EMC TEST REPORT For RCM

Test Report No.	:	KES-EM-22T0969
Date of Issue	:	Dec. 08, 2022
Product name	:	Decorder
Model/Type No.	:	SPD-152
Variant Model	:	-
Applicant	:	Hanwha Techwin Co., Ltd.
Applicant Address	:	6, Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea
Manufacturer	:	1. HANWHA TECHWIN SECURITY VIETNAM CO.,LTD. 2. D-TECH CO.,LTD.
Manufacturer Address	:	1. Lot O-2, Que Vo Industrial Zone extended area, Nam Son commune, Bac Ninh city, Bac Ninh province, Vietnam 2. 173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi- do, Korea (Suwon Industrial Complex)
Date of Receipt	:	Nov. 23, 2022
Test date	:	Nov. 28, 2022 ~ Nov. 29, 2022
Test Results	:	☒ **In Compliance** ☐ **Not in Compliance**

Tested by

김 세 헌

Se Heon, 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.

REPORT REVISION HISTORY

Date	Test Report No.	Revision History
Dec. 08, 2022	KES-EM-22T0969	Issued

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1.0 General Product Description

Main Specifications of EUT are:

CPU		Embedded CPU
Operating System		Embedded Linux
Video Output	HDMI#1	1EA (up-to 4K), Audio support
	HDMI#2	1EA (up-to 1080p), Audio not support
	VGA	None
	CVBS	None
	Video-out Format	3840 X 2160@30Hz (HDMI#1) 2560 X 1440@30Hz (HDMI#1) 1920 X 1080@60Hz (HDMI#1, HDMI#2) 1280 X 10240@60Hz (HDMI#1, HDMI#2) 1280 X 720@60Hz (HDMI#1, HDMI#2)
External	Ethernet	1EA (10/100/1000BASE-T)
	USB	2EA(USB 2.0)
	Audio Out	None
	LED	Power, Network
Network	Bandwidth	Max. 150Mbps
Environmental		
Operating Temperature		0°C to +40°C (32°F to 104°F)
Operating Humidity		20% ~ 85% RH
Electrical		
Power Input		12VDC, PoE (IEEE802.3af)
Power Consumption		None
Mechanical		
Color / Material		Black / Metal&Plastic
Dimension (WxHxD)		140 x 29.5 x 115.4mm
Weight		260g
Software		
Video	Codec	H.265 / H.264 / MJPEG
	Max. Decoding Performance	8M@60fps, 2M@360fps
	Division (/Monitor)	■ Clone mode (HDMI#1) Max. 64 ■ Expand mode (HDMI#1) Max. 36 (HDMI#2) Max. 25
	Layout	Up to 20, Sequence support
Audio	Codec	G.711 / G.726 / AAC
Merge	Monitor Merge	None
	Tile Merge	None
Management		Local UI, Web-Viewer
Time Setting		NTP/Manual
Export/Import		Configuration Export/Import
Log		Max. 10000 (System log)
Protocol		RTP, RTSP, HTTP, CGI (SUNAPI), ONVIF
Remote Connect		None
Security		IP address filtering, User access Log, 802.1x, Encryption, Device certificate(Hanwha
ETC	P2P	None

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 240 V, 50 Hz ☒ PoE

1.2 Variant Model Differences

Not applicable

1.3 Device Modifications

Not applicable

1.4 Equipment Under Test

Description	Model Number	Serial Number	Manufacturer	Remarks
Decorder	SPD-152	-	HANWHA TECHWIN SECURITY VIETNAM CO.,LTD.	EUT
Mouse	MOKJUO	-	Primax Electronics Ltd.	EUT

1.5 Support Equipments

Description	Model Number	Serial Number	Manufacturer	Remarks
Adapter	FJ-SW1205000	-	Shenzhen Fujia Appliance Co, LTD.	-
PoE Injector 1	MA-INJ-4	-	Changzhou Wujin Hong Guang radio Factory Co.,LTD	-
PoE Injector 2	GS728TPP	-	NETGEAR	-
Notebook	LG15N54	507NZET040180	LG Electronics	-
Notebook Adapter	PA-1900-14	OF4A263348701J247	LITE-ON TECHNOLOGY COPORATION	-
Monitor 1	SMT-2233	ZC6U67VH500194D	Weihai Daewoo Electronics Co., Ltd.	-
Monitor 2	DELL E2222H DVT	8221TCM10D00103X	DELL INC.	-
Camera	LND-6070R	-	HANWHA TECHWIN SECURITY VIETNAM CO.,LTD.	-
Router	IpTIME A2004MU	-	ipTIME	-
Router Adapter	DCP024B121000K	-	ZIONCOM ELECTRONICS (SHENZHEN) LTD.	-
USB Memory	-	-	Sandisk	-

1.6 External I/O Cabling

■ DC Mode

Start		END		Cable Spec.	
Description	**I/O Port**	**Description**	**I/O Port**	**Length**	**Shield**
Decorder (EUT)	DC 12V	Adapter	DC 12V	1.5	U
	HDMI 1	Monitor 1	HDMI 1	1.3	S
	HDMI 2	Monitor 2	HDMI 2	1.2	S
	NETWORK	Router	NETWORK	3.0	U
	USB	Mouse (EUT)	USB	1.4	U
	USB	USB Memory	USB	-	-
	GROUND	GROUND	GROUND	2.0	-
Router	DC Jack	Router Adapter	DC Jack	1.5	U
	RJ-45	Notebook	RJ-45	2.0	U
	RJ-45	PoE Injector 1	RJ-45	2.0	U
Notebook	DC Jack	Notebook Adapter	DC Jack	1.4	U
PoE Injector 1	RJ-45	Camera	RJ-45	1.0	U

* Unshielded=U, Shielded=S

■ PoE Mode

Start		END		Cable Spec.	
Description	**I/O Port**	**Description**	**I/O Port**	**Length**	**Shield**
Decorder (EUT)	NETWORK	PoE Injector 2	NETWORK	3.0	U
	HDMI 1	Monitor 1	HDMI 1	1.3	U
	HDMI 2	Monitor 2	HDMI 2	1.2	-
	USB	Mouse (EUT)	USB	1.4	S
	USB	USB Memory	USB	-	U
	GROUND	GROUND	GROUND	2.0	S
PoE Injector 2	RJ-45	Notebook	RJ-45	2.0	U
	RJ-45	Camera	RJ-45	1.0	U
Notebook	DC Jack	Notebook Adapter	DC Jack	1.4	U

* Unshielded=U, Shielded=S

1.7 EUT Operating Mode(s)

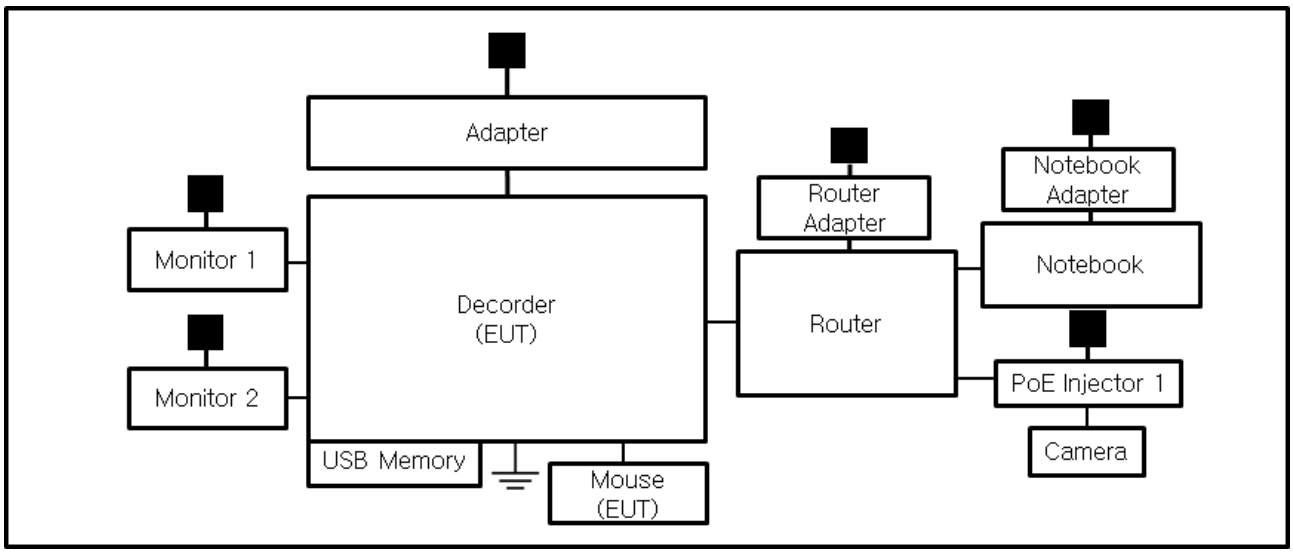
Test Mode	operating
DC, PoE Mode	- Check the image output of the camera on the monitor, and check the normal operation of the network function through the laptop ping test. - After testing, check if the recording is normally done on the USB Memory

