

TEST REPORT

**CTK Co., Ltd.**

5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si,
Gyeonggi-do, Republic of Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

REPORT No.:

CTK-2025-01265

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1. Applicant

- Name : Hanwha Vision Co., Ltd
- Address : 6 Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, 13488 KOREA
- Date of Receipt : Mar. 18, 2025

2. Manufacturer

- Name : HANWHA VISION VIETNAM COMPANY LIMITED
- Address : Lot O-2, Que Vo Industrial Zone extended area, Nam Son ward,
Bac Ninh city, Bac Ninh province, Vietnam

3. Use of Report :

Quality control

4. Test sample / Model :

NETWORK THERMAL CAMERA / TNO-C3050T

5. Date(s) of test :

Apr. 09, 2025~ Apr. 16, 2025

6. Test Standard (Method) used :

NEMA 250-2014

Enclosures for Electrical Equipment (1000 Volts Maximum)

7. Testing Environment :

Temperature: (25 ±10) °C, Humidity: (50 ±25) % R.H.

Pressure: (96 ±10) kPa

8. Test Results :

Refer to the test results

9. Location of Test :☒ Permanent Testing Lab ☐ On Site Testing

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The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This report cannot be reproduced or copied without the written consent of CTK.

Approval	Tested by	Technical Manager
	Name: HyungUk Jeon (Signature)	Name: HoHyun Lee (Signature)

Remark. This report is not related to KOLAS accreditation and relevant regulation.

May. 13, 2025

CTK Co., Ltd.

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1. Testing laboratory

1.1 Testing laboratory information

Lab. Name	CTK Co., Ltd.
Representative	Young Joseph Seungwon
Address	5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea
Tel.	+82-31-339-9970
Fax.	+82-31-624-9501
E-Mail	all.youngin@element.com
Website	www.elementkorea.kr

1.2 Testing laboratory accreditation status

Country	Classification	Accreditation Number	Logo
International	KOLAS	TESTING NO. KT119	

2. Product description and equipment information

2.1 Product description

Product Name	Model Name	Quantity	Comment
NETWORK THERMAL CAMERA	TNO-C3050T	1 EA	—

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2.2 Manufacturer information

Test item description : NETWORK THERMAL CAMERA**Trade Mark****Manufacturer** : Lot O-2, Que Vo Industrial Zone extended area, Nam Son commune, Bac Ninh city, Bac Ninh province, Vietnam**Model/Type reference** : TNO-C3050T

Electrical

TNO-C3040T

DC 12 V  9.4 W / PoE (48 V  10.8W)DC 12 V  0.78 A / PoE(48 V ) 0.23 A

TNO-C3042T

DC 12 V  9.4 W / PoE (48 V  10.8W)**Ratings** : DC 12 V  0.78 A / PoE(48 V ) 0.23 A

TNO-C3050T

DC 12 V  9.4 W / PoE (48 V  10.8W)DC 12 V  0.78 A / PoE(48 V ) 0.23 A

TNO-C3052T

DC 12 V  9.4 W / PoE (48 V  10.8W)DC 12 V  0.78 A / PoE(48 V ) 0.23 A

Dimension:

Ø 140.5 by 441.17 mm, Ø 93.8 by 294.53 mm, Ø 36.5 by 114.61 mm, Ø 9.3*3 by 87.6 mm, 35 mm, 58 mm, 48 mm, Ø 25*2 by 157 mm

List of Attachments (including a total number of pages in each attachment):

Attachment 1: 16-17 pages (Construction Diagram including installation method)

Attachment 2: 18-20 pages (Parts List)

Attachment 3: 22-26 pages (photographs)

Summary of testing:**Tests performed (name of test and test clause):**
Clause 5.7(Hose Down Test)**Testing location:**

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Copy of marking plate: The artwork above may be only a draft.

제품명칭: NETWORK THERMAL CAMERA
모델명: TNO-C3040T
정격전압: DC 12V $\approx$ 9.4W /
PoE (48V $\approx$) 10.8W
M/C: TNO-C3040T/KDO Fac.ID: D
DATE S/N: ZW1470GY31000MQ
MAC ADDRESS: XX-XX-XX-XX-XX-XX
인증번호: R-R-HWVS-TNO-C3050T
상호: 한화비전(주)
제조자/제조국가: 한화비전(주)/한국

IP66



CE UL ITE EAC UK CA 10 ! i FC

NETWORK THERMAL CAMERA, TNO-C3040T
DC 12V $\approx$ 0.78A /
PoE (48V $\approx$) 0.23A
M/C: TNO-C3040T/KEX Fac.ID: D
DATE S/N: ZW1470GY31000MR
MAC ADDRESS: XX-XX-XX-XX-XX-XX
CAN ICES-3(A)/NMB-3(A)
HANWHA VISION CO.,LTD.
MADE IN KOREA

Rainproof/Étanche
IP66

제품명칭: NETWORK THERMAL CAMERA
모델명: TNO-C3042T
정격전압: DC 12V $\approx$ 9.4W /
PoE (48V $\approx$) 10.8W
M/C: TNO-C3042T/KDO Fac.ID: D
DATE S/N: ZW1470GY31000MQ
MAC ADDRESS: XX-XX-XX-XX-XX-XX
인증번호: R-R-HWVS-TNO-C3050T
상호: 한화비전(주)
제조자/제조국가: 한화비전(주)/한국

IP66



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NETWORK THERMAL CAMERA, TNO-C3042T
DC 12V $\approx$ 0.78A /
PoE (48V $\approx$) 0.23A
M/C: TNO-C3042T/KEX Fac.ID: D
DATE S/N: ZW1470GY31000MR
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정격전압: DC 12V $\approx$ 9.4W /
PoE (48V $\approx$) 10.8W
M/C: TNO-C3050T/KDO Fac.ID: D
DATE S/N: ZW1470GY31000MQ
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인증번호: R-R-HWVS-TNO-C3050T
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모델명: TNO-C3052T
정격전압: DC 12V $\approx$ 9.4W /
PoE (48V $\approx$) 10.8W
M/C: TNO-C3052T/KDO Fac.ID: D
DATE S/N: ZW1470GY31000MQ
MAC ADDRESS: XX-XX-XX-XX-XX-XX
인증번호: R-R-HWVS-TNO-C3050T
상호: 한화비전(주)
제조자/제조국가: 한화비전(주)/한국

