TEST REPORT

CTK Co., Ltd.
5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si,
Gyeonggi-do, Republic of Korea
Tel: 1551-9871
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REPORT No.:
CTK-2026-02081

1.	**Applicant**	
	◦ Name :	Hanwha Vision Co., Ltd.
	◦ Address :	6, Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si, Gyeonggi-do, 13488 KOREA
	◦ Date of Receipt :	Jun. 11, 2026
2.	**Manufacturer**	
	◦ Name :	HANWHA VISION VIETNAM COMPANY LIMITED
	◦ Address :	Lot O-2, Que Vo Industrial Zone extended area, Nam Son ward, Bac Ninh province, Vietnam
3.	**Use of Report :**	Quality control
4.	**Test sample / Model :**	NETWORK CAMERA / XNV-A9095RZ
5.	**Date(s) of test :**	Jul. 03, 2026
6.	**Test Standard (Method) used :**	NEMA 250-2020 Enclosures for Electrical Equipment (1000 Volts Maximum)
7.	**Testing Environment :**	Temperature: (25 ± 10) ℃, 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 (5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea)

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
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Approval	Tested by Name: HongBeom Jeon (Signature)	Technical Manager Name: HoHyun Lee (Signature)

Remark. This report is not related to ISO/IEC 17025, KOLAS accreditation and relevant regulation.

Jul. 28, 2026

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.	1551-9871
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. Sample description and equipment information

2.1 Sample description

Sample Name	Model Name	S/N	Date of Manufacture	Quantity	Comment
NETWORK CAMERA	XNV-A9095RZ	ZX8R70GL60000NY	Jun. 2026	1 EA	-

2.2 Model description

Basic Model .....:	XNV-A9095RZ
Series model ..... .:	XNV-A9085RZ
Model differences .....:	Differences between the basic model and the lens module

2.3 Manufacturer information

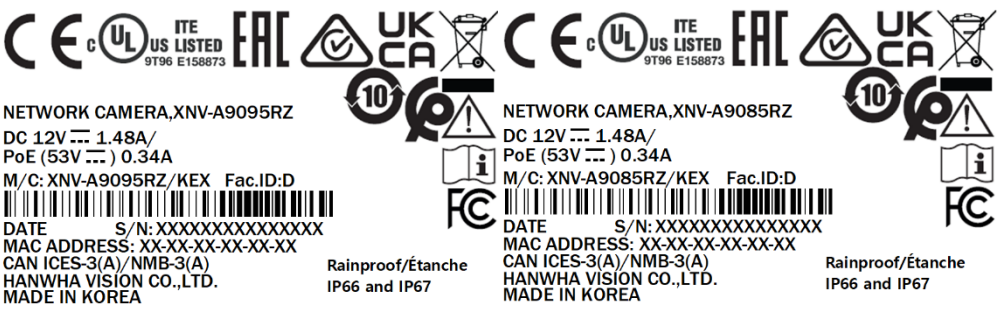
Test item description .....:	NETWORK CAMERA
Trade Mark .....:	Hanwha Vision
Manufacturer .....:	Lot O-2, Que Vo Industrial Zone extended area, Nam Son ward, Bac Ninh province, Vietnam
Model/Type reference .....:	ZNV-A9095RZ
Ratings .....:	Electrical ZNV-A9095RZ DC 12 V ⎓ 1.48 A / PoE(53 V ⎓) 0.34 A ZNV-A9085RZ DC 12 V ⎓ 1.48 A / PoE(53 V ⎓) 0.34 A Dimension: Ø 102.1 mm by 320.59 mm , Ø 180mm by 565.2 mm, Ø 16* 2 mm * 2 by 100.48 mm, Ø 4*4 mm by 50.24 mm

List of Attachments (including a total number of pages in each attachment):
Attachment 1: 8-9 pages (Construction Diagram including installation method)
Attachment 2: 16-20 pages (Parts List)
Attachment 3: 22-24 pages (photographs)

Summary of testing:

Tests performed (name of test and test clause): **Clause 5.7(Hose Down Test)**	**Testing location:** CTK Co., Ltd. 5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea

