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EMC TEST REPORT

Dates of Tests: May 02 - 10, 2022
Test Report S/N: LR500172205G
Test Site : LTA Co., Ltd.

Model No.

SPE-1630

APPLICANT

Hanwha Techwin Co., Ltd

Equipment Name : Network Video Encoder
Manufacturer : HANWHA TECHWIN SECURITY VIETNAM CO.,LTD.
Model name : SPE-1630
Test Device Serial No.: Identification
Rule Part(s) : VCCI-CISPR 32:2016

Date of issue : May 12, 2022

This test report is issued under the authority of:

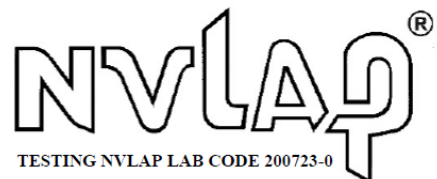
The test was supervised by:

Young Kyu Shin, Technical Manager

Joo Hyung Cho, Test Engineer

This test result only responds to the tested sample. It is not allowed to copy this report even partly without the allowance of the test laboratory. The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

This test report is not related to KS Q ISO/IEC 17025 and KOLAS accreditation.



Revision history

Revision	Date of issue	Test report No.	Description
0	12.05.2022	LR500172205G	Initial

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1. General information's

1-1 Test Performed

Company name : **LTA Co., Ltd**
 Address : 4, Songju-ro 236beon-gil, Yangji-myeon, Cheoin-gu, Yongin-si, Gyeonggi-do, 17159, Korea
 Web site : <http://www.ltalab.com>
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Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which “General requirements for the competents of calibration and testing laboratory”.

1-2 Accredited agencies

LTA Co., Ltd. is approved to perform EMC testing by the following agencies:

Agency	Country	Accreditation No.	Validity	Reference
NVLAP	U.S.A	200723-0	2022-09-30	ECT accredited Lab.
	KOREA		-	
RRA	U.S.A	KR0049	2023-04-08	RRA accredited Lab.
	CANADA		2022-10-18	
		C-14948	2023-09-10	
VCCI	JAPAN	T-12416	2023-09-10	VCCI registration
		R-14483	2023-10-15	
		G-10847	2024-12-13	
KOLAS	KOREA	KT551	2025-10-12	KOLAS accredited Lab.

2. Information's about test item

2-1 Client / Manufacturer

Company name : Hanwha Techwin Co., Ltd.
 Address : 6, Pangyo-ro 319 Beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, 13488, KOREA
 Telephone /Facsimile : +82-70-7147-8753(<http://hanhwa-security.com>)

Factory #1

Company name : HANWHA TECHWIN SECURITY VIETNAM CO.,LTD.
 Address : Lot O-2, Que Vo Industrial Zone extended area ,Nam Son commune, Bac Ninh city, Bac Ninh province, Vietnam

Factory #2

Company name : D-TECH CO.,LTD.
 Address : 173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi-do, Korea
 (Suwon Industrial Complex)

2-2 Equipment Under Test (EUT)

Class : A
 Category : Network Video Encoder
 Model name : SPE-1630
 Serial number : Identification
 Date of receipt : April 26, 2022
 EUT condition : Pre-production, not damaged
 Interface ports : DC IN, GND, BNC #1 ~ #16, HDMI, LAN, AUDIO IN #1 ~ #2, AUDIO OUT, RS485, ALARM IN #1 ~ #16, ALARM OUT #1 ~ #8
 Power rating : AC 100 V, 50 Hz

2-3 Modification

- Insert Gasket Tape at Internal.

2-4 Test conditions

Temp. / Humid. / Pressure : (22 - 24) °C / (31 - 41) % R.H.
 Tested Model : SPE-1630
 Test mode : Network Video Encoder mode
 Test Voltage : AC 100 V, 50 Hz

2-5 List of EUT and ACCESSORY

EUT				
Equipment Name	Model Name	Serial No.	Manufacturer	Remarks
Network Video Encoder	SPE-1630	N/A	HANWHA TECHWIN SECURITY VIETNAM CO.,LTD. D-TECH CO.,LTD.	-
Adapter	FSP060-DHAN3	N/A	Zhonghan Electronics (Shenzhen) Co., Ltd.	-
ACCESSORY				
Equipment Name	Model Name	Serial No.	Manufacturer	Remarks
Headset	SHS-150V/W	N/A	SAMSUNG	-
Mobile phone	SHW-M250K	N/A	SAMSUNG	-
ALARM JIG	N/A	N/A	N/A	-
Notebook	MS-16GB	N/A	MSI	-
Notebook Adapter	A10-090P3A	N/A	Chicony	-
Monitor	24MT58DF	N/A	LG	-
Monitor Adapter	ADS-40FSG-19	N/A	LG	-
Network Video Encoder #2	SPE-410	N/A	HANWHA TECHWIN SECURITY VIETNAM CO.,LTD. D-TECH CO.,LTD.	3 EA
Network Video Encoder #2 Adapter	2ACB022F	N/A	Channel Well Technology (Guangzhou) Co., Ltd.	3 EA
ANALOG CAMERA	HCD-7010RA	N/A	HANWHA TECHWIN SECURITY VIETNAM CO.,LTD. D-TECH CO.,LTD.	-
ANALOG CAMERA Adapter	DAD12050DKA	N/A	Dream Electronic Co.,Ltd	-
RS485 to USB Convertor	LCC-COMS-485usb	N/A	LIGHT COM	-

2-6 Cable List

Cable List						
From		To		Length (m)	Shielding	
Type	I/O Port	Type	I/O Port		Cable	backshell
EUT	DC IN	Adapter	DC OUT	1.3	NO	Plastic
	GND	GND	GND	1.5	NO	Plastic
	BNC #1 ~ #8	Network Video Encoder #2 1	BNC #1 ~ #8	3.0	YES	Metal
	BNC #9 ~ #16	Network Video Encoder #2 2	BNC #9 ~ #16	3.0	YES	Metal
	HDMI	Monitor	HDMI	1.5	YES	Plastic
	LAN	Notebook	LAN	3.0	NO	Plastic
	AUDIO IN #1	Notebook	AUDIO OUT	3.0	NO	Plastic
	AUDIO IN #2	Mobile phone	AUDIO OUT	3.0	NO	Plastic

