69	321	80.00	-29.70	vertical	Peak

- PoE Mode



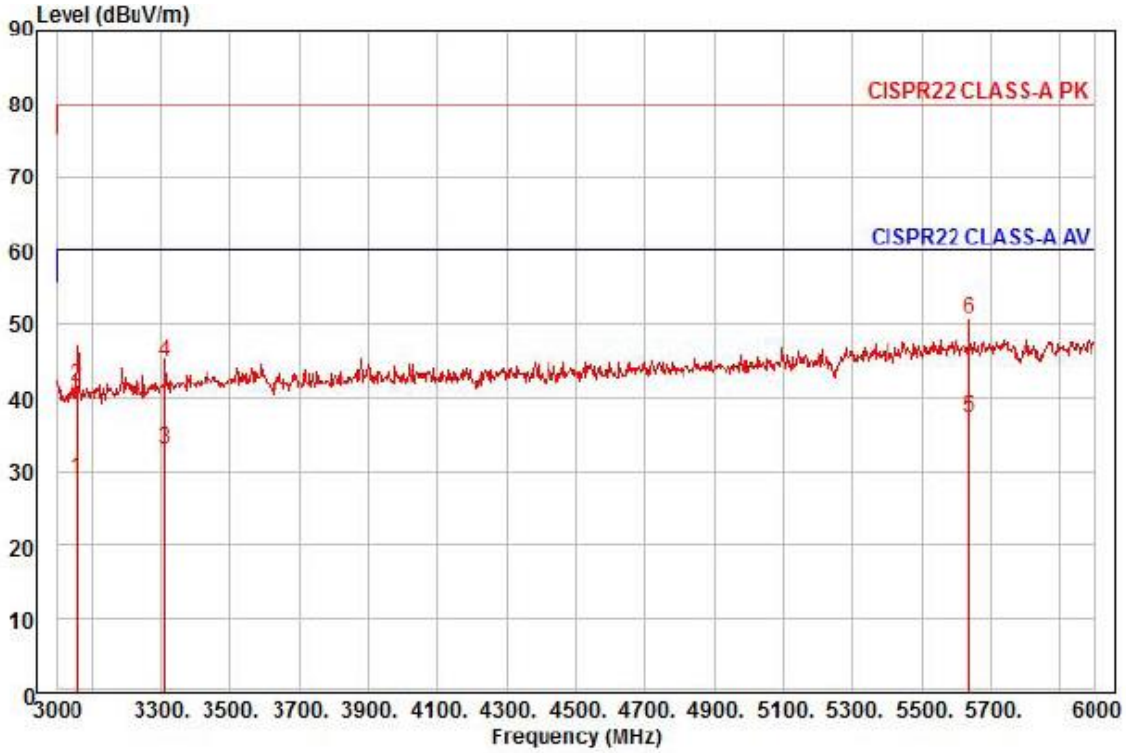
Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(RRA CAL 2017-05-18) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNF-8010RVMP
Mode : PoE
Memo : (1 - 3) GHz

	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	1594.00	27.84	24.39	8.49	35.53	205	56.00	-30.81	horizontal	Average
2	1594.00	47.94	24.39	8.49	35.53	205	76.00	-30.71	horizontal	Peak
3	2058.00	29.06	26.19	9.79	35.19	100	56.00	-26.15	horizontal	Average
4 pp	2058.00	58.02	26.19	9.79	35.19	100	76.00	-17.19	horizontal	Peak
5	2132.00	30.65	26.41	9.96	35.22	103	56.00	-24.20	horizontal	Average
6	2132.00	47.31	26.41	9.96	35.22	103	76.00	-27.54	horizontal	Peak
7 av	2938.00	31.72	29.47	11.98	35.54	179	56.00	-18.37	horizontal	Average
8	2938.00	39.52	29.47	11.98	35.54	179	76.00	-30.57	horizontal	Peak



