



EMC TEST REPORT For CE

Test Report No. : KES- E1-19T0023-R1

Date of Issue : May. 15, 2019

Product name : NETWORK CAMERA

Model/Type No. : XNP-6371RH

Variant Model : -

Applicant : Hanwha Techwin Co., Ltd.

Applicant Address : 6, Pangyo-ro 319 Beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, 13488, KOREA

Manufacturer : 1. Hanwha Techwin (Tianjin) Co.,Ltd.
2. HANWHA TECHWIN SECURITY VIETNAM CO.,LTD.
3. D-TECH CO.,LTD.

Manufacturer Address : 1. No.11 Weiliu Rd, Micro-Electronic Industrial Park, TEDA, Tianjin,
300385, People's Republic of China
2. Lot O-2, Que Vo Industrial Zone extended area,
Nam Son commune, Bac Ninh city, Bac Ninh province, Vietnam
3. 173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi- do,
Korea (Suwon Industrial Complex)

Date of Receipt : Jan. 07, 2019

Test date : Jan. 11, 2019 ~ Jan. 13, 2019

Test Results : ☒ **In Compliance** ☐ **Not in Compliance**

Tested by

Dong Hyun, Won
EMC Test Engineer

Reviewed by

Dong-Hun, Jang
EMC Technical Manager

This test report is not related to KOLAS.

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Report No.:
KES-E1-19T0023-R1
Page (2) of (64)

REPORT REVISION HISTORY

Date	Test Report No.	Revision History
Jan. 15, 2019	KES-E1-19T0023	Issued
May. 15, 2019	KES-E1-19T0023-R1	Re-issue due to regulations update

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TABLE OF CONTENTS

1.0	General Product Description	4
1.1	Test Voltage & Frequency	8
1.2	Variant Model Differences.....	8
1.3	Device Modifications	8
1.4	Equipment Under Test.....	8
1.5	Support Equipments	9
1.6	External I/O Cabling	9
1.7	EUT Operating Mode(s)	10
1.8	Configuration.....	10
1.9	Remarks when standards applied	11
1.10	Calibration Details of Equipment Used for Measurement.....	11
1.11	Test Facility	11
1.12	Laboratory Accreditations and Listings	11
2.0	Test Regulations.....	12
2.1	Conducted Emissions at Mains Power Ports.....	14
2.2	Conducted Emissions at Telecommunication Ports	15
2.3	Radiated Electric Field Emissions(Below 1 GHz)	16
2.4	Radiated Electric Field Emissions(Above 1 GHz)	17
2.5	Harmonic Current Emissions.....	18
2.6	Voltage Fluctuations and Flicker	19
3.0	Criteria for compliance.....	20
3.1	Electrostatic Discharge.....	21
3.2	Radiated Electric Field Immunity	24
3.3	Electrical Fast Transients/Bursts	27
3.4	Surge Transients	29
3.5	Conducted Disturbance	32
3.6	Voltage Dips and Short Interruptions	34
APPENDIX A – TEST DATA.....		36
Conducted Emissions at Mains Power Ports.....		36
Conducted Emissions at Telecommunication Ports		38
Radiated Electric Field Emissions(Below 1 GHz)		40
Radiated Electric Field Emissions(Above 1 GHz).....		41
Harmonic Current Emissions and Voltage Fluctuations and Flicker		42
Test Setup Photos and Configuration		45
Conducted Voltage Emissions		45
Conducted Telecommunication Emissions		46
Radiated Electric Field Emissions(Below 1 GHz)		47
Radiated Electric Field Emissions(Above 1 GHz).....		48
Harmonic Current Emissions and Voltage Fluctuations and Flicker		49
Electrostatic Discharge		50
Radiated Electric Field Immunity		50
Electrical Fast Transients/Bursts		51
Surge Transients		51
Conducted Disturbance.....		52
Voltage Dips and Short Interruptions		52
EUT External Photographs		53
EUT Internal Photographs		54



1.0 General Product Description

Main Specifications of E.U.T are:

	Model
Video	XNP-6371RH
Imaging Device	1/2" 2.17M CMOS
Total Pixels	1952(H) x 1113(V), 2.17M
Effective Pixels	1937(H) x 1097(V), 2.12M
Scanning System	Progressive
Min. Illumination	Color : 0.01Lux (1/30sec, F1.5) B/W : 0 Lux (IR LED On)
S / N Ratio	50dB
Video Out	CVBS : 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P),
Lens	
Focal Length (Zoom Ratio)	6 ~ 222mm(Optical 37X)
Max. Aperture Ratio	F1.5 (Wide) / F4.6 (Tele)
Angular Field of View	H : 59.3°(Wide) ~ 1.9°(Tele) / V : 35.8°(Wide) ~ 1.1°(Tele)
Min. Object Distance	Wide 1.5m ,Tele 2m
Focus Control	Auto / Manual / One shot AF
Lens Type	DC Auto Iris
Mount Type	Board-in type
Pan/Tilt/Rotate	
Pan Range	360° Endless
Pan Speed	Preset : 400°/sec, Manual : 0.024°/sec ~ 250°/sec
Tilt Range	190°(-5°~185°)
Tilt Speed	Preset : 300°/sec, Manual : 0.024°/sec ~250°/sec
Sequence	Preset (300 ea), Swing, Group (6 ea), Trace, Tour (1 ea), Auto Run, Schedule
Preset Accuracy	±0.2°
Azimuth	Yes (E/W/S/N/NE/NW/SE/SW)
Auto Tracking	Off / On
Operational	
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 / Schedule
Backlight Compensation	Off / BLC / HLC / 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 (built-in Gyro)
Defog	Auto/Manual/Off
Motion Detection	Off / On(8ea, Rectangle)

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Report No.:

KES-EI-19T0023-R1

Page (5) of (64)

Privacy Masking	Off / On (24 Zones of Rectangle zone) - Color : Grey/Green/Red/Blue/Black/White - Zoom ratio option for mask mode - Mosaic option
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor (included Mercury & Sodium)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2 ~ 1/12,000sec)
Digital Zoom	32x
Image Rotation	Flip/Mirror : On/Off
Video&Audio Analytics	Tampering, Loitering, Directional Detection, Fog Detection, Virtual Line, Enter/Exit, Appear / Disappear, Audio Detection, Face Detection, Motion Detection, Sound Classification
Serial Interface	RS-485 - Samsung-T, Pelco-D/P, Panasonic, Bosch, AD, GE, Vicon, Honeywell
Alarm I/O	Input 4ea / Output 2ea (Relay)
Alarm Triggers	Alarm Input, Motion Detection, Video & Audio Analytics, Network Disconnect
Alarm events	File upload via FTP and E-Mail Notification via E-Mail, TCP and HTTP local storage(SD/SDHC/SDXC) or NAS recording at Alarm 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.264 (MPEG-4 Part 10/AVC), H.265, 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

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Report No.:

KES-E1-19T0023-R1

Page (6) of (64)

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-directional (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 (up to 128GB) - 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 (ready/error/recording/formatting/lock) NAS(Network Attached Storage) Local PC for Instant Recording(plug-in viewer only)
Application Programming I	ONVIF Profile S/G SUNAPI 2.0(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	Supported OS : Windows 7, 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Plug-in Free Webviewer Supported Browser : Google Chrome, MS Edge, Mozilla Firefox(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)
Central Management Softw	SmartViewer

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Report No.:

KES-E1-19T0023-R1

Page (7) of (64)

Environmental	
Operating Temperature / Humidity	-50°C ~ +55°C(+14°F ~ +131°F) / Less than 90% RH
Storage Temperature /	-50°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
Electrical	
Input Voltage / Current	AC24V±10%
Power Consumption	90W(Heater On, IR On), 60W(Heater Off, IR On)
Mechanical	
Color / Material	Black(head) +Ivory(body) / Plastic+Metal
Dimension (WxH)	H407.7 x Ø236.9 mm
Weight	7.1Kg

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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 ☐ 230Vac ☐ 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	XNP-6371RH	-	Hanwha Techwin (Tianjin) Co.,Ltd.	EUT

1.5 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
Notebook	X56K	HN11N5151FJ0045W	Hansung Computer Co., Ltd.	-
Notebook Adaptor	A12-120P1A	F180271552011758	CHICONY POWER TECHNOLOGY CO.,LTD.	-
Speaker	BR1000A Cuve Black 2	-	DONGGUAN EDIFIER TECHNOLOGY Co., Ltd	-
MIC	MP1000	-	-	-
Alarm 1	SIP-1201DD D0	-	SAMSUNG TECHWIN CO., LTD.	-
Alarm 2	-	-	-	-
Controller	SPC-1010	C60E67WD601003	SamSung Techwin Co.,Ltd.	-
Controller Adaptor	RS-AB1000	-	Dongguan Jinhusheng Power Technology Co.,Ltd.	-
Cellular phone	SHV-E210L	R33D713KA3F	Samsung Electronics Co.,Ltd.	-
Micro SD Card	-	-	SanDisk	8 GB

1.6 External I/O Cabling

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
NETWORK CAMERA (EUT)	RJ-45	Notebook	RJ-45	3.0	U
	Audio Out	Speaker	Audio In	1.4	U
	Audio In	MIC	Audio Out	1.4	U
	Alarm Out	Alarm 1	Alarm In	3.0	U
	Alarm In	Alarm 2	Alarm Out	3.0	U
	3 Pin	Controller	3 Pin	5.0	U
	SLOT	Micro SD Card	SLOT	-	-
Notebook	3.5 mm	Cellular phone	3.5 mm	0.6	U