From		To		Length (m)	Shielding	
Type	I/O Port	Type	I/O Port		Cable	backshell
EUT	AUDIO OUT	Headset	AUDIO IN	1.7	NO	Plastic
	RS485	RS485 to USB Convertor	RS485	3.0	NO	Plastic
	ALARM IN #1 ~ #16	ALARM JIG	ALARM OUT #1 ~ #16	3.0	NO	Plastic
	ALARM OUT #1 ~ #8	ALARM JIG	ALARM IN #1 ~ #8	3.0	NO	Plastic
Adapter	AC IN	AC Power Source	3 Pin AC Line	1.5	NO	Plastic
Monitor	DC IN	Monitor Adapter	DC OUT	1.3	NO	Plastic
Monitor Adapter	AC IN	AC Power Source	2 Pin AC Line	-	NO	Plastic
Notebook	DC IN	Notebook Adapter	DC OUT	1.4	NO	Plastic
	USB	RS485 to USB Convertor	USB	1.0	NO	Plastic
Notebook Adapter	AC IN	AC Power Source	3 Pin AC Line	1.5	NO	Plastic
Network Video Encoder #2 1	DC IN	Network Video Encoder #2 1 Adapter	DC OUT	1.2	NO	Plastic
	BNC #9	Network Video Encoder #2 3	BNC #1	1.5	YES	Metal
Network Video Encoder #2 1 Adapter	AC IN	AC Power Source	2 Pin AC Line	1.5	NO	Plastic
Network Video Encoder #2 2	DC IN	Network Video Encoder #2 2 Adapter	DC OUT	1.2	NO	Plastic
	BNC #9	Network Video Encoder #2 3	BNC #2	1.5	YES	Metal
Network Video Encoder #2 2 Adapter	AC IN	AC Power Source	2 Pin AC Line	1.5	NO	Plastic
Network Video Encoder #2 3	DC IN	Network Video Encoder #2 3 Adapter	DC OUT	1.2	NO	Plastic
	BNC #3	ANALOG CAMERA	BNC	1.5	YES	Metal
Network Video Encoder #2 3	DC IN	Network Video Encoder #2 3 Adapter	DC OUT	1.2	NO	Plastic
	BNC #3	ANALOG CAMERA	BNC	1.5	YES	Metal
Network Video Encoder #2 3 Adapter	AC IN	AC Power Source	2 Pin AC Line	1.5	NO	Plastic
ANALOG CAMERA	DC IN	ANALOG CAMERA Adapter	DC OUT	1.4	NO	Plastic
ANALOG CAMERA Adapter	AC IN	AC Power Source	2 Pin AC Line	1.5	NO	Plastic

3. Test Report

3.1 Summary of tests

Parameter	Applied Standard	Status
I. Emission		
Conducted Emissions	VCCI-CISPR 32:2016	C
Conducted Emissions at telecommunication ports	VCCI-CISPR 32:2016	C
Radiated Emissions	VCCI-CISPR 32:2016	C
Radiated Emissions at above 1 GHz	VCCI-CISPR 32:2016	C

Note 1: C=Complies NC=Not Complies NT=Not Tested NA=Not Applicable

Note 2: The data in this test report are traceable to the national or international standards.

4. EMISSION

4.1 Conducted Emissions

Definition:

The test assesses the ability of the EUT to limit its internal noise from being present on the AC mains Power In/Output/Telecommunication ports.

We were performed the test according to LTA procedure LTA-QI-04.

Test method	: VCCI-CISPR 32:2016
Measurement Frequency range	: 150 kHz - 30 MHz
Measurement RBW	: 9 kHz
Test Location	: Shielded Room
Test mode	: Network Video Encoder mode
Result	: Complies

Measurement Data:

- Refer to the Next page (Maximum emission configuration)

A sample calculation:

COR. F (correction factor)= LISN Insertion loss + Cable loss + Pulse Limiter Factor

Emission Level= meter reading + COR.F

Limits for Conducted Emissions at the mains ports of class A ITE

Frequency Range	Quasi-peak	Average
(0.15 - 0.5) MHz	79 dB μ V	66 dB μ V
(0.5 – 30) MHz	73 dB μ V	60 dB μ V

Note: The limits will decrease with the frequency logarithmically within 0.15MHz to 0.5MHz

Limits for Conducted Emissions at the mains ports of class B ITE

Frequency Range	Quasi-peak	Average
(0.15 – 0.5) MHz	(66 – 56) dB μ V	(56 - 46) dB μ V
(0.5 – 5) MHz	56 dB μ V	46 dB μ V
(5 – 30) MHz	60 dB μ V	50 dB μ V

Note: The limits will decrease with the frequency logarithmically within 0.15 MHz to 0.5 MHz

Limits of conducted common mode (asymmetric mode) disturbance at telecommunication ports in the frequency range 0.15 MHz to 30 MHz for class A equipment

Frequency Range	Voltage limits		Current limits	
	Quasi-peak	Average	Quasi-peak	Average
(0.15 - 0.5) MHz	(97 – 87) dB μ V	(84 – 74) dB μ V	(53 – 43) dB μ V	(40 – 30) dB μ V
(0.5 – 30) MHz	87 dB μ V	74 dB μ V	43 dB μ V	30 dB μ V

Note 1: The limits decrease linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Note 2: The current and voltage disturbance limits are derived for use with an impedance stabilization network (ISN) which presents a common mode (asymmetric mode) impedance of 150 Ω to the telecommunication port under test (conversion factor is $20 \log_{10} 150/I = 44$ dB)

Limits of conducted common mode (asymmetric mode) disturbance at telecommunication ports in the frequency range 0.15 MHz to 30 MHz for class B equipment

Frequency Range	Voltage limits		Current limits	
	Quasi-peak	Average	Quasi-peak	Average
(0.15 - 0.5) MHz	(84 – 74) dB μ V	(74 – 64) dB μ V	(40 – 30) dB μ V	(30 – 20) dB μ V
(0.5 – 30) MHz	74 dB μ V	64 dB μ V	30 dB μ V	20 dB μ V

Note 1: The limits decrease linearly with the logarithm of the frequency in the range 0.15 MHz to 0.5 MHz.

Note 2: The current and voltage disturbance limits are derived for use with an impedance stabilization network (ISN) which presents a common mode (asymmetric mode) impedance of 150 Ω to the telecommunication port under test (conversion factor is $20 \log_{10} 150/I = 44$ dB)

Conducted Emissions (LINE)