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NETWORK THERMAL CAMERA, TNO-C3052T
DC 12V $\approx$ 0.78A /
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2.3 Equipment information

Testing equipment	Model Name	Manufacturer	Manufacturing Number	Next Cal. Date
25.4mm Nozzle	S3-IP18	CTK	S3-IP18	-
Temperature & Humidity Chamber	TH-GA-408	JEIO TECH	X110169	Aug.23,2025
Area flow meter	Z-6504	FLOWTECH	229400	Jan.16,2026
Steel measuring meter	5.5 m	KOMELON	225851	Jan.16,2026
Stop Watch	NONE	Casio	612Q01R-1	Jan.15,2027
Digital Vernier Calipers	100 mm	MITUTOYO	A17179462	-



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2.4 Pre-test product images

2.4.1 Test sample



Top



Bottom



Front



Rear



Left side



Right side



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2.5 Testing equipment images

2.5.1 Test equipment



25.4mm Nozzle



Temperature & Humidity Chamber



Area flow meter



Steel measuring meter



Stop Watch



Digital Vernier Calipers

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3. Test Information

3.1 Test item particulars and Possible test case verdicts

Test item particulars	Network Thermal Camera
Classification of installation and use	Outdoor (Watertight/Corrosion Resistant)
Possible test case verdicts:	
- test case does not apply to the test object	N/A
- test object does meet the requirement.....	P (Pass)
- test object does not meet the requirement	F (Fail)
- test case does not evaluate to the test object:	N/E

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3.2 General remarks and factory information

General remarks:

"(See Enclosure #)" refers to additional information appended to the report.

"(See appended table)" refers to a table appended to the report.

Throughout this report a ☐ comma / ☒ point is used as the decimal separator.

Clause numbers between brackets refer to clauses in NEMA 250-2014

Name and address of factory (ies):**1. HANWHA VISION VIETNAM COMPANY LIMITED**

Lot O-2, Que Vo Industrial Zone extended area, Nam Son ward, Bac Ninh city, Bac Ninh province, Vietnam

2. D-TECH CO., LTD.

173-25, Saneop-ro, Gwonseon-gu, Suwon-si, Gyeonggi-do, Korea (Suwon Industrial Complex)

Basic Model	TNO-C3050T
Series Model	TNO-C3040T, TNO-C3042T, TNO-C3052T
Model differences	Use of the same external shape and materials (case,finishing material, PCB, cable, etc.), Difference in distribution channel



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3.3 Type 4X Test information

Type 4X

Enclosures constructed for either indoor or outdoor use to provide a degree of protection to personnel against access to hazardous parts; to provide a degree of protection of the equipment inside the enclosure against ingress of solid foreign objects (falling dirt and windblown dust); to provide a degree of protection with respect to harmful effects on the equipment due to the ingress of water (rain, sleet, snow, splashing water, and hose directed water); that provides an increased level of protection against corrosion; and that will be undamaged by the external formation of ice on the enclosure.

Table 2-1
Comparison of Specific Applications of Enclosures for Indoor Nonhazardous (Unclassified) Locations

Provides a Degree of Protection against the Following Conditions	Type of Enclosure									
	1	2	4	4X	5	6	6P	12	12K	13
Access to hazardous parts	X	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects (falling dirt)	X	X	X	X	X	X	X	X	X	X
Ingress of water (dripping and light splashing)	...	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects (circulating dust, lint, fibers, and flyings **)	...	...	X	X	...	X	X	X	X	X
Ingress of solid foreign objects (settling airborne dust, lint, fibers, and flyings **)	...	...	X	X	X	X	X	X	X	X
Ingress of water (hosedown and splashing water)	...	...	X	X	...	X	X	...	...	...
Oil and coolant seepage	...	...	...	...	...	...	...	X	X	X
Oil or coolant spraying and splashing	...	...	...	...	...	...	...	...	...	X
Corrosive agents	...	...	...	X	...	...	X	...	...	...
Ingress of water (occasional temporary submersion)	...	...	...	...	...	X	X	...	...	...
Ingress of water (occasional prolonged submersion)	...	...	...	...	...	...	X	...	...	...

** These fibers and flyings are not considered Class III type ignitable fibers or combustible flyings. For Class III type ignitable fibers or flyings see the *National Electrical Code*®, Article 500.5(D).

Table 2-2
Comparison of Specific Applications of Enclosures for Indoor & Outdoor Nonhazardous (Unclassified) Locations

Provides a Degree of Protection Against the Following Conditions	Type of Enclosure									
	3	3X	3R	3RX	3S	3SX	4	4X	6	6P
Access to hazardous parts	X	X	X	X	X	X	X	X	X	X
Ingress of solid foreign objects (falling dirt)	X	X	X	X	X	X	X	X	X	X
Ingress of water (dripping and light splashing)	X	X	X	X	X	X	X	X	X	X
Ingress of water (rain, snow, and sleet **)	X	X	X	X	X	X	X	X	X	X
Sleet ***	...	...	...	...	X	X	...	...	...	...
Ingress of solid foreign objects (windblown dust, lint, fibers, and flyings****)	X	X	...	...	X	X	X	X	X	X
Ingress of water (hosedown and splashing water)	...	...	...	...	...	...	X	X	X	X
Corrosive agents	...	X	...	X	...	X	...	X	...	X
Ingress of water (occasional temporary submersion)	...	...	...	...	...	...	...	...	X	X
Ingress of water (occasional prolonged submersion)	...	...	...	...	...	...	...	...	...	X

** External operating mechanisms are not required to be operable when the enclosure is ice covered.

*** External operating mechanisms are operable when the enclosure is ice covered. See subsection 5.6.

**** These fibers and flyings are not considered Class III type ignitable fibers or combustible flyings. For Class III type ignitable fibers or flyings see the *National Electrical Code*®, Article 500.5(D).

