

**KES Co., Ltd.**

3701, 40, Simin-daero 365beon-gil,
Dongan-gu, Anyang-si, Gyeonggi-do, 14057, Korea
Tel: +82-31-425-6200 / Fax: +82-31-424-0450
www.kes.co.kr

Report No.:

KES-EM-22T0731-R1

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EMC TEST REPORT

Test Report No. : KES-EM-22T0731-R1
Date of Issue : Feb. 24, 2023
Product name : NETWORK CAMERA
Model/Type No. : XNV-6083RZ
Variant Model : -
Applicant : Hanwha Vision Co., Ltd
Applicant Address : 6, Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, Republic of Korea
Manufacturer : 1. HANWHA VISION VIETNAM COMPANY LIMITED
2. D-TECH CO.,LTD.
Manufacturer Address : 1. Lot O-2, Que Vo Industrial Zone extended area,
Nam Son commune, Bac Ninh city, Bac Ninh province, Vietnam
2. 173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi- do,
Korea (Suwon Industrial Complex)
Equipment authorization : **Supplier's Declaration of Conformity**
Date of Receipt : Jul. 29, 2022
Test date : Aug. 03, 2022 ~ Aug. 04, 2022
Test Results : ☒ **In Compliance** ☐ **Not in Compliance**

Tested by

Dae Hyun, Kim
EMC Test Engineer

Reviewed by

Dong-Hun, Jang
EMC Technical Manager

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
Aug. 25, 2022	KES-EM-22T0731	Issued
Feb. 24, 2023	KES-EM-22T0731-R1	Change the Applicant and manufacturer at the request of the customer

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1.0 General Product Description

Main Specifications of EUT are:

	XNV-6083RZ	Radiometry	
Video		Temperature Detect Range	None
Imaging Device	1/2.8" progressive CMOS	Temperature Accuracy	None
Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	Temperature Detection	None
Max. Frame rate	H.265/H.264: Max. 120fps/100fps(60Hz/50Hz)(WDR on) Max. 60fps/50fps(60Hz/50Hz)(WDR on) MJPEG: Max. 30fps/25fps(60Hz/50Hz)	Additional	None
NETD	None	Network	
Pixel Size	None	Ethernet	Metal shielded RJ-45(10/100/1000BASE-T)
Min. Illumination	Color: 0.01Lux(F1.4, 1/30sec, 30IRE) B/W: 0.001Lux(F1.4, 1/30sec, 30IRE), 0Lux(IR LED on), 30/25fps Color: 0.02Lux(F1.4, 1/60sec, 30IRE) B/W: 0.002Lux(F1.4, 1/60sec, 30IRE), 0Lux(IR LED on), 60/50fps Color: 0.04Lux(F1.4, 1/120sec, 30IRE) B/W: 0.004Lux(F1.4, 1/120sec, 30IRE), 0Lux(IR LED on), 120/100fps	Video Compression	H.265/H.264: Main/High, MJPEG
Video Out	None	Audio Compression	None
Video Transmission Distance	None	Smart Codec	Manual(See anal.) WiseStreamII, WiseStreamIII(Based on AI engine)
Lens		Video Quality Adjustment	H.264/H.265: Target bitrate level control MJPEG: Target bitrate level control
Focal Length (Zoom Ratio)	2.8~12mm(4.3x) motorized varifocal	Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Max. Aperture Ratio	F1.4(Wide) ~ F3.6(Tele)	Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 10 profiles, 3 virtual channel support)
Angular Field of View	H: 120°(Wide) ~ 27°(Tele) V: 63°(Wide) ~ 15°(Tele) D: 143°(Wide) ~ 32°(Tele)	Protocol	IPV4, IPV6, TCP/IP, UDP/IP, RTP/UDP, RTP/CP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, CMP, ICMP, SNMP(1,2,3,5/SMB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP, TCP, UDP, Unicast
Min. Object Distance	0.5m(1.64ft)		TFM 2.0 (FIPS 140-2 level 2) HTTPS(SSL) Login Authentication Digest Login Authentication IP Address Filtering
Focus Control	Simple focus, Manual	Security	User access log 802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2) Device Certificate(Ianwha Technin Root CA, pre-installed) Secure by default certificate Secure OS/Boot/Storage, Verify firmware forgery
Lens Type	DC auto iris with hall sensor (IR connected)	SIP support (VoIP, Peer-to-peer, SIP/P)	None
Mount Type	None	Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI(HTTP API) Wisetnet open platform
Optional Lens	None	General	
Pan / Tilt / Rotate		Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Greek, Hungarian
Pan / Tilt / Rotate Range	Remote adjustment(Max. 200cycles) 0°~350° / 0°~85° / 0°~340°	Web Viewer	None
Pan Range	None	Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
Pan Speed	None	Memory	2GB RAM, 512MB Flash
Tilt Range	None	Environmental & Electrical	
Tilt Speed	None	Operating Temperature / Humidity	-50°C ~ +55°C(58°F ~ +131°F) +74°C(165°F)(Max) based on NEMA TS-2(2,7) * Start up should be done at above -30°C (0~95%RH(non-condensing)) Humidity control /w AIR vent
Rotate Range	None	Storage Temperature / Humidity	-50°C ~ +60°C(58°F ~ +140°F) / Less than 90% RH
Sequence	None	Certification	IP66/IP67/IP68, NEMA4X, IK10+
Preset Accuracy	None	Input Voltage	PoE+ (IEEE802.3at, Class4)
Operational		Power Consumption	PoE+: Max 22.5W, typical 11W
Camera Title	Displayed up to 85 characters	Mechanical	
Direction Indicator	None	Color / Material	White / Aluminum Hard-coated dome bubble
Day & Night	Auto(ICR)	RAL Code	RAL9003
Backlight Compensation	BLC, HLC, WDR, SDR	Product Dimensions / Weight	Ø180x135mm(7.09x5.31"); 2000g(4.41 lb)
Wide Dynamic Range	extremeWDR (150dB)	Compatible Conduit hole / Gangbox	19.1mm(3/4") (M25) single, double, 4" octagon, 4" square
Digital Noise Reduction	WiseNRⅡ(Based on AI engine), SSNRV	Hanging Mount (Dome)	SBP-187H/MW
Digital Image Stabilization	Support	Skin Cover (Dome)	None
Defog	Support	Weather Cap (Dome)	Include
Motion Detection	Box, Spot, Polygonal zones 32zea, 4point Quadrangle zones	Power Module	None
Privacy Masking	Color: Gray, Green, Red, Blue, Black, White - Mosaic	Backbox	None
Gain Control	Off / Max Gain / Manual	Certifications & Standards	
White Balance	ATW / Narrow ATW / AWC / Manual / Indoor / Outdoor	Network	None
LDC	Support (Fill/stretch mode)	EMC	EN 50121-4 ICC 47 CFR 15 Subpart B Class A ICES 3(A)/NMB 3(A) CEA/ICCA - EN 55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3 VCCI CISPR 32 Class A RCM AS/NZS CISPR 32 Class A KS C 9832 Class A, KS C 9835
Electronic Shutter Speed	Minimum / Maximum / Prefer / Anti Flicker (2~1/12,000sec) Auto Prefer shutter control(based on AI engine)	Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1 EN IEC 60000
Digital PTZ	Support(preset/group)	Environment	IEC 60529 IP66/IP67, ISO 20653 IP68/IK, IEC 62262 IK10+ NEMA 250 type 4X
Video Rotation	Flip, Mirror, Halfway view(90°/270°)	Video	None
	Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle(type:car/bus/truck/motorcycle/bicycle) Support Detection/Shot Analytics events based on AI engine - Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit) Analytics events - Defocus detection, Motion detection, Tampering, Fog detection, Virtual area(Appear/Disappear) * Audio detection, Sound classification(with NW I/O box SPM-4210)	DORI (EN62676-4 standard)	
Business Intelligence	None	Detect (25PPM/ 8PPF)	Wide: 22.2m(72.74ft) / Tele: 159.9m(524.76ft)
Serial Interface	None	Observe (33PPM/ 19PPF)	Wide: 8.9m(29.09ft) / Tele: 64.0m(209.90ft)
Alarm I/O	None	Recognize (125PPM/ 38PPF)	Wide: 4.4m(14.55ft) / Tele: 32.0m(104.95ft)
Alarm Triggers	Analytics, Network disconnect, App event, Time schedule * Alarm input(with NW I/O Box SPM-4210)	Identify (250PPM/ 76PPF)	Wide: 2.2m(7.27ft) / Tele: 16.0m(52.48ft)
	When alarm trigger occurred - File upload(image): e-mail/FTP - Notification: e-mail - Recording: SD/SDHC/SDXC or NAS recording at event triggers - Alarm output(with NW I/O box SPM-4210) - Handover/PTZ preset, Send message by HTTP/HTTPS/TCP		
Alarm Events			
Audio In	None		
Audio Out	None		
IR Viewable Length	15m(49.21ft) 30m(98.43ft) based on scene		
IR Illuminator (Optional)	None		
Water Removal	None		
Auto Tracking	None		
Coaxial Protocol	None		
Color Palettes	None		

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1.1 Test Voltage & Frequency

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

☒ AC 120 V, 60 Hz (PoE Adapter Input Power)

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-6083RZ	-	HANWHA VISION VIETNAM COMPANY LIMITED	EUT

1.5 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
PoE Adapter	PT-PSE109GBRO-AH	-	Dongguan PROCET Network Technology Co.,Ltd	-
Notebook	P95G001	8KM8HT2	DELL INC.	-
Notebook Adapter	HA65NM130	-	Chicony Power Technology(Suzhou) Co.,Ltd.	-
Micro SD Card	-	-	Sandisk	-



