TEST REPORT

KES Co., Ltd.
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Tel : +82-31-425-6200, Fax : +82-31-341-3838

1. Client

○ Name	:	Hanwha Vision Co., Ltd.
○ Address	:	6, Pangyo-ro 319beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

2. Sample Description

◯ Product item	:	LENS MODULE
◯ Model name	:	SLA-T1080FA
◯ Variant model	:	SLA-T2480WA,SLA-T16080WA
◯ Manufacturer etc.	:	HANWHA VISION VIETNAM COMPANY LIMITED
◯ Manufacturer address	:	Lot O-2, Que Vo Industrial Zone Extended Area, Nam Son Ward, Bac Ninh Province, Vietnam
◯ Manufacturer etc.	:	D-TECH CO.,LTD.
◯ Manufacturer address	:	173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi-do, Korea (Suwon Industrial Complex)

3. Date of test : 2026. 01. 21. ~ 2026. 01. 24.

4. Location of Test : Permanent Testing Lab

○ Address : 473-21, Gayeo-ro, Yeoju-si, Gyeonggi-do, 12658, Republic of Korea

5. Test method used : EN 55032:2015/A1:2020, EN 50130-4:2011/A1:2014, EN IEC 61000-3-2:2019, EN 61000-3-3:2013/A2:2021

6. Test result : PASS

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
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This laboratory is not accredited for the test results marked *.
This test report is not related to KOLAS accreditation.

	Tested by	Technical Manager by
Affirmation	Name : YoungSeok Oh [오영석]2026/02/04	Name : DongHun Jang [장동훈]2026/02/04

2026. 02. 04.

KES Co., Ltd.

REPORT REVISION HISTORY

Date	Test Report No.	Revision History
2026. 02. 04.	KES-EM260183	Issued

Use of uncertainty of measurement for decisions on conformity (decision rule):

■ No decision rule is specified by the standard, when comparing the measurement result with the applicable limit according to the specification in that standard. The decisions on conformity are made without applying the measurement uncertainty(“simple acceptance” decision rule, previously known as “accuracy method”).

□ Other (to be specified, for example when required by the standard or client)

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1 Laboratory Information

1.1 Test Location

Category	Details
Addres	473-21, Gayeo-ro, Yeoju-si, Gyeonggi-do, 12658, Republic of Korea
Telephone Number	031-883-5092
Facsimile Number	031-883-5169

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

1.2 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 0008

2 Test Summary

2.1 Class and Voltage

Test Class	Test Voltage
Class A	AC 230 V, 50 Hz

2.2 Summary of Test Results

Regulation
EMC Directive 2014/30/EU, EMC Regulations SI 2016/1091

Test Item	Test Standard		Test Result	Remark
Conducted Emissions at Mains Power Ports	EN 55032:2015+A1:2020		PASS	-
Conducted Emissions at Telecommunication Ports			N/A	NOTE 1
Radiated Emissions(Below 1 ㎓)			PASS	-
Radiated Emissions(Above 1 ㎓)			PASS	-
Harmonic Current Emissions	EN IEC 61000-3-2:2019		PASS	-
Voltage Fluctuations and Flicker	EN 61000-3-3:2013+A2:2021		PASS	-
Electrostatic Discharge	EN 50130-4:2011+A1:2014	EN 61000-4-2:2009	PASS	-
Continuous RF electromagnetic field disturbances		EN IEC 61000-4-3:2020	PASS	-
Electrical Fast Transients/Bursts		EN 61000-4-4:2012	PASS	-
Surge		EN 61000-4-5 :2014+A1:2017	PASS	-
Continuous Induced RF Disturbances		EN IEC 61000-4-6:2023	PASS	-
Voltage Dips and Interruptions		EN IEC 61000-4-11:2020	PASS	-

* N/A: Not Applicable

(NOTE 1) No signal line ports.

2.3 Remarks when standards applied

N/A

2.4 Variant Model Differences

- Fixed lens and partial modification of mechanical components

2.5 Device Modifications

N/A

3 General Product Description

Video	
Imaging Device	1/2.8" 2MP CMOS
Min. Illumination	Color: 0.03Lux(F1.6, 1/30sec)

Lens	
Focal Length (Zoom Ratio)	1.6mm fixed focal
Max. Aperture Ratio	F1.6
Angular Field of View	H: 187°, V: 113.9°
Mount Type	RJ12 connected with main unit
Focus Control	fixed

Mechanical	
Color / Material	Black / Metal
Product dimensions / weight	Ø35xL68.9mm, 430g

4 EUT Setup and Operation Mode

4.1 EUT Configuration

Product Name	Model Number	Serial Number	Manufacturer	Remarks
LENS MODULE	SLA-T1080FA	-	HANWHA VISION VIETNAM COMPANY LIMITED	EUT
NETWORK CAMERA	XNB-6002	-	HANWHA VISION VIETNAM COMPANY LIMITED	-
NETWORK CAMERA Adapter	FSP060-DIBAN2	-	Zhonghan Electronics (Shenzhen) Co., Ltd.	-
Monitor	SMT-2232	C95V67VF900025B	Weihai Daewoo Electronics Co., Ltd.	-

4.2 System Configuration

Product Name	Model Number	Serial Number	Manufacturer	Remarks
-	-	-	-	-

4.3 External I/O Cabling

Mode 1

Start		End		Cable Spec.	
Product Name	**I/O Port**	**Product Name**	**I/O Port**	**Length(m)**	**Shield**
EUT	8 Pin	NETWORK CAMERA	6 Pin	8.5	S
NETWORK CAMERA	2 Pin	NETWORK CAMERA Adapter	2 Pin	0.8	U
	BNC	Monitor	BNC	1.2	S

* Unshielded=U, Shielded=S

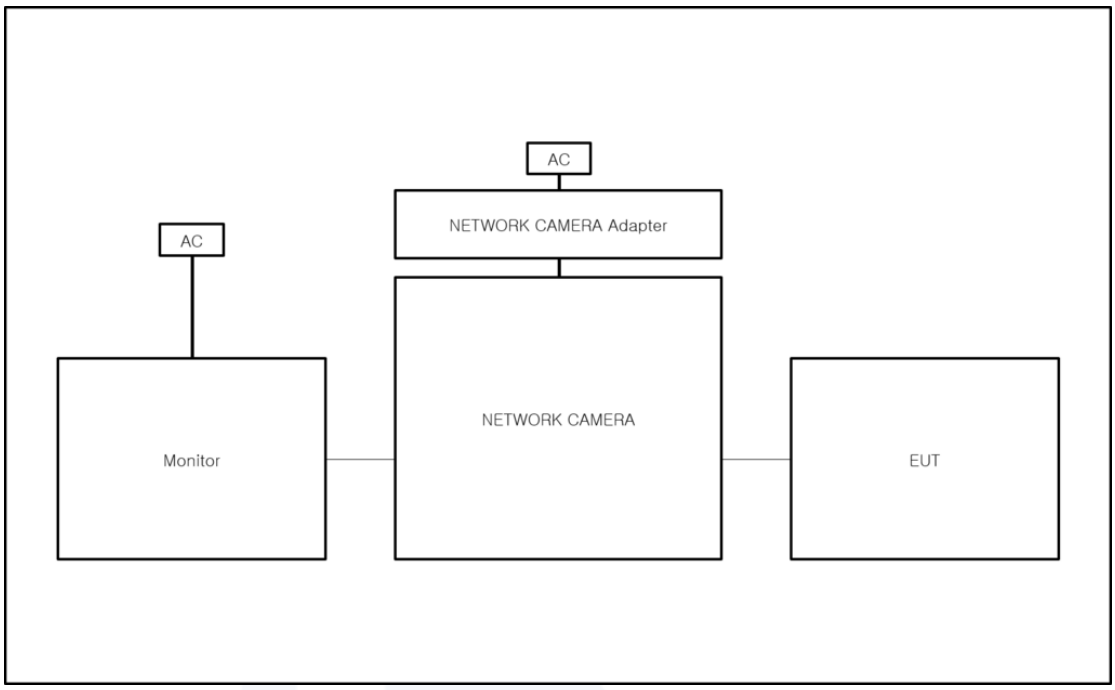
4.4 EUT Operating Mode(s)

Category	Mode	Operating
Mode 1	Operating	The test equipment was connected to the NETWORK CAMERA using an 8-pin to 6-pin cable, and the NETWORK CAMERA was powered on. The test was conducted while confirming that the video from the test equipment was properly displayed on the monitor connected to the NETWORK CAMERA.