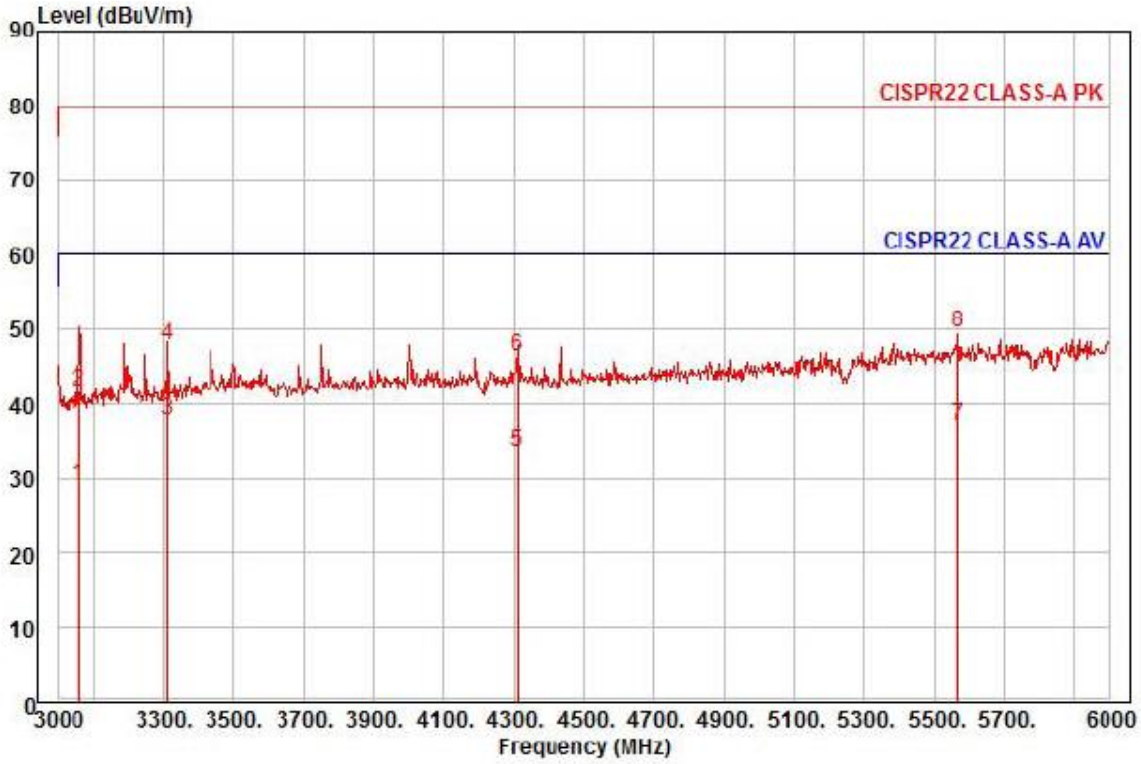
Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(RRA CAL 2017-05-18) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNF-8010RVMP
Mode : PoE
Memo : (1 - 3) GHz

	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	1600.00	36.18	24.42	8.51	35.53	228	56.00	-22.42	vertical	Average
2	1600.00	51.50	24.42	8.51	35.53	228	76.00	-27.10	vertical	Peak
3	2000.00	39.21	26.01	9.65	35.17	245	56.00	-16.30	vertical	Average
4	2000.00	53.28	26.01	9.65	35.17	245	76.00	-22.23	vertical	Peak
5	2060.00	28.15	26.19	9.79	35.19	183	56.00	-27.06	vertical	Average
6 pk	2060.00	55.64	26.19	9.79	35.19	183	76.00	-19.57	vertical	Peak
7 pp	3000.00	36.65	29.74	12.15	35.56	180	56.00	-13.02	vertical	Average
8	3000.00	43.81	29.74	12.15	35.56	180	76.00	-25.86	vertical	Peak



Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(RRA CAL 2017-05-18) horizontal
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNF-8010RVMP
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	3060.00	22.34	29.91	12.30	35.54	132	60.00	-30.99	horizontal	Average
2	3060.00	34.91	29.91	12.30	35.54	132	80.00	-38.42	horizontal	Peak
3	3312.00	25.14	30.62	12.86	35.47	192	60.00	-26.85	horizontal	Average
4	3312.00	36.98	30.62	12.86	35.47	192	80.00	-35.01	horizontal	Peak
5 pp	5640.00	20.47	35.58	16.82	35.67	51	60.00	-22.80	horizontal	Average
6 pk	5640.00	33.95	35.58	16.82	35.67	51	80.00	-29.32	horizontal	Peak



Site : chamber
Condition: CISPR22 CLASS-A PK 3m STLP9149(RRA CAL 2017-05-18) vertical
: RBW:1000.000kHz VBW:1000.000kHz SWT:Auto
Project :
Model : XNF-8010RVMP
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	3060.00	22.36	29.91	12.30	35.54	141	60.00	-30.97	vertical	Average
2	3060.00	35.09	29.91	12.30	35.54	141	80.00	-38.24	vertical	Peak
3 pp	3312.00	29.73	30.62	12.86	35.47	187	60.00	-22.26	vertical	Average
4	3312.00	39.76	30.62	12.86	35.47	187	80.00	-32.23	vertical	Peak
5	4311.00	21.95	32.41	14.63	35.39	195	60.00	-26.40	vertical	Average
6	4311.00	34.81	32.41	14.63	35.39	195	80.00	-33.54	vertical	Peak
7	5565.00	20.60	35.47	16.71	35.66	147	60.00	-22.88	vertical	Average
8 pk	5565.00	33.02	35.47	16.71	35.66	147	80.00	-30.46	vertical	Peak

♦ Calculation
Over Limit [㏈] = (Read Level[㏈㎶] + Ant Factor[㏈/m] + Cable Loss [㏈] – Preamp Factor [㏈]) – Limit Line[㏈㎶]
Over Limit : Marjin, Read Level : Reading value, Ant Factor : ANT Factor,
Cable Loss : Cable loss, Preamp Factor : Preamp Factor

Harmonic Current Emissions and Voltage Fluctuations and Flicker

Average harmonic current results

Hn	Ieff [A]	% of Limit	Limit [A]	Result
		N/A		

Harmonic currents less than 0.6% of the input current measured under the test conditions, or less than 5 mA, whichever is greater, are disregarded.