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Table 5-1A
Degrees of Protection Against Access to Hazardous Parts

Enclosure Type	Test Conditions	Degree of Protection		Corresponding IP First Characteristic Numeral
		Brief Description	Definition	
4X	5.7	Protected against access to hazardous parts with a wire	An access probe of 1.0 mm shall not penetrate	6

Table 5-1B
Degrees of Protection Against Solid Foreign Objects

Enclosure Type	Test Conditions	Degree of Protection		Corresponding IP First Characteristic Numeral
		Brief Description	Definition	
4X	<u>Non-vented</u> 5.7	Windblown dust protected	No ingress of dust	6
	<u>Vented</u> 5.5.1 Dust Blast Method			

Table 5-1C
Degrees of Protection against Water

Enclosure Type	Test Conditions	Degree of Protection		Corresponding IP Second Characteristic Numeral
		Brief Description	Definition	
4X	5.7	Protected against hose directed water	Water projected against the enclosure in any direction shall not enter	6 No Ingress Allowed*

Table 5-1D
Additional Protection

Enclosure Type	Test Conditions	Additional Protection		Corresponding IP Second Characteristic Numeral
		Brief Description	Definition	
4X	5.6 5.9 5.10	Special corrosion protection and undamaged by the external formation of ice	Enclosure provides increased corrosion protection and is not damaged by ice that forms on the outside	None

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3.4 NEMA 250-2014 Test list

NEMA 250-2014			
Clause	Requirement + Test	Result – Remark	Verdict
3	CONSTRUCTION		
3.1	General		P
3.2	Units of Measurement		P
3.3	Materials-General	Enclosures are made of metal or polymeric materials	P
3.4	Materials-Polymeric	More than 650 mm ² (1 in ²) in area Polymeric Materials used is declared as Min. V-2 Used to UL certified material. (See the attachment 2)	N/E
3.5	Corrosion Protection	Stainless steel and/or aluminium are declared as the materials used (See the attachment 2)	N/E
3.6	Openings	No openings in Product	N/A
3.7	Mounting	Mounting means are external to the equipment cavity (See the attachment 1)	P
3.8	Conduit Connection	No conduit connection (See the attachment 1)	N/A
3.9	Hubs and Fittings	No Hubs and Fittings	N/A
3.10	Knockouts	No Knockouts	N/A
3.11	External Operating Mechanisms	No External Operating Mechanisms	N/A
3.12	Access to Interior	Needs tool to open unit	P
3.13	Closing Hardware	No closing Hardware	N/A


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Clause	Requirement + Test	Result – Remark	Verdict
3.14	Gaskets	Gaskets made of a silicone Sponge Rubber (no Elastomeric or Thermoplastic used) (See clause 5.14 and the attachment 2)	P
3.15	Observation Windows	No Observation Window	N/A

4	MARKING		
4.1	Type Designations	“Type 4X” Marking is declared to be on the product before on the market	P
4.2	Supplemental Markings	Supplemental Marking (watertight/corrosion resistant) is declared to be used when it is on the market. The required marking shall be added on the product)	P
4.3	Location of Markings	See the Attachment 3	P
4.4	Enclosure Orientation	No Particular Mounting Orientation	N/A
4.5	Conduit Hubs and Closure Plates	No Conduit Hubs and Closure Plates	N/A
4.6	Equipment Openings	No Openings on Unit	N/A
4.7	Drainage Openings	No Drain Openings	N/A

5	DESIGN TESTS		
5.1	General	See Table 5-1A to 5-1D and 5.1.5 in the General product information	P
5.2	Tests For Protection Against Access to Hazardous Parts	Rated 4X	N/A
5.3	Tests for Protection Against Ingress of Water (Dripping and Light Splashing)	Rated 4X	N/A