4.5 Test operating S/W

Name	Version	Manufacture Company
-	-	-

4.6 Configuration



Mode 1

5 General Performance Criteria

Criteria for compliance was based on the following guidelines:

EN 50130-4 Alarm systems-Part 4: Electromagnetic compatibility Product family standard: Immunity requirements for components of fire, intruder and social alarm systems

The variety and the diversity of the apparatus within the scope of this document makes it difficult to define precise criteria for the evaluation of the immunity test results.

If as a result of the application of the tests defined in this standard, the apparatus

becomes dangerous or unsafe then the apparatus shall be deemed to have failed the test.

A functional description and a definition of performance by the manufacture and noted in the test

report, based on the following criteria:

Electrostatic discharge

There shall be no damage, malfunction or change of status due to the conditioning.

Flickering of an indicator during the application of discharge is permissible, providing that is no

residual change in the EUT or any change in outputs, which could be interpreted by associated

equipment as a change.

Radiated electromagnetic fields

There shall be no damage, malfunction or change of status due to the conditioning.

Flickering of an indicator during the application of discharge is permissible, providing

which could be interpreted by associated equipment as a change, and no such

Flickering of indicators occurs at a field strength of 3 V/m.

For components of CCTV systems, where the picture is allowed at 10 V/m, providing.

(a) there is no permanent damage or change to EUT

(e.g. no corruption of memory or changes to programmable setting etc.)

(b) at 3 V/m, any deterioration of the picture is so minor that the system could still be used; and

(c) there is no observable deterioration of the picture at 1 V/m.

Fast transient burst / slow high energy voltage surge

There shall be no damage, malfunction or change of status due to the conditioning.

Flickering of an indicator during the application of discharge is permissible, providing

That there is no residual is permissible, providing that there is no residual change in the EUT or any

change in outputs, which could be interpreted by associated equipment as a change.

Conducted RF immunity

There shall be no damage, malfunction or change of status due to the conditioning.

Flickering of an indicator during the application of discharge is permissible, providing

That there is no residual is permissible, providing that there is no residual change in the EUT or any

change in outputs, which could be interpreted by associated equipment as a change,

and no such flickering of indicators oeuvres at U = 130 dBμV.

For component of CCTV systems, where the status is monitored by observing the TV picture,

then deterioration of the picture is allowed at U = 140 dBμV, providing:

(a) there is no permanent damage or change to the EUT

(e.g. no corruption of memory or changes to programmable settings etc.)

(b) at U = 130 dBμV, any deterioration of the picture is so minor that the system could

still be used; and

(c) there in no observable deterioration of the picture at U = 120 dBμV.

Voltage dip/interruption / Voltage variation

There shall be no damage, malfunction or change of status due to the conditioning.

Flickering of an indicator during the conditioning is permissible, providing that there is no residual

change in the EUT or any change in outputs, which could be interpreted by associated equipment

as a change. The EUT shall meet the acceptance criteria for the functional test, after the conditioning.

♦ Calculation

- Conducted Emissions

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

- Radiated Emissions(Below 1 GHz)

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 Emissions(Above 1 GHz)

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

6 Test Item

6.1 Conducted Emissions at Mains Power Ports

6.1.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #6	-	DYMSTEC	-	-	-	■
EMC32 Measurement Software	EMC32	R&S	9.12.00	-	-	■
EMI TEST RECEIVER	ESR3	Rohde & Schwarz	101783	2025-11-03	2026-11-03	■
LISN	ENV216	Rohde & Schwarz	101787	2025-09-04	2026-09-04	■
ARTIFICIAL MAINS NETWORK	ESH2-Z5	Rohde & Schwarz	100450	2025-11-03	2026-11-03	■
PULSE LIMITER	ESH3-Z2	Rohde & Schwarz	101915	2025-11-03	2026-11-03	■

6.1.2 Test Location : SHIELD ROOM #6

6.1.3 Test Conditions :

Temperature	Relative Humidity
(21.5 ~ 21.6) °C	(34.9 ~ 35.0) % R.H.

6.1.4 Test Result

○ Test Date : 2026-01-21

● Test Mode : Mode 1

Test Report

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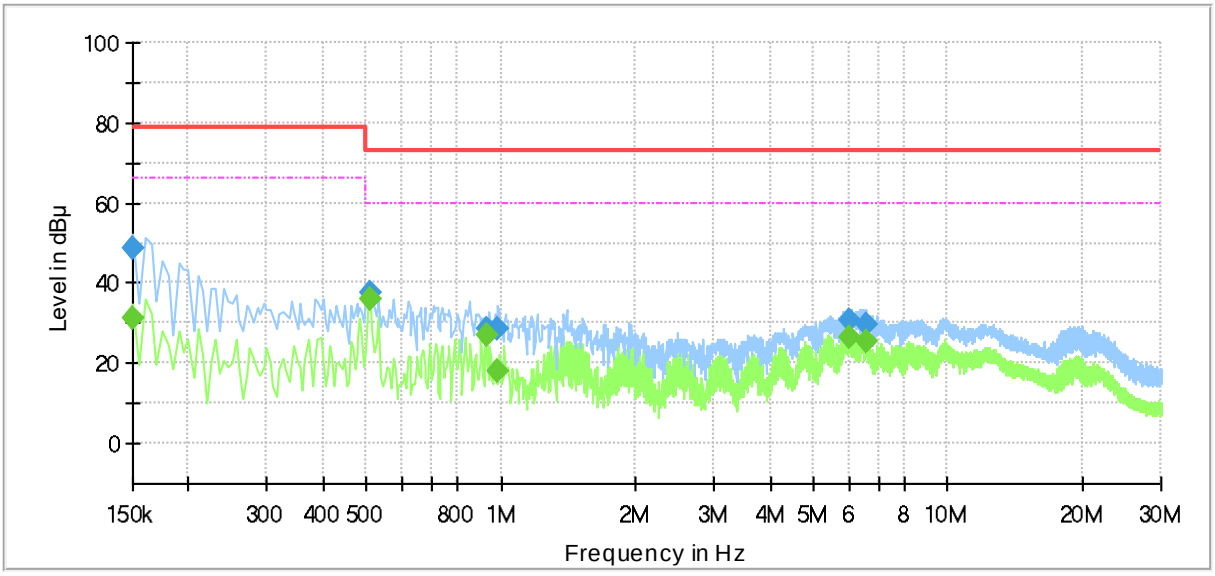
Test Description:	Conducted Emission
Job No.:	KES-EM260183
Phase:	L
Mode:	Mode 1
Operator Name:	KES