1.6 External I/O Cabling

Start		END		Cable Spec.	
Description	I/O Port	Description	I/O Port	Length	Shield
NETWORK CAMERA (EUT)	Micro SD Card Slot	Micro SD Card	Micro SD Card Slot	-	-
	RJ-45 (PoE)	PoE Adapter	RJ-45 (PoE)	3.0	S
PoE Adapter	RJ-45 (LAN)	Notebook	RJ-45 (LAN)	1.5	U
Notebook	DC Jack	Notebook Adapter	DC Jack	1.8	U

* Unshielded=U, Shielded=S

1.7 EUT Operating Mode(s)

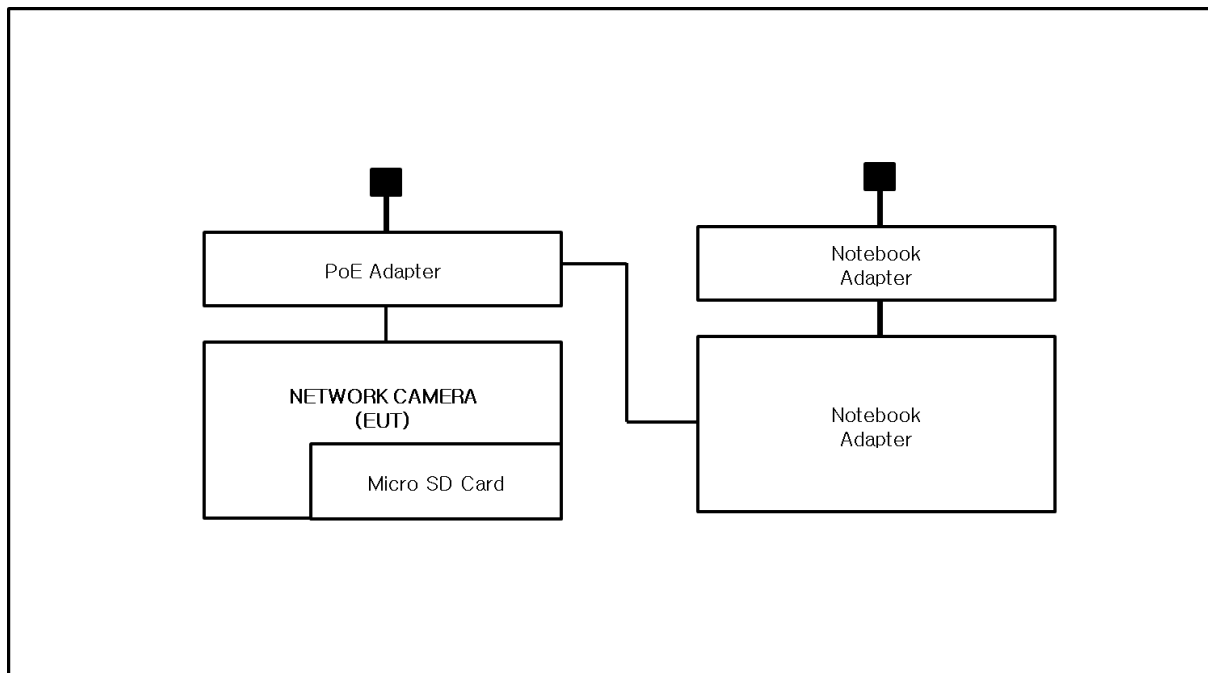
Test Mode	operating
Operating	Check the Normal Operation status. after testing, check if the recording is normally done on the Micro SD Card

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

1.8 Configuration

■ AC Main

□ DC Main



1.9 Remarks when standards applied

The USB, VIDEO ports were excluded from the test as administrator ports.

1.10 Calibration Details of Equipment Used for Measurement

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

1.11 Test Facility

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

1.12 Laboratory Accreditations and Listings

Country	Agency	Scope of Accreditation	Logo
KOREA	RRA	EMI (3 m & 10 m Semi-Anechoic Chamber and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 KR0100
International	KOLAS	EMI (3 m & 10 m Semi-Anechoic Chamber and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 KT489
USA	FCC	3 m & 10 m Semi-Anechoic Chamber Conducted test site to perform FCC Part 15/18 measurements.	 KR0100
Canada	ISED	3 m & 10 m Semi-Anechoic Chamber and Conducted test site	 23298
JAPAN	VCCI	EMI (3 m & 10 m Semi-Anechoic Chamber and conducted test site)	 C-20136, T-20137, R-20181, G-20176
Europe	TÜV SÜD	EMI (3 m & 10 m Semi-Anechoic Chamber and conducted test site) EMS (ESD, RS, EFT/Burst, Surge, CS, Magnetic, Dips and interruptions)	 CARAT 001633 0004



2.0 Test Regulations

The emissions tests were performed according to following regulations:

☒ **47 CFR Part 15, Subpart B**

☐ CISPR 22:2009 +A1:2010

☐ Class A

☐ Class B

☒ ANSI C63.4a-2017

☒ Class A

☐ Class B

☒ **IC Regulation ICES-003 Issue 7**

☐ CAN/CSA-CISPR 32:17

☐ Class A

☐ Class B

☒ ANSI C63.4a-2017

☒ Class A

☐ Class B

2.1 Conducted Emissions at Mains Power Ports

Test Date

Aug. 04, 2022

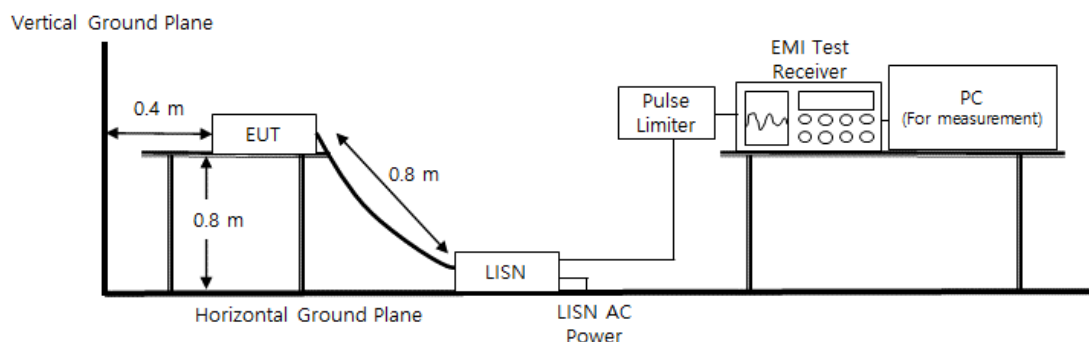
Test Location

Electro wave Shieldroom #6

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI Test S/W	EMC32	R & S	9.12.00	-
☒	EMI TEST RECEIVER	ESR3	R & S	101783	12, 28, 2022
☒	LISN	ENV216	R & S	101787	12, 27, 2022
☒	LISN	ESH2-Z5	R & S	100450	12, 27, 2022
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	12, 27, 2022

Diagram of test setup





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Test Conditions

Temperature: (24,6 ± 0,1) °C

Relative Humidity: (45,9 ± 0,1) % 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.

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2.2 Radiated Electric Field Emissions(Below 1 GHz)

Test Date

Aug. 03, 2022

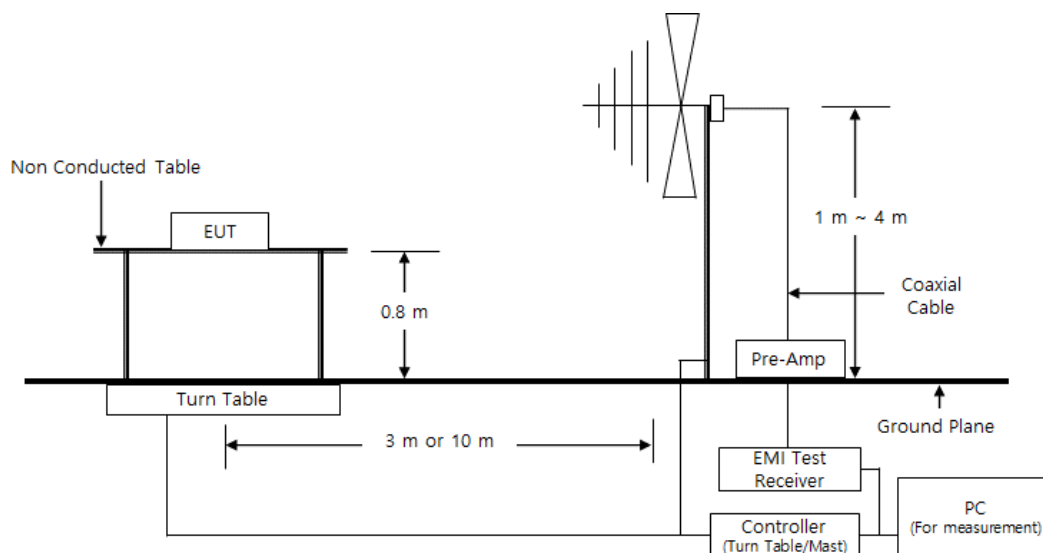
Test Location

☐ 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	03, 31, 2023
☒	AMPLIFIER	SCU 01	R & S	100603	11, 24, 2022
☒	TRILOG-BROADBAND ANTENNA	VULB9163	Schwarzbeck	715	12, 08, 2022
☒	ATTENUATOR	8491A	HP	32173	03, 08, 2023

Diagram of test setup





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Test Conditions

Temperature: (24,5 ± 0,2) °C

Relative Humidity: (46,3 ± 0,1) % 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

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2.3 Radiated Electric Field Emissions(Above 1 GHz)