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EUT /Model No. : SPE-1630

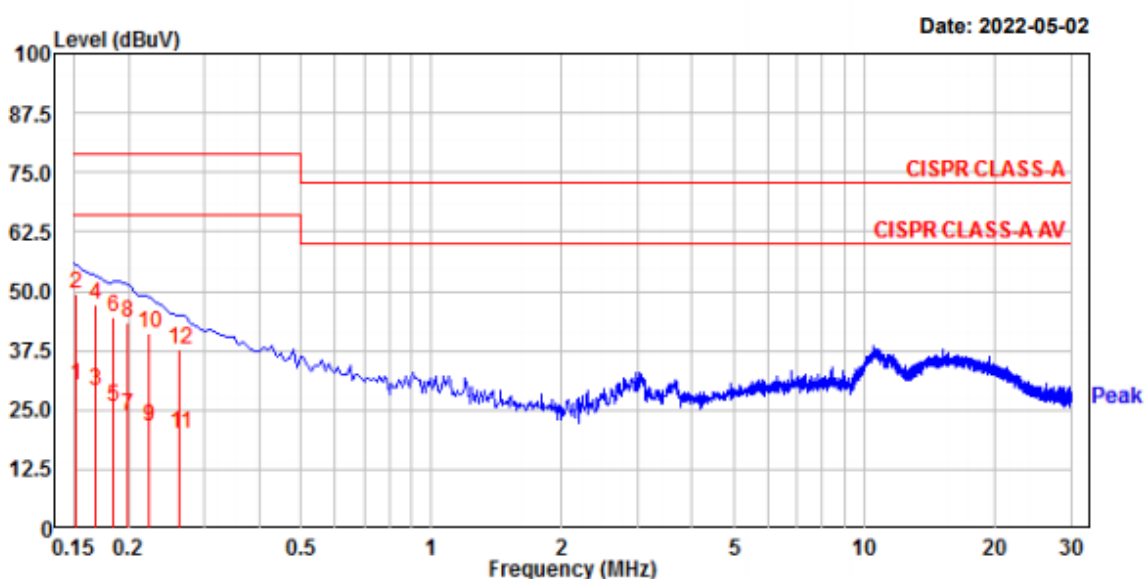
Phase : Line

Test Mode : Network Video Encoder mode

Test Power : 100 V / 50 Hz

Temp./ Humi. : 21 'C / 39 % R.H

Test Engineer : CHO J H



No.	Freq MHz	RD QP dBμV	RD AV dBμV	C.F dB	Result QP dBμV	Result AV dBμV	Limit QP dBμV	Limit AV dBμV	Margin QP dB	Margin AV dB	Phase
2.	0.151	29.81	10.85	19.47	49.28	30.32	79.00	66.00	29.72	35.68	Line
4.	0.168	27.67	9.52	19.47	47.14	28.99	79.00	66.00	31.86	37.01	Line
6.	0.185	25.14	6.16	19.47	44.61	25.63	79.00	66.00	34.39	40.37	Line
8.	0.198	23.90	4.39	19.47	43.37	23.86	79.00	66.00	35.63	42.14	Line
10.	0.224	21.76	2.16	19.47	41.23	21.63	79.00	66.00	37.77	44.37	Line
12.	0.263	18.41	0.47	19.48	37.89	19.95	79.00	66.00	41.11	46.05	Line

Remarks: C.F (Correction Factor) = Insertion loss + Cable loss + Pulse Limiter

Conducted Emissions (NEUTRAL)



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EUT /Model No. : SPE-1630

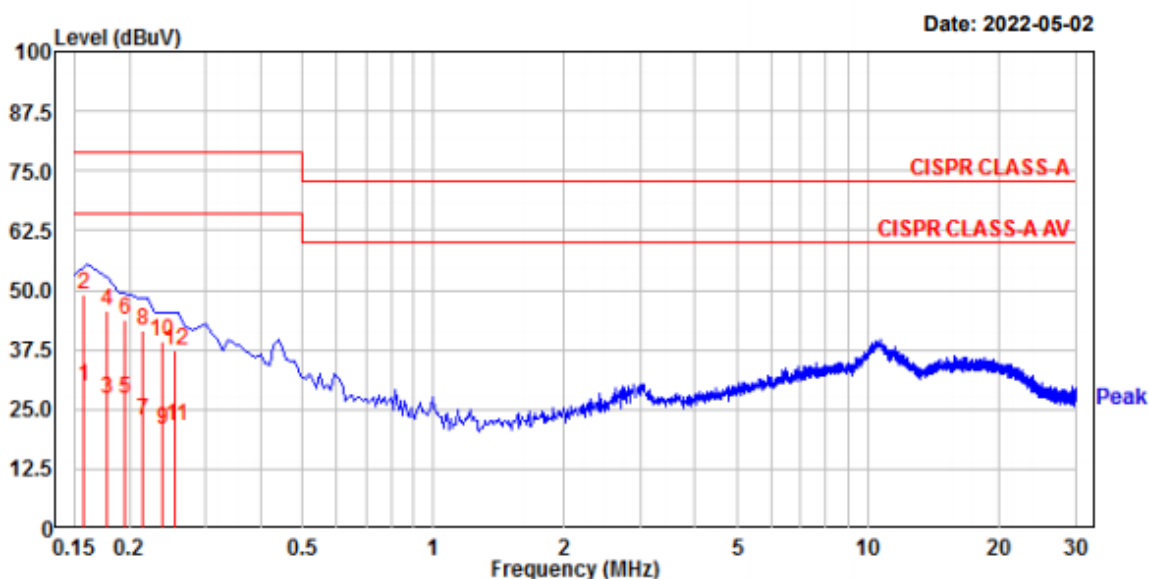
Phase : Neutral

Test Mode : Network Video Encoder mode

Test Power : 100 V / 50 Hz

Temp./ Humi. : 21 'C / 39 % R.H

Test Engineer : CHO J H



No.	Freq MHz	RD QP dBμV	RD AV dBμV	C.F dB	Result QP dBμV	Result AV dBμV	Limit QP dBμV	Limit AV dBμV	Margin QP dB	Margin AV dB	Phase
2.	0.157	29.64	10.26	19.50	49.14	29.76	79.00	66.00	29.86	36.24	neutral
4.	0.177	26.29	7.69	19.49	45.78	27.18	79.00	66.00	33.22	38.82	neutral
6.	0.195	24.36	7.52	19.49	43.85	27.01	79.00	66.00	35.15	38.99	neutral
8.	0.214	21.94	3.34	19.49	41.43	22.83	79.00	66.00	37.57	43.17	neutral
10.	0.237	19.59	1.41	19.49	39.08	20.90	79.00	66.00	39.92	45.10	neutral
12.	0.255	18.01	2.15	19.50	37.51	21.65	79.00	66.00	41.49	44.35	neutral

Remarks: C.F (Correction Factor) = Insertion loss + Cable loss + Pulse Limiter

Conducted Emissions (TEL_10 M)