Final_Result

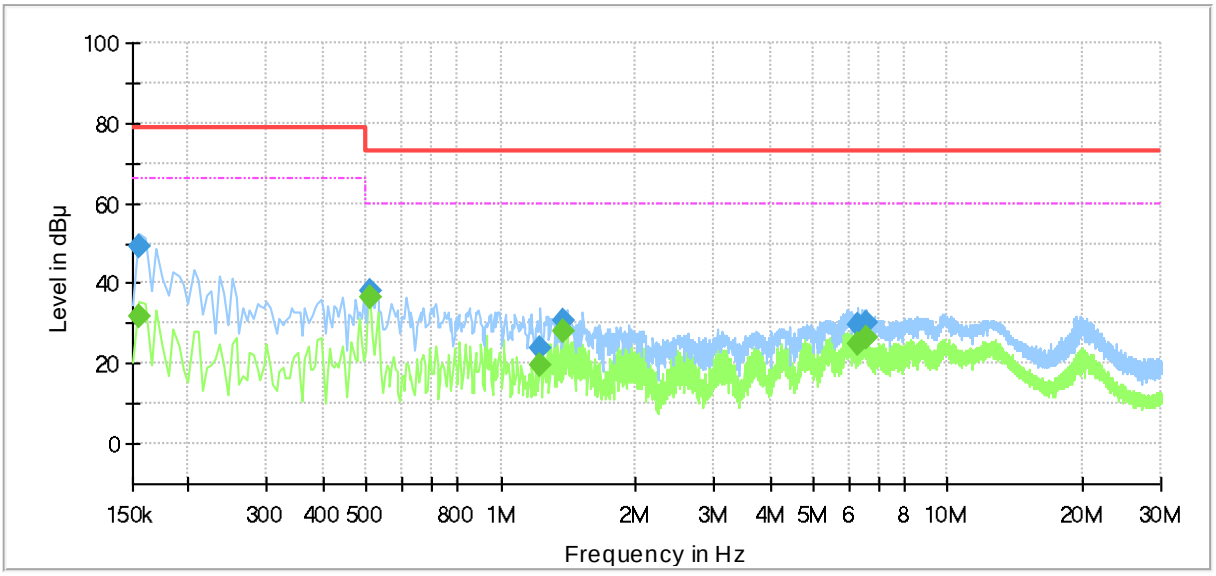
Frequency (MHz)	QuasiPeak (dBµV)	CAverage (dBµV)	Limit (dBµV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.150000	---	31.37	66.00	34.63	1000.0	9.000	L1	19.5
0.150000	48.54	---	79.00	30.46	1000.0	9.000	L1	19.5
0.510000	---	36.27	60.00	23.73	1000.0	9.000	L1	19.5
0.510000	37.86	---	73.00	35.14	1000.0	9.000	L1	19.5
0.925000	---	26.78	60.00	33.22	1000.0	9.000	L1	19.5
0.925000	28.68	---	73.00	44.32	1000.0	9.000	L1	19.5
0.985000	---	17.82	60.00	42.18	1000.0	9.000	L1	19.5
0.985000	28.86	---	73.00	44.14	1000.0	9.000	L1	19.5
6.030000	---	26.64	60.00	33.36	1000.0	9.000	L1	19.9
6.030000	30.57	---	73.00	42.43	1000.0	9.000	L1	19.9
6.540000	---	25.24	60.00	34.76	1000.0	9.000	L1	19.9
6.540000	29.60	---	73.00	43.40	1000.0	9.000	L1	19.9

○ Test Date : 2026-01-21
● Test Mode : Mode 1

Test Report

1 / 1

Test Description:	Conducted Emission
Job No.:	KES-EM260183
Phase:	N
Mode:	Mode 1
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	---	31.79	66.00	34.21	1000.0	9.000	N	19.5
0.155000	49.22	---	79.00	29.78	1000.0	9.000	N	19.5
0.510000	---	36.28	60.00	23.72	1000.0	9.000	N	19.5
0.510000	37.87	---	73.00	35.13	1000.0	9.000	N	19.5
1.225000	---	19.63	60.00	40.37	1000.0	9.000	N	19.6
1.225000	23.69	---	73.00	49.31	1000.0	9.000	N	19.6
1.385000	---	28.01	60.00	31.99	1000.0	9.000	N	19.6
1.385000	30.75	---	73.00	42.25	1000.0	9.000	N	19.6
6.280000	---	24.88	60.00	35.12	1000.0	9.000	N	19.9
6.280000	29.82	---	73.00	43.18	1000.0	9.000	N	19.9
6.560000	---	26.63	60.00	33.37	1000.0	9.000	N	20.0
6.560000	30.09	---	73.00	42.91	1000.0	9.000	N	20.0

6.1.5 Remark

Complies with the test requirements.

6.2 Radiated Emissions(Below 1 ㎓)

6.2.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SEMI ANECHOIC CHAMBER #4(10 m)	-	DYMSTEC	-	-	-	■
EP5/RE Software	EP5/RE	TOYO	6.0.0	-	-	■
EMI TEST RECEIVER	ESU26	Rohde & Schwarz	100551	2025-02-13	2026-02-13	■
AMPLIFIER	SCU 01	Rohde & Schwarz	100603	2025-11-03	2026-11-03	■
BILOG ANTENNA	VULB 9168	SCHWARZBECK	9168-461	2024-05-09	2026-05-09	■
ATTENUATOR	6806.17.A	HUBER+SUHNER	-	2025-02-13	2026-02-13	■

6.2.2 Test Location : SEMI ANECHOIC CHAMBER #4(10 m) Measurement Distance : □ 3 m, ■ 10 m

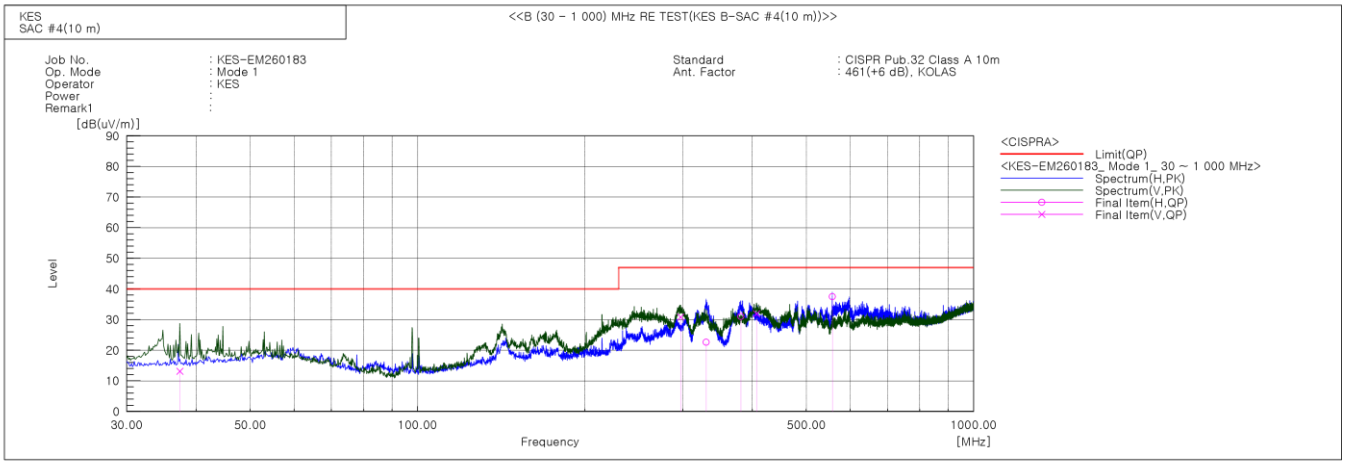
6.2.3 Test Conditions :

Temperature	Relative Humidity
(19.3 ~ 19.4) °C	(33.8 ~ 33.9) % R.H.

6.2.4 Test Result

○ Test Date : 2026-01-22

● Test Mode : Mode 1



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	37.396	V	34.6	-21.5	13.1	40.0	26.9	100.0	342.0	
2	297.235	V	47.9	-17.1	30.8	47.0	16.2	110.0	6.0	
3	330.458	H	38.5	-15.9	22.6	47.0	24.4	386.0	242.0	
4	381.261	H	45.1	-14.1	31.0	47.0	16.0	400.0	185.0	
5	407.088	V	44.9	-13.0	31.9	47.0	15.1	150.0	39.0	
6	556.953	H	45.8	-8.3	37.5	47.0	9.5	199.0	16.0	

※ The data is the result measured by the detector in Quasi-Peak mode on the Peak graph.

6.2.5 Remark

Complies with the test requirements.