Test Data - Harmonics (continued)

Maximum harmonic current results

Hn	Ieff [A]	% of Limit	Limit [A]	Result
		N/A		

Harmonic currents less than 0.6% of the input current measured under the test conditions, or less than 5 mA, whichever is greater, are disregarded.

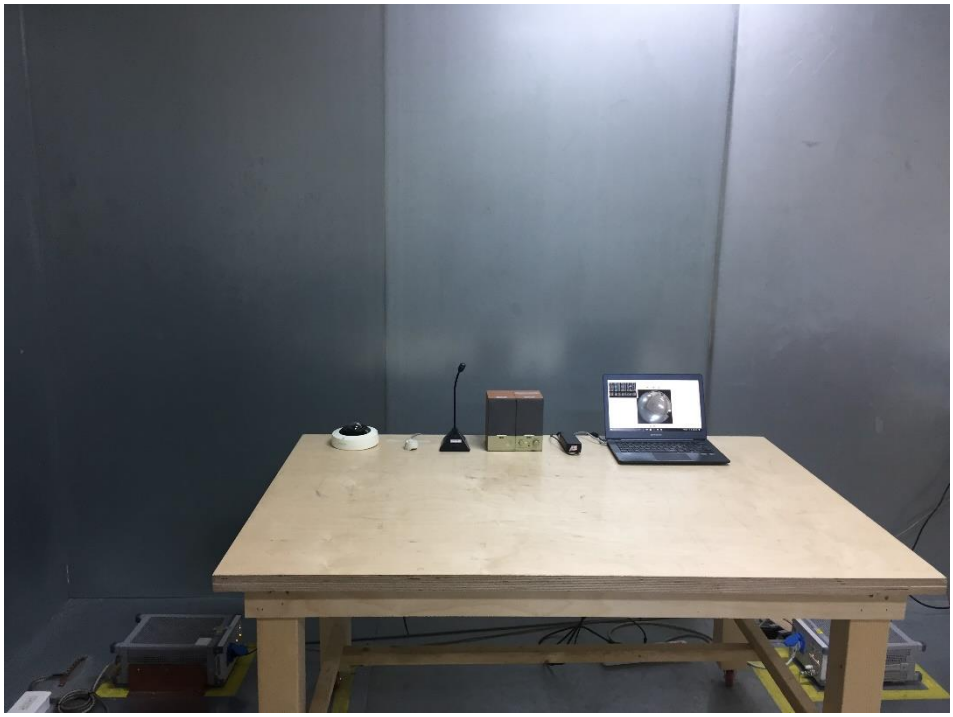
Test Data - Voltage Fluctuations

Maximum Flicker results

	EUT values	Limit	Result
Pst	N/A		
Plt			
dc [%]			
dmax [%]			
Tmax [s]			

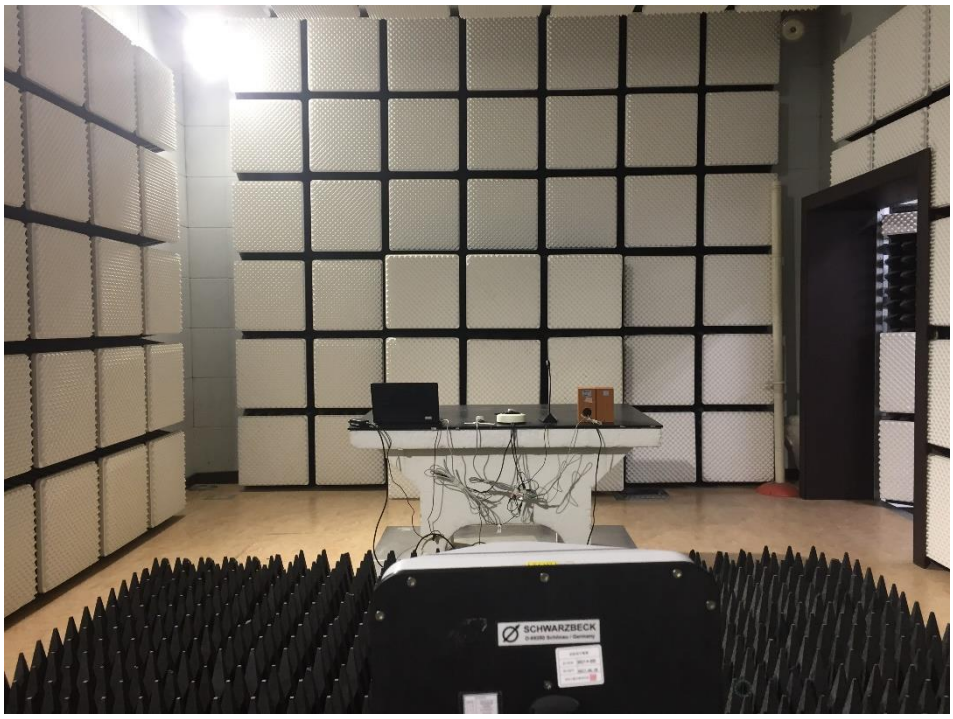
Test Setup Photos and Configuration

Conducted Voltage Emissions



Radiated Electric Field Emissions(Below 1 ㎓)