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EUT /Model No. : SPE-1630

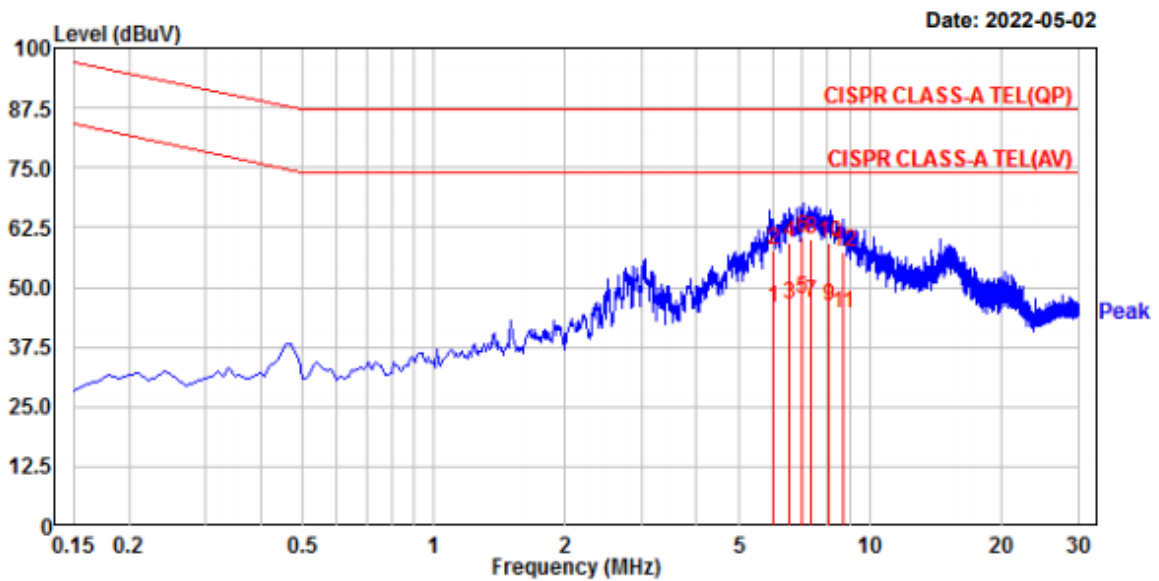
Phase : TEL_10M

Test Mode : Network Video Encoder mode

Test Power : 100 V / 50 Hz

Temp./ Humi. : 21 'C / 39 % R.H

Test Engineer : CHO J H



No.	Freq MHz	RD QP dBuV	RD AV dBuV	C.F dB	Result QP dBuV	Result AV dBuV	Limit QP dBuV	Limit AV dBuV	Margin QP dB	Margin AV dB	Phase
2.	5.981	38.13	26.06	19.55	57.68	45.61	87.00	74.00	29.32	28.39	Line
4.	6.504	39.56	26.76	19.56	59.12	46.32	87.00	74.00	27.88	27.68	Line
6.	6.947	40.94	27.96	19.57	60.51	47.53	87.00	74.00	26.49	26.47	Line
8.	7.347	40.56	27.37	19.59	60.15	46.96	87.00	74.00	26.85	27.04	Line
10.	8.036	39.60	26.46	19.62	59.22	46.08	87.00	74.00	27.78	27.92	Line
12.	8.642	37.78	24.86	19.64	57.42	44.50	87.00	74.00	29.58	29.50	Line

Remarks: C.F (Correction Factor) = Insertion loss + Cable loss + Pulse Limiter

Conducted Emissions (TEL_1000 M)



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EUT /Model No. : SPE-1630

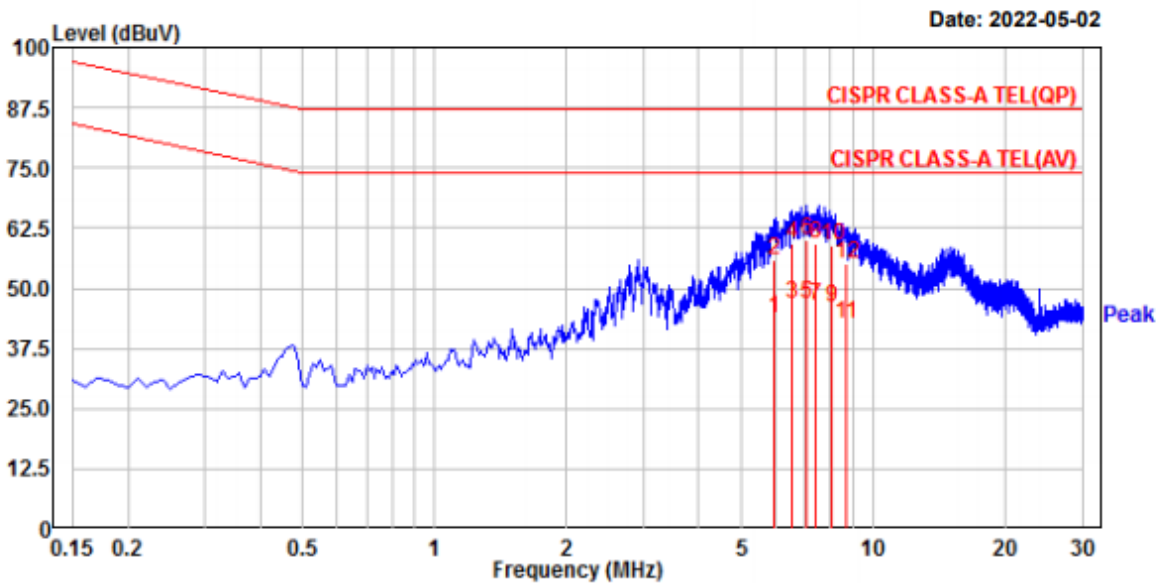
Phase : TEL_1000M

Test Mode : Network Video Encoder mode

Test Power : 100 V / 50 Hz

Temp./ Humi. : 21 'C / 39 % R.H

Test Engineer : CHO J H



No.	Freq MHz	RD QP dBuV	RD AV dBuV	C.F dB	Result QP dBuV	Result AV dBuV	Limit QP dBuV	Limit AV dBuV	Margin QP dB	Margin AV dB	Phase
2.	5.922	36.67	24.46	19.32	55.99	43.78	87.00	74.00	31.01	30.22	Line
4.	6.549	39.79	27.55	19.33	59.12	46.88	87.00	74.00	27.88	27.12	Line
6.	7.044	40.63	27.34	19.34	59.97	46.68	87.00	74.00	27.03	27.32	Line
8.	7.362	39.91	27.24	19.36	59.27	46.60	87.00	74.00	27.73	27.40	Line
10.	8.013	39.44	26.49	19.39	58.83	45.88	87.00	74.00	28.17	28.12	Line
12.	8.685	35.86	23.25	19.41	55.27	42.66	87.00	74.00	31.73	31.34	Line

Remarks: C.F (Correction Factor) = Insertion loss + Cable loss + Pulse Limiter

4.2 Radiated Emissions

Definition:

The test assesses the ability of ancillary equipment to limit their internal noise from being radiated from the enclosure.

We were performed the test according to LTA procedure LTA-QI-04.

Test method	: VCCI-CISPR 32:2016
Measuring Distance	: 10 m below 1 GHz / 3 m above 1 GHz
Measurement Frequency range	: 30 MHz – 6 000 MHz
Measurement RBW	: 120 kHz @ 10 m / 1 MHz @ 3 m
Test Location	: 10 m Chamber
Test mode	: Network Video Encoder mode
Result	: Complies

Measurement Data:

- Refer to the Next page (Maximum emission configuration)
- The highest internal source of an EUT is higher than 108 MHz, the measurement shall only be made up to 6 GHz.
(The highest internal source of an EUT : 1.2 GHz)

A sample calculation:

COR. F (correction factor)= Antenna factor + Cable loss- Amp.gain- Distance correction

Emission Level= meter reading + COR.F

Limit of 10 m below 1 GHz

CLASS A

Frequency Range	Quasi-peak
(30 – 230) MHz	40 dB μ V/m
(230 – 1 000) MHz	47 dB μ V/m

CLASS B

Frequency Range	Quasi-peak
(30 – 230) MHz	30 dB μ V/m
(230 – 1 000) MHz	37 dB μ V/m

Limit of 3m above 1 GHz

CLASS A

Frequency Range	Average Limit @ 3m (dB μ V/m)	Peak limit @ 3m (dB μ V/m)
(1 000 – 3 000) MHz	56	76
(3 000 – 6 000) MHz	60	80

NOTE: The lower limit applies at the transition frequency.

CLASS B

Frequency Range	Average Limit @ 3m (dB μ V/m)	Peak limit @ 3m (dB μ V/m)
(1 000 – 3 000) MHz	50	70
(3 000 – 6 000) MHz	54	74

NOTE: The lower limit applies at the transition frequency.