6.3 Radiated Emissions(Above 1 ㎓)

6.3.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SEMI ANECHOIC CHAMBER #5	-	SY Corporation	-	-	-	■
ES10/RE Software	ES10/RE	TOYO	2022.01.000	-	-	■
EMI TEST RECEIVER	ESU26	Rohde & Schwarz	100552	2025-02-13	2026-02-13	■
PREAMPLIFIER	8449B	HP	3008A00538	2025-04-30	2026-04-30	■
ATTENUATOR	8491B	HP	23094	2025-02-13	2026-02-13	■
HORN ANTENNA	BBHA 9120D	SCHWARZBECK	9120D-1802	2025-11-05	2026-11-05	■

6.3.2 Test Location : SEMI ANECHOIC CHAMBER #5

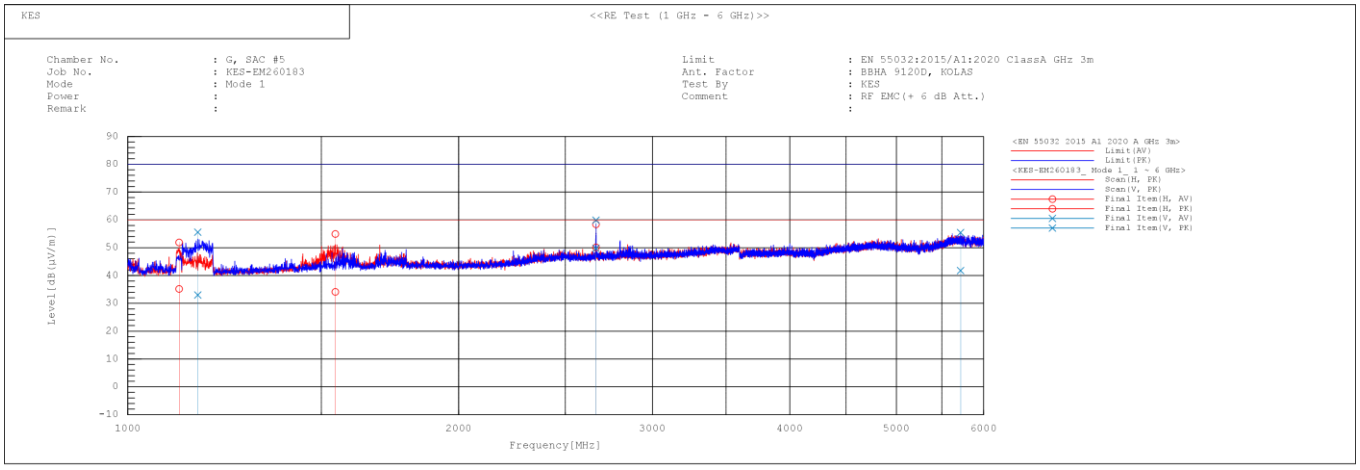
6.3.3 Test Conditions :

Temperature	Relative Humidity
(20.4 ~ 20.5) °C	(34.9 ~ 35.0) % R.H.

6.3.4 Test Result

○ Test Date : 2026-01-22

● Test Mode : Mode 1



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	1113.519	H	36.1	52.8	-0.9	35.2	51.9	60.0	80.0	24.8	28.1	100.0	27.3	
2	1158.017	V	33.7	56.3	-0.7	33.0	55.6	60.0	80.0	27.0	24.4	100.0	14.8	
3	1544.538	H	32.8	53.6	1.3	34.1	54.9	60.0	80.0	25.9	25.1	100.0	45.3	
4	2665.533	V	44.0	54.1	5.8	49.8	59.9	60.0	80.0	10.2	20.1	100.0	318.5	
5	2665.970	H	44.3	52.6	5.8	50.1	58.4	60.0	80.0	9.9	21.6	100.0	339.6	
6	5719.917	V	27.7	41.3	14.1	41.8	55.4	60.0	80.0	18.2	24.6	100.0	290.0	

※ The data is the result of measured by the detector in PK and CISPR Average on the Peak graph.
※ The Average of the test data is the cispr average result.

6.3.5 Remark

Complies with the test requirements.

6.4 Harmonic Current Emissions

6.4.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #7	-	DYMSTEC	-	-	-	■
DIGITAL POWER ANALYZER (Harmonic)	DPA 500N	EM TEST	V1024106759	2025-03-31	2026-03-31	■
POWER SOURCE	ACS 500N6	EM TEST	V1024106760	-	-	■
net.control Software	net.control	EM TEST	2.1.4	-	-	■

6.4.2 Test Location : SHIELD ROOM #7

6.4.3 Test Conditions :

Temperature	Relative Humidity
(20.5 ~ 20.6) °C	(36.1 ~ 36.2) % R.H.

6.4.4 Classification of Equipment for Harmonic Current Emissions

■ Limits for Class A equipment
□ Limits for Class B equipment
□ Limits for Class C equipment(Rated Power > 25 W)
□ Limits for Class C equipment(Rated Power ≥ 5 W and ≤ 25 W)
□ Limits for Class D equipment

6.4.5 Test Result

○ Test Date : 2026-01-23

● Test Mode : Mode 1

Maximum harmonic current results

Hn	Ieff [A]	% of Limit	Limit [A]	Result
1	0.036	n/a	n/a	n/a
2	0.005	0.292	1.620	n/a
3	0.026	0.760	3.450	PASS
4	0.004	0.648	0.645	n/a
5	0.026	1.498	1.710	PASS
6	0.006	1.321	0.450	PASS
7	0.025	2.194	1.155	PASS
8	0.004	1.193	0.345	n/a
9	0.025	4.179	0.600	PASS
10	0.003	1.231	0.276	n/a
11	0.024	4.934	0.495	PASS
12	0.004	1.576	0.230	n/a
13	0.024	7.483	0.315	PASS
14	0.004	2.005	0.197	n/a
15	0.023	10.077	0.225	PASS
16	0.004	2.267	0.173	n/a
17	0.022	11.003	0.199	PASS
18	0.004	2.451	0.153	n/a
19	0.021	11.746	0.178	PASS
20	0.003	2.517	0.138	n/a
21	0.019	12.098	0.161	PASS
22	0.003	2.647	0.125	n/a
23	0.019	12.660	0.147	PASS
24	0.003	2.825	0.115	n/a
25	0.018	12.979	0.135	PASS
26	0.003	2.757	0.106	n/a
27	0.016	12.946	0.125	PASS
28	0.003	2.916	0.099	n/a
29	0.015	13.011	0.116	PASS
30	0.003	2.846	0.092	n/a
31	0.014	12.722	0.109	PASS
32	0.002	2.661	0.086	n/a
33	0.013	12.348	0.102	PASS
34	0.002	2.815	0.081	n/a
35	0.012	12.050	0.096	PASS
36	0.002	2.474	0.077	n/a
37	0.010	11.306	0.091	PASS
38	0.002	2.334	0.073	n/a
39	0.009	10.621	0.087	PASS
40	0.002	2.260	0.069	n/a

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

disregarded.

Test Data - Harmonics (continued)

Average harmonic current results

Hn	Ieff [A]	% of Limit	Limit [A]	Result
1	0.036	n/a	n/a	n/a
2	0.004	0.400	1.080	n/a
3	0.026	1.134	2.300	PASS
4	0.004	0.899	0.430	n/a
5	0.025	2.232	1.140	PASS
6	0.006	1.837	0.300	PASS
7	0.025	3.263	0.770	PASS
8	0.004	1.641	0.230	n/a
9	0.025	6.233	0.400	PASS
10	0.003	1.670	0.184	n/a
11	0.024	7.350	0.330	PASS
12	0.003	2.173	0.153	n/a
13	0.023	11.148	0.210	PASS
14	0.004	2.766	0.131	n/a
15	0.023	15.057	0.150	PASS
16	0.004	3.131	0.115	n/a
17	0.022	16.326	0.132	PASS
18	0.003	3.407	0.102	n/a
19	0.021	17.447	0.118	PASS
20	0.003	3.448	0.092	n/a
21	0.019	11.977	0.161	PASS
22	0.003	3.629	0.084	n/a
23	0.018	12.479	0.147	PASS
24	0.003	3.896	0.077	n/a
25	0.017	12.872	0.135	PASS
26	0.003	3.805	0.071	n/a
27	0.016	12.860	0.125	PASS
28	0.003	4.029	0.066	n/a
29	0.015	12.932	0.116	PASS
30	0.002	3.895	0.061	n/a
31	0.014	12.642	0.109	PASS
32	0.002	3.633	0.058	n/a
33	0.012	12.209	0.102	PASS
34	0.002	3.793	0.054	n/a
35	0.012	11.949	0.096	PASS
36	0.002	3.393	0.051	n/a
37	0.010	11.121	0.091	PASS
38	0.002	3.192	0.048	n/a
39	0.009	10.444	0.087	PASS
40	0.001	3.082	0.046	n/a

Note: 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.