Test Date

Aug. 03, 2022

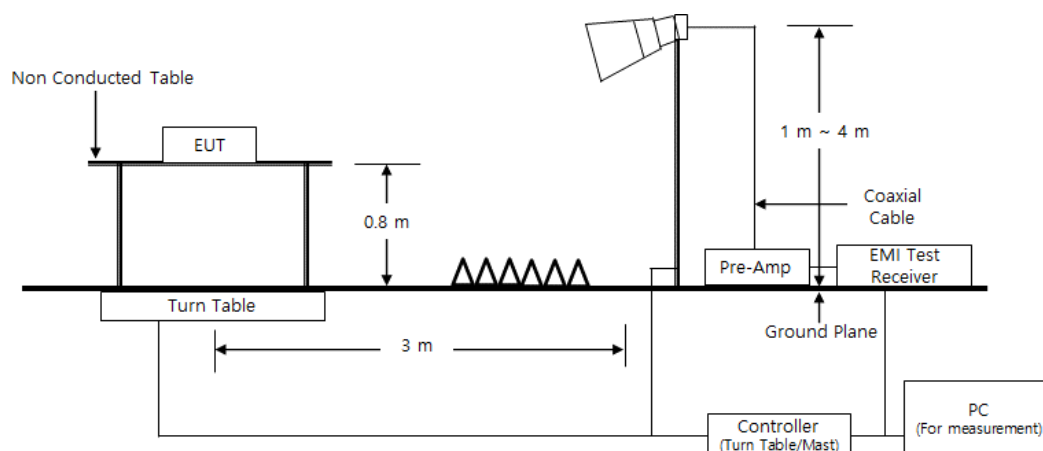
Test Location

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	03, 31, 2023
☒	PREAMPLIFIER	8449B	AGILENT	3008A01742	12, 27, 2022
☒	HORN ANTENNA	BBHA 9120D	SCHWARZBECK	9120D-1802	12, 16, 2022

Diagram of test setup





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Test Conditions

Temperature: (24,6 ± 0,2) °C

Relative Humidity: (45,9 ± 0,2) % R.H.

Frequency Range of Measurement

1 GHz to 5 GHz

Instrument Settings

IF Band Width: 1 MHz

Test Results

The requirements are:

☒ PASS

☐ NOT PASS

☐ NOT APPLICABLE

Remarks

See Appendix A for test data.

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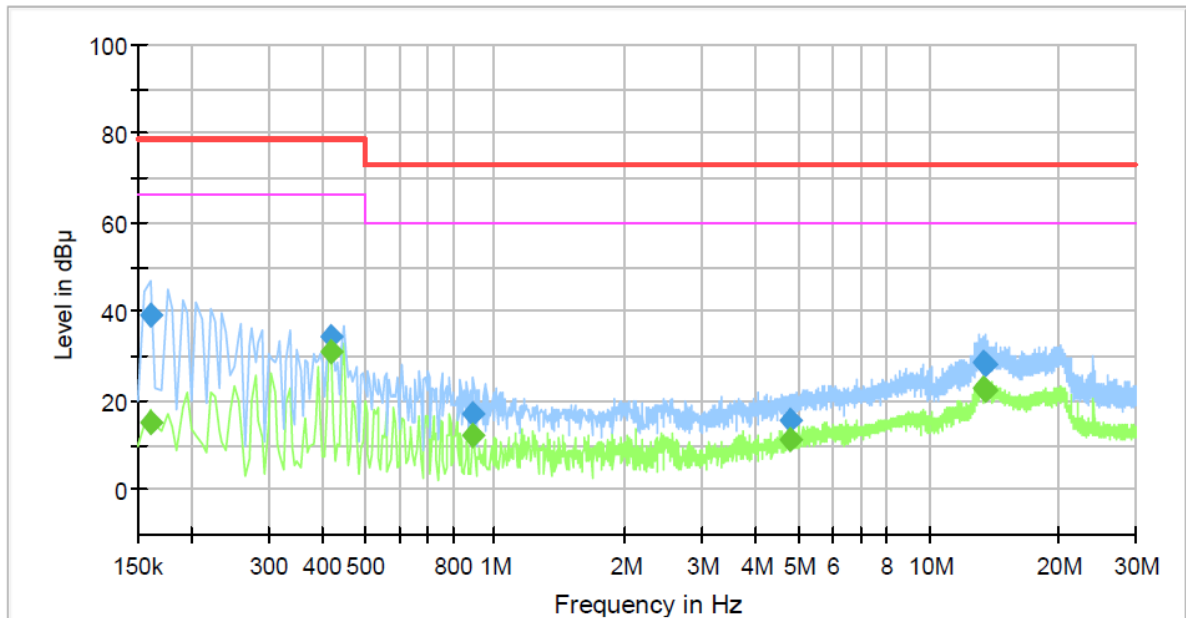
APPENDIX A – TEST DATA

Conducted Emissions at Mains Power Ports

HOT LINE

Common Information

Test Description: Conducted Emission
Model No.: XNV-6083RZ
Phase:
Mode:
Operator Name: KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.160000	---	15.20	66.00	50.80	1000.0	9.000	L1	19.4
0.160000	39.42	---	79.00	39.58	1000.0	9.000	L1	19.4
0.420000	---	30.79	66.00	35.21	1000.0	9.000	L1	19.6
0.420000	34.38	---	79.00	44.62	1000.0	9.000	L1	19.6
0.890000	---	12.07	60.00	47.93	1000.0	9.000	L1	20.1
0.890000	17.09	---	73.00	55.91	1000.0	9.000	L1	20.1
4.805000	---	11.18	60.00	48.82	1000.0	9.000	L1	19.7
4.805000	15.59	---	73.00	57.41	1000.0	9.000	L1	19.7
13.340000	---	22.75	60.00	37.25	1000.0	9.000	L1	19.9
13.340000	28.80	---	73.00	44.20	1000.0	9.000	L1	19.9
13.500000	---	22.51	60.00	37.49	1000.0	9.000	L1	19.9
13.500000	28.24	---	73.00	44.76	1000.0	9.000	L1	19.9

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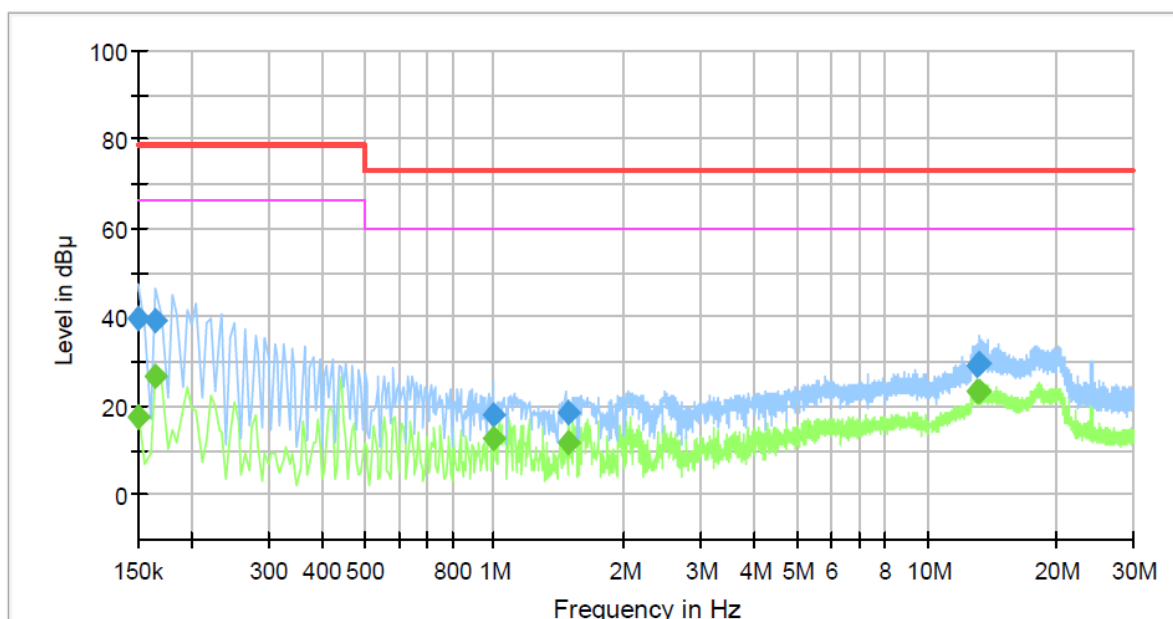
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NEUTRAL LINE

Common Information

Test Description: Conducted Emission
 Model No.: XNV-6083RZ
 Phase:
 Mode:
 Operator Name: KES



Final Result

Frequency (MHz)	QuasiPeak (dBμV)	CAverage (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	---	17.29	66.00	48.71	1000.0	9.000	N	19.4
0.150000	39.68	---	79.00	39.32	1000.0	9.000	N	19.4
0.165000	---	26.74	66.00	39.26	1000.0	9.000	N	19.4
0.165000	39.17	---	79.00	39.83	1000.0	9.000	N	19.4
0.995000	---	12.76	60.00	47.24	1000.0	9.000	N	20.0
0.995000	18.01	---	73.00	54.99	1000.0	9.000	N	20.0
1.490000	---	11.72	60.00	48.28	1000.0	9.000	N	20.2
1.490000	18.30	---	73.00	54.70	1000.0	9.000	N	20.2
13.125000	---	23.32	60.00	36.68	1000.0	9.000	N	19.9
13.125000	29.25	---	73.00	43.75	1000.0	9.000	N	19.9
13.210000	---	23.32	60.00	36.68	1000.0	9.000	N	19.9
13.210000	29.35	---	73.00	43.65	1000.0	9.000	N	19.9