Radiated Emissions (Below 1 GHz) / V



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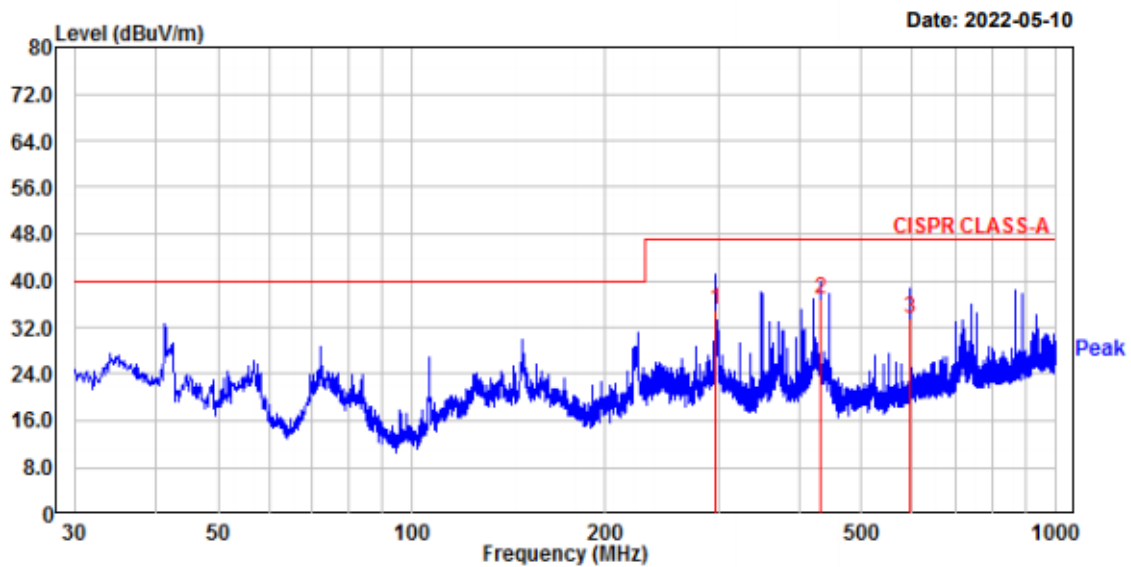
EUT/Model No.: SPE-1630

Temp/Humi: 20 'C / 43 % R.H.

Test Mode : Network Video Encoder mode

Tested by: CHO J H

Power : 100 V / 50 Hz



No.	Freq MHz	Reading dB μ V	C.F dB	Result QP dB μ V/m	Limit dB μ V/m	Margin dB	Height cm	Angle deg	Polarity
1.	296.99	44.09	-9.16	34.93	47.00	12.07	121	15	vertical
2.	431.94	41.28	-4.44	36.84	47.00	10.16	217	335	vertical
3.	594.06	34.30	-0.69	33.61	47.00	13.39	139	140	vertical

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

Radiated Emissions (Below 1 GHz) / H



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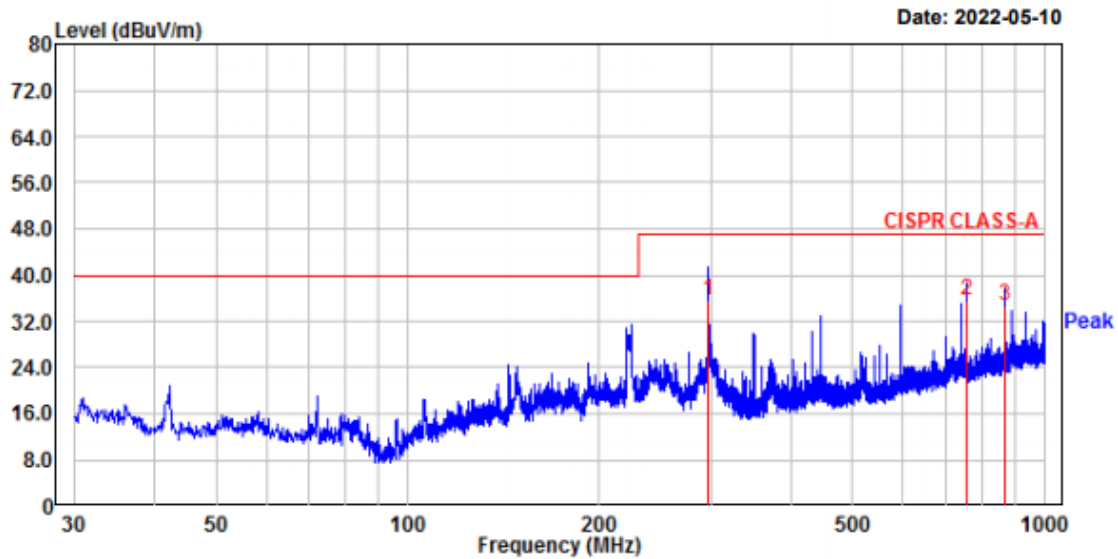
EUT/Model No.: SPE-1630

Temp/Humi: 20 'C / 43 % R.H.

Test Mode : Network Video Encoder mode

Tested by: CHO J H

Power : 100 V / 50 Hz



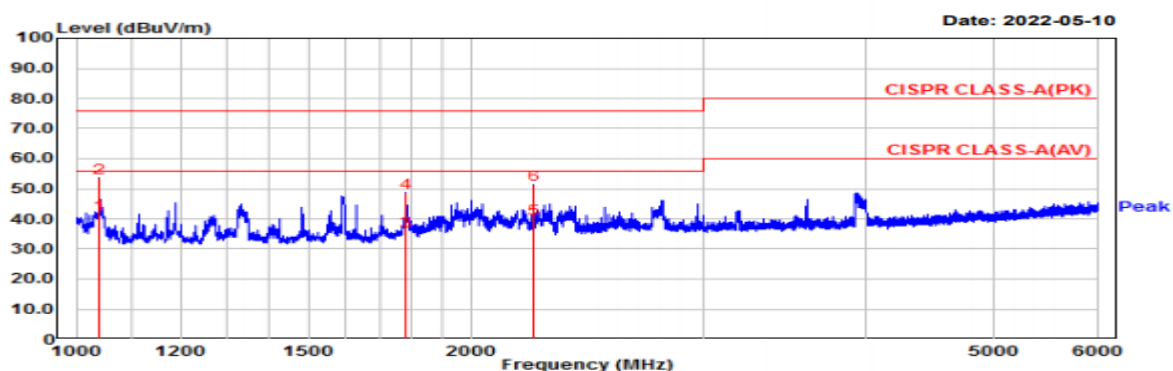
No.	Freq MHz	Reading dB μ V	C.F dB	Result QP dB μ V/m	Limit dB μ V/m	Margin dB	Height cm	Angle deg	Polarity
1.	296.99	44.66	-9.16	35.50	47.00	11.50	139	171	horizontal
2.	756.05	32.73	2.82	35.55	47.00	11.45	121	164	horizontal
3.	864.08	30.63	4.14	34.77	47.00	12.23	188	178	horizontal