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



2.4 Equipment information

Testing equipment	Model Name	Manufacturer	Manufacturing Number	Next Cal. Date
25.4 mm Nozzle	S3-IP18	CTK	S3-IP18	-
Area flow meter	Z-6504	FLOWTECH	0064	Jan. 19, 2027
Steel measuring meter	5.5 m	KOMELON	225851	Jan. 13, 2028
Stop Watch	NONE	Casio	612Q01R-1	Jan. 15, 2027
Digital Vernier Calipers	100 mm	MITUTOYO	A17179462	-

2.5 Pre-test sample images

2.5.1 Test sample



Top



Bottom



Front



Rear



Left side



Right side

2.6 Testing equipment images

2.6.1 Test equipment



25.4mm Nozzle



Digital Vernier Calipers



Area flow meter



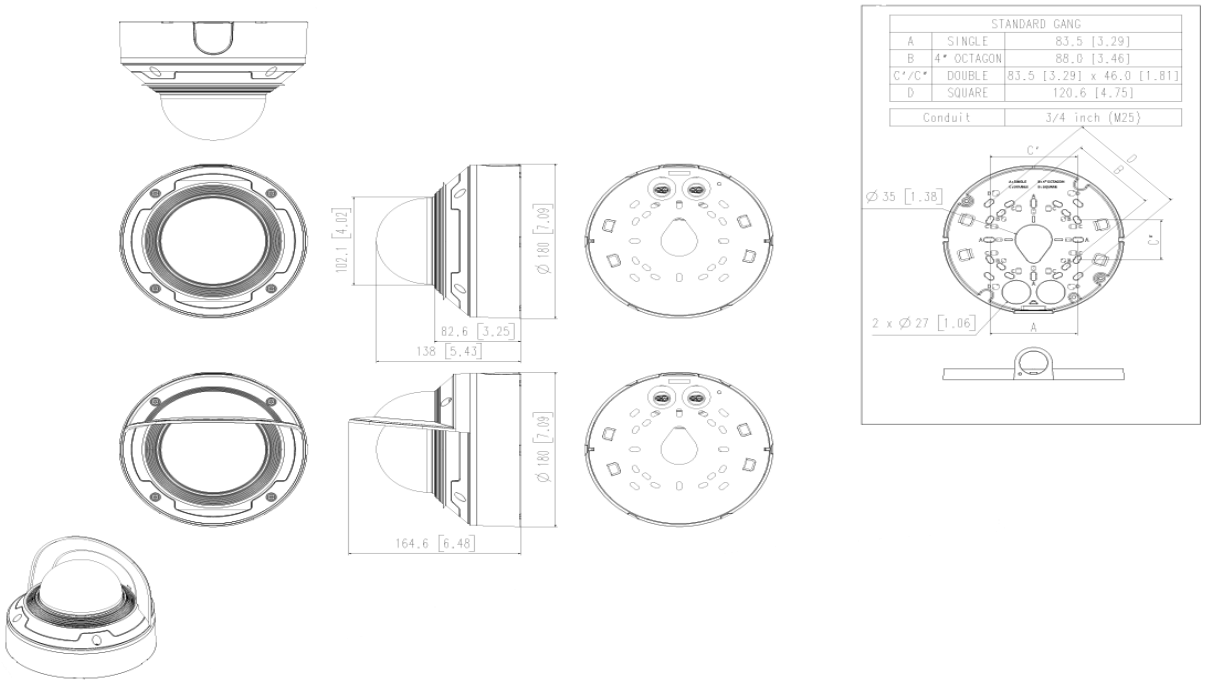