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

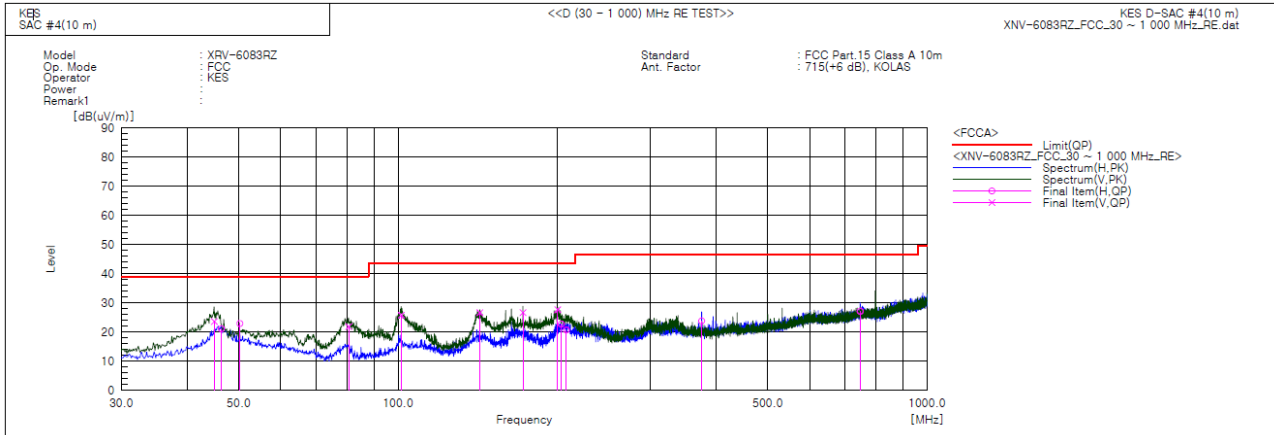
Report No.:

KES-EM-22T0731-R1

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Radiated Electric Field Emissions(Below 1 GHz)

- 47 CFR Part 15, Subpart B



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	44.956	V	45.0	-21.4	23.6	39.0	15.4	105.0	288.0	
2	46.369	H	42.4	-21.3	21.1	39.0	17.9	400.0	314.0	
3	50.249	H	43.9	-21.0	22.9	39.0	16.1	369.0	276.0	
4	80.683	V	49.4	-27.6	21.8	39.0	17.2	113.0	125.0	
5	101.425	V	48.3	-22.5	25.8	43.5	17.7	100.0	51.0	
6	142.770	V	52.2	-25.5	26.7	43.5	16.8	100.0	178.0	
7	172.226	V	50.8	-24.1	26.7	43.5	16.8	100.0	288.0	
8	200.356	V	48.6	-20.9	27.7	43.5	15.8	100.0	269.0	
9	203.509	H	43.6	-20.9	22.7	43.5	20.8	400.0	109.0	
10	208.116	H	41.5	-20.8	20.7	43.5	22.8	400.0	332.0	
11	374.956	H	38.6	-14.8	23.8	46.5	22.7	265.0	332.0	
12	747.800	H	33.4	-6.3	27.1	46.5	19.4	400.0	239.0	

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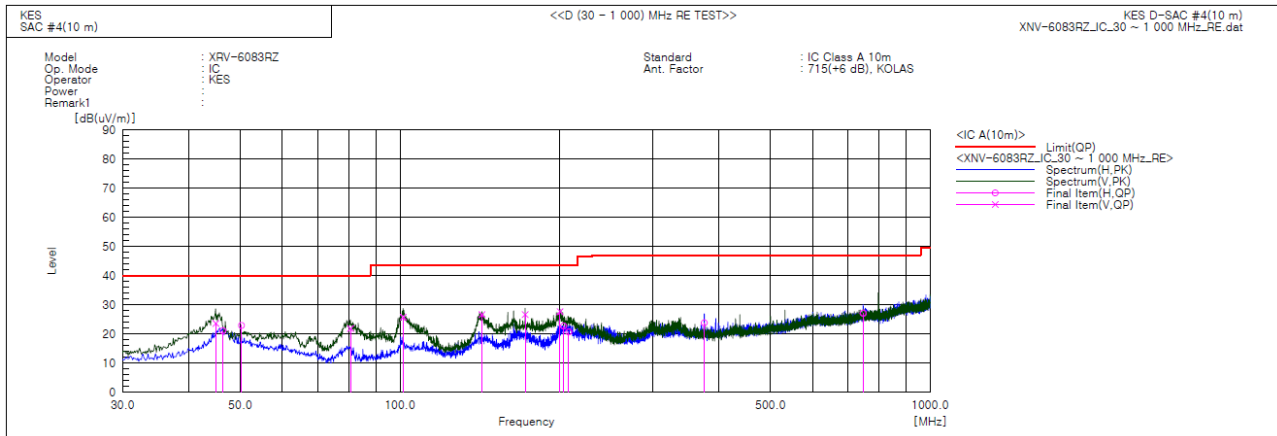
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KES-EM-22T0731-R1

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- IC Regulation ICES-003 Issue 7



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	44.956	V	45.0	-21.4	23.6	40.0	16.4	105.0	288.0	
2	46.369	H	42.4	-21.3	21.1	40.0	18.9	400.0	314.0	
3	50.249	H	43.9	-21.0	22.9	40.0	17.1	369.0	276.0	
4	80.683	V	49.4	-27.6	21.8	40.0	18.2	113.0	125.0	
5	101.425	V	48.3	-22.5	25.8	43.5	17.7	100.0	51.0	
6	142.770	V	52.2	-25.5	26.7	43.5	16.8	100.0	178.0	
7	172.226	V	50.8	-24.1	26.7	43.5	16.8	100.0	288.0	
8	200.356	V	48.6	-20.9	27.7	43.5	15.8	100.0	269.0	
9	203.509	H	43.6	-20.9	22.7	43.5	20.8	400.0	109.0	
10	208.116	H	41.5	-20.8	20.7	43.5	22.8	400.0	332.0	
11	374.956	H	38.6	-14.8	23.8	47.0	23.2	265.0	332.0	
12	747.800	H	33.4	-6.3	27.1	47.0	19.9	400.0	239.0	

◆ Calculation - SAC #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

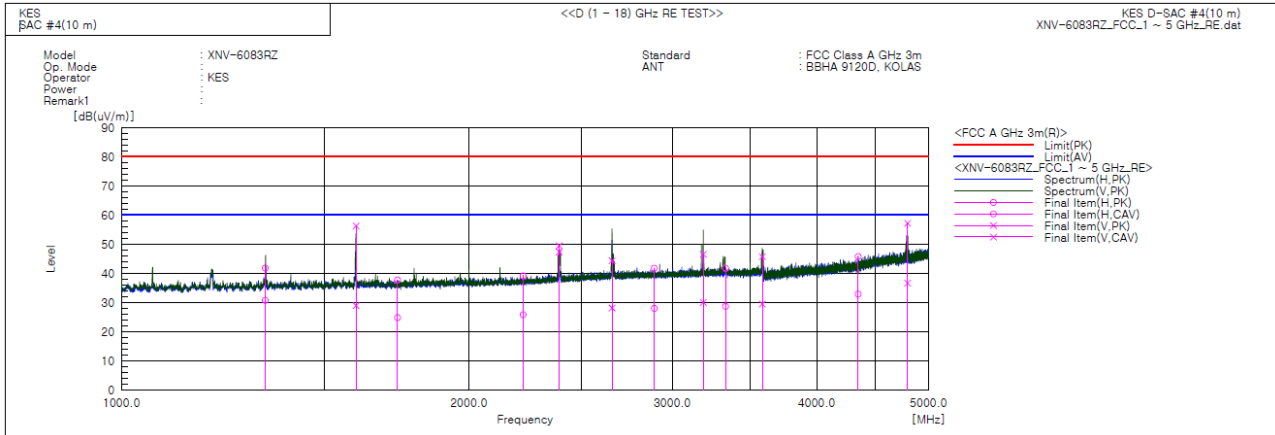
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Radiated Electric Field Emissions(Above 1 GHz)



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	1332.089	H	46.1	35.0	-4.2	41.9	30.8	80.0	60.0	38.1	29.2	355.0	89.0	
2	1596.123	V	59.2	31.9	-2.9	56.3	29.0	80.0	60.0	23.7	31.0	120.0	53.0	
3	1734.156	H	40.2	27.3	-2.4	37.8	24.9	80.0	60.0	42.2	35.1	400.0	35.0	
4	2228.200	H	39.3	26.0	-0.1	39.2	25.9	80.0	60.0	40.8	34.1	265.0	126.0	
5	2393.500	V	48.7	46.6	0.8	49.5	47.4	80.0	60.0	30.5	12.6	110.0	328.0	
6	2660.095	V	42.4	26.2	2.0	44.4	28.2	80.0	60.0	35.6	31.8	100.0	107.0	
7	2894.220	H	38.9	25.2	2.9	41.8	28.1	80.0	60.0	38.2	31.9	400.0	332.0	
8	3191.144	V	42.8	26.3	3.8	46.6	30.1	80.0	60.0	33.4	29.9	124.0	254.0	
9	3335.519	H	37.7	24.7	4.1	41.8	28.8	80.0	60.0	38.2	31.2	300.0	187.0	
10	3589.001	V	41.1	24.9	4.7	45.8	29.6	80.0	60.0	34.2	30.4	105.0	126.0	
11	4345.980	H	36.7	23.9	9.1	45.8	33.0	80.0	60.0	34.2	27.0	347.0	291.0	
12	4794.735	V	45.3	24.8	11.9	57.2	36.7	80.0	60.0	22.8	23.3	100.0	145.0	