Radiated Electric Field Emissions(Above 1 ㎓)



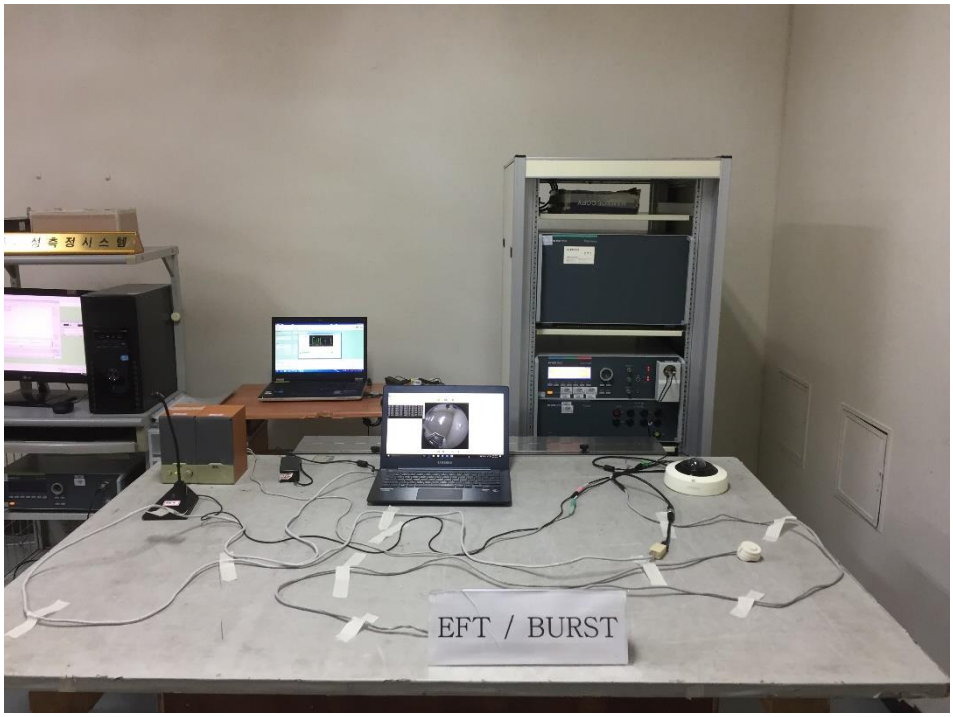
Harmonic Current Emissions and Voltage Fluctuations and Flicker