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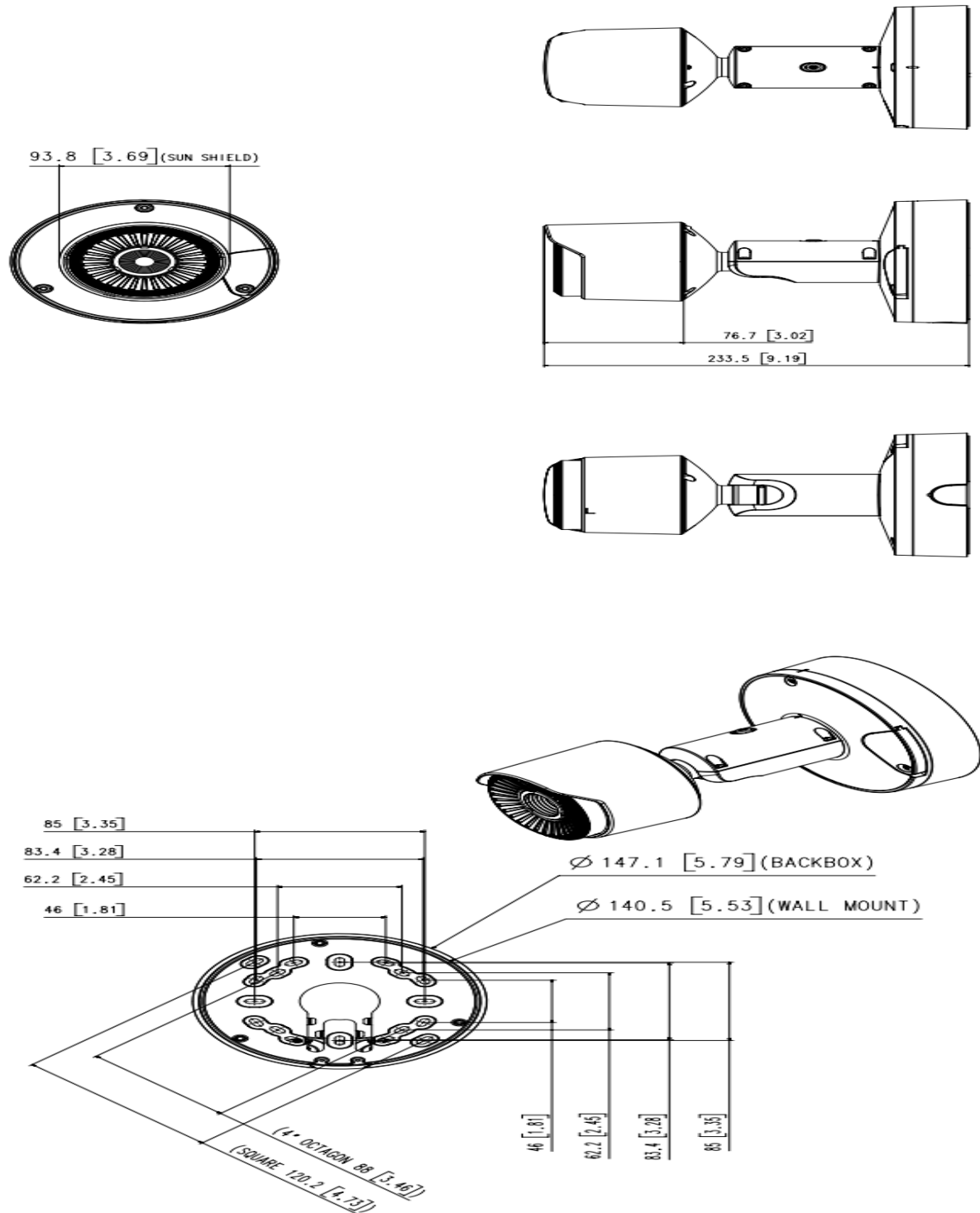
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NEMA 250-2014

Clause	Requirement + Test	Result – Remark	Verdict
5.4	Tests for Protection Against Ingress of Water (Rain)	Rated 4X	N/A
5.5	Tests for Protection Against Ingress of Solid Foreign Objects (Setting Airborne Dust, Lint, Fibers, And Flings)	Non-vented (See clause 5.7)	N/A
5.6	External Icing Test	No external cavities to trap water when mounted in the normal position.	N/A
5.7	Tests for Protection Against Ingress of Water (Hosedown)	No entry of water See the test information	P
5.8	Indoor Corrosion Protection (Rust-Resistance Test (24-Hour Salt Spray Test))	See clause 3.5	N/E
5.9	Outdoor Corrosion Protection	See clause 3.5	N/E
5.10	Corrosion Protection-Type 3X, 3RX, 3SX, 4X Or 6P Enclosures	See clause 3.5	N/E
5.11	Test for Protection Against Ingress of Water (Temporary Submersion)	Rated 4X	N/A
5.12	Test for Protection Against Ingress of Water (Prolonged Submersion)	Rated 4X	N/A
5.13	Oil Exclusion Test	Rated 4X	N/A
5.14	GASKET MATERIAL TESTS	The product itself(including gaskets) was conditioned at 70 °C for 168 hrs according to 5.14.3(Alternate Evaluation) before performing relevant required tests.	P
5.15	Test for Sharpness of Edges	No sharp edges	P

3.5 Attachment 1 - Construction Diagram and installation method

3.5.1 Construction Diagram



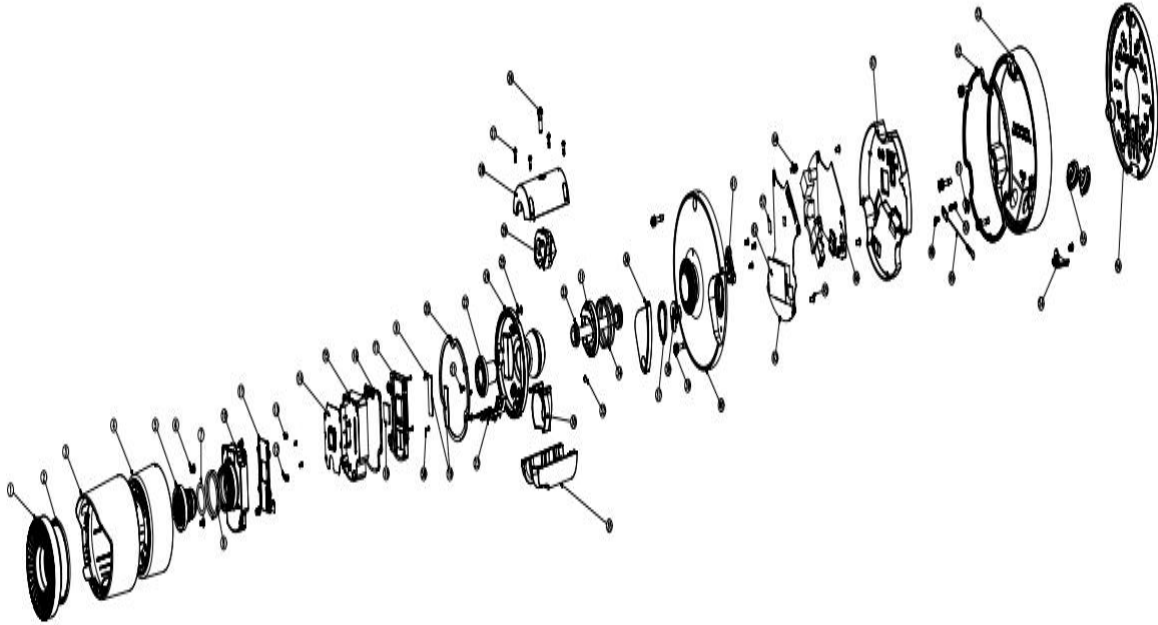


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3.5.2 Installation method



41	FC15-008240A	1
42	FC28-003047A	1
43	AM06-011187A	1
44	FC29-014054A	2
45	Z9642306007	5
46	AM06-011193A	1
47	FC15-010132B	1
48	Z9642306007	2
49	RM01-005941A	1
50	Z6001044701A	1
51	FC09-006670A	1
52	HP07-001638A	1
53	FC29-014049A	1
54	FC15-008241A	1
55	MC06-001189A	2
56	FC09-012507A	1
57	FC28-003686A	1
58	Z9761208007	6