◆ Calculation

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

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

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

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

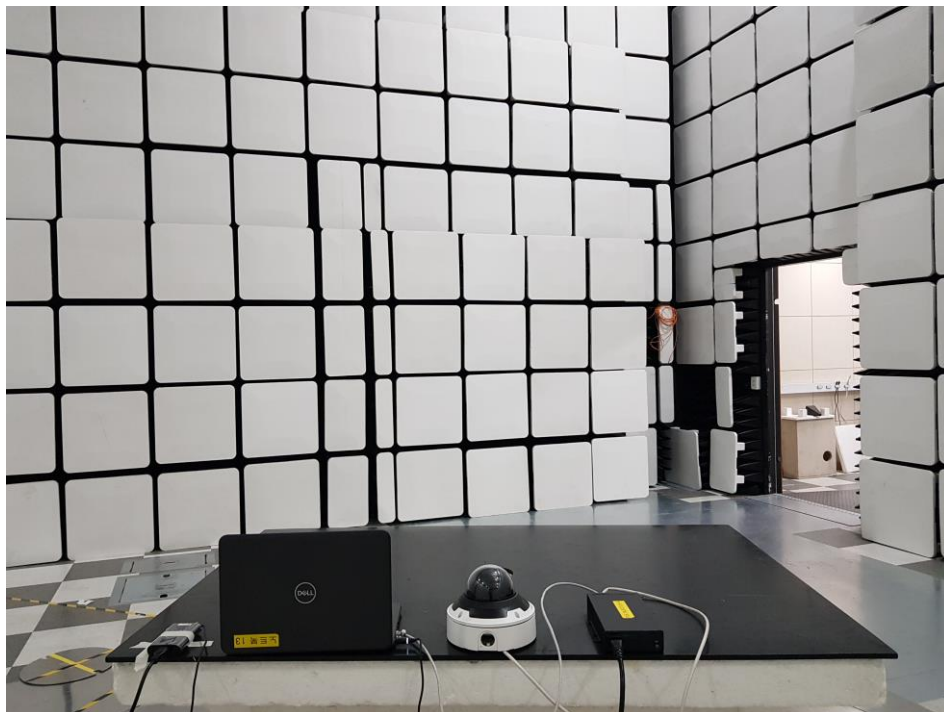
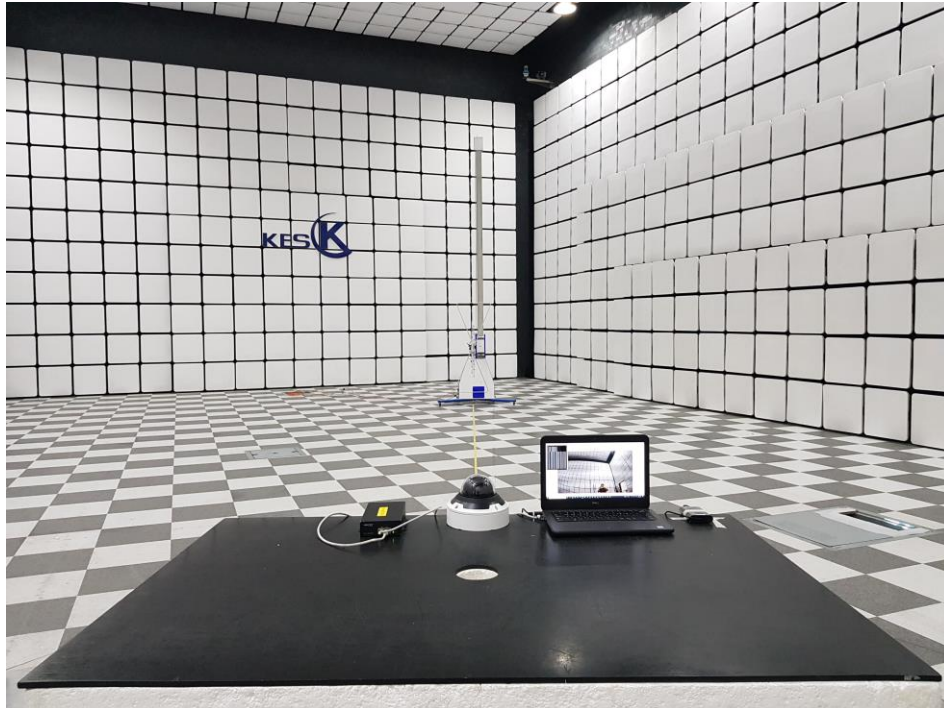
Test Setup Photos and Configuration

Conducted Emissions at Mains Power Ports



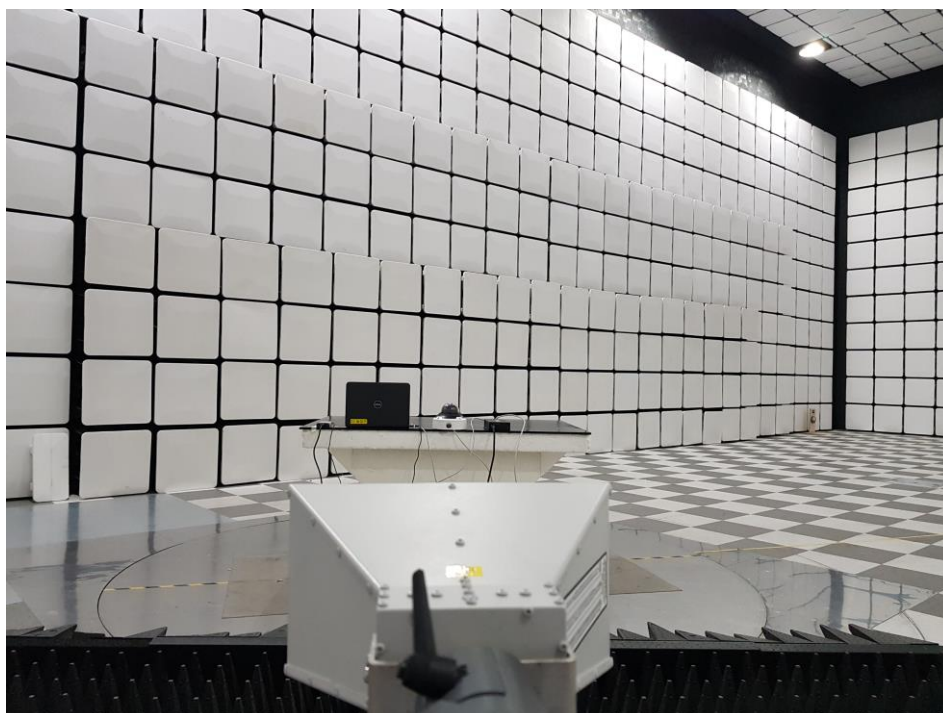
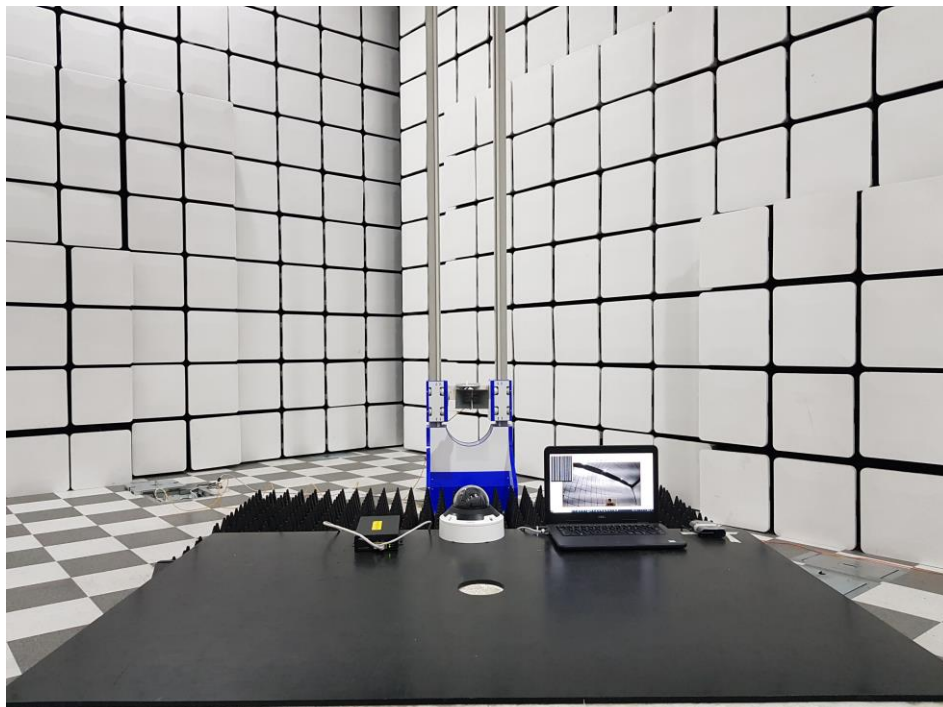
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Radiated Electric Field Emissions(Below 1 GHz)



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Radiated Electric Field Emissions(Above 1 GHz)



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EUT External Photographs

(Top)