* Unshielded=U, Shielded=S

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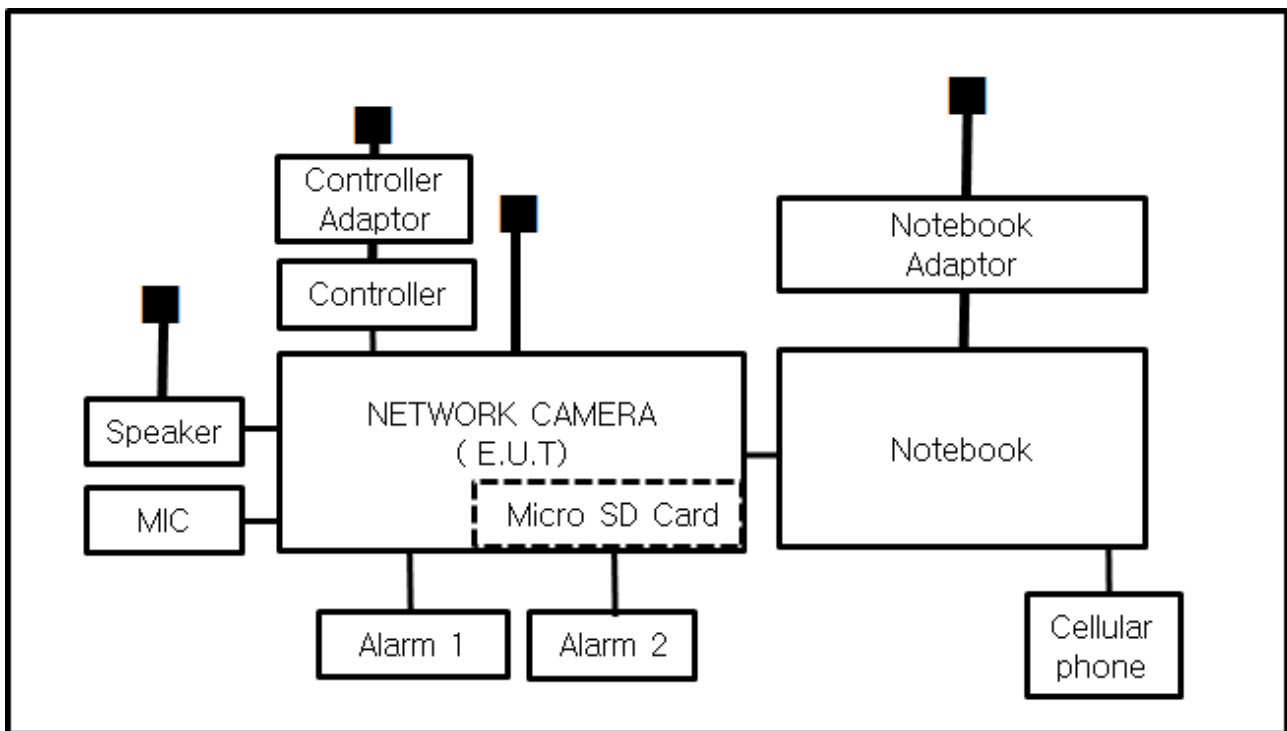
1.7 EUT Operating Mode(s)

Test Mode	operating
AC 24 Vac	EUT Monitoring, Ping Test

EUT Test operating S/W		
Name	Version	Manufacture Company
WebView	-	Hanwha Techwin Co., Ltd.

1.8 Configuration

■ AC Main
□ DC Main



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, Yeosu-si, Gyeonggi-do, 12658, Korea. The sites are constructed in conformance with the requirements of ANSI C63.4:2014 and CISPR 16-1-4:2012

1.12 Laboratory Accreditations and Listings

Country	Agency	Scope of Accreditation	Logo
KOREA	RRA	EMI (3 m & 10 m Semi-Aechoic Chamber , 10 m Open Area and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 KR0100
International	KOLAS	EMI (3 m & 10 m Semi-Aechoic Chamber , and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 KT489
USA	FCC	3 m & 10 m Semi-Aechoic Chamber, 10 m Open Area and Conducted test site to perform FCC Part 15/18 measurements.	 KR0100
Canada	ISED	3 m & 10 m Semi-Aechoic Chamber and Conducted test site	 23298-1
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
Europe	TÜV SÜD	EMI (3 m & 10 m Semi-Aechoic Chamber , 10 m Open Area and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 CARAT 17 07 01633 001

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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

☐ Group 2

☐ Class A

☐ 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



-
- | | | |
|---|----------------------------------|----------------------------------|
| ☐ VCCI V-3 / 2015.04 | ☐ Class A | ☐ Class B |
| ☐ AS/NZS:2013 | ☐ Class A | ☐ Class B |
| ☐ 47 CFR Part 15, Subpart B | | |
| ☐ CISPR 22:2009 +A1:2010 | ☐ Class A | ☐ Class B |
| ☐ ANSI C63.4-2014 | | |
| ☐ 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

Jan. 11, 2019

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	101781	04, 25, 2019
☒	LISN	ENV216	R & S	101787	01, 04, 2020
☒	LISN	ESH2-Z5	R & S	100450	04, 25, 2019
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	11, 26, 2019

Test Conditions

Temperature: 24,4 °C
Relative Humidity: 55,5 % 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

Remarks

See Appendix A for test data.

2.2 Conducted Emissions at Telecommunication Ports

Test Date

Jan. 11, 2019

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	101781	04, 25, 2019
☒	LISN	ENV216	R & S	101787	01, 04, 2020
☒	LISN	ESH2-Z5	R & S	100450	04, 25, 2019
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	11, 26, 2019
☒	8-WIRE ISN CAT3,5	ENY81	R & S	100174	01, 07, 2020
☐	8-WIRE ISN CAT6	ENY81-CAT6	R & S	101665	01, 07, 2020

Test Conditions

Temperature: 24,4 °C

Relative Humidity: 55,5 % 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

Remarks

See Appendix A for test data.



2.3 Radiated Electric Field Emissions(Below 1 GHz)

Test Date

Jan. 11, 2019

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, 11, 2019
☒	AMPLIFIER	SCU 01	R & S	100603	11, 26, 2019
☒	TRILOG-BROADBAND ANTENNA	VULB9163	Schwarzbeck	715	09, 20, 2020

Test Conditions

Temperature: 24,3 °C
Relative Humidity: 52,7 % 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.



2.4 Radiated Electric Field Emissions(Above 1 GHz)

Test Date

Jan. 12, 2019

Test Location

SEMI ANECHOIC CHAMBER #3

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	ESR7	R & S	101190	08, 06, 2019
☒	PREAMPLIFIER	8449B	AGILENT	3008A01967	05, 31, 2019
☐	ATTENUATOR	8491A	HP	35496	03, 21, 2019
☒	DOUBLE RIDGED HORN ANTENNA	SAS-571	A.H.SYSTEM,INC	781	05, 02, 2019

Test Conditions

Temperature: 24,8 °C
Relative Humidity: 51,1 % R.H.

Frequency Range of Measurement

1 GHz to 6 GHz

Instrument Settings

IF Band Width: 1 MHz

Test Results

The requirements are:

- ☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

Remarks

N/A



2.5 Harmonic Current Emissions

Test Date

Jan. 11, 2019

Test Location

Electro wave Shieldroom #3

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, 08, 2019
☒	POWER SOURCE	ACS 500N6	EM TEST	V1024106760	-

Test Conditions

Temperature: 21,0 °C

Relative Humidity: 54,2 % R.H.

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

See Appendix A for test data.



2.6 Voltage Fluctuations and Flicker

Test Date

Jan. 11, 2019

Test Location

Electro wave Shieldroom #3

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, 08, 2019
☒	POWER SOURCE	ACS 500N6	EM TEST	V1024106760	-

Test Conditions

Temperature: 21,0 °C
Relative Humidity: 54,2 % R.H.

Test Results

The requirements are:

- ☒ PASS
☐ NOT PASS
☐ NOT APPLICABLE

Remarks

See Appendix A for test data.

3.0 Criteria for compliance

Criteria for compliance was based on the following guidelines:

General performance criteria

The manufacturer has the obligation to express the performance criteria in terms which relate to the performance of his specific product when used as intended.

The following performance criteria are applicable, and shall only be evaluated when the functions referred to are implemented.

Examples of functions defined by the manufacturer to be evaluated during testing include, but are not limited to, the following:

- essential operational modes and states;
- tests of all peripheral access (hard disks, floppy disks, printers, keyboard, mouse, etc.);
- quality of software execution;
- quality of data display and transmission;
- quality of speech transmission.

Performance criterion A

During and after the test the EUT shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed below a minimum performance level specified by the manufacturer when the EUT 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, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the EUT if used as intended.

Performance criterion B

After the test, the EUT shall continue to operate as intended without operator intervention. No degradation of performance or loss of function is allowed, after the application of the phenomena below a performance level specified by the manufacturer, when the EUT is used as intended. The performance level may be replaced by a permissible loss of performance. During the test, degradation of performance is allowed. However, no change of operating state or stored data is allowed to persist after the test.

If the minimum performance level (or the permissible performance loss) is not specified by the manufacturer, then either of these may be derived from the product description and documentation, and by what the user may reasonably expect from the EUT if used as intended.

Performance criterion C

During and after testing, a temporary loss of function is allowed, provided the function is self recoverable, or can be restored by the operation of the controls or cycling of the power to the Functions, and/or information stored in non-volatile memory, or protected by a battery backup, shall not be lost.

EUT by the user in accordance with the manufacturer's instructions.