EUT Test operating S/W		
Name	**Version**	**Manufacture Company**
-	-	-

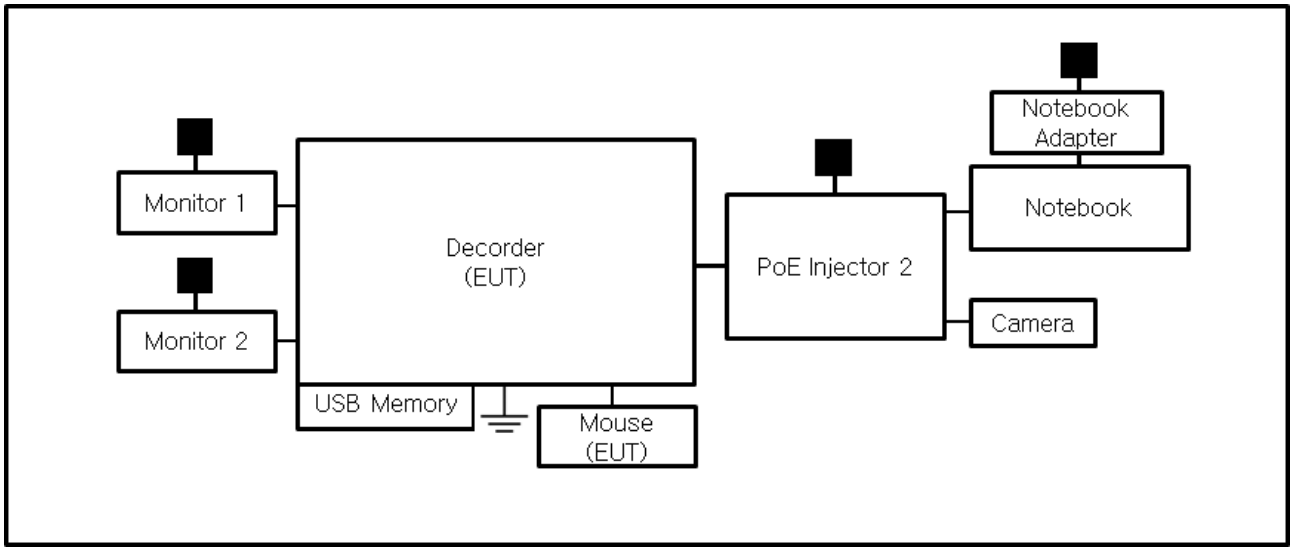
1.8 Configuration

■ AC Main
□ DC Main

■ DC Mode



■ PoE Mode



1.9 Remarks when standards applied

PoE port is considered to be wired network port, so power-related test items are excluded.

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, 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 , 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-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, 10 m Open Area and 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**	Mains Ports Conducted Interference Measurement, Telecommunication Ports Conducted Disturbance Measurement and Radiation 10 meter site, Facility for measuring radiated disturbance above 1 GHz	R-20056, C-20036, T-20040, G-20057
Europe	**TÜV SÜD**	EMI (3 m & 10 m Semi-Anechoic Chamber , 10 m Open Area 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:

☒ **AS/NZS CISPR 32:2015 AMD 1:2020** ☒ Class A ☐ Class B

2.1 Conducted Emissions at Mains Power Ports

Test Date
Nov. 29, 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	11, 11, 2023
☒	LISN	ENV216	R & S	101787	11, 10, 2023
☒	LISN	ESH2-Z5	R & S	100450	11, 10, 2023
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	11, 10, 2023

Test Conditions
Temperature: (22,9 ± 0,0) ℃
Relative Humidity: (45,9 ± 0,0) % R.H.

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 Conducted Emissions at Telecommunication Ports

Test Date
Nov. 29, 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	11, 11, 2023
☒	LISN	ENV216	R & S	101787	11, 10, 2023
☒	LISN	ESH2-Z5	R & S	100450	11, 10, 2023
☒	PULSE LIMITER	ESH3-Z2	R & S	101915	11, 10, 2023
☒	8-WIRE ISN CAT6	NTFM 8158	SCHWARZBECK	8158-0029	03, 09, 2023

Test Conditions
Temperature: (22,8 ± 0,1) ℃
Relative Humidity: (45,9 ± 0,1) % R.H.

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.
- For Ethernet interfaces, measurements are required at the highest data rate supported by the interface.

2.3 Radiated Electric Field Emissions(Below 1 ㎓)

Test Date
Nov. 29, 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, 10, 2023
☒	TRILOG-BROADBAND ANTENNA	VULB9163	Schwarzbeck	715	11, 17, 2024
☒	ATTENUATOR	8491A	HP	32173	03, 08, 2023

Test Conditions
Temperature: (22,4 ± 0,2) ℃
Relative Humidity: (45,9 ± 0,1) % R.H.

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.

2.4 Radiated Electric Field Emissions(Above 1 ㎓)

Test Date
Nov. 28, 2022

Test Location
SEMI ANECHOIC CHAMBER #5

Test Equipment

Used	Description	Model Number	Manufacturer	Serial Number	Cal. Due
☒	EMI Test S/W	ES10/RE	TOYO Corporation	2022.01.000	-
☒	EMI TEST RECEIVER	ESU26	Rohde & Schwarz	100552	03, 31, 2023
☒	HORN ANTENNA	BBHA 9120D	SCHWARZBECK	9120D-1802	11, 08, 2023
☒	PREAMPLIFIER	8449B	HP	3008A00538	06, 02, 2023
☒	ATTENUATOR	8491B	HP	23094	04, 21, 2023

Test Conditions
Temperature: (23,1 ± 0,2) ℃
Relative Humidity: (46,9 ± 0,0) % R.H.

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.
- The Average of the test data is the cispr average result.

APPENDIX A – TEST DATA

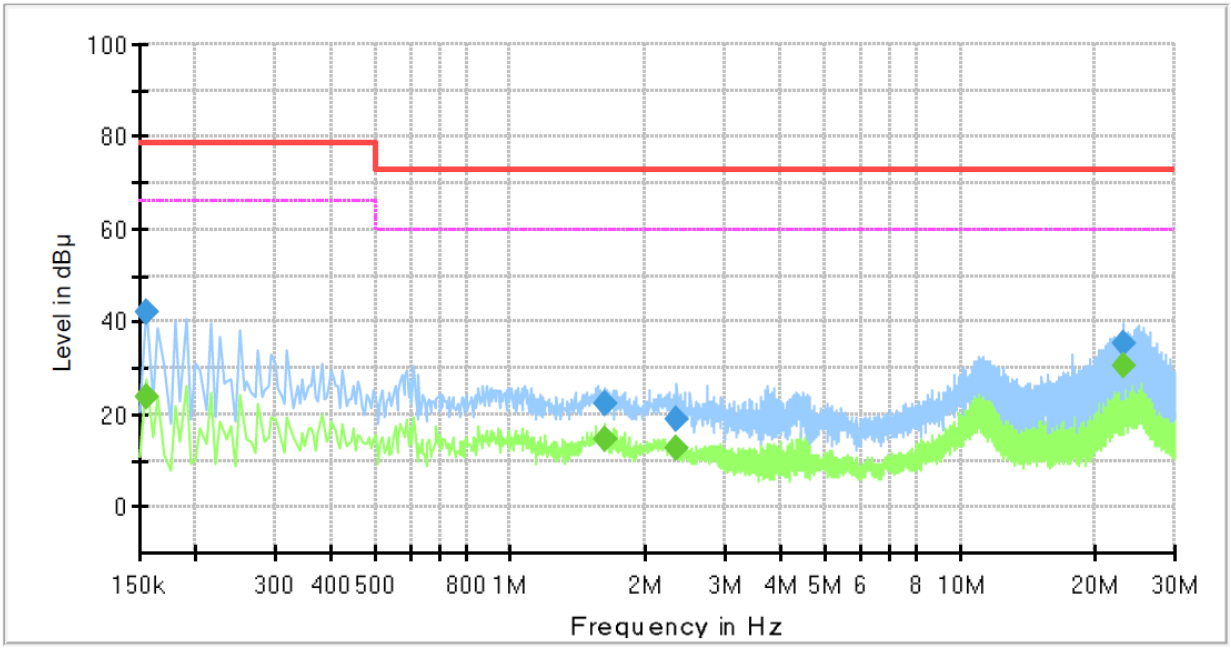
Conducted Emissions at Mains Power Ports