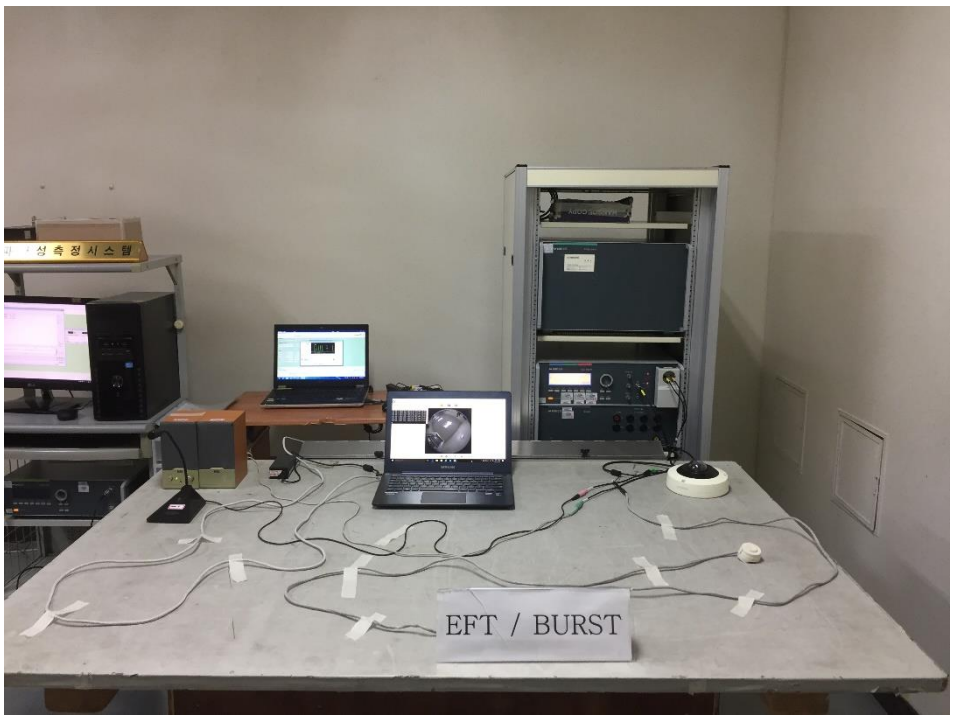
N/A

Electrostatic Discharge

Radiated Electric Field Immunity

Electrical Fast Transients/Bursts





Surge Transients

Conducted Disturbance

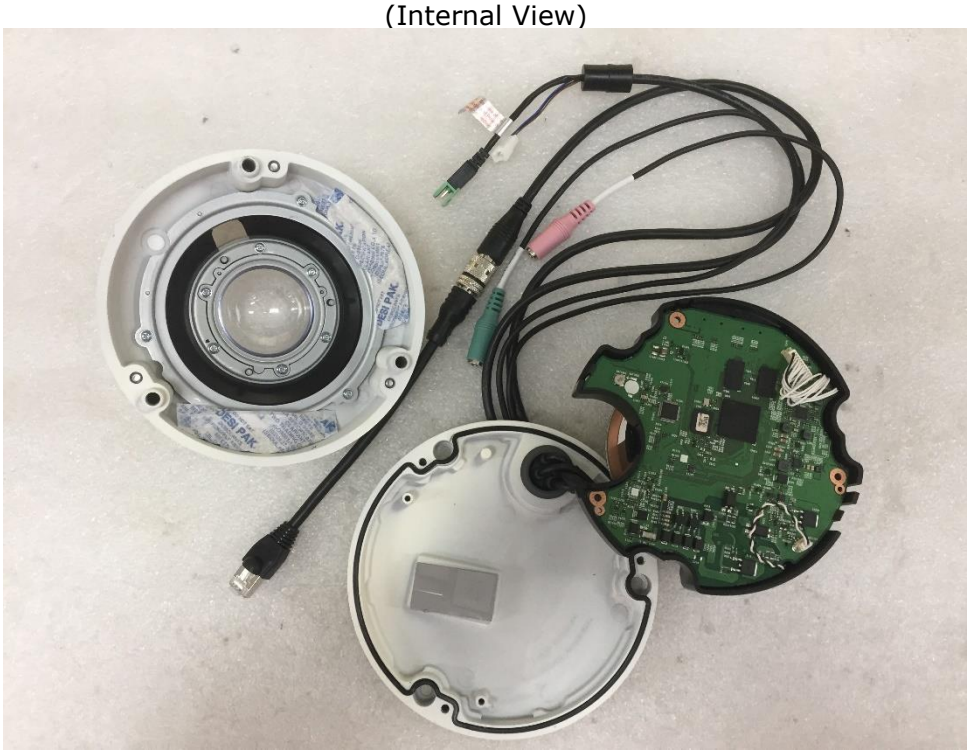
EUT External Photographs

(Top)

(Bottom)

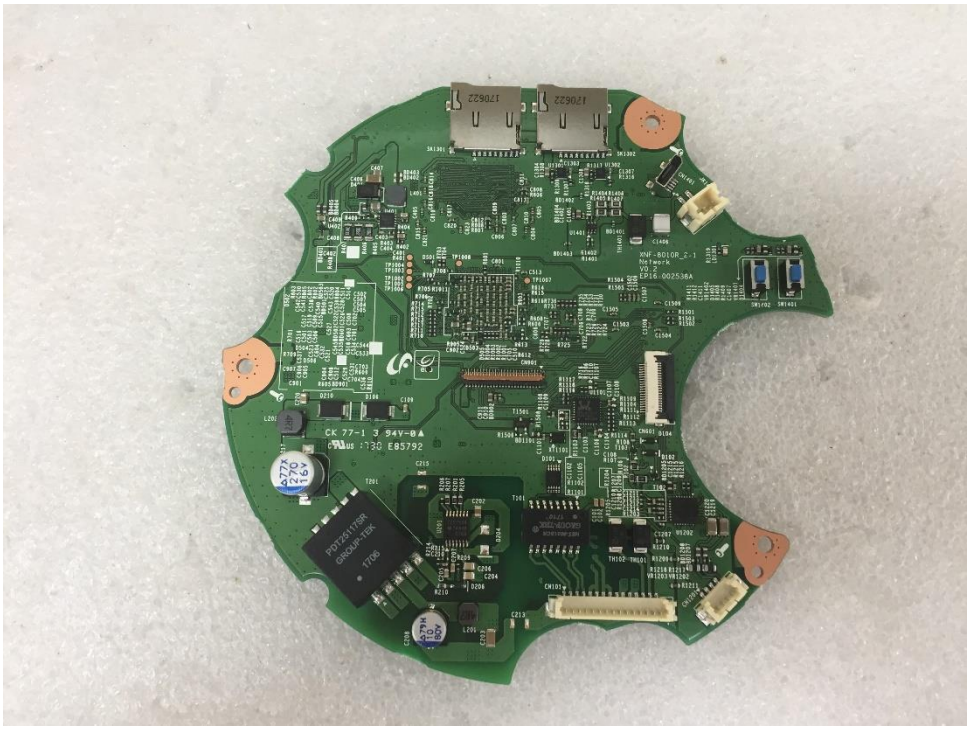
EUT Internal Photographs

(Internal View)