Remarks: C.F (Correction Factor) = Antenna factor + Cable loss - Preamp gain

Radiated Emissions

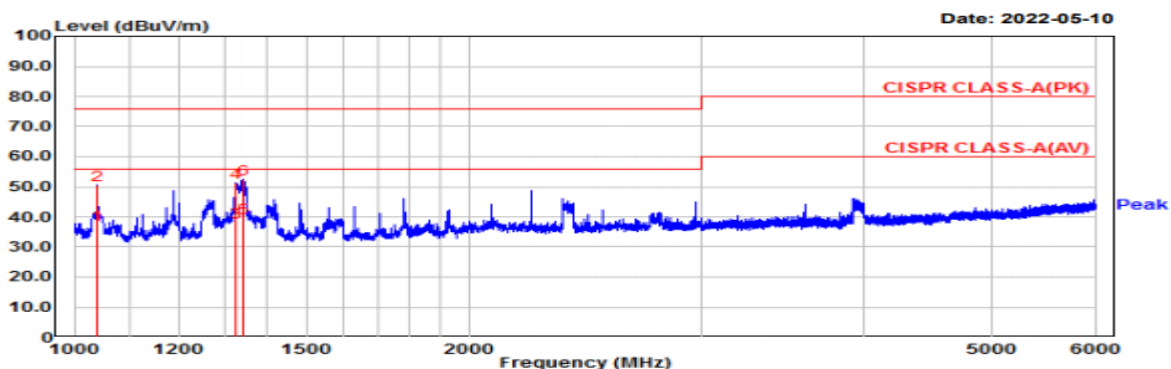
(Above 1 GHz) / V

EUT/Model No.: SPE-1630 Temp/Humi: 20 °C / 43 % R.H.
 Test Mode : Network Video Encoder mode Tested by: CHO J H
 Power : 100 V / 50 Hz



(Above 1 GHz) / H

EUT/Model No.: SPE-1630 Temp/Humi: 20 °C / 43 % R.H.
 Test Mode : Network Video Encoder mode Tested by: CHO J H
 Power : 100 V / 50 Hz



Manufacture : HANWHA TECHWIN SECURITY VIETNAM CO.,LTD.
 Model : SPE-1630
 TEST mode : Network Video Encoder mode

Test Date : 2022-05-10
 Temp.: 20.00 °C
 Humidity: 43.00 %
 Distance (m) : 3.6

Frequency MHz	Reading(PK) dBuV	Reading(AV) dBuV	C.F dB	Result(PK) dBuV/m	Result(AV) dBuV/m	Limit(PK) dBuV/m	Limit(AV) dBuV/m	Margin(PK) dB	Margin(AV) dB	Height cm	Angle deg	Polarity H/V
1039.38	59.85	46.85	-7.87	51.98	38.98	76.00	56.00	24.02	17.02	100	231	H
1326.88	58.06	45.06	-5.21	52.85	39.85	76.00	56.00	23.15	16.15	100	87	H
1341.25	59.22	46.22	-5.15	54.07	41.07	76.00	56.00	21.93	14.93	100	112	H
1039.38	63.07	51.07	-7.87	55.20	43.20	76.00	56.00	20.80	12.80	100	146	V
1781.88	53.35	40.35	-2.94	50.41	37.41	76.00	56.00	25.59	18.59	100	284	V
2227.50	52.27	41.27	0.49	52.76	41.76	76.00	56.00	23.24	14.24	100	60	V

APPENDIX A

TEST EQUIPMENT AND ANCILLARIES USED FOR TESTS

To facilitate inclusion on each page of the test equipment used for related tests, each item of test equipment are identified by the Test Laboratory.

Conducted Emissions

	Item	Model Name	Manufacturer	Serial No.	Next Cal.	Interval
☒	EMI TEST Receiver	ESR	Rohde & Schwarz	101499	2023.03.14	1 year
☒	Pulse Limiter	ESH3-Z2	Rohde & Schwarz	100710	2023.03.14	1 year
☒	ISN	ISN T800	TESEQ	27109	2022.09.06	1 year
☒	ISN	ENY81-CA6	Rohde & Schwarz	101565	2022.09.06	1 year
☐	ISN	ISN S8	Schwarzbeck	79	2022.09.02	1 year
☐	CURRENT PROBE	EZ-17	Rohde & Schwarz	100508	2022.09.02	1 year
☐	CDN	TSCDN-C1-BNC-75	F.C.C	07004	2023.03.14	1 year
☐	LISN	ESH3-Z6	Rohde & Schwarz	100378	2022.09.02	1 year
☐	LISN	ESH3-Z6	Rohde & Schwarz	101468	2022.09.02	1 year
☒	LISN(main)	ENV216	Rohde & Schwarz	100408	2022.09.02	1 year
☒	LISN(sub)	LT32C/10	AFJ	32031518210	2022.09.02	1 year
☒	TEST PROGRAM	e3_ce 20181212a (V9)	AUDIX	-	-	-

Radiated Emissions – Below 1 GHz

	Item	Model Name	Manufacturer	Serial No.	Next Cal.	Interval
☒	EMI TEST Receiver	ESCI7	Rohde & Schwarz	100772	2022.09.02	1 year
☒	Amplifier	8447D	HP	1937A03453	2022.11.30	1 year
☒	BILOG Antenna	VULB 9168	SCHWARZBECK	775	2023.03.22	2 year
☒	TEST PROGRAM	e3 20181212a (V9)	AUDIX	-	-	-

Radiated Emissions – Above 1 GHz

	Item	Model Name	Manufacturer	Serial No.	Next Cal.	Interval
☒	EMI TEST Receiver	ESCI7	Rohde & Schwarz	100772	2022.09.02	1 year
☐	EMI TEST Receiver	ESU	Rohde & Schwarz	100092	2022.09.02	1 year
☒	Amplifier	8449B	Agilent	3008A02126	2023.03.14	1 year
☐	Amplifier	PAM-840A	COM-POWER	461314	2023.03.17	1 year
☐	HORN ANTENNA	3116B	ETS	133350	2024.03.22	1 year
☐	HORN ANTENNA	3116B	ETS	81109	2024.04.25	1 year
☒	HORN ANTENNA	3115	ETS	114105	2023.05.12	2 year
☒	TEST PROGRAM	e3 20181212a (V9)	AUDIX	-	-	-