■ DC Mode

HOT LINE

Common Information

Test Description:	Conducted Emission
Model No.:	SPD-152
Phase:	L1
Mode:	DC
Operator Name:	KES



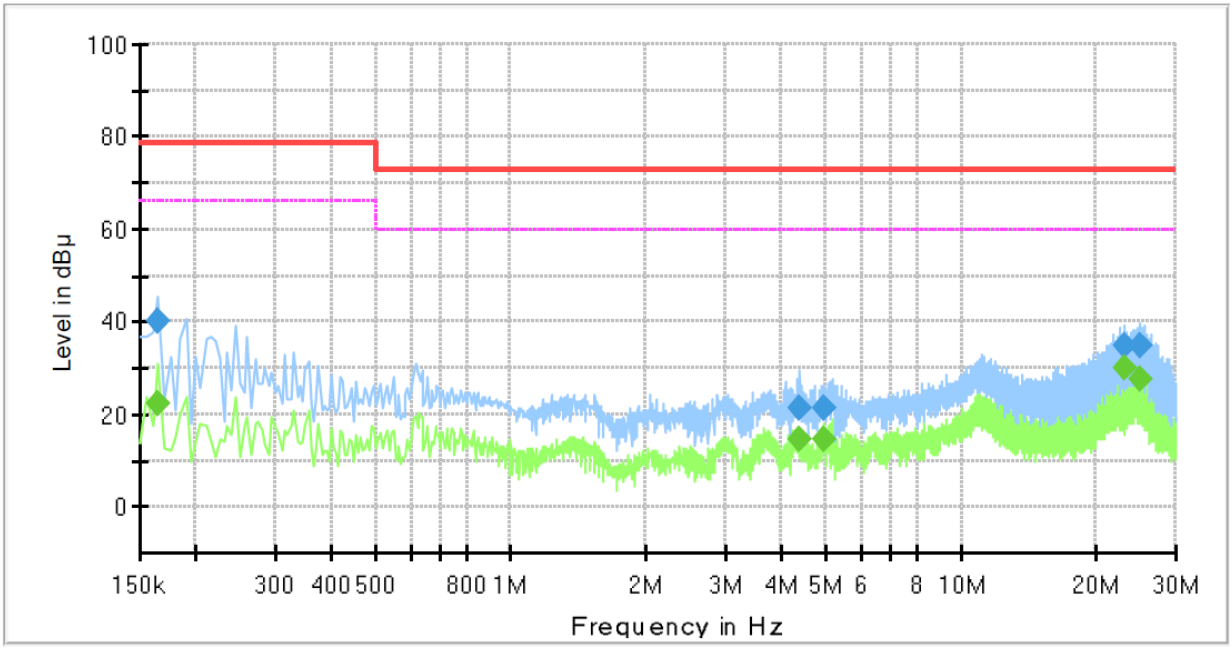
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.155000	---	23.63	66.00	42.37	1000.0	9.000	L1	19.5
0.155000	42.02	---	79.00	36.98	1000.0	9.000	L1	19.5
1.620000	---	14.74	60.00	45.26	1000.0	9.000	L1	20.3
1.620000	22.10	---	73.00	50.90	1000.0	9.000	L1	20.3
2.350000	---	12.44	60.00	47.56	1000.0	9.000	L1	20.3
2.350000	18.89	---	73.00	54.11	1000.0	9.000	L1	20.3
23.130000	---	30.46	60.00	29.54	1000.0	9.000	L1	20.2
23.130000	35.34	---	73.00	37.66	1000.0	9.000	L1	20.2

NEUTRAL LINE

Common Information

Test Description:	Conducted Emission
Model No.:	SPD-152
Phase:	N
Mode:	DC
Operator Name:	KES



Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.165000	---	22.52	66.00	43.48	1000.0	9.000	N	19.4
0.165000	40.09	---	79.00	38.91	1000.0	9.000	N	19.4
4.360000	---	14.48	60.00	45.52	1000.0	9.000	N	19.8
4.360000	21.16	---	73.00	51.84	1000.0	9.000	N	19.8
4.950000	---	14.82	60.00	45.18	1000.0	9.000	N	19.7
4.950000	21.12	---	73.00	51.88	1000.0	9.000	N	19.7
23.125000	---	29.87	60.00	30.13	1000.0	9.000	N	20.2
23.125000	35.10	---	73.00	37.90	1000.0	9.000	N	20.2
24.960000	---	27.83	60.00	32.17	1000.0	9.000	N	20.2
24.960000	34.75	---	73.00	38.25	1000.0	9.000	N	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 (LISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

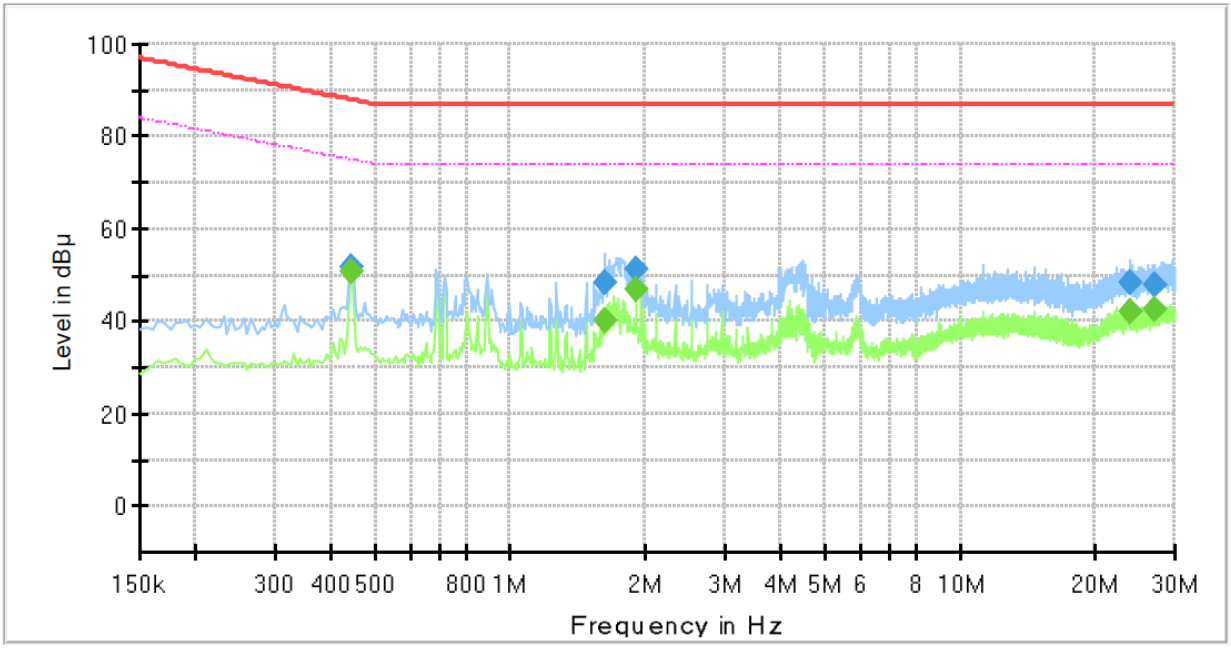
Conducted Emissions at Telecommunication Ports

■ DC Mode

[1 000 Mbps]

Common Information

Test Description:	Telecommunication Emission
Model No.:	SPD-152
Mode :	DC
Speed :	1 000 Mbps
Operator Name:	KES