Steel measuring meter



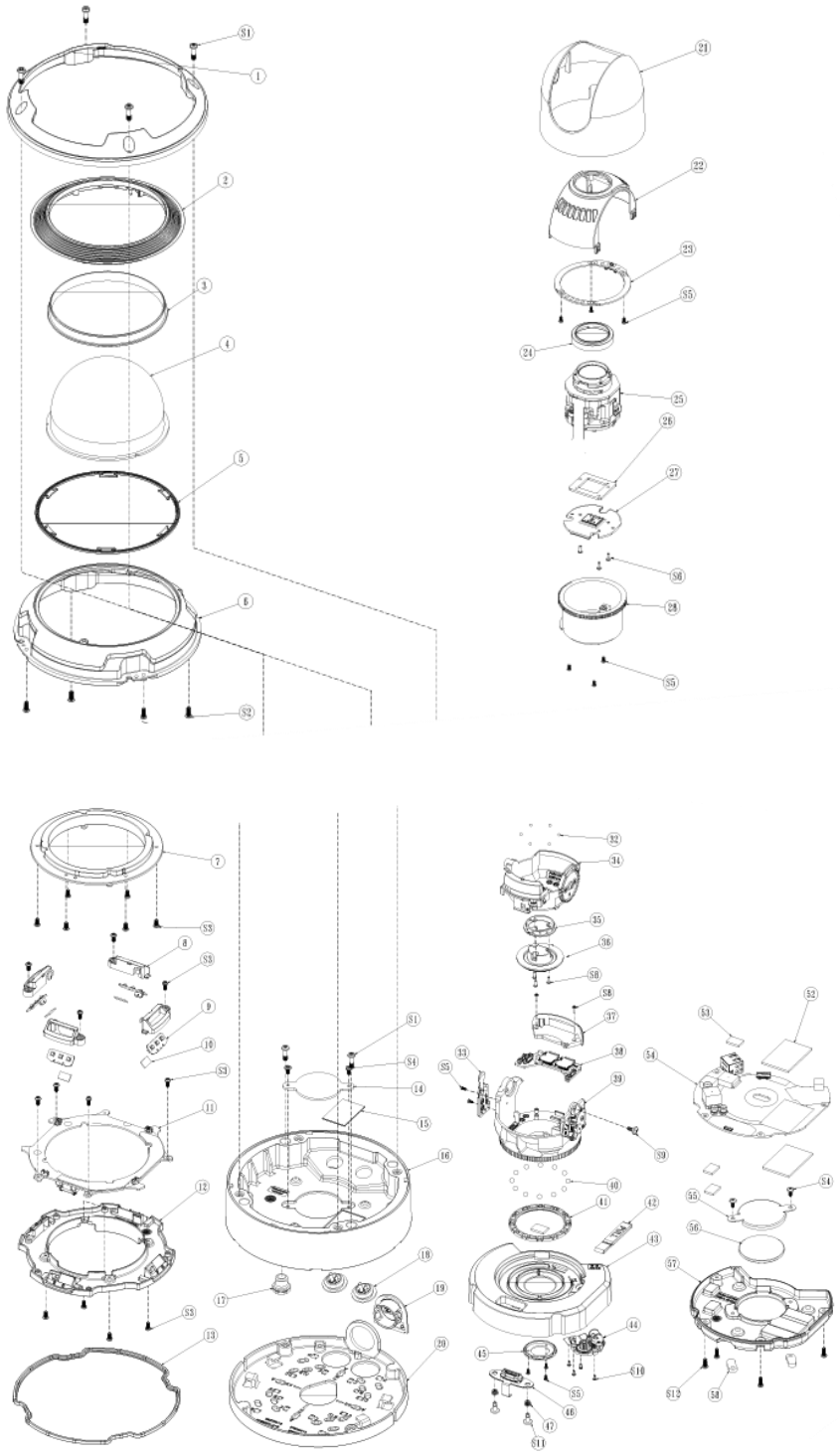
Stop Watch

2.7 Sample appearance

Enclosure dimensions [unit : mm]



2.8 Construction Diagram including installation method



3. Test Information

3.1 Test item particulars and Possible test case verdicts

Test item particulars.....:	NETWORK 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

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 250-2020

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 province, Vietnam

2. D-TECH CO., LTD.

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

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).