3.1 Electrostatic Discharge

Reference Standard

EN 61000-4-2:2009

Test Date

Jan. 13, 2019

Test Location

EMS-ESD: Electro wave Shieldroom #7

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	ESD SIMULATOR	ESS-2000	Noise Ken	ESS01Z0454	10, 11, 2019
☒	HCP	-	KES	-	-
☒	VCP	-	KES	-	-

Test Conditions

Temperature: 24,4 °C
Relative Humidity: 53,8 % R.H.
Atmospheric Pressure: 101,5 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 ☐ 2 kV ☐ 4 kV ☒ 6 kV ☐ 8 kV ☐ 15 kV	Air ☒ 2 kV ☒ 4 kV ☐ 6 kV ☒ 8 kV ☐ 15 kV	HCP ☐ 2 kV ☐ 4 kV ☒ 6 kV ☐ 8 kV ☐ 15 kV	VCP ☐ 2 kV ☐ 4 kV ☒ 6 kV ☐ 8 kV ☐ 15 kV
--------------------	---	---	---	---

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

Required Performance Criteria: ☒ Complied

Location of Discharge:

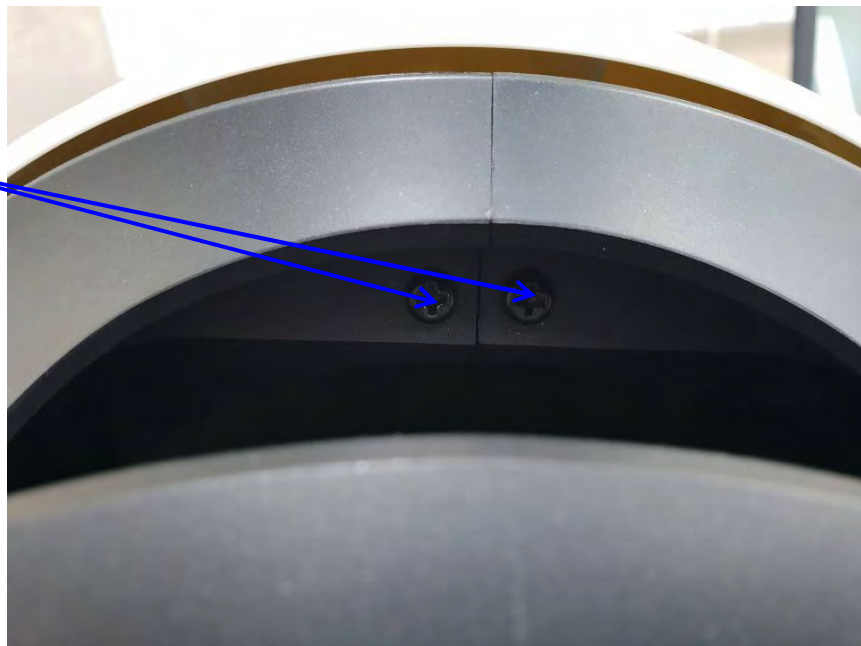
Air
Contact



1



2



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Report No.:
KES-E1-19T0023-R1
Page (23) of (64)

Test Data**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	Surface	Contact Discharge	A	-
2	Screw	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

N/A

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3.2 Radiated Electric Field Immunity

Reference Standard

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

Test Date

Jan. 12, 2019

Test Location

EMS-RS: ☐ SEMI ANECHOIC CHAMBER #2 ☒ SEMI ANECHOIC CHAMBER #3

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMS Test S/W	EMC32	R & S	10.10.02	-
☒	SIGNAL GENERATOR	SMB 100A	R & S	177586	08, 06, 2019
☒	BROADBAND AMPLIFIER	BBA100	R & S	101239	08, 06, 2019
☒	BROADBAND AMPLIFIER	100S1G6M1	AR	579931	08, 06, 2019
☒	POWER METER	NRP2	R & S	103475	08, 06, 2019
☒	AVG POWER SENSOR	NRP-Z91	R & S	102526	08, 06, 2019
☒	AVG POWER SENSOR	NRP-Z91	R & S	102527	08, 06, 2019
☒	STACKED DOUBLE LOG-PER- ANTENNA	STPL9128 E	Schwarzbeck	9128ES-121	-
☒	DIRECTIONAL COUPLER	KYDC-D1070-DX40	KY TELECOM	KY150001	08, 06, 2019
☒	DOUBLE RIDGED HORN ANTENNA	SAS-571	A.H.SYSTEM, INC	781	05, 02, 2019

Test Conditions

Temperature: 24,8 °C
Relative Humidity: 51,1 % R.H.
Atmospheric Pressure: 101,3 kPa



Test Specifications

Antenna Polarization: Horizontal & vertical unless indicated otherwise

Antenna Distance: ☒ 3 m

Field Strength: ☐ 1 V/m ☐ 3 V/m
☒ 10 V/m

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

Modulation: ☒ AM, 80 %, 1 kHz sine wave
☒ PM, 1 Hz (0,5 s ON : 0,5 s OFF)

Frequency step: ☒ 1 % step

Dwell Time: ☒ 1 s ☐ 3 s

of Sides Radiated: ☒ 4

Required Performance Criteria: ☒ Complied

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Report No.:
KES-E1-19T0023-R1
Page (26) of (64)

Test Data

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

Note: "Blank" = Not performed

Observations:

Complied – No degradation of function

Test Results

- ☒ PASS Required Performance Criteria
☐ NOT PASS Required Performance Criteria

Remarks

N/A

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3.3 Electrical Fast Transients/Bursts

Reference Standard

EN 61000-4-4:2012

Test Date

Jan. 13, 2019

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	AMETEK CTS	7.1.2	-
☒	ULTRA COMPACT SIMULATOR	UCS 500 N5	EM TEST	V0936105120	06, 26, 2019
☒	MOTOR VARIAC	MV2616	EM TEST	V0936105123	06, 26, 2019
☒	CAPACITIVE COUPLING CLAMP	HFK	EM TEST	070925	06, 26, 2019

Test Conditions

Temperature: 21,1 °C
Relative Humidity: 54,8 % R.H.
Atmospheric Pressure: 101,6 kPa

Test Specifications

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

Test Data

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

Mode of Application	Observations	
	(+) Burst (kV)	(-) Burst (kV)
L	Complied	Complied
N	Complied	Complied
L - N	Complied	Complied

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

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

☒ Signal ports and telecommunication ports – Coupling Clamp used

Mode of Application	Observations	
	(+) Burst (kV)	(-) Burst (kV)
RJ-45	Complied	Complied
RS-485	Complied	Complied
Alarm In	Complied	Complied
Alarm Out	Complied	Complied

Note: “Blank” = Not performed

Observations:

Complied – No degradation of function

Test Results

☒ PASS Required Performance Criteria

☐ NOT PASS Required Performance Criteria

Remarks

N/A

3.4 Surge Transients

Reference Standard

EN 61000-4-5:2014

Test Date

Jan. 08, 2019

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	AMETEK CTS	7.1.2	-
☒	ULTRA COMPACT SIMULATOR	UCS 500 N5	EM TEST	V0936105120	06, 26, 2019
☒	MOTOR VARIAC	MV2616	EM TEST	V0936105123	06, 26, 2019
☒	CDN	CNV 508N1	EM TEST	P1551168979	04, 25, 2019
☐	CDN	CNV 508T5	EM TEST	P1549168422	04, 25, 2019

Test Conditions

Temperature: 21,1 °C
Relative Humidity: 54,8 % R.H.
Atmospheric Pressure: 101,6 kPa



Test Specifications

AC Power Lines

Source Impedance: 12 ohm for common Mode and 2 ohm for differential Mode

Surge Amplitude : Common Mode
☐ (0,5 / 1,0 / 2,0) kV
Differential Mode
☒ (0,5 / 1,0) kV

Number of Surges: ☒ 5 surges per angle

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

Polarity: ☒ Positive & Negative

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

Required Performance Criteria: ☒ Complied

Other supply / Signal Lines

Source Impedance: 42 ohm for common Mode

Surge Amplitude: Common Mode
☐ (0,5 / 1,0) kV

Number of Surges: ☐ 5 Surges

Polarity: ☐ Positive & Negative

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

Required Performance Criteria: ☐ Complied

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Report No.:

KES-E1-19T0023-R1

Page (31) of (64)

Test Data☒ Line to Line - Differential Mode

Mode of Application	Observations	
	(+) Surge (kV)	(-) Surge (kV)
L - N	Complied	Complied

☐ Line to Earth - Common Mode

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

Signal Lines☐ Line to Earth - Common Mode

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

Note: "Blank" = Not performed

Observations:

Complied - No degradation of function

Test Results

- ☒ PASS Required Performance Criteria
☐ NOT PASS Required Performance Criteria
☐ NOT APPLICABLE

RemarksN/A

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3.5 Conducted Disturbance

Reference Standard

EN 61000-4-6:2014

Test Date

Jan. 12, 2019

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, 09, 2019
☒	ATTENUATOR	ATT6	EM TEST	1208-34	08, 08, 2019
☒	CDN	CDN-M2/M3N	EM TEST	0909-06	08, 06, 2019
☒	CDN	CDN T8RJ45	EM TEST	0909-09	08, 06, 2019
☒	EM INJECTION CLAMP	EM 101	Liithi	35943	02, 02, 2019

Test Conditions

Temperature: 20,9 °C
Relative Humidity: 55,1 % R.H.
Atmospheric Pressure: 101,8 kPa

Test Specifications

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

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

Modulation: ☒ AM, 80 %, 1 kHz sine wave
☒ PM, 1 Hz (0,5 s ON : 0,5 s OFF)

Frequency step: ☒ 1 % step

Dwell Time: ☒ 1 s ☐ 3 s

Required Performance Criteria: ☒ Complied

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Report No.:

KES-E1-19T0023-R1

Page (33) of (64)

Test Data☒ Input a.c. power ports

Coupling Location (Line Stressed)	Coupling Method	Observations
L – N	CDN	Complied

☐ Input d.c. power ports

Coupling Location (Line Stressed)	Coupling Method	Observations
-	-	-

☒ Signal ports and telecommunication ports

Coupling Location (Line Stressed)	Coupling Method	Observations
RJ-45	CDN T800	Complied
RS-485	Clamp	Complied
Alarm In	Clamp	Complied
Alarm Out	Clamp	Complied

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**N/A



3.6 Voltage Dips and Short Interruptions

Reference Standard

EN 61000-4-11:2004

Test Date

Jan. 13, 2019

Test Location

EMS-Voltage dip: Electro wave Shieldroom #3

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMS Test S/W	iec.control	AMETEK CTS	7.1.2	-
☒	ULTRA COMPACT SIMULATOR	UCS 500 N5	EM TEST	V0936105120	06, 26, 2019
☒	MOTOR VARIAC	MV2616	EM TEST	V0936105123	06, 26, 2019

Test Conditions

Temperature: 21,1 °C
Relative Humidity: 54,8 % R.H.
Atmospheric Pressure: 101,6 kPa



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KES-E1-19T0023-R1

Page (35) of (64)

Test Specifications & Observations/Remarks

<u>Test Level</u>	<u>Duration [in period/ms (50 Hz)]</u>	<u>Results</u>
☒ 20 % dip	☒ 250 / 5 000	<u>Complied</u>
☒ 30 % dip	☒ 25 / 500	<u>Complied</u>
☒ 60 % dip	☒ 10 / 200	<u>Complied</u>
☒ 100 % dip	☒ 250 / 5 000	<u>Complied</u>

- Voltage variations

☒ Unom + 10 %	☒ 253.0 V (ac)	<u>Complied</u>
☒ Unom - 15 %	☒ 195.5 V (ac)	<u>Complied</u>

Observations:

Complied – No degradation of function

Test Results

- ☒ PASS Required Performance Criteria
- ☐ NOT PASS Required Performance Criteria
- ☐ NOT APPLICABLE

Remarks

N/A

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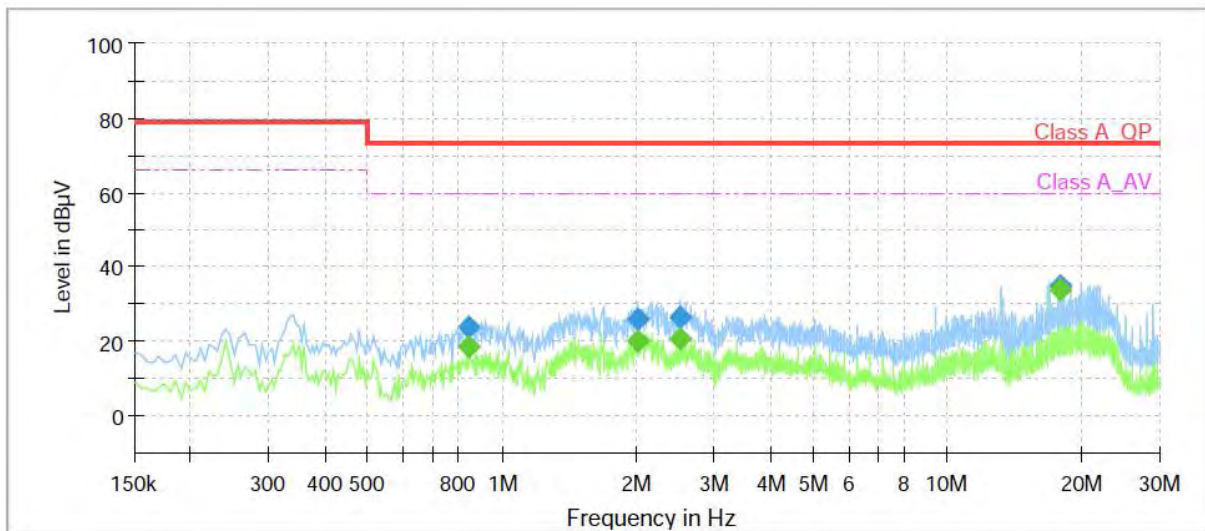
APPENDIX A – TEST DATA

Conducted Emissions at Mains Power Ports

[HOT]

Common Information

Test Description:	Conducted Emission
Model No.:	XNP-6371RH
Mode	AC_H
Operator Name:	KES



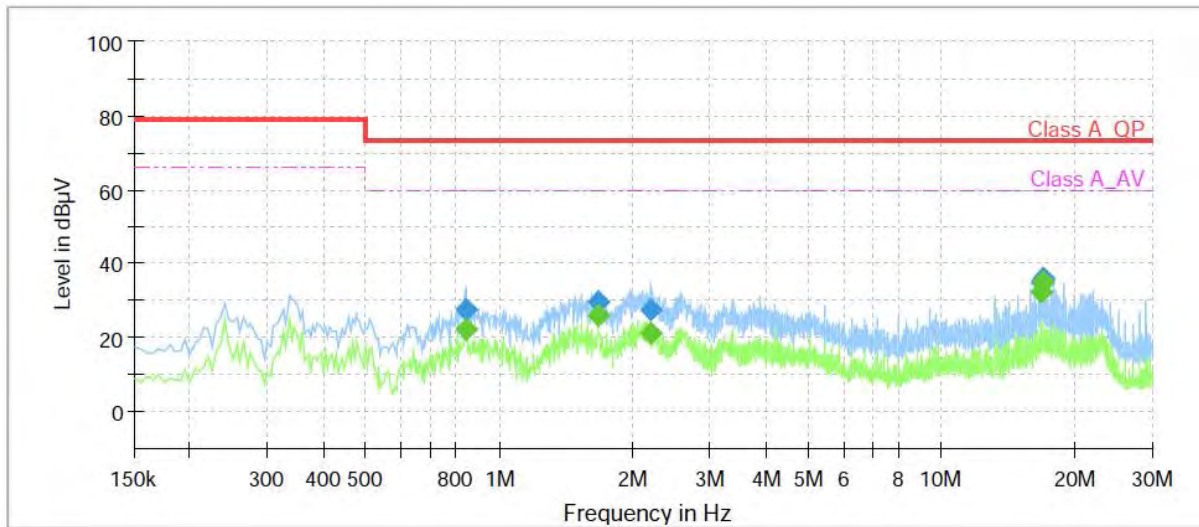
Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.840000	---	18.41	60.00	41.59	1000.0	9.000	L1	20.0
0.840000	23.82	---	73.00	49.18	1000.0	9.000	L1	20.0
2.010000	---	20.03	60.00	39.97	1000.0	9.000	L1	20.3
2.010000	26.13	---	73.00	46.87	1000.0	9.000	L1	20.3
2.525000	---	20.65	60.00	39.35	1000.0	9.000	L1	20.3
2.525000	26.48	---	73.00	46.52	1000.0	9.000	L1	20.3
17.920000	---	34.01	60.00	25.99	1000.0	9.000	L1	20.1
17.920000	34.99	---	73.00	38.01	1000.0	9.000	L1	20.1

[NEUTRAL]

Common Information

Test Description:	Conducted Emission
Model No.:	XNP-6371RH
Mode	AC_N
Operator Name:	KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.840000	---	22.33	60.00	37.67	1000.0	9.000	N	20.0
0.840000	27.61	---	73.00	45.39	1000.0	9.000	N	20.0
1.680000	---	25.72	60.00	34.28	1000.0	9.000	N	20.3
1.680000	29.86	---	73.00	43.14	1000.0	9.000	N	20.3
2.215000	---	21.00	60.00	39.00	1000.0	9.000	N	20.3
2.215000	27.63	---	73.00	45.37	1000.0	9.000	N	20.3
16.895000	---	32.45	60.00	27.55	1000.0	9.000	N	20.1
16.895000	34.93	---	73.00	38.07	1000.0	9.000	N	20.1
16.935000	---	34.89	60.00	25.11	1000.0	9.000	N	20.1
16.935000	35.77	---	73.00	37.23	1000.0	9.000	N	20.1

◆ Calculation

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

QuasiPeak / CAverage : The Final Value

Reading Value : Not shown in the table.