Final_Result

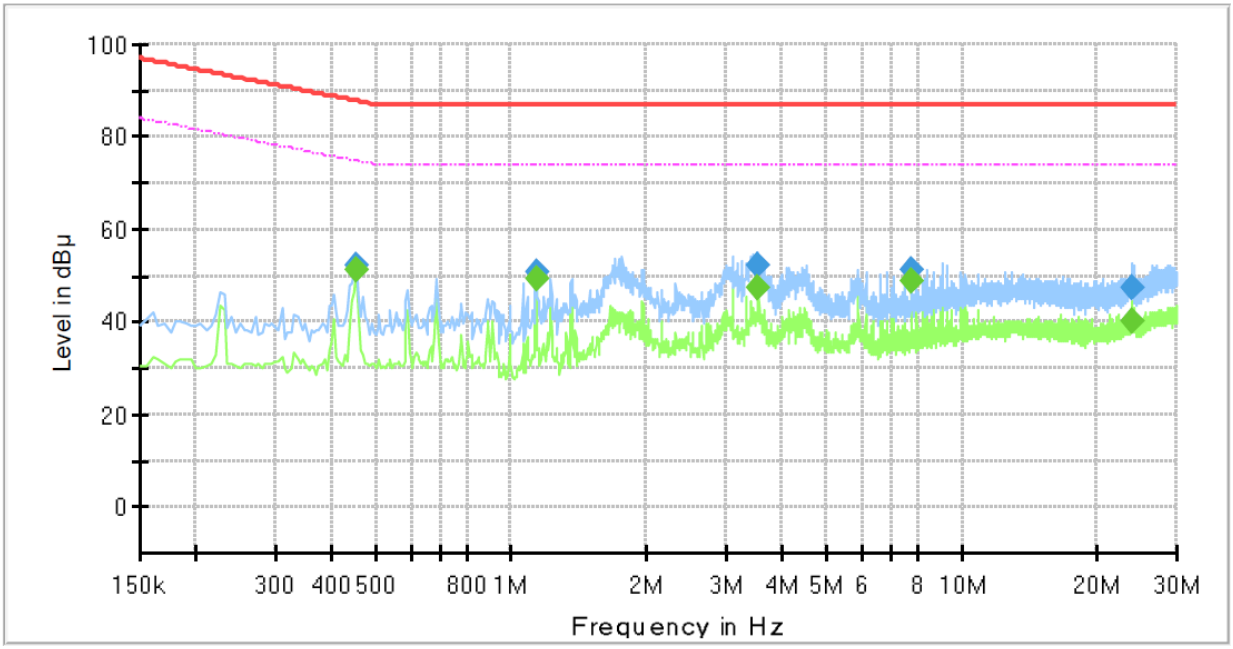
Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.445000	---	50.85	74.97	24.12	1000.0	9.000	Single Line	19.4
0.445000	51.84	---	87.97	36.13	1000.0	9.000	Single Line	19.4
1.625000	---	40.19	74.00	33.81	1000.0	9.000	Single Line	19.8
1.625000	48.30	---	87.00	38.70	1000.0	9.000	Single Line	19.8
1.900000	---	46.86	74.00	27.14	1000.0	9.000	Single Line	19.9
1.900000	51.11	---	87.00	35.89	1000.0	9.000	Single Line	19.9
23.800000	---	42.19	74.00	31.81	1000.0	9.000	Single Line	19.6
23.800000	48.26	---	87.00	38.74	1000.0	9.000	Single Line	19.6
27.155000	---	42.66	74.00	31.34	1000.0	9.000	Single Line	19.7
27.155000	48.03	---	87.00	38.97	1000.0	9.000	Single Line	19.7

■ PoE Mode

[1 000 Mbps]

Common Information

Test Description:	Telecommunication Emission
Model No.:	SPD-152
Mode :	PoE
Speed :	1 000 Mbps
Operator Name:	KES



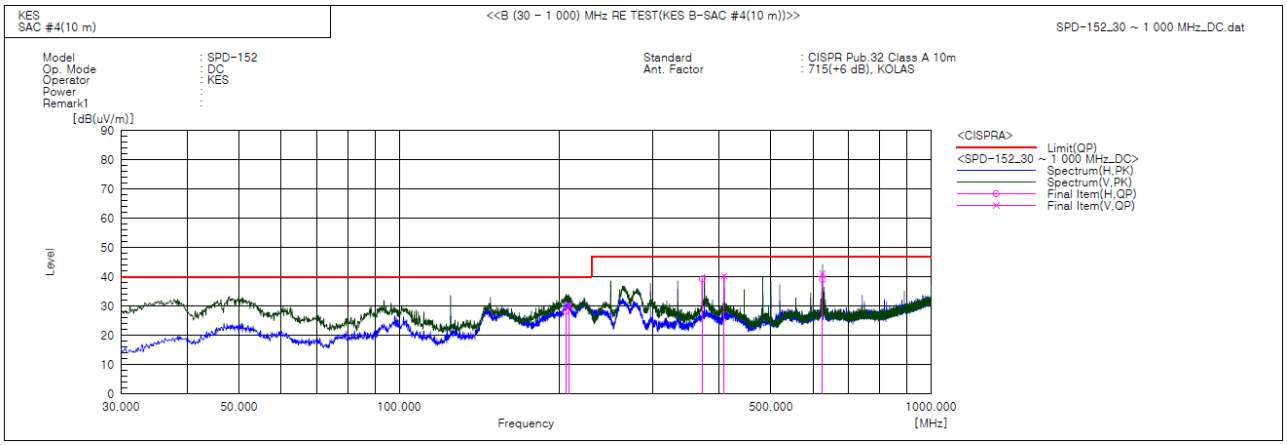
Final_Result

Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.455000	---	51.21	74.78	23.57	1000.0	9.000	Single Line	19.5
0.455000	52.05	---	87.78	35.73	1000.0	9.000	Single Line	19.5
1.135000	---	49.50	74.00	24.50	1000.0	9.000	Single Line	19.7
1.135000	50.76	---	87.00	36.24	1000.0	9.000	Single Line	19.7
3.540000	---	47.19	74.00	26.81	1000.0	9.000	Single Line	19.5
3.540000	52.11	---	87.00	34.89	1000.0	9.000	Single Line	19.5
7.720000	---	48.99	74.00	25.01	1000.0	9.000	Single Line	19.0
7.720000	51.05	---	87.00	35.95	1000.0	9.000	Single Line	19.0
23.790000	---	40.07	74.00	33.93	1000.0	9.000	Single Line	19.6
23.790000	47.23	---	87.00	39.77	1000.0	9.000	Single Line	19.6

♦ Calculation
QuasiPeak[dBuV] / CAverage [dBuV] = Reading Value[dBuV] + Corr. [dB]
QuasiPeak / CAverage : The Final Value
Reading Value : Not shown in the table.
Corr. : Correction values (ISN FACTOR + (Cable Loss + Pulse Limiter FACTOR))

Radiated Electric Field Emissions(Below 1 ㎓)

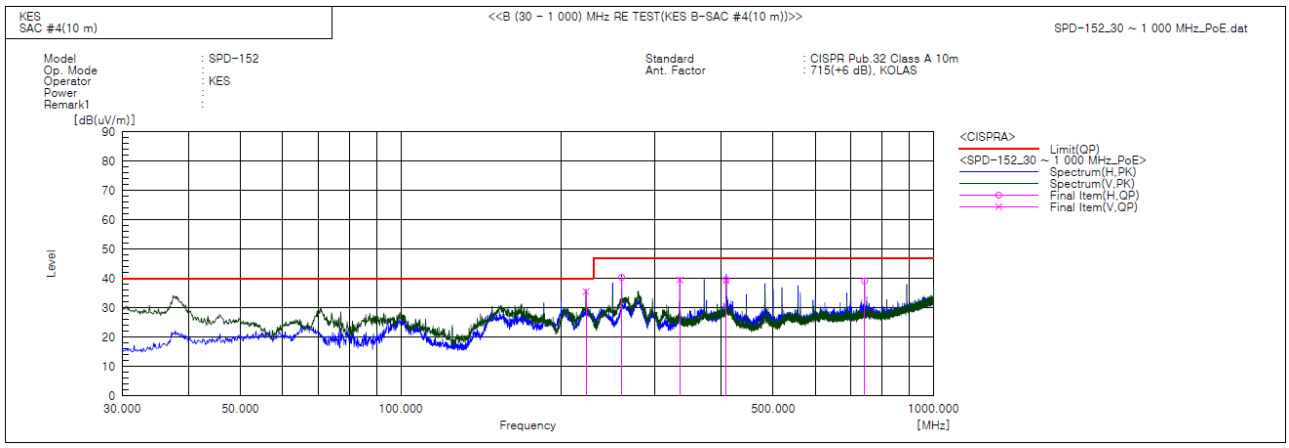
■ DC Mode



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	205.691	H	48.7	-20.5	28.2	40.0	11.8	362.0	17.0	
2	208.238	V	50.5	-20.3	30.2	40.0	9.8	114.0	357.0	
3	371.198	H	53.3	-14.0	39.3	47.0	7.7	357.0	325.0	
4	408.300	V	53.6	-13.3	40.3	47.0	6.7	105.0	197.0	
5	624.974	H	46.7	-7.6	39.1	47.0	7.9	396.0	110.0	
6	625.095	V	48.7	-7.6	41.1	47.0	5.9	129.0	86.0	