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	Non-vented 5.7 Vented 5.5.1 Dust Blast Method	Windblown dust protected	No ingress of dust	6

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

3.4 NEMA 250-2020 Test list

NEMA 250-2020			
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	P
3.7	Mounting	Mounting means are external to the equipment cavity (See the attachment 1)	N/A
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

NEMA 250-2020			
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)	N/E
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

NEMA 250-2020			
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/A
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 ℃ for 168 h according to 5.14.3(Alternate Evaluation) before performing relevant required tests.	N/E
5.15	Test for Sharpness of Edges	No sharp edges	P

3.5 Parts List

3.5.1 Parts List (1)

Level	제품/자재 코드	제품/자재명	수량
1	AM07-018120A	ASSY,FINAL-XNV-A9095RZ	1
2	AM07-018149A	ASSY,CASE-TOP-XNV-A9095RZ	1
3	FC15-006668B	COVER-DOME;HARD-COATING,100,65	1
3	FC37-001170A	WINDOW-IR-XNV-A9095RZ	1
3	FC29-019061A	CASE-TOP-XNV-A9095RZ;ADC12	1
3	FC29-015250B	CASE-DOME-PNV-A9082RZ	1
3	FC09-017129A	BRACKET-DOME-PNV-A9082RZ;ADC12	1
3	FC39-007781A	FRAME-IR-PNV-A9082RZ;ADC12	1
3	FC15-010853B	COVER-IR-PNV-A9082RZ;PC,RECYCLE	4
3	FC10-001168A	RUBBER-DOME-IR_XPLUS;RUBBER,-	1
3	FC10-001149A	RUBBER-TOP-XNV-6081Z;SILICON	1
3	FC10-001245A	RUBBER-IR-XNV-9083RZ;SILICON	1
3	Z9642306007	MACHINE SCREW(M3xL6,Zn-B,냄비머리)	18
3	FC18-004000A	SCREW-SPECIAL;PH,TR20,M4,L7+5,SUS,FP	4
3	Z9642308001	SCREW-MACHINE;PH,+,M3,L8,WHT,FP	4
3	FC28-002128A	PAD-THERMAL, 12X8;GP-1(350),1.0	4
3	FC36-001464A	SHEET-PROTECT-DOME-310MM	1
3	AM06-012067A	ASSY,PCB-PNV-A9082RZ-IR_ITFC_4K	1
3	AM06-011474A	ASSY,PCB-PNV-A9082RZ-IR	4
3	EP02-005243A	HARNESS-PNM-C34404RQPZ;WIRE,2P-2P,40MM	4
2	AM07-011961A	ASSY,CASE-BOTTOM-XNV-6081Z	1
3	FC29-010814A	CASE-BOTTOM-XNV-6081Z;ADC12	1
3	FC09-009874A	BRACKET-MAGNET-XNV-6081Z;SECC	1
3	FC28-002823A	PAD-THERMAL-PET-38X25XT1,K=7W/M-K	1
3	MC06-001042A	BUSHING-CABLE SET;SILICON,PNV-9080R	2
3	HP06-001469A	VENT-SCREW TYPE_PFOE_B	1
3	FC18-004000A	SCREW-SPECIAL;PH,TR20,M4,L7+5,SUS,FP	2
3	Z6001049601A	SCREW-MACHINE;6001-000128,BH,+,M3,L6,NI	2
2	AM08-005993A	ASSY-MOUNT-PLATE-XNV-6081Z	1
3	FC39-005085A	MOUNT-PLATE-XNV-6081Z;ADC12	1
3	FC15-006682B	COVER-BOT-XNV-6081Z;PC	1
2	AM08-008246A	ASSY-CAP-WEATHER-XNV-A9095RZ	1
3	FC29-017669A	CAP-WEATHER-PNV-A9082RZ;PC	1
3	FC18-006437A	SCREW-SPECIAL : PH,TR20,M4,L26+5,SUS,FP	2
3	FC18-008360A	STUD-WEATHER-XNV-A9085RZ	2
3	RM04-001030A	TAPE-FILAMENT;#8915,T0.15MM,W12MM,L	0.1
2	AM07-018122A	ASSY,MODULE-XNV-A9095RZ	1
3	AM07-018123A	ASSY,ROTATE HEAD-XNV-A9095RZ	1
4	AM08-008146A	ASSY-LENS-XNV-A9095RZ	1
5	EP14-001384	LENS SET-YT0W2X15DB_8MP_10.9-29_WB-ICR;M	1
5	FC18-008074A	SPACER-XNV-A9095R SENSOR	1
5	Z6003019601A	SCREW-TAPTITE;PH,+,M2,L6,BLK,B-TYPE	3