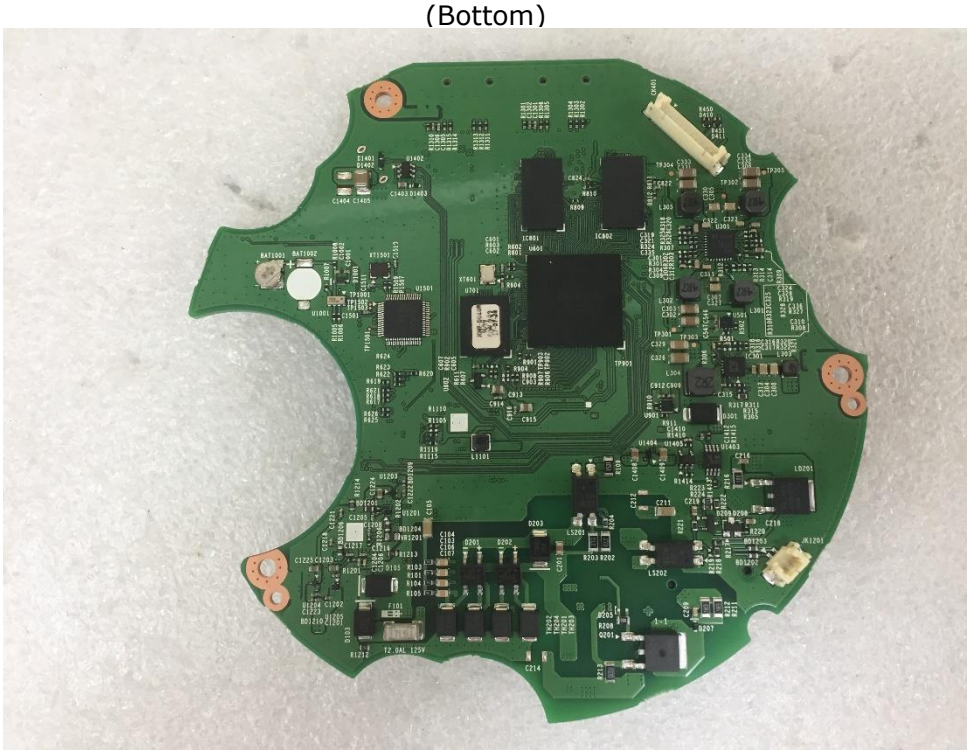


EUT Internal View – Main board

(Top)

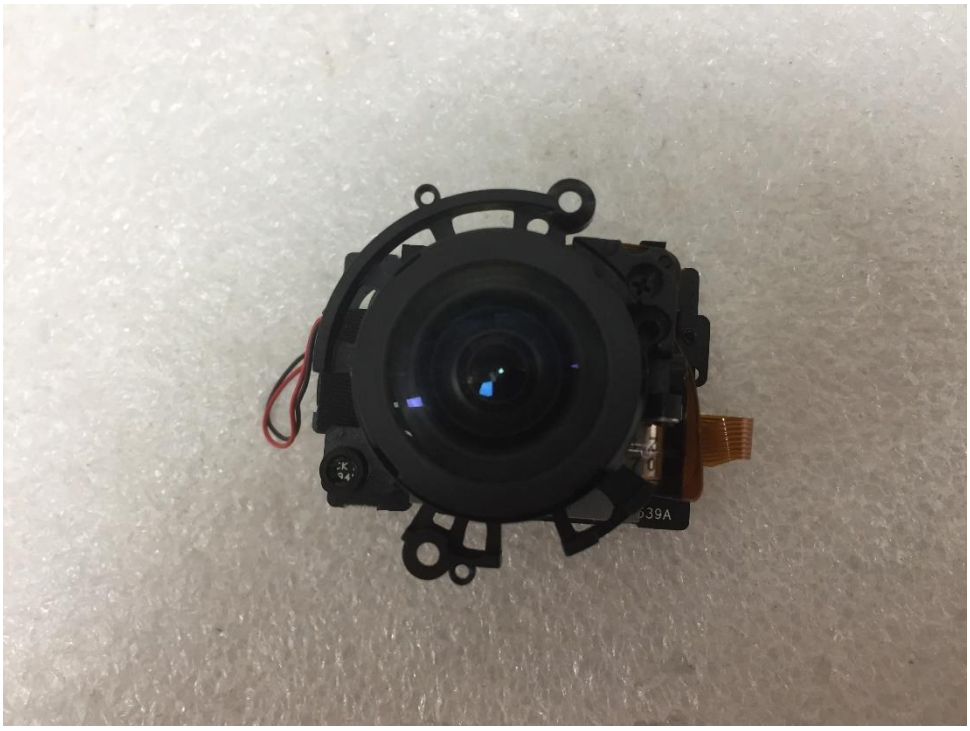


(Bottom)