■ PoE Mode



Final Result

No.	Frequency [MHz]	(P)	Reading QP [dB(uV)]	c.f [dB(1/m)]	Result QP [dB(uV/m)]	Limit QP [dB(uV/m)]	Margin QP [dB]	Height [cm]	Angle [deg]	Remark
1	222.666	V	55.0	-19.5	35.5	40.0	4.5	139.0	30.0	
2	259.890	H	58.9	-18.6	40.3	47.0	6.7	373.0	189.0	
3	334.095	V	55.1	-15.6	39.5	47.0	7.5	127.0	156.0	
4	408.300	V	52.5	-13.3	39.2	47.0	7.8	140.0	187.0	
5	408.300	H	52.9	-13.3	39.6	47.0	7.4	395.0	269.0	
6	742.465	H	45.2	-6.1	39.1	47.0	7.9	370.0	334.0	

♦ Calculation

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

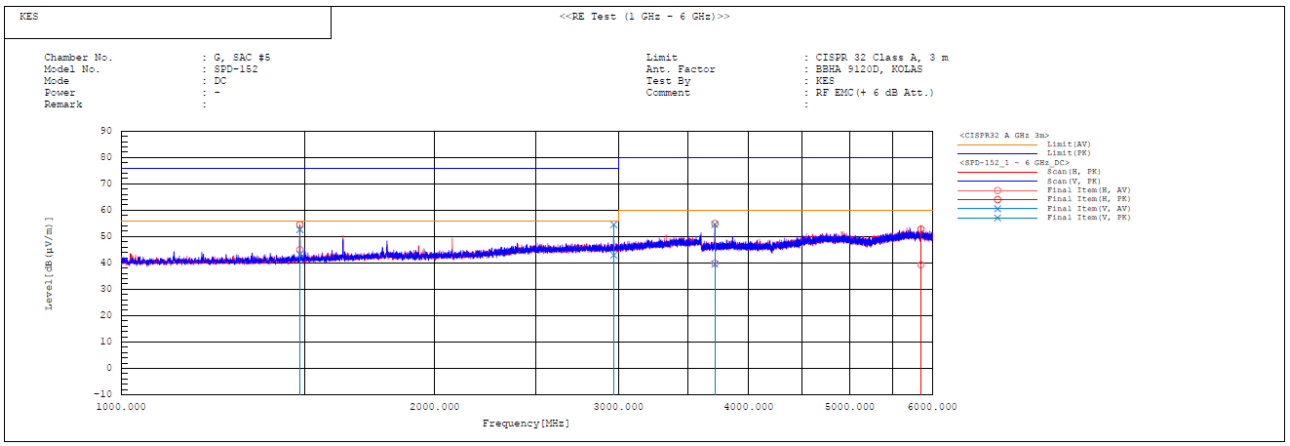
Margin(QP)[dB] = Limit[dB(μV/m)] - Result(QP) [dB(μV/m)]

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 ㎓)

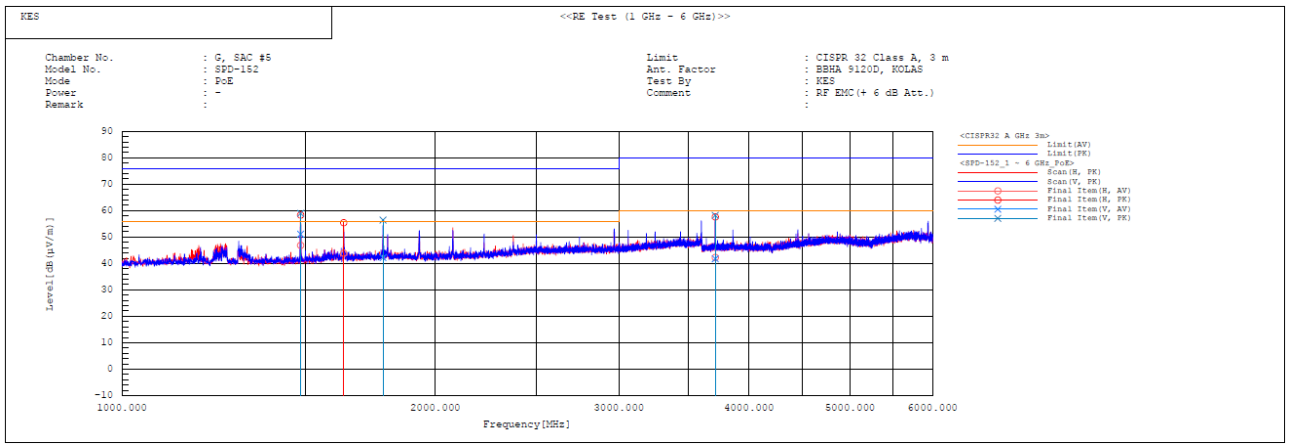
■ DC Mode



Final Result

No.	Frequency [MHz]	Pol	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit AV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [deg]	Remark
1	1484.500	H	45.2	54.7	-0.2	45.0	54.5	56.0	76.0	11.0	21.5	100.0	343.1	
2	1484.500	V	43.4	52.8	-0.2	43.2	52.6	56.0	76.0	12.8	23.4	100.0	0.2	
3	2969.500	V	38.1	49.6	4.9	43.0	54.5	56.0	76.0	13.0	21.5	100.0	93.2	
4	3712.000	V	33.3	48.4	6.2	39.5	54.6	60.0	80.0	20.5	25.4	100.0	158.4	
5	3713.000	H	33.7	48.7	6.2	39.9	54.9	60.0	80.0	20.1	25.1	100.0	9.0	
6	5853.000	H	27.1	40.6	12.2	39.3	52.8	60.0	80.0	20.7	27.2	100.0	231.5	

■ PoE Mode



Final Result

No.	Frequency [MHz]	Pol	Reading AV [dB(μV)]	Reading PK [dB(μV)]	c.f [dB(1/m)]	Result AV [dB(μV/m)]	Result PK [dB(μV/m)]	Limit AV [dB(μV/m)]	Limit PK [dB(μV/m)]	Margin AV [dB]	Margin PK [dB]	Height [cm]	Angle [deg]	Remark
1	1484.500	H	47.1	58.5	-0.2	46.9	58.3	56.0	76.0	9.1	17.7	100.0	31.3	
2	1485.000	V	51.3	59.2	-0.2	51.1	59.0	56.0	76.0	4.9	17.0	100.0	16.0	
3	1633.000	H	43.5	55.0	0.4	43.9	55.4	56.0	76.0	12.1	20.6	100.0	22.2	
4	1781.000	V	41.0	55.2	1.2	42.2	56.4	56.0	76.0	13.8	19.6	100.0	29.0	
5	3712.000	H	36.1	51.4	6.2	42.3	57.6	60.0	80.0	17.7	22.4	100.0	16.5	
6	3712.000	V	35.6	52.0	6.2	41.8	58.2	60.0	80.0	18.2	21.8	100.0	0.3	

♦ Calculation

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

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

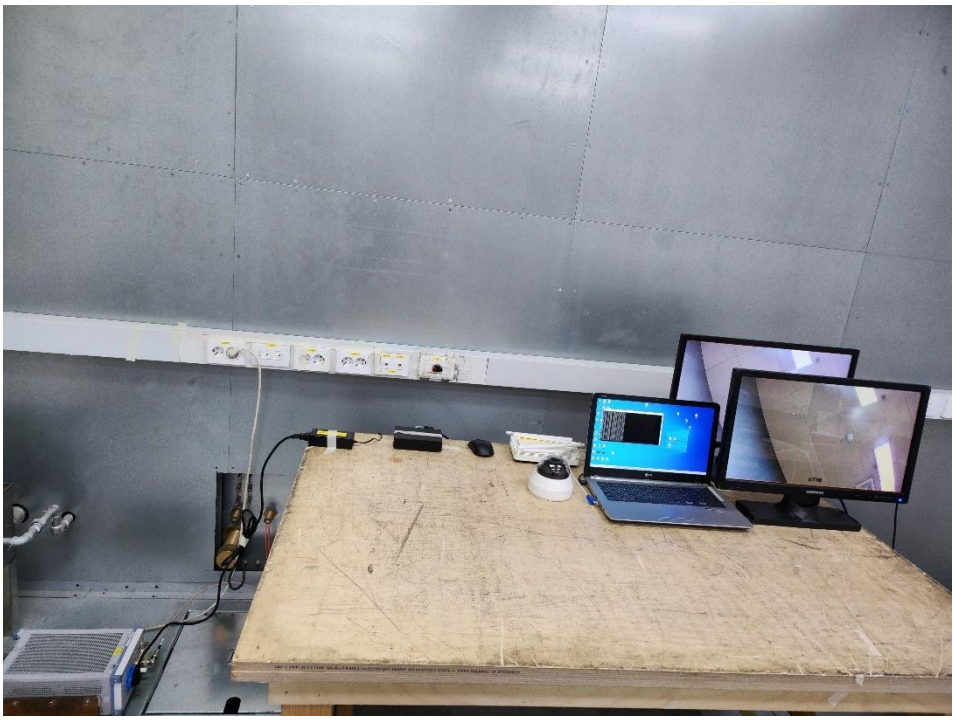
Reading(PK/CAV) : Reading value, Result(PK/CAV) : Reading value + Factor value