APPENDIX B

PHOTOGRAPHS

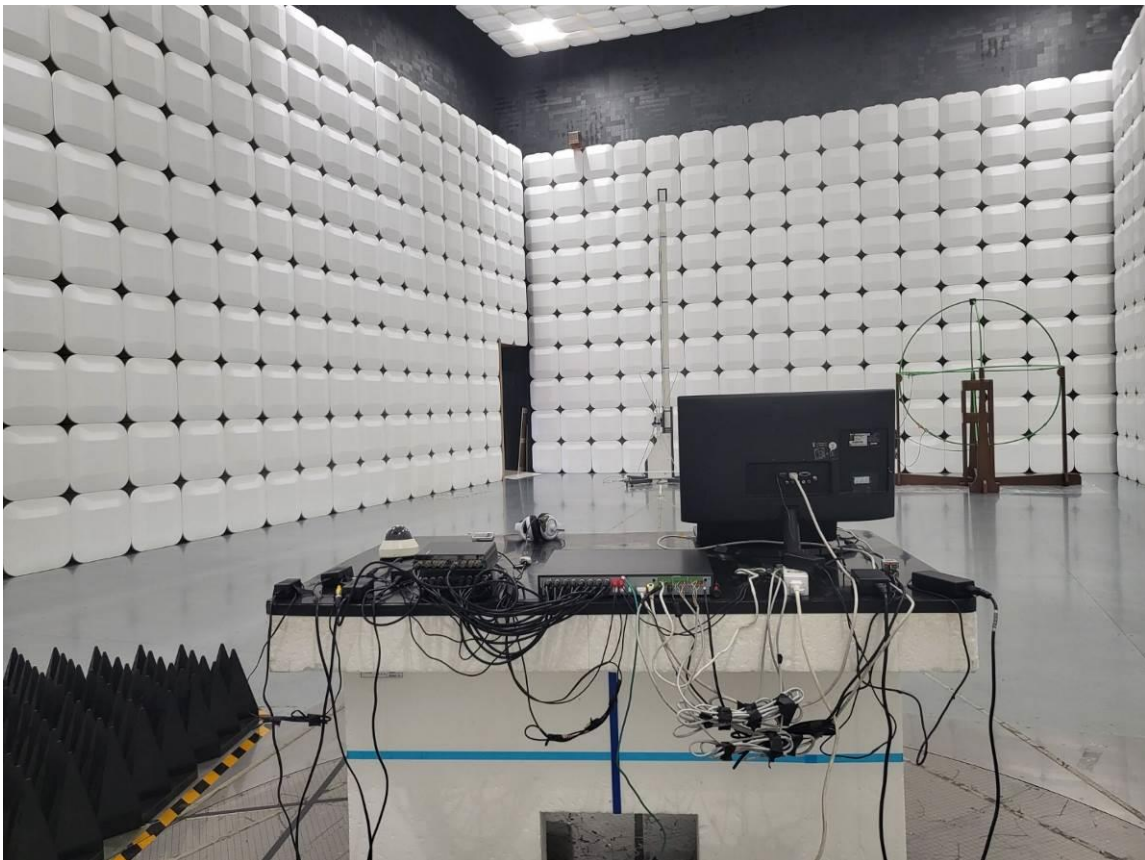
Conducted Emissions



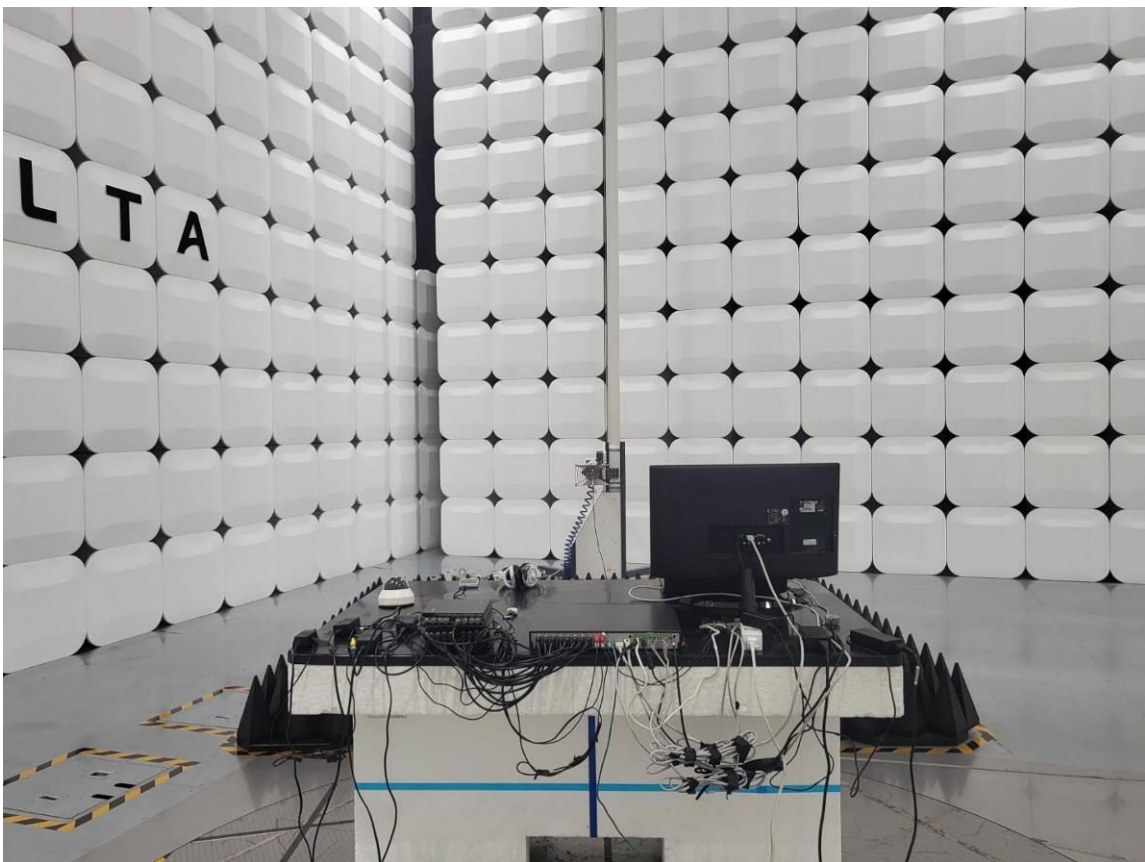
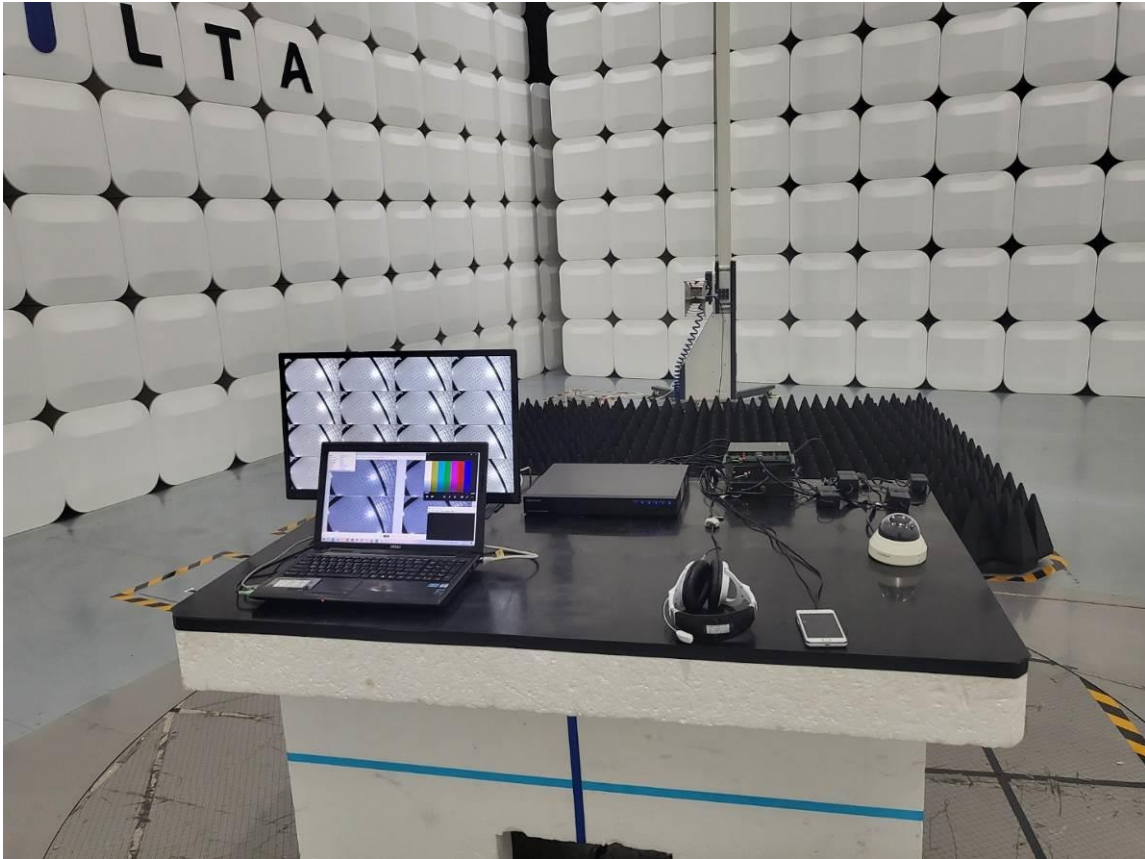
Conducted Emissions (TEL)