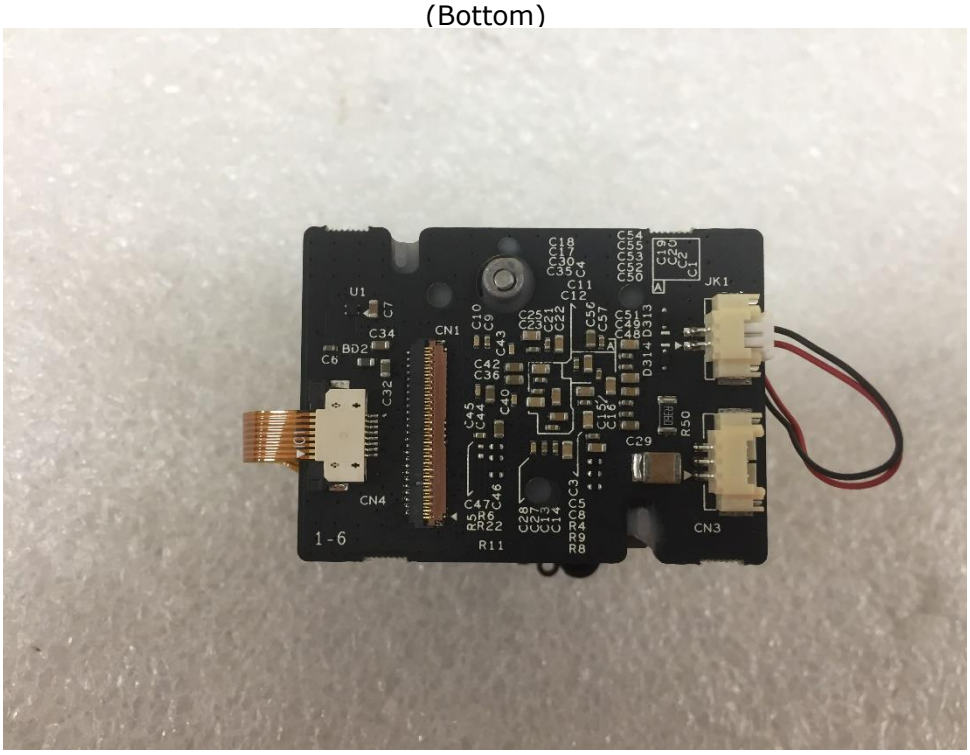


EUT Internal View – CAMERA board

(Top)

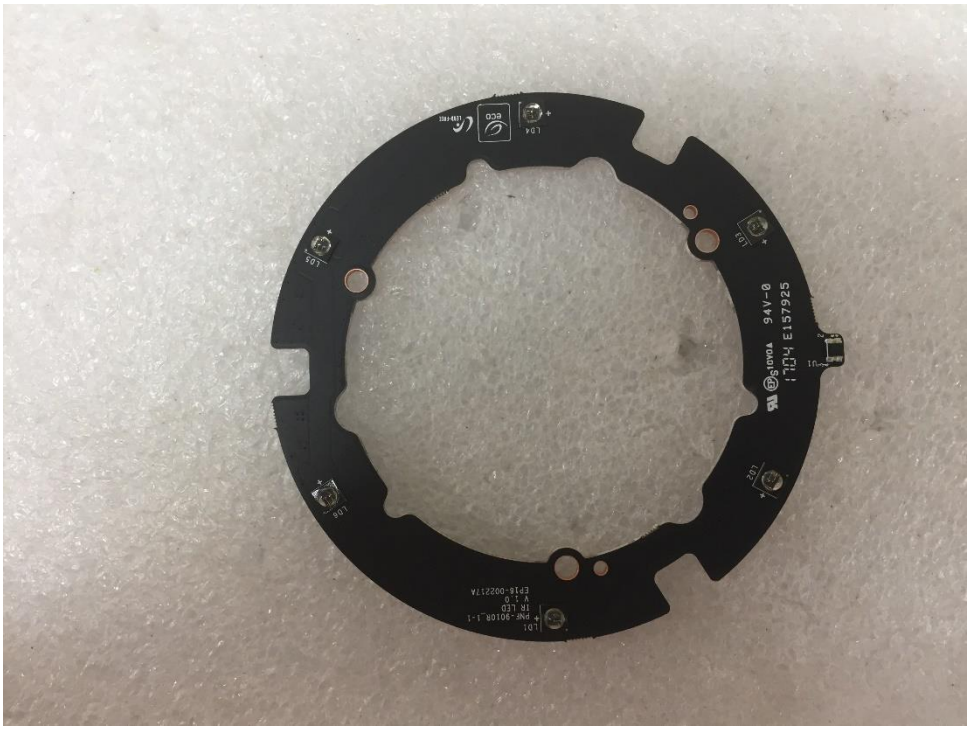


(Bottom)