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

Test Setup Photos and Configuration

Conducted Emissions at Mains Power Ports

■ DC Mode



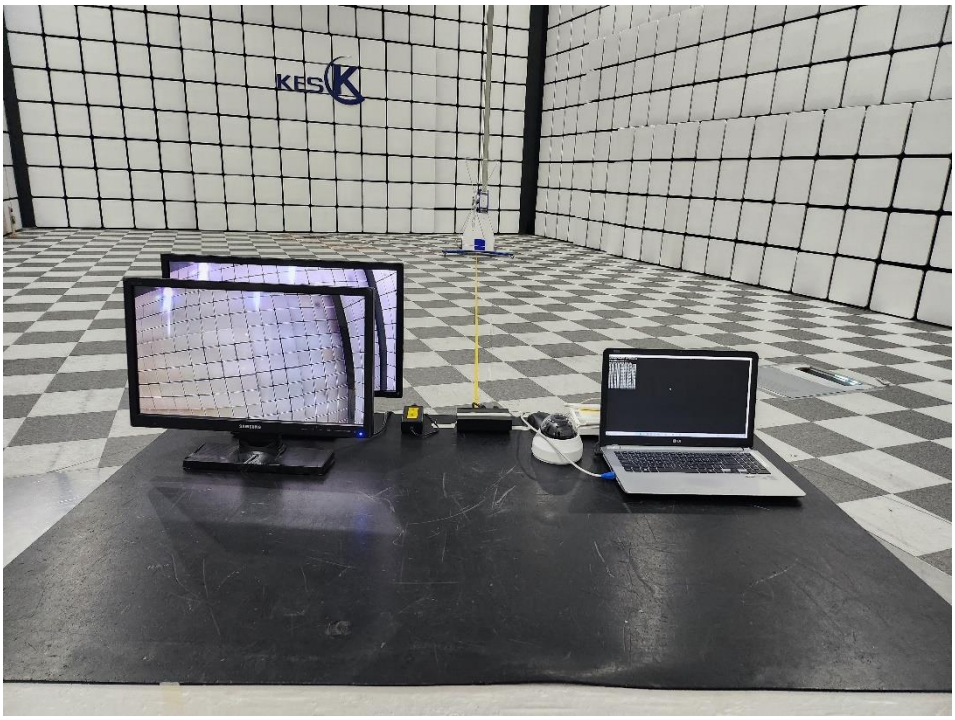
Conducted Emissions at Telecommunication Ports

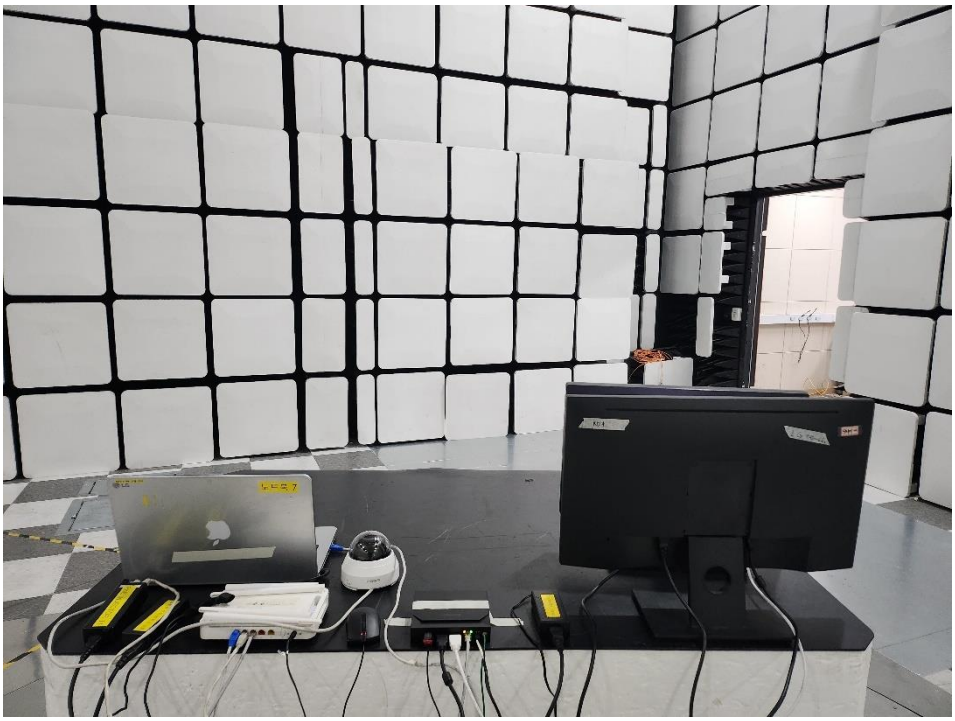
■ DC Mode

■ PoE Mode

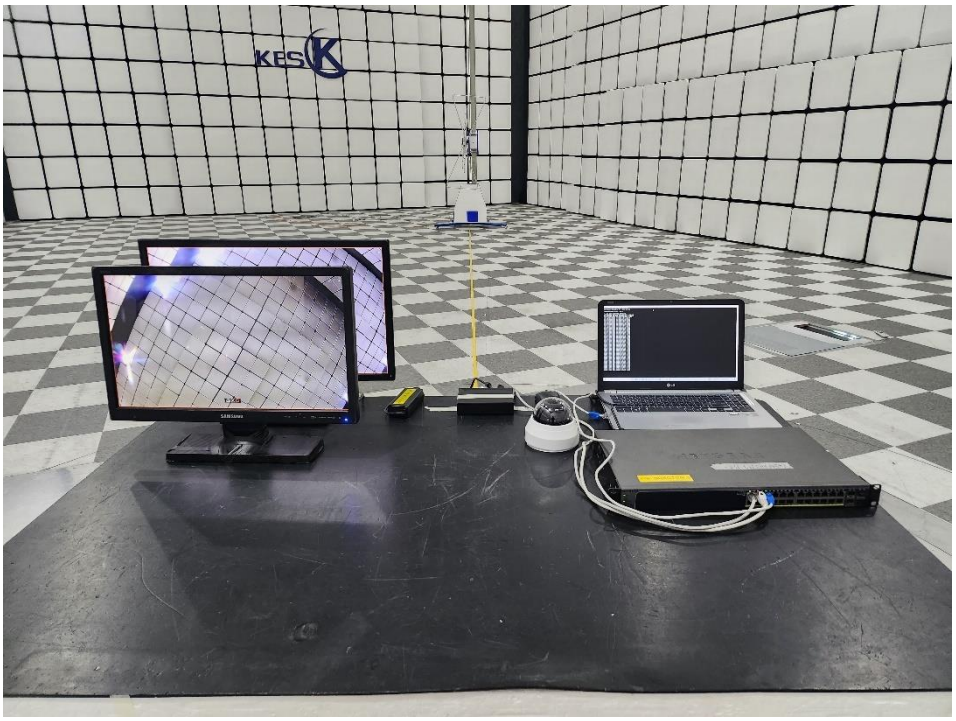
Radiated Electric Field Emissions(Below 1 ㎓)