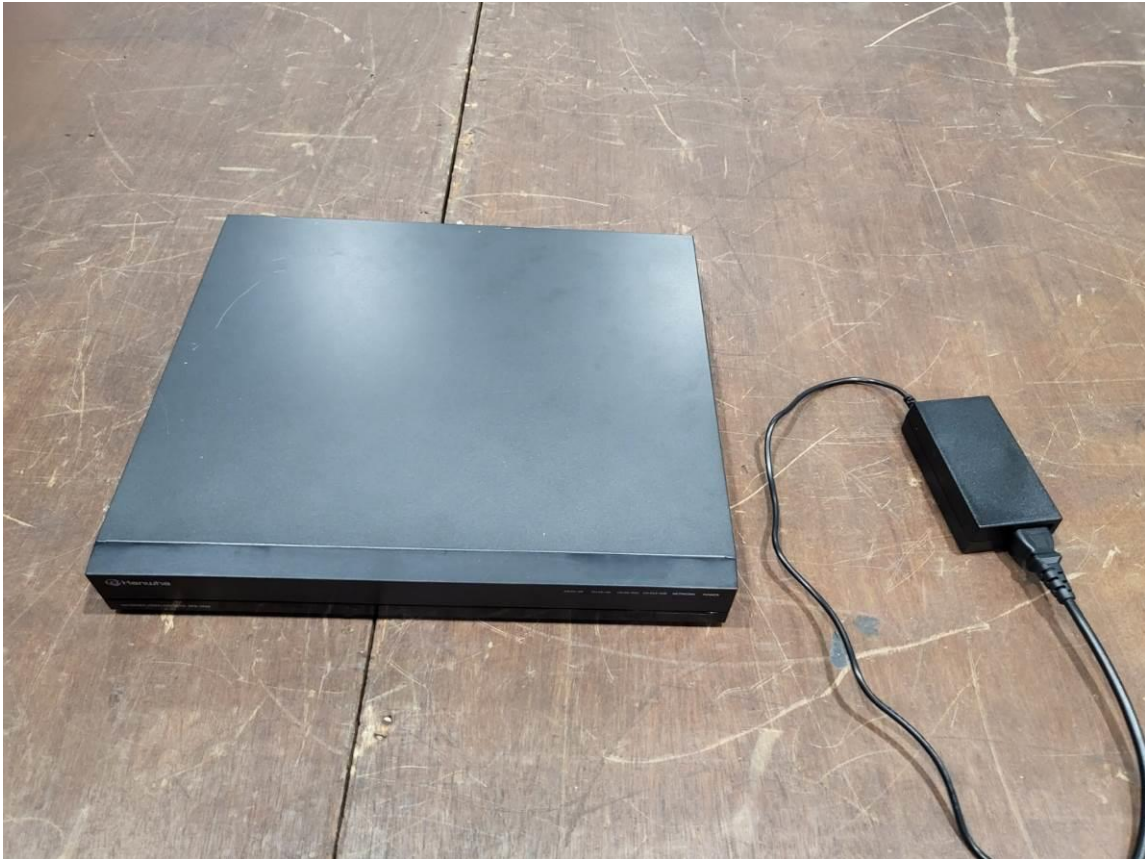
Radiated Emissions - Below 1 GHz



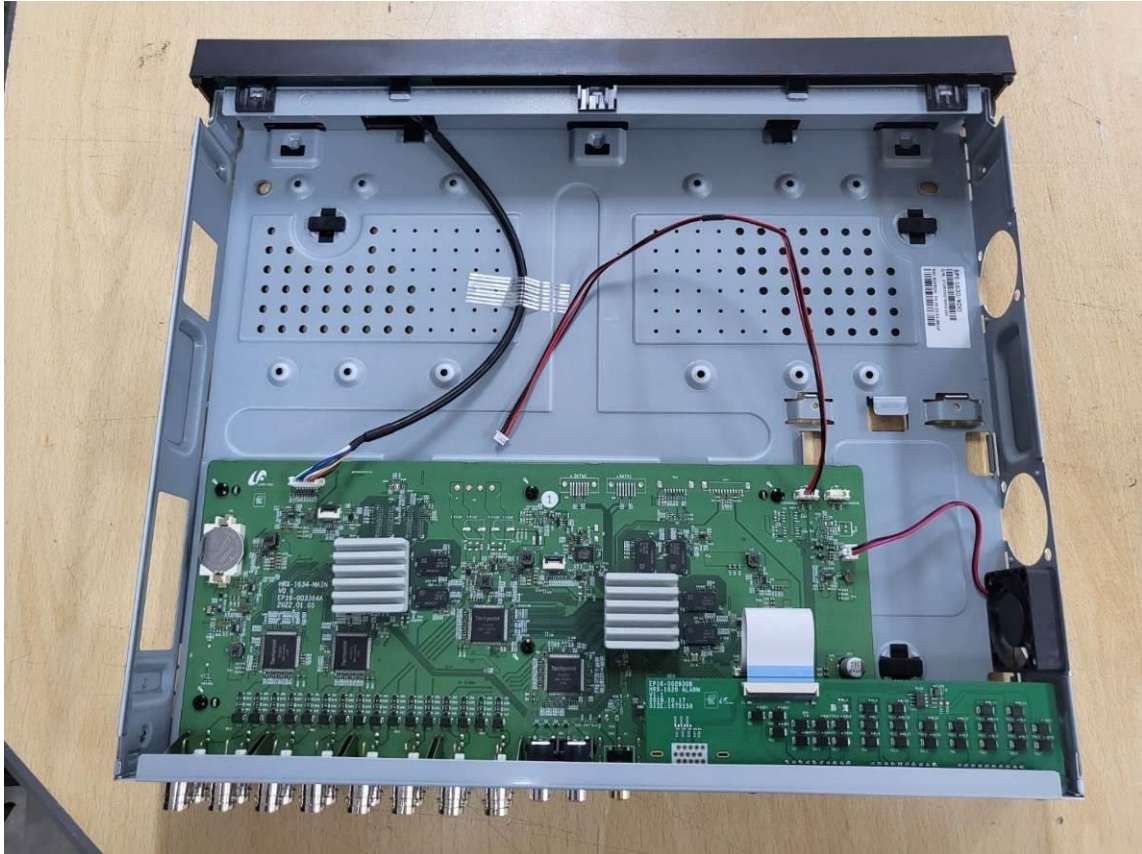
Radiated Emissions - Above 1 GHz



EUT



EUT



EUT _ Modification