3.5.2 Parts List (2)

5	AM06-012512A	ASSY,PCB-XNV-A9095RZ SENSOR	1
5	EP02-004492B	HARNESS-XNV-6081Z;MCX,50P-50P,120MM,B	1
4	MC11-007333A	GEAR-ROTATE-XNV-A9095RZ;PC+GF	1
4	Z6003019801A	SCREW-TAPTITE:PL,+,M2,L4,WHT,B-TYPE	3
3	AM08-007575A	ASSY-FRAME-TILT-PNV-A7082RZ	1
4	AM07-017286A	ASSY,MOTOR-R-PNV-A9082RZ	1
5	FC39-007779B	FRAME-TILT-PNV-A9082RZ;PC,RECYCLE	1
5	AM06-011467A	ASSY,PCB-ROTATE-PNV-A9082RZ	1
6	AM06-011507A	ASSY,PCB MANUAL-PNV-A9082RZ_ROTATE	1
7	EP08-000101	MOTOR,STEP-SMC10-20;2PHASE /20STEP/ 5VOL	1
7	Z0608000201A	PHOTO INTERRUPTER(ON1004-CA)	1
6	AM06-011513A	ASSY,PCB-PNV-A9082RZ ROTATE	1
5	MC11-000408A	GEAR-MOTOR SPUR;POM,3.3,N/A,MOLD,0.4,3.9	1
5	MC19-002628A	SHAFT-R-GEAR-6085	2
5	MC11-004648A	GEAR,SPUR-R2-6085;MOLD	1
5	MC11-004649A	GEAR,SPUR-R3-6085;MOLD	1
5	Z6003022301A	SCREW-TAPTITE:PH,+,M1.7,L2.9,BLK,B-TYPE	4
5	EP02-005131A	HARNESS-XNV-9083RZ;WIRE,BLUE,7P-7P,120MM	1
4	MC11-004650A	GEAR,SPUR-TILT-6085;MOLD	1
4	FC15-010881B	COVER-GEAR-R-PNV-A9082RZ;PC,RECYCLE	1
4	Z6003019801A	SCREW-TAPTITE:PL,+,M2,L4,WHT,B-TYPE	4
3	FC15-012883A	COVER-LENS-F-XNV-A9095RZ;POM	1
3	FC15-011173A	COVER-REAR-R-PNV-A9082RZ;POM	1
3	EP07-002047A	SINK,HEAT-PNV-A9082RZ;ADC12	1
3	FC04-001009A	BALL-2_5PI;SUS	6
3	Z6003019601A	SCREW-TAPTITE:PH,+,M2,L6,BLK,B-TYPE	3
3	AM07-017284B	ASSY,COVER-FRONT-XNV-A9095RZ	1
4	FC15-010858B	COVER-FRONT-PNV-A9082RZ;PC,RECYCLE	1
4	Z6003019801A	SCREW-TAPTITE:PL,+,M2,L4,WHT,B-TYPE	3
4	AM06-012514A	ASSY,PCB-XNV-A9095RZ ALS	1
4	EP02-004146A	HARNESS-WNL_4M_2M_IR_LED_CABLE;6P_6P	1
3	AM08-008153A	ASSY-FRAME-TOP-XNV-A9095RZ	1
4	FC39-008284A	FRAME-TOP-XNV-A9095RZ;ADC12	1
4	AM08-008267A	ASSY-FRAME-PAN-XNV-A9095RZ	1
5	AM07-017335A	ASSY,MOTOR-T-PNV-A9082RZ	1
6	FC39-007780A	FRAME-PAN-PNV-A9082RZ;PC+GF	1
6	AM07-013785A	ASSY-SUB-HELICAL-TEMP	1
7	FC09-008365B	BRACKET,MOTOR-6040;PC+GF10%	1
7	FC18-000470A	PIN-ABF SENSOR GUIDE;SUS304BD,GUIDE PIN	1
6	AM07-013786A	ASSY-SUB-SPUR-GEAR-TEMP	1
7	FC15-005766A	COVER-GEAR-MODULE-6085;MOLD	1
7	FC18-000470A	PIN-ABF SENSOR GUIDE;SUS304BD,GUIDE PIN	1
6	AM06-008750A	ASSY,PCB-XNV-6081Z TILT MOTOR	1