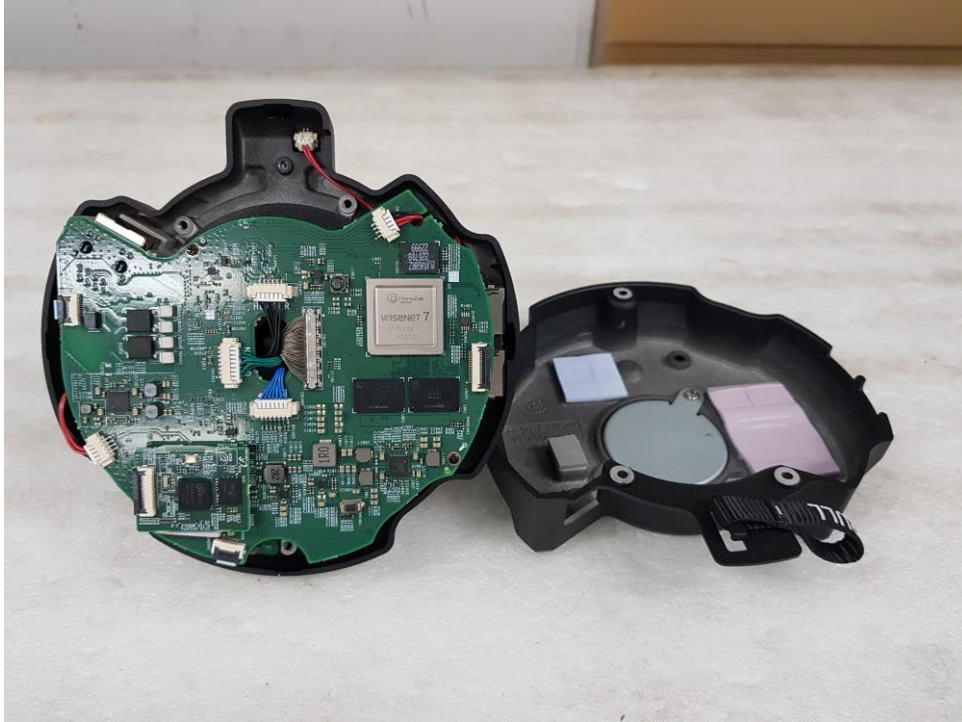


(Bottom)



EUT Internal Photographs

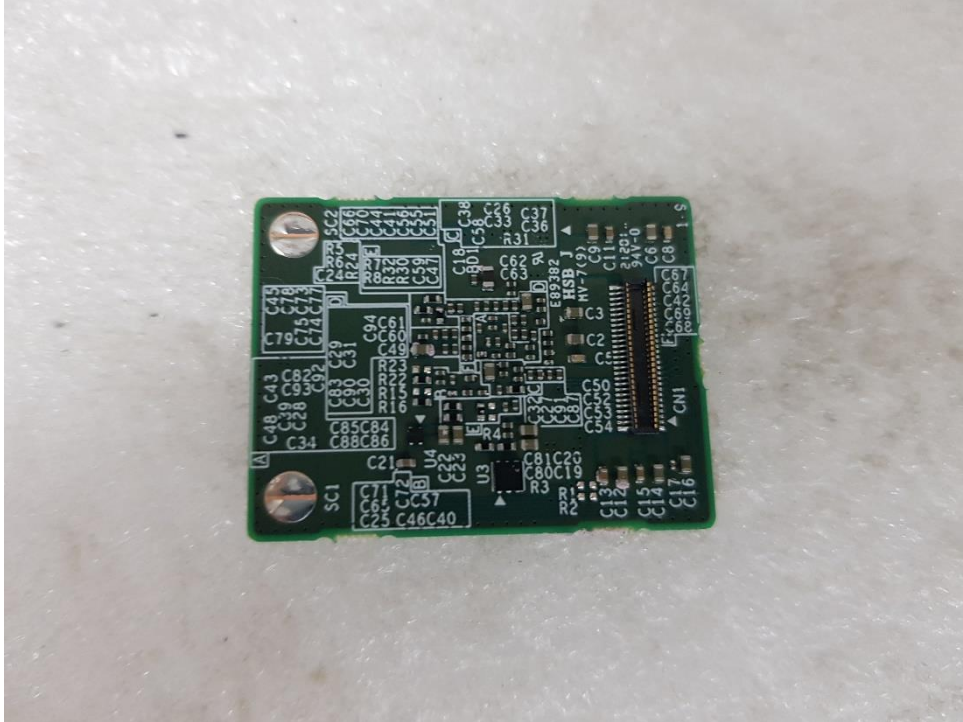
(Internal View)



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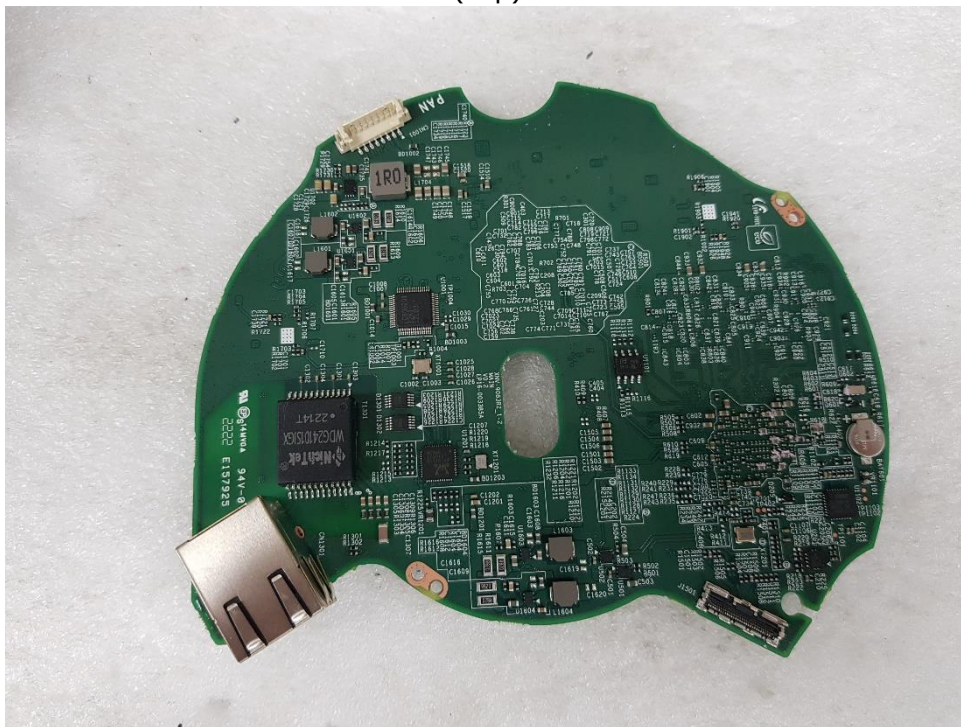
EUT Internal View – Board 1

(Top)

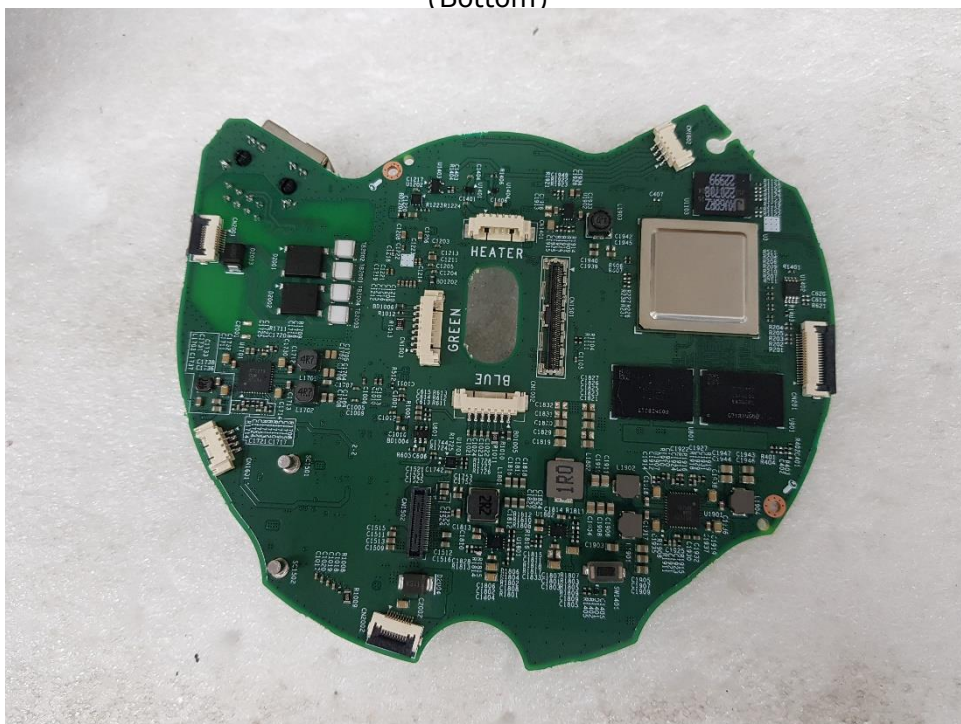


EUT Internal View – Board 2

(Top)