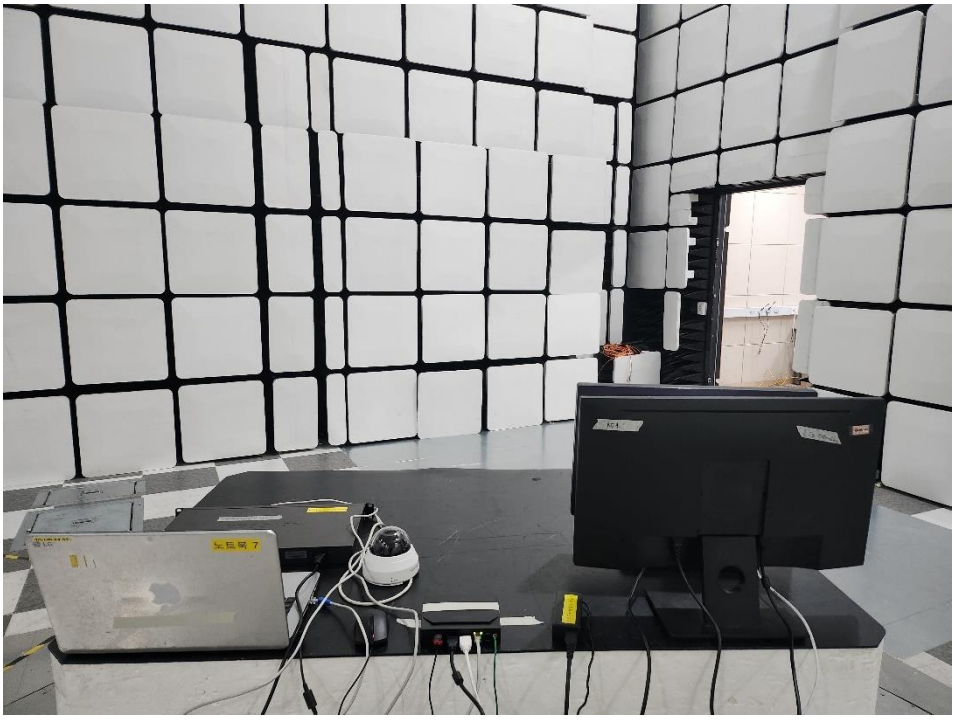
■ DC Mode





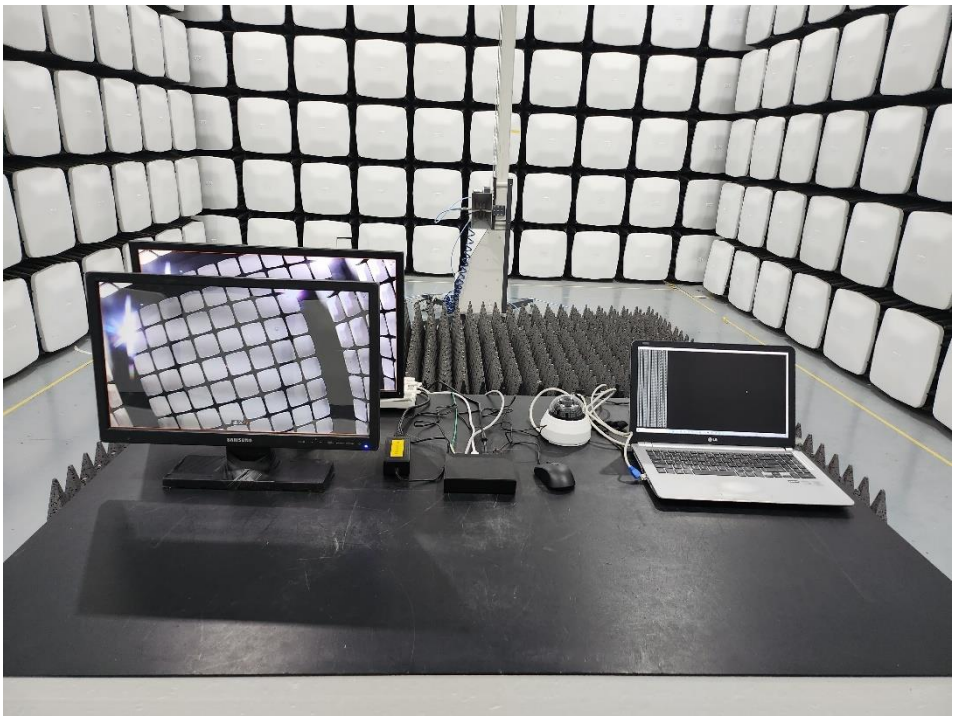
■ PoE Mode

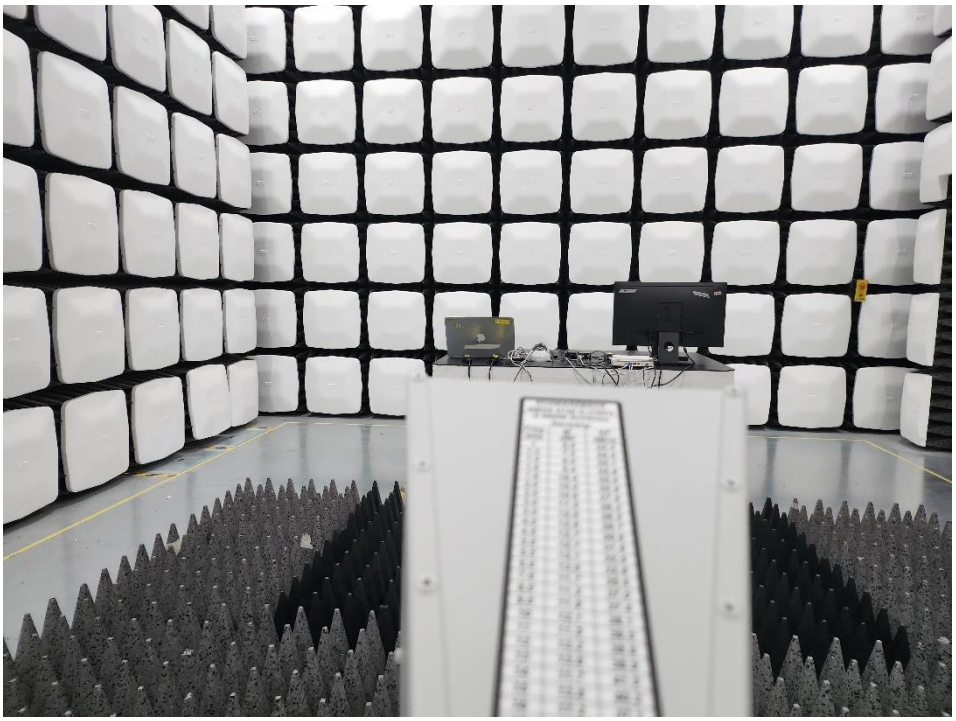




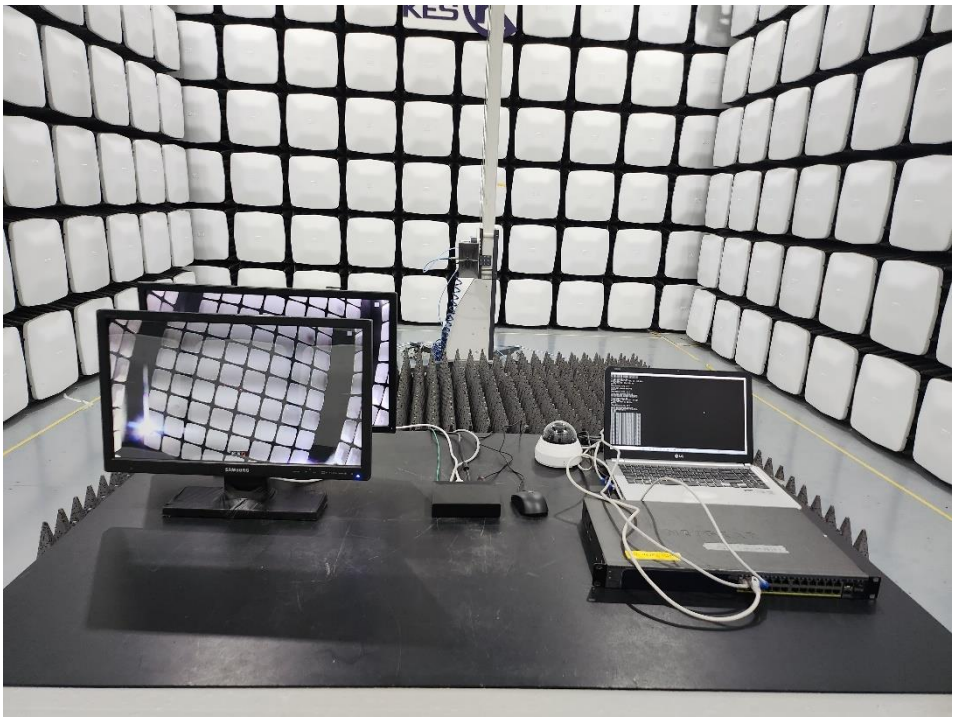
Radiated Electric Field Emissions(Above 1 ㎓)