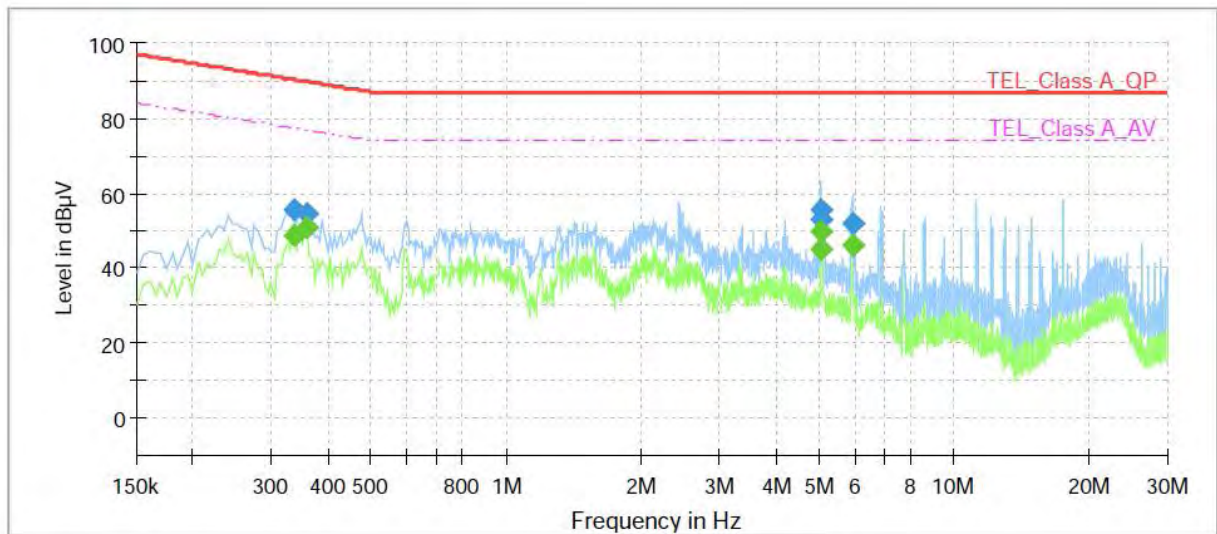
Corr. : Correction values (LISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

Conducted Emissions at Telecommunication Ports

[10 Mbps]

Common Information

Test Description: Telecommunication Emission
Model No.: XNP-6371RH
Mode: AC_10 Mbps
Operator Name: KES



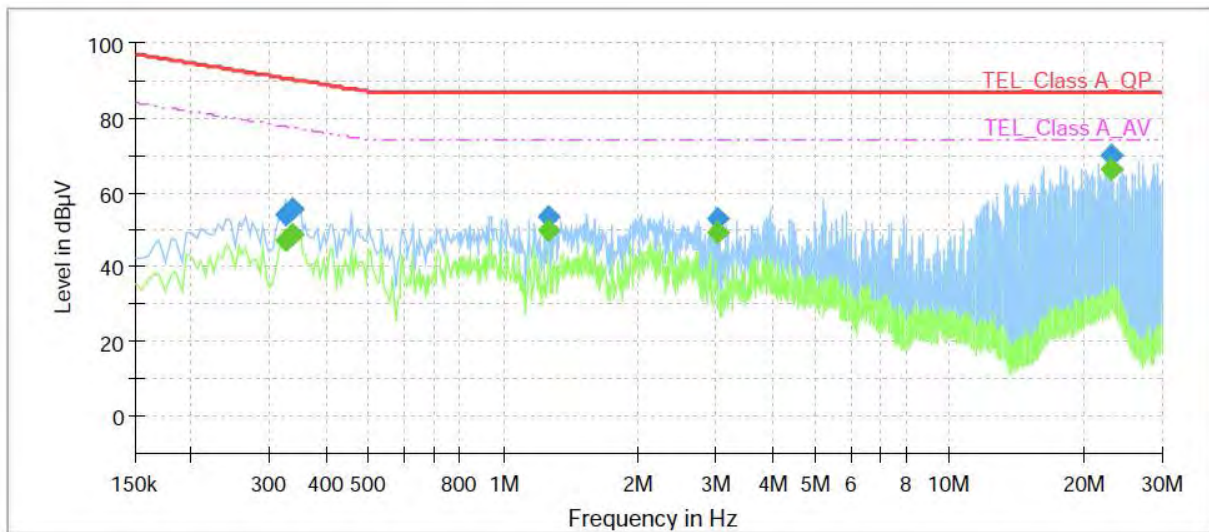
Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.335000	---	48.89	77.33	28.44	1000.0	9.000	Single Line	19.9
0.335000	55.59	---	90.33	34.74	1000.0	9.000	Single Line	19.9
0.360000	---	50.70	76.73	26.03	1000.0	9.000	Single Line	19.9
0.360000	54.30	---	89.73	35.43	1000.0	9.000	Single Line	19.9
5.050000	---	45.13	74.00	28.87	1000.0	9.000	Single Line	19.7
5.050000	52.73	---	87.00	34.27	1000.0	9.000	Single Line	19.7
5.055000	---	49.62	74.00	24.38	1000.0	9.000	Single Line	19.7
5.055000	55.37	---	87.00	31.63	1000.0	9.000	Single Line	19.7
5.925000	---	46.05	74.00	27.95	1000.0	9.000	Single Line	19.6
5.925000	52.11	---	87.00	34.89	1000.0	9.000	Single Line	19.6

[100 Mbps]

Common Information

Test Description: Telecommunication Emission
Model No.: XNP-6371RH
Mode: AC_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)
0.325000	---	47.20	77.58	30.38	1000.0	9.000	Single Line	19.8
0.325000	53.73	---	90.58	36.85	1000.0	9.000	Single Line	19.8
0.335000	---	48.74	77.33	28.59	1000.0	9.000	Single Line	19.8
0.335000	55.39	---	90.33	34.94	1000.0	9.000	Single Line	19.8
1.265000	---	50.00	74.00	24.00	1000.0	9.000	Single Line	20.1
1.265000	53.65	---	87.00	33.35	1000.0	9.000	Single Line	20.1
3.040000	---	49.45	74.00	24.55	1000.0	9.000	Single Line	20.0
3.040000	53.12	---	87.00	33.88	1000.0	9.000	Single Line	20.0
23.130000	---	66.02	74.00	7.98	1000.0	9.000	Single Line	20.2
23.130000	69.79	---	87.00	17.21	1000.0	9.000	Single Line	20.2

◆ Calculation

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

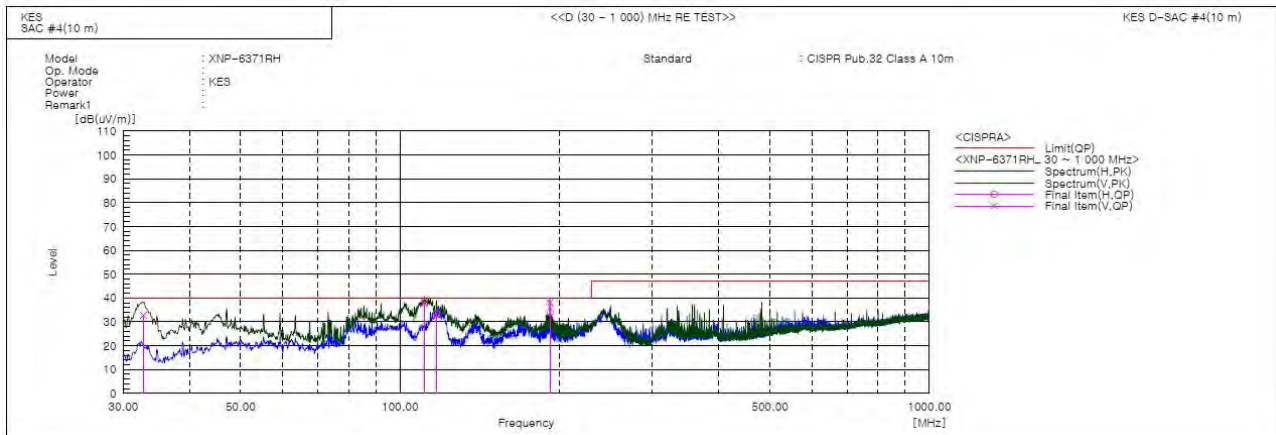
QuasiPeak / CAverage : The Final Value

Reading Value : Not shown in the table.

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



Radiated Electric Field Emissions(Below 1 GHz)



Final Result

No.	Frequency	(P)	Reading	c.f	Result	Limit	Margin	Height	Angle	Remark
	[MHz]		QP		QP	QP	QP			
			[dB(uV)]	[dB(1/m)]	[dB(uV/m)]	[dB(uV/m)]	[dB]	[cm]	[deg]	
1	32.774	V	57.9	-25.2	32.7	40.0	7.3	105.0	42.0	
2	111.090	V	60.8	-22.9	37.9	40.0	2.1	148.0	159.0	
3	117.275	H	57.2	-23.7	33.5	40.0	6.5	367.0	90.0	
4	192.011	V	60.8	-22.8	38.0	40.0	2.0	123.0	159.0	
5	191.995	H	56.9	-22.8	34.1	40.0	5.9	340.0	50.0	

◆ Calculation - SEMI ANECHOIC CHAMBER #4(10 m)

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

Margin(QP)[dB] = Limit[dB(μ V/m)] - Result(QP) [dB(μ V/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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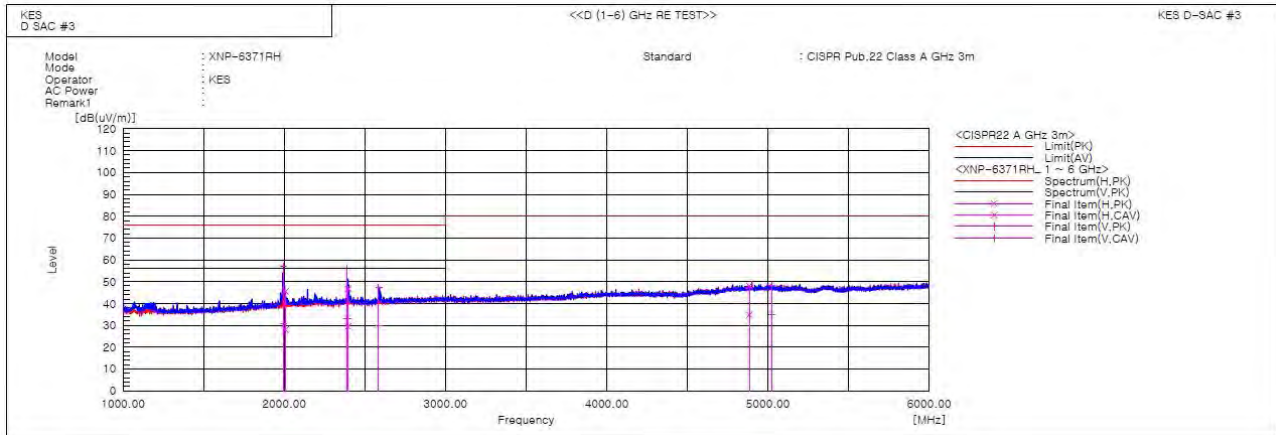
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Report No.:

KES-E1-19T0023-R1

Page (41) of (64)

Radiated Electric Field Emissions(Above 1 GHz)



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	1993.150	V	58.9	32.8	-2.1	56.8	30.7	76.0	56.0	19.2	25.3	100.0	23.3	
2	2006.378	H	47.7	30.2	-2.1	45.6	28.1	76.0	56.0	30.4	27.9	100.0	45.9	
3	2391.330	V	56.6	33.3	-0.4	56.2	32.9	76.0	56.0	19.8	23.1	100.0	27.3	
4	2395.609	H	47.2	29.8	-0.4	46.8	29.4	76.0	56.0	29.2	26.6	100.0	19.2	
5	2584.821	V	47.2	29.7	0.3	47.5	30.0	76.0	56.0	28.5	26.0	100.0	62.4	
6	4884.213	H	40.0	26.7	8.1	48.1	34.8	80.0	60.0	31.9	25.2	100.0	67.4	
7	5021.885	V	39.7	26.3	8.4	48.1	34.7	80.0	60.0	31.9	25.3	100.0	8.1	

◆ 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

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Harmonic Current Emissions and Voltage Fluctuations and Flicker

Average harmonic current results

Hn	I _{eff} [A]	% of Limit	Limit [A]	Result
1	125.801E-3			
2	3.467E-3			PASS
3	40.259E-3	1.945	2.07	PASS
4	1.505E-3			PASS
5	48.111E-3	4.689	1.03	PASS
6	631.429E-6			PASS
7	24.996E-3	3.607	693.00E-3	PASS
8	678.152E-6			PASS
9	14.485E-3	4.024	360.00E-3	PASS
10	885.501E-6			PASS
11	5.105E-3	1.719	297.00E-3	PASS
12	561.625E-6			PASS
13	4.343E-3			PASS
14	747.582E-6			PASS
15	4.438E-3			PASS
16	1.040E-3			PASS
17	2.965E-3			PASS
18	871.034E-6			PASS
19	2.103E-3			PASS
20	824.172E-6			PASS
21	1.972E-3			PASS
22	590.544E-6			PASS
23	1.875E-3			PASS
24	679.523E-6			PASS
25	1.351E-3			PASS
26	936.528E-6			PASS
27	1.237E-3			PASS
28	836.720E-6			PASS
29	1.275E-3			PASS
30	700.500E-6			PASS
31	1.121E-3			PASS
32	854.923E-6			PASS
33	1.247E-3			PASS
34	748.350E-6			PASS
35	841.742E-6			PASS
36	873.520E-6			PASS
37	1.030E-3			PASS
38	613.884E-6			PASS
39	882.507E-6			PASS
40	790.812E-6			PASS

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	I _{eff} [A]	% of Limit	Limit [A]	Result
1	125.938E-3			
2	3.724E-3			PASS
3	40.553E-3	0.882	4.60	PASS
4	1.596E-3			PASS
5	48.284E-3	2.118	2.28	PASS
6	747.174E-6			PASS
7	25.099E-3	1.630	1.54	PASS
8	758.311E-6			PASS
9	14.662E-3	1.833	800.00E-3	PASS
10	964.461E-6			PASS
11	5.205E-3	0.789	660.00E-3	PASS
12	664.962E-6			PASS
13	4.584E-3			PASS
14	838.245E-6			PASS
15	4.570E-3			PASS
16	1.167E-3			PASS
17	3.048E-3			PASS
18	949.486E-6			PASS
19	2.164E-3			PASS
20	915.654E-6			PASS
21	2.053E-3			PASS
22	661.282E-6			PASS
23	2.214E-3			PASS
24	760.330E-6			PASS
25	1.597E-3			PASS
26	1.060E-3			PASS
27	1.420E-3			PASS
28	924.163E-6			PASS
29	1.467E-3			PASS
30	791.956E-6			PASS
31	1.221E-3			PASS
32	949.762E-6			PASS
33	1.368E-3			PASS
34	909.263E-6			PASS
35	909.984E-6			PASS
36	962.065E-6			PASS
37	1.111E-3			PASS
38	681.305E-6			PASS
39	982.512E-6			PASS
40	885.072E-6			PASS

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.



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Report No.:
KES-E1-19T0023-R1
Page (44) of (64)

Test Data - Voltage Fluctuations

Maximum Flicker results

	EUT values	Limit	Result
Pst	0.028	1.00	PASS
Plt	0.028	0.65	PASS
dc [%]	0.000	3.30	PASS
dmax [%]	0.046	4.00	PASS
Tmax [s]	0.000	0.50	PASS

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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 GHz)



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Radiated Electric Field Emissions(Above 1 GHz)



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Harmonic Current Emissions and Voltage Fluctuations and Flicker



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Electrostatic Discharge



Radiated Electric Field Immunity



Electrical Fast Transients/Bursts



Surge Transients



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Conducted Disturbance



Voltage Dips and Short Interruptions



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EUT External Photographs

(Top)



(Bottom)



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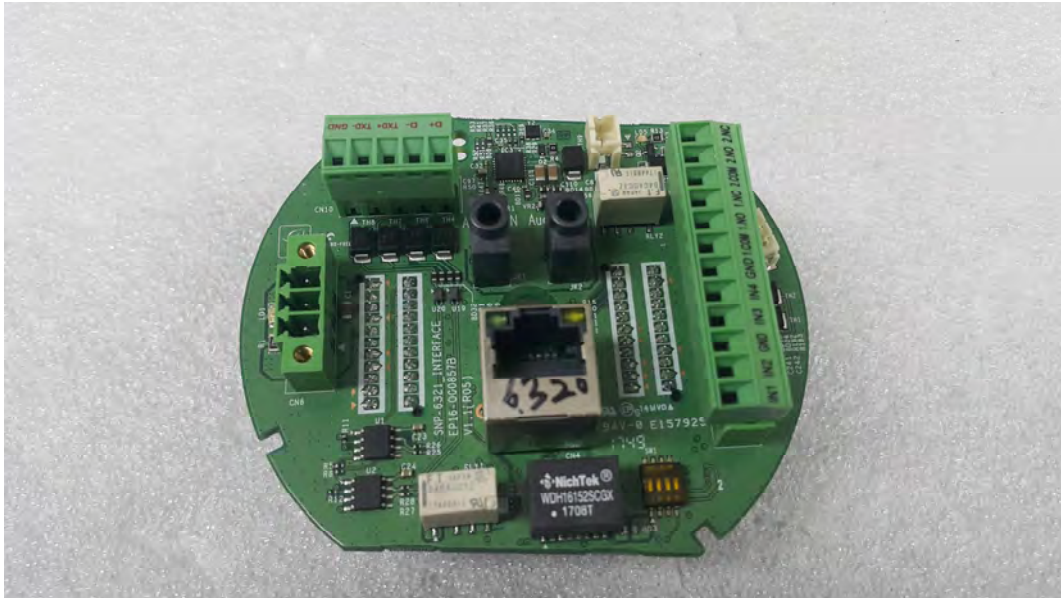
EUT Internal Photographs

(Internal View)

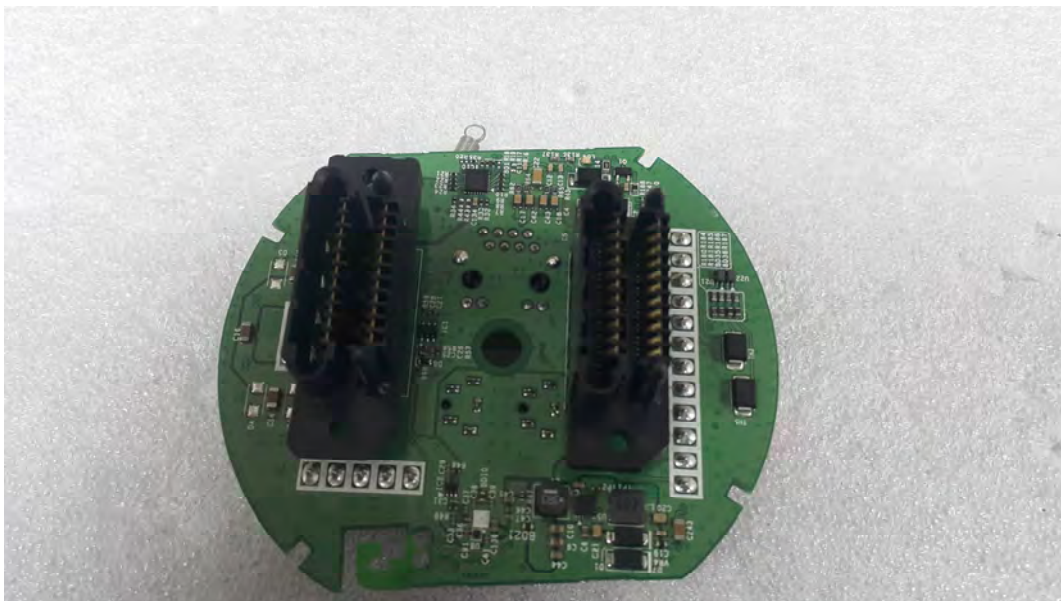


EUT Internal View – IO Board

(Front)



(Rear)



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EUT Internal View – IR Board

(Front)