3.5.3 Parts List (3)

7	AM06-008522A	ASSY,PCB-XNV-6081Z TILT	1
7	EP08-002492A	MOTOR,STEP-6040	1
7	Z0608000201A	PHOTO INTERRUPTER(ON1004-CA)	1
6	MC11-004647A	GEAR,SPUR-COM-6085;MOLD	1
6	MC11-004801A	GEAR-HELICAL_6085;MOLD	1
6	MC11-006805A	GEAR,WORM-C32083RQZ;MD	1
6	RM04-001053A	TAPE-PORON-6040;PORON,0.4MM,3.9	1
6	Z6003020401A	SCREW-TAPTITE;CH,+,M1.7,L4,BLK,B-TYPE	7
6	EP02-005588A	HARNESS-1.25HOUSING;1:1,WIRE,G,7P,60MM/A	1
5	FC15-013274A	COVER-SD-XNV-A9095RZ;PC	1
5	Z6003019601A	SCREW-TAPTITE;PH,+,M2,L6,BLK,B-TYPE	2
5	AM06-012516A	ASSY,PCB-XNV-A9095RZ MOTION	1
5	EP02-005481A	CABLE-PNV-A9082RZ MOTION;1:1,MCX,50P,-,6	1
4	AM07-017285A	ASSY,MOTOR-P-PNV-A9082RZ	1
5	AM07-013785A	ASSY-SUB-HELICAL-TEMP	1
6	FC09-008365B	BRACKET,MOTOR-6040;PC+GF10%	1
6	FC18-000470A	PIN-ABF SENSOR GUIDE;SUS304BD,GUIDE PIN	1
5	AM07-013786A	ASSY-SUB-SPUR-GEAR-TEMP	1
6	FC15-005766A	COVER-GEAR-MODULE-6085;MOLD	1
6	FC18-000470A	PIN-ABF SENSOR GUIDE;SUS304BD,GUIDE PIN	1
5	AM06-011469A	ASSY,PCB-PAN-PNV-A9082RZ	1
6	AM06-011508A	ASSY,PCB MANUAL-PNV-A9082RZ_PAN	1
7	EP16-003653A	FPCB-PNV-9082RZ;PAN FPCB,PI,1L,0.33T-0.1	1
7	EP08-002492A	MOTOR,STEP-6040	1
7	Z0608000201A	PHOTO INTERRUPTER(ON1004-CA)	1
5	MC11-004647A	GEAR,SPUR-COM-6085;MOLD	1
5	MC11-004801A	GEAR-HELICAL_6085;MOLD	1
5	MC11-006805A	GEAR,WORM-C32083RQZ;MD	1
5	RM04-001053A	TAPE-PORON-6040;PORON,0.4MM,3.9	1
5	Z6003020401A	SCREW-TAPTITE;CH,+,M1.7,L4,BLK,B-TYPE	4
4	FC15-006401A	COVER-BALL-GUIDE;POM,MOLD	1
4	FC04-001006A	BALL-SUS;COMMON	12
4	FC15-006402A	COVER-PAN-LOCK;POM,MOLD	1
4	FC29-011023A	STRAP-PULL-XNV-6081Z	1
4	FC18-003435A	SCREW-MACHINE : CH,+,M1.7,L4,BLK,FP	4
4	Z6003019801A	SCREW-TAPTITE;PL,+,M2,L4,WHT,B-TYPE	3
4	FC18-005594A	SCREW,ETC-SHOULDER;0.5,-,PWH,M3	2
4	FC38-001385A	SPRING,COM-PNV-A9082RZ;SUS304	2
4	AM06-011477A	ASSY,PCB-PNV-A9082RZ-SUB	1
6	EP16-003659A	FPCB-PNV-A9082RZ;SUB FPCB,PI,1L,1.6-0.2T	1
3	AM08-007574A	ASSY-FRAME-BOT-PNV-A9082RZ	1
4	FC39-007783A	FRAME-BOT-PNV-A9082RZ;ADC12	1
4	EP10-001189A	MAGNET-OD44-T3.0-N35UH	1