* Application of limits for average is 100% except for odd harmonics from 21 to 39, where 150% applies.

6.4.6 Remark

Complies with the test requirements.

6.5 Voltage Fluctuations and Flicker

6.5.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #7	-	DYMSTEC	-	-	-	■
DIGITAL POWER ANALYZER (Flicker)	DPA 500N	EM TEST	V1024106759	2025-04-01	2026-04-01	■
POWER SOURCE	ACS 500N6	EM TEST	V1024106760	-	-	■
net.control Software	net.control	EM TEST	2.1.4	-	-	■

6.5.2 Test Location : SHIELD ROOM #7

6.5.3 Test Conditions :

Temperature	Relative Humidity
(20.5 ~ 20.6) °C	(36.1 ~ 36.2) % R.H.

6.5.4 Test Result

○ Test Date : 2026-01-23

● Test Mode : Mode 1

Flicker Measurements					
	P_{lt}	Max P_{st}	Max D_c	Max D_{max}	Max T_{max}
Line 1:	0.028	0.028	0	< 0.2	0
Limits:	0.65	1	3.3	4	0.5
Results:	PASS	PASS	PASS	PASS	PASS

6.5.5 Remark

Complies with the test requirements.

6.6 Electrostatic Discharge

6.6.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #6	-	DYMSTEC	-	-	-	■
ESD SIMULATOR	ESS-2000	NoiseKen	ESS01Z0454	2026-01-13	2027-01-13	■
HCP	-	KES	-	-	-	■
VCP	-	Noise Ken	-	-	-	■

6.6.2 Test Location : SHIELD ROOM #6

6.6.3 Test Conditions :

Temperature	Relative Humidity
Temperature(15 ~ 35) °C	(20.7 ~ 20.8) °C
Relative Humidity(30 ~ 60) % R.H.	(35.4 ~ 35.5) % R.H.
Atmospheric Pressure(86 ~ 106) kPa	(101.1 ~ 101.1) kPa

6.6.4 Test Specifications :

Discharge Factor : 1 s

Discharge Impedance : 330 Ω / 150 pF

Kind of Discharge : Direct Discharge - Contact Discharge, Air Discharge
Indirect Discharge - HCP, VCP

Polarity : Positive and Negative

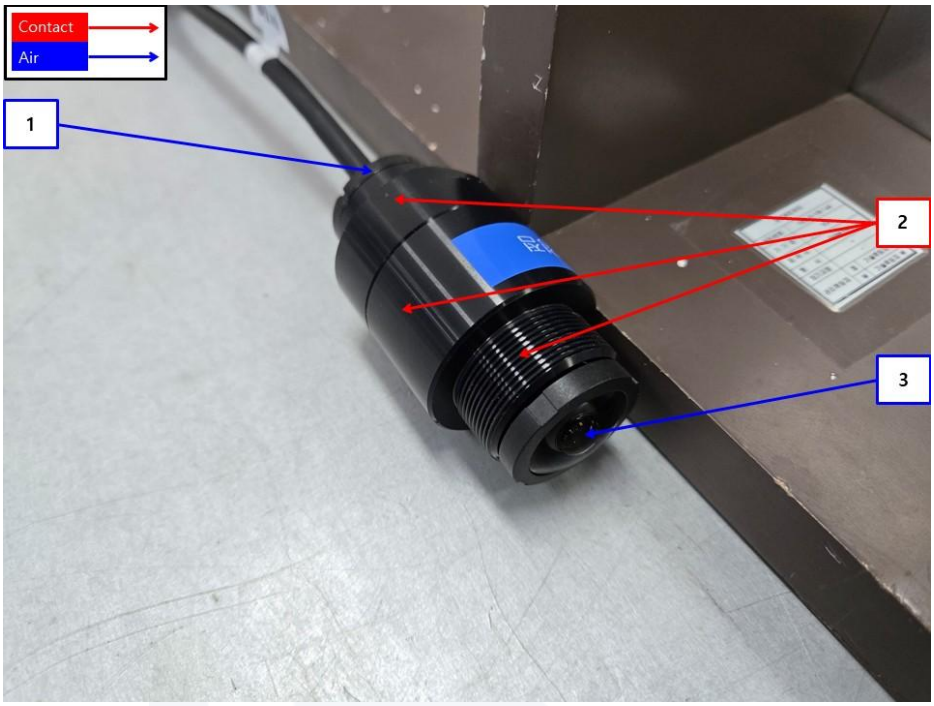
Number of Discharge : 10 at all locations for Contact Discharge,
10 at all locations for Air Discharge

Performance Criteria : Complied

Discharge Voltage :

Type	Direct Discharge		Indirect Discharge	
	Contact Discharge	Air Discharge	Horizontal Coupling Plane	Vertical Coupling Plane
Test Voltage	-	± 2 kV	-	-
	± 6 kV	± 4 kV	± 6 kV	± 6 kV
	-	± 8 kV	-	-

6.6.5 Location of Discharge



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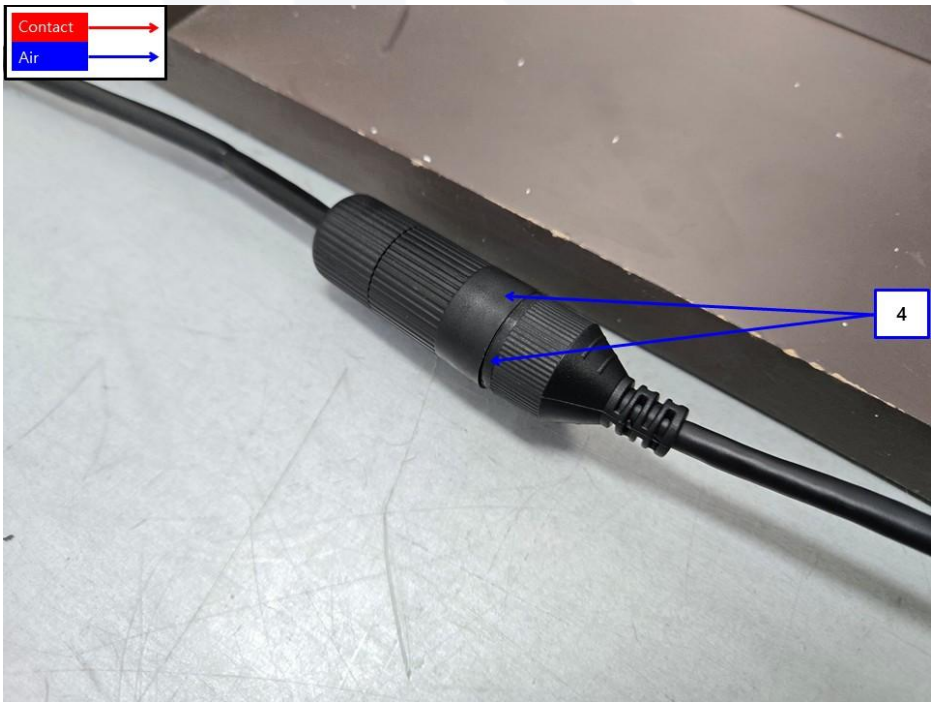


<Location of Discharge-2>

6.6.6 Test Result

○ Test Date : 2026-01-24
● Test Mode : Mode 1

○ **Indirect Discharge**

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

○ **Direct Discharge**

No.	Test Point	Discharge Method	Observations	Remarks
1	Enclosure1	Air Discharge	Complied	-
2	Enclosure2	Contact Discharge	Complied	-
3	Lens	Air Discharge	Complied	-
4	Port	Air Discharge	Complied	-

6.6.7 Remark

No loss of performance of function.