(Rear)

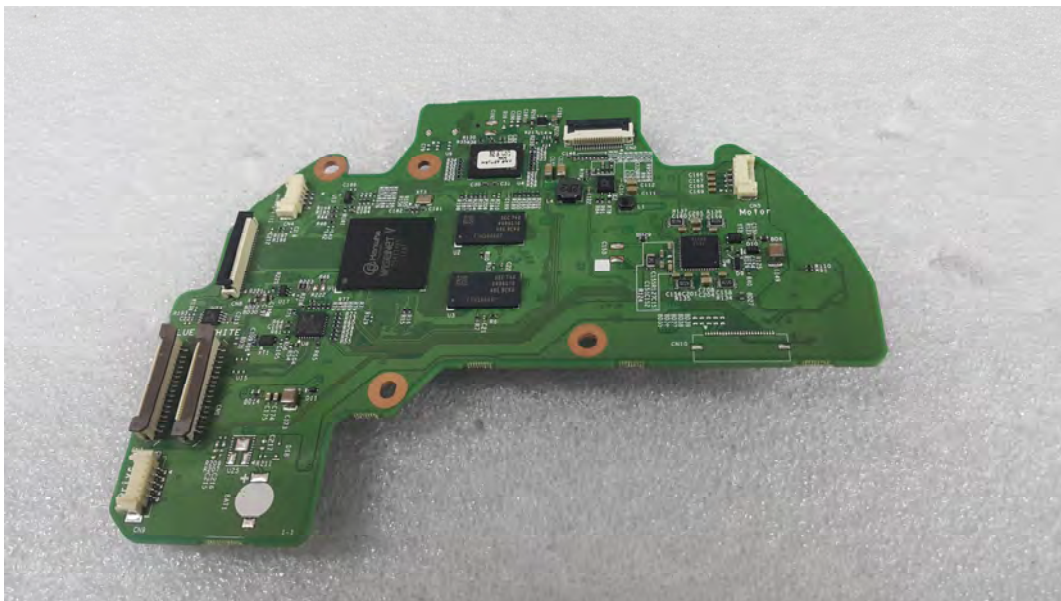


EUT Internal View – Network Board

(Front)



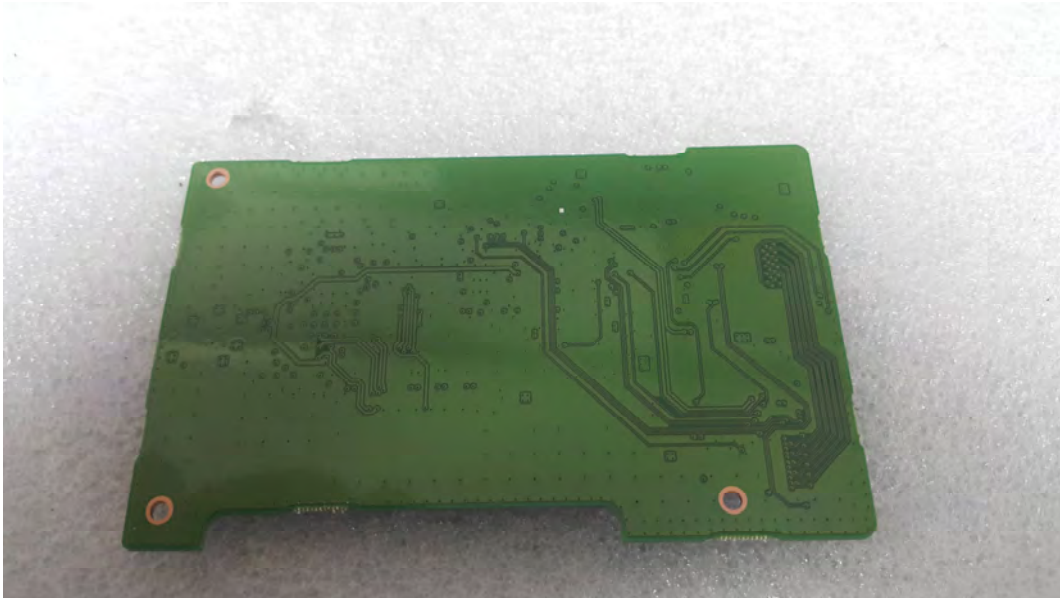
(Rear)



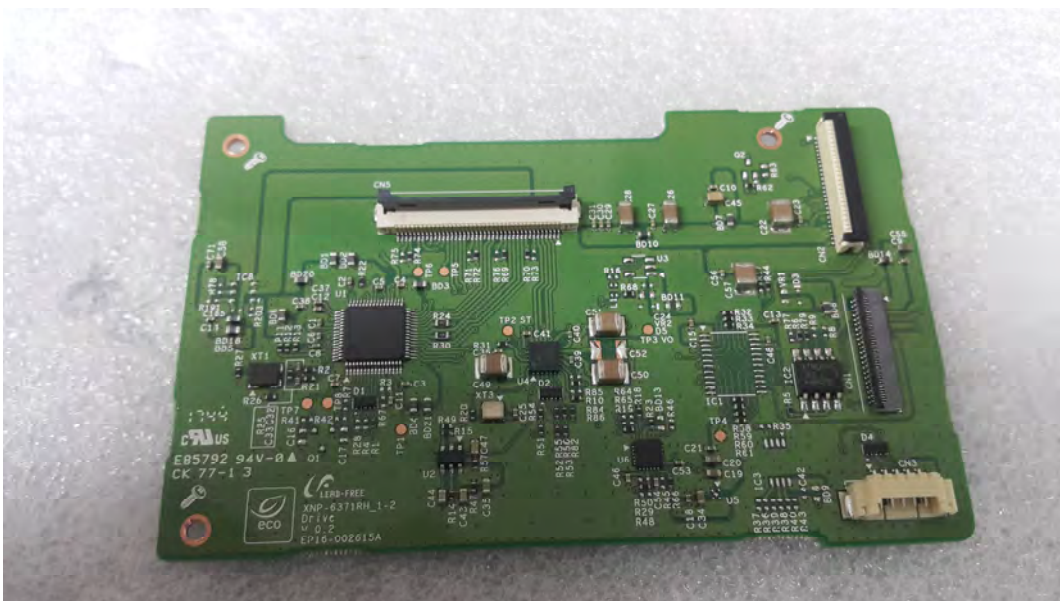
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EUT Internal View – Main Board

(Front)



(Rear)



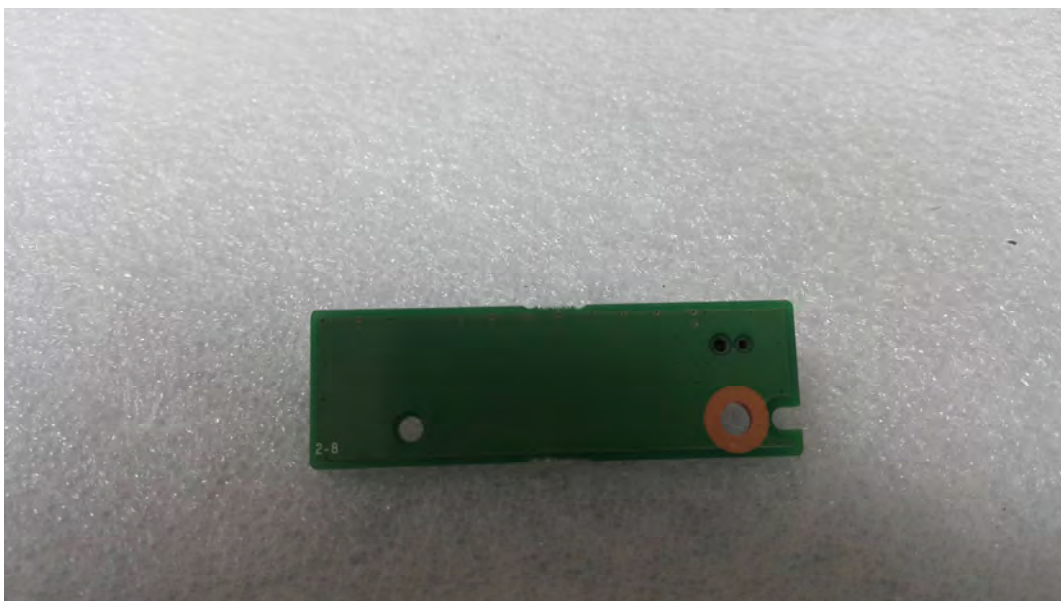
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EUT Internal View – SUB Board 1

(Front)



(Rear)

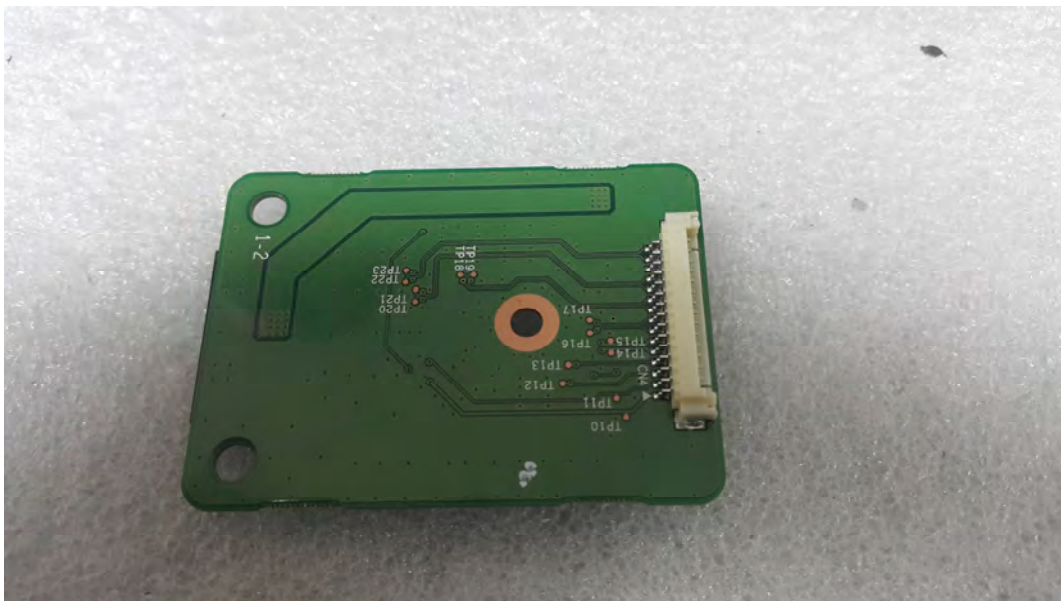


EUT Internal View – SUB Board 2

(Front)