Num	Part Code	Qty
1	FC15-010056A	1
2	HP07-001850A	1
3	AM08-007375A	1
4	FC29-016593A	1
5	EP14-001350	1
6	Z6001049601A	5
7	FC18-007943A	1
8	HP07-001728A	2
9	Z9761208007	6
10	FC29-016592B	1
11	EP15-001017A	1
12	FC18-003435A	2
13	Z6001055201A	3
14	AM06-011195A	1
15	FC29-016660A	1
16	AM06-011819A	1
17	EP07-001971A	1
18	FC28-003447A	1
19	FC28-003866A	2
20	HP07-001850A	1
21	FC18-001418A	6
22	FC15-008257A	1
23	FC29-016661A	1
24	FC29-016594A	1
25	FC18-001418A	3
26	FC18-006234A	1
27	FC18-001418A	4
28	FC29-014039A	1
29	FC29-014038C	1
30	FC28-003367E	1
31	FC28-003369B	1
32	FC29-014053A	2
33	HP13-001248B	1
34	FC38-001279A	1
35	FC29-014048A	1
36	FC28-003368A	1
37	HP07-001639A	1
38	FC15-008243A	1
39	FC18-006121A	6
40	FC29-014047B	1



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3.6 Attachment 2 - Parts List

3.6.1 Parts List (1)

Lev	상위자재코드	제품/자재 코드	제품/자재명	수량
0		AM08-007819A	ASSY-FINAL-TNO-C3050T	
1	AM08-007819A	AM07-015318A	ASSY,CASE-BOTTOM_BB_XNO-C9083R	1
2	AM07-015318A	FC29-014049A	CASE-BOTTOM BACKBOX_XNO-C9083R;ADC12,WHI	1
2	AM07-015318A	HP07-001638A	GASKET-BACKBOX_XNO-C9083R;SILICON	1
2	AM07-015318A	FC15-008241A	COVER-CONDUIT_XNO-C9083R;ADC12,WHITE	1
2	AM07-015318A	Z9642306007	MACHINE SCREW(M3xL6,Zn-B,넵비머리)	2
2	AM07-015318A	FC18-006121A	SCREW-MACHINE;TORX20,P0.7,L20,FLAT+SPRIN	3
2	AM07-015318A	MC06-001189A	BUSHING-CABLE 2 HOLE;SILICONE,GRAY	2
2	AM07-015318A	FC09-006670A	BRACKET-WIRE-SNO-8081R;SUS304,1.2	1
2	AM07-015318A	FC09-012507A	BRACKET-WALL MOUNT_XNO-C9083R;ADC12,WHIT	1
1	AM08-007819A	FC28-003866A	PAD-THERMAL-PET_32X10XT1.0;7W	2
1	AM08-007819A	RM04-001030A	TAPE-FILAMENT;#8915,T0.15MM,W12MM,L	0.15
1	AM08-007819A	FC36-001443A	SHEET-INSTALL GUIDE;FILM T0.1,XNO-C9083R	1
1	AM08-007819A	AM08-007801A	ASSY-CAMERA-REAR_TNO-C3040T	1
2	AM08-007801A	AM08-007301A	ASSY-HALF-REAR_TNO-C3012TRA	1
3	AM08-007301A	AM08-007303A	ASSY-SUB-REARBODY_TNO-C3012TRA	1
4	AM08-007303A	FC29-016594A	CASE-BODY-REAR_TNO-C3022TRA;ADC12	1
4	AM08-007303A	FC29-016661A	HOLDER-CABLE-MAIN_TNO-C3022TRA	1
4	AM08-007303A	Z6001055201A	SCREW-MACHINE;6001-001708,BH,+,M2,L5,ZP	2
4	AM08-007303A	FC18-001418A	SCREW-MACHINE;PH,T10,M3,L8,SUS,FP	3

4	AM08-007303A	HP07-001851A	GASKET-MAIN-BODY_TNO-C3022TRA;SILICON	1
3	AM08-007301A	AM08-007302A	ASSY-SUB-TOP-BBOX_TNO-C3012TR	1
4	AM08-007302A	FC29-014047B	CASE-TOP BACKBOX_TNO-C3022TRA;ADC12,WHIT	1
4	AM08-007302A	FC28-003368A	DOOR-BUTTON_XNO-C9083R;ADC12	1
4	AM08-007302A	FC15-008243A	COVER-INTERFACE_XNO-C9083R;PC,BLACK	1
4	AM08-007302A	HP07-001639A	GASKET-DOOR_XNO-C9083R;SILICON	1
4	AM08-007302A	FC18-006121A	SCREW-MACHINE;TORX20,P0.7,L20,FLAT+SPRIN	3
3	AM08-007301A	FC28-003367E	LOCKER-FRONT-BRKT_C3012TRA;D13,ADC12	1
3	AM08-007301A	FC29-014038C	PUSHER-BRACKET_TNO-C30X;ADC12,WHITE	1
3	AM08-007301A	FC28-003369B	LOCKER-REAR_TNO-C30X;ADC12,ANODIZING	1
3	AM08-007301A	FC29-014053A	STOPPER,PIN-XNO-9083R;SUS	2
3	AM08-007301A	FC38-001279A	SPRING,COM-BRACKET_XNO-C9083R;SWPB	1
3	AM08-007301A	HP13-001248B	TUBE,ETC-CABLE_95MM_TNO-C30*;RB,1,1	1
3	AM08-007301A	FC15-008257A	COVER-BUSHING-MD-XNO-C9083R;PC,MOLD	1
3	AM08-007301A	FC15-008240A	COVER-BUSHING_XNO-C9083R;ADC12	1
3	AM08-007301A	Z6001055201A	SCREW-MACHINE;6001-001708,BH,+,M2,L5,ZP	6
3	AM08-007301A	FC29-014039A	CASE-TOP BRACKET_XNO-C9083R;ADC12,WHITE	1
3	AM08-007301A	FC29-014048A	CASE-BOTTOM BRACKET_XNO-C9083R;ADC12,WHI	1
3	AM08-007301A	FC18-001418A	SCREW-MACHINE;PH,T10,M3,L8,SUS,FP	4
3	AM08-007301A	FC18-006234A	SCREW-SEMS-TORX20_M5XL15;0.8,15,FLAT,M5,	1