6.7 Continuous RF electromagnetic field disturbances

6.7.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SEMI ANECHOIC CHAMBER #3	-	DYMSTEC	-	-	-	■
EMC32 Measurement Software	EMC32	R&S	10.10.02	-	-	■
SIGNAL GENERATOR	SMB 100A	Rohde & Schwarz	108252	2025-07-28	2026-07-28	■
HIGH POWER DUAL AMP	SSA532	SUNGSAN	SSA532-001	-	-	■
POWER METER	E4419B	Agilent	GB40203000	2025-02-13	2026-02-13	■
AVERAGE POWER SENSOR	E9301A	Agilent	MY52170007	2025-02-13	2026-02-13	■
AVERAGE POWER SENSOR	E9301A	Agilent	MY41498669	2025-02-13	2026-02-13	■
STACKED DOUBLE LOG-PER- ANTENNA	STPL9128 E	SCHWARZBECK	9128ES-121	-	-	■
DOUBLE RIDGED HORN ANTENNA	SAS-571	A.H. SYSTEM,INC	781	2025-03-05	2026-03-05	■

6.7.2 Test Location : SEMI ANECHOIC CHAMBER #3

6.7.3 Test Conditions :

Temperature	Relative Humidity
(20.6 ~ 20.8) °C	(34.4 ~ 34.6) % R.H.

6.7.4 Test Specifications :

Antenna Polarization	:	Horizontal & Vertical unless indicated otherwise
Antenna Distance	:	3 m
Field Strength	:	10 V/m (rms)
Frequency Range	:	80 MHz ~ 2.7 GHz
Modulation	:	AM 80 %, 1 kHz, Sine wave
		PM 1 Hz (0.5 s ON : 0.5 s OFF)
Dwell Time	:	3 s
Frequency Step	:	1 %
Application method	:	4
Performance Criteria	:	Complied

6.7.5 Test Result

○ Test Date : 2026-01-23

● Test Mode : Mode 1

○ Enclosure Port

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

6.7.6 Remark

No loss of performance of function.

6.8 Electrical Fast Transients/Bursts

6.8.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #7	-	DYMSTEC	-	-	-	■
iec.control Software	iec.control	EM TEST	5.4.8	-	-	■
ULTRA COMPACT SIMULATOR	UCS 500N7	EM TEST	P1608172950	2025-11-05	2026-11-05	■
MOTOR VARIAC	MV 2616	EM TEST	P1552169719	2025-11-05	2026-11-05	■
CAPACITIVE COUPLING CLAMP	HFK	EM TEST	P1633183115	2025-11-05	2026-11-05	■

6.8.2 Test Location : SHIELD ROOM #7

6.8.3 Test Conditions :

Temperature	Relative Humidity
(20.4 ~ 20.5) °C	(36.1 ~ 36.2) % R.H.

6.8.4 Test Specifications :

Pulse Amplitude & Polarity	:	Input a.c power ports ± 2.0 kV
		Other supply and Signal ports ± 1 kV
Repetition Rate	:	100 kHz
Impulse Rise Time	:	5 ns ± 30 %
Impulse Period	:	50 ns ± 30 %
Burst Duration	:	15 ms ± 20 %
Burst Period	:	300 ms ± 20 %
Duration of Test Voltage	:	1 min
Application Method	:	a.c / d.c power ports (Coupling / Decoupling Network)
		Other than a.c / d.c power poerts (Capacitive Coupling Clamp)
Performance Criteria	:	Complied

6.8.5 Test Result

○ Test Date : 2026-01-23

● Test Mode : Mode 1

○ Input a.c power ports

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

○ Input d.c power ports

Mode of Application	Observations	
	(+) Burst	(-) Burst
N/A	-	-

○ Signal ports and telecommunication ports

Mode of Application	Observations	
	(+) Burst	(-) Burst
8 Pin to 6 Pin Cable	Complied	Complied

6.8.6 Remark

No loss of performance of function.

6.9 Surge

6.9.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #7	-	DYMSTEC	-	-	-	■
iec.control Software	iec.control	EM TEST	5.4.8	-	-	■
ULTRA COMPACT SIMULATOR	UCS 500N7	EM TEST	P1608172950	2025-11-05	2026-11-05	■
MOTOR VARIAC	MV 2616	EM TEST	P1552169719	2025-11-05	2026-11-05	■

6.9.2 Test Location : SHIELD ROOM #7

6.9.3 Test Conditions :

Temperature	Relative Humidity
(20.4 ~ 20.5) °C	(36.1 ~ 36.2) % R.H.

6.9.4 Test Specifications :

Surge	: Input a.c power ports	Line to Line	±0.5 kV, ±1.0 kV
		Line to Ground	±0.5 kV, ±1.0 kV, ±2.0 kV
	Other supply / Signal lines	Line to Ground	±0.5 kV, ±1.0 kV

Input a.c / Other supply / Signal lines

Open-Circuit Voltage Waveform : 1.2/50 μs

Short-Circuit Current Waveform : 8/20 μs

Number of Applications : Apply 5 surges for each polarity

Phase Angle : 0˚ ~ 270˚ (input a.c. power port)

Polarity : Positive and Negative

Repetition Rate : 1 surge per 30 s

Performance Criteria : Complied

6.9.5 Test Result

○ Test Date : 2026-01-23

● Test Mode : Mode 1

○ Input a.c power ports

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

○ Signal ports and telecommunication ports

Mode of Application	Coupling Method	Observations	
		(+) Surge	(-) Surge
N/A	CDN	-	-
N/A	LINE	-	-

6.9.6 Remark

No loss of performance of function.

6.10 Continuous Induced RF Disturbances

6.10.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #7	-	DYMSTEC	-	-	-	■
icd.control Software	icd.control	EM TEST	8.0.0	-	-	■
TEST SYSTEM FOR CONDUCTED AND RADIATED	NSG4070	TESEQ	65585	2025-11-03	2026-11-03	■
ATTENUATOR	ATT 6/80	EM TEST	P1614178148	2025-11-03	2026-11-03	■
CDN	CDN M016	TESEQ	43694	2025-11-03	2026-11-03	■
CDN	CDN M016	TESEQ	43697	2025-11-03	2026-11-03	■
EM CLAMP	KEMZ 801A	TESEQ	44099	2025-11-05	2026-11-05	■

6.10.2 Test Location : SHIELD ROOM #7

6.10.3 Test Conditions :

Temperature	Relative Humidity
(19.7 ~ 19.9)°C	(34.8 ~ 35.0) % R.H.

6.10.4 Test Specifications

Frequency range and Voltage Level	:	0.15 MHz ~ 100 MHz : 10 V(r.m.s)
Modulation	:	AM 80 %, 1 kHz, Sine wave
		PM 1 Hz (0.5 s ON : 0.5 s OFF)
Dwell Time	:	3 s
Frequency Step	:	1 %
Performance Criteria	:	Complied

6.10.5 Test Result

○ Test Date : 2026-01-22

● Test Mode : Mode 1

○ Input a.c power ports

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

○ Input d.c power ports

Coupling Location (Line Stressed)	Coupling Method	Observations
N/A	CDN	-

○ Signal ports and telecommunication ports

Coupling Location (Line Stressed)	Coupling Method	Observations
8 Pin to 6 Pin Cable	Clamp	Complied

6.10.6 Remark

No loss of performance of function.

6.11 Voltage Dips and Interruptions

6.11.1 Test Equipment

Equipment Name	Model Number	Manufacturer	Serial No.	Cal. Date	Next Cal. Date	Used
SHIELD ROOM #7	-	DYMSTEC	-	-	-	■
iec.control Software	iec.control	EM TEST	5.4.8	-	-	■
ULTRA COMPACT SIMULATOR	UCS 500N7	EM TEST	P1608172950	2025-11-05	2026-11-05	■
MOTOR VARIAC	MV 2616	EM TEST	P1552169719	2025-11-05	2026-11-05	■

6.11.2 Test Location : SHIELD ROOM #7

6.11.3 Test Conditions :

Temperature	Relative Humidity
(20.4 ~ 20.5) °C	(36.1 ~ 36.2) % R.H.