3.5.4 Parts List (4)

4	FC09-009905A	BRACKET-YOKE-XNV-6081Z;SECC	1
4	HP07-001393A	GASKET-XNV-6081Z;8.4X18.2;3.5	2
4	Z6001049601A	SCREW-MACHINE;6001-000128,BH,+,M3,L6,NI	2
3	FC29-017338B	CASE-SHIELD-PNV-A9082RZ;PC,RECYCLE	1
3	PT03-003054A	LABEL-WARNING-XNV-6081Z	1
3	FC28-004148A	PAD-THERMAL-14X10XT2,7W/M-K	1
3	FC28-002489A	PAD-THERMAL_1014T2_V6430BNH	4
3	FC18-004952A	SCREW-SPECIAL-TT:PWH,+,M3,L2.3+5.7,BLK,B	1
3	FC28-003375A	PAD-THERMAL-45X30XT2,K=7W/M-K	2
3	Z9642308001	SCREW-MACHINE;PH,+,M3,L8,WHT,FP	4
3	AM06-012518A	ASSY;PCB-XNV-A9095RZ MAIN	1
3	FC15-011680B	COVER-CABLE-PNV-A9082RZ;PC,RECYCLE	1
3	Z6003019801A	SCREW-TAPTITE;PL,+,M2,L4,WHT,B-TYPE	2
2	PM02-005397A	CUSHION-PROTECT-LENS_PNV-A8081R;EVA	1
2	RM04-001030A	TAPE-FILAMENT;#8915,T0.15MM,W12MM,L	0.2

3.5.5 Parts List (5)

Component - Plastics E115797

Guide Information View Certificate of Compliance

LOTTE CHEMICAL CORPORATION
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GC-1021F, GC-1022F, GC-1023F, GC-1024F, GC-1025F, GC-1026F, GC-1027F, GC-1028F, GC-1029F(f1)
Polycarbonate (PC), recycled "INFINO", furnished as pellets [contains mechanically recycled content]

Color	Min. Thk (mm)	Flame Class	HWI	HAI	RTI Elec (°C)	RTI Imp (°C)	RTI Str (°C)
ALL	0.75	V-2	4	4	80	80	80
	1.0	V-2	-	-	80	80	80
	1.2	V-1	4	4	80	80	80
	1.5	V-0	3	3	130	130	130
	3.0	V-0	-	-	130	130	130

Comparative Tracking Index (CTI): 3
Dielectric Strength (kV/mm): 24.3
High-Voltage Arc Tracking Rate (HVTR): -
Dimensional Change (%): -
Inclined Plane Tracking (IPT) kV: -
Volume Resistivity (10^X ohm-cm): -
Surface Resistivity (10^X ohms/square): -
High Volt, Low Current Arc Resis (D495): -

(f1) - Suitable for outdoor use with respect to exposure to Ultraviolet Light, Water Exposure and Immersion in accordance with UL 746C.

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.

Report Date: 1996-08-24
Last Revised: 2024-07-24

c UL us ALSO CERTIFIED TO IEC REQUIREMENTS

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IEC and ISO Test Methods

Test Name	Test Method	Units	Thk (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	0.75	V-2 (ALL)
			1.0	V-2 (ALL)
			1.2	V-1 (ALL)
			1.5	V-0 (ALL)
			3.0	V-0 (ALL)
Glow-Wire Flammability (GWFI)	IEC 60695-2-12	°C	1.5	930
			3.0	960
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	°C	1.5	825
			3.0	825
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC AC Dielectric Strength (AC DS)	IEC 60243-1	kV/mm	-	-
IEC DC Dielectric Strength (DC DS)	IEC 60243-2	kV/mm	-	-
IEC Volume Resistivity (VR)	IEC 62631-3-1	10^X ohm-m	-	-
IEC Surface Resistivity (SR)	IEC 62631-3-2	10^X ohms	-	-
IEC Inclined Plane Tracking (IPT)	IEC 60587	kV	-	-
IEC Ball Pressure	IEC 60695-10-2	°C	-	130
ISO Heat Deflection (1.80 MPa)	ISO 75-2	°C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m^2	-	-
ISO Izod Impact	ISO 180	kJ/m^2	-	-
ISO Charpy Impact	ISO 179-1	kJ/m^2	-	-