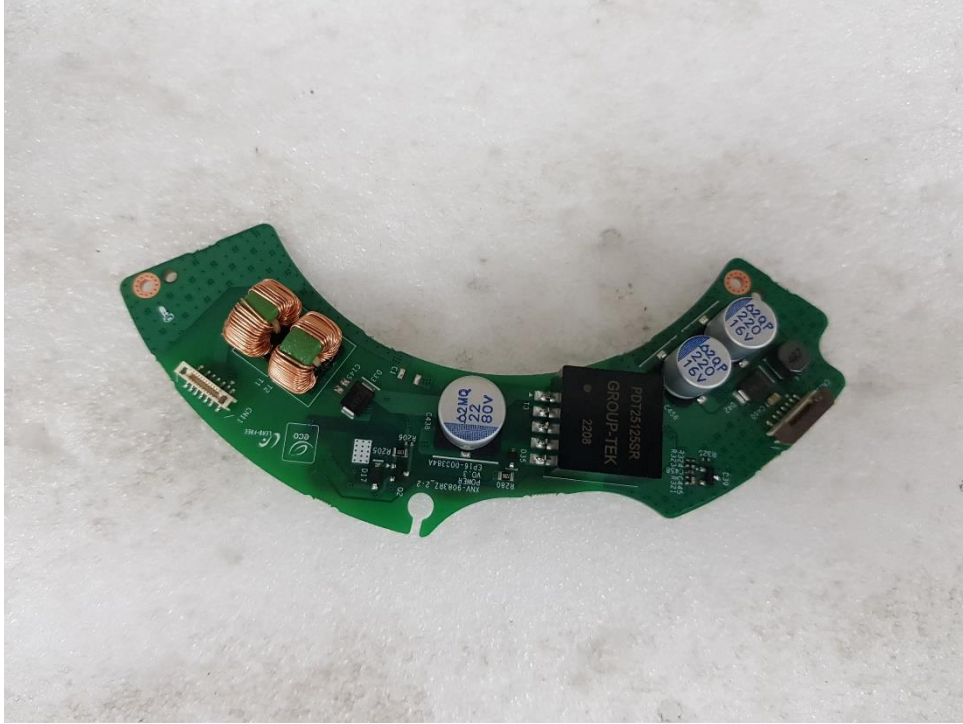
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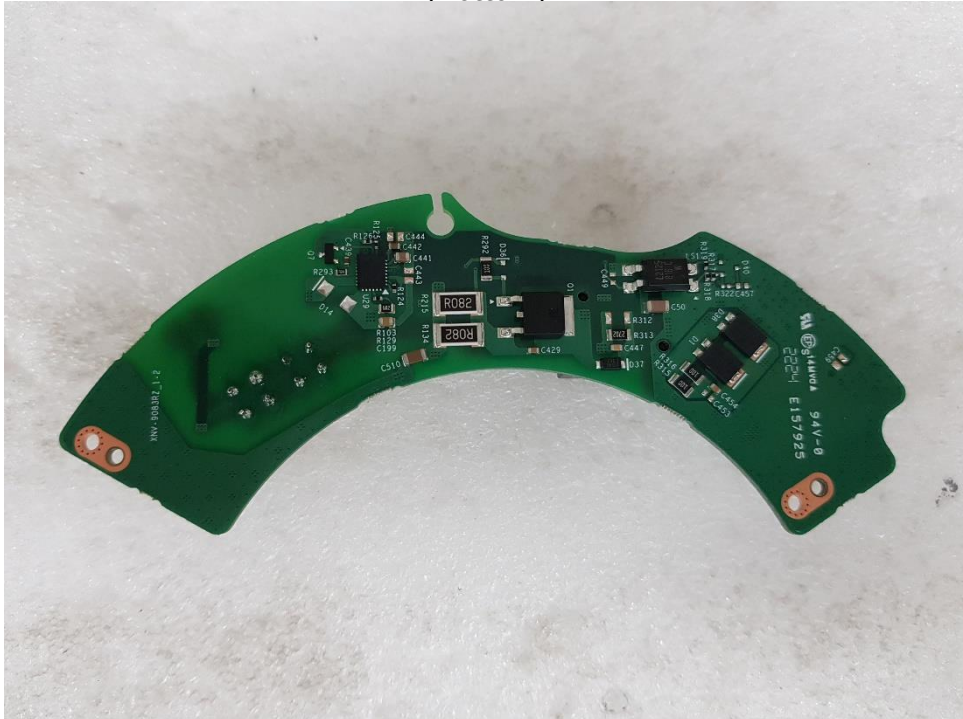
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EUT Internal View – Board 3

(Top)



(Bottom)



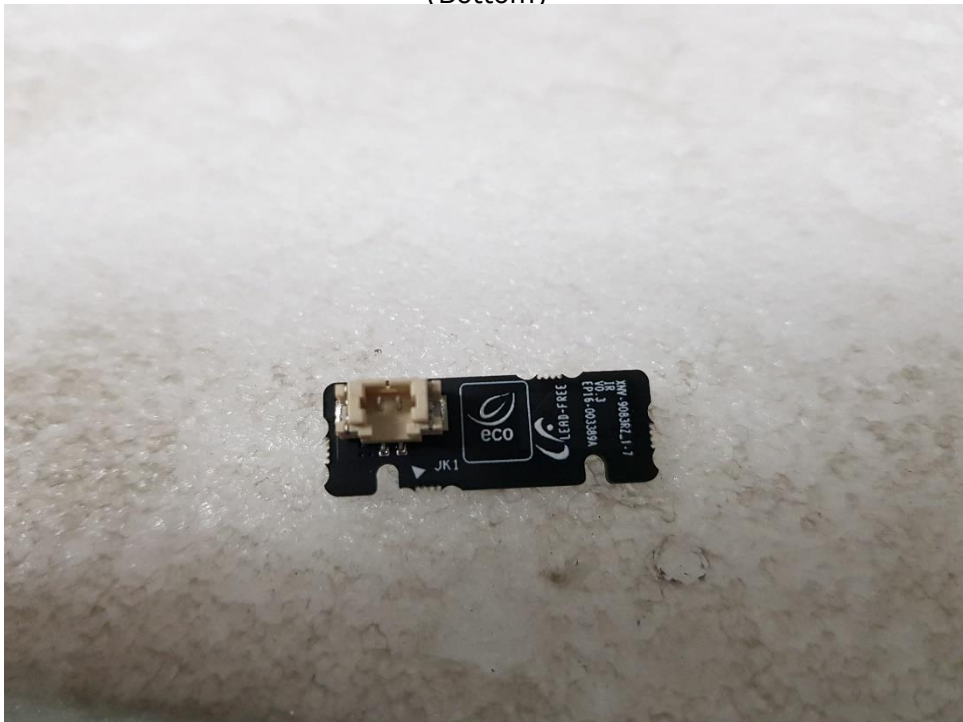
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EUT Internal View – Board 4

(Top)



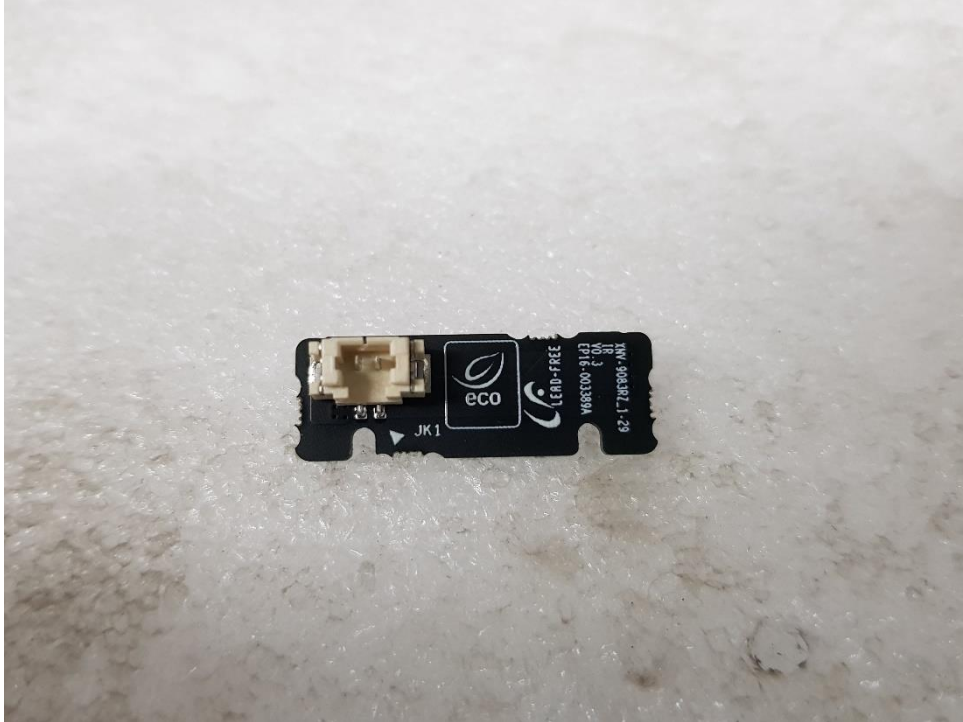
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EUT Internal View – Board 5

(Top)



(Bottom)



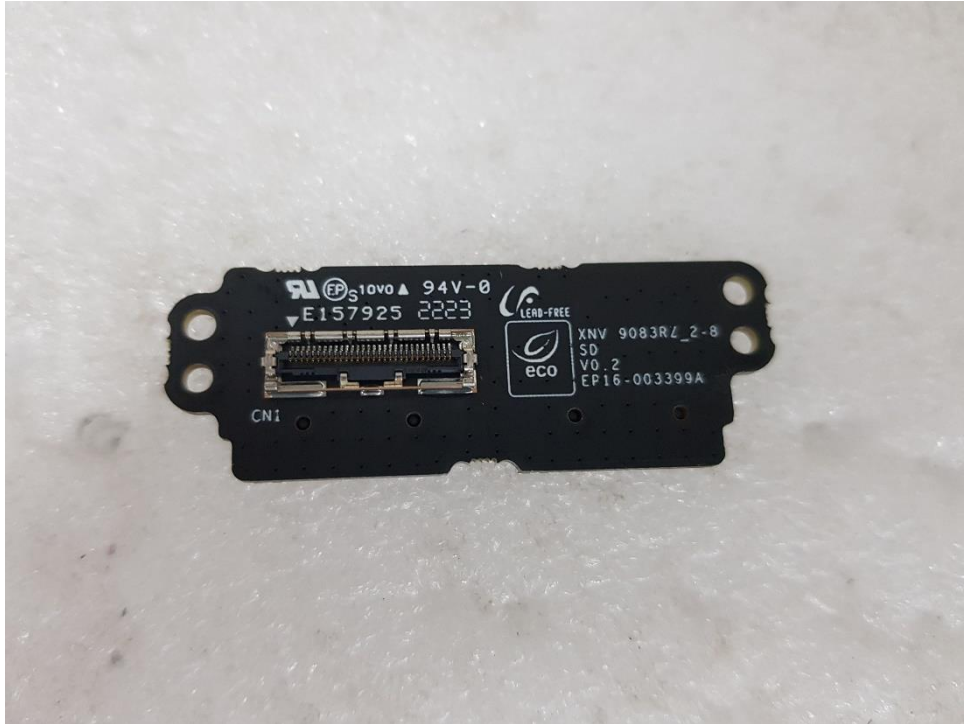
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EUT Internal View – Board 6