6.11.4 Test Specifications

Instantaneous peak overshoot/undershoot of the actual voltage	:	Less than 5 %
Voltage Rise Time, Voltage Fall Time	:	Between 1 μs and 5 μs
Test Voltage Frequency Deviation for Voltage Dips	:	with in ± 2 %
EUT Voltage	:	AC 230 V, 50 Hz
Number of Applications	:	3 cycles
Test Interval	:	10 s
Performance Criteria	:	Complied

Voltage Dips and Interruptions	Duration [in period]
20 % Voltage reduction	250 T
30 % Voltage reduction	25 T
60 % Voltage reduction	10 T
100 % Voltage reduction	250 T

Voltage Variations	Supply Voltage
Supply Voltage max (Umax)	Unom a + 10 %
Supply Voltage min (Umin)	Unom a - 15 %

6.11.5 Test Result

○ Test Date: 2026-01-23

● Test Mode: Mode 1

○ Voltage Dips and Short Interruptions

Depth	Duration [in period]	Observations
20 % Voltage reduction	250 T	Complied
30 % Voltage reduction	25 T	Complied
60 % Voltage reduction	10 T	Complied
100 % Voltage reduction	250 T	Degradation

○ Voltage variations

Voltage Variations	Supply Voltage	Observations
Supply voltage max (Umax = Unom a + 10 %)	253 V	Complied
Supply voltage min (Umin = Unom a - 15 %)	195.5 V	Complied

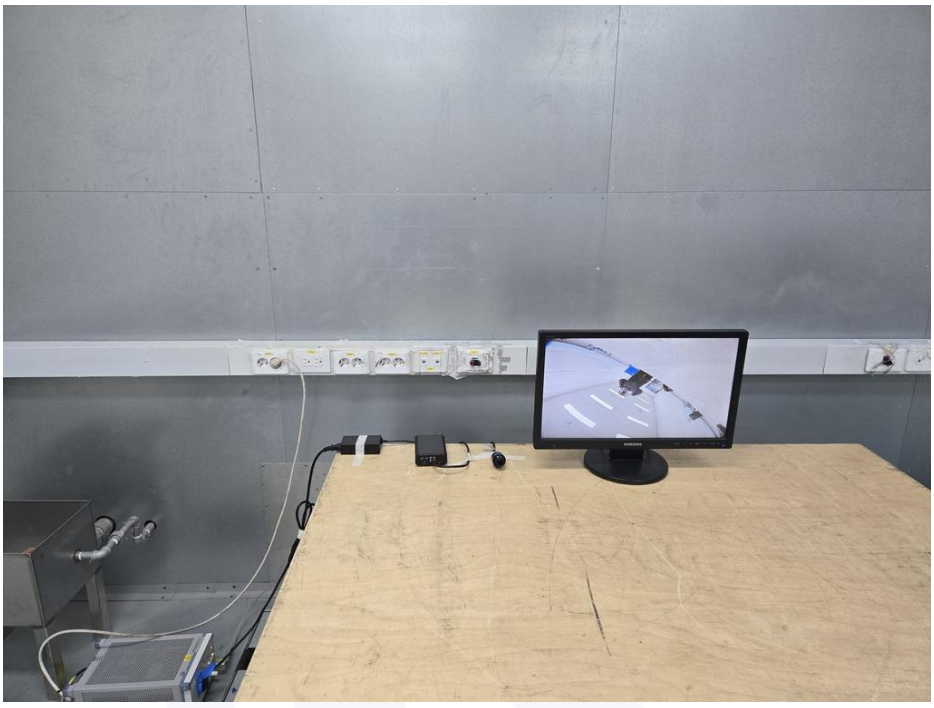
U_{nom} = Nominal mains voltage, U_{max} = (Maximum U_{nom}) + 10 %, U_{min} = (Minimum U_{nom}) – 15 %.

6.11.6 Remark

Degradation : During the test(100%, 250cycle), EUT was turned off but after the test, it was recovered without operator’s intervention