(Rear)



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EUT Internal View – SUB Board 3

(Front)

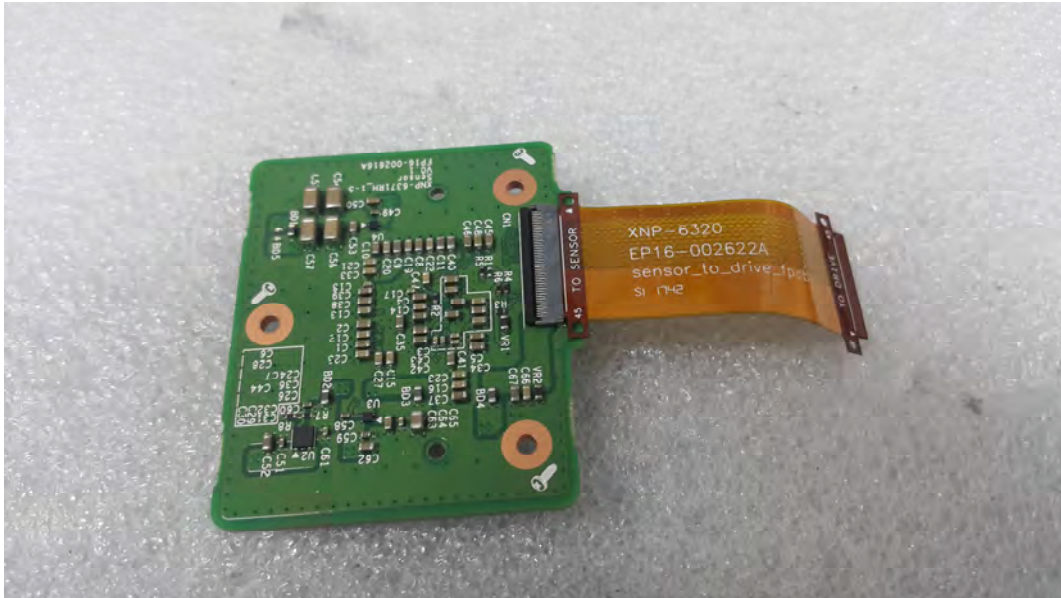


(Rear)

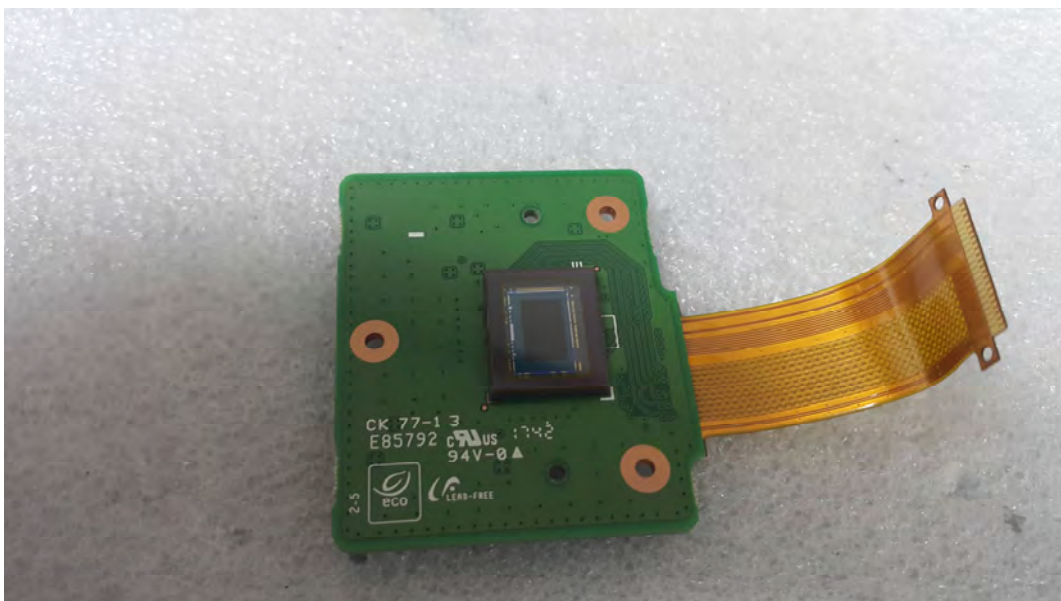


EUT Internal View – Sensor Board

(Front)

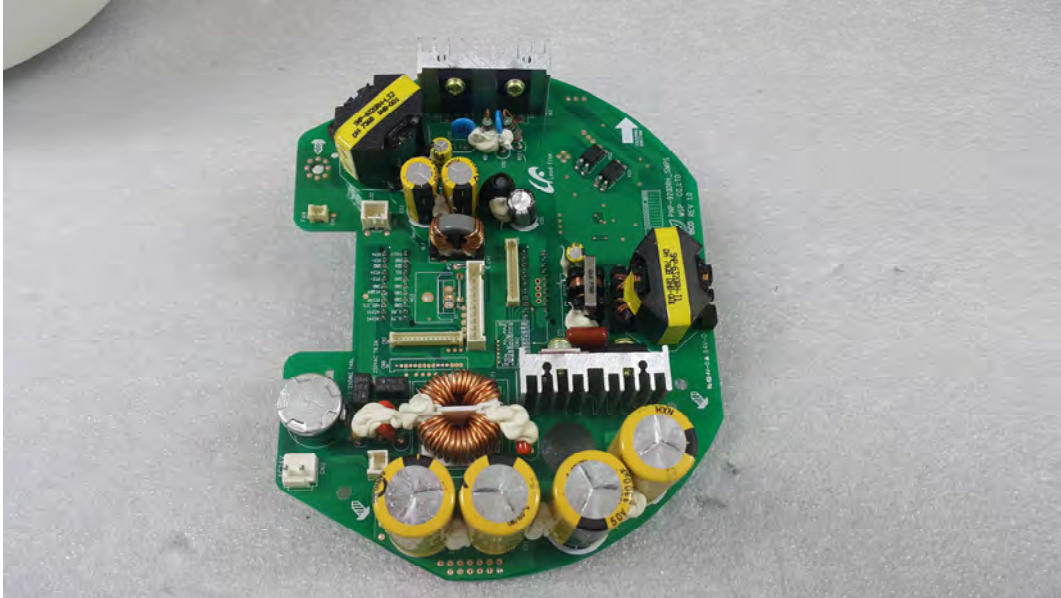


(Rear)

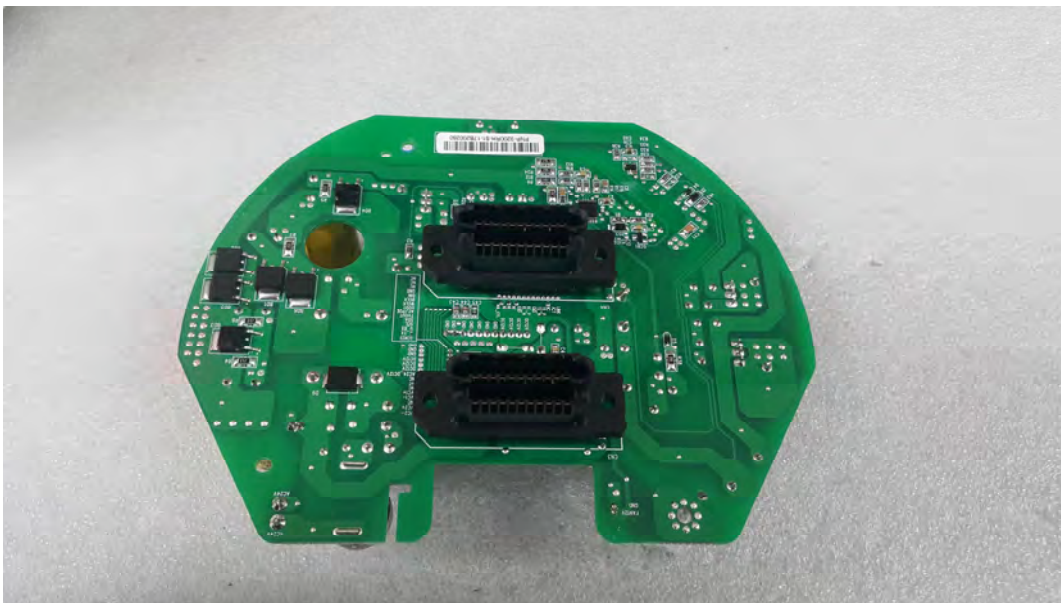


EUT Internal View – Power Board

(Front)



(Rear)



Label and Location



NETWORK CAMERA

Model No : XNP-6371RH

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

Made in China