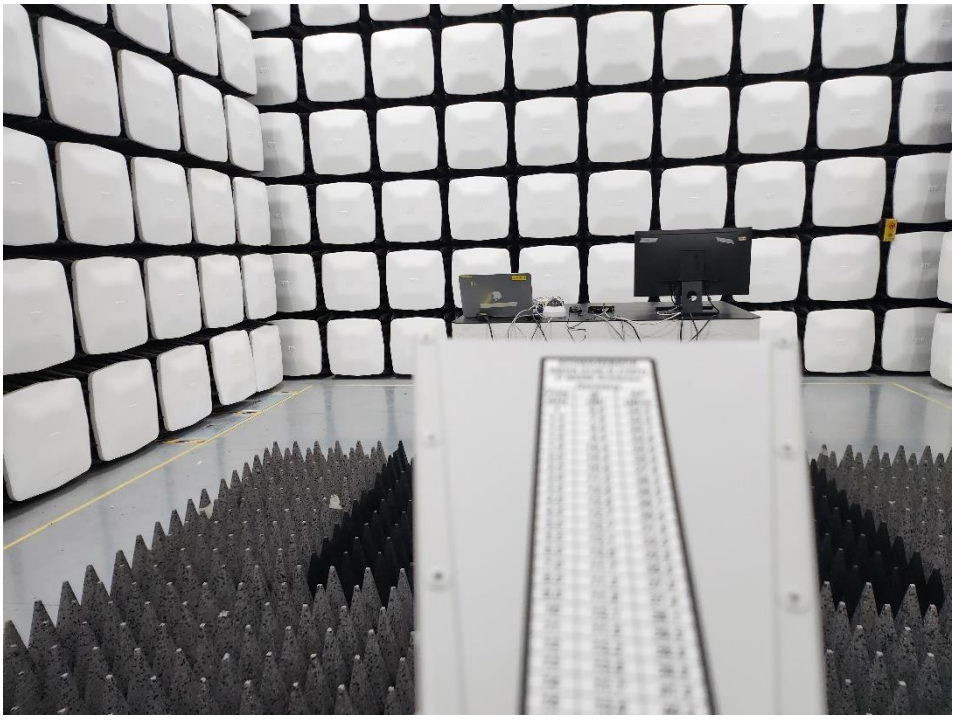
■ DC Mode





■ PoE Mode





EUT External Photographs

(Top)

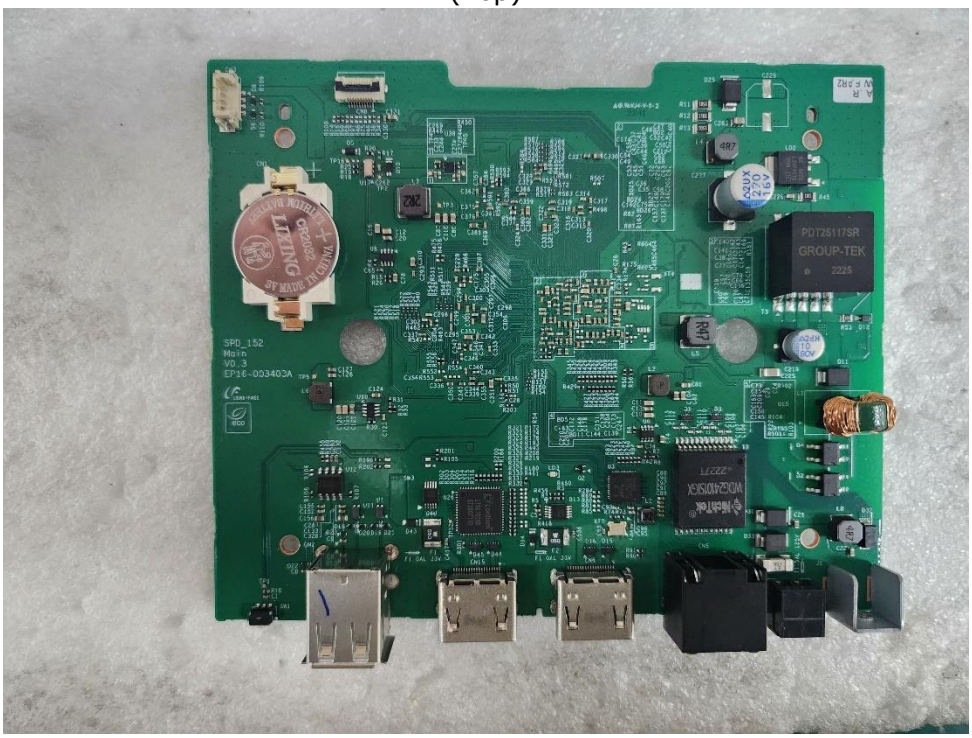
(Bottom)

EUT Internal Photographs

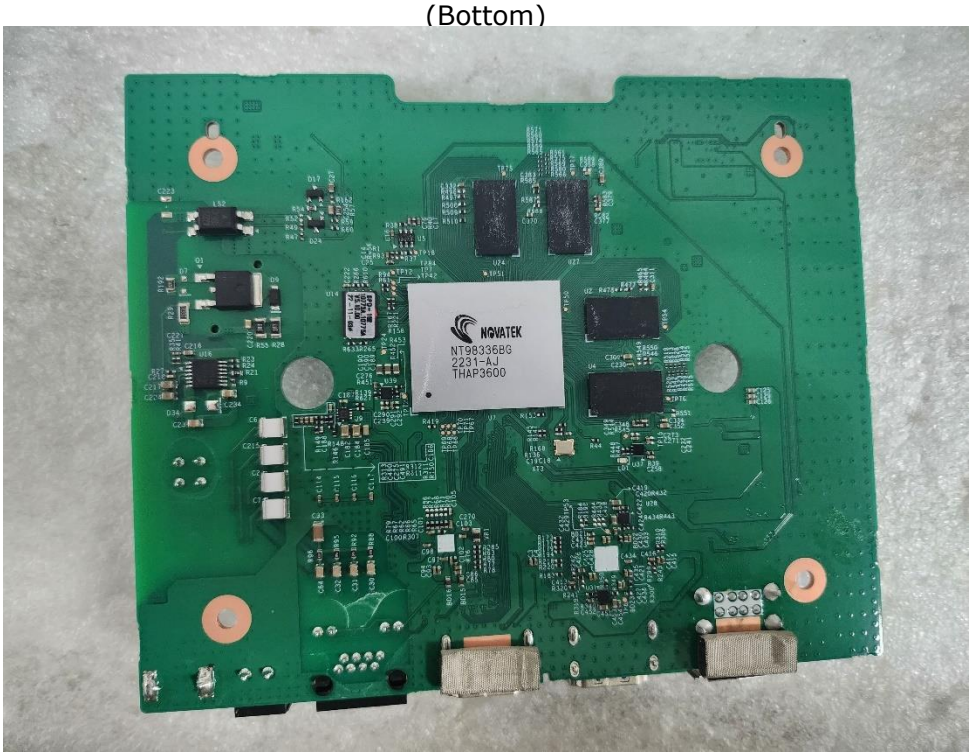
(Internal View)

EUT Internal View – Board

(Top)

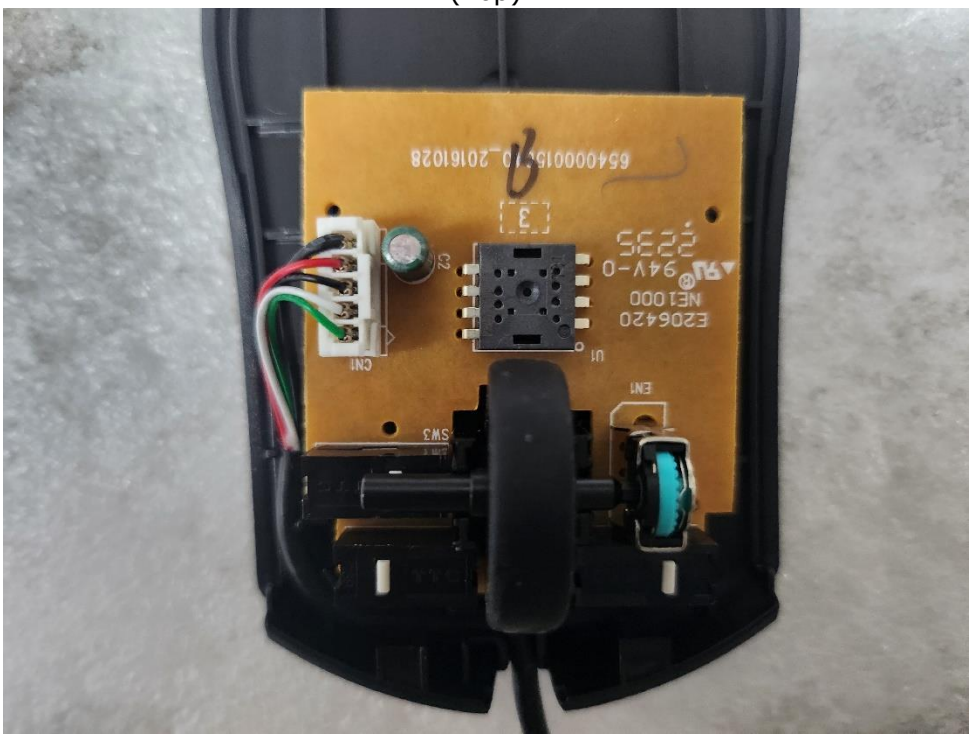


(Bottom)



EUT Internal View – Mouse Board

(Top)



(Bottom)