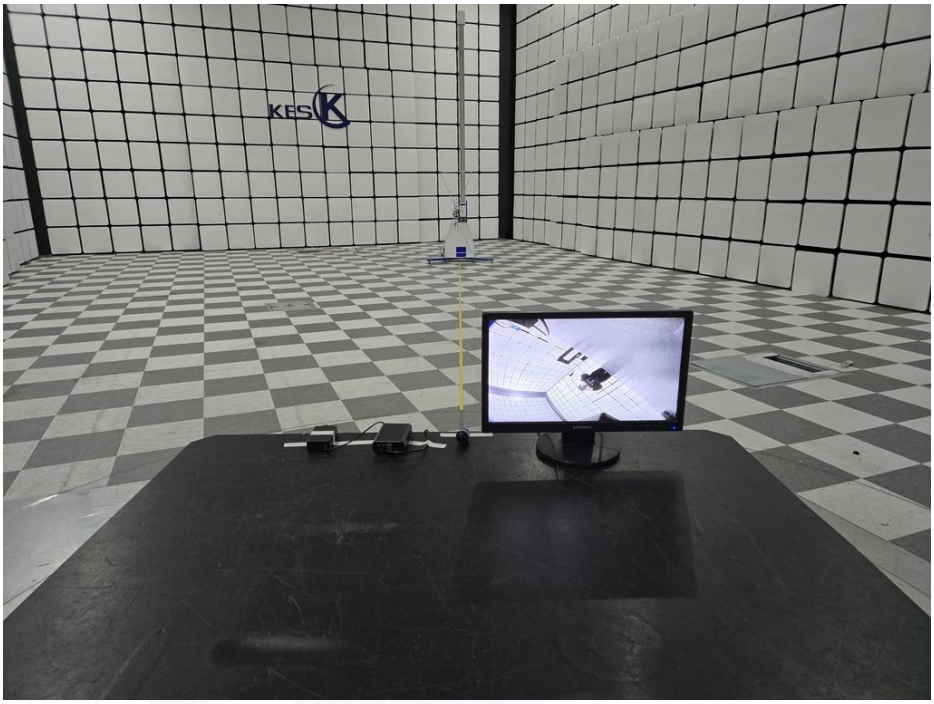
7 Test Setup Photos and EUT Photographs

7.1 Test Setup Photos



<Conducted Emissions at Mains Power Ports - Front>

<Conducted Emissions at Mains Power Ports - Rear>



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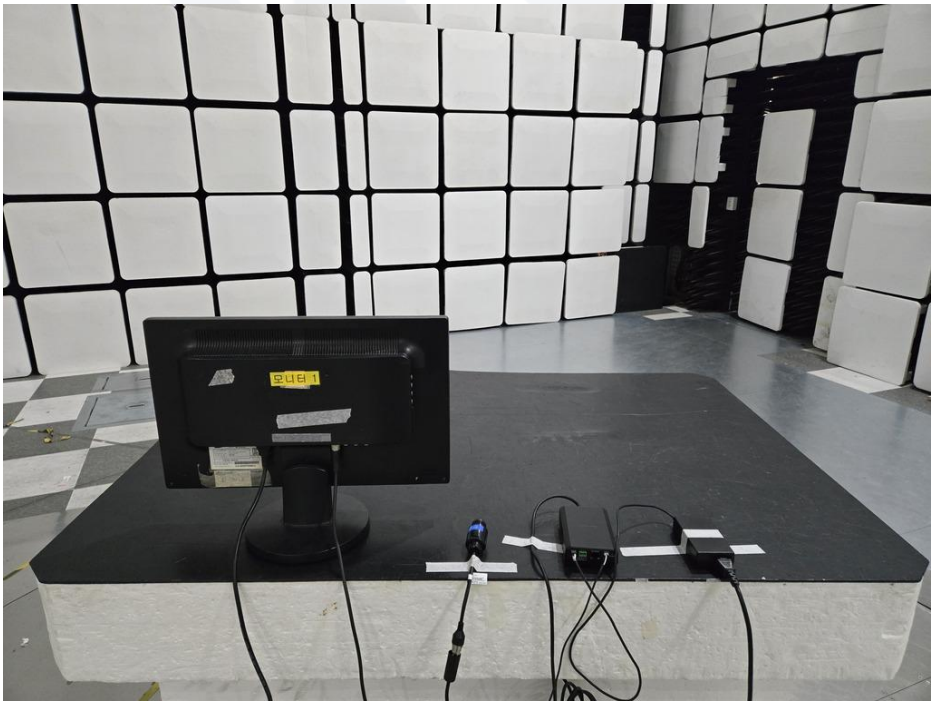
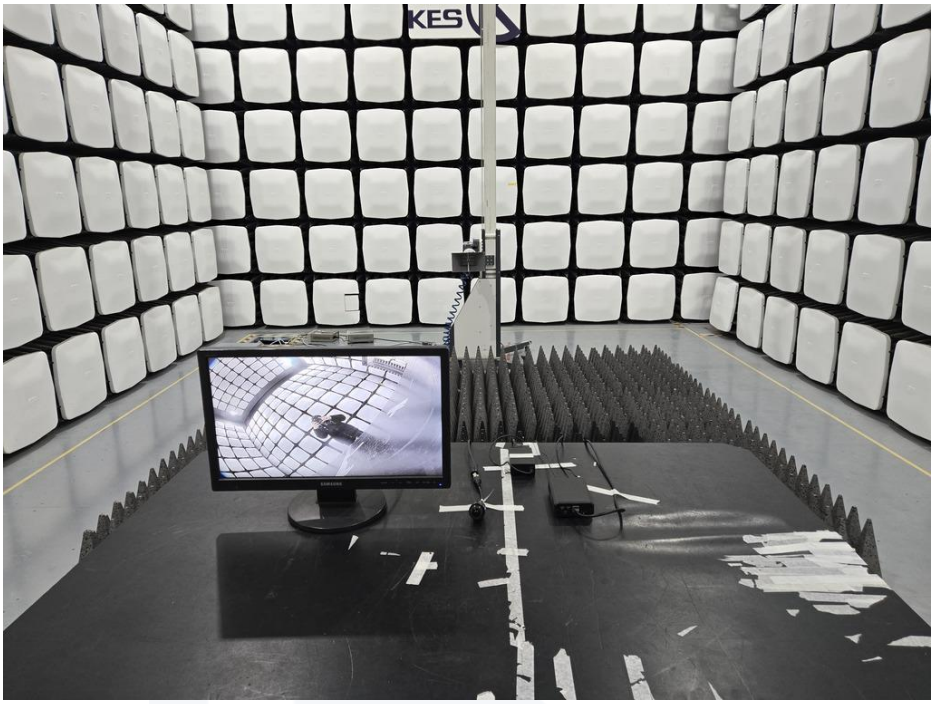
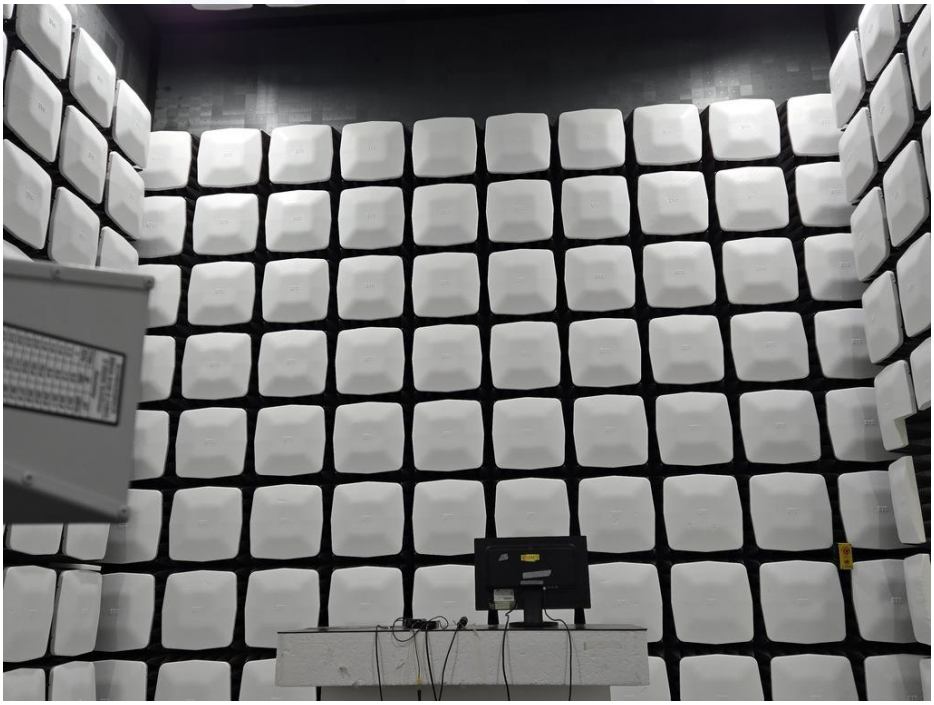


<Radiated Emissions(Below 1 ㎓) - Rear>



<Radiated Emissions(Above 1 ㎓) - Front>



<Radiated Emissions(Above 1 ㎓) - Rear>

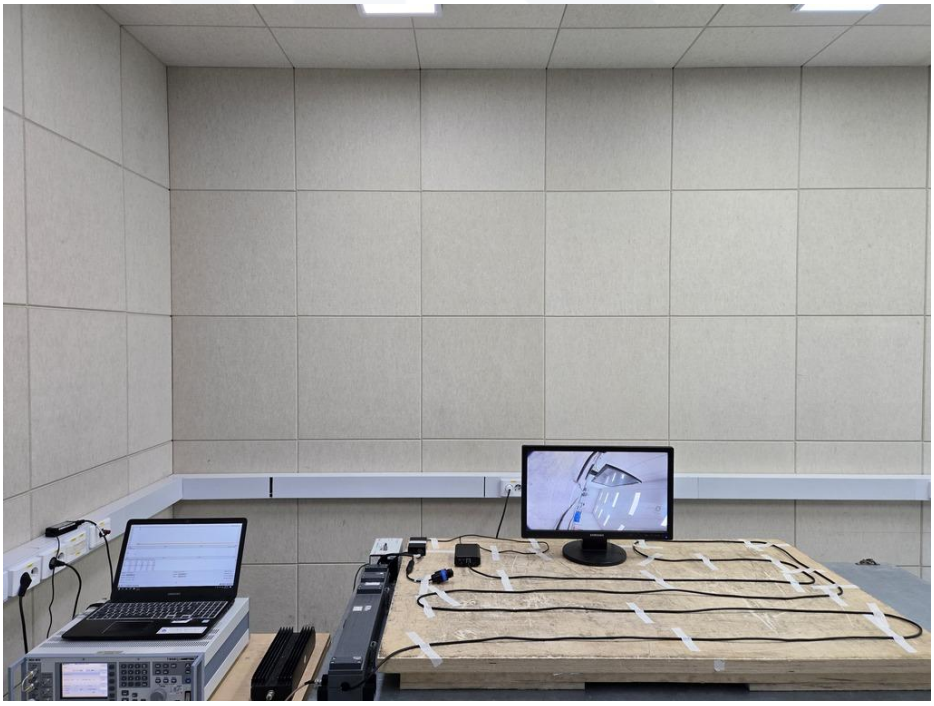
<Harmonic Current Emissions and Voltage Fluctuations and Flicker>

<Electrostatic Discharge>

<Continuous RF electromagnetic field disturbances>

<Electrical Fast Transients/Bursts>

<Surge>



<Continuous Induced RF Disturbances>

<Voltage Dips and Interruptions>

7.2 EUT Photographs

<EUT External Photographs - Top>

<EUT External Photographs - Bottom>

<Components>

<Port>

<EUT Internal Photographs>

7.3 Label

Name	:	Hanwha Vision Co., Ltd.
Product item	:	LENS MODULE
Model name	:	SLA-T1080FA

The End.