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3.6.2 Parts List (2)

3	AM08-007301A	EP02-004605A	HARNESS-PNM-9084QZ;MCX,BLACK,50P-50P,340	
2	AM08-007801A	FC15-010132B	COVER-BBOX-PCB_TNO-C3022TRA_WO-SD-LO;PC	
2	AM08-007801A	FC28-003047A	PAD-THERMAL-48X30XT1,K=7W/M-K	
2	AM08-007801A	FC29-014054A	SUPPORT-PCB_XNO-C9083R;3604BD,6,5.5	
2	AM08-007801A	RM01-005941A	WIRE,METALIC-SAFETY;SUS304 Ø1.0	
2	AM08-007801A	Z9642306007	MACHINE SCREW(M3xL6,Zn-B,넵비머리)	
2	AM08-007801A	AM06-011193A	ASSY,PCB-TNO-C3010TRA,POWER	
4	AM06-011186A	AM06-011187A	ASSY,PCB MANUAL-TNO-C3010TRA,POWER	
2	AM08-007801A	EP16-003538A	FPCB-TNO-C3010TRA;2L,51PIN(0.3PITCH),FH2	
2	AM08-007801A	Z3809021301A	SDC425_FCABLE	
2	AM08-007801A	FC28-003686A	PAD-THERMAL;9X6XT1.0, 7W	
2	AM08-007801A	Z6001044701A	SCREW-MACHINE : BH,+,M3,L12,BLK,FP	
2	AM08-007801A	AM06-011177A	ASSY,PCB-TNO-C3040T,NETWORK	
1	AM08-007819A	AM08-007818A	ASSY-CAMERA-FRONT_TNO-C3052T	
2	AM08-007818A	AM08-007295A	ASSY-CASE-FRONT_TNO-C3012TRA	
3	AM08-007295A	FC15-010056A	COVER-DECO-FRONT_TNO-C3022TRA;DC,BLK	
3	AM08-007295A	HP07-001850A	GASKET-FRONT-BODY_TNO-C3022TRA;SILICON	
3	AM08-007295A	FC29-016593A	CASE-BODY-FRONT_TNO-C3022TRA;ADC12	
3	AM08-007295A	AM08-007375A	ASSY-SHIELD-SUN-SHEET_TNO-C30XXTRA	
4	AM08-007375A	FC28-003825A	SHIELD-SUN_TNO-C3022TRA	

3	AM08-007295A	Z6001049601A	SCREW-MACHINE;6001-000128,BH,+,M3,L6,NI	3
2	AM08-007818A	Z6001049601A	SCREW-MACHINE;6001-000128,BH,+,M3,L6,NI	2
2	AM08-007818A	AM08-007816A	ASSY-MODULE-NUC_TNO-C3052T_S-GOODS	1
3	AM08-007816A	EP07-001971A	SINK,HEAT-NUC-PBA_TNO-C30XXTRA;ADC12	1
3	AM08-007816A	FC29-016660A	HOLDER-PCB-NUC_TNO-C3022TRA	1
3	AM08-007816A	HP07-001728A	GASKET-O-RING-D1_32-D2_2.5_TNM-A49X;RUBB	2
3	AM08-007816A	FC28-003447A	PAD-THERMAL-45X22XT1.5;K=7W/M-K	1
3	AM08-007816A	FC18-003435A	SCREW-MACHINE : CH,+,M1.7,L4,BLK,FP	2
3	AM08-007816A	Z6001055201A	SCREW-MACHINE;6001-001708,BH,+,M2,L5,ZP	3
3	AM08-007816A	Z9761208007	SCREW-TAPTITE;PH,+,M2,L8,BLK,B-TYPE	6
3	AM08-007816A	AM06-011195A	ASSY,PCB-TNO-C3010TRA,IR DETECTOR	1
3	AM08-007816A	EP02-004794A	HARNESS-XNP-9300RW;MCX,50P-50P,100MM	1
3	AM08-007816A	EP15-001017A	SHUTTER-THERMAL CAMERA;TEMP. MONITORING	1
3	AM08-007816A	FC29-016592B	HOLDER-LENS_TNO-C3040T	1
3	AM08-007816A	FC18-007943A	O-RING-D1 23.47;D2 2.62,TNO-C3040T	1
3	AM08-007816A	EP14-001350	LENS SET-H3772_19MM_QVGA;FIXED	1
3	AM08-007816A	AM06-011819A	ASSY,PCB-TNO-C3040T,NUC	1



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3.6.3 Parts List (3)

Component - Plastics			Yellow Card™
HN-1068(+)(f1)			
LOTTE CHEMICAL CORPORATION			File Number: E115797
56 GOSAN-RO UIWANG-SI, GYEONGGI-DO 16073 Republic of Korea			
INFINO: HN-1068(+)(f1)			
Polycarbonate (PC), pellets			
(*) - May be replaced by one, two, or three numbers and/or letter(s)			
(f1) - Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.			
			