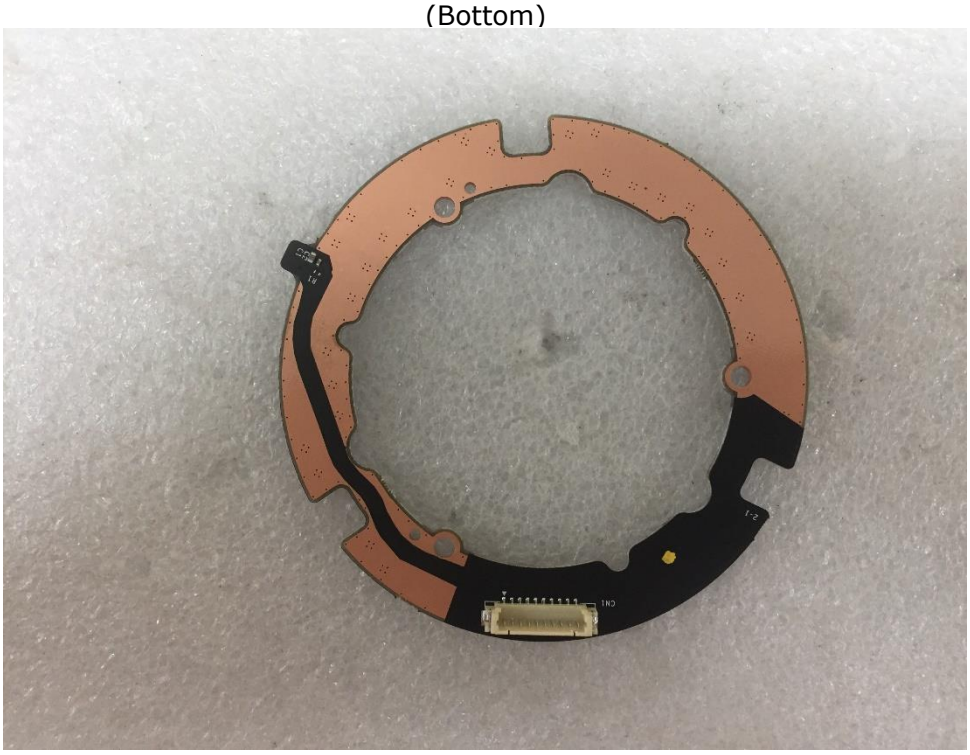


EUT Internal View – LED board

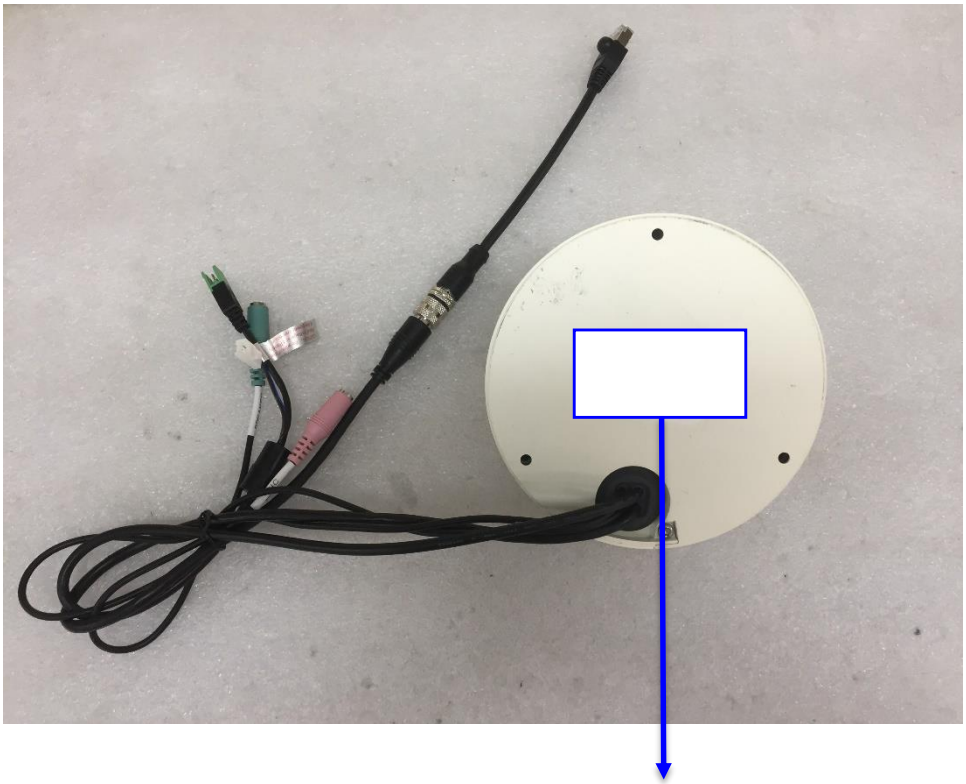
(Top)



(Bottom)



Label and Location



NETWORK CAMERA

Model No : XNF-8010RVMP

Manufacturer : Hanwha Techwin (Tianjin) Co.,Ltd.

Made in of China

CE