(Top)



(Bottom)



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EUT Internal View – Board 7

(Top)



(Bottom)



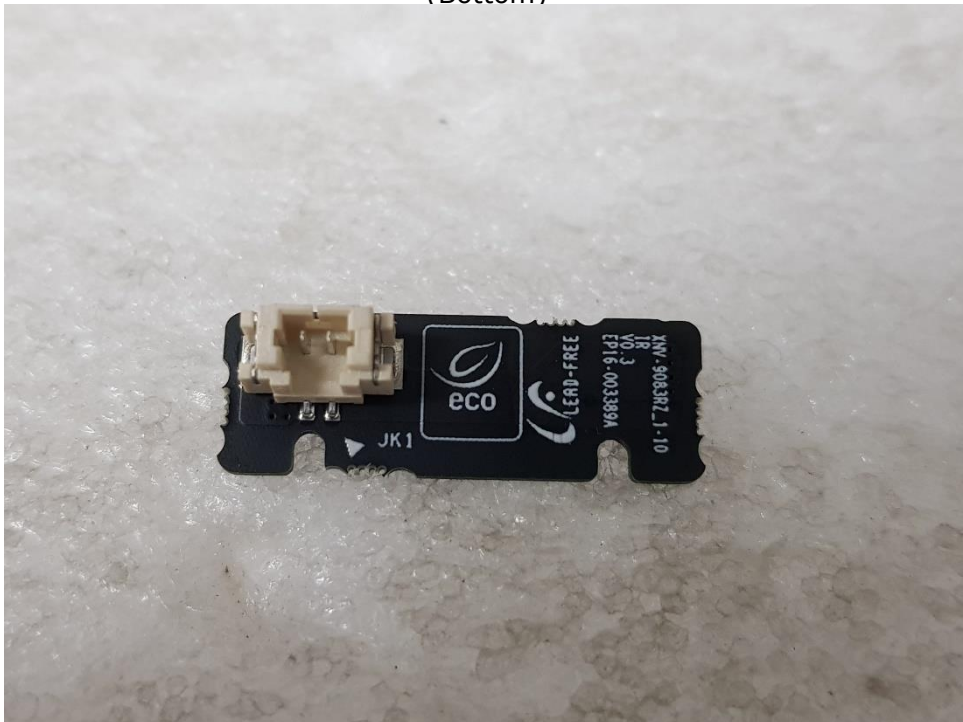
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EUT Internal View – Board 8

(Top)



(Bottom)



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EUT Internal View – Board 9

(Top)



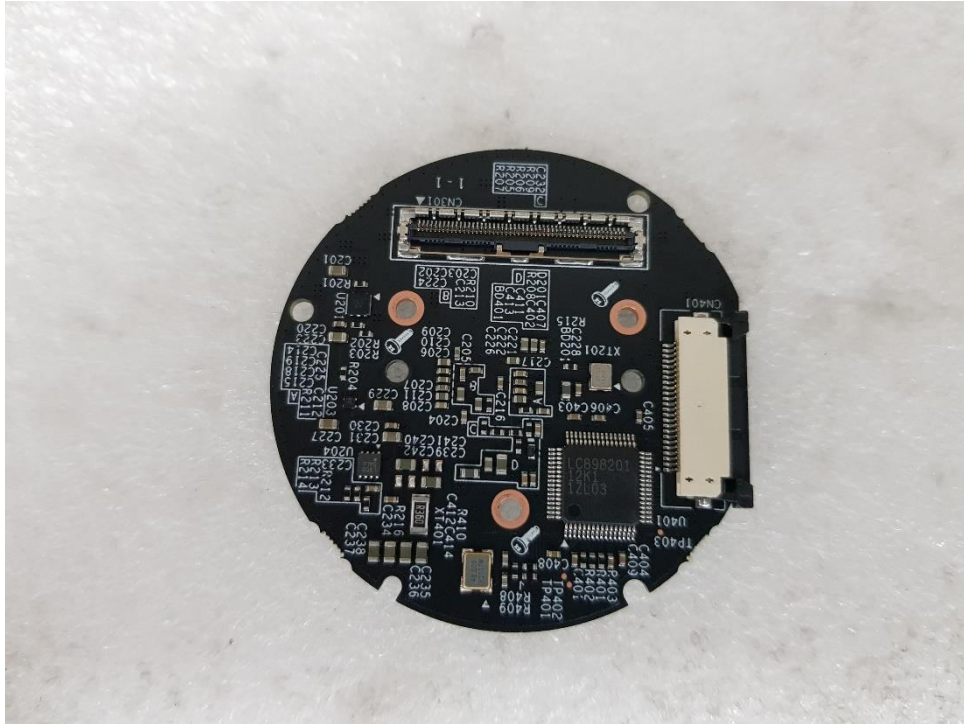
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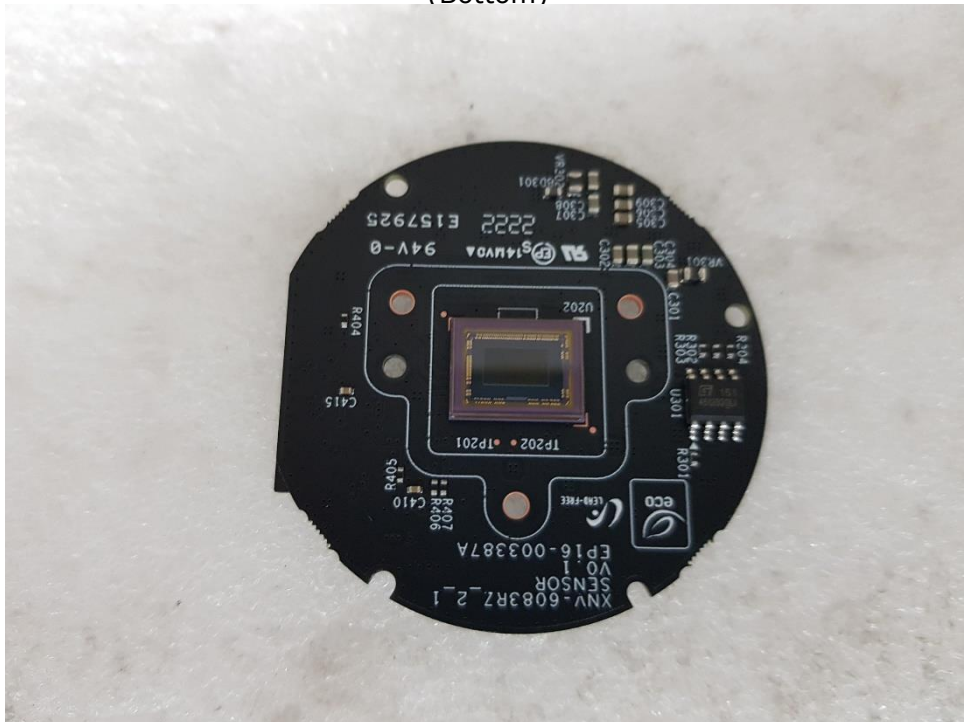
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EUT Internal View – Board 10

(Top)



(Bottom)



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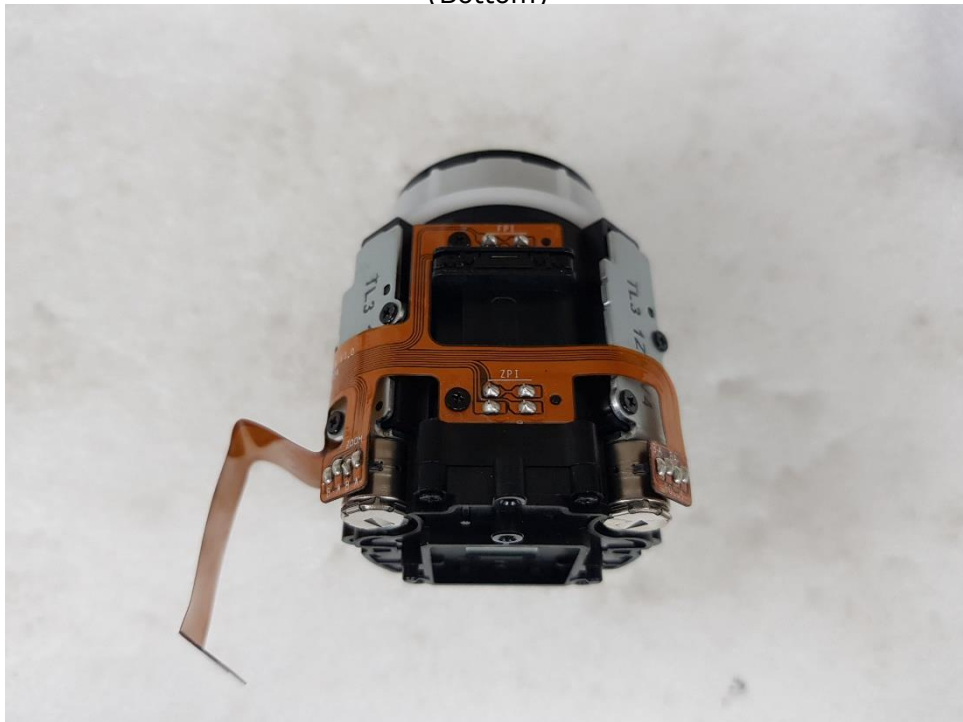
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EUT Internal View – Lens

(Top)



(Bottom)



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Label Photographs

FCC Label



HANWHA VISION VIETNAM COMPANY LIMITED
XNV-6083RZ

IC Label

CAN ICES-003(A) / NMB-003(A)

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

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

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