Flammability	Value	Test Method	
Flame Rating			
1.5 mm, ALL	V-0	UL 94	
3.0 mm, ALL	V-0	IEC 60695-11-10, -20	
Glow Wire Flammability Index		IEC 60695-2-12	
1.5 mm	960 °C		
3.0 mm	960 °C		
Glow Wire Ignition Temperature		IEC 60695-2-13	
1.5 mm	825 °C		
3.0 mm	825 °C		
Electrical	Value	Test Method	
Hot-wire Ignition (HWI) (1.5 mm)	PLC 3	UL 746A	
High Amp Arc Ignition (HAI) (1.5 mm)	PLC 3	UL 746A	
Comparative Tracking Index (CTI)	PLC 3	UL 746A	
Dielectric Strength	32 kV/mm	ASTM D149	
Volume Resistivity	1.0E+17 ohms-cm	ASTM D257 IEC 60093	
Thermal	Value	Test Method	
RTI Elec		UL 746B	
1.5 mm	130 °C		
3.0 mm	130 °C		
RTI Imp		UL 746B	
1.5 mm	130 °C		
3.0 mm	130 °C		
RTI Str		UL 746B	
1.5 mm	130 °C		
3.0 mm	130 °C		
Ball Pressure Test (130°C)	Pass	IEC 60695-10-2	
Physical	Value	Test Method	
Outdoor Suitability	f1	UL 746C	

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Report Date: 8/24/1998
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ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

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4. Hose Down Test (Clause 5.7)

4.1 Test date and environmental conditions

4.1.1 Test date: Apr. 09, 2025~ Apr. 16, 2025

4.1.2 Measured Environmental Conditions

Item	Temperature (°C)	Humidity (% R.H.)	Pressure (kPa)
Measurement	23.5	44.2	99.8

4.2 Test Conditions and methods

4.2.1 Description of Test

The enclosure and its external mechanisms were subjected to a stream of water from a hose that has a 25.4 mm (1 in) inside diameter nozzle and delivers at least 240 L (65 gal) per minute. The nozzle was held from 3.0 to 3.5 m (10 to 12 feet) from the enclosure, and the spray of water was directed at all points of potential water entry such as seams, joints, external operating mechanisms, and such. The nozzle was moved along each test point one time at a uniform rate of 6 mm/sec (1/4 in/sec).

4.2.2 Sample Dimension

Ø 140.5 by 441.17 mm, Ø 93.8 by 294.53 mm, Ø 36.5 by 114.61 mm,
Ø 9.3*3 by 87.6 mm, 35 mm, 58 mm, 48 mm, Ø 25*2 by 157 mm
Test Duration = 205.98 secs

4.2.3 Acceptance conditions

The enclosure shall be considered to have met the requirements if at the conclusion of the test no water has entered the enclosure



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4.3 Attachment 3 - Photographs

4.3.1 Hose down test



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4.4 Test result**4.4.1 Test result table**

Sample No (Model)	Water Flow	Presence of water inside	Result
TNO-C3050T	240 LPM	No	Normal

※ Refer to the product photos after the completion of testing in section 4.5.