4. Hose Down Test (Clause 5.7)

4.1 Test date and environmental conditions

4.1.1 Test date: Jul. 03, 2026

4.1.2 Measured Environmental Conditions

Item	Temperature (℃)	Humidity (% R.H.)	Pressure (kPa)
Measurement	26.3	62.6	100.1

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/min (65 gal). 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/s (1/4 in/s).

4.2.2 Sample Dimension

Ø 102.1 mm by 320.59 mm , Ø 180mm by 565.2 mm, Ø 16* 2 mm * 2 by 100.48 mm, Ø 4*4 mm by 50.24 mm Test Duration = 172.75 s

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

4.3 Test Setup and During test sample images

4.3.1 Evidence of test setting



4.4 Test result

4.4.1 Test result table

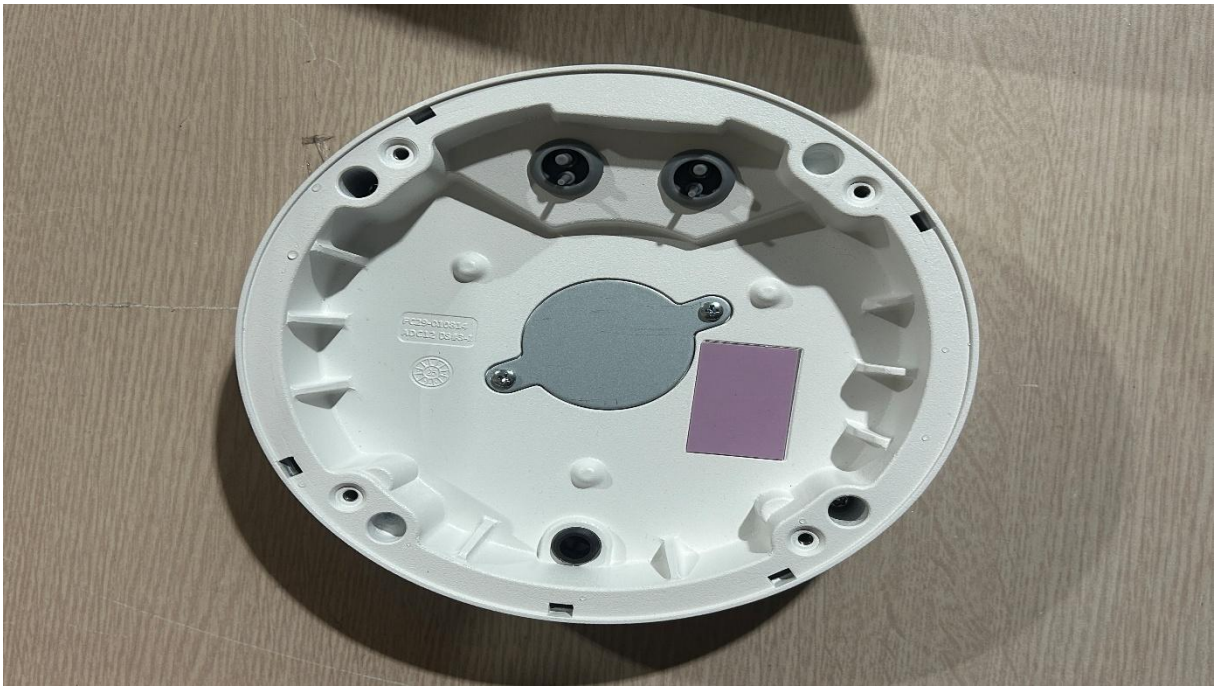
Sample No (Model)	Water Flow	Presence of water inside	Result
XNV-A9095RZ	240 L/min	**No**	Pass

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

4.5 Post-test sample images

4.5.1 Test sample image





- End -