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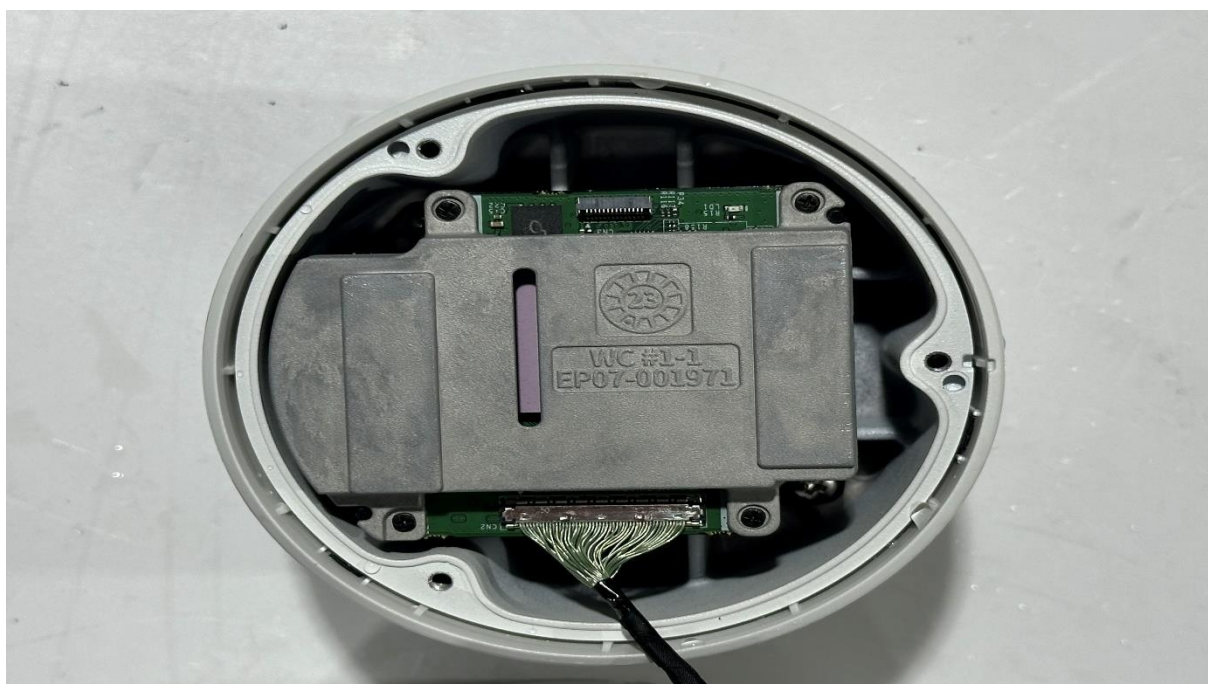
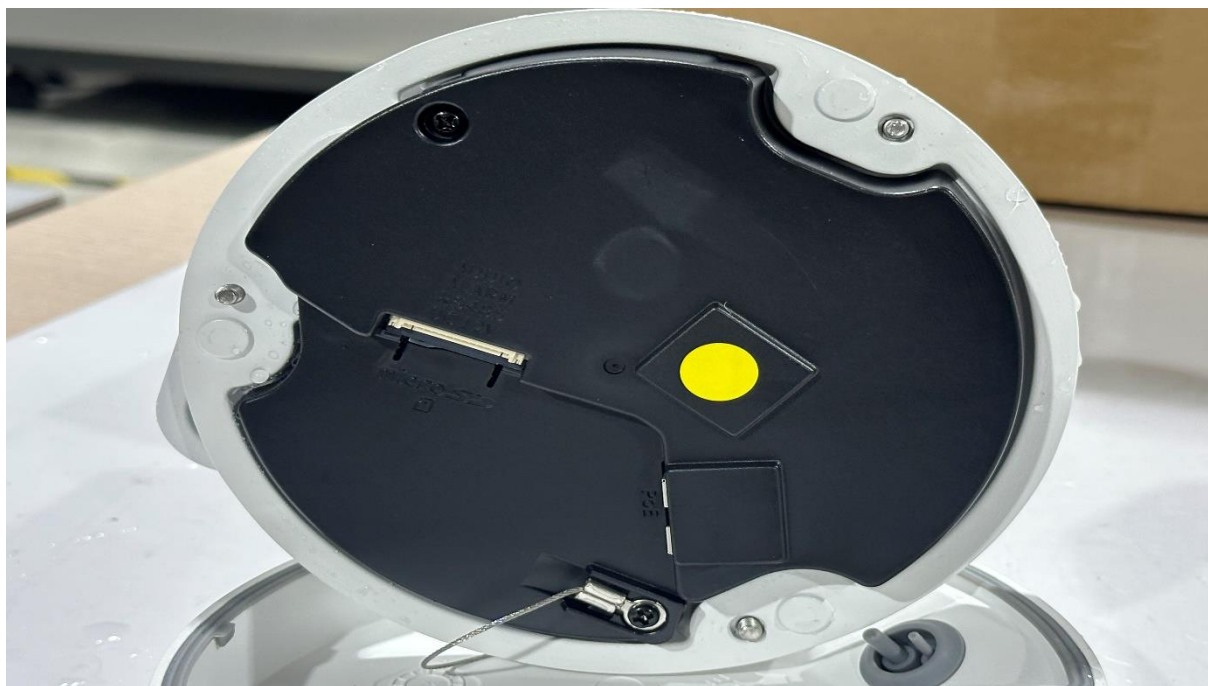
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4.5 Post-test product images

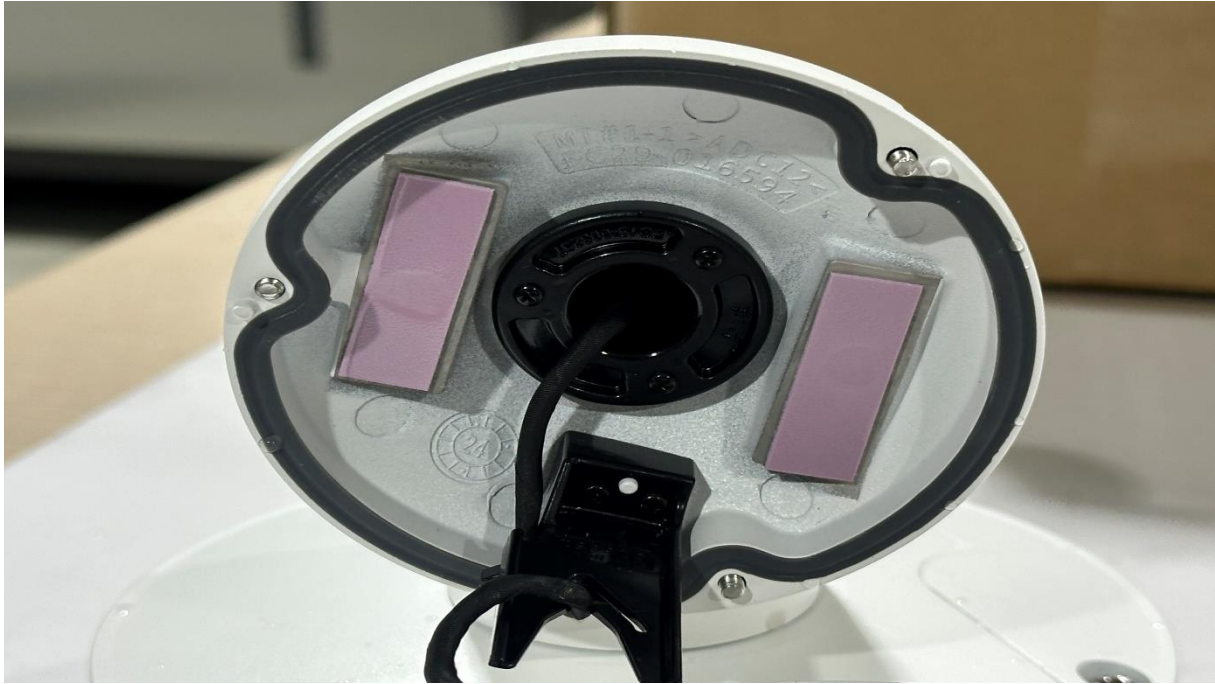
4.5.1 Test sample image (1)



4.5.2 Test sample image (2)



4.5.3 Test sample image (3)



- End -